PART 1 Test Under Static Transmission Scenario

Test Report No.: 14367173H-B-R1

Customer	**Panasonic Corporation of North America**
Description of EUT	**Radio Module (Tested inside of Panasonic Personal Computer FZ-G2)**
Model Number of EUT	**WW21A**
FCC ID	**ACJ9TGWW21A**
Test Regulation	**FCC47CFR 2.1093**
Test Result	**Complied (Refer to SECTION 9)**
Highest Exposure value	**The highest reported SAR Body: 1.074 W/kg (1 g) Worst TER: 0.996 Worst SPLSR: 0.031 Simultaneous: 1.579 W/kg**
Issue Date	**February 21, 2023**
Remarks	**-**

Representative Test Engineer	**Approved By**
T. Nakagawa	Takayuki. S
Tomohisa Nakagawa Engineer	Takayuki Shimada Leader

ACCREDITED
CERTIFICATE 5107.02

☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan, Inc.
☒ There is no testing item of "Non-accreditation".

UL Japan, Inc. Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 Japan / +81-596-24-8999

ANNOUNCEMENT

- This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
- The results in this report apply only to the sample tested.(Laboratory was not involved in sampling.)
- This sample tested is in compliance with the limits of the above regulation.
- The test results in this test report are traceable to the national or international standards.
- This test report must not be used by the customer to claim product certification, approval, or endorsement by the A2LA accreditation body.
- This test report covers SAR technical requirements.
  It does not cover administrative issues such as Manual or non-SAR test related Requirements. (if applicable)
- The all test items in this test report are conducted by UL Japan, Inc. Ise EMC Lab.
- The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan, Inc. has been accredited.
- The information provided from the applicant for this report is identified in Section 2.
- For test report(s) referred in this report, the latest version (including any revisions) is always referred.

Contents

1 Introduction 5
2 Customer information 5
3 Equipment under test (EUT) 6
3.1 Identification of EUT 6
3.2 Product description 7
4 Time averaging for SAR and PD 8
5 General LTE/NR SAR Test and Reporting Considerations 9
5.1 LTE (TDD) Considerations 15
5.2 General 5G NR(FR1) SAR Test and Reporting Considerations 16
5.3 NR (FDD/TDD) Considerations 19
5.4 WWAN Antenna configuration 19
5.5 Time averaging for SAR and PD 19
6 Test standard information 20
6.1 Test Specification 20
6.2 Published RF exposure KDB procedures 20
6.3 SAR Work Procedures Procedure 20
6.4 Additions or deviations to standard 20
6.5 References 21
6.6 Limit 21
7 Location 21
8 Definitions, symbols, and abbreviations 22
8.1 Definitions 22
8.2 Symbols 23
8.3 Abbreviations 24
9 Test result 25
9.1 verdict 25
9.2 Stand-alone SAR result 25
9.3 Simultaneous transmission SAR result 26
9.4 Measurement uncertainty for SAR < 6 GHz 26
9.5 Measurement uncertainty for PD > 6 GHz 27
10 Software information, Tune up tolerance limit, Plimit and input.power.limit 28
10.1 Software information 28
10.2 Tune up tolerance limit and Plimit 29
11 SAR Exposure Conditions (Test Configurations) 32
11.1 Summary of the distance between antenna and surface of EUT 32
11.2 SAR-based Exemption - FCC section 1.1307 32
12 SAR System Check 34
12.1 Dielectric Property 34
12.2 System check 39
13 Conducted Output Power / SAR / PD Measurements 43
13.1 Measurement configuration for conducted output power 43
13.2 WCDMA 50
13.3 LTE single 53
13.4 LTE CA 176
13.5 NR(new radio) 204
13.6 Measurement configuration for SAR 250
13.7 SAR result 252
13.8 Repeated measurement 280
14 WLAN additional testing for simultaneous measurement 281
14.1 KDB 248227 D01 (SAR Guidance for 802.11(Wi-Fi) Transmitters): 281
15 Simultaneous transmission SAR test exclusion considerations 283
15.1 Sum and SPLSR 283

15.2 Total exposure ratio (TER) 333
15.3 TER calculation with WiFi 2.4 GHz and 5 GHz + WWAN (mmW) 334
15.4 TER calculation with 6E + WWAN (Sub6) and WWAN (mmW) 335
15.5 Conclusion 336
16 Test instrument 337
16.1 Test system 340
17 Appendixes 341
18 Revision History 342

Table 10-1 Plimit 30
Table 11-1 summary of distance 32
Table 11-2 For full power exemption FCC 33
Table 11-3 For redution power exemption FCC 33
Table 12-1 standard parameters on the KDB 865664D01 34
Table 12-2 Directric Property Measurements Result: 35

1 Introduction

This device uses Qualcomm® Smart Transmit feature These modem(s) is enabled in Qualcomm® Smart Transmit Feature to control and manage transmitting power in real time and to ensure at all times the averaged RF exposure is in compliance with FCC/ISED requirements

This report (part 1) demonstrates that Qualcomm® Reference Design (QRD) complies with FCC/ISED RF exposure limits at these maximum time averaged power limits.

Note: WLAN operations are not enabled with Smart Transmit.

2 Customer information

Company Name	Panasonic Corporation of North America
Address	Two Riverfront Plaza, 9th Floor Newark, NEW JERSEY, 07102-5940, USA
Telephone Number	+1-201-348-7760
Contact Person	Ben Botros

*Remarks:
Panasonic Connect Co., Ltd. is on behalf of the applicant: Panasonic Corporation of North America (Company incorporated abroad).

The information provided from the customer is as follows;
- Customer, Description of EUT, Model No. FCC ID on the cover and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 2: Customer information
- SECTION 3: Equipment under test (EUT) other than the Receipt Date
- SECTION 10: Tune-up tolerance information and software information

* The laboratory is exempted from liability of any test results affected from the above information in section 3.

3 Equipment under test (EUT)

3.1 Identification of EUT

Description	Radio Module
Model Number	WW21A
Serial number	2CTSA00742 (1.75 GHz and 650 MHz band) 2CTSA00747 (Above 2 GHz) 2CTSA00763 (Other than the above) 2CTSA00735 (DLCA Power measurement) 2CTSA00764 (WLAN)
Rating	DC 3.0 to 3.6 V
Condition	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	No Modification by the test lab.
Receipt Date	June 13, 2022
Test Date	June 21, 2022 to October 31, 2022

<Information of Host device>

Type	Personal Computer FZ-G2 Intel Core i7-1185G7 (1.1 GHz Max 4.9 GHz) 10.1 inch LCD (1920 x 1200)

3.2 Product description

Wireless technologies	Dup.	Band		Mode
WCDMA	FDD	2		UMTS Rel. 99 (Data) HSDPA (Rel. 5)
	FDD	4		HSUPA (Rel. 6), HSPA+ (Rel. 7), DC-HSDPA (Rel. 8)
	FDD	5		
LTE *B42: not used in US (FCC) *B48: not used in Canada(ISED)	FDD	2		QPSK, 16QAM, 64AQM, 256QAM Downlink MIMO Support: Yes(2x2, 4x4) Supported band : B2, B4, B7, B25, B38, B41, B42, B48, B66 Uplink MIMO Support: No Uplink transmission is limited to a single output stream.
	FDD	4		
	FDD	5		
	FDD	7		
	FDD	12		
	FDD	13		
	FDD	14		
	FDD	17		
	FDD	25		
	FDD	26		
	FDD (Rx only)	29		
	TDD	38		
	TDD	41		
	TDD	42		
	TDD (Rx only)	46		
	TDD	48		
	FDD	66		
	FDD	71		
LTE CA	Downlink			Uplink *B42: not used in US (FCC) / B48: not used in Canada (ISED)
	Maximum 7 carriers			Maximum 2 carriers Supported combination: <Inrta-band contiguous> 7C, 41C, 42C <Inter-band> not supported
5G NR (FR1) *n78 is not used in US (FCC)	FDD	15 kHz	n2	Pi/2 BPSK (DFT-s-OFDM), QPSK (CP-OFDM/DFT-s-OFDM), 16QAM (CP-OFDM/DFT-s-OFDM), 64QAM (CP-OFDM/DFT-s-OFDM), 256QAM (CP-OFDM/DFT-s-OFDM) Downlink MIMO Support: Yes(2x2, 4x4) Supported band : n2, n41, n66, n77, n78 Uplink MIMO Support: No Uplink transmission is limited to a single output stream.
	FDD	15 kHz	n5	
	TDD	30 kHz	n41	
	FDD	15 kHz	n66	
	FDD	15 kHz	n71	
	TDD	30 kHz	n77	
	TDD	30 kHz	n78	
	-	-	-	
	-	-	-	
EN-DC (LTE-FR1 Sub6) (NSA mode only)	Supported combination			
	LTE Anchor Bands for NR band n2			LTE Band 5/12/13/14/48
	LTE Anchor Bands for NR band n5			LTE Band 2/7/66
	LTE Anchor Bands for NR band n41			LTE Band 2/4/25/26/41/66
	LTE Anchor Bands for NR band n66			LTE Band 5/12/13/14/48/71
	LTE Anchor Bands for NR band n71			LTE Band 2/7/66
	LTE Anchor Bands for NR band n77			LTE Band 2/5/12/13/14/41/66
	LTE Anchor Bands for NR band n78*			LTE Band 2/4/5/7/12/13/38/41/66/71 *n78: not used in US (FCC)

Downlink CA Combination is listed in section 13.

Wireless module (Tested inside of Panasonic Tablet PC FZ-G2)
Model: WL22A (FCC ID ACJ9TGWL22A / ISED certification number 216H-CFWL22A)

Wireless technologies	Dup.	Band		Mode
WLAN	TDD	2.4 GHz	2412 - 2472 for US 2412 - 2462 for Canada	802.11b 802.11g 802.11n(20, 40)
	TDD	5 GHz	5180 - 5240 5260 - 5320 5500 - 5720 5745 - 5825	802.11a 802.11n(20, 40) 802.11ac(20, 40, 80, 160) 802.11ax(20, 40, 80, 160)
	TDD	6 GHz	5955 - 6415 6435 - 6515 6535 - 6875 6875 - 7115	802.11ax(20, 40, 80, 160)
Bluetooth	TDD	2.4 GHz	2402 - 2480	BR/EDR/LE

4 Time averaging for SAR and PD

The Qualcomm® Smart Transmit algorithm controls and manages the instantaneous Tx power to maintain the time-averaged Tx power (in turn, time-averaged RF exposure) is in compliance with regulatory limits.

5 General LTE/NR SAR Test and Reporting Considerations

Frequency range, Channel Bandwidth, Numbers and Frequencies

Band		Frequency range: 1850 - 1910 MHz					
		Channel Bandwidth[MHz]					
2		20	15	10	5	3	1.4
Low	Ch	18700	18675	18650	18625	18625	18607
	Freq[MHz]	1860	1857.5	1855	1852.5	18625	1850.7
Mid	Ch	18900	18900	18900	18900	18900	18900
	Freq[MHz]	1880	1880	1880	1880	1880	1880
High	Ch	19100	19125	19150	19175	19185	19193
	Freq[MHz]	1900	1902.5	1905	1907.5	1908.5	1909.3
Band		Frequency range: 1710 - 1755 MHz					
		Channel Bandwidth[MHz]					
4		20	15	10	5	3	1.4
Low	Ch	20050	20025	20000	19975	19965	19957
	Freq[MHz]	1720	1717.5	1715	1712.5	1711.5	1710.7
Mid	Ch	20175	20175	20175	20175	20175	20175
	Freq[MHz]	1732.5	1732.5	1732.5	1732.5	1732.5	1732.5
High	Ch	20300	20325	20350	20375	20385	20393
	Freq[MHz]	1745	1747.5	1750	1752.5	1753.5	1754.3
Band		Frequency range: 824 - 849 MHz					
		Channel Bandwidth[MHz]					
5				10 *1	5	3	1.4
Low	Ch			20450	20425	20415	20407
	Freq[MHz]			829	826.5	825.5	824.7
Mid	Ch			20525	20525	20525	20525
	Freq[MHz]			836.5	836.5	836.5	836.5
High	Ch			20600	20625	20635	20643
	Freq[MHz]			844	846.5	847.5	848.3
Band		Frequency range: 2500 - 2570 MHz					
		Channel Bandwidth[MHz]					
7		20	15	10	5		
Low	Ch	20850	20825	20800	20775		
	Freq[MHz]	2510	2507.5	2505	2502.5		
Mid	Ch	21100	21100	21100	21100		
	Freq[MHz]	2535	2535	2535	2535		
High	Ch	21350	21375	21400	21425		
	Freq[MHz]	2560	2562.5	2565	2567.5		
Band		Frequency range: 699 - 716 MHz					
		Channel Bandwidth[MHz]					
12				10 *1	5	3	1.4
Low	Ch			23060	23035	23025	23017
	Freq[MHz]			704	701.5	700.5	699.7
Mid	Ch			23095	23095	23095	23095
	Freq[MHz]			707.5	707.5	707.5	707.5
High	Ch			23130	23155	23165	23173
	Freq[MHz]			711	713.5	714.5	715.3

Band		Frequency range: 777 - 787 MHz					
		Channel Bandwidth[MHz]					
13				10 *1	5 *1		
Low	Ch				23205		
	Freq[MHz]				779.5		
Mid	Ch			23230	23230		
	Freq[MHz]			782	782		
High	Ch				23255		
	Freq[MHz]				784.5		
Band		Frequency range: 788 - 798 MHz					
		Channel Bandwidth[MHz]					
14				10 *1	5 *1		
Low	Ch				23305		
	Freq[MHz]				790.5		
Mid	Ch			23330	23330		
	Freq[MHz]			793	793		
High	Ch				23355		
	Freq[MHz]				795.5		
Band		Frequency range: 704 - 716 MHz					
		Channel Bandwidth[MHz]					
17		20	15	10 *1	5 *1	3	1.4
Low	Ch			23780	23755		
	Freq[MHz]			709	706.5		
Mid	Ch			23790	23790		
	Freq[MHz]			710	710		
High	Ch			23800	23825		
	Freq[MHz]			711	713.5		
Band		Frequency range: 1850 - 1915 MHz					
		Channel Bandwidth[MHz]					
25		20	15	10	5	3	1.4
Low	Ch	26140	26115	26090	26065	26055	26047
	Freq[MHz]	1860	1857.5	1855	1882.5	1851.5	1850.7
Mid	Ch	26365	26365	26365	26365	26365	26365
	Freq[MHz]	1882.5	1882.5	1882.5	1882.5	1882.5	1882.5
High	Ch	26590	26615	26640	26665	26675	26683
	Freq[MHz]	1905	1907.5	1910	1912.5	1913.5	1914.3
Band		Frequency range: 814 - 849 MHz					
		Channel Bandwidth[MHz]					
26			15 *1	10	5	3	1.4
Low	Ch		26765	26740	26715	26705	26697
	Freq[MHz]		821.5	819	816.5	815.5	814.7
Mid	Ch		26865	26865	26865	26865	26865
	Freq[MHz]		831.5	831.5	831.5	831.5	831.5
High	Ch		26965	26990	27015	27025	27033
	Freq[MHz]		841.5	844	846.5	847.5	848.3

Band		Frequency range: 2570 - 2620 MHz					
		Channel Bandwidth[MHz]					
38		20	15	10	5		
Low	Ch	37850	37825	37800	37775		
	Freq[MHz]	2580	2577.5	2575	2572.5		
Mid	Ch	38000	38000	38000	38000		
	Freq[MHz]	2595	2595	2595	2595		
High	Ch	38150	38175	38200	38225		
	Freq[MHz]	2610	2612.5	2615	2617.5		

Band FCC		Frequency range: 2496 - 2690 MHz					
		Channel Bandwidth[MHz]					
41		20	15	10	5		
Low	Ch	39750	39725	39700	39675		
	Freq[MHz]	2506	2503.5	2501	2498.5		
Low-Mid	Ch	40185	40173	40160	40148		
	Freq[MHz]	2549.5	2548.3	2547	2545.8		
Mid	Ch	40620	40620	40620	40620		
	Freq[MHz]	2593	2593	2593	2593		
Mid-High	Ch	41055	41068	41080	41093		
	Freq[MHz]	2636.5	2637.8	2639	2640.3		
High	Ch	41490	41515	41540	41565		
	Freq[MHz]	2680	2682.5	2685	2687.5		

Band ISED		Frequency range: 2500 - 2690 MHz					
		Channel Bandwidth[MHz]					
41		20	15	10	5		
Low	Ch	39790	39765	39740	39715		
	Freq[MHz]	2510	2507.5	2505	2502.5		
Low-Mid	Ch	40185	40173	40160	40148		
	Freq[MHz]	2549.5	2548.3	2547	2545.8		
Mid	Ch	40620	40620	40620	40620		
	Freq[MHz]	2593	2593	2593	2593		
Mid-High	Ch	41055	41068	41080	41093		
	Freq[MHz]	2636.5	2637.8	2639	2640.3		
High	Ch	41490	41515	41540	41565		
	Freq[MHz]	2680	2682.5	2685	2687.5		

Band ISED		Frequency range: 3450 - 3600 MHz					
		Channel Bandwidth[MHz]					
42		20	15	10	5		
Low	Ch	42190	42165	42140	42115		
	Freq[MHz]	3460	3457.5	3455	3452.5		
Low-Mid	Ch	42623	42615	42607	42598		
	Freq[MHz]	3503.3	3502.5	3501.7	3500.8		
Mid-High	Ch	43057	43065	43073	43082		
	Freq[MHz]	3546.7	3547.5	3548.3	3549.2		
High	Ch	43490	43515	43540	43565		
	Freq[MHz]	3590	3592.5	3595	3597.5		
Band FCC		Frequency range: 3550 - 3700 MHz					
		Channel Bandwidth[MHz]					
48		20	15	10	5		
Low	Ch	55340	55315	55290	55265		
	Freq[MHz]	3560	3557.5	3555	3552.5		
Low-Mid	Ch	55773	55765	55757	55748		
	Freq[MHz]	3603.3	3602.5	3601.7	3600.8		
Mid-High	Ch	56207	56215	56223	56232		
	Freq[MHz]	3646.7	3647.5	3648.3	3649.2		
High	Ch	56640	56665	56690	56715		
	Freq[MHz]	3690	3692.5	3695	3697.5		

Band		Frequency range: 1710 - 1780 MHz					
		Channel Bandwidth[MHz]					
66		20	15	10	5	3	1.4
Low	Ch	132072	132047	132022	131997	131987	131979
	Freq[MHz]	1720	1717.5	1715	1712.5	1711.5	1710.7
Mid	Ch	132322	132322	132322	132322	132322	132322
	Freq[MHz]	1745	1745	1745	1745	1745	1745
High	Ch	132572	132597	132622	132647	132657	132665
	Freq[MHz]	1770	1772.5	1775	1777.5	1778.5	1779.3
Band		Frequency range: 663 - 698 MHz					
		Channel Bandwidth[MHz]					
71		20 *1	15 *1	10	5		
Low	Ch	133222	133197	133172	133147		
	Freq[MHz]	673	670.5	668	665.5		
Mid	Ch	133297	133297	133297	133297		
	Freq[MHz]	680.5	680.5	680.5	680.5		
High	Ch	133372	133397	133422	133447		
	Freq[MHz]	688	690.5	693	695.5		

*1 : This bandwidth does not support at least three non-overlapping channels. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 for LTE Devices.

Maximum power reduction (MPR)

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

MPR Built-in by design
The manufacturer MPR values are always within the 3GPP maximum MPR allowance but may not follow the default MPR values. A-MPR (additional MPR) was disabled during SAR testing

Spectrum plots for RB configurations

A properly configured base station simulator was used for the SAR and power measurements;
therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.

5.1 LTE (TDD) Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

LTE TDD Bands support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$	$7680 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$
5	$6592 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-
10	$13168 \cdot T_s$	$13152 \cdot T_s$	$12800 \cdot T_s$	-	-	-

Table 4.2-2: Uplink-downlink configurations & Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.3%
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.3%
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.3%
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.7%
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.7%
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.7%
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.3%

Calculated Duty Cycle = Extended cyclic prefix in uplink * (T_s) * # of S + # of U / period

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = {[(2+0) * 2560] * [1/(15000 * 2048)] * 2 + 6 ms} / 10 ms = 63.3%

Where
D = Downlink subframe
S = Special subframe
U = Uplink subframe
T_s = 1/(15000 x 2048) seconds
X = 0

Note(s):
This device supports uplink-downlink configurations 0-6. The configuration with highest duty cycle was used for SAR Testing: configuration 0 at 63.3% (Power Class 3) and Special Subframe 7 with Extended cyclic prefix in uplink.

5.2 General 5G NR(FR1) SAR Test and Reporting Considerations

Frequency range, Channel Bandwidth, Numbers and Frequencies

Band		Frequency range: 1850 - 1910 MHz												
		Channel Bandwidth[MHz]												
n2		100	90	80	70	60	50	40	30	25	20	15	10	5
Low	Ch										372000	371500	371000	370500
	Freq[MHz]										1860	1857.5	1855	1852.5
Mid	Ch										376000	376000	376000	376000
	Freq[MHz]										1880	1880	1880	1880
High	Ch										380000	380500	381000	381500
	Freq[MHz]										1900	1902.5	1905	1907.5

Band		Frequency range: 824 - 849 MHz												
		Channel Bandwidth[MHz]												
n5		100	90	80	70	60	50	40	30	25	20 *1	15 *1	10 *1	5
Low	Ch										166800	166300	165800	165300
	Freq[MHz]										834	831.5	829	826.5
Mid	Ch										167300	167300	167300	167300
	Freq[MHz]										836.5	836.5	836.5	836.5
High	Ch										167800	168300	168800	169300
	Freq[MHz]										839	841.5	844	846.5

Band FCC		Frequency range: 2496 - 2690 MHz												
		Channel Bandwidth[MHz]												
n41		100 *1	90 *1	80 *1	70	60 *2	50 *2	40 *2	30	25	20	15	10	5
Low	Ch	509200	508200	507200		505200	504200	503200			501200			
	Freq[MHz]	2546	2541	2536		2526	2521	2516			2506			
Low-Mid	Ch	513900	513400	512900		511900	511400	510900			509900			
	Freq[MHz]	2569.5	2567	2564.5		2559.5	2557	2554.5			2549.5			
Mid	Ch	518600	518600	518600		518600	518600	518600			518600			
	Freq[MHz]	2593	2593	2593		2593	2593	2593			2593			
Mid-High	Ch	523300	523800	524300		525300	525800	526300			527300			
	Freq[MHz]	2616.5	2619	2621.5		2626.5	2629	2631.5			2636.5			
High	Ch	528000	529000	530000		532000	533000	534000			536000			
	Freq[MHz]	2640	2645	2650		2660	2665	2670			2680			

Band ISED		Frequency range: 2500 - 2690 MHz												
		Channel Bandwidth[MHz]												
n41		100 *1	90 *1	80 *1	70	60 *2	50 *2	40 *2	30	25	20	15	10	5
Low	Ch	510000	509000	508000		506000	505000	504000			502000			
	Freq[MHz]	2550	2545	2540		2530	2525	2520			2510			
Low-Mid	Ch	513900	513400	512900		511900	511400	510900			509900			
	Freq[MHz]	2569.5	2567	2564.5		2559.5	2557	2554.5			2549.5			
Mid	Ch	518600	518600	518600		518600	518600	518600			518600			
	Freq[MHz]	2593	2593	2593		2593	2593	2593			2593			
Mid-High	Ch	523300	523800	524300		525300	525800	526300			527300			
	Freq[MHz]	2616.5	2619	2621.5		2626.5	2629	2631.5			2636.5			
High	Ch	528000	529000	530000		532000	533000	534000			536000			
	Freq[MHz]	2640	2645	2650		2660	2665	2670			2680			

Band		Frequency range: 1710 - 1780 MHz												
		Channel Bandwidth[MHz]												
n66		100	90	80	70	60	50	40	30	25	20	15	10	5
Low	Ch										344000	343500	343000	342500
	Freq[MHz]										1720	1717.5	1715	1712.5
Mid	Ch										349000	349000	349000	349000
	Freq[MHz]										1745	1745	1745	1745
High	Ch										354000	354500	355000	355500
	Freq[MHz]										1770	1772.5	1775	1777.5
Band		Frequency range: 663 - 698 MHz												
		Channel Bandwidth[MHz]												
n71		100	90	80	70	60	50	40	30	25	20 *1	15 *1	10	5
Low	Ch										134600	134100	133600	133100
	Freq[MHz]										673	670.5	668	665.5
Mid	Ch										136100	136100	136100	136100
	Freq[MHz]										680.5	680.5	680.5	680.5
High	Ch										137600	138100	138600	139100
	Freq[MHz]										688	690.5	693	695.5
Band ISED		Frequency rang 3450 - 3650 MHz												
		Channel Bandwidth[MHz]												
n77/n78		100 *1	90 *1	80 *1	70	60	50	40	30	25	20	15	10	5
Low	Ch	633333	633000	632666		632000	631668	631334			630668			
	Freq[MHz]	3500	3495	3490		3480	3475	3470			3460			
Low-Mid	Ch						635000	634900			633666			
	Freq[MHz]						3525	3523.5			3505			
Mid	Ch	636666	636666	636666		636666					636666			
	Freq[MHz]	3550	3550	3550		3550					3550			
Mid-High	Ch						638334	638440			639666			
	Freq[MHz]						3575	3576.6			3595			
High	Ch	640000	640333	640666		641332	641668	642000			642666			
	Freq[MHz]	3600	3605	3610		3620	3625	3630			3640			
Band FCC		Frequency rang 3450 - 3550 MHz												
		Channel Bandwidth[MHz]												
n77 block A		100 *1	90 *1	80 *1	70	60 *1	50	40	30	25	20	15	10	5
Low	Ch	636666	633000	632666		632000	631666	631333			630666			
	Freq[MHz]	3550	3495	3490		3480	3475	3470			3460			
Mid	Ch	633332	633332	633332		633332	633332	633332			633333			
	Freq[MHz]	3500	3500	3500		3500	3500	3500			3500			
High	Ch	636666	633666	634000		634666	635000	635333			635998			
	Freq[MHz]	3550	3505	3510		3520	3525	3530			3540			
Band FCC		Frequency rang 3700 - 3980 MHz												
		Channel Bandwidth[MHz]												
n77 block C		100 *1	90	80	70	60	50	40	30	25	20	15	10	5
Low	Ch	650000	649666	649333		648666	648333	648000			647333			
	Freq[MHz]	3750	3745	3740		3730	3725	3720			3710			
Low-Mid	Ch	652998	652832	652666		652332	652166	652843			651666			
	Freq[MHz]	3795	3792.5	3790		3785	3782.5	3780			3775			
Mid	Ch	656000	656000	656000		656000	656000	656000			656000			
	Freq[MHz]	3840	3840	3840		3840	3840	3840			3840			
Mid-High	Ch	658998	659166	659332		659666	659832	659998			660333			
	Freq[MHz]	3885	3887.5	3890		3895	3897.5	3900			3905			
High	Ch	662000	662333	662666		663333	663666	664000			664666			
	Freq[MHz]	3930	3935	3940		3950	3955	3960			3970			

*: SAR test for NR bands and LTE anchor Bands were performed separately due to limitations in SAR probe calibration factors. And, due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
*1: This bandwidth does not support at least three non-overlapping channels. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 for LTE Devices.
*2: For this channel bandwidth, available non-over-lapping channels were tested.

Sub-Carrier Spacing (SCS)

n2	n5	n66	n71	n41	n77	n78
15 kHz				30 kHz		

A-MPR(Additional MPR) disabled for SAR testing

Yes

EN-DC Carrier Aggregation Possible Combinations

See section 3.2 Product description

5.3 NR (FDD/TDD) Considerations

Factory Test Mode (FTM) is used for SAR testing, 100 % duty.

5.4 WWAN Antenna configuration

The WWAN transmitter operates independently of the WLAN/BT wireless transmitter in the device, and it only supports data transmission.

The 4G LTE antenna configuration consists of WWAN-main TX/RX antenna and WWAN-aux – 3rd RX only antennas.

The 5G NR(FR1) antenna configuration consists of
- WWAN-main antenna: Tx except n41, and Rx
- WWAN-4th antenna: Tx for n41 only, and Rx
- WWAN-aux – 3rd antennas: Rx only

WWAN Antennas	4G LTE		5G NR(FR1)	
	Tx	Rx	Tx	Rx
WWAN-Main	All bands	All bands	All bands except n41	All bands
WWAN-aux	-	All bands	-	All bands
WWAN-3rd	-	All bands	-	All bands
WWAN-4th	-	All bands	n41 only	All bands

5.5 Time averaging for SAR and PD

The Qualcomm® Smart Transmit algorithm controls and manages the instantaneous Tx power to maintain the time-averaged Tx power (in turn, time-averaged RF exposure) is in compliance with regulatory limits.

This device uses Qualcomm® Smart Transmit feature and cannot operate without RF exposure characterization at the device level, beforehand. The parameters obtained from SAR and PD characterization (char), if any, is used as input for Smart Transmit. Both SAR char and PD char will be entered via the Embedded File System (EFS) to enable the Smart Transmit feature.

6 Test standard information

6.1 Test Specification

	Title	
☒	FCC47CFR 2.1093	RF Exposure Procedures and Equipment Authorization Policies for Portable Devices

6.2 Published RF exposure KDB procedures

	Name of documents	Title
☒	KDB447498D01(v06)	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices
☐	KDB447498D04	Interim General RF Exposure Guidance v01
☐	KDB447498D02(v02r01)	SAR Measurement Procedures for USB Dongle Transmitters
☐	KDB648474D04(v01r04)	SAR Evaluation Considerations for Wireless Handsets
☒	KDB941225D01(v03r01)	3G SAR Measurement Procedures
☒	KDB941225D05(v02r05)	SAR Evaluation Considerations for LTE Devices
☐	KDB941225D06(v02r01)	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
☐	KDB941225D07(v01r02)	SAR Evaluation Procedures for UMPC Mini-Tablet Devices
☒	KDB616217D04(v01r02)	SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers
☒	KDB865664D01(v01r04)	SAR Measurement Requirements for 100MHz to 6 GHz
☒	KDB248227D01(v02r02)	SAR Guidance for IEEE 802.11 (Wi-Fi) transmitters

6.3 SAR Work Procedures Procedure

	Name of documents	Title or details
☒	C/N: Work Instructions-ULID-003598 Name:13-EM-W0429	UL Japan, Inc.'s SAR Work Procedures Procedure
☒	C/N: Work Instructions-ULID-003599 Name:13-EM-W0430	UL Japan, Inc.'s SAR Work Procedures Procedure
☒	C/N: Work Instructions-ULID-003619 Name: 13-EM-W0863	UL Japan, Inc.'s PD Work Procedures Procedure
☒	IEEE Std 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorptions Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.
☒	IEC TR 63170 Edition 1.0	Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz

6.4 Additions or deviations to standard

A non-standard configuration was used for SAR testing based on guidance from the FCC.
The operational description contains additional information.
KDB inquiry test method was applied for Uplink CA.

Other than above, no addition, exclusion nor deviation has been made from the standard.

6.5 References

SPEAG. (August 2018). *5G Module V1.2 Application Note: 5G Compliance Testing.*
SPEAG. (n.d.). *SPEAG uncertainty document (AN 15-7/AN19-17).*

6.6 Limit

6.6.1 Below 6 GHz

(A) Limits for Occupational/Controlled Exposure (W/kg)

Spatial Average (averaged over the whole body)	Spatial Peak (averaged over any 1 g of tissue)	Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)
0.4	8.0	20.0

(B) Limits for General population/Uncontrolled Exposure (W/kg)

Spatial Average (averaged over the whole body	Spatial Peak (averaged over any 1 g of tissue)	Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)
0.08	1.6	4.0

Occupational/Controlled Environments: are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. because of employment or occupation).

General Population/Uncontrolled Environments: are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

1.6 W / kg limit is applied

6.6.2 Above 6 GHz

Frequency Range [MHz]	Power Density [mW/cm^2]	Average Time [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1	30

Note: 1.0 mW/cm^2 is 10 W/m^2

7 Location

UL Japan, Inc. Ise EMC Lab.
Shielded room for SAR testings
A2LA Certificate Number: 5107.02 / FCC Test Firm Registration Number: 884919
ISED SAR Lab Company Number: 2973C / CAB identifier: JP0002
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone: +81-596-24-8999

8 Definitions, symbols, and abbreviations

8.1 Definitions

SAR_design_target : The SAR_design_target shall be less than regulatory SAR limit (i.e., 1 gSAR limit for FCC) after accounting for all device design related uncertainties.

SAR_design_target_extremity : SAR_design_target for limbs

Tx_power_at_SAR_design_target : Transmit level that matches SAR_design_target (Plimit in dBm)

Δmin : housing material influence

PD_design_target : The design target for PD compliance. It should be less than regulatory power density limit to account for all device design related uncertainties

input.power.limit : For a PD characterized wireless device, the input power level at antenna port(s) for each beam corresponding to PD_design_target.

PD char : the table that contains input.power.limit fed to antenna port(s) for all supported beams.

N beams : The mmW device supports total N beams, where M out of N are single beams and the rest of (N-M) are beam pairs (where 2 single beams are excited at the same time).

power density (PD) or S_{av} : energy per unit time and unit area crossing a surface of area A characterized by the normal unit vector $\hat{\mathbf{n}}$ and averaging time.

$$S_{av} = \frac{1}{AT}\int\int(\mathbf{E}\times\mathbf{H})\cdot\hat{\boldsymbol{n}}\,dA\,dT$$

Specific Absorption Rate (SAR) : The time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ), as shown in the following equation:

$$\mathrm{SAR} = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dV}\right)$$

Reported SAR : Measured SAR is scaled to the maximum tune-up tolerance limit and the maximum duty by the following formulas.

$$Reported\ SAR[w/kg] = Measured\ SAR\ [w/kg] \times scale\ factor\ for\ power \times Scaled\ factor\ for\ duty(if\ needed)$$

Where

$$Scaled\ factor\ for\ power = \frac{Maximum\ tune\ up\ tolerance\ limit\ [mW]}{Measured\ power\ [mW]}$$

And

$$Scaled\ factor\ for\ duty = \frac{1}{Duty}$$

Maximum Tune-up tolerance limit : Tolerance power specified by customer (Pmax or Plimit)

8.2 Symbols

Symbol	Quantity	Unit	Dimensions
E	Electric field	volt per meter	V / m
f	Frequency	hertz	Hz
H	Magnetic field	ampere per meter	A / m
λ	Wavelength	meter	m
S	Local power density	watt per square meter	W / m^2
PD or S_{av}	Spatial-average power density	watt per square meter	W / m^2 (mW / cm^2)
SAR	Specific Absorption Rate	watt per square meter	W / kg

8.3 Abbreviations

☐	NOT applicable.
☒	applicable.
A2LA	The American Association for Laboratory Accreditation
AC	Alternating Current
AFH	Adaptive Frequency Hopping
AM	Amplitude Modulation
Amp, AMP	Amplifier
ANSI	American National Standards Institute
Ant, ANT	Antenna
AP	Access Point
Atten., ATT	Attenuator
AV	Average
BPSK	Binary Phase-Shift Keying
BR	Bluetooth Basic Rate
BS	base station
BT	Bluetooth
BT LE	Bluetooth Low Energy
BW	BandWidth
Cal Int	Calibration Interval
CCK	Complementary Code Keying
Ch., CH	Channel
CISPR	Comite International Special des Perturbations Radioelectriques
CW	Continuous Wave
DBPSK	Differential BPSK
DC	Direct Current
DFS	Dynamic Frequency Selection
DQPSK	Differential QPSK
DSI	Device state index
DSSS	Direct Sequence Spread Spectrum
DUT	Device under test
EDR	Enhanced Data Rate
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power
EMC	ElectroMagnetic Compatibility
EMI	ElectroMagnetic Interference
EN	European Norm
ERP, e.r.p.	Effective Radiated Power
EU	European Union
EUT	Equipment Under Test
Fac.	Factor
FCC	Federal Communications Commission
FHSS	Frequency Hopping Spread Spectrum
FM	Frequency Modulation
Freq.	Frequency
GFSK	Gaussian Frequency-Shift Keying
GNSS	Global Navigation Satellite System
EN-DC	E-UTRAN New Radio - Dual Connectivity
GPS	Global Positioning System
Hori.	Horizontal
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IF	Intermediate Frequency
ILAC	International Laboratory Accreditation Conference
ISED	Innovation, Science and Economic Development Canada
ISO	International Organization for Standardization
KDB	Knowledge data base from Federal communication committee
LAN	Local Area Network
LIMS	Laboratory Information Management System
MCS	Modulation and Coding Scheme
MRA	Mutual Recognition Arrangement
nG	n generation (e.g. 3G,4G and 5G)
NIST	National Institute of Standards and Technology
NR	New radio
OBW	Occupied Band Width
OFDM	Orthogonal Frequency Division Multiplexing
P/M	Power meter
PCB	Printed Circuit Board
PD	Power density
PER	Packet Error Rate
PHY	Physical Layer
PK	Peak
PN	Pseudo random Noise
PRBS	Pseudo-Random Bit Sequence
PSD	Power Spectral Density
QAM	Quadrature Amplitude Modulation
QP	Quasi-Peak
QPSK	Quadri-Phase Shift Keying
RBW	Resolution Band Width
RDS	Radio Data System
RE	Radio Equipment
RF	Radio Frequency
RMS	Root Mean Square
Rx	Receiving
SA, S/A	Spectrum Analyzer
SG	Signal Generator
S_n	Surface number
SVSWR	Site-Voltage Standing Wave Ratio
TER	Total exposure ratio
TR	Test Receiver
Tx	Transmitting
VBW	Video BandWidth
Vert.	Vertical
WLAN	Wireless LAN

9 Test result

9.1 verdict

Complied
Highest values at each band are listed next section.

9.2 Stand-alone SAR result

RAT	Band	DSI	Test Position	Dist. (mm)	Mod	Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up limit	Power (dBm) Meas.	1-g SAR Meas.	(W/kg) Scaled
WCDMA	2	0	Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	9400	1880.0	NA	NA	23.2	23.1	0.779	0.806
WCDMA	2	1	Edge4	0	Rel 99 RMC 12.2 kbps	9538	1907.6	NA	NA	17.7	16.1	0.639	0.915
WCDMA	4	0	Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	1312	1712.4	NA	NA	22.8	21.6	0.779	1.027
WCDMA	4	1	Rear tilt (Edge4 side)	0	Rel 99 RMC 12.2 kbps	1312	1712.4	NA	NA	18.6	17.4	***0.811***	***1.074***
WCDMA	5	0	Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	4183	836.6	NA	NA	23.1	22.2	0.655	0.815
WCDMA	5	1	Edge4	0	Rel 99 RMC 12.2 kbps	4233	846.6	NA	NA	17.2	15.8	0.612	0.851
LTE	2	0	Rear tilt(Edge1 side)	0	QPSK	18700	1860	1	0	23.5	22.8	0.751	0.891
LTE	2	1	Edge4	0	QPSK	18700	1860	100	0	17.5	16.4	0.672	0.864
LTE	4	0	Rear tilt (Edge4 side)	9	QPSK	20175	1732.5	100	0	22.5	21.3	0.696	0.920
LTE	4	1	Edge4	0	QPSK	20175	1732.5	100	0	18.0	16.9	0.712	0.917
LTE	5	0	Rear tilt(Edge1 side)	0	QPSK	20525	836.5	1	0	24.0	22.8	0.562	0.743
LTE	5	1	Edge4	0	QPSK	20525	836.5	50	0	17.6	16.3	0.621	0.832
LTE	7	0	Rear tilt(Edge1 side)	0	QPSK	20850	2510	50	50	23.0	21.9	0.660	0.854
LTE	7	1	Edge4	0	QPSK	20850	2510	50	50	17.8	16.6	0.715	0.949
LTE	12	0	Rear tilt(Edge1 side)	0	QPSK	23095	707.5	1	49	24.0	22.7	0.309	0.416
LTE	12	1	Edge4	0	QPSK	23095	707.5	25	12	18.9	18.3	0.665	0.760
LTE	13	0	Rear tilt(Edge1 side)	0	QPSK	23230	782	1	0	24.0	22.5	0.459	0.656
LTE	13	1	Edge4	0	QPSK	23230	782	25	12	18.1	16.6	0.607	0.861
LTE	14	0	Rear tilt(Edge1 side)	0	QPSK	23330	793	1	0	24.0	22.4	0.512	0.740
LTE	14	1	Edge4	0	QPSK	23330	793	25	12	18.1	16.5	0.663	0.963
LTE	17	0	Rear tilt(Edge1 side)	0	QPSK	23790	710	1	49	24.0	22.9	0.314	0.409
LTE	17	1	Edge4	0	QPSK	23790	710	25	25	19.2	17.7	0.653	0.925
LTE	25	0	Rear tilt(Edge1 side)	0	QPSK	26140	1860	1	0	23.6	22.8	0.730	0.882
LTE	25	1	Edge4	0	QPSK	26140	1860	100	0	17.6	16.3	0.659	0.885
LTE	26	0	Rear tilt (Edge4 side)	9	QPSK	26865	831.5	1	0	23.3	22.1	0.647	0.857
LTE	26	1	Edge4	0	QPSK	26865	831.5	75	0	17.6	16.3	0.638	0.853
LTE	38	0	Rear tilt(Edge1 side)	0	QPSK	38000	2595	1	49	24.0	22.6	0.417	0.578
LTE	38	1	Rear tilt (Edge4 side)	0	QPSK	38000	2595	100	0	21.5	20.1	0.671	0.928
LTE	41	0	Rear tilt (Edge4 side)	9	QPSK	40620	2593	1	0	24.0	22.8	0.491	0.650
LTE	41	1	Edge4	0	QPSK	40185	2549.5	1	99	20.1	18.8	0.752	1.014
LTE	48	0	Edge4	19	QPSK	55340	3560	1	99	10.9	9.8	0.051	0.066
LTE	48	1	Edge4	0	QPSK	55340	3560	50	50	10.9	9.8	0.415	0.531
LTE	66	0	Rear tilt(Edge4 side)	9	QPSK	132072	1720	50	24	22.5	21.4	0.731	0.937
LTE	66	1	Rear tilt(Edge4 side)	0	QPSK	132072	1720	50	24	18.0	17.0	0.756	0.954
LTE	71	0	Rear tilt(Edge4 side)	9	QPSK	133297	680.5	1	99	24.0	22.6	0.461	0.633
LTE	71	1	Edge 4	0	QPSK	133297	680.5	50	24	19.1	17.5	0.570	0.828
NR	n2	0	Rear tilt(Edge1 side)	0	BPSK	372000	1860	100	0	23.4	22.3	0.637	0.826
NR	n2	1	Edge 4	0	BPSK	380000	1900	1	1	18.4	17.3	0.800	1.042
NR	n5	0	Rear tilt(Edge4 side)	9	BPSK	167300	836.5	1	1	24.2	23.2	0.667	0.838
NR	n5	1	Edge 4	0	BPSK	167300	836.5	100	0	18.0	16.7	0.673	0.911
NR	n41	0	Rear tilt(Edge2 side)	9	BPSK	518600	2593	135	69	21.5	20.7	0.686	0.825
NR	n41	1	Edge 2	0	BPSK	518600	2593	135	69	12.2	11.4	0.603	0.725
NR	n66	0	Rear tilt(Edge4 side)	9	BPSK	349000	1745	50	0	21.8	21.0	0.685	0.822
NR	n66	1	Edge 4	0	BPSK	354000	1770	50	28	18.0	17.3	0.726	0.860
NR	n71	0	Rear tilt(Edge1 side)	0	BPSK	136100	680.5	50	28	24.5	22.5	0.418	0.658
NR	n71	1	Edge 4	0	BPSK	136100	680.5	100	0	19.4	18.5	0.703	0.869
NR	n77BlcA	0	Edge 4	19	BPSK	633332	3499.98	135	0	20.1	19.0	0.585	0.748
NR	n77BlcA	1	Edge 4	0	BPSK	633332	3499.98	135	69	9.0	8.1	0.538	0.668
NR	n77BlcC	0	Edge 4	19	BPSK	656000	3840	135	138	20.1	19.2	0.722	0.890
NR	n77BlcC	1	Edge 4	0	BPSK	656000	3840	1	271	9.0	8.3	0.688	0.814

The sample used for the SAR is not more than 2 dB lower than the maximum tune-up tolerance limit. Measured power is within the tune-up tolerance range.
Measurement SAR is below than the target SAR +1 dB, 0.7 W/kg + 1 dB = 0.881 W/kg

9.3 Simultaneous transmission SAR result

Worst TER: 0.996
Worst SPLSR: 0.031
Simultaneous: 1.579 W/kg
See section 15

9.4 Measurement uncertainty for SAR < 6 GHz

Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std.Unc. (10g)
Measurement System Errors							
Probe Calibration	± 14.0 %	N	2	1	1	±7.0%	±7.0%
Probe Calibration Drift	± 1.7 %	R	√3	1	1	±1.0%	±1.0%
Probe Linearity	± 4.7 %	R	√3	1	1	±2.7%	±2.7%
Broadband Signal	± 2.6 %	R	√3	1	1	±1.5%	±1.5%
Probe Isotropy	± 7.6 %	R	√3	1	1	±4.4%	±4.4%
Data Acquisition	± 0.3 %	N	1	1	1	±0.3%	±0.3%
RF Ambient	± 1.8 %	N	1	1	1	±1.8%	±1.8%
Probe Positioning	± 0.2 %	N	1	0.33	0.33	±0.1%	±0.1%
Data Processing	± 2.3 %	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors							
Conductivity (meas.)DAK	± 10.0 %	N	1	0.78	0.71	±7.8%	±7.1%
Conductivity (temp.)BB	± 3.4 %	R	√3	0.78	0.71	±1.5%	±1.4%
Phantom Permittivity	± 14.0 %	R	√3	0.25	0.25	±2.0%	±2.0%
Distance DUT - TSL	± 2.0 %	N	1	2	2	±4.0%	±4.0%
Device Positioning (+/- 0.5mm)	± 1.0 %	N	1	1	1	±1.0%	±1.0%
Device Holder	± 3.6 %	N	1	1	1	±3.6%	±3.6%
DUT Modulationm	± 2.4 %	R	√3	1	1	±1.4%	±1.4%
Time-average SAR	± 2.6 %	R	√3	1	1	±1.5%	±1.5%
DUT drift	± 2.5 %	N	1	1	1	±2.5%	±2.5%
Val Antenna Unc.val	± 0.0 %	N	1	1	1	±0.0%	±0.0%
Unc. Input Powerval	± 0.0 %	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results							
Deviation to Target	± 1.9 %	N	1	1	0.84	±1.9%	±1.6%
SAR scalingp	± 0.0 %	R	√3	1	1	±0.0%	±0.0%
Combined Std. Uncertainty						±14.1%	±13.7%
Expanded STD Uncertainty (κ =2)						±28.2%	±27.4%

9.5 Measurement uncertainty for PD > 6 GHz

Error Description	Uncert. value (dB)	Probab. Distri.	Div.	(c_i)	Std. Unc. (±dB)	(v_i) v_{eff}
Uncertainty terms dependent on the measurement system						
Calibration	± 0.49	N	1	1	0.49	∞
Probe correction	± 0.00	R	√3	1	0.00	∞
Frequency response (BW <= 1 GHz)	± 0.20	R	√3	1	0.12	∞
Sensor cross coupling	± 0.00	R	√3	1	0.00	∞
Isotropy	± 0.50	R	√3	1	0.29	∞
Linearity	± 0.20	R	√3	1	0.12	∞
Probe scattering	± 0.00	R	√3	1	0.00	∞
Probe positioning o set	± 0.30	R	√3	1	0.17	∞
Probe positioning repeatability	± 0.04	R	√3	1	0.02	∞
Sensor mechanical o set	± 0.00	R	√3	1	0.00	∞
Probe spatial resolution	± 0.00	R	√3	1	0.00	∞
Field impedance dependance	± 0.00	R	√3	1	0.00	∞
Amplitude and phase drift	± 0.00	R	√3	1	0.00	∞
Amplitude and phase noise	± 0.04	R	√3	1	0.02	∞
Measurement area truncation	± 0.00	R	√3	1	0.00	∞
Data acquisition	± 0.03	N	1	1	0.03	∞
Sampling	± 0.00	R	√3	1	0.00	∞
Field reconstruction	± 0.95	R	√3	1	0.55	∞
Forward transformation	± 0.00	R	√3	1	0.00	∞
Power density scaling	-	R	√3	1	-	∞
Spatial averaging	0.10	R	√3	1	0.06	∞
System detection limit	± 0.04	R	√3	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors						
Probe coupling with DUT	± 0.00	R	√3	1	0.00	∞
Modulation response	± 0.40	R	√3	1	0.23	∞
Integration time	± 0.00	R	√3	1	0.00	∞
Response time	± 0.00	R	√3	1	0.00	∞
Device holder influence	± 0.10	R	√3	1	0.06	∞
DUT alignment	± 0.00	R	√3	1	0.00	∞
RF ambient conditions	± 0.04	R	√3	1	0.02	∞
Ambient reflections	± 0.04	R	√3	1	0.02	∞
Immunity / secondary reception	± 0.00	R	√3	1	0.00	∞
Drift of the DUT	± 0.21	R	√3	1	0.12	∞
Combined Std. Uncertainty					0.87	∞
Expanded STD Uncertainty (k=2)					1.74	

10 Software information, Tune up tolerance limit, Plimit and input.power.limit

10.1 Software information

*The power value of the EUT was set for testing as follows (setting value might be different from product specification value);
Software: QRCT version 4.0

*This setting of software is the worst case.
The test was performed with condition that obtained the maximum average power (Burst) in pre-check.
Any conditions under the normal use do not exceed the condition of setting.
In addition, end users cannot change the settings of the output power of the product.

10.2 Tune up tolerance limit and Plimit

The Plimit used in this report are determined and listed in Part 0 report.

If Pmax < Plimit then
Pmax is used for test
Else Plimit is used for test

Device uncertainty is 1.0 dB (k=2) provided from customer.

DSI	*SAR design target*
0 and 1	0.7 W/kg All band excluding force peak (FP) mode, results for FP might be lower than 0.7 W/kg

Table 10-1 Plimit

RAT	Force Peak	Band	Pmax	Plimit(DSI 0)	Plimit (DSI 1)
WCDMA		2	23.5	22.2	16.7
		4	22.7	21.8	17.6
		5	23.5	22.1	16.2
LTE		2	23.0	22.5	16.5
		4	23.0	21.5	17.0
		5	23.0	23.5	16.6
		7	23.0	22.1	16.8
		12	23.0	26.0	17.9
		13	23.0	23.7	17.1
		14	23.0	23.5	17.1
		17	23.0	26.1	18.2
		25	23.0	22.6	16.6
		26	23.0	22.3	16.6
		38	23.0	24.6	20.5
		41	23.0	25.5	19.1
	Y	42*	10.8	20.6	10.9
	Y	48*	9.9	21.1	11.3
		66	23.0	21.5	17.0
		71	23.0	24.4	18.1
NR		n2	23.5	22.4	17.4
		n5	23.5	23.2	17.0
		n41	20.5	20.8	11.2
		n66	22.5	20.8	17.0
		n71	23.5	25.3	18.4
		n77(FCC Block A)	23.5	19.1	8.0
		n77(FCC Block C)	23.5	19.1	8.0
	Y	n77(ISED)*	8.2	18.4	8.6
	Y	n78(ISED)*	8.2	18.4	8.6

If $P_{max} < P_{limit}$ then,
The EUT operates at P_{max} for static SAR measurement
else EUT transmit at P_{limit} for static SAR measurement
Below bands Plimit is converted to Pmax by applying above condition.

RAT	Force Peak	Band	Pmax	Plimit(DSI 0)	Plimit (DSI 1)
LTE		5	23.0	**23.0**	16.6
		12	23.0	**23.0**	17.9
		13	23.0	**23.0**	17.1
		14	23.0	**23.0**	17.1
		17	23.0	**23.0**	18.2
		38	23.0	**23.0**	20.5
		41	23.0	**23.0**	19.1
	Y	42*	10.8	**10.8**	**10.8**
	Y	48*	9.9	**9.9**	**9.9**
		71	23.0	**23.0**	18.1
NR		n41	20.5	**20.5**	11.2
		n71	23.5	**23.5**	18.4
	Y	n77(ISED)*	8.2	**8.2**	**8.2**
	Y	n78(ISED)*	8.2	**8.2**	**8.2**

Note(s):

- LTE band 42 is only for ISED, LTE band 48 is only for FCC.
- FCC support only n77, ISED supports both n77/n78
- Plimit(DSI 0 / 1) has a tolerance (±1 dB).
- Tune up limit = Plimit

Additional information

For LTE B48 (FCC)

Uplink Downlink config (UDC)	Special sub frame (SSF)	Burst ave tune up DSI=0/1 [dBm]	P_{max} burst ave [dBm]	Time ave DSI=0/1 [dBm]
0	0 to 7	9.9	9.9	7.5
1	0 to 7	11.3	11.3	7.5
2	0 to 7	14.2	14.2	7.5
3	0 to 7	12.8	12.8	7.5
4	0 to 7	14.4	14.4	7.5
5	0 to 7	17.3	17.3	7.5
6	0 to 7	10.4	10.4	7.5

LTE band 48 doesn't have a same burst tune up for UDC/SSF but has same time average tune up limit.

11 SAR Exposure Conditions (Test Configurations)

11.1 Summary of the distance between antenna and surface of EUT

Table 11-1 summary of distance

Test position	Distance[mm] WWAN-main	Distance[mm] WWAN-4th
Edge1	41.8	28.6
Edge2	268.4	2.7
Edge3	82.1	138.8
Edge4	1.7	268.2
Rear	7.6	7.3
Rear Tilt (Edge4 side)	0.0	0.0
Rear Tilt (Edge2 side)	0.0	0.0
Rear Tilt (Edge1 side)	0.0	0.0

Notes
- Rear Tilt (Edge1/2/4 side), distances are applied 0.0 mm as conservative.
- Details are shown in appendix

11.2 SAR-based Exemption - FCC section 1.1307

Exception condition as per section 1.1307 (b)(3)(i)(B)
the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th}\ (mW)\ = \begin{cases} ERP_{20dm}\ (d/20\ cm)^{x} & d \leq\ 20\ cm \\ ERP_{20cm} & 20\ cm\ <\ d\ \leq\ 40cm \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20dm}\sqrt{f}}\right)\ and\ f\ is\ in\ GHz;$$

And

$$ERP_{20cm}(mW) = \begin{cases} 2040\ f & 0.3\ GHz \leq\ f\ <1.5\ GHz \\ 3060 & 1.5\ GHz\ \leq f \leq 6\ GHz \end{cases}$$

d = the separation distance.

When separation distance is less than 0.5 cm, no exemption condition, so test is required.

As per section 1.1307 (b)(2)
Separation distance is the minimum distance in any direction from any part of a radiating structure and any part of the body of a nearby person.

Radiating structure is an unshielded RF current-carrying conductor that generates an RF reactive near electric or magnetic field and/or radiates an RF electromagnetic wave. It is the component of an RF source that transmits, generates, or reradiates an RF field, such as an antenna, aperture, coil, or plate.

Table 11-2 For full power exemption FCC

Antenna	RAT	Band	Frequency	Output Power or ERP		Separation Distances (mm)								Calculated Threshold Value							
			[MHz]	dBm	mW	Edge1	Edge2	Edge3	Edge4	Rear	Rear Tilt (Edge4 side)	Rear Tilt (Edge2 side)	Rear Tilt (Edge1 side)	Edge1	Edge2	Edge3	Edge4	Rear	Rear Tilt (Edge4 side)	Rear Tilt (Edge2 side)	Rear Tilt (Edge1 side)
#1	WCDMA	B2	1850	23.81	240	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	171 mW -MEASURE-	3060 mW -EXEMPT-	594 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	WCDMA	B4	1710	23.13	206	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	176 mW -MEASURE-	3060 mW -EXEMPT-	603 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	WCDMA	B5	824	23.10	204	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1680.96 mW -EXEMPT-	481 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B2	1850	24.11	258	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	171 mW -MEASURE-	3060 mW -EXEMPT-	594 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B4	1710	22.83	192	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	176 mW -MEASURE-	3060 mW -EXEMPT-	603 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B5	824	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1680.96 mW -EXEMPT-	481 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B7	2500	23.10	204	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	155 mW -MEASURE-	3060 mW -EXEMPT-	560 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B12	699	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	187 mW -MEASURE-	1425.96 mW -EXEMPT-	449 mW -EXEMPT-	<5mm - MEASURE-	20 mW -MEASURE-	<5mm - MEASURE-	1425.96 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B13	777	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1585.08 mW -EXEMPT-	469 mW -EXEMPT-	<5mm - MEASURE-	18 mW -MEASURE-	<5mm - MEASURE-	1585.08 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B14	788	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1607.52 mW -EXEMPT-	472 mW -EXEMPT-	<5mm - MEASURE-	18 mW -MEASURE-	<5mm - MEASURE-	1607.52 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B17	704	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	187 mW -MEASURE-	1436.16 mW -EXEMPT-	450 mW -EXEMPT-	<5mm - MEASURE-	20 mW -MEASURE-	<5mm - MEASURE-	1436.16 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B25	1850	24.21	264	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	171 mW -MEASURE-	3060 mW -EXEMPT-	594 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B26	814	23.30	214	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1660.56 mW -EXEMPT-	479 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1660.56 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B38	2570	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	133 mW -MEASURE-	3060 mW -EXEMPT-	557 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B41	2496	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	155 mW -MEASURE-	3060 mW -EXEMPT-	561 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B48	3550	11.14	13	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	137 mW -EXEMPT-	3060 mW -EXEMPT-	524 mW -EXEMPT-	<5mm - MEASURE-	5 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B66	1710	22.83	192	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	176 mW -MEASURE-	3060 mW -EXEMPT-	603 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	LTE	B71	663	24.00	251	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	187 mW -MEASURE-	1352.52 mW -EXEMPT-	439 mW -EXEMPT-	<5mm - MEASURE-	22 mW -MEASURE-	<5mm - MEASURE-	1352.52 mW -EXEMPT-	<5mm - MEASURE-
#1	NR	n2	1850	24.01	252	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	171 mW -MEASURE-	3060 mW -EXEMPT-	594 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	NR	n5	824	24.20	263	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	186 mW -MEASURE-	1680.96 mW -EXEMPT-	481 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-	<5mm - MEASURE-
#2	NR	n41	2496	21.50	141	28.60	2.70	138.80	268.20	7.30	N/A	0.00	0.00	75 mW -MEASURE-	<5mm - MEASURE-	1525 mW -EXEMPT-	3060 mW -EXEMPT-	6 mW -MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-	<5mm - MEASURE-
#1	NR	n66	1710	22.13	163	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	176 mW -EXEMPT-	3060 mW -EXEMPT-	603 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	NR	n71	663	24.50	282	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	187 mW -MEASURE-	1352.52 mW -EXEMPT-	439 mW -EXEMPT-	<5mm - MEASURE-	22 mW -MEASURE-	<5mm - MEASURE-	1352.52 mW -EXEMPT-	<5mm - MEASURE-
#1	NR	n77	3450	20.56	114	41.80	268.40	82.10	1.70	7.60	0.00	N/A	0.00	139 mW -EXEMPT-	3060 mW -EXEMPT-	527 mW -EXEMPT-	<5mm - MEASURE-	5 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-

Table 11-3 For redution power exemption FCC

Antenna	RAT	Band	Frequency	Output Power or ERP		Separation Distances (mm)					Calculated Threshold Value				
			[MHz]	dBm	mW	Edge2	Edge4	Rear	Rear Tilt (Edge4 side)	Rear Tilt (Edge2 side)	Edge2	Edge4	Rear	Rear Tilt (Edge4 side)	Rear Tilt (Edge2 side)
#1	WCDMA	B2	1850	18.31	68	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	WCDMA	B4	1710	18.93	78	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	WCDMA	B5	824	17.20	52	268.40	1.70	7.60	0.00	N/A	1680.96 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-
#1	LTE	B2	1850	18.11	65	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B4	1710	18.33	68	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B5	824	17.60	58	268.40	1.70	7.60	0.00	N/A	1680.96 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-
#1	LTE	B7	2500	17.80	60	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B12	699	18.90	78	268.40	1.70	7.60	0.00	N/A	1425.96 mW -EXEMPT-	<5mm - MEASURE-	20 mW -MEASURE-	<5mm - MEASURE-	1425.96 mW -EXEMPT-
#1	LTE	B13	777	18.10	65	268.40	1.70	7.60	0.00	N/A	1585.08 mW -EXEMPT-	<5mm - MEASURE-	18 mW -MEASURE-	<5mm - MEASURE-	1585.08 mW -EXEMPT-
#1	LTE	B14	788	18.10	65	268.40	1.70	7.60	0.00	N/A	1607.52 mW -EXEMPT-	<5mm - MEASURE-	18 mW -MEASURE-	<5mm - MEASURE-	1607.52 mW -EXEMPT-
#1	LTE	B17	704	19.20	83	268.40	1.70	7.60	0.00	N/A	1436.16 mW -EXEMPT-	<5mm - MEASURE-	20 mW -MEASURE-	<5mm - MEASURE-	1436.16 mW -EXEMPT-
#1	LTE	B25	1850	18.21	66	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B26	814	17.60	58	268.40	1.70	7.60	0.00	N/A	1660.56 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1660.56 mW -EXEMPT-
#1	LTE	B38	2570	21.50	141	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B41	2496	20.10	102	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	6 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B48	3550	11.14	13	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	5 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B66	1710	18.33	68	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	LTE	B71	663	19.10	81	268.40	1.70	7.60	0.00	N/A	1352.52 mW -EXEMPT-	<5mm - MEASURE-	22 mW -MEASURE-	<5mm - MEASURE-	1352.52 mW -EXEMPT-
#1	NR	n2	1850	19.01	80	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	7 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	NR	n5	824	18.00	63	268.40	1.70	7.60	0.00	N/A	1680.96 mW -EXEMPT-	<5mm - MEASURE-	17 mW -MEASURE-	<5mm - MEASURE-	1680.96 mW -EXEMPT-
#2	NR	n41	2496	12.20	17	2.70	268.20	7.30	N/A	0.00	<5mm - MEASURE-	3060 mW -EXEMPT-	6 mW -MEASURE-	3060 mW -EXEMPT-	<5mm - MEASURE-
#1	NR	n66	1710	18.33	68	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	8 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-
#1	NR	n71	663	19.40	87	268.40	1.70	7.60	0.00	N/A	1352.52 mW -EXEMPT-	<5mm - MEASURE-	22 mW -MEASURE-	<5mm - MEASURE-	1352.52 mW -EXEMPT-
#1	NR	n77	3450	9.46	9	268.40	1.70	7.60	0.00	N/A	3060 mW -EXEMPT-	<5mm - MEASURE-	5 mW -MEASURE-	<5mm - MEASURE-	3060 mW -EXEMPT-

	: measurement is NOT required
	: measurement is required

12 SAR System Check

12.1 Dielectric Property

12.1.1 Dielectric Property for SAR

The dielectric parameters were checked prior to assessment using the DAK dielectric probe kit.

According to KDB865664 D01, the dielectric constant (εr) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within 5 % of the required target values for a range of approximately 50 MHz at frequencies below 300 MHz. At above 3 GHz, 5 % tolerance can usually be maintained for ± 100 MHz or more.

For SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for εr and σ may be relaxed to ± 10 % (<= 3 GHz).

The dielectric parameters were linearly interpolated between the closest pair of target frequencies defined in KDB 865664D01 to determine the applicable dielectric parameters corresponding to the device test frequency for measurement.

Listed conductivity and relative permittivity values including the target are rounded one or two decimal places due to significant digit, so some differences might be observed, and actual SAR calculation is done four decimal places.

Table 12-1 standard parameters on the KDB 865664D01

Target Frequency	Head		Body	
(MHz)	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

Table 12-2 Directric Property Measurements Result:

DIELECTRIC PARAMETERS MEASUREMENT RESULTS													
Date	Ambient Temp. [deg.c]	Relative Humidity [%]	Liquid type	Liquid Temp. [deg.c]	Measured Frequency [MHz]	Target [σ]	Target [εr]	Measure [σ]	Measure [εr]	Deviation σ [%]	Deviation εr [%]	Limiit [%]	Remark
2022/6/21	22.4	50.0	HBBL600-10000	22.4	700.0	0.89	42.201	0.90	42.0	1.6	-0.4	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	725.0	0.89	42.071	0.91	41.9	2.0	-0.3	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	750.0	0.89	41.942	0.92	41.9	2.5	-0.2	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	775.0	0.90	41.812	0.92	41.8	3.0	0.0	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	800.0	0.90	41.682	0.93	41.7	3.6	0.1	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	835.0	0.90	41.500	0.94	41.6	4.4	0.3	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	850.0	0.92	41.500	0.94	41.6	3.1	0.2	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	1860.0	1.40	40.000	1.42	39.7	1.3	-0.7	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	1880.0	1.40	40.000	1.43	39.7	2.1	-0.7	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	1900.0	1.40	40.000	1.44	39.7	2.6	-0.7	+-5	
2022/6/21	22.4	50.0	HBBL600-10000	22.4	1910.0	1.40	40.000	1.44	39.7	3.0	-0.6	+-5	
2022/6/27	21.0	50.0	HBBL600-10000	21.0	1860.0	1.40	40.000	1.38	39.3	-1.7	-1.8	+-5	
2022/6/27	21.0	50.0	HBBL600-10000	21.0	1880.0	1.40	40.000	1.39	39.2	-0.7	-1.9	+-5	
2022/6/27	21.0	50.0	HBBL600-10000	21.0	1900.0	1.40	40.000	1.40	39.2	0.2	-2.0	+-5	
2022/6/27	21.0	50.0	HBBL600-10000	21.0	1910.0	1.40	40.000	1.41	39.2	0.6	-2.0	+-5	
2022/6/28	23.0	50.0	HBBL600-10000	23.0	650.0	0.89	42.461	0.88	40.6	-1.0	***-4.5***	+-5	
2022/6/28	23.0	50.0	HBBL600-10000	23.0	700.0	0.89	42.201	0.89	40.4	0.6	-4.2	+-5	
2022/6/28	23.0	50.0	HBBL600-10000	23.0	750.0	0.89	41.942	0.91	40.3	1.8	-3.9	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	2500.0	1.86	39.136	1.90	39.8	2.2	1.7	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	2600.0	1.96	39.009	1.97	39.4	0.5	1.1	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	2700.0	2.07	38.882	2.10	39.3	1.2	1.1	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	3500.0	2.91	37.929	2.80	37.9	-3.7	-0.2	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	3550.0	2.96	37.871	2.83	37.7	-4.6	-0.4	+-5	
2022/7/4	18.5	43.0	HBBL600-10000	18.5	3600.0	3.02	37.814	2.87	37.5	-4.9	-0.8	+-5	
2022/7/11	21.0	40.0	HBBL600-10000	20.7	800.0	0.90	41.682	0.90	42.3	0.6	1.4	+-5	
2022/7/11	21.0	40.0	HBBL600-10000	20.7	835.0	0.90	41.500	0.91	42.2	1.6	1.7	+-5	
2022/7/11	21.0	40.0	HBBL600-10000	20.7	850.0	0.92	41.500	0.92	42.2	0.4	1.6	+-5	
2022/7/19	20.5	49.0	HBBL600-10000	20.3	2500.0	1.86	39.136	1.83	40.2	-1.6	2.8	+-5	
2022/7/19	20.5	49.0	HBBL600-10000	20.3	2600.0	1.96	39.009	1.90	40.0	-3.2	2.5	+-5	
2022/7/19	20.5	49.0	HBBL600-10000	20.3	2700.0	2.07	38.882	1.98	39.8	-4.5	2.4	+-5	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	650.0	0.89	42.461	0.83	42.7	-6.8	0.5	+-10	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	700.0	0.89	42.201	0.84	42.6	-5.6	0.9	+-10	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	750.0	0.89	41.942	0.85	42.5	-5.2	1.3	+-10	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	1700.0	1.34	40.158	1.28	40.6	-4.5	1.1	+-5	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	1750.0	1.37	40.079	1.31	40.5	-4.3	0.9	+-5	
2022/7/25	20.5	45.0	HBBL600-10000	20.3	1800.0	1.40	40.000	1.34	40.3	-4.1	0.8	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	700.0	0.89	42.201	0.85	42.2	-3.9	0.0	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	725.0	0.89	42.071	0.86	42.0	-3.8	-0.2	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	750.0	0.89	41.942	0.86	41.8	-3.5	-0.4	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	810.0	0.90	41.618	0.88	41.4	-2.5	-0.5	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	835.0	0.90	41.500	0.88	41.3	-1.9	-0.6	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	910.0	0.97	41.482	0.91	41.1	-6.6	-0.8	+-10	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	1860.0	1.40	40.000	1.39	40.2	-0.5	0.5	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	1880.0	1.40	40.000	1.41	40.2	0.4	0.4	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	1900.0	1.40	40.000	1.42	40.1	1.1	0.4	+-5	
2022/8/1	22.0	45.0	HBBL600-10000	22.0	1910.0	1.40	40.000	1.42	40.1	1.4	0.4	+-5	

Cont.

2022/8/2	22.0	41.0	HBBL600-10000	22.0	650.0	0.89	42.461	0.89	41.3	0.6	-2.7	+-5	
2022/8/2	22.0	41.0	HBBL600-10000	22.0	700.0	0.89	42.201	0.91	41.1	2.0	-2.6	+-5	
2022/8/2	22.0	41.0	HBBL600-10000	22.0	750.0	0.89	41.942	0.92	40.9	3.5	-2.5	+-5	
2022/8/2	22.0	41.0	HBBL600-10000	22.0	1700.0	1.34	40.158	1.33	38.9	-1.0	-3.0	+-5	
2022/8/2	22.0	41.0	HBBL600-10000	22.0	1750.0	1.37	40.079	1.36	38.9	-1.1	-2.9	+-5	
2022/8/2	22.0	41.0	HBBL600-10000	22.0	1800.0	1.40	40.000	1.39	38.8	-0.9	-2.9	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	750.0	0.89	41.942	0.88	41.2	-1.5	-1.7	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	775.0	0.90	41.812	0.89	41.2	-0.7	-1.5	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	800.0	0.90	41.682	0.90	41.1	0.2	-1.4	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	800.0	0.90	41.682	0.90	41.1	0.2	-1.4	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	835.0	0.90	41.500	0.92	41.1	1.7	-1.1	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	850.0	0.92	41.500	0.92	41.0	0.7	-1.2	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	1800.0	1.40	40.000	1.34	39.3	-4.1	-1.8	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	1850.0	1.40	40.000	1.37	39.2	-2.4	-2.1	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	1900.0	1.40	40.000	1.39	39.1	-0.4	-2.3	+-5	
2022/8/3	22.0	44.0	HBBL600-10000	22.0	1910.0	1.40	40.000	1.40	39.1	-0.1	-2.4	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	700.0	0.89	42.201	0.84	40.9	-5.4	-3.0	+-10	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	725.0	0.89	42.071	0.85	40.8	-4.7	-2.9	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	750.0	0.89	41.942	0.86	40.8	-4.1	-2.8	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	775.0	0.90	41.812	0.86	40.7	-3.6	-2.6	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	800.0	0.90	41.682	0.87	40.6	-2.8	-2.5	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	835.0	0.90	41.500	0.88	40.5	-1.8	-2.4	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	850.0	0.92	41.500	0.89	40.5	-2.9	-2.5	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	1850.0	1.40	40.000	1.34	38.7	-4.0	-3.2	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	1900.0	1.40	40.000	1.37	38.7	-2.0	-3.3	+-5	
2022/8/9	21.0	50.0	HBBL600-10000	20.7	2000.0	1.40	40.000	1.43	38.5	1.9	-3.7	+-5	
2022/8/17	21.5	41.0	HBBL600-10000	21.5	650.0	0.89	42.461	0.87	41.2	-1.8	-3.1	+-5	
2022/8/17	21.5	41.0	HBBL600-10000	21.5	700.0	0.89	42.201	0.89	40.8	0.3	-3.2	+-5	
2022/8/17	21.5	41.0	HBBL600-10000	21.5	750.0	0.89	41.942	0.91	40.6	2.4	-3.3	+-5	
2022/8/17	21.0	50.0	HBBL600-10000	20.7	800.0	0.90	41.682	0.94	40.4	4.6	-3.1	+-5	
2022/8/17	21.0	50.0	HBBL600-10000	20.7	835.0	0.90	41.500	0.96	40.2	6.1	-3.1	+-10	
2022/8/17	21.0	50.0	HBBL600-10000	20.7	850.0	0.92	41.500	0.96	40.1	5.0	-3.3	+-10	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	700.0	0.89	42.201	0.89	41.1	0.3	-2.6	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	750.0	0.89	41.942	0.90	41.2	0.9	-1.9	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	800.0	0.90	41.682	0.91	41.2	1.4	-1.2	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	835.0	0.90	41.500	0.92	41.1	2.2	-0.9	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	850.0	0.92	41.500	0.92	41.1	0.9	-0.9	+-5	
2022/8/23	22.0	52.0	HBBL600-10000	23.5	1700.0	1.34	40.158	1.28	39.2	-4.4	-2.4	+-5	
2022/8/23	22.0	52.0	HBBL600-10000	23.5	1750.0	1.37	40.079	1.31	39.1	-4.6	-2.4	+-5	
2022/8/23	22.0	52.0	HBBL600-10000	23.5	1810.0	1.40	40.000	1.34	39.0	-4.4	-2.4	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	1850.0	1.40	40.000	1.41	38.6	0.9	-3.5	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	1900.0	1.40	40.000	1.45	38.5	3.4	-3.7	+-5	
2022/8/23	24.0	58.0	HBBL600-10000	23.5	1910.0	1.40	40.000	1.45	38.5	3.9	-3.7	+-5	

Cont.

2022/8/29	24.0	60.0	HBBL600-10000	23.5	700.0	0.89	42.201	0.90	42.2	1.1	0.0	+-5	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	725.0	0.89	42.071	0.91	42.1	2.2	0.1	+-5	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	750.0	0.89	41.942	0.92	42.0	3.4	0.2	+-5	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	800.0	0.90	41.682	0.95	41.9	5.7	0.4	+-10	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	835.0	0.90	41.500	0.97	41.7	*7.3*	0.6	+-10	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	850.0	0.92	41.500	0.97	41.7	6.2	0.5	+-10	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	1800.0	1.40	40.000	1.39	40.4	-0.6	1.0	+-5	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	1850.0	1.40	40.000	1.42	40.3	1.1	0.6	+-5	
2022/8/29	24.0	60.0	HBBL600-10000	23.5	1900.0	1.40	40.000	1.44	40.1	2.9	0.3	+-5	
2022/8/29	22.0	56.0	HBBL600-10000	22.0	1700.0	1.34	40.158	1.28	38.4	-4.5	-4.4	+-5	
2022/8/29	22.0	56.0	HBBL600-10000	22.0	1750.0	1.37	40.079	1.31	38.4	-4.3	-4.3	+-5	
2022/8/29	22.0	56.0	HBBL600-10000	22.0	1810.0	1.40	40.000	1.35	38.2	-3.8	-4.4	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3500.0	2.91	37.929	3.00	39.5	3.0	4.2	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3550.0	2.96	37.871	3.04	39.5	2.5	4.2	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3600.0	3.02	37.814	3.07	39.4	1.9	4.2	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3800.0	3.22	37.586	3.23	39.2	0.4	4.3	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3850.0	3.27	37.529	3.28	39.2	0.4	4.3	+-5	
2022/9/5	25.0	46.0	HBBL600-10000	24.2	3900.0	3.32	37.471	3.32	39.1	-0.2	4.4	+-5	
2022/9/6	23.5	53.0	HBBL600-10000	23.5	2500.0	1.86	39.136	1.83	39.6	-1.6	1.3	+-5	
2022/9/6	23.5	53.0	HBBL600-10000	23.5	2600.0	1.96	39.009	1.90	39.5	-3.2	1.3	+-5	
2022/9/6	23.5	53.0	HBBL600-10000	23.5	2700.0	2.07	38.882	1.98	39.4	-4.6	1.3	+-5	
2022/9/7	23.0	59.0	HBBL600-10000	23.0	800.0	0.90	41.682	0.92	41.7	2.6	0.1	+-5	
2022/9/7	23.0	59.0	HBBL600-10000	23.0	835.0	0.90	41.500	0.93	41.6	3.7	0.3	+-5	
2022/9/7	23.0	59.0	HBBL600-10000	23.0	850.0	0.92	41.500	0.94	41.6	2.4	0.2	+-5	
2022/9/7	23.0	40.0	HBBL600-10000	23.0	1700.0	1.34	40.158	1.31	40.0	-2.5	-0.4	+-5	
2022/9/7	23.0	40.0	HBBL600-10000	23.0	1750.0	1.37	40.079	1.34	40.0	-2.6	-0.3	+-5	
2022/9/7	23.0	40.0	HBBL600-10000	23.0	1800.0	1.40	40.000	1.37	39.9	-2.5	-0.4	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3500.0	2.91	37.929	2.94	38.0	0.9	0.3	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3550.0	2.96	37.871	2.98	38.0	0.5	0.4	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3600.0	3.02	37.814	3.02	38.0	0.1	0.4	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3800.0	3.22	37.586	3.18	37.7	-1.4	0.4	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3850.0	3.27	37.529	3.22	37.7	-1.6	0.4	+-5	
2022/9/9	23.3	55.0	HBBL600-10000	22.9	3900.0	3.32	37.471	3.25	37.6	-2.2	0.4	+-5	
2022/9/12	23.0	53.0	HBBL600-10000	23.0	2500.0	1.86	39.136	1.83	39.4	-1.2	0.6	+-5	
2022/9/12	23.0	53.0	HBBL600-10000	23.0	2600.0	1.96	39.009	1.91	39.1	-2.8	0.3	+-5	
2022/9/12	23.0	53.0	HBBL600-10000	23.0	2700.0	2.07	38.882	1.99	39.0	-4.1	0.4	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3500.0	2.91	37.929	2.97	37.9	2.1	0.0	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3550.0	2.96	37.871	3.01	37.9	1.7	0.0	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3600.0	3.02	37.814	3.05	37.8	1.1	0.0	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3800.0	3.22	37.586	3.20	37.6	-0.6	0.0	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3850.0	3.27	37.529	3.24	37.5	-0.9	0.0	+-5	
2022/9/12	24.0	55.0	HBBL600-10000	23.5	3900.0	3.32	37.471	3.27	37.5	-1.5	0.1	+-5	

Cont.

2022/9/13	23.0	40.0	HBBL600-10000	23.0	1860.0	1.40	40.000	1.40	38.7	0.1	-3.4	+-5	
2022/9/13	23.0	40.0	HBBL600-10000	23.0	1880.0	1.40	40.000	1.41	38.6	1.0	-3.4	+-5	
2022/9/13	23.0	40.0	HBBL600-10000	23.0	1900.0	1.40	40.000	1.43	38.6	1.9	-3.5	+-5	
2022/9/13	23.0	40.0	HBBL600-10000	23.0	1910.0	1.40	40.000	1.43	38.6	2.3	-3.5	+-5	
2022/9/15	23.5	48.0	HBBL600-10000	23.5	2500.0	1.86	39.136	1.83	39.2	-1.6	0.1	+-5	
2022/9/15	23.5	48.0	HBBL600-10000	23.5	2600.0	1.96	39.009	1.90	39.0	-3.2	0.0	+-5	
2022/9/15	23.5	48.0	HBBL600-10000	23.5	2700.0	2.07	38.882	1.98	38.8	-4.5	-0.1	+-5	
2022/9/20	23.5	50.0	HBBL600-10000	23.5	2500.0	1.86	39.136	1.83	38.5	-1.6	-1.6	+-5	
2022/9/20	23.5	50.0	HBBL600-10000	23.5	2600.0	1.96	39.009	1.89	38.2	-3.7	-2.0	+-5	
2022/9/20	23.5	50.0	HBBL600-10000	23.5	2680.0	2.05	38.907	1.95	38.1	-4.9	-2.0	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3500.0	2.91	37.929	2.95	37.9	1.4	0.0	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3550.0	2.96	37.871	3.00	37.9	1.0	0.1	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3600.0	3.02	37.814	3.03	37.9	0.5	0.2	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3800.0	3.22	37.586	3.18	37.6	-1.2	0.1	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3850.0	3.27	37.529	3.23	37.6	-1.4	0.1	+-5	
2022/9/20	24.0	55.0	HBBL600-10000	23.5	3900.0	3.32	37.471	3.26	37.5	-2.0	0.2	+-5	
2022/9/29	22.0	40.0	HBBL600-10000	21.5	2400.0	1.76	39.289	1.73	38.3	-1.6	-2.6	+-5	
2022/9/29	22.0	40.0	HBBL600-10000	21.5	2450.0	1.80	39.200	1.76	38.3	-2.2	-2.4	+-5	
2022/9/29	22.0	40.0	HBBL600-10000	21.5	2500.0	1.86	39.136	1.81	38.3	-2.6	-2.2	+-5	
2022/10/3	23.0	50.0	HBBL600-10000	22.5	2400.0	1.76	39.289	1.79	40.5	2.0	3.0	+-5	
2022/10/3	23.0	50.0	HBBL600-10000	22.5	2450.0	1.80	39.200	1.83	40.4	1.6	3.0	+-5	
2022/10/3	23.0	50.0	HBBL600-10000	22.5	2500.0	1.85	39.136	1.87	40.3	0.6	3.1	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	1700.0	1.34	40.143	1.32	39.9	-2.0	-0.7	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	1750.0	1.37	40.071	1.35	39.8	-1.9	-0.6	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	1810.0	1.40	40.000	1.38	39.7	-1.3	-0.8	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	2500.0	1.85	39.133	1.81	38.6	-2.1	-1.3	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	2550.0	1.91	39.067	1.84	38.6	-3.3	-1.1	+-5	
2022/10/3	23.5	52.0	HBBL600-10000	23.5	2600.0	1.96	39.000	1.89	38.6	-3.7	-1.1	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5700.0	5.17	35.414	5.06	35.6	-2.1	0.5	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5750.0	5.22	35.357	5.14	35.5	-1.5	0.4	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5800.0	5.27	35.300	5.15	35.5	-2.4	0.4	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5200.0	4.66	35.986	4.43	36.4	-4.9	1.2	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5250.0	4.71	35.929	4.56	36.2	-3.1	0.8	+-5	
2022/10/4	23.5	50.0	HBBL600-10000	23.5	5300.0	4.76	35.871	4.66	36.2	-2.1	0.8	+-5	
2022/10/4	23.5	40.0	HBBL600-10000	23.5	3500.0	2.91	37.900	2.93	37.8	0.7	-0.2	+-5	
2022/10/4	23.5	40.0	HBBL600-10000	23.5	3550.0	2.96	37.850	2.97	37.8	0.2	-0.2	+-5	
2022/10/4	23.5	40.0	HBBL600-10000	23.5	3600.0	3.01	37.800	3.00	37.7	-0.4	-0.2	+-5	

12.1.2 Dielectric Property for PD

Media is air so Relative Permittivity (εr) and Conductivity (σ) are 1 and 0 respectively.

12.2 System check

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media,probe calibration points and other system operating parameters required for measuring the SAR of a test device.The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

12.2.1 System Performance Check Measurement Conditions for SAR:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipolecenter to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.
  For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- Distance between probe sensors and phantom surface was set to 3 mm.
  For 5 GHz band - Distance between probe sensors and phantom surface was set to 2.5 mm
- The dipole input power (forward power) was 100 mW.
- The results are normalized to 1 W input power.

The target(reference) SAR values can be obtained from the calibration certificate of system validation dipoles(Refer to Appendix). The target SAR values are SAR measured value in the calibration certificate scaled to 1W.

12.2.2 System Performance Check Measurement Conditions for PD:

System validation is required before a system is deployed for measurement
Peak and spatially averaged power density at the peak location(s) must be compared to calibrated results according to the defined test conditions

- the same spatial resolution and measurement region used in the waveguide calibration should be applied to system validation and system check
- power density distribution should also be verified, both spatially (shape) and numerically (level) through visual inspection for noticeable differences
- the measured results should be within 10 % of the calibrated targets

Then create a measurement file with a test distance of 10mm for 10 GHz and 5.55 mm for 30 GHz and above (the later will account for the retracted location of the horn aperture towards the top surface of a verification source). Use the scan settings defined in below table.

Grid setting

Frequency [GHz]	Grid step	Grid extent X/Y [mm]	Measurement points
10	0.25 ($\frac{\lambda}{4}$)	120/120	18 × 18
30	0.25 ($\frac{\lambda}{4}$)	60/60	26 × 26
45	0.25 ($\frac{\lambda}{4}$)	42/42	28 × 28
60	0.25 ($\frac{\lambda}{4}$)	32.5/32.5	28 × 28
90	0.25 ($\frac{\lambda}{4}$)	30/30	38 × 38

12.2.3 System Check Results for SAR and PD

For SAR

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within ±10 % of the manufacturer calibrated dipole SAR target. Refer to Appendix for the SAR System Check Plots.

Conditions				Meas value 250mW (100mW for >=3GHz		Meas value Normalized to 1W		System performance check			
Date	Frequency [MHz]	Temp [deg. C]	Humid [% RH]	1g [W/kg]	10g [W/kg]	1g [W/kg]	10g [W/kg]	(SPEAG) 1g [W/kg]	(SPEAG) 10g[W/kg]	[%]	[%]
6/21	750	22.4	50	2.21	1.45	8.84	5.80	8.68	5.64	1.84	2.84
6/21	835	22.4	50	2.58	1.68	10.32	6.72	9.84	6.44	4.88	4.35
6/21	1900	22.4	50	10.40	5.35	41.60	21.40	39.56	20.52	5.16	4.29
6/27	1900	21.0	50	10.70	5.55	42.80	22.20	39.56	20.52	8.19	8.19
6/28	750	23.0	50	1.98	1.32	7.92	5.28	8.68	5.64	-8.76	-6.38
7/4	2600	18.5	43	15.00	6.73	60.00	26.92	58.00	25.52	3.45	5.49
7/4	3500	18.5	43	7.02	2.70	70.20	27.00	68.00	25.50	3.24	5.88
7/11	835	21.0	40	2.46	1.62	9.84	6.48	9.84	6.44	0.00	0.62
7/19	2600	20.5	49	13.30	6.01	53.20	24.04	58.00	25.52	-8.28	-5.80
7/25	750	20.5	45	2.00	1.33	8.00	5.32	8.68	5.64	-7.83	-5.67
7/25	1750	20.5	45	8.83	4.74	35.32	18.96	36.76	19.36	-3.92	-2.07
8/1	750	22.0	45	1.96	1.31	7.84	5.24	8.68	5.64	-9.68	-7.09
8/1	835	22.0	45	2.26	1.48	9.04	5.92	9.84	6.44	-8.13	-8.07
8/1	1900	22.0	45	9.62	5.03	38.48	20.12	39.56	20.52	-2.73	-1.95
8/2	750	22.0	41	2.24	1.47	8.96	5.88	8.68	5.64	3.23	4.26
8/2	1750	22.0	41	9.34	4.95	37.36	19.80	36.76	19.36	1.63	2.27
8/3	750	22.0	44	2.15	1.43	8.60	5.72	8.68	5.64	-0.92	1.42
8/3	835	22.0	44	2.47	1.61	9.88	6.44	9.84	6.44	0.41	0.00
8/3	1900	22.0	44	9.88	5.19	39.52	20.76	39.56	20.52	-0.10	1.17
8/9	750	21.0	50	2.14	1.42	8.56	5.68	8.68	5.64	-1.38	0.71
8/9	835	21.0	50	2.30	1.50	9.20	6.00	9.84	6.44	-6.50	-6.83
8/9	1900	21.0	50	9.12	4.78	36.48	19.12	39.56	20.52	-7.79	-6.82
8/17	750	21.5	41	2.22	1.46	8.88	5.84	8.68	5.64	2.30	3.55
8/17	835	21.5	41	2.67	1.72	10.68	6.88	9.84	6.44	8.54	6.83
8/23	750	24.0	58	1.96	1.27	7.84	5.08	8.68	5.64	-9.68	-9.93
8/23	835	24.0	58	2.24	1.47	8.96	5.88	9.84	6.44	-8.94	-8.70
8/23	1900	24.0	58	9.84	5.05	39.36	20.20	39.56	20.52	-0.51	-1.56
8/23	1750	22.0	52	9.21	4.92	36.84	19.68	36.76	19.36	0.22	1.65
8/29	750	24.0	60	2.17	1.41	8.68	5.64	8.68	5.64	0.00	0.00
8/29	835	24.0	60	2.57	1.68	10.28	6.72	9.84	6.44	4.47	4.35
8/29	1900	24.0	60	9.91	5.12	39.64	20.48	39.56	20.52	0.20	-0.19
8/29	1750	22.0	56	9.28	4.93	37.12	19.72	36.76	19.36	0.98	1.86
9/5	3500	25.0	46	7.07	2.63	70.70	26.30	68.00	25.50	3.97	3.14
9/5	3900	25.0	46	6.43	2.22	64.30	22.20	71.10	24.60	-9.56	-9.76
9/6	2600	23.5	53	14.40	6.49	57.60	25.96	58.00	25.52	-0.69	1.72
9/7	835	23.0	59	2.61	1.69	10.44	6.76	9.84	6.44	6.10	4.97
9/7	1750	23.0	59	9.29	4.91	37.16	19.64	36.76	19.36	1.09	1.45
9/9	3500	23.3	55	7.09	2.63	70.90	26.30	68.00	25.50	4.26	3.14
9/9	3900	23.3	55	6.50	2.27	65.00	22.70	71.10	24.60	-8.58	-7.72
9/12	2600	23.0	55	14.30	6.40	57.20	25.60	58.00	25.52	-1.38	0.31
9/12	3500	24.0	55	7.11	2.65	71.10	26.50	68.00	25.50	4.56	3.92
9/12	3900	24.0	55	6.50	2.28	65.00	22.80	71.10	24.60	-8.58	-7.32
9/13	1900	23.0	40	10.70	5.56	42.80	22.24	39.56	20.52	8.19	8.38
9/15	2600	23.5	48	13.90	6.25	55.60	25.00	58.00	25.52	-4.14	-2.04
9/20	3500	24.0	55	7.12	2.65	71.20	26.50	68.00	25.50	4.71	3.92
9/20	3900	24.0	55	6.42	2.25	64.20	22.50	71.10	24.60	-9.70	-8.54
9/20	2600	23.5	50	14.30	6.46	57.20	25.84	58.00	25.52	-1.38	1.25
9/29	2450	22.0	40	12.90	6.09	51.60	24.36	53.20	24.76	-3.01	-1.62
10/3	2450	23.0	50	12.90	6.11	51.60	24.44	53.20	24.76	-3.01	-1.29
10/3	1750	23.5	52	9.40	4.99	37.60	19.96	36.76	19.36	2.29	3.10
10/3	2600	23.5	52	13.80	6.16	55.20	24.64	58.00	25.52	-4.83	-3.45
10/4	3500	23.5	40	6.57	2.44	65.70	24.40	68.00	25.50	-3.38	-4.31
10/4	5250	23.5	50	7.58	2.16	75.80	21.60	77.90	22.30	-2.70	-3.14
10/4	5800	23.5	50	7.48	2.13	74.80	21.30	78.00	22.10	-4.10	-3.62

For PD

Date	Frequency [MHz]	Temp [deg. C]	Humid [% RH]	E/H-Field Probe	Verification source	Phantom	4cm^2 (S_{tot})	(SPEAG) 4cm^2 (S_{tot})	Dev. (S_{tot}) [%]	Visual Inspection
10/31	10000	24.5	57	MPBm-01	MVSm-04	5G	54.5	53.9	1.1	OK

Date	Frequency [MHz]	Temp [deg. C]	Humid [% RH]	E/H-Field Probe	Verification Source	Phantom	4cm^2 (S_{norm})	(SPEAG) 4cm^2 (S_{norm})	Dev. (S_{norm}) [%]	Visual Inspection
10/31	10000	24.5	57	MPBm-01	MVSm-04	5G	54.4	53.8	1.2	OK

MPBm-01, MVSm-04 details are shown in instrument list.

13 Conducted Output Power / SAR / PD Measurements

13.1 Measurement configuration for conducted output power

WWAN average output power was measured with burst power (on time).

13.1.1 WCDMA configuration

Release 99 Setup Procedures used to establish the test signals

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

Mode	Subtest	Rel99
WCDMA General Settings	Loopback Mode	Test Mode 2
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	βc/βd	8/15

HSDPA Setup Procedures used to establish the test signals

The following 4 Sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

Table C.10.2.4: β values for transmitter characteristics tests with HS-DPCCH

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
W-CDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 1			
	Power Control Algorithm	Algorithm 2			
	βc	2/15	11/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	βc/βd	2/15	11/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
HSDPA Specific Settings	D_{ACK}	8			
	D_{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	Ahs=βhs/βc	30/15			

HSPA (HSDPA & HSUPA) Setup Procedures used to establish the test signals

The following 5 Sub-tests were completed according to Release 6 procedures in table C,11.1.3 of 3GPP TS 34.121-1
A summary of these settings are illustrated below:

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

	Mode	HSPA				
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2 kbps RMC				
	HSDPA FRC	H-Set 1				
	HSUPA Test	HSPA				
	Power Control Algorithm	Algorithm 2				Algorithm 1
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	0
	βec	209/225	12/15	30/15	2/15	5/15
	βc/βd	11/15	6/15	15/9	2/15	-
	βhs	22/15	12/15	30/15	4/15	5/15
	βed	1309/225	94/75	47/15	56/75	47/15
	CM (dB)	1	3	2	3	1
	MPR (dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				0
	DNAK	8				0
	DCQI	8				0
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
	Ahs = βhs/βc	30/15				
HSUPA Specific Settings	E-DPDCCH	6	8	8	5	0
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	12
	ETFCI (from 34.121 Table C.11.1.3)	75	67	92	71	67
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E-TFCIs	5	5	2	5	1
	Reference E-TFCI	11	11	11	11	67
	Reference E-TFCI PO	4	4	4	4	18
	Reference E-TFCI	67	67	92	67	67
	Reference E-TFCI PO	18	18	18	18	18
	Reference E-TFCI	71	71	71	71	71
	Reference E-TFCI PO	23	23	23	23	23
	Reference E-TFCI	75	75	75	75	75
	Reference E-TFCI PO	26	26	26	26	26
	Reference E-TFCI	81	81	81	81	81
	Reference E-TFCI PO	27	27	27	27	27
	Maximum Channelization Codes	2xSF2				SF4

DC-HSDPA Setup Procedures used to establish the test signals

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS34.108. A summary of these settings are illustrated below:
Downlink Physical Channels are set as per 3GPP TS34.121-1

Table E.5.0: Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH _Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 sub clause 7.3.13
The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

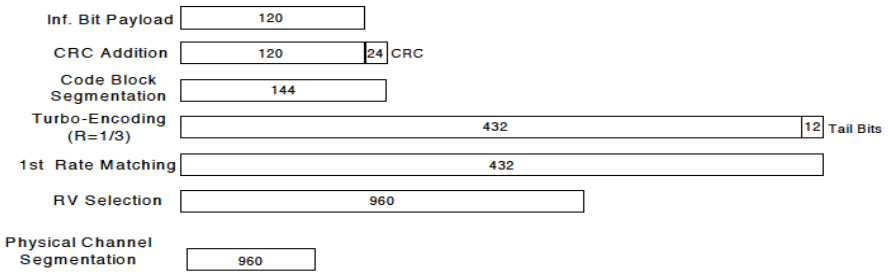


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121.
A summary of subtest settings are illustrated below:

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 1			
	Power Control Algorithm	Algorithm2			
	βc	2/15	11/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/βd	2/15	12/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack Repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs = βhs/ βc	30/15			

HSPA+

The following 1 Sub-test was completed according to Release 7 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

Table C.11.1.4: **β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM**

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with $\beta_{hs} = 30/15 * \beta_c$.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

13.1.2 LTE single configuration

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2 dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A

13.1.3 LTE CA configuration

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

For intra-band contiguous carrier aggregation the allowed Maximum Power Reduction (MPR) for the maximum output power applicable to the DUT in table below. In case the modulation format is different on different component carriers then the MPR is determined by the rules applied to higher order of those modulations.

Modulation	CA bandwidth Class B and C / Smallest Component Carrier Transmission Bandwidth Configuration				MPR (dB)
	25 RB	50 RB	75 RB	100 RB	
QPSK	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 18 and ≤ 100	≤ 1
QPSK	> 25	> 50	> 75	> 100	≤ 2
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 8 and ≤ 25	> 12 and ≤ 50	> 16 and ≤ 75	> 18 and ≤ 100	≤ 2
16 QAM	> 25	> 50	> 75	> 100	≤ 3
64 QAM	≤ 8 and allocation wholly contained within a single CC	≤ 12 and allocation wholly contained within a single CC	≤ 16 and allocation wholly contained within a single CC	≤ 18 and allocation wholly contained within a single CC	≤ 2
64 QAM	> 8 or allocation extends across two CC's	> 12 or allocation extends across two CC's	> 16 or allocation extends across two CC's	> 18 or allocation extends across two CC's	≤ 3

For PUCCH and SRS transmissions, the allowed MPR is according to that specified for PUSCH WPDK modulation for the corresponding transmission bandwidth.

13.1.4 LTE CA power measurement combination

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:
- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination.
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.
- All bands required for SAR testing per FCC KDB procedures were considered.

General PCC and SCC configuration selection procedure:
- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KDB 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

Downlink CA with Downlink 4x4 MIMO RF Conducted Powers:
This device supports downlink 4x4 MIMO operations for some LTE bands. Uplink transmission is limited to a single output stream. When carrier aggregation was applicable, the general test selection and setup procedures described above were applied.

Uplink CA Conducted Powers:
This device supports uplink carrier aggregation for some LTE bands with a maximum of two component carriers. For intra-band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when noncontiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.

Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

Downlink CA with Uplink CA Enabled:
This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. 4x4 DL MIMO is only operating in the downlink. Uplink transmission is limited to a single output stream for each component carrier of ULCA.
Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

13.1.5 New Radio (NR) configuration

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.
UE Power Class: 3 (23 +/- 2 dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.2-1 of the 3GPP TS36.101.

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	Pi/2 BPSK w Pi/2 BPSK DMRS	≤ 0.5[2]	≤ 0[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

The allowed A-MPR values specified below in Table 6.2.3.1-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Network signalling label	Requirements (clause)	NR Band	Channel bandwidth (MHz)	Resources blocks (N_{RB})	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100	Table 5.3.2-1	N/A

13.2 WCDMA

13.2.1 WCMDA Band 2 DSI 0 and 1

R99

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 2	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	23.20	17.70	23.15	16.43
		9400	1880.0	23.20	17.70	23.05	16.33
		9538	1907.6	23.20	17.70	22.89	16.14

HSDPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 2	Subtest 1	9262	1852.4	22.20	16.70	21.20	15.42
		9400	1880.0	22.20	16.70	21.06	15.32
		9538	1907.6	22.20	16.70	20.83	15.21
	Subtest 2	9262	1852.4	22.20	16.70	21.19	15.43
		9400	1880.0	22.20	16.70	21.06	15.35
		9538	1907.6	22.20	16.70	20.86	15.24
	Subtest 3	9262	1852.4	21.70	16.20	20.68	14.91
		9400	1880.0	21.70	16.20	20.53	14.85
		9538	1907.6	21.70	16.20	20.31	14.69
	Subtest 4	9262	1852.4	21.70	16.20	20.69	14.94
		9400	1880.0	21.70	16.20	20.54	14.87
		9538	1907.6	21.70	16.20	20.30	14.67

DC-HSDPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band II	Subtest 1	9262	1852.4	22.20	16.70	21.17	15.34
		9400	1880.0	22.20	16.70	21.06	15.27
		9538	1907.6	22.20	16.70	20.88	15.09
	Subtest 2	9262	1852.4	22.20	16.70	21.21	15.25
		9400	1880.0	22.20	16.70	21.06	15.13
		9538	1907.6	22.20	16.70	20.89	15.01
	Subtest 3	9262	1852.4	21.70	16.20	20.70	14.62
		9400	1880.0	21.70	16.20	20.55	14.54
		9538	1907.6	21.70	16.20	20.36	14.55
	Subtest 4	9262	1852.4	21.70	16.20	20.68	14.71
		9400	1880.0	21.70	16.20	20.59	14.56
		9538	1907.6	21.70	16.20	20.37	14.51

HSUPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	Avg Pwr (dBm)
						Full Power	Full Power
WCDMA (UMTS) Band 2	Subtest 1	9262	1852.4	22.20	16.70	21.27	15.39
		9400	1880.0	22.20	16.70	21.09	15.34
		9538	1907.6	22.20	16.70	20.89	15.16
	Subtest 2	9262	1852.4	20.20	14.70	19.22	13.45
		9400	1880.0	20.20	14.70	19.06	13.38
		9538	1907.6	20.20	14.70	18.86	13.15
	Subtest 3	9262	1852.4	21.20	15.70	20.35	14.40
		9400	1880.0	21.20	15.70	20.04	14.34
		9538	1907.6	21.20	15.70	19.81	14.21
	Subtest 4	9262	1852.4	20.20	14.70	19.35	13.45
		9400	1880.0	20.20	14.70	19.12	13.36
		9538	1907.6	20.20	14.70	18.89	13.20
	Subtest 5	9262	1852.4	22.20	16.70	21.24	15.46
		9400	1880.0	22.20	16.70	21.07	15.33
		9538	1907.6	22.20	16.70	20.88	15.16

HSPA+

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 2	Subtest 1	9262	1852.4	19.70	14.20	19.12	13.28
		9400	1880.0	19.70	14.20	19.01	13.17
		9538	1907.6	19.70	14.20	19.50	13.12

13.2.2 WCMDA Band 4 DSI 0 and 1

R99

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 4	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	22.80	18.60	21.60	17.38
		1413	1732.6	22.80	18.60	21.77	17.57
		1513	1752.6	22.80	18.60	21.86	17.62

HSDPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 4	Subtest 1	1312	1712.4	21.80	17.60	20.68	16.48
		1413	1732.6	21.80	17.60	20.85	16.64
		1513	1752.6	21.80	17.60	20.93	16.71
	Subtest 2	1312	1712.4	21.80	17.60	20.70	16.48
		1413	1732.6	21.80	17.60	20.86	16.66
		1513	1752.6	21.80	17.60	20.97	16.74
	Subtest 3	1312	1712.4	21.30	17.10	20.20	16.01
		1413	1732.6	21.30	17.10	20.37	16.15
		1513	1752.6	21.30	17.10	20.45	16.22
	Subtest 4	1312	1712.4	21.30	17.10	20.22	15.94
		1413	1732.6	21.30	17.10	20.34	16.13
		1513	1752.6	21.30	17.10	20.46	16.24

DC-HSDPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 4	Subtest 1	1312	1712.4	21.80	17.60	20.72	16.52
		1413	1732.6	21.80	17.60	20.91	16.69
		1513	1752.6	21.80	17.60	20.97	16.76
	Subtest 2	1312	1712.4	21.80	17.60	20.74	16.55
		1413	1732.6	21.80	17.60	20.91	16.71
		1513	1752.6	21.80	17.60	20.98	16.76
	Subtest 3	1312	1712.4	21.30	17.10	20.21	16.03
		1413	1732.6	21.30	17.10	20.40	16.19
		1513	1752.6	21.30	17.10	20.47	16.26
	Subtest 4	1312	1712.4	21.30	17.10	20.22	16.02
		1413	1732.6	21.30	17.10	20.40	16.19
		1513	1752.6	21.30	17.10	20.51	16.27

HSUPA

Band	Mode	UL Ch	Freq.	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
WCDMA (UMTS) Band 4	Subtest 1	1312	1712.4	21.80	17.60	20.71	16.56
		1413	1732.6	21.80	17.60	20.90	16.69
		1513	1752.6	21.80	17.60	20.96	16.84
	Subtest 2	1312	1712.4	19.80	15.60	18.72	14.53
		1413	1732.6	19.80	15.60	18.92	14.64
		1513	1752.6	19.80	15.60	18.96	14.74
	Subtest 3	1312	1712.4	20.80	16.60	19.64	15.50
		1413	1732.6	20.80	16.60	19.87	15.71
		1513	1752.6	20.80	16.60	19.93	15.81
	Subtest 4	1312	1712.4	19.80	15.60	18.72	14.52
		1413	1732.6	19.80	15.60	18.87	14.65
		1513	1752.6	19.80	15.60	19.00	14.86
	Subtest 5	1312	1712.4	21.80	17.60	20.73	16.55
		1413	1732.6	21.80	17.60	20.87	16.69
		1513	1752.6	21.80	17.60	20.94	16.76

HSPA+

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 4	Subtest 1	1312	1712.4	19.30	15.10	18.11	14.42
		1413	1732.6	19.30	15.10	18.26	14.54
		1513	1752.6	19.30	15.10	18.33	14.56

13.2.3 WCMDA Band 5 DSI 0 and 1

R99

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 5	Rel 99 (RMC, 12.2 kbps)	4132	826.4	23.10	17.20	22.31	16.19
		4183	836.6	23.10	17.20	22.15	15.98
		4233	846.6	23.10	17.20	21.95	15.77

HSDPA

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 5	Subtest 1	4132	826.4	22.10	16.20	21.31	15.23
		4183	836.6	22.10	16.20	21.15	14.97
		4233	846.6	22.10	16.20	20.93	14.76
	Subtest 2	4132	826.4	22.10	16.20	21.30	15.21
		4183	836.6	22.10	16.20	21.15	14.94
		4233	846.6	22.10	16.20	20.93	14.78
	Subtest 3	4132	826.4	21.60	15.70	20.82	14.72
		4183	836.6	21.60	15.70	20.59	14.52
		4233	846.6	21.60	15.70	20.43	14.28
	Subtest 4	4132	826.4	21.60	15.70	20.79	14.73
		4183	836.6	21.60	15.70	20.55	14.48
		4233	846.6	21.60	15.70	20.45	14.30

HSUPA

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
WCDMA (UMTS) Band 5	Subtest 1	4132	826.4	22.10	16.20	21.67	15.21
		4183	836.6	22.10	16.20	21.51	15.02
		4233	846.6	22.10	16.20	21.11	14.80
	Subtest 2	4132	826.4	20.10	14.20	19.50	13.24
		4183	836.6	20.10	14.20	19.29	13.00
		4233	846.6	20.10	14.20	19.07	12.78
	Subtest 3	4132	826.4	21.10	15.20	20.67	14.23
		4183	836.6	21.10	15.20	20.48	14.01
		4233	846.6	21.10	15.20	20.09	13.80
	Subtest 4	4132	826.4	20.10	14.20	19.66	13.19
		4183	836.6	20.10	14.20	19.49	12.99
		4233	846.6	20.10	14.20	19.27	12.77
	Subtest 5	4132	826.4	22.10	16.20	21.62	15.21
		4183	836.6	22.10	16.20	21.54	15.01
		4233	846.6	22.10	16.20	21.29	14.79

DC-HSDPA

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 5	Subtest 1	4132	826.4	22.10	16.20	21.29	15.22
		4183	836.6	22.10	16.20	21.13	15.09
		4233	846.6	22.10	16.20	20.95	14.86
	Subtest 2	4132	826.4	22.10	16.20	21.30	15.22
		4183	836.6	22.10	16.20	21.13	15.07
		4233	846.6	22.10	16.20	20.92	14.84
	Subtest 3	4132	826.4	21.60	15.70	20.82	14.74
		4183	836.6	21.60	15.70	20.61	14.60
		4233	846.6	21.60	15.70	20.43	14.38
	Subtest 4	4132	826.4	21.60	15.70	20.80	14.77
		4183	836.6	21.60	15.70	20.57	14.62
		4233	846.6	21.60	15.70	20.44	14.40

HSPA+

Band	Mode	UL Ch	Freq. (MHz)	Full Power mode Tune-up Upper	Reduced Power mode Tune-up	Avg Pwr (dBm)	
						Full Power	Reduced Power
W-CDMA (UMTS) Band 5	Subtest 1	4132	826.4	19.60	13.70	19.34	13.02
		4183	836.6	19.60	13.70	19.07	13.22
		4233	846.6	19.60	13.70	18.89	13.15

13.3 LTE single

13.3.1 LTE band 2 DSI0

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18700	18900	19100
						Freq(MHz)		
						1860	1880	1900
20	QPSK	1	0	0.0	23.5	22.76	22.67	22.66
		1	49	0.0	23.5	22.75	22.65	22.58
		1	99	0.0	23.5	22.72	22.66	22.55
		50	0	0.5	23.0	21.90	21.66	21.64
		50	24	0.5	23.0	21.88	21.69	21.68
		50	50	0.5	23.0	21.89	21.75	21.66
		100	0	0.5	23.0	21.89	21.68	21.65
	16QAM	1	0	0.5	23.0	22.19	22.05	22.03
		1	49	0.5	23.0	22.16	22.04	21.93
		1	99	0.5	23.0	22.13	21.98	21.90
		50	0	1.5	22.0	20.89	20.62	20.65
		50	24	1.5	22.0	20.93	20.66	20.68
		50	50	1.5	22.0	20.92	20.74	20.64
		100	0	1.5	22.0	20.88	20.70	20.68
	64QAM	1	0	1.5	22.0	21.00	20.77	20.76
		1	49	1.5	22.0	20.96	20.79	20.64
		1	99	1.5	22.0	20.98	20.77	20.65
		50	0	2.5	21.0	19.92	19.69	19.69
		50	24	2.5	21.0	19.96	19.71	19.72
		50	50	2.5	21.0	19.95	19.79	19.71
		100	0	2.5	21.0	19.90	19.70	19.72
	256QAM	1	0	4.5	19.0	17.80	17.78	17.78
		1	49	4.5	19.0	17.85	17.82	17.73
		1	99	4.5	19.0	17.86	17.82	17.73
		50	0	4.5	19.0	17.92	17.65	17.67
		50	24	4.5	19.0	17.95	17.70	17.70
		50	50	4.5	19.0	17.93	17.76	17.68
		100	0	4.5	19.0	17.92	17.70	17.69

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18675	18900	19125
						Freq(MHz)		
						1857.5	1880	1902.5
15	QPSK	1	0	0.0	23.5	22.68	22.63	22.59
		1	37	0.0	23.5	22.70	22.61	22.54
		1	74	0.0	23.5	22.72	22.65	22.55
		36	0	0.5	23.0	21.85	21.67	21.67
		36	19	0.5	23.0	21.89	21.66	21.65
		36	39	0.5	23.0	21.87	21.71	21.66
		75	0	0.5	23.0	21.84	21.62	21.65
	16QAM	1	0	0.5	23.0	22.11	21.88	21.87
		1	37	0.5	23.0	22.12	21.92	21.78
		1	74	0.5	23.0	22.07	21.93	21.80
		36	0	1.5	22.0	20.87	20.68	20.70
		36	19	1.5	22.0	20.91	20.70	20.73
		36	39	1.5	22.0	20.88	20.77	20.70
		75	0	1.5	22.0	20.89	20.63	20.65
	64QAM	1	0	1.5	22.0	21.24	21.21	21.26
		1	37	1.5	22.0	21.15	21.22	21.21
		1	74	1.5	22.0	21.14	21.27	21.19
		36	0	2.5	21.0	19.84	19.71	19.70
		36	19	2.5	21.0	19.87	19.69	19.73
		36	39	2.5	21.0	19.88	19.82	19.74
		75	0	2.5	21.0	19.88	19.68	19.65
	256QAM	1	0	4.5	19.0	18.12	17.59	17.62
		1	37	4.5	19.0	18.15	17.67	17.60
		1	74	4.5	19.0	18.19	17.72	17.66
		36	0	4.5	19.0	17.83	17.68	17.67
		36	19	4.5	19.0	17.83	17.74	17.70
		36	39	4.5	19.0	17.82	17.79	17.72
		75	0	4.5	19.0	17.90	17.68	17.67

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18650	18900	19150
						Freq(MHz)		
						1855	1880	1905
10	QPSK	1	0	0.0	23.5	22.81	22.61	22.45
		1	24	0.0	23.5	22.76	22.62	22.40
		1	49	0.0	23.5	22.82	22.64	22.44
		25	0	0.5	23.0	21.88	21.61	21.62
		25	12	0.5	23.0	21.87	21.74	21.65
		25	25	0.5	23.0	21.90	21.72	21.61
		50	0	0.5	23.0	21.90	21.64	21.58
	16QAM	1	0	0.5	23.0	22.10	21.98	21.77
		1	24	0.5	23.0	22.12	21.92	21.68
		1	49	0.5	23.0	22.13	21.97	21.72
		25	0	1.5	22.0	20.87	20.64	20.59
		25	12	1.5	22.0	20.95	20.77	20.64
		25	25	1.5	22.0	20.92	20.74	20.67
		50	0	1.5	22.0	20.90	20.61	20.61
	64QAM	1	0	1.5	22.0	21.21	21.08	21.09
		1	24	1.5	22.0	21.07	21.13	21.01
		1	49	1.5	22.0	21.13	21.14	20.97
		25	0	2.5	21.0	19.89	19.63	19.65
		25	12	2.5	21.0	19.95	19.76	19.68
		25	25	2.5	21.0	19.95	19.77	19.67
		50	0	2.5	21.0	19.93	19.65	19.66
	256QAM	1	0	4.5	19.0	18.21	17.96	17.92
		1	24	4.5	19.0	18.17	17.98	17.74
		1	49	4.5	19.0	18.20	18.06	17.91
		25	0	4.5	19.0	17.84	17.60	17.63
		25	12	4.5	19.0	17.89	17.74	17.63
		25	25	4.5	19.0	17.91	17.71	17.63
		50	0	4.5	19.0	17.91	17.64	17.63

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18625	18900	19175
						Freq(MHz)		
						1852.5	1880	1907.5
5	QPSK	1	0	0.0	23.5	22.78	22.52	22.39
		1	12	0.0	23.5	22.83	22.58	22.47
		1	24	0.0	23.5	22.84	22.60	22.43
		12	0	0.5	23.0	21.83	21.70	21.59
		12	6	0.5	23.0	21.90	21.75	21.62
		12	13	0.5	23.0	21.86	21.73	21.55
		25	0	0.5	23.0	21.88	21.70	21.53
	16QAM	1	0	0.5	23.0	22.29	21.95	21.82
		1	12	0.5	23.0	22.25	22.05	21.89
		1	24	0.5	23.0	22.29	22.01	21.90
		12	0	1.5	22.0	20.92	20.73	20.60
		12	6	1.5	22.0	20.94	20.80	20.67
		12	13	1.5	22.0	20.96	20.76	20.60
		25	0	1.5	22.0	20.91	20.69	20.55
	64QAM	1	0	1.5	22.0	21.32	20.92	20.79
		1	12	1.5	22.0	21.32	20.92	20.82
		1	24	1.5	22.0	21.36	20.99	20.82
		12	0	2.5	21.0	19.78	19.76	19.62
		12	6	2.5	21.0	19.84	19.83	19.67
		12	13	2.5	21.0	19.82	19.76	19.65
		25	0	2.5	21.0	19.87	19.75	19.63
	256QAM	1	0	4.5	19.0	17.96	18.16	18.04
		1	12	4.5	19.0	17.96	18.18	18.07
		1	24	4.5	19.0	18.03	18.21	18.08
		12	0	4.5	19.0	17.93	17.68	17.57
		12	6	4.5	19.0	18.01	17.76	17.59
		12	13	4.5	19.0	17.98	17.72	17.61
		25	0	4.5	19.0	17.91	17.70	17.61

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18615	18900	18615
						Freq(MHz)		
						1851.5	1880	1908.5
3	QPSK	1	0	0.0	23.5	22.75	22.55	22.40
		1	7	0.0	23.5	22.77	22.71	22.59
		1	14	0.0	23.5	22.82	22.60	22.47
		8	0	0.5	23.0	21.84	21.68	21.52
		8	3	0.5	23.0	21.93	21.74	21.59
		8	7	0.5	23.0	21.87	21.75	21.60
		15	0	0.5	23.0	21.88	21.69	21.54
	16QAM	1	0	0.5	23.0	22.19	21.80	21.64
		1	7	0.5	23.0	22.13	21.83	21.68
		1	14	0.5	23.0	22.15	21.80	21.67
		8	0	1.5	22.0	20.95	20.59	20.48
		8	3	1.5	22.0	21.02	20.67	20.54
		8	7	1.5	22.0	20.96	20.64	20.50
		15	0	1.5	22.0	20.95	20.68	20.53
	64QAM	1	0	1.5	22.0	21.29	21.03	20.93
		1	7	1.5	22.0	21.30	21.02	20.90
		1	14	1.5	22.0	21.35	21.07	20.92
		8	0	2.5	21.0	19.92	19.75	19.64
		8	3	2.5	21.0	19.94	19.83	19.71
		8	7	2.5	21.0	19.96	19.82	19.68
		15	0	2.5	21.0	19.90	19.75	19.61
	256QAM	1	0	4.5	19.0	18.19	17.94	17.79
		1	7	4.5	19.0	18.19	17.92	17.77
		1	14	4.5	19.0	18.27	17.96	17.83
		8	0	4.5	19.0	17.88	17.79	17.66
		8	3	4.5	19.0	17.96	17.84	17.70
		8	7	4.5	19.0	17.90	17.81	17.69
		15	0	4.5	19.0	17.90	17.71	17.54

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18607	18900	19193
						Freq(MHz)		
						1850.7	1880	1909.3
1.4	QPSK	1	0	0.0	23.5	22.73	22.48	22.35
		1	2	0.0	23.5	22.83	22.56	22.40
		1	5	0.0	23.5	22.75	22.49	22.34
		3	0	0.0	23.5	22.75	22.54	22.39
		3	1	0.0	23.5	22.76	22.58	22.47
		3	3	0.0	23.5	22.77	22.53	22.41
		6	0	0.5	23.0	21.82	21.60	21.48
	16QAM	1	0	0.5	23.0	21.83	21.76	21.61
		1	2	0.5	23.0	21.90	21.90	21.77
		1	5	0.5	23.0	21.85	21.74	21.61
		3	0	0.5	23.0	21.78	21.79	21.69
		3	1	0.5	23.0	21.82	21.85	21.73
		3	3	0.5	23.0	21.77	21.77	21.69
		6	0	1.5	22.0	20.88	20.59	20.49
	64QAM	1	0	1.5	22.0	21.21	21.02	20.90
		1	2	1.5	22.0	21.31	21.13	21.00
		1	5	1.5	22.0	21.19	21.02	20.92
		3	0	1.5	22.0	20.98	20.71	20.57
		3	1	1.5	22.0	20.90	20.76	20.59
		3	3	1.5	22.0	20.92	20.66	20.56
		6	0	2.5	21.0	19.82	19.74	19.61
	256QAM	1	0	4.5	19.0	17.67	17.86	17.72
		1	2	4.5	19.0	17.74	17.93	17.79
		1	5	4.5	19.0	17.65	17.89	17.74
		3	0	4.5	19.0	17.75	17.72	17.53
		3	1	4.5	19.0	17.76	17.74	17.57
		3	3	4.5	19.0	17.67	17.72	17.55
		6	0	4.5	19.0	17.68	17.72	17.54

13.3.2 LTE band 2 DSI1

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18700	18900	19100
						Freq(MHz)		
						1860	1880	1900
20	QPSK	1	0	-	17.5	16.42	16.32	16.31
		1	49	-	17.5	16.37	16.29	16.23
		1	99	-	17.5	16.36	16.30	16.24
		50	0	-	17.5	16.49	16.28	16.26
		50	24	-	17.5	16.52	16.31	16.32
		50	50	-	17.5	16.51	16.38	16.29
		100	0	-	17.5	16.41	16.30	16.29
	16QAM	1	0	-	17.5	16.89	16.71	16.66
		1	49	-	17.5	16.82	16.69	16.61
		1	99	-	17.5	16.80	16.66	16.56
		50	0	-	17.5	16.58	16.26	16.32
		50	24	-	17.5	16.57	16.31	16.31
		50	50	-	17.5	16.57	16.40	16.31
		100	0	-	17.5	16.55	16.31	16.33
	64QAM	1	0	-	17.5	16.64	16.39	16.42
		1	49	-	17.5	16.63	16.40	16.31
		1	99	-	17.5	16.63	16.39	16.30
		50	0	-	17.5	16.56	16.31	16.32
		50	24	-	17.5	16.60	16.32	16.33
		50	50	-	17.5	16.54	16.39	16.32
		100	0	-	17.5	16.53	16.31	16.34
	256QAM	1	0	-	17.5	16.42	16.40	16.42
		1	49	-	17.5	16.48	16.44	16.37
		1	99	-	17.5	16.49	16.46	16.35
		50	0	-	17.5	16.54	16.29	16.34
		50	24	-	17.5	16.54	16.30	16.34
		50	50	-	17.5	16.54	16.40	16.34
		100	0	-	17.5	16.50	16.32	16.34

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18675	18900	19125
						Freq(MHz)		
						1857.5	1880	1902.5
15	QPSK	1	0	-	17.5	16.34	16.24	16.20
		1	37	-	17.5	16.31	16.23	16.16
		1	74	-	17.5	16.32	16.25	16.17
		36	0	-	17.5	16.47	16.27	16.25
		36	19	-	17.5	16.51	16.26	16.26
		36	39	-	17.5	16.50	16.33	16.24
		75	0	-	17.5	16.34	16.25	16.12
	16QAM	1	0	-	17.5	16.69	16.49	16.44
		1	37	-	17.5	16.67	16.51	16.36
		1	74	-	17.5	16.76	16.51	16.44
		36	0	-	17.5	16.47	16.27	16.27
		36	19	-	17.5	16.53	16.33	16.30
		36	39	-	17.5	16.51	16.40	16.32
		75	0	-	17.5	16.52	16.25	16.23
	64QAM	1	0	-	17.5	16.74	16.69	16.63
		1	37	-	17.5	16.81	16.64	16.59
		1	74	-	17.5	16.73	16.75	16.67
		36	0	-	17.5	16.44	16.30	16.28
		36	19	-	17.5	16.48	16.29	16.29
		36	39	-	17.5	16.50	16.39	16.31
		75	0	-	17.5	16.49	16.25	16.24
	256QAM	1	0	-	17.5	16.74	16.23	16.19
		1	37	-	17.5	16.74	16.29	16.17
		1	74	-	17.5	16.78	16.32	16.23
		36	0	-	17.5	16.42	16.28	16.25
		36	19	-	17.5	16.43	16.32	16.30
		36	39	-	17.5	16.45	16.37	16.32
		75	0	-	17.5	16.49	16.27	16.26

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18650	18900	19150
						Freq(MHz)		
						1855	1880	1905
10	QPSK	1	0	-	17.5	16.30	16.10	16.10
		1	24	-	17.5	16.20	16.08	15.95
		1	49	-	17.5	16.28	16.16	15.97
		25	0	-	17.5	16.46	16.20	16.16
		25	12	-	17.5	16.48	16.29	16.23
		25	25	-	17.5	16.49	16.30	16.18
		50	0	-	17.5	16.30	16.10	16.07
	16QAM	1	0	-	17.5	16.56	16.32	16.36
		1	24	-	17.5	16.56	16.37	16.25
		1	49	-	17.5	16.53	16.39	16.29
		25	0	-	17.5	16.50	16.18	16.22
		25	12	-	17.5	16.53	16.32	16.24
		25	25	-	17.5	16.52	16.35	16.25
		50	0	-	17.5	16.49	16.24	16.18
	64QAM	1	0	-	17.5	16.80	16.52	16.53
		1	24	-	17.5	16.61	16.52	16.42
		1	49	-	17.5	16.76	16.57	16.41
		25	0	-	17.5	16.48	16.23	16.22
		25	12	-	17.5	16.53	16.34	16.23
		25	25	-	17.5	16.54	16.36	16.23
		50	0	-	17.5	16.50	16.27	16.22
	256QAM	1	0	-	17.5	16.71	16.57	16.49
		1	24	-	17.5	16.63	16.51	16.43
		1	49	-	17.5	16.78	16.60	16.46
		25	0	-	17.5	16.48	16.22	16.19
		25	12	-	17.5	16.51	16.34	16.25
		25	25	-	17.5	16.51	16.36	16.21
		50	0	-	17.5	16.48	16.22	16.19

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18625	18900	19175
						Freq(MHz)		
						1852.5	1880	1907.5
5	QPSK	1	0	-	17.5	16.35	16.12	15.94
		1	12	-	17.5	16.39	16.11	15.98
		1	24	-	17.5	16.41	16.16	16.02
		12	0	-	17.5	16.46	16.32	16.16
		12	6	-	17.5	16.48	16.34	16.18
		12	13	-	17.5	16.49	16.29	16.15
		25	0	-	17.5	16.35	16.11	15.93
	16QAM	1	0	-	17.5	16.81	16.49	16.30
		1	12	-	17.5	16.83	16.52	16.32
		1	24	-	17.5	16.85	16.56	16.36
		12	0	-	17.5	16.52	16.34	16.18
		12	6	-	17.5	16.59	16.35	16.18
		12	13	-	17.5	16.56	16.36	16.22
		25	0	-	17.5	16.54	16.31	16.17
	64QAM	1	0	-	17.5	16.78	16.51	16.33
		1	12	-	17.5	16.81	16.48	16.35
		1	24	-	17.5	16.83	16.54	16.38
		12	0	-	17.5	16.40	16.34	16.21
		12	6	-	17.5	16.44	16.39	16.20
		12	13	-	17.5	16.44	16.40	16.22
		25	0	-	17.5	16.53	16.33	16.22
	256QAM	1	0	-	17.5	16.60	16.56	16.42
		1	12	-	17.5	16.58	16.57	16.40
		1	24	-	17.5	16.64	16.59	16.46
		12	0	-	17.5	16.54	16.29	16.13
		12	6	-	17.5	16.58	16.33	16.19
		12	13	-	17.5	16.55	16.34	16.16
		25	0	-	17.5	16.51	16.28	16.15

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18615	18900	18615
						Freq(MHz)		
						1851.5	1880	1908.5
3	QPSK	1	0	-	17.5	16.32	16.10	15.97
		1	7	-	17.5	16.34	16.28	16.06
		1	14	-	17.5	16.39	16.13	15.98
		8	0	-	17.5	16.46	16.24	16.17
		8	3	-	17.5	16.50	16.33	16.18
		8	7	-	17.5	16.48	16.27	16.12
		15	0	-	17.5	16.36	16.10	15.95
	16QAM	1	0	-	17.5	16.65	16.35	16.17
		1	7	-	17.5	16.73	16.39	16.21
		1	14	-	17.5	16.70	16.43	16.21
		8	0	-	17.5	16.54	16.22	16.05
		8	3	-	17.5	16.55	16.25	16.12
		8	7	-	17.5	16.55	16.23	16.09
		15	0	-	17.5	16.50	16.28	16.10
	64QAM	1	0	-	17.5	16.81	16.51	16.46
		1	7	-	17.5	16.75	16.59	16.47
		1	14	-	17.5	16.84	16.62	16.46
		8	0	-	17.5	16.48	16.40	16.20
		8	3	-	17.5	16.48	16.42	16.26
		8	7	-	17.5	16.49	16.37	16.24
		15	0	-	17.5	16.52	16.33	16.22
	256QAM	1	0	-	17.5	16.76	16.54	16.37
		1	7	-	17.5	16.75	16.50	16.35
		1	14	-	17.5	16.84	16.57	16.40
		8	0	-	17.5	16.46	16.39	16.25
		8	3	-	17.5	16.55	16.45	16.29
		8	7	-	17.5	16.48	16.38	16.26
		15	0	-	17.5	16.47	16.30	16.14

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
2						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	18607	18900	19193
						Freq(MHz)		
						1850.7	1880	1909.3
1.4	QPSK	1	0	-	17.5	16.28	16.02	15.88
		1	2	-	17.5	16.35	16.11	15.95
		1	5	-	17.5	16.34	16.01	15.87
		3	0	-	17.5	16.30	16.10	15.97
		3	1	-	17.5	16.33	16.15	15.99
		3	3	-	17.5	16.29	16.14	15.96
		6	0	-	17.5	16.25	16.08	15.87
	16QAM	1	0	-	17.5	16.39	16.30	16.14
		1	2	-	17.5	16.52	16.46	16.29
		1	5	-	17.5	16.45	16.29	16.14
		3	0	-	17.5	16.35	16.39	16.23
		3	1	-	17.5	16.42	16.45	16.26
		3	3	-	17.5	16.34	16.39	16.23
		6	0	-	17.5	16.50	16.23	16.07
	64QAM	1	0	-	17.5	16.78	16.49	16.31
		1	2	-	17.5	16.77	16.60	16.45
		1	5	-	17.5	16.77	16.50	16.33
		3	0	-	17.5	16.53	16.27	16.13
		3	1	-	17.5	16.58	16.30	16.14
		3	3	-	17.5	16.58	16.29	16.11
		6	0	-	17.5	16.40	16.38	16.19
	256QAM	1	0	-	17.5	16.27	16.45	16.29
		1	2	-	17.5	16.34	16.53	16.34
		1	5	-	17.5	16.25	16.48	16.31
		3	0	-	17.5	16.34	16.31	16.14
		3	1	-	17.5	16.38	16.36	16.14
		3	3	-	17.5	16.27	16.30	16.14
		6	0	-	17.5	16.31	16.28	16.10

*MPR is disabled when power reduction is enabled.

13.3.3 LTE band 4 DSI0

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20050	20175	20300
						Freq(MHz)		
						1720	1732.5	1745
20	QPSK	1	0	0	22.5	-	21.29	-
		1	49	0	22.5	-	21.28	-
		1	99	0	22.5	-	21.31	-
		50	0	0	22.5	-	21.40	-
		50	24	0	22.5	-	21.41	-
		50	50	0	22.5	-	21.42	-
		100	0	0	22.5	-	21.29	-
	16QAM	1	0	0	22.5	-	21.70	-
		1	49	0	22.5	-	21.67	-
		1	99	0	22.5	-	21.74	-
		50	0	0.5	22.0	-	20.94	-
		50	24	0.5	22.0	-	20.93	-
		50	50	0.5	22.0	-	20.95	-
		100	0	0.5	22.0	-	20.90	-
	64QAM	1	0	0.5	22.0	-	20.97	-
		1	49	0.5	22.0	-	21.03	-
		1	99	0.5	22.0	-	21.04	-
		50	0	1.5	21.0	-	19.97	-
		50	24	1.5	21.0	-	19.97	-
		50	50	1.5	21.0	-	19.99	-
		100	0	1.5	21.0	-	19.94	-
	256QAM	1	0	3.5	19.0	-	17.86	-
		1	49	3.5	19.0	-	17.94	-
		1	99	3.5	19.0	-	17.98	-
		50	0	3.5	19.0	-	17.99	-
		50	24	3.5	19.0	-	18.00	-
		50	50	3.5	19.0	-	17.99	-
		100	0	3.5	19.0	-	17.94	-

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20025	20175	20325
						Freq(MHz)		
						1717.5	1732.5	1747.5
15	QPSK	1	0	0	22.5	21.18	21.33	21.31
		1	37	0	22.5	21.07	21.23	21.20
		1	74	0	22.5	21.11	21.29	21.22
		36	0	0	22.5	21.30	21.45	21.44
		36	19	0	22.5	21.32	21.42	21.38
		36	39	0	22.5	21.33	21.43	21.43
		75	0	0	22.5	21.14	21.33	21.27
	16QAM	1	0	0	22.5	21.59	21.68	21.81
		1	37	0	22.5	21.50	21.58	21.68
		1	74	0	22.5	21.55	21.64	21.72
		36	0	0.5	22.0	20.81	20.92	20.96
		36	19	0.5	22.0	20.86	20.89	20.92
		36	39	0.5	22.0	20.84	20.94	20.93
		75	0	0.5	22.0	20.85	20.90	20.89
	64QAM	1	0	0.5	22.0	21.08	21.20	21.24
		1	37	0.5	22.0	20.96	21.18	21.16
		1	74	0.5	22.0	21.11	21.26	21.17
		36	0	1.5	21.0	19.84	19.91	19.97
		36	19	1.5	21.0	19.87	19.86	19.93
		36	39	1.5	21.0	19.86	19.91	19.94
		75	0	1.5	21.0	19.81	19.88	19.90
	256QAM	1	0	3.5	19.0	17.93	18.22	18.12
		1	37	3.5	19.0	17.89	18.15	18.05
		1	74	3.5	19.0	17.98	18.08	18.08
		36	0	3.5	19.0	17.77	17.97	17.97
		36	19	3.5	19.0	17.83	17.95	17.90
		36	39	3.5	19.0	17.82	17.96	17.94
		75	0	3.5	19.0	17.82	17.93	17.85

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20000	20175	20350
						Freq(MHz)		
						1715	1732.5	1750
10	QPSK	1	0	0	22.5	21.06	21.28	21.26
		1	24	0	22.5	21.04	21.27	21.23
		1	49	0	22.5	21.11	21.30	21.33
		25	0	0	22.5	21.28	21.26	21.35
		25	12	0	22.5	21.31	21.30	21.39
		25	25	0	22.5	21.30	21.41	21.48
		50	0	0	22.5	21.11	21.23	21.32
	16QAM	1	0	0	22.5	21.46	21.57	21.73
		1	24	0	22.5	21.45	21.59	21.70
		1	49	0	22.5	21.47	21.63	21.79
		25	0	0.5	22.0	20.68	20.83	20.88
		25	12	0.5	22.0	20.70	20.86	20.92
		25	25	0.5	22.0	20.76	20.94	20.99
		50	0	0.5	22.0	20.77	20.82	20.86
	64QAM	1	0	0.5	22.0	21.07	21.18	21.04
		1	24	0.5	22.0	21.00	21.30	21.20
		1	49	0.5	22.0	20.94	21.38	21.15
		25	0	1.5	21.0	19.79	19.84	19.88
		25	12	1.5	21.0	19.81	19.87	19.92
		25	25	1.5	21.0	19.82	19.95	19.99
		50	0	1.5	21.0	19.77	19.81	19.88
	256QAM	1	0	3.5	19.0	17.93	18.07	18.04
		1	24	3.5	19.0	17.92	18.18	18.12
		1	49	3.5	19.0	17.98	18.19	18.09
		25	0	3.5	19.0	17.78	17.79	17.86
		25	12	3.5	19.0	17.79	17.80	17.92
		25	25	3.5	19.0	17.82	17.91	17.99
		50	0	3.5	19.0	17.75	17.84	17.82

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19975	20175	20375
						Freq(MHz)		
						1712.5	1732.5	1752.5
5	QPSK	1	0	0	22.5	21.15	21.22	21.33
		1	12	0	22.5	21.16	21.31	21.34
		1	24	0	22.5	21.20	21.34	21.39
		12	0	0	22.5	21.20	21.32	21.42
		12	6	0	22.5	21.29	21.38	21.48
		12	13	0	22.5	21.25	21.42	21.46
		25	0	0	22.5	21.13	21.28	21.38
	16QAM	1	0	0	22.5	21.62	21.65	21.80
		1	12	0	22.5	21.65	21.76	21.78
		1	24	0	22.5	21.69	21.79	21.76
		12	0	0.5	22.0	20.79	20.85	21.06
		12	6	0.5	22.0	20.83	20.91	21.10
		12	13	0.5	22.0	20.81	20.99	21.12
		25	0	0.5	22.0	20.79	20.89	21.00
	64QAM	1	0	0.5	22.0	21.20	21.27	21.19
		1	12	0.5	22.0	21.18	21.33	21.28
		1	24	0.5	22.0	21.19	21.39	21.16
		12	0	1.5	21.0	19.67	19.78	20.11
		12	6	1.5	21.0	19.71	19.84	20.15
		12	13	1.5	21.0	19.71	19.87	20.11
		25	0	1.5	21.0	19.79	19.87	20.02
	256QAM	1	0	3.5	19.0	17.86	17.92	18.00
		1	12	3.5	19.0	17.87	18.01	17.97
		1	24	3.5	19.0	17.90	18.06	18.04
		12	0	3.5	19.0	17.83	17.92	18.01
		12	6	3.5	19.0	17.85	17.94	18.04
		12	13	3.5	19.0	17.81	18.00	18.02
		25	0	3.5	19.0	17.75	17.85	18.03

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19965	20175	20385
						Freq(MHz)		
						1711.5	1732.5	1753.5
3	QPSK	1	0	0	22.5	21.12	21.17	21.29
		1	7	0	22.5	21.16	21.30	21.25
		1	14	0	22.5	21.26	21.34	21.36
		8	0	0	22.5	21.23	21.33	21.45
		8	3	0	22.5	21.34	21.40	21.46
		8	7	0	22.5	21.30	21.41	21.48
		15	0	0	22.5	21.22	21.33	21.36
	16QAM	1	0	0	22.5	21.53	21.57	21.65
		1	7	0	22.5	21.50	21.65	21.69
		1	14	0	22.5	21.55	21.62	21.68
		8	0	0.5	22.0	20.84	20.93	21.01
		8	3	0.5	22.0	20.86	20.96	21.07
		8	7	0.5	22.0	20.86	21.01	21.00
		15	0	0.5	22.0	20.82	20.91	20.91
	64QAM	1	0	0.5	22.0	21.14	21.19	21.17
		1	7	0.5	22.0	21.14	21.28	21.21
		1	14	0.5	22.0	21.19	21.32	21.24
		8	0	1.5	21.0	19.82	19.86	19.91
		8	3	1.5	21.0	19.85	19.89	19.99
		8	7	1.5	21.0	19.84	19.98	19.95
		15	0	1.5	21.0	19.78	19.87	19.92
	256QAM	1	0	3.5	19.0	18.11	18.01	18.08
		1	7	3.5	19.0	18.07	18.11	18.03
		1	14	3.5	19.0	18.16	18.18	18.07
		8	0	3.5	19.0	17.78	17.92	18.00
		8	3	3.5	19.0	17.88	17.95	18.02
		8	7	3.5	19.0	17.84	18.00	18.00
		15	0	3.5	19.0	17.75	17.89	17.94

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19957	20175	20393
						Freq(MHz)		
						1710.7	1732.5	1754.3
1.4	QPSK	1	0	0	22.5	21.07	21.17	21.20
		1	2	0	22.5	21.18	21.32	21.23
		1	5	0	22.5	21.09	21.27	21.21
		3	0	0	22.5	21.11	21.15	21.27
		3	1	0	22.5	21.12	21.23	21.28
		3	3	0	22.5	21.13	21.25	21.26
		6	0	0	22.5	21.12	21.25	21.21
	16QAM	1	0	0	22.5	21.12	21.30	21.65
		1	2	0	22.5	21.29	21.42	21.70
		1	5	0	22.5	21.20	21.36	21.60
		3	0	0	22.5	21.17	21.17	21.47
		3	1	0	22.5	21.19	21.32	21.55
		3	3	0	22.5	21.11	21.29	21.50
		6	0	0.5	22.0	20.77	20.81	20.89
	64QAM	1	0	0.5	22.0	21.10	21.12	21.10
		1	2	0.5	22.0	21.18	21.32	21.14
		1	5	0.5	22.0	21.05	21.24	21.09
		3	0	0.5	22.0	20.84	20.96	20.82
		3	1	0.5	22.0	20.89	21.04	20.87
		3	3	0.5	22.0	20.87	21.04	20.86
		6	0	1.5	21.0	19.74	19.78	19.77
	256QAM	1	0	3.5	19.0	17.54	17.59	17.97
		1	2	3.5	19.0	17.63	17.78	18.01
		1	5	3.5	19.0	17.59	17.73	17.97
		3	0	3.5	19.0	17.60	17.66	17.92
		3	1	3.5	19.0	17.63	17.80	17.97
		3	3	3.5	19.0	17.60	17.69	17.94
		6	0	3.5	19.0	17.58	17.67	17.75

13.3.4 LTE band 4 DSI1

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20050	20175	20300
						Freq(MHz)		
						1720	1732.5	1745
20	QPSK	1	0	-	18.0	-	16.88	-
		1	49	-	18.0	-	16.89	-
		1	99	-	18.0	-	16.91	-
		50	0	-	18.0	-	17.04	-
		50	24	-	18.0	-	17.02	-
		50	50	-	18.0	-	17.06	-
		100	0	-	18.0	-	16.90	-
	16QAM	1	0	-	18.0	-	17.31	-
		1	49	-	18.0	-	17.37	-
		1	99	-	18.0	-	17.38	-
		50	0	-	18.0	-	17.09	-
		50	24	-	18.0	-	17.08	-
		50	50	-	18.0	-	17.10	-
		100	0	-	18.0	-	17.03	-
	64QAM	1	0	-	18.0	-	17.12	-
		1	49	-	18.0	-	17.18	-
		1	99	-	18.0	-	17.21	-
		50	0	-	18.0	-	17.11	-
		50	24	-	18.0	-	17.10	-
		50	50	-	18.0	-	17.13	-
		100	0	-	18.0	-	17.05	-
	256QAM	1	0	-	18.0	-	17.06	-
		1	49	-	18.0	-	17.03	-
		1	99	-	18.0	-	17.05	-
		50	0	-	18.0	-	17.09	-
		50	24	-	18.0	-	17.08	-
		50	50	-	18.0	-	17.10	-
		100	0	-	18.0	-	17.04	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20025	20175	20325
						Freq(MHz)		
						1717.5	1732.5	1747.5
15	QPSK	1	0	-	18.0	16.87	16.94	17.00
		1	37	-	18.0	16.78	16.89	16.92
		1	74	-	18.0	16.85	16.91	16.95
		36	0	-	18.0	16.87	16.97	17.04
		36	19	-	18.0	16.88	16.94	16.99
		36	39	-	18.0	16.89	16.99	17.02
		75	0	-	18.0	16.79	16.94	16.97
	16QAM	1	0	-	18.0	17.14	17.26	17.29
		1	37	-	18.0	17.02	17.17	17.15
		1	74	-	18.0	17.15	17.14	17.18
		36	0	-	18.0	16.88	17.00	17.06
		36	19	-	18.0	16.91	16.97	17.02
		36	39	-	18.0	16.94	17.05	17.08
		75	0	-	18.0	16.95	16.97	17.01
	64QAM	1	0	-	18.0	17.13	17.19	17.40
		1	37	-	18.0	17.10	17.23	17.25
		1	74	-	18.0	17.18	17.30	17.38
		36	0	-	18.0	16.91	17.05	17.09
		36	19	-	18.0	16.93	17.03	17.02
		36	39	-	18.0	16.94	17.04	17.08
		75	0	-	18.0	16.97	17.02	17.05
	256QAM	1	0	-	18.0	17.12	17.17	17.24
		1	37	-	18.0	17.10	17.15	17.24
		1	74	-	18.0	17.10	17.12	17.19
		36	0	-	18.0	16.88	17.00	17.06
		36	19	-	18.0	16.93	16.99	17.01
		36	39	-	18.0	16.95	17.04	17.07
		75	0	-	18.0	16.98	16.98	17.04

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20000	20175	20350
						Freq(MHz)		
						1715	1732.5	1750
10	QPSK	1	0	-	18.0	16.75	16.86	16.91
		1	24	-	18.0	16.70	16.87	16.94
		1	49	-	18.0	16.78	16.91	16.95
		25	0	-	18.0	16.83	16.91	16.95
		25	12	-	18.0	16.89	16.95	16.98
		25	25	-	18.0	16.90	17.03	17.09
		50	0	-	18.0	16.78	16.86	16.87
	16QAM	1	0	-	18.0	17.10	17.18	17.22
		1	24	-	18.0	17.07	17.19	17.30
		1	49	-	18.0	17.12	17.26	17.29
		25	0	-	18.0	16.87	16.94	16.99
		25	12	-	18.0	16.91	16.98	17.05
		25	25	-	18.0	16.92	17.10	17.15
		50	0	-	18.0	16.91	16.96	17.02
	64QAM	1	0	-	18.0	17.11	17.14	17.26
		1	24	-	18.0	17.08	17.23	17.21
		1	49	-	18.0	17.14	17.32	17.30
		25	0	-	18.0	16.88	16.97	16.99
		25	12	-	18.0	16.93	17.03	17.06
		25	25	-	18.0	16.91	17.07	17.14
		50	0	-	18.0	16.91	16.99	17.04
	256QAM	1	0	-	18.0	17.04	17.10	17.22
		1	24	-	18.0	17.04	17.16	17.28
		1	49	-	18.0	17.16	17.23	17.33
		25	0	-	18.0	16.88	16.92	16.99
		25	12	-	18.0	16.93	16.98	17.01
		25	25	-	18.0	16.91	17.07	17.11
		50	0	-	18.0	16.90	16.95	17.01

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19975	20175	20375
						Freq(MHz)		
						1712.5	1732.5	1752.5
5	QPSK	1	0	-	18.0	16.76	16.71	16.97
		1	12	-	18.0	16.72	16.84	16.95
		1	24	-	18.0	16.82	16.89	16.99
		12	0	-	18.0	16.84	16.93	17.06
		12	6	-	18.0	16.90	17.00	17.12
		12	13	-	18.0	16.89	17.03	17.10
		25	0	-	18.0	16.81	16.86	16.96
	16QAM	1	0	-	18.0	17.23	17.15	17.29
		1	12	-	18.0	17.15	17.32	17.24
		1	24	-	18.0	17.21	17.35	17.33
		12	0	-	18.0	16.91	17.03	17.14
		12	6	-	18.0	16.95	17.05	17.20
		12	13	-	18.0	16.90	17.11	17.19
		25	0	-	18.0	16.88	16.99	17.13
	64QAM	1	0	-	18.0	17.15	17.13	17.29
		1	12	-	18.0	17.15	17.22	17.26
		1	24	-	18.0	17.31	17.28	17.23
		12	0	-	18.0	16.90	17.04	17.12
		12	6	-	18.0	16.93	17.08	17.16
		12	13	-	18.0	16.97	17.11	17.18
		25	0	-	18.0	16.93	17.05	17.17
	256QAM	1	0	-	18.0	16.99	17.15	17.42
		1	12	-	18.0	17.08	17.28	17.43
		1	24	-	18.0	17.05	17.33	17.47
		12	0	-	18.0	16.86	16.97	17.06
		12	6	-	18.0	16.89	17.01	17.11
		12	13	-	18.0	16.97	17.06	17.10
		25	0	-	18.0	16.88	17.03	17.08

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19965	20175	20385
						Freq(MHz)		
						1711.5	1732.5	1753.5
3	QPSK	1	0	-	18.0	16.79	16.74	16.93
		1	7	-	18.0	16.76	16.92	16.99
		1	14	-	18.0	16.78	16.87	17.01
		8	0	-	18.0	16.87	16.95	17.06
		8	3	-	18.0	16.94	17.03	17.10
		8	7	-	18.0	16.89	17.07	17.08
		15	0	-	18.0	16.79	16.86	16.97
	16QAM	1	0	-	18.0	17.18	17.16	17.26
		1	7	-	18.0	17.17	17.16	17.22
		1	14	-	18.0	17.21	17.26	17.24
		8	0	-	18.0	16.95	16.99	17.16
		8	3	-	18.0	17.01	17.09	17.17
		8	7	-	18.0	17.02	17.11	17.17
		15	0	-	18.0	16.96	17.03	17.13
	64QAM	1	0	-	18.0	17.28	17.16	17.42
		1	7	-	18.0	17.17	17.22	17.42
		1	14	-	18.0	17.21	17.28	17.48
		8	0	-	18.0	16.94	17.06	17.10
		8	3	-	18.0	17.00	17.08	17.16
		8	7	-	18.0	16.97	17.14	17.15
		15	0	-	18.0	16.94	17.03	17.13
	256QAM	1	0	-	18.0	17.23	17.05	17.35
		1	7	-	18.0	17.15	17.18	17.32
		1	14	-	18.0	17.19	17.32	17.43
		8	0	-	18.0	16.92	17.09	17.10
		8	3	-	18.0	16.95	17.10	17.14
		8	7	-	18.0	16.97	17.17	17.12
		15	0	-	18.0	16.90	16.95	17.07

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
4						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	19957	20175	20393
						Freq(MHz)		
						1710.7	1732.5	1754.3
1.4	QPSK	1	0	-	18.0	16.67	16.78	16.90
		1	2	-	18.0	16.74	16.95	17.00
		1	5	-	18.0	16.71	16.87	16.91
		3	0	-	18.0	16.69	16.79	16.92
		3	1	-	18.0	16.73	16.89	16.94
		3	3	-	18.0	16.71	16.86	16.87
		6	0	-	18.0	16.69	16.80	16.87
	16QAM	1	0	-	18.0	16.82	16.89	17.04
		1	2	-	18.0	16.93	17.07	17.13
		1	5	-	18.0	16.80	17.00	17.07
		3	0	-	18.0	16.79	16.80	16.99
		3	1	-	18.0	16.78	16.89	17.00
		3	3	-	18.0	16.77	16.91	16.93
		6	0	-	18.0	16.85	16.93	17.04
	64QAM	1	0	-	18.0	17.10	17.27	17.39
		1	2	-	18.0	17.20	17.44	17.46
		1	5	-	18.0	17.20	17.32	17.38
		3	0	-	18.0	16.96	17.04	17.17
		3	1	-	18.0	17.00	17.16	17.21
		3	3	-	18.0	17.00	17.14	17.21
		6	0	-	18.0	16.84	16.94	16.99
	256QAM	1	0	-	18.0	16.61	16.70	16.82
		1	2	-	18.0	16.75	17.18	16.86
		1	5	-	18.0	16.64	17.03	16.80
		3	0	-	18.0	16.68	16.95	16.92
		3	1	-	18.0	16.76	17.02	16.94
		3	3	-	18.0	16.64	17.02	16.87
		6	0	-	18.0	16.67	16.90	16.88

*MPR is disabled when power reduction is enabled.

13.3.5 LTE band 5 DSI0

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	20525	-
						Freq(MHz)		
						-	836.5	-
10	QPSK	1	0	0	24.0	-	22.79	-
		1	24	0	24.0	-	22.70	-
		1	49	0	24.0	-	22.60	-
		25	0	1	23.0	-	21.80	-
		25	12	1	23.0	-	21.77	-
		25	25	1	23.0	-	21.79	-
		50	0	1	23.0	-	21.78	-
	16QAM	1	0	1	23.0	-	22.12	-
		1	24	1	23.0	-	22.04	-
		1	49	1	23.0	-	21.96	-
		25	0	2	22.0	-	20.84	-
		25	12	2	22.0	-	20.80	-
		25	25	2	22.0	-	20.82	-
		50	0	2	22.0	-	20.78	-
	64QAM	1	0	2	22.0	-	21.29	-
		1	24	2	22.0	-	21.26	-
		1	49	2	22.0	-	21.20	-
		25	0	3	21.0	-	19.83	-
		25	12	3	21.0	-	19.80	-
		25	25	3	21.0	-	19.82	-
		50	0	3	21.0	-	19.79	-
	256QAM	1	0	5	19.0	-	18.11	-
		1	24	5	19.0	-	18.10	-
		1	49	5	19.0	-	18.05	-
		25	0	5	19.0	-	17.81	-
		25	12	5	19.0	-	17.75	-
		25	25	5	19.0	-	17.77	-
		50	0	5	19.0	-	17.74	-

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20425	20525	20625
						Freq(MHz)		
						826.5	836.5	846.5
5	QPSK	1	0	0	24.0	23.07	22.73	22.59
		1	12	0	24.0	22.94	22.70	22.46
		1	24	0	24.0	22.87	22.63	22.41
		12	0	1	23.0	22.05	21.89	21.69
		12	6	1	23.0	22.06	21.86	21.64
		12	13	1	23.0	21.97	21.80	21.57
		25	0	1	23.0	22.03	21.80	21.64
	16QAM	1	0	1	23.0	22.56	22.14	21.97
		1	12	1	23.0	22.40	22.13	21.85
		1	24	1	23.0	22.36	22.07	21.83
		12	0	2	22.0	21.14	20.88	20.77
		12	6	2	22.0	21.08	20.90	20.71
		12	13	2	22.0	21.06	20.83	20.66
		25	0	2	22.0	21.06	20.79	20.65
	64QAM	1	0	2	22.0	21.58	21.18	20.96
		1	12	2	22.0	21.47	21.06	20.82
		1	24	2	22.0	21.41	21.01	20.50
		12	0	3	21.0	20.02	19.92	19.74
		12	6	3	21.0	20.01	19.95	19.75
		12	13	3	21.0	19.93	19.85	19.66
		25	0	3	21.0	20.07	19.85	19.71
	256QAM	1	0	5	19.0	18.27	18.33	18.18
		1	12	5	19.0	18.11	18.26	18.06
		1	24	5	19.0	18.07	18.26	18.03
		12	0	5	19.0	18.13	17.85	17.67
		12	6	5	19.0	18.13	17.90	17.65
		12	13	5	19.0	18.06	17.84	17.60
		25	0	5	19.0	18.02	17.82	17.68

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20415	20525	20635
						Freq(MHz)		
						825.5	836.5	847.5
3	QPSK	1	0	0	24.0	22.99	22.81	22.53
		1	7	0	24.0	22.89	22.76	22.56
		1	14	0	24.0	22.83	22.71	22.39
		8	0	1	23.0	22.07	21.87	21.65
		8	3	1	23.0	22.08	21.90	21.64
		8	7	1	23.0	21.99	21.79	21.58
		15	0	1	23.0	22.03	21.83	21.60
	16QAM	1	0	1	23.0	22.39	22.16	21.92
		1	7	1	23.0	22.28	22.08	21.81
		1	14	1	23.0	22.22	22.03	21.74
		8	0	2	22.0	21.12	20.96	20.71
		8	3	2	22.0	21.12	20.94	20.70
		8	7	2	22.0	21.05	20.88	20.66
		15	0	2	22.0	21.04	20.92	20.64
	64QAM	1	0	2	22.0	21.50	21.33	21.11
		1	7	2	22.0	21.45	21.24	20.95
		1	14	2	22.0	21.35	21.17	20.83
		8	0	3	21.0	20.13	19.92	19.73
		8	3	3	21.0	20.05	19.92	19.73
		8	7	3	21.0	19.99	19.83	19.66
		15	0	3	21.0	20.08	19.86	19.67
	256QAM	1	0	5	19.0	18.39	18.24	17.91
		1	7	5	19.0	18.31	18.10	17.79
		1	14	5	19.0	18.34	18.16	17.78
		8	0	5	19.0	18.08	17.94	17.78
		8	3	5	19.0	18.05	17.90	17.76
		8	7	5	19.0	17.99	17.83	17.69
		15	0	5	19.0	18.03	17.81	17.60

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20407	20525	20643
						Freq(MHz)		
						824.7	836.5	848.3
1.4	QPSK	1	0	0	24.0	22.87	22.73	22.47
		1	2	0	24.0	23.00	22.78	22.51
		1	5	0	24.0	22.84	22.63	22.41
		3	0	0	24.0	22.92	22.72	22.46
		3	1	0	24.0	22.94	22.73	22.47
		3	3	0	24.0	22.88	22.66	22.43
		6	0	1	23.0	21.95	21.74	21.53
	16QAM	1	0	1	23.0	21.97	21.80	21.56
		1	2	1	23.0	22.09	21.92	21.61
		1	5	1	23.0	21.95	21.75	21.49
		3	0	1	23.0	21.92	21.74	21.50
		3	1	1	23.0	21.95	21.79	21.52
		3	3	1	23.0	21.88	21.71	21.38
		6	0	2	22.0	20.99	20.83	20.56
	64QAM	1	0	2	22.0	21.37	21.22	20.90
		1	2	2	22.0	21.48	21.27	20.93
		1	5	2	22.0	21.32	21.13	20.81
		3	0	2	22.0	21.14	20.98	20.69
		3	1	2	22.0	21.20	21.00	20.72
		3	3	2	22.0	21.12	20.98	20.66
		6	0	3	21.0	20.01	19.77	19.52
	256QAM	1	0	5	19.0	17.85	17.63	17.40
		1	2	5	19.0	17.91	17.69	17.40
		1	5	5	19.0	17.79	17.59	17.34
		3	0	5	19.0	17.88	17.69	17.42
		3	1	5	19.0	17.93	17.76	17.44
		3	3	5	19.0	17.83	17.66	17.35
		6	0	5	19.0	17.88	17.68	17.44

13.3.6 LTE band 5 DSI1

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	20525	-
						Freq(MHz)		
						-	836.5	-
10	QPSK	1	0	-	17.6	-	16.36	-
		1	24	-	17.6	-	16.35	-
		1	49	-	17.6	-	16.18	-
		25	0	-	17.6	-	16.38	-
		25	12	-	17.6	-	16.34	-
		25	25	-	17.6	-	16.37	-
		50	0	-	17.6	-	16.33	-
	16QAM	1	0	-	17.6	-	16.66	-
		1	24	-	17.6	-	16.59	-
		1	49	-	17.6	-	16.52	-
		25	0	-	17.6	-	16.40	-
		25	12	-	17.6	-	16.37	-
		25	25	-	17.6	-	16.40	-
		50	0	-	17.6	-	16.31	-
	64QAM	1	0	-	17.6	-	16.76	-
		1	24	-	17.6	-	16.78	-
		1	49	-	17.6	-	16.67	-
		25	0	-	17.6	-	16.38	-
		25	12	-	17.6	-	16.37	-
		25	25	-	17.6	-	16.37	-
		50	0	-	17.6	-	16.32	-
	256QAM	1	0	-	17.6	-	16.66	-
		1	24	-	17.6	-	16.64	-
		1	49	-	17.6	-	16.58	-
		25	0	-	17.6	-	16.33	-
		25	12	-	17.6	-	16.30	-
		25	25	-	17.6	-	16.30	-
		50	0	-	17.6	-	16.30	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20425	20525	20625
						Freq(MHz)		
						826.5	836.5	846.5
5	QPSK	1	0	-	17.6	16.62	16.40	16.25
		1	12	-	17.6	16.46	16.32	16.08
		1	24	-	17.6	16.41	16.27	16.06
		12	0	-	17.6	16.59	16.38	16.27
		12	6	-	17.6	16.61	16.42	16.19
		12	13	-	17.6	16.53	16.32	16.15
		25	0	-	17.6	16.57	16.31	16.20
	16QAM	1	0	-	17.6	17.07	16.78	16.64
		1	12	-	17.6	16.87	16.75	16.50
		1	24	-	17.6	16.82	16.68	16.43
		12	0	-	17.6	16.71	16.48	16.31
		12	6	-	17.6	16.64	16.49	16.30
		12	13	-	17.6	16.57	16.41	16.18
		25	0	-	17.6	16.61	16.36	16.22
	64QAM	1	0	-	17.6	17.11	16.89	16.73
		1	12	-	17.6	16.92	16.81	16.57
		1	24	-	17.6	16.91	16.74	16.53
		12	0	-	17.6	16.54	16.33	16.14
		12	6	-	17.6	16.51	16.35	16.16
		12	13	-	17.6	16.46	16.28	16.05
		25	0	-	17.6	16.62	16.38	16.24
	256QAM	1	0	-	17.6	16.78	16.57	16.44
		1	12	-	17.6	16.63	16.53	16.28
		1	24	-	17.6	16.62	16.40	16.22
		12	0	-	17.6	16.72	16.46	16.34
		12	6	-	17.6	16.64	16.47	16.28
		12	13	-	17.6	16.57	16.42	16.22
		25	0	-	17.6	16.58	16.36	16.20

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20415	20525	20635
						Freq(MHz)		
						825.5	836.5	847.5
3	QPSK	1	0	-	17.6	16.51	16.35	16.16
		1	7	-	17.6	16.47	16.29	16.01
		1	14	-	17.6	16.40	16.23	15.97
		8	0	-	17.6	16.61	16.40	16.19
		8	3	-	17.6	16.60	16.44	16.21
		8	7	-	17.6	16.51	16.35	16.12
		15	0	-	17.6	16.50	16.33	16.15
	16QAM	1	0	-	17.6	16.85	16.68	16.43
		1	7	-	17.6	16.74	16.62	16.35
		1	14	-	17.6	16.73	16.60	16.32
		8	0	-	17.6	16.65	16.52	16.29
		8	3	-	17.6	16.64	16.50	16.25
		8	7	-	17.6	16.64	16.45	16.19
		15	0	-	17.6	16.62	16.42	16.21
	64QAM	1	0	-	17.6	17.00	16.79	16.58
		1	7	-	17.6	16.92	16.76	16.50
		1	14	-	17.6	16.87	16.72	16.46
		8	0	-	17.6	16.60	16.45	16.20
		8	3	-	17.6	16.58	16.43	16.20
		8	7	-	17.6	16.56	16.40	16.11
		15	0	-	17.6	16.56	16.39	16.17
	256QAM	1	0	-	17.6	16.91	16.78	16.55
		1	7	-	17.6	16.84	16.66	16.41
		1	14	-	17.6	16.86	16.66	16.45
		8	0	-	17.6	16.59	16.43	16.20
		8	3	-	17.6	16.64	16.42	16.22
		8	7	-	17.6	16.56	16.36	16.15
		15	0	-	17.6	16.57	16.40	16.14

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
5						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20407	20525	20643
						Freq(MHz)		
						824.7	836.5	848.3
1.4	QPSK	1	0	-	17.6	16.46	16.25	16.00
		1	2	-	17.6	16.49	16.30	16.08
		1	5	-	17.6	16.36	16.23	15.98
		3	0	-	17.6	16.45	16.25	16.00
		3	1	-	17.6	16.44	16.27	16.02
		3	3	-	17.6	16.40	16.21	15.97
		6	0	-	17.6	16.40	16.25	16.01
	16QAM	1	0	-	17.6	16.54	16.32	16.08
		1	2	-	17.6	16.63	16.43	16.19
		1	5	-	17.6	16.47	16.30	16.08
		3	0	-	17.6	16.48	16.27	16.03
		3	1	-	17.6	16.48	16.30	16.05
		3	3	-	17.6	16.44	16.21	15.97
		6	0	-	17.6	16.59	16.37	16.14
	64QAM	1	0	-	17.6	16.91	16.68	16.46
		1	2	-	17.6	16.95	16.78	16.54
		1	5	-	17.6	16.81	16.65	16.36
		3	0	-	17.6	16.68	16.45	16.22
		3	1	-	17.6	16.68	16.50	16.28
		3	3	-	17.6	16.64	16.43	16.19
		6	0	-	17.6	16.52	16.32	16.08
	256QAM	1	0	-	17.6	16.39	16.19	15.94
		1	2	-	17.6	16.43	16.23	15.98
		1	5	-	17.6	16.30	16.15	15.91
		3	0	-	17.6	16.42	16.24	15.95
		3	1	-	17.6	16.47	16.23	16.04
		3	3	-	17.6	16.35	16.15	15.92
		6	0	-	17.6	16.39	16.23	15.98

*MPR is disabled when power reduction is enabled.

13.3.7 LTE band 7 DSI0

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20850	21100	21350
						Freq(MHz)		
						2510	2535	2560
20	QPSK	1	0	0	23.1	22.85	22.95	22.87
		1	49	0	23.1	22.78	22.90	22.88
		1	99	0	23.1	22.82	22.83	22.83
		50	0	0.1	23.0	21.83	22.01	21.94
		50	24	0.1	23.0	21.87	21.96	21.90
		50	50	0.1	23.0	21.88	21.99	21.89
		100	0	0.1	23.0	21.82	21.98	21.88
	16QAM	1	0	0.1	23.0	22.25	22.38	22.17
		1	49	0.1	23.0	22.16	22.27	22.19
		1	99	0.1	23.0	22.17	22.28	22.10
		50	0	1.1	22.0	20.86	21.01	20.89
		50	24	1.1	22.0	20.94	21.04	20.91
		50	50	1.1	22.0	20.89	21.00	20.95
		100	0	1.1	22.0	20.89	21.02	20.88
	64QAM	1	0	1.1	22.0	20.92	21.09	21.10
		1	49	1.1	22.0	21.09	21.12	21.10
		1	99	1.1	22.0	21.06	20.42	21.11
		50	0	2.1	21.0	19.89	20.03	19.95
		50	24	2.1	21.0	19.93	20.06	19.97
		50	50	2.1	21.0	19.92	20.05	19.98
		100	0	2.1	21.0	19.88	19.99	19.89
	256QAM	1	0	4.1	19.0	17.82	17.87	17.88
		1	49	4.1	19.0	17.89	17.96	17.94
		1	99	4.1	19.0	17.94	17.95	17.92
		50	0	4.1	19.0	17.94	18.04	17.95
		50	24	4.1	19.0	17.97	18.08	17.95
		50	50	4.1	19.0	17.94	18.07	17.99
		100	0	4.1	19.0	17.95	18.04	17.95

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20825	21100	21375
						Freq(MHz)		
						2507.5	2535	2562.5
15	QPSK	1	0	0	23.1	22.83	22.94	22.88
		1	37	0	23.1	22.76	22.91	22.84
		1	74	0	23.1	22.78	22.89	22.76
		36	0	0.1	23.0	21.85	22.04	21.91
		36	19	0.1	23.0	21.93	22.03	21.89
		36	39	0.1	23.0	21.90	22.01	21.93
		75	0	0.1	23.0	21.90	22.03	21.85
	16QAM	1	0	0.1	23.0	22.23	22.21	22.20
		1	37	0.1	23.0	22.11	22.26	22.22
		1	74	0.1	23.0	22.08	22.28	22.16
		36	0	1.1	22.0	20.85	21.01	20.90
		36	19	1.1	22.0	20.93	21.06	20.91
		36	39	1.1	22.0	20.95	21.03	20.96
		75	0	1.1	22.0	20.92	21.03	20.88
	64QAM	1	0	1.1	22.0	21.26	21.31	21.32
		1	37	1.1	22.0	21.24	21.36	21.35
		1	74	1.1	22.0	21.32	21.36	21.29
		36	0	2.1	21.0	19.84	20.00	19.90
		36	19	2.1	21.0	19.89	20.03	19.90
		36	39	2.1	21.0	19.88	20.00	19.94
		75	0	2.1	21.0	19.92	20.03	19.90
	256QAM	1	0	4.1	19.0	18.19	18.26	18.24
		1	37	4.1	19.0	18.21	18.30	18.25
		1	74	4.1	19.0	18.24	18.34	18.25
		36	0	4.1	19.0	17.82	18.00	17.83
		36	19	4.1	19.0	17.89	17.99	17.86
		36	39	4.1	19.0	17.87	18.00	17.88
		75	0	4.1	19.0	17.95	18.06	17.91

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20800	21100	21400
						Freq(MHz)		
						2505	2535	2565
10	QPSK	1	0	0	23.1	22.83	22.94	22.90
		1	24	0	23.1	22.78	22.92	22.89
		1	49	0	23.1	22.86	22.95	22.87
		25	0	0.1	23.0	21.89	22.06	21.95
		25	12	0.1	23.0	21.94	22.07	21.97
		25	25	0.1	23.0	21.93	22.04	22.00
		50	0	0.1	23.0	21.92	22.05	21.98
	16QAM	1	0	0.1	23.0	22.17	22.27	22.25
		1	24	0.1	23.0	22.13	22.31	22.19
		1	49	0.1	23.0	22.16	22.29	22.20
		25	0	1.1	22.0	20.91	21.07	20.99
		25	12	1.1	22.0	21.00	21.10	20.98
		25	25	1.1	22.0	20.99	21.09	21.06
		50	0	1.1	22.0	20.94	21.06	20.98
	64QAM	1	0	1.1	22.0	21.29	21.43	21.39
		1	24	1.1	22.0	21.31	21.42	21.43
		1	49	1.1	22.0	21.36	21.45	21.44
		25	0	2.1	21.0	19.93	20.09	19.97
		25	12	2.1	21.0	20.03	20.13	20.01
		25	25	2.1	21.0	19.97	20.08	20.07
		50	0	2.1	21.0	19.99	20.10	20.01
	256QAM	1	0	4.1	19.0	18.19	18.38	18.29
		1	24	4.1	19.0	18.20	18.29	18.26
		1	49	4.1	19.0	18.27	18.38	18.33
		25	0	4.1	19.0	17.88	18.05	17.94
		25	12	4.1	19.0	17.96	18.08	17.93
		25	25	4.1	19.0	17.94	18.07	18.03
		50	0	4.1	19.0	17.94	18.04	17.94

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20775	21100	21425
						Freq(MHz)		
						2502.5	2535	2567.5
5	QPSK	1	0	0	23.1	22.83	22.94	22.93
		1	12	0	23.1	22.85	22.91	22.90
		1	24	0	23.1	22.86	22.93	22.92
		12	0	0.1	23.0	21.91	22.08	22.07
		12	6	0.1	23.0	21.93	22.05	22.00
		12	13	0.1	23.0	21.95	22.06	22.04
		25	0	0.1	23.0	21.94	22.05	22.05
	16QAM	1	0	0.1	23.0	22.27	22.41	22.41
		1	12	0.1	23.0	22.22	22.37	22.34
		1	24	0.1	23.0	22.26	22.34	22.39
		12	0	1.1	22.0	20.98	21.14	21.10
		12	6	1.1	22.0	21.00	21.14	21.08
		12	13	1.1	22.0	21.03	21.14	21.08
		25	0	1.1	22.0	21.02	21.10	21.07
	64QAM	1	0	1.1	22.0	21.34	21.47	21.47
		1	12	1.1	22.0	21.37	21.45	21.42
		1	24	1.1	22.0	21.40	21.47	21.46
		12	0	2.1	21.0	19.83	19.98	19.96
		12	6	2.1	21.0	19.89	19.99	20.01
		12	13	2.1	21.0	19.93	20.04	19.99
		25	0	2.1	21.0	20.00	20.11	20.08
	256QAM	1	0	4.1	19.0	18.06	18.24	18.21
		1	12	4.1	19.0	18.03	18.13	18.10
		1	24	4.1	19.0	18.11	18.19	18.14
		12	0	4.1	19.0	17.98	18.16	18.13
		12	6	4.1	19.0	18.02	18.14	18.10
		12	13	4.1	19.0	18.02	18.17	18.13
		25	0	4.1	19.0	17.98	18.08	18.08

13.3.8 LTE band 7 DSI1

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20850	21100	21350
						Freq(MHz)		
						2510	2535	2560
20	QPSK	1	0	-	17.8	16.41	16.52	16.57
		1	49	-	17.8	16.47	16.51	16.52
		1	99	-	17.8	16.48	16.53	16.53
		50	0	-	17.8	16.45	16.55	16.63
		50	24	-	17.8	16.56	16.54	16.52
		50	50	-	17.8	16.57	16.59	16.57
		100	0	-	17.8	16.46	16.45	16.52
	16QAM	1	0	-	17.8	16.84	16.90	16.94
		1	49	-	17.8	16.85	16.84	16.89
		1	99	-	17.8	16.89	16.89	16.79
		50	0	-	17.8	16.49	16.58	16.53
		50	24	-	17.8	16.61	16.58	16.62
		50	50	-	17.8	16.59	16.63	16.60
		100	0	-	17.8	16.57	16.57	16.60
	64QAM	1	0	-	17.8	16.66	16.74	16.66
		1	49	-	17.8	16.72	16.77	16.66
		1	99	-	17.8	16.70	16.80	16.64
		50	0	-	17.8	16.52	16.60	16.54
		50	24	-	17.8	16.63	16.60	16.65
		50	50	-	17.8	16.63	16.65	16.62
		100	0	-	17.8	16.59	16.54	16.67
	256QAM	1	0	-	17.8	16.43	16.52	16.60
		1	49	-	17.8	16.55	16.60	16.65
		1	99	-	17.8	16.57	16.65	16.67
		50	0	-	17.8	16.50	16.60	16.58
		50	24	-	17.8	16.62	16.62	16.64
		50	50	-	17.8	16.64	16.64	16.60
		100	0	-	17.8	16.57	16.56	16.64

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20825	21100	21375
						Freq(MHz)		
						2507.5	2535	2562.5
15	QPSK	1	0	-	17.8	16.41	16.56	16.58
		1	37	-	17.8	16.42	16.52	16.52
		1	74	-	17.8	16.45	16.54	16.50
		36	0	-	17.8	16.46	16.56	16.58
		36	19	-	17.8	16.57	16.55	16.55
		36	39	-	17.8	16.59	16.59	16.57
		75	0	-	17.8	16.37	16.53	16.52
	16QAM	1	0	-	17.8	16.87	16.85	16.77
		1	37	-	17.8	16.76	16.76	16.76
		1	74	-	17.8	16.82	16.76	16.72
		36	0	-	17.8	16.45	16.56	16.58
		36	19	-	17.8	16.60	16.58	16.58
		36	39	-	17.8	16.60	16.63	16.63
		75	0	-	17.8	16.58	16.49	16.51
	64QAM	1	0	-	17.8	16.86	17.03	17.02
		1	37	-	17.8	16.89	17.02	17.02
		1	74	-	17.8	16.87	17.03	17.00
		36	0	-	17.8	16.50	16.60	16.60
		36	19	-	17.8	16.59	16.61	16.61
		36	39	-	17.8	16.59	16.65	16.65
		75	0	-	17.8	16.58	16.53	16.54
	256QAM	1	0	-	17.8	16.80	16.50	16.52
		1	37	-	17.8	16.87	16.55	16.58
		1	74	-	17.8	16.89	16.63	16.59
		36	0	-	17.8	16.44	16.57	16.56
		36	19	-	17.8	16.53	16.60	16.60
		36	39	-	17.8	16.53	16.66	16.63
		75	0	-	17.8	16.57	16.53	16.55

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20800	21100	21400
						Freq(MHz)		
						2505	2535	2565
10	QPSK	1	0	-	17.8	16.28	16.37	16.44
		1	24	-	17.8	16.25	16.35	16.39
		1	49	-	17.8	16.32	16.36	16.43
		25	0	-	17.8	16.53	16.58	16.53
		25	12	-	17.8	16.56	16.59	16.52
		25	25	-	17.8	16.57	16.60	16.56
		50	0	-	17.8	16.31	16.31	16.41
	16QAM	1	0	-	17.8	16.62	16.69	16.78
		1	24	-	17.8	16.58	16.65	16.73
		1	49	-	17.8	16.61	16.70	16.84
		25	0	-	17.8	16.58	16.60	16.55
		25	12	-	17.8	16.61	16.62	16.59
		25	25	-	17.8	16.58	16.63	16.63
		50	0	-	17.8	16.55	16.55	16.52
	64QAM	1	0	-	17.8	16.69	16.87	16.86
		1	24	-	17.8	16.75	16.78	16.82
		1	49	-	17.8	16.75	16.82	16.80
		25	0	-	17.8	16.58	16.63	16.58
		25	12	-	17.8	16.59	16.63	16.57
		25	25	-	17.8	16.59	16.64	16.60
		50	0	-	17.8	16.57	16.56	16.55
	256QAM	1	0	-	17.8	16.71	16.84	16.73
		1	24	-	17.8	16.60	16.68	16.81
		1	49	-	17.8	16.71	16.81	16.81
		25	0	-	17.8	16.52	16.55	16.54
		25	12	-	17.8	16.56	16.56	16.51
		25	25	-	17.8	16.52	16.63	16.58
		50	0	-	17.8	16.52	16.53	16.48

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
7						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	20775	21100	21425
						Freq(MHz)		
						2502.5	2535	2567.5
5	QPSK	1	0	-	17.8	16.43	16.31	16.41
		1	12	-	17.8	16.40	16.36	16.35
		1	24	-	17.8	16.44	16.38	16.38
		12	0	-	17.8	16.52	16.56	16.62
		12	6	-	17.8	16.51	16.53	16.58
		12	13	-	17.8	16.53	16.60	16.56
		25	0	-	17.8	16.43	16.37	16.37
	16QAM	1	0	-	17.8	16.86	16.67	16.71
		1	12	-	17.8	16.85	16.72	16.67
		1	24	-	17.8	16.89	16.76	16.73
		12	0	-	17.8	16.60	16.59	16.65
		12	6	-	17.8	16.63	16.61	16.65
		12	13	-	17.8	16.59	16.66	16.64
		25	0	-	17.8	16.58	16.53	16.58
	64QAM	1	0	-	17.8	16.91	16.72	16.72
		1	12	-	17.8	16.81	16.71	16.69
		1	24	-	17.8	16.89	16.78	16.73
		12	0	-	17.8	16.44	16.61	16.65
		12	6	-	17.8	16.46	16.61	16.68
		12	13	-	17.8	16.43	16.62	16.66
		25	0	-	17.8	16.58	16.62	16.64
	256QAM	1	0	-	17.8	16.67	16.72	16.84
		1	12	-	17.8	16.58	16.79	16.78
		1	24	-	17.8	16.66	16.85	16.86
		12	0	-	17.8	16.62	16.57	16.57
		12	6	-	17.8	16.59	16.53	16.59
		12	13	-	17.8	16.56	16.63	16.62
		25	0	-	17.8	16.57	16.55	16.63

*MPR is disabled when power reduction is enabled.

13.3.9 LTE band 12 DSI0

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23095	-
						Freq(MHz)		
						-	707.5	-
10	QPSK	1	0	0	24.0	-	22.49	-
		1	24	0	24.0	-	22.55	-
		1	49	0	24.0	-	22.71	-
		25	0	1	23.0	-	21.80	-
		25	12	1	23.0	-	21.86	-
		25	25	1	23.0	-	21.79	-
		50	0	1	23.0	-	21.83	-
	16QAM	1	0	1	23.0	-	21.81	-
		1	24	1	23.0	-	21.87	-
		1	49	1	23.0	-	21.98	-
		25	0	2	22.0	-	20.81	-
		25	12	2	22.0	-	20.87	-
		25	25	2	22.0	-	20.85	-
		50	0	2	22.0	-	20.86	-
	64QAM	1	0	2	22.0	-	21.10	-
		1	24	2	22.0	-	21.07	-
		1	49	2	22.0	-	21.28	-
		25	0	3	21.0	-	19.85	-
		25	12	3	21.0	-	19.94	-
		25	25	3	21.0	-	19.84	-
		50	0	3	21.0	-	19.93	-
	256QAM	1	0	5	19.0	-	17.92	-
		1	24	5	19.0	-	17.85	-
		1	49	5	19.0	-	18.27	-
		25	0	5	19.0	-	17.83	-
		25	12	5	19.0	-	17.91	-
		25	25	5	19.0	-	17.82	-
		50	0	5	19.0	-	17.86	-

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23035	23095	23155
						Freq(MHz)		
						701.5	707.5	713.5
5	QPSK	1	0	0	24.0	22.66	22.69	22.89
		1	12	0	24.0	22.70	22.70	22.95
		1	24	0	24.0	22.69	22.76	22.99
		12	0	1	23.0	21.76	21.90	21.95
		12	6	1	23.0	21.80	21.92	22.00
		12	13	1	23.0	21.78	21.86	22.03
		25	0	1	23.0	21.80	21.88	21.95
	16QAM	1	0	1	23.0	22.17	22.07	22.22
		1	12	1	23.0	22.10	22.08	22.37
		1	24	1	23.0	22.15	22.18	22.35
		12	0	2	22.0	20.82	20.93	21.05
		12	6	2	22.0	20.88	21.00	21.07
		12	13	2	22.0	20.84	20.94	21.13
		25	0	2	22.0	20.86	20.91	21.01
	64QAM	1	0	2	22.0	21.22	21.11	21.25
		1	12	2	22.0	21.19	21.08	21.28
		1	24	2	22.0	21.22	21.14	21.39
		12	0	3	21.0	19.68	19.93	20.04
		12	6	3	21.0	19.74	19.96	20.01
		12	13	3	21.0	19.73	19.94	20.04
		25	0	3	21.0	19.87	19.96	20.02
	256QAM	1	0	5	19.0	17.87	18.05	18.26
		1	12	5	19.0	17.86	18.02	18.19
		1	24	5	19.0	17.91	18.04	18.25
		12	0	5	19.0	17.85	17.92	18.00
		12	6	5	19.0	17.89	17.98	18.03
		12	13	5	19.0	17.83	17.91	18.09
		25	0	5	19.0	17.79	17.96	18.02

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23025	23095	23165
						Freq(MHz)		
						700.5	707.5	714.5
3	QPSK	1	0	0	24.0	22.73	22.76	22.67
		1	7	0	24.0	22.68	22.69	22.51
		1	14	0	24.0	22.72	22.70	22.42
		8	0	1	23.0	21.84	21.78	21.69
		8	3	1	23.0	21.86	21.87	21.67
		8	7	1	23.0	21.85	21.77	21.59
		15	0	1	23.0	21.78	21.80	21.62
	16QAM	1	0	1	23.0	21.96	22.10	22.01
		1	7	1	23.0	21.88	22.05	21.88
		1	14	1	23.0	21.88	22.04	21.75
		8	0	2	22.0	20.88	20.89	20.75
		8	3	2	22.0	20.94	20.93	20.69
		8	7	2	22.0	20.88	20.89	20.66
		15	0	2	22.0	20.85	20.86	20.64
	64QAM	1	0	2	22.0	21.16	21.25	20.95
		1	7	2	22.0	20.99	21.23	20.81
		1	14	2	22.0	21.08	21.19	20.70
		8	0	3	21.0	19.85	19.86	19.73
		8	3	3	21.0	19.90	19.89	19.74
		8	7	3	21.0	19.83	19.82	19.67
		15	0	3	21.0	19.94	19.88	19.68
	256QAM	1	0	5	19.0	17.77	18.20	17.99
		1	7	5	19.0	17.77	18.14	17.96
		1	14	5	19.0	17.72	18.15	17.87
		8	0	5	19.0	17.93	17.85	17.75
		8	3	5	19.0	17.97	17.91	17.73
		8	7	5	19.0	17.98	17.87	17.67
		15	0	5	19.0	17.93	17.84	17.65

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23017	23095	23017
						Freq(MHz)		
						699.7	707.5	715.3
1.4	QPSK	1	0	0	24.0	22.71	22.65	22.46
		1	2	0	24.0	22.81	22.78	22.54
		1	5	0	24.0	22.69	22.72	22.45
		3	0	0	24.0	22.78	22.74	22.44
		3	1	0	24.0	22.77	22.73	22.49
		3	3	0	24.0	22.71	22.65	22.39
		6	0	1	23.0	21.82	21.79	21.55
	16QAM	1	0	1	23.0	21.78	21.76	21.78
		1	2	1	23.0	21.92	21.90	21.86
		1	5	1	23.0	21.81	21.79	21.78
		3	0	1	23.0	21.80	21.78	21.62
		3	1	1	23.0	21.84	21.79	21.77
		3	3	1	23.0	21.74	21.71	21.65
		6	0	2	22.0	20.87	20.86	20.62
	64QAM	1	0	2	22.0	21.15	21.13	20.90
		1	2	2	22.0	21.31	21.25	20.96
		1	5	2	22.0	21.19	21.15	20.90
		3	0	2	22.0	21.02	20.99	20.70
		3	1	2	22.0	21.07	21.00	20.76
		3	3	2	22.0	20.96	20.93	20.69
		6	0	3	21.0	19.82	19.77	19.53
	256QAM	1	0	5	19.0	17.70	17.66	17.79
		1	2	5	19.0	17.79	17.74	17.85
		1	5	5	19.0	17.69	17.62	17.70
		3	0	5	19.0	17.74	17.74	17.69
		3	1	5	19.0	17.79	17.75	17.73
		3	3	5	19.0	17.70	17.66	17.68
		6	0	5	19.0	17.74	17.72	17.62

13.3.10 LTE band 12 DSI1

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23095	-
						Freq(MHz)		
						-	707.5	-
10	QPSK	1	0	-	18.9	-	18.16	-
		1	24	-	18.9	-	18.23	-
		1	49	-	18.9	-	18.33	-
		25	0	-	18.9	-	18.25	-
		25	12	-	18.9	-	18.32	-
		25	25	-	18.9	-	18.24	-
		50	0	-	18.9	-	18.31	-
	16QAM	1	0	-	18.9	-	18.39	-
		1	24	-	18.9	-	18.43	-
		1	49	-	18.9	-	18.57	-
		25	0	-	18.9	-	18.27	-
		25	12	-	18.9	-	18.33	-
		25	25	-	18.9	-	18.27	-
		50	0	-	18.9	-	18.30	-
	64QAM	1	0	-	18.9	-	18.63	-
		1	24	-	18.9	-	18.62	-
		1	49	-	18.9	-	18.74	-
		25	0	-	18.9	-	18.30	-
		25	12	-	18.9	-	18.36	-
		25	25	-	18.9	-	18.31	-
		50	0	-	18.9	-	18.34	-
	256QAM	1	0	-	18.9	-	18.04	-
		1	24	-	18.9	-	18.10	-
		1	49	-	18.9	-	18.34	-
		25	0	-	18.9	-	17.88	-
		25	12	-	18.9	-	17.93	-
		25	25	-	18.9	-	17.89	-
		50	0	-	18.9	-	17.94	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23035	23095	23035
						Freq(MHz)		
						701.5	707.5	713.5
5	QPSK	1	0	-	18.9	18.06	18.13	18.13
		1	12	-	18.9	18.05	18.19	18.20
		1	24	-	18.9	18.11	18.18	18.30
		12	0	-	18.9	18.10	18.25	18.32
		12	6	-	18.9	18.17	18.30	18.41
		12	13	-	18.9	18.11	18.26	18.36
		25	0	-	18.9	18.07	18.17	18.24
	16QAM	1	0	-	18.9	18.42	18.51	18.58
		1	12	-	18.9	18.42	18.57	18.68
		1	24	-	18.9	18.43	18.54	18.75
		12	0	-	18.9	18.14	18.29	18.41
		12	6	-	18.9	18.18	18.30	18.42
		12	13	-	18.9	18.12	18.28	18.47
		25	0	-	18.9	18.18	18.26	18.36
	64QAM	1	0	-	18.9	18.47	18.51	18.55
		1	12	-	18.9	18.46	18.46	18.64
		1	24	-	18.9	18.41	18.53	18.68
		12	0	-	18.9	18.13	18.32	18.47
		12	6	-	18.9	18.18	18.36	18.48
		12	13	-	18.9	18.17	18.30	18.48
		25	0	-	18.9	18.17	18.31	18.41
	256QAM	1	0	-	18.9	17.86	18.04	18.11
		1	12	-	18.9	17.92	18.06	18.15
		1	24	-	18.9	18.00	18.10	18.23
		12	0	-	18.9	17.78	17.89	18.02
		12	6	-	18.9	17.86	17.93	18.07
		12	13	-	18.9	17.79	17.93	18.02
		25	0	-	18.9	17.85	17.90	17.98

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23025	23095	23165
						Freq(MHz)		
						700.5	707.5	714.5
3	QPSK	1	0	-	18.9	18.16	18.13	17.96
		1	7	-	18.9	18.14	18.07	17.93
		1	14	-	18.9	18.13	18.02	17.72
		8	0	-	18.9	18.23	18.18	18.05
		8	3	-	18.9	18.29	18.23	18.00
		8	7	-	18.9	18.22	18.14	17.95
		15	0	-	18.9	18.16	18.09	17.87
	16QAM	1	0	-	18.9	18.51	18.48	18.12
		1	7	-	18.9	18.46	18.41	18.02
		1	14	-	18.9	18.48	18.40	17.99
		8	0	-	18.9	18.31	18.27	17.99
		8	3	-	18.9	18.35	18.32	17.93
		8	7	-	18.9	18.34	18.27	17.90
		15	0	-	18.9	18.33	18.27	18.01
	64QAM	1	0	-	18.9	18.57	18.61	18.38
		1	7	-	18.9	18.63	18.49	18.31
		1	14	-	18.9	18.61	18.46	18.13
		8	0	-	18.9	18.31	18.22	18.16
		8	3	-	18.9	18.31	18.25	18.12
		8	7	-	18.9	18.27	18.25	18.05
		15	0	-	18.9	18.29	18.27	18.08
	256QAM	1	0	-	18.9	18.21	18.15	17.94
		1	7	-	18.9	18.17	18.10	17.77
		1	14	-	18.9	18.18	18.12	17.70
		8	0	-	18.9	17.90	17.81	17.75
		8	3	-	18.9	17.93	17.85	17.73
		8	7	-	18.9	17.87	17.78	17.71
		15	0	-	18.9	17.88	17.79	17.57

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
12						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23017	23095	23017
						Freq(MHz)		
						699.7	707.5	715.3
1.4	QPSK	1	0	-	18.9	18.09	18.06	17.83
		1	2	-	18.9	18.20	18.15	17.82
		1	5	-	18.9	18.07	18.05	17.70
		3	0	-	18.9	18.17	18.11	17.82
		3	1	-	18.9	18.16	18.10	17.81
		3	3	-	18.9	18.09	18.04	17.80
		6	0	-	18.9	18.10	18.06	17.82
	16QAM	1	0	-	18.9	18.18	18.15	18.07
		1	2	-	18.9	18.33	18.30	18.15
		1	5	-	18.9	18.20	18.18	17.96
		3	0	-	18.9	18.18	18.18	18.11
		3	1	-	18.9	18.21	18.20	18.13
		3	3	-	18.9	18.15	18.07	18.09
		6	0	-	18.9	18.27	18.24	17.91
	64QAM	1	0	-	18.9	18.56	18.53	18.28
		1	2	-	18.9	18.69	18.64	18.29
		1	5	-	18.9	18.54	18.54	18.15
		3	0	-	18.9	18.42	18.35	17.98
		3	1	-	18.9	18.44	18.39	18.05
		3	3	-	18.9	18.40	18.33	17.98
		6	0	-	18.9	18.26	18.18	18.05
	256QAM	1	0	-	18.9	17.65	17.58	17.77
		1	2	-	18.9	17.77	17.73	17.84
		1	5	-	18.9	17.69	17.63	17.75
		3	0	-	18.9	17.73	17.70	17.61
		3	1	-	18.9	17.76	17.74	17.66
		3	3	-	18.9	17.70	17.64	17.55
		6	0	-	18.9	17.75	17.68	17.61

*MPR is disabled when power reduction is enabled.

13.3.11 LTE band 13 DSI0

Band						Meas. Pwr Avg (dBm)		
13						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23230	-
						Freq(MHz)		
						-	782	-
10	QPSK	1	0	0	24.0	-	22.45	-
		1	24	0	24.0	-	22.41	-
		1	49	0	24.0	-	22.33	-
		25	0	1	23.0	-	21.54	-
		25	12	1	23.0	-	21.53	-
		25	25	1	23.0	-	21.55	-
		50	0	1	23.0	-	21.52	-
	16QAM	1	0	1	23.0	-	21.80	-
		1	24	1	23.0	-	21.73	-
		1	49	1	23.0	-	21.72	-
		25	0	2	22.0	-	20.56	-
		25	12	2	22.0	-	20.55	-
		25	25	2	22.0	-	20.55	-
		50	0	2	22.0	-	20.51	-
	64QAM	1	0	2	22.0	-	20.74	-
		1	24	2	22.0	-	20.81	-
		1	49	2	22.0	-	20.67	-
		25	0	3	21.0	-	19.55	-
		25	12	3	21.0	-	19.54	-
		25	25	3	21.0	-	19.56	-
		50	0	3	21.0	-	19.54	-
	256QAM	1	0	5	19.0	-	17.64	-
		1	24	5	19.0	-	17.63	-
		1	49	5	19.0	-	17.75	-
		25	0	5	19.0	-	17.54	-
		25	12	5	19.0	-	17.56	-
		25	25	5	19.0	-	17.54	-
		50	0	5	19.0	-	17.52	-

Band						Meas. Pwr Avg (dBm)		
13						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23205	23230	23255
						Freq(MHz)		
						779.5	782	784.5
5	QPSK	1	0	0	24.0	22.49	22.40	22.44
		1	12	0	24.0	22.47	22.42	22.40
		1	24	0	24.0	22.48	22.45	22.38
		12	0	1	23.0	21.60	21.55	21.60
		12	6	1	23.0	21.63	21.56	21.53
		12	13	1	23.0	21.58	21.53	21.51
		25	0	1	23.0	21.48	21.56	21.54
	16QAM	1	0	1	23.0	21.85	21.81	21.83
		1	12	1	23.0	21.92	21.82	21.73
		1	24	1	23.0	21.88	21.80	21.72
		12	0	2	22.0	20.62	20.64	20.60
		12	6	2	22.0	20.64	20.59	20.64
		12	13	2	22.0	20.62	20.65	20.59
		25	0	2	22.0	20.70	20.58	20.54
	64QAM	1	0	2	22.0	20.86	20.79	20.85
		1	12	2	22.0	20.85	20.81	20.80
		1	24	2	22.0	20.89	20.86	20.83
		12	0	3	21.0	19.65	19.63	19.66
		12	6	3	21.0	19.70	19.64	19.55
		12	13	3	21.0	19.64	19.65	19.50
		25	0	3	21.0	19.68	19.57	19.60
	256QAM	1	0	5	19.0	17.79	17.72	17.68
		1	12	5	19.0	17.72	17.74	17.62
		1	24	5	19.0	17.84	17.70	17.65
		12	0	5	19.0	17.63	17.61	17.71
		12	6	5	19.0	17.65	17.57	17.56
		12	13	5	19.0	17.65	17.60	17.57
		25	0	5	19.0	17.66	17.53	17.57

13.3.12 LTE band 13 DSI1

Band						Meas. Pwr Avg (dBm)		
13						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23230	-
						Freq(MHz)		
						-	782	-
10	QPSK	1	0	-	18.1	-	16.57	-
		1	24	-	18.1	-	16.48	-
		1	49	-	18.1	-	16.39	-
		25	0	-	18.1	-	16.57	-
		25	12	-	18.1	-	16.58	-
		25	25	-	18.1	-	16.56	-
		50	0	-	18.1	-	16.56	-
	16QAM	1	0	-	18.1	-	16.85	-
		1	24	-	18.1	-	16.85	-
		1	49	-	18.1	-	16.73	-
		25	0	-	18.1	-	16.61	-
		25	12	-	18.1	-	16.58	-
		25	25	-	18.1	-	16.59	-
		50	0	-	18.1	-	16.53	-
	64QAM	1	0	-	18.1	-	17.00	-
		1	24	-	18.1	-	16.90	-
		1	49	-	18.1	-	16.82	-
		25	0	-	18.1	-	16.65	-
		25	12	-	18.1	-	16.64	-
		25	25	-	18.1	-	16.61	-
		50	0	-	18.1	-	16.58	-
	256QAM	1	0	-	18.1	-	16.81	-
		1	24	-	18.1	-	16.83	-
		1	49	-	18.1	-	16.81	-
		25	0	-	18.1	-	16.49	-
		25	12	-	18.1	-	16.55	-
		25	25	-	18.1	-	16.55	-
		50	0	-	18.1	-	16.55	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
13						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23205	23230	23255
						Freq(MHz)		
						779.5	782	784.5
5	QPSK	1	0	-	18.1	16.45	16.38	16.44
		1	12	-	18.1	16.46	16.39	16.39
		1	24	-	18.1	16.47	16.37	16.37
		12	0	-	18.1	16.59	16.57	16.59
		12	6	-	18.1	16.61	16.52	16.56
		12	13	-	18.1	16.62	16.56	16.52
		25	0	-	18.1	16.46	16.33	16.43
	16QAM	1	0	-	18.1	16.83	16.74	16.87
		1	12	-	18.1	16.80	16.79	16.78
		1	24	-	18.1	16.78	16.79	16.78
		12	0	-	18.1	16.59	16.55	16.64
		12	6	-	18.1	16.66	16.56	16.58
		12	13	-	18.1	16.64	16.57	16.56
		25	0	-	18.1	16.70	16.56	16.58
	64QAM	1	0	-	18.1	16.80	16.77	16.86
		1	12	-	18.1	16.84	16.87	16.76
		1	24	-	18.1	16.83	16.77	16.75
		12	0	-	18.1	16.69	16.62	16.65
		12	6	-	18.1	16.70	16.62	16.62
		12	13	-	18.1	16.67	16.64	16.60
		25	0	-	18.1	16.73	16.54	16.57
	256QAM	1	0	-	18.1	16.72	16.63	16.71
		1	12	-	18.1	16.60	16.66	16.66
		1	24	-	18.1	16.76	16.66	16.73
		12	0	-	18.1	16.61	16.61	16.61
		12	6	-	18.1	16.65	16.56	16.58
		12	13	-	18.1	16.62	16.59	16.54
		25	0	-	18.1	16.65	16.57	16.57

*MPR is disabled when power reduction is enabled.

13.3.13 LTE band 14 DSI0

Band						Meas. Pwr Avg (dBm)		
14						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23330	-
						Freq(MHz)		
						-	793	-
10	QPSK	1	0	0	24.0	-	22.40	-
		1	24	0	24.0	-	22.35	-
		1	49	0	24.0	-	22.31	-
		25	0	1	23.0	-	21.38	-
		25	12	1	23.0	-	21.48	-
		25	25	1	23.0	-	21.46	-
		50	0	1	23.0	-	21.47	-
	16QAM	1	0	1	23.0	-	21.74	-
		1	24	1	23.0	-	21.66	-
		1	49	1	23.0	-	21.68	-
		25	0	2	22.0	-	20.42	-
		25	12	2	22.0	-	20.51	-
		25	25	2	22.0	-	20.49	-
		50	0	2	22.0	-	20.45	-
	64QAM	1	0	2	22.0	-	20.72	-
		1	24	2	22.0	-	20.73	-
		1	49	2	22.0	-	20.69	-
		25	0	3	21.0	-	19.44	-
		25	12	3	21.0	-	19.52	-
		25	25	3	21.0	-	19.45	-
		50	0	3	21.0	-	19.46	-
	256QAM	1	0	5	19.0	-	17.58	-
		1	24	5	19.0	-	17.64	-
		1	49	5	19.0	-	17.59	-
		25	0	5	19.0	-	17.43	-
		25	12	5	19.0	-	17.49	-
		25	25	5	19.0	-	17.44	-
		50	0	5	19.0	-	17.47	-

Band						Meas. Pwr Avg (dBm)		
14						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23305	23330	23355
						Freq(MHz)		
						790.5	793	795.5
5	QPSK	1	0	0	24.0	22.43	22.38	22.27
		1	12	0	24.0	22.49	22.42	22.34
		1	24	0	24.0	22.39	22.40	22.26
		12	0	1	23.0	21.50	21.46	21.43
		12	6	1	23.0	21.55	21.54	21.47
		12	13	1	23.0	21.48	21.50	21.44
		25	0	1	23.0	21.51	21.47	21.41
	16QAM	1	0	1	23.0	21.79	21.84	21.66
		1	12	1	23.0	21.83	21.89	21.78
		1	24	1	23.0	21.69	21.90	21.76
		12	0	2	22.0	20.61	20.52	20.48
		12	6	2	22.0	20.59	20.59	20.51
		12	13	2	22.0	20.57	20.53	20.51
		25	0	2	22.0	20.56	20.56	20.42
	64QAM	1	0	2	22.0	20.81	20.92	20.64
		1	12	2	22.0	20.83	20.99	20.72
		1	24	2	22.0	20.76	20.91	20.70
		12	0	3	21.0	19.64	19.42	19.50
		12	6	3	21.0	19.66	19.49	19.54
		12	13	3	21.0	19.62	19.46	19.53
		25	0	3	21.0	19.53	19.56	19.48
	256QAM	1	0	5	19.0	17.61	17.57	17.90
		1	12	5	19.0	17.69	17.60	17.98
		1	24	5	19.0	17.59	17.62	17.92
		12	0	5	19.0	17.62	17.55	17.44
		12	6	5	19.0	17.58	17.62	17.47
		12	13	5	19.0	17.54	17.57	17.47
		25	0	5	19.0	17.54	17.50	17.42

13.3.14 LTE band 14 DSI1

Band						Meas. Pwr Avg (dBm)		
14						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23330	-
						Freq(MHz)		
						-	793	-
10	QPSK	1	0	-	18.1	-	16.43	-
		1	24	-	18.1	-	16.32	-
		1	49	-	18.1	-	16.35	-
		25	0	-	18.1	-	16.41	-
		25	12	-	18.1	-	16.48	-
		25	25	-	18.1	-	16.46	-
		50	0	-	18.1	-	16.38	-
	16QAM	1	0	-	18.1	-	16.71	-
		1	24	-	18.1	-	16.62	-
		1	49	-	18.1	-	16.52	-
		25	0	-	18.1	-	16.47	-
		25	12	-	18.1	-	16.53	-
		25	25	-	18.1	-	16.51	-
		50	0	-	18.1	-	16.52	-
	64QAM	1	0	-	18.1	-	16.88	-
		1	24	-	18.1	-	16.74	-
		1	49	-	18.1	-	16.76	-
		25	0	-	18.1	-	16.48	-
		25	12	-	18.1	-	16.56	-
		25	25	-	18.1	-	16.52	-
		50	0	-	18.1	-	16.51	-
	256QAM	1	0	-	18.1	-	16.72	-
		1	24	-	18.1	-	16.71	-
		1	49	-	18.1	-	16.78	-
		25	0	-	18.1	-	16.44	-
		25	12	-	18.1	-	16.53	-
		25	25	-	18.1	-	16.50	-
		50	0	-	18.1	-	16.52	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
14						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	23305	23330	23355
						Freq(MHz)		
						790.5	793	795.5
5	QPSK	1	0	-	18.1	16.42	16.29	16.23
		1	12	-	18.1	16.43	16.30	16.34
		1	24	-	18.1	16.35	16.31	16.31
		12	0	-	18.1	16.50	16.45	16.44
		12	6	-	18.1	16.57	16.53	16.47
		12	13	-	18.1	16.49	16.46	16.46
		25	0	-	18.1	16.42	16.28	16.31
	16QAM	1	0	-	18.1	16.87	16.72	16.66
		1	12	-	18.1	16.88	16.70	16.69
		1	24	-	18.1	16.84	16.70	16.74
		12	0	-	18.1	16.62	16.51	16.51
		12	6	-	18.1	16.63	16.58	16.52
		12	13	-	18.1	16.56	16.55	16.51
		25	0	-	18.1	16.57	16.49	16.46
	64QAM	1	0	-	18.1	16.91	16.70	16.65
		1	12	-	18.1	16.85	16.73	16.73
		1	24	-	18.1	16.83	16.69	16.70
		12	0	-	18.1	16.45	16.53	16.49
		12	6	-	18.1	16.46	16.58	16.54
		12	13	-	18.1	16.44	16.56	16.52
		25	0	-	18.1	16.56	16.54	16.49
	256QAM	1	0	-	18.1	16.65	16.74	16.68
		1	12	-	18.1	16.64	16.77	16.77
		1	24	-	18.1	16.60	16.73	16.74
		12	0	-	18.1	16.61	16.48	16.44
		12	6	-	18.1	16.64	16.52	16.48
		12	13	-	18.1	16.55	16.49	16.46
		25	0	-	18.1	16.52	16.51	16.42

*MPR is disabled when power reduction is enabled.

13.3.15 LTE band 17 DSI0

Band						Meas. Pwr Avg (dBm)		
17						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23790	-
						Freq(MHz)		
						-	710	-
10	QPSK	1	0	0	24.0	-	22.61	-
		1	24	0	24.0	-	22.72	-
		1	49	0	24.0	-	22.85	-
		25	0	1	23.0	-	21.75	-
		25	12	1	23.0	-	21.82	-
		25	25	1	23.0	-	21.88	-
		50	0	1	23.0	-	21.80	-
	16QAM	1	0	1	23.0	-	21.92	-
		1	24	1	23.0	-	22.10	-
		1	49	1	23.0	-	22.19	-
		25	0	2	22.0	-	20.78	-
		25	12	2	22.0	-	20.91	-
		25	25	2	22.0	-	20.92	-
		50	0	2	22.0	-	20.84	-
	64QAM	1	0	2	22.0	-	20.95	-
		1	24	2	22.0	-	21.13	-
		1	49	2	22.0	-	21.26	-
		25	0	3	21.0	-	19.78	-
		25	12	3	21.0	-	19.89	-
		25	25	3	21.0	-	19.94	-
		50	0	3	21.0	-	19.84	-
	256QAM	1	0	5	19.0	-	17.86	-
		1	24	5	19.0	-	18.14	-
		1	49	5	19.0	-	18.20	-
		25	0	5	19.0	-	17.77	-
		25	12	5	19.0	-	17.87	-
		25	25	5	19.0	-	17.89	-
		50	0	5	19.0	-	17.82	-

Band						Meas. Pwr Avg (dBm)		
17						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23790	-
						Freq(MHz)		
						-	710	-
5	QPSK	1	0	0	24.0	-	22.71	-
		1	12	0	24.0	-	22.85	-
		1	24	0	24.0	-	22.90	-
		12	0	1	23.0	-	21.85	-
		12	6	1	23.0	-	21.87	-
		12	13	1	23.0	-	21.93	-
		25	0	1	23.0	-	21.87	-
	16QAM	1	0	1	23.0	-	22.19	-
		1	12	1	23.0	-	22.25	-
		1	24	1	23.0	-	22.40	-
		12	0	2	22.0	-	20.96	-
		12	6	2	22.0	-	21.02	-
		12	13	2	22.0	-	20.99	-
		25	0	2	22.0	-	20.95	-
	64QAM	1	0	2	22.0	-	21.30	-
		1	12	2	22.0	-	21.36	-
		1	24	2	22.0	-	21.43	-
		12	0	3	21.0	-	19.85	-
		12	6	3	21.0	-	19.88	-
		12	13	3	21.0	-	19.91	-
		25	0	3	21.0	-	19.94	-
	256QAM	1	0	5	19.0	-	17.99	-
		1	12	5	19.0	-	18.02	-
		1	24	5	19.0	-	18.12	-
		12	0	5	19.0	-	17.97	-
		12	6	5	19.0	-	18.01	-
		12	13	5	19.0	-	18.05	-
		25	0	5	19.0	-	17.90	-

13.3.16 LTE band 17 DSI1

Band						Meas. Pwr Avg (dBm)		
17						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23790	-
						Freq(MHz)		
						-	710	-
10	QPSK	1	0	-	19.2	-	17.47	-
		1	24	-	19.2	-	17.59	-
		1	49	-	19.2	-	17.71	-
		25	0	-	19.2	-	17.53	-
		25	12	-	19.2	-	17.67	-
		25	25	-	19.2	-	17.69	-
		50	0	-	19.2	-	17.67	-
	16QAM	1	0	-	19.2	-	17.79	-
		1	24	-	19.2	-	17.91	-
		1	49	-	19.2	-	18.01	-
		25	0	-	19.2	-	17.58	-
		25	12	-	19.2	-	17.66	-
		25	25	-	19.2	-	17.74	-
		50	0	-	19.2	-	17.61	-
	64QAM	1	0	-	19.2	-	17.96	-
		1	24	-	19.2	-	18.01	-
		1	49	-	19.2	-	18.19	-
		25	0	-	19.2	-	17.60	-
		25	12	-	19.2	-	17.70	-
		25	25	-	19.2	-	17.77	-
		50	0	-	19.2	-	17.68	-
	256QAM	1	0	-	19.2	-	17.68	-
		1	24	-	19.2	-	17.88	-
		1	49	-	19.2	-	18.11	-
		25	0	-	19.2	-	17.60	-
		25	12	-	19.2	-	17.70	-
		25	25	-	19.2	-	17.79	-
		50	0	-	19.2	-	17.67	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
17						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	23790	-
						Freq(MHz)		
						-	710	-
5	QPSK	1	0	-	19.2	-	17.49	-
		1	12	-	19.2	-	17.62	-
		1	24	-	19.2	-	17.72	-
		12	0	-	19.2	-	17.66	-
		12	6	-	19.2	-	17.70	-
		12	13	-	19.2	-	17.72	-
		25	0	-	19.2	-	17.64	-
	16QAM	1	0	-	19.2	-	17.96	-
		1	12	-	19.2	-	18.01	-
		1	24	-	19.2	-	18.09	-
		12	0	-	19.2	-	17.70	-
		12	6	-	19.2	-	17.72	-
		12	13	-	19.2	-	17.76	-
		25	0	-	19.2	-	17.75	-
	64QAM	1	0	-	19.2	-	17.97	-
		1	12	-	19.2	-	18.06	-
		1	24	-	19.2	-	18.13	-
		12	0	-	19.2	-	17.57	-
		12	6	-	19.2	-	17.66	-
		12	13	-	19.2	-	17.67	-
		25	0	-	19.2	-	17.71	-
	256QAM	1	0	-	19.2	-	17.77	-
		1	12	-	19.2	-	17.85	-
		1	24	-	19.2	-	17.91	-
		12	0	-	19.2	-	17.74	-
		12	6	-	19.2	-	17.79	-
		12	13	-	19.2	-	17.80	-
		25	0	-	19.2	-	17.73	-

*MPR is disabled when power reduction is enabled.

13.3.17 LTE band 25 DSI0

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26140	26140	26590
						Freq(MHz)		
						1860	1882.5	1905
20	QPSK	1	0	0.0	23.6	22.78	22.70	22.68
		1	49	0.0	23.6	22.76	22.69	22.61
		1	99	0.0	23.6	22.71	22.68	22.58
		50	0	0.6	23.0	21.89	21.75	21.69
		50	24	0.6	23.0	21.90	21.85	21.68
		50	50	0.6	23.0	21.86	21.79	21.72
		100	0	0.6	23.0	21.87	21.83	21.68
	16QAM	1	0	0.6	23.0	22.22	22.11	22.09
		1	49	0.6	23.0	22.18	22.11	22.04
		1	99	0.6	23.0	22.17	22.10	22.03
		50	0	1.6	22.0	20.91	20.77	20.72
		50	24	1.6	22.0	20.94	20.87	20.72
		50	50	1.6	22.0	20.89	20.82	20.75
		100	0	1.6	22.0	20.88	20.84	20.69
	64QAM	1	0	1.6	22.0	21.03	20.98	20.90
		1	49	1.6	22.0	21.02	20.93	20.91
		1	99	1.6	22.0	21.06	20.93	20.86
		50	0	2.6	21.0	19.97	19.78	19.72
		50	24	2.6	21.0	19.95	19.88	19.77
		50	50	2.6	21.0	19.92	19.84	19.78
		100	0	2.6	21.0	19.88	19.80	19.68
	256QAM	1	0	4.6	19.0	17.88	17.78	17.70
		1	49	4.6	19.0	17.99	17.77	17.74
		1	99	4.6	19.0	18.03	17.77	17.70
		50	0	4.6	19.0	17.93	17.78	17.70
		50	24	4.6	19.0	17.92	17.87	17.74
		50	50	4.6	19.0	17.84	17.80	17.76
		100	0	4.6	19.0	17.88	17.82	17.73

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26115	26365	26615
						Freq(MHz)		
						1857.5	1882.5	1907.5
15	QPSK	1	0	0.0	23.6	22.64	22.59	22.56
		1	37	0.0	23.6	22.62	22.54	22.54
		1	74	0.0	23.6	22.63	22.56	22.51
		36	0	0.6	23.0	21.71	21.60	21.59
		36	19	0.6	23.0	21.76	21.68	21.63
		36	39	0.6	23.0	21.73	21.61	21.58
		75	0	0.6	23.0	21.72	21.62	21.59
	16QAM	1	0	0.6	23.0	22.06	21.86	21.81
		1	37	0.6	23.0	21.97	21.75	21.78
		1	74	0.6	23.0	21.96	21.85	21.79
		36	0	1.6	22.0	20.70	20.63	20.60
		36	19	1.6	22.0	20.77	20.70	20.67
		36	39	1.6	22.0	20.74	20.67	20.62
		75	0	1.6	22.0	20.74	20.64	20.63
	64QAM	1	0	1.6	22.0	20.89	20.88	20.86
		1	37	1.6	22.0	21.04	20.99	20.87
		1	74	1.6	22.0	21.02	20.99	20.83
		36	0	2.6	21.0	19.74	19.62	19.64
		36	19	2.6	21.0	19.80	19.69	19.67
		36	39	2.6	21.0	19.75	19.63	19.63
		75	0	2.6	21.0	19.77	19.67	19.64
	256QAM	1	0	4.6	19.0	17.94	17.74	17.69
		1	37	4.6	19.0	17.86	17.81	17.77
		1	74	4.6	19.0	17.90	17.77	17.74
		36	0	4.6	19.0	17.72	17.63	17.57
		36	19	4.6	19.0	17.78	17.68	17.67
		36	39	4.6	19.0	17.73	17.65	17.61
		75	0	4.6	19.0	17.76	17.68	17.65

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26090	26365	26640
						Freq(MHz)		
						1855	1882.5	1910
10	QPSK	1	0	0.0	23.6	22.70	22.50	22.44
		1	24	0.0	23.6	22.61	22.49	22.43
		1	49	0.0	23.6	22.66	22.54	22.46
		25	0	0.6	23.0	21.77	21.57	21.51
		25	12	0.6	23.0	21.82	21.65	21.55
		25	25	0.6	23.0	21.83	21.64	21.59
		50	0	0.6	23.0	21.82	21.56	21.52
	16QAM	1	0	0.6	23.0	22.04	21.91	21.76
		1	24	0.6	23.0	22.04	21.87	21.83
		1	49	0.6	23.0	22.01	21.81	21.77
		25	0	1.6	22.0	20.83	20.55	20.56
		25	12	1.6	22.0	20.85	20.73	20.56
		25	25	1.6	22.0	20.86	20.69	20.61
		50	0	1.6	22.0	20.82	20.67	20.55
	64QAM	1	0	1.6	22.0	20.98	20.77	20.73
		1	24	1.6	22.0	20.98	20.89	20.82
		1	49	1.6	22.0	21.04	20.93	20.80
		25	0	2.6	21.0	19.81	19.59	19.53
		25	12	2.6	21.0	19.85	19.71	19.57
		25	25	2.6	21.0	19.81	19.69	19.64
		50	0	2.6	21.0	19.84	19.70	19.54
	256QAM	1	0	4.6	19.0	18.08	17.74	17.76
		1	24	4.6	19.0	17.95	17.82	17.79
		1	49	4.6	19.0	17.95	17.85	17.82
		25	0	4.6	19.0	17.82	17.60	17.51
		25	12	4.6	19.0	17.82	17.68	17.55
		25	25	4.6	19.0	17.80	17.66	17.64
		50	0	4.6	19.0	17.79	17.68	17.54

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26065	26365	26665
						Freq(MHz)		
						1852.5	1882.5	1912.5
5	QPSK	1	0	0.0	23.6	22.69	22.53	22.40
		1	12	0.0	23.6	22.74	22.51	22.41
		1	24	0.0	23.6	22.71	22.52	22.42
		12	0	0.6	23.0	21.77	21.68	21.54
		12	6	0.6	23.0	21.81	21.67	21.60
		12	13	0.6	23.0	21.82	21.74	21.61
		25	0	0.6	23.0	21.78	21.69	21.59
	16QAM	1	0	0.6	23.0	22.20	21.97	21.85
		1	12	0.6	23.0	22.19	22.01	21.86
		1	24	0.6	23.0	22.21	21.96	21.83
		12	0	1.6	22.0	20.83	20.67	20.61
		12	6	1.6	22.0	20.92	20.72	20.67
		12	13	1.6	22.0	20.91	20.77	20.68
		25	0	1.6	22.0	20.85	20.69	20.61
	64QAM	1	0	1.6	22.0	21.26	20.90	20.84
		1	12	1.6	22.0	21.25	20.89	20.81
		1	24	1.6	22.0	21.28	20.92	20.70
		12	0	2.6	21.0	19.70	19.70	19.61
		12	6	2.6	21.0	19.76	19.77	19.68
		12	13	2.6	21.0	19.77	19.78	19.69
		25	0	2.6	21.0	19.87	19.75	19.66
	256QAM	1	0	4.6	19.0	17.87	18.12	18.11
		1	12	4.6	19.0	17.88	18.14	18.07
		1	24	4.6	19.0	17.90	18.15	18.07
		12	0	4.6	19.0	17.83	17.61	17.56
		12	6	4.6	19.0	17.90	17.69	17.65
		12	13	4.6	19.0	17.88	17.70	17.67
		25	0	4.6	19.0	17.83	17.68	17.65

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26055	26365	26675
						Freq(MHz)		
						1851.5	1882.5	1913.5
3	QPSK	1	0	0.0	23.6	22.59	22.49	22.40
		1	7	0.0	23.6	22.72	22.69	22.52
		1	14	0.0	23.6	22.71	22.59	22.48
		8	0	0.6	23.0	21.80	21.67	21.54
		8	3	0.6	23.0	21.84	21.72	21.64
		8	7	0.6	23.0	21.82	21.71	21.63
		15	0	0.6	23.0	21.81	21.66	21.59
	16QAM	1	0	0.6	23.0	21.84	21.70	21.65
		1	7	0.6	23.0	21.93	21.79	21.71
		1	14	0.6	23.0	21.93	21.81	21.73
		8	0	1.6	22.0	20.69	20.58	20.49
		8	3	1.6	22.0	20.81	20.68	20.58
		8	7	1.6	22.0	20.81	20.67	20.57
		15	0	1.6	22.0	20.80	20.69	20.60
	64QAM	1	0	1.6	22.0	21.12	20.96	20.95
		1	7	1.6	22.0	21.11	20.96	20.94
		1	14	1.6	22.0	21.20	21.07	20.80
		8	0	2.6	21.0	19.86	19.77	19.66
		8	3	2.6	21.0	19.95	19.83	19.73
		8	7	2.6	21.0	19.96	19.83	19.76
		15	0	2.6	21.0	19.86	19.76	19.68
	256QAM	1	0	4.6	19.0	18.03	17.86	17.83
		1	7	4.6	19.0	18.01	17.93	17.85
		1	14	4.6	19.0	18.13	18.01	17.91
		8	0	4.6	19.0	17.85	17.75	17.68
		8	3	4.6	19.0	17.93	17.82	17.76
		8	7	4.6	19.0	17.95	17.83	17.77
		15	0	4.6	19.0	17.80	17.67	17.62

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26047	26365	26683
						Freq(MHz)		
						1850.7	1882.5	1914.3
1.4	QPSK	1	0	0.0	23.6	22.58	22.39	22.35
		1	2	0.0	23.6	22.66	22.53	22.42
		1	5	0.0	23.6	22.60	22.48	22.38
		3	0	0.0	23.6	22.63	22.48	22.38
		3	1	0.0	23.6	22.68	22.53	22.42
		3	3	0.0	23.6	22.64	22.56	22.41
		6	0	0.6	23.0	21.73	21.59	21.50
	16QAM	1	0	0.6	23.0	21.82	21.68	21.58
		1	2	0.6	23.0	21.99	21.85	21.77
		1	5	0.6	23.0	21.90	21.75	21.64
		3	0	0.6	23.0	21.89	21.76	21.66
		3	1	0.6	23.0	21.99	21.83	21.74
		3	3	0.6	23.0	21.93	21.77	21.72
		6	0	1.6	22.0	20.77	20.64	20.52
	64QAM	1	0	1.6	22.0	21.10	20.95	20.87
		1	2	1.6	22.0	21.27	20.81	20.94
		1	5	1.6	22.0	21.18	20.83	20.71
		3	0	1.6	22.0	20.84	20.70	20.59
		3	1	1.6	22.0	20.87	20.78	20.60
		3	3	1.6	22.0	20.83	20.74	20.47
		6	0	2.6	21.0	19.92	19.71	19.63
	256QAM	1	0	4.6	19.0	17.96	17.73	17.73
		1	2	4.6	19.0	18.04	17.91	17.80
		1	5	4.6	19.0	18.02	17.88	17.79
		3	0	4.6	19.0	17.80	17.68	17.58
		3	1	4.6	19.0	17.88	17.74	17.63
		3	3	4.6	19.0	17.88	17.76	17.61
		6	0	4.6	19.0	17.83	17.65	17.60

13.3.18 LTE band 25 DSI1

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26140	26365	26590
						Freq(MHz)		
						1860	1882.5	1905
20	QPSK	1	0	-	17.6	16.33	16.26	16.21
		1	49	-	17.6	16.28	16.25	16.18
		1	99	-	17.6	16.25	16.24	16.11
		50	0	-	17.6	16.42	16.25	16.20
		50	24	-	17.6	16.40	16.29	16.18
		50	50	-	17.6	16.41	16.28	16.27
		100	0	-	17.6	16.32	16.19	16.18
	16QAM	1	0	-	17.6	16.76	16.57	16.57
		1	49	-	17.6	16.71	16.63	16.57
		1	99	-	17.6	16.70	16.57	16.53
		50	0	-	17.6	16.48	16.27	16.26
		50	24	-	17.6	16.46	16.34	16.26
		50	50	-	17.6	16.43	16.34	16.26
		100	0	-	17.6	16.40	16.29	16.21
	64QAM	1	0	-	17.6	16.51	16.41	16.42
		1	49	-	17.6	16.51	16.39	16.40
		1	99	-	17.6	16.53	16.43	16.37
		50	0	-	17.6	16.45	16.28	16.27
		50	24	-	17.6	16.45	16.34	16.24
		50	50	-	17.6	16.42	16.30	16.31
		100	0	-	17.6	16.38	16.26	16.18
	256QAM	1	0	-	17.6	16.38	16.23	16.22
		1	49	-	17.6	16.36	16.25	16.25
		1	99	-	17.6	16.37	16.22	16.17
		50	0	-	17.6	16.47	16.26	16.25
		50	24	-	17.6	16.47	16.32	16.26
		50	50	-	17.6	16.40	16.31	16.27
		100	0	-	17.6	16.42	16.30	16.24

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26115	26365	26615
						Freq(MHz)		
						1857.5	1882.5	1907.5
15	QPSK	1	0	-	17.6	16.15	16.03	16.06
		1	37	-	17.6	16.11	15.99	16.03
		1	74	-	17.6	16.09	16.07	16.01
		36	0	-	17.6	16.21	16.14	16.07
		36	19	-	17.6	16.28	16.17	16.12
		36	39	-	17.6	16.22	16.13	16.08
		75	0	-	17.6	16.15	16.07	16.01
	16QAM	1	0	-	17.6	16.52	16.44	16.29
		1	37	-	17.6	16.52	16.36	16.26
		1	74	-	17.6	16.46	16.35	16.22
		36	0	-	17.6	16.21	16.11	16.09
		36	19	-	17.6	16.28	16.19	16.15
		36	39	-	17.6	16.21	16.17	16.11
		75	0	-	17.6	16.27	16.19	16.12
	64QAM	1	0	-	17.6	16.35	16.31	16.41
		1	37	-	17.6	16.44	16.38	16.30
		1	74	-	17.6	16.41	16.35	16.31
		36	0	-	17.6	16.21	16.10	16.07
		36	19	-	17.6	16.26	16.19	16.15
		36	39	-	17.6	16.21	16.18	16.06
		75	0	-	17.6	16.26	16.15	16.14
	256QAM	1	0	-	17.6	16.43	16.31	16.20
		1	37	-	17.6	16.44	16.33	16.25
		1	74	-	17.6	16.45	16.34	16.24
		36	0	-	17.6	16.18	16.12	16.10
		36	19	-	17.6	16.30	16.22	16.14
		36	39	-	17.6	16.25	16.12	16.07
		75	0	-	17.6	16.28	16.19	16.13

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26090	26365	26640
						Freq(MHz)		
						1855	1882.5	1910
10	QPSK	1	0	-	17.6	16.19	16.06	15.84
		1	24	-	17.6	16.11	16.03	15.83
		1	49	-	17.6	16.14	16.08	15.96
		25	0	-	17.6	16.27	16.10	16.00
		25	12	-	17.6	16.29	16.16	16.03
		25	25	-	17.6	16.28	16.14	16.08
		50	0	-	17.6	16.19	16.08	15.92
	16QAM	1	0	-	17.6	16.57	16.44	16.22
		1	24	-	17.6	16.43	16.28	16.25
		1	49	-	17.6	16.56	16.32	16.24
		25	0	-	17.6	16.30	16.05	16.00
		25	12	-	17.6	16.32	16.20	16.07
		25	25	-	17.6	16.29	16.18	16.12
		50	0	-	17.6	16.28	16.17	16.03
	64QAM	1	0	-	17.6	16.61	16.22	16.27
		1	24	-	17.6	16.49	16.30	16.22
		1	49	-	17.6	16.42	16.24	16.26
		25	0	-	17.6	16.29	16.10	16.07
		25	12	-	17.6	16.33	16.22	16.07
		25	25	-	17.6	16.32	16.21	16.13
		50	0	-	17.6	16.32	16.19	16.05
	256QAM	1	0	-	17.6	16.54	16.28	16.23
		1	24	-	17.6	16.45	16.28	16.24
		1	49	-	17.6	16.45	16.29	16.19
		25	0	-	17.6	16.32	16.06	16.01
		25	12	-	17.6	16.30	16.18	16.06
		25	25	-	17.6	16.26	16.18	16.10
		50	0	-	17.6	16.26	16.15	16.00

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26065	26365	26665
						Freq(MHz)		
						1852.5	1882.5	1912.5
5	QPSK	1	0	-	17.6	16.25	16.10	16.04
		1	12	-	17.6	16.24	16.11	16.02
		1	24	-	17.6	16.21	16.12	16.06
		12	0	-	17.6	16.28	16.17	16.07
		12	6	-	17.6	16.34	16.20	16.14
		12	13	-	17.6	16.38	16.26	16.12
		25	0	-	17.6	16.22	16.08	16.02
	16QAM	1	0	-	17.6	16.62	16.41	16.24
		1	12	-	17.6	16.65	16.43	16.31
		1	24	-	17.6	16.69	16.40	16.33
		12	0	-	17.6	16.33	16.19	16.11
		12	6	-	17.6	16.38	16.28	16.16
		12	13	-	17.6	16.42	16.30	16.20
		25	0	-	17.6	16.35	16.20	16.08
	64QAM	1	0	-	17.6	16.75	16.41	16.33
		1	12	-	17.6	16.65	16.40	16.32
		1	24	-	17.6	16.67	16.44	16.31
		12	0	-	17.6	16.22	16.21	16.14
		12	6	-	17.6	16.30	16.30	16.22
		12	13	-	17.6	16.31	16.33	16.25
		25	0	-	17.6	16.38	16.25	16.19
	256QAM	1	0	-	17.6	16.37	16.59	16.49
		1	12	-	17.6	16.36	16.56	16.47
		1	24	-	17.6	16.41	16.57	16.55
		12	0	-	17.6	16.34	16.15	16.07
		12	6	-	17.6	16.41	16.23	16.16
		12	13	-	17.6	16.43	16.24	16.20
		25	0	-	17.6	16.30	16.18	16.15

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26055	26365	26675
						Freq(MHz)		
						1851.5	1882.5	1913.5
3	QPSK	1	0	-	17.6	16.18	15.96	15.87
		1	7	-	17.6	16.20	16.14	16.02
		1	14	-	17.6	16.30	16.08	15.99
		8	0	-	17.6	16.24	16.14	16.06
		8	3	-	17.6	16.35	16.18	16.16
		8	7	-	17.6	16.36	16.19	16.15
		15	0	-	17.6	16.21	16.13	16.00
	16QAM	1	0	-	17.6	16.48	16.16	16.17
		1	7	-	17.6	16.52	16.22	16.19
		1	14	-	17.6	16.61	16.26	16.23
		8	0	-	17.6	16.35	16.04	15.99
		8	3	-	17.6	16.41	16.13	16.06
		8	7	-	17.6	16.43	16.12	16.08
		15	0	-	17.6	16.35	16.13	16.08
	64QAM	1	0	-	17.6	16.66	16.41	16.33
		1	7	-	17.6	16.70	16.46	16.40
		1	14	-	17.6	16.78	16.54	16.49
		8	0	-	17.6	16.33	16.25	16.15
		8	3	-	17.6	16.41	16.32	16.26
		8	7	-	17.6	16.41	16.30	16.24
		15	0	-	17.6	16.34	16.24	16.18
	256QAM	1	0	-	17.6	16.56	16.37	16.25
		1	7	-	17.6	16.59	16.37	16.34
		1	14	-	17.6	16.70	16.46	16.39
		8	0	-	17.6	16.30	16.20	16.17
		8	3	-	17.6	16.41	16.29	16.23
		8	7	-	17.6	16.35	16.30	16.29
		15	0	-	17.6	16.28	16.13	16.07

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
25						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26047	26365	26683
						Freq(MHz)		
						1850.7	1882.5	1914.3
1.4	QPSK	1	0	-	17.6	16.13	16.02	15.84
		1	2	-	17.6	16.22	16.13	15.94
		1	5	-	17.6	16.21	16.04	15.92
		3	0	-	17.6	16.15	16.01	15.87
		3	1	-	17.6	16.22	16.08	15.94
		3	3	-	17.6	16.20	16.00	15.91
		6	0	-	17.6	16.16	16.08	15.90
	16QAM	1	0	-	17.6	16.20	16.26	16.07
		1	2	-	17.6	16.34	16.37	16.26
		1	5	-	17.6	16.28	16.35	16.14
		3	0	-	17.6	16.14	16.23	16.16
		3	1	-	17.6	16.21	16.28	16.22
		3	3	-	17.6	16.15	16.24	16.23
		6	0	-	17.6	16.33	16.13	15.99
	64QAM	1	0	-	17.6	16.59	16.32	16.33
		1	2	-	17.6	16.63	16.44	16.38
		1	5	-	17.6	16.66	16.35	16.42
		3	0	-	17.6	16.39	16.06	16.07
		3	1	-	17.6	16.45	16.13	16.11
		3	3	-	17.6	16.46	16.11	16.10
		6	0	-	17.6	16.27	16.04	16.15
	256QAM	1	0	-	17.6	16.05	15.96	16.20
		1	2	-	17.6	16.15	16.05	16.27
		1	5	-	17.6	16.13	15.99	16.28
		3	0	-	17.6	16.10	15.95	16.08
		3	1	-	17.6	16.15	16.05	16.09
		3	3	-	17.6	16.12	16.00	16.10
		6	0	-	17.6	16.14	16.00	16.09

*MPR is disabled when power reduction is enabled.

13.3.19 LTE band 26 DSI0

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	26865	-
						Freq(MHz)		
						-	831.5	-
15	QPSK	1	0	0	23.3	-	22.08	-
		1	37	0	23.3	-	21.98	-
		1	74	0	23.3	-	21.90	-
		36	0	0.3	23.0	-	21.90	-
		36	19	0.3	23.0	-	21.81	-
		36	39	0.3	23.0	-	21.82	-
		75	0	0.3	23.0	-	21.79	-
	16QAM	1	0	0.3	23.0	-	22.06	-
		1	37	0.3	23.0	-	22.00	-
		1	74	0.3	23.0	-	21.96	-
		36	0	1.3	22.0	-	20.92	-
		36	19	1.3	22.0	-	20.87	-
		36	39	1.3	22.0	-	20.79	-
		75	0	1.3	22.0	-	20.81	-
	64QAM	1	0	1.3	22.0	-	21.23	-
		1	37	1.3	22.0	-	21.18	-
		1	74	1.3	22.0	-	21.06	-
		36	0	2.3	21.0	-	19.88	-
		36	19	2.3	21.0	-	19.83	-
		36	39	2.3	21.0	-	19.82	-
		75	0	2.3	21.0	-	19.84	-
	256QAM	1	0	4.3	19.0	-	18.19	-
		1	37	4.3	19.0	-	18.09	-
		1	74	4.3	19.0	-	18.08	-
		36	0	4.3	19.0	-	17.82	-
		36	19	4.3	19.0	-	17.77	-
		36	39	4.3	19.0	-	17.78	-
		75	0	4.3	19.0	-	17.82	-

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26740	26865	26990
						Freq(MHz)		
						819	831.5	844
10	QPSK	1	0	0	23.3	22.24	22.15	21.84
		1	24	0	23.3	22.14	22.01	21.78
		1	49	0	23.3	22.21	21.95	21.71
		25	0	0.3	23.0	21.97	21.88	21.71
		25	12	0.3	23.0	22.01	21.87	21.67
		25	25	0.3	23.0	21.94	21.83	21.57
		50	0	0.3	23.0	22.00	21.84	21.66
	16QAM	1	0	0.3	23.0	22.23	22.16	21.86
		1	24	0.3	23.0	22.20	22.18	21.73
		1	49	0.3	23.0	22.17	22.04	21.64
		25	0	1.3	22.0	21.03	20.84	20.75
		25	12	1.3	22.0	21.07	20.83	20.69
		25	25	1.3	22.0	20.97	20.80	20.61
		50	0	1.3	22.0	20.97	20.82	20.68
	64QAM	1	0	1.3	22.0	21.45	21.18	21.16
		1	24	1.3	22.0	21.39	21.18	21.13
		1	49	1.3	22.0	21.31	21.10	20.95
		25	0	2.3	21.0	20.01	19.91	19.75
		25	12	2.3	21.0	20.09	19.92	19.72
		25	25	2.3	21.0	19.98	19.91	19.62
		50	0	2.3	21.0	20.04	19.79	19.72
	256QAM	1	0	4.3	19.0	18.29	17.99	17.90
		1	24	4.3	19.0	18.25	18.07	17.83
		1	49	4.3	19.0	18.26	18.00	17.85
		25	0	4.3	19.0	17.92	17.88	17.73
		25	12	4.3	19.0	18.01	17.90	17.69
		25	25	4.3	19.0	17.92	17.88	17.62
		50	0	4.3	19.0	18.02	17.77	17.69

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26715	26865	27015
						Freq(MHz)		
						816.5	831.5	846.5
5	QPSK	1	0	0	23.3	22.24	22.09	21.89
		1	12	0	23.3	22.25	22.10	21.84
		1	24	0	23.3	22.17	22.08	21.77
		12	0	0.3	23.0	21.98	21.91	21.67
		12	6	0.3	23.0	22.01	21.87	21.66
		12	13	0.3	23.0	21.97	21.85	21.56
		25	0	0.3	23.0	21.99	21.86	21.61
	16QAM	1	0	0.3	23.0	22.22	22.20	22.02
		1	12	0.3	23.0	22.22	22.23	21.95
		1	24	0.3	23.0	22.17	22.22	21.88
		12	0	1.3	22.0	21.06	20.98	20.70
		12	6	1.3	22.0	21.08	20.94	20.70
		12	13	1.3	22.0	21.03	20.91	20.61
		25	0	1.3	22.0	21.07	20.91	20.67
	64QAM	1	0	1.3	22.0	21.48	21.33	21.09
		1	12	1.3	22.0	21.41	21.30	21.03
		1	24	1.3	22.0	21.35	21.27	20.96
		12	0	2.3	21.0	19.93	19.87	19.61
		12	6	2.3	21.0	20.00	19.79	19.58
		12	13	2.3	21.0	19.90	19.77	19.52
		25	0	2.3	21.0	20.08	19.89	19.67
	256QAM	1	0	4.3	19.0	18.14	18.03	17.85
		1	12	4.3	19.0	18.14	18.02	17.71
		1	24	4.3	19.0	18.06	17.94	17.62
		12	0	4.3	19.0	18.11	17.98	17.73
		12	6	4.3	19.0	18.14	17.95	17.71
		12	13	4.3	19.0	18.05	17.90	17.63
		25	0	4.3	19.0	18.04	17.85	17.63

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26705	26865	27025
						Freq(MHz)		
						815.5	831.5	847.5
3	QPSK	1	0	0	23.3	22.19	22.11	21.85
		1	7	0	23.3	22.21	22.07	21.80
		1	14	0	23.3	22.12	22.05	21.73
		8	0	0.3	23.0	22.02	21.88	21.58
		8	3	0.3	23.0	22.05	21.87	21.63
		8	7	0.3	23.0	21.97	21.86	21.53
		15	0	0.3	23.0	21.97	21.85	21.58
	16QAM	1	0	0.3	23.0	22.20	22.11	21.85
		1	7	0.3	23.0	22.18	22.09	21.76
		1	14	0.3	23.0	22.16	22.09	21.79
		8	0	1.3	22.0	21.10	20.96	20.70
		8	3	1.3	22.0	21.11	20.95	20.68
		8	7	1.3	22.0	21.01	20.91	20.65
		15	0	1.3	22.0	21.01	20.88	20.64
	64QAM	1	0	1.3	22.0	21.31	21.25	20.97
		1	7	1.3	22.0	21.36	21.28	20.95
		1	14	1.3	22.0	21.33	21.24	20.93
		8	0	2.3	21.0	20.05	19.91	19.64
		8	3	2.3	21.0	20.03	19.92	19.67
		8	7	2.3	21.0	20.04	19.89	19.61
		15	0	2.3	21.0	20.05	19.86	19.63
	256QAM	1	0	4.3	19.0	18.29	18.18	17.93
		1	7	4.3	19.0	18.28	18.19	17.89
		1	14	4.3	19.0	18.25	18.16	17.88
		8	0	4.3	19.0	18.07	17.93	17.66
		8	3	4.3	19.0	18.07	17.91	17.65
		8	7	4.3	19.0	17.99	17.89	17.56
		15	0	4.3	19.0	17.98	17.86	17.60

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26697	26865	27033
						Freq(MHz)		
						814.7	831.5	848.3
1.4	QPSK	1	0	0	23.3	22.15	21.98	21.72
		1	2	0	23.3	22.24	22.14	21.82
		1	5	0	23.3	22.13	22.03	21.66
		3	0	0	23.3	22.21	21.99	21.72
		3	1	0	23.3	22.19	22.05	21.73
		3	3	0	23.3	22.13	21.97	21.67
		6	0	0.3	23.0	21.90	21.73	21.48
	16QAM	1	0	0.3	23.0	21.87	21.79	21.53
		1	2	0.3	23.0	22.08	21.90	21.57
		1	5	0.3	23.0	21.92	21.77	21.46
		3	0	0.3	23.0	21.90	21.74	21.46
		3	1	0.3	23.0	21.94	21.80	21.48
		3	3	0.3	23.0	21.84	21.75	21.37
		6	0	1.3	22.0	21.01	20.84	20.55
	64QAM	1	0	1.3	22.0	21.28	21.10	20.88
		1	2	1.3	22.0	21.40	21.28	20.97
		1	5	1.3	22.0	21.26	21.17	20.81
		3	0	1.3	22.0	21.13	20.94	20.66
		3	1	1.3	22.0	21.14	21.04	20.69
		3	3	1.3	22.0	21.10	20.97	20.64
		6	0	2.3	21.0	19.95	19.78	19.48
	256QAM	1	0	4.3	19.0	17.77	17.62	17.38
		1	2	4.3	19.0	17.86	17.74	17.40
		1	5	4.3	19.0	17.79	17.62	17.31
		3	0	4.3	19.0	17.88	17.71	17.41
		3	1	4.3	19.0	17.92	17.79	17.43
		3	3	4.3	19.0	17.85	17.68	17.37
		6	0	4.3	19.0	17.87	17.65	17.40

13.3.20 LTE band 26 DSI1

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	26865	-
						Freq(MHz)		
						-	831.5	-
15	QPSK	1	0	-	17.6	-	16.35	-
		1	37	-	17.6	-	16.22	-
		1	74	-	17.6	-	16.19	-
		36	0	-	17.6	-	16.45	-
		36	19	-	17.6	-	16.39	-
		36	39	-	17.6	-	16.40	-
		75	0	-	17.6	-	16.34	-
	16QAM	1	0	-	17.6	-	16.66	-
		1	37	-	17.6	-	16.58	-
		1	74	-	17.6	-	16.56	-
		36	0	-	17.6	-	16.47	-
		36	19	-	17.6	-	16.42	-
		36	39	-	17.6	-	16.41	-
		75	0	-	17.6	-	16.38	-
	64QAM	1	0	-	17.6	-	16.85	-
		1	37	-	17.6	-	16.69	-
		1	74	-	17.6	-	16.66	-
		36	0	-	17.6	-	16.48	-
		36	19	-	17.6	-	16.40	-
		36	39	-	17.6	-	16.41	-
		75	0	-	17.6	-	16.41	-
	256QAM	1	0	-	17.6	-	16.76	-
		1	37	-	17.6	-	16.68	-
		1	74	-	17.6	-	16.66	-
		36	0	-	17.6	-	16.42	-
		36	19	-	17.6	-	16.35	-
		36	39	-	17.6	-	16.35	-
		75	0	-	17.6	-	16.39	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26740	26865	26990
						Freq(MHz)		
						819	831.5	844
10	QPSK	1	0	-	17.6	16.60	16.49	16.31
		1	24	-	17.6	16.52	16.46	16.24
		1	49	-	17.6	16.41	16.27	16.14
		25	0	-	17.6	16.56	16.46	16.33
		25	12	-	17.6	16.61	16.45	16.28
		25	25	-	17.6	16.50	16.42	16.16
		50	0	-	17.6	16.60	16.41	16.28
	16QAM	1	0	-	17.6	16.94	16.77	16.60
		1	24	-	17.6	16.79	16.76	16.49
		1	49	-	17.6	16.80	16.67	16.39
		25	0	-	17.6	16.60	16.52	16.38
		25	12	-	17.6	16.67	16.49	16.34
		25	25	-	17.6	16.56	16.48	16.27
		50	0	-	17.6	16.60	16.43	16.30
	64QAM	1	0	-	17.6	17.09	16.98	16.75
		1	24	-	17.6	17.00	16.96	16.73
		1	49	-	17.6	16.86	16.72	16.62
		25	0	-	17.6	16.61	16.52	16.34
		25	12	-	17.6	16.66	16.49	16.30
		25	25	-	17.6	16.57	16.43	16.21
		50	0	-	17.6	16.59	16.42	16.30
	256QAM	1	0	-	17.6	16.82	16.77	16.60
		1	24	-	17.6	16.80	16.79	16.56
		1	49	-	17.6	16.85	16.75	16.48
		25	0	-	17.6	16.54	16.43	16.30
		25	12	-	17.6	16.61	16.40	16.26
		25	25	-	17.6	16.49	16.42	16.13
		50	0	-	17.6	16.59	16.40	16.27

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26715	26865	27015
						Freq(MHz)		
						816.5	831.5	846.5
5	QPSK	1	0	-	17.6	16.62	16.49	16.26
		1	12	-	17.6	16.61	16.45	16.23
		1	24	-	17.6	16.56	16.38	16.16
		12	0	-	17.6	16.60	16.52	16.24
		12	6	-	17.6	16.65	16.44	16.23
		12	13	-	17.6	16.53	16.43	16.15
		25	0	-	17.6	16.62	16.45	16.20
	16QAM	1	0	-	17.6	16.93	16.88	16.60
		1	12	-	17.6	16.90	16.82	16.54
		1	24	-	17.6	16.92	16.83	16.51
		12	0	-	17.6	16.67	16.56	16.35
		12	6	-	17.6	16.74	16.57	16.34
		12	13	-	17.6	16.67	16.53	16.22
		25	0	-	17.6	16.68	16.49	16.28
	64QAM	1	0	-	17.6	17.06	16.93	16.71
		1	12	-	17.6	17.02	16.92	16.65
		1	24	-	17.6	16.98	16.88	16.59
		12	0	-	17.6	16.52	16.44	16.21
		12	6	-	17.6	16.61	16.45	16.19
		12	13	-	17.6	16.50	16.36	16.11
		25	0	-	17.6	16.64	16.50	16.24
	256QAM	1	0	-	17.6	16.75	16.64	16.43
		1	12	-	17.6	16.71	16.64	16.32
		1	24	-	17.6	16.65	16.54	16.22
		12	0	-	17.6	16.68	16.60	16.33
		12	6	-	17.6	16.71	16.57	16.32
		12	13	-	17.6	16.62	16.55	16.23
		25	0	-	17.6	16.62	16.47	16.24

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26705	26865	27025
						Freq(MHz)		
						815.5	831.5	847.5
3	QPSK	1	0	-	17.6	16.59	16.47	16.23
		1	7	-	17.6	16.60	16.40	16.19
		1	14	-	17.6	16.55	16.38	16.15
		8	0	-	17.6	16.66	16.49	16.21
		8	3	-	17.6	16.65	16.50	16.24
		8	7	-	17.6	16.60	16.48	16.15
		15	0	-	17.6	16.56	16.46	16.19
	16QAM	1	0	-	17.6	16.82	16.69	16.42
		1	7	-	17.6	16.82	16.70	16.36
		1	14	-	17.6	16.78	16.70	16.34
		8	0	-	17.6	16.78	16.60	16.31
		8	3	-	17.6	16.76	16.59	16.32
		8	7	-	17.6	16.69	16.60	16.26
		15	0	-	17.6	16.68	16.51	16.29
	64QAM	1	0	-	17.6	16.98	16.85	16.60
		1	7	-	17.6	17.02	16.87	16.56
		1	14	-	17.6	16.94	16.86	16.55
		8	0	-	17.6	16.71	16.55	16.27
		8	3	-	17.6	16.69	16.55	16.23
		8	7	-	17.6	16.63	16.50	16.18
		15	0	-	17.6	16.64	16.51	16.20
	256QAM	1	0	-	17.6	16.92	16.81	16.55
		1	7	-	17.6	16.92	16.81	16.47
		1	14	-	17.6	16.88	16.76	16.42
		8	0	-	17.6	16.69	16.55	16.28
		8	3	-	17.6	16.69	16.52	16.28
		8	7	-	17.6	16.65	16.49	16.18
		15	0	-	17.6	16.64	16.45	16.21

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
26						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	26697	26865	27033
						Freq(MHz)		
						814.7	831.5	848.3
1.4	QPSK	1	0	-	17.6	16.48	16.34	15.95
		1	2	-	17.6	16.56	16.44	16.00
		1	5	-	17.6	16.47	16.30	15.87
		3	0	-	17.6	16.50	16.33	16.04
		3	1	-	17.6	16.51	16.40	16.05
		3	3	-	17.6	16.46	16.31	15.99
		6	0	-	17.6	16.47	16.35	15.99
	16QAM	1	0	-	17.6	16.57	16.43	16.32
		1	2	-	17.6	16.69	16.60	16.38
		1	5	-	17.6	16.61	16.46	16.26
		3	0	-	17.6	16.56	16.37	16.30
		3	1	-	17.6	16.60	16.49	16.31
		3	3	-	17.6	16.49	16.38	16.25
		6	0	-	17.6	16.62	16.47	16.16
	64QAM	1	0	-	17.6	16.85	16.77	16.31
		1	2	-	17.6	17.05	16.91	16.40
		1	5	-	17.6	16.91	16.75	16.28
		3	0	-	17.6	16.73	16.58	16.08
		3	1	-	17.6	16.78	16.68	16.11
		3	3	-	17.6	16.73	16.61	16.04
		6	0	-	17.6	16.57	16.36	16.02
	256QAM	1	0	-	17.6	16.37	16.23	16.24
		1	2	-	17.6	16.49	16.38	16.28
		1	5	-	17.6	16.36	16.24	16.19
		3	0	-	17.6	16.49	16.31	16.15
		3	1	-	17.6	16.51	16.41	16.23
		3	3	-	17.6	16.43	16.31	16.14
		6	0	-	17.6	16.44	16.29	15.99

*MPR is disabled when power reduction is enabled.

13.3.21 LTE band 38 DSI0

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	38000	-
						Freq(MHz)		
						-	2595	-
20	QPSK	1	0	0	24.0	-	22.57	-
		1	49	0	24.0	-	22.58	-
		1	99	0	24.0	-	22.55	-
		50	0	1	23.0	-	21.70	-
		50	24	1	23.0	-	21.68	-
		50	50	1	23.0	-	21.76	-
		100	0	1	23.0	-	21.70	-
	16QAM	1	0	1	23.0	-	21.40	-
		1	49	1	23.0	-	21.35	-
		1	99	1	23.0	-	21.43	-
		50	0	2	22.0	-	20.68	-
		50	24	2	22.0	-	20.67	-
		50	50	2	22.0	-	20.74	-
		100	0	2	22.0	-	20.68	-
	64QAM	1	0	2	22.0	-	20.55	-
		1	49	2	22.0	-	20.67	-
		1	99	2	22.0	-	20.65	-
		50	0	3	21.0	-	19.73	-
		50	24	3	21.0	-	19.73	-
		50	50	3	21.0	-	19.78	-
		100	0	3	21.0	-	19.70	-
	256QAM	1	0	5	19.0	-	17.77	-
		1	49	5	19.0	-	17.69	-
		1	99	5	19.0	-	17.77	-
		50	0	5	19.0	-	17.69	-
		50	24	5	19.0	-	17.66	-
		50	50	5	19.0	-	17.69	-
		100	0	5	19.0	-	17.72	-

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37825	38000	38175
						Freq(MHz)		
						2577.5	2595	2612.5
15	QPSK	1	0	0	24.0	22.81	22.71	22.83
		1	37	0	24.0	22.73	22.70	22.77
		1	74	0	24.0	22.79	22.65	22.80
		36	0	1	23.0	21.83	21.87	21.84
		36	19	1	23.0	21.82	21.80	21.92
		36	39	1	23.0	21.81	21.88	21.91
		75	0	1	23.0	21.76	21.82	21.83
	16QAM	1	0	1	23.0	21.48	21.74	21.47
		1	37	1	23.0	21.53	21.67	21.48
		1	74	1	23.0	21.48	21.65	21.48
		36	0	2	22.0	20.80	20.90	20.83
		36	19	2	22.0	20.85	20.89	20.92
		36	39	2	22.0	20.81	20.96	20.90
		75	0	2	22.0	20.85	20.84	20.86
	64QAM	1	0	2	22.0	20.29	20.58	20.35
		1	37	2	22.0	20.35	20.54	20.32
		1	74	2	22.0	20.32	20.60	20.32
		36	0	3	21.0	19.87	19.91	19.92
		36	19	3	21.0	19.87	19.87	19.96
		36	39	3	21.0	19.88	19.96	19.93
		75	0	3	21.0	19.89	19.87	19.84
	256QAM	1	0	5	19.0	17.35	18.17	17.32
		1	37	5	19.0	17.30	18.07	17.30
		1	74	5	19.0	17.40	18.25	17.40
		36	0	5	19.0	17.88	17.87	17.83
		36	19	5	19.0	17.89	17.82	17.94
		36	39	5	19.0	17.90	17.88	17.91
		75	0	5	19.0	17.93	17.87	17.87

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37800	38000	38200
						Freq(MHz)		
						2575	2595	2615
10	QPSK	1	0	0	24.0	22.91	22.94	22.88
		1	24	0	24.0	22.81	22.89	22.86
		1	49	0	24.0	22.88	22.88	22.87
		25	0	1	23.0	21.92	21.84	21.84
		25	12	1	23.0	21.94	21.85	21.85
		25	25	1	23.0	21.93	21.91	21.93
		50	0	1	23.0	21.92	21.82	21.88
	16QAM	1	0	1	23.0	21.56	22.18	21.48
		1	24	1	23.0	21.47	22.19	21.52
		1	49	1	23.0	21.60	22.16	21.51
		25	0	2	22.0	20.89	20.94	20.81
		25	12	2	22.0	20.89	20.92	20.78
		25	25	2	22.0	20.90	20.96	20.87
		50	0	2	22.0	20.93	20.89	20.89
	64QAM	1	0	2	22.0	20.53	20.68	20.44
		1	24	2	22.0	20.47	20.85	20.50
		1	49	2	22.0	20.48	20.73	20.44
		25	0	3	21.0	19.99	19.85	19.88
		25	12	3	21.0	19.97	19.90	19.93
		25	25	3	21.0	19.96	19.99	19.93
		50	0	3	21.0	19.93	19.88	19.87
	256QAM	1	0	5	19.0	17.47	17.69	17.43
		1	24	5	19.0	17.30	17.63	17.34
		1	49	5	19.0	17.46	17.73	17.44
		25	0	5	19.0	17.92	17.90	17.81
		25	12	5	19.0	17.96	17.86	17.89
		25	25	5	19.0	17.92	17.89	17.92
		50	0	5	19.0	17.96	17.86	17.88

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37775	38000	38225
						Freq(MHz)		
						2572.5	2595	2617.5
5	QPSK	1	0	0	24.0	22.79	22.74	22.85
		1	12	0	24.0	22.78	22.80	22.78
		1	24	0	24.0	22.76	22.81	22.82
		12	0	1	23.0	21.91	21.87	21.89
		12	6	1	23.0	21.95	21.85	21.93
		12	13	1	23.0	21.89	21.91	21.91
		25	0	1	23.0	21.91	21.85	21.88
	16QAM	1	0	1	23.0	21.73	21.63	22.14
		1	12	1	23.0	21.68	21.66	22.00
		1	24	1	23.0	21.70	21.67	22.05
		12	0	2	22.0	20.87	20.82	20.94
		12	6	2	22.0	20.94	20.81	20.97
		12	13	2	22.0	20.89	20.87	20.95
		25	0	2	22.0	20.89	20.81	20.90
	64QAM	1	0	2	22.0	20.72	20.59	21.23
		1	12	2	22.0	20.66	20.65	21.26
		1	24	2	22.0	20.65	20.70	21.23
		12	0	3	21.0	20.02	19.96	19.94
		12	6	3	21.0	20.04	19.96	20.01
		12	13	3	21.0	20.00	19.94	19.96
		25	0	3	21.0	19.91	19.85	19.82
	256QAM	1	0	5	19.0	17.73	17.63	18.14
		1	12	5	19.0	17.74	17.63	18.12
		1	24	5	19.0	17.68	17.70	18.12
		12	0	5	19.0	17.92	17.82	17.86
		12	6	5	19.0	17.90	17.84	17.84
		12	13	5	19.0	17.90	17.88	17.84
		25	0	5	19.0	17.87	17.81	17.81

13.3.22 LTE band 38 DSI1

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	-	38000	-
						Freq(MHz)		
						-	2595	-
20	QPSK	1	0	-	21.5	-	20.08	-
		1	49	-	21.5	-	20.10	-
		1	99	-	21.5	-	20.11	-
		50	0	-	21.5	-	20.21	-
		50	24	-	21.5	-	20.19	-
		50	50	-	21.5	-	20.28	-
		100	0	-	21.5	-	20.09	-
	16QAM	1	0	-	21.5	-	20.05	-
		1	49	-	21.5	-	19.94	-
		1	99	-	21.5	-	19.94	-
		50	0	-	21.5	-	20.22	-
		50	24	-	21.5	-	20.15	-
		50	50	-	21.5	-	20.20	-
		100	0	-	21.5	-	20.18	-
	64QAM	1	0	-	21.5	-	20.22	-
		1	49	-	21.5	-	20.26	-
		1	99	-	21.5	-	20.21	-
		50	0	0.5	21.0	-	19.75	-
		50	24	0.5	21.0	-	19.74	-
		50	50	0.5	21.0	-	19.80	-
		100	0	0.5	21.0	-	19.76	-
	256QAM	1	0	2.5	19.0	-	17.77	-
		1	49	2.5	19.0	-	17.69	-
		1	99	2.5	19.0	-	17.79	-
		50	0	2.5	19.0	-	17.76	-
		50	24	2.5	19.0	-	17.71	-
		50	50	2.5	19.0	-	17.77	-
		100	0	2.5	19.0	-	17.70	-

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37825	38000	38175
						Freq(MHz)		
						2577.5	2595	2612.5
15	QPSK	1	0	-	21.5	20.17	20.31	20.28
		1	37	-	21.5	20.07	20.24	20.18
		1	74	-	21.5	20.10	20.25	20.20
		36	0	-	21.5	20.24	20.28	20.25
		36	19	-	21.5	20.32	20.24	20.31
		36	39	-	21.5	20.26	20.32	20.28
		75	0	-	21.5	20.15	20.24	20.21
	16QAM	1	0	-	21.5	20.14	20.03	19.99
		1	37	-	21.5	20.10	19.96	19.90
		1	74	-	21.5	20.12	19.97	19.92
		36	0	-	21.5	20.31	20.29	20.23
		36	19	-	21.5	20.34	20.23	20.29
		36	39	-	21.5	20.31	20.28	20.25
		75	0	-	21.5	20.29	20.21	20.19
	64QAM	1	0	-	21.5	20.05	19.78	19.78
		1	37	-	21.5	19.99	19.81	19.79
		1	74	-	21.5	20.04	19.78	19.76
		36	0	0.5	21.0	19.77	19.88	19.85
		36	19	0.5	21.0	19.83	19.82	19.90
		36	39	0.5	21.0	19.84	19.85	19.82
		75	0	0.5	21.0	19.80	19.82	19.75
	256QAM	1	0	2.5	19.0	18.07	17.36	17.23
		1	37	2.5	19.0	18.02	17.23	17.20
		1	74	2.5	19.0	18.12	17.38	17.31
		36	0	2.5	19.0	17.79	17.82	17.81
		36	19	2.5	19.0	17.83	17.83	17.82
		36	39	2.5	19.0	17.79	17.85	17.78
		75	0	2.5	19.0	17.87	17.80	17.77

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37800	38000	38200
						Freq(MHz)		
						2575	2595	2615
10	QPSK	1	0	-	21.5	20.43	20.34	20.29
		1	24	-	21.5	20.31	20.38	20.27
		1	49	-	21.5	20.39	20.37	20.30
		25	0	-	21.5	20.44	20.32	20.24
		25	12	-	21.5	20.43	20.33	20.23
		25	25	-	21.5	20.42	20.39	20.28
		50	0	-	21.5	20.40	20.29	20.18
	16QAM	1	0	-	21.5	20.18	20.78	19.99
		1	24	-	21.5	20.00	20.68	19.97
		1	49	-	21.5	20.08	20.68	20.00
		25	0	-	21.5	20.37	20.43	20.28
		25	12	-	21.5	20.38	20.39	20.28
		25	25	-	21.5	20.33	20.48	20.31
		50	0	-	21.5	20.41	20.35	20.29
	64QAM	1	0	-	21.5	20.02	20.20	19.86
		1	24	-	21.5	19.87	20.29	19.91
		1	49	-	21.5	19.96	20.23	19.84
		25	0	0.5	21.0	19.98	19.87	19.82
		25	12	0.5	21.0	19.95	19.85	19.82
		25	25	0.5	21.0	19.96	19.93	19.87
		50	0	0.5	21.0	19.94	19.85	19.73
	256QAM	1	0	2.5	19.0	17.45	17.63	17.32
		1	24	2.5	19.0	17.27	17.62	17.20
		1	49	2.5	19.0	17.47	17.75	17.32
		25	0	2.5	19.0	17.97	17.86	17.72
		25	12	2.5	19.0	17.98	17.83	17.77
		25	25	2.5	19.0	17.90	17.90	17.83
		50	0	2.5	19.0	17.96	17.86	17.77

Band						Meas. Pwr Avg (dBm)		
38						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	37775	38000	38225
						Freq(MHz)		
						2572.5	2595	2617.5
5	QPSK	1	0	-	21.5	20.28	20.22	20.23
		1	12	-	21.5	20.22	20.27	20.21
		1	24	-	21.5	20.23	20.29	20.24
		12	0	-	21.5	20.34	20.28	20.35
		12	6	-	21.5	20.36	20.29	20.38
		12	13	-	21.5	20.37	20.39	20.39
		25	0	-	21.5	20.24	20.29	20.22
	16QAM	1	0	-	21.5	20.13	20.18	20.25
		1	12	-	21.5	20.21	20.21	20.23
		1	24	-	21.5	20.20	20.34	20.20
		12	0	-	21.5	20.35	20.33	20.33
		12	6	-	21.5	20.32	20.31	20.35
		12	13	-	21.5	20.33	20.36	20.33
		25	0	-	21.5	20.35	20.35	20.36
	64QAM	1	0	-	21.5	20.18	20.09	20.11
		1	12	-	21.5	20.15	20.13	20.06
		1	24	-	21.5	20.14	20.12	20.07
		12	0	0.5	21.0	19.95	19.94	19.92
		12	6	0.5	21.0	19.97	19.92	19.96
		12	13	0.5	21.0	19.90	19.97	19.94
		25	0	0.5	21.0	19.84	19.80	19.84
	256QAM	1	0	2.5	19.0	17.64	17.60	17.65
		1	12	2.5	19.0	17.69	17.71	17.64
		1	24	2.5	19.0	17.61	17.65	17.64
		12	0	2.5	19.0	17.87	17.85	17.86
		12	6	2.5	19.0	17.83	17.84	17.86
		12	13	2.5	19.0	17.82	17.87	17.80
		25	0	2.5	19.0	17.82	17.75	17.79

13.3.23 LTE band 41 DSI0 FCC

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39750	40185	40620	41055	41490
						Freq(MHz)				
						2506	2549.5	2593	2636.5	2680
20	QPSK	1	0	0	24.0	22.57	22.47	22.78	22.74	22.66
		1	49	0	24.0	22.58	22.51	22.62	22.58	22.54
		1	99	0	24.0	22.59	22.54	22.76	22.69	22.63
		50	0	1	23.0	21.79	21.69	21.72	21.83	21.65
		50	24	1	23.0	21.82	21.74	21.80	21.82	21.64
		50	50	1	23.0	21.78	21.78	21.79	21.79	21.75
		100	0	1	23.0	21.82	21.77	21.78	21.76	21.66
	16QAM	1	0	1	23.0	21.48	21.45	21.52	21.62	21.50
		1	49	1	23.0	21.50	21.41	21.42	21.49	21.38
		1	99	1	23.0	21.48	21.43	21.57	21.57	21.48
		50	0	2	22.0	20.76	20.69	20.69	20.83	20.67
		50	24	2	22.0	20.80	20.75	20.75	20.78	20.65
		50	50	2	22.0	20.78	20.72	20.75	20.78	20.70
		100	0	2	22.0	20.86	20.79	20.82	20.83	20.68
	64QAM	1	0	2	22.0	20.78	20.71	20.70	20.67	20.66
		1	49	2	22.0	20.73	20.70	20.78	20.76	20.67
		1	99	2	22.0	20.75	20.61	20.76	20.75	20.67
		50	0	3	21.0	19.77	19.74	19.75	19.84	19.60
		50	24	3	21.0	19.83	19.80	19.85	19.78	19.70
		50	50	3	21.0	19.80	19.78	19.85	19.87	19.75
		100	0	3	21.0	19.85	19.79	19.78	19.83	19.63
	256QAM	1	0	5	19.0	17.82	17.80	17.79	17.78	17.71
		1	49	5	19.0	17.73	17.77	17.77	17.73	17.66
		1	99	5	19.0	17.73	17.81	17.81	17.81	17.76
		50	0	5	19.0	17.77	17.75	17.74	17.81	17.72
		50	24	5	19.0	17.84	17.84	17.84	17.81	17.69
		50	50	5	19.0	17.84	17.80	17.80	17.80	17.71
		100	0	5	19.0	17.83	17.82	17.84	17.81	17.67

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39725	40173	40620	41068	41515
						Freq(MHz)				
						2503.5	2548.3	2593	2637.8	2682.5
15	QPSK	1	0	0	24.0	22.87	22.86	22.88	22.87	22.80
		1	37	0	24.0	22.80	22.76	22.82	22.77	22.77
		1	74	0	24.0	22.81	22.87	22.90	22.93	22.85
		36	0	1	23.0	21.99	21.84	21.87	21.97	21.84
		36	19	1	23.0	21.94	21.90	21.92	21.95	21.79
		36	39	1	23.0	21.95	21.91	21.93	21.91	21.88
		75	0	1	23.0	21.94	21.89	21.90	21.92	21.78
	16QAM	1	0	1	23.0	21.58	21.56	21.53	21.55	21.55
		1	37	1	23.0	21.53	21.48	21.59	21.53	21.54
		1	74	1	23.0	21.61	21.64	21.69	21.64	21.57
		36	0	2	22.0	20.99	20.83	20.85	20.96	20.84
		36	19	2	22.0	20.93	20.92	20.92	20.96	20.79
		36	39	2	22.0	20.93	20.89	20.90	20.92	20.87
		75	0	2	22.0	20.95	20.88	20.96	20.94	20.82
	64QAM	1	0	2	22.0	20.42	20.39	20.36	20.37	20.39
		1	37	2	22.0	20.40	20.34	20.41	20.39	20.32
		1	74	2	22.0	20.36	20.43	20.45	20.45	20.39
		36	0	3	21.0	20.02	19.91	19.96	19.99	19.89
		36	19	3	21.0	19.99	19.94	20.00	19.98	19.85
		36	39	3	21.0	19.98	19.93	20.00	20.01	19.93
		75	0	3	21.0	20.01	19.94	19.97	19.94	19.83
	256QAM	1	0	5	19.0	17.46	17.41	17.42	17.35	17.28
		1	37	5	19.0	17.36	17.33	17.39	17.34	17.28
		1	74	5	19.0	17.51	17.46	17.50	17.50	17.45
		36	0	5	19.0	18.03	17.91	17.94	17.98	17.88
		36	19	5	19.0	18.00	17.99	17.98	17.95	17.86
		36	39	5	19.0	17.99	17.96	17.98	17.98	17.94
		75	0	5	19.0	17.98	17.98	18.02	17.98	17.83

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39700	40160	40620	41080	41540
						Freq(MHz)				
						2501	2547	2593	2639	2685
10	QPSK	1	0	0	24.0	22.97	22.97	23.02	23.05	22.90
		1	24	0	24.0	22.93	22.87	23.00	22.95	22.87
		1	49	0	24.0	22.90	22.89	23.01	22.96	22.88
		25	0	1	23.0	21.99	21.90	21.95	21.93	21.85
		25	12	1	23.0	22.02	21.95	22.02	22.03	21.87
		25	25	1	23.0	21.95	21.96	22.03	21.98	21.96
		50	0	1	23.0	21.98	21.96	22.01	21.99	21.84
	16QAM	1	0	1	23.0	21.59	21.59	21.52	21.61	21.50
		1	24	1	23.0	21.58	21.53	21.62	21.60	21.52
		1	49	1	23.0	21.58	21.57	21.68	21.62	21.49
		25	0	2	22.0	20.97	20.88	20.90	20.92	20.82
		25	12	2	22.0	20.99	20.94	20.99	21.01	20.82
		25	25	2	22.0	20.93	20.91	20.98	20.97	20.85
		50	0	2	22.0	21.04	20.96	21.04	21.04	20.85
	64QAM	1	0	2	22.0	20.62	20.47	20.55	20.51	20.42
		1	24	2	22.0	20.50	20.39	20.57	20.56	20.49
		1	49	2	22.0	20.55	20.47	20.56	20.56	20.46
		25	0	3	21.0	20.09	19.95	20.00	19.98	19.89
		25	12	3	21.0	20.07	20.04	20.07	20.09	19.93
		25	25	3	21.0	20.04	20.02	20.07	20.09	19.94
		50	0	3	21.0	20.05	19.97	20.01	20.01	19.87
	256QAM	1	0	5	19.0	17.55	17.39	17.49	17.43	17.35
		1	24	5	19.0	17.47	17.28	17.48	17.37	17.41
		1	49	5	19.0	17.53	17.48	17.49	17.47	17.42
		25	0	5	19.0	18.04	17.90	17.95	17.91	17.86
		25	12	5	19.0	18.05	18.04	18.04	18.05	17.87
		25	25	5	19.0	18.02	18.01	18.05	18.03	17.91
		50	0	5	19.0	18.08	18.02	18.09	18.04	17.91

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39675	40148	40620	41093	41565
						Freq(MHz)				
						2498.5	2545.8	2593	2640.3	2687.5
5	QPSK	1	0	0	24.0	22.99	22.85	22.86	22.89	22.84
		1	12	0	24.0	22.95	22.88	22.89	22.90	22.83
		1	24	0	24.0	22.96	22.89	22.90	22.88	22.82
		12	0	1	23.0	22.07	21.99	21.93	21.96	21.91
		12	6	1	23.0	22.09	21.98	22.01	21.99	21.95
		12	13	1	23.0	22.03	21.96	22.04	22.00	21.93
		25	0	1	23.0	22.03	21.93	22.01	22.00	21.90
	16QAM	1	0	1	23.0	21.92	21.74	22.01	21.73	21.73
		1	12	1	23.0	21.84	21.75	21.97	21.81	21.70
		1	24	1	23.0	21.85	21.79	21.98	21.78	21.68
		12	0	2	22.0	21.02	20.94	20.95	20.96	20.88
		12	6	2	22.0	21.05	20.95	21.05	20.99	20.92
		12	13	2	22.0	21.00	20.93	21.02	20.97	20.85
		25	0	2	22.0	21.00	20.96	21.02	20.96	20.89
	64QAM	1	0	2	22.0	20.91	20.74	20.92	20.73	20.69
		1	12	2	22.0	20.81	20.76	21.11	20.80	20.66
		1	24	2	22.0	20.85	20.76	20.72	20.80	20.65
		12	0	3	21.0	20.18	20.08	20.04	20.10	20.00
		12	6	3	21.0	20.15	20.10	20.12	20.13	20.04
		12	13	3	21.0	20.14	20.07	20.10	20.11	19.99
		25	0	3	21.0	20.11	20.00	20.04	20.04	19.93
	256QAM	1	0	5	19.0	17.87	17.71	17.74	17.72	17.70
		1	12	5	19.0	17.87	17.75	17.76	17.77	17.74
		1	24	5	19.0	17.85	17.75	17.78	17.78	17.67
		12	0	5	19.0	18.06	17.99	17.93	18.00	17.94
		12	6	5	19.0	18.11	17.98	18.07	18.04	17.96
		12	13	5	19.0	18.08	17.99	18.03	18.00	17.90
		25	0	5	19.0	18.04	17.94	17.95	17.95	17.85

13.3.24 LTE band 41 DSI1 FCC

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39750	40185	40620	41055	41490
						Freq(MHz)				
						2506	2549.5	2593	2636.5	2680
20	QPSK	1	0	-	20.1	18.72	18.74	19.03	19.00	18.81
		1	49	-	20.1	18.80	18.79	18.92	18.79	18.66
		1	99	-	20.1	18.81	18.80	18.97	18.88	18.70
		50	0	-	20.1	19.06	18.98	19.01	18.99	18.79
		50	24	-	20.1	19.08	19.07	19.10	19.02	18.78
		50	50	-	20.1	19.09	19.04	19.06	18.94	18.80
		100	0	-	20.1	18.80	18.79	19.01	18.98	18.73
	16QAM	1	0	-	20.1	18.87	18.76	19.15	18.78	18.98
		1	49	-	20.1	18.78	18.71	19.05	18.69	18.84
		1	99	-	20.1	18.75	18.74	19.10	18.72	18.89
		50	0	-	20.1	19.02	18.99	19.07	19.00	18.79
		50	24	-	20.1	19.07	19.04	19.13	18.99	18.85
		50	50	-	20.1	19.06	19.01	19.09	18.96	18.87
		100	0	-	20.1	19.11	19.09	19.08	19.01	18.81
	64QAM	1	0	-	20.1	19.07	19.12	18.92	18.97	18.73
		1	49	-	20.1	19.04	19.04	18.83	18.96	18.67
		1	99	-	20.1	19.05	19.00	18.86	18.95	18.81
		50	0	-	20.1	19.05	19.02	19.13	19.05	18.90
		50	24	-	20.1	19.11	19.11	19.17	19.03	18.89
		50	50	-	20.1	19.08	19.07	19.16	19.04	18.91
		100	0	-	20.1	19.10	19.07	19.15	19.00	18.89
	256QAM	1	0	1.1	19.0	18.00	18.03	18.13	17.90	17.88
		1	49	1.1	19.0	17.95	17.94	18.04	17.88	17.83
		1	99	1.1	19.0	17.98	18.01	18.12	17.91	17.89
		50	0	1.1	19.0	17.94	17.91	17.96	17.93	17.76
		50	24	1.1	19.0	18.03	18.00	18.01	17.95	17.74
		50	50	1.1	19.0	17.97	18.00	18.03	17.91	17.78
		100	0	1.1	19.0	17.98	17.98	18.05	17.92	17.74

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39725	40173	40620	41068	41515
						Freq(MHz)				
						2503.5	2548.3	2593	2637.8	2682.5
15	QPSK	1	0	-	20.1	19.04	18.95	19.05	18.91	18.68
		1	37	-	20.1	18.99	18.78	18.96	18.81	18.60
		1	74	-	20.1	18.88	18.89	19.04	18.94	18.71
		36	0	-	20.1	19.10	18.96	18.97	18.95	18.73
		36	19	-	20.1	19.05	18.99	19.03	18.93	18.72
		36	39	-	20.1	19.04	18.98	19.04	18.92	18.78
		75	0	-	20.1	19.02	18.95	19.03	18.92	18.68
	16QAM	1	0	-	20.1	18.83	18.90	18.67	18.60	18.65
		1	37	-	20.1	18.71	18.78	18.61	18.54	18.58
		1	74	-	20.1	18.70	18.89	18.74	18.62	18.69
		36	0	-	20.1	19.08	19.00	18.93	19.00	18.81
		36	19	-	20.1	19.06	19.07	19.05	18.94	18.78
		36	39	-	20.1	19.04	19.03	19.01	18.90	18.86
		75	0	-	20.1	19.05	19.01	19.03	18.96	18.70
	64QAM	1	0	-	20.1	18.61	18.78	18.47	18.43	18.60
		1	37	-	20.1	18.49	18.66	18.51	18.44	18.54
		1	74	-	20.1	18.55	18.82	18.53	18.49	18.63
		36	0	-	20.1	19.16	19.01	19.06	19.03	18.84
		36	19	-	20.1	19.10	19.06	19.09	18.98	18.80
		36	39	-	20.1	19.10	19.03	19.11	18.97	18.85
		75	0	-	20.1	19.14	19.06	19.07	18.98	18.76
	256QAM	1	0	1.1	19.0	17.39	18.18	17.34	17.27	17.97
		1	37	1.1	19.0	17.30	18.10	17.32	17.24	17.92
		1	74	1.1	19.0	17.44	18.26	17.46	17.34	18.07
		36	0	1.1	19.0	18.03	17.83	17.94	17.91	17.69
		36	19	1.1	19.0	17.94	17.95	17.99	17.85	17.64
		36	39	1.1	19.0	17.90	17.92	17.97	17.88	17.71
		75	0	1.1	19.0	17.97	17.98	17.98	17.93	17.69

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39700	40160	40620	41080	41540
						Freq(MHz)				
						2501	2547	2593	2639	2685
10	QPSK	1	0	-	20.1	19.07	19.09	19.14	19.02	18.78
		1	24	-	20.1	19.02	18.96	19.08	19.04	18.75
		1	49	-	20.1	19.04	19.07	19.10	19.07	18.82
		25	0	-	20.1	19.14	19.03	19.07	19.01	18.78
		25	12	-	20.1	19.15	19.14	19.16	19.10	18.83
		25	25	-	20.1	19.10	19.08	19.14	19.08	18.84
		50	0	-	20.1	19.04	19.07	19.12	19.03	18.81
	16QAM	1	0	-	20.1	18.72	18.65	18.78	18.65	18.65
		1	24	-	20.1	18.68	18.62	18.79	18.49	18.64
		1	49	-	20.1	18.84	18.66	18.75	18.62	18.58
		25	0	-	20.1	19.12	19.01	19.04	19.00	18.80
		25	12	-	20.1	19.07	19.10	19.17	19.06	18.75
		25	25	-	20.1	19.07	19.05	19.10	19.05	18.82
		50	0	-	20.1	19.18	19.11	19.16	19.09	18.82
	64QAM	1	0	-	20.1	18.76	18.52	18.69	18.57	18.76
		1	24	-	20.1	18.77	18.58	18.73	18.68	18.87
		1	49	-	20.1	18.71	18.63	18.68	18.68	18.83
		25	0	-	20.1	19.17	19.10	19.09	19.08	18.80
		25	12	-	20.1	19.18	19.16	19.20	19.18	18.79
		25	25	-	20.1	19.13	19.13	19.14	19.11	18.84
		50	0	-	20.1	19.14	19.10	19.14	19.10	18.78
	256QAM	1	0	1.1	19.0	17.51	17.38	17.41	17.33	17.92
		1	24	1.1	19.0	17.40	17.29	17.50	17.39	17.94
		1	49	1.1	19.0	17.53	17.53	17.54	17.43	17.88
		25	0	1.1	19.0	18.01	17.99	17.98	17.98	17.69
		25	12	1.1	19.0	18.07	18.07	18.09	18.00	17.72
		25	25	1.1	19.0	18.05	18.01	18.02	17.97	17.75
		50	0	1.1	19.0	18.09	18.07	18.09	18.04	17.72

Band						Meas. Pwr Avg (dBm)				
41						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	39675	40148	40620	41093	41565
						Freq(MHz)				
						2498.5	2545.8	2593	2640.3	2687.5
5	QPSK	1	0	-	20.1	19.13	18.98	19.05	18.89	18.79
		1	12	-	20.1	19.08	19.04	19.06	18.94	18.75
		1	24	-	20.1	19.10	19.05	19.09	18.96	18.77
		12	0	-	20.1	19.24	19.17	19.14	19.02	18.84
		12	6	-	20.1	19.22	19.18	19.20	19.08	18.90
		12	13	-	20.1	19.17	19.16	19.22	19.06	18.87
		25	0	-	20.1	19.11	19.05	19.09	18.94	18.78
	16QAM	1	0	-	20.1	19.11	19.07	18.92	18.81	18.70
		1	12	-	20.1	19.04	18.94	18.97	18.89	18.67
		1	24	-	20.1	19.01	18.99	19.01	18.87	18.71
		12	0	-	20.1	19.16	19.12	19.15	19.06	18.87
		12	6	-	20.1	19.16	19.15	19.19	19.08	18.86
		12	13	-	20.1	19.15	19.11	19.20	19.07	18.87
		25	0	-	20.1	19.15	19.12	19.21	19.08	18.85
	64QAM	1	0	-	20.1	19.11	18.95	18.86	18.80	18.67
		1	12	-	20.1	18.99	18.96	18.94	18.83	18.64
		1	24	-	20.1	19.02	18.95	18.92	18.85	18.64
		12	0	-	20.1	19.30	19.25	19.22	19.18	18.98
		12	6	-	20.1	19.30	19.27	19.32	19.18	19.02
		12	13	-	20.1	19.28	19.25	19.28	19.16	18.93
		25	0	-	20.1	19.23	19.17	19.20	19.09	18.93
	256QAM	1	0	1.1	19.0	17.90	17.78	17.83	17.71	17.56
		1	12	1.1	19.0	17.84	17.83	17.83	17.79	17.64
		1	24	1.1	19.0	17.87	17.82	17.87	17.79	17.54
		12	0	1.1	19.0	18.13	18.06	18.03	18.01	17.81
		12	6	1.1	19.0	18.12	18.09	18.12	17.99	17.80
		12	13	1.1	19.0	18.11	18.09	18.13	17.96	17.77
		25	0	1.1	19.0	18.06	18.02	18.04	17.95	17.74

13.3.25 LTE band 48 FCC

For B48, the Tune-up limits were different depending on the TDD configurations (see Section 10.2), so the worst power configurations were checked as follows.

Worst power configuration check

Band								Burst Pwr Avg (dBm)	Timed Pwr Avg (dBm)
48								UL Ch #	
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Tune-up Limit Burst Pwr Avg (dBm)	Tune-up Limit Timed Pwr Avg (dBm)	Uplink/Downlink Configuration	Special Subframe	56207	
								Freq(MHz)	
								3646.7	
20	QPSK	1	49	10.9	8.5	0	0	9.56	7.38
							7	9.65	**7.49**
20	QPSK	1	49	12.3	8.5	1	0	11.20	7.34
							7	11.00	7.16
20	QPSK	1	49	15.2	8.5	2	0	14.08	7.15
							7	13.87	6.91
20	QPSK	1	49	13.8	8.5	3	0	12.64	7.48
							7	12.45	7.32
20	QPSK	1	49	15.4	8.5	4	0	14.32	7.38
							7	14.10	7.17
20	QPSK	1	49	18.3	8.5	5	0	17.37	7.24
							7	17.01	6.86
20	QPSK	1	49	11.4	8.5	6	0	10.27	7.31
							7	10.17	7.22

*Cyclic prefix "Extended" was used.

13.3.26 LTE band 48 DSI0/1 FCC

Note: For all measurement configuration in this band:
*U/D Config. = "0", SSF = "7" and CP = "Extended" were used to measure the highest transmission implemented for the device according to KDB 941225 D05 (Worst Timed Power AV Mode).
*MPR is disabled with U/D Config. = "0", SSF = "7" and CP = "Extended" mode.

Band						Meas. Pwr Avg (dBm)				
48						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	55340	55773	-	56207	56640
						Freq(MHz)				
						3560	3603.3	-	3646.7	3690
20	QPSK	1	0	-	10.9	9.78	9.62	-	9.62	9.63
		1	49	-	10.9	9.68	9.54	-	9.49	9.55
		1	99	-	10.9	9.80	9.61	-	9.60	9.56
		50	0	-	10.9	9.82	9.64	-	9.67	9.63
		50	24	-	10.9	9.74	9.62	-	9.64	9.59
		50	50	-	10.9	9.83	9.57	-	9.65	9.62
		100	0	-	10.9	9.77	9.56	-	9.58	9.53
	16QAM	1	0	-	10.9	9.57	9.42	-	9.42	9.39
		1	49	-	10.9	9.45	9.26	-	9.31	9.27
		1	99	-	10.9	9.54	9.35	-	9.42	9.31
		50	0	-	10.9	9.81	9.63	-	9.62	9.53
		50	24	-	10.9	9.82	9.64	-	9.63	9.52
		50	50	-	10.9	9.74	9.54	-	9.59	9.60
		100	0	-	10.9	9.73	9.64	-	9.66	9.58
	64QAM	1	0	-	10.9	9.81	9.62	-	9.60	9.57
		1	49	-	10.9	9.78	9.52	-	9.55	9.55
		1	99	-	10.9	9.76	9.56	-	9.63	9.57
		50	0	-	10.9	9.75	9.64	-	9.66	9.59
		50	24	-	10.9	9.78	9.64	-	9.69	9.59
		50	50	-	10.9	9.77	9.61	-	9.67	9.60
		100	0	-	10.9	9.75	9.63	-	9.64	9.53
	256QAM	1	0	-	10.9	9.76	9.69	-	9.71	9.62
		1	49	-	10.9	9.81	9.61	-	9.63	9.62
		1	99	-	10.9	9.80	9.59	-	9.68	9.63
		50	0	-	10.9	9.77	9.64	-	9.62	9.55
		50	24	-	10.9	9.82	9.64	-	9.64	9.55
		50	50	-	10.9	9.67	9.53	-	9.61	9.61
		100	0	-	10.9	9.70	9.62	-	9.60	9.56

Band						Meas. Pwr Avg (dBm)				
48						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	55315	55765	-	56215	56665
						Freq(MHz)				
						3557.5	3602.5	-	3647.5	3692.5
15	QPSK	1	0	-	10.9	9.79	9.67	-	9.65	9.52
		1	37	-	10.9	9.70	9.55	-	9.55	9.47
		1	74	-	10.9	9.80	9.64	-	9.69	9.57
		36	0	-	10.9	9.88	9.71	-	9.71	9.62
		36	19	-	10.9	9.76	9.63	-	9.65	9.66
		36	39	-	10.9	9.77	9.61	-	9.68	9.63
		75	0	-	10.9	9.73	9.55	-	9.63	9.50
	16QAM	1	0	-	10.9	9.45	9.32	-	9.30	9.52
		1	37	-	10.9	9.47	9.28	-	9.22	9.42
		1	74	-	10.9	9.48	9.35	-	9.38	9.46
		36	0	-	10.9	9.81	9.69	-	9.65	9.66
		36	19	-	10.9	9.74	9.61	-	9.68	9.70
		36	39	-	10.9	9.75	9.55	-	9.66	9.67
		75	0	-	10.9	9.75	9.60	-	9.70	9.54
	64QAM	1	0	-	10.9	9.36	9.16	-	9.18	9.31
		1	37	-	10.9	9.31	9.09	-	9.12	9.35
		1	74	-	10.9	9.29	9.13	-	9.20	9.45
		36	0	-	10.9	9.84	9.73	-	9.74	9.65
		36	19	-	10.9	9.82	9.62	-	9.69	9.70
		36	39	-	10.9	9.83	9.64	-	9.72	9.67
		75	0	-	10.9	9.82	9.59	-	9.67	9.60
	256QAM	1	0	-	10.9	9.29	9.13	-	9.12	9.84
		1	37	-	10.9	9.20	9.08	-	9.07	9.82
		1	74	-	10.9	9.26	9.11	-	9.18	9.87
		36	0	-	10.9	9.83	9.68	-	9.71	9.59
		36	19	-	10.9	9.76	9.63	-	9.71	9.64
		36	39	-	10.9	9.73	9.59	-	9.67	9.63
		75	0	-	10.9	9.78	9.61	-	9.72	9.62

Band						Meas. Pwr Avg (dBm)				
48						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	55290	55757	-	56223	56690
						Freq(MHz)				
						3555	3601.7	-	3648.3	3695
10	QPSK	1	0	-	10.9	9.87	9.70	-	9.73	9.67
		1	24	-	10.9	9.80	9.64	-	9.63	9.58
		1	49	-	10.9	9.83	9.65	-	9.67	9.64
		25	0	-	10.9	9.86	9.67	-	9.71	9.65
		25	12	-	10.9	9.83	9.72	-	9.69	9.72
		25	25	-	10.9	9.78	9.63	-	9.70	9.68
		50	0	-	10.9	9.78	9.61	-	9.69	9.67
	16QAM	1	0	-	10.9	9.48	9.33	-	9.33	9.31
		1	24	-	10.9	9.38	9.21	-	9.26	9.19
		1	49	-	10.9	9.47	9.28	-	9.34	9.28
		25	0	-	10.9	9.80	9.61	-	9.60	9.61
		25	12	-	10.9	9.76	9.60	-	9.68	9.66
		25	25	-	10.9	9.74	9.54	-	9.64	9.61
		50	0	-	10.9	9.79	9.67	-	9.73	9.66
	64QAM	1	0	-	10.9	9.46	9.25	-	9.32	9.29
		1	24	-	10.9	9.42	9.25	-	9.20	9.21
		1	49	-	10.9	9.37	9.17	-	9.27	9.22
		25	0	-	10.9	9.86	9.74	-	9.76	9.75
		25	12	-	10.9	9.85	9.80	-	9.75	9.73
		25	25	-	10.9	9.84	9.67	-	9.75	9.72
		50	0	-	10.9	9.82	9.68	-	9.71	9.66
	256QAM	1	0	-	10.9	9.37	9.19	-	9.23	9.19
		1	24	-	10.9	9.29	9.09	-	9.11	9.04
		1	49	-	10.9	9.31	9.10	-	9.19	9.16
		25	0	-	10.9	9.86	9.72	-	9.69	9.69
		25	12	-	10.9	9.83	9.72	-	9.71	9.69
		25	25	-	10.9	9.79	9.62	-	9.68	9.67
		50	0	-	10.9	9.82	9.74	-	9.70	9.65

Band						Meas. Pwr Avg (dBm)				
48						UL Ch #				
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	55265	55748	-	56232	56715
						Freq(MHz)				
						3552.5	3600.8	-	3649.2	3697.5
5	QPSK	1	0	-	10.9	9.77	9.64	-	9.64	9.64
		1	12	-	10.9	9.68	9.55	-	9.57	9.52
		1	24	-	10.9	9.79	9.56	-	9.66	9.58
		12	0	-	10.9	9.86	9.71	-	9.74	9.70
		12	6	-	10.9	9.85	9.68	-	9.71	9.65
		12	13	-	10.9	9.84	9.70	-	9.72	9.66
		25	0	-	10.9	9.79	9.58	-	9.60	9.61
	16QAM	1	0	-	10.9	9.67	9.52	-	9.49	9.49
		1	12	-	10.9	9.59	9.44	-	9.43	9.42
		1	24	-	10.9	9.64	9.46	-	9.52	9.45
		12	0	-	10.9	9.82	9.64	-	9.65	9.63
		12	6	-	10.9	9.82	9.65	-	9.71	9.65
		12	13	-	10.9	9.79	9.62	-	9.69	9.65
		25	0	-	10.9	9.85	9.69	-	9.70	9.63
	64QAM	1	0	-	10.9	9.62	9.47	-	9.48	9.47
		1	12	-	10.9	9.52	9.34	-	9.36	9.39
		1	24	-	10.9	9.61	9.39	-	9.48	9.42
		12	0	-	10.9	9.82	9.77	-	9.78	9.76
		12	6	-	10.9	9.85	9.76	-	9.80	9.74
		12	13	-	10.9	9.85	9.74	-	9.80	9.74
		25	0	-	10.9	9.77	9.72	-	9.73	9.70
	256QAM	1	0	-	10.9	9.66	9.53	-	9.54	9.51
		1	12	-	10.9	9.54	9.38	-	9.40	9.41
		1	24	-	10.9	9.66	9.43	-	9.54	9.47
		12	0	-	10.9	9.77	9.68	-	9.71	9.68
		12	6	-	10.9	9.85	9.68	-	9.69	9.68
		12	13	-	10.9	9.85	9.70	-	9.70	9.64
		25	0	-	10.9	9.76	9.64	-	9.62	9.61

13.3.27 LTE band 66 DSI0

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132072	132322	132572
						Freq(MHz)		
						1720	1745	1770
20	QPSK	1	0	0	22.5	21.30	21.35	21.45
		1	49	0	22.5	21.32	21.31	21.40
		1	99	0	22.5	21.41	21.44	21.41
		50	0	0	22.5	21.29	21.46	21.57
		50	24	0	22.5	21.42	21.48	21.66
		50	50	0	22.5	21.38	21.56	21.64
		100	0	0	22.5	21.40	21.43	21.42
	16QAM	1	0	0	22.5	21.70	21.68	21.95
		1	49	0	22.5	21.66	21.60	21.78
		1	99	0	22.5	21.77	21.83	21.77
		50	0	0.5	22.0	20.82	21.02	21.10
		50	24	0.5	22.0	20.94	21.03	21.17
		50	50	0.5	22.0	20.90	21.10	21.16
		100	0	0.5	22.0	20.93	20.98	21.09
	64QAM	1	0	0.5	22.0	20.99	20.85	20.95
		1	49	0.5	22.0	21.03	20.81	20.94
		1	99	0.5	22.0	21.09	20.85	20.88
		50	0	1.5	21.0	19.84	19.95	20.03
		50	24	1.5	21.0	19.94	19.97	20.12
		50	50	1.5	21.0	19.93	20.02	20.09
		100	0	1.5	21.0	19.88	19.97	20.08
	256QAM	1	0	3.5	19.0	17.86	18.02	18.15
		1	49	3.5	19.0	17.82	18.04	18.11
		1	99	3.5	19.0	17.95	18.06	18.12
		50	0	3.5	19.0	17.82	18.00	18.11
		50	24	3.5	19.0	17.93	18.00	18.21
		50	50	3.5	19.0	17.95	18.07	18.15
		100	0	3.5	19.0	17.94	18.02	18.08

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132047	132322	132597
						Freq(MHz)		
						1717.5	1745	1772.5
15	QPSK	1	0	0	22.5	21.20	21.36	21.57
		1	37	0	22.5	21.24	21.37	21.47
		1	74	0	22.5	21.26	21.40	21.45
		36	0	0	22.5	21.27	21.44	21.59
		36	19	0	22.5	21.37	21.46	21.67
		36	39	0	22.5	21.38	21.52	21.66
		75	0	0	22.5	21.25	21.35	21.55
	16QAM	1	0	0	22.5	21.51	21.65	21.95
		1	37	0	22.5	21.64	21.81	21.87
		1	74	0	22.5	21.65	21.88	21.87
		36	0	0.5	22.0	20.77	20.95	21.09
		36	19	0.5	22.0	20.88	20.99	21.19
		36	39	0.5	22.0	20.87	21.04	21.16
		75	0	0.5	22.0	20.85	20.95	21.08
	64QAM	1	0	0.5	22.0	21.13	21.24	21.47
		1	37	0.5	22.0	21.15	21.32	21.45
		1	74	0.5	22.0	21.18	21.28	21.44
		36	0	1.5	21.0	19.77	19.93	20.09
		36	19	1.5	21.0	19.87	19.96	20.18
		36	39	1.5	21.0	19.85	19.98	20.13
		75	0	1.5	21.0	19.85	19.94	20.08
	256QAM	1	0	3.5	19.0	18.08	18.25	18.43
		1	37	3.5	19.0	18.16	18.32	18.48
		1	74	3.5	19.0	18.14	18.35	18.44
		36	0	3.5	19.0	17.74	17.89	18.03
		36	19	3.5	19.0	17.82	17.92	18.13
		36	39	3.5	19.0	17.83	17.97	18.11
		75	0	3.5	19.0	17.87	17.97	18.08

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132022	132322	132622
						Freq(MHz)		
						1715	1745	1775
10	QPSK	1	0	0	22.5	21.23	21.36	21.58
		1	24	0	22.5	21.15	21.35	21.51
		1	49	0	22.5	21.28	21.44	21.53
		25	0	0	22.5	21.29	21.42	21.58
		25	12	0	22.5	21.31	21.43	21.59
		25	25	0	22.5	21.28	21.46	21.62
		50	0	0	22.5	21.22	21.43	21.58
	16QAM	1	0	0	22.5	21.57	21.69	21.92
		1	24	0	22.5	21.46	21.68	21.90
		1	49	0	22.5	21.64	21.81	21.89
		25	0	0.5	22.0	20.82	20.94	21.09
		25	12	0.5	22.0	20.82	20.93	21.09
		25	25	0.5	22.0	20.79	20.99	21.11
		50	0	0.5	22.0	20.79	20.89	21.02
	64QAM	1	0	0.5	22.0	21.22	21.33	21.50
		1	24	0.5	22.0	21.16	21.39	21.56
		1	49	0.5	22.0	21.17	21.42	21.54
		25	0	1.5	21.0	19.82	19.93	20.09
		25	12	1.5	21.0	19.84	19.95	20.09
		25	25	1.5	21.0	19.79	19.98	20.13
		50	0	1.5	21.0	19.85	19.93	20.04
	256QAM	1	0	3.5	19.0	18.16	18.21	18.40
		1	24	3.5	19.0	18.11	18.27	18.46
		1	49	3.5	19.0	18.09	18.28	18.43
		25	0	3.5	19.0	17.81	17.89	18.04
		25	12	3.5	19.0	17.78	17.90	18.07
		25	25	3.5	19.0	17.74	17.96	18.09
		50	0	3.5	19.0	17.78	17.90	18.07

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131997	132322	132647
						Freq(MHz)		
						1712.5	1745	1777.5
5	QPSK	1	0	0	22.5	21.17	21.31	21.55
		1	12	0	22.5	21.21	21.43	21.57
		1	24	0	22.5	21.16	21.38	21.52
		12	0	0	22.5	21.30	21.43	21.61
		12	6	0	22.5	21.32	21.44	21.67
		12	13	0	22.5	21.29	21.48	21.63
		25	0	0	22.5	21.20	21.41	21.56
	16QAM	1	0	0	22.5	21.65	21.79	21.92
		1	12	0	22.5	21.68	21.87	21.95
		1	24	0	22.5	21.62	21.71	21.89
		12	0	0.5	22.0	20.87	21.01	21.22
		12	6	0.5	22.0	20.87	21.00	21.23
		12	13	0.5	22.0	20.84	21.03	21.19
		25	0	0.5	22.0	20.85	20.96	21.18
	64QAM	1	0	0.5	22.0	21.25	21.35	21.60
		1	12	0.5	22.0	21.27	21.41	21.59
		1	24	0.5	22.0	21.16	21.42	21.52
		12	0	1.5	21.0	19.74	19.84	20.04
		12	6	1.5	21.0	19.77	19.92	20.11
		12	13	1.5	21.0	19.71	19.91	20.03
		25	0	1.5	21.0	19.86	19.93	20.19
	256QAM	1	0	3.5	19.0	17.93	18.04	18.25
		1	12	3.5	19.0	17.90	18.11	18.25
		1	24	3.5	19.0	17.87	18.09	18.26
		12	0	3.5	19.0	17.91	18.04	18.24
		12	6	3.5	19.0	17.92	18.04	18.27
		12	13	3.5	19.0	17.90	18.05	18.20
		25	0	3.5	19.0	17.82	17.95	18.16

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131987	132322	132657
						Freq(MHz)		
						1711.5	1745	1778.5
3	QPSK	1	0	0	22.5	21.24	21.31	21.54
		1	7	0	22.5	21.28	21.39	21.62
		1	14	0	22.5	21.21	21.38	21.50
		8	0	0	22.5	21.32	21.40	21.64
		8	3	0	22.5	21.39	21.54	21.67
		8	7	0	22.5	21.31	21.45	21.59
		15	0	0	22.5	21.23	21.39	21.61
	16QAM	1	0	0	22.5	21.56	21.65	21.94
		1	7	0	22.5	21.52	21.68	21.77
		1	14	0	22.5	21.54	21.64	21.82
		8	0	0.5	22.0	20.92	21.00	21.20
		8	3	0.5	22.0	20.93	21.05	21.21
		8	7	0.5	22.0	20.92	21.08	21.17
		15	0	0.5	22.0	20.87	20.96	21.13
	64QAM	1	0	0.5	22.0	21.21	21.30	21.52
		1	7	0.5	22.0	21.24	21.36	21.50
		1	14	0.5	22.0	21.23	21.37	21.51
		8	0	1.5	21.0	19.84	19.96	20.16
		8	3	1.5	21.0	19.90	20.01	20.18
		8	7	1.5	21.0	19.87	19.99	20.13
		15	0	1.5	21.0	19.87	19.92	20.16
	256QAM	1	0	3.5	19.0	18.17	18.21	18.43
		1	7	3.5	19.0	18.12	18.22	18.37
		1	14	3.5	19.0	18.17	18.31	18.45
		8	0	3.5	19.0	17.83	17.94	18.16
		8	3	3.5	19.0	17.85	18.04	18.21
		8	7	3.5	19.0	17.89	18.01	18.17
		15	0	3.5	19.0	17.81	17.90	18.11

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131979	132322	132665
						Freq(MHz)		
						1710.7	1745	1779.3
1.4	QPSK	1	0	0	22.5	21.18	21.36	21.40
		1	2	0	22.5	21.24	21.43	21.46
		1	5	0	22.5	21.14	21.34	21.41
		3	0	0	22.5	21.16	21.33	21.48
		3	1	0	22.5	21.19	21.35	21.50
		3	3	0	22.5	21.17	21.32	21.42
		6	0	0	22.5	21.18	21.34	21.45
	16QAM	1	0	0	22.5	21.26	21.40	21.80
		1	2	0	22.5	21.35	21.48	21.89
		1	5	0	22.5	21.22	21.42	21.77
		3	0	0	22.5	21.18	21.36	21.70
		3	1	0	22.5	21.20	21.38	21.79
		3	3	0	22.5	21.16	21.34	21.71
		6	0	0.5	22.0	20.79	20.96	21.11
	64QAM	1	0	0.5	22.0	21.16	21.30	21.27
		1	2	0.5	22.0	21.24	21.41	21.40
		1	5	0.5	22.0	21.12	21.30	21.28
		3	0	0.5	22.0	20.93	21.10	21.03
		3	1	0.5	22.0	20.99	21.13	21.08
		3	3	0.5	22.0	20.92	21.11	21.06
		6	0	1.5	21.0	19.76	19.92	19.95
	256QAM	1	0	3.5	19.0	17.61	17.78	18.18
		1	2	3.5	19.0	17.67	17.83	18.24
		1	5	3.5	19.0	17.59	17.75	18.18
		3	0	3.5	19.0	17.69	17.84	18.12
		3	1	3.5	19.0	17.72	17.90	18.17
		3	3	3.5	19.0	17.62	17.78	18.16
		6	0	3.5	19.0	17.61	17.80	17.95

13.3.28 LTE band 66 DSI1

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132072	132322	132572
						Freq(MHz)		
						1720	1745	1770
20	QPSK	1	0	-	18.0	16.98	17.04	17.18
		1	49	-	18.0	16.95	17.01	17.10
		1	99	-	18.0	17.01	17.03	17.08
		50	0	-	18.0	16.87	17.03	17.16
		50	24	-	18.0	16.99	17.02	17.25
		50	50	-	18.0	16.98	17.10	17.20
		100	0	-	18.0	16.95	17.04	17.15
	16QAM	1	0	-	18.0	17.27	17.43	17.44
		1	49	-	18.0	17.23	17.43	17.28
		1	99	-	18.0	17.33	17.46	17.30
		50	0	-	18.0	16.91	17.09	17.16
		50	24	-	18.0	17.04	17.08	17.22
		50	50	-	18.0	17.02	17.15	17.18
		100	0	-	18.0	17.04	17.09	17.13
	64QAM	1	0	-	18.0	17.08	17.27	17.38
		1	49	-	18.0	17.12	17.27	17.46
		1	99	-	18.0	17.19	17.31	17.32
		50	0	-	18.0	16.92	17.13	17.20
		50	24	-	18.0	17.03	17.15	17.28
		50	50	-	18.0	17.03	17.17	17.24
		100	0	-	18.0	16.97	17.05	17.18
	256QAM	1	0	-	18.0	16.98	17.14	17.22
		1	49	-	18.0	16.92	17.14	17.21
		1	99	-	18.0	17.08	17.16	17.17
		50	0	-	18.0	16.94	17.10	17.20
		50	24	-	18.0	17.05	17.13	17.27
		50	50	-	18.0	17.04	17.19	17.23
		100	0	-	18.0	17.02	17.10	17.19

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132047	132322	132597
						Freq(MHz)		
						1717.5	1745	1772.5
15	QPSK	1	0	-	18.0	16.78	16.94	17.25
		1	37	-	18.0	16.85	16.98	17.27
		1	74	-	18.0	16.88	16.97	17.19
		36	0	-	18.0	16.89	17.10	17.21
		36	19	-	18.0	16.97	17.09	17.31
		36	39	-	18.0	16.95	17.13	17.25
		75	0	-	18.0	16.87	16.94	17.16
	16QAM	1	0	-	18.0	17.18	17.38	17.41
		1	37	-	18.0	17.28	17.44	17.44
		1	74	-	18.0	17.33	17.47	17.47
		36	0	-	18.0	16.94	17.09	17.22
		36	19	-	18.0	17.04	17.16	17.31
		36	39	-	18.0	17.02	17.17	17.25
		75	0	-	18.0	16.99	17.08	17.12
	64QAM	1	0	-	18.0	17.25	17.40	17.68
		1	37	-	18.0	17.27	17.40	17.69
		1	74	-	18.0	17.37	17.38	17.67
		36	0	-	18.0	16.89	17.09	17.22
		36	19	-	18.0	16.99	17.09	17.31
		36	39	-	18.0	17.00	17.14	17.27
		75	0	-	18.0	17.01	17.10	17.17
	256QAM	1	0	-	18.0	17.21	17.39	17.23
		1	37	-	18.0	17.30	17.48	17.18
		1	74	-	18.0	17.29	17.45	17.21
		36	0	-	18.0	16.86	17.05	17.24
		36	19	-	18.0	16.98	17.06	17.35
		36	39	-	18.0	16.96	17.15	17.29
		75	0	-	18.0	17.01	17.10	17.18

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	132022	132322	132622
						Freq(MHz)		
						1715	1745	1775
10	QPSK	1	0	-	18.0	16.75	16.86	16.91
		1	24	-	18.0	16.70	16.87	16.94
		1	49	-	18.0	16.78	16.91	16.95
		25	0	-	18.0	16.83	16.91	16.95
		25	12	-	18.0	16.89	16.95	16.98
		25	25	-	18.0	16.90	17.03	17.09
		50	0	-	18.0	16.78	16.86	16.87
	16QAM	1	0	-	18.0	17.10	17.18	17.22
		1	24	-	18.0	17.07	17.19	17.30
		1	49	-	18.0	17.12	17.26	17.29
		25	0	-	18.0	16.87	16.94	16.99
		25	12	-	18.0	16.91	16.98	17.05
		25	25	-	18.0	16.92	17.10	17.15
		50	0	-	18.0	16.91	16.96	17.02
	64QAM	1	0	-	18.0	17.11	17.14	17.26
		1	24	-	18.0	17.08	17.23	17.21
		1	49	-	18.0	17.14	17.32	17.30
		25	0	-	18.0	16.88	16.97	16.99
		25	12	-	18.0	16.93	17.03	17.06
		25	25	-	18.0	16.91	17.07	17.14
		50	0	-	18.0	16.91	16.99	17.04
	256QAM	1	0	-	18.0	17.04	17.10	17.22
		1	24	-	18.0	17.04	17.16	17.28
		1	49	-	18.0	17.16	17.23	17.33
		25	0	-	18.0	16.88	16.92	16.99
		25	12	-	18.0	16.93	16.98	17.01
		25	25	-	18.0	16.91	17.07	17.11
		50	0	-	18.0	16.90	16.95	17.01

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131997	132322	132647
						Freq(MHz)		
						1712.5	1745	1777.5
5	QPSK	1	0	-	18.0	16.91	17.08	17.13
		1	12	-	18.0	16.89	17.05	17.12
		1	24	-	18.0	16.87	17.03	17.08
		12	0	-	18.0	16.96	17.13	17.28
		12	6	-	18.0	17.00	17.12	17.29
		12	13	-	18.0	16.95	17.15	17.23
		25	0	-	18.0	16.89	17.01	17.13
	16QAM	1	0	-	18.0	17.36	17.31	17.44
		1	12	-	18.0	17.34	17.42	17.44
		1	24	-	18.0	17.32	17.40	17.38
		12	0	-	18.0	17.04	17.12	17.28
		12	6	-	18.0	17.05	17.18	17.34
		12	13	-	18.0	16.99	17.20	17.26
		25	0	-	18.0	17.01	17.09	17.24
	64QAM	1	0	-	18.0	17.38	17.30	17.45
		1	12	-	18.0	17.35	17.37	17.44
		1	24	-	18.0	17.35	17.35	17.42
		12	0	-	18.0	16.90	17.15	17.33
		12	6	-	18.0	16.90	17.22	17.34
		12	13	-	18.0	16.90	17.25	17.30
		25	0	-	18.0	16.99	17.14	17.30
	256QAM	1	0	-	18.0	17.09	17.49	17.62
		1	12	-	18.0	17.06	17.54	17.62
		1	24	-	18.0	17.05	17.53	17.54
		12	0	-	18.0	17.03	17.14	17.25
		12	6	-	18.0	17.09	17.13	17.29
		12	13	-	18.0	17.04	17.16	17.25
		25	0	-	18.0	16.95	17.08	17.24

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131987	132322	132657
						Freq(MHz)		
						1711.5	1745	1778.5
3	QPSK	1	0	-	18.0	16.83	16.90	17.13
		1	7	-	18.0	16.94	17.10	17.10
		1	14	-	18.0	16.81	16.97	17.11
		8	0	-	18.0	17.02	17.13	17.22
		8	3	-	18.0	17.03	17.19	17.27
		8	7	-	18.0	17.00	17.15	17.19
		15	0	-	18.0	16.91	17.08	17.12
	16QAM	1	0	-	18.0	16.96	17.15	17.50
		1	7	-	18.0	17.06	17.21	17.40
		1	14	-	18.0	17.03	17.21	17.43
		8	0	-	18.0	16.91	17.01	17.30
		8	3	-	18.0	16.93	17.13	17.34
		8	7	-	18.0	16.87	17.06	17.28
		15	0	-	18.0	16.92	17.06	17.26
	64QAM	1	0	-	18.0	17.24	17.35	17.62
		1	7	-	18.0	17.27	17.41	17.59
		1	14	-	18.0	17.28	17.47	17.59
		8	0	-	18.0	17.10	17.19	17.25
		8	3	-	18.0	17.11	17.24	17.30
		8	7	-	18.0	17.04	17.20	17.25
		15	0	-	18.0	17.00	17.11	17.27
	256QAM	1	0	-	18.0	17.21	17.36	17.54
		1	7	-	18.0	17.14	17.31	17.50
		1	14	-	18.0	17.23	17.40	17.57
		8	0	-	18.0	17.07	17.22	17.27
		8	3	-	18.0	17.09	17.30	17.32
		8	7	-	18.0	17.08	17.26	17.26
		15	0	-	18.0	16.98	17.06	17.23

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
66						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	131979	132322	132665
						Freq(MHz)		
						1710.7	1745	1779.3
1.4	QPSK	1	0	-	18.0	16.75	16.86	16.91
		1	2	-	18.0	16.70	16.87	16.94
		1	5	-	18.0	16.78	16.91	16.95
		3	0	-	18.0	16.83	16.91	16.95
		3	1	-	18.0	16.89	16.95	16.98
		3	3	-	18.0	16.90	17.03	17.09
		6	0	-	18.0	16.78	16.86	16.87
	16QAM	1	0	-	18.0	17.10	17.18	17.22
		1	2	-	18.0	17.07	17.19	17.30
		1	5	-	18.0	17.12	17.26	17.29
		3	0	-	18.0	16.87	16.94	16.99
		3	1	-	18.0	16.91	16.98	17.05
		3	3	-	18.0	16.92	17.10	17.15
		6	0	-	18.0	16.91	16.96	17.02
	64QAM	1	0	-	18.0	17.11	17.14	17.26
		1	2	-	18.0	17.08	17.23	17.21
		1	5	-	18.0	17.14	17.32	17.30
		3	0	-	18.0	16.88	16.97	16.99
		3	1	-	18.0	16.93	17.03	17.06
		3	3	-	18.0	16.91	17.07	17.14
		6	0	-	18.0	16.91	16.99	17.04
	256QAM	1	0	-	18.0	17.04	17.10	17.22
		1	2	-	18.0	17.04	17.16	17.28
		1	5	-	18.0	17.16	17.23	17.33
		3	0	-	18.0	16.88	16.92	16.99
		3	1	-	18.0	16.93	16.98	17.01
		3	3	-	18.0	16.91	17.07	17.11
		6	0	-	18.0	16.90	16.95	17.01

*MPR is disabled when power reduction is enabled.

13.3.29 LTE band 71 DSI0

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133222	133297	133372
						Freq(MHz)		
						673	680.5	688
20	QPSK	1	0	0	24.0	-	22.59	-
		1	49	0	24.0	-	22.58	-
		1	99	0	24.0	-	22.62	-
		50	0	1	23.0	-	21.65	-
		50	24	1	23.0	-	21.73	-
		50	50	1	23.0	-	21.68	-
		100	0	1	23.0	-	21.72	-
	16QAM	1	0	1	23.0	-	22.03	-
		1	49	1	23.0	-	21.99	-
		1	99	1	23.0	-	22.07	-
		50	0	2	22.0	-	20.65	-
		50	24	2	22.0	-	20.75	-
		50	50	2	22.0	-	20.70	-
		100	0	2	22.0	-	20.72	-
	64QAM	1	0	2	22.0	-	20.85	-
		1	49	2	22.0	-	20.83	-
		1	99	2	22.0	-	20.92	-
		50	0	3	21.0	-	19.70	-
		50	24	3	21.0	-	19.76	-
		50	50	3	21.0	-	19.74	-
		100	0	3	21.0	-	19.73	-
	256QAM	1	0	5	19.0	-	17.61	-
		1	49	5	19.0	-	17.68	-
		1	99	5	19.0	-	17.82	-
		50	0	5	19.0	-	17.68	-
		50	24	5	19.0	-	17.77	-
		50	50	5	19.0	-	17.73	-
		100	0	5	19.0	-	17.72	-

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133197	133297	133397
						Freq(MHz)		
						670.5	680.5	690.5
15	QPSK	1	0	0	24.0	-	22.61	-
		1	37	0	24.0	-	22.48	-
		1	74	0	24.0	-	22.60	-
		36	0	1	23.0	-	21.69	-
		36	19	1	23.0	-	21.71	-
		36	39	1	23.0	-	21.68	-
		75	0	1	23.0	-	21.67	-
	16QAM	1	0	1	23.0	-	21.93	-
		1	37	1	23.0	-	21.84	-
		1	74	1	23.0	-	21.90	-
		36	0	2	22.0	-	20.71	-
		36	19	2	22.0	-	20.74	-
		36	39	2	22.0	-	20.72	-
		75	0	2	22.0	-	20.73	-
	64QAM	1	0	2	22.0	-	21.04	-
		1	37	2	22.0	-	21.03	-
		1	74	2	22.0	-	21.07	-
		36	0	3	21.0	-	19.68	-
		36	19	3	21.0	-	19.70	-
		36	39	3	21.0	-	19.69	-
		75	0	3	21.0	-	19.72	-
	256QAM	1	0	5	19.0	-	17.82	-
		1	37	5	19.0	-	17.81	-
		1	74	5	19.0	-	17.85	-
		36	0	5	19.0	-	17.70	-
		36	19	5	19.0	-	17.71	-
		36	39	5	19.0	-	17.69	-
		75	0	5	19.0	-	17.72	-

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133172	133297	133422
						Freq(MHz)		
						668	680.5	693
10	QPSK	1	0	0	24.0	22.70	22.57	22.65
		1	24	0	24.0	22.52	22.54	22.62
		1	49	0	24.0	22.53	22.55	22.58
		25	0	1	23.0	21.71	21.64	21.70
		25	12	1	23.0	21.68	21.70	21.72
		25	25	1	23.0	21.63	21.65	21.76
		50	0	1	23.0	21.70	21.62	21.73
	16QAM	1	0	1	23.0	22.03	21.93	21.99
		1	24	1	23.0	21.89	21.89	21.95
		1	49	1	23.0	21.86	21.92	21.87
		25	0	2	22.0	20.75	20.63	20.73
		25	12	2	22.0	20.72	20.74	20.75
		25	25	2	22.0	20.63	20.67	20.79
		50	0	2	22.0	20.66	20.68	20.69
	64QAM	1	0	2	22.0	21.16	21.03	21.11
		1	24	2	22.0	20.90	21.09	21.07
		1	49	2	22.0	21.06	21.16	21.20
		25	0	3	21.0	19.65	19.66	19.73
		25	12	3	21.0	19.49	19.76	19.78
		25	25	3	21.0	19.63	19.68	19.78
		50	0	3	21.0	19.65	19.67	19.75
	256QAM	1	0	5	19.0	18.03	17.88	17.96
		1	24	5	19.0	17.93	17.94	17.99
		1	49	5	19.0	17.92	18.00	18.04
		25	0	5	19.0	17.74	17.66	17.73
		25	12	5	19.0	17.66	17.67	17.72
		25	25	5	19.0	17.58	17.60	17.71
		50	0	5	19.0	17.67	17.65	17.69

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133147	133297	133447
						Freq(MHz)		
						665.5	680.5	695.5
5	QPSK	1	0	0	24.0	22.71	22.55	22.75
		1	12	0	24.0	22.62	22.51	22.74
		1	24	0	24.0	22.55	22.53	22.59
		12	0	1	23.0	21.78	21.65	21.78
		12	6	1	23.0	21.73	21.73	21.75
		12	13	1	23.0	21.62	21.61	21.77
		25	0	1	23.0	21.68	21.69	21.75
	16QAM	1	0	1	23.0	22.15	21.99	22.21
		1	12	1	23.0	22.03	21.89	22.14
		1	24	1	23.0	22.01	21.89	22.09
		12	0	2	22.0	20.82	20.75	20.87
		12	6	2	22.0	20.79	20.77	20.82
		12	13	2	22.0	20.74	20.67	20.80
		25	0	2	22.0	20.77	20.66	20.79
	64QAM	1	0	2	22.0	20.90	20.94	21.28
		1	12	2	22.0	21.00	20.90	21.27
		1	24	2	22.0	20.84	20.87	21.15
		12	0	3	21.0	19.55	19.74	19.76
		12	6	3	21.0	19.57	19.75	19.69
		12	13	3	21.0	19.47	19.75	19.70
		25	0	3	21.0	19.56	19.73	19.76
	256QAM	1	0	5	19.0	17.98	18.17	17.93
		1	12	5	19.0	17.80	18.07	17.91
		1	24	5	19.0	17.73	18.10	17.85
		12	0	5	19.0	17.86	17.65	17.86
		12	6	5	19.0	17.82	17.70	17.83
		12	13	5	19.0	17.70	17.64	17.83
		25	0	5	19.0	17.76	17.68	17.76

13.3.30 LTE band 71 DSI1

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133222	133297	133372
						Freq(MHz)		
						673	680.5	688
20	QPSK	1	0	-	19.1	-	17.38	-
		1	49	-	19.1	-	17.35	-
		1	99	-	19.1	-	17.42	-
		50	0	-	19.1	-	17.45	-
		50	24	-	19.1	-	17.48	-
		50	50	-	19.1	-	17.47	-
		100	0	-	19.1	-	17.41	-
	16QAM	1	0	-	19.1	-	17.79	-
		1	49	-	19.1	-	17.78	-
		1	99	-	19.1	-	17.85	-
		50	0	-	19.1	-	17.46	-
		50	24	-	19.1	-	17.54	-
		50	50	-	19.1	-	17.51	-
		100	0	-	19.1	-	17.50	-
	64QAM	1	0	-	19.1	-	17.66	-
		1	49	-	19.1	-	17.64	-
		1	99	-	19.1	-	17.71	-
		50	0	-	19.1	-	17.49	-
		50	24	-	19.1	-	17.58	-
		50	50	-	19.1	-	17.52	-
		100	0	-	19.1	-	17.53	-
	256QAM	1	0	-	19.1	-	17.38	-
		1	49	-	19.1	-	17.48	-
		1	99	-	19.1	-	17.58	-
		50	0	-	19.1	-	17.49	-
		50	24	-	19.1	-	17.56	-
		50	50	-	19.1	-	17.51	-
		100	0	-	19.1	-	17.52	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133197	133297	133397
						Freq(MHz)		
						670.5	680.5	690.5
15	QPSK	1	0	-	19.1	-	17.39	-
		1	37	-	19.1	-	17.25	-
		1	74	-	19.1	-	17.32	-
		36	0	-	19.1	-	17.48	-
		36	19	-	19.1	-	17.49	-
		36	39	-	19.1	-	17.47	-
		75	0	-	19.1	-	17.38	-
	16QAM	1	0	-	19.1	-	17.70	-
		1	37	-	19.1	-	17.63	-
		1	74	-	19.1	-	17.70	-
		36	0	-	19.1	-	17.45	-
		36	19	-	19.1	-	17.50	-
		36	39	-	19.1	-	17.49	-
		75	0	-	19.1	-	17.51	-
	64QAM	1	0	-	19.1	-	17.64	-
		1	37	-	19.1	-	17.59	-
		1	74	-	19.1	-	17.72	-
		36	0	-	19.1	-	17.50	-
		36	19	-	19.1	-	17.51	-
		36	39	-	19.1	-	17.47	-
		75	0	-	19.1	-	17.48	-
	256QAM	1	0	-	19.1	-	17.59	-
		1	37	-	19.1	-	17.57	-
		1	74	-	19.1	-	17.69	-
		36	0	-	19.1	-	17.48	-
		36	19	-	19.1	-	17.51	-
		36	39	-	19.1	-	17.46	-
		75	0	-	19.1	-	17.49	-

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133172	133297	133422
						Freq(MHz)		
						668	680.5	693
10	QPSK	1	0	-	19.1	17.47	17.34	17.41
		1	24	-	19.1	17.34	17.30	17.38
		1	49	-	19.1	17.30	17.38	17.37
		25	0	-	19.1	17.49	17.41	17.52
		25	12	-	19.1	17.50	17.52	17.55
		25	25	-	19.1	17.44	17.51	17.57
		50	0	-	19.1	17.40	17.38	17.37
	16QAM	1	0	-	19.1	17.79	17.56	17.63
		1	24	-	19.1	17.64	17.58	17.60
		1	49	-	19.1	17.66	17.61	17.63
		25	0	-	19.1	17.52	17.46	17.51
		25	12	-	19.1	17.48	17.53	17.56
		25	25	-	19.1	17.45	17.51	17.63
		50	0	-	19.1	17.46	17.49	17.53
	64QAM	1	0	-	19.1	17.95	17.77	17.84
		1	24	-	19.1	17.77	17.78	17.80
		1	49	-	19.1	17.72	17.80	17.85
		25	0	-	19.1	17.54	17.47	17.52
		25	12	-	19.1	17.52	17.55	17.58
		25	25	-	19.1	17.48	17.51	17.61
		50	0	-	19.1	17.45	17.50	17.53
	256QAM	1	0	-	19.1	17.85	17.59	17.68
		1	24	-	19.1	17.72	17.60	17.68
		1	49	-	19.1	17.73	17.60	17.69
		25	0	-	19.1	17.51	17.48	17.55
		25	12	-	19.1	17.45	17.52	17.54
		25	25	-	19.1	17.33	17.43	17.51
		50	0	-	19.1	17.45	17.45	17.50

*MPR is disabled when power reduction is enabled.

Band						Meas. Pwr Avg (dBm)		
71						UL Ch #		
BW (MHz)	Modu-lation	UL RB Allocation	UL RB Start	Target MPR	Tune-up Limit (dBm)	133147	133297	133447
						Freq(MHz)		
						665.5	680.5	695.5
5	QPSK	1	0	-	19.1	17.49	17.44	17.48
		1	12	-	19.1	17.40	17.36	17.44
		1	24	-	19.1	17.36	17.40	17.38
		12	0	-	19.1	17.54	17.45	17.54
		12	6	-	19.1	17.55	17.51	17.57
		12	13	-	19.1	17.43	17.42	17.53
		25	0	-	19.1	17.43	17.36	17.38
	16QAM	1	0	-	19.1	17.94	17.78	17.86
		1	12	-	19.1	17.80	17.71	17.82
		1	24	-	19.1	17.77	17.72	17.73
		12	0	-	19.1	17.62	17.52	17.61
		12	6	-	19.1	17.55	17.56	17.60
		12	13	-	19.1	17.50	17.52	17.59
		25	0	-	19.1	17.53	17.46	17.50
	64QAM	1	0	-	19.1	17.94	17.70	17.83
		1	12	-	19.1	17.84	17.65	17.78
		1	24	-	19.1	17.83	17.62	17.71
		12	0	-	19.1	17.46	17.51	17.63
		12	6	-	19.1	17.45	17.55	17.60
		12	13	-	19.1	17.42	17.48	17.59
		25	0	-	19.1	17.53	17.51	17.55
	256QAM	1	0	-	19.1	17.76	17.83	17.97
		1	12	-	19.1	17.57	17.77	17.90
		1	24	-	19.1	17.55	17.76	17.83
		12	0	-	19.1	17.64	17.47	17.59
		12	6	-	19.1	17.61	17.51	17.56
		12	13	-	19.1	17.50	17.43	17.54
		25	0	-	19.1	17.55	17.47	17.54

*MPR is disabled when power reduction is enabled.

13.4 LTE CA

13.4.1 SAR test exclusion for DL CA

The configurations that require power measurements as described in Section 14.1.4 "LTE DLCA Test Reduction Methodology" are highlighted in yellow in the table below. Only yellow highlighted cells need power measurement.

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC#1	CA_2C		3CC#12, 3CC#13, 3CC#14, 3CC#15, 3CC#45, 3CC#48, 4CC#7, 4CC#27, 4CC#30, 4CC#68, 4CC#99, 5CC#13, 5CC#44
2CC#2	CA_5B		3CC#5, 3CC#16, 3CC#27, 3CC#28, 4CC#7, 4CC#13, 4CC#14, 4CC#37, 4CC#42, 4CC#50, 4CC#69, 4CC#83, 5CC#19, 5CC#20, 5CC#36, 5CC#37, 5CC#57,
2CC#3	CA_7B		No
2CC#4	CA_7C		3CC#6, 3CC#17, 3CC#21, 3CC#31, 3CC#32, 3CC#33, 4CC#16, 4CC#43, 4CC#53, 4CC#54, 4CC#86, 4CC#87, 5CC#60, 5CC#61
2CC#5	CA_12B		3CC#18, 3CC#22, 3CC#29, 3CC#36, 3CC#7, 4CC#38, 4CC#44, 4CC#45, 4CC#51, 4CC#56, 4CC#70, 4CC#71, 4CC#85, 4CC#88, 5CC#53, 5CC#59, 5CC#62
2CC#6	CA_38C		No
2CC#7	CA_41C		3CC#41, 3CC#43, 3CC#44, 3CC#47, 4CC#26, 4CC#27, 4CC#96, 4CC#97, 4CC#98, 5CC#12
2CC#9	CA_48C		3CC#9, 3CC#20, 3CC#24, 3CC#38, 3CC#52, 3CC#55, 3CC#56, 4CC#33, 4CC#34, 4CC#35, 4CC#47, 4CC#58, 4CC#63, 4CC#64, 4CC#72, 4CC#74, 4CC#79, 4CC#80, 4CC#90, 4CC#93, 4CC#104, 4CC#105, 5CC#15, 5CC#28, 5CC#41, 5CC#47, 5CC#48, 5CC#50, 5CC#64, 5CC#65, 5CC#70
2CC#10	CA_66B		3CC#10, 3CC#25, 3CC#39, 3CC#53, 3CC#57, 4CC#13, 4CC#34, 4CC#40, 4CC#48, 4CC#59, 4CC#65, 4CC#75, 4CC#81, 4CC#91, 4CC#94, 4CC#102, 5CC#19, 5CC#36, 5CC#47, 5CC#51, 5CC#54, 5CC#66
2CC#11	CA_66C		3CC#11, 3CC#26, 3CC#35, 3CC#40, 3CC#49, 3CC#54, 3CC#58, 3CC#59, 4CC#14, 4CC#35, 4CC#41, 4CC#49, 4CC#55, 4CC#60, 4CC#66, 4CC#67, 4CC#76, 4CC#82, 4CC#92, 4CC#95, 4CC#103, 5CC#20, 5CC#37, 5CC#48, 5CC#52, 5CC#55, 5CC#67
2CC#12	CA_2A-2A		3CC#60, 3CC#61, 3CC#62, 3CC#63, 3CC#64, 3CC#65, 3CC#66, 3CC#67, 3CC#68, 3CC#69, 4CC#37, 4CC#38, 4CC#39, 4CC#40, 4CC#41, 4CC#106, 4CC#107, 4CC#108, 4CC#109, 4CC#110, 4CC#111, 4CC#112, 4CC#113, 4CC#114, 4CC#115, 4CC#116, 4CC#117, 4CC#118, 4CC#119, 4CC#120, 5CC#17, 5CC#51, 5CC#52, 5CC#53, 5CC#54, 5CC#55, 5CC#72, 5CC#73, 5CC#74, 5CC#75, 5CC#76
2CC#13	CA_2A-4A		3CC#60, 3CC#70, 3CC#71, 3CC#72, 3CC#73, 3CC#74, 3CC#75, 3CC#76, 4CC#42, 4CC#43, 4CC#44, 4CC#106, 4CC#107, 4CC#108, 4CC#109, 4CC#110, 4CC#121, 4CC#122, 4CC#123, 4CC#124, 4CC#125, 4CC#126
2CC#14	CA_2A-5A		3CC#61, 3CC#77, 3CC#78, 3CC#79, 3CC#80, 3CC#81, 4CC#45, 4CC#46, 4CC#47, 4CC#48, 4CC#49, 4CC#111, 4CC#112, 4CC#127, 4CC#128, 4CC#129, 4CC#130, 4CC#131, 5CC#18, 5CC#51, 5CC#52, 5CC#56, 5CC#72, 5CC#73, 5CC#77, 6CC#1, 6CC#8, 6CC#14, 7CC#1, 7CC#4
2CC#15	CA_2A-7A		3CC#62, 3CC#82, 3CC#83, 3CC#84, 3CC#85, 3CC#86, 3CC#87, 4CC#51, 4CC#52, 4CC#113, 4CC#114, 4CC#132, 4CC#133, 4CC#134, 4CC#135, 4CC#136, 4CC#137, 4CC#138, 4CC#139, 5CC#21, 5CC#58, 5CC#59, 5CC#74, 5CC#78, 5CC#79, 6CC#2,
2CC#16	CA_2A-12A		3CC#63, 3CC#88, 3CC#89, 3CC#110, 4CC#55, 4CC#115, 4CC#116, 4CC#126, 4CC#140, 4CC#153, 5CC#75, 6CC#1, 6CC#2, 6CC#3, 6CC#4, 6CC#5, 6CC#6, 6CC#7, 6CC#8, 6CC#9, 6CC#10, 6CC#11, 6CC#12, 6CC#13, 6CC#14, 6CC#15
2CC#17	CA_2A-13A		3CC#64, 3CC#90, 3CC#91, 3CC#92, 4CC#57, 4CC#58, 4CC#59, 4CC#60, 4CC#117, 4CC#141, 5CC#23, 5CC#24, 5CC#63, 5CC#64, 5CC#65, 5CC#66, 5CC#67, 5CC#80, 5CC#81, 6CC#10, 6CC#15, 7CC#5
2CC#18	CA_2A-14A		3CC#65, 3CC#93, 4CC#118, 4CC#145, 5CC#76, 5CC#82
2CC#19	CA_2A-17A		No
2CC#20	CA_2A-29A	B29 SCC only	3CC#66, 3CC#94

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC#21	CA_2A-46A	B46 SCC only	3CC#67, 3CC#95, 3CC#96, 4CC#61, 4CC#146, 4CC#147, 5CC#25, 5CC#68
2CC#22	CA_2A-48A		3CC#97, 3CC#98, 4CC#63, 4CC#148, 4CC#149, 5CC#27, 5CC#70
2CC#23	CA_2A-66A		3CC#68, 3CC#89, 3CC#99, 3CC#100, 3CC#117, 3CC#126, 3CC#130, 4CC#65, 4CC#66, 4CC#116, 4CC#119, 4CC#120, 4CC#127, 4CC#136, 4CC#140, 4CC#150, 4CC#151, 5CC#54, 5CC#55, 5CC#72, 5CC#74, 5CC#75
2CC#24	CA_2A-71A		3CC#69
2CC#25	CA_4A-4A		3CC#70, 3CC#101, 3CC#102, 3CC#103, 3CC#104, 3CC#105, 3CC#106, 4CC#69, 4CC#70, 4CC#106, 4CC#121, 4CC#122, 4CC#152, 4CC#153
2CC#26	CA_4A-5A		3CC#101, 3CC#107, 3CC#71, 4CC#107, 4CC#121, 4CC#123, 4CC#152, 4CC#71
2CC#27	CA_4A-7A		3CC#72, 3CC#102, 3CC#108, 3CC#109, 4CC#124, 4CC#125
2CC#28	CA_4A-12A		3CC#73, 3CC#103, 3CC#110, 4CC#108, 4CC#122, 4CC#126, 4CC#153
2CC#29	CA_4A-13A		3CC#74, 3CC#104, 3CC#111, 4CC#72, 4CC#109,
2CC#30	CA_4A-17A		No
2CC#31	CA_4A-29A	B29 SCC only	3CC#75, 3CC#105
2CC#32	CA_4A-46A	B46 SCC only	3CC#112, 4CC#73, 5CC#30
2CC#33	CA_4A-48A		3CC#113, 4CC#74
2CC#34	CA_4A-71A		3CC#76, 3CC#106, 4CC#110
2CC#35	CA_5A-5A		3CC#114, 4CC#75, 4CC#76, 4CC#154
2CC#36	CA_5A-7A		3CC#77, 3CC#115, 3CC#116, 4CC#77, 5CC#32
2CC#37	CA_5A-12A		3CC#78, 3CC#107, 3CC#117, 4CC#111, 4CC#123, 4CC#127, 4CC#152, 5CC#72
2CC#38	CA_5A-25A		No
2CC#39	CA_5A-38A		No
2CC#40	CA_5A-41A		No
2CC#41	CA_5A-46A	B46 SCC only	3CC#79, 3CC#116, 3CC#118, 4CC#128, 4CC#155, 5CC#77
2CC#42	CA_5A-48A		3CC#80, 3CC#119, 3CC#120, 4CC#79, 4CC#129, 4CC#130, 4CC#156, 5CC#34
2CC#43	CA_5A-66A		3CC#81, 3CC#114, 3CC#121, 4CC#81, 4CC#82, 4CC#112, 4CC#131, 4CC#154, 5CC#73
2CC#44	CA_7A-7A		3CC#82, 3CC#108, 3CC#115, 3CC#122, 3CC#123, 3CC#124, 3CC#125, 4CC#84, 4CC#124, 4CC#132, 4CC#133, 4CC#134, 4CC#135, 4CC#157, 4CC#158, 5CC#38, 5CC#58, 5CC#78, 5CC#79, 6CC#5, 6CC#9, 7CC#2
2CC#45	CA_7A-12A		3CC#83, 3CC#109, 3CC#126, 4CC#113, 4CC#125, 4CC#136, 5CC#74
2CC#46	CA_7A-13A		3CC#84, 3CC#122, 4CC#132
2CC#47	CA_7A-29A	B29 SCC only	3CC#85, 3CC#123, 3CC#127, 4CC#133, 4CC#137, 4CC#157, 5CC#78
2CC#49	CA_7A-46A	B46 SCC only	3CC#86, 3CC#116, 3CC#124, 3CC#128, 4CC#134, 4CC#138
2CC#50	CA_7A-66A		3CC#87, 3CC#125, 3CC#129, 4CC#114, 4CC#135, 4CC#139, 4CC#158, 5CC#79
2CC#51	CA_12A-12A		3CC#88, 3CC#110, 4CC#115, 4CC#126, 4CC#153
2CC#52	CA_12A-25A		No
2CC#53	CA_12A-46A	B46 SCC only	No
2CC#54	CA_12A-66A		3CC#89, 3CC#117, 3CC#126, 3CC#130, 4CC#116, 4CC#127, 4CC#136, 4CC#140, 5CC#72, 5CC#74, 5CC#75
2CC#55	CA_13A-46A	B46 SCC only	3CC#90, 3CC#131, 4CC#141, 4CC#159, 5CC#80
2CC#56	CA_13A-48A		3CC#90, 3CC#131, 4CC#141, 4CC#159, 5CC#80
2CC#57	CA_13A-66A		3CC#92, 3CC#134, 4CC#94, 4CC#95, 4CC#117, 4CC#144, 4CC#161, 5CC#66, 5CC#67
2CC#58	CA_14A-66A		3CC#93, 3CC#135, 4CC#118, 4CC#145, 4CC#162, 5CC#76, 5CC#82
2CC#59	CA_25A-25A		3CC#136, 3CC#137, 3CC#138, 4CC#96, 5CC#43
2CC#60	CA_25A-26A		3CC#137, 3CC#139, 4CC#97

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC#61	CA_25A-41A		3CC#138
2CC#62	CA_25A-46A	B46 SCC only	No
2CC#63	CA_26A-41A		3CC#139
2CC#64	CA_26A-46A	B46 SCC only	No
2CC#65	CA_29A-66A	B29 SCC only	3CC#94, 3CC#127, 3CC#140, 4CC#86, 4CC#137, 4CC#157, 5CC#60, 5CC#78
2CC#66	CA_41A-41A		3CC#141, 4CC#98
2CC#68	CA_41A-46A	B46 SCC only	No
2CC#69	CA_41A-48A		No
2CC#71	CA_46A-66A	B46 SCC only	3CC#96, 3CC#118, 3CC#128, 3CC#131, 3CC#143, 3CC#144, 4CC#128, 4CC#138, 4CC#141, 4CC#146, 4CC#147, 4CC#155, 4CC#159, 4CC#163, 5CC#77, 5CC#80
2CC#72	CA_46A-71A	B46 SCC only	No
2CC#73	CA_48A-48A		3CC#97, 3CC#113, 3CC#119, 3CC#132, 3CC#145, 3CC#146, 4CC#102, 4CC#103, 4CC#129, 4CC#142, 4CC#148, 4CC#156, 4CC#160, 4CC#164, 5CC#81
2CC#74	CA_48A-66A		3CC#98, 3CC#120, 3CC#133, 3CC#145, 3CC#147, 4CC#130, 4CC#143, 4CC#148, 4CC#149, 4CC#156, 4CC#160, 4CC#164, 4CC#165, 5CC#81
2CC#75	CA_48A-71A		3CC#146
2CC#76	CA_66A-66A		3CC#99, 3CC#121, 3CC#129, 3CC#130, 3CC#134, 3CC#135, 3CC#140, 3CC#144, 3CC#147, 3CC#148, 3CC#149, 4CC#68, 4CC#83, 4CC#87, 4CC#88, 4CC#101, 4CC#105, 4CC#119, 4CC#131, 4CC#139, 4CC#140, 4CC#144, 4CC#145, 4CC#147, 4CC#149, 4CC#150, 4CC#151, 4CC#154, 4CC#155, 4CC#158, 4CC#159, 4CC#161, 4CC#162, 4CC#163, 4CC#162, 4CC#163, 4CC#164, 4CC#165, 5CC#46, 5CC#57, 5CC#61, 5CC#62, 5CC#69, 5CC#71, 5CC#73, 5CC#75, 5CC#76, 5CC#77, 5CC#79, 5CC#80, 5CC#82, 6CC#7, 6CC#11, 6CC#12, 6CC#13, 6CC#14, 6CC#15, 7CC#3, 7CC#4, 7CC#5
2CC#77	CA_66A-71A		3CC#100, 3CC#149, 4CC#120, 4CC#151
2CC#78	CA_7A-26A		3CC#152

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC#1	CA_41D		4CC#120, 4CC#151
3CC#3	CA_48D		4CC#5, 4CC#9, 4CC#11, 4CC#19, 4CC#32, 4CC#36, 5CC#15, 5CC#23, 5CC#27, 5CC#29, 5CC#34, 5CC#35, 5CC#40, 5CC#42, 5CC#49
3CC#4	CA_66D		4CC#6, 4CC#12, 4CC#20, 5CC#24
3CC#5	CA_2A-5B		4CC#37, 4CC#50, 5CC#19, 5CC#20, 5CC#57
3CC#6	CA_2A-7C		4CC#53, 4CC#54, 5CC#60, 5CC#61
3CC#7	CA_2A-12B		4CC#38, 4CC#56, 5CC#53, 5CC#62
3CC#8	CA_2A-46C	B46 SCC only	4CC#39, 4CC#62, 4CC#62
3CC#9	CA_2A-48C		4CC#64, 5CC#28
3CC#10	CA_2A-66B		4CC#40
3CC#11	CA_2A-66C		4CC#41, 4CC#55, 4CC#67
3CC#12	CA_2C-5A		No
3CC#13	CA_2C-12A		No
3CC#14	CA_2C-29A	B29 SCC only	No
3CC#15	CA_2C-66A		4CC#68
3CC#16	CA_4A-5B		4CC#42, 4CC#69
3CC#17	CA_4A-7C		4CC#43
3CC#18	CA_4A-12B		4CC#44, 4CC#70
3CC#19	CA_4A-46C	B46 SCC only	5CC#31
3CC#20	CA_4A-48C		4CC#72, 4CC#74
3CC#21	CA_5A-7C		No
3CC#22	CA_5A-12B		4CC#45, 4CC#71
3CC#23	CA_5A-46C	B46 SCC only	4CC#46, 4CC#78, 5CC#56, 6CC#14
3CC#24	CA_5A-48C		4CC#47, 4CC#80
3CC#25	CA_5A-66B		4CC#48, 4CC#75, 5CC#51
3CC#26	CA_5A-66C		4CC#49, 4CC#76, 5CC#52
3CC#27	CA_5B-46A	B46 SCC only	No
3CC#28	CA_5B-66A		4CC#50, 4CC#83, 5CC#36, 5CC#37, 5CC#57
3CC#29	CA_7A-12B		4CC#51, 4CC#85, 5CC#59
3CC#30	CA_7A-46C	B46 SCC only	4CC#52, 4CC#77, 4CC#84, 5CC#58
3CC#31	CA_7C-29A	B29 SCC only	4CC#53, 4CC#86, 5CC#60
3CC#32	CA_7C-46A	B46 SCC only	No
3CC#33	CA_7C-66A		4CC#54, 4CC#87, 5CC#61
3CC#34	CA_12A-46C	B46 SCC only	No
3CC#35	CA_12A-66C		4CC#55
3CC#36	CA_12B-66A		4CC#56, 4CC#85, 4CC#88, 5CC#53, 5CC#59, 5CC#62
3CC#37	CA_13A-46C	B46 SCC only	4CC#57, 4CC#89, 5CC#63, 5CC#71, 6CC#15
3CC#38	CA_13A-48C		4CC#58, 4CC#72, 4CC#93, 5CC#41, 5CC#65
3CC#39	CA_13A-66B		4CC#59
3CC#40	CA_13A-66C		4CC#60
3CC#41	CA_25A-41C		4CC#96
3CC#42	CA_25A-46C	B46 SCC only	No
3CC#43	CA_26A-41C		4CC#97
3CC#44	CA_41A-41C		4CC#98
3CC#46	CA_41A-46C	B46 SCC only	No
3CC#49	CA_46A-66C	B46 SCC only	No
3CC#50	CA_46C-66A	B46 SCC only	4CC#62, 4CC#78, 4CC#89, 4CC#100, 4CC#101, 5CC#56, 5CC#63, 5CC#68, 5CC#69, 5CC#71, 6CC#14, 6CC#15

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC#51	CA_46C-71A	B46 SCC only	No
3CC#52	CA_48A-48C		4CC#63, 4CC#74, 4CC#79, 4CC#90, 4CC#104, 5CC#47, 5CC#48, 5CC#64, 5CC#70
3CC#53	CA_48A-66B		4CC#91, 4CC#102
3CC#54	CA_48A-66C		4CC#92, 4CC#103
3CC#55	CA_48C-66A		4CC#64, 4CC#80, 4CC#93, 4CC#104, 4CC#105, 5CC#50, 5CC#65, 5CC#70
3CC#56	CA_48C-71A		No
3CC#57	CA_66A-66B		4CC#65, 4CC#81, 4CC#94, 5CC#36, 5CC#54, 5CC#66
3CC#58	CA_66A-66C		4CC#66, 4CC#82, 4CC#95, 5CC#37, 5CC#55, 5CC#67
3CC#59	CA_66C-71A		4CC#67
3CC#60	CA_2A-2A-4A		4CC#106, 4CC#107, 4CC#108, 4CC#109, 4CC#110
3CC#61	CA_2A-2A-5A		4CC#111, 4CC#112, 5CC#51, 5CC#52, 5CC#72, 5CC#73
3CC#62	CA_2A-2A-7A		4CC#113, 4CC#114, 5CC#74
3CC#63	CA_2A-2A-12A		4CC#115, 4CC#116, 5CC#75
3CC#64	CA_2A-2A-13A		4CC#117
3CC#65	CA_2A-2A-14A		4CC#118, 5CC#76
3CC#66	CA_2A-2A-29A	B29 SCC only	No
3CC#67	CA_2A-2A-46A	B46 SCC only	No
3CC#68	CA_2A-2A-66A		4CC#119, 4CC#120, 5CC#54, 5CC#55
3CC#69	CA_2A-2A-71A		4CC#110, 4CC#120
3CC#70	CA_2A-4A-4A		4CC#106, 4CC#121, 4CC#122
3CC#71	CA_2A-4A-5A		4CC#107, 4CC#123
3CC#72	CA_2A-4A-7A		4CC#124, 4CC#125
3CC#73	CA_2A-4A-12A		4CC#108, 4CC#126
3CC#74	CA_2A-4A-13A		4CC#109
3CC#75	CA_2A-4A-29A	B29 SCC only	No
3CC#76	CA_2A-4A-71A		4CC#110
3CC#77	CA_2A-5A-7A		No
3CC#78	CA_2A-5A-12A		4CC#111, 4CC#127, 5CC#72
3CC#79	CA_2A-5A-46A	B46 SCC only	4CC#128, 5CC#77
3CC#80	CA_2A-5A-48A		4CC#129, 4CC#130
3CC#81	CA_2A-5A-66A		4CC#112, 4CC#131, 5CC#73
3CC#82	CA_2A-7A-7A		4CC#132, 4CC#133, 4CC#134, 4CC#135, 5CC#58, 5CC#78, 5CC#79, 6CC#9, 7CC#2
3CC#83	CA_2A-7A-12A		4CC#113, 4CC#136, 5CC#74
3CC#84	CA_2A-7A-13A		4CC#132
3CC#85	CA_2A-7A-29A	B29 SCC only	4CC#137
3CC#86	CA_2A-7A-46A	B46 SCC only	4CC#138
3CC#87	CA_2A-7A-66A		4CC#114, 4CC#139
3CC#88	CA_2A-12A-12A		4CC#115
3CC#89	CA_2A-12A-66A		4CC#116, 4CC#140, 5CC#75
3CC#90	CA_2A-13A-46A	B46 SCC only	4CC#141, 5CC#80
3CC#91	CA_2A-13A-48A		4CC#142, 4CC#143, 5CC#64, 5CC#81
3CC#92	CA_2A-13A-66A		4CC#117, 4CC#144, 5CC#66, 5CC#67
3CC#93	CA_2A-14A-66A		4CC#118, 4CC#145, 5CC#76, 5CC#82
3CC#94	CA_2A-29A-66A	B29 SCC only	4CC#137, 5CC#60, 5CC#78
3CC#95	CA_2A-46A-46A	B46 SCC only	4CC#146
3CC#96	CA_2A-46A-66A	B46 SCC only	4CC#147
3CC#97	CA_2A-48A-48A		4CC#148
3CC#98	CA_2A-48A-66A		4CC#149
3CC#99	CA_2A-66A-66A		4CC#119, 4CC#140, 4CC#150, 4CC#151, 5CC#75
3CC#100	CA_2A-66A-71A		4CC#120

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC#101	CA_4A-4A-5A		4CC#121, 4CC#152
3CC#102	CA_4A-4A-7A		No
3CC#103	CA_4A-4A-12A		4CC#122, 4CC#153
3CC#104	CA_4A-4A-13A		No
3CC#105	CA_4A-4A-29A	B29 SCC only	No
3CC#106	CA_4A-4A-71A		No
3CC#107	CA_4A-5A-12A		4CC#123, 4CC#152
3CC#108	CA_4A-7A-7A		4CC#124
3CC#109	CA_4A-7A-12A		4CC#125
3CC#110	CA_4A-12A-12A		4CC#126, 4CC#153
3CC#111	CA_4A-13A-48A		No
3CC#112	CA_4A-46A-46A	B46 SCC only	No
3CC#113	CA_4A-48A-48A		No
3CC#114	CA_5A-5A-66A		4CC#154
3CC#115	CA_5A-7A-7A		No
3CC#116	CA_5A-7A-46A	B46 SCC only	No
3CC#117	CA_5A-12A-66A		4CC#127, 5CC#72
3CC#118	CA_5A-46A-66A	B46 SCC only	4CC#128, 4CC#155, 5CC#77
3CC#119	CA_5A-48A-48A		4CC#129, 4CC#156
3CC#120	CA_5A-48A-66A		4CC#130, 4CC#156
3CC#121	CA_5A-66A-66A		4CC#131, 4CC#154, 4CC#155, 5CC#73, 5CC#77, 6CC#12, 6CC#14, 7CC#3, 7CC#4
3CC#122	CA_7A-7A-13A		4CC#132
3CC#123	CA_7A-7A-29A	B29 SCC only	4CC#133, 4CC#157, 5CC#78
3CC#124	CA_7A-7A-46A	B46 SCC only	4CC#134
3CC#125	CA_7A-7A-66A		4CC#135, 4CC#157, 4CC#158, 5CC#78, 5CC#79
3CC#126	CA_7A-12A-66A		4CC#136, 5CC#74
3CC#127	CA_7A-29A-66A	B29 SCC only	4CC#137, 4CC#157, 5CC#78
3CC#128	CA_7A-46A-66A	B46 SCC only	4CC#138
3CC#129	CA_7A-66A-66A		4CC#139, 4CC#158, 5CC#79
3CC#130	CA_12A-66A-66A		4CC#140, 5CC#75
3CC#131	CA_13A-46A-66A	B46 SCC only	4CC#141, 4CC#159, 5CC#80
3CC#132	CA_13A-48A-48A		4CC#142, 4CC#160, 5CC#81
3CC#133	CA_13A-48A-66A		4CC#143, 4CC#160, 5CC#81
3CC#134	CA_13A-66A-66A		4CC#144, 4CC#159, 4CC#161, 5CC#71, 5CC#80, 6CC#13, 6CC#15, 7CC#5
3CC#135	CA_14A-66A-66A		4CC#145, 4CC#162, 5CC#76, 5CC#82
3CC#136	CA_25A-25A-25A		No
3CC#137	CA_25A-25A-26A		No
3CC#138	CA_25A-25A-41A		No
3CC#139	CA_25A-26A-41A		No
3CC#140	CA_29A-66A-66A	B29 SCC only	No
3CC#141	CA_41A-41A-41A		No
3CC#143	CA_46A-46A-66A	B46 SCC only	4CC#146
3CC#144	CA_46A-66A-66A	B46 SCC only	4CC#147, 4CC#155, 4CC#159, 4CC#163, 5CC#77, 5CC#80
3CC#145	CA_48A-48A-66A		4CC#148, 4CC#156, 4CC#160, 4CC#164, 5CC#81
3CC#146	CA_48A-48A-71A		No
3CC#147	CA_48A-66A-66A		4CC#149, 4CC#164, 4CC#165
3CC#148	CA_66A-66A-66A		4CC#150, 4CC#161, 4CC#162, 4CC#163, 4CC#165, 5CC#82
3CC#149	CA_66A-66A-71A		4CC#151
3CC#150	CA_7C-13A		4CC#168
3CC#151	CA_5A-7A-66A		4CC#174
3CC#152	CA_7A-7A-26A		No
3CC#153	CA_13A-46A-46A	B46 SCC only	4CC#173

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#1	CA_41E		No
4CC#3	CA_48E		5CC#3, 5CC#4, 5CC#10, 5CC#16, 6CC#6
4CC#4	CA_2A-46D	B46 SCC only	5CC#17, 5CC#18, 5CC#21, 5CC#22, 5CC#25, 5CC#26, 6CC#8, 6CC#9, 6CC#10, 6CC#11, 7CC#4, 7CC#5
4CC#5	CA_2A-48D		5CC#23, 5CC#27, 5CC#29
4CC#6	CA_2A-66D		5CC#24
4CC#7	CA_2C-5B		No
4CC#8	CA_4A-46D	B46 SCC only	5CC#30
4CC#9	CA_4A-48D		No
4CC#10	CA_5A-46D	B46 SCC only	5CC#18, 5CC#32, 5CC#33, 6CC#8, 6CC#12, 7CC#4
4CC#11	CA_5A-48D		5CC#34, 5CC#35
4CC#12	CA_5A-66D		No
4CC#13	CA_5B-66B		5CC#19, 5CC#36
4CC#14	CA_5B-66C		5CC#20, 5CC#37
4CC#15	CA_7A-46D	B46 SCC only	5CC#21, 5CC#32, 5CC#38, 6CC#9
4CC#16	CA_7C-46C	B46 SCC only	No
4CC#17	CA_12A-46D	B46 SCC only	No
4CC#18	CA_13A-46D	B46 SCC only	5CC#22, 5CC#39, 6CC#10, 6CC#13, 7CC#5
4CC#19	CA_13A-48D		5CC#23, 5CC#40, 5CC#42
4CC#20	CA_13A-66D		5CC#24
4CC#21	CA_25A-41D		5CC#43
4CC#22	CA_25A-46D	B46 SCC only	No
4CC#23	CA_41A-41D		No
4CC#25	CA_41A-46D	B46 SCC only	No
4CC#26	CA_41C-41C		No
4CC#31	CA_46D-66A	B46 SCC only	5CC#26, 5CC#33, 5CC#39, 5CC#45, 5CC#46, 6CC#8, 6CC#10, 6CC#11, 6CC#12, 6CC#13, 7CC#4, 7CC#5
4CC#32	CA_48A-48D		5CC#27, 5CC#34, 5CC#40, 5CC#49
4CC#33	CA_48C-48C		5CC#28, 5CC#41, 5CC#50
4CC#34	CA_48C-66B		5CC#47
4CC#35	CA_48C-66C		5CC#48
4CC#36	CA_48D-66A		5CC#29, 5CC#35, 5CC#42, 5CC#49
4CC#37	CA_2A-2A-5B		No
4CC#38	CA_2A-2A-12B		5CC#53
4CC#39	CA_2A-2A-46C	B46 SCC only	No
4CC#40	CA_2A-2A-66B		5CC#51, 5CC#54

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#41	CA_2A-2A-66C		5CC#52, 5CC#55
4CC#42	CA_2A-4A-5B		No
4CC#43	CA_2A-4A-7C		No
4CC#44	CA_2A-4A-12B		No
4CC#45	CA_2A-5A-12B		No
4CC#46	CA_2A-5A-46C	B46 SCC only	5CC#56, 6CC#14
4CC#47	CA_2A-5A-48C		No
4CC#48	CA_2A-5A-66B		5CC#51
4CC#49	CA_2A-5A-66C		5CC#52
4CC#50	CA_2A-5B-66A		5CC#57
4CC#51	CA_2A-7A-12B		5CC#59
4CC#52	CA_2A-7A-46C	B46 SCC only	5CC#58
4CC#53	CA_2A-7C-29A	B29 SCC only	5CC#60
4CC#54	CA_2A-7C-66A		5CC#60
4CC#55	CA_2A-12A-66C		No
4CC#56	CA_2A-12B-66A		5CC#53, 5CC#59, 5CC#62
4CC#57	CA_2A-13A-46C	B46 SCC only	5CC#63, 6CC#15
4CC#58	CA_2A-13A-48C		5CC#64, 5CC#65
4CC#59	CA_2A-13A-66B		5CC#66
4CC#60	CA_2A-13A-66C		5CC#67
4CC#61	CA_2A-46A-46C	B46 SCC only	5CC#68
4CC#62	CA_2A-46C-66A	B46 SCC only	5CC#56, 5CC#63, 5CC#68, 5CC#69, 6CC#14, 6CC#15
4CC#63	CA_2A-48A-48C		5CC#64, 5CC#70
4CC#64	CA_2A-48C-66A		5CC#65, 5CC#70
4CC#65	CA_2A-66A-66B		5CC#54, 5CC#66
4CC#66	CA_2A-66A-66C		5CC#55, 5CC#67
4CC#67	CA_2A-66C-71A		No
4CC#68	CA_2C-66A-66A		No
4CC#69	CA_4A-4A-5B		No
4CC#70	CA_4A-4A-12B		No
4CC#71	CA_4A-5A-12B		No
4CC#72	CA_4A-13A-48C		No
4CC#73	CA_4A-46A-46C	B46 SCC only	No
4CC#74	CA_4A-48A-48C		No
4CC#75	CA_5A-5A-66B		No
4CC#76	CA_5A-5A-66C		No
4CC#77	CA_5A-7A-46C	B46 SCC only	No
4CC#78	CA_5A-46C-66A	B46 SCC only	5CC#56, 6CC#14
4CC#79	CA_5A-48A-48C		No
4CC#80	CA_5A-48C-66A		No

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#81	CA_5A-66A-66B		No
4CC#82	CA_5A-66A-66C		No
4CC#83	CA_5B-66A-66A		5CC#57
4CC#84	CA_7A-7A-46C	B46 SCC only	5CC#58
4CC#85	CA_7A-12B-66A		5CC#59
4CC#86	CA_7C-29A-66A	B29 SCC only	5CC#60
4CC#87	CA_7C-66A-66A		5CC#61
4CC#88	CA_12B-66A-66A		5CC#62
4CC#89	CA_13A-46C-66A	B46 SCC only	5CC#63, 5CC#71, 6CC#15
4CC#90	CA_13A-48A-48C		5CC#64
4CC#91	CA_13A-48A-66B		No
4CC#92	CA_13A-48A-66C		No
4CC#93	CA_13A-48C-66A		5CC#65
4CC#94	CA_13A-66A-66B		5CC#65
4CC#95	CA_13A-66A-66C		5CC#67
4CC#96	CA_25A-25A-41C		No
4CC#97	CA_25A-26A-41C		No
4CC#98	CA_41A-41A-41C		No
4CC#100	CA_46A-46C-66A	B46 SCC only	5CC#68
4CC#101	CA_46C-66A-66A	B46 SCC only	5CC#69, 5CC#71, 6CC#14, 6CC#15
4CC#102	CA_48A-48A-66B		No
4CC#103	CA_48A-48A-66C		No
4CC#104	CA_48A-48C-66A		5CC#70
4CC#105	CA_48C-66A-66A		No
4CC#106	CA_2A-2A-4A-4A		No
4CC#107	CA_2A-2A-4A-5A		No
4CC#108	CA_2A-2A-4A-12A		No
4CC#109	CA_2A-2A-4A-13A		No
4CC#110	CA_2A-2A-4A-71A		No
4CC#111	CA_2A-2A-5A-12A		5CC#72
4CC#112	CA_2A-2A-5A-66A		5CC#72, 5CC#73
4CC#113	CA_2A-2A-7A-12A		5CC#74
4CC#114	CA_2A-2A-7A-66A		5CC#74
4CC#115	CA_2A-2A-12A-12A		No
4CC#116	CA_2A-2A-12A-66A		5CC#72, 5CC#74, 5CC#75
4CC#117	CA_2A-2A-13A-66A		No
4CC#118	CA_2A-2A-14A-66A		5CC#76
4CC#119	CA_2A-2A-66A-66A		5CC#73, 5CC#75, 5CC#76
4CC#120	CA_2A-2A-66A-71A		No

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#121	CA_2A-4A-4A-5A		No
4CC#122	CA_2A-4A-4A-12A		No
4CC#123	CA_2A-4A-5A-12A		No
4CC#124	CA_2A-4A-7A-7A		No
4CC#125	CA_2A-4A-7A-12A		No
4CC#126	CA_2A-4A-12A-12A		No
4CC#127	CA_2A-5A-12A-66A		5CC#72
4CC#128	CA_2A-5A-46A-66A	B46 SCC only	5CC#77
4CC#129	CA_2A-5A-48A-48A		No
4CC#130	CA_2A-5A-48A-66A		No
4CC#131	CA_2A-5A-66A-66A		5CC#73, 5CC#77, 6CC#14, 7CC#4
4CC#132	CA_2A-7A-7A-13A		No
4CC#133	CA_2A-7A-7A-29A	B29 SCC only	5CC#78
4CC#134	CA_2A-7A-7A-46A	B46 SCC only	No
4CC#135	CA_2A-7A-7A-66A		5CC#78, 5CC#79
4CC#136	CA_2A-7A-12A-66A		5CC#74
4CC#137	CA_2A-7A-29A-66A	B29 SCC only	5CC#78
4CC#138	CA_2A-7A-46A-66A	B46 SCC only	No
4CC#139	CA_2A-7A-66A-66A		5CC#79
4CC#140	CA_2A-12A-66A-66A		5CC#75
4CC#141	CA_2A-13A-46A-66A	B46 SCC only	5CC#80
4CC#142	CA_2A-13A-48A-48A		5CC#81
4CC#143	CA_2A-13A-48A-66A		5CC#81
4CC#144	CA_2A-13A-66A-66A		5CC#80, 6CC#15, 7CC#5
4CC#145	CA_2A-14A-66A-66A		5CC#76, 5CC#82
4CC#146	CA_2A-46A-46A-66A	B46 SCC only	No
4CC#147	CA_2A-46A-66A-66A	B46 SCC only	5CC#77, 5CC#80
4CC#148	CA_2A-48A-48A-66A		5CC#81
4CC#149	CA_2A-48A-66A-66A		No
4CC#150	CA_2A-66A-66A-66A		5CC#82
4CC#151	CA_2A-66A-66A-71A		No
4CC#152	CA_4A-4A-5A-12A		No
4CC#153	CA_4A-4A-12A-12A		No
4CC#154	CA_5A-5A-66A-66A		No
4CC#155	CA_5A-46A-66A-66A	B46 SCC only	5CC#77
4CC#156	CA_5A-48A-48A-66A		No
4CC#157	CA_7A-7A-29A-66A	B29 SCC only	5CC#78
4CC#158	CA_7A-7A-66A-66A		5CC#79
4CC#159	CA_13A-46A-66A-66A	B46 SCC only	5CC#80
4CC#160	CA_13A-48A-48A-66A		5CC#81
4CC#161	CA_13A-66A-66A-66A		No
4CC#162	CA_14A-66A-66A-66A		5CC#82
4CC#163	CA_46A-66A-66A-66A	B46 SCC only	No
4CC#164	CA_48A-48A-66A-66A		No
4CC#165	CA_48A-66A-66A-66A		No

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#166	CA_5B-46C	B46 SCC only	No
4CC#167	CA_2A-5A-7C		No
4CC#168	CA_2A-7C-13A		No
4CC#169	CA_5A-7C-66A		5CC#93
4CC#170	CA_13A-46A-46C	B46 SCC only	5CC#92
4CC#172	CA_2A-5A-7A-7A		No
4CC#173	CA_2A-13A-46A-46A	B46 SCC only	No
4CC#174	CA_5A-7A-66A-66A		No

Index	5CC	Restriction	Completely Covered by Measurement Superset
5CC#1	CA_48F		No
5CC#2	CA_2A-46E	B46 SCC only	6CC#1, 6CC#2, 6CC#3, 7CC#1, 7CC#2
5CC#3	CA_2A-48E		No
5CC#4	CA_4A-48E		No
5CC#5	CA_5A-46E	B46 SCC only	6CC#1, 6CC#4, 7CC#1, 7CC#3
5CC#6	CA_7A-46E	B46 SCC only	6CC#2, 6CC#5, 7CC#2
5CC#7	CA_7C-46D	B46 SCC only	No
5CC#8	CA_12A-46E	B46 SCC only	No
5CC#9	CA_13A-46E	B46 SCC only	No
5CC#10	CA_13A-48E		6CC#6
5CC#11	CA_41A-46E	B46 SCC only	No
5CC#12	CA_41C-41D		No
5CC#14	CA_46E-66A	B46 SCC only	6CC#3, 6CC#4, 6CC#7, 7CC#1, 7CC#3
5CC#15	CA_48C-48D		No
5CC#16	CA_48E-66A		6CC#6
5CC#17	CA_2A-2A-46D	B46 SCC only	No
5CC#18	CA_2A-5A-46D	B46 SCC only	6CC#8, 7CC#4
5CC#19	CA_2A-5B-66B		No
5CC#20	CA_2A-5B-66C		No
5CC#21	CA_2A-7A-46D	B46 SCC only	6CC#9
5CC#22	CA_2A-13A-46D	B46 SCC only	6CC#10, 7CC#5
5CC#23	CA_2A-13A-48D		No
5CC#24	CA_2A-13A-66D		No
5CC#25	CA_2A-46A-46D	B46 SCC only	No
5CC#26	CA_2A-46D-66A	B46 SCC only	6CC#8, 6CC#10, 6CC#11, 7CC#4, 7CC#5
5CC#27	CA_2A-48A-48D		No
5CC#28	CA_2A-48C-48C		No
5CC#29	CA_2A-48D-66A		No
5CC#30	CA_4A-46A-46D	B46 SCC only	No
5CC#31	CA_4A-46C-46C	B46 SCC only	No
5CC#32	CA_5A-7A-46D	B46 SCC only	No
5CC#33	CA_5A-46D-66A	B46 SCC only	6CC#8, 6CC#12, 7CC#4
5CC#34	CA_5A-48A-48D		No
5CC#35	CA_5A-48D-66A		No
5CC#36	CA_5B-66A-66B		No
5CC#37	CA_5B-66A-66C		No
5CC#38	CA_7A-7A-46D	B46 SCC only	6CC#9
5CC#39	CA_13A-46D-66A	B46 SCC only	6CC#10, 6CC#13, 7CC#5
5CC#40	CA_13A-48A-48D		No

Index	5CC	Restriction	Completely Covered by Measurement Superset
5CC#41	CA_13A-48C-48C		No
5CC#42	CA_13A-48D-66A		No
5CC#43	CA_25A-25A-41D		No
5CC#45	CA_46A-46D-66A	B46 SCC only	No
5CC#46	CA_46D-66A-66A	B46 SCC only	6CC#11, 6CC#12, 6CC#13, 7CC#4, 7CC#5
5CC#47	CA_48A-48C-66B		No
5CC#48	CA_48A-48C-66C		No
5CC#49	CA_48A-48D-66A		No
5CC#50	CA_48C-48C-66A		No
5CC#51	CA_2A-2A-5A-66B		No
5CC#52	CA_2A-2A-5A-66C		No
5CC#53	CA_2A-2A-12B-66A		No
5CC#54	CA_2A-2A-66A-66B		No
5CC#55	CA_2A-2A-66A-66C		No
5CC#56	CA_2A-5A-46C-66A	B46 SCC only	6CC#14
5CC#57	CA_2A-5B-66A-66A		No
5CC#58	CA_2A-7A-7A-46C	B46 SCC only	No
5CC#59	CA_2A-7A-12B-66A		No
5CC#60	CA_2A-7C-29A-66A	B29 SCC only	No
5CC#61	CA_2A-7C-66A-66A		No
5CC#62	CA_2A-12B-66A-66A		No
5CC#63	CA_2A-13A-46C-66A	B46 SCC only	6CC#15
5CC#64	CA_2A-13A-48A-48C		No
5CC#65	CA_2A-13A-48C-66A		No
5CC#66	CA_2A-13A-66A-66B		No
5CC#67	CA_2A-13A-66A-66C		No
5CC#68	CA_2A-46A-46C-66A	B46 SCC only	No
5CC#69	CA_2A-46C-66A-66A	B46 SCC only	6CC#14, 6CC#15
5CC#70	CA_2A-48A-48C-66A		No
5CC#71	CA_13A-46C-66A-66A	B46 SCC only	6CC#15
5CC#72	CA_2A-2A-5A-12A-66A		No
5CC#73	CA_2A-2A-5A-66A-66A		No
5CC#74	CA_2A-2A-7A-12A-66A		No
5CC#75	CA_2A-2A-12A-66A-66A		No
5CC#76	CA_2A-2A-14A-66A-66A		No
5CC#77	CA_2A-5A-46A-66A-66A	B46 SCC only	No
5CC#78	CA_2A-7A-7A-29A-66A	B29 SCC only	No
5CC#79	CA_2A-7A-7A-66A-66A		No
5CC#80	CA_2A-13A-46A-66A-66A	B46 SCC only	No

Index	5CC	Restriction	Completely Covered by Measurement Superset
5CC#81	CA_2A-13A-48A-48A-66A		No
5CC#82	CA_2A-14A-66A-66A-66A		No
5CC#83	CA_5A-46C-66A-66A	B46 SCC only	6CC#14
5CC#84	CA_5B-46D	B46 SCC only	No
5CC#85	CA_25A-41E		No
5CC#86	CA_2A-5A-48D		No
5CC#87	CA_13A-46A-46D	B46 SCC only	6CC#22
5CC#89	CA_2A-2A-5B-66A		No
5CC#90	CA_2A-2A-13A-66B		No
5CC#91	CA_2A-5A-48C-66A		No
5CC#92	CA_2A-13A-46A-46C	B46 SCC only	No
5CC#93	CA_5A-7C-66A-66A		No
5CC#94	CA_13A-48A-48C-66A		No
5CC#95	CA_2A-2A-13A-66A-66A		No

Index	6CC	Restriction	Completely Covered by Measurement Superset
6CC#1	CA_2A-5A-46E	B46 SCC only	7CC#1
6CC#2	CA_2A-7A-46E	B46 SCC only	7CC#2
6CC#3	CA_2A-46E-66A	B46 SCC only	7CC#1
6CC#4	CA_5A-46E-66A	B46 SCC only	7CC#1, 7CC#3
6CC#5	CA_7A-7A-46E	B46 SCC only	7CC#2
6CC#6	CA_13A-48E-66A		No
6CC#7	CA_46E-66A-66A	B46 SCC only	7CC#3
6CC#8	CA_2A-5A-46D-66A	B46 SCC only	7CC#4
6CC#9	CA_2A-7A-7A-46D	B46 SCC only	No
6CC#10	CA_2A-13A-46D-66A	B46 SCC only	7CC#5
6CC#11	CA_2A-46D-66A-66A	B46 SCC only	7CC#4, 7CC#5
6CC#12	CA_5A-46D-66A-66A	B46 SCC only	7CC#4
6CC#13	CA_13A-46D-66A-66A	B46 SCC only	7CC#5
6CC#14	CA_2A-5A-46C-66A-66A	B46 SCC only	No
6CC#15	CA_2A-13A-46C-66A-66A	B46 SCC only	No
6CC#16	CA_5B-46E	B46 SCC only	No
6CC#17	CA_7C-46E	B46 SCC only	No
6CC#18	CA_2A-13A-46E	B46 SCC only	No
6CC#19	CA_2A-48E-66A		No
6CC#20	CA_13A-46E-66A	B46 SCC only	No
6CC#22	CA_2A-13A-46A-46D	B46 SCC only	No

Index	7CC	Restriction	Completely Covered by Measurement Superset
7CC#1	CA_2A-5A-46E-66A	B46 SCC only	
7CC#2	CA_2A-7A-7A-46E	B46 SCC only	
7CC#3	CA_5A-46E-66A-66A	B46 SCC only	
7CC#4	CA_2A-5A-46D-66A-66A	B46 SCC only	
7CC#5	CA_2A-13A-46D-66A-66A	B46 SCC only	
7CC#6	CA_2A-46E-66A-66A	B46 SCC only	

13.4.2 DL CA power measurement

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only.

All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

This device supports LAA with downlink carrier aggregation only. It uses carrier aggregation in the downlink to combine LTE in the unlicensed spectrum (i.e. LTE Band 46) with LTE in the licensed band (served as PCC). All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

Conducted power was evaluated as described in Sections 13.1.4 “General PCC and SCC configuration selection procedure:” and “Downlink CA with Downlink 4x4 MIMO RF Conducted Powers:”.

1.1.1.1 LTE Band 2 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled				
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO	Single Carrier	PCC DL SISO	PCC DL 4x4 MIMO
2CC#19	CA_2A-17A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	17	10	5790	740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.86	22.84	-0.02	0.02
3CC#12	CA_2C-5A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	742	1944.2	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.74	22.88	22.84	-0.10	0.04
3CC#13	CA_2C-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	742	1944.2	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.89	22.84	22.84	0.05	0.00
3CC#14	CA_2C-29A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	742	1944.2	29	10	9715	722.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.80	22.85	22.84	-0.04	0.01
3CC#66	CA_2A-2A-29A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	29	10	9715	722.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.82	22.84	-0.02	-0.02
3CC#67	CA_2A-2A-46A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.68	22.84	0.00	-0.16
3CC#75	CA_2A-4A-29A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2175	2132.5	29	10	9715	722.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.83	22.97	22.84	-0.01	0.13
3CC#77	CA_2A-5A-7A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	7	20	3100	2655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.68	22.67	22.84	-0.16	-0.17
4CC#7	CA_2C-5B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	742	1944.2	5	10	2450	874	5	10	2549	883.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.69	22.77	22.84	-0.15	-0.07
4CC#37	CA_2A-2A-5B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2450	874	5	10	2549	883.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.93	22.91	22.84	0.09	0.07
4CC#39	CA_2A-2A-46C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.86	22.89	22.84	0.02	0.05
4CC#42	CA_2A-4A-5B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2175	2132.5	5	10	2450	874	5	10	2549	883.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.96	22.93	22.84	0.12	0.09
4CC#43	CA_2A-4A-7C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2175	2132.5	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.83	22.80	22.84	-0.01	-0.04
4CC#44	CA_2A-4A-12B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2175	2132.5	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.87	22.91	22.84	0.03	0.07
4CC#45	CA_2A-5A-12B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.86	22.84	0.01	0.02
4CC#47	CA_2A-5A-48C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	48	20	55773	3603.3	48	20	55575	3583.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.80	22.85	22.84	-0.04	0.01
4CC#55	CA_2A-12A-66C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	12	10	5095	737.5	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.88	22.80	22.84	0.04	-0.04
4CC#67	CA_2A-66C-71A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	66	20	66786	2145	66	20	66588	2125.2	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.91	22.87	22.84	0.07	0.03
4CC#68	CA_2C-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	742	1944.2	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.90	22.94	22.84	0.06	0.10
4CC#106	CA_2A-2A-4A-4A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.90	22.84	22.84	0.06	0.00
4CC#107	CA_2A-2A-4A-5A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	4	20	2050	2120	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.86	22.79	22.84	0.02	-0.05
4CC#108	CA_2A-2A-4A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	4	20	2050	2120	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.80	22.84	0.00	-0.04
4CC#109	CA_2A-2A-4A-13A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	4	20	2050	2120	13	10	5230	751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.83	22.84	22.84	-0.01	0.00
4CC#110	CA_2A-2A-4A-71A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	4	20	2050	2120	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.81	22.84	0.00	-0.03
4CC#115	CA_2A-2A-12A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	12	5	5155	743.5	12	5	5035	731.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.79	22.84	-0.02	-0.05
4CC#117	CA_2A-2A-13A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	13	10	5230	751	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.85	22.84	0.01	0.01
4CC#120	CA_2A-2A-66A-71A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	66	20	66786	2145	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.87	22.84	22.84	0.03	0.00
4CC#121	CA_2A-4A-4A-5A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	4	20	2300	2145	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.88	22.84	0.01	0.04
4CC#122	CA_2A-4A-4A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	4	20	2300	2145	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.87	22.84	0.01	0.03
4CC#123	CA_2A-4A-5A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	5	10	2525	881.5	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.87	22.86	22.84	0.03	0.02
4CC#124	CA_2A-4A-7A-7A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	7	20	3350	2680	7	20	2850	2630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.87	22.84	0.01	0.03
4CC#125	CA_2A-4A-7A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	7	20	3100	2655	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.81	22.81	22.84	-0.03	-0.03
4CC#126	CA_2A-4A-12A-12A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	4	20	2050	2120	12	5	5155	743.5	12	5	5035	731.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.87	22.84	-0.02	0.03
4CC#129	CA_2A-5A-48A-48A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	48	20	55990	3625	48	20	55340	3560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.91	22.84	0.00	0.07
4CC#130	CA_2A-5A-48A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	48	20	55990	3625	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.86	22.82	22.84	0.02	-0.02
4CC#132	CA_2A-7A-7A-13A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	13	10	5230	751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.80	22.84	-0.02	-0.04
4CC#134	CA_2A-7A-7A-46A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.84	22.84	-0.02	0.00
4CC#138	CA_2A-7A-46A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3100	2655	46	20	50665	5537.5	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.83	22.83	22.84	-0.01	-0.01
4CC#146	CA_2A-46A-46A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	46	20	50665	5537.5	46	20	46890	5160	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.89	22.88	22.84	0.05	0.04
4CC#149	CA_2A-48A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.88	22.76	22.84	0.04	-0.08
4CC#151	CA_2A-66A-66A-71A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	66	20	67236	2190	66	20	66536	2120	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.86	22.84	0.01	0.02
5CC#3	CA_2A-48E	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	-	-	-	-	-	-	-	-	-	-	22.80	22.84	22.84	-0.04	0.00
5CC#17	CA_2A-2A-46D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	-	-	22.89	22.86	22.84	0.05	0.02
5CC#19	CA_2A-5B-66B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2450	874	5	10	2549	883.9	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	22.87	22.86	22.84	0.03	0.02
5CC#20	CA_2A-5B-66C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2450	874	5	10	2549	883.9	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	22.81	22.83	22.84	-0.03	-0.01
5CC#23	CA_2A-13A-48D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	-	-	22.83	22.82	22.84	-0.01	-0.02
5CC#24	CA_2A-13A-66D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	66	20	66786	2145	66	20	66588	2125.2	66	20	66984	2164.8	-	-	-	-	-	-	-	-	-	-	22.82	22.83	22.84	-0.02	-0.01
5CC#25	CA_2A-46A-46D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	46	20	47286	5199.6	-	-	-	-	-	-	-	-	-	-	22.85	22.87	22.84	0.01	0.03
5CC#27	CA_2A-48A-48D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	48	20	55736	3599.6	-	-	-	-	-	-	-	-	-	-	22.84	22.86	22.84	0.00	0.02
5CC#28	CA_2A-48C-48C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55340	3560	48	20	55538	3579.8	48	20	55640	3690	48	20	56442	3670.2	-	-	-	-	-	-	-	-	-	-	22.86	22.85	22.84	0.02	0.01
5CC#29	CA_2A-48D-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.88	22.87	22.84	0.04	0.03
5CC#51	CA_2A-2A-5A-66B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2525	881.5	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	22.86	22.87	22.84	0.02	0.03
5CC#52	CA_2A-2A-5A-66C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2525	881.5	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	22.87	22.89	22.84	0.03	0.05
5CC#53	CA_2A-2A-12B-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	12	10	5130	741	12	5	5058	733.8	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.89	22.88	22.84	0.05	0.04
5CC#54	CA_2A-2A-66A-66B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	66	20	66786	2145	66	10	66486	2115	66	10	66585	2124.9	-	-	-	-	-	-	-	-	-	-	22.91	22.89	22.84	0.07	0.05
5CC#55	CA_2A-2A-66A-66C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	66	20	66786	2145	66	20	67236	2190	66	20	67038	2170.2	-	-	-	-	-	-	-	-	-	-	22.95	22.95	22.84	0.11	0.11
5CC#57	CA_2A-5B-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2450	874	5	10	2549	883.9	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	22.89	22.87	22.84	0.05	0.03
5CC#58	CA_2A-7A-7A-46C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	22.86	22.87	22.84	0.02	0.03
5CC#59	CA_2A-7A-12B-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3100	2655	12	10	5130	741	12	5	5058	733.8	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.83	22.84	22.84	-0.01	0.00
5CC#60	CA_2A-7C-29A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3100	2655	7	20	2902	2635.2	29	10	9715	722.5	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.83	22.83	22.84	-0.01	-0.01
5CC#61	CA_2A-7C-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3100	2655	7	20	2902	2635.2	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	22.85	22.84	22.84	0.01	0.00

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.			DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
5CC#62	CA_2A-12B-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	12	10	5130	741	12	5	5058	733.8	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.91	22.90	22.84	0.07	0.06
5CC#64	CA_2A-13A-48A-48C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	22.91	22.90	22.84	0.07	0.06
5CC#65	CA_2A-13A-48C-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	66	20	66786	2145	-	-	-	-	-	-	-	-	22.89	22.86	22.84	0.05	0.02
5CC#66	CA_2A-13A-66A-66B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	66	20	66786	2145	66	10	67286	2195	66	10	67187	2185.1	-	-	-	-	-	-	-	-	22.87	22.90	22.84	0.03	0.06
5CC#67	CA_2A-13A-66A-66C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	66	20	66786	2145	66	20	67236	2190	66	20	67038	2170.2	-	-	-	-	-	-	-	-	22.94	22.93	22.84	0.10	0.09
5CC#68	CA_2A-46A-46C-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	66	20	66786	2145	-	-	-	-	-	-	-	-	22.90	22.89	22.84	0.06	0.05
5CC#70	CA_2A-48A-48C-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	66	20	66786	2145	-	-	-	-	-	-	-	-	22.79	22.81	22.84	-0.05	-0.03
5CC#72	CA_2A-2A-5A-12A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2525	881.5	12	10	5095	737.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.80	22.79	22.84	-0.04	-0.05
5CC#73	CA_2A-2A-5A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2525	881.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.79	22.80	22.84	-0.05	-0.04
5CC#74	CA_2A-2A-7A-12A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	7	20	3100	2655	12	10	5095	737.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.83	22.83	22.84	-0.01	-0.01
5CC#75	CA_2A-2A-12A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	12	10	5095	737.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.91	22.90	22.84	0.07	0.06
5CC#76	CA_2A-2A-14A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	14	10	5330	763	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.90	22.89	22.84	0.06	0.05
5CC#77	CA_2A-5A-46A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	46	20	50665	5537.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.89	22.89	22.84	0.05	0.05
5CC#78	CA_2A-7A-7A-29A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	29	10	9715	722.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.83	22.84	22.84	-0.01	0.00
5CC#79	CA_2A-7A-7A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.86	22.85	22.84	0.02	0.01
5CC#80	CA_2A-13A-46A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.91	22.90	22.84	0.07	0.06
5CC#81	CA_2A-13A-48A-48A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	48	20	55990	3625	48	20	55340	3560	66	20	66786	2145	-	-	-	-	-	-	-	-	22.92	22.91	22.84	0.08	0.07
5CC#82	CA_2A-14A-66A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	14	10	5330	763	66	20	66786	2145	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	22.91	22.90	22.84	0.07	0.06
6CC#9	CA_2A-7A-7A-46D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	22.82	22.81	22.84	-0.02	-0.03
6CC#14	CA_2A-5A-46C-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	66	20	66786	2145	66	20	66536	2120	-	-	-	-	22.83	22.82	22.84	-0.01	-0.02
6CC#15	CA_2A-13A-46C-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	66	20	66786	2145	66	20	66536	2120	-	-	-	-	22.90	22.83	22.84	0.06	-0.01
7CC#1	CA_2A-5A-46E-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	66786	2145	22.87	22.86	22.84	0.03	0.02
7CC#2	CA_2A-7A-7A-46E	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3350	2680	7	20	2850	2630	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	22.90	22.87	22.84	0.06	0.03
7CC#4	CA_2A-5A-46D-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	67236	2190	66	20	66536	2120	22.85	22.75	22.84	0.01	-0.09
7CC#5	CA_2A-13A-46D-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	67236	2190	66	20	66536	2120	22.79	22.77	22.84	-0.05	-0.07
4CC#167	CA_2A-5A-7C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	22.80	22.78	22.84	-0.04	-0.06
4CC#168	CA_2A-7C-13A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	7	20	3100	2655	7	20	2902	2635.2	13	10	5230	751	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.91	22.84	0.00	0.07
4CC#172	CA_2A-5A-7A-7A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	7	20	3350	2680	7	20	2850	2630	-	-	-	-	-	-	-	-	-	-	-	-	22.82	22.86	22.84	-0.02	0.02
4CC#173	CA_2A-13A-46A-46A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	54440	5915	46	20	46890	5160	-	-	-	-	-	-	-	-	-	-	-	-	22.78	22.81	22.84	-0.06	-0.03
5CC#86	CA_2A-5A-48D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	22.84	22.83	22.84	0.00	-0.01
5CC#89	CA_2A-2A-5B-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	5	10	2450	874	5	10	2549	883.9	66	20	66786	2145	-	-	-	-	-	-	-	-	22.78	22.83	22.84	-0.06	-0.01
5CC#90	CA_2A-2A-13A-66B	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	13	10	5230	751	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	22.94	22.83	22.84	0.10	-0.01
5CC#91	CA_2A-5A-48C-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	5	10	2525	881.5	48	20	55990	3625	48	20	55792	3605.2	66	20	66786	2145	-	-	-	-	-	-	-	-	22.83	22.87	22.84	-0.01	0.03
5CC#92	CA_2A-13A-46A-46C	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	-	-	-	-	-	-	-	-	22.86	22.83	22.84	0.02	-0.01
5CC#95	CA_2A-2A-13A-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	2	20	1100	1980	13	10	5230	751	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.88	22.88	22.84	0.04	0.04
6CC#18	CA_2A-13A-46E	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	22.90	22.85	22.84	0.06	0.01
6CC#19	CA_2A-48E-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	66	20	66786	2145	-	-	-	-	22.88	22.86	22.84	0.04	0.02
6CC#22	CA_2A-13A-46A-46D	2	5	18625	1852.5	QPSK	1	24	625	1932.5	13	10	5230	751	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	46	20	47286	5199.6	-	-	-	-	22.86	22.87	22.84	0.02	0.03
7CC#6	CA_2A-46E-66A-66A	2	5	18625	1852.5	QPSK	1	24	625	1932.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	67236	2190	66	20	66536	2120	22.88	22.88	22.84	0.04	0.04

1.1.1.2 LTE Band 4 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				Power [dBm]			Delta [dB]	
																										DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#30	CA_4A-17A	4	5	20375	1752.5	16QAM	1	0	2375	2152.5	17	10	5790	740	-	-	-	-	-	-	-	-	-	-	-	-	21.80	21.68	21.80	0.00	-0.12
3CC#75	CA_2A-4A-29A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	29	10	9715	722.5	-	-	-	-	-	-	-	-	21.71	21.69	21.81	-0.10	-0.12
3CC#102	CA_4A-4A-7A (1)	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	7	20	3100	2655	-	-	-	-	-	-	-	-	21.83	21.74	21.81	0.02	-0.07
3CC#104	CA_4A-4A-13A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	13	10	5230	751	-	-	-	-	-	-	-	-	21.72	21.52	21.81	-0.09	-0.29
3CC#105	CA_4A-4A-29A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	29	10	9715	722.5	-	-	-	-	-	-	-	-	21.54	21.52	21.81	-0.27	-0.29
3CC#106	CA_4A-4A-71A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	71	20	68761	634.5	-	-	-	-	-	-	-	-	21.53	21.52	21.81	-0.28	-0.29
3CC#111	CA_4A-13A-48A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	13	10	5230	751	48	20	55990	3625	-	-	-	-	-	-	-	-	21.76	21.77	21.81	-0.05	-0.04
3CC#112	CA_4A-46A-46A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	46	20	50665	5537.5	46	20	46890	5160	-	-	-	-	-	-	-	-	21.67	21.66	21.81	-0.14	-0.15
3CC#113	CA_4A-48A-48A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	48	20	55990	3625	48	20	55340	3560	-	-	-	-	-	-	-	-	21.75	21.74	21.81	-0.06	-0.07
4CC#9	CA_4A-48D	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	21.65	21.66	21.81	-0.16	-0.15
4CC#42	CA_2A-4A-5B	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	5	10	2450	874	5	10	2549	883.9	-	-	-	-	21.66	21.68	21.81	-0.15	-0.13
4CC#43	CA_2A-4A-7C	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	21.69	21.61	21.81	-0.12	-0.20
4CC#44	CA_2A-4A-12B	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	12	10	5130	741	12	5	5058	733.8	-	-	-	-	21.57	21.49	21.81	-0.24	-0.32
4CC#69	CA_4A-4A-5B	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	5	10	2450	874	5	10	2549	883.9	-	-	-	-	21.61	21.47	21.81	-0.20	-0.34
4CC#70	CA_4A-4A-12B	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	12	10	5130	741	12	5	5058	733.8	-	-	-	-	21.56	21.57	21.81	-0.25	-0.24
4CC#71	CA_4A-5A-12B	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	5	10	2525	881.5	12	10	5130	741	12	5	5058	733.8	-	-	-	-	21.58	21.51	21.81	-0.23	-0.30
4CC#72	CA_4A-13A-48C	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	21.69	21.68	21.81	-0.12	-0.13
4CC#73	CA_4A-46A-46C	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	-	-	-	-	21.62	21.52	21.81	-0.19	-0.29
4CC#74	CA_4A-48A-48C	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	21.77	21.78	21.81	-0.04	-0.03
4CC#106	CA_2A-2A-4A-4A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	2	20	700	1940	4	20	2050	2120	-	-	-	-	21.56	21.53	21.81	-0.25	-0.28
4CC#107	CA_2A-2A-4A-5A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	2	20	700	1940	5	10	2525	881.5	-	-	-	-	21.57	21.61	21.81	-0.24	-0.20
4CC#108	CA_2A-2A-4A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	2	20	700	1940	12	10	5095	737.5	-	-	-	-	21.65	21.54	21.81	-0.16	-0.27
4CC#109	CA_2A-2A-4A-13A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	2	20	700	1940	13	10	5230	751	-	-	-	-	21.61	21.64	21.81	-0.20	-0.17
4CC#110	CA_2A-2A-4A-71A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	2	20	700	1940	71	20	68761	634.5	-	-	-	-	21.58	21.54	21.81	-0.23	-0.27
4CC#121	CA_2A-4A-4A-5A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	4	20	2050	2120	5	10	2525	881.5	-	-	-	-	21.60	21.51	21.81	-0.21	-0.30
4CC#122	CA_2A-4A-4A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	4	20	2050	2120	12	10	5095	737.5	-	-	-	-	21.68	21.51	21.81	-0.13	-0.30
4CC#123	CA_2A-4A-5A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	5	10	2525	881.5	12	10	5095	737.5	-	-	-	-	21.66	21.61	21.81	-0.15	-0.20
4CC#124	CA_2A-4A-7A-7A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	7	20	3100	2655	7	20	2850	2630	-	-	-	-	21.57	21.51	21.81	-0.24	-0.30
4CC#125	CA_2A-4A-7A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	7	20	3100	2655	12	10	5095	737.5	-	-	-	-	21.57	21.47	21.81	-0.24	-0.34
4CC#126	CA_2A-4A-12A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	2	20	900	1960	12	5	5095	737.5	12	5	5035	731.5	-	-	-	-	21.59	21.70	21.81	-0.22	-0.11
4CC#152	CA_4A-4A-5A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	5	10	2525	881.5	12	10	5095	737.5	-	-	-	-	21.59	21.55	21.81	-0.22	-0.26
4CC#153	CA_4A-4A-12A-12A	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	4	20	2050	2120	12	5	5095	737.5	12	5	5035	731.5	-	-	-	-	21.59	21.63	21.81	-0.22	-0.18
5CC#4	CA_4A-48E	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	21.57	21.85	21.81	-0.24	0.04
5CC#30	CA_4A-46A-46D	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	46	20	47286	5199.6	21.52	21.62	21.81	-0.29	-0.19
5CC#31	CA_4A-46C-46C	4	15	20325	1747.5	16QAM	1	0	2325	2147.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	46890	5160	46	20	47088	5179.8	21.77	21.78	21.81	-0.04	-0.03

1.1.1.3 LTE Band 5 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.			DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#38	CA_5A-25A	5	5	20425	826.5	QPSK	1	0	2425	871.5	25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.02		23.07	-0.05	
2CC#39	CA_5A-38A	5	5	20425	826.5	QPSK	1	0	2425	871.5	38	20	37850	2580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.13		23.07	0.06	
2CC#40	CA_5A-41A	5	5	20425	826.5	QPSK	1	0	2425	871.5	41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.16		23.07	0.09	
3CC#12	CA_2C-5A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	2	20	702	1940.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.13		23.07	0.06	
3CC#21	CA_5A-7C	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.06		23.07	-0.01	
3CC#27	CA_5B-46A	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.09		23.07	0.02	
3CC#77	CA_2A-5A-7A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	7	20	3100	2655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.08		23.07	0.01	
3CC#115	CA_5A-7A-7A	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3350	2680	7	20	2850	2630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.10		23.07	0.03	
3CC#116	CA_5A-7A-46A	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.12		23.07	0.05	
4CC#7	CA_2C-5B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	2	20	702	1940.2	5	10	2497	878.7	-	-	-	-	-	-	-	-	-	-	-	-	23.05		23.07	-0.02	
4CC#12	CA_5A-66D	5	5	20425	826.5	QPSK	1	0	2425	871.5	66	20	66786	2145	66	20	66588	2125.2	66	20	66984	2164.8	-	-	-	-	-	-	-	-	-	-	-	-	23.06		23.07	-0.01	
4CC#37	CA_2A-2A-5B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	5	10	2497	878.7	-	-	-	-	-	-	-	-	-	-	-	-	22.94		23.07	-0.13	
4CC#42	CA_2A-4A-5B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	4	20	2175	2132.5	5	10	2497	878.7	-	-	-	-	-	-	-	-	-	-	-	-	23.15		23.07	0.08	
4CC#45	CA_2A-5A-12B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	-	-	-	-	23.22		23.07	0.15	
4CC#47	CA_2A-5A-48C	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	-	-	-	-	22.99		23.07	-0.08	
4CC#69	CA_4A-4A-5B	5	5	20425	826.5	QPSK	1	0	2425	871.5	4	20	2050	2120	4	20	2300	2145	5	10	2497	878.7	-	-	-	-	-	-	-	-	-	-	-	-	23.11		23.07	0.04	
4CC#71	CA_4A-5A-12B	5	5	20425	826.5	QPSK	1	0	2425	871.5	4	20	2175	2132.5	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	-	-	-	-	23.04		23.07	-0.03	
4CC#75	CA_5A-5A-66B	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	-	-	22.89		23.07	-0.18	
4CC#76	CA_5A-5A-66C	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	23.06		23.07	-0.01	
4CC#77	CA_5A-7A-46C	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	23.11		23.07	0.04	
4CC#79	CA_5A-48A-48C	5	5	20425	826.5	QPSK	1	0	2425	871.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	-	-	-	-	23.16		23.07	0.09	
4CC#80	CA_5A-48C-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	48	20	55990	3625	48	20	55792	3605.2	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.16		23.07	0.09	
4CC#81	CA_5A-66A-66B	5	5	20425	826.5	QPSK	1	0	2425	871.5	66	20	66786	2145	66	10	67286	2195	66	10	67187	2185.1	-	-	-	-	-	-	-	-	-	-	-	-	23.13		23.07	0.06	
4CC#82	CA_5A-66A-66C	5	5	20425	826.5	QPSK	1	0	2425	871.5	66	20	66786	2145	66	20	67236	2190	66	20	67038	2170.2	-	-	-	-	-	-	-	-	-	-	-	-	22.91		23.07	-0.16	
4CC#107	CA_2A-2A-4A-5A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	23.18		23.07	0.11	
4CC#121	CA_2A-4A-4A-5A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.17		23.07	0.10	
4CC#123	CA_2A-4A-5A-12A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	4	20	2175	2132.5	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	23.18		23.07	0.11	
4CC#129	CA_2A-5A-48A-48A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	48	20	56640	3690	48	20	55340	3560	-	-	-	-	-	-	-	-	-	-	-	-	23.16		23.07	0.09	
4CC#130	CA_2A-5A-48A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	48	20	55990	3625	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.16		23.07	0.09	
4CC#152	CA_4A-4A-5A-12A	5	5	20425	826.5	QPSK	1	0	2425	871.5	4	20	2050	2120	4	20	2300	2145	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	23.18		23.07	0.11	
4CC#154	CA_5A-5A-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	23.17		23.07	0.10	
4CC#156	CA_5A-48A-48A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	48	20	56640	3690	48	20	55340	3560	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.10		23.07	0.03	
5CC#19	CA_2A-5B-66B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	5	10	2497	878.7	66	10	66786	2145	66	20	66642	2130.6	-	-	-	-	-	-	-	-	23.09		23.07	0.02	
5CC#20	CA_2A-5B-66C	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	5	10	2497	878.7	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	23.12		23.07	0.05	
5CC#32	CA_5A-7A-46D	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	23.08		23.07	0.01	
5CC#34	CA_5A-48A-48D	5	5	20425	826.5	QPSK	1	0	2425	871.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	48	20	55736	3599.6	-	-	-	-	-	-	-	-	22.97		23.07	-0.10	
5CC#35	CA_5A-48D-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	66	20	66786	2145	-	-	-	-	-	-	-	-	23.08		23.07	0.01	
5CC#36	CA_5B-66A-66B	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	66	20	66786	2145	66	10	67286	2195	66	10	67187	2185.1	-	-	-	-	-	-	-	-	23.01		23.07	-0.06	
5CC#37	CA_5B-66A-66C	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	66	20	66786	2145	66	20	67236	2190	66	20	67038	2170.2	-	-	-	-	-	-	-	-	23.20		23.07	0.13	
5CC#51	CA_2A-2A-5A-66B	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	22.97		23.07	-0.10	
5CC#52	CA_2A-2A-5A-66C	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	23.18		23.07	0.11	
5CC#57	CA_2A-5B-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	5	10	2497	878.7	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	23.21		23.07	0.14	
5CC#72	CA_2A-2A-5A-12A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	12	10	5095	737.5	66	20	66786	2145	-	-	-	-	-	-	-	-	23.12		23.07	0.05	
5CC#73	CA_2A-2A-5A-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	1100	1980	2	20	700	1940	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	23.13		23.07	0.06	
5CC#77	CA_2A-5A-46A-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	46	20	50665	5537.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	23.09		23.07	0.02	
6CC#14	CA_2A-5A-46C-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	66	20	67236	2190	66	20	66536	2120	-	-	-	-	23.07		23.07	0.00	
7CC#1	CA_2A-5A-46E-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	66786	2145	23.12		23.07	0.05	
7CC#3	CA_5A-46E-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	67236	2190	66	20	66536	2120	23.08		23.07	0.01	
7CC#4	CA_2A-5A-46D-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	67236	2190	66	20	66536	2120	23.08		23.07	0.01	
4CC#166	CA_5B-46C	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	23.08		23.07	0.01	
4CC#167	CA_2A-5A-7C	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	23.09		23.07	0.02	
4CC#172	CA_2A-5A-7A-7A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	7	20	3350	2680	7	20	2850	2630	-	-	-	-	-	-	-	-	-	-	-	-	23.07		23.07	0.00	
4CC#174	CA_5A-7A-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	23.07		23.07	0.00	
5CC#84	CA_5B-46D	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	23.07		23.07	0.00	
5CC#86	CA_2A-5A-48D	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	23.07		23.07	0.00	
5CC#89	CA_2A-2A-5B-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	2	20	1100	1980	2	20	700	1940	66	20	66786	2145	-	-	-	-	-	-	-	-	23.05		23.07	-0.02	
5CC#91	CA_2A-5A-48C-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	66	20	66786	2145	-	-	-	-	-	-	-	-	23.09		23.07	0.02	
5CC#93	CA_5A-7C-66A-66A	5	5	20425	826.5	QPSK	1	0	2425	871.5	7	20	3100	2655	7	20	2902	2635.2	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	23.08		23.07	0.01	
6CC#16	CA_5B-46E	5	5	20425	826.5	QPSK	1	0	2425	871.5	5	10	2497	878.7	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	23.05		23.07	-0.02	

1.1.1.4 LTE Band 7 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled				
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO	Single Carrier	PCC DL SISO	PCC DL 4x4 MIMO
2CC#3	CA_7B	7	15	21100	2535	QPSK	1	0	3100	2655	7	5	2918	2636.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.02	23.04	22.94	0.08	0.10
2CC#48	CA_7A-42A	7	20	21100	2535	QPSK	1	0	3100	2655	42	20	42840	3525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.98	23.00	22.95	0.03	0.05
3CC#32	CA_7C-46A	7	20	21100	2535	QPSK	1	0	3100	2655	7	20	2902	2635.2	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.98	22.97	22.95	0.03	0.02
3CC#77	CA_2A-5A-7A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.91	22.90	22.95	-0.04	-0.05
3CC#102	CA_4A-4A-7A (1)	7	20	21100	2535	QPSK	1	0	3100	2655	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.95	22.94	22.95	0.00	-0.01
3CC#115	CA_5A-7A-7A	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	7	20	3350	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.01	23.04	22.95	0.06	0.09
3CC#116	CA_5A-7A-46A	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.99	22.94	22.95	0.04	-0.01
4CC#16	CA_7C-46C	7	20	21100	2535	QPSK	1	0	3100	2655	7	20	2902	2635.2	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	22.95	22.98	22.95	0.00	0.03
4CC#43	CA_2A-4A-7C	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	4	20	2175	2132.5	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	22.94	22.90	22.95	-0.01	-0.05
4CC#77	CA_5A-7A-46C	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	22.97	22.99	22.95	0.02	0.04
4CC#124	CA_2A-4A-7A-7A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	4	20	2175	2132.5	7	20	3350	2680	-	-	-	-	-	-	-	-	-	-	-	-	22.88	22.91	22.95	-0.07	-0.04
4CC#125	CA_2A-4A-7A-12A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	4	20	2175	2132.5	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	22.85	22.89	22.95	-0.10	-0.06
4CC#132	CA_2A-7A-7A-13A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	13	10	5230	751	-	-	-	-	-	-	-	-	-	-	-	-	22.92	22.94	22.95	-0.03	-0.01
4CC#134	CA_2A-7A-7A-46A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	22.91	22.92	22.95	-0.04	-0.03
4CC#138	CA_2A-7A-46A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	46	20	50665	5537.5	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	22.90	22.93	22.95	-0.05	-0.02
5CC#7	CA_7C-46D	7	20	21100	2535	QPSK	1	0	3100	2655	7	20	2902	2635.2	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	22.91	22.96	22.95	-0.04	0.01
5CC#32	CA_5A-7A-46D	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	22.87	22.94	22.95	-0.08	-0.01
5CC#58	CA_2A-7A-7A-46C	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	22.85	22.84	22.95	-0.10	-0.11
5CC#59	CA_2A-7A-12B-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	12	10	5130	741	12	5	5058	733.8	66	20	66786	2145	-	-	-	-	-	-	-	-	22.83	22.89	22.95	-0.12	-0.06
5CC#60	CA_2A-7C-29A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	2902	2635.2	29	10	9715	722.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.88	22.87	22.95	-0.07	-0.08
5CC#61	CA_2A-7C-66A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	2902	2635.2	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.89	22.86	22.95	-0.06	-0.09
5CC#74	CA_2A-2A-7A-12A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	1100	1980	2	20	700	1940	12	10	5095	737.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.87	22.88	22.95	-0.08	-0.07
5CC#78	CA_2A-7A-7A-29A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	29	10	9715	722.5	66	20	66786	2145	-	-	-	-	-	-	-	-	22.90	22.87	22.95	-0.05	-0.08
5CC#79	CA_2A-7A-7A-66A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	22.86	22.88	22.95	-0.09	-0.07
6CC#9	CA_2A-7A-7A-46D	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	22.87	22.88	22.95	-0.08	-0.07
7CC#2	CA_2A-7A-7A-46E	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	7	20	3350	2680	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	22.89	22.88	22.95	-0.06	-0.07
3CC#152	CA_7A-7A-26A	7	20	21100	2535	QPSK	1	0	3100	2655	7	20	3350	2680	26	15	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.99	22.96	22.95	0.04	0.01
4CC#167	CA_2A-5A-7C	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	5	10	2525	881.5	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	22.84	22.88	22.95	-0.11	-0.07
4CC#168	CA_2A-7C-13A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	13	10	5230	751	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	22.96	22.99	22.95	0.01	0.04
4CC#172	CA_2A-5A-7A-7A	7	20	21100	2535	QPSK	1	0	3100	2655	2	20	900	1960	5	10	2525	881.5	7	20	3350	2680	-	-	-	-	-	-	-	-	-	-	-	-	22.91	22.87	22.95	-0.04	-0.08
4CC#174	CA_5A-7A-66A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	22.87	22.89	22.95	-0.08	-0.06
5CC#93	CA_5A-7C-66A-66A	7	20	21100	2535	QPSK	1	0	3100	2655	5	10	2525	881.5	66	20	67236	2190	66	20	66536	2120	7	20	2902	2635.2	-	-	-	-	-	-	-	-	22.88	22.88	22.95	-0.07	-0.07
6CC#17	CA_7C-46E	7	20	21100	2535	QPSK	1	0	3100	2655	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	7	20	2902	2635.2	-	-	-	-	22.96	22.93	22.95	0.01	-0.02

1.1.1.5 TE Band 12 as PCC

Index	Combination	PCC									SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled				
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO	Single Carrier	PCC DL SISO	PCC DL 4x4 MIMO
2CC#52	CA_12A-25A	12	5	23155	713.5	QPSK	1	24	5155	743.5	25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.93		22.99	-0.06	
2CC#53	CA_12A-46A	12	5	23155	713.5	QPSK	1	24	5155	743.5	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.93		22.99	-0.06	
3CC#13	CA_2C-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	2	20	702	1940.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.89		22.99	-0.10	
3CC#34	CA_12A-46C	12	5	23155	713.5	QPSK	1	24	5155	743.5	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.89		22.99	-0.10	
4CC#17	CA_12A-46D	12	5	23155	713.5	QPSK	1	24	5155	743.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	-	-	-	-	22.92		22.99	-0.07	
4CC#44	CA_2A-4A-12B	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	4	20	2175	2132.5	12	5	5107	738.7	-	-	-	-	-	-	-	-	-	-	-	-	22.97		22.99	-0.02	
4CC#45	CA_2A-5A-12B	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	5	10	2525	881.5	12	5	5107	738.7	-	-	-	-	-	-	-	-	-	-	-	-	23.03		22.99	0.04	
4CC#55	CA_2A-12A-66C	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	22.99		22.99	0.00	
4CC#70	CA_4A-4A-12B	12	5	23155	713.5	QPSK	1	24	5155	743.5	4	20	2050	2120	4	20	2300	2145	12	5	5107	738.7	-	-	-	-	-	-	-	-	-	-	-	-	22.89		22.99	-0.10	
4CC#71	CA_4A-5A-12B	12	5	23155	713.5	QPSK	1	24	5155	743.5	4	20	2175	2132.5	5	10	2525	881.5	12	5	5107	738.7	-	-	-	-	-	-	-	-	-	-	-	-	23.03		22.99	0.04	
4CC#108	CA_2A-2A-4A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	22.89		22.99	-0.10	
4CC#115	CA_2A-2A-12A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	12	5	5035	731.5	-	-	-	-	-	-	-	-	-	-	-	-	22.90		22.99	-0.09	
4CC#122	CA_2A-4A-4A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	22.97		22.99	-0.02	
4CC#123	CA_2A-4A-5A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	4	20	2175	2132.5	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	22.96		22.99	-0.03	
4CC#125	CA_2A-4A-7A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	4	20	2175	2132.5	7	20	3100	2655	-	-	-	-	-	-	-	-	-	-	-	-	22.79		22.99	-0.20	
4CC#126	CA_2A-4A-12A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	4	20	2175	2132.5	12	5	5035	731.5	-	-	-	-	-	-	-	-	-	-	-	-	22.91		22.99	-0.08	
4CC#152	CA_4A-4A-5A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	4	20	2050	2120	4	20	2300	2145	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	23.03		22.99	0.04	
4CC#153	CA_4A-4A-12A-12A	12	5	23155	713.5	QPSK	1	24	5155	743.5	4	20	2050	2120	4	20	2300	2145	12	5	5035	731.5	-	-	-	-	-	-	-	-	-	-	-	-	23.00		22.99	0.01	
5CC#8	CA_12A-46E	12	5	23155	713.5	QPSK	1	24	5155	743.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	-	-	-	-	22.96		22.99	-0.03	
5CC#53	CA_2A-2A-12B-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	12	5	5107	738.7	66	20	66786	2145	-	-	-	-	-	-	-	-	23.02		22.99	0.03	
5CC#59	CA_2A-7A-12B-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	7	20	3100	2655	12	5	5107	738.7	66	20	66786	2145	-	-	-	-	-	-	-	-	22.72		22.99	-0.27	
5CC#62	CA_2A-12B-66A-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	900	1960	12	5	5107	738.7	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	22.89		22.99	-0.10	
5CC#72	CA_2A-2A-5A-12A-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	5	10	2525	881.5	66	20	66786	2145	-	-	-	-	-	-	-	-	23.02		22.99	0.03	
5CC#74	CA_2A-2A-7A-12A-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	7	20	3100	2655	66	20	66786	2145	-	-	-	-	-	-	-	-	22.87		22.99	-0.12	
5CC#75	CA_2A-2A-12A-66A-66A	12	5	23155	713.5	QPSK	1	24	5155	743.5	2	20	700	1940	2	20	1100	1980	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	22.90		22.99	-0.09	

1.1.1.6 LTE Band 13 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
3CC#104	CA_4A-4A-13A	13	10	23230	782	QPSK	1	0	5230	751	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.40		22.45	-0.05	
3CC#111	CA_4A-13A-48A	13	5	23205	779.5	QPSK	1	0	5205	748.5	4	20	2175	2132.5	48	20	55990	3625	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.50		22.49	0.01	
4CC#72	CA_4A-13A-48C	13	5	23205	779.5	QPSK	1	0	5205	748.5	4	20	2175	2132.5	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.50		22.49	0.01	
4CC#91	CA_13A-48A-66B	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.44		22.49	-0.05	
4CC#92	CA_13A-48A-66C	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
4CC#109	CA_2A-2A-4A-13A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	1100	1980	2	20	700	1940	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.47		22.49	-0.02	
4CC#117	CA_2A-2A-13A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	1100	1980	2	20	700	1940	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
4CC#132	CA_2A-7A-7A-13A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	7	20	3350	2680	7	20	2850	2630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.47		22.49	-0.02	
4CC#161	CA_13A-66A-66A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	66	20	67236	2190	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.49		22.49	0.00	
5CC#9	CA_13A-46E	13	5	23205	779.5	QPSK	1	0	5205	748.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	-	-	-	-	-	-	22.49		22.49	0.00	
5CC#23	CA_2A-13A-48D	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	-	-	22.54		22.49	0.05	
5CC#24	CA_2A-13A-66D	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	66	20	66786	2145	66	20	66588	2125.2	66	20	66984	2164.8	-	-	-	-	-	-	-	-	-	-	22.56		22.49	0.07	
5CC#40	CA_13A-48A-48D	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	48	20	55736	3599.6	-	-	-	-	-	-	-	-	-	-	22.49		22.49	0.00	
5CC#41	CA_13A-48C-48C	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	48	20	55792	3605.2	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	-	-	22.46		22.49	-0.03	
5CC#42	CA_13A-48D-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.46		22.49	-0.03	
5CC#64	CA_2A-13A-48A-48C	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	-	-	22.43		22.49	-0.06	
5CC#65	CA_2A-13A-48C-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#66	CA_2A-13A-66A-66B	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	66	20	66786	2145	66	10	67286	2195	66	10	67187	2185.1	-	-	-	-	-	-	-	-	-	-	22.46		22.49	-0.03	
5CC#67	CA_2A-13A-66A-66C	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	66	20	66786	2145	66	20	67236	2190	66	20	67038	2170.2	-	-	-	-	-	-	-	-	-	-	22.42		22.49	-0.07	
5CC#80	CA_2A-13A-46A-66A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	22.43		22.49	-0.06	
5CC#81	CA_2A-13A-48A-48A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	48	20	56640	3690	48	20	55340	3560	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.41		22.49	-0.08	
6CC#6	CA_13A-48E-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	66	20	66786	2145	-	-	-	-	-	-	22.47		22.49	-0.02	
6CC#15	CA_2A-13A-46C-66A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	66	20	67236	2190	66	20	66536	2120	-	-	-	-	-	-	22.46		22.49	-0.03	
7CC#5	CA_2A-13A-46D-66A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	67236	2190	66	20	66536	2120	-	-	22.46		22.49	-0.03	
4CC#168	CA_2A-7C-13A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	7	20	3100	2655	7	20	2902	2635.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.46		22.49	-0.03	
4CC#173	CA_2A-13A-46A-46A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	46890	5160	46	20	54440	5915	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#90	CA_2A-2A-13A-66B	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	1100	1980	2	20	700	1940	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#92	CA_2A-13A-46A-46C	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#94	CA_13A-48A-48C-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#95	CA_2A-2A-13A-66A-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	1100	1980	2	20	700	1940	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	22.51		22.49	0.02	
6CC#18	CA_2A-13A-46E	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	-	-	22.47		22.49	-0.02	
6CC#20	CA_13A-46E-66A	13	5	23205	779.5	QPSK	1	0	5205	748.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	66786	2145	-	-	-	-	-	-	22.48		22.49	-0.01	
6CC#22	CA_2A-13A-46A-46D	13	5	23205	779.5	QPSK	1	0	5205	748.5	2	20	900	1960	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	46	20	47286	5199.6	-	-	-	-	-	-	22.48		22.49	-0.01	

1.1.1.7 LTE Band 14 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
5CC#76	CA_2A-2A-14A-66A-66A	14	5	23305	790.5	QPSK	1	12	5305	760.5	2	20	900	1960	2	20	700	1940	66	20	66786	2145	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	22.48		22.49	-0.01	
5CC#82	CA_2A-14A-66A-66A-66A	14	5	23305	790.5	QPSK	1	12	5305	760.5	2	20	900	1960	66	20	66786	2145	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	22.41		22.49	-0.08	

1.1.1.8 LTE Band 17 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#19	CA_2A-17A	17	5	23790	710	QPSK	1	24	5790	740	2	10	900	1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.89		22.90	-0.01	
2CC#30	CA_4A-17A	17	5	23790	710	QPSK	1	24	5790	740	4	10	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.87		22.90	-0.03	

1.1.1.9 LTE Band 25 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																			DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#38	CA_5A-25A	25	20	26140	1860	QPSK	1	0	8140	1940	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.75	22.43	22.78	-0.03	-0.35
2CC#52	CA_12A-25A	25	20	26140	1860	QPSK	1	0	8140	1940	12	10	5095	737.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.98	23.01	22.78	0.20	0.23
2CC#62	CA_25A-46A	25	20	26140	1860	QPSK	1	0	8140	1940	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.76	22.77	22.78	-0.02	-0.01
3CC#42	CA_25A-46C	25	20	26140	1860	QPSK	1	0	8140	1940	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.75	22.75	22.78	-0.03	-0.03
3CC#136	CA_25A-25A-25A	25	20	26140	1860	QPSK	1	0	8140	1940	25	20	8365	1962.5	25	20	8590	1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.74	22.49	22.78	-0.04	-0.29
3CC#137	CA_25A-25A-26A	25	20	26140	1860	QPSK	1	0	8140	1940	25	20	8590	1985	26	5	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.79	22.64	22.78	0.01	-0.14
3CC#138	CA_25A-25A-41A	25	20	26140	1860	QPSK	1	0	8140	1940	25	20	8590	1985	41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.79	22.81	22.78	0.01	0.03
3CC#139	CA_25A-26A-41A	25	20	26140	1860	QPSK	1	0	8140	1940	26	15	8865	876.5	41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.73	22.50	22.78	-0.05	-0.28
4CC#22	CA_25A-46D	25	20	26140	1860	QPSK	1	0	8140	1940	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	-	-	-	-	22.78	23.01	22.78	0.00	0.23
4CC#96	CA_25A-25A-41C	25	20	26140	1860	QPSK	1	0	8140	1940	25	20	8590	1985	41	20	40620	2593	41	20	40422	2573.2	-	-	-	-	-	-	-	-	-	-	-	-	22.76	22.01	22.78	-0.02	-0.77
4CC#97	CA_25A-26A-41C	25	20	26140	1860	QPSK	1	0	8140	1940	26	15	8865	876.5	41	20	40620	2593	41	20	40422	2573.2	-	-	-	-	-	-	-	-	-	-	-	-	22.79	22.76	22.78	0.01	-0.02
5CC#43	CA_25A-25A-41D	25	20	26140	1860	QPSK	1	0	8140	1940	25	20	8590	1985	41	20	40620	2593	41	20	40422	2573.2	41	20	40818	2612.8	-	-	-	-	-	-	-	-	22.82	22.58	22.78	0.04	-0.20
5CC#85	CA_25A-41E	25	20	26140	1860	QPSK	1	0	8140	1940	41	20	40620	2593	41	20	40422	2573.2	41	20	40224	2553.4	41	20	40026	2533.6	-	-	-	-	-	-	-	-	22.78	22.77	22.78	0.00	-0.01

1.1.1.10 LTE Band 26 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#64	CA_26A-46A	26	5	26715	816.5	QPSK	1	12	8715	861.5	46	20	50665	5537.5	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.29		22.25	0.04	
3CC#137	CA_25A-25A-26A	26	5	26715	816.5	QPSK	1	12	8715	861.5	25	20	8365	1962.5	25	20	8140	1940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.27		22.25	0.02	
3CC#139	CA_25A-26A-41A	26	5	26715	816.5	QPSK	1	12	8715	861.5	25	20	8365	1962.5	41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.27		22.25	0.02	
4CC#97	CA_25A-26A-41C	26	5	26715	816.5	QPSK	1	12	8715	861.5	25	20	8365	1962.5	41	20	40620	2593	41	20	40422	2573.2	-	-	-	-	-	-	-	-	-	-	-	-	22.27		22.25	0.02	
3CC#152	CA_7A-7A-26A	26	5	26715	816.5	QPSK	1	12	8715	861.5	7	20	2850	2630	7	20	3350	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.25		22.25	0.00	

1.1.1.11 LTE Band 38 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#6	CA_38C	38	15	38175	2612.5	QPSK	1	0	38175	2612.5	38	15	38025	2597.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.96	22.94	22.83	0.13	0.11
2CC#39	CA_5A-38A	38	15	38175	2612.5	QPSK	1	0	38175	2612.5	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.86	22.92	22.83	0.03	0.09

1.1.1.12 LTE Band 41 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.			DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#40	CA_5A-41A	41	20	40620	2593	QPSK	1	0	40620	2593	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.68	22.67	22.78	-0.10	-0.11
2CC#68	CA_41A-46A	41	10	41080	2639	QPSK	1	0	41080	2639	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.97	22.96	23.05	-0.08	-0.09
2CC#69	CA_41A-48A	41	10	41080	2639	QPSK	1	0	41080	2639	48	20	55990	3625	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.02	22.96	23.05	-0.03	-0.09
3CC#46	CA_41A-46C	41	10	41080	2639	QPSK	1	0	41080	2639	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.94	22.94	23.05	-0.11	-0.11
3CC#47	CA_41C-42A	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	40936	2624.6	42	20	42840	3525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.03	23.04	23.05	-0.02	-0.01
3CC#141	CA_41A-41A-41A *1	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39750	2506	41	20	41490	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.11	23.15	23.05	0.06	0.10
3CC#141	CA_41A-41A-41A *2	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39790	2510	41	20	41490	2680	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.13	23.15	23.05	0.08	0.10
3CC#142	CA_41A-42A-42A	41	10	41080	2639	QPSK	1	0	41080	2639	42	20	42840	3525	42	20	42190	3460	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.00	23.19	23.05	-0.05	0.14
4CC#1	CA_41E	41	15	41068	2637.8	QPSK	1	74	41068	2637.8	41	20	40897	2620.7	41	20	41239	2654.9	41	20	40699	2600.9	-	-	-	-	-	-	-	-	-	-	-	-	22.97	22.87	22.93	0.04	-0.06
4CC#23	CA_41A-41D *1	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39750	2506	41	20	39948	2525.8	41	20	40146	2545.6	-	-	-	-	-	-	-	-	-	-	-	-	23.20	23.04	23.05	0.15	-0.01
4CC#23	CA_41A-41D *2	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39790	2510	41	20	39988	2529.8	41	20	40186	2549.6	-	-	-	-	-	-	-	-	-	-	-	-	22.91	22.91	23.05	-0.14	-0.14
4CC#24	CA_41A-42D	41	10	41080	2639	QPSK	1	0	41080	2639	42	20	42840	3525	42	20	42642	3505.2	42	20	43038	3544.8	-	-	-	-	-	-	-	-	-	-	-	-	23.05	23.02	23.05	0.00	-0.03
4CC#25	CA_41A-46D	41	10	41080	2639	QPSK	1	0	41080	2639	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	-	-	-	-	-	-	-	-	-	-	-	-	23.08	23.10	23.05	0.03	0.05
4CC#26	CA_41C-41C *1	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	41224	2653.4	41	20	39750	2506	41	20	39948	2525.8	-	-	-	-	-	-	-	-	-	-	-	-	23.16	23.14	23.05	0.11	0.09
4CC#26	CA_41C-41C *2	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	41224	2653.4	41	20	39790	2510	41	20	39988	2529.8	-	-	-	-	-	-	-	-	-	-	-	-	23.00	23.00	23.05	-0.05	-0.05
4CC#27	CA_41C-42C	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	40936	2624.6	42	20	42840	3525	42	20	42642	3505.2	-	-	-	-	-	-	-	-	-	-	-	-	23.00	23.00	23.05	-0.05	-0.05
4CC#28	CA_41D-42A	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	40936	2624.6	41	20	41224	2653.4	42	20	42840	3525	-	-	-	-	-	-	-	-	-	-	-	-	23.01	23.01	23.05	-0.04	-0.04
4CC#98	CA_41A-41A-41C *1	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39750	2506	41	20	41490	2680	41	20	41224	2653.4	-	-	-	-	-	-	-	-	-	-	-	-	23.18	23.11	23.05	0.13	0.06
4CC#98	CA_41A-41A-41C *2	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	39790	2510	41	20	41490	2680	41	20	41224	2653.4	-	-	-	-	-	-	-	-	-	-	-	-	23.08	23.07	23.05	0.03	0.02
4CC#99	CA_41A-42A-42C	41	10	41080	2639	QPSK	1	0	41080	2639	42	20	42590	3500	42	20	42840	3525	42	20	42642	3505.2	-	-	-	-	-	-	-	-	-	-	-	-	23.04	22.95	23.05	-0.01	-0.10
5CC#11	CA_41A-46E	41	10	41080	2639	QPSK	1	0	41080	2639	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	-	-	-	-	22.97	23.04	23.05	-0.08	-0.01
5CC#12	CA_41C-41D *1	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	41224	2653.4	41	20	39750	2506	41	20	39948	2525.8	41	20	40146	2545.6	-	-	-	-	-	-	-	-	23.09	23.11	23.05	0.04	0.06
5CC#12	CA_41C-41D *2	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	41224	2653.4	41	20	39790	2510	41	20	39988	2529.8	41	20	40186	2549.6	-	-	-	-	-	-	-	-	22.99	22.96	23.05	-0.06	-0.09
5CC#13	CA_41D-42C	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	40936	2624.6	41	20	41224	2653.4	42	20	42840	3525	42	20	42642	3505.2	-	-	-	-	-	-	-	-	23.07	23.01	23.05	0.02	-0.04
5CC#44	CA_41A-42C-42C	41	10	41080	2639	QPSK	1	0	41080	2639	42	20	42190	3460	42	20	41992	3440.2	42	20	43490	3590	42	20	43292	3570.2	-	-	-	-	-	-	-	-	23.05	23.06	23.05	0.00	0.01
3CC#43	CA_26A-41C	41	10	41080	2639	QPSK	1	0	41080	2639	41	20	40936	2624.6	26	15	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.04	23.06	23.05	-0.01	0.01
2CC#63	CA_26A-41A	41	10	41080	2639	QPSK	1	0	41080	2639	26	15	8865	876.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.13	23.13	23.05	0.08	0.08

*1 : FCC

*2 : ISED

1.1.1.13 LTE Band 48 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#69	CA_41A-48A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.74	9.82	9.88	-0.14	-0.06
3CC#56	CA_48C-71A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.74	9.87	9.88	-0.14	-0.01
3CC#146	CA_48A-48A-71A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	56640	3690	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.71	9.84	9.88	-0.17	-0.04
4CC#9	CA_4A-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	55684	3594.4	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.74	9.81	9.88	-0.14	-0.07
4CC#47	CA_2A-5A-48C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	5	10	2525	881.5	48	20	55486	3574.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.75	9.82	9.88	-0.13	-0.06
4CC#80	CA_5A-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	5	10	2525	881.5	48	20	55486	3574.6	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.88	9.71	9.88	0.00	-0.17
4CC#91	CA_13A-48A-66B	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.74	9.88	9.88	-0.14	0.00
4CC#92	CA_13A-48A-66C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.68	9.72	9.88	-0.20	-0.16
4CC#102	CA_48A-48A-66B	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	56640	3690	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.74	9.74	9.88	-0.14	-0.14
4CC#103	CA_48A-48A-66C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	56640	3690	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.94	9.85	9.88	0.06	-0.03
4CC#105	CA_48C-66A-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	66	20	66786	2145	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.91	9.78	9.88	0.03	-0.10
4CC#130	CA_2A-5A-48A-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	5	10	2525	881.5	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.88	9.73	9.88	0.00	-0.15
4CC#149	CA_2A-48A-66A-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	66	20	66786	2145	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8	9.77	9.88	-0.08	-0.11
4CC#164	CA_48A-48A-66A-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	56640	3690	66	20	66786	2145	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.71	9.69	9.88	-0.17	-0.19
5CC#1	CA_48F	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	55684	3594.4	48	20	55882	3614.2	48	20	56080	3634	-	-	-	-	-	-	-	-	-	-	9.83	9.85	9.88	-0.05	-0.03
5CC#3	CA_2A-48E	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	48	20	55486	3574.6	48	20	55684	3594.4	48	20	55882	3614.2	-	-	-	-	-	-	-	-	-	-	9.75	9.74	9.88	-0.13	-0.14
5CC#4	CA_4A-48E	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	4	20	2175	2132.5	48	20	55486	3574.6	48	20	55684	3594.4	48	20	55882	3614.2	-	-	-	-	-	-	-	-	-	-	9.77	9.71	9.88	-0.11	-0.17
5CC#15	CA_48C-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	56640	3690	48	20	56442	3670.2	48	20	56244	3650.4	-	-	-	-	-	-	-	-	-	-	9.82	9.84	9.88	-0.06	-0.04
5CC#23	CA_2A-13A-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	13	10	5230	751	48	20	55486	3574.6	48	20	55684	3594.4	-	-	-	-	-	-	-	-	-	-	9.88	9.83	9.88	0.00	-0.05
5CC#27	CA_2A-48A-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	48	20	55486	3574.6	48	20	55684	3594.4	48	20	56640	3690	-	-	-	-	-	-	-	-	-	-	9.85	9.84	9.88	-0.03	-0.04
5CC#28	CA_2A-48C-48C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	48	20	55486	3574.6	48	20	56640	3690	48	20	56442	3670.2	-	-	-	-	-	-	-	-	-	-	9.85	9.83	9.88	-0.03	-0.05
5CC#29	CA_2A-48D-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	48	20	55486	3574.6	48	20	55684	3594.4	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.79	9.78	9.88	-0.09	-0.10
5CC#35	CA_5A-48D-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	5	10	2525	881.5	48	20	55486	3574.6	48	20	55684	3594.4	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.81	9.78	9.88	-0.07	-0.10
5CC#40	CA_13A-48A-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	48	20	55486	3574.6	48	20	55684	3594.4	48	20	56640	3690	-	-	-	-	-	-	-	-	-	-	9.84	9.8	9.88	-0.04	-0.08
5CC#41	CA_13A-48C-48C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	48	20	55486	3574.6	48	20	56640	3690	48	20	56442	3670.2	-	-	-	-	-	-	-	-	-	-	9.97	9.87	9.88	0.09	-0.01
5CC#42	CA_13A-48D-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	48	20	55486	3574.6	48	20	55684	3594.4	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.85	9.81	9.88	-0.03	-0.07
5CC#47	CA_48A-48C-66B	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	56640	3690	66	10	66786	2145	66	10	66687	2135.1	-	-	-	-	-	-	-	-	-	-	9.87	9.88	9.88	-0.01	0.00
5CC#48	CA_48A-48C-66C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	56640	3690	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	9.77	9.77	9.88	-0.11	-0.11
5CC#49	CA_48A-48D-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	55684	3594.4	48	20	56640	3690	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.76	9.76	9.88	-0.12	-0.12
5CC#50	CA_48C-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	56640	3690	48	20	56442	3670.2	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.84	9.82	9.88	-0.04	-0.06
5CC#64	CA_2A-13A-48A-48C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	13	10	5230	751	48	20	55486	3574.6	48	20	56640	3690	-	-	-	-	-	-	-	-	-	-	9.73	9.74	9.88	-0.15	-0.14
5CC#65	CA_2A-13A-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	13	10	5230	751	48	20	55486	3574.6	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.74	9.71	9.88	-0.14	-0.17
5CC#70	CA_2A-48A-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	48	20	55486	3574.6	48	20	56640	3690	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.75	9.76	9.88	-0.13	-0.12
5CC#81	CA_2A-13A-48A-48A-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	2	20	900	1960	13	10	5230	751	48	20	56640	3690	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.87	9.82	9.88	-0.01	-0.06
6CC#6	CA_13A-48E-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	13	10	5230	751	48	20	55486	3574.6	48	20	55684	3594.4	48	20	55882	3614.2	-	-	-	-	-	-	-	-	-	-	9.73	9.8	9.88	-0.15	-0.08
5CC#86	CA_2A-5A-48D	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	55684	3594.4	2	20	900	1960	5	10	2525	881.5	-	-	-	-	-	-	-	-	-	-	9.8	9.8	9.88	-0.08	-0.08
5CC#91	CA_2A-5A-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	2	20	900	1960	5	10	2525	881.5	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.73	9.75	9.88	-0.15	-0.13
5CC#94	CA_13A-48A-48C-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	56640	3690	13	10	5230	751	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	9.86	9.83	9.88	-0.02	-0.05
6CC#19	CA_2A-48E-66A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	48	20	55684	3594.4	48	20	55882	3614.2	2	20	900	1960	66	20	66786	2145	-	-	-	-	-	-	9.87	9.87	9.88	-0.01	-0.01
3CC#20	CA_4A-48C	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	48	20	55486	3574.6	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.91	9.87	9.88	0.03	-0.01
2CC#33	CA_4A-48A	48	15	55315	3557.5	QPSK	36	0	55315	3557.5	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.72	9.75	9.88	-0.16	-0.13

1.1.1.14 LTE Band 66 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
																																		DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
3CC#49	CA_46A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	46	20	50665	5537.5	66	20	66838	2150.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.83	21.81	21.95	-0.12	-0.14
3CC#140	CA_29A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	29	10	9715	722.5	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.83	21.79	21.95	-0.12	-0.16
4CC#12	CA_5A-66D	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	66	20	66838	2150.2	66	20	67234	2189.8	-	-	-	-	-	-	-	-	-	-	-	-	21.78	21.77	21.95	-0.17	-0.18
4CC#55	CA_2A-12A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	12	10	5095	737.5	66	20	66838	2150.2	-	-	-	-	-	-	-	-	-	-	-	-	21.80	21.71	21.95	-0.15	-0.24
4CC#67	CA_2A-66C-71A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	66	20	66838	2150.2	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	21.81	21.78	21.95	-0.14	-0.17
4CC#68	CA_2C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	2	20	702	1940.2	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.91	21.75	21.95	-0.04	-0.20
4CC#75	CA_5A-5A-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	5	10	2450	874	5	10	2600	889	66	5	66968	2163.2	-	-	-	-	-	-	-	-	-	-	-	-	21.86	21.74	21.95	-0.09	-0.21
4CC#76	CA_5A-5A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2450	874	5	10	2600	889	66	20	66838	2150.2	-	-	-	-	-	-	-	-	-	-	-	-	21.78	21.72	21.95	-0.17	-0.23
4CC#80	CA_5A-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	-	-	-	-	21.94	21.83	21.95	-0.01	-0.12
4CC#81	CA_5A-66A-66B	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	66	10	66486	2115	66	10	66585	2124.9	-	-	-	-	-	-	-	-	-	-	-	-	21.84	21.75	21.95	-0.11	-0.20
4CC#82	CA_5A-66A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	66	20	66536	2120	66	20	66734	2139.8	-	-	-	-	-	-	-	-	-	-	-	-	21.84	21.75	21.95	-0.11	-0.20
4CC#91	CA_13A-48A-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	13	10	5230	751	48	20	55990	3625	66	5	66968	2163.2	-	-	-	-	-	-	-	-	-	-	-	-	21.89	21.86	21.95	-0.06	-0.09
4CC#92	CA_13A-48A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	48	20	55990	3625	66	20	66838	2150.2	-	-	-	-	-	-	-	-	-	-	-	-	21.73	21.73	21.95	-0.22	-0.22
4CC#102	CA_48A-48A-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	48	20	56640	3690	48	20	55340	3560	66	5	66968	2163.2	-	-	-	-	-	-	-	-	-	-	-	-	22.01	21.70	21.95	0.06	-0.25
4CC#103	CA_48A-48A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	56640	3690	48	20	55340	3560	66	20	66838	2150.2	-	-	-	-	-	-	-	-	-	-	-	-	21.99	21.76	21.95	0.04	-0.19
4CC#105	CA_48C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	55990	3625	48	20	55792	3605.2	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.94	21.78	21.95	-0.01	-0.17
4CC#117	CA_2A-2A-13A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	13	10	5230	751	-	-	-	-	-	-	-	-	-	-	-	-	21.88	21.75	21.95	-0.07	-0.20
4CC#120	CA_2A-2A-66A-71A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	21.85	21.76	21.95	-0.10	-0.19
4CC#130	CA_2A-5A-48A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	48	20	55990	3625	-	-	-	-	-	-	-	-	-	-	-	-	22.01	21.76	21.95	0.06	-0.19
4CC#138	CA_2A-7A-46A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3100	2655	46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	21.76	21.75	21.95	-0.19	-0.20
4CC#146	CA_2A-46A-46A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	46	20	50665	5537.5	46	20	46890	5160	-	-	-	-	-	-	-	-	-	-	-	-	21.85	21.79	21.95	-0.10	-0.16
4CC#149	CA_2A-48A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	48	20	55990	3625	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.85	21.75	21.95	-0.10	-0.20
4CC#151	CA_2A-66A-66A-71A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	66	20	66536	2120	71	20	68761	634.5	-	-	-	-	-	-	-	-	-	-	-	-	21.78	21.71	21.95	-0.17	-0.24
4CC#154	CA_5A-5A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2450	874	5	10	2600	889	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.74	21.75	21.95	-0.21	-0.20
4CC#156	CA_5A-48A-48A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	48	20	56640	3690	48	20	55340	3560	-	-	-	-	-	-	-	-	-	-	-	-	21.98	21.72	21.95	0.03	-0.23
4CC#161	CA_13A-66A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	-	-	21.79	21.80	21.95	-0.16	-0.15
4CC#163	CA_46A-66A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	46	20	50665	5537.5	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	-	-	21.75	21.89	21.95	-0.20	-0.06
4CC#164	CA_48A-48A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	56640	3690	48	20	55340	3560	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.93	21.73	21.95	-0.02	-0.22
4CC#165	CA_48A-66A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	55990	3625	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	-	-	-	-	21.76	21.75	21.95	-0.19	-0.20
5CC#19	CA_2A-5B-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	2	20	900	1960	5	10	2450	874	5	10	2549	883.9	66	5	66968	2163.2	-	-	-	-	-	-	-	-	21.74	21.72	21.95	-0.21	-0.23
5CC#20	CA_2A-5B-66C	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2450	874	5	10	2549	883.9	66	20	66838	2150.2	-	-	-	-	-	-	-	-	21.72	21.79	21.95	-0.23	-0.16
5CC#24	CA_2A-13A-66D	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	66	20	66838	2150.2	66	20	67234	2189.8	-	-	-	-	-	-	-	-	21.74	21.83	21.95	-0.21	-0.12
5CC#29	CA_2A-48D-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	21.80	21.77	21.95	-0.15	-0.18
5CC#35	CA_5A-48D-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	48	20	55990	3625	48	10	55846	3610.6	48	10	56134	3639.4	-	-	-	-	-	-	-	-	21.74	21.75	21.95	-0.21	-0.20
5CC#36	CA_5B-66A-66B	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2450	874	5	10	2549	883.9	66	10	66486	2115	66	10	66585	2124.9	-	-	-	-	-	-	-	-	21.76	21.75	21.95	-0.19	-0.20
5CC#37	CA_5B-66A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2450	874	5	10	2549	883.9	66	20	66536	2120	66	20	66734	2139.8	-	-	-	-	-	-	-	-	21.76	21.77	21.95	-0.19	-0.18
5CC#42	CA_13A-48D-66A	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	-	-	-	-	-	-	-	-	21.76	21.72	21.95	-0.19	-0.23
5CC#45	CA_46A-46D-66A	66	20	132572	1770	16QAM	1	0	67036	2170	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	46	20	47286	5199.6	-	-	-	-	-	-	-	-	21.73	21.77	21.95	-0.22	-0.18
5CC#47	CA_48A-48C-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	66	5	66968	2163.2	-	-	-	-	-	-	-	-	21.82	21.78	21.95	-0.13	-0.17
5CC#48	CA_48A-48C-66C	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	66	20	66838	2150.2	-	-	-	-	-	-	-	-	21.80	21.77	21.95	-0.15	-0.18
5CC#49	CA_48A-48D-66A	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	55990	3625	48	20	55792	3606.2	48	20	56188	3644.8	48	20	55594	3585.4	-	-	-	-	-	-	-	-	21.86	21.79	21.95	-0.09	-0.16
5CC#50	CA_48C-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	48	20	55990	3625	48	20	55792	3605.2	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	21.76	21.76	21.95	-0.19	-0.19
5CC#51	CA_2A-2A-5A-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	2	20	1100	1980	2	20	700	1940	5	10	2525	881.5	66	5	66968	2163.2	-	-	-	-	-	-	-	-	21.84	21.94	21.95	-0.11	-0.01
5CC#52	CA_2A-2A-5A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	5	10	2525	881.5	66	20	66838	2150.2	-	-	-	-	-	-	-	-	21.78	21.79	21.95	-0.17	-0.16
5CC#53	CA_2A-2A-12B-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	21.76	21.80	21.95	-0.19	-0.15
5CC#54	CA_2A-2A-66A-66B	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	66	10	66486	2115	66	10	66585	2124.9	-	-	-	-	-	-	-	-	21.74	21.76	21.95	-0.21	-0.19
5CC#55	CA_2A-2A-66A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	66	20	66536	2120	66	20	66734	2139.8	-	-	-	-	-	-	-	-	21.83	21.75	21.95	-0.12	-0.20
5CC#57	CA_2A-5B-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2450	874	5	10	2549	883.9	66	20	66536	2120	-	-	-	-	-	-	-	-	21.83	21.77	21.95	-0.12	-0.18
5CC#59	CA_2A-7A-12B-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3100	2655	12	10	5130	741	12	5	5058	733.8	-	-	-	-	-	-	-	-	21.77	21.82	21.95	-0.18	-0.13
5CC#60	CA_2A-7C-29A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3100	2655	7	20	2902	2635.2	29	10	9715	722.5	-	-	-	-	-	-	-	-	21.73	21.75	21.95	-0.22	-0.20
5CC#61	CA_2A-7C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3100	2655	7	20	2902	2635.2	66	20	66536	2120	-	-	-	-	-	-	-	-	21.77	21.73	21.95	-0.18	-0.22
5CC#62	CA_2A-12B-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	12	10	5130	741	12	5	5058	733.8	66	20	66536	2120	-	-	-	-	-	-	-	-	21.76	21.80	21.95	-0.19	-0.15
5CC#65	CA_2A-13A-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	21.81	21.78	21.95	-0.14	-0.17
5CC#66	CA_2A-13A-66A-66B	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	66	10	66486	2115	66	10	66585	2124.9	-	-	-	-	-	-	-	-	21.76	21.83	21.95	-0.19	-0.12
5CC#67	CA_2A-13A-66A-66C	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	66	20	66536	2120	66	20	66734	2139.8	-	-	-	-	-	-	-	-	21.79	21.81	21.95	-0.16	-0.14
5CC#68	CA_2A-46A-46C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	46	20	50665	5537.5	46	20	46890	5160	46	20	47088	5179.8	-	-	-	-	-	-	-	-	21.81	21.78	21.95	-0.14	-0.17

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.			DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
5CC#70	CA_2A-48A-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	21.82	21.80	21.95	-0.13	-0.15
5CC#72	CA_2A-2A-5A-12A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	5	10	2525	881.5	12	10	5095	737.5	-	-	-	-	-	-	-	-	21.82	21.79	21.95	-0.13	-0.16
5CC#73	CA_2A-2A-5A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	2	20	700	1940	5	10	2525	881.5	66	20	66536	2120	-	-	-	-	-	-	-	-	21.81	21.80	21.95	-0.14	-0.15
5CC#74	CA_2A-2A-7A-12A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	2	20	700	1940	7	20	3100	2655	12	10	5095	737.5	-	-	-	-	-	-	-	-	21.73	21.75	21.95	-0.22	-0.20
5CC#75	CA_2A-2A-12A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	12	10	5095	737.5	66	20	66536	2120	-	-	-	-	-	-	-	-	21.77	21.80	21.95	-0.18	-0.15
5CC#76	CA_2A-2A-14A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	14	10	5330	763	66	20	66536	2120	-	-	-	-	-	-	-	-	21.79	21.81	21.95	-0.16	-0.14
5CC#77	CA_2A-5A-46A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	46	20	50665	5537.5	66	20	66536	2120	-	-	-	-	-	-	-	-	21.81	21.80	21.95	-0.14	-0.15
5CC#78	CA_2A-7A-7A-29A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3350	2680	7	20	2850	2630	29	10	9715	722.5	-	-	-	-	-	-	-	-	21.79	21.72	21.95	-0.16	-0.23
5CC#79	CA_2A-7A-7A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	7	20	3350	2680	7	20	2850	2630	66	20	66536	2120	-	-	-	-	-	-	-	-	21.73	21.75	21.95	-0.22	-0.20
5CC#80	CA_2A-13A-46A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	46	20	50665	5537.5	66	20	66536	2120	-	-	-	-	-	-	-	-	21.76	21.75	21.95	-0.19	-0.20
5CC#81	CA_2A-13A-48A-48A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	48	20	56640	3690	48	20	55340	3560	-	-	-	-	-	-	-	-	21.74	21.80	21.95	-0.21	-0.15
5CC#82	CA_2A-14A-66A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	14	10	5330	763	66	20	66536	2120	66	20	67236	2190	-	-	-	-	-	-	-	-	21.80	21.85	21.95	-0.15	-0.10
6CC#6	CA_13A-48E-66A	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	-	-	-	-	21.82	21.82	21.95	-0.13	-0.13
6CC#14	CA_2A-5A-46C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	66	20	66536	2120	-	-	-	-	21.79	21.77	21.95	-0.16	-0.18
6CC#15	CA_2A-13A-46C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	66	20	66536	2120	-	-	-	-	21.80	21.77	21.95	-0.15	-0.18
7CC#1	CA_2A-5A-46E-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	21.82	21.83	21.95	-0.13	-0.12
7CC#3	CA_5A-46E-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	66536	2120	21.85	21.85	21.95	-0.10	-0.10
7CC#4	CA_2A-5A-46D-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	66536	2120	21.82	21.82	21.95	-0.13	-0.13
7CC#5	CA_2A-13A-46D-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	66	20	66536	2120	21.79	21.80	21.95	-0.16	-0.15
4CC#174	CA_5A-7A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	7	20	3100	2655	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	21.79	21.75	21.95	-0.16	-0.20
5CC#89	CA_2A-2A-5B-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	5	10	2450	874	5	10	2549	883.9	-	-	-	-	-	-	-	-	21.82	21.81	21.95	-0.13	-0.14
5CC#90	CA_2A-2A-13A-66B	66	15	132597	1772.5	16QAM	1	0	67061	2172.5	2	20	1100	1980	2	20	700	1940	13	10	5230	751	66	5	66968	2163.2	-	-	-	-	-	-	-	-	21.89	21.83	21.95	-0.06	-0.12
5CC#91	CA_2A-5A-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	5	10	2525	881.5	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	21.85	21.87	21.95	-0.10	-0.08
5CC#93	CA_5A-7C-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	5	10	2525	881.5	7	20	3100	2655	7	20	2902	2635.2	66	20	66536	2120	-	-	-	-	-	-	-	-	21.79	21.76	21.95	-0.16	-0.19
5CC#94	CA_13A-48A-48C-66A	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	48	20	55990	3625	48	20	55340	3560	48	20	55538	3579.8	-	-	-	-	-	-	-	-	21.8	21.81	21.95	-0.15	-0.14
5CC#95	CA_2A-2A-13A-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	1100	1980	2	20	700	1940	13	10	5230	751	66	20	66536	2120	-	-	-	-	-	-	-	-	21.85	21.83	21.95	-0.10	-0.12
6CC#19	CA_2A-48E-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	48	20	55990	3625	48	20	55792	3605.2	48	20	56188	3644.8	48	20	55594	3585.4	-	-	-	-	21.81	21.85	21.95	-0.14	-0.10
6CC#20	CA_13A-46E-66A	66	20	132572	1770	16QAM	1	0	67036	2170	13	10	5230	751	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	-	-	-	-	21.79	21.86	21.95	-0.16	-0.09
7CC#6	CA_2A-46E-66A-66A	66	20	132572	1770	16QAM	1	0	67036	2170	2	20	900	1960	46	20	50665	5537.5	46	20	50467	5517.7	46	20	50863	5557.3	46	20	50269	5497.9	66	20	66536	2120	21.8	21.84	21.95	-0.15	-0.11

1.1.1.15 LTE Band 71 as PCC

Index	Combination	PCC								SCC 1				SCC 2				SCC 3				SCC 4				SCC 5				SCC 6				Power [dBm]			Delta [dB]	
							UL#RB / Offset																											DL CA Enabled		Single Carrier		
		Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.			DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	Band	BW [MHz]	DL Ch	DL Freq. [MHz]	PCC DL SISO	PCC DL 4x4 MIMO		PCC DL SISO	PCC DL 4x4 MIMO
2CC#72	CA_46A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	46	20	50665	5537.5	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.78		22.75	0.03	
3CC#51	CA_46C-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	46	20	50665	5537.5	46	20	50467	5517.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.74		22.75	-0.01	
3CC#56	CA_48C-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	48	20	55990	3625	48	20	55792	3605.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.75		22.75	0.00	
3CC#106	CA_4A-4A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	4	20	2050	2120	4	20	2300	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.62		22.75	-0.13	
3CC#146	CA_48A-48A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	48	20	55990	3625	48	20	55340	3560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.76		22.75	0.01	
4CC#67	CA_2A-66C-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	2	20	900	1960	66	20	66786	2145	66	20	66588	2125.2	-	-	-	-	-	-	-	-	-	-	-	-	22.66		22.75	-0.09	
4CC#110	CA_2A-2A-4A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	2	20	900	1960	2	20	700	1940	4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	22.66		22.75	-0.09	
4CC#120	CA_2A-2A-66A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	2	20	900	1960	2	20	700	1940	66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	22.71		22.75	-0.04	
4CC#151	CA_2A-66A-66A-71A	71	5	133447	695.5	QPSK	1	0	68911	649.5	2	20	900	1960	66	20	66786	2145	66	20	66536	2120	-	-	-	-	-	-	-	-	-	-	-	-	22.67		22.75	-0.08	

13.4.3 UL CA power measurement

This device supports LTE Carrier Aggregation (CA) for LTE B7 and B41 with two component carriers in the uplink. Conducted power was evaluated as described in Sections 13.1.4 “Uplink CA Conducted Powers:” and “Downlink CA with Uplink CA Enabled:”

			PCC								SCC1								Power [dBm]				Delta[dB]	
Combination	Pow mode	Mode	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Tune-up limit	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active	Single Carrier	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active
CA_7C	DSI0	QPSK	7	20	20850	2510	QPSK	50	50	2850	2630	7	20	21048	2529.8	QPSK	50	0	3048	2649.8	23	22.15	22.17	21.88	0.3	0.3
CA_7C	DSI1	QPSK	7	20	20850	2510	QPSK	50	50	2850	2630	7	20	21048	2529.8	QPSK	50	0	3048	2649.8	17.8	16.45	16.56	16.57	-0.1	0.0
CA_41C	DSI0	QPSK	41	20	40620	2593	QPSK	1	0	40620	2593	41	20	40422	2573.2	QPSK	1	99	40422	2573.2	24.0	23.4	23.34	22.78	0.6	0.6
CA_41C	DSI1	QPSK	41	20	40185	2549.5	QPSK	1	99	40185	2549.5	41	20	40383	2569.3	QPSK	1	0	40383	2569.3	20.1	18.62	18.58	18.80	-0.2	-0.2

Note(s):
PCC RB allocation setting for UL CA has been adjusted based on the worst-case power.

13.5 NR(new radio)

13.5.1 NR band n2 DSI0

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	372000 / 1860 [dBm]	376000 / 1880 [dBm]	380000 / 1900 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	23.4	***22.44***	***22.29***	***22.26***
			0	53	1	23.4	22.38	22.26	22.20
			0	104	1	23.4	22.32	22.21	22.16
			0	0	50	23.4	22.36	22.19	22.08
			0	28	50	23.4	22.33	22.24	22.12
			0	56	50	23.4	22.29	22.18	22.09
			0	0	100	23.4	22.27	22.21	22.12
DFTS-OFDM	QPSK	15	0	1	1	23.4	22.36	22.24	22.17
			0	53	1	23.4	22.33	22.18	22.10
			0	104	1	23.4	22.26	22.19	22.06
			0.4	0	50	23.0	21.93	21.78	21.73
			0	28	50	23.4	22.35	22.23	22.15
			0.4	56	50	23.0	21.91	21.76	21.72
			0.4	0	100	23.0	21.92	21.78	21.73
DFTS-OFDM	16QAM	15	0.4	1	1	23.0	21.90	21.75	21.75
DFTS-OFDM	64QAM	15	1.9	1	1	21.5	20.42	20.28	20.22
DFTS-OFDM	256QAM	15	3.9	1	1	19.5	18.35	18.20	18.11
CP-OFDM	QPSK	15	0.9	1	1	22.5	21.38	21.24	21.22

BW 15 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	371500 / 1857.5 [dBm]	376000 / 1880 [dBm]	380500 / 1902.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	23.4	***22.25***	***22.06***	***22.16***
			0	40	1	23.4	22.20	22.02	22.15
			0	77	1	23.4	22.14	22.03	22.14
			0	0	36	23.4	22.13	21.96	22.11
			0	22	36	23.4	22.10	21.90	22.06
			0	43	36	23.4	22.15	22.01	22.09
			0	0	75	23.4	22.12	21.94	22.09
DFTS-OFDM	QPSK	15	0	1	1	23.4	22.19	22.04	22.10
			0	40	1	23.4	22.15	22.03	22.11
			0	77	1	23.4	22.13	22.01	22.12
			0.4	0	36	23.0	21.68	21.55	21.68
			0	22	36	23.4	22.10	21.94	22.04
			0.4	43	36	23.0	21.71	21.54	21.69
			0.4	0	75	23.0	21.74	21.53	21.68
DFTS-OFDM	16QAM	15	0.4	1	1	23.0	21.70	21.52	21.69
DFTS-OFDM	64QAM	15	1.9	1	1	21.5	20.47	20.37	20.48
DFTS-OFDM	256QAM	15	3.9	1	1	19.5	18.35	18.14	18.29
CP-OFDM	QPSK	15	0.9	1	1	22.5	21.07	20.92	20.99

BW	10 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	371000 / 1855 [dBm]	376000 / 1880 [dBm]	381000 / 1905 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	23.4	***22.34***	***22.28***	***22.00***
			0	26	1	23.4	22.33	22.22	21.98
			0	50	1	23.4	22.29	22.25	21.99
			0	0	25	23.4	22.31	22.15	21.97
			0	14	25	23.4	22.30	22.12	21.99
			0	27	25	23.4	22.29	22.14	21.98
			0	0	50	23.4	22.29	22.17	21.96
DFTS-OFDM	QPSK	15	0	1	1	23.4	22.32	22.17	21.99
			0	26	1	23.4	22.33	22.27	21.98
			0	50	1	23.4	22.31	22.16	21.97
			0.4	0	25	23.0	21.86	21.75	21.61
			0	14	25	23.4	22.31	22.17	21.99
			0.4	27	25	23.0	21.90	21.74	21.60
			0.4	0	50	23.0	21.94	21.79	21.61
DFTS-OFDM	16QAM	15	0.4	1	1	23.0	21.86	21.69	21.51
DFTS-OFDM	64QAM	15	1.9	1	1	21.5	20.62	20.49	20.29
DFTS-OFDM	256QAM	15	3.9	1	1	19.5	18.48	18.30	18.11
CP-OFDM	QPSK	15	0.9	1	1	22.5	21.19	20.99	20.81

BW	5 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	370500 / 1852.5 [dBm]	376000 / 1880 [dBm]	381500 / 1907.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	23.4	22.32	22.23	21.97
			0	13	1	23.4	***22.33***	***22.30***	***22.03***
			0	23	1	23.4	22.31	22.28	22.02
			0	0	12	23.4	22.28	22.23	21.98
			0	7	12	23.4	22.32	22.24	22.00
			0	13	12	23.4	22.31	22.29	21.99
			0	0	25	23.4	22.29	22.12	21.86
DFTS-OFDM	QPSK	15	0	1	1	23.4	22.31	22.16	21.99
			0	13	1	23.4	22.26	22.17	21.91
			0	23	1	23.4	22.28	22.22	21.89
			0.4	0	12	23.0	21.93	21.74	21.61
			0	7	12	23.4	22.31	22.21	21.98
			0.4	13	12	23.0	21.96	21.89	21.62
			0.4	0	25	23.0	21.90	21.76	21.57
DFTS-OFDM	16QAM	15	0.4	1	1	23.0	22.15	22.06	21.78
DFTS-OFDM	64QAM	15	1.9	1	1	21.5	20.60	20.58	20.25
DFTS-OFDM	256QAM	15	3.9	1	1	19.5	18.46	18.34	18.05
CP-OFDM	QPSK	15	0.9	1	1	22.5	21.29	21.18	20.91

13.5.2 NR band n2 DSI1

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	372000 / 1860 [dBm]	376000 / 1880 [dBm]	380000 / 1900 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.4	17.45	17.33	17.25
			0	53	1	18.4	17.44	17.31	17.20
			0	104	1	18.4	17.41	17.25	17.13
			0	0	50	18.4	17.40	17.24	17.10
			0	28	50	18.4	17.42	17.27	17.14
			0	56	50	18.4	17.38	17.19	17.08
			0	0	100	18.4	17.39	17.25	17.11
DFTS-OFDM	QPSK	15	0	1	1	18.4	17.37	17.27	17.24
			0	53	1	18.4	17.38	17.24	17.19
			0	104	1	18.4	17.34	17.20	17.06
			0	0	50	18.4	17.41	17.22	17.10
			0	28	50	18.4	17.41	17.25	17.09
			0	56	50	18.4	17.38	17.24	17.08
			0	0	100	18.4	17.42	17.21	17.12
DFTS-OFDM	16QAM	15	0	1	1	18.4	17.37	17.16	17.44
DFTS-OFDM	64QAM	15	0	1	1	18.4	***17.58***	***17.57***	***17.51***
			0	53	1	18.4	17.57	17.56	17.41
			0	104	1	18.4	17.54	17.56	17.36
			0	0	50	18.4	17.39	17.23	17.13
			0	28	50	18.4	17.39	17.22	17.12
			0	56	50	18.4	17.36	17.26	17.10
			0	0	100	18.4	17.39	17.25	17.14
DFTS-OFDM	256QAM	15	0	1	1	18.4	17.34	17.21	17.06
CP-OFDM	QPSK	15	0	1	1	18.4	17.43	17.30	17.10

BW	15 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	371500 / 1857.5 [dBm]	376000 / 1880 [dBm]	380500 / 1902.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.4	17.44	17.21	17.12
			0	40	1	18.4	17.38	17.24	17.09
			0	77	1	18.4	17.37	17.25	17.11
			0	0	36	18.4	17.32	17.19	17.07
			0	22	36	18.4	17.28	17.15	17.01
			0	43	36	18.4	17.34	17.20	17.04
			0	0	75	18.4	17.33	17.18	17.03
DFTS-OFDM	QPSK	15	0	1	1	18.4	***17.47***	17.30	***17.24***
			0	40	1	18.4	17.44	17.34	17.17
			0	77	1	18.4	17.41	***17.36***	17.15
			0	0	36	18.4	17.35	17.16	17.02
			0	22	36	18.4	17.31	17.15	17.04
			0	43	36	18.4	17.31	17.15	17.05
			0	0	75	18.4	17.36	17.19	17.08
DFTS-OFDM	16QAM	15	0	1	1	18.4	17.25	17.10	17.03
DFTS-OFDM	64QAM	15	0	1	1	18.4	17.26	17.18	17.07
DFTS-OFDM	256QAM	15	0	1	1	18.4	17.28	17.15	17.04
CP-OFDM	QPSK	15	0	1	1	18.4	17.38	17.20	17.07

BW	10 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	371000 / 1855 [dBm]	376000 / 1880 [dBm]	381000 / 1905 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.4	17.33	17.25	17.03
			0	26	1	18.4	17.32	17.21	17.03
			0	50	1	18.4	17.27	17.27	17.00
			0	0	25	18.4	17.26	17.18	16.94
			0	14	25	18.4	17.30	17.20	16.97
			0	27	25	18.4	17.29	17.24	16.99
			0	0	50	18.4	17.31	17.22	16.94
DFTS-OFDM	QPSK	15	0	1	1	18.4	17.38	17.31	17.01
			0	26	1	18.4	***17.42***	***17.33***	***17.06***
			0	50	1	18.4	17.37	17.31	17.01
			0	0	25	18.4	17.32	17.23	16.94
			0	14	25	18.4	17.31	17.22	16.90
			0	27	25	18.4	17.28	17.22	16.97
			0	0	50	18.4	17.33	17.25	16.96
DFTS-OFDM	16QAM	15	0	1	1	18.4	17.16	17.11	17.01
DFTS-OFDM	64QAM	15	0	1	1	18.4	17.18	17.13	17.03
DFTS-OFDM	256QAM	15	0	1	1	18.4	17.30	17.17	17.01
CP-OFDM	QPSK	15	0	1	1	18.4	17.31	17.23	16.88

BW 5 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	370500 / 1852.5 [dBm]	376000 / 1880 [dBm]	381500 / 1907.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.4	17.35	17.27	16.96
			0	13	1	18.4	17.32	17.26	17.01
			0	23	1	18.4	17.33	17.27	16.95
			0	0	12	18.4	17.28	17.23	16.97
			0	7	12	18.4	17.28	17.27	16.95
			0	13	12	18.4	17.30	17.27	16.97
			0	0	25	18.4	17.27	17.19	16.92
DFTS-OFDM	QPSK	15	0	1	1	18.4	17.33	17.22	16.99
			0	13	1	18.4	***17.37***	***17.28***	***17.04***
			0	23	1	18.4	17.36	17.25	17.03
			0	0	12	18.4	17.27	17.21	16.91
			0	7	12	18.4	17.31	17.23	16.97
			0	13	12	18.4	17.32	17.21	16.94
			0	0	25	18.4	17.30	17.20	16.92
DFTS-OFDM	16QAM	15	0	1	1	18.4	17.34	17.26	17.01
DFTS-OFDM	64QAM	15	0	1	1	18.4	17.35	17.23	17.02
DFTS-OFDM	256QAM	15	0	1	1	18.4	17.34	17.24	16.92
CP-OFDM	QPSK	15	0	1	1	18.4	17.33	17.24	16.88

13.5.3 NR band n5 DSI0

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.2	***23.21***
			0	53	1	24.2	23.08
			0	104	1	24.2	22.94
			0.5	0	50	23.7	22.60
			0	28	50	24.2	23.01
			0.5	56	50	23.7	22.39
			0.5	0	100	23.7	22.50
DFTS-OFDM	QPSK	15	0	1	1	24.2	23.20
			0	53	1	24.2	23.08
			0	104	1	24.2	22.90
			1	0	50	23.2	22.06
			0	28	50	24.2	23.01
			1	56	50	23.2	21.94
			1	0	100	23.2	22.02
DFTS-OFDM	16QAM	15	1	1	1	23.2	22.30
DFTS-OFDM	64QAM	15	2.5	1	1	21.7	20.89
DFTS-OFDM	256QAM	15	4.5	1	1	19.7	18.60
CP-OFDM	QPSK	15	1.5	1	1	22.7	21.70

BW 15 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.2	23.16
			0	40	1	24.2	23.09
			0	77	1	24.2	23.00
			0.5	0	36	23.7	22.55
			0	22	36	24.2	22.92
			0.5	43	36	23.7	22.39
			0.5	0	75	23.7	22.47
DFTS-OFDM	QPSK	15	0	1	1	24.2	***23.19***
			0	40	1	24.2	23.12
			0	77	1	24.2	22.99
			1	0	36	23.2	22.02
			0	22	36	24.2	22.91
			1	43	36	23.2	21.88
			1	0	75	23.2	22.02
DFTS-OFDM	16QAM	15	1	1	1	23.2	22.30
DFTS-OFDM	64QAM	15	2.5	1	1	21.7	20.97
DFTS-OFDM	256QAM	15	4.5	1	1	19.7	18.62
CP-OFDM	QPSK	15	1.5	1	1	22.7	21.71

BW	10 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.2	***23.15***
			0	26	1	24.2	23.10
			0	50	1	24.2	23.01
			0.5	0	25	23.7	22.54
			0	14	25	24.2	22.96
			0.5	27	25	23.7	22.35
			0.5	0	50	23.7	22.52
DFTS-OFDM	QPSK	15	0	1	1	24.2	23.08
			0	26	1	24.2	23.03
			0	50	1	24.2	23.00
			1	0	25	23.2	22.04
			0	14	25	24.2	22.97
			1	27	25	23.2	21.89
			1	0	50	23.2	22.01
DFTS-OFDM	16QAM	15	1	1	1	23.2	22.22
DFTS-OFDM	64QAM	15	2.5	1	1	21.7	20.80
DFTS-OFDM	256QAM	15	4.5	1	1	19.7	18.56
CP-OFDM	QPSK	15	1.5	1	1	22.7	21.59

BW	5 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	165300 / 826.5 [dBm]	167300 / 836.5 [dBm]	169300 / 846.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.2	***23.35***	***23.19***	***23.00***
			0	13	1	24.2	23.29	23.10	22.87
			0	23	1	24.2	23.23	23.06	22.83
			0.5	0	12	23.7	22.75	22.56	22.26
			0	7	12	24.2	23.20	23.00	22.78
			0.5	13	12	23.7	22.62	22.43	22.12
			0.5	0	25	23.7	22.59	22.41	22.20
DFTS-OFDM	QPSK	15	0	1	1	24.2	23.34	23.16	22.96
			0	13	1	24.2	23.26	23.08	22.87
			0	23	1	24.2	23.17	22.96	22.77
			1	0	12	23.2	22.27	22.06	21.87
			0	7	12	24.2	23.21	23.04	22.83
			1	13	12	23.2	22.14	21.97	21.74
			1	0	25	23.2	22.15	21.97	21.76
DFTS-OFDM	16QAM	15	1	1	1	23.2	22.38	22.26	22.01
DFTS-OFDM	64QAM	15	2.5	1	1	21.7	20.87	20.76	20.35
DFTS-OFDM	256QAM	15	4.5	1	1	19.7	18.80	18.58	18.41
CP-OFDM	QPSK	15	1.5	1	1	22.7	21.81	21.64	21.42

13.5.4 NR band n5 DSI1

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	16.87
			0	53	1	18.0	16.72
			0	104	1	18.0	16.63
			0	0	50	18.0	16.74
			0	28	50	18.0	16.67
			0	56	50	18.0	16.63
			0	0	100	18.0	16.68
DFTS-OFDM	QPSK	15	0	1	1	18.0	16.74
			0	53	1	18.0	16.67
			0	104	1	18.0	16.63
			0	0	50	18.0	16.74
			0	28	50	18.0	16.65
			0	56	50	18.0	16.63
			0	0	100	18.0	16.71
DFTS-OFDM	16QAM	15	0	1	1	18.0	***17.04***
			0	53	1	18.0	17.03
			0	104	1	18.0	16.93
			0	0	50	18.0	16.74
			0	28	50	18.0	16.81
			0	56	50	18.0	16.63
			0	0	100	18.0	16.65
DFTS-OFDM	64QAM	15	0	1	1	18.0	16.94
			0	53	1	18.0	16.74
			0	104	1	18.0	16.63
			0	0	50	18.0	16.78
			0	28	50	18.0	16.73
			0	56	50	18.0	16.68
			0	0	100	18.0	16.73
DFTS-OFDM	256QAM	15	0	1	1	18.0	16.74
CP-OFDM	QPSK	15	0	1	1	18.0	16.99
			0	53	1	18.0	16.86
			0	104	1	18.0	16.61
			0	0	53	18.0	16.71
			0	28	53	18.0	16.64
			0	53	53	18.0	16.63
			0	0	106	18.0	16.66

BW 15 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	16.81
			0	40	1	18.0	16.80
			0	77	1	18.0	16.79
			0	0	36	18.0	16.73
			0	22	36	18.0	16.60
			0	43	36	18.0	16.65
			0	0	75	18.0	16.66
DFTS-OFDM	QPSK	15	0	1	1	18.0	16.76
			0	40	1	18.0	16.61
			0	77	1	18.0	16.74
			0	0	36	18.0	16.75
			0	22	36	18.0	16.60
			0	43	36	18.0	16.59
			0	0	75	18.0	16.68
DFTS-OFDM	16QAM	15	0	1	1	18.0	***17.02***
			0	40	1	18.0	16.93
			0	77	1	18.0	16.84
			0	0	36	18.0	16.74
			0	22	36	18.0	16.61
			0	43	36	18.0	16.58
			0	0	75	18.0	16.68
DFTS-OFDM	64QAM	15	0	1	1	18.0	16.89
			0	40	1	18.0	16.69
			0	77	1	18.0	16.61
			0	0	36	18.0	16.71
			0	22	36	18.0	16.62
			0	43	36	18.0	16.59
			0	0	75	18.0	16.65
DFTS-OFDM	256QAM	15	0	1	1	18.0	16.54
CP-OFDM	QPSK	15	0	1	1	18.0	16.91
			0	40	1	18.0	16.87
			0	77	1	18.0	16.74
			0	0	39	18.0	16.71
			0	22	39	18.0	16.62
			0	40	39	18.0	16.63
			0	0	79	18.0	16.68

BW 10 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	16.78
			0	26	1	18.0	16.70
			0	50	1	18.0	16.71
			0	0	25	18.0	16.71
			0	14	25	18.0	16.65
			0	27	25	18.0	16.58
			0	0	50	18.0	16.63
DFTS-OFDM	QPSK	15	0	1	1	18.0	16.75
			0	26	1	18.0	16.74
			0	50	1	18.0	16.62
			0	0	25	18.0	16.73
			0	14	25	18.0	16.66
			0	27	25	18.0	16.57
			0	0	50	18.0	16.67
DFTS-OFDM	16QAM	15	0	1	1	18.0	16.88
			0	26	1	18.0	16.87
			0	50	1	18.0	16.82
			0	0	25	18.0	16.77
			0	14	25	18.0	16.70
			0	27	25	18.0	16.58
			0	0	50	18.0	16.68
DFTS-OFDM	64QAM	15	0	1	1	18.0	16.83
			0	26	1	18.0	16.70
			0	50	1	18.0	16.58
			0	0	25	18.0	16.71
			0	14	25	18.0	16.63
			0	27	25	18.0	16.59
			0	0	50	18.0	16.66
DFTS-OFDM	256QAM	15	0	1	1	18.0	16.49
CP-OFDM	QPSK	15	0	1	1	18.0	***16.89***
			0	26	1	18.0	16.88
			0	50	1	18.0	16.76
			0	0	26	18.0	16.72
			0	14	26	18.0	16.66
			0	26	26	18.0	16.58
			0	0	52	18.0	16.67

BW 5 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	167300 / 836.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	16.88
			0	13	1	18.0	16.80
			0	23	1	18.0	16.67
			0	0	12	18.0	16.71
			0	7	12	18.0	16.70
			0	13	12	18.0	16.64
			0	0	25	18.0	16.58
DFTS-OFDM	QPSK	15	0	1	1	18.0	16.72
			0	13	1	18.0	16.60
			0	23	1	18.0	16.57
			0	0	12	18.0	16.76
			0	7	12	18.0	16.69
			0	13	12	18.0	16.63
			0	0	25	18.0	16.67
DFTS-OFDM	16QAM	15	0	1	1	18.0	16.93
			0	13	1	18.0	16.88
			0	23	1	18.0	16.83
			0	0	12	18.0	16.67
			0	7	12	18.0	16.59
			0	13	12	18.0	16.59
			0	0	25	18.0	16.68
DFTS-OFDM	64QAM	15	0	1	1	18.0	16.90
			0	13	1	18.0	16.68
			0	23	1	18.0	16.61
			0	0	12	18.0	16.59
			0	7	12	18.0	16.49
			0	13	12	18.0	16.49
			0	0	25	18.0	16.52
DFTS-OFDM	256QAM	15	0	1	1	18.0	16.62
CP-OFDM	QPSK	15	0	1	1	18.0	***16.94***
			0	13	1	18.0	16.81
			0	23	1	18.0	16.74
			0	0	13	18.0	16.65
			0	7	13	18.0	16.55
			0	12	13	18.0	16.52
			0	0	25	18.0	16.59

13.5.5 NR band n41 DSI0 FCC

BW 100 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.56
			0	137	1	21.5	***20.73***
			0	271	1	21.5	20.52
			0	0	135	21.5	20.63
			0	69	135	21.5	20.70
			0	138	135	21.5	20.52
			0	0	270	21.5	20.60
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.70
			0	137	1	21.5	20.55
			0	271	1	21.5	20.52
			0	0	135	21.5	20.55
			0	69	135	21.5	20.70
			0	138	135	21.5	20.54
			0	0	270	21.5	20.59
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.56
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.52
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.60
CP-OFDM	QPSK	30	0	1	1	21.5	20.49

BW 90 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.40
			0	123	1	21.5	***20.64***
			0	243	1	21.5	20.60
			0	0	120	21.5	20.56
			0	63	120	21.5	20.42
			0	125	120	21.5	20.54
			0	0	243	21.5	20.40
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.61
			0	123	1	21.5	20.63
			0	243	1	21.5	20.60
			0	0	120	21.5	20.40
			0	63	120	21.5	20.46
			0	125	120	21.5	20.56
			0	0	243	21.5	20.40
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.50
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.52
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.61
CP-OFDM	QPSK	30	0	1	1	21.5	20.52

BW 80 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.02
			0	109	1	21.5	***20.12***
			0	215	1	21.5	20.06
			0	0	108	21.5	19.88
			0	55	108	21.5	19.94
			0	109	108	21.5	20.06
			0	0	216	21.5	19.88
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.03
			0	109	1	21.5	20.10
			0	215	1	21.5	19.98
			0	0	108	21.5	19.89
			0	55	108	21.5	19.91
			0	109	108	21.5	19.88
			0	0	216	21.5	19.90
DFTS-OFDM	16QAM	30	0	1	1	21.5	19.92
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.02
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.55
CP-OFDM	QPSK	30	0	1	1	21.5	20.01

BW 60 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	505200 / 2526 [dBm]	518600 / 2593 [dBm]	532000 / 2660 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.30	19.95	19.89
			0	81	1	21.5	20.32	20.08	19.92
			0	160	1	21.5	20.50	20.02	19.97
			0	0	81	21.5	20.37	20.00	19.97
			0	40	81	21.5	20.48	20.05	20.06
			0	81	81	21.5	20.39	20.03	19.89
			0	0	162	21.5	20.34	20.02	20.00
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.41	20.04	20.05
			0	81	1	21.5	***20.54***	***20.17***	***20.13***
			0	160	1	21.5	20.50	20.07	19.93
			0	0	81	21.5	20.37	19.97	20.05
			0	40	81	21.5	20.36	19.99	20.11
			0	81	81	21.5	20.46	19.96	20.08
			0	0	162	21.5	20.31	19.93	20.01
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.33	20.02	20.08
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.34	20.01	19.89
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.52	17.58	17.58
CP-OFDM	QPSK	30	0	1	1	21.5	20.30	20.03	20.11

BW 50 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	504200 / 2521 [dBm]	518600 / 2593 [dBm]	533000 / 2665 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.43	19.98	20.52
			0	67	1	21.5	20.57	20.16	20.55
			0	131	1	21.5	20.49	20.07	20.58
			0	0	64	21.5	20.43	20.04	20.48
			0	35	64	21.5	20.49	20.07	20.55
			0	69	64	21.5	20.45	20.00	20.46
			0	0	128	21.5	20.44	20.05	20.50
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.46	19.99	20.57
			0	67	1	21.5	***20.67***	***20.21***	***20.60***
			0	131	1	21.5	20.53	20.10	20.56
			0	0	64	21.5	20.52	20.04	20.50
			0	35	64	21.5	20.56	20.18	20.58
			0	69	64	21.5	20.49	20.15	20.57
			0	0	128	21.5	20.55	20.14	20.54
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.49	20.11	20.48
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.52	20.05	20.46
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.62	17.65	17.61
CP-OFDM	QPSK	30	0	1	1	21.5	20.53	20.04	20.39

BW 40 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	503200 / 2516 [dBm]	518600 / 2593 [dBm]	534000 / 2670 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.34	20.06	20.08
			0	53	1	21.5	20.38	20.10	19.92
			0	104	1	21.5	20.37	20.03	20.02
			0	0	50	21.5	20.36	20.00	19.92
			0	28	50	21.5	20.31	20.06	19.90
			0	56	50	21.5	20.34	19.89	19.95
			0	0	100	21.5	20.33	19.90	19.92
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.23	20.01	20.05
			0	53	1	21.5	***20.46***	***20.12***	***20.14***
			0	104	1	21.5	20.40	20.02	19.95
			0	0	50	21.5	20.31	20.04	19.99
			0	28	50	21.5	20.40	20.11	19.92
			0	56	50	21.5	20.27	20.03	19.90
			0	0	100	21.5	20.25	20.11	19.91
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.31	20.03	19.99
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.22	19.92	20.06
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.62	17.52	17.58
CP-OFDM	QPSK	30	0	1	1	21.5	20.24	20.04	20.02

BW 20 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	501200 / 2506 [dBm]	509900 / 2549.5 [dBm]	518600 / 2593 [dBm]	527300 / 2636.5 [dBm]	536000 / 2680 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	21.5	20.47	20.22	20.00	19.98	19.88
			0	26	1	21.5	20.48	20.24	20.03	20.04	20.08
			0	49	1	21.5	20.35	20.11	19.98	19.96	19.92
			0	0	25	21.5	20.33	20.20	19.90	19.94	19.87
			0	13	25	21.5	20.34	20.21	20.02	20.01	19.89
			0	26	25	21.5	20.29	20.19	20.01	19.93	19.86
			0	0	50	21.5	20.30	20.20	19.85	19.96	19.88
DFTS-OFDM	QPSK	30	0	1	1	21.5	20.42	20.15	19.83	19.96	19.90
			0	26	1	21.5	***20.53***	***20.32***	***20.05***	***20.17***	***20.10***
			0	49	1	21.5	20.34	20.28	19.92	19.97	19.92
			0	0	25	21.5	20.33	20.25	19.95	20.06	19.89
			0	13	25	21.5	20.45	20.27	20.01	19.95	19.88
			0	26	25	21.5	20.31	20.30	19.88	19.96	19.90
			0	0	50	21.5	20.30	20.19	19.92	19.93	19.87
DFTS-OFDM	16QAM	30	0	1	1	21.5	20.33	20.30	19.89	19.98	20.02
DFTS-OFDM	64QAM	30	0	1	1	21.5	20.47	20.28	19.87	20.07	20.05
DFTS-OFDM	256QAM	30	2	1	1	19.5	17.99	17.65	17.95	17.72	17.95
CP-OFDM	QPSK	30	0	1	1	21.5	20.41	20.27	19.82	20.10	19.89

13.5.6 NR band n41 DSI1 FCC

BW 100 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.17
			0	137	1	12.2	***11.62***
			0	271	1	12.2	11.14
			0	0	135	12.2	11.16
			0	69	135	12.2	11.40
			0	138	135	12.2	10.91
			0	0	270	12.2	11.05
DFTS-OFDM	QPSK	30	0	1	1	12.2	11.15
			0	137	1	12.2	11.60
			0	271	1	12.2	11.08
			0	0	135	12.2	11.18
			0	69	135	12.2	11.40
			0	138	135	12.2	10.96
			0	0	270	12.2	11.11
DFTS-OFDM	16QAM	30	0	1	1	12.2	11.55
DFTS-OFDM	64QAM	30	0	1	1	12.2	11.33
DFTS-OFDM	256QAM	30	0	1	1	12.2	11.10
CP-OFDM	QPSK	30	0	1	1	12.2	11.55

BW 90 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.51
			0	123	1	12.2	***11.74***
			0	243	1	12.2	11.45
			0	0	120	12.2	11.32
			0	63	120	12.2	11.50
			0	125	120	12.2	11.09
			0	0	243	12.2	11.20
DFTS-OFDM	QPSK	30	0	1	1	12.2	11.31
			0	123	1	12.2	11.62
			0	243	1	12.2	11.35
			0	0	120	12.2	11.28
			0	63	120	12.2	11.48
			0	125	120	12.2	11.07
			0	0	243	12.2	11.19
DFTS-OFDM	16QAM	30	0	1	1	12.2	10.70
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.48
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.30
CP-OFDM	QPSK	30	0	1	1	12.2	10.73

BW 80 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	518600 / 2593 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.38
			0	109	1	12.2	***11.78***
			0	215	1	12.2	11.45
			0	0	108	12.2	11.32
			0	55	108	12.2	11.53
			0	109	108	12.2	11.11
			0	0	216	12.2	11.17
DFTS-OFDM	QPSK	30	0	1	1	12.2	11.25
			0	109	1	12.2	11.70
			0	215	1	12.2	11.38
			0	0	108	12.2	11.25
			0	55	108	12.2	11.48
			0	109	108	12.2	11.08
			0	0	216	12.2	11.16
DFTS-OFDM	16QAM	30	0	1	1	12.2	10.62
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.41
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.20
CP-OFDM	QPSK	30	0	1	1	12.2	10.61

BW 60 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	505200 / 2526 [dBm]	518600 / 2593 [dBm]	532000 / 2660 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	10.25	11.14	10.75
			0	81	1	12.2	***11.53***	11.19	11.01
			0	160	1	12.2	10.61	10.83	11.32
			0	0	81	12.2	10.87	11.42	11.35
			0	40	81	12.2	11.25	11.59	11.30
			0	81	81	12.2	11.00	11.32	10.87
			0	0	162	12.2	10.93	11.36	11.10
DFTS-OFDM	QPSK	30	0	1	1	12.2	10.72	11.01	11.09
			0	81	1	12.2	11.43	***11.72***	***11.48***
			0	160	1	12.2	11.11	10.77	11.26
			0	0	81	12.2	10.89	11.43	11.30
			0	40	81	12.2	11.27	11.57	11.26
			0	81	81	12.2	11.01	11.30	11.23
			0	0	162	12.2	10.95	11.34	11.05
DFTS-OFDM	16QAM	30	0	1	1	12.2	10.87	10.93	11.01
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.32	10.71	10.80
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.85	10.50	10.78
CP-OFDM	QPSK	30	0	1	1	12.2	10.44	10.95	10.99

BW 50 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	504200 / 2521 [dBm]	518600 / 2593 [dBm]	533000 / 2665 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.12	11.11	11.29
			0	67	1	12.2	11.13	***11.56***	***11.49***
			0	131	1	12.2	11.01	11.37	11.01
			0	0	64	12.2	11.00	11.25	11.24
			0	35	64	12.2	10.92	11.38	11.27
			0	69	64	12.2	10.73	11.16	10.91
			0	0	128	12.2	10.60	11.21	11.10
DFTS-OFDM	QPSK	30	0	1	1	12.2	***11.44***	11.00	11.13
			0	67	1	12.2	11.06	11.50	11.35
			0	131	1	12.2	10.95	11.32	10.96
			0	0	64	12.2	10.97	11.24	11.23
			0	35	64	12.2	11.41	11.37	11.18
			0	69	64	12.2	11.22	11.14	10.89
			0	0	128	12.2	11.10	11.20	11.08
DFTS-OFDM	16QAM	30	0	1	1	12.2	10.64	10.90	11.00
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.60	10.66	10.79
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.63	10.47	10.79
CP-OFDM	QPSK	30	0	1	1	12.2	10.23	10.95	11.01

BW 40 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	503200 / 2516 [dBm]	518600 / 2593 [dBm]	534000 / 2670 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.00	***11.22***	11.26
			0	53	1	12.2	***11.30***	11.14	11.35
			0	104	1	12.2	11.06	11.16	11.21
			0	0	50	12.2	10.78	11.21	11.16
			0	28	50	12.2	10.98	10.79	***11.43***
			0	56	50	12.2	10.65	10.67	10.92
			0	0	100	12.2	10.51	10.72	11.13
DFTS-OFDM	QPSK	30	0	1	1	12.2	10.96	11.05	11.09
			0	53	1	12.2	11.25	10.97	11.23
			0	104	1	12.2	10.47	10.99	11.11
			0	0	50	12.2	10.81	11.18	11.11
			0	28	50	12.2	11.03	10.72	11.42
			0	56	50	12.2	10.66	11.17	10.90
			0	0	100	12.2	10.52	10.69	11.08
DFTS-OFDM	16QAM	30	0	1	1	12.2	10.76	10.89	10.34
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.34	10.61	10.63
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.91	10.69	10.90
CP-OFDM	QPSK	30	0	1	1	12.2	10.78	10.80	10.94

BW 20 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	501200 / 2506 [dBm]	509900 / 2549.5 [dBm]	518600 / 2593 [dBm]	527300 / 2636.5 [dBm]	536000 / 2680 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	12.2	11.33	***11.50***	11.23	11.06	10.93
			0	26	1	12.2	11.14	11.06	11.15	11.14	***11.38***
			0	49	1	12.2	***11.37***	11.44	***11.28***	10.86	11.04
			0	0	25	12.2	11.35	11.28	10.98	***11.22***	11.08
			0	13	25	12.2	10.94	11.47	10.92	10.86	11.23
			0	26	25	12.2	11.00	11.25	11.05	11.15	10.93
			0	0	50	12.2	10.66	11.27	10.98	11.21	11.01
DFTS-OFDM	QPSK	30	0	1	1	12.2	11.17	11.41	11.07	10.87	10.72
			0	26	1	12.2	11.12	11.03	11.06	10.99	11.37
			0	49	1	12.2	11.32	11.39	11.18	10.71	11.01
			0	0	25	12.2	10.89	11.26	10.97	11.08	11.09
			0	13	25	12.2	10.96	10.93	10.85	10.90	11.24
			0	26	25	12.2	11.04	10.73	11.05	10.84	10.96
			0	0	50	12.2	10.69	10.74	10.99	10.87	11.02
DFTS-OFDM	16QAM	30	0	1	1	12.2	11.15	11.18	10.90	11.15	11.00
DFTS-OFDM	64QAM	30	0	1	1	12.2	10.44	10.81	10.69	10.93	10.76
DFTS-OFDM	256QAM	30	0	1	1	12.2	10.33	10.82	10.70	11.00	11.03
CP-OFDM	QPSK	30	0	1	1	12.2	10.40	11.15	10.94	11.12	11.13

13.5.7 NR band n66 DSI0

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	344000 / 1720 [dBm]	349000 / 1745 [dBm]	354000 / 1770 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	21.8	21.01	21.01	20.95
			0	53	1	21.8	20.94	21.04	20.88
			0	104	1	21.8	***21.03***	***21.10***	***21.03***
			0	0	50	21.8	20.93	21.01	20.98
			0	28	50	21.8	20.91	20.98	20.89
			0	56	50	21.8	20.90	20.96	20.95
			0	0	100	21.8	20.89	20.97	20.94
DFTS-OFDM	QPSK	15	0	1	1	21.8	21.01	20.95	20.90
			0	53	1	21.8	20.84	20.96	20.89
			0	104	1	21.8	21.00	20.98	20.96
			0	0	50	21.8	20.94	20.97	20.86
			0	28	50	21.8	20.93	20.95	20.91
			0	56	50	21.8	20.86	20.98	20.96
			0	0	100	21.8	20.92	21.05	20.99
DFTS-OFDM	16QAM	15	0	1	1	21.8	20.81	20.90	20.81
DFTS-OFDM	64QAM	15	0.3	1	1	21.5	20.66	20.64	20.54
DFTS-OFDM	256QAM	15	2.3	1	1	19.5	18.69	18.66	18.70
CP-OFDM	QPSK	15	0	1	1	21.8	20.80	20.76	20.69

BW 15 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	343500 / 1717.5 [dBm]	349000 / 1745 [dBm]	354500 / 1772.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	21.8	20.97	21.05	20.94
			0	40	1	21.8	20.93	21.00	20.95
			0	77	1	21.8	***21.01***	***21.09***	***21.07***
			0	0	36	21.8	20.93	21.01	20.97
			0	22	36	21.8	20.83	20.92	20.89
			0	43	36	21.8	20.90	20.97	20.92
			0	0	75	21.8	20.96	21.02	20.97
DFTS-OFDM	QPSK	15	0	1	1	21.8	20.96	21.05	20.96
			0	40	1	21.8	20.78	20.95	20.85
			0	77	1	21.8	20.87	20.94	20.94
			0	0	36	21.8	20.90	21.02	20.95
			0	22	36	21.8	20.82	20.91	20.83
			0	43	36	21.8	20.87	21.00	20.91
			0	0	75	21.8	20.95	21.04	20.95
DFTS-OFDM	16QAM	15	0	1	1	21.8	20.81	20.92	20.87
DFTS-OFDM	64QAM	15	0.3	1	1	21.5	20.68	20.75	20.62
DFTS-OFDM	256QAM	15	2.3	1	1	19.5	18.68	18.77	18.67
CP-OFDM	QPSK	15	0	1	1	21.8	20.76	20.81	20.78

BW	10 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	343000 / 1715 [dBm]	349000 / 1745 [dBm]	355000 / 1775 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	21.8	20.90	21.02	20.99
			0	26	1	21.8	20.91	21.01	***21.02***
			0	50	1	21.8	***20.92***	***21.07***	20.98
			0	0	25	21.8	20.87	20.96	20.95
			0	14	25	21.8	20.86	20.94	20.94
			0	27	25	21.8	20.90	21.05	20.96
			0	0	50	21.8	20.88	20.91	20.96
DFTS-OFDM	QPSK	15	0	1	1	21.8	20.84	20.89	20.99
			0	26	1	21.8	20.80	21.02	20.89
			0	50	1	21.8	20.87	20.97	20.87
			0	0	25	21.8	20.86	20.91	20.96
			0	14	25	21.8	20.81	20.90	20.92
			0	27	25	21.8	20.84	20.99	20.89
			0	0	50	21.8	20.87	20.92	20.99
DFTS-OFDM	16QAM	15	0	1	1	21.8	20.77	20.87	20.92
DFTS-OFDM	64QAM	15	0.3	1	1	21.5	20.60	20.63	20.64
DFTS-OFDM	256QAM	15	2.3	1	1	19.5	18.61	18.66	18.67
CP-OFDM	QPSK	15	0	1	1	21.8	18.58	20.73	20.74

BW	5 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	342500 / 1712.5 [dBm]	349000 / 1745 [dBm]	355500 / 1777.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	21.8	20.89	20.97	20.94
			0	13	1	21.8	***20.90***	***21.08***	***20.98***
			0	23	1	21.8	20.86	21.06	20.96
			0	0	12	21.8	20.86	20.91	20.89
			0	7	12	21.8	20.89	21.02	20.97
			0	13	12	21.8	20.81	21.06	20.93
			0	0	25	21.8	20.81	20.90	20.92
DFTS-OFDM	QPSK	15	0	1	1	21.8	20.87	20.87	20.81
			0	13	1	21.8	20.77	20.97	20.89
			0	23	1	21.8	20.73	20.90	20.80
			0	0	12	21.8	20.87	20.96	20.77
			0	7	12	21.8	20.86	20.95	20.78
			0	13	12	21.8	20.85	20.94	20.76
			0	0	25	21.8	20.81	20.90	20.89
DFTS-OFDM	16QAM	15	0	1	1	21.8	20.79	20.85	20.85
DFTS-OFDM	64QAM	15	0.3	1	1	21.5	20.61	20.60	20.60
DFTS-OFDM	256QAM	15	2.3	1	1	19.5	18.55	18.63	18.65
CP-OFDM	QPSK	15	0	1	1	21.8	20.60	20.67	20.66

13.5.8 NR band n66 DSI1

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	344000 / 1720 [dBm]	349000 / 1745 [dBm]	354000 / 1770 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	17.26	17.28	17.22
			0	53	1	18.0	17.16	17.20	17.16
			0	104	1	18.0	17.25	17.25	17.24
			0	0	50	18.0	17.21	17.18	17.25
			0	28	50	18.0	17.22	17.26	17.27
			0	56	50	18.0	17.19	17.25	17.21
			0	0	100	18.0	17.16	17.27	17.26
DFTS-OFDM	QPSK	15	0	1	1	18.0	17.25	17.25	17.24
			0	53	1	18.0	17.11	17.15	17.19
			0	104	1	18.0	17.24	17.23	17.18
			0	0	50	18.0	17.21	17.27	17.29
			0	28	50	18.0	17.20	17.26	17.23
			0	56	50	18.0	17.17	17.24	17.22
			0	0	100	18.0	17.19	17.27	17.27
DFTS-OFDM	16QAM	15	0	1	1	18.0	17.11	16.98	17.04
DFTS-OFDM	64QAM	15	0	1	1	18.0	17.29	17.30	17.34
			0	53	1	18.0	17.22	17.27	17.27
			0	104	1	18.0	17.32	17.34	17.38
			0	0	50	18.0	17.18	17.25	17.17
			0	28	50	18.0	17.12	17.23	17.28
			0	56	50	18.0	17.16	17.24	17.21
			0	0	100	18.0	17.19	17.25	17.21
DFTS-OFDM	256QAM	15	0	1	1	18.0	17.36	17.35	17.39
			0	53	1	18.0	17.19	17.31	17.32
			0	104	1	18.0	17.41	17.34	17.35
			0	0	50	18.0	17.25	17.33	17.35
			0	28	50	18.0	17.22	17.29	17.27
			0	56	50	18.0	17.19	17.30	17.25
			0	0	100	18.0	17.23	17.26	17.26
CP-OFDM	QPSK	15	0	1	1	18.0	***17.55***	***17.57***	17.56
			0	53	1	18.0	17.48	17.56	***17.60***
			0	104	1	18.0	17.54	17.48	17.51
			0	0	53	18.0	17.26	17.30	17.31
			0	28	53	18.0	17.24	17.26	17.29
			0	53	53	18.0	17.22	17.23	17.30
			0	0	106	18.0	17.20	17.25	17.31

BW 15 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	343500 / 1717.5 [dBm]	349000 / 1745 [dBm]	354500 / 1772.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	17.17	17.28	17.27
			0	40	1	18.0	17.11	17.21	17.14
			0	77	1	18.0	17.23	17.25	17.22
			0	0	36	18.0	17.21	17.29	17.24
			0	22	36	18.0	17.13	17.16	17.16
			0	43	36	18.0	17.18	17.22	17.19
			0	0	75	18.0	17.17	17.22	17.22
DFTS-OFDM	QPSK	15	0	1	1	18.0	17.26	17.30	17.26
			0	40	1	18.0	17.23	17.14	17.11
			0	77	1	18.0	17.24	17.26	17.23
			0	0	36	18.0	17.23	17.25	17.21
			0	22	36	18.0	17.16	17.19	17.15
			0	43	36	18.0	17.21	17.23	17.20
			0	0	75	18.0	17.21	17.27	17.23
DFTS-OFDM	16QAM	15	0	1	1	18.0	17.04	17.07	17.04
DFTS-OFDM	64QAM	15	0	1	1	18.0	17.35	17.38	17.31
			0	40	1	18.0	17.28	17.34	17.26
			0	77	1	18.0	17.36	17.40	17.29
			0	0	36	18.0	17.27	17.32	17.27
			0	22	36	18.0	17.21	17.24	17.18
			0	43	36	18.0	17.22	17.23	17.19
			0	0	75	18.0	17.27	17.22	17.17
DFTS-OFDM	256QAM	15	0	1	1	18.0	17.24	17.45	17.39
			0	40	1	18.0	17.11	17.21	17.23
			0	77	1	18.0	17.34	17.37	17.32
			0	0	36	18.0	17.25	17.33	17.28
			0	22	36	18.0	17.20	17.26	17.18
			0	43	36	18.0	17.23	17.25	17.21
			0	0	75	18.0	17.23	17.26	17.23
CP-OFDM	QPSK	15	0	1	1	18.0	***17.56***	17.62	***17.60***
			0	40	1	18.0	17.52	***17.63***	17.57
			0	77	1	18.0	17.51	17.58	17.54
			0	0	39	18.0	17.20	17.27	17.23
			0	22	39	18.0	17.11	17.19	17.16
			0	40	39	18.0	17.15	17.24	17.20
			0	0	79	18.0	17.21	17.29	17.24

BW 10 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	343000 / 1715 [dBm]	349000 / 1745 [dBm]	355000 / 1775 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	17.17	17.21	17.30
			0	26	1	18.0	17.15	17.27	17.28
			0	50	1	18.0	17.14	17.29	17.27
			0	0	25	18.0	17.15	17.17	17.24
			0	14	25	18.0	17.13	17.13	17.22
			0	27	25	18.0	17.12	17.26	17.21
			0	0	50	18.0	17.15	17.17	17.23
DFTS-OFDM	QPSK	15	0	1	1	18.0	17.20	17.22	17.38
			0	26	1	18.0	17.19	***17.36***	***17.40***
			0	50	1	18.0	17.12	17.29	17.35
			0	0	25	18.0	17.19	17.11	17.25
			0	14	25	18.0	17.15	17.15	17.23
			0	27	25	18.0	17.14	17.17	17.22
			0	0	50	18.0	17.18	17.21	17.26
DFTS-OFDM	16QAM	15	0	1	1	18.0	17.01	17.11	17.25
DFTS-OFDM	64QAM	15	0	1	1	18.0	17.28	17.16	17.32
			0	26	1	18.0	17.15	17.23	17.26
			0	50	1	18.0	17.25	17.24	17.25
			0	0	25	18.0	17.15	17.07	17.24
			0	14	25	18.0	17.14	17.16	17.22
			0	27	25	18.0	17.12	17.17	17.18
			0	0	50	18.0	17.14	17.24	17.24
DFTS-OFDM	256QAM	15	0	1	1	18.0	17.26	17.08	17.24
			0	26	1	18.0	17.23	17.18	17.22
			0	50	1	18.0	17.15	17.19	17.19
			0	0	25	18.0	17.06	17.07	17.23
			0	14	25	18.0	17.09	17.18	17.25
			0	27	25	18.0	17.03	17.16	17.21
			0	0	50	18.0	17.16	17.19	17.27
CP-OFDM	QPSK	15	0	1	1	18.0	17.55	17.19	17.27
			0	26	1	18.0	***17.57***	17.26	17.34
			0	50	1	18.0	17.39	17.25	17.29
			0	0	26	18.0	17.14	17.20	17.31
			0	14	26	18.0	17.16	17.24	17.28
			0	26	26	18.0	17.15	17.28	17.32
			0	0	52	18.0	17.13	17.26	17.30

BW 5 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	342500 / 1712.5 [dBm]	349000 / 1745 [dBm]	355500 / 1777.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	18.0	17.25	17.26	17.28
			0	13	1	18.0	17.28	17.35	17.29
			0	23	1	18.0	17.23	17.34	17.25
			0	0	12	18.0	17.22	17.22	17.25
			0	7	12	18.0	17.21	17.23	17.24
			0	13	12	18.0	17.19	17.20	17.23
			0	0	25	18.0	17.15	17.17	17.22
DFTS-OFDM	QPSK	15	0	1	1	18.0	17.35	17.34	17.40
			0	13	1	18.0	***17.37***	17.40	***17.42***
			0	23	1	18.0	17.33	***17.42***	17.34
			0	0	12	18.0	17.24	17.26	17.26
			0	7	12	18.0	17.26	17.27	17.29
			0	13	12	18.0	17.23	17.22	17.25
			0	0	25	18.0	17.21	17.20	17.23
DFTS-OFDM	16QAM	15	0	1	1	18.0	17.22	17.20	17.25
DFTS-OFDM	64QAM	15	0	1	1	18.0	17.20	17.20	17.22
DFTS-OFDM	256QAM	15	0	1	1	18.0	17.13	17.13	17.17
CP-OFDM	QPSK	15	0	1	1	18.0	17.22	17.20	17.23

13.5.9 NR band n71 DSI0

BW	20 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	136100 / 680.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.5	***22.75***
			0	53	1	24.5	22.55
			0	104	1	24.5	22.54
			0.5	0	50	24.0	22.14
			0	28	50	24.5	22.53
			0.5	56	50	24.0	22.04
			0.5	0	100	24.0	22.16
DFTS-OFDM	QPSK	15	0	1	1	24.5	22.72
			0	53	1	24.5	22.56
			0	104	1	24.5	22.51
			1	0	50	23.5	21.64
			0	28	50	24.5	22.60
			1	56	50	23.5	21.53
			1	0	100	23.5	21.62
DFTS-OFDM	16QAM	15	1	1	1	23.5	21.74
DFTS-OFDM	64QAM	15	2.5	1	1	22.0	20.24
DFTS-OFDM	256QAM	15	4.5	1	1	20.0	18.24
CP-OFDM	QPSK	15	1.5	1	1	23.0	21.20

BW	15 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	136100 / 680.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.5	22.73
			0	40	1	24.5	22.54
			0	77	1	24.5	22.60
			0.5	0	36	24.0	22.17
			0	22	36	24.5	22.51
			0.5	43	36	24.0	22.03
			0.5	0	75	24.0	22.07
DFTS-OFDM	QPSK	15	0	1	1	24.5	***22.82***
			0	40	1	24.5	22.75
			0	77	1	24.5	22.71
			1	0	36	23.5	21.66
			0	22	36	24.5	22.67
			1	43	36	23.5	21.51
			1	0	75	23.5	21.56
DFTS-OFDM	16QAM	15	1	1	1	23.5	21.51
DFTS-OFDM	64QAM	15	2.5	1	1	22.0	20.30
DFTS-OFDM	256QAM	15	4.5	1	1	20.0	18.28
CP-OFDM	QPSK	15	1.5	1	1	23.0	21.31

BW 10 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	133600 / 668 [dBm]	136100 / 680.5 [dBm]	138600 / 693 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.5	22.83	22.64	22.59
			0	26	1	24.5	22.68	22.51	22.51
			0	50	1	24.5	22.73	22.52	22.53
			0.5	0	25	24.0	22.22	22.06	22.05
			0	14	25	24.5	22.68	22.53	22.52
			0.5	27	25	24.0	22.23	22.02	22.03
			0.5	0	50	24.0	22.25	22.05	22.05
DFTS-OFDM	QPSK	15	0	1	1	24.5	***22.92***	***22.75***	***22.71***
			0	26	1	24.5	22.84	22.73	22.69
			0	50	1	24.5	22.70	22.74	22.68
			1	0	25	23.5	21.73	21.58	21.57
			0	14	25	24.5	22.77	22.54	22.56
			1	27	25	23.5	21.69	21.53	21.52
			1	0	50	23.5	21.69	21.52	21.56
DFTS-OFDM	16QAM	15	1	1	1	23.5	21.70	21.58	21.54
DFTS-OFDM	64QAM	15	2.5	1	1	22.0	20.40	20.14	20.07
DFTS-OFDM	256QAM	15	4.5	1	1	20.0	18.35	18.11	18.18
CP-OFDM	QPSK	15	1.5	1	1	23.0	21.41	21.23	21.20

BW 5 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	133100 / 665.5 [dBm]	136100 / 680.5 [dBm]	139100 / 695.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	24.5	22.83	22.62	22.58
			0	13	1	24.5	22.78	22.60	22.54
			0	23	1	24.5	22.75	22.56	22.52
			0.5	0	12	24.0	22.30	22.12	22.05
			0	7	12	24.5	22.83	22.57	22.54
			0.5	13	12	24.0	22.26	22.08	22.03
			0.5	0	25	24.0	22.30	22.07	22.08
DFTS-OFDM	QPSK	15	0	1	1	24.5	***22.97***	***22.80***	***22.63***
			0	13	1	24.5	22.91	22.78	22.59
			0	23	1	24.5	22.79	22.63	22.57
			1	0	12	23.5	21.81	21.64	21.56
			0	7	12	24.5	22.80	22.62	22.53
			1	13	12	23.5	21.75	21.59	21.52
			1	0	25	23.5	21.76	21.56	21.59
DFTS-OFDM	16QAM	15	1	1	1	23.5	21.74	21.62	21.57
DFTS-OFDM	64QAM	15	2.5	1	1	22.0	20.28	20.14	20.03
DFTS-OFDM	256QAM	15	4.5	1	1	20.0	18.44	18.20	18.11
CP-OFDM	QPSK	15	1.5	1	1	23.0	21.25	21.24	21.12

13.5.10 NR band n71 DSI1

BW 20 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	136100 / 680.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	19.4	***18.58***
			0	53	1	19.4	18.46
			0	104	1	19.4	18.39
			0	0	50	19.4	18.49
			0	28	50	19.4	18.52
			0	56	50	19.4	18.40
			0	0	100	19.4	18.48
DFTS-OFDM	QPSK	15	0	1	1	19.4	18.49
			0	53	1	19.4	18.43
			0	104	1	19.4	18.38
			0	0	50	19.4	18.48
			0	28	50	19.4	18.45
			0	56	50	19.4	18.39
			0	0	100	19.4	18.50
DFTS-OFDM	16QAM	15	0	1	1	19.4	18.54
DFTS-OFDM	64QAM	15	0	1	1	19.4	18.51
DFTS-OFDM	256QAM	15	0	1	1	19.4	18.42
CP-OFDM	QPSK	15	0	1	1	19.4	18.42

BW 15 MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	136100 / 680.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	19.4	18.38
			0	40	1	19.4	18.27
			0	77	1	19.4	18.23
			0	0	36	19.4	18.26
			0	22	36	19.4	18.23
			0	43	36	19.4	18.22
			0	0	75	19.4	18.24
DFTS-OFDM	QPSK	15	0	1	1	19.4	***18.46***
			0	40	1	19.4	18.41
			0	77	1	19.4	18.34
			0	0	36	19.4	18.26
			0	22	36	19.4	18.22
			0	43	36	19.4	18.12
			0	0	75	19.4	18.26
DFTS-OFDM	16QAM	15	0	1	1	19.4	18.24
DFTS-OFDM	64QAM	15	0	1	1	19.4	18.35
DFTS-OFDM	256QAM	15	0	1	1	19.4	18.14
CP-OFDM	QPSK	15	0	1	1	19.4	18.13

BW 10 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	133600 / 668 [dBm]	136100 / 680.5 [dBm]	138600 / 693 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	19.4	18.44	18.19	***18.27***
			0	26	1	19.4	18.30	18.22	18.14
			0	50	1	19.4	18.27	18.23	18.01
			0	0	25	19.4	18.35	18.15	18.10
			0	14	25	19.4	18.23	18.18	18.09
			0	27	25	19.4	18.19	18.13	18.06
			0	0	50	19.4	18.29	18.23	18.17
DFTS-OFDM	QPSK	15	0	1	1	19.4	18.50	18.30	18.19
			0	26	1	19.4	18.36	***18.37***	18.13
			0	50	1	19.4	18.22	18.29	18.00
			0	0	25	19.4	18.36	18.17	18.14
			0	14	25	19.4	18.28	18.18	18.09
			0	27	25	19.4	18.26	18.16	18.07
			0	0	50	19.4	18.33	18.20	18.11
DFTS-OFDM	16QAM	15	0	1	1	19.4	18.19	18.09	18.21
DFTS-OFDM	64QAM	15	0	1	1	19.4	18.23	18.12	18.00
DFTS-OFDM	256QAM	15	0	1	1	19.4	18.19	18.06	18.09
CP-OFDM	QPSK	15	0	1	1	19.4	18.53	18.12	17.98
			0	26	1	19.4	***18.63***	18.14	17.83
			0	50	1	19.4	18.57	18.15	17.82
			0	0	26	19.4	18.21	18.14	18.18
			0	14	26	19.4	18.19	18.15	18.12
			0	26	26	19.4	18.23	18.12	18.04
			0	0	52	19.4	18.20	18.22	18.08

BW		5 MHz					ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	133100 / 665.5 [dBm]	136100 / 680.5 [dBm]	139100 / 695.5 [dBm]
DFTS-OFDM	BPSK	15	0	1	1	19.4	***18.56***	18.22	18.16
			0	13	1	19.4	18.42	18.12	17.94
			0	23	1	19.4	18.33	18.07	17.90
			0	0	12	19.4	18.32	18.13	17.99
			0	7	12	19.4	18.35	18.11	17.94
			0	13	12	19.4	18.25	18.08	17.90
			0	0	25	19.4	18.27	18.07	17.88
DFTS-OFDM	QPSK	15	0	1	1	19.4	18.32	18.09	18.05
			0	13	1	19.4	18.28	17.98	17.82
			0	23	1	19.4	18.19	17.99	17.83
			0	0	12	19.4	18.41	18.11	18.02
			0	7	12	19.4	18.40	18.14	17.99
			0	13	12	19.4	18.28	18.06	17.90
			0	0	25	19.4	18.31	18.11	17.92
DFTS-OFDM	16QAM	15	0	1	1	19.4	18.45	18.28	***18.26***
			0	13	1	19.4	18.44	18.28	18.16
			0	23	1	19.4	18.31	18.13	18.04
			0	0	12	19.4	18.33	18.07	18.06
			0	7	12	19.4	18.25	18.06	17.92
			0	13	12	19.4	18.19	18.00	17.91
			0	0	25	19.4	18.27	18.10	17.99
DFTS-OFDM	64QAM	15	0	1	1	19.4	18.52	***18.35***	18.22
			0	13	1	19.4	18.46	18.31	18.14
			0	23	1	19.4	18.43	18.22	18.07
			0	0	12	19.4	18.31	18.02	18.00
			0	7	12	19.4	18.27	18.06	17.90
			0	13	12	19.4	18.18	18.04	17.87
			0	0	25	19.4	18.22	18.08	17.94
DFTS-OFDM	256QAM	15	0	1	1	19.4	18.38	18.05	18.05
CP-OFDM	QPSK	15	0	1	1	19.4	18.20	18.08	18.01

13.5.11 NR band n77 Block A DSI0 FCC

BW	100 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	***19.17***
			0	137	1	20.1	19.02
			0	271	1	20.1	19.09
			0	0	135	20.1	19.03
			0	69	135	20.1	19.00
			0	138	135	20.1	18.99
			0	0	270	20.1	19.03
DFTS-OFDM	QPSK	30	0	1	1	20.1	19.16
			0	137	1	20.1	19.15
			0	271	1	20.1	19.14
			0	0	135	20.1	19.01
			0	69	135	20.1	19.03
			0	138	135	20.1	19.04
			0	0	270	20.1	19.04
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.90
DFTS-OFDM	64QAM	30	0	1	1	20.1	19.09
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.53
CP-OFDM	QPSK	30	0	1	1	20.1	19.16

BW	90 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.86
			0	123	1	20.1	18.83
			0	243	1	20.1	***18.89***
			0	0	120	20.1	18.81
			0	63	120	20.1	18.78
			0	125	120	20.1	18.77
			0	0	243	20.1	18.74
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.87
			0	123	1	20.1	18.81
			0	243	1	20.1	18.85
			0	0	120	20.1	18.81
			0	63	120	20.1	18.77
			0	125	120	20.1	18.75
			0	0	243	20.1	18.79
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.88
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.75
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.39
CP-OFDM	QPSK	30	0	1	1	20.1	18.80

BW	80 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.83
			0	109	1	20.1	18.70
			0	215	1	20.1	18.73
			0	0	108	20.1	18.74
			0	55	108	20.1	18.76
			0	109	108	20.1	18.79
			0	0	216	20.1	18.79
DFTS-OFDM	QPSK	30	0	1	1	20.1	***18.90***
			0	109	1	20.1	18.80
			0	215	1	20.1	18.88
			0	0	108	20.1	18.80
			0	55	108	20.1	18.76
			0	109	108	20.1	18.83
			0	0	216	20.1	18.79
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.86
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.73
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.40
CP-OFDM	QPSK	30	0	1	1	20.1	18.88

BW	60 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.91
			0	81	1	20.1	18.80
			0	160	1	20.1	18.85
			0	0	81	20.1	18.82
			0	40	81	20.1	18.72
			0	81	81	20.1	18.75
			0	0	162	20.1	18.77
DFTS-OFDM	QPSK	30	0	1	1	20.1	***18.96***
			0	81	1	20.1	18.88
			0	160	1	20.1	18.89
			0	0	81	20.1	18.82
			0	40	81	20.1	18.75
			0	81	81	20.1	18.78
			0	0	162	20.1	18.83
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.95
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.77
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.45
CP-OFDM	QPSK	30	0	1	1	20.1	18.92

BW	50 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.73
			0	67	1	20.1	18.68
			0	131	1	20.1	***18.83***
			0	0	64	20.1	18.73
			0	35	64	20.1	18.79
			0	69	64	20.1	18.74
			0	0	128	20.1	18.81
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.81
			0	67	1	20.1	18.79
			0	131	1	20.1	18.80
			0	0	64	20.1	18.74
			0	35	64	20.1	18.77
			0	69	64	20.1	18.70
			0	0	128	20.1	18.75
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.80
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.65
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.36
CP-OFDM	QPSK	30	0	1	1	20.1	18.79

BW	40 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.91
			0	53	1	20.1	18.76
			0	104	1	20.1	***19.08***
			0	0	50	20.1	18.91
			0	28	50	20.1	18.92
			0	56	50	20.1	19.01
			0	0	100	20.1	18.87
DFTS-OFDM	QPSK	30	0	1	1	20.1	19.04
			0	53	1	20.1	18.85
			0	104	1	20.1	19.07
			0	0	50	20.1	18.81
			0	28	50	20.1	18.79
			0	56	50	20.1	18.89
			0	0	100	20.1	18.85
DFTS-OFDM	16QAM	30	0	1	1	20.1	19.02
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.81
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.63
CP-OFDM	QPSK	30	0	1	1	20.1	18.99

BW	20 MHz					ch/MHz			
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	630666 / 3460 [dBm]	633332 / 3500 [dBm]	635998 / 3550 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.95	18.89	***19.04***
			0	26	1	20.1	18.88	18.84	18.93
			0	49	1	20.1	18.84	18.85	19.02
			0	0	25	20.1	18.94	18.88	18.95
			0	13	25	20.1	18.88	18.87	18.90
			0	26	25	20.1	18.87	18.82	18.86
			0	0	50	20.1	18.94	18.84	18.86
DFTS-OFDM	QPSK	30	0	1	1	20.1	***19.04***	***19.02***	19.03
			0	26	1	20.1	18.96	18.92	18.93
			0	49	1	20.1	19.02	18.89	19.02
			0	0	25	20.1	19.00	18.86	18.87
			0	13	25	20.1	18.96	18.85	18.82
			0	26	25	20.1	18.94	18.88	18.86
			0	0	50	20.1	18.94	18.88	18.86
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.94	18.93	18.83
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.93	18.82	18.92
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.59	18.51	18.40
CP-OFDM	QPSK	30	0	1	1	20.1	18.94	18.92	18.89

13.5.12 NR band n77 Block A DSI1 FCC

BW	100 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.99
			0	137	1	9.0	***8.12***
			0	271	1	9.0	8.05
			0	0	135	9.0	7.93
			0	69	135	9.0	8.06
			0	138	135	9.0	8.00
			0	0	270	9.0	8.03
DFTS-OFDM	QPSK	30	0	1	1	9.0	8.10
			0	137	1	9.0	8.11
			0	271	1	9.0	8.08
			0	0	135	9.0	7.99
			0	69	135	9.0	7.96
			0	138	135	9.0	8.02
			0	0	270	9.0	8.03
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.83
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.82
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.83
CP-OFDM	QPSK	30	0	1	1	9.0	8.04

BW	90 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.69
			0	123	1	9.0	7.72
			0	243	1	9.0	7.77
			0	0	120	9.0	7.63
			0	63	120	9.0	7.70
			0	125	120	9.0	7.64
			0	0	243	9.0	7.75
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.79
			0	123	1	9.0	7.73
			0	243	1	9.0	***7.84***
			0	0	120	9.0	7.70
			0	63	120	9.0	7.73
			0	125	120	9.0	7.66
			0	0	243	9.0	7.63
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.53
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.66
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.68
CP-OFDM	QPSK	30	0	1	1	9.0	7.62

BW	80 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.73
			0	109	1	9.0	***7.81***
			0	215	1	9.0	7.70
			0	0	108	9.0	7.67
			0	55	108	9.0	7.74
			0	109	108	9.0	7.64
			0	0	216	9.0	7.70
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.77
			0	109	1	9.0	7.71
			0	215	1	9.0	7.73
			0	0	108	9.0	7.64
			0	55	108	9.0	7.73
			0	109	108	9.0	7.67
			0	0	216	9.0	7.67
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.53
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.67
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.76
CP-OFDM	QPSK	30	0	1	1	9.0	7.59

BW	60 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.67
			0	81	1	9.0	7.77
			0	160	1	9.0	7.73
			0	0	81	9.0	7.69
			0	40	81	9.0	7.76
			0	81	81	9.0	7.63
			0	0	162	9.0	7.75
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.71
			0	81	1	9.0	7.73
			0	160	1	9.0	***7.83***
			0	0	81	9.0	7.64
			0	40	81	9.0	7.68
			0	81	81	9.0	7.67
			0	0	162	9.0	7.72
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.53
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.61
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.69
CP-OFDM	QPSK	30	0	1	1	9.0	7.61

BW	50 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.66
			0	67	1	9.0	7.65
			0	131	1	9.0	7.71
			0	0	64	9.0	7.68
			0	35	64	9.0	7.70
			0	69	64	9.0	7.65
			0	0	128	9.0	7.67
DFTS-OFDM	QPSK	30	0	1	1	9.0	***7.79***
			0	67	1	9.0	7.66
			0	131	1	9.0	7.75
			0	0	64	9.0	7.66
			0	35	64	9.0	7.70
			0	69	64	9.0	7.60
			0	0	128	9.0	7.65
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.53
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.60
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.62
CP-OFDM	QPSK	30	0	1	1	9.0	7.53

BW	40 MHz						ch/MHz
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	633332 / 3500 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.89
			0	53	1	9.0	7.80
			0	104	1	9.0	***7.98***
			0	0	50	9.0	7.82
			0	28	50	9.0	7.83
			0	56	50	9.0	7.97
			0	0	100	9.0	7.89
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.95
			0	53	1	9.0	7.94
			0	104	1	9.0	7.90
			0	0	50	9.0	7.80
			0	28	50	9.0	7.83
			0	56	50	9.0	7.94
			0	0	100	9.0	7.86
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.74
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.84
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.88
CP-OFDM	QPSK	30	0	1	1	9.0	7.78

BW	20 MHz					ch/MHz			
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	630666 / 3460 [dBm]	633332 / 3500 [dBm]	635998 / 3550 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.88	7.81	7.87
			0	26	1	9.0	7.83	7.71	7.84
			0	49	1	9.0	7.84	7.76	7.88
			0	0	25	9.0	7.78	7.72	7.83
			0	13	25	9.0	7.79	7.63	7.81
			0	26	25	9.0	7.74	7.74	7.82
			0	0	50	9.0	7.75	7.70	7.79
DFTS-OFDM	QPSK	30	0	1	1	9.0	***7.96***	7.83	7.89
			0	26	1	9.0	7.83	7.76	7.87
			0	49	1	9.0	7.90	***7.87***	***7.93***
			0	0	25	9.0	7.82	7.70	7.78
			0	13	25	9.0	7.76	7.63	7.77
			0	26	25	9.0	7.81	7.71	7.79
			0	0	50	9.0	7.74	7.69	7.77
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.76	7.60	7.69
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.84	7.67	7.85
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.93	7.78	7.88
CP-OFDM	QPSK	30	0	1	1	9.0	7.82	7.66	7.74

13.5.13 NR band n77 Block C DSI0 FCC

BW 100 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	656000 / 3840 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	19.01
			0	137	1	20.1	19.02
			0	271	1	20.1	***19.36***
			0	0	135	20.1	18.98
			0	69	135	20.1	19.12
			0	138	135	20.1	19.19
			0	0	270	20.1	19.13
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.99
			0	137	1	20.1	19.10
			0	271	1	20.1	19.30
			0	0	135	20.1	19.04
			0	69	135	20.1	19.10
			0	138	135	20.1	19.18
			0	0	270	20.1	19.15
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.90
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.85
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.13
CP-OFDM	QPSK	30	0	1	1	20.1	19.03

BW 90 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	649666 / 3745 [dBm]	656000 / 3840 [dBm]	662333 / 3935 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.65	18.65	18.76
			0	123	1	20.1	18.71	18.73	18.96
			0	243	1	20.1	18.80	***18.85***	18.95
			0	0	120	20.1	18.64	18.60	18.74
			0	63	120	20.1	18.77	18.71	18.89
			0	125	120	20.1	18.76	18.79	18.92
			0	0	243	20.1	18.73	18.70	18.82
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.72	18.71	18.76
			0	123	1	20.1	18.81	18.77	***18.99***
			0	243	1	20.1	***18.88***	18.66	18.93
			0	0	120	20.1	18.87	18.61	18.75
			0	63	120	20.1	18.76	18.74	18.88
			0	125	120	20.1	18.77	18.73	18.89
			0	0	243	20.1	18.74	18.71	18.89
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.51	18.46	18.57
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.60	18.53	18.62
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.07	18.04	18.06
CP-OFDM	QPSK	30	0	1	1	20.1	18.57	18.51	18.62

BW	80 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	649333 / 3740 [dBm]	656000 / 3840 [dBm]	662666 / 3940 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.72	18.62	18.85
			0	109	1	20.1	18.80	18.81	18.99
			0	215	1	20.1	***18.85***	18.84	18.87
			0	0	108	20.1	18.69	18.61	18.78
			0	55	108	20.1	18.72	18.75	18.92
			0	109	108	20.1	18.81	18.79	18.90
			0	0	216	20.1	18.74	18.73	18.91
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.74	18.69	18.89
			0	109	1	20.1	18.80	18.76	***19.03***
			0	215	1	20.1	18.84	***18.87***	18.91
			0	0	108	20.1	18.65	18.65	18.79
			0	55	108	20.1	18.73	18.71	18.90
			0	109	108	20.1	18.81	18.83	18.89
			0	0	216	20.1	18.75	18.74	18.87
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.55	18.53	18.69
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.61	18.59	18.72
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.12	18.08	18.21
CP-OFDM	QPSK	30	0	1	1	20.1	18.62	18.57	18.70

BW	60 MHz						ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648666 / 3730 [dBm]	656000 / 3840 [dBm]	663333 / 3950 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.64	18.65	18.82
			0	81	1	20.1	18.76	18.82	19.01
			0	160	1	20.1	18.89	18.89	18.99
			0	0	81	20.1	18.65	18.68	18.87
			0	40	81	20.1	18.70	18.77	18.94
			0	81	81	20.1	18.81	18.81	18.90
			0	0	162	20.1	18.72	18.71	18.86
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.76	18.71	18.87
			0	81	1	20.1	18.89	18.84	***19.05***
			0	160	1	20.1	***18.94***	***18.99***	19.04
			0	0	81	20.1	18.65	18.64	18.90
			0	40	81	20.1	18.72	18.72	18.92
			0	81	81	20.1	18.78	18.79	18.93
			0	0	162	20.1	18.72	18.77	18.91
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.76	18.47	18.70
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.57	18.57	18.68
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.07	18.09	18.19
CP-OFDM	QPSK	30	0	1	1	20.1	18.60	18.56	18.70

BW 50 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648333 / 3725 [dBm]	652166 / 3782.5 [dBm]	656000 / 3840 [dBm]	659832 / 3897.5 [dBm]	663666 / 3955 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	18.72	18.65	18.66	18.62	18.80
			0	67	1	20.1	18.87	18.69	18.61	18.69	18.85
			0	131	1	20.1	18.85	18.81	18.90	18.83	18.94
			0	0	64	20.1	18.70	18.73	18.60	18.90	18.95
			0	35	64	20.1	18.79	18.71	18.73	18.65	18.98
			0	69	64	20.1	18.85	18.74	18.70	18.70	18.86
			0	0	128	20.1	18.84	18.72	18.67	18.69	18.91
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.78	18.76	18.70	18.61	19.05
			0	67	1	20.1	18.85	18.79	18.74	18.70	19.02
			0	131	1	20.1	***18.91***	***18.89***	***18.98***	***18.93***	***19.11***
			0	0	64	20.1	18.78	18.70	18.69	18.66	18.97
			0	35	64	20.1	18.83	18.80	18.75	18.70	18.99
			0	69	64	20.1	18.85	18.82	18.76	18.77	19.03
			0	0	128	20.1	18.83	18.77	18.68	18.69	18.95
DFTS-OFDM	16QAM	30	0	1	1	20.1	18.51	18.50	18.51	18.77	19.10
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.55	18.45	18.45	18.17	18.56
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.58	18.48	18.49	18.02	18.37
CP-OFDM	QPSK	30	0	1	1	20.1	18.79	18.73	18.69	18.54	18.95

BW 40 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648333 / 3725 [dBm]	652843 / 3780 [dBm]	656000 / 3840 [dBm]	659998 / 3900 [dBm]	664000 / 3960 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	19.12	19.12	19.00	19.10	19.25
			0	53	1	20.1	19.08	19.03	18.96	19.04	19.20
			0	104	1	20.1	***19.30***	***19.20***	***19.12***	***19.29***	***19.30***
			0	0	50	20.1	19.07	19.00	18.90	18.97	19.22
			0	28	50	20.1	19.08	19.02	18.95	18.99	19.20
			0	56	50	20.1	19.19	19.13	18.99	19.20	19.28
			0	0	100	20.1	19.12	19.05	18.99	19.07	19.28
DFTS-OFDM	QPSK	30	0	1	1	20.1	19.19	19.09	18.95	19.18	19.27
			0	53	1	20.1	19.09	19.05	18.54	19.08	19.25
			0	104	1	20.1	19.29	19.16	19.06	19.28	19.29
			0	0	50	20.1	18.98	19.00	18.96	19.03	19.21
			0	28	50	20.1	19.08	19.04	18.99	19.01	19.22
			0	56	50	20.1	19.16	19.11	19.02	19.23	19.28
			0	0	100	20.1	19.07	19.08	18.96	19.07	19.28
DFTS-OFDM	16QAM	30	0	1	1	20.1	19.18	19.11	19.06	19.11	19.29
DFTS-OFDM	64QAM	30	0	1	1	20.1	19.05	18.98	18.90	18.96	19.21
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.87	18.78	18.72	18.75	18.98
CP-OFDM	QPSK	30	0	1	1	20.1	19.11	19.05	19.02	19.09	19.28

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	647333 / 3710 [dBm]	651666 / 3775 [dBm]	656000 / 3840 [dBm]	660333 / 3905 [dBm]	664666 / 3970 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	20.1	19.06	18.88	18.72	18.77	19.05
			0	26	1	20.1	18.95	18.84	18.69	18.88	19.12
			0	49	1	20.1	19.02	19.01	18.79	18.94	19.17
			0	0	25	20.1	18.92	18.88	18.67	18.87	19.13
			0	13	25	20.1	18.91	18.83	18.66	18.83	19.02
			0	26	25	20.1	18.93	18.85	18.69	18.86	19.07
			0	0	50	20.1	18.97	18.86	18.67	18.86	19.02
DFTS-OFDM	QPSK	30	0	1	1	20.1	18.99	18.86	18.69	18.80	19.13
			0	26	1	20.1	18.94	18.84	18.65	18.84	19.09
			0	49	1	20.1	***19.07***	***19.02***	***18.83***	***18.95***	***19.19***
			0	0	25	20.1	18.97	18.89	18.70	18.89	19.18
			0	13	25	20.1	18.94	18.86	18.66	18.88	19.02
			0	26	25	20.1	18.99	18.92	18.71	18.90	19.01
			0	0	50	20.1	18.94	18.92	18.69	18.90	19.08
DFTS-OFDM	16QAM	30	0	1	1	20.1	19.04	18.93	18.72	18.92	19.18
DFTS-OFDM	64QAM	30	0	1	1	20.1	18.90	18.85	18.64	18.68	19.01
DFTS-OFDM	256QAM	30	0.6	1	1	19.5	18.69	18.56	18.40	18.60	18.80
CP-OFDM	QPSK	30	0	1	1	20.1	18.95	18.90	18.71	18.85	19.03

13.5.14 NR band n77 Block C DSI1 FCC

BW 100 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	656000 / 3840 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.90
			0	137	1	9.0	8.04
			0	271	1	9.0	***8.27***
			0	0	135	9.0	7.87
			0	69	135	9.0	7.92
			0	138	135	9.0	8.07
			0	0	270	9.0	7.97
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.85
			0	137	1	9.0	7.99
			0	271	1	9.0	8.26
			0	0	135	9.0	7.83
			0	69	135	9.0	7.93
			0	138	135	9.0	8.01
			0	0	270	9.0	7.95
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.68
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.61
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.72
CP-OFDM	QPSK	30	0	1	1	9.0	7.76

BW 90 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	649666 / 3745 [dBm]	656000 / 3840 [dBm]	662333 / 3935 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.58	7.41	7.43
			0	123	1	9.0	7.64	7.48	7.59
			0	243	1	9.0	7.70	7.59	***7.72***
			0	0	120	9.0	7.52	7.33	7.49
			0	63	120	9.0	7.67	7.43	7.52
			0	125	120	9.0	7.65	7.47	7.66
			0	0	243	9.0	7.67	7.38	7.51
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.64	7.42	7.39
			0	123	1	9.0	7.69	7.50	7.57
			0	243	1	9.0	***7.76***	***7.60***	***7.72***
			0	0	120	9.0	7.61	7.32	7.47
			0	63	120	9.0	7.70	7.39	7.53
			0	125	120	9.0	7.68	7.41	7.65
			0	0	243	9.0	7.62	7.40	7.50
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.75	7.45	7.49
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.48	7.14	7.21
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.75	7.40	7.43
CP-OFDM	QPSK	30	0	1	1	9.0	7.50	7.41	7.36

BW		80 MHz					ch/MHz		
OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	649333 / 3740 [dBm]	656000 / 3840 [dBm]	662666 / 3940 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.59	7.41	7.42
			0	109	1	9.0	7.67	7.49	7.66
			0	215	1	9.0	***7.68***	***7.59***	***7.70***
			0	0	108	9.0	7.52	7.35	7.52
			0	55	108	9.0	7.65	7.44	7.59
			0	109	108	9.0	7.64	7.42	7.68
			0	0	216	9.0	7.63	7.42	7.55
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.59	7.37	7.47
			0	109	1	9.0	***7.68***	7.48	7.69
			0	215	1	9.0	7.64	7.54	7.67
			0	0	108	9.0	7.53	7.33	7.49
			0	55	108	9.0	7.59	7.39	7.54
			0	109	108	9.0	7.67	7.46	7.65
			0	0	216	9.0	7.65	7.39	7.56
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.65	7.49	7.50
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.43	7.20	7.25
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.63	7.39	7.44
CP-OFDM	QPSK	30	0	1	1	9.0	7.55	7.39	7.40

BW 60 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648666 / 3730 [dBm]	656000 / 3840 [dBm]	663333 / 3950 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.57	7.41	7.53
			0	81	1	9.0	7.70	7.48	7.74
			0	160	1	9.0	7.76	7.64	***7.77***
			0	0	81	9.0	7.56	7.40	7.45
			0	40	81	9.0	7.64	7.46	7.53
			0	81	81	9.0	7.66	7.49	7.69
			0	0	162	9.0	7.67	7.44	7.52
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.56	7.36	7.49
			0	81	1	9.0	7.69	7.53	7.71
			0	160	1	9.0	***7.77***	***7.68***	7.67
			0	0	81	9.0	7.56	7.37	7.51
			0	40	81	9.0	7.68	7.44	7.59
			0	81	81	9.0	7.69	7.43	7.67
			0	0	162	9.0	7.62	7.45	7.51
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.67	7.46	7.51
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.37	7.13	7.29
DFTS-OFDM	256QAM	30	0.6	1	1	8.4	7.57	7.40	7.49
CP-OFDM	QPSK	30	0	1	1	9.0	7.52	7.40	7.47

BW 50 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648333 / 3725 [dBm]	652166 / 3782.5 [dBm]	656000 / 3840 [dBm]	659832 / 3897.5 [dBm]	663666 / 3955 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.64	7.40	7.37	7.40	7.64
			0	67	1	9.0	7.68	7.47	7.39	7.50	7.66
			0	131	1	9.0	***7.78***	***7.62***	***7.52***	***7.57***	***7.82***
			0	0	64	9.0	7.56	7.46	7.37	7.41	7.64
			0	35	64	9.0	7.70	7.52	7.42	7.49	7.61
			0	69	64	9.0	7.66	7.55	7.41	7.51	7.80
			0	0	128	9.0	7.60	7.54	7.42	7.47	7.67
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.58	7.41	7.27	7.35	7.65
			0	67	1	9.0	7.71	7.50	7.43	7.49	7.66
			0	131	1	9.0	7.75	7.60	7.50	7.54	7.81
			0	0	64	9.0	7.62	7.45	7.37	7.43	7.62
			0	35	64	9.0	7.66	7.50	7.39	7.46	7.61
			0	69	64	9.0	7.69	7.49	7.42	7.49	7.67
			0	0	128	9.0	7.66	7.46	7.39	7.47	7.64
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.70	7.51	7.41	7.45	7.50
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.39	7.19	7.13	7.21	7.43
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.69	7.45	7.33	7.42	7.66
CP-OFDM	QPSK	30	0	1	1	9.0	7.64	7.38	7.33	7.32	7.61

BW 40 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	648333 / 3725 [dBm]	652843 / 3780 [dBm]	656000 / 3840 [dBm]	659998 / 3900 [dBm]	664000 / 3960 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.87	7.75	7.73	7.67	7.87
			0	53	1	9.0	7.83	7.66	7.62	7.61	7.80
			0	104	1	9.0	7.98	7.82	7.72	7.83	***7.99***
			0	0	50	9.0	7.93	7.74	7.60	7.63	7.85
			0	28	50	9.0	7.89	7.73	7.68	7.61	7.86
			0	56	50	9.0	7.98	7.76	7.71	7.79	7.98
			0	0	100	9.0	7.89	7.77	7.55	7.67	7.82
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.97	7.80	7.63	7.73	7.91
			0	53	1	9.0	7.93	7.74	7.56	7.62	7.78
			0	104	1	9.0	***7.99***	***7.89***	***7.74***	***7.87***	***7.99***
			0	0	50	9.0	7.83	7.72	7.59	7.64	7.85
			0	28	50	9.0	7.86	7.70	7.54	7.61	7.81
			0	56	50	9.0	7.87	7.79	7.64	7.68	7.98
			0	0	100	9.0	7.89	7.72	7.59	7.64	7.83
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.77	7.76	7.50	7.51	7.69
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.72	7.67	7.58	7.50	7.83
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.84	7.76	7.55	7.64	7.83
CP-OFDM	QPSK	30	0	1	1	9.0	7.86	7.81	7.55	7.57	7.81

BW 20 MHz ch/MHz

OFDM	Modulation	SCS [kHz]	Max. MPR [dB]	RB offset	RB size	Tune-up limit [dBm]	647333 / 3710 [dBm]	651666 / 3775 [dBm]	656000 / 3840 [dBm]	660333 / 3905 [dBm]	664666 / 3970 [dBm]
DFTS-OFDM	BPSK	30	0	1	1	9.0	7.82	7.65	7.52	7.44	7.77
			0	26	1	9.0	7.75	7.67	7.49	7.43	7.80
			0	49	1	9.0	***7.84***	***7.71***	***7.61***	***7.57***	***7.82***
			0	0	25	9.0	7.78	7.64	7.47	7.43	7.68
			0	13	25	9.0	7.74	7.56	7.46	7.41	7.75
			0	26	25	9.0	7.75	7.62	7.50	7.40	7.81
			0	0	50	9.0	7.79	7.65	7.44	7.38	7.79
DFTS-OFDM	QPSK	30	0	1	1	9.0	7.80	7.65	7.53	7.45	7.79
			0	26	1	9.0	7.79	7.64	7.51	7.48	7.71
			0	49	1	9.0	7.82	7.68	7.60	7.53	7.80
			0	0	25	9.0	7.78	7.58	7.47	7.43	7.69
			0	13	25	9.0	7.76	7.57	7.46	7.36	7.77
			0	26	25	9.0	7.79	7.63	7.48	7.38	7.78
			0	0	50	9.0	7.66	7.61	7.30	7.38	7.75
DFTS-OFDM	16QAM	30	0	1	1	9.0	7.66	7.46	7.44	7.24	7.57
DFTS-OFDM	64QAM	30	0	1	1	9.0	7.76	7.56	7.45	7.36	7.73
DFTS-OFDM	256QAM	30	0	1	1	9.0	7.75	7.56	7.46	7.40	7.67
CP-OFDM	QPSK	30	0	1	1	9.0	7.69	7.53	7.44	7.34	7.61

13.6 Measurement configuration for SAR

13.6.1 SAR evaluation procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the E-field at a fixed location above the ear point or central position of flat phantom was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of head or body position was measured at a distance of each device from the inner surface of the shell. The area covered the entire dimension of the antenna of EUT and the horizontal grid spacing was 15 mm x 15 mm, 12 mm x 12 mm or 10 mm x 10 mm. Based on these data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Around this point found in the Step 2 (area scan), a volume of 30 mm x 30 mm x 30 mm or more was assessed by measuring 7 x 7 x 7 points at least for below 3 GHz and a volume of 28 mm x 28 mm x 22.5 mm or more was assessed by measuring 8 x 8 x 6(ratio step method (*1)) points at least for 5 GHz band.

And for any secondary peaks found in the Step2 which are within 2 dB of maximum peak and not with this Step3 (Zoom scan) is repeated.
On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

(1). The data at the surface were extrapolated, since the center of the dipoles is 1 mm(EX3DV4) away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm [4]. A polynomial of the fourth order was calculated through the points in z-axes.
This polynomial was then used to evaluate the points between the surface and the probe tip.

(2). The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one-dimensional splines with the “Not a knot"-condition (in x, y and z-directions) [4], [5]. The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

(3). All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

***1. Ratio step method parameters used;**
The first measurement point: 2 mm from the phantom surface, the initial grid separation: 2mm, subsequent graded grid ratio: 1.5
These parameters comply with the requirement of the KDB 865664D01.

Step 4: Re-measurement of the E-field at the same location as in Step 1.
Confirmation after SAR testing
It was checked that the power drift [W] is within +/-5 %.The verification of power drift during the SAR test is that DASY5 system calculates the power drift by measuring the e-filed at the same location at beginning and the end of the scan measurement for each test position.

DASY5/6 system calculation Power drift value[dB] =20log(Ea)/(Eb)
Before SAR testing : Eb[V/m]
After SAR testing : Ea[V/m]

Limit of power drift[W] =+/-5 %
X[dB]=10log[P]=10log(1.05/1)=10log(1.05)-10log(1)=0.212 dB

from E-filed relations with power.
p=E^2/η=E^2/
Therefore, The correlation of power and the E-filed
XdB=10log(P)=10log(E)^2=20log(E)

Therefore,
The calculated power drift of DASY5 System must be the less than +/-0.212 dB.

Step size.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 mm ± 1 mm	½·δ·ln(2) mm ± 0.5 mm
Maximum probe angle from probe axis to phantomsurface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device withat least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal tophantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3– 4 GHz: ≤ 4 mm 4– 5 GHz: ≤ 3 mm 5– 6 GHz: ≤ 2 mm
	gradedgrid	$\Delta z_{Zoom}(1)$: between 1st two points closestto phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequentpoints	≤ 1.5·$\Delta z_{Zoom}(n-1)$ mm	
Minimum zoomscan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std1528-2013 for details.
* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures ofKDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

13.6.2 KDB 447498 D01 (General RF Exposure Guidance):

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

- ✧ ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
- ✧ ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
- ✧ ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.6.3 KDB 941225 D01 (SAR test for 3G device):

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≦1/4 dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ration of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≦ 1.2 W/kg, SAR measurement is not required for the secondary mode.

13.6.4 KDB 941225 D01 (SAR for LTE Devices):

SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
  - o When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
  - o When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
  - o For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.
- The same procedures apply to QPSK 50 % RB allocation configurations at the largest channel bandwidth.
- Testing for 100 % RB allocation configurations at the largest channel bandwidth is performed for the channel, across low, mid and high, with the highest output power, when the highest reported SAR for either 1 RB or 50 % RB is ≥ 0.8 W/kg, or when the maximum output power among 100 % RB allocation configurations is greater than the maximum output power among either 1 RB or 50 % RB allocation configurations.
  - o Testing for the remaining channels in 100 % RB allocation configurations is required only when reported SAR for the initial 100 % RB allocation configuration is > 1.45 W/kg.
- Testing for higher order modulations (16-QAM or 64-QAM) is required only when the highest reported SAR for QPSK is > 1.45 W/Kg or if its output power is more than 0.5 dB higher than that of QPSK.
- Testing for the other channel bandwidths is required only when the highest reported SAR for the highest channel bandwidth is > 1.45 W/Kg or if its output power is more than 0.5 dB higher than that of the highest channel bandwidth.

13.6.5 KDB 447498 D01 (General RF Exposure Guidance):

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

- ✧ ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
- ✧ ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
- ✧ ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

- According to Notice 2016-DRS001 based on the IEEE1528 and IEC 62209 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
- When reported SAR value is exceed 1.2W/kg(if any), device holder perturbation verification is required; however, since distance between device holder and antenna of EUT is enough, it was not conducted.
- Reported SAR= Measured SAR [W/kg] · Scaled factor
  * Scaled factor = Maximum tune-up tolerance limit [mW] / Measured power [mW]
- Maximum tune-up tolerance limit is by the specification from a customer.

Note: Measured value is rounded round off to three decimal places

13.7 SAR result

13.7.1 WCDMA band 2 DSI=0, full power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge1	0	Rel 99 RMC 12.2 kbps	9262	1852.4	23.2	23.15			
			9400	1880.0	23.2	23.05	0.181	0.187	
			9538	1907.6	23.2	22.89			
Edge3	0	Rel 99 RMC 12.2 kbps	9262	1852.4	24.5	23.15			
			9400	1880.0	24.5	23.05	0.104	0.145	
			9538	1907.6	24.5	22.89			
Edge4	19	Rel 99 RMC 12.2 kbps	9262	1852.4	23.2	23.15			
			9400	1880	23.2	23.05	0.464	0.480	
			9538	1907.6	23.2	22.89			
Rear	9	Rel 99 RMC 12.2 kbps	9262	1852.4	23.2	23.15			
			9400	1880.0	23.2	23.05	0.486	0.503	
			9538	1907.6	23.2	22.89			
Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	9262	1852.4	23.2	23.15	0.726	0.734	
			9400	1880.0	23.2	23.05	***0.779***	**0.806**	W2.1
			9538	1907.6	23.2	22.89	0.711	0.764	
Rear tilt (Edge1 side)	0	Rel 99 RMC 12.2 kbps	9262	1852.4	23.2	23.15			
			9400	1880.0	23.2	23.05	0.593	0.614	
			9538	1907.6	23.2	22.89			

13.7.2 WCDMA band 2 DSI=1, reduction power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge4	0	Rel 99 RMC 12.2 kbps	9262	1852.4	17.7	16.43	***0.665***	0.891	
			9400	1880.0	17.7	16.33	0.656	0.899	
			9538	1907.6	17.7	16.14	0.639	**0.915**	W2.2
Rear tilt (Edge4 side)	0	Rel 99 RMC 12.2 kbps	9262	1852.4	17.7	16.43	0.652	0.873	
			9400	1880.0	17.7	16.33	0.635	0.871	
			9538	1907.6	17.7	16.14	0.579	0.829	
Rear	0	Rel 99 RMC 12.2 kbps	9262	1852.4	17.7	16.43			
			9400	1880.0	17.7	16.33	0.374	0.513	
			9538	1907.6	17.7	16.14			

13.7.3 WCDMA band 4 DSI=0, full power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge1	0	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.60			
			1413	1732.6	22.8	21.77	0.137	0.174	
			1513	1752.6	22.8	21.86			
Edge3	0	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.6			
			1413	1732.6	22.8	21.77	0.189	0.240	
			1513	1752.6	22.8	21.86			
Edge4	19	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.6			
			1413	1732.6	22.8	21.77	0.611	0.775	
			1513	1752.6	22.8	21.86			
Rear	9	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.60			
			1413	1732.6	22.8	21.77	0.463	0.587	
			1513	1752.6	22.8	21.86			
Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.60	***0.779***	**1.027**	W4.1
			1413	1732.6	22.8	21.77	0.744	0.943	
			1513	1752.6	22.8	21.86	0.712	0.884	
Rear tilt (Edge1 side)	0	Rel 99 RMC 12.2 kbps	1312	1712.4	22.8	21.60			
			1413	1732.6	22.8	21.77	0.555	0.704	
			1513	1752.6	22.8	21.86			

13.7.4 WCDMA band 4 DSI=1, reduction power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge4	0	Rel 99 RMC 12.2 kbps	1312	1712.4	18.6	17.38	0.715	0.947	
			1413	1732.6	18.6	17.57	0.764	0.968	
			1513	1752.6	18.6	17.62	***0.819***	1.026	
Rear tilt (Edge4 side)	0	Rel 99 RMC 12.2 kbps	1312	1712.4	18.6	17.38	0.811	**1.074**	W4.2
			1413	1732.6	18.6	17.57	0.815	1.033	
			1513	1752.6	18.6	17.62	0.814	1.020	
Rear	0	Rel 99 RMC 12.2 kbps	1312	1712.4	18.6	17.38			
			1413	1732.6	18.6	17.57	0.394	0.499	
			1513	1752.6	18.6	17.62			

13.7.5 WCDMA band 5 DSI=0, full power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge1	0	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31			
			4183	836.6	23.1	22.15	0.137	0.170	
			4233	846.6	23.1	21.95			
Edge3	0	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31			
			4183	836.6	23.1	22.15	0.037	0.046	
			4233	846.6	23.1	21.95			
Edge4	19	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31			
			4183	836.6	23.1	22.15	0.387	0.482	
			4233	846.6	23.1	21.95			
Rear	9	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31			
			4183	836.6	23.1	22.15	0.495	0.616	
			4233	846.6	23.1	21.95			
Rear tilt (Edge4 side)	9	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31	0.644	0.772	
			4183	836.6	23.1	22.15	***0.655***	**0.815**	W5.1
			4233	846.6	23.1	21.95	0.617	0.804	
Rear tilt (Edge1 side)	0	Rel 99 RMC 12.2 kbps	4132	826.4	23.1	22.31			
			4183	836.6	23.1	22.15	0.557	0.693	
			4233	846.6	23.1	21.95			

13.7.6 WCDMA band 5 DSI=1, reduction power

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
					Tune-up limit	Meas.	Meas.	Scaled	
Edge4	0	Rel 99 RMC 12.2 kbps	4132	826.4	17.2	16.19	0.624	0.787	
			4183	836.6	17.2	15.98	***0.626***	0.829	
			4233	846.6	17.2	15.77	0.612	**0.851**	W5.2
Rear tilt (Edge4 side)	0	Rel 99 RMC 12.2 kbps	4132	826.4	17.2	16.19			
			4183	836.6	17.2	15.98	0.363	0.481	
			4233	846.6	17.2	15.77			
Rear	0	Rel 99 RMC 12.2 kbps	4132	826.4	17.2	16.19			
			4183	836.6	17.2	15.98	0.242	0.320	
			4233	846.6	17.2	15.77			

13.7.7 LTE band 2 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	18700	1860	1	0	23.5	22.76	***0.751***	***0.891***	L2.1
			18900	1880	1	0	23.5	22.67	0.719	0.870	
			19100	1900	1	0	23.5	22.66	0.669	0.812	
			18700	1860	50	0	23.0	21.90	0.600	0.773	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89	0.583	0.753	
Edge 4	19	QPSK	18700	1860	1	0	23.5	22.76	0.532	0.631	
			18900	1880	1	0	23.5	22.67			
			19100	1900	1	0	23.5	22.66			
			18700	1860	50	0	23.0	21.90	0.428	0.551	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89			
Rear tilt(Edge4 side)	9	QPSK	18700	1860	1	0	23.5	22.76	0.704	0.835	
			18900	1880	1	0	23.5	22.67	0.656	0.794	
			19100	1900	1	0	23.5	22.66	0.599	0.727	
			18700	1860	50	0	23.0	21.90	0.588	0.757	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89	0.572	0.739	
Rear	9	QPSK	18700	1860	1	0	23.5	22.76	0.332	0.394	
			18900	1880	1	0	23.5	22.67			
			19100	1900	1	0	23.5	22.66			
			18700	1860	50	0	23.0	21.90	0.264	0.340	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89			
Edge 1	0	QPSK	18700	1860	1	0	23.5	22.76	0.268	0.318	
			18900	1880	1	0	23.5	22.67			
			19100	1900	1	0	23.5	22.66			
			18700	1860	50	0	23.0	21.90	0.181	0.233	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89			
Edge 3	0	QPSK	18700	1860	1	0	23.5	22.76	0.124	0.147	
			18900	1880	1	0	23.5	22.67			
			19100	1900	1	0	23.5	22.66			
			18700	1860	50	0	23.0	21.90	0.110	0.142	
			18900	1880	50	50	23.0	21.75			
			19100	1900	50	24	23.0	21.68			
			18700	1860	100	0	23.0	21.89			

13.7.8 LTE band 2 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	18700	1860	1	0	17.5	16.42	0.646	0.828	
			18900	1880	1	0	17.5	16.32	0.635	0.833	
			19100	1900	1	0	17.5	16.31	0.631	0.830	
			18700	1860	50	24	17.5	16.52	0.671	0.841	
			18900	1880	50	50	17.5	16.38	0.655	0.848	
			19100	1900	50	24	17.5	16.32	0.635	0.833	
			18700	1860	100	0	17.5	16.41	***0.672***	***0.864***	L2.2
Rear tilt(Edge4 side)	0	QPSK	18700	1860	1	0	17.5	16.42	0.611	0.784	
			18900	1880	1	0	17.5	16.32	0.630	0.827	
			19100	1900	1	0	17.5	16.31	0.589	0.775	
			18700	1860	50	24	17.5	16.52	0.627	0.786	
			18900	1880	50	50	17.5	16.38	0.622	0.805	
			19100	1900	50	24	17.5	16.32	0.586	0.769	
			18700	1860	100	0	17.5	16.41	0.626	0.805	
Rear	0	QPSK	18700	1860	1	0	17.5	16.42	0.407	0.522	
			18900	1880	1	0	17.5	16.32			
			19100	1900	1	0	17.5	16.31			
			18700	1860	50	24	17.5	16.52	0.417	0.523	
			18900	1880	50	50	17.5	16.38			
			19100	1900	50	24	17.5	16.32			
			18700	1860	100	0	17.5	16.41			

13.7.9 LTE band 4 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	20175	1732.5	1	99	22.5	21.31	0.560	0.737	
			20175	1732.5	50	50	22.5	21.42	0.578	0.741	
			20175	1732.5	100	0	22.5	21.29			
Edge 4	19	QPSK	20175	1732.5	1	99	22.5	21.31	0.591	0.777	
			20175	1732.5	50	50	22.5	21.42	0.632	0.810	
			20175	1732.5	100	0	22.5	21.29	0.649	0.858	
Rear tilt(Edge4 side)	9	QPSK	20175	1732.5	1	99	22.5	21.31	0.655	0.861	
			20175	1732.5	50	50	22.5	21.42	0.689	0.884	
			20175	1732.5	100	0	22.5	21.29	***0.696***	***0.920***	L4.1
Rear	9	QPSK	20175	1732.5	1	99	22.5	21.31	0.354	0.466	
			20175	1732.5	50	50	22.5	21.42	0.362	0.464	
			20175	1732.5	100	0	22.5	21.29			
Edge 1	0	QPSK	20175	1732.5	1	99	22.5	21.31	0.092	0.120	
			20175	1732.5	50	50	22.5	21.42	0.094	0.120	
			20175	1732.5	100	0	22.5	21.29			
Edge 3	0	QPSK	20175	1732.5	1	99	22.5	21.31	0.154	0.203	
			20175	1732.5	50	50	22.5	21.42	0.168	0.215	
			20175	1732.5	100	0	22.5	21.29			

13.7.10 LTE band 4 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	20175	1732.5	1	99	18.0	16.91	0.695	0.893	
			20175	1732.5	50	50	18.0	17.06	0.704	0.874	
			20175	1732.5	100	0	18.0	16.90	***0.712***	***0.917***	L4.2
Rear tilt(Edge4 side)	0	QPSK	20175	1732.5	1	99	18.0	16.91	0.675	0.868	
			20175	1732.5	50	50	18.0	17.06	0.695	0.863	
			20175	1732.5	100	0	18.0	16.90	0.705	0.908	
Rear	0	QPSK	20175	1732.5	1	99	18.0	16.91	0.353	0.454	
			20175	1732.5	50	50	18.0	17.06	0.367	0.456	
			20175	1732.5	100	0	18.0	16.90			

13.7.11 LTE band 5 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	20525	836.5	1	0	24.0	22.79	***0.562***	***0.743***	L5.1
			20525	836.5	25	0	23.0	21.80	0.449	0.592	
			20525	836.5	50	0	23.0	21.78			
Edge 4	19	QPSK	20525	836.5	1	0	24.0	22.79	0.515	0.680	
			20525	836.5	25	0	23.0	21.80	0.411	0.542	
			20525	836.5	50	0	23.0	21.78			
Rear tilt(Edge4 side)	9	QPSK	20525	836.5	1	0	24.0	22.79	0.558	0.737	
			20525	836.5	25	0	23.0	21.80	0.496	0.654	
			20525	836.5	50	0	23.0	21.78			
Rear	9	QPSK	20525	836.5	1	0	24.0	22.79	0.460	0.608	
			20525	836.5	25	0	23.0	21.80	0.364	0.480	
			20525	836.5	50	0	23.0	21.78			
Edge 1	0	QPSK	20525	836.5	1	0	24.0	22.79	0.142	0.188	
			20525	836.5	25	0	23.0	21.80	0.114	0.150	
			20525	836.5	50	0	23.0	21.78			
Edge 3	0	QPSK	20525	836.5	1	0	24.0	22.79	0.032	0.042	
			20525	836.5	25	0	23.0	21.80	0.034	0.045	
			20525	836.5	50	0	23.0	21.78			

13.7.12 LTE band 5 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	20525	836.5	1	0	17.6	16.36	0.599	0.797	
			20525	836.5	25	0	17.6	16.38	0.617	0.817	
			20525	836.5	50	0	17.6	16.33	***0.621***	***0.832***	L5.2
Rear tilt(Edge4 side)	0	QPSK	20525	836.5	1	0	17.6	16.36	0.389	0.518	
			20525	836.5	25	0	17.6	16.38	0.402	0.532	
			20525	836.5	50	0	17.6	16.33			
Rear	0	QPSK	20525	836.5	1	0	17.6	16.36	0.246	0.327	
			20525	836.5	25	0	17.6	16.38	0.265	0.351	
			20525	836.5	50	0	17.6	16.33			

13.7.13 LTE band 7 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	0.667	0.690	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88	0.660	***0.854***	L7.1
			21100	2535	50	0	23.0	22.01	0.661	0.830	
			21350	2560	50	0	23.0	21.94	0.650	0.830	
			21100	2535	100	0	23.0	21.98	0.665	0.841	
Edge 4	19	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	0.375	0.388	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88			
			21100	2535	50	0	23.0	22.01	0.364	0.457	
			21350	2560	50	0	23.0	21.94			
			21100	2535	100	0	23.0	21.98			
Rear tilt(Edge4 side)	9	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	***0.715***	0.740	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88			
			21100	2535	50	0	23.0	22.01	0.596	0.749	
			21350	2560	50	0	23.0	21.94			
			21100	2535	100	0	23.0	21.98			
Rear	9	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	0.452	0.468	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88			
			21100	2535	50	0	23.0	22.01	0.451	0.566	
			21350	2560	50	0	23.0	21.94			
			21100	2535	100	0	23.0	21.98			
Edge 1	0	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	0.120	0.124	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88			
			21100	2535	50	0	23.0	22.01	0.099	0.125	
			21350	2560	50	0	23.0	21.94			
			21100	2535	100	0	23.0	21.98			
Edge 3	0	QPSK	20850	2510	1	0	23.1	22.85			
			21100	2535	1	0	23.1	22.95	0.124	0.128	
			21350	2560	1	49	23.1	22.88			
			20850	2510	50	50	23.0	21.88			
			21100	2535	50	0	23.0	22.01	0.113	0.142	
			21350	2560	50	0	23.0	21.94			
			21100	2535	100	0	23.0	21.98			

13.7.14 LTE band 7 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	20850	2510	1	99	17.8	16.48			
			21100	2535	1	99	17.8	16.53			
			21350	2560	1	0	17.8	16.57	0.470	0.624	
			20850	2510	50	50	17.8	16.57	***0.715***	***0.949***	L7.2
			21100	2535	50	50	17.8	16.59	0.636	0.840	
			21350	2560	50	0	17.8	16.63	0.657	0.860	
			21350	2560	100	0	17.8	16.52	0.607	0.815	
Rear tilt(Edge4 side)	0	QPSK	20850	2510	1	99	17.8	16.48			
			21100	2535	1	99	17.8	16.53			
			21350	2560	1	0	17.8	16.57	0.545	0.723	
			20850	2510	50	50	17.8	16.57			
			21100	2535	50	50	17.8	16.59			
			21350	2560	50	0	17.8	16.63	0.512	0.670	
			21350	2560	100	0	17.8	16.52			
Rear	0	QPSK	20850	2510	1	99	17.8	16.48			
			21100	2535	1	99	17.8	16.53			
			21350	2560	1	0	17.8	16.57	0.307	0.408	
			20850	2510	50	50	17.8	16.57			
			21100	2535	50	50	17.8	16.59			
			21350	2560	50	0	17.8	16.63	0.291	0.381	
			21350	2560	100	0	17.8	16.52			

13.7.15 LTE band 12 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	23095	707.5	1	49	24.0	22.71	***0.309***	***0.416***	L12.1
			23095	707.5	25	12	23.0	21.86	0.247	0.321	
			23095	707.5	50	0	23.0	21.83			
Edge 4	19	QPSK	23095	707.5	1	49	24.0	22.71	0.116	0.156	
			23095	707.5	25	12	23.0	21.86	0.093	0.121	
			23095	707.5	50	0	23.0	21.83			
Rear tilt(Edge4 side)	9	QPSK	23095	707.5	1	49	24.0	22.71	0.267	0.359	
			23095	707.5	25	12	23.0	21.86	0.200	0.260	
			23095	707.5	50	0	23.0	21.83			
Rear	9	QPSK	23095	707.5	1	49	24.0	22.71	0.217	0.292	
			23095	707.5	25	12	23.0	21.86	0.172	0.224	
			23095	707.5	50	0	23.0	21.83			
Edge 1	0	QPSK	23095	707.5	1	49	24.0	22.71	0.126	0.170	
			23095	707.5	25	12	23.0	21.86	0.095	0.124	
			23095	707.5	50	0	23.0	21.83			
Edge 3	0	QPSK	23095	707.5	1	49	24.0	22.71	0.010	0.013	
			23095	707.5	25	12	23.0	21.86	0.006	0.008	
			23095	707.5	50	0	23.0	21.83			

13.7.16 LTE band 12 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	23095	707.5	1	49	18.9	18.33	0.662	0.755	
			23095	707.5	25	12	18.9	18.32	***0.665***	***0.760***	L12.2
			23095	707.5	50	0	18.9	18.31			
Rear tilt(Edge4 side)	0	QPSK	23095	707.5	1	49	18.9	18.33	0.356	0.406	
			23095	707.5	25	12	18.9	18.32	0.348	0.398	
			23095	707.5	50	0	18.9	18.31			
Rear	0	QPSK	23095	707.5	1	49	18.9	18.33	0.188	0.214	
			23095	707.5	25	12	18.9	18.32	0.180	0.206	
			23095	707.5	50	0	18.9	18.31			

13.7.17 LTE band 13 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	23230	782	1	0	24.0	22.45	***0.459***	***0.656***	L13.1
			23230	782	25	25	23.0	21.55	0.397	0.554	
			23230	782	50	0	23.0	21.52			
Edge 4	19	QPSK	23230	782	1	0	24.0	22.45	0.216	0.309	
			23230	782	25	25	23.0	21.55	0.196	0.274	
			23230	782	50	0	23.0	21.52			
Rear tilt(Edge4 side)	9	QPSK	23230	782	1	0	24.0	22.45	0.434	0.620	
			23230	782	25	25	23.0	21.55	0.370	0.517	
			23230	782	50	0	23.0	21.52			
Rear	9	QPSK	23230	782	1	0	24.0	22.45	0.317	0.453	
			23230	782	25	25	23.0	21.55	0.274	0.383	
			23230	782	50	0	23.0	21.52			
Edge 1	0	QPSK	23230	782	1	0	24.0	22.45	0.176	0.251	
			23230	782	25	25	23.0	21.55	0.141	0.197	
			23230	782	50	0	23.0	21.52			
Edge 3	0	QPSK	23230	782	1	0	24.0	22.45	0.004	0.006	
			23230	782	25	25	23.0	21.55	0.003	0.004	
			23230	782	50	0	23.0	21.52			

13.7.18 LTE band 13 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	23230	782	1	0	18.1	16.57	0.586	0.833	
			23230	782	25	12	18.1	16.58	***0.607***	***0.861***	L13.2
			23230	782	50	0	18.1	16.56	0.604	0.861	
Rear tilt(Edge4 side)	0	QPSK	23230	782	1	0	18.1	16.57	0.352	0.501	
			23230	782	25	12	18.1	16.58	0.367	0.521	
			23230	782	50	0	18.1	16.56			
Rear	0	QPSK	23230	782	1	0	18.1	16.57	0.211	0.300	
			23230	782	25	12	18.1	16.58	0.222	0.315	
			23230	782	50	0	18.1	16.56			

13.7.19 LTE band 14 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	23330	793	1	0	24.0	22.40	***0.512***	***0.740***	L14.1
			23330	793	25	12	23.0	21.48	0.422	0.599	
			23330	793	50	0	23.0	21.47			
Edge 4	19	QPSK	23330	793	1	0	24.0	22.40	0.193	0.279	
			23330	793	25	12	23.0	21.48	0.168	0.238	
			23330	793	50	0	23.0	21.47			
Rear tilt(Edge4 side)	9	QPSK	23330	793	1	0	24.0	22.40	0.504	0.729	
			23330	793	25	12	23.0	21.48	0.439	0.623	
			23330	793	50	0	23.0	21.47			
Rear	9	QPSK	23330	793	1	0	24.0	22.40	0.358	0.517	
			23330	793	25	12	23.0	21.48	0.293	0.416	
			23330	793	50	0	23.0	21.47			
Edge 1	0	QPSK	23330	793	1	0	24.0	22.40	0.201	0.291	
			23330	793	25	12	23.0	21.48	0.156	0.221	
			23330	793	50	0	23.0	21.47			
Edge 3	0	QPSK	23330	793	1	0	24.0	22.40	0.010	0.014	
			23330	793	25	12	23.0	21.48	0.006	0.008	
			23330	793	50	0	23.0	21.47			

13.7.20 LTE band 14 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	23330	793	1	0	18.1	16.43	0.580	0.852	
			23330	793	25	12	18.1	16.48	***0.663***	***0.963***	L14.2
			23330	793	50	0	18.1	16.38	0.602	0.895	
Rear tilt(Edge4 side)	0	QPSK	23330	793	1	0	18.1	16.43	0.362	0.532	
			23330	793	25	12	18.1	16.48	0.378	0.549	
			23330	793	50	0	18.1	16.38			
Rear	0	QPSK	23330	793	1	0	18.1	16.43	0.223	0.328	
			23330	793	25	12	18.1	16.48	0.230	0.334	
			23330	793	50	0	18.1	16.38			

13.7.21 LTE band 17 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	23790	710	1	49	24.0	22.85	***0.314***	***0.409***	L17.1
			23790	710	25	25	23.0	21.88	0.257	0.333	
			23790	710	50	0	23.0	21.80			
Edge 4	9	QPSK	23790	710	1	49	24.0	22.85	0.091	0.118	
			23790	710	25	25	23.0	21.88	0.085	0.110	
			23790	710	50	0	23.0	21.80			
Rear tilt(Edge4 side)	19	QPSK	23790	710	1	49	24.0	22.85	0.261	0.340	
			23790	710	25	25	23.0	21.88	0.214	0.277	
			23790	710	50	0	23.0	21.80			
Rear	9	QPSK	23790	710	1	49	24.0	22.85	0.214	0.279	
			23790	710	25	25	23.0	21.88	0.182	0.236	
			23790	710	50	0	23.0	21.80			
Edge 1	0	QPSK	23790	710	1	49	24.0	22.85	0.128	0.167	
			23790	710	25	25	23.0	21.88	0.103	0.133	
			23790	710	50	0	23.0	21.80			
Edge 3	0	QPSK	23790	710	1	49	24.0	22.85	0.014	0.018	
			23790	710	25	25	23.0	21.88	0.008	0.010	
			23790	710	50	0	23.0	21.80			

13.7.22 LTE band 17 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	23790	710	1	49	19.2	17.71	0.642	0.905	
			23790	710	25	25	19.2	17.69	***0.653***	***0.925***	L17.2
			23790	710	50	0	19.2	17.67	0.649	0.923	
Rear tilt(Edge4 side)	0	QPSK	23790	710	1	49	19.2	17.71	0.310	0.437	
			23790	710	25	25	19.2	17.69	0.316	0.447	
			23790	710	50	0	19.2	17.67			
Rear	0	QPSK	23790	710	1	49	19.2	17.71	0.185	0.261	
			23790	710	25	25	19.2	17.69	0.187	0.265	
			23790	710	50	0	19.2	17.67			

13.7.23 LTE band 25 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	26140	1860	1	0	23.6	22.78	***0.730***	***0.882***	L25.1
			26140	1882.5	1	0	23.6	22.70	0.712	0.876	
			26590	1905	1	0	23.6	22.68	0.670	0.828	
			26140	1860	50	24	23.0	21.90	0.585	0.754	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87	0.580	0.752	
Edge 4	19	QPSK	26140	1860	1	0	23.6	22.78	0.539	0.651	
			26140	1882.5	1	0	23.6	22.70			
			26590	1905	1	0	23.6	22.68			
			26140	1860	50	24	23.0	21.90	0.426	0.549	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87			
Rear tilt(Edge4 side)	9	QPSK	26140	1860	1	0	23.6	22.78	0.692	0.836	
			26140	1882.5	1	0	23.6	22.70	0.674	0.829	
			26590	1905	1	0	23.6	22.68	0.607	0.750	
			26140	1860	50	24	23.0	21.90	0.567	0.730	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87	0.564	0.732	
Rear	9	QPSK	26140	1860	1	0	23.6	22.78	0.465	0.562	
			26140	1882.5	1	0	23.6	22.70			
			26590	1905	1	0	23.6	22.68			
			26140	1860	50	24	23.0	21.90	0.369	0.475	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87			
Edge 1	0	QPSK	26140	1860	1	0	23.6	22.78	0.339	0.409	
			26140	1882.5	1	0	23.6	22.70			
			26590	1905	1	0	23.6	22.68			
			26140	1860	50	24	23.0	21.90	0.214	0.276	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87			
Edge 3	0	QPSK	26140	1860	1	0	23.6	22.78	0.122	0.147	
			26140	1882.5	1	0	23.6	22.70			
			26590	1905	1	0	23.6	22.68			
			26140	1860	50	24	23.0	21.90	0.101	0.130	
			26140	1882.5	50	24	23.0	21.85			
			26590	1905	50	50	23.0	21.72			
			26140	1860	100	0	23.0	21.87			

13.7.24 LTE band 25 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	26140	1860	1	0	17.6	16.33	0.637	0.853	
			26365	1882.5	1	0	17.6	16.26	0.628	0.855	
			26590	1905	1	0	17.6	16.21	0.614	0.846	
			26140	1860	50	0	17.6	16.42	***0.664***	0.871	
			26365	1882.5	50	24	17.6	16.29	0.647	0.875	
			26590	1905	50	50	17.6	16.27	0.639	0.868	
			26140	1860	100	0	17.6	16.32	0.659	***0.885***	L25.2
Rear tilt(Edge4 side)	0	QPSK	26140	1860	1	0	17.6	16.33	0.637	0.853	
			26365	1882.5	1	0	17.6	16.26	0.619	0.843	
			26590	1905	1	0	17.6	16.21	0.566	0.780	
			26140	1860	50	0	17.6	16.42	0.625	0.820	
			26365	1882.5	50	24	17.6	16.29	0.620	0.838	
			26590	1905	50	50	17.6	16.27	0.570	0.774	
			26140	1860	100	0	17.6	16.32	0.600	0.806	
Rear	0	QPSK	26140	1860	1	0	17.6	16.33	0.409	0.548	
			26365	1882.5	1	0	17.6	16.26			
			26590	1905	1	0	17.6	16.21			
			26140	1860	50	0	17.6	16.42	0.417	0.547	
			26365	1882.5	50	24	17.6	16.29			
			26590	1905	50	50	17.6	16.27			
			26140	1860	100	0	17.6	16.32			

13.7.25 LTE band 26 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	26865	831.5	1	0	23.3	22.08	0.560	0.742	
			26865	831.5	36	0	23.0	21.90	0.532	0.685	
			26865	831.5	75	0	23.0	21.79			
Edge 4	19	QPSK	26865	831.5	1	0	23.3	22.08	0.408	0.540	
			26865	831.5	36	0	23.0	21.90	0.377	0.486	
			26865	831.5	75	0	23.0	21.79			
Rear tilt(Edge4 side)	9	QPSK	26865	831.5	1	0	23.3	22.08	***0.647***	***0.857***	L26.1
			26865	831.5	36	0	23.0	21.90	0.627	0.808	
			26865	831.5	75	0	23.0	21.79	0.628	0.830	
Rear	9	QPSK	26865	831.5	1	0	23.3	22.08	0.469	0.621	
			26865	831.5	36	0	23.0	21.90	0.456	0.587	
			26865	831.5	75	0	23.0	21.79			
Edge 1	0	QPSK	26865	831.5	1	0	23.3	22.08	0.155	0.205	
			26865	831.5	36	0	23.0	21.90	0.147	0.189	
			26865	831.5	75	0	23.0	21.79			
Edge 3	0	QPSK	26865	831.5	1	0	23.3	22.08	0.026	0.034	
			26865	831.5	36	0	23.0	21.90	0.025	0.032	
			26865	831.5	75	0	23.0	21.79			

13.7.26 LTE band 26 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	26865	831.5	1	0	17.6	16.35	0.624	0.832	
			26865	831.5	36	0	17.6	16.45	***0.648***	0.844	
			26865	831.5	75	0	17.6	16.34	0.638	***0.853***	L26.2
Rear tilt(Edge4 side)	0	QPSK	26865	831.5	1	0	17.6	16.35	0.380	0.507	
			26865	831.5	36	0	17.6	16.45	0.395	0.515	
			26865	831.5	75	0	17.6	16.34			
Rear	0	QPSK	26865	831.5	1	0	17.6	16.35	0.264	0.352	
			26865	831.5	36	0	17.6	16.45	0.273	0.356	
			26865	831.5	75	0	17.6	16.34			

13.7.27 LTE band 38 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	38000	2595	1	49	24.0	22.58	***0.417***	***0.578***	L38.1
			38000	2595	50	50	23.0	21.76	0.352	0.468	
			38000	2595	100	0	23.0	21.70			
Edge 4	19	QPSK	38000	2595	1	49	24.0	22.58	0.236	0.327	
			38000	2595	50	50	23.0	21.76	0.198	0.263	
			38000	2595	100	0	23.0	21.70			
Rear tilt(Edge4 side)	9	QPSK	38000	2595	1	49	24.0	22.58	0.410	0.569	
			38000	2595	50	50	23.0	21.76	0.365	0.486	
			38000	2595	100	0	23.0	21.70			
Rear	9	QPSK	38000	2595	1	49	24.0	22.58	0.356	0.494	
			38000	2595	50	50	23.0	21.76	0.287	0.382	
			38000	2595	100	0	23.0	21.70			
Edge 1	0	QPSK	38000	2595	1	49	24.0	22.58	0.078	0.108	
			38000	2595	50	50	23.0	21.76	0.059	0.078	
			38000	2595	100	0	23.0	21.70			
Edge 3	0	QPSK	38000	2595	1	49	24.0	22.58	0.054	0.075	
			38000	2595	50	50	23.0	21.76	0.038	0.050	
			38000	2595	100	0	23.0	21.70			

13.7.28 LTE band 38 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	38000	2595	1	99	21.5	20.11	0.613	0.844	
			38000	2595	50	50	21.5	20.28	0.644	0.853	
			38000	2595	100	0	21.5	20.09	0.642	0.888	
Rear tilt(Edge4 side)	0	QPSK	38000	2595	1	99	21.5	20.11	0.641	0.883	
			38000	2595	50	50	21.5	20.28	***0.686***	0.908	
			38000	2595	100	0	21.5	20.09	0.671	***0.928***	L38.2
Rear	0	QPSK	38000	2595	1	99	21.5	20.11	0.319	0.439	
			38000	2595	50	50	21.5	20.28	0.354	0.469	
			38000	2595	100	0	21.5	20.09			

13.7.29 LTE band 41 DSI=0, full power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up limit	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	0.245	0.324	
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.233	0.305	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			
Edge 4	19	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	0.238	0.315	
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.298	0.390	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			
Rear tilt(Edge4 side)	9	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	***0.491***	***0.650***	L41.1
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.367	0.480	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			
Rear	9	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	0.358	0.474	
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.255	0.334	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			
Edge 1	0	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	0.088	0.117	
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.037	0.048	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			
Edge 3	0	QPSK	39750	2506	1	99	24.0	22.59			
			40185	2549.5	1	99	24.0	22.54			
			40620	2593	1	0	24.0	22.78	0.056	0.075	
			41055	2636.5	1	0	24.0	22.74			
			41490	2680	1	0	24.0	22.66			
			39750	2506	50	24	23.0	21.82			
			40185	2549.5	50	50	23.0	21.78			
			40620	2593	50	24	23.0	21.80			
			41055	2636.5	50	0	23.0	21.83	0.045	0.059	
			41490	2680	50	50	23.0	21.75			
			39750	2506	100	0	23.0	21.82			

13.7.30 LTE band 41 DSI=1, reduction power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas. Avg	Meas.	Scaled	
Edge 4	0	QPSK	39750	2506	1	99	20.1	18.81	0.699	0.941	
			40185	2549.5	1	99	20.1	18.80	0.752	***1.014***	L41.2
			40620	2593	1	0	20.1	19.03	0.772	0.988	
			41055	2636.5	1	0	20.1	19.00	0.764	0.984	
			41490	2680	1	0	20.1	18.81	0.732	0.985	
			39750	2506	50	50	20.1	19.09	0.750	0.946	
			40185	2549.5	50	24	20.1	19.07	***0.797***	1.010	
			40620	2593	50	24	20.1	19.10	0.783	0.986	
			41055	2636.5	50	24	20.1	19.02	0.745	0.955	
			41490	2680	50	50	20.1	18.80	0.719	0.970	
			40620	2593	100	0	20.1	19.01	0.782	1.005	
Rear tilt(Edge4 side)	0	QPSK	39750	2506	1	99	20.1	18.81			
			40185	2549.5	1	99	20.1	18.80			
			40620	2593	1	0	20.1	19.03	0.572	0.732	
			41055	2636.5	1	0	20.1	19.00			
			41490	2680	1	0	20.1	18.81			
			39750	2506	50	50	20.1	19.09			
			40185	2549.5	50	24	20.1	19.07			
			40620	2593	50	24	20.1	19.10	0.576	0.725	
			41055	2636.5	50	24	20.1	19.02			
			41490	2680	50	50	20.1	18.80			
			40620	2593	100	0	20.1	19.01			
Rear	0	QPSK	39750	2506	1	99	20.1	18.81			
			40185	2549.5	1	99	20.1	18.80			
			40620	2593	1	0	20.1	19.03	0.239	0.306	
			41055	2636.5	1	0	20.1	19.00			
			41490	2680	1	0	20.1	18.81			
			39750	2506	50	50	20.1	19.09			
			40185	2549.5	50	24	20.1	19.07			
			40620	2593	50	24	20.1	19.10	0.252	0.317	
			41055	2636.5	50	24	20.1	19.02			
			41490	2680	50	50	20.1	18.80			
			40620	2593	100	0	20.1	19.01			

13.7.31 LTE band 48 DSI=0, full power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up limit	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	55340	3560	1	99	10.9	9.80	0.020	0.026	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.019	0.024	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Edge 4	19	QPSK	55340	3560	1	99	10.9	9.80	***0.051***	***0.066***	L48.1
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.049	0.063	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Rear tilt(Edge4 side)	9	QPSK	55340	3560	1	99	10.9	9.80	0.018	0.023	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.020	0.026	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Rear	9	QPSK	55340	3560	1	99	10.9	9.80	0.004	0.006	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.008	0.010	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Edge 1	0	QPSK	55340	3560	1	99	10.9	9.80	0.000	0.000	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.000	0.000	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Edge 3	0	QPSK	55340	3560	1	99	10.9	9.80	0.000	0.000	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.000	0.000	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			

13.7.32 LTE band 48 DSI=1, reduction power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas. Avg	Meas.	Scaled	
Edge 4	0	QPSK	55340	3560	1	99	10.9	9.80	0.410	0.528	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	***0.415***	***0.531***	L48.2
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Rear tilt(Edge4 side)	0	QPSK	55340	3560	1	99	10.9	9.80	0.101	0.130	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.100	0.128	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			
Rear	0	QPSK	55340	3560	1	99	10.9	9.80	0.032	0.041	
			55773	3603.3	1	0	10.9	9.62			
			56207	3646.7	1	0	10.9	9.62			
			56640	3690	1	0	10.9	9.63			
			55340	3560	50	50	10.9	9.83	0.033	0.042	
			55773	3603.3	50	0	10.9	9.64			
			56207	3646.7	50	0	10.9	9.67			
			56640	3690	50	0	10.9	9.63			
			55340	3560	100	0	10.9	9.77			

13.7.33 LTE band 66 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	132072	1720	1	99	22.5	21.41			
			132322	1745	1	99	22.5	21.44			
			132572	1770	1	0	22.5	21.45	0.575	0.732	
			132072	1720	50	24	22.5	21.42			
			132322	1745	50	50	22.5	21.56			
			132572	1770	50	24	22.5	21.66	0.597	0.724	
			132322	1745	100	0	22.5	21.43			
Edge 4	19	QPSK	132072	1720	1	99	22.5	21.41			
			132322	1745	1	99	22.5	21.44			
			132572	1770	1	0	22.5	21.45	0.552	0.703	
			132072	1720	50	24	22.5	21.42			
			132322	1745	50	50	22.5	21.56			
			132572	1770	50	24	22.5	21.66	0.555	0.673	
			132322	1745	100	0	22.5	21.43			
Rear tilt(Edge4 side)	9	QPSK	132072	1720	1	99	22.5	21.41	0.677	0.870	
			132322	1745	1	99	22.5	21.44	0.651	0.831	
			132572	1770	1	0	22.5	21.45	0.643	0.819	
			132072	1720	50	24	22.5	21.42	***0.731***	***0.937***	L66.1
			132322	1745	50	50	22.5	21.56	0.679	0.843	
			132572	1770	50	24	22.5	21.66	0.662	0.803	
			132322	1745	100	0	22.5	21.43	0.652	0.834	
Rear	9	QPSK	132072	1720	1	99	22.5	21.41			
			132322	1745	1	99	22.5	21.44			
			132572	1770	1	0	22.5	21.45	0.345	0.439	
			132072	1720	50	24	22.5	21.42			
			132322	1745	50	50	22.5	21.56			
			132572	1770	50	24	22.5	21.66	0.359	0.436	
			132322	1745	100	0	22.5	21.43			
Edge 1	0	QPSK	132072	1720	1	99	22.5	21.41			
			132322	1745	1	99	22.5	21.44			
			132572	1770	1	0	22.5	21.45	0.088	0.112	
			132072	1720	50	24	22.5	21.42			
			132322	1745	50	50	22.5	21.56			
			132572	1770	50	24	22.5	21.66	0.087	0.106	
			132322	1745	100	0	22.5	21.43			
Edge 3	0	QPSK	132072	1720	1	99	22.5	21.41			
			132322	1745	1	99	22.5	21.44			
			132572	1770	1	0	22.5	21.45	0.166	0.211	
			132072	1720	50	24	22.5	21.42			
			132322	1745	50	50	22.5	21.56			
			132572	1770	50	24	22.5	21.66	0.148	0.180	
			132322	1745	100	0	22.5	21.43			

13.7.34 LTE band 66 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	132072	1720	1	99	18.0	17.01	0.672	0.844	
			132322	1745	1	0	18.0	17.04	0.721	0.899	
			132572	1770	1	0	18.0	17.18	0.757	0.914	
			132072	1720	50	24	18.0	16.99	0.704	0.888	
			132322	1745	50	50	18.0	17.10	0.747	0.919	
			132572	1770	50	24	18.0	17.25	***0.782***	0.929	
			132572	1770	100	0	18.0	17.15	0.774	0.941	
Rear tilt(Edge4 side)	0	QPSK	132072	1720	1	99	18.0	17.01	0.718	0.902	
			132322	1745	1	0	18.0	17.04	0.744	0.928	
			132572	1770	1	0	18.0	17.18	0.758	0.916	
			132072	1720	50	24	18.0	16.99	0.756	***0.954***	L66.2
			132322	1745	50	50	18.0	17.10	0.757	0.931	
			132572	1770	50	24	18.0	17.25	0.777	0.923	
			132572	1770	100	0	18.0	17.15	0.769	0.935	
Rear	0	QPSK	132072	1720	1	99	18.0	17.01			
			132322	1745	1	0	18.0	17.04			
			132572	1770	1	0	18.0	17.18	0.371	0.448	
			132072	1720	50	24	18.0	16.99			
			132322	1745	50	50	18.0	17.10			
			132572	1770	50	24	18.0	17.25	0.373	0.443	
			132572	1770	100	0	18.0	17.15			

13.7.35 LTE band 71 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	QPSK	133297	680.5	1	99	24.0	22.62	0.363	0.499	
			133297	680.5	50	24	23.0	21.73	0.295	0.395	
			133297	680.5	100	0	23.0	21.72			
Edge 4	19	QPSK	133297	680.5	1	99	24.0	22.62	0.209	0.287	
			133297	680.5	50	24	23.0	21.73	0.161	0.216	
			133297	680.5	100	0	23.0	21.72			
Rear tilt(Edge4 side)	9	QPSK	133297	680.5	1	99	24.0	22.62	***0.461***	***0.633***	L77.1
			133297	680.5	50	24	23.0	21.73	0.375	0.502	
			133297	680.5	100	0	23.0	21.72			
Rear	9	QPSK	133297	680.5	1	99	24.0	22.62	0.303	0.416	
			133297	680.5	50	24	23.0	21.73	0.242	0.324	
			133297	680.5	100	0	23.0	21.72			
Edge 1	0	QPSK	133297	680.5	1	99	24.0	22.62	0.161	0.221	
			133297	680.5	50	24	23.0	21.73	0.146	0.196	
			133297	680.5	100	0	23.0	21.72			
Edge 3	0	QPSK	133297	680.5	1	99	24.0	22.62	0.033	0.045	
			133297	680.5	50	24	23.0	21.73	0.026	0.035	
			133297	680.5	100	0	23.0	21.72			

13.7.36 LTE band 71 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	133297	680.5	1	99	19.1	17.42	0.544	0.801	
			133297	680.5	50	24	19.1	17.48	***0.570***	***0.828***	L71.2
			133297	680.5	100	0	19.1	17.41	0.554	0.818	
Rear tilt(Edge4 side)	0	QPSK	133297	680.5	1	99	19.1	17.42	0.351	0.517	
			133297	680.5	50	24	19.1	17.48	0.357	0.518	
			133297	680.5	100	0	19.1	17.41			
Rear	0	QPSK	133297	680.5	1	99	19.1	17.42	0.226	0.333	
			133297	680.5	50	24	19.1	17.48	0.226	0.328	
			133297	680.5	100	0	19.1	17.41			

13.7.37 LTE Up-Link Carrier Aggregation (Intra-Band Contiguous)

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.
UL CA power measurements were performed for each antennas at with QPSK modulation based on the worst-case standalone SAR.

The UL CA mode power measurements represent the total power across both carriers. Measurements were made for all supported PCC bandwidths using the channel/RB combination resulting in the highest standalone output power at the least MPR (0 dB). SCCs were set to use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions (highest maximum power with MPR of 0 dB).

The standalone power measurement is the power for the PCC in the non-CA mode (i.e. single carrier power).
In all cases the UL CA power is less than or equal to the standalone power, which is in accordance with the tune-up limits in table below.

According to November 2017 TCB workshop, Uplink CA SAR Test Guidance as follows:
a) When the maximum output for UL CA is ≤ standalone LTE mode (without CA)
• PCC is configured according to the highest standalone SAR configuration tested
• SCC and subsequent CCs are configured according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC
b) When the Reported SAR for UL CA configuration, described above, is > 1.2 W/kg, UL CA SAR is also required for all required test channels (PCC based)
c) UL CA SAR is also required for standalone SAR configurations > 1.2 W/kg when they are scaled to the UL CA power level

Measured Results

Full Power Mode

					PCC		PCC						SCC1		SCC1						Power [dBm]				Delta[dB]		1-g SAR (W/kg)		
Combination	Test Position	Dist. (mm)	Pow mode	Mode	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Tune-up limit	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active	Single Carrier	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active	Meas.	Scaled	Plot No.
CA_7C	Rear tilt (Edge1 side)	0	DSI0	QPSK	7	20	20850	2510	QPSK	50	50	2850	2630	7	20	21048	2529.8	QPSK	50	0	3048	2649.8	23	22.15	22.17	21.88	0.3	0.3	0.638	0.826	ULCA7-1
CA_41C	Rear tilt (Edge4 side)	9	DSI0	QPSK	41	20	40620	2593	QPSK	1	0	40620	2593	41	20	40422	2573.2	QPSK	1	99	40422	2573.2	24.0	23.4	23.34	22.78	0.6	0.6	0.484	0.641	ULCA41-1

Reduction Power Mode

					PCC		PCC						SCC1		SCC1						Power [dBm]				Delta[dB]		1-g SAR (W/kg)		
Combination	Test Position	Dist. (mm)	Pow mode	Mode	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Band	BW [MHz]	UL Ch.	UL Freq. [MHz]	Mod.	UL#RB / Offset		DL Ch	DL Freq. [MHz]	Tune-up limit	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active	Single Carrier	PCC & SCC1 DLCA SISO	PCC &SCC1 DLCA 4x4 MIMO Active	Meas.	Scaled	Plot No.
CA_7C	Edge4	0	DSI1	QPSK	7	20	20850	2510	QPSK	50	50	2850	2630	7	20	21048	2529.8	QPSK	50	0	3048	2649.8	17.8	16.45	16.56	16.57	-0.1	0.0	0.703	0.933	ULCA7-2
CA_41C	Edge4	0	DSI1	QPSK	41	20	40185	2549.5	QPSK	1	99	40185	2549.5	41	20	40383	2569.3	QPSK	1	0	40383	2569.3	20.1	18.62	18.58	18.80	-0.2	-0.2	0.728	0.982	ULCA41-2

Note(s):
PCC RB allocation setting for UL CA has been adjusted based on the worst-case power.

13.7.38 NR band n2 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	372000	1860	1	1	23.4	22.44	***0.652***	0.813	
			376000	1880	1	1	23.4	22.29	0.620	0.801	
			380000	1900	1	1	23.4	22.26	0.566	0.736	
			372000	1860	50	0	23.4	22.36	0.648	0.823	
			376000	1880	50	28	23.4	22.24	0.582	0.760	
			380000	1900	50	28	23.4	22.12	0.540	0.725	
			372000	1860	100	0	23.4	22.27	0.637	***0.826***	N2.1
Edge 4	19	BPSK	372000	1860	1	1	23.4	22.44	0.499	0.622	
			376000	1880	1	1	23.4	22.29			
			380000	1900	1	1	23.4	22.26			
			372000	1860	50	0	23.4	22.36	0.486	0.617	
			376000	1880	50	28	23.4	22.24			
			380000	1900	50	28	23.4	22.12			
			372000	1860	100	0	23.4	22.27			
Rear tilt(Edge4 side)	9	BPSK	372000	1860	1	1	23.4	22.44	0.504	0.629	
			376000	1880	1	1	23.4	22.29			
			380000	1900	1	1	23.4	22.26			
			372000	1860	50	0	23.4	22.36	0.486	0.617	
			376000	1880	50	28	23.4	22.24			
			380000	1900	50	28	23.4	22.12			
			372000	1860	100	0	23.4	22.27			
Rear	9	BPSK	372000	1860	1	1	23.4	22.44	0.307	0.383	
			376000	1880	1	1	23.4	22.29			
			380000	1900	1	1	23.4	22.26			
			372000	1860	50	0	23.4	22.36	0.287	0.365	
			376000	1880	50	28	23.4	22.24			
			380000	1900	50	28	23.4	22.12			
			372000	1860	100	0	23.4	22.27			
Edge 1	0	BPSK	372000	1860	1	1	23.4	22.44	0.197	0.246	
			376000	1880	1	1	23.4	22.29			
			380000	1900	1	1	23.4	22.26			
			372000	1860	50	0	23.4	22.36	0.161	0.205	
			376000	1880	50	28	23.4	22.24			
			380000	1900	50	28	23.4	22.12			
			372000	1860	100	0	23.4	22.27			
Edge 3	0	BPSK	372000	1860	1	1	23.4	22.44	0.138	0.172	
			376000	1880	1	1	23.4	22.29			
			380000	1900	1	1	23.4	22.26			
			372000	1860	50	0	23.4	22.36	0.122	0.155	
			376000	1880	50	28	23.4	22.24			
			380000	1900	50	28	23.4	22.12			
			372000	1860	100	0	23.4	22.27			

13.7.39 NR band n2 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	BPSK	372000	1860	1	1	18.4	17.45	***0.824***	1.026	
			376000	1880	1	1	18.4	17.33	0.811	1.037	
			380000	1900	1	1	18.4	17.25	0.800	***1.042***	N2.2
			372000	1860	50	28	18.4	17.42	0.808	1.013	
			376000	1880	50	28	18.4	17.27	0.797	1.033	
			380000	1900	50	28	18.4	17.14	0.776	1.037	
			372000	1860	100	0	18.4	17.39	0.802	1.012	
Rear tilt(Edge4 side)	0	BPSK	372000	1860	1	1	18.4	17.45	0.714	0.889	
			376000	1880	1	1	18.4	17.33	0.690	0.882	
			380000	1900	1	1	18.4	17.25	0.656	0.855	
			372000	1860	50	28	18.4	17.42	0.677	0.849	
			376000	1880	50	28	18.4	17.27	0.656	0.850	
			380000	1900	50	28	18.4	17.14	0.623	0.833	
			372000	1860	100	0	18.4	17.39	0.679	0.857	
Rear	0	BPSK	372000	1860	1	1	18.4	17.45	0.506	0.630	
			376000	1880	1	1	18.4	17.33			
			380000	1900	1	1	18.4	17.25			
			372000	1860	50	28	18.4	17.42	0.475	0.595	
			376000	1880	50	28	18.4	17.27			
			380000	1900	50	28	18.4	17.14			
			372000	1860	100	0	18.4	17.39			

13.7.40 NR band n5 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	167300	836.5	1	1	24.2	23.21	0.642	0.806	
			167300	836.5	50	28	23.7	23.01	0.607	0.712	
			167300	836.5	100	0	23.7	22.50	0.536	0.707	
Edge 4	19	BPSK	167300	836.5	1	1	24.2	23.21	0.329	0.413	
			167300	836.5	50	28	23.7	23.01	0.341	0.400	
			167300	836.5	100	0	23.7	22.50			
Rear tilt(Edge4 side)	9	BPSK	167300	836.5	1	1	24.2	23.21	***0.667***	***0.838***	N5.1
			167300	836.5	50	28	23.7	23.01	0.666	0.781	
			167300	836.5	100	0	23.7	22.50	0.589	0.776	
Rear	9	BPSK	167300	836.5	1	1	24.2	23.21	0.380	0.477	
			167300	836.5	50	28	23.7	23.01	0.368	0.431	
			167300	836.5	100	0	23.7	22.50			
Edge 1	0	BPSK	167300	836.5	1	1	24.2	23.21	0.165	0.207	
			167300	836.5	50	28	23.7	23.01	0.142	0.166	
			167300	836.5	100	0	23.7	22.50			
Edge 3	0	BPSK	167300	836.5	1	1	24.2	23.21	0.027	0.034	
			167300	836.5	50	28	23.7	23.01	0.041	0.048	
			167300	836.5	100	0	23.7	22.50			

13.7.41 NR band n5 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	BPSK	167300	836.5	1	1	18.0	16.87	***0.698***	0.905	
			167300	836.5	50	0	18.0	16.74	0.673	0.899	
			167300	836.5	100	0	18.0	16.68	0.673	***0.911***	N5.2
Rear tilt(Edge4 side)	0	BPSK	167300	836.5	1	1	18.0	16.87	0.475	0.616	
			167300	836.5	50	0	18.0	16.74	0.457	0.610	
			167300	836.5	100	0	18.0	16.68			
Rear	0	BPSK	167300	836.5	1	1	18.0	16.87	0.295	0.382	
			167300	836.5	50	0	18.0	16.74	0.286	0.382	
			167300	836.5	100	0	18.0	16.68			

13.7.42 NR band n41 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	518600	2593	1	137	21.5	20.73	0.661	0.789	
			518600	2593	135	69	21.5	20.70	0.685	0.824	
			518600	2593	270	0	21.5	20.60	0.640	0.787	
Edge 2	15	BPSK	518600	2593	1	137	21.5	20.73	0.430	0.513	
			518600	2593	135	69	21.5	20.70	0.399	0.480	
			518600	2593	270	0	21.5	20.60			
Rear tilt(Edge2 side)	9	BPSK	518600	2593	1	137	21.5	20.73	0.666	0.795	
			518600	2593	135	69	21.5	20.70	***0.686***	***0.825***	N41.1
			518600	2593	270	0	21.5	20.60	0.657	0.808	
Rear	9	BPSK	518600	2593	1	137	21.5	20.73	0.261	0.312	
			518600	2593	135	69	21.5	20.70	0.258	0.310	
			518600	2593	270	0	21.5	20.60			
Edge 1	0	BPSK	518600	2593	1	137	21.5	20.73	0.171	0.204	
			518600	2593	135	69	21.5	20.70	0.160	0.192	
			518600	2593	270	0	21.5	20.60			
Edge 3	0	BPSK	518600	2593	1	137	21.5	20.73	0.030	0.036	
			518600	2593	135	69	21.5	20.70	0.023	0.028	
			518600	2593	270	0	21.5	20.60			

13.7.43 NR band n41 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 2	0	BPSK	518600	2593	1	137	12.2	11.62	0.593	0.678	
			518600	2593	135	69	12.2	11.40	***0.603***	***0.725***	N41.2
			518600	2593	270	0	12.2	11.05			
Rear tilt(Edge2 side)	0	BPSK	518600	2593	1	137	12.2	11.62	0.346	0.395	
			518600	2593	135	69	12.2	11.40	0.362	0.435	
			518600	2593	270	0	12.2	11.05			
Rear	0	BPSK	518600	2593	1	137	12.2	11.62	0.107	0.122	
			518600	2593	135	69	12.2	11.40	0.103	0.124	
			518600	2593	270	0	12.2	11.05			

13.7.44 NR band n66 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.482	0.566	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93			
			349000	1745	50	0	21.8	21.01	0.496	0.595	
			354000	1770	50	0	21.8	20.98			
			349000	1745	100	0	21.8	20.97			
Edge 4	19	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.578	0.679	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93			
			349000	1745	50	0	21.8	21.01	0.611	0.733	
			354000	1770	50	0	21.8	20.98			
			349000	1745	100	0	21.8	20.97			
Rear tilt(Edge4 side)	9	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.658	0.773	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93	0.647	0.791	
			349000	1745	50	0	21.8	21.01	***0.685***	***0.822***	N66.1
			354000	1770	50	0	21.8	20.98	0.538	0.650	
			349000	1745	100	0	21.8	20.97	0.667	0.807	
Rear	9	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.424	0.498	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93			
			349000	1745	50	0	21.8	21.01	0.445	0.534	
			354000	1770	50	0	21.8	20.98			
			349000	1745	100	0	21.8	20.97			
Edge 1	0	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.120	0.141	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93			
			349000	1745	50	0	21.8	21.01	0.113	0.136	
			354000	1770	50	0	21.8	20.98			
			349000	1745	100	0	21.8	20.97			
Edge 3	0	BPSK	344000	1720	1	104	21.8	21.03			
			349000	1745	1	104	21.8	21.10	0.130	0.153	
			354000	1770	1	104	21.8	21.03			
			344000	1720	50	0	21.8	20.93			
			349000	1745	50	0	21.8	21.01	0.143	0.172	
			354000	1770	50	0	21.8	20.98			
			349000	1745	100	0	21.8	20.97			

13.7.45 NR band n66 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	BPSK	344000	1720	1	1	18.0	17.26	0.656	0.778	
			349000	1745	1	1	18.0	17.28	0.671	0.792	
			354000	1770	1	104	18.0	17.24	0.644	0.768	
			344000	1720	50	28	18.0	17.22	0.661	0.791	
			349000	1745	50	28	18.0	17.26	0.698	0.828	
			354000	1770	50	28	18.0	17.27	***0.726***	***0.860***	N66.2
			349000	1745	100	0	18.0	17.27	0.691	0.818	
Rear tilt(Edge4 side)	0	BPSK	344000	1720	1	1	18.0	17.26			
			349000	1745	1	1	18.0	17.28	0.636	0.751	
			354000	1770	1	104	18.0	17.24			
			344000	1720	50	28	18.0	17.22			
			349000	1745	50	28	18.0	17.26			
			354000	1770	50	28	18.0	17.27	0.638	0.756	
			349000	1745	100	0	18.0	17.27			
Rear	0	BPSK	344000	1720	1	1	18.0	17.26			
			349000	1745	1	1	18.0	17.28	0.397	0.469	
			354000	1770	1	104	18.0	17.24			
			344000	1720	50	28	18.0	17.22			
			349000	1745	50	28	18.0	17.26			
			354000	1770	50	28	18.0	17.27	0.373	0.442	
			349000	1745	100	0	18.0	17.27			

13.7.46 NR band n71 DSI=0, full power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	136100	680.5	1	1	24.5	22.75	0.400	0.598	
			136100	680.5	50	28	24.5	22.53	***0.418***	***0.658***	N71.1
			136100	680.5	100	0	24.0	22.16			
Edge 4	19	BPSK	136100	680.5	1	1	24.5	22.75	0.211	0.316	
			136100	680.5	50	28	24.5	22.53	0.220	0.346	
			136100	680.5	100	0	24.0	22.16			
Rear tilt(Edge4 side)	9	BPSK	136100	680.5	1	1	24.5	22.75	0.376	0.563	
			136100	680.5	50	28	24.5	22.53	0.390	0.614	
			136100	680.5	100	0	24.0	22.16			
Rear	9	BPSK	136100	680.5	1	1	24.5	22.75	0.344	0.515	
			136100	680.5	50	28	24.5	22.53	0.343	0.540	
			136100	680.5	100	0	24.0	22.16			
Edge 1	0	BPSK	136100	680.5	1	1	24.5	22.75	0.171	0.256	
			136100	680.5	50	28	24.5	22.53	0.172	0.271	
			136100	680.5	100	0	24.0	22.16			
Edge 3	0	BPSK	136100	680.5	1	1	24.5	22.75	0.005	0.008	
			136100	680.5	50	28	24.5	22.53	0.009	0.014	
			136100	680.5	100	0	24.0	22.16			

13.7.47 NR band n71 DSI=1, reduction power

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	QPSK	136100	680.5	1	1	19.4	18.58	0.655	0.791	
			136100	680.5	50	28	19.4	18.52	0.702	0.860	
			136100	680.5	100	0	19.4	18.48	***0.703***	***0.869***	N71.2
Rear tilt(Edge4 side)	0	QPSK	136100	680.5	1	1	19.4	18.58	0.456	0.551	
			136100	680.5	50	28	19.4	18.52	0.479	0.587	
			136100	680.5	100	0	19.4	18.48			
Rear	0	QPSK	136100	680.5	1	1	19.4	18.58	0.246	0.297	
			136100	680.5	50	28	19.4	18.52	0.256	0.314	
			136100	680.5	100	0	19.4	18.48			

13.7.48 NR band n77 (Block A) DSI=0, full power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	633332	3499.98	1	1	20.1	19.17	0.406	0.503	
			633332	3499.98	135	0	20.1	19.03	0.369	0.472	
			633332	3499.98	270	0	20.1	19.03			
Edge 4	19	BPSK	633332	3499.98	1	1	20.1	19.17	***0.602***	0.746	
			633332	3499.98	135	0	20.1	19.03	0.585	***0.748***	N77-A1
			633332	3499.98	270	0	20.1	19.03			
Rear tilt(Edge4 side)	9	BPSK	633332	3499.98	1	1	20.1	19.17	0.424	0.525	
			633332	3499.98	135	0	20.1	19.03	0.405	0.518	
			633332	3499.98	270	0	20.1	19.03			
Rear	9	BPSK	633332	3499.98	1	1	20.1	19.17	0.287	0.356	
			633332	3499.98	135	0	20.1	19.03	0.259	0.331	
			633332	3499.98	270	0	20.1	19.03			
Edge 1	0	BPSK	633332	3499.98	1	1	20.1	19.17	0.131	0.162	
			633332	3499.98	135	0	20.1	19.03	0.139	0.178	
			633332	3499.98	270	0	20.1	19.03			
Edge 3	0	BPSK	633332	3499.98	1	1	20.1	19.17	0.036	0.045	
			633332	3499.98	135	0	20.1	19.03	0.034	0.043	
			633332	3499.98	270	0	20.1	19.03			

13.7.49 NR band n77 (Block A) DSI=1, reduction power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	BPSK	633332	3499.98	1	137	9.0	8.12	***0.541***	0.663	
			633332	3499.98	135	69	9.0	8.06	0.538	***0.668***	N77-A2
			633332	3499.98	270	0	9.0	8.03			
Rear tilt(Edge4 side)	0	BPSK	633332	3499.98	1	137	9.0	8.12	0.144	0.176	
			633332	3499.98	135	69	9.0	8.06	0.134	0.166	
			633332	3499.98	270	0	9.0	8.03			
Rear	0	BPSK	633332	3499.98	1	137	9.0	8.12	0.038	0.047	
			633332	3499.98	135	69	9.0	8.06	0.038	0.047	
			633332	3499.98	270	0	9.0	8.03			

13.7.50 NR band n77 (Block C) DSI=0, full power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Rear tilt(Edge1 side)	0	BPSK	656000	3840	1	271	20.1	19.36	0.551	0.653	
			656000	3840	135	138	20.1	19.19	0.535	0.660	
			656000	3840	270	0	20.1	19.13			
Edge 4	19	BPSK	656000	3840	1	271	20.1	19.36	0.717	0.850	
			656000	3840	135	138	20.1	19.19	***0.722***	***0.890***	N77-C.1
			656000	3840	270	0	20.1	19.13	0.708	0.885	
Rear tilt(Edge4 side)	9	BPSK	656000	3840	1	271	20.1	19.36	0.666	0.790	
			656000	3840	135	138	20.1	19.19	0.666	0.821	
			656000	3840	270	0	20.1	19.13	0.607	0.759	
Rear	9	BPSK	656000	3840	1	271	20.1	19.36	0.356	0.422	
			656000	3840	135	138	20.1	19.19	0.322	0.397	
			656000	3840	270	0	20.1	19.13			
Edge 1	0	BPSK	656000	3840	1	271	20.1	19.36	0.038	0.045	
			656000	3840	135	138	20.1	19.19	0.034	0.042	
			656000	3840	270	0	20.1	19.13			
Edge 3	0	BPSK	656000	3840	1	271	20.1	19.36	0.042	0.050	
			656000	3840	135	138	20.1	19.19	0.038	0.047	
			656000	3840	270	0	20.1	19.13			

13.7.51 NR band n77 (Block C) DSI=1, reduction power (FCC)

Test Position	Dist. (mm)	Modu-lation	UL CH #	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up	Power (dBm) Meas. Avg	1-g SAR (W/kg) Meas.	1-g SAR (W/kg) Scaled	Plot No.
Edge 4	0	BPSK	656000	3840	1	271	9.0	8.27	***0.688***	***0.814***	N77-C.2
			656000	3840	135	138	9.0	8.07	0.626	0.775	
			656000	3840	270	0	9.0	7.97	0.594	0.753	
Rear tilt(Edge4 side)	0	BPSK	656000	3840	1	271	9.0	8.27	0.167	0.198	
			656000	3840	135	138	9.0	8.07	0.157	0.194	
			656000	3840	270	0	9.0	7.97			
Rear	0	BPSK	656000	3840	1	271	9.0	8.27	0.054	0.064	
			656000	3840	135	138	9.0	8.07	0.053	0.066	
			656000	3840	270	0	9.0	7.97			

13.8 Repeated measurement

According to KDB 865664 D1.
1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10 % from the 1-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

RAT	Band	DSI	Test Position	Dist. (mm)	Mod	Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm) Tune-up limit	Power (dBm) Meas.	1-g SAR (W/kg) Meas. 1st	1-g SAR (W/kg) Meas. 2nd	Ratio	Plot
WCDMA	4	Edge 4	1	0	Rel 99 RMC 12.2 kbps	1513	1752.6	NA	NA	18.6	17.62	0.819	0.818	-0.12%	RP1
NR	n2	Edge 4	1	0	BPSK	372000	1860	1	1	18.4	17.45	0.824	0.822	-0.24%	RP2

Note(s):
N/A: Other repeated measurement is not required since the original highest measured SAR for all band is < 0.80 W/kg.
Worst ratio is less than 1.20, additional test isn't required.

14 WLAN additional testing for simultaneous measurement

14.1 KDB 248227 D01 (SAR Guidance for 802.11(Wi-Fi) Transmitters):

SAR test reduction for 802.11 WLAN transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.
The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the *initial test position(s)* by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The *initial test position(s)* is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the *reported* SAR for the *initial test position* is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- > 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the *initial test position* to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the *reported* SAR is ≤ 0.8 W/kg or all required test positions are tested.
    - For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
    - When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the *initial test position* and subsequent test positions, when the *reported* SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is ≤ 1.2 W/kg or all required test channels are considered.
    - The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

To determine the *initial test position*, Area Scans were performed to determine the position with the *Maximum Value of SAR (measured)*. The position that produced the highest *Maximum Value of SAR* is considered the worst case position; thus used as the *initial test position*.

14.1.1 Additional testing (WLAN other than 6E) for simultaneous transmission and calc.

2.4 GHz

Test Position	Dist. (mm)	Mode	Ant	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	
Edge2	0	802.11b	#1 (main)	1	2412.0	14.5	14.08			
				6	2437.0	14.5	14.29			
				11	2462.0	14.5	14.41	***0.000***	***0.000***	WM2.4
Edge3	0	802.11b	#1 (main)	1	2412.0	14.5	14.08			
				6	2437.0	14.5	14.29			
				11	2462.0	14.5	14.41	***0.000***	***0.000***	

Test Position	Dist. (mm)	Mode	Ant	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	
Edge2	0	802.11b	#2 (aux)	1	2412.0	14.5	14.40			
				6	2437.0	14.5	14.38			
				11	2462.0	14.5	14.32	***0.025***	***0.026***	WA2.4
Edge3	0	802.11b	#2 (aux)	1	2412.0	14.5	14.40			
				6	2437.0	14.5	14.38			
				11	2462.0	14.5	14.32	0.000	0.000	

5 GHz

Test Position	Dist. (mm)	Mode	Ant	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	
Edge2	0	802.11ac VHT160	#1 (main)	50	5250	13.0	12.90			
		802.11ac VHT160	#1 (main)	114	5570	13.0	12.90			
		802.11ac VHT80	#1 (main)	155	5775	13.0	12.90	***0.000***	***0.000***	WM5G
Edge3	0	802.11ac VHT160	#1 (main)	50	5250	13.0	12.90			
		802.11ac VHT160	#1 (main)	114	5570	13.0	12.90			
		802.11ac VHT80	#1 (main)	155	5775	13.0	12.90	***0.000***	***0.000***	

Test Position	Dist. (mm)	Mode	Ant	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	
Edge2	0	802.11ac VHT160	#2 (aux)	50	5250	10.5	10.40	***0.006***	***0.006***	WA5G
		802.11ac VHT160	#2 (aux)	114	5570	10.5	10.20			
		802.11ac VHT80	#2 (aux)	155	5775	10.0	9.90			
Edge3	0	802.11ac VHT160	#2 (aux)	50	5250	10.5	10.40	0.000	0.000	
		802.11ac VHT160	#2 (aux)	114	5570	10.5	10.20			
		802.11ac VHT80	#2 (aux)	155	5775	10.0	9.90			

Note: Edge1, Rear, Rear tilt edge1 result and tested mode and channels are based on original test report (FCCID: ACJ9TGWL22A / report num: R14206457-S1V3 published by UL LLC

14.1.2 Additional testing (WLAN 6E) for simultaneous transmission

Test Position	Dist. (mm)	Mode	Ant	Ch #.	Freq. (MHz)	Power (dBm)		PD total			PD normal			Plot No.
						Tune-up limit	Meas.	Meas. (W/m^2)	Meas. (mW/cm^2)	Scaled (mW/cm^2)	Meas. (W/m^2)	Meas. (mW/cm^2)	Scaled (mW/cm^2)	
Edge2	2	802.11 ax HE0	main	207	6985.0	11.8	10.32	0.439	0.044	0.061	0.315	0.032	***0.044***	
		160 MHz	aux	143	6665.0	7.3	6.71	0.321	0.032	0.036	0.131	0.013	0.013	
Edge3	2	802.11 ax HE0	main	207	6985.0	11.8	10.32	0.332	0.033	0.046	0.102	0.010	0.010	
		160 MHz	aux	143	6665.0	7.3	6.71	0.692	0.069	0.078	0.286	0.029	0.029	PD.6EA
Edge4	2	802.11 ax HE0	main	207	6985.0	11.8	10.32	0.889	0.089	***0.124***	0.286	0.029	0.028	PD.6EM
		160 MHz	aux	143	6665.0	7.3	6.71	0.136	0.014	0.015	0.091	0.009	0.009	
Rear tilt (Edge4 side)	2	802.11 ax HE0	main	207	6985.0	11.8	10.32	0.229	0.023	0.032	0.222	0.022	0.022	
		160 MHz	aux	143	6665.0	7.3	6.71	0.242	0.024	0.027	0.213	0.021	0.021	

Note: Edge1, Rear, Rear tilt edge1 result and tested mode and channels are based on original test report (FCCID: ACJ9TGWL22A / report num: R14206457-S1V3 published by UL LLC

15 Simultaneous transmission SAR test exclusion considerations

15.1 Sum and SPLSR

KDB 447498 D01 General RF Exposure Guidance provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based on sum of SAR, the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit, then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met. When a pair of the summation is above 1.58 W/kg for 1g SAR, then SAR to Peak Location Ratio (SPLSR) is performed, as conservative even though applicable limit is 1.6 W/kg. finally sum of SAR value is convert to TER, see next section.
Simultaneous transmission for ENDC mode is treated on part2 test report.

SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$$SPLSR = (SAR_1 + SAR_2)^{1.5} / Ri$$

Where:

SAR_1 is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

SAR_2 is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$$[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$(SAR_1 + SAR_2)^{1.5} / Ri \leq 0.04$$

When an individual antenna transmits at on two bands simultaneously, the sum of the highest *reported* SAR for the frequency bands should be used to determine SAR_1.or SAR_2. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

The antennas in all antenna pairs that do not qualify for simultaneous transmission SAR test exclusion must be tested for SAR compliance, according to the enlarged zoom scan and volume scan post-processing procedures in KDB Publication 865664 D01

Note

- BT value (Edge1,Rear,Rear tilt edge1) is from FCCID: ACJ9TGWL22A / report num: R14206457-S1V3 published by UL LLC.

15.1.1 Sum of the SAR for WLAN Ant 1 2.4 GHz / WLAN Ant 2 2.4 GHz / BT

Sum of the SAR for WCDMA B2 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	WCDMA B2	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.187	0.422	0.268		0.877	
	0.187	0.422		0.020	0.629	
Edge3	0.145	0.000	0.000		0.145	
	0.145	0.000		0.138	0.283	
Edge4	0.480	0.035	0.010		0.525	
	0.480	0.035		0.138	0.653	
Edge4 Reduction	0.915	0.035	0.010		0.960	
	0.915	0.035		0.138	1.088	
Rear	0.503	0.075	0.681		1.259	
	0.503	0.075		0.086	0.664	
Rear Reduction	0.513	0.075	0.681		1.269	
	0.513	0.075		0.086	0.674	
Rear tilt (Edge 1 side)	0.614	0.151	0.925		1.690	See next Section
	0.614	0.151		0.138	0.903	
Rear tilt (Edge 4 side)	0.806	0.029	0.011		0.846	
	0.806	0.029		0.138	0.973	
Rear tilt (Edge 4 side) Reduction	0.873	0.029	0.011		0.913	
	0.873	0.029		0.138	1.040	

Sum of the SAR for WCDMA B4 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	WCDMA B4	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.174	0.422	0.268		0.864	
	0.174	0.422		0.020	0.616	
Edge3	0.240	0.000	0.000		0.240	
	0.240	0.000		0.138	0.378	
Edge4	0.775	0.035	0.010		0.820	
	0.775	0.035		0.138	0.948	
Edge4 Reduction	1.026	0.035	0.010		1.071	
	1.026	0.035		0.138	1.199	
Rear	0.587	0.075	0.681		1.343	
	0.587	0.075		0.086	0.748	
Rear Reduction	0.499	0.075	0.681		1.255	
	0.499	0.075		0.086	0.660	
Rear tilt (Edge 1 side)	0.704	0.151	0.925		1.780	See next Section
	0.704	0.151		0.138	0.993	
Rear tilt (Edge 4 side)	1.027	0.029	0.011		1.067	
	1.027	0.029		0.138	1.194	
Rear tilt (Edge 4 side) Reduction	1.074	0.029	0.011		1.114	
	1.074	0.029		0.138	1.241	

Sum of the SAR for WCDMA B5 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	WCDMA B5	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.170	0.422	0.268		0.860	
	0.170	0.422		0.020	0.612	
Edge3	0.046	0.000	0.000		0.046	
	0.046	0.000		0.138	0.184	
Edge4	0.482	0.035	0.010		0.527	
	0.482	0.035		0.138	0.655	
Edge4 Reduction	0.851	0.035	0.010		0.896	
	0.851	0.035		0.138	1.024	
Rear	0.616	0.075	0.681		1.372	
	0.616	0.075		0.086	0.777	
Rear Reduction	0.320	0.075	0.681		1.076	
	0.320	0.075		0.086	0.481	
Rear tilt (Edge 1 side)	0.693	0.151	0.925		1.769	See next Section
	0.693	0.151		0.138	0.982	
Rear tilt (Edge 4 side)	0.815	0.029	0.011		0.855	
	0.815	0.029		0.138	0.982	
Rear tilt (Edge 4 side) Reduction	0.481	0.029	0.011		0.521	
	0.481	0.029		0.138	0.648	

Sum of the SAR for LTE B2 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B2	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.318	0.422	0.268		1.008	
	0.318	0.422		0.020	0.760	
Edge3	0.147	0.000	0.000		0.147	
	0.147	0.000		0.138	0.285	
Edge4	0.631	0.035	0.010		0.676	
	0.631	0.035		0.138	0.804	
Edge4 Reduction	0.864	0.035	0.010		0.909	
	0.864	0.035		0.138	1.037	
Rear	0.394	0.075	0.681		1.150	
	0.394	0.075		0.086	0.555	
Rear Reduction	0.523	0.075	0.681		1.279	
	0.523	0.075		0.086	0.684	
Rear tilt (Edge 1 side)	0.891	0.151	0.925		1.967	See next Section
	0.891	0.151		0.138	1.180	
Rear tilt (Edge 4 side)	0.835	0.029	0.011		0.875	
	0.835	0.029		0.138	1.002	
Rear tilt (Edge 4 side) Reduction	0.827	0.029	0.011		0.867	
	0.827	0.029		0.138	0.994	

Sum of the SAR for LTE B4 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B4	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.120	0.422	0.268		0.810	
	0.120	0.422		0.020	0.562	
Edge3	0.215	0.000	0.000		0.215	
	0.215	0.000		0.138	0.353	
Edge4	0.858	0.035	0.010		0.903	
	0.858	0.035		0.138	1.031	
Edge4 Reduction	0.917	0.035	0.010		0.962	
	0.917	0.035		0.138	1.090	
Rear	0.466	0.075	0.681		1.222	
	0.466	0.075		0.086	0.627	
Rear Reduction	0.456	0.075	0.681		1.212	
	0.456	0.075		0.086	0.617	
Rear tilt (Edge 1 side)	0.741	0.151	0.925		1.817	See next Section
	0.741	0.151		0.138	1.030	
Rear tilt (Edge 4 side)	0.920	0.029	0.011		0.960	
	0.920	0.029		0.138	1.087	
Rear tilt (Edge 4 side) Reduction	0.908	0.029	0.011		0.948	
	0.908	0.029		0.138	1.075	

Sum of the SAR for LTE B5 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B5	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.188	0.422	0.268		0.878	
	0.188	0.422		0.020	0.630	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.680	0.035	0.010		0.725	
	0.680	0.035		0.138	0.853	
Edge4 Reduction	0.832	0.035	0.010		0.877	
	0.832	0.035		0.138	1.005	
Rear	0.608	0.075	0.681		1.364	
	0.608	0.075		0.086	0.769	
Rear Reduction	0.351	0.075	0.681		1.107	
	0.351	0.075		0.086	0.512	
Rear tilt (Edge 1 side)	0.743	0.151	0.925		1.819	See next Section
	0.743	0.151		0.138	1.032	
Rear tilt (Edge 4 side)	0.737	0.029	0.011		0.777	
	0.737	0.029		0.138	0.904	
Rear tilt (Edge 4 side) Reduction	0.532	0.029	0.011		0.572	
	0.532	0.029		0.138	0.699	

Sum of the SAR for LTE B7 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B7	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.125	0.422	0.268		0.815	
	0.125	0.422		0.020	0.567	
Edge3	0.142	0.000	0.000		0.142	
	0.142	0.000		0.138	0.280	
Edge4	0.457	0.035	0.010		0.502	
	0.457	0.035		0.138	0.630	
Edge4 Reduction	0.949	0.035	0.010		0.994	
	0.949	0.035		0.138	1.122	
Rear	0.566	0.075	0.681		1.322	
	0.566	0.075		0.086	0.727	
Rear Reduction	0.408	0.075	0.681		1.164	
	0.408	0.075		0.086	0.569	
Rear tilt (Edge 1 side)	0.854	0.151	0.925		1.930	See next Section
	0.854	0.151		0.138	1.143	
Rear tilt (Edge 4 side)	0.749	0.029	0.011		0.789	
	0.749	0.029		0.138	0.916	
Rear tilt (Edge 4 side) Reduction	0.723	0.029	0.011		0.763	
	0.723	0.029		0.138	0.890	

Sum of the SAR for LTE B12 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B12	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.170	0.422	0.268		0.860	
	0.170	0.422		0.020	0.612	
Edge3	0.013	0.000	0.000		0.013	
	0.013	0.000		0.138	0.151	
Edge4	0.156	0.035	0.010		0.201	
	0.156	0.035		0.138	0.329	
Edge4 Reduction	0.760	0.035	0.010		0.805	
	0.760	0.035		0.138	0.933	
Rear	0.292	0.075	0.681		1.048	
	0.292	0.075		0.086	0.453	
Rear Reduction	0.214	0.075	0.681		0.970	
	0.214	0.075		0.086	0.375	
Rear tilt (Edge 1 side)	0.416	0.151	0.925		1.492	
	0.416	0.151		0.138	0.705	
Rear tilt (Edge 4 side)	0.359	0.029	0.011		0.399	
	0.359	0.029		0.138	0.526	
Rear tilt (Edge 4 side) Reduction	0.406	0.029	0.011		0.446	
	0.406	0.029		0.138	0.573	

Sum of the SAR for LTE B13 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B13	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.251	0.422	0.268		0.941	
	0.251	0.422		0.020	0.693	
Edge3	0.006	0.000	0.000		0.006	
	0.006	0.000		0.138	0.144	
Edge4	0.309	0.035	0.010		0.354	
	0.309	0.035		0.138	0.482	
Edge4 Reduction	0.861	0.035	0.010		0.906	
	0.861	0.035		0.138	1.034	
Rear	0.453	0.075	0.681		1.209	
	0.453	0.075		0.086	0.614	
Rear Reduction	0.315	0.075	0.681		1.071	
	0.315	0.075		0.086	0.476	
Rear tilt (Edge 1 side)	0.656	0.151	0.925		1.732	See next Section
	0.656	0.151		0.138	0.945	
Rear tilt (Edge 4 side)	0.620	0.029	0.011		0.660	
	0.620	0.029		0.138	0.787	
Rear tilt (Edge 4 side) Reduction	0.521	0.029	0.011		0.561	
	0.521	0.029		0.138	0.688	

Sum of the SAR for LTE B14 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B14	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.291	0.422	0.268		0.981	
	0.291	0.422		0.020	0.733	
Edge3	0.014	0.000	0.000		0.014	
	0.014	0.000		0.138	0.152	
Edge4	0.279	0.035	0.010		0.324	
	0.279	0.035		0.138	0.452	
Edge4 Reduction	0.963	0.035	0.010		1.008	
	0.963	0.035		0.138	1.136	
Rear	0.517	0.075	0.681		1.273	
	0.517	0.075		0.086	0.678	
Rear Reduction	0.334	0.075	0.681		1.090	
	0.334	0.075		0.086	0.495	
Rear tilt (Edge 1 side)	0.740	0.151	0.925		1.816	See next Section
	0.740	0.151		0.138	1.029	
Rear tilt (Edge 4 side)	0.729	0.029	0.011		0.769	
	0.729	0.029		0.138	0.896	
Rear tilt (Edge 4 side) Reduction	0.549	0.029	0.011		0.589	
	0.549	0.029		0.138	0.716	

Sum of the SAR for LTE B17 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B17	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.167	0.422	0.268		0.857	
	0.167	0.422		0.020	0.609	
Edge3	0.018	0.000	0.000		0.018	
	0.018	0.000		0.138	0.156	
Edge4	0.118	0.035	0.010		0.163	
	0.118	0.035		0.138	0.291	
Edge4 Reduction	0.925	0.035	0.010		0.970	
	0.925	0.035		0.138	1.098	
Rear	0.279	0.075	0.681		1.035	
	0.279	0.075		0.086	0.440	
Rear Reduction	0.265	0.075	0.681		1.021	
	0.265	0.075		0.086	0.426	
Rear tilt (Edge 1 side)	0.409	0.151	0.925		1.485	
	0.409	0.151		0.138	0.698	
Rear tilt (Edge 4 side)	0.340	0.029	0.011		0.380	
	0.340	0.029		0.138	0.507	
Rear tilt (Edge 4 side) Reduction	0.447	0.029	0.011		0.487	
	0.447	0.029		0.138	0.614	

Sum of the SAR for LTE B25 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B25	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.409	0.422	0.268		1.099	
	0.409	0.422		0.020	0.851	
Edge3	0.147	0.000	0.000		0.147	
	0.147	0.000		0.138	0.285	
Edge4	0.651	0.035	0.010		0.696	
	0.651	0.035		0.138	0.824	
Edge4 Reduction	0.885	0.035	0.010		0.930	
	0.885	0.035		0.138	1.058	
Rear	0.562	0.075	0.681		1.318	
	0.562	0.075		0.086	0.723	
Rear Reduction	0.548	0.075	0.681		1.304	
	0.548	0.075		0.086	0.709	
Rear tilt (Edge 1 side)	0.882	0.151	0.925		1.958	See next Section
	0.882	0.151		0.138	1.171	
Rear tilt (Edge 4 side)	0.836	0.029	0.011		0.876	
	0.836	0.029		0.138	1.003	
Rear tilt (Edge 4 side) Reduction	0.853	0.029	0.011		0.893	
	0.853	0.029		0.138	1.020	

Sum of the SAR for LTE B26 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B26	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.205	0.422	0.268		0.895	
	0.205	0.422		0.020	0.647	
Edge3	0.034	0.000	0.000		0.034	
	0.034	0.000		0.138	0.172	
Edge4	0.540	0.035	0.010		0.585	
	0.540	0.035		0.138	0.713	
Edge4 Reduction	0.853	0.035	0.010		0.898	
	0.853	0.035		0.138	1.026	
Rear	0.621	0.075	0.681		1.377	
	0.621	0.075		0.086	0.782	
Rear Reduction	0.356	0.075	0.681		1.112	
	0.356	0.075		0.086	0.517	
Rear tilt (Edge 1 side)	0.742	0.151	0.925		1.818	See next Section
	0.742	0.151		0.138	1.031	
Rear tilt (Edge 4 side)	0.857	0.029	0.011		0.897	
	0.857	0.029		0.138	1.024	
Rear tilt (Edge 4 side) Reduction	0.515	0.029	0.011		0.555	
	0.515	0.029		0.138	0.682	

Sum of the SAR for LTE B38 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B38	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.108	0.422	0.268		0.798	
	0.108	0.422		0.020	0.550	
Edge3	0.075	0.000	0.000		0.075	
	0.075	0.000		0.138	0.213	
Edge4	0.327	0.035	0.010		0.372	
	0.327	0.035		0.138	0.500	
Edge4 Reduction	0.888	0.035	0.010		0.933	
	0.888	0.035		0.138	1.061	
Rear	0.494	0.075	0.681		1.250	
	0.494	0.075		0.086	0.655	
Rear Reduction	0.469	0.075	0.681		1.225	
	0.469	0.075		0.086	0.630	
Rear tilt (Edge 1 side)	0.578	0.151	0.925		1.654	See next Section
	0.578	0.151		0.138	0.867	
Rear tilt (Edge 4 side)	0.569	0.029	0.011		0.609	
	0.569	0.029		0.138	0.736	
Rear tilt (Edge 4 side) Reduction	0.928	0.029	0.011		0.968	
	0.928	0.029		0.138	1.095	

Sum of the SAR for LTE B41 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B41	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.117	0.422	0.268		0.807	
	0.117	0.422		0.020	0.559	
Edge3	0.075	0.000	0.000		0.075	
	0.075	0.000		0.138	0.213	
Edge4	0.390	0.035	0.010		0.435	
	0.390	0.035		0.138	0.563	
Edge4 Reduction	1.014	0.035	0.010		1.059	
	1.014	0.035		0.138	1.187	
Rear	0.474	0.075	0.681		1.230	
	0.474	0.075		0.086	0.635	
Rear Reduction	0.317	0.075	0.681		1.073	
	0.317	0.075		0.086	0.478	
Rear tilt (Edge 1 side)	0.324	0.151	0.925		1.400	
	0.324	0.151		0.138	0.613	
Rear tilt (Edge 4 side)	0.650	0.029	0.011		0.690	
	0.650	0.029		0.138	0.817	
Rear tilt (Edge 4 side) Reduction	0.732	0.029	0.011		0.772	
	0.732	0.029		0.138	0.899	

Sum of the SAR for LTE B48 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B48	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.000	0.422	0.268		0.690	
	0.000	0.422		0.020	0.442	
Edge3	0.000	0.000	0.000		0.000	
	0.000	0.000		0.138	0.138	
Edge4	0.066	0.035	0.010		0.111	
	0.066	0.035		0.138	0.239	
Edge4 Reduction	0.531	0.035	0.010		0.576	
	0.531	0.035		0.138	0.704	
Rear	0.010	0.075	0.681		0.766	
	0.010	0.075		0.086	0.171	
Rear Reduction	0.042	0.075	0.681		0.798	
	0.042	0.075		0.086	0.203	
Rear tilt (Edge 1 side)	0.026	0.151	0.925		1.102	
	0.026	0.151		0.138	0.315	
Rear tilt (Edge 4 side)	0.026	0.029	0.011		0.066	
	0.026	0.029		0.138	0.193	
Rear tilt (Edge 4 side) Reduction	0.130	0.029	0.011		0.170	
	0.130	0.029		0.138	0.297	

Sum of the SAR for LTE B66 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B66	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.112	0.422	0.268		0.802	
	0.112	0.422		0.020	0.554	
Edge3	0.211	0.000	0.000		0.211	
	0.211	0.000		0.138	0.349	
Edge4	0.703	0.035	0.010		0.748	
	0.703	0.035		0.138	0.876	
Edge4 Reduction	0.941	0.035	0.010		0.986	
	0.941	0.035		0.138	1.114	
Rear	0.439	0.075	0.681		1.195	
	0.439	0.075		0.086	0.600	
Rear Reduction	0.448	0.075	0.681		1.204	
	0.448	0.075		0.086	0.609	
Rear tilt (Edge 1 side)	0.732	0.151	0.925		1.808	See next Section
	0.732	0.151		0.138	1.021	
Rear tilt (Edge 4 side)	0.937	0.029	0.011		0.977	
	0.937	0.029		0.138	1.104	
Rear tilt (Edge 4 side) Reduction	0.954	0.029	0.011		0.994	
	0.954	0.029		0.138	1.121	

Sum of the SAR for LTE B71 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	LTE B71	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.221	0.422	0.268		0.911	
	0.221	0.422		0.020	0.663	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.287	0.035	0.010		0.332	
	0.287	0.035		0.138	0.460	
Edge4 Reduction	0.828	0.035	0.010		0.873	
	0.828	0.035		0.138	1.001	
Rear	0.416	0.075	0.681		1.172	
	0.416	0.075		0.086	0.577	
Rear Reduction	0.333	0.075	0.681		1.089	
	0.333	0.075		0.086	0.494	
Rear tilt (Edge 1 side)	0.499	0.151	0.925		1.575	
	0.499	0.151		0.138	0.788	
Rear tilt (Edge 4 side)	0.633	0.029	0.011		0.673	
	0.633	0.029		0.138	0.800	
Rear tilt (Edge 4 side) Reduction	0.518	0.029	0.011		0.558	
	0.518	0.029		0.138	0.685	

Sum of the SAR for NR Bn2 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn2	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.246	0.422	0.268		0.936	
	0.246	0.422		0.020	0.688	
Edge3	0.172	0.000	0.000		0.172	
	0.172	0.000		0.138	0.310	
Edge4	0.622	0.035	0.010		0.667	
	0.622	0.035		0.138	0.795	
Edge4 Reduction	1.042	0.035	0.010		1.087	
	1.042	0.035		0.138	1.215	
Rear	0.383	0.075	0.681		1.139	
	0.383	0.075		0.086	0.544	
Rear Reduction	0.630	0.075	0.681		1.386	
	0.630	0.075		0.086	0.791	
Rear tilt (Edge 1 side)	0.826	0.151	0.925		1.902	See next Section
	0.826	0.151		0.138	1.115	
Rear tilt (Edge 4 side)	0.629	0.029	0.011		0.669	
	0.629	0.029		0.138	0.796	
Rear tilt (Edge 4 side) Reduction	0.889	0.029	0.011		0.929	
	0.889	0.029		0.138	1.056	

Sum of the SAR for NR Bn5 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn5	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.207	0.422	0.268		0.897	
	0.207	0.422		0.020	0.649	
Edge3	0.048	0.000	0.000		0.048	
	0.048	0.000		0.138	0.186	
Edge4	0.413	0.035	0.010		0.458	
	0.413	0.035		0.138	0.586	
Edge4 Reduction	0.911	0.035	0.010		0.956	
	0.911	0.035		0.138	1.084	
Rear	0.477	0.075	0.681		1.233	
	0.477	0.075		0.086	0.638	
Rear Reduction	0.382	0.075	0.681		1.138	
	0.382	0.075		0.086	0.543	
Rear tilt (Edge 1 side)	0.806	0.151	0.925		1.882	See next Section
	0.806	0.151		0.138	1.095	
Rear tilt (Edge 4 side)	0.838	0.029	0.011		0.878	
	0.838	0.029		0.138	1.005	
Rear tilt (Edge 4 side) Reduction	0.616	0.029	0.011		0.656	
	0.616	0.029		0.138	0.783	

Sum of the SAR for NR Bn41 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn41	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.204	0.422	0.268		0.894	
	0.204	0.422		0.020	0.646	
Edge3	0.036	0.000	0.000		0.036	
	0.036	0.000		0.138	0.174	
Edge2	0.513	0.035	0.010		0.558	
	0.513	0.035		0.138	0.686	
Edge2 Reduction	0.725	0.035	0.010		0.770	
	0.725	0.035		0.138	0.898	
Rear	0.312	0.075	0.681		1.068	
	0.312	0.075		0.086	0.473	
Rear Reduction	0.124	0.075	0.681		0.880	
	0.124	0.075		0.086	0.285	
Rear tilt (Edge 1 side)	0.824	0.151	0.925		1.900	See next Section
	0.824	0.151		0.138	1.113	
Rear tilt (Edge 2 side)	0.825	0.029	0.011		0.865	
	0.825	0.029		0.138	0.992	
Rear tilt (Edge 2 side) Reduction	0.435	0.029	0.011		0.475	
	0.435	0.029		0.138	0.602	

Sum of the SAR for NR Bn66 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn66	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.141	0.422	0.268		0.831	
	0.141	0.422		0.020	0.583	
Edge3	0.172	0.000	0.000		0.172	
	0.172	0.000		0.138	0.310	
Edge4	0.733	0.035	0.010		0.778	
	0.733	0.035		0.138	0.906	
Edge4 Reduction	0.860	0.035	0.010		0.905	
	0.860	0.035		0.138	1.033	
Rear	0.534	0.075	0.681		1.290	
	0.534	0.075		0.086	0.695	
Rear Reduction	0.469	0.075	0.681		1.225	
	0.469	0.075		0.086	0.630	
Rear tilt (Edge 1 side)	0.595	0.151	0.925		1.671	See next Section
	0.595	0.151		0.138	0.884	
Rear tilt (Edge 4 side)	0.822	0.029	0.011		0.862	
	0.822	0.029		0.138	0.989	
Rear tilt (Edge 4 side) Reduction	0.773	0.029	0.011		0.813	
	0.773	0.029		0.138	0.940	

Sum of the SAR for NR Bn71 & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn71	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.271	0.422	0.268		0.961	
	0.271	0.422		0.020	0.713	
Edge3	0.014	0.000	0.000		0.014	
	0.014	0.000		0.138	0.152	
Edge4	0.346	0.035	0.010		0.391	
	0.346	0.035		0.138	0.519	
Edge4 Reduction	0.869	0.035	0.010		0.914	
	0.869	0.035		0.138	1.042	
Rear	0.540	0.075	0.681		1.296	
	0.540	0.075		0.086	0.701	
Rear Reduction	0.314	0.075	0.681		1.070	
	0.314	0.075		0.086	0.475	
Rear tilt (Edge 1 side)	0.658	0.151	0.925		1.734	See next Section
	0.658	0.151		0.138	0.947	
Rear tilt (Edge 4 side)	0.614	0.029	0.011		0.654	
	0.614	0.029		0.138	0.781	
Rear tilt (Edge 4 side) Reduction	0.587	0.029	0.011		0.627	
	0.587	0.029		0.138	0.754	

Sum of the SAR for NR Bn77 (Block A) & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn77 (Block A)	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.178	0.422	0.268		0.868	
	0.178	0.422		0.020	0.620	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.748	0.035	0.010		0.793	
	0.748	0.035		0.138	0.921	
Edge4 Reduction	0.668	0.035	0.010		0.713	
	0.668	0.035		0.138	0.841	
Rear	0.356	0.075	0.681		1.112	
	0.356	0.075		0.086	0.517	
Rear Reduction	0.047	0.075	0.681		0.803	
	0.047	0.075		0.086	0.208	
Rear tilt (Edge 1 side)	0.503	0.151	0.925		1.579	
	0.503	0.151		0.138	0.792	
Rear tilt (Edge 4 side)	0.525	0.029	0.011		0.565	
	0.525	0.029		0.138	0.692	
Rear tilt (Edge 4 side) Reduction	0.176	0.029	0.011		0.216	
	0.176	0.029		0.138	0.343	

Sum of the SAR for NR Bn77(Block C) & WLAN Main 2.4GHz / WLAN Aux 2.4GHz / BT

	Mode					
Test Position	NR Bn77(Block C)	WLAN Main 2.4GHz	WLAN Aux 2.4GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.045	0.422	0.268		0.735	
	0.045	0.422		0.020	0.487	
Edge3	0.050	0.000	0.000		0.050	
	0.050	0.000		0.138	0.188	
Edge4	0.890	0.035	0.010		0.935	
	0.890	0.035		0.138	1.063	
Edge4 Reduction	0.814	0.035	0.010		0.859	
	0.814	0.035		0.138	0.987	
Rear	0.422	0.075	0.681		1.178	
	0.422	0.075		0.086	0.583	
Rear Reduction	0.066	0.075	0.681		0.822	
	0.066	0.075		0.086	0.227	
Rear tilt (Edge 1 side)	0.660	0.151	0.925		1.736	See next Section
	0.660	0.151		0.138	0.949	
Rear tilt (Edge 4 side)	0.821	0.029	0.011		0.861	
	0.821	0.029		0.138	0.988	
Rear tilt (Edge 4 side) Reduction	0.198	0.029	0.011		0.238	
	0.198	0.029		0.138	0.365	

15.1.2 Sum of the SAR for WLAN Ant 1 5 GHz / WLAN Ant 2 5 GHz / BT

Sum of the SAR for WCDMA B2 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	WCDMA B2	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.187	0.553	0.201		0.941	
	0.187	0.553		0.020	0.760	
Edge3	0.145	0.000	0.000		0.145	
	0.145	0.000		0.138	0.283	
Edge4	0.480	0.034	0.010		0.524	
	0.480	0.034		0.138	0.652	
Edge4 Reduction	0.915	0.034	0.010		0.959	
	0.915	0.034		0.138	1.087	
Rear	0.503	0.211	0.562		1.276	
	0.503	0.211		0.086	0.800	
Rear Reduction	0.513	0.211	0.562		1.286	
	0.513	0.211		0.086	0.810	
Rear tilt (Edge 1 side)	0.614	0.355	0.854		1.823	See next Section
	0.614	0.355		0.138	1.107	
Rear tilt (Edge 4 side)	0.806	0.155	0.041		1.002	
	0.806	0.155		0.138	1.099	
Rear tilt (Edge 4 side) Reduction	0.873	0.155	0.041		1.069	
	0.873	0.155		0.138	1.166	

Sum of the SAR for WCDMA B4 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	WCDMA B4	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.174	0.553	0.201		0.928	
	0.174	0.553		0.020	0.747	
Edge3	0.240	0.000	0.000		0.240	
	0.240	0.000		0.138	0.378	
Edge4	0.775	0.034	0.010		0.819	
	0.775	0.034		0.138	0.947	
Edge4 Reduction	1.026	0.034	0.010		1.070	
	1.026	0.034		0.138	1.198	
Rear	0.587	0.211	0.562		1.360	
	0.587	0.211		0.086	0.884	
Rear Reduction	0.499	0.211	0.562		1.272	
	0.499	0.211		0.086	0.796	
Rear tilt (Edge 1 side)	0.704	0.355	0.854		1.913	See next Section
	0.704	0.355		0.138	1.197	
Rear tilt (Edge 4 side)	1.027	0.155	0.041		1.223	
	1.027	0.155		0.138	1.320	
Rear tilt (Edge 4 side) Reduction	1.074	0.155	0.041		1.270	
	1.074	0.155		0.138	1.367	

Sum of the SAR for WCDMA B5 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	WCDMA B5	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.170	0.553	0.201		0.924	
	0.170	0.553		0.020	0.743	
Edge3	0.046	0.000	0.000		0.046	
	0.046	0.000		0.138	0.184	
Edge4	0.482	0.034	0.010		0.526	
	0.482	0.034		0.138	0.654	
Edge4 Reduction	0.851	0.034	0.010		0.895	
	0.851	0.034		0.138	1.023	
Rear	0.616	0.211	0.562		1.389	
	0.616	0.211		0.086	0.913	
Rear Reduction	0.320	0.211	0.562		1.093	
	0.320	0.211		0.086	0.617	
Rear tilt (Edge 1 side)	0.693	0.355	0.854		1.902	See next Section
	0.693	0.355		0.138	1.186	
Rear tilt (Edge 4 side)	0.815	0.155	0.041		1.011	
	0.815	0.155		0.138	1.108	
Rear tilt (Edge 4 side) Reduction	0.481	0.155	0.041		0.677	
	0.481	0.155		0.138	0.774	

Sum of the SAR for LTE B2 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B2	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.318	0.553	0.201		1.072	
	0.318	0.553		0.020	0.891	
Edge3	0.147	0.000	0.000		0.147	
	0.147	0.000		0.138	0.285	
Edge4	0.631	0.034	0.010		0.675	
	0.631	0.034		0.138	0.803	
Edge4 Reduction	0.864	0.034	0.010		0.908	
	0.864	0.034		0.138	1.036	
Rear	0.394	0.211	0.562		1.167	
	0.394	0.211		0.086	0.691	
Rear Reduction	0.523	0.211	0.562		1.296	
	0.523	0.211		0.086	0.820	
Rear tilt (Edge 1 side)	0.891	0.355	0.854		2.100	See next Section
	0.891	0.355		0.138	1.384	
Rear tilt (Edge 4 side)	0.835	0.155	0.041		1.031	
	0.835	0.155		0.138	1.128	
Rear tilt (Edge 4 side) Reduction	0.827	0.155	0.041		1.023	
	0.827	0.155		0.138	1.120	

Sum of the SAR for LTE B4 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B4	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.120	0.553	0.201		0.874	
	0.120	0.553		0.020	0.693	
Edge3	0.215	0.000	0.000		0.215	
	0.215	0.000		0.138	0.353	
Edge4	0.858	0.034	0.010		0.902	
	0.858	0.034		0.138	1.030	
Edge4 Reduction	0.917	0.034	0.010		0.961	
	0.917	0.034		0.138	1.089	
Rear	0.466	0.211	0.562		1.239	
	0.466	0.211		0.086	0.763	
Rear Reduction	0.456	0.211	0.562		1.229	
	0.456	0.211		0.086	0.753	
Rear tilt (Edge 1 side)	0.741	0.355	0.854		1.950	See next Section
	0.741	0.355		0.138	1.234	
Rear tilt (Edge 4 side)	0.920	0.155	0.041		1.116	
	0.920	0.155		0.138	1.213	
Rear tilt (Edge 4 side) Reduction	0.908	0.155	0.041		1.104	
	0.908	0.155		0.138	1.201	

Sum of the SAR for LTE B5 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B5	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.188	0.553	0.201		0.942	
	0.188	0.553		0.020	0.761	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.680	0.034	0.010		0.724	
	0.680	0.034		0.138	0.852	
Edge4 Reduction	0.832	0.034	0.010		0.876	
	0.832	0.034		0.138	1.004	
Rear	0.608	0.211	0.562		1.381	
	0.608	0.211		0.086	0.905	
Rear Reduction	0.351	0.211	0.562		1.124	
	0.351	0.211		0.086	0.648	
Rear tilt (Edge 1 side)	0.743	0.355	0.854		1.952	See next Section
	0.743	0.355		0.138	1.236	
Rear tilt (Edge 4 side)	0.737	0.155	0.041		0.933	
	0.737	0.155		0.138	1.030	
Rear tilt (Edge 4 side) Reduction	0.532	0.155	0.041		0.728	
	0.532	0.155		0.138	0.825	

Sum of the SAR for LTE B7 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B7	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.125	0.553	0.201		0.879	
	0.125	0.553		0.020	0.698	
Edge3	0.142	0.000	0.000		0.142	
	0.142	0.000		0.138	0.280	
Edge4	0.457	0.034	0.010		0.501	
	0.457	0.034		0.138	0.629	
Edge4 Reduction	0.949	0.034	0.010		0.993	
	0.949	0.034		0.138	1.121	
Rear	0.566	0.211	0.562		1.339	
	0.566	0.211		0.086	0.863	
Rear Reduction	0.408	0.211	0.562		1.181	
	0.408	0.211		0.086	0.705	
Rear tilt (Edge 1 side)	0.854	0.355	0.854		2.063	See next Section
	0.854	0.355		0.138	1.347	
Rear tilt (Edge 4 side)	0.749	0.155	0.041		0.945	
	0.749	0.155		0.138	1.042	
Rear tilt (Edge 4 side) Reduction	0.723	0.155	0.041		0.919	
	0.723	0.155		0.138	1.016	

Sum of the SAR for LTE B12 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B12	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.170	0.553	0.201		0.924	
	0.170	0.553		0.020	0.743	
Edge3	0.013	0.000	0.000		0.013	
	0.013	0.000		0.138	0.151	
Edge4	0.156	0.034	0.010		0.200	
	0.156	0.034		0.138	0.328	
Edge4 Reduction	0.760	0.034	0.010		0.804	
	0.760	0.034		0.138	0.932	
Rear	0.292	0.211	0.562		1.065	
	0.292	0.211		0.086	0.589	
Rear Reduction	0.214	0.211	0.562		0.987	
	0.214	0.211		0.086	0.511	
Rear tilt (Edge 1 side)	0.416	0.355	0.854		1.625	See next Section
	0.416	0.355		0.138	0.909	
Rear tilt (Edge 4 side)	0.359	0.155	0.041		0.555	
	0.359	0.155		0.138	0.652	
Rear tilt (Edge 4 side) Reduction	0.406	0.155	0.041		0.602	
	0.406	0.155		0.138	0.699	

Sum of the SAR for LTE B13 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B13	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.251	0.553	0.201		1.005	
	0.251	0.553		0.020	0.824	
Edge3	0.006	0.000	0.000		0.006	
	0.006	0.000		0.138	0.144	
Edge4	0.309	0.034	0.010		0.353	
	0.309	0.034		0.138	0.481	
Edge4 Reduction	0.861	0.034	0.010		0.905	
	0.861	0.034		0.138	1.033	
Rear	0.453	0.211	0.562		1.226	
	0.453	0.211		0.086	0.750	
Rear Reduction	0.315	0.211	0.562		1.088	
	0.315	0.211		0.086	0.612	
Rear tilt (Edge 1 side)	0.656	0.355	0.854		1.865	See next Section
	0.656	0.355		0.138	1.149	
Rear tilt (Edge 4 side)	0.620	0.155	0.041		0.816	
	0.620	0.155		0.138	0.913	
Rear tilt (Edge 4 side) Reduction	0.521	0.155	0.041		0.717	
	0.521	0.155		0.138	0.814	

Sum of the SAR for LTE B14 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B14	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.291	0.553	0.201		1.045	
	0.291	0.553		0.020	0.864	
Edge3	0.014	0.000	0.000		0.014	
	0.014	0.000		0.138	0.152	
Edge4	0.279	0.034	0.010		0.323	
	0.279	0.034		0.138	0.451	
Edge4 Reduction	0.963	0.034	0.010		1.007	
	0.963	0.034		0.138	1.135	
Rear	0.517	0.211	0.562		1.290	
	0.517	0.211		0.086	0.814	
Rear Reduction	0.334	0.211	0.562		1.107	
	0.334	0.211		0.086	0.631	
Rear tilt (Edge 1 side)	0.740	0.355	0.854		1.949	See next Section
	0.740	0.355		0.138	1.233	
Rear tilt (Edge 4 side)	0.729	0.155	0.041		0.925	
	0.729	0.155		0.138	1.022	
Rear tilt (Edge 4 side) Reduction	0.549	0.155	0.041		0.745	
	0.549	0.155		0.138	0.842	

Sum of the SAR for LTE B17 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B17	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.167	0.553	0.201		0.921	
	0.167	0.553		0.020	0.740	
Edge3	0.018	0.000	0.000		0.018	
	0.018	0.000		0.138	0.156	
Edge4	0.118	0.034	0.010		0.162	
	0.118	0.034		0.138	0.290	
Edge4 Reduction	0.925	0.034	0.010		0.969	
	0.925	0.034		0.138	1.097	
Rear	0.279	0.211	0.562		1.052	
	0.279	0.211		0.086	0.576	
Rear Reduction	0.265	0.211	0.562		1.038	
	0.265	0.211		0.086	0.562	
Rear tilt (Edge 1 side)	0.409	0.355	0.854		1.618	See next Section
	0.409	0.355		0.138	0.902	
Rear tilt (Edge 4 side)	0.340	0.155	0.041		0.536	
	0.340	0.155		0.138	0.633	
Rear tilt (Edge 4 side) Reduction	0.447	0.155	0.041		0.643	
	0.447	0.155		0.138	0.740	

Sum of the SAR for LTE B25 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B25	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.409	0.553	0.201		1.163	
	0.409	0.553		0.020	0.982	
Edge3	0.147	0.000	0.000		0.147	
	0.147	0.000		0.138	0.285	
Edge4	0.651	0.034	0.010		0.695	
	0.651	0.034		0.138	0.823	
Edge4 Reduction	0.885	0.034	0.010		0.929	
	0.885	0.034		0.138	1.057	
Rear	0.562	0.211	0.562		1.335	
	0.562	0.211		0.086	0.859	
Rear Reduction	0.548	0.211	0.562		1.321	
	0.548	0.211		0.086	0.845	
Rear tilt (Edge 1 side)	0.882	0.355	0.854		2.091	See next Section
	0.882	0.355		0.138	1.375	
Rear tilt (Edge 4 side)	0.836	0.155	0.041		1.032	
	0.836	0.155		0.138	1.129	
Rear tilt (Edge 4 side) Reduction	0.853	0.155	0.041		1.049	
	0.853	0.155		0.138	1.146	

Sum of the SAR for LTE B26 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B26	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.205	0.553	0.201		0.959	
	0.205	0.553		0.020	0.778	
Edge3	0.034	0.000	0.000		0.034	
	0.034	0.000		0.138	0.172	
Edge4	0.540	0.034	0.010		0.584	
	0.540	0.034		0.138	0.712	
Edge4 Reduction	0.853	0.034	0.010		0.897	
	0.853	0.034		0.138	1.025	
Rear	0.621	0.211	0.562		1.394	
	0.621	0.211		0.086	0.918	
Rear Reduction	0.356	0.211	0.562		1.129	
	0.356	0.211		0.086	0.653	
Rear tilt (Edge 1 side)	0.742	0.355	0.854		1.951	See next Section
	0.742	0.355		0.138	1.235	
Rear tilt (Edge 4 side)	0.857	0.155	0.041		1.053	
	0.857	0.155		0.138	1.150	
Rear tilt (Edge 4 side) Reduction	0.515	0.155	0.041		0.711	
	0.515	0.155		0.138	0.808	

Sum of the SAR for LTE B38 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B38	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.108	0.553	0.201		0.862	
	0.108	0.553		0.020	0.681	
Edge3	0.075	0.000	0.000		0.075	
	0.075	0.000		0.138	0.213	
Edge4	0.327	0.034	0.010		0.371	
	0.327	0.034		0.138	0.499	
Edge4 Reduction	0.888	0.034	0.010		0.932	
	0.888	0.034		0.138	1.060	
Rear	0.494	0.211	0.562		1.267	
	0.494	0.211		0.086	0.791	
Rear Reduction	0.469	0.211	0.562		1.242	
	0.469	0.211		0.086	0.766	
Rear tilt (Edge 1 side)	0.578	0.355	0.854		1.787	See next Section
	0.578	0.355		0.138	1.071	
Rear tilt (Edge 4 side)	0.569	0.155	0.041		0.765	
	0.569	0.155		0.138	0.862	
Rear tilt (Edge 4 side) Reduction	0.928	0.155	0.041		1.124	
	0.928	0.155		0.138	1.221	

Sum of the SAR for LTE B41 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B41	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.117	0.553	0.201		0.871	
	0.117	0.553		0.020	0.690	
Edge3	0.075	0.000	0.000		0.075	
	0.075	0.000		0.138	0.213	
Edge4	0.390	0.034	0.010		0.434	
	0.390	0.034		0.138	0.562	
Edge4 Reduction	1.014	0.034	0.010		1.058	
	1.014	0.034		0.138	1.186	
Rear	0.474	0.211	0.562		1.247	
	0.474	0.211		0.086	0.771	
Rear Reduction	0.317	0.211	0.562		1.090	
	0.317	0.211		0.086	0.614	
Rear tilt (Edge 1 side)	0.324	0.355	0.854		1.533	
	0.324	0.355		0.138	0.817	
Rear tilt (Edge 4 side)	0.650	0.155	0.041		0.846	
	0.650	0.155		0.138	0.943	
Rear tilt (Edge 4 side) Reduction	0.732	0.155	0.041		0.928	
	0.732	0.155		0.138	1.025	

Sum of the SAR for LTE B48 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B48	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.000	0.553	0.201		0.754	
	0.000	0.553		0.020	0.573	
Edge3	0.000	0.000	0.000		0.000	
	0.000	0.000		0.138	0.138	
Edge4	0.066	0.034	0.010		0.110	
	0.066	0.034		0.138	0.238	
Edge4 Reduction	0.531	0.034	0.010		0.575	
	0.531	0.034		0.138	0.703	
Rear	0.010	0.211	0.562		0.783	
	0.010	0.211		0.086	0.307	
Rear Reduction	0.042	0.211	0.562		0.815	
	0.042	0.211		0.086	0.339	
Rear tilt (Edge 1 side)	0.026	0.355	0.854		1.235	
	0.026	0.355		0.138	0.519	
Rear tilt (Edge 4 side)	0.026	0.155	0.041		0.222	
	0.026	0.155		0.138	0.319	
Rear tilt (Edge 4 side) Reduction	0.130	0.155	0.041		0.326	
	0.130	0.155		0.138	0.423	

Sum of the SAR for LTE B66 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B66	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.112	0.553	0.201		0.866	
	0.112	0.553		0.020	0.685	
Edge3	0.211	0.000	0.000		0.211	
	0.211	0.000		0.138	0.349	
Edge4	0.703	0.034	0.010		0.747	
	0.703	0.034		0.138	0.875	
Edge4 Reduction	0.941	0.034	0.010		0.985	
	0.941	0.034		0.138	1.113	
Rear	0.439	0.211	0.562		1.212	
	0.439	0.211		0.086	0.736	
Rear Reduction	0.448	0.211	0.562		1.221	
	0.448	0.211		0.086	0.745	
Rear tilt (Edge 1 side)	0.732	0.355	0.854		1.941	See next Section
	0.732	0.355		0.138	1.225	
Rear tilt (Edge 4 side)	0.937	0.155	0.041		1.133	
	0.937	0.155		0.138	1.230	
Rear tilt (Edge 4 side) Reduction	0.954	0.155	0.041		1.150	
	0.954	0.155		0.138	1.247	

Sum of the SAR for LTE B71 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	LTE B71	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.221	0.553	0.201		0.975	
	0.221	0.553		0.020	0.794	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.287	0.034	0.010		0.331	
	0.287	0.034		0.138	0.459	
Edge4 Reduction	0.828	0.034	0.010		0.872	
	0.828	0.034		0.138	1.000	
Rear	0.416	0.211	0.562		1.189	
	0.416	0.211		0.086	0.713	
Rear Reduction	0.333	0.211	0.562		1.106	
	0.333	0.211		0.086	0.630	
Rear tilt (Edge 1 side)	0.499	0.355	0.854		1.708	See next Section
	0.499	0.355		0.138	0.992	
Rear tilt (Edge 4 side)	0.633	0.155	0.041		0.829	
	0.633	0.155		0.138	0.926	
Rear tilt (Edge 4 side) Reduction	0.518	0.155	0.041		0.714	
	0.518	0.155		0.138	0.811	

Sum of the SAR for NR Bn2 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn2	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.246	0.553	0.201		1.000	
	0.246	0.553		0.020	0.819	
Edge3	0.172	0.000	0.000		0.172	
	0.172	0.000		0.138	0.310	
Edge4	0.622	0.034	0.010		0.666	
	0.622	0.034		0.138	0.794	
Edge4 Reduction	1.042	0.034	0.010		1.086	
	1.042	0.034		0.138	1.214	
Rear	0.383	0.211	0.562		1.156	
	0.383	0.211		0.086	0.680	
Rear Reduction	0.630	0.211	0.562		1.403	
	0.630	0.211		0.086	0.927	
Rear tilt (Edge 1 side)	0.826	0.355	0.854		2.035	See next Section
	0.826	0.355		0.138	1.319	
Rear tilt (Edge 4 side)	0.629	0.155	0.041		0.825	
	0.629	0.155		0.138	0.922	
Rear tilt (Edge 4 side) Reduction	0.889	0.155	0.041		1.085	
	0.889	0.155		0.138	1.182	

Sum of the SAR for NR Bn5 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn5	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.207	0.553	0.201		0.961	
	0.207	0.553		0.020	0.780	
Edge3	0.048	0.000	0.000		0.048	
	0.048	0.000		0.138	0.186	
Edge4	0.413	0.034	0.010		0.457	
	0.413	0.034		0.138	0.585	
Edge4 Reduction	0.911	0.034	0.010		0.955	
	0.911	0.034		0.138	1.083	
Rear	0.477	0.211	0.562		1.250	
	0.477	0.211		0.086	0.774	
Rear Reduction	0.382	0.211	0.562		1.155	
	0.382	0.211		0.086	0.679	
Rear tilt (Edge 1 side)	0.806	0.355	0.854		2.015	See next Section
	0.806	0.355		0.138	1.299	
Rear tilt (Edge 4 side)	0.838	0.155	0.041		1.034	
	0.838	0.155		0.138	1.131	
Rear tilt (Edge 4 side) Reduction	0.616	0.155	0.041		0.812	
	0.616	0.155		0.138	0.909	

Sum of the SAR for NR Bn41 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn41	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.204	0.553	0.201		0.958	
	0.204	0.553		0.020	0.777	
Edge3	0.036	0.000	0.000		0.036	
	0.036	0.000		0.138	0.174	
Edge2	0.513	0.034	0.010		0.557	
	0.513	0.034		0.138	0.685	
Edge2 Reduction	0.725	0.034	0.010		0.769	
	0.725	0.034		0.138	0.897	
Rear	0.312	0.211	0.562		1.085	
	0.312	0.211		0.086	0.609	
Rear Reduction	0.124	0.211	0.562		0.897	
	0.124	0.211		0.086	0.421	
Rear tilt (Edge 1 side)	0.824	0.355	0.854		2.033	See next Section
	0.824	0.355		0.138	1.317	
Rear tilt (Edge 2 side)	0.825	0.155	0.041		1.021	
	0.825	0.155		0.138	1.118	
Rear tilt (Edge 2 side) Reduction	0.435	0.155	0.041		0.631	
	0.435	0.155		0.138	0.728	

Sum of the SAR for NR Bn66 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn66	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.141	0.553	0.201		0.895	
	0.141	0.553		0.020	0.714	
Edge3	0.172	0.000	0.000		0.172	
	0.172	0.000		0.138	0.310	
Edge4	0.733	0.034	0.010		0.777	
	0.733	0.034		0.138	0.905	
Edge4 Reduction	0.860	0.034	0.010		0.904	
	0.860	0.034		0.138	1.032	
Rear	0.534	0.211	0.562		1.307	
	0.534	0.211		0.086	0.831	
Rear Reduction	0.469	0.211	0.562		1.242	
	0.469	0.211		0.086	0.766	
Rear tilt (Edge 1 side)	0.595	0.355	0.854		1.804	See next Section
	0.595	0.355		0.138	1.088	
Rear tilt (Edge 4 side)	0.822	0.155	0.041		1.018	
	0.822	0.155		0.138	1.115	
Rear tilt (Edge 4 side) Reduction	0.773	0.155	0.041		0.969	
	0.773	0.155		0.138	1.066	

Sum of the SAR for NR Bn71 & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn71	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.271	0.553	0.201		1.025	
	0.271	0.553		0.020	0.844	
Edge3	0.014	0.000	0.000		0.014	
	0.014	0.000		0.138	0.152	
Edge4	0.346	0.034	0.010		0.390	
	0.346	0.034		0.138	0.518	
Edge4 Reduction	0.869	0.034	0.010		0.913	
	0.869	0.034		0.138	1.041	
Rear	0.540	0.211	0.562		1.313	
	0.540	0.211		0.086	0.837	
Rear Reduction	0.314	0.211	0.562		1.087	
	0.314	0.211		0.086	0.611	
Rear tilt (Edge 1 side)	0.658	0.355	0.854		1.867	See next Section
	0.658	0.355		0.138	1.151	
Rear tilt (Edge 4 side)	0.614	0.155	0.041		0.810	
	0.614	0.155		0.138	0.907	
Rear tilt (Edge 4 side) Reduction	0.587	0.155	0.041		0.783	
	0.587	0.155		0.138	0.880	

Sum of the SAR for NR Bn77 (Block A) & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn77 (Block A)	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.178	0.553	0.201		0.932	
	0.178	0.553		0.020	0.751	
Edge3	0.045	0.000	0.000		0.045	
	0.045	0.000		0.138	0.183	
Edge4	0.748	0.034	0.010		0.792	
	0.748	0.034		0.138	0.920	
Edge4 Reduction	0.668	0.034	0.010		0.712	
	0.668	0.034		0.138	0.840	
Rear	0.356	0.211	0.562		1.129	
	0.356	0.211		0.086	0.653	
Rear Reduction	0.047	0.211	0.562		0.820	
	0.047	0.211		0.086	0.344	
Rear tilt (Edge 1 side)	0.503	0.355	0.854		1.712	See next Section
	0.503	0.355		0.138	0.996	
Rear tilt (Edge 4 side)	0.525	0.155	0.041		0.721	
	0.525	0.155		0.138	0.818	
Rear tilt (Edge 4 side) Reduction	0.176	0.155	0.041		0.372	
	0.176	0.155		0.138	0.469	

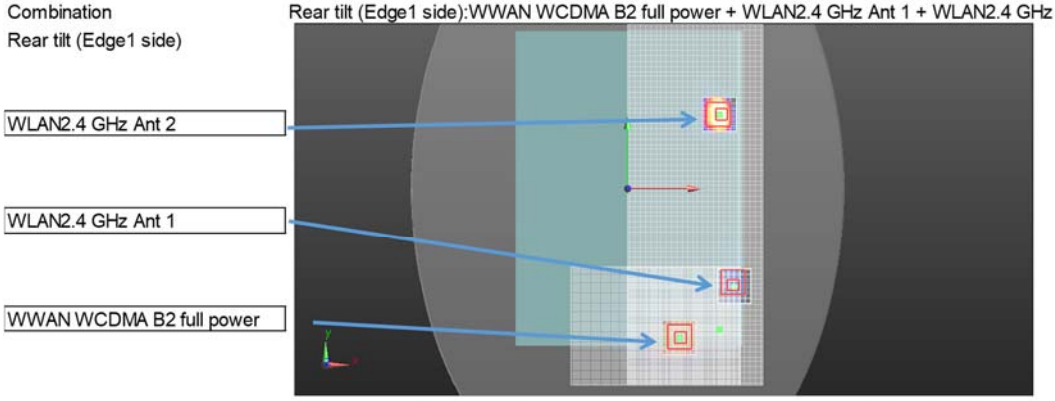
Sum of the SAR for NR Bn77(Block C) & WLAN Main 5 GHz / WLAN Aux 5 GHz / BT

	Mode					
Test Position	NR Bn77(Block C)	WLAN Main 5 GHz	WLAN Aux 5 GHz	BT	Sum of SAR [W/kg](1g)	Remarks
Edge1	0.045	0.553	0.201		0.799	
	0.045	0.553		0.020	0.618	
Edge3	0.050	0.000	0.000		0.050	
	0.050	0.000		0.138	0.188	
Edge4	0.890	0.034	0.010		0.934	
	0.890	0.034		0.138	1.062	
Edge4 Reduction	0.814	0.034	0.010		0.858	
	0.814	0.034		0.138	0.986	
Rear	0.422	0.211	0.562		1.195	
	0.422	0.211		0.086	0.719	
Rear Reduction	0.066	0.211	0.562		0.839	
	0.066	0.211		0.086	0.363	
Rear tilt (Edge 1 side)	0.660	0.355	0.854		1.869	See next Section
	0.660	0.355		0.138	1.153	
Rear tilt (Edge 4 side)	0.821	0.155	0.041		1.017	
	0.821	0.155		0.138	1.114	
Rear tilt (Edge 4 side) Reduction	0.198	0.155	0.041		0.394	
	0.198	0.155		0.138	0.491	

15.1.3 SPLSR

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B2 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



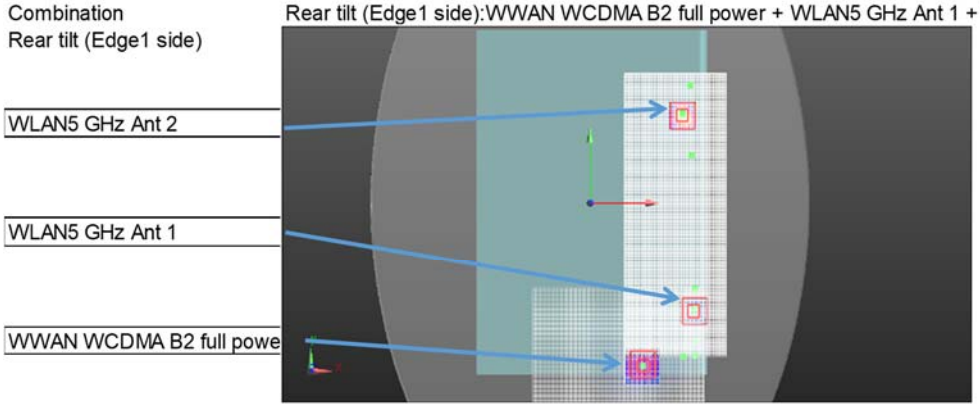
Mode	Ant	No	X mm	Y mm	Z mm	Combination	d: Calculated distance (mm)
WWAN WCDMA B2 full power	#1	1	47.00	-133.00	1.23		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	66.16
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	201.60

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.614	0.151		No.1 + No.2	0.765	66.16	0.010	No
Rear tilt(Edge 1 side)	0.614		0.925	No.1 + No.3	1.539	201.60	0.009	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B2 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



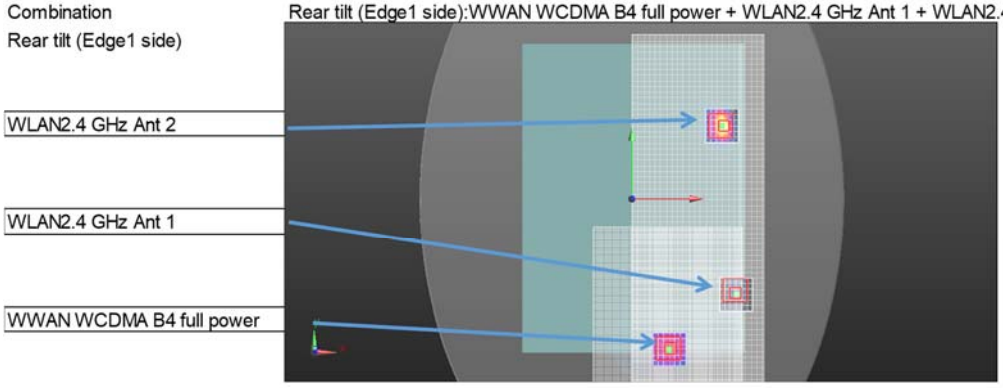
Mode	Ant	No	X mm	Y mm	Z mm	Combination	d: Calculated distance (mm)
WWAN WCDMA B2 full powe	#1	1	47.00	-133.00	1.23		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	62.65
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	204.18

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.614	0.355		No.1 + No.2	0.969	62.65	0.015	No
Rear tilt(Edge 1 side)	0.614		0.854	No.1 + No.3	1.468	204.18	0.009	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B4 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



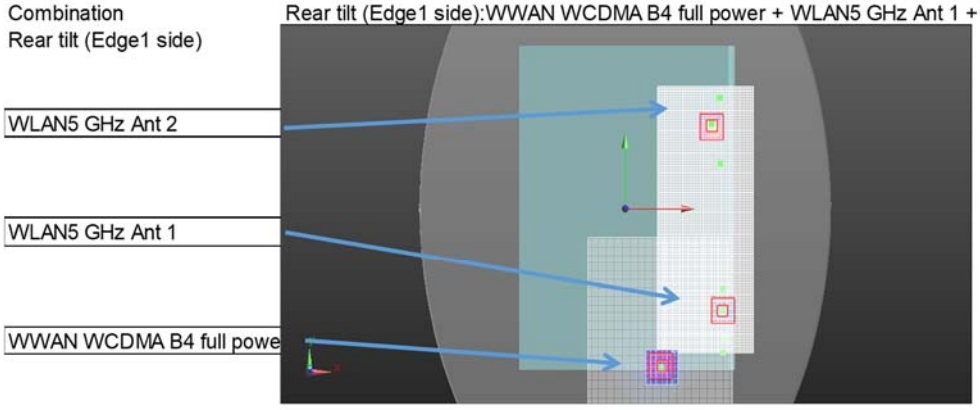
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN WCDMA B4 full power	#1	1	37.00	-136.50	-3.76		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	75.75
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	207.01

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.704	0.151		No.1 + No.2	0.855	75.75	0.010	No
Rear tilt(Edge 1 side)	0.704		0.925	No.1 + No.3	1.629	207.01	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B4 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



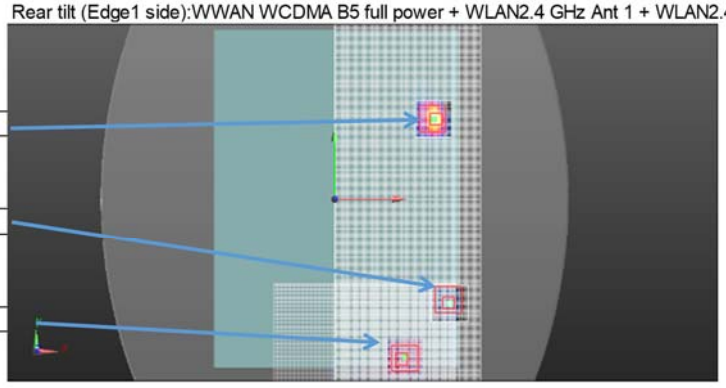
Mode	Ant	No	X	Y	Z	Combinatior	d: Calculated distance (mm)
			mm	mm	mm		
WWAN WCDMA B4 full powe	#1	1	37.00	-136.50	-3.76		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	72.06
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	209.51

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.704	0.355		No.1 + No.2	1.059	72.06	0.015	No
Rear tilt(Edge 1 side)	0.704		0.854	No.1 + No.3	1.558	209.51	0.009	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B5 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



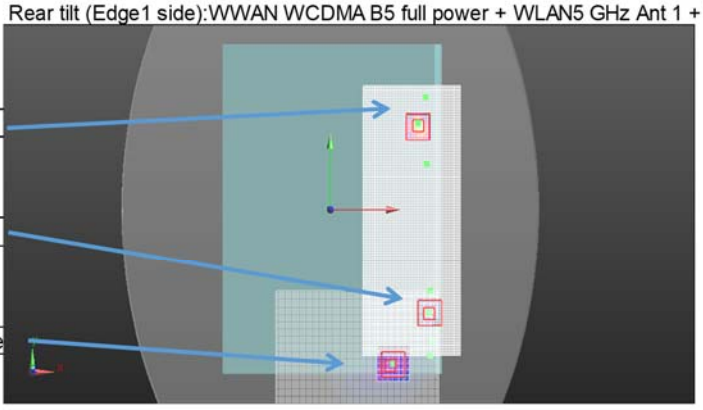
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN WCDMA B5 full power	#1	1	50.00	-135.50	1.32		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	65.92
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	203.54

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.693	0.151		No.1 + No.2	0.844	65.92	0.012	No
Rear tilt(Edge 1 side)	0.693		0.925	No.1 + No.3	1.618	203.54	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN WCDMA B5 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



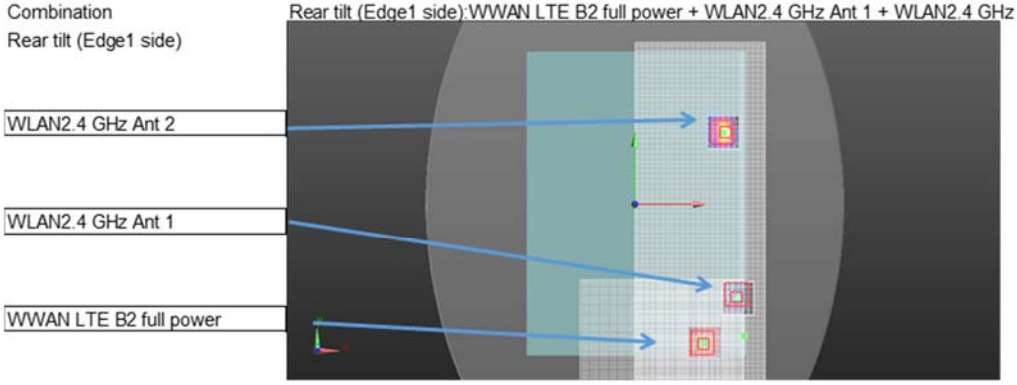
Mode	Ant	No	X	Y	Z	Combinatior	d: Calculated distance (mm)
			mm	mm	mm		
WWAN WCDMA B5 full powe	#1	1	50.00	-135.50	1.32		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	62.44
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	206.14

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.693	0.355		No.1 + No.2	1.048	62.44	0.017	No
Rear tilt(Edge 1 side)	0.693		0.854	No.1 + No.3	1.547	206.14	0.009	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B2 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



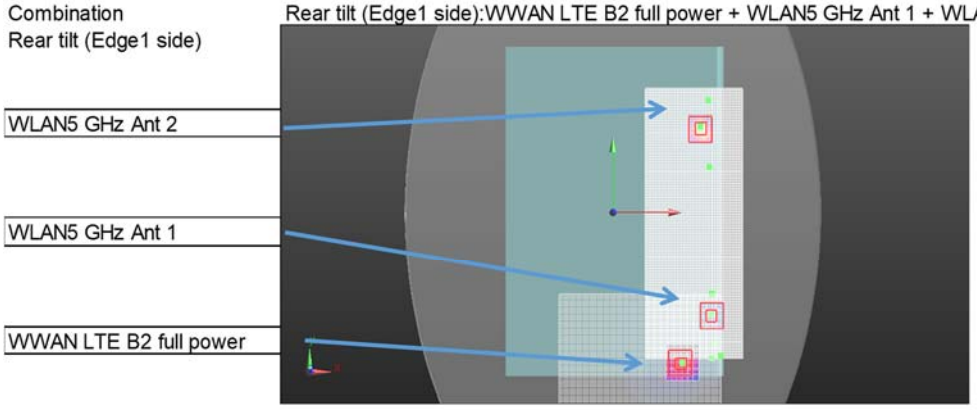
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B2 full power	#1	1	64.00	-129.50	-3.08		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	52.40
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	195.68

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.891	0.151		No.1 + No.2	1.042	52.40	0.020	No
Rear tilt(Edge 1 side)	0.891		0.925	No.1 + No.3	1.816	195.68	0.013	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B2 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



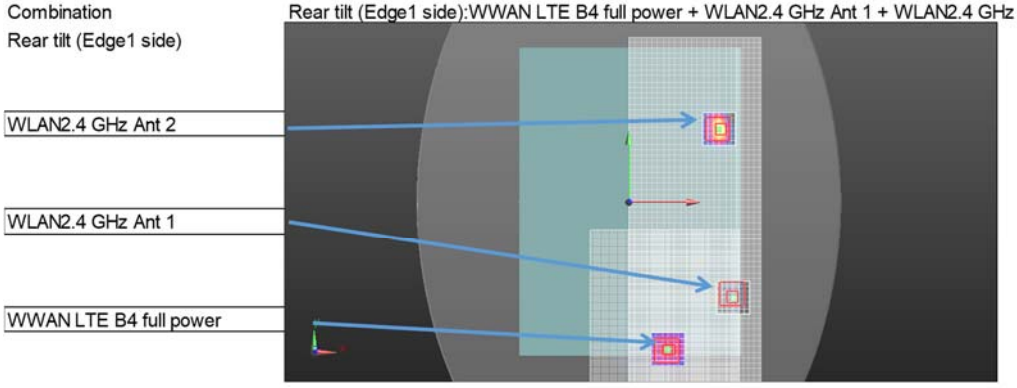
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B2 full power	#1	1	64.00	-129.50	-3.08		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	48.87
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	198.27

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.891	0.355		No.1 + No.2	1.246	48.87	0.028	No
Rear tilt(Edge 1 side)	0.891		0.854	No.1 + No.3	1.745	198.27	0.012	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B4 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



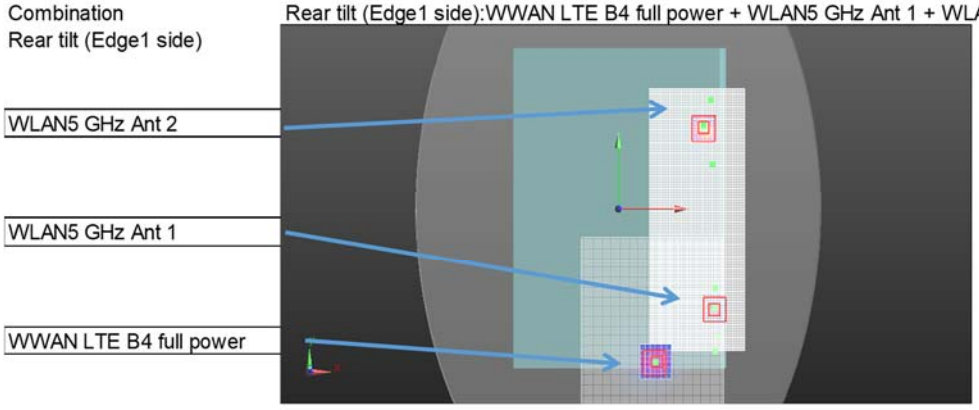
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B4 full power	#1	1	38.50	-134.50	-3.63		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	73.30
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	204.73

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.741	0.151		No.1 + No.2	0.892	73.30	0.011	No
Rear tilt(Edge 1 side)	0.741		0.925	No.1 + No.3	1.666	204.73	0.011	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B4 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



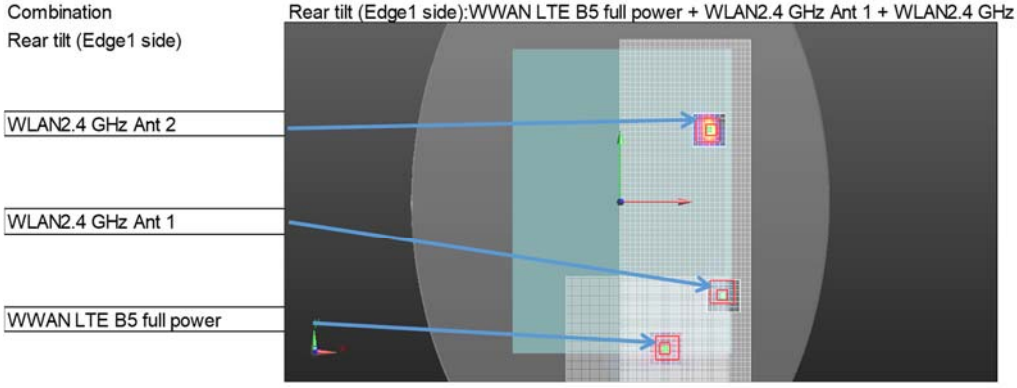
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B4 full power	#1	1	38.50	-134.50	-3.63		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	69.61
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	207.23

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.741	0.355		No.1 + No.2	1.096	69.61	0.016	No
Rear tilt(Edge 1 side)	0.741		0.854	No.1 + No.3	1.595	207.23	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B5 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



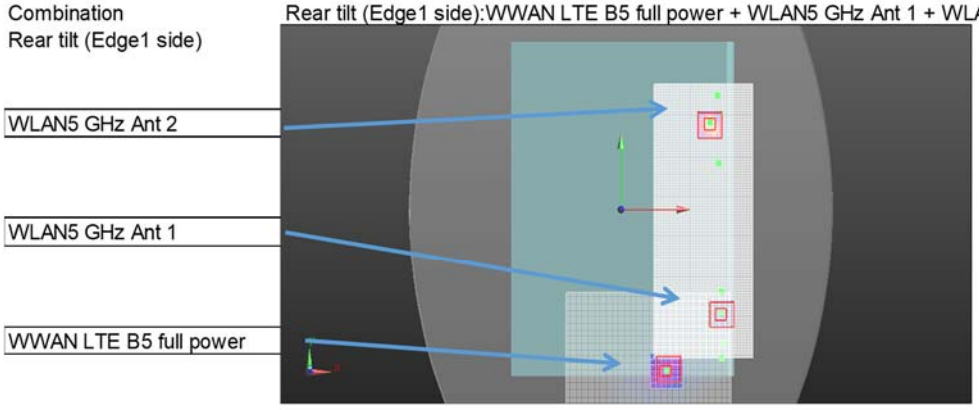
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B5 full power	#1	1	39.50	-136.00	-3.60		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	73.55
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	205.98

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.743	0.151		No.1 + No.2	0.894	73.55	0.011	No
Rear tilt(Edge 1 side)	0.743		0.925	No.1 + No.3	1.668	205.98	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B5 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B5 full power	#1	1	39.50	-136.00	-3.60		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	69.87
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	208.48

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.743	0.355		No.1 + No.2	1.098	69.87	0.016	No
Rear tilt(Edge 1 side)	0.743		0.854	No.1 + No.3	1.597	208.48	0.010	No

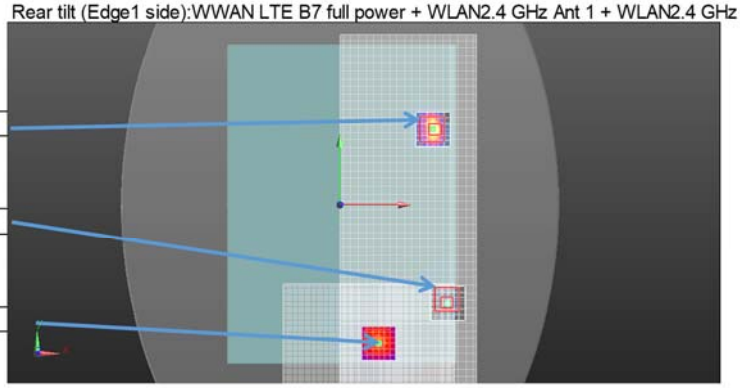
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B7 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 1

WWAN LTE B7 full power



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B7 full power	#1	1	34.00	-121.50	-3.88		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	69.35
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	193.18

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.854	0.151		No.1 + No.2	1.005	69.35	0.015	No
Rear tilt(Edge 1 side)	0.854		0.925	No.1 + No.3	1.779	193.18	0.012	No

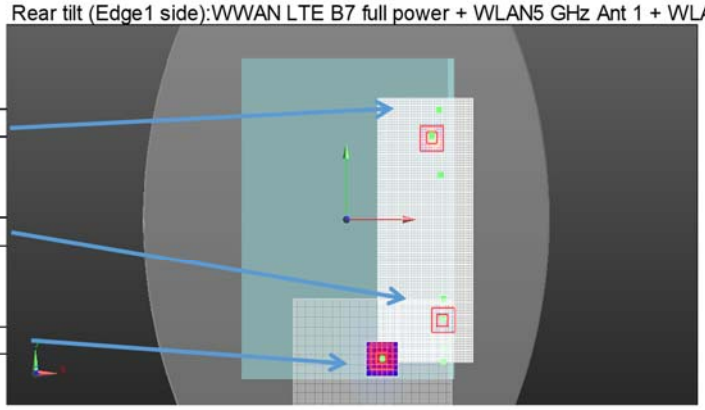
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B7 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2

WLAN5 GHz Ant 2

WLAN5 GHz Ant 1

WWAN LTE B7 full power



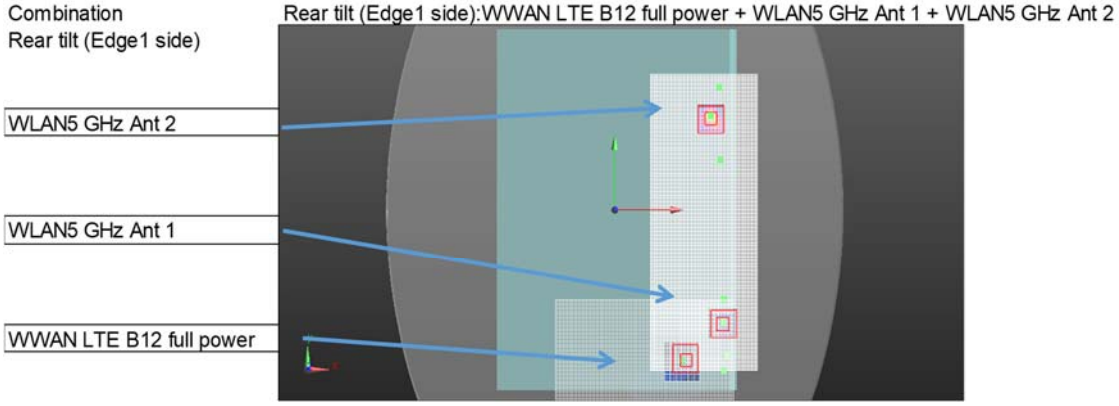
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B7 full power	#1	1	34.00	-121.50	-3.88		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	65.72
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	195.65

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.854	0.355		No.1 + No.2	1.209	65.72	0.020	No
Rear tilt(Edge 1 side)	0.854		0.854	No.1 + No.3	1.708	195.65	0.011	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B12 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B12 full power	#1	1	60.50	-117.00	-3.49		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	41.56
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	186.22

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.416	0.355		No.1 + No.2	0.771	41.56	0.016	No
Rear tilt(Edge 1 side)	0.416		0.854	No.1 + No.3	1.270	186.22	0.008	No

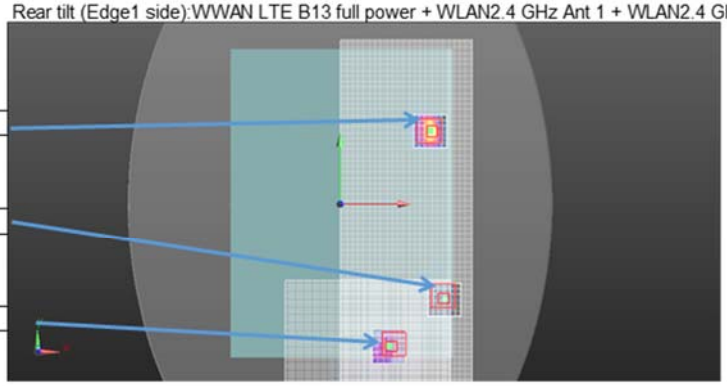
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B13 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 1

WWAN LTE B13 full power



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B13 full power	#1	1	40.50	-133.00	-3.65		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	70.80
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	202.83

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.656	0.151		No.1 + No.2	0.807	70.80	0.010	No
Rear tilt(Edge 1 side)	0.656		0.925	No.1 + No.3	1.581	202.83	0.010	No

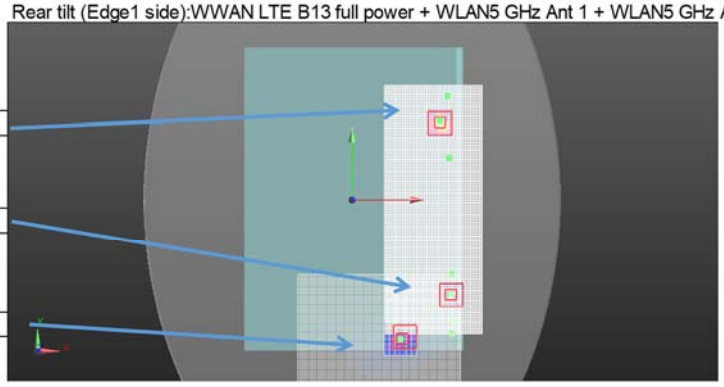
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B13 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2

WLAN5 GHz Ant 2

WLAN5 GHz Ant 1

WWAN LTE B13 full power



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B13 full power	#1	1	40.50	-133.00	-3.65		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	67.12
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	205.34

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.656	0.355		No.1 + No.2	1.011	67.12	0.015	No
Rear tilt(Edge 1 side)	0.656		0.854	No.1 + No.3	1.510	205.34	0.009	No

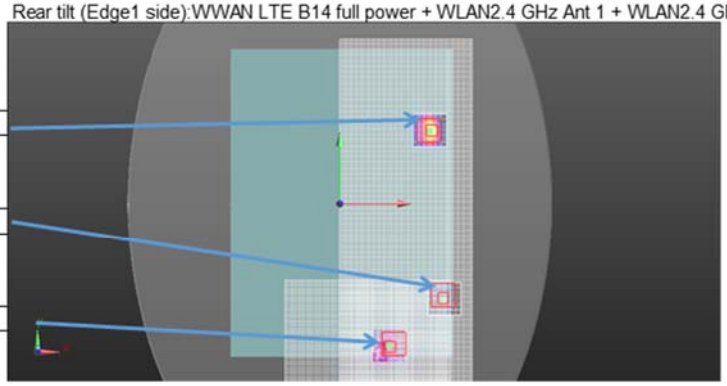
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B14 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 1

WWAN LTE B14 full power



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B14 full power	#1	1	41.50	-133.00	-3.65		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	70.06
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	202.62

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.740	0.151		No.1 + No.2	0.891	70.06	0.012	No
Rear tilt(Edge 1 side)	0.740		0.925	No.1 + No.3	1.665	202.62	0.011	No

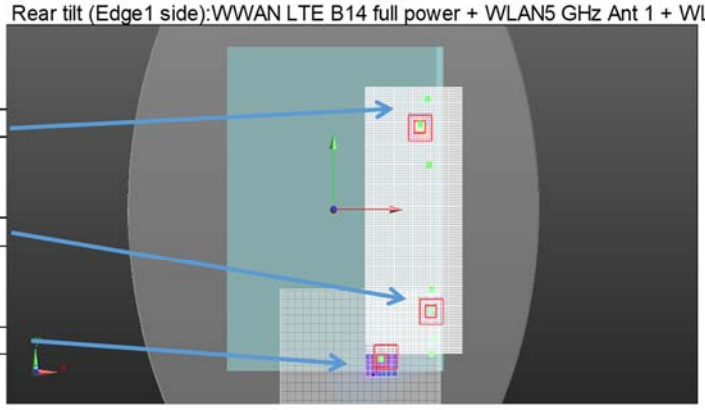
Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B14 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2

WLAN5 GHz Ant 2

WLAN5 GHz Ant 1

WWAN LTE B14 full power



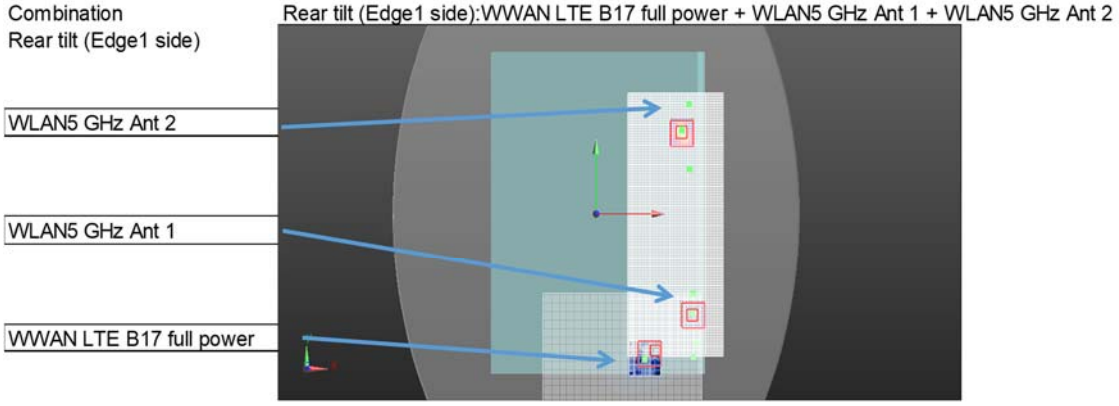
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B14 full power	#1	1	41.50	-133.00	-3.65		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	66.37
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	205.13

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.740	0.355		No.1 + No.2	1.095	66.37	0.017	No
Rear tilt(Edge 1 side)	0.740		0.854	No.1 + No.3	1.594	205.13	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B17 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B17 full power	#1	1	56.00	-121.00	-3.53		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	47.57
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	190.79

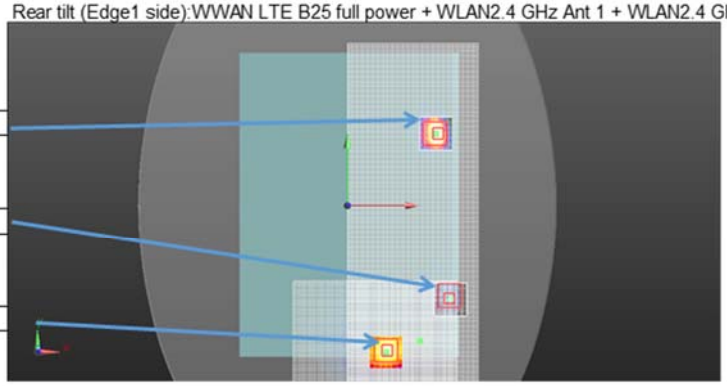
The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.409	0.355		No.1 + No.2	0.764	47.57	0.014	No
Rear tilt(Edge 1 side)	0.409		0.854	No.1 + No.3	1.263	190.79	0.007	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B25 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2

WLAN2.4 GHz Ant 2
WLAN2.4 GHz Ant 1
WWAN LTE B25 full power



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B25 full power	#1	1	37.50	-135.00	-3.66		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	74.38
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	205.44

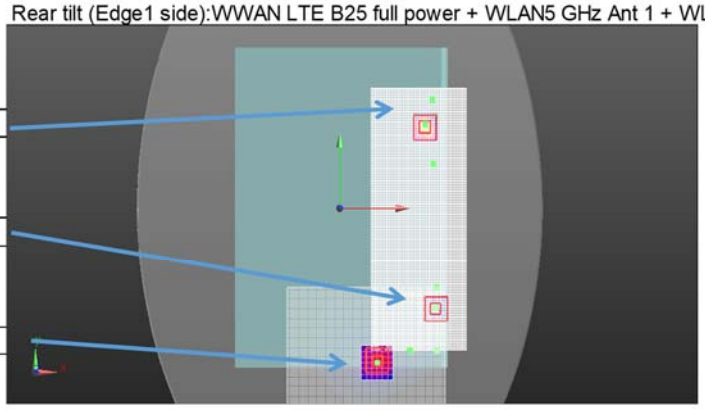
The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.882	0.151		No.1 + No.2	1.033	74.38	0.014	No
Rear tilt(Edge 1 side)	0.882		0.925	No.1 + No.3	1.807	205.44	0.012	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B25 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2

WLAN5 GHz Ant 2
WLAN5 GHz Ant 1
WWAN LTE B25 full power



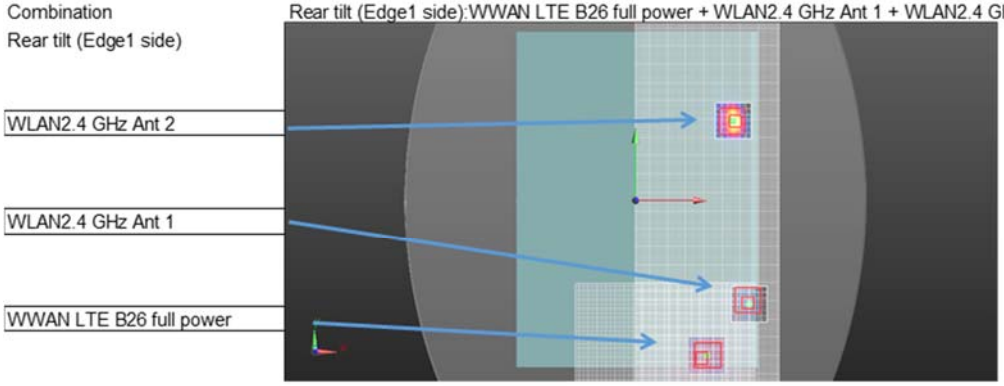
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B25 full power	#1	1	37.50	-135.00	-3.66		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	70.70
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	207.94

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.882	0.355		No.1 + No.2	1.237	70.70	0.019	No
Rear tilt(Edge 1 side)	0.882		0.854	No.1 + No.3	1.736	207.94	0.011	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B26 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



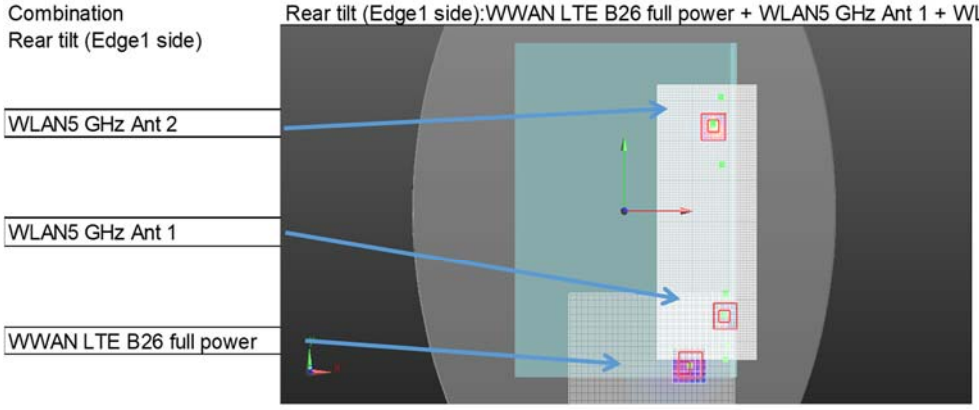
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B26 full power	#1	1	50.50	-134.00	1.31		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	64.47
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	201.98

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.742	0.151		No.1 + No.2	0.893	64.47	0.013	No
Rear tilt(Edge 1 side)	0.742		0.925	No.1 + No.3	1.667	201.98	0.011	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B26 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



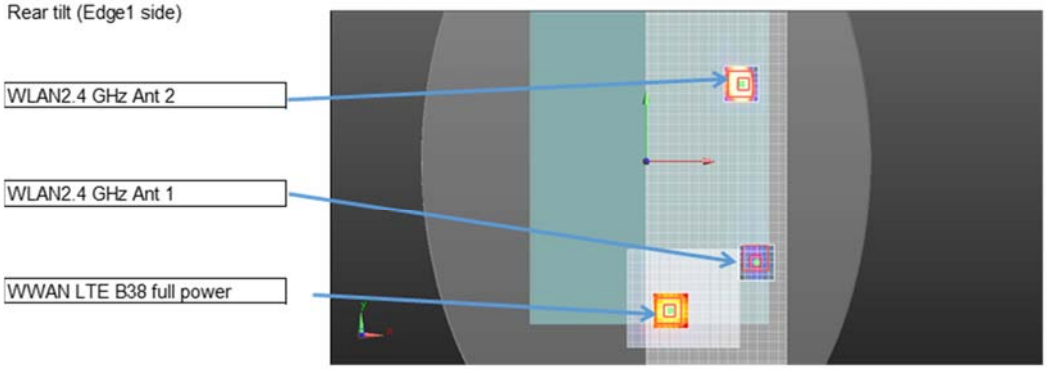
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B26 full power	#1	1	50.50	-134.00	1.31		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	60.99
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	204.58

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.742	0.355		No.1 + No.2	1.097	60.99	0.019	No
Rear tilt(Edge 1 side)	0.742		0.854	No.1 + No.3	1.596	204.58	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B38 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



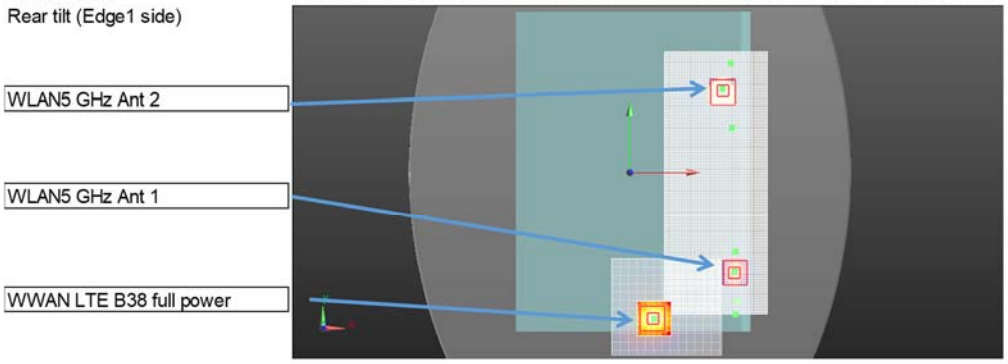
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B38 full power	#1	1	21.20	-128.80	-3.93		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	84.08
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	203.79

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.578	0.151		No.1 + No.2	0.729	84.08	0.007	No
Rear tilt(Edge 1 side)	0.578		0.925	No.1 + No.3	1.503	203.79	0.009	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B38 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



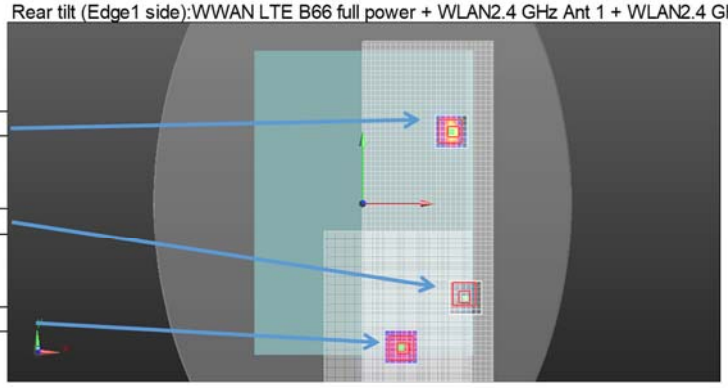
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B38 full power	#1	1	21.20	-128.80	-3.93		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	80.45
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	206.21

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.578	0.355		No.1 + No.2	0.933	80.45	0.011	No
Rear tilt(Edge 1 side)	0.578		0.854	No.1 + No.3	1.432	206.21	0.008	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B66 full power + WLAN2.4 GHz Ant 1 + WLAN2.4 GHz Ant 2



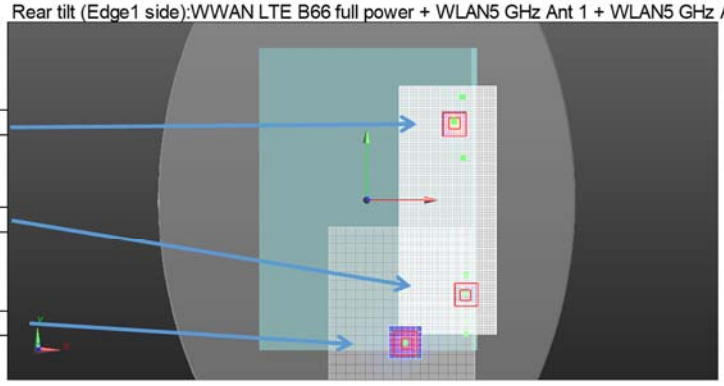
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B66 full power	#1	1	38.50	-134.00	-3.65		
WLAN2.4 GHz	Ant 1	2	93.80	-86.40	-2.72	No1+No2	72.97
WLAN2.4 GHz	Ant 2	3	83.60	65.20	-3.19	No1+No3	204.24

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.732	0.151		No.1 + No.2	0.883	72.97	0.011	No
Rear tilt(Edge 1 side)	0.732		0.925	No.1 + No.3	1.657	204.24	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B66 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



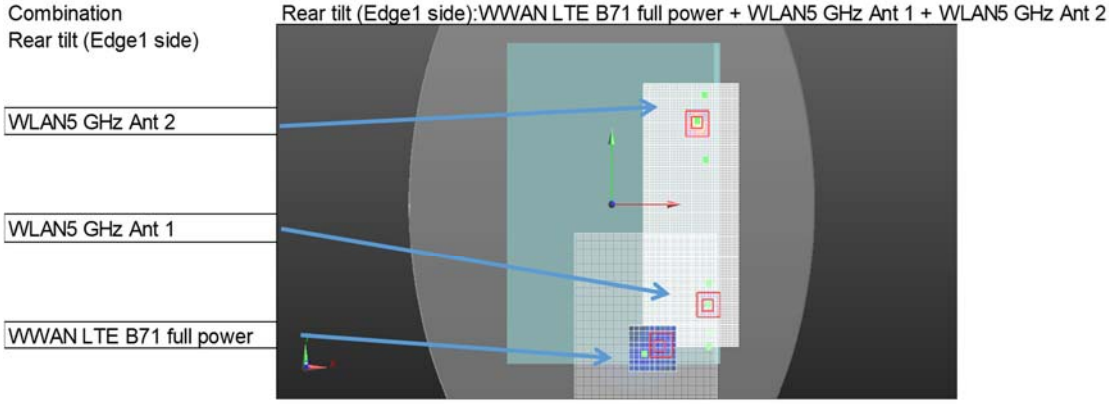
Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B66 full power	#1	1	38.50	-134.00	-3.65		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	69.29
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	206.74

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.732	0.355		No.1 + No.2	1.087	69.29	0.016	No
Rear tilt(Edge 1 side)	0.732		0.854	No.1 + No.3	1.586	206.74	0.010	No

Combination
Rear tilt (Edge1 side)

Rear tilt (Edge1 side):WWAN LTE B71 full power + WLAN5 GHz Ant 1 + WLAN5 GHz Ant 2



Mode	Ant	No	X	Y	Z	Combination	d: Calculated distance (mm)
			mm	mm	mm		
WWAN LTE B71 full power	#1	1	34.00	-131.50	-2.72		
WLAN5 GHz	Ant 1	2	91.00	-88.80	-4.72	No1+No2	71.25
WLAN5 GHz	Ant 2	3	83.40	67.80	-5.48	No1+No3	205.35

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Test Position	No.1 WWAN #1	No.2 WLAN Ant 1	No.3 WLAN Ant 2	Combination	Σ 1-g SAR (W/kg)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)
Rear tilt(Edge 1 side)	0.499	0.355		No.1 + No.2	0.854	71.25	0.011	No
Rear tilt(Edge 1 side)	0.499		0.854	No.1 + No.3	1.353	205.35	0.008	No