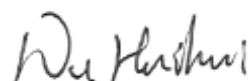
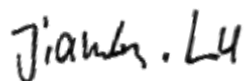


TEST REPORT

Applicant: Blackshark Technologies (Nanchang) Co., Ltd.
Room 815-1, 8th floor, Block A, Huajiang Building,
No.1 Tsinghua Science Park, No. 299, Yupingdong
Address: Street, Nanchang Economic and Technological
Development Zone, Nanchang City, Jiangxi
Province, China
Equipment Type: 5G Digital Mobile Phone
Model Name: SHARK KSR-H0
Brand Name: BLACK SHARK
Test Standard: 47 CFR Part 2
(refer section 3.1)
FCC ID: 2A2ZHKSR-H0
Test Date: Dec. 08, 2021 - Jan. 24, 2022
Date of Issue: Feb. 11, 2022

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Jiamin Lu**Checked by:** Wu Huihui**Approved by:** Wei Yanquan

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Feb. 11, 2022</u>	<u>Initial Issue</u>

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China.
Phone Number	+86 755 6685 0100

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055



2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Blackshark Technologies (Nanchang) Co., Ltd.
Address	Room 815-1, 8th floor, Block A, Huajiang Building, No.1 Tsinghua Science Park, No. 299, Yupingdong Street, Nanchang Economic and Technological Development Zone, Nanchang City, Jiangxi Province, China

2.2 Manufacturer Information

Manufacturer	Blackshark Technologies (Nanchang) Co., Ltd.
Address	Room 815-1, 8th floor, Block A, Huajiang Building, No.1 Tsinghua Science Park, No. 299, Yupingdong Street, Nanchang Economic and Technological Development Zone, Nanchang City, Jiangxi Province, China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	5G Digital Mobile Phone
Model Name Under Test	SHARK KSR-H0
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Technical Information

Note: The information provided by the applicant, except for The Max RF Output Power (EIRP/ERP).

All Network and Wireless connectivity for EUT	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 EVDO Rel. 0/Rev. A Band Class 0 4G Network LTE FDD Band 5/7 LTE TDD Band 38/41 LTE CA Uplink (UL): CA_7C 5G Network SA: NR n41/n77/n78 NSA(EN-DC): DC_5A_n78A, DC_7A_n78A, DC_38A_n78A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40), 802.11ax(HE20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80), 802.11ax(HE20/40/80/160) U-NII-1/2A/2C/3, GPS, GLONASS, BDS, Galileo, SBAS, FM Receiver, NFC
About the Product	The equipment is 5G Digital Mobile Phone, intended for used with information technology equipment.
Note 1: The EUT is a 5G Digital Mobile Phone, supporting dual SIM card slots under the same transceiver. Both SIM card slots support GSM, WCDMA, LTE and NR. And both SIM card slots share the same transceiver, so only SIM1 is tested in this report.	

The requirement for the following technical information of the EUT was tested in this report:

Operating Bands	GSM/GPRS/EGPRS 850/ 1900 MHz WCDMA/HSDPA/HSUPA Band 2/ 4/ 5 EVDO Rel. 0/Rev. A Band Class 0 LTE FDD Band 5/7 LTE TDD Band 38/41 LTE CA Uplink (UL): CA_7C SA: NR n41/n77/n78 NSA(EN-DC): DC 5A n78A, DC 7A n78A, DC 38A n78A	
Modulation Type	GSM/GPRS	GMSK
	EGPRS	8PSK
	WCDMA	QPSK
	HSDPA /HSUPA	QPSK 16QAM
	LTE	QPSK 16QAM
	NR	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
		DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM
TX Frequency Range	GSM/GPRS/EGPRS 850: 824 MHz ~ 849 MHz GSM/GPRS/EGPRS 1900: 1850 MHz ~ 1910 MHz EVDO BC 0: 824.025 MHz ~ 848.985 MHz WCDMA/HSDPA/HSUPA Band 2: 1850 MHz ~ 1910 MHz WCDMA/HSDPA/HSUPA Band 4: 1710 MHz ~ 1755 MHz WCDMA/HSDPA/HSUPA Band 5: 824 MHz ~ 849 MHz FDD LTE Band 5: 824 MHz ~ 849 MHz FDD LTE Band 7: 2500 MHz ~ 2570 MHz TDD LTE Band 38: 2570 MHz ~ 2620 MHz TDD LTE Band 41: 2496 MHz ~ 2690 MHz TDD NR Band n41: 2496 MHz ~ 2690MHz	

	TDD NR Band n77: 3450 MHz ~ 3550MHz&3700 MHz ~ 3980MHz TDD NR Band n78: 3450 MHz ~ 3550MHz&3700 MHz ~ 3800MHz
Rx Frequency Range	GSM/GPRS/EGPRS 850: 869 MHz ~ 894 MHz GSM/GPRS/EGPRS 1900: 1930 MHz ~ 1990 MHz EVDO BC 0: 869.025 MHz ~ 893.985 MHz WCDMA/HSDPA/HSUPA Band 2: 1930 MHz ~ 1990 MHz WCDMA/HSDPA/HSUPA Band 4: 2110 MHz ~ 2155 MHz WCDMA/HSDPA/HSUPA Band 5: 869 MHz ~ 894 MHz FDD LTE Band 5: 869 MHz ~ 894 MHz FDD LTE Band 7: 2620 MHz ~ 2690 MHz TDD LTE Band 38: 2570 MHz ~ 2620 MHz TDD LTE Band 41: 2496 MHz ~ 2690 MHz TDD NR Band n41: 2496 MHz ~ 2690MHz TDD NR Band n77: 3450 MHz ~ 3550MHz&3700 MHz ~ 3980MHz TDD NR Band n78: 3450 MHz ~ 3550MHz&3700 MHz ~ 3800MHz
SCS and Channel Bandwidths	n41_SCS 30kHz: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz,100 MHz n77_SCS 30kHz: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz,100 MHz n78_SCS 30kHz: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz,100 MHz
Power Class	GSM/GPRS 850: 4 GSM/GPRS 1900: 1 EGPRS 850/1900: E2 EVDO BC 0: 3 WCDMA/HSDPA/HSUPA Band 2: 3 WCDMA/HSDPA/HSUPA Band 4: 3 WCDMA/HSDPA/HSUPA Band 5: 3 FDD LTE Band 5: 3 FDD LTE Band 7: 3 TDD LTE Band 38: 3 TDD LTE Band 41: 2 TDD NR Band n41: 2 TDD NR Band n77: 2 TDD NR Band n78: 2
Multislot Class	GPRS/EGPRS: 12
Antenna Type	PIFA Antenna
Antenna Gain	GSM/GPRS/EGPRS 850: -0.8 dBi(Ant0), -3.4 dBi(Ant1) GSM/GPRS/EGPRS 1900: -1.4 dBi(Ant1), -1.8 dBi(Ant2) EVDO BC 0: -0.8 dBi(Ant0), -3.4 dBi(Ant1) WCDMA/HSDPA/HSUPA Band 2: -1.4 dBi(Ant1), -1.8 dBi(Ant2) WCDMA/HSDPA/HSUPA Band 4: -0.7 dBi(Ant1), -2.2 dBi(Ant2) WCDMA/HSDPA/HSUPA Band 5: -0.8 dBi(Ant0), -3.4 dBi(Ant1) FDD LTE Band 5: -0.8 dBi(Ant0), -3.4 dBi(Ant1) FDD LTE Band 7: -0.4 dBi(Ant1), -0.5 dBi(Ant2) TDD LTE Band 38: -0.4 dBi(Ant1), -0.5 dBi(Ant2) TDD LTE Band 41: -0.4 dBi(Ant1), -0.5 dBi(Ant2) CA_7C: -0.4 dBi(Ant1), -0.5 dBi(Ant2) TDD NR Band n41: -2.1 dBi(Ant5) TDD NR Band n77: -0.2 dBi(Ant5) TDD NR Band n78: -0.2 dBi(Ant5)
The Max RF Output Power (EIRP/ERP)	GSM/GPRS/EGPRS 850: 29.89 dBm GSM/GPRS/EGPRS 1900: 27.38 dBm EVDO BC 0: 20.02 dBm WCDMA/HSDPA/HSUPA Band 2: 19.18 dBm

	WCDMA/HSDPA/HSUPA Band 4: 17.77 dBm WCDMA/HSDPA/HSUPA Band 5: 20.88 dBm FDD LTE Band 5: 21.69 dBm FDD LTE Band 7: 18.80 dBm TDD LTE Band 38: 18.84 dBm TDD LTE Band 41: 20.70 dBm CA_7C: 21.05 dBm TDD NR Band n41: 18.19 dBm TDD NR Band n77: 21.13 dBm TDD NR Band n78: 19.50 dBm FDD NR DC_5A_n78A: 19.41 dBm FDD NR DC_7A_n78A: 20.61 dBm FDD NR DC_38A_n78A: 20.57 dBm
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Note 1: The EUT information are declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or user's manual.

Note 2: There are multiple antennas for WWAN to transceiving, which can be switched but can't transmit simultaneously. Details please refer to internal photos.



3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22 Subpart H	Cellular Radiotelephone Service
3	47 CFR Part 24 Subpart E	Broadband PCS
4	47 CFR Part 27	Miscellaneous Wireless Communications Services
5	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
6	KDB 971168 D01 v03	Measurement Guidance for Certification of Licensed Digital Transmitters



3.2 Test Verdict

No.	Test Description	FCC Part No.	Test Result	Test Verdict
1	Conducted RF Output Power	2.1046	Reporting only (ANNEX A.1)	Pass
2	Effective (Isotropic) Radiated Power	2.1046 22.913 24.232 27.50	ANNEX A.1	Pass
3	Peak to Average Ratio	2.1046 24.232(d) 27.50(d)	ANNEX A.2	Pass
4	Occupied Bandwidth	2.1049 22.917 24.238 27.53	ANNEX A.3	Pass
5	Frequency Stability	2.1055 22.355 24.235 27.54	ANNEX A.4	Pass
6	Spurious Emission at Antenna Terminals	2.1051 22.917 24.238 27.53	ANNEX A.5	Pass
7	Band Edge	2.1051 22.917 24.238 27.53	ANNEX A.6	Pass
8	Field Strength of Spurious Radiation	2.1053 22.917 24.238 27.53	ANNEX A.7	Pass

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the environmental conditions were within the listed ranges:

Test Voltage of the EUT	NV (Normal Voltage)	7.74 V
	LV (Low Voltage)	7.2 V
	HV (High Voltage)	8.9 V
Test Temperature of the EUT	NT (Normal Temperature)	+25 °C
	LT (Low Temperature)	-10 °C
	HT (High Temperature)	+55 °C

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Software /Firmware Version	Cal. Date	Cal. Due
Conducted Test System						
Test Software 1	R&S	CMUgo	N/A	V2.0.1	N/A	N/A
Test Software 2	R&S	CMWRun	N/A	V1.9.8	N/A	N/A
Test Software 3	BALUN	BL410R	N/A	V2.1.1.48 8	N/A	N/A
Universal Radio Communication Tester	R&S	CMU 200	121487	V5.13	2022.01.04	2023.01.03
Wideband Radio Communication Tester	R&S	CMW 500	127794	V3.5.137	2021.06.01	2022.05.31
Wideband Radio Communication Tester	R&S	CMW 500	120598	V3.5.137	2022.01.05	2023.01.04
Spectrum Analyzer	R&S	FSV-40	101544	2.30.SP4	2021.06.01	2022.05.31
Spectrum Analyzer	Agilent	E4440A	MY45304434	A.11.21	2021.09.08	2022.09.07
Spectrum Analyzer	Agilent	E4440A	MY46181663	A.11.21	2021.10.11	2022.10.10
Temperature Chamber	AHK	SP20	1412	N/A	2021.06.04	2022.06.03
DC Power Supply	ITECH	IT6863A	8000140207 57120008	N/A	2021.09.12	2022.09.11
Power Sensor	Agilent	E9304A H18	MY41497164	N/A	2021.09.08	2022.09.07
Power Splitter	KMW	DCPD-LDC	1305003215	N/A	N/A	N/A
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	N/A	N/A	N/A
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	N/A	N/A	N/A
Radio Communication Test Station	Anritsu	MT8821C	6201588572	N/A	2021.07.06	2022.07.05
Radio	Anritsu	MT8000A	6261940329	N/A	2021.03.16	2022.03.15

Description	Manufacturer	Model	Serial No.	Software /Firmware Version	Cal. Date	Cal. Due
Communication Test Station						
5G Wireless Test Platform	Keysight	E7515B UXM	MY59321617	N/A	2021.10.11	2022.10.10
5G Wireless Test Platform	Starpont	SP9500-CTS	19220	N/A	2021.10.11	2022.10.10
Wideband Radio Communication Tester	R&S	CMW 500	168792	V3.5.137	2021.04.01	2022.03.31
Radiated Test System						
Test Software	BALUN	BL410_E	N/A	V19.918	N/A	N/A
Test Antenna-Bi-Log(30 MHz-3 GHz)	Schwarzbeck	VULB 9163	9163-624	N/A	2019.07.02	2022.07.01
Test Antenna-Horn(1-18 GHz)	Schwarzbeck	BBHA 9120D	9120D-1917	N/A	2019.07.02	2022.07.01
Test Antenna-Horn(18-40 GHz)	A-INFO	LB-180400KF	J211060273	N/A	2021.01.04	2023.01.03
Anechoic Chamber	YIHENG	9m*6m*6m	#3	N/A	2018.07.18	2022.07.17
EMI Receiver	KEYSIGHT	N9038A	MY53220118	A.14.16	2021.09.13	2022.09.12
Wideband Radio Communication Tester	R&S	CMW 500	127794	V3.2.73	2021.06.01	2022.05.31
5G Wireless Test Platform	Keysight	E7515B UXM	MY59321617	N/A	2021.10.11	2022.10.10
5G Wireless Test Platform	Starpont	SP9500-CTS	19220	N/A	2021.10.11	2022.10.10

4.3 Test Configurations

Test Items	Test Mode	Test Channel		
		LCH	MCH	HCH
Effective (Isotropic) Radiated Power	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v
	HSDPA Band 2	v	v	v
	HSDPA Band 4	v	v	v
	HSDPA Band 5	v	v	v
	HSUPA Band 2	v	v	v
	HSUPA Band 4	v	v	v
	HSUPA Band 5	v	v	v
Peak to Average Ratio	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v
Occupied Bandwidth	GSM 850	v	v	v
	GSM 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v
Frequency Stability	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v
Spurious Emission at Antenna Terminals	GSM 850	v	v	v
	GSM 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v
Band Edge	GSM 850	v	--	v
	GSM 1900	v	--	v
	EGPRS 850	v	--	v
	EGPRS 1900	v	--	v
	EVDO BC 0	v	--	v

Test Items	Test Mode	Test Channel		
		LCH	MCH	HCH
	WCDMA Band 2	v	--	v
	WCDMA Band 4	v	--	v
	WCDMA Band 5	v	--	v
Field Strength of Spurious Radiation	GSM 850	v	v	v
	GSM 1900	v	v	v
	EGPRS 850	v	v	v
	EGPRS 1900	v	v	v
	EVDO BC 0	v	v	v
	WCDMA Band 2	v	v	v
	WCDMA Band 4	v	v	v
	WCDMA Band 5	v	v	v

Note 1: The mark “v” means that this configuration is chosen for testing.

Test Mode	UL Channel	UL Channel No.	UL Frequency (MHz)
GSM/GPRS/EGPRS 850	Low Channel	128	824.2
	Middle Channel	190	836.6
	High Channel	251	848.8
GSM/GPRS/EGPRS 1900	Low Channel	512	1850.2
	Middle Channel	661	1880.0
	High Channel	810	1909.8
EVDO BC 0	Low Channel	1013	824.70
	Middle Channel	384	836.52
	High Channel	777	848.31
WCDMA Band 2	Low Channel	9262	1852.4
	Middle Channel	9400	1880.0
	High Channel	9538	1907.6
WCDMA Band 4	Low Channel	1312	1712.4
	Middle Channel	1412	1732.4
	High Channel	1513	1752.6
WCDMA Band 5	Low Channel	4132	826.4
	Middle Channel	4182	836.4
	High Channel	4233	846.6

LTE Band	Bandwidth (MHz)						Modulation Type		RB#			Test Channel		
	1.4	3	5	10	15	20	QPSK	16-QAM	1	Half	Full	LCH	MCH	HCH
Effective (Isotropic) Radiated Power														
5	v	v	v	v	n	n	v	v	v	v	v	v	v	v
7	n	n	v	v	v	v	v	v	v	v	v	v	v	v
38	n	n	v	v	v	v	v	v	v	v	v	v	v	v
41	n	n	v	v	v	v	v	v	v	v	v	v	v	v
Peak to Average Ratio														
5	--	--	--	v	n	n	v	v	v	--	v	v	v	v
7	n	n	--	--	--	v	v	v	v	--	v	v	v	v
38	n	n	--	--	--	v	v	v	v	--	v	v	v	v
41	n	n	--	--	--	v	v	v	v	--	v	v	v	v
Occupied Bandwidth														
5	v	v	v	v	n	n	v	v	--	--	v	v	v	v
7	n	n	v	v	v	v	v	v	--	--	v	v	v	v
38	n	n	v	v	v	v	v	v	--	--	v	v	v	v
41	n	n	v	v	v	v	v	v	--	--	v	v	v	v
Frequency Stability														
5	--	--	--	v	n	n	v	v	--	--	v	--	v	--
7	n	n	--	v	--	--	v	v	--	--	v	--	v	--
38	n	n	--	v	--	--	v	v	--	--	v	--	v	--
41	n	n	--	v	--	--	v	v	--	--	v	--	v	--
Spurious Emission at Antenna Terminals														
5	v	v	v	v	n	n	v	v	v	--	--	v	v	v
7	n	n	v	v	v	v	v	v	v	--	--	v	v	v
38	n	n	v	v	v	v	v	v	v	--	--	v	v	v
41	n	n	v	v	v	v	v	v	v	--	--	v	v	v
Band Edge														
5	v	v	v	v	n	n	v	v	v	--	v	v	--	v
7	n	n	v	v	v	v	v	v	v	--	v	v	--	v
38	n	n	v	v	v	v	v	v	v	--	v	v	--	v
41	n	n	v	v	v	v	v	v	v	--	v	v	--	v
Field Strength of Spurious Radiation														
5	v	v	v	v	n	n	v	--	v	--	--	--	v	--
7	n	n	v	v	v	v	v	--	v	--	--	--	v	--
38	n	n	v	v	v	v	v	--	v	--	--	--	v	--
41	n	n	v	v	v	v	v	--	v	--	--	--	v	--
Note 1: The mark "v" means that this configuration is chosen for testing. Note 2: The mark "n" means that this bandwidth is not supported.														

Test Mode	UL Channel	Channel Bandwidth (MHz)	UL Channel No.	UL Frequency (MHz)
LTE Band 5	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Middle Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844
LTE Band 7	Low Range	5	20775	2502.5
		10	20800	2505
		15	20825	2507.5
		20	20850	2510
	Middle Range	5/10/15/20	21100	2535
	High Range	5	21425	2567.5
		10	21400	2565
		15	21375	2562.5
		20	21350	2560
LTE Band 38	Low Range	5	37775	2572.5
		10	37800	2575
		15	37825	2577.5
		20	37850	2580
	Middle Range	5/10/15/20	38000	2595
	High Range	5	38225	2617.5
		10	38200	2615
		15	38175	2612.5
		20	38150	2610
LTE Band 41	Low Range	5	39675	2498.5
		10	39700	2501
		15	39725	2503.5
		20	39750	2506
	Middle Range	5/10/15/20	40620	2593
	High Range	5	41565	2687.5
		10	41540	2685
		15	41515	2682.5
		20	41490	2680

Test frequencies for CA_7C											
Range	CC-Combo / NRB_agg [RB]	CC1					CC2				
		BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]	BW [RB]	N _{UL}	f _{UL} [MHz]	N _{DL}	f _{DL} [MHz]
Low	50+100	50	20805	2505.5	2805	2625.5	100	20949	2519.9	2949	2639.9
		100	20850	2510	2850	2630	50	20994	2524.4	2994	2644.4
	75+50	75	20825	2507.5	2825	2627.5	50	20945	2519.5	2945	2639.5
	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5
	75+100	75	20828	2507.8	2828	2627.8	100	20999	2524.9	2999	2644.9
		100	20850	2510	2850	2630	75	21021	2527.1	3021	2647.1
Mid	50+100	50	21006	2525.6	3006	2645.6	100	21150	2540	3150	2660
		100	21051	2530.1	3051	2650.1	50	21195	2544.5	3195	2664.5
	75+50	75	21051	2530.1	3051	2650.1	50	21171	2542.1	3171	2662.1
	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5
	75+100	75	21003	2525.3	3003	2645.3	100	21174	2542.4	3174	2662.4
		100	21026	2527.6	3026	2647.6	75	21197	2544.7	3197	2664.7
High	50+100	50	21206	2545.6	3206	2665.6	100	21350	2560	3350	2680
		100	21251	2550.1	3251	2670.1	50	21395	2564.5	3395	2684.5
	75+50	75	21277	2552.7	3277	2672.7	50	21397	2564.7	3397	2684.7
	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5
	75+100	75	21179	2542.9	3179	2662.9	100	21350	2560	3350	2680
		100	21201	2545.1	3201	2665.1	75	21372	2562.2	3372	2682.2
	100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680

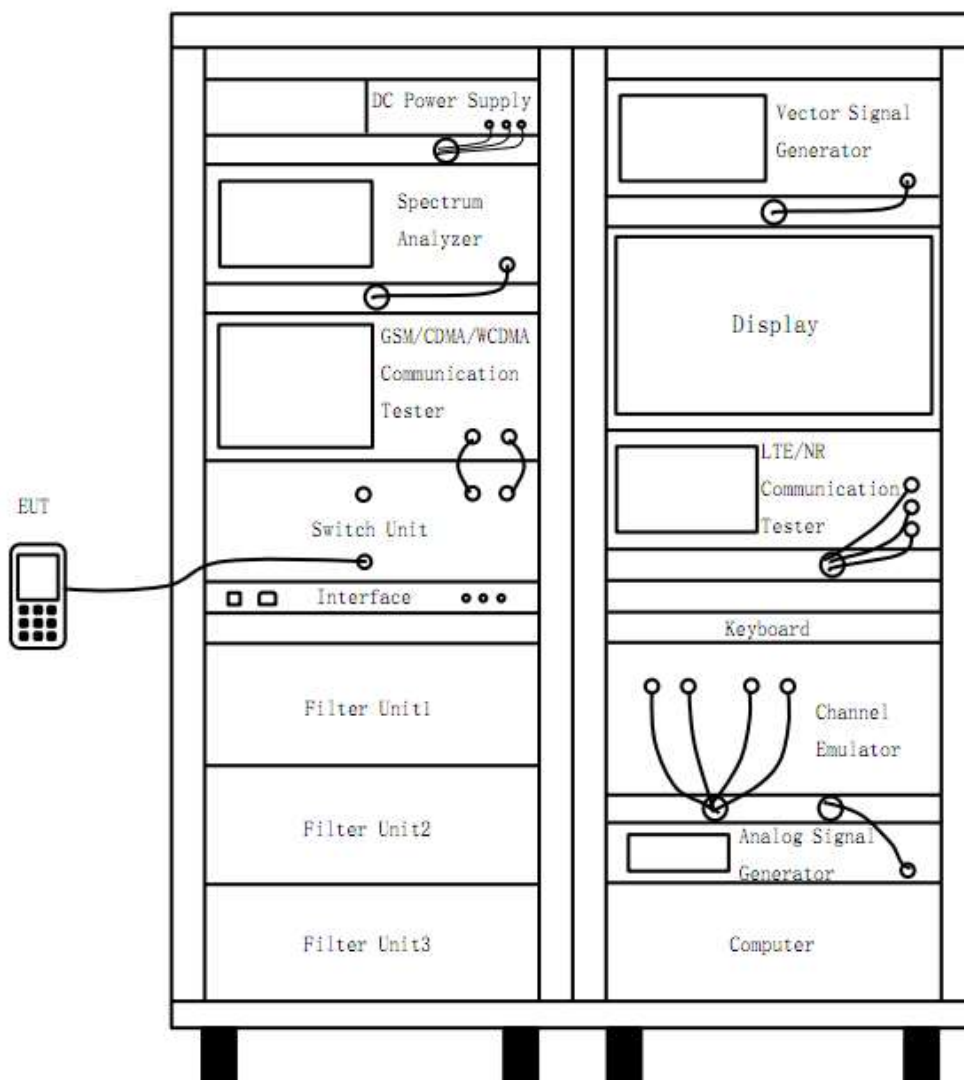
Test Mode	Channel Bandwidth (MHz)	UL Channel	UL Channel No.	UL Frequency (MHz)
NR Band n41	20	Low Range	501204	2506.02
		Middle Range	518598	2592.99
		High Range	535998	2679.99
	60	Low Range	505200	2526
		Middle Range	518598	2592.99
		High Range	531996	2659.98
	100	Low Range	509202	2546.01
		Middle Range	518598	2592.99
		High Range	528000	2640

Test Mode	Channel Bandwidth (MHz)	UL Channel	UL Channel No.	UL Frequency (MHz)
NR Band n77(3450-3550 MHz)	20	Low Range	501204	3460.02
		Middle Range	518598	3499.98
		High Range	535998	3540
	50	Low Range	504204	3475.02
		Middle Range	518598	3499.98
		High Range	532998	3525
	100	Low Range	--	--
		Middle Range	518598	3499.98
		High Range	--	--
NR Band n77(3700-3980 MHz)	20	Low Range	501204	3710
		Middle Range	518598	3840
		High Range	535998	3970
	50	Low Range	504204	3725
		Middle Range	518598	3840
		High Range	532998	3955
	100	Low Range	504204	3750
		Middle Range	518598	3840
		High Range	532998	3930

Test Mode	Channel Bandwidth (MHz)	UL Channel	UL Channel No.	UL Frequency (MHz)
NR Band n78(3450-3550 MHz)	20	Low Range	501204	3460.02
		Middle Range	518598	3499.98
		High Range	535998	3540
	50	Low Range	504204	3475.02
		Middle Range	518598	3499.98
		High Range	532998	3525
	100	Low Range	--	--
		Middle Range	518598	3499.98
		High Range	--	--
NR Band n78(3700-3800 MHz)	20	Low Range	501204	3710
		Middle Range	518598	3750
		High Range	535998	3790
	50	Low Range	504204	3725
		Middle Range	518598	3750
		High Range	532998	3775
	100	Low Range	--	--
		Middle Range	518598	3750
		High Range	--	--

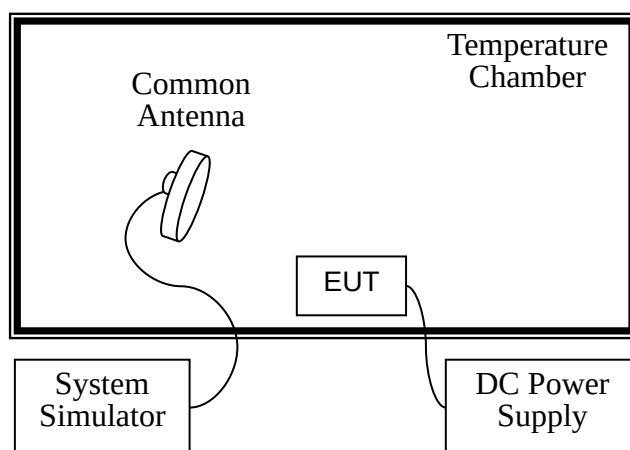
4.4 Test Setup

4.4.1 For Antenna Port Test



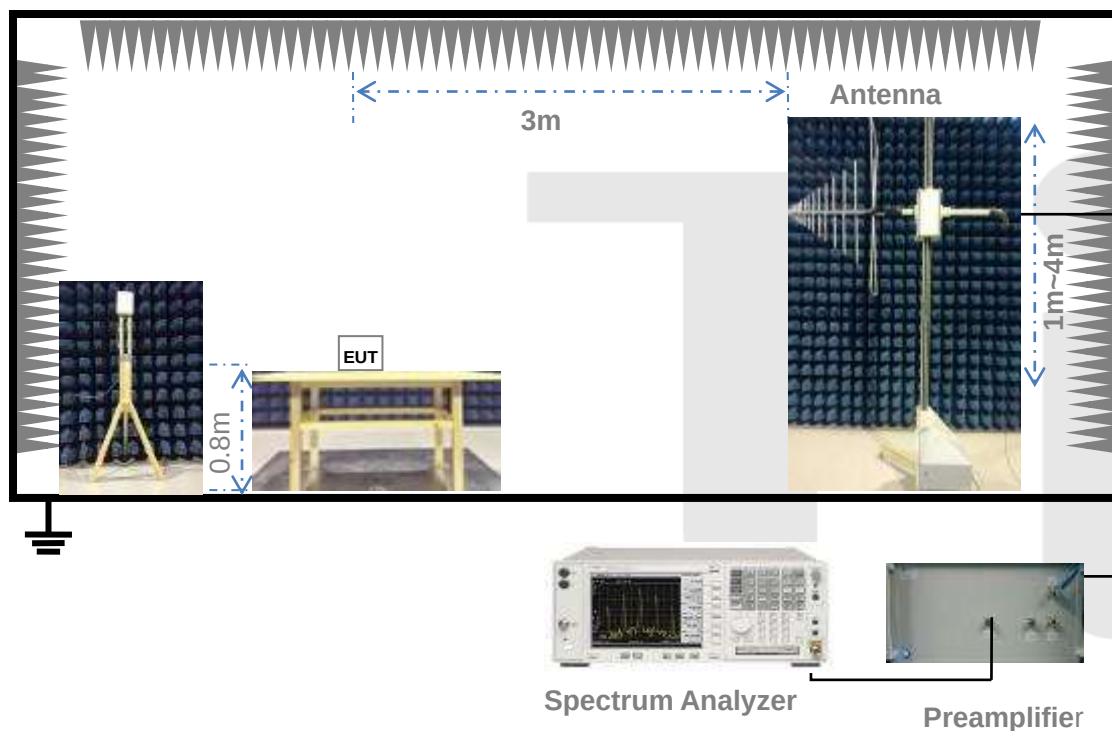
(Diagram 1)

4.4.2 For Frequency Stability Test



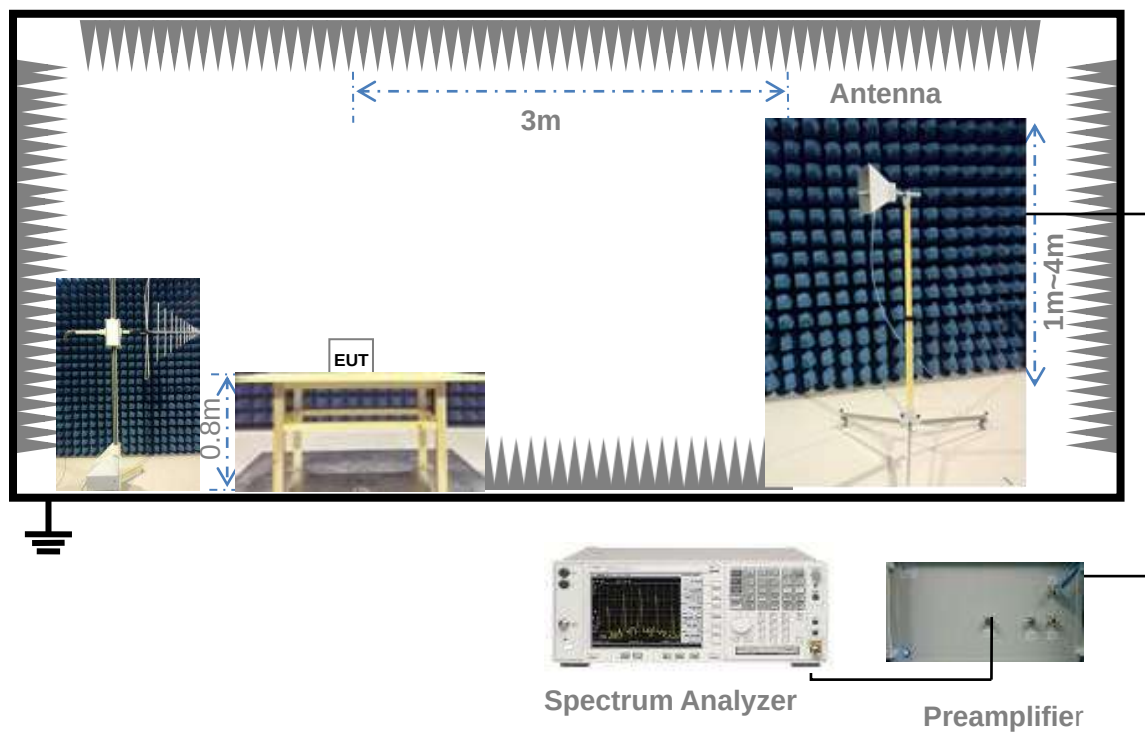
(Diagram 2)

4.4.3 For Radiated Test (30 MHz ~ 1 GHz)



(Diagram 3)

4.4.4 For Radiated Test (Above 1 GHz)



(Diagram 4)

5 TEST ITEMS

5.1 Transmitter Radiated Power (EIRP/ERP)

5.1.1 Limit

FCC § 2.1046 & 22.913(a) & 24.232(c) & 27.50(a) & 27.50(b) & 27.50(c) & 27.50(d) & 27.50(h) & 27.50(j) & 27.50(k)

According to FCC section 22.913(a) (5), the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 24.232(c), mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to FCC section 27.50(a) (3), for mobile and portable stations transmitting in the 2305-2315MHz band or the 2350-2360MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards.

FCC section 27.50(b) (10), portable stations (hand-held devices) transmitting in the 746-757MHz, 776-788MHz, and 805-806MHz bands are limited to 3 watts ERP.

FCC section 27.50(c) (10), portable stations (hand-held devices) in the 600MHz uplink band and the 698-746MHz band, and fixed and mobile stations in the 600MHz uplink band are limited to 3 watts ERP.

FCC section 27.50(d) (4), fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications. (7) Fixed, mobile, and portable (hand-held) stations operating in the 2000-2020 MHz band are limited to 2 watts EIRP.

And FCC section 27.50(h) (2), for mobile and other user stations, mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

According to FCC section 27.50(j) (3), mobile and portable stations in the 3700-3980MHz band are limited to 1 watts EIRP.

According to FCC section 27.50(k) (3), Mobile devices in the 3450-3550MHz band are limited to 1 watts EIRP.

5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for conducted test, and the section 4.4.3 and 4.4.4 (Diagram 3, 4) test setup description is used for radiated test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

Description of the Conducted Output Power Measurement

The EUT is coupled to the SS with attenuator through power splitter; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. A system simulator is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The relevant equation for determining the conducted measured value is:

$$\text{Conducted Output Power Value (dBm)} = \text{Measured Value (dBm)} + \text{Path Loss (dB)}$$

where:

Conducted Output Power Value = final conducted measured value in the conducted power test, in dBm;
Measured Value = measured conducted power received by spectrum analyzer or power meter, in dBm;
Path Loss = signal attenuation in the connecting cable between the transmitter and spectrum analyzer or power meter, including external cable loss, in dB;

During the test, the data of Path Loss (dB) is added in the spectrum analyzer or power meter, so Measured Value (dBm) is the final values which contains the data of Path Loss (dB).

For example:

In the conducted output power test, when measured value for GSM850 is 24.7 dBm, and path loss is 8.5 dB, then final conducted output power value is:

$$\text{Conducted Output Power Value (dBm)} = 24.7 \text{ dBm} + 8.5 \text{ dB} = 33.2 \text{ dBm}$$

Description of the Transmitter Radiated Power Measurement

In many cases, the RF output power limits for licensed digital transmission devices is specified in terms of effective radiated power (ERP) or equivalent isotropic radiated power (EIRP). Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are determined by adding the transmit antenna gain to the conducted RF output power with the primary difference between the two being that when determining the ERP, the transmit antenna gain is referenced to a dipole antenna (i.e., dBd) whereas when determining the EIRP, the transmit antenna gain is referenced to an isotropic antenna (dBi).

Final measurement calculation as below:

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP/EIRP} = P_{\text{Meas}} + \text{GT} - \text{LC}$$

where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

dBd (ERP)=dBi (EIRP) -2.15 dB

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

For example:

In the EIRP test, when P_{Meas} value for GSM1900 is 30.2 dBm, LC is 0.6 dB, and GT is -3.4 dB, then final EIRP value is:

$$\text{EIRP for GSM1900} = 30.2 \text{ dBm} - 3.4 \text{ dBi} - 0.6 \text{ dB} = 26.2 \text{ dBm}$$

The relevant equation for determining the ERP/EIRP from the radiated RF output power is:

$$\text{ERP/EIRP (dBm)} = \text{SA Read Value (dBm)} + \text{Correction Factor (dB)}$$

where:

ERP/EIRP = effective or equivalent radiated power, in dBm;

SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm;

Correction Factor = total correction factor including cable loss, in dB;

During the test, the data of Correction Factor (dB) is added in the EMI receiver or spectrum analyzer, so SA Read Value (dBm) is the final values which contains the data of Correction Factor (dB).

For example:

In the ERP test, when SA read value for GSM850 is 21dBm, and correction factor is 8dB, then final ERP value for GSM850 is:

$$\text{ERP (dBm)} = 21\text{dBm} + 8\text{dB} = 29\text{dBm}$$

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Peak to Average Ratio

5.2.1 Limit

FCC § 2.1046 & 24.232(d) & 27.50(d) & 27.50(j) & 27.50(k)

In addition, when the transmitter power is measured in terms of average value, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

According to FCC section 24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with 24.232 (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of § 24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

FCC section 24.232(e), peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

According to FCC section 27.50(d) (5) & 27.50(j) (4) & 27.50(k) (4), in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

5.2.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Here the lowest, middle and highest channels are selected to perform testing to verify the peak-to-average ratio.

According to KDB 971168 D01, there is CCDF procedure for PAPR:

- a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
- b) Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
- c) Set the number of counts to a value that stabilizes the measured CCDF curve;
- d) Set the measurement interval as follows:
 - 1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

Alternate procedure for PAPR:

Use one of the procedures presented in 4.1 to measure the total peak power and record as P_{Pk} . Use one of the applicable procedures presented 4.2 to measure the total average power and record as P_{Avg} . Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

$$PAPR (dB) = P_{Pk} (dBm) - P_{Avg} (dBm).$$

5.2.4 Test Result

Please refer to ANNEX A.2.



5.3 Occupied Bandwidth

5.3.1 Limit

FCC § 2.1049

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Many of the individual rule parts specify a relative OBW in lieu of the 99% OBW. In such cases, the OBW is defined as the width of the signal between two points, one below the carrier center frequency and on above the carrier center frequency, outside of which all emissions are attenuated by at least X dB below the transmitter power, where the value of X is typically specified as 26.

5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

The following procedure shall be used for measuring power bandwidth.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the anticipated OBW).
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least $10\log(\text{OBW} / \text{RBW})$ below the reference level.
- d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.
- e) For -26 dB OBW, the dynamic range of the spectrum analyzer at the selected RBW shall be at least 10dB below the target “-X dB down” requirement, e.g. -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be 36dB below the reference value.
- f) Set the detection mode to peak, and the trace mode to max hold.
- g) For 99% OBW, use the 99 % power bandwidth function of the spectrum analyzer (if available) and report the measured bandwidth.

If the instrument does not have a 99 % power bandwidth function, the trace data points are to be recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is

recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % power bandwidth is the difference between these two frequencies.

h) For -26 dB OBW, determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).

Determine the “-X dB down amplitude” as equal to (reference value -X). Alternatively, this calculation can be performed by the analyzer by using the marker-delta function.

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below “-X dB down amplitude” determined in step g). If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

i) The OBW shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

j) Change variable modulations, coding, or channel bandwidth settings, then repeat above test procedures.

5.3.4 Test Result

Please refer to ANNEX A.3.



5.4 Frequency Stability

5.4.1 Limit

FCC § 2.1055 & 22.355 & 24.235 & 27.54

FCC § 2.1055

The frequency stability shall be measured with variation of ambient temperature as follows:

- (1) The temperature is varied from -30°C to +50°C.
- (2) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10°C through the range.

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than carried battery equipment.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating and point which shall be specified by the manufacture.
- (3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

FCC § 22.355

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Table C-1—Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency range (MHz)	Base, fixed (ppm)	Mobile > 3 watts (ppm)	Mobile ≤ 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

FCC § 24.235

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

FCC § 27.54

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

1. The EUT is placed in a temperature chamber.
2. The temperature is set to 25°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured.
3. The temperature is increased by not more than 10 degrees, allowed to stabilize and soak, and then repeat the frequency error measurement.
4. Repeat procedure 3 until +50°C and -30°C is reached.
5. Change supply voltage, and repeat measurement until extreme voltage is reached.

5.4.4 Test Result

Please refer to ANNEX A.4.



5.5 Spurious Emission at Antenna Terminals

5.5.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(f) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n)

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC § 22.917(a) & 24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337MHz.

(2) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292MHz, and $70 + 10 \log(P)$ dB below 2288MHz.

(3) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365MHz, and not less than $70 + 10 \log(P)$ dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated

outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(f)

For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to - 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43+10*\log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

FCC § 27.53(m) (4)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- $40+10\log P$ dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the

channel edge.

- $43+10\log P$ dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,
- $55+10\log P$ dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450 - 3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.



5.5.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(P)$ dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency blocks a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

1. The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.
2. CMW500 is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power.
3. The RF output of the transmitter is connected to the input of the spectrum analyzer through sufficient attenuation.
4. Spurious emissions are tested with 0.001MHz RBW for frequency less than 150kHz, 0.01MHz RBW for frequency less than 30MHz, 0.1MHz RBW for frequency less than 1GHz, and 1MHz RBW for frequency above 1GHz. And sweep point number are at least 401, referring to following formula.

Sweep point number = Span/RBW

VBW=3*RBW

Detector Mode=mean or average power

5. Record the frequencies and levels of spurious emissions.

5.5.4 Test Result

Please refer to ANNEX A.5.

5.6 Band Edge

5.6.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n)

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC § 22.917(a) & 24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337MHz.

(2) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292MHz, and $70 + 10 \log(P)$ dB below 2288MHz.

(3) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365MHz, and not less than $70 + 10 \log(P)$ dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;
- (3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;
- (4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43+10*\log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

FCC § 27.53(m) (4)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- $40+10\log P$ dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.
- $43+10\log P$ dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,

- $55 + 10 \log P$ dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450 - 3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.



5.6.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.6.3 Test Procedure

The EUT, which is powered by the Battery, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading.

1. The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading.
2. CMW500 is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power.
3. The RF output of the transmitter is connected to the input of the spectrum analyzer through sufficient attenuation.
4. The center of the spectrum analyzer was set to block edge frequency.
5. Band edge are tested with 1%*cBW (RBW), and sweep point number referred to following formula.

$$\text{Sweep point number} = 2 * \text{Span} / \text{RBW}$$

$$\text{VBW} = 3 \text{RBW}$$

6. Record the frequencies and levels of spurious emissions.

For mobile and portable stations, on all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment. Since it was not possible to set the resolution bandwidth to 6.25 kHz with the available equipment, a bandwidth of 10 kHz was used instead to show compliance. By using a 10 kHz bandwidth on the spectrum analyzer.

$$10 * \log(10 \text{ kHz} / 6.25 \text{ kHz}) = 2.04 \text{ dB}$$

$$\text{Limit Line} = -35 \text{ dBm} + 2.04 \text{ dB} = -32.96 \text{ dBm}$$

5.6.4 Test Result

Please refer to ANNEX A.6.

5.7 Field Strength of Spurious Radiation

5.7.1 Limit

FCC § 2.1053 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(f) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n)

FCC § 22.917(a) & 24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337MHz.

(2) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292MHz, and $70 + 10 \log(P)$ dB below 2288MHz.

(3) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365MHz, and not less than $70 + 10 \log(P)$ dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $76 + 10 \log(P)$ dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than $65 + 10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of

measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(f)

For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to - 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43+10\log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

FCC § 27.53(m) (4)

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

- $40+10\log P$ dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.
- $43+10\log P$ dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,
- $55+10\log P$ dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

5.7.2 Test Setup

The section 4.4.3 and 4.4.4 (Diagram 3, 4) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

1. On a test site, the EUT shall be placed at 80cm height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. During the measurement of the EUT, the resolution bandwidth was to 1 MHz and the average bandwidth was set to 1 MHz.
5. The transmitter shall be switched on; the measuring receiver shall be tuned to the frequency of the transmitter under test.
6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
9. The maximum signal level detected by the measuring receiver shall be noted.
10. The EUT was replaced by half-wave dipole (824 ~ 849 MHz) or horn antenna (1 850 ~ 1 910 MHz) connected to a signal generator.
11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to

increase the sensitivity of the measuring receiver.

12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.

13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.

14. The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.

15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.



Final measurement calculation as below:

The relevant equation for determining the ERP/EIRP from the radiated RF output power is:

$$\text{ERP/EIRP (dBm)} = \text{SA Read Value (dBm)} + \text{Correction Factor (dB)}$$

where:

ERP/EIRP = effective or equivalent radiated power, in dBm;

SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm;

Correction Factor = total correction factor including cable loss, in dB;

During the test, the data of Correction Factor (dB) is added in the EMI receiver or spectrum analyzer, so SA Read Value (dBm) is the final values which contains the data of Correction Factor (dB).

For example:

In the ERP test, when SA read value for GSM850 is 21dBm, and correction factor is 8dB, then final ERP value for GSM850 is:

$$\text{ERP (dBm)} = 21\text{dBm} + 8\text{dB} = 29\text{dBm}$$

5.7.4 Test Result

Please refer to ANNEX A.7.



ANNEX A TEST RESULTS

A.1 Transmitter Radiated Power (EIRP/ERP)

GSM Mode Test Data

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
GSM 850	LCH	32.34	-0.8	-2.95	29.39	0.869	7.00	Pass
	MCH	32.37	-0.8	-2.95	29.42	0.875	7.00	Pass
	HCH	32.84	-0.8	-2.95	29.89	0.975	7.00	Pass
GPRS 850	LCH	32.28	-0.8	-2.95	29.33	0.857	7.00	Pass
	MCH	32.32	-0.8	-2.95	29.37	0.865	7.00	Pass
	HCH	32.76	-0.8	-2.95	29.81	0.957	7.00	Pass
EGPRS 850	LCH	28.82	-0.8	-2.95	25.87	0.386	7.00	Pass
	MCH	28.89	-0.8	-2.95	25.94	0.393	7.00	Pass
	HCH	28.97	-0.8	-2.95	26.02	0.400	7.00	Pass

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
GSM 1900	LCH	29.14	-1.8	27.34	0.542	2.00	Pass
	MCH	29.07	-1.8	27.27	0.533	2.00	Pass
	HCH	29.16	-1.8	27.36	0.545	2.00	Pass
GPRS 1900	LCH	29.18	-1.8	27.38	0.547	2.00	Pass
	MCH	28.99	-1.8	27.19	0.524	2.00	Pass
	HCH	29.07	-1.8	27.27	0.533	2.00	Pass
EGPRS 1900	LCH	28.67	-1.8	26.87	0.486	2.00	Pass
	MCH	28.65	-1.8	26.85	0.484	2.00	Pass
	HCH	28.58	-1.8	26.78	0.476	2.00	Pass

Note 1: For the GPRS and EGPRS mode, all slots were tested and just the worst data were recorded in this table.

Note 2: $ERP/EIRP = P_{Meas} + GT - LC$

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

$ERP = EIRP - 2.15$; where ERP and EIRP are expressed in consistent units.

Note 3: Set PCL to 5 for GSM/GPRS 850 (power class 4) and 0 for GSM/GPRS 1900 (power class 1).

Set PCL to 8 for EGPRS850 (power class E2) and 2 for EGPRS1900 (power class E2).

GPRS Conducted Output Power

Band	Channel	Conducted Output Peak Power
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		1 Slot (dBm)	1 Slot (W)	2 Slots (dBm)	2 Slots (W)	3 Slots (dBm)	3 Slots (W)	4 Slots (dBm)	4 Slots (W)
GPRS 850	LCH	32.28	1.690	30.09	1.021	27.59	0.574	25.59	0.362
	MCH	32.32	1.706	30.14	1.032	27.82	0.605	25.63	0.366
	HCH	32.76	1.888	30.22	1.051	27.96	0.625	25.87	0.386
GPRS 1900	LCH	29.18	0.828	28.92	0.779	26.80	0.479	24.45	0.279
	MCH	28.99	0.793	28.75	0.750	26.71	0.469	24.51	0.282
	HCH	29.07	0.807	28.84	0.765	26.44	0.441	24.22	0.264

EGPRS Conducted Output Power

Band	Channel	Conducted Output Peak Power							
		1 Slot (dBm)	1 Slot (W)	2 Slots (dBm)	2 Slots (W)	3 Slots (dBm)	3 Slots (W)	4 Slots (dBm)	4 Slots (W)
EGPRS 850	LCH	28.82	0.762	27.47	0.558	25.68	0.370	23.98	0.250
	MCH	28.89	0.774	27.61	0.576	25.94	0.393	24.12	0.258
	HCH	28.97	0.789	27.72	0.592	25.99	0.397	24.27	0.268
EGPRS 1900	LCH	28.67	0.736	27.55	0.569	25.42	0.349	23.61	0.229
	MCH	28.65	0.733	27.44	0.554	25.46	0.352	23.45	0.222
	HCH	28.58	0.721	27.46	0.557	25.45	0.351	23.44	0.221



EVDO Mode Test Data

Test Band	Test Channel	Conducted Output Peak Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
EVDO BC0 Rel. 0	LCH	22.78	-0.8	-2.95	19.83	0.096	Pass
	MCH	22.95	-0.8	-2.95	20.00	0.100	Pass
	HCH	22.68	-0.8	-2.95	19.73	0.094	Pass
EVDO BC0 Rel. A	LCH	22.76	-0.8	-2.95	19.81	0.096	Pass
	MCH	22.97	-0.8	-2.95	20.02	0.100	Pass
	HCH	22.74	-0.8	-2.95	19.79	0.095	Pass

WCDMA Mode Test Data

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
WCDMA Band 2	LCH	20.80	-1.8	19.00	0.079	2.00	Pass
	MCH	20.98	-1.8	19.18	0.083	2.00	Pass
	HCH	20.87	-1.8	19.07	0.081	2.00	Pass
HSDPA Band 2	LCH	19.81	-1.8	18.01	0.063	2.00	Pass
	MCH	19.97	-1.8	18.17	0.066	2.00	Pass
	HCH	19.87	-1.8	18.07	0.064	2.00	Pass
HSUPA Band 2	LCH	19.74	-1.8	17.94	0.062	2.00	Pass
	MCH	19.93	-1.8	18.13	0.065	2.00	Pass
	HCH	19.87	-1.8	18.07	0.064	2.00	Pass

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
WCDMA Band 4	LCH	19.79	-2.2	17.59	0.057	1.00	Pass
	MCH	19.97	-2.2	17.77	0.060	1.00	Pass
	HCH	19.94	-2.2	17.74	0.059	1.00	Pass
HSDPA Band 4	LCH	18.75	-2.2	16.55	0.045	1.00	Pass
	MCH	19.00	-2.2	16.80	0.048	1.00	Pass
	HCH	18.94	-2.2	16.74	0.047	1.00	Pass
HSUPA Band 4	LCH	18.78	-2.2	16.58	0.045	1.00	Pass
	MCH	18.96	-2.2	16.76	0.047	1.00	Pass
	HCH	18.92	-2.2	16.72	0.047	1.00	Pass

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
WCDMA Band 5	LCH	22.49	-0.8	-2.95	19.54	0.090	7.00	Pass
	MCH	23.83	-0.8	-2.95	20.88	0.122	7.00	Pass
	HCH	23.69	-0.8	-2.95	20.74	0.119	7.00	Pass
HSDPA Band 5	LCH	22.12	-0.8	-2.95	19.17	0.083	7.00	Pass
	MCH	22.86	-0.8	-2.95	19.91	0.098	7.00	Pass
	HCH	22.41	-0.8	-2.95	19.46	0.088	7.00	Pass
HSUPA Band 5	LCH	21.99	-0.8	-2.95	19.04	0.080	7.00	Pass
	MCH	22.84	-0.8	-2.95	19.89	0.097	7.00	Pass

Test Band	Test Channel	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
	HCH	22.03	-0.8	-2.95	19.08	0.081	7.00	Pass

Note 1: For the HSDPA and HSUPA mode, all subtests were tested and just the worst data were recorded in this table.

Note 2: $ERP/EIRP = P_{Meas} + GT - LC$

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

$ERP = EIRP - 2.15$; where ERP and EIRP are expressed in consistent units.

HSDPA Conducted Output Power

Band	Channel	Conducted Output Average Power							
		Subtest1		Subtest2		Subtest3		Subtest4	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)
HSDPA Band 2	LCH	19.81	0.096	19.79	0.095	19.28	0.085	19.29	0.085
	MCH	19.97	0.099	19.97	0.099	18.46	0.070	18.45	0.070
	HCH	19.87	0.097	19.86	0.097	18.39	0.069	18.36	0.069
HSDPA Band 4	LCH	18.75	0.075	18.74	0.075	18.27	0.067	18.25	0.067
	MCH	18.96	0.079	19.00	0.079	18.47	0.070	18.46	0.070
	HCH	18.93	0.078	18.94	0.078	18.44	0.070	18.44	0.070
HSDPA Band 5	LCH	22.12	0.163	21.87	0.154	21.50	0.141	21.63	0.146
	MCH	22.85	0.193	22.86	0.193	22.35	0.172	22.34	0.171
	HCH	22.41	0.174	22.04	0.160	21.18	0.131	21.46	0.140

HSUPA Conducted Output Power

Band	Channel	Conducted Output Average Power									
		Subtest1		Subtest2		Subtest3		Subtest4		Subtest5	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)
HSUPA Band 2	LCH	19.71	0.094	17.81	0.060	18.79	0.076	17.76	0.060	19.74	0.094
	MCH	19.93	0.098	17.90	0.062	18.95	0.079	17.90	0.062	19.90	0.098
	HCH	19.87	0.097	17.92	0.062	18.89	0.077	17.90	0.062	19.79	0.095
HSUPA Band 4	LCH	18.78	0.076	16.75	0.047	17.78	0.060	16.77	0.048	18.72	0.074
	MCH	18.96	0.079	17.04	0.051	17.99	0.063	17.03	0.050	18.92	0.078
	HCH	18.89	0.077	17.06	0.051	17.96	0.063	16.93	0.049	18.92	0.078
HSUPA Band 5	LCH	21.99	0.158	19.84	0.096	20.77	0.119	19.93	0.098	21.59	0.144
	MCH	22.84	0.192	20.90	0.123	21.81	0.152	20.81	0.121	22.79	0.190
	HCH	22.02	0.159	20.02	0.100	20.82	0.121	20.00	0.100	22.03	0.160



LTE Mode Test Data

Test BW	Test Channel	Test Mode	Test RB (Size#Off set)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	Antenna Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
LTE BAND5										
1.4 MHz	LCH	QPSK	RB1#0	24.47	-0.8	-2.95	21.52	0.142	7.00	Pass
			RB1#3	24.46	-0.8	-2.95	21.51	0.142	7.00	Pass
			RB1#5	24.4	-0.8	-2.95	21.45	0.140	7.00	Pass
			RB3#0	24.47	-0.8	-2.95	21.52	0.142	7.00	Pass
			RB3#2	24.46	-0.8	-2.95	21.51	0.142	7.00	Pass
			RB3#3	24.37	-0.8	-2.95	21.42	0.139	7.00	Pass
			RB6#0	23.56	-0.8	-2.95	20.61	0.115	7.00	Pass
		16-QAM	RB1#0	23.66	-0.8	-2.95	20.71	0.118	7.00	Pass
			RB1#3	23.72	-0.8	-2.95	20.77	0.119	7.00	Pass
			RB1#5	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
			RB3#0	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
			RB3#2	23.63	-0.8	-2.95	20.68	0.117	7.00	Pass
			RB3#3	23.53	-0.8	-2.95	20.58	0.114	7.00	Pass
			RB6#0	22.73	-0.8	-2.95	19.78	0.095	7.00	Pass
	MCH	QPSK	RB1#0	24.38	-0.8	-2.95	21.43	0.139	7.00	Pass
			RB1#3	24.47	-0.8	-2.95	21.52	0.142	7.00	Pass
			RB1#5	24.35	-0.8	-2.95	21.40	0.138	7.00	Pass
			RB3#0	24.43	-0.8	-2.95	21.48	0.141	7.00	Pass
			RB3#2	24.46	-0.8	-2.95	21.51	0.142	7.00	Pass
			RB3#3	24.35	-0.8	-2.95	21.40	0.138	7.00	Pass
			RB6#0	23.51	-0.8	-2.95	20.56	0.114	7.00	Pass
		16-QAM	RB1#0	23.87	-0.8	-2.95	20.92	0.124	7.00	Pass
			RB1#3	23.95	-0.8	-2.95	21.00	0.126	7.00	Pass
			RB1#5	23.79	-0.8	-2.95	20.84	0.121	7.00	Pass
			RB3#0	23.63	-0.8	-2.95	20.68	0.117	7.00	Pass
			RB3#2	23.78	-0.8	-2.95	20.83	0.121	7.00	Pass
			RB3#3	23.6	-0.8	-2.95	20.65	0.116	7.00	Pass
			RB6#0	22.44	-0.8	-2.95	19.49	0.089	7.00	Pass
	HCH	QPSK	RB1#0	24.04	-0.8	-2.95	21.09	0.129	7.00	Pass
			RB1#3	24.06	-0.8	-2.95	21.11	0.129	7.00	Pass
			RB1#5	23.99	-0.8	-2.95	21.04	0.127	7.00	Pass
			RB3#0	24.11	-0.8	-2.95	21.16	0.131	7.00	Pass
			RB3#2	24.09	-0.8	-2.95	21.14	0.130	7.00	Pass
			RB3#3	24.07	-0.8	-2.95	21.12	0.129	7.00	Pass
			RB6#0	23.13	-0.8	-2.95	20.18	0.104	7.00	Pass
		16-QAM	RB1#0	23.16	-0.8	-2.95	20.21	0.105	7.00	Pass
			RB1#3	23.18	-0.8	-2.95	20.23	0.105	7.00	Pass
			RB1#5	23.11	-0.8	-2.95	20.16	0.104	7.00	Pass
			RB3#0	23.32	-0.8	-2.95	20.37	0.109	7.00	Pass
			RB3#2	23.29	-0.8	-2.95	20.34	0.108	7.00	Pass
			RB3#3	23.24	-0.8	-2.95	20.29	0.107	7.00	Pass
			RB6#0	22.34	-0.8	-2.95	19.39	0.087	7.00	Pass
3 MHz	LCH	QPSK	RB1#0	24.59	-0.8	-2.95	21.64	0.146	7.00	Pass
			RB1#7	24.58	-0.8	-2.95	21.63	0.146	7.00	Pass
			RB1#14	24.43	-0.8	-2.95	21.48	0.141	7.00	Pass
			RB8#0	23.52	-0.8	-2.95	20.57	0.114	7.00	Pass
			RB8#4	23.72	-0.8	-2.95	20.77	0.119	7.00	Pass
			RB8#7	23.57	-0.8	-2.95	20.62	0.115	7.00	Pass
			RB15#0	23.65	-0.8	-2.95	20.70	0.117	7.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Off set)	Conducted Output AV Power (dBm)	Antenn a Gain (dBi)	Antenn a Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
LTE BAND5										
		16-QAM	RB1#0	23.62	-0.8	-2.95	20.67	0.117	7.00	Pass
			RB1#7	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
			RB1#14	23.48	-0.8	-2.95	20.53	0.113	7.00	Pass
			RB8#0	22.79	-0.8	-2.95	19.84	0.096	7.00	Pass
			RB8#4	22.74	-0.8	-2.95	19.79	0.095	7.00	Pass
			RB8#7	22.72	-0.8	-2.95	19.77	0.095	7.00	Pass
			RB15#0	22.67	-0.8	-2.95	19.72	0.094	7.00	Pass
	MCH	QPSK	RB1#0	24.58	-0.8	-2.95	21.63	0.146	7.00	Pass
			RB1#7	24.58	-0.8	-2.95	21.63	0.146	7.00	Pass
			RB1#14	24.41	-0.8	-2.95	21.46	0.140	7.00	Pass
			RB8#0	23.63	-0.8	-2.95	20.68	0.117	7.00	Pass
			RB8#4	23.57	-0.8	-2.95	20.62	0.115	7.00	Pass
			RB8#7	23.53	-0.8	-2.95	20.58	0.114	7.00	Pass
			RB15#0	23.61	-0.8	-2.95	20.66	0.116	7.00	Pass
		16-QAM	RB1#0	24.02	-0.8	-2.95	21.07	0.128	7.00	Pass
			RB1#7	24.01	-0.8	-2.95	21.06	0.128	7.00	Pass
			RB1#14	23.86	-0.8	-2.95	20.91	0.123	7.00	Pass
			RB8#0	22.73	-0.8	-2.95	19.78	0.095	7.00	Pass
			RB8#4	22.65	-0.8	-2.95	19.70	0.093	7.00	Pass
			RB8#7	22.62	-0.8	-2.95	19.67	0.093	7.00	Pass
			RB15#0	22.62	-0.8	-2.95	19.67	0.093	7.00	Pass
	HCH	QPSK	RB1#0	24.2	-0.8	-2.95	21.25	0.133	7.00	Pass
			RB1#7	24.22	-0.8	-2.95	21.27	0.134	7.00	Pass
			RB1#14	24.08	-0.8	-2.95	21.13	0.130	7.00	Pass
			RB8#0	23.24	-0.8	-2.95	20.29	0.107	7.00	Pass
			RB8#4	23.21	-0.8	-2.95	20.26	0.106	7.00	Pass
			RB8#7	23.2	-0.8	-2.95	20.25	0.106	7.00	Pass
			RB15#0	23.23	-0.8	-2.95	20.28	0.107	7.00	Pass
		16-QAM	RB1#0	23.36	-0.8	-2.95	20.41	0.110	7.00	Pass
			RB1#7	23.27	-0.8	-2.95	20.32	0.108	7.00	Pass
			RB1#14	23.17	-0.8	-2.95	20.22	0.105	7.00	Pass
			RB8#0	22.35	-0.8	-2.95	19.40	0.087	7.00	Pass
			RB8#4	22.34	-0.8	-2.95	19.39	0.087	7.00	Pass
			RB8#7	22.25	-0.8	-2.95	19.30	0.085	7.00	Pass
			RB15#0	22.2	-0.8	-2.95	19.25	0.084	7.00	Pass
	LCH	QPSK	RB1#0	24.64	-0.8	-2.95	21.69	0.148	7.00	Pass
			RB1#13	24.52	-0.8	-2.95	21.57	0.144	7.00	Pass
			RB1#24	24.45	-0.8	-2.95	21.50	0.141	7.00	Pass
			RB12#0	23.66	-0.8	-2.95	20.71	0.118	7.00	Pass
			RB12#6	23.65	-0.8	-2.95	20.70	0.117	7.00	Pass
			RB12#13	23.63	-0.8	-2.95	20.68	0.117	7.00	Pass
			RB25#0	23.68	-0.8	-2.95	20.73	0.118	7.00	Pass
		16-QAM	RB1#0	23.9	-0.8	-2.95	20.95	0.124	7.00	Pass
			RB1#13	23.8	-0.8	-2.95	20.85	0.122	7.00	Pass
			RB1#24	23.71	-0.8	-2.95	20.76	0.119	7.00	Pass
			RB12#0	22.83	-0.8	-2.95	19.88	0.097	7.00	Pass
			RB12#6	22.73	-0.8	-2.95	19.78	0.095	7.00	Pass
			RB12#13	22.68	-0.8	-2.95	19.73	0.094	7.00	Pass
			RB25#0	22.67	-0.8	-2.95	19.72	0.094	7.00	Pass
	MCH	QPSK	RB1#0	24.55	-0.8	-2.95	21.60	0.145	7.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Off set)	Conducted Output AV Power (dBm)	Antenn a Gain (dBi)	Antenn a Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
LTE BAND5										
			RB1#13	24.53	-0.8	-2.95	21.58	0.144	7.00	Pass
			RB1#24	24.36	-0.8	-2.95	21.41	0.138	7.00	Pass
			RB12#0	23.63	-0.8	-2.95	20.68	0.117	7.00	Pass
			RB12#6	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
			RB12#13	23.52	-0.8	-2.95	20.57	0.114	7.00	Pass
			RB25#0	23.57	-0.8	-2.95	20.62	0.115	7.00	Pass
		16-QAM	RB1#0	24.27	-0.8	-2.95	21.32	0.136	7.00	Pass
			RB1#13	24.2	-0.8	-2.95	21.25	0.133	7.00	Pass
			RB1#24	23.97	-0.8	-2.95	21.02	0.126	7.00	Pass
			RB12#0	22.78	-0.8	-2.95	19.83	0.096	7.00	Pass
			RB12#6	22.73	-0.8	-2.95	19.78	0.095	7.00	Pass
			RB12#13	22.65	-0.8	-2.95	19.70	0.093	7.00	Pass
			RB25#0	22.65	-0.8	-2.95	19.70	0.093	7.00	Pass
	HCH	QPSK	RB1#0	24.33	-0.8	-2.95	21.38	0.137	7.00	Pass
			RB1#13	24.14	-0.8	-2.95	21.19	0.132	7.00	Pass
			RB1#24	24.07	-0.8	-2.95	21.12	0.129	7.00	Pass
			RB12#0	23.36	-0.8	-2.95	20.41	0.110	7.00	Pass
			RB12#6	23.29	-0.8	-2.95	20.34	0.108	7.00	Pass
			RB12#13	23.21	-0.8	-2.95	20.26	0.106	7.00	Pass
			RB25#0	23.26	-0.8	-2.95	20.31	0.107	7.00	Pass
		16-QAM	RB1#0	23.46	-0.8	-2.95	20.51	0.112	7.00	Pass
			RB1#13	23.37	-0.8	-2.95	20.42	0.110	7.00	Pass
			RB1#24	23.28	-0.8	-2.95	20.33	0.108	7.00	Pass
			RB12#0	22.45	-0.8	-2.95	19.50	0.089	7.00	Pass
			RB12#6	22.38	-0.8	-2.95	19.43	0.088	7.00	Pass
			RB12#13	22.26	-0.8	-2.95	19.31	0.085	7.00	Pass
			RB25#0	22.28	-0.8	-2.95	19.33	0.086	7.00	Pass
10 MHz	LCH	QPSK	RB1#0	24.55	-0.8	-2.95	21.60	0.145	7.00	Pass
			RB1#25	24.49	-0.8	-2.95	21.54	0.143	7.00	Pass
			RB1#49	24.27	-0.8	-2.95	21.32	0.136	7.00	Pass
			RB25#0	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
			RB25#13	23.69	-0.8	-2.95	20.74	0.119	7.00	Pass
			RB25#25	23.61	-0.8	-2.95	20.66	0.116	7.00	Pass
			RB50#0	23.64	-0.8	-2.95	20.69	0.117	7.00	Pass
		16-QAM	RB1#0	23.6	-0.8	-2.95	20.65	0.116	7.00	Pass
			RB1#25	23.49	-0.8	-2.95	20.54	0.113	7.00	Pass
			RB1#49	23.46	-0.8	-2.95	20.51	0.112	7.00	Pass
			RB25#0	22.62	-0.8	-2.95	19.67	0.093	7.00	Pass
			RB25#13	22.7	-0.8	-2.95	19.75	0.094	7.00	Pass
			RB25#25	22.64	-0.8	-2.95	19.69	0.093	7.00	Pass
			RB50#0	22.61	-0.8	-2.95	19.66	0.092	7.00	Pass
	MCH	QPSK	RB1#0	24.59	-0.8	-2.95	21.64	0.146	7.00	Pass
			RB1#25	24.52	-0.8	-2.95	21.57	0.144	7.00	Pass
			RB1#49	24.25	-0.8	-2.95	21.30	0.135	7.00	Pass
			RB25#0	23.58	-0.8	-2.95	20.63	0.116	7.00	Pass
			RB25#13	23.56	-0.8	-2.95	20.61	0.115	7.00	Pass
			RB25#25	23.46	-0.8	-2.95	20.51	0.112	7.00	Pass
			RB50#0	23.59	-0.8	-2.95	20.64	0.116	7.00	Pass
		16-QAM	RB1#0	24.03	-0.8	-2.95	21.08	0.128	7.00	Pass
			RB1#25	23.94	-0.8	-2.95	20.99	0.126	7.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Off set)	Conducted Output AV Power (dBm)	Antenn a Gain (dBi)	Antenn a Gain (dBd)	ERP (dBm)	ERP (W)	Limit (W)	Verdict
LTE BAND5										
			RB1#49	23.79	-0.8	-2.95	20.84	0.121	7.00	Pass
			RB25#0	22.71	-0.8	-2.95	19.76	0.095	7.00	Pass
			RB25#13	22.65	-0.8	-2.95	19.70	0.093	7.00	Pass
			RB25#25	22.48	-0.8	-2.95	19.53	0.090	7.00	Pass
			RB50#0	22.59	-0.8	-2.95	19.64	0.092	7.00	Pass
	HCH	QPSK	RB1#0	24.42	-0.8	-2.95	21.47	0.140	7.00	Pass
			RB1#25	24.23	-0.8	-2.95	21.28	0.134	7.00	Pass
			RB1#49	24.11	-0.8	-2.95	21.16	0.131	7.00	Pass
			RB25#0	23.42	-0.8	-2.95	20.47	0.111	7.00	Pass
			RB25#13	23.38	-0.8	-2.95	20.43	0.110	7.00	Pass
			RB25#25	23.2	-0.8	-2.95	20.25	0.106	7.00	Pass
			RB50#0	23.41	-0.8	-2.95	20.46	0.111	7.00	Pass
		16-QAM	RB1#0	23.52	-0.8	-2.95	20.57	0.114	7.00	Pass
			RB1#25	23.28	-0.8	-2.95	20.33	0.108	7.00	Pass
			RB1#49	23.14	-0.8	-2.95	20.19	0.104	7.00	Pass
			RB25#0	22.58	-0.8	-2.95	19.63	0.092	7.00	Pass
			RB25#13	22.42	-0.8	-2.95	19.47	0.089	7.00	Pass
			RB25#25	22.31	-0.8	-2.95	19.36	0.086	7.00	Pass
			RB50#0	22.44	-0.8	-2.95	19.49	0.089	7.00	Pass



Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND7									
5 MHz	LCH	QPSK	RB1#0	18.6	-0.5	18.10	0.065	2.00	Pass
			RB1#13	18.6	-0.5	18.10	0.065	2.00	Pass
			RB1#24	18.46	-0.5	17.96	0.063	2.00	Pass
			RB12#0	17.7	-0.5	17.20	0.052	2.00	Pass
			RB12#6	17.64	-0.5	17.14	0.052	2.00	Pass
			RB12#13	17.69	-0.5	17.19	0.052	2.00	Pass
			RB25#0	17.67	-0.5	17.17	0.052	2.00	Pass
		16-QAM	RB1#0	17.81	-0.5	17.31	0.054	2.00	Pass
			RB1#13	17.83	-0.5	17.33	0.054	2.00	Pass
			RB1#24	17.76	-0.5	17.26	0.053	2.00	Pass
			RB12#0	16.8	-0.5	16.30	0.043	2.00	Pass
			RB12#6	16.73	-0.5	16.23	0.042	2.00	Pass
			RB12#13	16.73	-0.5	16.23	0.042	2.00	Pass
			RB25#0	16.71	-0.5	16.21	0.042	2.00	Pass
	MCH	QPSK	RB1#0	18.88	-0.5	18.38	0.069	2.00	Pass
			RB1#13	18.95	-0.5	18.45	0.070	2.00	Pass
			RB1#24	19	-0.5	18.50	0.071	2.00	Pass
			RB12#0	17.98	-0.5	17.48	0.056	2.00	Pass
			RB12#6	18.05	-0.5	17.55	0.057	2.00	Pass
			RB12#13	18.06	-0.5	17.56	0.057	2.00	Pass
			RB25#0	17.98	-0.5	17.48	0.056	2.00	Pass
		16-QAM	RB1#0	18.44	-0.5	17.94	0.062	2.00	Pass
			RB1#13	18.49	-0.5	17.99	0.063	2.00	Pass
			RB1#24	18.54	-0.5	18.04	0.064	2.00	Pass
			RB12#0	17.14	-0.5	16.64	0.046	2.00	Pass
			RB12#6	17.23	-0.5	16.73	0.047	2.00	Pass
			RB12#13	17.17	-0.5	16.67	0.046	2.00	Pass
			RB25#0	17.05	-0.5	16.55	0.045	2.00	Pass
	HCH	QPSK	RB1#0	19.27	-0.5	18.77	0.075	2.00	Pass
			RB1#13	19.28	-0.5	18.78	0.076	2.00	Pass
			RB1#24	19.3	-0.5	18.80	0.076	2.00	Pass
			RB12#0	18.44	-0.5	17.94	0.062	2.00	Pass
			RB12#6	18.39	-0.5	17.89	0.062	2.00	Pass
			RB12#13	18.4	-0.5	17.90	0.062	2.00	Pass
			RB25#0	18.44	-0.5	17.94	0.062	2.00	Pass
		16-QAM	RB1#0	18.51	-0.5	18.01	0.063	2.00	Pass
			RB1#13	18.46	-0.5	17.96	0.063	2.00	Pass
			RB1#24	18.55	-0.5	18.05	0.064	2.00	Pass
			RB12#0	17.54	-0.5	17.04	0.051	2.00	Pass
			RB12#6	17.5	-0.5	17.00	0.050	2.00	Pass
			RB12#13	17.5	-0.5	17.00	0.050	2.00	Pass
			RB25#0	17.38	-0.5	16.88	0.049	2.00	Pass
10 MHz	LCH	QPSK	RB1#0	18.52	-0.5	18.02	0.063	2.00	Pass
			RB1#25	18.44	-0.5	17.94	0.062	2.00	Pass
			RB1#49	18.48	-0.5	17.98	0.063	2.00	Pass
			RB25#0	17.67	-0.5	17.17	0.052	2.00	Pass
			RB25#13	17.66	-0.5	17.16	0.052	2.00	Pass
			RB25#25	17.67	-0.5	17.17	0.052	2.00	Pass
			RB50#0	17.65	-0.5	17.15	0.052	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND7									
		16-QAM	RB1#0	17.54	-0.5	17.04	0.051	2.00	Pass
			RB1#25	17.41	-0.5	16.91	0.049	2.00	Pass
			RB1#49	17.53	-0.5	17.03	0.050	2.00	Pass
			RB25#0	16.7	-0.5	16.20	0.042	2.00	Pass
			RB25#13	16.72	-0.5	16.22	0.042	2.00	Pass
			RB25#25	16.7	-0.5	16.20	0.042	2.00	Pass
			RB50#0	16.63	-0.5	16.13	0.041	2.00	Pass
	MCH	QPSK	RB1#0	18.8	-0.5	18.30	0.068	2.00	Pass
			RB1#25	18.85	-0.5	18.35	0.068	2.00	Pass
			RB1#49	18.89	-0.5	18.39	0.069	2.00	Pass
			RB25#0	17.98	-0.5	17.48	0.056	2.00	Pass
			RB25#13	18	-0.5	17.50	0.056	2.00	Pass
			RB25#25	18.05	-0.5	17.55	0.057	2.00	Pass
			RB50#0	17.99	-0.5	17.49	0.056	2.00	Pass
		16-QAM	RB1#0	18.31	-0.5	17.81	0.060	2.00	Pass
			RB1#25	18.35	-0.5	17.85	0.061	2.00	Pass
			RB1#49	18.37	-0.5	17.87	0.061	2.00	Pass
			RB25#0	17.04	-0.5	16.54	0.045	2.00	Pass
			RB25#13	17.08	-0.5	16.58	0.045	2.00	Pass
			RB25#25	17.08	-0.5	16.58	0.045	2.00	Pass
			RB50#0	17.01	-0.5	16.51	0.045	2.00	Pass
	HCH	QPSK	RB1#0	19.3	-0.5	18.80	0.076	2.00	Pass
			RB1#25	19.26	-0.5	18.76	0.075	2.00	Pass
			RB1#49	19.27	-0.5	18.77	0.075	2.00	Pass
			RB25#0	18.4	-0.5	17.90	0.062	2.00	Pass
			RB25#13	18.4	-0.5	17.90	0.062	2.00	Pass
			RB25#25	18.44	-0.5	17.94	0.062	2.00	Pass
			RB50#0	18.39	-0.5	17.89	0.062	2.00	Pass
		16-QAM	RB1#0	18.37	-0.5	17.87	0.061	2.00	Pass
			RB1#25	18.3	-0.5	17.80	0.060	2.00	Pass
			RB1#49	18.29	-0.5	17.79	0.060	2.00	Pass
			RB25#0	17.53	-0.5	17.03	0.050	2.00	Pass
			RB25#13	17.48	-0.5	16.98	0.050	2.00	Pass
			RB25#25	17.55	-0.5	17.05	0.051	2.00	Pass
			RB50#0	17.42	-0.5	16.92	0.049	2.00	Pass
	LCH	QPSK	RB1#0	18.62	-0.5	18.12	0.065	2.00	Pass
			RB1#38	18.53	-0.5	18.03	0.064	2.00	Pass
			RB1#74	18.58	-0.5	18.08	0.064	2.00	Pass
			RB36#0	17.61	-0.5	17.11	0.051	2.00	Pass
			RB36#19	17.67	-0.5	17.17	0.052	2.00	Pass
			RB36#39	17.69	-0.5	17.19	0.052	2.00	Pass
			RB75#0	17.66	-0.5	17.16	0.052	2.00	Pass
		16-QAM	RB1#0	17.59	-0.5	17.09	0.051	2.00	Pass
			RB1#38	17.56	-0.5	17.06	0.051	2.00	Pass
			RB1#74	17.61	-0.5	17.11	0.051	2.00	Pass
			RB36#0	16.65	-0.5	16.15	0.041	2.00	Pass
			RB36#19	16.66	-0.5	16.16	0.041	2.00	Pass
			RB36#39	16.62	-0.5	16.12	0.041	2.00	Pass
			RB75#0	16.65	-0.5	16.15	0.041	2.00	Pass
	MCH	QPSK	RB1#0	18.87	-0.5	18.37	0.069	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict	
LTE BAND7										
			RB1#38	18.91	-0.5	18.41	0.069	2.00	Pass	
			RB1#74	19.03	-0.5	18.53	0.071	2.00	Pass	
			RB36#0	17.99	-0.5	17.49	0.056	2.00	Pass	
			RB36#19	17.96	-0.5	17.46	0.056	2.00	Pass	
			RB36#39	18.07	-0.5	17.57	0.057	2.00	Pass	
			RB75#0	17.96	-0.5	17.46	0.056	2.00	Pass	
		16-QAM	RB1#0	18.37	-0.5	17.87	0.061	2.00	Pass	
			RB1#38	18.39	-0.5	17.89	0.062	2.00	Pass	
			RB1#74	18.52	-0.5	18.02	0.063	2.00	Pass	
			RB36#0	17.05	-0.5	16.55	0.045	2.00	Pass	
			RB36#19	17.05	-0.5	16.55	0.045	2.00	Pass	
			RB36#39	17.1	-0.5	16.60	0.046	2.00	Pass	
		HCH	QPSK	RB75#0	17.04	-0.5	16.54	0.045	2.00	Pass
				RB1#0	19.25	-0.5	18.75	0.075	2.00	Pass
	RB1#38			19.24	-0.5	18.74	0.075	2.00	Pass	
	RB1#74			19.22	-0.5	18.72	0.074	2.00	Pass	
	RB36#0			18.31	-0.5	17.81	0.060	2.00	Pass	
	RB36#19			18.33	-0.5	17.83	0.061	2.00	Pass	
	16-QAM		RB36#39	18.35	-0.5	17.85	0.061	2.00	Pass	
			RB75#0	18.31	-0.5	17.81	0.060	2.00	Pass	
		RB1#0	18.76	-0.5	18.26	0.067	2.00	Pass		
		RB1#38	18.81	-0.5	18.31	0.068	2.00	Pass		
		RB1#74	18.84	-0.5	18.34	0.068	2.00	Pass		
		RB36#0	17.32	-0.5	16.82	0.048	2.00	Pass		
	20 MHz	LCH	QPSK	RB36#19	17.34	-0.5	16.84	0.048	2.00	Pass
				RB36#39	17.37	-0.5	16.87	0.049	2.00	Pass
				RB75#0	17.34	-0.5	16.84	0.048	2.00	Pass
				RB1#0	18.64	-0.5	18.14	0.065	2.00	Pass
RB1#50				18.54	-0.5	18.04	0.064	2.00	Pass	
RB1#99				18.69	-0.5	18.19	0.066	2.00	Pass	
RB50#0				17.66	-0.5	17.16	0.052	2.00	Pass	
16-QAM			RB50#25	17.73	-0.5	17.23	0.053	2.00	Pass	
			RB50#50	17.78	-0.5	17.28	0.053	2.00	Pass	
			RB100#0	17.72	-0.5	17.22	0.053	2.00	Pass	
			RB1#0	18.28	-0.5	17.78	0.060	2.00	Pass	
			RB1#50	18.14	-0.5	17.64	0.058	2.00	Pass	
			RB1#99	18.26	-0.5	17.76	0.060	2.00	Pass	
			RB50#0	16.68	-0.5	16.18	0.041	2.00	Pass	
MCH	QPSK	RB50#25	16.76	-0.5	16.26	0.042	2.00	Pass		
		RB50#50	16.8	-0.5	16.30	0.043	2.00	Pass		
		RB100#0	16.76	-0.5	16.26	0.042	2.00	Pass		
		RB1#0	18.94	-0.5	18.44	0.070	2.00	Pass		
		RB1#50	18.98	-0.5	18.48	0.070	2.00	Pass		
		RB1#99	19.08	-0.5	18.58	0.072	2.00	Pass		
	16-QAM	RB50#0	18.01	-0.5	17.51	0.056	2.00	Pass		
RB50#25		18.01	-0.5	17.51	0.056	2.00	Pass			
RB50#50	18.06	-0.5	17.56	0.057	2.00	Pass				
RB100#0	18.01	-0.5	17.51	0.056	2.00	Pass				
RB1#0	18.54	-0.5	18.04	0.064	2.00	Pass				
RB1#50	18.62	-0.5	18.12	0.065	2.00	Pass				

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND7									
			RB1#99	18.69	-0.5	18.19	0.066	2.00	Pass
			RB50#0	17.02	-0.5	16.52	0.045	2.00	Pass
			RB50#25	17.03	-0.5	16.53	0.045	2.00	Pass
			RB50#50	17.07	-0.5	16.57	0.045	2.00	Pass
			RB100#0	17.02	-0.5	16.52	0.045	2.00	Pass
	HCH	QPSK	RB1#0	19.13	-0.5	18.63	0.073	2.00	Pass
			RB1#50	19.19	-0.5	18.69	0.074	2.00	Pass
			RB1#99	19.15	-0.5	18.65	0.073	2.00	Pass
			RB50#0	18.26	-0.5	17.76	0.060	2.00	Pass
			RB50#25	18.41	-0.5	17.91	0.062	2.00	Pass
			RB50#50	18.36	-0.5	17.86	0.061	2.00	Pass
			RB100#0	18.26	-0.5	17.76	0.060	2.00	Pass
		16-QAM	RB1#0	18.65	-0.5	18.15	0.065	2.00	Pass
			RB1#50	18.67	-0.5	18.17	0.066	2.00	Pass
			RB1#99	18.63	-0.5	18.13	0.065	2.00	Pass
			RB50#0	17.31	-0.5	16.81	0.048	2.00	Pass
			RB50#25	17.4	-0.5	16.90	0.049	2.00	Pass
			RB50#50	17.38	-0.5	16.88	0.049	2.00	Pass
			RB100#0	17.33	-0.5	16.83	0.048	2.00	Pass



Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND38									
5 MHz	LCH	QPSK	RB1#0	19.34	-0.5	18.84	0.077	2.00	Pass
			RB1#13	19.31	-0.5	18.81	0.076	2.00	Pass
			RB1#24	19.27	-0.5	18.77	0.075	2.00	Pass
			RB12#0	18.35	-0.5	17.85	0.061	2.00	Pass
			RB12#6	18.36	-0.5	17.86	0.061	2.00	Pass
			RB12#13	18.28	-0.5	17.78	0.060	2.00	Pass
			RB25#0	18.36	-0.5	17.86	0.061	2.00	Pass
		16-QAM	RB1#0	18.59	-0.5	18.09	0.064	2.00	Pass
			RB1#13	18.6	-0.5	18.10	0.065	2.00	Pass
			RB1#24	18.54	-0.5	18.04	0.064	2.00	Pass
			RB12#0	17.4	-0.5	16.90	0.049	2.00	Pass
			RB12#6	17.38	-0.5	16.88	0.049	2.00	Pass
			RB12#13	17.35	-0.5	16.85	0.048	2.00	Pass
			RB25#0	17.41	-0.5	16.91	0.049	2.00	Pass
	MCH	QPSK	RB1#0	19.24	-0.5	18.74	0.075	2.00	Pass
			RB1#13	19.29	-0.5	18.79	0.076	2.00	Pass
			RB1#24	19.24	-0.5	18.74	0.075	2.00	Pass
			RB12#0	18.29	-0.5	17.79	0.060	2.00	Pass
			RB12#6	18.24	-0.5	17.74	0.059	2.00	Pass
			RB12#13	18.25	-0.5	17.75	0.060	2.00	Pass
			RB25#0	18.24	-0.5	17.74	0.059	2.00	Pass
		16-QAM	RB1#0	18.72	-0.5	18.22	0.066	2.00	Pass
			RB1#13	18.8	-0.5	18.30	0.068	2.00	Pass
			RB1#24	18.69	-0.5	18.19	0.066	2.00	Pass
			RB12#0	17.42	-0.5	16.92	0.049	2.00	Pass
			RB12#6	17.4	-0.5	16.90	0.049	2.00	Pass
			RB12#13	17.36	-0.5	16.86	0.049	2.00	Pass
			RB25#0	17.28	-0.5	16.78	0.048	2.00	Pass
	HCH	QPSK	RB1#0	19.24	-0.5	18.74	0.075	2.00	Pass
			RB1#13	19.3	-0.5	18.80	0.076	2.00	Pass
			RB1#24	19.28	-0.5	18.78	0.076	2.00	Pass
			RB12#0	18.34	-0.5	17.84	0.061	2.00	Pass
			RB12#6	18.35	-0.5	17.85	0.061	2.00	Pass
			RB12#13	18.33	-0.5	17.83	0.061	2.00	Pass
			RB25#0	18.33	-0.5	17.83	0.061	2.00	Pass
		16-QAM	RB1#0	18.53	-0.5	18.03	0.064	2.00	Pass
			RB1#13	18.55	-0.5	18.05	0.064	2.00	Pass
			RB1#24	18.48	-0.5	17.98	0.063	2.00	Pass
			RB12#0	17.42	-0.5	16.92	0.049	2.00	Pass
			RB12#6	17.44	-0.5	16.94	0.049	2.00	Pass
			RB12#13	17.39	-0.5	16.89	0.049	2.00	Pass
			RB25#0	17.32	-0.5	16.82	0.048	2.00	Pass
10 MHz	LCH	QPSK	RB1#0	19.34	-0.5	18.84	0.077	2.00	Pass
			RB1#25	19.24	-0.5	18.74	0.075	2.00	Pass
			RB1#49	19.22	-0.5	18.72	0.074	2.00	Pass
			RB25#0	18.39	-0.5	17.89	0.062	2.00	Pass
			RB25#13	18.37	-0.5	17.87	0.061	2.00	Pass
			RB25#25	18.31	-0.5	17.81	0.060	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND38									
		16-QAM	RB50#0	18.37	-0.5	17.87	0.061	2.00	Pass
			RB1#0	18.75	-0.5	18.25	0.067	2.00	Pass
			RB1#25	18.58	-0.5	18.08	0.064	2.00	Pass
			RB1#49	18.59	-0.5	18.09	0.064	2.00	Pass
			RB25#0	17.41	-0.5	16.91	0.049	2.00	Pass
			RB25#13	17.4	-0.5	16.90	0.049	2.00	Pass
			RB25#25	17.37	-0.5	16.87	0.049	2.00	Pass
			RB50#0	17.39	-0.5	16.89	0.049	2.00	Pass
	MCH	QPSK	RB1#0	19.28	-0.5	18.78	0.076	2.00	Pass
			RB1#25	19.17	-0.5	18.67	0.074	2.00	Pass
			RB1#49	19.1	-0.5	18.60	0.072	2.00	Pass
			RB25#0	18.34	-0.5	17.84	0.061	2.00	Pass
			RB25#13	18.3	-0.5	17.80	0.060	2.00	Pass
			RB25#25	18.24	-0.5	17.74	0.059	2.00	Pass
			RB50#0	18.28	-0.5	17.78	0.060	2.00	Pass
		16-QAM	RB1#0	18.77	-0.5	18.27	0.067	2.00	Pass
			RB1#25	18.62	-0.5	18.12	0.065	2.00	Pass
			RB1#49	18.6	-0.5	18.10	0.065	2.00	Pass
			RB25#0	17.34	-0.5	16.84	0.048	2.00	Pass
			RB25#13	17.32	-0.5	16.82	0.048	2.00	Pass
			RB25#25	17.31	-0.5	16.81	0.048	2.00	Pass
			RB50#0	17.34	-0.5	16.84	0.048	2.00	Pass
		HCH	RB1#0	19.31	-0.5	18.81	0.076	2.00	Pass
			RB1#25	19.32	-0.5	18.82	0.076	2.00	Pass
			RB1#49	19.34	-0.5	18.84	0.077	2.00	Pass
			RB25#0	18.3	-0.5	17.80	0.060	2.00	Pass
			RB25#13	18.29	-0.5	17.79	0.060	2.00	Pass
			RB25#25	18.35	-0.5	17.85	0.061	2.00	Pass
			RB50#0	18.29	-0.5	17.79	0.060	2.00	Pass
			RB1#0	18.64	-0.5	18.14	0.065	2.00	Pass
			RB1#25	18.54	-0.5	18.04	0.064	2.00	Pass
			RB1#49	18.63	-0.5	18.13	0.065	2.00	Pass
			RB25#0	17.33	-0.5	16.83	0.048	2.00	Pass
			RB25#13	17.39	-0.5	16.89	0.049	2.00	Pass
			RB25#25	17.45	-0.5	16.95	0.050	2.00	Pass
			RB50#0	17.36	-0.5	16.86	0.049	2.00	Pass
15 MHz	LCH	QPSK	RB1#0	19.26	-0.5	18.76	0.075	2.00	Pass
			RB1#38	19.13	-0.5	18.63	0.073	2.00	Pass
			RB1#74	19.06	-0.5	18.56	0.072	2.00	Pass
			RB36#0	18.38	-0.5	17.88	0.061	2.00	Pass
			RB36#19	18.32	-0.5	17.82	0.061	2.00	Pass
			RB36#39	18.3	-0.5	17.80	0.060	2.00	Pass
			RB75#0	18.33	-0.5	17.83	0.061	2.00	Pass
		16-QAM	RB1#0	18.6	-0.5	18.10	0.065	2.00	Pass
			RB1#38	18.5	-0.5	18.00	0.063	2.00	Pass
			RB1#74	18.35	-0.5	17.85	0.061	2.00	Pass
			RB36#0	17.4	-0.5	16.90	0.049	2.00	Pass
			RB36#19	17.36	-0.5	16.86	0.049	2.00	Pass
			RB36#39	17.27	-0.5	16.77	0.048	2.00	Pass
			RB75#0	17.36	-0.5	16.86	0.049	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND38									
	MCH	QPSK	RB1#0	19.24	-0.5	18.74	0.075	2.00	Pass
			RB1#38	19.11	-0.5	18.61	0.073	2.00	Pass
			RB1#74	18.99	-0.5	18.49	0.071	2.00	Pass
			RB36#0	18.28	-0.5	17.78	0.060	2.00	Pass
			RB36#19	18.24	-0.5	17.74	0.059	2.00	Pass
			RB36#39	18.2	-0.5	17.70	0.059	2.00	Pass
			RB75#0	18.23	-0.5	17.73	0.059	2.00	Pass
		16-QAM	RB1#0	18.68	-0.5	18.18	0.066	2.00	Pass
			RB1#38	18.52	-0.5	18.02	0.063	2.00	Pass
			RB1#74	18.46	-0.5	17.96	0.063	2.00	Pass
			RB36#0	17.28	-0.5	16.78	0.048	2.00	Pass
			RB36#19	17.27	-0.5	16.77	0.048	2.00	Pass
			RB36#39	17.2	-0.5	16.70	0.047	2.00	Pass
			RB75#0	17.29	-0.5	16.79	0.048	2.00	Pass
	HCH	QPSK	RB1#0	19.22	-0.5	18.72	0.074	2.00	Pass
			RB1#38	19.17	-0.5	18.67	0.074	2.00	Pass
			RB1#74	19.25	-0.5	18.75	0.075	2.00	Pass
			RB36#0	18.26	-0.5	17.76	0.060	2.00	Pass
			RB36#19	18.32	-0.5	17.82	0.061	2.00	Pass
			RB36#39	18.33	-0.5	17.83	0.061	2.00	Pass
			RB75#0	18.24	-0.5	17.74	0.059	2.00	Pass
		16-QAM	RB1#0	18.51	-0.5	18.01	0.063	2.00	Pass
			RB1#38	18.52	-0.5	18.02	0.063	2.00	Pass
			RB1#74	18.42	-0.5	17.92	0.062	2.00	Pass
			RB36#0	17.31	-0.5	16.81	0.048	2.00	Pass
			RB36#19	17.41	-0.5	16.91	0.049	2.00	Pass
			RB36#39	17.38	-0.5	16.88	0.049	2.00	Pass
			RB75#0	17.27	-0.5	16.77	0.048	2.00	Pass
20 MHz	LCH	QPSK	RB1#0	19.32	-0.5	18.82	0.076	2.00	Pass
			RB1#50	19.14	-0.5	18.64	0.073	2.00	Pass
			RB1#99	19.07	-0.5	18.57	0.072	2.00	Pass
			RB50#0	18.4	-0.5	17.90	0.062	2.00	Pass
			RB50#25	18.32	-0.5	17.82	0.061	2.00	Pass
			RB50#50	18.27	-0.5	17.77	0.060	2.00	Pass
			RB100#0	18.33	-0.5	17.83	0.061	2.00	Pass
		16-QAM	RB1#0	18.75	-0.5	18.25	0.067	2.00	Pass
			RB1#50	18.59	-0.5	18.09	0.064	2.00	Pass
			RB1#99	18.48	-0.5	17.98	0.063	2.00	Pass
			RB50#0	17.41	-0.5	16.91	0.049	2.00	Pass
			RB50#25	17.37	-0.5	16.87	0.049	2.00	Pass
			RB50#50	17.27	-0.5	16.77	0.048	2.00	Pass
			RB100#0	17.33	-0.5	16.83	0.048	2.00	Pass
	MCH	QPSK	RB1#0	19.28	-0.5	18.78	0.076	2.00	Pass
			RB1#50	19.05	-0.5	18.55	0.072	2.00	Pass
			RB1#99	18.96	-0.5	18.46	0.070	2.00	Pass
			RB50#0	18.32	-0.5	17.82	0.061	2.00	Pass
			RB50#25	18.29	-0.5	17.79	0.060	2.00	Pass
			RB50#50	18.22	-0.5	17.72	0.059	2.00	Pass
			RB100#0	18.28	-0.5	17.78	0.060	2.00	Pass
		16-QAM	RB1#0	18.6	-0.5	18.10	0.065	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND38									
			RB1#50	18.43	-0.5	17.93	0.062	2.00	Pass
			RB1#99	18.38	-0.5	17.88	0.061	2.00	Pass
			RB50#0	17.35	-0.5	16.85	0.048	2.00	Pass
			RB50#25	17.28	-0.5	16.78	0.048	2.00	Pass
			RB50#50	17.23	-0.5	16.73	0.047	2.00	Pass
			RB100#0	17.3	-0.5	16.80	0.048	2.00	Pass
	HCH	QPSK	RB1#0	19.31	-0.5	18.81	0.076	2.00	Pass
			RB1#50	19.22	-0.5	18.72	0.074	2.00	Pass
			RB1#99	19.24	-0.5	18.74	0.075	2.00	Pass
			RB50#0	18.3	-0.5	17.80	0.060	2.00	Pass
			RB50#25	18.33	-0.5	17.83	0.061	2.00	Pass
			RB50#50	18.3	-0.5	17.80	0.060	2.00	Pass
			RB100#0	18.28	-0.5	17.78	0.060	2.00	Pass
		16-QAM	RB1#0	18.72	-0.5	18.22	0.066	2.00	Pass
			RB1#50	18.66	-0.5	18.16	0.065	2.00	Pass
			RB1#99	18.66	-0.5	18.16	0.065	2.00	Pass
			RB50#0	17.35	-0.5	16.85	0.048	2.00	Pass
			RB50#25	17.4	-0.5	16.90	0.049	2.00	Pass
			RB50#50	17.37	-0.5	16.87	0.049	2.00	Pass
			RB100#0	17.27	-0.5	16.77	0.048	2.00	Pass



Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND41									
5 MHz	LCH	QPSK	RB1#0	20.44	-0.5	19.94	0.099	2.00	Pass
			RB1#13	20.47	-0.5	19.97	0.099	2.00	Pass
			RB1#24	20.37	-0.5	19.87	0.097	2.00	Pass
			RB12#0	19.47	-0.5	18.97	0.079	2.00	Pass
			RB12#6	19.49	-0.5	18.99	0.079	2.00	Pass
			RB12#13	19.47	-0.5	18.97	0.079	2.00	Pass
			RB25#0	19.45	-0.5	18.95	0.079	2.00	Pass
		16-QAM	RB1#0	19.65	-0.5	19.15	0.082	2.00	Pass
			RB1#13	19.71	-0.5	19.21	0.083	2.00	Pass
			RB1#24	19.67	-0.5	19.17	0.083	2.00	Pass
			RB12#0	18.54	-0.5	18.04	0.064	2.00	Pass
			RB12#6	18.58	-0.5	18.08	0.064	2.00	Pass
			RB12#13	18.47	-0.5	17.97	0.063	2.00	Pass
			RB25#0	18.48	-0.5	17.98	0.063	2.00	Pass
	MCH	QPSK	RB1#0	20.94	-0.5	20.44	0.111	2.00	Pass
			RB1#13	20.93	-0.5	20.43	0.110	2.00	Pass
			RB1#24	20.85	-0.5	20.35	0.108	2.00	Pass
			RB12#0	19.98	-0.5	19.48	0.089	2.00	Pass
			RB12#6	19.94	-0.5	19.44	0.088	2.00	Pass
			RB12#13	19.9	-0.5	19.40	0.087	2.00	Pass
			RB25#0	19.91	-0.5	19.41	0.087	2.00	Pass
		16-QAM	RB1#0	20.17	-0.5	19.67	0.093	2.00	Pass
			RB1#13	20.18	-0.5	19.68	0.093	2.00	Pass
			RB1#24	20.1	-0.5	19.60	0.091	2.00	Pass
			RB12#0	18.99	-0.5	18.49	0.071	2.00	Pass
			RB12#6	18.94	-0.5	18.44	0.070	2.00	Pass
			RB12#13	18.9	-0.5	18.40	0.069	2.00	Pass
			RB25#0	18.97	-0.5	18.47	0.070	2.00	Pass
	HCH	QPSK	RB1#0	20.38	-0.5	19.88	0.097	2.00	Pass
			RB1#13	20.42	-0.5	19.92	0.098	2.00	Pass
			RB1#24	20.35	-0.5	19.85	0.097	2.00	Pass
			RB12#0	19.4	-0.5	18.90	0.078	2.00	Pass
			RB12#6	19.38	-0.5	18.88	0.077	2.00	Pass
			RB12#13	19.33	-0.5	18.83	0.076	2.00	Pass
			RB25#0	19.35	-0.5	18.85	0.077	2.00	Pass
		16-QAM	RB1#0	19.84	-0.5	19.34	0.086	2.00	Pass
			RB1#13	19.8	-0.5	19.30	0.085	2.00	Pass
			RB1#24	19.72	-0.5	19.22	0.084	2.00	Pass
			RB12#0	18.47	-0.5	17.97	0.063	2.00	Pass
			RB12#6	18.5	-0.5	18.00	0.063	2.00	Pass
			RB12#13	18.48	-0.5	17.98	0.063	2.00	Pass
			RB25#0	18.37	-0.5	17.87	0.061	2.00	Pass
10 MHz	LCH	QPSK	RB1#0	20.46	-0.5	19.96	0.099	2.00	Pass
			RB1#25	20.37	-0.5	19.87	0.097	2.00	Pass
			RB1#49	20.34	-0.5	19.84	0.096	2.00	Pass
			RB25#0	19.49	-0.5	18.99	0.079	2.00	Pass
			RB25#13	19.5	-0.5	19.00	0.079	2.00	Pass
			RB25#25	19.42	-0.5	18.92	0.078	2.00	Pass
			RB50#0	19.48	-0.5	18.98	0.079	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND41									
		16-QAM	RB1#0	19.79	-0.5	19.29	0.085	2.00	Pass
			RB1#25	19.79	-0.5	19.29	0.085	2.00	Pass
			RB1#49	19.66	-0.5	19.16	0.082	2.00	Pass
			RB25#0	18.55	-0.5	18.05	0.064	2.00	Pass
			RB25#13	18.5	-0.5	18.00	0.063	2.00	Pass
			RB25#25	18.46	-0.5	17.96	0.063	2.00	Pass
			RB50#0	18.46	-0.5	17.96	0.063	2.00	Pass
	MCH	QPSK	RB1#0	20.94	-0.5	20.44	0.111	2.00	Pass
			RB1#25	20.79	-0.5	20.29	0.107	2.00	Pass
			RB1#49	20.71	-0.5	20.21	0.105	2.00	Pass
			RB25#0	19.97	-0.5	19.47	0.089	2.00	Pass
			RB25#13	19.99	-0.5	19.49	0.089	2.00	Pass
			RB25#25	19.88	-0.5	19.38	0.087	2.00	Pass
			RB50#0	19.93	-0.5	19.43	0.088	2.00	Pass
		16-QAM	RB1#0	20.47	-0.5	19.97	0.099	2.00	Pass
			RB1#25	20.3	-0.5	19.80	0.095	2.00	Pass
			RB1#49	20.2	-0.5	19.70	0.093	2.00	Pass
			RB25#0	19.03	-0.5	18.53	0.071	2.00	Pass
			RB25#13	18.99	-0.5	18.49	0.071	2.00	Pass
			RB25#25	18.91	-0.5	18.41	0.069	2.00	Pass
			RB50#0	18.99	-0.5	18.49	0.071	2.00	Pass
	HCH	QPSK	RB1#0	20.4	-0.5	19.90	0.098	2.00	Pass
			RB1#25	20.41	-0.5	19.91	0.098	2.00	Pass
			RB1#49	20.31	-0.5	19.81	0.096	2.00	Pass
			RB25#0	19.4	-0.5	18.90	0.078	2.00	Pass
			RB25#13	19.39	-0.5	18.89	0.077	2.00	Pass
			RB25#25	19.36	-0.5	18.86	0.077	2.00	Pass
			RB50#0	19.4	-0.5	18.90	0.078	2.00	Pass
		16-QAM	RB1#0	19.7	-0.5	19.20	0.083	2.00	Pass
			RB1#25	19.64	-0.5	19.14	0.082	2.00	Pass
			RB1#49	19.66	-0.5	19.16	0.082	2.00	Pass
			RB25#0	18.49	-0.5	17.99	0.063	2.00	Pass
			RB25#13	18.48	-0.5	17.98	0.063	2.00	Pass
			RB25#25	18.42	-0.5	17.92	0.062	2.00	Pass
			RB50#0	18.44	-0.5	17.94	0.062	2.00	Pass
	LCH	QPSK	RB1#0	20.33	-0.5	19.83	0.096	2.00	Pass
			RB1#38	20.22	-0.5	19.72	0.094	2.00	Pass
			RB1#74	20.17	-0.5	19.67	0.093	2.00	Pass
			RB36#0	19.47	-0.5	18.97	0.079	2.00	Pass
			RB36#19	19.41	-0.5	18.91	0.078	2.00	Pass
			RB36#39	19.41	-0.5	18.91	0.078	2.00	Pass
			RB75#0	19.45	-0.5	18.95	0.079	2.00	Pass
		16-QAM	RB1#0	19.74	-0.5	19.24	0.084	2.00	Pass
			RB1#38	19.59	-0.5	19.09	0.081	2.00	Pass
			RB1#74	19.52	-0.5	19.02	0.080	2.00	Pass
			RB36#0	18.47	-0.5	17.97	0.063	2.00	Pass
			RB36#19	18.44	-0.5	17.94	0.062	2.00	Pass
			RB36#39	18.4	-0.5	17.90	0.062	2.00	Pass
			RB75#0	18.44	-0.5	17.94	0.062	2.00	Pass
	MCH	QPSK	RB1#0	21.01	-0.5	20.51	0.112	2.00	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict		
LTE BAND41											
			RB1#38	20.73	-0.5	20.23	0.105	2.00	Pass		
			RB1#74	20.7	-0.5	20.20	0.105	2.00	Pass		
			RB36#0	19.98	-0.5	19.48	0.089	2.00	Pass		
			RB36#19	19.9	-0.5	19.40	0.087	2.00	Pass		
			RB36#39	19.8	-0.5	19.30	0.085	2.00	Pass		
			RB75#0	19.9	-0.5	19.40	0.087	2.00	Pass		
		16-QAM	RB1#0	20.43	-0.5	19.93	0.098	2.00	Pass		
			RB1#38	20.18	-0.5	19.68	0.093	2.00	Pass		
			RB1#74	20.12	-0.5	19.62	0.092	2.00	Pass		
			RB36#0	18.93	-0.5	18.43	0.070	2.00	Pass		
			RB36#19	18.91	-0.5	18.41	0.069	2.00	Pass		
			RB36#39	18.82	-0.5	18.32	0.068	2.00	Pass		
		16-QAM	RB75#0	18.93	-0.5	18.43	0.070	2.00	Pass		
			HCH	QPSK	RB1#0	20.34	-0.5	19.84	0.096	2.00	Pass
					RB1#38	20.29	-0.5	19.79	0.095	2.00	Pass
					RB1#74	20.28	-0.5	19.78	0.095	2.00	Pass
					RB36#0	19.43	-0.5	18.93	0.078	2.00	Pass
					RB36#19	19.34	-0.5	18.84	0.077	2.00	Pass
	RB36#39	19.31			-0.5	18.81	0.076	2.00	Pass		
	RB75#0	19.37		-0.5	18.87	0.077	2.00	Pass			
	16-QAM	RB1#0	19.66	-0.5	19.16	0.082	2.00	Pass			
		RB1#38	19.58	-0.5	19.08	0.081	2.00	Pass			
		RB1#74	19.55	-0.5	19.05	0.080	2.00	Pass			
		RB36#0	18.45	-0.5	17.95	0.062	2.00	Pass			
		RB36#19	18.39	-0.5	17.89	0.062	2.00	Pass			
		RB36#39	18.37	-0.5	17.87	0.061	2.00	Pass			
	20 MHz	LCH	QPSK	RB1#0	20.36	-0.5	19.86	0.097	2.00	Pass	
				RB1#50	20.27	-0.5	19.77	0.095	2.00	Pass	
				RB1#99	20.2	-0.5	19.70	0.093	2.00	Pass	
				RB50#0	19.5	-0.5	19.00	0.079	2.00	Pass	
RB50#25				19.47	-0.5	18.97	0.079	2.00	Pass		
RB50#50				19.38	-0.5	18.88	0.077	2.00	Pass		
RB100#0				19.45	-0.5	18.95	0.079	2.00	Pass		
16-QAM			RB1#0	19.75	-0.5	19.25	0.084	2.00	Pass		
			RB1#50	19.61	-0.5	19.11	0.081	2.00	Pass		
			RB1#99	19.64	-0.5	19.14	0.082	2.00	Pass		
			RB50#0	18.49	-0.5	17.99	0.063	2.00	Pass		
			RB50#25	18.42	-0.5	17.92	0.062	2.00	Pass		
	RB50#50		18.39	-0.5	17.89	0.062	2.00	Pass			
	RB100#0		18.43	-0.5	17.93	0.062	2.00	Pass			
MCH	QPSK		RB1#0	21.2	-0.5	20.70	0.117	2.00	Pass		
			RB1#50	20.79	-0.5	20.29	0.107	2.00	Pass		
			RB1#99	20.72	-0.5	20.22	0.105	2.00	Pass		
			RB50#0	20.11	-0.5	19.61	0.091	2.00	Pass		
		RB50#25	19.99	-0.5	19.49	0.089	2.00	Pass			
		RB50#50	19.92	-0.5	19.42	0.087	2.00	Pass			
	RB100#0	19.96	-0.5	19.46	0.088	2.00	Pass				
	16-QAM	RB1#0	20.31	-0.5	19.81	0.096	2.00	Pass			
		RB1#50	20.08	-0.5	19.58	0.091	2.00	Pass			

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND41									
			RB1#99	20.01	-0.5	19.51	0.089	2.00	Pass
			RB50#0	19.17	-0.5	18.67	0.074	2.00	Pass
			RB50#25	19.06	-0.5	18.56	0.072	2.00	Pass
			RB50#50	18.94	-0.5	18.44	0.070	2.00	Pass
			RB100#0	18.97	-0.5	18.47	0.070	2.00	Pass
	HCH	QPSK	RB1#0	20.51	-0.5	20.01	0.100	2.00	Pass
			RB1#50	20.28	-0.5	19.78	0.095	2.00	Pass
			RB1#99	20.3	-0.5	19.80	0.095	2.00	Pass
			RB50#0	19.44	-0.5	18.94	0.078	2.00	Pass
			RB50#25	19.4	-0.5	18.90	0.078	2.00	Pass
			RB50#50	19.33	-0.5	18.83	0.076	2.00	Pass
			RB100#0	19.39	-0.5	18.89	0.077	2.00	Pass
		16-QAM	RB1#0	19.94	-0.5	19.44	0.088	2.00	Pass
			RB1#50	19.71	-0.5	19.21	0.083	2.00	Pass
			RB1#99	19.79	-0.5	19.29	0.085	2.00	Pass
			RB50#0	18.49	-0.5	17.99	0.063	2.00	Pass
			RB50#25	18.43	-0.5	17.93	0.062	2.00	Pass
			RB50#50	18.4	-0.5	17.90	0.062	2.00	Pass
			RB100#0	18.42	-0.5	17.92	0.062	2.00	Pass



Modulation	PCC RB		SCC RB		Conducted Output AV Power (dBm)			Antenna Gain (dBi)	EIRP (W)			Limit (W)
	Size	Offset	Size	Offset	LCH	MCH	HCH		LCH	MCH	HCH	
CA_7C												
10MHz+20MHz												
QPSK	1	49	1	0	19.77	20.03	20.34	-0.5	0.085	0.090	0.096	2.000
	50	0	100	0	18.17	18.26	18.58	-0.5	0.058	0.060	0.064	2.000
16-QAM	1	49	1	0	18.65	18.86	19.32	-0.5	0.065	0.069	0.076	2.000
	50	0	100	0	16.98	17.31	17.54	-0.5	0.044	0.048	0.051	2.000
20MHz+10MHz												
QPSK	1	0	0	0	18.92	19.16	19.45	-0.5	0.070	0.073	0.079	2.000
	50	0	0	0	18.03	18.36	18.62	-0.5	0.057	0.061	0.065	2.000
	100	0	0	0	17.07	17.38	17.63	-0.5	0.045	0.049	0.052	2.000
	1	99	1	0	19.87	20.12	20.55	-0.5	0.086	0.092	0.101	2.000
	100	0	50	0	18.04	18.31	18.57	-0.5	0.057	0.060	0.064	2.000
16-QAM	1	0	0	0	18.23	18.33	18.8	-0.5	0.059	0.061	0.068	2.000
	50	0	0	0	17.03	17.36	17.62	-0.5	0.045	0.049	0.052	2.000
	100	0	0	0	16.03	16.38	16.64	-0.5	0.036	0.039	0.041	2.000
	1	99	1	0	19.81	19.34	19.57	-0.5	0.085	0.077	0.081	2.000
	100	0	50	0	16.99	17.36	17.55	-0.5	0.045	0.049	0.051	2.000
15MHz+15MHz												
QPSK	1	74	1	0	19.64	20.01	20.33	-0.5	0.082	0.089	0.096	2.000
	75	0	75	0	17.94	18.23	18.53	-0.5	0.055	0.059	0.064	2.000
16-QAM	1	74	1	0	18.61	19.12	19.21	-0.5	0.065	0.073	0.074	2.000
	75	0	75	0	16.95	17.28	17.58	-0.5	0.044	0.048	0.051	2.000
15MHz+20MHz												
QPSK	1	74	1	0	19.71	19.96	20.25	-0.5	0.083	0.088	0.094	2.000
	75	0	100	0	18.02	18.26	18.6	-0.5	0.056	0.060	0.065	2.000
16-QAM	1	74	1	0	18.63	19.18	19.31	-0.5	0.065	0.074	0.076	2.000
	75	0	100	0	17.04	17.33	17.47	-0.5	0.045	0.048	0.050	2.000
20MHz+15MHz												
QPSK	1	99	1	0	19.83	20.12	20.3	-0.5	0.086	0.092	0.095	2.000
	100	0	75	0	18.03	18.22	18.48	-0.5	0.057	0.059	0.063	2.000
16-QAM	1	99	1	0	18.98	19.25	19.39	-0.5	0.070	0.075	0.077	2.000
	100	0	75	0	17.04	17.24	17.38	-0.5	0.045	0.047	0.049	2.000
20MHz+20MHz												
QPSK	1	0	0	0	18.92	19.15	19.38	-0.5	0.070	0.073	0.077	2.000
	50	0	0	0	18.07	18.32	18.5	-0.5	0.057	0.061	0.063	2.000
	100	0	0	0	18.13	18.34	18.54	-0.5	0.058	0.061	0.064	2.000
	1	99	1	0	19.79	20.04	20.28	-0.5	0.085	0.090	0.095	2.000
	100	0	100	0	18.09	18.33	18.53	-0.5	0.057	0.061	0.064	2.000
16-QAM	1	0	0	0	18.06	18.33	18.59	-0.5	0.057	0.061	0.064	2.000
	50	0	0	0	17.04	17.31	17.51	-0.5	0.045	0.048	0.050	2.000
	100	0	0	0	17.1	17.36	17.52	-0.5	0.046	0.049	0.050	2.000
	1	99	1	0	19.09	19.16	19.41	-0.5	0.072	0.073	0.078	2.000

Modulation	PCC RB		SCC RB		Conducted Output AV Power (dBm)			Antenna Gain (dBi)	EIRP (W)			Limit (W)
	Size	Offset	Size	Offset	LCH	MCH	HCH		LCH	MCH	HCH	
CA_7C												
	100	0	100	0	17.1	17.33	17.58	-0.5	0.046	0.048	0.051	2.000



NR Mode Test Data

Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n41								
20 MHz	LCH	PI/2 BPSK	25	12	19.96	0.061	2.000	Pass
			1	1	19.86	0.060	2.000	Pass
			1	49	20	0.062	2.000	Pass
		QPSK	25	12	20.01	0.062	2.000	Pass
			1	1	19.8	0.059	2.000	Pass
			1	49	19.97	0.061	2.000	Pass
	MCH	PI/2 BPSK	25	12	20.19	0.064	2.000	Pass
			1	1	20.2	0.065	2.000	Pass
			1	49	20.23	0.065	2.000	Pass
		QPSK	25	12	20.28	0.066	2.000	Pass
			1	1	20.15	0.064	2.000	Pass
			1	49	20.24	0.065	2.000	Pass
	HCH	PI/2 BPSK	25	12	20.19	0.064	2.000	Pass
			1	1	20.16	0.064	2.000	Pass
			1	49	20.09	0.063	2.000	Pass
		QPSK	25	12	20.15	0.064	2.000	Pass
			1	1	20.14	0.064	2.000	Pass
			1	49	20.05	0.062	2.000	Pass
60 MHz	LCH	PI/2 BPSK	81	40	19.53	0.055	2.000	Pass
			1	1	19.91	0.060	2.000	Pass
			1	160	20.04	0.062	2.000	Pass
		QPSK	81	40	20.03	0.062	2.000	Pass
			1	1	19.89	0.060	2.000	Pass
			1	160	20.04	0.062	2.000	Pass
	MCH	PI/2 BPSK	81	40	20.26	0.065	2.000	Pass
			1	1	20.13	0.064	2.000	Pass
			1	160	20.29	0.066	2.000	Pass
		QPSK	81	40	20.18	0.064	2.000	Pass
			1	1	20.09	0.063	2.000	Pass
			1	160	20.24	0.065	2.000	Pass
	HCH	PI/2 BPSK	81	40	20.17	0.064	2.000	Pass
			1	1	20.18	0.064	2.000	Pass
			1	160	20.09	0.063	2.000	Pass
		QPSK	81	40	20.14	0.064	2.000	Pass
			1	1	20.2	0.065	2.000	Pass
			1	160	20.15	0.064	2.000	Pass
100 MHz	LCH	PI/2 BPSK	135	67	19.82	0.059	2.000	Pass
			1	1	19.67	0.057	2.000	Pass
			1	271	19.4	0.054	2.000	Pass
		QPSK	135	67	19.85	0.060	2.000	Pass
			1	1	19.63	0.057	2.000	Pass
			1	271	19.4	0.054	2.000	Pass
	MCH	PI/2 BPSK	135	67	19.83	0.059	2.000	Pass
			1	1	19.93	0.061	2.000	Pass
			1	271	19.78	0.059	2.000	Pass
		QPSK	135	67	19.8	0.059	2.000	Pass
			1	1	19.84	0.059	2.000	Pass
			1	271	19.76	0.058	2.000	Pass

	HCH	PI/2 BPSK	135	67	19.91	0.060	2.000	Pass
			1	1	19.73	0.058	2.000	Pass
			1	271	19.64	0.057	2.000	Pass
		QPSK	135	67	19.89	0.060	2.000	Pass
			1	1	19.81	0.059	2.000	Pass
			1	271	19.58	0.056	2.000	Pass



Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n77(3450-3550MHz)								
20 MHz	LCH	PI/2 BPSK	25	12	20.51	0.107	1.000	Pass
			1	1	20.63	0.110	1.000	Pass
			1	49	20.29	0.102	1.000	Pass
		QPSK	25	12	20.5	0.107	1.000	Pass
			1	1	20.65	0.111	1.000	Pass
			1	49	20.24	0.101	1.000	Pass
	MCH	PI/2 BPSK	25	12	20.12	0.098	1.000	Pass
			1	1	20.21	0.100	1.000	Pass
			1	49	20.25	0.101	1.000	Pass
		QPSK	25	12	20.08	0.097	1.000	Pass
			1	1	20.14	0.099	1.000	Pass
			1	49	20.25	0.101	1.000	Pass
	HCH	PI/2 BPSK	25	12	20.65	0.111	1.000	Pass
			1	1	20.65	0.111	1.000	Pass
			1	49	20.66	0.111	1.000	Pass
		QPSK	25	12	20.66	0.111	1.000	Pass
			1	1	20.6	0.110	1.000	Pass
			1	49	20.61	0.110	1.000	Pass
50 MHz	LCH	PI/2 BPSK	64	32	20.16	0.099	1.000	Pass
			1	1	20.46	0.106	1.000	Pass
			1	131	20.08	0.097	1.000	Pass
		QPSK	64	32	20.13	0.098	1.000	Pass
			1	1	20.36	0.104	1.000	Pass
			1	131	20.01	0.096	1.000	Pass
	MCH	PI/2 BPSK	64	32	20.12	0.098	1.000	Pass
			1	1	20.21	0.100	1.000	Pass
			1	131	20.38	0.104	1.000	Pass
		QPSK	64	32	20.12	0.098	1.000	Pass
			1	1	20.1	0.098	1.000	Pass
			1	131	20.33	0.103	1.000	Pass
	HCH	PI/2 BPSK	64	32	20.34	0.103	1.000	Pass
			1	1	20	0.095	1.000	Pass
			1	131	20.48	0.107	1.000	Pass
		QPSK	64	32	20.33	0.103	1.000	Pass
			1	1	20.01	0.096	1.000	Pass
			1	131	20.44	0.106	1.000	Pass
100 MHz	MCH	PI/2 BPSK	135	67	19.95	0.094	1.000	Pass
			1	1	20.2	0.100	1.000	Pass
			1	271	20.23	0.101	1.000	Pass
		QPSK	135	67	19.94	0.094	1.000	Pass
			1	1	20.19	0.100	1.000	Pass
			1	271	20.11	0.098	1.000	Pass

Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n77(3700-3980MHz)								
20 MHz	LCH	PI/2 BPSK	25	12	20.18	0.100	1.000	Pass
			1	1	20.12	0.098	1.000	Pass
			1	49	20.2	0.100	1.000	Pass

		QPSK	25	12	20.12	0.098	1.000	Pass
			1	1	20.1	0.098	1.000	Pass
			1	49	20.17	0.099	1.000	Pass
	MCH	PI/2 BPSK	25	12	21.18	0.125	1.000	Pass
			1	1	21.14	0.124	1.000	Pass
			1	49	21.33	0.130	1.000	Pass
		QPSK	25	12	21.18	0.125	1.000	Pass
			1	1	21.12	0.124	1.000	Pass
			1	49	21.28	0.128	1.000	Pass
	HCH	PI/2 BPSK	25	12	20.35	0.104	1.000	Pass
			1	1	20.16	0.099	1.000	Pass
			1	49	20.39	0.104	1.000	Pass
		QPSK	25	12	20.32	0.103	1.000	Pass
			1	1	20.12	0.098	1.000	Pass
			1	49	20.37	0.104	1.000	Pass
50 MHz	LCH	PI/2 BPSK	64	32	20.02	0.096	1.000	Pass
			1	1	19.97	0.095	1.000	Pass
			1	131	19.74	0.090	1.000	Pass
		QPSK	64	32	20.01	0.096	1.000	Pass
			1	1	19.93	0.094	1.000	Pass
			1	131	19.68	0.089	1.000	Pass
	MCH	PI/2 BPSK	64	32	21.09	0.123	1.000	Pass
			1	1	20.73	0.113	1.000	Pass
			1	131	21.11	0.123	1.000	Pass
		QPSK	64	32	21.06	0.122	1.000	Pass
			1	1	20.64	0.111	1.000	Pass
			1	131	21.07	0.122	1.000	Pass
	HCH	PI/2 BPSK	64	32	20.03	0.096	1.000	Pass
			1	1	20.03	0.096	1.000	Pass
			1	131	20.15	0.099	1.000	Pass
		QPSK	64	32	20.07	0.097	1.000	Pass
			1	1	20	0.095	1.000	Pass
			1	131	20.21	0.100	1.000	Pass
100 MHz	LCH	PI/2 BPSK	135	67	19.48	0.085	1.000	Pass
			1	1	19.74	0.090	1.000	Pass
			1	271	19.34	0.082	1.000	Pass
		QPSK	135	67	19.5	0.085	1.000	Pass
			1	1	19.69	0.089	1.000	Pass
			1	271	19.3	0.081	1.000	Pass
	MCH	PI/2 BPSK	135	67	20.69	0.112	1.000	Pass
			1	1	20.03	0.096	1.000	Pass
			1	271	20.36	0.104	1.000	Pass
		QPSK	135	67	20.72	0.113	1.000	Pass
			1	1	19.95	0.094	1.000	Pass
			1	271	20.32	0.103	1.000	Pass
	HCH	PI/2 BPSK	135	67	19.77	0.091	1.000	Pass
			1	1	20.62	0.110	1.000	Pass
			1	271	19.48	0.085	1.000	Pass
		QPSK	135	67	19.71	0.089	1.000	Pass
			1	1	20.54	0.108	1.000	Pass
			1	271	19.37	0.083	1.000	Pass



Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n78(3450-3550MHz)								
20 MHz	LCH	PI/2 BPSK	25	12	19.39	0.083	1.000	Pass
			1	1	19.64	0.088	1.000	Pass
			1	49	19.32	0.082	1.000	Pass
		QPSK	25	12	19.44	0.084	1.000	Pass
			1	1	19.69	0.089	1.000	Pass
			1	49	19.29	0.081	1.000	Pass
	MCH	PI/2 BPSK	25	12	19.2	0.079	1.000	Pass
			1	1	19.15	0.079	1.000	Pass
			1	49	19.26	0.081	1.000	Pass
		QPSK	25	12	19.24	0.080	1.000	Pass
			1	1	19.1	0.078	1.000	Pass
			1	49	19.25	0.080	1.000	Pass
	HCH	PI/2 BPSK	25	12	19.6	0.087	1.000	Pass
			1	1	19.61	0.087	1.000	Pass
			1	49	19.65	0.088	1.000	Pass
		QPSK	25	12	19.62	0.087	1.000	Pass
			1	1	19.63	0.088	1.000	Pass
			1	49	19.7	0.089	1.000	Pass
50 MHz	LCH	PI/2 BPSK	64	32	19.12	0.078	1.000	Pass
			1	1	19.41	0.083	1.000	Pass
			1	131	18.95	0.075	1.000	Pass
		QPSK	64	32	19.08	0.077	1.000	Pass
			1	1	19.46	0.084	1.000	Pass
			1	131	18.94	0.075	1.000	Pass
	MCH	PI/2 BPSK	64	32	19.07	0.077	1.000	Pass
			1	1	19.19	0.079	1.000	Pass
			1	131	19.28	0.081	1.000	Pass
		QPSK	64	32	19.08	0.077	1.000	Pass
			1	1	19.18	0.079	1.000	Pass
			1	131	19.27	0.081	1.000	Pass
	HCH	PI/2 BPSK	64	32	19.27	0.081	1.000	Pass
			1	1	18.94	0.075	1.000	Pass
			1	131	19.48	0.085	1.000	Pass
		QPSK	64	32	19.29	0.081	1.000	Pass
			1	1	19.02	0.076	1.000	Pass
			1	131	19.46	0.084	1.000	Pass
100 MHz	MCH	PI/2 BPSK	135	67	18.88	0.074	1.000	Pass
			1	1	19.24	0.080	1.000	Pass
			1	271	19.15	0.079	1.000	Pass
		QPSK	135	67	18.86	0.073	1.000	Pass
			1	1	19.25	0.080	1.000	Pass
			1	271	19.24	0.080	1.000	Pass

Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n78(3700-3800MHz)								
20 MHz	LCH	PI/2 BPSK	25	12	19.32	0.082	1.000	Pass
			1	1	19.34	0.082	1.000	Pass
			1	49	19.32	0.082	1.000	Pass

		QPSK	25	12	19.31	0.081	1.000	Pass
			1	1	19.38	0.083	1.000	Pass
			1	49	19.36	0.082	1.000	Pass
	MCH	PI/2 BPSK	25	12	19.15	0.079	1.000	Pass
			1	1	19.28	0.081	1.000	Pass
			1	49	18.95	0.075	1.000	Pass
		QPSK	25	12	19.12	0.078	1.000	Pass
			1	1	19.28	0.081	1.000	Pass
			1	49	18.88	0.074	1.000	Pass
	HCH	PI/2 BPSK	25	12	18.94	0.075	1.000	Pass
			1	1	18.99	0.076	1.000	Pass
			1	49	19.05	0.077	1.000	Pass
		QPSK	25	12	18.93	0.075	1.000	Pass
			1	1	18.99	0.076	1.000	Pass
			1	49	19.02	0.076	1.000	Pass
50 MHz	LCH	PI/2 BPSK	64	32	19.18	0.079	1.000	Pass
			1	1	19.25	0.080	1.000	Pass
			1	131	18.93	0.075	1.000	Pass
		QPSK	64	32	19.15	0.079	1.000	Pass
			1	1	19.25	0.080	1.000	Pass
			1	131	18.99	0.076	1.000	Pass
	MCH	PI/2 BPSK	64	32	19.04	0.077	1.000	Pass
			1	1	19.36	0.082	1.000	Pass
			1	131	18.81	0.073	1.000	Pass
		QPSK	64	32	19.04	0.077	1.000	Pass
			1	1	19.32	0.082	1.000	Pass
			1	131	18.84	0.073	1.000	Pass
	HCH	PI/2 BPSK	64	32	18.93	0.075	1.000	Pass
			1	1	19.1	0.078	1.000	Pass
			1	131	18.74	0.071	1.000	Pass
		QPSK	64	32	18.91	0.074	1.000	Pass
			1	1	19.18	0.079	1.000	Pass
			1	131	18.81	0.073	1.000	Pass
100 MHz	MCH	PI/2 BPSK	135	67	18.64	0.070	1.000	Pass
			1	1	18.95	0.075	1.000	Pass
			1	271	18.44	0.067	1.000	Pass
		QPSK	135	67	18.6	0.069	1.000	Pass
			1	1	18.94	0.075	1.000	Pass
			1	271	18.38	0.066	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 5A n78A (3450-3550MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	19.37	6.98	19.61	0.087	1.000	Pass
			25	12	8	0	19.21	7.22	19.48	0.085	1.000	Pass
		QPSK	1	1	1	0	19.26	7.16	19.52	0.086	1.000	Pass
			25	12	8	0	19.11	7.03	19.37	0.083	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	18.83	7.15	19.12	0.078	1.000	Pass
		QPSK	25	12	8	0	18.77	7.08	19.05	0.077	1.000	Pass
	HCH	PI/2 BPSK	1	49	1	24	19.28	6.84	19.52	0.086	1.000	Pass
			25	12	8	0	19.29	6.93	19.54	0.086	1.000	Pass
		QPSK	1	49	1	24	19.33	6.73	19.56	0.086	1.000	Pass
			25	12	8	0	19.24	6.91	19.49	0.085	1.000	Pass
10MHz(LTE) + 100MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	18.9	7.13	19.18	0.079	1.000	Pass
			135	67	12	0	18.55	7.1	18.85	0.073	1.000	Pass
		QPSK	1	1	1	0	18.94	7.21	19.22	0.080	1.000	Pass
			135	67	12	0	18.57	7.15	18.87	0.074	1.000	Pass
	MCH	PI/2 BPSK	135	67	12	0	18.5	7.37	18.82	0.073	1.000	Pass
		QPSK	135	67	12	0	18.55	7.34	18.87	0.074	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	49	18.87	6.81	19.13	0.078	1.000	Pass
			135	67	12	0	18.56	7.15	18.86	0.074	1.000	Pass
		QPSK	1	271	1	49	18.68	6.8	18.95	0.075	1.000	Pass
			135	67	12	0	18.49	7.1	18.79	0.072	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 5A n78A (3700-3800MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	19.37	6.98	19.61	0.087	1.000	Pass
			25	12	8	0	19.21	7.22	19.48	0.085	1.000	Pass
		QPSK	1	1	1	0	19.26	7.16	19.52	0.086	1.000	Pass
			25	12	8	0	19.11	7.03	19.37	0.083	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	18.83	7.15	19.12	0.078	1.000	Pass
		QPSK	25	12	8	0	18.77	7.08	19.05	0.077	1.000	Pass
	HCH	QPSK	1	49	1	24	19.28	6.84	19.52	0.086	1.000	Pass
			25	12	8	0	19.29	6.93	19.54	0.086	1.000	Pass
		PI/2 BPSK	1	49	1	24	19.33	6.73	19.56	0.086	1.000	Pass
			25	12	8	0	19.24	6.91	19.49	0.085	1.000	Pass
10MHz(LTE) + 100MHz(NR)	LCH	QPSK	1	1	1	0	18.9	7.13	19.18	0.079	1.000	Pass
			135	67	12	0	18.55	7.1	18.85	0.073	1.000	Pass
		PI/2 BPSK	1	1	1	0	18.94	7.21	19.22	0.080	1.000	Pass
			135	67	12	0	18.57	7.15	18.87	0.074	1.000	Pass
	MCH	QPSK	135	67	12	0	18.5	7.37	18.82	0.073	1.000	Pass
		QPSK	135	67	12	0	18.55	7.34	18.87	0.074	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	49	18.87	6.81	19.13	0.078	1.000	Pass
			135	67	12	0	18.56	7.15	18.86	0.074	1.000	Pass
		QPSK	1	271	1	49	18.68	6.8	18.95	0.075	1.000	Pass
			135	67	12	0	18.49	7.1	18.79	0.072	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 7A n78A (3450-3550MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	15.48	18.48	20.24	0.101	1.000	Pass
			25	12	8	0	15.3	18.39	20.12	0.098	1.000	Pass
		PI/2 BPSK	1	1	1	0	15.45	18.51	20.25	0.101	1.000	Pass
			25	12	8	0	15.42	18.44	20.20	0.100	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	15.01	18.96	20.43	0.105	1.000	Pass
		QPSK	25	12	8	0	15.06	18.94	20.43	0.105	1.000	Pass
	HCH	PI/2 BPSK	1	49	1	24	15.61	19.17	20.76	0.114	1.000	Pass
			25	12	8	0	15.44	19.3	20.80	0.115	1.000	Pass
		PI/2 BPSK	1	49	1	24	15.55	19.23	20.78	0.114	1.000	Pass
			25	12	8	0	15.48	19.31	20.81	0.115	1.000	Pass
10MHz(LTE) + 100MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	14.97	18.47	20.07	0.097	1.000	Pass
			135	67	18	0	14.56	18.45	19.94	0.094	1.000	Pass
		PI/2 BPSK	1	1	1	0	14.93	18.51	20.09	0.097	1.000	Pass
			135	67	18	0	14.66	18.46	19.97	0.095	1.000	Pass
	MCH	PI/2 BPSK	135	67	18	0	14.65	18.81	20.22	0.100	1.000	Pass
		QPSK	135	67	18	0	14.56	18.77	20.17	0.099	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	99	14.98	19.16	20.56	0.109	1.000	Pass
			135	67	18	0	14.64	19.2	20.50	0.107	1.000	Pass
		PI/2 BPSK	1	271	1	99	14.92	19.17	20.56	0.109	1.000	Pass
			135	67	18	0	14.65	19.18	20.49	0.107	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 7A n78A (3700-3800MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	15.01	18.26	19.94	0.094	1.000	Pass
			25	12	8	0	15.04	18.45	20.08	0.097	1.000	Pass
		PI/2 BPSK	1	1	1	0	15	18.42	20.05	0.097	1.000	Pass
			25	12	8	0	14.99	18.44	20.06	0.097	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	14.74	18.87	20.29	0.102	1.000	Pass
		QPSK	25	12	8	0	14.81	18.86	20.30	0.102	1.000	Pass
	HCH	PI/2 BPSK	1	49	1	24	14.87	19.1	20.49	0.107	1.000	Pass
			25	12	8	0	14.84	19.3	20.63	0.110	1.000	Pass
		PI/2 BPSK	1	49	1	24	14.97	19.11	20.53	0.108	1.000	Pass
			25	12	8	0	14.75	19.27	20.58	0.109	1.000	Pass
20MHz(LTE) + 100MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	14.41	18.37	19.84	0.092	1.000	Pass
			135	67	18	0	14.37	18.44	19.88	0.093	1.000	Pass
		PI/2 BPSK	1	1	1	0	14.48	18.42	19.89	0.093	1.000	Pass
			135	67	18	0	14.4	18.34	19.81	0.091	1.000	Pass
	MCH	PI/2 BPSK	135	67	18	0	14.34	18.71	20.06	0.097	1.000	Pass
		QPSK	135	67	18	0	14.31	18.77	20.10	0.098	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	99	14.29	19.17	20.39	0.105	1.000	Pass
			135	67	18	0	14.38	19.24	20.47	0.106	1.000	Pass
		PI/2 BPSK	1	271	1	99	14.36	19.09	20.35	0.104	1.000	Pass
			135	67	18	0	15.6	19.25	20.81	0.115	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 38A n78A (3450-3550MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	15.52	19.21	20.76	0.114	1.000	Pass
			25	12	8	0	15.3	19.2	20.68	0.112	1.000	Pass
		PI/2 BPSK	1	1	1	0	15.34	19.19	20.69	0.112	1.000	Pass
			25	12	8	0	15.32	19.21	20.70	0.112	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	14.95	19.19	20.58	0.109	1.000	Pass
		QPSK	25	12	8	0	14.93	19.17	20.56	0.109	1.000	Pass
	HCH	PI/2 BPSK	1	49	1	24	15.5	19.19	20.74	0.113	1.000	Pass
			25	12	8	0	15.46	19.26	20.77	0.114	1.000	Pass
		PI/2 BPSK	1	49	1	24	15.56	19.18	20.75	0.113	1.000	Pass
			25	12	8	0	15.44	19.25	20.76	0.114	1.000	Pass
10MHz(LTE) + 100MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	14.89	19.24	20.60	0.110	1.000	Pass
			135	67	18	0	14.68	19.3	20.59	0.109	1.000	Pass
		PI/2 BPSK	1	1	1	0	14.8	19.1	20.47	0.106	1.000	Pass
			135	67	18	0	14.69	19.23	20.54	0.108	1.000	Pass
	MCH	PI/2 BPSK	135	67	18	0	14.58	19.15	20.45	0.106	1.000	Pass
		QPSK	135	67	18	0	14.69	19.22	20.53	0.108	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	99	14.82	18.93	20.35	0.104	1.000	Pass
			135	67	18	0	14.63	19.21	20.51	0.107	1.000	Pass
		PI/2 BPSK	1	271	1	99	14.87	18.93	20.37	0.104	1.000	Pass
			135	67	18	0	14.58	19.26	20.53	0.108	1.000	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	EIRP (W)	Limit (W)	Verdict
DC 38A n78A (3700-3800MHz)												
5MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	14.95	19.23	20.61	0.110	1.000	Pass
			25	12	8	0	14.98	19.23	20.62	0.110	1.000	Pass
		PI/2 BPSK	1	1	1	0	15.02	19.23	20.63	0.110	1.000	Pass
			25	12	8	0	14.96	19.22	20.60	0.110	1.000	Pass
	MCH	PI/2 BPSK	25	12	8	0	14.83	19.2	20.55	0.108	1.000	Pass
		QPSK	25	12	8	0	14.72	19.22	20.54	0.108	1.000	Pass
	HCH	PI/2 BPSK	1	49	1	24	14.84	19.24	20.59	0.109	1.000	Pass
			25	12	8	0	14.73	19.21	20.53	0.108	1.000	Pass
		PI/2 BPSK	1	49	1	24	14.78	19.13	20.49	0.107	1.000	Pass
			25	12	8	0	14.7	19.19	20.51	0.107	1.000	Pass
20MHz(LTE) + 100MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	14.35	19.11	20.36	0.104	1.000	Pass
			135	67	18	0	14.36	19.34	20.54	0.108	1.000	Pass
		PI/2 BPSK	1	1	1	0	14.45	19.21	20.46	0.106	1.000	Pass
			135	67	18	0	14.38	19.26	20.48	0.107	1.000	Pass
	MCH	PI/2 BPSK	135	67	18	0	14.34	19.27	20.48	0.107	1.000	Pass
		QPSK	135	67	18	0	14.37	19.19	20.43	0.105	1.000	Pass
	HCH	PI/2 BPSK	1	271	1	99	14.21	19.12	20.34	0.103	1.000	Pass
			135	67	18	0	14.29	19.32	20.51	0.107	1.000	Pass
		PI/2 BPSK	1	271	1	99	14.15	19.06	20.28	0.102	1.000	Pass
			135	67	18	0	14.22	19.27	20.45	0.106	1.000	Pass

A.2 Peak to Average Ratio

Note 1: For average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB. For GSM, GPRS and EGPRS, there are peak power to demonstrate compliance, PAR measurements are not required.

Note 2: Test plots please refer to the document “Annex No.: BL-EC21C0184-501 Data Part 1.pdf”.

EVDO Mode Test Data

Test Band	Test Channel	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note2}	Verdict
EVDO BC0	LCH	4.27	13	1.1	Pass
	MCH	4.27	13	2.1	Pass
	HCH	4.27	13	3.1	Pass

WCDMA Mode Test Data

Test Band	Test Channel	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note2}	Verdict
Band 2	LCH	2.81	13	4.1	Pass
	MCH	2.86	13	4.2	Pass
	HCH	2.86	13	4.3	Pass
Band 4	LCH	2.77	13	5.1	Pass
	MCH	2.86	13	5.2	Pass
	HCH	2.81	13	5.3	Pass
Band 5	LCH	3.05	13	6.1	Pass
	MCH	2.91	13	6.2	Pass
	HCH	2.91	13	6.3	Pass

LTE Mode Test Data

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note2}	Verdict
LTE Band 5	10 MHz	LCH	QPSK	RB1#0	3.37	13	7.1	Pass
				RB50#0	5.02	13	7.2	Pass
			16-QAM	RB1#0	4.36	13	7.3	Pass
				RB50#0	5.86	13	7.4	Pass
		MCH	QPSK	RB1#0	3.33	13	7.5	Pass
				RB50#0	5.11	13	7.6	Pass
			16-QAM	RB1#0	5.2	13	7.7	Pass
				RB50#0	5.91	13	7.8	Pass
		HCH	QPSK	RB1#0	3.37	13	7.9	Pass
				RB50#0	5.06	13	7.10	Pass
			16-QAM	RB1#0	4.59	13	7.11	Pass
				RB50#0	5.86	13	7.12	Pass
LTE Band 7	20 MHz	LCH	QPSK	RB1#0	7.27	13	8.1	Pass
				RB100#0	8.81	13	8.2	Pass
			16-QAM	RB1#0	9	13	8.3	Pass
				RB100#0	9.61	13	8.4	Pass
		MCH	QPSK	RB1#0	7.41	13	8.5	Pass
				RB100#0	8.81	13	8.6	Pass
			16-QAM	RB1#0	9.28	13	8.7	Pass
				RB100#0	9.56	13	8.8	Pass
		HCH	QPSK	RB1#0	7.36	13	8.9	Pass
				RB100#0	8.81	13	8.10	Pass
			16-QAM	RB1#0	9.37	13	8.11	Pass
				RB100#0	9.61	13	8.12	Pass
LTE Band 38	20 MHz	LCH	QPSK	RB1#0	7.36	13	9.1	Pass
				RB100#0	8.58	13	9.2	Pass
			16-QAM	RB1#0	9.14	13	9.3	Pass
				RB100#0	9.42	13	9.4	Pass
		MCH	QPSK	RB1#0	7.5	13	9.5	Pass
				RB100#0	8.67	13	9.6	Pass
			16-QAM	RB1#0	8.39	13	9.7	Pass
				RB100#0	9.52	13	9.8	Pass
		HCH	QPSK	RB1#0	7.31	13	9.9	Pass
				RB100#0	8.62	13	9.10	Pass
			16-QAM	RB1#0	8.3	13	9.11	Pass
				RB100#0	9.42	13	9.12	Pass
LTE Band 41	20 MHz	LCH	QPSK	RB1#0	3.33	13	10.1	Pass
				RB100#0	5.11	13	10.2	Pass
			16-QAM	RB1#0	5.02	13	10.3	Pass
				RB100#0	5.91	13	10.4	Pass
		MCH	QPSK	RB1#0	3.52	13	10.5	Pass
				RB100#0	5.02	13	10.6	Pass
			16-QAM	RB1#0	5.58	13	10.7	Pass
				RB100#0	5.91	13	10.8	Pass
		HCH	QPSK	RB1#0	3.28	13	10.9	Pass
				RB100#0	5.25	13	10.10	Pass
			16-QAM	RB1#0	5.16	13	10.11	Pass
				RB100#0	5.95	13	10.12	Pass

Test Channel	Modulation	PCC RB		SCC RB		Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
		Size	Offset	Size	Offset				
CA_7C									
10MHz+20MHz									
Mid	QPSK	50	0	100	0	5.77	13	11.1	Pass
	16-QAM	50	0	100	0	6.56	13	11.2	Pass
20MHz+10MHz									
Mid	QPSK	100	0	50	0	5.77	13	11.3	Pass
	16-QAM	100	0	50	0	6.52	13	11.4	Pass
15MHz+15MHz									
Mid	QPSK	75	0	75	0	5.77	13	11.5	Pass
	16-QAM	75	0	75	0	6.61	13	11.6	Pass
15MHz+20MHz									
Mid	QPSK	75	0	100	0	5.72	13	11.7	Pass
	16-QAM	75	0	100	0	6.52	13	11.8	Pass
20MHz+15MHz									
Mid	QPSK	100	0	75	0	5.72	13	11.9	Pass
	16-QAM	100	0	75	0	6.42	13	11.10	Pass
20MHz+20MHz									
Mid	QPSK	100	0	100	0	5.72	13	11.11	Pass
	16-QAM	100	0	100	0	6.56	13	11.12	Pass

NR Mode Test Data

Test Band	NR Test Bandwidth	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note2}	Verdict
n41	100 MHz	LCH	PI/2 BPSK	1	0	4.364	13	12.1	Pass
				270	0	4.028	13	12.2	Pass
			QPSK	1	0	4.686	13	12.3	Pass
				270	0	5.468	13	12.4	Pass
		MCH	PI/2 BPSK	1	0	4.322	13	12.5	Pass
				270	0	4.843	13	12.6	Pass
			QPSK	1	0	4.651	13	12.7	Pass
				270	0	5.535	13	12.8	Pass
		HCH	PI/2 BPSK	1	0	4.311	13	12.9	Pass
				270	0	4.680	13	12.10	Pass
			QPSK	1	0	5.341	13	12.11	Pass
				270	0	5.432	13	12.12	Pass
n77 (3450-3550M Hz)	100 MHz	MCH	PI/2 BPSK	1	0	4.406	13	13.1	Pass
				270	0	4.132	13	13.2	Pass
			QPSK	1	0	6.502	13	13.3	Pass
				270	0	4.677	13	13.4	Pass
n77 (3700-3980M Hz)	100 MHz	LCH	PI/2 BPSK	1	0	4.248	13	13.5	Pass
				270	0	4.059	13	13.6	Pass
			QPSK	1	0	4.390	13	13.7	Pass
				270	0	4.607	13	13.8	Pass
		MCH	PI/2 BPSK	1	0	4.285	13	13.9	Pass
				270	0	4.063	13	13.10	Pass
			QPSK	1	0	4.744	13	13.11	Pass
				270	0	4.686	13	13.12	Pass
		HCH	PI/2 BPSK	1	0	4.125	13	13.13	Pass
				270	0	4.227	13	13.14	Pass
			QPSK	1	0	5.882	13	13.15	Pass
				270	0	4.687	13	13.16	Pass
n78 (3450-3550M Hz)	100 MHz	MCH	PI/2 BPSK	1	0	3.811	13	14.1	Pass
				270	0	4.939	13	14.2	Pass
			QPSK	1	0	5.525	13	14.3	Pass
				270	0	5.735	13	14.4	Pass
n78 (3700-3800M Hz)	100 MHz	MCH	PI/2 BPSK	1	0	4.289	13	14.5	Pass
				270	0	4.674	13	14.6	Pass
			QPSK	1	0	5.408	13	14.7	Pass
				270	0	5.257	13	14.8	Pass

A.3 Occupied Bandwidth

Note 1: All modes were tested, but only the typical data were reported in this report.

Note 2: Test plots please refer to the document “Annex No.: BL-EC21C0184-501 Data Part 2.pdf”.

GSM and WCDMA Mode Test Data

Test Band	Test Channel	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
GSM 850	LCH	0.243	0.311	1.1
	MCH	0.247	0.312	1.2
	HCH	0.244	0.31	1.3
GSM 1900	LCH	0.244	0.308	2.1
	MCH	0.244	0.308	2.2
	HCH	0.243	0.303	2.3
EGPRS 850	LCH	0.243	0.306	3.1
	MCH	0.243	0.308	3.2
	HCH	0.245	0.311	3.3
EGPRS 1900	LCH	0.245	0.31	4.1
	MCH	0.241	0.306	4.2
	HCH	0.242	0.309	4.3
EVDO BC0	LCH	1.276393	1.433176	5.1
	MCH	1.27417	1.433394	6.2
	HCH	1.275984	1.435259	7.3
WCDMA Band 2	LCH	4.133	4.729	8.1
	MCH	4.123	4.727	8.2
	HCH	4.135	4.721	8.3
WCDMA Band 4	LCH	4.137	4.732	9.1
	MCH	4.13	4.729	9.2
	HCH	4.136	4.73	9.3
WCDMA Band 5	LCH	4.167	4.756	10.1
	MCH	4.131	4.711	10.2
	HCH	4.125	4.728	10.3

LTE Mode Test Data

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
Band 5	1.4 MHz	LCH	QPSK	RB6#0	1.083	1.229	11.1
			16-QAM	RB6#0	1.087	1.228	11.2
		MCH	QPSK	RB6#0	1.083	1.231	11.3
			16-QAM	RB6#0	1.081	1.22	11.4
		HCH	QPSK	RB6#0	1.09	1.222	11.5
			16-QAM	RB6#0	1.09	1.228	11.6
	3 MHz	LCH	QPSK	RB15#0	2.701	3.007	11.7
			16-QAM	RB15#0	2.698	3.006	11.8
		MCH	QPSK	RB15#0	2.704	2.992	11.9
			16-QAM	RB15#0	2.692	3.012	11.10
		HCH	QPSK	RB15#0	2.698	3.009	11.11
			16-QAM	RB15#0	2.693	3.019	11.12
	5 MHz	LCH	QPSK	RB25#0	4.512	4.961	11.13
			16-QAM	RB25#0	4.496	4.894	11.14
		MCH	QPSK	RB25#0	4.494	4.953	11.15
			16-QAM	RB25#0	4.498	4.951	11.16
		HCH	QPSK	RB25#0	4.494	4.945	11.17
			16-QAM	RB25#0	4.498	4.98	11.18
	10 MHz	LCH	QPSK	RB50#0	8.977	9.902	11.19
			16-QAM	RB50#0	8.973	9.802	11.20
		MCH	QPSK	RB50#0	8.937	9.753	11.21
			16-QAM	RB50#0	8.931	9.76	11.22
		HCH	QPSK	RB50#0	8.968	9.85	11.23
			16-QAM	RB50#0	8.973	9.803	11.24

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
Band 7	5 MHz	LCH	QPSK	RB25#0	4.503	4.967	12.1
			16-QAM	RB25#0	4.499	4.907	12.2
		MCH	QPSK	RB25#0	4.496	4.963	12.3
			16-QAM	RB25#0	4.503	4.959	12.4
		HCH	QPSK	RB25#0	4.489	4.931	12.5
			16-QAM	RB25#0	4.5	4.991	12.6
	10 MHz	LCH	QPSK	RB50#0	8.968	9.844	12.7
			16-QAM	RB50#0	8.976	9.755	12.8
		MCH	QPSK	RB50#0	8.934	9.81	12.9
			16-QAM	RB50#0	8.944	9.781	12.10
		HCH	QPSK	RB50#0	8.948	9.82	12.11
			16-QAM	RB50#0	8.934	9.813	12.12
	15 MHz	LCH	QPSK	RB75#0	13.456	14.789	12.13
			16-QAM	RB75#0	13.456	14.705	12.14
		MCH	QPSK	RB75#0	13.418	14.684	12.15
			16-QAM	RB75#0	13.434	14.691	12.16
		HCH	QPSK	RB75#0	13.429	14.635	12.17
			16-QAM	RB75#0	13.439	14.618	12.18
	20 MHz	LCH	QPSK	RB100#0	17.906	19.349	12.19
			16-QAM	RB100#0	17.965	19.504	12.20
		MCH	QPSK	RB100#0	17.887	19.529	12.21
			16-QAM	RB100#0	17.91	19.484	12.22
		HCH	QPSK	RB100#0	17.869	19.53	12.23
			16-QAM	RB100#0	17.874	19.513	12.24

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
Band 38	5 MHz	LCH	QPSK	RB25#0	4.493	4.989	13.1
			16-QAM	RB25#0	4.498	4.966	13.2
		MCH	QPSK	RB25#0	4.5	4.939	13.3
			16-QAM	RB25#0	4.491	4.983	13.4
		HCH	QPSK	RB25#0	4.489	4.955	13.5
			16-QAM	RB25#0	4.496	4.997	13.6
	10 MHz	LCH	QPSK	RB50#0	8.979	9.883	13.7
			16-QAM	RB50#0	8.978	9.797	13.8
		MCH	QPSK	RB50#0	8.967	9.92	13.9
			16-QAM	RB50#0	8.945	9.776	13.10
		HCH	QPSK	RB50#0	8.994	9.833	13.11
			16-QAM	RB50#0	8.968	9.862	13.12
	15 MHz	LCH	QPSK	RB75#0	13.478	14.717	13.13
			16-QAM	RB75#0	13.455	14.711	13.14
		MCH	QPSK	RB75#0	13.46	14.714	13.15
			16-QAM	RB75#0	13.496	14.79	13.16
		HCH	QPSK	RB75#0	13.402	14.748	13.17
			16-QAM	RB75#0	13.488	14.722	13.18
	20 MHz	LCH	QPSK	RB100#0	17.934	19.374	13.19
			16-QAM	RB100#0	17.904	19.528	13.20
		MCH	QPSK	RB100#0	17.886	19.432	13.21
			16-QAM	RB100#0	17.906	19.526	13.22
		HCH	QPSK	RB100#0	17.916	19.509	13.23
			16-QAM	RB100#0	17.886	19.538	13.24

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
Band 41	5 MHz	LCH	QPSK	RB25#0	4.495	4.986	14.1
			16-QAM	RB25#0	4.503	4.977	14.2
		MCH	QPSK	RB25#0	4.499	4.943	14.3
			16-QAM	RB25#0	4.493	5.008	14.4
		HCH	QPSK	RB25#0	4.491	4.945	14.5
			16-QAM	RB25#0	4.5	5.001	14.6
	10 MHz	LCH	QPSK	RB50#0	8.979	9.876	14.7
			16-QAM	RB50#0	8.972	9.797	14.8
		MCH	QPSK	RB50#0	8.976	9.926	14.9
			16-QAM	RB50#0	8.943	9.778	14.10
		HCH	QPSK	RB50#0	8.992	9.819	14.11
			16-QAM	RB50#0	8.985	9.898	14.12
	15 MHz	LCH	QPSK	RB75#0	13.47	14.695	14.13
			16-QAM	RB75#0	13.461	14.785	14.14
		MCH	QPSK	RB75#0	13.424	14.728	14.15
			16-QAM	RB75#0	13.508	14.802	14.16
		HCH	QPSK	RB75#0	13.416	14.736	14.17
			16-QAM	RB75#0	13.5	14.758	14.18
	20 MHz	LCH	QPSK	RB100#0	17.911	19.562	14.19
			16-QAM	RB100#0	17.883	19.514	14.20
		MCH	QPSK	RB100#0	17.884	19.42	14.21
			16-QAM	RB100#0	17.9	19.492	14.22
		HCH	QPSK	RB100#0	17.931	19.578	14.23
			16-QAM	RB100#0	17.894	19.572	14.24

Test Channel	Modulation	PCC RB		SCC RB		Measured 99% Occupied Bandwidth (MHz)	Measured - 26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note2}
		Size	Offset	Size	Offset			
CA_7C								
10MHz+20MHz								
Mid	QPSK	50	0	100	0	27.86	29.78	15.1
	16-QAM	50	0	100	0	27.77	29.5	15.2
20MHz+10MHz								
Mid	QPSK	100	0	50	0	27.9	29.78	15.3
	16-QAM	100	0	50	0	27.94	29.74	15.4
15MHz+15MHz								
Mid	QPSK	75	0	75	0	28.45	30.34	15.5
	16-QAM	75	0	75	0	28.4	30.32	15.6
15MHz+20MHz								
Mid	QPSK	75	0	100	0	32.73	34.94	15.7
	16-QAM	75	0	100	0	32.72	34.93	15.8
20MHz+15MHz								
Mid	QPSK	100	0	75	0	32.74	34.99	15.9
	16-QAM	100	0	75	0	32.74	34.86	15.10
20MHz+20MHz								
Mid	QPSK	100	0	100	0	37.72	42.1	15.11
	16-QAM	100	0	100	0	37.57	40.12	15.12

NR Mode Test Data

Test Band	NR Test Bandwidth	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Measured 99% Occupied Bandwidth (MHz)	Measured - 26 dB Occupied Bandwidth (MHz)	Verdict	Refer to Plot ^{Note2}
n41	20 MHz	LCH	PI/2 BPSK	50	0	17.85376	19.33004	Pass	16.1
			QPSK	50	0	17.84009	19.26158	Pass	16.2
		MCH	PI/2 BPSK	50	0	17.85514	19.25615	Pass	16.3
			QPSK	50	0	17.87071	19.29808	Pass	16.4
		HCH	PI/2 BPSK	50	0	17.87374	19.32053	Pass	16.5
			QPSK	50	0	17.85819	19.35334	Pass	16.6
	60 MHz	LCH	PI/2 BPSK	162	0	57.65233	60.74711	Pass	16.7
			QPSK	162	0	57.65334	60.80028	Pass	16.8
		MCH	PI/2 BPSK	162	0	57.84619	60.70621	Pass	16.9
			QPSK	162	0	57.74283	60.88427	Pass	16.10
		HCH	PI/2 BPSK	162	0	57.86278	60.64375	Pass	16.11
			QPSK	162	0	57.84685	60.78977	Pass	16.12
	100 MHz	LCH	PI/2 BPSK	270	0	95.73526	99.55602	Pass	16.13
			QPSK	270	0	95.95135	99.65478	Pass	16.14
		MCH	PI/2 BPSK	270	0	96.17085	99.61771	Pass	16.15
			QPSK	270	0	96.07214	99.56656	Pass	16.16
		HCH	PI/2 BPSK	270	0	95.85528	99.53305	Pass	16.17
			QPSK	270	0	96.09728	99.59614	Pass	16.18
n77(3450-3550 MHz)	20 MHz	LCH	PI/2 BPSK	50	0	17.86317	19.21469	Pass	17.1
			QPSK	50	0	17.89299	19.26763	Pass	17.2
		MCH	PI/2 BPSK	50	0	17.86068	19.27584	Pass	17.3
			QPSK	50	0	17.88105	19.82858	Pass	17.4
		HCH	PI/2 BPSK	50	0	17.89891	19.26848	Pass	17.5
			QPSK	50	0	17.87943	19.21617	Pass	17.6
	50 MHz	LCH	PI/2 BPSK	128	0	45.6678	48.50828	Pass	17.7
			QPSK	128	0	45.8049	48.44489	Pass	17.8
		MCH	PI/2 BPSK	128	0	45.7675	48.417	Pass	17.9
			QPSK	128	0	45.78806	48.5927	Pass	17.10
		HCH	PI/2 BPSK	128	0	45.73844	48.4193	Pass	17.11
			QPSK	128	0	45.75465	48.54106	Pass	17.12

Test Band	NR Test Bandwidth	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Measured 99% Occupied Bandwidth (MHz)	Measured - 26 dB Occupied Bandwidth (MHz)	Verdict	Refer to Plot ^{Note2}
	100 MHz	MCH	PI/2 BPSK	270	0	96.07013	99.56127	Pass	17.13
			QPSK	270	0	96.18652	99.67918	Pass	17.14
n77(3 700-3980 MHz)	20 MHz	LCH	PI/2 BPSK	50	0	17.89076	19.30117	Pass	17.15
			QPSK	50	0	17.889	19.24544	Pass	17.16
		MCH	PI/2 BPSK	50	0	17.8887	19.23662	Pass	17.17
			QPSK	50	0	17.89854	19.33068	Pass	17.18
		HCH	PI/2 BPSK	50	0	17.88372	19.14658	Pass	17.19
			QPSK	50	0	17.89025	19.32146	Pass	17.20
	50 MHz	LCH	PI/2 BPSK	128	0	45.71896	48.4231	Pass	17.21
			QPSK	128	0	45.71323	48.5064	Pass	17.22
		MCH	PI/2 BPSK	128	0	45.78898	48.47277	Pass	17.23
			QPSK	128	0	45.81989	48.4391	Pass	17.24
		HCH	PI/2 BPSK	128	0	45.80197	48.45186	Pass	17.25
			QPSK	128	0	45.70779	48.51848	Pass	17.26
	100 MHz	LCH	PI/2 BPSK	270	0	96.12952	99.64458	Pass	17.27
			QPSK	270	0	96.08381	99.74909	Pass	17.28
		MCH	PI/2 BPSK	270	0	96.21355	99.62295	Pass	17.29
			QPSK	270	0	96.14391	99.6488	Pass	17.30
		HCH	PI/2 BPSK	270	0	96.23497	99.6097	Pass	17.31
			QPSK	270	0	96.20071	99.61754	Pass	17.32
n78(3 450-3550 MHz)	20 MHz	LCH	PI/2 BPSK	50	0	17.88441	19.28049	Pass	18.1
			QPSK	50	0	17.87699	19.32645	Pass	18.2
		MCH	PI/2 BPSK	50	0	17.89497	19.28875	Pass	18.3
			QPSK	50	0	17.86462	19.32311	Pass	18.4
		HCH	PI/2 BPSK	50	0	17.84653	19.14891	Pass	18.5
			QPSK	50	0	17.89227	19.33637	Pass	18.6
	50 MHz	LCH	PI/2 BPSK	128	0	45.79354	48.48666	Pass	18.7
			QPSK	128	0	45.83574	48.63922	Pass	18.8
		MCH	PI/2 BPSK	128	0	45.72356	48.4439	Pass	18.9
			QPSK	128	0	45.76141	48.61758	Pass	18.10
		HCH	PI/2 BPSK	128	0	45.73426	48.37892	Pass	18.11
			QPSK	128	0	45.74781	48.57206	Pass	18.12

Test Band	NR Test Bandwidth	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Measured 99% Occupied Bandwidth (MHz)	Measured - 26 dB Occupied Bandwidth (MHz)	Verdict	Refer to Plot ^{Note2}
n78(3 700-3800 MHz)	100 MHz	MCH	PI/2 BPSK	270	0	96.09906	99.59729	Pass	18.13
			QPSK	270	0	96.04613	99.57142	Pass	18.14
	20 MHz	LCH	PI/2 BPSK	50	0	17.87331	19.2925	Pass	18.15
			QPSK	50	0	17.87371	19.30241	Pass	18.16
		MCH	PI/2 BPSK	50	0	17.88628	19.28241	Pass	18.17
			QPSK	50	0	17.86845	19.21886	Pass	18.18
		HCH	PI/2 BPSK	50	0	17.85978	19.29268	Pass	18.19
			QPSK	50	0	17.87512	19.58065	Pass	18.20
	50 MHz	LCH	PI/2 BPSK	128	0	45.71039	48.4108	Pass	18.21
			QPSK	128	0	45.72746	48.49681	Pass	18.22
		MCH	PI/2 BPSK	128	0	45.76828	48.49916	Pass	18.23
			QPSK	128	0	45.7833	48.42246	Pass	18.24
		HCH	PI/2 BPSK	128	0	45.83452	48.38657	Pass	18.25
			QPSK	128	0	45.77889	48.50074	Pass	18.26
	100 MHz	MCH	PI/2 BPSK	270	0	95.98134	99.3517	Pass	18.27
			QPSK	270	0	96.06114	99.5439	Pass	18.28

A.4 Frequency Stability

Note 1: The temperature range supported by the product is -10~+50°C.

GSM 850

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 824.2 MHz		MCH 836.6 MHz		HCH 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	15.17	±2060.5	18.89	±2091.5	11.3	±2122	Pass
	0	12.33		3.71		14.04		
	10	12.46		7.91		10.33		
	20	15.21		10.27		13.17		
	25	17.92		12.46		22.24		
	30	16.43		8.04		20.11		
	40	12.62		6.62		10.11		
	50	13.01		8.14		8.52		
	55	17.4		11.2		10.2		
8.9	25	20.18		6.65		14.17		
7.2	25	10.69		8.49		13.04		

GSM 1900

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 1850.2 MHz		MCH 1880 MHz		HCH 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	13.11	±4625.5	11.2	±4700.0	7.62	±4774.5	Pass
	0	13.3		20.82		-8.43		
	10	6.78		21.99		15.08		
	20	17.89		16.69		15.37		
	25	22.79		23.08		7.85		
	30	8.98		15.27		-5.36		
	40	-8.75		18.34		-6.3		
	50	9.98		12.01		5.36		
	55	18.73		19.4		9.75		
8.9	25	7.36		15.5		5.88		
7.2	25	5.13		11.36		15.37		

GPRS 850

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 824.2 MHz		MCH 836.6 MHz		HCH 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	25.51	±2060.5	25.99	±2091.5	22.92	±2122	Pass
	0	23.47		19.15		22.73		
	10	15.46		14.88		17.34		
	20	14.92		15.05		15.27		
	25	25.67		24.89		25.38		
	30	15.92		16.3		20.31		
	40	17.24		16.08		17.92		
	50	16.34		16.89		19.31		
	55	14.43		13.72		15.43		
8.9	25	19.44		19.37		17.14		
7.2	25	21.47		13.59		13.5		

GPRS 1900

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 1850.2 MHz		MCH 1880 MHz		HCH 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	11.04	±4625.5	22.54	±4700.0	16.21	±4774.5	Pass
	0	29.74		20.57		25.76		
	10	23.96		24.47		16.05		
	20	15.82		16.18		24.57		
	25	27.51		28.35		20.89		
	30	17.63		20.76		23.83		
	40	15.08		23.96		26.93		
	50	18.44		26.18		22.02		
	55	20.66		16.18		34		
8.9	25	25.51		24.31		18.82		
7.2	25	17.76		11.75		22.6		

EGPRS 850

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 824.2 MHz		MCH 836.6 MHz		HCH 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	30.25	±2060.5	27.54	±2091.5	25.34	±2122	Pass
	0	24.47		21.41		21.76		
	10	24.96		23.37		24.63		
	20	23.73		21.99		21.41		
	25	31.74		33.19		22.12		
	30	23.18		25.22		21.05		
	40	20.66		26.05		15.11		
	50	20.63		11.82		17.98		
	55	19.57		21.11		30.99		
8.9	25	26.47		33.96		26.41		
7.2	25	28.8		29.77		27.38		

EGPRS 1900

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 1850.2 MHz		MCH 1880 MHz		HCH 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	36.58	±4625.5	30.03	±4700.0	57.89	±4774.5	Pass
	0	34.35		28.44		38.39		
	10	40.65		21.92		49.78		
	20	32.16		30.67		41.87		
	25	35.84		33.77		52.56		
	30	44.36		28.8		44.17		
	40	48.2		33.42		36.19		
	50	27.86		31.28		50.3		
	55	49.69		40.2		43.39		
8.9	25	40.1		28.57		41.68		
7.2	25	44.65		35.61		44.36		

EVDO BC0

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 824.7MHz		MCH 836.52MHz		HCH 848.31MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	-8.86	±2061.75	21.02	±2091.3	14.36	±2021.77 5	Pass
	0	4.17		10.11		5.57		
	10	9.52		9.38		-1.03		
	20	11.13		5.42		-1.17		
	25	-11.87		9.45		-6.52		
	30	-10.84		2.93		-8.5		
	40	1.76		-3.96		0.44		
	50	-0.88		-4.3		7.23		
	55	3.52		10.4		-1.98		
8.9	25	13.62		17.58		3.81		
7.2	25	-8.86		21.02		14.36		

WCDMA Band 2

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 1852.4 MHz		MCH 1880 MHz		HCH 1907.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	14.45	±4631	11.88	±4700	11.11	±4769	Pass
	0	13.53		12.07		10.04		
	10	13.28		11.67		10.46		
	20	12.49		11.81		9.78		
	25	12.75		11.87		10.02		
	30	11.84		11.52		10.62		
	40	12.92		11.72		10.31		
	50	11.99		11.74		10.73		
	55	12.21		11.69		10.61		
8.9	25	12.65		11.63		11		
7.2	25	11.74		12.02		11.2		

WCDMA Band 4

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 1712.4 MHz		MCH 1732.4 MHz		HCH 1752.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	10.16	±4281	5.36	±4331	0.02	±4381.5	Pass
	0	10.5		5.61		-0.03		
	10	7.32		5.34		0.37		
	20	7.72		5.92		1.14		
	25	11.45		5.74		1.22		
	30	11.12		5.71		0.26		
	40	19.32		5.45		1.6		
	50	17.34		5.86		2.42		
	55	18.15		5.39		2.71		
8.9	25	4.1		5.12		2.32		
7.2	25	3.65		4.88		2.24		

WCDMA Band B5

Test Conditions		Frequency Deviation						Verdict
Power (VDC)	Temperature (°C)	LCH 826.4 MHz		MCH 836.4 MHz		HCH 846.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
7.74	-10	0.91	±2066	0.21	±2091	0.74	±2116.5	Pass
	0	0.3		0.34		1.05		
	10	0.24		-0.44		0.36		
	20	-0.09		-0.04		0.87		
	25	0.17		0.69		0.45		
	30	0.64		0.26		0.54		
	40	-0.19		0.29		0.61		
	50	0.07		-0.18		0.3		
	55	0.46		-0.23		0.73		
8.9	25	0.57		0.32		0.41		
7.2	25	0.16		-0.19		0.03		

LTE Band 5 QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 836.5 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-3.69	±2091.25	Pass
	0	-1.62		
	10	-1.29		
	20	2.7		
	25	1.97		
	30	-0.4		
	40	-0.01		
	50	-4.55		
	55	2.6		
8.9	25	-0.2		
7.2	25	-2.25		

LTE Band 5 16QAM 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 836.5 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-0.53	±2091.25	Pass
	0	2.12		
	10	1.13		
	20	-2.42		
	25	0.09		
	30	-1.3		
	40	0.44		
	50	-2.98		
	55	1.6		
8.9	25	-2.26		
7.2	25	-0.57		

LTE Band 7 QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2535 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	0.1	±6337.5	Pass
	0	3.99		
	10	2.7		
	20	-3.06		
	25	-6.49		
	30	4.03		
	40	0.66		
	50	-4.29		
55	4.72			
8.9	25	-2.07		
7.2	25	1.17		

LTE Band 7 16-QAM 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2535 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-1.49	±6337.5	Pass
	0	-0.72		
	10	-6.24		
	20	-6.31		
	25	-4.94		
	30	2.62		
	40	-2.47		
	50	1.53		
55	-8.44			
8.9	25	1.65		
7.2	25	-5.61		

LTE Band 38 QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2595 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-10.67	±6487.5	Pass
	0	-8.38		
	10	-11.8		
	20	-12.92		
	25	-11.73		
	30	-9.11		
	40	-8.27		
	50	-6.92		
55	-18.18			
8.9	25	-14.96		
7.2	25	-17.05		

LTE Band 38 16QAM10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2595 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-11.7	±6487.5	Pass
	0	-16.49		
	10	-8.5		
	20	-10.11		
	25	-6.71		
	30	-19.24		
	40	-19.93		
	50	-4.86		
55	-14.76			
8.9	25	-12.33		
7.2	25	-11.64		

LTE Band 41 QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2593 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-6.27	±6482.5	Pass
	0	-6.65		
	10	-5.35		
	20	-10.27		
	25	-5.11		
	30	-2.27		
	40	-8.04		
	50	-14.61		
55	-5.29			
8.9	25	-2.42		
7.2	25	-11.36		

LTE Band 41 16QAM10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2593 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-7.25	±6482.5	Pass
	0	-6.28		
	10	-2.55		
	20	-3.15		
	25	-0.99		
	30	-12.06		
	40	-0.59		
	50	-10.44		
55	-3.25			
8.9	25	-12.03		
7.2	25	-9.98		

CA_7C QPSK 20MHz+10MHz

Test Conditions		Frequency Deviation				Verdict
Power (VDC)	Temperature (°C)	PCC MCH 2530.1 MHz		SCC MCH 2544.5 MHz		
		Value(Hz)	Limits (Hz)	Value(Hz)	Limits (Hz)	
7.74	-10	5.52	±6,325.25	-4.58	±6,361.25	Pass
	0	6.57		-10.71		
	10	5.21		-11.66		
	20	5.76		-10.13		
	25	2.35		-8.08		
	30	4.76		-5.16		
	40	3.2		-3.6		
	50	1.3		-3.82		
	55	5.44		-8.33		
8.9	25	5.31		-7.4		
7.2	25	7.08		-7.5		

CA_7C 16QAM 20MHz+10MHz

Test Conditions		Frequency Deviation				Verdict
Power (VDC)	Temperature (°C)	PCC MCH 2530.1 MHz		SCC MCH 2544.5 MHz		
		Value(Hz)	Limits (Hz)	Value(Hz)	Limits (Hz)	
7.74	-10	8.68	±6,325.25	-16.61	±6,361.25	Pass
	0	7.41		-11.27		
	10	12.85		-5.18		
	20	9.44		-12.35		
	25	2.66		-8.53		
	30	1.54		-12.59		
	40	11.49		-9.66		
	50	6.74		-2.95		
	55	13.06		-4.55		
8.9	25	9.58		-5.71		
7.2	25	6.68		-11.22		

CA_7C QPSK 20MHz+20MHz

Test Conditions		Frequency Deviation				Verdict
Power (VDC)	Temperature (°C)	PCC MCH 2525.1 MHz		SCC MCH 2544.9 MHz		
		Value(Hz)	Limits (Hz)	Value(Hz)	Limits (Hz)	
7.74	-10	13.53	±6,312.75	-11.13	±6,362.25	Pass
	0	21.44		-16.51		
	10	17.57		-13.88		
	20	18.38		-11.8		
	25	13.86		-9.73		
	30	7.94		-8.4		
	40	18.11		-21.66		
	50	14.19		-15.61		
	55	14.09		-9.91		
8.9	25	18.31		-12.87		
7.2	25	21.77		-15.51		

CA_7C 16QAM 20MHz+20MHz

Test Conditions		Frequency Deviation				Verdict
Power (VDC)	Temperature (°C)	PCC MCH 2525.1 MHz		SCC MCH 2544.9 MHz		
		Value(Hz)	Limits (Hz)	Value(Hz)	Limits (Hz)	
7.74	-10	19.56	±6,312.75	-12.1	±6,362.25	Pass
	0	15.36		-16.72		
	10	10.74		-12.3		
	20	13.26		-7.72		
	25	8.15		-4.43		
	30	17.82		-13.3		
	40	14.42		-19.11		
	50	17.15		-15.42		
	55	17.64		-9.21		
8.9	25	8.7		-4.21		
7.2	25	13.82		-7.74		

NR Band n41 PI/2 BPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2592.99 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-2.9	±6482.475	Pass
	0	0.3		
	10	-4.8		
	20	5.9		
	25	-3.7		
	30	-11.3		
	40	1		
	50	1.4		
55	-25.3			
8.9	25	5.5		
7.2	25	-1.3		

NR Band n41 QPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 2592.99 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	3.7	±6482.475	Pass
	0	2.1		
	10	-12.9		
	20	7.2		
	25	-1.8		
	30	7.5		
	40	12.3		
	50	5.4		
	55	-2.6		
8.9	25	3.5		
7.2	25	1.2		

NR Band n77(3450-3550MHz) PI/2 BPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3499.98MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	12	±8749.95	Pass
	0	14.4		
	10	-10.9		
	20	-7.6		
	25	11.1		
	30	10.4		
	40	-7.5		
	50	12.9		
	55	10.3		
8.9	25	-6.4		
7.2	25	10		

NR Band n77(3450-3550MHz) QPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3499.98MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-8.5	±8749.95	Pass
	0	-12		
	10	4.6		
	20	-8.5		
	25	-3.4		
	30	3		
	40	-4.1		
	50	-6.5		
	55	-8.7		
8.9	25	4.4		
7.2	25	-8.3		

NR Band n77(3700-3980MHz) PI/2 BPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3840MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	12	±9600	Pass
	0	14.4		
	10	-10.9		
	20	-7.6		
	25	11.1		
	30	10.4		
	40	-7.5		
	50	12.9		
	55	10.3		
8.9	25	-6.4	±9600	Pass
7.2	25	10		

NR Band n77(3700-3980MHz) QPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3840MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-8.5	±9600	Pass
	0	-12		
	10	4.6		
	20	-8.5		
	25	-3.4		
	30	3		
	40	-4.1		
	50	-6.5		
	55	-8.7		
8.9	25	4.4	±9600	Pass
7.2	25	-8.3		

NR Band n78(3450-3550MHz) PI/2 BPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3499.98MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	8	±8749.95	Pass
	0	-5.4		
	10	-5.1		
	20	4.5		
	25	3.8		
	30	-3.7		
	40	5.7		
	50	7.4		
55	-10.8			
8.9	25	3.6		
7.2	25	4.1		

NR Band n78(3450-3550MHz) QPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3499.98MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-4.8	±8749.95	Pass
	0	-4.7		
	10	7.9		
	20	5.4		
	25	-8.9		
	30	-6.4		
	40	7.7		
	50	6.3		
55	-1.9			
8.9	25	-2.7		
7.2	25	-5.5		

NR Band n78(3700-3800MHz) PI/2 BPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3750 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	8	±9375	Pass
	0	-5.4		
	10	-5.1		
	20	4.5		
	25	3.8		
	30	-3.7		
	40	5.7		
	50	7.4		
	55	-10.8		
8.9	25	3.6	±9375	Pass
7.2	25	4.1		

NR Band n78(3700-3800MHz) QPSK 100 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3750 MHz		
		Value (Hz)	Limits (Hz)	
7.74	-10	-4.8	±9375	Pass
	0	-4.7		
	10	7.9		
	20	5.4		
	25	-8.9		
	30	-6.4		
	40	7.7		
	50	6.3		
	55	-1.9		
8.9	25	-2.7	±9375	Pass
7.2	25	-5.5		

A.5 Spurious Emission at Antenna Terminals

Note 1: All modes have been tested, and only the worst case data are shown here.

Note 2: The frequencies of verdict which are marked by "N/A" should be ignored because they are UE carrier frequency.

Note 3: Test plots please refer to the document "Annex No.:BL-EC21C0184-501 Data Part 3.pdf".

GSM and WCDMA Mode Test Verdict

Test Band	Test Channel	Refer to Plot ^{Note3}	Verdict
GSM 850	LCH	1.1	Pass
	MCH	1.2	Pass
	HCH	1.3	Pass
GSM 1900	LCH	2.1	Pass
	MCH	2.2	Pass
	HCH	2.3	Pass
EGPRS 850	LCH	3.1	Pass
	MCH	3.2	Pass
	HCH	3.3	Pass
EGPRS 1900	LCH	4.1	Pass
	MCH	4.2	Pass
	HCH	4.3	Pass
EVDO BC0	LCH	5.1	Pass
	MCH	6.1	Pass
	HCH	7.1	Pass
WCDMA Band 2	LCH	8.1	Pass
	MCH	8.2	Pass
	HCH	8.3	Pass
WCDMA Band 4	LCH	9.1	Pass
	MCH	9.2	Pass
	HCH	9.3	Pass
WCDMA Band 5	LCH	10.1	Pass
	MCH	10.2	Pass
	HCH	10.3	Pass

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note3}	Verdict
Band 5	1.4 MHz	LCH	QPSK	RB1#0	11.1	Pass
			16-QAM	RB1#0	11.2	Pass
		MCH	QPSK	RB1#0	11.3	Pass
			16-QAM	RB1#0	11.4	Pass
		HCH	QPSK	RB1#0	11.5	Pass
			16-QAM	RB1#0	11.6	Pass
	3 MHz	LCH	QPSK	RB1#0	11.7	Pass
			16-QAM	RB1#0	11.8	Pass
		MCH	QPSK	RB1#0	11.9	Pass
			16-QAM	RB1#0	11.10	Pass
		HCH	QPSK	RB1#0	11.11	Pass
			16-QAM	RB1#0	11.12	Pass
	5 MHz	LCH	QPSK	RB1#0	11.13	Pass
			16-QAM	RB1#0	11.14	Pass
		MCH	QPSK	RB1#0	11.15	Pass
			16-QAM	RB1#0	11.16	Pass
		HCH	QPSK	RB1#0	11.17	Pass
			16-QAM	RB1#0	11.18	Pass
	10 MHz	LCH	QPSK	RB1#0	11.19	Pass
			16-QAM	RB1#0	11.20	Pass
		MCH	QPSK	RB1#0	11.21	Pass
			16-QAM	RB1#0	11.22	Pass
		HCH	QPSK	RB1#0	11.23	Pass
			16-QAM	RB1#0	11.24	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note3}	Verdict
Band 7	5 MHz	LCH	QPSK	RB1#0	12.1	Pass
			16-QAM	RB1#0	12.2	Pass
		MCH	QPSK	RB1#0	12.3	Pass
			16-QAM	RB1#0	12.4	Pass
		HCH	QPSK	RB1#0	12.5	Pass
			16-QAM	RB1#0	12.6	Pass
	10 MHz	LCH	QPSK	RB1#0	12.7	Pass
			16-QAM	RB1#0	12.8	Pass
		MCH	QPSK	RB1#0	12.9	Pass
			16-QAM	RB1#0	12.10	Pass
		HCH	QPSK	RB1#0	12.11	Pass
			16-QAM	RB1#0	12.12	Pass
	15 MHz	LCH	QPSK	RB1#0	12.13	Pass
			16-QAM	RB1#0	12.14	Pass
		MCH	QPSK	RB1#0	12.15	Pass
			16-QAM	RB1#0	12.16	Pass
		HCH	QPSK	RB1#0	12.17	Pass
			16-QAM	RB1#0	12.18	Pass
	20 MHz	LCH	QPSK	RB1#0	12.19	Pass
			16-QAM	RB1#0	12.20	Pass
		MCH	QPSK	RB1#0	12.21	Pass
			16-QAM	RB1#0	12.22	Pass
		HCH	QPSK	RB1#0	12.23	Pass
			16-QAM	RB1#0	12.24	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note3}	Verdict
Band 38	5 MHz	LCH	QPSK	RB1#0	13.1	Pass
			16-QAM	RB1#0	13.2	Pass
		MCH	QPSK	RB1#0	13.3	Pass
			16-QAM	RB1#0	13.4	Pass
		HCH	QPSK	RB1#0	13.5	Pass
			16-QAM	RB1#0	13.6	Pass
	10 MHz	LCH	QPSK	RB1#0	13.7	Pass
			16-QAM	RB1#0	13.8	Pass
		MCH	QPSK	RB1#0	13.9	Pass
			16-QAM	RB1#0	13.10	Pass
		HCH	QPSK	RB1#0	13.11	Pass
			16-QAM	RB1#0	13.12	Pass
	15 MHz	LCH	QPSK	RB1#0	13.13	Pass
			16-QAM	RB1#0	13.14	Pass
		MCH	QPSK	RB1#0	13.15	Pass
			16-QAM	RB1#0	13.16	Pass
		HCH	QPSK	RB1#0	13.17	Pass
			16-QAM	RB1#0	13.18	Pass
	20 MHz	LCH	QPSK	RB1#0	13.19	Pass
			16-QAM	RB1#0	13.20	Pass
		MCH	QPSK	RB1#0	13.21	Pass
			16-QAM	RB1#0	13.22	Pass
		HCH	QPSK	RB1#0	13.23	Pass
			16-QAM	RB1#0	13.24	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note3}	Verdict
Band 41	5 MHz	LCH	QPSK	RB1#0	14.1	Pass
			16-QAM	RB1#0	14.2	Pass
		MCH	QPSK	RB1#0	14.3	Pass
			16-QAM	RB1#0	14.4	Pass
		HCH	QPSK	RB1#0	14.5	Pass
			16-QAM	RB1#0	14.6	Pass
	10 MHz	LCH	QPSK	RB1#0	14.7	Pass
			16-QAM	RB1#0	14.8	Pass
		MCH	QPSK	RB1#0	14.9	Pass
			16-QAM	RB1#0	14.10	Pass
		HCH	QPSK	RB1#0	14.11	Pass
			16-QAM	RB1#0	14.12	Pass
	15 MHz	LCH	QPSK	RB1#0	14.13	Pass
			16-QAM	RB1#0	14.14	Pass
		MCH	QPSK	RB1#0	14.15	Pass
			16-QAM	RB1#0	14.16	Pass
		HCH	QPSK	RB1#0	14.17	Pass
			16-QAM	RB1#0	14.18	Pass
	20 MHz	LCH	QPSK	RB1#0	14.19	Pass
			16-QAM	RB1#0	14.20	Pass
		MCH	QPSK	RB1#0	14.21	Pass
			16-QAM	RB1#0	14.22	Pass
		HCH	QPSK	RB1#0	14.23	Pass
			16-QAM	RB1#0	14.24	Pass

Test Channel	Modulation	PCC RB		SCC RB		Refer to Plot ^{+Note2}	Verdict
		Size	Offset	Size	Offset		
CA_7C							
20MHz+10MHz							
Low	QPSK	1	0	1	49	15.1	Pass
		100	0	50	0	15.2	Pass
	16QAM	1	0	1	49	15.3	Pass
		100	0	50	0	15.4	Pass
Mid	QPSK	1	0	1	49	15.5	Pass
		100	0	50	0	15.6	Pass
	16QAM	1	0	1	49	15.7	Pass
		100	0	50	0	15.8	Pass
High	QPSK	1	0	1	49	15.9	Pass
		100	0	50	0	15.10	Pass
	16QAM	1	0	1	49	15.11	Pass
		100	0	50	0	15.12	Pass
20MHz+20MHz							
Low	QPSK	1	0	1	99	15.13	Pass
		100	0	100	0	15.14	Pass
	16QAM	1	0	1	99	15.15	Pass
		100	0	100	0	15.16	Pass
Mid	QPSK	1	0	1	99	15.17	Pass
		100	0	100	0	15.18	Pass
	16QAM	1	0	1	99	15.19	Pass
		100	0	100	0	15.20	Pass
High	QPSK	1	0	1	99	15.21	Pass
		100	0	100	0	15.22	Pass
	16QAM	1	0	1	99	15.23	Pass
		100	0	100	0	15.24	Pass

NR Mode Test Verdict

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n41	20 MHz	LCH	PI/2 BPSK	25	12	16.1	Pass
			QPSK	25	12	16.2	Pass
		MCH	PI/2 BPSK	25	12	16.3	Pass
			QPSK	25	12	16.4	Pass
		HCH	PI/2 BPSK	25	12	16.5	Pass
			QPSK	25	12	16.6	Pass
	60 MHz	LCH	PI/2 BPSK	81	40	16.7	Pass
			QPSK	81	40	16.8	Pass
		MCH	PI/2 BPSK	81	40	16.9	Pass
			QPSK	81	40	16.10	Pass
		HCH	PI/2 BPSK	81	40	16.11	Pass
			QPSK	81	40	16.12	Pass
	100 MHz	LCH	PI/2 BPSK	135	67	16.13	Pass
			QPSK	135	67	16.14	Pass
		MCH	PI/2 BPSK	135	67	16.15	Pass
			QPSK	135	67	16.16	Pass
		HCH	PI/2 BPSK	135	67	16.17	Pass
			QPSK	135	67	16.18	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3450-3550MHz)	20 MHz	LCH	PI/2 BPSK	25	12	17.1	Pass
			QPSK	25	12	17.2	Pass
		MCH	PI/2 BPSK	25	12	17.3	Pass
			QPSK	25	12	17.4	Pass
		HCH	PI/2 BPSK	25	12	17.5	Pass
			QPSK	25	12	17.6	Pass
	50 MHz	LCH	PI/2 BPSK	64	32	17.7	Pass
			QPSK	64	32	17.8	Pass
		MCH	PI/2 BPSK	64	32	17.9	Pass
			QPSK	64	32	17.10	Pass
		HCH	PI/2 BPSK	64	32	17.11	Pass
			QPSK	64	32	17.12	Pass
	100 MHz	MCH	PI/2 BPSK	135	67	17.13	Pass
			QPSK	135	67	17.14	Pass



Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3700-3980MHz)	20 MHz	LCH	PI/2 BPSK	25	12	18.1	Pass
			QPSK	25	12	18.2	Pass
		MCH	PI/2 BPSK	25	12	18.3	Pass
			QPSK	25	12	18.4	Pass
		HCH	PI/2 BPSK	25	12	18.5	Pass
			QPSK	25	12	18.6	Pass
	50 MHz	LCH	PI/2 BPSK	64	32	18.7	Pass
			QPSK	64	32	18.8	Pass
		MCH	PI/2 BPSK	64	32	18.9	Pass
			QPSK	64	32	18.10	Pass
		HCH	PI/2 BPSK	64	32	18.11	Pass
			QPSK	64	32	18.12	Pass
	100 MHz	LCH	PI/2 BPSK	135	67	18.13	Pass
			QPSK	135	67	18.14	Pass
		MCH	PI/2 BPSK	135	67	18.15	Pass
			QPSK	135	67	18.16	Pass
		HCH	PI/2 BPSK	135	67	18.17	Pass
			QPSK	135	67	18.18	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3450-3550MHz)	20 MHz	LCH	PI/2 BPSK	25	12	19.1	Pass
			QPSK	25	12	19.2	Pass
		MCH	PI/2 BPSK	25	12	19.3	Pass
			QPSK	25	12	19.4	Pass
		HCH	PI/2 BPSK	25	12	19.5	Pass
			QPSK	25	12	19.6	Pass
	50 MHz	LCH	PI/2 BPSK	64	32	19.7	Pass
			QPSK	64	32	19.8	Pass
		MCH	PI/2 BPSK	64	32	19.9	Pass
			QPSK	64	32	19.10	Pass
		HCH	PI/2 BPSK	64	32	19.11	Pass
			QPSK	64	32	19.12	Pass
	100 MHz	MCH	PI/2 BPSK	135	67	19.13	Pass
			QPSK	135	67	19.14	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3700-3800MHz)	20 MHz	LCH	PI/2 BPSK	25	12	20.1	Pass
			QPSK	25	12	20.2	Pass
		MCH	PI/2 BPSK	25	12	20.3	Pass
			QPSK	25	12	20.4	Pass
		HCH	PI/2 BPSK	25	12	20.5	Pass
			QPSK	25	12	20.6	Pass
	50 MHz	LCH	PI/2 BPSK	64	32	20.7	Pass
			QPSK	64	32	20.8	Pass
		MCH	PI/2 BPSK	64	32	20.9	Pass
			QPSK	64	32	20.10	Pass
		HCH	PI/2 BPSK	64	32	20.11	Pass
			QPSK	64	32	20.12	Pass
	100 MHz	MCH	PI/2 BPSK	135	67	20.13	Pass
			QPSK	135	67	20.14	Pass

A.6 Band Edge

Note 1: Test plots please refer to the document “Annex No.:BL-EC21C0184-501 Data Part 4.pdf”.

GSM and WCDMA Mode Test Verdict

Test Band	Test Channel	Refer to Plot ^{Note1}	Verdict
GSM 850	LCH	1.1	Pass
	HCH	1.2	Pass
GSM 1900	LCH	2.1	Pass
	HCH	2.2	Pass
EGPRS 850	LCH	3.1	Pass
	HCH	3.2	Pass
EGPRS 1900	LCH	4.1	Pass
	HCH	4.2	Pass
EVDO BC0	LCH	5.1	Pass
	HCH	6.1	Pass
WCDMA Band 2	LCH	7.1	Pass
	HCH	7.2	Pass
WCDMA Band 4	LCH	8.1	Pass
	HCH	8.2	Pass
WCDMA Band 5	LCH	9.1	Pass
	HCH	9.2	Pass

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note1}	Verdict
Band 5	1.4 MHz	LCH	QPSK	RB1#0	10.1	Pass
				RB6#0	10.2	Pass
			16-QAM	RB1#0	10.3	Pass
				RB6#0	10.4	Pass
		HCH	QPSK	RB1#5	10.5	Pass
				RB6#0	10.6	Pass
			16-QAM	RB1#5	10.7	Pass
				RB6#0	10.8	Pass
	3 MHz	LCH	QPSK	RB1#0	10.9	Pass
				RB15#0	10.10	Pass
			16-QAM	RB1#0	10.11	Pass
				RB15#0	10.12	Pass
		HCH	QPSK	RB1#14	10.13	Pass
				RB15#0	10.14	Pass
			16-QAM	RB1#14	10.15	Pass
				RB15#0	10.16	Pass
	5 MHz	LCH	QPSK	RB1#0	10.17	Pass
				RB25#0	10.18	Pass
			16-QAM	RB1#0	10.19	Pass
				RB25#0	10.20	Pass
		HCH	QPSK	RB1#24	10.21	Pass
				RB25#0	10.22	Pass
			16-QAM	RB1#24	10.23	Pass
				RB25#0	10.24	Pass
	10 MHz	LCH	QPSK	RB1#0	10.25	Pass
				RB50#0	10.26	Pass
			16-QAM	RB1#0	10.27	Pass
				RB50#0	10.28	Pass
		HCH	QPSK	RB1#49	10.29	Pass
				RB50#0	10.30	Pass
			16-QAM	RB1#49	10.31	Pass
				RB50#0	10.32	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note1}	Verdict
Band 7	5 MHz	LCH	QPSK	RB1#0	11.1	Pass
				RB25#0	11.2	Pass
			16-QAM	RB1#0	11.3	Pass
				RB25#0	11.4	Pass
		HCH	QPSK	RB1#24	11.5	Pass
				RB25#0	11.6	Pass
			16-QAM	RB1#24	11.7	Pass
				RB25#0	11.8	Pass
	10 MHz	LCH	QPSK	RB1#0	11.9	Pass
				RB50#0	11.10	Pass
			16-QAM	RB1#0	11.11	Pass
				RB50#0	11.12	Pass
		HCH	QPSK	RB1#49	11.13	Pass
				RB50#0	11.14	Pass
			16-QAM	RB1#49	11.15	Pass
				RB50#0	11.16	Pass
	15 MHz	LCH	QPSK	RB1#0	11.17	Pass
				RB75#0	11.18	Pass
			16-QAM	RB1#0	11.19	Pass
				RB75#0	11.20	Pass
		HCH	QPSK	RB1#74	11.21	Pass
				RB75#0	11.22	Pass
			16-QAM	RB1#74	11.23	Pass
				RB75#0	11.24	Pass
	20 MHz	LCH	QPSK	RB1#0	11.25	Pass
				RB100#0	11.26	Pass
			16-QAM	RB1#0	11.27	Pass
				RB100#0	11.28	Pass
		HCH	QPSK	RB1#99	11.29	Pass
				RB100#0	11.30	Pass
			16-QAM	RB1#99	11.31	Pass
				RB100#0	11.32	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note1}	Verdict
Band 38	5 MHz	LCH	QPSK	RB1#0	12.1	Pass
				RB25#0	12.2	Pass
			16-QAM	RB1#0	12.3	Pass
				RB25#0	12.4	Pass
		HCH	QPSK	RB1#24	12.5	Pass
				RB25#0	12.6	Pass
			16-QAM	RB1#24	12.7	Pass
				RB25#0	12.8	Pass
	10 MHz	LCH	QPSK	RB1#0	12.9	Pass
				RB50#0	12.10	Pass
			16-QAM	RB1#0	12.11	Pass
				RB50#0	12.12	Pass
		HCH	QPSK	RB1#49	12.13	Pass
				RB50#0	12.14	Pass
			16-QAM	RB1#49	12.15	Pass
				RB50#0	12.16	Pass
	15 MHz	LCH	QPSK	RB1#0	12.17	Pass
				RB75#0	12.18	Pass
			16-QAM	RB1#0	12.19	Pass
				RB75#0	12.20	Pass
		HCH	QPSK	RB1#74	12.21	Pass
				RB75#0	12.22	Pass
			16-QAM	RB1#74	12.23	Pass
				RB75#0	12.24	Pass
	20 MHz	LCH	QPSK	RB1#0	12.25	Pass
				RB100#0	12.26	Pass
			16-QAM	RB1#0	12.27	Pass
				RB100#0	12.28	Pass
		HCH	QPSK	RB1#99	12.29	Pass
				RB100#0	12.30	Pass
			16-QAM	RB1#99	12.31	Pass
				RB100#0	12.32	Pass

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note1}	Verdict
Band 41	5 MHz	LCH	QPSK	RB1#0	13.1	Pass
				RB25#0	13.2	Pass
			16-QAM	RB1#0	13.3	Pass
				RB25#0	13.4	Pass
		HCH	QPSK	RB1#24	13.5	Pass
				RB25#0	13.6	Pass
			16-QAM	RB1#24	13.7	Pass
				RB25#0	13.8	Pass
	10 MHz	LCH	QPSK	RB1#0	13.9	Pass
				RB50#0	13.10	Pass
			16-QAM	RB1#0	13.11	Pass
				RB50#0	13.12	Pass
		HCH	QPSK	RB1#49	13.13	Pass
				RB50#0	13.14	Pass
			16-QAM	RB1#49	13.15	Pass
				RB50#0	13.16	Pass
	15 MHz	LCH	QPSK	RB1#0	13.17	Pass
				RB75#0	13.18	Pass
			16-QAM	RB1#0	13.19	Pass
				RB75#0	13.20	Pass
		HCH	QPSK	RB1#74	13.21	Pass
				RB75#0	13.22	Pass
			16-QAM	RB1#74	13.23	Pass
				RB75#0	13.24	Pass
	20 MHz	LCH	QPSK	RB1#0	13.25	Pass
				RB100#0	13.26	Pass
			16-QAM	RB1#0	13.27	Pass
				RB100#0	13.28	Pass
		HCH	QPSK	RB1#99	13.29	Pass
				RB100#0	13.30	Pass
			16-QAM	RB1#99	13.31	Pass
				RB100#0	13.32	Pass

Test Channel	Modulation	PCC RB		SCC RB		Refer to Plot ^{+Note2}	Verdict
		Size	Offset	Size	Offset		
CA_7C							
20MHz+10MHz							
Low	QPSK	1	0	1	0	14.1	Pass
		1	0	1	49	14.2	Pass
		100	0	50	0	14.3	Pass
	16-QAM	1	0	1	0	14.4	Pass
		1	0	1	49	14.5	Pass
		100	0	50	0	14.6	Pass
High	QPSK	1	0	1	49	14.7	Pass
		1	99	1	49	14.8	Pass
		100	0	50	0	14.9	Pass
	16-QAM	1	0	1	49	14.10	Pass
		1	99	1	49	14.11	Pass
		100	0	50	0	14.12	Pass
20MHz+20MHz							
Low	QPSK	1	0	1	0	14.13	Pass
		1	0	1	99	14.14	Pass
		100	0	100	0	14.15	Pass
	16-QAM	1	0	1	0	14.16	Pass
		1	0	1	99	14.17	Pass
		100	0	100	0	14.18	Pass
High	QPSK	1	0	1	99	14.19	Pass
		1	99	1	99	14.20	Pass
		100	0	100	0	14.21	Pass
	16-QAM	1	0	1	99	14.22	Pass
		1	99	1	99	14.23	Pass
		100	0	100	0	14.24	Pass

NR Mode Test Verdict

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n41	20	LCH	PI/2 BPSK	1	1	15.1	Pass
				50	0	15.2	Pass
			QPSK	1	1	15.3	Pass
				50	0	15.4	Pass
		HCH	PI/2 BPSK	1	49	15.5	Pass
				50	0	15.6	Pass
			QPSK	1	49	15.7	Pass
				50	0	15.8	Pass
	60	LCH	PI/2 BPSK	1	1	15.9	Pass
				162	0	15.10	Pass
			QPSK	1	1	15.11	Pass
				162	0	15.12	Pass
		HCH	PI/2 BPSK	1	160	15.13	Pass
				162	0	15.14	Pass
			QPSK	1	160	15.15	Pass
				162	0	15.16	Pass
	100	LCH	PI/2 BPSK	1	1	15.17	Pass
				273	0	15.18	Pass
			QPSK	1	1	15.19	Pass
				273	0	15.20	Pass
		HCH	PI/2 BPSK	1	271	15.21	Pass
				273	0	15.22	Pass
			QPSK	1	271	15.23	Pass
				273	0	15.24	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3450-3550MHz)	20 MHz	LCH	PI/2 BPSK	1	0	16.1	Pass
				50	0	16.2	Pass
			QPSK	1	0	16.3	Pass
				50	0	16.4	Pass
		HCH	PI/2 BPSK	1	50	16.5	Pass
				50	0	16.6	Pass
			QPSK	1	50	16.7	Pass
				50	0	16.8	Pass
	50 MHz	LCH	PI/2 BPSK	1	0	16.9	Pass
				128	0	16.10	Pass
			QPSK	1	0	16.11	Pass
				128	0	16.12	Pass
		HCH	PI/2 BPSK	1	132	16.13	Pass
				162	0	16.14	Pass
			QPSK	1	132	16.15	Pass
				162	0	16.16	Pass
	100 MHz	LCH	PI/2 BPSK	1	0	16.17	Pass
				273	0	16.18	Pass
			QPSK	1	0	16.19	Pass
				273	0	16.20	Pass
		HCH	PI/2 BPSK	1	272	16.21	Pass
				273	0	16.22	Pass
			QPSK	1	272	16.23	Pass
				273	0	16.24	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3700-3980MHz)	20 MHz	LCH	PI/2 BPSK	1	0	17.1	Pass
				50	0	17.2	Pass
			QPSK	1	0	17.3	Pass
				50	0	17.4	Pass
		HCH	PI/2 BPSK	1	50	17.5	Pass
				50	0	17.6	Pass
			QPSK	1	50	17.7	Pass
				50	0	17.8	Pass
	50 MHz	LCH	PI/2 BPSK	1	0	17.9	Pass
				128	0	17.10	Pass
			QPSK	1	0	17.11	Pass
				128	0	17.12	Pass
		HCH	PI/2 BPSK	1	132	17.13	Pass
				162	0	17.14	Pass
			QPSK	1	132	17.15	Pass
				162	0	17.16	Pass
	100 MHz	LCH	PI/2 BPSK	1	0	17.17	Pass
				273	0	17.18	Pass
			QPSK	1	0	17.19	Pass
				273	0	17.20	Pass
		HCH	PI/2 BPSK	1	272	17.21	Pass
				273	0	17.22	Pass
			QPSK	1	272	17.23	Pass
				273	0	17.24	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3450-3550MHz)	20 MHz	LCH	PI/2 BPSK	1	0	18.1	Pass
				50	0	18.2	Pass
			QPSK	1	0	18.3	Pass
				50	0	18.4	Pass
		HCH	PI/2 BPSK	1	50	18.5	Pass
				50	0	18.6	Pass
			QPSK	1	50	18.7	Pass
				50	0	18.8	Pass
	50 MHz	LCH	PI/2 BPSK	1	0	18.9	Pass
				128	0	18.10	Pass
			QPSK	1	0	18.11	Pass
				128	0	18.12	Pass
		HCH	PI/2 BPSK	1	132	18.13	Pass
				128	0	18.14	Pass
			QPSK	1	132	18.15	Pass
				128	0	18.16	Pass
	100 MHz	LCH	PI/2 BPSK	1	0	18.17	Pass
				273	0	18.18	Pass
			QPSK	1	0	18.19	Pass
				273	0	18.20	Pass
		HCH	PI/2 BPSK	1	272	18.21	Pass
				273	0	18.22	Pass
			QPSK	1	272	18.23	Pass
				273	0	18.24	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3700-3800MHz)	20 MHz	LCH	PI/2 BPSK	1	0	19.1	Pass
				50	0	19.2	Pass
			QPSK	1	0	19.3	Pass
				50	0	19.4	Pass
		HCH	PI/2 BPSK	1	50	19.5	Pass
				50	0	19.6	Pass
			QPSK	1	50	19.7	Pass
				50	0	19.8	Pass
	50 MHz	LCH	PI/2 BPSK	1	0	19.9	Pass
				128	0	19.10	Pass
			QPSK	1	0	19.11	Pass
				128	0	19.12	Pass
		HCH	PI/2 BPSK	1	132	19.13	Pass
				128	0	19.14	Pass
			QPSK	1	132	19.15	Pass
				128	0	19.16	Pass
	100 MHz	LCH	PI/2 BPSK	1	0	19.17	Pass
				273	0	19.18	Pass
			QPSK	1	0	19.19	Pass
				273	0	19.20	Pass
		HCH	PI/2 BPSK	1	272	19.21	Pass
				273	0	19.22	Pass
			QPSK	1	272	19.23	Pass
				273	0	19.24	Pass

A.7 Field Strength of Spurious Radiation

Note 1: All modes have been tested, and only the worst case data are shown here.

Note 2: The frequencies of verdict which are marked by "N/A" should be ignored because they are UE carrier frequency.

Note 3: Test plots please refer to the document "Annex No.:BL-EC21C0184-501 Data Part 5.pdf".

GSM and WCDMA Mode Test Verdict

Test Band	Test Channel	Refer to Plot ^{Note3}	Verdict
GSM 850	LCH	1.1	Pass
	MCH	1.2	Pass
	HCH	1.3	Pass
GSM 1900	LCH	2.1	Pass
	MCH	2.2	Pass
	HCH	2.3	Pass
EGPRS 850	LCH	3.1	Pass
	MCH	3.2	Pass
	HCH	3.3	Pass
EGPRS 1900	LCH	4.1	Pass
	MCH	4.2	Pass
	HCH	4.3	Pass
EVDO BC0	LCH	5.1	Pass
	MCH	5.2	Pass
	HCH	5.3	Pass
WCDMA Band 2	LCH	6.1	Pass
	MCH	6.2	Pass
	HCH	6.3	Pass
WCDMA Band 4	LCH	7.1	Pass
	MCH	7.2	Pass
	HCH	7.3	Pass
WCDMA Band 5	LCH	8.1	Pass
	MCH	8.2	Pass
	HCH	8.3	Pass

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot ^{Note3}	Verdict
Band 5	1.4 MHz	MCH	QPSK	RB1#0	9.1	Pass
	3 MHz	MCH	QPSK	RB1#0	9.2	Pass
	5 MHz	MCH	QPSK	RB1#0	9.3	Pass
	10 MHz	MCH	QPSK	RB1#0	9.4	Pass
Band 7	5 MHz	MCH	QPSK	RB1#0	10.1	Pass
	10 MHz	MCH	QPSK	RB1#0	10.2	Pass
	15 MHz	MCH	QPSK	RB1#0	10.3	Pass
	20 MHz	MCH	QPSK	RB1#0	10.4	Pass
Band 38	5 MHz	MCH	QPSK	RB1#0	11.1	Pass
	10 MHz	MCH	QPSK	RB1#0	11.2	Pass
	15 MHz	MCH	QPSK	RB1#0	11.3	Pass
	20 MHz	MCH	QPSK	RB1#0	11.4	Pass
Band 41	5 MHz	MCH	QPSK	RB1#0	12.1	Pass
	10 MHz	MCH	QPSK	RB1#0	12.2	Pass
	15 MHz	MCH	QPSK	RB1#0	12.3	Pass
	20 MHz	MCH	QPSK	RB1#0	12.4	Pass



Test Channel	Modulation	PCC RB		SCC RB		Refer to Plot ^{Note2}	Verdict
		Size	Offset	Size	Offset		
CA_7C							
20MHz+10MHz							
Low	QPSK	1	0	1	49	13.1	Pass
	16QAM	1	0	1	49	13.2	Pass
Mid	QPSK	1	0	1	49	13.3	Pass
	16QAM	1	0	1	49	13.4	Pass
High	QPSK	1	0	1	49	13.5	Pass
	16QAM	1	0	1	49	13.6	Pass
20MHz+20MHz							
Low	QPSK	1	0	1	99	13.7	Pass
	16QAM	1	0	1	99	13.8	Pass
Mid	QPSK	1	0	1	99	13.9	Pass
	16QAM	1	0	1	99	13.10	Pass
High	QPSK	1	0	1	99	13.11	Pass
	16QAM	1	0	1	99	13.12	Pass

NR Mode Test Verdict

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n41	20	MCH	PI/2 BPSK	25	12	14.1	Pass
			QPSK	25	12	14.2	Pass
	60	MCH	PI/2 BPSK	81	40	14.3	Pass
			QPSK	81	40	14.4	Pass
	100	MCH	PI/2 BPSK	135	67	14.5	Pass
			QPSK	135	67	14.6	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3450-3550MHz)	20	MCH	PI/2 BPSK	25	12	15.1	Pass
			QPSK	25	12	15.2	Pass
	50	MCH	PI/2 BPSK	64	32	15.3	Pass
			QPSK	64	32	15.4	Pass
	100	MCH	PI/2 BPSK	135	67	15.5	Pass
			QPSK	135	67	15.6	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n77(3700-3980MHz)	20	MCH	PI/2 BPSK	25	12	16.1	Pass
			QPSK	25	12	16.2	Pass
	50	MCH	PI/2 BPSK	64	32	16.3	Pass
			QPSK	64	32	16.4	Pass
	100	MCH	PI/2 BPSK	135	67	16.5	Pass
			QPSK	135	67	16.6	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3450-3550MHz)	20	MCH	PI/2 BPSK	25	12	17.1	Pass
			QPSK	25	12	17.2	Pass
	50	MCH	PI/2 BPSK	64	32	17.3	Pass
			QPSK	64	32	17.4	Pass
	100	MCH	PI/2 BPSK	135	67	17.5	Pass
			QPSK	135	67	17.6	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
n78(3700-3800MHz)	20	MCH	PI/2 BPSK	25	12	18.1	Pass
			QPSK	25	12	18.2	Pass
	50	MCH	PI/2 BPSK	64	32	18.3	Pass
			QPSK	64	32	18.4	Pass
	100	MCH	PI/2 BPSK	135	67	18.5	Pass
			QPSK	135	67	18.6	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_5A_n78A(3450-3550MHz)	10MHz(LTE)+100MHz(NR)	HCH	QPSK	50	0	1	0	19.1	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_5A_n78A(3700-3800M Hz)	10MHz(LTE)+100MHz(NR)	HCH	QPSK	50	0	1	0	20.1	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_7A_n78A(3450-3550M Hz)	20MHz(LTE)+100MHz(NR)	HCH	QPSK	100	0	1	0	21.1	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_7A_n78A(3700-3800M Hz)	20MHz(LTE)+100MHz(NR)	HCH	QPSK	100	0	1	0	22.1	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_38A_n78A(3450-3550M Hz)	20MHz(LTE)+100MHz(NR)	HCH	QPSK	100	0	1	0	23.1	Pass

Test Band	NR Test Bandwidth (MHz)	Test Channel	Test Mode	LTE UL RB No.	LTE UL RB Pos.	NR UL RB No.	NR UL RB Pos.	Refer to Plot ^{Note3}	Verdict
DC_38A_n78A(700-3800M Hz)	20MHz(LTE)+100MHz(NR)	HCH	QPSK	100	0	1	0	24.1	Pass

ANNEX B TEST SETUP PHOTOS

Please refer to the document “BL-EC21C0184-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer to the document “BL-EC21C0184-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer to the document “BL-EC21C0184-AI.PDF”.



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