

FCC Radio Test Report

FCC ID: M82-NMCR014T

Report No. : BTL-FCCP-3-2405T119A
Equipment : NMC LTE Card
Model Name : NMC-R014T, NMC-R014TZXXXXXXXXXXXXXXXXX,
NMC-YYR014TZXXXXXXXXXXXXXXXXX (Where "X" may be any
alphanumeric character, "-" or Blank, Y only for A-Z marketing purpose. Z is
equal to 0~9 or any alphanumeric character, except "N".)
Brand Name : Advantech
Applicant : Advantech Co., Ltd.
Address : No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 11491,
Taiwan.
Radio Function : WCDMA Band IV & LTE Band 7, 12, 13, 17, 38, 40, 41
FCC Rule Part(s) : FCC CFR Title 47, Part 27, Subpart L
FCC CFR Title 47, Part 27, Subpart M
FCC CFR Title 47, Part 27, Subpart H
FCC CFR Title 47, Part 27, Subpart F
FCC CFR Title 47, Part 27, Subpart D
Date of Receipt : 2024/7/1
Date of Test : 2025/1/6 ~ 2025/3/6
Issued Date : 2025/6/26

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2405T119A	R00	Original Report.	2025/4/9	Invalid
BTL-FCCP-3-2405T119A	R01	Revised report to address TCB's comments.	2025/6/26	Valid

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
2.1046 27.50(b)(10) 27.50(c)(10) 27.50(d)(4) 27.50(h)(2) 27.50(a)(3)	Conducted Output Power Effective Radiated Power & Equivalent Isotropic Radiated Power	APPENDIX A	Pass	-----
2.1049	Occupied Bandwidth	APPENDIX B	Pass	-----
2.1051 27.53(c)(2) 27.53(g) 27.53(m)(4) 27.53(a)(4)	Conducted Spurious Emissions	APPENDIX C	Pass	-----
2.1053 27.53(c)(2) 27.53(f) 27.53(g) 27.53(m)(4) 27.53(a)(4)	Radiated Spurious Emissions	APPENDIX D	Pass	-----
2.1051 27.53(c)(2)(4) 27.53(f) 27.53(g) 27.53(m)(4) 27.53(a)(4)	Band Edge Measurements	APPENDIX E	Pass	-----
-	Peak To Average Ratio	APPENDIX F	Pass	-----
2.1055 27.54	Frequency Stability	APPENDIX G	Pass	-----

Statement of Conformity

The statement of conformity is based on the binary decision rule according to IEC Guide 115 and ILAC G8 "simple acceptance" principle. Without considering measurement uncertainty, its specific risk is less than 50% PFA. (PFA: Probability of False Accept)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.

1.1 REFERENCE TEST GUIDANCE

ANSI C63.26-2015

ANSI/TIA-603-E-2016

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

1.2 TEST FACILITY

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C05 ☐ CB08 ☐ CB11 ☒ SR10 ☐ SR11

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C06 ☒ CB21 ☐ CB22

1.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k = 2$, providing a level of confidence of approximately **95 %**.

A. Effective Radiated Power & Equivalent Isotropic Radiated Power and Radiated emissions test :

Test Site	Measurement Frequency Range	U,(dB)
CB21	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.21
	6 GHz ~ 18 GHz	5.51
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.4 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
Conducted Output Power	23.3 °C, 51 %	AC 120V	Dolly Lin
Effective Radiated Power & Equivalent Isotropic Radiated Power	Refer to data	AC 120V	Mark Wang
Occupied Bandwidth	23.3 °C, 51 %	AC 120V	Dolly Lin
Conducted Spurious Emissions	23.3 °C, 51 %	AC 120V	Dolly Lin
Radiated Spurious Emissions	Refer to data	AC 120V	Mark Wang
Band Edge	23.3 °C, 51 %	AC 120V	Dolly Lin
Peak to Average Ratio	23.3 °C, 51 %	AC 120V	Dolly Lin
Frequency Stability	Normal and Extreme		Dolly Lin

2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	NMC LTE Card			
Model Name	NMC-R014T, NMC-R014TZXXXXXXXXXXXXXXXXXX, NMC-YYYYR014TZXXXXXXXXXXXXXXXXXX (Where “X” may be any alphanumeric character, “-”or Blank, Y only for A-Z marketing purpose. Z is equal to 0~9 or any alphanumeric character, except “N”).)			
Brand Name	Advantech			
Model Difference	Different model distribute to different area.			
Power Source	DC voltage supplied from host system.			
Power Rating	DC 12V			
Products Covered	1* LTE Module: Telit / LN920A12-WW			
IMEI No.	WCDMA Call Control Active Cell Setup Screen Cell Params Operating Mode Active Cell End Call Paging Parameters Handovers Clear UE Info 1 of 6 UE Information UE Expected Open Loop Transmit Power Call Processing Status RSRP Information RSRQ Information Active Cell Connected 1 of 3		LTE 2025/01/06 11:52 Fundamental Measurement Output Main Connected Continuous Phone-2 Phone-1 LTE Parameter Fundamental UE Report Measuring UE Power : 22.1 dBm UE Report LE Report IMSI (DEC) IMSI UE Category PCN Type PCN RSRP RSRQ SOC-1 RSRP SOC-2 RSRP RSRQ Neighbour Cell LTE Cell ID RSRP RSRQ H-DMB/TD-SCDMA WAT Cell ID RSRP W-CDMA/TD-SCDMA WAT Cell ID RSRP	
	Band UL Frequency (MHz) DL Frequency (MHz) WCDMA IV 1710 ~ 1755 2110 ~ 2155 LTE 7 2500 ~ 2570 2620 ~ 2690 LTE 12 699 ~ 716 729 ~ 746 LTE 13 777 ~ 787 746 ~ 756 LTE 17 704 ~ 716 734 ~ 746 LTE 38 2570 ~ 2620 2570 ~ 2620 LTE 40 2305 ~ 2315 2305 ~ 2315 2350 ~ 2360 2350 ~ 2360 LTE 41 2496 ~ 2690 2496 ~ 2690-			
Maximum EIRP	Band	BW (MHz)	Mode	Power (W)
	WCDMA IV	-	-	0.209
	LTE 7	5	QPSK	0.417
			16QAM	0.403
			64QAM	0.348
			256QAM	0.337
		10	QPSK	0.422
			16QAM	0.407
			64QAM	0.352
			256QAM	0.340
		15	QPSK	0.428
			16QAM	0.415
			64QAM	0.356
			256QAM	0.343
		20	QPSK	0.433
			16QAM	0.420
			64QAM	0.361
			256QAM	0.347

Maximum EIRP	Band	BW (MHz)	Mode	Power (W)
	LTE 38	5	QPSK	0.321
			16QAM	0.313
			64QAM	0.254
			256QAM	0.254
		10	QPSK	0.324
			16QAM	0.318
			64QAM	0.258
			256QAM	0.256
		15	QPSK	0.330
			16QAM	0.322
			64QAM	0.261
			256QAM	0.259
		20	QPSK	0.335
			16QAM	0.325
			64QAM	0.264
			256QAM	0.263
	LTE 40 (2305~2315MHz)	5	QPSK	0.228
			16QAM	0.218
			64QAM	0.179
			256QAM	0.175
		10	QPSK	0.230
			16QAM	0.221
			64QAM	0.181
			256QAM	0.177
	LTE 40 (2350~2360MHz)	5	QPSK	0.227
			16QAM	0.221
			64QAM	0.179
			256QAM	0.179
		10	QPSK	0.229
			16QAM	0.223
			64QAM	0.181
			256QAM	0.179
	LTE 41	5	QPSK	0.425
			16QAM	0.414
			64QAM	0.339
			256QAM	0.336
		10	QPSK	0.432
			16QAM	0.421
			64QAM	0.343
256QAM			0.340	
15		QPSK	0.439	
		16QAM	0.426	
		64QAM	0.348	
		256QAM	0.344	
20		QPSK	0.445	
		16QAM	0.431	
		64QAM	0.352	
		256QAM	0.348	

Maximum ERP	LTE 12	1.4	QPSK	0.106
			16QAM	0.102
			64QAM	0.089
			256QAM	0.090
		3	QPSK	0.108
			16QAM	0.103
			64QAM	0.091
			256QAM	0.091
		5	QPSK	0.109
			16QAM	0.105
			64QAM	0.092
			256QAM	0.092
		10	QPSK	0.110
			16QAM	0.106
			64QAM	0.093
			256QAM	0.094
	LTE 13	5	QPSK	0.105
			16QAM	0.108
			64QAM	0.087
			256QAM	0.086
		10	QPSK	0.106
			16QAM	0.109
			64QAM	0.088
			256QAM	0.087
	LTE 17	5	QPSK	0.151
			16QAM	0.152
			64QAM	0.123
			256QAM	0.127
		10	QPSK	0.153
			16QAM	0.154
			64QAM	0.124
			256QAM	0.128
Test Model		NMC-R014T		
Sample Status		Engineering Sample		
EUT Modification(s)		N/A		

NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

(2) Channel List:

WCDMA Band IV				
Test Frequency ID	UARFCN	Frequency of Uplink (MHz)	UARFCN	Frequency of Downlink (MHz)
Low Range	1312	1712.4	1537	2112.4
Mid Range	1413	1732.6	1638	2132.6
High Range	1513	1752.6	1738	2152.6

LTE Band 7					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	5	20775	2502.5	2775	2622.5
	10	20800	2505	2800	2625
	15	20825	2507.5	2825	2627.5
	20	20850	2510	2850	2630
Mid Range	5/10/15/20	21100	2535	3100	2655
High Range	5	21425	2567.5	3425	2687.5
	10	21400	2565	3400	2685
	15	21375	2562.5	3375	2682.5
	20	21350	2560	3350	2680

LTE Band 12					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	1.4	23017	699.7	5017	729.7
	3	23025	700.5	5025	730.5
	5	23035	701.5	5035	731.5
	10	23060	704	5060	734
Mid Range	1.4/3/5/10	23095	707.5	5095	737.5
High Range	1.4	23173	715.3	5173	745.3
	3	23165	714.5	5165	744.5
	5	23155	713.5	5155	743.5
	10	23130	711	5130	741

LTE Band 13					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	5	23205	779.5	5205	748.5
Mid Range	5/10	23230	782.0	5230	751
High Range	5	23255	784.5	5255	753.5

LTE Band 17					
Test Frequency ID	Bandwidth (MHz)	N _{UL}	Frequency of Uplink (MHz)	N _{DL}	Frequency of Downlink (MHz)
Low Range	5	23755	706.5	5755	736.5
	10	23780	709	5780	739
Mid Range	5/10	23790	710	5790	740
High Range	5	23825	713.5	5825	743.5
	10	23800	711	5800	741

LTE Band 38			
Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	37775	2572.5
	10	37800	2575
	15	37825	2577.5
	20	37850	2580
Mid Range	5/10/15/20	38000	2600
High Range	5	38225	2617.5
	10	38200	2615
	15	38175	2612.5
	20	38150	2610

LTE Band 40 (UL/DL: 2305~2315MHz)			
Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	38725	2307.5
Mid Range	5/10	38750	2310
High Range	5	38775	2312.5

LTE Band 40 (UL/DL: 2350~2360MHz)			
Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	39175	2352.5
Mid Range	5/10	39200	2355
High Range	5	39225	2357.5

LTE Band 41			
Test Frequency ID	Bandwidth (MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	39675	2498.5
	10	39700	2501.0
	15	39725	2503.5
	20	39750	2506.0
Mid Range	5/10/15/20	40620	2593
High Range	5	41565	2687.5
	10	41540	2685.0
	15	41515	2682.5
	20	41490	2680.0

(3) Table for Filed Antenna:

Dipole Antenna:

Antenna	Manufacture	Part Number	Type	Connector	Gain (dBi)	Note
1	Cortec	AN0750-64S01BSM	Dipole	SMA Male	0.13	WCDMA Band IV
					3.27	LTE Band 7
					-0.52	LTE Band 12
					-0.34	LTE Band 13
					0.95	LTE Band 17
					2.15	LTE Band 38
					0.46	LTE Band 40 (2305~2315MHz)
					0.49	LTE Band 40 (2350~2360MHz)
					3.27	LTE Band 41

Patch Type Antenna:

Antenna	Manufacture	Part Number	Type	Connector	Gain (dBi)	Note
1	Cortec	DR0727-9007BSM	PiFa	SMA Male	-1.24	WCDMA Band IV
					-2.8	LTE Band 7
					-3.18	LTE Band 12
					-2.78	LTE Band 13
					-3.18	LTE Band 17
					-2.36	LTE Band 38
					-2.65	LTE Band 40
					-1.21	LTE Band 41
2	Cortec	DR0727-9007BSM	PiFa	SMA Male	-2.47	WCDMA Band IV
					-2.07	LTE Band 7
					-1.07	LTE Band 12
					-2.78	LTE Band 13
					-1.07	LTE Band 17
					-0.79	LTE Band 38
					-1.59	LTE Band 40
					-0.79	LTE Band 41

(4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2 TEST MODES

WCDMA BAND IV MODE			
Test Item	Available Channel	Tested Channel	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	1312 to 1513	1312, 1413, 1513	WCDMA, HSDPA, HSUPA
Occupied Bandwidth	1312 to 1513	1312, 1413, 1513	WCDMA
Conducted Spurious Emissions	1312 to 1513	1413	WCDMA
Radiated Spurious Emissions	1312 to 1513	1413	WCDMA
Band Edge	1312 to 1513	1312, 1513	WCDMA
Peak To Average Ratio	1312 to 1513	1312, 1413, 1513	WCDMA
Frequency Stability	1312 to 1513	1312, 1513	WCDMA

LTE BAND 7 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/12RB/25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/25RB/50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/36RB/75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/50RB/100RB
Occupied Bandwidth	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM, 256QAM	75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM, 256QAM	100RB
Conducted Spurious Emissions	20775 to 21425	21100	5MHz	QPSK	1RB
	20850 to 21350	21100	20MHz	QPSK	1RB
Radiated Spurious Emissions	20775 to 21425	21100	5MHz	QPSK	1RB
	20850 to 21350	21100	20MHz	QPSK	1RB
Band Edge	20775 to 21425	20775, 21425	5MHz	QPSK	1RB/25RB
	20800 to 21400	20800, 21400	10MHz	QPSK	1RB/50RB
	20825 to 21375	20825, 21375	15MHz	QPSK	1RB/75RB
	20850 to 21350	20850, 21350	20MHz	QPSK	1RB/100RB
Peak To Average Ratio	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
Frequency Stability	20850 to 21350	20850, 21350	20MHz	QPSK	100RB

LTE BAND 12 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Effective Radiated Power	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/3RB/6RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/8RB/15RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/12RB/25RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/25RB/50RB
Frequency Stability	23060 to 23130	23060, 23130	10MHz	QPSK	50RB
Occupied Bandwidth	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	6RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	15RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50RB
Peak to Average Ratio	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
Band Edge	23017 to 23173	23017, 23173	1.4MHz	QPSK	1RB/6RB
	23025 to 23165	23025, 23165	3MHz	QPSK	1RB/15RB
	23035 to 23155	23035, 23155	5MHz	QPSK	1RB/25RB
	23060 to 23130	23060, 23130	10MHz	QPSK	1RB/50RB
Conducted Emission	23017 to 23173	23095	1.4MHz	QPSK	1RB
	23025 to 23165	23095	3MHz	QPSK	1RB
	23035 to 23155	23095	5MHz	QPSK	1RB
	23060 to 23130	23095	10MHz	QPSK	1RB
Radiated Emission	23060 to 23130	23095	10MHz	QPSK	1RB

LTE BAND 13 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power& Effective Radiated Power	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM,256QAM	1RB/12RB/25RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM,256QAM	1RB/25RB/50RB
Occupied Bandwidth	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM,256QAM	25RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM,256QAM	50RB
Band Edge	23205 to 23255	23205, 23255	5MHz	QPSK	1RB/25RB
	23230	23230	10MHz	QPSK	1RB/50RB
Conducted Emission	23205 to 23255	23230	5MHz	QPSK	1RB
	23230	23230	10MHz	QPSK	1RB
Radiated Emission	23230	23230	10MHz	QPSK	1RB
Peak to Average Ratio	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM,256QAM	1RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM,256QAM	1RB
Frequency Stability	23230	23230	10MHz	QPSK	50RB

LTE BAND 17 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Output Power & ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM, 64QAM,256QAM	1RB/12RB/25RB
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM, 64QAM,256QAM	1RB/25RB/50RB
Occupied Bandwidth	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM, 64QAM,256QAM	25RB
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM, 64QAM,256QAM	50RB
Conducted Spurious Emissions	23755 to 23825	23790	5MHz	QPSK	1RB
	23780 to 23800	23790	20MHz	QPSK	1RB
Radiated Spurious Emissions	23755 to 23825	23790	5MHz	QPSK	1RB
	23780 to 23800	23790	20MHz	QPSK	1RB
Band Edge	23755 to 23825	23755, 23825	5MHz	QPSK	1RB/25RB
	23780 to 23800	23780, 23800	10MHz	QPSK	1RB/50RB
Peak to Average Ratio	23755 to 23825	23755, 23790, 23825	5MHz	QPSK, 16QAM, 64QAM,256QAM	1RB
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK, 16QAM, 64QAM,256QAM	1RB
Frequency Stability	23780 to 23800	23780, 23800	10MHz	QPSK	50RB

LTE BAND 38 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Output Power & EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/12RB/25RB
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/25RB/50RB
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/36RB/75RB
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/50RB/100RB
Occupied Bandwidth	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25RB
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50RB
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM, 256QAM	75RB
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM, 256QAM	100RB
Conducted Spurious Emissions	37850 to 38150	38000	5MHz	QPSK	1RB
	37850 to 38150	38000	20MHz	QPSK	1RB
Radiated Spurious Emissions	37850 to 38150	38000	5MHz	QPSK	1RB
	37850 to 38150	38000	20MHz	QPSK	1RB
Band Edge	37775 to 38225	37775, 38225	5MHz	QPSK	1RB/25RB
	37800 to 38200	37800, 38200	10MHz	QPSK	1RB/50RB
	37825 to 38175	37825, 38175	15MHz	QPSK	1RB/75RB
	37850 to 38150	37850, 38150	20MHz	QPSK	1RB/100RB
Peak to Average Ratio	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	37850 to 38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
Frequency Stability	37850 to 38150	37850, 38150	20MHz	QPSK	100RB

LTE BAND 40 MODE (2305~2315MHz)					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Output Power & EIRP	38725 to 38775	38725, 38750, 38775	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/12RB/25RB
	38750	38750	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/25RB/50RB
Occupied Bandwidth	38725 to 38775	38725, 38750, 38775	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25RB
	38750	38750	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50RB
Band Edge	38725 to 38775	38725, 38775	5MHz	QPSK	1RB/25RB
	38750	38750	10MHz	QPSK	1RB/50RB
Conducted Emission	38725 to 38775	38750	5MHz	QPSK	1RB
	38750	38750	10MHz	QPSK	1RB
Radiated Emission	38725 to 38775	38750	5MHz	QPSK	1RB
	38750	38750	10MHz	QPSK	1RB
Peak to Average Ratio	38725 to 38775	38725, 38750, 38775	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	38750	38750	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
Frequency Stability	38750	38750	10MHz	QPSK	50RB

LTE BAND 40 MODE (2350~2360MHz)					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Output Power & EIRP	39175 to 39225	39175, 39200, 39225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/12RB/25RB
	39200	39200	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB/25RB/50RB
Occupied Bandwidth	39175 to 39225	39175, 39200, 39225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	25RB
	39200	39200	10MHz	QPSK, 16QAM, 64QAM, 256QAM	50RB
Band Edge	39175 to 39225	39175, 39225	5MHz	QPSK	1RB/25RB
	39200	39200	10MHz	QPSK	1RB/50RB
Conducted Emission	39175 to 39225	39200	5MHz	QPSK	1RB
	39200	39200	10MHz	QPSK	1RB
Radiated Emission	39175 to 39225	39200	5MHz	QPSK	1RB
	39200	39200	10MHz	QPSK	1RB
Peak to Average Ratio	39175 to 39225	39175, 39200, 39225	5MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
	39200	38750	10MHz	QPSK, 16QAM, 64QAM, 256QAM	1RB
Frequency Stability	39200	39200	10MHz	QPSK	50RB

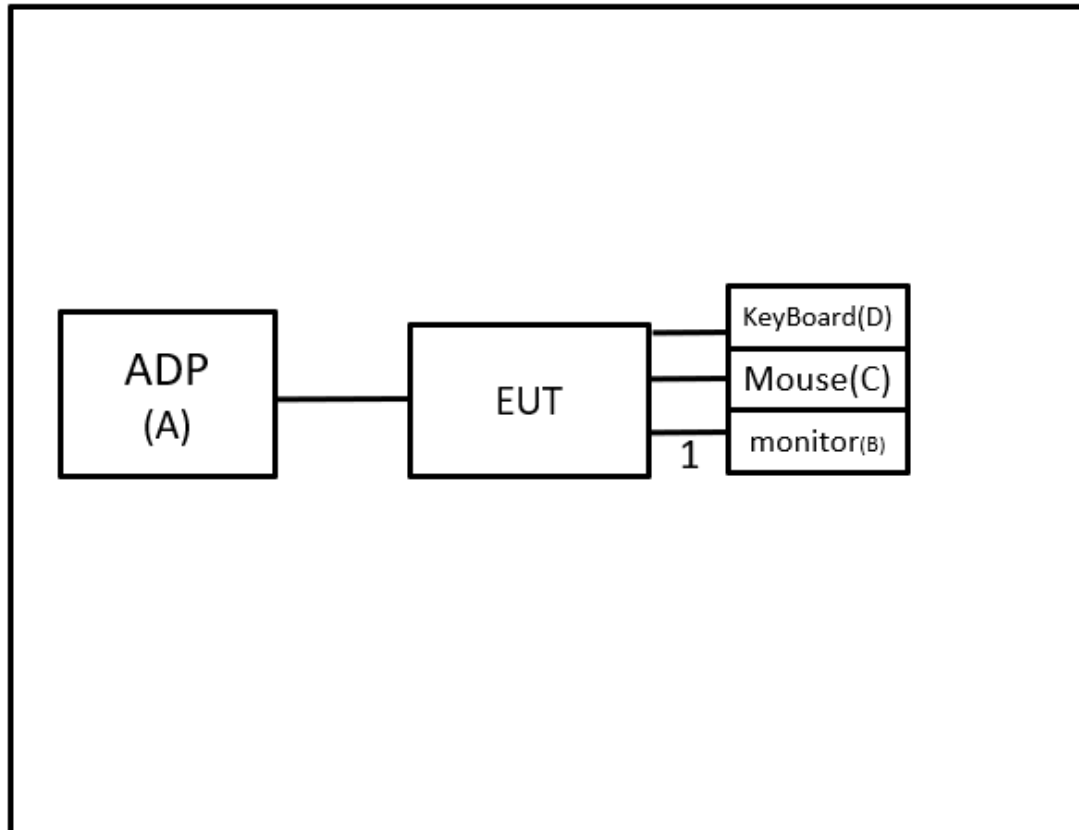
LTE BAND 41 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1RB/12RB/25RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1RB/25RB/50RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1RB/36RB/75RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1RB/50RB/100RB
Occupied Bandwidth	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	25RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	50RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	75RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	100RB
Conducted Spurious Emissions	39675 to 41565	40620	5MHz	QPSK	1RB
	39750 to 41490	40620	20MHz	QPSK	1RB
Radiated Spurious Emissions	39750 to 41490	40620	20MHz	QPSK	1RB
Band Edge	39675 to 41565	39675, 41565	5MHz	QPSK	1RB/25RB
	39700 to 41540	39700, 41540	10MHz	QPSK	1RB/50RB
	39725 to 41515	39725, 41515	15MHz	QPSK	1RB/75RB
	39750 to 41490	39750, 41490	20MHz	QPSK	1RB/100RB
Peak to Average Ratio	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1RB
	39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1RB
	39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1RB
	39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1RB
Frequency Stability	39750 to 41490	39750, 41490	20MHz	QPSK	100RB

NOTE:

- (1) For Radiated Spurious Emissions both QPSK and 16QAM are evaluated, but only the worst case (QPSK) is recorded.

2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	ADP	FSP GROUP INC	FSP150-AHAN3	N/A	Supplied by test requester.
B	Monitor	ACER	V227-Q	N/A	Furnished by test lab.
C	Mouse	Lenovo	SM-8823	N/A	Furnished by test lab.
D	Keyboard	Bloody	KB-8	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1m	VGA HD-15	Furnished by test lab.

3 CONDUCTED OUTPUT POWER AND EFFECTIVE RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER MEASUREMENT

3.1 LIMIT

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.

Mobile stations of BRS/EBS are operating in the 2496–2690 MHz band limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

Control stations and mobile stations transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands and fixed stations transmitting in the 787–788 MHz and 805–806 MHz bands are limited to 30 watts ERP.

Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

Control and mobile stations in the 698–746 MHz band are limited to 30 watts ERP.

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz 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 or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305–2315 MHz and 2350–2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305–2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

NOTE:

(1) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level (dBm)		Correct Factor (dB)		Measurement Value (dBm)
-29.66	+	34.26	=	4.60

Measurement Value (dBm)		Limit Value (dBm)		Margin Level (dB)
4.60	-	38.45	=	-33.85

3.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.

EIRP / ERP Power Measurement:

EIRP = Conducted Power + Antenna gain.

ERP power = EIPR power - 2.15 dBi.

Conducted Measurement:

The EUT was set up for the maximum power with LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Radiated Measurement:

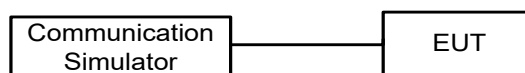
- Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G
- EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- ERP can be calculated form EIRP by subtracting the gain of dipole, ERP = EIPR - 2.15dBi..
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.3 DEVIATION FROM TEST STANDARD

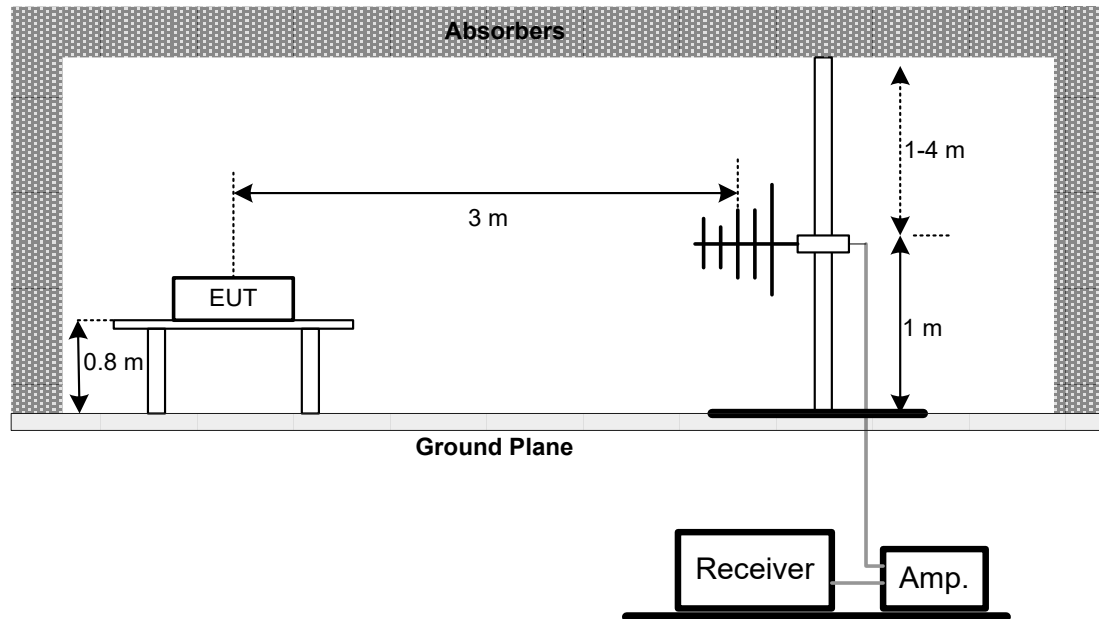
No deviation.

3.4 TEST SETUP

Conducted Measurement:



Radiated Measurement:



3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULT

Please refer to the APPENDIX A.

4 OCCUPIED BANDWIDTH MEASUREMENT

4.1 TEST PROCEDURE

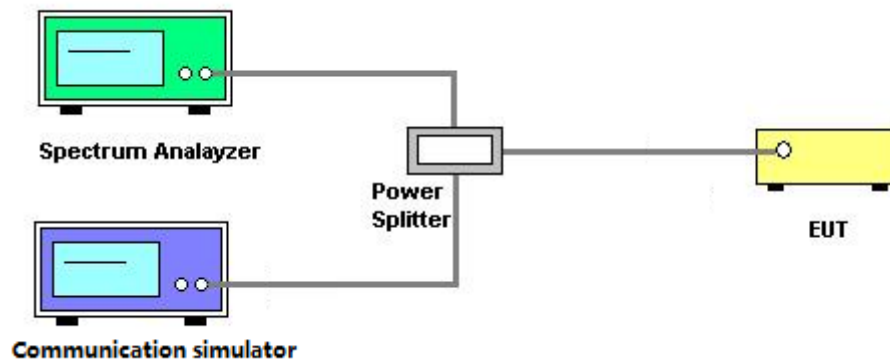
The testing follows FCC KDB 971168 v03r01 Section 4.

- The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.
- The EUT was connected to spectrum analyzer and system simulator via a power divider.
- $RBW = (1\% \sim 5\%) * EBW$
 $VBW \geq 3 * RBW$.
- Set spectrum analyzer with Peak detector.

4.2 DEVIATION FROM TEST STANDARD

No deviation.

4.3 TEST SETUP



4.4 TEST RESULT

Please refer to the APPENDIX B.

5 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

5.1 LIMIT

For operations in the 600MHz band and 698 -746 MHz band, 776-788 MHz band, 1710-1755 MHz band: 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. The emission limit equal to -13dBm.

For operations in the 2496 -2690 MHz band:

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 $55 + 10 \log(P)$ dB. The emission limit equal to -25dBm.

For operations in the 2305-2315 MHz and 2350-2360 MHz bands:

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 $70 + 10 \log(P)$ dB. The emission limit equal to -40dBm.

5.2 TEST PROCEDURE

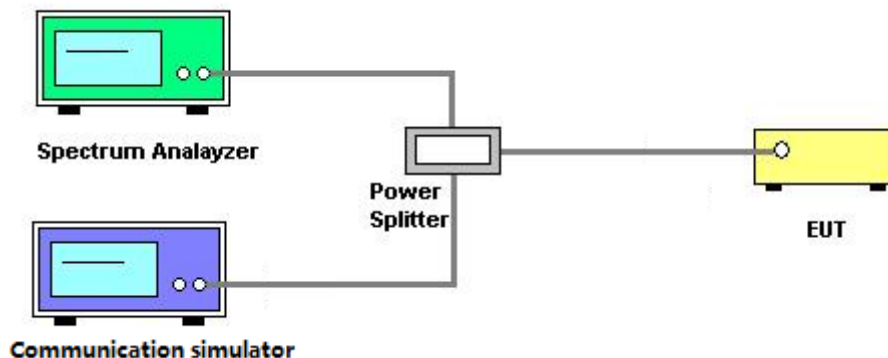
The testing follows FCC KDB 971168 v03r01 Section 6.

- The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The band edges of low and high channels for the highest RF powers were measured. Set RBW $\geq$ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- Set spectrum analyzer with Peak detector.
- The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 TEST RESULT

Please refer to the APPENDIX C.

6 RADIATED SPURIOUS EMISSIONS MEASUREMENT

6.1 LIMIT

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. The emission limit equal to -13dBm. (Part 27 Subpart L & H)

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 $55 + 10 \log(P)$ dB. The emission limit equal to -25dBm. (Part 27 Subpart M)

NOTE:

(2) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level (dBm)		Correct Factor (dB)		Measurement Value (dBm)
-50.43	+	-2.11	=	-52.54

Measurement Value (dBm)		Limit Value (dBm)		Margin Level (dB)
-52.54	-	-13	=	-39.54

6.2 TEST PROCEDURE

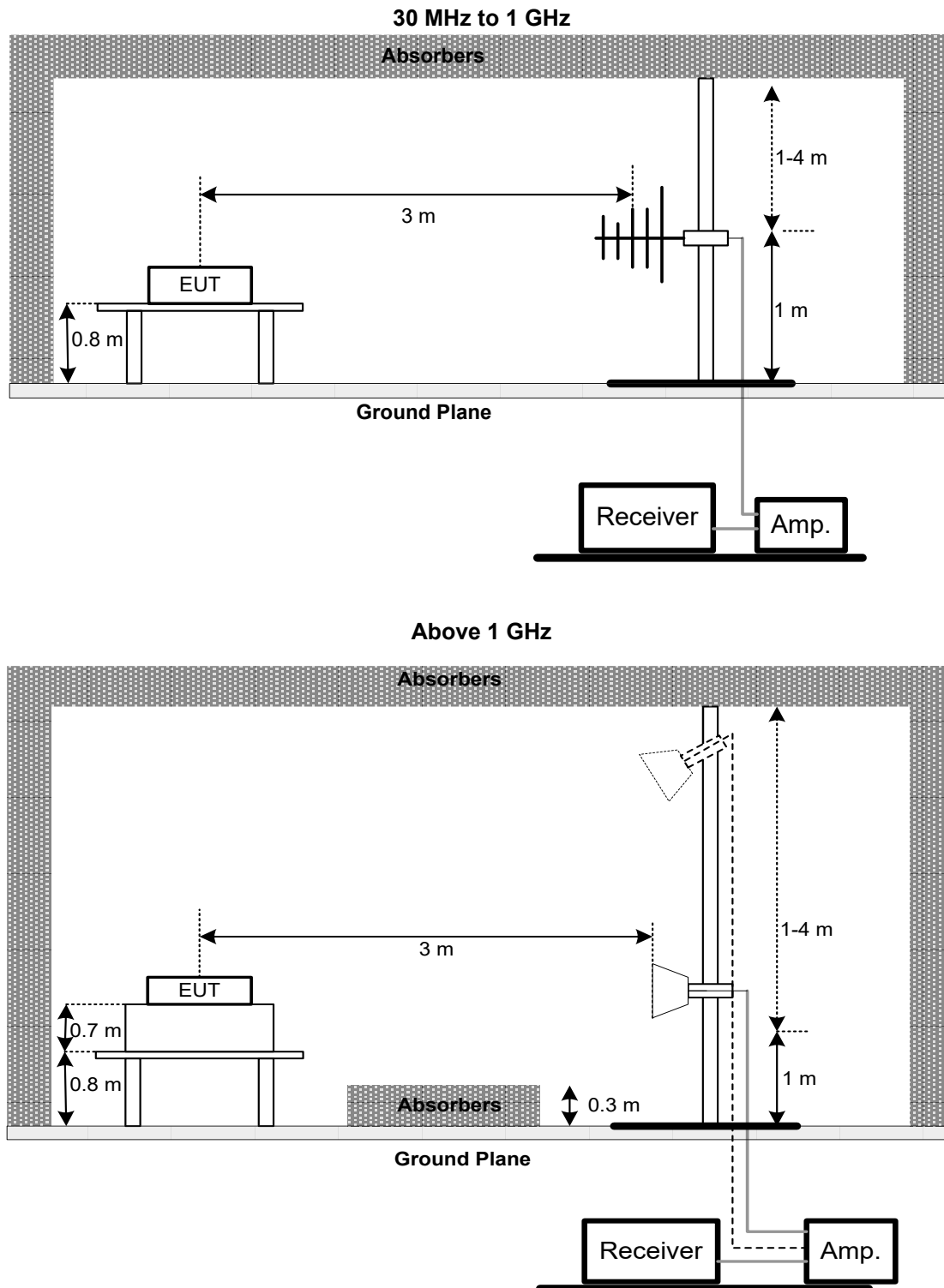
The testing follows FCC KDB 971168 v03r01 Section 6.2.

- In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$
- ERP power can be calculated form EIRP power by subtracting the gain of dipole,
 $ERP \text{ power} = EIRP \text{ power} - 2.15 \text{ dBi}.$
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz / 3 MHz.

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULT

Please refer to the APPENDIX D

7 BAND EDGE MEASUREMENT

7.1 LIMIT

For operations in the 776-788 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. 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. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least $65 + 10 \log_{10} p(\text{watts})$, dB, for mobile and portable equipment.

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. 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.

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

(i) By a factor of

not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation,

not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz,

not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz,

and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of

not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz,

$55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz,

$61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz,

$67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;

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

and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

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

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

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

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

7.2 TEST PROCEDURE

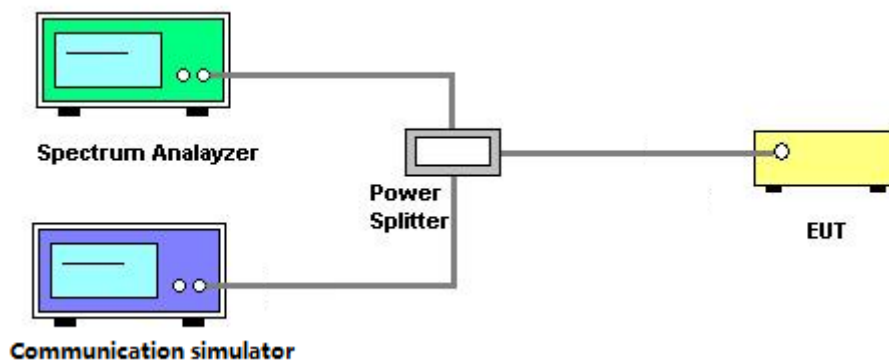
The testing follows FCC KDB 971168 v03r01 Section 6.

- a. All measurements were done at low and high operational frequency range.
- b. Record the max trace plot into the test report.

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP



7.5 TEST RESULT

Please refer to the APPENDIX E.

8 PEAK TO AVERAGE RATIO MEASUREMENT

8.1 LIMIT

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.

8.2 TEST PROCEDURE

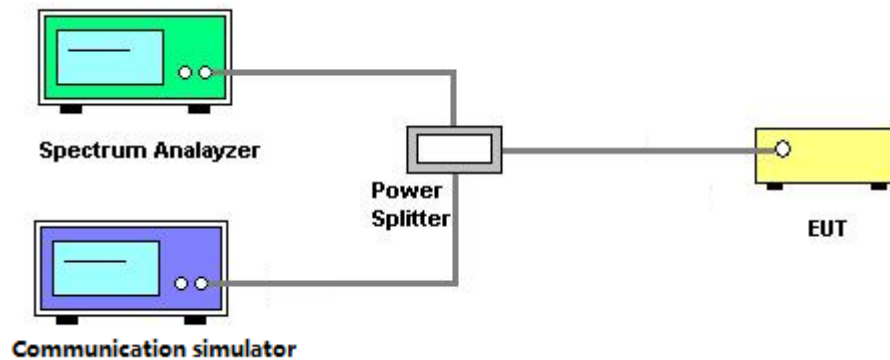
The testing follows FCC KDB 971168 v03r01 Section 5.7.

- Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth.
- Set the number of counts to a value that stabilizes the measured CCDF curve.
- Record the maximum PAPR level associated with a probability of 0.1%.

8.3 DEVIATION FROM TEST STANDARD

No deviation.

8.4 TEST SETUP



8.5 TEST RESULT

Please refer to the APPENDIX F.

9 FREQUENCY STABILITY MEASUREMENT

9.1 LIMIT

± 1.5 ppm is for base and fixed station. ± 2.5 ppm is for mobile station.

9.2 TEST PROCEDURE

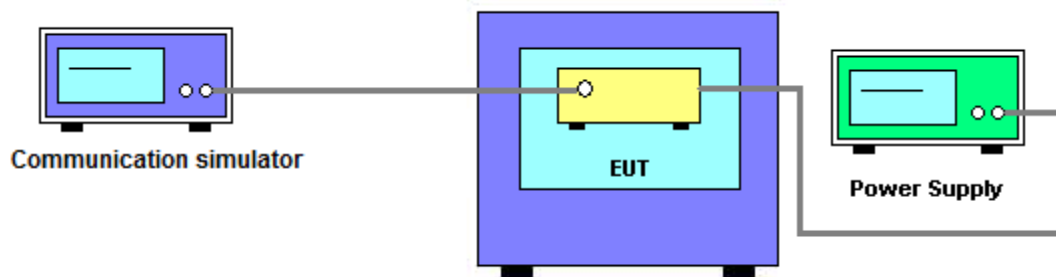
The testing follows FCC KDB 971168 v03r01 Section 9.

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
- The frequency error was recorded frequency error from the communication simulator.

9.3 DEVIATION FROM TEST STANDARD

No deviation.

9.4 TEST SETUP



9.5 TEST RESULT

Please refer to the APPENDIX G.

10 LIST OF MEASURING EQUIPMENTS

Effective Radiated Power 、 Effective Isotropic Radiated Power and Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC330N	980850	2024/9/5	2025/9/4
2	Preamplifier	EMCI	EMC118A45SE	980819	2024/3/6	2025/3/5
3	Preamplifier	EMCI	EMC118A45SE	980819	2025/3/5	2026/3/4
4	Pre-Amplifier	EMCI	EMC184045SE	980907	2024/9/4	2025/9/3
5	Preamplifier	EMCI	EMC001340	980579	2024/9/4	2025/9/3
6	Test Cable	EMCI	EMC104-SM-1000	180809	2024/3/8	2025/3/7
7	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2024/3/8	2025/3/7
8	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2024/3/8	2025/3/7
9	EXA Signal Analyzer	keysight	N9020B	MY57120120	2024/2/23	2025/2/22
10	EXA Signal Analyzer	keysight	N9020B	MY57120120	2025/2/19	2026/2/18
11	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2024/9/9	2025/9/8
12	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2024/5/9	2025/5/8
13	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2024/5/17	2025/5/16
14	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2024/6/14	2025/6/13
15	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2024/6/14	2025/6/13
16	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2024/3/13	2025/3/12
17	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2024/3/13	2025/3/12
18	Measurement Software	EZ	EZ EMC (Version NB-03A1-01)	N/A	N/A	N/A
19	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2024/11/19	2025/11/18

Conducted Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSV7	103032	2024/8/7	2025/8/6
2	EXA Spectrum Analyzer	Keysight	N9010A	MY56480489	2025/1/2	2026/1/1
3	Thermal Chamber	HOLINK	H-TH-2SP-B	EK04101902	2024/6/28	2025/6/27
4	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2024/7/7	2025/7/6
5	Radio Communication Analyzer	ANRITSU	MT8820C	6201168846	2024/8/20	2025/8/19

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.
All calibration period of equipment list is one year.

11 EUT TEST PHOTO

Please refer to document Appendix No.: TP-2405T119A-FCCP-1 (APPENDIX-TEST PHOTOS).

12 EUT PHOTOS

Please refer to document Appendix No.: EP-2405T119A-1 (APPENDIX-EUT PHOTOS).

APPENDIX A CONDUCTED OUTPUT POWER AND EFFECTIVE RADIATED POWER & EQUIVALENT ISOTROPIC RADIATED POWER

Conducted Output Power and calculated ERP/EIRP:

WCDMA Band IV Power:

Band	Mode	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
WCDMA Band IV	Rel 99	1312/1537	1712.4	23.02	23.15	0.207
		1413/1638	1732.6	23.07	23.20	0.209
		1513/1738	1752.6	23.06	23.19	0.208

Band	Sub-test	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
HSDPA IV	1	1312/1537	1712.4	22.13	22.26	0.168
		1413/1638	1732.6	22.16	22.29	0.169
		1513/1738	1752.6	22.19	22.32	0.171
	2	1312/1537	1712.4	22.12	22.25	0.168
		1413/1638	1732.6	22.14	22.27	0.169
		1513/1738	1752.6	22.09	22.22	0.167
	3	1312/1537	1712.4	21.55	21.68	0.147
		1413/1638	1732.6	21.63	21.76	0.150
		1513/1738	1752.6	21.66	21.79	0.151
	4	1312/1537	1712.4	21.64	21.77	0.150
		1413/1638	1732.6	21.65	21.78	0.151
		1513/1738	1752.6	21.68	21.81	0.152

Band	Sub-test	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
HSUPA IV	1	1312/1537	1712.4	22.08	22.21	0.166
		1413/1638	1732.6	22.11	22.24	0.167
		1513/1738	1752.6	22.07	22.20	0.166
	2	1312/1537	1712.4	20.26	20.39	0.109
		1413/1638	1732.6	20.19	20.32	0.108
		1513/1738	1752.6	20.21	20.34	0.108
	3	1312/1537	1712.4	21.13	21.26	0.134
		1413/1638	1732.6	21.25	21.38	0.137
		1513/1738	1752.6	21.17	21.30	0.135
	4	1312/1537	1712.4	20.17	20.30	0.107
		1413/1638	1732.6	20.12	20.25	0.106
		1513/1738	1752.6	20.18	20.31	0.107
	5	1312/1537	1712.4	22.23	22.36	0.172
		1413/1638	1732.6	22.16	22.29	0.169
		1513/1738	1752.6	22.18	22.31	0.170

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

LTE Band 7 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
7	5	20775	2502.5	QPSK	1	0	0	22.65	25.92	0.391
					1	12	0	22.53	25.80	0.380
					1	24	0	22.66	25.93	0.392
					25	0	1	21.65	24.92	0.310
				16QAM	1	0	1	22.72	25.99	0.397
					1	12	1	22.65	25.92	0.391
					1	24	1	22.70	25.97	0.395
					25	0	2	21.70	24.97	0.314
				64QAM	1	0	2	21.83	25.10	0.324
					1	12	2	21.76	25.03	0.318
					1	24	2	21.70	24.97	0.314
					25	0	3	21.04	24.31	0.270
				256QAM	1	0	4	21.77	25.04	0.319
					1	12	4	21.70	24.97	0.314
					1	24	4	21.75	25.02	0.318
					25	0	5	21.03	24.30	0.269
		21100	2535.0	QPSK	1	0	0	22.93	26.20	0.417
					1	12	0	22.83	26.10	0.407
					1	24	0	22.77	26.04	0.402
					25	0	1	21.95	25.22	0.333
				16QAM	1	0	1	22.73	26.00	0.398
					1	12	1	22.78	26.05	0.403
					1	24	1	22.75	26.02	0.400
					25	0	2	21.95	25.22	0.333
				64QAM	1	0	2	22.12	25.39	0.346
					1	12	2	22.14	25.41	0.348
					1	24	2	22.07	25.34	0.342
					25	0	3	21.02	24.29	0.269
				256QAM	1	0	4	21.93	25.20	0.331
					1	12	4	22.00	25.27	0.337
					1	24	4	21.90	25.17	0.329
					25	0	5	21.04	24.31	0.270
		21425	2567.5	QPSK	1	0	0	22.73	26.00	0.398
					1	12	0	22.63	25.90	0.389
					1	24	0	22.69	25.96	0.394
					25	0	1	21.79	25.06	0.321
				16QAM	1	0	1	22.70	25.97	0.395
					1	12	1	22.68	25.95	0.394
					1	24	1	22.64	25.91	0.390
					25	0	2	21.69	24.96	0.313
				64QAM	1	0	2	21.79	25.06	0.321
					1	12	2	21.74	25.01	0.317
					1	24	2	21.65	24.92	0.310
					25	0	3	21.01	24.28	0.268
				256QAM	1	0	4	21.65	24.92	0.310
					1	12	4	21.79	25.06	0.321
					1	24	4	21.70	24.97	0.314
					25	0	5	21.03	24.30	0.269

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
7	10	20800	25005.0	QPSK	1	0	0	22.69	25.96	0.394
					1	24	0	22.58	25.85	0.385
					1	49	0	22.70	25.97	0.395
					50	0	1	21.72	24.99	0.316
				16QAM	1	0	1	22.79	26.06	0.404
					1	24	1	22.70	25.97	0.395
					1	49	1	22.76	26.03	0.401
					50	0	2	21.77	25.04	0.319
				64QAM	1	0	2	21.88	25.15	0.327
					1	24	2	21.81	25.08	0.322
					1	49	2	21.78	25.05	0.320
					50	0	3	21.05	24.32	0.270
				256QAM	1	0	4	21.81	25.08	0.322
					1	24	4	21.76	25.03	0.318
					1	49	4	21.82	25.09	0.323
					50	0	5	21.05	24.32	0.270
		21100	2535.0	QPSK	1	0	0	22.98	26.25	0.422
					1	24	0	22.90	26.17	0.414
					1	49	0	22.82	26.09	0.406
					50	0	1	22.02	25.29	0.338
				16QAM	1	0	1	22.80	26.07	0.405
					1	24	1	22.83	26.10	0.407
					1	49	1	22.82	26.09	0.406
					50	0	2	22.00	25.27	0.337
				64QAM	1	0	2	22.18	25.45	0.351
					1	24	2	22.20	25.47	0.352
					1	49	2	22.14	25.41	0.348
					50	0	3	21.09	24.36	0.273
				256QAM	1	0	4	21.99	25.26	0.336
					1	24	4	22.04	25.31	0.340
					1	49	4	21.96	25.23	0.333
					50	0	5	21.08	24.35	0.272
		21400	2565.0	QPSK	1	0	0	22.79	26.06	0.404
					1	24	0	22.70	25.97	0.395
					1	49	0	22.73	26.00	0.398
					50	0	1	21.87	25.14	0.327
				16QAM	1	0	1	22.75	26.02	0.400
					1	24	1	22.72	25.99	0.397
					1	49	1	22.69	25.96	0.394
					50	0	2	21.73	25.00	0.316
				64QAM	1	0	2	21.86	25.13	0.326
					1	24	2	21.80	25.07	0.321
					1	49	2	21.72	24.99	0.316
					50	0	3	21.02	24.29	0.269
				256QAM	1	0	4	21.69	24.96	0.313
					1	24	4	21.84	25.11	0.324
					1	49	4	21.75	25.02	0.318
					50	0	5	21.07	24.34	0.272

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
7	15	20825	2507.5	QPSK	1	0	0	22.77	26.04	0.402
					1	38	0	22.64	25.91	0.390
					1	74	0	22.77	26.04	0.402
					75	0	1	21.80	25.07	0.321
				16QAM	1	0	1	22.85	26.12	0.409
					1	38	1	22.78	26.05	0.403
					1	74	1	22.81	26.08	0.406
					75	0	2	21.81	25.08	0.322
				64QAM	1	0	2	21.94	25.21	0.332
					1	38	2	21.87	25.14	0.327
					1	74	2	21.82	25.09	0.323
					75	0	3	21.07	24.34	0.272
				256QAM	1	0	4	21.86	25.13	0.326
					1	38	4	21.83	25.10	0.324
					1	74	4	21.90	25.17	0.329
					75	0	5	21.07	24.34	0.272
		21100	2535.0	QPSK	1	0	0	23.04	26.31	0.428
					1	38	0	22.97	26.24	0.421
					1	74	0	22.86	26.13	0.410
					75	0	1	22.08	25.35	0.343
				16QAM	1	0	1	22.87	26.14	0.411
					1	38	1	22.91	26.18	0.415
					1	74	1	22.87	26.14	0.411
					75	0	2	22.05	25.32	0.340
				64QAM	1	0	2	22.24	25.51	0.356
					1	38	2	22.25	25.52	0.356
					1	74	2	22.21	25.48	0.353
					75	0	3	21.16	24.43	0.277
				256QAM	1	0	4	22.03	25.30	0.339
					1	38	4	22.08	25.35	0.343
					1	74	4	22.02	25.29	0.338
					75	0	5	21.16	24.43	0.277
		21375	2562.5	QPSK	1	0	0	22.85	26.12	0.409
					1	38	0	22.78	26.05	0.403
					1	74	0	22.80	26.07	0.405
					75	0	1	21.91	25.18	0.330
				16QAM	1	0	1	22.79	26.06	0.404
					1	38	1	22.77	26.04	0.402
					1	74	1	22.75	26.02	0.400
					75	0	2	21.78	25.05	0.320
				64QAM	1	0	2	21.94	25.21	0.332
					1	38	2	21.85	25.12	0.325
					1	74	2	21.78	25.05	0.320
					75	0	3	21.03	24.30	0.269
				256QAM	1	0	4	21.77	25.04	0.319
					1	38	4	21.88	25.15	0.327
					1	74	4	21.80	25.07	0.321
					75	0	5	21.11	24.38	0.274

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
7	20	20850	2510.0	QPSK	1	0	0	22.84	26.11	0.408
					1	49	0	22.71	25.98	0.396
					1	99	0	22.83	26.10	0.407
					100	0	1	21.87	25.14	0.327
				16QAM	1	0	1	22.89	26.16	0.413
					1	49	1	22.82	26.09	0.406
					1	99	1	22.85	26.12	0.409
					100	0	2	21.85	25.12	0.325
				64QAM	1	0	2	21.99	25.26	0.336
					1	49	2	21.94	25.21	0.332
					1	99	2	21.89	25.16	0.328
					100	0	3	21.14	24.41	0.276
				256QAM	1	0	4	21.92	25.19	0.330
					1	49	4	21.91	25.18	0.330
					1	99	4	21.95	25.22	0.333
					100	0	5	21.13	24.40	0.275
		21100	2535.0	QPSK	1	0	0	23.09	26.36	0.433
					1	49	0	23.03	26.30	0.427
					1	99	0	22.92	26.19	0.416
					100	0	1	22.12	25.39	0.346
				16QAM	1	0	1	22.93	26.20	0.417
					1	49	1	22.96	26.23	0.420
					1	99	1	22.92	26.19	0.416
					100	0	2	22.10	25.37	0.344
				64QAM	1	0	2	22.29	25.56	0.360
					1	49	2	22.30	25.57	0.361
					1	99	2	22.26	25.53	0.357
					100	0	3	21.17	24.44	0.278
				256QAM	1	0	4	22.08	25.35	0.343
					1	49	4	22.13	25.40	0.347
					1	99	4	22.07	25.34	0.342
					100	0	5	21.21	24.48	0.281
		21350	2560.0	QPSK	1	0	0	22.90	26.17	0.414
					1	49	0	22.83	26.10	0.407
					1	99	0	22.85	26.12	0.409
					100	0	1	21.96	25.23	0.333
				16QAM	1	0	1	22.84	26.11	0.408
					1	49	1	22.82	26.09	0.406
					1	99	1	22.80	26.07	0.405
					100	0	2	21.83	25.10	0.324
				64QAM	1	0	2	21.99	25.26	0.336
					1	49	2	21.90	25.17	0.329
					1	99	2	21.83	25.10	0.324
					100	0	3	21.08	24.35	0.272
				256QAM	1	0	4	21.82	25.09	0.323
					1	49	4	21.93	25.20	0.331
					1	99	4	21.85	25.12	0.325
					100	0	5	21.16	24.43	0.277

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

LTE Band 12 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
12	1.4	23017	699.7	QPSK	1	0	0	22.78	20.11	0.103
					1	2	0	22.82	20.15	0.104
					1	5	0	22.77	20.10	0.102
					6	0	1	22.01	19.34	0.086
				16QAM	1	0	1	22.65	19.98	0.100
					1	2	1	22.63	19.96	0.099
					1	5	1	22.62	19.95	0.099
					6	0	2	21.99	19.32	0.086
				64QAM	1	0	2	22.12	19.45	0.088
					1	2	2	22.17	19.50	0.089
					1	5	2	21.92	19.25	0.084
					6	0	3	21.02	18.35	0.068
				256QAM	1	0	4	21.86	19.19	0.083
					1	2	4	22.08	19.41	0.087
					1	5	4	21.92	19.25	0.084
					6	0	5	21.03	18.36	0.069
		23095	707.5	QPSK	1	0	0	22.82	20.15	0.104
					1	2	0	22.76	20.09	0.102
					1	5	0	22.81	20.14	0.103
					6	0	1	21.87	19.20	0.083
				16QAM	1	0	1	22.69	20.02	0.100
					1	2	1	22.69	20.02	0.100
					1	5	1	22.67	20.00	0.100
					6	0	2	21.92	19.25	0.084
				64QAM	1	0	2	21.85	19.18	0.083
					1	2	2	21.87	19.20	0.083
					1	5	2	21.92	19.25	0.084
					6	0	3	21.00	18.33	0.068
				256QAM	1	0	4	21.99	19.32	0.086
					1	2	4	22.13	19.46	0.088
					1	5	4	22.11	19.44	0.088
					6	0	5	21.02	18.35	0.068
		23173	715.3	QPSK	1	0	0	22.92	20.25	0.106
					1	2	0	22.84	20.17	0.104
					1	5	0	22.94	20.27	0.106
					6	0	1	21.88	19.21	0.083
				16QAM	1	0	1	22.71	20.04	0.101
					1	2	1	22.75	20.08	0.102
					1	5	1	22.75	20.08	0.102
					6	0	2	21.96	19.29	0.085
				64QAM	1	0	2	22.04	19.37	0.086
					1	2	2	22.00	19.33	0.086
					1	5	2	22.01	19.34	0.086
					6	0	3	21.05	18.38	0.069
				256QAM	1	0	4	22.13	19.46	0.088
					1	2	4	22.08	19.41	0.087
					1	5	4	22.20	19.53	0.090
					6	0	5	21.01	18.34	0.068

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
12	3	23025	700.5	QPSK	1	0	0	22.85	20.18	0.104
					1	8	0	22.89	20.22	0.105
					1	14	0	22.84	20.17	0.104
					15	0	1	22.08	19.41	0.087
				16QAM	1	0	1	22.73	20.06	0.101
					1	8	1	22.70	20.03	0.101
					1	14	1	22.67	20.00	0.100
					15	0	2	22.03	19.36	0.086
				64QAM	1	0	2	22.19	19.52	0.090
					1	8	2	22.24	19.57	0.091
					1	14	2	21.96	19.29	0.085
					15	0	3	21.04	18.37	0.069
				256QAM	1	0	4	21.91	19.24	0.084
					1	8	4	22.14	19.47	0.089
					1	14	4	21.97	19.30	0.085
					15	0	5	21.04	18.37	0.069
		23095	707.5	QPSK	1	0	0	22.86	20.19	0.104
					1	8	0	22.82	20.15	0.104
					1	14	0	22.85	20.18	0.104
					15	0	1	21.95	19.28	0.085
				16QAM	1	0	1	22.75	20.08	0.102
					1	8	1	22.75	20.08	0.102
					1	14	1	22.74	20.07	0.102
					15	0	2	21.99	19.32	0.086
				64QAM	1	0	2	21.90	19.23	0.084
					1	8	2	21.94	19.27	0.085
					1	14	2	22.00	19.33	0.086
					15	0	3	21.06	18.39	0.069
				256QAM	1	0	4	22.03	19.36	0.086
					1	8	4	22.18	19.51	0.089
					1	14	4	22.15	19.48	0.089
					15	0	5	21.09	18.42	0.070
		23165	714.5	QPSK	1	0	0	22.97	20.30	0.107
					1	8	0	22.91	20.24	0.106
					1	14	0	23.00	20.33	0.108
					15	0	1	21.94	19.27	0.085
				16QAM	1	0	1	22.78	20.11	0.103
					1	8	1	22.81	20.14	0.103
					1	14	1	22.80	20.13	0.103
					15	0	2	22.01	19.34	0.086
				64QAM	1	0	2	22.12	19.45	0.088
					1	8	2	22.07	19.40	0.087
					1	14	2	22.08	19.41	0.087
					15	0	3	21.06	18.39	0.069
				256QAM	1	0	4	22.19	19.52	0.090
					1	8	4	22.14	19.47	0.089
					1	14	4	22.28	19.61	0.091
					15	0	5	21.06	18.39	0.069

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
12	5	23035	701.5	QPSK	1	0	0	22.93	20.26	0.106
					1	12	0	22.96	20.29	0.107
					1	24	0	22.91	20.24	0.106
					25	0	1	22.12	19.45	0.088
				16QAM	1	0	1	22.78	20.11	0.103
					1	12	1	22.78	20.11	0.103
					1	24	1	22.75	20.08	0.102
					25	0	2	22.08	19.41	0.087
				64QAM	1	0	2	22.23	19.56	0.090
					1	12	2	22.30	19.63	0.092
					1	24	2	22.03	19.36	0.086
					25	0	3	21.11	18.44	0.070
				256QAM	1	0	4	21.98	19.31	0.085
					1	12	4	22.20	19.53	0.090
					1	24	4	22.03	19.36	0.086
					25	0	5	21.06	18.39	0.069
		23095	707.5	QPSK	1	0	0	22.93	20.26	0.106
					1	12	0	22.90	20.23	0.105
					1	24	0	22.91	20.24	0.106
					25	0	1	22.03	19.36	0.086
				16QAM	1	0	1	22.81	20.14	0.103
					1	12	1	22.80	20.13	0.103
					1	24	1	22.80	20.13	0.103
					25	0	2	22.06	19.39	0.087
				64QAM	1	0	2	21.98	19.31	0.085
					1	12	2	22.01	19.34	0.086
					1	24	2	22.06	19.39	0.087
					25	0	3	21.11	18.44	0.070
				256QAM	1	0	4	22.07	19.40	0.087
					1	12	4	22.25	19.58	0.091
					1	24	4	22.22	19.55	0.090
					25	0	5	21.11	18.44	0.070
		23155	713.5	QPSK	1	0	0	23.03	20.36	0.109
					1	12	0	22.99	20.32	0.108
					1	24	0	23.04	20.37	0.109
					25	0	1	21.99	19.32	0.086
				16QAM	1	0	1	22.86	20.19	0.104
					1	12	1	22.88	20.21	0.105
					1	24	1	22.85	20.18	0.104
					25	0	2	22.05	19.38	0.087
				64QAM	1	0	2	22.20	19.53	0.090
					1	12	2	22.15	19.48	0.089
					1	24	2	22.15	19.48	0.089
					25	0	3	21.08	18.41	0.069
				256QAM	1	0	4	22.26	19.59	0.091
					1	12	4	22.20	19.53	0.090
					1	24	4	22.33	19.66	0.092
					25	0	5	21.07	18.40	0.069

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
12	10	23060	704.0	QPSK	1	0	0	22.97	20.30	0.107
					1	24	0	23.01	20.34	0.108
					1	49	0	22.95	20.28	0.107
					50	0	1	22.19	19.52	0.090
				16QAM	1	0	1	22.85	20.18	0.104
					1	24	1	22.83	20.16	0.104
					1	49	1	22.81	20.14	0.103
					50	0	2	22.15	19.48	0.089
				64QAM	1	0	2	22.28	19.61	0.091
					1	24	2	22.35	19.68	0.093
					1	49	2	22.11	19.44	0.088
					50	0	3	21.12	18.45	0.070
				256QAM	1	0	4	22.02	19.35	0.086
					1	24	4	22.26	19.59	0.091
					1	49	4	22.10	19.43	0.088
					50	0	5	21.13	18.46	0.070
		23095	707.5	QPSK	1	0	0	22.98	20.31	0.107
					1	24	0	22.97	20.30	0.107
					1	49	0	22.96	20.29	0.107
					50	0	1	22.10	19.43	0.088
				16QAM	1	0	1	22.88	20.21	0.105
					1	24	1	22.85	20.18	0.104
					1	49	1	22.87	20.20	0.105
					50	0	2	22.11	19.44	0.088
				64QAM	1	0	2	22.04	19.37	0.086
					1	24	2	22.07	19.40	0.087
					1	49	2	22.13	19.46	0.088
					50	0	3	21.18	18.51	0.071
				256QAM	1	0	4	22.13	19.46	0.088
					1	24	4	22.29	19.62	0.092
					1	49	4	22.28	19.61	0.091
					50	0	5	21.15	18.48	0.070
		23130	711.0	QPSK	1	0	0	23.09	20.42	0.110
					1	24	0	23.06	20.39	0.109
					1	49	0	23.08	20.41	0.110
					50	0	1	22.07	19.40	0.087
				16QAM	1	0	1	22.91	20.24	0.106
					1	24	1	22.92	20.25	0.106
					1	49	1	22.90	20.23	0.105
					50	0	2	22.09	19.42	0.087
				64QAM	1	0	2	22.27	19.60	0.091
					1	24	2	22.21	19.54	0.090
					1	49	2	22.22	19.55	0.090
					50	0	3	21.14	18.47	0.070
				256QAM	1	0	4	22.30	19.63	0.092
					1	24	4	22.25	19.58	0.091
					1	49	4	22.38	19.71	0.094
					50	0	5	21.11	18.44	0.070

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

LTE Band 13 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
13	5	23025	779.5	QPSK	1	0	0	22.64	20.15	0.104
					1	12	0	22.69	20.20	0.105
					1	24	0	22.66	20.17	0.104
					25	0	1	22.04	19.55	0.090
				16QAM	1	0	1	22.61	20.12	0.103
					1	12	1	22.80	20.31	0.107
					1	24	1	22.64	20.15	0.104
					25	0	2	22.04	19.55	0.090
				64QAM	1	0	2	21.87	19.38	0.087
					1	12	2	21.90	19.41	0.087
					1	24	2	21.84	19.35	0.086
					25	0	3	21.06	18.57	0.072
				256QAM	1	0	4	21.85	19.36	0.086
					1	12	4	21.70	19.21	0.083
					1	24	4	21.80	19.31	0.085
					25	0	5	21.00	18.51	0.071
		23230	782.0	QPSK	1	0	0	22.63	20.14	0.103
					1	12	0	22.67	20.18	0.104
					1	24	0	22.65	20.16	0.104
					25	0	1	22.04	19.55	0.090
				16QAM	1	0	1	22.61	20.12	0.103
					1	12	1	22.80	20.31	0.107
					1	24	1	22.63	20.14	0.103
					25	0	2	22.06	19.57	0.091
				64QAM	1	0	2	21.86	19.37	0.086
					1	12	2	21.89	19.40	0.087
					1	24	2	21.85	19.36	0.086
					25	0	3	21.04	18.55	0.072
				256QAM	1	0	4	21.83	19.34	0.086
					1	12	4	21.72	19.23	0.084
					1	24	4	21.81	19.32	0.086
					25	0	5	21.03	18.54	0.071
		23255	784.5	QPSK	1	0	0	22.62	20.13	0.103
					1	12	0	22.67	20.18	0.104
					1	24	0	22.66	20.17	0.104
					25	0	1	22.03	19.54	0.090
				16QAM	1	0	1	22.63	20.14	0.103
					1	12	1	22.81	20.32	0.108
					1	24	1	22.65	20.16	0.104
					25	0	2	22.07	19.58	0.091
				64QAM	1	0	2	21.85	19.36	0.086
					1	12	2	21.89	19.40	0.087
					1	24	2	21.85	19.36	0.086
					25	0	3	21.05	18.56	0.072
				256QAM	1	0	4	21.85	19.36	0.086
					1	12	4	21.71	19.22	0.084
					1	24	4	21.82	19.33	0.086
					25	0	5	21.03	18.54	0.071

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
13	10	23230	782.0	QPSK	1	0	0	22.68	20.19	0.104
					1	24	0	22.74	20.25	0.106
					1	49	0	22.70	20.21	0.105
					50	0	1	22.11	19.62	0.092
				16QAM	1	0	1	22.68	20.19	0.104
					1	24	1	22.85	20.36	0.109
					1	49	1	22.70	20.21	0.105
					50	0	2	22.11	19.62	0.092
				64QAM	1	0	2	21.92	19.43	0.088
					1	24	2	21.95	19.46	0.088
					1	49	2	21.92	19.43	0.088
					50	0	3	21.11	18.62	0.073
				256QAM	1	0	4	21.89	19.40	0.087
					1	24	4	21.76	19.27	0.085
					1	49	4	21.87	19.38	0.087
					50	0	5	21.07	18.58	0.072

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(dBm) / 10)} / 1000$

LTE Band 17 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
17	5	23755	706.5	QPSK	1	0	0	22.89	21.69	0.148
					1	12	0	22.84	21.64	0.146
					1	24	0	22.82	21.62	0.145
					25	0	1	21.93	20.73	0.118
				16QAM	1	0	1	22.78	21.58	0.144
					1	12	1	22.86	21.66	0.147
					1	24	1	22.79	21.59	0.144
					25	0	2	21.91	20.71	0.118
				64QAM	1	0	2	22.10	20.90	0.123
					1	12	2	22.03	20.83	0.121
					1	24	2	22.02	20.82	0.121
					25	0	3	21.02	19.82	0.096
				256QAM	1	0	4	22.07	20.87	0.122
					1	12	4	22.04	20.84	0.121
					1	24	4	22.10	20.90	0.123
					25	0	5	21.01	19.81	0.096
		23790	710.0	QPSK	1	0	0	22.87	21.67	0.147
					1	12	0	22.81	21.61	0.145
					1	24	0	22.91	21.71	0.148
					25	0	1	21.84	20.64	0.116
				16QAM	1	0	1	22.76	21.56	0.143
					1	12	1	22.86	21.66	0.147
					1	24	1	22.82	21.62	0.145
					25	0	2	21.94	20.74	0.119
				64QAM	1	0	2	22.00	20.80	0.120
					1	12	2	21.97	20.77	0.119
					1	24	2	22.02	20.82	0.121
					25	0	3	21.08	19.88	0.097
				256QAM	1	0	4	22.13	20.93	0.124
					1	12	4	22.07	20.87	0.122
					1	24	4	22.09	20.89	0.123
					25	0	5	21.07	19.87	0.097
		23825	713.5	QPSK	1	0	0	22.92	21.72	0.149
					1	12	0	22.99	21.79	0.151
					1	24	0	22.93	21.73	0.149
					25	0	1	21.92	20.72	0.118
				16QAM	1	0	1	22.96	21.76	0.150
					1	12	1	23.00	21.80	0.151
					1	24	1	23.02	21.82	0.152
					25	0	2	21.98	20.78	0.120
				64QAM	1	0	2	22.00	20.80	0.120
					1	12	2	21.99	20.79	0.120
					1	24	2	22.01	20.81	0.121
					25	0	3	21.02	19.82	0.096
				256QAM	1	0	4	22.24	21.04	0.127
					1	12	4	22.01	20.81	0.121
					1	24	4	22.14	20.94	0.124
					25	0	5	21.03	19.83	0.096

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
17	10	23780	709.0	QPSK	1	0	0	22.93	21.73	0.149
					1	24	0	22.89	21.69	0.148
					1	49	0	22.86	21.66	0.147
					50	0	1	22.00	20.80	0.120
				16QAM	1	0	1	22.85	21.65	0.146
					1	24	1	22.91	21.71	0.148
					1	49	1	22.85	21.65	0.146
					50	0	2	21.98	20.78	0.120
				64QAM	1	0	2	22.15	20.95	0.124
					1	24	2	22.08	20.88	0.122
					1	49	2	22.10	20.90	0.123
					50	0	3	21.07	19.87	0.097
				256QAM	1	0	4	22.11	20.91	0.123
					1	24	4	22.10	20.90	0.123
					1	49	4	22.17	20.97	0.125
					50	0	5	21.08	19.88	0.097
		23790	710.0	QPSK	1	0	0	22.92	21.72	0.149
					1	24	0	22.88	21.68	0.147
					1	49	0	22.96	21.76	0.150
					50	0	1	21.91	20.71	0.118
				16QAM	1	0	1	22.83	21.63	0.146
					1	24	1	22.91	21.71	0.148
					1	49	1	22.89	21.69	0.148
					50	0	2	21.99	20.79	0.120
				64QAM	1	0	2	22.06	20.86	0.122
					1	24	2	22.03	20.83	0.121
					1	49	2	22.09	20.89	0.123
					50	0	3	21.10	19.90	0.098
				256QAM	1	0	4	22.19	20.99	0.126
					1	24	4	22.11	20.91	0.123
					1	49	4	22.15	20.95	0.124
					50	0	5	21.11	19.91	0.098
		23800	711.0	QPSK	1	0	0	22.98	21.78	0.151
					1	24	0	23.06	21.86	0.153
					1	49	0	22.97	21.77	0.150
					50	0	1	22.00	20.80	0.120
				16QAM	1	0	1	23.01	21.81	0.152
					1	24	1	23.04	21.84	0.153
					1	49	1	23.07	21.87	0.154
					50	0	2	22.02	20.82	0.121
				64QAM	1	0	2	22.07	20.87	0.122
					1	24	2	22.05	20.85	0.122
					1	49	2	22.08	20.88	0.122
					50	0	3	21.08	19.88	0.097
				256QAM	1	0	4	22.28	21.08	0.128
					1	24	4	22.06	20.86	0.122
					1	49	4	22.19	20.99	0.126
					50	0	5	21.07	19.87	0.097

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

LTE Band 38 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
38	5	37775	2572.5	QPSK	1	0	0	22.91	25.06	0.321
					1	12	0	22.85	25.00	0.316
					1	24	0	22.91	25.06	0.321
					25	0	1	21.87	24.02	0.252
				16QAM	1	0	1	22.80	24.95	0.313
					1	12	1	22.65	24.80	0.302
					1	24	1	22.70	24.85	0.305
					25	0	2	21.90	24.05	0.254
				64QAM	1	0	2	21.82	23.97	0.249
					1	12	2	21.74	23.89	0.245
					1	24	2	21.80	23.95	0.248
					25	0	3	21.03	23.18	0.208
				256QAM	1	0	4	21.90	24.05	0.254
					1	12	4	21.80	23.95	0.248
					1	24	4	21.80	23.95	0.248
					25	0	5	21.00	23.15	0.207
		38000	2595.0	QPSK	1	0	0	22.84	24.99	0.316
					1	12	0	22.73	24.88	0.308
					1	24	0	22.83	24.98	0.315
					25	0	1	21.88	24.03	0.253
				16QAM	1	0	1	22.67	24.82	0.303
					1	12	1	22.70	24.85	0.305
					1	24	1	22.68	24.83	0.304
					25	0	2	21.87	24.02	0.252
				64QAM	1	0	2	21.83	23.98	0.250
					1	12	2	21.87	24.02	0.252
					1	24	2	21.75	23.90	0.245
					25	0	3	21.03	23.18	0.208
				256QAM	1	0	4	21.83	23.98	0.250
					1	12	4	21.89	24.04	0.254
					1	24	4	21.78	23.93	0.247
					25	0	5	21.05	23.20	0.209
		38225	2617.5	QPSK	1	0	0	22.84	24.99	0.316
					1	12	0	22.78	24.93	0.311
					1	24	0	22.79	24.94	0.312
					25	0	1	21.98	24.13	0.259
				16QAM	1	0	1	22.73	24.88	0.308
					1	12	1	22.78	24.93	0.311
					1	24	1	22.59	24.74	0.298
					25	0	2	22.01	24.16	0.261
				64QAM	1	0	2	21.81	23.96	0.249
					1	12	2	21.90	24.05	0.254
					1	24	2	21.86	24.01	0.252
					25	0	3	21.01	23.16	0.207
				256QAM	1	0	4	21.78	23.93	0.247
					1	12	4	21.89	24.04	0.254
					1	24	4	21.84	23.99	0.251
					25	0	5	21.04	23.19	0.208

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
38	10	37800	2575.0	QPSK	1	0	0	22.95	25.10	0.324
					1	24	0	22.90	25.05	0.320
					1	49	0	22.95	25.10	0.324
					50	0	1	21.94	24.09	0.256
				16QAM	1	0	1	22.87	25.02	0.318
					1	24	1	22.70	24.85	0.305
					1	49	1	22.76	24.91	0.310
					50	0	2	21.97	24.12	0.258
				64QAM	1	0	2	21.87	24.02	0.252
					1	24	2	21.79	23.94	0.248
					1	49	2	21.88	24.03	0.253
					50	0	3	21.05	23.20	0.209
				256QAM	1	0	4	21.94	24.09	0.256
					1	24	4	21.86	24.01	0.252
					1	49	4	21.87	24.02	0.252
					50	0	5	21.07	23.22	0.210
		38000	2595.0	QPSK	1	0	0	22.89	25.04	0.319
					1	24	0	22.80	24.95	0.313
					1	49	0	22.88	25.03	0.318
					50	0	1	21.95	24.10	0.257
				16QAM	1	0	1	22.74	24.89	0.308
					1	24	1	22.75	24.90	0.309
					1	49	1	22.75	24.90	0.309
					50	0	2	21.92	24.07	0.255
				64QAM	1	0	2	21.89	24.04	0.254
					1	24	2	21.93	24.08	0.256
					1	49	2	21.82	23.97	0.249
					50	0	3	21.05	23.20	0.209
				256QAM	1	0	4	21.89	24.04	0.254
					1	24	4	21.93	24.08	0.256
					1	49	4	21.84	23.99	0.251
					50	0	5	21.06	23.21	0.209
		38200	2615.0	QPSK	1	0	0	22.90	25.05	0.320
					1	24	0	22.85	25.00	0.316
					1	49	0	22.83	24.98	0.315
					50	0	1	22.06	24.21	0.264
				16QAM	1	0	1	22.78	24.93	0.311
					1	24	1	22.82	24.97	0.314
					1	49	1	22.64	24.79	0.301
					50	0	2	22.05	24.20	0.263
				64QAM	1	0	2	21.88	24.03	0.253
					1	24	2	21.96	24.11	0.258
					1	49	2	21.93	24.08	0.256
					50	0	3	21.07	23.22	0.210
				256QAM	1	0	4	21.82	23.97	0.249
					1	24	4	21.94	24.09	0.256
					1	49	4	21.89	24.04	0.254
					50	0	5	21.05	23.20	0.209

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
38	15	37825	2577.5	QPSK	1	0	0	23.03	25.18	0.330
					1	38	0	22.96	25.11	0.324
					1	74	0	23.02	25.17	0.329
					75	0	1	22.02	24.17	0.261
				16QAM	1	0	1	22.93	25.08	0.322
					1	38	1	22.78	24.93	0.311
					1	74	1	22.81	24.96	0.313
					75	0	2	22.01	24.16	0.261
				64QAM	1	0	2	21.93	24.08	0.256
					1	38	2	21.85	24.00	0.251
					1	74	2	21.92	24.07	0.255
					75	0	3	21.06	23.21	0.209
				256QAM	1	0	4	21.99	24.14	0.259
					1	38	4	21.93	24.08	0.256
					1	74	4	21.95	24.10	0.257
					75	0	5	21.13	23.28	0.213
		38000	2595.0	QPSK	1	0	0	22.95	25.10	0.324
					1	38	0	22.87	25.02	0.318
					1	74	0	22.92	25.07	0.321
					75	0	1	22.01	24.16	0.261
				16QAM	1	0	1	22.81	24.96	0.313
					1	38	1	22.83	24.98	0.315
					1	74	1	22.80	24.95	0.313
					75	0	2	21.97	24.12	0.258
				64QAM	1	0	2	21.95	24.10	0.257
					1	38	2	21.98	24.13	0.259
					1	74	2	21.89	24.04	0.254
					75	0	3	21.12	23.27	0.212
				256QAM	1	0	4	21.93	24.08	0.256
					1	38	4	21.97	24.12	0.258
					1	74	4	21.90	24.05	0.254
					75	0	5	21.08	23.23	0.210
		38175	2612.5	QPSK	1	0	0	22.96	25.11	0.324
					1	38	0	22.93	25.08	0.322
					1	74	0	22.90	25.05	0.320
					75	0	1	22.10	24.25	0.266
				16QAM	1	0	1	22.82	24.97	0.314
					1	38	1	22.87	25.02	0.318
					1	74	1	22.70	24.85	0.305
					75	0	2	22.10	24.25	0.266
				64QAM	1	0	2	21.96	24.11	0.258
					1	38	2	22.01	24.16	0.261
					1	74	2	21.99	24.14	0.259
					75	0	3	21.13	23.28	0.213
				256QAM	1	0	4	21.90	24.05	0.254
					1	38	4	21.98	24.13	0.259
					1	74	4	21.94	24.09	0.256
					75	0	5	21.06	23.21	0.209

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
38	20	37850	2580.0	QPSK	1	0	0	23.10	25.25	0.335
					1	49	0	23.03	25.18	0.330
					1	99	0	23.08	25.23	0.333
					100	0	1	22.09	24.24	0.265
				16QAM	1	0	1	22.97	25.12	0.325
					1	49	1	22.82	24.97	0.314
					1	99	1	22.85	25.00	0.316
					100	0	2	22.05	24.20	0.263
				64QAM	1	0	2	21.98	24.13	0.259
					1	49	2	21.92	24.07	0.255
					1	99	2	21.99	24.14	0.259
					100	0	3	21.08	23.23	0.210
				256QAM	1	0	4	22.05	24.20	0.263
					1	49	4	22.01	24.16	0.261
					1	99	4	22.00	24.15	0.260
					100	0	5	21.19	23.34	0.216
		38000	2595.0	QPSK	1	0	0	23.00	25.15	0.327
					1	49	0	22.93	25.08	0.322
					1	99	0	22.98	25.13	0.326
					100	0	1	22.05	24.20	0.263
				16QAM	1	0	1	22.87	25.02	0.318
					1	49	1	22.88	25.03	0.318
					1	99	1	22.85	25.00	0.316
					100	0	2	22.02	24.17	0.261
				64QAM	1	0	2	22.00	24.15	0.260
					1	49	2	22.03	24.18	0.262
					1	99	2	21.94	24.09	0.256
					100	0	3	21.17	23.32	0.215
				256QAM	1	0	4	21.98	24.13	0.259
					1	49	4	22.02	24.17	0.261
					1	99	4	21.95	24.10	0.257
					100	0	5	21.09	23.24	0.211
		38150	2610.0	QPSK	1	0	0	23.01	25.16	0.328
					1	49	0	22.98	25.13	0.326
					1	99	0	22.95	25.10	0.324
					100	0	1	22.15	24.30	0.269
				16QAM	1	0	1	22.87	25.02	0.318
					1	49	1	22.92	25.07	0.321
					1	99	1	22.75	24.90	0.309
					100	0	2	22.15	24.30	0.269
				64QAM	1	0	2	22.01	24.16	0.261
					1	49	2	22.06	24.21	0.264
					1	99	2	22.04	24.19	0.262
					100	0	3	21.18	23.33	0.215
				256QAM	1	0	4	21.95	24.10	0.257
					1	49	4	22.03	24.18	0.262
					1	99	4	21.99	24.14	0.259
					100	0	5	21.11	23.26	0.212

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

**LTE Band 40 Power:
2305~2315MHz:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
40	5	38725	2307.5	QPSK	1	0	0	23.04	23.50	0.224
					1	12	0	23.06	23.52	0.225
					1	24	0	23.11	23.57	0.228
					25	0	1	22.05	22.51	0.178
				16QAM	1	0	1	22.91	23.37	0.217
					1	12	1	22.92	23.38	0.218
					1	24	1	22.89	23.35	0.216
					25	0	2	22.12	22.58	0.181
				64QAM	1	0	2	22.06	22.52	0.179
					1	12	2	21.96	22.42	0.175
					1	24	2	21.97	22.43	0.175
					25	0	3	21.06	21.52	0.142
				256QAM	1	0	4	21.98	22.44	0.175
					1	12	4	21.95	22.41	0.174
					1	24	4	21.93	22.39	0.173
					25	0	5	21.08	21.54	0.143
		38750	2310.0	QPSK	1	0	0	23.03	23.49	0.223
					1	12	0	23.04	23.50	0.224
					1	24	0	23.10	23.56	0.227
					25	0	1	22.05	22.51	0.178
				16QAM	1	0	1	22.91	23.37	0.217
					1	12	1	22.92	23.38	0.218
					1	24	1	22.88	23.34	0.216
					25	0	2	22.14	22.60	0.182
				64QAM	1	0	2	22.05	22.51	0.178
					1	12	2	21.95	22.41	0.174
					1	24	2	21.98	22.44	0.175
					25	0	3	21.04	21.50	0.141
				256QAM	1	0	4	21.96	22.42	0.175
					1	12	4	21.97	22.43	0.175
					1	24	4	21.94	22.40	0.174
					25	0	5	21.11	21.57	0.144
		38775	2312.5	QPSK	1	0	0	23.02	23.48	0.223
					1	12	0	23.04	23.50	0.224
					1	24	0	23.11	23.57	0.228
					25	0	1	22.04	22.50	0.178
				16QAM	1	0	1	22.93	23.39	0.218
					1	12	1	22.93	23.39	0.218
					1	24	1	22.90	23.36	0.217
					25	0	2	22.15	22.61	0.182
				64QAM	1	0	2	22.04	22.50	0.178
					1	12	2	21.95	22.41	0.174
					1	24	2	21.98	22.44	0.175
					25	0	3	21.05	21.51	0.142
				256QAM	1	0	4	21.98	22.44	0.175
					1	12	4	21.96	22.42	0.175
					1	24	4	21.95	22.41	0.174
					25	0	5	21.11	21.57	0.144

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
40	10	38750	2310.0	QPSK	1	0	0	23.08	23.54	0.226
					1	24	0	23.11	23.57	0.228
					1	49	0	23.15	23.61	0.230
					50	0	1	22.12	22.58	0.181
				16QAM	1	0	1	22.98	23.44	0.221
					1	24	1	22.97	23.43	0.220
					1	49	1	22.95	23.41	0.219
					50	0	2	22.19	22.65	0.184
				64QAM	1	0	2	22.11	22.57	0.181
					1	24	2	22.01	22.47	0.177
					1	49	2	22.05	22.51	0.178
					50	0	3	21.11	21.57	0.144
				256QAM	1	0	4	22.02	22.48	0.177
					1	24	4	22.01	22.47	0.177
					1	49	4	22.00	22.46	0.176
					50	0	5	21.15	21.61	0.145

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

2350~2360MHz:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
40	5	39175	2352.5	QPSK	1	0	0	23.07	23.56	0.227
					1	12	0	23.04	23.53	0.225
					1	24	0	23.04	23.53	0.225
					25	0	1	22.06	22.55	0.180
				16QAM	1	0	1	22.93	23.42	0.220
					1	12	1	22.94	23.43	0.220
					1	24	1	22.91	23.40	0.219
					25	0	2	22.16	22.65	0.184
				64QAM	1	0	2	22.04	22.53	0.179
					1	12	2	21.95	22.44	0.175
					1	24	2	21.93	22.42	0.175
					25	0	3	21.08	21.57	0.144
				256QAM	1	0	4	21.99	22.48	0.177
					1	12	4	21.94	22.43	0.175
					1	24	4	22.01	22.50	0.178
					25	0	5	21.12	21.61	0.145
		39200	2355.0	QPSK	1	0	0	23.06	23.55	0.226
					1	12	0	23.02	23.51	0.224
					1	24	0	23.03	23.52	0.225
					25	0	1	22.06	22.55	0.180
				16QAM	1	0	1	22.93	23.42	0.220
					1	12	1	22.94	23.43	0.220
					1	24	1	22.90	23.39	0.218
					25	0	2	22.18	22.67	0.185
				64QAM	1	0	2	22.03	22.52	0.179
					1	12	2	21.94	22.43	0.175
					1	24	2	21.94	22.43	0.175
					25	0	3	21.06	21.55	0.143
				256QAM	1	0	4	21.97	22.46	0.176
					1	12	4	21.96	22.45	0.176
					1	24	4	22.02	22.51	0.178
					25	0	5	21.15	21.64	0.146
		39225	2357.5	QPSK	1	0	0	23.05	23.54	0.226
					1	12	0	23.02	23.51	0.224
					1	24	0	23.04	23.53	0.225
					25	0	1	22.05	22.54	0.179
				16QAM	1	0	1	22.95	23.44	0.221
					1	12	1	22.95	23.44	0.221
					1	24	1	22.92	23.41	0.219
					25	0	2	22.19	22.68	0.185
				64QAM	1	0	2	22.02	22.51	0.178
					1	12	2	21.94	22.43	0.175
					1	24	2	21.94	22.43	0.175
					25	0	3	21.07	21.56	0.143
				256QAM	1	0	4	21.99	22.48	0.177
					1	12	4	21.95	22.44	0.175
					1	24	4	22.03	22.52	0.179
					25	0	5	21.15	21.64	0.146

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
40	10	39200	2355.0	QPSK	1	0	0	23.11	23.60	0.229
					1	24	0	23.09	23.58	0.228
					1	49	0	23.08	23.57	0.228
					50	0	1	22.13	22.62	0.183
				16QAM	1	0	1	23.00	23.49	0.223
					1	24	1	22.99	23.48	0.223
					1	49	1	22.97	23.46	0.222
					50	0	2	22.23	22.72	0.187
				64QAM	1	0	2	22.09	22.58	0.181
					1	24	2	22.00	22.49	0.177
					1	49	2	22.01	22.50	0.178
					50	0	3	21.13	21.62	0.145
				256QAM	1	0	4	22.03	22.52	0.179
					1	24	4	22.00	20.34	0.108
					1	49	4	22.08	20.42	0.110
					50	0	5	21.19	19.53	0.090

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

LTE Band 41 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
41	5	39675	2498.5	QPSK	1	0	0	22.85	26.12	0.409
					1	12	0	22.93	26.20	0.417
					1	24	0	22.88	26.15	0.412
					25	0	1	21.86	25.13	0.326
				16QAM	1	0	1	22.84	26.11	0.408
					1	12	1	22.75	26.02	0.400
					1	24	1	22.82	26.09	0.406
					25	0	2	21.98	25.25	0.335
				64QAM	1	0	2	22.03	25.30	0.339
					1	12	2	21.94	25.21	0.332
					1	24	2	21.90	25.17	0.329
					25	0	3	21.05	24.32	0.270
				256QAM	1	0	4	21.98	25.25	0.335
					1	12	4	21.91	25.18	0.330
					1	24	4	21.81	25.08	0.322
					25	0	5	21.00	24.27	0.267
		40620	2593.0	QPSK	1	0	0	22.98	26.25	0.422
					1	12	0	23.01	26.28	0.425
					1	24	0	22.93	26.20	0.417
					25	0	1	21.84	25.11	0.324
				16QAM	1	0	1	22.71	25.98	0.396
					1	12	1	22.84	26.11	0.408
					1	24	1	22.90	26.17	0.414
					25	0	2	21.87	25.14	0.327
				64QAM	1	0	2	22.02	25.29	0.338
					1	12	2	21.96	25.23	0.333
					1	24	2	21.80	25.07	0.321
					25	0	3	21.03	24.30	0.269
				256QAM	1	0	4	21.99	25.26	0.336
					1	12	4	21.89	25.16	0.328
					1	24	4	21.94	25.21	0.332
					25	0	5	21.05	24.32	0.270
		41565	2687.5	QPSK	1	0	0	22.77	26.04	0.402
					1	12	0	22.91	26.18	0.415
					1	24	0	22.92	26.19	0.416
					25	0	1	21.94	25.21	0.332
				16QAM	1	0	1	22.87	26.14	0.411
					1	12	1	22.78	26.05	0.403
					1	24	1	22.71	25.98	0.396
					25	0	2	21.98	25.25	0.335
				64QAM	1	0	2	21.81	25.08	0.322
					1	12	2	21.76	25.03	0.318
					1	24	2	21.88	25.15	0.327
					25	0	3	21.03	24.30	0.269
				256QAM	1	0	4	21.98	25.25	0.335
					1	12	4	21.94	25.21	0.332
					1	24	4	21.87	25.14	0.327
					25	0	5	21.07	24.34	0.272

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) $P(W) = 1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
41	10	39700	2501.0	QPSK	1	0	0	22.89	26.16	0.413
					1	24	0	22.98	26.25	0.422
					1	49	0	22.92	26.19	0.416
					50	0	1	21.93	25.20	0.331
				16QAM	1	0	1	22.91	26.18	0.415
					1	24	1	22.80	26.07	0.405
					1	49	1	22.88	26.15	0.412
					50	0	2	22.05	25.32	0.340
				64QAM	1	0	2	22.08	25.35	0.343
					1	24	2	21.99	25.26	0.336
					1	49	2	21.98	25.25	0.335
					50	0	3	21.06	24.33	0.271
				256QAM	1	0	4	22.02	25.29	0.338
					1	24	4	21.97	25.24	0.334
					1	49	4	21.88	25.15	0.327
					50	0	5	21.07	24.34	0.272
		40620	2593.0	QPSK	1	0	0	23.03	26.30	0.427
					1	24	0	23.08	26.35	0.432
					1	49	0	22.98	26.25	0.422
					50	0	1	21.91	25.18	0.330
				16QAM	1	0	1	22.78	26.05	0.403
					1	24	1	22.89	26.16	0.413
					1	49	1	22.97	26.24	0.421
					50	0	2	21.92	25.19	0.330
				64QAM	1	0	2	22.08	25.35	0.343
					1	24	2	22.02	25.29	0.338
					1	49	2	21.87	25.14	0.327
					50	0	3	21.05	24.32	0.270
				256QAM	1	0	4	22.05	25.32	0.340
					1	24	4	21.93	25.20	0.331
					1	49	4	22.00	25.27	0.337
					50	0	5	21.07	24.34	0.272
		41540	2685.0	QPSK	1	0	0	22.83	26.10	0.407
					1	24	0	22.98	26.25	0.422
					1	49	0	22.96	26.23	0.420
					50	0	1	22.02	25.29	0.338
				16QAM	1	0	1	22.92	26.19	0.416
					1	24	1	22.82	26.09	0.406
					1	49	1	22.76	26.03	0.401
					50	0	2	22.02	25.29	0.338
				64QAM	1	0	2	21.88	25.15	0.327
					1	24	2	21.82	25.09	0.323
					1	49	2	21.95	25.22	0.333
					50	0	3	21.09	24.36	0.273
				256QAM	1	0	4	22.02	25.29	0.338
					1	24	4	21.99	25.26	0.336
					1	49	4	21.92	25.19	0.330
					50	0	5	21.09	24.36	0.273

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
41	15	39725	2503.5	QPSK	1	0	0	22.97	26.24	0.421
					1	38	0	23.04	26.31	0.428
					1	74	0	22.99	26.26	0.423
					75	0	1	22.01	25.28	0.337
				16QAM	1	0	1	22.97	26.24	0.421
					1	38	1	22.88	26.15	0.412
					1	74	1	22.93	26.20	0.417
					75	0	2	22.09	25.36	0.344
				64QAM	1	0	2	22.14	25.41	0.348
					1	38	2	22.05	25.32	0.340
					1	74	2	22.02	25.29	0.338
					75	0	3	21.08	24.35	0.272
				256QAM	1	0	4	22.07	25.34	0.342
					1	38	4	22.04	25.31	0.340
					1	74	4	21.96	25.23	0.333
					75	0	5	21.13	24.40	0.275
		40620	2593.0	QPSK	1	0	0	23.09	26.36	0.433
					1	38	0	23.15	26.42	0.439
					1	74	0	23.02	26.29	0.426
					75	0	1	21.97	25.24	0.334
				16QAM	1	0	1	22.85	26.12	0.409
					1	38	1	22.97	26.24	0.421
					1	74	1	23.02	26.29	0.426
					75	0	2	21.97	25.24	0.334
				64QAM	1	0	2	22.14	25.41	0.348
					1	38	2	22.07	25.34	0.342
					1	74	2	21.94	25.21	0.332
					75	0	3	21.08	24.35	0.272
				256QAM	1	0	4	22.09	25.36	0.344
					1	38	4	21.97	25.24	0.334
					1	74	4	22.06	25.33	0.341
					75	0	5	21.11	24.38	0.274
		41515	2682.5	QPSK	1	0	0	22.89	26.16	0.413
					1	38	0	23.06	26.33	0.430
					1	74	0	23.03	26.30	0.427
					75	0	1	22.06	25.33	0.341
				16QAM	1	0	1	22.96	26.23	0.420
					1	38	1	22.87	26.14	0.411
					1	74	1	22.82	26.09	0.406
					75	0	2	22.07	25.34	0.342
				64QAM	1	0	2	21.96	25.23	0.333
					1	38	2	21.87	25.14	0.327
					1	74	2	22.01	25.28	0.337
					75	0	3	21.15	24.42	0.277
				256QAM	1	0	4	22.10	25.37	0.344
					1	38	4	22.03	25.30	0.339
					1	74	4	21.97	25.24	0.334
					75	0	5	21.11	24.38	0.274

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
41	20	39750	2506.0	QPSK	1	0	0	23.04	26.31	0.428
					1	49	0	23.11	26.38	0.435
					1	99	0	23.05	26.32	0.429
					100	0	1	22.08	25.35	0.343
				16QAM	1	0	1	23.01	26.28	0.425
					1	49	1	22.92	26.19	0.416
					1	99	1	22.97	26.24	0.421
					100	0	2	22.13	25.40	0.347
				64QAM	1	0	2	22.19	25.46	0.352
					1	49	2	22.12	25.39	0.346
					1	99	2	22.09	25.36	0.344
					100	0	3	21.15	24.42	0.277
				256QAM	1	0	4	22.13	25.40	0.347
					1	49	4	22.12	25.39	0.346
					1	99	4	22.01	25.28	0.337
					100	0	5	21.19	24.46	0.279
		40620	2593.0	QPSK	1	0	0	23.14	26.41	0.438
					1	49	0	23.21	26.48	0.445
					1	99	0	23.08	26.35	0.432
					100	0	1	22.01	25.28	0.337
				16QAM	1	0	1	22.91	26.18	0.415
					1	49	1	23.02	26.29	0.426
					1	99	1	23.07	26.34	0.431
					100	0	2	22.02	25.29	0.338
				64QAM	1	0	2	22.19	25.46	0.352
					1	49	2	22.12	25.39	0.346
					1	99	2	21.99	25.26	0.336
					100	0	3	21.10	24.37	0.274
				256QAM	1	0	4	22.14	25.41	0.348
					1	49	4	22.02	25.29	0.338
					1	99	4	22.11	25.38	0.345
					100	0	5	21.16	24.43	0.277
		41490	2680.0	QPSK	1	0	0	22.94	26.21	0.418
					1	49	0	23.11	26.38	0.435
					1	99	0	23.08	26.35	0.432
					100	0	1	22.11	25.38	0.345
				16QAM	1	0	1	23.01	26.28	0.425
					1	49	1	22.92	26.19	0.416
					1	99	1	22.87	26.14	0.411
					100	0	2	22.12	25.39	0.346
				64QAM	1	0	2	22.01	25.28	0.337
					1	49	2	21.92	25.19	0.330
					1	99	2	22.06	25.33	0.341
					100	0	3	21.20	24.47	0.280
				256QAM	1	0	4	22.15	25.42	0.348
					1	49	4	22.08	25.35	0.343
					1	99	4	22.02	25.29	0.338
					100	0	5	21.12	24.39	0.275

NOTE:

(1) EIRP = Average power + Antenna gain.

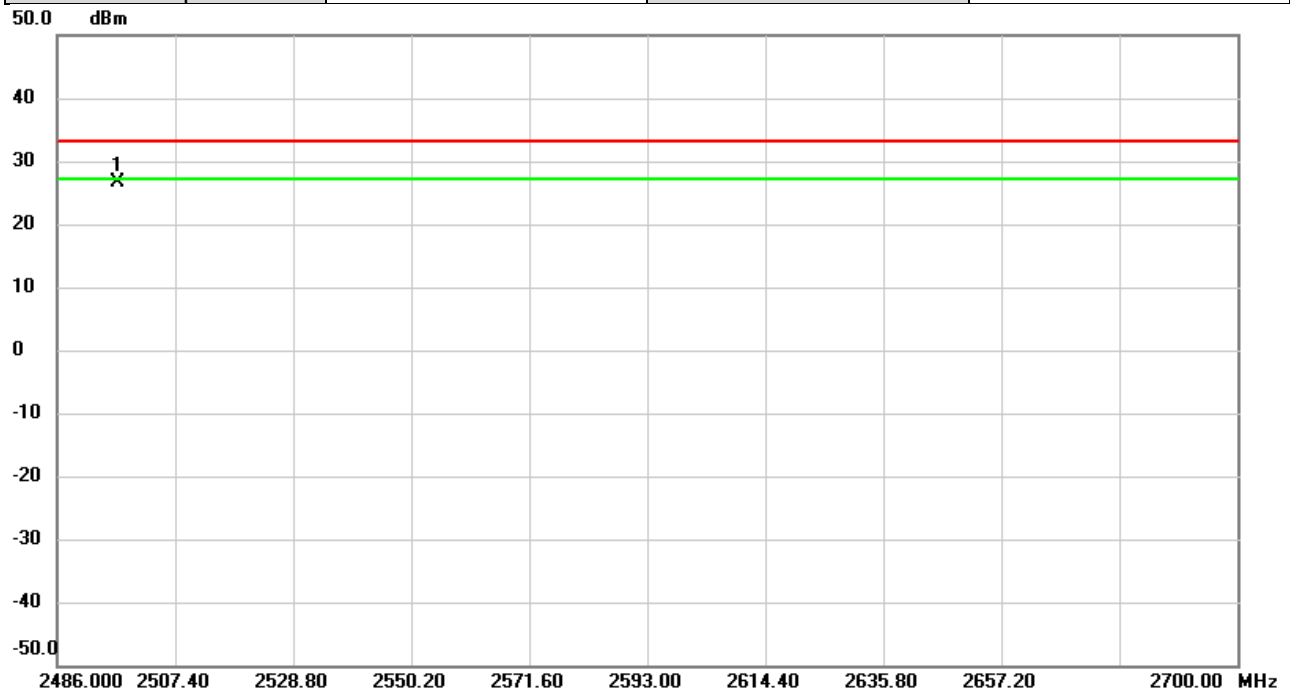
(2) ERP = EIRP - 2.15.

(3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10) / 1000}$

Radiated EIRP Power:

Dipole Antenna:

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH39750	Polarization	Vertical
Temp	24°C	Hum.	62%

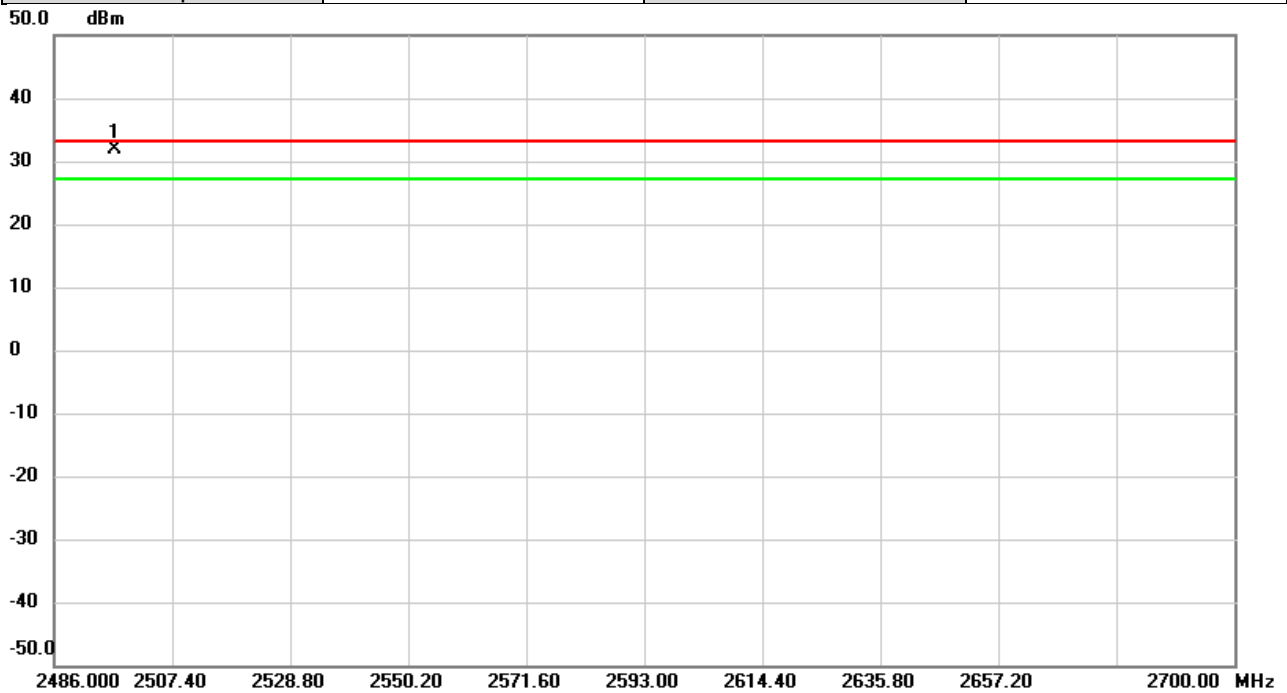


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2496.964	19.16	7.47	26.63	33.01	-6.38	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH39750	Polarization	Horizontal
Temp	24°C	Hum.	62%

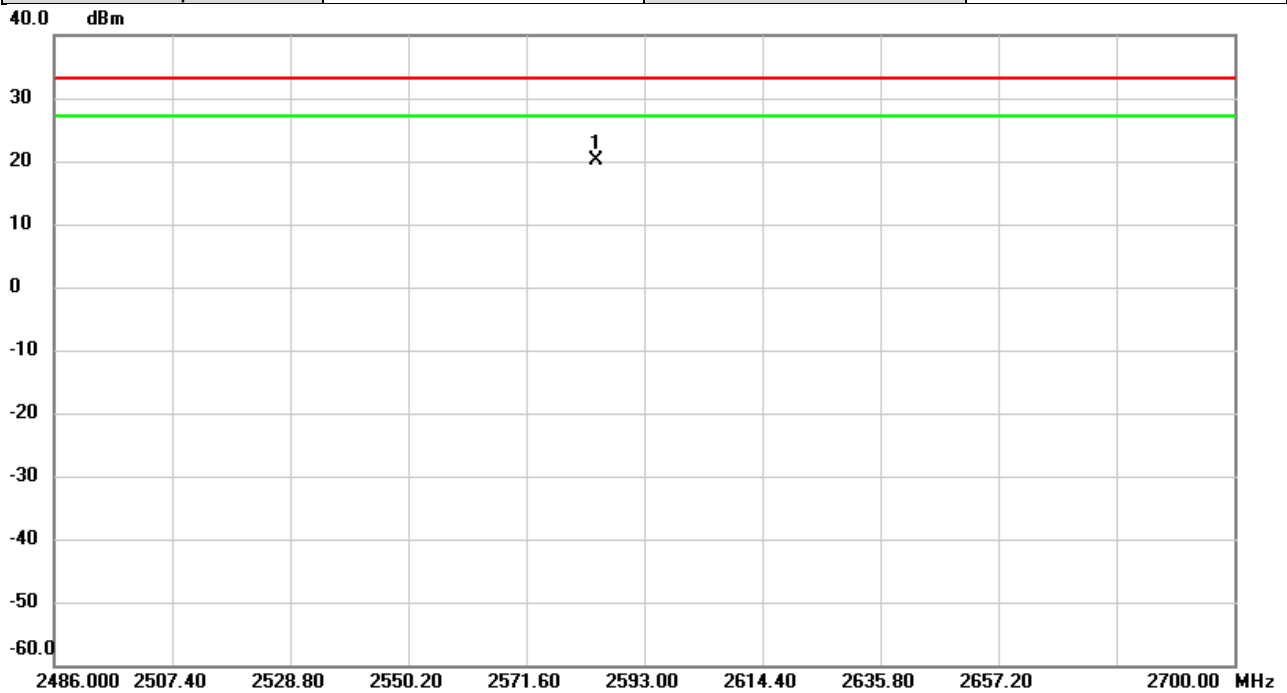


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2496.864	24.83	7.12	31.95	33.01	-1.06	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH40620	Polarization	Vertical
Temp	24°C	Hum.	62%

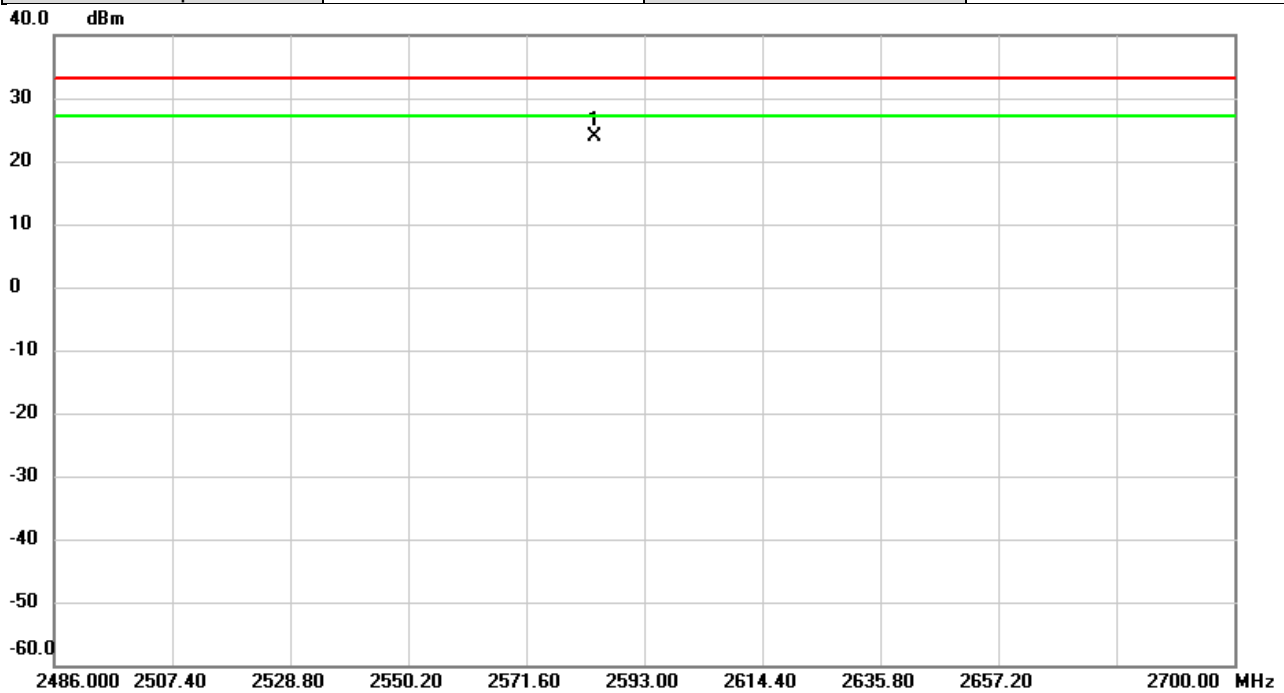


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2584.233	12.35	7.72	20.07	33.01	-12.94	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH40620	Polarization	Horizontal
Temp	24°C	Hum.	62%

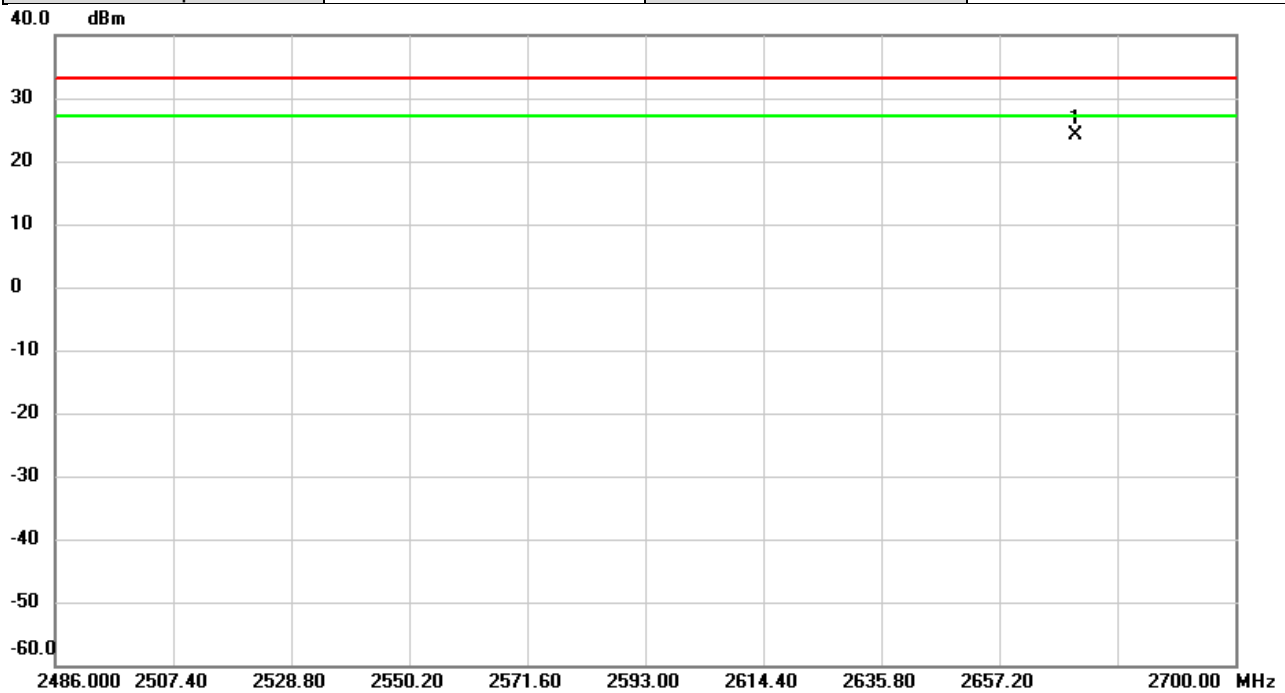


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2583.926	16.55	7.30	23.85	33.01	-9.16	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH41490	Polarization	Vertical
Temp	24°C	Hum.	62%

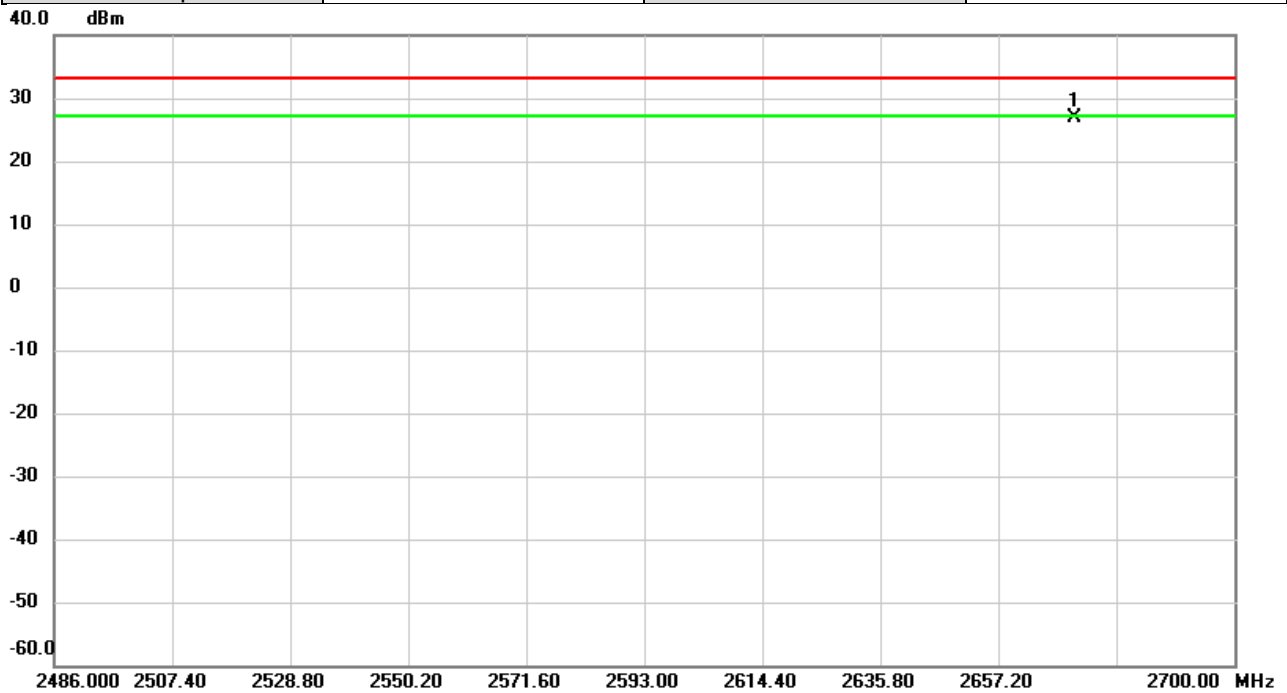


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2671.039	15.71	8.38	24.09	33.01	-8.92	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/3/6
Test Channel	CH41490	Polarization	Horizontal
Temp	24°C	Hum.	62%



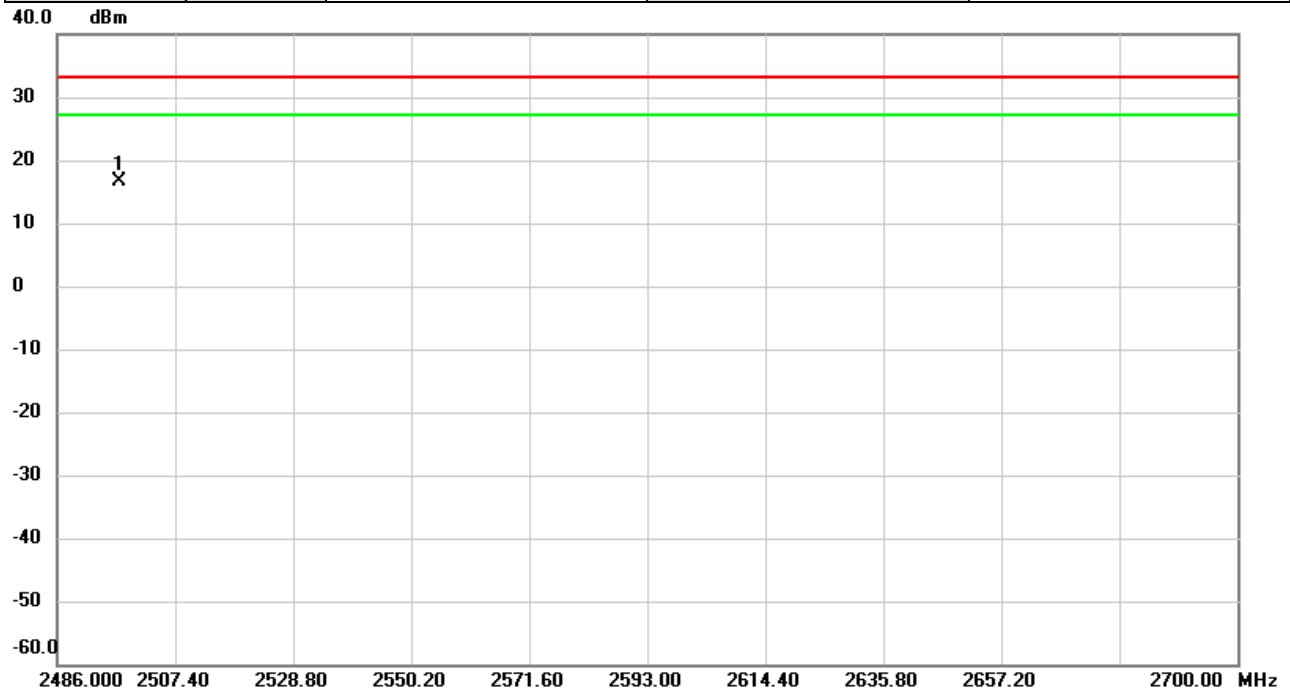
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2670.946	18.85	8.13	26.98	33.01	-6.03	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Patch Type Antenna:

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH39750	Polarization	Vertical
Temp	24°C	Hum.	62%

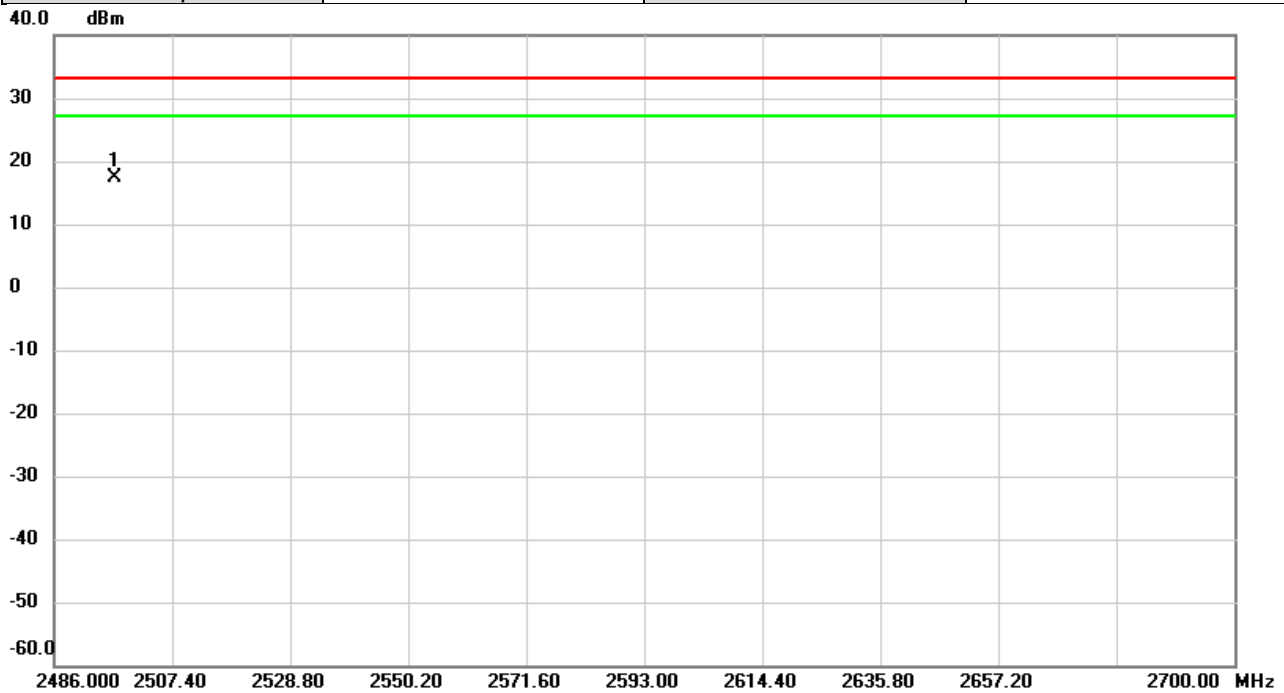


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2497.264	9.17	7.47	16.64	33.01	-16.37	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH39750	Polarization	Horizontal
Temp	24°C	Hum.	62%

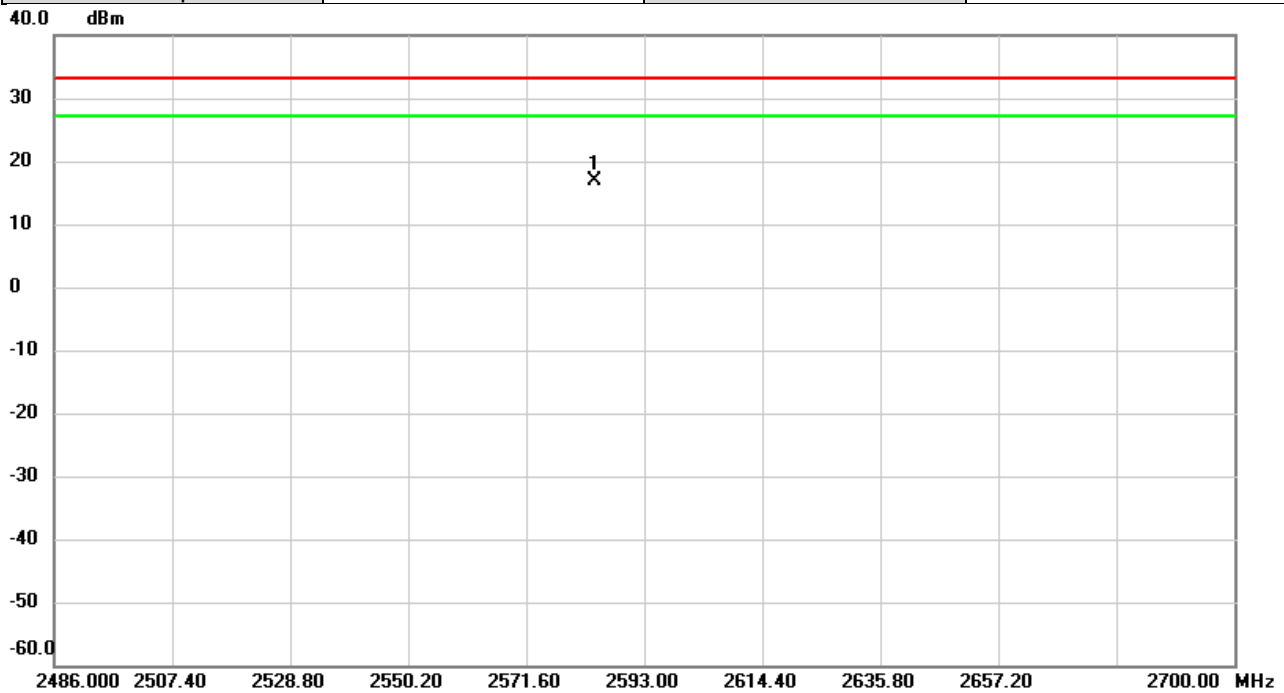


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2496.907	10.28	7.12	17.40	33.01	-15.61	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH40620	Polarization	Vertical
Temp	24°C	Hum.	62%

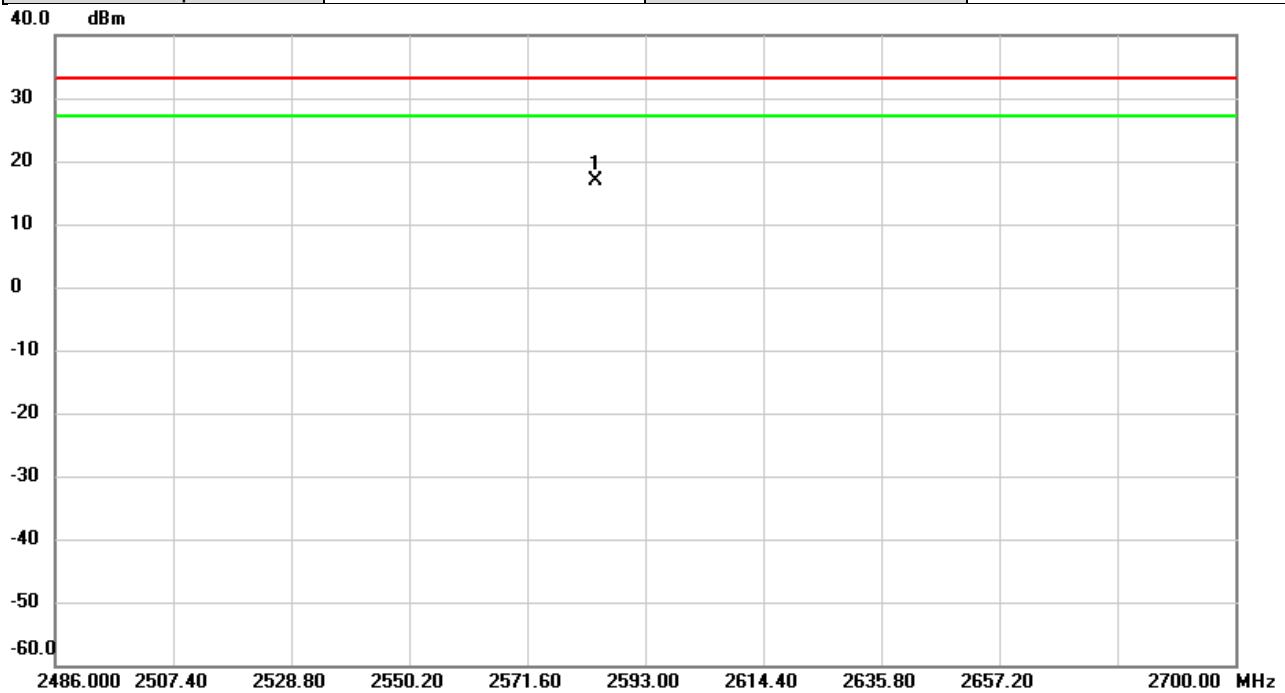


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2584.033	9.06	7.72	16.78	33.01	-16.23	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH40620	Polarization	Horizontal
Temp	24°C	Hum.	62%

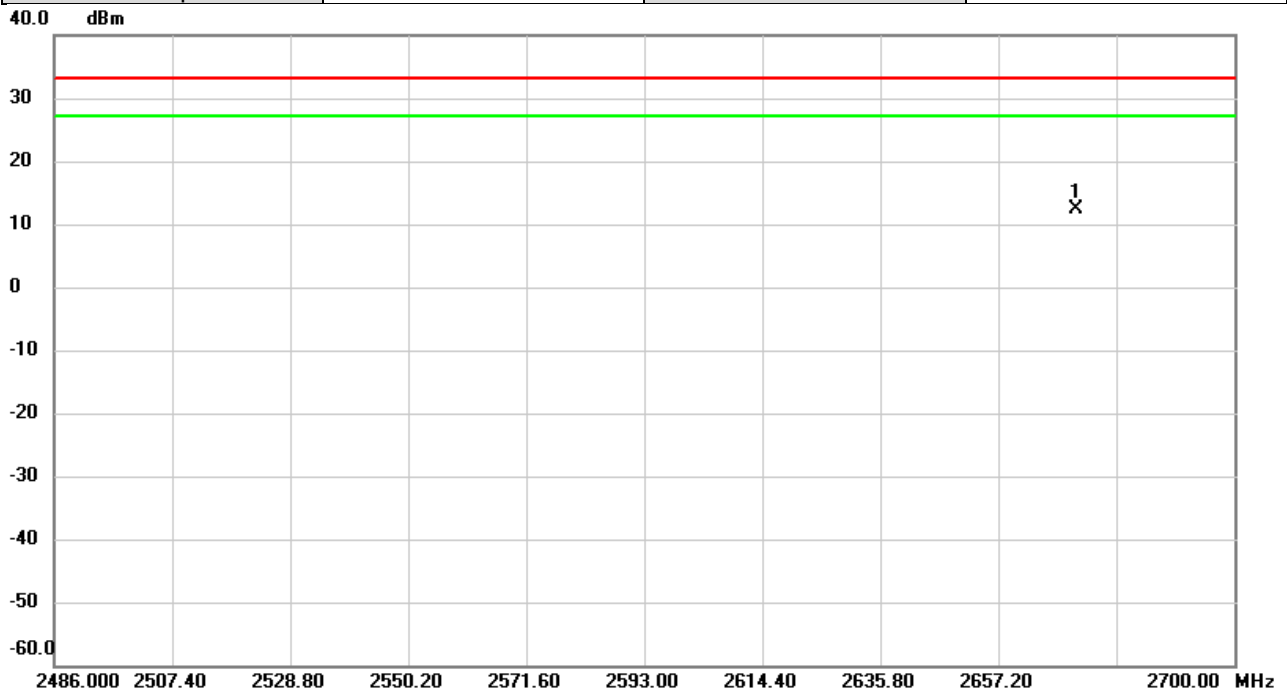


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2584.012	9.54	7.30	16.84	33.01	-16.17	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH41490	Polarization	Vertical
Temp	24°C	Hum.	62%

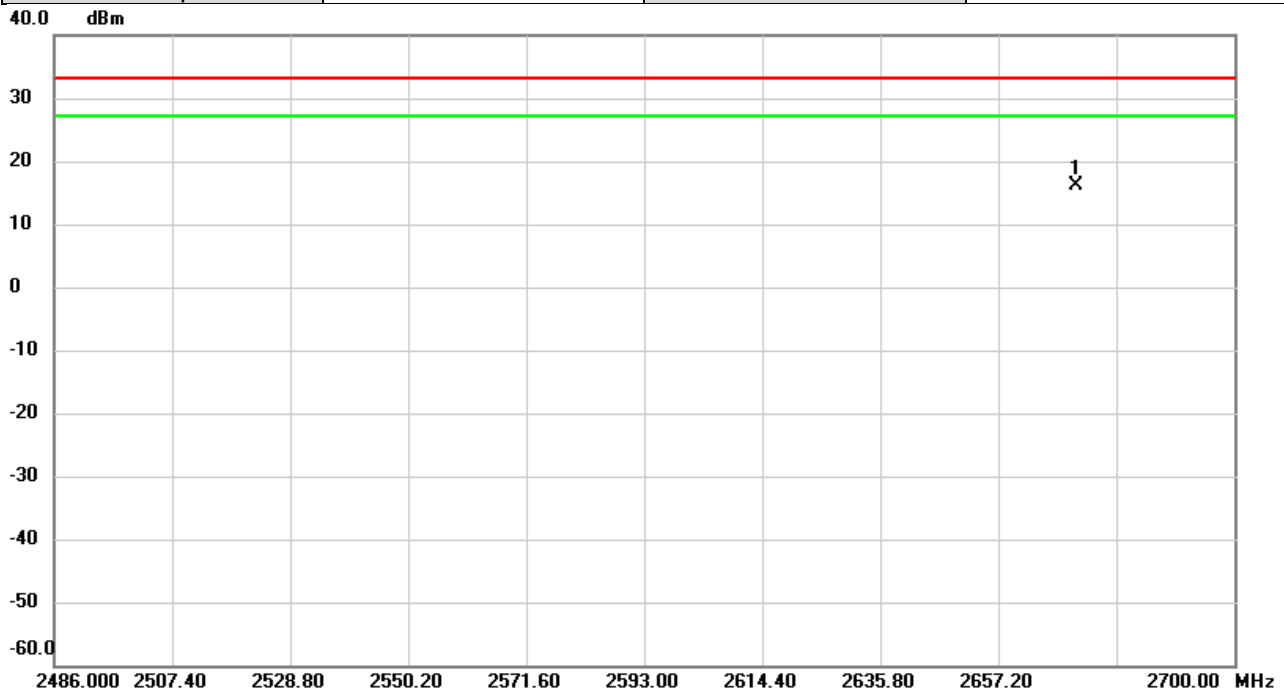


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2671.224	3.90	8.38	12.28	33.01	-20.73	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 41	Test Date	2025/2/21
Test Channel	CH41490	Polarization	Horizontal
Temp	24°C	Hum.	62%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2671.260	8.10	8.13	16.23	33.01	-16.78	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

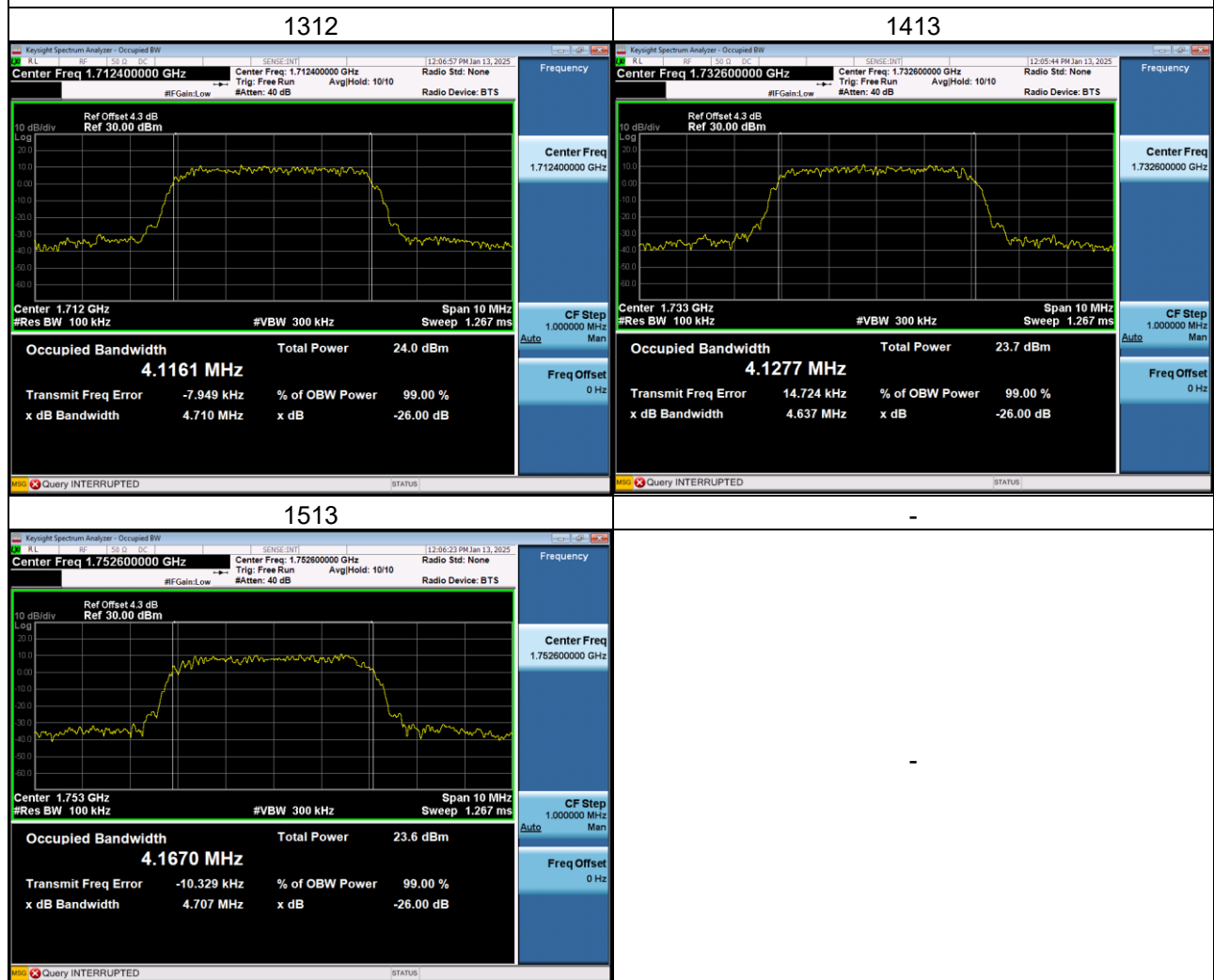
APPENDIX B OCCUPIED BANDWIDTH

WCDMA Band IV_WCDMA

QPSK

Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1312	1712.4	4.1161	1312	1712.4	4.710
1413	1732.6	4.1277	1413	1732.6	4.637
1513	1752.6	4.1670	1513	1752.6	4.707

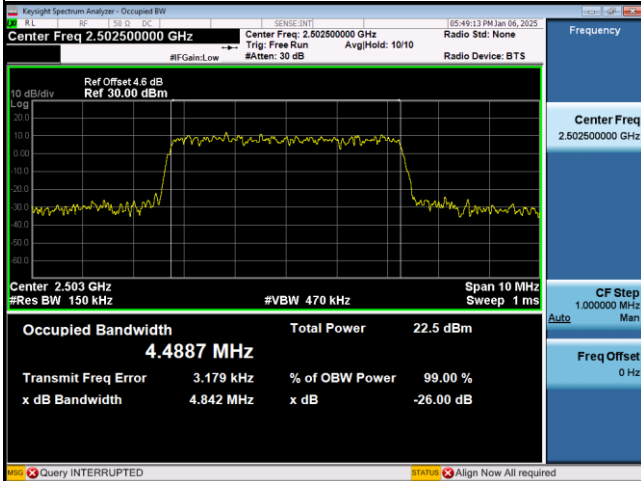
Spectrum Plot



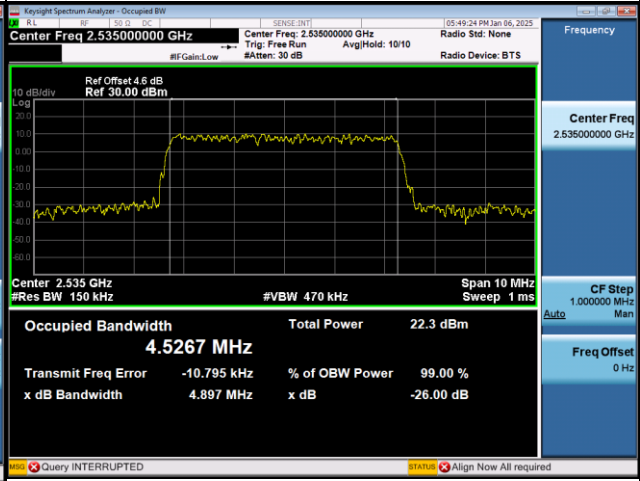
LTE Band 7_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	1710.7	4.4887	20775	1710.7	4.842
21100	1732.5	4.5267	21100	1732.5	4.897
21425	1754.3	4.5274	21425	1754.3	4.859
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.4959	20775	2502.5	4.803
21100	2535	4.5185	21100	2535	4.818
21425	2567.5	4.5211	21425	2567.5	4.840
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.5336	20775	2502.5	4.836
21100	2535	4.4942	21100	2535	4.811
21425	2567.5	4.5140	21425	2567.5	4.843
256QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20775	2502.5	4.5243	20775	2502.5	4.827
21100	2535	4.5058	21100	2535	4.831
21425	2567.5	4.5236	21425	2567.5	4.826

Spectrum Plot

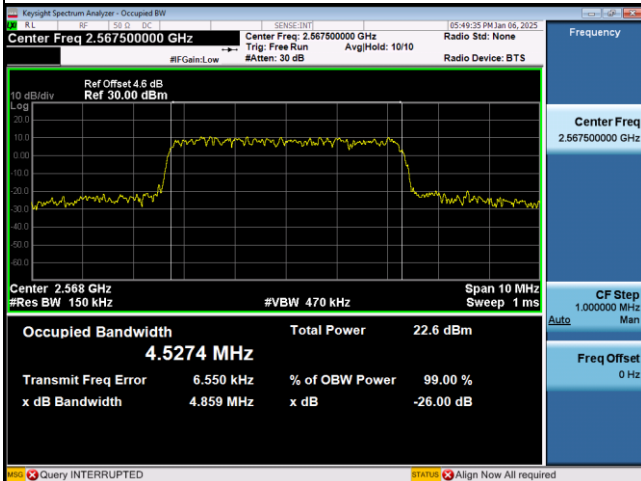
QPSK-20775



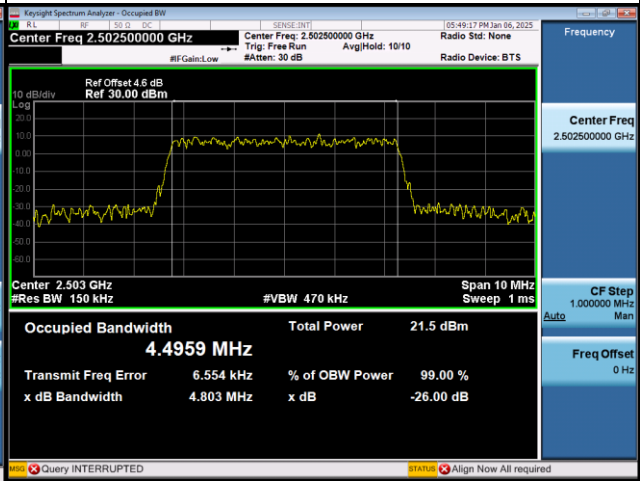
QPSK-21100



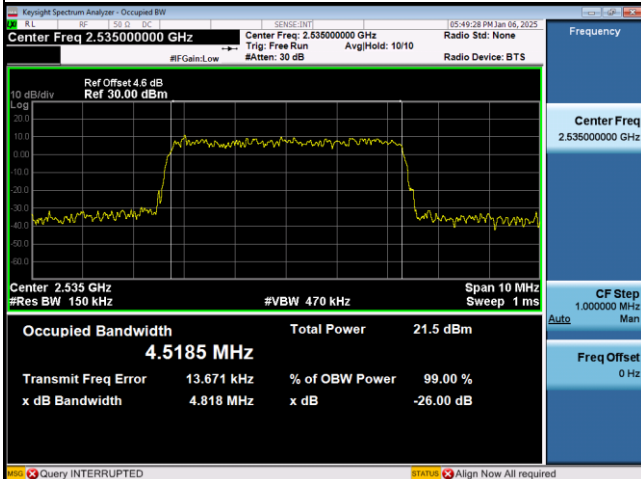
QPSK-21425



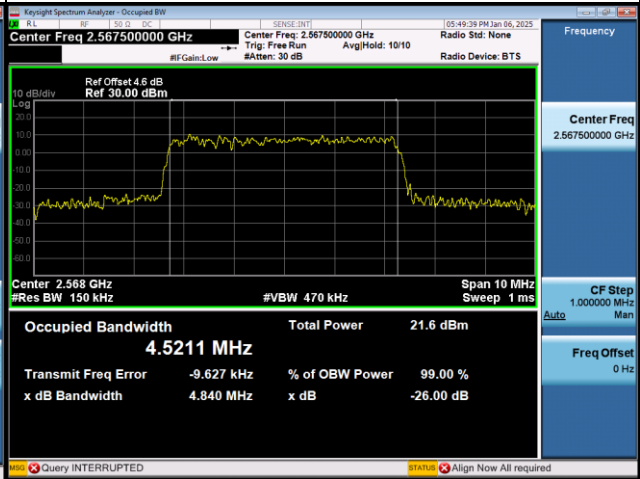
16QAM-20775

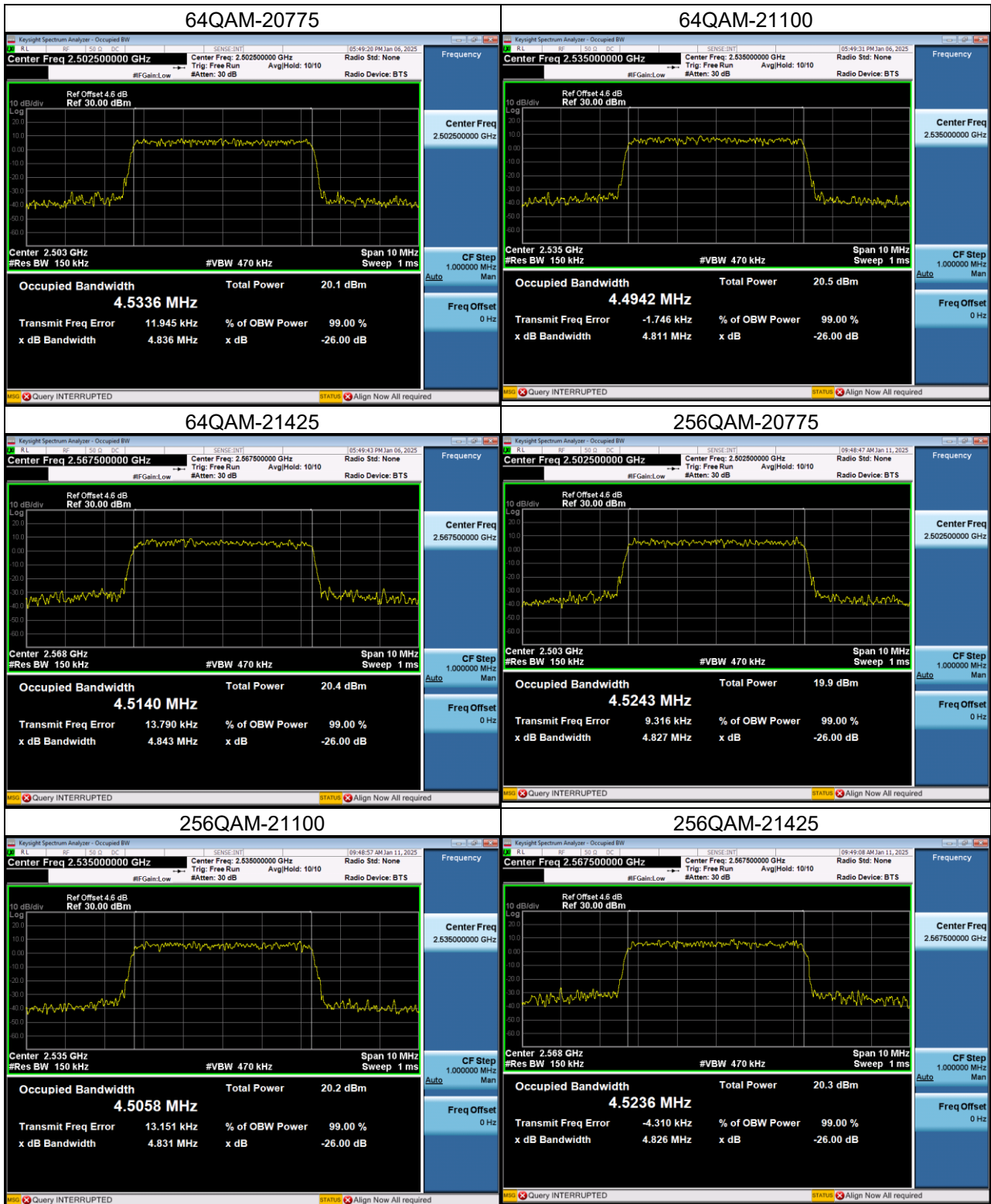


16QAM-21100



16QAM-21425

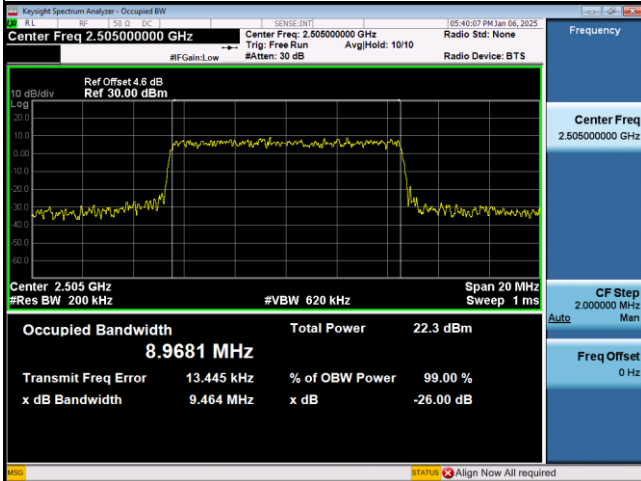




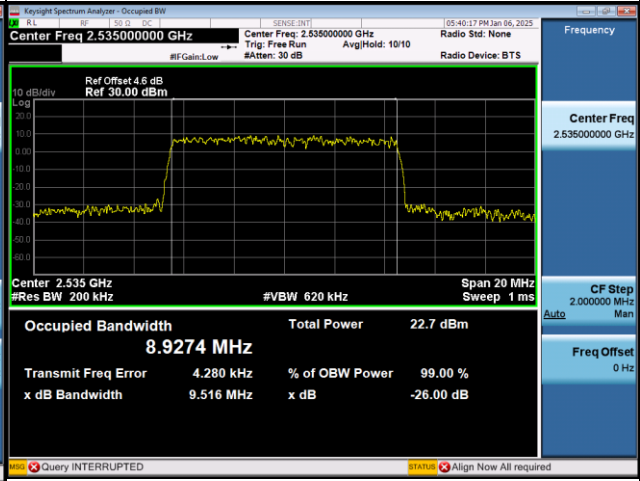
LTE Band 7_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.9681	20800	2505	9.464
21100	2535	8.9274	21100	2535	9.516
21400	2565	8.9505	21400	2565	9.473
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	8.9139	20800	2505	9.452
21100	2535	8.9279	21100	2535	9.458
21400	2565	8.9815	21400	2565	9.467
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	9.0208	20800	2505	9.549
21100	2535	8.9165	21100	2535	9.447
21400	2565	8.9937	21400	2565	9.457
256QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20800	2505	9.0007	20800	2505	9.549
21100	2535	8.9502	21100	2535	9.498
21400	2565	8.9641	21400	2565	9.510

Spectrum Plot

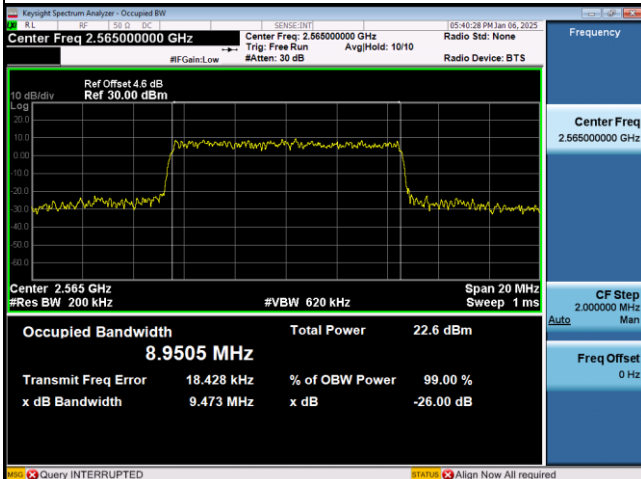
QPSK-20800



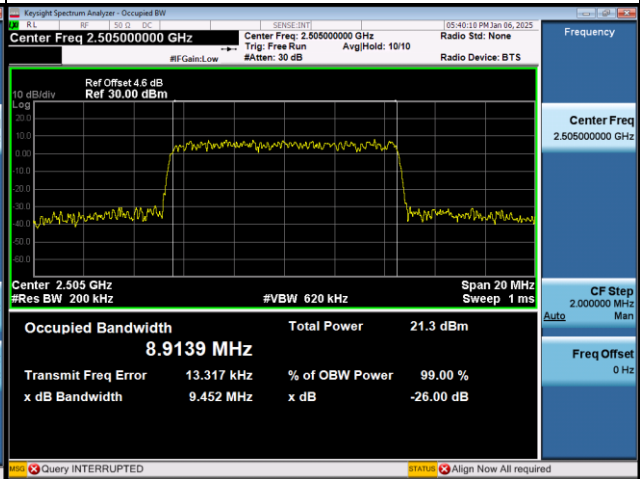
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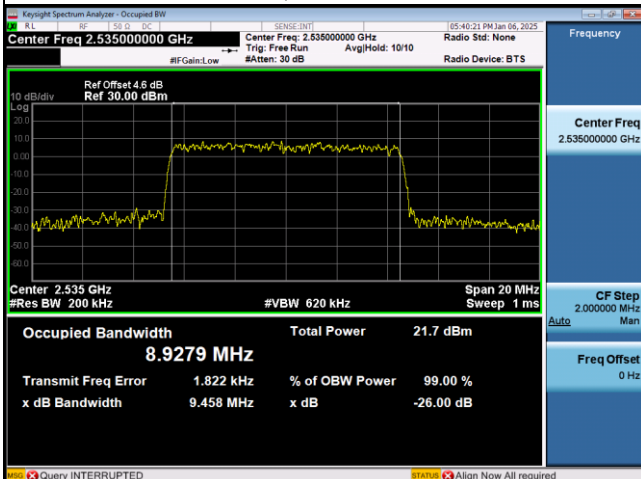
QPSK-21400



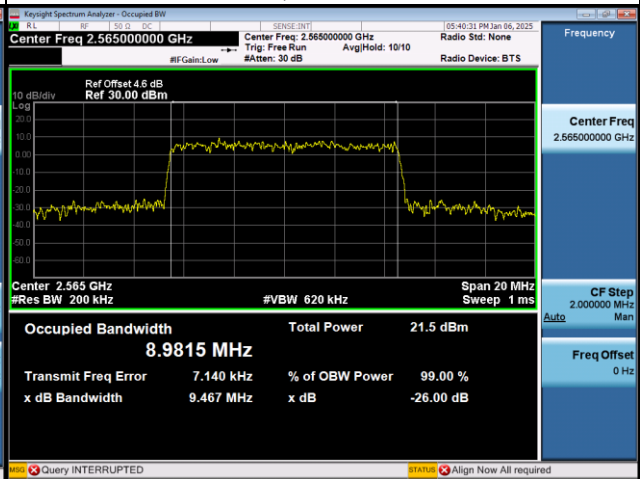
16QAM-20800

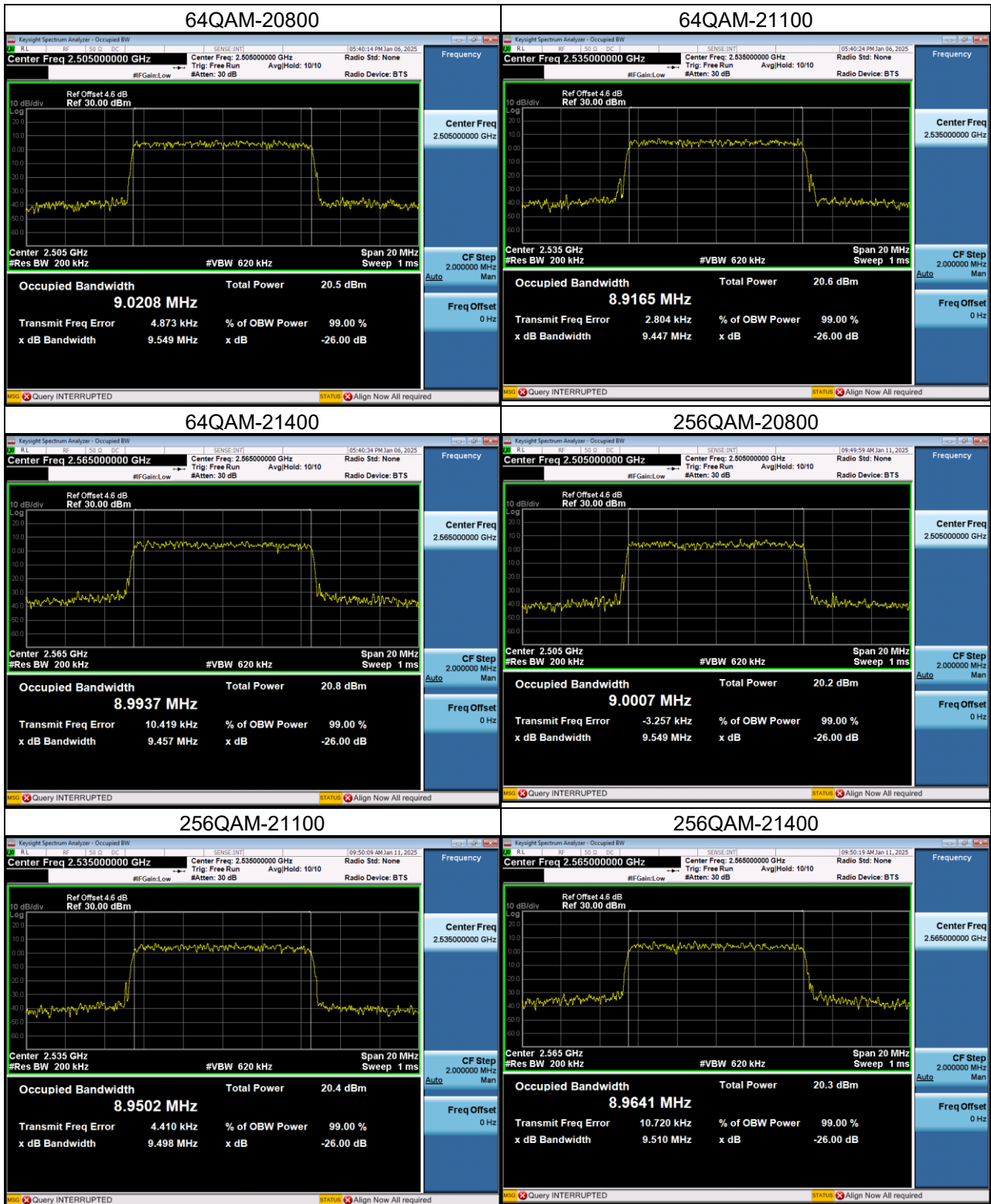


16QAM-21100



16QAM-21400

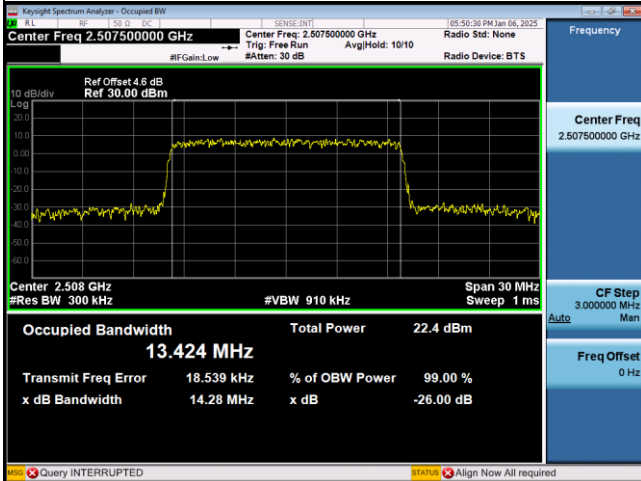




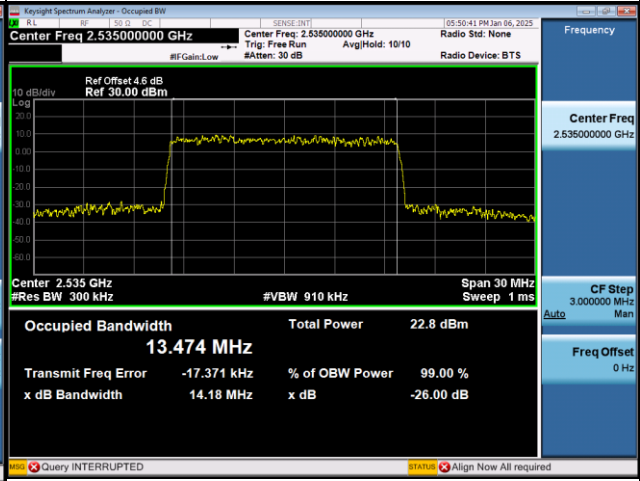
LTE Band 7_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.424	20825	2507.5	14.28
21100	2535	13.474	21100	2535	14.18
21375	2562.5	13.413	21375	2562.5	14.22
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.396	20825	2507.5	14.16
21100	2535	13.365	21100	2535	14.16
21375	2562.5	13.355	21375	2562.5	14.41
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.417	20825	2507.5	14.14
21100	2535	13.428	21100	2535	14.21
21375	2562.5	13.429	21375	2562.5	14.23
256QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20825	2507.5	13.489	20825	2507.5	14.17
21100	2535	13.424	21100	2535	14.18
21375	2562.5	13.378	21375	2562.5	14.16

Spectrum Plot

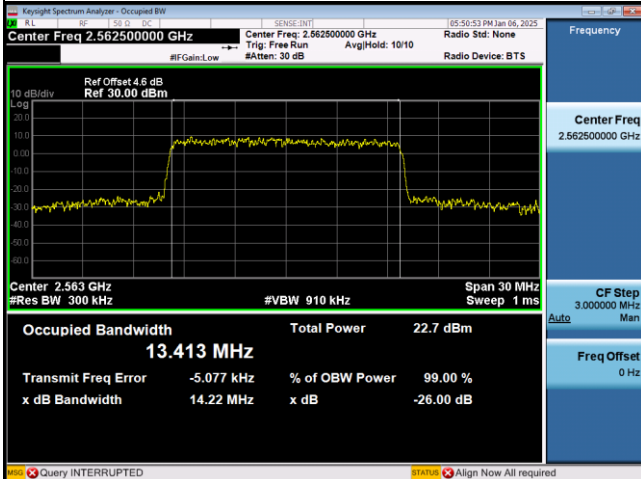
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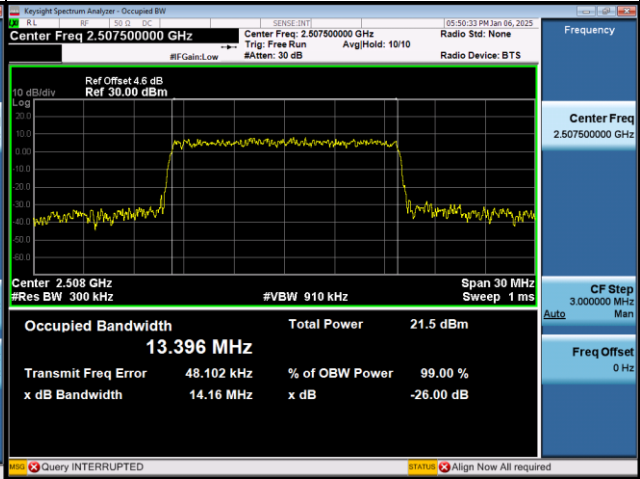
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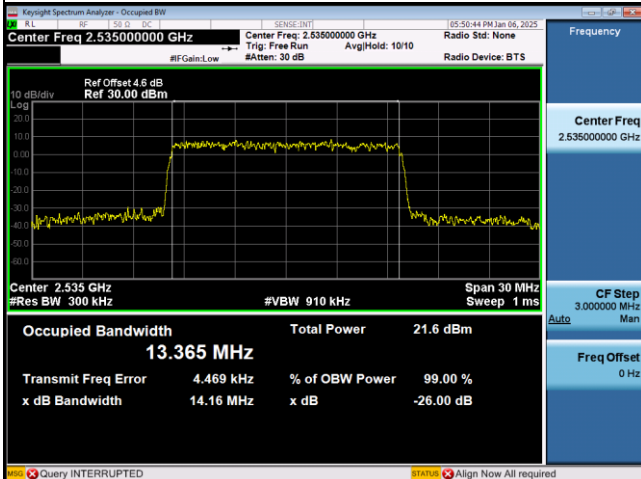
QPSK-21375



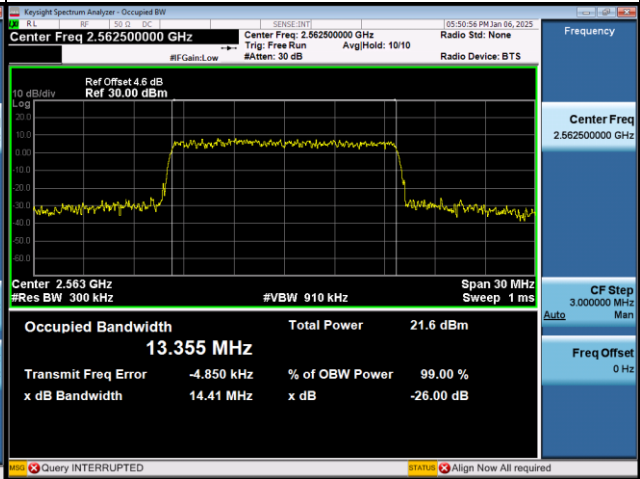
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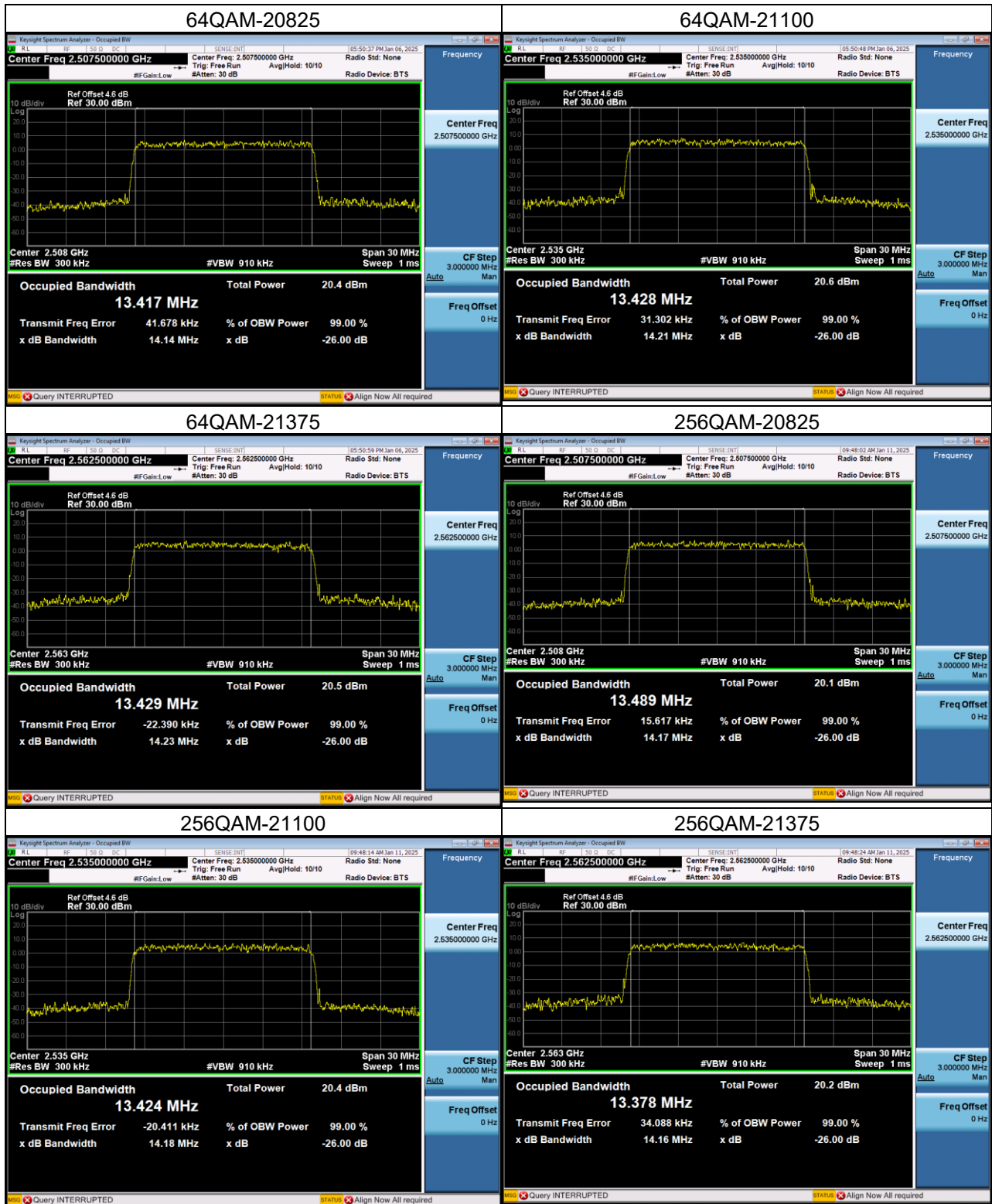


16QAM-21100



16QAM-21375

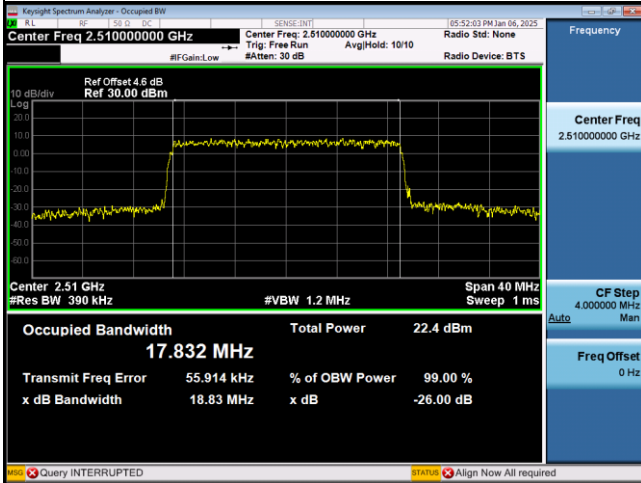




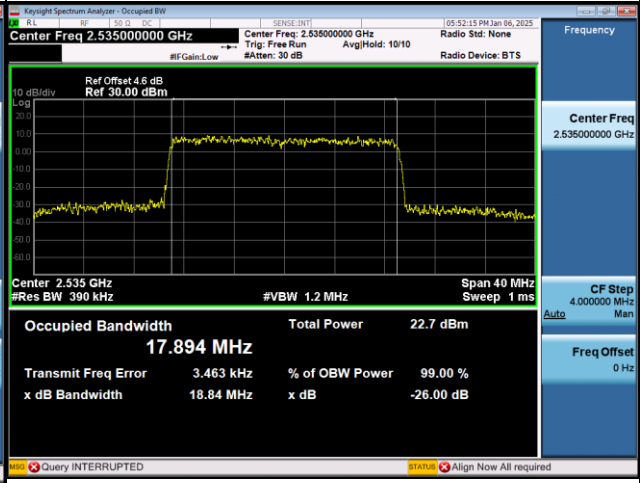
LTE Band 7_20M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.832	20850	2510	18.83
21100	2535	17.894	21100	2535	18.84
21350	2560	17.869	21350	2560	18.81
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.816	20850	2510	18.85
21100	2535	17.843	21100	2535	18.93
21350	2560	17.879	21350	2560	18.82
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.860	20850	2510	18.79
21100	2535	17.852	21100	2535	18.84
21350	2560	17.850	21350	2560	18.88
256QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20850	2510	17.898	20850	2510	18.81
21100	2535	17.897	21100	2535	18.84
21350	2560	17.958	21350	2560	18.84

Spectrum Plot

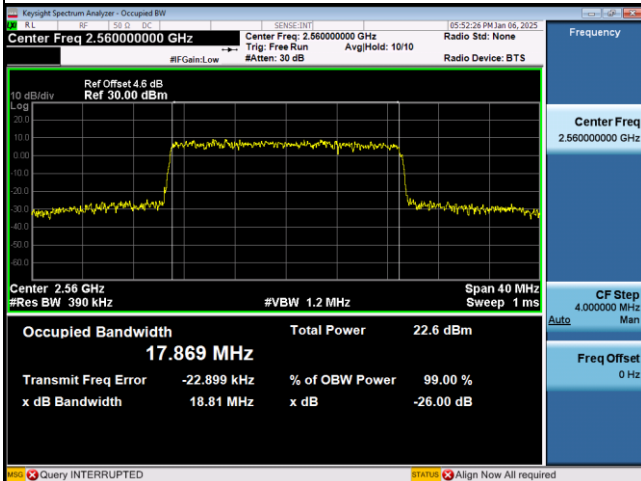
QPSK-20850



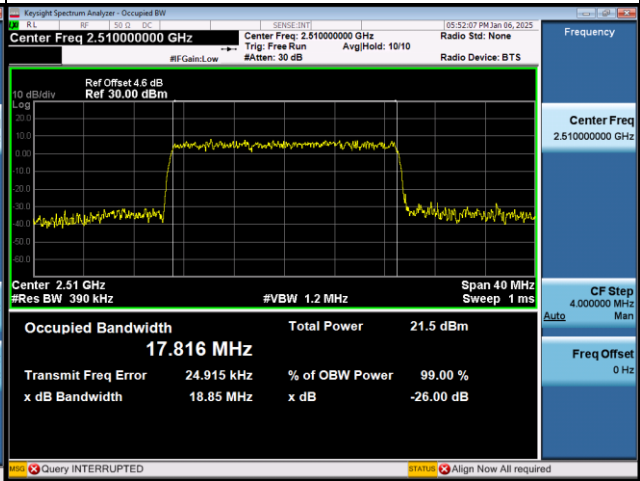
QPSK-21100



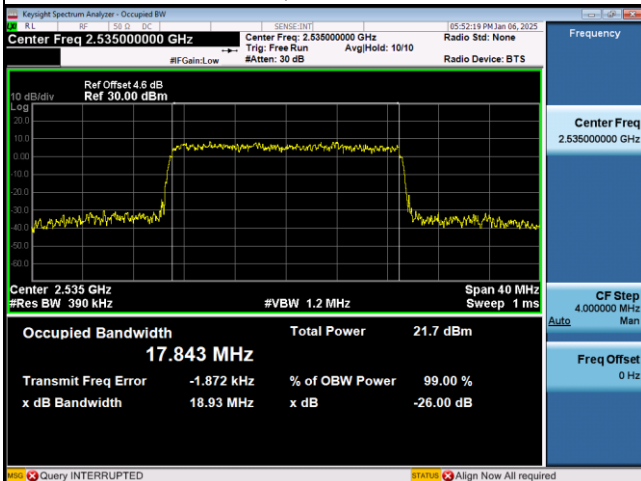
QPSK-21350



16QAM-20850



16QAM-21100



16QAM-21350

