



# FCC Radio Test Report

## FCC ID: M82-SCN100

**Report No.** : BTL-FCCP-7-2212T004  
**Equipment** : Computer  
**Model Name** : SCN-100-9, SCN-100-9xxxxxxxxxxxxxxxx (where "x" may be any alphanumeric character, "-" or blank for marketing purpose and no impact safety related critical components and constructions)  
**Brand Name** :  
 (1) ADVANTECH or   
 (2)   
**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 4, 7, 12, 13, 41, 66, 7C, 41C  
**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  
**Date of Receipt** : 2022/12/9  
**Date of Test** : 2023/2/24 ~ 2023/10/27  
**Issued Date** : 2023/11/7

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

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**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** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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-7-2212T004	R00	Original Report.	2023/9/4	Invalid
BTL-FCCP-7-2212T004	R01	Added others conducted test items.	2023/11/7	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)	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(h) 27.53(m)(4)	Conducted Spurious Emissions	APPENDIX C	Pass	-----
2.1053 27.53(c)(2) 27.53(f) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	APPENDIX D	Pass	-----
2.1051 27.53(c)(2)(4) 27.53(f) 27.53(g) 27.53(h) 27.53(m)(4)	Band Edge Measurements	APPENDIX E	Pass	-----
-	Peak To Average Ratio	APPENDIX F	Pass	-----
2.1055 27.54	Frequency Stability	APPENDIX G	Pass	-----

**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

The test locations stated below are under the TAF Accreditation Number 0659.  
 The test location(s) used to collect the test data in this report are:  
 No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan  
 (FCC DN: TW0659)

C05                       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 %**. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{cispr}$  requirement.

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:**



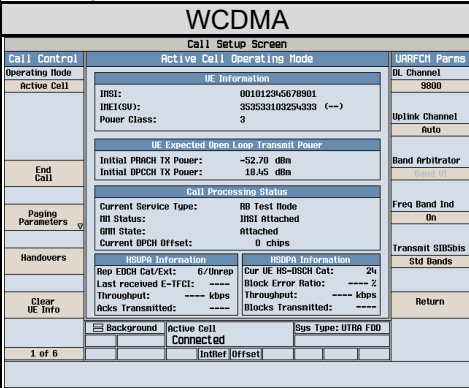
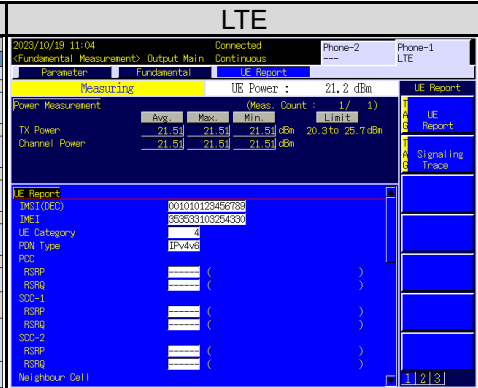
Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

### 1.4 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
Conducted Output Power	23.4 °C, 59 %	AC 120V	Cora Lin
Effective Radiated Power & Equivalent Isotropic Radiated Power	Refer to data	AC 120V	Mark Wang
Occupied Bandwidth	25.4 °C, 54 %	AC 120V	Cora Lin
Conducted Spurious Emissions	25.4 °C, 54 %	AC 120V	Cora Lin
Radiated Spurious Emissions	Refer to data	AC 120V	Mark Wang Eddie Lee
Band Edge	25.4 °C, 54 %	AC 120V	Cora Lin
Peak to Average Ratio	25.4 °C, 54 %	AC 120V	Cora Lin
Frequency Stability	Normal and Extreme		Cora Lin

## 2 GENERAL INFORMATION

### 2.1 DESCRIPTION OF EUT

Equipment	Computer				
Model Name	SCN-100-9, SCN-100-9xxxxxxxxxxxxxxxx (where "x" may be any alphanumeric character, "-" or blank for marketing purpose and no impact safety related critical components and constructions)				
Brand Name	(1) ADVANTECH or  (2) 				
Model Difference	Different model distribute to different area.				
Power Source	DC voltage supplied from AC/DC Adapter.				
Power Rating	EUT: 12-32Vdc, 10-3.75A For Adapter: I/P: 100-240V~2.3A, 50-60Hz O/P: 24.0V --- 7.5A 180.0W				
Products Covered	1 * Adapter: FSP / FSP180-AAAN3				
IMEI No.					
WWAN Module	AirPrime / EM7565				
Operation Frequency	Band	UL Frequency (MHz)	DL Frequency (MHz)		
	WCDMA IV	1710 ~ 1755	2110 ~ 2155		
	LTE 4	1710 ~ 1755	2110 ~ 2155		
	LTE 7	2500 ~ 2570	2620 ~ 2690		
	LTE 12	699 ~ 716	729 ~ 746		
	LTE 13	777 ~ 787	746 ~ 756		
	LTE 41	2496 ~ 2690	-		
Maximum EIRP	Band	BW (MHz)	Mode	Power (W)	
	WCDMA IV	-	-	0.488	
	LTE 4	1.4	3	QPSK	0.337
				16QAM	0.290
		3	5	QPSK	0.341
				16QAM	0.293
		5	10	QPSK	0.345
				16QAM	0.296
		10	15	QPSK	0.349
				16QAM	0.300
15	20	QPSK	0.353		
		16QAM	0.303		
20	-	QPSK	0.357		
		16QAM	0.307		



	Band	BW (MHz)	Mode	Power (W)
	Maximum EIRP	LTE 7	5	QPSK
16QAM				0.341
10			QPSK	0.426
			16QAM	0.345
15			QPSK	0.431
			16QAM	0.349
20		QPSK	0.436	
		16QAM	0.353	
LTE 41		5	QPSK	0.437
			16QAM	0.355
		10	QPSK	0.442
			16QAM	0.359
		15	QPSK	0.447
			16QAM	0.363
20		QPSK	0.452	
		16QAM	0.367	
LTE 66		1.4	QPSK	0.476
			16QAM	0.388
		3	QPSK	0.482
			16QAM	0.393
		5	QPSK	0.488
			16QAM	0.397
		10	QPSK	0.493
			16QAM	0.402
15		QPSK	0.499	
		16QAM	0.406	
LTE CA_7C		20+20	QPSK	0.387
			16QAM	0.335
		20+15	QPSK	0.390
			16QAM	0.334
		15+20	QPSK	0.384
			16QAM	0.343
	20+10	QPSK	0.399	
		16QAM	0.336	
10+20	QPSK	0.386		
	16QAM	0.331		
15+15	QPSK	0.415		
	16QAM	0.348		
15+10	QPSK	0.410		
	16QAM	0.348		

	Band	BW (MHz)	Mode	Power (W)
	LTE CA_41C	20+20	QPSK	0.434
			16QAM	0.398
		20+15	QPSK	0.414
			16QAM	0.386
		20+10	QPSK	0.400
			16QAM	0.382
		20+5	QPSK	0.407
			16QAM	0.360
		15+20	QPSK	0.402
			16QAM	0.389
		15+15	QPSK	0.405
			16QAM	0.370
		15+10	QPSK	0.414
			16QAM	0.374
		10+20	QPSK	0.399
			16QAM	0.358
		10+15	QPSK	0.399
			16QAM	0.352
		5+20	QPSK	0.396
			16QAM	0.348
Maximum ERP	LTE 12	1.4	QPSK	0.147
			16QAM	0.119
		3	QPSK	0.148
			16QAM	0.121
		5	QPSK	0.150
			16QAM	0.122
	10	QPSK	0.152	
		16QAM	0.124	
	LTE 13	5	QPSK	0.239
			16QAM	0.194
		10	QPSK	0.241
			16QAM	0.196
Test Model	SCN-100-9			
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 4					
Test Frequency ID	Bandwidth (MHz)	N <sub>UL</sub>	Frequency of Uplink (MHz)	N <sub>DL</sub>	Frequency of Downlink (MHz)
Low Range	1.4	19957	1710.7	1957	2110.7
	3	19965	1711.5	1965	2111.5
	5	19975	1712.5	1975	2112.5
	10	20000	1715	2000	2115
	15	20025	1717.5	2025	2117.5
	20	20050	1720	2050	2120
Mid Range	1.4/3/5/10/15/20	20175	1732.5	2175	2132.5
High Range	1.4	20393	1754.3	2393	2154.3
	3	20385	1753.5	2385	2153.5
	5	20375	1752.5	2375	2152.5
	10	20350	1750	2350	2150
	15	20325	1747.5	2325	2147.5
	20	20300	1745	2300	2145

LTE Band 7					
Test Frequency ID	Bandwidth (MHz)	N <sub>UL</sub>	Frequency of Uplink (MHz)	N <sub>DL</sub>	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 <sub>UL</sub>	Frequency of Uplink (MHz)	N <sub>DL</sub>	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 <sub>UL</sub>	Frequency of Uplink (MHz)	N <sub>DL</sub>	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 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

LTE Band 66					
Test Frequency ID	Bandwidth (MHz)	N <sub>UL</sub>	Frequency of Uplink (MHz)	N <sub>DL</sub>	Frequency of Downlink (MHz)
Low Range	1.4	131979	1710.7	66443	2110.7
	3	131987	1711.5	66451	2111.5
	5	131997	1712.5	66461	2112.5
	10	132022	1715	66486	2115
	15	132047	1717.5	66511	2117.5
	20	132072	1720	66536	2120
Mid Range	1.4/3/5/10/15/20	132322	1745	66786	2145
High Range	1.4	132665	1779.3	67129	2179.3
	3	132657	1778.5	67121	2178.5
	5	132647	1777.5	67111	2177.5
	10	132622	1775	67086	2175
	15	132597	1772.5	67061	2172.5
	20	132572	1770	67036	2170

LTE Band CA_7C											
Rang	CC-Combo/ N <sub>RB_agg</sub> [RB]	CC1 Note 1					CC2 Note 1				
		BW [RB]	N <sub>UL</sub>	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]	BW [RB]	N <sub>UL</sub>	f <sub>UL</sub> [MHz]	N <sub>DL</sub>	f <sub>DL</sub> [MHz]
Low	50+100	50	20805	2505.5	2805	2625.5	100	20949	2519.9	2949	2639.9
		100	20850	2510	2850	2630	50	20994	2524.4	2994	2644.4
	75+50	75	20825	2507.5	2825	2627.5	50	20945	2519.5	2945	2639.5
	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5
	75+100	75	20828	2507.8	2828	2627.8	100	20999	2524.9	2999	2644.9
		100	20850	2510	2850	2630	75	21021	2527.1	3021	2647.1
100+100	100	20850	2510	2850	2630	100	21048	2529.8	3048	2649.8	
Mid	50+100	50	21006	2525.6	3006	2645.6	100	21150	2540	3150	2660
		100	21051	2530.1	3051	2650.1	50	21195	2544.5	3195	2664.5
	75+50	75	21051	2530.1	3051	2650.1	50	21171	2542.1	3171	2662.1
	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5
	75+100	75	21003	2525.3	3003	2645.3	100	21174	2542.4	3174	2662.4
		100	21026	2527.6	3026	2647.6	75	21197	2544.7	3197	2664.7
100+100	100	21001	2525.1	3001	2645.1	100	21199	2544.9	3199	2664.9	
High	50+100	50	21206	2545.6	3206	2665.6	100	21350	2560	3350	2680
		100	21251	2550.1	3251	2670.1	50	21395	2564.5	3395	2684.5
	75+50	75	21277	2552.7	3277	2672.7	50	21397	2564.7	3397	2684.7
	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5
	75+100	75	21179	2542.9	3179	2662.9	100	21350	2560	3350	2680
		100	21201	2545.1	3201	2665.1	75	21372	2562.2	3372	2682.2
100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680	

Note 1: Carriers in increasing frequency order.

LTE Band CA_41C								
Rang	CC-Combo/ N <sub>RB_agg</sub> [RB]	CC1 Note 1			CC2 Note 1			
		BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	BW [RB]	N <sub>UL/DL</sub>	f <sub>UL/DL</sub> [MHz]	
Low	25+100	25	39683	2499.3	100	39800	2511	
		100	39750	2506	25	39867	2517.7	
	50+75	50	39703	2501.3	75	39823	2513.3	
		75	39725	2503.5	50	39845	2515.5	
	50+100	50	39705	2501.5	100	39849	2515.9	
		100	39750	2506	50	39894	2520.4	
	75+75	75	39725	2503.5	75	39875	2518.5	
		75	39725	2503.8	100	39899	2520.9	
	75+100	100	39750	2506	75	39921	2523.1	
		100	39750	2506	100	39948	2525.8	
	Mid	25+100	25	40528	2583.8	100	40645	2595.5
			100	40595	2590.5	25	40712	2602.2
50+75		50	40549	2585.9	75	40669	2597.9	
		75	40571	2588.1	50	40691	2600.1	
50+100		50	40526	2583.6	100	40670	2598.0	
		100	40571	2588.1	50	40715	2602.5	
75+75		75	40545	2585.5	75	40695	2600.5	
		75	40523	2583.3	100	40694	2600.4	
75+100		100	40546	2585.6	75	40717	2602.7	
		100	40521	2583.1	100	40719	2602.9	
High		25+100	25	41373	2668.3	100	41490	2680
			100	41440	2675	25	41557	2686.7
	50+75	50	41395	2670.5	75	41545	2682.5	
		75	41417	2672.7	50	41537	2684.7	
	50+100	50	41346	2665.6	100	41490	2680	
		100	41391	2670.1	50	41535	2684.5	
	75+75	75	41365	2667.5	75	41545	2682.5	
		75	41319	2662.9	100	41490	2680	
	75+100	100	41341	2665.1	75	41512	2682.2	
		100	41292	2660.2	100	41490	2680	

Note 1: Carriers in increasing frequency order.

(3) Table for Filed Antenna:

Antenna	Manufacture	Part Number	Type	Connector	Gain (dBi)	Note
Main		PCUB77.A.07.A.001	PCB	I-PEX MFH4L	2.90	WCDMA Band IV
					2.90	LTE Band 4
					3.37	LTE Band 7
					1.34	LTE Band 12
					3.30	LTE Band 13
					3.53	LTE Band 41
					3.21	LTE Band 66
Aux		PCUB77.A.07.A.001	PCB	I-PEX MFH4L	3.59	WCDMA Band IV
					3.59	LTE Band 4
					3.32	LTE Band 7
					-4.88	LTE Band 12
					0.21	LTE Band 13
					3.32	LTE Band 41
					3.73	LTE Band 66

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**

<b>WCDMA BAND IV MODE</b>			
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 4 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1RB/3RB/6RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1RB/8RB/15RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1RB/12RB/25RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1RB/25RB/50RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1RB/36RB/75RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1RB/50RB/100RB
Occupied Bandwidth	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	6RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	15RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	25RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	50RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	75RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	100RB
Conducted Spurious Emissions	19957 to 20393	20175	1.4MHz	QPSK	1RB
	19975 to 20375	20175	5MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB
Radiated Spurious Emissions	19957 to 20393	20175	1.4MHz	QPSK	1RB
	19975 to 20375	20175	5MHz	QPSK	1RB
	20050 to 20300	20175	20MHz	QPSK	1RB
Band Edge	19957 to 20393	19957, 20393	1.4MHz	QPSK	1RB/6RB
	19965 to 20385	19965, 20385	3MHz	QPSK	1RB/15RB
	19975 to 20375	19975, 20375	5MHz	QPSK	1RB/25RB
	20000 to 20350	20000, 20350	10MHz	QPSK	1RB/50RB
	20025 to 20325	20025, 20325	15MHz	QPSK	1RB/75RB
	20050 to 20300	20050, 20300	20MHz	QPSK	1RB/100RB
Peak To Average Ratio	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM, 64QAM	1RB
	19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM, 64QAM	1RB
	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM, 64QAM	1RB
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM, 64QAM	1RB
	20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM, 64QAM	1RB
	20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM, 64QAM	1RB
Frequency Stability	20050 to 20300	20050, 20300	20MHz	QPSK	100RB



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	1RB/12RB/25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	1RB/25RB/50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	1RB/36RB/75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	1RB/50RB/100RB
Occupied Bandwidth	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM, 64QAM	25RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	50RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	75RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	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	1RB
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM, 64QAM	1RB
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM, 64QAM	1RB
	20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM, 64QAM	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	1RB/3RB/6RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM	1RB/8RB/15RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM	1RB/12RB/25RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM	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	6RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM	15RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM	25RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM	50RB
Peak to Average Ratio	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM	1RB
	23025 to 23165	23025, 23095, 23165	3MHz	QPSK, 16QAM, 64QAM	1RB
	23035 to 23155	23035, 23095, 23155	5MHz	QPSK, 16QAM, 64QAM	1RB
	23060 to 23130	23060, 23095, 23130	10MHz	QPSK, 16QAM, 64QAM	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	1RB/12RB/25RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM	1RB/25RB/50RB
Occupied Bandwidth	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM, 64QAM	25RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM	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	1RB
	23230	23230	10MHz	QPSK, 16QAM, 64QAM	1RB
Frequency Stability	23230	23230	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

LTE BAND 66 MODE					
Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM, 64QAM	1RB/3RB/6RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM, 64QAM	1RB/8RB/15RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM, 64QAM	1RB/12RB/25RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM, 64QAM	1RB/25RB/50RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM, 64QAM	1RB/36RB/75RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	1RB/50RB/100RB
Occupied Bandwidth	131979 to 132665	131979, 132322, 132665	1.4MHz	QPSK, 16QAM, 64QAM	6RB
	131987 to 132657	131987, 132322, 132657	3MHz	QPSK, 16QAM, 64QAM	15RB
	131997 to 132647	131997, 132322, 132647	5MHz	QPSK, 16QAM, 64QAM	25RB
	132022 to 132622	132022, 132322, 132622	10MHz	QPSK, 16QAM, 64QAM	50RB
	132047 to 132597	132047, 132322, 132597	15MHz	QPSK, 16QAM, 64QAM	75 RB
	132072 to 132572	132072, 132322, 132572	20MHz	QPSK, 16QAM, 64QAM	100RB
Conducted Spurious Emissions	131979 to 132665	132322	1.4MHz	QPSK	1RB
	131997 to 132647	132322	5MHz	QPSK	1RB
	132072 to 132572	132322	20MHz	QPSK	1RB
Radiated Spurious Emissions	132072 to 132572	132322	20MHz	QPSK	1RB
Band Edge	131979 to 132665	131979, 132665	1.4MHz	QPSK	1RB/6RB
	131987 to 132657	131987, 132657	3MHz	QPSK	1RB/15RB
	131997 to 132647	131997, 132647	5MHz	QPSK	1RB/25RB
	132022 to 132622	132022, 132622	10MHz	QPSK	1RB/50RB
	132047 to 132597	132047, 132597	15MHz	QPSK	1RB/75RB
	132072 to 132572	132072, 132572	20MHz	QPSK	1RB/100RB
Peak to Average Ratio	131979 to 132665	131979, 132322,	1.4MHz	QPSK, 16QAM,	1RB/3RB/6RB
	131987 to 132657	131987, 132322,	3MHz	QPSK, 16QAM,	1RB/8RB/15RB
	131997 to 132647	131997, 132322,	5MHz	QPSK, 16QAM,	1RB/12RB/25RB
	132022 to 132622	132022, 132322,	10MHz	QPSK, 16QAM,	1RB/25RB/50RB
	132047 to 132597	132047, 132322,	15MHz	QPSK, 16QAM,	1RB/36RB/75RB
	132072 to 132572	132072, 132322,	20MHz	QPSK, 16QAM,	1RB/50RB/100RB
Frequency Stability	132072 to 132572	132072, 132572	20MHz	QPSK	100RB

LTE Band CA_7C MODE				
Test Item	Channel Range	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	Low, Mid, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	PCC+SCC: 1RB#High+1RB#Low 1RB#Low+1RB# High Full RB+Full RB
		20MHz+10MHz		
		15MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Occupied Bandwidth	Low, Mid, High	10MHz+20MHz	QPSK, 16QAM, 64QAM	PCC+SCC: Full RB+Full RB
		20MHz+10MHz		
		15MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Conducted Spurious Emissions	Mid	20MHz+10MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low
		15MHz+10MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Radiated Spurious Emissions	Mid	20MHz+20MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low
Band Edge	Low, High	10MHz+20MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low 1RB#Low+1RB# High Full RB+Full RB
		20MHz+10MHz		
		15MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		

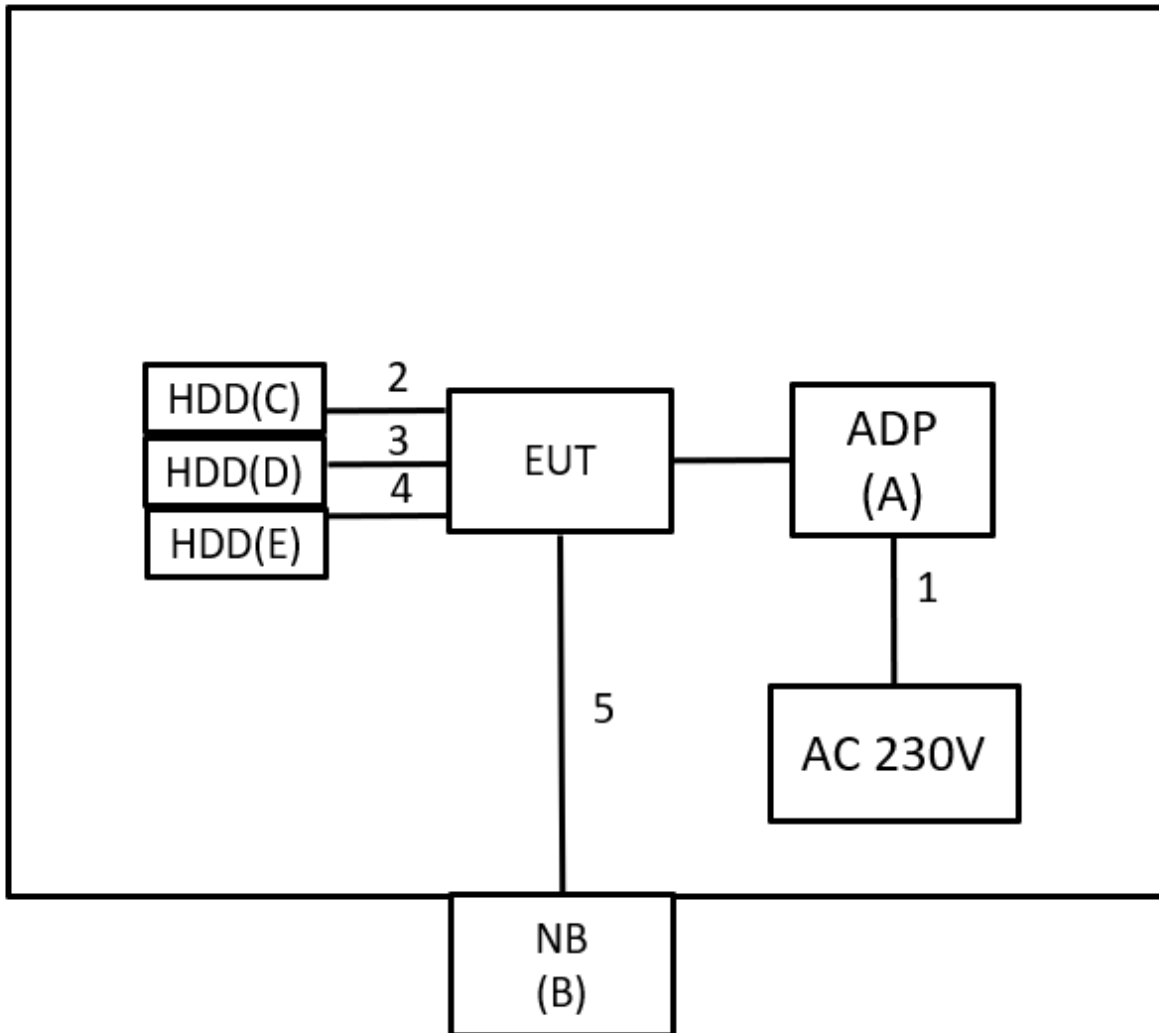
LTE Band CA_41C MODE				
Test Item	Channel Range	Channel Bandwidth	Modulation	Mode
Conducted Output Power & Equivalent Isotropic Radiated Power	Low, Mid, High	5MHz+20MHz	QPSK, 16QAM, 64QAM	PCC+SCC: 1RB#High+1RB#Low 1RB#Low+1RB# High Full RB+Full RB
		20MHz+5MHz		
		10MHz+15MHz		
		15MHz+10MHz		
		10MHz+20MHz		
		20MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Occupied Bandwidth	Low, Mid, High	5MHz+20MHz	QPSK, 16QAM, 64QAM	PCC+SCC: Full RB+Full RB
		20MHz+5MHz		
		10MHz+15MHz		
		15MHz+10MHz		
		10MHz+20MHz		
		20MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Conducted Spurious Emissions	Mid	15MHz+10MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low
		20MHz+10MHz		
		20MHz+15MHz		
		20MHz+20MHz		
Radiated Spurious Emissions	Mid	20MHz+20MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low
Band Edge	Low, High	5MHz+20MHz	QPSK	PCC+SCC: 1RB#High+1RB#Low 1RB#Low+1RB# High Full RB+Full RB
		20MHz+5MHz		
		10MHz+15MHz		
		15MHz+10MHz		
		10MHz+20MHz		
		20MHz+10MHz		
		15MHz+15MHz		
		15MHz+20MHz		
		20MHz+15MHz		
		20MHz+20MHz		

**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	FSP180-AAAN3	N/A	Supplied by test requester.
B	NB	HP	TPN-C125	N/A	Furnished by test lab.
C	USB 2.5" HDD	AKITIO	Neutrino U3.1	SK21D1621D003 F	Furnished by test lab.
D	USB 2.5" HDD	AKITIO	Neutrino U3.1	SK21D1621D003 F	Furnished by test lab.
E	USB 3.0 HDD	WD	WD3C3C0010B SL-0B	WX81A88ALJUC	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1m	Power Cable	Supplied by test requester.
2	N/A	N/A	0.6m	TypeC to TypeC Cable	Furnished by test lab.
3	N/A	N/A	1m	TypeC to TypeC Cable	Furnished by test lab.
4	N/A	N/A	0.3m	TypeC to TypeC Cable	Furnished by test lab.
5	N/A	N/A	12m	RJ45 Cable	Furnished by test lab.

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

#### 3.1 LIMIT

WCDMA IV, LTE Band 4 and 66:

27.50(d)(4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

LTE Band 7 and 41:

27.50(h)(2) BRS and EBS: Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

LTE Band 12:

27.50(c)(10) 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.

LTE Band 13:

27.50(b)(10) 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.

**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.

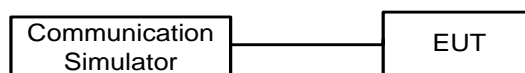
**Radiated Measurement:**

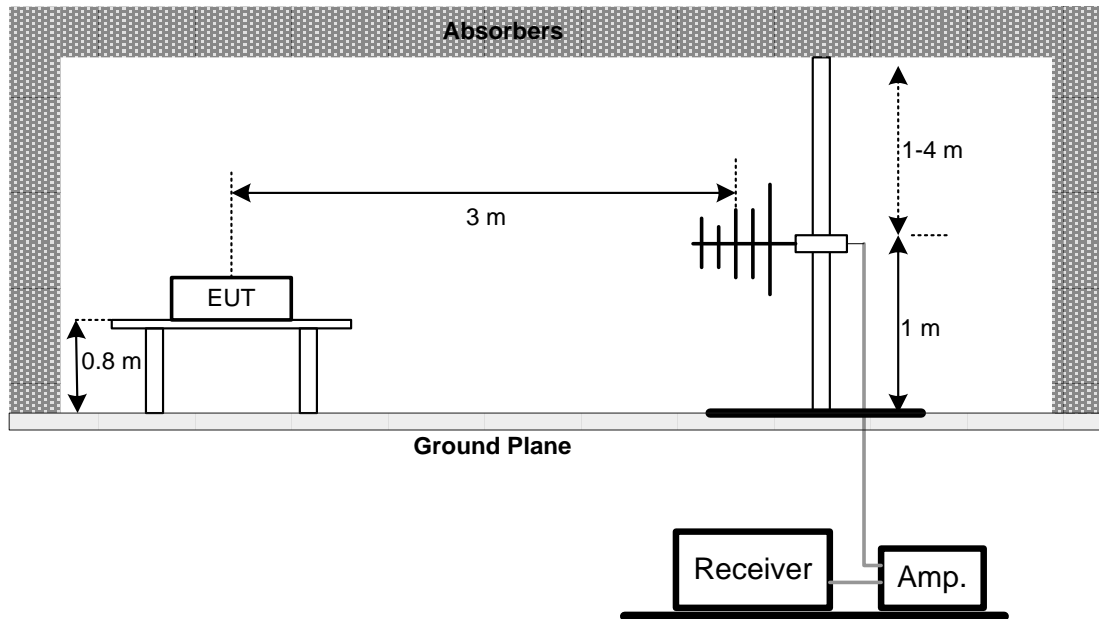
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. 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
- c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- d. ERP can be calculated form EIRP by subtracting the gain of dipole, ERP = EIPR - 2.15dBi..
- e. 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

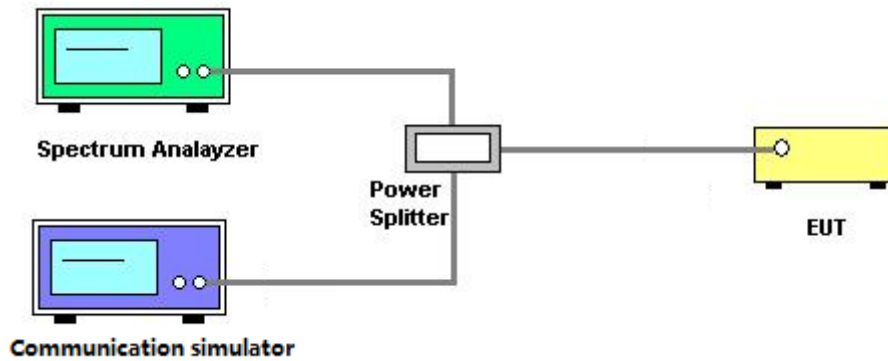
The testing follows FCC KDB 971168 v03r01 Section 4.

- 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

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)

### 5.2 TEST PROCEDURE

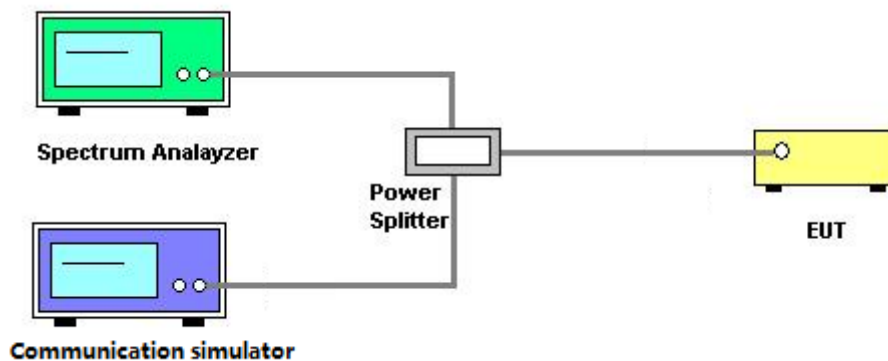
The testing follows FCC KDB 971168 v03r01 Section 6.

- 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

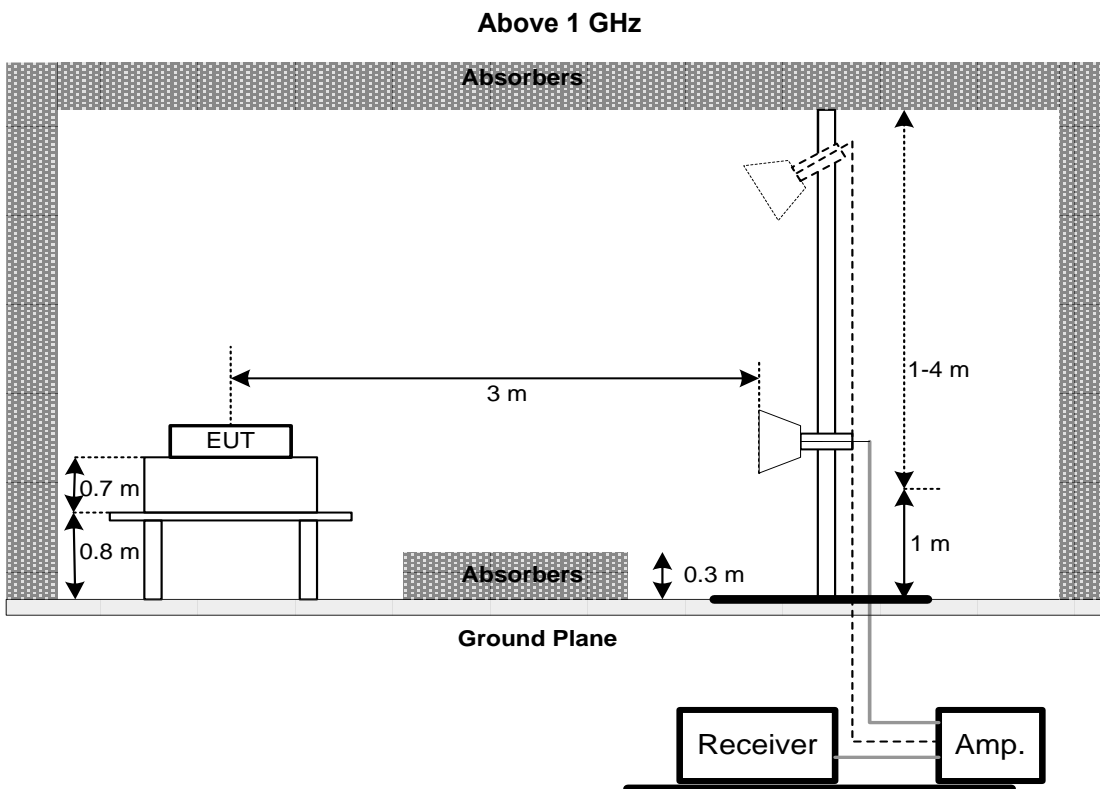
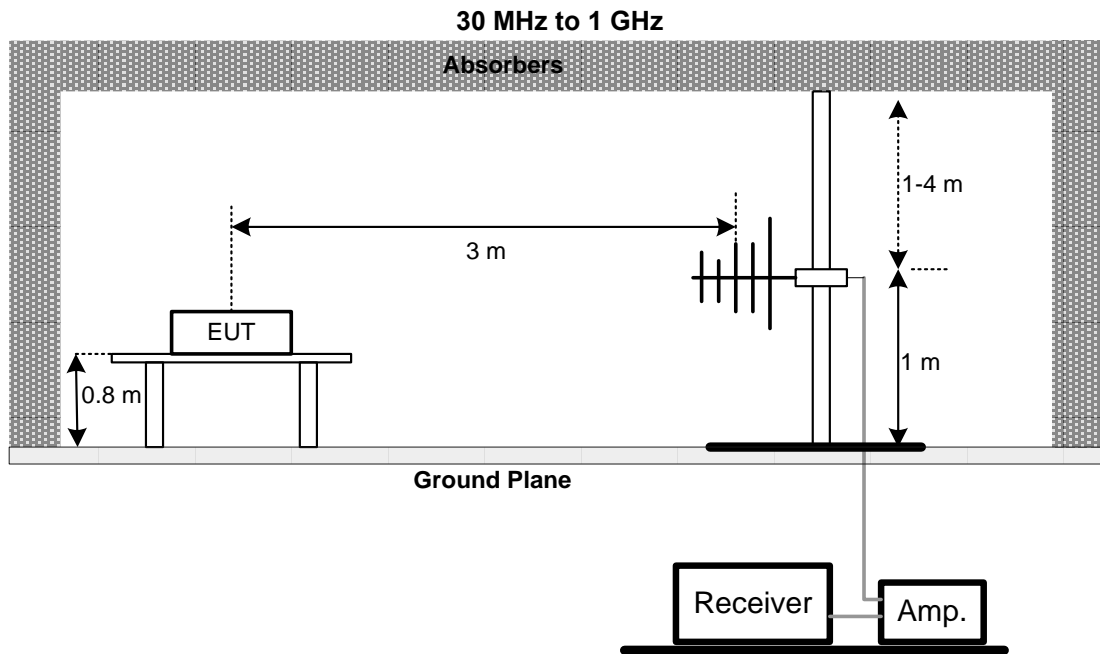
The testing follows FCC KDB 971168 v03r01 Section 6.2.

- a. 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.
- b. 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
- c. EIRP = Output power level of S.G - TX cable loss + Antenna gain of substitution horn.
- d. ERP power can be calculated form EIRP power by subtracting the gain of dipole,  
ERP power = EIRP power - 2.15 dBi.
- e. 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

The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. 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. (Part 27 Subpart L & H)

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. (Part 27 Subpart M)

### 7.2 TEST PROCEDURE

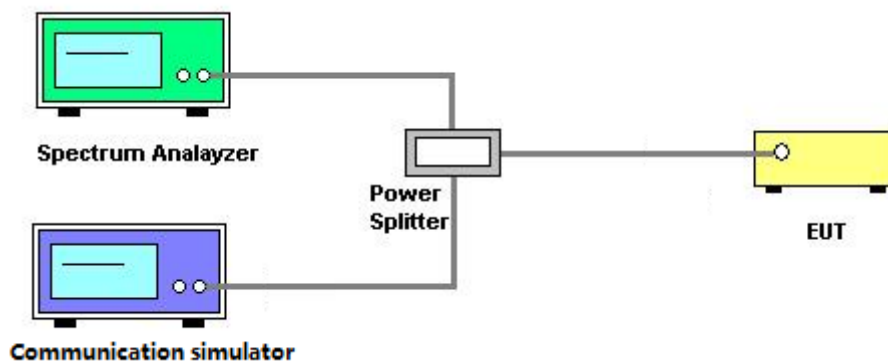
The testing follows FCC KDB 971168 v03r01 Section 6.

- All measurements were done at low and high operational frequency range.
- 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

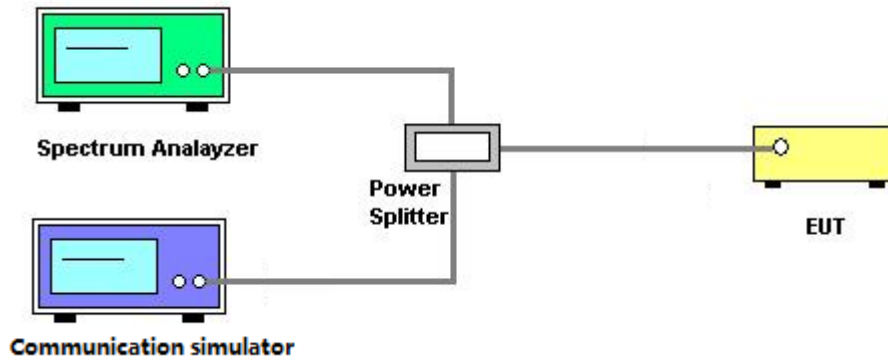
The testing follows FCC KDB 971168 v03r01 Section 5.7.

- 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

$\pm 1.5$  ppm is for base and fixed station.  $\pm 2.5$  ppm is for mobile station.

### 9.2 TEST PROCEDURE

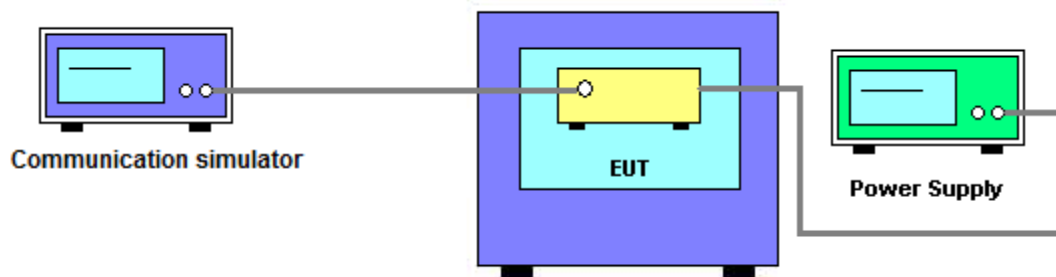
The testing follows FCC KDB 971168 v03r01 Section 9.

- 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

Conducted Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	Keysight	N9010A	MY56480489	2022/10/19	2023/10/18
2	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2023/7/4	2024/7/3
3	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2022/11/25	2023/11/24

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	2022/9/19	2023/9/18
2	Preamplifier	EMCI	EMC118A45SE	980819	2023/3/7	2024/3/6
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2022/9/28	2023/9/27
4	Test Cable	EMCI	EMC104-SM-1000	180809	2023/7/10	2024/7/9
5	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2023/3/14	2024/3/13
6	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2023/3/14	2024/3/13
7	EXA Signal Analyzer	keysight	N9020B	MY57120120	2023/2/24	2024/2/23
8	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2022/5/18	2023/5/17
					2023/5/12	2024/5/11
9	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2022/5/18	2023/5/17
					2023/5/12	2024/5/11
10	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2022/5/20	2023/5/19
					2023/5/9	2024/5/8
11	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2022/5/20	2023/5/19
					2023/5/9	2024/5/8
12	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2023/3/14	2024/3/13
13	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2023/3/14	2024/3/13
14	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2022/7/7	2023/7/6
					2023/7/4	2024/7/3
15	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2022/11/25	2023/11/24
16	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

Others Conducted Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSV7	103032	2023/8/10	2024/8/9
2	Spectrum Analyzer	Keysight	N9010A	MY54200240	2023/6/26	2024/6/25
3	Spectrum Analyzer	Keysight	N9010A	MY56480489	2022/10/19	2023/10/18
4	Thermal Chamber	HOLINK	H-TH-2SP-B	EK04101902	2023/7/3	2024/7/2
5	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2023/7/4	2024/7/3
6	Radio Communication Analyzer	ANRITSU	MT8820C	6201381608	2022/12/22	2023/12/21
7	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2022/11/25	2023/11/24

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-2212T004-FCCP-1 (APPENDIX-TEST PHOTOS).

## **12 EUT PHOTOS**

Please refer to document Appendix No.: EP-2212T004-1 (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	23.81	26.71	0.469
		1413/1638	1732.6	23.87	26.77	0.475
		1513/1738	1752.6	23.82	26.72	0.470

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	23.90	26.80	0.479
		1413/1638	1732.6	23.98	26.88	0.488
		1513/1738	1752.6	23.95	26.85	0.484
	2	1312/1537	1712.4	23.40	26.30	0.427
		1413/1638	1732.6	23.50	26.40	0.437
		1513/1738	1752.6	23.45	26.35	0.432
	3	1312/1537	1712.4	22.91	25.81	0.381
		1413/1638	1732.6	23.01	25.91	0.390
		1513/1738	1752.6	23.00	25.90	0.389
	4	1312/1537	1712.4	22.95	25.85	0.385
		1413/1638	1732.6	23.05	25.95	0.394
		1513/1738	1752.6	22.97	25.87	0.386

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	23.77	26.67	0.465
		1413/1638	1732.6	23.90	26.80	0.479
		1513/1738	1752.6	23.86	26.76	0.474
	2	1312/1537	1712.4	21.79	24.69	0.294
		1413/1638	1732.6	21.95	24.85	0.305
		1513/1738	1752.6	21.87	24.77	0.300
	3	1312/1537	1712.4	22.82	25.72	0.373
		1413/1638	1732.6	22.94	25.84	0.384
		1513/1738	1752.6	22.87	25.77	0.378
	4	1312/1537	1712.4	21.82	24.72	0.296
		1413/1638	1732.6	21.91	24.81	0.303
		1513/1738	1752.6	21.89	24.79	0.301
	5	1312/1537	1712.4	23.72	26.62	0.459
		1413/1638	1732.6	23.83	26.73	0.471
		1513/1738	1752.6	23.77	26.67	0.465

**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 4 Power:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)		
4	1.4	19957	1710.7	QPSK	1	0	0	22.18	25.08	0.322		
					1	2	0	22.08	24.98	0.315		
					1	5	0	21.88	24.78	0.301		
					3	0	0	22.18	25.08	0.322		
					3	1	0	22.08	24.98	0.315		
					3	2	0	21.88	24.78	0.301		
				16QAM	6	0	1	21.22	24.12	0.258		
					1	0	1	21.50	24.40	0.275		
					1	2	1	21.58	24.48	0.281		
					1	5	1	21.30	24.20	0.263		
					3	0	1	21.50	24.40	0.275		
					3	1	1	21.58	24.48	0.281		
		20175	1732.5	QPSK	1732.5	QPSK	1	0	0	22.38	25.28	0.337
							1	2	0	21.98	24.88	0.308
							1	5	0	21.96	24.86	0.306
							3	0	0	22.38	25.28	0.337
							3	1	0	21.98	24.88	0.308
							3	2	0	21.96	24.86	0.306
				16QAM	6	0	1	21.21	24.11	0.258		
					1	0	1	21.66	24.56	0.286		
					1	2	1	21.53	24.43	0.277		
					1	5	1	21.36	24.26	0.267		
					3	0	1	21.66	24.56	0.286		
					3	1	1	21.53	24.43	0.277		
		20393	1754.3	QPSK	1754.3	QPSK	1	0	0	22.33	25.23	0.333
							1	2	0	22.09	24.99	0.316
							1	5	0	21.98	24.88	0.308
							3	0	0	22.33	25.23	0.333
							3	1	0	22.09	24.99	0.316
							3	2	0	21.98	24.88	0.308
16QAM	6			0	1	21.22	24.12	0.258				
	1			0	1	21.72	24.62	0.290				
	1			2	1	21.46	24.36	0.273				
	1			5	1	21.29	24.19	0.262				
	3			0	1	21.72	24.62	0.290				
	3			1	1	21.46	24.36	0.273				
					3	2	1	21.29	24.19	0.262		
					6	0	2	20.27	23.17	0.207		

**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)
4	3	19965	1711.5	QPSK	1	0	0	22.23	25.13	0.326
					1	7	0	22.13	25.03	0.318
					1	14	0	21.93	24.83	0.304
					8	0	1	21.23	24.13	0.259
					8	4	1	21.24	24.14	0.259
					8	7	1	21.16	24.06	0.255
				16QAM	15	0	1	21.27	24.17	0.261
					1	0	1	21.55	24.45	0.279
					1	7	1	21.63	24.53	0.284
					1	14	1	21.35	24.25	0.266
					8	0	2	20.23	23.13	0.206
					8	4	2	20.22	23.12	0.205
		20175	1732.5	QPSK	8	7	2	20.17	23.07	0.203
					15	0	2	20.27	23.17	0.207
					1	0	0	22.43	25.33	0.341
					1	7	0	22.03	24.93	0.311
					1	14	0	22.01	24.91	0.310
					8	0	1	21.32	24.22	0.264
				16QAM	8	4	1	21.21	24.11	0.258
					8	7	1	21.12	24.02	0.252
					15	0	1	21.26	24.16	0.261
					1	0	1	21.71	24.61	0.289
					1	7	1	21.58	24.48	0.281
					1	14	1	21.41	24.31	0.270
		20385	1753.5	QPSK	8	0	2	20.37	23.27	0.212
					8	4	2	20.24	23.14	0.206
					8	7	2	20.17	23.07	0.203
					15	0	2	20.24	23.14	0.206
					1	0	0	22.38	25.28	0.337
					1	7	0	22.14	25.04	0.319
				16QAM	1	14	0	22.03	24.93	0.311
					8	0	1	21.31	24.21	0.264
					8	4	1	21.27	24.17	0.261
					8	7	1	21.17	24.07	0.255
					15	0	1	21.27	24.17	0.261
					1	0	1	21.77	24.67	0.293
16QAM	1	7	1	21.51	24.41	0.276				
	1	14	1	21.34	24.24	0.265				
	8	0	2	20.32	23.22	0.210				
	8	4	2	20.28	23.18	0.208				
	8	7	2	20.18	23.08	0.203				
	15	0	2	20.27	23.17	0.207				

**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)
4	5	19975	1712.5	QPSK	1	0	0	22.28	25.18	0.330
					1	12	0	22.18	25.08	0.322
					1	24	0	21.98	24.88	0.308
					12	0	1	21.28	24.18	0.262
					12	6	1	21.29	24.19	0.262
					12	11	1	21.21	24.11	0.258
				16QAM	25	0	1	21.32	24.22	0.264
					1	0	1	21.60	24.50	0.282
					1	12	1	21.68	24.58	0.287
					1	24	1	21.40	24.30	0.269
					12	0	2	20.28	23.18	0.208
					12	6	2	20.27	23.17	0.207
		20175	1732.5	QPSK	12	11	2	20.22	23.12	0.205
					25	0	2	20.32	23.22	0.210
					1	0	0	22.48	25.38	0.345
					1	12	0	22.08	24.98	0.315
					1	24	0	22.06	24.96	0.313
					12	0	1	21.37	24.27	0.267
				16QAM	12	6	1	21.26	24.16	0.261
					12	11	1	21.17	24.07	0.255
					25	0	1	21.31	24.21	0.264
					1	0	1	21.76	24.66	0.292
					1	12	1	21.63	24.53	0.284
					1	24	1	21.46	24.36	0.273
		20375	1752.5	QPSK	12	0	2	20.42	23.32	0.215
					12	6	2	20.29	23.19	0.208
					12	11	2	20.22	23.12	0.205
					25	0	2	20.29	23.19	0.208
					1	0	0	22.43	25.33	0.341
					1	12	0	22.19	25.09	0.323
				16QAM	1	24	0	22.08	24.98	0.315
					12	0	1	21.36	24.26	0.267
					12	6	1	21.32	24.22	0.264
					12	11	1	21.22	24.12	0.258
					25	0	1	21.32	24.22	0.264
					1	0	1	21.82	24.72	0.296
16QAM	1	12	1	21.56	24.46	0.279				
	1	24	1	21.39	24.29	0.269				
	12	0	2	20.37	23.27	0.212				
	12	6	2	20.33	23.23	0.210				
	12	11	2	20.23	23.13	0.206				
	25	0	2	20.32	23.22	0.210				

**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)		
4	10	20000	1715.0	QPSK	1	0	0	22.33	25.23	0.333		
					1	24	0	22.23	25.13	0.326		
					1	49	0	22.03	24.93	0.311		
					25	0	1	21.33	24.23	0.265		
					25	12	1	21.34	24.24	0.265		
					25	24	1	21.26	24.16	0.261		
				16QAM	50	0	1	21.37	24.27	0.267		
					1	0	1	21.65	24.55	0.285		
					1	24	1	21.73	24.63	0.290		
					1	49	1	21.45	24.35	0.272		
					25	0	2	20.33	23.23	0.210		
					25	12	2	20.32	23.22	0.210		
		20175	1732.5	QPSK	1732.5	QPSK	25	24	2	20.27	23.17	0.207
							50	0	2	20.37	23.27	0.212
							1	0	0	22.53	25.43	0.349
							1	24	0	22.13	25.03	0.318
							1	49	0	22.11	25.01	0.317
							25	0	1	21.42	24.32	0.270
				16QAM	25	12	1	21.31	24.21	0.264		
					25	24	1	21.22	24.12	0.258		
					50	0	1	21.36	24.26	0.267		
					1	0	1	21.81	24.71	0.296		
					1	24	1	21.68	24.58	0.287		
					1	49	1	21.51	24.41	0.276		
		20350	1750.0	QPSK	1750.0	QPSK	25	0	2	20.47	23.37	0.217
							25	12	2	20.34	23.24	0.211
							25	24	2	20.27	23.17	0.207
							50	0	2	20.34	23.24	0.211
							1	0	0	22.48	25.38	0.345
							1	24	0	22.24	25.14	0.327
				16QAM	1	49	0	22.13	25.03	0.318		
					25	0	1	21.41	24.31	0.270		
					25	12	1	21.37	24.27	0.267		
					25	24	1	21.27	24.17	0.261		
					50	0	1	21.37	24.27	0.267		
					1	0	1	21.87	24.77	0.300		
16QAM	1	24	1	21.61	24.51	0.282						
	1	49	1	21.44	24.34	0.272						
	25	0	2	20.42	23.32	0.215						
	25	12	2	20.38	23.28	0.213						
	25	24	2	20.28	23.18	0.208						
	50	0	2	20.37	23.27	0.212						

**NOTE:**

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

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

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)		
4	15	20025	1717.5	QPSK	1	0	0	22.38	25.28	0.337		
					1	37	0	22.28	25.18	0.330		
					1	74	0	22.08	24.98	0.315		
					36	0	1	21.38	24.28	0.268		
					36	18	1	21.39	24.29	0.269		
					36	35	1	21.31	24.21	0.264		
				16QAM	75	0	1	21.42	24.32	0.270		
					1	0	1	21.70	24.60	0.288		
					1	37	1	21.78	24.68	0.294		
					1	74	1	21.50	24.40	0.275		
					36	0	2	20.38	23.28	0.213		
					36	18	2	20.37	23.27	0.212		
		20175	1732.5	QPSK	1732.5	QPSK	36	35	2	20.32	23.22	0.210
							75	0	2	20.42	23.32	0.215
							1	0	0	22.58	25.48	0.353
							1	37	0	22.18	25.08	0.322
							1	74	0	22.16	25.06	0.321
							36	0	1	21.47	24.37	0.274
				16QAM	36	18	1	21.36	24.26	0.267		
					36	35	1	21.27	24.17	0.261		
					75	0	1	21.41	24.31	0.270		
					1	0	1	21.86	24.76	0.299		
					1	37	1	21.73	24.63	0.290		
					1	74	1	21.56	24.46	0.279		
		20325	1747.5	QPSK	1747.5	QPSK	36	0	2	20.52	23.42	0.220
							36	18	2	20.39	23.29	0.213
							36	35	2	20.32	23.22	0.210
							75	0	2	20.39	23.29	0.213
							1	0	0	22.53	25.43	0.349
							1	37	0	22.29	25.19	0.330
16QAM	1			74	0	22.18	25.08	0.322				
	36			0	1	21.46	24.36	0.273				
	36			18	1	21.42	24.32	0.270				
	36			35	1	21.32	24.22	0.264				
	75			0	1	21.42	24.32	0.270				
	1			0	1	21.92	24.82	0.303				
16QAM	1	37	1	21.66	24.56	0.286						
	1	74	1	21.49	24.39	0.275						
	36	0	2	20.47	23.37	0.217						
	36	18	2	20.43	23.33	0.215						
	36	35	2	20.33	23.23	0.210						
	75	0	2	20.42	23.32	0.215						

**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)
4	20	20050	1720.0	QPSK	1	0	0	<b>22.43</b>	25.33	0.341
					1	49	0	<b>22.33</b>	25.23	0.333
					1	99	0	<b>22.13</b>	25.03	0.318
					50	0	1	21.43	24.33	0.271
					50	24	1	21.44	24.34	0.272
					50	49	1	21.36	24.26	0.267
				100	0	1	21.47	24.37	0.274	
				16QAM	1	0	1	21.75	24.65	0.292
					1	49	1	21.83	24.73	0.297
					1	99	1	21.55	24.45	0.279
					50	0	2	20.43	23.33	0.215
					50	24	2	20.42	23.32	0.215
		50	49		2	20.37	23.27	0.212		
		20175	1732.5	QPSK	1	0	0	<b>22.63</b>	25.53	0.357
					1	49	0	<b>22.23</b>	25.13	0.326
					1	99	0	<b>22.21</b>	25.11	0.324
					50	0	1	21.52	24.42	0.277
					50	24	1	21.41	24.31	0.270
					50	49	1	21.32	24.22	0.264
				100	0	1	21.46	24.36	0.273	
				16QAM	1	0	1	21.91	24.81	0.303
					1	49	1	21.78	24.68	0.294
					1	99	1	21.61	24.51	0.282
					50	0	2	20.57	23.47	0.222
					50	24	2	20.44	23.34	0.216
		50	49		2	20.37	23.27	0.212		
		20300	1745.0	QPSK	1	0	0	<b>22.58</b>	25.48	0.353
					1	49	0	<b>22.34</b>	25.24	0.334
					1	99	0	<b>22.23</b>	25.13	0.326
					50	0	1	21.51	24.41	0.276
50	24				1	21.47	24.37	0.274		
50	49				1	21.37	24.27	0.267		
100	0			1	21.47	24.37	0.274			
16QAM	1			0	1	21.97	24.87	0.307		
	1			49	1	21.71	24.61	0.289		
	1			99	1	21.54	24.44	0.278		
	50			0	2	20.52	23.42	0.220		
	50			24	2	20.48	23.38	0.218		
	50	49	2	20.38	23.28	0.213				
100	0	2	20.47	23.37	0.217					

**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 Start	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
7	5M	20775	2502.5	QPSK	1	0	0	21.89	25.26	0.336
					1	12	0	21.97	25.34	0.342
					1	24	0	22.05	25.42	0.348
					12	0	1	21.00	24.37	0.274
					12	6	1	21.13	24.50	0.282
					12	11	1	21.19	24.56	0.286
				16QAM	25	0	1	21.00	24.37	0.274
					1	0	1	20.98	24.35	0.272
					1	12	1	21.07	24.44	0.278
					1	24	1	21.16	24.53	0.284
					12	0	2	19.94	23.31	0.214
					12	6	2	20.08	23.45	0.221
					12	11	2	20.11	23.48	0.223
					25	0	2	20.00	23.37	0.217
					21100	2535.0	QPSK	1	0	0
		1	12	0				22.50	25.87	0.386
		1	24	0				22.51	25.88	0.387
		12	0	1				21.53	24.90	0.309
		12	6	1				21.66	25.03	0.318
		12	11	1				21.65	25.02	0.318
		16QAM	25	0			1	21.61	24.98	0.315
			1	0			1	21.51	24.88	0.308
			1	12			1	21.60	24.97	0.314
			1	24			1	21.62	24.99	0.316
			12	0			2	20.68	24.05	0.254
			12	6			2	20.77	24.14	0.259
			12	11			2	20.71	24.08	0.256
			25	0			2	20.64	24.01	0.252
			21425	2567.5			QPSK	1	0	0
		1			12	0		22.76	26.13	0.410
		1			24	0		22.45	25.82	0.382
		12			0	1		21.98	25.35	0.343
		12			6	1		21.92	25.29	0.338
		12			11	1		21.59	24.96	0.313
		16QAM			25	0	1	21.98	25.35	0.343
					1	0	1	21.96	25.33	0.341
					1	12	1	21.86	25.23	0.333
					1	24	1	21.56	24.93	0.311
					12	0	2	20.50	23.87	0.244
					12	6	2	20.87	24.24	0.265
					12	11	2	20.82	24.19	0.262
					25	0	2	20.79	24.16	0.261

**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 Start	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
7	10M	20800	2505.0	QPSK	1	0	0	21.94	25.31	0.340
					1	24	0	22.02	25.39	0.346
					1	49	0	22.10	25.47	0.352
					25	0	1	21.05	24.42	0.277
					25	12	1	21.18	24.55	0.285
					25	24	1	21.24	24.61	0.289
				16QAM	50	0	1	21.05	24.42	0.277
					1	0	1	21.03	24.40	0.275
					1	24	1	21.12	24.49	0.281
					1	49	1	21.21	24.58	0.287
					25	0	2	19.99	23.36	0.217
					25	12	2	20.13	23.50	0.224
		21100	2535.0	QPSK	25	24	2	20.16	23.53	0.225
					50	0	2	20.05	23.42	0.220
					1	0	0	22.47	25.84	0.384
					1	24	0	22.55	25.92	0.391
					1	49	0	22.56	25.93	0.392
					25	0	1	21.58	24.95	0.313
				16QAM	25	12	1	21.71	25.08	0.322
					25	24	1	21.70	25.07	0.321
					50	0	1	21.66	25.03	0.318
					1	0	1	21.56	24.93	0.311
					1	24	1	21.65	25.02	0.318
					1	49	1	21.67	25.04	0.319
		21400	2565.0	QPSK	25	0	2	20.73	24.10	0.257
					25	12	2	20.82	24.19	0.262
					25	24	2	20.76	24.13	0.259
					50	0	2	20.69	24.06	0.255
					1	0	0	22.92	26.29	0.426
					1	24	0	22.81	26.18	0.415
				16QAM	1	49	0	22.50	25.87	0.386
					25	0	1	22.03	25.40	0.347
					25	12	1	21.97	25.34	0.342
					25	24	1	21.64	25.01	0.317
					50	0	1	22.03	25.40	0.347
					1	0	1	22.01	25.38	0.345
		16QAM	1	24	1	21.91	25.28	0.337		
			1	49	1	21.61	24.98	0.315		
			25	0	2	20.55	23.92	0.247		
			25	12	2	20.92	24.29	0.269		
			25	24	2	20.87	24.24	0.265		
			50	0	2	20.84	24.21	0.264		

**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 Start	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)
7	15M	20825	2507.5	QPSK	1	0	0	21.99	25.36	0.344
					1	37	0	22.07	25.44	0.350
					1	74	0	22.15	25.52	0.356
					36	0	1	21.10	24.47	0.280
					36	18	1	21.23	24.60	0.288
					36	35	1	21.29	24.66	0.292
				75	0	1	21.10	24.47	0.280	
				16QAM	1	0	1	21.08	24.45	0.279
					1	37	1	21.17	24.54	0.284
					1	74	1	21.26	24.63	0.290
					36	0	2	20.04	23.41	0.219
					36	18	2	20.18	23.55	0.226
					36	35	2	20.21	23.58	0.228
					75	0	2	20.10	23.47	0.222
					QPSK	1	0	0	22.52	25.89
		1	37			0	22.60	25.97	0.395	
		1	74	0		22.61	25.98	0.396		
		36	0	1		21.63	25.00	0.316		
		36	18	1		21.76	25.13	0.326		
		36	35	1		21.75	25.12	0.325		
		75	0	1		21.71	25.08	0.322		
		16QAM	1	0		1	21.61	24.98	0.315	
			1	37		1	21.70	25.07	0.321	
			1	74		1	21.72	25.09	0.323	
			36	0		2	20.78	24.15	0.260	
			36	18		2	20.87	24.24	0.265	
			36	35		2	20.81	24.18	0.262	
			75	0		2	20.74	24.11	0.258	
			QPSK	1		0	0	22.97	26.34	0.431
				1	37	0	22.86	26.23	0.420	
		1		74	0	22.55	25.92	0.391		
		36		0	1	22.08	25.45	0.351		
		36		18	1	22.02	25.39	0.346		
		36		35	1	21.69	25.06	0.321		
		75		0	1	22.08	25.45	0.351		
		16QAM		1	0	1	22.06	25.43	0.349	
				1	37	1	21.96	25.33	0.341	
				1	74	1	21.66	25.03	0.318	
				36	0	2	20.60	23.97	0.249	
				36	18	2	20.97	24.34	0.272	
				36	35	2	20.92	24.29	0.269	
				75	0	2	20.89	24.26	0.267	

**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 Start	MPR	Average power (dBm)	ERP power (dBm)	ERP power (W)		
7	20M	20850	2510.0	QPSK	1	0	0	<b>22.04</b>	25.41	0.348		
					1	49	0	<b>22.12</b>	25.49	0.354		
					1	99	0	<b>22.20</b>	25.57	0.361		
					50	0	1	21.15	24.52	0.283		
					50	24	1	21.28	24.65	0.292		
					50	49	1	21.34	24.71	0.296		
				16QAM	100	0	1	21.15	24.52	0.283		
					1	0	1	21.13	24.50	0.282		
					1	49	1	21.22	24.59	0.288		
					1	99	1	21.31	24.68	0.294		
					50	0	2	20.09	23.46	0.222		
					50	24	2	20.23	23.60	0.229		
		21100	2535.0	QPSK	2535.0	QPSK	50	49	2	20.26	23.63	0.231
							100	0	2	20.15	23.52	0.225
							1	0	0	<b>22.57</b>	25.94	0.393
							1	49	0	<b>22.65</b>	26.02	0.400
							1	99	0	<b>22.66</b>	26.03	0.401
							50	0	1	21.68	25.05	0.320
				16QAM	50	24	1	21.81	25.18	0.330		
					50	49	1	21.80	25.17	0.329		
					100	0	1	21.76	25.13	0.326		
					1	0	1	21.66	25.03	0.318		
					1	49	1	21.75	25.12	0.325		
					1	99	1	21.77	25.14	0.327		
		21350	2560.0	QPSK	2560.0	QPSK	50	0	2	20.83	24.20	0.263
							50	24	2	20.92	24.29	0.269
							50	49	2	20.86	24.23	0.265
							100	0	2	20.79	24.16	0.261
							1	0	0	<b>23.02</b>	26.39	0.436
							1	49	0	<b>22.91</b>	26.28	0.425
				16QAM	1	99	0	<b>22.60</b>	25.97	0.395		
					50	0	1	22.13	25.50	0.355		
					50	24	1	22.07	25.44	0.350		
					50	49	1	21.74	25.11	0.324		
					100	0	1	22.13	25.50	0.355		
					1	0	1	22.11	25.48	0.353		
16QAM	1	49	1	22.01	25.38	0.345						
	1	99	1	21.71	25.08	0.322						
	50	0	2	20.65	24.02	0.252						
	50	24	2	21.02	24.39	0.275						
	50	49	2	20.97	24.34	0.272						
	100	0	2	20.94	24.31	0.270						

## 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 12 Power:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power	ERP power (dBm)	ERP power (W)
12	1.4	23017	699.7	QPSK	1	0	0	21.99	21.18	0.131
					1	2	0	22.26	21.45	0.140
					1	5	0	22.28	21.47	0.140
					3	0	0	21.99	21.18	0.131
					3	1	0	22.26	21.45	0.140
					3	2	0	22.28	21.47	0.140
				16QAM	6	0	1	21.10	20.29	0.107
					1	0	1	21.08	20.27	0.106
					1	2	1	21.36	20.55	0.114
					1	5	1	21.39	20.58	0.114
					3	0	1	21.08	20.27	0.106
					3	1	1	21.36	20.55	0.114
		23095	707.5	QPSK	3	2	1	21.39	20.58	0.114
					6	0	2	20.29	19.48	0.089
					1	0	0	22.17	21.36	0.137
					1	2	0	22.31	21.50	0.141
					1	5	0	22.47	21.66	0.147
					3	0	0	22.17	21.36	0.137
				16QAM	3	1	0	22.31	21.50	0.141
					3	2	0	22.47	21.66	0.147
					6	0	1	21.28	20.47	0.111
					1	0	1	21.26	20.45	0.111
					1	2	1	21.41	20.60	0.115
					1	5	1	21.58	20.77	0.119
		23173	715.3	QPSK	3	0	1	21.26	20.45	0.111
					3	1	1	21.41	20.60	0.115
					3	2	1	21.58	20.77	0.119
					6	0	2	20.52	19.71	0.094
					1	0	0	22.13	21.32	0.136
					1	2	0	22.45	21.64	0.146
				16QAM	1	5	0	22.46	21.65	0.146
					3	0	0	22.13	21.32	0.136
					3	1	0	22.45	21.64	0.146
					3	2	0	22.46	21.65	0.146
					6	0	1	21.24	20.43	0.110
					1	0	1	21.22	20.41	0.110
16QAM	1	2	1	21.55	20.74	0.119				
	1	5	1	21.57	20.76	0.119				
	3	0	1	21.22	20.41	0.110				
	3	1	1	21.55	20.74	0.119				
	3	2	1	21.57	20.76	0.119				
	6	0	2	20.51	19.70	0.093				

**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	ERP power (dBm)	ERP power (W)
12	3	23025	700.5	QPSK	1	0	0	22.04	21.23	0.133
					1	7	0	22.31	21.50	0.141
					1	14	0	22.33	21.52	0.142
					8	0	1	21.15	20.34	0.108
					8	4	1	21.47	20.66	0.116
					8	7	1	21.47	20.66	0.116
				16QAM	15	0	1	21.15	20.34	0.108
					1	0	1	21.13	20.32	0.108
					1	7	1	21.41	20.60	0.115
					1	14	1	21.44	20.63	0.116
					8	0	2	20.38	19.57	0.091
					8	4	2	20.42	19.61	0.091
					8	7	2	20.37	19.56	0.090
					15	0	2	20.34	19.53	0.090
					23095	707.5	QPSK	1	0	0
		1	7	0				22.36	21.55	0.143
		1	14	0				22.52	21.71	0.148
		8	0	1				21.33	20.52	0.113
		8	4	1				21.52	20.71	0.118
		8	7	1				21.66	20.85	0.122
		16QAM	15	0			1	21.33	20.52	0.113
			1	0			1	21.31	20.50	0.112
			1	7			1	21.46	20.65	0.116
			1	14			1	21.63	20.82	0.121
			8	0			2	20.57	19.76	0.095
			8	4			2	20.47	19.66	0.092
			8	7			2	20.42	19.61	0.091
			15	0			2	20.39	19.58	0.091
			23165	714.5			QPSK	1	0	0
		1			7	0		22.50	21.69	0.148
		1			14	0		22.51	21.70	0.148
		8			0	1		21.29	20.48	0.112
		8			4	1		21.66	20.85	0.122
		8			7	1		21.65	20.84	0.121
		16QAM			15	0	1	21.29	20.48	0.112
					1	0	1	21.27	20.46	0.111
					1	7	1	21.60	20.79	0.120
					1	14	1	21.62	20.81	0.121
					8	0	2	20.56	19.75	0.094
					8	4	2	20.61	19.80	0.095
					8	7	2	20.56	19.75	0.094
					15	0	2	20.53	19.72	0.094

**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	ERP power (dBm)	ERP power (W)
12	5	23035	701.5	QPSK	1	0	0	22.09	21.28	0.134
					1	12	0	22.36	21.55	0.143
					1	24	0	22.38	21.57	0.144
					12	0	1	21.20	20.39	0.109
					12	6	1	21.52	20.71	0.118
					12	11	1	21.52	20.71	0.118
				16QAM	25	0	1	21.20	20.39	0.109
					1	0	1	21.18	20.37	0.109
					1	12	1	21.46	20.65	0.116
					1	24	1	21.49	20.68	0.117
					12	0	2	20.43	19.62	0.092
					12	6	2	20.47	19.66	0.092
					12	11	2	20.42	19.61	0.091
					25	0	2	20.39	19.58	0.091
					23095	707.5	QPSK	1	0	0
		1	12	0				22.41	21.60	0.145
		1	24	0				22.57	21.76	0.150
		12	0	1				21.38	20.57	0.114
		12	6	1				21.57	20.76	0.119
		12	11	1				21.71	20.90	0.123
		16QAM	25	0			1	21.38	20.57	0.114
			1	0			1	21.36	20.55	0.114
			1	12			1	21.51	20.70	0.117
			1	24			1	21.68	20.87	0.122
			12	0			2	20.62	19.81	0.096
			12	6			2	20.52	19.71	0.094
			12	11			2	20.47	19.66	0.092
			25	0			2	20.44	19.63	0.092
			23155	713.5			QPSK	1	0	0
		1			12	0		22.55	21.74	0.149
		1			24	0		22.56	21.75	0.150
		12			0	1		21.34	20.53	0.113
		12			6	1		21.71	20.90	0.123
		12			11	1		21.70	20.89	0.123
		16QAM			25	0	1	21.34	20.53	0.113
					1	0	1	21.32	20.51	0.112
					1	12	1	21.65	20.84	0.121
					1	24	1	21.67	20.86	0.122
					12	0	2	20.61	19.80	0.095
					12	6	2	20.66	19.85	0.097
					12	11	2	20.61	19.80	0.095
					25	0	2	20.58	19.77	0.095

**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	ERP power (dBm)	ERP power (W)
12	10	23060	704.0	QPSK	1	0	0	<b>22.14</b>	21.33	0.136
					1	24	0	<b>22.41</b>	21.60	0.145
					1	49	0	<b>22.43</b>	21.62	0.145
					25	0	1	21.25	20.44	0.111
					25	12	1	21.57	20.76	0.119
				25	24	1	21.57	20.76	0.119	
				50	0	1	21.25	20.44	0.111	
				16QAM	1	0	1	21.23	20.42	0.110
					1	24	1	21.51	20.70	0.117
					1	49	1	21.54	20.73	0.118
		25	0		2	20.48	19.67	0.093		
		25	12		2	20.52	19.71	0.094		
		23095	707.5	QPSK	25	24	2	20.47	19.66	0.092
					50	0	2	20.44	19.63	0.092
					1	0	0	<b>22.32</b>	21.51	0.142
					1	24	0	<b>22.46</b>	21.65	0.146
					1	49	0	<b>22.62</b>	21.81	0.152
				16QAM	25	0	1	21.43	20.62	0.115
					25	12	1	21.62	20.81	0.121
					25	24	1	21.76	20.95	0.124
					50	0	1	21.43	20.62	0.115
					1	0	1	21.41	20.60	0.115
		23130	711.0	QPSK	1	24	1	21.56	20.75	0.119
					1	49	1	21.73	20.92	0.124
					25	0	2	20.67	19.86	0.097
					25	12	2	20.57	19.76	0.095
					25	24	2	20.52	19.71	0.094
				16QAM	50	0	2	20.49	19.68	0.093
					1	0	0	<b>22.28</b>	21.47	0.140
					1	24	0	<b>22.60</b>	21.79	0.151
1	49				0	<b>22.61</b>	21.80	0.151		
25	0				1	21.39	20.58	0.114		
16QAM	25	12	1	21.76	20.95	0.124				
	25	24	1	21.75	20.94	0.124				
	50	0	1	21.39	20.58	0.114				
	1	0	1	21.37	20.56	0.114				
	1	24	1	21.70	20.89	0.123				
	1	49	1	21.72	20.91	0.123				
	25	0	2	20.66	19.85	0.097				
	25	12	2	20.71	19.90	0.098				
	25	24	2	20.66	19.85	0.097				
	50	0	2	20.63	19.82	0.096				

## NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

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

**LTE Band 13 Power:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power	ERP power (dBm)	ERP power (W)
13	5	23205	779.5	QPSK	1	0	0	22.55	23.70	0.234
					1	12	0	22.61	23.76	0.238
					1	24	0	22.37	23.52	0.225
					12	0	1	21.66	22.81	0.191
					12	6	1	21.77	22.92	0.196
					12	11	1	21.52	22.67	0.185
				25	0	1	21.69	22.84	0.192	
				16QAM	1	0	1	21.65	22.80	0.191
					1	12	1	21.71	22.86	0.193
		1	24		1	21.48	22.63	0.183		
		12	0		2	20.41	21.56	0.143		
		12	6		2	20.71	21.86	0.153		
		12	11		2	20.67	21.82	0.152		
		23230	782.0	QPSK	1	0	0	22.58	23.73	0.236
					1	12	0	22.64	23.79	0.239
					1	24	0	22.41	23.56	0.227
					12	0	1	21.70	22.85	0.193
					12	6	1	21.80	22.95	0.197
	12				11	1	21.55	22.70	0.186	
	25			0	1	21.70	22.85	0.193		
	16QAM			1	0	1	21.68	22.83	0.192	
				1	12	1	21.74	22.89	0.194	
		1	24	1	21.52	22.67	0.185			
		12	0	2	20.46	21.61	0.145			
		12	6	2	20.75	21.90	0.155			
		12	11	2	20.70	21.85	0.153			
	23255	784.5	QPSK	25	0	2	20.67	21.82	0.152	
				1	0	0	22.57	23.72	0.236	
				1	12	0	22.62	23.77	0.238	
				1	24	0	22.39	23.54	0.226	
				12	0	1	21.68	22.83	0.192	
				12	6	1	21.78	22.93	0.196	
			12	11	1	21.53	22.68	0.185		
			25	0	1	21.68	22.83	0.192		
			16QAM	1	0	1	21.66	22.81	0.191	
	1	12		1	21.72	22.87	0.194			
1	24	1		21.50	22.65	0.184				
12	0	2		20.44	21.59	0.144				
12	6	2		20.73	21.88	0.154				
12	11	2		20.68	21.83	0.153				
25	0	2	20.65	21.80	0.151					

**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	ERP power (dBm)	ERP power (W)
13	10	23230	782.0	QPSK	1	0	0	<b>22.62</b>	23.77	0.238
					1	24	0	<b>22.67</b>	23.82	0.241
					1	49	0	<b>22.44</b>	23.59	0.229
					25	0	1	21.73	22.88	0.194
					25	12	1	21.83	22.98	0.199
					25	24	1	21.58	22.73	0.187
				16QAM	50	0	1	21.73	22.88	0.194
					1	0	1	21.71	22.86	0.193
					1	24	1	21.77	22.92	0.196
					1	49	1	21.55	22.70	0.186
					25	0	2	20.49	21.64	0.146
					25	12	2	20.78	21.93	0.156
					25	24	2	20.73	21.88	0.154
					50	0	2	20.70	21.85	0.153

**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 41 Power:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power	EIRP power (dBm)	EIRP power (W)
41	5M	39675	2498.5	QPSK	1	0	0	21.80	25.33	0.341
					1	12	0	21.78	25.31	0.340
					1	24	0	21.89	25.42	0.348
					12	0	1	20.91	24.44	0.278
					12	6	1	20.94	24.47	0.280
					12	11	1	21.03	24.56	0.286
				25	0	1	20.91	24.44	0.278	
				1	0	1	20.89	24.42	0.277	
				1	12	1	20.88	24.41	0.276	
				1	24	1	21.00	24.53	0.284	
				12	0	2	19.94	23.47	0.222	
				12	6	2	19.89	23.42	0.220	
		12	11	2	19.84	23.37	0.217			
		25	0	2	19.81	23.34	0.216			
		1	0	0	22.31	25.84	0.384			
		1	12	0	22.06	25.59	0.362			
		1	24	0	21.88	25.41	0.348			
		12	0	1	21.42	24.95	0.313			
		12	6	1	21.22	24.75	0.299			
		12	11	1	21.02	24.55	0.285			
		25	0	1	21.42	24.95	0.313			
		1	0	1	21.40	24.93	0.311			
		1	12	1	21.16	24.69	0.294			
		1	24	1	20.99	24.52	0.283			
		12	0	2	19.93	23.46	0.222			
		12	6	2	20.17	23.70	0.234			
		12	11	2	20.12	23.65	0.232			
		25	0	2	20.09	23.62	0.230			
		1	0	0	22.79	26.32	0.429			
		1	12	0	22.87	26.40	0.437			
		1	24	0	22.17	25.70	0.372			
		12	0	1	21.90	25.43	0.349			
		12	6	1	22.03	25.56	0.360			
		12	11	1	21.31	24.84	0.305			
		25	0	1	21.90	25.43	0.349			
		1	0	1	21.88	25.41	0.348			
1	12	1	21.97	25.50	0.355					
1	24	1	21.28	24.81	0.303					
12	0	2	20.22	23.75	0.237					
12	6	2	20.98	24.51	0.282					
12	11	2	20.93	24.46	0.279					
25	0	2	20.90	24.43	0.277					

**NOTE:**

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

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

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Average power	EIRP power (dBm)	EIRP power (W)
41	10M	39700	2501.0	QPSK	1	0	0	21.85	25.38	0.345
					1	24	0	21.83	25.36	0.344
					1	49	0	21.94	25.47	0.352
					25	0	1	20.96	24.49	0.281
					25	12	1	20.99	24.52	0.283
					25	24	1	21.08	24.61	0.289
				16QAM	50	0	1	20.96	24.49	0.281
					1	0	1	20.94	24.47	0.280
					1	24	1	20.93	24.46	0.279
					1	49	1	21.05	24.58	0.287
					25	0	2	19.99	23.52	0.225
					25	12	2	19.94	23.47	0.222
		40620	2593.0	QPSK	25	24	2	19.89	23.42	0.220
					50	0	2	19.86	23.39	0.218
					1	0	0	22.36	25.89	0.388
					1	24	0	22.11	25.64	0.366
					1	49	0	21.93	25.46	0.352
					25	0	1	21.47	25.00	0.316
				16QAM	25	12	1	21.27	24.80	0.302
					25	24	1	21.07	24.60	0.288
					50	0	1	21.47	25.00	0.316
					1	0	1	21.45	24.98	0.315
					1	24	1	21.21	24.74	0.298
					1	49	1	21.04	24.57	0.286
		41540	2685.0	QPSK	25	0	2	19.98	23.51	0.224
					25	12	2	20.22	23.75	0.237
					25	24	2	20.17	23.70	0.234
					50	0	2	20.14	23.67	0.233
					1	0	0	22.84	26.37	0.434
					1	24	0	22.92	26.45	0.442
				16QAM	1	49	0	22.22	25.75	0.376
					25	0	1	21.95	25.48	0.353
					25	12	1	22.08	25.61	0.364
					25	24	1	21.36	24.89	0.308
					50	0	1	21.95	25.48	0.353
					1	0	1	21.93	25.46	0.352
16QAM	1	24	1	22.02	25.55	0.359				
	1	49	1	21.33	24.86	0.306				
	25	0	2	20.27	23.80	0.240				
	25	12	2	21.03	24.56	0.286				
	25	24	2	20.98	24.51	0.282				
	50	0	2	20.95	24.48	0.281				

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 Start	MPR	Average power	EIRP power (dBm)	EIRP power (W)
41	15M	39725	2503.5	QPSK	1	0	0	21.90	25.43	0.349
					1	37	0	21.88	25.41	0.348
					1	74	0	21.99	25.52	0.356
					36	0	1	21.01	24.54	0.284
					36	18	1	21.04	24.57	0.286
					36	35	1	21.13	24.66	0.292
				16QAM	75	0	1	21.01	24.54	0.284
					1	0	1	20.99	24.52	0.283
					1	37	1	20.98	24.51	0.282
					1	74	1	21.10	24.63	0.290
					36	0	2	20.04	23.57	0.228
					36	18	2	19.99	23.52	0.225
					36	35	2	19.94	23.47	0.222
					75	0	2	19.91	23.44	0.221
					40620	2593.0	QPSK	1	0	0
		1	37	0				22.16	25.69	0.371
		1	74	0				21.98	25.51	0.356
		36	0	1				21.52	25.05	0.320
		36	18	1				21.32	24.85	0.305
		36	35	1				21.12	24.65	0.292
		16QAM	75	0			1	21.52	25.05	0.320
			1	0			1	21.50	25.03	0.318
			1	37			1	21.26	24.79	0.301
			1	74			1	21.09	24.62	0.290
			36	0			2	20.03	23.56	0.227
			36	18			2	20.27	23.80	0.240
			36	35			2	20.22	23.75	0.237
			75	0			2	20.19	23.72	0.236
			41515	2682.5			QPSK	1	0	0
		1			37	0		22.97	26.50	0.447
		1			74	0		22.27	25.80	0.380
		36			0	1		22.00	25.53	0.357
		36			18	1		22.13	25.66	0.368
		36			35	1		21.41	24.94	0.312
		16QAM			75	0	1	22.00	25.53	0.357
					1	0	1	21.98	25.51	0.356
					1	37	1	22.07	25.60	0.363
					1	74	1	21.38	24.91	0.310
					36	0	2	20.32	23.85	0.243
					36	18	2	21.08	24.61	0.289
					36	35	2	21.03	24.56	0.286
					75	0	2	21.00	24.53	0.284

**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 Start	MPR	Average power	EIRP power (dBm)	EIRP power (W)				
41	20M	39750	2506.0	QPSK	1	0	0	<b>21.95</b>	25.48	0.353				
					1	49	0	<b>21.93</b>	25.46	0.352				
					1	99	0	<b>22.04</b>	25.57	0.361				
					50	0	1	21.06	24.59	0.288				
					50	24	1	21.09	24.62	0.290				
					50	49	1	21.18	24.71	0.296				
				16QAM	100	0	1	21.06	24.59	0.288				
					1	0	1	21.04	24.57	0.286				
					1	49	1	21.03	24.56	0.286				
					1	99	1	21.15	24.68	0.294				
					50	0	2	20.09	23.62	0.230				
					50	24	2	20.04	23.57	0.228				
		40620	2593.0	QPSK	2593.0	QPSK	50	49	2	19.99	23.52	0.225		
							100	0	2	19.96	23.49	0.223		
							1	0	0	<b>22.46</b>	25.99	0.397		
							1	49	0	<b>22.21</b>	25.74	0.375		
							1	99	0	<b>22.03</b>	25.56	0.360		
							50	0	1	21.57	25.10	0.324		
				16QAM	2593.0	16QAM	2593.0	16QAM	50	24	1	21.37	24.90	0.309
									50	49	1	21.17	24.70	0.295
									100	0	1	21.57	25.10	0.324
									1	0	1	21.55	25.08	0.322
									1	49	1	21.31	24.84	0.305
									1	99	1	21.14	24.67	0.293
		41490	2680.0	QPSK	2680.0	QPSK	50	0	2	20.08	23.61	0.230		
							50	24	2	20.32	23.85	0.243		
							50	49	2	20.27	23.80	0.240		
							100	0	2	20.24	23.77	0.238		
							1	0	0	<b>22.94</b>	26.47	0.444		
							1	49	0	<b>23.02</b>	26.55	0.452		
				16QAM	2680.0	16QAM	2680.0	16QAM	1	99	0	<b>22.32</b>	25.85	0.385
									50	0	1	22.05	25.58	0.361
									50	24	1	22.18	25.71	0.372
									50	49	1	21.46	24.99	0.316
									100	0	1	22.05	25.58	0.361
									1	0	1	22.03	25.56	0.360
16QAM	2680.0	16QAM	2680.0	16QAM	1	49	1	22.12	25.65	0.367				
					1	99	1	21.43	24.96	0.313				
					50	0	2	20.37	23.90	0.245				
					50	24	2	21.13	24.66	0.292				
					50	49	2	21.08	24.61	0.289				
					100	0	2	21.05	24.58	0.287				

**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 66 Power:**

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power	EIRP power (dBm)	EIRP power (W)		
66	1.4	131979	1710.7	QPSK	1	0	0	23.13	26.34	0.431		
					1	2	0	22.98	26.19	0.416		
					1	5	0	23.16	26.37	0.434		
					3	0	0	23.13	26.34	0.431		
					3	1	0	22.98	26.19	0.416		
					3	2	0	23.16	26.37	0.434		
		16QAM	6	0	1	22.24	25.45	0.351				
			1	0	1	22.22	25.43	0.349				
			1	2	1	22.08	25.29	0.338				
			1	5	1	22.27	25.48	0.353				
			3	0	1	22.22	25.43	0.349				
			3	1	1	22.08	25.29	0.338				
		132322	1745.0	QPSK	1745.0	QPSK	3	2	1	22.27	25.48	0.353
							6	0	2	21.01	24.22	0.264
							1	0	0	23.22	26.43	0.440
							1	2	0	23.07	26.28	0.425
							1	5	0	23.23	26.44	0.441
							3	0	0	23.22	26.43	0.440
	16QAM		3	1	0	23.07	26.28	0.425				
			3	2	0	23.23	26.44	0.441				
			6	0	1	22.33	25.54	0.358				
			1	0	1	22.31	25.52	0.356				
			1	2	1	22.17	25.38	0.345				
			1	5	1	22.34	25.55	0.359				
	132665		1779.3	QPSK	1779.3	QPSK	3	0	1	22.31	25.52	0.356
							3	1	1	22.17	25.38	0.345
							3	2	1	22.34	25.55	0.359
							6	0	2	21.28	24.49	0.281
							1	0	0	23.38	26.59	0.456
							1	2	0	23.33	26.54	0.451
		16QAM	1	5	0	23.57	26.78	0.476				
			3	0	0	23.38	26.59	0.456				
			3	1	0	23.33	26.54	0.451				
			3	2	0	23.57	26.78	0.476				
			6	0	1	22.49	25.70	0.372				
			1	0	1	22.47	25.68	0.370				
1779.3		16QAM	16QAM	1779.3	16QAM	1	2	1	22.43	25.64	0.366	
						1	5	1	22.68	25.89	0.388	
						3	0	1	22.47	25.68	0.370	
						3	1	1	22.43	25.64	0.366	
						3	2	1	22.68	25.89	0.388	
						6	0	2	21.62	24.83	0.304	

**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	EIRP power (dBm)	EIRP power (W)
66	3	131987	1711.5	QPSK	1	0	0	23.18	26.39	0.436
					1	7	0	23.03	26.24	0.421
					1	14	0	23.21	26.42	0.439
					8	0	1	22.29	25.50	0.355
					8	4	1	22.19	25.40	0.347
					8	7	1	22.35	25.56	0.360
				16QAM	15	0	1	22.29	25.50	0.355
					1	0	1	22.27	25.48	0.353
					1	7	1	22.13	25.34	0.342
					1	14	1	22.32	25.53	0.357
					8	0	2	21.26	24.47	0.280
					8	4	2	21.14	24.35	0.272
					8	7	2	21.09	24.30	0.269
					15	0	2	21.06	24.27	0.267
					132322	1745.0	QPSK	1	0	0
		1	7	0				23.12	26.33	0.430
		1	14	0				23.28	26.49	0.446
		8	0	1				22.38	25.59	0.362
		8	4	1				22.28	25.49	0.354
		8	7	1				22.42	25.63	0.366
		16QAM	15	0			1	22.38	25.59	0.362
			1	0			1	22.36	25.57	0.361
			1	7			1	22.22	25.43	0.349
			1	14			1	22.39	25.60	0.363
			8	0			2	21.33	24.54	0.284
			8	4			2	21.23	24.44	0.278
			8	7			2	21.18	24.39	0.275
			15	0			2	21.15	24.36	0.273
			132657	1778.5			QPSK	1	0	0
		1			7	0		23.38	26.59	0.456
		1			14	0		23.62	26.83	0.482
		8			0	1		22.54	25.75	0.376
		8			4	1		22.54	25.75	0.376
		8			7	1		22.76	25.97	0.395
		16QAM			15	0	1	22.54	25.75	0.376
					1	0	1	22.52	25.73	0.374
					1	7	1	22.48	25.69	0.371
					1	14	1	22.73	25.94	0.393
					8	0	2	21.67	24.88	0.308
					8	4	2	21.49	24.70	0.295
					8	7	2	21.44	24.65	0.292
					15	0	2	21.41	24.62	0.290

**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	EIRP power (dBm)	EIRP power (W)
66	5	131997	1712.5	QPSK	1	0	0	23.23	26.44	0.441
					1	12	0	23.08	26.29	0.426
					1	24	0	23.26	26.47	0.444
					12	0	1	22.34	25.55	0.359
					12	6	1	22.24	25.45	0.351
					12	11	1	22.40	25.61	0.364
				25	0	1	22.34	25.55	0.359	
				1	0	1	22.32	25.53	0.357	
				1	12	1	22.18	25.39	0.346	
				1	24	1	22.37	25.58	0.361	
				12	0	2	21.31	24.52	0.283	
				12	6	2	21.19	24.40	0.275	
				12	11	2	21.14	24.35	0.272	
				25	0	2	21.11	24.32	0.270	
				1	0	0	23.32	26.53	0.450	
		1	12	0	23.17	26.38	0.435			
		1	24	0	23.33	26.54	0.451			
		12	0	1	22.43	25.64	0.366			
		12	6	1	22.33	25.54	0.358			
		12	11	1	22.47	25.68	0.370			
		25	0	1	22.43	25.64	0.366			
		1	0	1	22.41	25.62	0.365			
		1	12	1	22.27	25.48	0.353			
		1	24	1	22.44	25.65	0.367			
		12	0	2	21.38	24.59	0.288			
		12	6	2	21.28	24.49	0.281			
		12	11	2	21.23	24.44	0.278			
		25	0	2	21.20	24.41	0.276			
		1	0	0	23.48	26.69	0.467			
		1	12	0	23.43	26.64	0.461			
		1	24	0	23.67	26.88	0.488			
		12	0	1	22.59	25.80	0.380			
		12	6	1	22.59	25.80	0.380			
		12	11	1	22.81	26.02	0.400			
		25	0	1	22.59	25.80	0.380			
		1	0	1	22.57	25.78	0.378			
		1	12	1	22.53	25.74	0.375			
		1	24	1	22.78	25.99	0.397			
		12	0	2	21.72	24.93	0.311			
		12	6	2	21.54	24.75	0.299			
		12	11	2	21.49	24.70	0.295			
		25	0	2	21.46	24.67	0.293			
		132322	1745.0	QPSK	1	0	0	23.32	26.53	0.450
					1	12	0	23.17	26.38	0.435
					1	24	0	23.33	26.54	0.451
12	0				1	22.43	25.64	0.366		
12	6				1	22.33	25.54	0.358		
12	11				1	22.47	25.68	0.370		
25	0			1	22.43	25.64	0.366			
1	0			1	22.41	25.62	0.365			
1	12			1	22.27	25.48	0.353			
1	24			1	22.44	25.65	0.367			
12	0			2	21.38	24.59	0.288			
12	6			2	21.28	24.49	0.281			
12	11			2	21.23	24.44	0.278			
25	0			2	21.20	24.41	0.276			
1	0			0	23.48	26.69	0.467			
1	12	0	23.43	26.64	0.461					
1	24	0	23.67	26.88	0.488					
12	0	1	22.59	25.80	0.380					
12	6	1	22.59	25.80	0.380					
12	11	1	22.81	26.02	0.400					
25	0	1	22.59	25.80	0.380					
1	0	1	22.57	25.78	0.378					
1	12	1	22.53	25.74	0.375					
1	24	1	22.78	25.99	0.397					
12	0	2	21.72	24.93	0.311					
12	6	2	21.54	24.75	0.299					
12	11	2	21.49	24.70	0.295					
25	0	2	21.46	24.67	0.293					
132647	1777.5	QPSK	1	0	0	23.48	26.69	0.467		
			1	12	0	23.43	26.64	0.461		
			1	24	0	23.67	26.88	0.488		
			12	0	1	22.59	25.80	0.380		
			12	6	1	22.59	25.80	0.380		
			12	11	1	22.81	26.02	0.400		
		25	0	1	22.59	25.80	0.380			
		1	0	1	22.57	25.78	0.378			
		1	12	1	22.53	25.74	0.375			
		1	24	1	22.78	25.99	0.397			
		12	0	2	21.72	24.93	0.311			
		12	6	2	21.54	24.75	0.299			
		12	11	2	21.49	24.70	0.295			
		25	0	2	21.46	24.67	0.293			

## 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	EIRP power (dBm)	EIRP power (W)	
66	10	132022	1715.0	QPSK	1	0	0	23.28	26.49	0.446	
					1	24	0	23.13	26.34	0.431	
					1	49	0	23.31	26.52	0.449	
					25	0	1	22.39	25.60	0.363	
					25	12	1	22.29	25.50	0.355	
					25	24	1	22.45	25.66	0.368	
				50	0	1	22.39	25.60	0.363		
				16QAM	1	0	1	22.37	25.58	0.361	
					1	24	1	22.23	25.44	0.350	
					1	49	1	22.42	25.63	0.366	
					25	0	2	21.36	24.57	0.286	
					25	12	2	21.24	24.45	0.279	
					25	24	2	21.19	24.40	0.275	
					50	0	2	21.16	24.37	0.274	
					132322	1745.0	QPSK	1	0	0	23.37
		1	24					0	23.22	26.43	0.440
		1	49	0				23.38	26.59	0.456	
		25	0	1				22.48	25.69	0.371	
		25	12	1				22.38	25.59	0.362	
		25	24	1				22.52	25.73	0.374	
		50	0	1			22.48	25.69	0.371		
		16QAM	1	0			1	22.46	25.67	0.369	
			1	24			1	22.32	25.53	0.357	
			1	49			1	22.49	25.70	0.372	
			25	0			2	21.43	24.64	0.291	
			25	12			2	21.33	24.54	0.284	
			25	24			2	21.28	24.49	0.281	
			50	0			2	21.25	24.46	0.279	
			132622	1775.0			QPSK	1	0	0	23.53
					1	24		0	23.48	26.69	0.467
		1			49	0		23.72	26.93	0.493	
		25			0	1		22.64	25.85	0.385	
		25			12	1		22.64	25.85	0.385	
		25			24	1		22.86	26.07	0.405	
		50			0	1	22.64	25.85	0.385		
		16QAM			1	0	1	22.62	25.83	0.383	
					1	24	1	22.58	25.79	0.379	
					1	49	1	22.83	26.04	0.402	
					25	0	2	21.77	24.98	0.315	
					25	12	2	21.59	24.80	0.302	
					25	24	2	21.54	24.75	0.299	
					50	0	2	21.51	24.72	0.296	

**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	EIRP power (dBm)	EIRP power (W)	
66	15	132047	1717.5	QPSK	1	0	0	23.33	26.54	0.451	
					1	37	0	23.18	26.39	0.436	
					1	74	0	23.36	26.57	0.454	
					36	0	1	22.44	25.65	0.367	
					36	18	1	22.34	25.55	0.359	
					36	35	1	22.50	25.71	0.372	
				75	0	1	22.44	25.65	0.367		
				16QAM	1	0	1	22.42	25.63	0.366	
					1	37	1	22.28	25.49	0.354	
					1	74	1	22.47	25.68	0.370	
					36	0	2	21.41	24.62	0.290	
					36	18	2	21.29	24.50	0.282	
					36	35	2	21.24	24.45	0.279	
					75	0	2	21.21	24.42	0.277	
					132322	1745.0	QPSK	1	0	0	23.42
		1	37					0	23.27	26.48	0.445
		1	74	0				23.43	26.64	0.461	
		36	0	1				22.53	25.74	0.375	
		36	18	1				22.43	25.64	0.366	
		36	35	1				22.57	25.78	0.378	
		75	0	1			22.53	25.74	0.375		
		16QAM	1	0			1	22.51	25.72	0.373	
			1	37			1	22.37	25.58	0.361	
			1	74			1	22.54	25.75	0.376	
			36	0			2	21.48	24.69	0.294	
			36	18			2	21.38	24.59	0.288	
			36	35			2	21.33	24.54	0.284	
			75	0			2	21.30	24.51	0.282	
			132597	1772.5			QPSK	1	0	0	23.58
					1	37		0	23.53	26.74	0.472
		1			74	0		23.77	26.98	0.499	
		36			0	1		22.69	25.90	0.389	
		36			18	1		22.69	25.90	0.389	
		36			35	1		22.91	26.12	0.409	
		75			0	1	22.69	25.90	0.389		
		16QAM			1	0	1	22.67	25.88	0.387	
					1	37	1	22.63	25.84	0.384	
					1	74	1	22.88	26.09	0.406	
					36	0	2	21.82	25.03	0.318	
					36	18	2	21.64	24.85	0.305	
					36	35	2	21.59	24.80	0.302	
					75	0	2	21.56	24.77	0.300	

**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	EIRP power (dBm)	EIRP power (W)				
66	20	132072	1720.0	QPSK	1	0	0	<b>23.38</b>	26.59	0.456				
					1	49	0	<b>23.23</b>	26.44	0.441				
					1	99	0	<b>23.41</b>	26.62	0.459				
					50	0	1	22.49	25.70	0.372				
					50	24	1	22.39	25.60	0.363				
					50	49	1	22.55	25.76	0.377				
				16QAM	100	0	1	22.49	25.70	0.372				
					1	0	1	22.47	25.68	0.370				
					1	49	1	22.33	25.54	0.358				
					1	99	1	22.52	25.73	0.374				
					50	0	2	21.46	24.67	0.293				
					50	24	2	21.34	24.55	0.285				
		132322	1745.0	QPSK	1745.0	QPSK	50	49	2	21.29	24.50	0.282		
							100	0	2	21.26	24.47	0.280		
							1	0	0	<b>23.47</b>	26.68	0.466		
							1	49	0	<b>23.32</b>	26.53	0.450		
							1	99	0	<b>23.48</b>	26.69	0.467		
							50	0	1	22.58	25.79	0.379		
				16QAM	16QAM	16QAM	16QAM	16QAM	50	24	1	22.48	25.69	0.371
									50	49	1	22.62	25.83	0.383
									100	0	1	22.58	25.79	0.379
									1	0	1	22.56	25.77	0.378
									1	49	1	22.42	25.63	0.366
									1	99	1	22.59	25.80	0.380
		132572	1770.0	QPSK	1770.0	QPSK	50	0	2	21.53	24.74	0.298		
							50	24	2	21.43	24.64	0.291		
							50	49	2	21.38	24.59	0.288		
							100	0	2	21.35	24.56	0.286		
							1	0	0	<b>23.63</b>	26.84	0.483		
							1	49	0	<b>23.58</b>	26.79	0.478		
				16QAM	16QAM	16QAM	16QAM	16QAM	1	99	0	<b>23.82</b>	27.03	0.505
									50	0	1	22.74	25.95	0.394
									50	24	1	22.74	25.95	0.394
									50	49	1	22.96	26.17	0.414
									100	0	1	22.74	25.95	0.394
									1	0	1	22.72	25.93	0.392
		16QAM	16QAM	16QAM	16QAM	16QAM	1	49	1	22.68	25.89	0.388		
							1	99	1	22.93	26.14	0.411		
							50	0	2	21.87	25.08	0.322		
							50	24	2	21.69	24.90	0.309		
							50	49	2	21.64	24.85	0.305		
							100	0	2	21.61	24.82	0.303		

**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 CA\_7C Power:**

Band 7	20+20	20850 21048	2510.0 2529.8	QPSK	0	0	1	99	21.41	24.78	0.301
					1	0	0	0	21.03	24.40	0.275
					100	0	0	0	20.49	23.86	0.243
					100	0	100	0	20.25	23.62	0.230
					1	0	1	99	13.41	16.78	0.048
					1	0	1	0	17.50	20.87	0.122
				1	99	1	0	22.44	25.81	0.381	
				100	0	1	99	18.73	22.10	0.162	
				16QAM	0	0	1	99	20.89	24.26	0.267
					1	0	0	0	20.65	24.02	0.252
					100	0	0	0	19.47	22.84	0.192
					100	0	100	0	19.24	22.61	0.182
		1	0		1	99	13.82	17.19	0.052		
		1	0		1	0	17.89	21.26	0.134		
		1	99	1	0	21.74	25.11	0.324			
		100	0	1	99	18.73	22.10	0.162			
		21001 21199	2525.1 2544.9	QPSK	0	0	1	99	21.44	24.81	0.303
					1	0	0	0	21.37	24.74	0.298
					100	0	0	0	20.38	23.75	0.237
					100	0	100	0	20.19	23.56	0.227
					1	0	1	99	13.64	17.01	0.050
					1	0	1	0	17.72	21.09	0.129
				1	99	1	0	22.48	25.85	0.385	
				100	0	1	99	18.68	22.05	0.160	
				16QAM	0	0	1	99	21.05	24.42	0.277
					1	0	0	0	20.95	24.32	0.270
					100	0	0	0	19.36	22.73	0.187
					100	0	100	0	19.23	22.60	0.182
		1	0		1	99	14.18	17.55	0.057		
		1	0		1	0	18.07	21.44	0.139		
		1	99	1	0	21.88	25.25	0.335			
		100	0	1	99	18.65	22.02	0.159			
		21152 21350	2540.2 2560	QPSK	0	0	1	99	21.25	24.62	0.290
					1	0	0	0	21.29	24.66	0.292
					100	0	0	0	20.52	23.89	0.245
					100	0	100	0	20.30	23.67	0.233
					1	0	1	99	13.55	16.92	0.049
					1	0	1	0	17.68	21.05	0.127
				1	99	1	0	22.51	25.88	0.387	
				100	0	1	99	18.79	22.16	0.164	
				16QAM	0	0	1	99	20.68	24.05	0.254
					1	0	0	0	20.95	24.32	0.270
					100	0	0	0	19.52	22.89	0.195
					100	0	100	0	19.36	22.73	0.187
		1	0		1	99	14.04	17.41	0.055		
		1	0		1	0	18.28	21.65	0.146		
		1	99	1	0	21.71	25.08	0.322			
		100	0	1	99	18.77	22.14	0.164			

**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	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	20+15	20850 21021	2510.0 2527.1	QPSK	100	0	75	0	20.46	23.83	0.242
					1	0	1	74	13.59	16.96	0.050
					1	99	1	0	22.04	25.41	0.348
				16QAM	100	0	75	0	18.80	22.17	0.165
					1	0	1	74	13.98	17.35	0.054
					1	99	1	0	21.75	25.12	0.325
		21026 21197	2527.6 2544.7	QPSK	100	0	75	0	20.35	23.72	0.236
					1	0	1	74	13.82	17.19	0.052
					1	99	1	0	22.54	25.91	0.390
				16QAM	100	0	75	0	19.34	22.71	0.187
					1	0	1	74	14.23	17.60	0.058
					1	99	1	0	21.87	25.24	0.334
		21201 21372	2545.1 2562.2	QPSK	100	0	75	0	20.48	23.85	0.243
					1	0	1	74	13.90	17.27	0.053
					1	99	1	0	22.32	25.69	0.371
				16QAM	100	0	75	0	19.08	22.45	0.176
					1	0	1	74	14.39	17.76	0.060
					1	99	1	0	21.64	25.01	0.317
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	15+20	20828 20999	2507.8 2524.9	QPSK	75	0	100	0	20.19	23.56	0.227
					1	0	1	99	13.55	16.92	0.049
					1	74	1	0	22.11	25.48	0.353
				16QAM	75	0	100	0	19.19	22.56	0.180
					1	0	1	99	13.88	17.25	0.053
					1	74	1	0	21.79	25.16	0.328
		21003 21174	2525.3 2542.4	QPSK	75	0	100	0	20.22	23.59	0.229
					1	0	1	99	13.74	17.11	0.051
					1	74	1	0	22.41	25.78	0.378
				16QAM	75	0	100	0	19.27	22.64	0.184
					1	0	1	99	14.29	17.66	0.058
					1	74	1	0	21.68	25.05	0.320
		21179 21350	2542.9 2560.0	QPSK	75	0	100	0	20.41	23.78	0.239
					1	0	1	99	13.83	17.20	0.052
					1	74	1	0	22.47	25.84	0.384
				16QAM	75	0	100	0	19.42	22.79	0.190
					1	0	1	99	14.24	17.61	0.058
					1	74	1	0	21.98	25.35	0.343
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	20+10	20850 20994	2510.0 2524.4	QPSK	100	0	50	0	20.34	23.71	0.235
					1	0	1	49	13.50	16.87	0.049
					1	99	1	0	22.40	25.77	0.378
				16QAM	100	0	50	0	19.32	22.69	0.186
					1	0	1	49	14.06	17.43	0.055
					1	99	1	0	21.58	24.95	0.313
		21051 21195	2530.1 2544.5	QPSK	100	0	50	0	20.40	23.77	0.238
					1	0	1	49	13.82	17.19	0.052
					1	99	1	0	22.64	26.01	0.399
				16QAM	100	0	50	0	19.38	22.75	0.188
					1	0	1	49	14.36	17.73	0.059
					1	99	1	0	20.85	24.22	0.264
		21251 21395	2550.1 2564.5	QPSK	100	0	50	0	20.57	23.94	0.248
					1	0	1	49	13.98	17.35	0.054
					1	99	1	0	22.55	25.92	0.391
				16QAM	100	0	50	0	19.60	22.97	0.198
					1	0	1	49	14.40	17.77	0.060
					1	99	1	0	21.89	25.26	0.336

**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	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	10+20	20805 20949	2505.5 2519.9	QPSK	50	0	100	0	20.16	23.53	0.225
					1	0	1	99	13.45	16.82	0.048
					1	49	1	0	22.06	25.43	0.349
				16QAM	50	0	100	0	19.15	22.52	0.179
					1	0	1	99	13.83	17.20	0.052
					1	49	1	0	21.56	24.93	0.311
		21006 21150	2525.6 2540.0	QPSK	50	0	100	0	20.30	23.67	0.233
					1	0	1	99	13.70	17.07	0.051
					1	49	1	0	22.30	25.67	0.369
				16QAM	50	0	100	0	19.31	22.68	0.185
					1	0	1	99	14.18	17.55	0.057
					1	49	1	0	21.55	24.92	0.310
		21206 21350	2545.6 2560.0	QPSK	50	0	100	0	20.39	23.76	0.238
					1	0	1	99	13.86	17.23	0.053
					1	49	1	0	22.50	25.87	0.386
				16QAM	50	0	100	0	19.39	22.76	0.189
					1	0	1	99	14.29	17.66	0.058
					1	49	1	0	21.83	25.20	0.331
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	15+15	20825 20975	2507.5 2522.5	QPSK	75	0	75	0	20.72	24.09	0.256
					1	0	1	74	14.10	17.47	0.056
					1	74	1	0	22.39	25.76	0.377
				16QAM	75	0	75	0	19.68	23.05	0.202
					1	0	1	74	14.28	17.65	0.058
					1	74	1	0	21.45	24.82	0.303
		21025 21175	2527.5 2542.5	QPSK	75	0	75	0	20.81	24.18	0.262
					1	0	1	74	14.28	17.65	0.058
					1	74	1	0	22.56	25.93	0.392
				16QAM	75	0	75	0	19.83	23.20	0.209
					1	0	1	74	14.52	17.89	0.062
					1	74	1	0	21.76	25.13	0.326
		21225 21375	2547.5 2562.5	QPSK	75	0	75	0	20.93	24.30	0.269
					1	0	1	74	14.54	17.91	0.062
					1	74	1	0	22.81	26.18	0.415
				16QAM	75	0	75	0	19.28	22.65	0.184
					1	0	1	74	14.49	17.86	0.061
					1	74	1	0	22.04	25.41	0.348
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 7	15+10	20825 20945	2507.5 2519.5	QPSK	75	0	50	0	20.68	24.05	0.254
					1	0	1	49	14.02	17.39	0.055
					1	74	1	0	22.51	25.88	0.387
				16QAM	75	0	50	0	19.67	23.04	0.201
					1	0	1	49	14.29	17.66	0.058
					1	74	1	0	21.68	25.05	0.320
		21051 21171	2530.1 2542.1	QPSK	75	0	50	0	20.86	24.23	0.265
					1	0	1	49	14.37	17.74	0.059
					1	74	1	0	22.52	25.89	0.388
				16QAM	75	0	50	0	19.84	23.21	0.209
					1	0	1	49	14.42	17.79	0.060
					1	74	1	0	21.75	25.12	0.325
		21277 21397	2552.7 2564.7	QPSK	75	0	50	0	20.95	24.32	0.270
					1	0	1	49	14.43	17.80	0.060
					1	74	1	0	22.76	26.13	0.410
				16QAM	75	0	50	0	19.47	22.84	0.192
					1	0	1	49	14.52	17.89	0.062
					1	74	1	0	22.05	25.42	0.348

**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 CA\_41C Power:**

Band	BW (MHz)	PCC/SCC Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
Band 41	20+20	39750 39948	2506 2525.8	QPSK	0	0	1	99	21.84	25.37	0.344
					1	0	0	0	21.62	25.15	0.327
					100	0	0	0	20.78	24.31	0.270
					100	0	100	0	20.71	24.24	0.265
					1	0	1	99	14.84	18.37	0.069
					1	0	1	0	18.86	22.39	0.173
				1	99	1	0	22.81	26.34	0.431	
				100	0	1	99	19.18	22.71	0.187	
				16QAM	0	0	1	99	21.93	25.46	0.352
					1	0	0	0	21.54	25.07	0.321
					100	0	0	0	19.82	23.35	0.216
					100	0	100	0	19.73	23.26	0.212
		1	0		1	99	14.84	18.37	0.069		
		1	0		1	0	18.88	22.41	0.174		
		1	99	1	0	22.28	25.81	0.381			
		100	0	1	99	19.11	22.64	0.184			
		40521 40719	2583.1 2602.9	QPSK	0	0	1	99	22.37	25.90	0.389
					1	0	0	0	22.32	25.85	0.385
					100	0	0	0	20.87	24.40	0.275
					100	0	100	0	20.69	24.22	0.264
					1	0	1	99	14.65	18.18	0.066
					1	0	1	0	18.65	22.18	0.165
				1	99	1	0	22.84	26.37	0.434	
				100	0	1	99	19.51	23.04	0.201	
				16QAM	0	0	1	99	22.07	25.60	0.363
					1	0	0	0	21.86	25.39	0.346
					100	0	0	0	20.21	23.74	0.237
					100	0	100	0	20.09	23.62	0.230
		1	0		1	99	15.16	18.69	0.074		
		1	0		1	0	19.43	22.96	0.198		
		1	99	1	0	22.47	26.00	0.398			
		100	0	1	99	19.85	23.38	0.218			
		41292 41490	2660.2 2680	QPSK	0	0	1	99	21.77	25.30	0.339
					1	0	0	0	22.39	25.92	0.391
					100	0	0	0	21.23	24.76	0.299
					100	0	100	0	20.94	24.47	0.280
					1	0	1	99	14.69	18.22	0.066
					1	0	1	0	18.68	22.21	0.166
				1	99	1	0	22.65	26.18	0.415	
				100	0	1	99	19.12	22.65	0.184	
				16QAM	0	0	1	99	21.64	25.17	0.329
					1	0	0	0	22.01	25.54	0.358
					100	0	0	0	20.38	23.91	0.246
					100	0	100	0	20.12	23.65	0.232
		1	0		1	99	15.04	18.57	0.072		
		1	0		1	0	19.33	22.86	0.193		
		1	99	1	0	22.47	26.00	0.398			
		100	0	1	99	19.15	22.68	0.185			

**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	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 41	20+15	39750 39921	2506 2523.1	QPSK	100	0	75	0	20.54	24.07	0.255
					1	0	1	74	13.90	17.43	0.055
					1	99	1	0	22.57	26.10	0.407
				16QAM	100	0	75	0	19.58	23.11	0.205
					1	0	1	74	14.76	18.29	0.067
					1	99	1	0	22.14	25.67	0.369
		40546 40717	2585.6 2602.7	QPSK	100	0	75	0	21.12	24.65	0.292
					1	0	1	74	14.48	18.01	0.063
					1	99	1	0	22.64	26.17	0.414
				16QAM	100	0	75	0	20.04	23.57	0.228
					1	0	1	74	15.09	18.62	0.073
					1	99	1	0	22.34	25.87	0.386
		41341 41512	2665.1 2682.2	QPSK	100	0	75	0	20.76	24.29	0.269
					1	0	1	74	14.56	18.09	0.064
					1	99	1	0	22.45	25.98	0.396
				16QAM	100	0	75	0	19.98	23.51	0.224
					1	0	1	74	14.95	18.48	0.070
					1	99	1	0	21.97	25.50	0.355
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 41	15+20	39728 39899	2503.8 2520.9	QPSK	75	0	100	0	20.64	24.17	0.261
					1	0	1	99	13.97	17.50	0.056
					1	74	1	0	22.43	25.96	0.394
				16QAM	75	0	100	0	19.34	22.87	0.194
					1	0	1	99	14.57	18.10	0.065
					1	74	1	0	22.06	25.59	0.362
		40523 40694	2583.3 2600.4	QPSK	75	0	100	0	20.64	24.17	0.261
					1	0	1	99	14.32	17.85	0.061
					1	74	1	0	22.49	26.02	0.400
				16QAM	75	0	100	0	19.86	23.39	0.218
					1	0	1	99	14.98	18.51	0.071
					1	74	1	0	22.29	25.82	0.382
		41319 41490	2662.9 2680	QPSK	75	0	100	0	20.54	24.07	0.255
					1	0	1	99	14.26	17.79	0.060
					1	74	1	0	22.17	25.70	0.372
				16QAM	75	0	100	0	19.87	23.40	0.219
					1	0	1	99	14.83	18.36	0.069
					1	74	1	0	21.94	25.47	0.352
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 41	20+10	39750 39894	2506 2520.4	QPSK	100	0	50	0	20.41	23.94	0.248
					1	0	1	49	14.02	17.55	0.057
					1	99	1	0	22.43	25.96	0.394
				16QAM	100	0	50	0	19.57	23.10	0.204
					1	0	1	49	14.69	18.22	0.066
					1	99	1	0	21.95	25.48	0.353
		40571 40715	2588.1 2602.5	QPSK	100	0	50	0	20.92	24.45	0.279
					1	0	1	49	14.45	17.98	0.063
					1	99	1	0	22.57	26.10	0.407
				16QAM	100	0	50	0	19.87	23.40	0.219
					1	0	1	49	15.02	18.55	0.072
					1	99	1	0	22.03	25.56	0.360
		41391 41535	2670.1 2684.5	QPSK	100	0	50	0	20.64	24.17	0.261
					1	0	1	49	14.48	18.01	0.063
					1	99	1	0	22.28	25.81	0.381
				16QAM	100	0	50	0	19.84	23.37	0.217
					1	0	1	49	14.83	18.36	0.069
					1	99	1	0	21.85	25.38	0.345

**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	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 41	10+20	39705 39849	2501.5 2515.9	QPSK	50	0	100	0	20.60	24.13	0.259
					1	0	1	99	14.07	17.60	0.058
					1	49	1	0	22.51	26.04	0.402
				16QAM	50	0	100	0	19.54	23.07	0.203
					1	0	1	99	14.92	18.45	0.070
					1	49	1	0	22.06	25.59	0.362
		40526 40670	2583.6 2598	QPSK	50	0	100	0	20.92	24.45	0.279
					1	0	1	99	14.46	17.99	0.063
					1	49	1	0	22.49	26.02	0.400
				16QAM	50	0	100	0	20.02	23.55	0.226
					1	0	1	99	15.01	18.54	0.071
					1	49	1	0	22.37	25.90	0.389
		41346 41490	2665.6 2680	QPSK	50	0	100	0	20.57	24.10	0.257
					1	0	1	99	14.34	17.87	0.061
					1	49	1	0	22.32	25.85	0.385
				16QAM	50	0	100	0	19.98	23.51	0.224
					1	0	1	99	14.76	18.29	0.067
					1	49	1	0	21.69	25.22	0.333
Band 41	20+5	39750 39867	2506 2517.7	QPSK	50	0	100	0	20.41	23.94	0.248
					1	0	1	99	14.04	17.57	0.057
					1	49	1	0	22.37	25.90	0.389
				16QAM	50	0	100	0	19.62	23.15	0.207
					1	0	1	99	14.64	18.17	0.066
					1	49	1	0	21.91	25.44	0.350
		40595 40712	2590.5 2602.2	QPSK	50	0	100	0	20.79	24.32	0.270
					1	0	1	99	14.48	18.01	0.063
					1	49	1	0	22.54	26.07	0.405
				16QAM	50	0	100	0	19.97	23.50	0.224
					1	0	1	99	14.91	18.44	0.070
					1	49	1	0	22.15	25.68	0.370
		41440 41557	2675 2686.7	QPSK	50	0	100	0	20.46	23.99	0.251
					1	0	1	99	14.52	18.05	0.064
					1	49	1	0	22.43	25.96	0.394
				16QAM	50	0	100	0	20.02	23.55	0.226
					1	0	1	99	14.87	18.40	0.069
					1	49	1	0	21.61	25.14	0.327
Band 41	5+20	39683 39800	2499.3 2511	QPSK	50	0	100	0	20.63	24.16	0.261
					1	0	1	99	14.32	17.85	0.061
					1	49	1	0	21.71	25.24	0.334
				16QAM	50	0	100	0	19.45	22.98	0.199
					1	0	1	99	14.82	18.35	0.068
					1	49	1	0	21.74	25.27	0.337
		40528 40645	2583.8 2595.5	QPSK	50	0	100	0	20.87	24.40	0.275
					1	0	1	99	14.31	17.84	0.061
					1	49	1	0	22.64	26.17	0.414
				16QAM	50	0	100	0	19.94	23.47	0.222
					1	0	1	99	15.06	18.59	0.072
					1	49	1	0	22.20	25.73	0.374
		41373 41490	2668.3 2680	QPSK	50	0	100	0	20.52	24.05	0.254
					1	0	1	99	14.48	18.01	0.063
					1	49	1	0	22.16	25.69	0.371
				16QAM	50	0	100	0	19.98	23.51	0.224
					1	0	1	99	14.81	18.34	0.068
					1	49	1	0	21.78	25.31	0.340

**NOTE:**

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3)  $P(W) = 1 W \cdot 10^{(P(dBm) / 10)} / 1000$



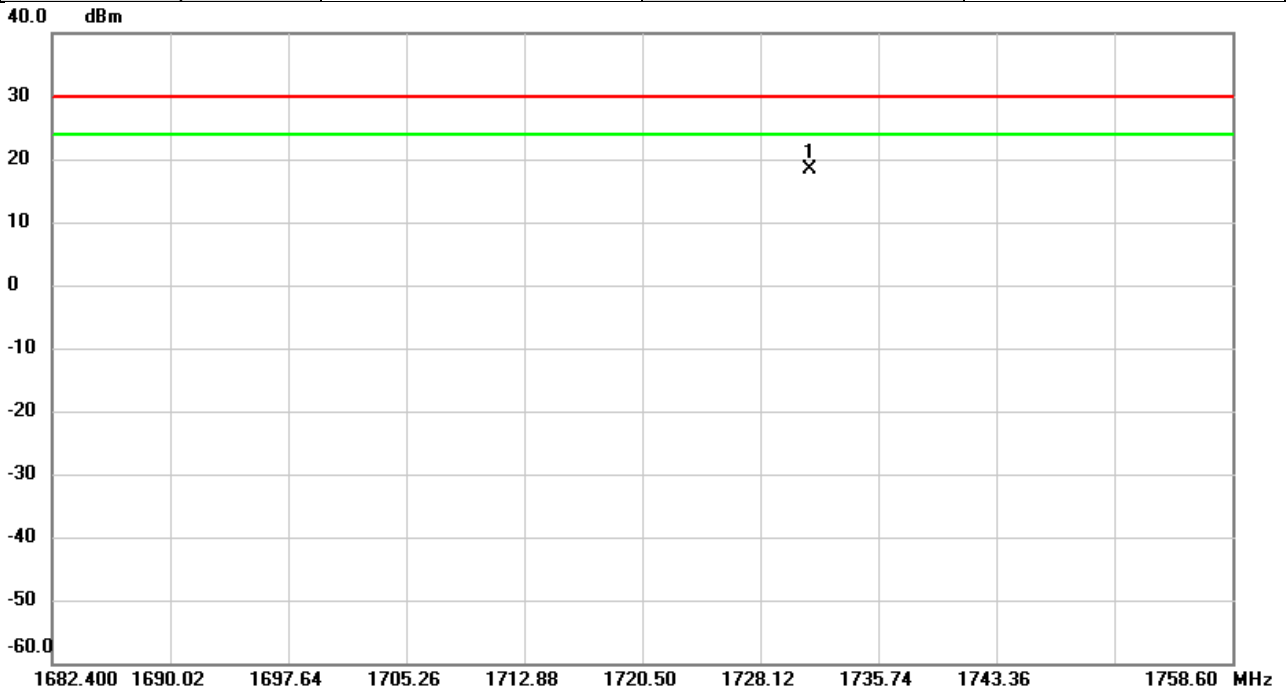
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	PCC UL RB Allocation	PCC UL RB Start	SCC UL RB Allocation	SCC UL RB Start	Average power (dBm)	ERP power (dBm)	ERP power (W)
Band 41	15+15	39725 39875	2503.5 2518.5	QPSK	75	0	75	0	20.65	24.18	0.262
					1	0	1	74	14.28	17.81	0.060
					1	74	1	0	22.16	25.69	0.371
				16QAM	75	0	75	0	19.45	22.98	0.199
					1	0	1	74	14.79	18.32	0.068
					1	74	1	0	21.51	25.04	0.319
		40545 40695	2585.5 2600.5	QPSK	75	0	75	0	20.99	24.52	0.283
					1	0	1	74	14.46	17.99	0.063
					1	74	1	0	22.48	26.01	0.399
				16QAM	75	0	75	0	19.86	23.39	0.218
					1	0	1	74	14.96	18.49	0.071
					1	74	1	0	21.89	25.42	0.348
		41365 41515	2667.5 2682.5	QPSK	75	0	75	0	20.56	24.09	0.256
					1	0	1	74	14.41	17.94	0.062
					1	74	1	0	22.09	25.62	0.365
				16QAM	75	0	75	0	19.81	23.34	0.216
					1	0	1	74	14.86	18.39	0.069
					1	74	1	0	22.01	25.54	0.358
Band 41	15+10	39725 39845	2503.5 2515.5	QPSK	75	0	50	0	20.74	24.27	0.267
					1	0	1	49	14.16	17.69	0.059
					1	74	1	0	21.84	25.37	0.344
				16QAM	75	0	50	0	19.36	22.89	0.195
					1	0	1	49	14.74	18.27	0.067
					1	74	1	0	21.94	25.47	0.352
		40571 40691	2588.1 2600.1	QPSK	75	0	50	0	20.51	24.04	0.254
					1	0	1	49	14.29	17.82	0.061
					1	74	1	0	22.48	26.01	0.399
				16QAM	75	0	50	0	19.86	23.39	0.218
					1	0	1	49	15.02	18.55	0.072
					1	74	1	0	21.80	25.33	0.341
		41417 41537	2672.7 2684.7	QPSK	75	0	50	0	20.62	24.15	0.260
					1	0	1	49	14.46	17.99	0.063
					1	74	1	0	22.26	25.79	0.379
				16QAM	75	0	50	0	19.78	23.31	0.214
					1	0	1	49	14.75	18.28	0.067
					1	74	1	0	21.86	25.39	0.346
Band 41	10+15	39703 39823	2501.3 2513.3	QPSK	50	0	75	0	20.31	23.84	0.242
					1	49	1	0	14.32	17.85	0.061
					1	0	1	74	21.82	25.35	0.343
				16QAM	50	0	75	0	19.38	22.91	0.195
					1	49	1	0	14.77	18.30	0.068
					1	0	1	74	21.81	25.34	0.342
		40549 40669	2585.9 2597.9	QPSK	50	0	75	0	21.08	24.61	0.289
					1	49	1	0	14.25	17.78	0.060
					1	0	1	74	22.45	25.98	0.396
				16QAM	50	0	75	0	19.76	23.29	0.213
					1	49	1	0	15.08	18.61	0.073
					1	0	1	74	21.83	25.36	0.344
		41395 41515	2670.5 2682.5	QPSK	50	0	75	0	20.55	24.08	0.256
					1	49	1	0	14.30	17.83	0.061
					1	0	1	74	22.17	25.70	0.372
				16QAM	50	0	75	0	19.86	23.39	0.218
					1	49	1	0	14.59	18.12	0.065
					1	0	1	74	21.89	25.42	0.348

**NOTE:**

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3)  $P(W) = 1 W \cdot 10^{(P(dBm) / 10)} / 1000$

**Radiated EIRP Power:**

Test Mode	WCDMA Band IV	Test Date	2023/5/3
Test Channel	CH1413	Polarization	Vertical
Temp	24°C	Hum.	58%

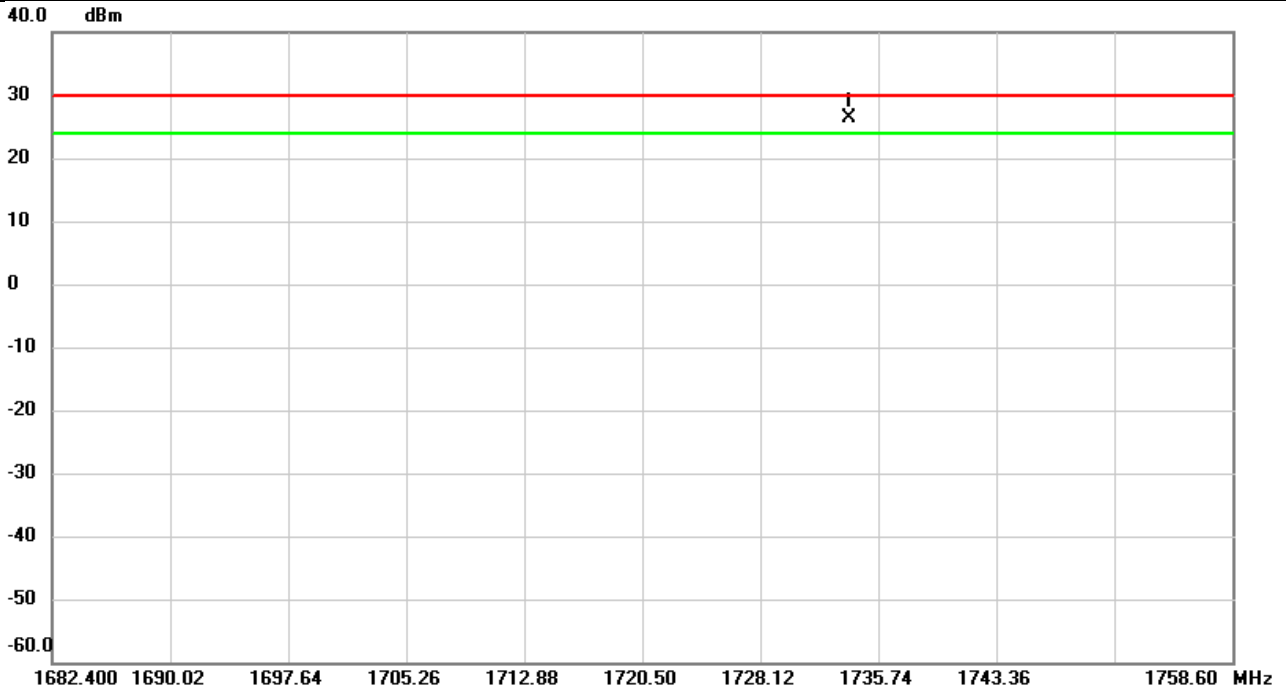


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1731.336	14.12	4.37	18.49	30.00	-11.51	peak	

**REMARKS:**

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

Test Mode	WCDMA Band IV	Test Date	2023/5/3
Test Channel	CH1413	Polarization	Horizontal
Temp	24°C	Hum.	58%

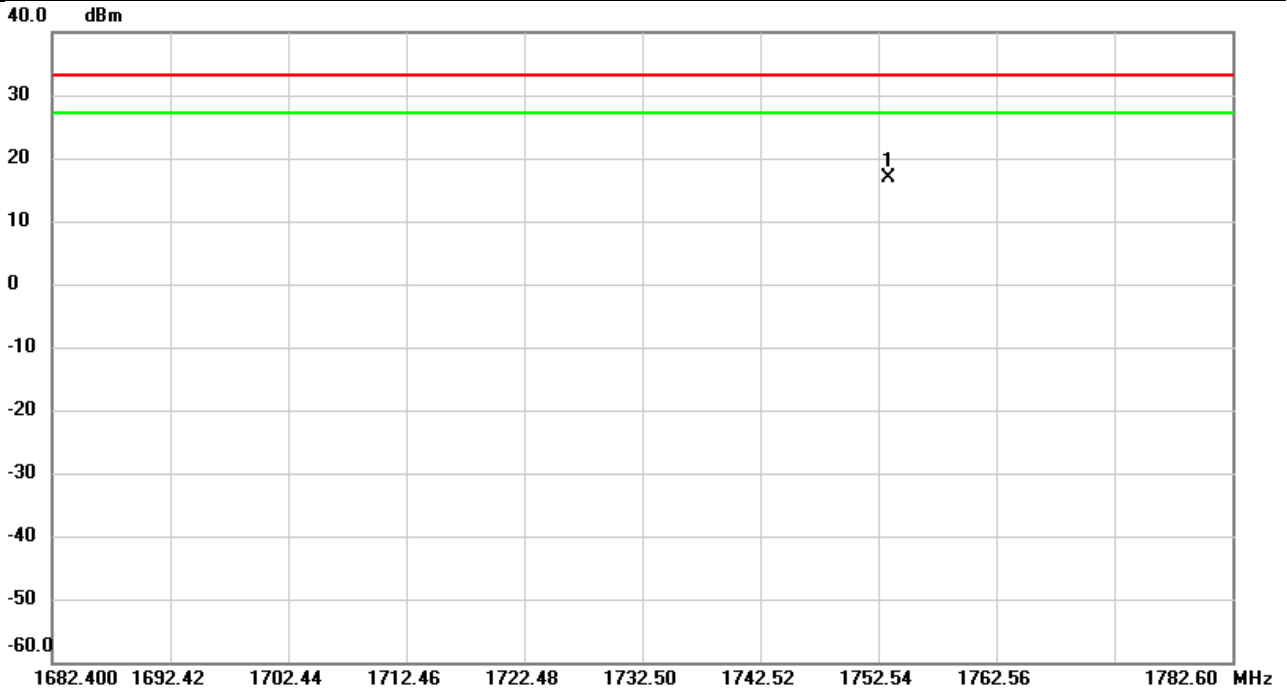


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	1733.812	22.19	4.26	26.45	30.00	-3.55	peak	

**REMARKS:**

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

Test Mode	WCDMA Band IV	Test Date	2023/5/3
Test Channel	CH1513	Polarization	Vertical
Temp	24°C	Hum.	58%

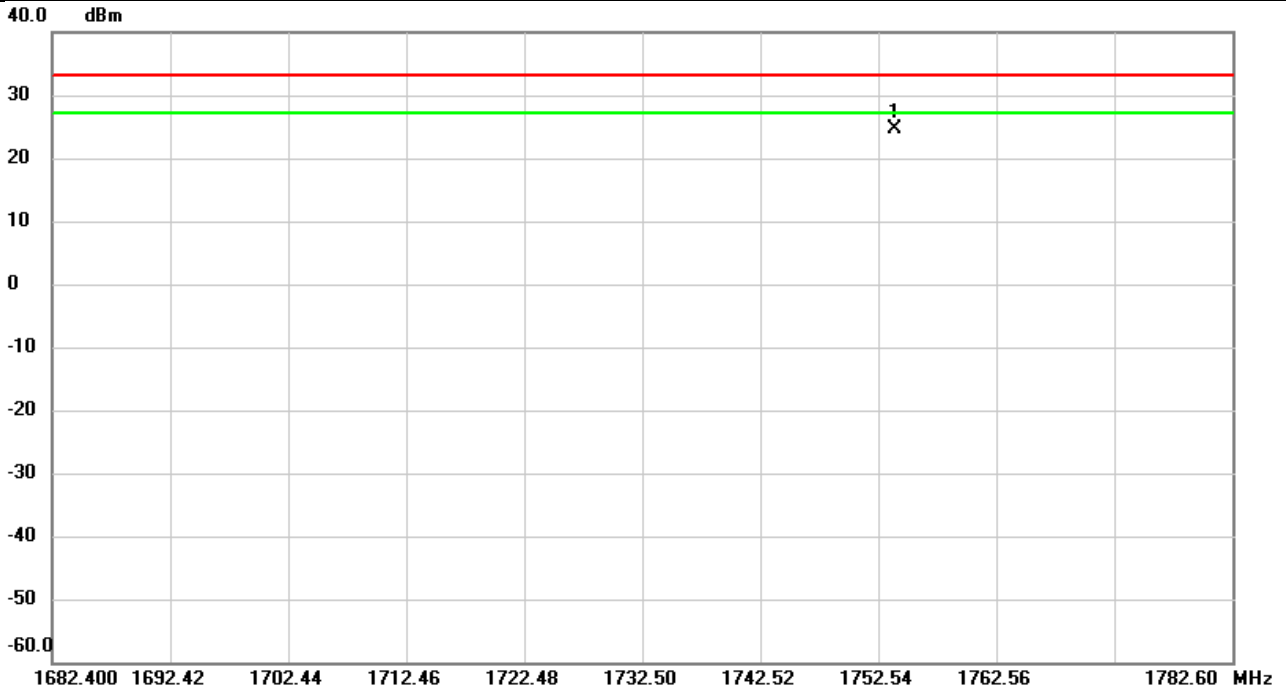


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1753.382	12.56	4.31	16.87	33.01	-16.14	peak	

**REMARKS:**

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

Test Mode	WCDMA Band IV	Test Date	2023/5/3
Test Channel	CH1513	Polarization	Horizontal
Temp	24°C	Hum.	58%

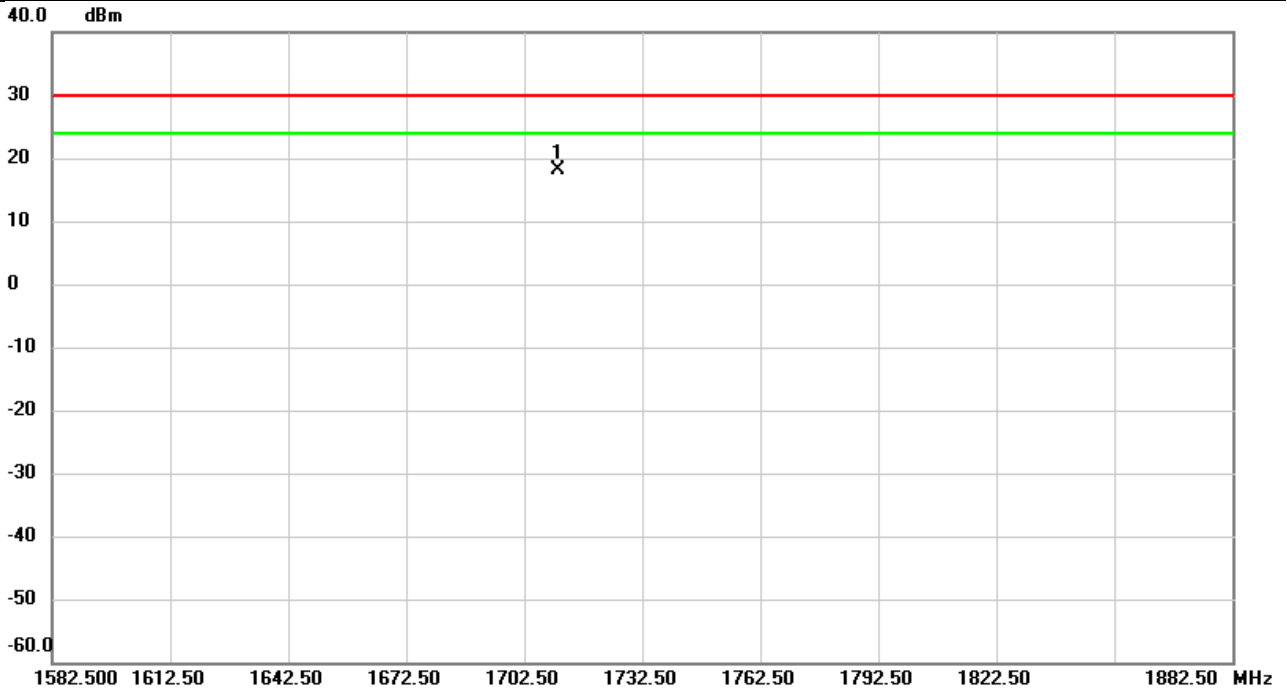


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1753.876	20.55	4.10	24.65	33.01	-8.36	peak	

REMARKS:

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

Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20050	Polarization	Vertical
Temp	22°C	Hum.	55%

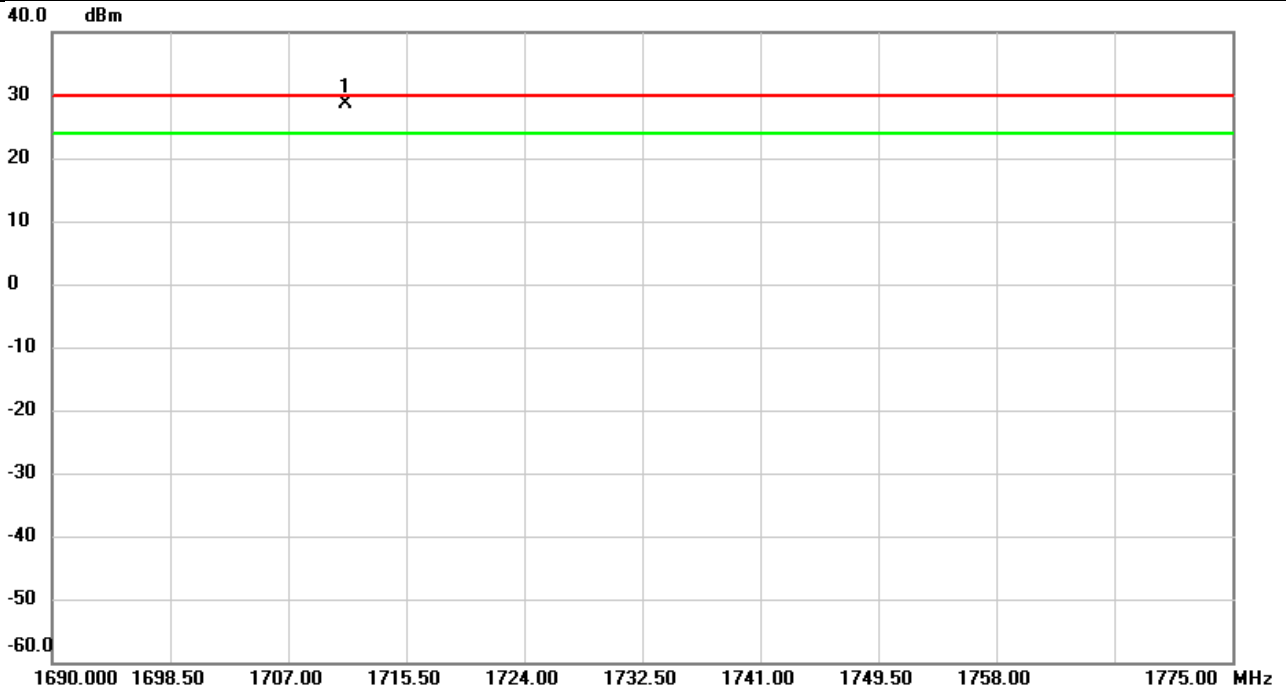


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1711.150	13.57	4.46	18.03	30.00	-11.97	peak	

REMARKS:

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

Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20050	Polarization	Horizontal
Temp	22°C	Hum.	55%

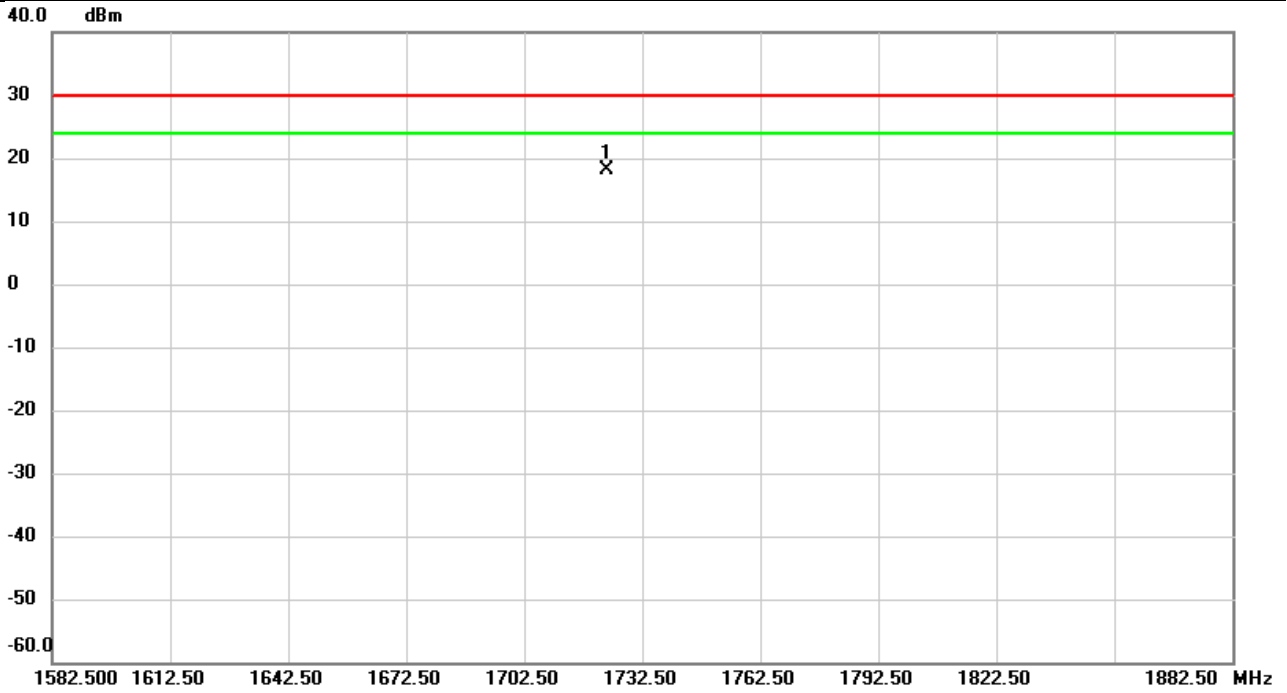


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1711.131	24.14	4.54	28.68	30.00	-1.32	peak	

REMARKS:

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

Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20175	Polarization	Vertical
Temp	22°C	Hum.	55%



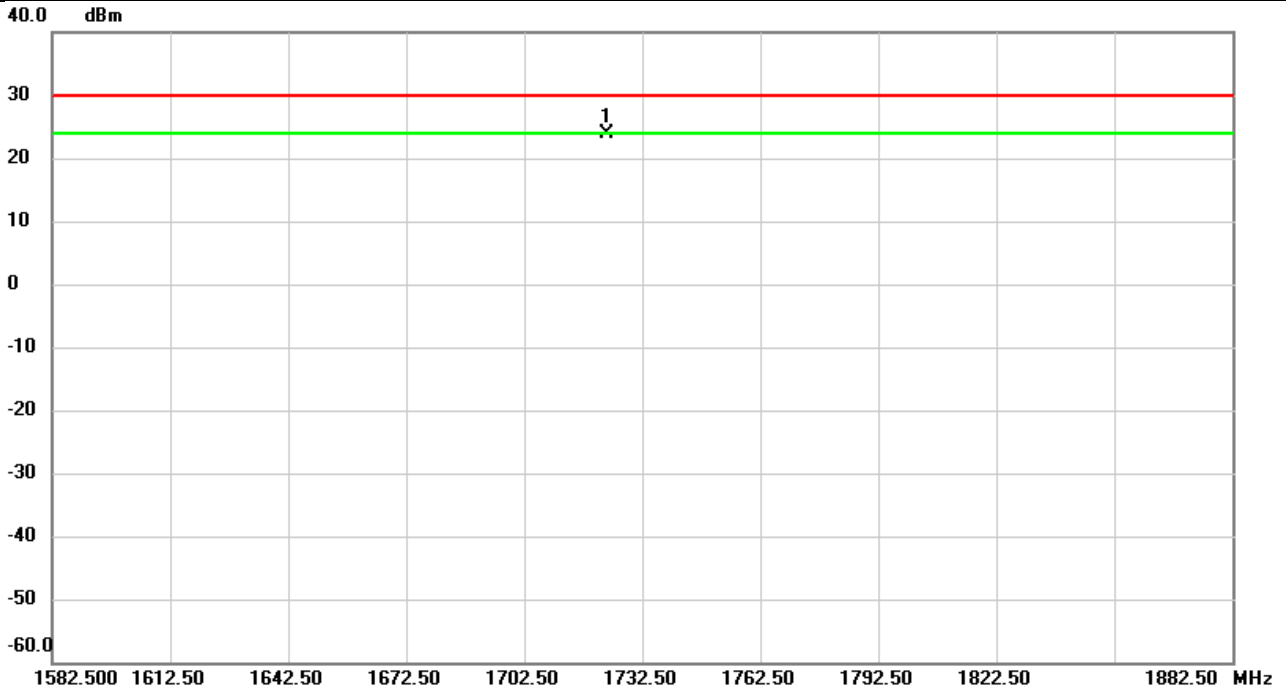
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1723.650	13.72	4.40	18.12	30.00	-11.88	peak	

REMARKS:

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



Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20175	Polarization	Horizontal
Temp	22°C	Hum.	55%

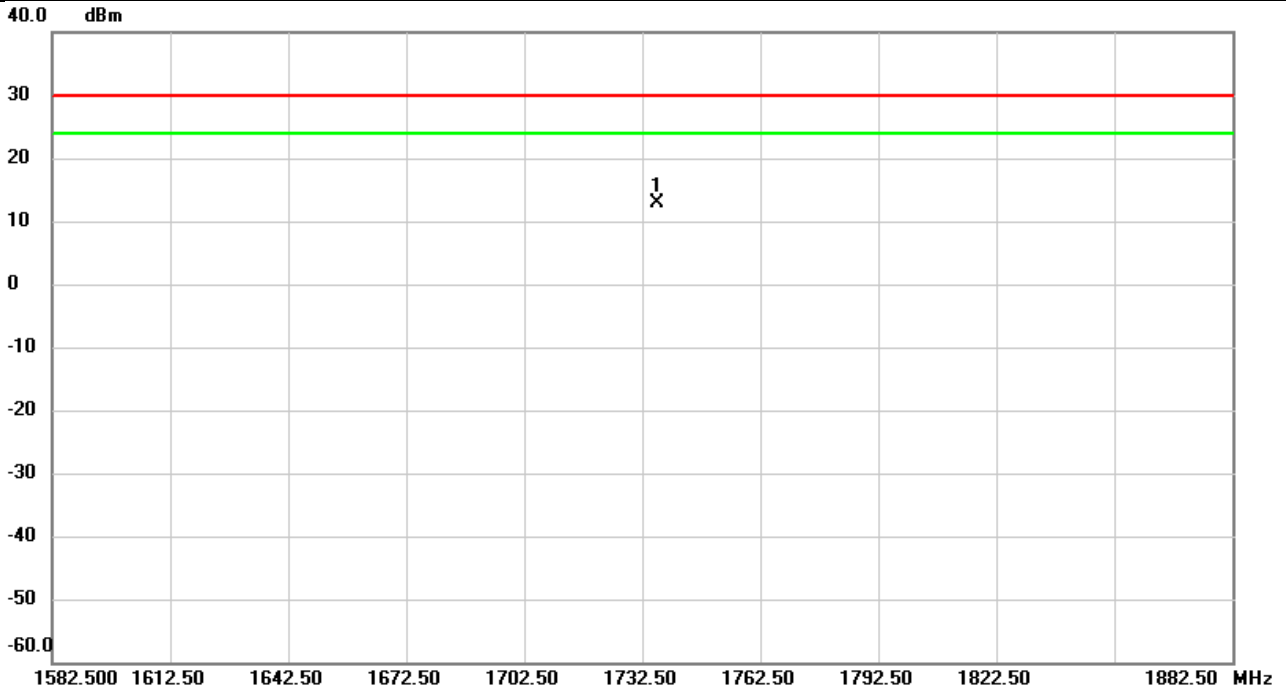


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1723.600	19.61	4.39	24.00	30.00	-6.00	peak	

REMARKS:

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

Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20300	Polarization	Vertical
Temp	22°C	Hum.	55%

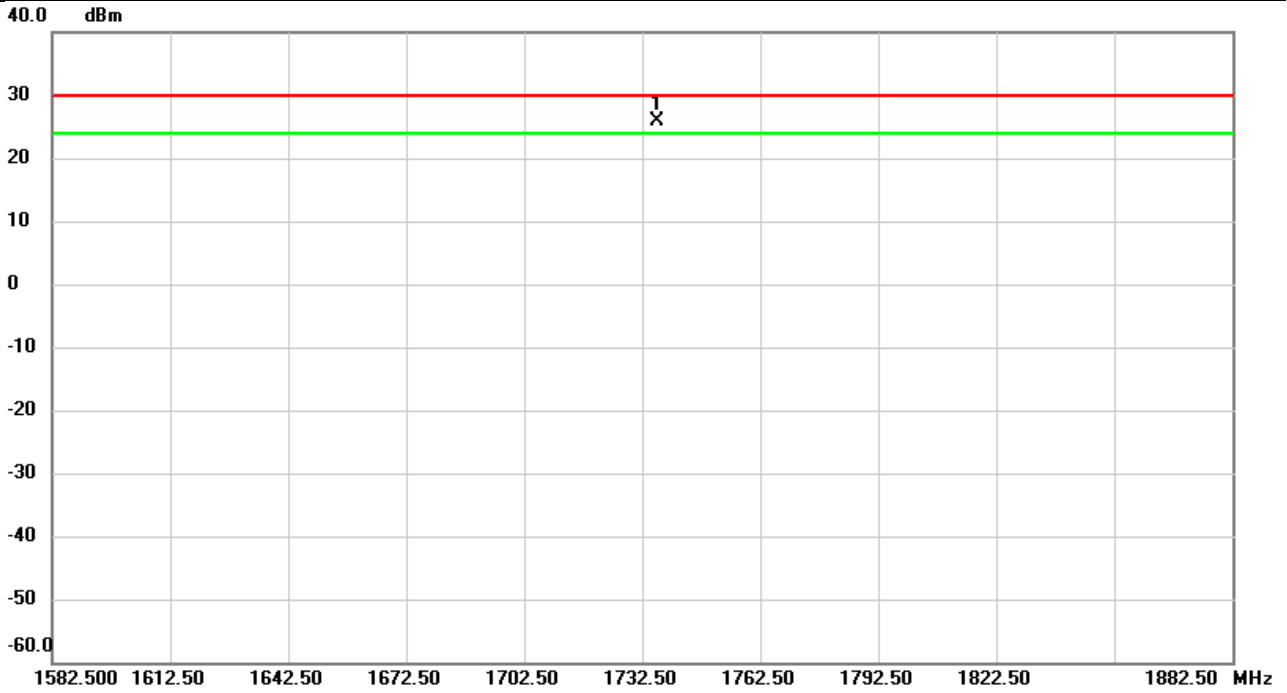


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1736.180	8.56	4.34	12.90	30.00	-17.10	peak	

REMARKS:

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

Test Mode	LTE Band 4	Test Date	2023/5/4
Test Channel	CH20300	Polarization	Horizontal
Temp	22°C	Hum.	55%

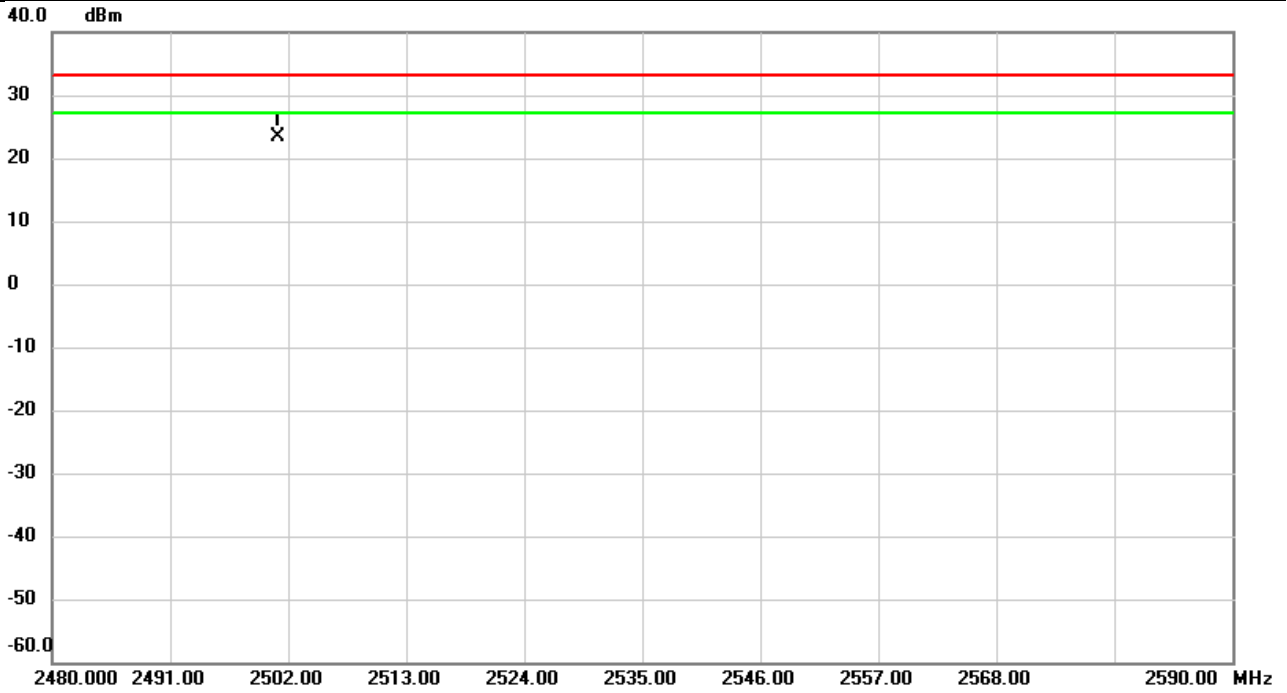


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1736.210	21.62	4.24	25.86	30.00	-4.14	peak	

**REMARKS:**

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

Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH20850	Polarization	Vertical
Temp	24°C	Hum.	61%

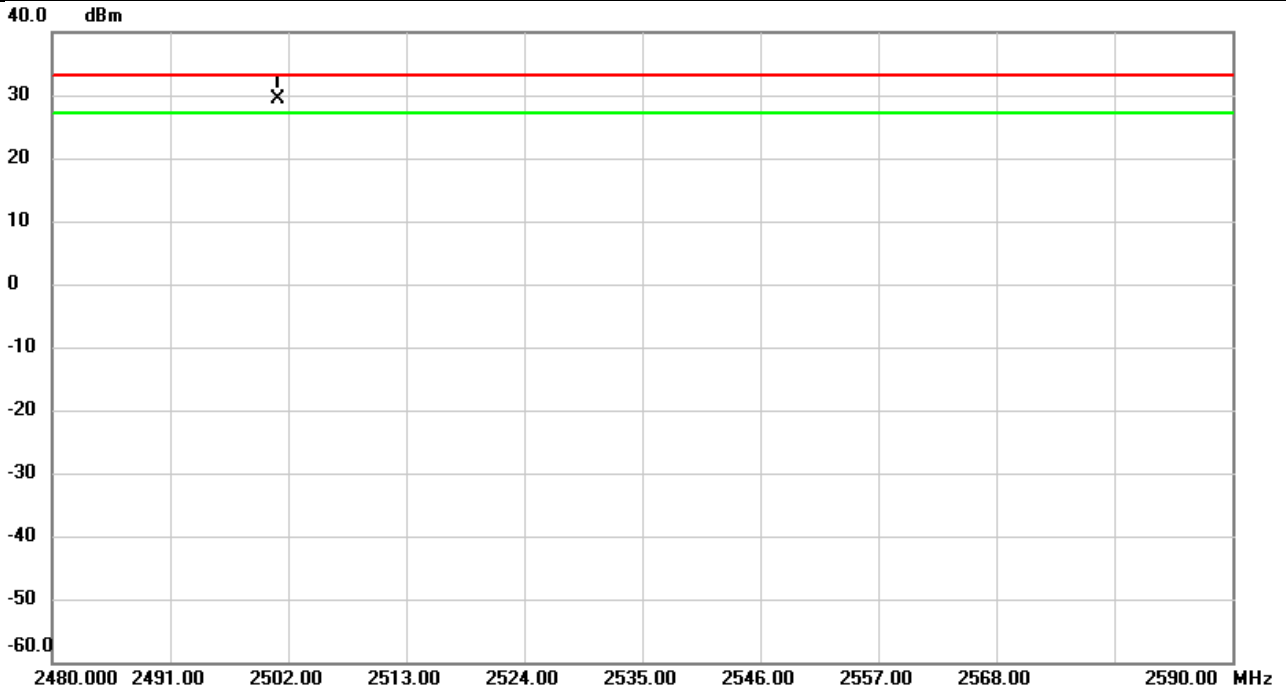


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2501.003	17.15	6.33	23.48	33.01	-9.53	peak	

REMARKS:

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

Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH20850	Polarization	Horizontal
Temp	24°C	Hum.	61%

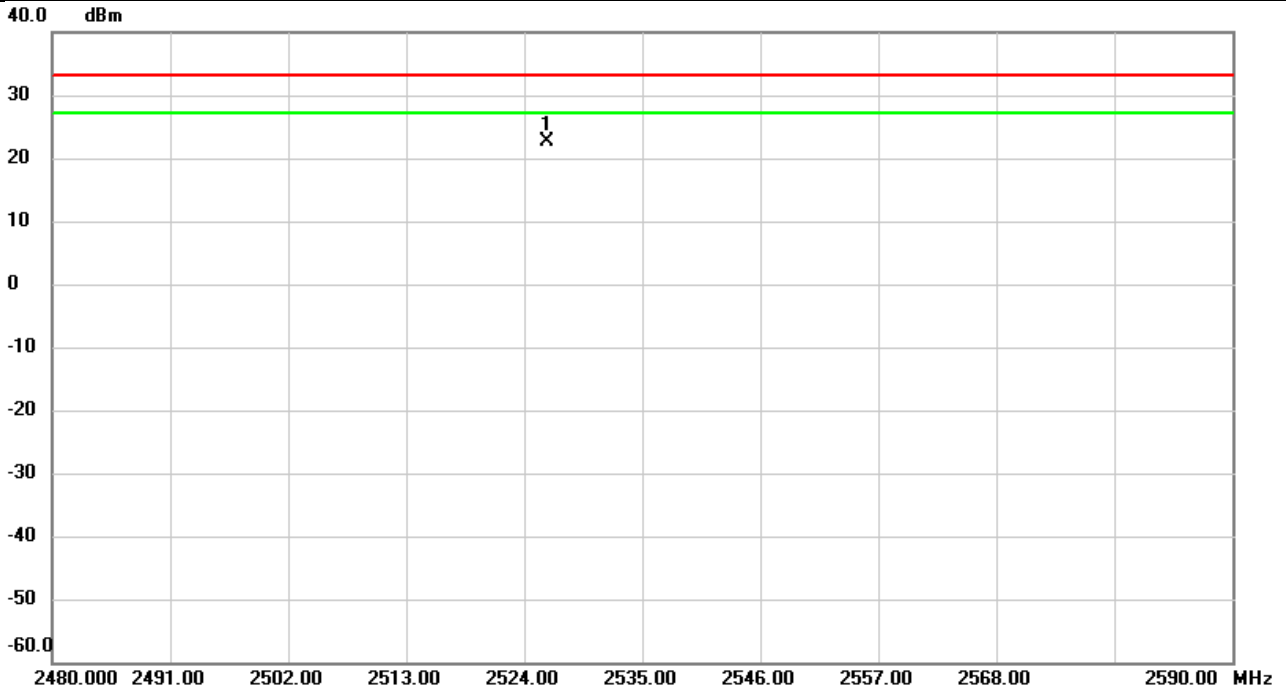


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2501.054	23.08	6.23	29.31	33.01	-3.70	peak	

REMARKS:

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

Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH21100	Polarization	Vertical
Temp	24°C	Hum.	61%

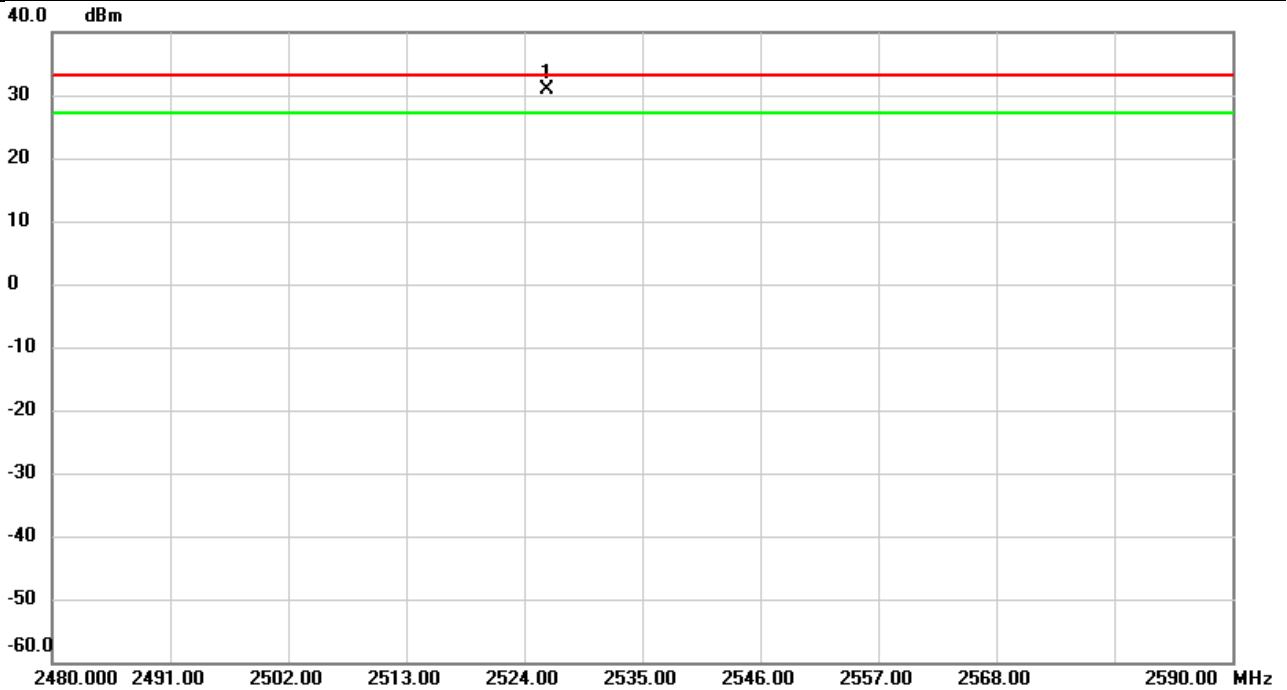


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2526.171	16.27	6.42	22.69	33.01	-10.32	peak	

REMARKS:

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

Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH21100	Polarization	Horizontal
Temp	24°C	Hum.	61%

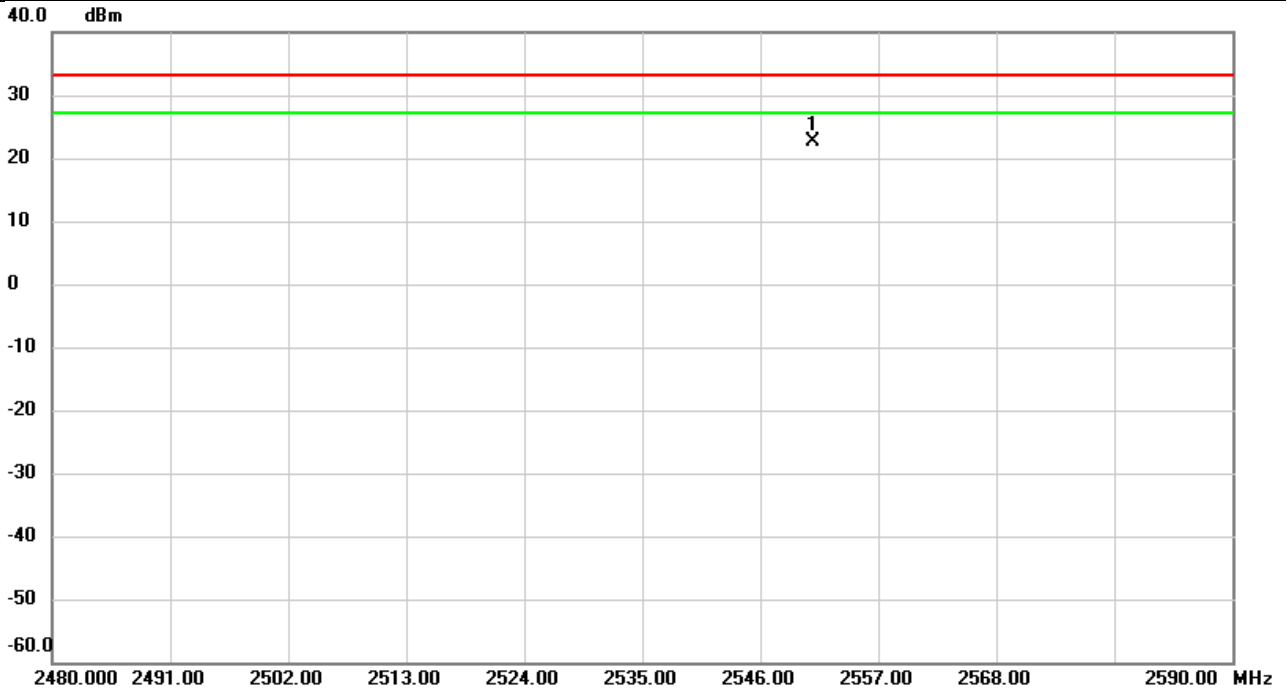


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2526.123	24.65	6.30	30.95	33.01	-2.06	peak	

REMARKS:

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

Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH21350	Polarization	Vertical
Temp	24°C	Hum.	61%



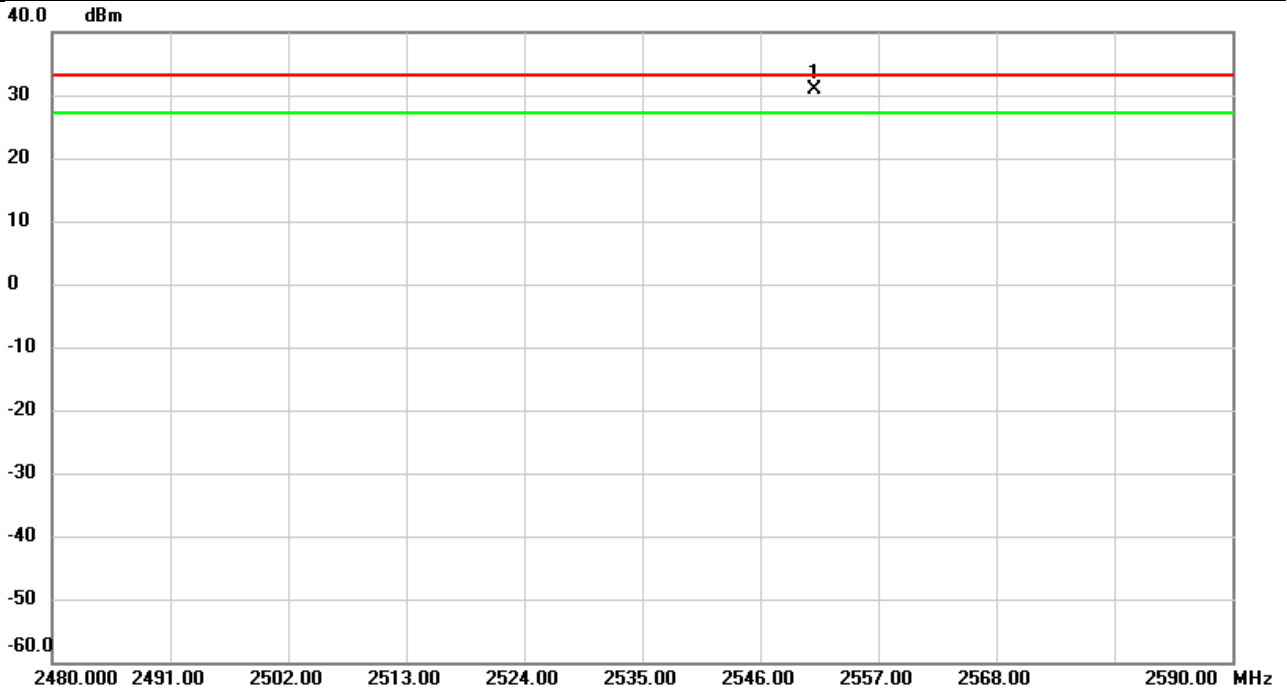
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2550.976	16.09	6.52	22.61	33.01	-10.40	peak	

REMARKS:

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



Test Mode	LTE Band 7	Test Date	2023/3/25
Test Channel	CH21350	Polarization	Horizontal
Temp	24°C	Hum.	61%

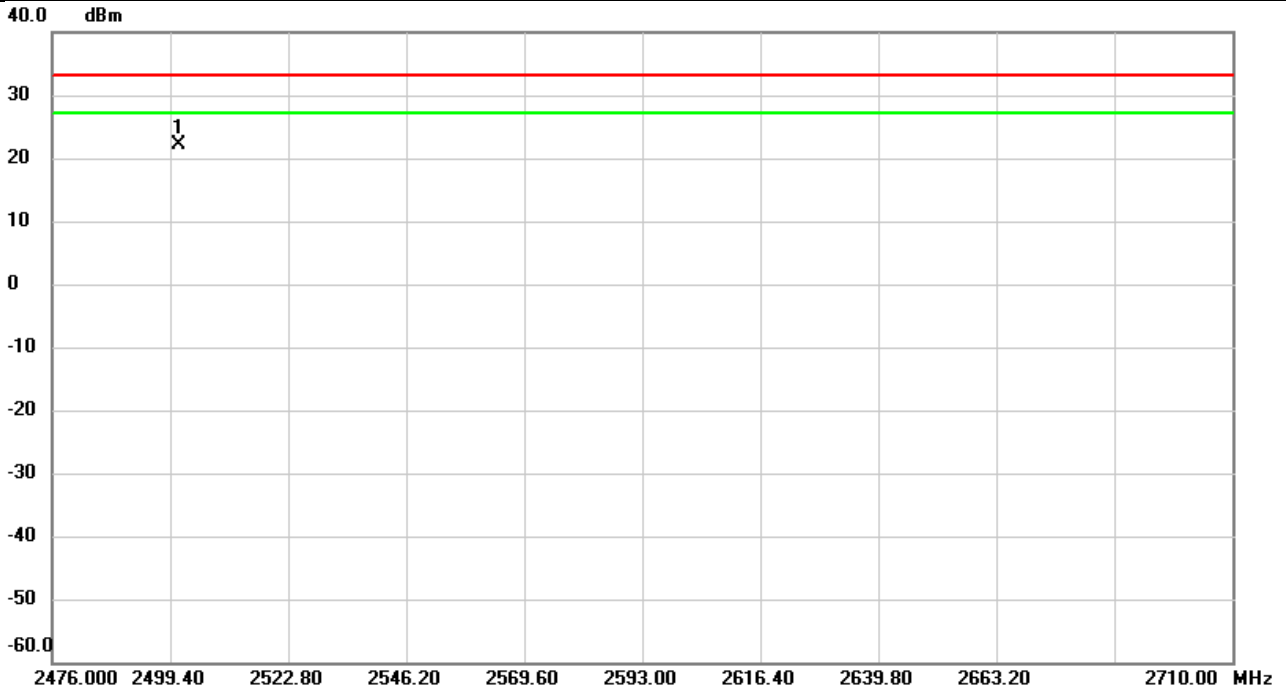


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2551.071	24.49	6.38	30.87	33.01	-2.14	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH39750	Polarization	Vertical
Temp	22°C	Hum.	66%

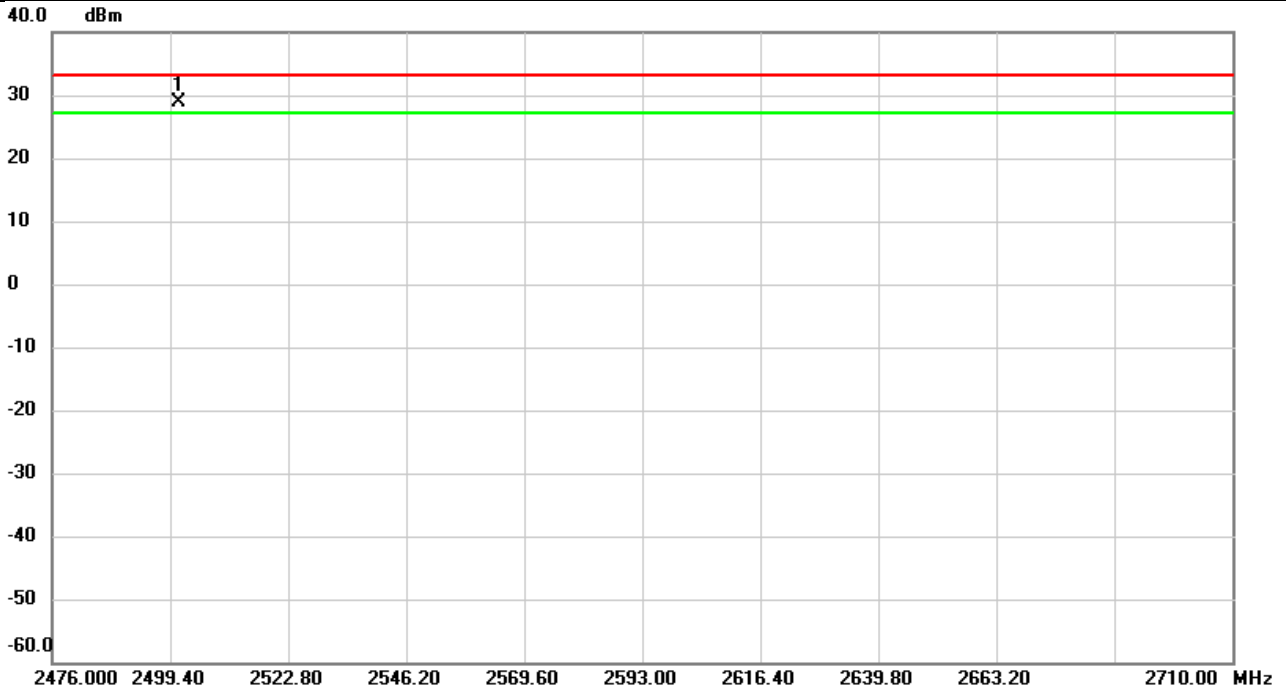


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2501.077	15.68	6.33	22.01	33.01	-11.00	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH39750	Polarization	Horizontal
Temp	22°C	Hum.	66%

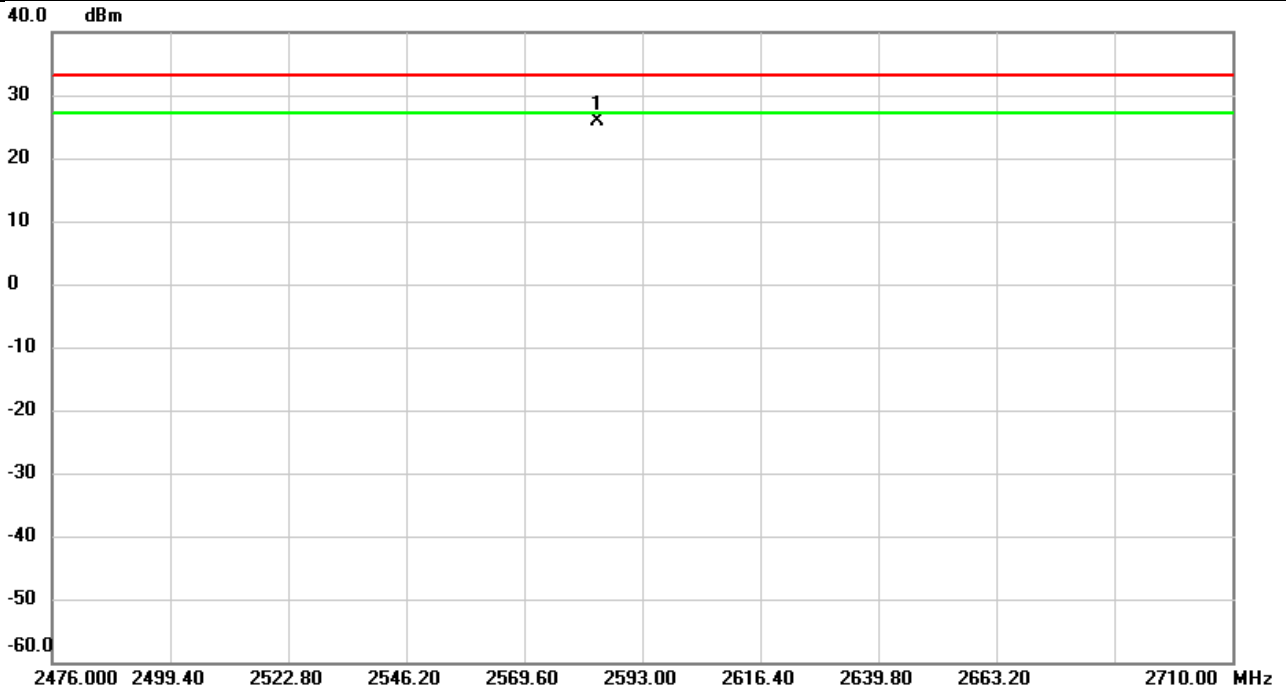


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	2500.999	22.69	6.23	28.92	33.01	-4.09	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH40620	Polarization	Vertical
Temp	22°C	Hum.	66%

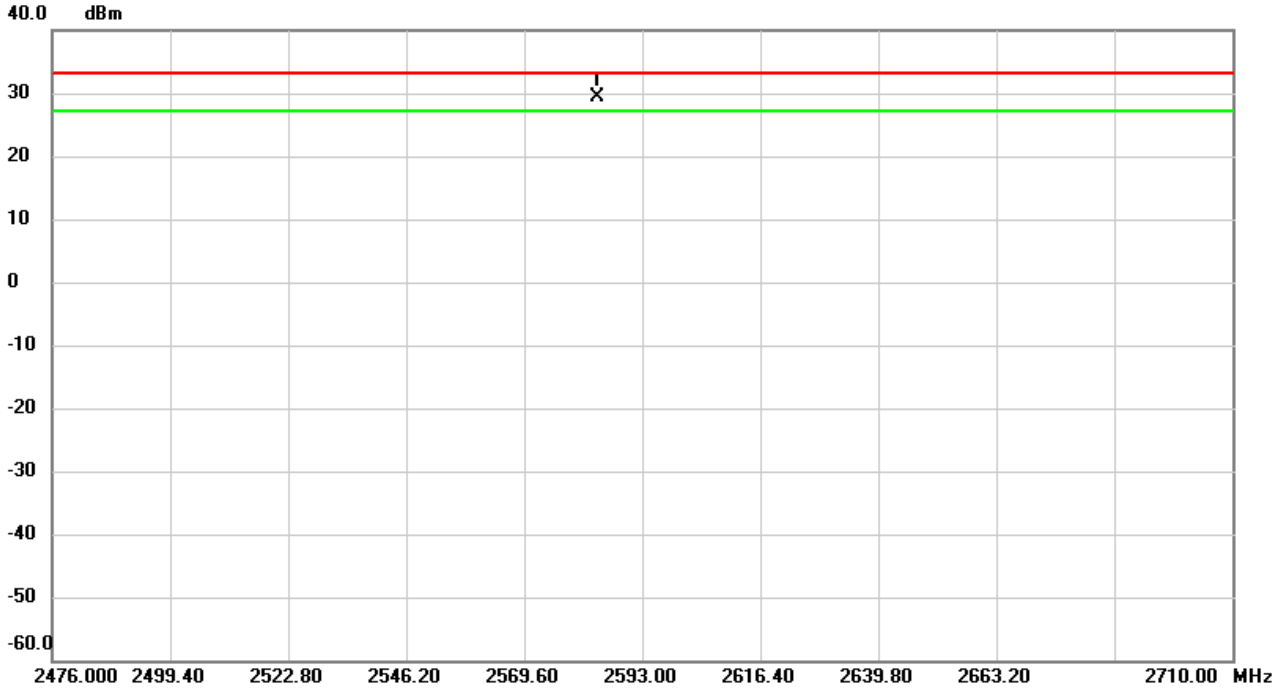


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2584.209	19.05	6.82	25.87	33.01	-7.14	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH40620	Polarization	Horizontal
Temp	22°C	Hum.	66%

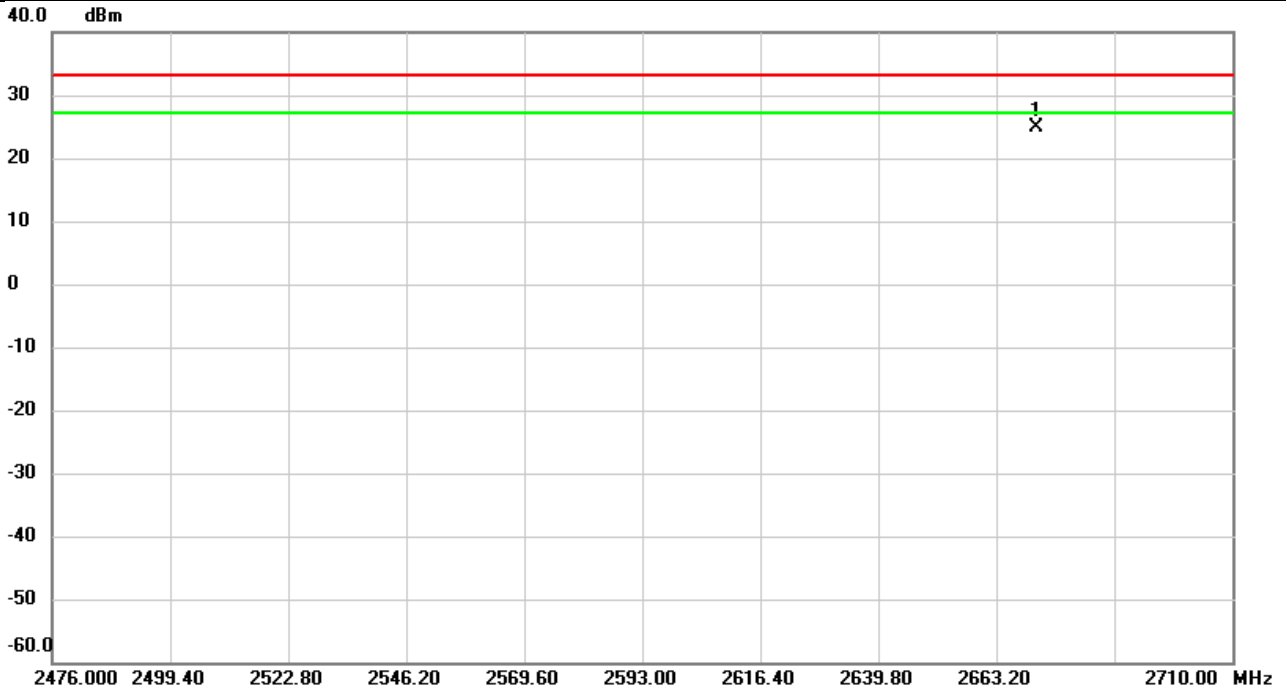


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	2584.155	22.81	6.58	29.39	33.01	-3.62	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH41490	Polarization	Vertical
Temp	22°C	Hum.	66%

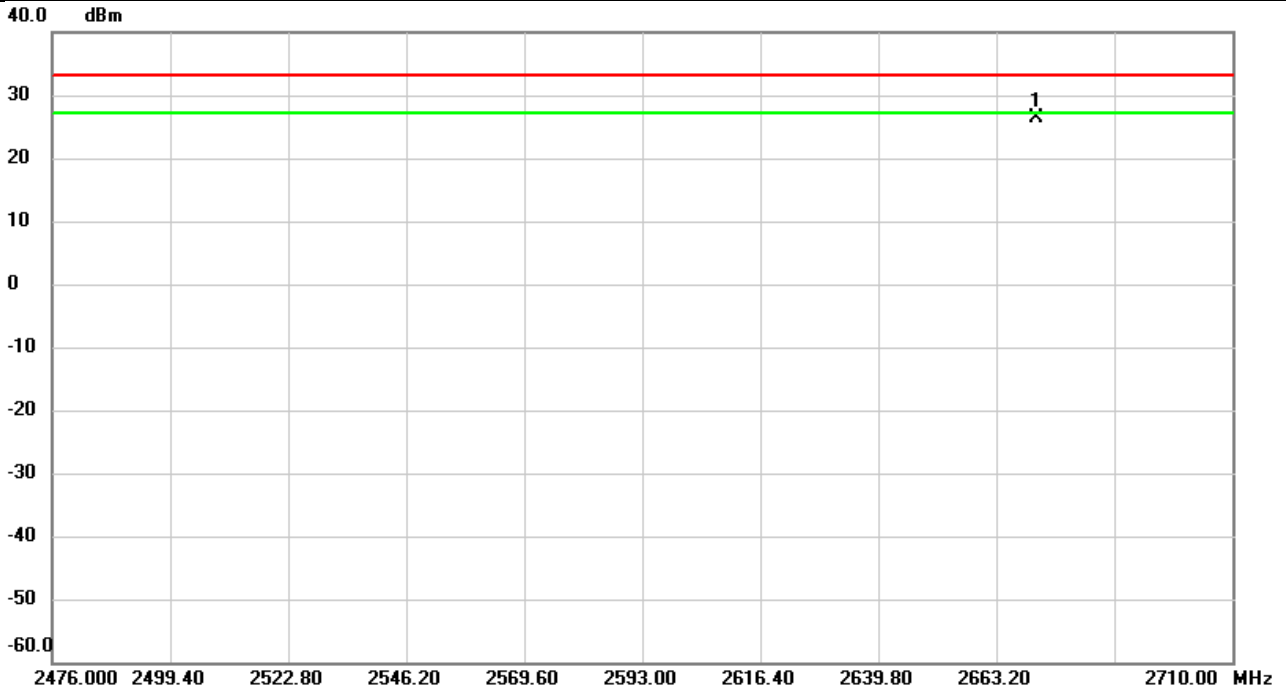


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2671.109	17.97	6.89	24.86	33.01	-8.15	peak	

REMARKS:

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

Test Mode	LTE Band 41	Test Date	2023/3/27
Test Channel	CH41490	Polarization	Horizontal
Temp	22°C	Hum.	66%

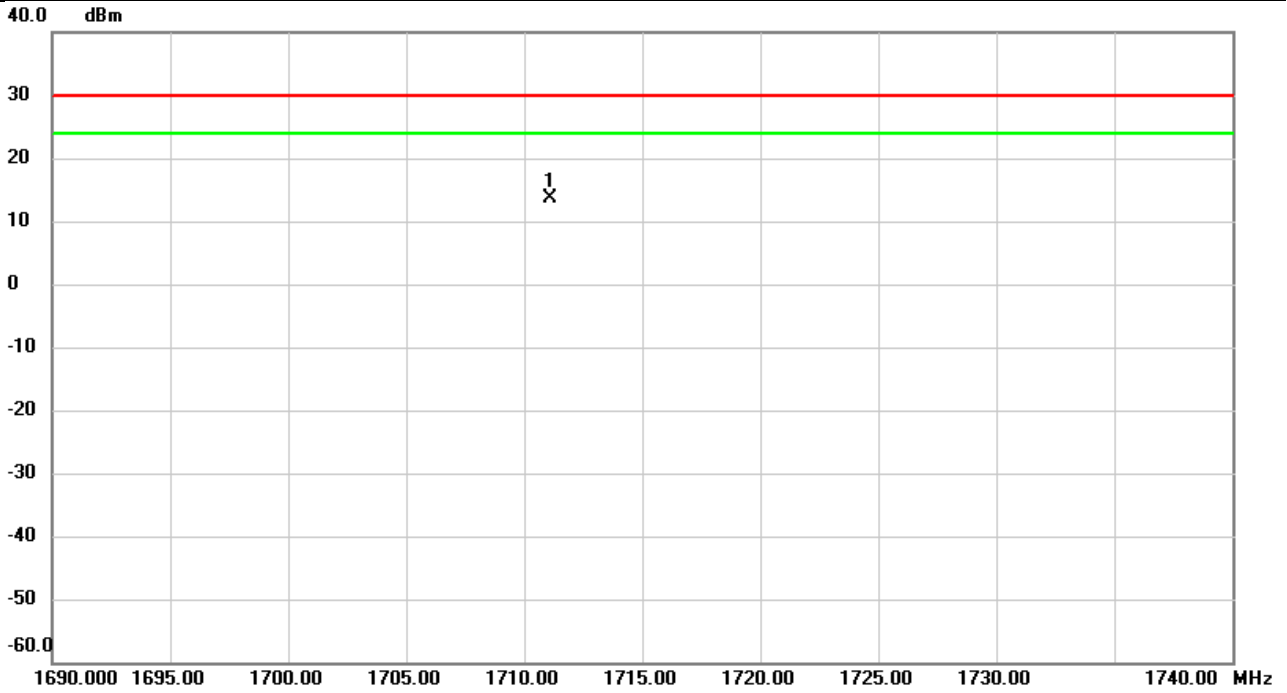


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	2671.094	19.42	6.94	26.36	33.01	-6.65	peak	

**REMARKS:**

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

Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132072	Polarization	Vertical
Temp	25°C	Hum.	61%



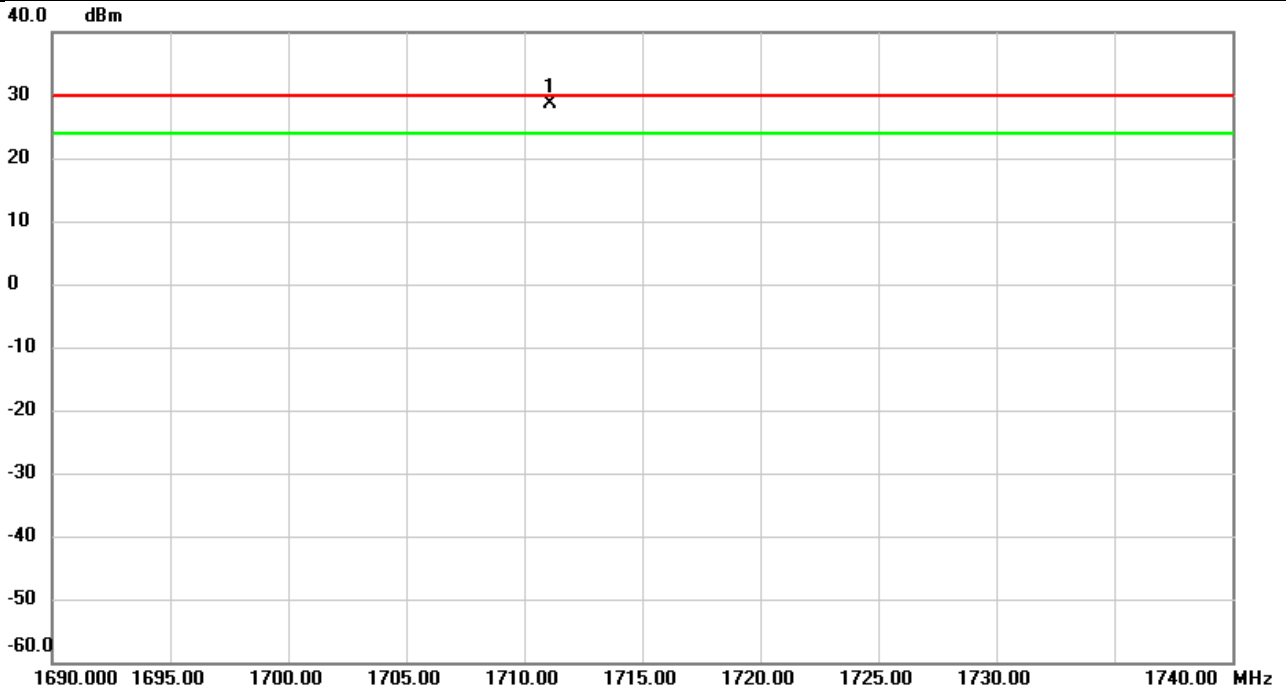
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1711.100	9.26	4.46	13.72	30.00	-16.28	peak	

REMARKS:

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



Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132072	Polarization	Horizontal
Temp	25°C	Hum.	61%

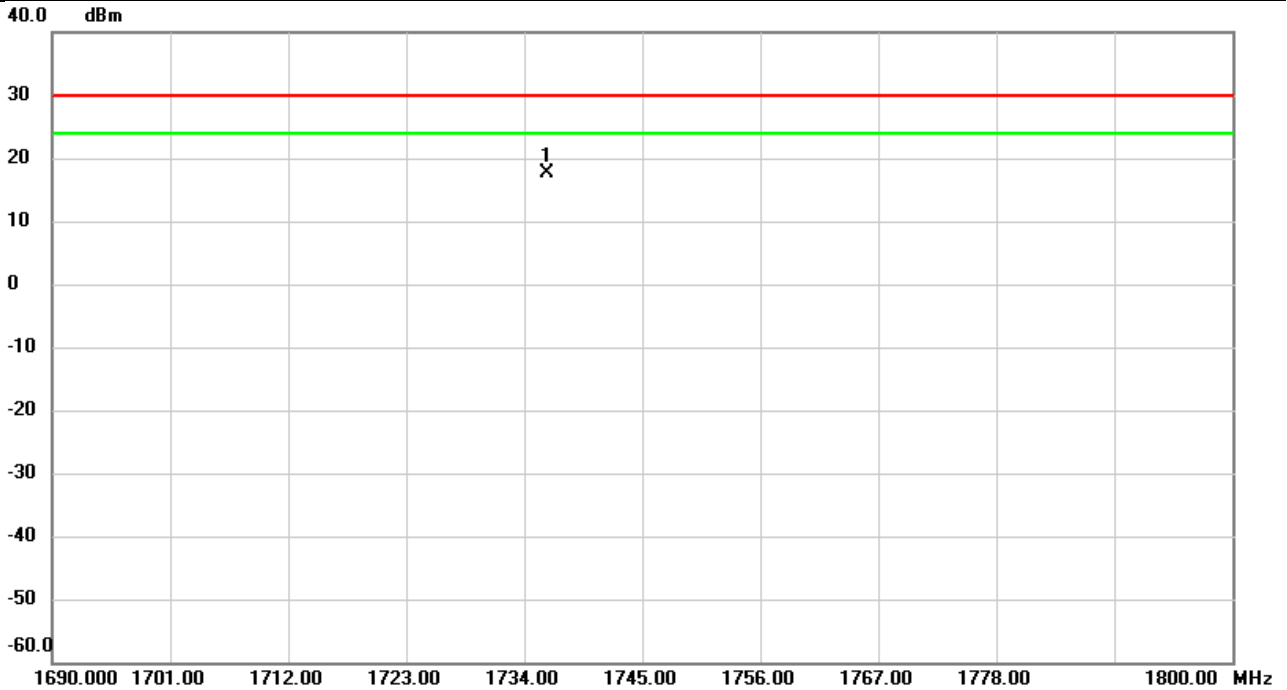


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	1711.118	24.06	4.54	28.60	30.00	-1.40	peak	

REMARKS:

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

Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132322	Polarization	Vertical
Temp	25°C	Hum.	61%

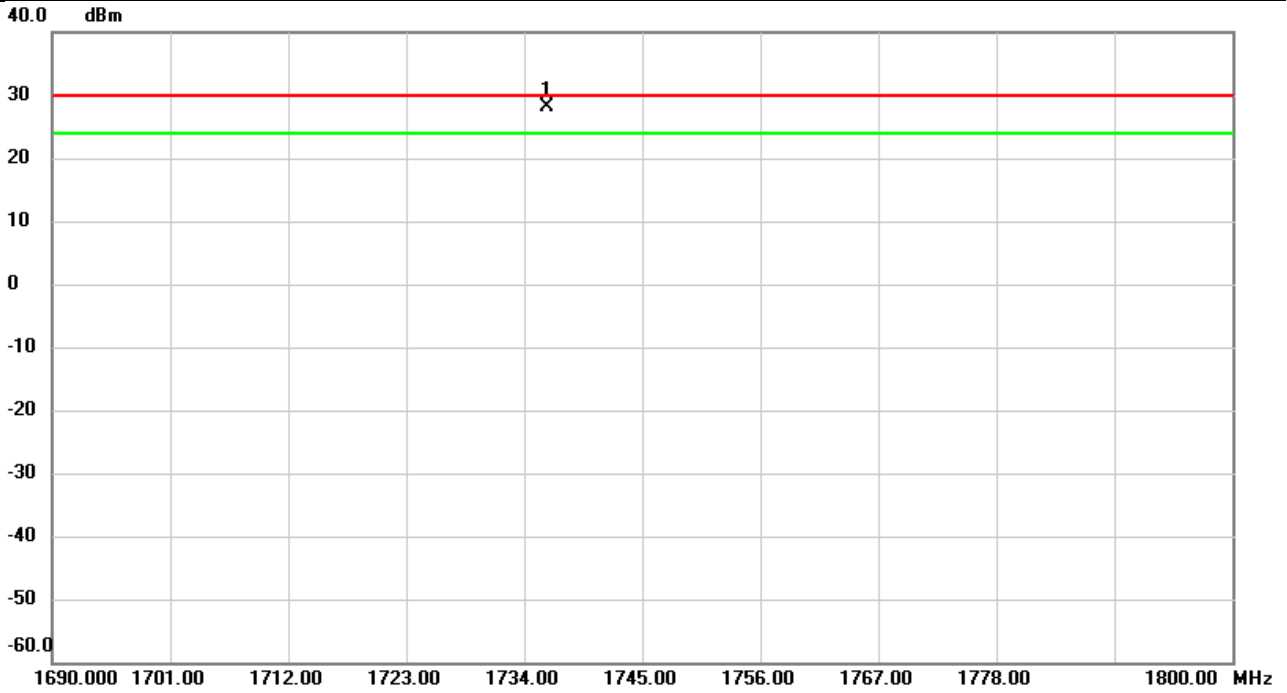


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1736.193	13.32	4.34	17.66	30.00	-12.34	peak	

REMARKS:

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

Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132322	Polarization	Horizontal
Temp	25°C	Hum.	61%

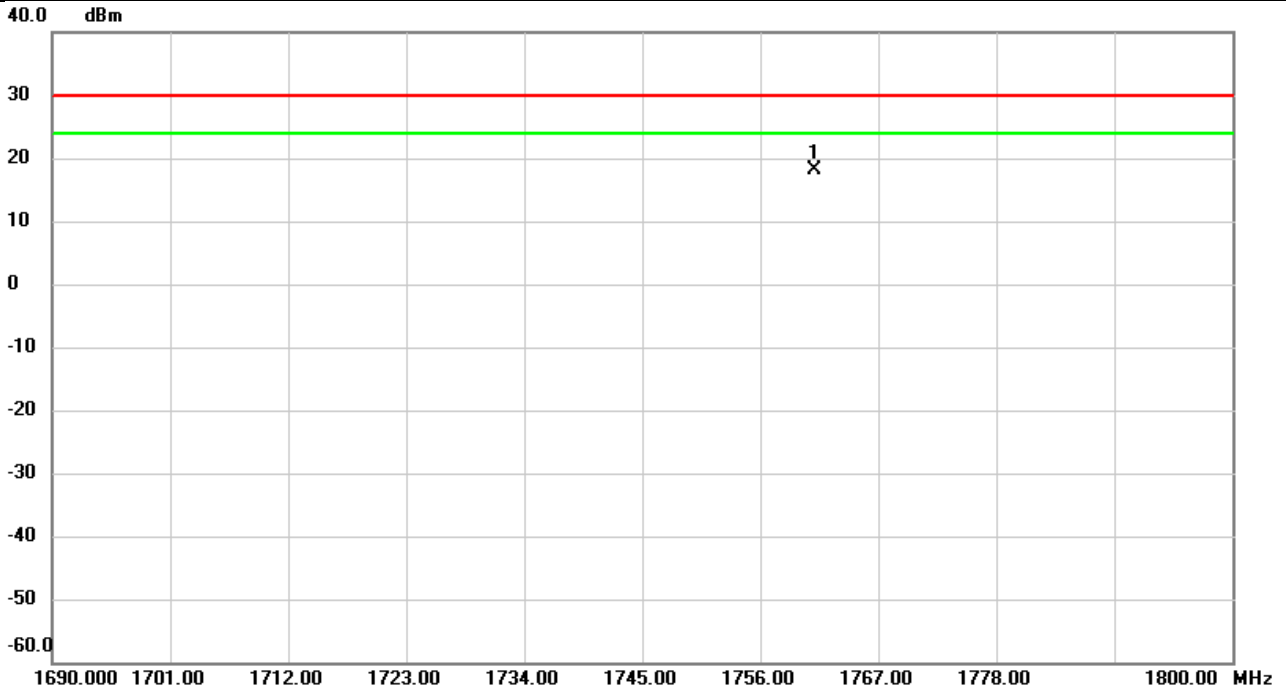


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	1736.182	23.96	4.24	28.20	30.00	-1.80	peak	

REMARKS:

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

Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132572	Polarization	Vertical
Temp	25°C	Hum.	61%

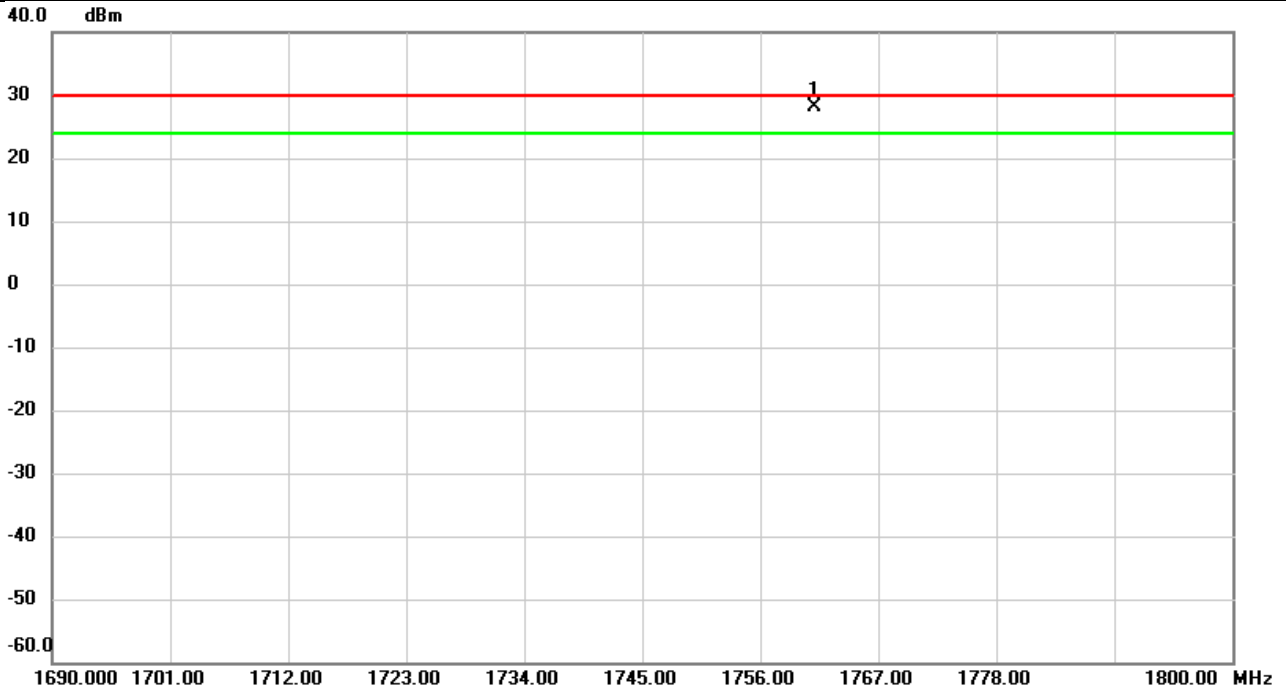


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1761.119	13.75	4.38	18.13	30.00	-11.87	peak	

REMARKS:

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

Test Mode	LTE Band 66	Test Date	2023/3/30
Test Channel	CH132572	Polarization	Horizontal
Temp	25°C	Hum.	61%



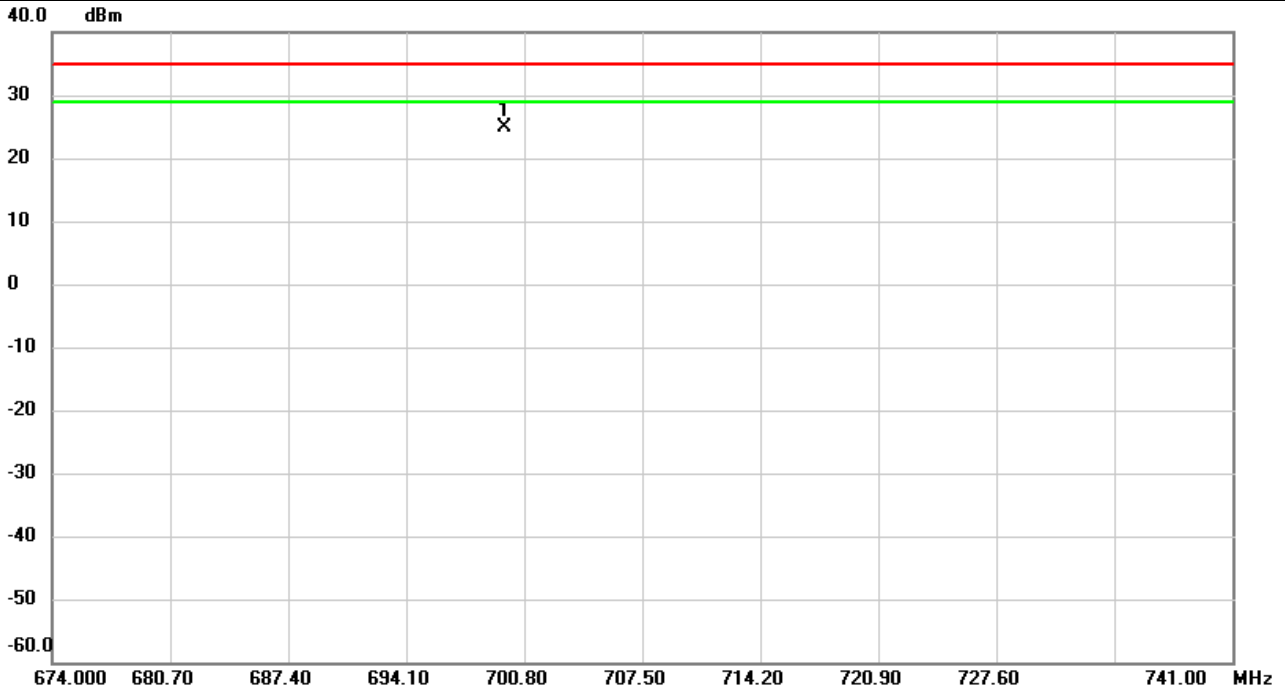
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	1761.115	24.08	4.16	28.24	30.00	-1.76	peak	

REMARKS:

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

**Radiated ERP Power:**

Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23060	Polarization	Vertical
Temp	22°C	Hum.	66%

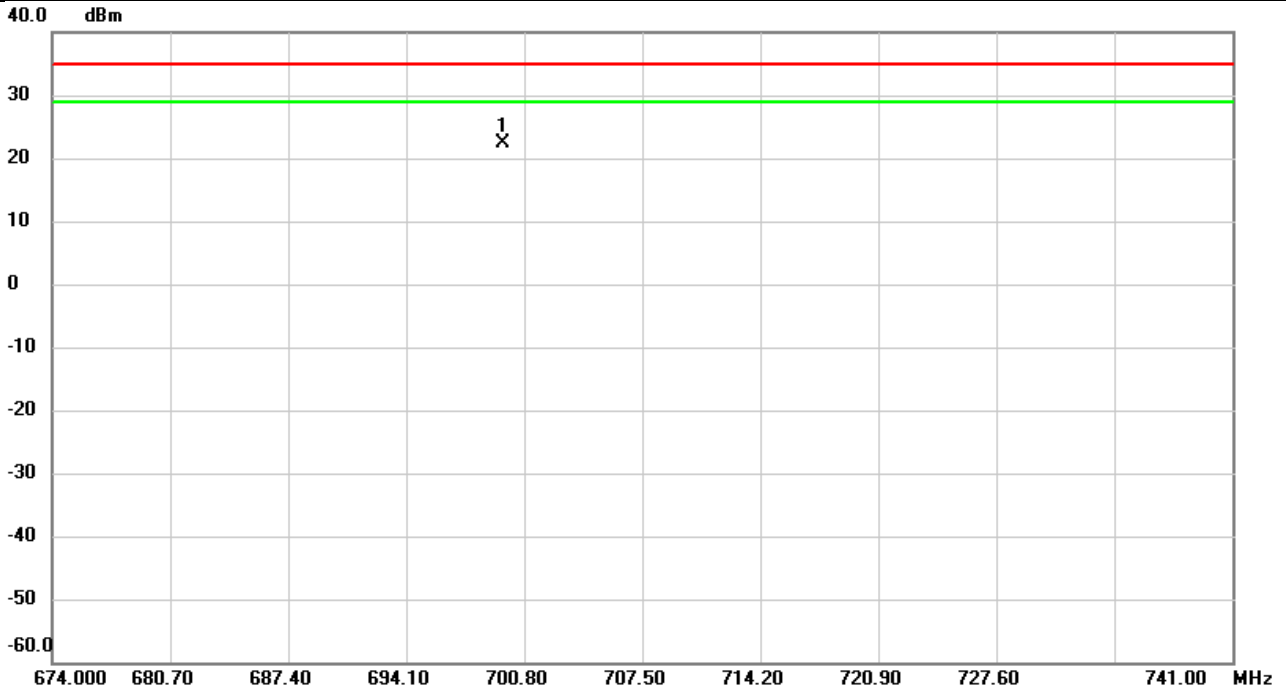


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Over dB	Detector	Comment
1	*	699.6498	14.37	10.55	24.92	34.77	-9.85	peak	

**REMARKS:**

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

Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23060	Polarization	Horizontal
Temp	22°C	Hum.	66%

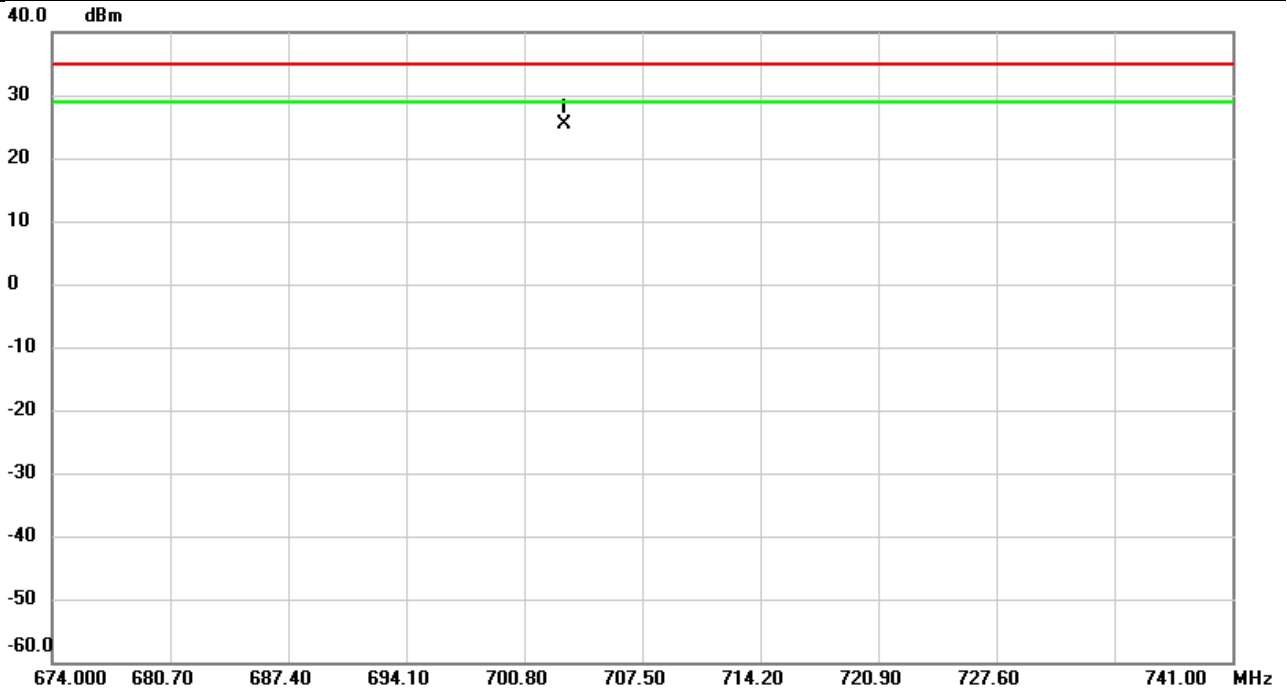


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	699.6253	13.55	8.92	22.47	34.77	-12.30	peak	

REMARKS:

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

Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23095	Polarization	Vertical
Temp	22°C	Hum.	66%



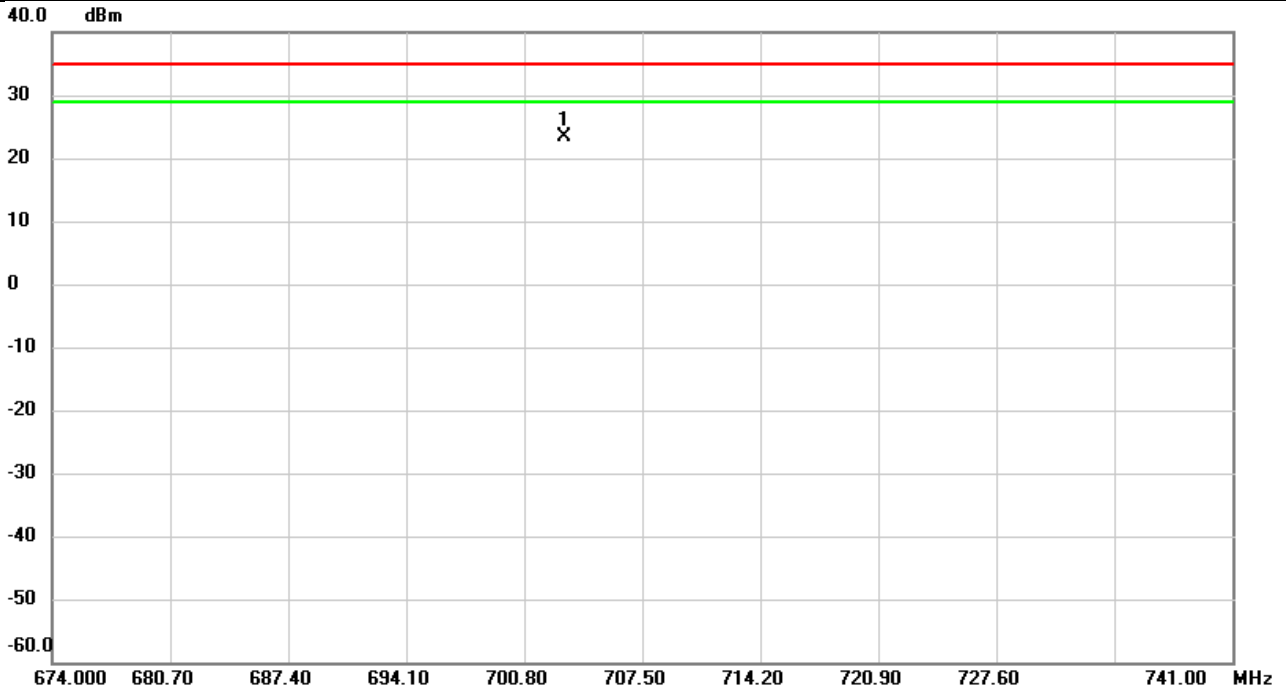
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	703.0534	14.98	10.51	25.49	34.77	-9.28	peak	

**REMARKS:**

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



Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23095	Polarization	Horizontal
Temp	22°C	Hum.	66%

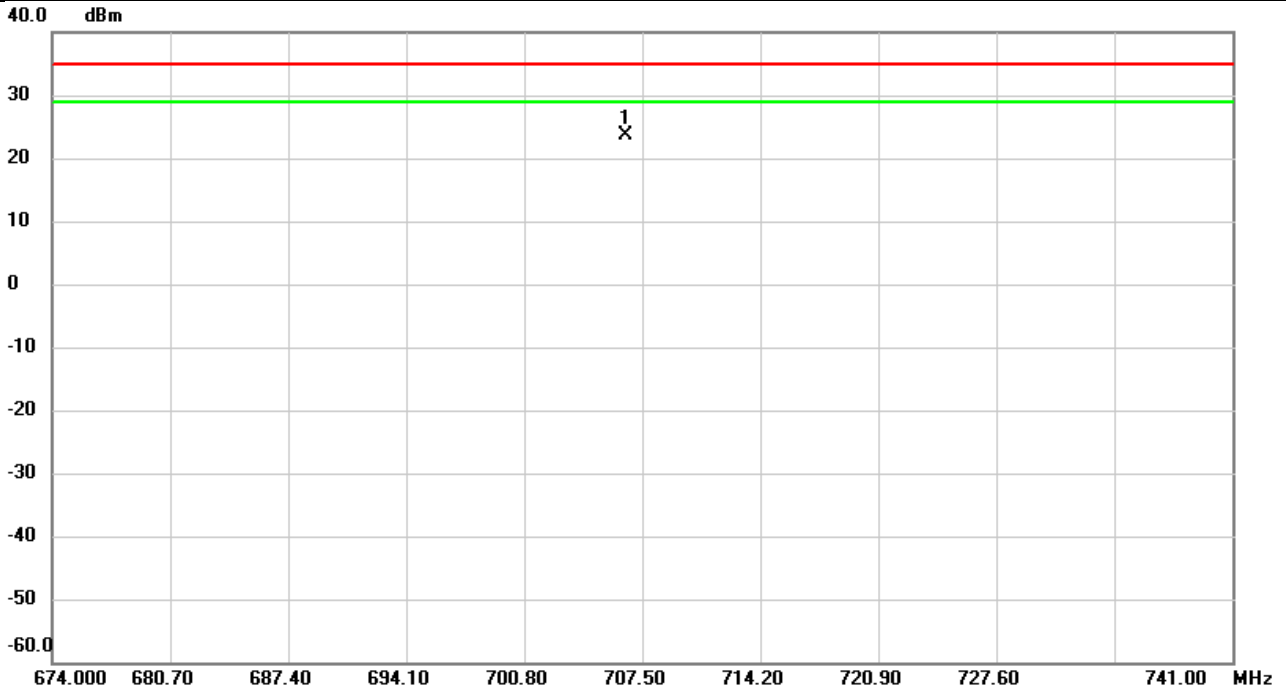


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	703.1182	14.31	8.95	23.26	34.77	-11.51	peak	

REMARKS:

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

Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23130	Polarization	Vertical
Temp	22°C	Hum.	66%

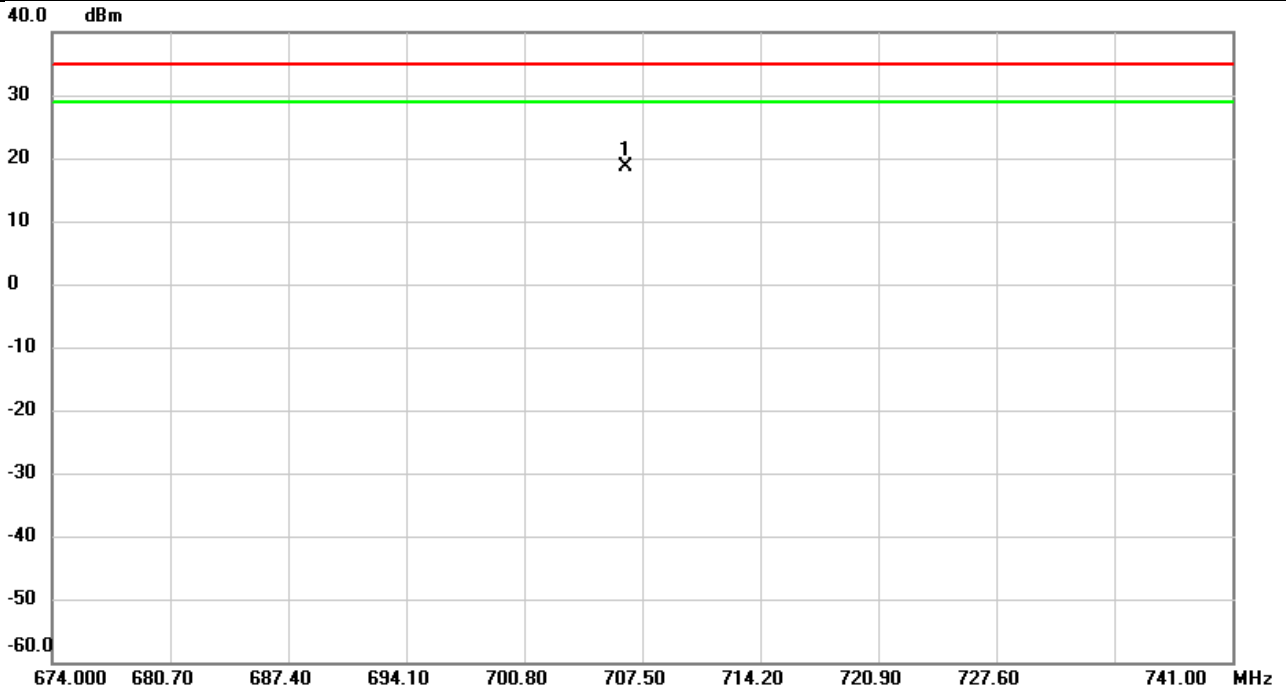


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	706.5420	13.19	10.46	23.65	34.77	-11.12	peak	

REMARKS:

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

Test Mode	LTE Band 12	Test Date	2023/3/27
Test Channel	CH23130	Polarization	Horizontal
Temp	22°C	Hum.	66%

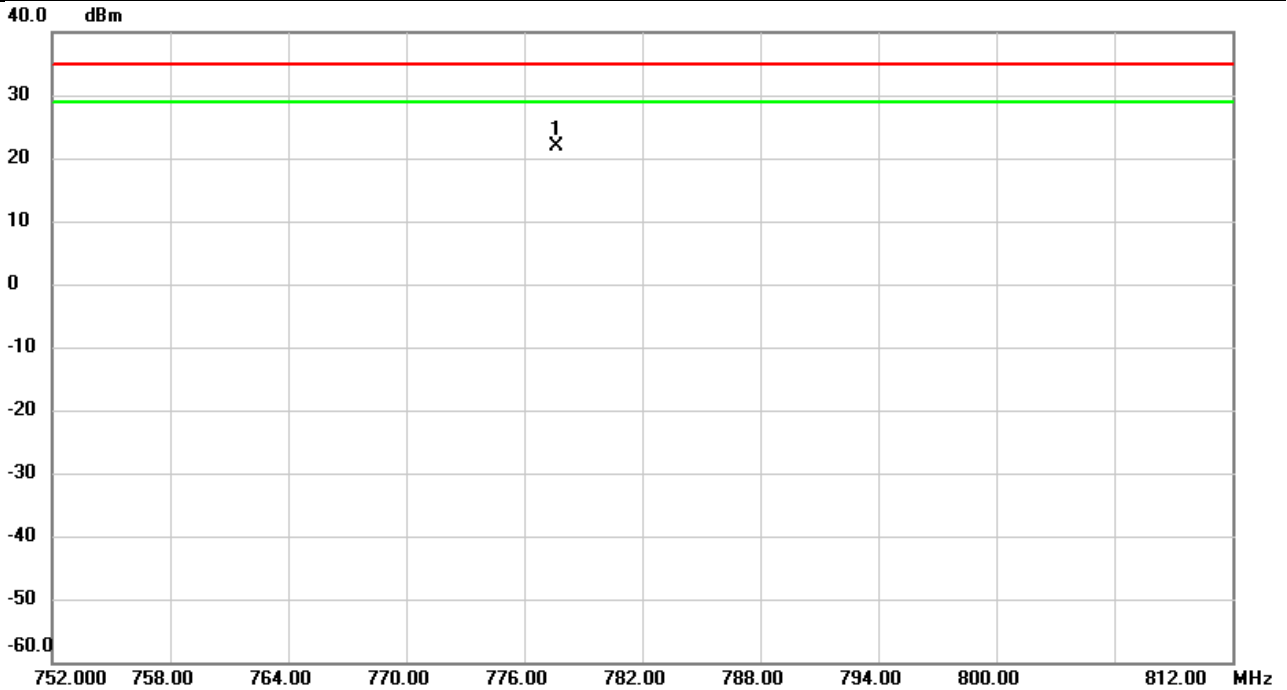


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	706.5888	9.64	8.97	18.61	34.77	-16.16	peak	

REMARKS:

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

Test Mode	LTE Band 13	Test Date	2023/3/27
Test Channel	CH23230	Polarization	Vertical
Temp	22°C	Hum.	66%

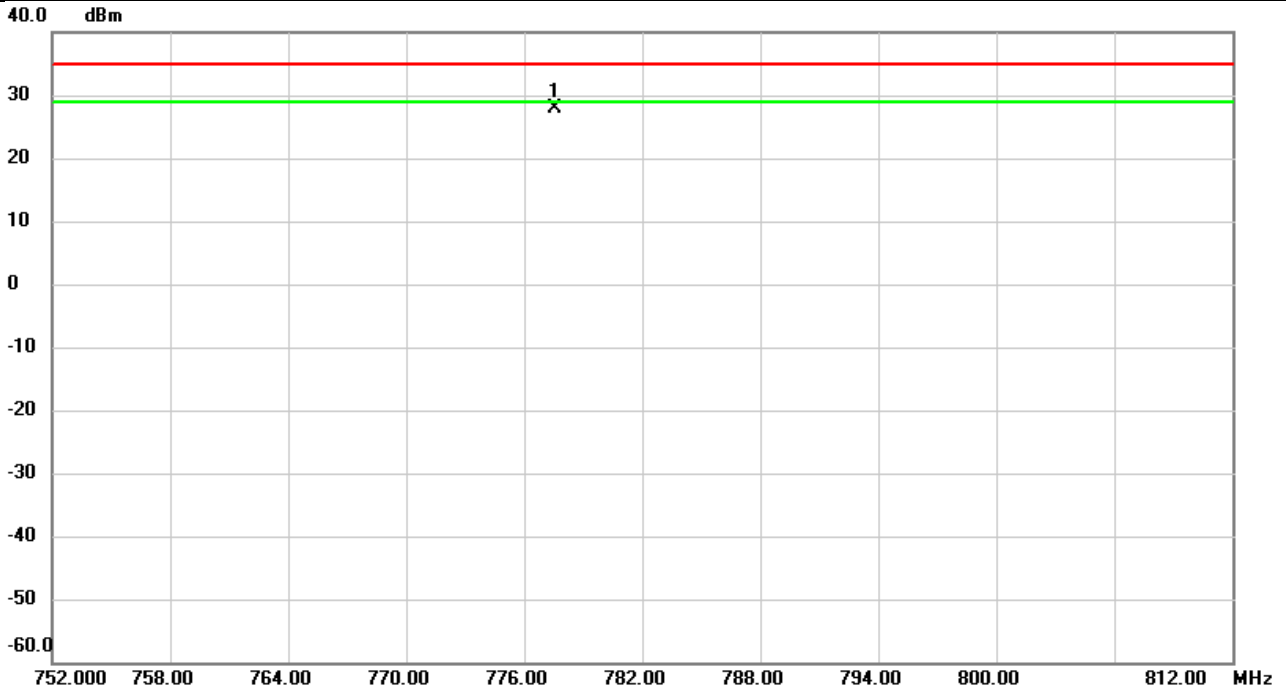


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	777.6280	12.24	9.73	21.97	34.77	-12.80	peak	

REMARKS:

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

Test Mode	LTE Band 13	Test Date	2023/3/27
Test Channel	CH23230	Polarization	Horizontal
Temp	22°C	Hum.	66%



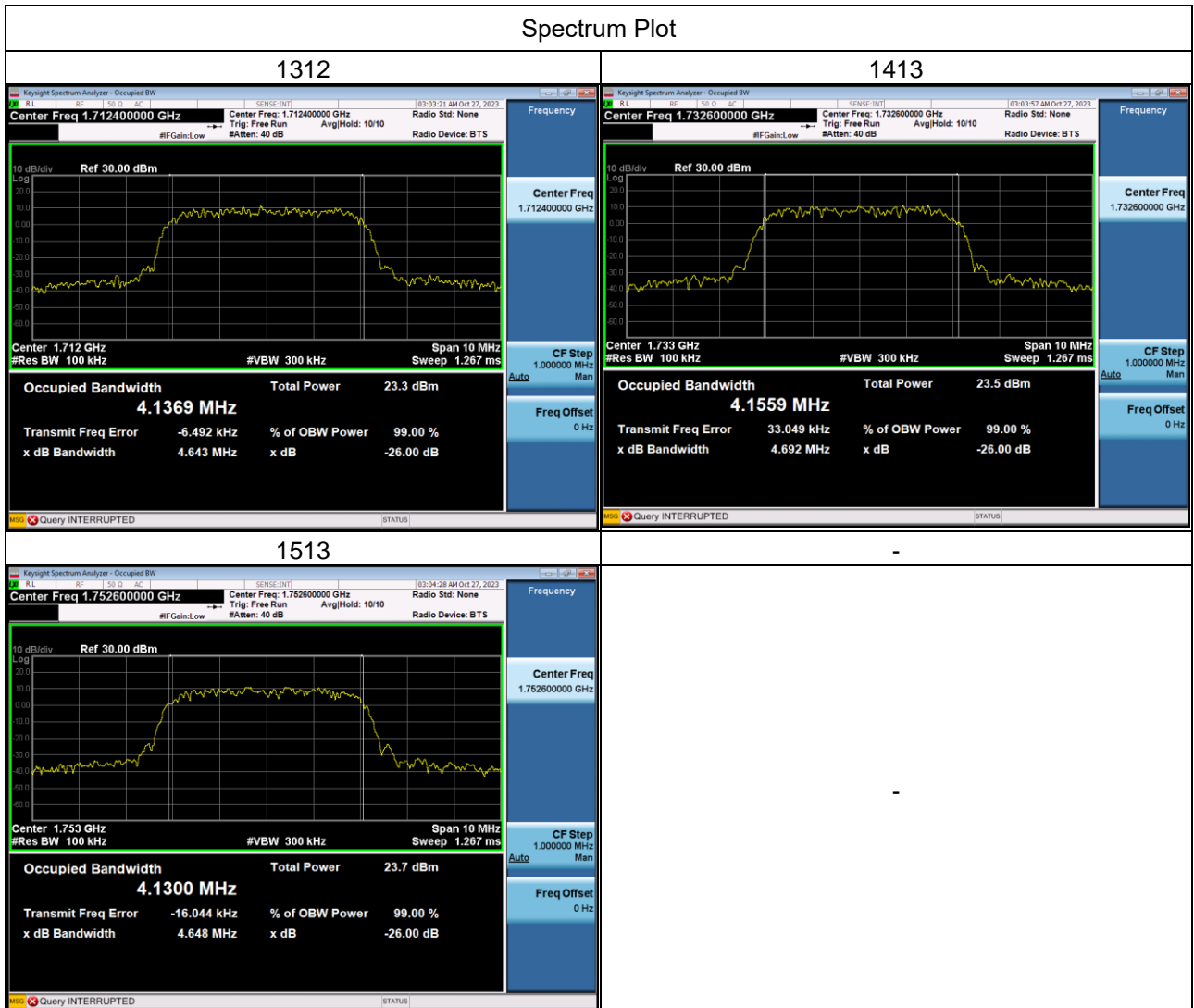
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	777.5440	17.99	9.95	27.94	34.77	-6.83	peak	

REMARKS:

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

## APPENDIX B OCCUPIED BANDWIDTH

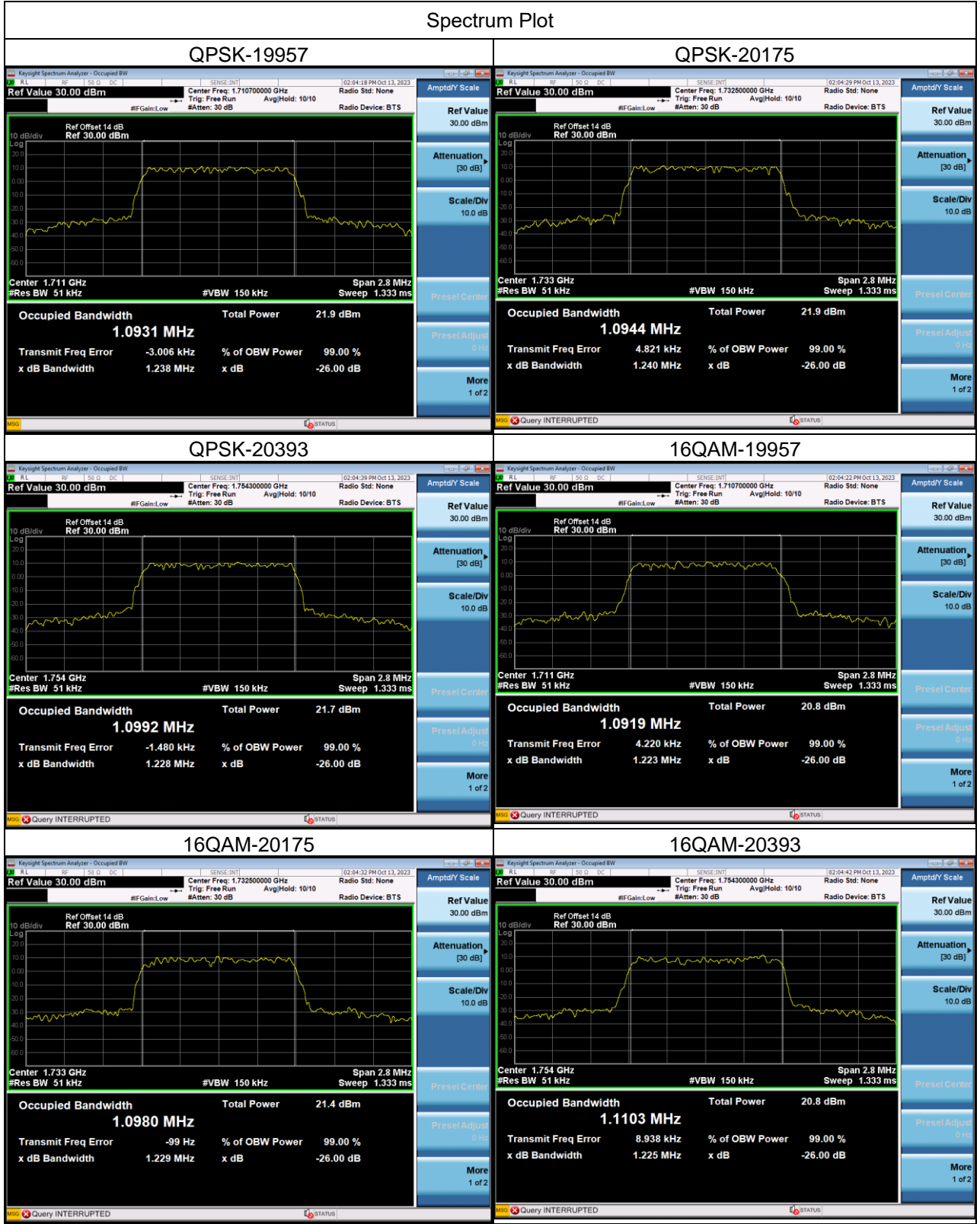
WCDMA Band IV_WCDMA					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
1312	1712.4	4.1369	1312	1712.4	4.643
1413	1732.6	4.1559	1413	1732.6	4.692
1513	1752.6	4.1300	1513	1752.6	4.648



LTE Band 4_1.4M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.0931	19957	1710.7	1.238
20175	1732.5	1.0944	20175	1732.5	1.240
20393	1754.3	1.0992	20393	1754.3	1.228
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.0919	19957	1710.7	1.223
20175	1732.5	1.0980	20175	1732.5	1.229
20393	1754.3	1.1103	20393	1754.3	1.225
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19957	1710.7	1.1003	19957	1710.7	1.220
20175	1732.5	1.1029	20175	1732.5	1.201
20393	1754.3	1.0969	20393	1754.3	1.228



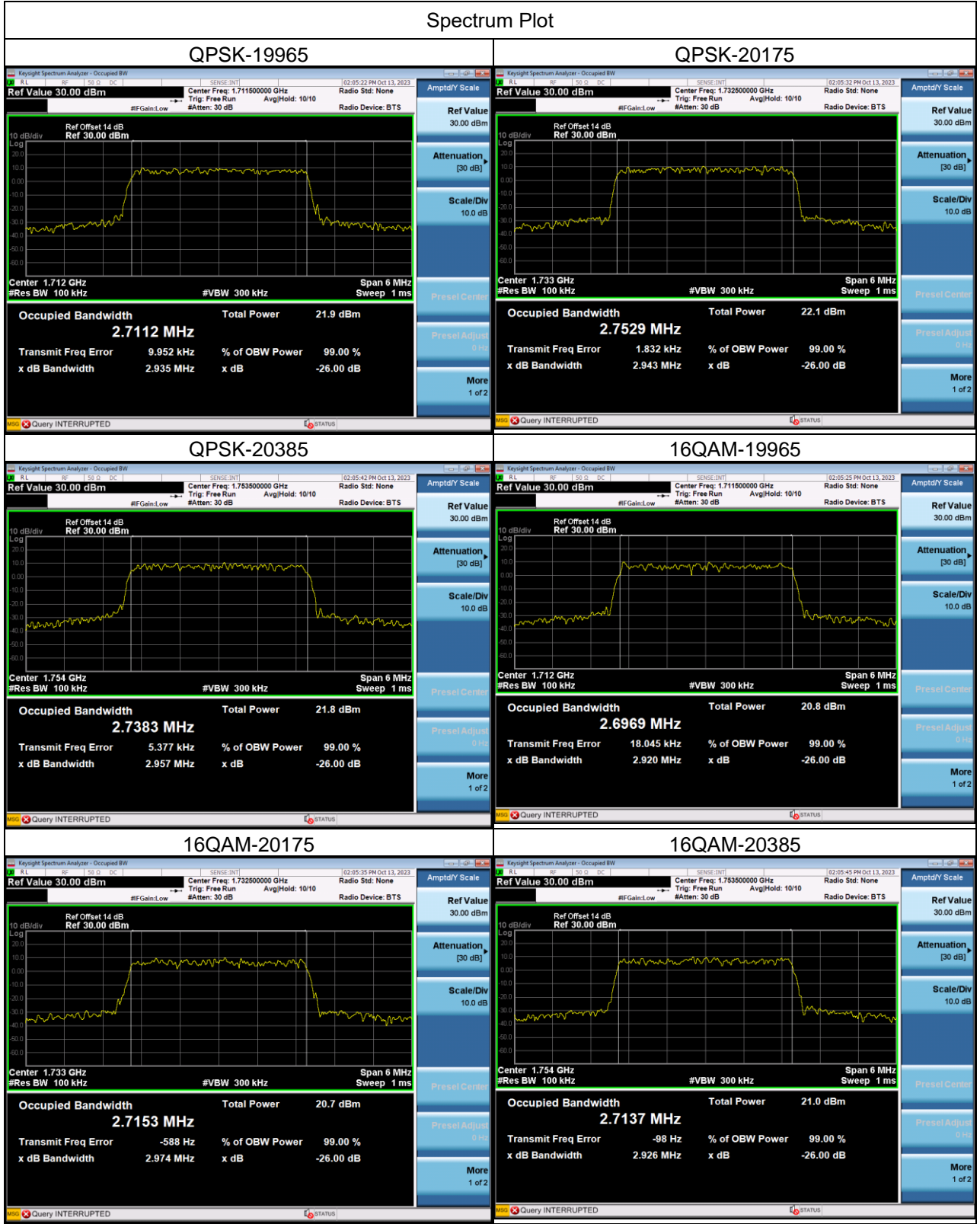
## Spectrum Plot

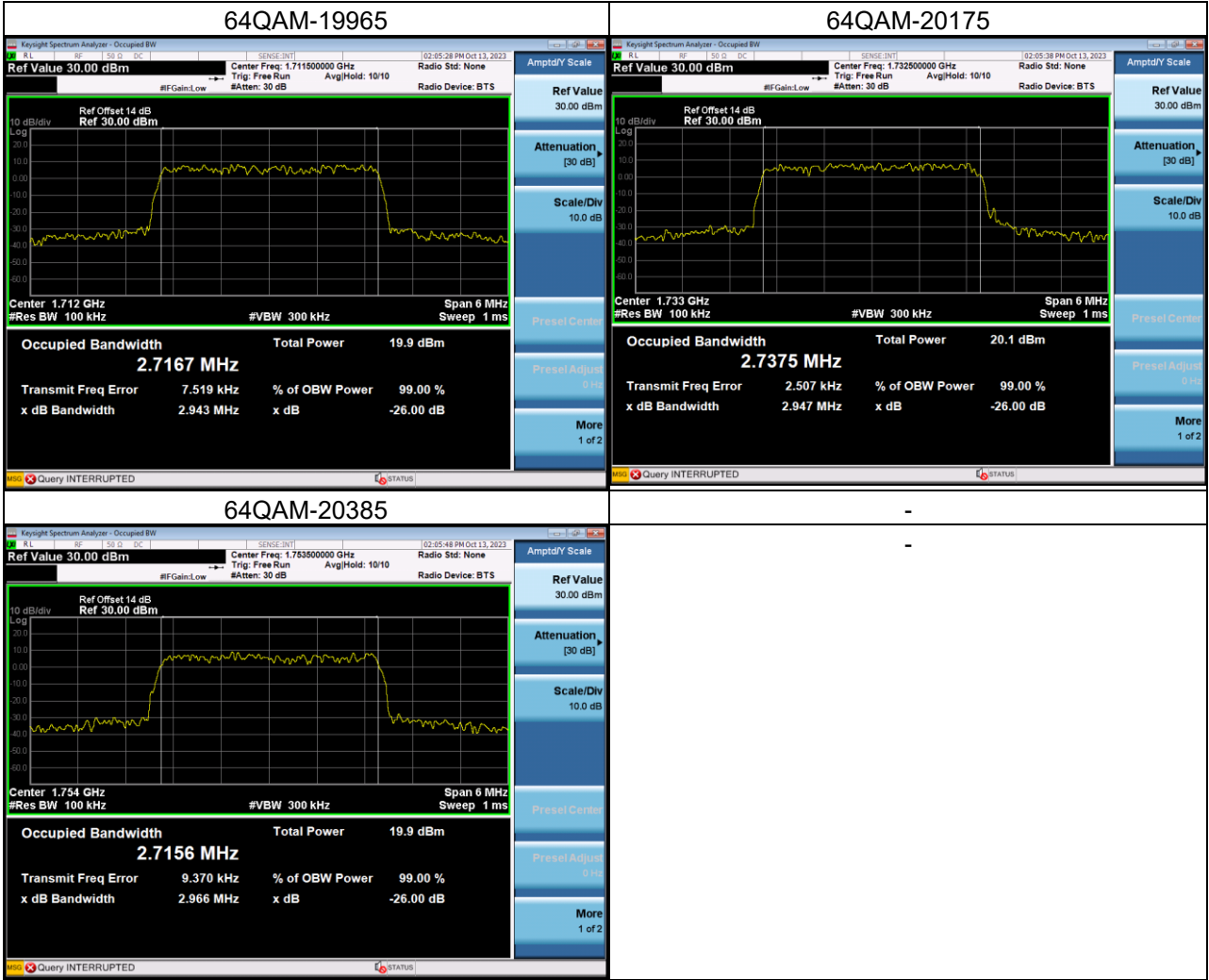




LTE Band 4_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.7112	19965	1711.5	2.935
20175	1732.5	2.7529	20175	1732.5	2.943
20385	1753.5	2.7383	20385	1753.5	2.957
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.6969	19965	1711.5	2.920
20175	1732.5	2.7153	20175	1732.5	2.974
20385	1753.5	2.7137	20385	1753.5	2.925
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19965	1711.5	2.7167	19965	1711.5	2.943
20175	1732.5	2.7375	20175	1732.5	2.947
20385	1753.5	2.7156	20385	1753.5	2.966

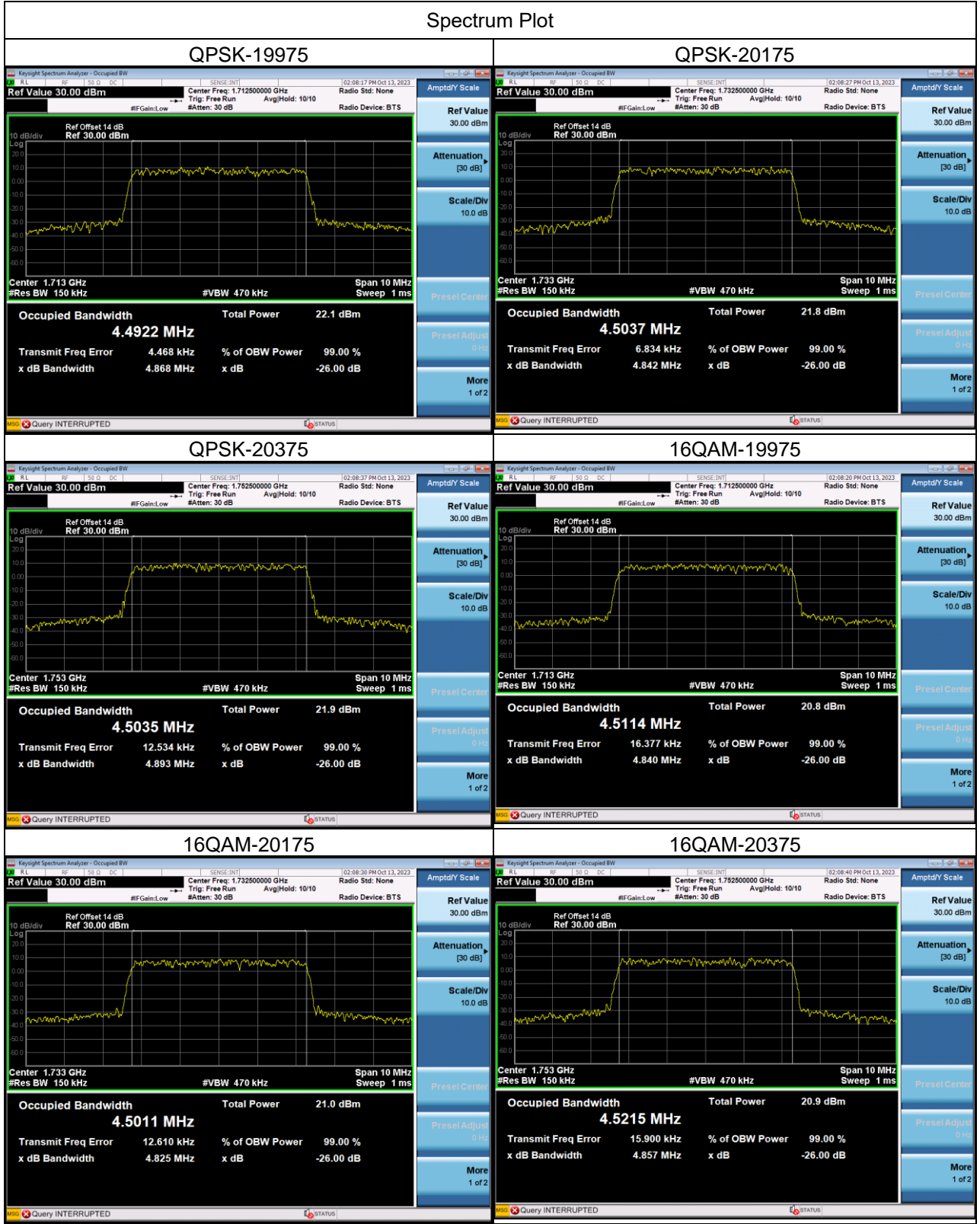
## Spectrum Plot





LTE Band 4_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.4922	19975	1712.5	4.868
20175	1732.5	4.5037	20175	1732.5	4.842
20375	1752.5	4.5035	20375	1752.5	4.893
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.5114	19975	1712.5	4.840
20175	1732.5	4.5011	20175	1732.5	4.825
20375	1752.5	4.5215	20375	1752.5	4.857
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
19975	1712.5	4.5145	19975	1712.5	4.872
20175	1732.5	4.5102	20175	1732.5	4.823
20375	1752.5	4.5087	20375	1752.5	4.835

## Spectrum Plot



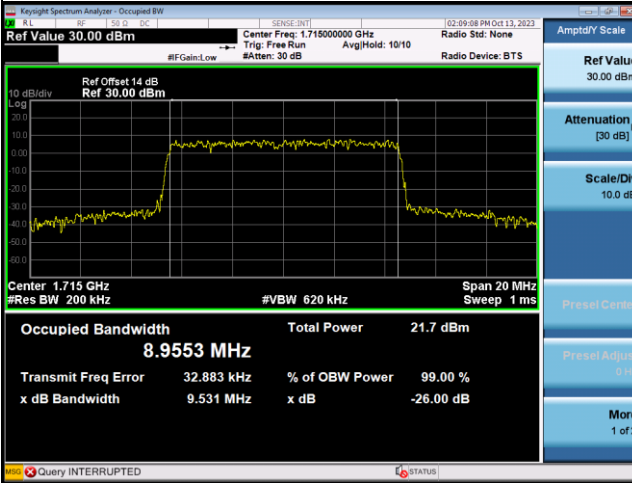




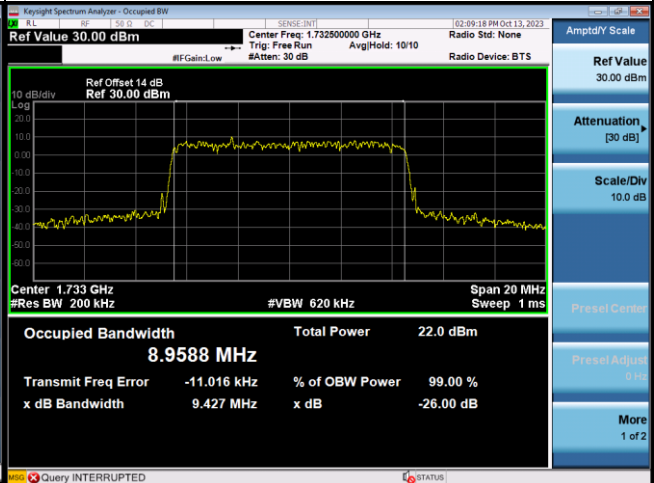
LTE Band 4_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	8.9553	20000	1715	9.531
20175	1732.5	8.9588	20175	1732.5	9.427
20350	1750	8.9456	20350	1750	9.459
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	8.9379	20000	1715	9.437
20175	1732.5	8.9340	20175	1732.5	9.468
20350	1750	8.9288	20350	1750	9.459
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20000	1715	8.9674	20000	1715	9.481
20175	1732.5	8.9972	20175	1732.5	9.504
20350	1750	8.9364	20350	1750	9.444

## Spectrum Plot

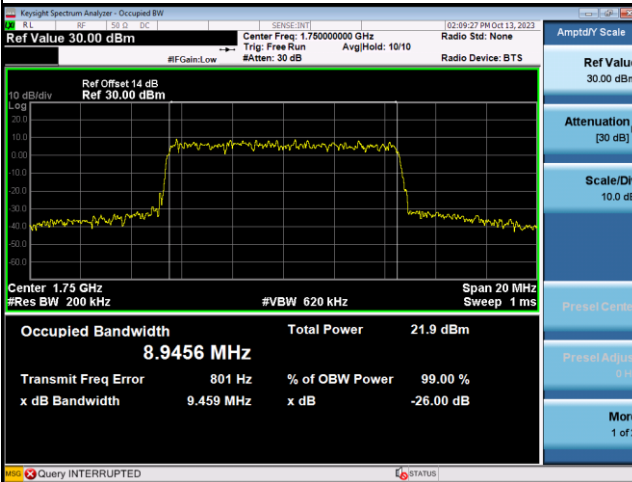
### QPSK-20000



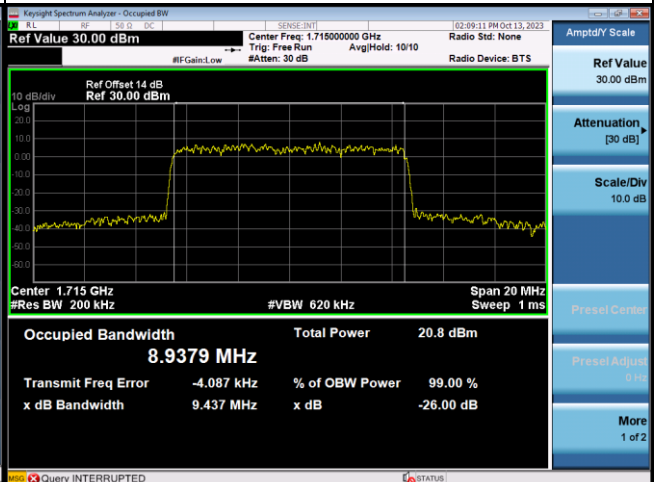
### QPSK-20175



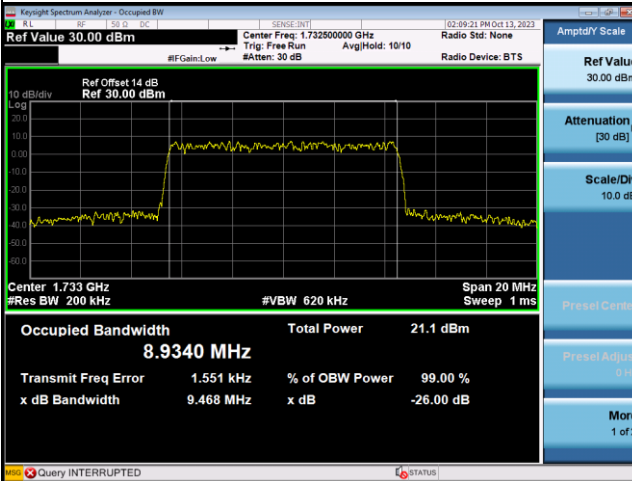
### QPSK-20350



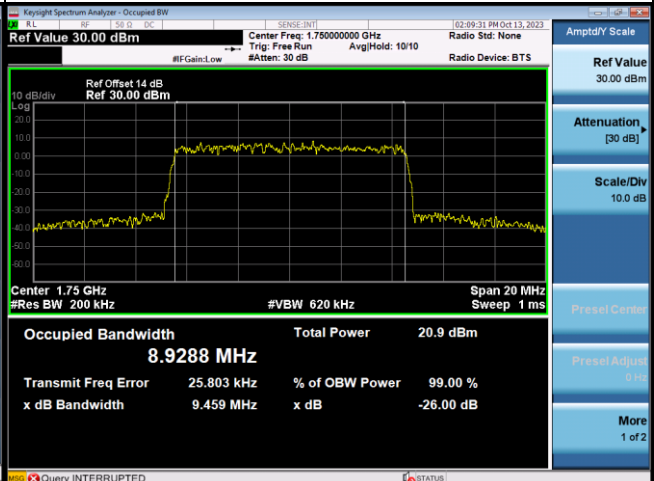
### 16QAM-20000

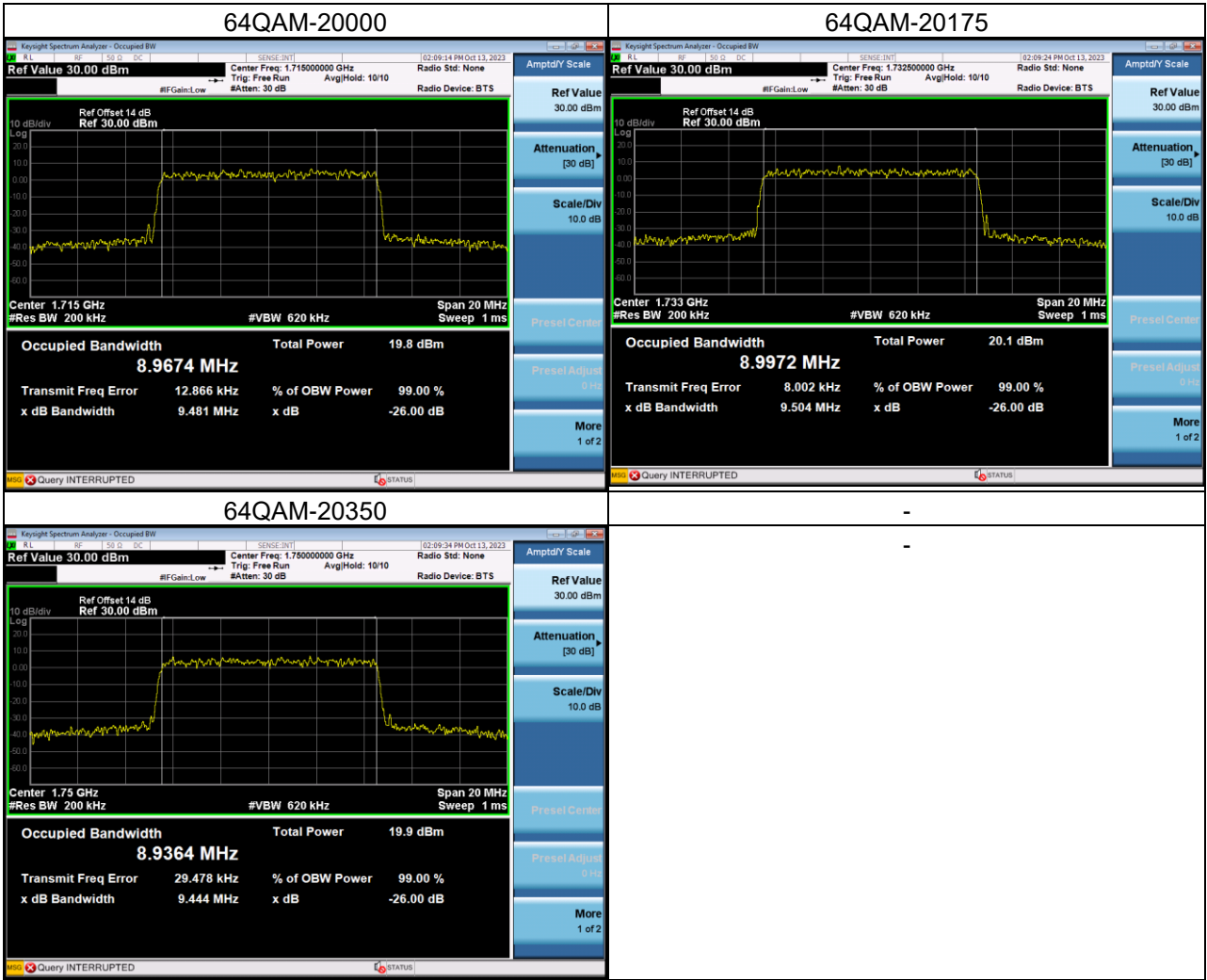


### 16QAM-20175



### 16QAM-20350





LTE Band 4_15M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.349	20025	1717.5	14.15
20175	1732.5	13.404	20175	1732.5	14.19
20325	1747.5	13.411	20325	1747.5	14.15
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.408	20025	1717.5	14.27
20175	1732.5	13.434	20175	1732.5	14.25
20325	1747.5	13.424	20325	1747.5	14.19
64QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
20025	1717.5	13.358	20025	1717.5	14.13
20175	1732.5	13.444	20175	1732.5	14.18
20325	1747.5	13.403	20325	1747.5	14.16