

**CFR 47 FCC PART 2
CFR 47 FCC PART 22 H
CFR 47 FCC PART 24 E
CFR 47 FCC PART 27
CFR 47 FCC PART 90S
RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199**

TEST REPORT

For

WisePOS Pro, 7MD

**FCC ID: 2AB7X-WSP7V1
IC: 28493-WSP7V1**

MODEL NUMBER: WSP74, WSP75, WSP76

REPORT NUMBER: 4791364876-1-RF-3

ISSUE DATE: Sep. 18, 2024

Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	Sep. 18, 2024	Initial Issue	\

Note:

1.This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 22 H >< CFR 47 FCC PART 24 E>< CFR 47 FCC PART 27 >< CFR 47 FCC PART 90S > < RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199 >when < Simple Acceptance > decision rule is applied.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: BBPOS Limited
Address: 15/F, Tower 2, Nina Tower, 8 Yeung Uk Road, Tsuen Wan, NT,
HK China

Manufacturer Information

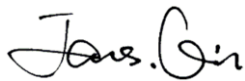
Company Name: BBPOS Limited
Address: 15/F, Tower 2, Nina Tower, 8 Yeung Uk Road, Tsuen Wan, NT,
HK China

EUT Information

EUT Name: WisePOS Pro, 7MD
Model: WSP74
Brand: 7-Eleven
Sample Received Date: June 21, 2024
Sample Status: Normal
Sample ID: 7342890
Date of Tested: July 5, 2024 ~ Sep. 18, 2024

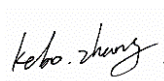
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 FCC PART 22 H	PASS
CFR 47 FCC PART 24 E	PASS
CFR 47 FCC PART 27	PASS
CFR 47 FCC PART 90S	PASS
RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199	PASS

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.26-2015, 971168 D01 Power Meas License Digital Systems v03r01, 971168 D02 Misc Rev Approv License Devices v02r01, 412172 D01 v01r01 Determining ERP and EIRP, CFR 47 FCC Part 2, Part 22 H, Part 24 E, Part 27, Part 90S, RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4102.01) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1187) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules ISED (Company No.: 21320) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202) UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202. Shielding Room B, the VCCI registration No. is C-20153 and T-20155.
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Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.62 dB
Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz)	2.2 dB
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)	4.00 dB
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz)	5.78 dB (1 GHz-18 GHz)
	5.23dB (18 GHz-26 GHz)
	5.64 dB (26 GHz-40 GHz)
Bandwidth	1.1 %
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.	

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name:	WisePOS Pro, 7MD
Model:	WSP74
Series Model:	WSP75, WSP76
Model Difference:	WSP74 is the product without accessory, WSP75 is the product with hand strap, WSP76 is the product with pistol grip

5.2. TEST CHANNEL CONFIGURATION

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 2	Low Range	1.4	18607	1850.7	607	1930.7
		3	18615	1851.5	615	1931.5
		5	18625	1852.5	625	1932.5
		10	18650	1855	650	1935
		15	18675	1857.5	675	1937.5
		20	18700	1860	700	1940
	Mid Range	1.4/3/5/10/15/20	18900	1880	900	1960
	High Range	1.4	19193	1909.3	1193	1989.3
		3	19185	1908.5	1185	1988.5
		5	19175	1907.5	1175	1987.5
		10	19150	1905	1150	1985
		15	19125	1902.5	1125	1982.5
		20	19100	1900	1100	1980

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 4	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

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 5	Low Range	1.4	20407	824.7	2407	869.7
		3	20415	825.5	2415	870.5
		5	20425	826.5	2425	871.5
		10	20450	829	2450	874
	Mid Range	1.4/3/5/10	20525	836.5	2525	881.5
	High Range	1.4	20643	848.3	2643	893.3
		3	20635	847.5	2635	892.5
		5	20625	846.5	2625	891.5
		10	20600	844	2600	889

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 7	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

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 12	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

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 17	Low Range	5	23755	706.5	5755	736.5
		10	23780	709	5780	739
	Mid Range	5 /10	23790	710	5790	740
	High Range	5	23825	713.5	5825	743.5
		10	23800	711	5800	741

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 25	Low Range	1.4	26047	1850.7	8047	1930.7
		3	26055	1851.5	8055	1931.5
		5	26065	1852.5	8065	1932.5
		10	26090	1855	8090	1935
		15	26115	1857.5	8115	1937.5
		20	26140	1860	8140	1940
	Mid Range	1.4/3/5/10/15/20	26365	1882.5	8365	1962.5
	High Range	1.4	26683	1914.3	8683	1994.3
		3	26675	1913.5	8675	1993.5
		5	26665	1912.5	8665	1992.5
		10	26640	1910	8640	1990
		15	26615	1907.5	8615	1987.5
		20	26590	1905	8590	1985

Band	Test Frequency ID	Bandwidth [MHz]	NUL	Frequency of Uplink [MHz]	NDL	Frequency of Downlink [MHz]
Band 26	Low Range	1.4	26697	814.7	8697	859.7
		3	26705	815.5	8705	860.5
		5	26715	816.5	8715	861.5
		10	26740	819	8740	864
		15	26765	821.5	8765	866.5
	Mid Range	1.4/3/5/10/15	26865	831.5	8865	876.5
	High Range	1.4	27033	848.3	9033	893.3
		3	27025	847.5	9025	892.5
		5	27015	846.5	9015	891.5
		10	26990	844	8990	889
		15	26965	841.5	8965	886.5

Band	Test Frequency ID	Bandwidth [MHz]	EARFCN	Frequency (UL and DL) [MHz]
Band 40 (Lower range)	Low Range	5	2307.5	38725
		10	\	\
	Mid Range	5/10	2310	38750
	High Range	5	2312.5	38775
		10	\	\

Band	Test Frequency ID	Bandwidth [MHz]	EARFCN	Frequency (UL and DL) [MHz]
Band 40 (Lower range)	Low Range	5	2352.5	39175
		10	\	\
	Mid Range	5/10	2355	39200
	High Range	5	2357.5	39225
		10	\	\

Band	Test Frequency ID	Bandwidth [MHz]	EARFCN	Frequency (UL and DL) [MHz]
Band 41	Low Range	5	39675*	2498.5
		10	39700	2501
		15	39725	2503.5
		20	39750	2506
	Mid Range	5/10/15/20	40620	2593
	High Range	5	41565	2687.5
		10	41540	2685
		15	41515	2682.5
		20	41490	2680

Note: * for below 2500 MHz frequency band will not use in Canada.

5.3. MAXIMUM AVERAGE OUTPUT POWER

LTE Band 2

Part 24, RSS-133							
EIRP Limit(W)		2.0					
Antenna Gain (dBi)		2.2					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
1.4	QPSK	1850.7	1909.3	16.96	0.082	1.09	1M09G7W
	16QAM			15.87	0.064	1.099	1M10D7W
3	QPSK	1851.5	1908.5	16.83	0.080	2.688	2M69G7W
	16QAM			16.48	0.074	2.685	2M69D7W
5	QPSK	1852.5	1907.5	16.86	0.081	4.521	4M52G7W
	16QAM			16.43	0.073	4.522	4M52D7W
10	QPSK	1855.0	1905.0	16.94	0.082	9.015	9M02G7W
	16QAM			16.43	0.073	9.002	9M00D7W
15	QPSK	1857.5	1902.5	16.81	0.080	13.508	13M5G7W
	16QAM			16.40	0.072	13.511	13M5D7W
20	QPSK	1860.0	1900.0	16.83	0.080	18.097	18M1G7W
	16QAM			16.36	0.072	18.045	18M0D7W

LTE Band 4							
Part 27 / RSS-139							
EIRP Limit(W)		1.0					
Antenna Gain (dBi)		2.2					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
1.4	QPSK	1710.7	1754.3	14.96	0.052	1.097	1M10G7W
	16QAM			13.76	0.039	1.098	1M10D7W
3	QPSK	1711.5	1753.5	14.95	0.052	2.688	2M69G7W
	16QAM			14.21	0.044	2.682	2M68D7W
5	QPSK	1712.5	1752.5	14.85	0.051	4.522	4M52G7W
	16QAM			14.29	0.045	4.517	4M52D7W
10	QPSK	1715.0	1750.0	14.80	0.050	9.000	9M00G7W
	16QAM			14.15	0.043	9.006	9M01D7W
15	QPSK	1717.5	1747.5	14.94	0.052	13.514	13M5G7W
	16QAM			14.06	0.042	13.54	13M5D7W
20	QPSK	1720.0	1745.0	14.83	0.050	18.115	18M1G7W
	16QAM			14.14	0.043	18.061	18M1D7W

LTE Band 5

Part 22H, RSS-132							
ERP Limit(W)		7.0					
Antenna Gain (dBi)		1.5					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (W)	99% OBW (MHz)	Emission Designator
1.4	QPSK	824.7	848.3	24.08	0.220	1.091	1M09G7W
	16QAM			23.26	0.182	1.098	1M10D7W
3	QPSK	825.5	847.5	24.16	0.224	2.686	2M69G7W
	16QAM			23.21	0.180	2.687	2M69D7W
5	QPSK	826.5	846.5	24.24	0.229	4.523	4M52G7W
	16QAM			23.30	0.184	4.521	4M52D7W
10	QPSK	829	844	24.14	0.223	9.002	9M00G7W
	16QAM			23.25	0.182	9.003	9M00D7W

LTE Band 7

Part 27, RSS-199							
EIRP Limit(W)		2.0					
Antenna Gain (dBi)		2.5					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	2502.5	2567.5	17.24	0.094	4.513	4M51G7W
	16QAM			16.49	0.079	4.523	4M52D7W
10	QPSK	2505	2565	17.23	0.094	9.02	9M02G7W
	16QAM			16.43	0.078	9.007	9M01D7W
15	QPSK	2507.5	2562.5	17.33	0.096	13.497	13M5G7W
	16QAM			16.45	0.079	13.497	13M5D7W
20	QPSK	2510	2560	17.19	0.093	18.084	18M1G7W
	16QAM			16.49	0.079	18.043	18M0D7W

LTE Band 12

Part 27, RSS-130							
ERP Limit(W)		3.0					
Antenna Gain (dBi)		1.1					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (W)	99% OBW (MHz)	Emission Designator
1.4	QPSK	699.7	715.3	24.10	0.202	1.09	1M09G7W
	16QAM			23.28	0.167	1.088	1M09D7W
3	QPSK	700.5	714.5	24.12	0.203	2.692	2M69G7W
	16QAM			23.09	0.160	2.684	2M68D7W
5	QPSK	701.5	713.5	24.18	0.206	4.533	4M53G7W
	16QAM			23.11	0.161	4.514	4M51D7W
10	QPSK	704.0	711.0	24.03	0.199	9.051	9M05G7W
	16QAM			23.16	0.163	9.040	9M04D7W

LTE Band 17

Part 27, RSS-130							
ERP Limit(W)		3.0					
Antenna Gain (dBi)		1.2					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	706.5	713.5	24.19	0.346	4.514	4M51G7W
	16QAM			23.21	0.276	4.526	4M52D7W
10	QPSK	709.0	711.0	24.07	0.337	9.018	9M02G7W
	16QAM			23.18	0.274	9.042	9M04D7W

LTE Band 38

Part 27, RSS-199							
EIRP Limit(W)		2.0					
Antenna Gain (dBi)		2.3					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	2572.5	2617.5	22.15	0.279	4.507	4M51G7W
	16QAM			20.85	0.207	4.491	4M49D7W
10	QPSK	2575.0	2615.0	21.91	0.264	8.991	8M99G7W
	16QAM			20.87	0.207	8.956	8M96D7W
15	QPSK	2577.5	2612.5	22.17	0.280	13.487	13M5G7W
	16QAM			20.88	0.208	13.482	13M5D7W
20	QPSK	2580.0	2610.0	22.03	0.271	18.081	18M1G7W
	16QAM			20.91	0.209	18.031	18M0D7W

LTE Band 40(2305-2315)

Part 27, RSS-195							
ERP Limit(W)		0.25					
Antenna Gain (dBi)		2.2					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	2307.5	2312.5	21.98	0.262	4.516	4M52G7W
	16QAM			20.67	0.194	4.507	4M51D7W
10	QPSK	2310.0	2310.0	21.99	0.262	9.011	9M01G7W
	16QAM			20.78	0.199	9.056	9M06D7W

LTE Band 40(2350-2360)

Part 27, RSS-195							
ERP Limit(W)		0.25					
Antenna Gain (dBi)		2.2					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	2352.5	2357.5	21.96	0.261	4.512	4M51G7W
	16QAM			20.80	0.200	4.504	4M50D7W
10	QPSK	2355.0	2355.0	21.99	0.262	8.988	8M99G7W
	16QAM			20.77	0.198	9.019	9M02D7W

LTE Band 41

Part 27, RSS-199							
EIRP Limit(W)		2.0					
Antenna Gain (dBi)		2.4					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (W)	99% OBW (MHz)	Emission Designator
5	QPSK	2498.5	2687.5	21.92	0.270	4.497	4M50G7W
	16QAM			20.97	0.217	4.482	4M48D7W
10	QPSK	2501	2685	21.98	0.274	8.988	8M99G7W
	16QAM			20.94	0.216	8.980	8M98D7W
15	QPSK	2503.5	2682.5	21.96	0.273	13.496	13M5G7W
	16QAM			20.89	0.213	13.485	13M5D7W
20	QPSK	2506	2680	21.94	0.272	18.056	18M1G7W
	16QAM			20.88	0.213	18.004	18M0D7W

5.4. WORST-CASE CONFIGURATION AND MODE

During all testing, EUT is in link mode with base station emulator at maximum power level. The worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. Output power measurements were measured on QPSK, 16QAM. All testing was performed using QPSK and 16QAM modulations to represent the worst case.

The radiated spurious emissions measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT was investigated in three orthogonal orientations X,Y and Z. It was determined that X orientation was the worst-case.

Radiated spurious emissions were investigated below 30 MHz, 30 MHz - 1 GHz and above 1 GHz. There are no emissions found on below 1GHz and above 18 GHz, the emissions between 1 GHz – 18 GHz are tested at the low, mid, high channel and the worse configuration.

Test Items	Worst case test configuration			
Description	Modulation	Channel	Bandwidth (MHz)	RB Configuration
Radiated Spurious Emissions	QPSK	L, M, H	Maximum BW	RB size=1, RB Location=Low

5.5. DESCRIPTION OF AVAILABLE ANTENNAS

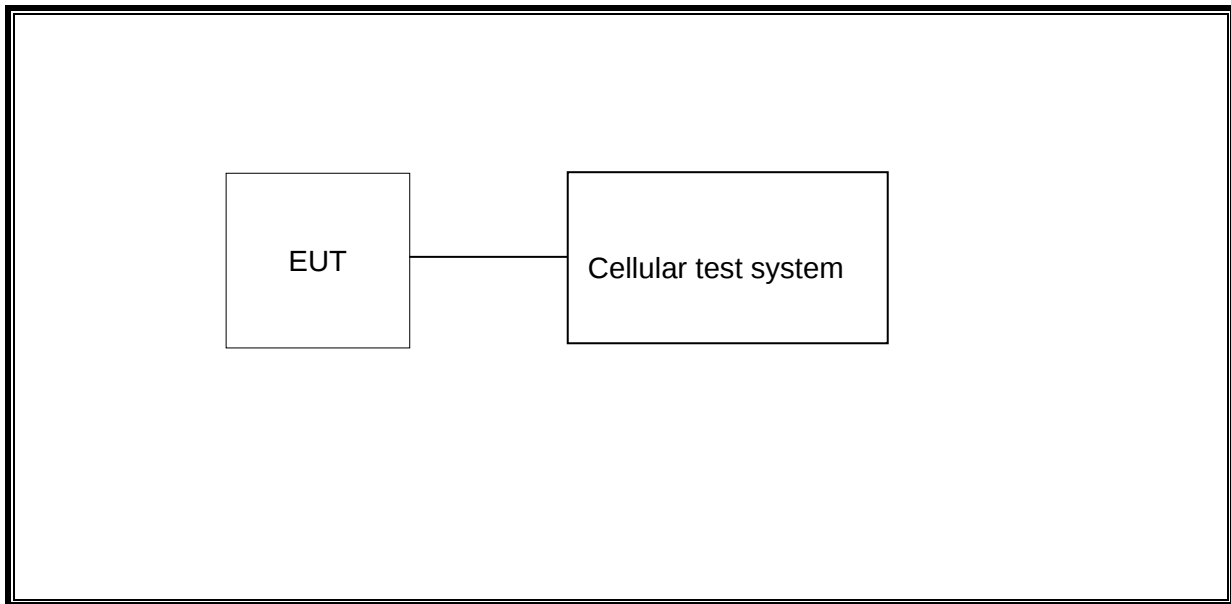
Antenna	Band	Antenna Type	MAX Antenna Gain (dBi)
Ant0	LTE Band 2	FPC	2.2
Ant0	LTE Band 4	FPC	2.2
Ant0	LTE Band 5	FPC	1.5
Ant0	LTE Band 7	FPC	2.5
Ant0	LTE Band 12	FPC	1.1
Ant0	LTE Band 17	FPC	1.2
Ant0	LTE Band 38	FPC	2.3
Ant0	LTE Band 40	FPC	2.2
Ant0	LTE Band 41	FPC	2.4

Band	Transmit and Receive Mode	Description
LTE Band 2	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 4	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 5	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 7	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 12	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 17	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 38	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 40	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna
LTE Band 41	☒ 1TX, 2RX	Main antenna can be used as transmitting/receiving antenna, DIV antenna can be used as receiving antenna

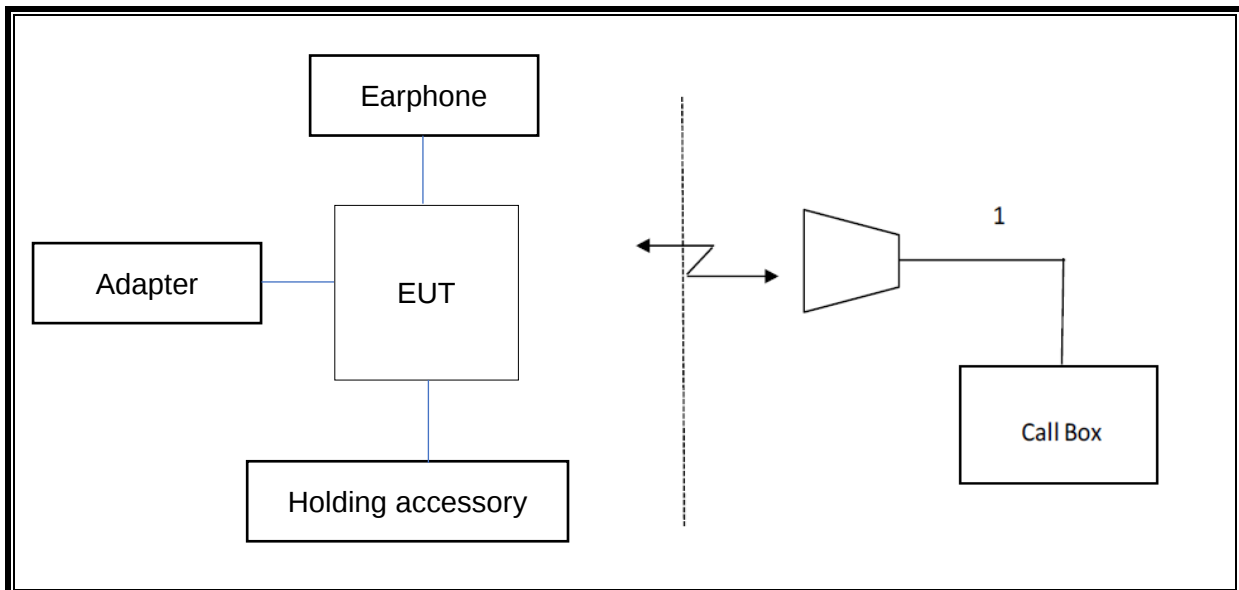
Note: The value of the antenna gain was declared by customer.

5.7. DESCRIPTION OF TEST SETUP

Conducted



Radiated



6. MEASURING INSTRUMENT AND SOFTWARE USED

Antenna Terminal Test						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☒	Spectrum Analyzer	R&S	FSV40	S422060001	Oct.12, 2023	Oct.11, 2024
☒	Wideband Radio Communication Tester	R&S	CMW500	155523	Oct.12, 2023	Oct.11, 2024
☒	DC Power Supply	Array	3662A	A1512015	Oct.12, 2023	Oct.11, 2024
Software						
Used	Description		Manufacturer	Name		Version
☒	Tonsend Cellular Test System		Tonsend	JS1120 RF Auto Test System		3.1.46
Radiated Test						
Instrument						
Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
☒	MXE EMI Receiver	KESIGHT	N9038A	MY56400036	Oct.12, 2023	Oct.11, 2024
☒	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130960	Jun. 28, 2024	Jun. 27, 2027
☒	Preamplifier	HP	8447D	2944A09099	Oct.12, 2023	Oct.11, 2024
☒	EMI Measurement Receiver	R&S	ESR26	101377	Oct.12, 2023	Oct.11, 2024
☒	Horn Antenna	TDK	HRN-0118	130939	April 29, 2022	April 30, 2025
☒	Horn Antenna	Schwarzbeck	BBHA9170	856	Feb 28, 2022	Feb 28, 2025
☒	Preamplifier	TDK	PA-02-0118	TRS-305-00067	Oct.12, 2023	Oct.11, 2024
☒	Preamplifier	TDK	PA-02-2	TRS-307-00003	Oct.12, 2023	Oct.11, 2024
☒	Loop antenna	Schwarzbeck	1519B	00008	Dec.14, 2021	Dec.13, 2024
☒	High Pass Filter	Wi	WHKX10-2700-3000-18000-40SS	23	Oct.12, 2023	Oct.11, 2024
Software						
Used	Description		Manufacturer	Name		Version
☒	Test Software for Radiated disturbance		Farad	EZ-EMC		Ver. UL-3A1

7. ANTENNA TERMINAL TEST RESULTS

7.1. EFFECTIVE (ISOTROPIC) RADIATED POWER OF TRANSMITTER

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27.50

RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199

LIMITS

22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50(c) 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.

27.50(d) 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 watts EIRP.

27.50(h) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

TEST PROCEDURE

Refer to ANSI C63.26:2015 and KDB 971168 D01 Section 5.6

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

where:

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

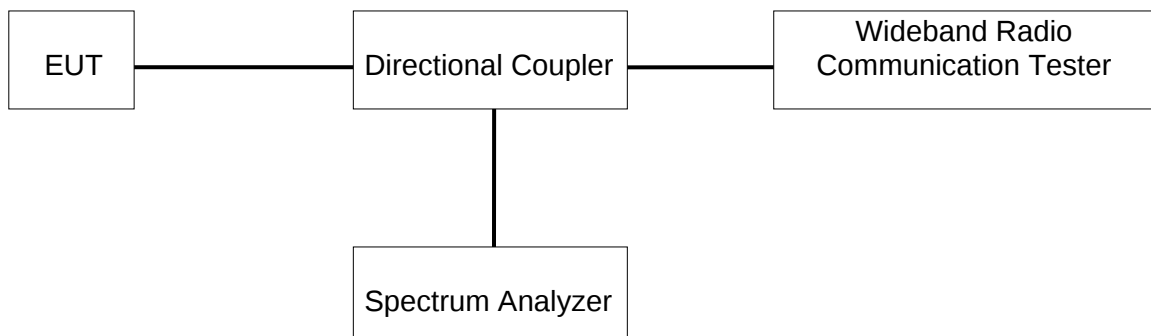
P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

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

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

The transmitter has a maximum output powers as follows and maximum ERP/EIRP is tabulated in section 5.3.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	66.1%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

7.1.1. LTE Band 2

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18607	18900	19193
1.4MHz	QPSK	1	0	16.52	16.67	16.56
		1	2	16.68	16.67	16.87
		1	5	16.53	16.53	16.37
		3	0	16.61	16.53	16.53
		3	1	16.77	16.67	16.96
		3	3	16.50	16.57	16.50
		6	0	15.77	15.86	15.70
	16QAM	1	0	15.62	15.70	15.75
		1	2	15.68	15.85	15.63
		1	5	15.60	15.74	15.87
		3	0	15.49	15.80	15.72
		3	1	15.49	15.81	15.73
		3	3	15.62	15.70	15.82
		6	0	14.51	14.87	14.61
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18615	18900	19185
3MHz	QPSK	1	0	16.74	16.54	16.62
		1	8	16.79	16.70	16.77
		1	14	16.42	16.83	16.35
		8	0	15.43	15.66	15.68
		8	4	15.55	15.63	15.76
		8	7	15.27	15.60	15.83
		15	0	15.74	15.51	15.98
	16QAM	1	0	15.71	16.27	16.03
		1	8	15.93	16.32	16.48
		1	14	15.96	15.67	15.72
		8	0	14.95	14.74	14.86
		8	4	14.76	14.73	14.76
		8	7	14.54	14.97	14.49
		15	0	14.51	14.72	14.60
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				18625	18900	19175
5MHz	QPSK	1	0	16.60	16.50	16.47
		1	12	16.75	16.72	16.86
		1	24	16.36	16.71	16.42
		12	0	15.53	15.65	15.57
		12	6	15.52	15.69	15.82
		12	13	15.37	15.61	15.88
		25	0	15.72	15.61	15.84
	16QAM	1	0	15.78	16.22	16.03

		1	12	16.00	16.42	16.43
		1	24	15.96	15.80	15.84
		12	0	14.83	14.76	14.89
		12	6	14.78	14.78	14.77
		12	13	14.55	14.91	14.50
		25	0	14.64	14.80	14.55
Bandwidth	Modulation	RB size	RB offset	Channel 18650	Channel 18900	Channel 19150
10MHz	QPSK	1	0	16.59	16.46	16.45
		1	24	16.75	16.80	16.94
		1	49	16.44	16.56	16.51
		25	0	15.63	15.67	15.50
		25	12	15.54	15.60	15.78
		25	25	15.44	15.70	15.82
		50	0	15.69	15.75	15.74
	16QAM	1	0	15.74	16.18	15.99
		1	24	15.86	16.43	16.42
		1	49	15.96	15.76	15.99
		25	0	14.81	14.67	14.97
		25	12	14.74	14.75	14.66
		25	25	14.57	14.94	14.53
		50	0	14.71	14.85	14.61
Bandwidth	Modulation	RB size	RB offset	Channel 18675	Channel 18900	Channel 19125
15MHz	QPSK	1	0	16.55	16.56	16.50
		1	38	16.71	16.76	16.81
		1	74	16.38	16.61	16.41
		36	0	15.68	15.71	15.58
		36	18	15.59	15.72	15.66
		36	37	15.55	15.59	15.72
		75	0	15.72	15.76	15.70
	16QAM	1	0	15.67	16.07	16.07
		1	38	15.99	16.39	16.40
		1	74	15.82	15.81	16.09
		36	0	14.71	14.72	14.85
		36	18	14.70	14.89	14.75
		36	37	14.68	14.90	14.68
		75	0	14.65	14.81	14.75
Bandwidth	Modulation	RB size	RB offset	Channel 18700	Channel 18900	Channel 19100
20MHz	QPSK	1	0	16.53	16.65	16.59
		1	49	16.68	16.80	16.83
		1	99	16.47	16.58	16.52
		50	0	15.63	15.74	15.72
		50	25	15.62	15.70	15.69
		50	50	15.63	15.73	15.74
		100	0	15.61	15.70	15.64
	16QAM	1	0	15.76	16.02	16.20
		1	49	15.94	16.24	16.36
		1	99	15.70	15.96	16.13
		50	0	14.67	14.77	14.73
		50	25	14.67	14.77	14.70
		50	50	14.66	14.76	14.73
		100	0	14.61	14.76	14.62

7.1.2. LTE Band 4

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19957	20175	20393
1.4MHz	QPSK	1	0	14.51	14.54	14.42
		1	2	14.54	14.87	14.96
		1	5	14.45	14.57	14.64
		3	0	14.41	14.49	14.47
		3	1	14.73	14.75	14.71
		3	3	14.36	14.44	14.61
		6	0	13.51	13.45	13.62
	16QAM	1	0	13.50	13.48	13.39
		1	2	13.73	13.55	13.37
		1	5	13.53	13.70	13.47
		3	0	13.60	13.52	13.64
		3	1	13.76	13.60	13.42
		3	3	13.76	13.60	13.42
		6	0	12.69	12.79	12.34
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19965	20175	20385
3MHz	QPSK	1	0	14.28	14.46	14.38
		1	8	14.59	14.64	14.95
		1	14	14.35	14.56	14.61
		8	0	13.67	13.55	13.54
		8	4	13.51	13.51	13.38
		8	7	13.63	13.73	13.35
		15	0	13.48	13.46	13.36
	16QAM	1	0	13.23	13.96	13.62
		1	8	13.40	14.21	14.12
		1	14	13.42	13.67	13.59
		8	0	12.69	12.51	12.50
		8	4	12.63	12.57	12.62
		8	7	12.73	12.76	12.75
		15	0	12.47	12.80	12.58
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				19975	20175	20375
5MHz	QPSK	1	0	14.40	14.49	14.42
		1	12	14.61	14.85	14.83
		1	24	14.40	14.66	14.52
		12	0	13.66	13.41	13.37
		12	6	13.80	13.70	13.67
		12	13	13.60	13.60	13.56
		25	0	13.46	13.67	13.40
	16QAM	1	0	13.39	13.99	13.69
		1	12	13.40	14.29	13.92
		1	24	13.30	13.81	13.60
		12	0	12.60	12.54	12.53
		12	6	12.82	12.64	12.63
		12	13	12.82	12.75	12.59
		25	0	12.48	12.79	12.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20000	20175	20350
10MHz	QPSK	1	0	14.28	14.64	14.39
		1	24	14.59	14.80	14.69
		1	49	14.52	14.47	14.51

		25	0	13.68	13.66	13.60
		25	12	13.75	13.42	13.50
		25	25	13.54	13.51	13.51
		50	0	13.53	13.50	13.56
	16QAM	1	0	13.29	13.92	13.75
		1	24	13.42	14.15	14.02
		1	49	13.17	13.77	13.63
		25	0	12.72	12.55	12.54
		25	12	12.83	12.62	12.78
		25	25	12.81	12.52	12.46
		50	0	12.52	12.75	12.35
Bandwidth	Modulation	RB size	RB offset	Channel 20025	Channel 20175	Channel 20325
15MHz	QPSK	1	0	14.40	14.67	14.52
		1	38	14.72	14.78	14.94
		1	74	14.44	14.50	14.66
		36	0	13.58	13.57	13.52
		36	18	13.77	13.45	13.60
		36	37	13.65	13.61	13.53
		75	0	13.55	13.58	13.61
	16QAM	1	0	13.24	14.00	13.65
		1	38	13.49	14.06	13.88
		1	74	13.36	13.95	13.72
		36	0	12.89	12.75	12.56
		36	18	12.91	12.50	12.75
		36	37	12.67	12.62	12.54
		75	0	12.65	12.53	12.55
Bandwidth	Modulation	RB size	RB offset	Channel 20050	Channel 20175	Channel 20300
20MHz	QPSK	1	0	14.43	14.57	14.50
		1	49	14.66	14.73	14.83
		1	99	14.42	14.56	14.52
		50	0	13.62	13.55	13.52
		50	25	13.66	13.57	13.52
		50	50	13.62	13.58	13.49
		100	0	13.60	13.59	13.46
	16QAM	1	0	13.35	13.85	13.70
		1	49	13.52	14.14	13.99
		1	99	13.31	13.82	13.66
		50	0	12.75	12.65	12.61
		50	25	12.78	12.65	12.66
		50	50	12.78	12.64	12.61
		100	0	12.62	12.66	12.49

7.1.3. LTE Band 5

0	Modulation	RB size	RB offset	Channel	Channel	Channel
				20407	20525	20643
1.4MHz	QPSK	1	0	23.57	23.82	24.04
		1	2	23.91	23.92	24.00
		1	5	23.88	24.03	23.91
		3	0	23.65	23.76	23.97
		3	1	23.96	23.98	24.08
		3	3	23.70	23.92	23.94
		6	0	22.87	23.17	23.21
	16QAM	1	0	23.03	23.21	23.26
		1	2	22.82	23.05	23.04
		1	5	23.03	23.26	23.12
		3	0	22.94	22.76	22.82
		3	1	23.05	23.25	23.17
		3	3	22.69	22.94	23.03
		6	0	21.89	22.00	22.15
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
3MHz	QPSK	1	0	23.51	23.80	24.10
		1	8	23.98	24.16	24.12
		1	14	23.69	24.06	24.01
		8	0	22.66	23.12	23.09
		8	4	22.79	23.17	23.22
		8	7	22.86	23.11	23.14
		15	0	22.88	23.00	23.20
	16QAM	1	0	22.86	22.81	22.85
		1	8	23.02	23.21	23.10
		1	14	22.86	23.16	22.92
		8	0	21.67	22.10	22.16
		8	4	21.92	22.22	22.09
		8	7	22.02	22.06	21.99
		15	0	21.78	22.05	22.32
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
5MHz	QPSK	1	0	23.64	23.85	24.04
		1	12	23.96	23.90	24.24
		1	24	23.75	23.99	24.10
		12	0	22.76	22.93	22.99
		12	6	22.89	23.00	23.14
		12	13	22.92	23.04	23.23
		25	0	22.91	23.21	23.06
	16QAM	1	0	22.85	22.66	22.91
		1	12	22.93	23.20	23.30
		1	24	22.81	23.04	22.89
		12	0	21.81	22.01	22.17
		12	6	21.79	22.10	22.37
		12	13	21.92	21.97	22.07
		25	0	21.83	22.14	22.16
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
10MHz	QPSK	1	0	23.64	23.79	23.96
		1	24	23.91	24.03	24.14
		1	49	23.77	23.94	24.01

		25	0	22.76	23.02	23.10
		25	12	22.89	23.07	23.13
		25	25	22.94	23.11	23.12
		50	0	22.90	23.12	23.12
	16QAM	1	0	22.79	22.79	22.96
		1	24	23.04	23.14	23.25
		1	49	22.83	23.01	23.00
		25	0	21.81	22.13	22.21
		25	12	21.93	22.12	22.23
		25	25	21.95	22.12	22.13
		50	0	21.90	22.06	22.19

7.1.4. LTE Band 7

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				20775	21100	21425
5MHz	QPSK	1	0	16.92	16.99	16.92
		1	12	16.99	16.98	17.24
		1	24	16.79	16.71	16.85
		12	0	16.13	15.89	15.74
		12	6	16.06	15.70	15.95
		12	13	16.07	15.85	15.96
		25	0	15.98	15.76	16.02
	16QAM	1	0	15.83	16.23	16.40
		1	12	16.33	16.42	16.49
		1	24	15.85	16.23	16.40
		12	0	15.08	14.97	14.94
		12	6	14.95	15.06	14.89
		12	13	14.96	14.94	15.05
		25	0	15.05	15.01	14.87
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
10MHz	QPSK	1	0	16.69	17.02	16.85
		1	24	16.99	17.06	17.23
		1	49	16.85	16.87	16.91
		25	0	16.08	15.87	15.89
		25	12	16.05	15.88	15.85
		25	25	16.01	15.92	16.01
		50	0	15.87	16.00	16.01
	16QAM	1	0	15.90	16.43	16.29
		1	24	16.13	16.43	16.36
		1	49	16.06	16.20	16.33
		25	0	15.05	15.01	15.01
		25	12	15.05	14.98	14.92
		25	25	15.06	14.85	14.91
		50	0	14.89	14.96	14.86
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
15MHz	QPSK	1	0	16.70	16.88	16.89
		1	38	17.17	17.08	17.33
		1	74	16.74	16.70	16.91
		36	0	16.12	15.88	15.74
		36	18	15.83	15.71	15.97
		36	37	15.97	15.90	15.87
		75	0	15.79	15.93	16.03
	16QAM	1	0	15.84	16.40	16.45
		1	38	16.13	16.45	16.45
		1	74	16.02	16.07	16.25
		36	0	14.88	14.81	15.02
		36	18	14.97	14.98	14.80
		36	37	14.91	14.81	15.04
		75	0	14.93	14.87	14.91
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
20MHz	QPSK	1	0	16.78	16.92	16.81
		1	49	17.07	16.96	17.19
		1	99	16.75	16.78	16.77

		50	0	15.99	15.86	15.87
		50	25	15.97	15.85	15.91
		50	50	15.98	15.84	15.88
		100	0	15.91	15.90	15.89
	16QAM	1	0	15.95	16.28	16.32
		1	49	16.23	16.48	16.49
		1	99	15.91	16.15	16.26
		50	0	15.02	14.91	14.93
		50	25	15.02	14.94	14.93
		50	50	15.03	14.91	14.91
		100	0	14.95	14.94	14.92

7.1.5. LTE Band 12

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23017	23095	23173
1.4MHz	QPSK	1	0	23.88	23.63	23.79
		1	2	23.95	23.95	23.94
		1	5	23.79	23.89	24.10
		3	0	23.99	23.93	23.80
		3	1	23.88	24.02	24.00
		3	3	23.92	23.92	23.91
		6	0	22.96	23.11	22.96
	16QAM	1	0	22.98	23.08	22.99
		1	2	22.76	23.24	23.03
		1	5	22.91	23.10	22.89
		3	0	22.84	22.80	22.65
		3	1	22.74	23.28	22.85
		3	3	22.62	22.94	22.73
		6	0	21.89	22.11	22.02
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23025	23095	23165
3MHz	QPSK	1	0	23.80	23.83	23.76
		1	8	24.04	24.12	23.88
		1	14	23.93	23.92	24.12
		8	0	22.95	22.85	22.79
		8	4	22.76	22.96	22.78
		8	7	22.93	23.18	23.07
		15	0	22.78	23.12	22.78
	16QAM	1	0	22.75	22.74	22.70
		1	8	22.80	23.09	23.01
		1	14	22.85	23.04	22.91
		8	0	21.81	22.07	22.05
		8	4	21.82	21.99	22.10
		8	7	21.87	22.12	21.91
		15	0	21.88	22.27	22.02
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23035	23095	23155
5MHz	QPSK	1	0	23.99	23.72	23.87
		1	12	23.88	23.85	24.18
		1	24	23.78	23.88	24.11
		12	0	22.82	22.94	22.82
		12	6	22.78	23.08	22.92
		12	13	22.92	23.02	22.94
		25	0	22.85	23.02	23.07
	16QAM	1	0	22.54	22.98	22.85
		1	12	22.89	23.11	22.85
		1	24	22.86	22.92	22.77
		12	0	21.76	22.16	22.09
		12	6	22.09	22.05	22.10
		12	13	22.02	22.08	21.95
		25	0	21.99	22.11	22.08
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23060	23095	23130
10MHz	QPSK	1	0	23.85	23.78	23.82
		1	24	23.93	24.00	24.03
		1	49	23.78	23.84	24.01

		25	0	22.85	22.97	22.90
		25	12	22.86	22.93	22.91
		25	25	22.80	23.14	22.97
		50	0	22.91	23.12	22.93
	16QAM	1	0	22.69	22.85	22.73
		1	24	22.86	23.16	22.97
		1	49	22.72	22.98	22.77
		25	0	21.86	22.08	22.02
		25	12	21.94	22.03	21.99
		25	25	21.89	22.21	21.96
		50	0	21.93	22.24	21.97

7.1.6. LTE Band 17

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23755	23790	23825
5MHz	QPSK	1	0	23.68	23.73	23.94
		1	12	24.01	24.19	24.11
		1	24	23.85	23.85	24.06
		12	0	23.19	23.12	22.96
		12	6	23.15	23.05	23.07
		12	13	23.26	23.15	22.88
		25	0	23.22	23.03	22.88
	16QAM	1	0	22.72	22.89	22.82
		1	12	23.21	22.86	23.14
		1	24	22.79	22.99	22.88
		12	0	22.00	22.00	22.01
		12	6	22.16	21.97	22.12
		12	13	22.19	21.95	21.98
		25	0	22.03	22.14	22.13
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				23780	23790	23800
10MHz	QPSK	1	0	23.81	23.83	23.89
		1	24	24.01	24.05	24.07
		1	49	23.95	23.95	24.00
		25	0	23.05	22.97	22.94
		25	12	23.02	23.02	22.96
		25	25	23.19	23.14	23.00
		50	0	23.09	23.02	22.97
	16QAM	1	0	22.72	22.76	22.96
		1	24	23.06	22.98	23.18
		1	49	22.79	22.84	22.96
		25	0	22.11	22.04	22.04
		25	12	22.02	22.02	21.98
		25	25	22.18	22.10	22.02
		50	0	22.14	22.08	22.06

7.1.7. LTE Band 38

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				37775	38000	38225
5MHz	QPSK	1	0	21.78	21.70	21.50
		1	12	22.15	21.73	21.84
		1	24	21.59	21.39	21.82
		12	0	20.88	20.66	20.64
		12	6	20.95	20.76	20.79
		12	13	20.70	20.61	20.59
		25	0	20.85	20.80	20.69
	16QAM	1	0	20.85	20.45	20.56
		1	12	20.84	20.58	20.64
		1	24	20.44	20.60	20.52
		12	0	19.68	19.82	19.57
		12	6	19.81	19.45	19.82
		12	13	19.81	19.65	19.84
		25	0	19.89	19.76	19.69
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
10MHz	QPSK	1	0	21.82	21.52	21.59
		1	24	21.88	21.91	21.73
		1	49	21.54	21.49	21.61
		25	0	20.70	20.62	20.77
		25	12	20.71	20.73	20.58
		25	25	20.70	20.49	20.78
		50	0	20.80	20.65	20.67
	16QAM	1	0	20.87	20.68	20.37
		1	24	20.80	20.63	20.81
		1	49	20.46	20.57	20.41
		25	0	19.73	19.59	19.60
		25	12	19.87	19.65	19.80
		25	25	19.90	19.60	19.74
		50	0	19.77	19.72	19.81
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
15MHz	QPSK	1	0	21.73	21.81	21.56
		1	38	22.17	21.87	21.82
		1	74	21.69	21.44	21.77
		36	0	20.89	20.78	20.48
		36	18	20.85	20.72	20.65
		36	37	20.84	20.48	20.75
		75	0	20.78	20.71	20.72
	16QAM	1	0	20.75	20.57	20.38
		1	38	20.88	20.75	20.75
		1	74	20.43	20.32	20.61
		36	0	19.75	19.82	19.61
		36	18	19.97	19.45	19.72
		36	37	19.77	19.46	19.64
		75	0	19.90	19.60	19.78
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
20MHz	QPSK	1	0	21.84	21.66	21.53
		1	49	22.03	21.76	21.87
		1	99	21.61	21.52	21.67

		50	0	20.82	20.68	20.63
		50	25	20.82	20.64	20.72
		50	50	20.76	20.59	20.65
		100	0	20.80	20.65	20.65
	16QAM	1	0	20.76	20.60	20.43
		1	49	20.91	20.71	20.75
		1	99	20.52	20.46	20.54
		50	0	19.83	19.67	19.72
		50	25	19.86	19.57	19.74
		50	50	19.77	19.56	19.73
		100	0	19.78	19.65	19.70

7.1.8. LTE Band 40

LTE Band 40(2305-2315)

LTE FDD B40				Conducted Power(dBm)		
Bandwidth (MHz)	Modulation	RB size	RB offset	Channel No.	Channel No.	Channel No.
				38725	38750	38775
5MHz	QPSK	1	0	22.26	21.59	21.26
		1	12	22.42	21.81	21.38
		1	24	21.89	21.42	21.31
		12	0	20.82	20.54	20.43
		12	6	20.95	20.38	20.42
		12	13	20.84	20.7	20.45
		25	0	20.66	20.6	20.26
	16QAM	1	0	20.86	20.37	20.38
		1	12	21.06	20.53	20.5
		1	24	20.67	20.5	20.28
		12	0	19.77	19.57	19.39
		12	6	19.78	19.76	19.33
		12	13	19.83	19.51	19.49
		25	0	19.77	19.76	19.28
Bandwidth (MHz)	Modulation	RB size	RB offset	Channel No.	Channel No.	Channel No.
10MHz	QPSK	1	0	N/A	21.66	N/A
		1	24	N/A	21.89	N/A
		1	49	N/A	21.64	N/A
		25	0	N/A	20.49	N/A
		25	12	N/A	20.38	N/A
		25	25	N/A	20.52	N/A
		50	0	N/A	20.64	N/A
	16QAM	1	0	N/A	20.47	N/A
		1	24	N/A	20.77	N/A
		1	49	N/A	20.31	N/A
		25	0	N/A	19.59	N/A
		25	12	N/A	19.55	N/A
		25	25	N/A	19.61	N/A
		50	0	N/A	19.63	N/A

LTE Band 40(2350-2360)

LTE FDD B40				Conducted Power(dBm)		
Bandwidth (MHz)	Modulation	RB size	RB offset	Channel No.	Channel No.	Channel No.
				39175	39200	39225
5MHz	QPSK	1	0	22.12	21.44	21.34
		1	24	22.16	21.83	21.58
		1	49	21.74	21.61	21.36
		25	0	21	20.53	20.42
		25	12	20.93	20.41	20.48
		25	25	20.79	20.57	20.44
		50	0	20.78	20.51	20.23
	16QAM	1	0	20.81	20.48	20.15
		1	24	20.82	20.75	20.54
		1	49	20.7	20.58	20.23
		25	0	19.81	19.43	19.63
		25	12	19.76	19.68	19.58
		25	25	19.93	19.74	19.47
		50	0	19.8	19.62	19.25
Bandwidth (MHz)	Modulation	RB size	RB offset	Channel No.	Channel No	Channel No.
10MHz	QPSK	1	0	N/A	21.59	N/A
		1	38	N/A	21.74	N/A
		1	74	N/A	21.54	N/A
		36	0	N/A	20.49	N/A
		36	18	N/A	20.5	N/A
		36	37	N/A	20.59	N/A
		75	0	N/A	20.61	N/A
	16QAM	1	0	N/A	20.48	N/A
		1	38	N/A	20.68	N/A
		1	74	N/A	20.46	N/A
		36	0	N/A	19.52	N/A
		36	18	N/A	19.69	N/A
		36	37	N/A	19.63	N/A
		75	0	N/A	19.73	N/A

7.1.1. LTE Band 41

Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				40315	40740	41165
5MHz	QPSK	1	0	21.77	21.66	21.78
		1	12	21.92	21.69	21.79
		1	24	21.63	21.70	21.51
		12	0	20.69	20.86	20.81
		12	6	20.79	20.67	20.62
		12	13	20.89	20.72	20.66
		25	0	20.75	20.75	20.70
	16QAM	1	0	20.59	20.56	20.60
		1	12	20.97	20.85	20.80
		1	24	20.61	20.60	20.49
		12	0	19.58	19.90	19.67
		12	6	19.68	19.87	19.64
		12	13	19.74	19.73	19.61
		25	0	19.65	19.64	19.65
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
10MHz	QPSK	1	0	21.64	21.61	21.67
		1	24	21.84	21.78	21.98
		1	49	21.82	21.44	21.62
		25	0	20.56	20.76	20.86
		25	12	20.82	20.76	20.58
		25	25	20.90	20.71	20.48
		50	0	20.61	20.57	20.73
	16QAM	1	0	20.46	20.66	20.77
		1	24	20.94	20.85	20.69
		1	49	20.74	20.52	20.41
		25	0	19.81	19.75	19.70
		25	12	19.79	19.89	19.77
		25	25	19.74	19.83	19.41
		50	0	19.70	19.73	19.55
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
15MHz	QPSK	1	0	21.81	21.52	21.51
		1	38	21.96	21.93	21.74
		1	74	21.66	21.70	21.58
		36	0	20.54	20.77	20.67
		36	18	20.78	20.64	20.64
		36	37	20.74	20.80	20.65
		75	0	20.84	20.63	20.78
	16QAM	1	0	20.70	20.51	20.72
		1	38	20.89	20.61	20.89
		1	74	20.83	20.40	20.35
		36	0	19.81	19.86	19.79
		36	18	19.74	19.85	19.79
		36	37	19.89	19.69	19.70
		75	0	19.65	19.89	19.69
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
20MHz	QPSK	1	0	21.67	21.57	21.63
		1	49	21.94	21.82	21.84
		1	99	21.76	21.59	21.52

		50	0	20.65	20.73	20.77
		50	25	20.81	20.74	20.70
		50	50	20.78	20.73	20.57
		100	0	20.74	20.69	20.65
	16QAM	1	0	20.56	20.55	20.62
		1	49	20.88	20.75	20.75
		1	99	20.73	20.52	20.46
		50	0	19.67	19.78	19.75
		50	25	19.81	19.80	19.71
		50	50	19.82	19.80	19.56
		100	0	19.73	19.78	19.67

7.2. PEAK TO AVERAGE RADIO

LIMITS

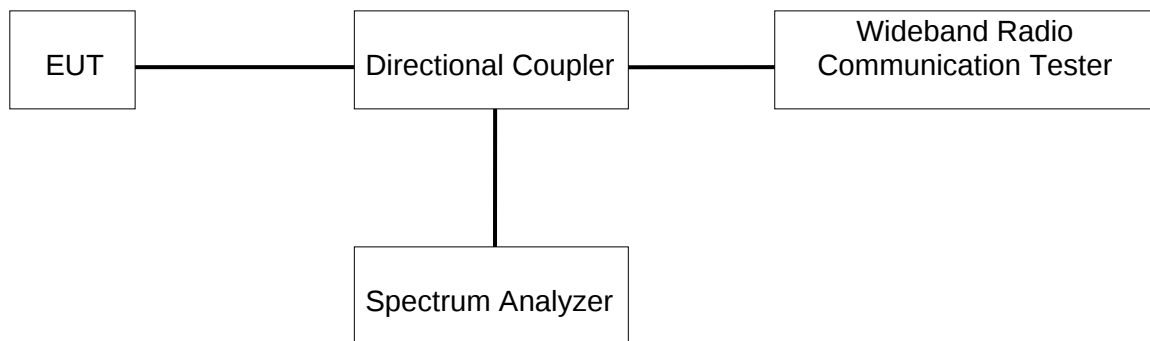
In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

TEST PROCEDURE

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01;

The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The PAR was measured on the Spectrum Analyzer.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	66.1%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

Middle was used to measure as the worst case. The results from all CCDF plots are passed with 13dB peak-to-average power ratio criteria.

Please refer to Appendix LTE.

7.3. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199

LIMITS

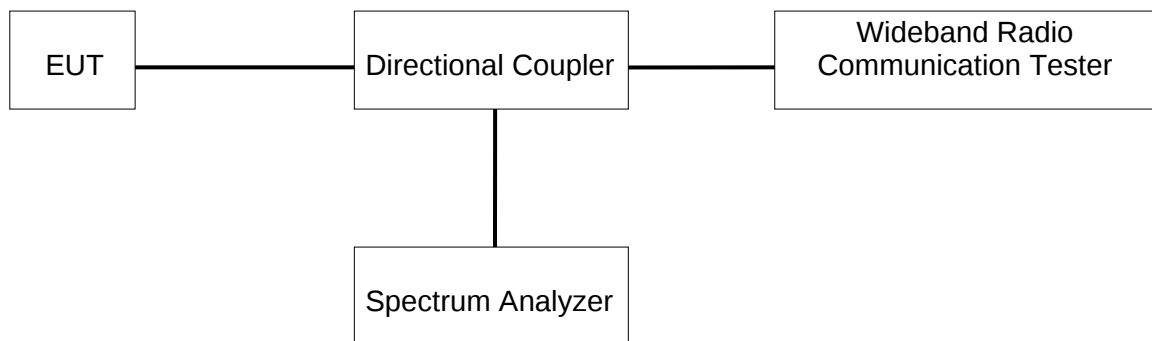
For reporting purposes only.

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

(Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01)

TEST SETUP



TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	66.1%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

There is no limit required and power is the same for low, middle and high channel, therefore, only middle channel was tested.

Please refer to Appendix LTE.

7.4. BAND EDGE EMISSIONS

RULE PART(S)

FCC §2.1051, §22.917, §24.238, §27.53

RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199

LIMITS

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.

TEST PROCEDURE

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01

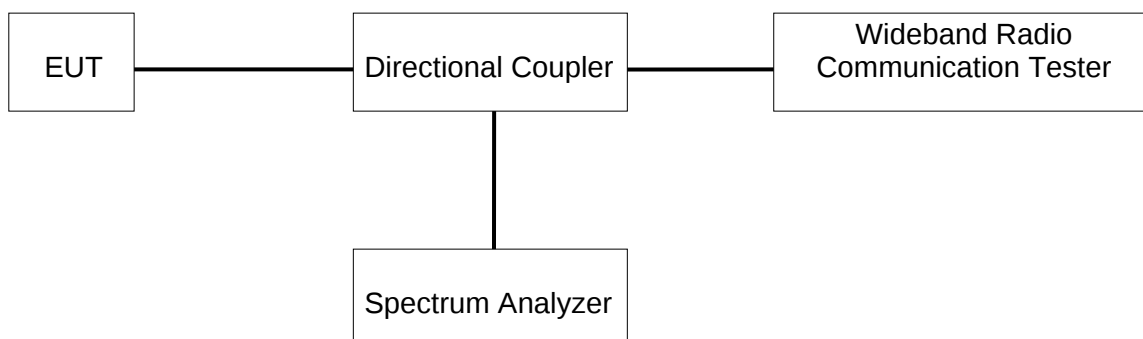
The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

- a) Set the RBW = 1 ~ 5 % of OBW (Typically limited to a minimum RBW of 1% of the OBW)
- b) Set VBW $\geq 3 \times$ RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = Auto;
- e) Detector = RMS;
- f) Ensure that the number of measurement points $\geq 2 \times$ Span/RBW;
- g) Trace mode = Average (100);

Test procedure for LTE Band 7/38/41

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	66.1%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

Please refer to Appendix LTE.

7.5. SPURIOUS EMISSION AT ANTENNA TERMINAL

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53

RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199

LIMITS

FCC: §22.901, §22.917, §24.238

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.

TEST PROCEDURE

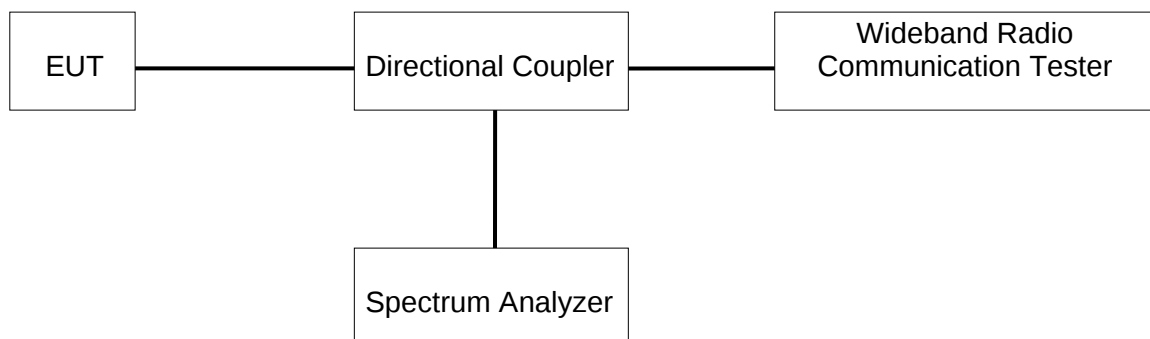
Per KDB 971168 D01 Power Meas License Digital Systems v03r01

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

- a) Set the RBW = 100 kHz for emission below 1GHz and 1MHz for emissions above 1GHz (Tests were performed 1 MHz [Worst case], to sweep 1 time for all frequency range)
- b) Set VBW $\geq 3 \times$ RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = auto couple;
- e) Detector = rms;
- f) Ensure that the number of measurement points = Max (40001);
- g) Trace mode = average (LTE 5), Maxhold (LTE Band7);

Note: Please refer to section 5.4 for bandwidth and RB setting about LTE bands.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.5°C	Relative Humidity	66.1%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

Please refer to Appendix LTE.

7.6. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235, §27.54

RSS-130, RSS-132, RSS-133, RSS-139, RSS-195, RSS-199

LIMITS

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

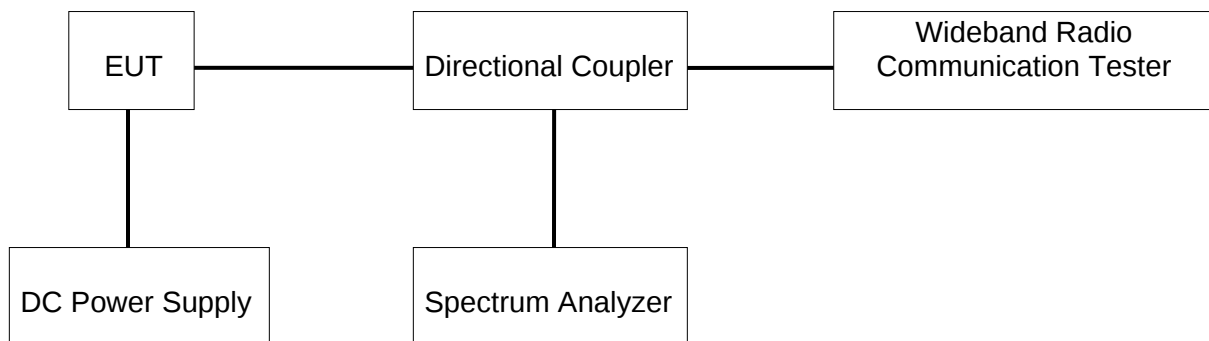
§24.235 and §27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

TEST PROCEDURE

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	45 % - 75 %	/
Atmospheric Pressure	100 kPa ~102 kPa	/
Temperature	T _N (Normal Temperature): 24.5 °C	T _L (Low Temperature): -30 °C
		T _H (High Temperature): 50 °C
Supply Voltage	V _N (Normal Voltage): DC 3.8 V	V _L (Low Voltage): DC 3.2V
		V _H (High Voltage): DC 4.4 V

TEST SETUP



RESULTS

The peak frequency error is recorded (worst-case).

Please refer to Appendix LTE.

8. RADIATED SPURIOUS EMISSIONS

LIMIT

FCC: §27.53 (m), ISSED: RSS-199 LTE (B7/38/41)

At least $55 + 10 \log (P)$ 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.

FCC: §27.50 (c), ISSED: RSS-130 LTE (B17)

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.

FCC: §27.53 (g), ISSED: RSS-132 LTE (B12)

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.

FCC: §24.238(a), ISSED: RSS-133 LTE (B2)

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.

FCC: §22.917(a) LTE, ISSED: RSS-132 (B5)

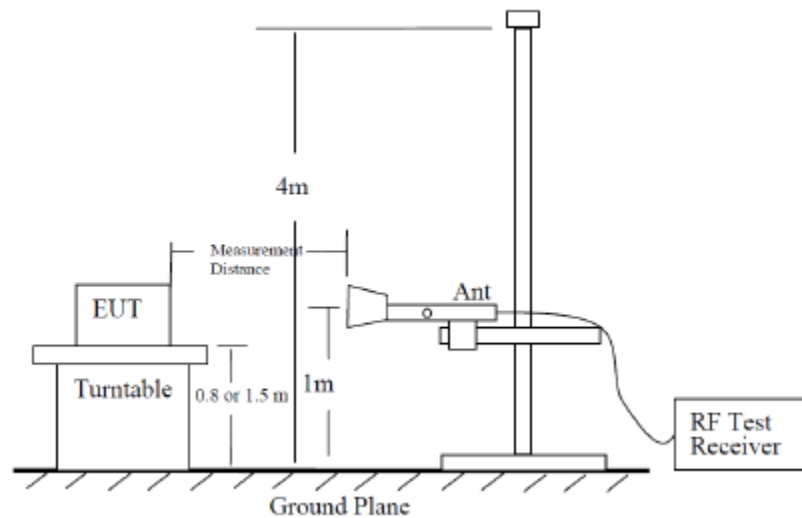
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

FCC: §27.53(h) LTE, ISSED: RSS-139 (B4)

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.

TEST PROCEDURE

Following the test configuration shown below, radiated emissions measured directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in section 5.5.1 of ANSI C63.26-2015. The field strength measurement method by using a test site validated to the requirement of ANSI C63.4 is an alternative method to the substitution measurement.



Radiated Power Measurement Calculation According to ANSI C63.26-2015

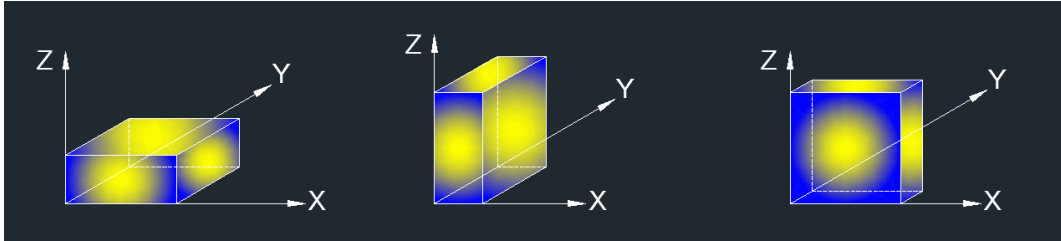
- $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dB}\mu\text{V)} + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- $E \text{ (dB}\mu\text{V/m)} = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$.
- $E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20\log(D) + 104.8$, where D is the measurement distance (in the far field region) in m.
- $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$, where D is the measurement distance (in the far field region) in m.

So, from d)

The measuring distance is at 3m, then $20 \cdot \log(3) = 9.5424$

Then, $\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 9.5424 - 104.8 = E \text{ (dB}\mu\text{V/m)} - 95.2576$

X axis, Y axis, Z axis:



Note: The EUT was investigated in three orthogonal orientations X/Y/Z on ANT0 and ANT3 to determine the worst-case orientation. X orientation is finally determined the worst.

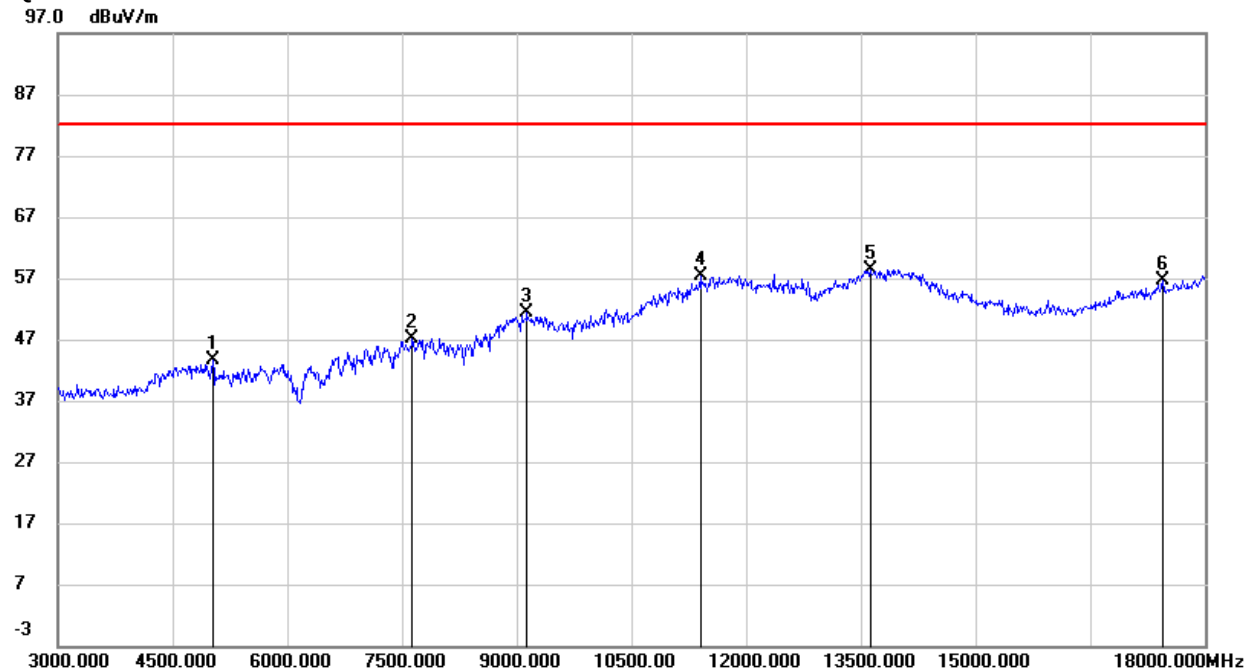
TEST ENVIRONMENT

Temperature	23.8°C	Relative Humidity	64%
Atmosphere Pressure	101kPa	Test Voltage	DC 3.8 V

RESULTS

8.1.1. LTE Band 2

QPSK-20 MHz-Low Channel- Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5025.000	43.23	0.47	43.70	82.25	-38.55	peak
2	7635.000	40.69	6.33	47.02	82.25	-35.23	peak
3	9135.000	40.71	10.55	51.26	82.25	-30.99	peak
4	11400.000	41.20	16.23	57.43	82.25	-24.82	peak
5	13620.000	37.32	21.15	58.47	82.25	-23.78	peak
6	17445.000	33.99	22.54	56.53	82.25	-25.72	peak

QPSK-20 MHz-Low Channel-Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4995.000	43.35	0.43	43.78	82.25	-38.47	peak
2	7590.000	41.14	6.32	47.46	82.25	-34.79	peak
3	8955.000	40.60	10.16	50.76	82.25	-31.49	peak
4	12270.000	38.82	17.77	56.59	82.25	-25.66	peak
5	13650.000	36.05	21.21	57.26	82.25	-24.99	peak
6	17925.000	31.51	25.25	56.76	82.25	-25.49	peak

QPSK-20 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
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1	5835.000	41.73	1.79	43.52	82.25	-38.73	peak
2	7755.000	41.96	6.31	48.27	82.25	-33.98	peak
3	8850.000	40.39	9.39	49.78	82.25	-32.47	peak
4	11415.000	39.66	16.29	55.95	82.25	-26.30	peak
5	13845.000	35.34	21.62	56.96	82.25	-25.29	peak
6	17610.000	31.29	23.38	54.67	82.25	-27.58	peak

QPSK-20 MHz- Mid Channel-Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4800.000	43.68	-0.31	43.37	82.25	-38.88	peak
2	7710.000	41.19	6.33	47.52	82.25	-34.73	peak
3	11070.000	38.72	15.03	53.75	82.25	-28.50	peak
4	12300.000	38.68	17.74	56.42	82.25	-25.83	peak
5	13590.000	35.38	21.09	56.47	82.25	-25.78	peak
6	18000.000	29.60	25.69	55.29	82.25	-26.96	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4785.000	42.37	-0.37	42.00	82.25	-40.25	peak
2	6660.000	39.81	5.02	44.83	82.25	-37.42	peak
3	9135.000	38.99	10.55	49.54	82.25	-32.71	peak
4	11775.000	37.14	17.35	54.49	82.25	-27.76	peak
5	13590.000	35.72	21.09	56.81	82.25	-25.44	peak
6	17985.000	30.93	25.60	56.53	82.25	-25.72	peak

QPSK-20 MHz- High Channel-Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4995.000	43.06	0.43	43.49	82.25	-38.76	peak
2	7755.000	40.38	6.31	46.69	82.25	-35.56	peak
3	9270.000	39.40	10.59	49.99	82.25	-32.26	peak
4	11820.000	38.43	17.47	55.90	82.25	-26.35	peak
5	13575.000	37.07	21.06	58.13	82.25	-24.12	peak
6	17940.000	31.31	25.34	56.65	82.25	-25.60	peak

Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.2. LTE Band 4

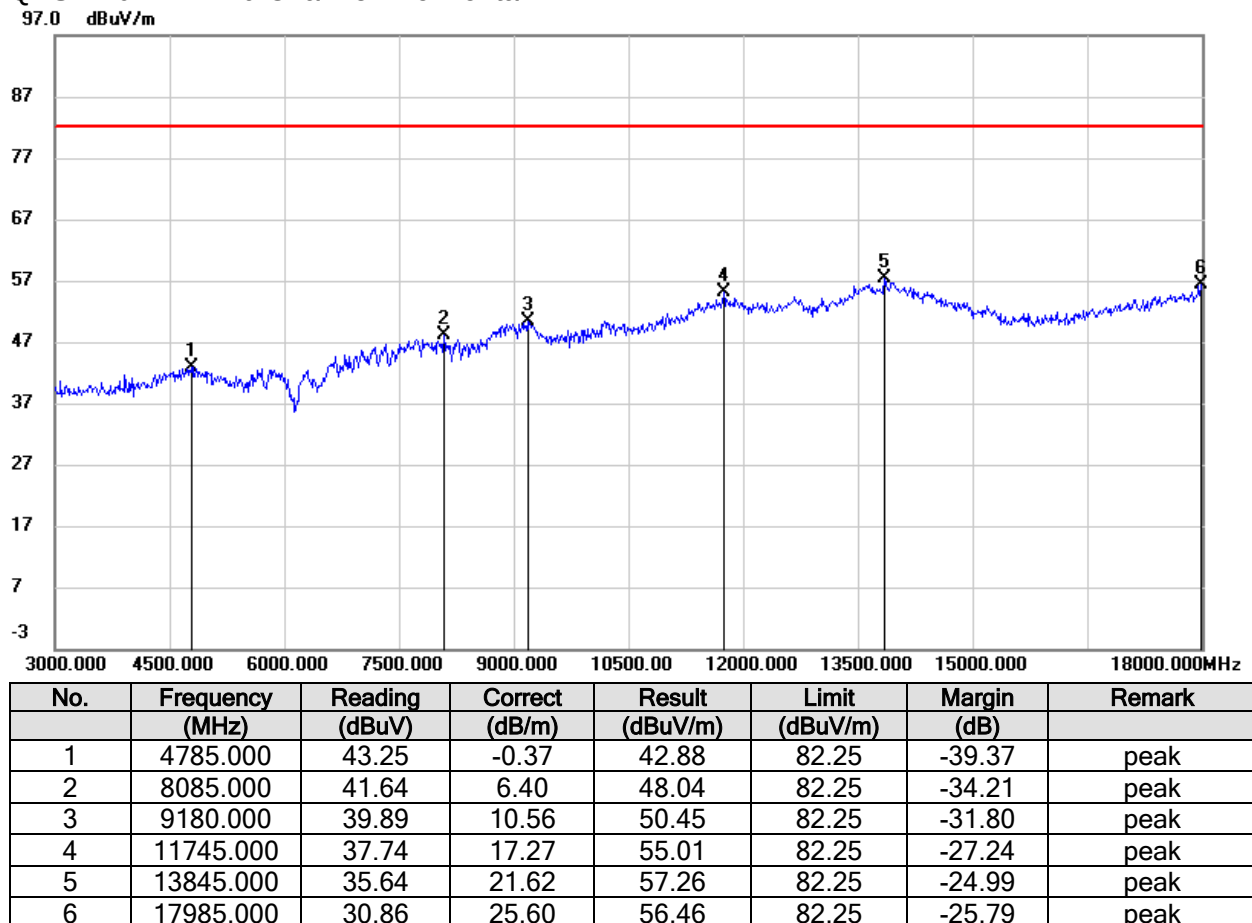
QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4755.000	43.99	-0.48	43.51	82.25	-38.74	peak
2	7500.000	40.31	6.33	46.64	82.25	-35.61	peak
3	11715.000	37.84	17.19	55.03	82.25	-27.22	peak
4	14040.000	34.70	21.79	56.49	82.25	-25.76	peak
5	17610.000	31.64	23.38	55.02	82.25	-27.23	peak
6	17970.000	30.75	25.51	56.26	82.25	-25.99	peak

QPSK-20 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4995.000	42.48	0.43	42.91	82.25	-39.34	peak
2	7185.000	40.22	6.55	46.77	82.25	-35.48	peak
3	8985.000	40.60	10.37	50.97	82.25	-31.28	peak
4	11415.000	37.81	16.29	54.10	82.25	-28.15	peak
5	13635.000	35.56	21.19	56.75	82.25	-25.50	peak
6	17610.000	32.36	23.38	55.74	82.25	-26.51	peak

QPSK-20 MHz-Mid Channel- Horizontal



QPSK-20 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	44.53	-0.03	44.50	82.25	-37.75	peak
2	7605.000	42.07	6.32	48.39	82.25	-33.86	peak
3	9255.000	40.43	10.59	51.02	82.25	-31.23	peak
4	11640.000	39.52	16.98	56.50	82.25	-25.75	peak
5	13680.000	35.67	21.29	56.96	82.25	-25.29	peak
6	17940.000	30.65	25.34	55.99	82.25	-26.26	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5670.000	42.19	1.33	43.52	82.25	-38.73	peak
2	7485.000	41.43	6.34	47.77	82.25	-34.48	peak
3	9225.000	39.80	10.58	50.38	82.25	-31.87	peak
4	11985.000	36.64	17.92	54.56	82.25	-27.69	peak
5	13575.000	35.32	21.06	56.38	82.25	-25.87	peak
6	17430.000	33.19	22.47	55.66	82.25	-26.59	peak

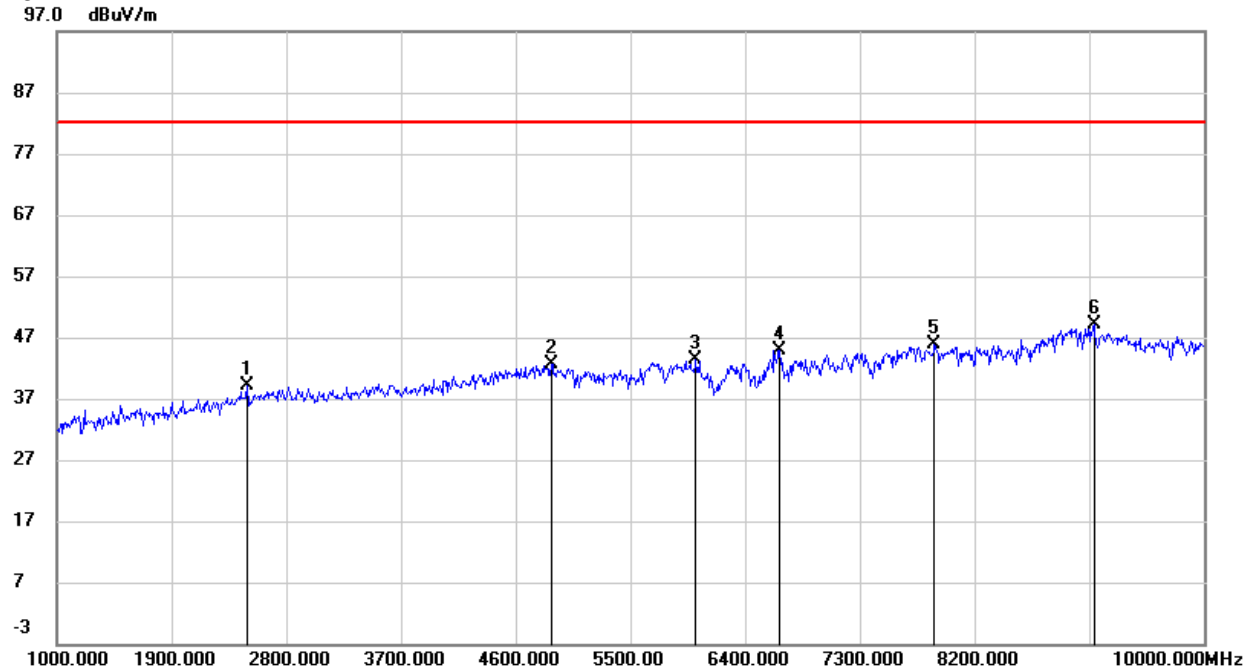
QPSK-20 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5085.000	44.84	0.52	45.36	82.25	-36.89	peak
2	7275.000	40.15	6.49	46.64	82.25	-35.61	peak
3	9150.000	38.99	10.54	49.53	82.25	-32.72	peak
4	12645.000	37.35	17.92	55.27	82.25	-26.98	peak
5	13620.000	35.38	21.15	56.53	82.25	-25.72	peak
6	18000.000	30.33	25.69	56.02	82.25	-26.23	peak

Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.3. LTE Band 5

QPSK-10 MHz-Low Channel- Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2494.000	47.75	-8.52	39.23	82.25	-43.02	peak
2	4879.000	43.28	-0.63	42.65	82.25	-39.60	peak
3	6013.000	41.48	1.90	43.38	82.25	-38.87	peak
4	6670.000	40.42	4.57	44.99	82.25	-37.26	peak
5	7885.000	40.33	5.66	45.99	82.25	-36.26	peak
6	9136.000	39.28	9.80	49.08	82.25	-33.17	peak

QPSK-20 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2413.000	59.10	-8.94	50.16	82.25	-32.09	peak
2	5959.000	40.72	1.74	42.46	82.25	-39.79	peak
3	7183.000	38.17	6.01	44.18	82.25	-38.07	peak
4	7759.000	39.47	5.67	45.14	82.25	-37.11	peak
5	8875.000	38.90	8.86	47.76	82.25	-34.49	peak
6	9253.000	38.21	9.83	48.04	82.25	-34.21	peak

QPSK-10 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2836.000	45.81	-7.48	38.33	82.25	-43.92	peak
2	4663.000	42.87	-1.49	41.38	82.25	-40.87	peak
3	4951.000	42.62	-0.34	42.28	82.25	-39.97	peak
4	6850.000	40.19	5.46	45.65	82.25	-36.60	peak
5	7759.000	39.55	5.67	45.22	82.25	-37.03	peak
6	9145.000	38.68	9.80	48.48	82.25	-33.77	peak

QPSK-10 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2476.000	50.84	-8.61	42.23	82.25	-40.02	peak
2	4438.000	44.19	-2.42	41.77	82.25	-40.48	peak
3	4897.000	44.67	-0.55	44.12	82.25	-38.13	peak
4	7309.000	38.54	5.88	44.42	82.25	-37.83	peak
5	7642.000	39.42	5.69	45.11	82.25	-37.14	peak
6	9199.000	38.26	9.82	48.08	82.25	-34.17	peak

QPSK-10 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1495.000	49.65	-12.74	36.91	82.25	-45.34	peak
2	2494.000	46.92	-8.52	38.40	82.25	-43.85	peak
3	4438.000	43.27	-2.42	40.85	82.25	-41.40	peak
4	5698.000	40.15	0.99	41.14	82.25	-41.11	peak
5	7732.000	39.79	5.68	45.47	82.25	-36.78	peak
6	8947.000	39.68	9.37	49.05	82.25	-33.20	peak

QPSK-10 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1495.000	50.93	-12.74	38.19	82.25	-44.06	peak
2	2494.000	50.92	-8.52	42.40	82.25	-39.85	peak
3	4996.000	43.50	-0.17	43.33	82.25	-38.92	peak
4	6661.000	38.99	4.52	43.51	82.25	-38.74	peak
5	7417.000	38.80	5.78	44.58	82.25	-37.67	peak
6	8938.000	38.31	9.31	47.62	82.25	-34.63	peak

Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.4. LTE Band 7

QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	43.11	0.14	43.25	82.25	-39.00	peak
2	7755.000	40.01	6.31	46.32	82.25	-35.93	peak
3	9135.000	38.68	10.55	49.23	82.25	-33.02	peak
4	11745.000	38.45	17.27	55.72	82.25	-26.53	peak
5	13590.000	37.00	21.09	58.09	82.25	-24.16	peak
6	17970.000	31.56	25.51	57.07	82.25	-25.18	peak

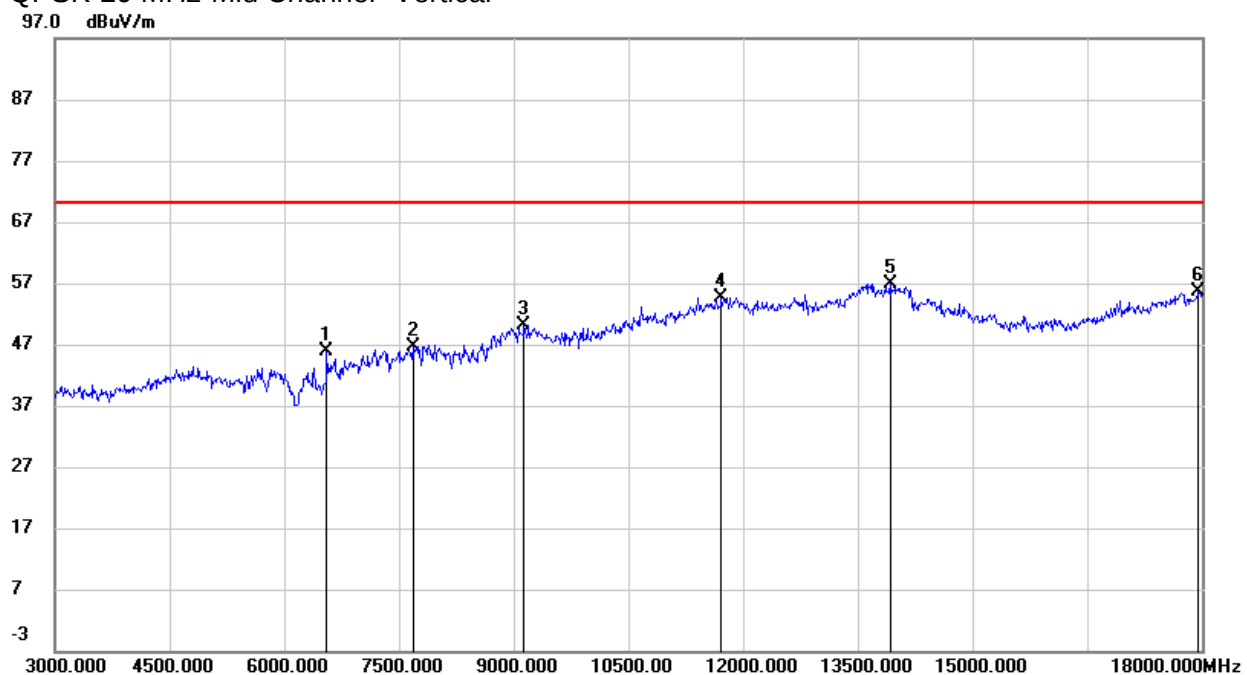
QPSK-20 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7305.000	38.26	6.47	44.73	70.25	-25.52	peak
2	9255.000	37.54	10.59	48.13	70.25	-22.12	peak
3	11025.000	37.26	14.85	52.11	70.25	-18.14	peak
4	11865.000	35.71	17.59	53.30	70.25	-16.95	peak
5	13920.000	33.93	21.79	55.72	70.25	-14.53	peak
6	17970.000	29.48	25.51	54.99	70.25	-15.26	peak

QPSK-20 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4725.000	42.46	-0.59	41.87	70.25	-28.38	peak
2	7020.000	37.28	6.67	43.95	70.25	-26.30	peak
3	8985.000	36.92	10.37	47.29	70.25	-22.96	peak
4	12660.000	36.54	17.95	54.49	70.25	-15.76	peak
5	13860.000	34.07	21.67	55.74	70.25	-14.51	peak
6	17970.000	30.58	25.51	56.09	70.25	-14.16	peak

QPSK-20 MHz-Mid Channel- Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6555.000	41.37	4.49	45.86	70.25	-24.39	peak
2	7680.000	40.29	6.32	46.61	70.25	-23.64	peak
3	9135.000	39.54	10.55	50.09	70.25	-20.16	peak
4	11715.000	37.46	17.19	54.65	70.25	-15.60	peak
5	13920.000	35.20	21.79	56.99	70.25	-13.26	peak
6	17955.000	30.09	25.42	55.51	70.25	-14.74	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4920.000	41.54	0.14	41.68	70.25	-28.57	peak
2	6570.000	41.11	4.57	45.68	70.25	-24.57	peak
3	9330.000	38.09	10.62	48.71	70.25	-21.54	peak
4	11550.000	38.19	16.74	54.93	70.25	-15.32	peak
5	13530.000	35.73	20.96	56.69	70.25	-13.56	peak
6	17655.000	32.52	23.64	56.16	70.25	-14.09	peak

QPSK-20 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4770.000	44.20	-0.43	43.77	70.25	-26.48	peak
2	6570.000	43.58	4.57	48.15	70.25	-22.10	peak
3	9195.000	40.41	10.56	50.97	70.25	-19.28	peak
4	11805.000	38.13	17.43	55.56	70.25	-14.69	peak
5	14100.000	35.17	21.55	56.72	70.25	-13.53	peak
6	17940.000	30.08	25.34	55.42	70.25	-14.83	peak

Note: Limit= -25dBm+95.25=70.25 dBuV/m

8.1.5. LTE Band 12

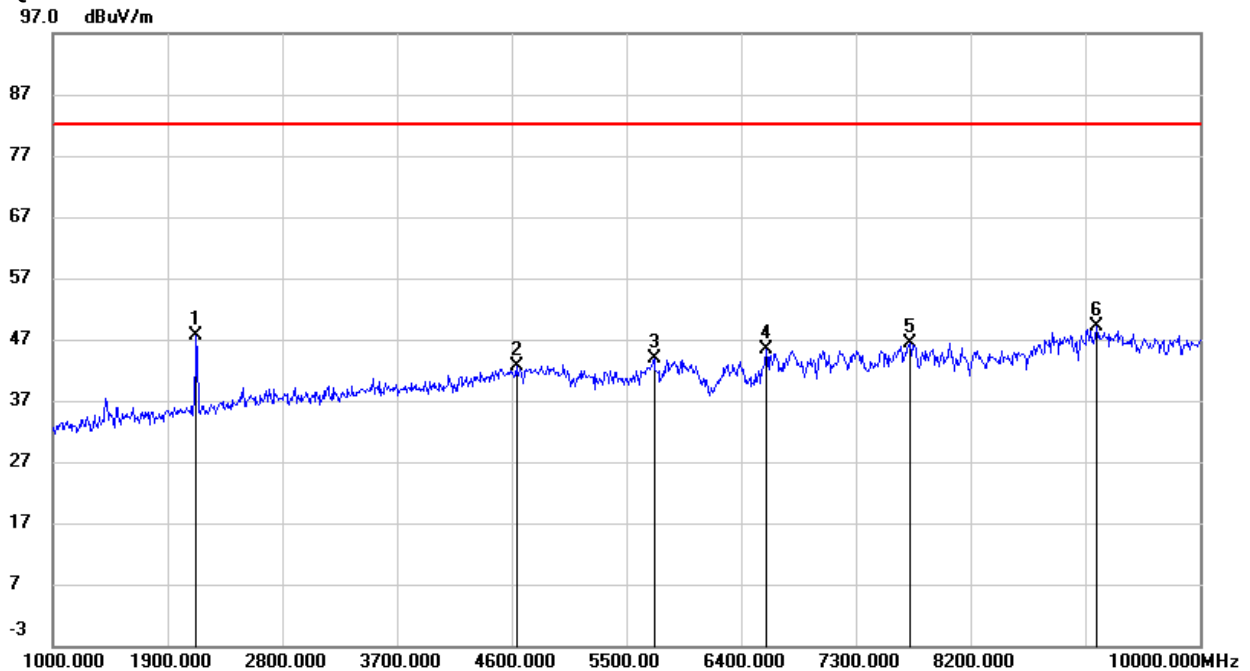
QPSK-10 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1405.000	50.95	-13.15	37.80	82.25	-44.45	peak
2	2116.000	56.11	-10.47	45.64	82.25	-36.61	peak
3	4834.000	42.86	-0.81	42.05	82.25	-40.20	peak
4	7048.000	37.90	6.16	44.06	82.25	-38.19	peak
5	8128.000	40.16	5.80	45.96	82.25	-36.29	peak
6	9073.000	39.01	9.77	48.78	82.25	-33.47	peak

QPSK-10 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2116.000	53.06	-10.47	42.59	82.25	-39.66	peak
2	2494.000	48.85	-8.52	40.33	82.25	-41.92	peak
3	4996.000	42.29	-0.17	42.12	82.25	-40.13	peak
4	7039.000	38.36	6.17	44.53	82.25	-37.72	peak
5	7903.000	40.73	5.66	46.39	82.25	-35.86	peak
6	9352.000	39.05	9.88	48.93	82.25	-33.32	peak

QPSK-10 MHz-Mid Channel- Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2125.000	58.15	-10.42	47.73	82.25	-34.52	peak
2	4636.000	44.16	-1.59	42.57	82.25	-39.68	peak
3	5716.000	42.77	1.04	43.81	82.25	-38.44	peak
4	6598.000	41.05	4.21	45.26	82.25	-36.99	peak
5	7723.000	40.80	5.67	46.47	82.25	-35.78	peak
6	9190.000	39.21	9.81	49.02	82.25	-33.23	peak

QPSK-10 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2125.000	53.88	-10.42	43.46	82.25	-38.79	peak
2	2494.000	49.34	-8.52	40.82	82.25	-41.43	peak
3	4996.000	43.82	-0.17	43.65	82.25	-38.60	peak
4	6670.000	39.90	4.57	44.47	82.25	-37.78	peak
5	7723.000	39.77	5.67	45.44	82.25	-36.81	peak
6	9145.000	38.66	9.80	48.46	82.25	-33.79	peak

QPSK-10 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2134.000	52.18	-10.37	41.81	82.25	-40.44	peak
2	2494.000	55.38	-8.52	46.86	82.25	-35.39	peak
3	4933.000	41.77	-0.42	41.35	82.25	-40.90	peak
4	6670.000	39.09	4.57	43.66	82.25	-38.59	peak
5	7444.000	41.77	5.75	47.52	82.25	-34.73	peak
6	8992.000	38.66	9.68	48.34	82.25	-33.91	peak

QPSK-10 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2134.000	50.66	-10.37	40.29	82.25	-41.96	peak
2	2494.000	49.59	-8.52	41.07	82.25	-41.18	peak
3	4699.000	43.11	-1.35	41.76	82.25	-40.49	peak
4	6805.000	38.27	5.23	43.50	82.25	-38.75	peak
5	7885.000	39.49	5.66	45.15	82.25	-37.10	peak
6	9217.000	38.21	9.83	48.04	82.25	-34.21	peak

Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.6. LTE Band 17

QPSK-10 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2494.000	48.73	-8.52	40.21	82.25	-42.04	peak
2	4996.000	42.05	-0.17	41.88	82.25	-40.37	peak
3	5860.000	40.88	1.45	42.33	82.25	-39.92	peak
4	7039.000	38.09	6.17	44.26	82.25	-37.99	peak
5	7714.000	39.62	5.68	45.30	82.25	-36.95	peak
6	8992.000	38.68	9.68	48.36	82.25	-33.89	peak

QPSK-10 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1495.000	50.98	-12.74	38.24	82.25	-44.01	peak
2	2494.000	50.70	-8.52	42.18	82.25	-40.07	peak
3	4996.000	44.58	-0.17	44.41	82.25	-37.84	peak
4	6670.000	39.27	4.57	43.84	82.25	-38.41	peak
5	7831.000	40.63	5.67	46.30	82.25	-35.95	peak
6	9064.000	38.51	9.76	48.27	82.25	-33.98	peak

QPSK-10 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2494.000	47.62	-8.52	39.10	82.25	-43.15	peak
2	4843.000	43.77	-0.78	42.99	82.25	-39.26	peak
3	6661.000	39.92	4.52	44.44	82.25	-37.81	peak
4	7192.000	39.83	6.00	45.83	82.25	-36.42	peak
5	7822.000	40.74	5.66	46.40	82.25	-35.85	peak
6	8938.000	38.92	9.31	48.23	82.25	-34.02	peak

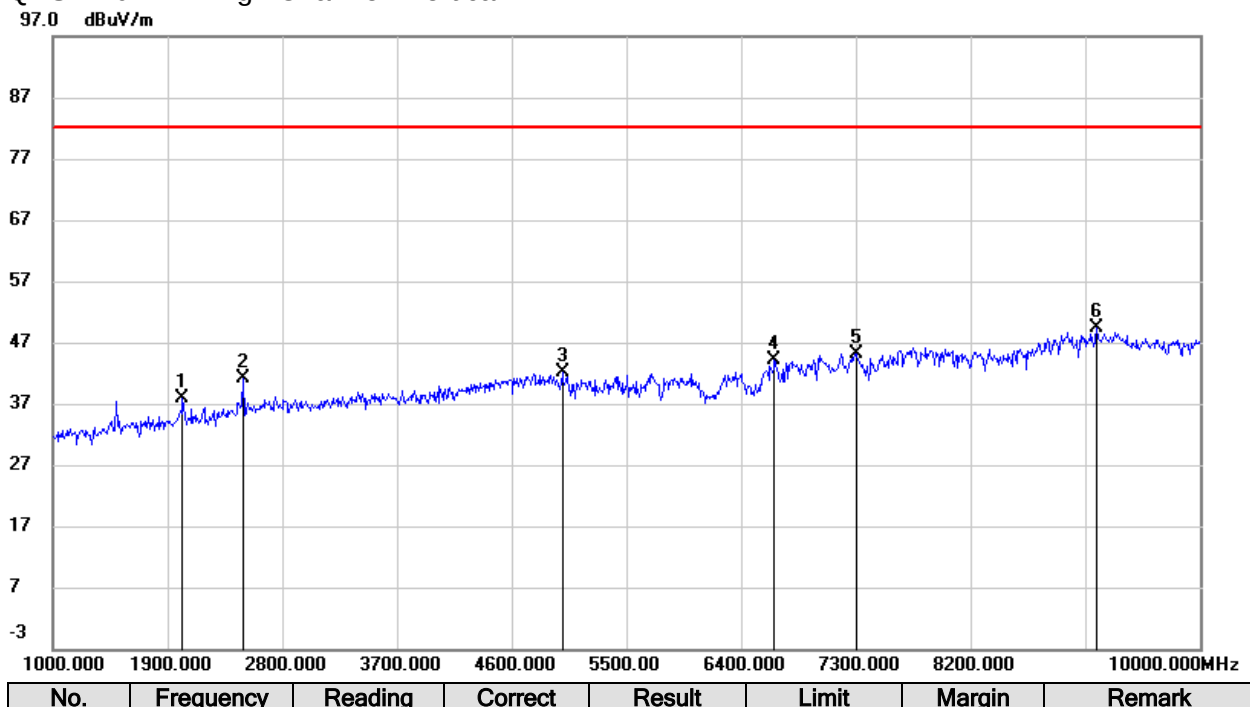
QPSK-10 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2116.000	46.32	-10.47	35.85	82.25	-46.40	peak
2	3628.000	44.93	-5.50	39.43	82.25	-42.82	peak
3	4834.000	43.26	-0.81	42.45	82.25	-39.80	peak
4	7039.000	38.53	6.17	44.70	82.25	-37.55	peak
5	7903.000	40.21	5.66	45.87	82.25	-36.38	peak
6	9190.000	38.43	9.81	48.24	82.25	-34.01	peak

QPSK-10 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1495.000	49.56	-12.74	36.82	82.25	-45.43	peak
2	2494.000	49.57	-8.52	41.05	82.25	-41.20	peak
3	4933.000	43.06	-0.42	42.64	82.25	-39.61	peak
4	6796.000	38.55	5.19	43.74	82.25	-38.51	peak
5	7894.000	40.08	5.66	45.74	82.25	-36.51	peak
6	9136.000	38.98	9.80	48.78	82.25	-33.47	peak

QPSK-10 MHz-High Channel- Vertical



	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	2017.000	48.75	-10.98	37.77	82.25	-44.48	peak
2	2494.000	49.58	-8.52	41.06	82.25	-41.19	peak
3	4996.000	42.31	-0.17	42.14	82.25	-40.11	peak
4	6661.000	39.59	4.52	44.11	82.25	-38.14	peak
5	7309.000	39.32	5.88	45.20	82.25	-37.05	peak
6	9190.000	39.50	9.81	49.31	82.25	-32.94	peak

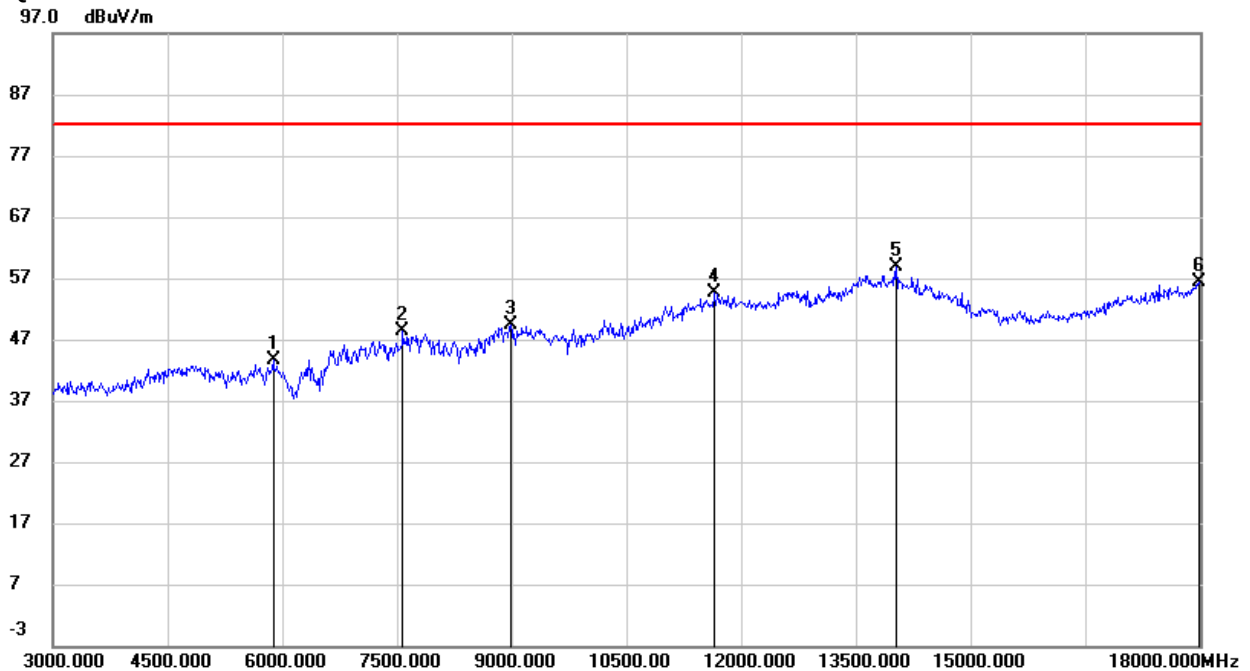
Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.7. LTE Band 38

QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4935.000	42.43	0.20	42.63	82.25	-39.62	peak
2	7755.000	41.01	6.31	47.32	82.25	-34.93	peak
3	9180.000	39.14	10.56	49.70	82.25	-32.55	peak
4	11775.000	37.05	17.35	54.40	82.25	-27.85	peak
5	13665.000	36.14	21.25	57.39	82.25	-24.86	peak
6	17970.000	31.89	25.51	57.40	82.25	-24.85	peak

QPSK-20 MHz-Low Channel- Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5880.000	41.81	1.92	43.73	82.25	-38.52	peak
2	7575.000	42.04	6.32	48.36	82.25	-33.89	peak
3	8985.000	39.04	10.37	49.41	82.25	-32.84	peak
4	11655.000	37.73	17.01	54.74	82.25	-27.51	peak
5	14025.000	36.93	21.86	58.79	82.25	-23.46	peak
6	17985.000	30.77	25.60	56.37	82.25	-25.88	peak

QPSK-20 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4830.000	42.95	-0.20	42.75	82.25	-39.50	peak
2	7170.000	40.14	6.56	46.70	82.25	-35.55	peak
3	9120.000	38.63	10.53	49.16	82.25	-33.09	peak
4	11730.000	36.41	17.22	53.63	82.25	-28.62	peak
5	13860.000	35.78	21.67	57.45	82.25	-24.80	peak
6	17985.000	30.66	25.60	56.26	82.25	-25.99	peak

QPSK-20 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4995.000	42.14	0.43	42.57	82.25	-39.68	peak
2	7755.000	40.76	6.31	47.07	82.25	-35.18	peak
3	9405.000	39.14	10.66	49.80	82.25	-32.45	peak
4	11880.000	37.10	17.63	54.73	82.25	-27.52	peak
5	13920.000	35.07	21.79	56.86	82.25	-25.39	peak
6	17970.000	30.49	25.51	56.00	82.25	-26.25	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5700.000	41.62	1.41	43.03	82.25	-39.22	peak
2	8085.000	42.32	6.40	48.72	82.25	-33.53	peak
3	10860.000	38.33	14.27	52.60	82.25	-29.65	peak
4	11730.000	37.57	17.22	54.79	82.25	-27.46	peak
5	13620.000	35.41	21.15	56.56	82.25	-25.69	peak
6	17850.000	30.79	24.81	55.60	82.25	-26.65	peak

QPSK-20 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5865.000	42.25	1.88	44.13	82.25	-38.12	peak
2	7650.000	40.54	6.33	46.87	82.25	-35.38	peak
3	8910.000	39.02	9.82	48.84	82.25	-33.41	peak
4	11910.000	36.25	17.72	53.97	82.25	-28.28	peak
5	13860.000	34.90	21.67	56.57	82.25	-25.68	peak
6	17940.000	31.48	25.34	56.82	82.25	-25.43	peak

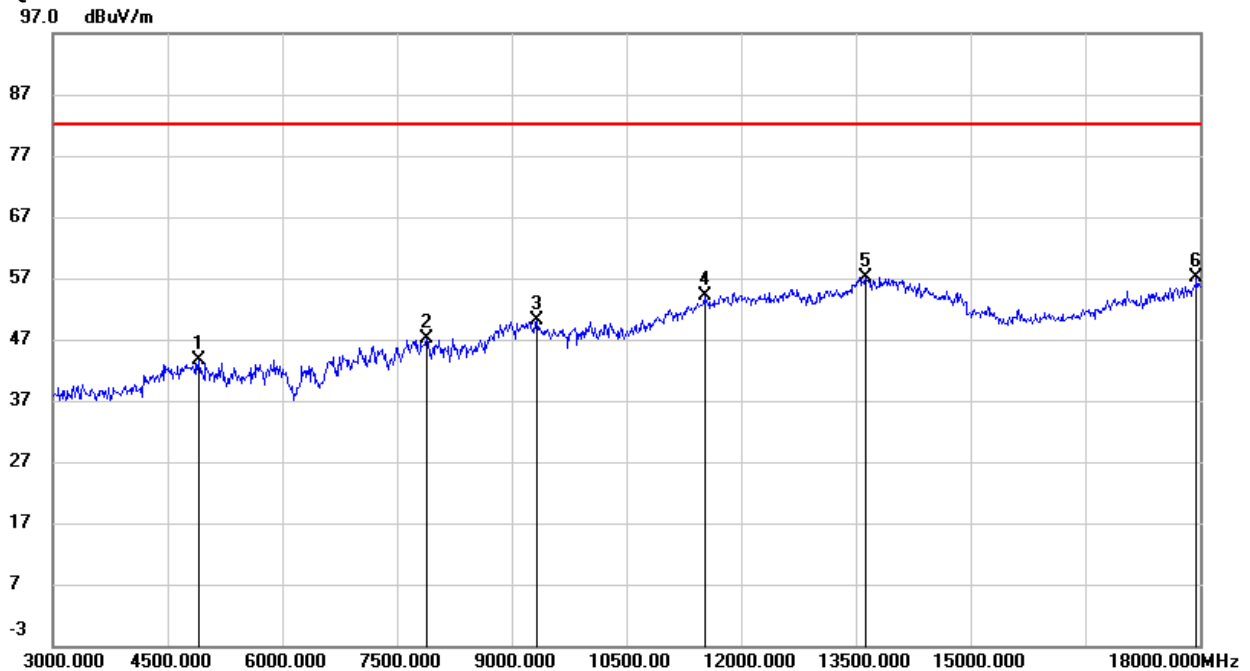
Note: Limit= -25dBm+95.25=70.25 dBuV/m

8.1.8. LTE Band 40

QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4890.000	42.15	0.03	42.18	82.25	-40.07	peak
2	7725.000	39.20	6.32	45.52	82.25	-36.73	peak
3	9060.000	38.83	10.51	49.34	82.25	-32.91	peak
4	11745.000	37.96	17.27	55.23	82.25	-27.02	peak
5	13965.000	35.04	21.89	56.93	82.25	-25.32	peak
6	17970.000	30.59	25.51	56.10	82.25	-26.15	peak

QPSK-20 MHz-Low Channel- Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4905.000	43.49	0.09	43.58	82.25	-38.67	peak
2	7890.000	40.89	6.31	47.20	82.25	-35.05	peak
3	9330.000	39.52	10.62	50.14	82.25	-32.11	peak
4	11520.000	37.47	16.65	54.12	82.25	-28.13	peak
5	13635.000	36.00	21.19	57.19	82.25	-25.06	peak
6	17955.000	31.63	25.42	57.05	82.25	-25.20	peak

QPSK-20 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4665.000	42.95	-0.83	42.12	82.25	-40.13	peak
2	7935.000	39.09	6.32	45.41	82.25	-36.84	peak
3	9060.000	38.22	10.51	48.73	82.25	-33.52	peak
4	11715.000	36.54	17.19	53.73	82.25	-28.52	peak
5	13755.000	34.79	21.45	56.24	82.25	-26.01	peak
6	17940.000	30.86	25.34	56.20	82.25	-26.05	peak

QPSK-20 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4665.000	44.59	-0.83	43.76	82.25	-38.49	peak
2	6660.000	41.69	5.02	46.71	82.25	-35.54	peak
3	9150.000	40.45	10.54	50.99	82.25	-31.26	peak
4	11640.000	37.84	16.98	54.82	82.25	-27.43	peak
5	13770.000	35.55	21.47	57.02	82.25	-25.23	peak
6	17985.000	30.07	25.60	55.67	82.25	-26.58	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	43.30	-0.03	43.27	82.25	-38.98	peak
2	7695.000	40.44	6.32	46.76	82.25	-35.49	peak
3	9240.000	40.60	10.58	51.18	82.25	-31.07	peak
4	11655.000	38.61	17.01	55.62	82.25	-26.63	peak
5	14445.000	36.31	20.14	56.45	82.25	-25.80	peak
6	17955.000	30.52	25.42	55.94	82.25	-26.31	peak

QPSK-20 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7485.000	39.90	6.34	46.24	82.25	-36.01	peak
2	9300.000	38.95	10.61	49.56	82.25	-32.69	peak
3	11295.000	37.41	15.85	53.26	82.25	-28.99	peak
4	12105.000	36.36	17.89	54.25	82.25	-28.00	peak
5	13665.000	34.87	21.25	56.12	82.25	-26.13	peak
6	17955.000	30.60	25.42	56.02	82.25	-26.23	peak

Note: Limit= -13dBm+95.25=82.25 dBuV/m

8.1.9. LTE Band 41

QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4770.000	42.38	-0.43	41.95	70.25	-28.30	peak
2	7035.000	38.88	6.67	45.55	70.25	-24.70	peak
3	9240.000	39.01	10.58	49.59	70.25	-20.66	peak
4	11910.000	37.51	17.72	55.23	70.25	-15.02	peak
5	14085.000	34.97	21.61	56.58	70.25	-13.67	peak
6	17940.000	30.32	25.34	55.66	70.25	-14.59	peak

QPSK-20 MHz-Low Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7500.000	39.68	6.33	46.01	70.25	-24.24	peak
2	9315.000	38.42	10.61	49.03	70.25	-21.22	peak
3	11775.000	36.52	17.35	53.87	70.25	-16.38	peak
4	12810.000	36.46	18.30	54.76	70.25	-15.49	peak
5	13800.000	34.49	21.54	56.03	70.25	-14.22	peak
6	17970.000	29.72	25.51	55.23	70.25	-15.02	peak

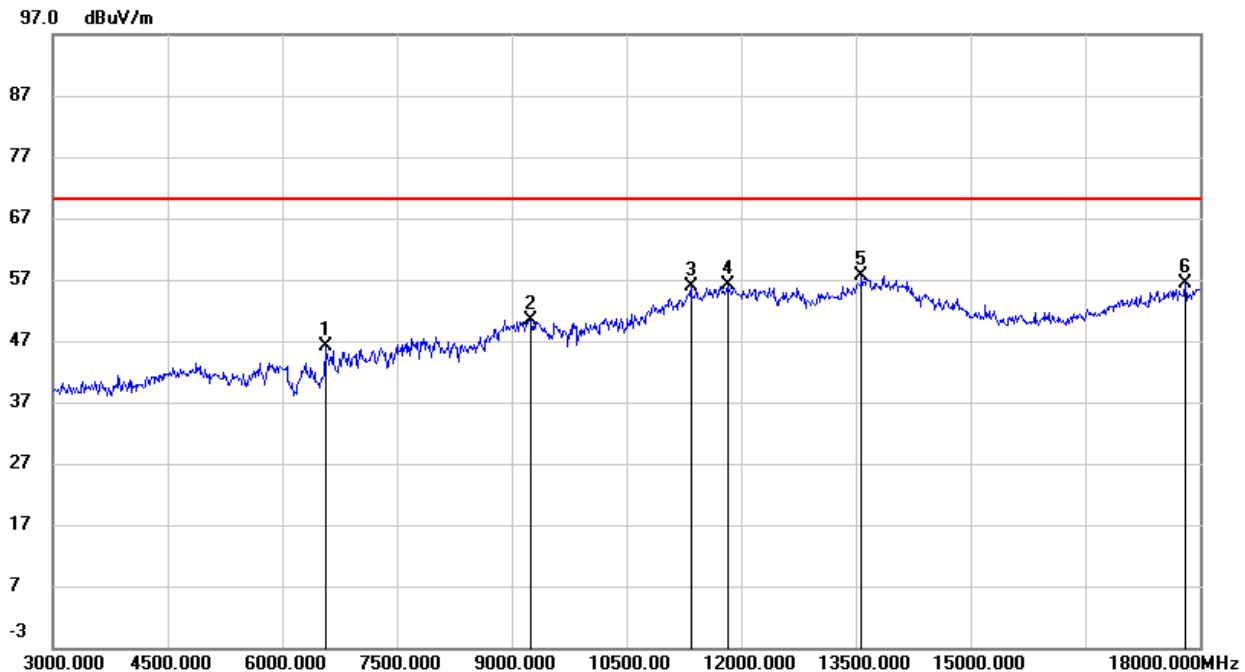
QPSK-20 MHz-Mid Channel- Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4875.000	42.66	-0.03	42.63	70.25	-27.62	peak
2	7710.000	39.96	6.33	46.29	70.25	-23.96	peak
3	9135.000	38.74	10.55	49.29	70.25	-20.96	peak
4	11655.000	37.17	17.01	54.18	70.25	-16.07	peak
5	13920.000	34.63	21.79	56.42	70.25	-13.83	peak
6	17940.000	30.19	25.34	55.53	70.25	-14.72	peak

QPSK-20 MHz-Mid Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7770.000	40.97	6.31	47.28	70.25	-22.97	peak
2	9240.000	38.87	10.58	49.45	70.25	-20.80	peak
3	11640.000	37.05	16.98	54.03	70.25	-16.22	peak
4	12675.000	37.94	17.99	55.93	70.25	-14.32	peak
5	13650.000	35.27	21.21	56.48	70.25	-13.77	peak
6	17940.000	30.36	25.34	55.70	70.25	-14.55	peak

QPSK-20 MHz-High Channel- Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6570.000	41.53	4.57	46.10	70.25	-24.15	peak
2	9255.000	39.85	10.59	50.44	70.25	-19.81	peak
3	11340.000	39.94	16.01	55.95	70.25	-14.30	peak
4	11820.000	38.64	17.47	56.11	70.25	-14.14	peak
5	13575.000	36.56	21.06	57.62	70.25	-12.63	peak
6	17805.000	31.81	24.54	56.35	70.25	-13.90	peak

QPSK-20 MHz-High Channel- Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	6570.000	41.34	4.57	45.91	70.25	-24.34	peak
2	8025.000	41.21	6.34	47.55	70.25	-22.70	peak
3	8925.000	39.30	9.94	49.24	70.25	-21.01	peak
4	11280.000	37.61	15.80	53.41	70.25	-16.84	peak
5	13455.000	35.42	20.71	56.13	70.25	-14.12	peak
6	17940.000	30.80	25.34	56.14	70.25	-14.11	peak

Note: Limit= -25dBm+95.25=70.25 dBuV/m

END OF REPORT