

47 CFR PART 2 47 CFR PART 22 H 47 CFR PART 27 RSS-Gen Issue 5 RSS-132 Issue 4 RSS-195 Issue 2 RSS-199 Issue 4

TEST REPORT

For

GMLINK IoT Gateway

MODEL NUMBER: GBM-NL100

REPORT NUMBER: 4791227002-1-RF-1

ISSUE DATE: Nov. 26, 2024

FCC ID: 2ADAP-GBMNL100 IC: 12478A-GBMNL100

Prepared for

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI Jinji West Rd, Qianshan, Zhuhai, Guangdong,519070, P. R. China

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	Oct. 23, 2024	Initial Issue	\
V1	Nov. 6, 2024	Updated by following CO' comments	James Qin
V2	Nov. 8, 2024	Updated by following CO' comments	James Qin
V3	Nov. 12, 2024	Updated by following CO' comments	James Qin
V4	Nov. 14, 2024	Antenna type updated	James Qin
V5	Nov. 26, 2024	Updated by following CO' comments	James Qin

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 < 47 CFR PART 22 H >< 47 CFR PART 27 > < RSS-Gen Issue 5, RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4 > when < Simple Acceptance > decision rule is applied.



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Address: Jinji West Rd, Qianshan, Zhuhai, Guangdong,519070, P. R.

China

Manufacturer Information

Company Name: GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Address: Jinji West Rd, Qianshan, Zhuhai, Guangdong,519070, P. R.

China

EUT Information

Operations Manager

EUT Name: GMLINK IoT Gateway

LTE category: Cat.1

Model: GBM-NL100
Brand: GREE GMLINK
Sample Received Date: July 3, 2024
Sample Status: Normal
Sample ID: 7311289

Date of Tested: Sep 19, 2024 ~ Oct. 22, 2024

APPLICABLE STANDARDS						
STANDARD	TEST RESULTS					
47 CFR PART 22 H	PASS					
47 CFR PART 27	PASS					
RSS-Gen Issue 5, RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4	PASS					

Prepared By:	Checked By:	
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Shan Lake Branch



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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, 47 CFR PART 2, 47 CFR PART 22 H, 47 CFR PART 27, RSS-Gen Issue 5, RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4.

3. FACILITIES AND ACCREDITATION

	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					
	Delcaration of Conformity (DoC) and Certification rules					
	ISED (Company No.: 21320)					
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.					
Certificate	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.



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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 4.00 dB		
Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz)			
	5.78 dB (1 GHz-18 GHz)		
Radiated Emission (Included Fundamental Emission) (1 GHz to 40 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.



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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name:	GMLINK IoT Gateway
Model:	GBM-NL100

5.2. TEST CHANNEL CONFIGURATION

Band	Test Frequency			Frequency		Frequency
		Bandwidth	NUL	of	NDL	of
Dana	ID	[MHz]	INOL	Uplink	NDL	Downlink
	טו			[MHz]		[MHz]
	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
Band 5	Mid Range	1.4/3/5/10	20525	836.5	2525	881.5
	High Dange	1.4	20643	848.3	2643	893.3
		3	20635	847.5	2635	892.5
	High Range	5	20625	846.5	2625	891.5
		10	20600	844	2600	889

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

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



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Band	Test Frequency ID	Bandwidth [MHz]	EARFCN	Frequency (UL and DL) [MHz]
	Low Range	5	40065	2537.5
		10	40090	2540
		15	40115	2542.5
		20	40140	2545
Band 41	Mid Range	5/10/15/20	40640	2595
	High Range	5	41215	2652.5
		10	41190	2650
		15	41165	2647.5
		20	41140	2645

Note: same spectrum allocated for FCC and ISED.



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5.3. MAXIMUM AVERAGE OUTPUT POWER

LTE Band 5

Part 22H, RSS-132 ISSUE 4								
ERP L	ERP Limit(W)							
Antenna	Gain (dBi)	2.84						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% OBW (kHz)	Emission Designator
1.4	QPSK	824.7	848.3	24.31	25.00	0.316	1093	1M09G7W
1.4	16QAM			23.90	24.59	0.288	1106	1M11D7W
3	QPSK	005.5	847.5	24.46	25.15	0.327	2688	2M69G7W
3	16QAM	825.5		23.40	24.09	0.256	2682	2M68D7W
5	QPSK	000 5	946 F	24.33	25.02	0.318	4481	4M48G7W
5	16QAM	826.5	846.5	23.38	24.07	0.255	4490	4M49D7W
10	QPSK	829	844	24.34	25.03	0.318	8927	8M93G7W
	16QAM	029		23.38	24.07	0.255	5002	5M00D7W

LTE Band 40(2305-2315)

	<u> </u>							
Part 27, RSS	-195 ISSUE 2		_					
EIRP L	_imit(W)	0.25						
Antenna	Gain (dBi)	1.23						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% OBW (kHz)	Emission Designator
5	QPSK	2307.5	2312.5	21.97	23.20	0.209	4500	4M50G7W
5	16QAM	2307.5	2312.5	21.46	22.69	0.186	4495	4M50D7W
10	QPSK	2310.0	2310.0	21.80	23.03	0.201	8996	9M00G7W
10	16QAM	2310.0	2310.0	21.42	22.65	0.184	4984	4M98D7W

LTE Band 40(2350-2360)

Part 27, RSS	-195 ISSUE 2		_					
EIRP L	_imit(W)	0.25						
Antenna	Gain (dBi)	2.18						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% OBW (kHz)	Emission Designator
5	QPSK	2352.5	2357.5	21.72	23.90	0.245	4507	4M51G7W
5	16QAM	2332.5	2337.5	21.38	23.56	0.227	4529	4M53D7W
10	QPSK	2355.0	2355.0	21.71	23.89	0.245	8986	8M99G7W
10	16QAM	2333.0	2333.0	21.36	23.54	0.226	4984	4M98D7W



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LTE Band 41

Part 27, RSS	-199 ISSUE 4							
EIRP L	.imit(W)	2.0						
Antenna	Gain (dBi)	4.94						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% OBW (kHz)	Emission Designator
5	QPSK	2537.5	2652.5	22.77	27.71	0.590	4496	4M50G7W
5	16QAM	2557.5	2002.0	21.83	26.77	0.475	4496	4M50D7W
10	QPSK	2540	2650	22.84	27.78	0.600	8982	8M98G7W
10	16QAM	2540	2000	21.97	26.91	0.491	4984	4M98D7W
15	QPSK	2542.5	2647.5	22.74	27.68	0.586	13504	13M5G7W
15	16QAM	2542.5	2047.5	21.95	26.89	0.489	5111	5M11D7W
20	QPSK	2545	2645	22.77	27.71	0.590	18039	18M0G7W
20	16QAM	2545	2043	21.91	26.85	0.484	5499	5M50D7W



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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 ate 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		



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5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Band	Antenna Type	MAX Antenna Gain (dBi)
Ant0	LTE Band 5	Monopole antenna	2.84
Ant0	LTE Band 40(2305-2315MHz)	Monopole antenna	1.23
Ant0	LTE Band 40(2350-2360 MHz)	Monopole antenna	2.18
Ant0	LTE Band 41	Monopole antenna	4.94

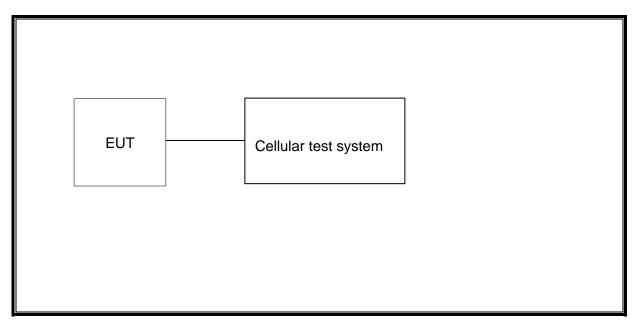
Band	Transmit and Receive Mode	Description
LTE Band 5	⊠1TX, 1RX	Main antenna can be used as transmitting/receiving antenna
LTE Band 40	⊠1TX, 1RX	Main antenna can be used as transmitting/receiving antenna
LTE Band 41	⊠1TX, 1RX	Main antenna can be used as transmitting/receiving antenna

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

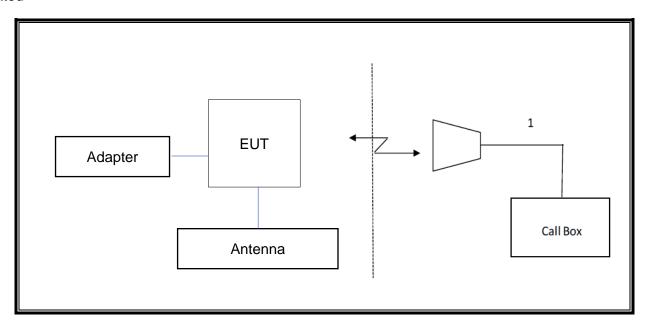


5.7. DESCRIPTION OF TEST SETUP

Conducted



Radiated





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MEASURING INSTRUMENT AND SOFTWARE USED

6. ME	EASURING INSTR	RUMENT AND	SO	FTWA	RE I	USED		
		An	tenna	Termin	al Te	st		
			Ins	strument	t			
Used	Equipment	Manufacturer	Mod	del No.	S	erial No.	Last Cal.	Next Cal.
	Spectrum Analyzer	R&S	FS	SV40	S42	22060001	Oct.12, 2023	Oct.11, 2024
$\overline{\mathbf{V}}$	Spectrum Analyzer	R&S	FS	SV40	S42	22060001	Sep.28, 2024	Sep.27, 2025
V	Wideband Radio Communication Tester	R&S	СМ	W500	1	61166	Oct.12, 2023	Oct.11, 2024
V	Wideband Radio Communication Tester	R&S	СМ	W500	1	61166	Sep.28, 2024	Sep.27, 2025
			S	oftware				
Used	Descript	ion	Ма	ınufactur	er		Name	Version
	Tonsend Cellular	Test System	٦	Γonsend		JS112	20 RF Auto Test System	3.1.46
			Rad	iated Te	st			
			Ins	strument	†			
Used	Equipment	Manufacturer	Mod	del No.	Se	erial No.	Last Cal.	Next Cal.
\checkmark	MXE EMI Receiver	KESIGHT	N9	038A	MY:	56400036	Oct.12, 2023	Oct.11, 2024
abla	Hybrid Log Periodic Antenna	TDK	HLP	-3003C	1	30960	Jun. 28, 2024	Jun. 27, 2027
$\overline{\checkmark}$	Preamplifier	HP	84	147D	294	4A09099	Oct.12, 2023	Oct.11, 2024
abla	EMI Measurement Receiver	R&S	ES	SR26	1	01377	Oct.12, 2023	Oct.11, 2024
	Horn Antenna	TDK	HRI	N-0118	1	30939	April 29, 2022	April 30, 2025
$\overline{\mathbf{V}}$	Horn Antenna	Schwarzbeck	BBH	IA9170		856	Feb 28, 2022	Feb 28, 2025
abla	Preamplifier	TDK	PA-0	2-0118		RS-305- 00067	Oct.12, 2023	Oct.11, 2024
	Preamplifier	TDK	PA	-02-2		RS-307- 00003	Oct.12, 2023	Oct.11, 2024
	Loop antenna	Schwarzbeck	15	519B		80000	Dec.14, 2021	Dec.13, 2024
V	High Pass Filter	Wi	2700	KX10- 0-3000- 0-40SS		23	Oct.12, 2023	Oct.11, 2024
			S	oftware				
Used	Desc	ription		Manuf	actur	er	Name	Version
	Test Software for R	adiated disturban	ce	Fa	rad		EZ-EMC	Ver. UL-3A1



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7. ANTENNA TERMINAL TEST RESULTS

7.1. EFFECTIVE (ISOTROPIC) RADIATED POWER OF TRANSMITTER

RULE PART(S)

FCC: §2.1046, §22.913, §27.50

RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4

LIMITS

22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts. 27.50(a) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

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 = PMeas + GT - LC

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

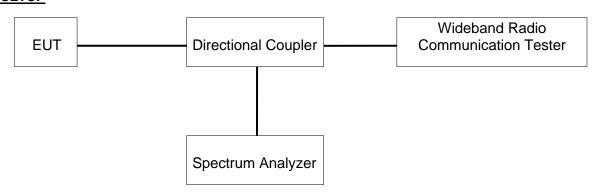
PMeas = measured transmitter output power or PSD, in dBm or dBW;

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	22.9°C	Relative Humidity	62.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 V



RESULTS

7.1.1. LTE Band 5

	LTE FDD B5		Conducted Power(dBm)					
				Channel No.	Channel No.	Channel No.		
Bandwidth				20407	20525	20643		
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)		
,				824.70	836.50	848.30		
				23.96	23.18	24.29		
		1	0		23.16			
	-	1	2 5	23.58 23.12	23.27	23.48 23.40		
	QPSK	3	0	23.76	23.23	24.31		
	QISIN	3	1	23.60	23.29	23.27		
	-	3	3	23.14	22.91	23.32		
		6	0	23.30	22.82	23.92		
1.4		1	0	23.43	22.63	22.60		
		1	2	23.08	22.91	23.90		
	Ī	1	5	23.07	23.21	23.42		
	16QAM	3	0	23.22	22.56	23.86		
		3	1	23.26	22.70	23.87		
		3	3	23.22	23.12	23.50		
		6	0	22.14	21.73	23.01		
				Channel No.	Channel No.	Channel No.		
Bandwidth				20415	20525	20635		
(MHz)	Modulation	Modulation RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)		
						825.50	836.50	847.50
		1	0	23.80	23.14	24.46		
		1	8	23.33	23.27	23.28		
	Ī	1	14	23.21	22.67	23.30		
	QPSK	8	0	23.21	22.66	24.00		
		8	4	23.12	22.92	23.89		
		8	7	23.08	23.09	23.37		
3		15	0	22.50	22.25	22.86		
3		1	0	22.70	23.03	23.40		
		1	8	22.51	22.33	22.28		
		1	14	22.18	22.96	22.50		
	16QAM	8	0	22.11	21.67	23.00		
		8	4	22.20	21.55	23.26		
		8	7	22.15	22.21	22.52		
		15	0	22.00 Channel No.	22.05 Channel No.	22.05 Channel No.		
				20425	20525	20625		
Bandwidth	Modulation	RB size	RB offset					
(MHz)				Fre. (MHz)	Fre. (MHz)	Fre. (MHz)		
				826.50	836.50	846.50		
		1	0	23.93	23.19	24.33		
		1	12	23.52	23.42	23.50		
		1	24	23.25	22.69	23.28		
	QPSK	12	0	23.39	22.61	23.88		
		12	6	23.22	22.92	23.98		
]	12	13	23.33	23.26	23.35		
5		25	0	22.57	22.25	22.85		
-	<u> </u>	1	0	22.66	23.01	23.38		
]	1	12	22.53	22.41	22.38		
	455	1	24	22.34	22.93	22.59		
	16QAM	12	0	22.18	21.65	22.93		
		12	6	22.17	21.55	23.17		
		12 25	13	22.08 22.21	22.02 21.99	22.57 22.16		
		/5	. ()	1///	71.99	//.Tb		



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				20450	20525	20600
Bandwidth (MHz)				Fre. (MHz)	Fre. (MHz)	Fre. (MHz)
(IVII IZ)				829.00	836.50	844.00
		1	0	23.82	23.10	24.34
		1	24	23.48	23.37	23.39
		1	49	23.18	22.81	23.26
	QPSK	25	0	23.34	22.68	23.95
		25	12	23.14	22.77	23.89
		25	25	23.19	23.16	23.40
10		50	0	22.49	22.24	22.86
10		1	0	22.61	22.88	23.38
		1	24	22.48	22.28	22.40
16QAM		1	49	22.33	22.87	22.49
	25	0	22.20	21.76	23.07	
		25	12	22.13	21.70	23.13
		25	25	22.17	22.08	22.42
		50	0	N/A	N/A	N/A



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7.1.2. LTE Band 40

LTE Band 40(2305-2315)

	LTE FDD B40		Conducted Power(dBm)					
				Channel No.	Channel No.	Channel No		
Bandwidth				38725	38750	38775		
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)		
				2307.5	2310.00	2312.5		
		1	0	21.90	21.94	21.79		
		1	12	21.62	21.97	21.69		
		1	24	21.70	21.89	21.73		
	QPSK	12	0	20.11	20.20	20.04		
		12	6	20.23	20.32	20.18		
		12	13	20.35	20.24	20.28		
F		25	0	20.67	20.63	20.68		
5		1	0	21.45	21.24	21.44		
		1	12	21.30	21.25	21.39		
		1	24	21.38	21.46	21.49		
	16QAM	12	0	19.77	19.40	19.77		
		12	6	19.37	19.33	19.97		
		12	13	19.56	19.46	19.62		
		25	0	19.59	19.67	19.69		
				Channel No.	Channel No.	Channel No		
Bandwidth		RB size RE		\	38750	\		
(MHz)	Modulation		RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)		
				\	2310.00	\		
		1	0	N/A	21.50	N/A		
		1	12	N/A	21.80	N/A		
		1	24	N/A	21.52	N/A		
	QPSK	12	0	N/A	21.33	N/A		
		12	6	N/A	21.17	N/A		
		12	13	N/A	21.24	N/A		
40		25	0	N/A	20.37	N/A		
10		1	0	N/A	21.28	N/A		
		1	12	N/A	21.42	N/A		
		1	24	N/A	21.38	N/A		
	16QAM	12	0	N/A	19.72	N/A		
		12	6	N/A	19.51	N/A		
		12	13	N/A	19.55	N/A		
		25	0	N/A	21.50	N/A		



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LTE Band 40(2350-2360)

	LTE FDD B40			Conducted	Power(dBm)	
				Channel No.	Channel No.	Channel No
Bandwidth				39175	39200	39225
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)
				2352.50	2355.00	2357.50
		1	0	21.59	21.64	21.62
		1	12	21.50	21.72	21.30
		1	24	21.61	21.63	21.55
	QPSK	12	0	21.19	21.25	21.36
		12	6	21.01	21.38	21.26
		12	13	21.11	21.22	21.18
5		25	0	21.02	20.99	20.79
5		1	0	21.19	21.25	21.36
		1	12	21.01	21.38	21.26
		1	24	21.11	21.22	21.18
	16QAM	12	0	19.80	19.88	19.73
		12	6	19.72	19.82	19.71
		12	13	19.80	19.88	19.73
		25	0	19.75	19.77	19.76
				Channel No.	Channel No.	Channel No
Bandwidth				\	39200	\
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)
				\	2355.00	\
		1	0	N/A	21.60	N/A
		1	12	N/A	21.71	N/A
		1	24	N/A	21.55	N/A
	QPSK	12	0	N/A	21.31	N/A
		12	6	N/A	21.02	N/A
		12	13	N/A	21.25	N/A
10		25	0	N/A	20.45	N/A
10		1	0	N/A	21.19	N/A
		1	12	N/A	21.36	N/A
		1	24	N/A	21.23	N/A
	16QAM	12	0	N/A	19.59	N/A
		12	6	N/A	19.65	N/A
		12	13	N/A	19.47	N/A
		25	0	N/A	N/A	N/A

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7.1.3. LTE Band 41

	LTE FDD	B41	Co	Conducted Power(dBm)			
			Channel No.	Channel No.	Channel No.		
Bandwidth			55 "	40065	40640	41215	
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)	
				2537.50	2595.00	2652.50	
		1	0	22.75	22.77	22.61	
		1	12	22.60	22.73	22.45	
		1	24	22.41	22.29	22.18	
	QPSK	12	0	21.76	21.74	21.72	
		12	6	21.81	21.61	21.57	
		12	13	21.61	21.52	21.48	
		25	0	21.64	21.59	21.63	
5		1	0	21.51	21.83	21.22	
		1	12	21.69	21.71	21.13	
		1	24	21.72	21.12	21.32	
	16QAM	12	0	20.44	20.65	20.22	
	1000/11/1	12	6	20.42	20.63	20.11	
		12	13	20.58	20.45	20.21	
		25	0	20.24	20.09	20.14	
		23	0	Channel No.	Channel No.	Channel No.	
Bandwidth				40090	40640	41190	
(MHz)	Modulation	RB size	RB offset	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)	
(1411 12)				2540.00	2595.00	2650.00	
		4	0	2540.00			
		1	0		22.78	22.41	
		1	24	22.84	22.66	22.61	
	00014	1	49	22.66	22.34	22.28	
	QPSK	25	0	21.65	21.58	21.68	
		25	12	21.88	21.88	21.76	
		25	25	21.65	21.63	21.42	
10		50	0	21.63	21.71	21.72	
		1	0	21.52	21.80	21.13	
	16QAM	1	24	21.82	21.47	21.27	
		1	49	21.69	21.15	21.97	
		25	0	20.67	20.75	20.13	
		25	12	20.51	20.44	19.96	
		25	25	20.57	20.45	20.18	
		50	0	N/A	N/A	N/A	
				Channel No.	Channel No.	Channel No.	
Bandwidth	Modulation	RB size	RB offset	40115	40640	41165	
(MHz)		. 1.5 5.25	5 0.1301	Fre. (MHz)	Fre. (MHz)	Fre. (MHz)	
				2542.50	2595.00	2647.50	
		1	0	22.72	22.74	22.41	
		1	38	22.65	22.64	22.53	
		1	74	22.50	22.23	22.41	
	QPSK	36	0	21.76	21.87	21.80	
		36	18	21.76	21.68	21.73	
		36	37	21.67	21.49	21.43	
15		75	0	21.59	21.73	21.62	
10		1	0	21.56	21.95	21.06	
		1	38	21.62	21.72	21.08	
		1	74	21.69	21.19	21.90	
	16QAM	36	0	N/A	N/A	N/A	
		36	18	N/A	N/A	N/A	
		36	37	N/A	N/A	N/A	
		75	0	N/A	N/A	N/A	
	Modulation	RB size	RB offset	Channel No.	Channel No.	Channel No.	



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						•
Bandwidth				40140	40640	41140
(MHz)				Fre. (MHz)	Fre. (MHz)	Fre. (MHz)
(IVII IZ)				2545.00	2595.00	2645.00
		1	0	22.63	22.77	22.51
		1	49	22.72	22.58	22.56
		1	99	22.56	22.21	22.32
	QPSK	50	0	21.77	21.73	21.68
		50	25	21.75	21.73	21.70
		50	50	21.68	21.50	21.57
20		100	0	21.71	21.59	21.61
20		1	0	21.62	21.80	21.17
		1	49	21.74	21.61	21.15
		1	99	21.59	21.25	21.91
	16QAM	50	0	N/A	N/A	N/A
		50	25	N/A	N/A	N/A
		50	50	N/A	N/A	N/A
		100	0	N/A	N/A	N/A



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7.2. PEAK TO AVERAGE RADIO

LIMITS

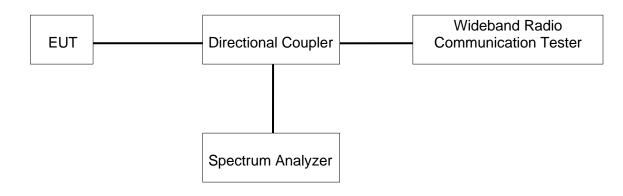
In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

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	22.9°C	Relative Humidity	62.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 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.



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OCCUPIED BANDWIDTH 7.3.

RULE PART(S)

FCC: §2.1049

RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4

LIMITS

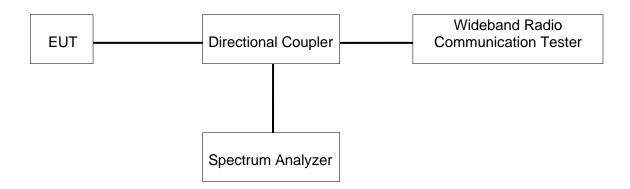
For reporting purposes only.

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	22.9°C	Relative Humidity	62.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 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.



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BAND EDGE EMISSIONS 7.4.

RULE PART(S)

FCC §2.1051, §22.917, §27.53 RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4

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.

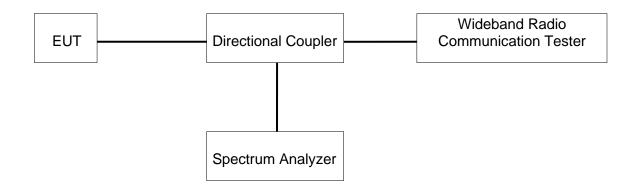
- a) Set the RBW = 1 ~ 5 % of OBW (Typically limited to a minimum RBW of 1% of the OBW)
- b) Set VBW ≥ 3 × RBW;
- c) Set span ≥ 1.5 times the OBW;
- d) Sweep time = Auto;
- e) Detector = RMS;
- f) Ensure that the number of measurement points ≥ 2*Span/RBW;
- g) Trace mode = Average (100);

Test procedure for LTE Band 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.

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TEST SETUP



TEST ENVIRONMENT

Temperature	22.9°C	Relative Humidity	62.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 V

RESULTS

Please refer to Appendix LTE.

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7.5. SPURIOUS EMISSION AT ANTENNA TERMINAL

RULE PART(S)

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

RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4

LIMITS

FCC: §22.901, §22.917

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

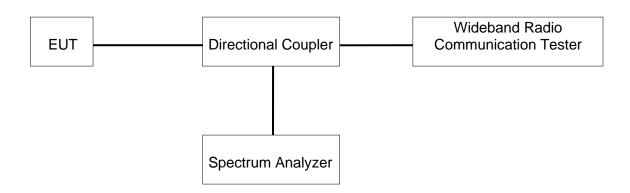
Per KDB 971168 D01 Power Meas License Digital Systems v03r01

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 × 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

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Temperature	22.9°C	Relative Humidity	62.8%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 V

RESULTS

Please refer to Appendix LTE.

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7.6. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §27.54

RSS-132 ISSUE 4, RSS-195 ISSUE 2, RSS-199 ISSUE 4

LIMITS

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

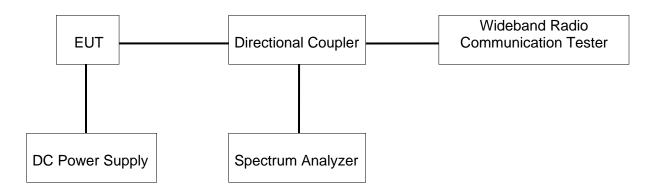
§27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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	/		
Tomporatura	T _N (Normal Temperature):	T _L (Low Temperature): -30 °C		
Temperature	24.5 °C	T _H (High Temperature): 50 °C		
Cupply Voltage	V _N (Normal Voltage):	V _L (Low Voltage): DC 20.4V		
Supply Voltage	DC 24 V	V _H (High Voltage): DC 27.6 V		

TEST SETUP



RESULTS

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

Please refer to Appendix LTE.



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8. RADIATED SPURIOUS EMISSIONS

LIMIT

FCC: §27.53 (m), ISED: RSS-195 ISSUE 2 LTE (40), RSS-199 ISSUE 4 LTE (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: §22.917(a) LTE, ISED: RSS-132 ISSUE 4 (B5)

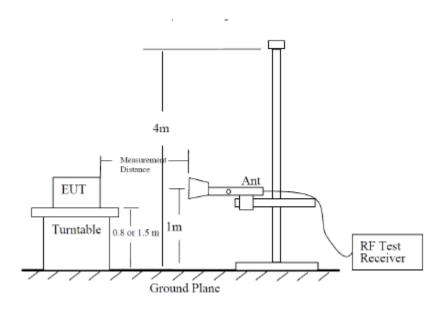
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 10g (P) dB.



TEST PROCEDURE

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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

- a) E $(dB\mu V/m)$ = Measured amplitude level $(dB\mu V)$ + Cable Loss (dB)+ Antenna Factor (dB/m).
- b) E (dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).
- c) E (dBµV/m) = EIRP (dBm) -- 20l0g(D) + 104.8, where D is the measurement distance (in the far field region) in m.
- d) EIRP (dBm) = E (dB μ V/m) + 20l0g(D) 104.8, where D is the measurement distance (in the far field region) in m.

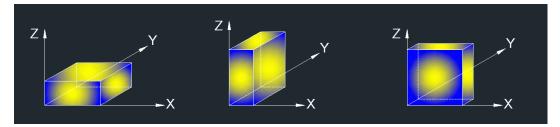
So, from d)

The measuring distance is at 3m, then 20*Log(3) = 9.5424

Then, EIRP (dBm) = E (dB μ V/m) + 9.5424 - 104.8 = E (dB μ 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

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Temperature	22.6°C	Relative Humidity	61%
Atmosphere Pressure	101kPa	Test Voltage	DC 24 V

RESULTS

8.1.1. LTE Band 5

QPSK-10 MHz-Low Channel- Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1657.000	59.18	-10.02	49.16	82.25	-33.09	peak
2	2332.000	51.22	-8.74	42.48	82.25	-39.77	peak
3	4141.000	51.59	-2.66	48.93	82.25	-33.32	peak
4	6004.000	40.63	2.70	43.33	82.25	-38.92	peak
5	7345.000	38.77	6.94	45.71	82.25	-36.54	peak
6	9325.000	38.56	11.45	50.01	82.25	-32.24	peak

QPSK-10 MHz-Low Channel- Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1657.000	65.16	-9.67	55.49	82.25	-26.76	peak
2	2512.000	59.87	-7.24	52.63	82.25	-29.62	peak
3	4141.000	61.35	-1.62	59.73	82.25	-22.52	peak
4	5860.000	40.92	3.35	44.27	82.25	-37.98	peak
5	7282.000	38.36	7.56	45.92	82.25	-36.33	peak
6	9712.000	38.11	12.02	50.13	82.25	-32.12	peak

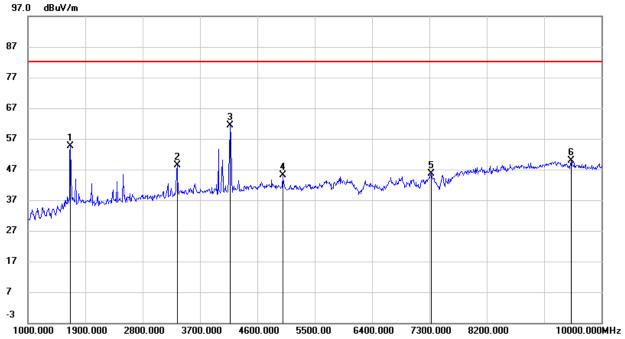
QPSK-10 MHz-Mid Channel- Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1666.000	58.40	-9.98	48.42	82.25	-33.83	peak
2	2539.000	51.97	-7.94	44.03	82.25	-38.22	peak
3	4177.000	51.76	-2.54	49.22	82.25	-33.03	peak
4	6004.000	40.76	2.70	43.46	82.25	-38.79	peak
5	7705.000	39.76	7.30	47.06	82.25	-35.19	peak
6	9334.000	38.30	11.47	49.77	82.25	-32.48	peak

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QPSK-10 MHz-Mid Channel- Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1666.000	64.13	-9.62	54.51	82.25	-27.74	peak
2	3340.000	51.77	-3.31	48.46	82.25	-33.79	peak
3	4177.000	62.86	-1.51	61.35	82.25	-20.90	peak
4	4996.000	43.95	1.20	45.15	82.25	-37.10	peak
5	7327.000	38.05	7.57	45.62	82.25	-36.63	peak
6	9523.000	38.10	11.87	49.97	82.25	-32.28	peak

QPSK-10 MHz-High Channel- Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1684.000	56.05	-9.93	46.12	82.25	-36.13	peak
2	2494.000	50.98	-8.11	42.87	82.25	-39.38	peak
3	4204.000	48.99	-2.46	46.53	82.25	-35.72	peak
4	6004.000	40.12	2.70	42.82	82.25	-39.43	peak
5	7048.000	39.07	6.38	45.45	82.25	-36.80	peak
6	9280.000	38.56	11.35	49.91	82.25	-32.34	peak

QPSK-10 MHz-High Channel- Vertical

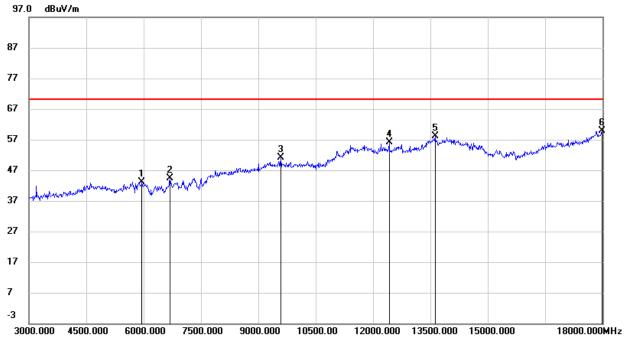
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1684.000	60.97	-9.53	51.44	82.25	-30.81	peak
2	3376.000	51.66	-3.17	48.49	82.25	-33.76	peak
3	4204.000	57.73	-1.44	56.29	82.25	-25.96	peak
4	4996.000	43.00	1.20	44.20	82.25	-38.05	peak
5	7669.000	37.85	7.72	45.57	82.25	-36.68	peak
6	9235.000	38.98	11.47	50.45	82.25	-31.80	peak

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

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8.1.2. LTE Band 40(2305-2315MHz)

QPSK-10 MHz-Mid Channel- Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5955.000	39.98	3.15	43.13	70.25	-27.12	peak
2	6690.000	38.89	5.52	44.41	70.25	-25.84	peak
3	9585.000	38.28	12.73	51.01	70.25	-19.24	peak
4	12420.000	37.07	19.03	56.10	70.25	-14.15	peak
5	13620.000	35.63	22.49	58.12	70.25	-12.13	peak
6	17985.000	30.48	29.29	59.77	70.25	-10.48	peak

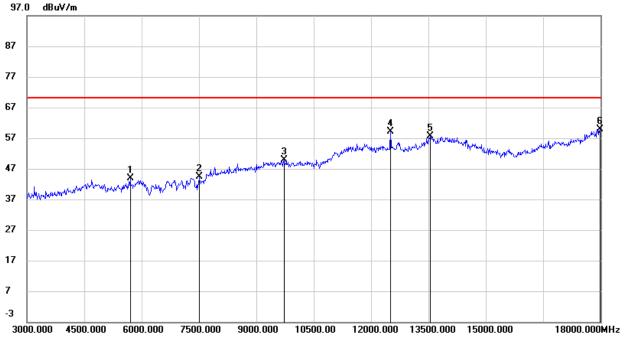
QPSK-10 MHz-Mid Channel- Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4620.000	44.12	0.95	45.07	70.25	-25.18	peak
2	7350.000	37.68	7.78	45.46	70.25	-24.79	peak
3	9585.000	37.27	12.61	49.88	70.25	-20.37	peak
4	12690.000	37.20	18.18	55.38	70.25	-14.87	peak
5	14235.000	34.46	21.97	56.43	70.25	-13.82	peak
6	16875.000	33.37	24.85	58.22	70.25	-12.03	peak

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8.1.3. LTE Band 40(2350-2360MHz)

QPSK-10 MHz-Mid Channel- Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5700.000	41.10	2.66	43.76	70.25	-26.49	peak
2	7500.000	37.01	7.44	44.45	70.25	-25.80	peak
3	9720.000	36.79	13.08	49.87	70.25	-20.38	peak
4	12510.000	40.12	18.94	59.06	70.25	-11.19	peak
5	13545.000	35.36	22.37	57.73	70.25	-12.52	peak
6	17985.000	30.65	29.29	59.94	70.25	-10.31	peak

QPSK-10 MHz-Mid Channel- Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4695.000	43.73	1.25	44.98	70.25	-25.27	peak
2	7305.000	37.51	7.75	45.26	70.25	-24.99	peak
3	9225.000	38.16	11.34	49.50	70.25	-20.75	peak
4	12615.000	36.27	18.06	54.33	70.25	-15.92	peak
5	14445.000	34.47	21.46	55.93	70.25	-14.32	peak
6	17265.000	32.94	25.14	58.08	70.25	-12.17	peak

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



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8.1.4. LTE Band 41

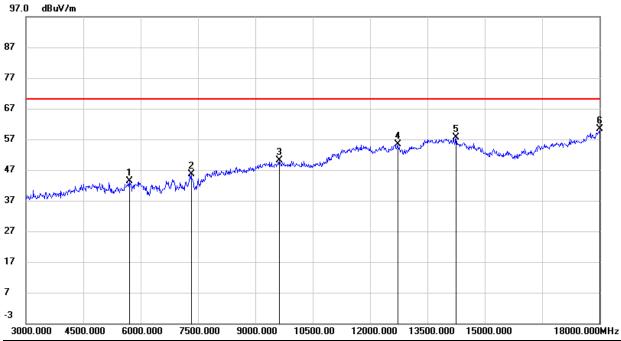
QPSK-20 MHz-Low Channel- Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5865.000	39.83	2.98	42.81	70.25	-27.44	peak
2	7500.000	39.35	7.44	46.79	70.25	-23.46	peak
3	10140.000	36.96	13.28	50.24	70.25	-20.01	peak
4	11340.000	37.32	17.46	54.78	70.25	-15.47	peak
5	13590.000	35.40	22.45	57.85	70.25	-12.40	peak
6	18000.000	29.99	29.44	59.43	70.25	-10.82	peak

QPSK-20 MHz-Low Channel- Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5895.000	39.92	4.07	43.99	70.25	-26.26	peak
2	7305.000	38.32	7.75	46.07	70.25	-24.18	peak
3	9255.000	39.34	11.44	50.78	70.25	-19.47	peak
4	12270.000	36.89	17.93	54.82	70.25	-15.43	peak
5	14010.000	34.41	22.00	56.41	70.25	-13.84	peak
6	17655.000	32.29	25.67	57.96	70.25	-12.29	peak

QPSK-20 MHz-Mid Channel- Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5700.000	40.74	2.66	43.40	70.25	-26.85	peak
2	7320.000	38.39	7.12	45.51	70.25	-24.74	peak
3	9630.000	37.28	12.86	50.14	70.25	-20.11	peak
4	12720.000	36.01	19.28	55.29	70.25	-14.96	peak
5	14250.000	34.73	22.89	57.62	70.25	-12.63	peak
6	18000.000	30.99	29.44	60.43	70.25	-9.82	peak

QPSK-20 MHz-Mid Channel- Vertical

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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark					
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)						



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1	5715.000	41.32	3.80	45.12	70.25	-25.13	peak
2	7335.000	37.80	7.77	45.57	70.25	-24.68	peak
3	9480.000	37.63	12.28	49.91	70.25	-20.34	peak
4	11865.000	37.50	17.52	55.02	70.25	-15.23	peak
5	13815.000	35.15	21.18	56.33	70.25	-13.92	peak
6	16905.000	33.25	24.88	58.13	70.25	-12.12	peak

QPSK-20 MHz-High Channel- Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	4695.000	42.53	0.23	42.76	70.25	-27.49	peak
2	6540.000	39.71	4.96	44.67	70.25	-25.58	peak
3	9375.000	38.26	11.78	50.04	70.25	-20.21	peak
4	12570.000	36.59	18.97	55.56	70.25	-14.69	peak
5	13830.000	35.22	22.88	58.10	70.25	-12.15	peak
6	18000.000	30.58	29.44	60.02	70.25	-10.23	peak

QPSK-20 MHz-High Channel- Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	5685.000	40.53	3.76	44.29	70.25	-25.96	peak
2	7350.000	38.22	7.78	46.00	70.25	-24.25	peak
3	9225.000	38.57	11.34	49.91	70.25	-20.34	peak
4	12615.000	36.12	18.06	54.18	70.25	-16.07	peak
5	14295.000	34.70	21.81	56.51	70.25	-13.74	peak
6	16800.000	33.28	24.77	58.05	70.25	-12.20	peak

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

END OF REPORT