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FCC TEST REPORT

(Part 27)

REPORT NO.: RF141218E07-3

MODEL NO.: T77W595

FCC ID: MCLT77W595

RECEIVED: Dec. 18, 2014

TESTED: Jan. 13 to 15, 2015

ISSUED: Jan. 27, 2015

APPLICANT: HON HAI PRECISION IND. CO., LTD.

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ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF141218E07-3	Original release	Jan. 27, 2015

1 CERTIFICATION

PRODUCT: LTE Cat4 PCI Express M.2 Module
MODEL NO.: T77W595
BRAND: FOXCONN
APPLICANT: HON HAI PRECISION IND. CO., LTD.
TESTED: Jan. 13 to 15, 2015
TEST SAMPLE: ENGINEERING SAMPLE
TEST STANDARDS: FCC Part 27, Subpart C, M
FCC Part 2

The above equipment (model: T77W595) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Phoenix Huang , **Date:** Jan. 27, 2015
(Phoenix Huang, Specialist)

Approved by : May Chen , **Date:** Jan. 27, 2015
(May Chen, Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(h)	Equivalent Isotropically Radiated Power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50(d)(5)	Peak to average ratio	PASS	Meet the requirement of limit.
2.1051 27.53(m)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(l)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(l)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -18.79dB at 30.25MHz.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Radiated emissions	30MHz ~ 1GHz	5.43 dB
	1GHz ~6GHz	3.72 dB
	6GHz ~ 18GHz	4.00 dB
	18GHz ~ 40GHz	4.11 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2.2 TEST SITE AND INSTRUMENTS

For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY50010156	Aug. 11, 2014	Aug. 10, 2015
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 12, 2014	Nov. 11, 2015
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Feb. 27, 2014	Feb. 26, 2015
RF Cable	NA	CHHCAB_001	Oct. 05, 2014	Oct. 04, 2015
Horn_Antenna AISI	AIH.8018	0000220091110	Aug. 26, 2014	Aug. 25, 2015
Pre-Amplifier Agilent	8449B	300801923	Oct. 28, 2014	Oct. 27, 2015
RF Cable	NA	131206 131215 SNMY23685/4	Jan. 17, 2014	Jan. 16, 2015
Spectrum Analyzer R&S	FSV40	100964	July 05, 2014	July 04, 2015
Pre-Amplifier EMCI	EMC184045	980143	Jan. 17, 2014	Jan. 16, 2015
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Aug. 26, 2014	Aug. 25, 2015
RF Cable	NA	RF104-121 RF104-204	Dec. 11, 2014	Dec. 10, 2015
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 3 The test was performed in 966 Chamber No. H.
4. The FCC Site Registration No. is 797305.
- 5 The CANADA Site Registration No. is IC 7450H-3.
- 6 Tested Date: Jan. 15, 2015

**A D T****For other test items:**

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP 40	100037	Oct. 30, 2014	Oct. 29, 2015
Spectrum Analyzer Agilent	E4446A	MY48250253	Dec. 18, 2014	Dec. 17, 2015
AC Power Source EXTECH Electronics	6502	1140503	NA	NA
Temperature & Humidity Chamber TERCHY	MHU-225AU	911033	Dec. 08, 2014	Dec. 07, 2015
DC Power Supply GOOD WILL INSTRUMENT CO., LTD.	GPC - 3030D	7700087	NA	NA
ESG Vector signal generator Agilent	E4438C	MY47271330 506 602 UNJ	Apr. 28, 2014	Apr. 27, 2015
Upgrade the software license on current E4438C ESG Agilent	E4438CK-403	ESG E4_010004	NA	NA
ESG Vector signal generator Agilent	E4438C	MY45094468/ 005 506 602 UK6 UNJ	Dec. 05, 2014	Dec. 04, 2015
Upgrade the software license on current E4438C ESG Agilent	E4438CK-403	ESG E4_010001	NA	NA
Power meter Anritsu	ML2495A	0824006	May 22, 2014	May 21, 2015
Power sensor Anritsu	MA2411B	0738172	May 22, 2014	May 21, 2015
Software	ADT_RF Test Software V6.6.5.3	NA	NA	NA
Radio Communication Analyzer Anritsu	MT8820C	6201127458	Mar. 05, 2014	Mar. 04, 2015

- NOTE:**
1. The test was performed in Oven room A.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: Jan. 13, 2015

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	LTE Cat4 PCI Express M.2 Module	
MODEL NO.	T77W595	
POWER SUPPLY	3.3Vdc from host equipment	
MODULATION TYPE	LTE Band 7	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 7 Channel Bandwidth: 5MHz	2502.5MHz ~ 2567.5MHz
	LTE Band 7 Channel Bandwidth: 10MHz	2505MHz ~ 2565MHz
	LTE Band 7 Channel Bandwidth: 15MHz	2507.5MHz ~ 2562.5MHz
	LTE Band 7 Channel Bandwidth: 20MHz	2510MHz ~ 2560MHz
EMISSION DESIGNATOR	LTE Band 7 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M52W7D
	LTE Band 7 Channel Bandwidth: 10MHz	QPSK: 8M97G7D
		16QAM: 8M97W7D
	LTE Band 7 Channel Bandwidth: 15MHz	QPSK: 13M6G7D
		16QAM: 13M6W7D
	LTE Band 7 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 18M0W7D
MAX. EIRP POWER	LTE Band 7 Channel Bandwidth: 5MHz	881.0mW
	LTE Band 7 Channel Bandwidth: 10MHz	861.0mW
	LTE Band 7 Channel Bandwidth: 15MHz	822.2mW
	LTE Band 7 Channel Bandwidth: 20MHz	881.0mW
ANTENNA TYPE	Refer to NOTE	
DATA CABLE	NA	
I/O PORTS	Refer to users' manual	
ACCESSORY DEVICES	NA	

Note:

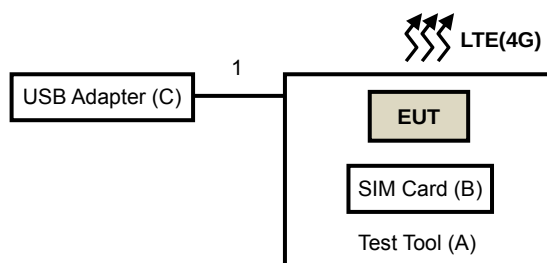
1. The antennas provided to the EUT, please refer to the following table:

Ant. Set	Transmitter Circuit	Brand	Model	Operation Band	Ant. Gain(dBi) <including cable loss>	Frequency range (MHz ~ MHz)	Ant. Type	Connector Type		
LTE 1	Main	NA	NA	LTE(4G) B12 / B17	5.19	699 ~ 716	PIFA	I-PEX MHF IV		
				LTE(4G) B28	5.2	703 ~ 748				
	Aux				LTE(4G) B12 / B17	5.19			699 ~ 716	
				LTE(4G) B28	5.2	703 ~ 748				
LTE 2	Main	NA	NA	LTE(4G) B13	6.14	777 ~ 787	PIFA	I-PEX MHF IV		
				LTE(4G) B20	3.77	832 ~ 862				
				CDMA(3G) BC10	3.22	816 ~ 824				
				LTE(4G) B26	3.4	814 ~ 849				
				WCDMA(3G) B5 / GSM850(2G) / LTE(4G) B5 / CDMA(3G) BC0	3.4	824 ~ 849				
				WCDMA(3G) B8 / E-GSM900(2G) / LTE(4G) B8	4.39	880 ~ 915				
	Aux				LTE(4G) B13	6.14			777 ~ 787	
					LTE(4G) B20	3.77			832 ~ 862	
					CDMA(3G) BC10	3.22			816 ~ 824	
					LTE(4G) B26	3.4			814 ~ 849	
					WCDMA(3G) B5 / GSM850(2G) / LTE(4G) B5 / CDMA(3G) BC0	3.4			824 ~ 849	
					WCDMA(3G) B8 / E-GSM900(2G) / LTE(4G) B8	4.39			880 ~ 915	

Ant. Set	Transmitter Circuit	Brand	Model	Operation Band	Ant. Gain(dBi) <including cable loss>	Frequency range (MHz ~ MHz)	Ant. Type	Connector Type
LTE 3	Main	NA	NA	WCDMA(3G) B2 / LTE(4G) B2 / B25 / PCS1900(2G) / CDMA(3G) BC1	3.62	1850 to 1915	PIFA	I-PEX MHF IV
				WCDMA(3G) B4 / DCS1800(2G) / LTE(4G) B3 / B4	4.25	1710 to 1785		
				LTE(4G) B7	4.37	2500 to 2570		
				WCDMA(3G) B1/ LTE(4G) B1	3.82	1920 to 1980		
				GPS	2.19	1575.42 ~ 1602		
	Aux			WCDMA(3G) B2 / LTE(4G) B2 / B25 / PCS1900(2G) / CDMA(3G) BC1	3.62	1850 to 1915		
				WCDMA(3G) B4 / DCS1800(2G) / LTE(4G) B3 / B4	4.25	1710 to 1785		
				LTE(4G) B7	4.37	2500 to 2570		
				WCDMA(3G) B1/ LTE(4G) B1	3.82	1920 to 1980		
				GPS	2.19	1575.42 ~ 1602		

2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 CONFIGURATION OF SYSTEM UNDER TEST



Remote site





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3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units.

No.	Product	Brand	Model No.	Serial No.	FCC ID	Remark
A	Test Tool	FOXCONN	NA	NA	NA	Supplied by Client
B	SIM Card	NA	NA	NA	NA	Provided by Lab
C	USB Adapter	NICELINK	US-T128	NA	NA	Provided by Lab
D	Radio Communication Analyzer	Anritsu	MT8820C	6201127458	NA	Provided by Lab

NOTE:

1. All power cords of the above support units are non-shielded (1.8 m).

No.	Cable	Qty.	Length (m)	Shielded (Yes/ No)	Cores (Number)	Remark
1	DC	1	1	No	0	Provided by Lab

3.4 DESCRIPTION OF TEST MODES

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on X-plane. Following channel(s) was (were) selected for the final test as listed below:

LTE BAND 7

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	20850, 21100 21350	20MHz	QPSK	1 RB / 0 RB Offset
FREQUENCY STABILITY	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	21100	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	21100	20MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	25 RB / 0 RB Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	75 RB / 0 RB Offset
	20850 to 21350	20850, 21100 21350	20MHz	QPSK, 16QAM	100 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1 RB / 12 RB Offset
	20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1 RB / 24 RB Offset
	20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1 RB / 37 RB Offset
	20850 to 21350	20850, 21100 21350	20MHz	QPSK, 16QAM	1 RB / 50 RB Offset
BAND EDGE	20775 to 21425	20775, 21425	5MHz	QPSK	25 RB / 0 RB Offset
	20800 to 21400	20800, 21400	10MHz	QPSK	50 RB / 0 RB Offset
	20825 to 21375	20825, 21375	15MHz	QPSK	75 RB / 0 RB Offset
	20850 to 21350	20850, 21350	20MHz	QPSK	100 RB / 0 RB Offset
CONDCUDED EMISSION	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	21100	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	21100	20MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB Offset
	20800 to 21400	21100	10MHz	QPSK	1 RB / 0 RB Offset
	20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB Offset
	20850 to 21350	21100	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
EIRP	25deg. C, 63%RH	120Vac, 60Hz	James Chan
FREQUENCY STABILITY	25deg. C, 63%RH	120Vac, 60Hz	James Chan
OCCUPIED BANDWIDTH	25deg. C, 63%RH	120Vac, 60Hz	James Chan
PEAK TO AVERAGE RATIO	25deg. C, 63%RH	120Vac, 60Hz	James Chan
BAND EDGE	25deg. C, 63%RH	120Vac, 60Hz	James Chan
CONDCUDED EMISSION	25deg. C, 63%RH	120Vac, 60Hz	James Chan
RADIATED EMISSION	25deg. C, 63%RH	120Vac, 60Hz	Gary Cheng

3.5 EUT OPERATING CONDITIONS

The EUT links to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI/TIA/EIA-603-C 2004

NOTE: All test items have been performed and recorded as per the above standards.

4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.”

4.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

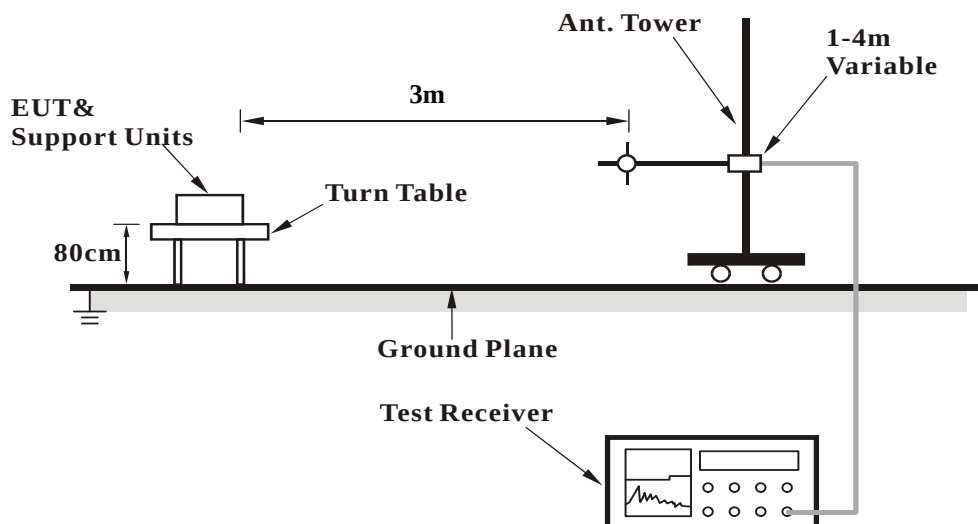
- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 10MHz for LTE mode.
- b. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
- c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step b. Record the power level of S.G.
- d. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$

CONDUCTED POWER MEASUREMENT:

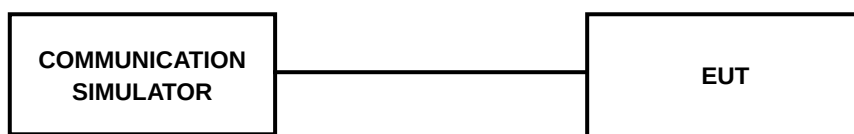
- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 TEST SETUP

EIRP MEASUREMENT:



CONDUCTED POWER MEASUREMENT:



4.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)

LTE Band / BW (Hz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 20775	Mid CH 21100	High CH 21425		Low CH 20775	Mid CH 21100	High CH 21425	
			2502.5 MHz	2535.0 MHz	2567.5 MHz		2502.5 MHz	2535.0 MHz	2567.5 MHz	
7 / 5M	1	0	23.83	23.71	23.84	0	22.78	22.66	22.79	1
	1	12	23.81	23.92	23.66	0	22.76	22.87	22.61	1
	1	24	23.83	23.99	23.81	0	22.78	22.94	22.76	1
	12	0	22.75	23.00	22.86	1	21.70	21.95	21.81	2
	12	6	23.02	23.02	22.85	1	21.97	21.97	21.80	2
	12	13	22.83	23.19	22.82	1	21.78	22.14	21.77	2
	25	0	23.01	22.85	22.91	1	21.96	21.80	21.86	2

LTE Band / BW (Hz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 20800	Mid CH 21100	High CH 21400		Low CH 20800	Mid CH 21100	High CH 21400	
			2505.0 MHz	2535.0 MHz	2565.0 MHz		2505.0 MHz	2535.0 MHz	2565.0 MHz	
7 / 10M	1	0	23.90	23.78	23.91	0	22.82	22.70	22.83	1
	1	24	23.88	23.99	23.73	0	22.80	22.91	22.65	1
	1	49	23.90	24.06	23.88	0	22.82	22.98	22.80	1
	25	0	22.82	23.07	22.93	1	21.74	21.99	21.85	2
	25	12	23.09	23.09	22.92	1	22.01	22.01	21.84	2
	25	25	22.90	23.26	22.89	1	21.82	22.18	21.81	2
	50	0	23.08	22.92	22.98	1	22.00	21.84	21.90	2

LTE Band / BW (Hz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 20825	Mid CH 21100	High CH 21375		Low CH 20825	Mid CH 21100	High CH 21375	
			2507.5 MHz	2535.0 MHz	2562.5 MHz		2507.5 MHz	2535.0 MHz	2562.5 MHz	
7 / 15M	1	0	23.98	23.86	23.99	0	22.89	22.77	22.90	1
	1	37	23.96	24.07	23.81	0	22.87	22.98	22.72	1
	1	74	23.98	24.14	23.96	0	22.89	23.05	22.87	1
	36	0	22.90	23.15	23.01	1	21.81	22.06	21.92	2
	36	19	23.17	23.17	23.00	1	22.08	22.08	21.91	2
	36	39	22.98	23.34	22.97	1	21.89	22.25	21.88	2
	75	0	23.16	23.00	23.06	1	22.07	21.91	21.97	2

LTE Band / BW (Hz)	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)
			Low CH 20850	Mid CH 21100	High CH 21350		Low CH 20850	Mid CH 21100	High CH 21350	
			2510.0 MHz	2535.0 MHz	2560.0 MHz		2510.0 MHz	2535.0 MHz	2560.0 MHz	
7 / 20M	1	0	24.01	23.89	24.02	0	22.94	22.82	22.95	1
	1	50	23.99	24.10	23.84	0	22.92	23.03	22.77	1
	1	99	24.01	24.17	23.99	0	22.94	23.10	22.92	1
	50	0	22.93	23.18	23.04	1	21.86	22.11	21.97	2
	50	25	23.20	23.20	23.03	1	22.13	22.13	21.96	2
	50	50	23.01	23.37	23.00	1	21.94	22.30	21.93	2
	100	0	23.19	23.03	23.09	1	22.12	21.96	22.02	2

AVERAGE EIRP (dBm)

LTE Band 7					
Channel Bandwidth: 5MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
20775	2502.5	27.9	1.3	29.2	835.6
21100	2535.0	28.3	1.2	29.5	881.0
21425	2567.5	28.3	1.0	29.3	855.1

LTE Band 7					
Channel Bandwidth: 10MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
20800	2505.0	27.9	1.3	29.2	824.1
21100	2535.0	28.2	1.2	29.4	861.0
21400	2565.0	28.1	1.0	29.1	820.4

LTE Band 7					
Channel Bandwidth: 15MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
20825	2507.5	27.7	1.3	29.0	799.8
21100	2535.0	28.0	1.2	29.2	822.2
21375	2562.5	28.1	1.0	29.1	814.7

LTE Band 7					
Channel Bandwidth: 20MHz / QPSK					
Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)
20850.0	2510.0	28.1	1.3	29.4	867.0
21100.0	2535.0	28.3	1.2	29.5	881.0
21350.0	2560.0	28.3	1.0	29.3	857.0

4.2 FREQUENCY STABILITY MEASUREMENT

4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

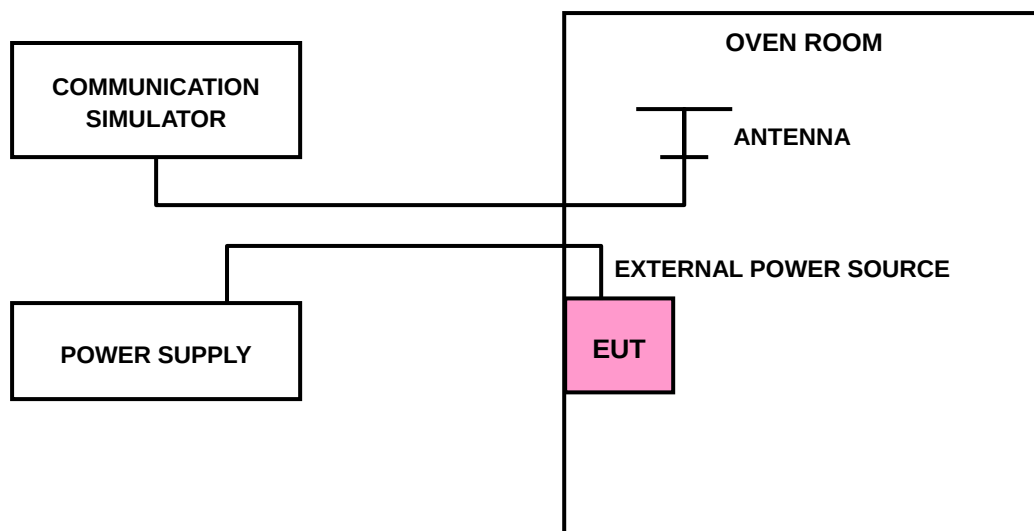
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

4.2.2 TEST PROCEDURE

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

NOTE: The frequency error was recorded frequency error from the communication simulator.

4.2.3 TEST SETUP



4.2.4 TEST RESULTS

VOLTAGE (Volts)	FREQUENCY ERROR (ppm)				LIMIT (ppm)
	LTE BAND 7				
	5MHz	10MHz	15MHz	20MHz	
102	0.017	0.017	0.017	0.010	2.5
138	0.017	0.016	0.012	0.009	2.5

NOTE: The applicant defined the normal working voltage of the host equipment is from 102Vac to 138Vac.

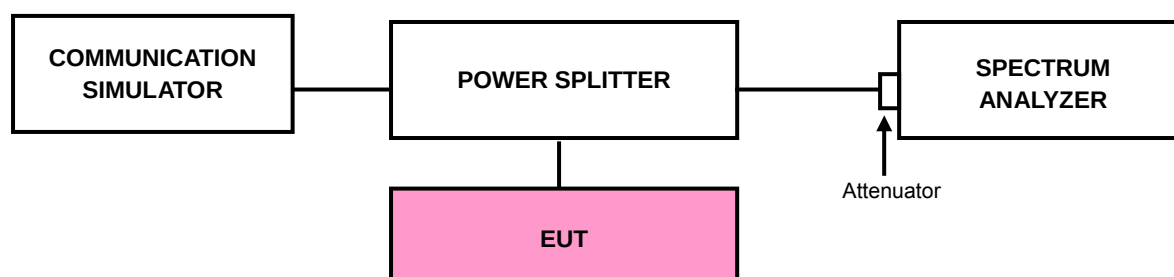
TEMP. (°C)	FREQUENCY ERROR (ppm)				LIMIT (ppm)
	LTE BAND 7				
	5MHz	10MHz	15MHz	20MHz	
75	0.015	0.017	0.014	0.012	2.5
70	0.009	0.017	0.018	0.017	2.5
60	0.015	0.017	0.014	0.012	2.5
50	0.010	0.012	0.013	0.014	2.5
40	0.010	0.010	0.015	0.016	2.5
30	0.013	0.011	0.014	0.017	2.5
20	0.015	0.014	0.014	0.014	2.5
10	0.009	0.018	0.015	0.013	2.5
0	0.017	0.011	0.009	0.015	2.5
-10	0.017	0.010	0.017	0.017	2.5
-20	0.012	0.013	0.010	0.012	2.5
-30	0.015	0.014	0.014	0.017	2.5

4.3 OCCUPIED BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

4.3.2 TEST SETUP

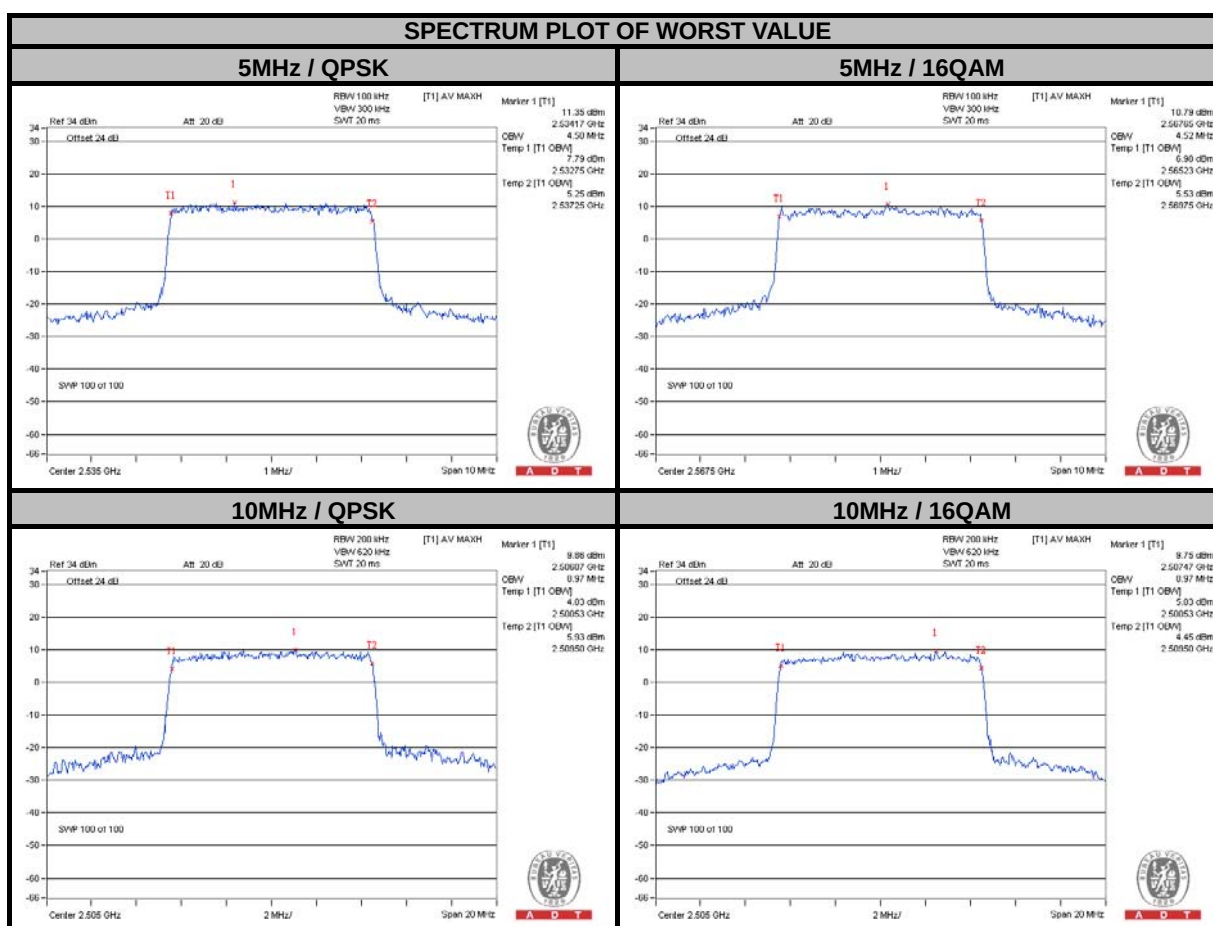


4.3.3 TEST PROCEDURES

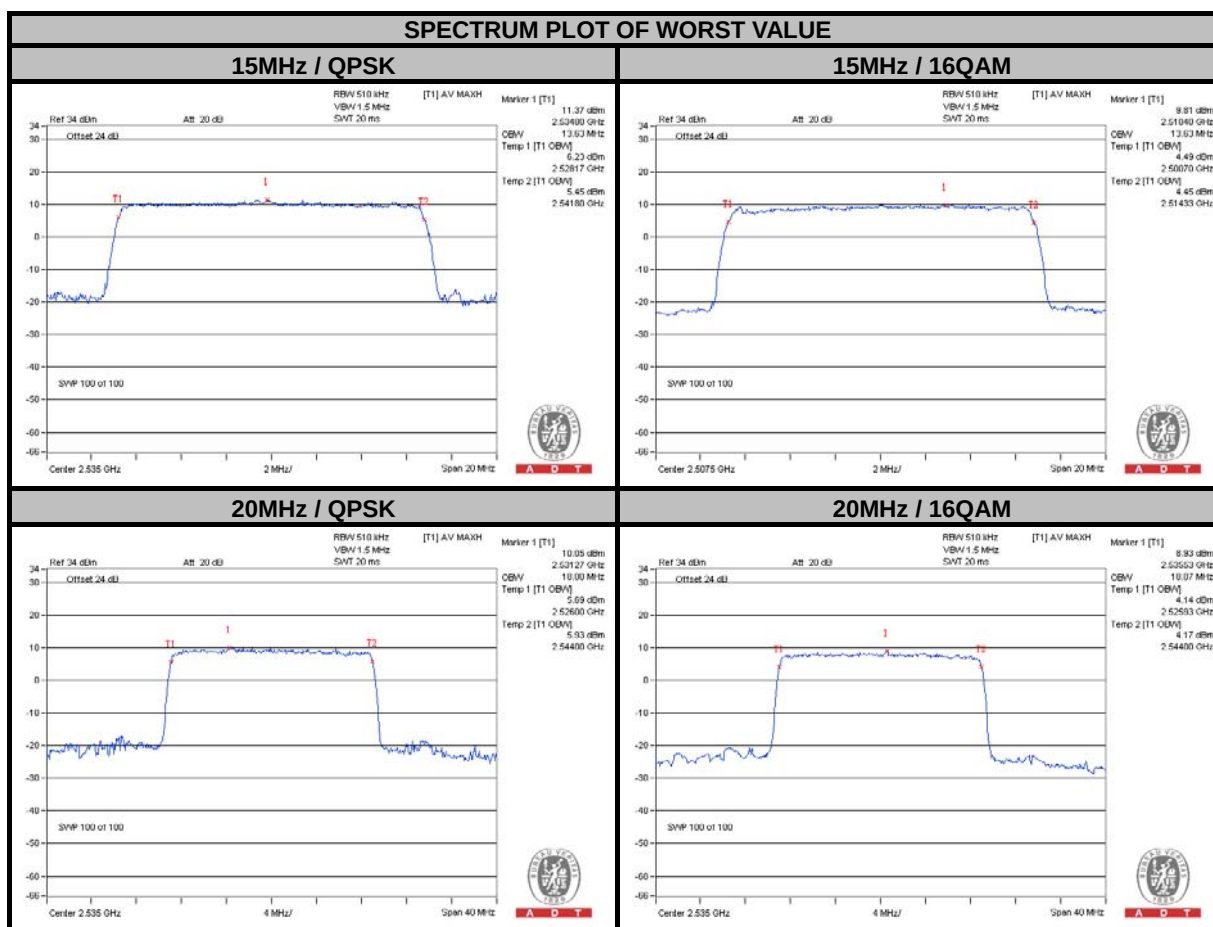
- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.3.4 TEST RESULTS

LTE BAND 7							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
20775	2502.5	4.48	4.5	20800	2505.0	8.97	8.97
21100	2535.0	4.5	4.5	21100	2535.0	8.97	8.97
21425	2567.5	4.5	4.52	21400	2565.0	8.97	8.97



LTE BAND 7							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
20825	2507.5	13.60	13.63	20850	2510.0	17.93	17.93
21100	2535.0	13.63	13.63	21100	2535.0	18.00	18.07
21375	2562.5	13.63	13.63	21350	2560.0	18.00	18.07

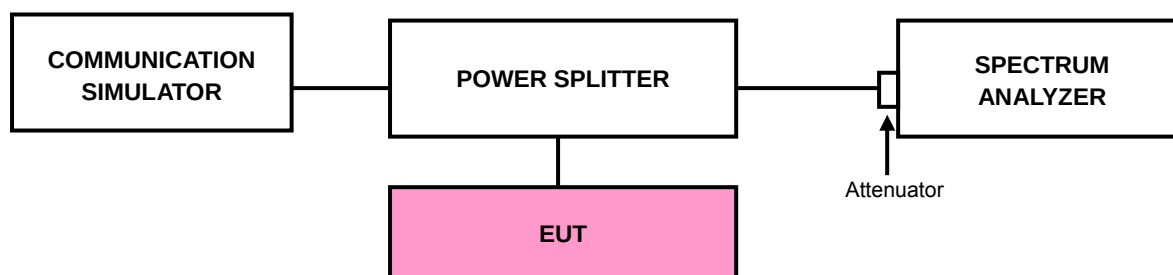


4.4 PEAK TO AVERAGE RATIO MEASUREMENT

4.4.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

4.4.2 TEST SETUP



4.4.3 TEST PROCEDURES

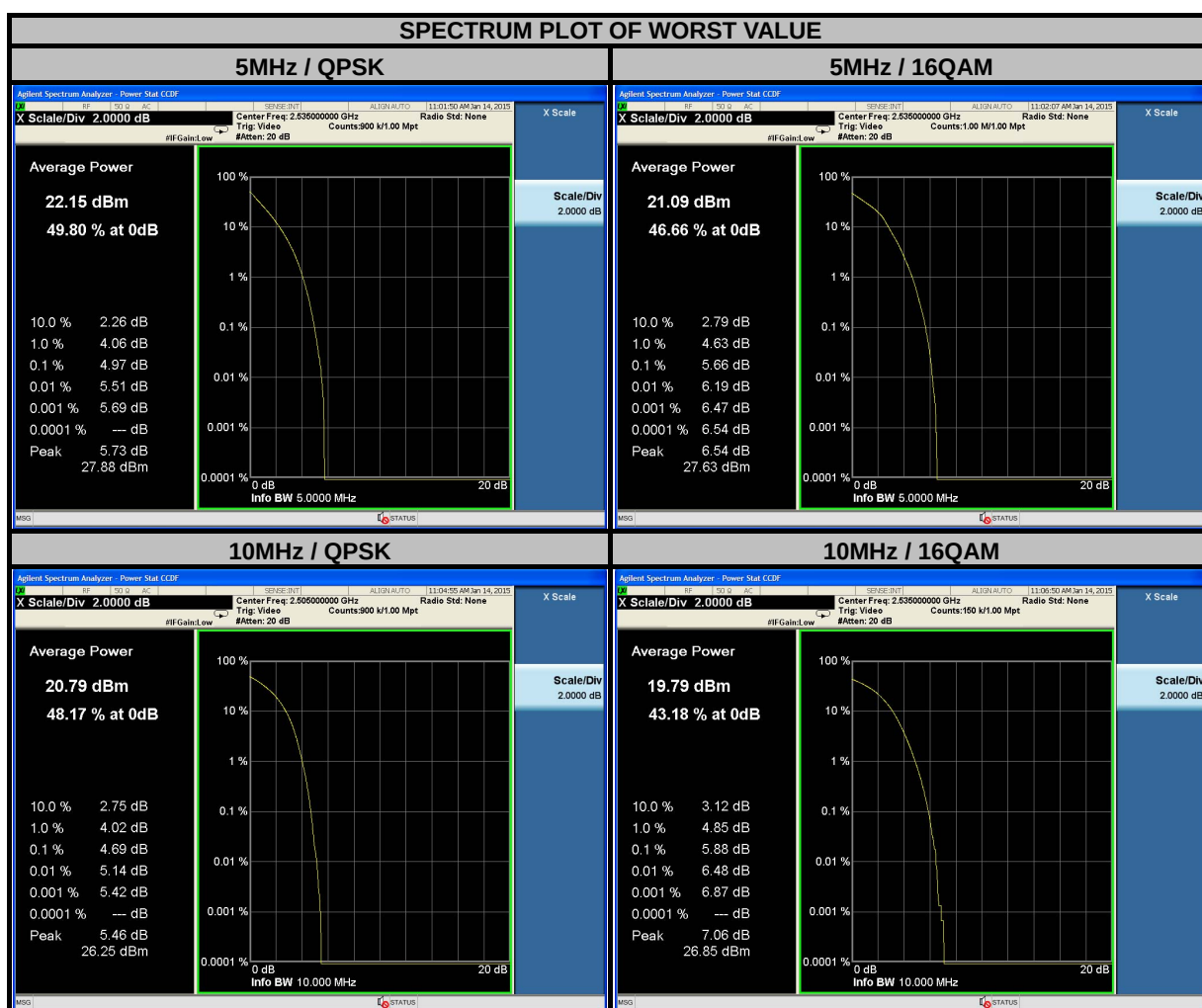
1. Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.



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4.4.4 TEST RESULTS

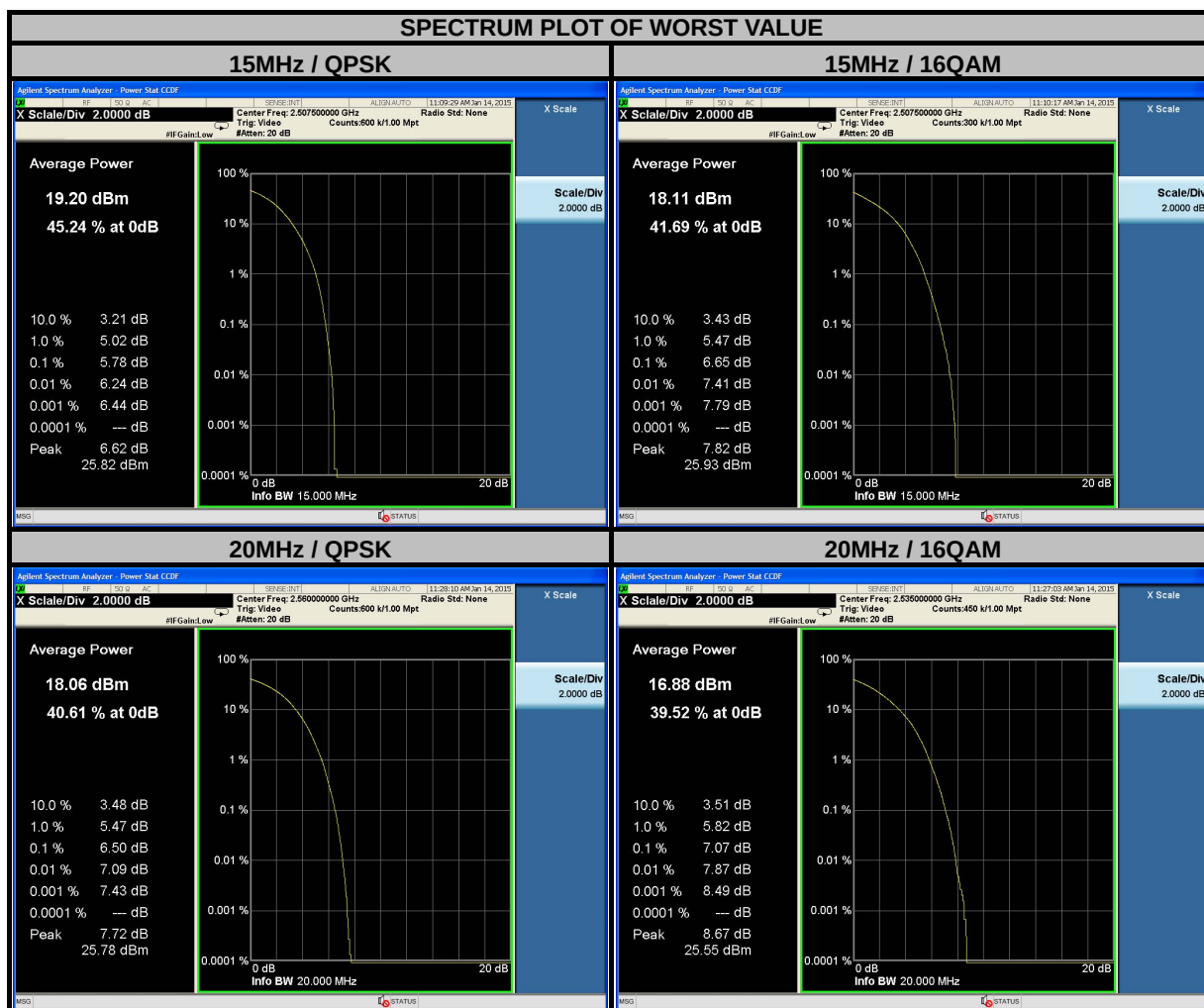
LTE BAND 7							
CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
20775	2502.5	4.58	5.35	20800	2505.0	4.69	5.83
21100	2535.0	4.97	5.66	21100	2535.0	4.67	5.88
21425	2567.5	4.48	4.98	21400	2565.0	4.66	5.71





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LTE BAND 7							
CHANNEL BANDWIDTH: 15MHz				CHANNEL BANDWIDTH: 20MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)		CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM			QPSK	16QAM
20825	2507.5	5.78	6.65	20850	2510.0	6.49	7.07
21100	2535.0	5.78	6.63	21100	2535.0	6.5	6.99
21375	2562.5	5.75	6.57	21350	2560.0	6.5	7.06

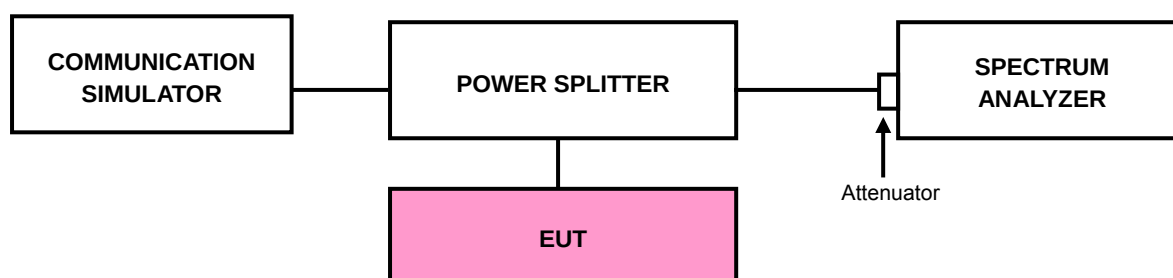


4.5 BAND EDGE MEASUREMENT

4.5.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(m)(4) specified that power of any emission outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. In the 1MHz 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.

4.5.2 TEST SETUP



4.5.3 TEST PROCEDURES

- All measurements were done at low and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and s RB of the spectrum is $>1\%$ OCCUPIED BANDWIDTH and VB of the spectrum is $\geq 3*RB$.
- Record the max trace plot into the test report.



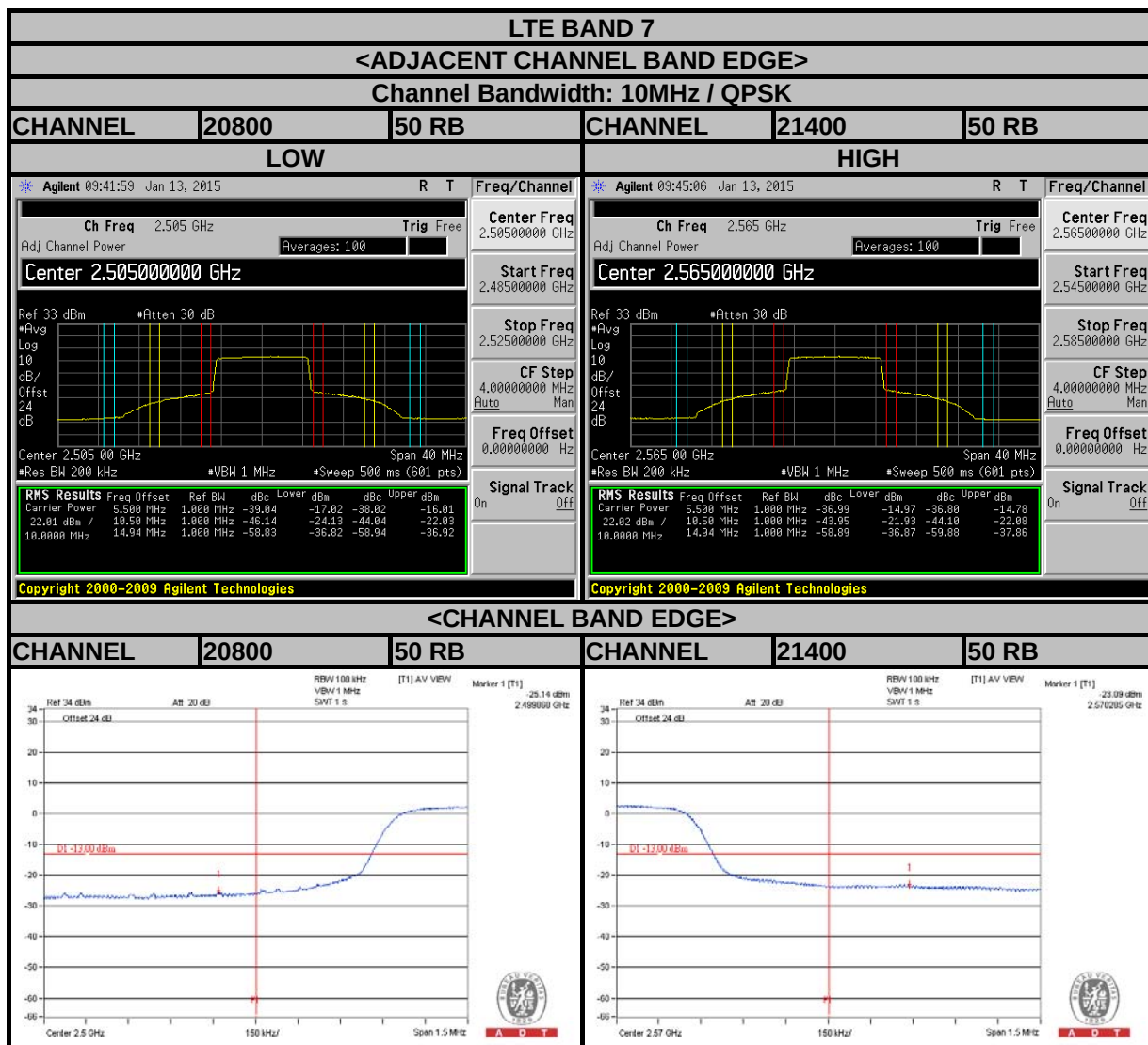
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4.5.4 TEST RESULTS



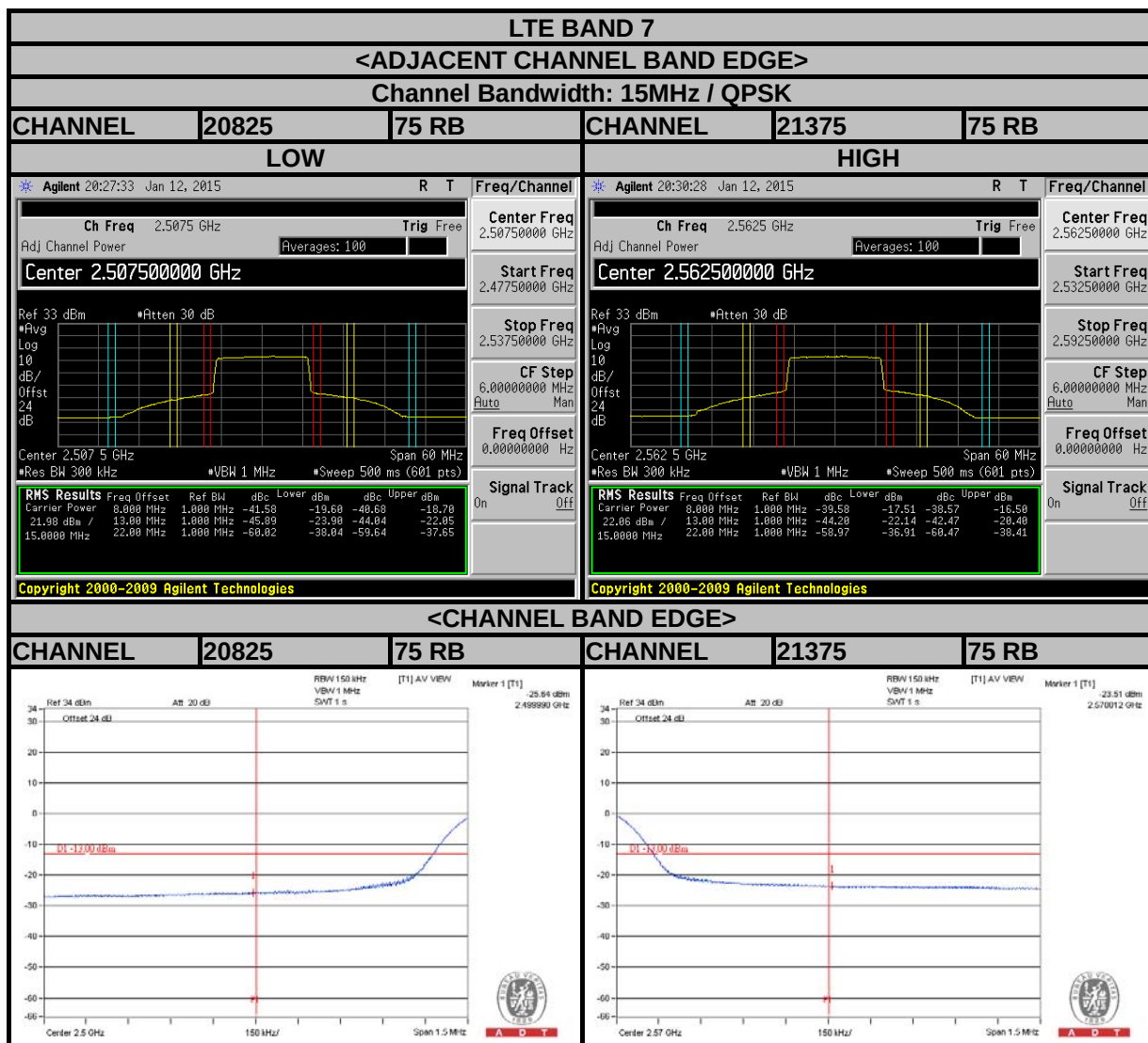


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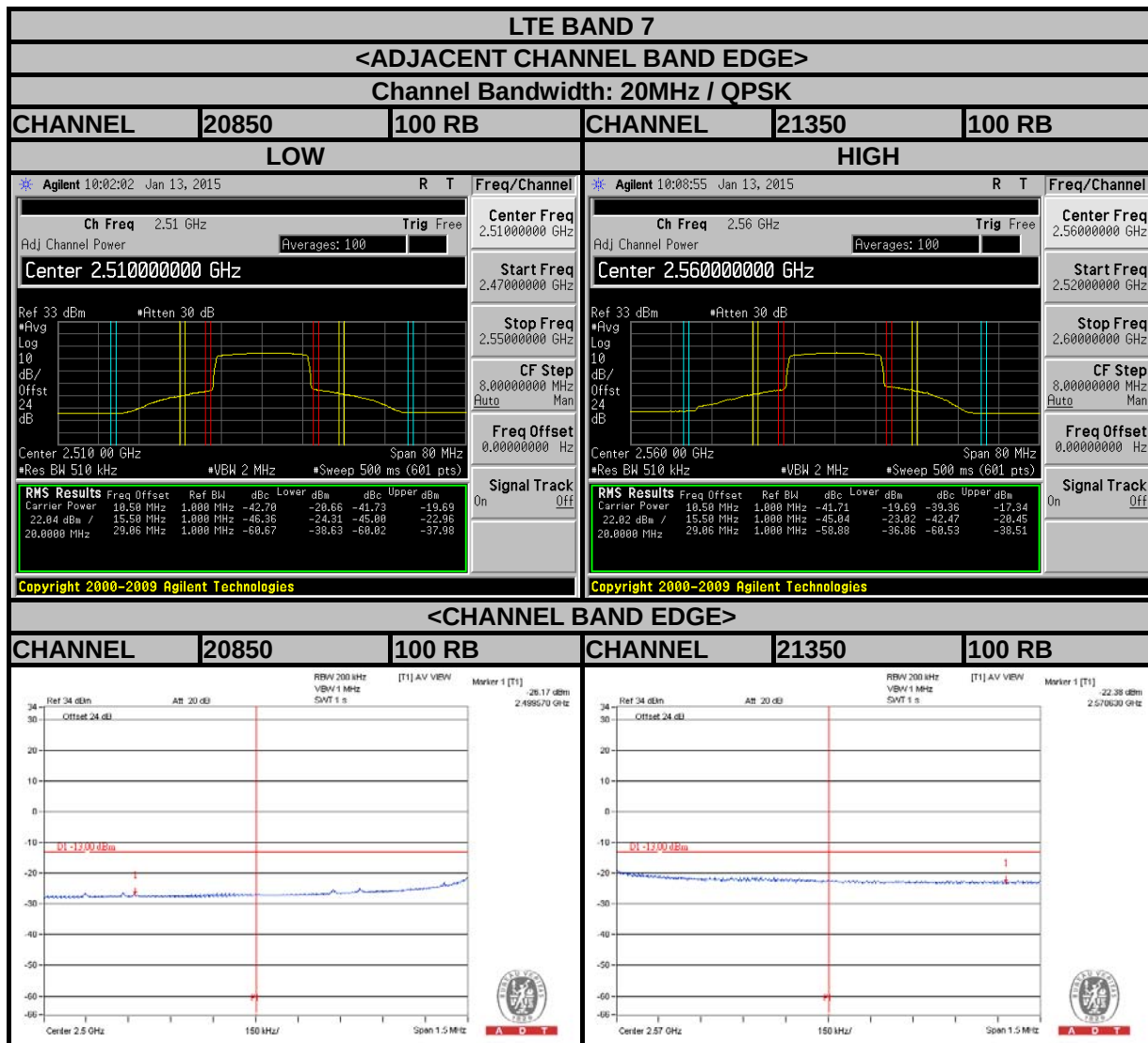


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4.6 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

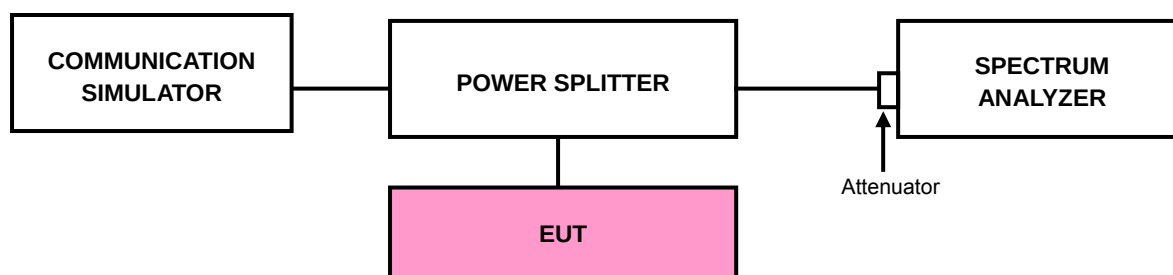
4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm.

4.6.2 TEST PROCEDURE

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9kHz to 26GHz for LTE Band 7. Attenuator is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

4.6.3 TEST SETUP

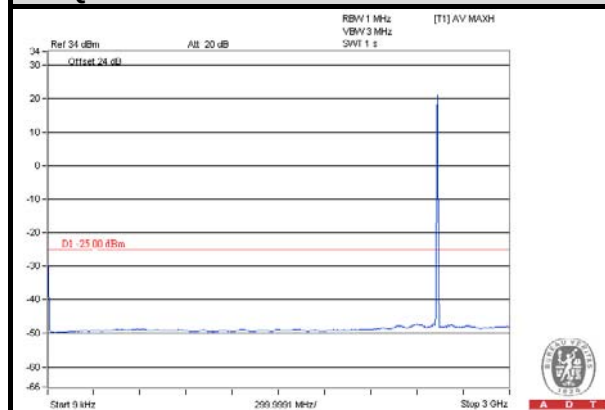


4.6.4 TEST RESULTS

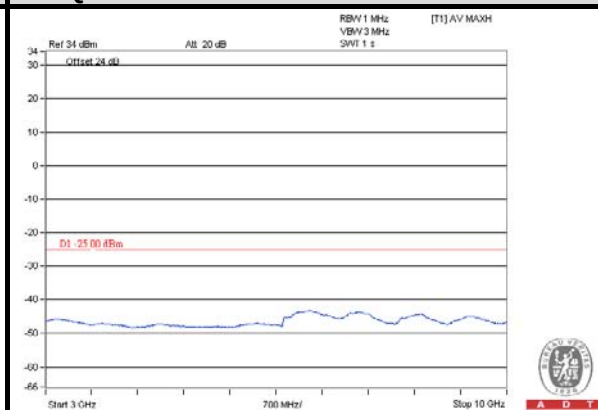
LTE Band 7 (Channel Bandwidth: 5MHz)

CHANNEL 21100

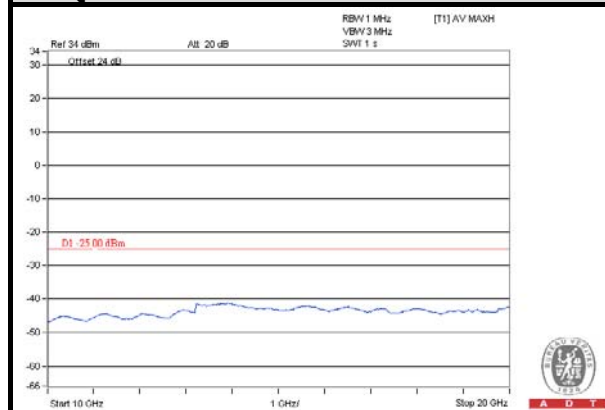
FREQUENCY RANGE : 9kHz~3GHz



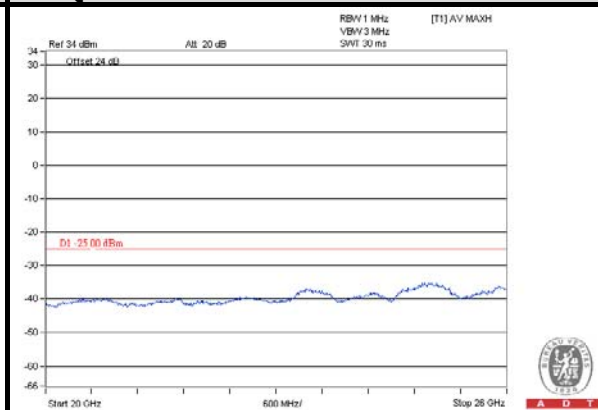
FREQUENCY RANGE : 3GHz~10GHz



FREQUENCY RANGE : 10GHz~20GHz



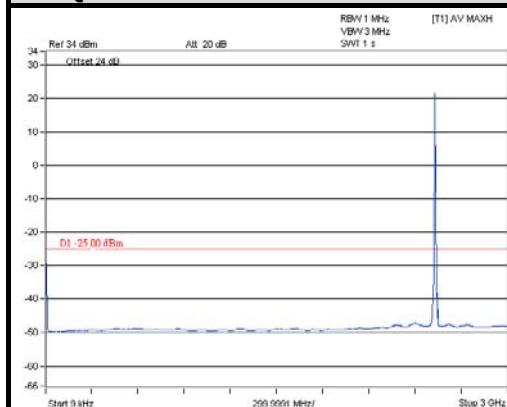
FREQUENCY RANGE : 20GHz~26GHz



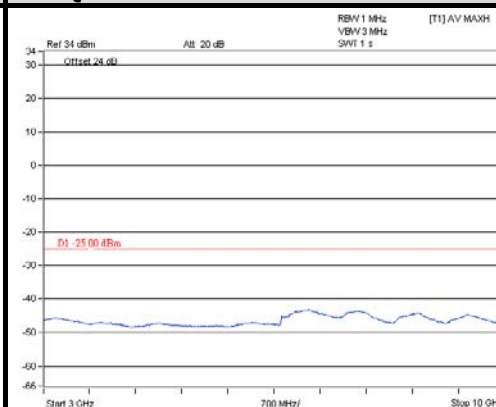
LTE Band 7 (Channel Bandwidth: 10MHz)

CHANNEL 21100

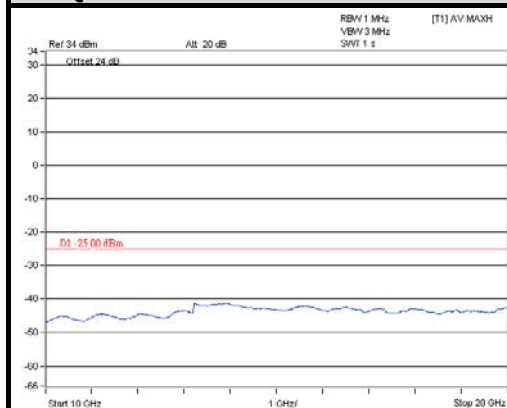
FREQUENCY RANGE : 9kHz~3GHz



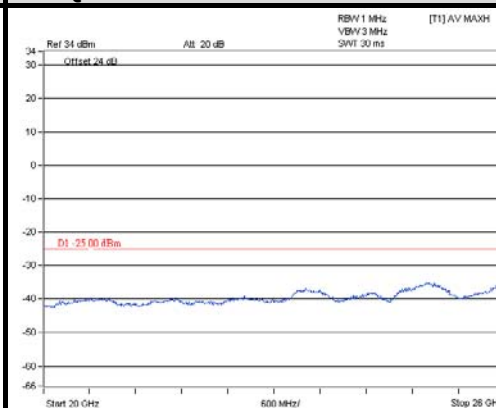
FREQUENCY RANGE : 3GHz~10GHz



FREQUENCY RANGE : 10GHz~20GHz



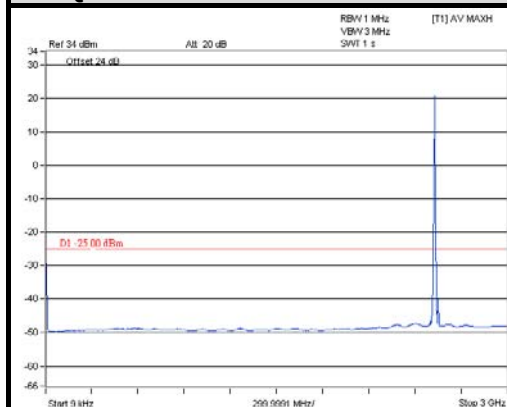
FREQUENCY RANGE : 20GHz~26GHz



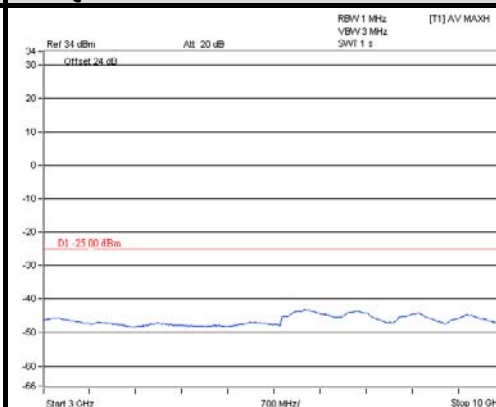
LTE Band 7 (Channel Bandwidth: 15MHz)

CHANNEL 21100

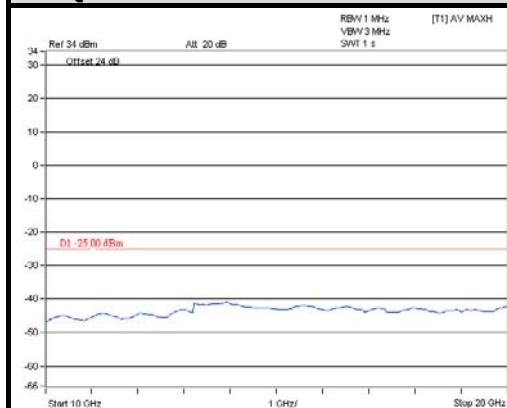
FREQUENCY RANGE : 9kHz~3GHz



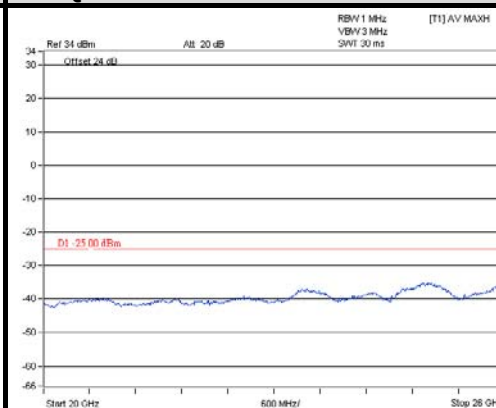
FREQUENCY RANGE : 3GHz~10GHz



FREQUENCY RANGE : 10GHz~20GHz



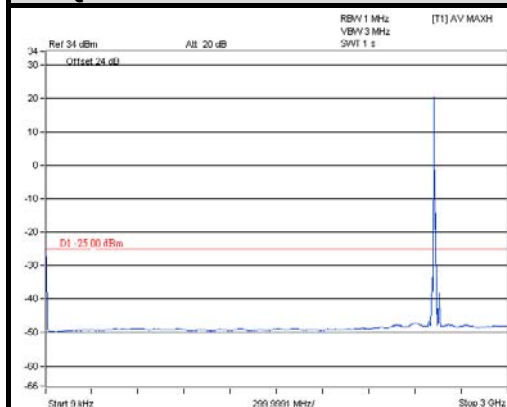
FREQUENCY RANGE : 20GHz~26GHz



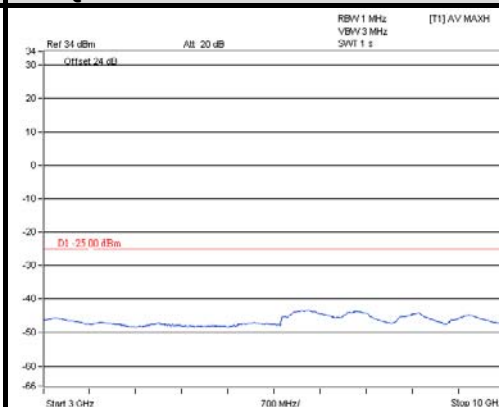
LTE Band 7 (Channel Bandwidth: 20MHz)

CHANNEL 21100

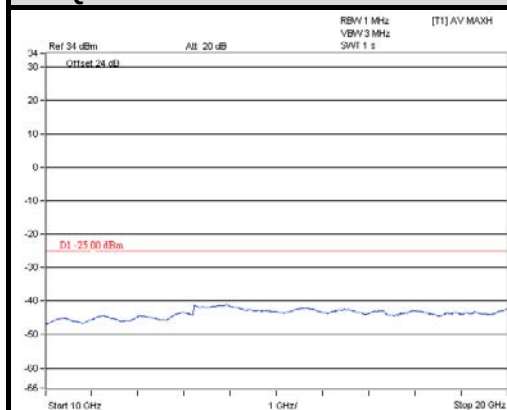
FREQUENCY RANGE : 9kHz~3GHz



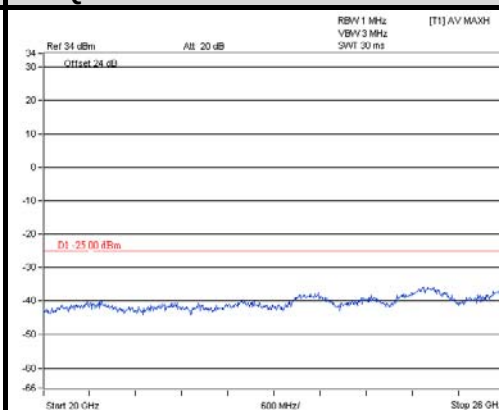
FREQUENCY RANGE : 3GHz~10GHz



FREQUENCY RANGE : 10GHz~20GHz



FREQUENCY RANGE : 20GHz~26GHz



4.7 RADIATED SPURIOUS EMISSION MEASUREMENT

4.7.1 LIMITS OF RADIATED SPURIOUS EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm.

4.7.2 TEST PROCEDURES

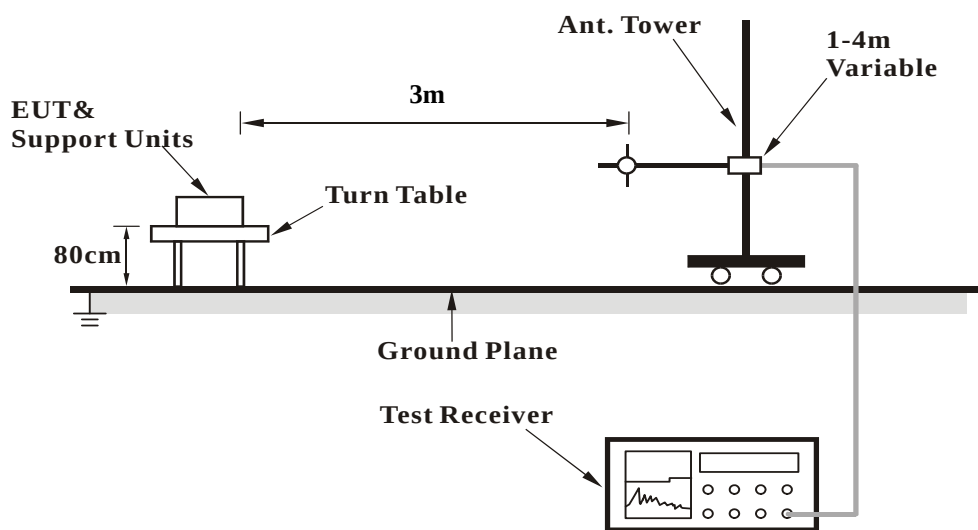
- a. Substitution method is used for EIRP measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G.
- c. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$

NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.7.3 DEVIATION FROM TEST STANDARD

No deviation

4.7.4 TEST SETUP



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.7.5 TEST RESULTS

LTE BAND 7

CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 21100	FREQUENCY RANGE	Below 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	31.668	27.97	-25	-43.90	-14.49	-58.39	-33.39
2	75.076	22.33	-25	-72.63	-2.06	-74.69	-49.69
3	134.039	23.74	-25	-71.91	-1.49	-73.40	-48.40
4	158.198	24.25	-25	-63.45	-0.96	-64.41	-39.41
5	205.764	24.77	-25	-70.70	4.27	-66.44	-41.44
6	239.445	24.91	-25	-70.47	3.81	-66.66	-41.66
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	32.14	39.98	-25	-32.06	-14.38	-46.43	-21.43
2	125.087	27.11	-25	-63.59	-1.22	-64.81	-39.81
3	160.518	25.79	-25	-62.56	-0.62	-63.18	-38.18
4	167.491	29.47	-25	-60.83	0.38	-60.44	-35.44
5	203.684	24.65	-25	-70.83	4.29	-66.54	-41.54
6	955.971	36.27	-25	-61.70	0.37	-61.33	-36.33

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor = gain of substitution antenna + cable loss



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MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	51.29	-25	-53.05	7.02	-46.02	-21.02
2	7605	55.65	-25	-47.10	4.46	-42.64	-17.64
3	10140	57.63	-25	-44.09	3.91	-40.18	-15.18
4	12675	48.3	-25	-53.03	4.38	-48.66	-23.66
5	15210	47.78	-25	-50.93	3.76	-47.18	-22.18
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	54.06	-25	-50.28	7.02	-43.25	-18.25
2	7605	56.51	-25	-46.24	4.46	-41.78	-16.78
3	10140	61.81	-25	-39.91	3.91	-36.00	-11.00
4	12675	50.8	-25	-50.53	4.38	-46.16	-21.16
5	15210	47	-25	-51.71	3.76	-47.96	-22.96

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).



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CHANNEL BANDWIDTH: 10MHz / QPSK

MODE	TX channel 21100	FREQUENCY RANGE	Below 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	31.848	28.04	-25	-43.89	-14.45	-58.34	-33.34
2	75.706	22.07	-25	-72.78	-2.03	-74.80	-49.80
3	133.739	23.22	-25	-69.36	-1.27	-70.63	-45.63
4	159.148	25.64	-25	-62.33	-0.82	-63.14	-38.14
5	207.994	24.79	-25	-70.68	4.24	-66.44	-41.44
6	239.105	26.25	-25	-69.14	3.81	-65.33	-40.33
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	30.25	42.40	-25	-28.95	-14.84	-43.79	-18.79
2	128.167	28.93	-25	-62.44	-1.23	-63.68	-38.68
3	160.288	26.27	-25	-62.01	-0.66	-62.67	-37.67
4	166.031	27.75	-25	-62.14	0.17	-61.97	-36.97
5	206.274	26.05	-25	-69.42	4.26	-65.16	-40.16
6	956.291	36.52	-25	-61.44	0.37	-61.06	-36.06

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor = gain of substitution antenna + cable loss



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MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	51.00	-25	-53.34	7.02	-46.31	-21.31
2	7605	54.96	-25	-47.79	4.46	-43.33	-18.33
3	10140	58.10	-25	-43.62	3.91	-39.71	-14.71
4	12675	48.06	-25	-53.27	4.38	-48.90	-23.90
5	15210	48.97	-25	-49.74	3.76	-45.99	-20.99
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	52.46	-25	-51.88	7.02	-44.85	-19.85
2	7605	56.26	-25	-46.49	4.46	-42.03	-17.03
3	10140	61.36	-25	-40.36	3.91	-36.45	-11.45
4	12675	51.27	-25	-50.06	4.38	-45.69	-20.69
5	15210	48.03	-25	-50.68	3.76	-46.93	-21.93

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

CHANNEL BANDWIDTH: 15MHz / QPSK

MODE	TX channel 21100	FREQUENCY RANGE	Below 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	30.458	27.22	-25	-44.21	-14.79	-58.99	-33.99
2	74.656	23.06	-25	-71.97	-2.09	-74.06	-49.06
3	132.539	22.94	-25	-73.14	-1.54	-74.68	-49.68
4	157.478	25.10	-25	-62.40	-1.06	-63.46	-38.46
5	206.084	24.41	-25	-71.06	4.26	-66.80	-41.80
6	238.085	26.75	-25	-68.68	3.80	-64.88	-39.88
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	31.71	41.39	-25	-30.49	-14.48	-44.97	-19.97
2	126.677	27.06	-25	-63.99	-1.23	-65.21	-40.21
3	159.678	27.23	-25	-60.88	-0.74	-61.63	-36.63
4	169.091	27.97	-25	-62.77	0.61	-62.16	-37.16
5	205.894	25.80	-25	-69.67	4.27	-65.41	-40.41
6	956.081	35.88	-25	-62.08	0.37	-61.71	-36.71

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor = gain of substitution antenna + cable loss

MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	51.78	-25	-52.56	7.02	-45.53	-20.53
2	7605	56.17	-25	-46.58	4.46	-42.12	-17.12
3	10140	58.01	-25	-43.71	3.91	-39.80	-14.80
4	12675	47.72	-25	-53.61	4.38	-49.24	-24.24
5	15210	48.73	-25	-49.98	3.76	-46.23	-21.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	68.31	-25	-36.03	7.02	-29.00	-4.00
2	7605	56.61	-25	-46.14	4.46	-41.68	-16.68
3	10140	62.59	-25	-39.13	3.91	-35.22	-10.22
4	12675	51.08	-25	-50.25	4.38	-45.88	-20.88
5	15210	47.75	-25	-50.96	3.76	-47.21	-22.21

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).



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CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 21100	FREQUENCY RANGE	Below 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	31.458	27.53	-25	-44.26	-14.54	-58.80	-33.80
2	73.776	22.01	-25	-73.17	-2.14	-75.31	-50.31
3	134.319	21.91	-25	-73.66	-1.48	-75.14	-50.14
4	159.298	23.73	-25	-64.28	-0.80	-65.08	-40.08
5	206.424	23.59	-25	-71.88	4.26	-67.62	-42.62
6	238.965	25.96	-25	-69.44	3.81	-65.63	-40.63
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	31.16	41.24	-25	-30.44	-14.62	-45.06	-20.06
2	127.227	28.05	-25	-63.12	-1.23	-64.35	-39.35
3	159.738	26.95	-25	-61.18	-0.73	-61.91	-36.91
4	167.821	28.03	-25	-62.36	0.43	-61.93	-36.93
5	206.654	26.41	-25	-69.06	4.26	-64.80	-39.80
6	956.131	36.54	-25	-61.42	0.37	-61.05	-36.05

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor = gain of substitution antenna + cable loss

MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
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ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	50.86	-25	-53.48	7.02	-46.45	-21.45
2	7605	55.58	-25	-47.17	4.46	-42.71	-17.71
3	10140	56.73	-25	-44.99	3.91	-41.08	-16.08
4	12675	48.31	-25	-53.02	4.38	-48.65	-23.65
5	15210	47.82	-25	-50.89	3.76	-47.14	-22.14
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							
No.	Freq. (MHz)	Reading (dBuV/m)	Limit (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	Level (dBm)	Margin (dB)
1	5070	53.28	-25	-51.06	7.02	-44.03	-19.03
2	7605	56.45	-25	-46.30	4.46	-41.84	-16.84
3	10140	61.53	-25	-40.19	3.91	-36.28	-11.28
4	12675	50.89	-25	-50.44	4.38	-46.07	-21.07
5	15210	47.64	-25	-51.07	3.76	-47.32	-22.32

REMARKS:

1. Level (dBm) = S.G Power Value (dBm) + Correction Factor (dB).
2. Correction Factor (dB) = Substitution Antenna Gain (dB) + Cable Loss (dB).

5 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.



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6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

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