



# FCC TEST REPORT (PART 27)

**REPORT NO.:** RF120713C03-2 R1

**MODEL NO.:** PM36100

**FCC ID:** NM8PM36100

**RECEIVED:** Jul. 13, 2012

**TESTED:** Jul. 25 ~ Jul. 30, 2012

**ISSUED:** Oct. 12, 2012

**APPLICANT:** HTC Corporation

**ADDRESS:** 23, Xinghua Rd., Taoyuan 330, Taiwan, R.O.C.

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

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,  
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**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120713C03-2	Original release	Aug. 08, 2012
RF120713C03-2 R1	The duplicate Section 4.5 has been removed.	Oct. 12, 2012



# 1 CERTIFICATION

**PRODUCT:** Smart Phone  
**MODEL NO.:** PM36100  
**BRAND:** HTC  
**APPLICANT:** HTC Corporation  
**TESTED:** Jul. 25 ~ Jul. 30, 2012  
**TEST SAMPLE:** Production Unit  
**TEST STANDARDS:** **FCC Part 27, Subpart C, L**  
**FCC Part 2**  
ANSI C63.4-2003

The above equipment (model: PM36100) 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 : Andrea Hsia , DATE : Oct. 12, 2012  
Andrea Hsia / Specialist

APPROVED BY : Gary Chang , DATE : Oct. 12, 2012  
Gary Chang / Technical Manager

## 2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

OPERATING BAND: 704–716 MHz			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(C)(10)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 27.53(g)	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.53(g)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(g)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(g)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -8.13dB at 1428.00MHz.

OPERATING BAND: 1710~1755 MHz			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(d)(4)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1055 27.54	Frequency Stability	PASS	Meet the requirement of limit.
2.1049 27.53(h)	Occupied Bandwidth	PASS	Meet the requirement of limit.
27.50(d)(5)	Peak to average ratio	PASS	Meet the requirement of limit.
27.53(h)	Band Edge Measurements	PASS	Meet the requirement of limit.
2.1051 27.53(h)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
2.1053 27.53(h)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -25.73dB at 5184.30MHz.

## 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
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Dec. 22, 2011	Dec. 21, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2011	Dec. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 20, 2011	Dec. 19, 2012
Preamplifier EMCI	EMC 012645	980115	Dec. 30, 2011	Dec. 29, 2012
Preamplifier EMCI	EMC 330H	980112	Dec. 30, 2011	Dec. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 21, 2011	Oct. 20, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Jan. 02, 2012	Jan. 01, 2013
RF signal cable Worken	RG-213	NA	Jan. 02, 2012	Jan. 01, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
Mini-Circuits Power Splitter	ZN2PD-9G	NA	Mar. 23, 2012	Mar. 22, 2013
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY50266653	Sep. 28, 2011	Sep. 27, 2012
Radio Communication Analyzer	MT8820C	6201010284	Aug. 01, 2011	Jul. 31, 2012

**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 test was performed in HwaYa Chamber 9.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 460141.

5. The IC Site Registration No. is IC 7450F-4.

### 3 GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

<b>EUT</b>	Smart Phone	
<b>MODEL NO.</b>	PM36100	
<b>POWER SUPPLY</b>	5.0Vdc (adapter or host equipment) 3.8Vdc (battery)	
<b>MODULATION TECHNOLOGY</b>	LTE Band 17	QPSK, 16QAM
	LTE Band 4	QPSK, 16QAM
<b>FREQUENCY RANGE</b>	LTE Band 17 Channel Bandwidth: 5MHz	706.5MHz ~ 713.5MHz
	LTE Band 17 Channel Bandwidth: 10MHz	709MHz ~ 711MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715.0MHz ~1750.0MHz
<b>EMISSION DESIGNATOR</b>	LTE Band 17 Channel Bandwidth: 5MHz	QPSK: 4M50G7D 16QAM: 4M50W7D
	LTE Band 17 Channel Bandwidth: 10MHz	QPSK: 8M93G7D 16QAM: 8M91W7D
	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 4M50G7D 16QAM: 4M50W7D
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 8M94G7D 16QAM: 8M91W7D
<b>MAX. ERP POWER (mW)</b>	LTE Band 17 Channel Bandwidth: 5MHz	52.24mW
	LTE Band 17 Channel Bandwidth: 10MHz	53.46mW
<b>MAX. EIRP POWER (mW)</b>	LTE Band 4 Channel Bandwidth: 5MHz	193.64mW
	LTE Band 4 Channel Bandwidth: 10MHz	203.24mW
<b>CATEGORY</b>	LTE: 3	
<b>ANTENNA TYPE</b>	LTE Band 17	Fixed Internal antenna with -4.5dBi gain
	LTE Band 4	Fixed Internal antenna with -1dBi gain
<b>DATA CABLE</b>	Refer to Note as below	
<b>I/O PORTS</b>	Refer to users' manual	
<b>ACCESSORY DEVICES</b>	Refer to Note as below	

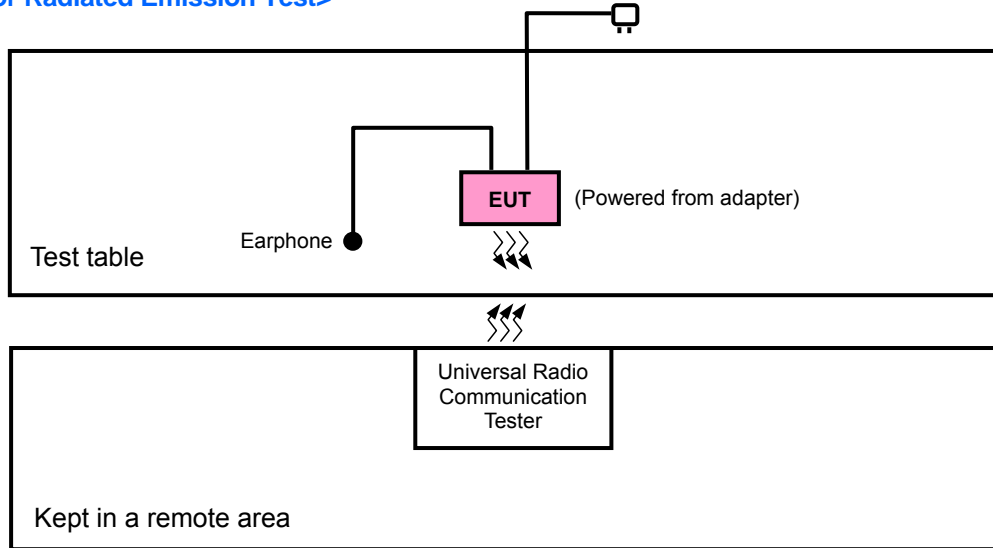
**NOTE:**

1. The EUT's accessories list refers to Ext Pho.pdf.
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.

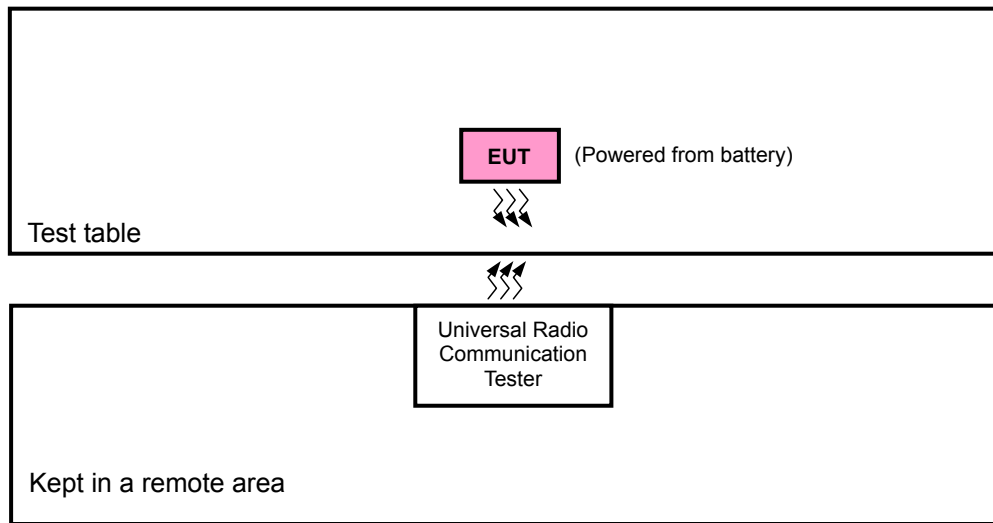


### 3.2 CONFIGURATION OF SYSTEM UNDER TEST

<For Radiated Emission Test>



<For Output Power Test>



### 3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Earphone	Merry	HS S250	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.1m non-shielded cable

**NOTE:** All power cords of the above support units are non shielded (1.8m).

### 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 Y-plane for ERP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

#### LTE Band 17

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	23755 to 23825	23755, 23790, 23825	5MHz	QPSK	1 RB / 0 RB Offset
	23780 to 23800	23780, 23790, 23800	10MHz	QPSK	1 RB / 49 RB Offset
FREQUENCY STABILITY	23755 to 23825	23790	5MHz	QPSK	1 RB / 0 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 49 RB Offset
OCCUPIED BANDWIDTH	23755 to 23825	23790	5MHz	QPSK, 16QAM	50 RB / 0 RB Offset
	23780 to 23800	23790	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
BAND EDGE	23755 to 23825	23755, 23825	5MHz	QPSK	1 RB / 0 RB Offset
					1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	23780 to 23800	23780, 23800	10MHz	QPSK	1 RB / 0 RB Offset
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDED EMISSION	23755 to 23825	23790	5MHz	QPSK	1 RB / 0 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 49 RB Offset
RADIATED EMISSION	23755 to 23825	23790	5MHz	QPSK	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
					25 RB / 0 RB Offset
	23780 to 23800	23790	10MHz	QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
				16QAM	1 RB / 49 RB Offset
					50 RB / 0 RB Offset



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LTE Band 4

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
EIRP	19975 to 20375	19975, 20175, 20375	5MHz	QPSK	1 RB / 24 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK	1 RB / 0 RB Offset
FREQUENCY STABILITY	19975 to 20375	20175	5MHz	QPSK	1 RB / 24 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
OCCUPIED BANDWIDTH	19975 to 20375	20175	5MHz	QPSK, 16QAM	25 RB / 24 RB Offset
	20000 to 20350	20175	10MHz	QPSK, 16QAM	50 RB / 0 RB Offset
PEAK TO AVERAGE RATIO	19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 24 RB Offset
	20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
BAND EDGE	19975 to 20375	19975, 20375	5MHz	QPSK	1 RB, / 0 RB Offset
					1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	20000 to 20350	20000, 20350	10MHz	QPSK	1 RB / 0 RB Offset
					1 RB / 49 RB Offset
					50 RB / 0 RB Offset
CONDCUDED EMISSION	19975 to 20375	20175	5MHz	QPSK	1 RB / 24 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
RADIATED EMISSION	19975 to 20375	20175	5MHz	QPSK	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
				16QAM	1 RB / 24 RB Offset
					25 RB / 0 RB Offset
	20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
				16QAM	1 RB / 0 RB Offset
					50 RB / 0 RB Offset



**TEST CONDITION:**

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP/EIRP	25deg. C, 65%RH	3.8Vdc	Phoenix Chen
FREQUENCY STABILITY	25deg. C, 65%RH	3.8Vdc	Phoenix Chen
OCCUPIED BANDWIDTH	25deg. C, 65%RH	3.8Vdc	Phoenix Chen
BAND EDGE	25deg. C, 65%RH	3.8Vdc	Phoenix Chen
CONDCUDED EMISSION	25deg. C, 65%RH	3.8Vdc	Phoenix Chen
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu

**3.5 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 C63.4-2003**

**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

Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.

Portable stations (hand-held devices) operating in the 704-716 MHz band are limited to 3 watts ERP

#### 4.1.2 TEST PROCEDURES

##### **EIRP / ERP MEASUREMENT:**

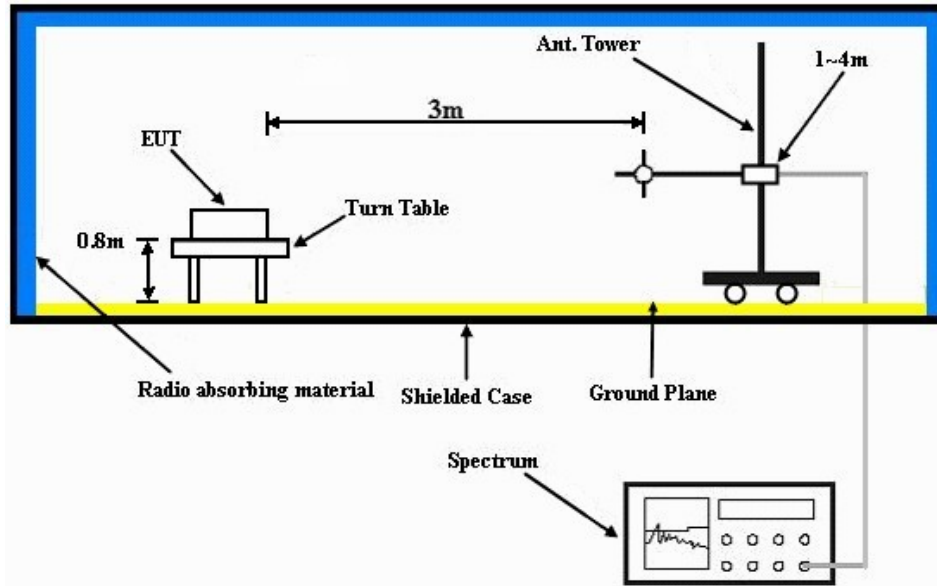
- a. The EUT was set up for the maximum power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RBW and VBW is 10MHz for LTE.
- b. E.I.R.P power measurement. In the semi-anechoic 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 a. Record the power level of S.G
- d.  $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e.  $E.R.P = E.I.R.P - 2.15 \text{ dB}$

##### **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.

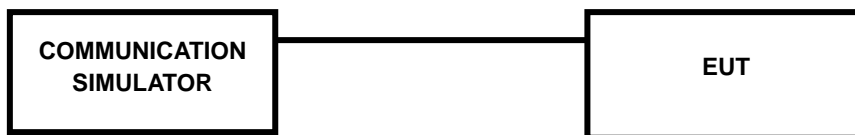
### 4.1.3 TEST SETUP

#### EIRP / ERP MEASUREMENT:



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

#### CONDUCTED POWER MEASUREMENT:



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

#### 4.1.4 TEST RESULTS

##### AVERAGE CONDUCTED OUTPUT POWER (dBm)

LTE Band 17								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
5 MHz	QPSK	23755	706.5	1	0	0	24	23.95
		23790	710	1	0	0	24	23.97
		23825	713.5	1	0	0	24	23.96
		23755	706.5	1	24	0	24	23.89
		23790	710	1	24	0	24	23.99
		23825	713.5	1	24	0	24	23.96
		23755	706.5	12	6	1	24	22.94
		23790	710	12	6	1	24	22.86
		23825	713.5	12	6	1	24	22.85
		23755	706.5	25	0	1	24	22.79
		23790	710	25	0	1	24	22.82
		23825	713.5	25	0	1	24	22.8
	16QAM	23755	706.5	1	0	1	24	22.92
		23790	710	1	0	1	24	22.97
		23825	713.5	1	0	1	24	22.94
		23755	706.5	1	24	1	24	22.96
		23790	710	1	24	1	24	22.99
		23825	713.5	1	24	1	24	22.69
		23755	706.5	12	6	2	24	21.94
		23790	710	12	6	2	24	21.98
23825	713.5	12	6	2	24	21.95		
23755	706.5	25	0	2	24	21.79		
23790	710	25	0	2	24	21.8		
23825	713.5	25	0	2	24	21.71		



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LTE Band 17								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
10MHz	QPSK	23780	709	1	0	0	24	23.86
		23790	710	1	0	0	24	23.97
		23800	711	1	0	0	24	23.95
		23780	709	1	49	0	24	23.97
		23790	710	1	49	0	24	24.06
		23800	711	1	49	0	24	23.77
		23780	709	25	12	1	24	22.72
		23790	710	25	12	1	24	22.76
		23800	711	25	12	1	24	22.7
		23780	709	50	0	1	24	22.56
		23790	710	50	0	1	24	22.59
		23800	711	50	0	1	24	22.57
	16QAM	23780	709	1	0	1	24	22.84
		23790	710	1	0	1	24	22.86
		23800	711	1	0	1	24	22.72
		23780	709	1	49	1	24	22.95
		23790	710	1	49	1	24	22.99
		23800	711	1	49	1	24	22.7
		23780	709	25	12	2	24	21.7
		23790	710	25	12	2	24	21.77
		23800	711	25	12	2	24	21.74
		23780	709	50	0	2	24	21.57
		23790	710	50	0	2	24	21.67
		23800	711	50	0	2	24	21.62





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LTE Band 4								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
5 MHz	QPSK	19975	1712.5	1	0	0	24.6	24.5
		20175	1732.5	1	0	0	24.6	24.45
		20375	1752.5	1	0	0	24.6	24.39
		19975	1712.5	1	24	0	24.6	24.29
		20175	1732.5	1	24	0	24.6	24.08
		20375	1752.5	1	24	0	24.6	24.44
		19975	1712.5	12	6	1	24.6	23.41
		20175	1732.5	12	6	1	24.6	23.34
		20375	1752.5	12	6	1	24.6	23.4
	19975	1712.5	25	0	1	24.6	23.17	
	20175	1732.5	25	0	1	24.6	23.01	
	20375	1752.5	25	0	1	24.6	23.01	
	19975	1712.5	1	0	1	24.6	23.19	
	20175	1732.5	1	0	1	24.6	23.35	
	20375	1752.5	1	0	1	24.6	23.16	
	19975	1712.5	1	24	1	24.6	23.11	
	20175	1732.5	1	24	1	24.6	23.25	
	20375	1752.5	1	24	1	24.6	23.34	
	19975	1712.5	12	6	2	24.6	22.2	
	20175	1732.5	12	6	2	24.6	22.27	
	20375	1752.5	12	6	2	24.6	22.3	
19975	1712.5	25	0	2	24.6	22.08		
20175	1732.5	25	0	2	24.6	22.04		
20375	1752.5	25	0	2	24.6	22.14		



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LTE Band 4								
BW	Modulation	CH	Frequency	RB	RB Offset	MPR	Target	Measured
			(MHz)				Power	Power
10MHz	QPSK	20000	1715	1	0	0	24.6	24.53
		20175	1732.5	1	0	0	24.6	24.22
		20350	1750	1	0	0	24.6	24.26
		20000	1715	1	49	0	24.6	24.43
		20175	1732.5	1	49	0	24.6	24.32
		20350	1750	1	49	0	24.6	24.34
		20000	1715	25	12	1	24.6	23.23
		20175	1732.5	25	12	1	24.6	23.17
		20350	1750	25	12	1	24.6	23.2
		20000	1715	50	0	1	24.6	23.01
		20175	1732.5	50	0	1	24.6	22.98
		20350	1750	50	0	1	24.6	22.99
	16QAM	20000	1715	1	0	1	24.6	23.3
		20175	1732.5	1	0	1	24.6	23.27
		20350	1750	1	0	1	24.6	23.28
		20000	1715	1	49	1	24.6	23.39
		20175	1732.5	1	49	1	24.6	23.3
		20350	1750	1	49	1	24.6	23.24
		20000	1715	25	12	2	24.6	22.18
		20175	1732.5	25	12	2	24.6	22.14
		20350	1750	25	12	2	24.6	22.13
		20000	1715	50	0	2	24.6	21.97
		20175	1732.5	50	0	2	24.6	21.93
		20350	1750	50	0	2	24.6	21.95



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**AVERAGE ERP (dBm)**

**LTE BAND 17**

**CHANNEL BANDWIDTH: 5MHz QPSK**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Y	23755	706.5	-11.03	30.36	17.18	52.24	H
	23790	710.0	-10.93	30.17	17.09	51.17	
	23825	713.5	-10.88	30.17	17.14	51.76	
	23755	706.5	-18.39	32.03	11.49	14.09	V
	23790	710.0	-18.08	31.98	11.75	14.96	
	23825	713.5	-18.56	32.06	11.35	13.65	

**CHANNEL BANDWIDTH: 10MHz QPSK**

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Y	23780	709.0	-10.75	30.17	17.27	53.33	H
	23790	710.0	-10.98	30.17	17.04	50.58	
	23800	711.0	-10.75	30.18	17.28	53.46	
	23780	709.0	-18.46	31.96	11.35	13.65	V
	23790	710.0	-18.10	31.98	11.73	14.89	
	23800	711.0	-18.71	32.03	11.17	13.09	



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## LTE BAND 4

### CHANNEL BANDWIDTH: 5MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	19975	1712.5	-19.95	37.90	17.95	62.37	H
	20175	1732.5	-19.56	37.99	18.43	69.66	
	20375	1752.5	-19.86	38.31	18.45	69.98	
	19975	1712.5	-15.50	37.81	22.31	170.22	V
	20175	1732.5	-15.83	38.00	22.17	164.82	
	20375	1752.5	-15.35	38.22	22.87	193.64	

### CHANNEL BANDWIDTH: 10MHz QPSK

Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Y	20000	1715.0	-20.41	37.99	17.58	57.28	H
	20175	1732.5	-20.02	37.99	17.97	62.66	
	20350	1750.0	-19.64	38.36	18.72	74.47	
	20000	1715.0	-15.69	37.91	22.22	166.72	V
	20175	1732.5	-15.15	38.00	22.85	192.75	
	20350	1750.0	-15.20	38.28	23.08	203.24	

## 4.2 FREQUENCY STABILITY MEASUREMENT

### 4.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

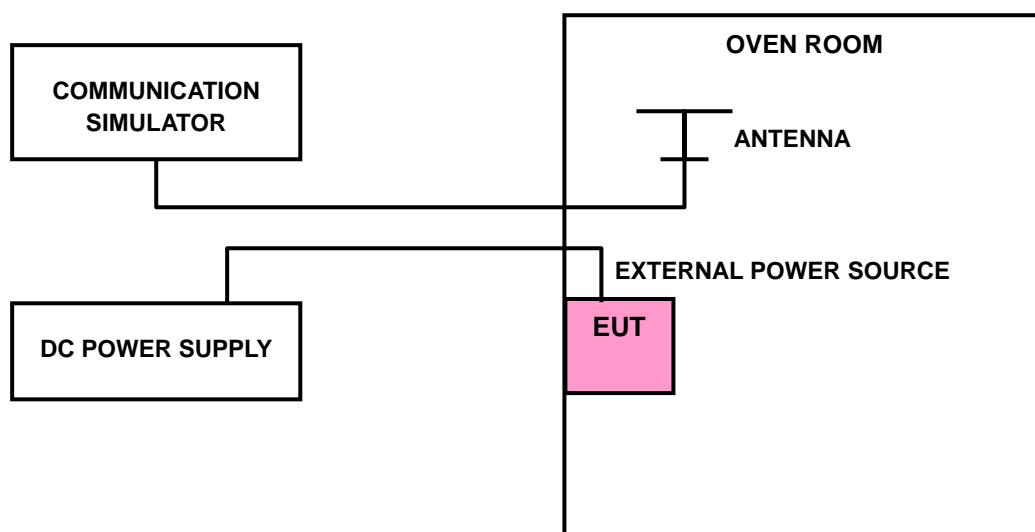
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

### 4.2.2 TEST PROCEDURE

- a. 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.
- b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- c. 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 17		LTE BAND 4		
	5MHz	10MHz	5MHz	10MHz	
3.8	-0.0017	-0.0025	0.0001	0.0005	2.5
3.6	-0.0052	-0.0021	0.0025	0.0029	2.5
4.2	0.0034	0.0035	0.0016	-0.0006	2.5

**NOTE:** The applicant defined the normal working voltage of the host equipment is from 3.6Vdc to 4.2Vdc.

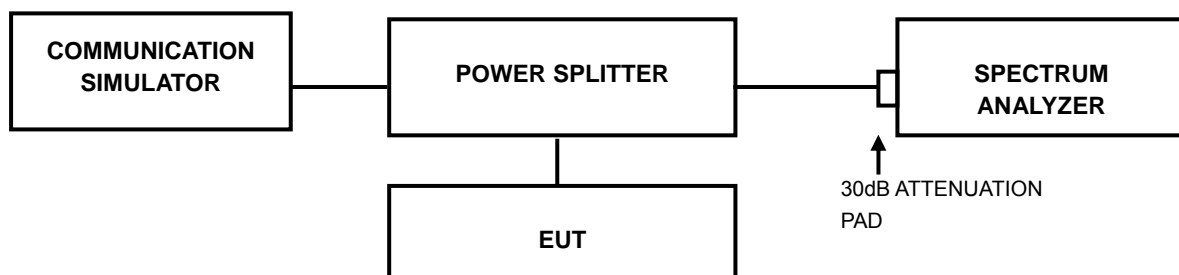
TEMP. (°C)	FREQUENCY ERROR (ppm)				LIMIT (ppm)
	LTE BAND 17		LTE BAND 4		
	5MHz	10MHz	5MHz	10MHz	
-10	0.0075	-0.0038	-0.0005	-0.0027	2.5
0	-0.0028	-0.0042	-0.0018	-0.0007	2.5
10	-0.0031	0.0045	-0.0003	0.0008	2.5
20	0.0056	-0.0030	-0.0006	0.0013	2.5
30	0.0045	-0.0034	0.0005	0.0020	2.5
40	-0.0021	-0.0020	-0.0004	0.0006	2.5
50	-0.0013	-0.0027	0.0019	-0.0006	2.5
55	0.0038	0.0023	-0.0029	0.0023	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.

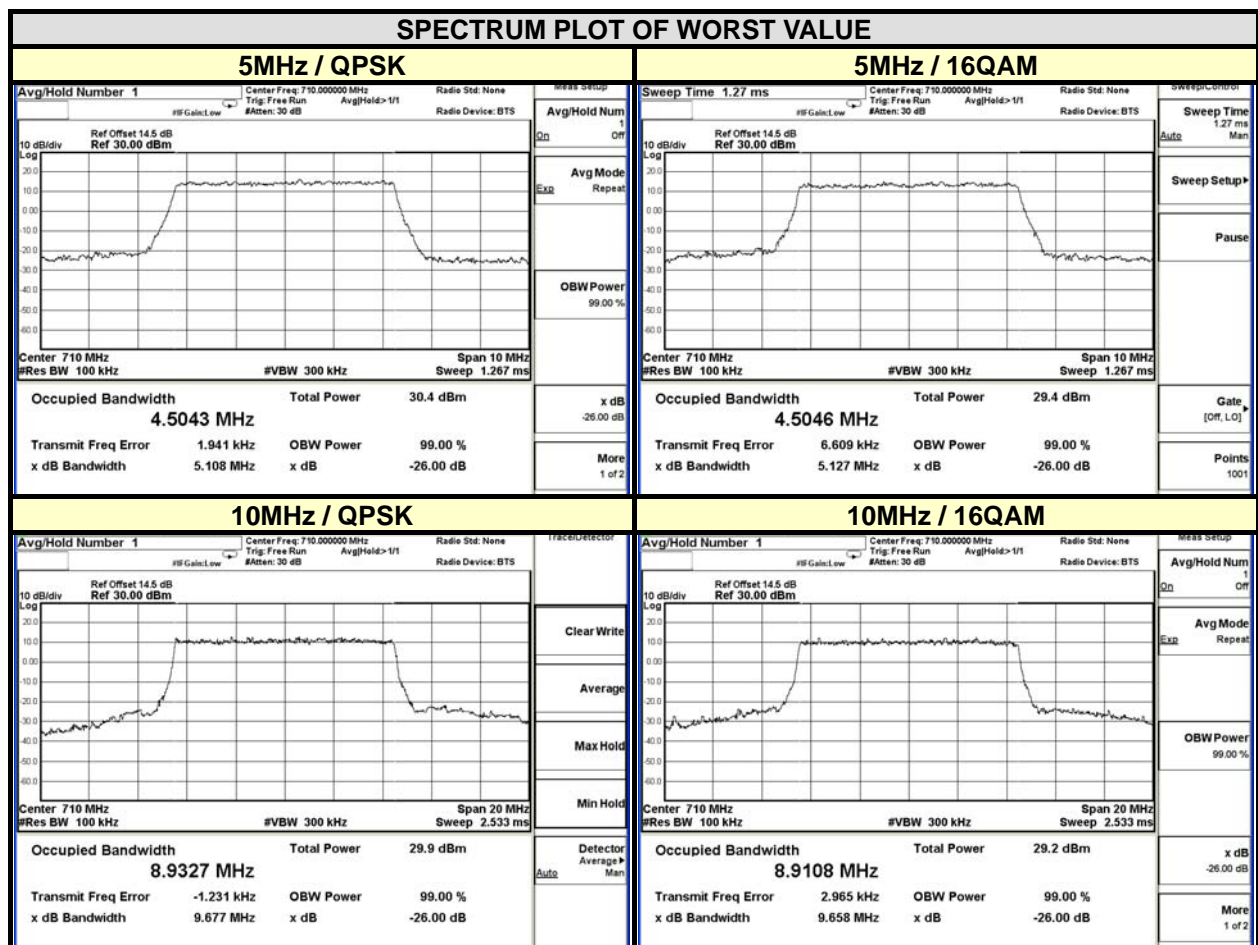


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### 4.3.4 TEST RESULTS

#### LTE BAND 17

CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
23790	710.0	4.5043	4.5046	23790	710.0	8.9327	8.9108



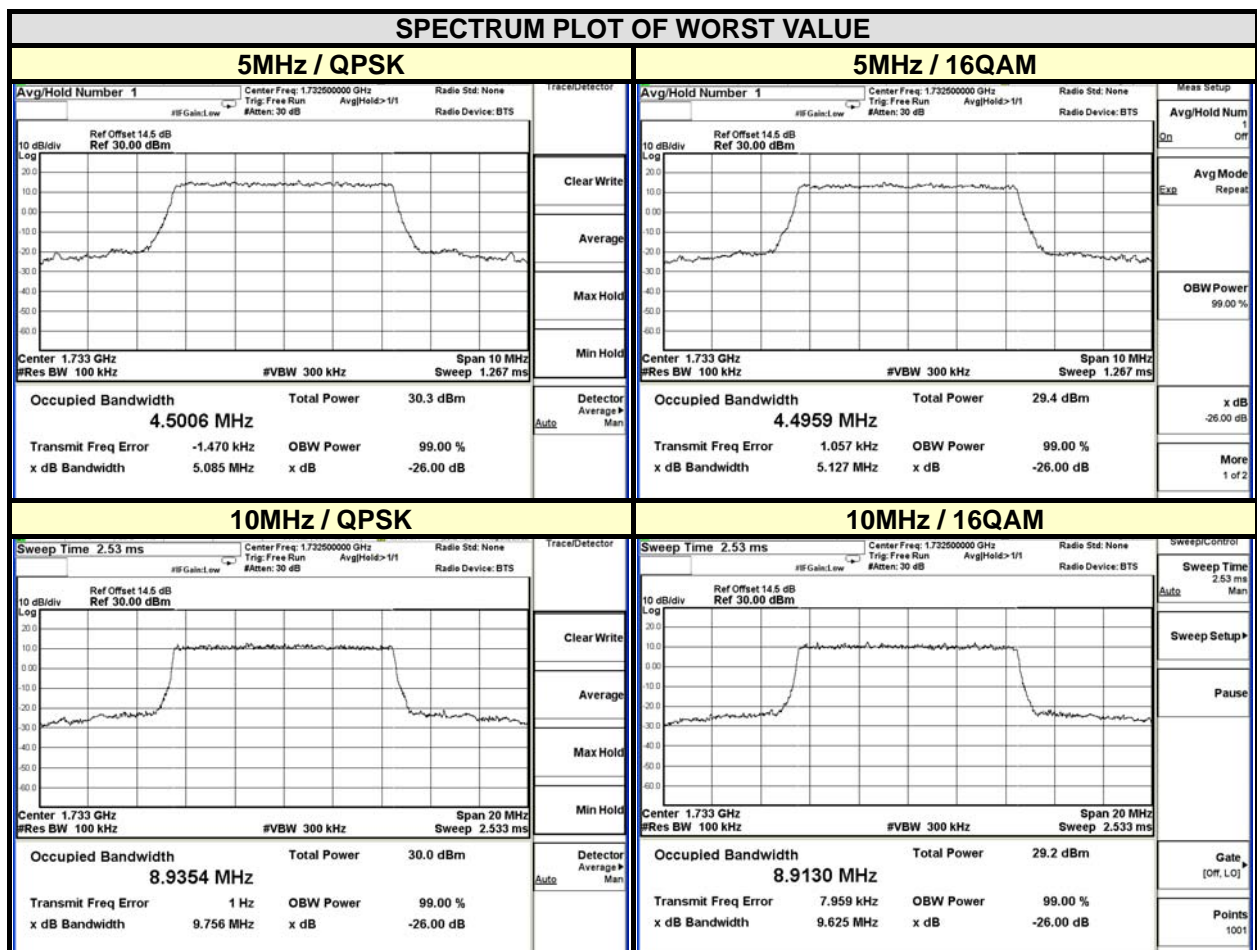




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LTE BAND 4

CHANNEL BANDWIDTH: 5MHz				CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)		CHANNEL	FREQUENCY (MHz)	99% OCCUPIED BANDWIDTH (MHz)	
		QPSK	16QAM			QPSK	16QAM
20175	1732.5	4.5006	4.4959	20175	1732.5	8.9354	8.9130

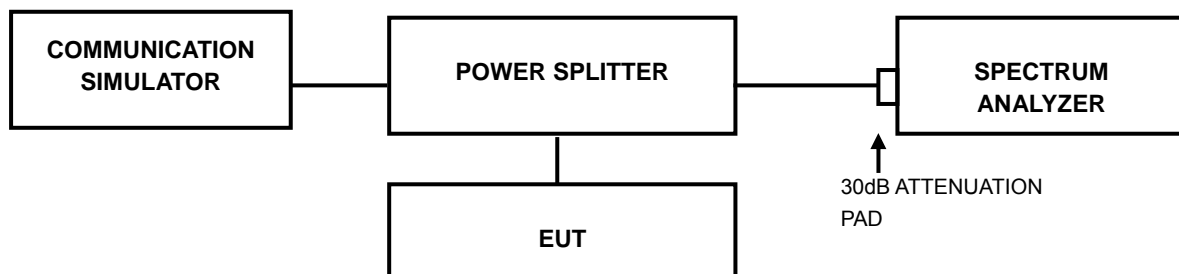


## 4.4 PEAK TO AVERAGE RATIO

### 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%.

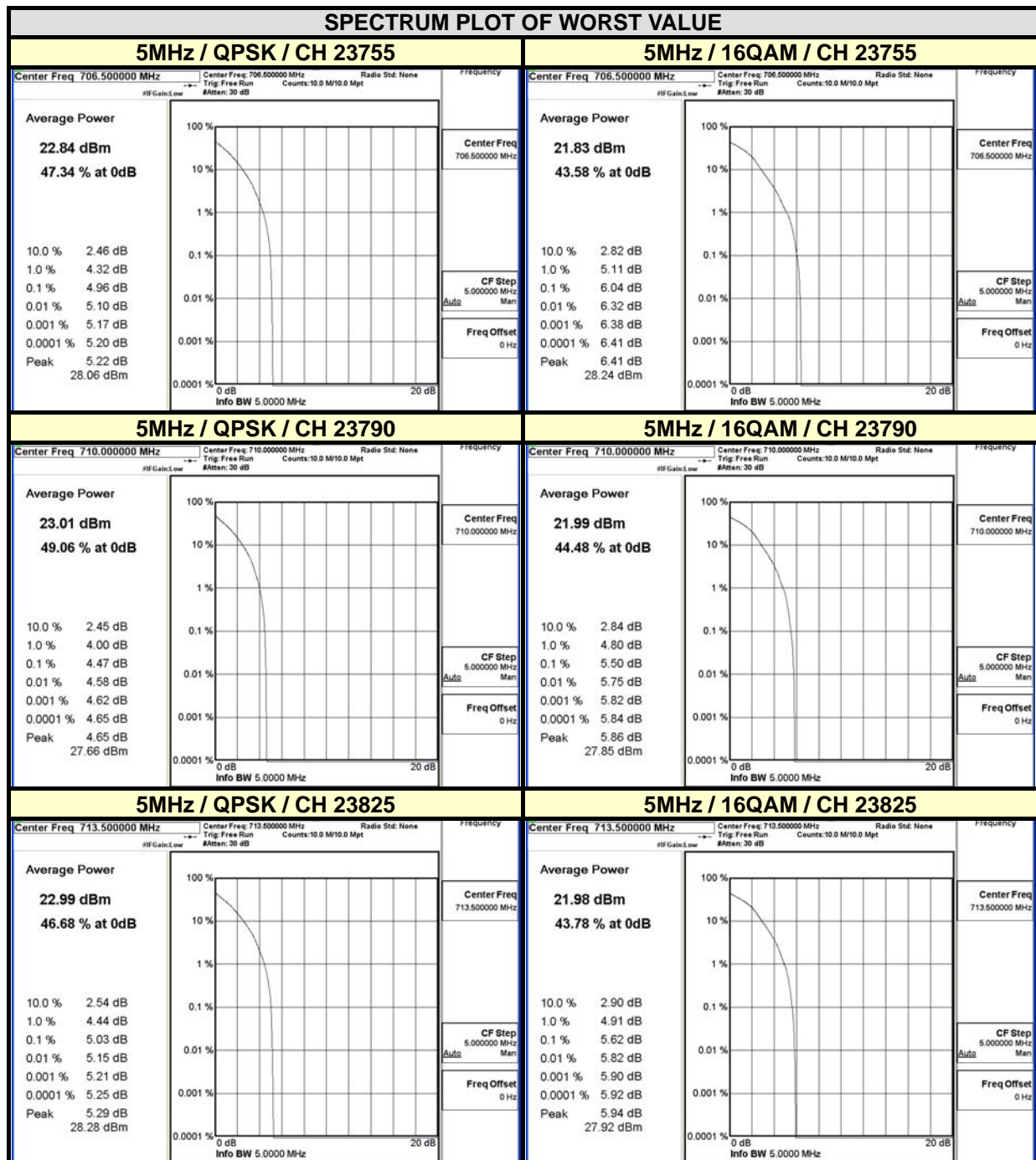


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### 4.4.4 TEST RESULTS

#### LTE BAND 17

CHANNEL BANDWIDTH: 5MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM
23755	706.5	4.96	6.04
23790	710.0	4.47	5.50
23825	713.5	5.03	5.62

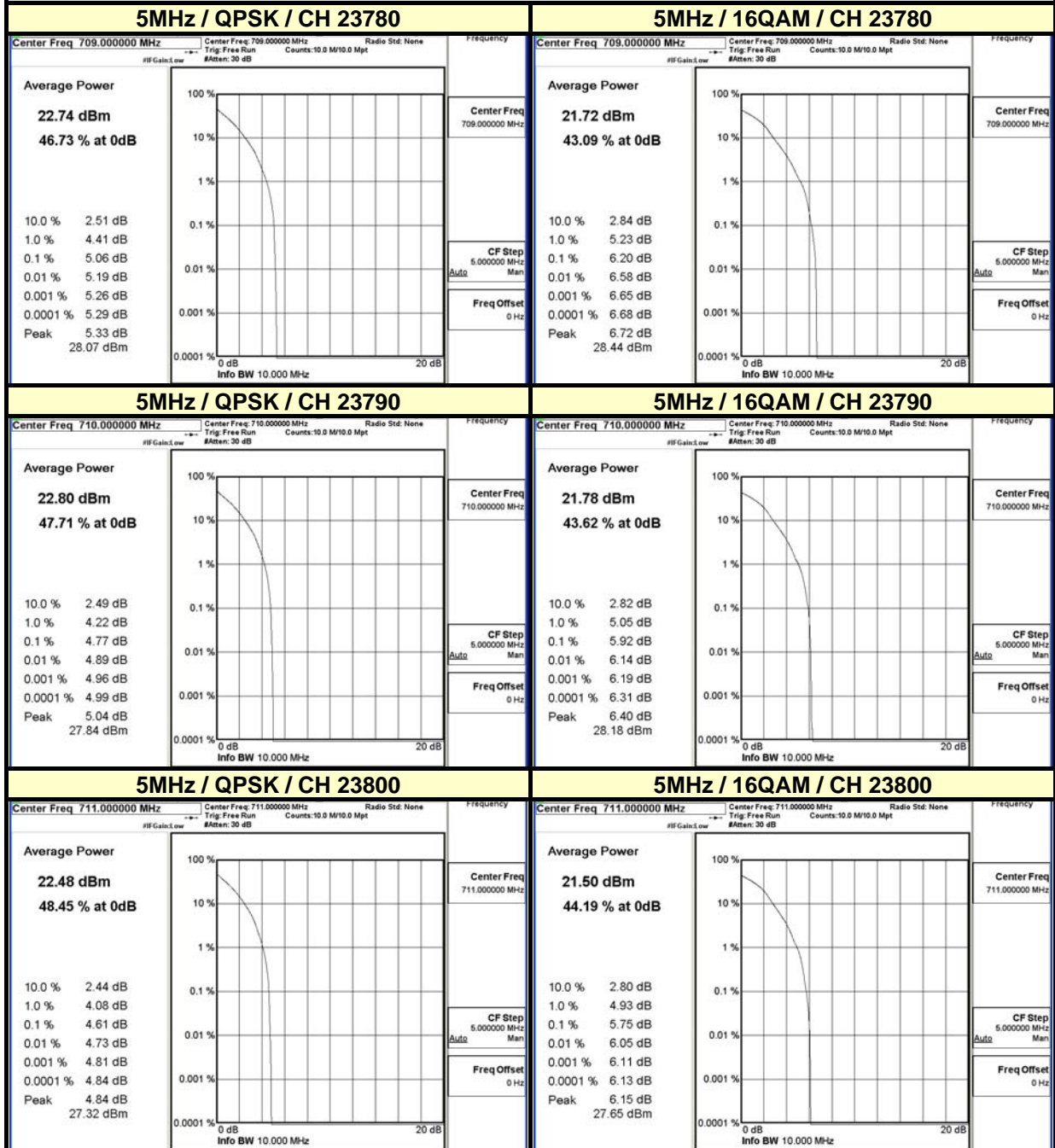




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CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM
23780	709.0		
23790	710.0		
23800	711.0		

**SPECTRUM PLOT OF WORST VALUE**

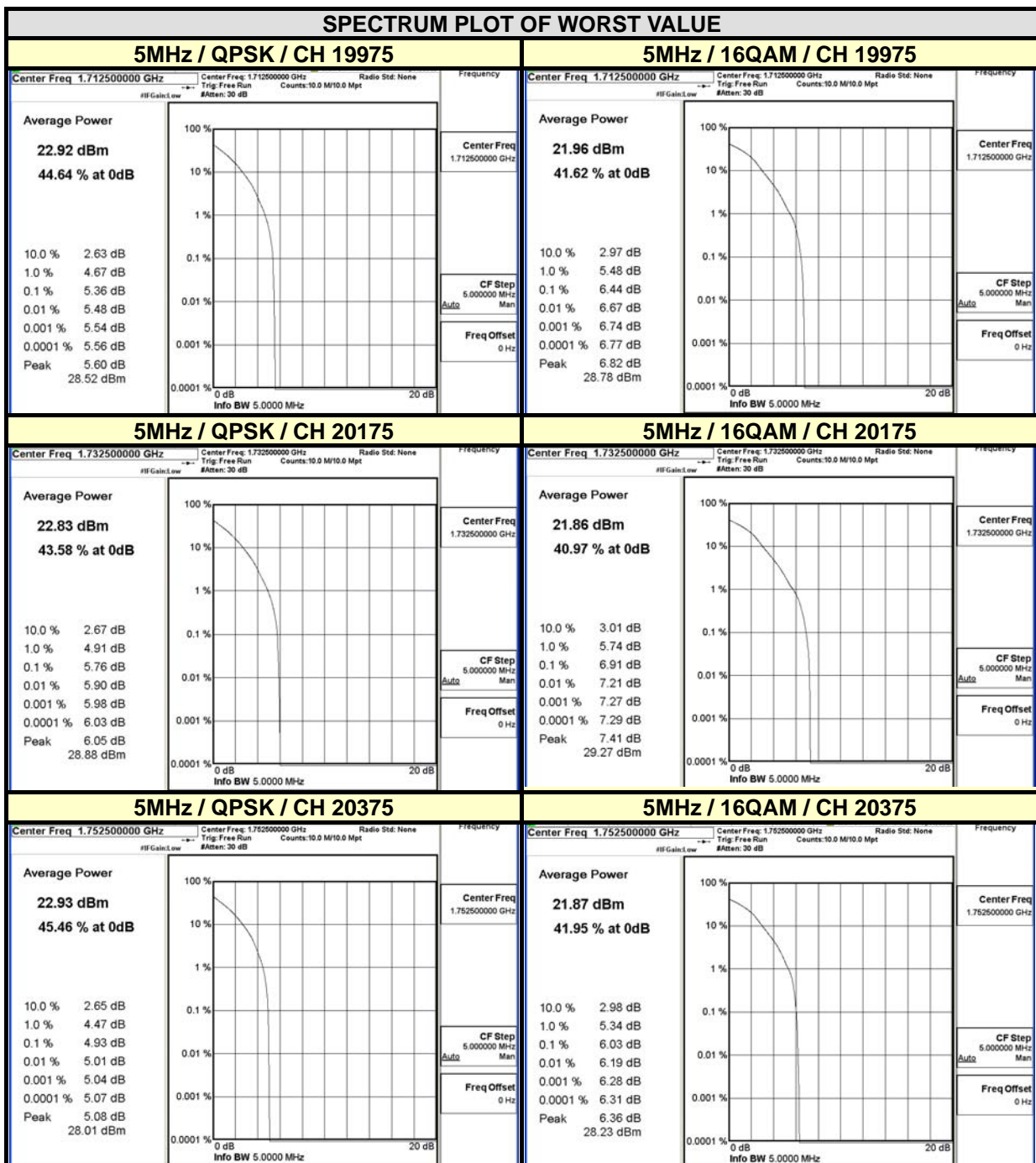




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LTE BAND 4

CHANNEL BANDWIDTH: 5MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM
19975	1712.5	5.36	6.44
20175	1732.5	5.76	6.91
20375	1752.5	4.93	6.03

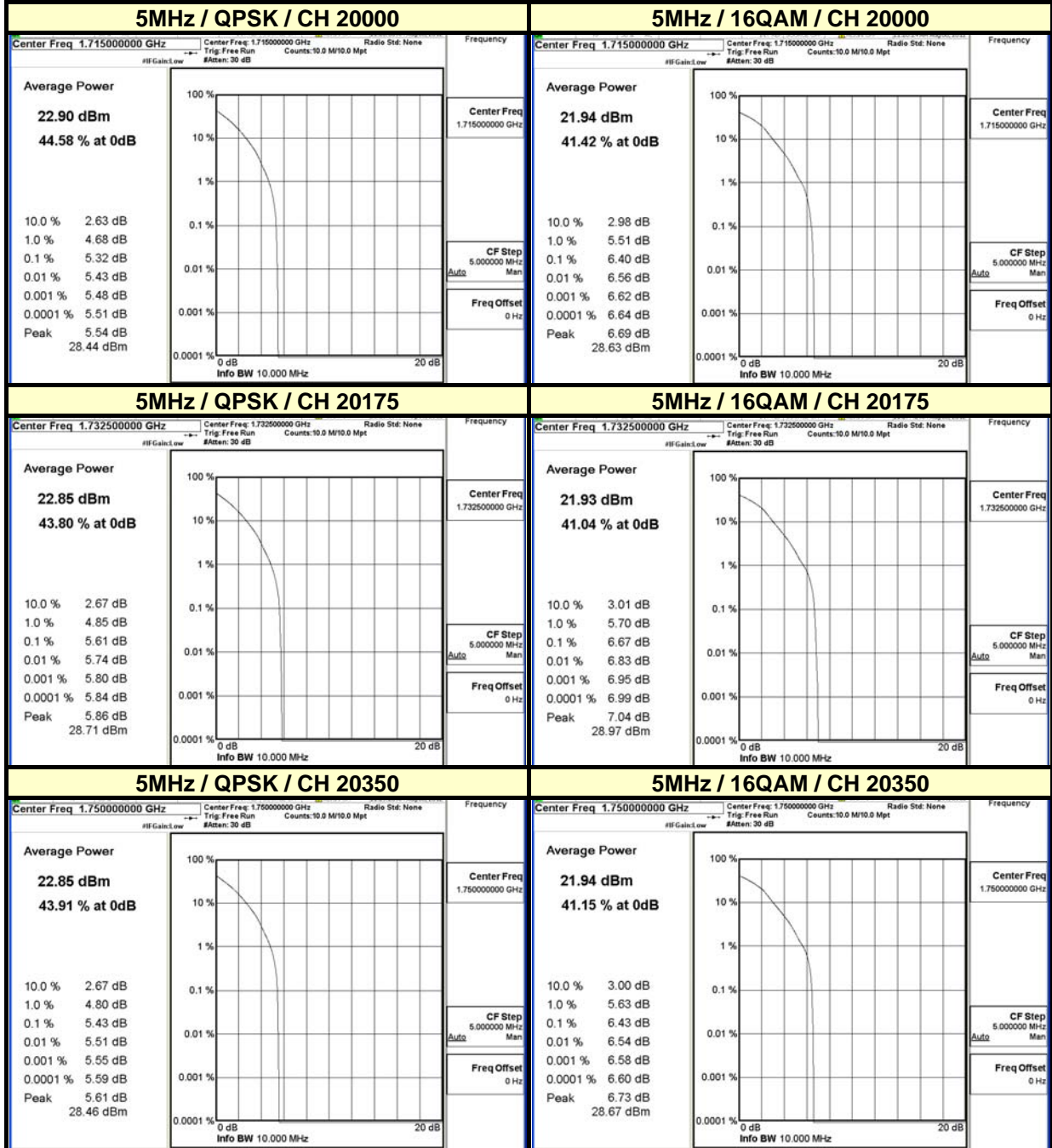




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CHANNEL BANDWIDTH: 10MHz			
CHANNEL	FREQUENCY (MHz)	PEAK TO AVERAGE RATIO (dB)	
		QPSK	16QAM
20000	1715.0	5.32	6.40
20175	1732.5	5.61	6.67
20350	1750.0	5.43	6.43

**SPECTRUM PLOT OF WORST VALUE**



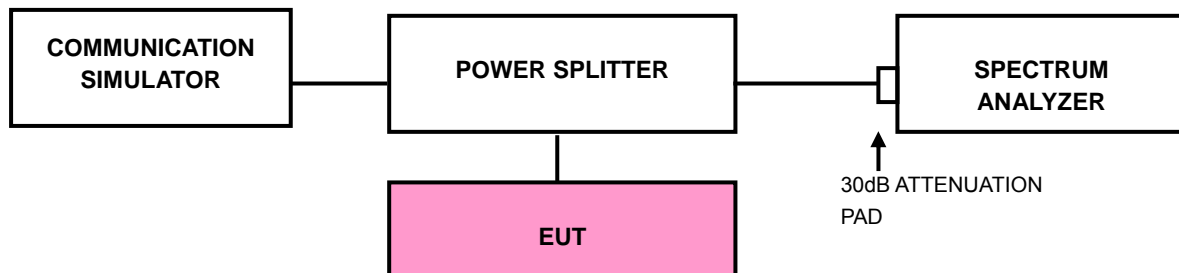
## 4.5 BAND EDGE MEASUREMENT

### 4.5.1 LIMITS OF BAND EDGE MEASUREMENT

For operations in the 704-716 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

For operations in the 1710 – 1755 MHz MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10}(P)$  dB.

### 4.5.2 TEST SETUP



### 4.5.3 TEST PROCEDURES

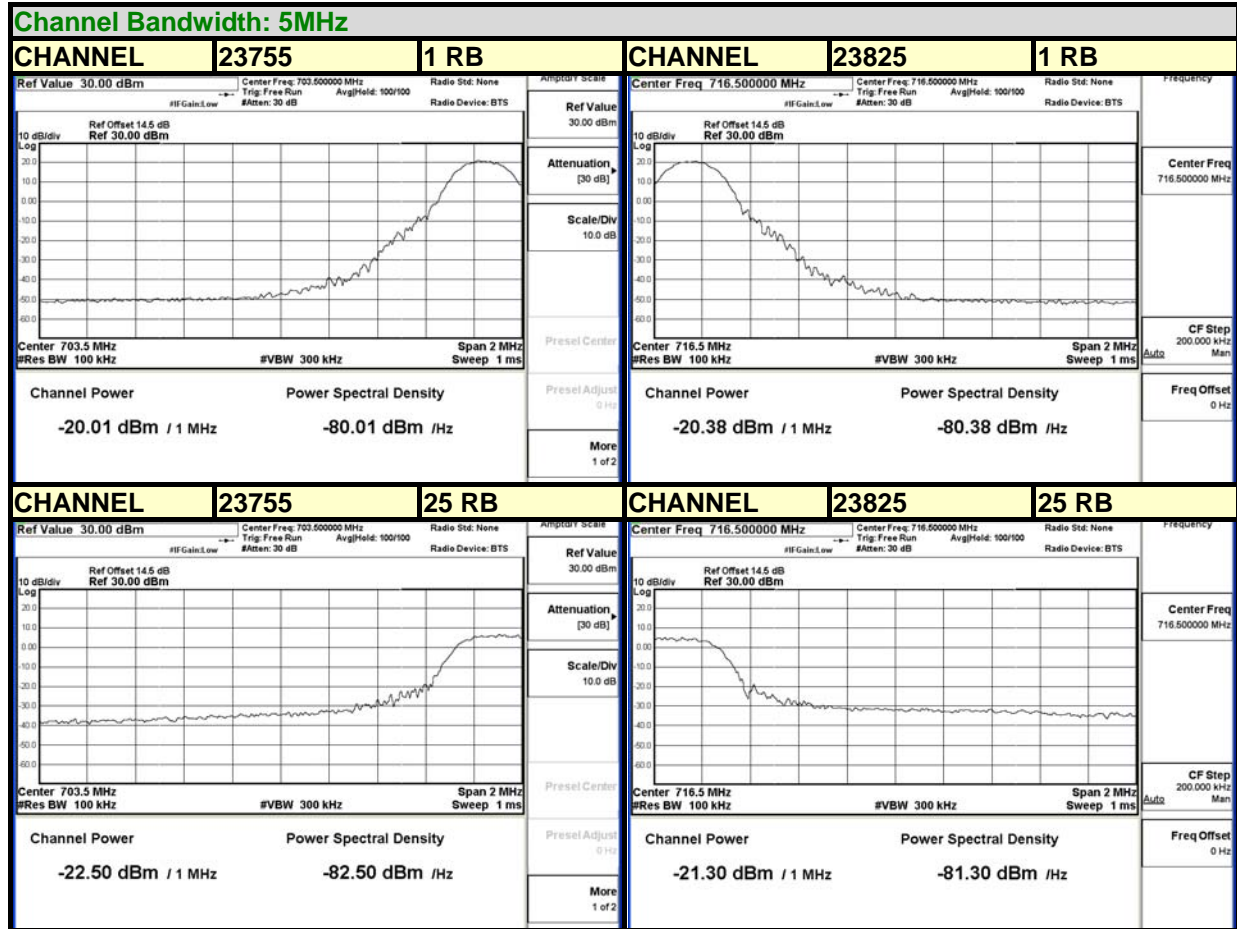
- The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with R&S Spectrum Analyzer. All measurements were done at 2 channels (low and high operational frequency range.).
- The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- The center frequency of spectrum is the band edge frequency and span is 2 MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz.
- Record the max trace plot into the test report.



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## 4.5.4 TEST RESULTS

### LTE BAND 17







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### Channel Bandwidth: 10MHz

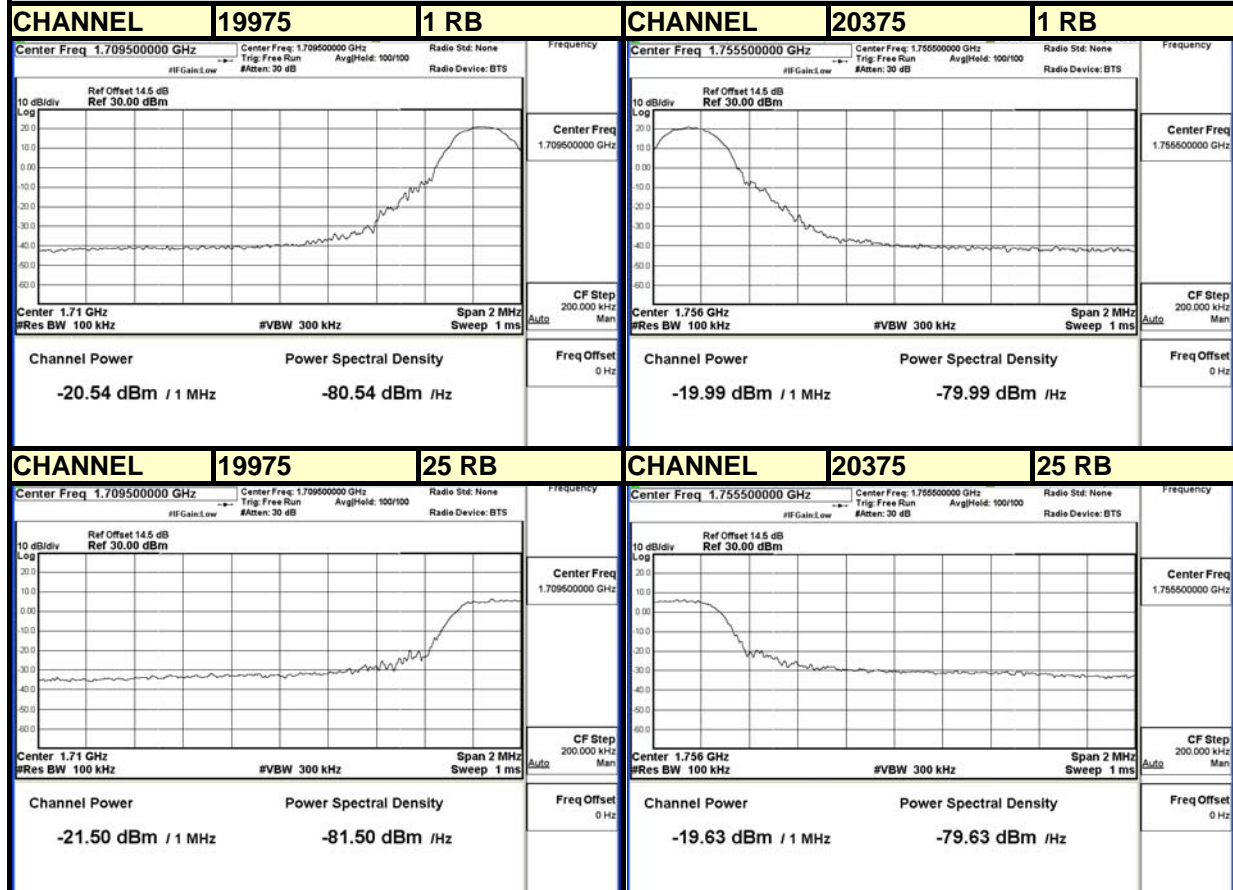
CHANNEL	23780	1 RB	CHANNEL	23800	1 RB
Ref Value 30.00 dBm Center Freq: 703.500000 MHz Trig: Free Run AvgHeld: 100/100 #IF Gain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS			Ref Value 30.00 dBm Center Freq: 716.500000 MHz Trig: Free Run AvgHeld: 100/100 #IF Gain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS		
Center 703.5 MHz #Res BW 100 kHz #VBW 300 kHz Span 2 MHz Sweep 1 ms			Center 716.5 MHz #Res BW 100 kHz #VBW 300 kHz Span 2 MHz Sweep 1 ms		
Channel Power Power Spectral Density <b>-33.78 dBm / 1 MHz -93.78 dBm /Hz</b>			Channel Power Power Spectral Density <b>-34.20 dBm / 1 MHz -94.20 dBm /Hz</b>		
Ref Value 30.00 dBm Center Freq: 703.500000 MHz Trig: Free Run AvgHeld: 100/100 #IF Gain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS			Ref Value 30.00 dBm Center Freq: 716.500000 MHz Trig: Free Run AvgHeld: 100/100 #IF Gain: Low #Atten: 30 dB Radio Std: None Radio Device: BTS		
Center 703.5 MHz #Res BW 100 kHz #VBW 300 kHz Span 2 MHz Sweep 1 ms			Center 716.5 MHz #Res BW 100 kHz #VBW 300 kHz Span 2 MHz Sweep 1 ms		
Channel Power Power Spectral Density <b>-26.85 dBm / 1 MHz -86.85 dBm /Hz</b>			Channel Power Power Spectral Density <b>-23.20 dBm / 1 MHz -83.20 dBm /Hz</b>		



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### LTE BAND 4

#### Channel Bandwidth: 5MHz





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**Channel Bandwidth: 10MHz**

CHANNEL	20000	1 RB	CHANNEL	20350	1 RB
<p>Avg/Hold Number 100   Center Freq: 1.709500000 GHz   Radio Std: None   #IF Gain: Low   #Atten: 30 dB   Avg/Hold: 100/100   Radio Device: BTS</p> <p>Center 1.71 GHz   #Res BW 100 kHz   #VBW 300 kHz   Span 2 MHz   Sweep 1 ms</p> <p>Channel Power: -29.49 dBm / 1 MHz   Power Spectral Density: -89.49 dBm /Hz</p>			<p>Avg/Hold Number 100   Center Freq: 1.705500000 GHz   Radio Std: None   #IF Gain: Low   #Atten: 30 dB   Avg/Hold: 100/100   Radio Device: BTS</p> <p>Center 1.756 GHz   #Res BW 100 kHz   #VBW 300 kHz   Span 2 MHz   Sweep 1 ms</p> <p>Channel Power: -29.53 dBm / 1 MHz   Power Spectral Density: -89.53 dBm /Hz</p>		
<p>CHANNEL 20000   50 RB</p> <p>Center 1.71 GHz   #Res BW 100 kHz   #VBW 300 kHz   Span 2 MHz   Sweep 1 ms</p> <p>Channel Power: -24.05 dBm / 1 MHz   Power Spectral Density: -84.05 dBm /Hz</p>			<p>CHANNEL 20350   50 RB</p> <p>Center 1.756 GHz   #Res BW 100 kHz   #VBW 300 kHz   Span 2 MHz   Sweep 1 ms</p> <p>Channel Power: -22.40 dBm / 1 MHz   Power Spectral Density: -82.40 dBm /Hz</p>		

## 4.6 CONDUCTED SPURIOUS EMISSIONS

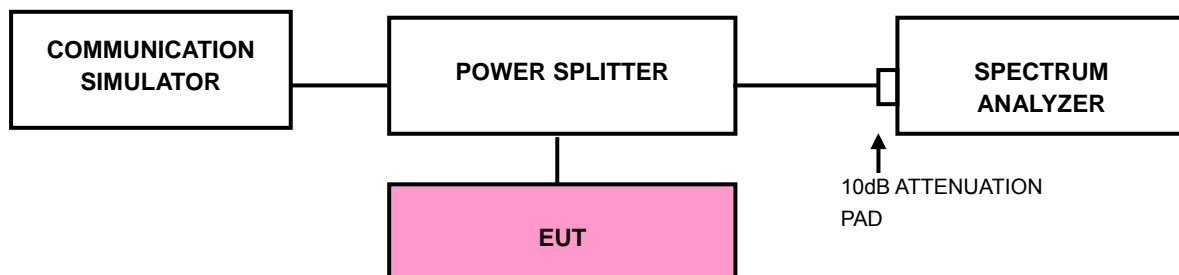
### 4.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10}(P)$  dB. The limit of emission equal to  $-13\text{dBm}$

### 4.6.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- b. Measuring frequency range is from 30 MHz to 7.2GHz for LTE Band 17 and from 30MHz to 18GHz for LTE Band 4. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

### 4.6.3 TEST SETUP

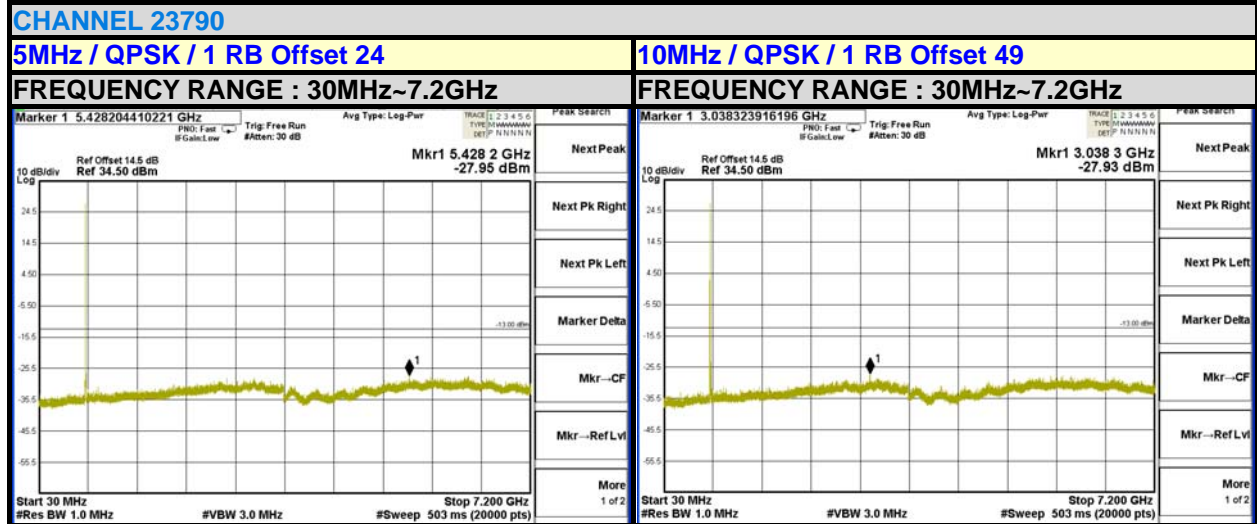




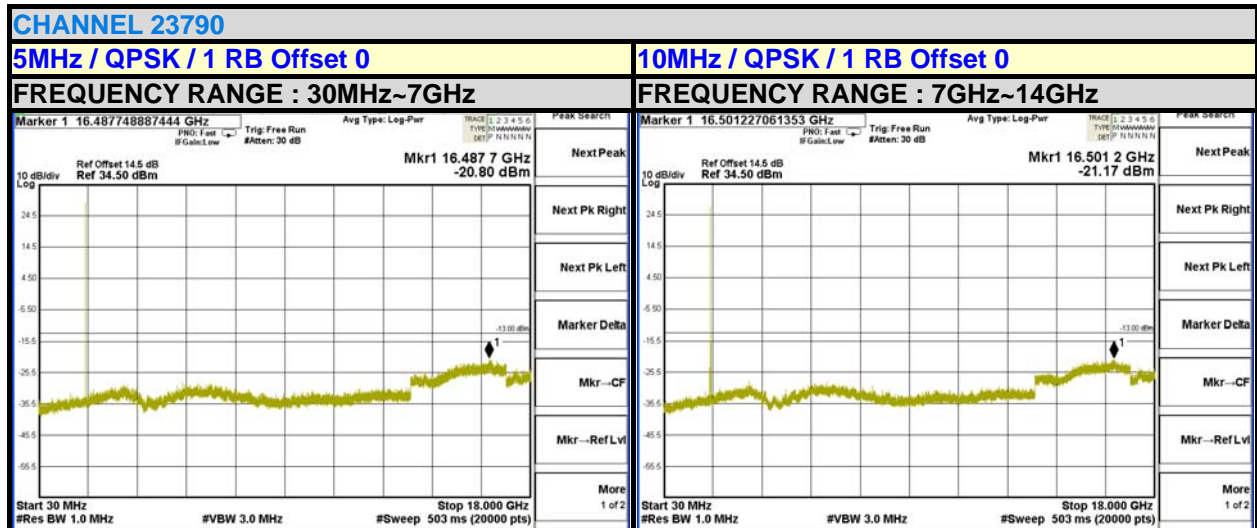
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### 4.6.4 TEST RESULTS

#### LTE BAND 17



#### LTE BAND 4



## 4.7 RADIATED EMISSION MEASUREMENT

### 4.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least  $43 + 10 \log_{10}(P)$  dB. The limit of emission equal to  $-13\text{dBm}$

### 4.7.2 TEST PROCEDURES

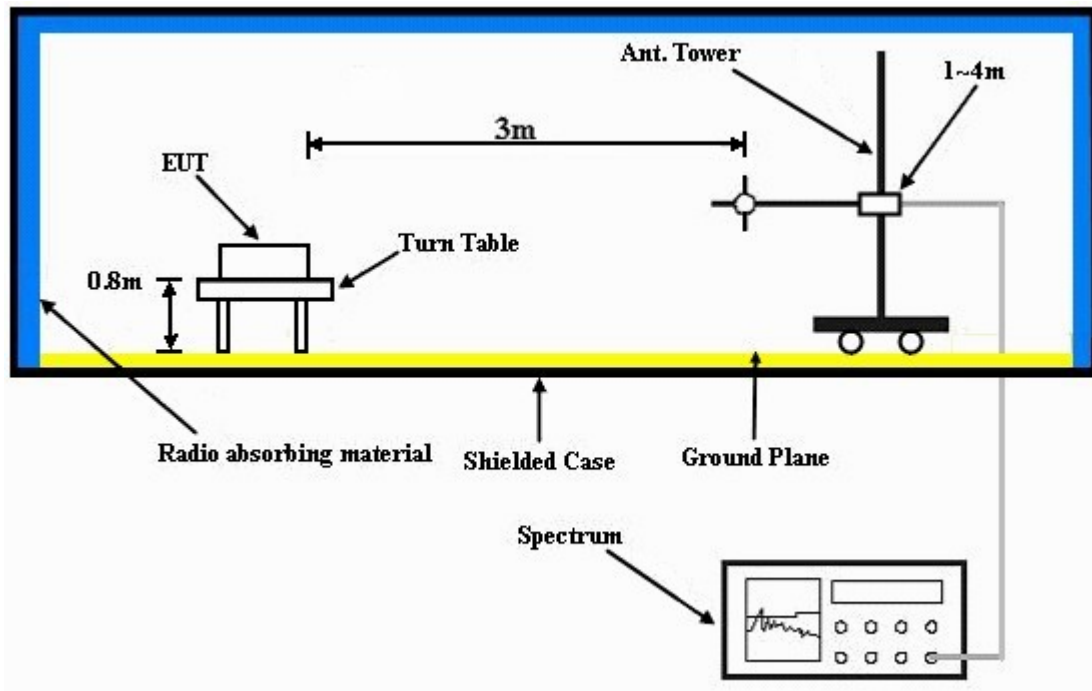
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from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

**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).



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### 4.7.5 TEST RESULTS

#### LTE BAND 17

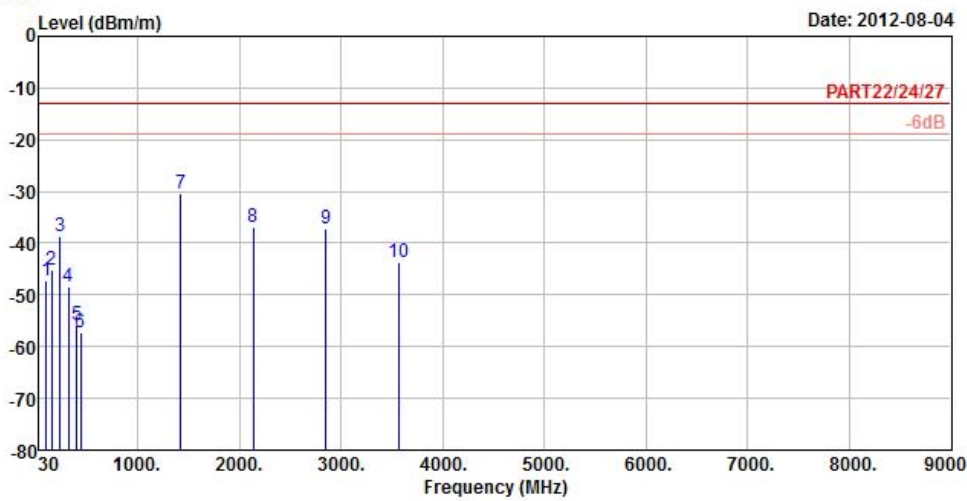
CHANNEL BANDWIDTH: 5MHz / QPSK



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Data: 9



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(QPSK1,24)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Read	Limit	Over			
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.31	-47.24	-36.80	-13.00	-34.24	-10.44 Peak
2	149.34	-45.14	-38.84	-13.00	-32.14	-6.30 Peak
3	233.04	-38.66	-32.19	-13.00	-25.66	-6.47 Peak
4	315.40	-48.35	-42.08	-13.00	-35.35	-6.27 Peak
5	402.20	-55.65	-50.08	-13.00	-42.65	-5.57 Peak
6	436.50	-57.16	-52.45	-13.00	-44.16	-4.71 Peak
7 pp	1424.40	-30.42	-17.90	-13.00	-17.42	-12.52 Peak
8	2136.60	-36.89	-26.53	-13.00	-23.89	-10.36 Peak
9	2848.80	-37.05	-28.91	-13.00	-24.05	-8.14 Peak
10	3561.00	-43.81	-36.55	-13.00	-30.81	-7.26 Peak





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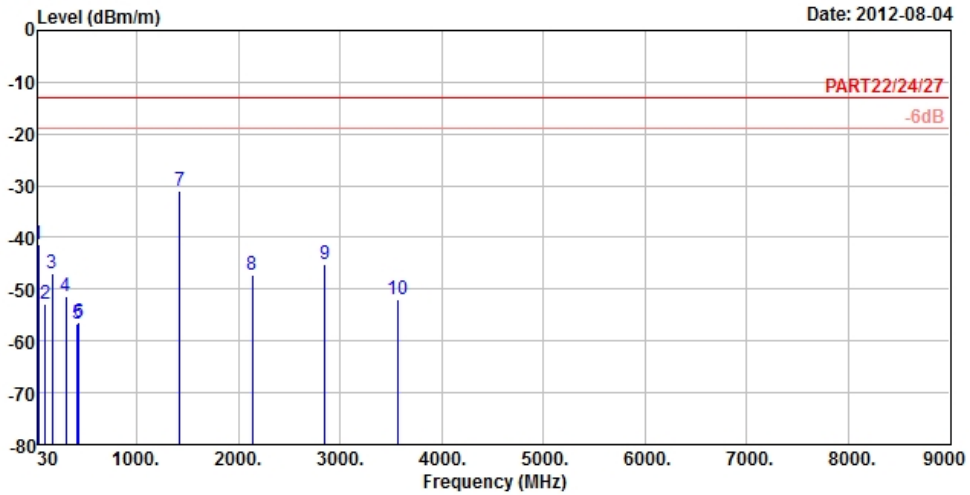


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Data: 10

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(QPSK1,24)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	32.70	-41.31	-40.20	-13.00	-28.31	-1.11	Peak
2	96.42	-52.84	-42.37	-13.00	-39.84	-10.47	Peak
3	167.70	-46.85	-40.19	-13.00	-33.85	-6.66	Peak
4	300.00	-51.37	-44.99	-13.00	-38.37	-6.38	Peak
5	412.70	-56.77	-51.47	-13.00	-43.77	-5.30	Peak
6	430.90	-56.27	-51.41	-13.00	-43.27	-4.86	Peak
7 pp	1424.40	-31.14	-18.62	-13.00	-18.14	-12.52	Peak
8	2136.60	-47.27	-36.91	-13.00	-34.27	-10.36	Peak
9	2848.80	-45.10	-36.96	-13.00	-32.10	-8.14	Peak
10	3561.00	-52.08	-44.82	-13.00	-39.08	-7.26	Peak



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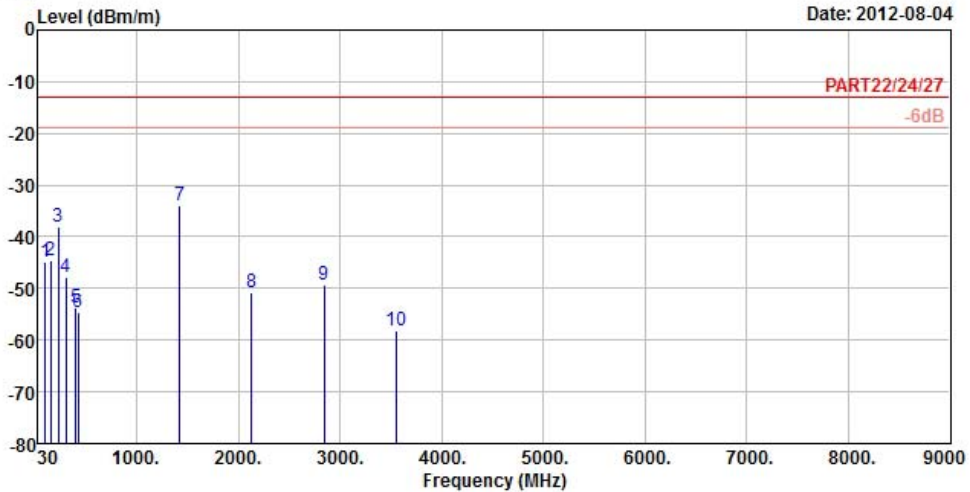


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

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Data: 9

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(QPSK25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read	Limit	Over		
	MHz	dBm/m	Level	Line	Limit	Factor	Remark
			dBm	dBm/m	dB	dB/m	
1	97.77	-44.93	-34.49	-13.00	-31.93	-10.44	Peak
2	148.80	-44.66	-38.43	-13.00	-31.66	-6.23	Peak
3	227.37	-38.11	-31.38	-13.00	-25.11	-6.73	Peak
4	301.40	-47.69	-41.32	-13.00	-34.69	-6.37	Peak
5	402.90	-53.60	-48.03	-13.00	-40.60	-5.57	Peak
6	426.00	-54.72	-49.74	-13.00	-41.72	-4.98	Peak
7 pp	1420.00	-33.87	-21.36	-13.00	-20.87	-12.51	Peak
8	2130.00	-50.89	-40.53	-13.00	-37.89	-10.36	Peak
9	2840.00	-49.41	-41.31	-13.00	-36.41	-8.10	Peak
10	3550.00	-58.27	-51.01	-13.00	-45.27	-7.26	Peak



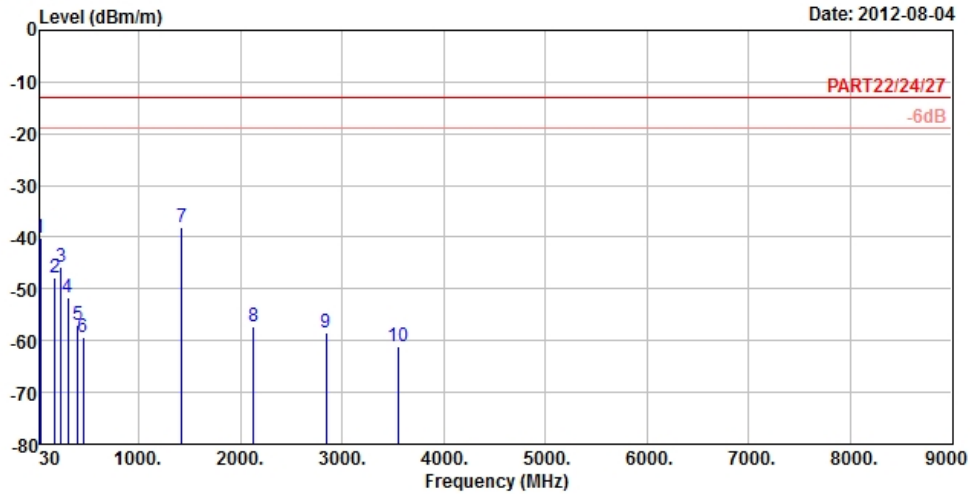
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(QPSK25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Read	Limit	Over		
Freq	Level	Level	Line	Limit	Factor Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m
1	32.70 -40.20	-39.09	-13.00	-27.20	-1.11 Peak
2	173.64 -47.70	-40.93	-13.00	-34.70	-6.77 Peak
3	234.12 -45.70	-39.28	-13.00	-32.70	-6.42 Peak
4	300.00 -51.72	-45.34	-13.00	-38.72	-6.38 Peak
5	402.90 -56.91	-51.34	-13.00	-43.91	-5.57 Peak
6	451.20 -59.24	-54.90	-13.00	-46.24	-4.34 Peak
7 pp	1420.00 -38.13	-25.62	-13.00	-25.13	-12.51 Peak
8	2130.00 -57.33	-46.97	-13.00	-44.33	-10.36 Peak
9	2840.00 -58.53	-50.43	-13.00	-45.53	-8.10 Peak
10	3550.00 -61.18	-53.92	-13.00	-48.18	-7.26 Peak



A D T

### CHANNEL BANDWIDTH: 5MHz / 16QAM

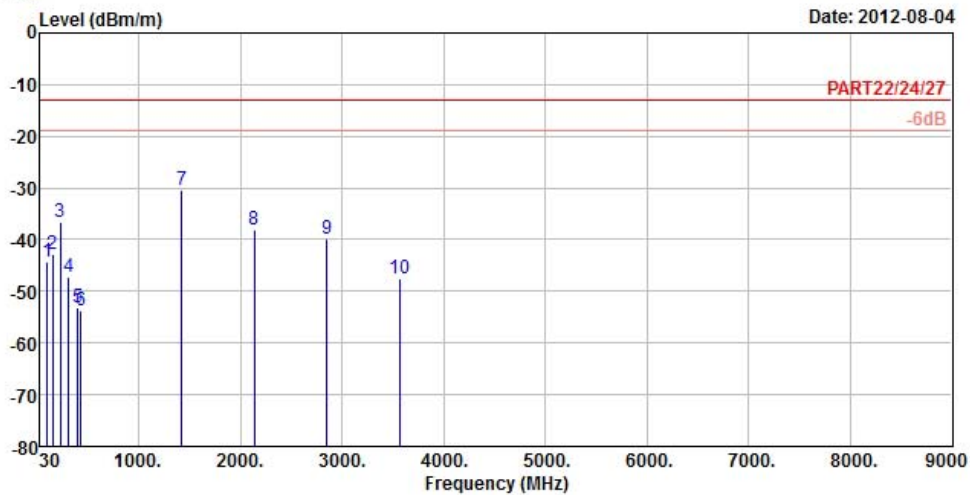


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(16QAM 1,24)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.31	-44.37	-33.93	-13.00	-31.37	-10.44	Peak
2	149.34	-42.89	-36.59	-13.00	-29.89	-6.30	Peak
3	228.45	-36.73	-30.09	-13.00	-23.73	-6.64	Peak
4	314.00	-47.12	-40.85	-13.00	-34.12	-6.27	Peak
5	402.20	-53.22	-47.65	-13.00	-40.22	-5.57	Peak
6	429.50	-53.73	-48.85	-13.00	-40.73	-4.88	Peak
7 pp	1424.40	-30.40	-17.88	-13.00	-17.40	-12.52	Peak
8	2136.60	-38.08	-27.72	-13.00	-25.08	-10.36	Peak
9	2848.80	-39.81	-31.67	-13.00	-26.81	-8.14	Peak
10	3561.00	-47.43	-40.17	-13.00	-34.43	-7.26	Peak



A D T

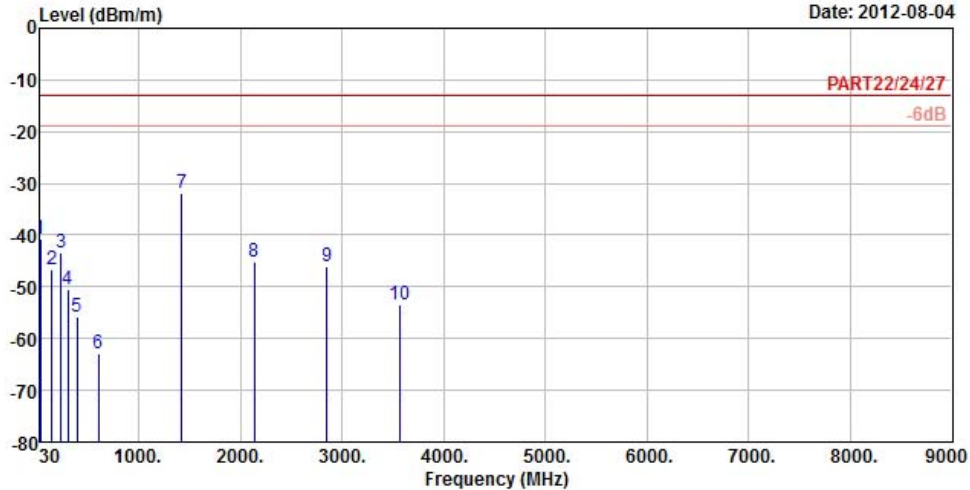


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(16QAM 1,24)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	32.43	-40.68	-39.57	-13.00	-27.68	-1.11	Peak
2	148.53	-46.62	-40.39	-13.00	-33.62	-6.23	Peak
3	231.69	-43.47	-36.96	-13.00	-30.47	-6.51	Peak
4	300.00	-50.55	-44.17	-13.00	-37.55	-6.38	Peak
5	393.10	-55.75	-50.06	-13.00	-42.75	-5.69	Peak
6	601.70	-62.91	-62.58	-13.00	-49.91	-0.33	Peak
7 pp	1424.40	-31.88	-19.36	-13.00	-18.88	-12.52	Peak
8	2136.60	-45.18	-34.82	-13.00	-32.18	-10.36	Peak
9	2848.38	-45.95	-37.81	-13.00	-32.95	-8.14	Peak
10	3561.00	-53.57	-46.31	-13.00	-40.57	-7.26	Peak



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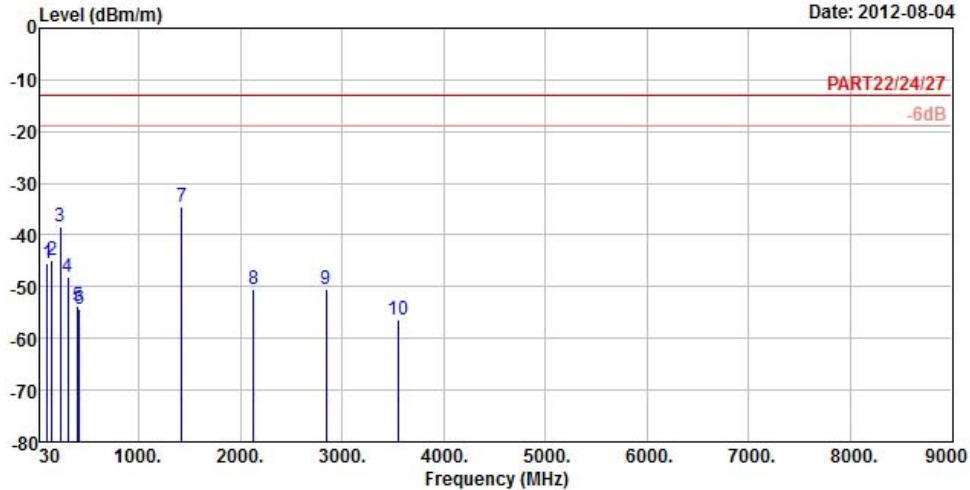


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(16QAM 25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.58	-45.33	-34.91	-13.00	-32.33	-10.42	Peak
2	143.40	-44.79	-38.87	-13.00	-31.79	-5.92	Peak
3	227.91	-38.41	-31.73	-13.00	-25.41	-6.68	Peak
4	306.30	-48.16	-41.83	-13.00	-35.16	-6.33	Peak
5	397.30	-53.65	-48.00	-13.00	-40.65	-5.65	Peak
6	412.70	-54.28	-48.98	-13.00	-41.28	-5.30	Peak
7 pp	1420.00	-34.66	-22.15	-13.00	-21.66	-12.51	Peak
8	2130.00	-50.43	-40.07	-13.00	-37.43	-10.36	Peak
9	2840.00	-50.52	-42.42	-13.00	-37.52	-8.10	Peak
10	3550.00	-56.49	-49.23	-13.00	-43.49	-7.26	Peak



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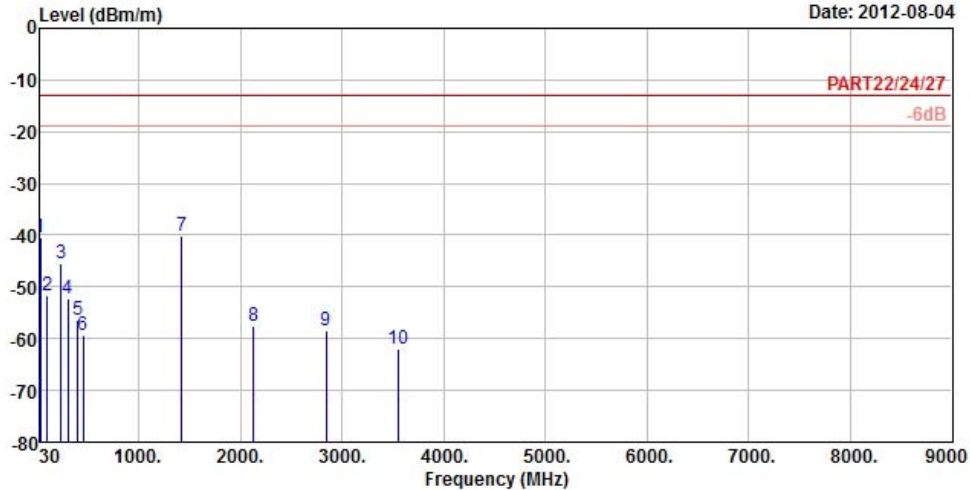


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_5M\_(16QAM 25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	32.43	-40.32	-39.21	-13.00	-27.32	-1.11	Peak
2	96.69	-51.78	-41.33	-13.00	-38.78	-10.45	Peak
3	235.74	-45.58	-39.25	-13.00	-32.58	-6.33	Peak
4	300.00	-52.26	-45.88	-13.00	-39.26	-6.38	Peak
5	400.80	-56.52	-50.90	-13.00	-43.52	-5.62	Peak
6	450.50	-59.32	-54.98	-13.00	-46.32	-4.34	Peak
7 pp	1420.00	-40.09	-27.58	-13.00	-27.09	-12.51	Peak
8	2130.00	-57.59	-47.23	-13.00	-44.59	-10.36	Peak
9	2840.00	-58.44	-50.34	-13.00	-45.44	-8.10	Peak
10	3550.00	-61.94	-54.68	-13.00	-48.94	-7.26	Peak



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### CHANNEL BANDWIDTH: 10MHz / QPSK

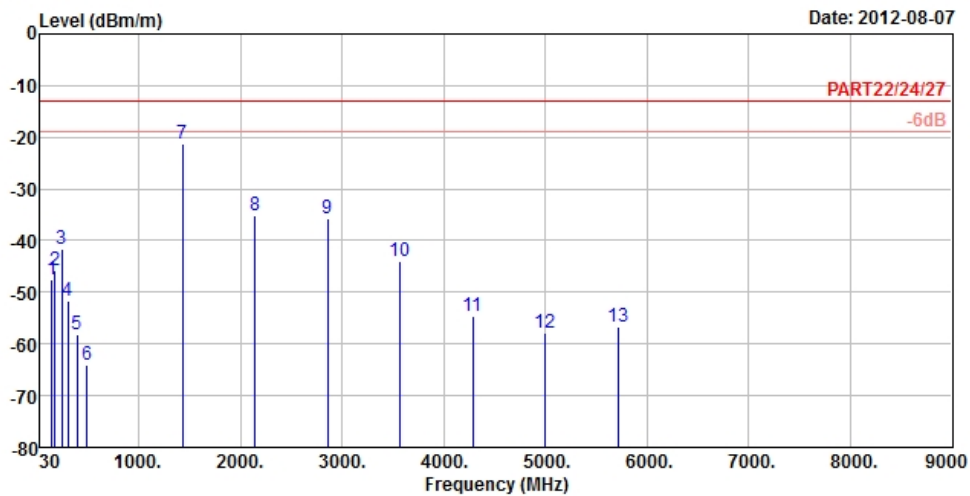


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2012-08-07



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(QPSK1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	148.26	-47.63	-41.40	-13.00	-34.63	-6.23	Peak
2	173.10	-45.76	-38.99	-13.00	-32.76	-6.77	Peak
3	240.06	-41.55	-35.43	-13.00	-28.55	-6.12	Peak
4	302.10	-51.60	-45.24	-13.00	-38.60	-6.36	Peak
5	393.80	-58.08	-52.40	-13.00	-45.08	-5.68	Peak
6	487.60	-64.17	-60.76	-13.00	-51.17	-3.41	Peak
7 pp	1428.80	-21.13	-8.61	-13.00	-8.13	-12.52	Peak
8	2143.20	-35.24	-24.97	-13.00	-22.24	-10.27	Peak
9	2857.60	-35.77	-27.63	-13.00	-22.77	-8.14	Peak
10	3572.00	-43.90	-36.69	-13.00	-30.90	-7.21	Peak
11	4286.40	-54.68	-49.79	-13.00	-41.68	-4.89	Peak
12	5000.80	-57.99	-56.90	-13.00	-44.99	-1.09	Peak
13	5715.20	-56.76	-57.00	-13.00	-43.76	0.24	Peak





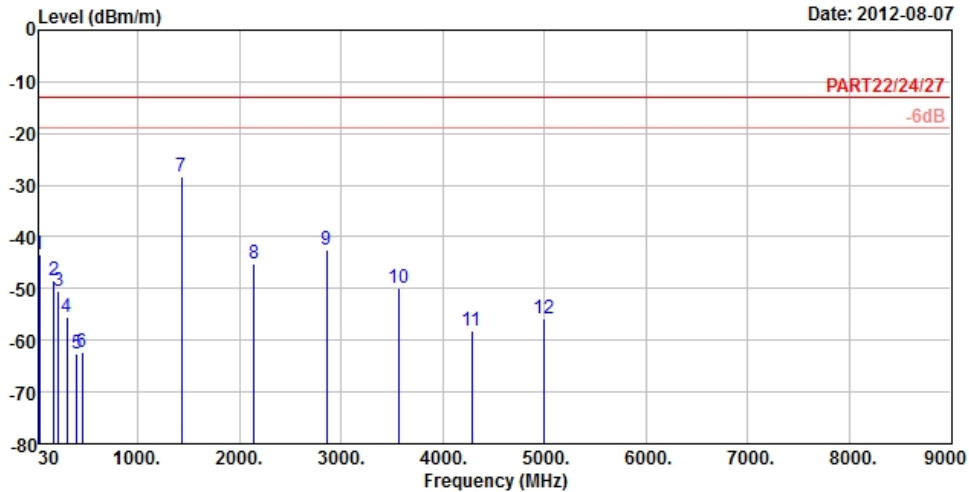
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(QPSK1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	33.51	-43.39	-41.55	-13.00	-30.39	-1.84	Peak
2	173.64	-48.50	-41.73	-13.00	-35.50	-6.77	Peak
3	223.32	-50.37	-43.47	-13.00	-37.37	-6.90	Peak
4	300.70	-55.55	-49.18	-13.00	-42.55	-6.37	Peak
5	397.30	-62.62	-56.97	-13.00	-49.62	-5.65	Peak
6	450.50	-62.25	-57.91	-13.00	-49.25	-4.34	Peak
7 pp	1428.80	-28.44	-15.92	-13.00	-15.44	-12.52	Peak
8	2143.20	-45.13	-34.86	-13.00	-32.13	-10.27	Peak
9	2857.60	-42.43	-34.29	-13.00	-29.43	-8.14	Peak
10	3572.00	-49.83	-42.62	-13.00	-36.83	-7.21	Peak
11	4286.40	-58.28	-53.39	-13.00	-45.28	-4.89	Peak
12	5000.80	-55.88	-54.79	-13.00	-42.88	-1.09	Peak



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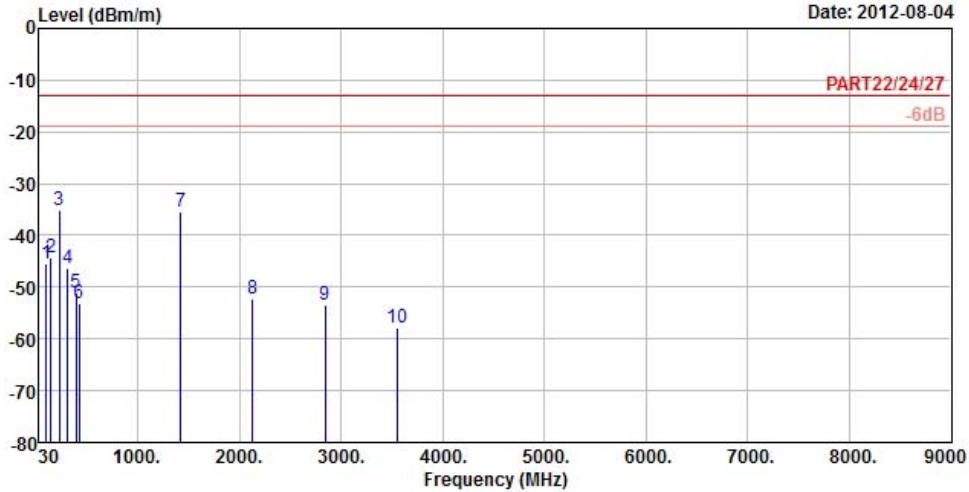


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2012-08-04



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(QPSK50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	99.12	-45.48	-35.06	-13.00	-32.48	-10.42	Peak
2	148.53	-44.31	-38.08	-13.00	-31.31	-6.23	Peak
3 pp	230.34	-35.03	-28.48	-13.00	-22.03	-6.55	Peak
4	309.80	-46.25	-39.94	-13.00	-33.25	-6.31	Peak
5	389.60	-51.01	-45.30	-13.00	-38.01	-5.71	Peak
6	424.60	-53.18	-48.18	-13.00	-40.18	-5.00	Peak
7	1420.00	-35.30	-22.79	-13.00	-22.30	-12.51	Peak
8	2130.00	-52.38	-42.02	-13.00	-39.38	-10.36	Peak
9	2840.00	-53.50	-45.40	-13.00	-40.50	-8.10	Peak
10	3550.00	-57.83	-50.57	-13.00	-44.83	-7.26	Peak



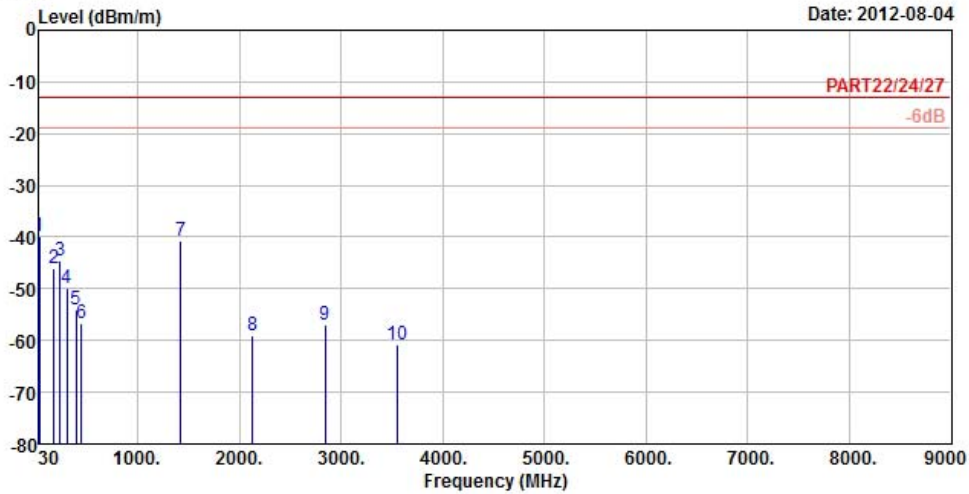
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(QPSK50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	30.27	-39.79	-40.86	-13.00	-26.79	1.07 Peak
2		172.02	-46.08	-39.35	-13.00	-33.08	-6.73 Peak
3		233.04	-44.51	-38.04	-13.00	-31.51	-6.47 Peak
4		300.00	-49.78	450.22	-13.00	-36.78-500.00	Peak
5		395.20	-53.99	446.01	-13.00	-40.99-500.00	Peak
6		447.70	-56.55	443.45	-13.00	-43.55-500.00	Peak
7		1420.00	-40.88	-28.37	-13.00	-27.88	-12.51 Peak
8		2130.00	-59.15	-48.79	-13.00	-46.15	-10.36 Peak
9		2840.00	-57.08	-48.98	-13.00	-44.08	-8.10 Peak
10		3550.00	-60.82	-53.56	-13.00	-47.82	-7.26 Peak



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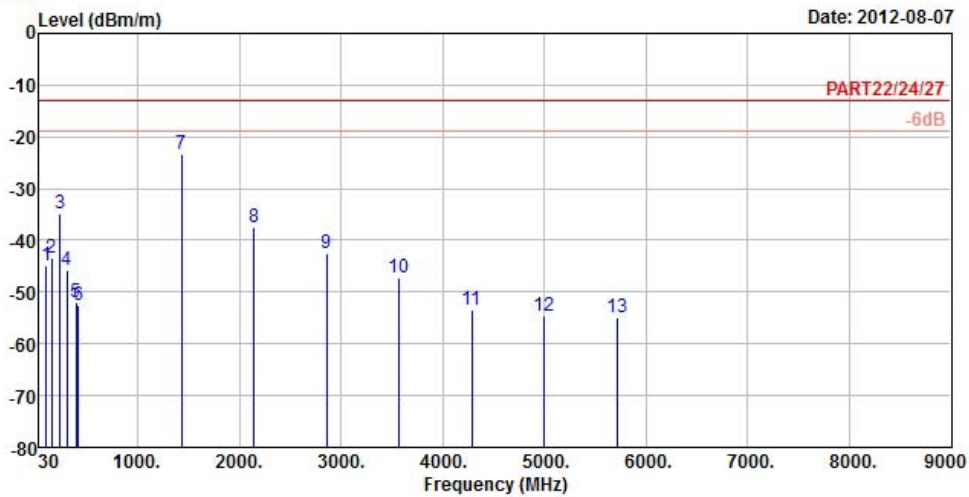
### CHANNEL BANDWIDTH: 10MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(16QAM1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Read	Limit	Over			
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.85 -44.96	-34.54	-13.00	-31.96	-10.42	Peak
2	149.07 -43.52	-37.22	-13.00	-30.52	-6.30	Peak
3	234.39 -34.86	-28.48	-13.00	-21.86	-6.38	Peak
4	302.10 -45.66	-39.30	-13.00	-32.66	-6.36	Peak
5	391.70 -51.96	-46.26	-13.00	-38.96	-5.70	Peak
6	414.10 -52.50	-47.23	-13.00	-39.50	-5.27	Peak
7 pp	1428.80 -23.36	-10.84	-13.00	-10.36	-12.52	Peak
8	2143.20 -37.46	-27.19	-13.00	-24.46	-10.27	Peak
9	2857.60 -42.39	-34.25	-13.00	-29.39	-8.14	Peak
10	3572.00 -47.26	-40.05	-13.00	-34.26	-7.21	Peak
11	4286.40 -53.56	-48.67	-13.00	-40.56	-4.89	Peak
12	5000.80 -54.70	-53.61	-13.00	-41.70	-1.09	Peak
13	5715.20 -54.88	-55.12	-13.00	-41.88	0.24	Peak



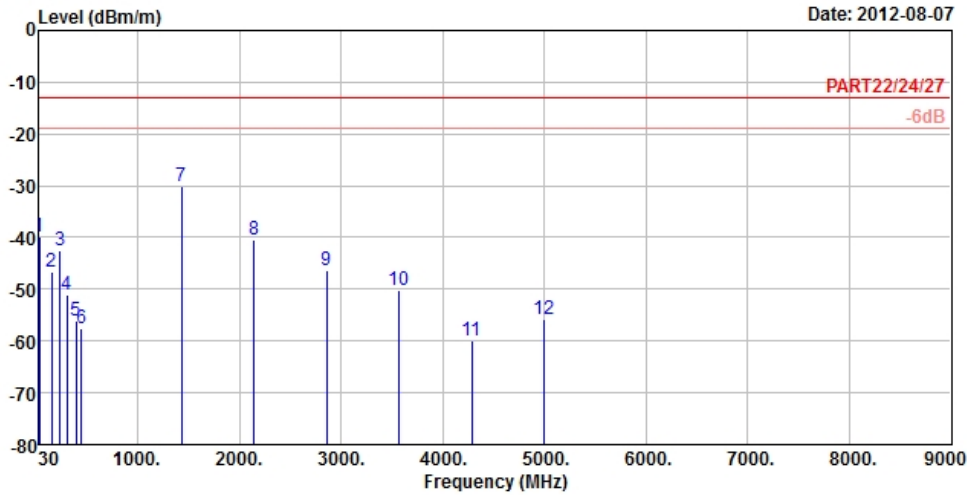
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Date: 2012-08-07

Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(16QAM1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read	Limit	Over		
	MHz	dBm/m	Level	Line	Limit	Factor	Remark
			dBm	dBm/m	dB	dB/m	
1	30.00	-39.82	-40.89	-13.00	-26.82	1.07	Peak
2	148.80	-46.59	-40.36	-13.00	-33.59	-6.23	Peak
3	232.50	-42.43	-35.96	-13.00	-29.43	-6.47	Peak
4	301.40	-51.15	-44.78	-13.00	-38.15	-6.37	Peak
5	391.70	-56.02	-50.32	-13.00	-43.02	-5.70	Peak
6	444.90	-57.66	-53.17	-13.00	-44.66	-4.49	Peak
7 pp	1428.80	-30.07	-17.55	-13.00	-17.07	-12.52	Peak
8	2143.20	-40.31	-30.04	-13.00	-27.31	-10.27	Peak
9	2857.60	-46.38	-38.24	-13.00	-33.38	-8.14	Peak
10	3572.00	-50.10	-42.89	-13.00	-37.10	-7.21	Peak
11	4286.40	-59.99	-55.10	-13.00	-46.99	-4.89	Peak
12	5000.80	-55.77	-54.68	-13.00	-42.77	-1.09	Peak



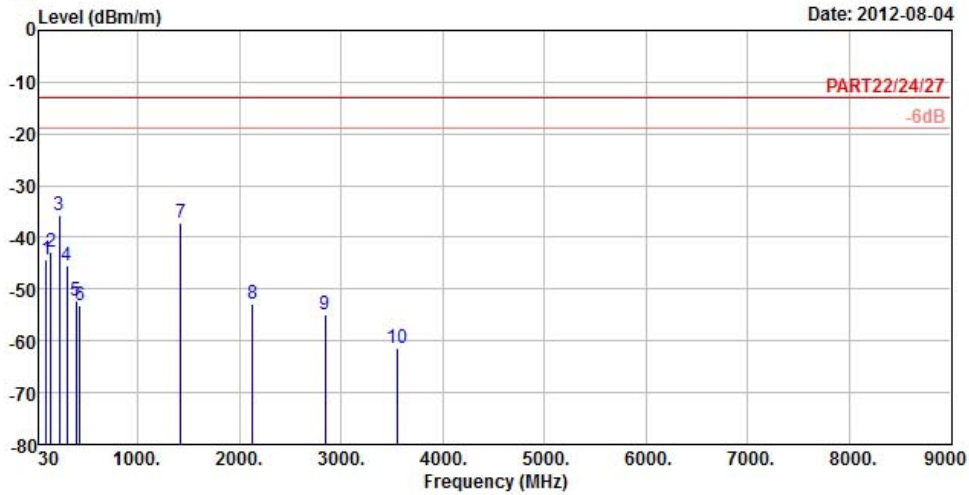
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(16QAM50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	97.50	-44.36	-33.92	-13.00	-31.36	-10.44	Peak
2	142.86	-42.71	-36.85	-13.00	-29.71	-5.86	Peak
3 pp	227.10	-35.79	-29.06	-13.00	-22.79	-6.73	Peak
4	301.40	-45.41	-39.04	-13.00	-32.41	-6.37	Peak
5	392.40	-52.28	-46.59	-13.00	-39.28	-5.69	Peak
6	430.90	-53.24	-48.38	-13.00	-40.24	-4.86	Peak
7	1420.00	-37.19	-24.68	-13.00	-24.19	-12.51	Peak
8	2130.00	-52.72	-42.36	-13.00	-39.72	-10.36	Peak
9	2840.00	-54.87	-46.77	-13.00	-41.87	-8.10	Peak
10	3550.00	-61.53	-54.27	-13.00	-48.53	-7.26	Peak



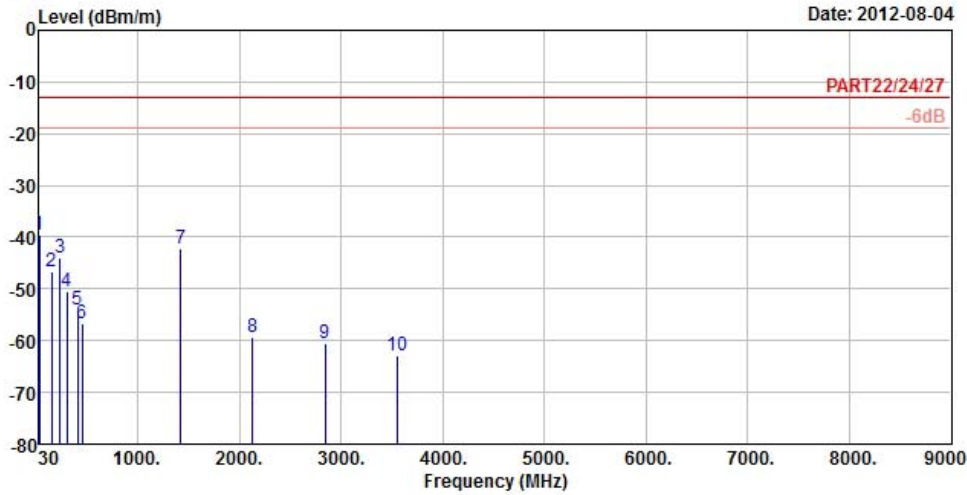
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 17\_10M\_(16QAM50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	30.00	-39.50	-40.57	-13.00	-26.50	1.07 Peak
2		150.69	-46.54	-40.18	-13.00	-33.54	-6.36 Peak
3		234.39	-44.03	-37.65	-13.00	-31.03	-6.38 Peak
4		300.00	-50.47	-44.09	-13.00	-37.47	-6.38 Peak
5		404.30	-54.17	-48.65	-13.00	-41.17	-5.52 Peak
6		451.20	-56.82	-52.48	-13.00	-43.82	-4.34 Peak
7		1420.00	-42.11	-29.60	-13.00	-29.11	-12.51 Peak
8		2130.00	-59.41	-49.05	-13.00	-46.41	-10.36 Peak
9		2840.00	-60.56	-52.46	-13.00	-47.56	-8.10 Peak
10		3550.00	-62.99	-55.73	-13.00	-49.99	-7.26 Peak



A D T

### LTE BAND 4

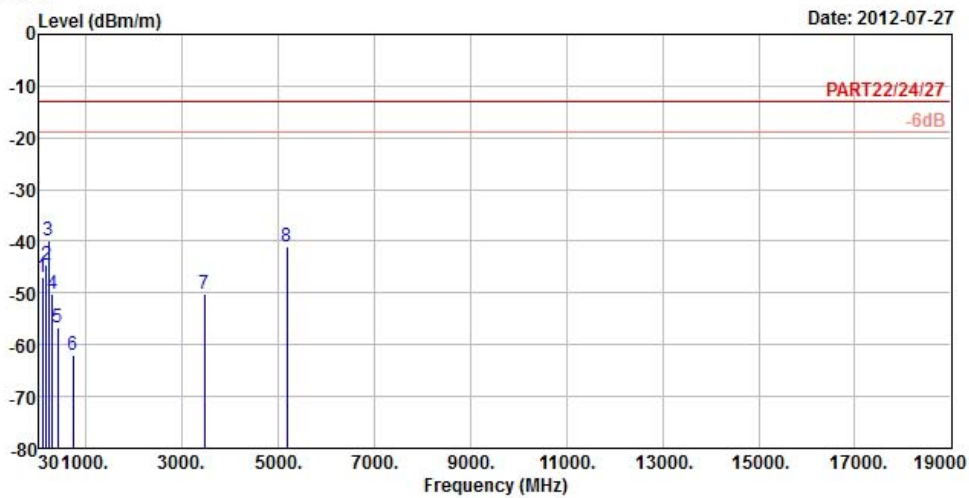
CHANNEL BANDWIDTH: 5MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(QPSK1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.04	-46.80	-36.36	-13.00	-33.80	-10.44	Peak
2	172.02	-44.63	-37.90	-13.00	-31.63	-6.73	Peak
3 pp	228.99	-39.85	-33.21	-13.00	-26.85	-6.64	Peak
4	300.70	-50.28	-43.91	-13.00	-37.28	-6.37	Peak
5	410.60	-56.72	-51.35	-13.00	-43.72	-5.37	Peak
6	727.00	-62.06	-63.69	-13.00	-49.06	1.63	Peak
7	3460.60	-50.27	-42.64	-13.00	-37.27	-7.63	Peak
8	5190.90	-41.07	-39.99	-13.00	-28.07	-1.08	Peak





A D T

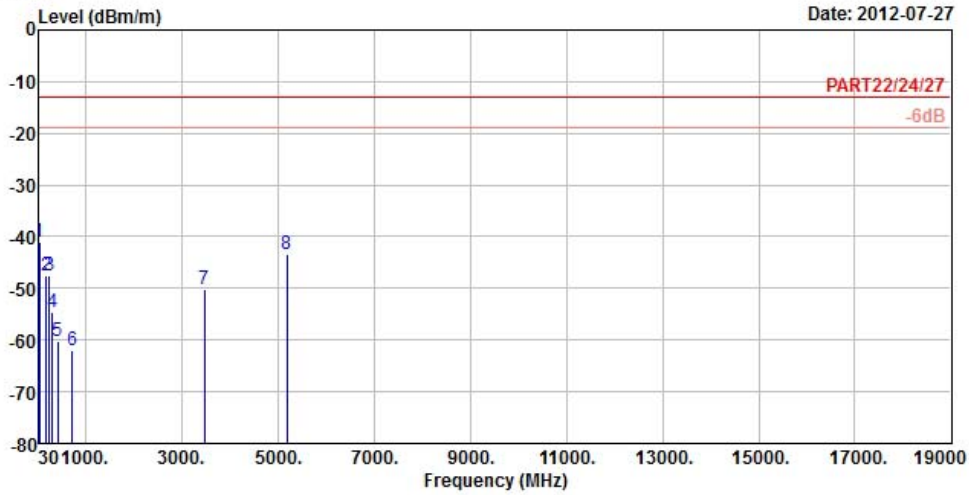


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(QPSK1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Read	Limit	Over			
Freq	Level	Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	42.42	-40.96	-39.63	-13.00	-27.96	-1.33 Peak
2	172.02	-47.41	-40.68	-13.00	-34.41	-6.73 Peak
3	239.25	-47.57	-41.41	-13.00	-34.57	-6.16 Peak
4	300.00	-54.62	-48.24	-13.00	-41.62	-6.38 Peak
5	409.20	-60.25	-54.86	-13.00	-47.25	-5.39 Peak
6	714.40	-61.92	-63.47	-13.00	-48.92	1.55 Peak
7	3460.60	-50.26	-42.63	-13.00	-37.26	-7.63 Peak
8	5190.90	-43.51	-42.43	-13.00	-30.51	-1.08 Peak



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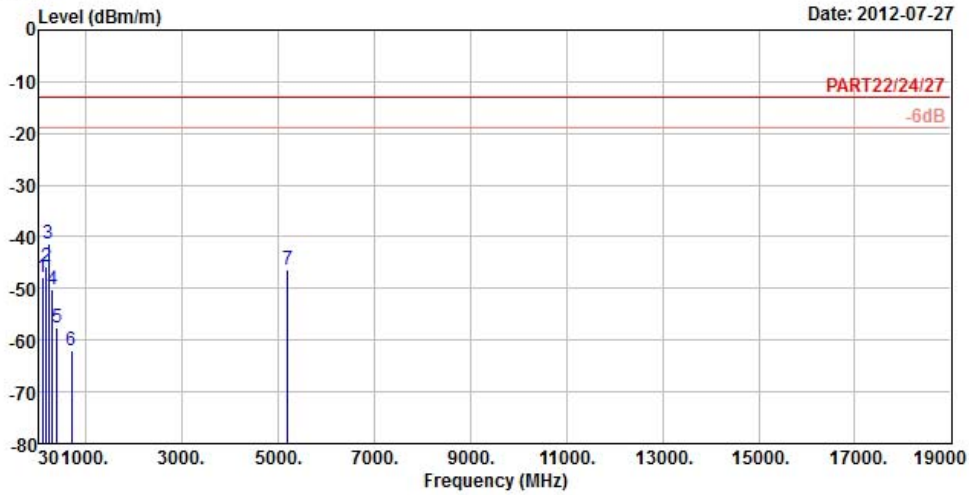


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(QPSK25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.04	-47.69	-37.25	-13.00	-34.69	-10.44	Peak
2	172.29	-45.77	-39.02	-13.00	-32.77	-6.75	Peak
3 pp	233.31	-41.46	-35.04	-13.00	-28.46	-6.42	Peak
4	300.70	-50.22	-43.85	-13.00	-37.22	-6.37	Peak
5	398.00	-57.65	-52.00	-13.00	-44.65	-5.65	Peak
6	702.50	-61.99	-63.45	-13.00	-48.99	1.46	Peak
7	5197.50	-46.27	-45.19	-13.00	-33.27	-1.08	Peak



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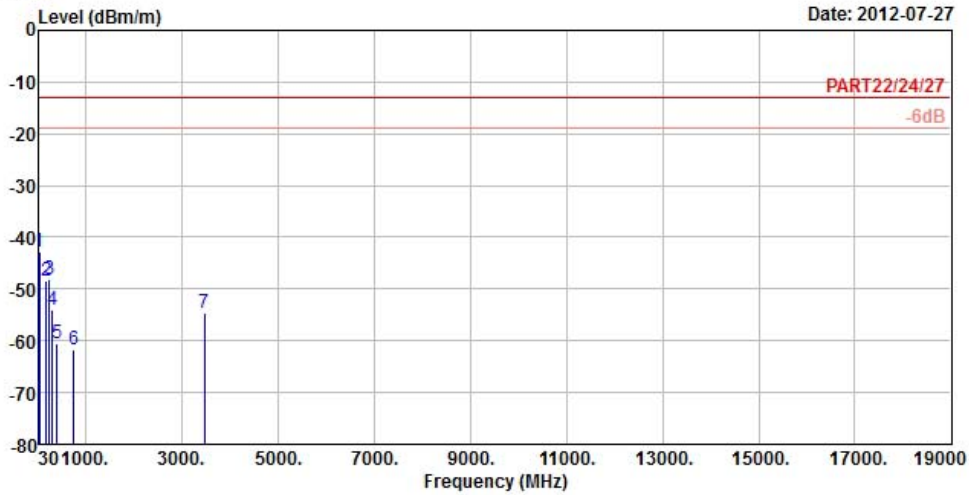


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(QPSK25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	42.42	-42.89	-41.56	-13.00	-29.89	-1.33 Peak
2		171.75	-48.30	-41.57	-13.00	-35.30	-6.73 Peak
3		238.98	-48.22	-42.02	-13.00	-35.22	-6.20 Peak
4		301.40	-54.04	-47.67	-13.00	-41.04	-6.37 Peak
5		396.60	-60.52	-54.86	-13.00	-47.52	-5.66 Peak
6		743.10	-61.74	-63.48	-13.00	-48.74	1.74 Peak
7		3465.00	-54.52	-46.89	-13.00	-41.52	-7.63 Peak



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### CHANNEL BANDWIDTH: 5MHz / 16QAM

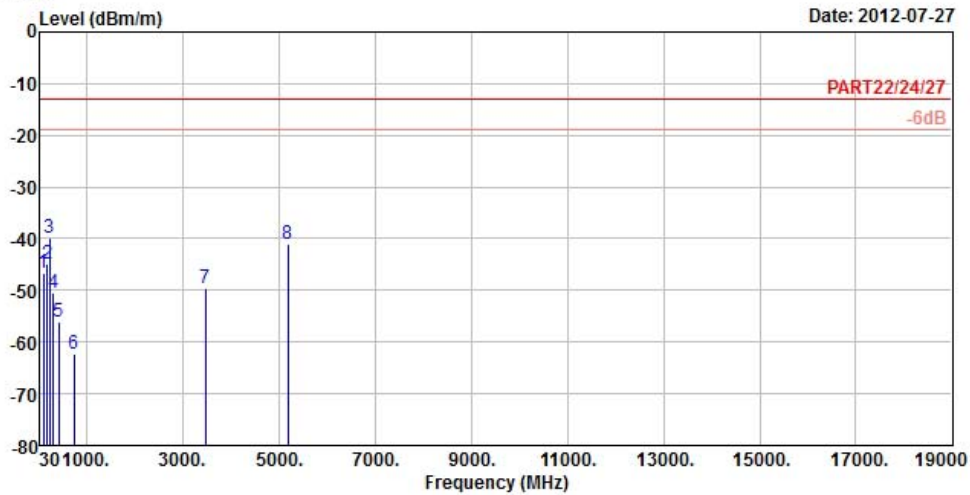


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(16QAM 1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.04	-46.68	-36.24	-13.00	-33.68	-10.44	Peak
2	172.29	-44.81	-38.06	-13.00	-31.81	-6.75	Peak
3 pp	228.99	-39.83	-33.19	-13.00	-26.83	-6.64	Peak
4	307.00	-50.56	-44.24	-13.00	-37.56	-6.32	Peak
5	414.10	-56.02	-50.75	-13.00	-43.02	-5.27	Peak
6	729.10	-62.22	-63.87	-13.00	-49.22	1.65	Peak
7	3460.60	-49.60	-41.97	-13.00	-36.60	-7.63	Peak
8	5190.90	-41.07	-39.99	-13.00	-28.07	-1.08	Peak



A D T

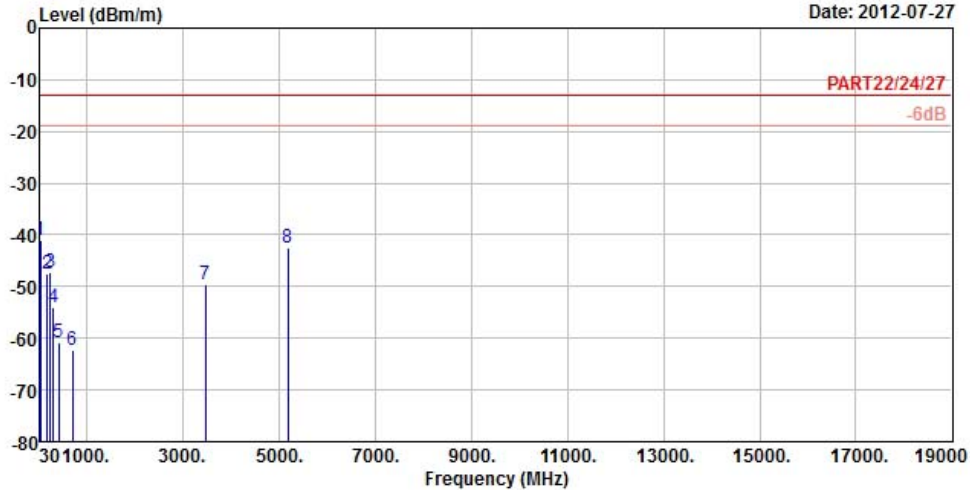


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(16QAM 1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	30.00	-40.96	-42.03	-13.00	-27.96	1.07	Peak
2	171.21	-47.51	-40.78	-13.00	-34.51	-6.73	Peak
3	237.63	-47.38	-41.13	-13.00	-34.38	-6.25	Peak
4	300.00	-53.90	-47.52	-13.00	-40.90	-6.38	Peak
5	409.20	-60.71	-55.32	-13.00	-47.71	-5.39	Peak
6	696.20	-62.19	-63.57	-13.00	-49.19	1.38	Peak
7	3460.60	-49.60	-41.97	-13.00	-36.60	-7.63	Peak
8	5190.90	-42.57	-41.49	-13.00	-29.57	-1.08	Peak



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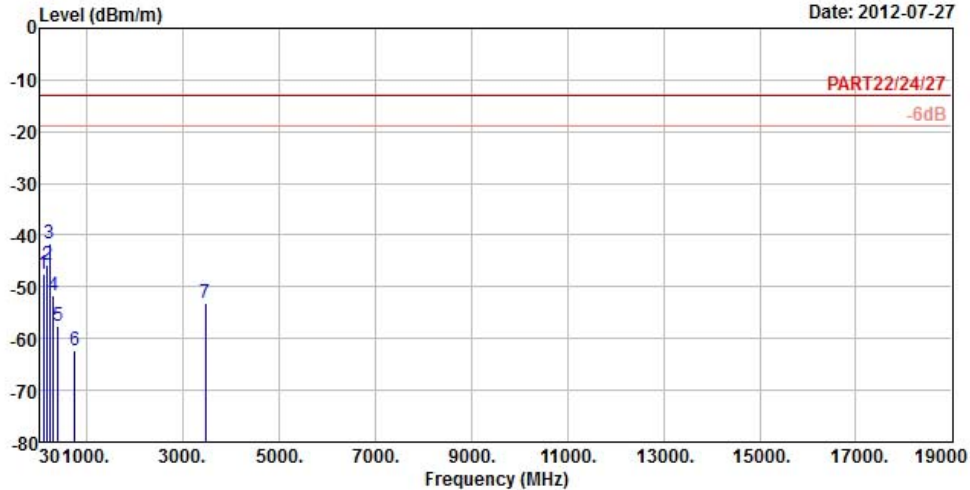


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(16QAM 25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.04	-47.55	-37.11	-13.00	-34.55	-10.44	Peak
2	172.29	-45.63	-38.88	-13.00	-32.63	-6.75	Peak
3 pp	230.88	-41.55	-35.00	-13.00	-28.55	-6.55	Peak
4	311.90	-51.70	-45.41	-13.00	-38.70	-6.29	Peak
5	393.80	-57.53	-51.85	-13.00	-44.53	-5.68	Peak
6	752.90	-62.21	-64.02	-13.00	-49.21	1.81	Peak
7	3465.00	-53.13	-45.50	-13.00	-40.13	-7.63	Peak



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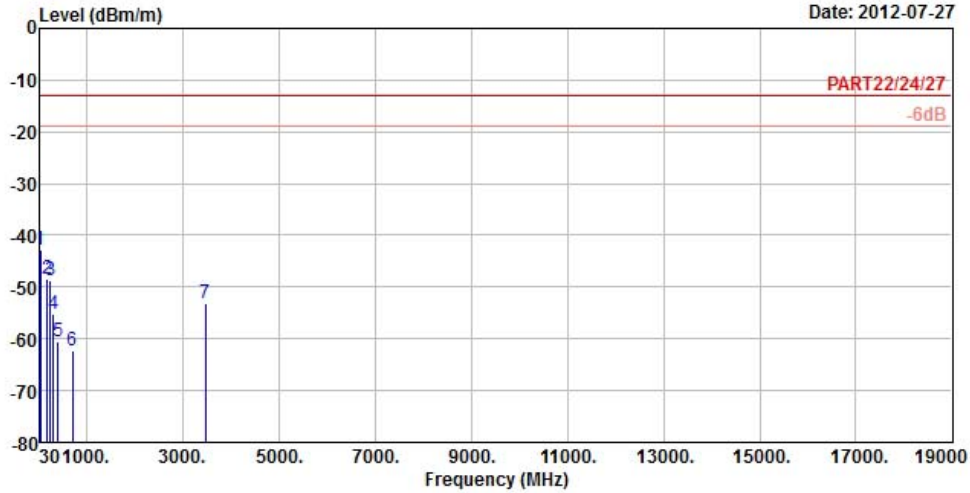


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_5M\_(16QAM 25,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	42.69	-42.79	-41.46	-13.00	-29.79	-1.33 Peak
2		172.02	-48.43	-41.70	-13.00	-35.43	-6.73 Peak
3		233.85	-48.75	-42.33	-13.00	-35.75	-6.42 Peak
4		300.00	-55.15	-48.77	-13.00	-42.15	-6.38 Peak
5		393.80	-60.51	-54.83	-13.00	-47.51	-5.68 Peak
6		703.20	-62.16	-63.63	-13.00	-49.16	1.47 Peak
7		3465.00	-53.02	-45.39	-13.00	-40.02	-7.63 Peak



A D T

### CHANNEL BANDWIDTH: 10MHz / QPSK

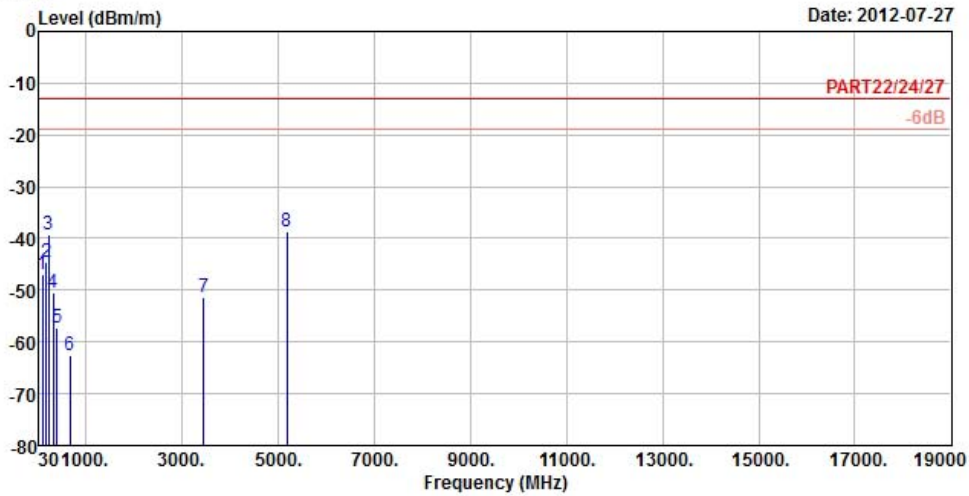


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(QPSK1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.31	-46.88	-36.44	-13.00	-33.88	-10.44	Peak
2	172.29	-44.54	-37.79	-13.00	-31.54	-6.75	Peak
3	230.34	-39.35	-32.80	-13.00	-26.35	-6.55	Peak
4	314.70	-50.52	-44.25	-13.00	-37.52	-6.27	Peak
5	406.40	-57.32	-51.85	-13.00	-44.32	-5.47	Peak
6	675.20	-62.71	-63.71	-13.00	-49.71	1.00	Peak
7	3456.20	-51.39	-43.73	-13.00	-38.39	-7.66	Peak
8 pp	5184.30	-38.73	-37.59	-13.00	-25.73	-1.14	Peak





A D T

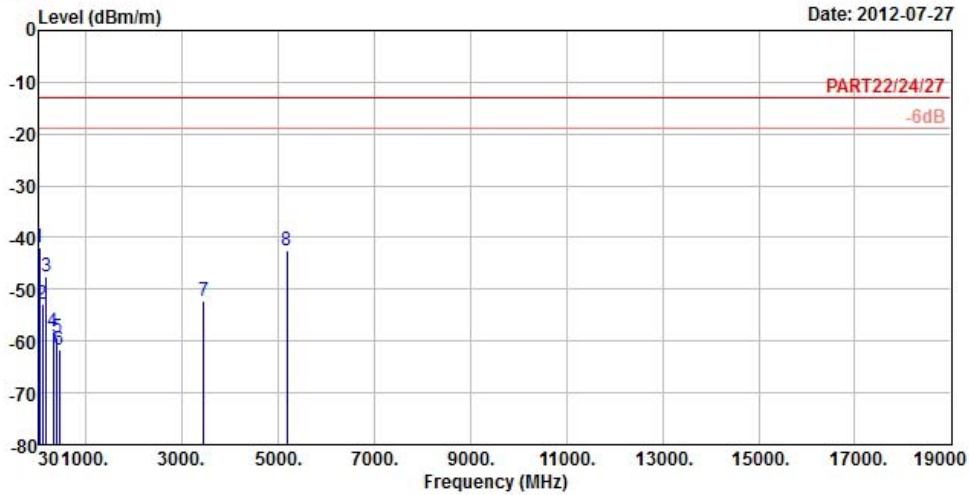


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(QPSK1,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read	Limit	Over		
	MHz	dBm/m	Level	Line	Limit	Factor	Remark
			dBm	dBm/m	dB	dB/m	
1	pp	41.88	-41.90	-40.51	-13.00	-28.90	-1.39 Peak
2		96.96	-52.98	-42.53	-13.00	-39.98	-10.45 Peak
3		172.02	-47.46	-40.73	-13.00	-34.46	-6.73 Peak
4		314.70	-58.07	-51.80	-13.00	-45.07	-6.27 Peak
5		394.50	-59.43	-53.75	-13.00	-46.43	-5.68 Peak
6		451.20	-61.68	-57.34	-13.00	-48.68	-4.34 Peak
7		3456.20	-52.37	-44.71	-13.00	-39.37	-7.66 Peak
8		5184.30	-42.61	-41.47	-13.00	-29.61	-1.14 Peak



A D T

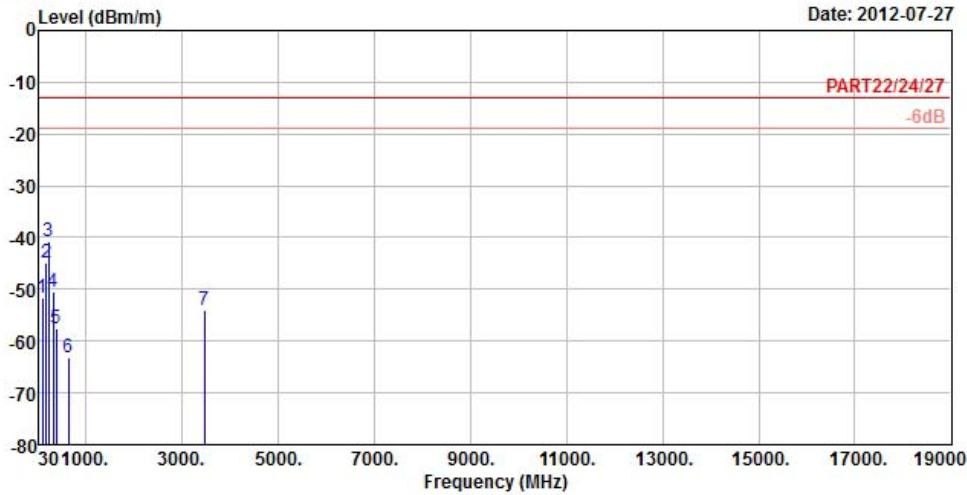


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(QPSK50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.31	-51.80	-41.36	-13.00	-38.80	-10.44	Peak
2	172.56	-44.79	-38.04	-13.00	-31.79	-6.75	Peak
3	233.31	-40.63	-34.21	-13.00	-27.63	-6.42	Peak
4	314.00	-50.53	-44.26	-13.00	-37.53	-6.27	Peak
5	392.40	-57.52	-51.83	-13.00	-44.52	-5.69	Peak
6	636.70	-63.15	-63.45	-13.00	-50.15	0.30	Peak
7	3465.00	-54.02	-46.39	-13.00	-41.02	-7.63	Peak



A D T

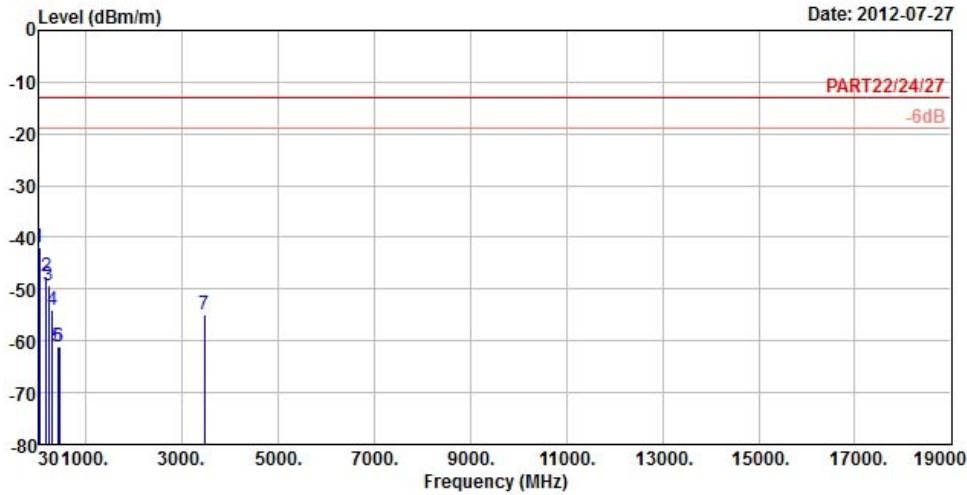


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(QPSK50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	42.15	-41.89	-40.56	-13.00	-28.89	-1.33 Peak
2		170.94	-47.51	-40.79	-13.00	-34.51	-6.72 Peak
3		217.92	-49.42	-42.30	-13.00	-36.42	-7.12 Peak
4		300.00	-54.09	-47.71	-13.00	-41.09	-6.38 Peak
5		412.70	-61.05	-55.75	-13.00	-48.05	-5.30 Peak
6		448.40	-61.10	-56.69	-13.00	-48.10	-4.41 Peak
7		3465.00	-55.00	-47.37	-13.00	-42.00	-7.63 Peak



A D T

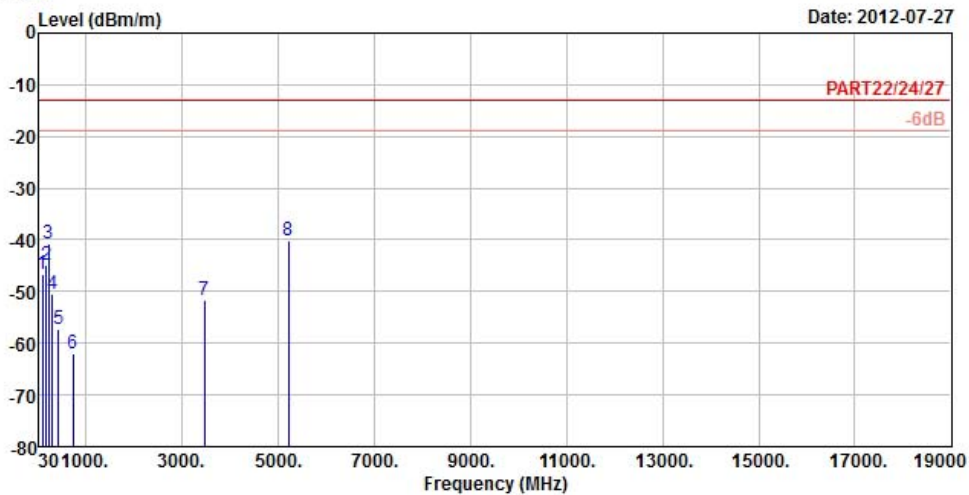
### CHANNEL BANDWIDTH: 10MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(16QAM1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.31	-46.75	-36.31	-13.00	-33.75	-10.44	Peak
2	172.29	-44.91	-38.16	-13.00	-31.91	-6.75	Peak
3	225.48	-40.59	-33.82	-13.00	-27.59	-6.77	Peak
4	311.90	-50.49	-44.20	-13.00	-37.49	-6.29	Peak
5	424.60	-57.22	-52.22	-13.00	-44.22	-5.00	Peak
6	731.90	-62.12	-63.79	-13.00	-49.12	1.67	Peak
7	3473.80	-51.66	-44.03	-13.00	-38.66	-7.63	Peak
8 pp	5210.70	-40.05	-38.99	-13.00	-27.05	-1.06	Peak



A D T

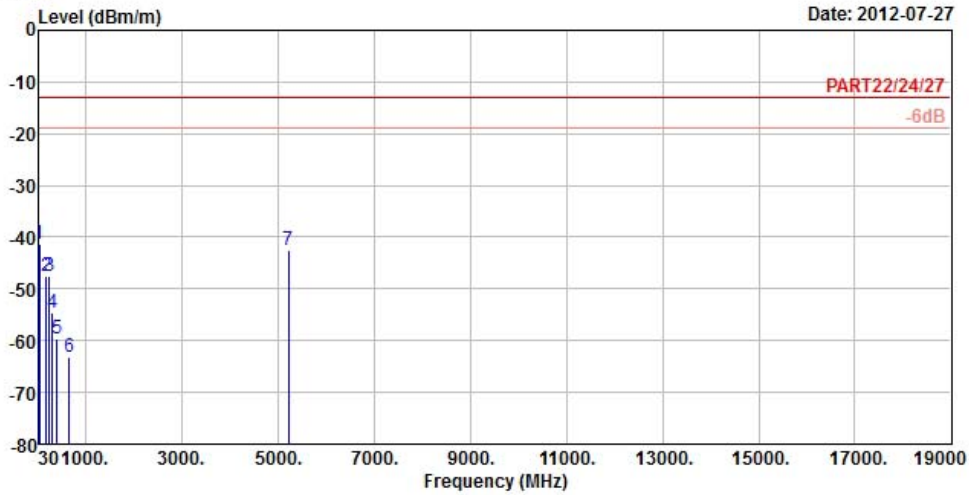


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(16QAM1,49)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read	Limit	Over		
	MHz	dBm/m	Level	Line	Limit	Factor	Remark
			dBm	dBm/m	dB	dB/m	
1	pp	42.69	-41.43	-40.10	-13.00	-28.43	-1.33 Peak
2		172.83	-47.58	-40.83	-13.00	-34.58	-6.75 Peak
3		237.90	-47.64	-41.39	-13.00	-34.64	-6.25 Peak
4		300.00	-54.70	-48.32	-13.00	-41.70	-6.38 Peak
5		404.30	-59.53	-54.01	-13.00	-46.53	-5.52 Peak
6		661.90	-63.20	-63.95	-13.00	-50.20	0.75 Peak
7		5210.70	-42.60	-41.54	-13.00	-29.60	-1.06 Peak



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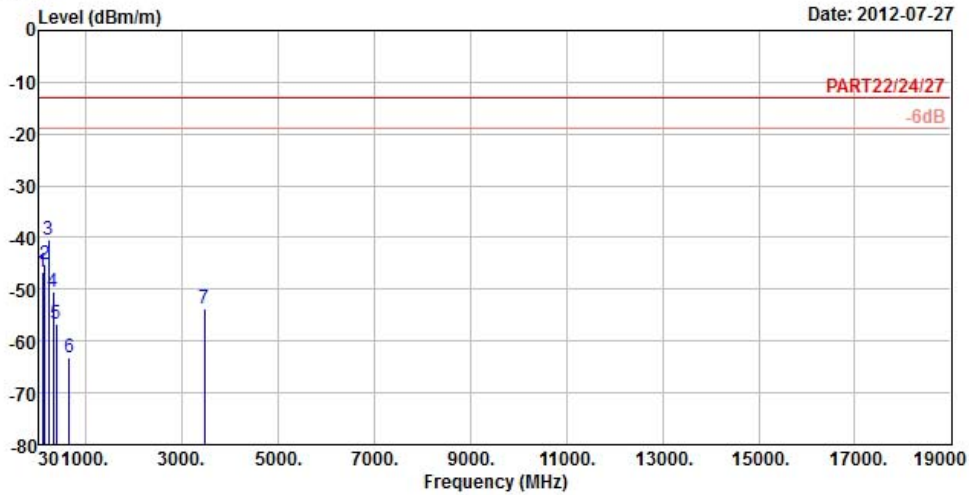


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 15

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 HORIZONTAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(16QAM50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	98.04	-46.76	-36.32	-13.00	-33.76	-10.44	Peak
2	145.02	-45.24	-39.19	-13.00	-32.24	-6.05	Peak
3 pp	231.69	-40.41	-33.90	-13.00	-27.41	-6.51	Peak
4	313.30	-50.47	-44.19	-13.00	-37.47	-6.28	Peak
5	392.40	-56.80	-51.11	-13.00	-43.80	-5.69	Peak
6	660.50	-63.25	-63.98	-13.00	-50.25	0.73	Peak
7	3465.00	-53.66	-46.03	-13.00	-40.66	-7.63	Peak



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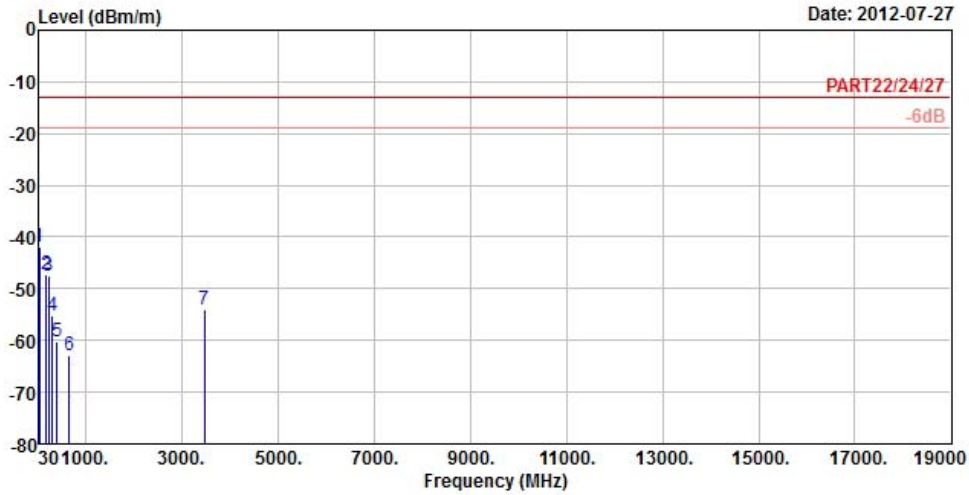


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 16

Date: 2012-07-27



Site : 966 Chamber 5  
 Condition : PART22/24/27 3m EIRP\_RSE\_1G~19G\_3 VERTICAL  
 Brand/Model: PM36100  
 Remark : LTE Band 4\_10M\_(16QAM50,0)  
 Tested by : Kay Wu  
 Temperature : 25°C  
 Humidity : 65%  
 Plane : X

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	pp	41.88	-41.88	-40.49	-13.00	-28.88	-1.39 Peak
2		171.48	-47.16	-40.43	-13.00	-34.16	-6.73 Peak
3		232.77	-47.57	-41.10	-13.00	-34.57	-6.47 Peak
4		302.10	-55.18	-48.82	-13.00	-42.18	-6.36 Peak
5		405.00	-60.23	-54.74	-13.00	-47.23	-5.49 Peak
6		658.40	-62.96	-63.66	-13.00	-49.96	0.70 Peak
7		3465.00	-53.88	-46.25	-13.00	-40.88	-7.63 Peak



## 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.

If you have any comments, please feel free to contact us at the following:

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Fax: 886-2-26051924

**Hsin Chu EMC/RF Lab:**

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**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

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.

**---END---**