

FCC TEST REPORT

(PART 27)

REPORT NO.: RF140606C12

MODEL NO.: HL7518

FCC ID: N7NHL7518

RECEIVED: Jun. 06, 2014

TESTED: Jun. 10, 2014 ~ Jun. 12, 2014

ISSUED: Jun. 13, 2014

APPLICANT: Sierra Wireless Inc.

ADDRESS: 13811 Wireless way Richmond, BC, V6V 3A4
Canada

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

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140606C12	Original release	Jun. 13, 2014

1 CERTIFICATION

PRODUCT: Radio Module
MODEL NO.: HL7518
BRAND: Sierra
APPLICANT: Sierra Wireless Inc.
TESTED: Jun. 10, 2014 ~ Jun. 12, 2014
TEST SAMPLE: ENGINEERING SAMPLE
TEST STANDARDS: FCC Part 27, Subpart C, L
FCC Part 2
ANSI C63.4-2003

The above equipment (model: HL7518) 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 : Gina Liu , **DATE:** Jun. 13, 2014

Gina Liu / Specialist

APPROVED BY : Sam Chen , **DATE:** Jun. 13, 2014

Sam Chen / Senior Project Engineer

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

LTE BAND 13			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(C)(10)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1053 27.53(g)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -18.11dB at 1159.60MHz.

LTE Band 4			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
2.1046 27.50(d)(4)	Maximum Peak Output Power	PASS	Meet the requirement of limit.
2.1053 27.53(h)	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -23.14dB at 236.78MHz.

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 ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2013	Dec. 20, 2014
BILOG Antenna SCHWARZBECK	VULB 9168	9168-153	Feb. 27, 2014	Feb. 26, 2015
HORN Antenna SCHWARZBECK	BBHA9120D	9120D-404	Jan. 05, 2014	Jan. 04, 2015
HORN Antenna SCHWARZBECK	BBHA9120D	9120D-404	Jan. 05, 2014	Jan. 04, 2015
Loop Antenna	HFH2-Z2	100070	Mar. 06, 2014	Mar. 05, 2016
Preamplifier EMCI	EMC 012645	980115	Dec. 26, 2013	Dec. 25, 2014
Preamplifier EMCI	EMC 184045	980116	Jan. 13, 2014	Jan. 12, 2015
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2013	Dec. 26, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2013	Oct. 17, 2014
RF signal cable Worken	RG-213	NA	Nov. 07, 2013	Nov. 06, 2014
Software BV ADT	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	Jul. 18, 2013	Jul. 17, 2014
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY52102544	Sep. 05, 2012	Sep. 04, 2014
Radio Communication Analyzer	MT8820C	6201300640	Aug. 01, 2013	Jul. 31, 2014

- 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 10.
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 690701.
5. The IC Site Registration No. is IC 7450F-10.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

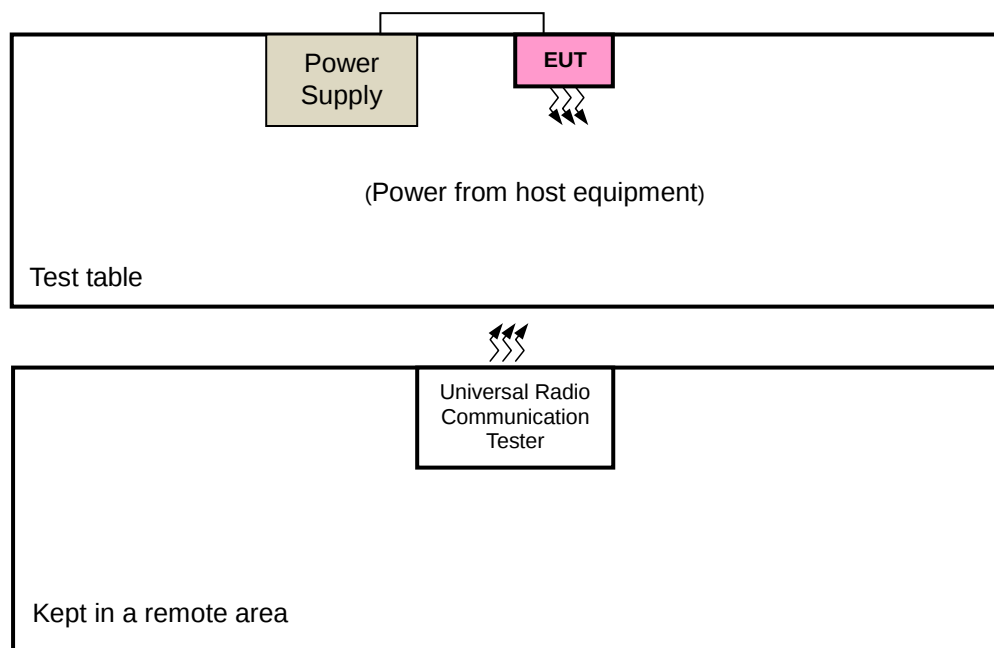
PRODUCT	Radio Module	
MODEL NO.	HL7518	
POWER SUPPLY	3.7Vdc (adapter or host equipment)	
MODULATION TECHNOLOGY	LTE Band 13	QPSK, 16QAM
	LTE Band 4	QPSK, 16QAM
FREQUENCY RANGE	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz~784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782.0MHz
	LTE Band 4 Channel Bandwidth: 1.4MHz	1710.7MHz~1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz~1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715.0MHz ~1750.0MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~1747.5MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720.0MHz ~1745.0MHz
MAX. ERP POWER	LTE Band 13 Channel Bandwidth: 5MHz	118.30mW
	LTE Band 13 Channel Bandwidth: 10MHz	103.99mW
MAX. EIRP POWER	LTE Band 4 Channel Bandwidth: 1.4MHz	276.06mW
	LTE Band 4 Channel Bandwidth: 3MHz	273.21mW
	LTE Band 4 Channel Bandwidth: 5MHz	274.73mW
	LTE Band 4 Channel Bandwidth: 10MHz	289.67mW
	LTE Band 4 Channel Bandwidth: 15MHz	300.54mW
	LTE Band 4 Channel Bandwidth: 20MHz	283.73mW

ANTENNA TYPE	Dipole Antenna
DATA CABLE	Refer to Note as below
I/O PORTS	Refer to users' manual
ACCESSORY DEVICES	Refer to Note as below

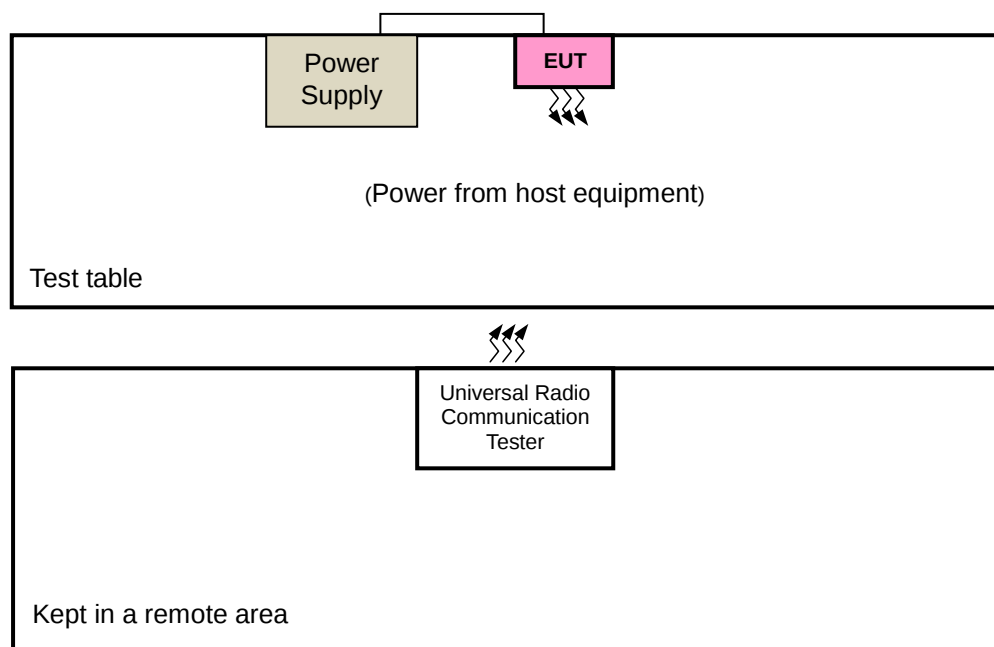
NOTE:

1. 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 RADIATION EMISSION TEST



FOR E.R.P. / E.I.R.P. 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	DC Power Supply	twintex	TP-3305D	11T35D0801027	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE:

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

LTE Band 13

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
-	ERP	23205 to 23255	23205, 23230, 23255	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK	1 RB / 0 RB Offset
-	RADIATED EMISSION	23205 to 23255	23230	5MHz	QPSK	1 RB / 0 RB Offset
		23205 to 23255	23230			1 RB / 25 RB Offset
		23205 to 23255	23230		16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK	1 RB / 0 RB Offset
						50 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. Radiated emission 16QAM test was tested on the worse case of QPSK.

LTE Band 4

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
-	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
-	RADIATED EMISSION	19957 to 20393	20175	1.4MHz	QPSK	1 RB / 0 RB Offset
					16QAM	1 RB / 0 RB Offset
		19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
		20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
		20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20175	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.
2. Radiated emission 16QAM test was tested on the worse case of QPSK.

**A D T****TEST CONDITION:**

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP/EIRP	26deg. C, 58%RH	3.7Vdc	Howard Kao
RADIATED EMISSION	25deg. C, 65%RH	3.7Vdc	Anson Lin

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 777-787 MHz band are limited to 3 watts ERP

4.1.2 TEST PROCEDURES

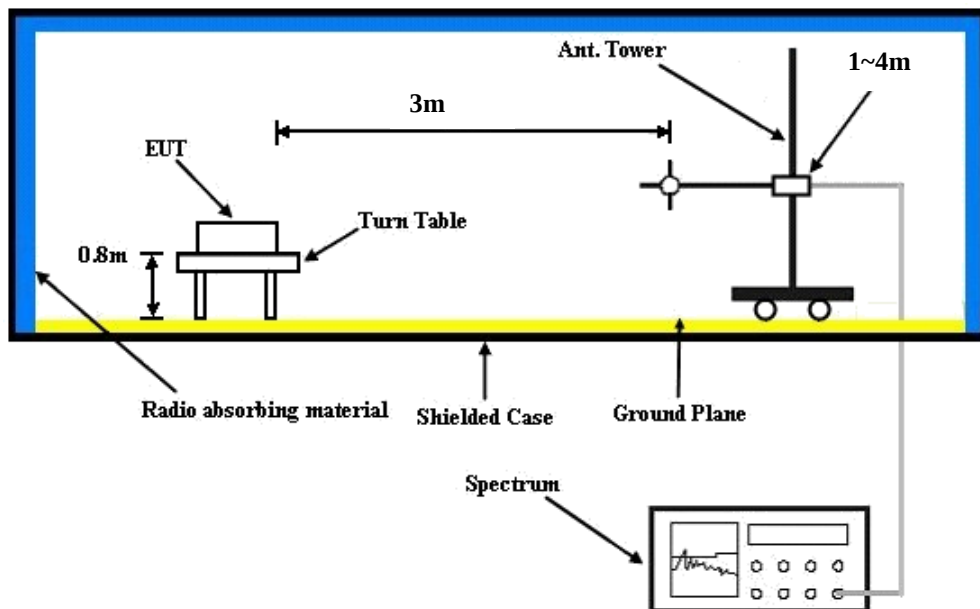
- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GSM, GPRS & EDGE, 5MHz for CDMA & WCDMA, and 10MHz for LTE mode.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, 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.
- 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 / ERP MEASUREMENT:



CONDUCTED POWER MEASUREMENT:



4.1.4 TEST RESULTS

Average Conducted Output Power (dBm)

Band / BW	Modulation	RB Size	RB Offset	Low CH 23205	Mid CH 23230	High CH 23255	3PGG MPR (dB)
				Frequency 779.5 MHz	Frequency 782 MHz	Frequency 784.5 MHz	
13 / 5M	QPSK	1	0	22.52	22.40	22.33	0
		1	12	22.47	22.45	22.38	0
		1	24	22.43	22.35	22.25	0
		12	0	21.62	21.58	21.54	1
		12	6	21.60	21.58	21.52	1
		12	13	21.56	21.57	21.50	1
		25	0	21.60	21.55	21.54	1
	16QAM	1	0	21.42	21.30	21.23	1
		1	12	21.37	21.35	21.28	1
		1	24	21.33	21.25	21.15	1
		12	0	20.52	20.48	20.44	2
		12	6	20.50	20.48	20.42	2
		12	13	20.46	20.47	20.40	2
		25	0	20.50	20.45	20.44	2

Band / BW	Modulation	RB Size	RB Offset	CH 23230	3PGG MPR (dB)
				Frequency 782 MHz	
13 / 10M	QPSK	1	0	22.29	0
		1	24	21.98	0
		1	49	21.62	0
		25	0	21.61	1
		25	12	21.55	1
		25	25	21.56	1
		50	0	21.52	1
	16QAM	1	0	20.99	1
		1	24	20.68	1
		1	49	20.32	1
		25	0	20.31	2
		25	12	20.25	2
		25	25	20.26	2
		50	0	20.22	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 19957	Mid CH 20175	High CH 20393	3PGG MPR (dB)
				Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz	
4 / 1.4M	QPSK	1	0	21.81	21.77	21.63	0
		1	2	21.29	21.12	21.04	0
		1	5	20.85	20.80	20.76	0
		3	0	20.91	20.84	20.71	0
		3	1	20.56	20.43	20.32	0
		3	3	20.48	20.33	20.25	0
		6	0	20.66	20.62	20.47	1
	16QAM	1	0	20.71	20.67	20.53	1
		1	2	20.19	20.02	19.94	1
		1	5	19.75	19.70	19.66	1
		3	0	19.81	19.74	19.61	1
		3	1	19.46	19.33	19.22	1
		3	3	19.38	19.23	19.15	1
		6	0	19.56	19.52	19.37	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 19965	Mid CH 20175	High CH 20385	3PGG MPR (dB)
				Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz	
4 / 3M	QPSK	1	0	21.91	21.87	21.73	0
		1	7	21.39	21.22	21.14	0
		1	14	20.95	20.9	20.86	0
		8	0	21.01	20.94	20.81	1
		8	3	20.66	20.53	20.42	1
		8	7	20.58	20.43	20.35	1
		15	0	20.76	20.72	20.57	1
	16QAM	1	0	20.81	20.77	20.63	1
		1	7	20.29	20.12	20.04	1
		1	14	19.85	19.80	19.76	1
		8	0	19.91	19.84	19.71	2
		8	3	19.56	19.43	19.32	2
		8	7	19.48	19.33	19.25	2
		15	0	19.66	19.62	19.47	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 19975	Mid CH 20175	High CH 20375	3PGG MPR (dB)
				Frequency 1712.5 MHz	Frequency 1732.5 MHz	Frequency 1752.5 MHz	
4 / 5M	QPSK	1	0	22.02	21.98	21.84	0
		1	12	21.50	21.33	21.25	0
		1	24	21.06	21.01	20.97	0
		12	0	21.12	21.05	20.92	1
		12	6	20.77	20.64	20.53	1
		12	13	20.69	20.54	20.46	1
		25	0	20.87	20.83	20.68	1
	16QAM	1	0	20.92	20.88	20.74	1
		1	12	20.40	20.23	20.15	1
		1	24	19.96	19.91	19.87	1
		12	0	20.02	19.95	19.82	2
		12	6	19.67	19.54	19.43	2
		12	13	19.59	19.44	19.36	2
		25	0	19.77	19.73	19.58	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 20000	Mid CH 20175	High CH 20350	3PGG MPR (dB)
				Frequency 1715.0 MHz	Frequency 1732.5 MHz	Frequency 1750.0 MHz	
4 / 10M	QPSK	1	0	22.13	22.09	21.95	0
		1	24	21.61	21.44	21.36	0
		1	49	21.17	21.12	21.08	0
		25	0	21.23	21.16	21.03	1
		25	12	20.88	20.75	20.64	1
		25	25	20.80	20.65	20.57	1
		50	0	20.98	20.94	20.79	1
	16QAM	1	0	21.03	20.99	20.85	1
		1	24	20.51	20.34	20.26	1
		1	49	20.07	20.02	19.98	1
		25	0	20.13	20.06	19.93	2
		25	12	19.78	19.65	19.54	2
		25	25	19.70	19.55	19.47	2
		50	0	19.88	19.84	19.69	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 20025	Mid CH 20175	High CH 20325	3PGG MPR (dB)
				Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz	
4 / 15M	QPSK	1	0	22.21	22.17	22.03	0
		1	37	21.69	21.52	21.44	0
		1	74	21.25	21.20	21.16	0
		36	0	21.31	21.24	21.11	1
		36	19	20.96	20.83	20.72	1
		36	39	20.88	20.73	20.65	1
		75	0	21.06	21.02	20.87	1
	16QAM	1	0	21.11	21.07	20.93	1
		1	37	20.59	20.42	20.34	1
		1	74	20.15	20.10	20.06	1
		36	0	20.21	20.14	20.01	2
		36	19	19.86	19.73	19.62	2
		36	39	19.78	19.63	19.55	2
		75	0	19.96	19.92	19.77	2

Band / BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300	3PGG MPR (dB)
				Frequency 1720.0 MHz	Frequency 1732.5 MHz	Frequency 1745.0 MHz	
4 / 20M	QPSK	1	0	22.33	22.29	22.15	0
		1	50	21.81	21.64	21.56	0
		1	99	21.37	21.32	21.28	0
		50	0	21.43	21.36	21.23	1
		50	25	21.08	20.95	20.84	1
		50	50	21.00	20.85	20.77	1
		100	0	21.18	21.14	20.99	1
	16QAM	1	0	21.23	21.19	21.05	1
		1	50	20.71	20.54	20.46	1
		1	99	20.27	20.22	20.18	1
		50	0	20.33	20.26	20.13	2
		50	25	19.98	19.85	19.74	2
		50	50	19.90	19.75	19.67	2
		100	0	20.08	20.04	19.89	2

AVERAGE ERP (dBm)

LTE Band 13							
Channel Bandwidth: 5MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Z	23205	779.5	-9.84	32.24	20.25	105.93	H
	23230	782.0	-9.48	32.17	20.54	113.24	
	23255	784.5	-9.23	32.11	20.73	118.30	
	23205	779.5	-12.19	32.43	18.09	64.42	V
	23230	782.0	-12.12	32.42	18.15	65.31	
	23255	784.5	-12.37	32.46	17.94	62.23	

LTE Band 13							
Channel Bandwidth: 5MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Z	23205	779.5	-10.46	32.24	19.63	91.83	H
	23230	782.0	-9.86	32.17	20.16	103.75	
	23255	784.5	-10.00	32.11	19.96	99.08	
	23205	779.5	-12.73	32.43	17.55	56.89	V
	23230	782.0	-12.89	32.42	17.38	54.70	
	23255	784.5	-13.05	32.46	17.26	53.21	

LTE Band 13							
Channel Bandwidth: 10MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Z	23230	782.0	-9.85	32.17	20.17	103.99	H
	23230	782.0	-12.35	32.42	17.92	61.94	V

LTE Band 13							
Channel Bandwidth: 10MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	ERP(dBm)	ERP(mW)	Polarization (H/V)
Z	23230	782.0	-10.56	32.17	19.46	88.31	H
	23230	782.0	-12.96	32.42	17.31	53.83	V

AVERAGE EIRP (dBm)

LTE Band 4							
Channel Bandwidth: 1.4MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19957	1710.7	-18.04	36.45	18.41	69.34	H
	20175	1732.5	-18.04	36.80	18.76	75.14	
	20393	1754.3	-18.74	36.94	18.20	66.11	
	19957	1710.7	-13.04	37.28	24.24	265.28	V
	20175	1732.5	-13.72	37.63	23.91	246.04	
	20393	1754.3	-13.23	37.64	24.41	276.06	

LTE Band 4							
Channel Bandwidth: 1.4MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19957	1710.7	-19.34	36.45	17.11	51.40	H
	20175	1732.5	-19.48	36.80	17.32	53.94	
	20393	1754.3	-19.22	36.94	17.72	59.20	
	19957	1710.7	-14.56	37.28	22.72	186.94	V
	20175	1732.5	-14.28	37.63	23.35	216.27	
	20393	1754.3	-14.66	37.64	22.98	198.61	

LTE Band 4							
Channel Bandwidth: 3MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19965	1711.5	-18.81	36.64	17.83	60.67	H
	20175	1732.5	-18.89	36.80	17.91	61.73	
	20385	1753.5	-18.59	36.80	18.21	66.22	
	19965	1711.5	-13.09	37.44	24.35	272.21	V
	20175	1732.5	-13.63	37.63	24.00	251.13	
	20385	1753.5	-13.27	37.64	24.37	273.21	

LTE Band 4							
Channel Bandwidth: 3MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19965	1711.5	-19.46	36.64	17.18	52.24	H
	20175	1732.5	-19.41	36.80	17.39	54.76	
	20385	1753.5	-19.16	36.80	17.64	58.08	
	19965	1711.5	-14.74	37.44	22.70	186.17	V
	20175	1732.5	-14.21	37.63	23.42	219.74	
	20385	1753.5	-14.89	37.64	22.75	188.15	

LTE Band 4							
Channel Bandwidth: 5MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19975	1712.5	-18.68	36.64	17.96	62.52	H
	20175	1732.5	-18.79	36.80	18.01	63.17	
	20375	1752.5	-18.41	36.80	18.39	69.02	
	19975	1712.5	-13.05	37.44	24.39	274.73	V
	20175	1732.5	-13.48	37.63	24.15	259.96	
	20375	1752.5	-13.37	37.64	24.27	266.99	

LTE Band 4							
Channel Bandwidth: 5MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	19975	1712.5	-19.28	36.64	17.36	54.45	H
	20175	1732.5	-19.37	36.80	17.43	55.27	
	20375	1752.5	-19.00	36.80	17.80	60.26	
	19975	1712.5	-14.62	37.44	22.82	191.38	V
	20175	1732.5	-14.01	37.63	23.62	230.09	
	20375	1752.5	-13.96	37.64	23.68	233.08	

LTE Band 4							
Channel Bandwidth: 10MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20000	1715.0	-17.54	36.64	19.10	81.28	H
	20175	1732.5	-17.39	36.80	19.41	87.20	
	20350	1750.0	-17.88	36.80	18.92	77.98	
	20000	1715.0	-13.33	37.44	24.11	257.57	V
	20175	1732.5	-13.01	37.63	24.62	289.67	
	20350	1750.0	-13.54	37.64	24.10	256.74	

LTE Band 4							
Channel Bandwidth: 10MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20000	1715.0	-18.13	36.64	18.51	70.96	H
	20175	1732.5	-18.04	36.80	18.76	75.08	
	20350	1750.0	-18.35	36.80	18.45	69.98	
	20000	1715.0	-13.84	37.44	23.60	229.03	V
	20175	1732.5	-13.64	37.63	23.99	250.55	
	20350	1750.0	-14.12	37.64	23.52	224.65	

LTE Band 4							
Channel Bandwidth: 15MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20025	1717.5	-17.35	36.64	19.29	84.92	H
	20175	1732.5	-17.30	36.80	19.50	89.02	
	20325	1747.5	-18.02	36.80	18.78	75.51	
	20025	1717.5	-13.26	37.44	24.18	261.76	V
	20175	1732.5	-12.85	37.63	24.78	300.54	
	20325	1747.5	-12.97	37.64	24.67	292.75	

LTE Band 4							
Channel Bandwidth: 15MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20025	1717.5	-18.10	36.64	18.54	71.45	H
	20175	1732.5	-18.07	36.80	18.73	74.56	
	20325	1747.5	-18.59	36.80	18.21	66.22	
	20025	1717.5	-13.82	37.44	23.62	230.09	V
	20175	1732.5	-13.50	37.63	24.13	258.76	
	20325	1747.5	-13.67	37.64	23.97	249.17	

LTE Band 4							
Channel Bandwidth: 20MHz / QPSK							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20050	1720.5	-17.65	36.64	18.99	79.25	H
	20175	1732.5	-17.64	36.80	19.16	82.32	
	20300	1745.0	-18.12	36.80	18.68	73.79	
	20050	1720.5	-13.35	37.44	24.09	256.39	V
	20175	1732.5	-13.10	37.63	24.53	283.73	
	20300	1745.0	-13.42	37.64	24.22	263.94	

LTE Band 4							
Channel Bandwidth: 20MHz / 16QAM							
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)
Z	20050	1720.5	-18.09	36.64	18.55	71.61	H
	20175	1732.5	-18.43	36.80	18.37	68.63	
	20300	1745.0	-18.64	36.80	18.16	65.46	
	20050	1720.5	-13.97	37.44	23.47	222.28	V
	20175	1732.5	-13.87	37.63	23.76	237.63	
	20300	1745.0	-13.89	37.64	23.75	236.86	

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 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 -13dBm

4.2.2 TEST PROCEDURES

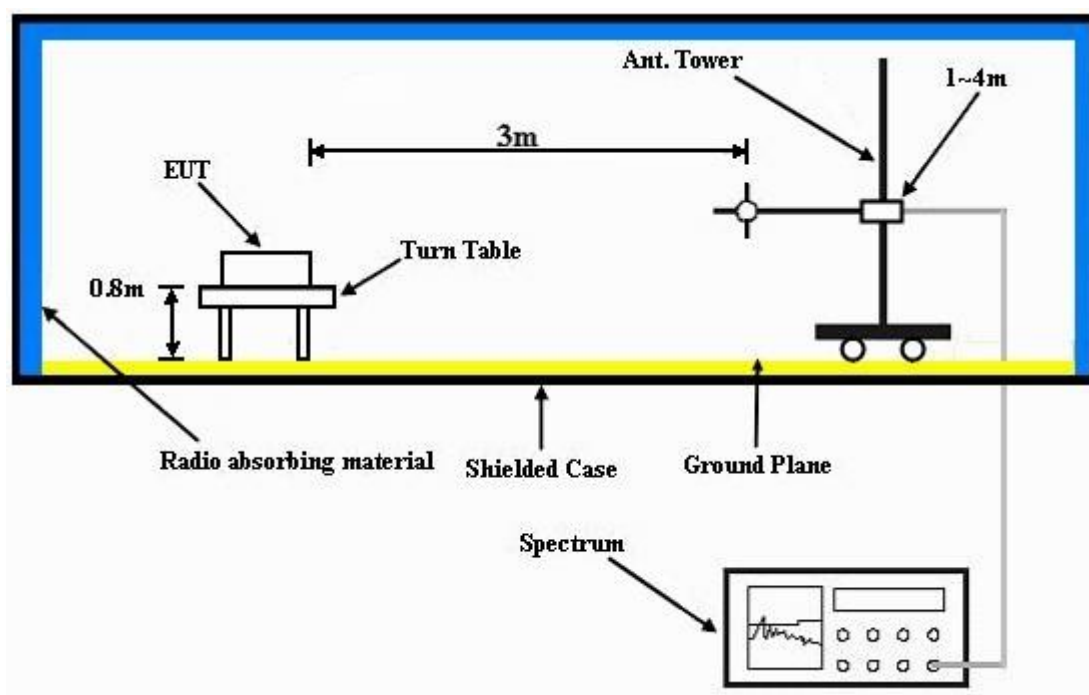
- Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 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
- $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}.$
- 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.

4.2.3 DEVIATION FROM TEST STANDARD

No deviation

4.2.4 TEST SETUP



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

4.2.5 TEST RESULTS

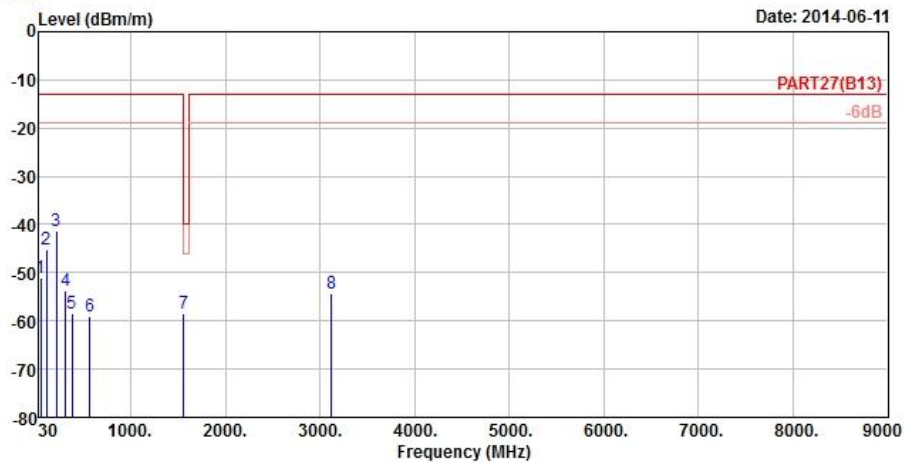
LTE BAND 13

CHANNEL BANDWIDTH: 5MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

Data: 9



Site : 966 Chamber 5
Condition: PART27(B13) 3m HORIZONTAL
Mode : LTE Band 13_5M_QPSK(1,0)
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	45.93	-51.02	-49.26	-13.00	-38.02	-1.76	Peak
2	103.71	-45.23	-34.75	-13.00	-32.23	-10.48	Peak
3	210.36	-41.36	-33.89	-13.00	-28.36	-7.47	Peak
4	308.40	-53.61	-47.29	-13.00	-40.61	-6.32	Peak
5	378.40	-58.36	-52.56	-13.00	-45.36	-5.80	Peak
6	563.20	-58.98	-57.62	-13.00	-45.98	-1.36	Peak
7 pp	1559.60	-58.54	-44.74	-40.00	-18.54	-13.80	Peak
8	3119.20	-54.28	-45.02	-13.00	-41.28	-9.26	Peak



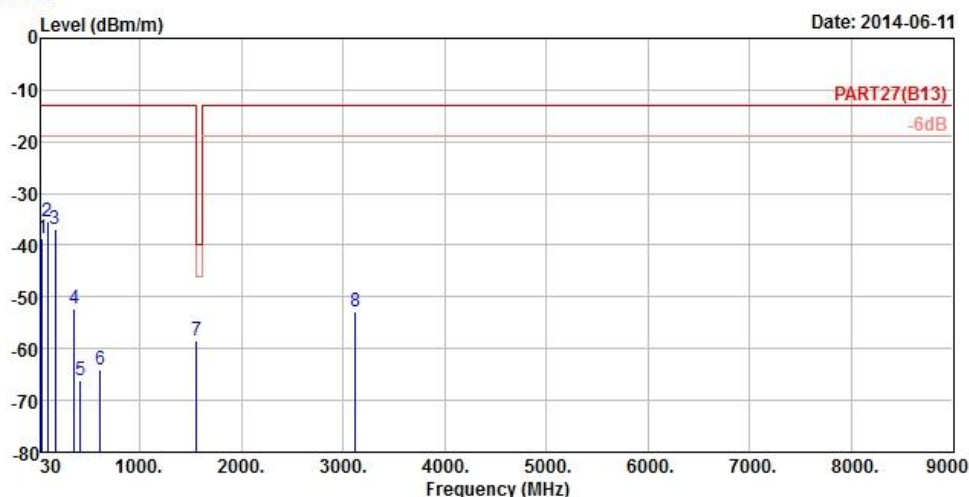
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27(B13) 3m VERTICAL
Mode : LTE Band 13_5M_QPSK(1,0)
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	38.37	-38.62	-36.88	-13.00	-25.62	-1.74	Peak
2	89.67	-35.29	-24.71	-13.00	-22.29	-10.58	Peak
3	164.46	-36.98	-30.38	-13.00	-23.98	-6.60	Peak
4	351.80	-52.32	-46.33	-13.00	-39.32	-5.99	Peak
5	418.30	-66.15	-60.98	-13.00	-53.15	-5.17	Peak
6	611.50	-64.04	-63.88	-13.00	-51.04	-0.16	Peak
7 pp	1559.60	-58.38	-44.58	-40.00	-18.38	-13.80	Peak
8	3119.20	-52.80	-43.54	-13.00	-39.80	-9.26	Peak



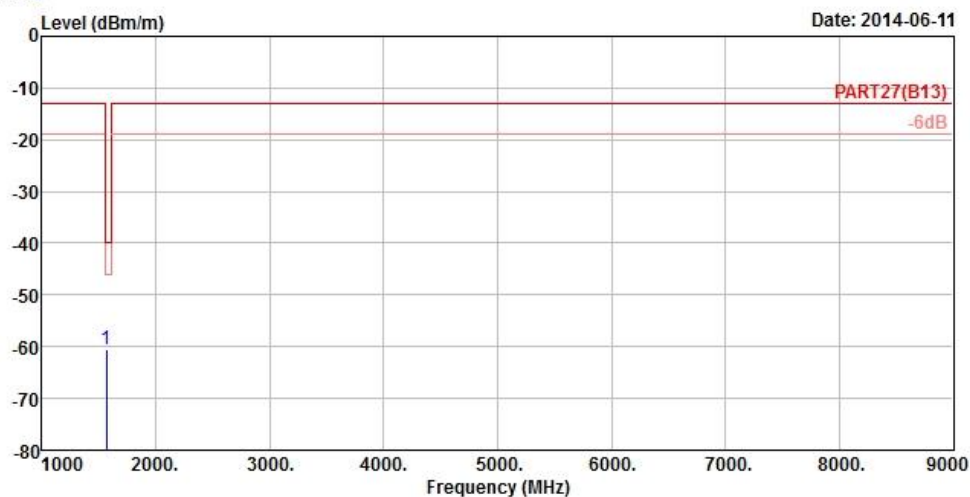
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Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27(B13) 3m HORIZONTAL
Mode : LTE Band 13_5M_QPSK(25,0)
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over		
		Level	Line	Limit	Factor	Remark
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 1564.00	-60.50	-46.70	-40.00	-20.50	-13.80	Peak



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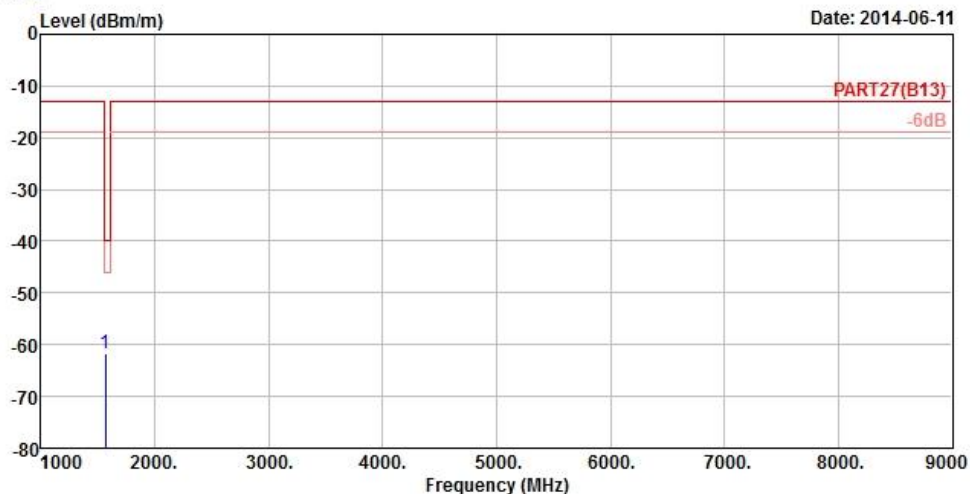


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2014-06-11



Site : 966 Chamber 5
Condition: PART27(B13) 3m VERTICAL
Mode : LTE Band 13_5M_QPSK(25,0)
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 1564.00	-61.80	-48.00	-40.00	-21.80	-13.80	Peak

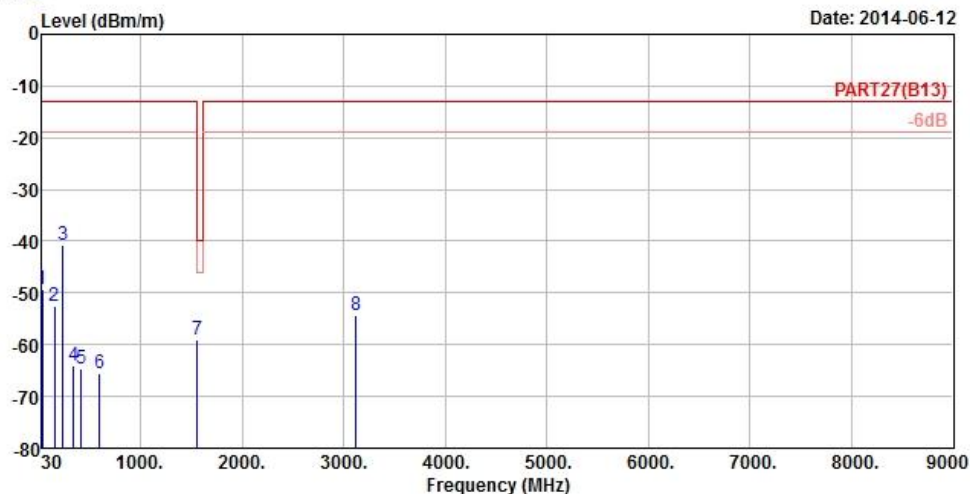
CHANNEL BANDWIDTH: 5MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5
Condition: PART27(B13) 3m HORIZONTAL
Mode : LTE Band 13_5M_16QAM(1,0)
Tested by: Anson Lin
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	33.78	-49.27	-47.43	-13.00	-36.27	-1.84	Peak
2	154.74	-52.46	-46.02	-13.00	-39.46	-6.44	Peak
3	235.20	-40.72	-34.39	-13.00	-27.72	-6.33	Peak
4	337.80	-63.94	-57.84	-13.00	-50.94	-6.10	Peak
5	416.90	-64.62	-59.42	-13.00	-51.62	-5.20	Peak
6	595.40	-65.43	-64.95	-13.00	-52.43	-0.48	Peak
7 pp	1559.60	-58.93	-45.13	-40.00	-18.93	-13.80	Peak
8	3119.20	-54.27	-45.01	-13.00	-41.27	-9.26	Peak



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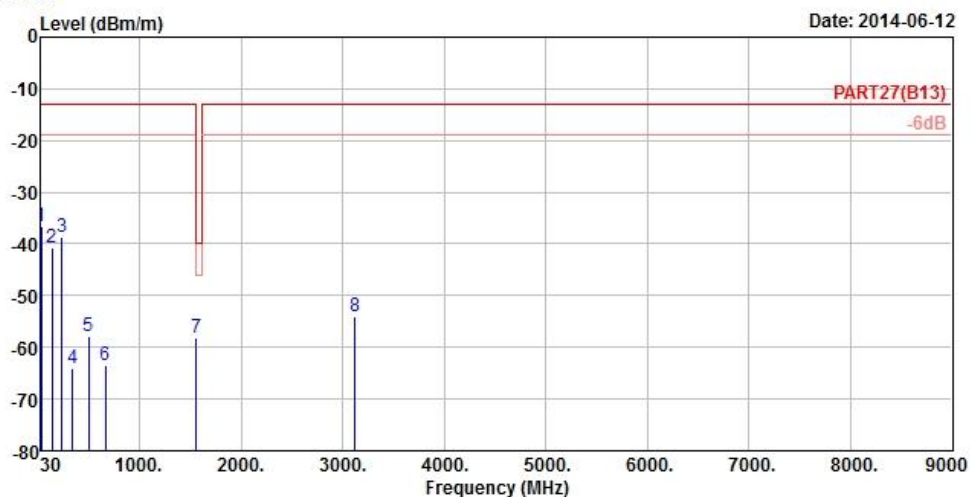


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10

Date: 2014-06-12



Site : 966 Chamber 5
Condition: PART27(B13) 3m VERTICAL
Mode : LTE Band 13_5M_16QAM(1,0)
Tested by: Anson Lin
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	33.78	-36.59	-34.75	-13.00	-23.59	-1.84	Peak
2	140.97	-40.70	-34.97	-13.00	-27.70	-5.73	Peak
3	237.63	-38.74	-32.49	-13.00	-25.74	-6.25	Peak
4	338.50	-64.18	-58.09	-13.00	-51.18	-6.09	Peak
5	495.30	-57.87	-54.66	-13.00	-44.87	-3.21	Peak
6	664.00	-63.46	-64.26	-13.00	-50.46	0.80	Peak
7 pp	1559.60	-58.11	-44.31	-40.00	-18.11	-13.80	Peak
8	3119.20	-53.88	-44.62	-13.00	-40.88	-9.26	Peak



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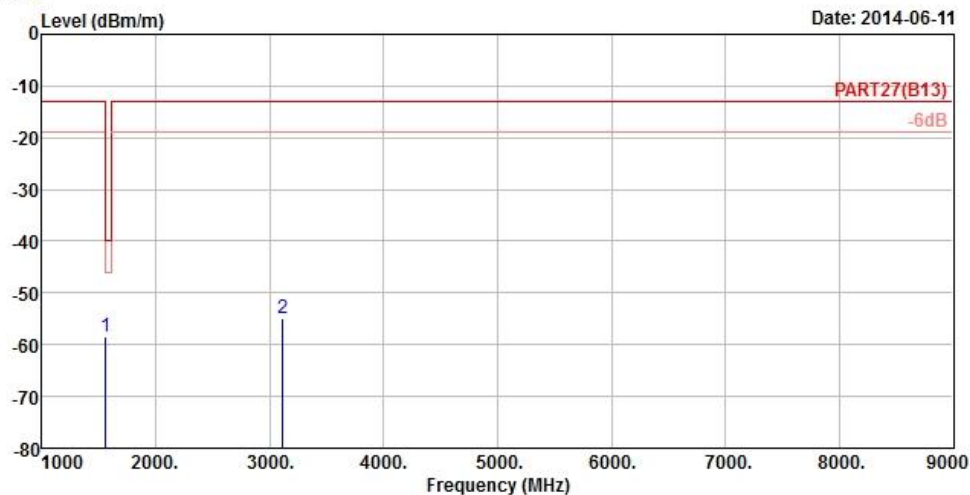
CHANNEL BANDWIDTH: 10MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27(B13) 3m HORIZONTAL
Mode : LTE Band 13_10M_QPSK(1,0)
Tested by: Anson Lin
Plane : Z

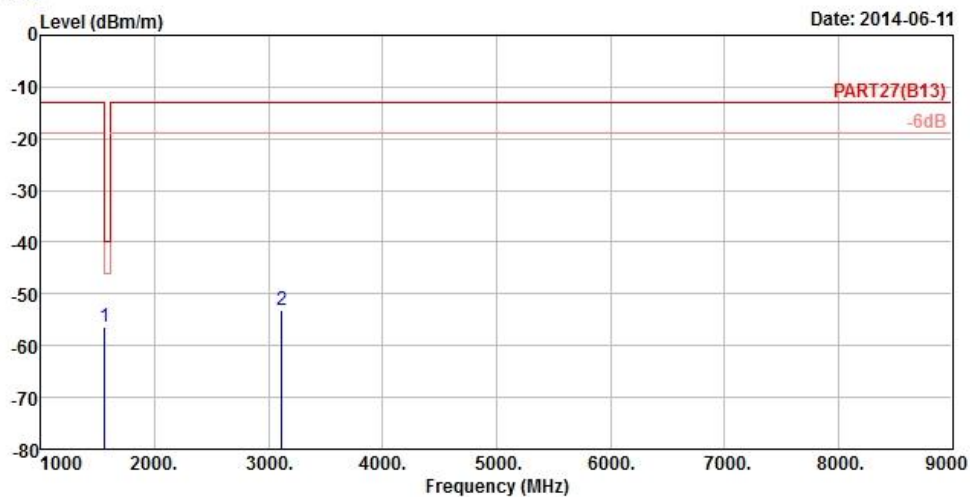
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	1555.20	-58.49	-44.69	-13.00	-45.49	-13.80	Peak
2 pp	3110.40	-54.80	-45.53	-13.00	-41.80	-9.27	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition: PART27(B13) 3m VERTICAL
Mode : LTE Band 13_10M_QPSK(1,0)
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	1555.20	-56.45	-42.65	-13.00	-43.45	-13.80	Peak
2 pp	3110.40	-53.21	-43.94	-13.00	-40.21	-9.27	Peak



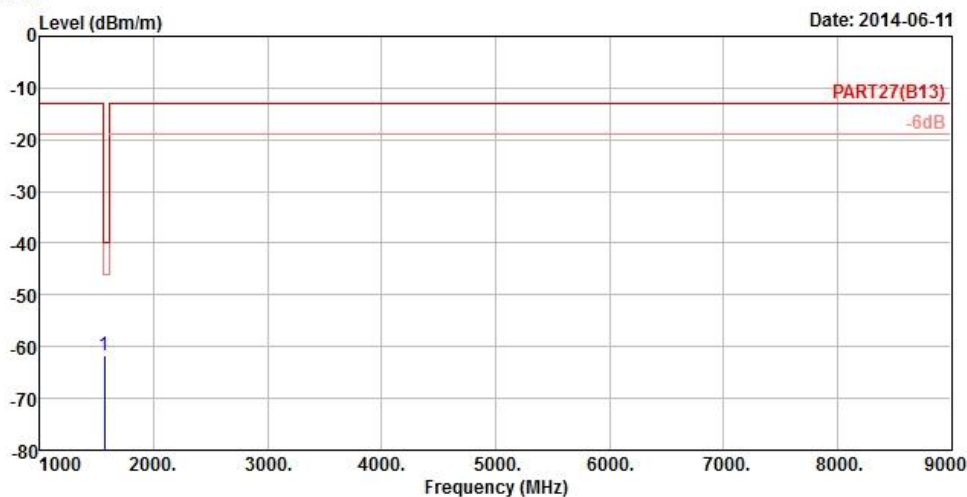
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition: PART27(B13) 3m HORIZONTAL
Mode : LTE Band 13_10M_QPSK(50,0)
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 1564.00	-61.72	-47.92	-40.00	-21.72	-13.80	Peak



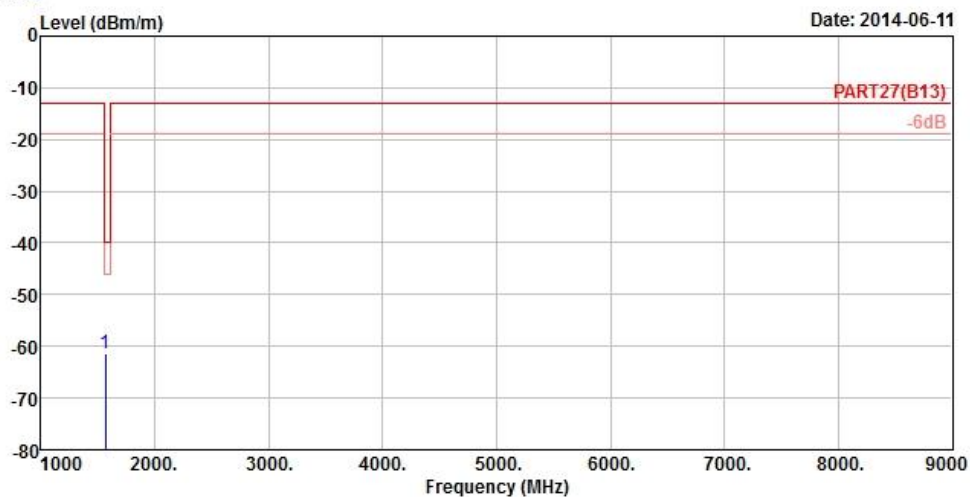
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition: PART27(B13) 3m VERTICAL
Mode : LTE Band 13_10M_QPSK(50,0)
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 1564.00	-61.51	-47.71	-40.00	-21.51	-13.80	Peak



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LTE BAND 4

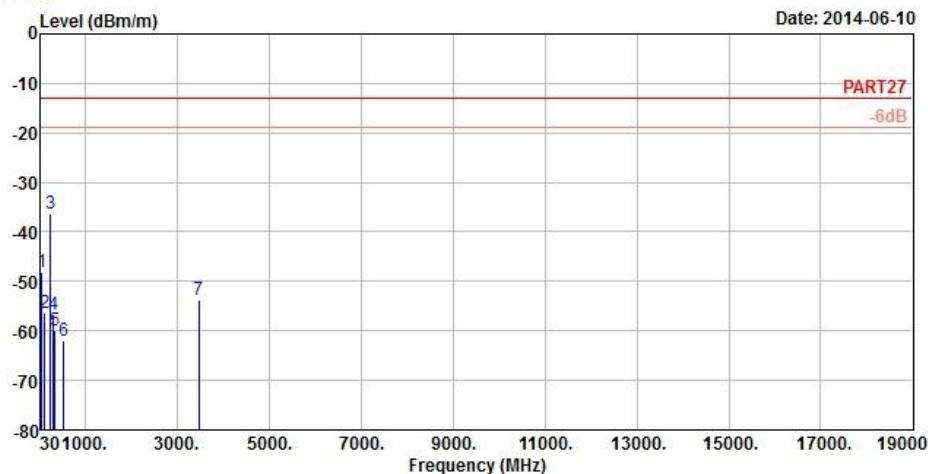
CHANNEL BANDWIDTH: 1.4MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 13



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _1.4M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	55.38	-47.99	-42.64	-13.00	-34.99	-5.35	Peak
2	106.41	-56.32	-45.77	-13.00	-43.32	-10.55	Peak
3 pp	236.82	-36.40	-30.11	-13.00	-23.40	-6.29	Peak
4	309.10	-56.57	-50.26	-13.00	-43.57	-6.31	Peak
5	337.10	-60.03	-53.93	-13.00	-47.03	-6.10	Peak
6	525.40	-61.88	-59.48	-13.00	-48.88	-2.40	Peak
7	3464.20	-53.83	-44.81	-13.00	-40.83	-9.02	Peak



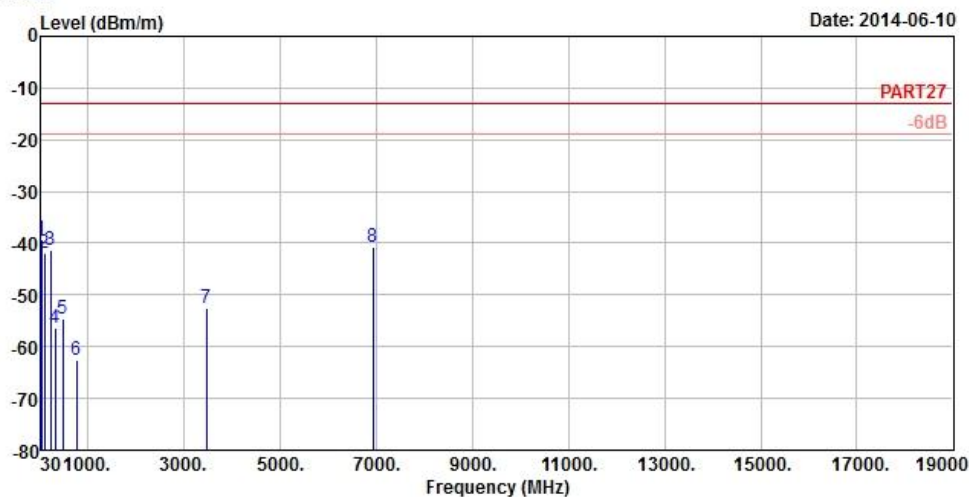
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 14



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _1.4M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp	38.37	-39.24	-37.50	-13.00	-26.24	-1.74	Peak
2	97.23	-41.85	-31.40	-13.00	-28.85	-10.45	Peak
3	233.04	-41.45	-34.98	-13.00	-28.45	-6.47	Peak
4	321.00	-56.33	-50.11	-13.00	-43.33	-6.22	Peak
5	472.20	-54.70	-50.90	-13.00	-41.70	-3.80	Peak
6	771.80	-62.49	-64.43	-13.00	-49.49	1.94	Peak
7	3464.20	-52.41	-43.39	-13.00	-39.41	-9.02	Peak
8	6928.40	-40.66	-42.96	-13.00	-27.66	2.30	Peak



A D T

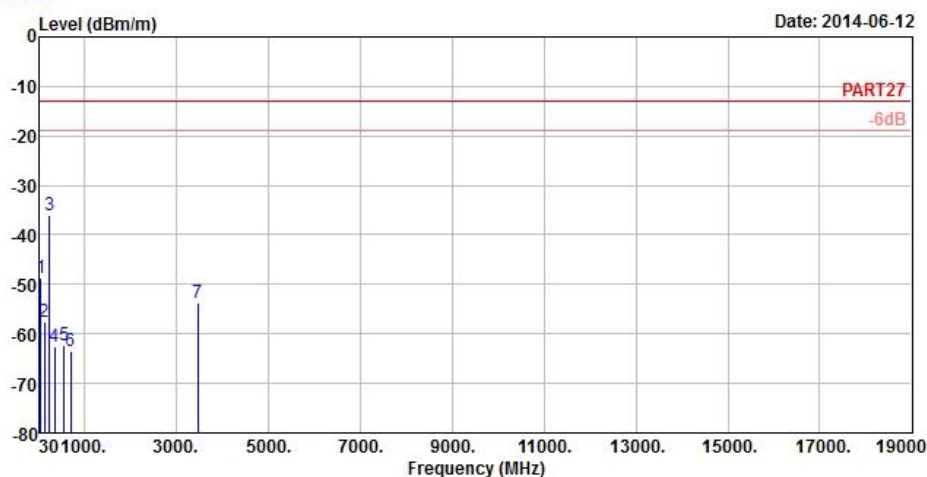
CHANNEL BANDWIDTH: 1.4MHz / 16QAM



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 13



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _1.4M_16QAM(1,0) Link
Tested by: Anson Lin
Plane : Z

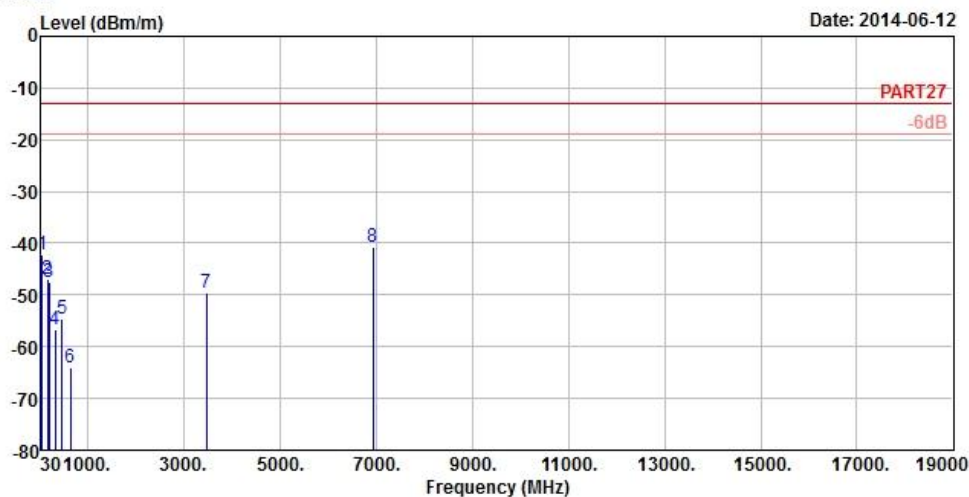
	Freq	Level	Read	Limit	Over	
	MHz	dBm/m	Level	Line	Limit	Factor Remark
			dBm	dBm/m	dB	dB/m
1	56.73	-48.79	-43.14	-13.00	-35.79	-5.65 Peak
2	134.76	-57.70	-50.74	-13.00	-44.70	-6.96 Peak
3 pp	236.78	-36.14	-29.85	-13.00	-23.14	-6.29 Peak
4	354.60	-62.71	-56.74	-13.00	-49.71	-5.97 Peak
5	559.70	-62.39	-60.92	-13.00	-49.39	-1.47 Peak
6	704.60	-63.35	-64.83	-13.00	-50.35	1.48 Peak
7	3464.20	-53.69	-44.67	-13.00	-40.69	-9.02 Peak



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 14



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _1.4M_16QAM(1,0) Link
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	46.74	-42.17	-39.84	-13.00	-29.17	-2.33	Peak
2	158.52	-47.06	-40.58	-13.00	-34.06	-6.48	Peak
3	201.45	-47.49	-39.63	-13.00	-34.49	-7.86	Peak
4	321.10	-56.75	-50.53	-13.00	-43.75	-6.22	Peak
5	471.90	-54.66	-50.86	-13.00	-41.66	-3.80	Peak
6	644.40	-64.01	-64.45	-13.00	-51.01	0.44	Peak
7	3464.20	-49.64	-40.62	-13.00	-36.64	-9.02	Peak
8 pp	6928.40	-40.85	-43.15	-13.00	-27.85	2.30	Peak



A D T

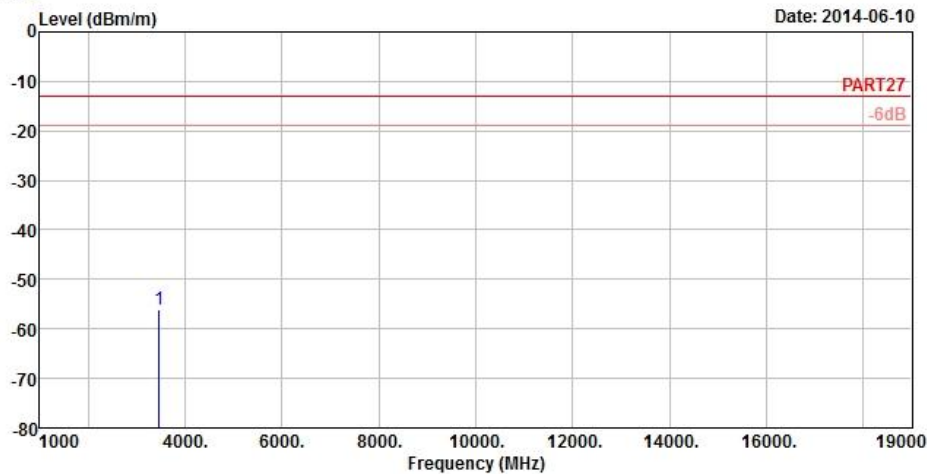
CHANNEL BANDWIDTH: 3MHz / QPSK



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _3M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3462.40	-56.00	-46.98	-13.00	-43.00	-9.02	Peak



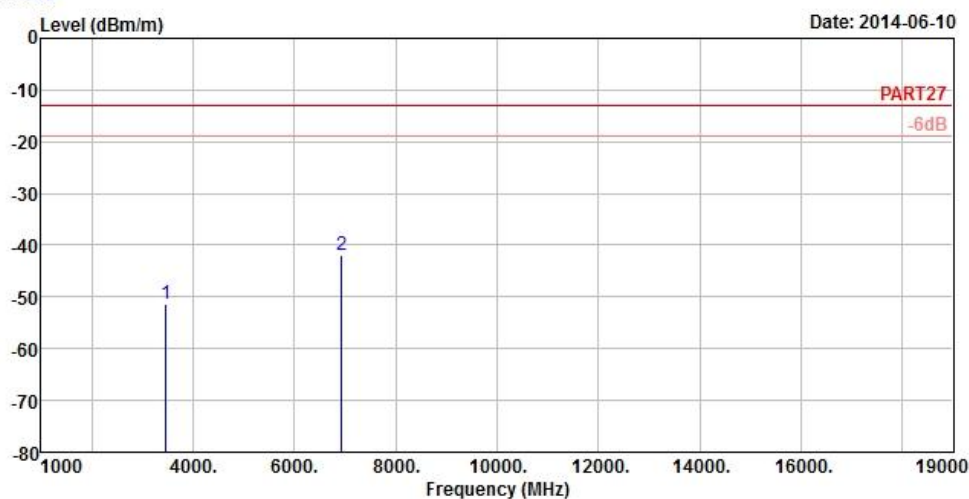
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _3M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over	
	Freq	Level	Level	Line	Limit	Factor Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m
1	3462.40	-51.33	-42.31	-13.00	-38.33	-9.02 Peak
2 pp	6924.80	-41.92	-44.22	-13.00	-28.92	2.30 Peak



A D T

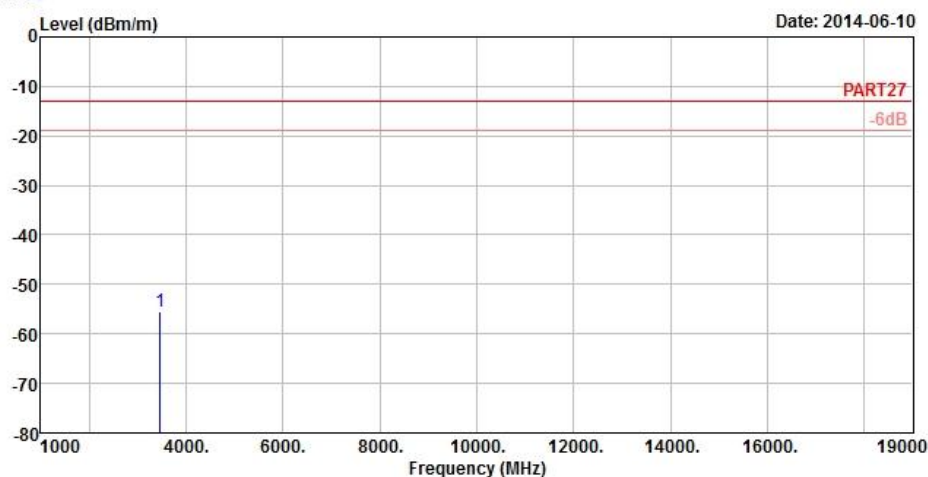
CHANNEL BANDWIDTH: 5MHz / QPSK



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _5M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3460.60	-55.44	-46.42	-13.00	-42.44	-9.02	Peak



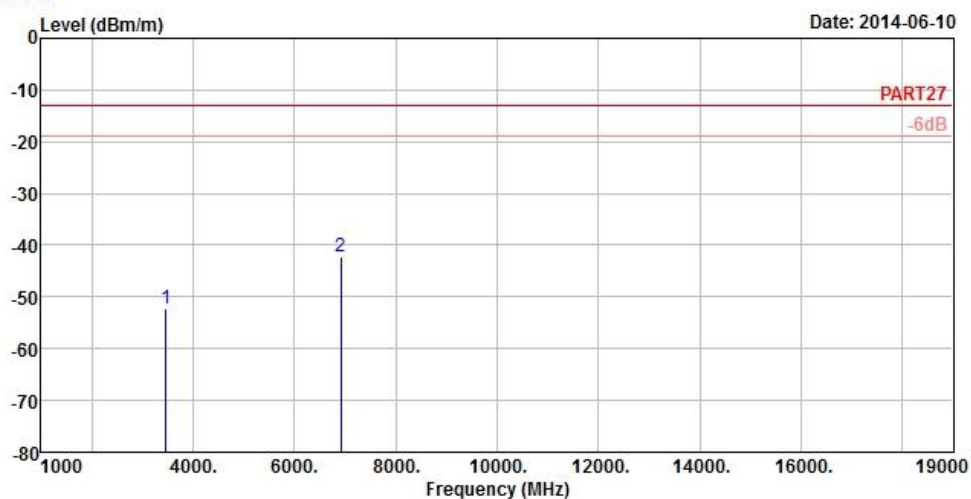
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _5M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3460.60	-52.32	-43.30	-13.00	-39.32	-9.02	Peak
2 pp	6921.20	-42.08	-44.38	-13.00	-29.08	2.30	Peak



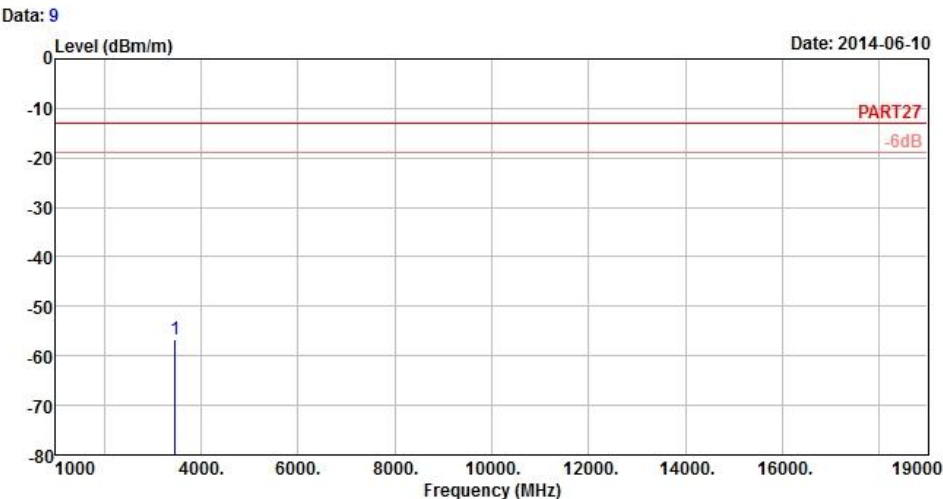
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CHANNEL BANDWIDTH: 10MHz / QPSK



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _10M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3456.20	-56.79	-47.70	-13.00	-43.79	-9.09	Peak



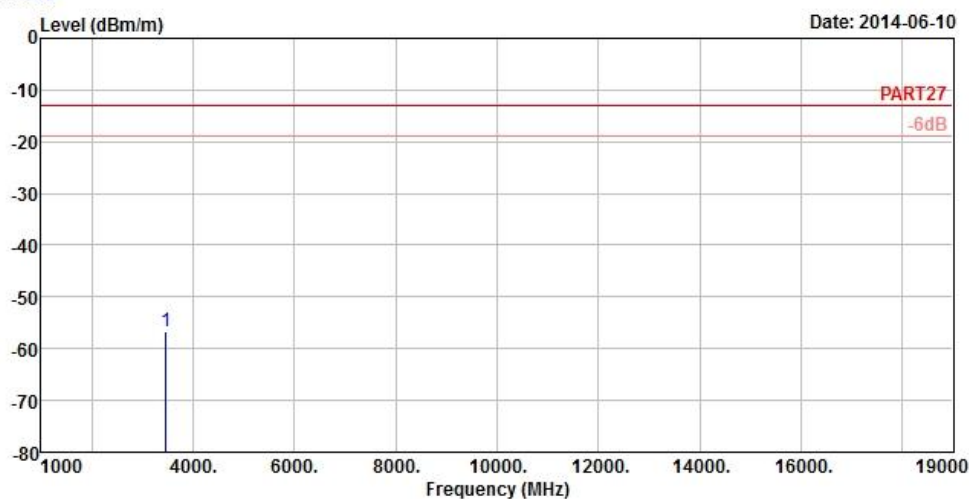
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _10M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3456.20	-56.65	-47.56	-13.00	-43.65	-9.09	Peak



A D T

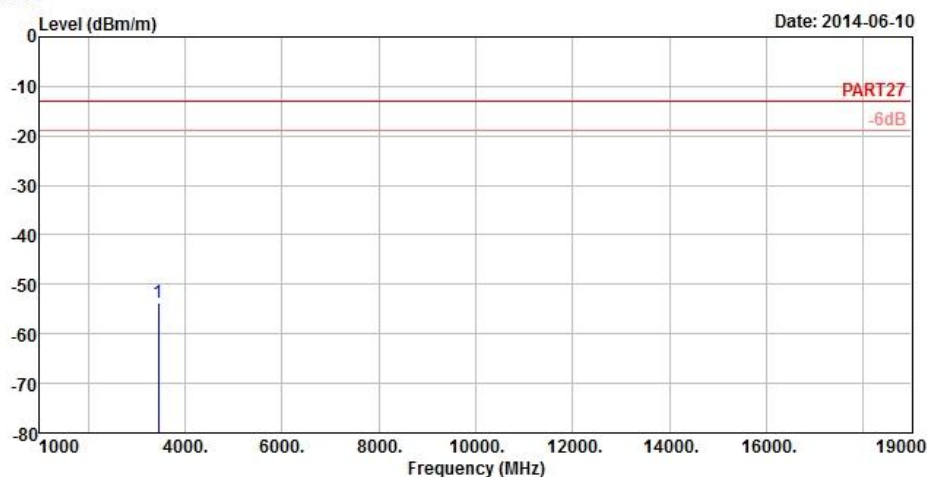
CHANNEL BANDWIDTH: 15MHz / QPSK



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _15M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3451.80	-53.78	-44.69	-13.00	-40.78	-9.09	Peak



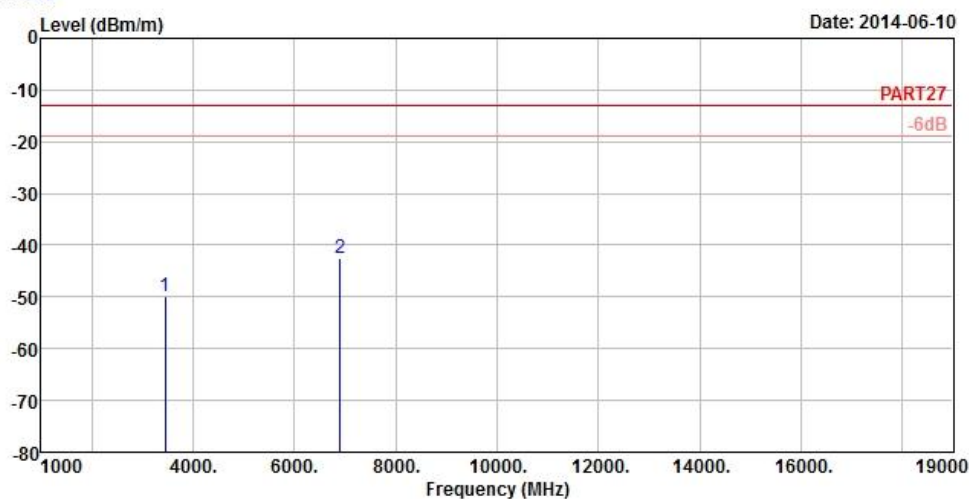
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _15M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

			Read	Limit	Over		
	Freq	Level	Level	Line	Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3451.80	-49.91	-40.82	-13.00	-36.91	-9.09	Peak
2 pp	6903.60	-42.46	-44.67	-13.00	-29.46	2.21	Peak



A D T

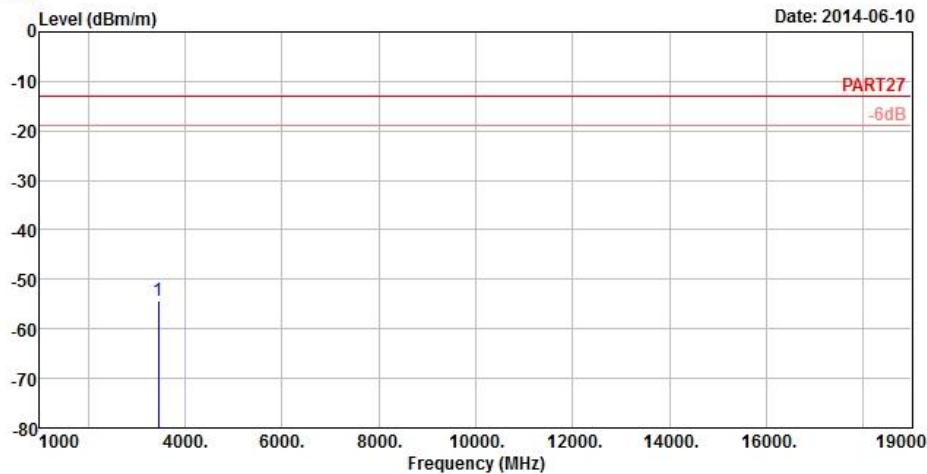
CHANNEL BANDWIDTH: 20MHz / QPSK



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 9



Site : 966 Chamber 5
Condition: PART27 3m HORIZONTAL
Mode : LTE Band 4 _20M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

Freq	Level	Read	Limit	Over	Factor	Remark
		Level	Line	Limit		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1 pp 3447.40	-54.19	-45.10	-13.00	-41.19	-9.09	Peak



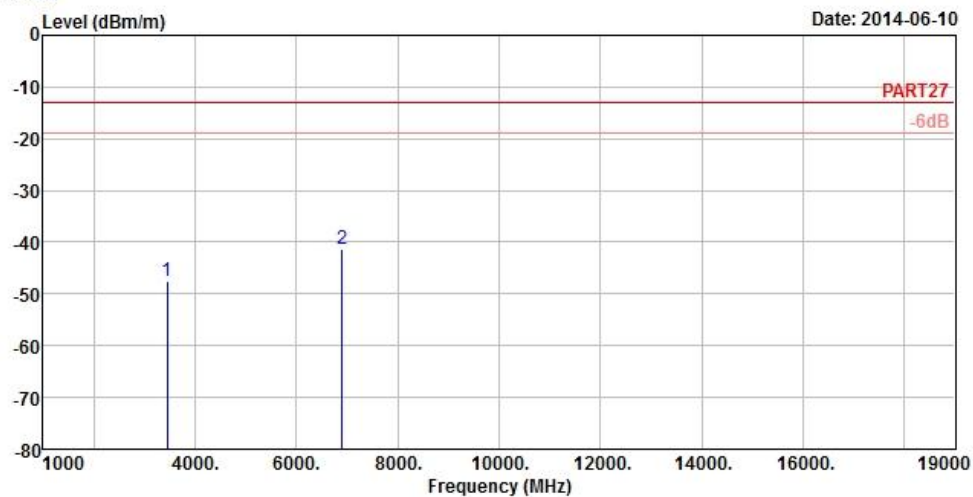
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10



Site : 966 Chamber 5
Condition: PART27 3m VERTICAL
Mode : LTE Band 4 _20M_QPSK(1,0) Link
Tested by: Anson Lin
Plane : Z

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3447.40	-47.41	-38.32	-13.00	-34.41	-9.09	Peak
2 pp	6894.80	-41.43	-43.60	-13.00	-28.43	2.17	Peak

6 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:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

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Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

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



A D T

7 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---