Partial FCC Test Report

(PART 90S)

Report No.:	RF170822C16D-5
FCC ID:	ZMOL850GL
Test Model:	L850-GL
Received Date:	Apr. 18, 2018
Test Date:	May 27, 2018
Issued Date:	Jun. 27, 2018
Applicant:	Fibocom Wireless Inc.
Address:	5/F, Tower A, Technology Building II, 1057#Nanhai Blvd, Shenzhen 518067, China
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 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 Vil, Kwei Shan Dist., Taoyuan City 33383, Taiwan (R.O.C)
FCC Registration / Designation Number:	788550 / TW0003

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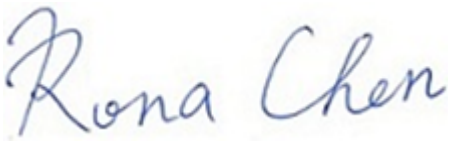
Release Control Record

Issue No.	Description	Date Issued
RF170822C16D-5	Original Release	Jun. 27, 2018

1 Certificate of Conformity

Product:	LTE module
Brand:	Fibocom
Test Model:	L850-GL
Sample Status:	Production Unit
Applicant:	Fibocom Wireless Inc.
Test Date:	May 27, 2018
Standards:	FCC Part 90, Subpart S

The above equipment 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 RF characteristics under the conditions specified in this report.

Prepared by :  , **Date:** Jun. 27, 2018

Rona Chen / Specialist

Approved by :  , **Date:** Jun. 27, 2018

Dylan Chiou / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 90 & Part 2			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 90.635 (b)	Effective Radiated Power	Pass	Meet the requirement of limit.
2.1055 90.213	Frequency Stability	N/A	Refer to Note
2.1049 90.209	Occupied Bandwidth (*)	N/A	Refer to Note
2.1051 90.209	Emission Masks	N/A	Refer to Note
2.1051 90.691	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 90.691	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -29.04 dB at 41.64 MHz.

Note:

This report is a partial report. Therefore, only test item of Effective Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to BV CPS report no.: RF170106C02-5 for module (Brand: Fibocom, Model: L850-GL)

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	Expended Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Mar. 16, 2018	Mar. 15, 2019
Spectrum Analyzer Agilent	N9010A	MY52220314	Nov. 24, 2017	Nov. 23, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Jan. 11, 2018	Jan. 10, 2019
Double Ridge Guide Horn Antenna EMCO	3115	5619	Nov. 30, 2017	Nov. 29, 2018
BILOG Antenna SCHWARZBECK	VULB 9168	9168-153	Dec. 06, 2017	Dec. 05, 2018
Fixed Attenuator Mini-Circuits	BW-N10W5+	NA	Jul. 07, 2017	Jul. 06, 2018
MXG Vector signal generator Agilent	N5182B	MY53050430	Oct. 24, 2017	Oct. 23, 2018
Preamplifier EMCI	EMC 012645	980115	Oct. 20, 2017	Oct. 19, 2018
Preamplifier EMCI	EMC 184045	980116	Oct. 20, 2017	Oct. 19, 2018
Preamplifier EMCI	EMC 330H	980112	Oct. 13, 2017	Oct. 12, 2018
RF Coaxial Cable HUBER+SUHNNER	EMC104-SM-SM-8000&3000	140811+170717	Oct. 20, 2017	Oct. 19, 2018
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	Oct. 20, 2017	Oct. 19, 2018
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Oct. 20, 2017	Oct. 19, 2018
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
Radio Communication Analyzer Anritsu	MT8820C	6201010284	Dec. 28, 2017	Dec. 27, 2018
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 08, 2017	Sep. 07, 2018
DC Power Supply Topward	33010D	807748	Oct. 25, 2016	Oct. 24, 2018
Digital Multimeter Fluke	87-III	70360742	Jun. 30, 2017	Jun. 29, 2018
HORN Antenna Schwarzbeck	BBHA 9120D	9120D-969	Dec. 12, 2017	Dec. 11, 2018

Note:
1. The calibration interval of the above test instruments is 12 / 24 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 preamplifier (model: EMC 184045) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The IC Site Registration No. is IC7450F-10.

3 General Information

3.1 General Description of EUT

Product	LTE module	
Brand	Fibocom	
Test Model	L850-GL	
Status of EUT	Production Unit	
Power Supply Rating	5.0 Vdc (Host equipment)	
Modulation Type	LTE	QPSK, 16QAM
Frequency Range	LTE Band 26 (Channel Bandwidth: 1.4 MHz)	814.7 ~ 823.3 MHz
	LTE Band 26 (Channel Bandwidth: 3 MHz)	815.5 ~ 822.5 MHz
	LTE Band 26 (Channel Bandwidth: 5 MHz)	816.5 ~ 821.5 MHz
	LTE Band 26 (Channel Bandwidth: 10 MHz)	819 MHz
Max. ERP Power	LTE Band 26 (Channel Bandwidth: 1.4 MHz)	74.64 mW
	LTE Band 26 (Channel Bandwidth: 3 MHz)	89.74 mW
	LTE Band 26 (Channel Bandwidth: 5 MHz)	93.54 mW
	LTE Band 26 (Channel Bandwidth: 10 MHz)	95.72 mW
Antenna Type	Refer to Note as below	
Accessory Device	Refer to Note as below	
Data Cable Supplied	Refer to Note as below	

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below table for more details.

Product	Brand	Model
Convertible PC	Lenovo	TP00078C

2. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter	Lenovo	ADLX65NDC3A	I/P: 100-240 Vac, 50-60 Hz, 1.5 A O/P: 20 Vdc, 3.25 A
Battery	Lenovo	SB10K97589	15.2 Vdc, 3260 mAh

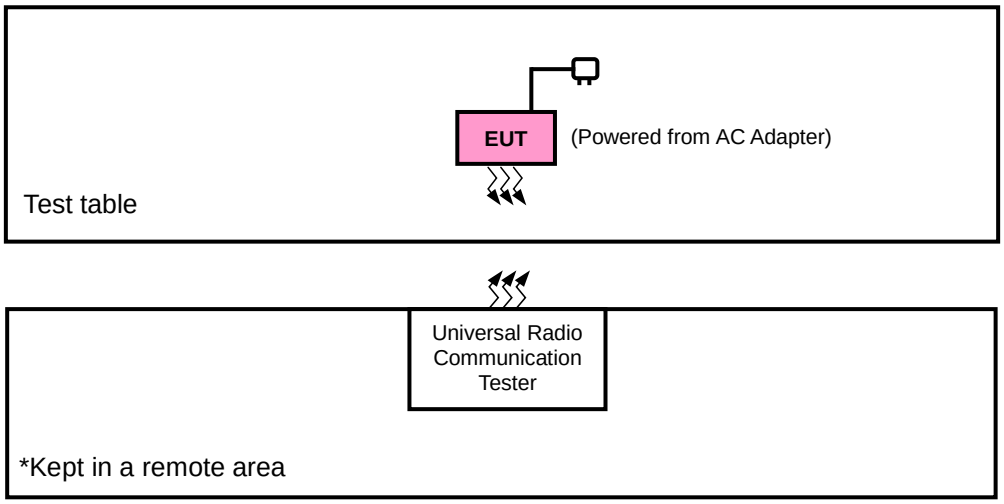
3. The information of antenna of End-product is listed as below.

Antenna Type	Manufacturer	Part No.	Antenna Gain (dBi)
PIFA	HUA CHENG TECHNOLOGY Co., Ltd	Main Antenna: DC33001WM60 Aux. Antenna: DC33001WM10 (Rx only)	-2.10

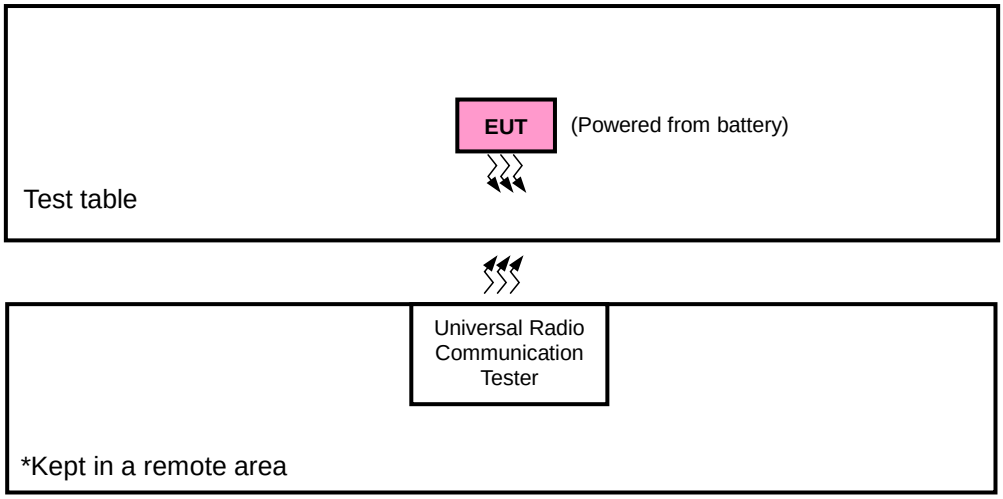
4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Configuration of System under Test

<Radiated Emission Test>



<E.R.P. Test>



3.2.1 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.	Communications Tester-Wireless	Agilent	8960 Series 10	MY53201073	N/A

No.	Signal Cable Description Of The Above Support Units
1.	N/A

Note:

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

2. Items 1 acted as communication partners to transfer data.

3.3 Test Mode Applicability and Tested Channel Detail

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

Band	ERP	Radiated Emission
LTE Band 26	Z-plane	Z-axis

LTE Band 26

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	26697 to 26783	26697, 26740, 26783	1.4 MHz	QPSK, 16QAM	1 RB / 2 RB Offset
		26705 to 26775	26705, 26740, 26775	3 MHz	QPSK, 16QAM	1 RB / 7 RB Offset
		26715 to 26765	26715, 26740, 26765	5 MHz	QPSK, 16QAM	1 RB / 12 RB Offset
		26740	26740	10 MHz	QPSK, 16QAM	1 RB / 49 RB Offset
-	Radiated Emission	26697 to 26783	26697, 26740, 26783	1.4 MHz	QPSK	1 RB / 0 RB Offset
		26715 to 26765	26715, 26740, 26765	5 MHz	QPSK	1 RB / 0 RB Offset
		26740	26740	10 MHz	QPSK	1 RB / 0 RB Offset

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

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
ERP	25 deg. C, 65 % RH	5 Vdc	Getaz Yang
Radiated Emission	25 deg. C, 65 % RH	120 Vac, 60 Hz	Jisysong Wang

3.4 EUT Operating Conditions

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

3.5 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 90
ANSI/TIA/EIA-603-E 2016
ANSI 63.26-2015

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

Mobile / Portable station are limited to 100 watts e.r.p.

4.1.2 Test Procedures

EIRP / ERP Measurement:

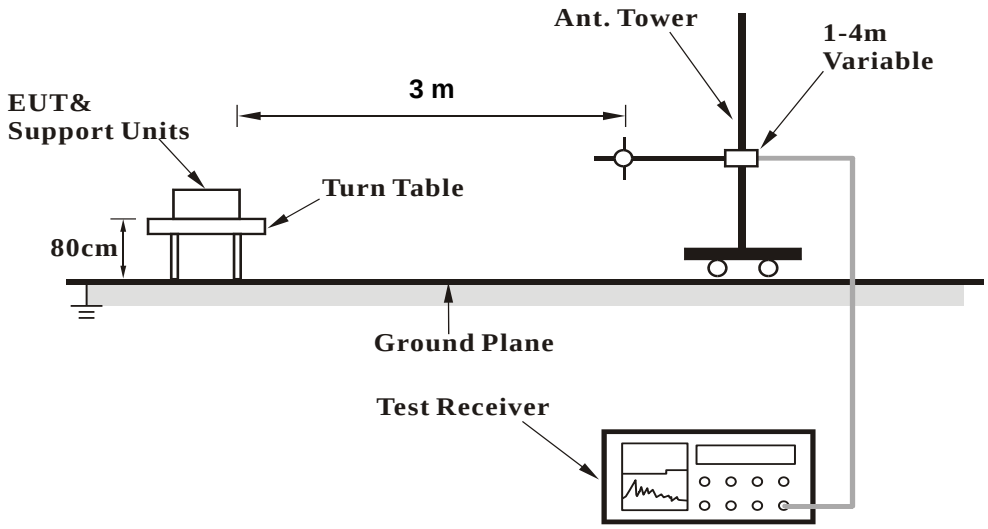
a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 5 MHz for CDMA and 10 MHz for LTE mode.
b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height 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 1 m to 4 m 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 = Output power level of S.G – TX cable loss + Antenna gain of substitution horn. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15 dB.

Conducted Power Measurement:

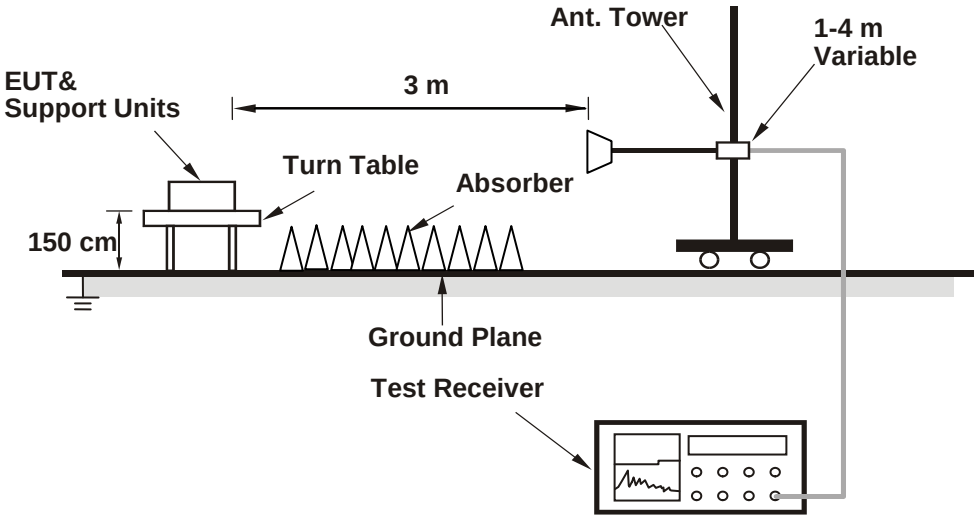
a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 Test Setup

EIRP / ERP Measurement:
<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



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

Conducted Power Measurement:

4.1.4 Test Results

ERP Power (dBm)

LTE Band 26							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
Z	26697	814.7	-11.53	32.01	18.33	68.08	H
	26740	819.0	-11.23	32.11	18.73	**74.64**	
	26783	823.3	-12.03	32.32	18.14	65.16	
	26697	814.7	-19.65	32.54	10.74	11.86	V
	26740	819.0	-19.02	32.51	11.34	13.61	
	26783	823.3	-20.04	32.51	10.32	10.76	
Channel Bandwidth: 1.4 MHz / 16QAM							
Z	26697	814.7	-12.69	32.01	17.17	52.12	H
	26740	819.0	-12.37	32.11	17.59	57.41	
	26783	823.3	-13.08	32.32	17.09	51.17	
	26697	814.7	-20.76	32.54	9.63	9.18	V
	26740	819.0	-20.09	32.51	10.27	10.64	
	26783	823.3	-21.10	32.51	9.26	8.43	

LTE Band 26							
Channel Bandwidth: 3 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
Z	26705	815.5	-10.75	32.02	19.12	81.66	H
	26740	819.0	-10.43	32.11	19.53	**89.74**	
	26775	822.5	-11.10	32.18	18.93	78.16	
	26705	815.5	-18.81	32.5	11.54	14.26	V
	26740	819.0	-18.20	32.51	12.16	16.44	
	26775	822.5	-19.20	32.47	11.12	12.94	
Channel Bandwidth: 3 MHz / 16QAM							
Z	26705	815.5	-11.90	32.02	17.97	62.66	H
	26740	819.0	-11.52	32.11	18.44	69.82	
	26775	822.5	-12.10	32.18	17.93	62.09	
	26705	815.5	-19.89	32.5	10.46	11.12	V
	26740	819.0	-19.31	32.51	11.05	12.74	
	26775	822.5	-20.35	32.47	9.97	9.93	

LTE Band 26							
Channel Bandwidth: 5 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
Z	26715	816.5	-10.57	32.04	19.32	85.51	H
	26740	819.0	-10.25	32.11	19.71	**93.54**	
	26765	821.5	-10.57	31.79	19.07	80.72	
	26715	816.5	-18.68	32.52	11.69	14.76	V
	26740	819.0	-18.03	32.51	12.33	17.10	
	26765	821.5	-18.74	32.17	11.28	13.43	
Channel Bandwidth: 5 MHz / 16QAM							
Z	26715	816.5	-11.69	32.04	18.20	66.07	H
	26740	819.0	-11.31	32.11	18.65	73.28	
	26765	821.5	-11.61	31.79	18.03	63.53	
	26715	816.5	-19.77	32.52	10.60	11.48	V
	26740	819.0	-19.08	32.51	11.28	13.43	
	26765	821.5	-19.78	32.17	10.24	10.57	

LTE Band 26							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**LVL (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
Z	26740	819.0	-10.15	32.11	19.81	**95.72**	H
	26740	819.0	-17.91	32.51	12.45	17.58	V
Channel Bandwidth: 10 MHz / 16QAM							
Z	26740	819.0	-11.16	32.11	18.80	75.86	H
	26740	819.0	-18.94	32.51	11.42	13.87	V

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 log10(P) dB. The limit of emission is equal to -13 dBm.

4.2.2 Test Procedure

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) 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 1 m to 4 m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G.
c. EIRP = Output power level of S.G – TX cable loss + 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, E.R.P power = E.I.P.R power - 2.15 dB.

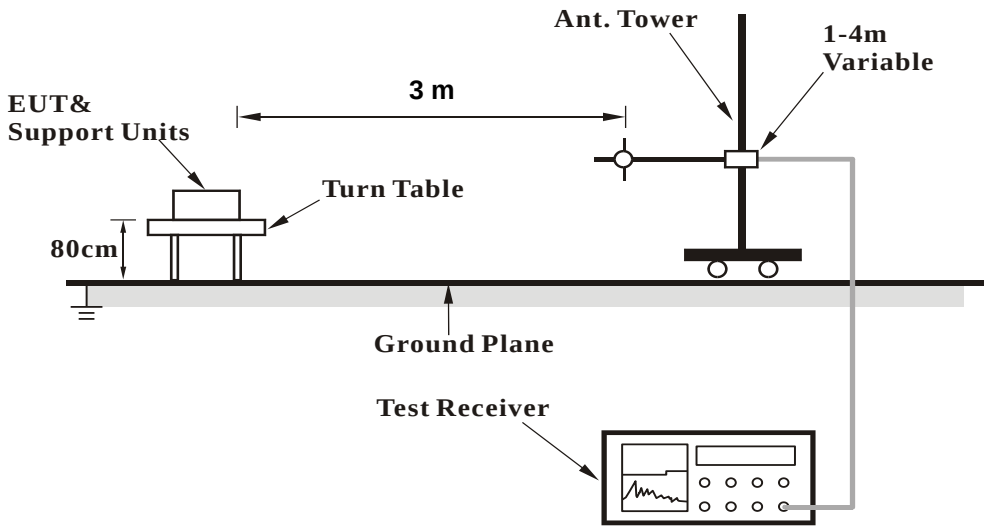
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.2.3 Deviation from Test Standard

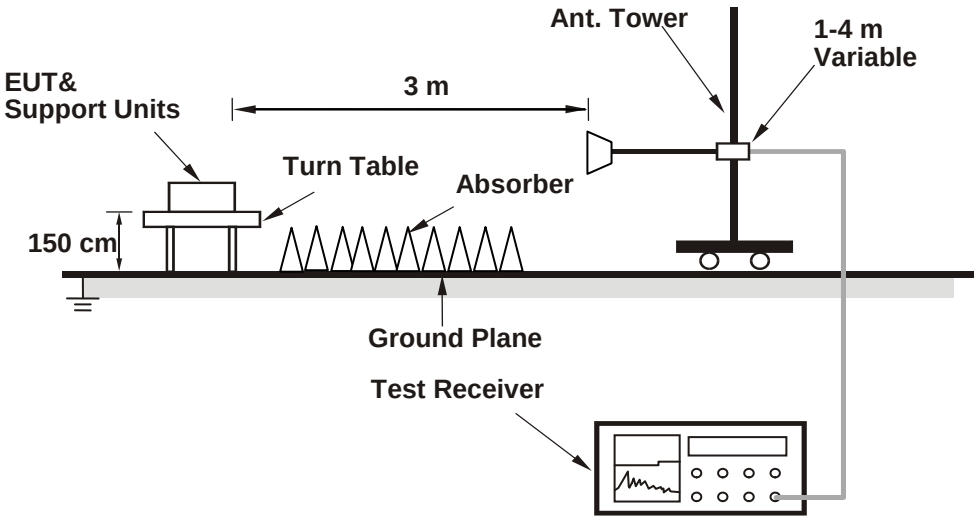
No deviation.

4.2.4 Test Setup

<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



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

4.2.5 Test Results

LTE Band 26

Channel Bandwidth: 1.4 MHz / QPSK

Low Channel

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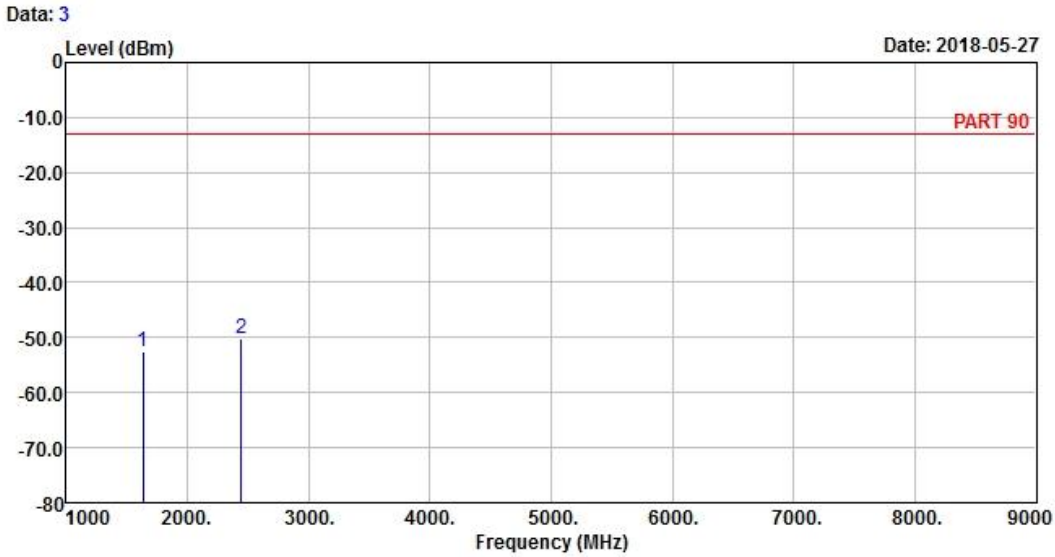
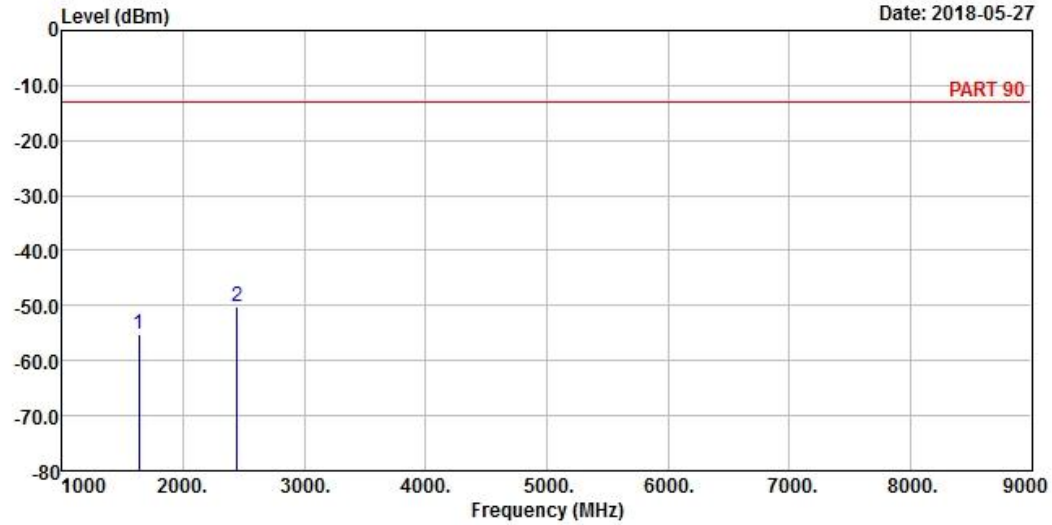


Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_1.4M_L-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1629.40	-52.69	-37.90	-13.00	-39.69	-14.79	Peak
2 pp	2444.10	-50.25	-39.81	-13.00	-37.25	-10.44	Peak

Data: 4



Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_1.4M_L-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1629.40	-55.23	-40.44	-13.00	-42.23	-14.79	Peak
2 pp	2444.10	-50.11	-39.67	-13.00	-37.11	-10.44	Peak

Middle Channel

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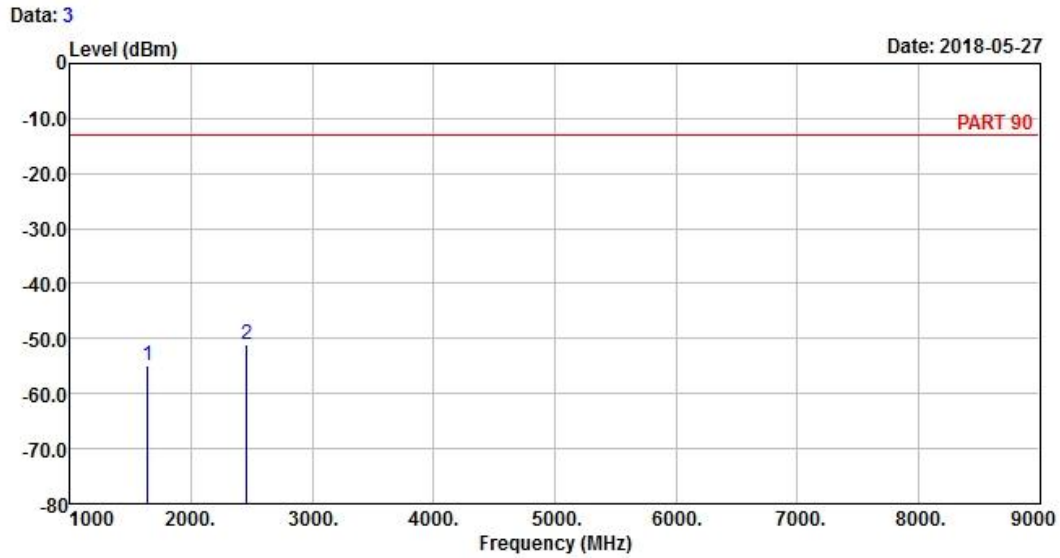
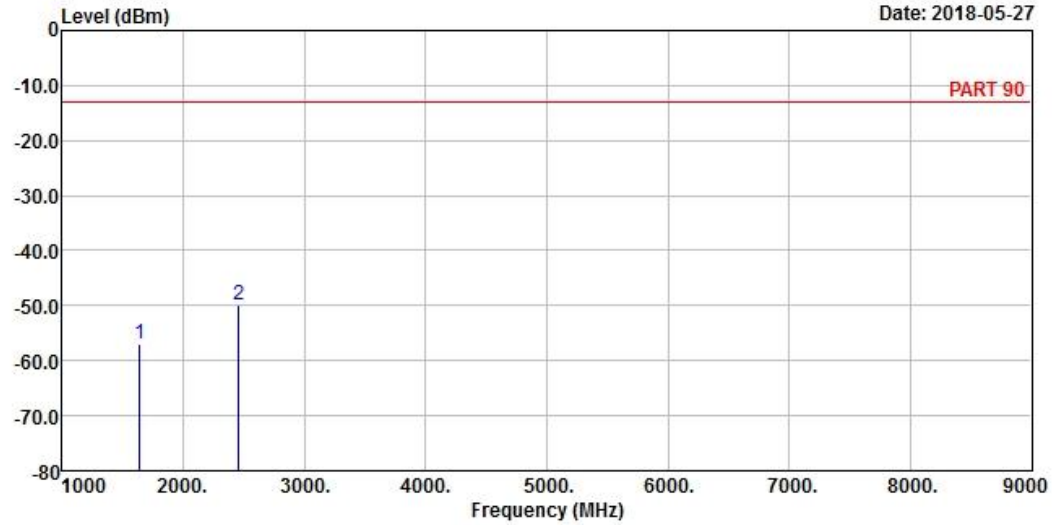


Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_1.4M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1638.00	-55.02	-40.23	-13.00	-42.02	-14.79	Peak
2 pp	2457.00	-51.11	-40.67	-13.00	-38.11	-10.44	Peak

Data: 4



Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_1.4M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1638.00	-57.11	-42.32	-13.00	-44.11	-14.79	Peak
2 pp	2457.00	-49.99	-39.55	-13.00	-36.99	-10.44	Peak

High Channel

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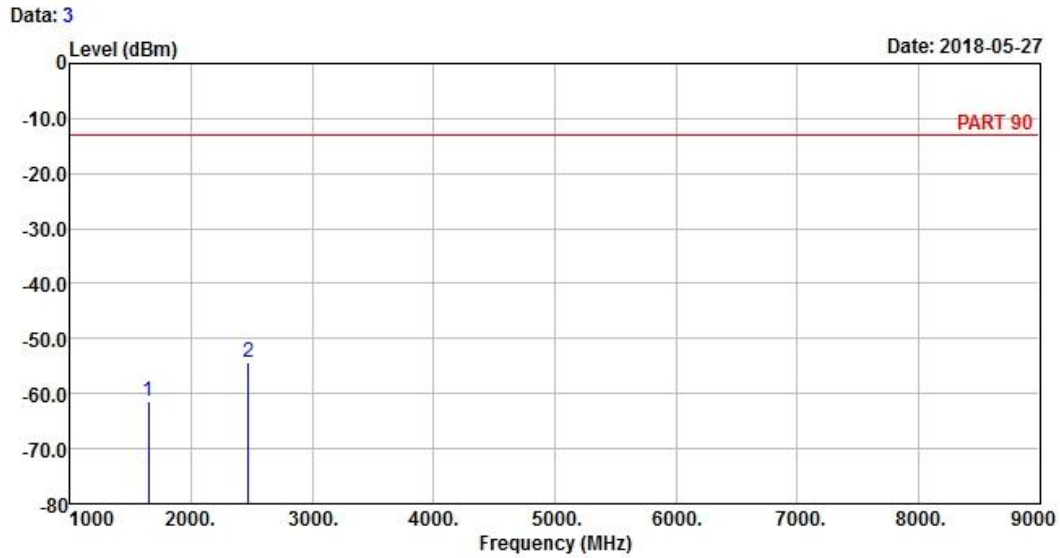
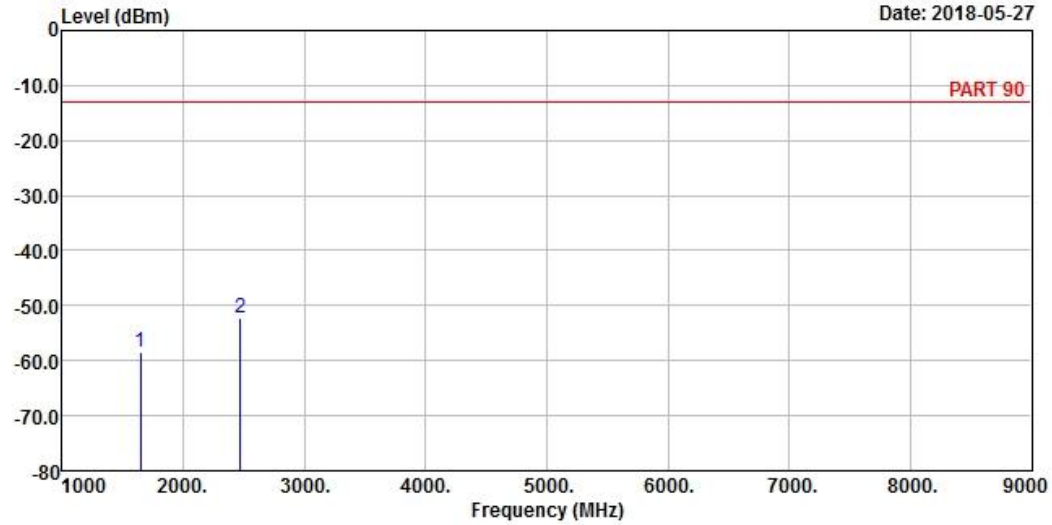


Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_1.4M_H-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1646.60	-61.52	-46.79	-13.00	-48.52	-14.73	Peak
2 pp	2469.90	-54.23	-43.79	-13.00	-41.23	-10.44	Peak

Data: 4



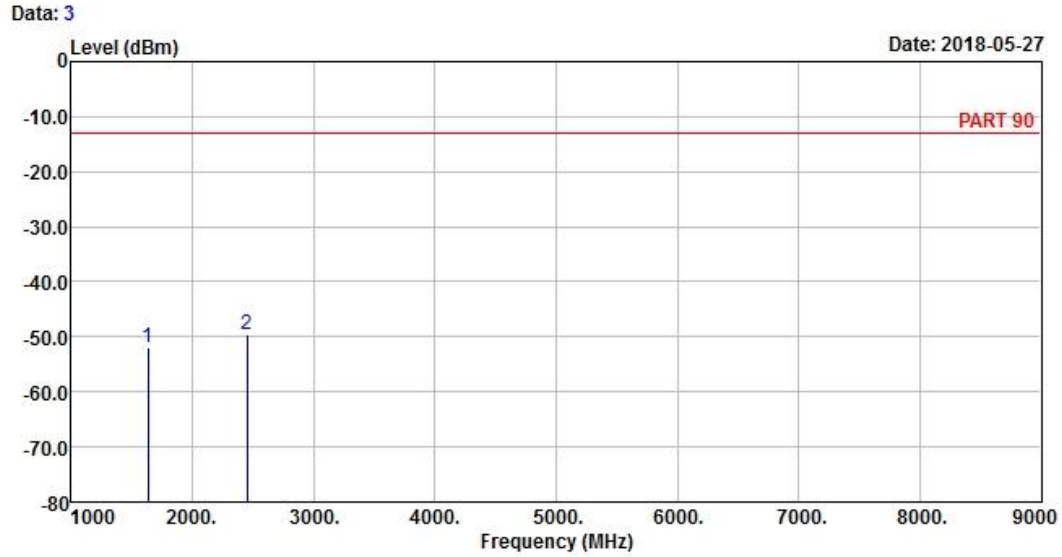
Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_1.4M_H-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1646.60	-58.48	-43.75	-13.00	-45.48	-14.73	Peak
2 pp	2469.90	-52.25	-41.81	-13.00	-39.25	-10.44	Peak

Channel Bandwidth: 5 MHz / QPSK

Low Channel

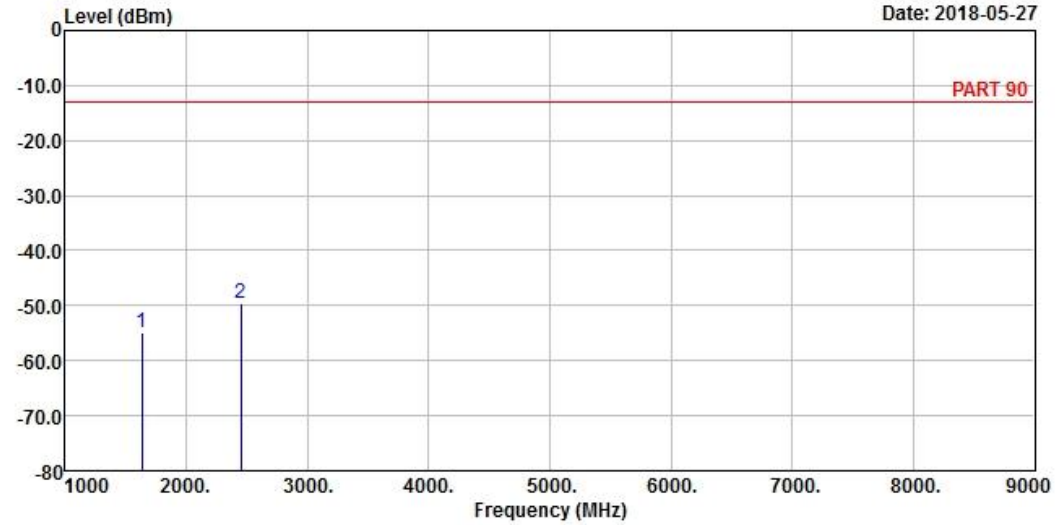
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_5M_L-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1633.00	-51.95	-37.16	-13.00	-38.95	-14.79	Peak
2 pp	2449.50	-49.48	-39.04	-13.00	-36.48	-10.44	Peak

Data: 4

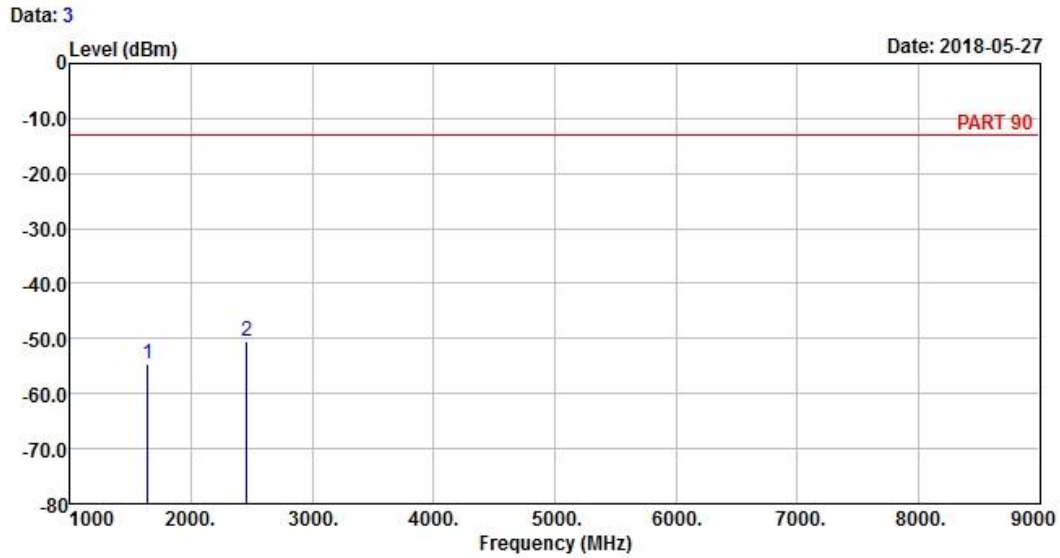


Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_5M_L-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1633.00	-54.92	-40.13	-13.00	-41.92	-14.79	Peak
2 pp	2449.50	-49.67	-39.23	-13.00	-36.67	-10.44	Peak

Middle Channel

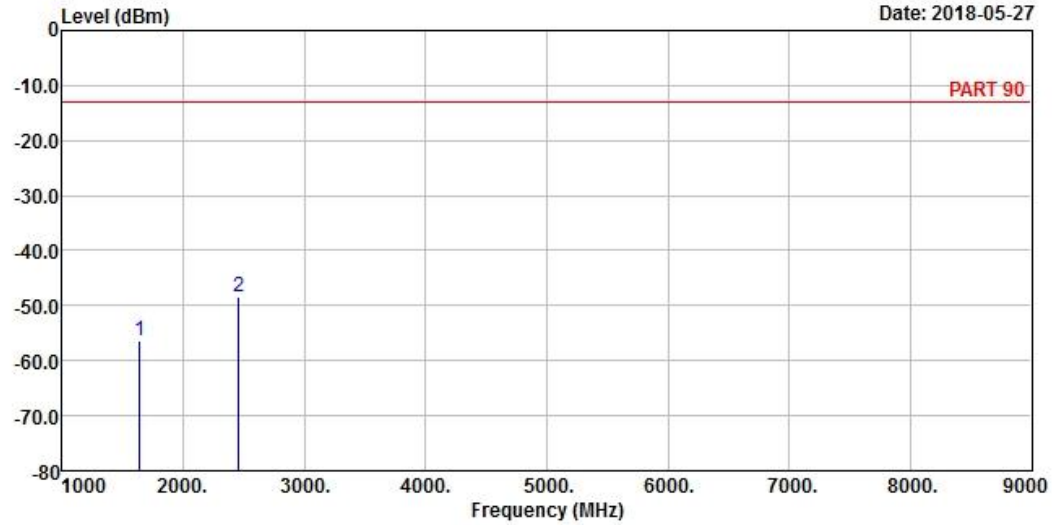
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_5M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1638.00	-54.75	-39.96	-13.00	-41.75	-14.79	Peak
2 pp	2457.00	-50.57	-40.13	-13.00	-37.57	-10.44	Peak

Data: 4

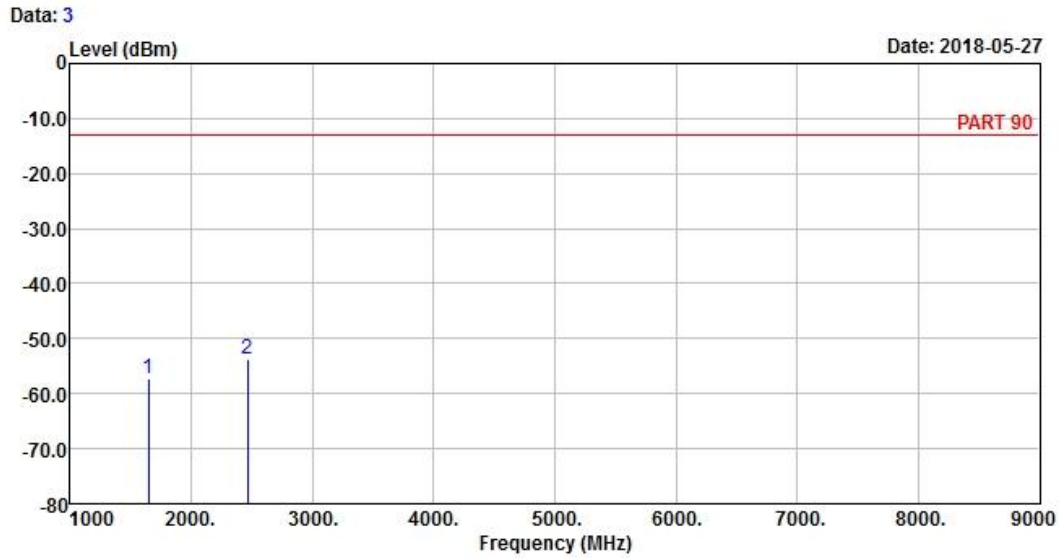


Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_5M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1638.00	-56.49	-41.70	-13.00	-43.49	-14.79	Peak
2 pp	2457.00	-48.48	-38.04	-13.00	-35.48	-10.44	Peak

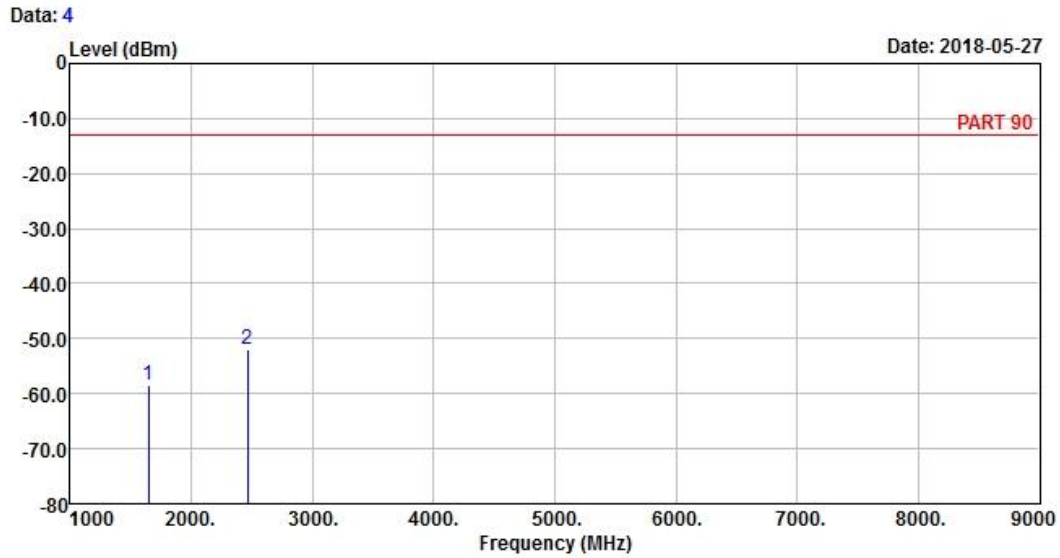
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_5M_H-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1643.00	-57.18	-42.45	-13.00	-44.18	-14.73	Peak
2 pp	2464.50	-53.75	-43.31	-13.00	-40.75	-10.44	Peak

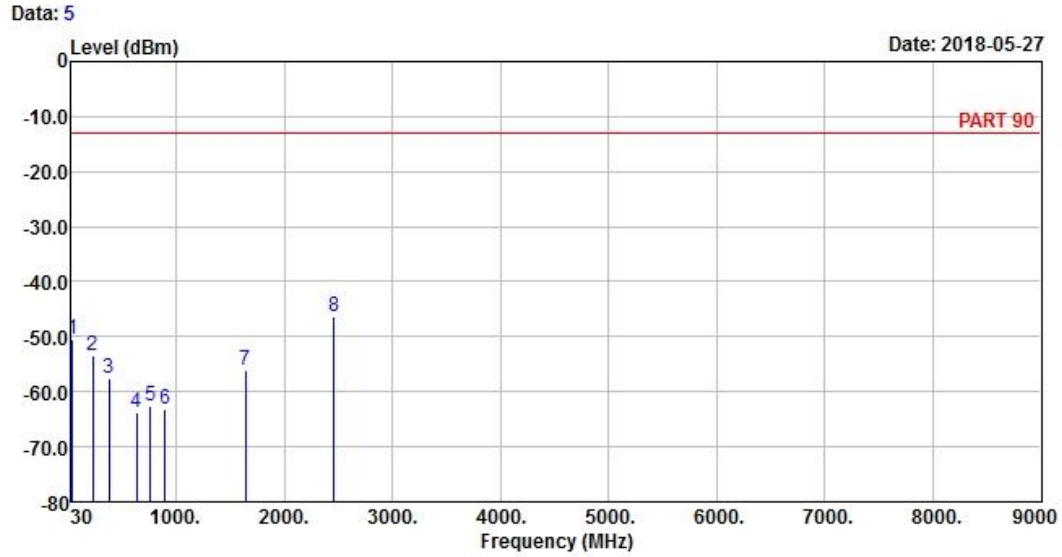


Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_5M_H-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1643.00	-58.48	-43.75	-13.00	-45.48	-14.73	Peak
2 pp	2464.50	-51.88	-41.44	-13.00	-38.88	-10.44	Peak

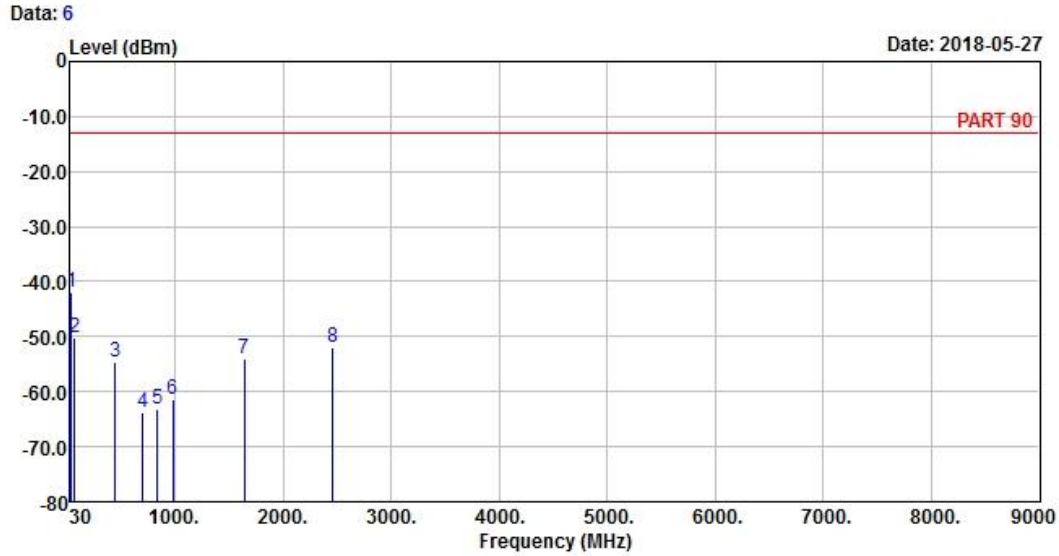
Channel Bandwidth: 10 MHz / QPSK
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 Chamber 5
Condition: PART 90 HORIZONTAL
Remak : LTE Band 26 QPSK_10M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	41.64	-50.57	-50.16	-13.00	-37.57	-0.41	Peak
2	226.91	-53.48	-46.55	-13.00	-40.48	-6.93	Peak
3	376.29	-57.65	-51.57	-13.00	-44.65	-6.08	Peak
4	635.28	-63.82	-62.97	-13.00	-50.82	-0.85	Peak
5	762.35	-62.64	-63.48	-13.00	-49.64	0.84	Peak
6	893.30	-63.29	-63.82	-13.00	-50.29	0.53	Peak
7	1638.00	-55.99	-41.20	-13.00	-42.99	-14.79	Peak
8 pp	2457.00	-46.25	-35.81	-13.00	-33.25	-10.44	Peak



Site : 966 Chamber 5
Condition: PART 90 VERTICAL
Remak : LTE Band 26 QPSK_10M_M-CH Link
Tested by: Jisyong Wang

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	41.64	-42.04	-41.63	-13.00	-29.04	-0.41	Peak
2	67.83	-50.07	-41.82	-13.00	-37.07	-8.25	Peak
3	445.16	-54.66	-49.07	-13.00	-41.66	-5.59	Peak
4	698.33	-63.77	-63.64	-13.00	-50.77	-0.13	Peak
5	837.04	-63.25	-63.65	-13.00	-50.25	0.40	Peak
6	979.63	-61.48	-64.34	-13.00	-48.48	2.86	Peak
7	1638.00	-53.90	-39.11	-13.00	-40.90	-14.79	Peak
8	2457.00	-52.05	-41.61	-13.00	-39.05	-10.44	Peak

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – 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 FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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

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Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

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

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