Partial FCC Test Report

(PART 27)

Report No.: RF190326C26-4

FCC ID: B94HNC04PK

Test Model: HSN-C04C

Received Date: Mar. 26, 2019

Test Date: Apr. 11, 2019 ~ Apr. 22, 2019

Issued Date: May 09, 2019

Applicant: HP Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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FCC Registration / Designation Number: 427177 / TW0011

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Table of Contents

Release Control Record **3**

1 Certificate of Conformity **4**

2 Summary of Test Results **5**

2.1 Measurement Uncertainty 8
2.2 Test Site and Instruments 9

3 General Information **11**

3.1 General Description of EUT 11
3.2 Configuration of System under Test 13
3.2.1 Description of Support Units 13
3.3 Test Mode Applicability and Tested Channel Detail 14
3.4 EUT Operating Conditions 17
3.5 General Description of Applied Standards 17

4 Test Types and Results **18**

4.1 Output Power Measurement 18
4.1.1 Limits of Output Power Measurement 18
4.1.2 Test Procedures 18
4.1.3 Test Setup 19
4.1.4 Test Results 20
4.2 Radiated Emission Measurement 44
4.2.1 Limits of Radiated Emission Measurement 44
4.2.2 Test Procedure 44
4.2.3 Deviation from Test Standard 44
4.2.4 Test Setup 45
4.2.5 Test Results 46

5 Pictures of Test Arrangements **126**

Appendix – Information of the Testing Laboratories **127**

Release Control Record

Issue No.	Description	Date Issued
RF190326C26-4	Original Release	May 09, 2019

1 Certificate of Conformity

Product: Tablet

Brand: HP

Test Model: HSN-C04C

Sample Status: Engineering Sample

Applicant: HP Inc.

Test Date: Apr. 11, 2019 ~ Apr. 22, 2019

Standards: FCC Part 27, Subpart C, H, F, L

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 : Rona Chen , **Date:** May 09, 2019

Rona Chen / Specialist

Approved by : , **Date:** May 09, 2019

Dylan Chiou / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2 (WCDMA)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(d)(4)	Equivalent Isotropic Radiated Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
27.50(d)(5)	Peak to Average Ratio	N/A	Refer to Note
27.53(h)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(h)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -39.47 dB at 3505.20 MHz.

Applied Standard: FCC Part 27 & Part 2 (LTE 4)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(d)(4)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
27.50(d)(5)	Peak to Average Ratio	N/A	Refer to Note
27.53(h)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(h)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -16.98 dB at 5160.00 MHz.

Applied Standard: FCC Part 27 & Part 2 (LTE 12)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(c)(10)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
---	Peak to Average Ratio	N/A	Refer to Note
27.53(g)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(g)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(g)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -38.70 dB at 1422.00 MHz.

Applied Standard: FCC Part 27 & Part 2 (LTE 13)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(b)(10)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
---	Peak to Average Ratio	N/A	Refer to Note
27.53(c)(2)(4)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(c)(2)&(f)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(c)(2)&(f)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -18.83 dB at 1564.00 MHz.

Applied Standard: FCC Part 27 & Part 2 (LTE 17)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(c)(10)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
---	Peak to Average Ratio	N/A	Refer to Note
27.53(g)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(g)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(g)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -40.33 dB at 34.59 MHz.

Applied Standard: FCC Part 27 & Part 2 (LTE 66)			
FCC Clause	**Test Item**	**Result**	**Remarks**
2.1046 27.50(d)(4)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1055 27.54	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
27.50(d)(5)	Peak to Average Ratio	N/A	Refer to Note
27.53(h)	Band Edge Measurements	N/A	Refer to Note
2.1051 27.53(h)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -26.02 dB at 5160.00 MHz.

Note:

1. 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 SGS report no.: SZEM180500437001 for module (Brand: Fibocom, Model: L860-GL)
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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) (±)
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.0400 dB
	30 MHz ~ 200 MHz	2.0153 dB
	200 MHz ~ 1000 MHz	2.0224 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	1.0121 dB
	18 GHz ~ 40 GHz	1.1508 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent Technologies	N9038A	MY52260177	Aug. 20, 2018	Aug. 19, 2019
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	100115	Jan. 21, 2019	Jan. 20, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSW26	102023	Oct. 11, 2018	Oct. 10, 2019
BILOG Antenna SCHWARZBECK	VULB9168	9168-616	Nov. 27, 2018	Nov. 26, 2019
HORN Antenna ETS-Lindgren	3117	00143293	Nov. 25, 2018	Nov. 24, 2019
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 25, 2018	Nov. 24, 2019
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 16, 2018	Apr. 15, 2019
			Apr. 15, 2019	Apr. 14, 2020
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 19, 2018	Nov. 18, 2019
Preamplifier Agilent	310N	187226	Jun. 19, 2018	Jun. 18, 2019
Preamplifier Agilent	83017A	MY39501357	Jun. 19, 2018	Jun. 18, 2019
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-400)	Jun. 19, 2018	Jun. 18, 2019
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(RFC-SMS-100-SMS-24)	Jun. 19, 2018	Jun. 18, 2019
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Software BV ADT	E3 8.130425b	NA	NA	NA
Antenna Tower MF	NA	NA	NA	NA
Turn Table MF	NA	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA
Communications Tester-Wireless Agilent	8960 Series 10	MY53201073	Jun. 28, 2017	Jun. 27, 2019
Radio Communication Analyzer Anritsu	MT8820C	6201300640	Aug. 16, 2017	Aug. 15, 2019
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 05, 2018	Sep. 04, 2019
DC Power Supply Topward	33010D	807748	NA	NA

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 HsinTien Chamber 1.
3. The horn antenna and preamplifier (model: 83017A) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The IC Site Registration No. is 7450I-1.

3 General Information

3.1 General Description of EUT

Product	Tablet	
Brand	HP	
Test Model	HSN-C04C	
Status of EUT	Engineering Sample	
Power Supply Rating	7.7 Vdc (Li-ion battery) 20 Vdc (Adapter)	
Modulation Type	WCDMA	QPSK
	LTE	QPSK, 16QAM, 64QAM
Frequency Range	WCDMA	1712.4 ~ 1752.6 MHz
	LTE Band 4 (Channel Bandwidth: 1.4 MHz)	1710.7 ~ 1754.3 MHz
	LTE Band 4 (Channel Bandwidth: 3 MHz)	1711.5 ~ 1753.5 MHz
	LTE Band 4 (Channel Bandwidth: 5 MHz)	1712.5 ~ 1752.5 MHz
	LTE Band 4 (Channel Bandwidth: 10 MHz)	1715.0 ~ 1750.0 MHz
	LTE Band 4 (Channel Bandwidth: 15 MHz)	1717.5 ~ 1747.5 MHz
	LTE Band 4 (Channel Bandwidth: 20 MHz)	1720.0 ~ 1745.0 MHz
	LTE Band 12 (Channel Bandwidth: 1.4 MHz)	699.7 ~ 715.3 MHz
	LTE Band 12 (Channel Bandwidth: 3 MHz)	700.5 ~ 714.5 MHz
	LTE Band 12 (Channel Bandwidth: 5 MHz)	701.5 ~ 713.5 MHz
	LTE Band 12 (Channel Bandwidth: 10 MHz)	704.0 ~ 711.0 MHz
	LTE Band 13 (Channel Bandwidth: 5 MHz)	779.5 ~ 784.5 MHz
	LTE Band 13 (Channel Bandwidth: 10 MHz)	782.0 MHz
	LTE Band 17 (Channel Bandwidth: 5 MHz)	706.5 ~ 713.5 MHz
	LTE Band 17 (Channel Bandwidth: 10 MHz)	709.0 ~ 711.0 MHz
	LTE Band 66 (Channel Bandwidth: 1.4 MHz)	1710.7 ~ 1779.3 MHz
	LTE Band 66 (Channel Bandwidth: 3 MHz)	1711.5 ~ 1778.5 MHz
	LTE Band 66 (Channel Bandwidth: 5 MHz)	1712.5 ~ 1777.5 MHz
	LTE Band 66 (Channel Bandwidth: 10 MHz)	1715.0 ~ 1775.0 MHz
	LTE Band 66 (Channel Bandwidth: 15 MHz)	1717.5 ~ 1772.5 MHz
	LTE Band 66 (Channel Bandwidth: 20 MHz)	1720.0 ~ 1770.0 MHz
Max. ERP Power	LTE Band 12 (Channel Bandwidth: 1.4 MHz)	28.09 mW
	LTE Band 12 (Channel Bandwidth: 3 MHz)	28.35 mW
	LTE Band 12 (Channel Bandwidth: 5 MHz)	28.35 mW
	LTE Band 12 (Channel Bandwidth: 10 MHz)	28.64 mW
	LTE Band 13 (Channel Bandwidth: 5 MHz)	84.16 mW
	LTE Band 13 (Channel Bandwidth: 10 MHz)	84.86 mW
	LTE Band 17 (Channel Bandwidth: 5 MHz)	28.37 mW
	LTE Band 17 (Channel Bandwidth: 10 MHz)	28.56 mW

Max. EIRP Power	WCDMA	247.57 mW
	LTE Band 4 (Channel Bandwidth: 1.4 MHz)	224.75 mW
	LTE Band 4 (Channel Bandwidth: 3 MHz)	226.83 mW
	LTE Band 4 (Channel Bandwidth: 5 MHz)	228.40 mW
	LTE Band 4 (Channel Bandwidth: 10 MHz)	229.99 mW
	LTE Band 4 (Channel Bandwidth: 15 MHz)	231.58 mW
	LTE Band 4 (Channel Bandwidth: 20 MHz)	233.72 mW
	LTE Band 66 (Channel Bandwidth: 1.4 MHz)	216.77 mW
	LTE Band 66 (Channel Bandwidth: 3 MHz)	218.78 mW
	LTE Band 66 (Channel Bandwidth: 5 MHz)	220.80 mW
	LTE Band 66 (Channel Bandwidth: 10 MHz)	222.33 mW
	LTE Band 66 (Channel Bandwidth: 15 MHz)	224.39 mW
	LTE Band 66 (Channel Bandwidth: 20 MHz)	226.46 mW
Antenna Type	PIFA Antenna	
Accessory Device	Refer to Note as below	
Data Cable Supplied	Refer to Note as below	

Note:

1. The WWAN module (Brand: Fibocom, Model: L860-GL) was installed in EUT.
2. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter	AcBel	TPN-AA03	I/P: 100-240 Vac, 50-60 Hz, 1.7 A O/P: 20 Vdc, 3.25 A
Battery	Dynapack	HSTNN-DB9E	7.7 Vdc, 5950 mAh
Keyboard 1	Primax	HSN-P01K	--
Keyboard 2	Cosmo	HSN-C01K	--
BT/WLAN Module	Intel® Wi-Fi 6 AX200	AX200D2WL	--
LTE Module	Fibocom	L860-GL	--

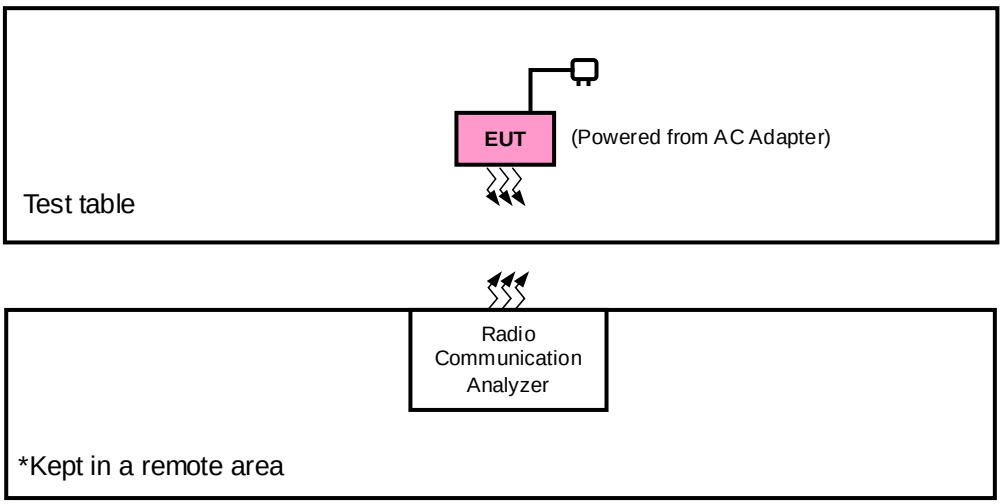
3. The antenna information of End-product is listed as below.

Ant. Type	Manufacturer	Parts Number	WWAN Antenna Gain (dBi)				
			WCDMA IV / LTE 4	LTE 12	LTE 13	LTE 17	LTE 66
PIFA	INPAQ	Main Antenna: WA-P-LTE15-02-001 (DC330029D20) Aux. Antenna: WA-P-LTE15-02-002 (DC330029D30) WA-P-LTE11-02-003 (DC330029D40) WA-P-LTE11-02-004 (DC330029D50)	0.55	-2.06	-0.67	-2.06	0.55

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>



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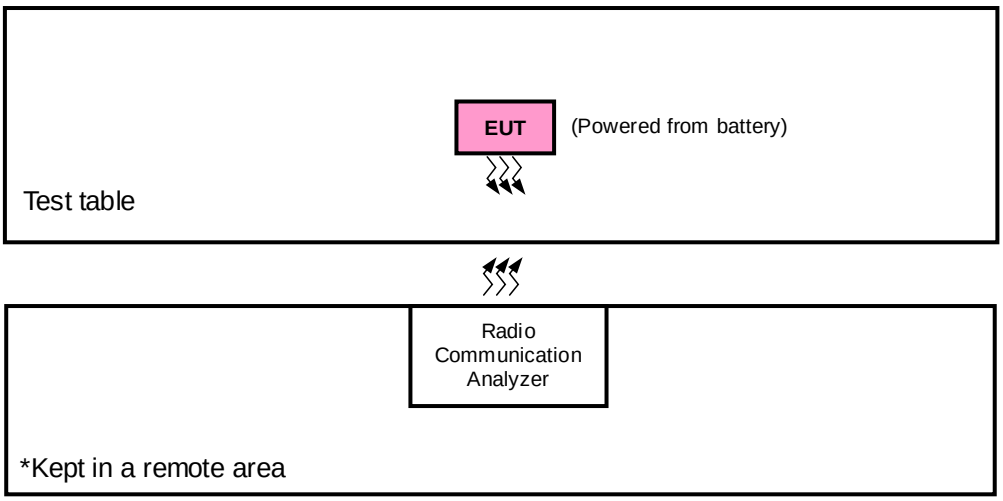


3.2.1 Description of Support Units

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

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 / EIRP	Radiated Emission
WCDMA	X-plane	Y-axis
LTE Band 4	X-plane	Z-axis
LTE Band 12	X-plane	X-axis
LTE Band 13	X-plane	NB Mode
LTE Band 17	X-plane	X-axis
LTE Band 66	X-plane	NB Mode

WCDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	EIRP	1312 to 1513	1312, 1413, 1513	WCDMA
-	Radiated Emission	1312 to 1513	1312, 1413, 1513	WCDMA

LTE Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	19957 to 20393	19957, 20175, 20393	1.4 MHz	QPSK	1 RB / 2 RB Offset
					16QAM, 64QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5 MHz	QPSK	1 RB / 24 RB Offset
					16QAM, 64QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
					64QAM	1 RB / 37 RB Offset
		20050 to 20300	20050, 20175, 20300	20 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
-	Radiated Emission	19957 to 20393	19957, 20175, 20393	1.4 MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5 MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20 MHz	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. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.

LTE Band 12

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	23017 to 23173	23017, 23095, 23173	1.4 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095, 23165	3 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095, 23155	5 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095, 23130	10 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
-	Radiated Emission	23017 to 23173	23017, 23095, 23173	1.4 MHz	QPSK	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095, 23155	5 MHz	QPSK	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095, 23130	10 MHz	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. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.

LTE Band 13

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	23205 to 23255	23205, 23230, 23255	5 MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
		23230	23230	10 MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
-	Radiated Emission	23205 to 23255	23205, 23230, 23255	5 MHz	QPSK	1 RB / 0 RB Offset
		23230	23230	10 MHz	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. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.

LTE Band 17

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	23755 to 23825	23755, 23790, 23825	5 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
-	Radiated Emission	23755 to 23825	23755, 23790, 23825	5 MHz	QPSK	1 RB / 0 RB Offset
		23780 to 23800	23780, 23790, 23800	10 MHz	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. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.

LTE Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	131979 to 132665	131979, 132322, 132665	1.4 MHz	QPSK	1 RB / 5 RB Offset
					16QAM	1 RB / 0 RB Offset
					64QAM	1 RB / 2 RB Offset
		131987 to 132657	131987, 132322, 132657	3 MHz	QPSK	1 RB / 14 RB Offset
					16QAM	1 RB / 7 RB Offset
					64QAM	1 RB / 24 RB Offset
		131997 to 132647	131997, 132322, 132647	5 MHz	QPSK	1 RB / 0 RB Offset
					16QAM	1 RB / 24 RB Offset
					64QAM	1 RB / 0 RB Offset
		132022 to 132622	132022, 132322, 132622	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
					64QAM	1 RB / 24 RB Offset
		132047 to 132597	132047, 132322, 132597	15 MHz	QPSK	1 RB / 37 RB Offset
					16QAM, 64QAM	1 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20 MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
-	Radiated Emission	131979 to 132665	131979, 132322, 132665	1.4 MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997, 132322, 132647	5 MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072, 132322, 132572	20 MHz	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. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
ERP / EIRP	25 deg. C, 65 % RH	7.7 Vdc	Karl Lee
Radiated Emission	25 deg. C, 65 % RH	120 Vac, 60 Hz	Karl Lee

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 27
KDB 971168 D01 Power Meas License Digital Systems v03r01
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

Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

Portable stations (hand-held devices) operating in the 746-757 MHz, 776-788 MHz and 805-806 MHz band are limited to 3 watts ERP

Portable stations (hand-held device) operating in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

4.1.2 Test Procedures

EIRP / ERP Measurement:

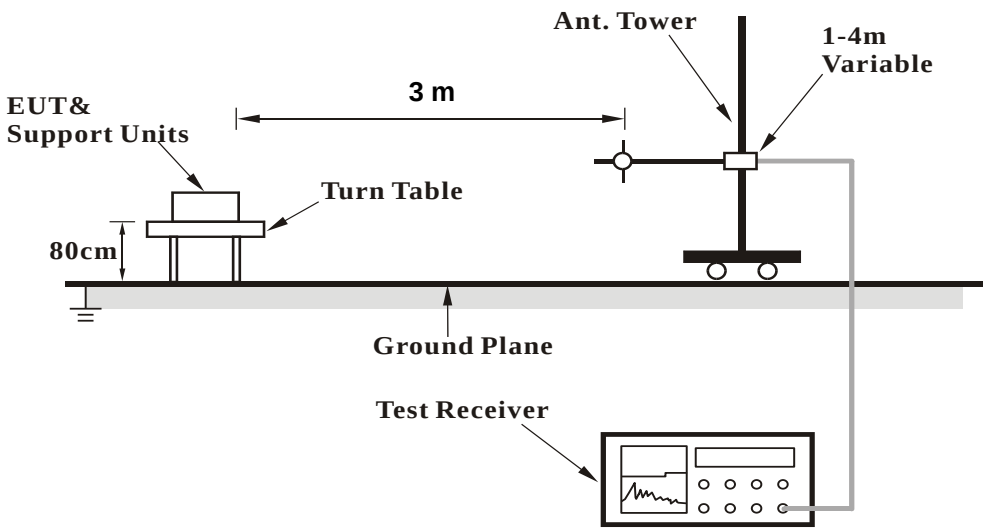
a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 5 MHz for WCDMA and 10 MHz for LTE mode.
b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height 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.R.P power - 2.15 dB.

Conducted Power Measurement:

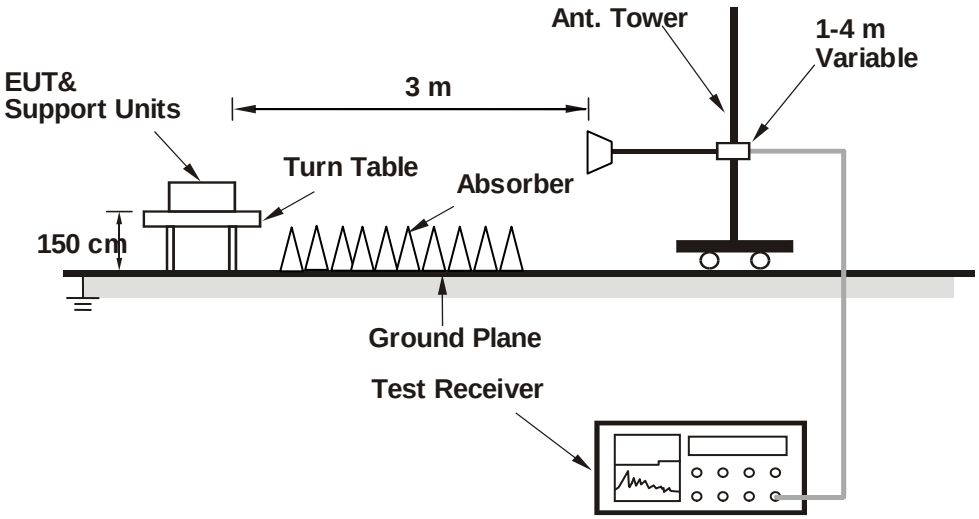
a. The EUT was set up for the maximum power with WCDMA and LTE link data modulation and link up with simulator.
b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

4.1.3 Test Setup

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

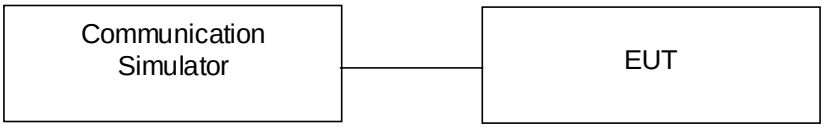


<Radiated Emission above 1 GHz>



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

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

Band	WCDMA IV		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2K	23.61	**23.75**	23.69
HSDPA Subtest-1	22.71	22.85	22.79
HSDPA Subtest-2	22.67	22.81	22.75
HSDPA Subtest-3	22.28	22.42	22.36
HSDPA Subtest-4	22.25	22.39	22.33
DC-HSDPA Subtest-1	22.62	22.76	22.70
DC-HSDPA Subtest-2	22.58	22.72	22.66
DC-HSDPA Subtest-3	22.19	22.33	22.27
DC-HSDPA Subtest-4	22.16	22.30	22.24
HSUPA Subtest-1	22.67	22.81	22.75
HSUPA Subtest-2	20.68	20.82	20.76
HSUPA Subtest-3	21.63	21.77	21.71
HSUPA Subtest-4	20.79	20.93	20.87
HSUPA Subtest-5	22.80	22.94	22.88

LTE Band 4

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20050	20175	20300	
		Frequency (MHz)		1720.0	1732.5	1745.0	
20M	QPSK	1	0	23.37	**23.42**	23.33	0
		1	50	23.34	23.39	23.30	0
		1	99	23.32	23.37	23.28	0
		50	0	22.33	**22.38**	22.29	1
		50	25	22.31	22.36	22.27	1
		50	50	22.27	22.32	22.23	1
		100	0	22.22	**22.27**	22.18	1
	16QAM	1	0	22.36	22.41	22.32	1
		1	50	22.33	22.38	22.29	1
		1	99	22.31	22.36	22.27	1
		50	0	21.32	21.37	21.28	2
		50	25	21.30	21.35	21.26	2
		50	50	21.26	21.31	21.22	2
		100	0	21.21	21.26	21.17	2
	64QAM	1	0	21.38	21.43	21.34	2
		1	50	21.35	21.40	21.31	2
		1	99	21.33	21.38	21.29	2
		50	0	20.34	20.39	20.30	3
		50	25	20.32	20.37	20.28	3
		50	50	20.28	20.33	20.24	3
		100	0	20.23	20.28	20.19	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20025	20175	20325	
		Frequency (MHz)		1717.5	1732.5	1747.5	
15M	QPSK	1	0	23.33	23.37	23.28	0
		1	37	23.24	23.37	23.26	0
		1	74	23.24	23.36	23.24	0
		36	0	22.30	22.36	22.25	1
		36	19	22.26	22.35	22.17	1
		36	39	22.22	22.23	22.20	1
		75	0	22.12	22.22	22.18	1
	16QAM	1	0	22.26	22.33	22.29	1
		1	37	22.27	22.31	22.19	1
		1	74	22.24	22.26	22.18	1
		36	0	21.28	21.29	21.26	2
		36	19	21.23	21.29	21.20	2
		36	39	21.23	21.24	21.18	2
		75	0	21.13	21.17	21.10	2
	64QAM	1	0	21.31	21.33	21.28	2
		1	37	21.29	21.35	21.23	2
		1	74	21.29	21.34	21.26	2
		36	0	20.25	20.38	20.25	3
		36	19	20.32	20.27	20.25	3
		36	39	20.22	20.33	20.15	3
		75	0	20.13	20.19	20.16	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20000	20175	20350	
		Frequency (MHz)		1715.0	1732.5	1750.0	
10M	QPSK	1	0	23.33	23.32	23.11	0
		1	24	23.16	23.23	23.23	0
		1	49	23.25	23.20	23.19	0
		25	0	22.21	22.29	22.23	1
		25	12	22.30	22.25	22.12	1
		25	25	22.24	22.25	22.08	1
		50	0	22.07	22.11	22.09	1
	16QAM	1	0	22.23	22.37	22.25	1
		1	24	22.11	22.23	22.18	1
		1	49	22.08	22.18	22.17	1
		25	0	21.12	21.25	21.13	2
		25	12	21.16	21.33	21.10	2
		25	25	21.16	21.18	21.02	2
		50	0	21.04	21.18	21.03	2
	64QAM	1	0	21.19	**21.40**	21.26	2
		1	24	21.18	21.21	21.13	2
		1	49	21.13	21.27	21.20	2
		25	0	20.16	20.20	20.14	3
		25	12	20.15	20.16	20.05	3
		25	25	20.18	20.16	20.10	3
		50	0	20.16	20.18	19.99	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19975	20175	20375	
		Frequency (MHz)		1712.5	1732.5	1752.5	
5M	QPSK	1	0	23.22	23.21	23.14	0
		1	12	23.15	23.20	23.00	0
		1	24	23.15	23.31	23.14	0
		12	0	22.16	22.25	22.04	1
		12	6	22.26	22.20	22.15	1
		12	13	22.05	22.19	22.02	1
		25	0	22.06	22.22	21.92	1
	16QAM	1	0	22.26	22.34	22.23	1
		1	12	22.28	22.27	22.21	1
		1	24	22.15	22.19	22.08	1
		12	0	21.22	21.17	21.12	2
		12	6	21.15	21.29	21.10	2
		12	13	21.14	21.19	21.19	2
		25	0	21.15	21.24	21.04	2
	64QAM	1	0	21.26	**21.33**	21.13	2
		1	12	21.22	21.30	21.15	2
		1	24	21.13	21.28	21.19	2
		12	0	20.29	20.23	20.19	3
		12	6	20.25	20.18	20.18	3
		12	13	20.15	20.26	20.02	3
		25	0	20.00	20.20	20.03	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19965	20175	20385	
		Frequency (MHz)		1711.5	1732.5	1753.5	
3M	QPSK	1	0	23.16	23.23	23.17	0
		1	7	23.29	23.28	23.14	0
		1	14	23.19	23.26	23.25	0
		8	0	22.16	22.14	22.18	1
		8	3	22.12	22.21	22.21	1
		8	7	22.26	22.24	22.04	1
		15	0	22.17	22.14	22.06	1
	16QAM	1	0	22.31	22.33	22.20	1
		1	7	22.09	22.25	22.18	1
		1	14	22.26	22.26	22.23	1
		8	0	21.09	21.24	21.17	2
		8	3	21.17	21.26	21.19	2
		8	7	21.07	21.15	21.08	2
		15	0	21.05	21.08	21.01	2
	64QAM	1	0	21.15	21.24	21.26	2
		1	7	21.21	21.22	21.22	2
		1	14	21.19	21.29	21.16	2
		8	0	20.22	20.30	20.10	3
		8	3	20.22	20.18	20.22	3
		8	7	20.17	20.11	20.02	3
		15	0	20.04	20.10	20.14	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		19957	20175	20393	
		Frequency (MHz)		1710.7	1732.5	1754.3	
1.4M	QPSK	1	0	23.33	23.29	23.18	0
		1	2	23.34	23.27	23.25	0
		1	5	23.27	23.15	23.20	0
		3	0	23.08	23.30	23.25	0
		3	1	23.19	23.21	23.27	0
		3	3	23.10	23.23	23.08	0
		6	0	21.98	22.13	22.04	1
	16QAM	1	0	22.32	22.34	22.24	1
		1	2	22.19	22.31	22.23	1
		1	5	22.22	22.22	22.22	1
		3	0	22.26	22.30	22.18	1
		3	1	22.27	22.29	22.17	1
		3	3	22.12	22.17	22.12	1
		6	0	21.09	21.13	21.04	2
	64QAM	1	0	21.26	**21.33**	21.19	2
		1	2	21.28	21.28	21.22	2
		1	5	21.19	21.16	21.11	2
		3	0	21.25	21.28	21.12	2
		3	1	21.17	21.21	21.12	2
		3	3	21.10	21.19	21.04	2
		6	0	20.10	20.13	20.03	3

LTE Band 12

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23060	23095	23130				Channel		23035	23095	23155	
		Frequency (MHz)		704.0	707.5	711.0				Frequency (MHz)		701.5	707.5	713.5	
10M	QPSK	1	0	22.76	22.88	22.81	0	5M	QPSK	1	0	22.71	22.87	22.80	0
		1	24	22.71	22.83	22.76	0			1	12	22.67	22.73	22.73	0
		1	49	22.67	22.79	22.72	0			1	24	22.59	22.78	22.62	0
		25	0	21.69	**21.81**	21.74	1			12	0	21.63	21.76	21.73	1
		25	12	21.67	21.79	21.72	1			12	6	21.66	21.70	21.70	1
		25	25	21.65	21.77	21.70	1			12	13	21.61	21.74	21.63	1
		50	0	21.66	**21.78**	21.71	1			25	0	21.57	21.78	21.63	1
	16QAM	1	0	21.74	21.86	21.79	1		16QAM	1	0	21.71	21.79	21.78	1
		1	24	21.69	21.81	21.74	1			1	12	21.59	21.76	21.67	1
		1	49	21.65	21.77	21.70	1			1	24	21.56	21.70	21.64	1
		25	0	20.67	20.79	20.72	2			12	0	20.60	20.77	20.65	2
		25	12	20.65	20.77	20.70	2			12	6	20.65	20.71	20.60	2
		25	25	20.63	20.75	20.68	2			12	13	20.58	20.68	20.63	2
		50	0	20.64	20.76	20.69	2			25	0	20.56	20.67	20.66	2
	64QAM	1	0	20.76	20.88	20.81	2		64QAM	1	0	20.74	20.86	20.75	2
		1	24	20.71	20.83	20.76	2			1	12	20.68	20.75	20.67	2
		1	49	20.67	20.79	20.72	2			1	24	20.60	20.79	20.72	2
		25	0	19.69	19.81	19.74	3			12	0	19.64	19.78	19.73	3
		25	12	19.67	19.79	19.72	3			12	6	19.62	19.73	19.68	3
		25	25	19.65	19.77	19.70	3			12	13	19.65	19.71	19.70	3
		50	0	19.66	19.78	19.71	3			25	0	19.66	19.69	19.66	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23025	23095	23165				Channel		23017	23095	23173	
		Frequency (MHz)		700.5	707.5	714.5				Frequency (MHz)		699.7	707.5	715.3	
3M	QPSK	1	0	22.60	22.73	22.67	0	1.4M	QPSK	1	0	22.62	22.67	22.71	0
		1	7	22.60	22.71	22.65	0			1	2	22.58	22.69	22.68	0
		1	14	22.48	22.72	22.64	0			1	5	22.55	22.63	22.64	0
		8	0	21.55	21.64	21.56	1			3	0	22.60	22.69	22.58	0
		8	3	21.52	21.67	21.58	1			3	1	22.58	22.69	22.53	0
		8	7	21.57	21.70	21.67	1			3	3	22.50	22.64	22.56	0
		15	0	21.45	21.60	21.60	1			6	0	21.45	21.54	21.60	1
	16QAM	1	0	21.73	21.82	21.73	1		16QAM	1	0	21.59	21.80	21.62	1
		1	7	21.46	21.70	21.64	1			1	2	21.59	21.73	21.59	1
		1	14	21.50	21.76	21.61	1			1	5	21.48	21.62	21.61	1
		8	0	20.44	20.55	20.69	2			3	0	21.56	21.66	21.54	1
		8	3	20.46	20.58	20.65	2			3	1	21.56	21.57	21.58	1
		8	7	20.55	20.66	20.59	2			3	3	21.47	21.61	21.52	1
		15	0	20.43	20.65	20.53	2			6	0	20.64	20.56	20.54	2
	64QAM	1	0	20.64	20.82	20.65	2		64QAM	1	0	20.61	20.68	20.65	2
		1	7	20.58	20.70	20.73	2			1	2	20.56	20.65	20.57	2
		1	14	20.55	20.66	20.49	2			1	5	20.49	20.62	20.65	2
		8	0	19.64	19.62	19.62	3			3	0	20.61	20.74	20.66	2
		8	3	19.62	19.67	19.67	3			3	1	20.47	20.76	20.53	2
		8	7	19.61	19.62	19.62	3			3	3	20.50	20.52	20.53	2
		15	0	19.56	19.66	19.56	3			6	0	19.51	19.65	19.64	3

LTE Band 13

BW	MCS Index	RB Size	RB Offset		Mid		3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel			23230					Channel		23205	23230	23225	
		Frequency (MHz)			782.0					Frequency (MHz)		779.5	782.0	784.5	
10M	QPSK	1	0		22.68		0	5M	QPSK	1	0	22.56	22.63	22.54	0
		1	24		22.75		0			1	12	22.63	22.70	22.61	0
		1	49		22.83		0			1	24	22.71	22.78	22.69	0
		25	0		21.74		1			12	0	21.62	21.69	21.60	1
		25	12		21.76		1			12	6	21.64	21.71	21.62	1
		25	25		**21.89**		1			12	13	21.77	21.84	21.75	1
		50	0		**21.82**		1			25	0	21.70	21.77	21.68	1
	16QAM	1	0		21.64		1		16QAM	1	0	21.54	21.59	21.52	1
		1	24		21.71		1			1	12	21.61	21.66	21.59	1
		1	49		21.79		1			1	24	21.69	21.74	21.67	1
		25	0		20.70		2			12	0	20.60	20.65	20.58	2
		25	12		20.72		2			12	6	20.62	20.67	20.60	2
		25	25		20.85		2			12	13	20.75	20.80	20.73	2
		50	0		20.78		2			25	0	20.68	20.73	20.66	2
	64QAM	1	0		20.66		2		64QAM	1	0	20.56	20.61	20.54	2
		1	24		20.73		2			1	12	20.63	20.68	20.61	2
		1	49		20.81		2			1	24	20.71	20.76	20.69	2
		25	0		19.72		3			12	0	19.62	19.67	19.60	3
		25	12		19.74		3			12	6	19.64	19.69	19.62	3
		25	25		19.87		3			12	13	19.77	19.82	19.75	3
		50	0		19.80		3			25	0	19.70	19.75	19.68	3

LTE Band 17															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		23780	23790	23800				Channel		23755	23790	23825	
		Frequency (MHz)		709.0	710.0	711.0				Frequency (MHz)		706.5	710.0	713.5	
10M	QPSK	1	0	22.84	22.85	22.76	0	5M	QPSK	1	0	22.76	22.75	22.68	0
		1	24	22.75	22.76	22.67	0			1	12	22.69	22.68	22.67	0
		1	49	22.70	22.71	22.62	0			1	24	22.67	22.61	22.62	0
		25	0	21.80	**21.81**	21.72	1			12	0	21.75	21.80	21.69	1
		25	12	21.78	21.79	21.70	1			12	6	21.74	21.69	21.62	1
		25	25	21.72	21.73	21.64	1			12	13	21.64	21.67	21.60	1
		50	0	21.74	**21.75**	21.66	1			25	0	21.64	21.67	21.56	1
	16QAM	1	0	21.82	21.83	21.74	1		16QAM	1	0	21.75	21.80	21.68	1
		1	24	21.73	21.74	21.65	1			1	12	21.72	21.69	21.59	1
		1	49	21.68	21.69	21.60	1			1	24	21.59	21.62	21.51	1
		25	0	20.78	20.79	20.70	2			12	0	20.75	20.69	20.67	2
		25	12	20.76	20.77	20.68	2			12	6	20.66	20.68	20.60	2
		25	25	20.70	20.71	20.62	2			12	13	20.70	20.67	20.53	2
		50	0	20.72	20.73	20.64	2			25	0	20.71	20.66	20.57	2
	64QAM	1	0	20.83	20.84	20.75	2		64QAM	1	0	20.82	20.82	20.67	2
		1	24	20.74	20.75	20.66	2			1	12	20.64	20.67	20.63	2
		1	49	20.69	20.70	20.61	2			1	24	20.64	20.67	20.58	2
		25	0	19.79	19.80	19.71	3			12	0	19.79	19.80	19.64	3
		25	12	19.77	19.78	19.69	3			12	6	19.70	19.73	19.63	3
		25	25	19.71	19.72	19.63	3			12	13	19.67	19.62	19.63	3
		50	0	19.73	19.74	19.65	3			25	0	19.66	19.72	19.62	3

LTE Band 66

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132072	132322	132572	
		Frequency (MHz)		1720.0	1745.0	1770.0	
20M	QPSK	1	0	23.36	23.33	23.35	0
		1	50	23.34	23.31	23.33	0
		1	99	23.31	23.28	23.30	0
		50	0	**21.35**	21.32	21.34	1
		50	25	21.31	21.28	21.30	1
		50	50	21.29	21.26	21.28	1
		100	0	**21.21**	21.18	21.20	1
	16QAM	1	0	22.34	22.24	22.26	1
		1	50	22.34	22.30	22.27	1
		1	99	22.30	22.27	22.30	1
		50	0	20.30	20.23	20.33	2
		50	25	20.29	20.25	20.22	2
		50	50	20.24	20.25	20.25	2
		100	0	20.15	20.12	20.17	2
	64QAM	1	0	21.31	21.25	21.25	2
		1	50	21.30	21.24	21.25	2
		1	99	21.25	21.18	21.28	2
		50	0	19.27	19.27	19.25	3
		50	25	19.21	19.22	19.26	3
		50	50	19.20	19.21	19.20	3
		100	0	19.14	19.11	19.11	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132047	132322	132597	
		Frequency (MHz)		1717.5	1745.0	1772.5	
15M	QPSK	1	0	23.29	23.23	23.31	0
		1	37	23.32	23.29	23.27	0
		1	74	23.21	23.23	23.25	0
		36	0	21.34	21.23	21.31	1
		36	19	21.27	21.26	21.25	1
		36	39	21.22	21.20	21.25	1
		75	0	21.18	21.08	21.10	1
	16QAM	1	0	22.30	22.24	22.25	1
		1	37	22.19	22.28	22.31	1
		1	74	22.19	22.23	22.25	1
		36	0	20.20	20.19	20.24	2
		36	19	20.21	20.21	20.21	2
		36	39	20.14	20.18	20.10	2
		75	0	20.15	20.05	20.06	2
	64QAM	1	0	21.29	21.30	21.17	2
		1	37	21.28	21.22	21.26	2
		1	74	21.12	21.17	21.29	2
		36	0	19.22	19.22	19.31	3
		36	19	19.21	19.22	19.27	3
		36	39	19.16	19.19	19.15	3
		75	0	19.03	19.08	19.13	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		132022	132322	132622	
		Frequency (MHz)		1715.0	1745.0	1775.0	
10M	QPSK	1	0	23.29	23.19	23.22	0
		1	24	23.26	23.28	23.09	0
		1	49	23.11	23.11	23.16	0
		25	0	21.29	21.23	21.28	1
		25	12	21.20	21.22	21.22	1
		25	25	21.12	21.12	21.28	1
		50	0	21.06	20.99	20.99	1
	16QAM	1	0	22.26	22.15	22.21	1
		1	24	22.09	22.02	22.12	1
		1	49	22.11	22.19	22.20	1
		25	0	20.13	20.19	20.23	2
		25	12	20.10	20.18	20.14	2
		25	25	20.13	20.01	20.16	2
		50	0	20.06	20.05	19.99	2
	64QAM	1	0	21.11	21.12	21.25	2
		1	24	21.20	21.19	21.19	2
		1	49	21.13	21.06	21.20	2
		25	0	19.30	19.06	19.14	3
		25	12	19.14	19.18	19.07	3
		25	25	19.04	19.06	19.17	3
		50	0	19.01	18.91	19.01	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131997	132322	132647	
		Frequency (MHz)		1712.5	1745.0	1777.5	
5M	QPSK	1	0	23.29	23.13	23.27	0
		1	12	23.14	23.26	23.15	0
		1	24	23.10	23.14	23.04	0
		12	0	21.20	21.23	21.12	1
		12	6	21.22	21.20	21.17	1
		12	13	21.24	21.11	21.16	1
		25	0	21.07	21.08	20.97	1
	16QAM	1	0	22.20	22.08	22.13	1
		1	12	22.16	22.14	22.22	1
		1	24	22.26	22.14	22.06	1
		12	0	20.25	20.23	20.23	2
		12	6	20.15	19.94	20.11	2
		12	13	20.17	20.18	20.10	2
		25	0	20.06	20.02	20.05	2
	64QAM	1	0	21.08	21.18	21.24	2
		1	12	21.20	21.15	21.11	2
		1	24	21.19	21.04	21.17	2
		12	0	19.20	19.13	19.14	3
		12	6	19.02	19.08	19.22	3
		12	13	19.20	19.14	19.14	3
		25	0	18.98	18.97	19.08	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131987	132322	132657	
		Frequency (MHz)		1711.5	1745.5	1778.5	
3M	QPSK	1	0	23.24	23.21	23.15	0
		1	7	23.21	23.24	23.23	0
		1	14	23.20	23.28	23.08	0
		8	0	21.30	21.19	21.17	1
		8	3	21.16	21.11	21.22	1
		8	7	21.25	21.20	21.18	1
		15	0	21.01	21.00	21.14	1
	16QAM	1	0	22.19	22.17	22.13	1
		1	7	22.16	22.22	22.16	1
		1	14	22.15	22.06	22.09	1
		8	0	20.22	20.23	20.16	2
		8	3	20.11	20.18	20.05	2
		8	7	20.15	20.05	20.23	2
		15	0	20.08	20.02	20.05	2
	64QAM	1	0	21.13	21.24	21.20	2
		1	7	21.20	21.02	21.12	2
		1	14	21.02	21.11	21.16	2
		8	0	19.15	19.18	19.12	3
		8	3	19.13	19.13	19.14	3
		8	7	19.04	19.12	19.07	3
		15	0	19.02	19.03	19.04	3

BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		131979	132322	132665	
		Frequency (MHz)		1710.7	1745.0	1779.3	
1.4M	QPSK	1	0	23.15	23.16	23.10	0
		1	2	23.26	23.25	23.17	0
		1	5	23.30	23.14	23.18	0
		3	0	23.12	23.11	23.01	0
		3	1	23.01	22.99	22.95	0
		3	3	22.94	22.94	23.01	0
		6	0	21.13	21.00	20.99	1
	16QAM	1	0	22.19	22.11	22.35	1
		1	2	22.05	22.12	22.20	1
		1	5	22.16	21.97	22.14	1
		3	0	22.13	22.10	22.15	1
		3	1	22.17	22.08	22.13	1
		3	3	22.17	22.07	22.09	1
		6	0	19.99	19.99	20.08	2
	64QAM	1	0	21.22	21.13	21.17	2
		1	2	21.24	21.15	21.12	2
		1	5	21.16	21.11	21.15	2
		3	0	21.08	20.96	20.95	2
		3	1	21.12	20.85	20.91	2
		3	3	20.91	20.90	20.87	2
		6	0	18.99	19.06	19.00	3

ERP Power (dBm)

LTE Band 12							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23017	699.7	-16.20	32.719	14.37	27.35	H
	23095	707.5	-16.10	32.736	14.49	**28.09**	
	23173	715.3	-16.02	32.591	14.42	27.68	
	23017	699.7	-21.18	32.69	9.36	8.63	V
	23095	707.5	-21.23	32.81	9.43	8.77	
	23173	715.3	-21.19	32.74	9.40	8.71	
Channel Bandwidth: 1.4 MHz / 16QAM							
X	23017	699.7	-17.21	32.719	13.36	21.67	H
	23095	707.5	-17.11	32.736	13.48	22.26	
	23173	715.3	-17.02	32.591	13.42	21.98	
	23017	699.7	-22.19	32.69	8.35	6.84	V
	23095	707.5	-22.24	32.81	8.42	6.95	
	23173	715.3	-22.20	32.74	8.39	6.90	
Channel Bandwidth: 1.4 MHz / 64QAM							
X	23017	699.7	-18.21	32.719	12.36	17.21	H
	23095	707.5	-18.11	32.736	12.48	17.68	
	23173	715.3	-18.03	32.591	12.41	17.42	
	23017	699.7	-23.20	32.69	7.34	5.42	V
	23095	707.5	-23.25	32.81	7.41	5.51	
	23173	715.3	-23.21	32.74	7.38	5.47	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 12							
Channel Bandwidth: 3 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23025	700.5	-16.16	32.719	14.41	27.60	H
	23095	707.5	-16.06	32.736	14.53	**28.35**	
	23165	714.5	-15.99	32.591	14.45	27.87	
	23025	700.5	-21.15	32.69	9.39	8.69	V
	23095	707.5	-21.19	32.81	9.47	8.85	
	23165	714.5	-21.16	32.74	9.43	8.77	
Channel Bandwidth: 3 MHz / 16QAM							
X	23025	700.5	-17.16	32.719	13.41	21.92	H
	23095	707.5	-17.06	32.736	13.53	22.52	
	23165	714.5	-16.99	32.591	13.45	22.14	
	23025	700.5	-22.15	32.69	8.39	6.90	V
	23095	707.5	-22.20	32.81	8.46	7.01	
	23165	714.5	-22.17	32.74	8.42	6.95	
Channel Bandwidth: 3 MHz / 64QAM							
X	23025	700.5	-18.16	32.719	12.41	17.41	H
	23095	707.5	-18.07	32.736	12.52	17.85	
	23165	714.5	-18.00	32.591	12.44	17.54	
	23025	700.5	-23.16	32.69	7.38	5.47	V
	23095	707.5	-23.21	32.81	7.45	5.56	
	23165	714.5	-23.18	32.74	7.41	5.51	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 12							
Channel Bandwidth: 5 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	23035	701.5	-16.12	32.719	14.45	27.85	H
	23095	707.5	-16.06	32.736	14.53	**28.35**	
	23155	713.5	-15.96	32.591	14.48	28.06	
	23035	701.5	-21.12	32.69	9.42	8.75	V
	23095	707.5	-21.15	32.81	9.51	8.93	
	23155	713.5	-21.12	32.74	9.47	8.85	
Channel Bandwidth: 5 MHz / 16QAM							
X	23035	701.5	-17.13	32.719	13.44	22.07	H
	23095	707.5	-17.06	32.736	13.53	22.52	
	23155	713.5	-16.96	32.591	13.48	22.29	
	23035	701.5	-22.13	32.69	8.41	6.93	V
	23095	707.5	-22.15	32.81	8.51	7.10	
	23155	713.5	-22.12	32.74	8.47	7.03	
Channel Bandwidth: 5 MHz / 64QAM							
X	23035	701.5	-18.14	32.719	12.43	17.49	H
	23095	707.5	-18.06	32.736	12.53	17.89	
	23155	713.5	-17.96	32.591	12.48	17.71	
	23035	701.5	-23.14	32.69	7.40	5.50	V
	23095	707.5	-23.16	32.81	7.50	5.62	
	23155	713.5	-23.12	32.74	7.47	5.58	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 12							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23060	704.0	-16.09	32.727	14.49	28.10	H
	23095	707.5	-16.02	32.739	14.57	**28.64**	
	23130	711.0	-16.06	32.728	14.52	28.30	
	23060	704.0	-21.14	32.75	9.46	8.83	V
	23095	707.5	-21.12	32.81	9.54	8.99	
	23130	711.0	-21.19	32.84	9.50	8.91	
Channel Bandwidth: 10 MHz / 16QAM							
X	23060	704.0	-17.10	32.727	13.48	22.27	H
	23095	707.5	-17.02	32.739	13.57	22.75	
	23130	711.0	-17.06	32.728	13.52	22.48	
	23060	704.0	-22.15	32.75	8.45	7.00	V
	23095	707.5	-22.12	32.81	8.54	7.14	
	23130	711.0	-22.20	32.84	8.49	7.06	
Channel Bandwidth: 10 MHz / 64QAM							
X	23060	704.0	-18.11	32.727	12.47	17.65	H
	23095	707.5	-18.02	32.739	12.57	18.07	
	23130	711.0	-18.07	32.728	12.51	17.82	
	23060	704.0	-23.16	32.75	7.44	5.55	V
	23095	707.5	-23.12	32.81	7.54	5.68	
	23130	711.0	-23.21	32.84	7.48	5.60	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 13							
Channel Bandwidth: 5 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23205	779.5	-11.41	32.771	19.21	83.39	H
	23230	782.0	-11.34	32.741	19.25	**84.16**	
	23255	784.5	-11.54	32.854	19.16	82.49	
	23205	779.5	-16.16	32.5	14.19	26.24	V
	23230	782.0	-16.13	32.52	14.24	26.55	
	23255	784.5	-16.33	32.62	14.14	25.94	
Channel Bandwidth: 5 MHz / 16QAM							
X	23205	779.5	-12.42	32.771	18.20	66.08	H
	23230	782.0	-12.35	32.741	18.24	66.70	
	23255	784.5	-12.54	32.854	18.16	65.52	
	23205	779.5	-17.16	32.5	13.19	20.84	V
	23230	782.0	-17.13	32.52	13.24	21.09	
	23255	784.5	-17.33	32.62	13.14	20.61	
Channel Bandwidth: 5 MHz / 64QAM							
X	23205	779.5	-13.42	32.771	17.20	52.49	H
	23230	782.0	-13.36	32.741	17.23	52.86	
	23255	784.5	-13.55	32.854	17.15	51.93	
	23205	779.5	-18.17	32.5	12.18	16.52	V
	23230	782.0	-18.13	32.52	12.24	16.75	
	23255	784.5	-18.34	32.62	12.13	16.33	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 13							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23230	782.0	-11.30	32.737	19.29	**84.86**	H
	23230	782.0	-16.10	32.52	14.27	26.73	V
Channel Bandwidth: 10 MHz / 16QAM							
X	23230	782.0	-12.30	32.737	18.29	67.41	H
	23230	782.0	-17.11	32.52	13.26	21.18	V
Channel Bandwidth: 10 MHz / 64QAM							
X	23230	782.0	-13.30	32.737	17.29	53.54	H
	23230	782.0	-18.12	32.52	12.25	16.79	V

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 17							
Channel Bandwidth: 5 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23755	706.5	-16.04	32.719	14.53	**28.37**	H
	23790	710.0	-16.22	32.736	14.37	27.33	
	23825	713.5	-15.99	32.591	14.45	27.87	
	23755	706.5	-21.98	32.69	8.56	7.18	V
	23790	710.0	-22.21	32.81	8.45	7.00	
	23825	713.5	-22.09	32.74	8.50	7.08	
Channel Bandwidth: 5 MHz / 16QAM							
X	23755	706.5	-17.04	32.719	13.53	22.54	H
	23790	710.0	-17.22	32.736	13.37	21.71	
	23825	713.5	-16.99	32.591	13.45	22.14	
	23755	706.5	-22.98	32.69	7.56	5.70	V
	23790	710.0	-23.22	32.81	7.44	5.55	
	23825	713.5	-23.09	32.74	7.50	5.62	
Channel Bandwidth: 5 MHz / 64QAM							
X	23755	706.5	-18.04	32.719	12.53	17.90	H
	23790	710.0	-18.23	32.736	12.36	17.20	
	23825	713.5	-18.00	32.591	12.44	17.54	
	23755	706.5	-23.98	32.69	6.56	4.53	V
	23790	710.0	-24.23	32.81	6.43	4.40	
	23825	713.5	-24.10	32.74	6.49	4.46	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

LTE Band 17							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**ERP (dBm)**	**ERP (mW)**	**Polarization (H/V)**
X	23780	709.0	-16.02	32.727	14.56	**28.56**	H
	23790	710.0	-16.18	32.739	14.41	27.60	
	23800	711.0	-16.09	32.728	14.49	28.11	
	23780	709.0	-22.00	32.75	8.60	7.24	V
	23790	710.0	-22.18	32.81	8.48	7.05	
	23800	711.0	-22.16	32.84	8.53	7.13	
Channel Bandwidth: 10 MHz / 16QAM							
X	23780	709.0	-17.02	32.727	13.56	22.68	H
	23790	710.0	-17.19	32.739	13.40	21.87	
	23800	711.0	-17.10	32.728	13.48	22.27	
	23780	709.0	-23.01	32.75	7.59	5.74	V
	23790	710.0	-23.19	32.81	7.47	5.58	
	23800	711.0	-23.17	32.84	7.52	5.65	
Channel Bandwidth: 10 MHz / 64QAM							
X	23780	709.0	-18.02	32.727	12.56	18.02	H
	23790	710.0	-18.20	32.739	12.39	17.33	
	23800	711.0	-18.11	32.728	12.47	17.65	
	23780	709.0	-24.02	32.75	6.58	4.55	V
	23790	710.0	-24.19	32.81	6.47	4.44	
	23800	711.0	-24.18	32.84	6.51	4.48	

Note: ERP (dBm) = Reading (dBm) + Correction Factor (dB) – 2.15

EIRP Power (dBm)

WCDMA							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	1312	1712.4	-18.63	42.49	23.86	242.94	H
	1413	1732.6	-18.39	42.33	23.94	**247.57**	
	1513	1752.6	-18.20	42.10	23.90	245.47	
	1312	1712.4	-22.14	42.99	20.85	121.62	V
	1413	1732.6	-21.81	42.74	20.93	123.88	
	1513	1752.6	-21.33	42.21	20.88	122.46	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	19957	1710.7	-19.06	42.49	23.43	220.04	H
	20175	1732.5	-18.81	42.33	23.52	**224.75**	
	20393	1754.3	-18.64	42.10	23.46	221.82	
	19957	1710.7	-22.60	42.99	20.39	109.40	V
	20175	1732.5	-22.24	42.74	20.50	112.20	
	20393	1754.3	-21.78	42.21	20.43	110.41	
Channel Bandwidth: 1.4 MHz / 16QAM							
X	19957	1710.7	-20.06	42.49	22.43	174.78	H
	20175	1732.5	-19.82	42.33	22.51	178.11	
	20393	1754.3	-19.65	42.10	22.45	175.79	
	19957	1710.7	-23.61	42.99	19.38	86.70	V
	20175	1732.5	-23.24	42.74	19.50	89.13	
	20393	1754.3	-22.79	42.21	19.42	87.50	
Channel Bandwidth: 1.4 MHz / 64QAM							
X	19957	1710.7	-21.06	42.49	21.43	138.84	H
	20175	1732.5	-20.82	42.33	21.51	141.48	
	20393	1754.3	-20.66	42.10	21.44	139.32	
	19957	1710.7	-24.61	42.99	18.38	68.87	V
	20175	1732.5	-24.25	42.74	18.49	70.63	
	20393	1754.3	-23.79	42.21	18.42	69.50	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 3 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	19965	1711.5	-19.02	42.49	23.47	222.08	H
	20175	1732.5	-18.77	42.33	23.56	**226.83**	
	20385	1753.5	-18.61	42.10	23.49	223.36	
	19965	1711.5	-22.56	42.99	20.43	110.41	V
	20175	1732.5	-22.20	42.74	20.54	113.24	
	20385	1753.5	-21.74	42.21	20.47	111.43	
Channel Bandwidth: 3 MHz / 16QAM							
X	19965	1711.5	-20.02	42.49	22.47	176.40	H
	20175	1732.5	-19.77	42.33	22.56	180.18	
	20385	1753.5	-19.62	42.10	22.48	177.01	
	19965	1711.5	-23.56	42.99	19.43	87.70	V
	20175	1732.5	-23.21	42.74	19.53	89.74	
	20385	1753.5	-22.75	42.21	19.46	88.31	
Channel Bandwidth: 3 MHz / 64QAM							
X	19965	1711.5	-21.02	42.49	21.47	140.12	H
	20175	1732.5	-20.78	42.33	21.55	142.79	
	20385	1753.5	-20.62	42.10	21.48	140.60	
	19965	1711.5	-24.56	42.99	18.43	69.66	V
	20175	1732.5	-24.22	42.74	18.52	71.12	
	20385	1753.5	-23.76	42.21	18.45	69.98	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 5 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	19975	1712.5	-18.98	42.49	23.51	224.13	H
	20175	1732.5	-18.74	42.33	23.59	**228.40**	
	20375	1752.5	-18.57	42.10	23.53	225.42	
	19975	1712.5	-22.52	42.99	20.47	111.43	V
	20175	1732.5	-22.17	42.74	20.57	114.02	
	20375	1752.5	-21.70	42.21	20.51	112.46	
Channel Bandwidth: 5 MHz / 16QAM							
X	19975	1712.5	-19.98	42.49	22.51	178.03	H
	20175	1732.5	-19.75	42.33	22.58	181.01	
	20375	1752.5	-19.58	42.10	22.52	178.65	
	19975	1712.5	-23.52	42.99	19.47	88.51	V
	20175	1732.5	-23.17	42.74	19.57	90.57	
	20375	1752.5	-22.71	42.21	19.50	89.13	
Channel Bandwidth: 5 MHz / 64QAM							
X	19975	1712.5	-20.98	42.49	21.51	141.42	H
	20175	1732.5	-20.76	42.33	21.57	143.45	
	20375	1752.5	-20.58	42.10	21.52	141.91	
	19975	1712.5	-24.52	42.99	18.47	70.31	V
	20175	1732.5	-24.18	42.74	18.56	71.78	
	20375	1752.5	-23.72	42.21	18.49	70.63	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	20000	1715.0	-18.95	42.49	23.54	225.68	H
	20175	1732.5	-18.71	42.33	23.62	**229.99**	
	20350	1750.0	-18.53	42.10	23.57	227.51	
	20000	1715.0	-22.49	42.99	20.50	112.20	V
	20175	1732.5	-22.13	42.74	20.61	115.08	
	20350	1750.0	-21.66	42.21	20.55	113.50	
Channel Bandwidth: 10 MHz / 16QAM							
X	20000	1715.0	-19.96	42.49	22.53	178.85	H
	20175	1732.5	-19.72	42.33	22.61	182.26	
	20350	1750.0	-19.54	42.10	22.56	180.30	
	20000	1715.0	-23.50	42.99	19.49	88.92	V
	20175	1732.5	-23.13	42.74	19.61	91.41	
	20350	1750.0	-22.67	42.21	19.54	89.95	
Channel Bandwidth: 10 MHz / 64QAM							
X	20000	1715.0	-20.96	42.49	21.53	142.07	H
	20175	1732.5	-20.72	42.33	21.61	144.78	
	20350	1750.0	-20.54	42.10	21.56	143.22	
	20000	1715.0	-24.51	42.99	18.48	70.47	V
	20175	1732.5	-24.13	42.74	18.61	72.61	
	20350	1750.0	-23.68	42.21	18.53	71.29	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 15 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	20025	1717.5	-18.92	42.49	23.57	227.25	H
	20175	1732.5	-18.68	42.33	23.65	**231.58**	
	20325	1747.5	-18.49	42.10	23.61	229.61	
	20025	1717.5	-22.45	42.99	20.54	113.24	V
	20175	1732.5	-22.09	42.74	20.65	116.14	
	20325	1747.5	-21.62	42.21	20.59	114.55	
Channel Bandwidth: 15 MHz / 16QAM							
X	20025	1717.5	-19.92	42.49	22.57	180.51	H
	20175	1732.5	-19.68	42.33	22.65	183.95	
	20325	1747.5	-19.50	42.10	22.60	181.97	
	20025	1717.5	-23.45	42.99	19.54	89.95	V
	20175	1732.5	-23.10	42.74	19.64	92.04	
	20325	1747.5	-22.63	42.21	19.58	90.78	
Channel Bandwidth: 15 MHz / 64QAM							
X	20025	1717.5	-20.92	42.49	21.57	143.38	H
	20175	1732.5	-20.69	42.33	21.64	145.78	
	20325	1747.5	-20.51	42.10	21.59	144.21	
	20025	1717.5	-24.46	42.99	18.53	71.29	V
	20175	1732.5	-24.11	42.74	18.63	72.95	
	20325	1747.5	-23.64	42.21	18.57	71.94	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 4							
Channel Bandwidth: 20 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	20050	1720.0	-18.88	42.49	23.61	229.35	H
	20175	1732.5	-18.64	42.33	23.69	**233.72**	
	20300	1745.0	-18.45	42.10	23.65	231.74	
	20050	1720.0	-22.41	42.99	20.58	114.29	V
	20175	1732.5	-22.06	42.74	20.68	116.95	
	20300	1745.0	-21.58	42.21	20.63	115.61	
Channel Bandwidth: 20 MHz / 16QAM							
X	20050	1720.0	-19.88	42.49	22.61	182.18	H
	20175	1732.5	-19.65	42.33	22.68	185.23	
	20300	1745.0	-19.45	42.10	22.65	184.08	
	20050	1720.0	-23.42	42.99	19.57	90.57	V
	20175	1732.5	-23.06	42.74	19.68	92.90	
	20300	1745.0	-22.59	42.21	19.62	91.62	
Channel Bandwidth: 20 MHz / 64QAM							
X	20050	1720.0	-20.89	42.49	21.60	144.38	H
	20175	1732.5	-20.65	42.33	21.68	147.13	
	20300	1745.0	-20.46	42.10	21.64	145.88	
	20050	1720.0	-24.43	42.99	18.56	71.78	V
	20175	1732.5	-24.07	42.74	18.67	73.62	
	20300	1745.0	-23.60	42.21	18.61	72.61	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	131979	1710.7	-13.09	36.45	23.36	**216.77**	H
	132322	1745.0	-13.49	36.80	23.31	214.24	
	132665	1779.3	-13.61	36.94	23.33	215.43	
	131979	1710.7	-17.94	37.28	19.34	85.84	V
	132322	1745.0	-18.37	37.63	19.26	84.33	
	132665	1779.3	-18.32	37.64	19.32	85.51	
Channel Bandwidth: 1.4 MHz / 16QAM							
X	131979	1710.7	-14.10	36.45	22.35	171.79	H
	132322	1745.0	-14.50	36.80	22.30	169.79	
	132665	1779.3	-14.61	36.94	22.33	171.12	
	131979	1710.7	-18.94	37.28	18.34	68.19	V
	132322	1745.0	-19.38	37.63	18.25	66.83	
	132665	1779.3	-19.32	37.64	18.32	67.92	
Channel Bandwidth: 1.4 MHz / 64QAM							
X	131979	1710.7	-15.11	36.45	21.34	136.14	H
	132322	1745.0	-15.50	36.80	21.30	134.87	
	132665	1779.3	-15.61	36.94	21.33	135.93	
	131979	1710.7	-19.94	37.28	17.34	54.16	V
	132322	1745.0	-20.38	37.63	17.25	53.09	
	132665	1779.3	-20.33	37.64	17.31	53.83	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 3 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	131987	1711.5	-13.05	36.45	23.40	**218.78**	H
	132322	1745.0	-13.46	36.80	23.34	215.72	
	132657	1778.5	-13.57	36.94	23.37	217.42	
	131987	1711.5	-17.90	37.28	19.38	86.64	V
	132322	1745.0	-18.33	37.63	19.30	85.11	
	132657	1778.5	-18.28	37.64	19.36	86.30	
Channel Bandwidth: 3 MHz / 16QAM							
X	131987	1711.5	-14.06	36.45	22.39	173.38	H
	132322	1745.0	-14.47	36.80	22.33	170.96	
	132657	1778.5	-14.58	36.94	22.36	172.31	
	131987	1711.5	-18.91	37.28	18.37	68.66	V
	132322	1745.0	-19.33	37.63	18.30	67.61	
	132657	1778.5	-19.29	37.64	18.35	68.39	
Channel Bandwidth: 3 MHz / 64QAM							
X	131987	1711.5	-15.07	36.45	21.38	137.40	H
	132322	1745.0	-15.48	36.80	21.32	135.49	
	132657	1778.5	-15.58	36.94	21.36	136.87	
	131987	1711.5	-19.91	37.28	17.37	54.54	V
	132322	1745.0	-20.33	37.63	17.30	53.70	
	132657	1778.5	-20.30	37.64	17.34	54.20	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 5 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	131997	1712.5	-13.01	36.45	23.44	**220.80**	H
	132322	1745.0	-13.43	36.80	23.37	217.22	
	132647	1777.5	-13.54	36.94	23.40	218.93	
	131997	1712.5	-17.86	37.28	19.42	87.44	V
	132322	1745.0	-18.29	37.63	19.34	85.90	
	132647	1777.5	-18.25	37.64	19.39	86.90	
Channel Bandwidth: 5 MHz / 16QAM							
X	131997	1712.5	-14.02	36.45	22.43	174.98	H
	132322	1745.0	-14.43	36.80	22.37	172.54	
	132647	1777.5	-14.54	36.94	22.40	173.90	
	131997	1712.5	-18.87	37.28	18.41	69.29	V
	132322	1745.0	-19.30	37.63	18.33	68.08	
	132647	1777.5	-19.25	37.64	18.39	69.02	
Channel Bandwidth: 5 MHz / 64QAM							
X	131997	1712.5	-15.03	36.45	21.42	138.68	H
	132322	1745.0	-15.44	36.80	21.36	136.74	
	132647	1777.5	-16.55	36.94	20.39	109.47	
	131997	1712.5	-19.87	37.28	17.41	55.04	V
	132322	1745.0	-20.31	37.63	17.32	53.95	
	132647	1777.5	-20.26	37.64	17.38	54.70	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 10 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	132022	1715.0	-13.17	36.64	23.47	**222.33**	H
	132322	1745.0	-13.40	36.80	23.40	218.52	
	132622	1775.0	-13.35	36.80	23.45	221.31	
	132022	1715.0	-17.98	37.44	19.46	88.29	V
	132322	1745.0	-18.25	37.63	19.38	86.68	
	132622	1775.0	-18.21	37.64	19.43	87.60	
Channel Bandwidth: 10 MHz / 16QAM							
X	132022	1715.0	-14.18	36.64	22.46	176.20	H
	132322	1745.0	-14.40	36.80	22.40	173.58	
	132622	1775.0	-14.36	36.80	22.44	175.39	
	132022	1715.0	-18.98	37.44	18.46	70.13	V
	132322	1745.0	-19.26	37.63	18.37	68.69	
	132622	1775.0	-19.22	37.64	18.42	69.42	
Channel Bandwidth: 10 MHz / 64QAM							
X	132022	1715.0	-15.19	36.64	21.45	139.64	H
	132322	1745.0	-15.41	36.80	21.39	137.56	
	132622	1775.0	-15.37	36.80	21.43	139.00	
	132022	1715.0	-19.98	37.44	17.46	55.71	V
	132322	1745.0	-20.26	37.63	17.37	54.56	
	132622	1775.0	-20.23	37.64	17.41	55.02	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 15 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	132047	1717.5	-12.94	36.45	23.51	**224.39**	H
	132322	1745.0	-13.36	36.80	23.44	220.75	
	132597	1772.5	-13.45	36.94	23.49	223.51	
	132047	1717.5	-17.78	37.28	19.50	89.06	V
	132322	1745.0	-18.21	37.63	19.42	87.50	
	132597	1772.5	-18.17	37.64	19.47	88.51	
Channel Bandwidth: 15 MHz / 16QAM							
X	132047	1717.5	-13.94	36.45	22.51	178.24	H
	132322	1745.0	-14.36	36.80	22.44	175.35	
	132597	1772.5	-14.46	36.94	22.48	177.13	
	132047	1717.5	-18.79	37.28	18.49	70.58	V
	132322	1745.0	-19.22	37.63	18.41	69.34	
	132597	1772.5	-19.17	37.64	18.47	70.31	
Channel Bandwidth: 15 MHz / 64QAM							
X	132047	1717.5	-14.95	36.45	21.50	141.25	H
	132322	1745.0	-15.36	36.80	21.44	139.28	
	132597	1772.5	-15.47	36.94	21.47	140.38	
	132047	1717.5	-19.80	37.28	17.48	55.94	V
	132322	1745.0	-20.23	37.63	17.40	54.95	
	132597	1772.5	-20.17	37.64	17.47	55.85	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

LTE Band 66							
Channel Bandwidth: 20 MHz / QPSK							
Plane	**Channel**	**Frequency (MHz)**	**Reading (dBm)**	**Correction Factor (dB)**	**EIRP (dBm)**	**EIRP (mW)**	**Polarization (H/V)**
X	132072	1720.0	-12.90	36.45	23.55	**226.46**	H
	132322	1745.0	-13.32	36.80	23.48	222.79	
	132572	1770.0	-13.42	36.94	23.52	225.06	
	132072	1720.0	-17.74	37.28	19.54	89.89	V
	132322	1745.0	-18.17	37.63	19.46	88.31	
	132572	1770.0	-18.13	37.64	19.51	89.33	
Channel Bandwidth: 20 MHz / 16QAM							
X	132072	1720.0	-13.91	36.45	22.54	179.47	H
	132322	1745.0	-14.32	36.80	22.48	176.97	
	132572	1770.0	-14.42	36.94	22.52	178.77	
	132072	1720.0	-18.74	37.28	18.54	71.40	V
	132322	1745.0	-19.18	37.63	18.45	69.98	
	132572	1770.0	-19.14	37.64	18.50	70.79	
Channel Bandwidth: 20 MHz / 64QAM							
X	132072	1720.0	-14.91	36.45	21.54	142.56	H
	132322	1745.0	-15.32	36.80	21.48	140.57	
	132572	1770.0	-15.43	36.94	21.51	141.68	
	132072	1720.0	-19.74	37.28	17.54	56.72	V
	132322	1745.0	-20.19	37.63	17.44	55.46	
	132572	1770.0	-20.15	37.64	17.49	56.10	

Note: EIRP (dBm) = Reading (dBm) + Correction Factor (dB)

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

a. 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 (P) dB. The limit of emission is equal to -13 dBm.
b. For operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 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.R.P power - 2.15 dB.

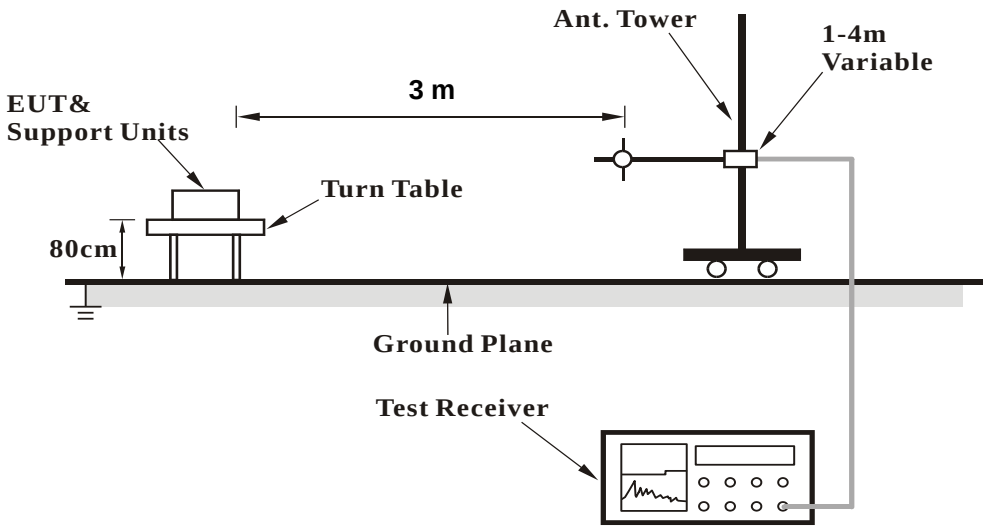
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.2.3 Deviation from Test Standard

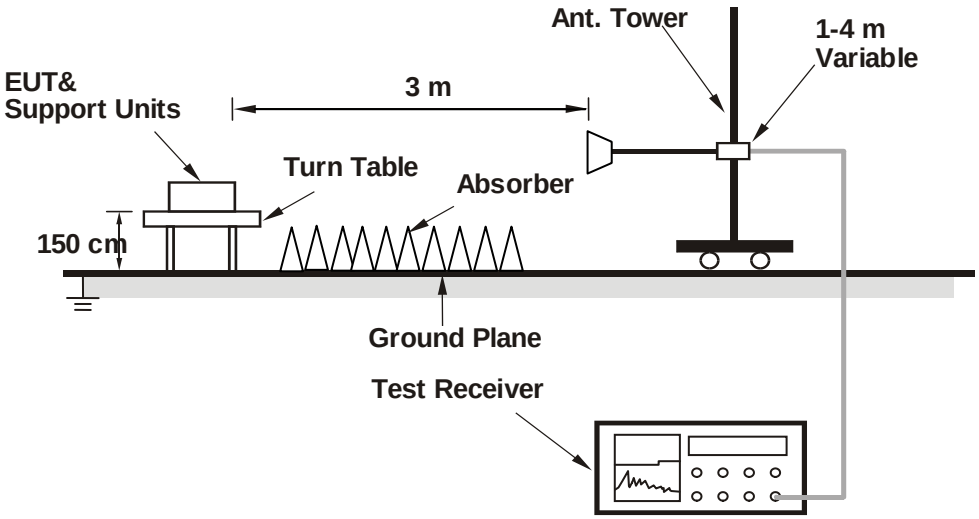
No deviation.

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

WCDMA:

Low Channel

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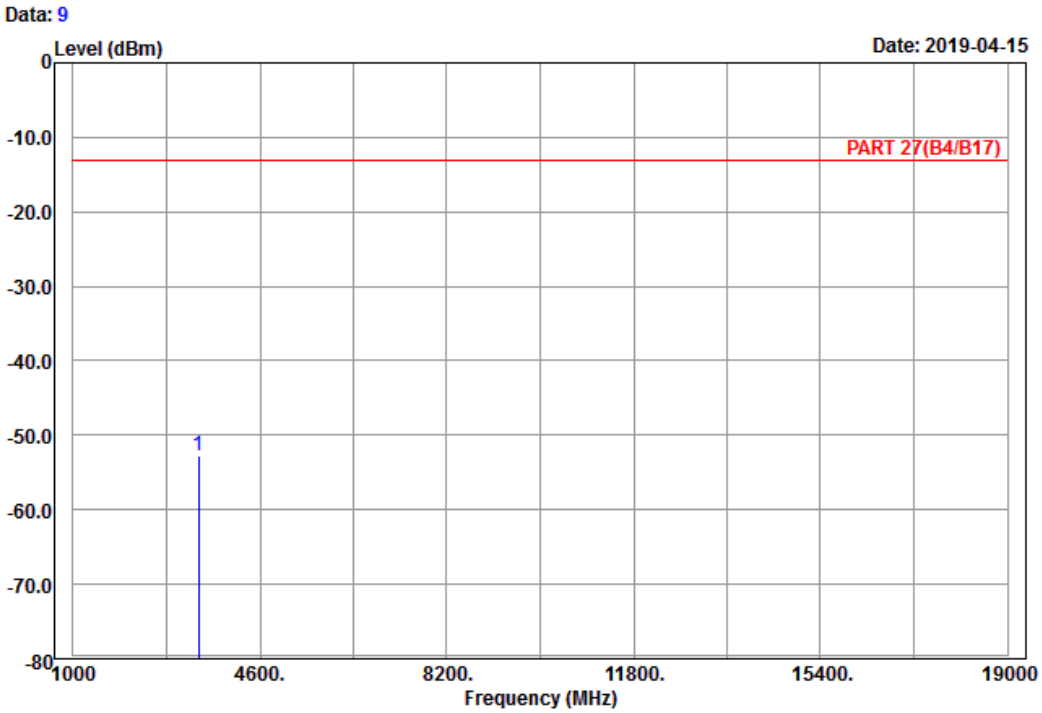
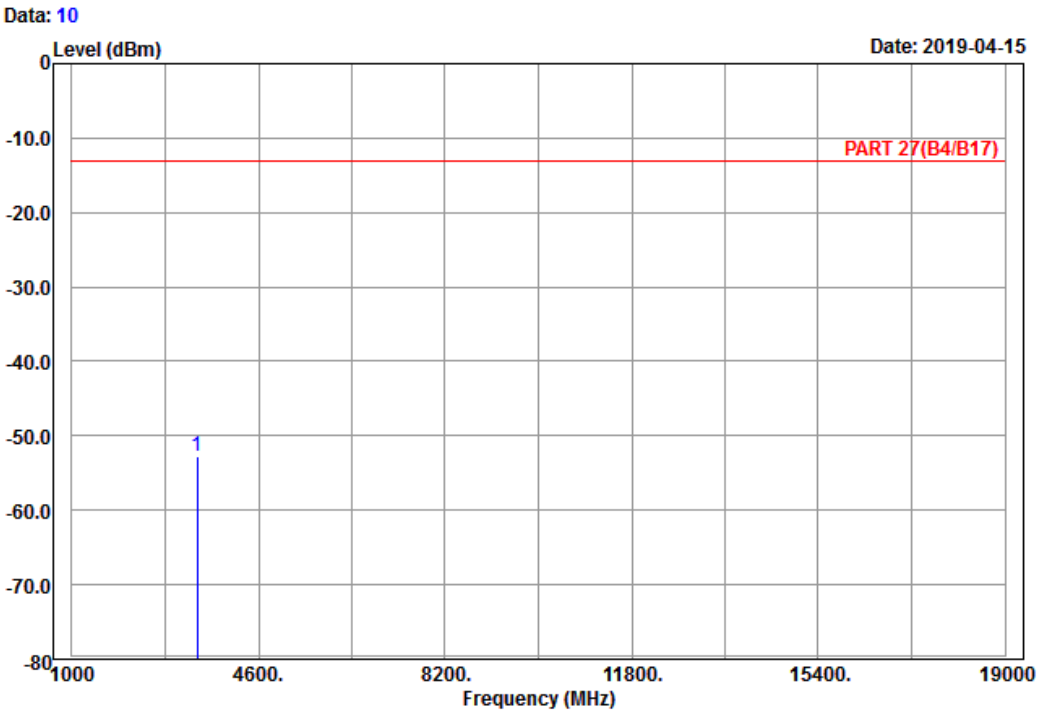


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : Band IV_Link_CH1312
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3424.80	-52.74	-67.11	-13.00	-39.74	14.37	Peak



Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : Band IV_Link_CH1312
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3424.80	-52.85	-67.22	-13.00	-39.85	14.37	Peak

Middle Channel

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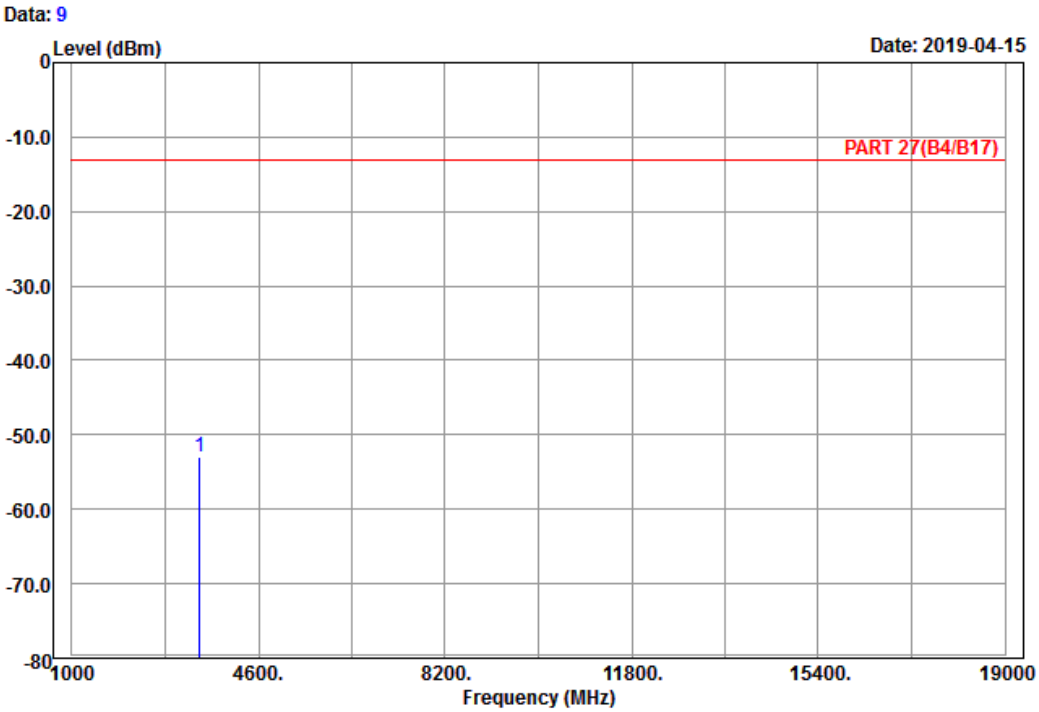
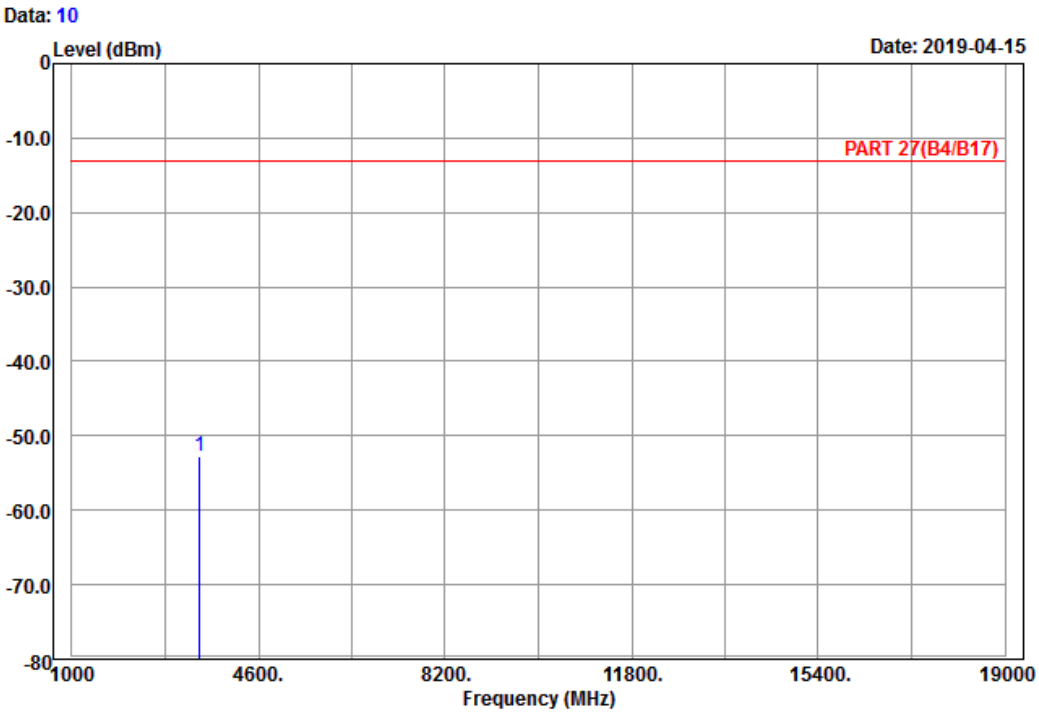


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : Band IV_Link_CH1413
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.20	-52.91	-67.25	-13.00	-39.91	14.34	Peak

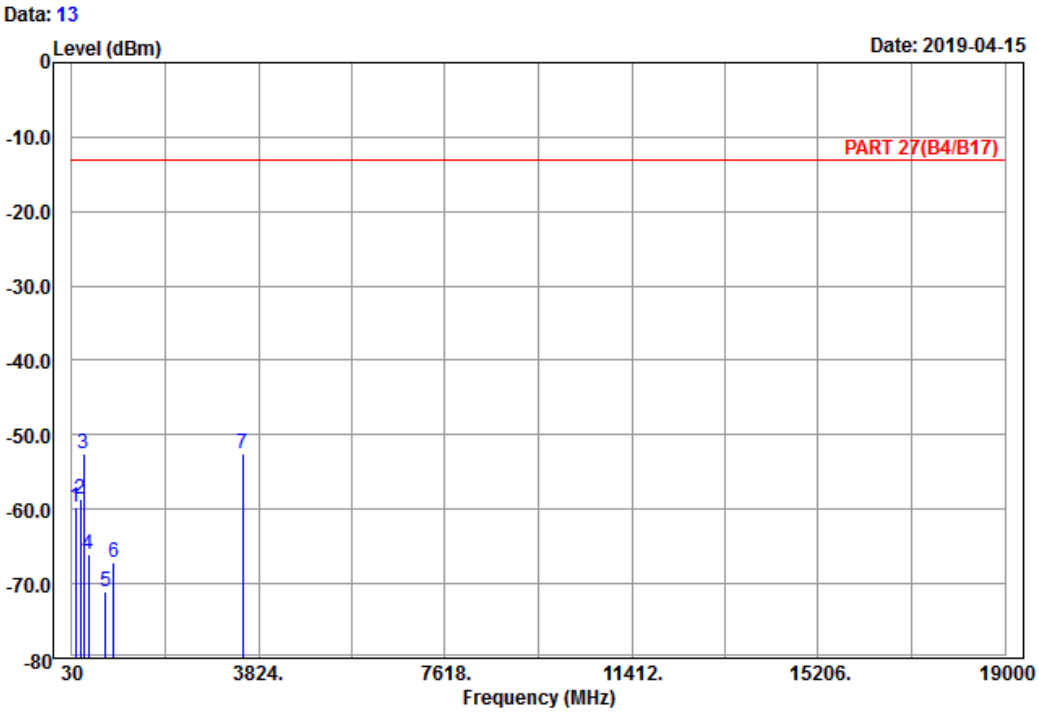


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : Band IV_Link_CH1413
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.20	-52.76	-67.10	-13.00	-39.76	14.34	Peak

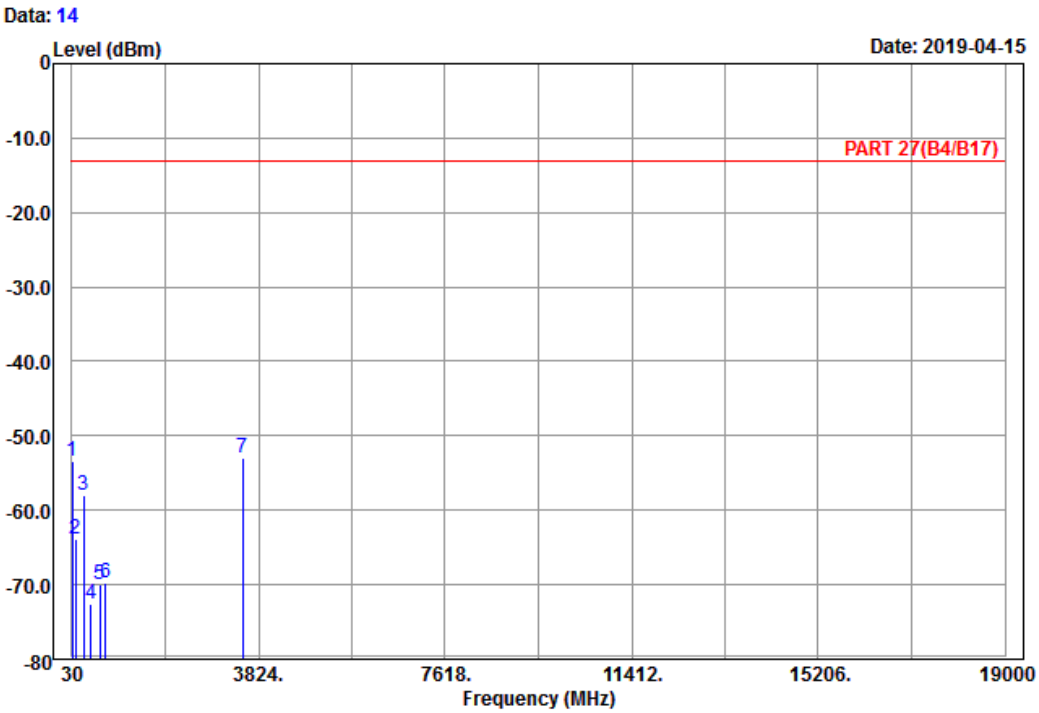
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : Band IV_Link_CH1513
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	102.90	-59.71	-49.94	-13.00	-46.71	-9.77	Peak
2	197.67	-58.60	-52.51	-13.00	-45.60	-6.09	Peak
3	274.89	-52.53	-46.80	-13.00	-39.53	-5.73	Peak
4	360.90	-66.09	-61.28	-13.00	-53.09	-4.81	Peak
5	714.40	-71.11	-70.46	-13.00	-58.11	-0.65	Peak
6	885.20	-67.12	-69.59	-13.00	-54.12	2.47	Peak
7 pp	3505.20	-52.47	-66.75	-13.00	-39.47	14.28	Peak



Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : Band IV_Link_CH1513
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	35.67	-53.39	-42.67	-13.00	-40.39	-10.72	Peak
2	102.09	-63.78	-53.89	-13.00	-50.78	-9.89	Peak
3	269.49	-58.09	-52.41	-13.00	-45.09	-5.68	Peak
4	416.20	-72.48	-69.38	-13.00	-59.48	-3.10	Peak
5	591.90	-69.99	-70.06	-13.00	-56.99	0.07	Peak
6	717.20	-69.70	-69.01	-13.00	-56.70	-0.69	Peak
7 pp	3505.20	-52.96	-67.24	-13.00	-39.96	14.28	Peak

LTE Band 4
Channel Bandwidth: 1.4 MHz / QPSK
Low Channel

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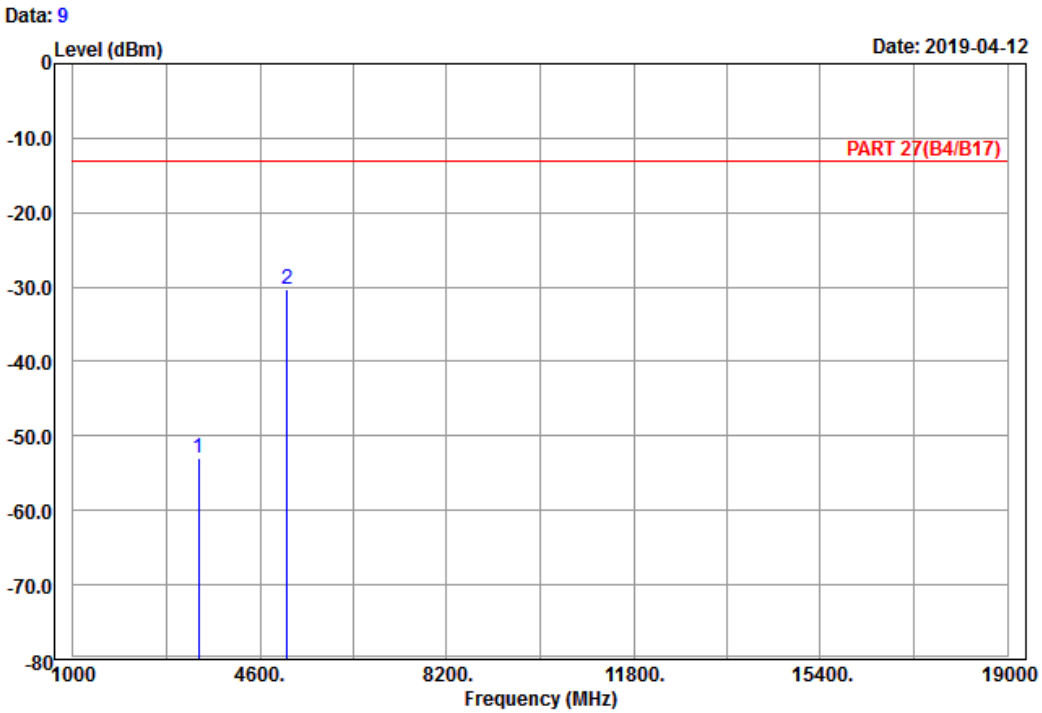
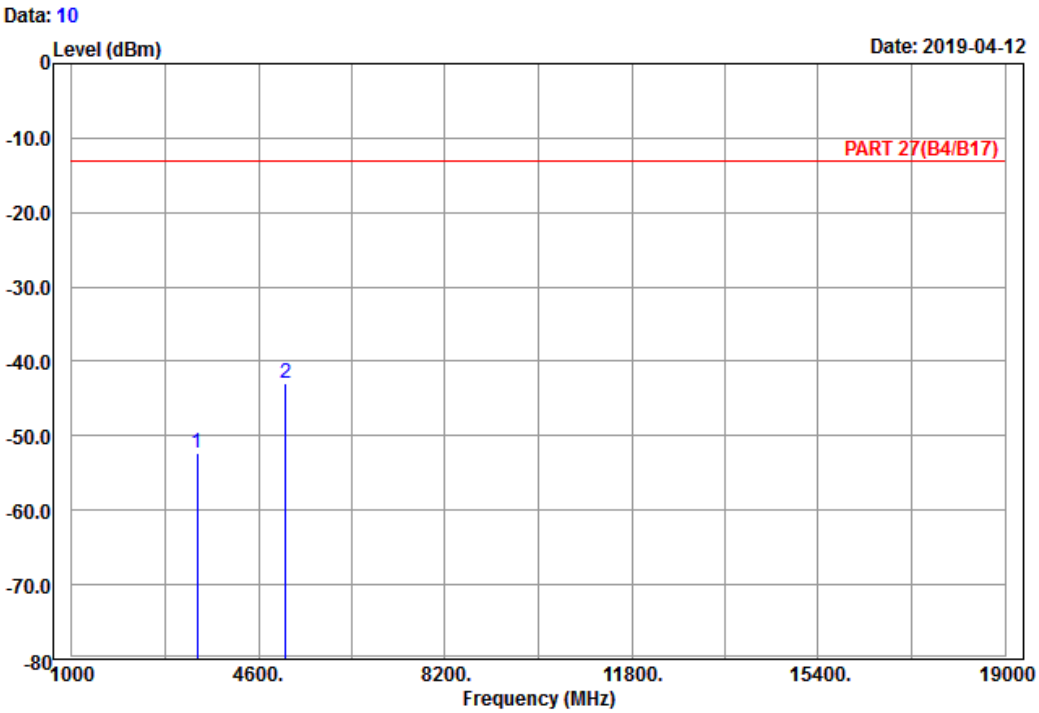


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH19957
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3421.40	-52.90	-67.27	-13.00	-39.90	14.37	Peak
2 pp	5132.10	-30.25	-50.06	-13.00	-17.25	19.81	Peak

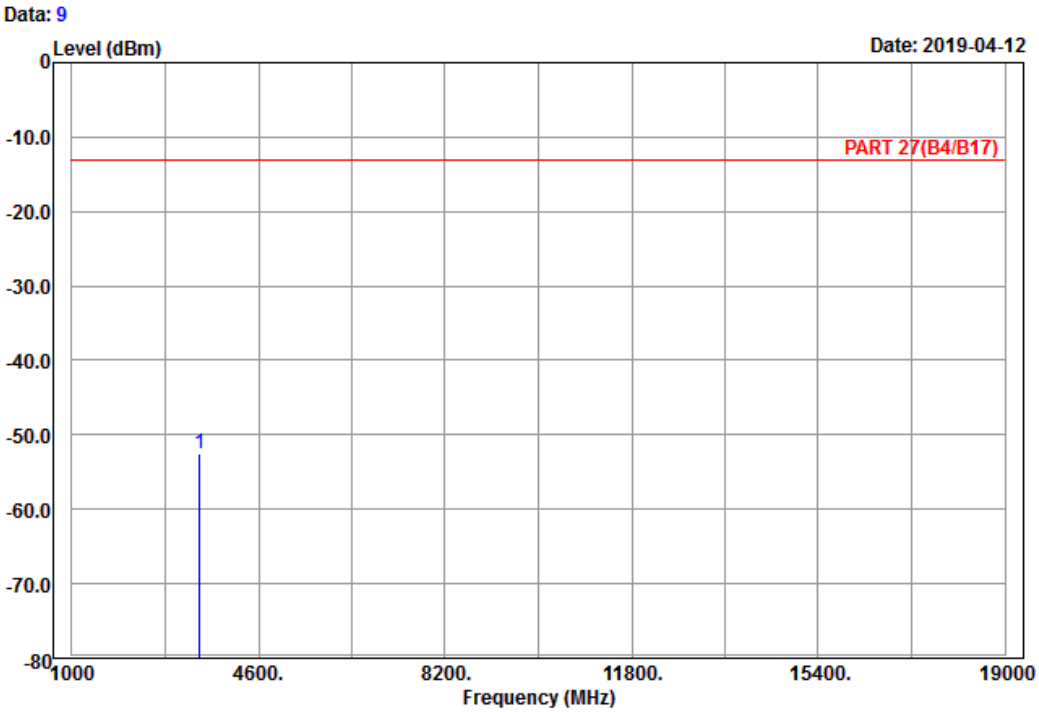


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH19957
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3421.40	-52.36	-66.73	-13.00	-39.36	14.37	Peak
2 pp	5132.10	-43.04	-62.85	-13.00	-30.04	19.81	Peak

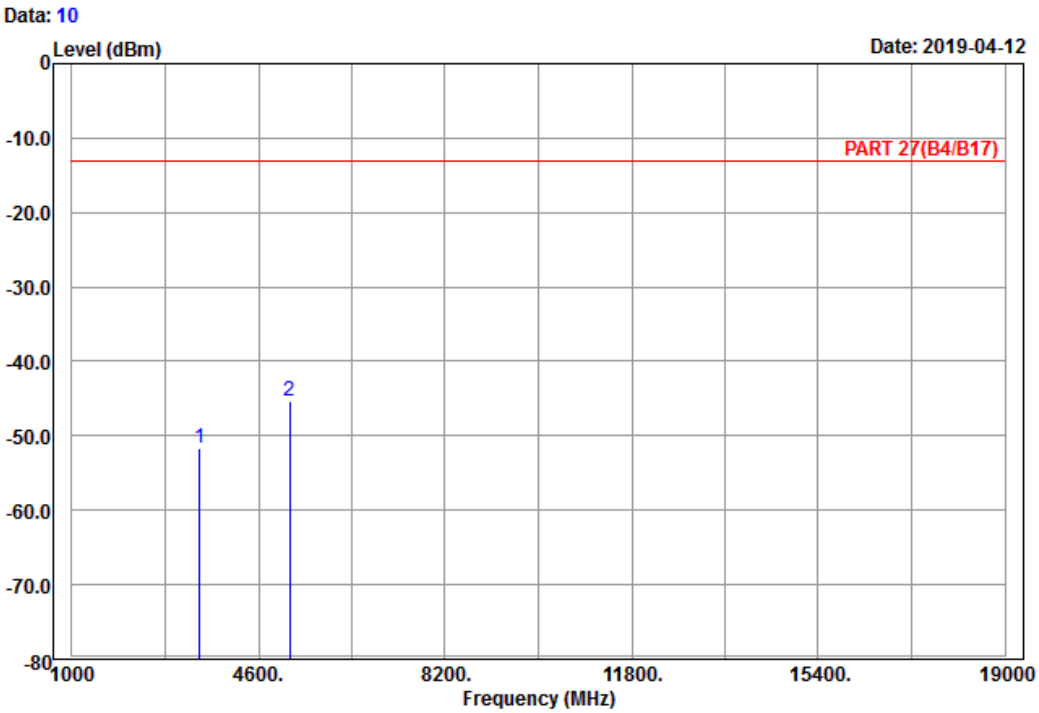
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3465.00	-52.46	-66.80	-13.00	-39.46	14.34	Peak

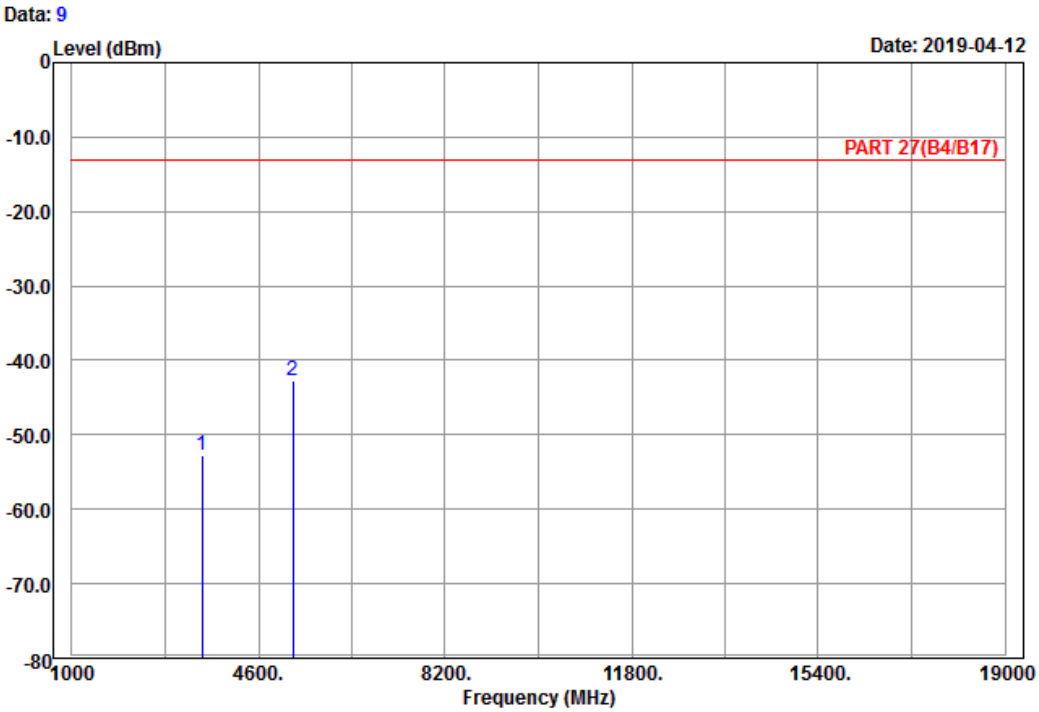


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-51.65	-65.99	-13.00	-38.65	14.34	Peak
2 pp	5197.50	-45.26	-65.38	-13.00	-32.26	20.12	Peak

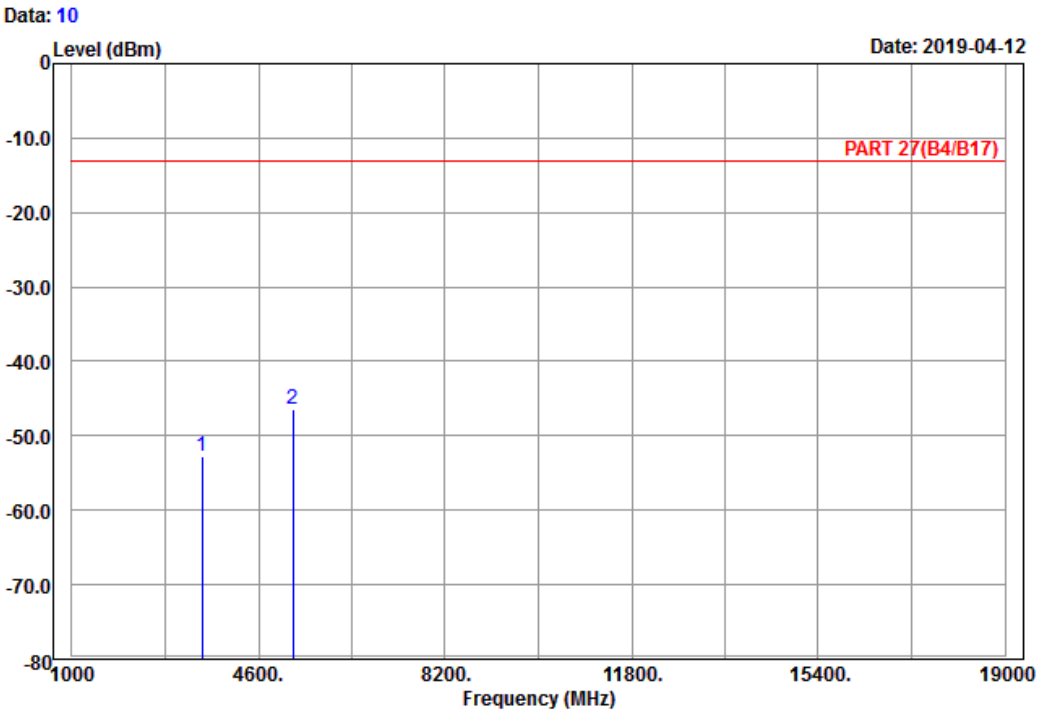
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20393
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3508.60	-52.82	-67.10	-13.00	-39.82	14.28	Peak
2 pp	5262.90	-42.81	-63.01	-13.00	-29.81	20.20	Peak

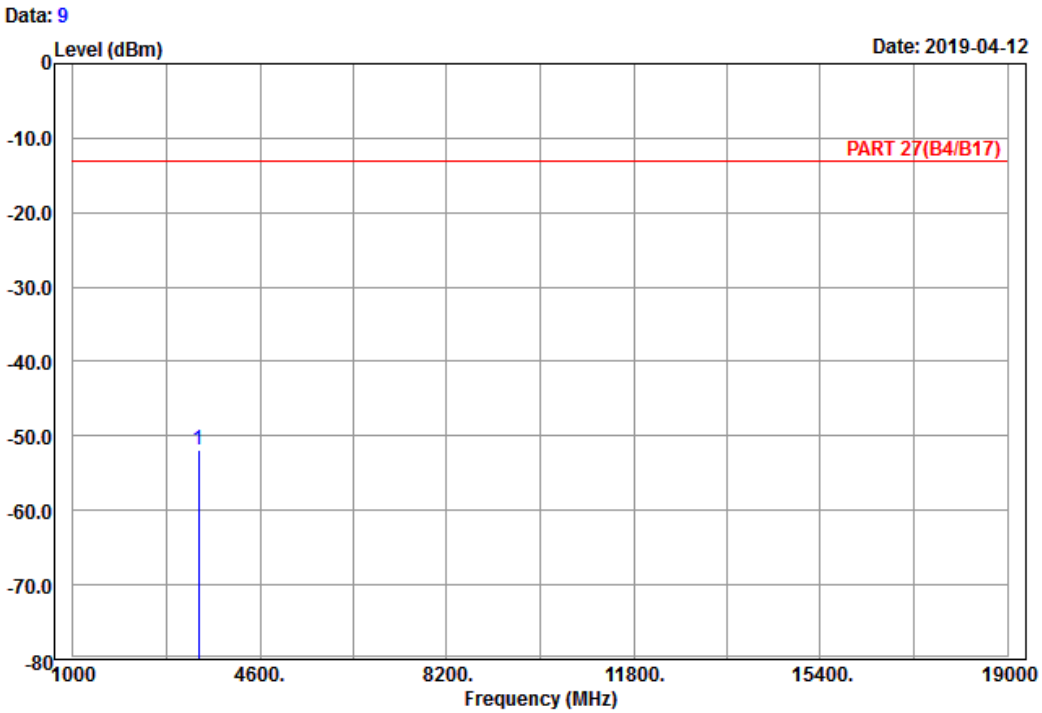


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20393
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3508.60	-52.72	-67.00	-13.00	-39.72	14.28	Peak
2 pp	5262.90	-46.38	-66.58	-13.00	-33.38	20.20	Peak

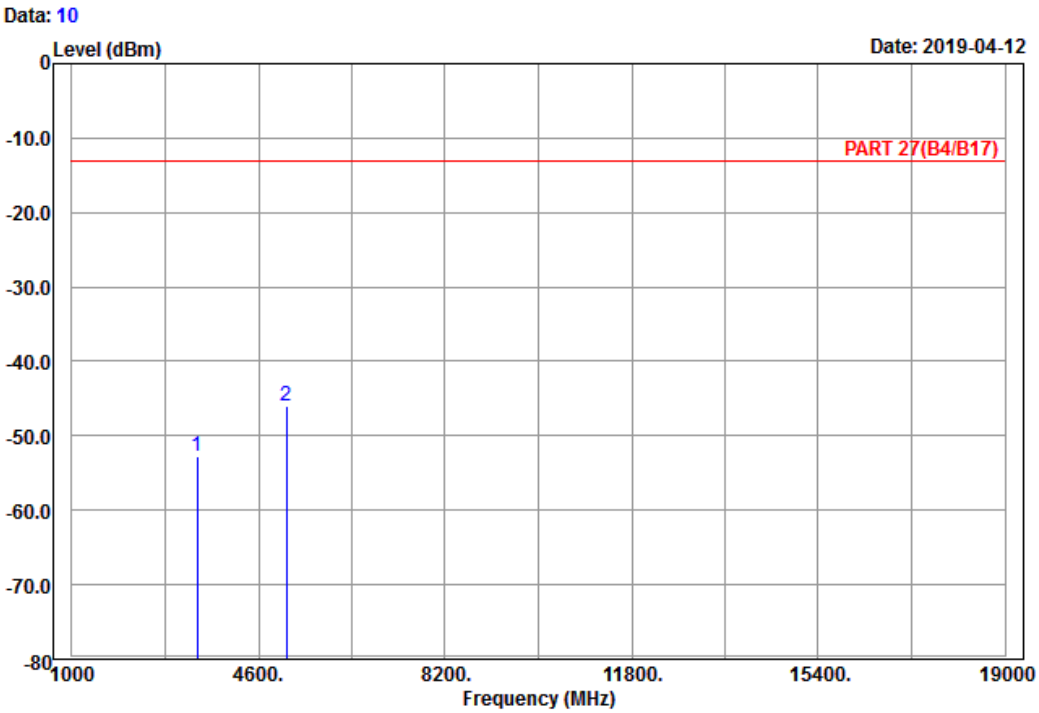
Channel Bandwidth: 5 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH19975
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3425.00	-51.90	-66.27	-13.00	-38.90	14.37	Peak

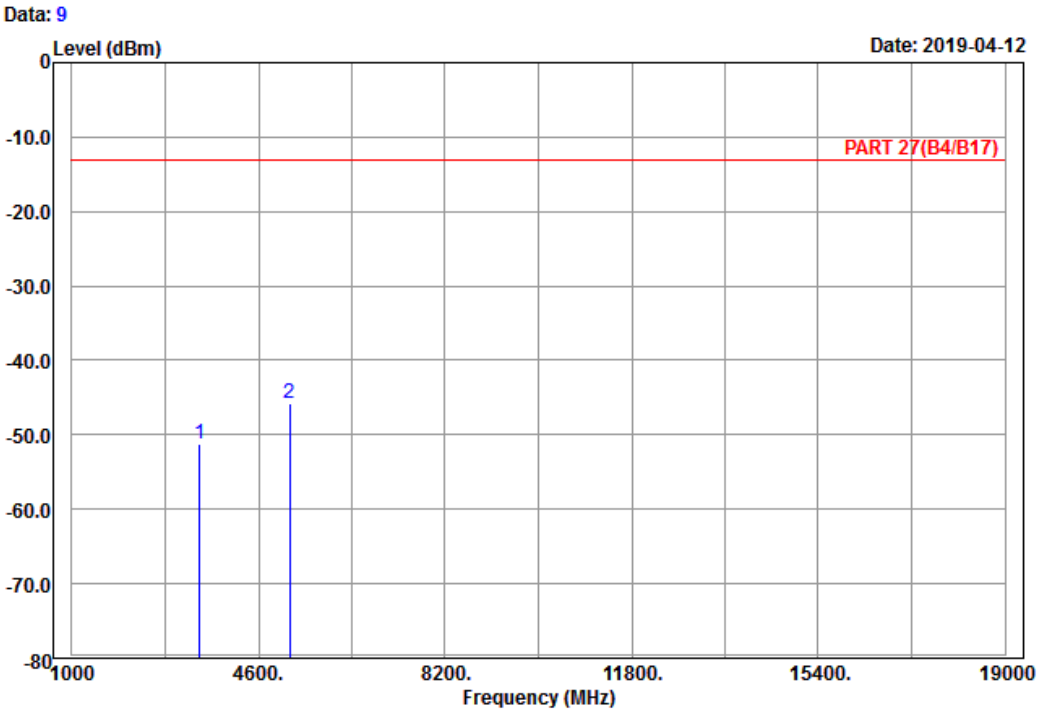


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH19975
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3425.00	-52.80	-67.17	-13.00	-39.80	14.37	Peak
2 pp	5137.50	-45.92	-65.73	-13.00	-32.92	19.81	Peak

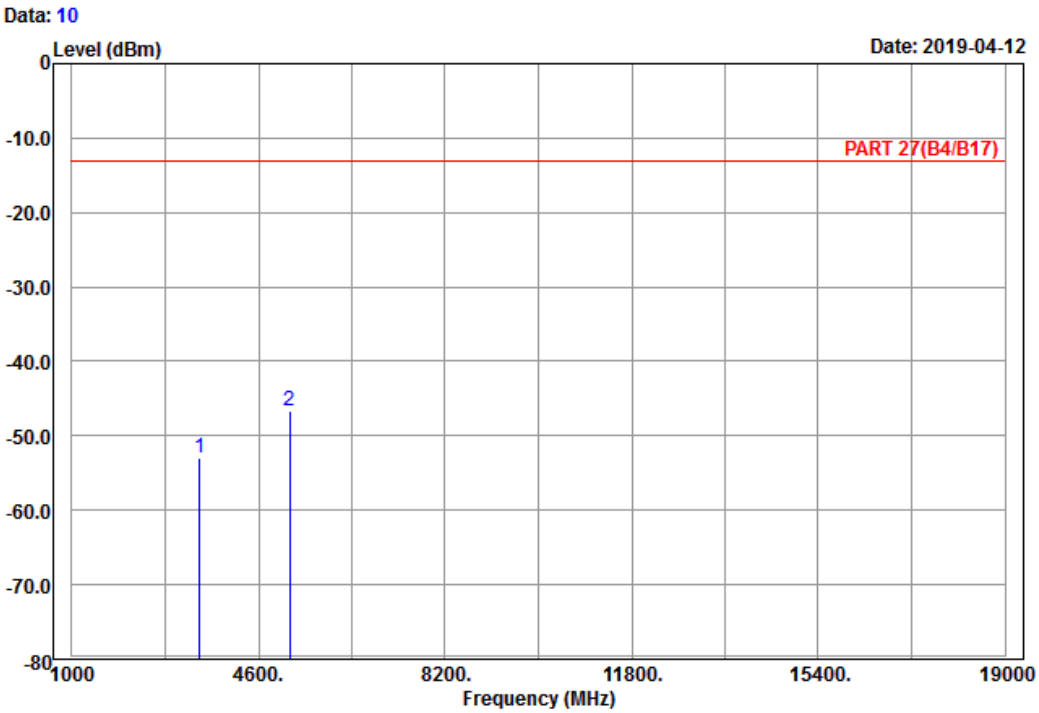
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-51.14	-65.48	-13.00	-38.14	14.34	Peak
2 pp	5197.50	-45.68	-65.80	-13.00	-32.68	20.12	Peak



Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-53.04	-67.38	-13.00	-40.04	14.34	Peak
2 pp	5197.50	-46.64	-66.76	-13.00	-33.64	20.12	Peak

High Channel

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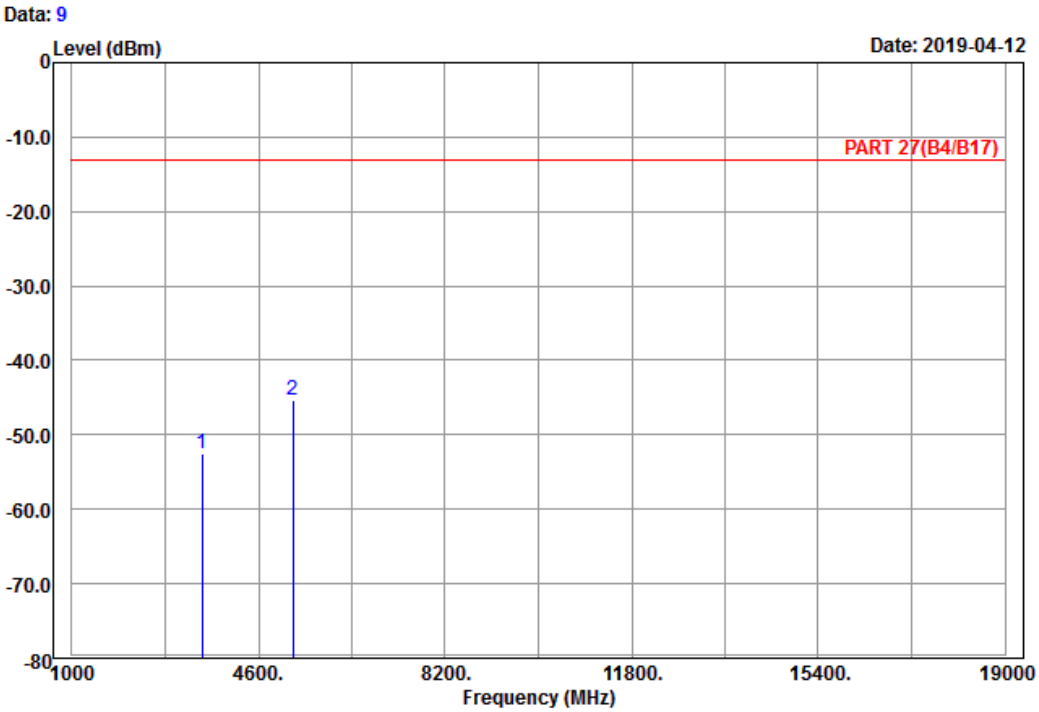
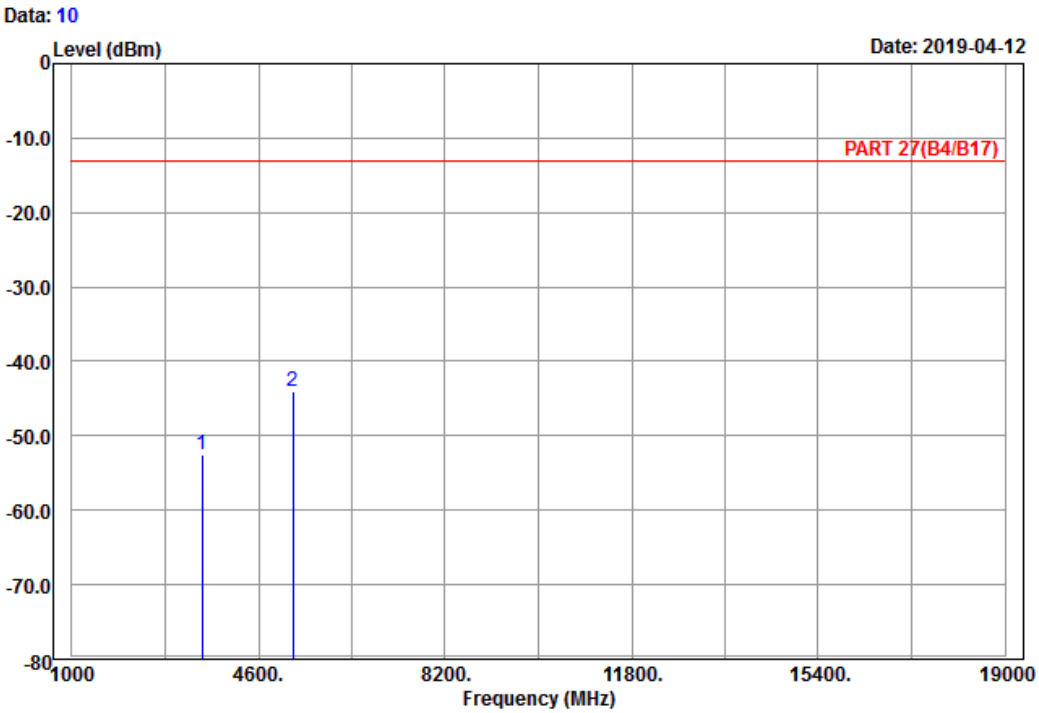


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20375
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3505.00	-52.47	-66.75	-13.00	-39.47	14.28	Peak
2 pp	5257.50	-45.43	-65.63	-13.00	-32.43	20.20	Peak



Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20375
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3505.00	-52.43	-66.71	-13.00	-39.43	14.28	Peak
2 pp	5257.50	-44.03	-64.23	-13.00	-31.03	20.20	Peak

Channel Bandwidth: 20 MHz / QPSK
Low Channel

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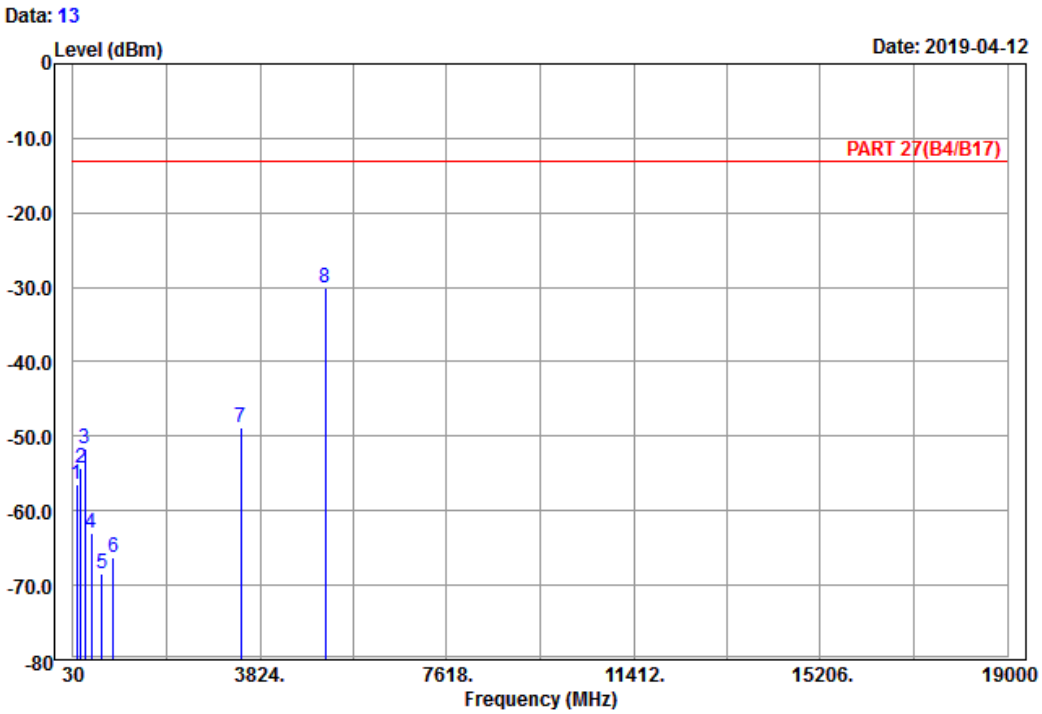
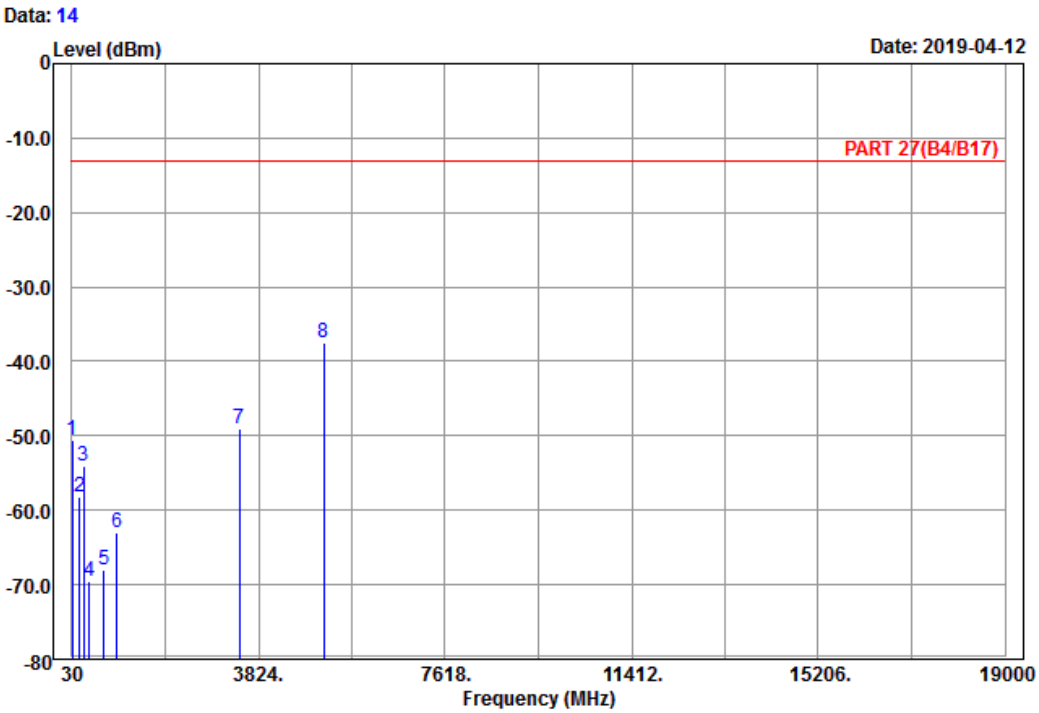


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20050
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	100.47	-56.49	-46.49	-13.00	-43.49	-10.00	Peak
2	190.11	-54.23	-48.50	-13.00	-41.23	-5.73	Peak
3	271.38	-51.55	-45.85	-13.00	-38.55	-5.70	Peak
4	396.60	-62.97	-60.07	-13.00	-49.97	-2.90	Peak
5	621.30	-68.54	-68.72	-13.00	-55.54	0.18	Peak
6	853.70	-66.25	-67.81	-13.00	-53.25	1.56	Peak
7	3440.00	-48.82	-63.17	-13.00	-35.82	14.35	Peak
8 pp	5160.00	-29.98	-49.90	-13.00	-16.98	19.92	Peak



Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20050
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	34.32	-50.51	-39.53	-13.00	-37.51	-10.98	Peak
2	194.70	-58.16	-52.20	-13.00	-45.16	-5.96	Peak
3	272.19	-54.06	-48.35	-13.00	-41.06	-5.71	Peak
4	381.90	-69.56	-65.89	-13.00	-56.56	-3.67	Peak
5	688.50	-68.11	-67.79	-13.00	-55.11	-0.32	Peak
6	937.70	-63.08	-67.66	-13.00	-50.08	4.58	Peak
7	3440.00	-48.94	-63.29	-13.00	-35.94	14.35	Peak
8 pp	5160.00	-37.50	-57.42	-13.00	-24.50	19.92	Peak

Middle Channel

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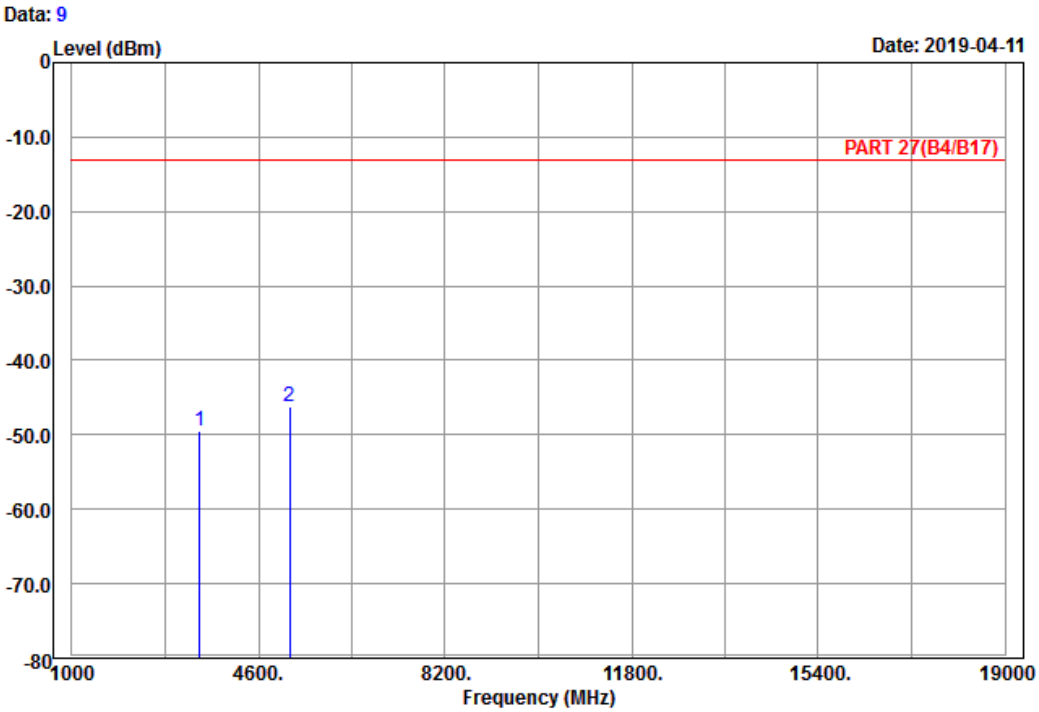
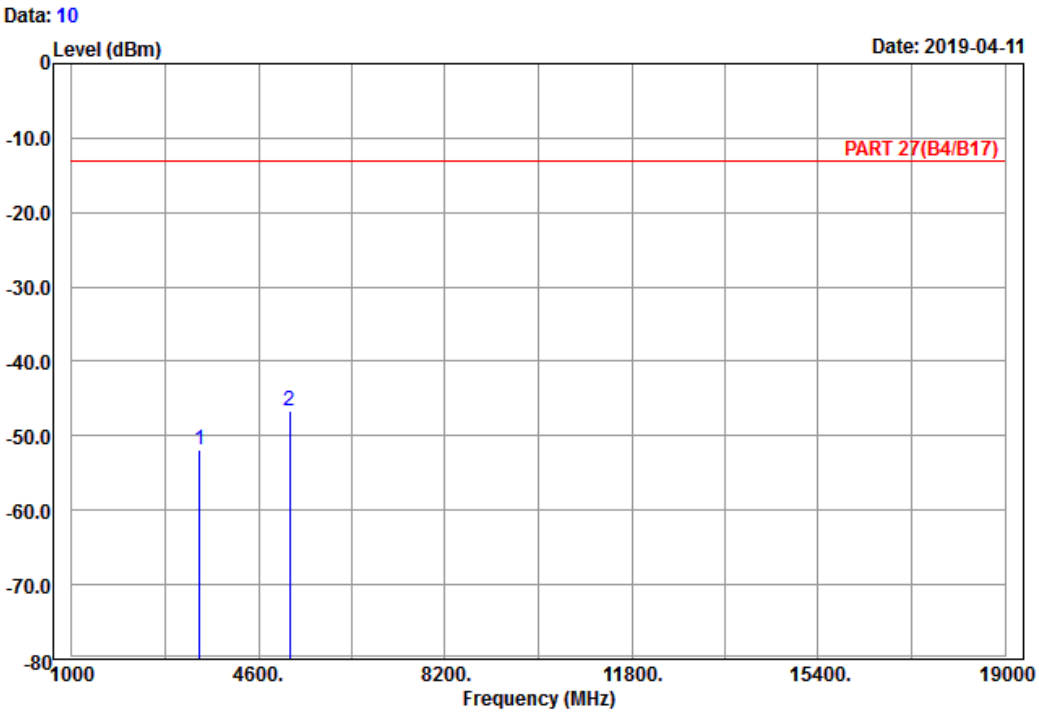


Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-49.41	-63.75	-13.00	-36.41	14.34	Peak
2 pp	5197.50	-46.14	-66.26	-13.00	-33.14	20.12	Peak

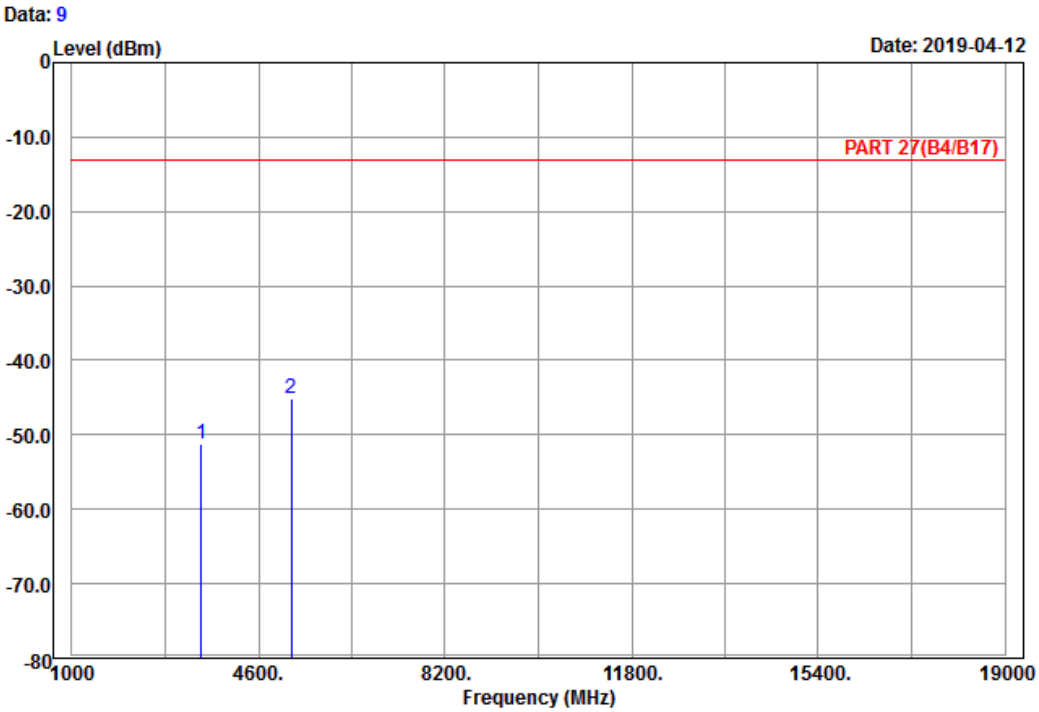


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20175
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3465.00	-51.80	-66.14	-13.00	-38.80	14.34	Peak
2 pp	5197.50	-46.69	-66.81	-13.00	-33.69	20.12	Peak

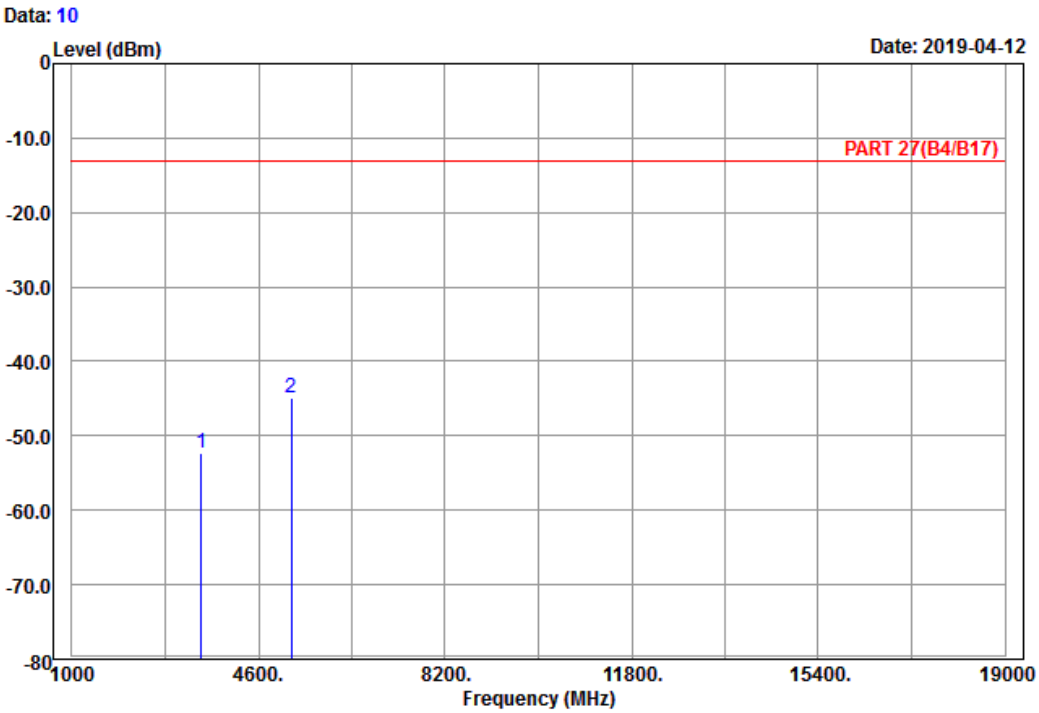
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 4_Link_CH20300
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3490.00	-51.22	-65.53	-13.00	-38.22	14.31	Peak
2 pp	5235.00	-45.23	-65.39	-13.00	-32.23	20.16	Peak

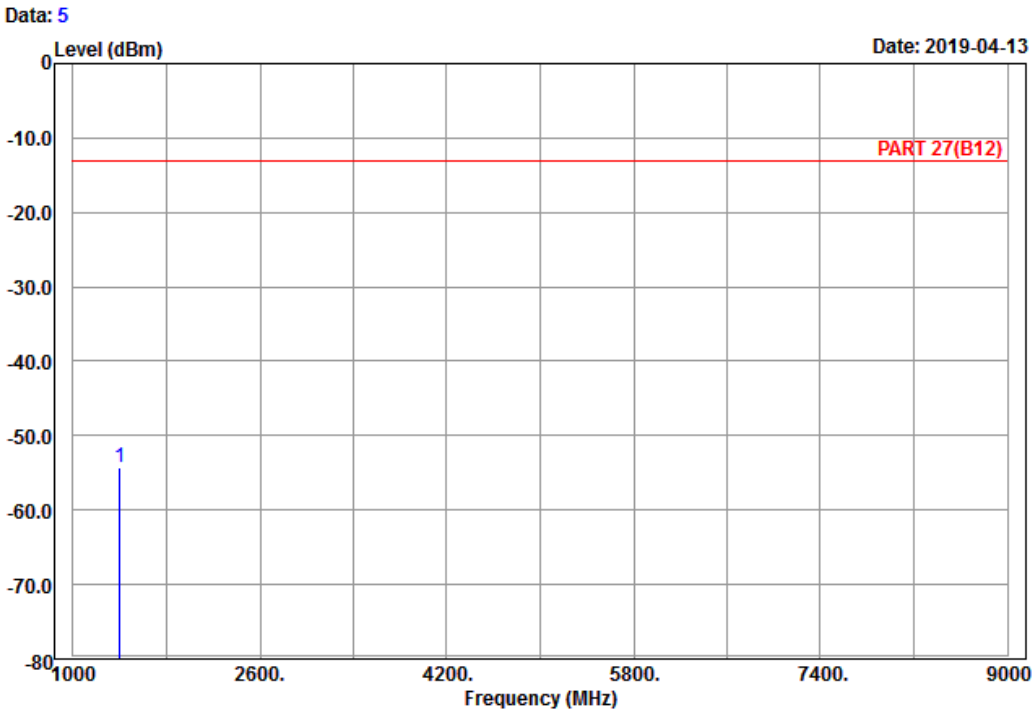


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 4_Link_CH20300
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3490.00	-52.36	-66.67	-13.00	-39.36	14.31	Peak
2 pp	5235.00	-44.95	-65.11	-13.00	-31.95	20.16	Peak

LTE Band 12
Channel Bandwidth: 1.4 MHz / QPSK
Low Channel

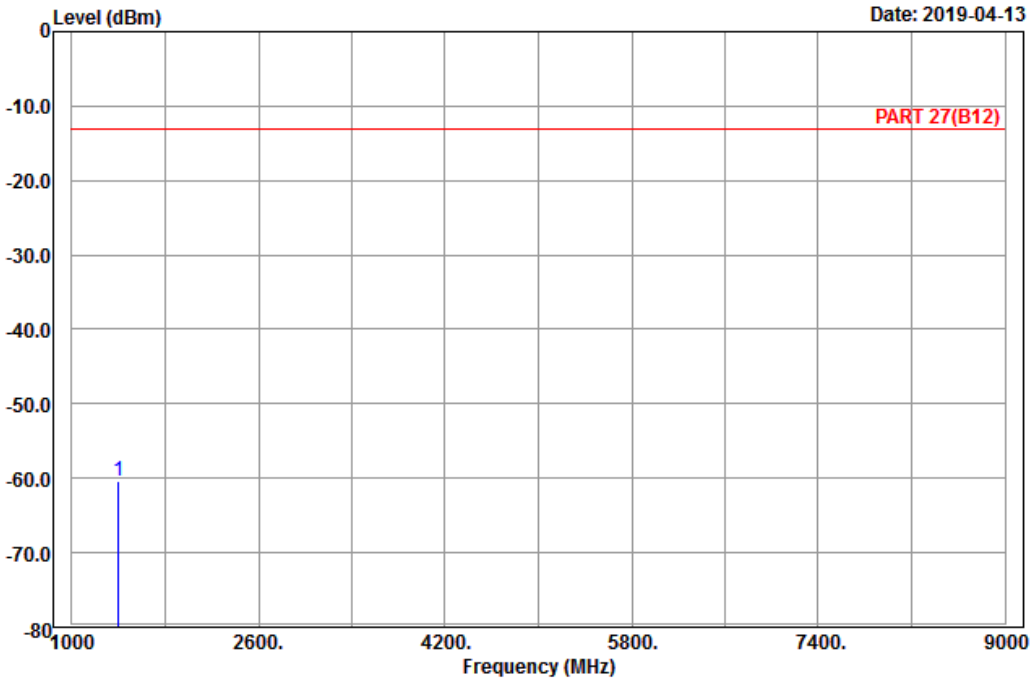
Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23017
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1399.40	-54.26	-60.36	-13.00	-41.26	6.10	Peak

Data: 6

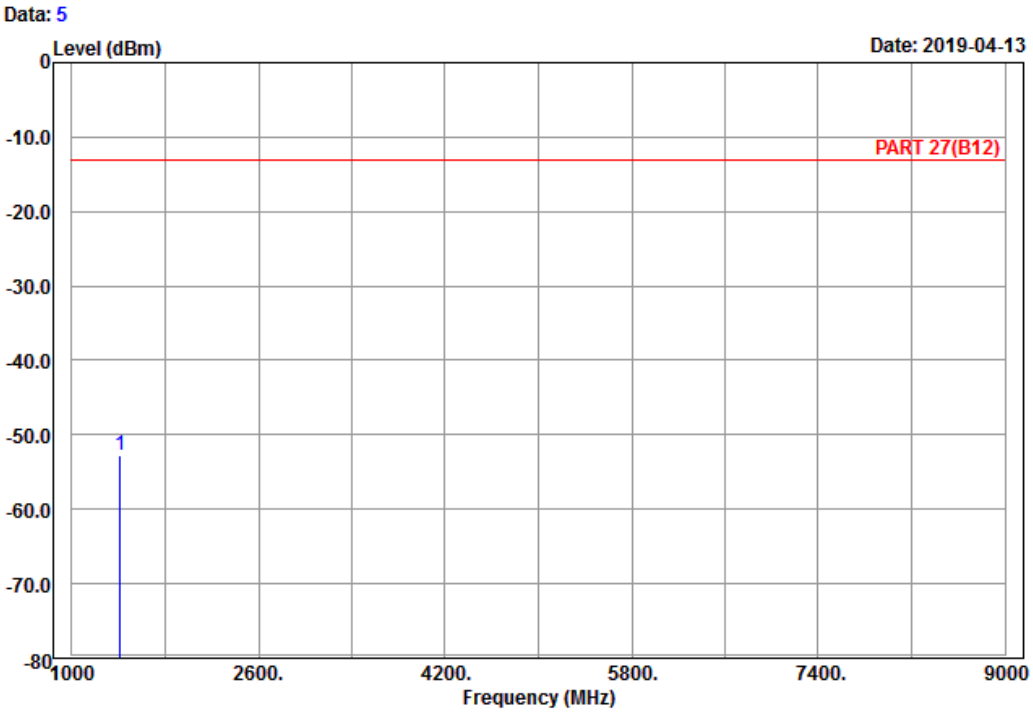


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23017
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1399.40	-60.41	-66.51	-13.00	-47.41	6.10	Peak

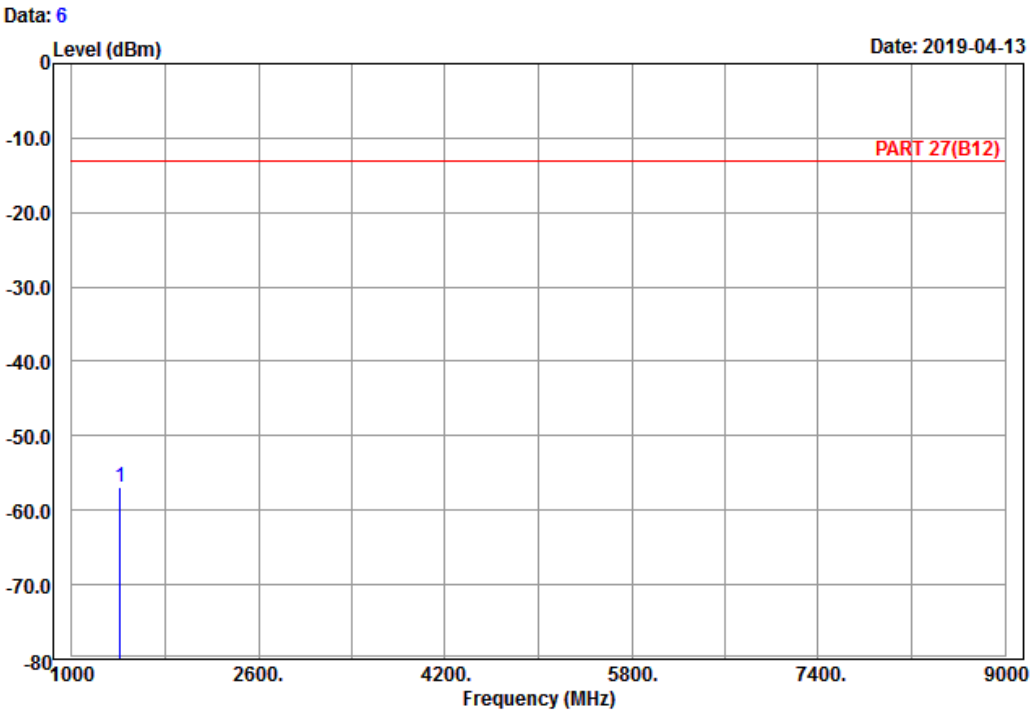
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-52.75	-59.11	-13.00	-39.75	6.36	Peak

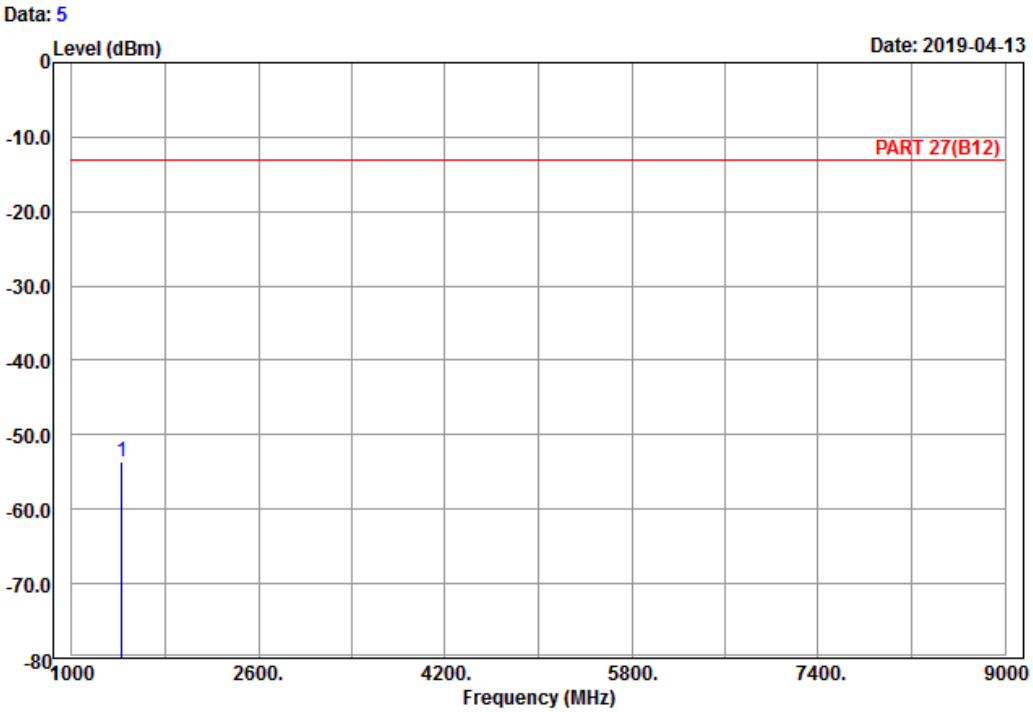


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-56.86	-63.22	-13.00	-43.86	6.36	Peak

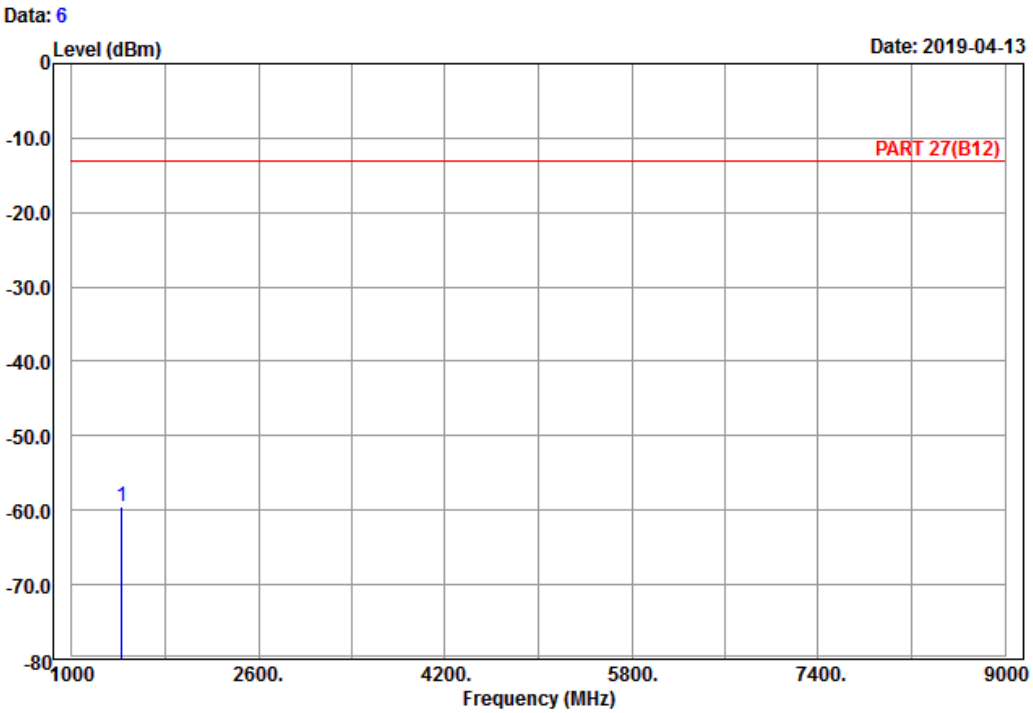
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23173
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1430.60	-53.57	-59.81	-13.00	-40.57	6.24	Peak

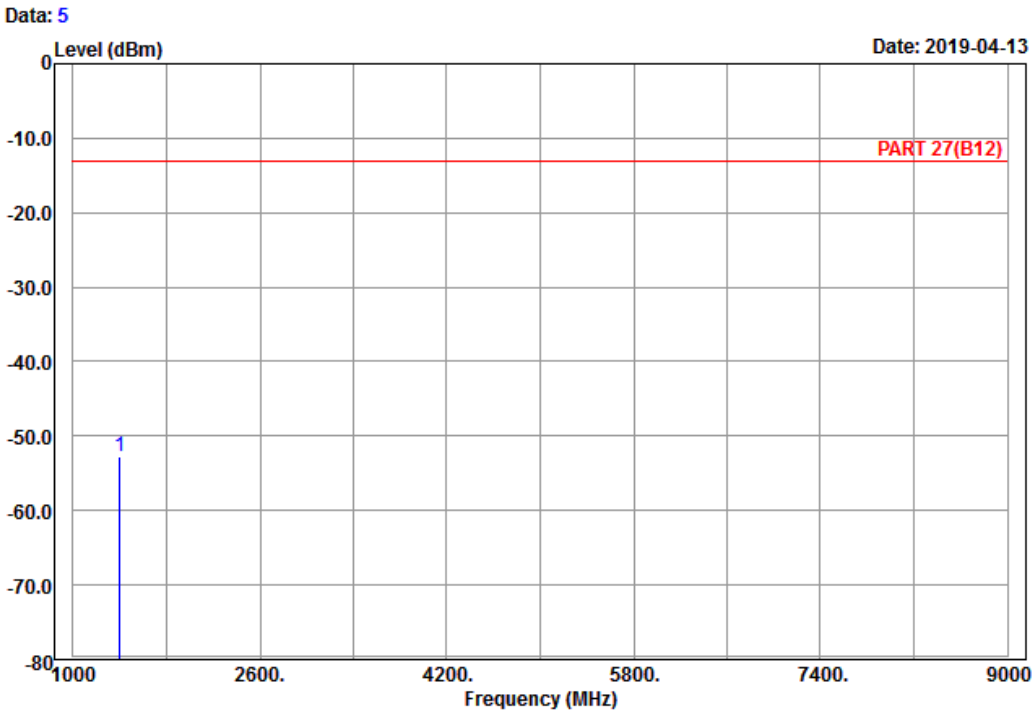


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23173
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1430.60	-59.46	-65.70	-13.00	-46.46	6.24	Peak

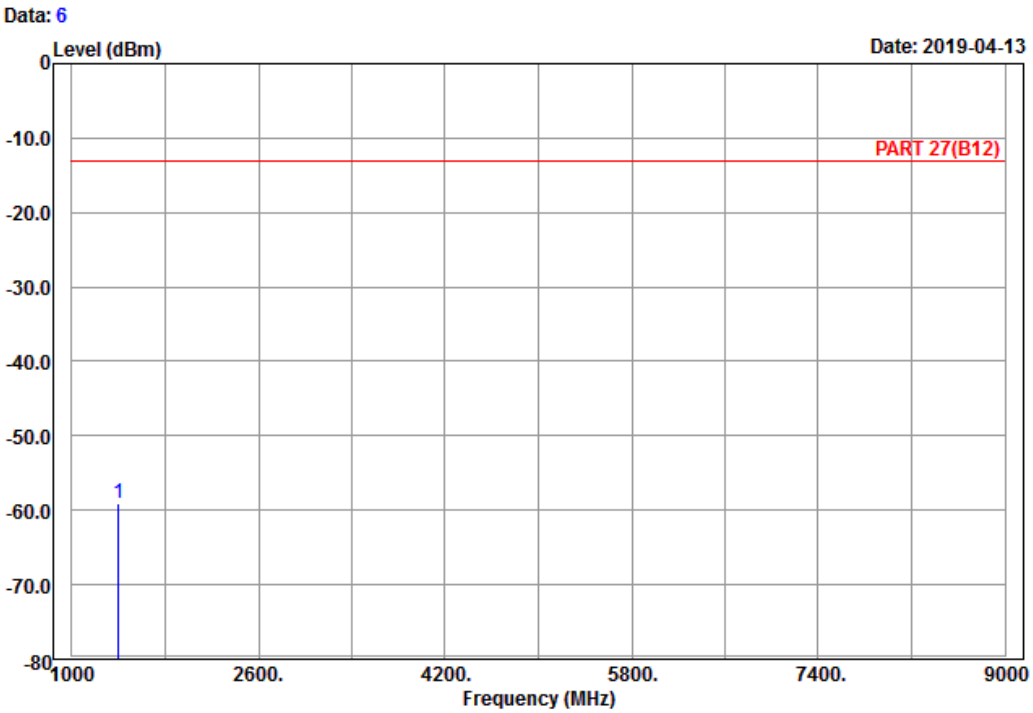
Channel Bandwidth: 5 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23035
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1403.00	-52.75	-58.85	-13.00	-39.75	6.10	Peak

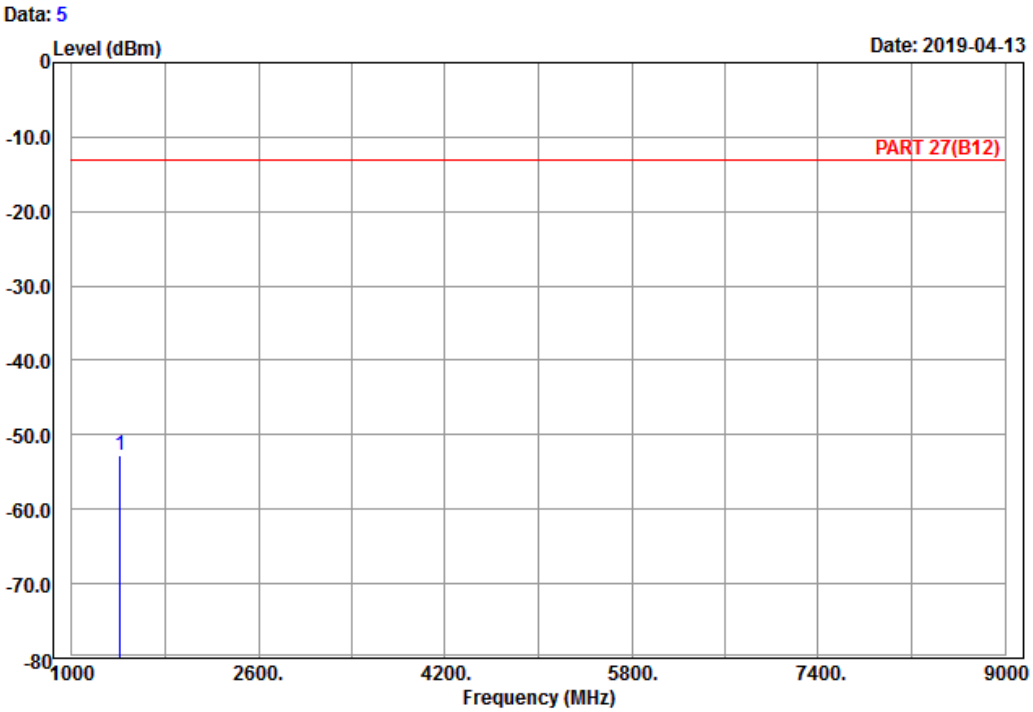


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23035
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1403.00	-59.05	-65.15	-13.00	-46.05	6.10	Peak

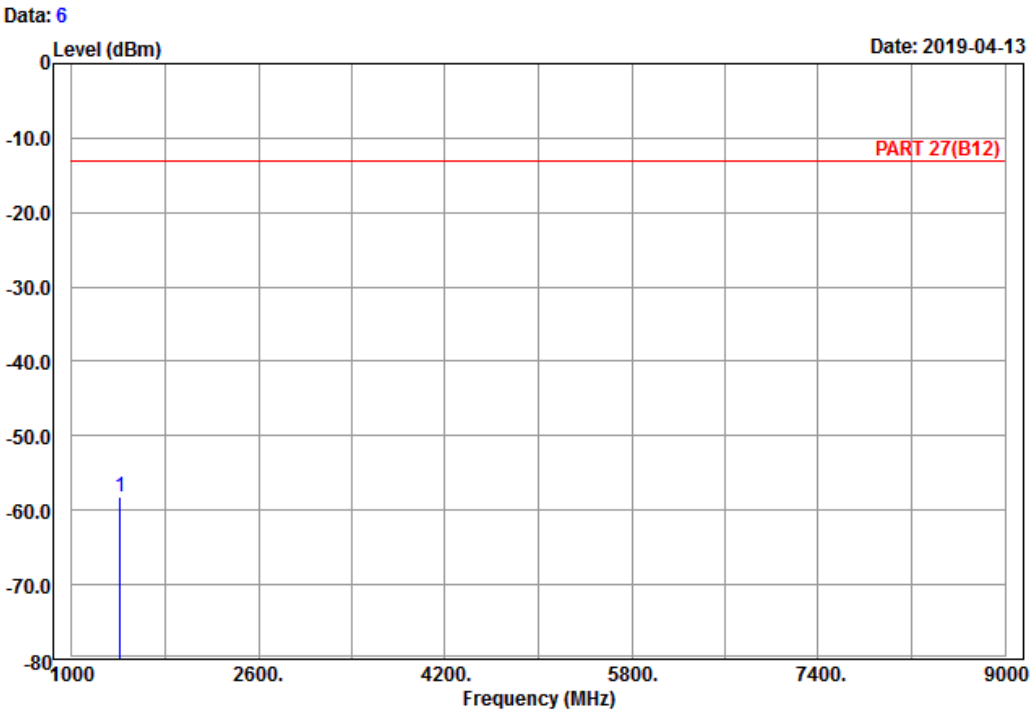
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-52.68	-59.04	-13.00	-39.68	6.36	Peak

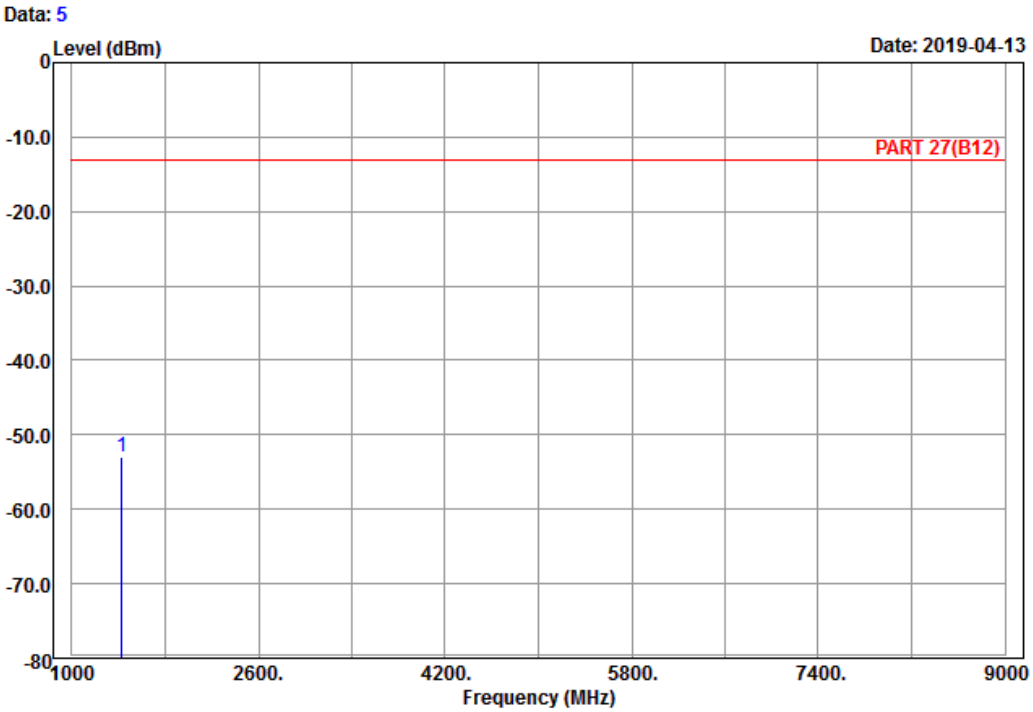


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-58.22	-64.58	-13.00	-45.22	6.36	Peak

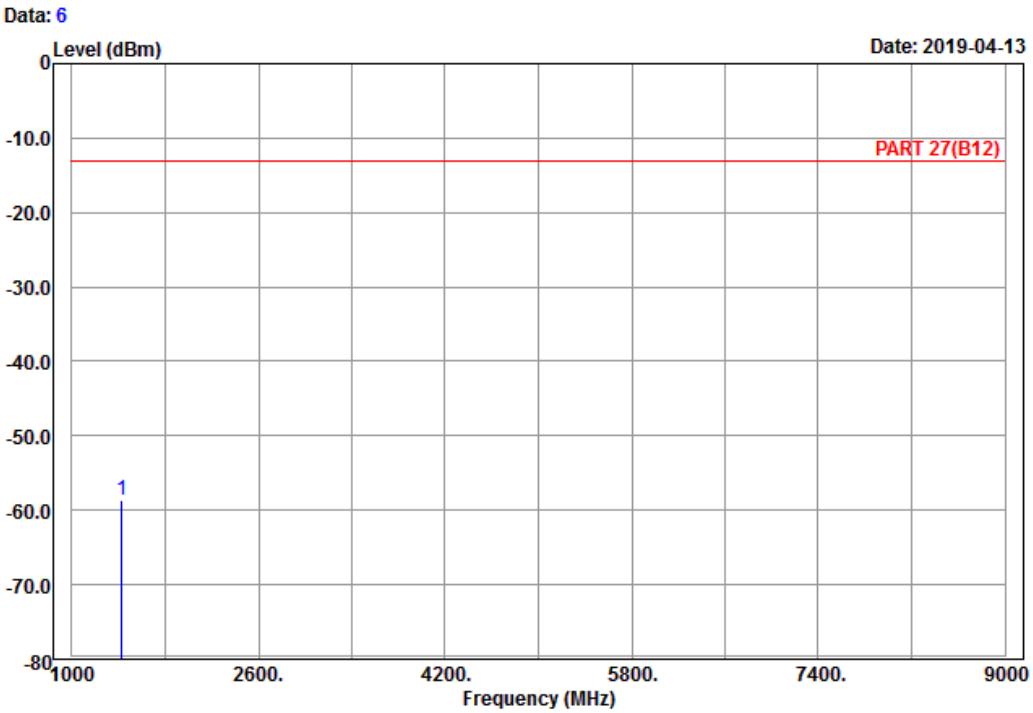
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23155
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1427.00	-53.05	-59.29	-13.00	-40.05	6.24	Peak

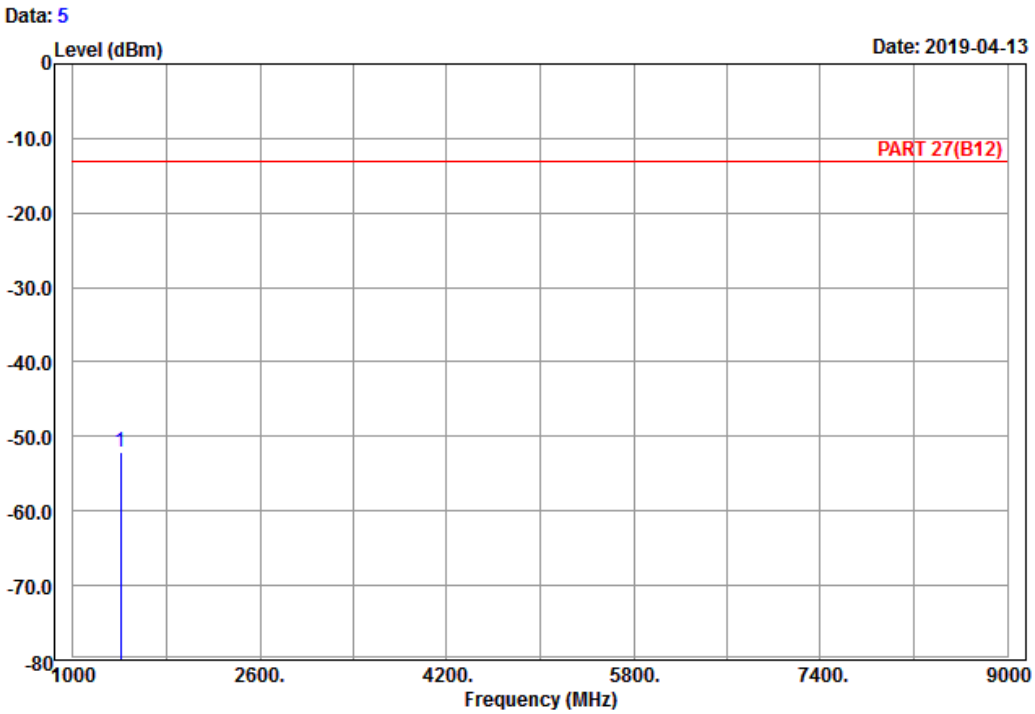


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23155
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1427.00	-58.57	-64.81	-13.00	-45.57	6.24	Peak

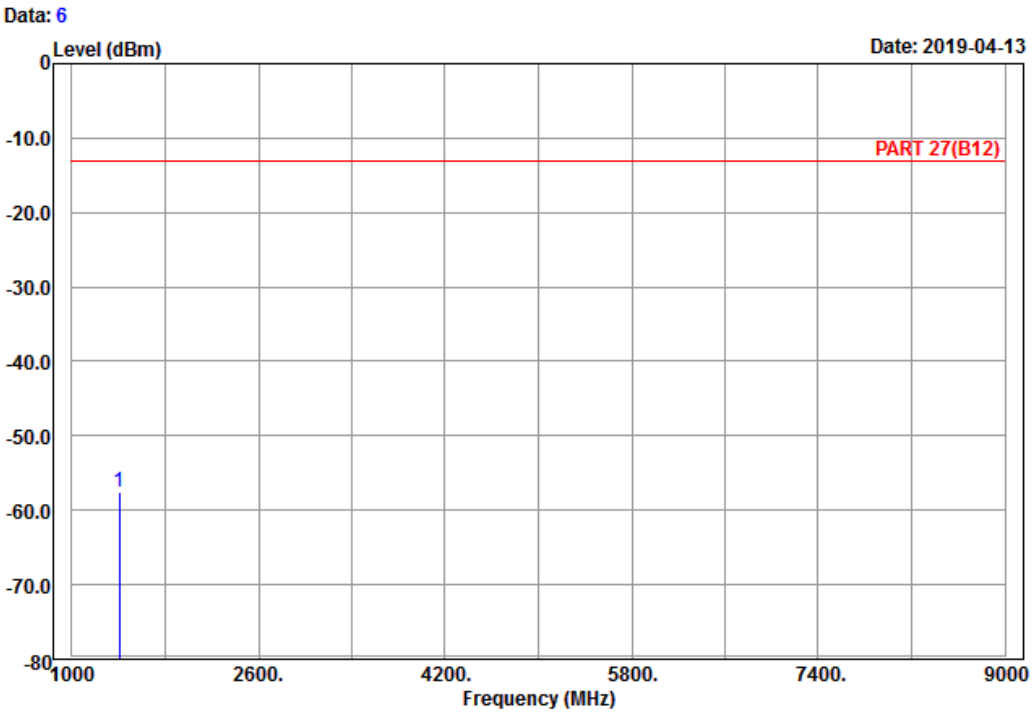
Channel Bandwidth: 10 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23060
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1408.00	-52.12	-58.48	-13.00	-39.12	6.36	Peak

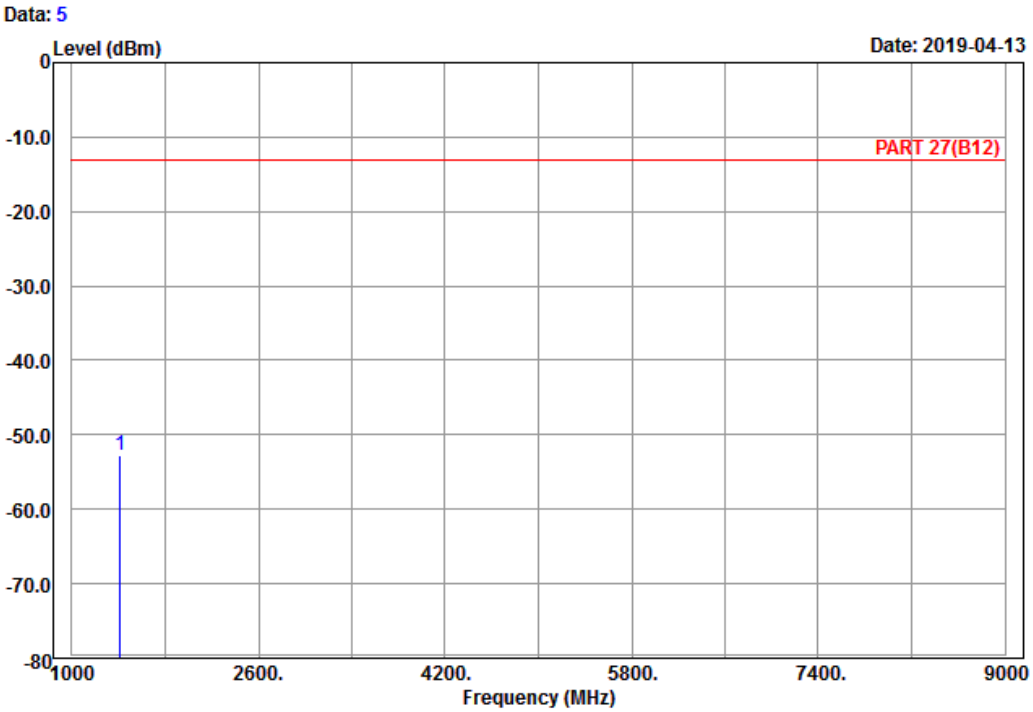


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23060
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1408.00	-57.60	-63.96	-13.00	-44.60	6.36	Peak

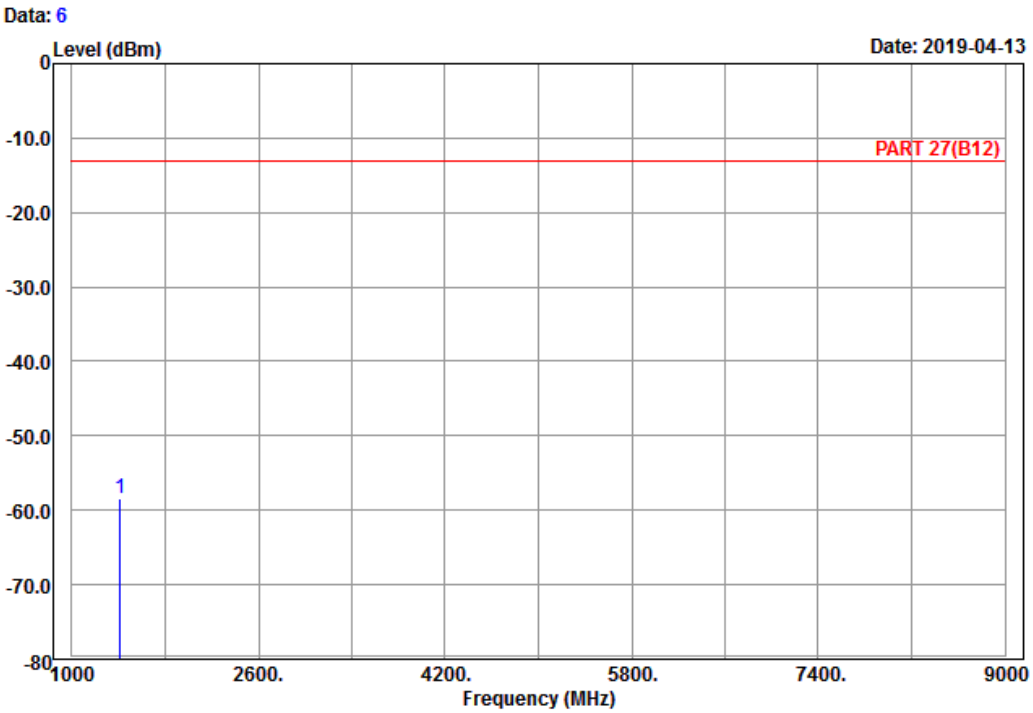
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-52.74	-59.10	-13.00	-39.74	6.36	Peak

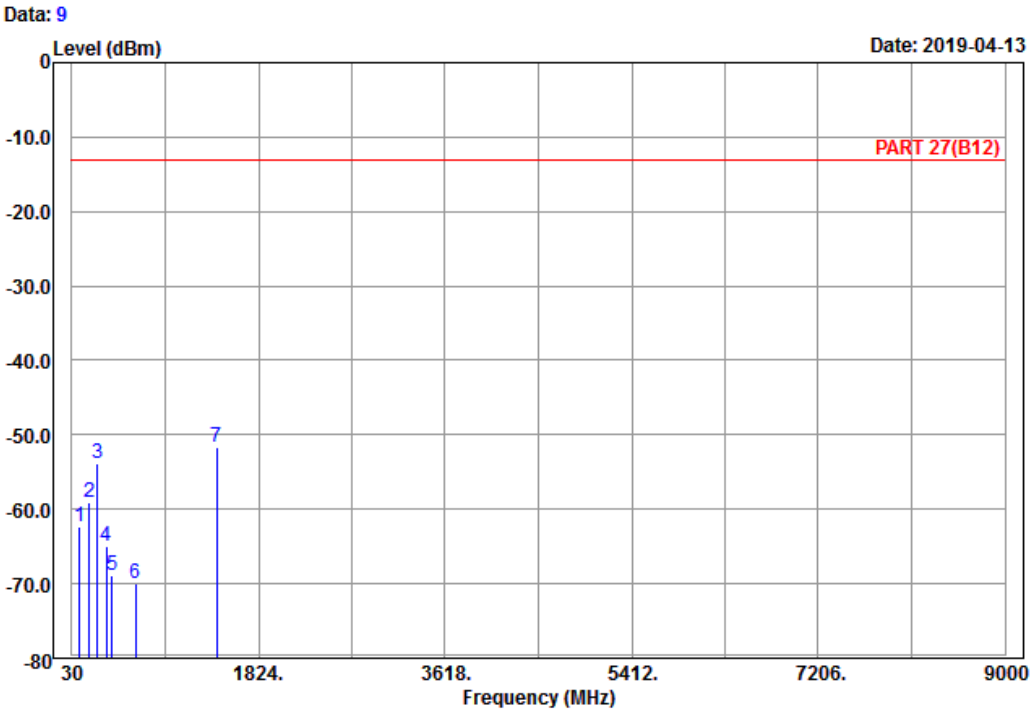


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23095
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1415.00	-58.46	-64.82	-13.00	-45.46	6.36	Peak

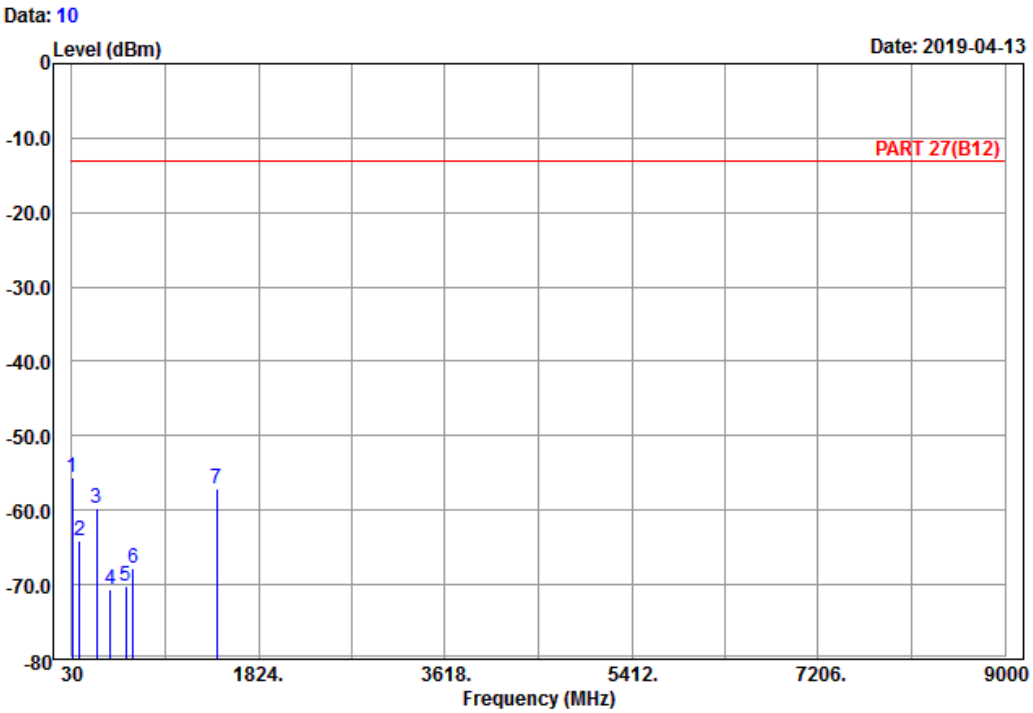
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B12) Horizontal
Remark : LTE_Band 12_Link_CH23130
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	103.98	-62.39	-52.74	-13.00	-49.39	-9.65	Peak
2	194.97	-59.18	-53.22	-13.00	-46.18	-5.96	Peak
3	275.97	-53.82	-48.07	-13.00	-40.82	-5.75	Peak
4	365.10	-64.86	-60.26	-13.00	-51.86	-4.60	Peak
5	415.50	-68.98	-65.90	-13.00	-55.98	-3.08	Peak
6	641.60	-69.87	-69.82	-13.00	-56.87	-0.05	Peak
7 pp	1422.00	-51.70	-58.06	-13.00	-38.70	6.36	Peak

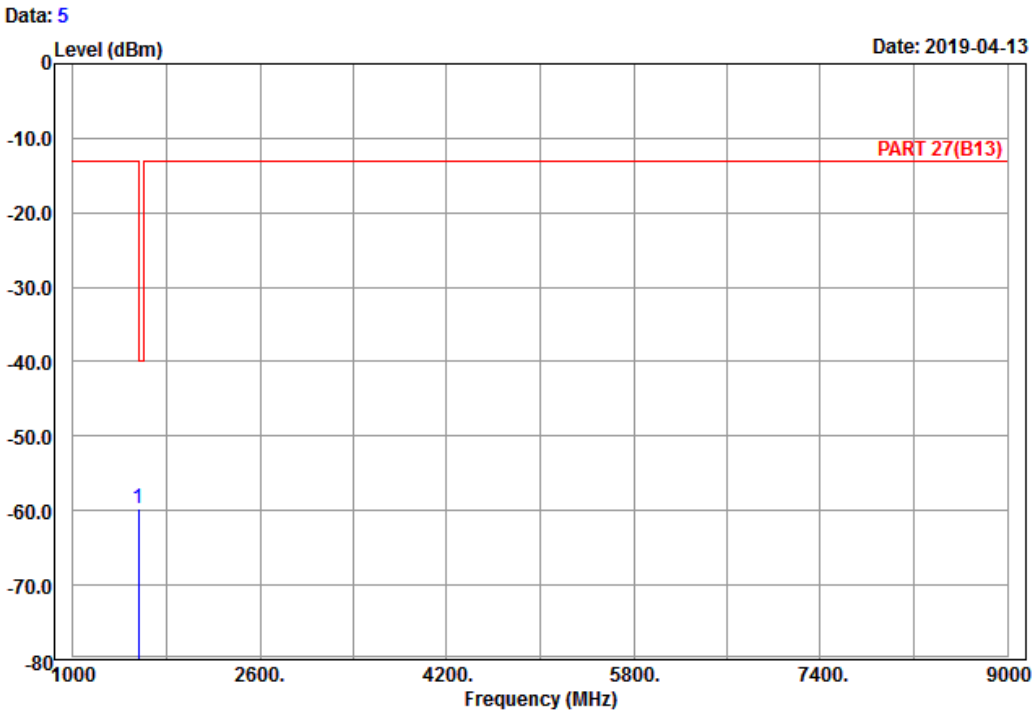


Site : 966 chamber 1
Condition: PART 27(B12) Vertical
Remark : LTE_Band 12_Link_CH23130
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	35.94	-55.57	-44.85	-13.00	-42.57	-10.72	Peak
2	102.36	-64.11	-54.34	-13.00	-51.11	-9.77	Peak
3	270.03	-59.73	-54.05	-13.00	-46.73	-5.68	Peak
4	402.20	-70.66	-67.86	-13.00	-57.66	-2.80	Peak
5	545.70	-70.17	-68.22	-13.00	-57.17	-1.95	Peak
6	622.00	-67.77	-67.95	-13.00	-54.77	0.18	Peak
7	1422.00	-57.16	-63.52	-13.00	-44.16	6.36	Peak

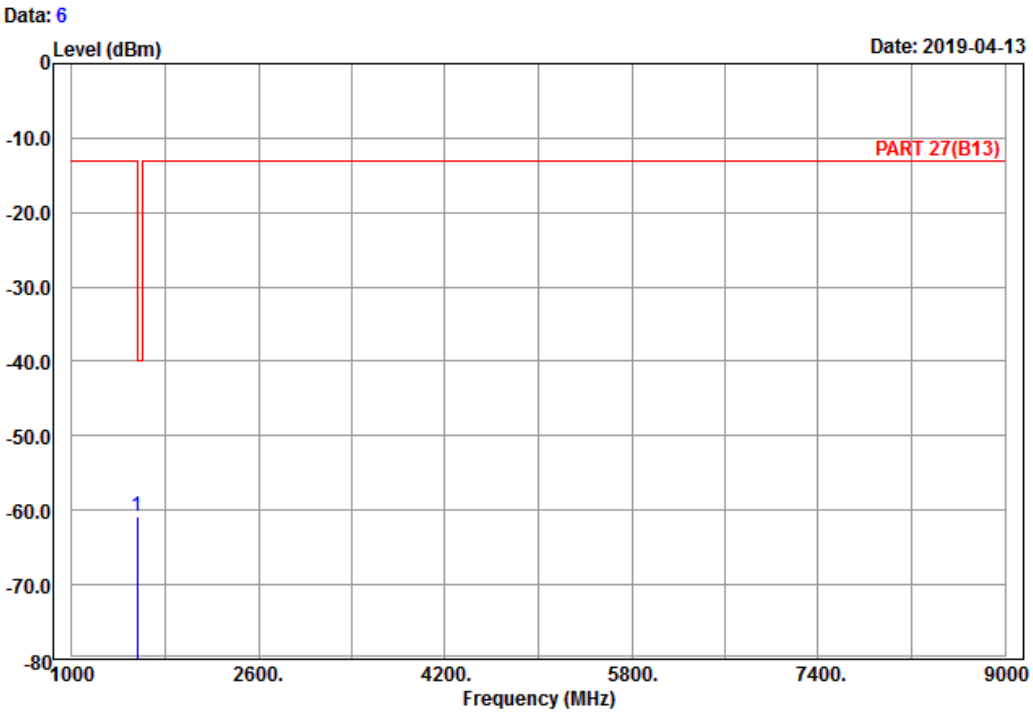
LTE Band 13
Channel Bandwidth: 5 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B13) Horizontal
Remark : LTE_Band 13_Link_CH23205
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1559.00	-59.71	-66.57	-40.00	-19.71	6.86	Peak

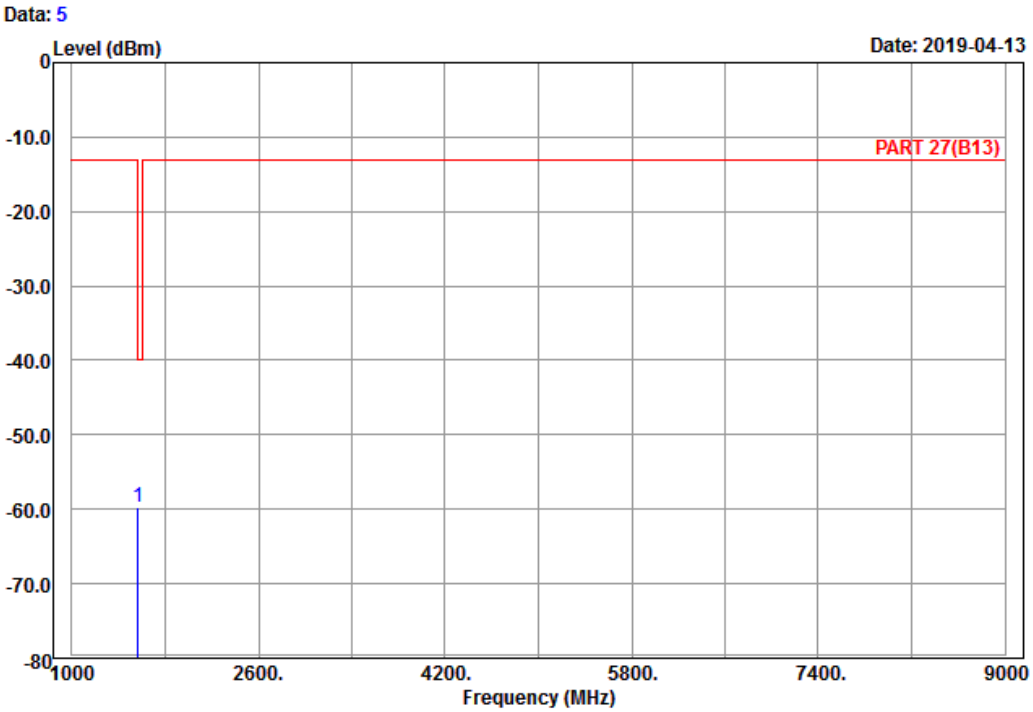


Site : 966 chamber 1
Condition: PART 27(B13) Vertical
Remark : LTE_Band 13_Link_CH23205
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1559.00	-60.91	-67.77	-40.00	-20.91	6.86	Peak

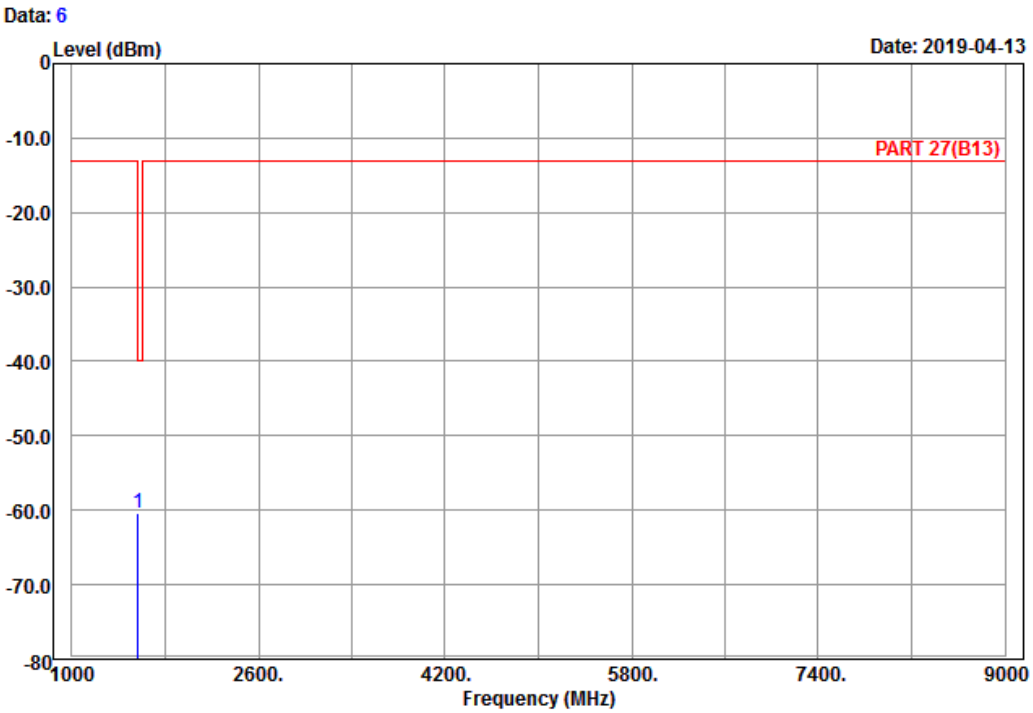
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B13) Horizontal
Remark : LTE_Band 13_Link_CH23230
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1564.00	-59.77	-66.63	-40.00	-19.77	6.86	Peak

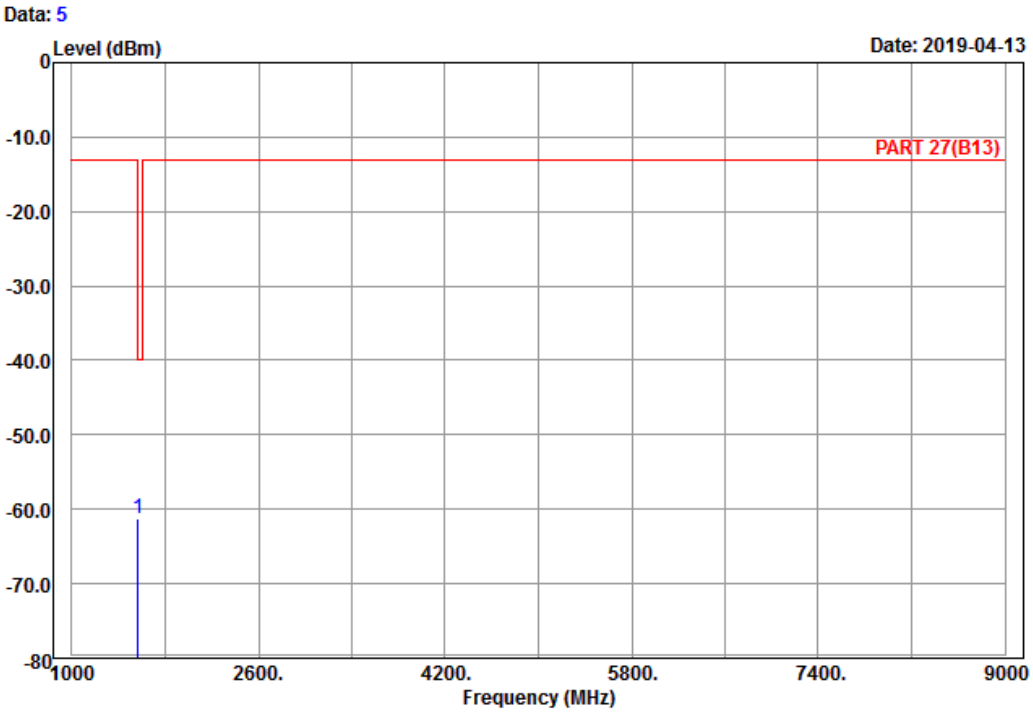


Site : 966 chamber 1
Condition: PART 27(B13) Vertical
Remark : LTE_Band 13_Link_CH23230
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1564.00	-60.40	-67.26	-40.00	-20.40	6.86	Peak

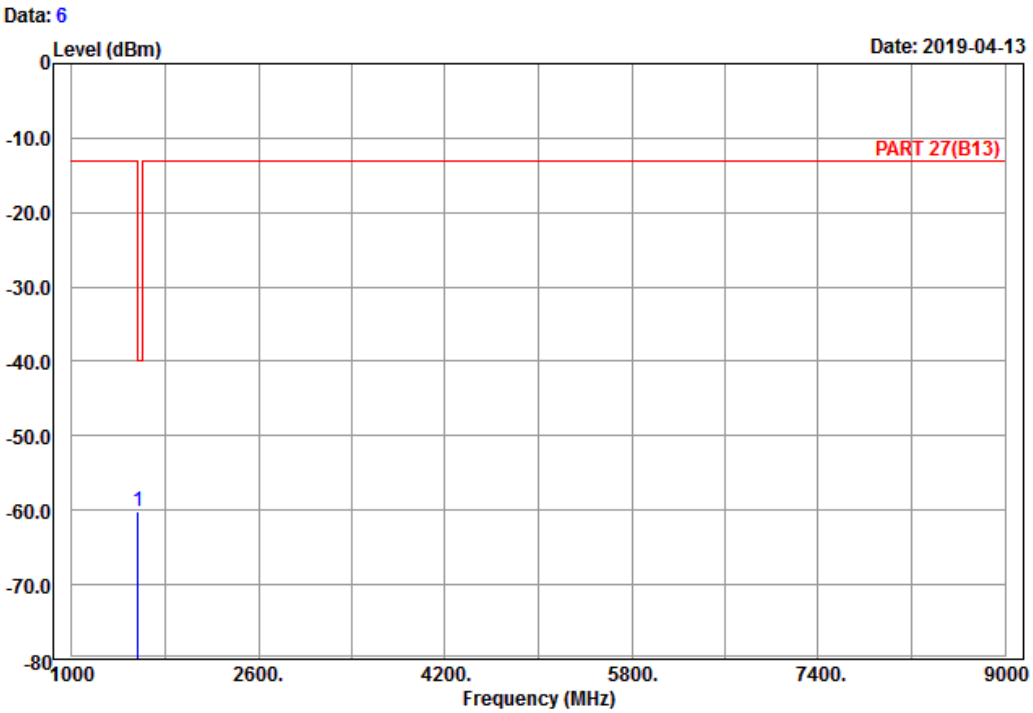
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B13) Horizontal
Remark : LTE_Band 13_Link_CH23255
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1569.00	-61.26	-68.30	-40.00	-21.26	7.04	Peak

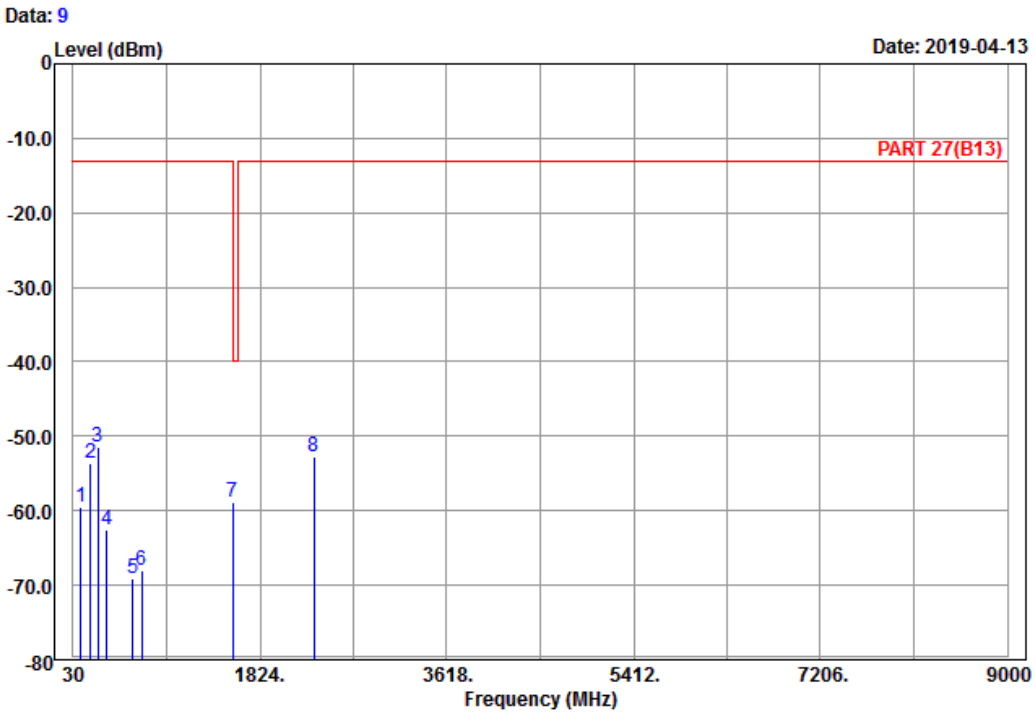


Site : 966 chamber 1
Condition: PART 27(B13) Vertical
Remark : LTE_Band 13_Link_CH23255
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1569.00	-60.11	-67.15	-40.00	-20.11	7.04	Peak

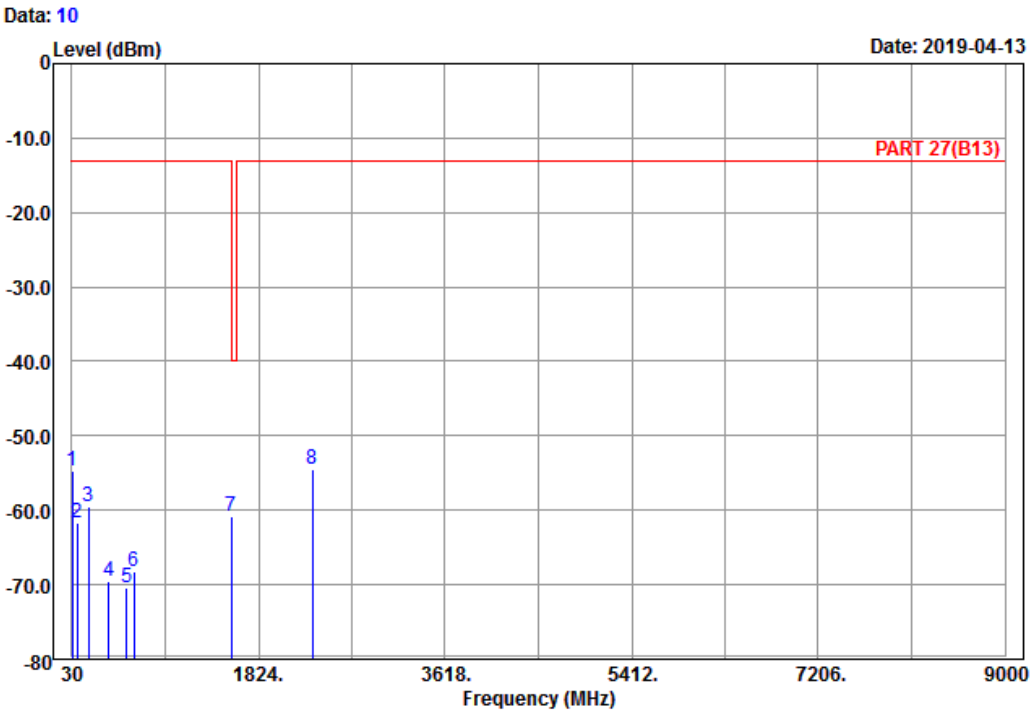
Channel Bandwidth: 10 MHz / QPSK
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B13) Horizontal
Remark : LTE_Band 13_Link_CH23230
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	103.17	-59.53	-49.76	-13.00	-46.53	-9.77	Peak
2	195.78	-53.73	-47.73	-13.00	-40.73	-6.00	Peak
3	266.79	-51.48	-45.82	-13.00	-38.48	-5.66	Peak
4	357.40	-62.52	-57.56	-13.00	-49.52	-4.96	Peak
5	599.60	-69.02	-69.41	-13.00	-56.02	0.39	Peak
6	687.10	-68.10	-67.79	-13.00	-55.10	-0.31	Peak
7 pp	1564.00	-58.83	-65.69	-40.00	-18.83	6.86	Peak
8	2346.00	-52.70	-63.64	-13.00	-39.70	10.94	Peak

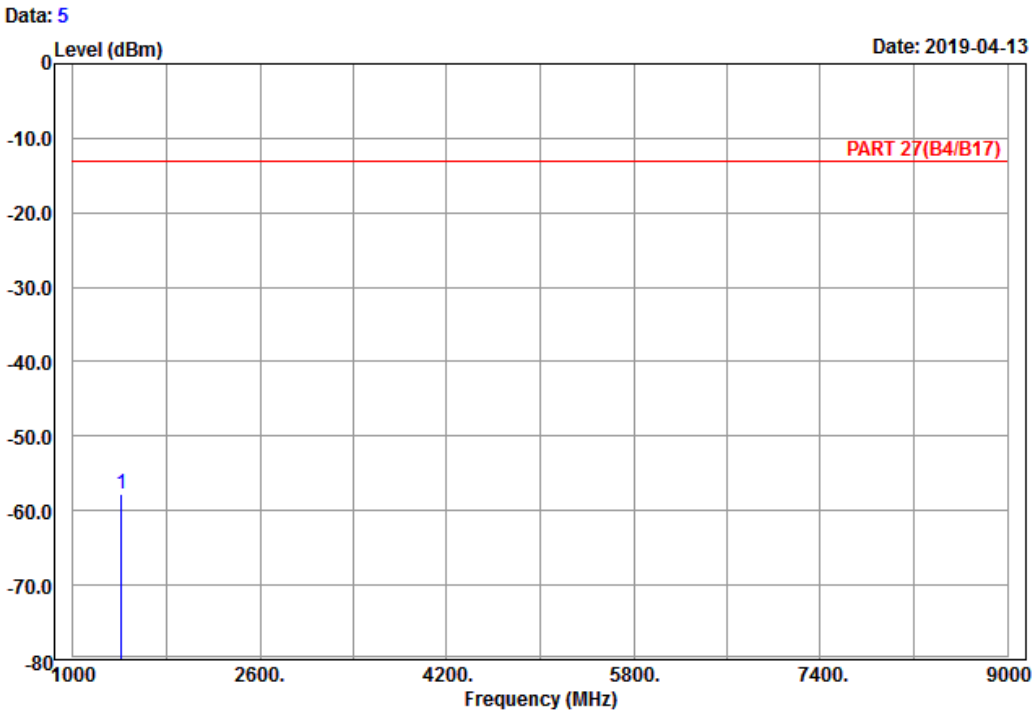


Site : 966 chamber 1
Condition: PART 27(B13) Vertical
Remark : LTE_Band 13_Link_CH23230
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	34.86	-54.72	-43.62	-13.00	-41.72	-11.10	Peak
2	83.19	-61.75	-50.31	-13.00	-48.75	-11.44	Peak
3	193.62	-59.56	-53.65	-13.00	-46.56	-5.91	Peak
4	387.50	-69.52	-66.16	-13.00	-56.52	-3.36	Peak
5	556.90	-70.51	-69.13	-13.00	-57.51	-1.38	Peak
6	626.90	-68.19	-68.32	-13.00	-55.19	0.13	Peak
7 pp	1564.00	-60.80	-67.66	-40.00	-20.80	6.86	Peak
8	2346.00	-54.40	-65.34	-13.00	-41.40	10.94	Peak

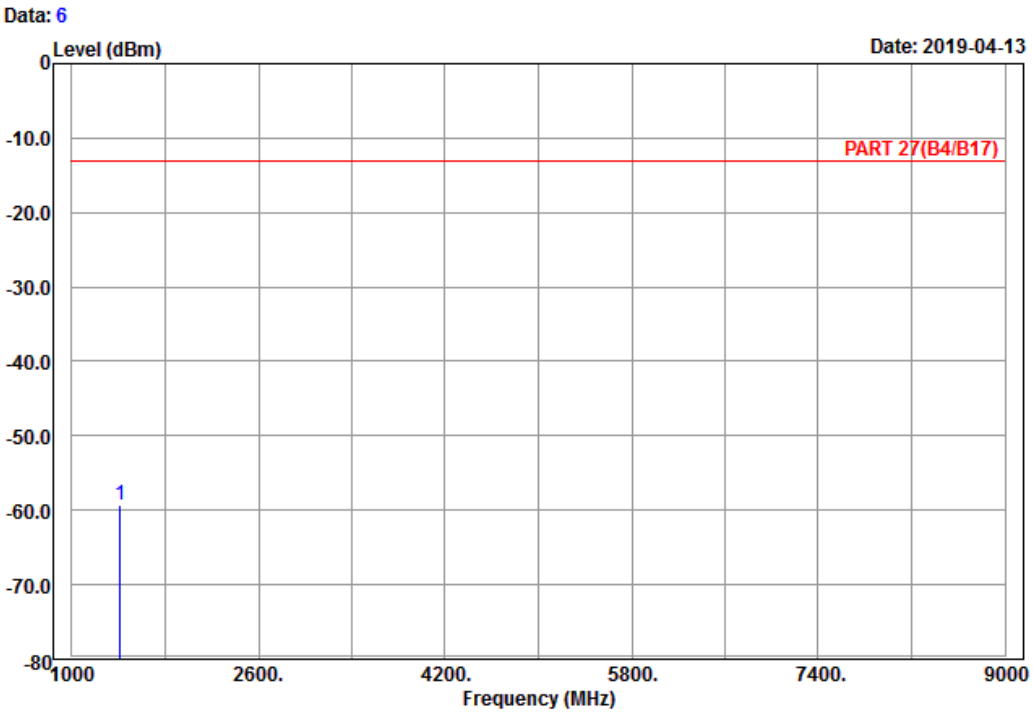
LTE Band 17
Channel Bandwidth: 5 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23755
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1413.00	-57.71	-64.07	-13.00	-44.71	6.36	Peak

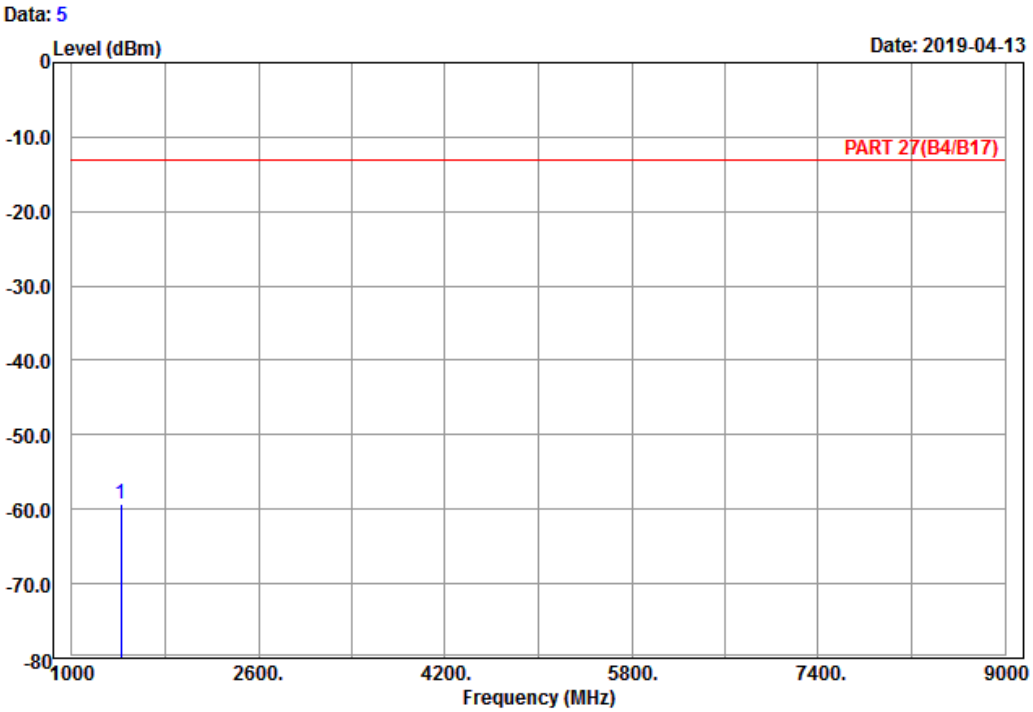


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23755
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1413.00	-59.39	-65.75	-13.00	-46.39	6.36	Peak

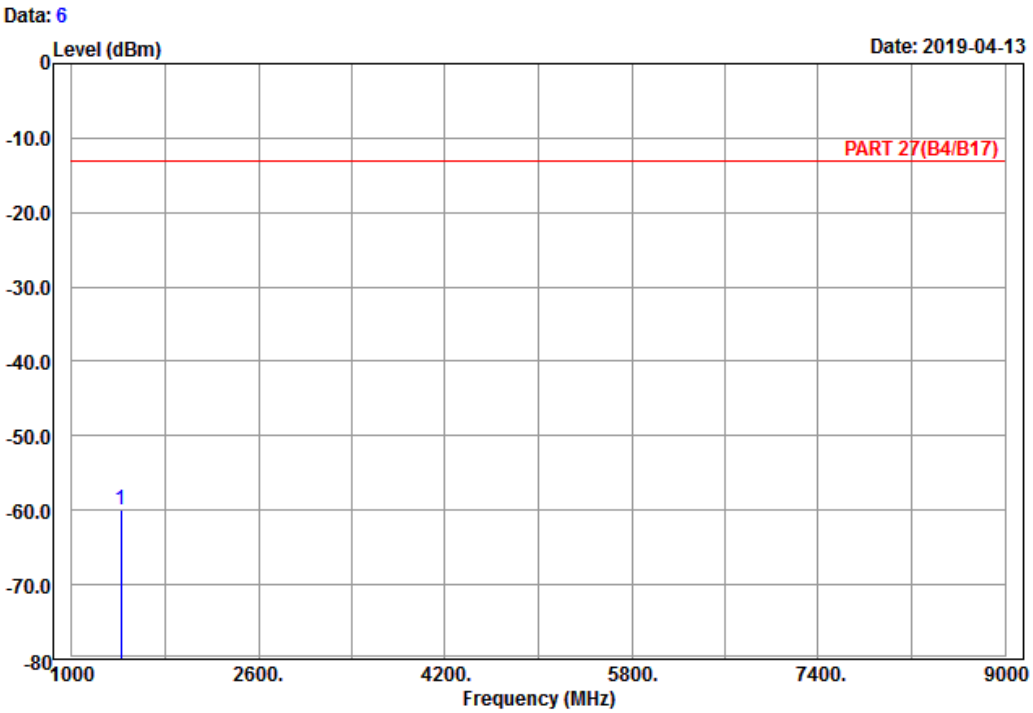
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23790
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1420.00	-59.40	-65.76	-13.00	-46.40	6.36	Peak

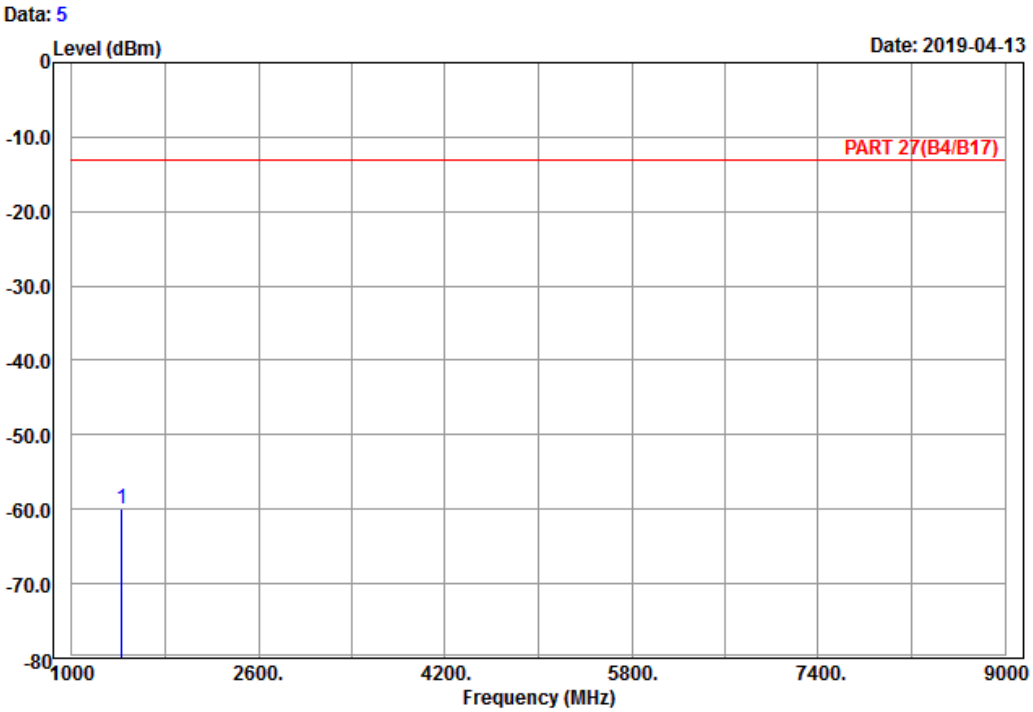


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23790
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1420.00	-60.02	-66.38	-13.00	-47.02	6.36	Peak

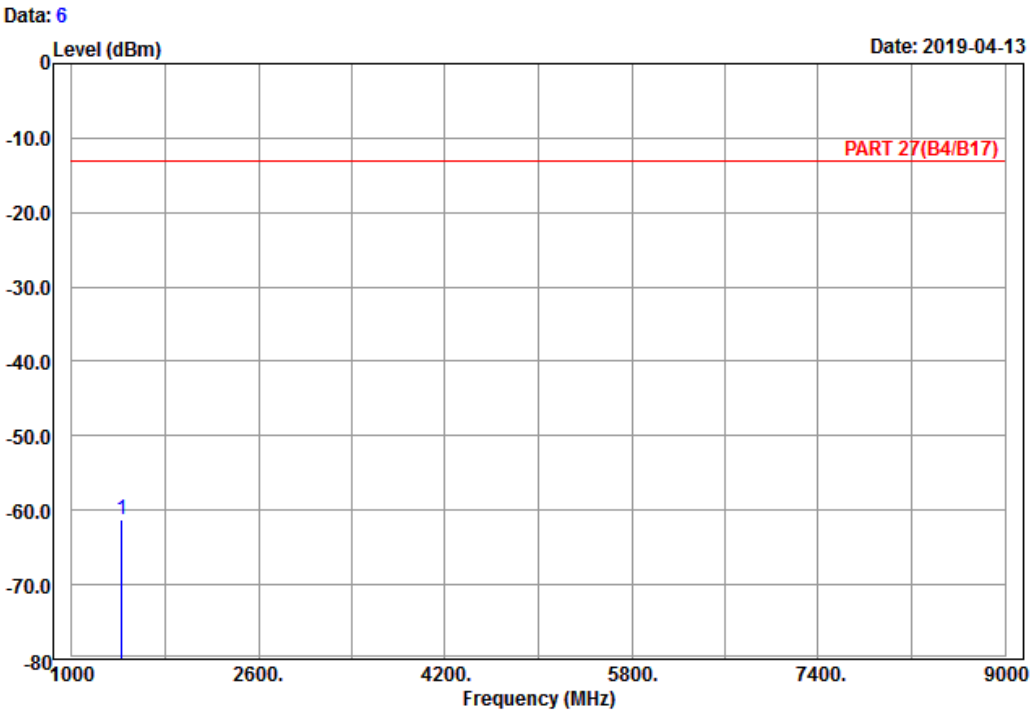
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23825
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1427.00	-59.96	-66.20	-13.00	-46.96	6.24	Peak

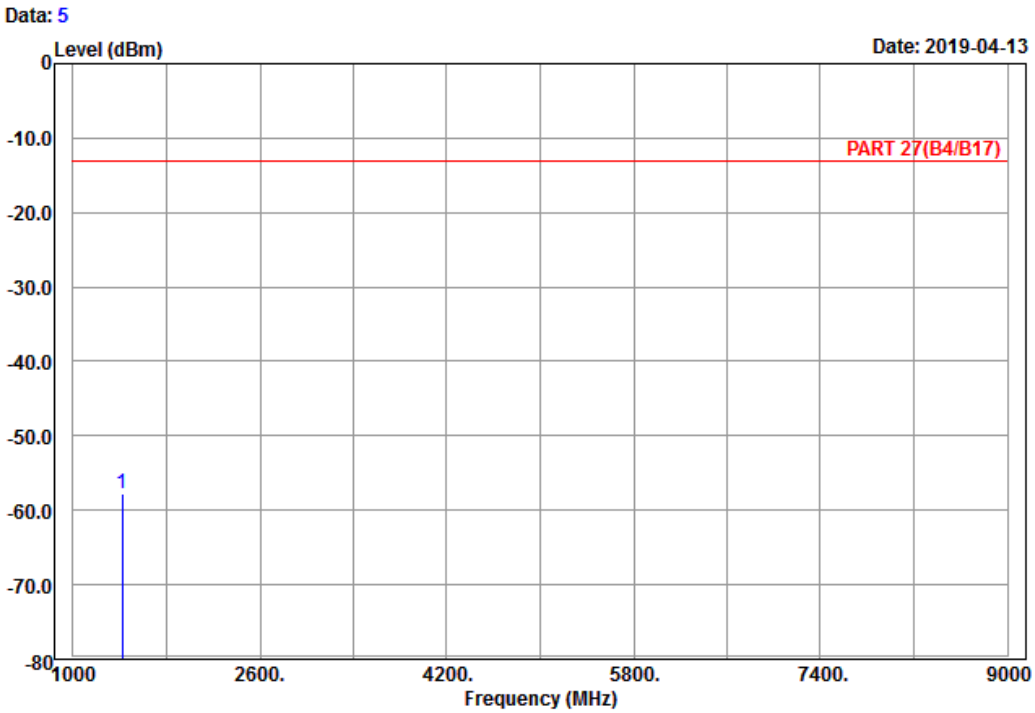


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23825
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1427.00	-61.20	-67.44	-13.00	-48.20	6.24	Peak

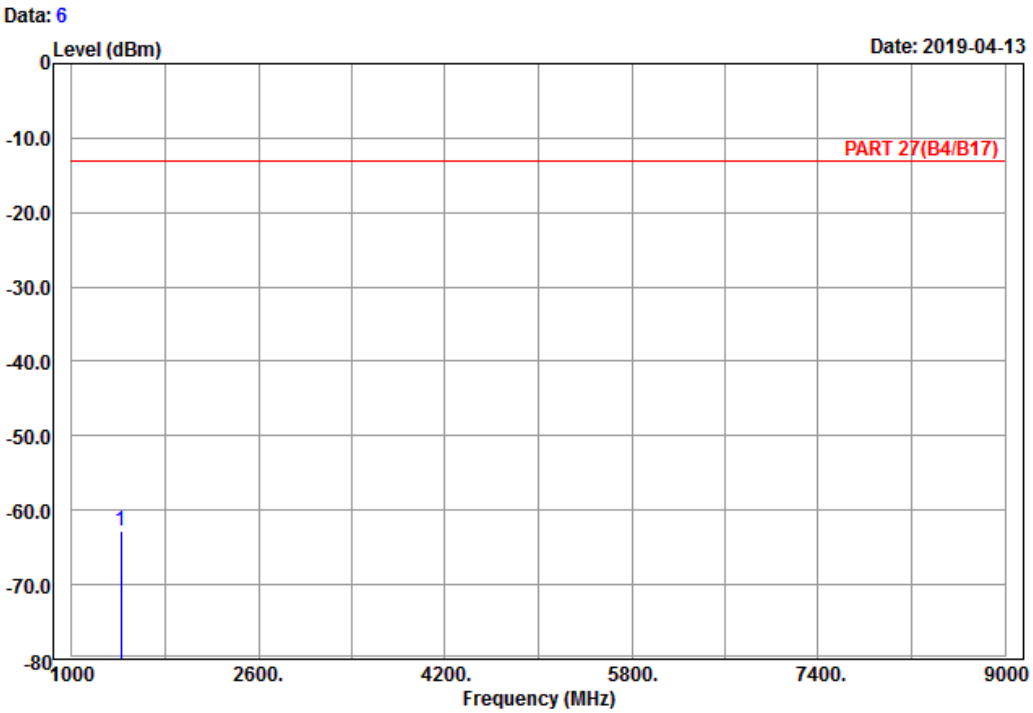
Channel Bandwidth: 10 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23780
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1418.00	-57.71	-64.07	-13.00	-44.71	6.36	Peak

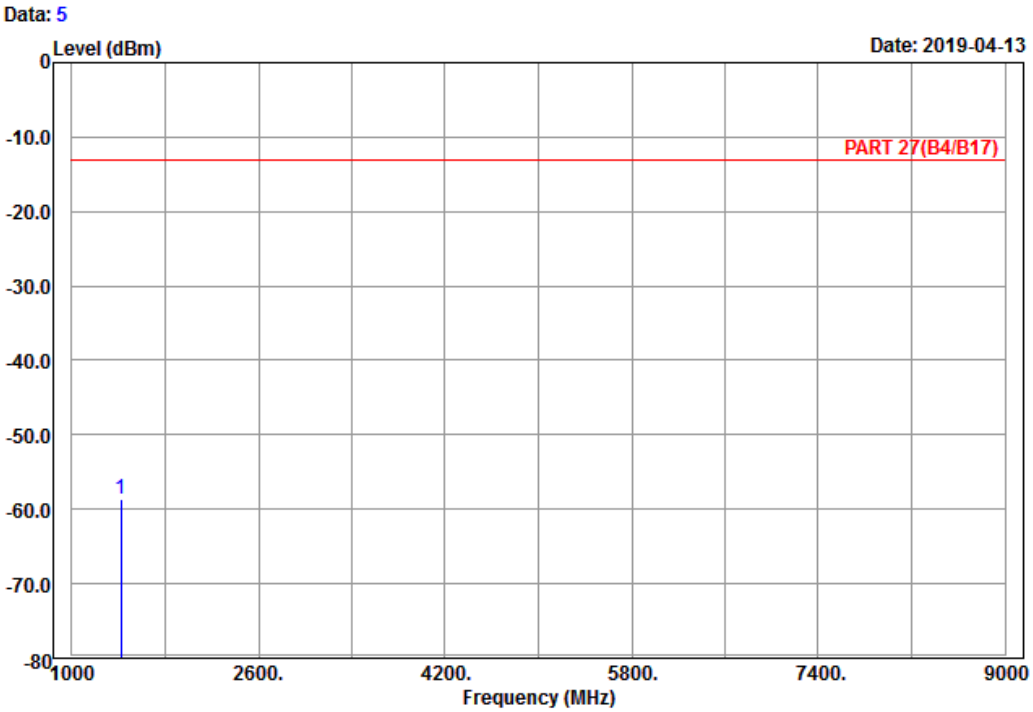


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23780
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1418.00	-62.81	-69.17	-13.00	-49.81	6.36	Peak

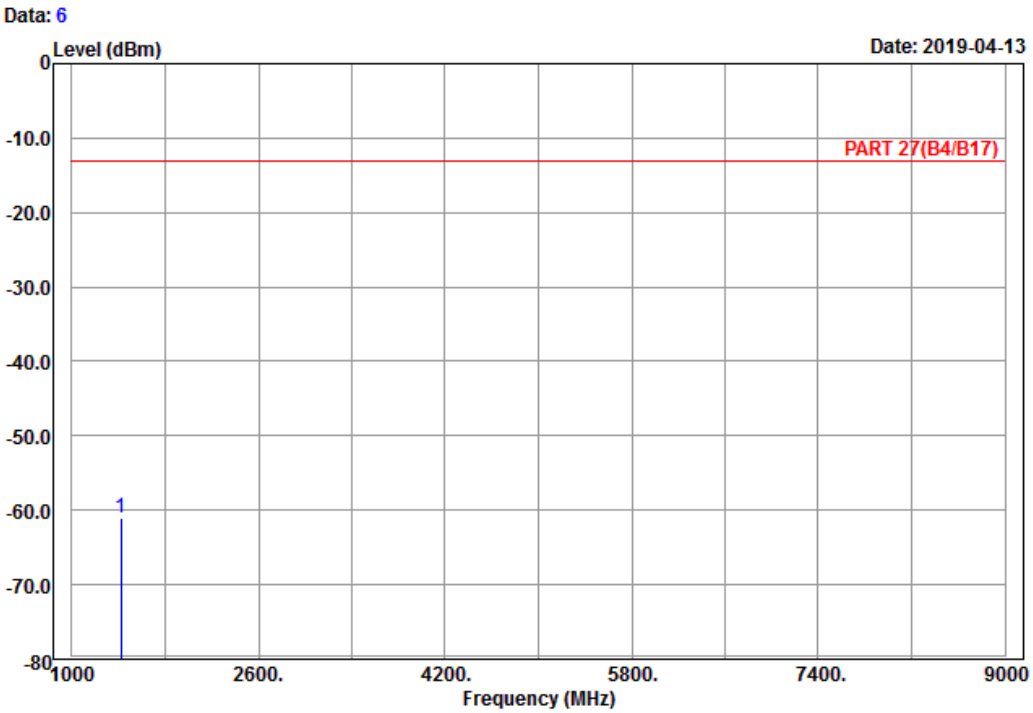
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23790
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1420.00	-58.57	-64.93	-13.00	-45.57	6.36	Peak

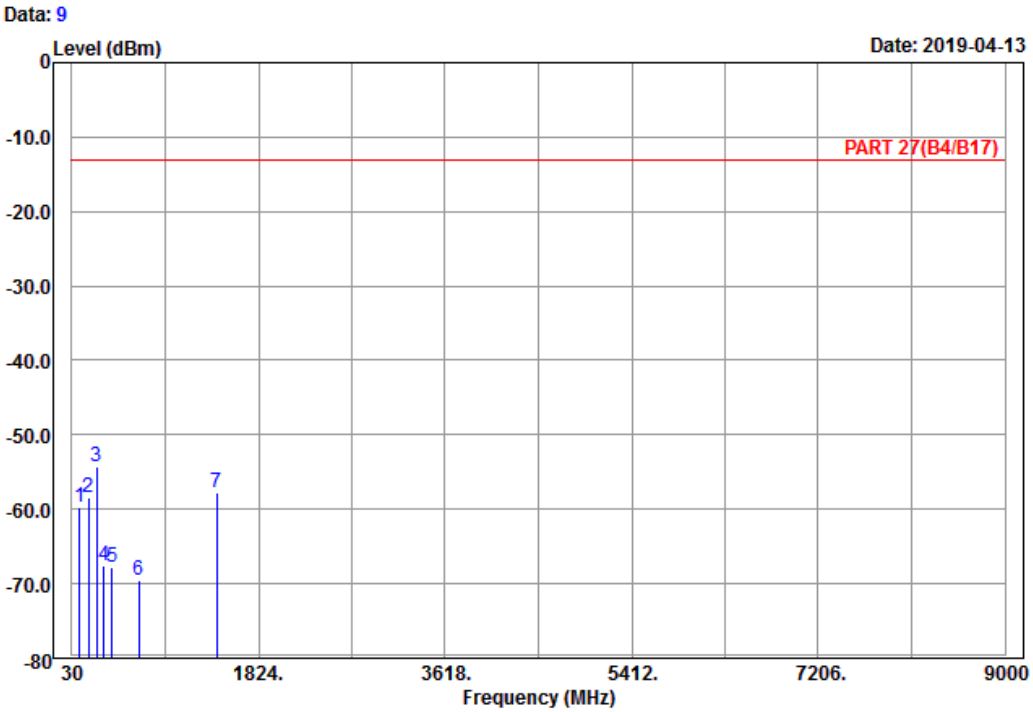


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23790
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	1420.00	-61.05	-67.41	-13.00	-48.05	6.36	Peak

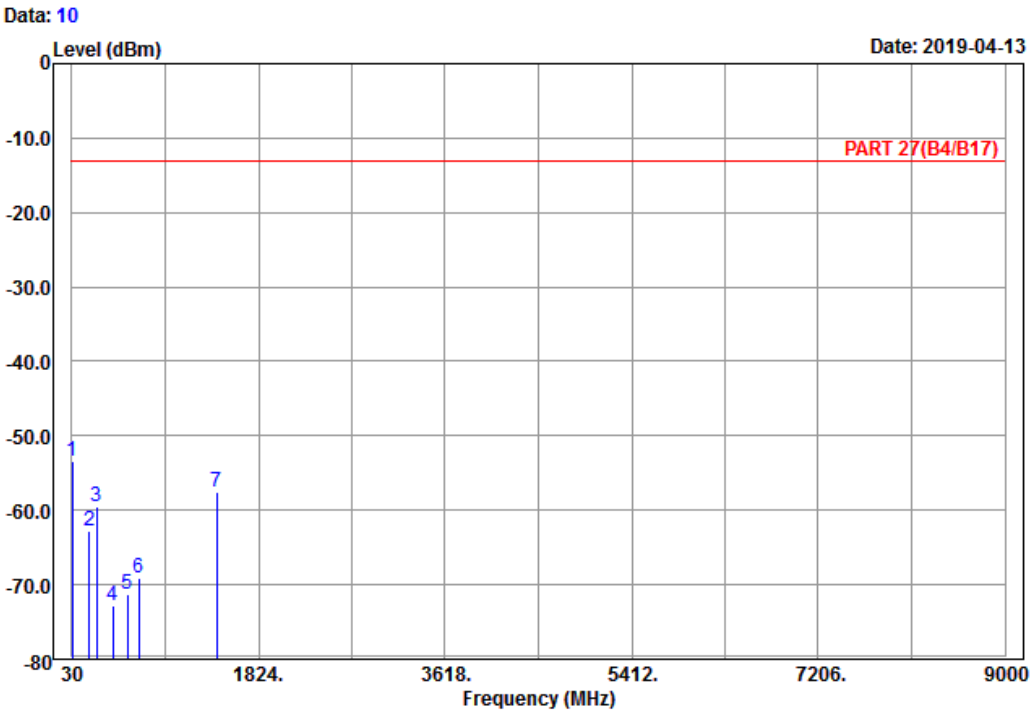
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 27(B4/B17) Horizontal
Remark : LTE_Band 17_Link_CH23800
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	102.90	-59.71	-49.94	-13.00	-46.71	-9.77	Peak
2	193.35	-58.36	-52.49	-13.00	-45.36	-5.87	Peak
3 pp	268.95	-54.31	-48.63	-13.00	-41.31	-5.68	Peak
4	342.00	-67.59	-62.12	-13.00	-54.59	-5.47	Peak
5	419.70	-67.71	-64.52	-13.00	-54.71	-3.19	Peak
6	670.30	-69.45	-69.22	-13.00	-56.45	-0.23	Peak
7	1422.00	-57.71	-64.07	-13.00	-44.71	6.36	Peak

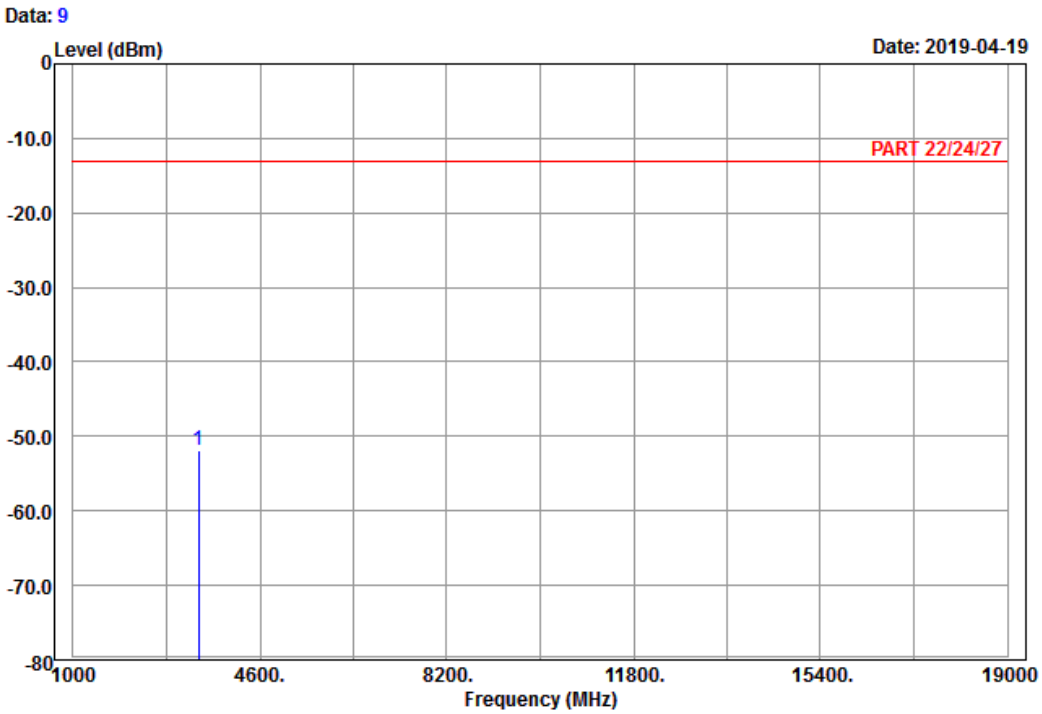


Site : 966 chamber 1
Condition: PART 27(B4/B17) Vertical
Remark : LTE_Band 17_Link_CH23800
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	34.59	-53.33	-42.23	-13.00	-40.33	-11.10	Peak
2	200.91	-62.83	-56.66	-13.00	-49.83	-6.17	Peak
3	266.52	-59.47	-53.81	-13.00	-46.47	-5.66	Peak
4	427.40	-72.78	-69.42	-13.00	-59.78	-3.36	Peak
5	566.70	-71.33	-70.35	-13.00	-58.33	-0.98	Peak
6	676.60	-69.11	-68.84	-13.00	-56.11	-0.27	Peak
7	1422.00	-57.46	-63.82	-13.00	-44.46	6.36	Peak

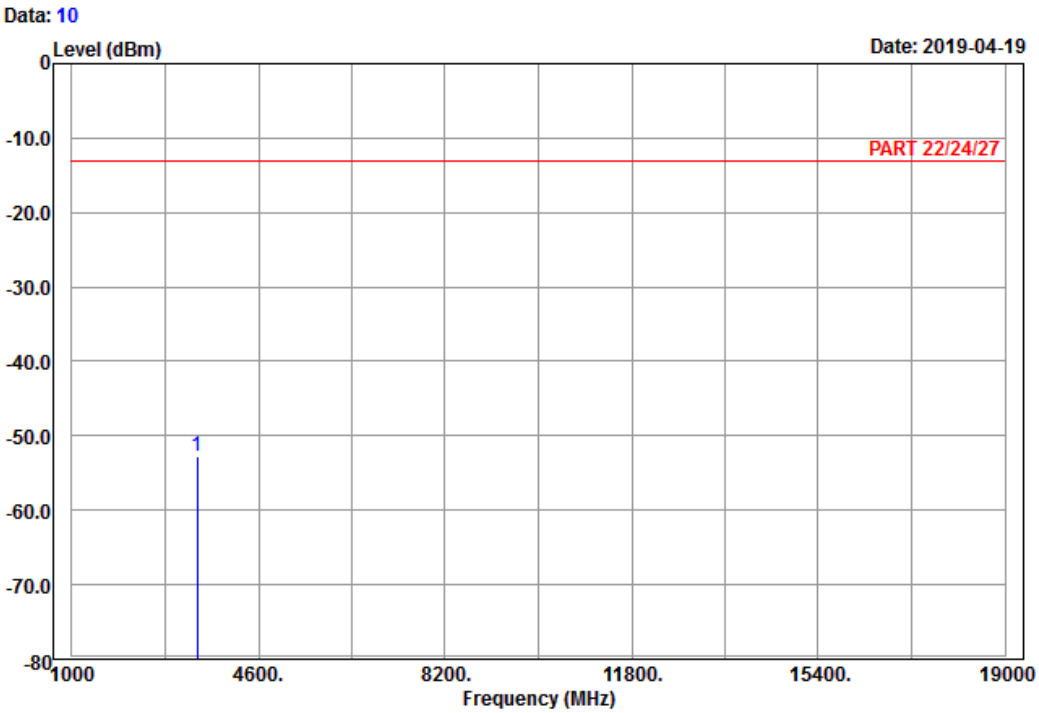
LTE Band 66:
Channel Bandwidth: 1.4 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH131979
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3421.40	-51.88	-66.25	-13.00	-38.88	14.37	Peak

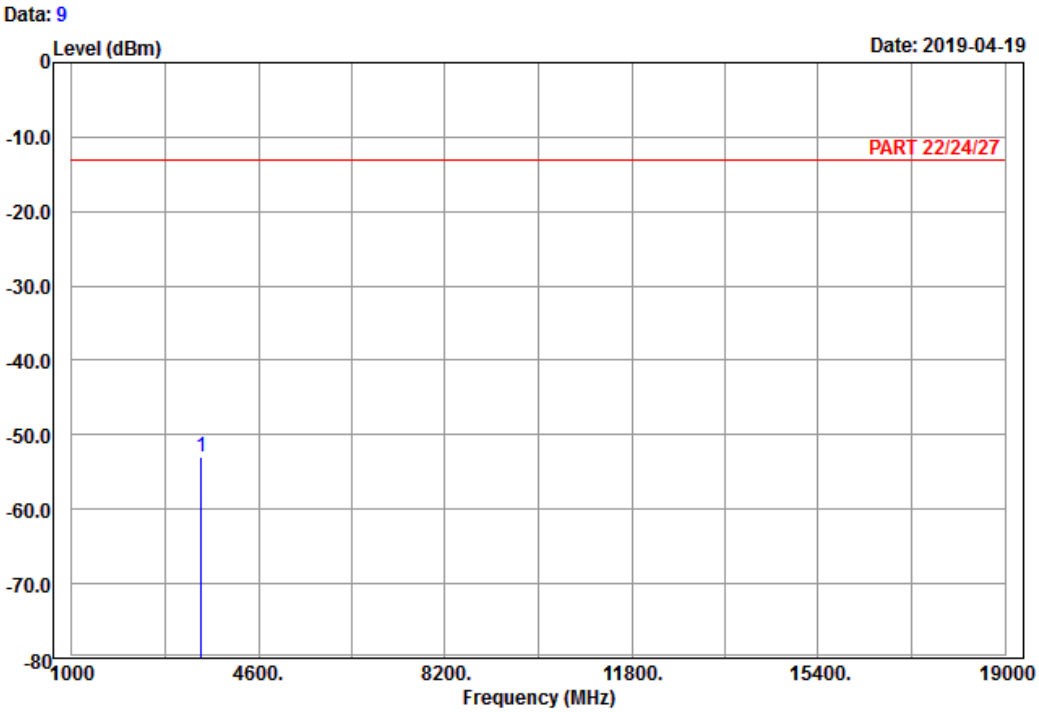


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH131979
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3421.40	-52.84	-67.21	-13.00	-39.84	14.37	Peak

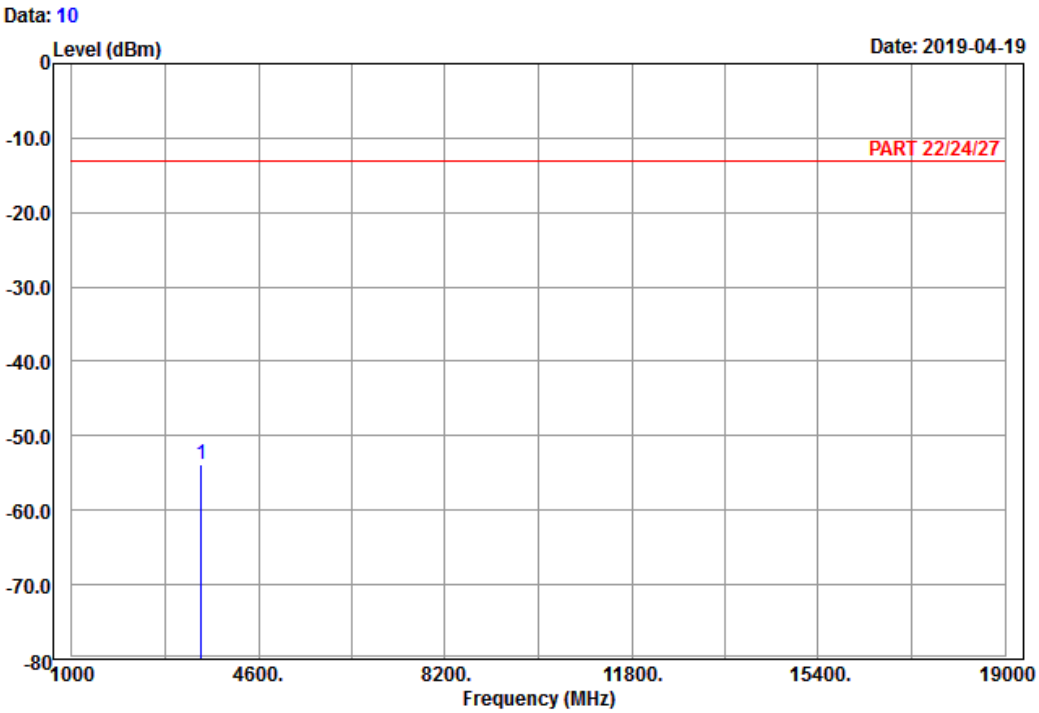
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3490.00	-52.99	-67.30	-13.00	-39.99	14.31	Peak

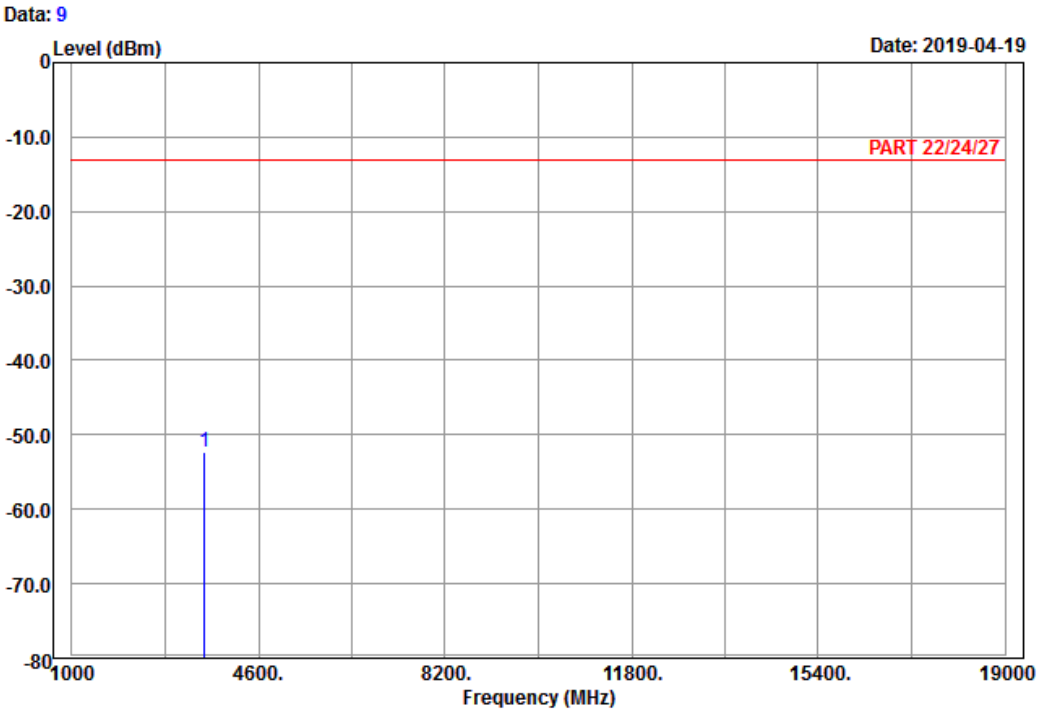


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3490.00	-53.80	-68.11	-13.00	-40.80	14.31	Peak

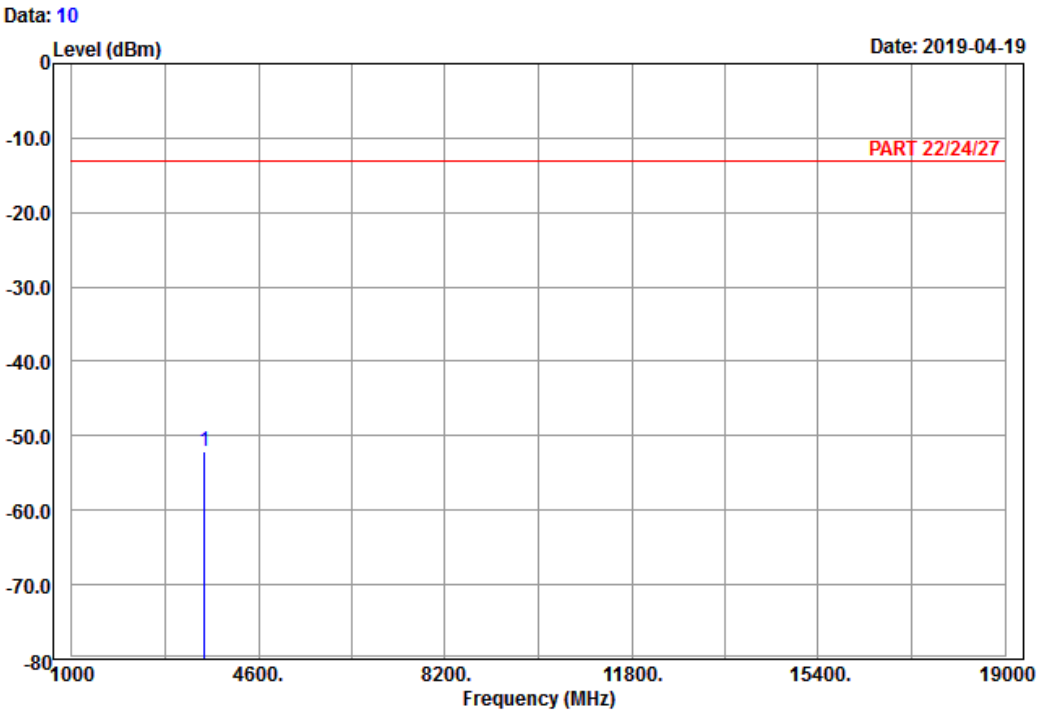
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132665
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3558.60	-52.35	-67.54	-13.00	-39.35	15.19	Peak

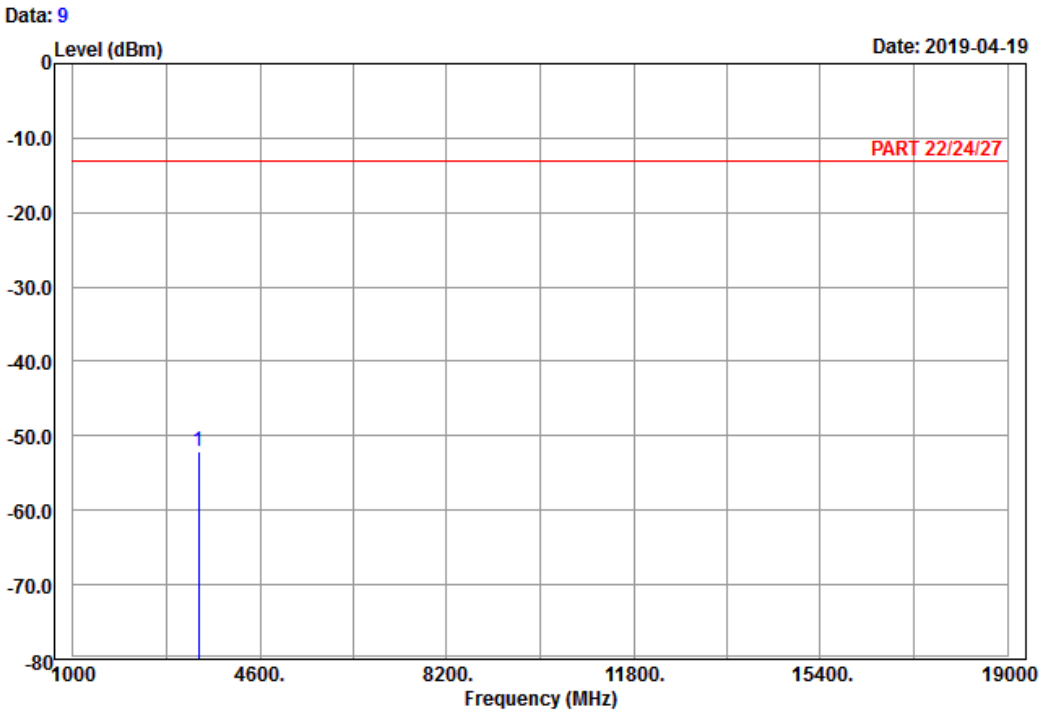


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132665
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3558.60	-52.04	-67.23	-13.00	-39.04	15.19	Peak

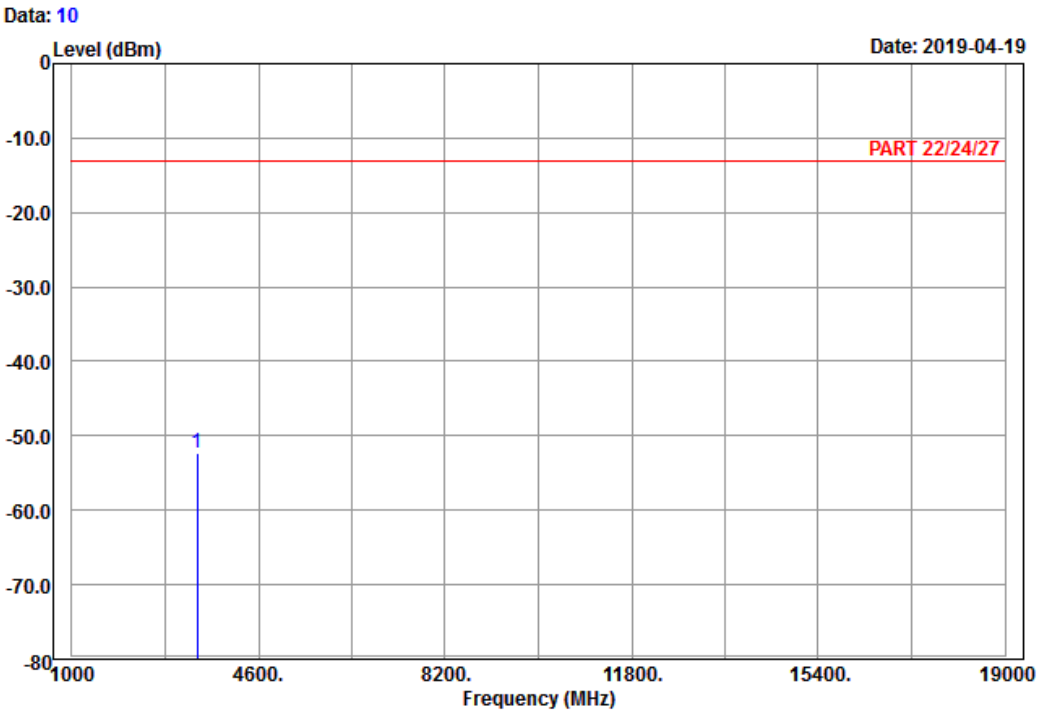
Channel Bandwidth: 5 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH131997
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3425.00	-52.10	-66.47	-13.00	-39.10	14.37	Peak

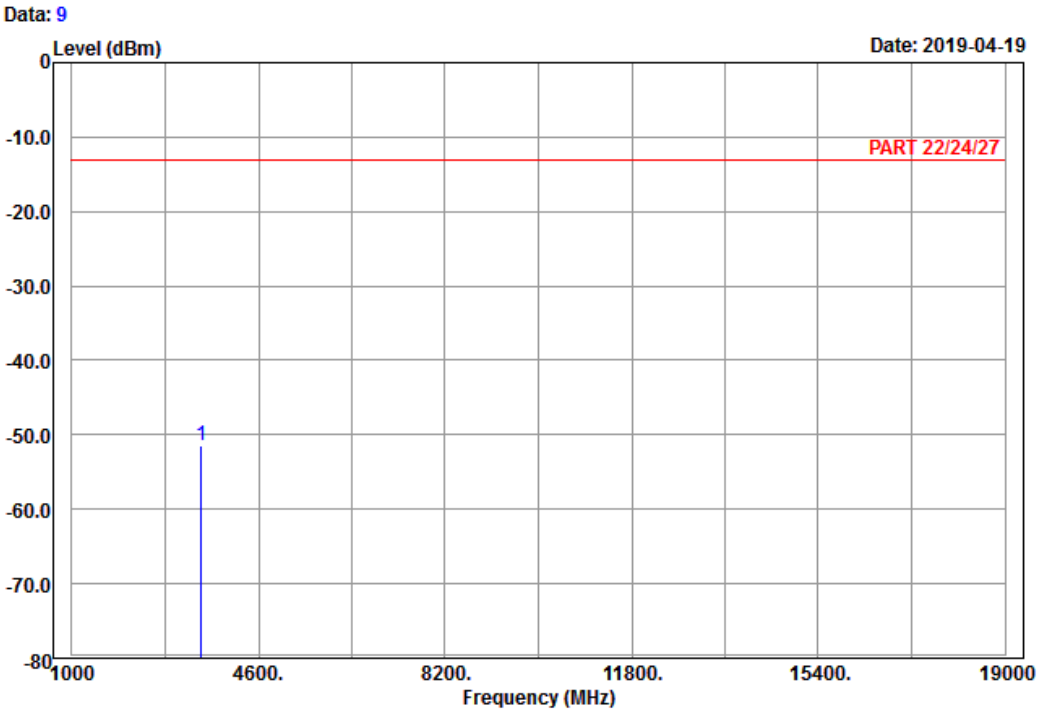


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH131997
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3425.00	-52.34	-66.71	-13.00	-39.34	14.37	Peak

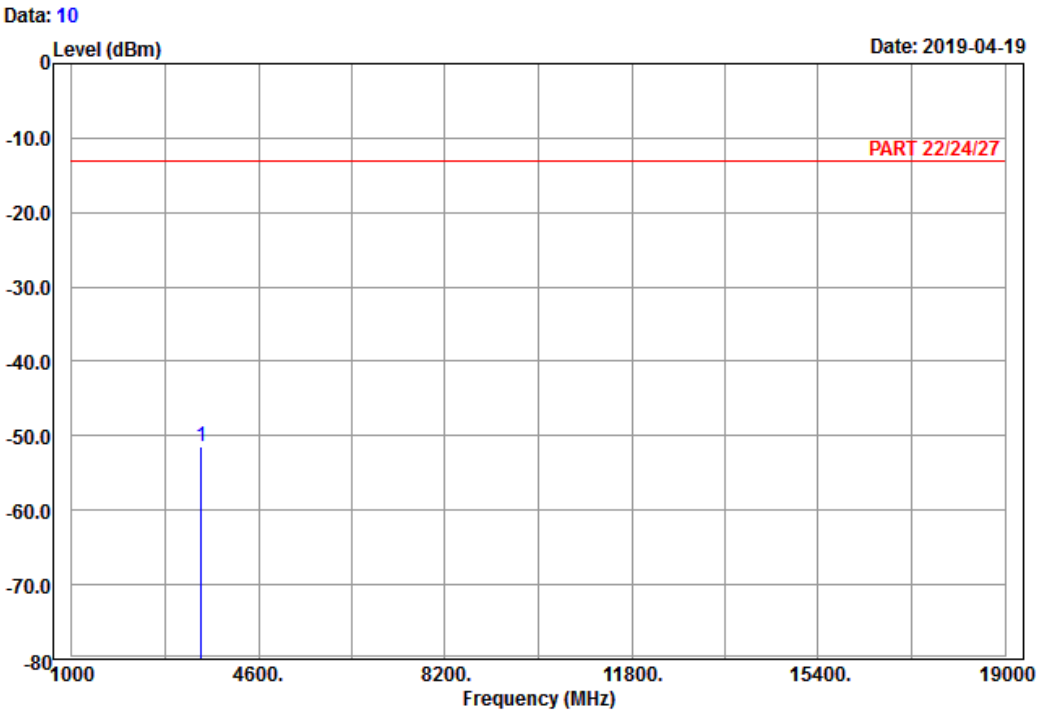
Middle Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3490.00	-51.34	-65.65	-13.00	-38.34	14.31	Peak

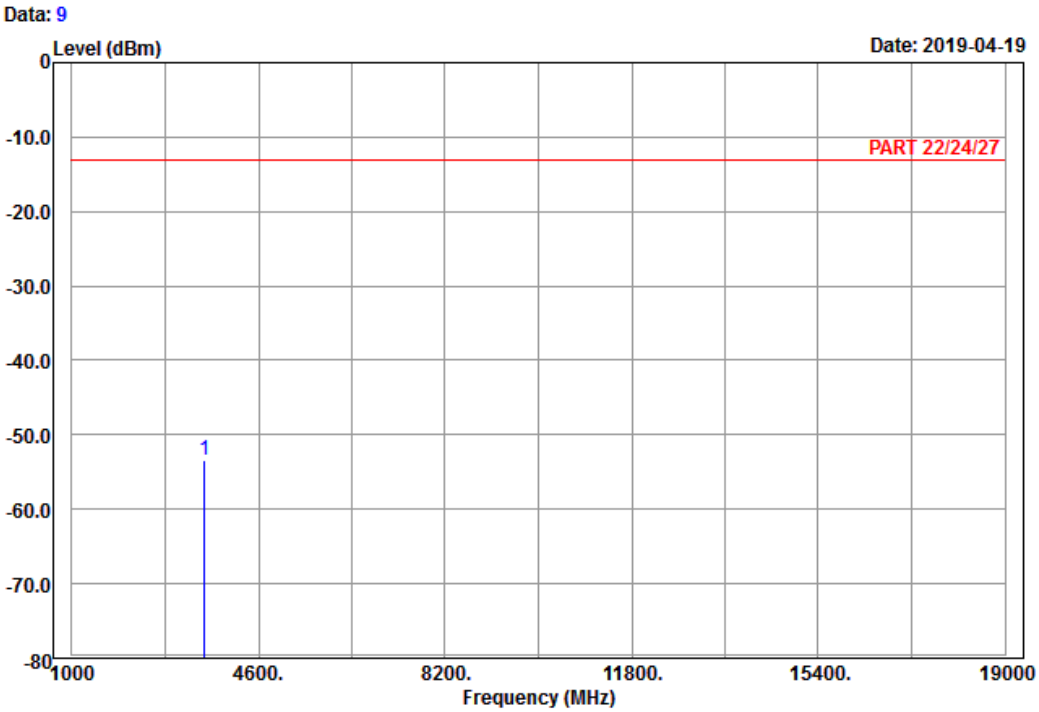


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3490.00	-51.51	-65.82	-13.00	-38.51	14.31	Peak

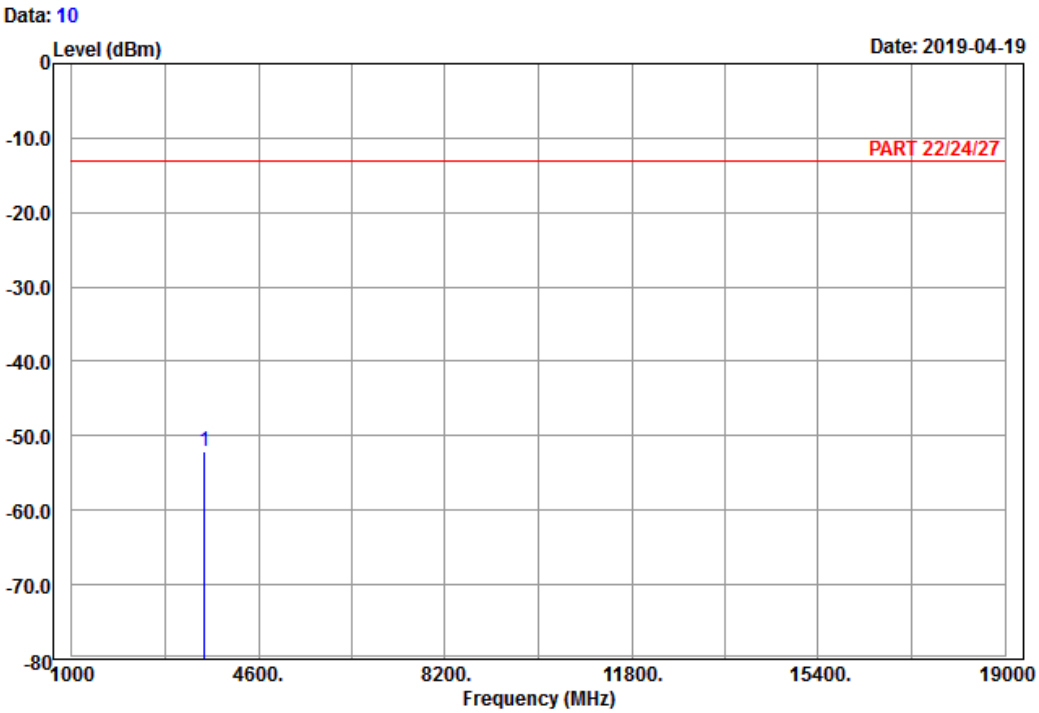
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132647
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3555.00	-53.51	-68.70	-13.00	-40.51	15.19	Peak

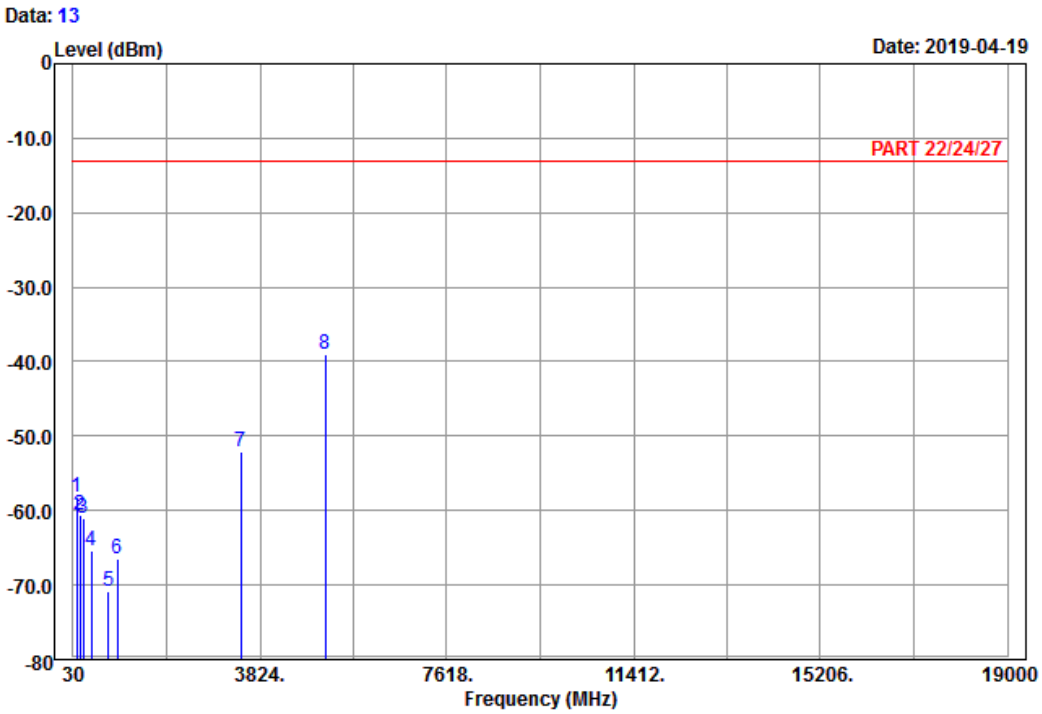


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132647
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	3555.00	-52.01	-67.20	-13.00	-39.01	15.19	Peak

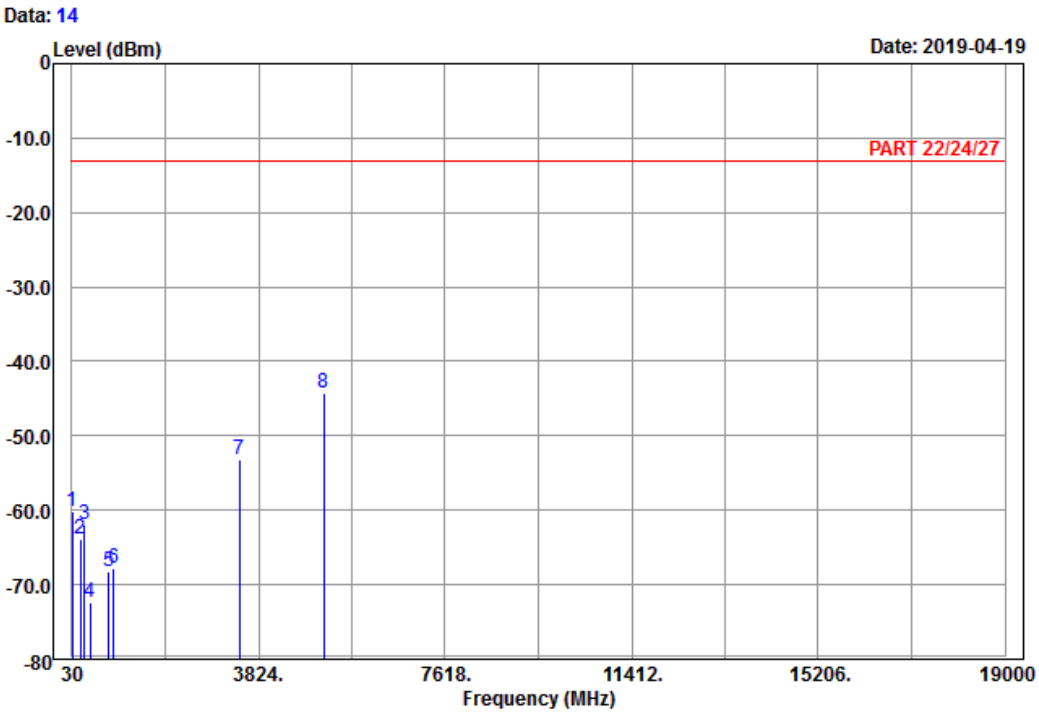
Channel Bandwidth: 20 MHz / QPSK
Low Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132072
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	102.09	-58.15	-48.26	-13.00	-45.15	-9.89	Peak
2	169.59	-60.58	-53.87	-13.00	-47.58	-6.71	Peak
3	232.77	-60.99	-55.25	-13.00	-47.99	-5.74	Peak
4	398.70	-65.47	-62.68	-13.00	-52.47	-2.79	Peak
5	754.30	-70.91	-69.92	-13.00	-57.91	-0.99	Peak
6	931.40	-66.55	-70.83	-13.00	-53.55	4.28	Peak
7	3440.00	-52.18	-66.53	-13.00	-39.18	14.35	Peak
8 pp	5160.00	-39.02	-58.94	-13.00	-26.02	19.92	Peak



Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132072
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	37.02	-60.18	-49.84	-13.00	-47.18	-10.34	Peak
2	201.72	-63.81	-57.65	-13.00	-50.81	-6.16	Peak
3	278.40	-62.02	-56.26	-13.00	-49.02	-5.76	Peak
4	400.10	-72.33	-69.57	-13.00	-59.33	-2.76	Peak
5	788.60	-68.23	-69.47	-13.00	-55.23	1.24	Peak
6	883.80	-67.88	-70.30	-13.00	-54.88	2.42	Peak
7	3440.00	-53.21	-67.56	-13.00	-40.21	14.35	Peak
8 pp	5160.00	-44.26	-64.18	-13.00	-31.26	19.92	Peak

Middle Channel

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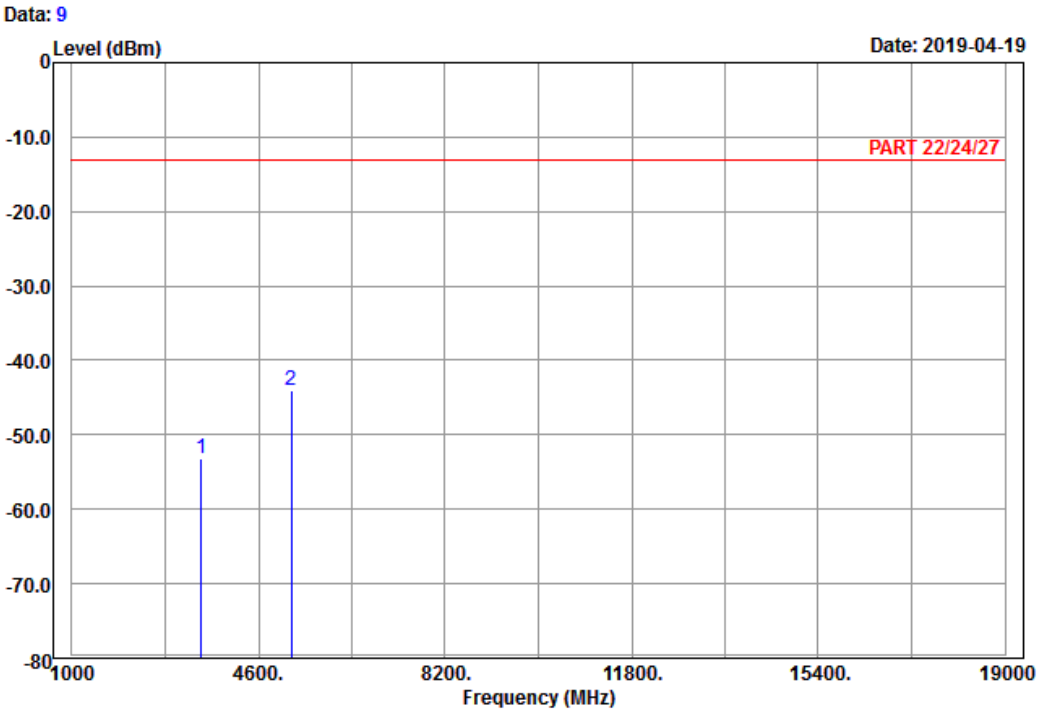
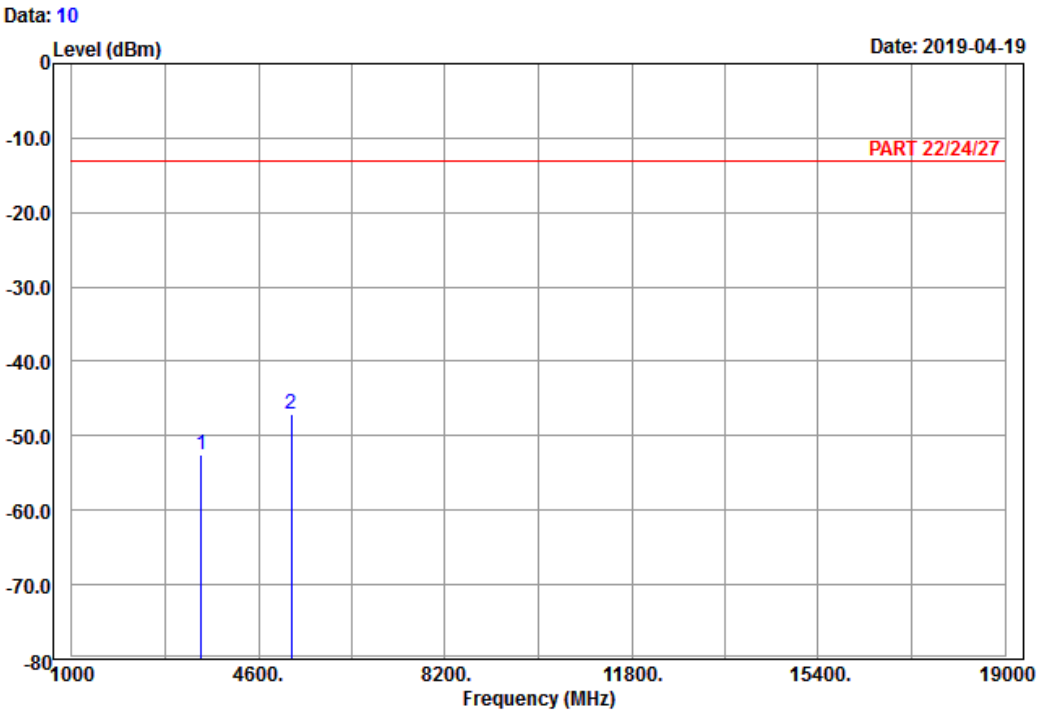


Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3490.00	-53.10	-67.41	-13.00	-40.10	14.31	Peak
2 pp	5235.00	-44.02	-64.18	-13.00	-31.02	20.16	Peak

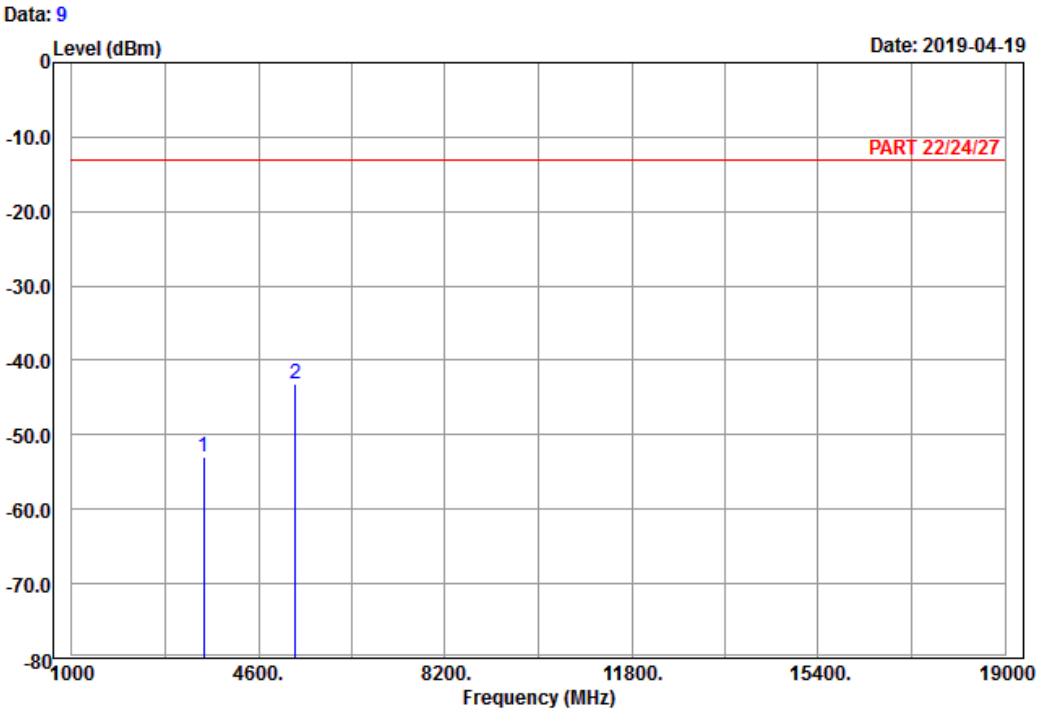


Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132322
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3490.00	-52.54	-66.85	-13.00	-39.54	14.31	Peak
2 pp	5235.00	-47.01	-67.17	-13.00	-34.01	20.16	Peak

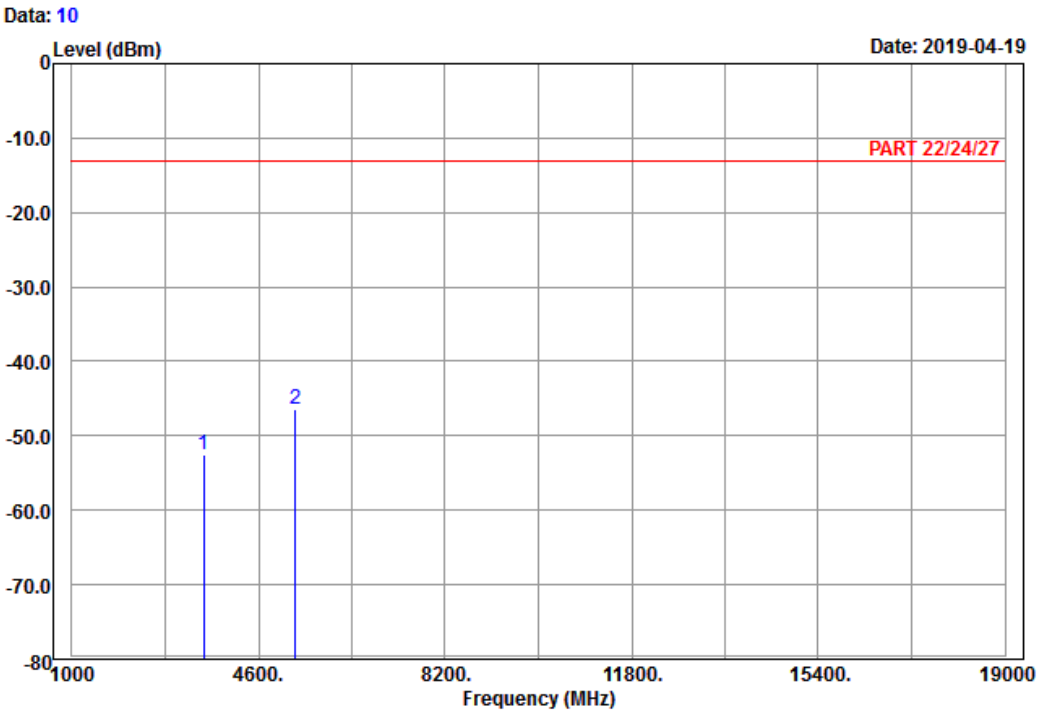
High Channel

Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch



Site : 966 chamber 1
Condition: PART 22/24/27 Horizontal
Remark : LTE_Band 66_Link_CH132572
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3540.00	-52.93	-67.82	-13.00	-39.93	14.89	Peak
2 pp	5310.00	-43.11	-63.35	-13.00	-30.11	20.24	Peak



Site : 966 chamber 1
Condition: PART 22/24/27 Vertical
Remark : LTE_Band 66_Link_CH132572
Tested by: Karl Lee

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	3540.00	-52.58	-67.47	-13.00	-39.58	14.89	Peak
2 pp	5310.00	-46.52	-66.76	-13.00	-33.52	20.24	Peak

5 Pictures of Test Arrangements

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

Appendix – Information of 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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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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