

FCC Test Report

(PART 22)

Report No.: RF200615C06-6

FCC ID: H8NTN502A1

Test Model: TN502A1

Series Model: TN502A1(WOS), access, access(WOS) (refer to item 3.1 for more details)

Received Date: Mar. 13, 2020

Test Date: Mar. 20 ~ Oct. 23, 2020

Issued Date: Oct. 28, 2020

Applicant: ASKEY COMPUTER CORP.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003

Designation Number: 427177 / TW0011



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Release Control Record

Issue No.	Description	Date Issued
RF200615C06-6	Original Release	Oct. 28, 2020

1 Certificate of Conformity

Product: TurboFon E4 / Handheld Device (refer to item 3.1 for more details)

Brand: TURBONET / Copernic (refer to item 3.1 for more details)

Test Model: TN502A1

Series Model: TN502A1(WOS), access, access(WOS) (refer to item 3.1 for more details)

Sample Status: Engineering Sample


Applicant: ASKEY COMPUTER CORP.

Test Date: Mar. 20 ~ Oct. 23, 2020

Standards: FCC Part 22, Subpart H

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

Prepared by : , **Date:** Oct. 28, 2020
Lena Wang / Specialist

Approved by : , **Date:** Oct. 28, 2020
Dylan Chiou / Senior Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective Radiated Power	Pass	Meet the requirement of limit.
2.1047 22.913 (d)	Modulation Characteristics Peak to Average Ratio	Pass	Meet the requirement.
2.1055 22.355	Frequency Stability	Pass	Meet the requirement of limit.
2.1049 22.917	Occupied Bandwidth Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 22.917	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -16.72 dB at 1972.80 MHz.

Note: 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	Expanded Uncertainty (k=2) (\pm)
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

For other test

Test Date: Mar. 20 ~ Jul.16, 2020

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent Technologies	N9038A	MY52260177	Aug. 26, 2019	Aug. 25, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Jul. 17, 2019	Jul. 16, 2020
			Apr. 16, 2020	Apr. 15, 2021
HORN Antenna ETS-Lindgren	3117	00143293	Nov. 24, 2019	Nov. 23, 2020
BILOG Antenna SCHWARZBECK	VULB 9168	9168-616	Nov. 12, 2019	Nov. 11, 2020
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 17, 2019	Apr. 16, 2020
			Apr. 14, 2020	Apr. 13, 2021
Loop Antenna	EM-6879	269	Sep. 16, 2019	Sep. 15, 2020
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2019	Nov. 24, 2020
Preamplifier Agilent	310N	187226	Jun. 18, 2019	Jun. 19, 2020
			Jun. 17, 2020	Jun. 16, 2021
Preamplifier Agilent	83017A	MY39501357	Jun. 18, 2019	Jun. 19, 2020
			Jun. 17, 2020	Jun. 16, 2021
Preamplifier EMCI	EMC 184045	980116	Oct. 08, 2019	Oct. 07, 2020
Power Meter Anritsu	ML2495A	1012010	Sep. 04, 2019	Sep. 03, 2020
Power Sensor Anritsu	MA2411B	1315050	Sep. 04, 2019	Sep. 03, 2020
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(RFC-SMS-100-SMS-120+RFC-SMS-100-SMS-400)	Jun. 18, 2019	Jun. 19, 2020
			Jun. 17, 2020	Jun. 16, 2021
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(RFC-SMS-100-SMS-24)	Jun. 18, 2019	Jun. 19, 2020
			Jun. 17, 2020	Jun. 17, 2021
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	Jul. 01, 2019	Jun. 30, 2021
Radio Communication Analyzer Anritsu	MT8820C	6201300640	Aug. 19, 2019	Aug. 18, 2020
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 10, 2019	Sep. 09, 2020
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.

For Docking Mode
 Test Date: Oct. 23, 2020

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver ROHDE & SCHWARZ	ESR3	102579	Jul. 07, 2020	Jul. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 09, 2020	Jun. 08, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna SCHWARZBECK	9120D	209	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 16, 2020	Aug. 15, 2021
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 23, 2020	Mar. 22, 2021
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM- SM-8000	Cable-CH3-03 (309224+170907)	Aug. 16, 2020	Aug. 15, 2021
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 01, 2020	May 31, 2021
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun 06, 2020	Jun 05, 2021
Communications Tester- Wireless Agilent	8960 Series 10	MY53201073	Jul. 01, 2019	Jun. 30, 2021
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 09, 2020	Sep. 08, 2021
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 HwaYa Chamber 3.

3 General Information

3.1 General Description of EUT

Product	TurboFon E4 / Handheld Device	
Brand	TURBONET / Coppernic	
Test Model	TN502A1	
Series Model	TN502A1(WOS), access, access(WOS)	
Model Difference	Refer to Note	
Status of EUT	Engineering Sample	
Power Supply Rating	3.85Vdc (from battery) 5.0Vdc / 9.0Vdc / 12.0Vdc (from adapter)	
Modulation Type	GSM/GPRS	GMSK
	EDGE	GMSK, 8PSK
	WCDMA	QPSK
	LTE	QPSK, 16QAM
Frequency Range	GSM/GPRS/EDGE	824.2 ~ 848.8 MHz
	WCDMA	826.4 ~ 846.6 MHz
	LTE 5 (Channel Bandwidth: 1.4 MHz)	824.7 ~ 848.3 MHz
	LTE 5 (Channel Bandwidth: 3 MHz)	825.5 ~ 847.5 MHz
	LTE 5 (Channel Bandwidth: 5 MHz)	826.5 ~ 846.5 MHz
	LTE 5 (Channel Bandwidth: 10 MHz)	829 ~ 844 MHz
	LTE 26 (Channel Bandwidth: 1.4 MHz)	824.7 ~ 848.3 MHz
	LTE 26 (Channel Bandwidth: 3 MHz)	825.5 ~ 847.5 MHz
	LTE 26 (Channel Bandwidth: 5 MHz)	826.5 ~ 846.5 MHz
	LTE 26 (Channel Bandwidth: 10 MHz)	829 ~ 844 MHz
Max. ERP Power	GSM/GPRS	1431.53 mW
	EDGE	286.29 mW
	WCDMA	143.15 mW
	LTE 5 (Channel Bandwidth: 1.4 MHz)	139.57 mW
	LTE 5 (Channel Bandwidth: 3 MHz)	140.54 mW
	LTE 5 (Channel Bandwidth: 5 MHz)	141.84 mW
	LTE 5 (Channel Bandwidth: 10 MHz)	143.15 mW
	LTE 26 (Channel Bandwidth: 1.4 MHz)	138.29 mW
	LTE 26 (Channel Bandwidth: 3 MHz)	139.57 mW
	LTE 26 (Channel Bandwidth: 5 MHz)	140.54 mW
	LTE 26 (Channel Bandwidth: 10 MHz)	141.84 mW
	LTE 26 (Channel Bandwidth: 15 MHz)	143.15 mW
Emission Designator	GSM/GPRS	244KGXW
	EDGE	249KG7W
	WCDMA	4M14F9W
	LTE 5 (Channel Bandwidth: 1.4 MHz)	1M09D7W
	LTE 5 (Channel Bandwidth: 3 MHz)	2M70G7D

	LTE 5 (Channel Bandwidth: 5 MHz)	4M50D7W
	LTE 5 (Channel Bandwidth: 10 MHz)	8M98D7W
	LTE 26 (Channel Bandwidth: 1.4 MHz)	1M09D7W
	LTE 26 (Channel Bandwidth: 3 MHz)	2M70G7D
	LTE 26 (Channel Bandwidth: 5 MHz)	4M49D7W
	LTE 26 (Channel Bandwidth: 10 MHz)	8M97D7W
	LTE 26 (Channel Bandwidth: 15 MHz)	13M4G7D
Antenna Type	Refer to Note as below	
Accessory Device	Refer to Note as below	
Data Cable Supplied	0.95m shielded USB cable without core	

Note:

1. All models are listed as below. Model TN502A1 is the representative for final test.

Brand	Product name	Model	Difference	
TURBONET	TurboFon E4	TN502A1	With scanner	-
		TN502A1(WOS)	Without scanner	-
Coppernic	Handheld Device	access	With scanner	Model: access is electrically identical to TN502A1, different brands and model names are for marketing purpose.
		access(WOS)	Without scanner	Model: access (WOS) is electrically identical to TN502A1(WOS), different brands and model names are for marketing purpose.

2. The antenna information is listed as below.

Antenna Type	PIFA							
	EDGE / WCDMA II / LTE 2	WCDMA IV / LTE 4	GSM / EDGE / WCDMA V / LTE5	LTE 7	LTE 17	LTE 26	LTE 38	LTE 41
Gain	2.25	1.93	-0.76	1.39	-2.74	-0.76	1.47	1.59

3. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

4. The EUT contains following accessory devices.

5. Battery	
Brand	ETI
Model	BP19-002710
Rating	3.85Vdc, 4000mAh. 15.4Wh

Adapter	
Brand	CHANNEL WELL TECHNOLOGY
Model	2ACP0183C
Input Power	100-240Vac~0.5A , 50/60Hz
Output Power	5.0Vdc, 3.0A, 15.0W / 9.0Vdc, 2.0A, 18.0W / 12.0Vdc, 1.5A, 18.0W

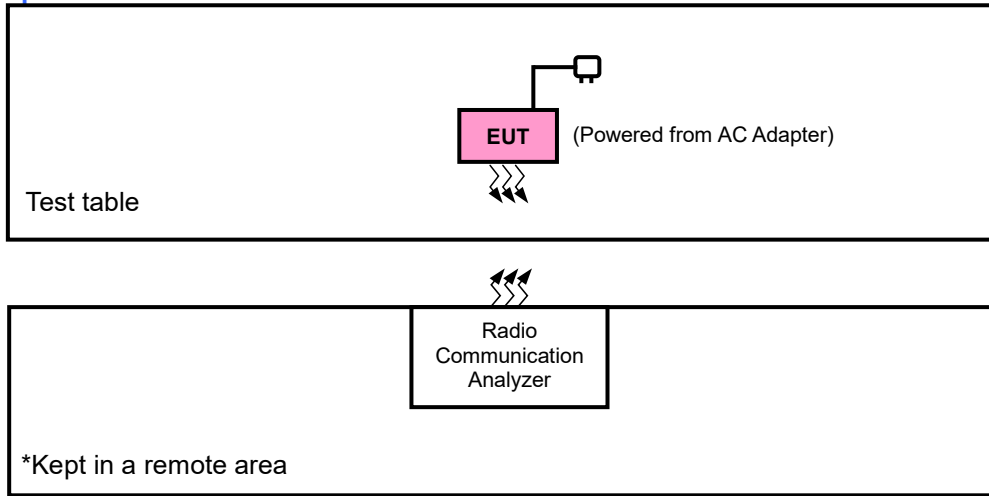
Item	Brand	Model	Description
Docking Station 1 (optional)	TURBONET	DS12310	The models and brand names of docking station are electrically identical, different models and brand names are for marketing purpose. The docking station 1 was chosen for final test.
Docking Station 2 (optional)	COPPERNIC	DS-ACCESS	
Data Cable Supplied	0.95m shielding USB cable without core		
Adapter (For docking use)			
Brand	Sunny ELECTRONICS CORP.		
Model	SYS1541-2412		
Input Power	100-240Vac, 1.0A, 50/60Hz		
Output Power	+12Vdc, 2A		
Power line	1.5m power cable without core		

6. 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.

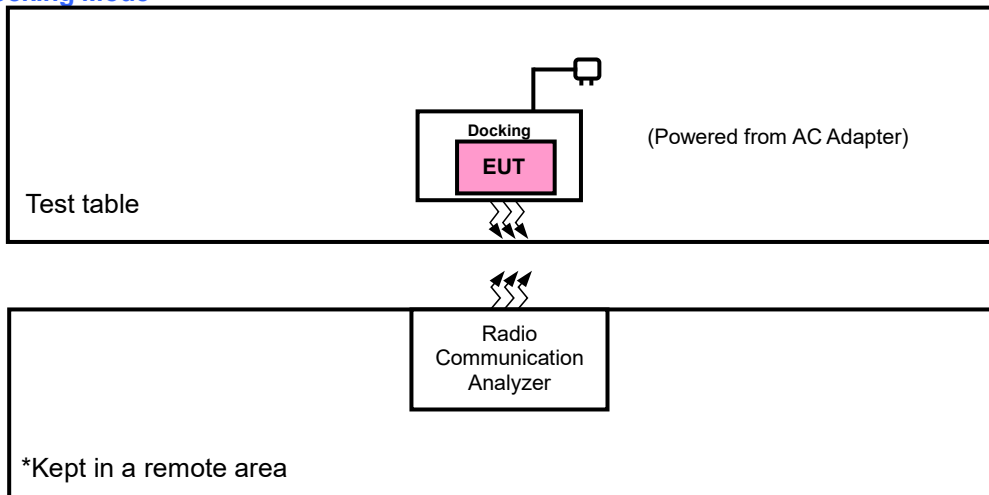
3.2 Configuration of System under Test

<Radiated Emission Test>

Adapter Mode

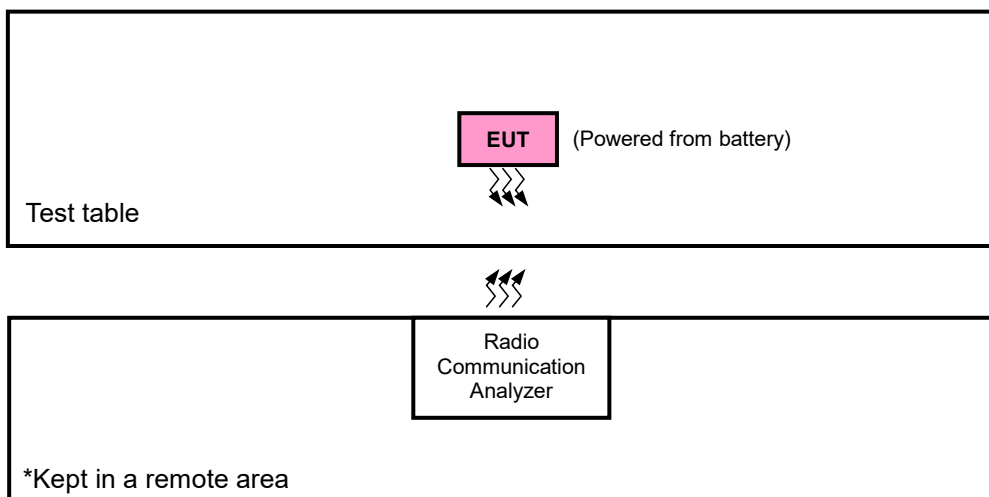


Docking Mode



<E.R.P. Test>

Adapter Mode



3.2.1 Description of Support Units

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

No.	Product	Brand	Model No.	Serial No.	FCC ID
A	Adapter	CHANNEL WELL TECHNOLOGY	2ACP0183C	N/A	N/A
B	Dock	TURBONET	DS12310	N/A	N/A

No.	Signal Cable Description Of The Above Support Units
1.	0.95m shielded USB cable without core provided by client

Note:

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

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, and antenna ports.

The worst case was found when positioned as the table below. Following channel(s) was (were) selected for the final test as listed below:

Band	ERP	Radiated Emission
GSM	X-plane	Z-axis
EDGE	X-plane	Z-axis
WCDMA	X-plane	Z-axis
LTE Band 5	X-plane	Y-axis
LTE Band 26	X-plane	Y-axis

GSM

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	128 to 251	128, 189, 251	GSM, EDGE
-	Modulation Characteristics	128 to 251	189	GSM, EDGE
-	Frequency Stability	128 to 251	128, 251	GSM, EDGE
-	Occupied Bandwidth	128 to 251	128, 189, 251	GSM, EDGE
-	Band Edge	128 to 251	128, 251	GSM, EDGE
-	Peak to Average Ratio	128 to 251	128, 189, 251	GSM, EDGE
-	Conducted Emission	128 to 251	128, 189, 251	GSM, EDGE
-	Radiated Emission	128 to 251	128, 189, 251	GSM, EDGE

WCDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	4132 to 4233	4132, 4182, 4233	WCDMA
-	Modulation Characteristics	4132 to 4233	4182	WCDMA
-	Frequency Stability	4132 to 4233	4132, 4233	WCDMA
-	Occupied Bandwidth	4132 to 4233	4132, 4182, 4233	WCDMA
-	Band Edge	4132 to 4233	4132, 4233	WCDMA
-	Peak to Average Ratio	4132 to 4233	4132, 4182, 4233	WCDMA
-	Conducted Emission	4132 to 4233	4132, 4182, 4233	WCDMA
-	Radiated Emission	4132 to 4233	4132, 4182, 4233	WCDMA

LTE Band 5

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode		
-	ERP	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		20415 to 20635	20415, 20525, 20635	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
-	Modulation Characteristics	20450 to 20600	20525	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
-	Frequency Stability	20407 to 20643	20407, 20643	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		20415 to 20635	20415, 20635	3 MHz	QPSK	1 RB / 0 RB Offset		
		20425 to 20625	20425, 20625	5 MHz	QPSK	1 RB / 0 RB Offset		
		20450 to 20600	20450, 20600	10 MHz	QPSK	1 RB / 0 RB Offset		
-	Occupied Bandwidth	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK, 16QAM	6 RB / 0 RB Offset		
		20415 to 20635	20415, 20525, 20635	3 MHz	QPSK, 16QAM	15 RB / 0 RB Offset		
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset		
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK, 16QAM	50 RB / 0 RB Offset		
-	Band Edge	20407 to 20643	20407	1.4MHz	QPSK	1 RB / 0 RB Offset 6 RB / 0 RB Offset		
			20643	1.4MHz	QPSK	1 RB / 5 RB Offset 6 RB / 0 RB Offset		
		20415 to 20635	20415	3 MHz	QPSK	1 RB / 0 RB Offset 15 RB / 0 RB Offset		
			20635	3 MHz	QPSK	1 RB / 14 RB Offset 15 RB / 0 RB Offset		
		20425 to 20625	20425	5 MHz	QPSK	1 RB / 0 RB Offset 25 RB / 0 RB Offset		
			20625	5 MHz	QPSK	1 RB / 24 RB Offset 25 RB / 0 RB Offset		
		20450 to 20600	20450	10 MHz	QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset		
			20600	10 MHz	QPSK	1 RB / 49 RB Offset 50 RB / 0 RB Offset		
		-	Peak to Average Ratio	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				20415 to 20635	20415, 20525, 20635	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				20425 to 20625	20425, 20525, 20625	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				20450 to 20600	20450, 20525, 20600	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
-	Conducted Emission	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		20415 to 20635	20415, 20525, 20635	3 MHz	QPSK	1 RB / 0 RB Offset		
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK	1 RB / 0 RB Offset		
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK	1 RB / 0 RB Offset		
-	Radiated Emission	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK	1 RB / 0 RB Offset		
		20450 to 20600	20450, 20525, 20600	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. Therefore, only ERP, modulation characteristics, occupied bandwidth and peak to average ratio items had been tested under QPSK, 16QAM mode, the other items were performed under QPSK mode only.
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 26

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode		
-	ERP	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		26805 to 27025	26805, 26915, 27025	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		26840 to 26990	26840, 26915, 26990	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
		26865 to 26965	26865, 26915, 26965	15 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
-	Modulation Characteristics	26865 to 26965	26915	15 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
-	Frequency Stability	26797 to 27033	26797, 27033	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		26805 to 27025	26805, 27025	3 MHz	QPSK	1 RB / 0 RB Offset		
		26815 to 27015	26815, 27015	5 MHz	QPSK	1 RB / 0 RB Offset		
		26840 to 26990	26840, 26990	10 MHz	QPSK	1 RB / 0 RB Offset		
		26865 to 26965	26865, 26965	15 MHz	QPSK	1 RB / 0 RB Offset		
-	Occupied Bandwidth	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK, 16QAM	6 RB / 0 RB Offset		
		26805 to 27025	26805, 26915, 27025	3 MHz	QPSK, 16QAM	15 RB / 0 RB Offset		
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK, 16QAM	25 RB / 0 RB Offset		
		26840 to 26990	26840, 26915, 26990	10 MHz	QPSK, 16QAM	50 RB / 0 RB Offset		
		26865 to 26965	26865, 26915, 26965	15 MHz	QPSK, 16QAM	75 RB / 0 RB Offset		
-	Band Edge	26797 to 27033	26797	1.4 MHz	QPSK	1 RB / 0 RB Offset 6 RB / 0 RB Offset		
			27033	1.4 MHz	QPSK	1 RB / 5 RB Offset 6 RB / 0 RB Offset		
		26805 to 27025	26805	3 MHz	QPSK	1 RB / 0 RB Offset 15 RB / 0 RB Offset		
			27025	3 MHz	QPSK	1 RB / 14 RB Offset 15 RB / 0 RB Offset		
		26815 to 27015	26815	5 MHz	QPSK	1 RB / 0 RB Offset 25 RB / 0 RB Offset		
			27015	5 MHz	QPSK	1 RB / 24 RB Offset 25 RB / 0 RB Offset		
		26840 to 26990	26840	10 MHz	QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset		
			26990	10 MHz	QPSK	1 RB / 49 RB Offset 50 RB / 0 RB Offset		
		26865 to 26965	26865	15 MHz	QPSK	1 RB / 0 RB Offset 75 RB / 0 RB Offset		
			26965	15 MHz	QPSK	1 RB / 74 RB Offset 75 RB / 0 RB Offset		
		-	Peak to Average Ratio	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				26805 to 27025	26805, 26915, 27025	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				26815 to 27015	26815, 26915, 27015	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				26840 to 26990	26840, 26915, 26990	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
26865 to 26965	26865, 26915, 26965			15 MHz	QPSK, 16QAM	1 RB / 0 RB Offset		
-	Conducted Emission	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		26805 to 27025	26805, 26915, 27025	3 MHz	QPSK	1 RB / 0 RB Offset		
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK	1 RB / 0 RB Offset		
		26840 to 26990	26840, 26915, 26990	10 MHz	QPSK	1 RB / 0 RB Offset		
		26865 to 26965	26865, 26915, 26965	15 MHz	QPSK	1 RB / 0 RB Offset		
-	Radiated Emission	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK	1 RB / 0 RB Offset		
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK	1 RB / 0 RB Offset		
		26865 to 26965	26865, 26915, 26965	15 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. Therefore, only ERP, modulation characteristics, occupied bandwidth and peak to average ratio items had been tested under QPSK, 16QAM mode, the other items were performed under QPSK mode only.
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	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Modulation Characteristics	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Frequency Stability	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Occupied Bandwidth	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Band Edge	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Peak to Average Ratio	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
Conducted Emission	25 deg. C, 65 % RH	3.85 Vdc	Gavin Wu
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 and references

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

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-E 2016

Note: All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

Mobile / Portable station are limited to 7 watts e.r.p.

4.1.2 Test Procedures

EIRP / ERP Measurement:

- a. All measurements were done at low, middle and high operational frequency range. RBW is 1MHz for GSM, 5MHz for WCDMA mode, 5MHz ∙ 10MHz ∙ 15MHz for LTE mode, and VBW $\geq 3 \times$ RBW.
- 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. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$.

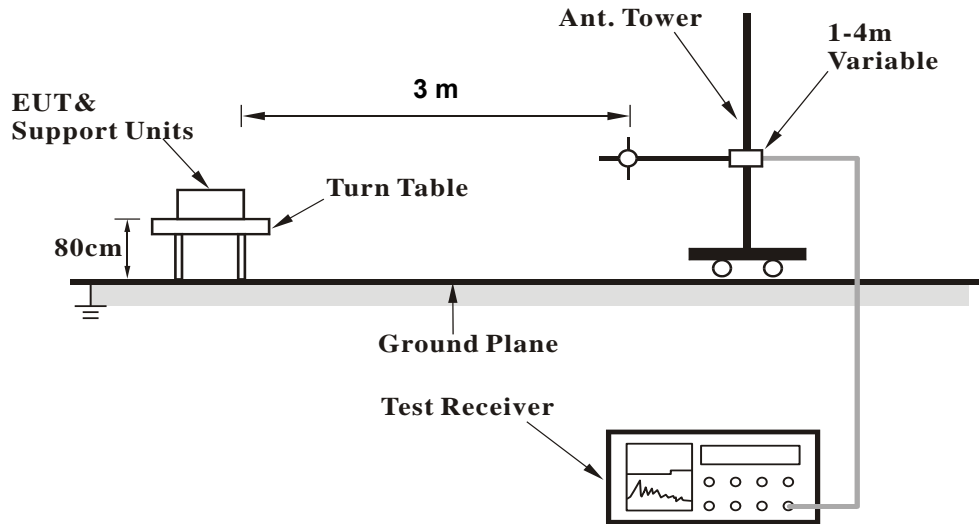
Conducted Power Measurement:

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

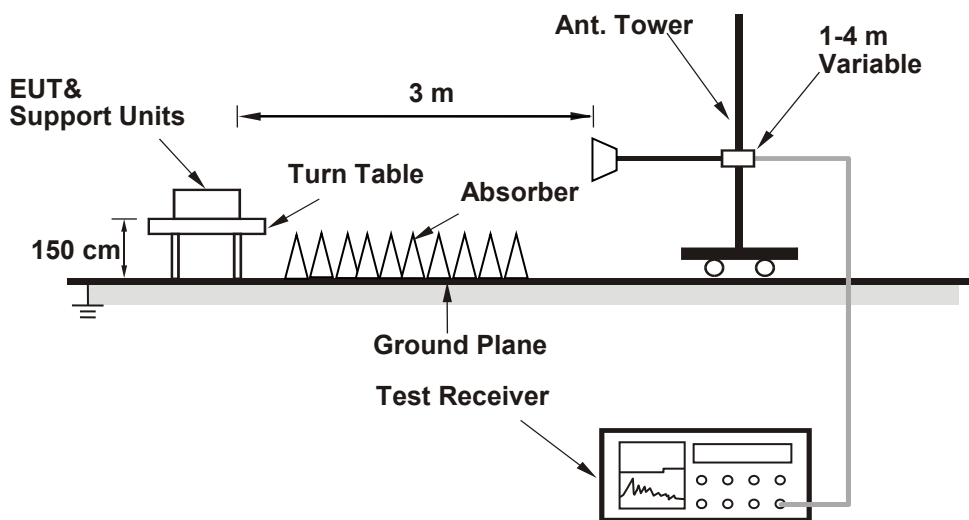
4.1.3 Test Setup

EIRP / ERP Measurement:

<Radiated Emission below or equal 1 GHz>

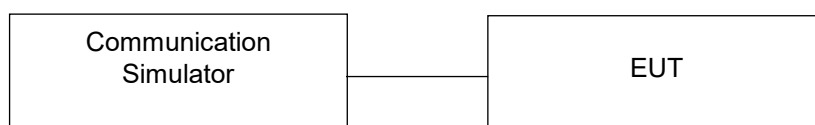


<Radiated Emission above 1 GHz>



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	GSM850		
	128	189	251
Channel	824.2	836.4	848.8
Frequency (MHz)	824.2	836.4	848.8
GSM (GMSK, 1Tx-slot)	32.91	32.95	32.93
GPRS (GMSK, 1Tx-slot)	32.89	32.93	32.9
GPRS (GMSK, 2Tx-slot)	29.93	29.97	29.94
GPRS (GMSK, 3Tx-slot)	28.01	28.05	28.02
GPRS (GMSK, 4Tx-slot)	27.11	27.15	27.12
DTM (GMSK, 2Tx-slot)	29.83	29.87	29.84
DTM (GMSK, 3Tx-slot)	27.91	27.95	27.92
EDGE (8PSK, 1Tx-slot)	26.95	26.99	26.96
EDGE (8PSK, 2Tx-slot)	26.84	26.88	26.85
EDGE (8PSK, 3Tx-slot)	26.7	26.74	26.71
EDGE (8PSK, 4Tx-slot)	26.56	26.6	26.57
DTM (8PSK, 2Tx-slot)	27.4	27.44	27.41
DTM (8PSK, 3Tx-slot)	27.23	27.27	27.24

Band	WCDMA V		
	4132	4182	4233
Channel	826.4	836.4	846.6
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	24.13	24.03	24.16
HSDPA Subtest-1	23.15	23.03	23.21
HSDPA Subtest-2	23.13	23.09	23.2
HSDPA Subtest-3	22.74	22.58	22.78
HSDPA Subtest-4	22.63	22.57	22.81
DC-HSDPA Subtest-1	23.13	23.01	23.19
DC-HSDPA Subtest-2	23.11	23.07	23.18
DC-HSDPA Subtest-3	22.72	22.56	22.76
DC-HSDPA Subtest-4	22.61	22.55	22.79
HSUPA Subtest-1	23.2	23.11	23.26
HSUPA Subtest-2	21.16	21.04	21.22
HSUPA Subtest-3	22.2	22.03	22.27
HSUPA Subtest-4	21.15	21.06	21.28
HSUPA Subtest-5	23.1	23	23.2

LTE Band 5															
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)
				20450	20525	20600						20425	20525	20625	
				Channel Frequency (MHz)	829.0	836.5						844.0	Channel Frequency (MHz)	826.5	
10M	QPSK	1	0	23.03	23.09	22.87	0	5M	QPSK	1	0	22.97	22.99	22.85	0
		1	24	22.91	22.98	22.77	0			1	12	22.91	22.94	22.73	0
		1	49	22.84	22.91	22.70	0			1	24	22.76	22.83	22.64	0
		25	0	22.01	22.08	21.87	1			12	0	21.99	22.02	21.83	1
		25	12	21.99	22.06	21.85	1			12	6	21.98	22.01	21.78	1
		25	25	21.94	22.01	21.80	1			12	13	21.93	21.94	21.76	1
		50	0	21.96	22.03	21.82	1			25	0	21.86	21.93	21.73	1
	16QAM	1	0	22.30	22.37	22.16	1		16QAM	1	0	22.23	22.31	22.09	1
		1	24	22.18	22.25	22.04	1			1	12	22.16	22.22	22.02	1
		1	49	22.11	22.18	21.97	1			1	24	22.05	22.11	21.91	1
		25	0	21.12	21.19	20.98	2			12	0	21.07	21.13	20.95	2
		25	12	21.05	21.12	20.91	2			12	6	20.96	21.08	20.90	2
		25	25	20.97	21.04	20.83	2			12	13	20.95	21.00	20.82	2
		50	0	21.09	21.16	20.95	2			25	0	21.00	21.16	20.88	2
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)
				20415	20525	20635						20407	20525	20643	
				Channel Frequency (MHz)	825.5	836.5						847.5	Channel Frequency (MHz)	824.7	
3M	QPSK	1	0	22.98	23.06	22.86	0	1.4M	QPSK	1	0	22.99	22.94	22.80	0
		1	7	22.90	22.98	22.75	0			1	2	22.77	22.85	22.67	0
		1	14	22.82	22.89	22.64	0			1	5	22.71	22.80	22.62	0
		8	0	21.95	22.04	21.78	1			3	0	22.93	22.92	22.78	0
		8	3	21.98	22.01	21.85	1			3	1	22.83	22.86	22.73	0
		8	7	21.85	21.95	21.74	1			3	3	22.77	22.86	22.70	0
		15	0	21.90	21.98	21.77	1			6	0	21.85	21.90	21.72	1
	16QAM	1	0	22.30	22.33	22.09	1		16QAM	1	0	22.13	22.25	22.11	1
		1	7	22.16	22.19	22.03	1			1	2	22.04	22.18	22.02	1
		1	14	22.04	22.12	21.97	1			1	5	22.07	21.98	21.85	1
		8	0	21.09	21.12	20.92	2			3	0	21.95	22.09	21.89	1
		8	3	21.04	21.09	20.82	2			3	1	21.94	22.03	21.81	1
		8	7	20.97	21.00	20.74	2			3	3	21.91	21.97	21.73	1
		15	0	21.01	21.06	20.86	2			6	0	20.90	21.02	20.88	2

LTE Band 26																			
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)				
				26865	26915	26965						26840	26915	26990					
				Channel Frequency (MHz)	831.5	836.5						841.5	Channel Frequency (MHz)	829.0		836.5	844.0		
15M	QPSK	1	0	23.02	23.15	23.01	0	10M	QPSK	1	0	22.92	23.14	22.92	0				
		1	37	22.85	22.96	22.83	0			1	24	22.79	22.91	22.77	0				
		1	74	22.75	22.86	22.73	0			1	49	22.65	22.78	22.66	0				
		36	0	21.95	22.06	21.93	1			25	0	21.85	21.99	21.87	1				
		36	19	21.90	22.01	21.88	1			25	12	21.82	21.96	21.85	1				
		36	39	21.82	21.93	21.80	1			25	25	21.72	21.86	21.76	1				
		75	0	21.90	22.01	21.88	1			50	0	21.89	22.01	21.88	1				
	16QAM	1	0	22.32	22.43	22.30	1		16QAM	1	0	22.29	22.35	22.25	1				
		1	37	22.21	22.32	22.19	1			1	24	22.20	22.22	22.19	1				
		1	74	21.97	22.08	21.95	1			1	49	21.94	22.06	21.94	1				
		36	0	21.08	21.19	21.06	2			25	0	21.06	21.12	21.05	2				
		36	19	21.05	21.16	21.03	2			25	12	21.05	21.16	21.03	2				
		36	39	20.92	21.03	20.90	2			25	25	20.90	20.99	20.89	2				
		75	0	20.98	21.09	20.96	2			50	0	20.89	21.06	20.95	2				
5M	QPSK	1	0	22.96	23.04	22.84	0	3M	QPSK	1	0	22.82	23.08	22.97	1				
		1	12	22.62	22.95	22.78	0			1	7	22.72	22.76	22.78	1				
		1	24	22.61	22.67	22.55	0			1	14	22.55	22.70	22.69	1				
		12	0	21.87	22.03	21.83	1			8	0	21.92	21.86	21.77	3				
		12	6	21.82	21.88	21.81	1			8	3	21.79	21.94	21.80	3				
		12	13	21.60	21.82	21.65	1			8	7	21.76	21.81	21.63	3				
		25	0	21.76	21.77	21.81	1			15	0	21.72	21.85	21.70	6				
	16QAM	1	0	22.11	22.34	22.27	1		16QAM	1	0	22.22	22.39	22.19	1				
		1	12	22.15	22.08	22.02	1			1	7	22.08	22.14	22.05	1				
		1	24	21.89	21.95	21.88	1			1	14	21.77	21.96	21.79	1				
		12	0	20.89	21.03	20.91	2			8	0	21.02	21.07	20.87	2				
		12	6	21.00	21.04	20.96	2			8	3	20.89	21.07	20.87	2				
		12	13	20.72	20.93	20.74	2			8	7	20.84	20.93	20.77	2				
		25	0	20.90	20.92	20.78	2			15	0	20.81	21.02	20.78	2				
		1.4M	QPSK	1	0	22.93	23.05			22.95	0	1.4M	QPSK	1	0	22.93	23.05	22.95	0
				1	2	22.68	22.78			22.73	0			1	2	22.68	22.78	22.73	0
				1	5	22.53	22.79			22.60	0			1	5	22.53	22.79	22.60	0
3	0			22.75	22.94	22.85	0	3	0	22.75	22.94			22.85	0				
3	1			22.70	22.81	22.71	0	3	1	22.70	22.81			22.71	0				
3	3			22.74	22.84	22.64	0	3	3	22.74	22.84			22.64	0				
6	0		21.84	21.86	21.84	1	6	0	21.84	21.86	21.84		1						
16QAM	1		0	22.20	22.43	22.08	1	16QAM	1	0	22.20		22.43	22.08	1				
	1		2	22.02	22.23	22.12	1		1	2	22.02		22.23	22.12	1				
	1		5	21.80	22.02	21.82	1		1	5	21.80		22.02	21.82	1				
	3		0	21.88	22.08	21.86	1		3	0	21.88		22.08	21.86	1				
	3	1	21.95	22.08	21.88	1	3		1	21.95	22.08	21.88	1						
6	0	20.88	20.91	20.79	2	6	0	20.88	20.91	20.79	2								

ERP Power (dBm)

GSM							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	128	824.2	2.50	31.208	31.56	1431.53	H
	189	836.4	2.34	31.3	31.49	1409.29	
	251	848.8	2.26	31.222	31.33	1358.94	
	128	824.2	-2.84	31.504	26.51	448.13	V
	189	836.4	-2.54	31.117	26.43	439.24	
	251	848.8	-3.40	31.922	26.37	433.71	

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

EDGE							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	128	824.2	-4.49	31.208	24.57	286.29	H
	189	836.4	-4.64	31.3	24.51	282.49	
	251	848.8	-4.68	31.222	24.39	274.92	
	128	824.2	-9.86	31.504	19.49	89.00	V
	189	836.4	-9.56	31.117	19.41	87.24	
	251	848.8	-10.40	31.922	19.37	86.54	

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

WCDMA							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	4132	826.4	-7.50	31.208	21.56	143.15	H
	4182	836.4	-7.70	31.3	21.45	139.64	
	4233	846.6	-7.69	31.222	21.38	137.47	
	4132	826.4	-12.70	31.504	16.65	46.28	V
	4182	836.4	-12.40	31.117	16.57	45.36	
	4233	846.6	-13.27	31.922	16.50	44.69	

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

LTE Band 5							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20407	824.7	-7.61	31.208	21.45	139.57	H
	20525	836.5	-7.75	31.3	21.40	138.04	
	20643	848.3	-7.74	31.222	21.33	135.89	
	V	20407	824.7	-12.92	31.504	16.43	43.99
		20525	836.5	-12.60	31.117	16.37	43.32
		20643	848.3	-13.48	31.922	16.29	42.58
Channel Bandwidth: 1.4 MHz / 16QAM							
X	20407	824.7	-8.61	31.208	20.45	110.87	H
	20525	836.5	-8.76	31.3	20.39	109.40	
	20643	848.3	-8.74	31.222	20.33	107.94	
	V	20407	824.7	-13.92	31.504	15.43	34.95
		20525	836.5	-13.61	31.117	15.36	34.33
		20643	848.3	-14.49	31.922	15.28	33.74

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

LTE Band 5							
Channel Bandwidth: 3 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20415	825.5	-7.58	31.208	21.48	140.54	H
	20525	836.5	-7.71	31.3	21.44	139.32	
	20635	847.5	-7.70	31.222	21.37	137.15	
	V	20415	825.5	-12.88	31.504	16.47	44.40
		20525	836.5	-12.56	31.117	16.41	43.72
		20635	847.5	-13.44	31.922	16.33	42.97
Channel Bandwidth: 3 MHz / 16QAM							
X	20415	825.5	-8.58	31.208	20.48	111.63	H
	20525	836.5	-8.72	31.3	20.43	110.41	
	20635	847.5	-8.71	31.222	20.36	108.69	
	V	20415	825.5	-13.89	31.504	15.46	35.19
		20525	836.5	-13.56	31.117	15.41	34.73
		20635	847.5	-14.45	31.922	15.32	34.06

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

LTE Band 5							
Channel Bandwidth: 5 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20425	826.5	-7.54	31.208	21.52	141.84	H
	20525	836.5	-7.68	31.3	21.47	140.28	
	20625	846.5	-7.67	31.222	21.40	138.10	
	20425	826.5	-12.84	31.504	16.51	44.81	V
	20525	836.5	-12.52	31.117	16.45	44.13	
	20625	846.5	-13.41	31.922	16.36	43.27	
Channel Bandwidth: 5 MHz / 16QAM							
X	20425	826.5	-8.54	31.208	20.52	112.67	H
	20525	836.5	-8.69	31.3	20.46	111.17	
	20625	846.5	-8.68	31.222	20.39	109.45	
	20425	826.5	-13.84	31.504	15.51	35.60	V
	20525	836.5	-13.53	31.117	15.44	34.97	
	20625	846.5	-14.42	31.922	15.35	34.29	

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

LTE Band 5							
Channel Bandwidth: 10 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	20450	829.0	-7.50	31.208	21.56	143.15	H
	20525	836.5	-7.64	31.3	21.51	141.58	
	20600	844.0	-7.64	31.222	21.43	139.06	
	20450	829.0	-12.80	31.504	16.55	45.23	V
	20525	836.5	-12.48	31.117	16.49	44.53	
	20600	844.0	-13.37	31.922	16.40	43.67	
Channel Bandwidth: 10 MHz / 16QAM							
X	20450	829.0	-8.51	31.208	20.55	113.45	H
	20525	836.5	-8.65	31.3	20.50	112.20	
	20600	844.0	-8.64	31.222	20.43	110.46	
	20450	829.0	-13.81	31.504	15.54	35.84	V
	20525	836.5	-13.48	31.117	15.49	35.38	
	20600	844.0	-14.38	31.922	15.39	34.61	

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

LTE Band 26							
Channel Bandwidth: 1.4 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	26797	824.7	-7.65	31.208	21.41	138.29	H
	26915	836.5	-7.86	31.3	21.29	134.59	
	27033	848.3	-7.87	31.222	21.20	131.89	
	26797	824.7	-13.95	31.504	15.40	34.71	V
	26915	836.5	-13.65	31.117	15.32	34.02	
	27033	848.3	-14.55	31.922	15.22	33.28	
Channel Bandwidth: 1.4 MHz / 16QAM							
X	26797	824.7	-8.65	31.208	20.41	109.85	H
	26915	836.5	-8.87	31.3	20.28	106.66	
	27033	848.3	-8.87	31.222	20.20	104.76	
	26797	824.7	-14.96	31.504	14.39	27.50	V
	26915	836.5	-14.65	31.117	14.32	27.02	
	27033	848.3	-15.56	31.922	14.21	26.38	

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

LTE Band 26							
Channel Bandwidth: 3 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	26805	825.5	-7.61	31.208	21.45	139.57	H
	26915	836.5	-7.82	31.3	21.33	135.83	
	27025	847.5	-7.83	31.222	21.24	133.11	
	26805	825.5	-13.92	31.504	15.43	34.95	V
	26915	836.5	-13.61	31.117	15.36	34.33	
	27025	847.5	-14.51	31.922	15.26	33.59	
Channel Bandwidth: 3 MHz / 16QAM							
X	26805	825.5	-8.61	31.208	20.45	110.87	H
	26915	836.5	-8.83	31.3	20.32	107.65	
	27025	847.5	-8.84	31.222	20.23	105.49	
	26805	825.5	-14.92	31.504	14.43	27.76	V
	26915	836.5	-14.61	31.117	14.36	27.27	
	27025	847.5	-15.52	31.922	14.25	26.62	

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

LTE Band 26							
Channel Bandwidth: 5 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	26815	826.5	-7.58	31.208	21.48	140.54	H
	26915	836.5	-7.78	31.3	21.37	137.09	
	27015	846.5	-7.79	31.222	21.28	134.34	
	26815	826.5	-13.88	31.504	15.47	35.27	V
	26919	836.5	-13.58	31.117	15.39	34.57	
	27015	846.5	-14.47	31.922	15.30	33.90	
Channel Bandwidth: 5 MHz / 16QAM							
X	26815	826.5	-8.58	31.208	20.48	111.63	H
	26915	836.5	-8.78	31.3	20.37	108.89	
	27015	846.5	-8.79	31.222	20.28	106.71	
	26815	826.5	-14.89	31.504	14.46	27.95	V
	26919	836.5	-14.58	31.117	14.39	27.46	
	27015	846.5	-15.47	31.922	14.30	26.93	

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

LTE Band 26							
Channel Bandwidth: 10 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	26840	829.0	-7.54	31.208	21.52	141.84	H
	26915	836.5	-7.74	31.3	21.41	138.36	
	26990	844.0	-7.76	31.222	21.32	135.39	
	26840	829.0	-13.84	31.504	15.51	35.60	V
	26919	836.5	-13.55	31.117	15.42	34.81	
	26990	844.0	-14.44	31.922	15.33	34.14	
Channel Bandwidth: 10 MHz / 16QAM							
X	26840	829.0	-8.54	31.208	20.52	112.67	H
	26915	836.5	-8.74	31.3	20.41	109.90	
	26990	844.0	-8.77	31.222	20.30	107.20	
	26840	829.0	-14.84	31.504	14.51	28.27	V
	26919	836.5	-14.55	31.117	14.42	27.65	
	26990	844.0	-15.44	31.922	14.33	27.11	

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

LTE Band 26							
Channel Bandwidth: 15 MHz / QPSK							
Plane	Channel	Frequency (MHz)	Reading (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (mW)	Polarization (H/V)
X	26865	831.5	-7.50	31.208	21.56	143.15	H
	26915	836.5	-7.70	31.3	21.45	139.64	
	26965	841.5	-7.71	31.222	21.36	136.84	
	26865	831.5	-13.80	31.504	15.55	35.93	V
	26915	836.5	-13.51	31.117	15.46	35.13	
	26965	841.5	-14.39	31.922	15.38	34.53	
Channel Bandwidth: 15 MHz / 16QAM							
X	26865	831.5	-8.51	31.208	20.55	113.45	H
	26915	836.5	-8.70	31.3	20.45	110.92	
	26965	841.5	-8.71	31.222	20.36	108.69	
	26865	831.5	-14.80	31.504	14.55	28.54	V
	26915	836.5	-14.51	31.117	14.46	27.91	
	26965	841.5	-15.39	31.922	14.38	27.43	

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

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

N/A

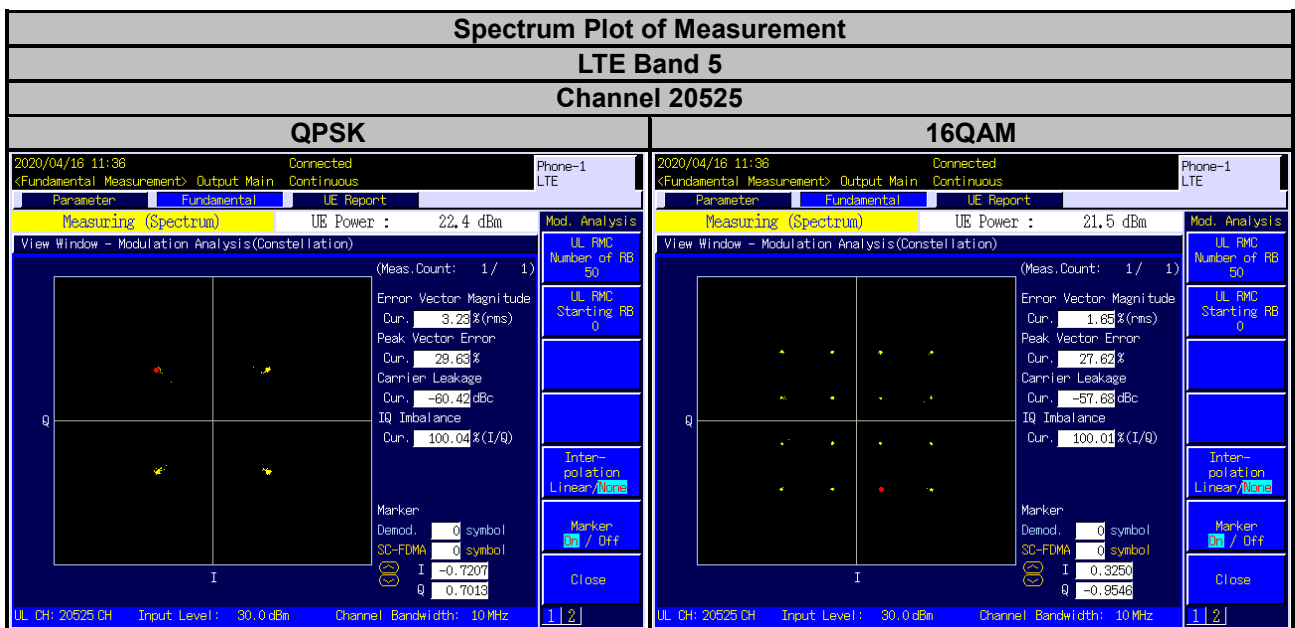
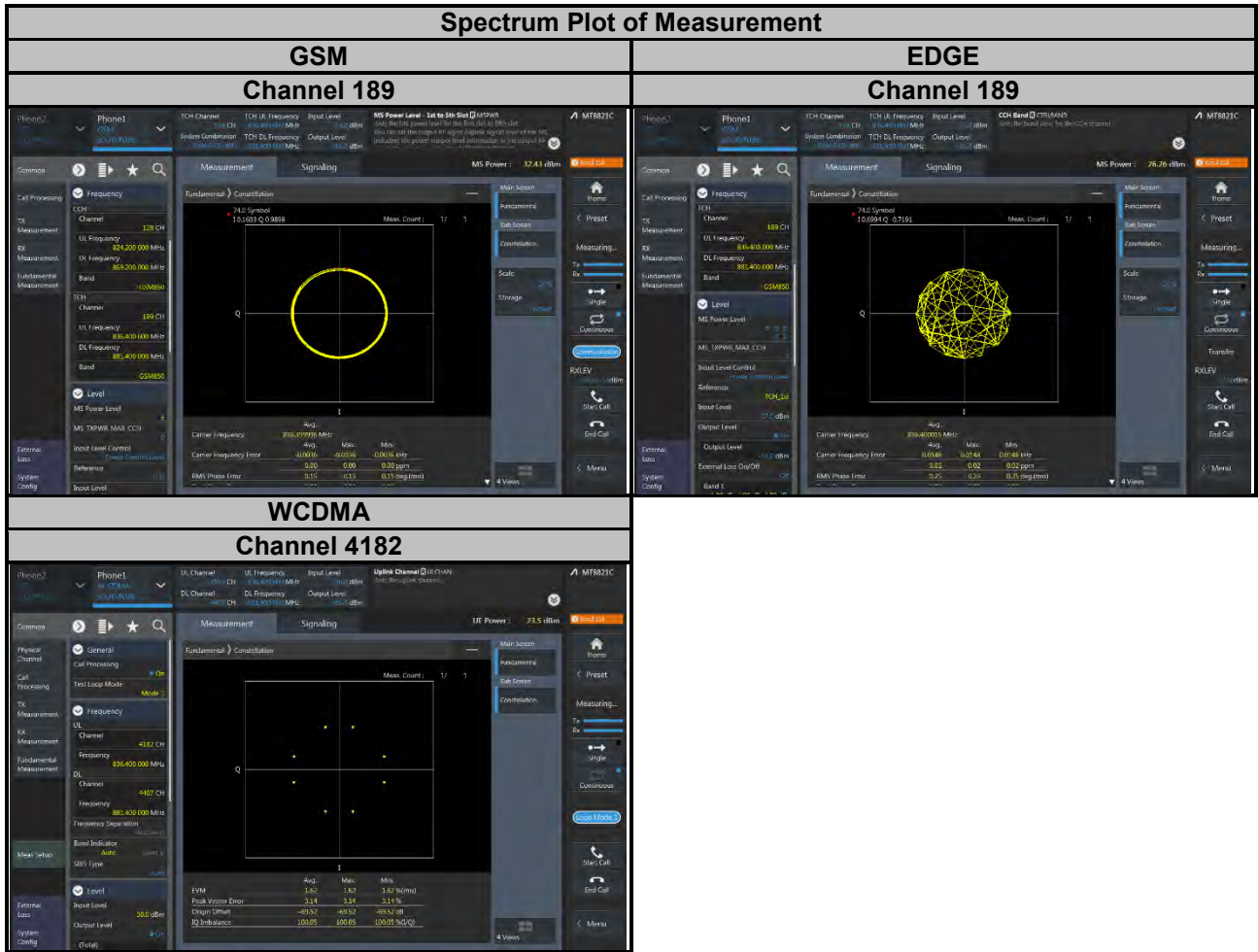
4.2.2 Test Setup



4.2.3 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector. The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.4 Test Results



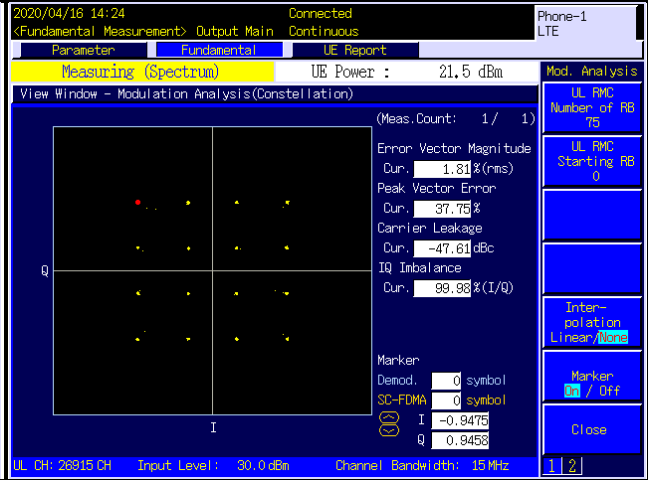
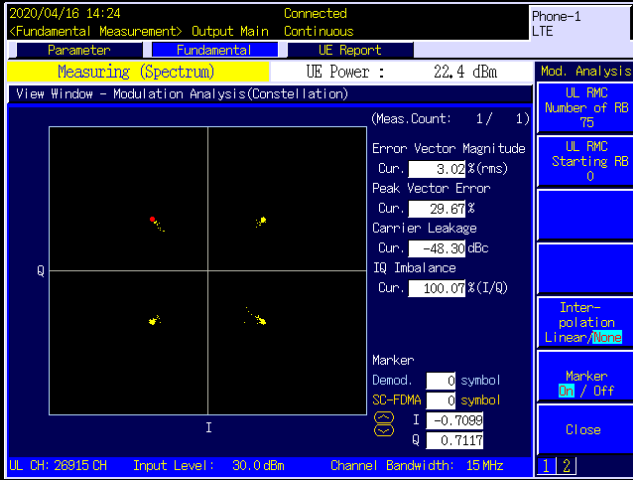
Spectrum Plot of Measurement

LTE Band 26

Channel 26915

QPSK

16QAM



4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

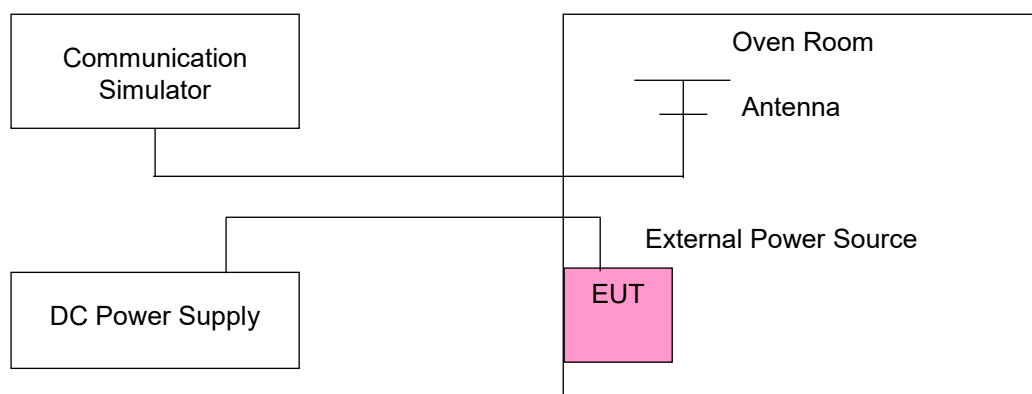
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.3.2 Test Procedure

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

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

4.3.3 Test Setup



4.3.4 Test Results

Frequency Error vs. Voltage

Voltage (Volts)	GSM				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	824.200003	0.004	848.800002	0.002	2.5
3.65	824.200004	0.005	848.800003	0.003	2.5
4.23	824.200004	0.005	848.800002	0.002	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	GSM				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	824.200001	0.002	848.800001	0.001	2.5
-20	824.200003	0.003	848.800003	0.003	2.5
-10	824.200001	0.002	848.800001	0.001	2.5
0	824.200002	0.002	848.800001	0.001	2.5
10	824.200004	0.004	848.800004	0.004	2.5
20	824.199998	-0.002	848.799997	-0.003	2.5
30	824.199996	-0.005	848.799998	-0.002	2.5
40	824.199998	-0.002	848.799999	-0.001	2.5
50	824.199997	-0.004	848.799998	-0.003	2.5

Frequency Error vs. Voltage

Voltage (Volts)	EDGE				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	824.200003	0.003	848.800004	0.004	2.5
3.65	824.200002	0.002	848.800002	0.003	2.5
4.23	824.200003	0.003	848.800003	0.003	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	EDGE				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	824.200001	0.001	848.800001	0.002	2.5
-20	824.200002	0.003	848.800002	0.003	2.5
-10	824.200002	0.002	848.800003	0.003	2.5
0	824.200004	0.005	848.800002	0.002	2.5
10	824.200003	0.004	848.800001	0.002	2.5
20	824.199997	-0.004	848.799998	-0.003	2.5
30	824.199996	-0.004	848.799998	-0.003	2.5
40	824.199998	-0.003	848.799996	-0.004	2.5
50	824.199998	-0.002	848.799999	-0.001	2.5

Frequency Error vs. Voltage

Voltage (Volts)	WCDMA				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	826.400004	0.004	846.600004	0.004	2.5
3.65	826.400004	0.004	846.600001	0.001	2.5
4.23	826.400002	0.002	846.600003	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	WCDMA				Limit (ppm)
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	826.400002	0.003	846.600002	0.002	2.5
-20	826.400003	0.003	846.600004	0.005	2.5
-10	826.400004	0.005	846.600003	0.004	2.5
0	826.400001	0.001	846.600004	0.005	2.5
10	826.400003	0.003	846.600004	0.005	2.5
20	826.399999	-0.001	846.599996	-0.005	2.5
30	826.399998	-0.002	846.599998	-0.003	2.5
40	826.399998	-0.002	846.599999	-0.001	2.5
50	826.399997	-0.004	846.599998	-0.002	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 1.4 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	824.700001	0.001	848.300004	0.004	2.5
3.65	824.700003	0.003	848.300003	0.004	2.5
4.23	824.700004	0.004	848.300002	0.003	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 1.4 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	824.700002	0.003	848.300001	0.002	2.5
-20	824.700003	0.003	848.300001	0.001	2.5
-10	824.700003	0.004	848.300002	0.003	2.5
0	824.700003	0.003	848.300003	0.004	2.5
10	824.700002	0.003	848.300002	0.003	2.5
20	824.699997	-0.004	848.299998	-0.003	2.5
30	824.699997	-0.003	848.299999	-0.001	2.5
40	824.699998	-0.002	848.299998	-0.003	2.5
50	824.699999	-0.002	848.299998	-0.002	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 3 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	825.500001	0.002	847.500002	0.003	2.5
3.65	825.500001	0.001	847.500002	0.002	2.5
4.23	825.500001	0.001	847.500003	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 3 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	825.500002	0.002	847.500002	0.002	2.5
-20	825.500003	0.004	847.500002	0.002	2.5
-10	825.500004	0.005	847.500002	0.002	2.5
0	825.500003	0.004	847.500003	0.003	2.5
10	825.500002	0.003	847.500004	0.004	2.5
20	825.499998	-0.003	847.499999	-0.002	2.5
30	825.499998	-0.002	847.499999	-0.001	2.5
40	825.499998	-0.002	847.499998	-0.003	2.5
50	825.499999	-0.002	847.499999	-0.002	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 5 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	826.500004	0.004	846.500003	0.004	2.5
3.65	826.500002	0.002	846.500002	0.002	2.5
4.23	826.500001	0.001	846.500001	0.001	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 5 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	826.500002	0.002	846.500001	0.002	2.5
-20	826.500004	0.004	846.500002	0.003	2.5
-10	826.500003	0.004	846.500002	0.002	2.5
0	826.500004	0.004	846.500003	0.003	2.5
10	826.500002	0.002	846.500003	0.003	2.5
20	826.499999	-0.002	846.499997	-0.004	2.5
30	826.499999	-0.002	846.499998	-0.002	2.5
40	826.499996	-0.005	846.499998	-0.003	2.5
50	826.499999	-0.001	846.499996	-0.005	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 10 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	829.000003	0.003	844.000003	0.003	2.5
3.65	829.000004	0.005	844.000003	0.004	2.5
4.23	829.000003	0.003	844.000002	0.003	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 5				Limit (ppm)
	Channel Bandwidth: 10 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	829.000002	0.002	844.000004	0.004	2.5
-20	829.000002	0.002	844.000004	0.005	2.5
-10	829.000002	0.002	844.000004	0.005	2.5
0	829.000003	0.004	844.000002	0.003	2.5
10	829.000003	0.003	844.000004	0.004	2.5
20	828.999997	-0.003	843.999996	-0.005	2.5
30	828.999999	-0.002	843.999997	-0.004	2.5
40	828.999997	-0.004	843.999998	-0.002	2.5
50	828.999999	-0.002	843.999997	-0.004	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 1.4 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	824.700002	0.002	848.300000	0.002	2.5
3.65	824.700003	0.004	848.300000	0.001	2.5
4.23	824.700002	0.002	848.300000	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 1.4 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	824.700001	0.001	848.300000	0.003	2.5
-20	824.700001	0.001	848.300000	0.003	2.5
-10	824.700002	0.002	848.300000	0.005	2.5
0	824.700003	0.004	848.300000	0.005	2.5
10	824.700002	0.003	848.300000	0.003	2.5
20	824.699997	-0.003	848.300000	-0.003	2.5
30	824.699999	-0.001	848.300000	-0.003	2.5
40	824.699998	-0.003	848.300000	-0.004	2.5
50	824.699999	-0.001	848.300000	-0.002	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 3 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	825.500003	0.003	847.500000	0.001	2.5
3.65	825.500002	0.003	847.500000	0.003	2.5
4.23	825.500001	0.001	847.500000	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 3 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	825.500003	0.004	847.500000	0.002	2.5
-20	825.500004	0.004	847.500000	0.002	2.5
-10	825.500003	0.003	847.500000	0.003	2.5
0	825.500003	0.004	847.500000	0.002	2.5
10	825.500003	0.004	847.500000	0.005	2.5
20	825.499997	-0.003	847.500000	-0.004	2.5
30	825.499998	-0.002	847.500000	-0.002	2.5
40	825.499998	-0.002	847.500000	-0.002	2.5
50	825.499999	-0.002	847.500000	-0.002	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 5 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	826.500001	0.001	846.500003	0.004	2.5
3.65	826.500003	0.003	846.500002	0.002	2.5
4.23	826.500003	0.004	846.500004	0.005	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 5 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	826.500003	0.004	846.500002	0.002	2.5
-20	826.500003	0.004	846.500002	0.003	2.5
-10	826.500002	0.003	846.500002	0.002	2.5
0	826.500003	0.003	846.500003	0.003	2.5
10	826.500002	0.003	846.500004	0.004	2.5
20	826.499997	-0.003	846.499999	-0.002	2.5
30	826.499996	-0.004	846.499999	-0.002	2.5
40	826.499998	-0.003	846.499998	-0.003	2.5
50	826.499997	-0.004	846.499997	-0.003	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 10 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	829.000003	0.004	844.000004	0.005	2.5
3.65	829.000004	0.005	844.000003	0.004	2.5
4.23	829.000002	0.002	844.000003	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

Temp. (°C)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 10 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	829.000002	0.003	844.000002	0.003	2.5
-20	829.000003	0.004	844.000004	0.004	2.5
-10	829.000002	0.002	844.000004	0.004	2.5
0	829.000002	0.003	844.000003	0.004	2.5
10	829.000001	0.002	844.000003	0.003	2.5
20	828.999996	-0.004	843.999999	-0.002	2.5
30	828.999997	-0.003	843.999998	-0.002	2.5
40	828.999999	-0.002	843.999996	-0.004	2.5
50	828.999997	-0.004	843.999998	-0.003	2.5

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 15 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
3.85	831.500003	0.003	841.500002	0.002	2.5
3.65	831.500001	0.002	841.500002	0.002	2.5
4.23	831.500002	0.002	841.500003	0.004	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.65 Vdc to 4.23 Vdc.

Frequency Error vs. Temperature

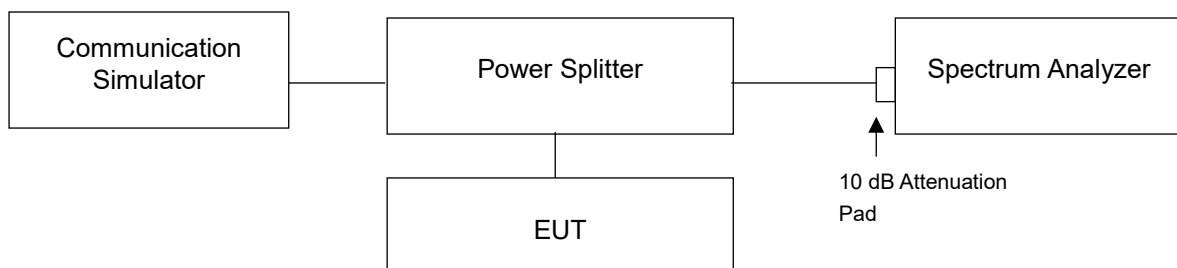
Temp. (°C)	LTE Band 26				Limit (ppm)
	Channel Bandwidth: 15 MHz				
	Low Channel		High Channel		
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)	
-30	831.500003	0.003	841.500001	0.002	2.5
-20	831.500004	0.005	841.500001	0.001	2.5
-10	831.500002	0.002	841.500003	0.003	2.5
0	831.500003	0.004	841.500002	0.002	2.5
10	831.500004	0.005	841.500004	0.004	2.5
20	831.499996	-0.004	841.499997	-0.003	2.5
30	831.499997	-0.003	841.499997	-0.004	2.5
40	831.499997	-0.004	841.499999	-0.001	2.5
50	831.499998	-0.002	841.499999	-0.002	2.5

4.4 Occupied Bandwidth Measurement

4.4.1 Test Procedure

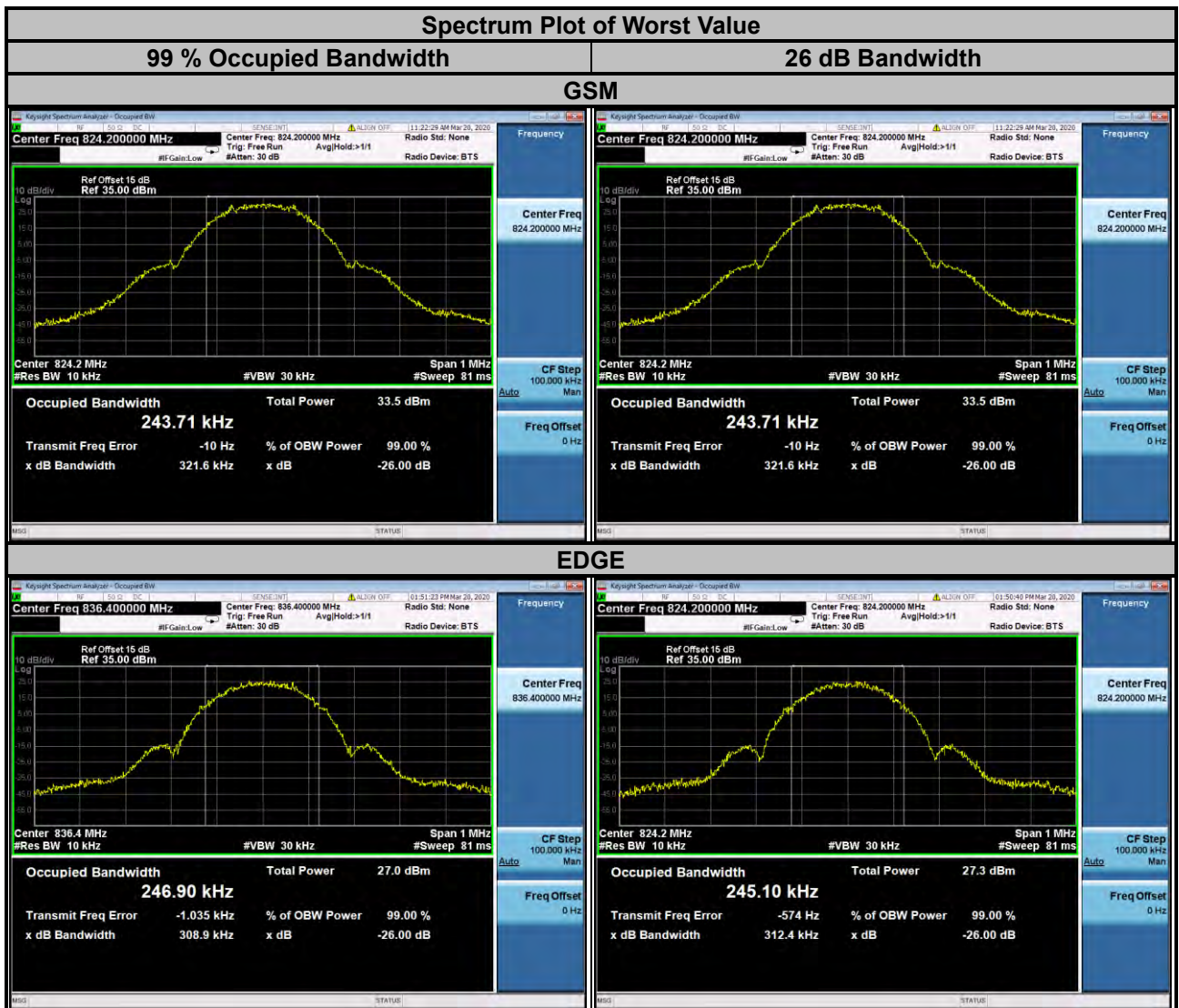
The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

4.4.2 Test Setup

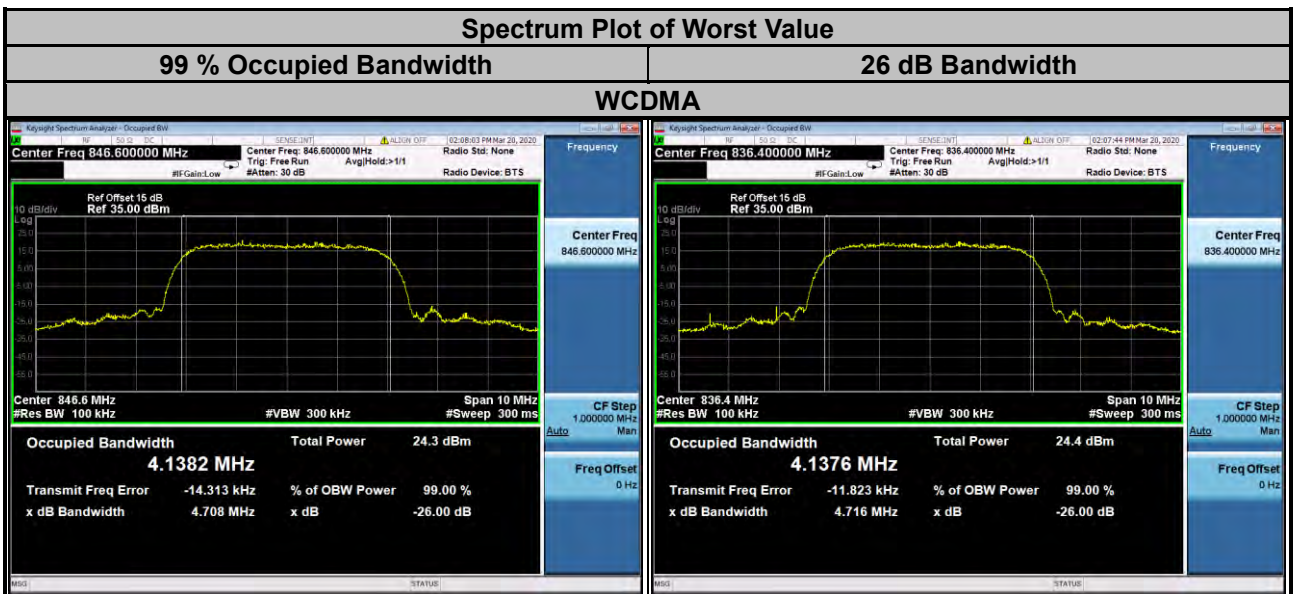


4.4.3 Test Result

GSM				EDGE			
Channel	Frequency (MHz)	99 % Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)	Channel	Frequency (MHz)	99 % Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)
128	824.2	243.71	321.60	128	824.2	245.10	312.40
189	836.4	242.63	310.20	189	836.4	246.90	308.90
251	848.8	242.06	315.60	251	848.8	249.39	311.40

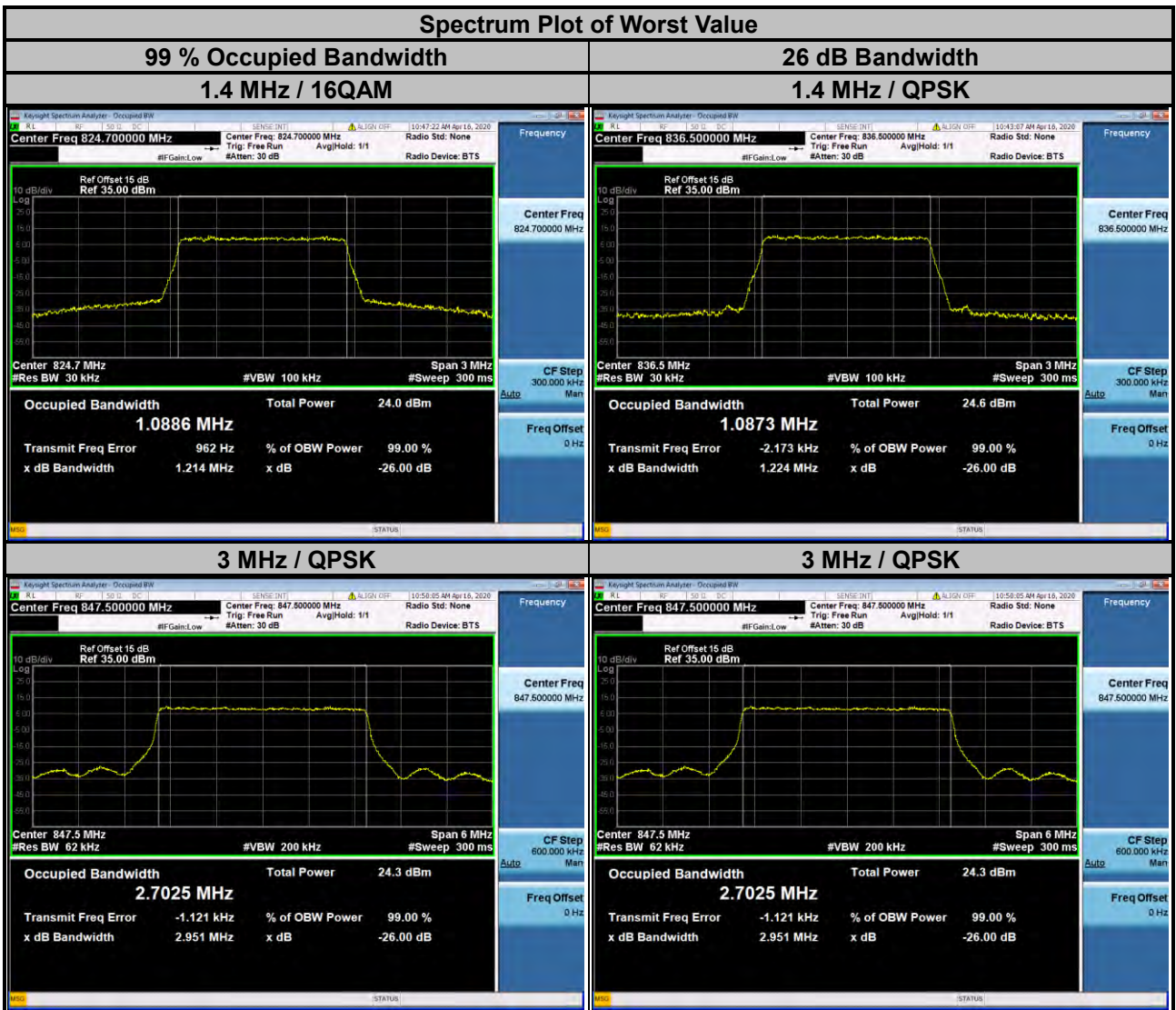


WCDMA			
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)	26 dB Bandwidth (MHz)
4132	826.4	4.1321	4.710
4182	836.4	4.1376	4.716
4233	846.6	4.1382	4.708



LTE Band 5					
Channel Bandwidth: 1.4 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20407	824.7	1.0858	1.0886	1.218	1.214
20525	836.5	1.0873	1.0875	1.224	1.211
20643	848.3	1.0862	1.0886	1.217	1.212

Channel Bandwidth: 3 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20415	825.5	2.7004	2.6998	2.929	2.938
20525	836.5	2.7005	2.6955	2.936	2.920
20635	847.5	2.7025	2.6968	2.951	2.924



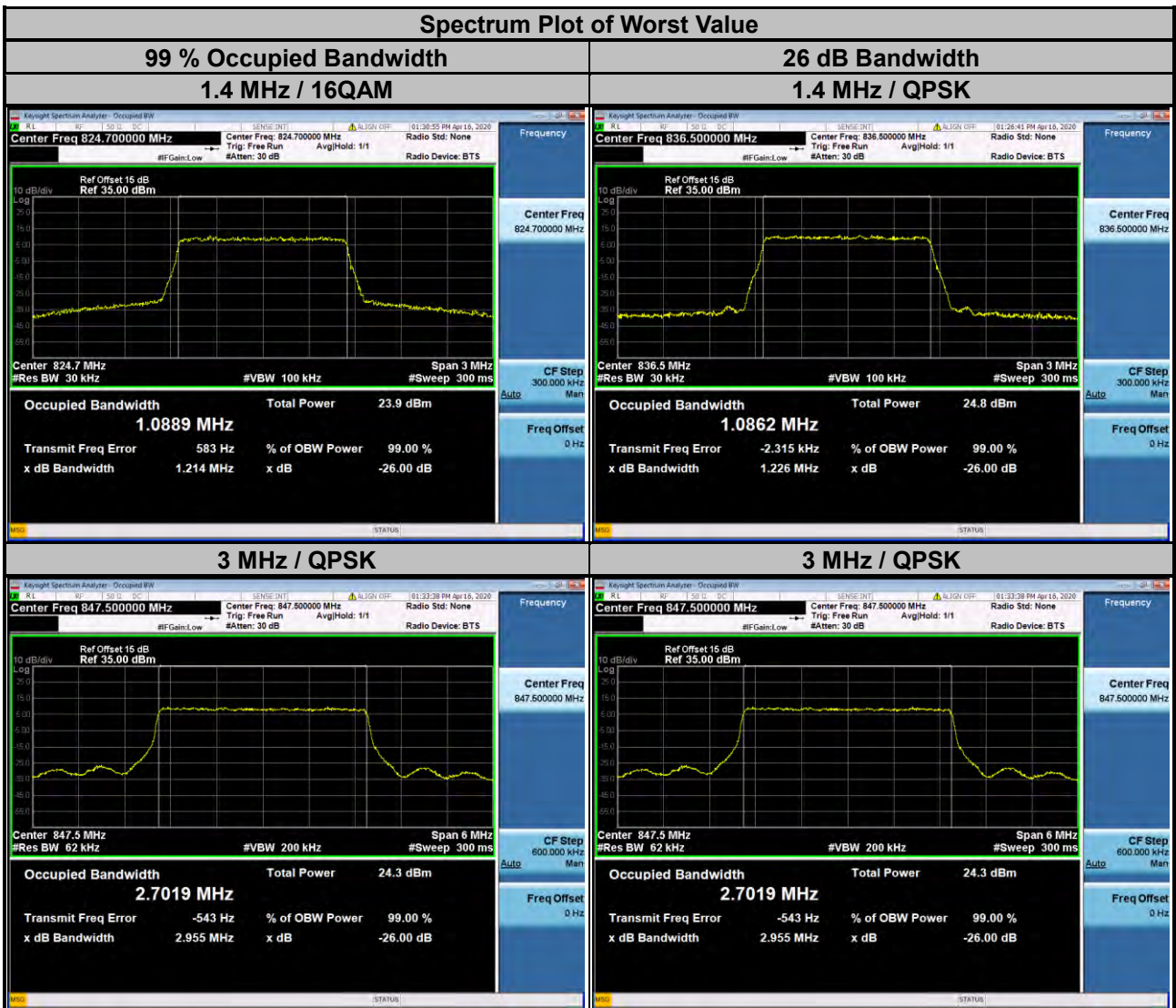
LTE Band 5					
Channel Bandwidth: 5 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20425	826.5	4.4944	4.4973	4.828	4.800
20525	836.5	4.4910	4.4935	4.821	4.810
20625	846.5	4.4903	4.4910	4.818	4.797

Channel Bandwidth: 10 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20450	829.0	8.9662	8.9759	9.513	9.512
20525	836.5	8.9649	8.9664	9.513	9.521
20600	844.0	8.9537	8.9548	9.528	9.508



LTE Band 26					
Channel Bandwidth: 1.4 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
26797	824.7	1.0847	1.0889	1.215	1.214
26915	836.5	1.0862	1.0872	1.226	1.212
27033	848.3	1.0866	1.0885	1.224	1.220

Channel Bandwidth: 3 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
26805	825.5	2.7001	2.6981	2.924	2.926
26915	836.5	2.7012	2.6974	2.930	2.925
27025	847.5	2.7019	2.6990	2.955	2.929

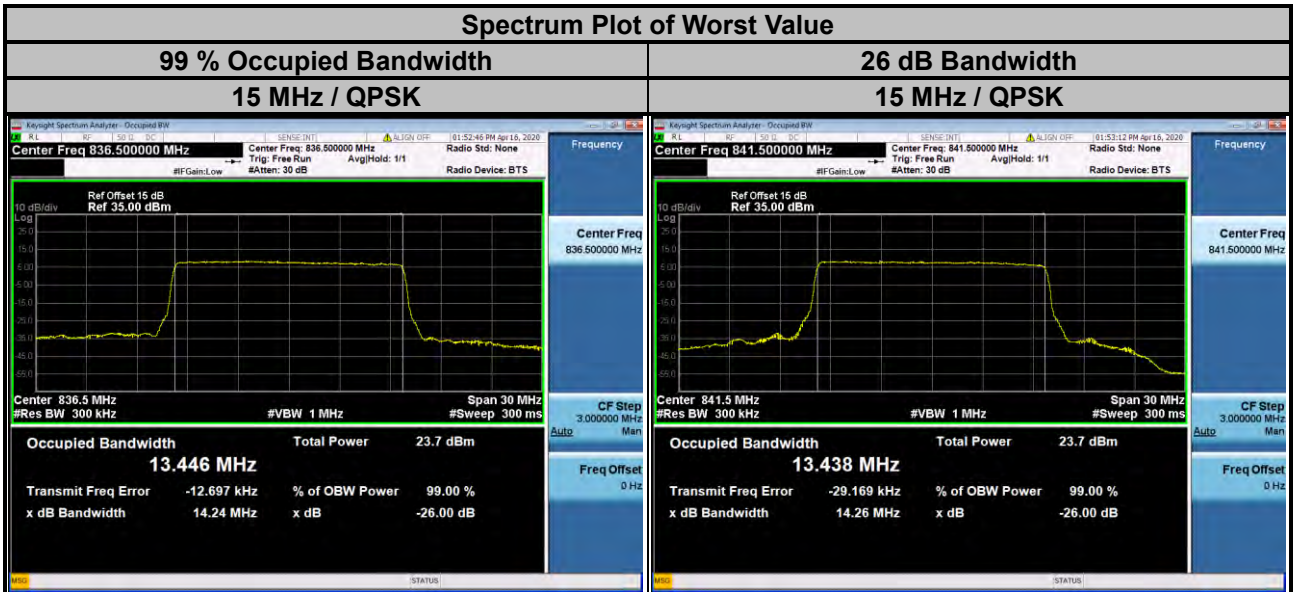


LTE Band 26					
Channel Bandwidth: 5 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
26815	826.5	4.4923	4.4941	4.820	4.800
26915	836.5	4.4929	4.4930	4.840	4.802
27015	846.5	4.4901	4.4910	4.813	4.799

Channel Bandwidth: 10 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
26840	829.0	8.9670	8.9715	9.529	9.514
26915	836.5	8.9591	8.9671	9.537	9.509
26990	844.0	8.9515	8.9560	9.538	9.500



LTE Band 26					
Channel Bandwidth: 15 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
26865	831.5	13.435	13.424	14.25	14.24
26915	836.5	13.446	13.433	14.24	14.23
26965	841.5	13.438	13.428	14.26	14.23

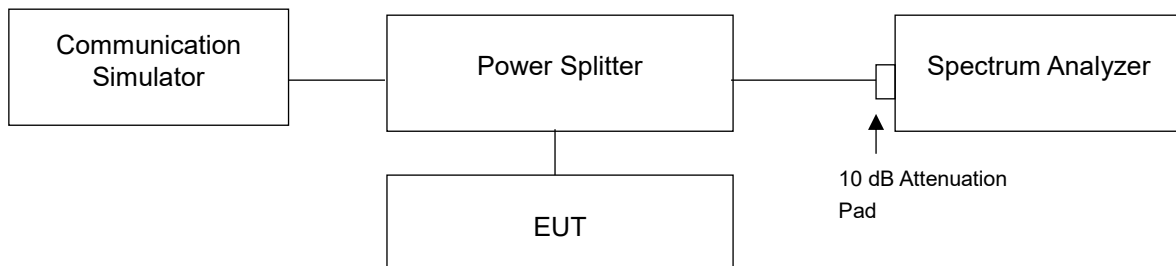


4.5 Band Edge Measurement

4.5.1 Limits of Band Edge Measurement

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

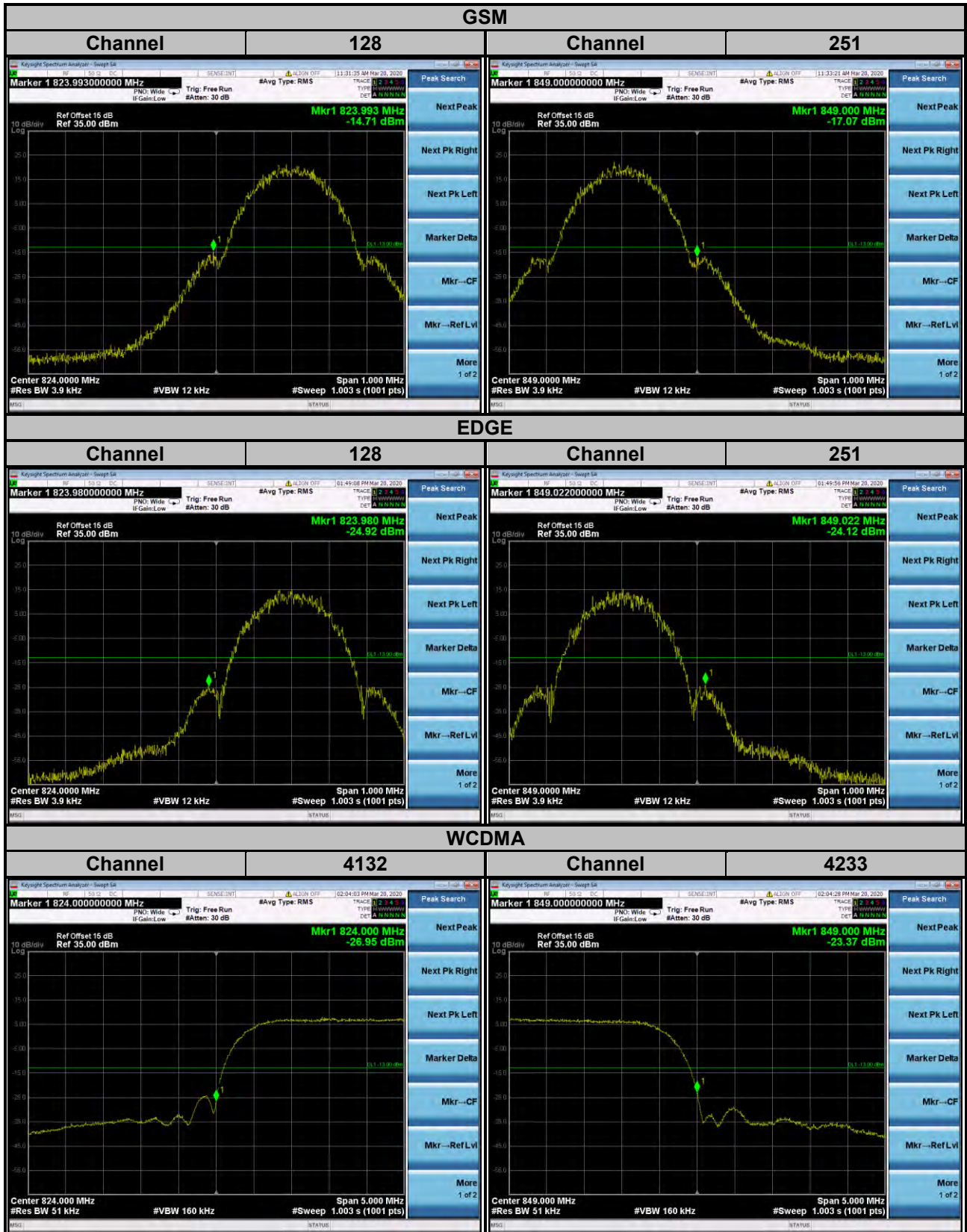
4.5.2 Test Setup



4.5.3 Test Procedures

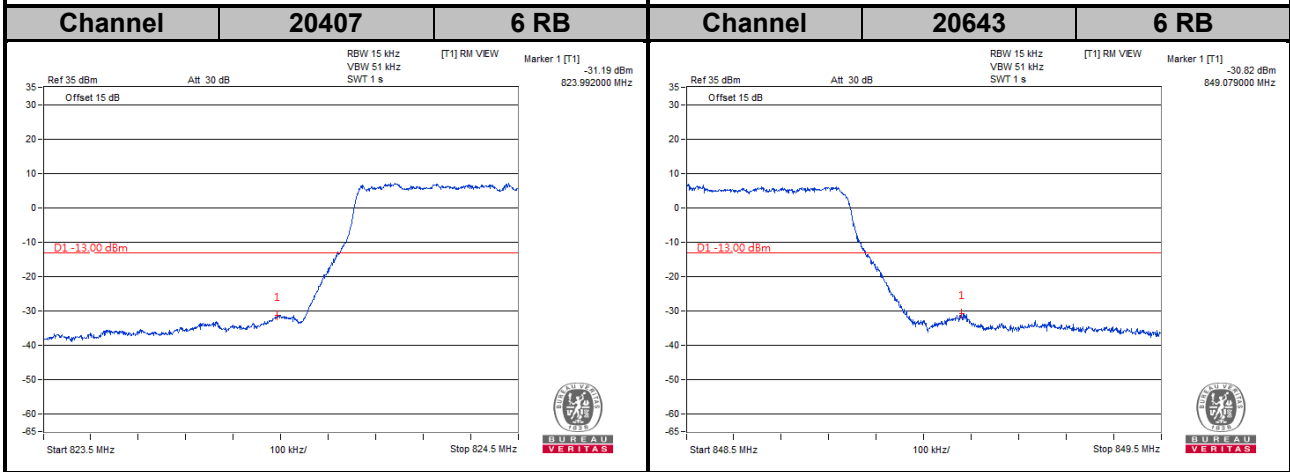
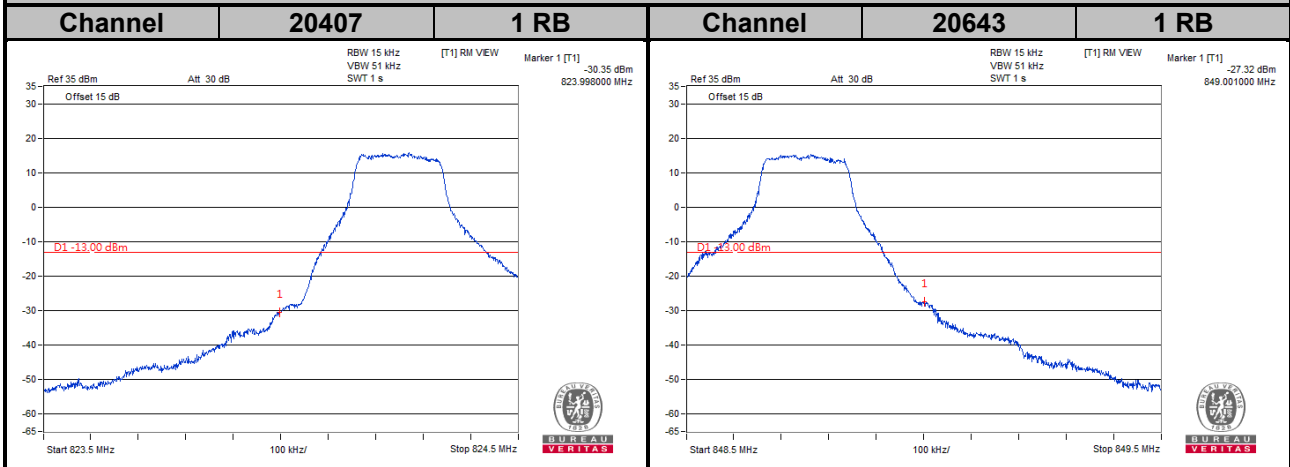
- All measurements were done at low and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 3.9 kHz and VB of the spectrum is 12 kHz (GSM/GPRS/EDGE).
- The center frequency of spectrum is the band edge frequency and span is 5 MHz. RB of the spectrum is 51 kHz and VB of the spectrum is 160 kHz (WCDMA).
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 15 kHz and VB of the spectrum is 51 kHz (LTE Bandwidth 1.4 MHz).
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 30 kHz and VB of the spectrum is 100 kHz (LTE Bandwidth 3 MHz).
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 51 kHz and VB of the spectrum is 160 kHz (LTE Bandwidth 5 MHz).
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 100 kHz and VB of the spectrum is 300 kHz (LTE Bandwidth 10 MHz).
- The center frequency of spectrum is the band edge frequency and span is 1 MHz. RB of the spectrum is 150 kHz and VB of the spectrum is 470 kHz (LTE Bandwidth 15 MHz).
- Record the max trace plot into the test report.

4.5.4 Test Results

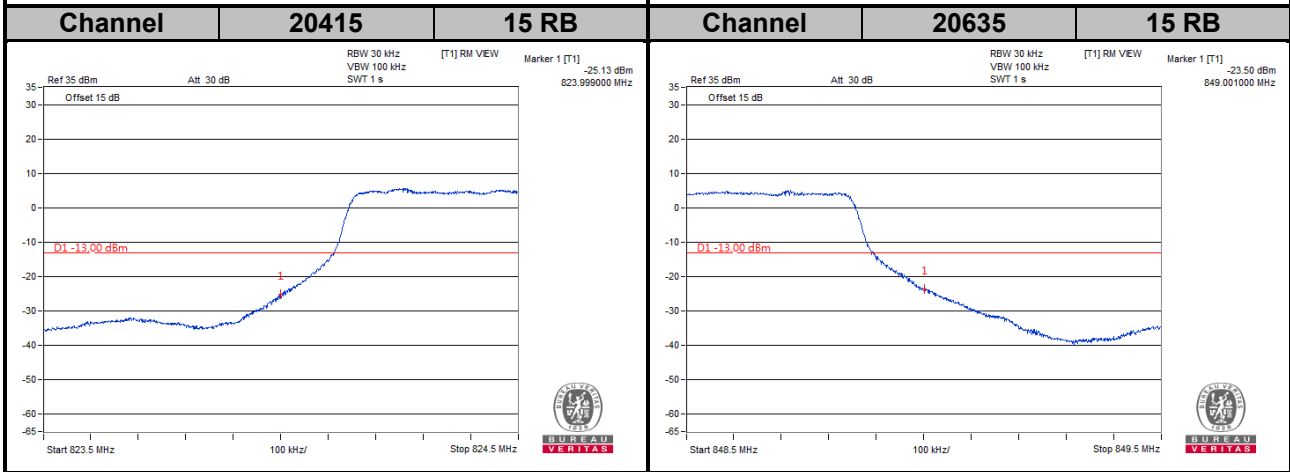
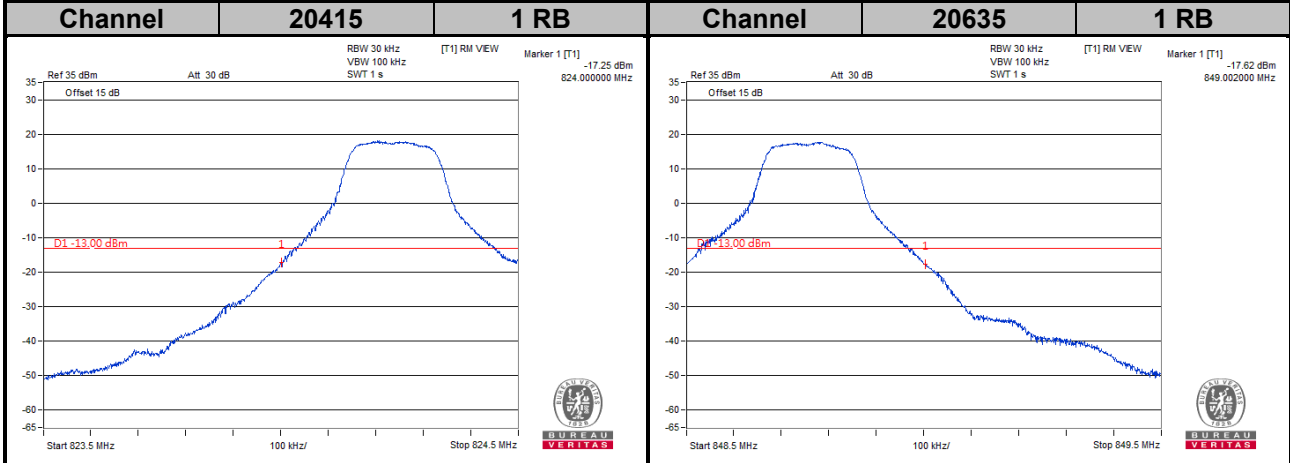


LTE Band 5

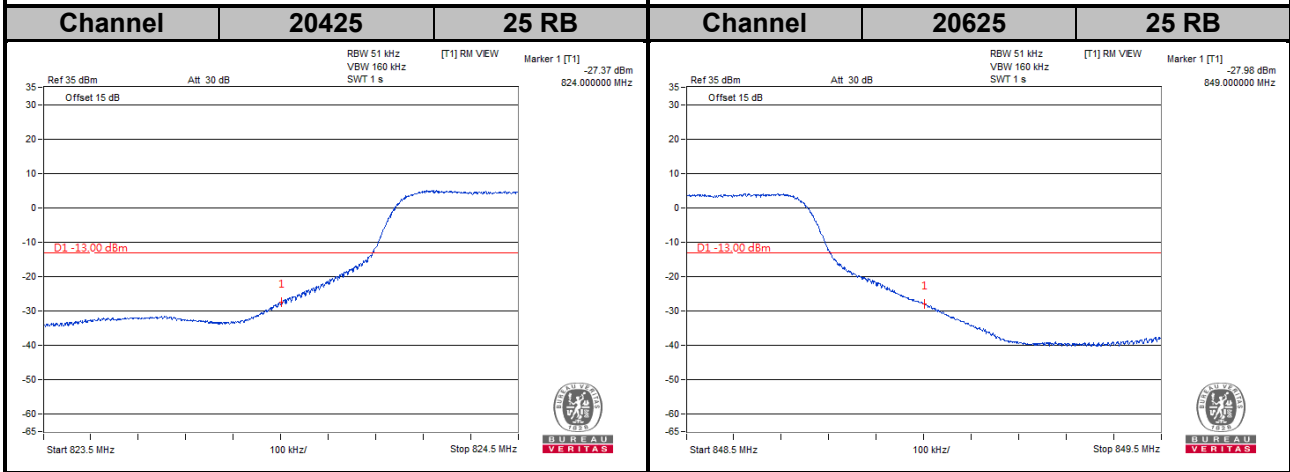
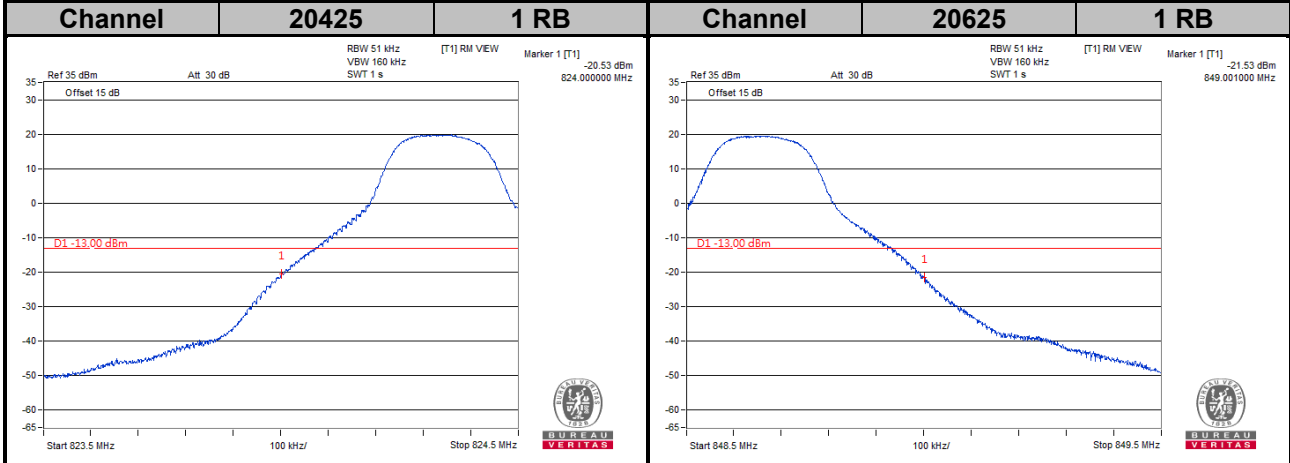
Channel Bandwidth: 1.4 MHz



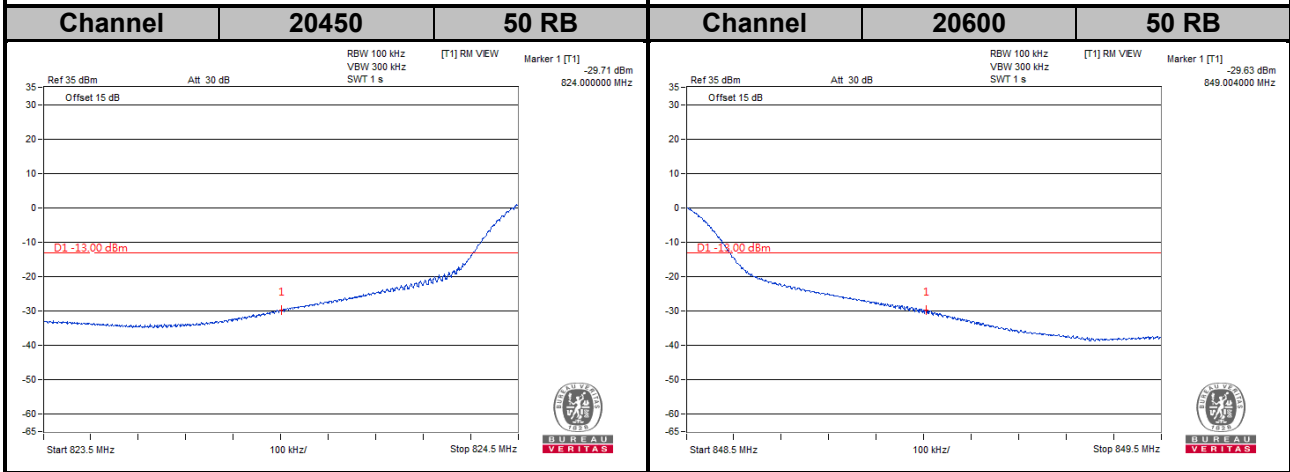
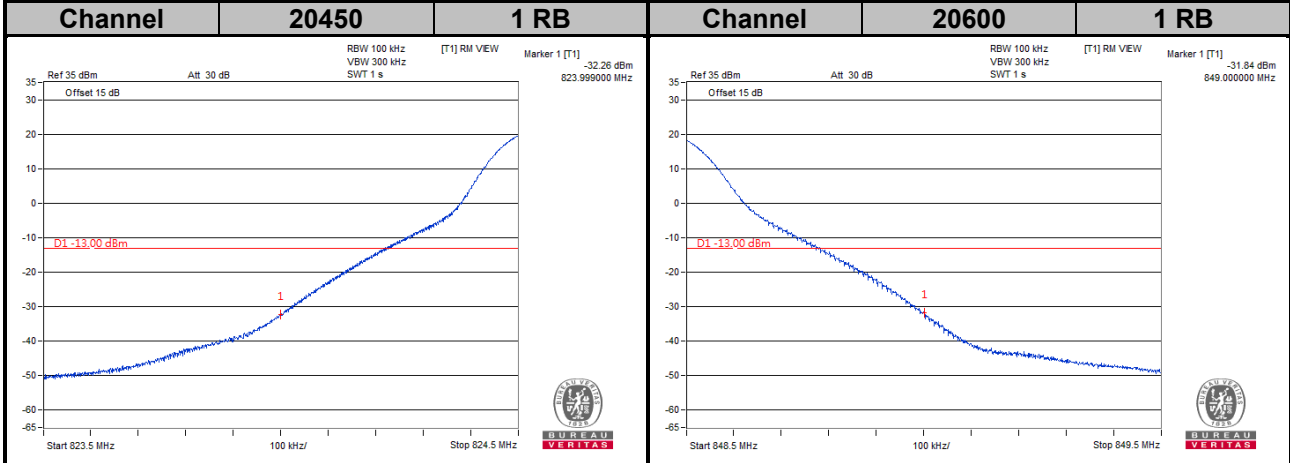
LTE Band 5
Channel Bandwidth: 3 MHz



LTE Band 5
Channel Bandwidth: 5 MHz

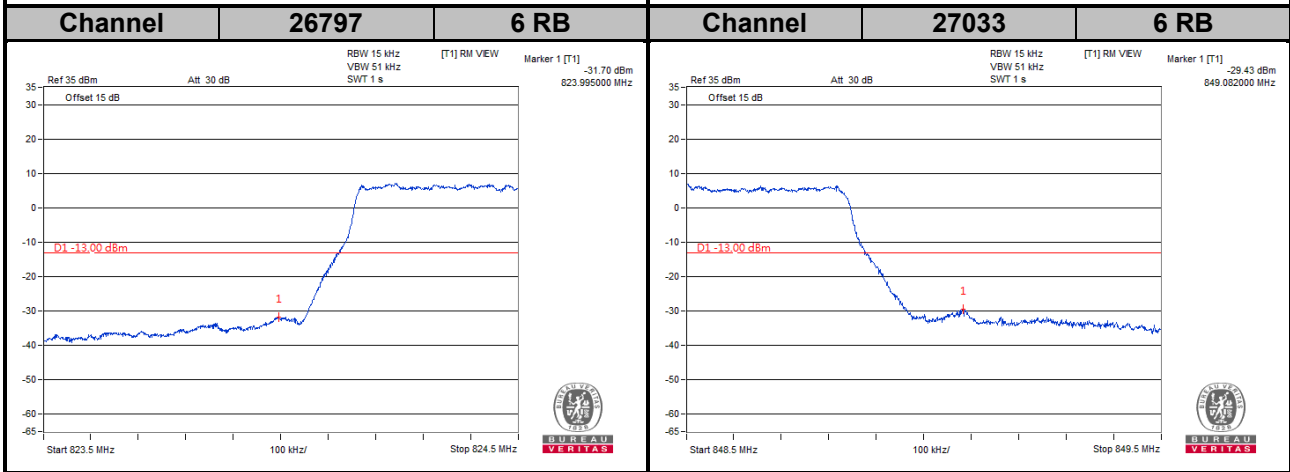
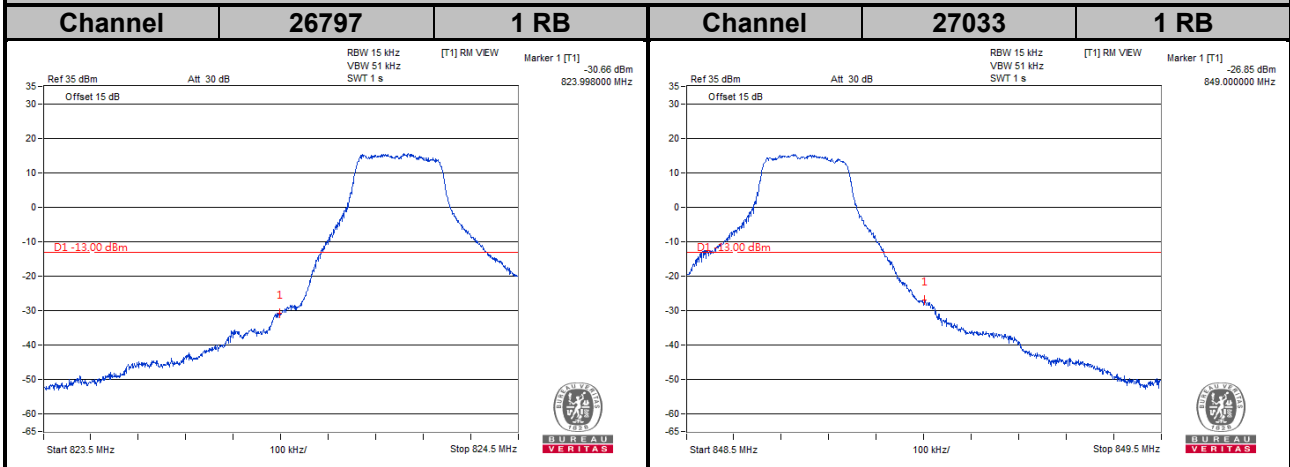


LTE Band 5
Channel Bandwidth: 10 MHz

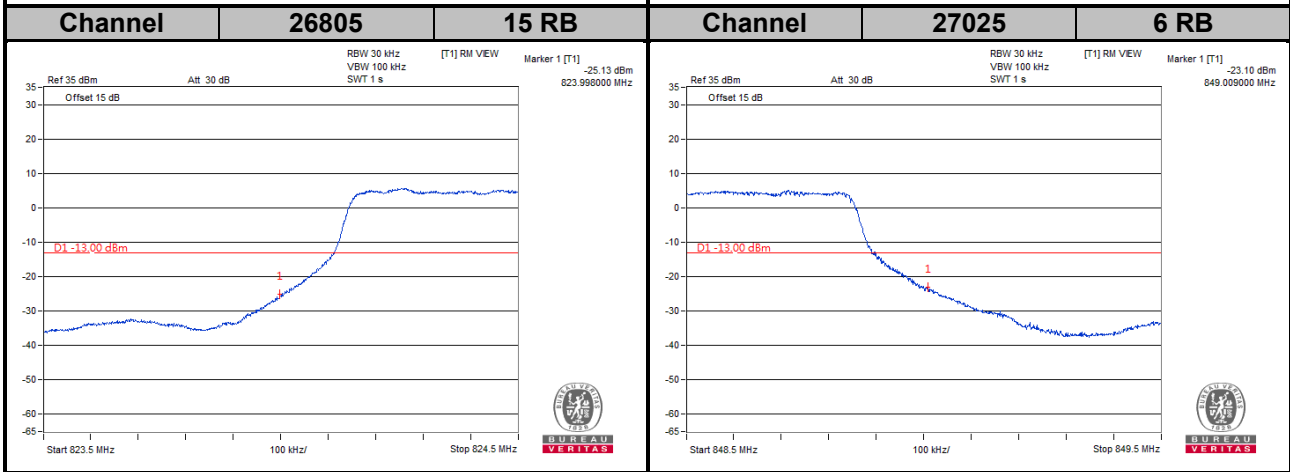
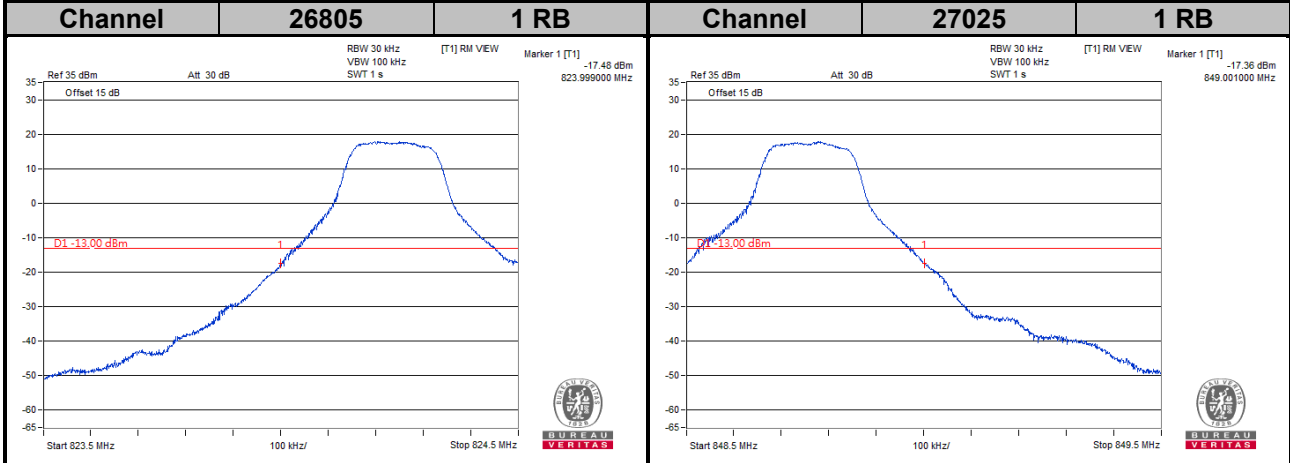


LTE Band 26

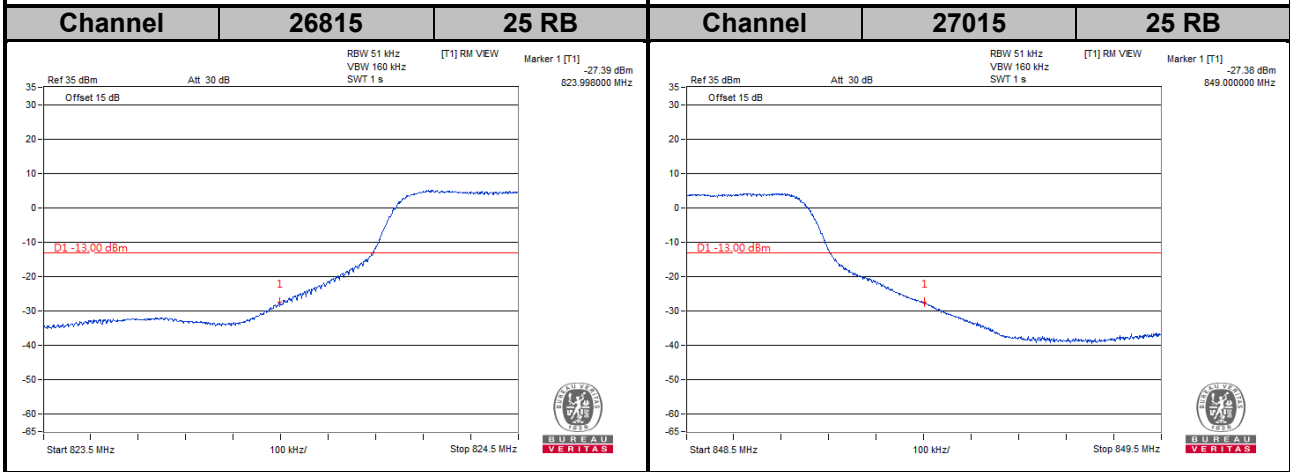
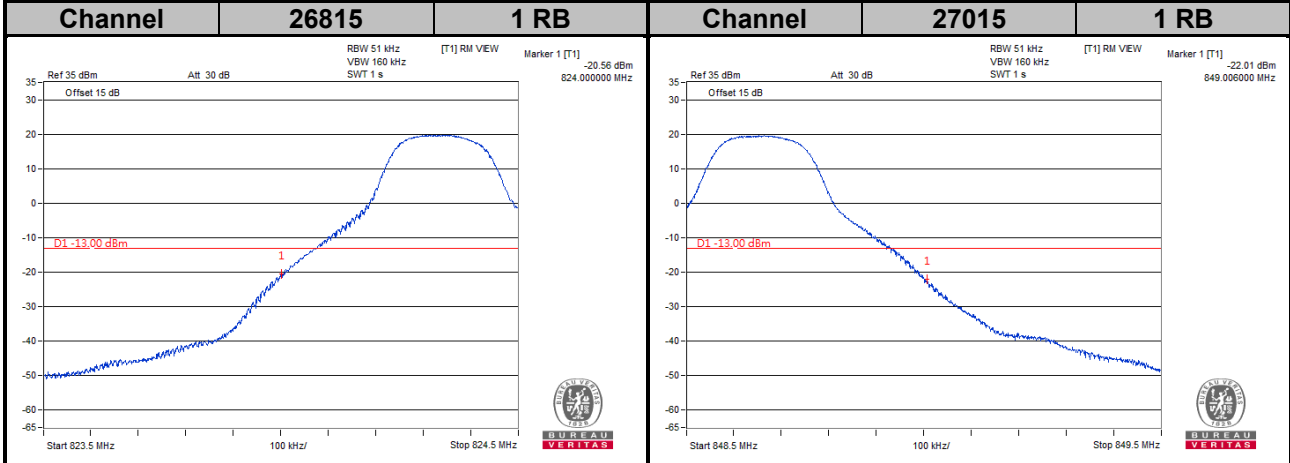
Channel Bandwidth: 1.4 MHz

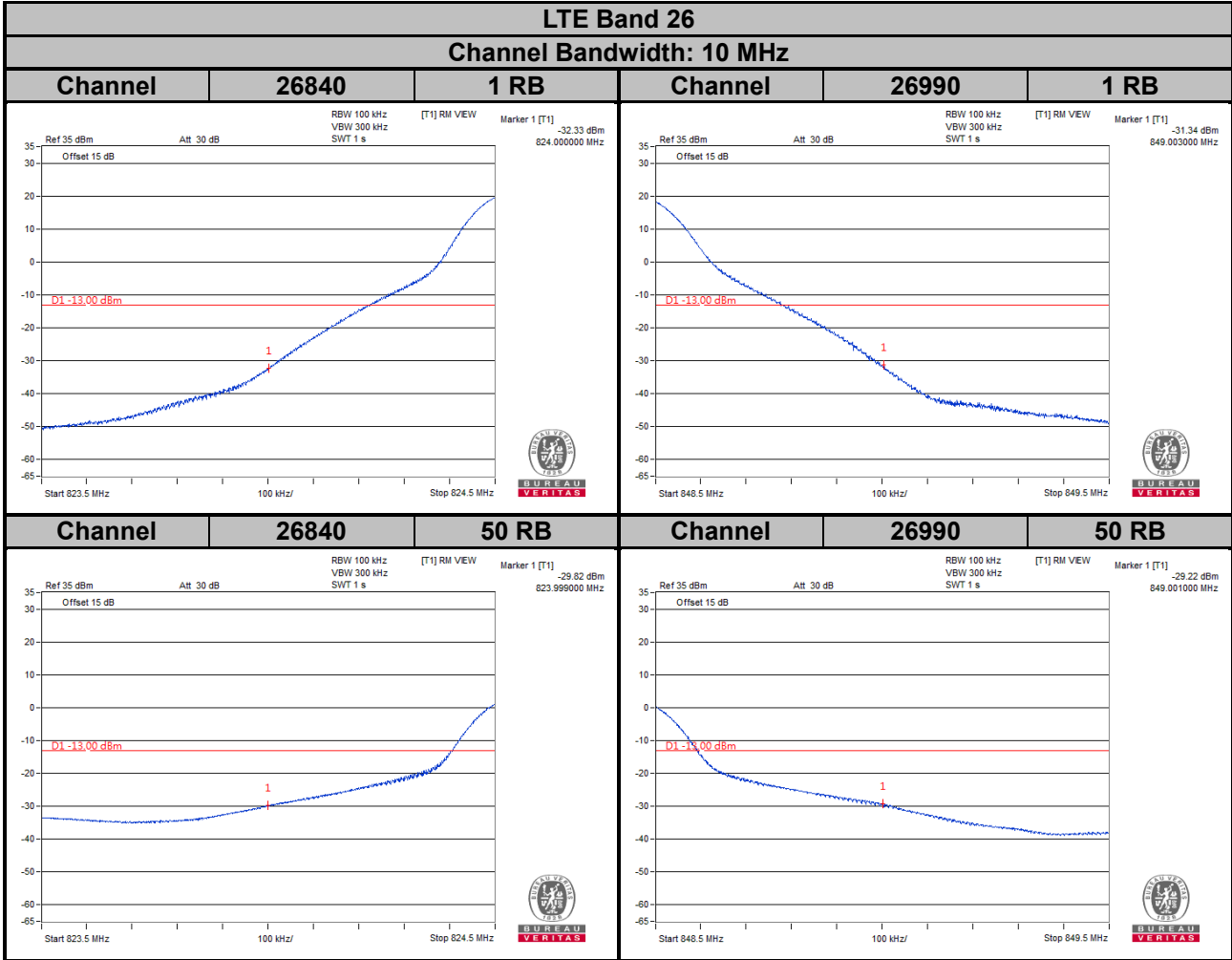


LTE Band 26
Channel Bandwidth: 3 MHz

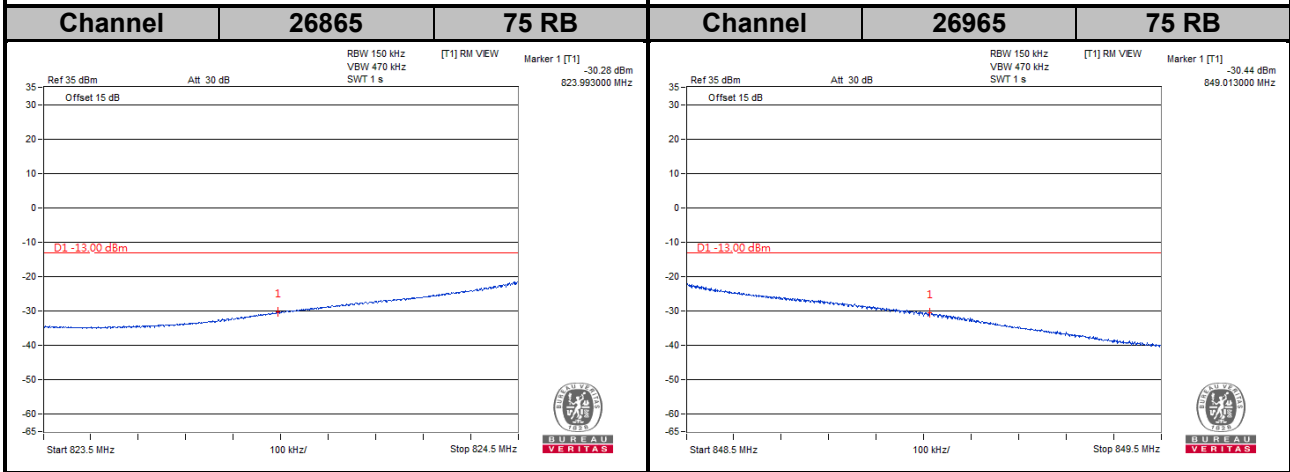
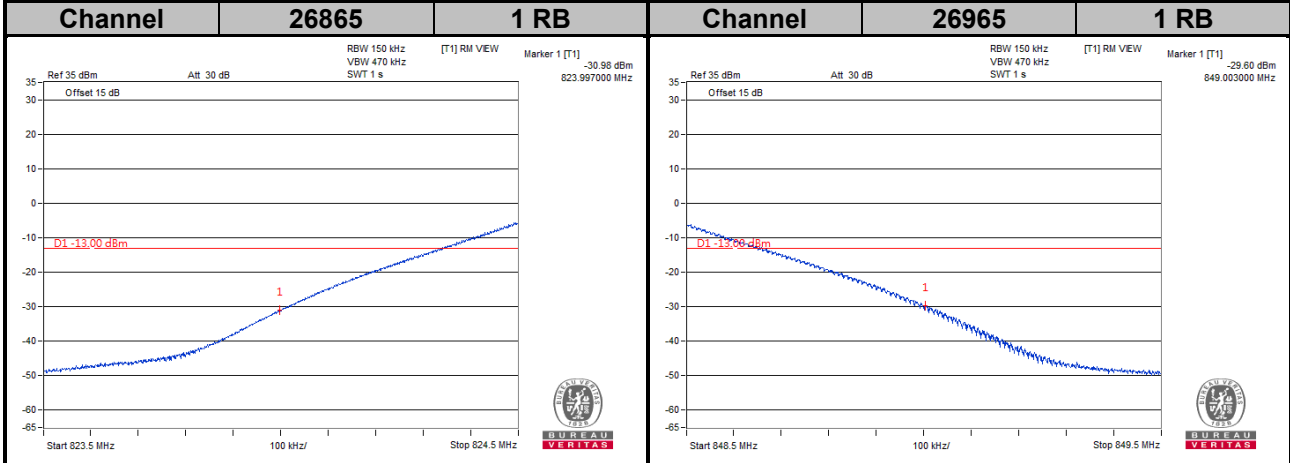


LTE Band 26
Channel Bandwidth: 5 MHz





LTE Band 26
Channel Bandwidth: 15 MHz

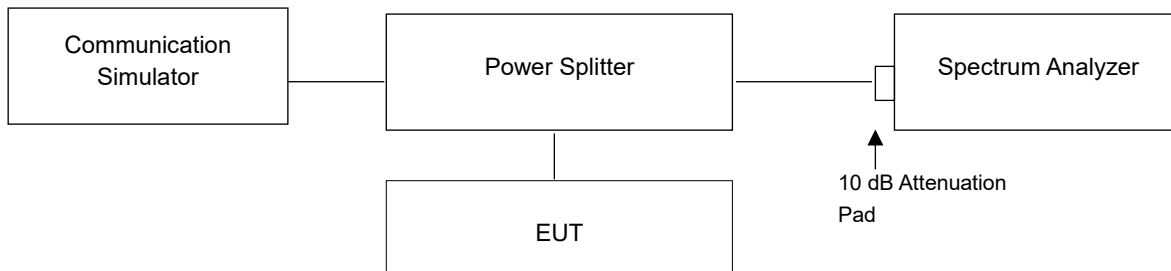


4.6 Peak to Average Ratio

4.6.1 Limits of Peak to Average Ratio Measurement

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

4.6.2 Test Setup



4.6.3 Test Procedures

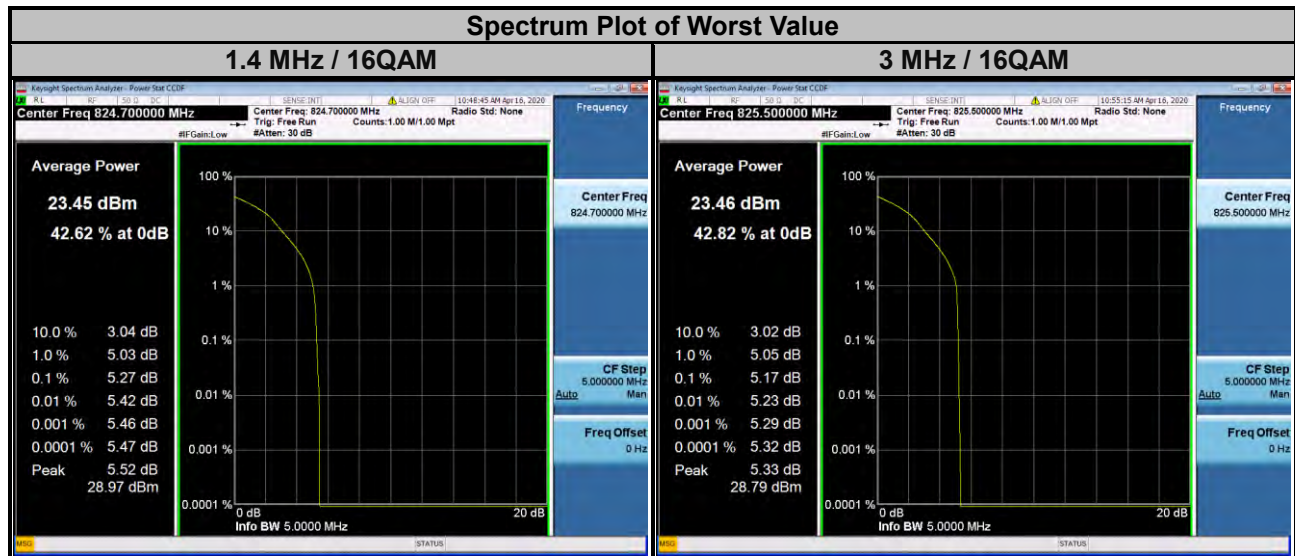
1. Set resolution/measurement bandwidth \geq signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1 %.

4.6.4 Test Results

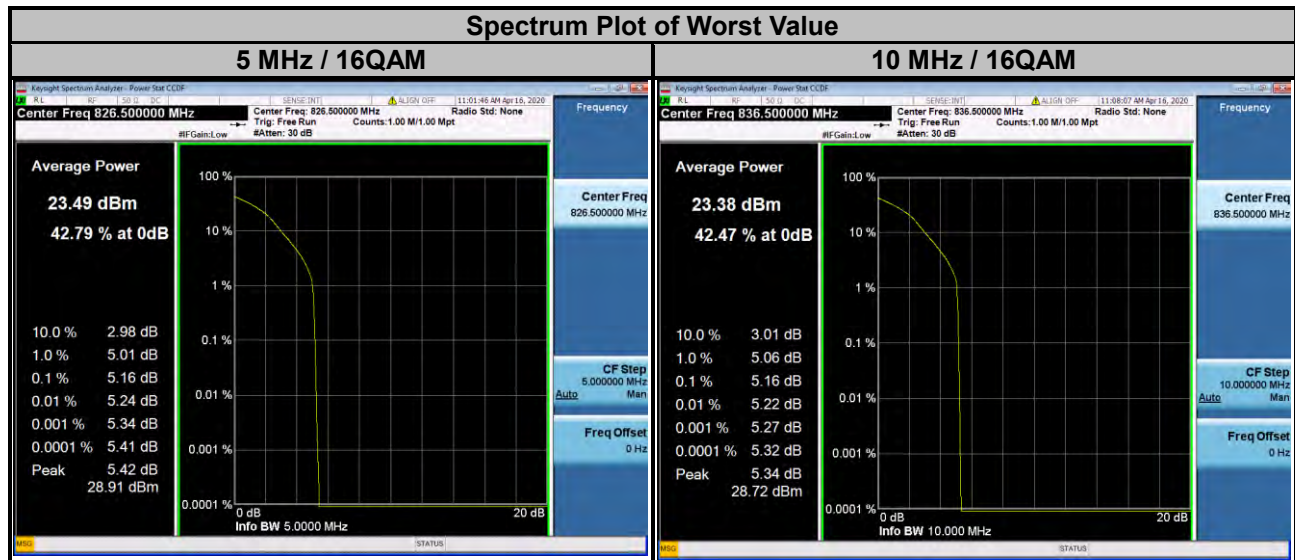
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		GSM	EDGE			WCDMA
128	824.2	2.62	5.62	4132	826.4	3.11
189	836.4	2.62	5.62	4182	836.4	2.78
251	848.8	2.62	5.60	4233	846.6	2.74



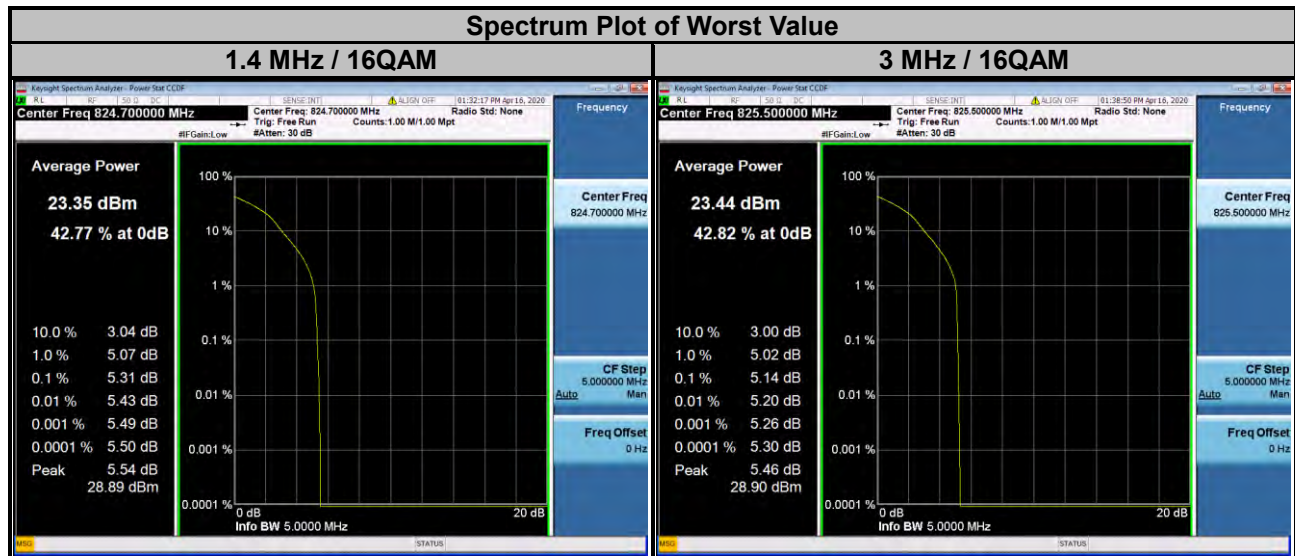
LTE Band 5							
Channel Bandwidth: 1.4 MHz				Channel Bandwidth: 3 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
20407	824.7	3.85	5.27	20415	825.5	3.66	5.17
20525	836.5	3.54	4.85	20525	836.5	3.41	4.79
20643	848.3	3.07	4.29	20635	847.5	3.20	4.44



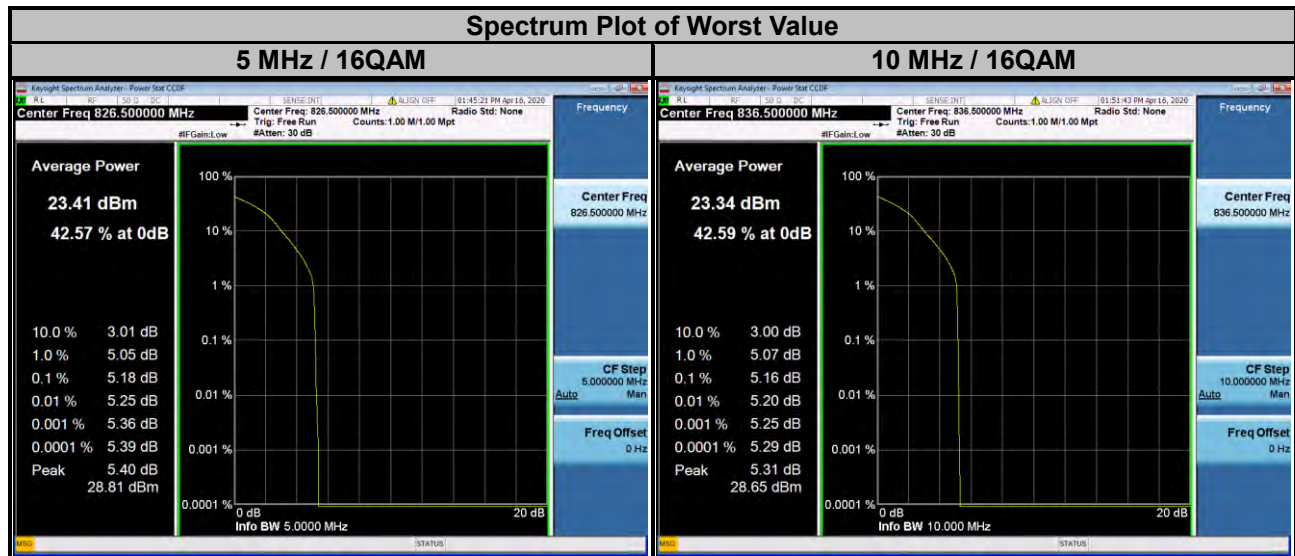
LTE Band 5							
Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
20425	826.5	3.66	5.16	20450	829.0	3.62	5.13
20525	836.5	3.52	4.91	20525	836.5	3.66	5.16
20625	846.5	3.57	4.98	20600	844.0	3.39	4.80



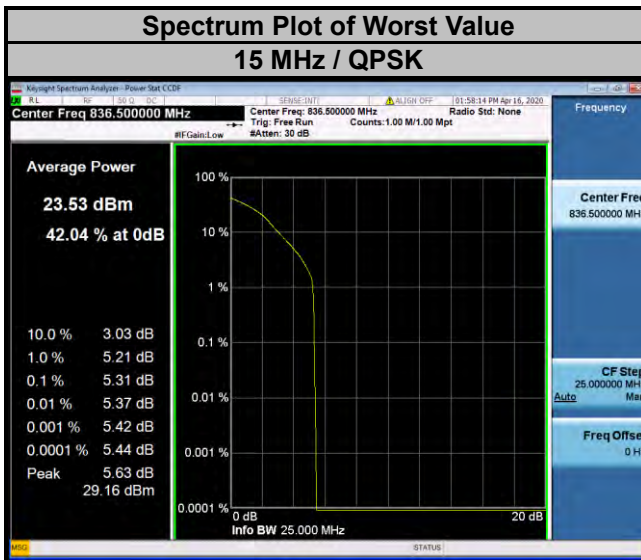
LTE Band 26							
Channel Bandwidth: 1.4 MHz				Channel Bandwidth: 3 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
26797	824.7	3.83	5.31	26805	825.5	3.63	5.14
26915	836.5	3.53	4.84	26915	836.5	3.39	4.80
27033	848.3	3.04	4.22	27025	847.5	3.15	4.41



LTE Band 26							
Channel Bandwidth: 5 MHz				Channel Bandwidth: 10 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM			QPSK	16QAM
26815	826.5	3.65	5.18	26840	829.0	3.61	5.15
26915	836.5	3.51	4.91	26915	836.5	3.64	5.16
27015	846.5	3.53	4.94	26990	844.0	3.35	4.73



LTE Band 26			
Channel Bandwidth: 15 MHz			
Channel	Frequency (MHz)	Peak to Average Ratio (dB)	
		QPSK	16QAM
26865	831.5	3.59	5.12
26915	836.5	3.71	5.31
26965	841.5	3.38	4.74

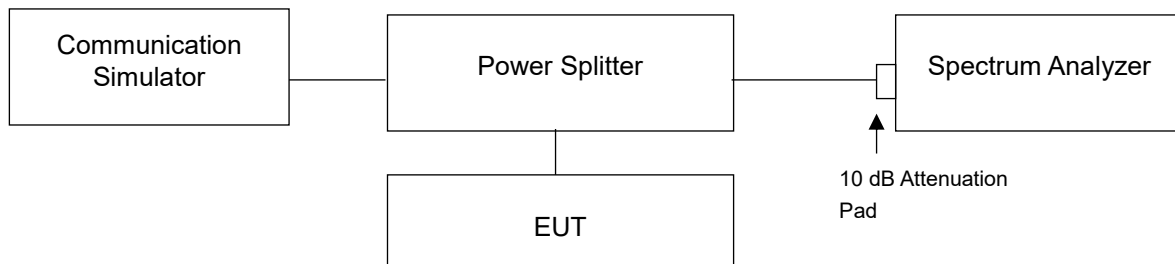


4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13 dBm.

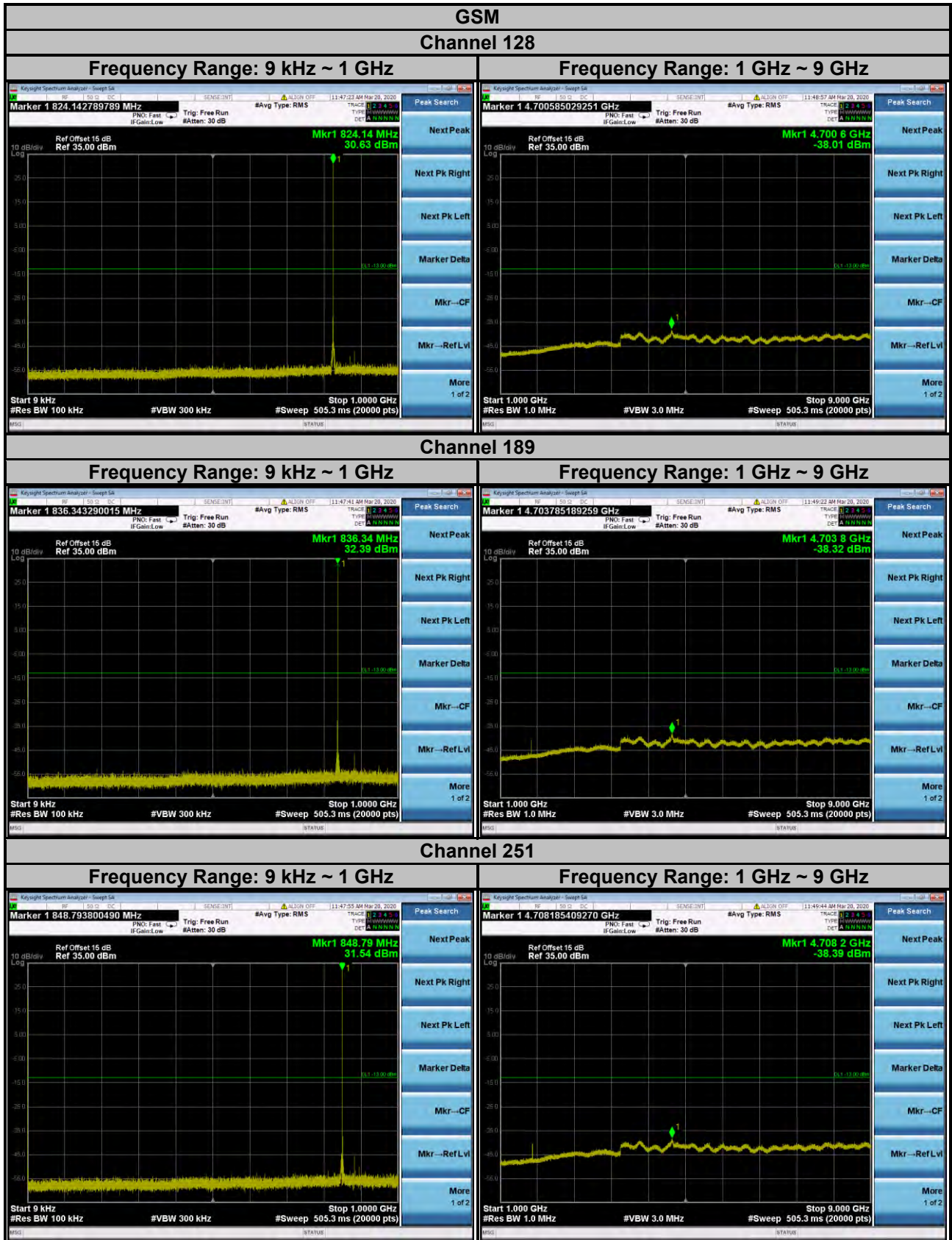
4.7.2 Test Setup



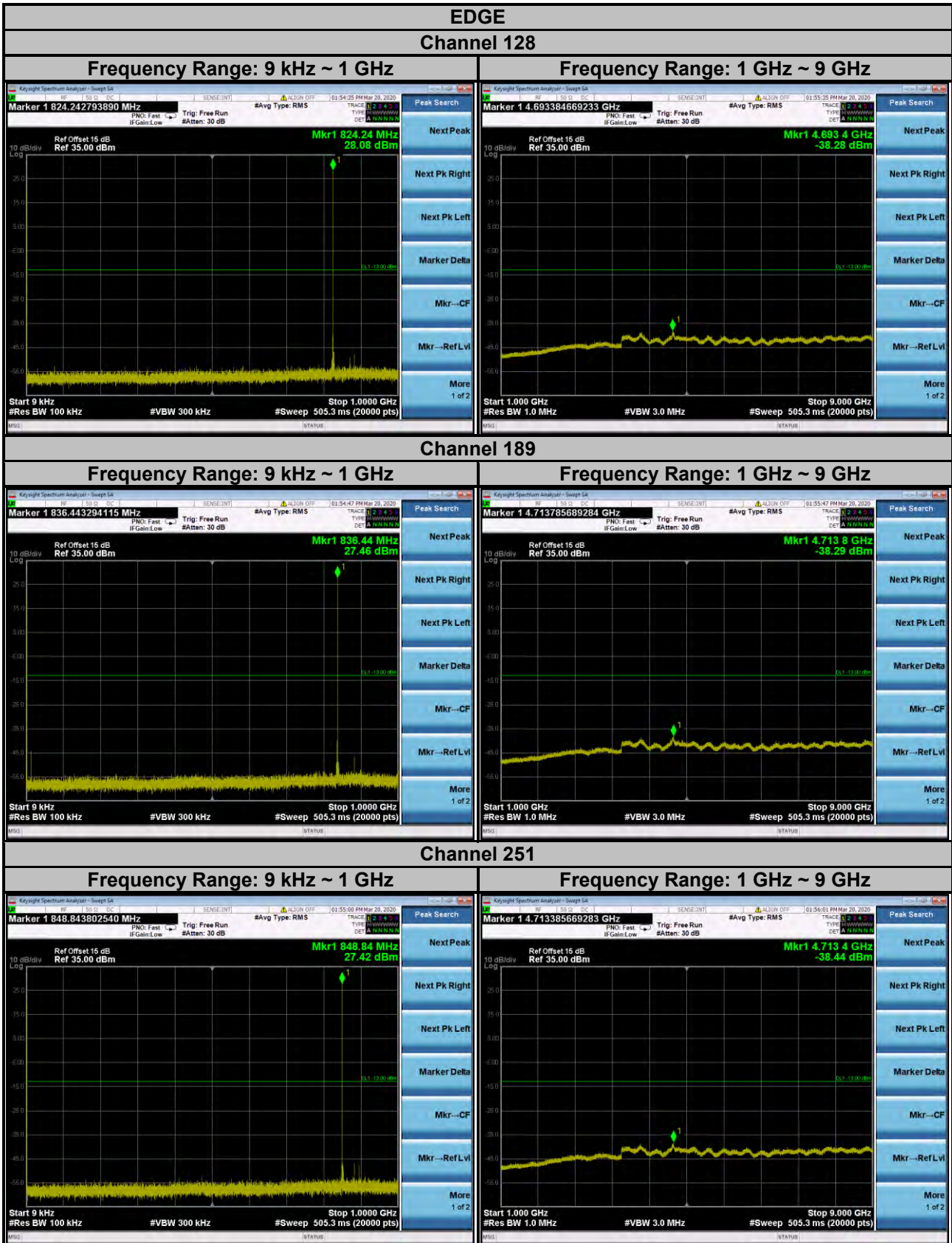
4.7.3 Test Procedure

- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9 kHz to 1 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.
- Measuring frequency range is from 1 GHz to 9 GHz. 10 dB attenuation pad is connected with spectrum. RBW = 1 MHz and VBW = 3 MHz is used for conducted emission measurement.

4.7.4 Test Results



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

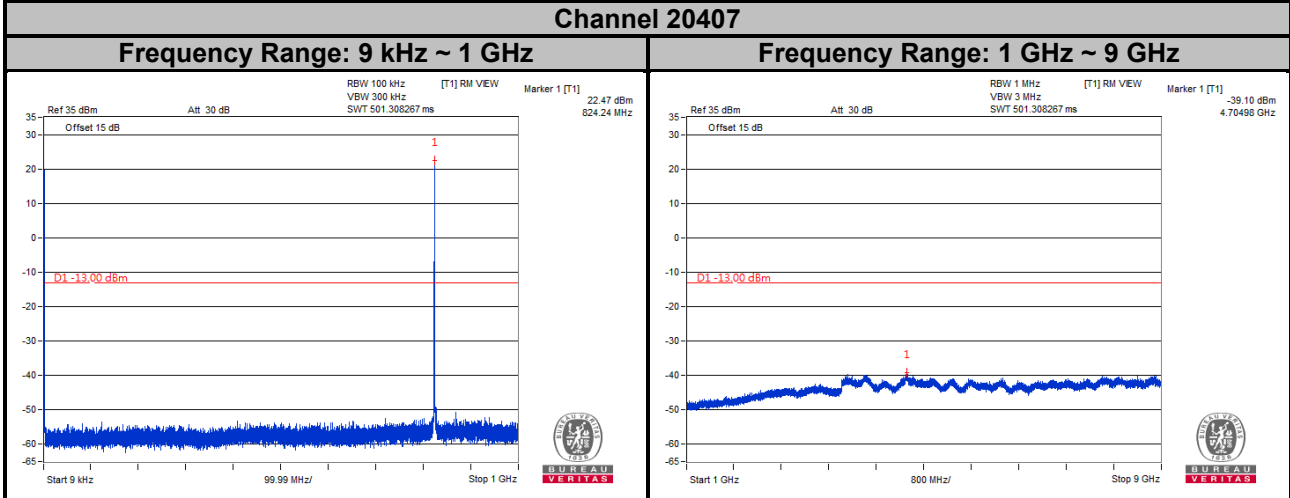


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

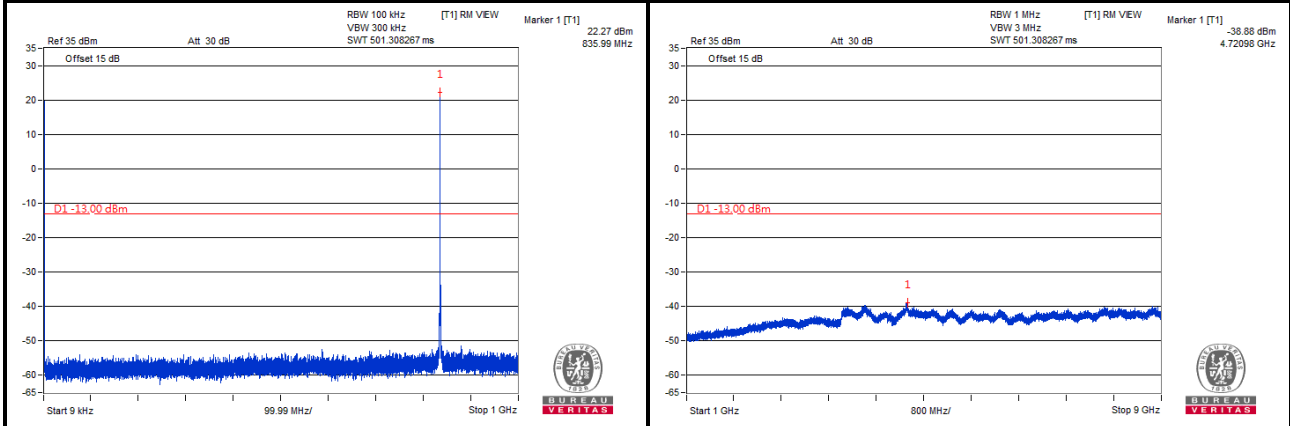


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

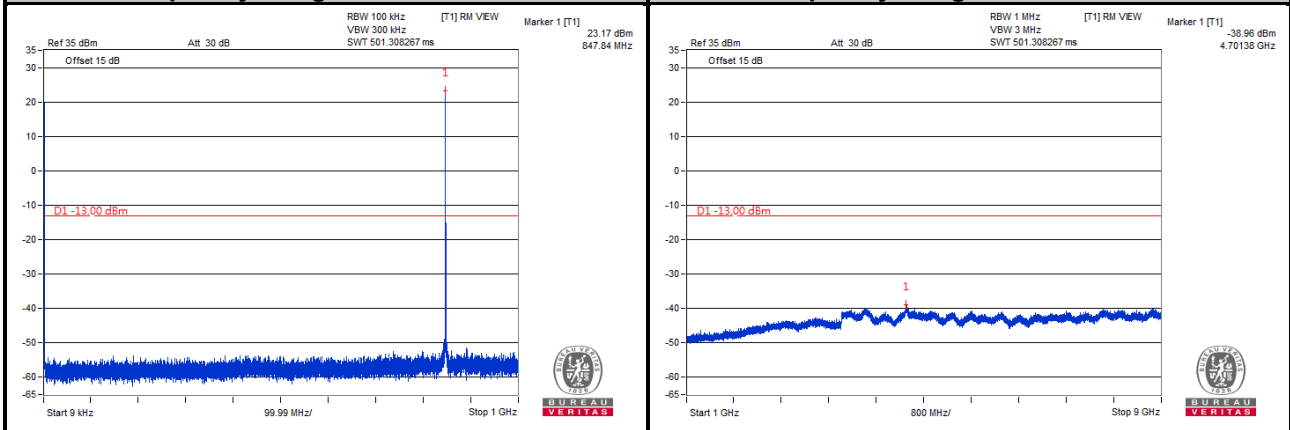
LTE Band 5
Channel Bandwidth: 1.4 MHz
Channel 20407



Channel 20525



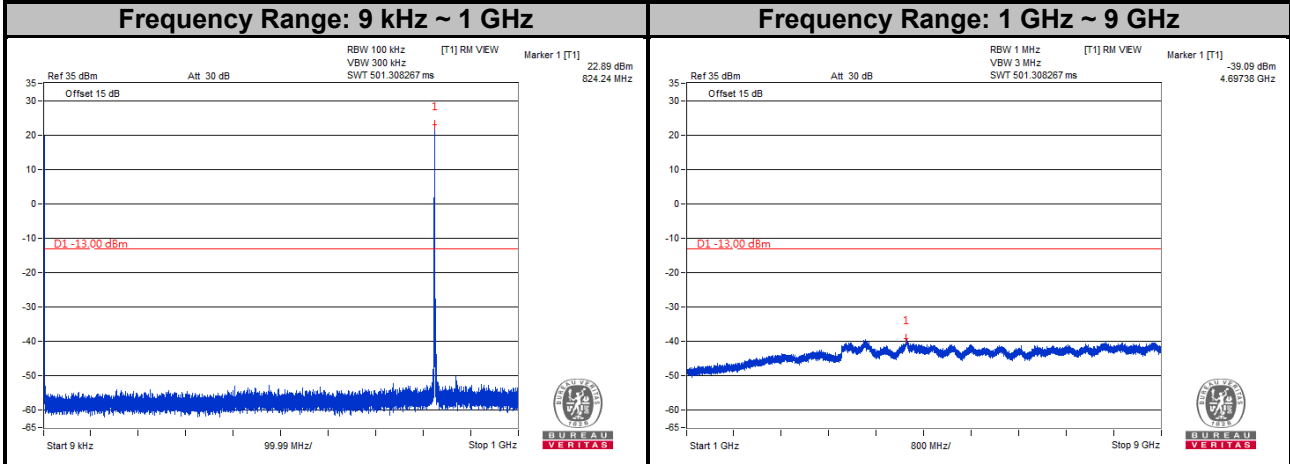
Channel 20643



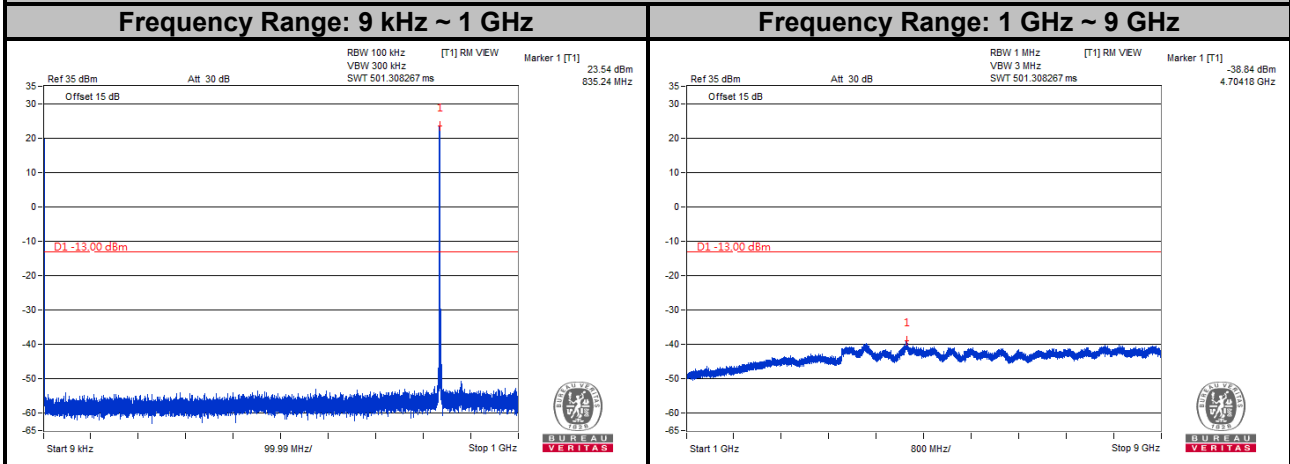
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 5
Channel Bandwidth: 3 MHz

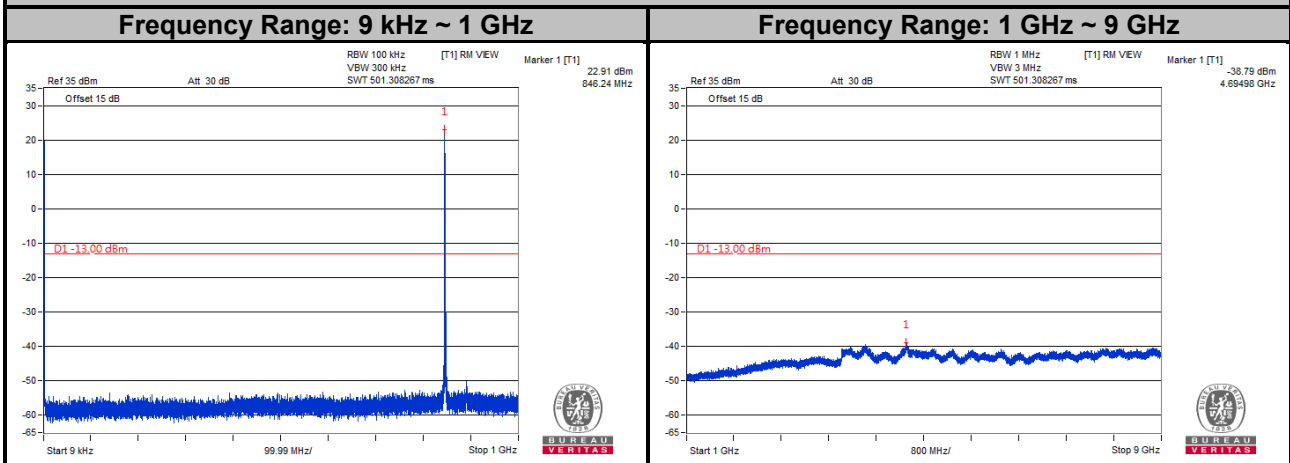
Channel 20415



Channel 20525

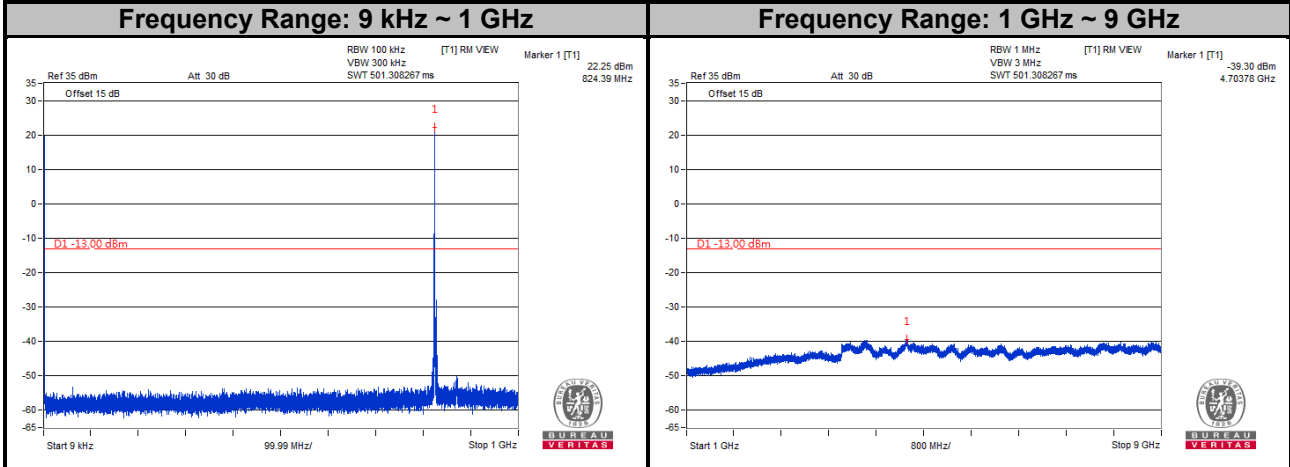


Channel 20635

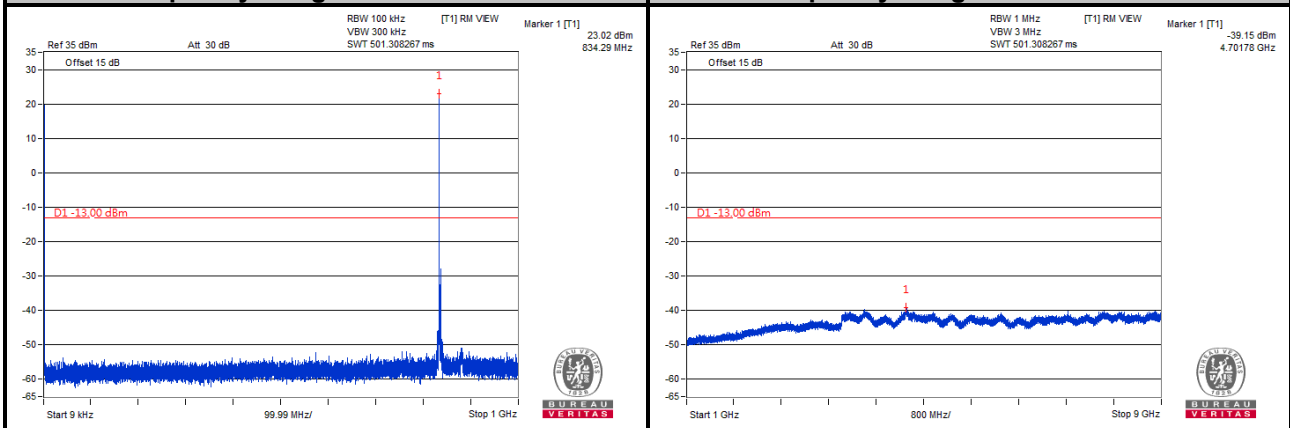


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

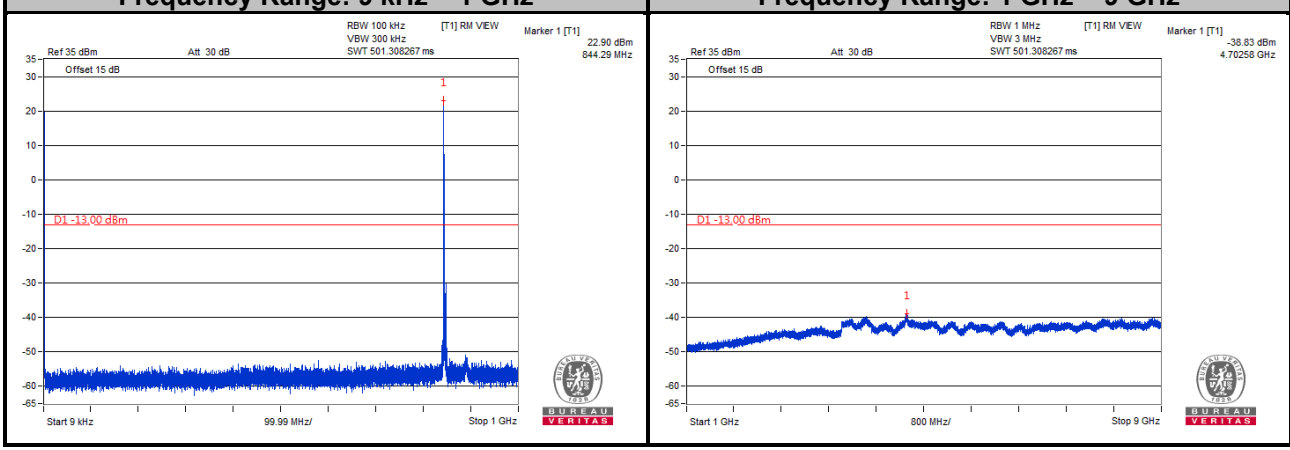
LTE Band 5
Channel Bandwidth: 5 MHz
Channel 20425



Channel 20525

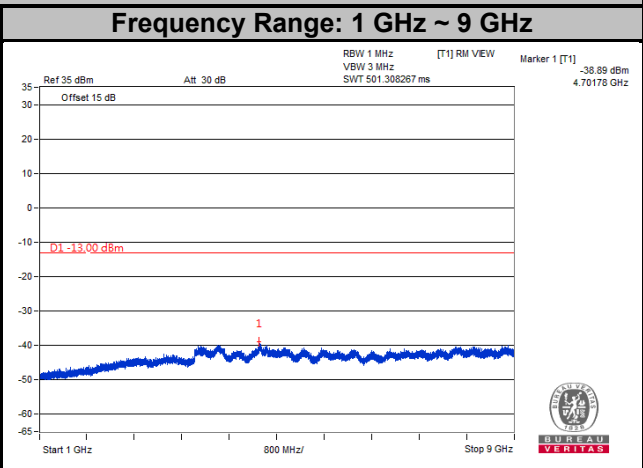
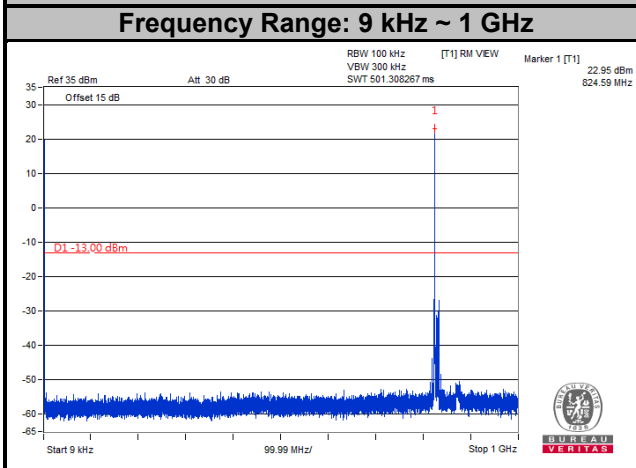


Channel 20625

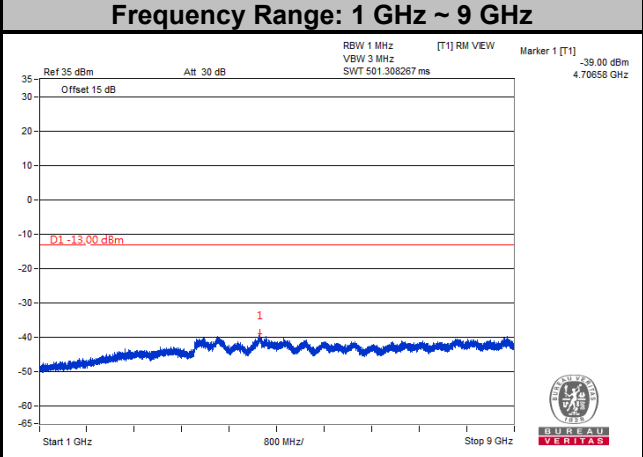
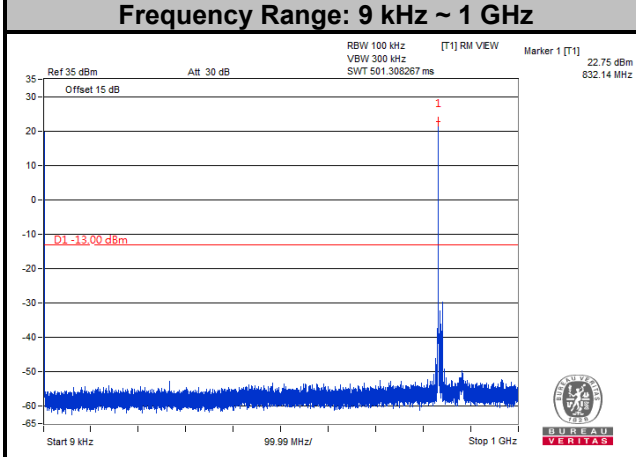


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

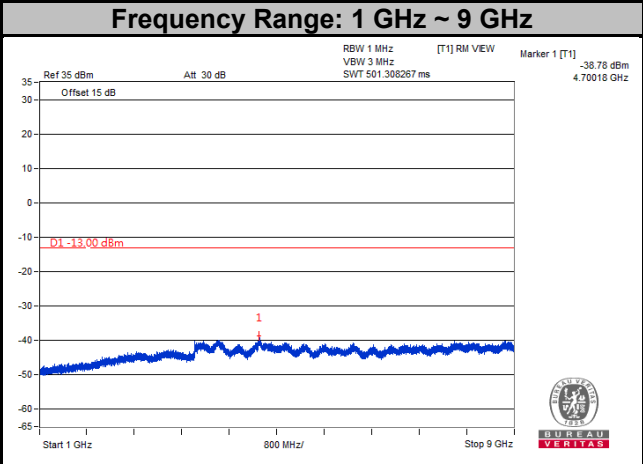
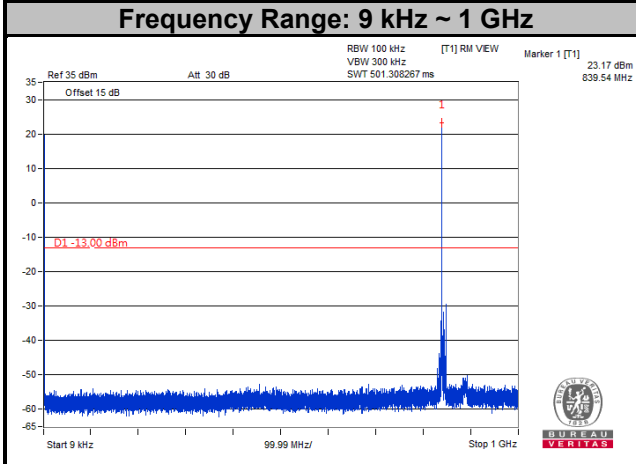
LTE Band 5
Channel Bandwidth: 10 MHz
Channel 20450



Channel 20525

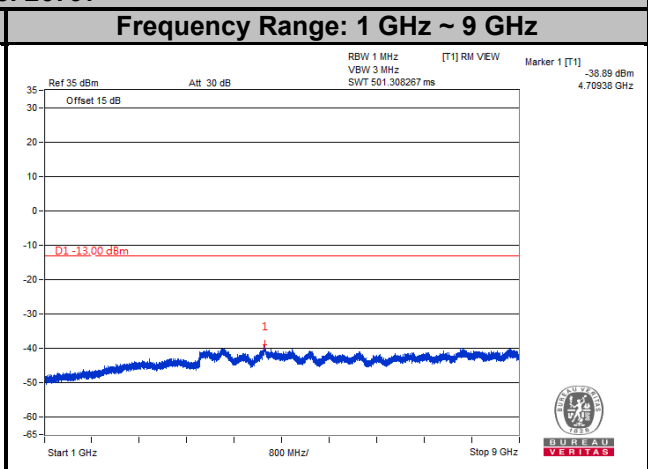
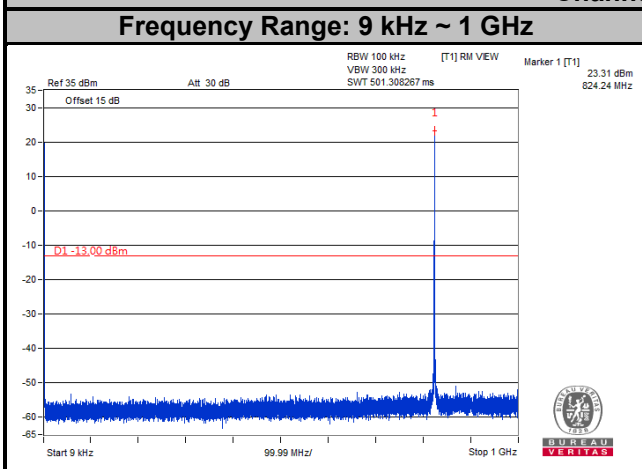


Channel 20600

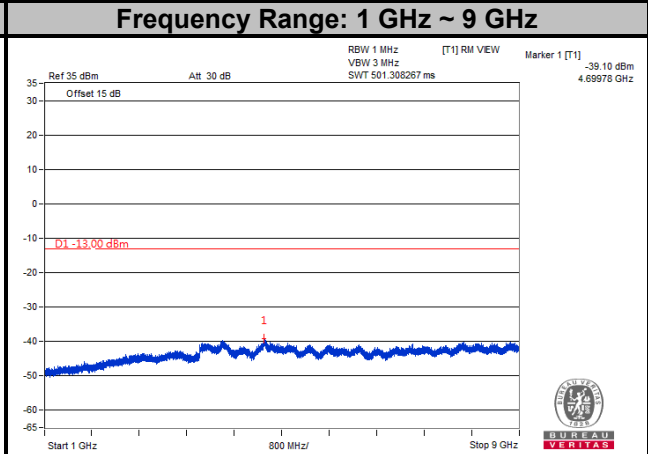
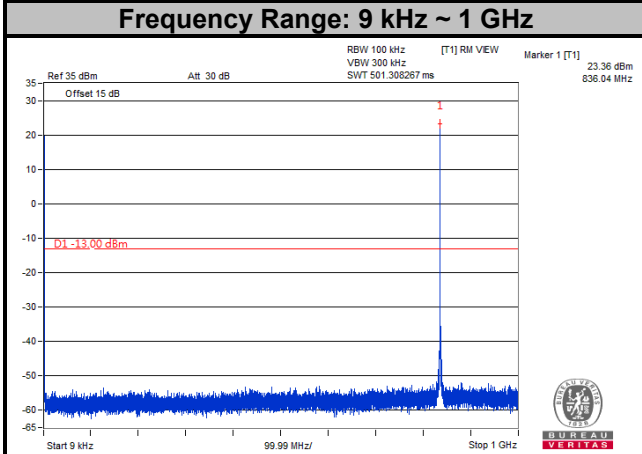


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

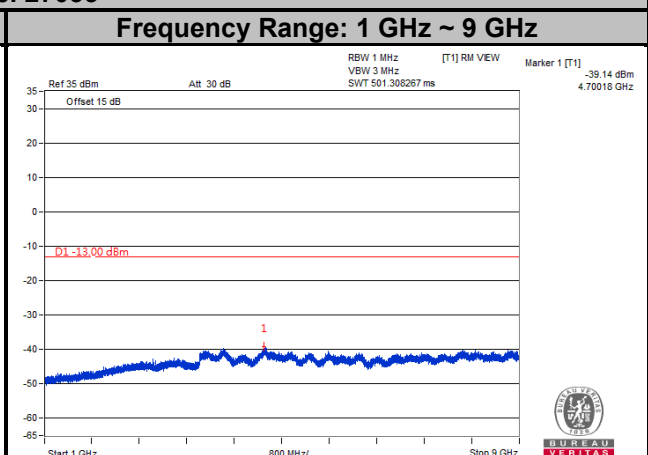
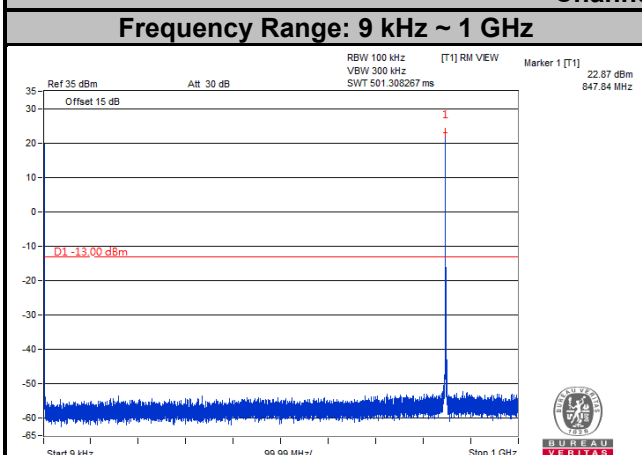
LTE Band 26
Channel Bandwidth: 1.4 MHz
Channel 26797



Channel 26915

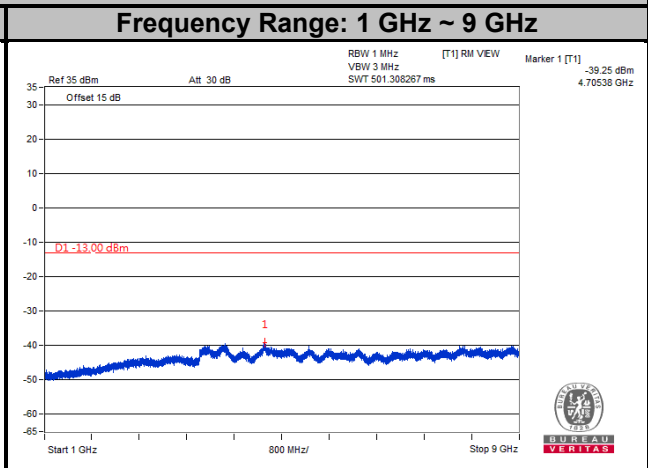
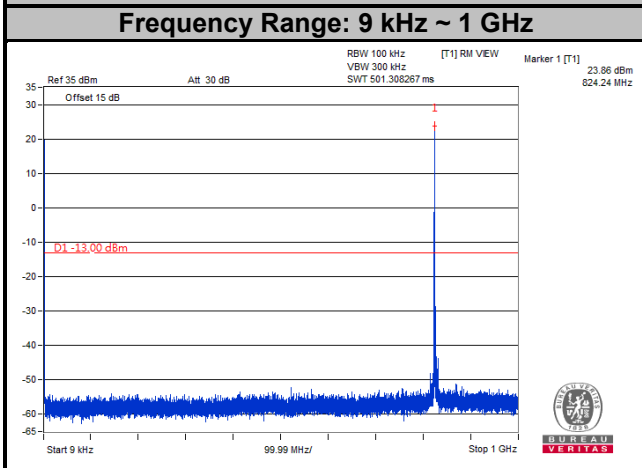


Channel 27033

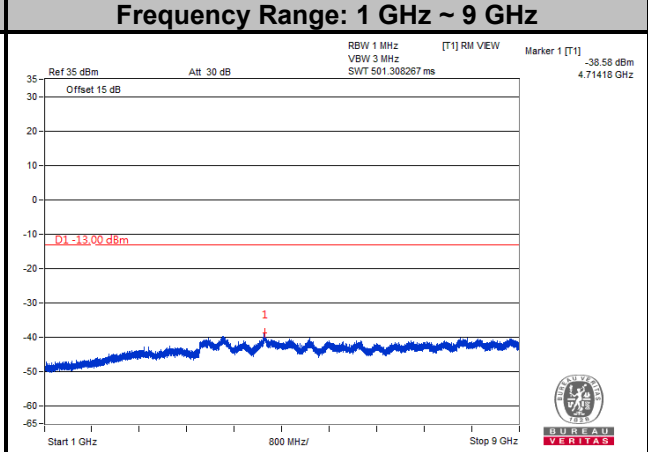
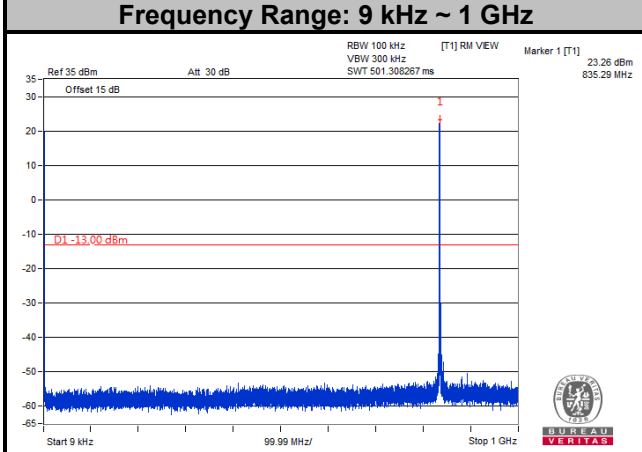


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

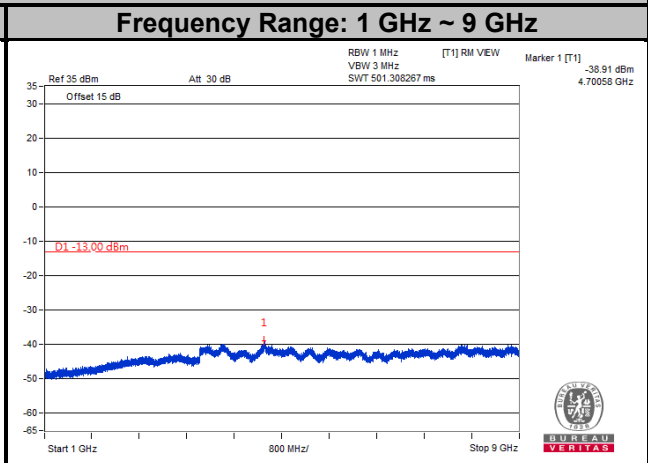
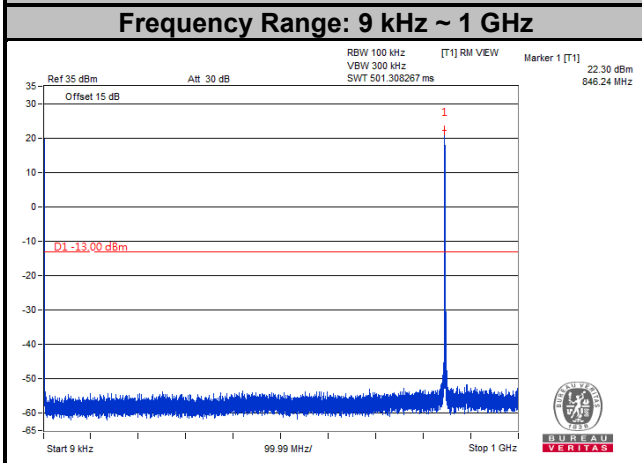
LTE Band 26
Channel Bandwidth: 3 MHz
Channel 26805



Channel 26915

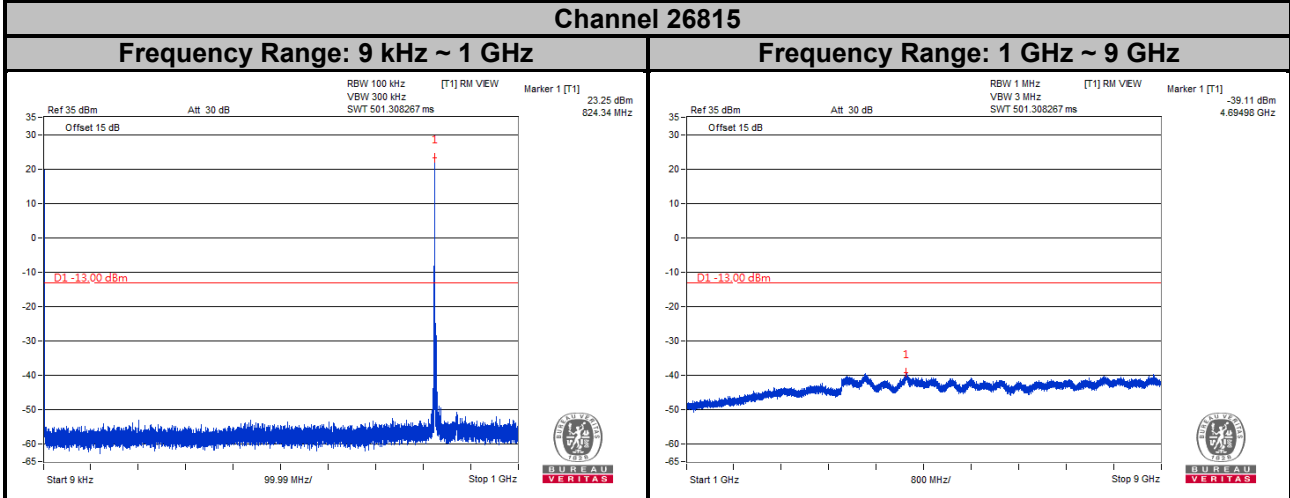


Channel 27025

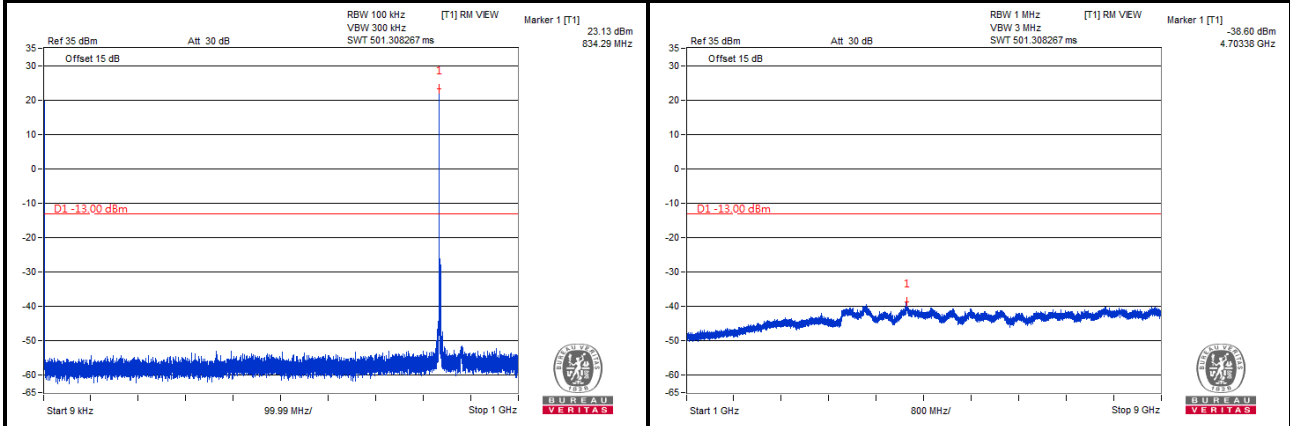


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

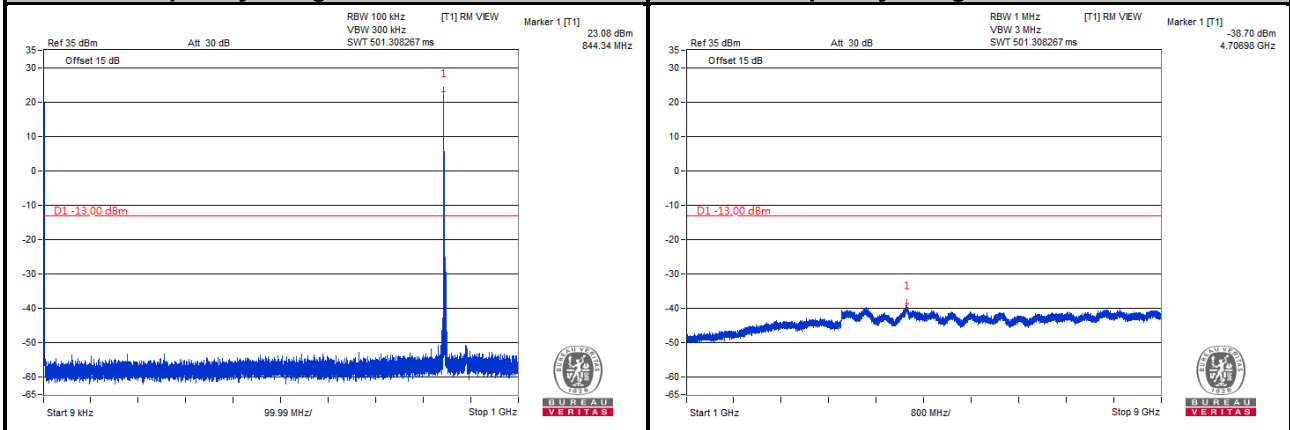
LTE Band 26
Channel Bandwidth: 5 MHz
Channel 26815



Channel 26915

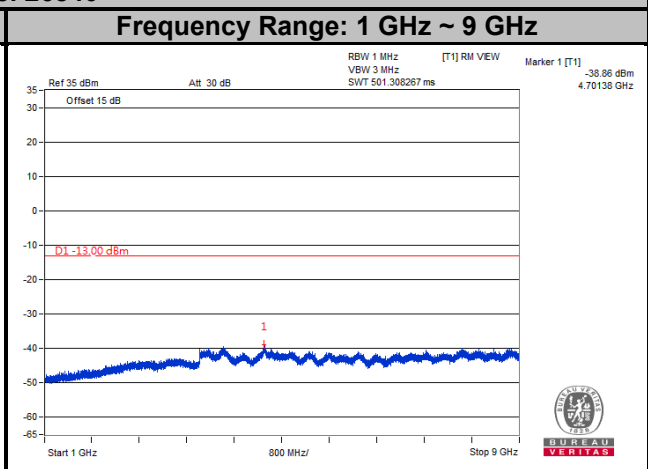
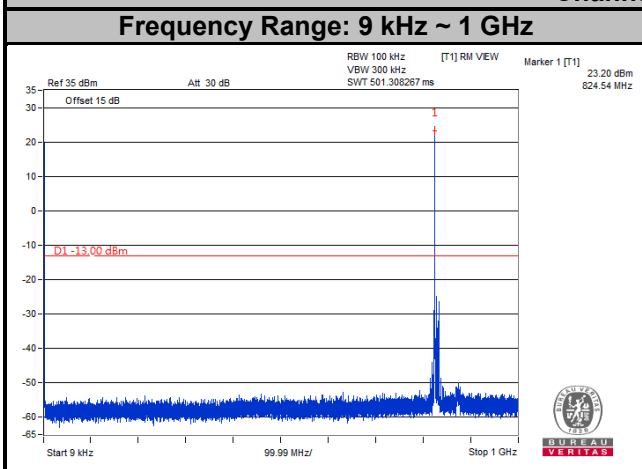


Channel 27015

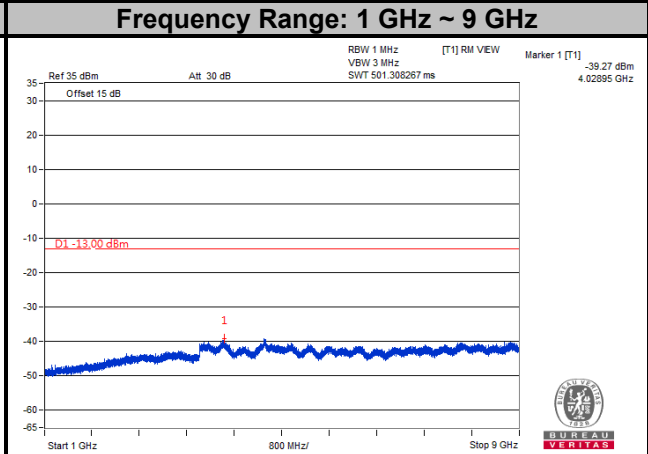
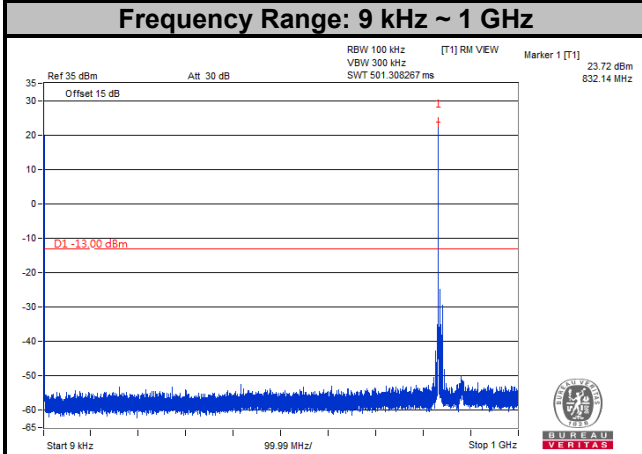


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

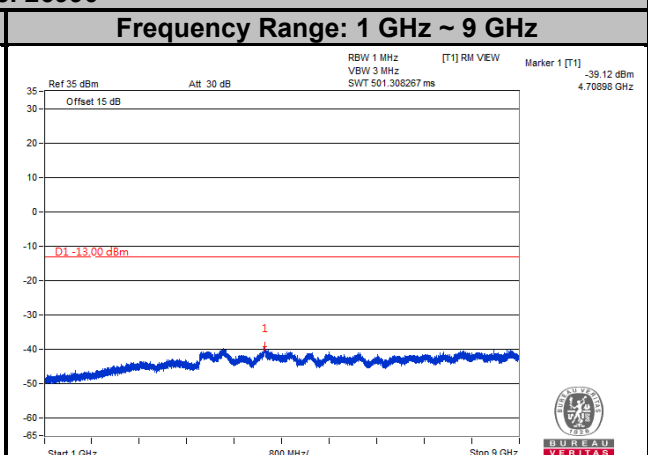
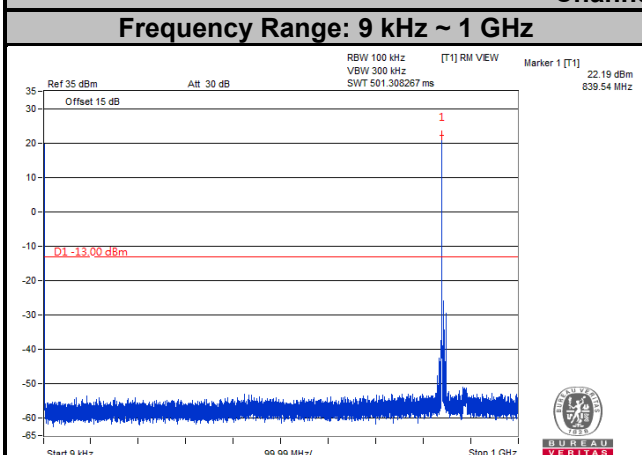
LTE Band 26
Channel Bandwidth: 10 MHz
Channel 26840



Channel 26915



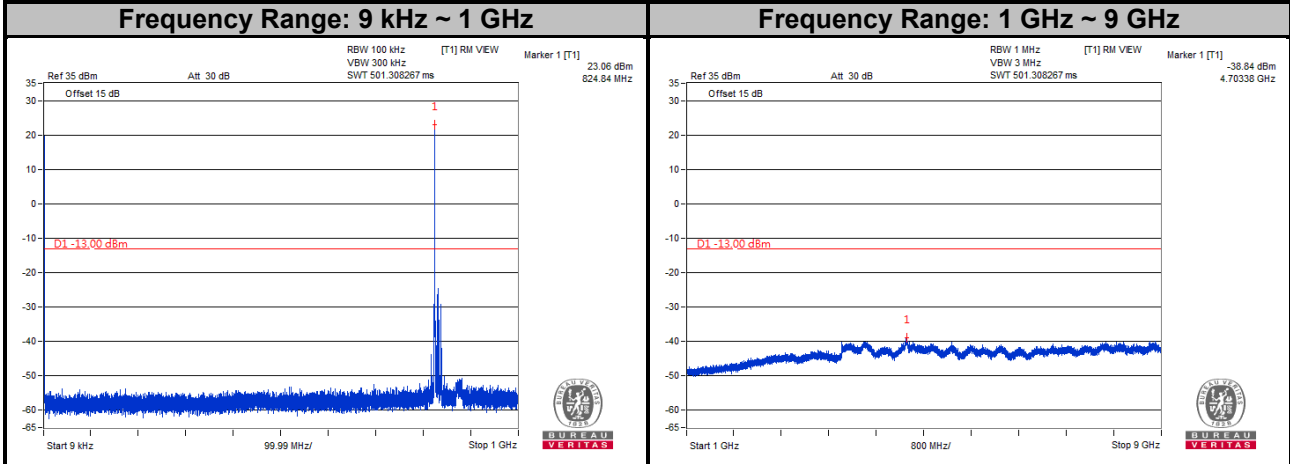
Channel 26990



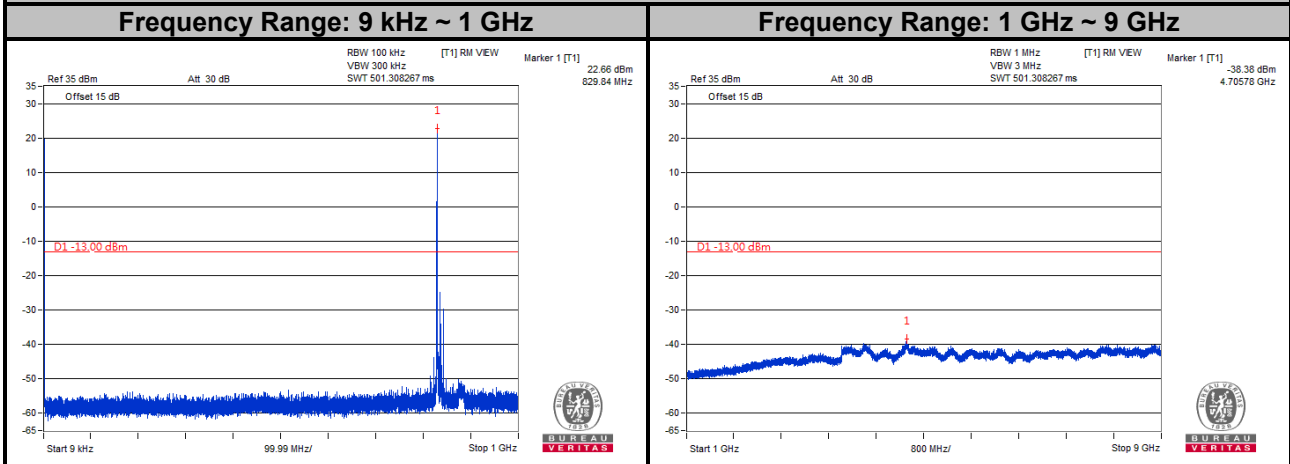
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

LTE Band 26
Channel Bandwidth: 15 MHz

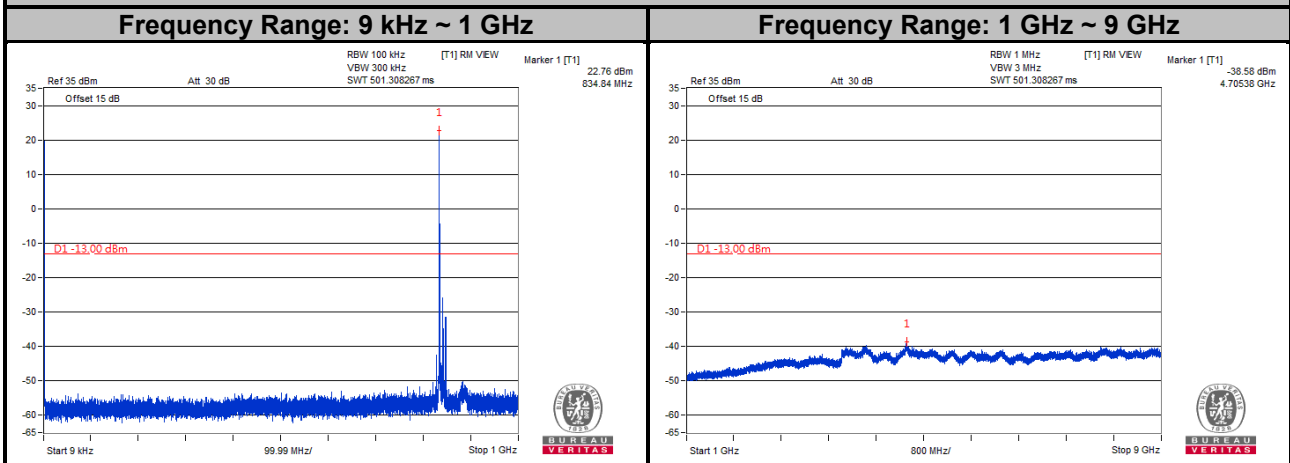
Channel 26865



Channel 26915



Channel 26965



Note: The signal over the limit in 9 kHz is from spectrum analyzer.

4.8 Radiated Emission Measurement

4.8.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit is equal to -13 dBm.

4.8.2 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.

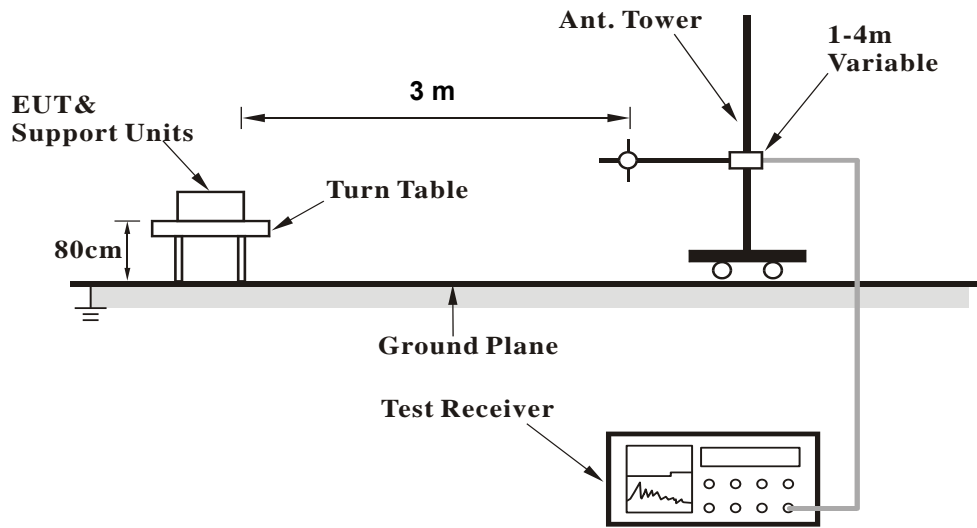
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

4.8.3 Deviation from Test Standard

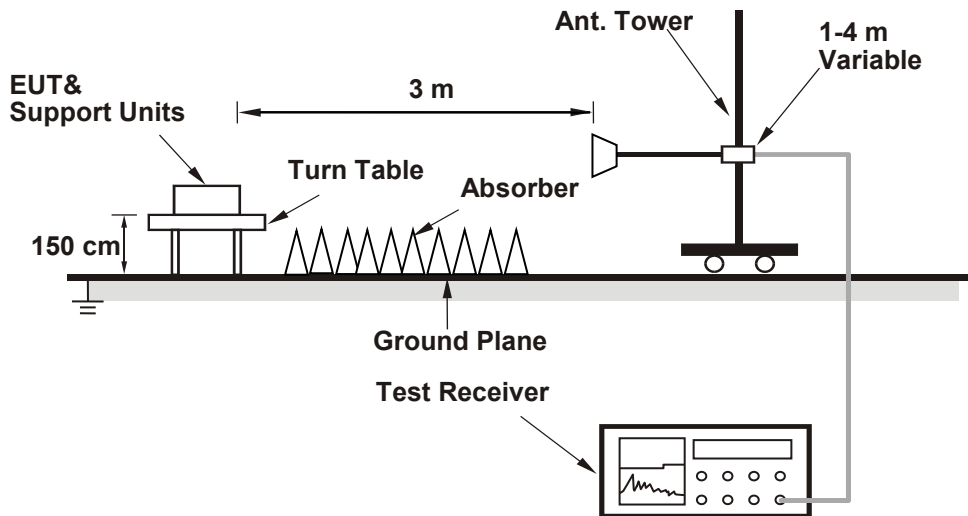
No deviation.

4.8.4 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).

4.8.5 Test Results

GSM:
Low Channel

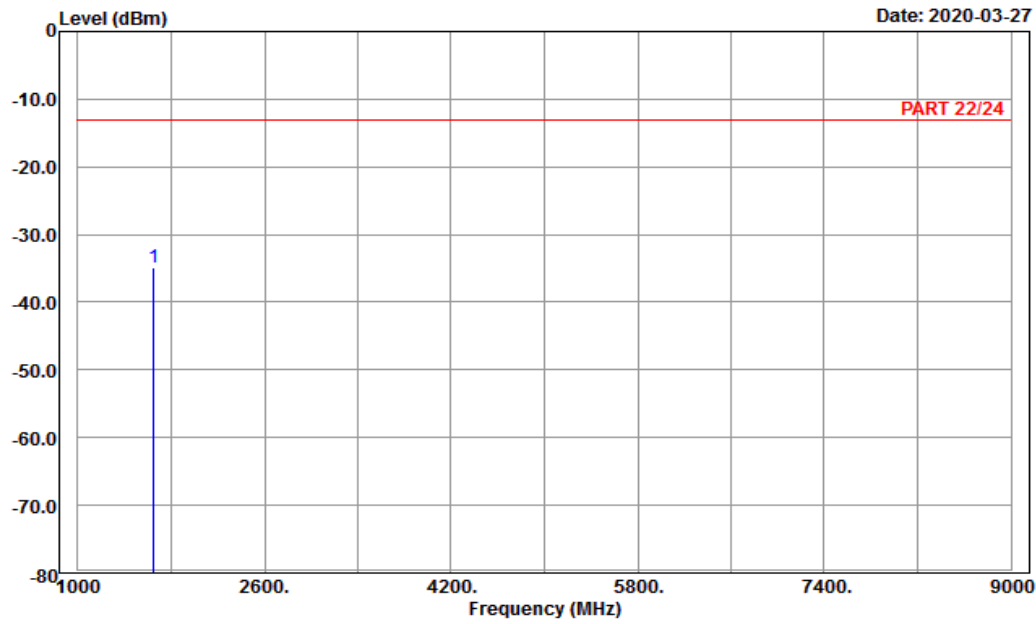


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A D T

Data: 5

Date: 2020-03-27



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : GSM 850_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1648.40	-34.78	-42.51	7.73	-13.00	-21.78	Peak

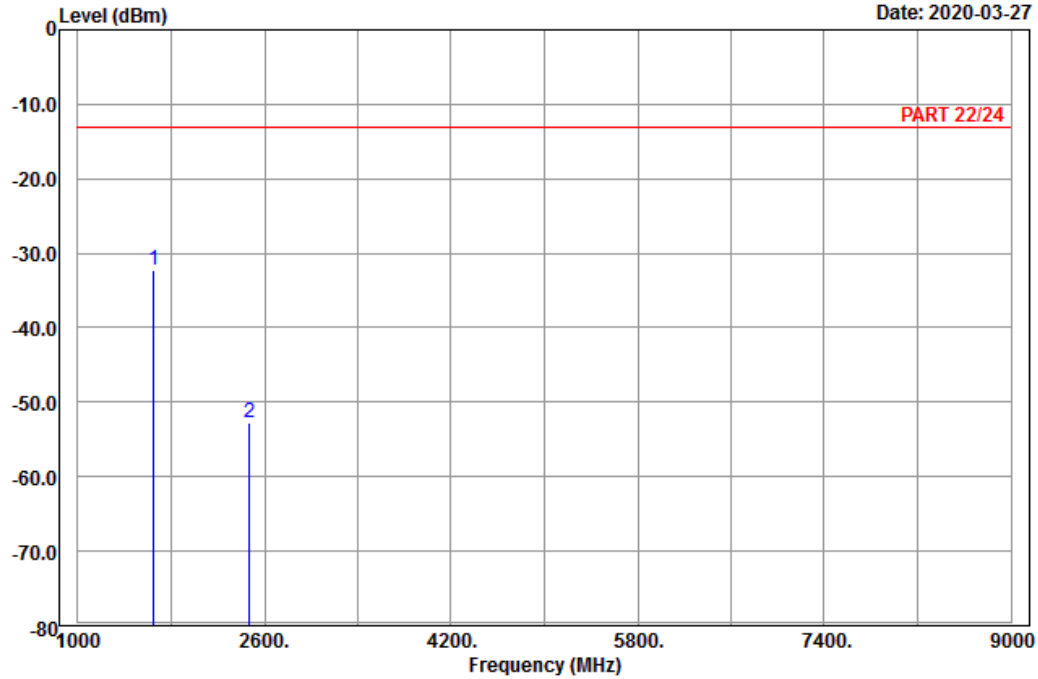


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A D T

Data: 6

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : GSM 850_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1648.40	-32.22	-39.95	7.73	-13.00	-19.22	Peak
2	2472.60	-52.67	-63.70	11.03	-13.00	-39.67	Peak

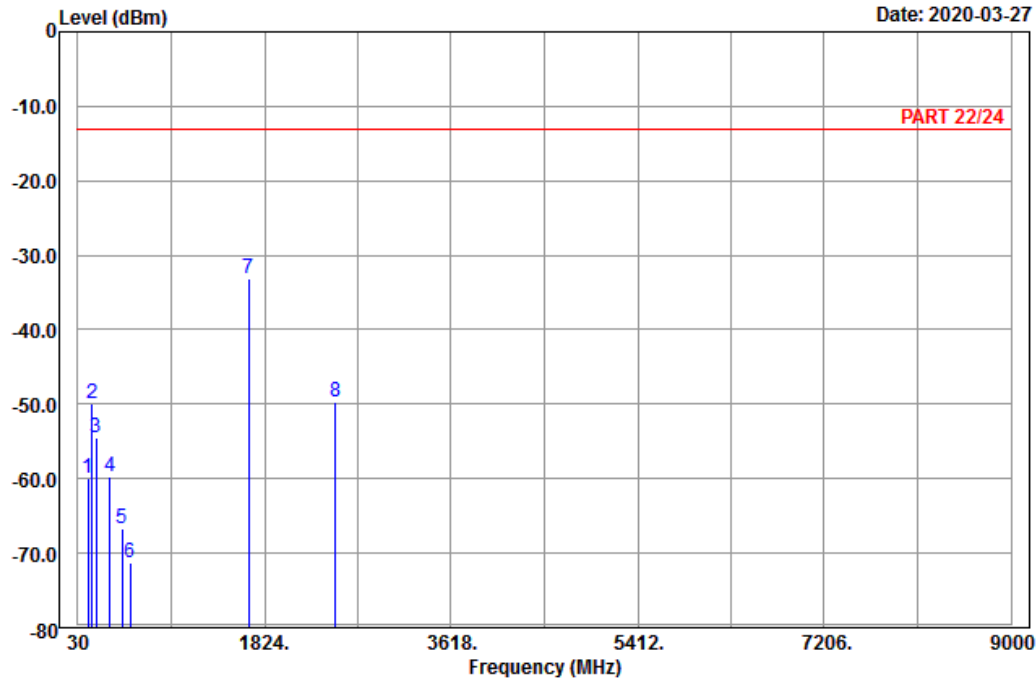
Middle Channel



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Data: 9



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : GSM 850_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	123.96	-59.96	-51.95	-8.01	-13.00	-46.96	Peak
2	168.51	-50.03	-43.23	-6.80	-13.00	-37.03	Peak
3	208.74	-54.51	-48.44	-6.07	-13.00	-41.51	Peak
4	337.10	-59.80	-54.28	-5.52	-13.00	-46.80	Peak
5	451.90	-66.69	-62.79	-3.90	-13.00	-53.69	Peak
6	534.50	-71.17	-68.37	-2.80	-13.00	-58.17	Peak
7 pp	1672.80	-33.24	-41.15	7.91	-13.00	-20.24	Peak
8	2509.20	-49.74	-61.02	11.28	-13.00	-36.74	Peak

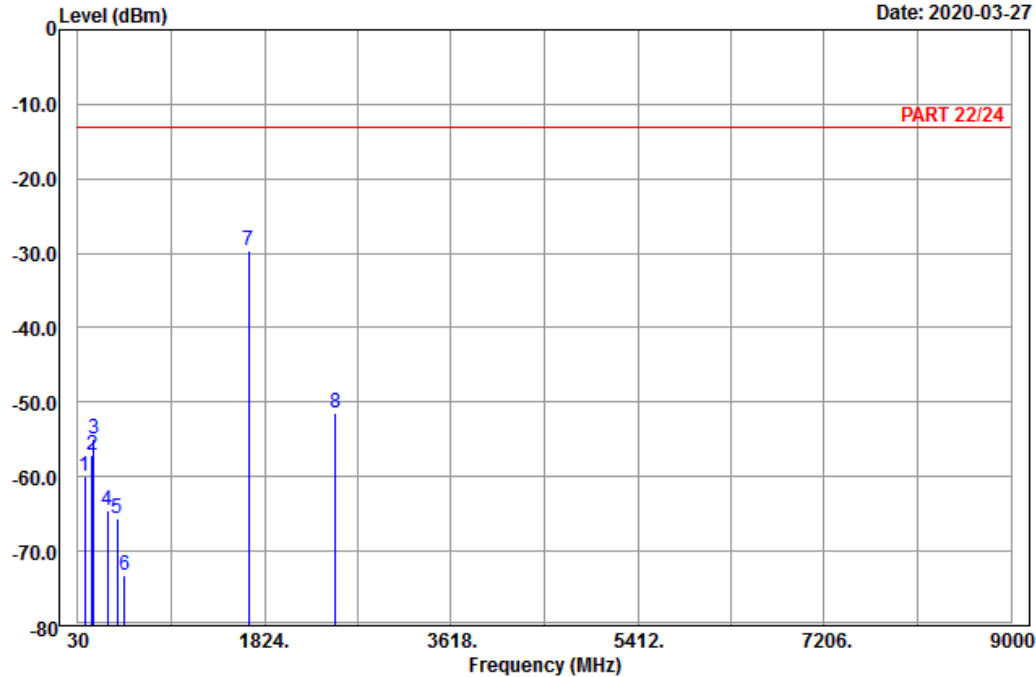


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A D T

Data: 10

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : GSM 850_Link_M-Ch
 Tested by: Karl Lee

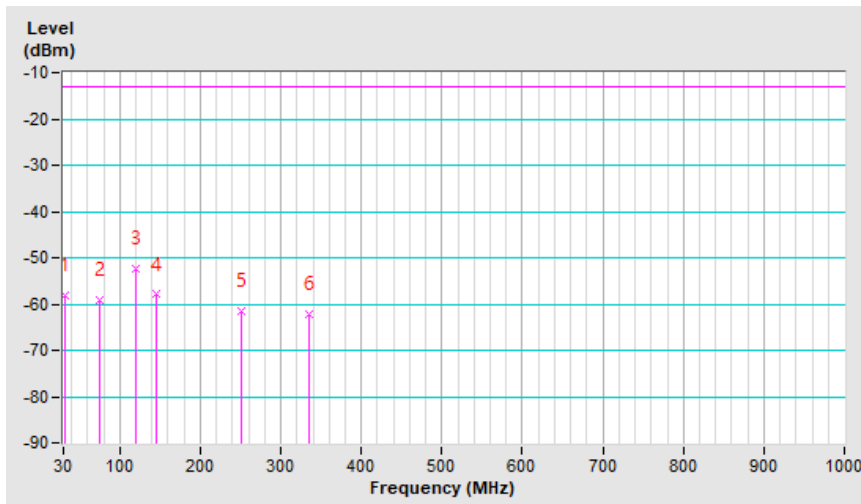
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	97.50	-59.84	-49.61	-10.23	-13.00	-46.84	Peak
2	168.24	-57.22	-50.42	-6.80	-13.00	-44.22	Peak
3	182.01	-54.99	-49.38	-5.61	-13.00	-41.99	Peak
4	314.70	-64.59	-58.81	-5.78	-13.00	-51.59	Peak
5	407.10	-65.53	-62.62	-2.91	-13.00	-52.53	Peak
6	478.50	-73.29	-68.64	-4.65	-13.00	-60.29	Peak
7 pp	1672.80	-29.72	-37.63	7.91	-13.00	-16.72	Peak
8	2509.20	-51.54	-62.82	11.28	-13.00	-38.54	Peak

For Docking Mode

Mode	TX channel 189 (836.4MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

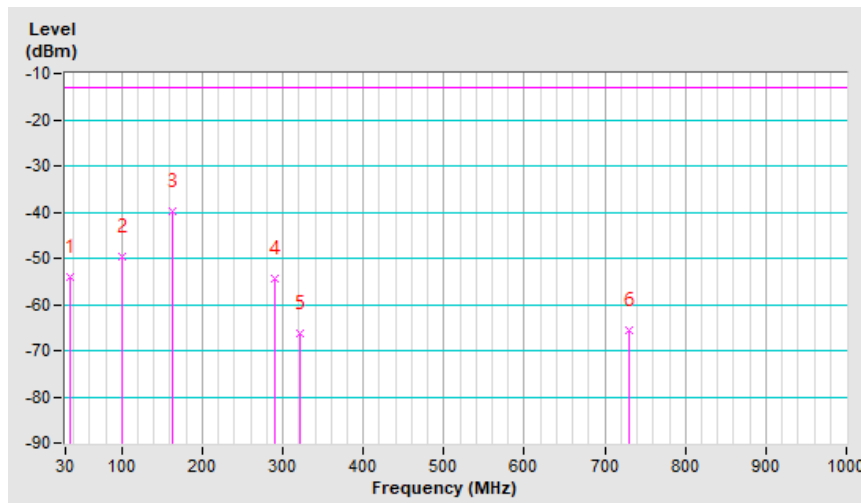
Antenna Polarity & Test Distance: Horizontal at 3 M

No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	31.41	-58.50	-46.00	-12.00	-58.00	-13.00	-45.00
2	74.99	-50.90	-55.80	-3.30	-59.10	-13.00	-46.10
3	119.97	-42.00	-52.40	0.10	-52.30	-13.00	-39.30
4	145.28	-51.00	-57.80	-0.20	-58.00	-13.00	-45.00
5	250.71	-53.00	-66.90	5.40	-61.50	-13.00	-48.50
6	335.06	-56.60	-67.40	5.20	-62.20	-13.00	-49.20



Mode	TX channel 189 (836.4MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Titan Hsu		

Antenna Polarity & Test Distance: Vertical at 3 M							
No.	Freq. (MHz)	Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)
1	35.62	-42.60	-42.60	-11.50	-54.10	-13.00	-41.10
2	100.29	-40.20	-50.60	0.90	-49.70	-13.00	-36.70
3	162.14	-35.30	-40.50	0.70	-39.80	-13.00	-26.80
4	290.07	-53.50	-59.60	5.10	-54.50	-13.00	-41.50
5	321.00	-64.20	-71.40	5.20	-66.20	-13.00	-53.20
6	730.09	-70.10	-70.50	4.90	-65.60	-13.00	-52.60



High Channel

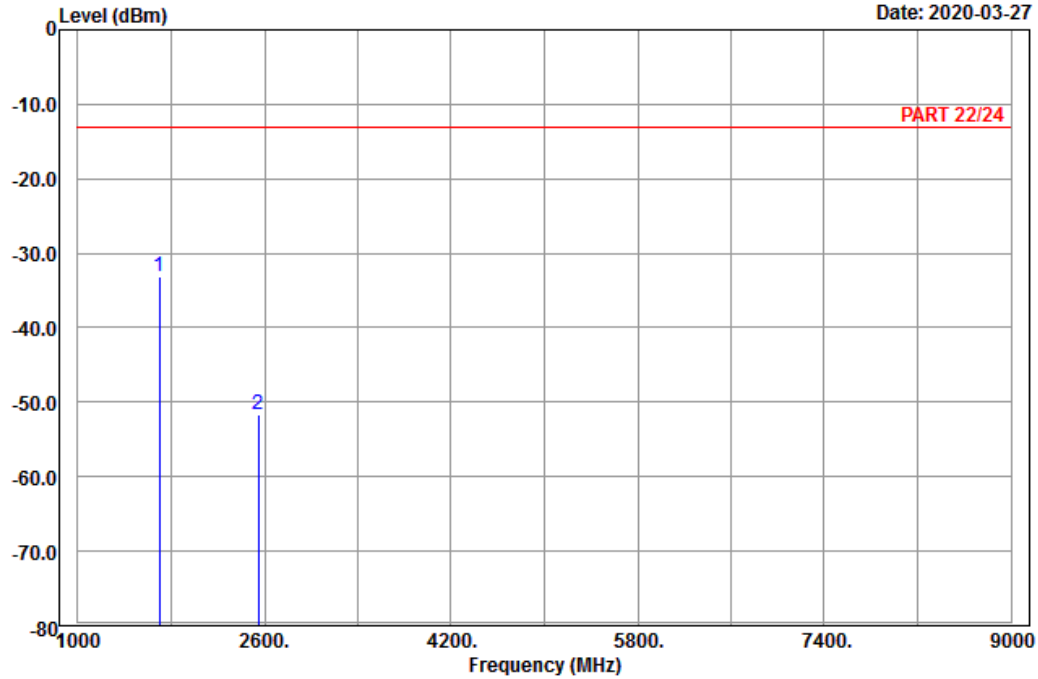


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A D T

Data: 5

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : GSM 850_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1697.60	-33.07	-41.21	8.14	-13.00	-20.07	Peak
2	2546.40	-51.57	-63.04	11.47	-13.00	-38.57	Peak

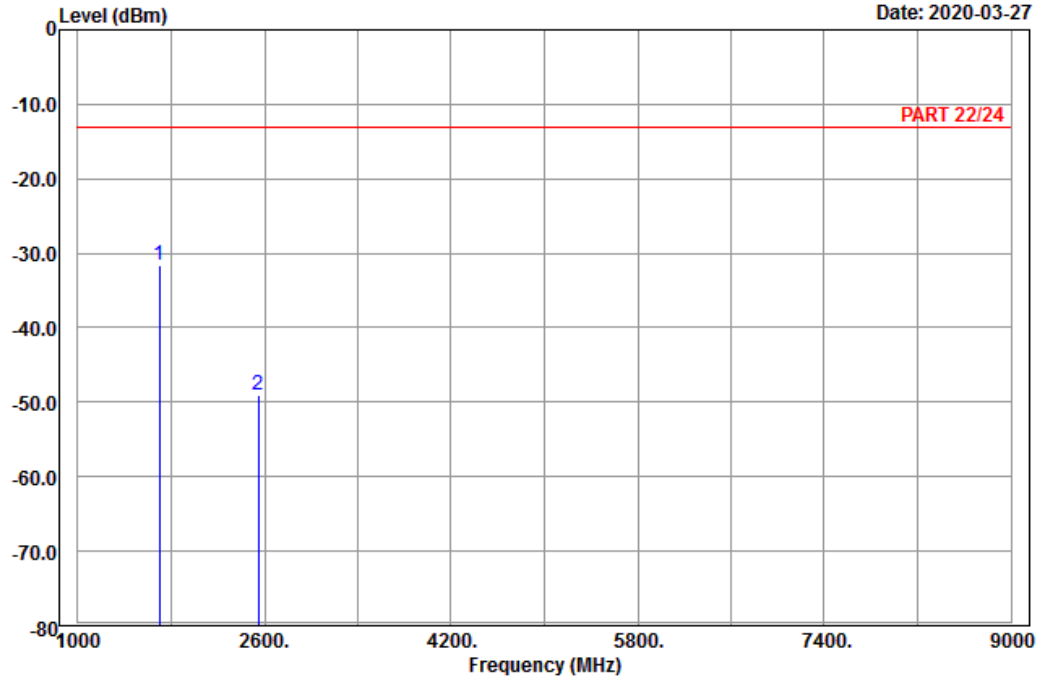


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A D T

Data: 6

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : GSM 850_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1697.60	-31.60	-39.74	8.14	-13.00	-18.60	Peak
2	2546.40	-48.97	-60.44	11.47	-13.00	-35.97	Peak

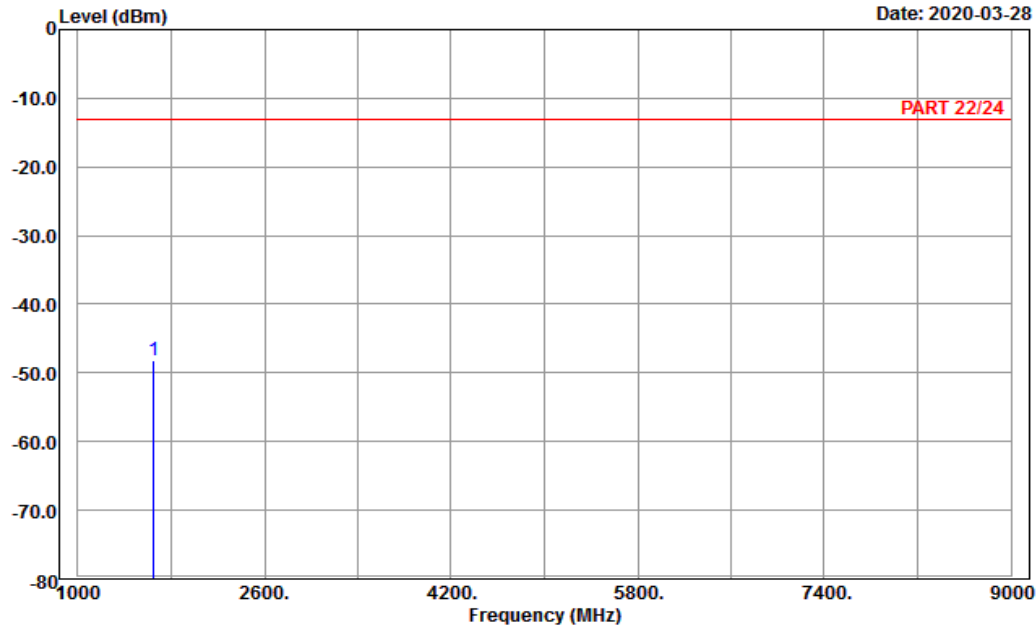
EDGE:
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : EDGE 850_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	pp 1648.40	-48.24	-55.97	7.73	-13.00	-35.24	Peak

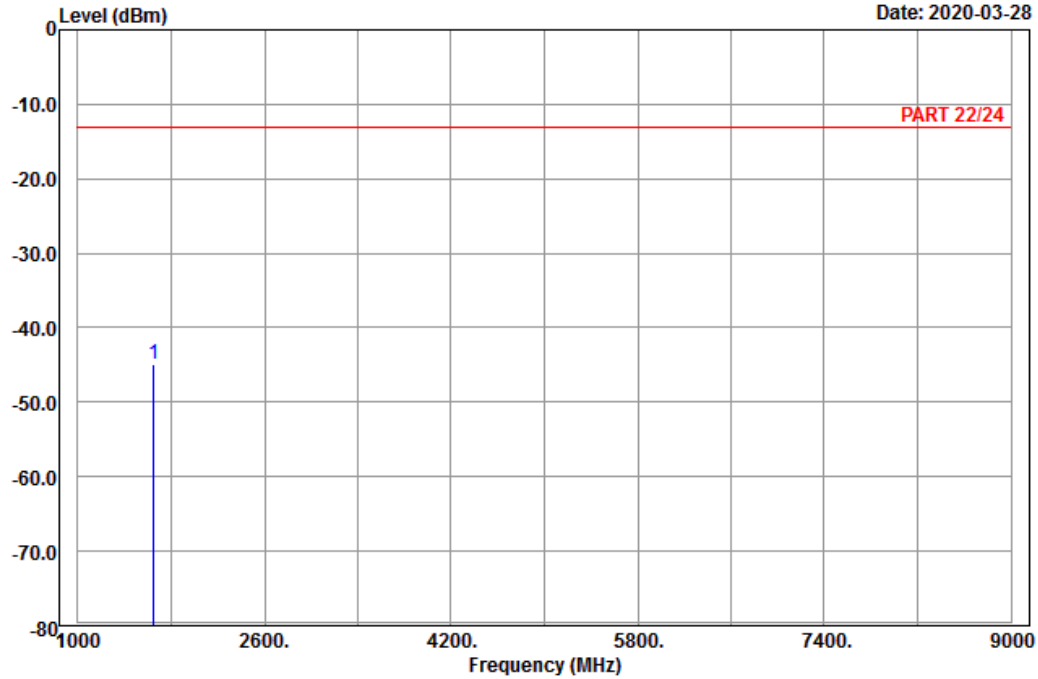


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A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : EDGE 850_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	pp 1648.40	-45.00	-52.73	7.73	-13.00	-32.00	Peak

Middle Channel

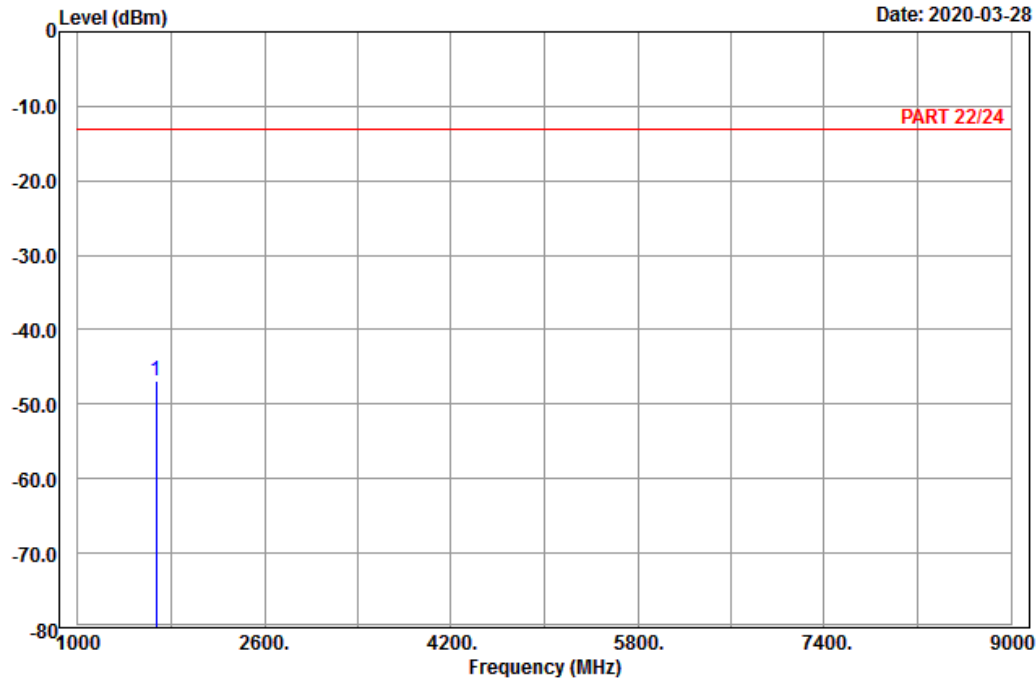


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : EDGE 850_Link_M-Ch
 Tested by: Karl Lee

	Read	Limit	Over	
Freq	Level	Level	Factor	Line
MHz	dBm	dBm	dB	dBm
1 pp 1672.80	-46.87	-54.78	7.91	-13.00
				-33.87 Peak

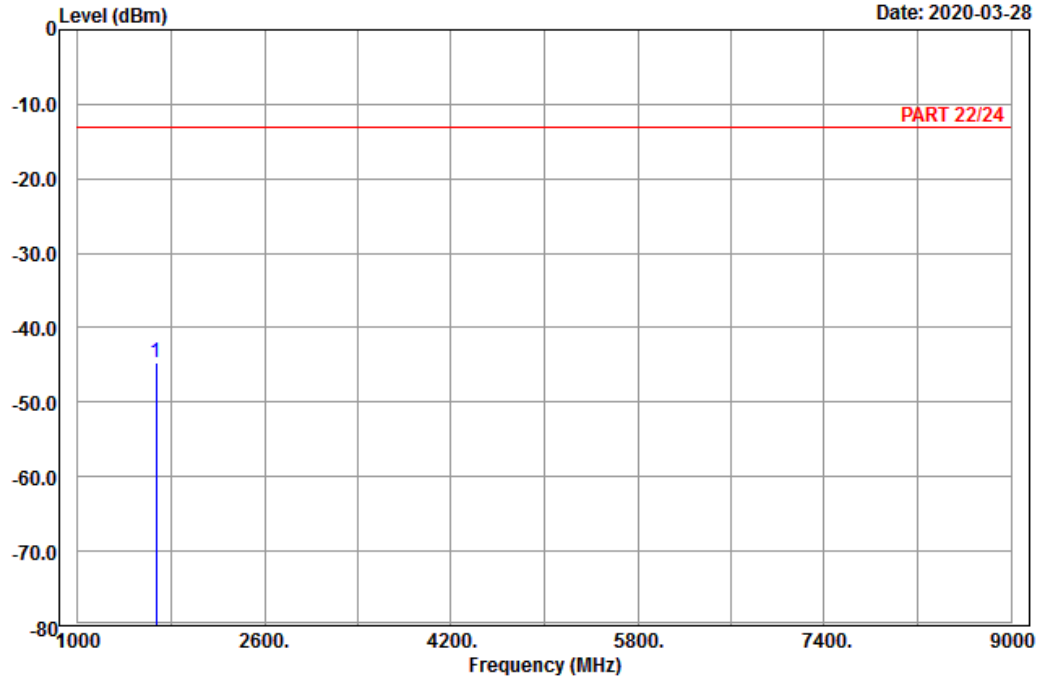


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : EDGE 850_Link_M-Ch
 Tested by: Karl Lee

	Read	Limit	Over	
Freq	Level	Level	Factor	Line
MHz	dBm	dBm	dB	dBm
1 pp 1672.80	-44.76	-52.67	7.91	-13.00
				-31.76
				Peak

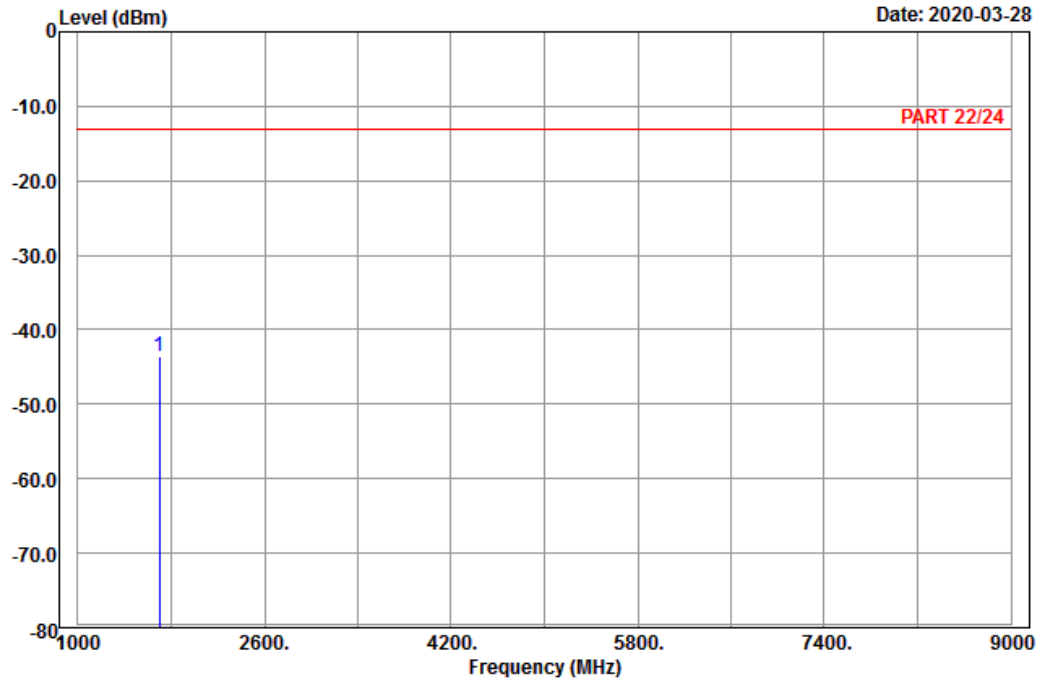
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : EDGE 850_Link_H-Ch
 Tested by: Karl Lee

	Read	Limit	Over	
Freq	Level	Level	Factor	Line
MHz	dBm	dBm	dB	dBm
1 pp 1697.60	-43.62	-51.76	8.14	-13.00
				-30.62 Peak

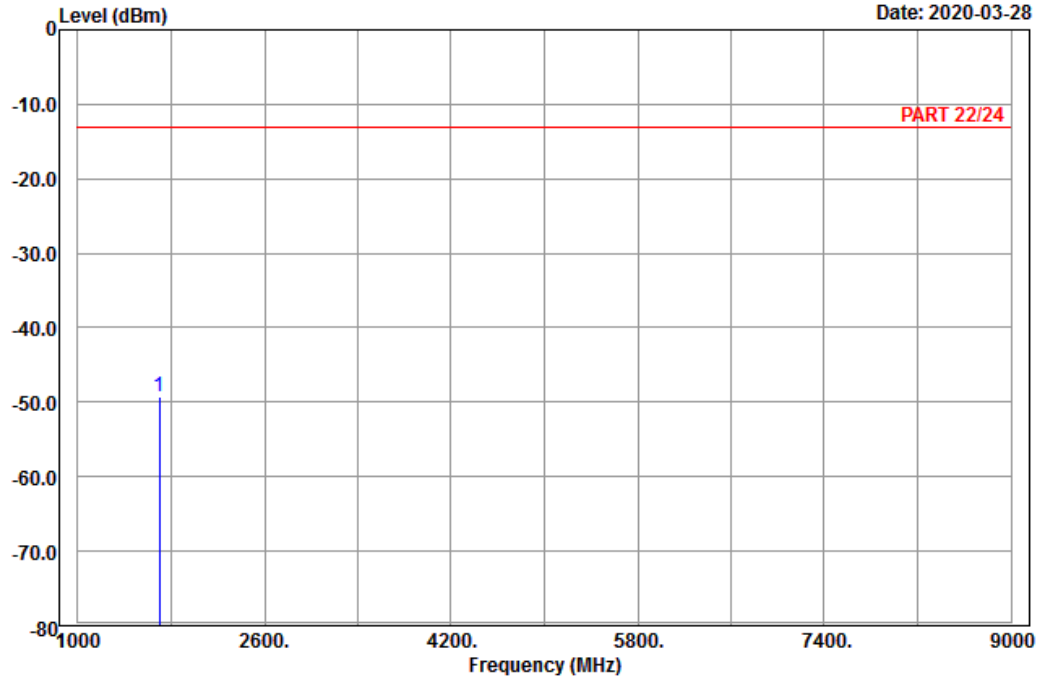


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : EDGE 850_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1697.60	-49.25	-57.39	8.14	-13.00	-36.25	Peak

WCDMA:
Low Channel

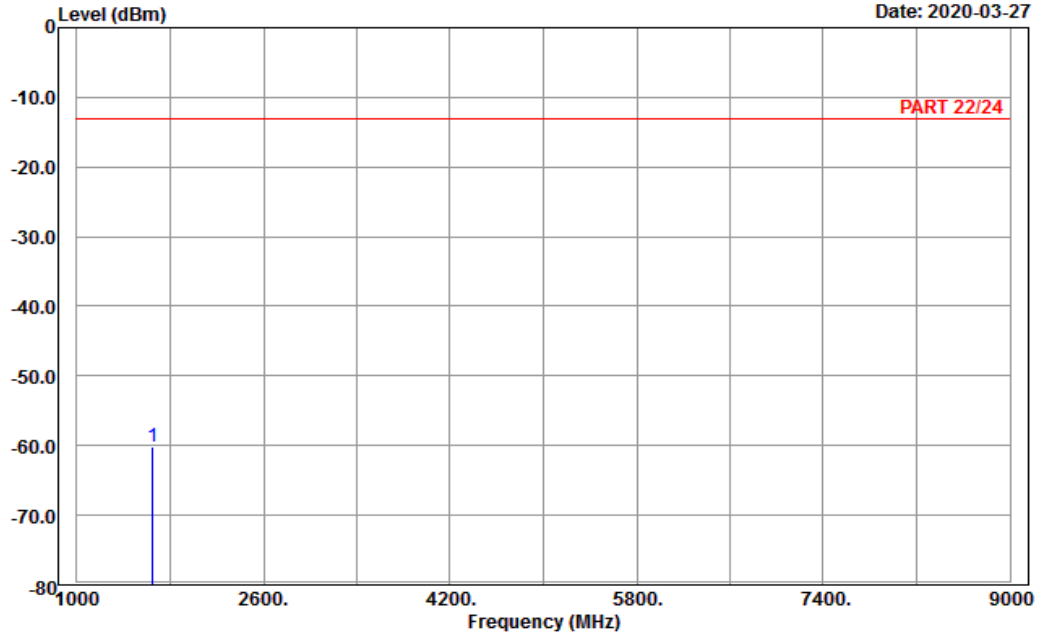


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-27



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : Band V_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1652.80	-60.22	-67.95	7.73	-13.00	-47.22	Peak

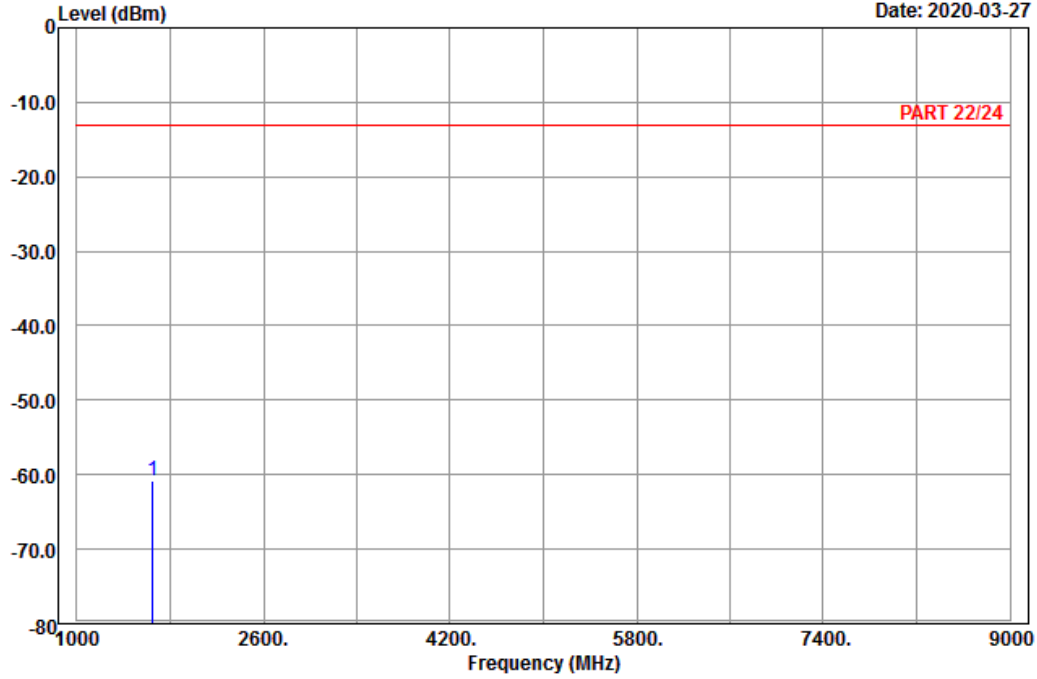


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : Band V_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1652.80	-60.85	-68.58	7.73	-13.00	-47.85	Peak

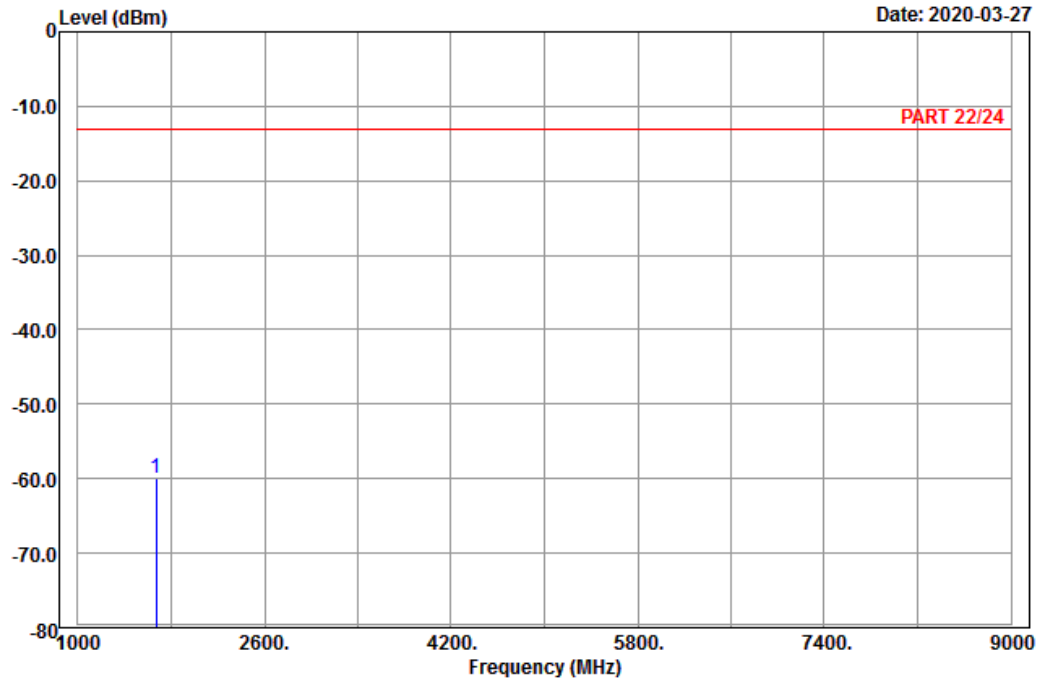
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : Band V_Link_M-Ch
 Tested by: Karl Lee

Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
MHz	dBm	dBm	dB	dBm	dB	
1 pp 1672.80	-59.99	-67.90	7.91	-13.00	-46.99	Peak

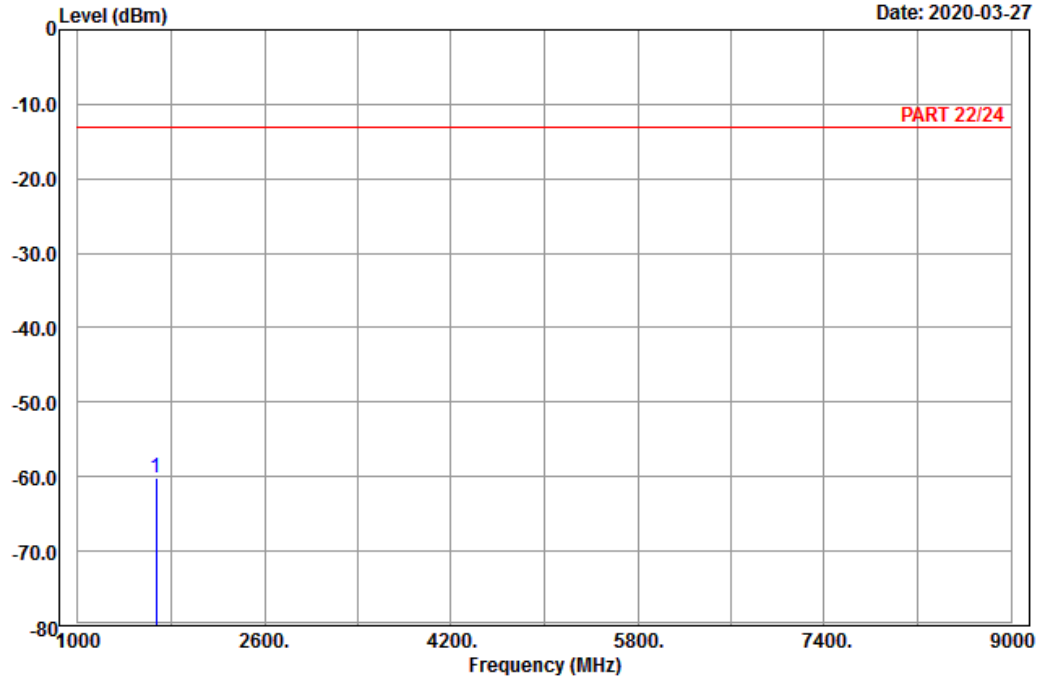


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : Band V_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1672.80	-60.18	-68.09	7.91	-13.00	-47.18	Peak

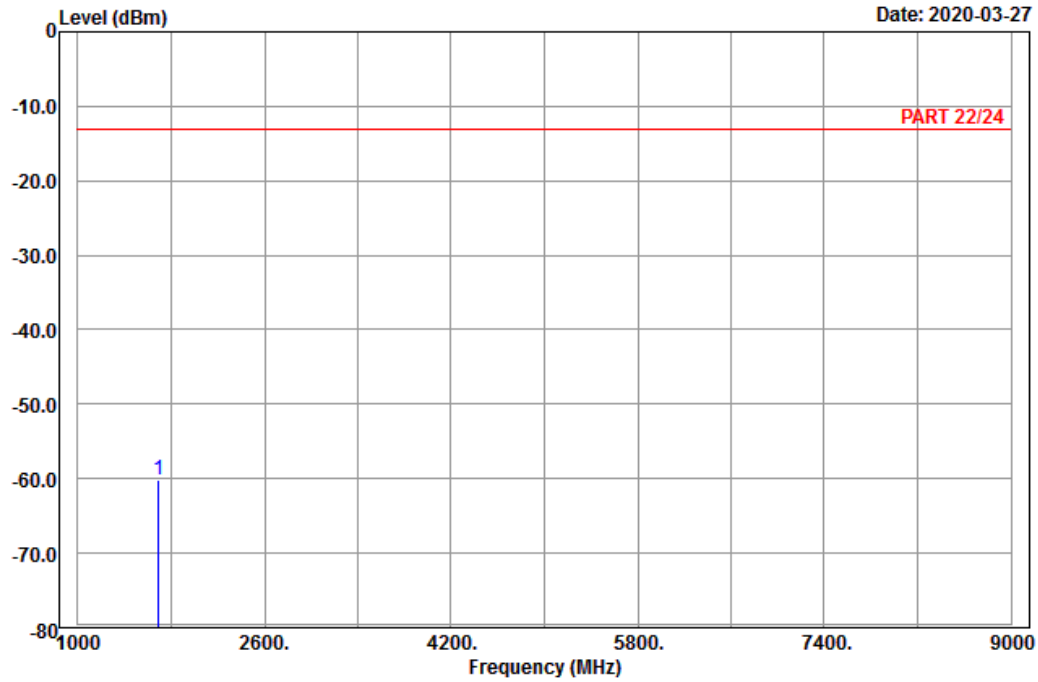
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : Band V_Link_H-Ch
 Tested by: Karl Lee

Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
MHz	dBm	dBm	dB	dBm	dB	
1 pp 1693.20	-60.27	-68.41	8.14	-13.00	-47.27	Peak

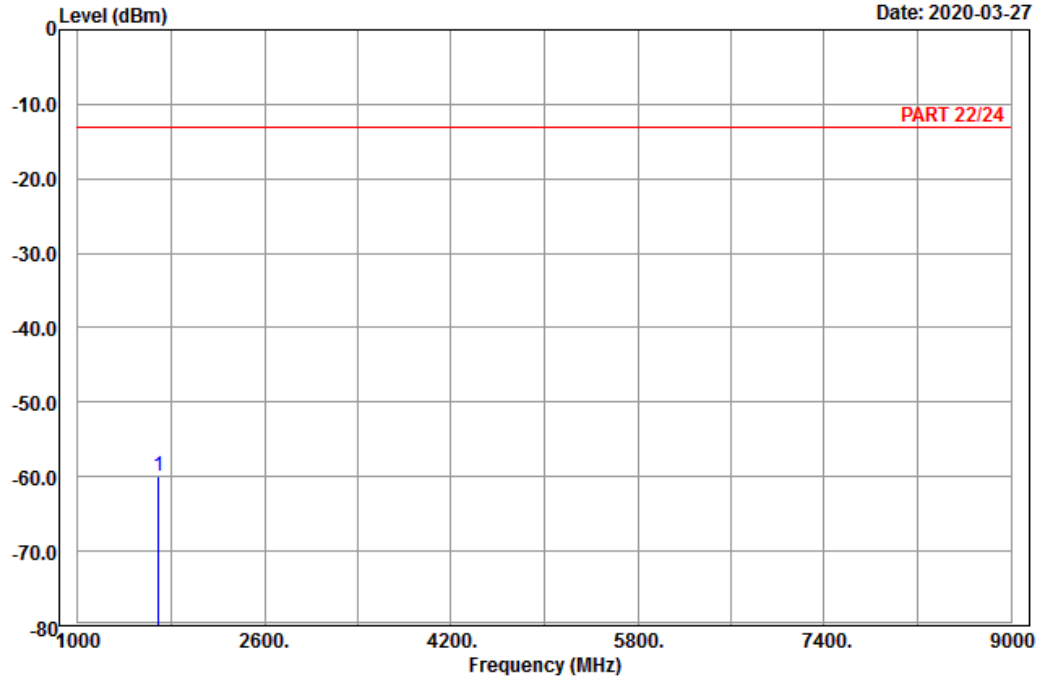


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-27



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : Band V_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1 pp	1693.20	-60.00	-68.14	8.14	-13.00	-47.00	Peak

LTE Band 5
 Channel Bandwidth: 1.4 MHz / QPSK
 Low Channel

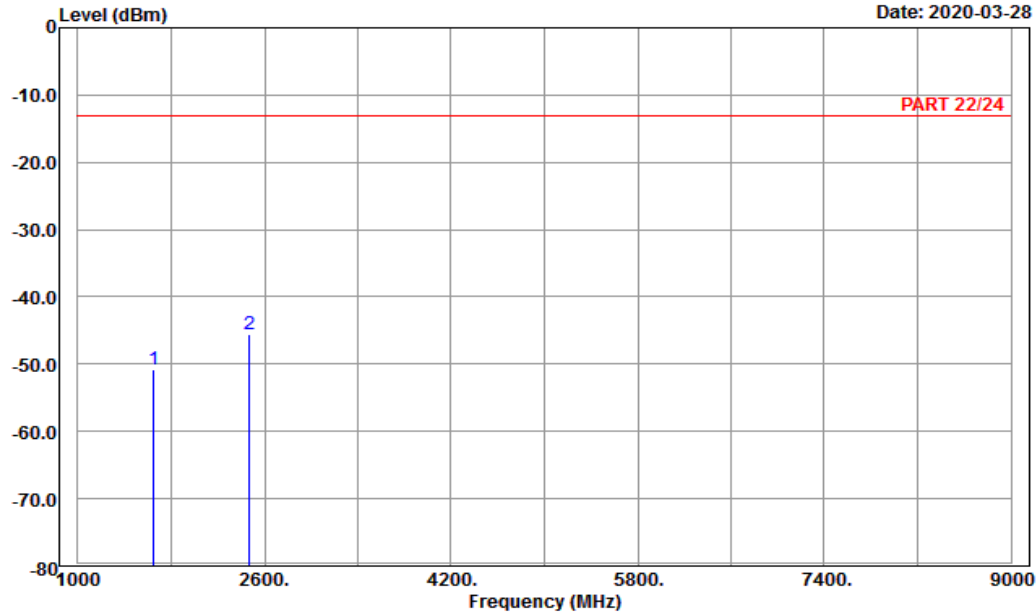


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1649.40	-50.77	-58.50	7.73	-13.00	-37.77	Peak
2 pp	2474.10	-45.65	-56.68	11.03	-13.00	-32.65	Peak

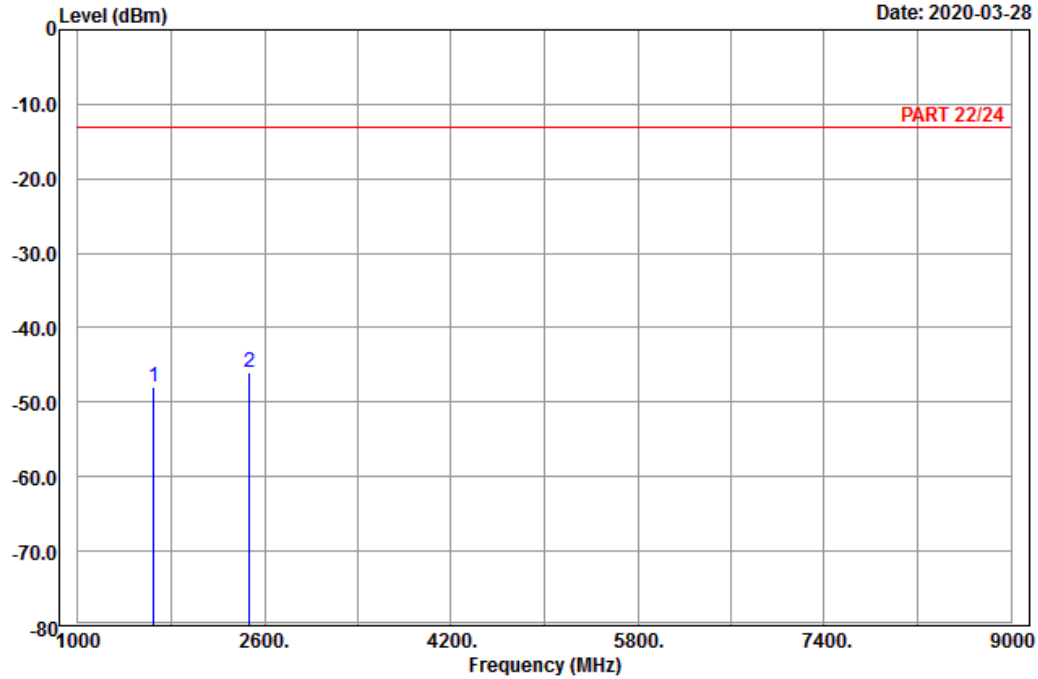


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1649.40	-47.98	-55.71	7.73	-13.00	-34.98	Peak
2 pp	2474.10	-45.96	-56.99	11.03	-13.00	-32.96	Peak

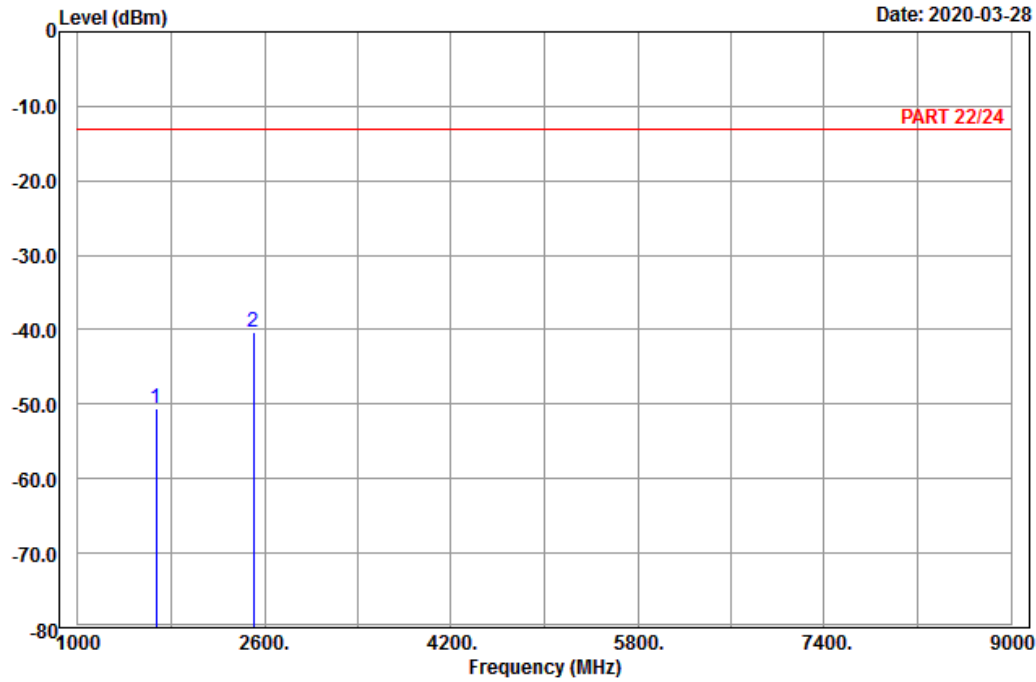
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-50.64	-58.55	7.91	-13.00	-37.64	Peak
2	2509.50	-40.23	-51.51	11.28	-13.00	-27.23	Peak

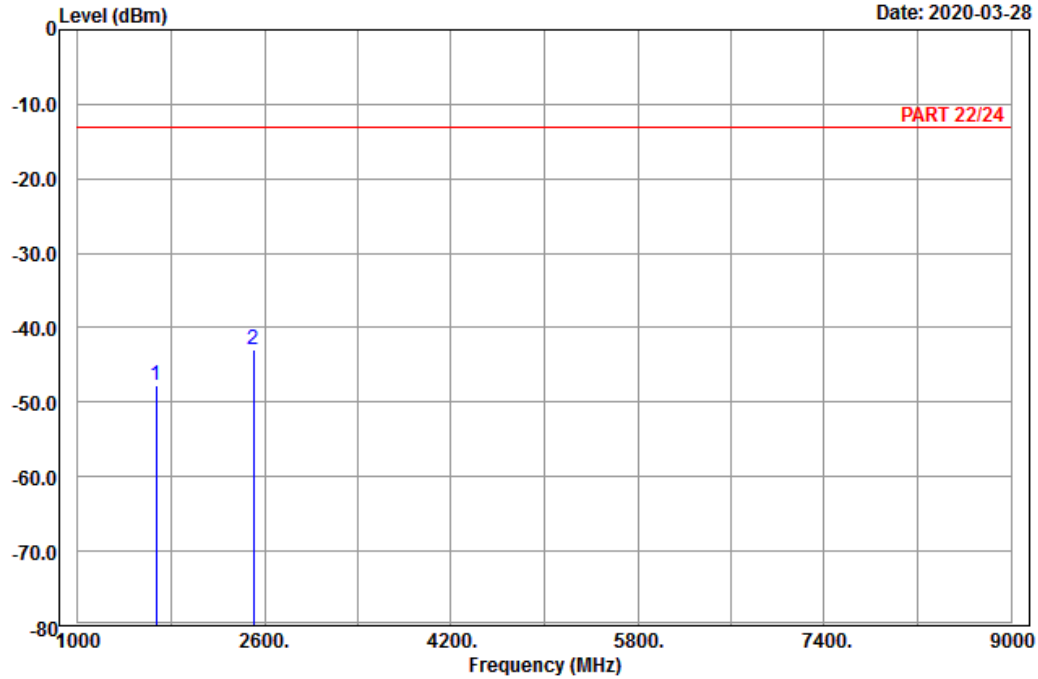


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-47.69	-55.60	7.91	-13.00	-34.69	Peak
2 pp	2509.50	-42.97	-54.25	11.28	-13.00	-29.97	Peak

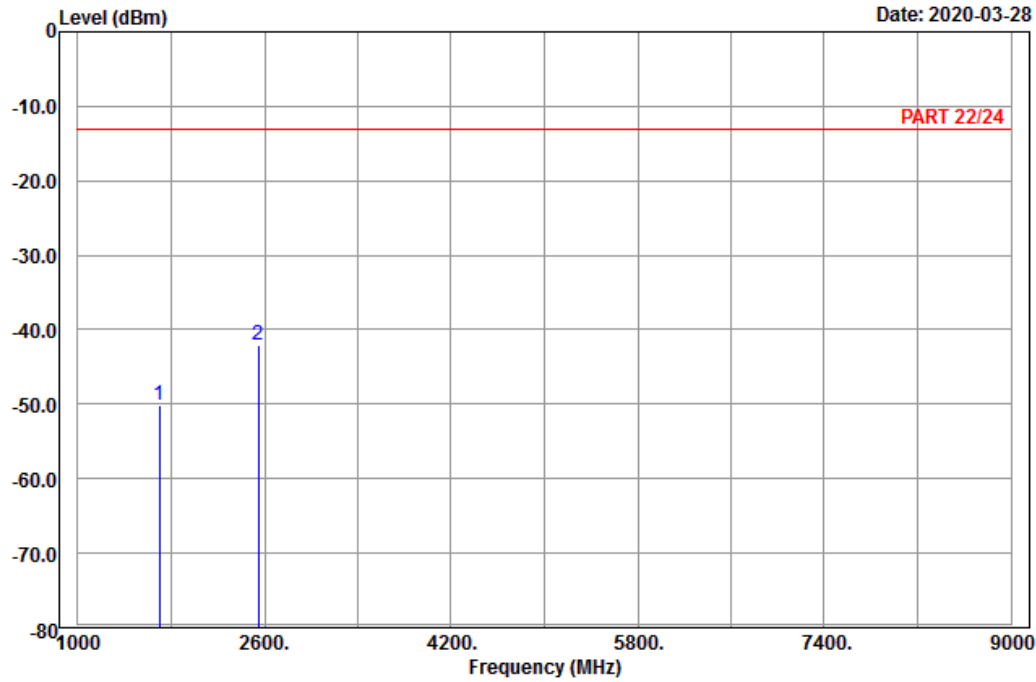
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1696.60	-50.07	-58.21	8.14	-13.00	-37.07	Peak
2	2544.90	-42.07	-53.54	11.47	-13.00	-29.07	Peak

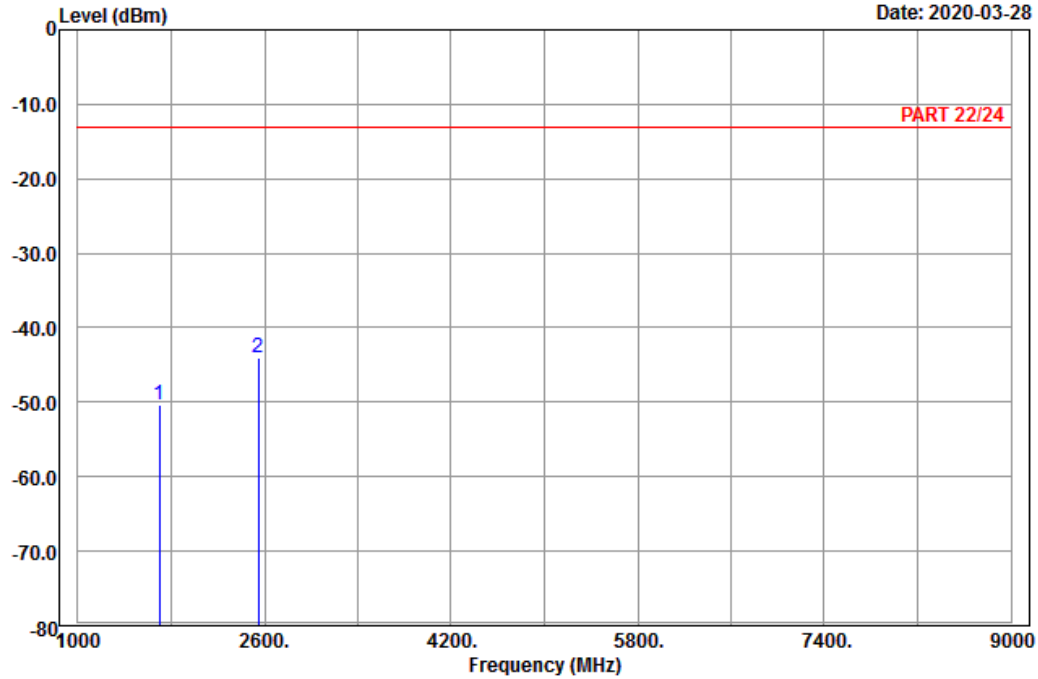


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1696.60	-50.25	-58.39	8.14	-13.00	-37.25	Peak
2 pp	2544.90	-44.12	-55.59	11.47	-13.00	-31.12	Peak

Channel Bandwidth: 5 MHz / QPSK
Low Channel

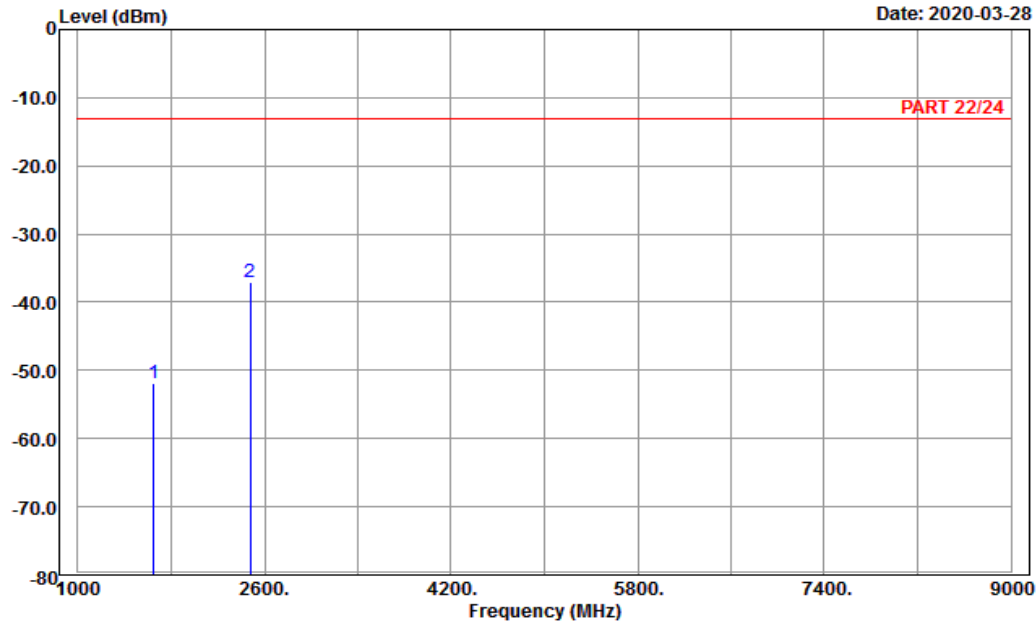


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : LTE_Band 5_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1653.00	-51.96	-59.69	7.73	-13.00	-38.96	Peak
2	pp 2479.50	-37.09	-48.12	11.03	-13.00	-24.09	Peak

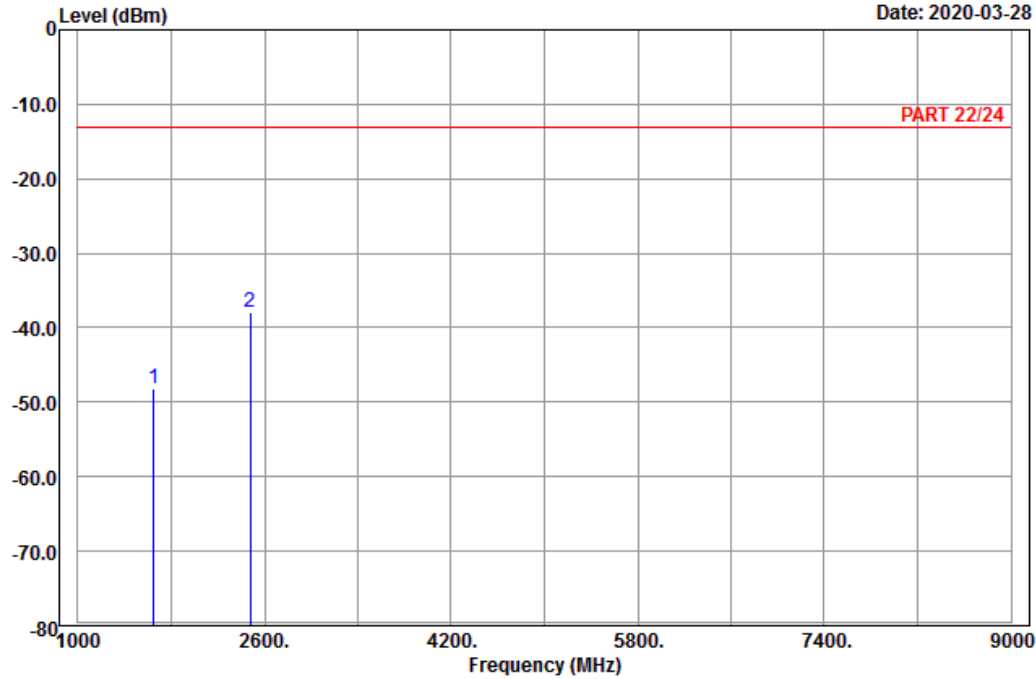


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1653.00	-48.14	-55.87	7.73	-13.00	-35.14	Peak
2 pp	2479.50	-37.90	-48.93	11.03	-13.00	-24.90	Peak

Middle Channel

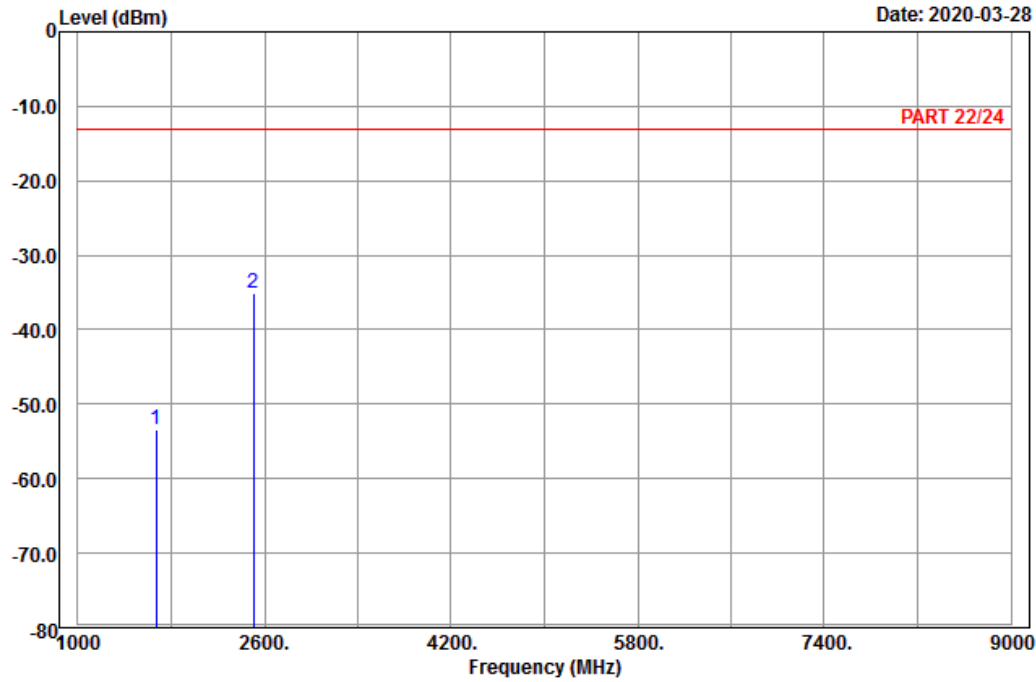


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-53.30	-61.21	7.91	-13.00	-40.30	Peak
2 pp	2509.50	-35.18	-46.46	11.28	-13.00	-22.18	Peak

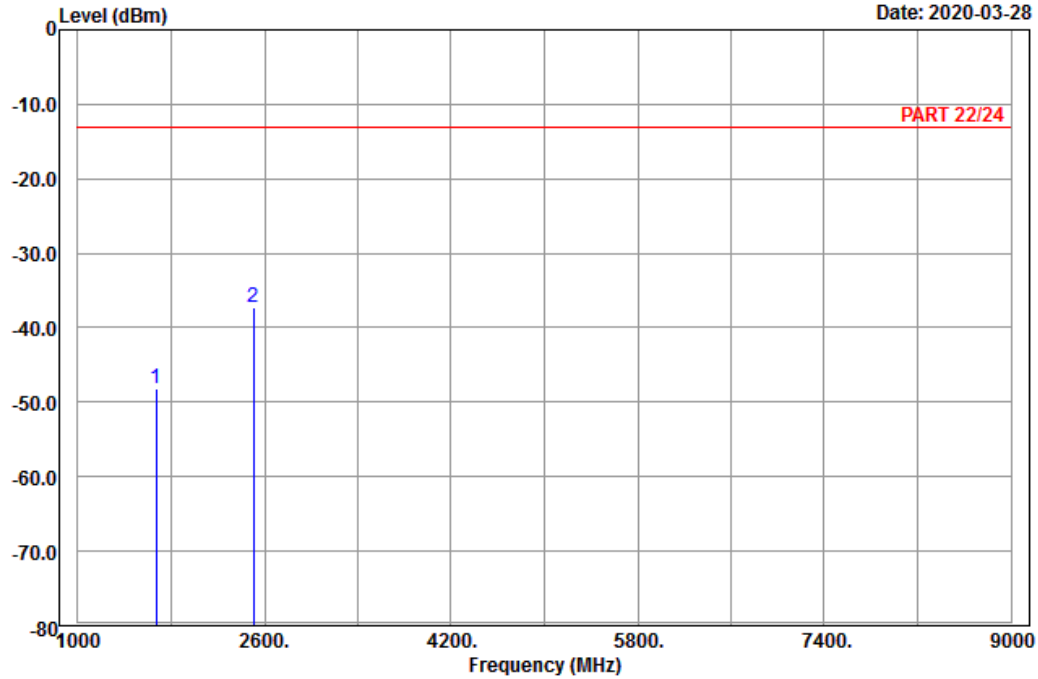


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-48.16	-56.07	7.91	-13.00	-35.16	Peak
2 pp	2509.50	-37.37	-48.65	11.28	-13.00	-24.37	Peak

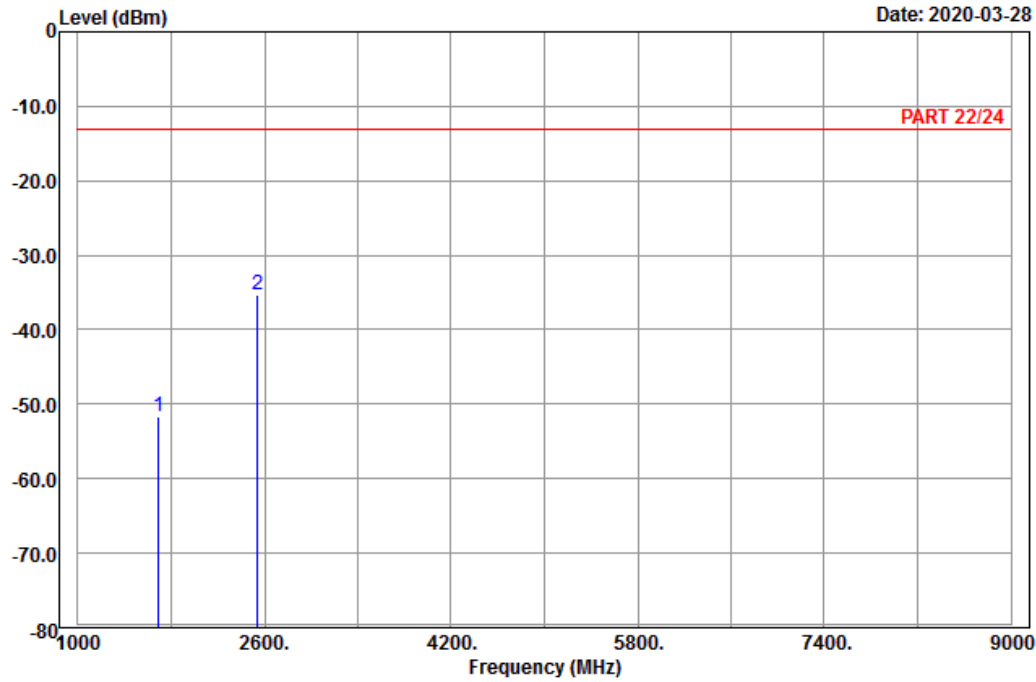
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1693.00	-51.66	-59.68	8.02	-13.00	-38.66	Peak
2 pp	2539.50	-35.31	-46.78	11.47	-13.00	-22.31	Peak

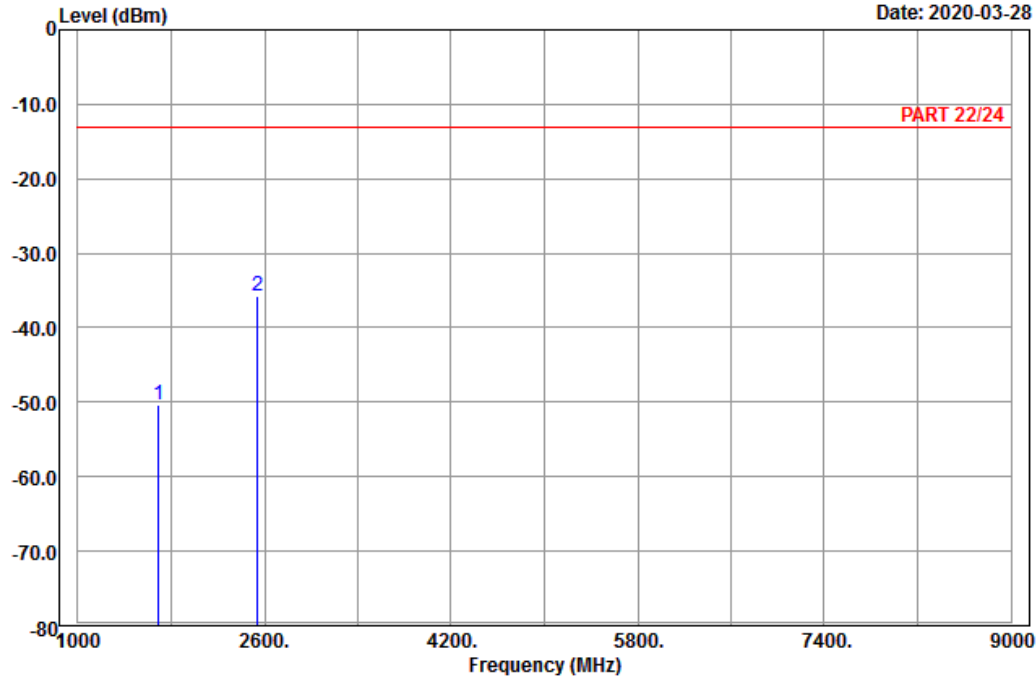


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1693.00	-50.33	-58.35	8.02	-13.00	-37.33	Peak
2 pp	2539.50	-35.68	-47.15	11.47	-13.00	-22.68	Peak

Channel Bandwidth: 10 MHz / QPSK
Low Channel

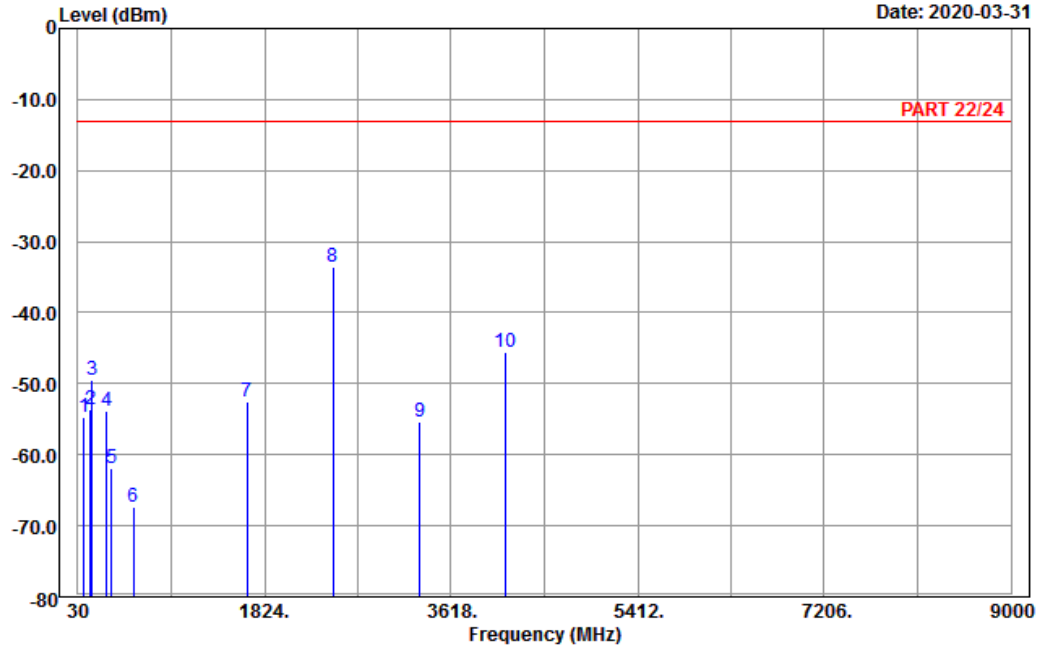


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2020-03-31



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : LTE_Band 5_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read	Limit	Over	Remark
	MHz	dBm	Level	Line	Limit	
			Factor			
			dB	dBm	dB	
1	92.37	-54.75	-44.19	-10.56	-13.00	-41.75 Peak
2	153.39	-53.63	-45.77	-7.86	-13.00	-40.63 Peak
3	169.05	-49.42	-42.62	-6.80	-13.00	-36.42 Peak
4	307.70	-53.92	-48.05	-5.87	-13.00	-40.92 Peak
5	356.70	-61.93	-56.91	-5.02	-13.00	-48.93 Peak
6	567.40	-67.40	-66.46	-0.94	-13.00	-54.40 Peak
7	1658.00	-52.56	-60.47	7.91	-13.00	-39.56 Peak
8 pp	2487.00	-33.61	-44.65	11.04	-13.00	-20.61 Peak
9	3316.00	-55.26	-69.64	14.38	-13.00	-42.26 Peak
10	4145.00	-45.61	-62.67	17.06	-13.00	-32.61 Peak

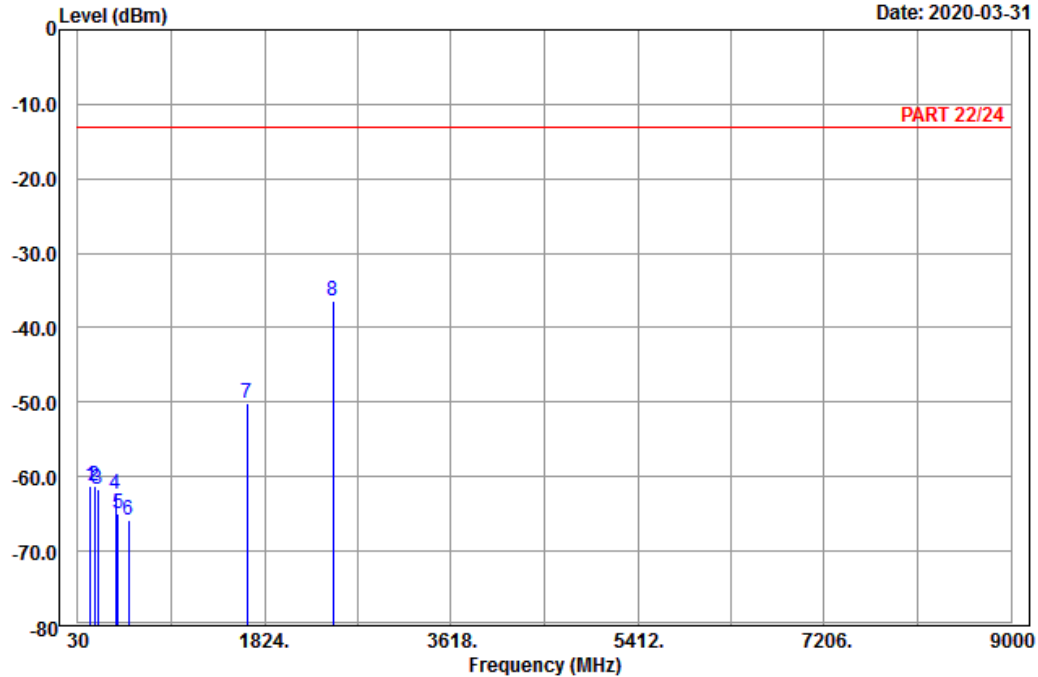


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10

Date: 2020-03-31



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	153.12	-61.20	-53.34	-7.86	-13.00	-48.20	Peak
2	193.62	-61.22	-55.31	-5.91	-13.00	-48.22	Peak
3	219.54	-61.78	-55.86	-5.92	-13.00	-48.78	Peak
4	390.30	-62.34	-59.08	-3.26	-13.00	-49.34	Peak
5	416.90	-64.93	-61.81	-3.12	-13.00	-51.93	Peak
6	516.30	-65.75	-61.60	-4.15	-13.00	-52.75	Peak
7	1658.00	-50.14	-58.05	7.91	-13.00	-37.14	Peak
8 pp	2487.00	-36.37	-47.41	11.04	-13.00	-23.37	Peak

Middle Channel

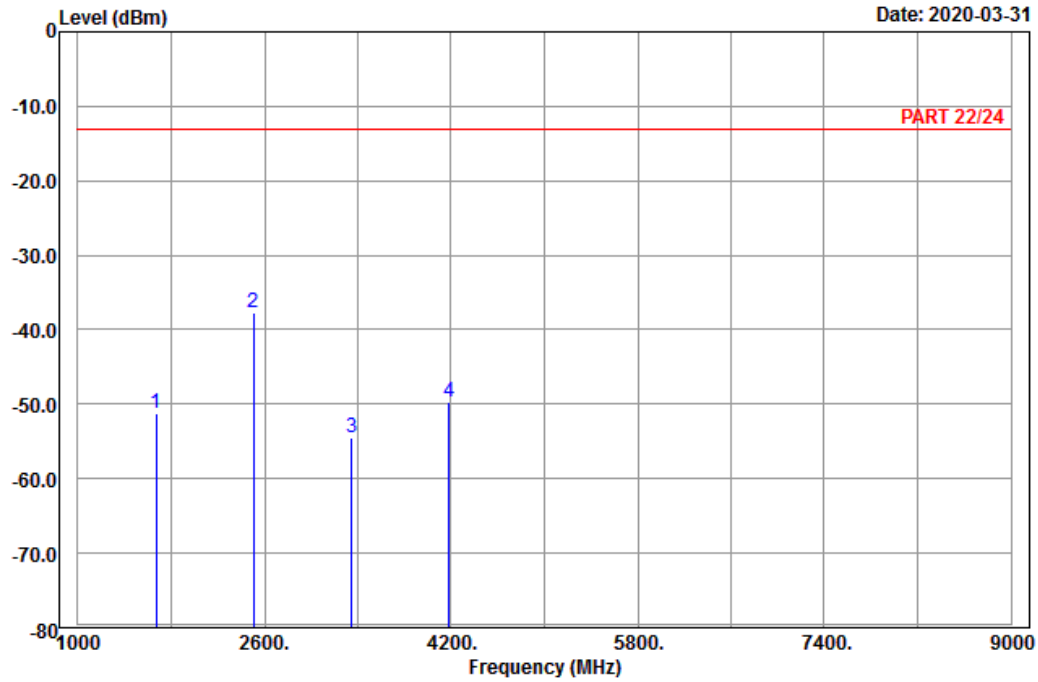


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-31



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-51.26	-59.17	7.91	-13.00	-38.26	Peak
2	2509.50	-37.71	-48.99	11.28	-13.00	-24.71	Peak
3	3346.00	-54.54	-68.99	14.45	-13.00	-41.54	Peak
4	4182.50	-49.61	-66.74	17.13	-13.00	-36.61	Peak

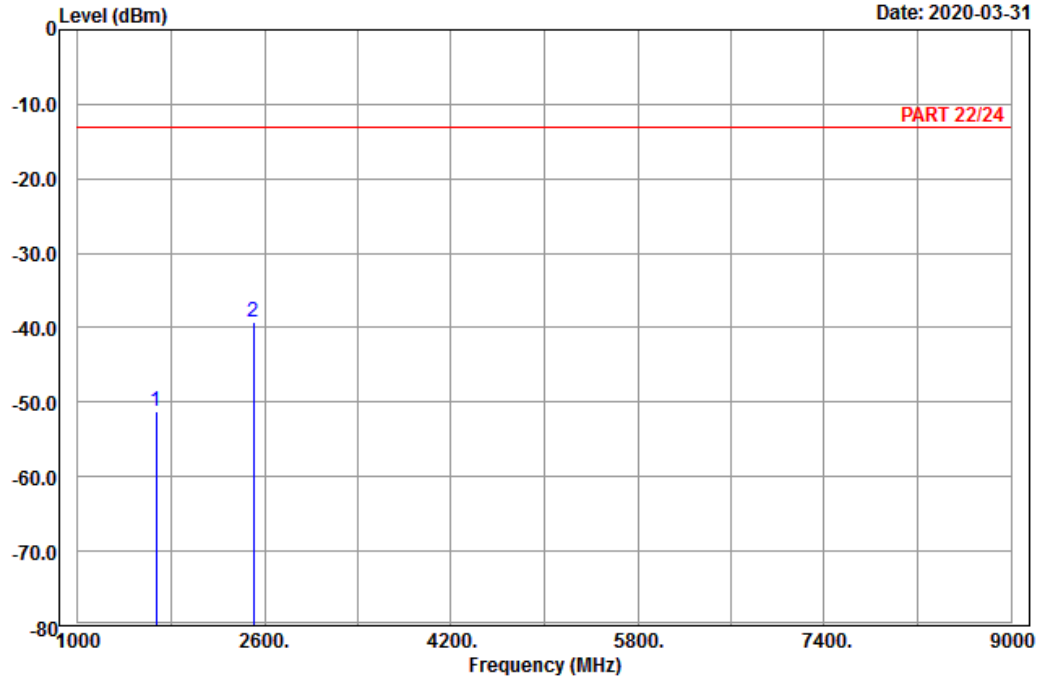


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-31



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-51.19	-59.10	7.91	-13.00	-38.19	Peak
2 pp	2509.50	-39.31	-50.59	11.28	-13.00	-26.31	Peak

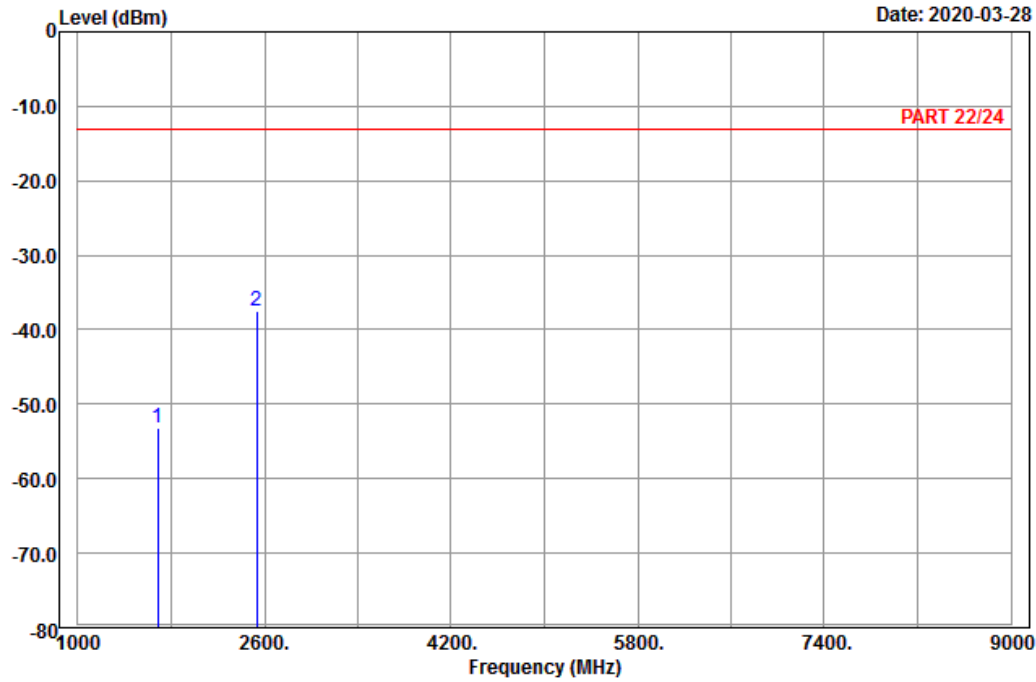
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1688.00	-53.17	-61.19	8.02	-13.00	-40.17	Peak
2	2532.00	-37.57	-48.95	11.38	-13.00	-24.57	Peak

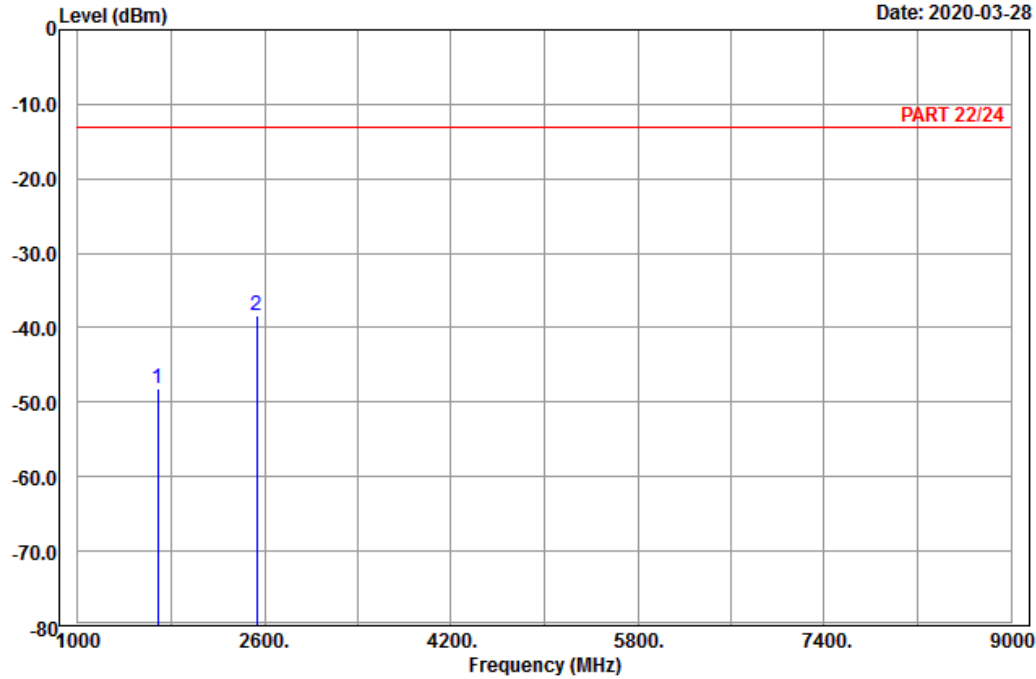


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 5_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1688.00	-48.24	-56.26	8.02	-13.00	-35.24	Peak
2 pp	2532.00	-38.31	-49.69	11.38	-13.00	-25.31	Peak

LTE Band 26
 Channel Bandwidth: 1.4 MHz / QPSK
 Low Channel

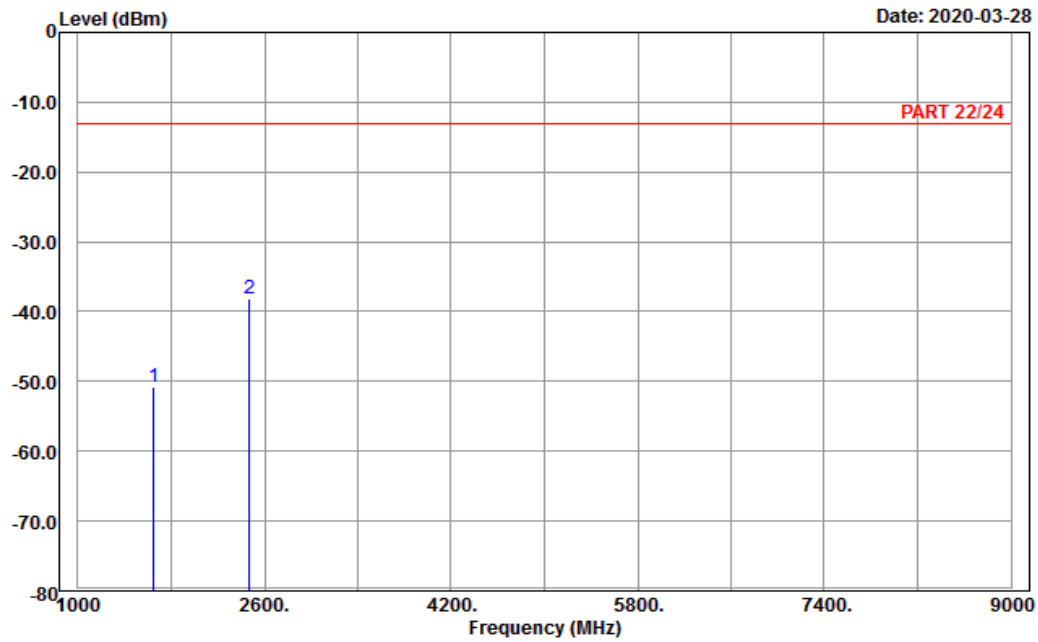


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1649.40	-50.82	-58.55	7.73	-13.00	-37.82	Peak
2 pp	2474.10	-38.24	-49.27	11.03	-13.00	-25.24	Peak

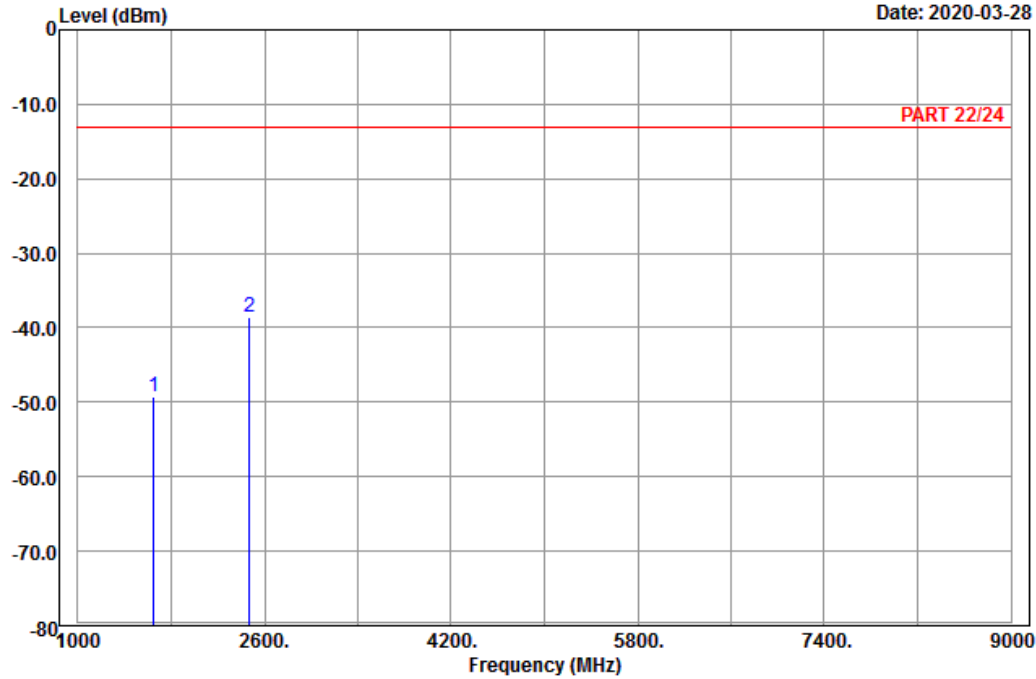


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1649.40	-49.32	-57.05	7.73	-13.00	-36.32	Peak
2 pp	2474.10	-38.57	-49.60	11.03	-13.00	-25.57	Peak

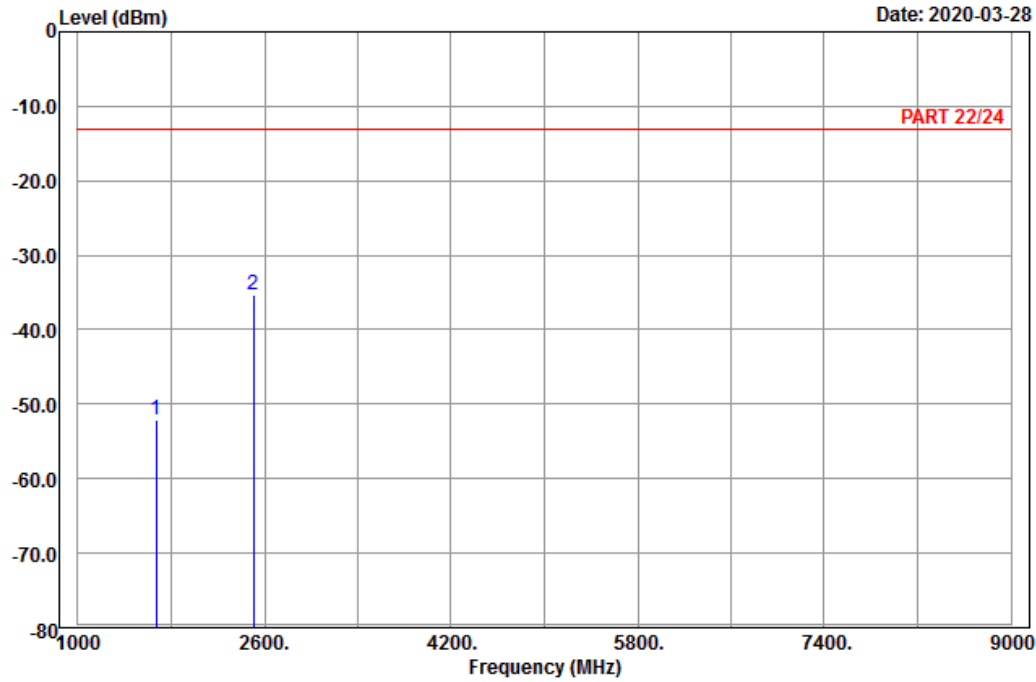
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-52.09	-60.00	7.91	-13.00	-39.09	Peak
2 pp	2509.50	-35.22	-46.50	11.28	-13.00	-22.22	Peak

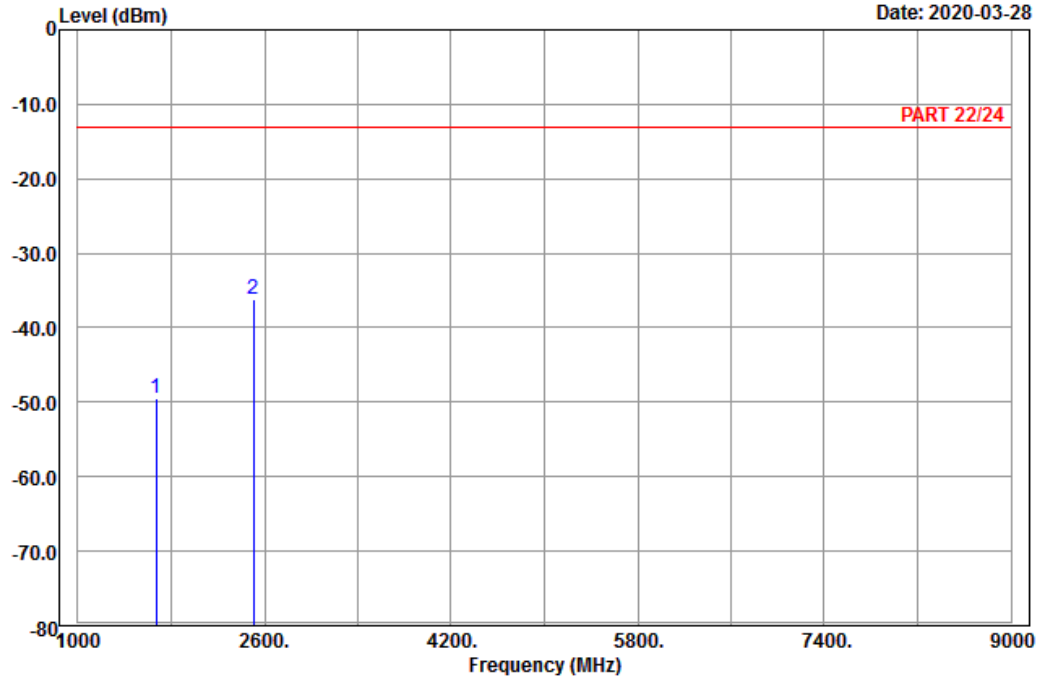


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-49.50	-57.41	7.91	-13.00	-36.50	Peak
2	2509.50	-36.12	-47.40	11.28	-13.00	-23.12	Peak

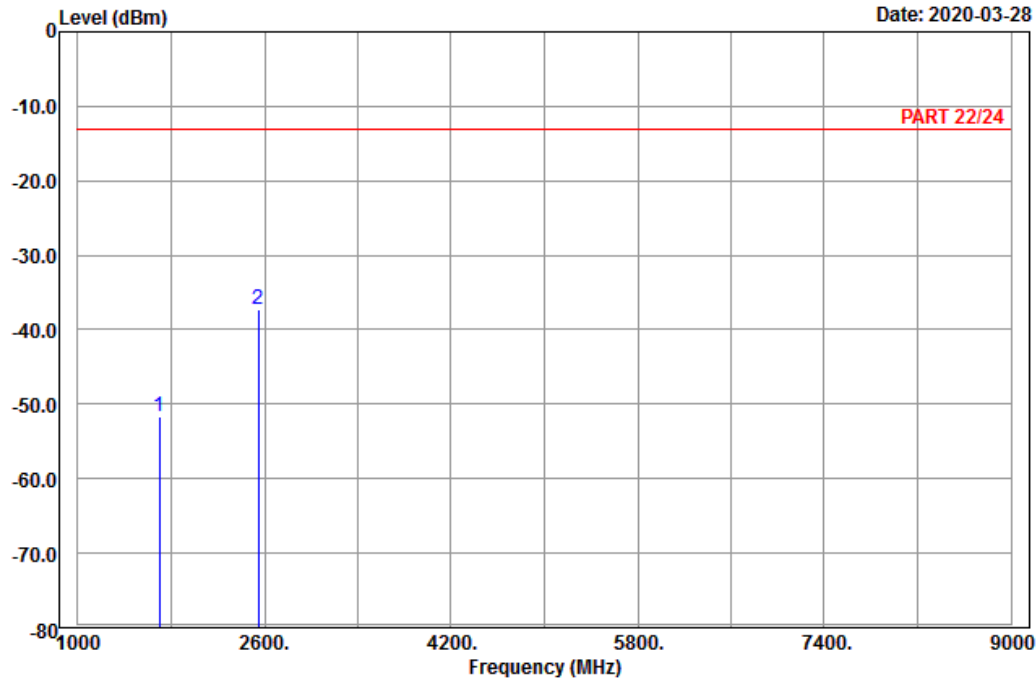
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1696.60	-51.76	-59.90	8.14	-13.00	-38.76	Peak
2 pp	2544.90	-37.31	-48.78	11.47	-13.00	-24.31	Peak

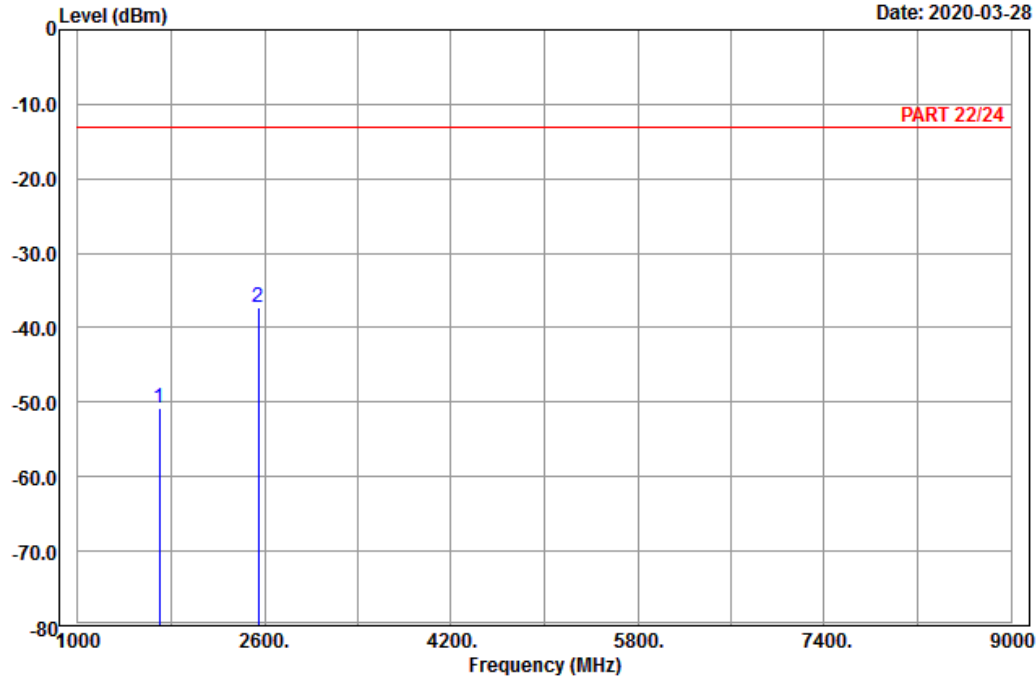


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1696.60	-50.87	-59.01	8.14	-13.00	-37.87	Peak
2 pp	2544.90	-37.31	-48.78	11.47	-13.00	-24.31	Peak

Channel Bandwidth: 5 MHz / QPSK
Low Channel

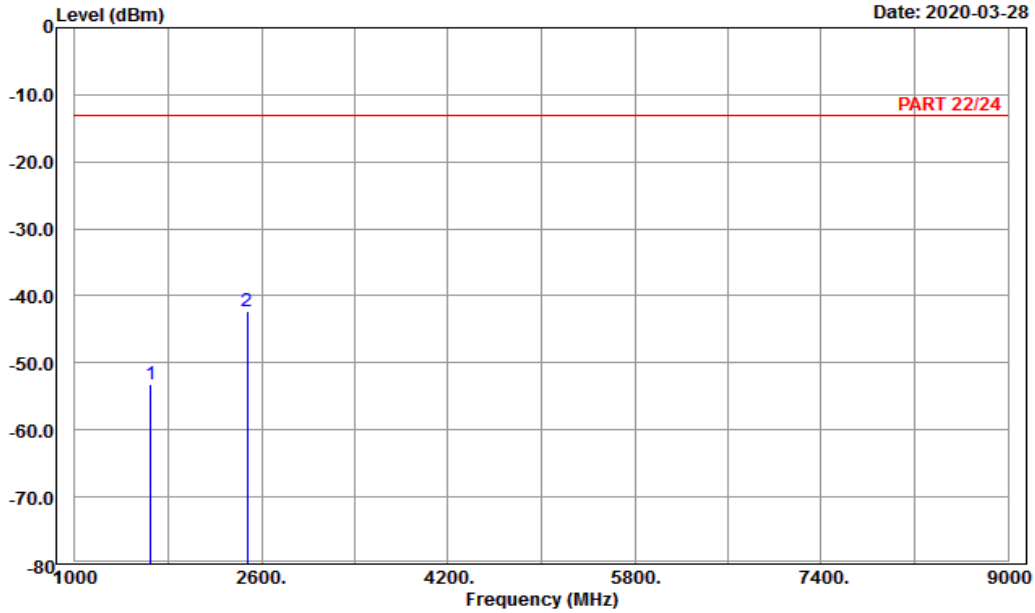


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : LTE_Band 26_Link_M-Ch
Tested by: Karl Lee

	Freq	Level	Read	Factor	Limit	Over	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1653.00	-53.27	-61.00	7.73	-13.00	-40.27	Peak
2	pp 2479.50	-42.27	-53.30	11.03	-13.00	-29.27	Peak

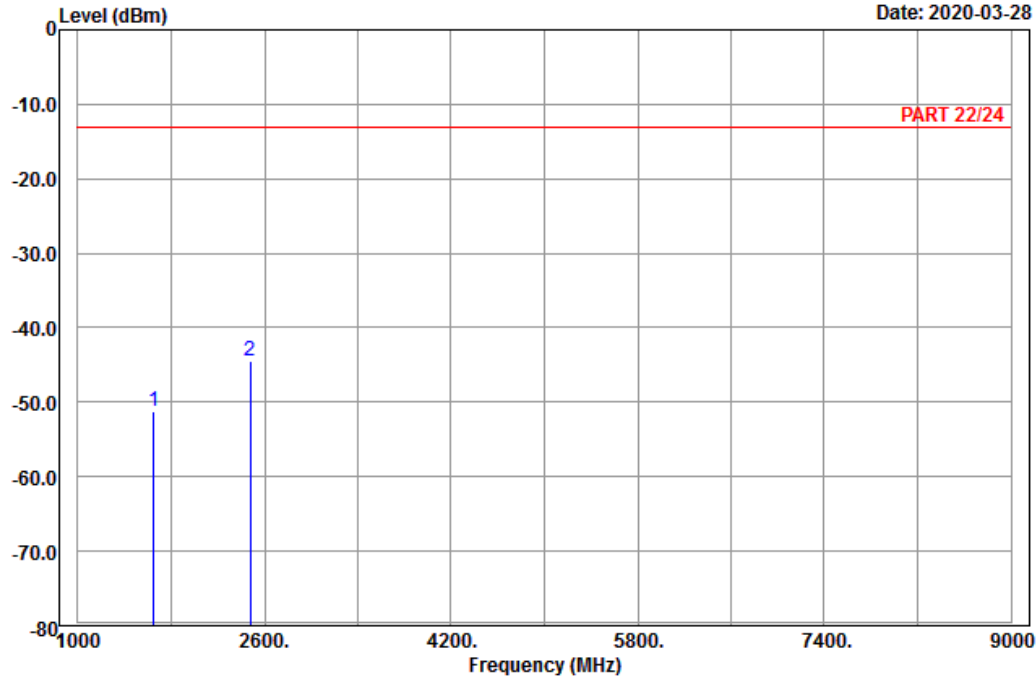


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1653.00	-51.22	-58.95	7.73	-13.00	-38.22	Peak
2 pp	2479.50	-44.54	-55.57	11.03	-13.00	-31.54	Peak

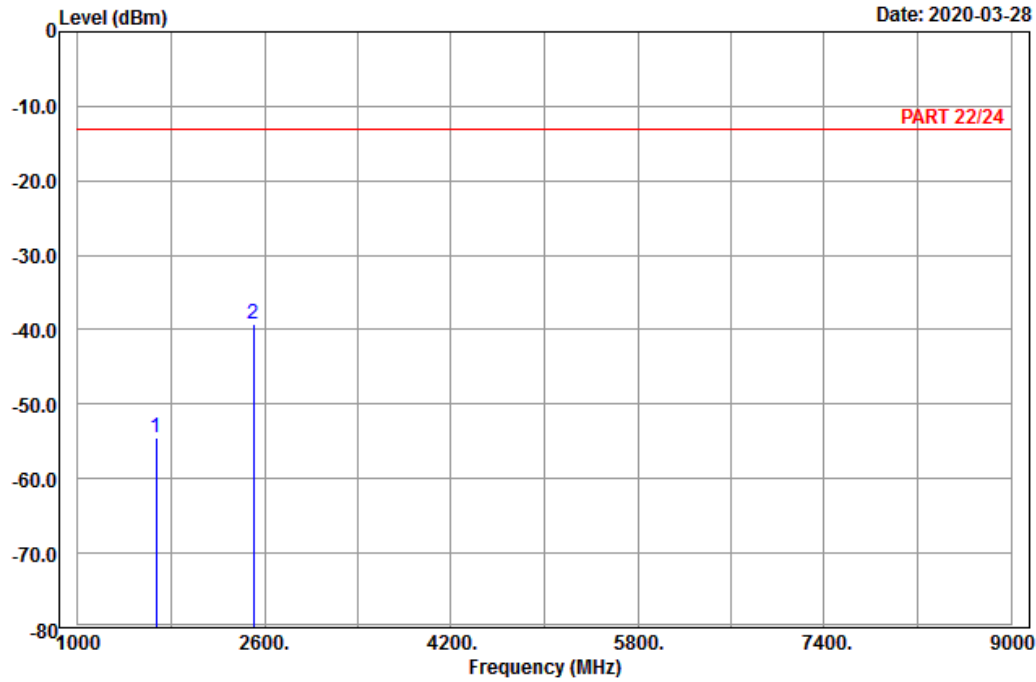
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-54.42	-62.33	7.91	-13.00	-41.42	Peak
2	2509.50	-39.19	-50.47	11.28	-13.00	-26.19	Peak

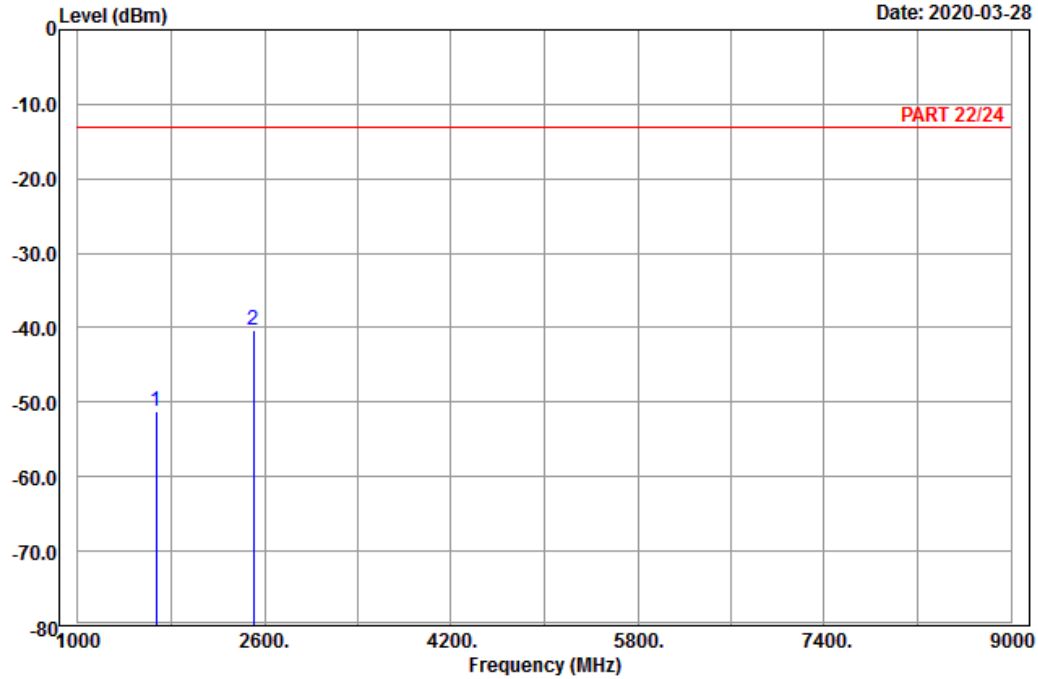


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-51.26	-59.17	7.91	-13.00	-38.26	Peak
2 pp	2509.50	-40.34	-51.62	11.28	-13.00	-27.34	Peak

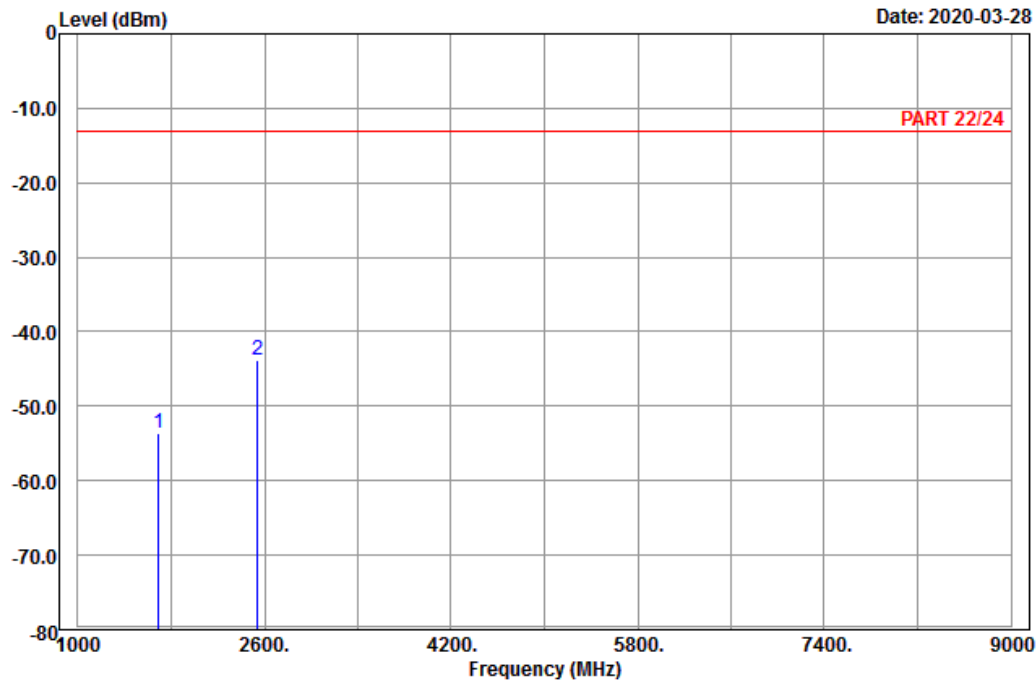
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1693.00	-53.55	-61.57	8.02	-13.00	-40.55	Peak
2	2539.50	-43.77	-55.24	11.47	-13.00	-30.77	Peak

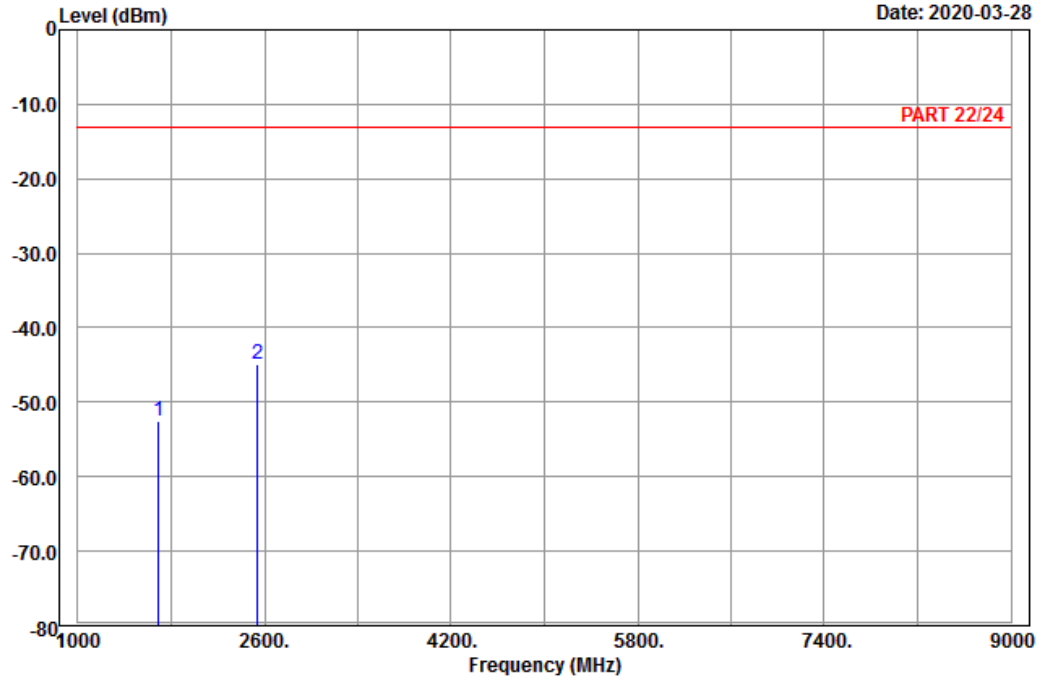


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1693.00	-52.62	-60.64	8.02	-13.00	-39.62	Peak
2 pp	2539.50	-44.90	-56.37	11.47	-13.00	-31.90	Peak

Channel Bandwidth: 15 MHz / QPSK
Low Channel

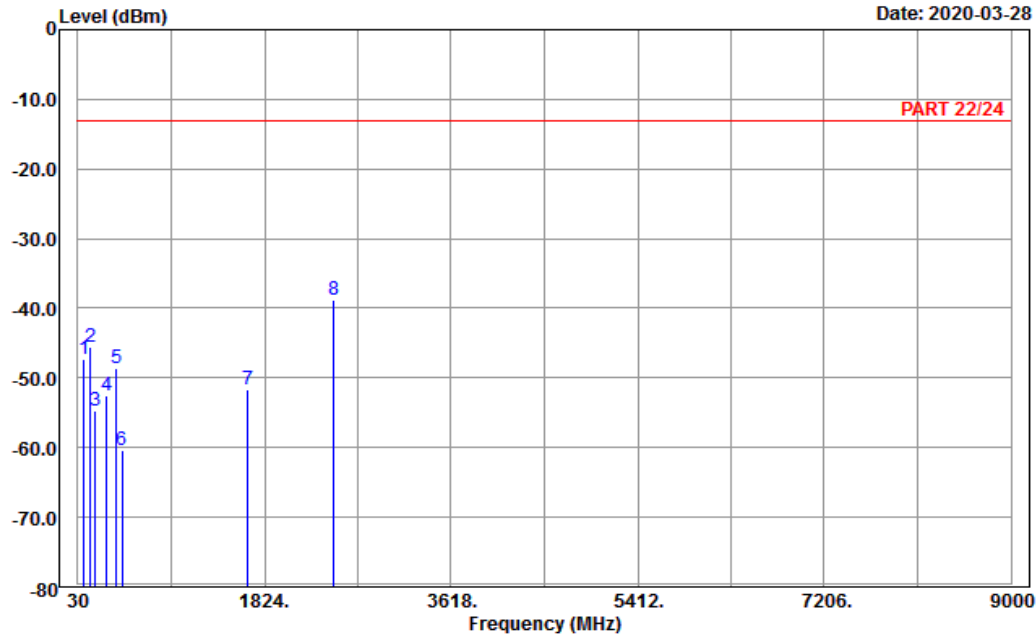


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 9

Date: 2020-03-28



Site : 966 chamber 1
Condition: PART 22/24 Horizontal
Remark : LTE_Band 26_Link_L-Ch
Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	90.48	-47.32	-36.65	-10.67	-13.00	-34.32	Peak
2	153.12	-45.62	-37.76	-7.86	-13.00	-32.62	Peak
3	194.43	-54.68	-48.72	-5.96	-13.00	-41.68	Peak
4	304.90	-52.56	-46.66	-5.90	-13.00	-39.56	Peak
5	399.40	-48.51	-45.77	-2.74	-13.00	-35.51	Peak
6	453.30	-60.28	-56.35	-3.93	-13.00	-47.28	Peak
7	1663.00	-51.62	-59.53	7.91	-13.00	-38.62	Peak
8 pp	2494.50	-38.87	-49.91	11.04	-13.00	-25.87	Peak

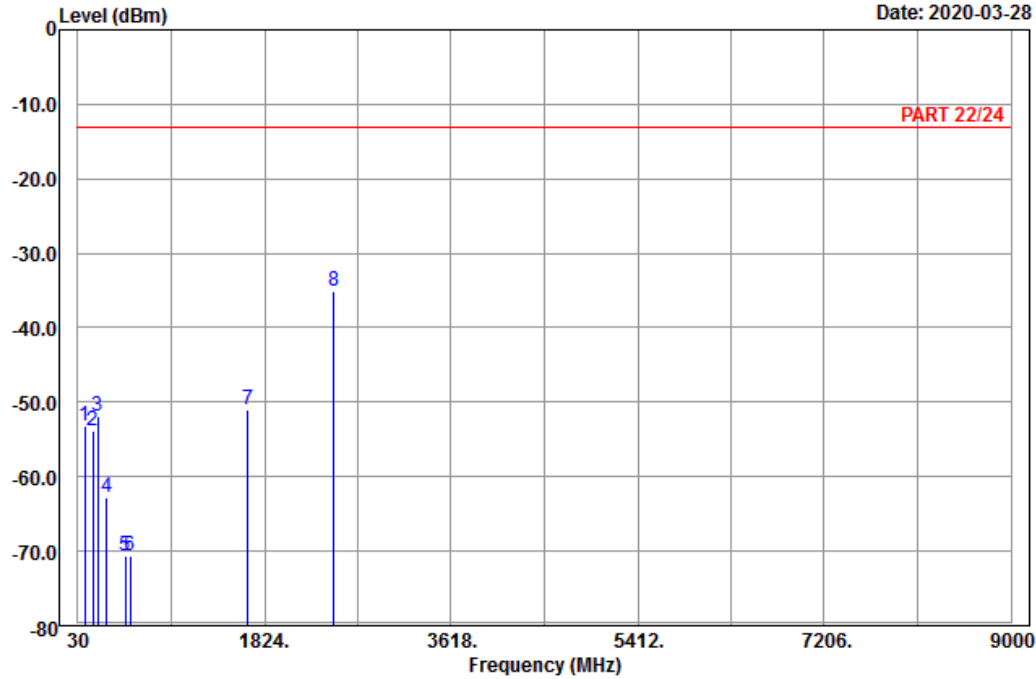


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 10

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_L-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	96.69	-53.10	-42.81	-10.29	-13.00	-40.10	Peak
2	170.40	-53.83	-47.23	-6.60	-13.00	-40.83	Peak
3	217.65	-51.77	-45.82	-5.95	-13.00	-38.77	Peak
4	307.00	-62.86	-56.99	-5.87	-13.00	-49.86	Peak
5	482.70	-70.68	-65.89	-4.79	-13.00	-57.68	Peak
6	531.70	-70.73	-67.72	-3.01	-13.00	-57.73	Peak
7	1663.00	-51.02	-58.93	7.91	-13.00	-38.02	Peak
8 pp	2494.50	-35.07	-46.11	11.04	-13.00	-22.07	Peak

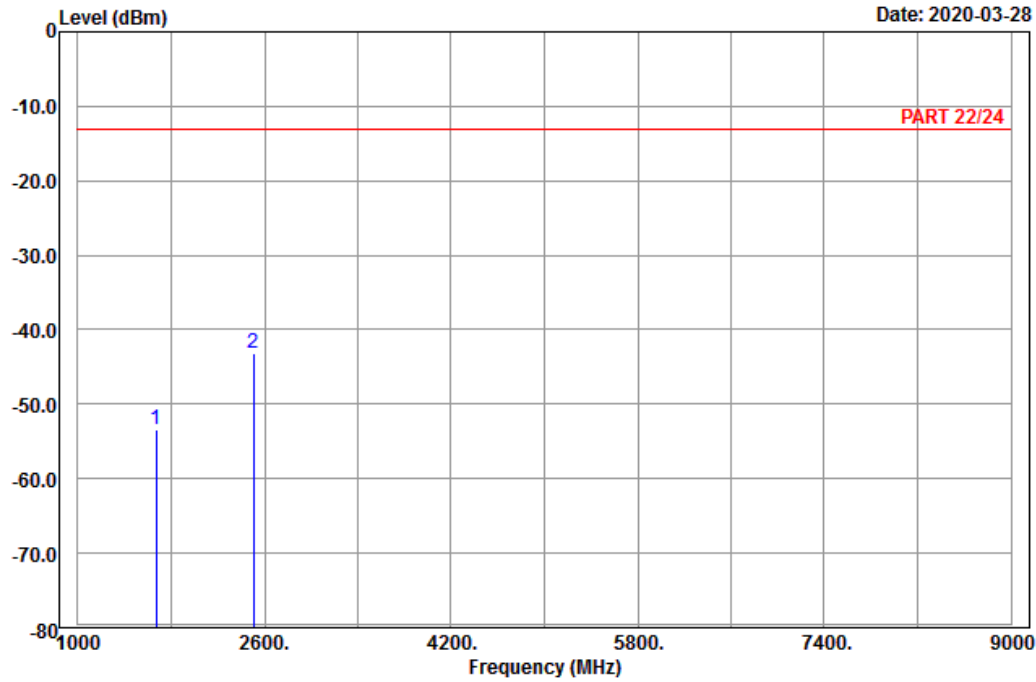
Middle Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-53.44	-61.35	7.91	-13.00	-40.44	Peak
2 pp	2509.50	-43.11	-54.39	11.28	-13.00	-30.11	Peak

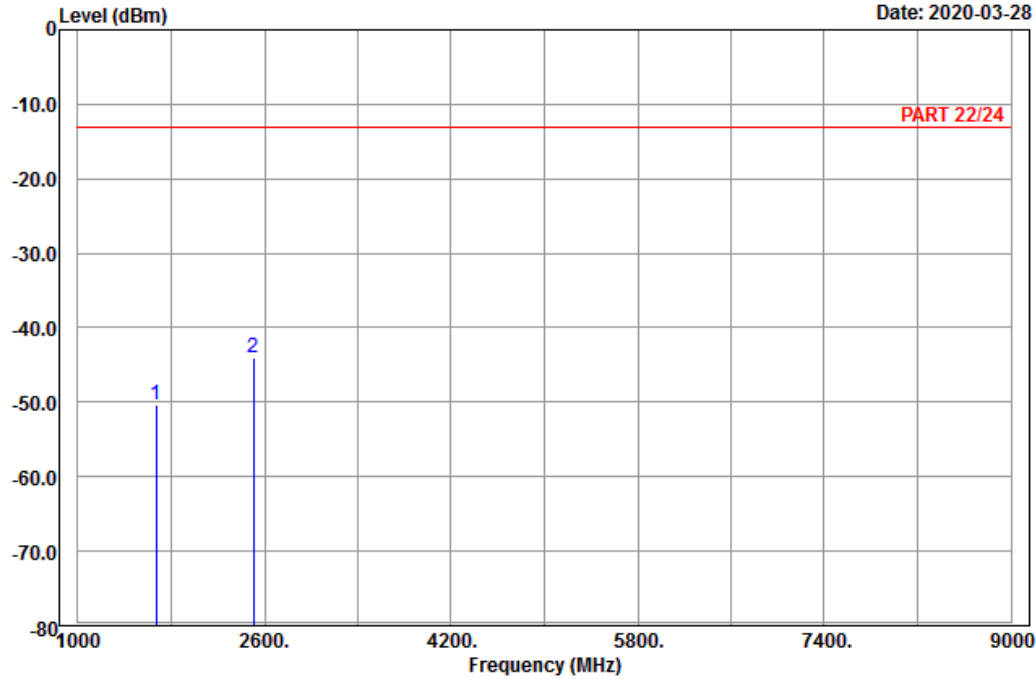


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_M-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1673.00	-50.36	-58.27	7.91	-13.00	-37.36	Peak
2 pp	2509.50	-43.97	-55.25	11.28	-13.00	-30.97	Peak

High Channel

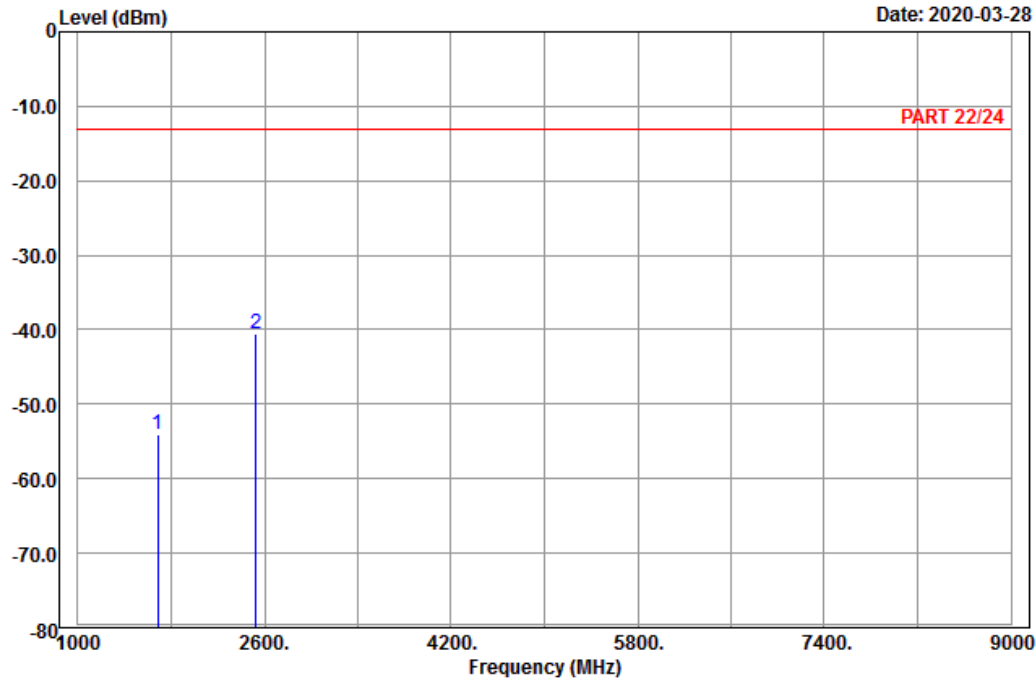


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Horizontal
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1683.00	-54.10	-62.12	8.02	-13.00	-41.10	Peak
2 pp	2524.50	-40.48	-51.86	11.38	-13.00	-27.48	Peak

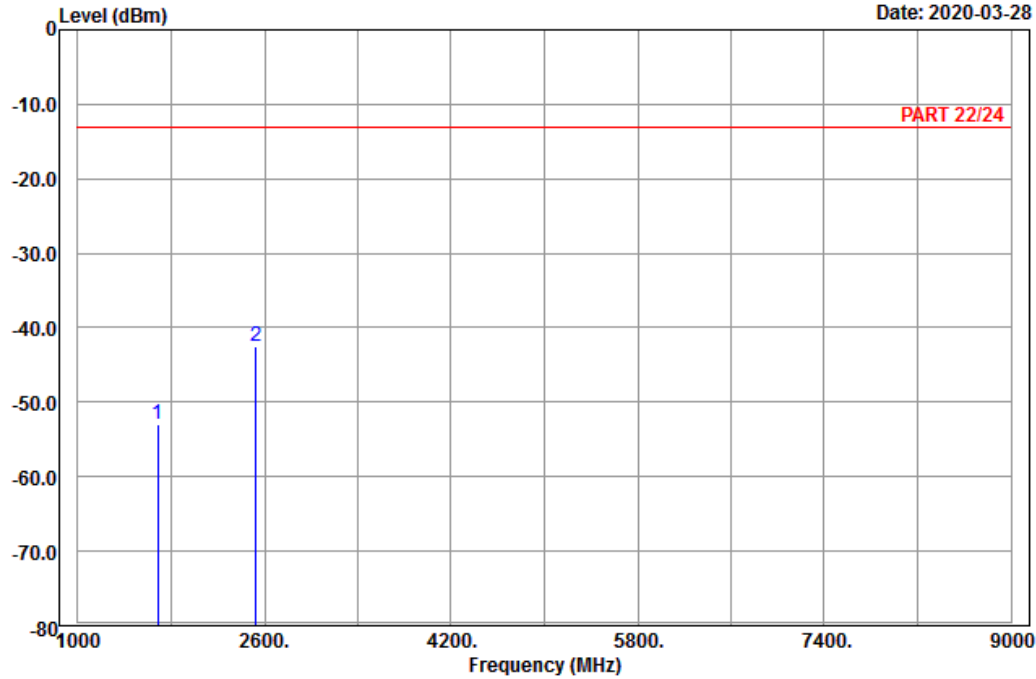


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2020-03-28



Site : 966 chamber 1
 Condition: PART 22/24 Vertical
 Remark : LTE_Band 26_Link_H-Ch
 Tested by: Karl Lee

	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Remark
	MHz	dBm	dBm	dB	dBm	dB	
1	1683.00	-52.88	-60.90	8.02	-13.00	-39.88	Peak
2 pp	2524.50	-42.53	-53.91	11.38	-13.00	-29.53	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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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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