

FCC Test Report

(PART 22)

Report No.: RFBHDC-WTW-P20120816-6

FCC ID: 2AYY9FMP182

Test Model: F-41B

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Test Date: Jan. 27 ~ Feb. 26, 2021

Issued Date: Mar. 03, 2021

Applicant: FCNT Limited

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



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Table of Contents

Release Control Record	4
1 Certificate of Conformity	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Test Site and Instruments	7
3 General Information	8
3.1 General Description of EUT	8
3.2 Configuration of System under Test	9
3.2.1 Description of Support Units	9
3.3 Test Mode Applicability and Tested Channel Detail	10
3.4 EUT Operating Conditions	12
3.5 General Description of Applied Standards and references	12
4 Test Types and Results	13
4.1 Output Power Measurement	13
4.1.1 Limits of Output Power Measurement	13
4.1.2 Test Procedures	13
4.1.3 Test Setup	14
4.1.4 Test Results	14
4.2 Modulation Characteristics Measurement	18
4.2.1 Limits of Modulation Characteristics	18
4.2.2 Test Setup	18
4.2.3 Test Procedure	18
4.2.4 Test Results	19
4.3 Frequency Stability Measurement	20
4.3.1 Limits of Frequency Stability Measurement	20
4.3.2 Test Procedure	20
4.3.3 Test Setup	20
4.3.4 Test Results	21
4.4 Occupied Bandwidth Measurement	27
4.4.1 Test Procedure	27
4.4.2 Test Setup	27
4.4.3 Test Result	28
4.5 Band Edge Measurement	31
4.5.1 Limits of Band Edge Measurement	31
4.5.2 Test Setup	31
4.5.3 Test Procedures	31
4.5.4 Test Results	32
4.6 Peak to Average Ratio	37
4.6.1 Limits of Peak to Average Ratio Measurement	37
4.6.2 Test Setup	37
4.6.3 Test Procedures	37
4.6.4 Test Results	38
4.7 Conducted Spurious Emissions	41
4.7.1 Limits of Conducted Spurious Emissions Measurement	41
4.7.2 Test Setup	41
4.7.3 Test Procedure	41
4.7.4 Test Results	42
4.8 Radiated Emission Measurement	48
4.8.1 Limits of Radiated Emission Measurement	48
4.8.2 Test Procedure	48
4.8.3 Deviation from Test Standard	48
4.8.4 Test Setup	49
4.8.5 Test Results	50

5 Pictures of Test Arrangements.....	80
Appendix – Information of the Testing Laboratories	81

Release Control Record

Issue No.	Description	Date Issued
RFBHDC-WTW-P20120816-6	Original Release	Mar. 03, 2021

1 Certificate of Conformity

Product: Smart Phone

Brand: FUJITSU

Test Model: F-41B

Sample Status: Engineering Sample

Applicant: FCNT Limited

Test Date: Jan. 27 ~ Feb. 26, 2021

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 : Gina Liu, **Date:** Mar. 03, 2021
Gina Liu / Specialist

Approved by : Dylan Chiou, **Date:** Mar. 03, 2021
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. Meet the requirement of limit.
2.1055 22.355	Frequency Stability	Pass	Meet the requirement of limit.
2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
22.917	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 -12.64 dB at 2509.20 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) (±)
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.04 dB
	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Mar. 18, 2020	Mar. 17, 2021
Spectrum Analyzer Agilent	N9010A	MY52220314	Dec. 07, 2020	Dec. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Apr. 16, 2020	Apr. 15, 2021
BILOG Antenna SCHWARZBECK	VULB 9168	9168-153	Nov. 03, 2020	Nov. 02, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	148	Nov. 22, 2020	Nov. 21, 2021
Horn Antenna EMCO	3115	00027023	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 22, 2020	Nov. 21, 2021
BILOG Antenna SCHWARZBECK	VULB 9168	9168-472	Nov. 06, 2020	Nov. 05, 2021
Fixed Attenuator WOKEN	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2020	Nov. 24, 2021
Loop Antenna	EM-6879	269	Sep. 17, 2020	Sep. 16, 2021
Preamplifier EMCI	EMC001340	980201	Oct. 21, 2020	Oct. 20, 2021
Preamplifier EMCI	EMC 012645	980115	Oct. 07, 2020	Oct. 06, 2021
Preamplifier EMCI	EMC 330H	980112	Oct. 07, 2020	Oct. 06, 2021
Power Meter Anritsu	ML2495A	1012010	Sep. 01, 2020	Aug. 31, 2021
Power Sensor Anritsu	MA2411B	1315050	Sep. 01, 2020	Aug. 31, 2021
RF Coaxial Cable EMCI	EMC104-SM-SM-8000	171005	Oct. 07, 2020	Oct. 06, 2021
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(140807)	Oct. 07, 2020	Oct. 06, 2021
RF Coaxial Cable WOKEN	8D-FB	Cable-Ch10-01	Oct. 07, 2020	Oct. 06, 2021
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
Radio Communication Analyzer Anritsu	MT8820C	6201010284	Dec. 28, 2020	Dec. 27, 2021
Radio Communication Analyzer Anritsu	MT8821C	6261806803	Jan. 22, 2021	Jan. 21, 2022
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 09, 2020	Sep. 08, 2021
DC Power Supply Keysight	U8002A	MY56330015	NA	NA

- Note:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 10.

3 General Information

3.1 General Description of EUT

Product	Smart Phone	
Brand	FUJITSU	
Test Model	F-41B	
Status of EUT	Engineering Sample	
Power Supply Rating	3.85 Vdc (Battery) 5 Vdc (Adapter)	
Modulation Type	GSM/GPRS	GMSK
	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
Max. ERP Power	GSM/GPRS	310.456 mW (24.92dBm)
	WCDMA	37.670 mW (15.76dBm)
	LTE 5 (Channel Bandwidth: 1.4 MHz)	40.644 mW (16.09dBm)
	LTE 5 (Channel Bandwidth: 3 MHz)	40.179 mW (16.04dBm)
	LTE 5 (Channel Bandwidth: 5 MHz)	41.400 mW (16.17dBm)
	LTE 5 (Channel Bandwidth: 10 MHz)	41.495 mW (16.18dBm)
Emission Designator	GSM/GPRS	249KGXW
	WCDMA	4M14F9W
	LTE 5 (Channel Bandwidth: 1.4 MHz)	1M09G7D
	LTE 5 (Channel Bandwidth: 3 MHz)	2M70D7W
	LTE 5 (Channel Bandwidth: 5 MHz)	4M49G7D
	LTE 5 (Channel Bandwidth: 10 MHz)	8M97D7W
Antenna Type	Monopole Antenna with -5.0 dBi gain	
Accessory Device	Refer to Note as below	
Data Cable Supplied	Refer to Note as below	

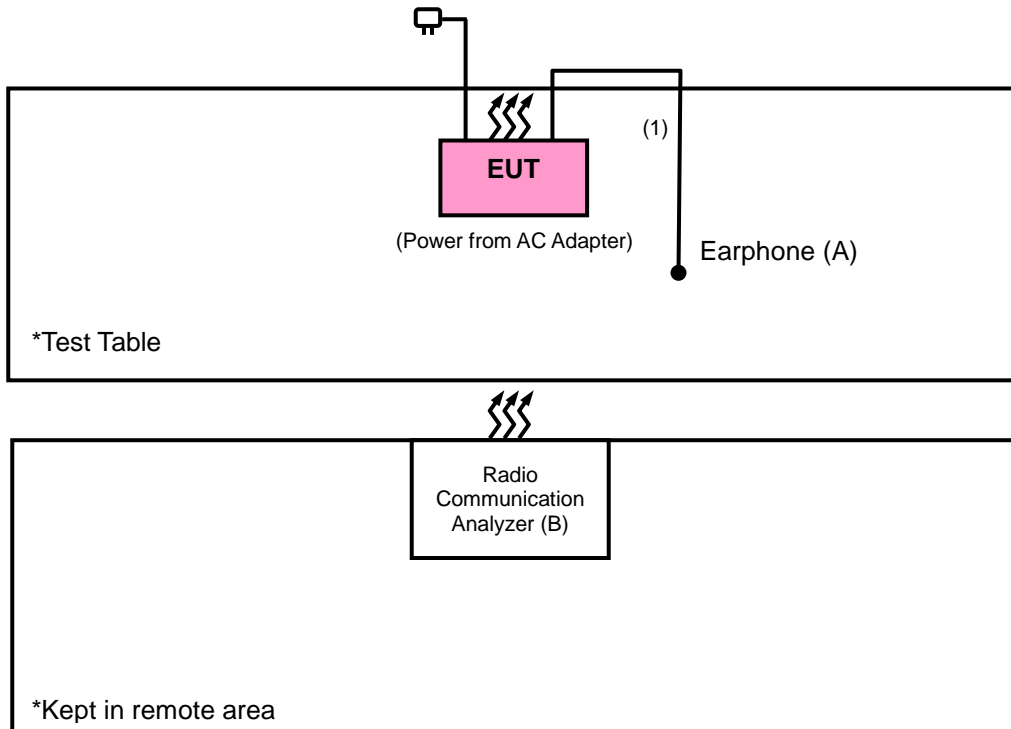
Note:

1. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter	NTT docomo	AC adaptor 06	I/P: 100-240 Vac, 50/60 Hz, 0.8 A O/P: 5 Vdc, 3 A
Battery	N/A	CA54310-0081	3.85 Vdc, 3500 mAh, 13.47Wh

2. 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.
3. 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



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.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Earphone	Apple	EW101BK	N/A	N/A	--
B.	Radio Communication Analyzer	Anritsu	MT8820C	6201010284	N/A	--

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item B acted as communication partner to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Earphone Cable	1	1.0	N	0	--

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	Radiated Emission
GSM	Y-axis
WCDMA	X-axis
LTE Band 5	Y-axis

GSM

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

Note: For radiated emissions below 1 GHz, select the worst radiated emission channel (above 1GHz) for final testing.

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

Note: For radiated emissions below 1 GHz, select the worst radiated emission channel (above 1GHz) for final testing.

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 / 12 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	50 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 / 12 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 / 12 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 / 12 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.
3. For radiated emissions below 1 GHz, select the worst radiated emission channel (above 1GHz) for final testing.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
ERP	25 deg. C, 65 % RH	3.85 Vdc	Tim Chen
Modulation Characteristics	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Frequency Stability	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Occupied Bandwidth	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Band Edge	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Peak to Average Ratio	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Conducted Emission	25 deg. C, 65 % RH	3.85 Vdc	Wayne Lin
Radiated Emission	25 deg. C, 65 % RH	120 Vac, 60 Hz	Tim Chen

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

Conducted Power Measurement:

The EUT was set up for the maximum power with GSM, GPRS, 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. $E.I.R.P = \text{Conducted power} + \text{Antenna Gain}$, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$.

4.1.3 Test Setup

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM (GMSK, 1Tx-slot)	32.02	32.05	32.07
GPRS (GMSK, 1Tx-slot)	32.01	32.03	32.05
GPRS (GMSK, 2Tx-slot)	30.33	30.36	30.38
GPRS (GMSK, 3Tx-slot)	28.43	28.44	28.46
GPRS (GMSK, 4Tx-slot)	27.07	27.11	27.13

Band	WCDMA V		
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	22.86	22.88	22.91
HSDPA Subtest-1	22.66	22.69	22.78
HSDPA Subtest-2	22.65	22.68	22.77
HSDPA Subtest-3	22.25	22.29	22.36
HSDPA Subtest-4	22.23	22.28	22.35
HSUPA Subtest-1	22.69	22.75	22.79
HSUPA Subtest-2	20.73	20.79	20.93
HSUPA Subtest-3	21.75	21.81	21.95
HSUPA Subtest-4	20.79	20.77	20.91
HSUPA Subtest-5	22.71	22.72	22.78

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	23.08	23.23	23.06	0	5M	QPSK	1	0	23.01	23.14	22.99	0
		1	24	23.07	23.22	23.05	0			1	12	23.16	23.22	23.10	0
		1	49	23.03	23.13	22.93	0			1	24	22.97	23.03	22.92	0
		25	0	22.12	22.15	22.11	1			12	0	22.03	22.09	22.08	1
		25	12	21.99	22.03	21.98	1			12	6	21.96	22.01	21.91	1
		25	25	21.89	21.96	21.83	1			12	13	21.84	21.91	21.79	1
		50	0	22.02	22.07	21.96	1			25	0	22.00	22.03	21.90	1
	16QAM	1	0	21.91	21.98	21.88	1		16QAM	1	0	21.83	21.91	21.80	1
		1	24	21.86	21.93	21.83	1			1	12	21.79	21.87	21.73	1
		1	49	21.84	21.89	21.80	1			1	24	21.84	21.83	21.79	1
		25	0	21.27	21.31	21.20	2			12	0	21.21	21.28	21.15	2
		25	12	21.26	21.28	21.20	2			12	6	21.16	21.27	21.20	2
		25	25	20.97	20.99	20.95	2			12	13	20.94	20.98	20.86	2
		50	0	20.95	21.03	20.86	2			25	0	20.85	20.94	20.86	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	22.90	23.09	23.00	0	1.4M	QPSK	1	0	23.02	23.14	22.91	0
		1	7	23.00	23.07	22.97	0			1	2	23.11	23.05	23.07	0
		1	14	22.96	23.07	22.77	0			1	5	22.88	23.05	22.70	0
		8	0	22.07	22.15	22.05	1			3	0	23.02	22.92	23.06	0
		8	3	21.76	21.87	21.90	1			3	1	22.84	22.92	22.91	0
		8	7	21.64	21.87	21.80	1			3	3	22.74	22.81	22.75	0
		15	0	21.90	22.05	21.79	1			6	0	21.79	21.92	21.82	1
	16QAM	1	0	21.77	21.85	21.66	1		16QAM	1	0	21.90	21.82	21.79	1
		1	7	21.64	21.91	21.70	1			1	2	21.77	21.71	21.67	1
		1	14	21.70	21.83	21.76	1			1	5	21.73	21.69	21.60	1
		8	0	21.14	21.24	21.02	2			3	0	22.18	22.24	22.02	1
		8	3	21.14	21.14	21.08	2			3	1	22.09	22.21	21.99	1
		8	7	20.94	20.93	20.90	2			3	3	21.79	21.75	21.84	1
		15	0	20.75	20.87	20.67	2			6	0	20.92	20.81	20.67	2

ERP Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GSM (GMSK, 1Tx-slot)	24.87	24.90	24.92
GPRS (GMSK, 1Tx-slot)	24.86	24.88	24.90
GPRS (GMSK, 2Tx-slot)	23.18	23.21	23.23
GPRS (GMSK, 3Tx-slot)	21.28	21.29	21.31
GPRS (GMSK, 4Tx-slot)	19.92	19.96	19.98

Band	WCDMA V		
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	15.71	15.73	15.76
HSDPA Subtest-1	15.51	15.54	15.63
HSDPA Subtest-2	15.50	15.53	15.62
HSDPA Subtest-3	15.10	15.14	15.21
HSDPA Subtest-4	15.08	15.13	15.20
HSUPA Subtest-1	15.54	15.60	15.64
HSUPA Subtest-2	13.58	13.64	13.78
HSUPA Subtest-3	14.60	14.66	14.80
HSUPA Subtest-4	13.64	13.62	13.76
HSUPA Subtest-5	15.56	15.57	15.63

Note: ERP (dBm) = Conducted Power + Antenna gain – 2.15

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	16.03	16.18	16.01	0	5M	QPSK	1	0	15.96	16.09	15.94	0
		1	24	16.02	16.17	16.00	0			1	12	16.11	16.17	16.05	0
		1	49	15.98	16.08	15.88	0			1	24	15.92	15.98	15.87	0
		25	0	15.07	15.10	15.06	1			12	0	14.98	15.04	15.03	1
		25	12	14.94	14.98	14.93	1			12	6	14.91	14.96	14.86	1
		25	25	14.84	14.91	14.78	1			12	13	14.79	14.86	14.74	1
		50	0	14.97	15.02	14.91	1			25	0	14.95	14.98	14.85	1
	16QAM	1	0	14.86	14.93	14.83	1		16QAM	1	0	14.78	14.86	14.75	1
		1	24	14.81	14.88	14.78	1			1	12	14.74	14.82	14.68	1
		1	49	14.79	14.84	14.75	1			1	24	14.79	14.78	14.74	1
		25	0	14.22	14.26	14.15	2			12	0	14.16	14.23	14.10	2
		25	12	14.21	14.23	14.15	2			12	6	14.11	14.22	14.15	2
		25	25	13.92	13.94	13.90	2			12	13	13.89	13.93	13.81	2
		50	0	13.90	13.98	13.81	2			25	0	13.80	13.89	13.81	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	15.85	16.04	15.95	0	1.4M	QPSK	1	0	15.97	16.09	15.86	0
		1	7	15.95	16.02	15.92	0			1	2	16.06	16.00	16.02	0
		1	14	15.91	16.02	15.72	0			1	5	15.83	16.00	15.65	0
		8	0	15.02	15.10	15.00	1			3	0	15.97	15.87	16.01	0
		8	3	14.71	14.82	14.85	1			3	1	15.79	15.87	15.86	0
		8	7	14.59	14.82	14.75	1			3	3	15.69	15.76	15.70	0
		15	0	14.85	15.00	14.74	1			6	0	14.74	14.87	14.77	1
	16QAM	1	0	14.72	14.80	14.61	1		16QAM	1	0	14.85	14.77	14.74	1
		1	7	14.59	14.86	14.65	1			1	2	14.72	14.66	14.62	1
		1	14	14.65	14.78	14.71	1			1	5	14.68	14.64	14.55	1
		8	0	14.09	14.19	13.97	2			3	0	15.13	15.19	14.97	1
		8	3	14.09	14.09	14.03	2			3	1	15.04	15.16	14.94	1
		8	7	13.89	13.88	13.85	2			3	3	14.74	14.70	14.79	1
		15	0	13.70	13.82	13.62	2			6	0	13.87	13.76	13.62	2

Note: ERP (dBm) = Conducted Power + Antenna gain – 2.15

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

N/A

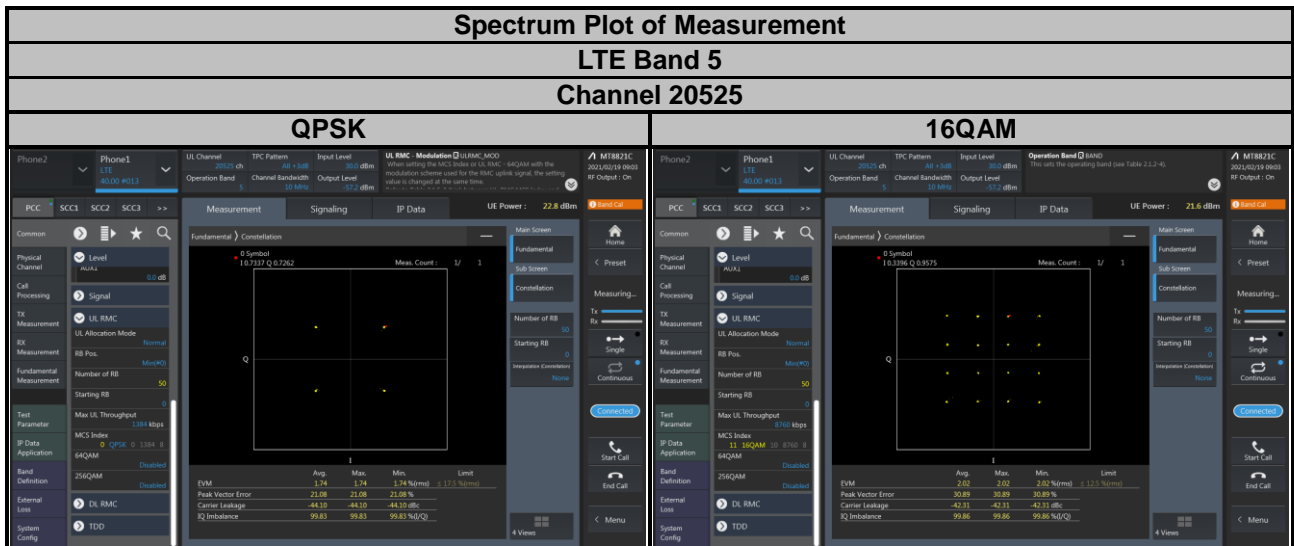
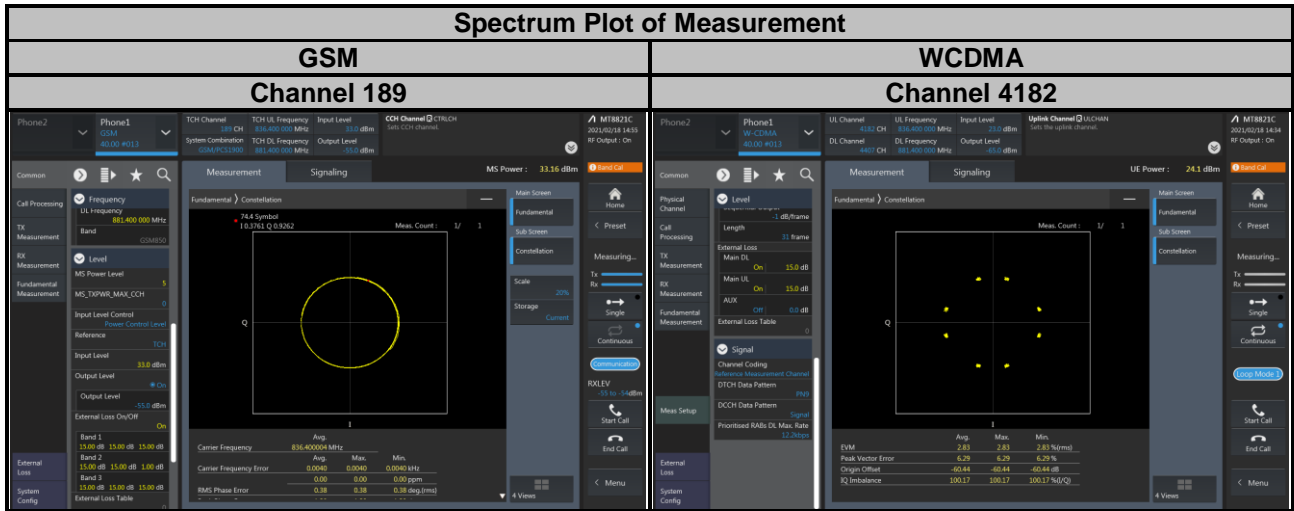
4.2.2 Test Setup



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



4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

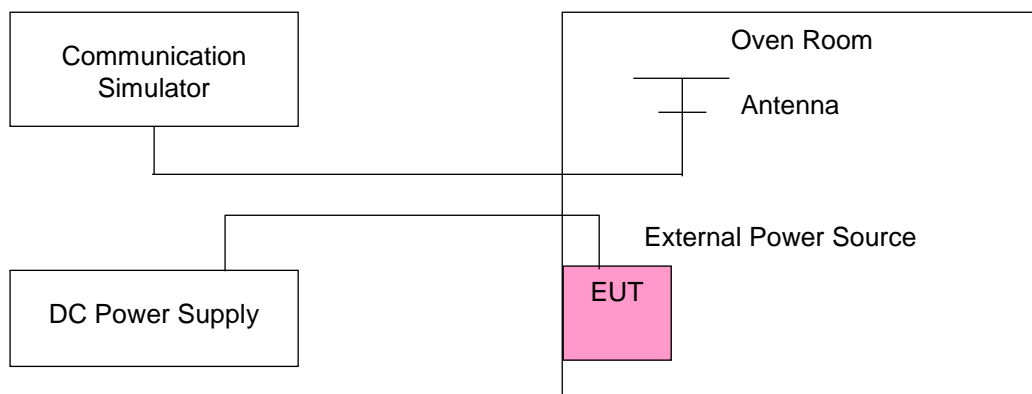
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

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	824.200002	0.002427	848.800003	0.003534	2.5
3.27	824.199991	-0.010920	848.799992	-0.009425	2.5
4.43	824.200002	0.002427	848.800006	0.007069	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	824.199999	-0.001213	848.799999	-0.001178	2.5
-20	824.199994	-0.007280	848.800002	0.002356	2.5
-10	824.200009	0.010920	848.799998	-0.002356	2.5
0	824.199992	-0.009706	848.800004	0.004713	2.5
10	824.199998	-0.002427	848.800002	0.002356	2.5
20	824.200006	0.007280	848.799993	-0.008247	2.5
30	824.199997	-0.003640	848.800008	0.009425	2.5
40	824.199998	-0.002427	848.800002	0.002356	2.5
50	824.200001	0.001213	848.799990	-0.011781	2.5
55	824.199994	-0.007280	848.800004	0.004713	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

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	826.399996	-0.004840	846.599994	-0.007087	2.5
3.27	826.399990	-0.012101	846.599990	-0.011812	2.5
4.43	826.399994	-0.007260	846.599994	-0.007087	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	826.399994	-0.007260	846.600002	0.002362	2.5
-20	826.400006	0.007260	846.599993	-0.008268	2.5
-10	826.399991	-0.010891	846.600010	0.011812	2.5
0	826.399995	-0.006050	846.600007	0.008268	2.5
10	826.400009	0.010891	846.599991	-0.010631	2.5
20	826.399990	-0.012101	846.599996	-0.004725	2.5
30	826.400002	0.002420	846.600001	0.001181	2.5
40	826.399996	-0.004840	846.600009	0.010631	2.5
50	826.399999	-0.001210	846.600001	0.001181	2.5
55	826.400003	0.003630	846.600005	0.005906	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

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	824.699996	-0.004850	848.300007	0.008252	2.5
3.27	824.699992	-0.009700	848.299998	-0.002358	2.5
4.43	824.699993	-0.008488	848.299996	-0.004715	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	0.002425	848.299995	-0.005894	2.5
-20	824.699998	-0.002425	848.299995	-0.005894	2.5
-10	824.700001	0.001213	848.299997	-0.003536	2.5
0	824.699990	-0.012126	848.300009	0.010609	2.5
10	824.699990	-0.012126	848.300005	0.005894	2.5
20	824.699992	-0.009700	848.300010	0.011788	2.5
30	824.700006	0.007275	848.299994	-0.007073	2.5
40	824.699992	-0.009700	848.300010	0.011788	2.5
50	824.699991	-0.010913	848.300001	0.001179	2.5
55	824.699998	-0.002425	848.300010	0.011788	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

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	825.500003	0.003634	847.500009	0.010619	2.5
3.27	825.499997	-0.003634	847.499998	-0.002360	2.5
4.43	825.500010	0.012114	847.500001	0.001180	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	825.500007	0.008480	847.499994	-0.007080	2.5
-20	825.500001	0.001211	847.500008	0.009440	2.5
-10	825.500006	0.007268	847.499991	-0.010619	2.5
0	825.500005	0.006057	847.499991	-0.010619	2.5
10	825.499997	-0.003634	847.499991	-0.010619	2.5
20	825.500007	0.008480	847.500005	0.005900	2.5
30	825.500002	0.002423	847.499992	-0.009440	2.5
40	825.499990	-0.012114	847.500003	0.003540	2.5
50	825.499998	-0.002423	847.499999	-0.001180	2.5
55	825.500001	0.001211	847.500010	0.011799	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

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	826.499991	-0.010889	846.500010	0.011813	2.5
3.27	826.499994	-0.007260	846.499999	-0.001181	2.5
4.43	826.500008	0.009679	846.500002	0.002363	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	826.500001	0.001210	846.500007	0.008269	2.5
-20	826.499999	-0.001210	846.500010	0.011813	2.5
-10	826.500003	0.003630	846.499997	-0.003544	2.5
0	826.500002	0.002420	846.499999	-0.001181	2.5
10	826.500009	0.010889	846.500010	0.011813	2.5
20	826.500007	0.008469	846.500009	0.010632	2.5
30	826.499995	-0.006050	846.500003	0.003544	2.5
40	826.500006	0.007260	846.499991	-0.010632	2.5
50	826.499995	-0.006050	846.500001	0.001181	2.5
55	826.500008	0.009679	846.499992	-0.009451	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

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	828.999998	-0.002413	843.999998	-0.002370	2.5
3.27	828.999995	-0.006031	844.000002	0.002370	2.5
4.43	829.000006	0.007238	843.999996	-0.004739	2.5

Note: The applicant defined the normal working voltage of the battery is from 3.27 Vdc to 4.43 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	829.000006	0.007238	843.999990	-0.011848	2.5
-20	829.000008	0.009650	843.999991	-0.010664	2.5
-10	829.000001	0.001206	844.000009	0.010664	2.5
0	829.000007	0.008444	844.000005	0.005924	2.5
10	828.999995	-0.006031	843.999991	-0.010664	2.5
20	828.999990	-0.012063	843.999994	-0.007109	2.5
30	828.999993	-0.008444	843.999996	-0.004739	2.5
40	829.000002	0.002413	843.999992	-0.009479	2.5
50	828.999990	-0.012063	843.999999	-0.001185	2.5
55	828.999994	-0.007238	844.000006	0.007109	2.5

Note: The applicant declared that the normal operating temperature of the EUT is from -10°C to 55°C.

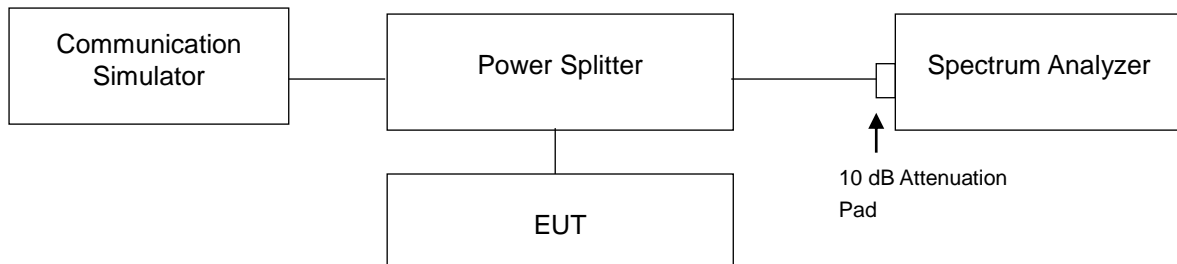
4.4 Occupied Bandwidth Measurement

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. Measurement method, please refer to section 5.4.4 of ANSI C63.26

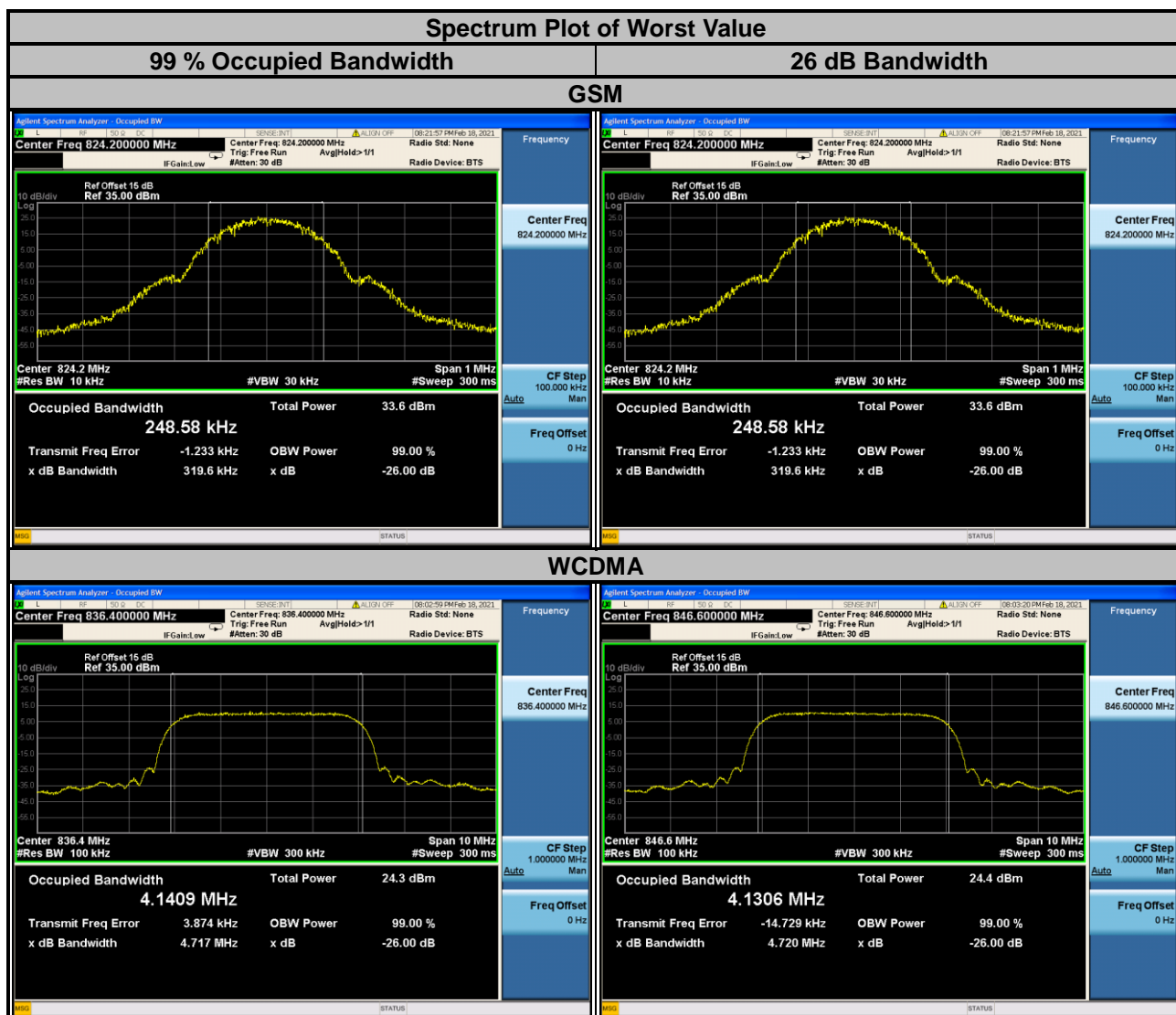
For the 26dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

4.4.2 Test Setup



4.4.3 Test Result

GSM				WCDMA			
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	248.58	319.60	4132	826.4	4.13	4.72
189	836.4	247.63	317.50	4182	836.4	4.14	4.72
251	848.8	246.53	316.00	4233	846.6	4.13	4.72



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	1.09	1.09	1.25	1.24
20525	836.5	1.09	1.09	1.26	1.25
20643	848.3	1.09	1.09	1.26	1.25
Channel Bandwidth: 3 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20415	825.5	2.69	2.70	2.90	2.92
20525	836.5	2.69	2.70	2.91	2.93
20635	847.5	2.70	2.69	2.91	2.92



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	4.48	4.48	4.78	4.80
20525	836.5	4.49	4.48	4.84	4.80
20625	846.5	4.48	4.48	4.82	4.79

Channel Bandwidth: 10 MHz					
Channel	Frequency (MHz)	99 % Occupied Bandwidth (MHz)		26 dB Bandwidth (MHz)	
		QPSK	16QAM	QPSK	16QAM
20450	829.0	8.94	8.94	9.48	9.50
20525	836.5	8.97	8.97	9.51	9.51
20600	844.0	8.93	8.94	9.49	9.49

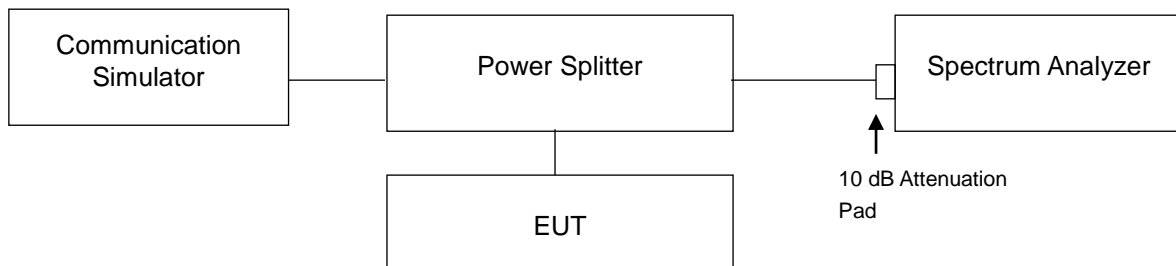


4.5 Band Edge Measurement

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.

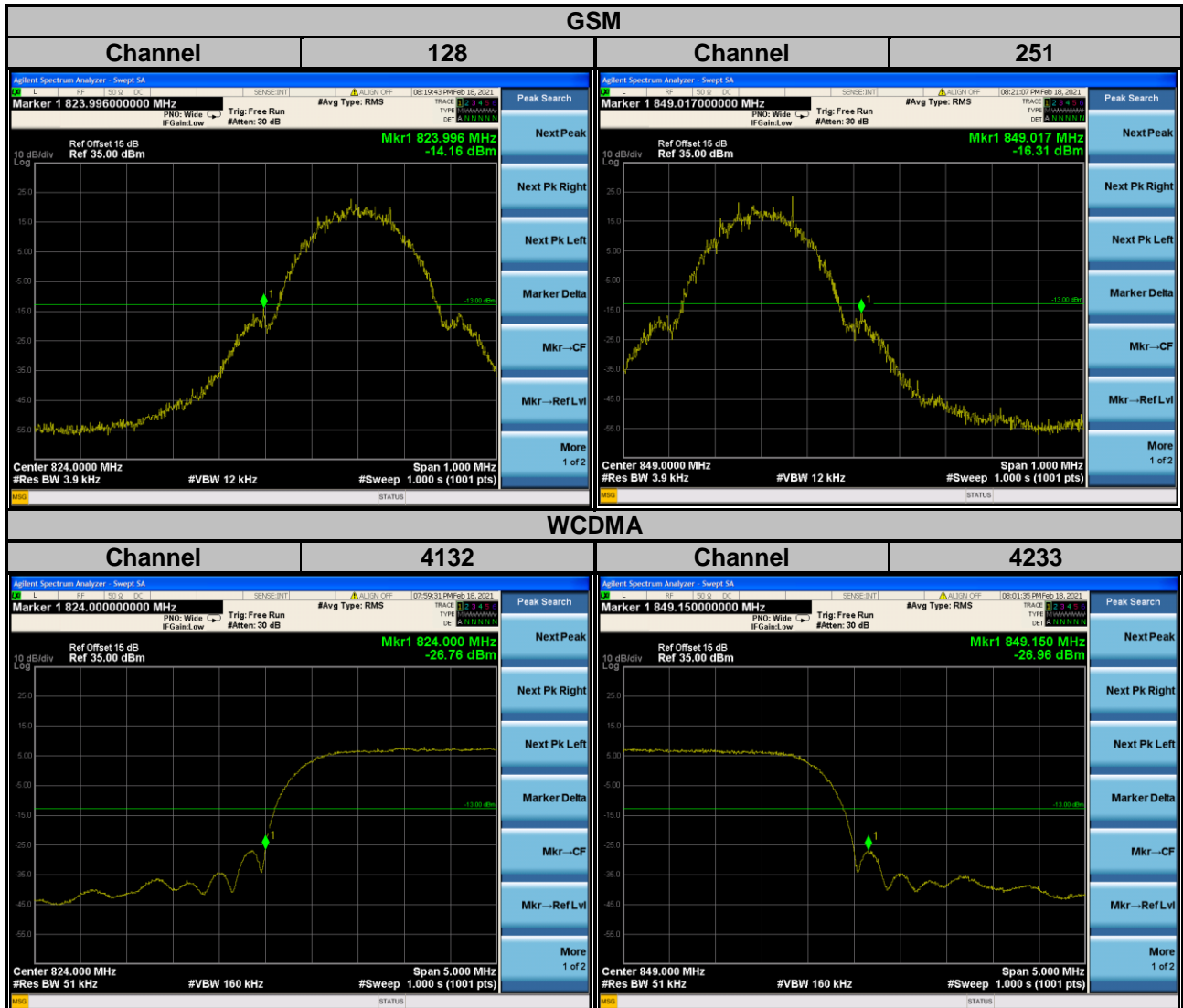
4.5.2 Test Setup



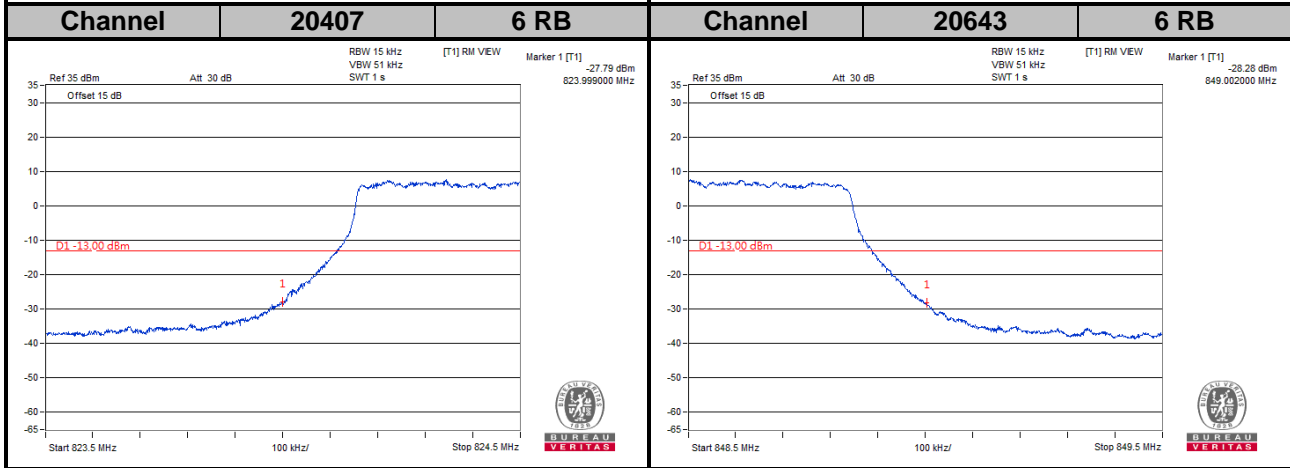
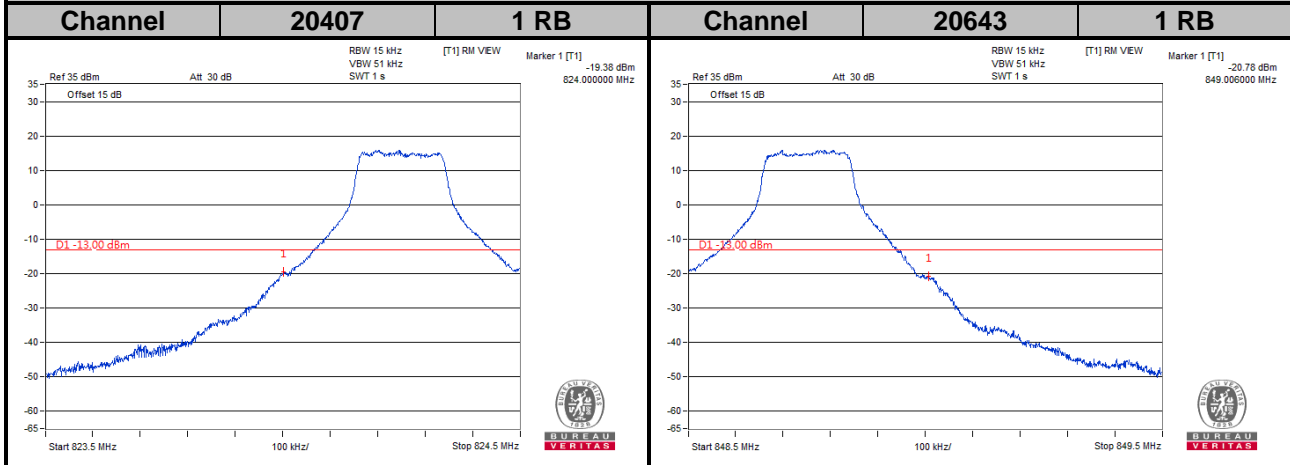
4.5.3 Test Procedures

- a. All measurements were done at low and high operational frequency range.
- b. 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).
- c. 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).
- d. 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).
- e. 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).
- f. 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).
- g. 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).
- h. Record the max trace plot into the test report.

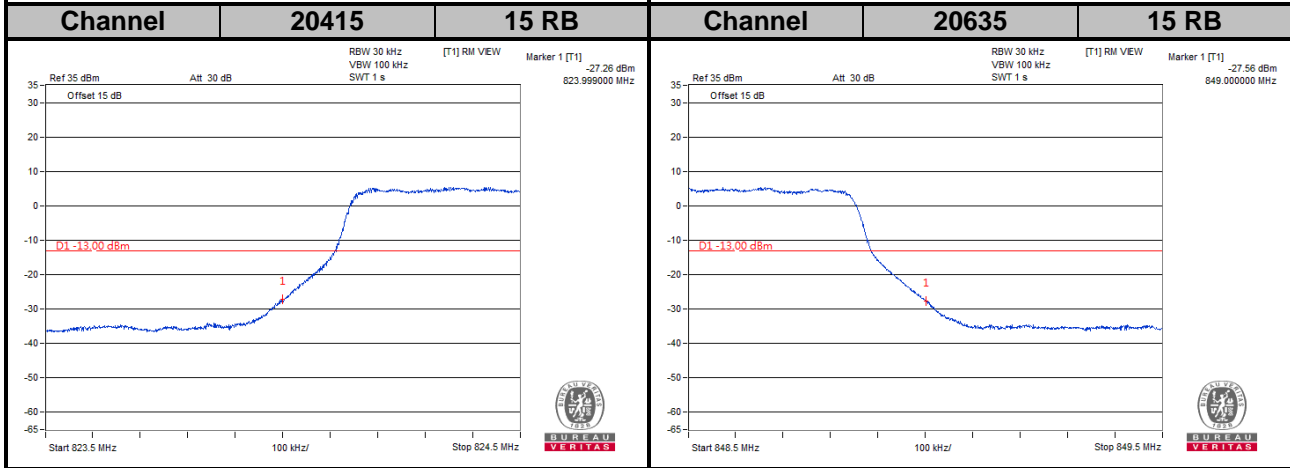
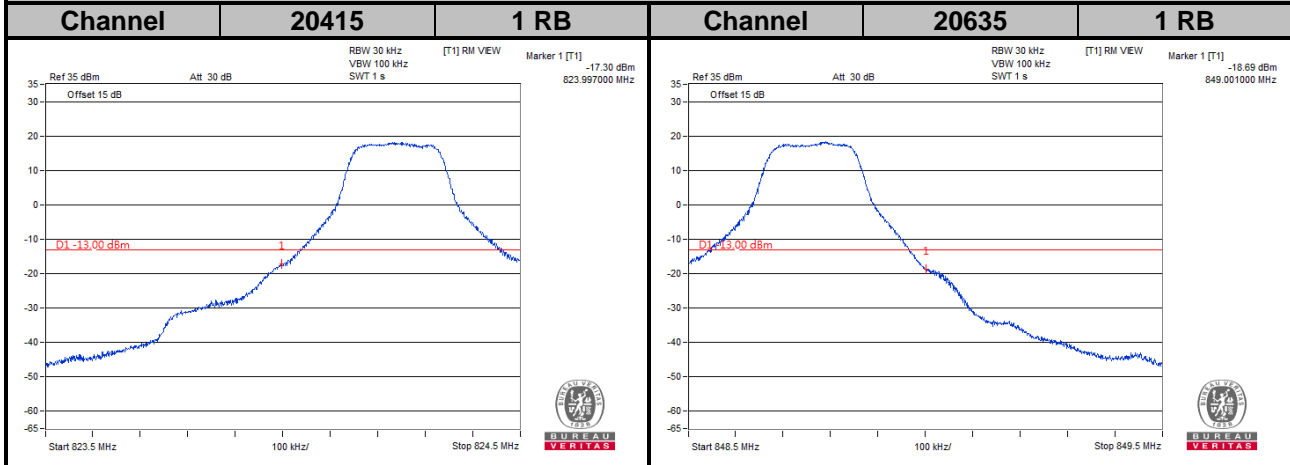
4.5.4 Test Results



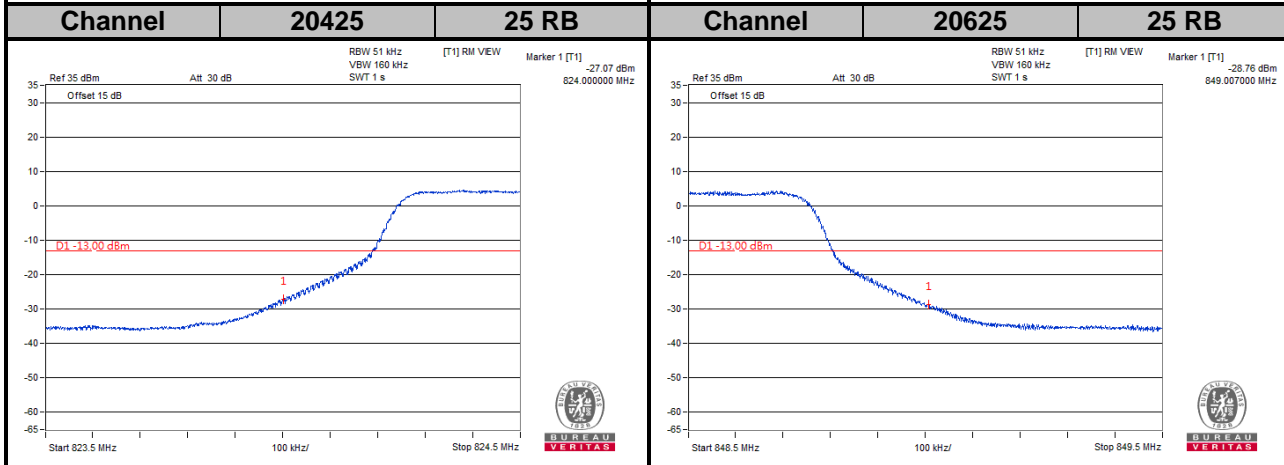
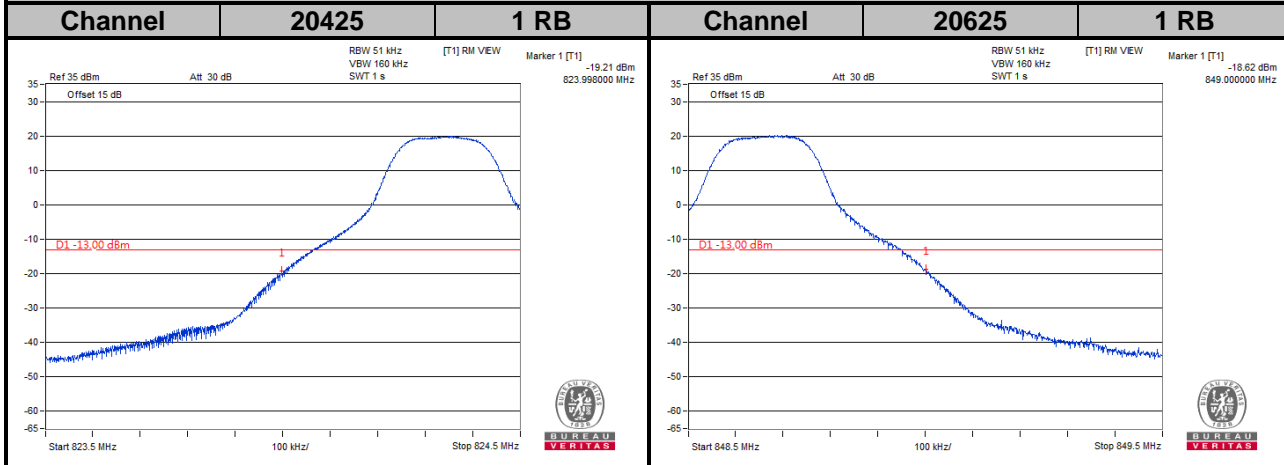
LTE Band 5
Channel Bandwidth: 1.4 MHz



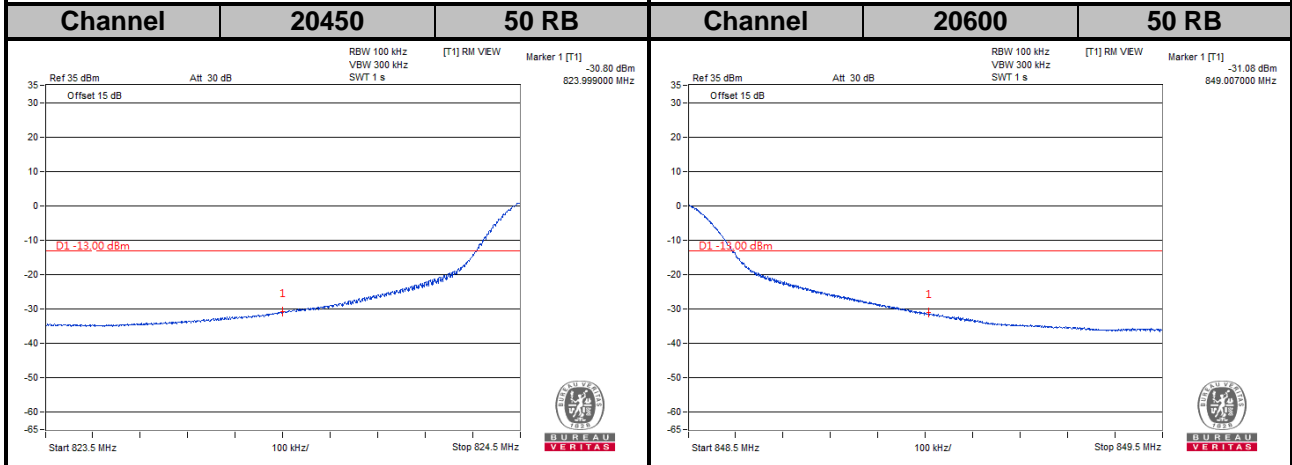
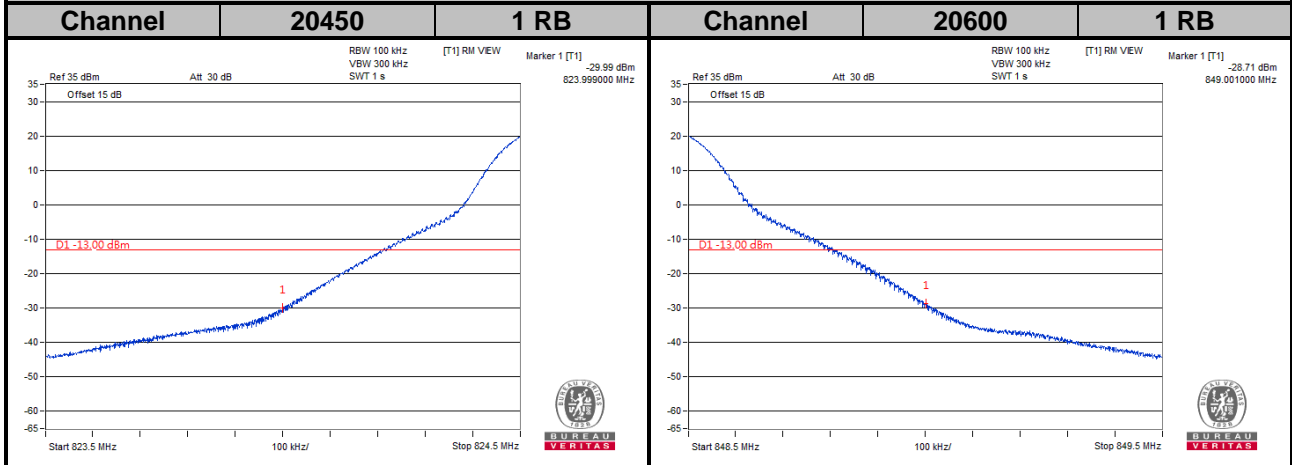
LTE Band 5
Channel Bandwidth: 3 MHz



LTE Band 5
Channel Bandwidth: 5 MHz



LTE Band 5
Channel Bandwidth: 10 MHz

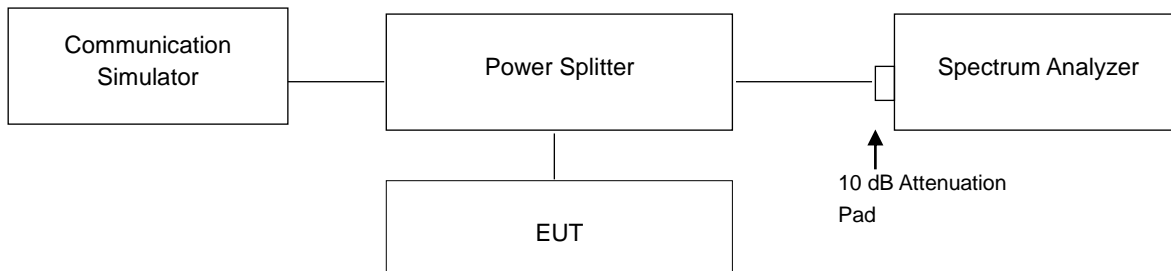


4.6 Peak to Average Ratio

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

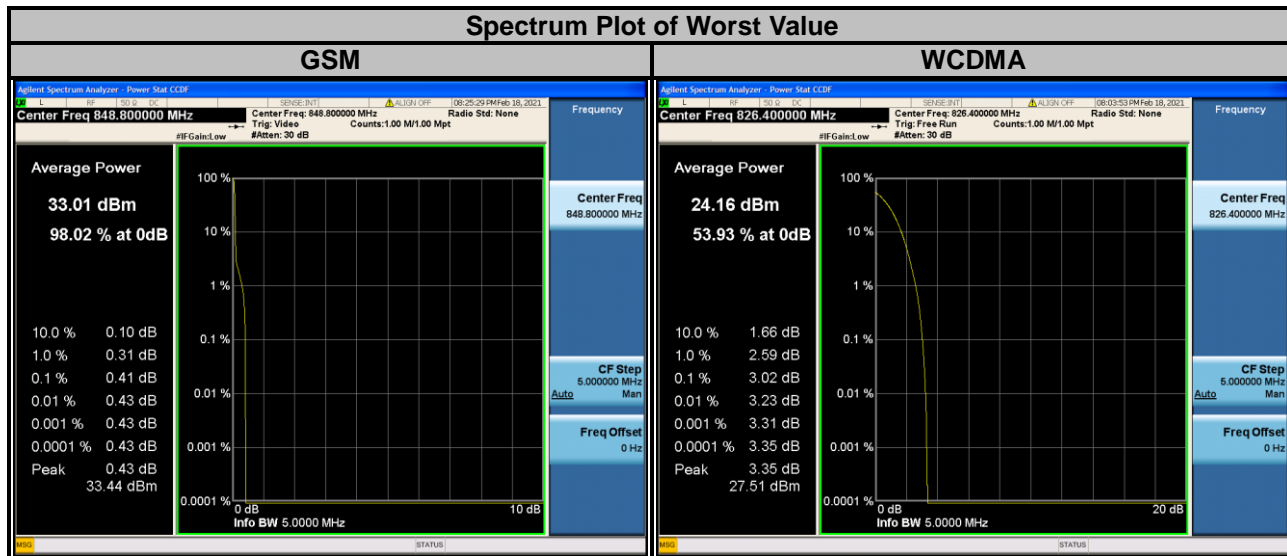


4.6.3 Test Procedures

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

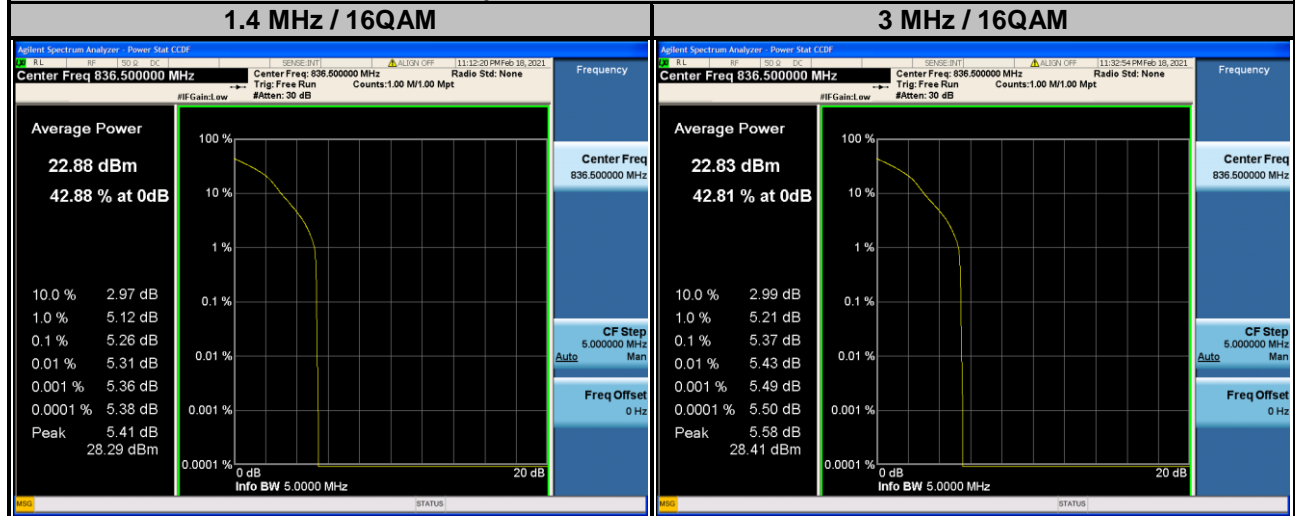
Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		GSM			WCDMA
128	824.2	0.40	4132	826.4	3.02
189	836.4	0.40	4182	836.4	3.02
251	848.8	0.41	4233	846.6	3.02



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	4.17	5.03	20415	825.5	4.12	5.09
20525	836.5	4.27	5.26	20525	836.5	4.27	5.37
20643	848.3	4.24	5.17	20635	847.5	4.23	5.10

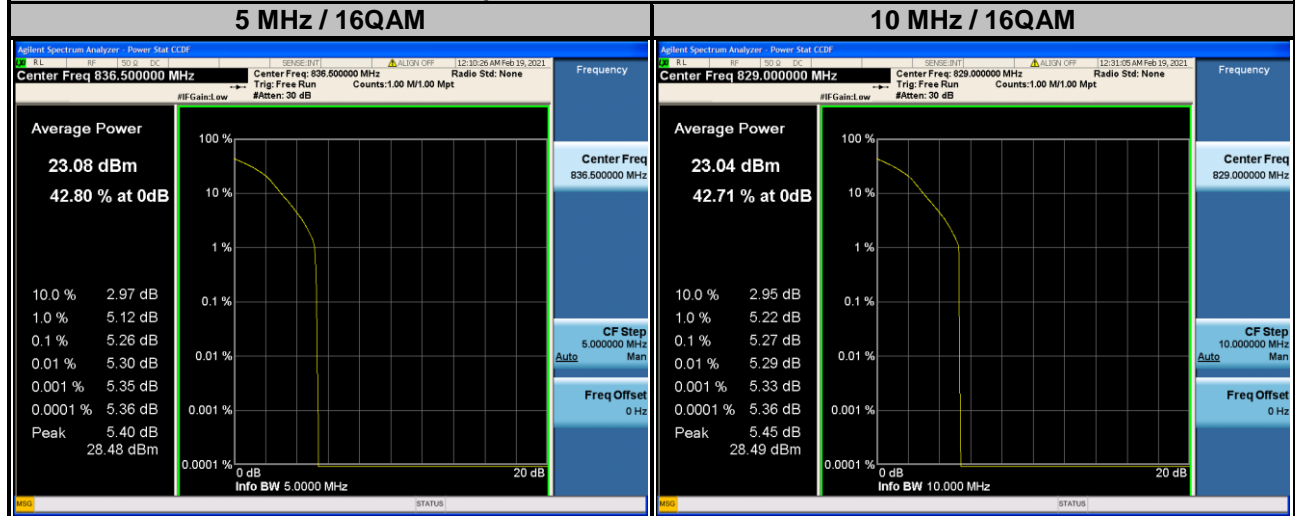
Spectrum Plot of Worst Value



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	4.20	5.09	20450	829.0	4.16	5.27
20525	836.5	4.40	5.26	20525	836.5	4.06	5.01
20625	846.5	4.05	5.08	20600	844.0	4.09	5.07

Spectrum Plot of Worst Value

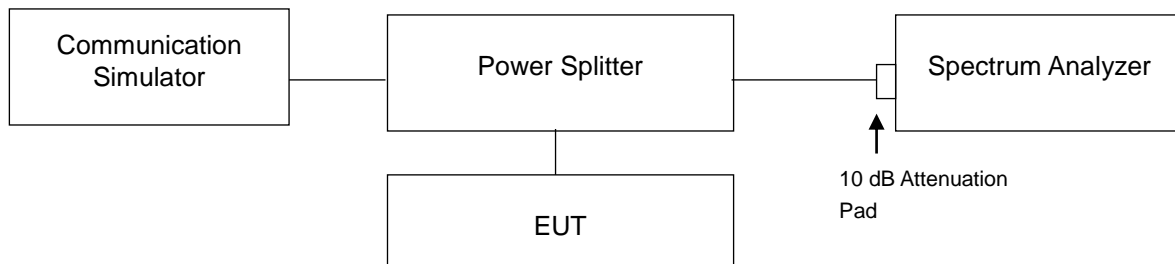


4.7 Conducted Spurious Emissions

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.

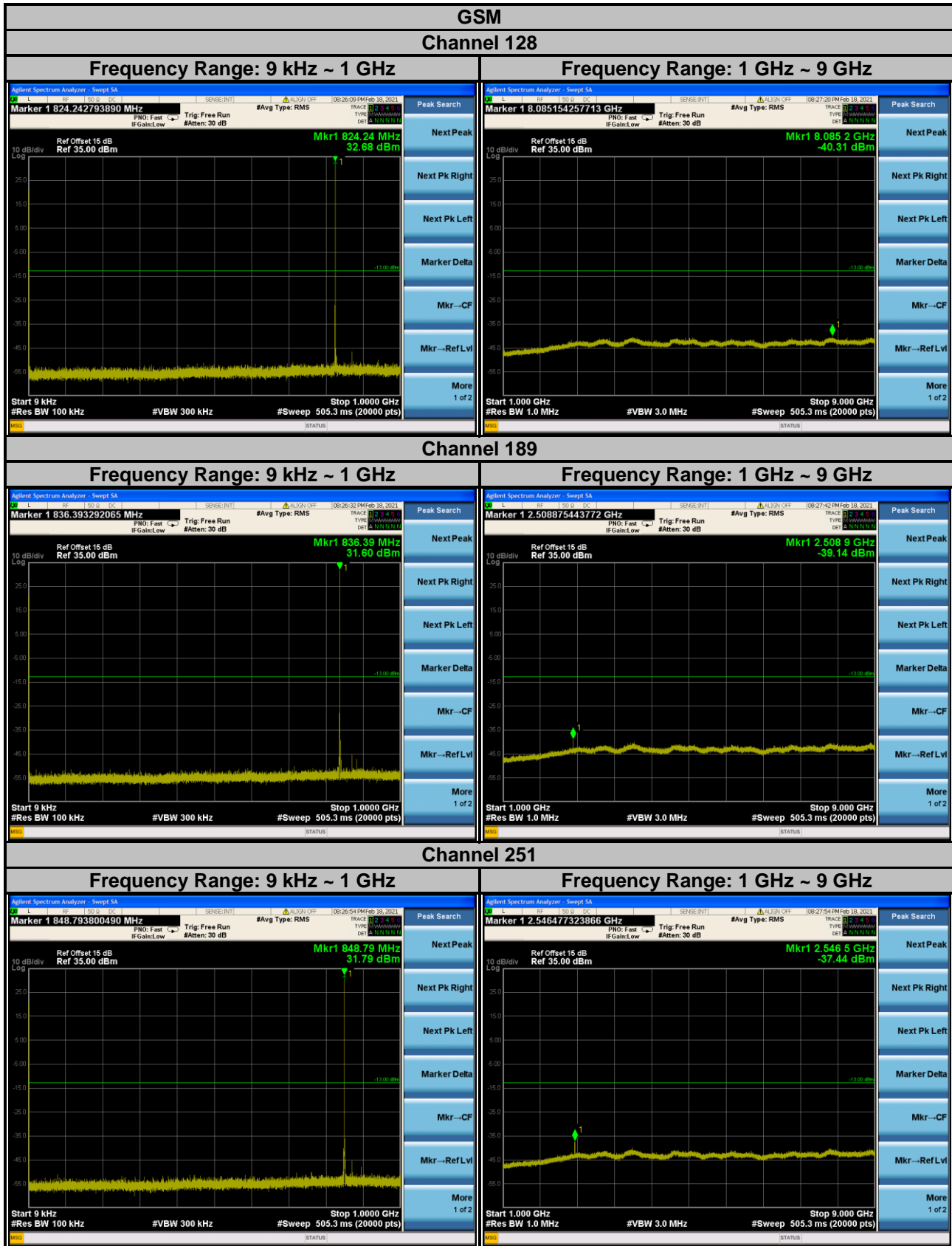
4.7.2 Test Setup



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.

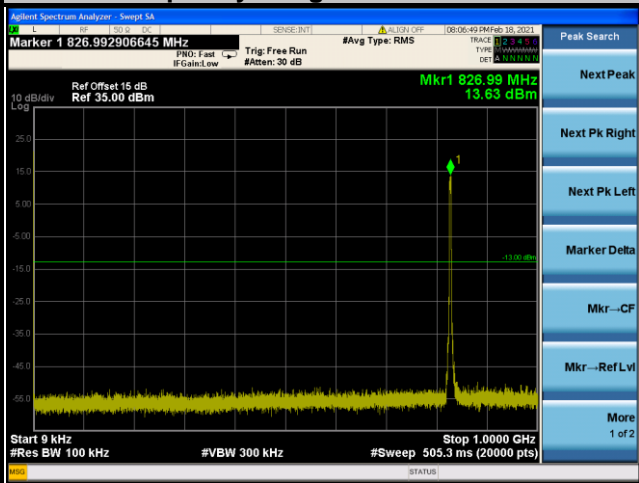
4.7.4 Test Results



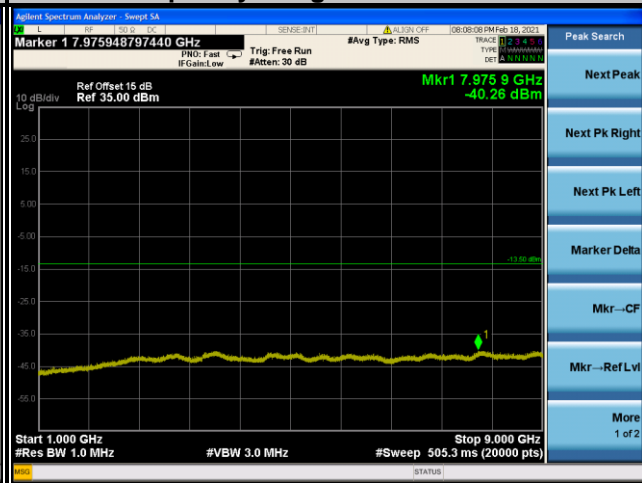
Note: The signal over the limit in 9 kHz is from spectrum analyzer.

WCDMA Channel 4132

Frequency Range: 9 kHz ~ 1 GHz

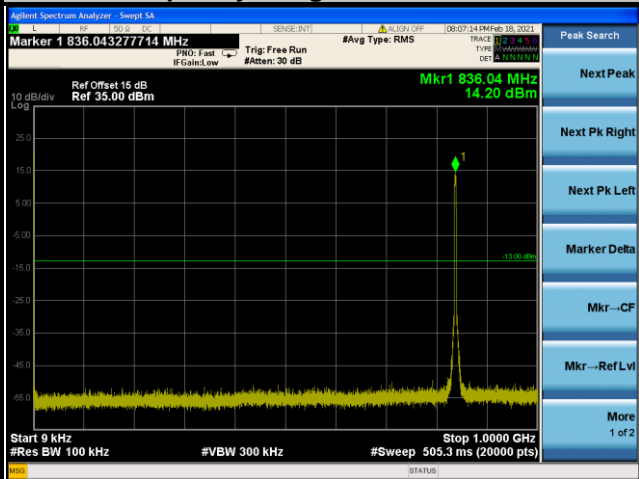


Frequency Range: 1 GHz ~ 9 GHz

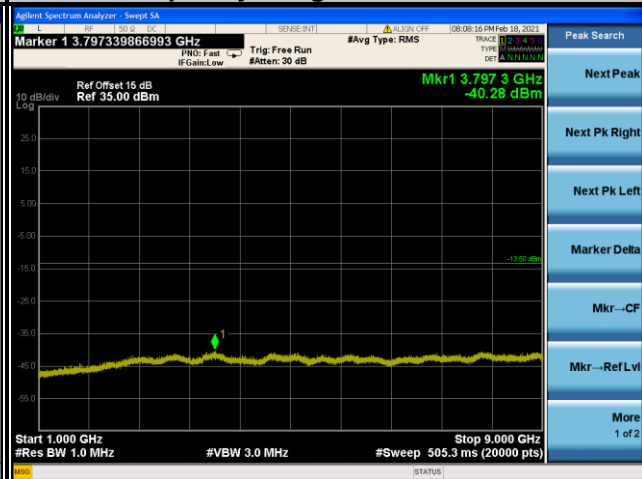


Channel 4182

Frequency Range: 9 kHz ~ 1 GHz

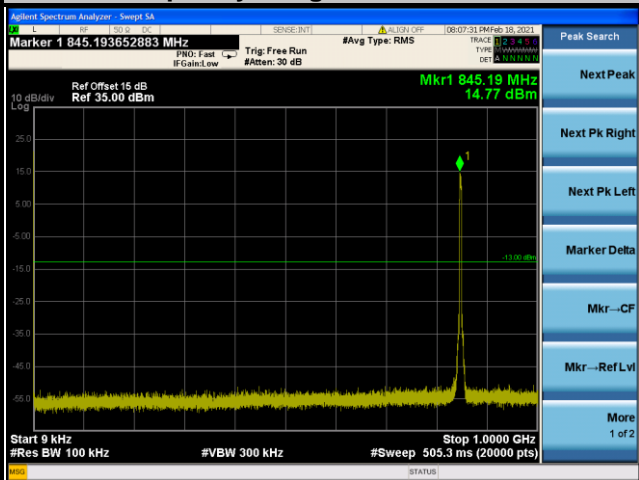


Frequency Range: 1 GHz ~ 9 GHz

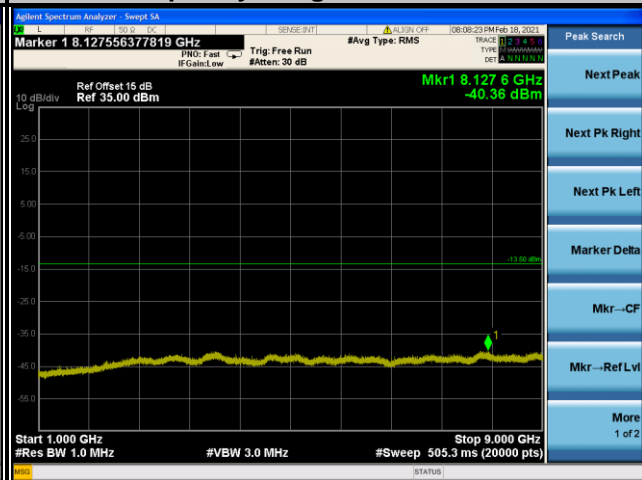


Channel 4233

Frequency Range: 9 kHz ~ 1 GHz

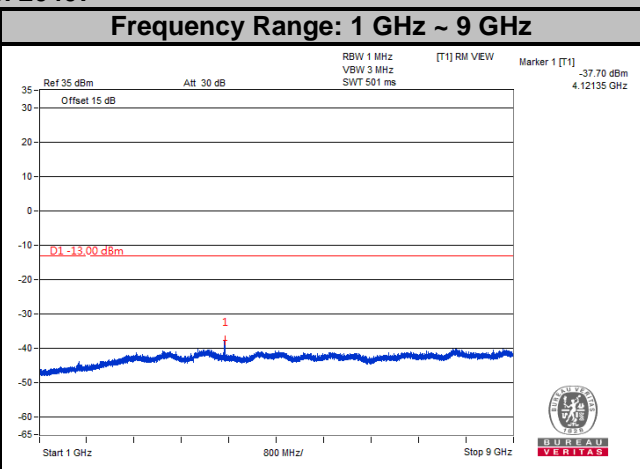
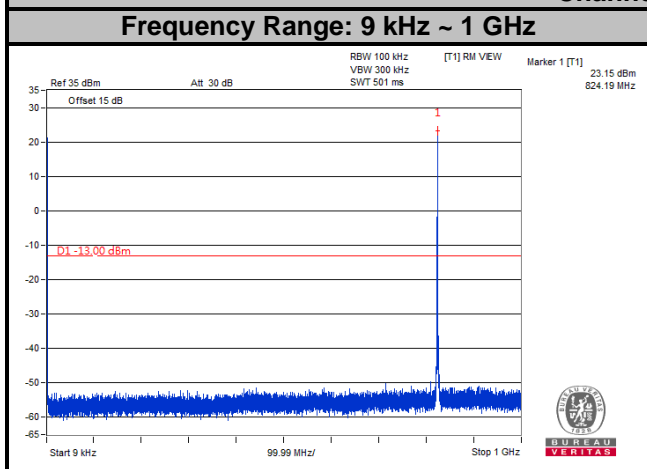


Frequency Range: 1 GHz ~ 9 GHz

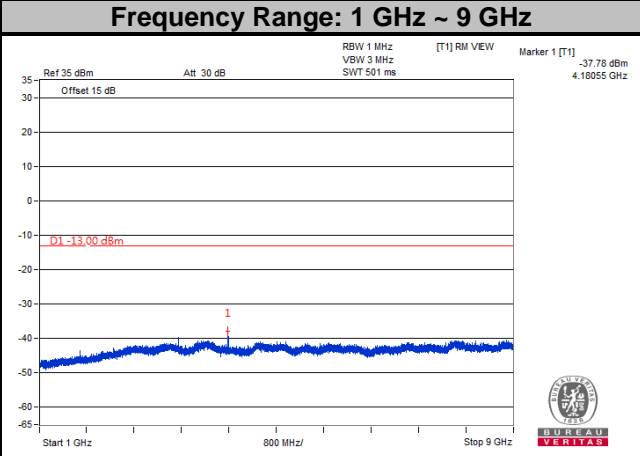
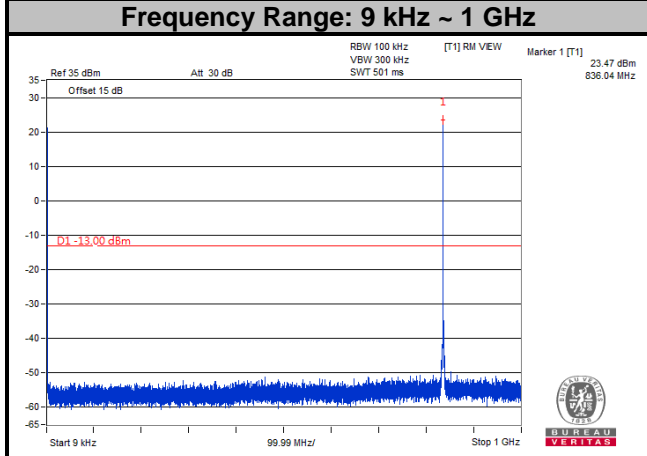


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

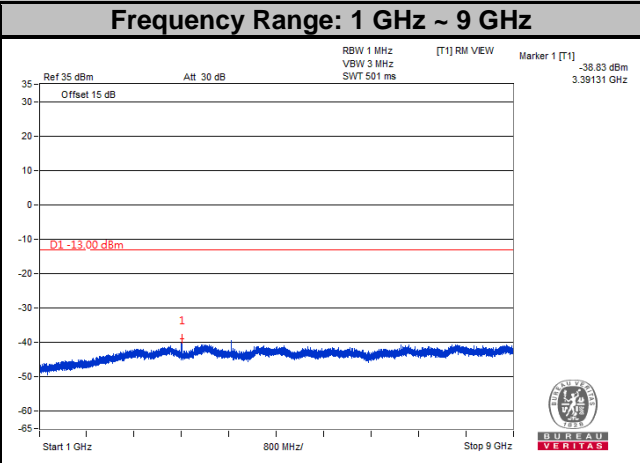
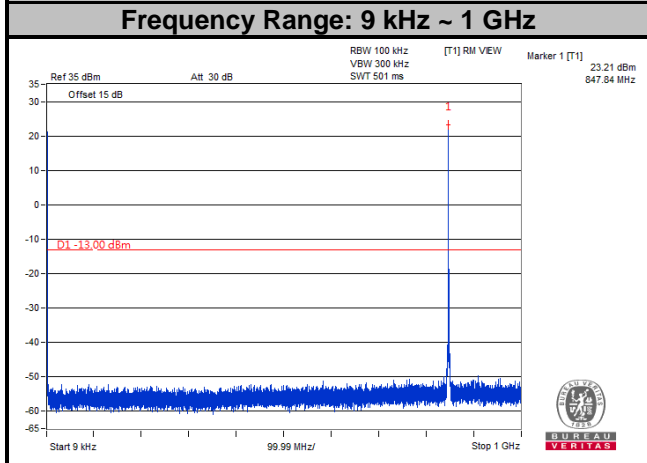
LTE Band 5
Channel Bandwidth: 1.4 MHz
Channel 20407



Channel 20525

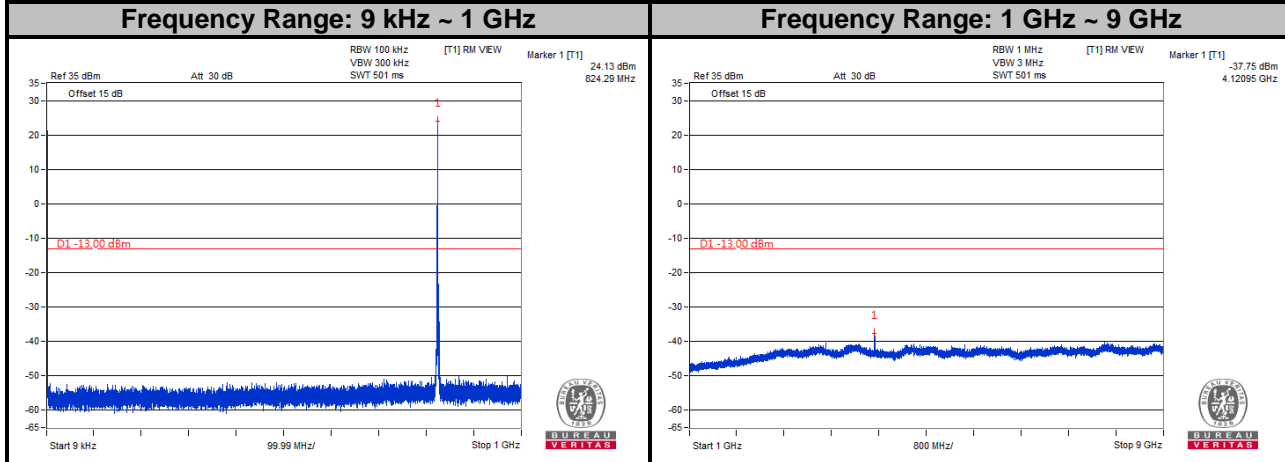


Channel 20643

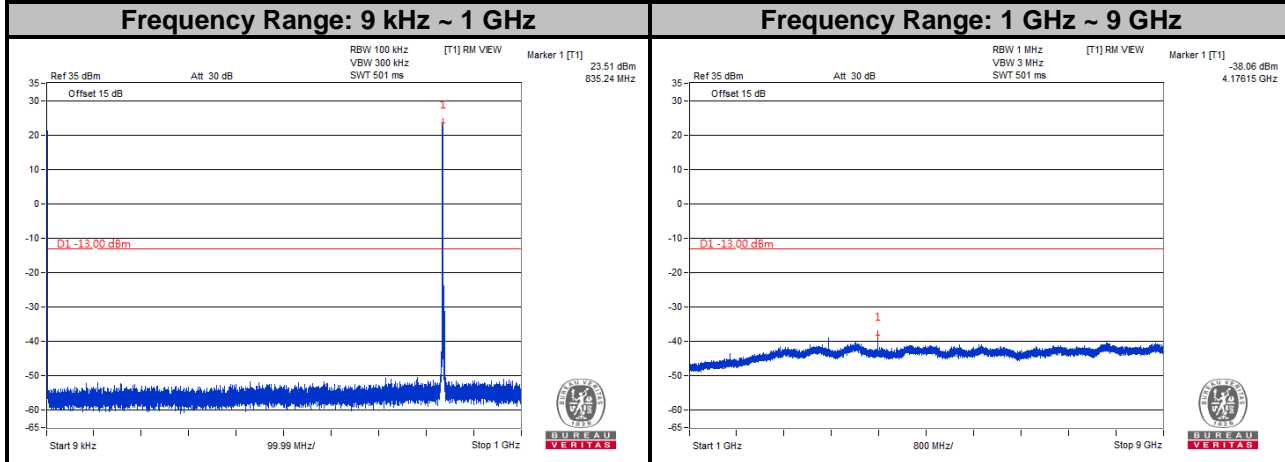


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

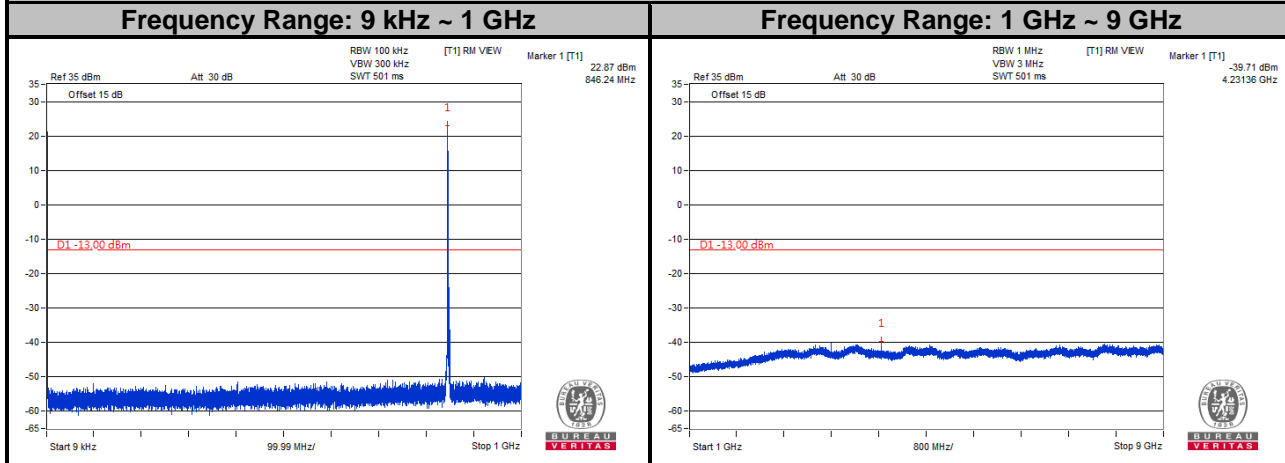
LTE Band 5
Channel Bandwidth: 3 MHz
Channel 20415



Channel 20525

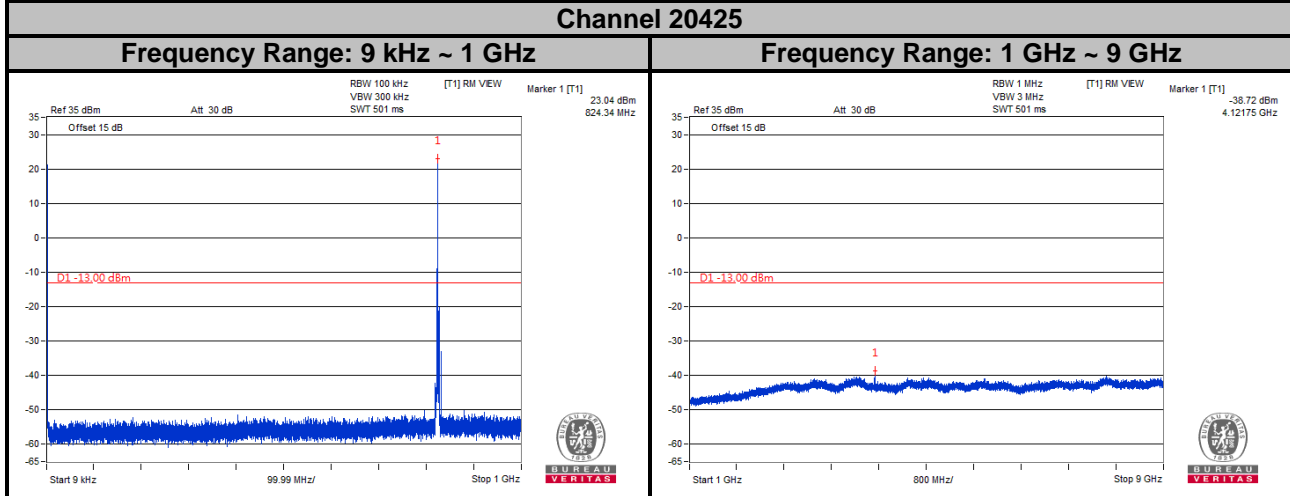


Channel 20635

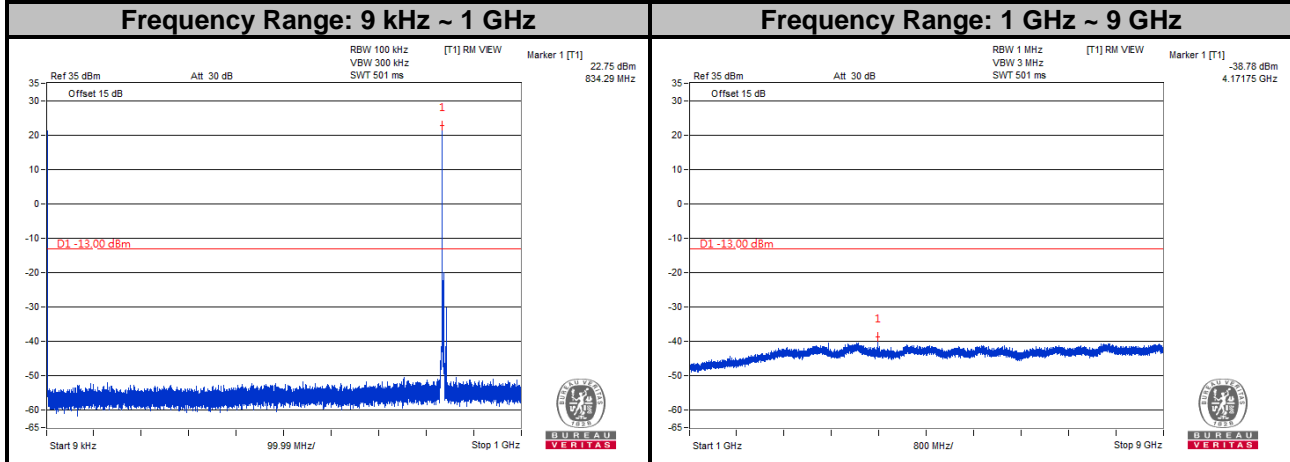


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

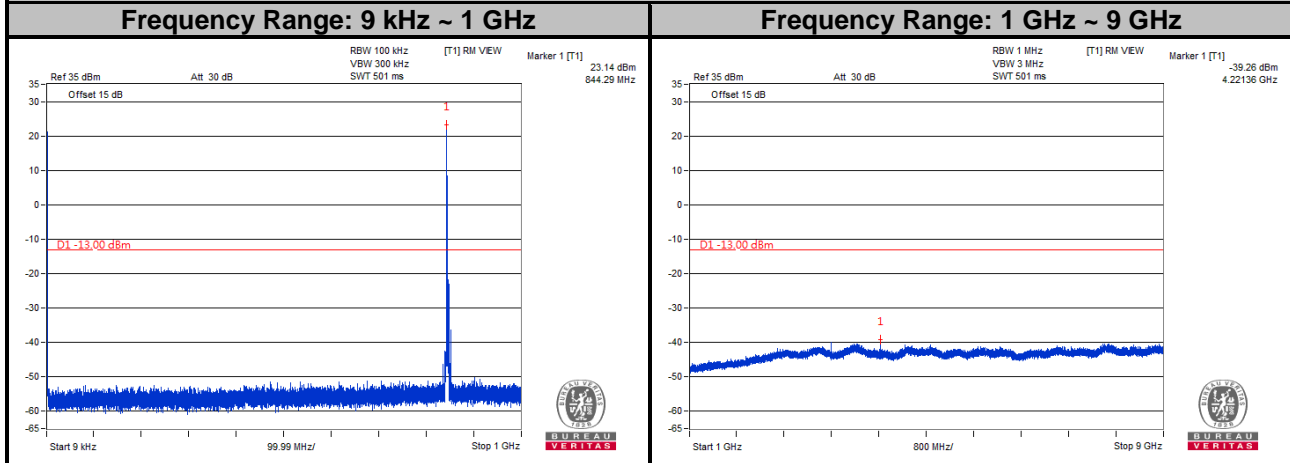
LTE Band 5
Channel Bandwidth: 5 MHz
Channel 20425



Channel 20525

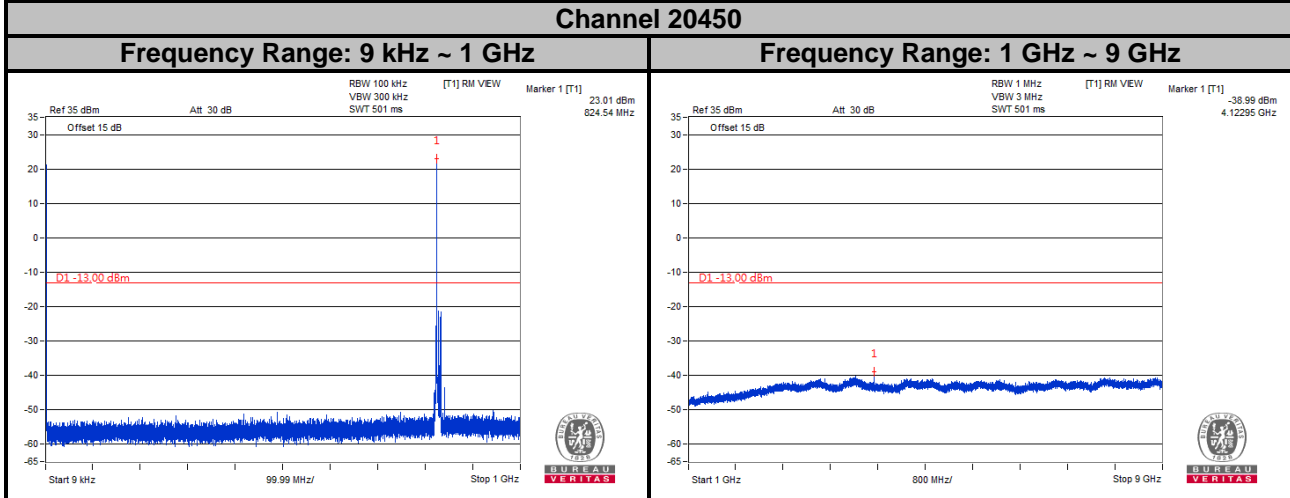


Channel 20625

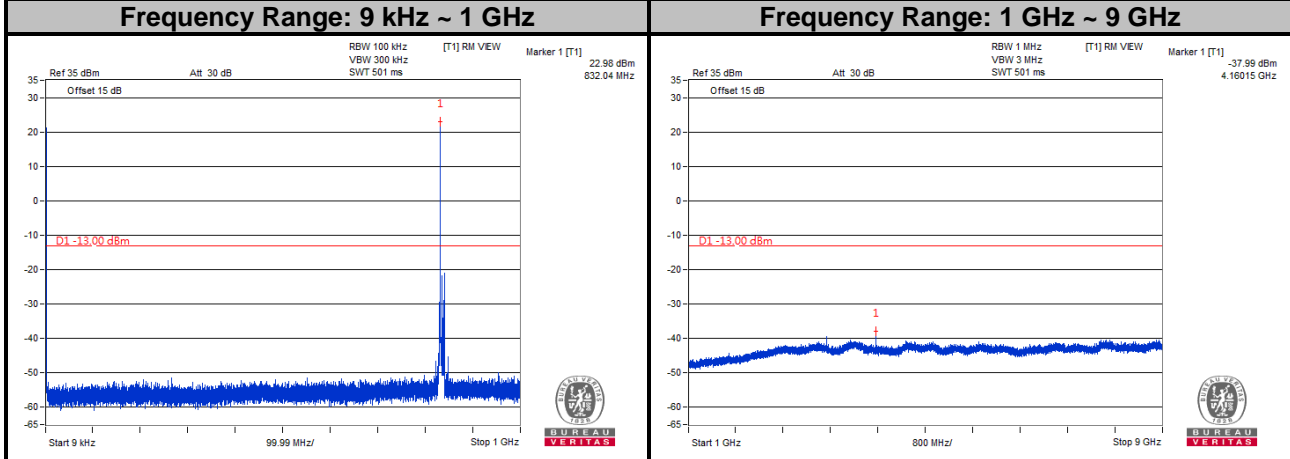


Note: The signal over the limit in 9 kHz is from spectrum analyzer.

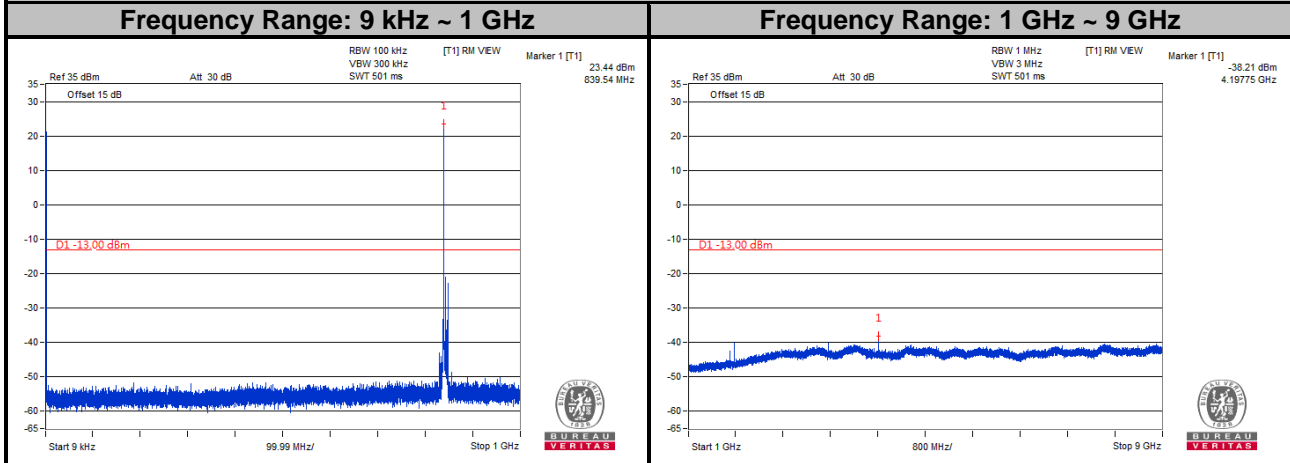
LTE Band 5
Channel Bandwidth: 10 MHz
Channel 20450



Channel 20525



Channel 20600



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

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. Measurement method refers to ANSI C63.26 section 5.5 and 5.2.7.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:

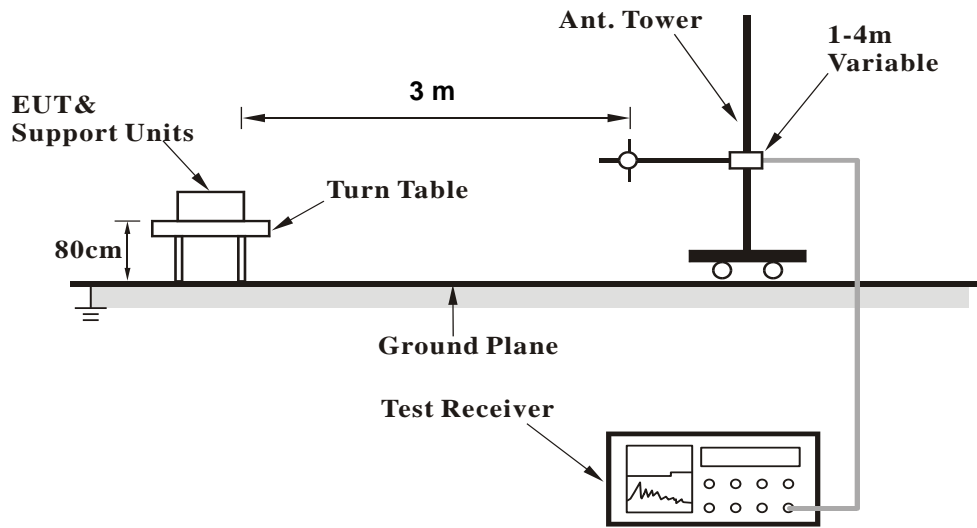
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.8.3 Deviation from Test Standard

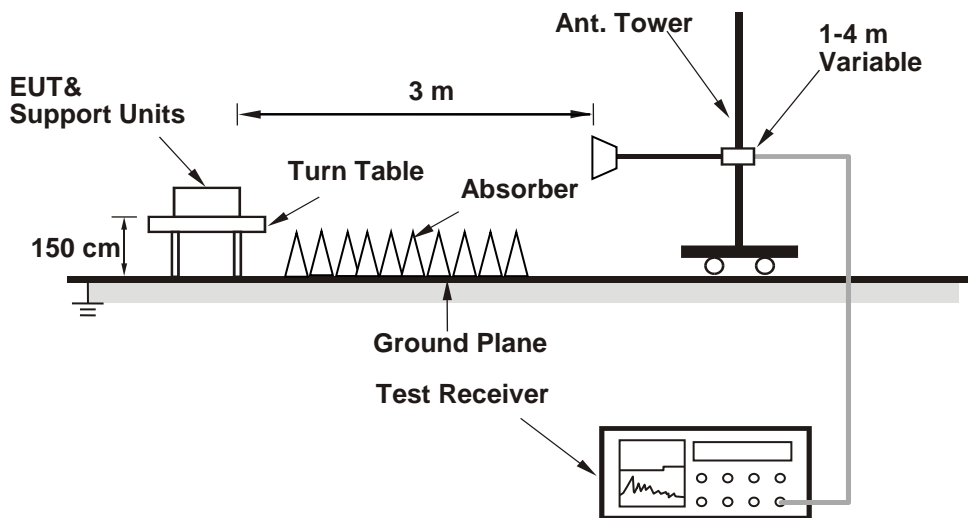
No deviation.

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

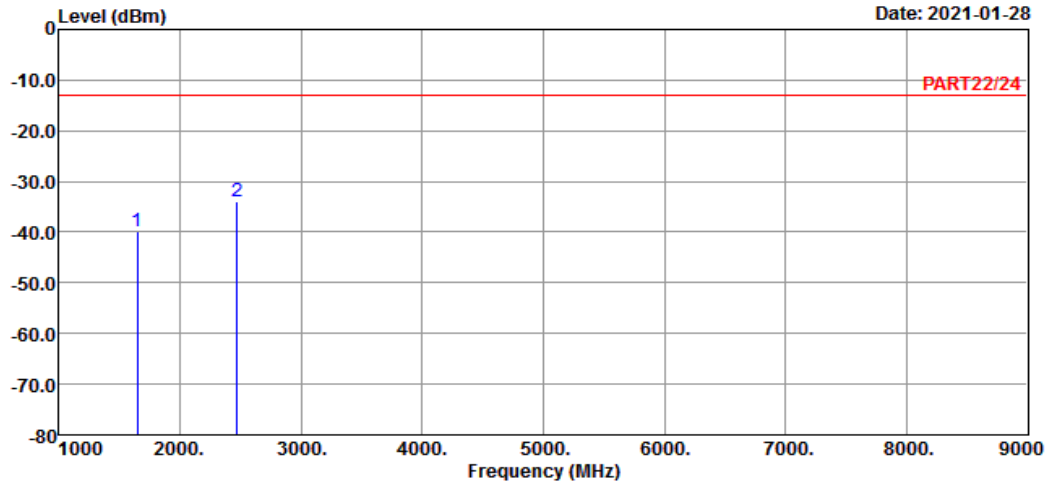


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A D T

Data: 3

Date: 2021-01-28



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remark : GSM 850 Link_L-CH
Tested by: tim-chen

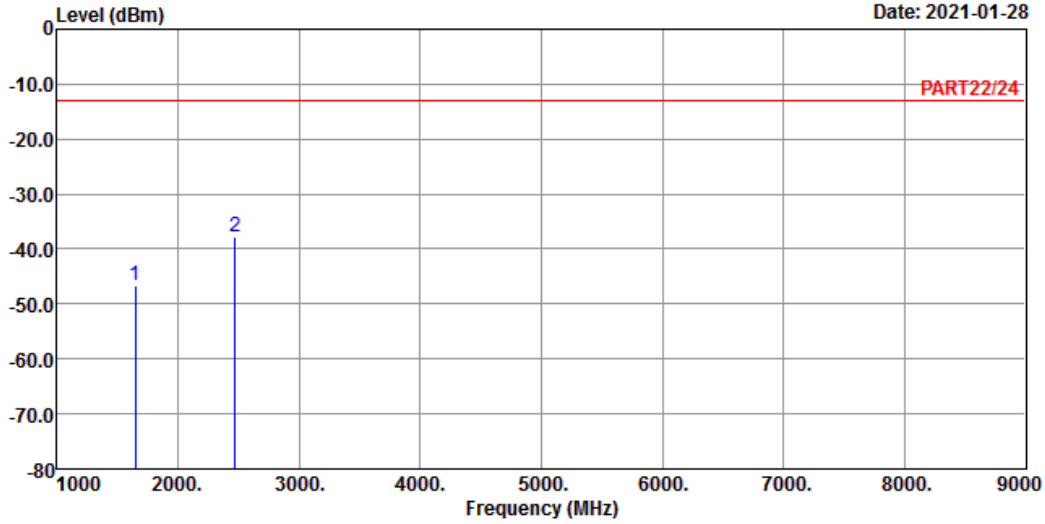
	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-39.71	-25.97	-13.00	-13.74	-26.71	Peak
2 pp	2472.60	-33.97	-23.95	-13.00	-10.02	-20.97	Peak



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A D T

Data: 4



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : GSM 850 Link_L-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-46.63	-32.89	-13.00	-13.74	-33.63	Peak
2	2472.60	-37.85	-27.83	-13.00	-10.02	-24.85	Peak

Middle Channel

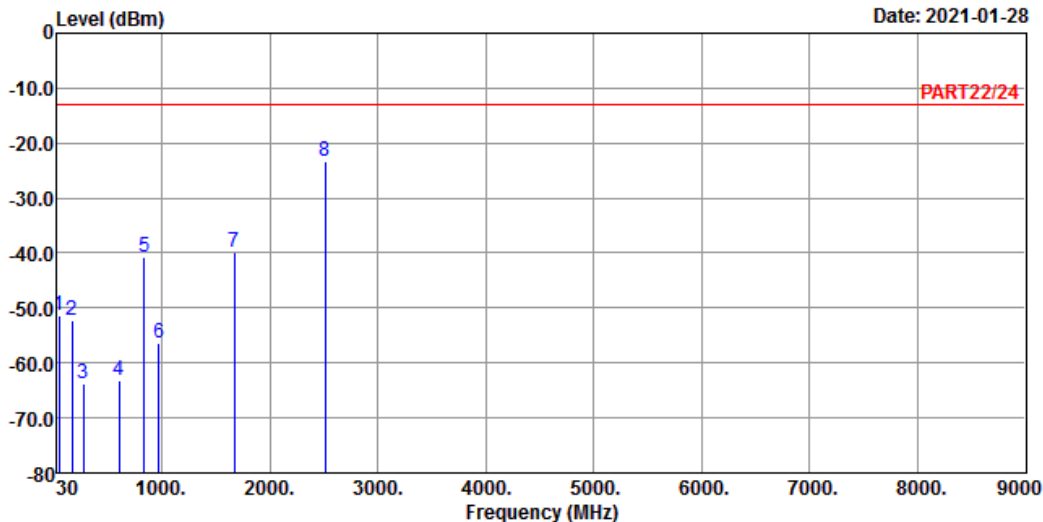


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A D T

Data: 5

Date: 2021-01-28



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : GSM 850 Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line	Factor	Over	Remark
	MHz	dBm	dBm	dBm		dB	dB	
1	43.58	-51.29	-49.82	-13.00	-1.47	-38.29	Peak	
2	166.77	-52.11	-46.79	-13.00	-5.32	-39.11	Peak	
3	270.56	-63.76	-57.35	-13.00	-6.41	-50.76	Peak	
4	604.24	-63.30	-62.54	-13.00	-0.76	-50.30	Peak	
5	836.40	-40.66	-41.07	-13.00	0.41	-27.66	Peak	
6	967.99	-56.25	-58.70	-13.00	2.45	-43.25	Peak	
7	1672.80	-39.89	-25.99	-13.00	-13.90	-26.89	Peak	
8 pp	2509.20	-23.31	-13.23	-13.00	-10.08	-10.31	Peak	

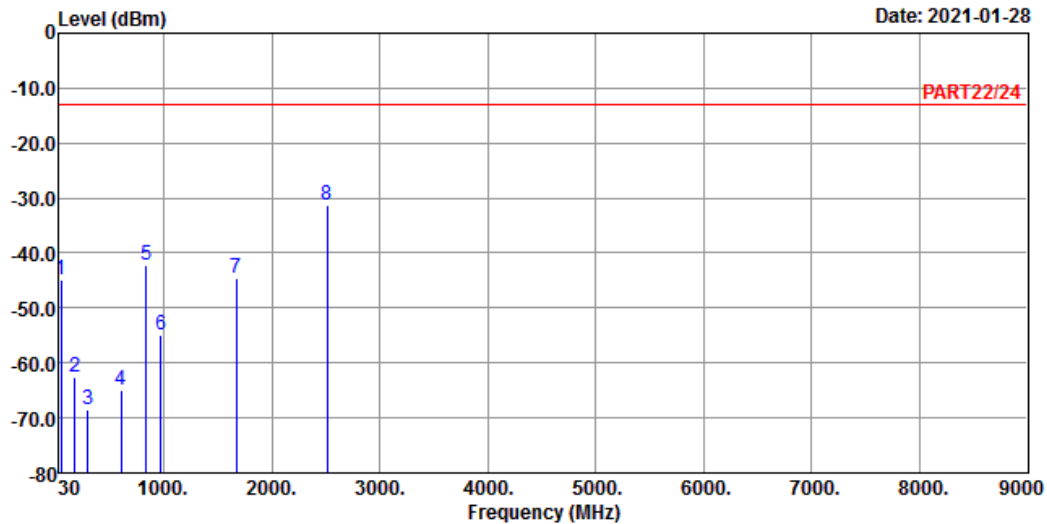


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A D T

Data: 6

Date: 2021-01-28



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : GSM 850 Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Over Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-45.00	-43.53	-13.00	-1.47	-32.00	Peak
2	172.59	-62.62	-56.58	-13.00	-6.04	-49.62	Peak
3	293.84	-68.41	-61.52	-13.00	-6.89	-55.41	Peak
4	603.27	-65.03	-64.27	-13.00	-0.76	-52.03	Peak
5	836.40	-42.30	-42.71	-13.00	0.41	-29.30	Peak
6	967.99	-54.86	-57.31	-13.00	2.45	-41.86	Peak
7	1672.80	-44.60	-30.70	-13.00	-13.90	-31.60	Peak
8 pp	2509.20	-31.41	-21.33	-13.00	-10.08	-18.41	Peak

High Channel

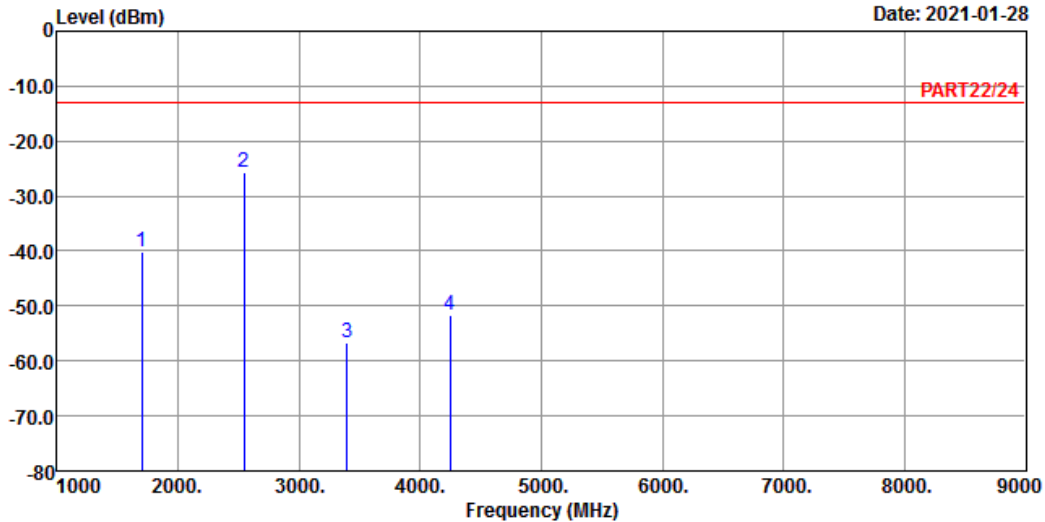


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A D T

Data: 3

Date: 2021-01-28



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remark : GSM 850 Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1697.60	-40.05	-26.00	-13.00	-14.05	-27.05	Peak
2 pp	2546.40	-25.65	-15.59	-13.00	-10.06	-12.65	Peak
3	3395.20	-56.82	-48.22	-13.00	-8.60	-43.82	Peak
4	4244.00	-51.77	-46.24	-13.00	-5.53	-38.77	Peak

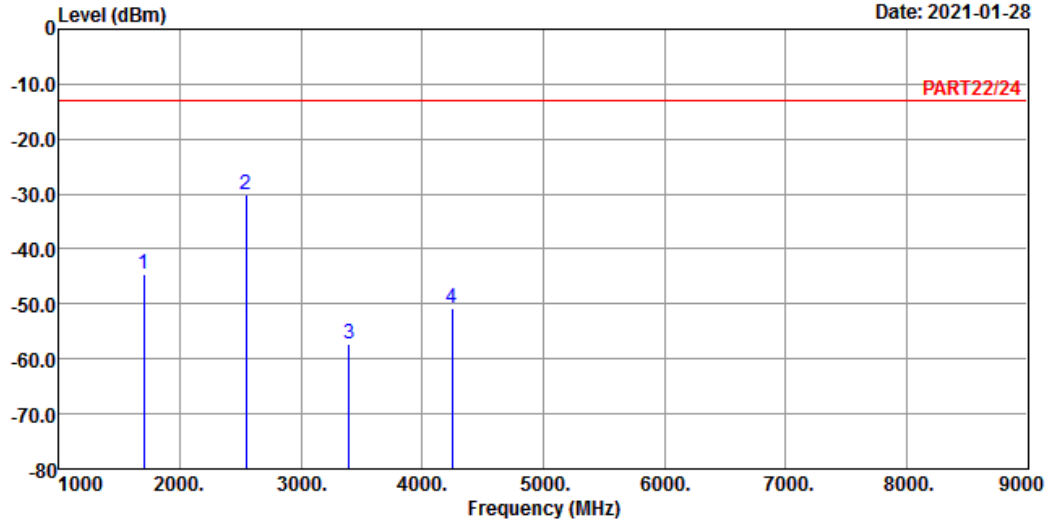


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-28



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remark : GSM 850 Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm		dB	dB	
1	1697.60	-44.43	-30.38	-13.00	-14.05	-31.43	Peak	
2	pp 2546.40	-30.02	-19.96	-13.00	-10.06	-17.02	Peak	
3	3395.20	-57.40	-48.80	-13.00	-8.60	-44.40	Peak	
4	4244.00	-50.65	-45.12	-13.00	-5.53	-37.65	Peak	

WCDMA:
Low Channel

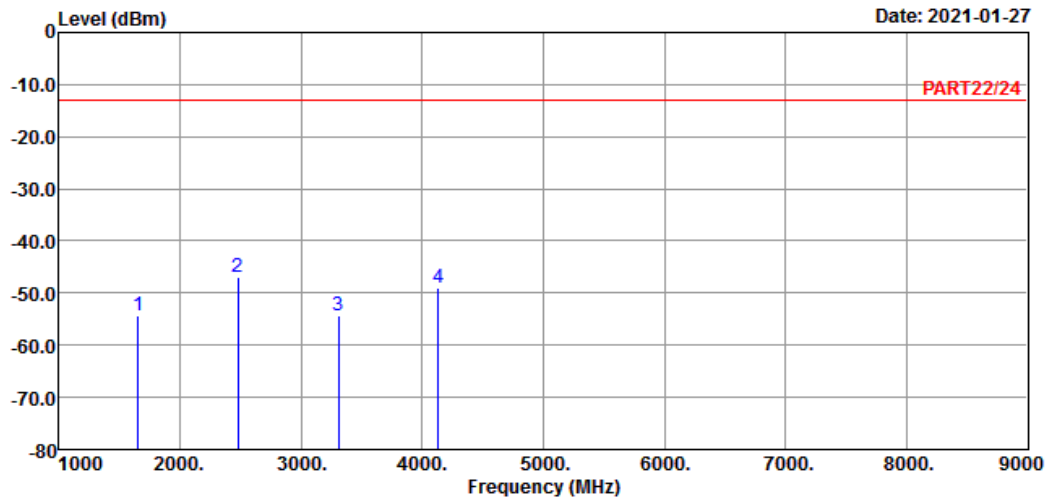


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Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : WCDMA Band 5 Link_L-CH
Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm		dB	dB	
1	1652.80	-54.43	-40.66	-13.00		-13.77	-41.43	Peak
2 pp	2479.20	-47.03	-37.00	-13.00		-10.03	-34.03	Peak
3	3305.60	-54.44	-45.55	-13.00		-8.89	-41.44	Peak
4	4132.00	-49.15	-43.12	-13.00		-6.03	-36.15	Peak

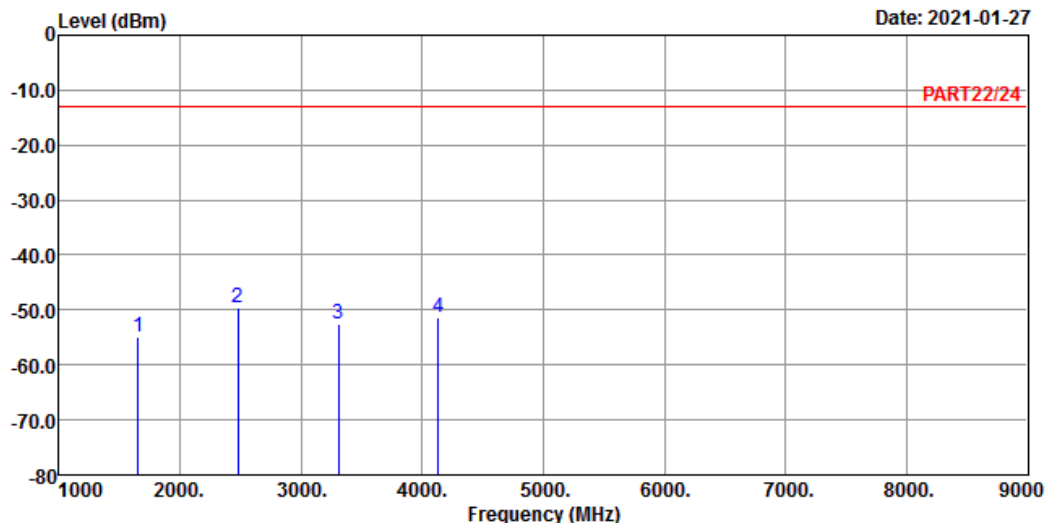


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : WCDMA Band 5 Link_L-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Over Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1652.80	-54.77	-41.00	-13.00	-13.77	-41.77	Peak
2	2479.20	-49.60	-39.57	-13.00	-10.03	-36.60	Peak
3	3305.60	-52.40	-43.51	-13.00	-8.89	-39.40	Peak
4	4132.00	-51.28	-45.25	-13.00	-6.03	-38.28	Peak

Middle Channel

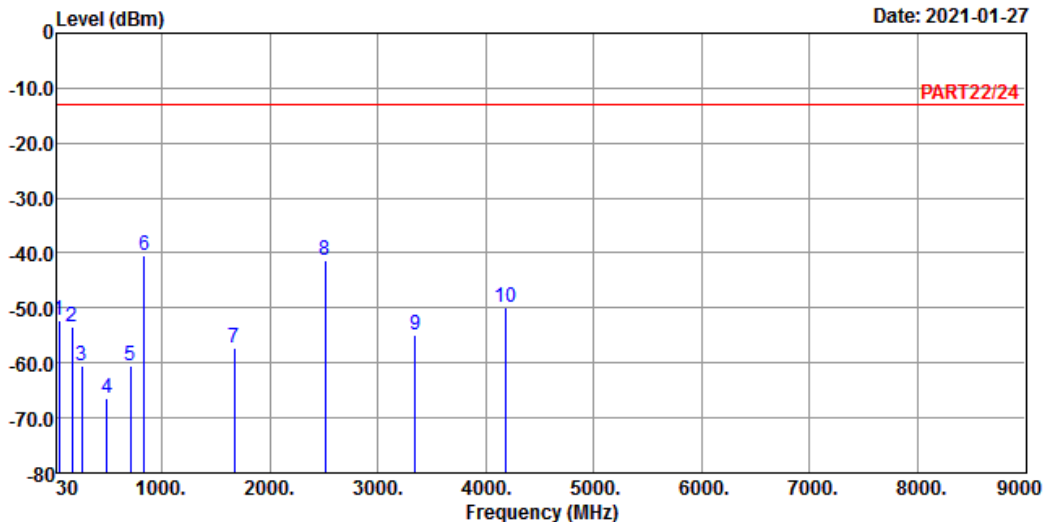


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : WCDMA Band 5 Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Over Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-52.26	-50.79	-13.00	-1.47	-39.26	Peak
2	166.77	-53.43	-48.11	-13.00	-5.32	-40.43	Peak
3	254.07	-60.40	-54.33	-13.00	-6.07	-47.40	Peak
4	490.75	-66.51	-61.72	-13.00	-4.79	-53.51	Peak
5	705.12	-60.46	-60.46	-13.00	0.00	-47.46	Peak
6 pp	836.40	-40.32	-40.73	-13.00	0.41	-27.32	Peak
7	1672.80	-57.38	-43.48	-13.00	-13.90	-44.38	Peak
8	2509.20	-41.42	-31.34	-13.00	-10.08	-28.42	Peak
9	3345.60	-54.76	-46.00	-13.00	-8.76	-41.76	Peak
10	4182.00	-49.99	-44.31	-13.00	-5.68	-36.99	Peak

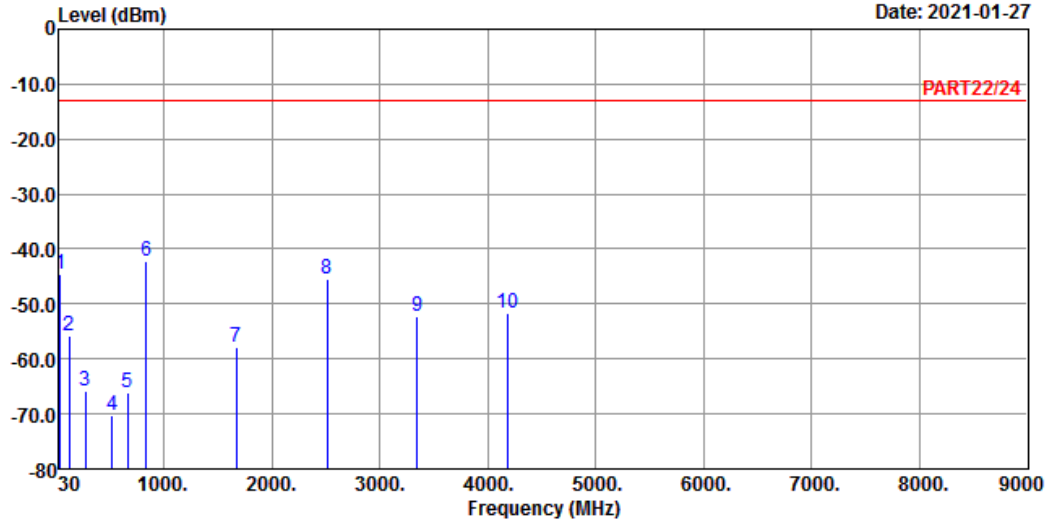


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : WCDMA Band 5 Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Over Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	42.61	-44.72	-43.78	-13.00	-0.94	-31.72	Peak
2	125.06	-55.85	-46.58	-13.00	-9.27	-42.85	Peak
3	271.53	-65.77	-59.34	-13.00	-6.43	-52.77	Peak
4	522.76	-70.26	-66.44	-13.00	-3.82	-57.26	Peak
5	661.47	-66.24	-65.54	-13.00	-0.70	-53.24	Peak
6 pp	836.40	-42.35	-42.76	-13.00	0.41	-29.35	Peak
7	1672.80	-57.91	-44.01	-13.00	-13.90	-44.91	Peak
8	2509.20	-45.37	-35.29	-13.00	-10.08	-32.37	Peak
9	3345.60	-52.37	-43.61	-13.00	-8.76	-39.37	Peak
10	4182.00	-51.73	-46.05	-13.00	-5.68	-38.73	Peak

High Channel

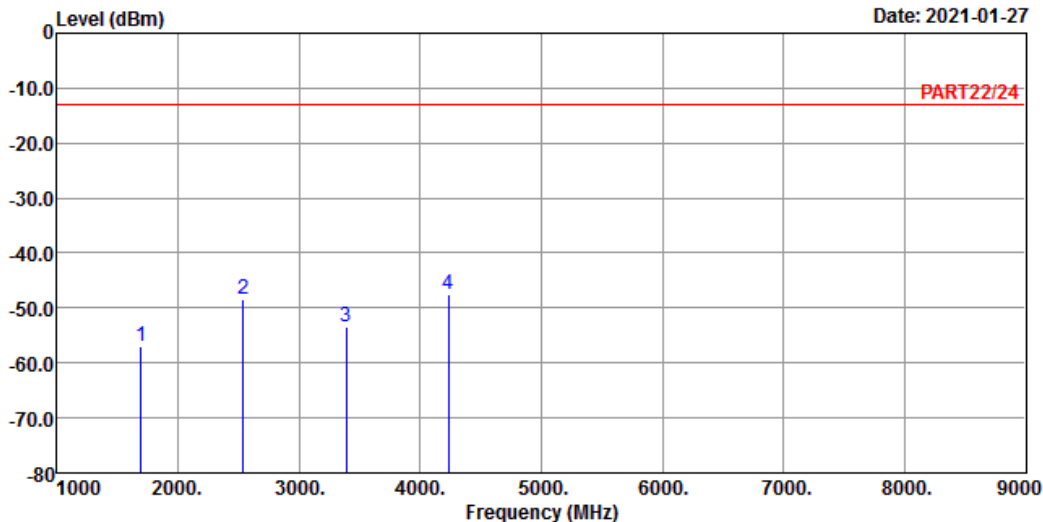


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : WCDMA Band 5 Link_H-CH
 Tested by: tim-chen

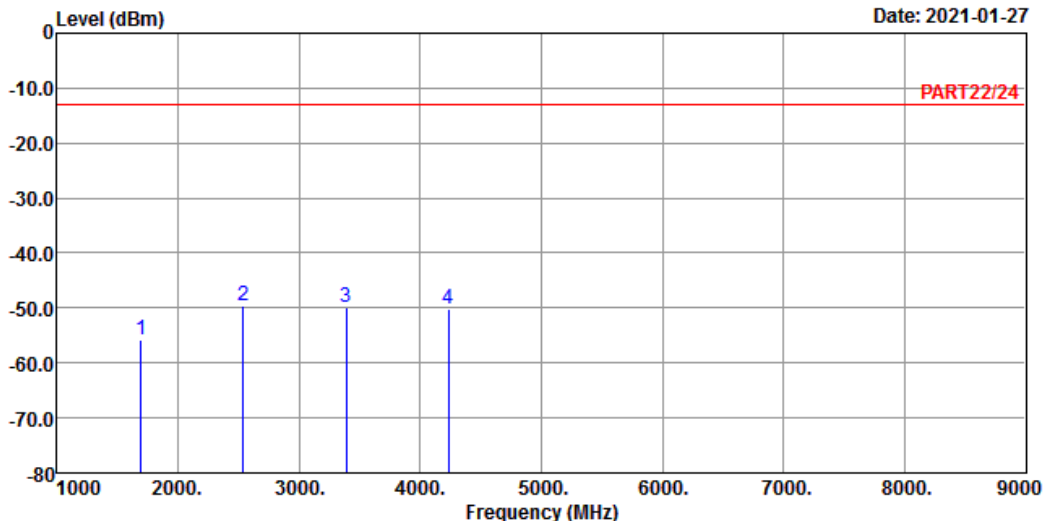
	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1693.20	-56.91	-42.89	-13.00	-14.02	-43.91	Peak
2	2539.80	-48.40	-38.34	-13.00	-10.06	-35.40	Peak
3	3386.40	-53.54	-44.91	-13.00	-8.63	-40.54	Peak
4 pp	4233.00	-47.59	-42.04	-13.00	-5.55	-34.59	Peak



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : WCDMA Band 5 Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Over Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1693.20	-55.93	-41.91	-13.00	-14.02	-42.93	Peak
2	2539.80	-49.61	-39.55	-13.00	-10.06	-36.61	Peak
3	3386.40	-49.75	-41.12	-13.00	-8.63	-36.75	Peak
4	4233.00	-50.07	-44.52	-13.00	-5.55	-37.07	Peak

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

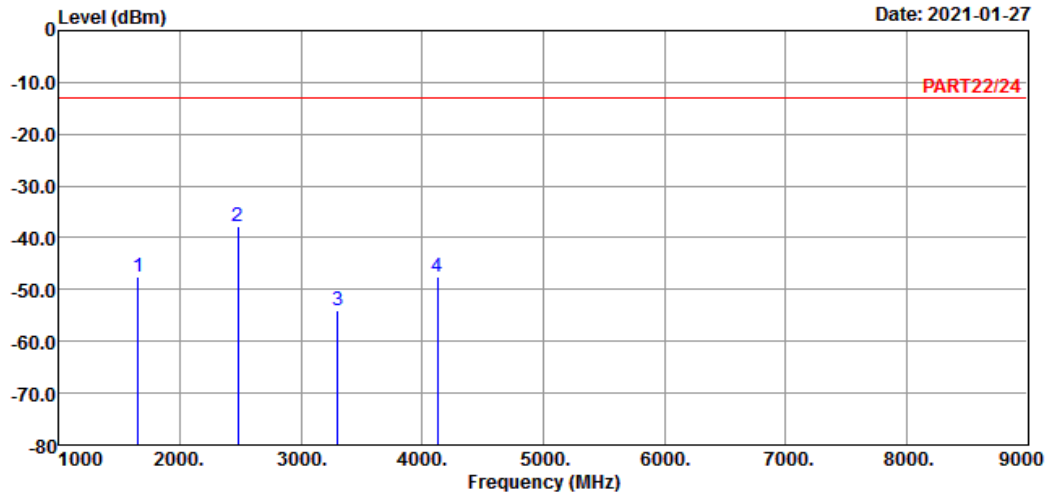


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_1.4M Link_L-CH
 Tested by: tim-chen

	Read	Limit	Over			
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1	1649.40	-47.63	-33.89	-13.00	-13.74	-34.63 Peak
2 pp	2474.10	-37.66	-27.64	-13.00	-10.02	-24.66 Peak
3	3298.80	-54.00	-45.14	-13.00	-8.86	-41.00 Peak
4	4123.50	-47.41	-41.30	-13.00	-6.11	-34.41 Peak

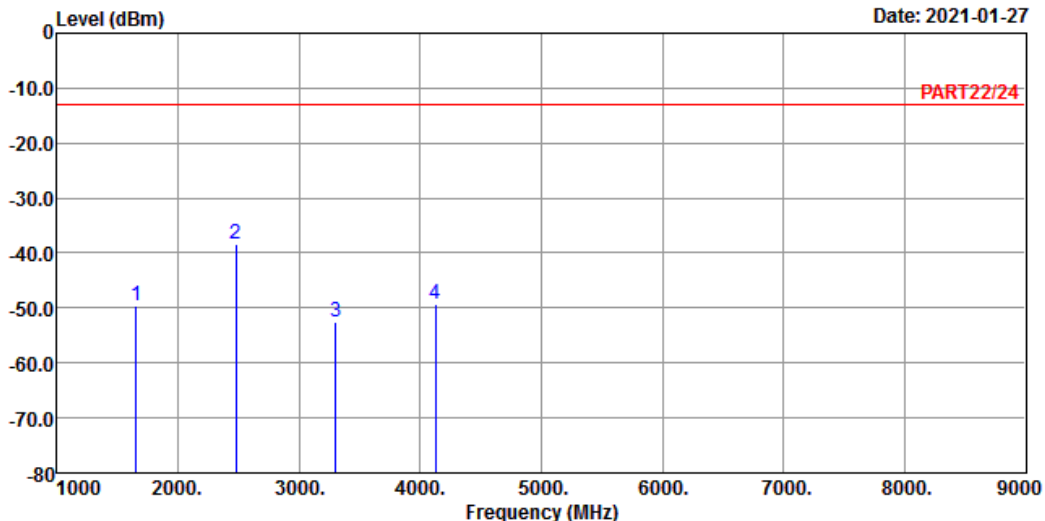


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_1.4M Link_L-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line	Factor	Over	Remark
	MHz	dBm	dBm	dBm	dB	dB	dB	
1	1649.40	-49.49	-35.75	-13.00	-13.74	-36.49	Peak	
2	2474.10	-38.32	-28.30	-13.00	-10.02	-25.32	Peak	
3	3298.80	-52.52	-43.66	-13.00	-8.86	-39.52	Peak	
4	4123.50	-49.34	-43.23	-13.00	-6.11	-36.34	Peak	

Middle Channel

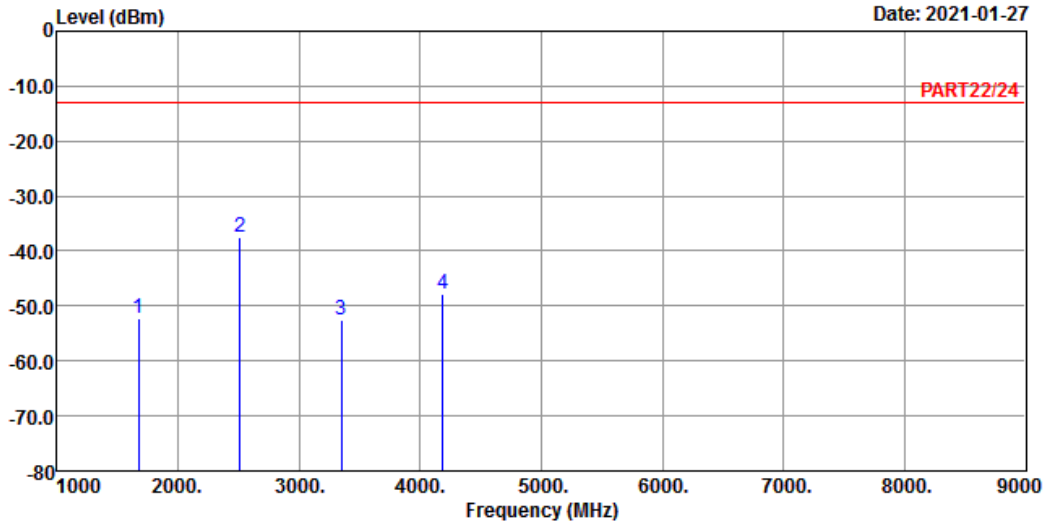


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_1.4M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-52.34	-38.44	-13.00	-13.90	-39.34	Peak
2 pp	2509.50	-37.37	-27.29	-13.00	-10.08	-24.37	Peak
3	3346.00	-52.58	-43.82	-13.00	-8.76	-39.58	Peak
4	4182.50	-47.74	-42.06	-13.00	-5.68	-34.74	Peak

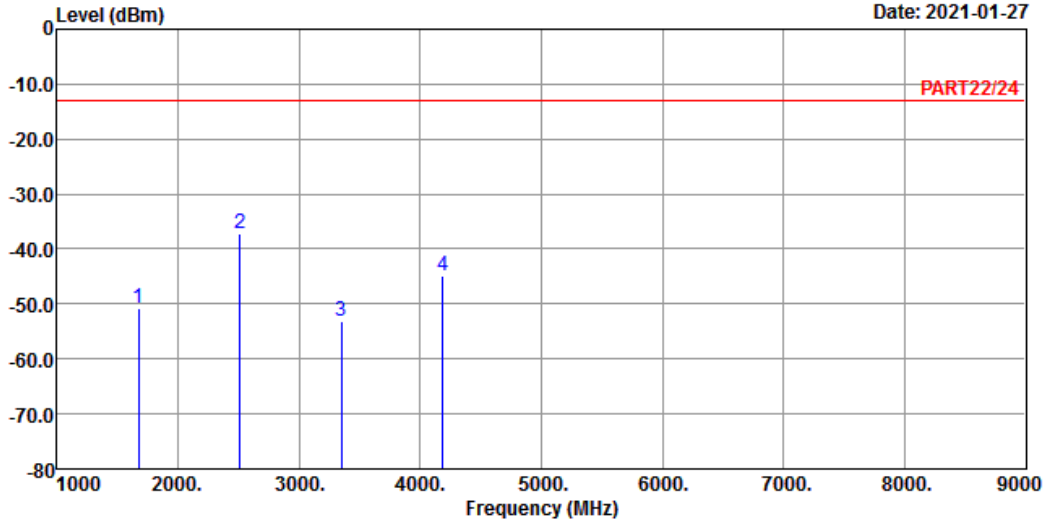


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_1.4M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-50.73	-36.83	-13.00	-13.90	-37.73	Peak
2	2509.50	-37.10	-27.02	-13.00	-10.08	-24.10	Peak
3	3346.00	-53.17	-44.41	-13.00	-8.76	-40.17	Peak
4	4182.50	-44.83	-39.15	-13.00	-5.68	-31.83	Peak

High Channel

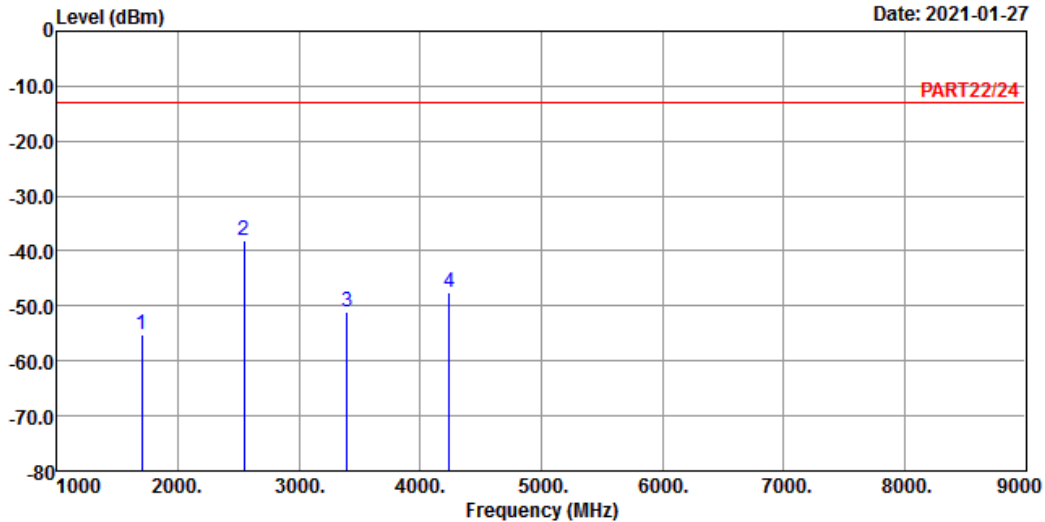


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_1.4M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1696.60	-55.30	-41.28	-13.00	-14.02	-42.30	Peak
2 pp	2544.90	-37.94	-27.88	-13.00	-10.06	-24.94	Peak
3	3393.20	-51.02	-42.42	-13.00	-8.60	-38.02	Peak
4	4241.50	-47.43	-41.88	-13.00	-5.55	-34.43	Peak

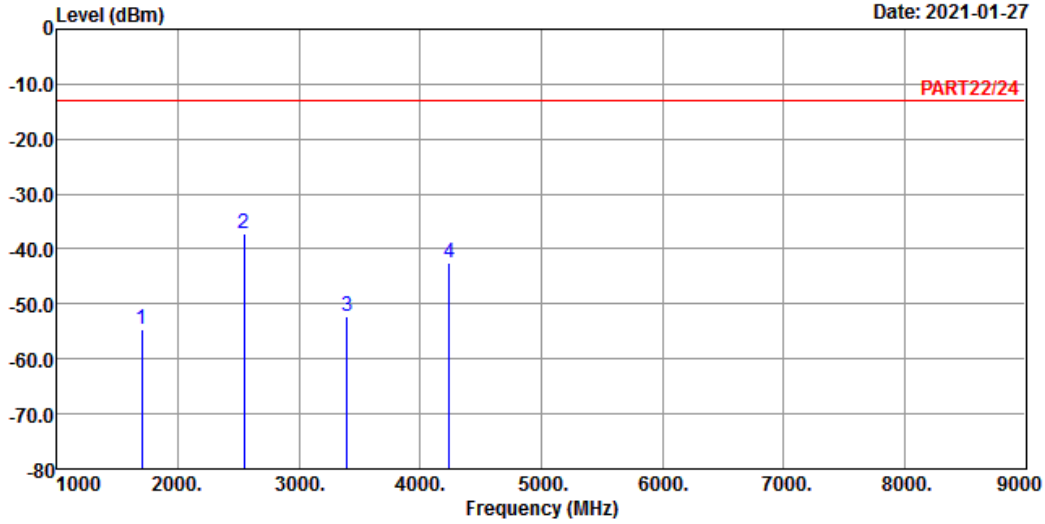


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_1.4M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1696.60	-54.55	-40.53	-13.00	-14.02	-41.55	Peak
2	2544.90	-37.09	-27.03	-13.00	-10.06	-24.09	Peak
3	3393.20	-52.31	-43.71	-13.00	-8.60	-39.31	Peak
4	4241.50	-42.44	-36.89	-13.00	-5.55	-29.44	Peak

Channel Bandwidth: 5 MHz / QPSK
Low Channel

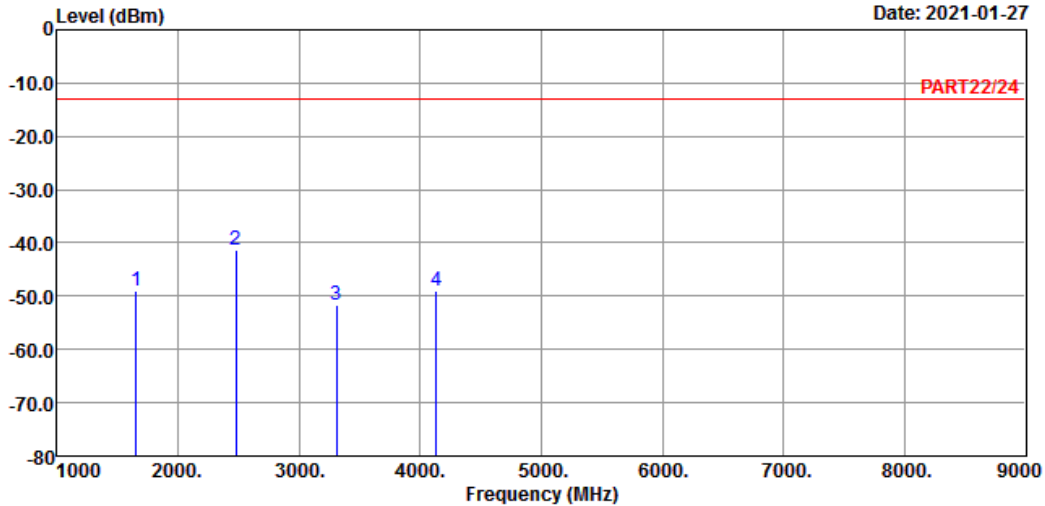


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : LTE Band 5 QPSK_5M Link_L-CH
Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1653.00	-48.98	-35.21	-13.00	-13.77	-35.98	Peak
2 pp	2479.50	-41.21	-31.18	-13.00	-10.03	-28.21	Peak
3	3306.00	-51.59	-42.70	-13.00	-8.89	-38.59	Peak
4	4132.50	-49.04	-43.01	-13.00	-6.03	-36.04	Peak

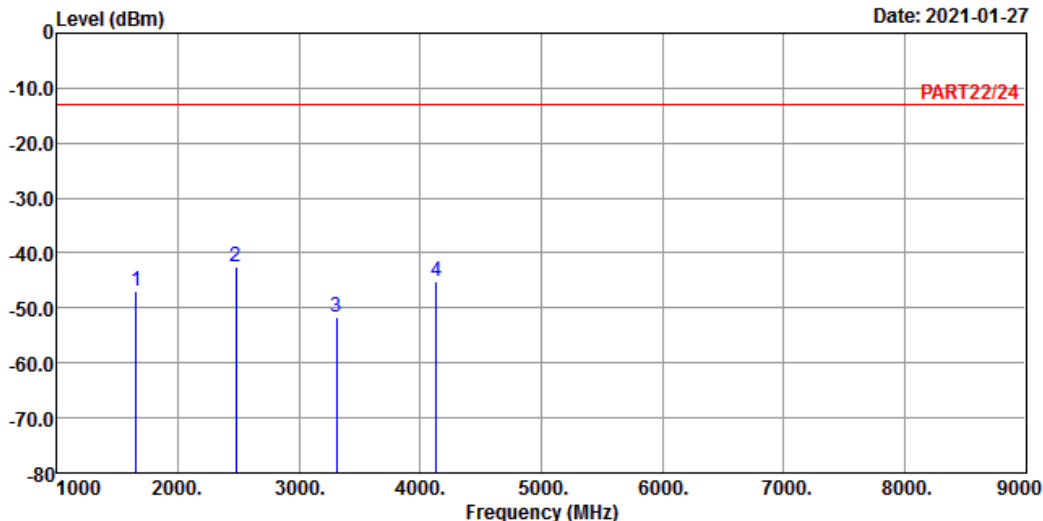


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_5M Link_L-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1653.00	-46.85	-33.08	-13.00	-13.77	-33.85	Peak
2	2479.50	-42.64	-32.61	-13.00	-10.03	-29.64	Peak
3	3306.00	-51.74	-42.85	-13.00	-8.89	-38.74	Peak
4	4132.50	-45.31	-39.28	-13.00	-6.03	-32.31	Peak

Middle Channel

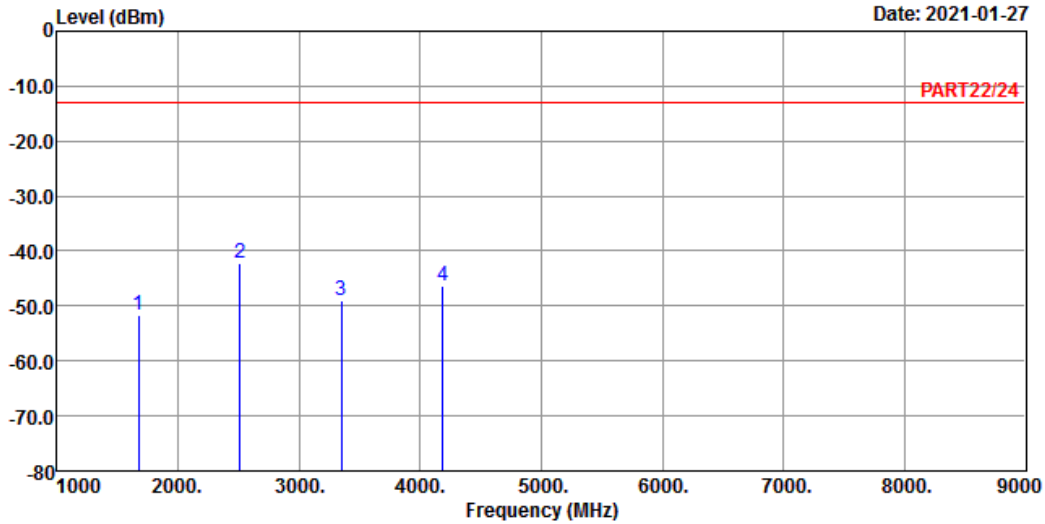


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_5M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-51.56	-37.66	-13.00	-13.90	-38.56	Peak
2 pp	2509.50	-42.08	-32.00	-13.00	-10.08	-29.08	Peak
3	3346.00	-49.12	-40.36	-13.00	-8.76	-36.12	Peak
4	4182.50	-46.37	-40.69	-13.00	-5.68	-33.37	Peak

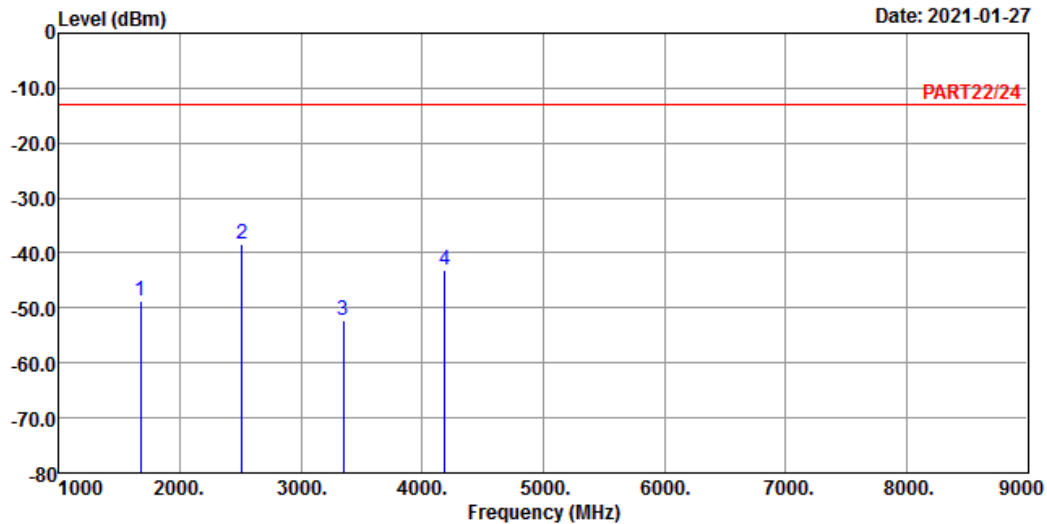


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_5M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-48.63	-34.73	-13.00	-13.90	-35.63	Peak
2	2509.50	-38.32	-28.24	-13.00	-10.08	-25.32	Peak
3	3346.00	-52.11	-43.35	-13.00	-8.76	-39.11	Peak
4	4182.50	-42.96	-37.28	-13.00	-5.68	-29.96	Peak

High Channel

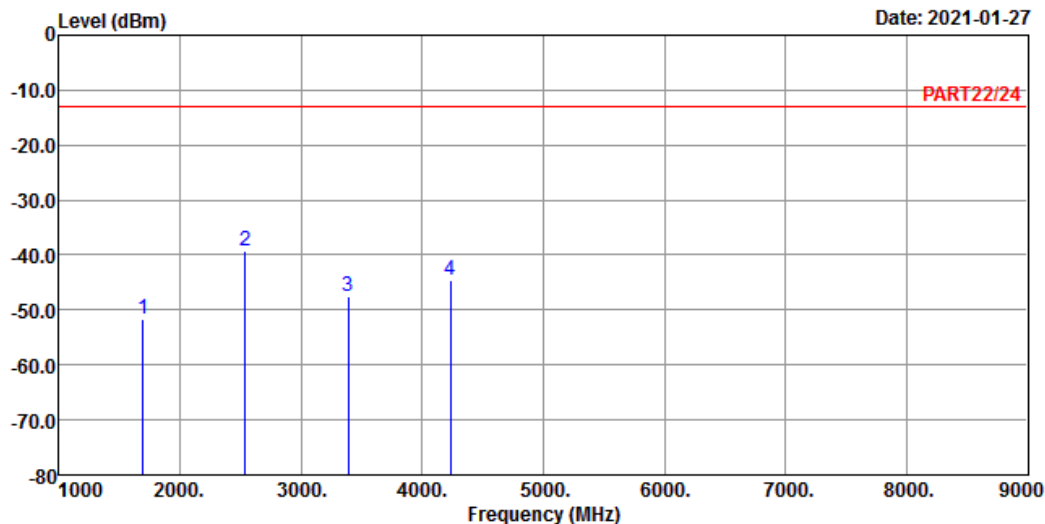


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_5M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1693.00	-51.69	-37.67	-13.00	-14.02	-38.69	Peak
2 pp	2539.50	-39.12	-29.06	-13.00	-10.06	-26.12	Peak
3	3386.00	-47.58	-38.95	-13.00	-8.63	-34.58	Peak
4	4232.50	-44.67	-39.12	-13.00	-5.55	-31.67	Peak

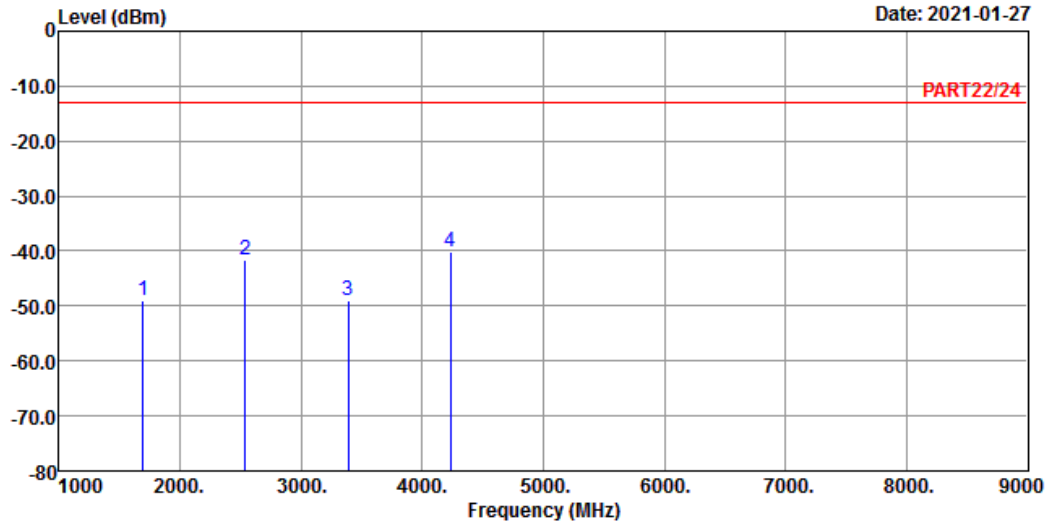


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_5M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1693.00	-49.10	-35.08	-13.00	-14.02	-36.10	Peak
2	2539.50	-41.55	-31.49	-13.00	-10.06	-28.55	Peak
3	3386.00	-49.08	-40.45	-13.00	-8.63	-36.08	Peak
4 pp	4232.50	-40.12	-34.57	-13.00	-5.55	-27.12	Peak

Channel Bandwidth: 10 MHz / QPSK
Low Channel

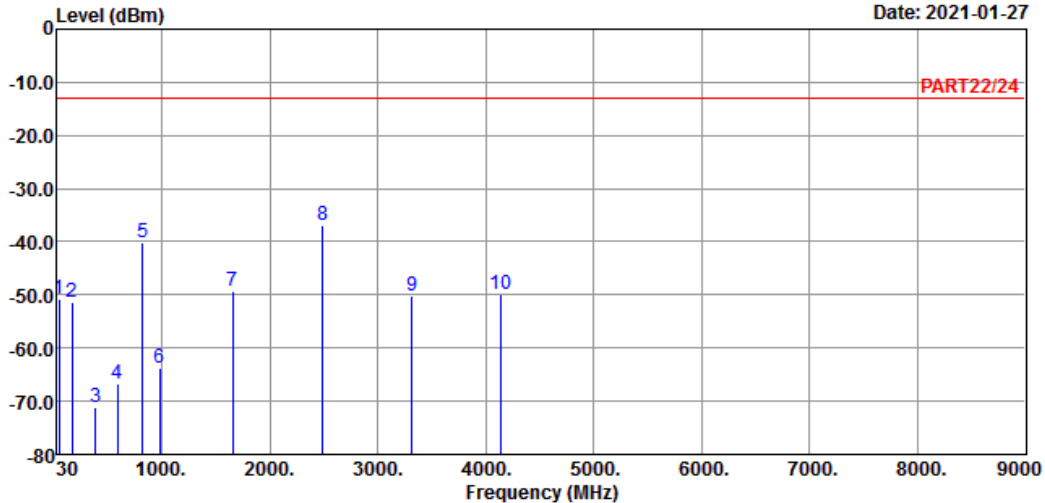


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-01-27



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : LTE Band 5 QPSK_10M Link_L-CH
Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-50.88	-49.41	-13.00	-1.47	-37.88	Peak
2	166.77	-51.35	-46.03	-13.00	-5.32	-38.35	Peak
3	386.96	-71.20	-65.18	-13.00	-6.02	-58.20	Peak
4	586.78	-66.67	-65.35	-13.00	-1.32	-53.67	Peak
5	824.00	-40.04	-40.56	-13.00	0.52	-27.04	Peak
6	982.54	-63.72	-66.68	-13.00	2.96	-50.72	Peak
7	1658.00	-49.25	-35.45	-13.00	-13.80	-36.25	Peak
8 pp	2487.00	-36.76	-26.71	-13.00	-10.05	-23.76	Peak
9	3316.00	-50.18	-41.32	-13.00	-8.86	-37.18	Peak
10	4145.00	-49.76	-43.82	-13.00	-5.94	-36.76	Peak

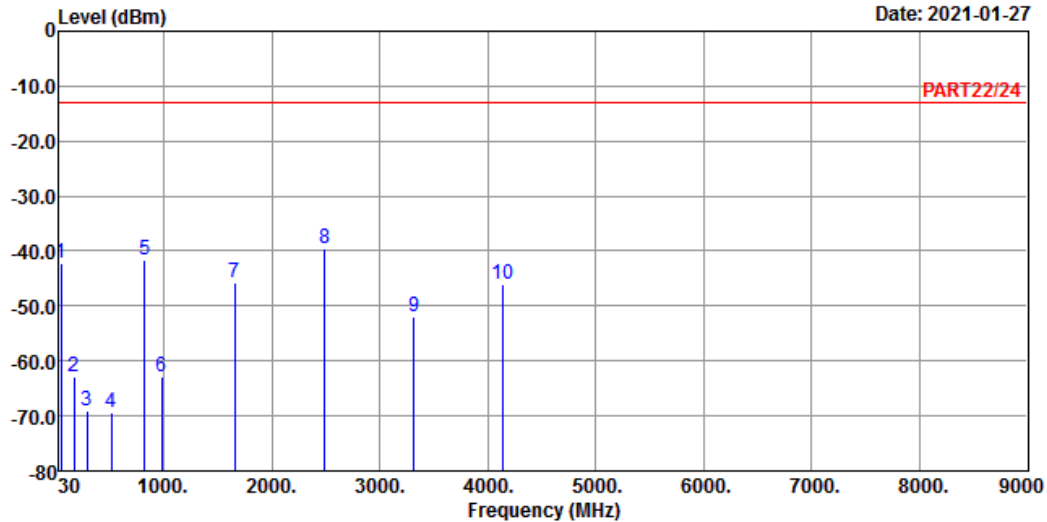


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_10M Link_L-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	43.58	-42.25	-40.78	-13.00	-1.47	-29.25	Peak
2	166.77	-62.84	-57.52	-13.00	-5.32	-49.84	Peak
3	290.93	-69.01	-62.18	-13.00	-6.83	-56.01	Peak
4	511.12	-69.32	-65.09	-13.00	-4.23	-56.32	Peak
5	824.00	-41.64	-42.16	-13.00	0.52	-28.64	Peak
6	981.57	-62.81	-65.74	-13.00	2.93	-49.81	Peak
7	1658.00	-45.79	-31.99	-13.00	-13.80	-32.79	Peak
8 pp	2487.00	-39.66	-29.61	-13.00	-10.05	-26.66	Peak
9	3316.00	-52.05	-43.19	-13.00	-8.86	-39.05	Peak
10	4145.00	-46.05	-40.11	-13.00	-5.94	-33.05	Peak

Middle Channel

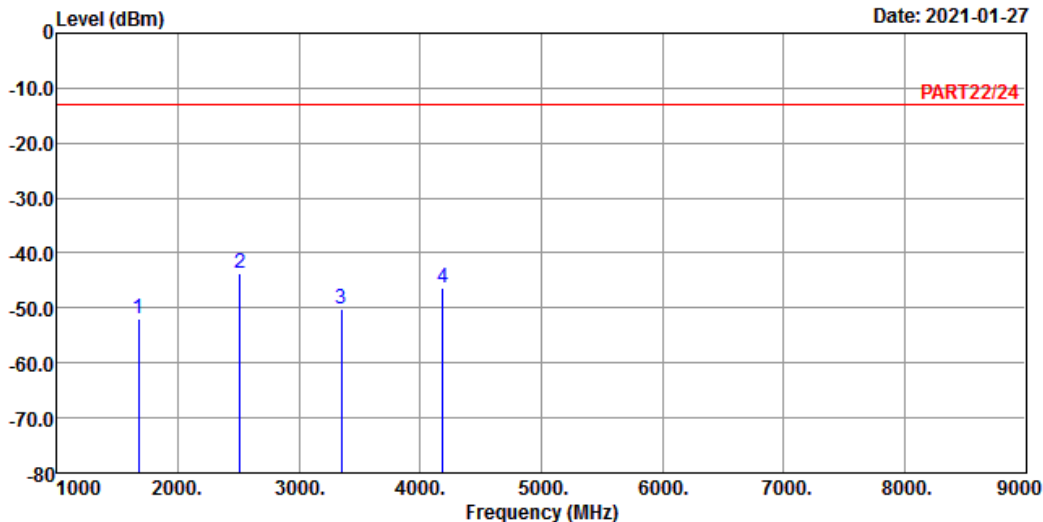


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_10M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-52.07	-38.17	-13.00	-13.90	-39.07	Peak
2 pp	2509.50	-43.61	-33.53	-13.00	-10.08	-30.61	Peak
3	3346.00	-50.08	-41.32	-13.00	-8.76	-37.08	Peak
4	4182.50	-46.46	-40.78	-13.00	-5.68	-33.46	Peak

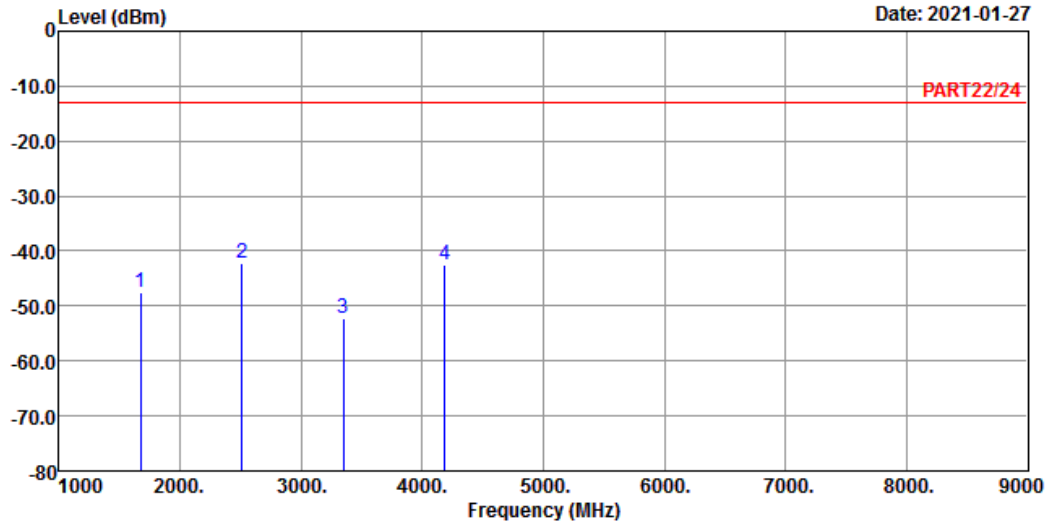


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_10M Link_M-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1673.00	-47.61	-33.71	-13.00	-13.90	-34.61	Peak
2	2509.50	-42.13	-32.05	-13.00	-10.08	-29.13	Peak
3	3346.00	-52.18	-43.42	-13.00	-8.76	-39.18	Peak
4	4182.50	-42.64	-36.96	-13.00	-5.68	-29.64	Peak

High Channel

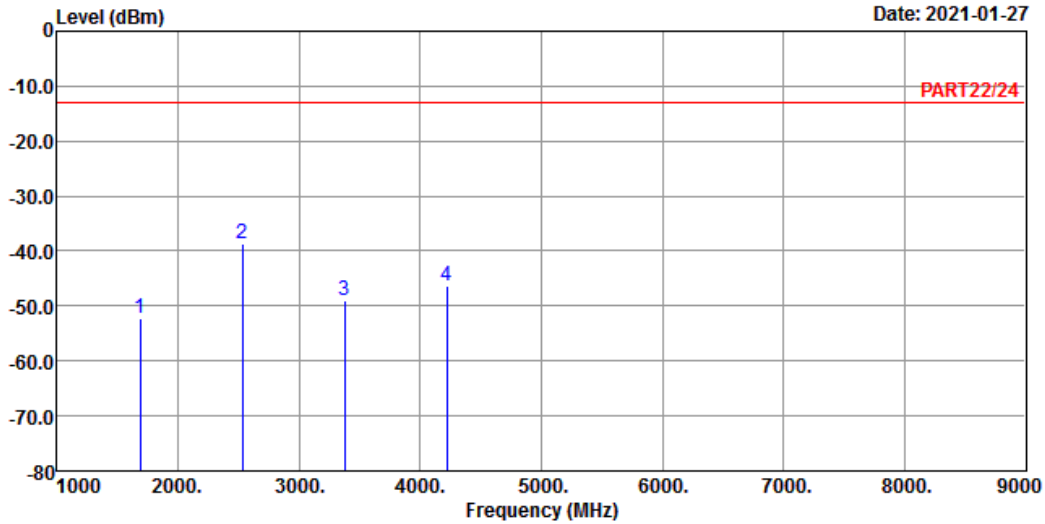


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : LTE Band 5 QPSK_10M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1688.00	-52.21	-38.22	-13.00	-13.99	-39.21	Peak
2 pp	2532.00	-38.78	-28.71	-13.00	-10.07	-25.78	Peak
3	3376.00	-48.91	-40.24	-13.00	-8.67	-35.91	Peak
4	4220.00	-46.31	-40.74	-13.00	-5.57	-33.31	Peak

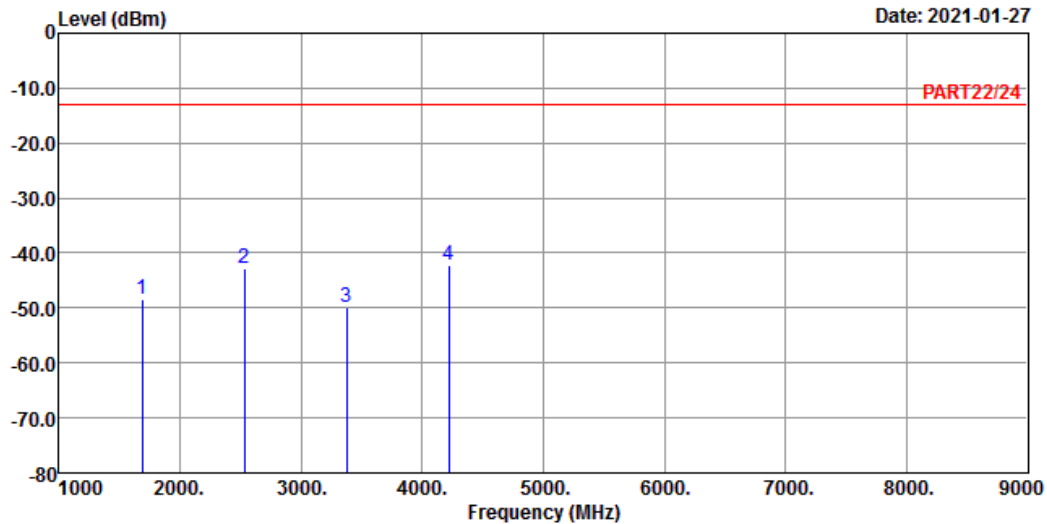


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-01-27



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : LTE Band 5 QPSK_10M Link_H-CH
 Tested by: tim-chen

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1688.00	-48.43	-34.44	-13.00	-13.99	-35.43	Peak
2	2532.00	-42.95	-32.88	-13.00	-10.07	-29.95	Peak
3	3376.00	-50.01	-41.34	-13.00	-8.67	-37.01	Peak
4 pp	4220.00	-42.36	-36.79	-13.00	-5.57	-29.36	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:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

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.

--- END ---