

Partial FCC Test Report (Part 27 – Cat-M1 B4/B12/B13/B66/B85)

Report No.: RFBCKS-WTW-P21050677-8

FCC ID: 2ASE7-BIOHB02CTM10

Test Model: ME910G1-WW

Received Date: May 18, 2021

Test Date: Jul. 09 ~ Jul. 10, 2021

Issued Date: Oct. 08, 2021

Applicant: BioIntelliSense, Inc

Address: 570 El Camino Real #200, Redwood City, CA 94063 US

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

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, TAIWAN

**FCC Registration /
Designation Number:** 788550 / TW0003



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Test Site and Instruments	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Configuration of System under Test	10
3.2.1 Description of Support Units	10
3.3 Test Mode Applicability and Tested Channel Detail	11
3.4 EUT Operating Conditions	19
3.5 General Description of Applied Standards and References	19
4 Test Types and Results	20
4.1 Output Power Measurement	20
4.1.1 Limits of Output Power Measurement	20
4.1.2 Test Procedures	20
4.1.3 Test Setup	20
4.1.4 Test Results	21
4.2 Radiated Emission Measurement	37
4.2.1 Limits of Radiated Emission Measurement	37
4.2.2 Test Procedure	37
4.2.3 Deviation from Test Standard	37
4.2.4 Test Setup	38
4.2.5 Test Results	39
5 Pictures of Test Arrangements	113
Appendix – Information of the Testing Laboratories	114

Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P21050677-8	Original release	Oct. 08, 2021

1 Certificate of Conformity

Product: Data Terminal Module

Brand: BioIntelliSense, Inc

Test Model: ME910G1-WW

Sample Status: Engineering sample

Applicant: BioIntelliSense, Inc

Test Date: Jul. 09 ~ Jul. 10, 2021

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

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

Prepared by : Celine Chou , **Date:** Oct. 08, 2021
Celine Chou / Senior Specialist

Approved by : Bruce Chen , **Date:** Oct. 08, 2021
Bruce Chen / Senior Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2						
FCC Clause				Test Item	Result	Remarks
Cat-M1 B4	Cat-M1 B12/B85	Cat-M1 B13	Cat-M1 B66			
2.1046 27.50 (d)(4)	2.1046 27.50 (c)	2.1046 27.50 (b)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1053 27.53 (h)	2.1053 27.53 (g)	2.1053 27.53 (c)(f)	2.1053 27.53 (h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -18.97dB at 1564.00MHz.

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	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	2.93 dB
	200MHz ~ 1000MHz	2.95 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer Agilent	N9010A	MY52220314	Dec. 07, 2020	Dec. 06, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Apr. 12, 2021	Apr. 11, 2022
Broadband Horn Antenna SCHWARZBECK	BBHA 9170	148	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. 13, 2021	Apr. 12, 2022
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 184045	980116	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-8 000	171005	Oct. 07, 2020	Oct. 06, 2021
RF Coaxial Cable HUBER+SUHNNER	SUCOFLEX 104	EMC104-SM-SM-1000(1 40807)	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

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	Data Terminal Module	
Brand	BioIntelliSense, Inc	
Test Model	ME910G1-WW	
Sample Status	Engineering sample	
Power Supply Rating	3.8Vdc	
Modulation Type	QPSK, 16QAM	
Operating Frequency	Cat-M1 Band 4 (Channel Bandwidth 1.4MHz)	1710.7MHz ~ 1754.3MHz
	Cat-M1 Band 4 (Channel Bandwidth 3MHz)	1711.5MHz ~ 1753.5MHz
	Cat-M1 Band 4 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1752.5MHz
	Cat-M1 Band 4 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1750.0MHz
	Cat-M1 Band 4 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1747.5MHz
	Cat-M1 Band 4 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1745.0MHz
	Cat-M1 Band 12 (Channel Bandwidth 1.4MHz)	699.7MHz ~ 715.3MHz
	Cat-M1 Band 12 (Channel Bandwidth 3MHz)	700.5MHz ~ 714.5MHz
	Cat-M1 Band 12 (Channel Bandwidth 5MHz)	701.5MHz ~ 713.5MHz
	Cat-M1 Band 12 (Channel Bandwidth 10MHz)	704.0MHz ~ 711.0MHz
	Cat-M1 Band 13 (Channel Bandwidth 5MHz)	779.5MHz ~ 784.5MHz
	Cat-M1 Band 13 (Channel Bandwidth 10MHz)	782.0MHz
	Cat-M1 Band 66 (Channel Bandwidth 1.4MHz)	1710.7MHz ~ 1779.3MHz
	Cat-M1 Band 66 (Channel Bandwidth 3MHz)	1711.5MHz ~ 1778.5MHz
	Cat-M1 Band 66 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1777.5MHz
	Cat-M1 Band 66 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1775.0MHz
	Cat-M1 Band 66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz
	Cat-M1 Band 66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz
	Cat-M1 Band 85 (Channel Bandwidth 5MHz)	700.5MHz ~ 713.5MHz
	Cat-M1 Band 85 (Channel Bandwidth 10MHz)	703.0MHz ~ 711.0MHz

Max. EIRP Power		QPSK	16QAM
	Cat-M1 Band 4 (Channel Bandwidth 1.4MHz)	369.828mW (25.68dBm)	281.838mW (24.50dBm)
	Cat-M1 Band 4 (Channel Bandwidth 3MHz)	373.250mW (25.72dBm)	300.608mW (24.78dBm)
	Cat-M1 Band 4 (Channel Bandwidth 5MHz)	368.129mW (25.66dBm)	354.813mW (25.50dBm)
	Cat-M1 Band 4 (Channel Bandwidth 10MHz)	363.078mW (25.60dBm)	360.579mW (25.57dBm)
	Cat-M1 Band 4 (Channel Bandwidth 15MHz)	378.443mW (25.78dBm)	360.579mW (25.57dBm)
	Cat-M1 Band 4 (Channel Bandwidth 20MHz)	366.438mW (25.64dBm)	358.096mW (25.54dBm)
	Cat-M1 Band 66 (Channel Bandwidth 1.4MHz)	352.371mW (25.47dBm)	285.102mW (24.55dBm)
	Cat-M1 Band 66 (Channel Bandwidth 3MHz)	380.189mW (25.80dBm)	285.759mW (24.56dBm)
	Cat-M1 Band 66 (Channel Bandwidth 5MHz)	381.066mW (25.81dBm)	354.813mW (25.50dBm)
	Cat-M1 Band 66 (Channel Bandwidth 10MHz)	386.367mW (25.87dBm)	344.350mW (25.37dBm)
	Cat-M1 Band 66 (Channel Bandwidth 15MHz)	368.129mW (25.66dBm)	363.078mW (25.60dBm)
	Cat-M1 Band 66 (Channel Bandwidth 20MHz)	387.258mW (25.88dBm)	369.828mW (25.68dBm)
Max. ERP Power		QPSK	16QAM
	Cat-M1 Band 12 (Channel Bandwidth 1.4MHz)	22.284mW (13.48dBm)	19.815mW (12.97dBm)
	Cat-M1 Band 12 (Channel Bandwidth 3MHz)	24.774mW (13.94dBm)	20.137mW (13.04dBm)
	Cat-M1 Band 12 (Channel Bandwidth 5MHz)	24.774mW (13.94dBm)	22.080mW (13.44dBm)
	Cat-M1 Band 12 (Channel Bandwidth 10MHz)	25.351mW (14.04dBm)	22.182mW (13.46dBm)
	Cat-M1 Band 13 (Channel Bandwidth 5MHz)	48.195mW (16.83dBm)	42.954mW (16.33dBm)
	Cat-M1 Band 13 (Channel Bandwidth 10MHz)	44.978mW (16.53dBm)	43.954mW (16.43dBm)
	Cat-M1 Band 85 (Channel Bandwidth 5MHz)	23.659mW (13.74dBm)	22.336mW (13.49dBm)
	Cat-M1 Band 85 (Channel Bandwidth 10MHz)	24.044mW (13.81dBm)	23.933mW (13.79dBm)

Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter
Cable Supplied	NA

Note:

1. This report is prepared for FCC class II permissive change. The differences compared with the original design are added antenna and antenna trace change. Therefore, only test item of Effective Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer Shenzhen STS Test Services Co., Ltd. report no.: STS1912245W01 for module (Brand: Telit, Model: ME910G1-WW).
2. The following antennas were provided to the EUT.

Original antenna

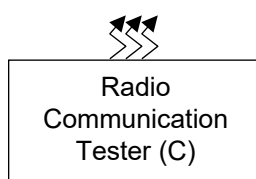
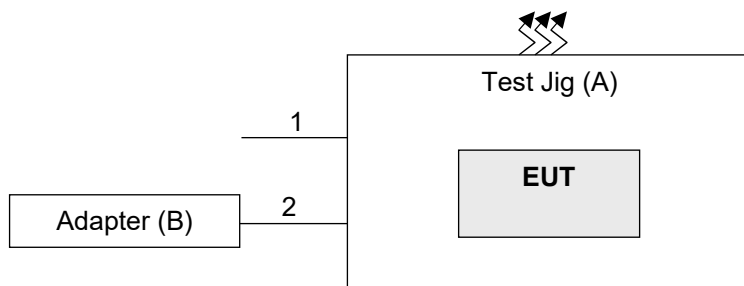
Antenna Type	Antenna gain (dBi)										
	GPRS 850	GPRS 1900	Cat-M1 B2	Cat-M1 B4	Cat-M1 B5	Cat-M1 B12	Cat-M1 B13	Cat-M1 B25	Cat-M1 B26	Cat-M1 B66	Cat-M1 B85
External	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14

New antenna

Antenna Type	Antenna gain (dBi)										
	GPRS 850	GPRS 1900	Cat-M1 B2	Cat-M1 B4	Cat-M1 B5	Cat-M1 B12	Cat-M1 B13	Cat-M1 B25	Cat-M1 B26	Cat-M1 B66	Cat-M1 B85
PIFA	-1.22	2.06	2.06	2.20	-1.22	-7.22	-4.03	2.06	0.10	2.20	-7.22

*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.

3.2 Configuration of System under Test



Remote site

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.	Test Jig	NA	NA	NA	NA	Provided by manufacturer
B.	Adapter	APD	WB-10Q05FU	NA	NA	Provided by manufacturer
C.	Radio Communication Tester	Anritsu	MT8820C	6201300640	NA	-

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Type C to USB cable	1	1.0	N	0	-
2.	Power cable	1	2.0	N	0	Provided by manufacturer Attached on adapter

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
Cat-M1 Band 4	X-plane
Cat-M1 Band 12	X-plane
Cat-M1 Band 13	X-plane
Cat-M1 Band 66	X-plane
Cat-M1 Band 85	X-plane

Cat-M1 Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		19965 to 20385	19965 (1711.5MHz), 20175 (1732.5MHz), 20385 (1753.5MHz)	3MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		20000 to 20350	20000 (1715.0MHz), 20175 (1732.5MHz), 20350 (1750.0MHz)	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		20025 to 20325	20025 (1717.5MHz), 20175 (1732.5MHz), 20325 (1747.5MHz)	15MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	20050 to 20300	20300 (1745.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	19957 to 20393	19957 (1710.7MHz), 20175 (1732.5MHz), 20393 (1754.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	19975 (1712.5MHz), 20175 (1732.5MHz), 20375 (1752.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20050 (1720.0MHz), 20175 (1732.5MHz), 20300 (1745.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM measured value of QPSK is higher than 16QAM mode. Therefore, the Radiated Emission test item was performed under QPSK mode only.

Cat-M1 Band 12

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		23025 to 23165	23025 (700.5MHz), 23095 (707.5MHz), 23165 (714.5MHz)	3MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0 MHz)	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	23060 to 23130	23060 (704.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	23017 to 23173	23017 (699.7MHz), 23095 (707.5MHz), 23173 (715.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		23035 to 23155	23035 (701.5MHz), 23095 (707.5MHz), 23155 (713.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		23060 to 23130	23060 (704.0MHz), 23095 (707.5MHz), 23130 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM measured value of QPSK is higher than 16QAM mode. Therefore, the Radiated Emission test item was performed under QPSK mode only.

Cat-M1 Band 13

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM measured value of QPSK is higher than 16QAM mode. Therefore, the Radiated Emission test item was performed under QPSK mode only.

Cat-M1 Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	132072 to 132572	132072 (1720.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM measured value of QPSK is higher than 16QAM mode. Therefore, the Radiated Emission test item was performed under QPSK mode only.

Cat-M1 Band 85

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	134027 to 134157	134027 (700.5MHz), 134092 (707.0MHz), 134157 (713.5MHz)	5MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
		134052 to 134132	134052 (703.0MHz), 134092 (707.0MHz), 134132 (711.0MHz)	10MHz	QPSK / 16QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 3 RB Offset 5 RB / 0 RB Offset 5 RB / 1 RB Offset 6 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	134052 to 134132	134052 (703.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	134027 to 134157	134027 (700.5MHz), 134092 (707.0MHz), 134157 (713.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		134052 to 134132	134052 (703.0MHz), 134092 (707.0MHz), 134132 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.
3. The output power for QPSK, 16QAM measured value of QPSK is higher than 16QAM mode. Therefore, the Radiated Emission test item was performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 60%RH	120Vac, 60Hz	Cookie Ku
Radiated Emission	25deg. C, 60%RH	120Vac, 60Hz	Cookie Ku

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 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

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

For Cat-M1 Band 4, Cat-M1 Band 66:

Mobile / Portable station are limited to 1 watts e.i.r.p.

For Cat-M1 Band 12, Cat-M1 Band 13, Cat-M1 Band 85:

Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with Cat-M1 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.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$

$$\text{ERP} = P_{\text{Meas}} + G_T - 2.15$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively
(expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

4.1.3 Test Setup

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

Cat-M1 Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	23.44	23.42	23.11
		1	5	23.41	23.36	23.10
		3	0	22.49	22.59	22.41
		3	3	22.41	22.50	22.41
		6	0	22.55	22.49	22.48
20M	16QAM	1	0	23.29	23.26	23.34
		1	5	23.22	23.30	23.30
		3	0	22.34	22.22	22.24
		3	3	22.23	22.22	22.36
		5	0	22.95	22.96	22.93
		5	1	22.85	22.82	22.86
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	23.41	23.44	23.58
		1	5	23.48	23.42	23.47
		3	0	22.43	22.49	22.55
		3	3	22.50	22.58	22.49
		6	0	22.45	22.58	22.49
15M	16QAM	1	0	23.37	23.33	23.25
		1	5	23.29	23.36	23.29
		3	0	22.30	22.20	22.33
		3	3	22.21	22.34	22.35
		5	0	22.97	22.97	22.95
		5	1	22.90	22.87	22.86
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	23.18	23.40	23.34
		1	5	23.15	23.37	23.31
		3	0	22.56	22.54	22.56
		3	3	22.46	22.42	22.41
		6	0	22.45	22.41	22.46
10M	16QAM	1	0	23.21	23.37	23.15
		1	5	23.22	23.20	23.11
		3	0	22.32	22.38	22.30
		3	3	22.30	22.22	22.39
		5	0	21.94	21.98	21.99
		5	1	21.80	21.86	21.81

Cat-M1 Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	23.28	23.31	23.46
		1	5	23.24	23.25	23.43
		3	0	22.48	22.40	22.40
		3	3	22.51	22.58	22.42
		6	0	22.46	22.40	22.41
5M	16QAM	1	0	23.02	23.28	23.30
		1	5	23.00	23.20	23.24
		3	0	22.28	22.40	22.30
		3	3	22.29	22.38	21.66
		5	0	21.64	21.44	21.66
		5	1	21.65	21.41	21.64
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	23.46	23.45	23.52
		1	5	23.49	23.41	23.48
		3	0	22.60	22.46	22.42
		3	3	22.44	22.55	22.59
		6	0	21.12	21.22	21.37
3M	16QAM	1	0	22.58	22.35	22.11
		1	5	22.39	22.24	22.08
		3	0	22.23	22.38	22.22
		3	3	22.40	22.32	22.35
		5	0	21.32	21.31	21.67
		5	1	21.25	21.25	21.56
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	23.42	23.48	23.44
		1	5	23.41	23.42	23.15
		3	0	22.40	22.56	22.53
		3	3	22.57	22.45	22.45
		6	0	21.44	21.31	21.17
1.4M	16QAM	1	0	22.17	22.30	22.24
		1	5	22.07	22.28	22.21
		3	0	22.22	22.19	22.21
		3	3	22.26	22.22	22.27
		5	0	21.33	21.31	21.50
		5	1	21.30	21.24	21.16

Cat-M1 Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	23.41	23.21	22.88
		1	5	23.23	23.17	22.87
		3	0	23.07	23.10	22.17
		3	3	23.06	23.00	22.05
		6	0	22.05	22.12	21.85
10M	16QAM	1	0	22.80	22.83	22.80
		1	5	22.72	22.66	22.76
		3	0	22.66	22.51	22.72
		3	3	22.65	22.48	22.74
		5	0	22.14	22.05	21.86
		5	1	22.12	22.01	21.79
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	23.18	23.10	23.31
		1	5	23.14	23.07	23.24
		3	0	23.12	23.07	23.11
		3	3	23.05	23.02	23.07
		6	0	22.07	21.98	21.45
5M	16QAM	1	0	22.41	22.81	22.36
		1	5	22.37	22.72	22.25
		3	0	22.35	22.65	22.28
		3	3	22.31	22.69	22.22
		5	0	21.57	21.21	21.30
		5	1	21.51	21.17	21.29
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	22.73	23.05	23.31
		1	5	22.67	23.01	23.25
		3	0	22.62	22.97	23.18
		3	3	22.55	22.92	23.13
		6	0	21.14	21.25	21.01
3M	16QAM	1	0	22.05	22.01	22.41
		1	5	22.06	21.92	22.28
		3	0	22.01	21.88	22.12
		3	3	22.02	21.84	22.17
		5	0	21.23	21.01	21.11
		5	1	21.18	20.98	21.09

Cat-M1 Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	22.37	22.85	22.57
		1	5	22.31	22.81	22.47
		3	0	22.29	22.74	22.45
		3	3	22.24	22.81	22.36
		6	0	21.02	21.01	21.03
1.4M	16QAM	1	0	22.34	21.82	22.11
		1	5	22.31	21.81	22.07
		3	0	22.24	21.85	22.02
		3	3	22.22	21.82	22.05
		5	0	21.01	20.98	21.19
		5	1	21.00	20.91	21.14

Cat-M1 Band 13						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		23230		
		Frequency (MHz)		782		
10M	QPSK	1	0	22.71		
		1	5	22.61		
		3	0	22.54		
		3	3	22.43		
		6	0	22.01		
10M	16QAM	1	0	22.61		
		1	5	22.54		
		3	0	22.48		
		3	3	22.42		
		5	0	22.12		
		5	1	22.08		
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	22.73	22.90	23.01
		1	5	22.65	22.88	22.92
		3	0	22.52	22.68	21.85
		3	3	22.45	22.61	21.81
		6	0	22.00	21.95	21.70
5M	16QAM	1	0	22.25	22.51	22.44
		1	5	22.17	22.47	22.38
		3	0	22.09	22.34	21.18
		3	3	22.02	22.31	21.12
		5	0	21.10	20.88	21.15
		5	1	21.04	20.74	21.14

Cat-M1 Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132575
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	23.68	23.45	23.27
		1	5	23.45	23.41	23.16
		3	0	22.51	22.57	22.55
		3	3	22.42	22.59	22.51
		6	0	22.50	22.83	22.85
20M	16QAM	1	0	23.31	23.38	23.48
		1	5	23.27	23.31	23.36
		3	0	22.26	22.30	22.35
		3	3	22.37	22.31	22.28
		5	0	22.73	22.62	22.65
		5	1	22.66	22.68	22.57
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	23.46	23.41	23.36
		1	5	23.41	23.40	23.35
		3	0	22.40	22.48	22.53
		3	3	22.58	22.53	22.50
		6	0	22.89	22.89	22.91
15M	16QAM	1	0	23.27	23.35	23.40
		1	5	23.22	23.33	23.32
		3	0	22.32	22.37	22.26
		3	3	22.32	22.21	22.21
		5	0	22.89	22.81	22.85
		5	1	22.73	22.71	22.76
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	23.67	23.31	23.07
		1	5	23.60	23.26	23.01
		3	0	22.49	22.43	22.50
		3	3	22.49	22.50	22.60
		6	0	22.35	22.31	22.05
10M	16QAM	1	0	23.11	23.17	23.16
		1	5	23.02	23.09	23.11
		3	0	22.35	22.35	22.31
		3	3	22.28	22.30	22.24
		5	0	21.87	21.95	21.85
		5	1	21.86	21.93	21.96

Cat-M1 Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	23.61	23.41	23.27
		1	5	23.44	23.33	23.18
		3	0	22.53	22.41	22.40
		3	3	22.52	22.46	22.61
		6	0	22.24	22.31	22.48
5M	16QAM	1	0	23.21	23.30	23.29
		1	5	23.14	23.24	23.20
		3	0	22.29	22.35	22.20
		3	3	22.32	22.23	21.41
		5	0	21.51	21.41	21.39
		5	1	21.42	21.38	21.36
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	23.60	23.57	23.46
		1	5	23.54	23.45	23.42
		3	0	22.46	22.56	22.57
		3	3	22.49	22.40	22.47
		6	0	21.01	21.29	21.53
3M	16QAM	1	0	22.36	22.32	22.31
		1	5	22.28	22.24	22.22
		3	0	22.27	22.20	22.23
		3	3	22.33	22.26	22.17
		5	0	21.05	21.15	21.41
		5	1	21.01	21.14	21.34
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	22.85	23.27	23.16
		1	5	22.77	23.16	23.12
		3	0	22.60	22.42	22.59
		3	3	22.50	22.43	22.54
		6	0	21.33	21.28	21.12
1.4M	16QAM	1	0	22.35	22.29	22.25
		1	5	22.32	22.26	22.21
		3	0	22.26	22.34	22.24
		3	3	22.24	22.27	22.25
		5	0	21.05	21.26	21.41
		5	1	21.01	21.24	21.36

Cat-M1 Band 85						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134052	134092	134132
		Frequency (MHz)		703	707	711
10M	QPSK	1	0	22.66	23.18	22.79
		1	5	22.63	22.83	22.69
		3	0	22.40	22.52	22.60
		3	3	22.29	22.51	22.43
		6	0	21.75	21.81	21.56
10M	16QAM	1	0	23.16	22.81	22.66
		1	5	23.12	22.72	22.58
		3	0	22.87	22.38	22.36
		3	3	22.78	22.25	22.20
		5	0	22.50	22.27	21.76
		5	1	22.45	22.19	21.71
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134027	134092	134157
		Frequency (MHz)		700.5	707	713.5
5M	QPSK	1	0	23.11	22.88	22.49
		1	5	23.07	22.83	22.41
		3	0	23.05	22.55	22.31
		3	3	23.01	22.54	21.90
		6	0	22.15	22.02	21.81
5M	16QAM	1	0	22.76	22.86	22.65
		1	5	22.71	22.74	22.51
		3	0	22.39	22.32	22.31
		3	3	22.38	22.24	22.26
		5	0	21.09	21.13	20.93
		5	1	21.03	21.05	20.91

EIRP / ERP Power (dBm)

Cat-M1 Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20050	20175	20300
		Frequency (MHz)		1720	1732.5	1745
20M	QPSK	1	0	25.64	25.62	25.31
		1	5	25.61	25.56	25.30
		3	0	24.69	24.79	24.61
		3	3	24.61	24.70	24.61
		6	0	24.75	24.69	24.68
20M	16QAM	1	0	25.49	25.46	25.54
		1	5	25.42	25.50	25.50
		3	0	24.54	24.42	24.44
		3	3	24.43	24.42	24.56
		5	0	25.15	25.16	25.13
		5	1	25.05	25.02	25.06
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20025	20175	20325
		Frequency (MHz)		1717.5	1732.5	1747.5
15M	QPSK	1	0	25.61	25.64	25.78
		1	5	25.68	25.62	25.67
		3	0	24.63	24.69	24.75
		3	3	24.70	24.78	24.69
		6	0	24.65	24.78	24.69
15M	16QAM	1	0	25.57	25.53	25.45
		1	5	25.49	25.56	25.49
		3	0	24.50	24.40	24.53
		3	3	24.41	24.54	24.55
		5	0	25.17	25.17	25.15
		5	1	25.10	25.07	25.06
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20000	20175	20350
		Frequency (MHz)		1715	1732.5	1750
10M	QPSK	1	0	25.38	25.60	25.54
		1	5	25.35	25.57	25.51
		3	0	24.76	24.74	24.76
		3	3	24.66	24.62	24.61
		6	0	24.65	24.61	24.66
10M	16QAM	1	0	25.41	25.57	25.35
		1	5	25.42	25.40	25.31
		3	0	24.52	24.58	24.50
		3	3	24.50	24.42	24.59
		5	0	24.14	24.18	24.19
		5	1	24.00	24.06	24.01

Cat-M1 Band 4						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19975	20175	20375
		Frequency (MHz)		1712.5	1732.5	1752.5
5M	QPSK	1	0	25.48	25.51	25.66
		1	5	25.44	25.45	25.63
		3	0	24.68	24.60	24.60
		3	3	24.71	24.78	24.62
		6	0	24.66	24.60	24.61
5M	16QAM	1	0	25.22	25.48	25.50
		1	5	25.20	25.40	25.44
		3	0	24.48	24.60	24.50
		3	3	24.49	24.58	23.86
		5	0	23.84	23.64	23.86
		5	1	23.85	23.61	23.84
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19965	20175	20385
		Frequency (MHz)		1711.5	1732.5	1753.5
3M	QPSK	1	0	25.66	25.65	25.72
		1	5	25.69	25.61	25.68
		3	0	24.80	24.66	24.62
		3	3	24.64	24.75	24.79
		6	0	23.32	23.42	23.57
3M	16QAM	1	0	24.78	24.55	24.31
		1	5	24.59	24.44	24.28
		3	0	24.43	24.58	24.42
		3	3	24.60	24.52	24.55
		5	0	23.52	23.51	23.87
		5	1	23.45	23.45	23.76
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		19957	20175	20393
		Frequency (MHz)		1710.7	1732.5	1754.3
1.4M	QPSK	1	0	25.62	25.68	25.64
		1	5	25.61	25.62	25.35
		3	0	24.60	24.76	24.73
		3	3	24.77	24.65	24.65
		6	0	23.64	23.51	23.37
1.4M	16QAM	1	0	24.37	24.50	24.44
		1	5	24.27	24.48	24.41
		3	0	24.42	24.39	24.41
		3	3	24.46	24.42	24.47
		5	0	23.53	23.51	23.70
		5	1	23.50	23.44	23.36

Cat-M1 Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23060	23095	23130
		Frequency (MHz)		704	707.5	711
10M	QPSK	1	0	14.04	13.84	13.51
		1	5	13.86	13.80	13.50
		3	0	13.70	13.73	12.80
		3	3	13.69	13.63	12.68
		6	0	12.68	12.75	12.48
10M	16QAM	1	0	13.43	13.46	13.43
		1	5	13.35	13.29	13.39
		3	0	13.29	13.14	13.35
		3	3	13.28	13.11	13.37
		5	0	12.77	12.68	12.49
		5	1	12.75	12.64	12.42
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23035	23095	23155
		Frequency (MHz)		701.5	707.5	713.5
5M	QPSK	1	0	13.81	13.73	13.94
		1	5	13.77	13.70	13.87
		3	0	13.75	13.70	13.74
		3	3	13.68	13.65	13.70
		6	0	12.70	12.61	12.08
5M	16QAM	1	0	13.04	13.44	12.99
		1	5	13.00	13.35	12.88
		3	0	12.98	13.28	12.91
		3	3	12.94	13.32	12.85
		5	0	12.20	11.84	11.93
		5	1	12.14	11.80	11.92
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23025	23095	23165
		Frequency (MHz)		700.5	707.5	714.5
3M	QPSK	1	0	13.36	13.68	13.94
		1	5	13.30	13.64	13.88
		3	0	13.25	13.60	13.81
		3	3	13.18	13.55	13.76
		6	0	11.77	11.88	11.64
3M	16QAM	1	0	12.68	12.64	13.04
		1	5	12.69	12.55	12.91
		3	0	12.64	12.51	12.75
		3	3	12.65	12.47	12.80
		5	0	11.86	11.64	11.74
		5	1	11.81	11.61	11.72

Cat-M1 Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23017	23095	23173
		Frequency (MHz)		699.7	707.5	715.3
1.4M	QPSK	1	0	13.00	13.48	13.20
		1	5	12.94	13.44	13.10
		3	0	12.92	13.37	13.08
		3	3	12.87	13.44	12.99
		6	0	11.65	11.64	11.66
1.4M	16QAM	1	0	12.97	12.45	12.74
		1	5	12.94	12.44	12.70
		3	0	12.87	12.48	12.65
		3	3	12.85	12.45	12.68
		5	0	11.64	11.61	11.82
		5	1	11.63	11.54	11.77

Cat-M1 Band 13						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		23230		
		Frequency (MHz)		782		
10M	QPSK	1	0	16.53		
		1	5	16.43		
		3	0	16.36		
		3	3	16.25		
		6	0	15.83		
10M	16QAM	1	0	16.43		
		1	5	16.36		
		3	0	16.30		
		3	3	16.24		
		5	0	15.94		
		5	1	15.90		
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	16.55	16.72	16.83
		1	5	16.47	16.70	16.74
		3	0	16.34	16.50	15.67
		3	3	16.27	16.43	15.63
		6	0	15.82	15.77	15.52
5M	16QAM	1	0	16.07	16.33	16.26
		1	5	15.99	16.29	16.20
		3	0	15.91	16.16	15.00
		3	3	15.84	16.13	14.94
		5	0	14.92	14.70	14.97
		5	1	14.86	14.56	14.96

Cat-M1 Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132575
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	25.88	25.65	25.47
		1	5	25.65	25.61	25.36
		3	0	24.71	24.77	24.75
		3	3	24.62	24.79	24.71
		6	0	24.70	25.03	25.05
20M	16QAM	1	0	25.51	25.58	25.68
		1	5	25.47	25.51	25.56
		3	0	24.46	24.50	24.55
		3	3	24.57	24.51	24.48
		5	0	24.93	24.82	24.85
		5	1	24.86	24.88	24.77
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	25.66	25.61	25.56
		1	5	25.61	25.60	25.55
		3	0	24.60	24.68	24.73
		3	3	24.78	24.73	24.70
		6	0	25.09	25.09	25.11
15M	16QAM	1	0	25.47	25.55	25.60
		1	5	25.42	25.53	25.52
		3	0	24.52	24.57	24.46
		3	3	24.52	24.41	24.41
		5	0	25.09	25.01	25.05
		5	1	24.93	24.91	24.96
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	25.87	25.51	25.27
		1	5	25.80	25.46	25.21
		3	0	24.69	24.63	24.70
		3	3	24.69	24.70	24.80
		6	0	24.55	24.51	24.25
10M	16QAM	1	0	25.31	25.37	25.36
		1	5	25.22	25.29	25.31
		3	0	24.55	24.55	24.51
		3	3	24.48	24.50	24.44
		5	0	24.07	24.15	24.05
		5	1	24.06	24.13	24.16

Cat-M1 Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	25.81	25.61	25.47
		1	5	25.64	25.53	25.38
		3	0	24.73	24.61	24.60
		3	3	24.72	24.66	24.81
		6	0	24.44	24.51	24.68
5M	16QAM	1	0	25.41	25.50	25.49
		1	5	25.34	25.44	25.40
		3	0	24.49	24.55	24.40
		3	3	24.52	24.43	23.61
		5	0	23.71	23.61	23.59
		5	1	23.62	23.58	23.56
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	25.80	25.77	25.66
		1	5	25.74	25.65	25.62
		3	0	24.66	24.76	24.77
		3	3	24.69	24.60	24.67
		6	0	23.21	23.49	23.73
3M	16QAM	1	0	24.56	24.52	24.51
		1	5	24.48	24.44	24.42
		3	0	24.47	24.40	24.43
		3	3	24.53	24.46	24.37
		5	0	23.25	23.35	23.61
		5	1	23.21	23.34	23.54
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	25.05	25.47	25.36
		1	5	24.97	25.36	25.32
		3	0	24.80	24.62	24.79
		3	3	24.70	24.63	24.74
		6	0	23.53	23.48	23.32
1.4M	16QAM	1	0	24.55	24.49	24.45
		1	5	24.52	24.46	24.41
		3	0	24.46	24.54	24.44
		3	3	24.44	24.47	24.45
		5	0	23.25	23.46	23.61
		5	1	23.21	23.44	23.56

Cat-M1 Band 85						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134052	134092	134132
		Frequency (MHz)		703	707	711
10M	QPSK	1	0	13.29	13.81	13.42
		1	5	13.26	13.46	13.32
		3	0	13.03	13.15	13.23
		3	3	12.92	13.14	13.06
		6	0	12.38	12.44	12.19
10M	16QAM	1	0	13.79	13.44	13.29
		1	5	13.75	13.35	13.21
		3	0	13.50	13.01	12.99
		3	3	13.41	12.88	12.83
		5	0	13.13	12.90	12.39
		5	1	13.08	12.82	12.34
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134027	134092	134157
		Frequency (MHz)		700.5	707	713.5
5M	QPSK	1	0	13.74	13.51	13.12
		1	5	13.70	13.46	13.04
		3	0	13.68	13.18	12.94
		3	3	13.64	13.17	12.53
		6	0	12.78	12.65	12.44
5M	16QAM	1	0	13.39	13.49	13.28
		1	5	13.34	13.37	13.14
		3	0	13.02	12.95	12.94
		3	3	13.01	12.87	12.89
		5	0	11.72	11.76	11.56
		5	1	11.66	11.68	11.54

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

For Cat-M1 Band 4, Cat-M1 Band 66:

According to FCC 27.53(h) for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz, 1915-1920MHz, 1995-2000 MHz, 2000-2020MHz, 2110-2155MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log (P)$ dB.

For Cat-M1 Band 12, Cat-M1 Band 85:

According to FCC 27.53(g) for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater.

For Cat-M1 Band 13:

According to FCC 27.53(c)(2) for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

According to FCC 27.53(f) for operations in the 775-788 MHz, emissions in the band 1559-1610MHz shall be limited to -70 dBW/MHz. The limit of emissions is equal to -40 dBm

4.2.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m (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 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. Correction Factor (includes EIRP and ERP unit conversion factor) = $\text{Antenna gain of substitution horn} - \text{Tx cable loss}$. Measurement method refers to ANSI C63.26 section 5.5.3.2.
- c. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15\text{dBi}$.

Note:

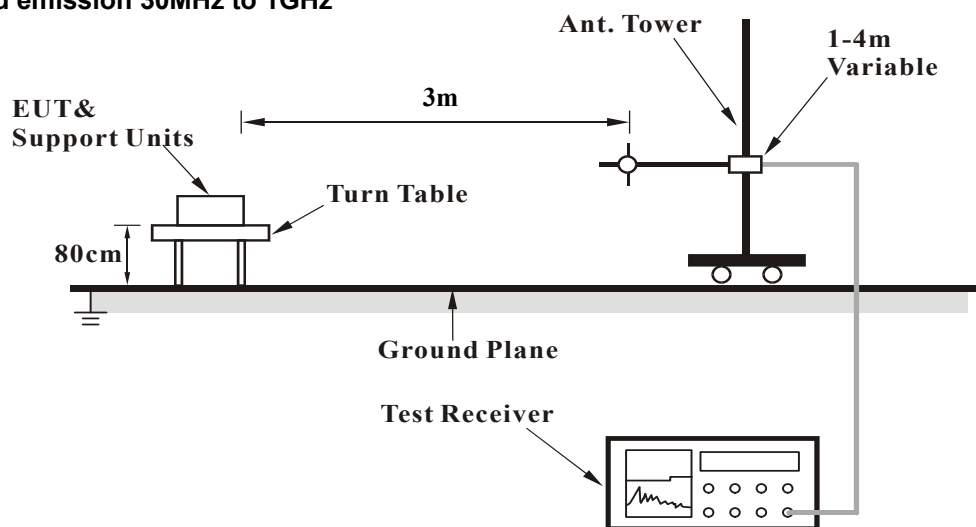
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.3 Deviation from Test Standard

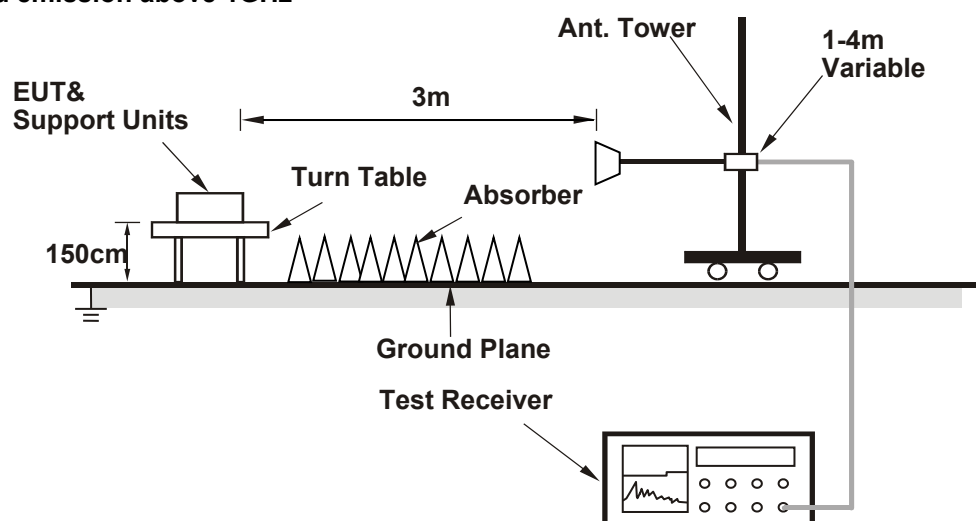
No deviation.

4.2.4 Test Setup

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.2.5 Test Results

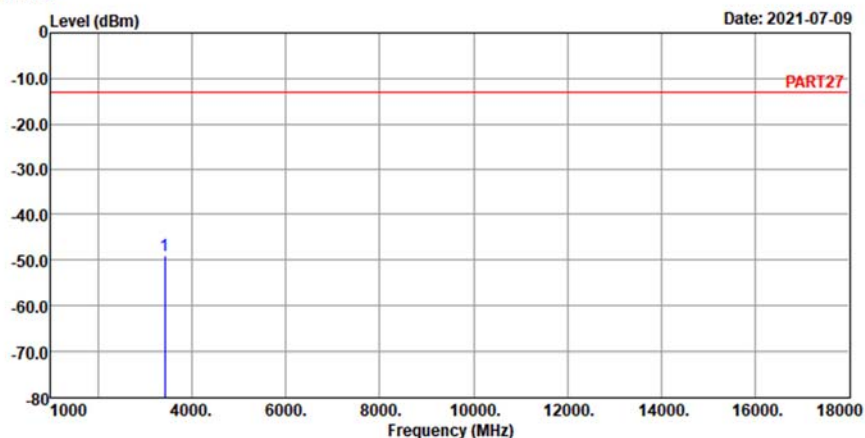
Cat-M1 Band 4, Channel Bandwidth 1.4MHz
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : CAT-M1 Band 4 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3421.40	-48.89	-40.55	-13.00	-8.34	-35.89	Peak

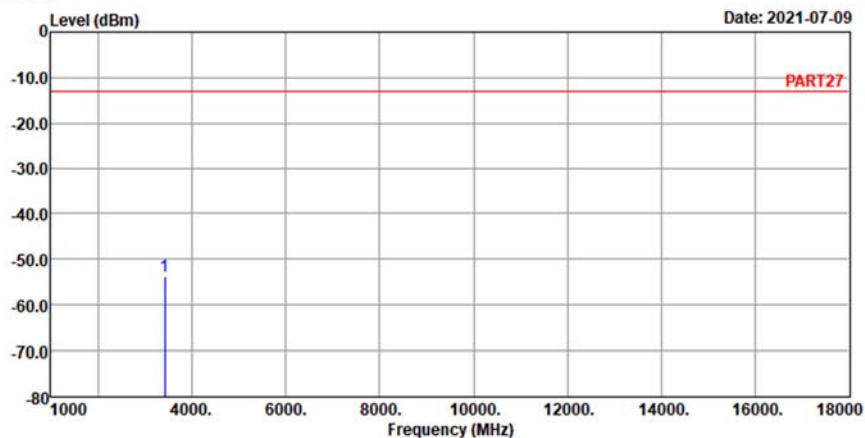


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : CAT-M1 Band 4 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3421.40 -53.71 -45.37 -13.00 -8.34 -40.71 Peak

Mid Channel

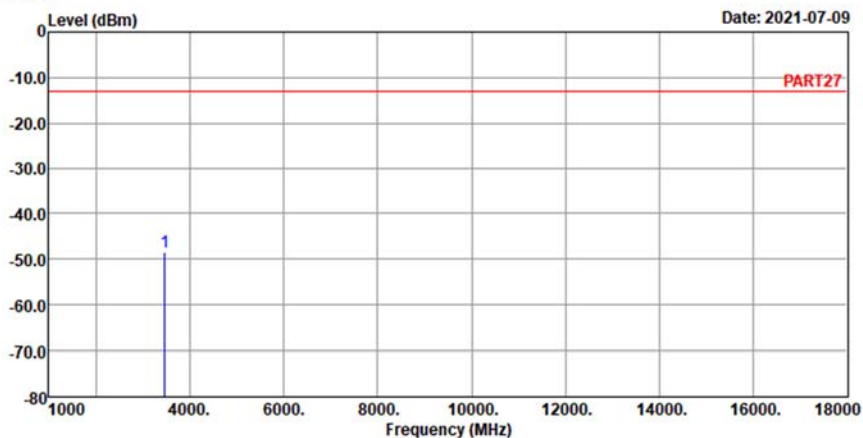


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 4 QPSK_1.4M Link_M-CH

Tested by: Cookie Ku

			Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3465.00	-48.52	-40.64	-13.00	-7.88	-35.52	Peak

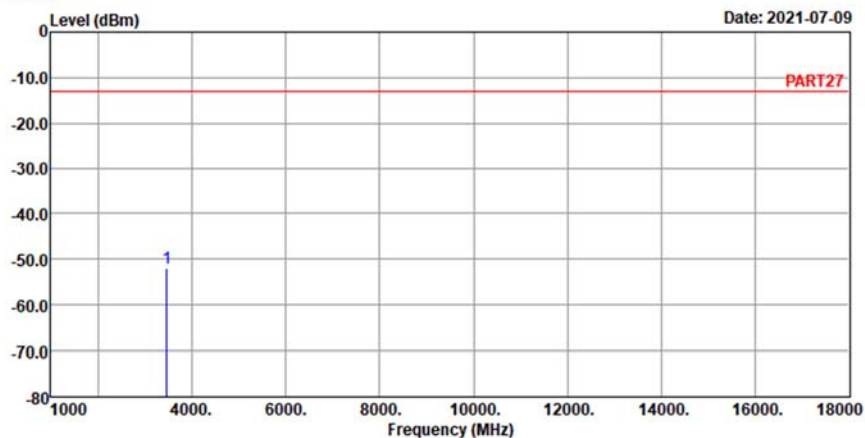


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_1.4M Link_M-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3465.00 -52.00 -44.12 -13.00 -7.88 -39.00 Peak

High Channel

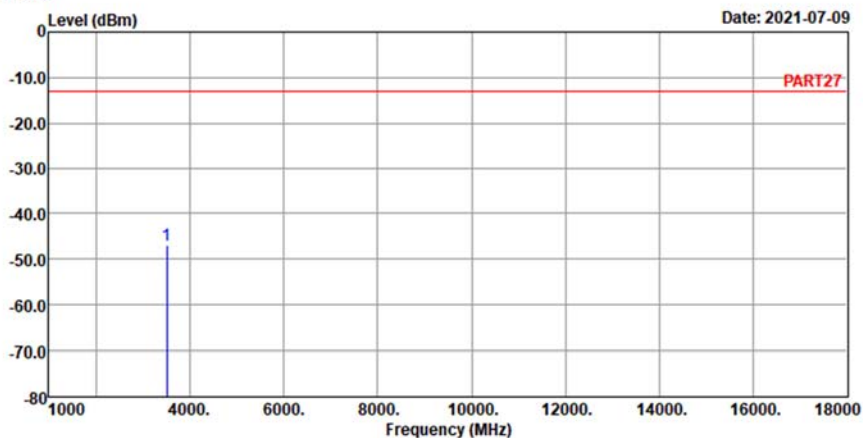


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 4 QPSK_1.4M Link_H-CH

Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB
1 pp	3508.60	-47.05	-39.60	-13.00	-7.45 -34.05 Peak

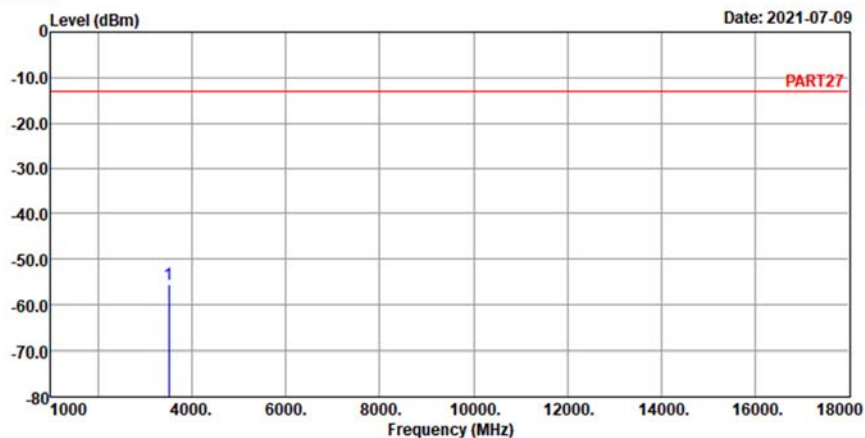


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_1.4M Link_H-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3508.60 -55.50 -48.05 -13.00 -7.45 -42.50 Peak

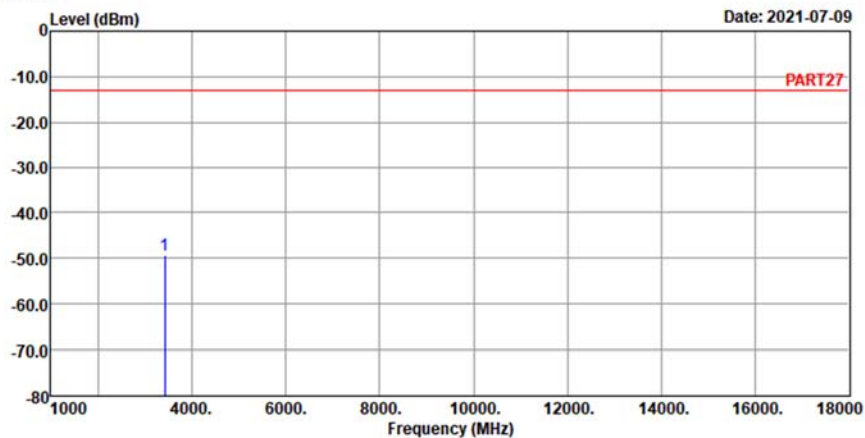
Cat-M1 Band 4, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 4 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3425.00	-49.30	-40.96	-13.00	-8.34	-36.30	Peak

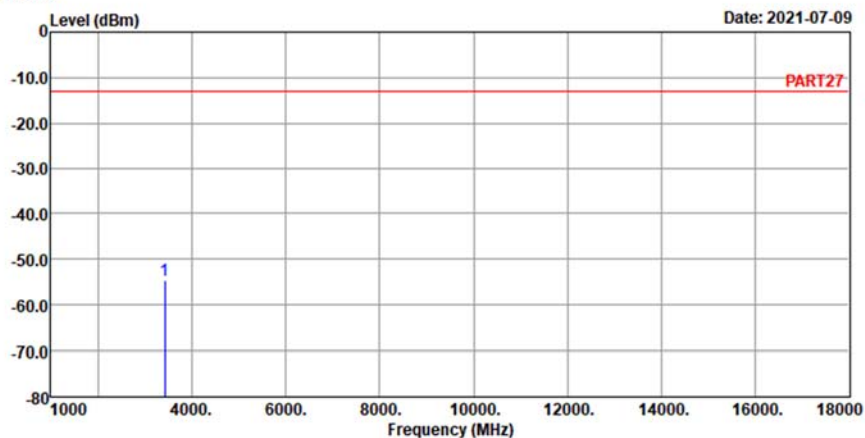


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3425.00 -54.72 -46.38 -13.00 -8.34 -41.72 Peak

Mid Channel

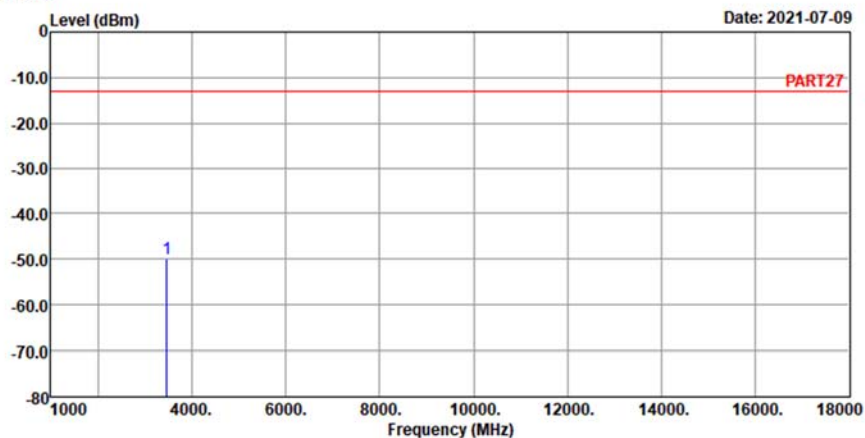


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 4 QPSK_5M Link_M-CH

Tested by: Cookie Ku

			Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark	
MHz	dBm	dBm	dBm	dB	dB		
1 pp 3465.00	-49.77	-41.89	-13.00	-7.88	-36.77	Peak	

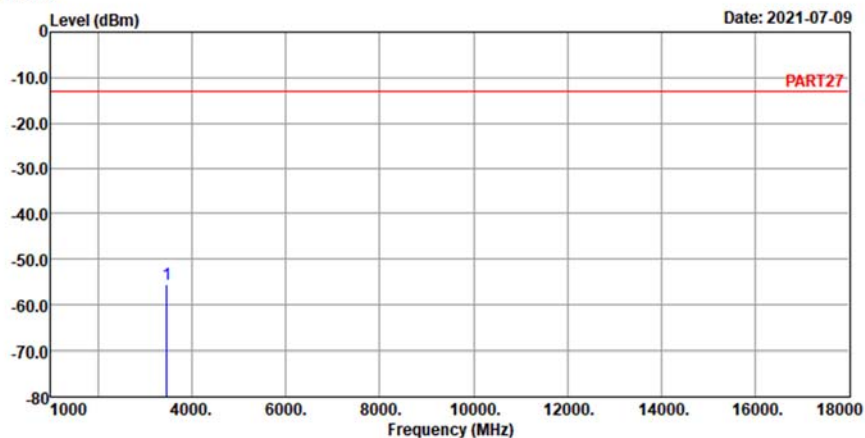


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_5M Link_M-CH
Tested by: Cookie Ku

Freq	Level	Read Level	Limit	Over	Remark
MHz	dBm	dBm	dBm	dB	dB

1 pp 3465.00 -55.35 -47.47 -13.00 -7.88 -42.35 Peak

High Channel

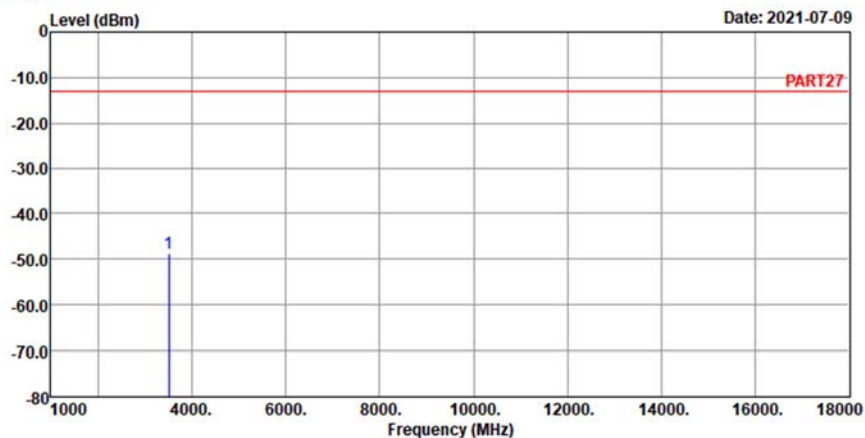


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 4 QPSK_5M Link_H-CH

Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB
1 pp 3505.00	-48.84	-41.39	-13.00	-7.45	-35.84 Peak

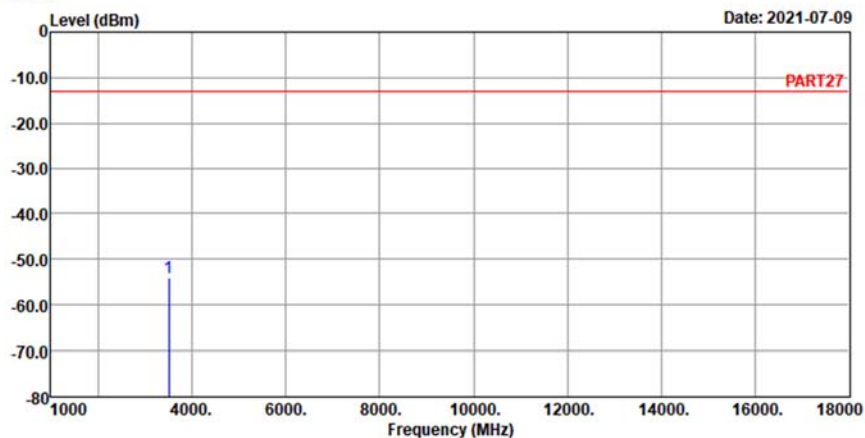


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_5M Link_H-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3505.00 -53.96 -46.51 -13.00 -7.45 -40.96 Peak

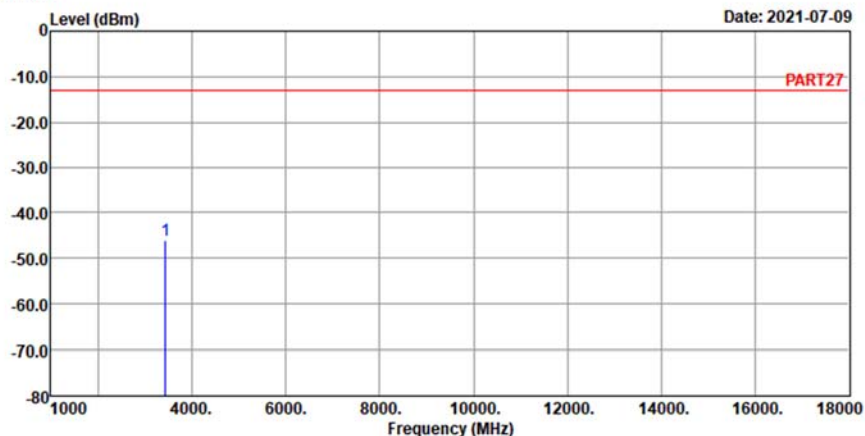
Cat-M1 Band 4, Channel Bandwidth 20MHz Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 4 QPSK_20M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3440.00	-46.13	-37.91	-13.00	-8.22	-33.13	Peak

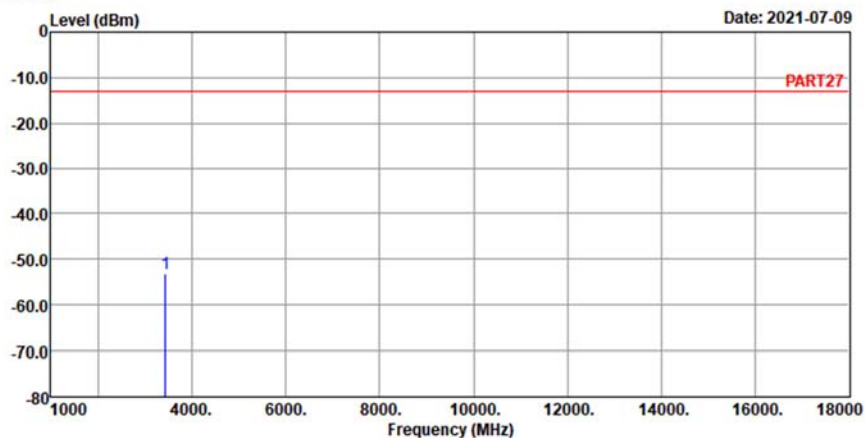


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 4 QPSK_20M Link_L-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3440.00 -53.12 -44.90 -13.00 -8.22 -40.12 Peak

Mid Channel

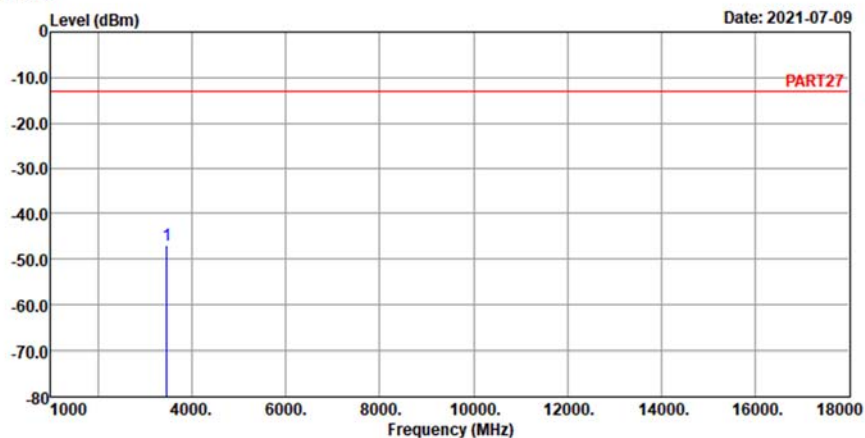


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 4 QPSK_20M Link_M-CH

Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3465.00	-47.07	-39.19	-13.00	-7.88	-34.07	Peak

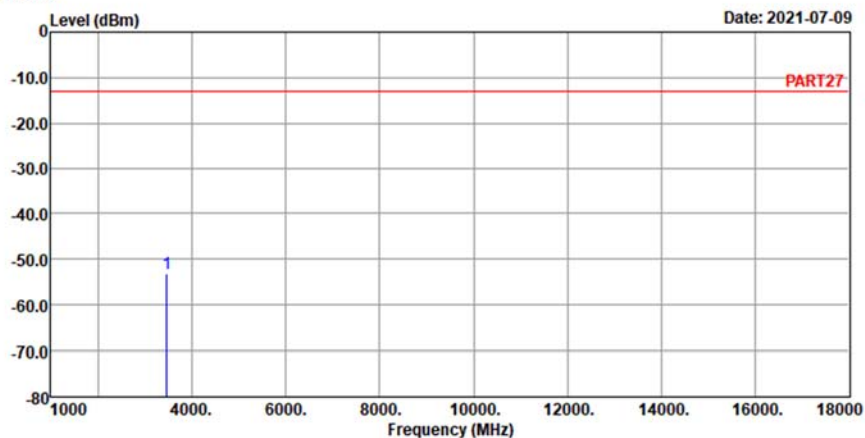


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 4 QPSK_20M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3465.00 -53.05 -45.17 -13.00 -7.88 -40.05 Peak

High Channel

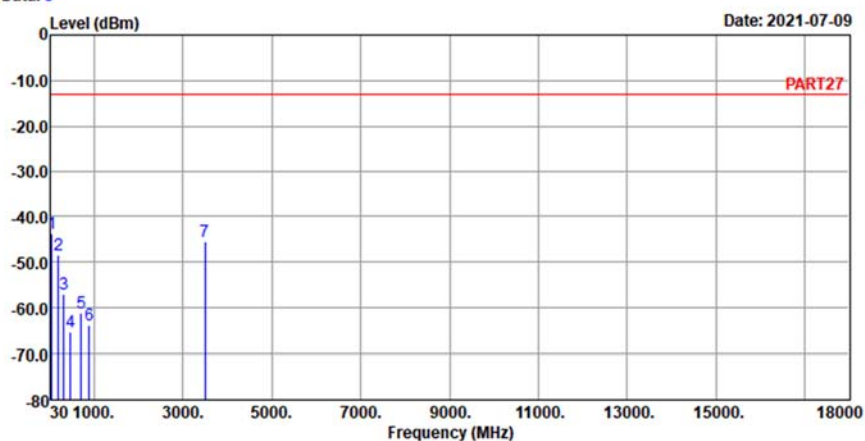


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 4 QPSK_20M Link_H-CH
Tested by: Cookie Ku

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	
1 pp	42.61	-43.75	-42.81	-13.00	-0.94	-30.75 Peak
2	203.63	-48.40	-40.54	-13.00	-7.86	-35.40 Peak
3	314.21	-57.08	-50.29	-13.00	-6.79	-44.08 Peak
4	467.47	-65.18	-59.96	-13.00	-5.22	-52.18 Peak
5	717.73	-61.24	-61.49	-13.00	0.25	-48.24 Peak
6	898.15	-63.70	-64.26	-13.00	0.56	-50.70 Peak
7	3490.00	-45.42	-37.77	-13.00	-7.65	-32.42 Peak

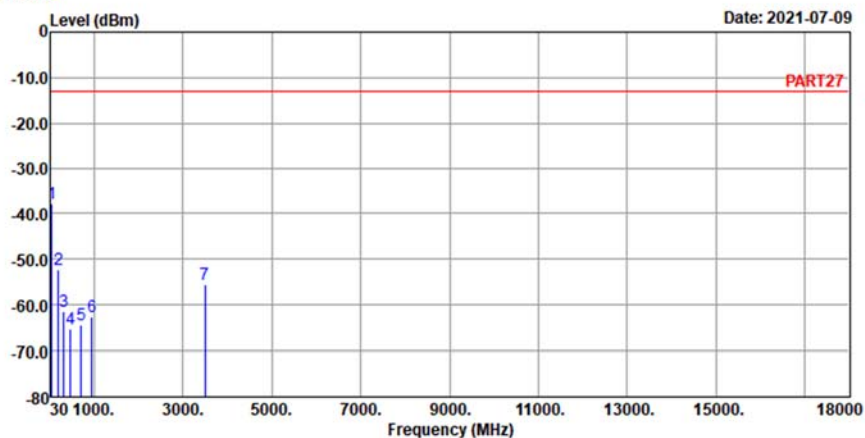


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 4 QPSK_20M Link_H-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	43.58	-37.81	-36.34	-13.00	-1.47	-24.81	Peak
2	203.63	-52.40	-44.54	-13.00	-7.86	-39.40	Peak
3	314.21	-61.29	-54.50	-13.00	-6.79	-48.29	Peak
4	475.23	-65.28	-60.20	-13.00	-5.08	-52.28	Peak
5	716.76	-64.27	-64.50	-13.00	0.23	-51.27	Peak
6	946.65	-62.69	-64.42	-13.00	1.73	-49.69	Peak
7	3490.00	-55.49	-47.84	-13.00	-7.65	-42.49	Peak

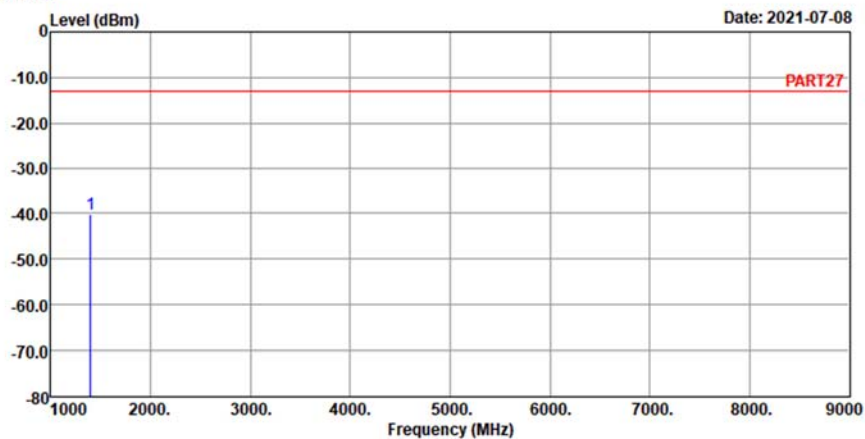
Cat-M1 Band 12, Channel Bandwidth 1.4MHz Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB

1 pp 1399.40 -40.15 -28.30 -13.00 -11.85 -27.15 Peak

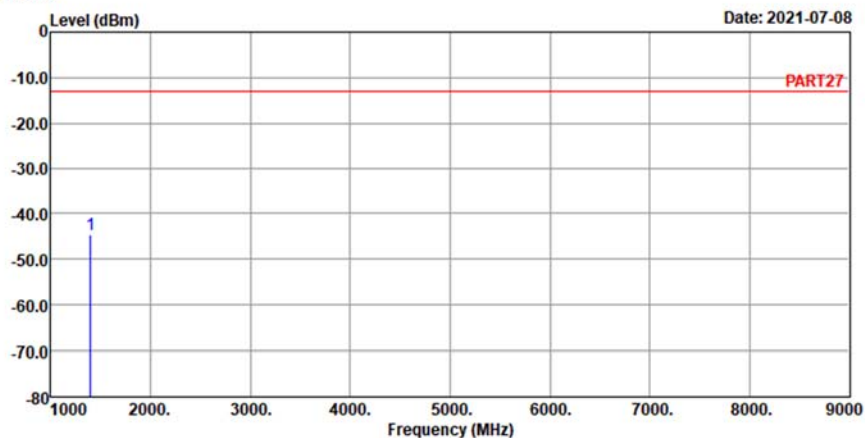


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 12 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1399.40 -44.70 -32.85 -13.00 -11.85 -31.70 Peak

Mid Channel

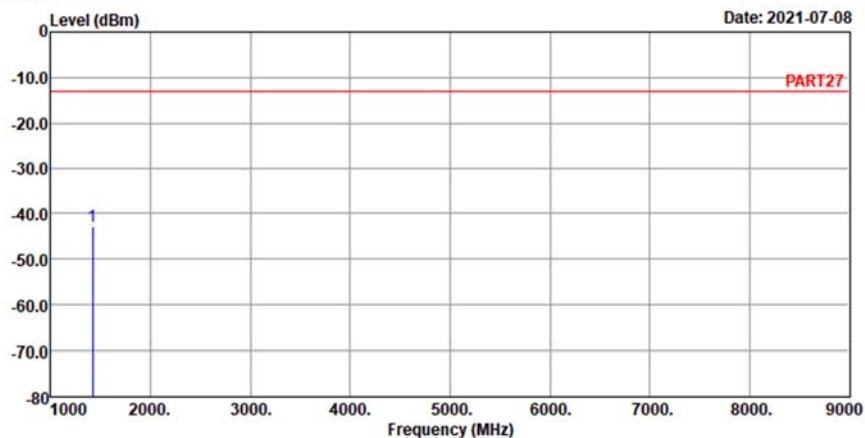


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-08



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH

Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Limit	Remark
		dBm	dBm	dB	

1 pp 1415.00 -42.74 -30.66 -13.00 -12.08 -29.74 Peak

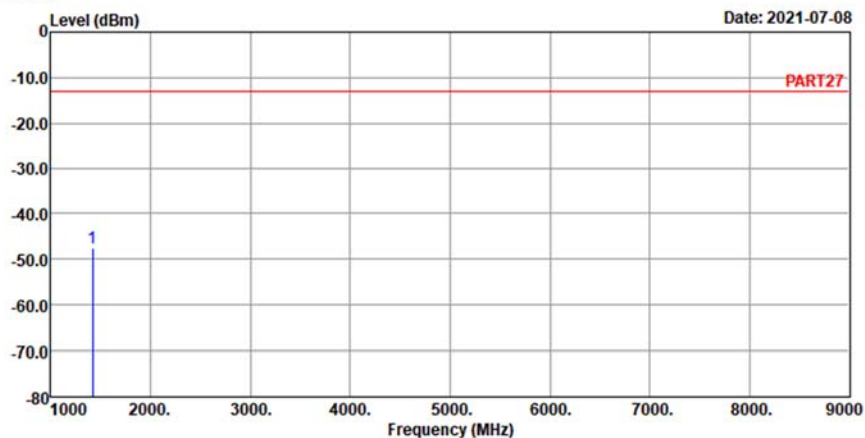


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_1.4M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1415.00 -47.44 -35.36 -13.00 -12.08 -34.44 Peak

High Channel

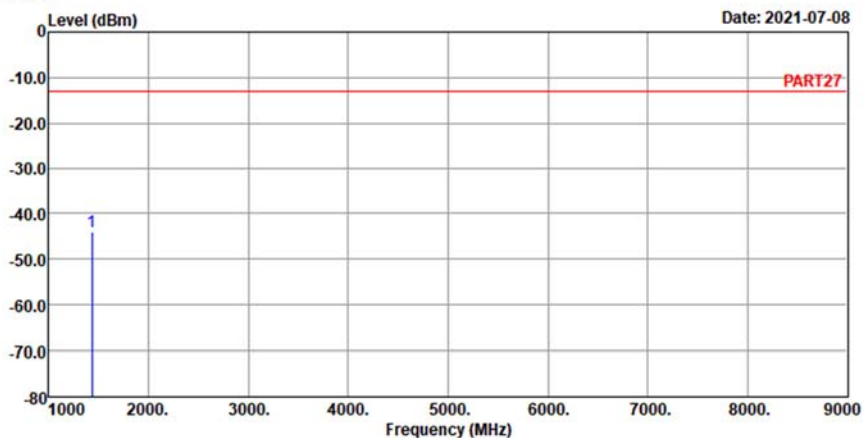


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-08



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_1.4M Link_H-CH

Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1430.60 -43.96 -31.65 -13.00 -12.31 -30.96 Peak

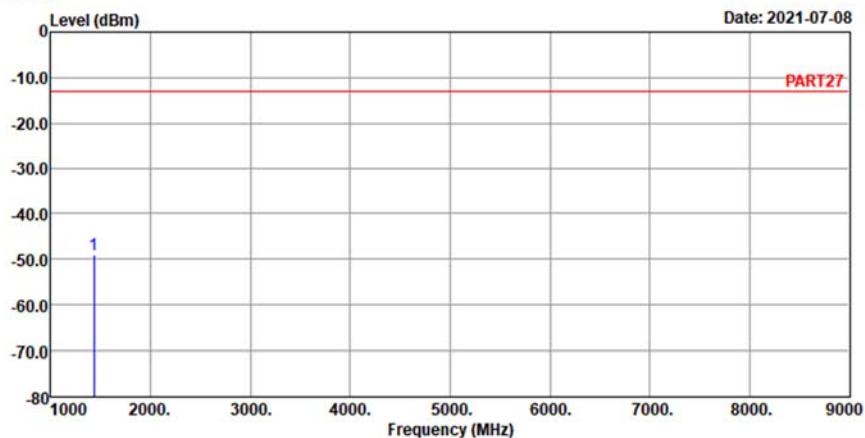


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_1.4M Link_H-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1430.60 -48.99 -36.68 -13.00 -12.31 -35.99 Peak

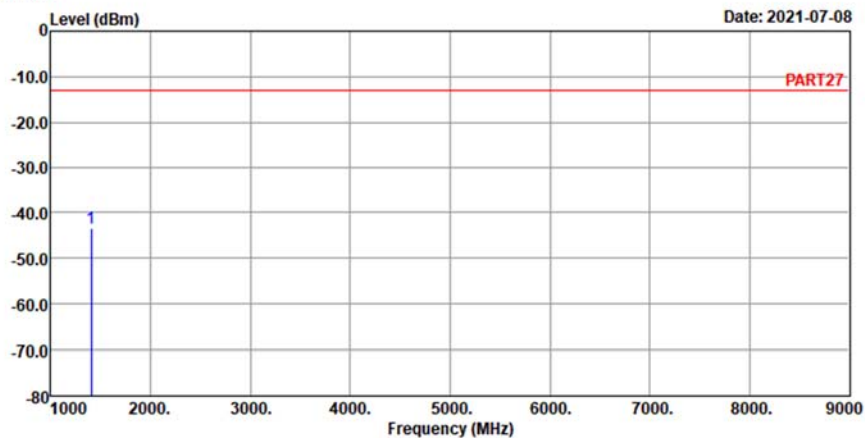
Cat-M1 Band 12, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 12 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1403.00 -43.26 -31.35 -13.00 -11.91 -30.26 Peak

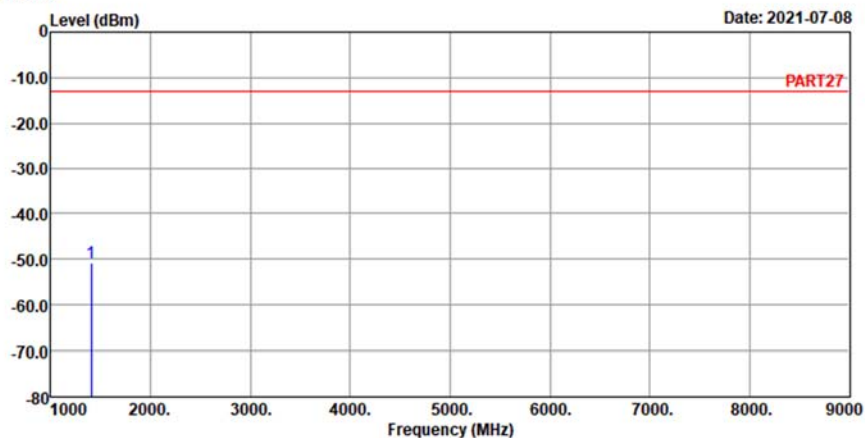


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 12 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1403.00 -50.74 -38.83 -13.00 -11.91 -37.74 Peak

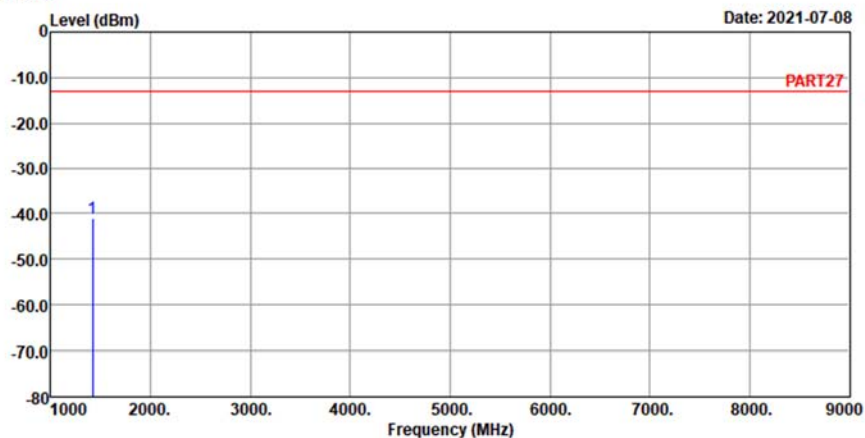
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 12 QPSK_5M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	
1 pp	1415.00	-41.09	-29.01	-13.00	-12.08 -28.09 Peak

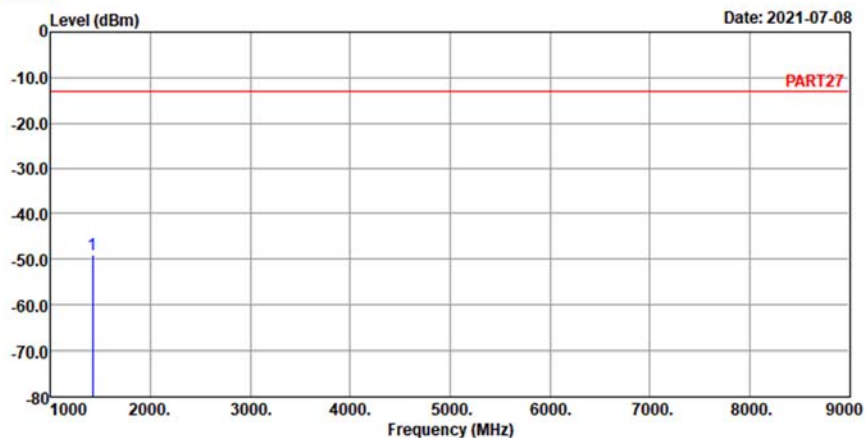


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remark : Cat-M1 Band 12 QPSK_5M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1415.00 -48.93 -36.85 -13.00 -12.08 -35.93 Peak

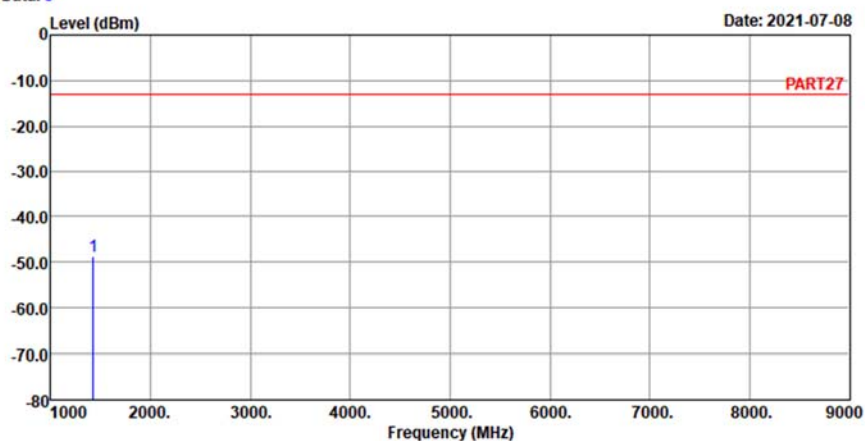
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 12 QPSK_5M Link_H-CH
 Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 1427.00	-48.66	-36.41	-13.00	-12.25	-35.66	Peak

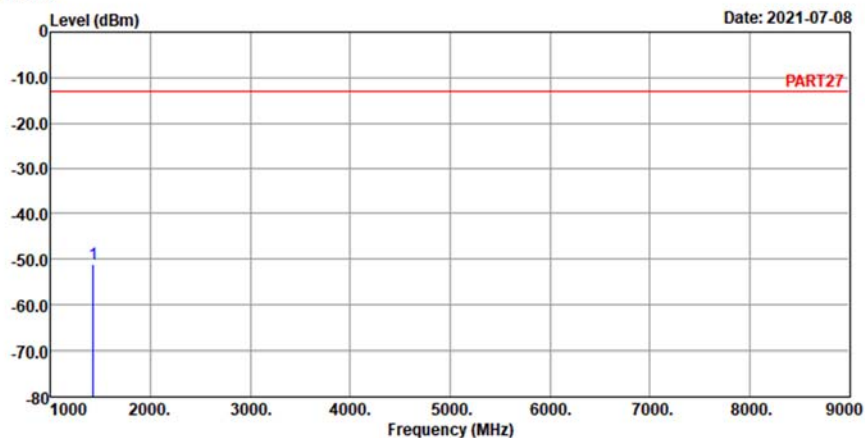


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_5M Link_H-CH
 Tested by: Cookie Ku

Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1427.00 -51.09 -38.84 -13.00 -12.25 -38.09 Peak

Cat-M1 Band 12, Channel Bandwidth 10MHz Low Channel

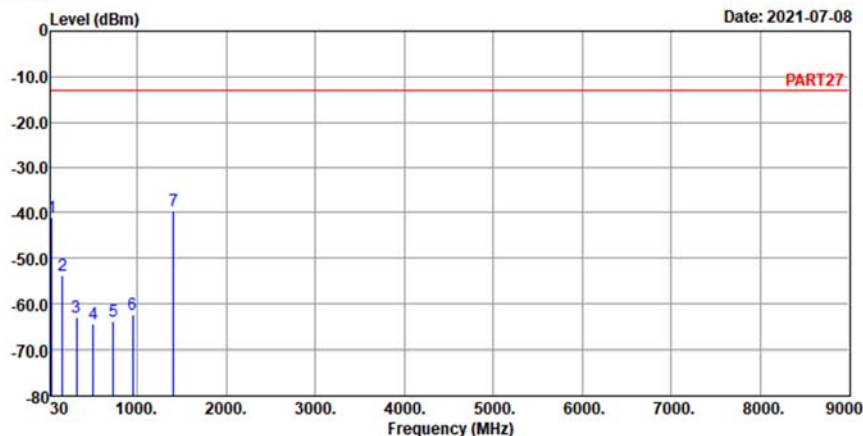


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-08



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_10M Link_L-CH

Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	41.64	-41.10	-40.69	-13.00	-0.41	-28.10	Peak
2	158.04	-53.81	-48.42	-13.00	-5.39	-40.81	Peak
3	315.18	-62.76	-55.98	-13.00	-6.78	-49.76	Peak
4	502.39	-64.30	-59.76	-13.00	-4.54	-51.30	Peak
5	730.34	-63.66	-64.16	-13.00	0.50	-50.66	Peak
6	947.62	-62.33	-64.08	-13.00	1.75	-49.33	Peak
7 pp	1408.00	-39.53	-27.57	-13.00	-11.96	-26.53	Peak

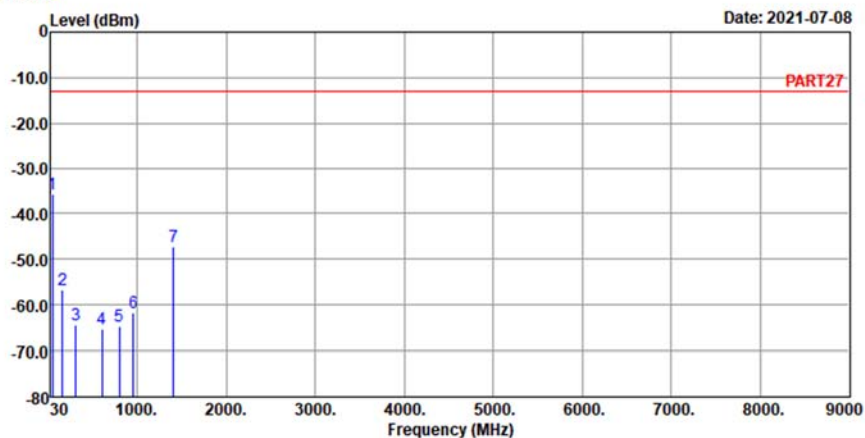


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 12 QPSK_10M Link_L-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	dB	Limit Remark
1 pp	44.55	-35.81	-33.82	-13.00	-1.99	-22.81 Peak
2	158.04	-56.67	-51.28	-13.00	-5.39	-43.67 Peak
3	308.39	-64.23	-57.35	-13.00	-6.88	-51.23 Peak
4	603.27	-65.10	-64.34	-13.00	-0.76	-52.10 Peak
5	799.21	-64.53	-65.27	-13.00	0.74	-51.53 Peak
6	960.23	-61.75	-63.93	-13.00	2.18	-48.75 Peak
7	1408.00	-47.36	-35.40	-13.00	-11.96	-34.36 Peak

Mid Channel

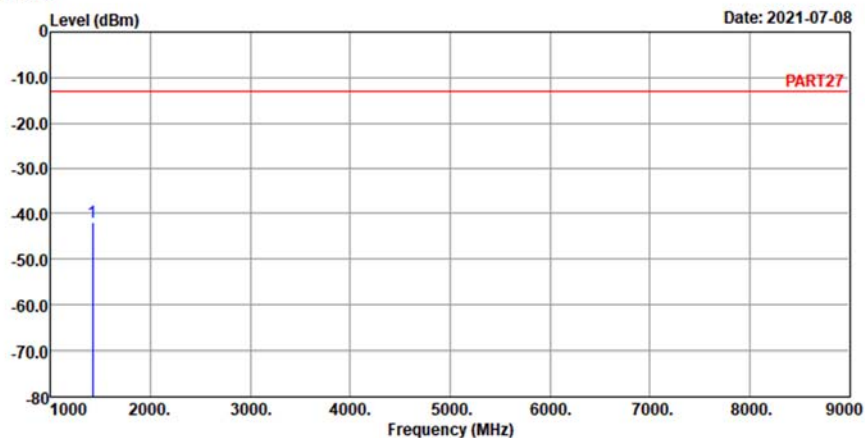


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-08



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_10M Link_M-CH

Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1415.00 -41.84 -29.76 -13.00 -12.08 -28.84 Peak

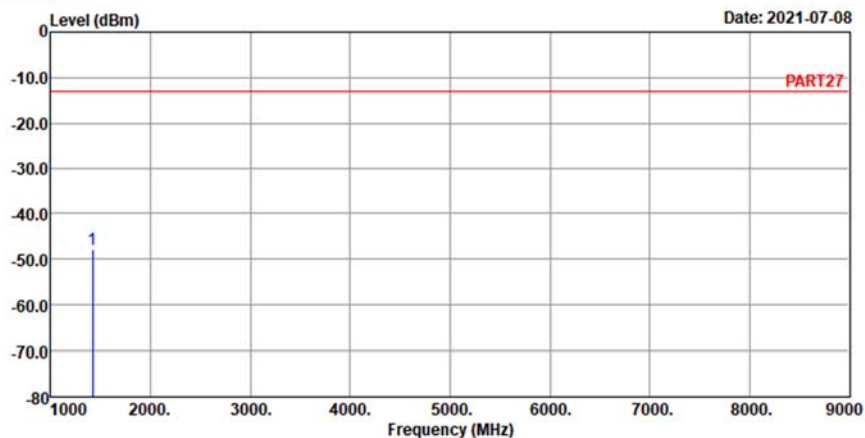


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_10M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1415.00 -47.93 -35.85 -13.00 -12.08 -34.93 Peak

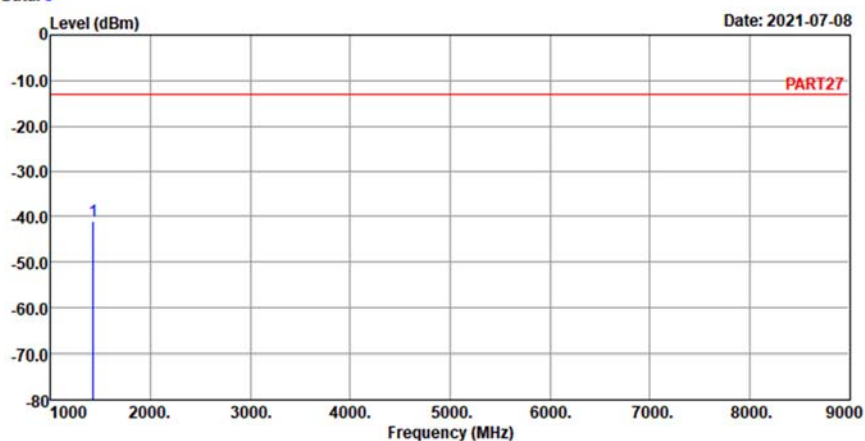
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 12 QPSK_10M Link_H-CH

Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 1422.00	-41.16	-28.97	-13.00	-12.19	-28.16	Peak

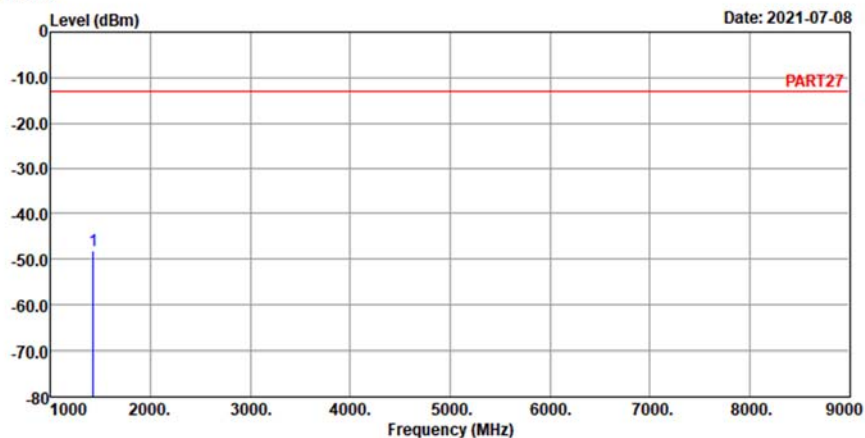


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 12 QPSK_10M Link_H-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1422.00 -48.09 -35.90 -13.00 -12.19 -35.09 Peak

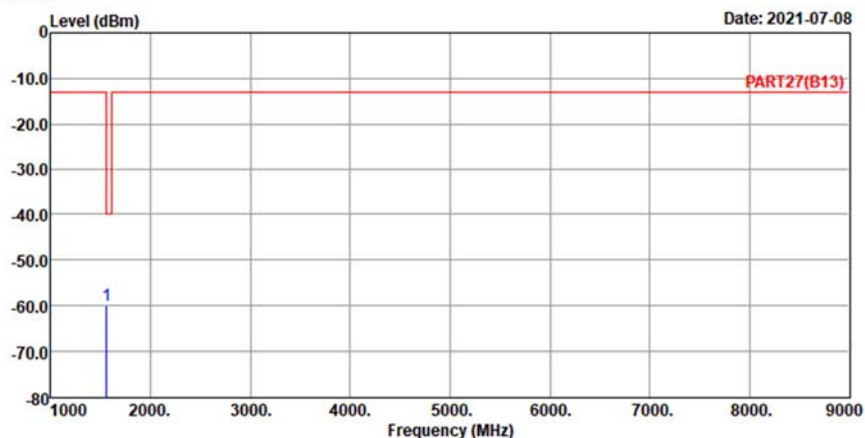
Cat-M1 Band 13, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : CAT M1 Band 13 QPSK_5M Link_L-CH
Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB

1 pp 1559.00 -59.97 -46.65 -40.00 -13.32 -19.97 Peak

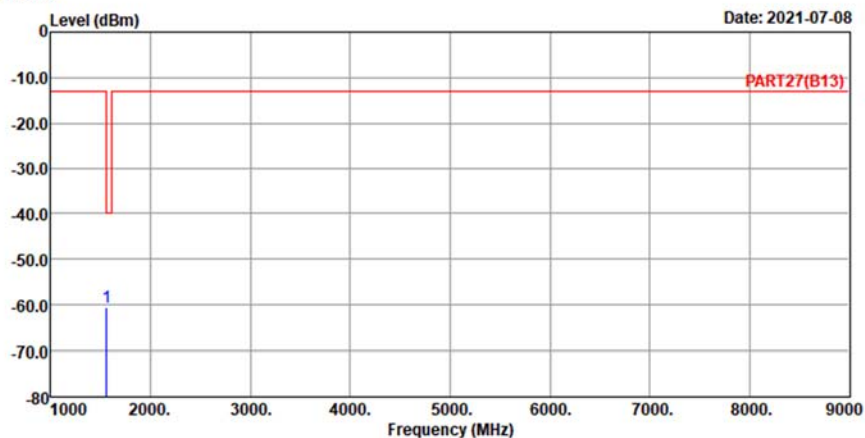


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27(B13) VERTICAL
Remak : CAT M1 Band 13 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1559.00 -60.57 -47.25 -40.00 -13.32 -20.57 Peak

Mid Channel

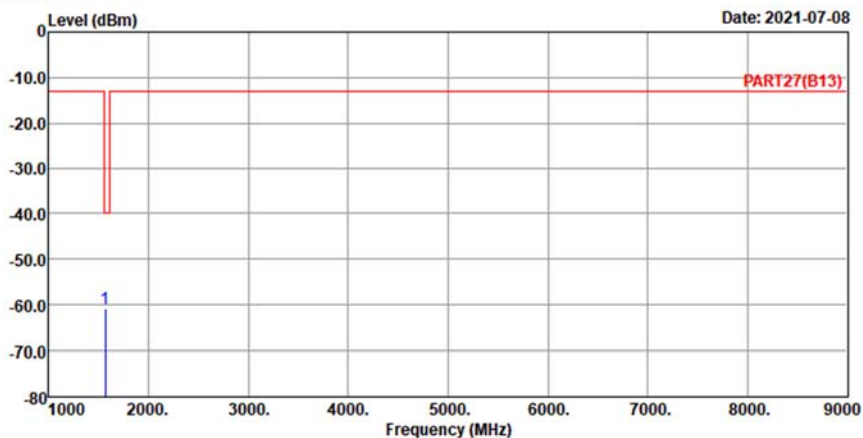


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_5M Link_M-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1564.00 -60.77 -47.43 -40.00 -13.34 -20.77 Peak

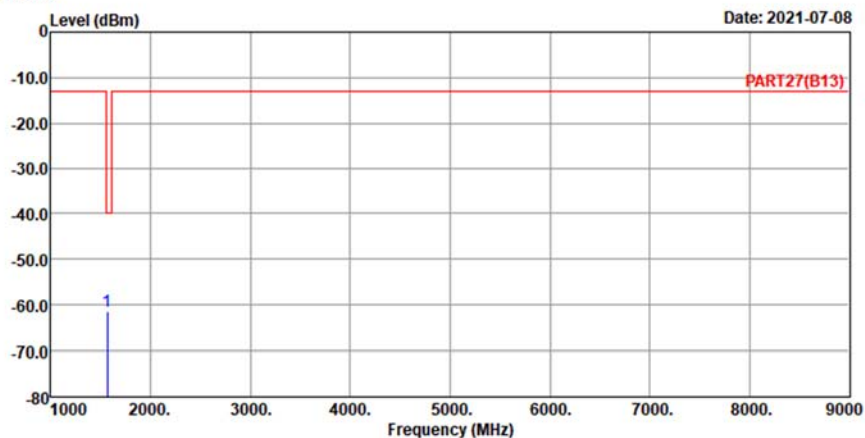


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27(B13) VERTICAL
Remak : Cat-M1 Band 13 QPSK_5M Link_M-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1564.00 -61.33 -47.99 -40.00 -13.34 -21.33 Peak

High Channel

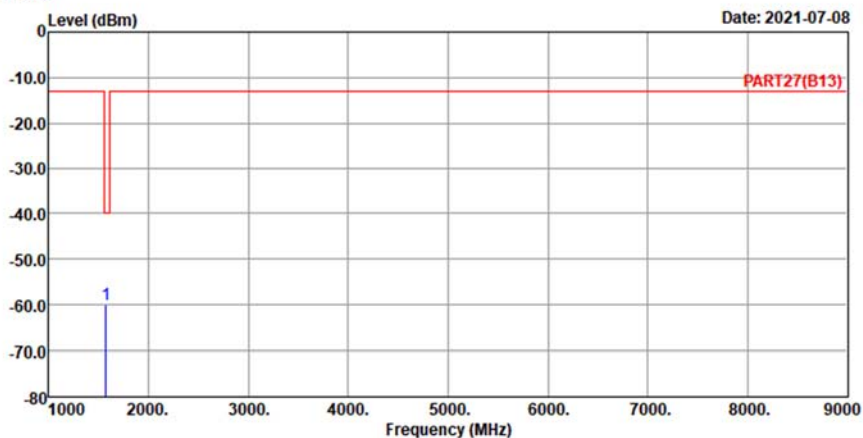


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27(B13) HORIZONTAL
Remak : Cat-M1 Band 13 QPSK_5M Link_H-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1569.00 -59.98 -46.63 -40.00 -13.35 -19.98 Peak

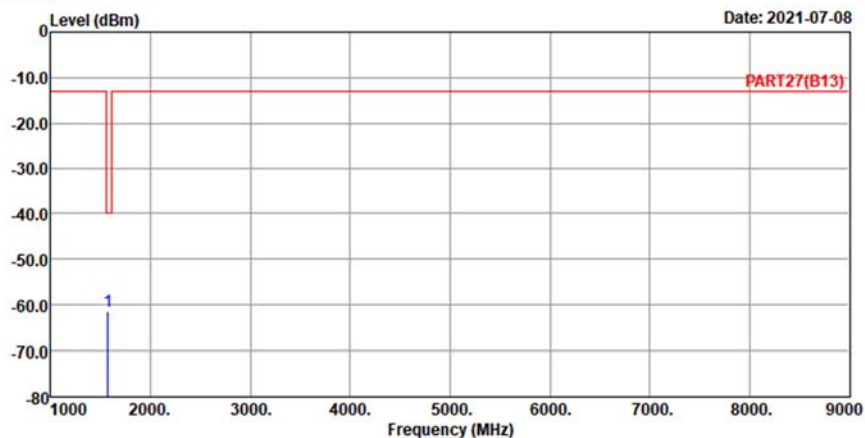


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-08



Site : 966 Chamber 5
 Condition: PART27(B13) VERTICAL
 Remak : Cat-M1 Band 13 QPSK_5M Link_H-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1569.00 -61.52 -48.17 -40.00 -13.35 -21.52 Peak

Cat-M1 Band 13, Channel Bandwidth 10MHz Mid Channel

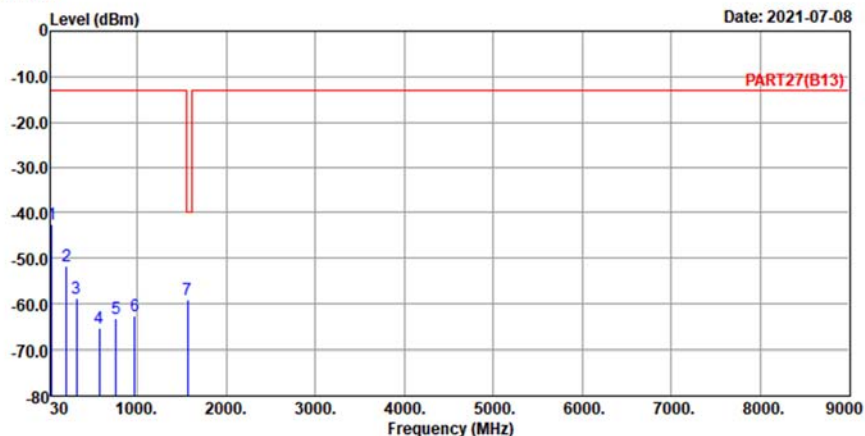


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-08



Site : 966 Chamber 5

Condition: PART27(B13) HORIZONTAL

Remak : Cat-M1 Band 13 QPSK_10M Link_M-CH

Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	37.76	-42.65	-42.21	-13.00	-0.44	-29.65	Peak
2	202.66	-51.60	-43.70	-13.00	-7.90	-38.60	Peak
3	314.21	-58.87	-52.08	-13.00	-6.79	-45.87	Peak
4	570.29	-65.36	-63.36	-13.00	-2.00	-52.36	Peak
5	762.35	-63.32	-64.16	-13.00	0.84	-50.32	Peak
6	972.84	-62.55	-65.17	-13.00	2.62	-49.55	Peak
7 pp	1564.00	-58.97	-45.63	-40.00	-13.34	-18.97	Peak

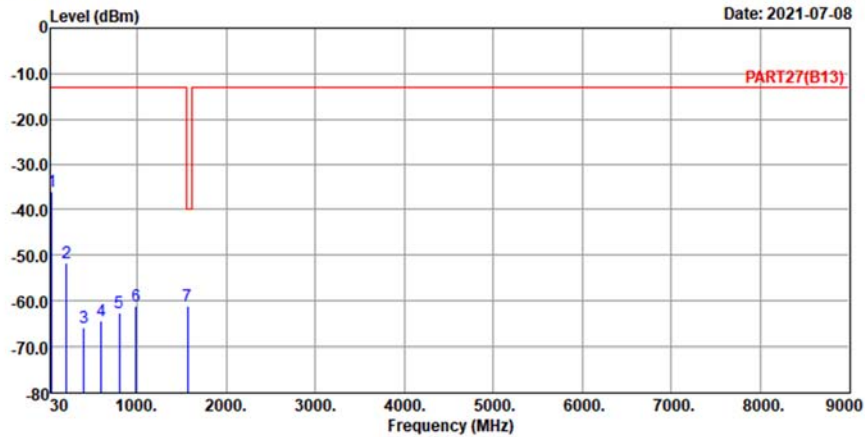


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-08



Site : 966 Chamber 5
Condition: PART27(B13) VERTICAL
Remak : Cat-M1 Band 13 QPSK_10M Link_M-CH
Tested by: Cookie Ku

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	
1	40.76	-35.97	-36.09	-13.00	0.12	-22.97 Peak
2	203.63	-51.61	-43.75	-13.00	-7.86	-38.61 Peak
3	403.45	-65.76	-59.84	-13.00	-5.92	-52.76 Peak
4	598.42	-64.49	-63.66	-13.00	-0.83	-51.49 Peak
5	798.24	-62.73	-63.47	-13.00	0.74	-49.73 Peak
6	984.48	-61.03	-64.06	-13.00	3.03	-48.03 Peak
7 pp	1564.00	-61.01	-47.67	-40.00	-13.34	-21.01 Peak

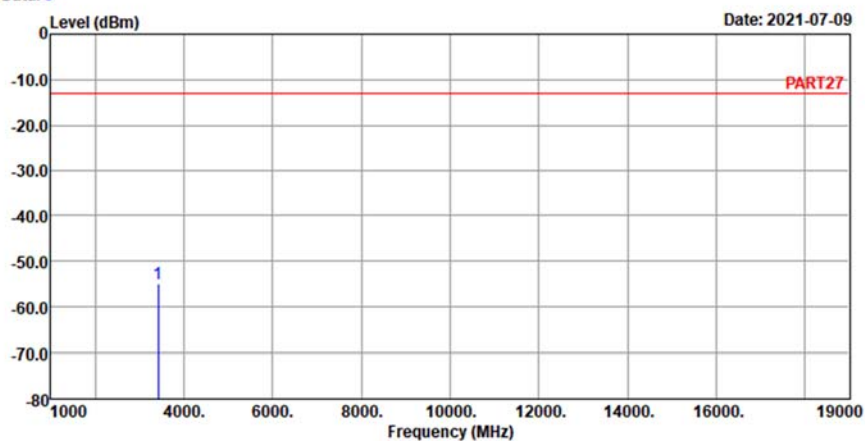
Cat-M1 Band 66, Channel Bandwidth 1.4MHz Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : LTE Band 66 QPSK_1.4M_L-CH Link
Tested by: Cookie Ku

Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3421.40	-54.78	-46.44	-13.00	-8.34	-41.78	Peak

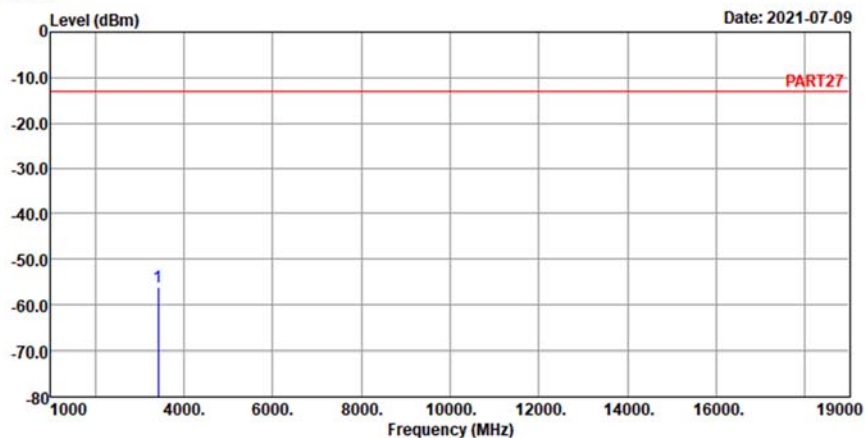


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : LTE Band 66 QPSK_1.4M_L-CH Link
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3421.40 -56.14 -47.80 -13.00 -8.34 -43.14 Peak

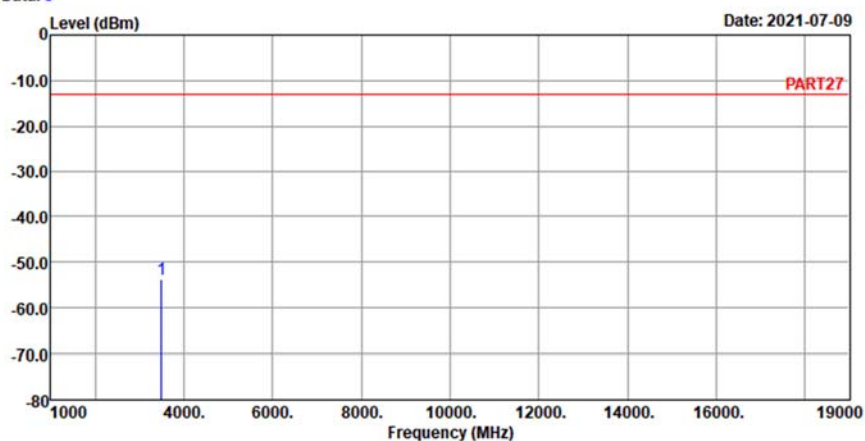
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : LTE Band 66 QPSK_1.4M_M-CH Link
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB
1 pp	3490.00	-53.82	-46.17	-13.00	-7.65 -40.82 Peak

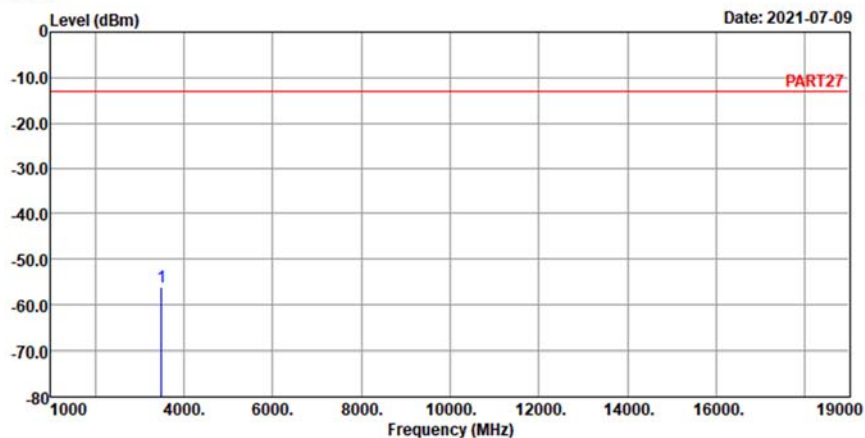


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_1.4M_M-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3490.00 -56.06 -48.41 -13.00 -7.65 -43.06 Peak

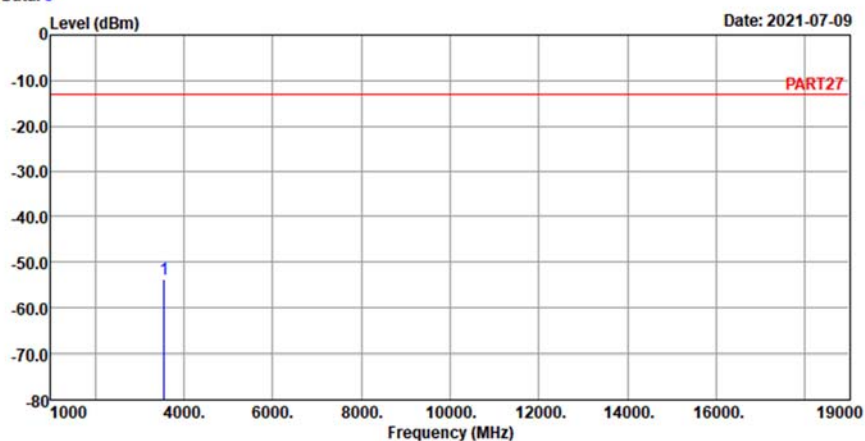
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : LTE Band 66 QPSK_1.4M_H-CH Link

Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3558.60	-53.83	-46.76	-13.00	-7.07	-40.83	Peak

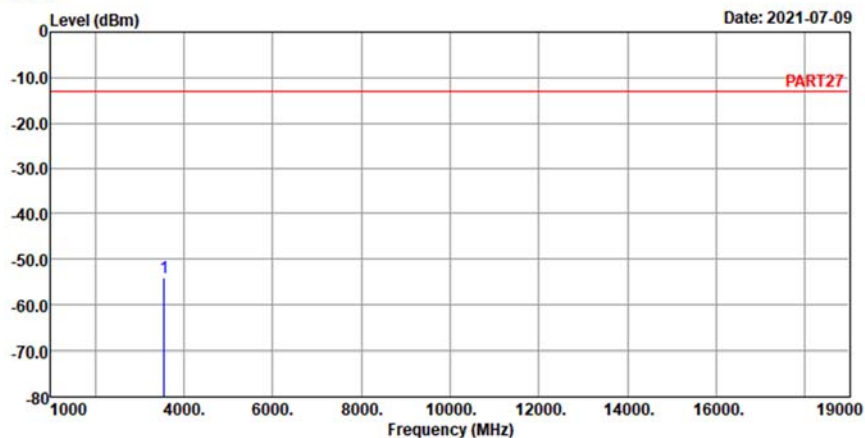


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : LTE Band 66 QPSK_1.4M_H-CH Link
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3558.60 -54.16 -47.09 -13.00 -7.07 -41.16 Peak

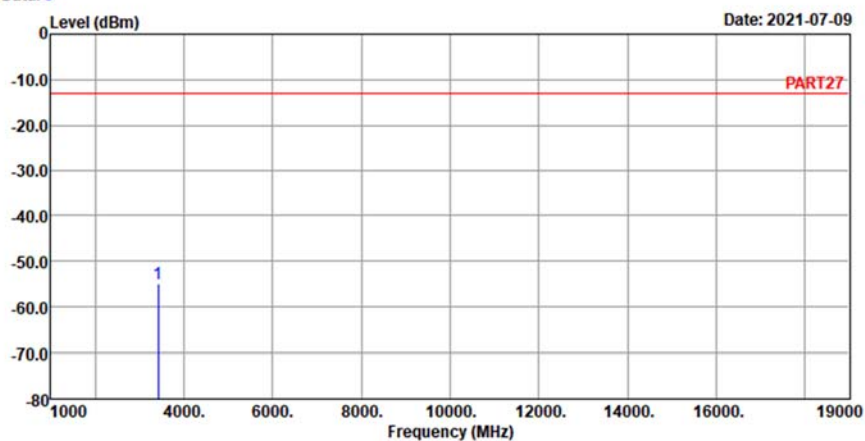
Cat-M1 Band 66, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd.,Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : LTE Band 66 QPSK_5M_L-CH Link
Tested by: Cookie Ku

Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 3425.00 -55.04 -46.70 -13.00 -8.34 -42.04 Peak

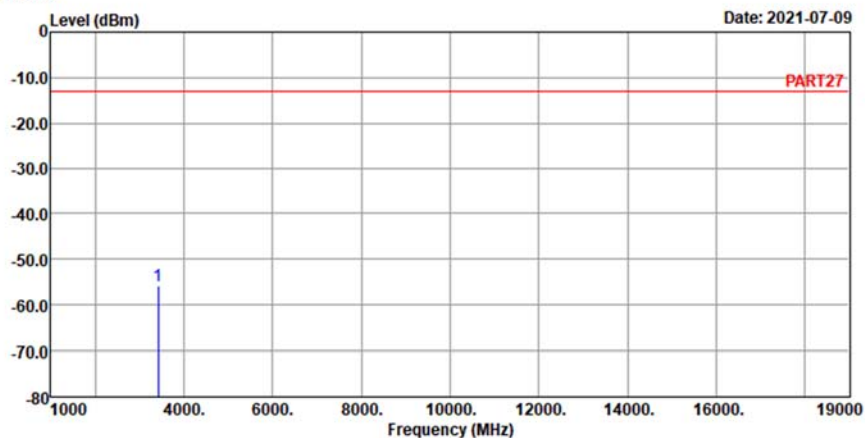


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_5M_L-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3425.00 -55.83 -47.49 -13.00 -8.34 -42.83 Peak

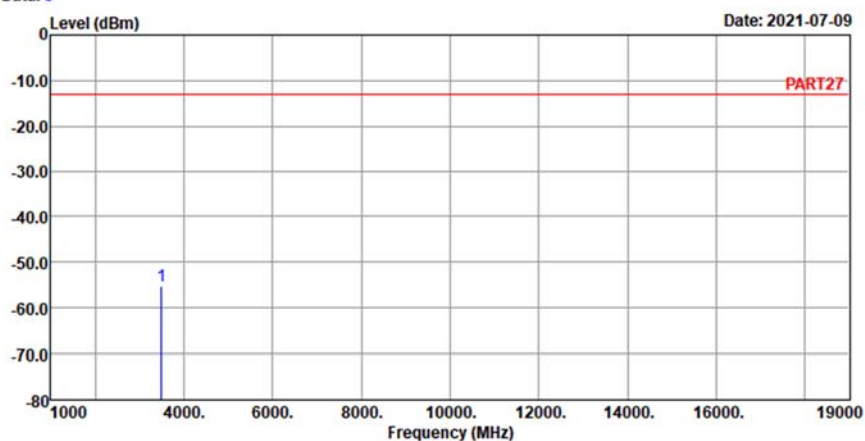
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : LTE Band 66 QPSK_5M_M-CH Link
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB
1 pp	3490.00	-55.24	-47.59	-13.00	-7.65 -42.24 Peak

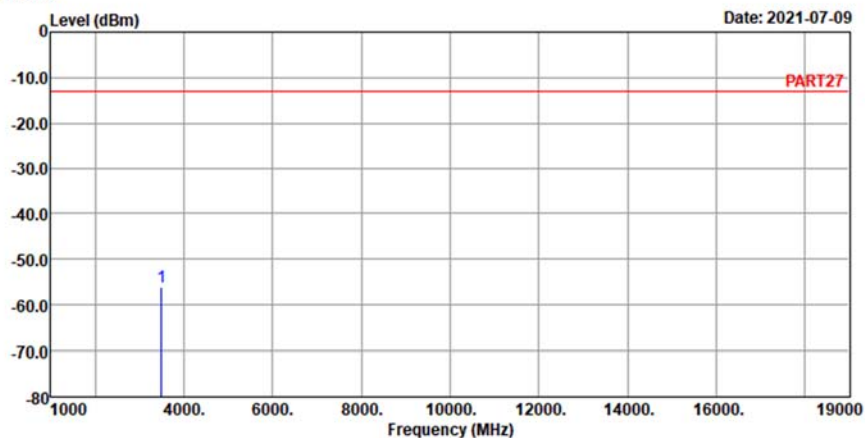


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_5M_M-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3490.00 -56.03 -48.38 -13.00 -7.65 -43.03 Peak

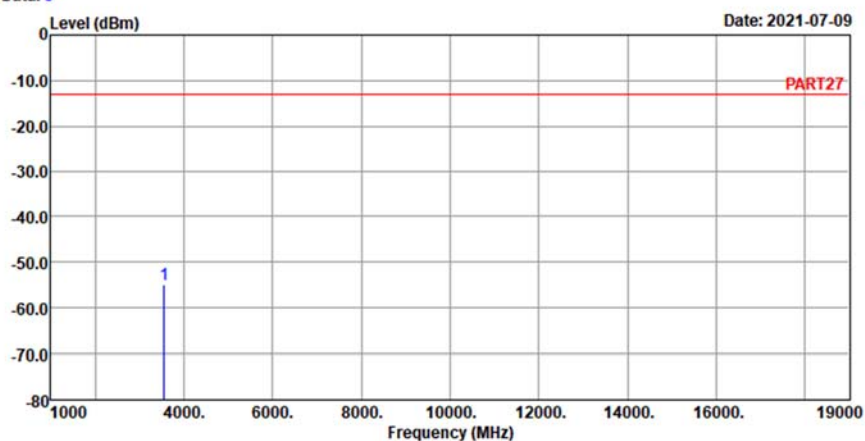
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : LTE Band 66 QPSK_5M_H-CH Link
 Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3555.00	-54.88	-47.73	-13.00	-7.15	-41.88	Peak

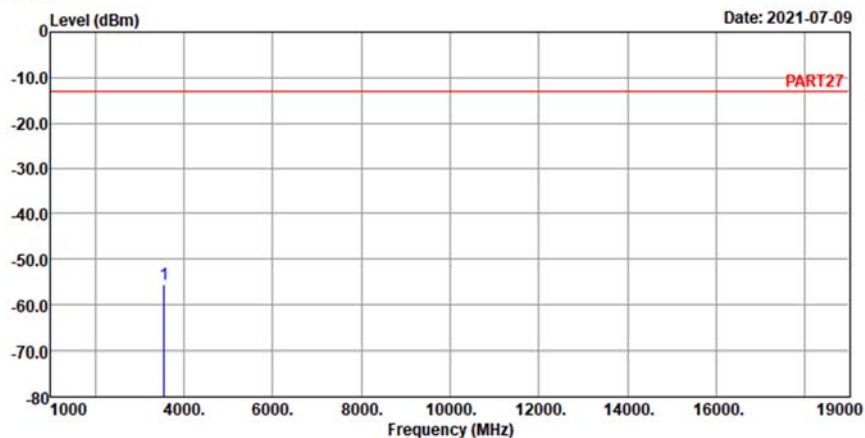


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_5M_H-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3555.00 -55.60 -48.45 -13.00 -7.15 -42.60 Peak

Cat-M1 Band 66, Channel Bandwidth 20MHz Low Channel

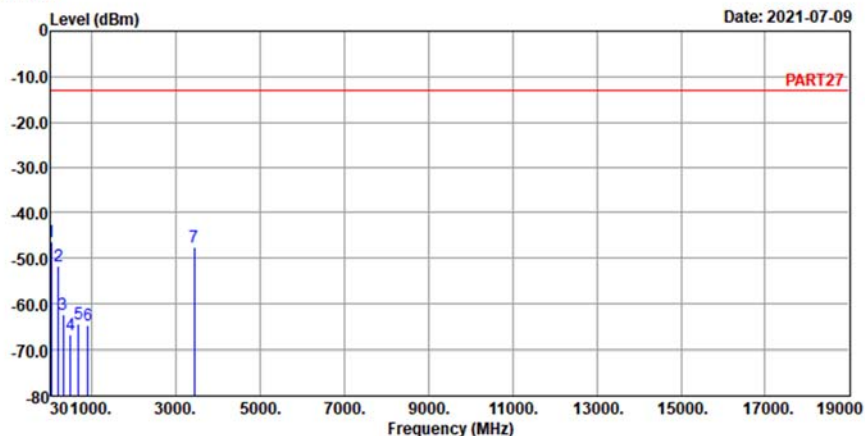


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : LTE Band 66 QPSK_20M_L-CH Link
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	38.73	-46.35	-46.45	-13.00	0.10	-33.35	Peak
2	207.51	-51.80	-44.09	-13.00	-7.71	-38.80	Peak
3	323.91	-62.23	-55.59	-13.00	-6.64	-49.23	Peak
4	500.45	-66.65	-62.04	-13.00	-4.61	-53.65	Peak
5	679.90	-64.28	-63.86	-13.00	-0.42	-51.28	Peak
6	915.61	-64.63	-65.59	-13.00	0.96	-51.63	Peak
7	3440.00	-47.51	-39.29	-13.00	-8.22	-34.51	Peak

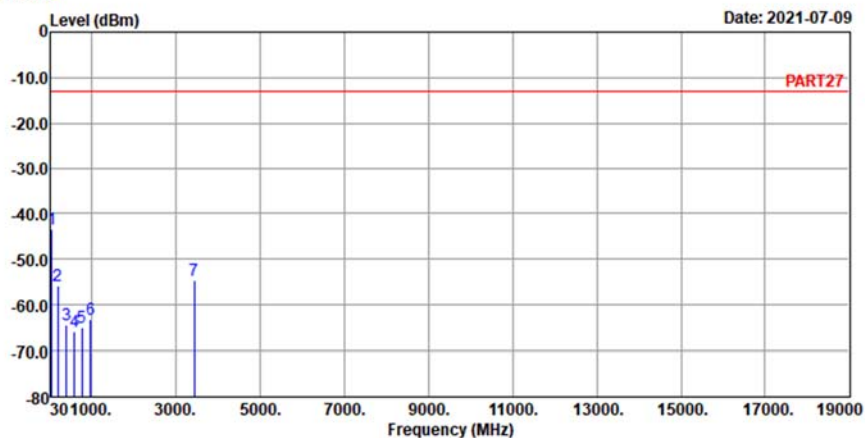


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_20M_L-CH Link
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1 pp	51.34	-43.39	-38.11	-13.00	-5.28	-30.39	Peak
2	198.78	-55.68	-47.75	-13.00	-7.93	-42.68	Peak
3	403.45	-64.25	-58.33	-13.00	-5.92	-51.25	Peak
4	594.54	-65.84	-64.85	-13.00	-0.99	-52.84	Peak
5	768.17	-64.80	-65.63	-13.00	0.83	-51.80	Peak
6	970.90	-63.14	-65.69	-13.00	2.55	-50.14	Peak
7	3440.00	-54.64	-46.42	-13.00	-8.22	-41.64	Peak

Mid Channel

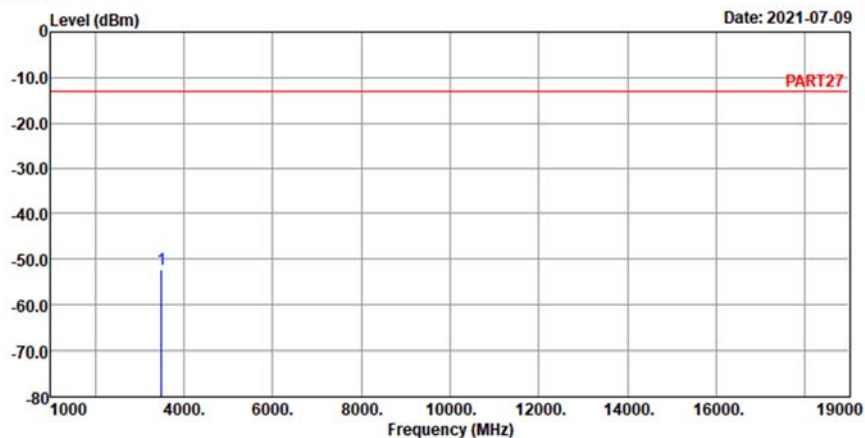


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : LTE Band 66 QPSK_20M_M-CH Link

Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB
1 pp 3490.00	-52.24	-44.59	-13.00	-7.65	-39.24 Peak

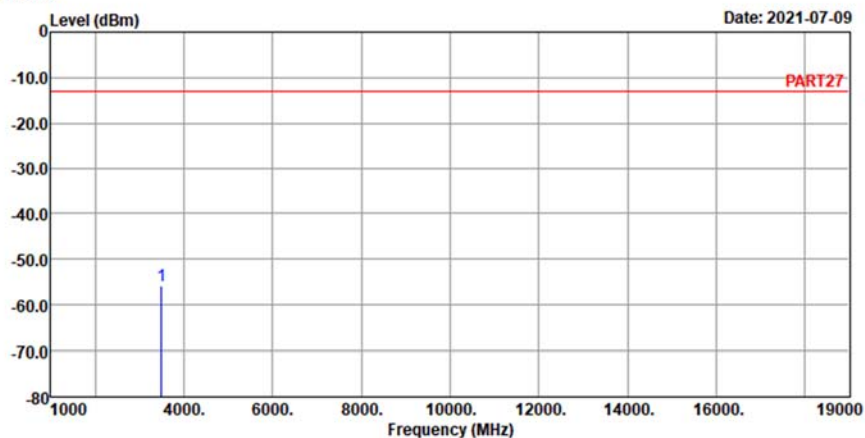


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_20M_M-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3490.00 -55.88 -48.23 -13.00 -7.65 -42.88 Peak

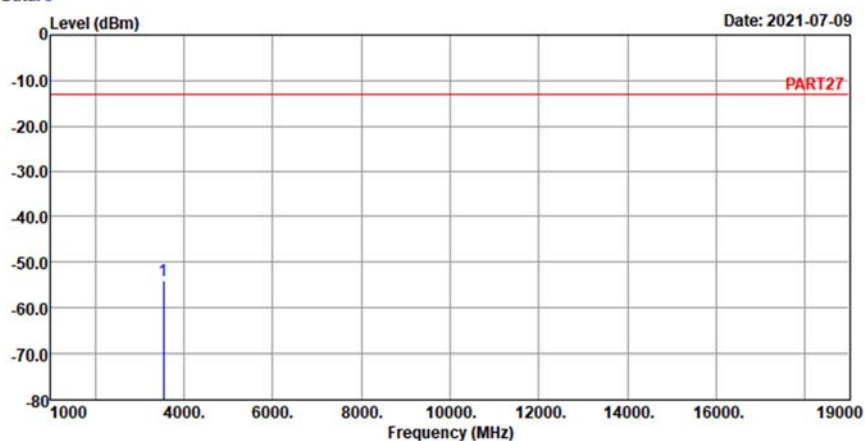
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : LTE Band 66 QPSK_20M_H-CH Link
 Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 3540.00	-54.04	-46.82	-13.00	-7.22	-41.04	Peak

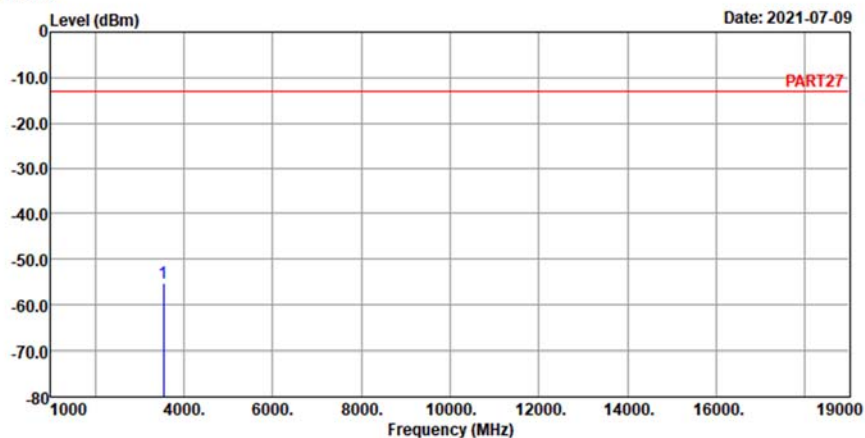


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : LTE Band 66 QPSK_20M_H-CH Link
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 3540.00 -55.08 -47.86 -13.00 -7.22 -42.08 Peak

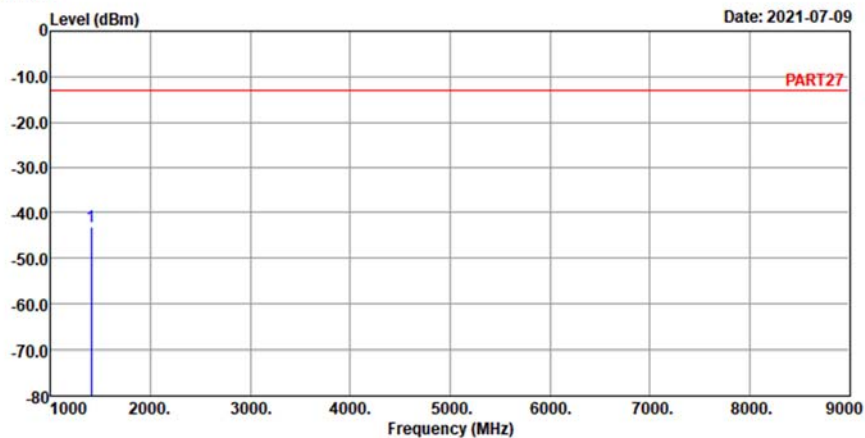
Cat-M1 Band 85, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART27 HORIZONTAL
Remak : Cat-M1 Band 85 QPSK_5M Link_L-CH
Tested by: Cookie Ku

Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1401.00 -43.07 -31.16 -13.00 -11.91 -30.07 Peak

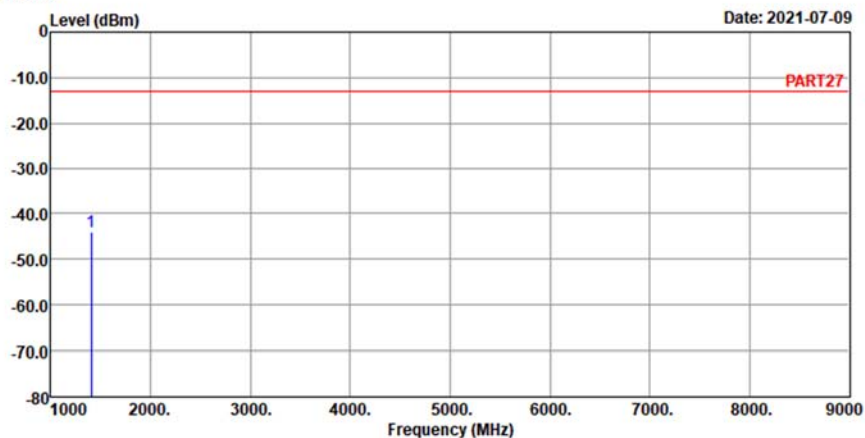


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 85 QPSK_5M Link_L-CH
 Tested by: Cookie Ku

Freq	Level	Read Level	Limit Level	Line Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1401.00 -43.97 -32.06 -13.00 -11.91 -30.97 Peak

Mid Channel

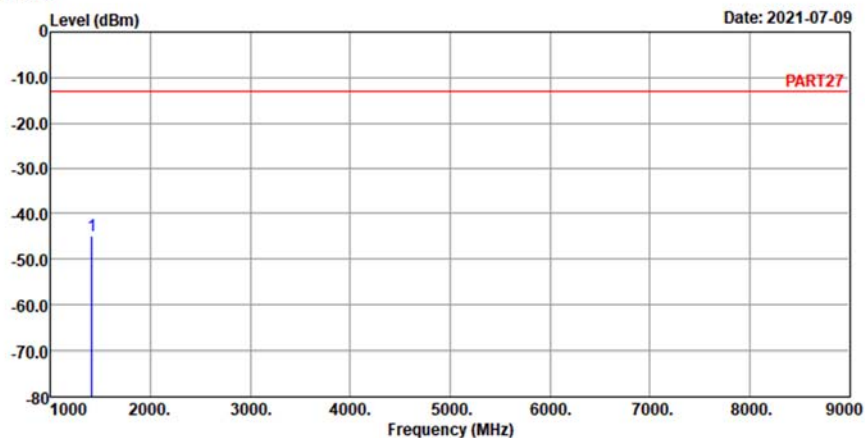


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 85 QPSK_5M Link_M-CH

Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB

1 pp 1414.00 -44.77 -32.69 -13.00 -12.08 -31.77 Peak

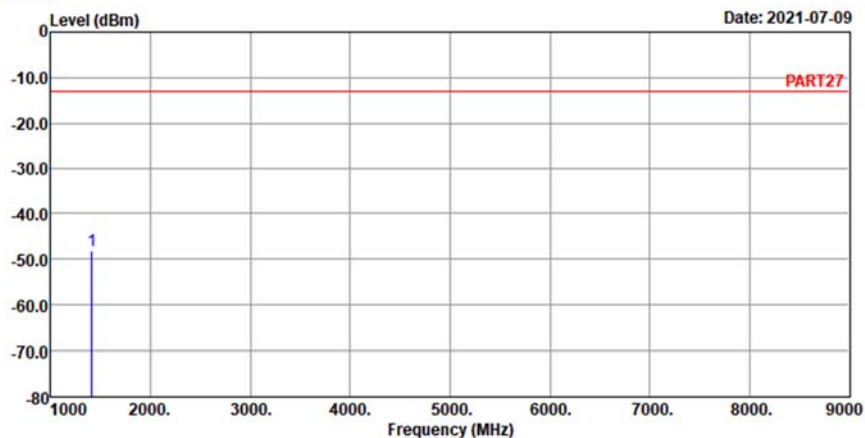


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 85 QPSK_5M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	

1 pp 1414.00 -48.00 -35.92 -13.00 -12.08 -35.00 Peak

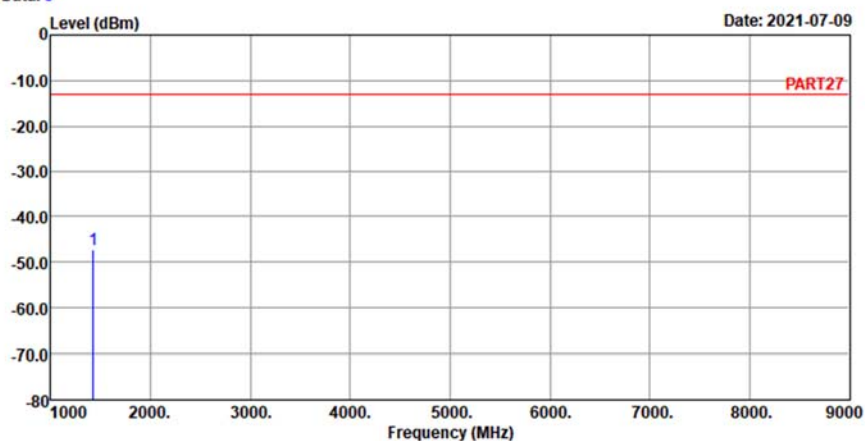
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART27 HORIZONTAL
 Remak : Cat-M1 Band 85 QPSK_5M Link_H-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB
1 pp 1427.00	-47.14	-34.89	-13.00	-12.25	-34.14 Peak

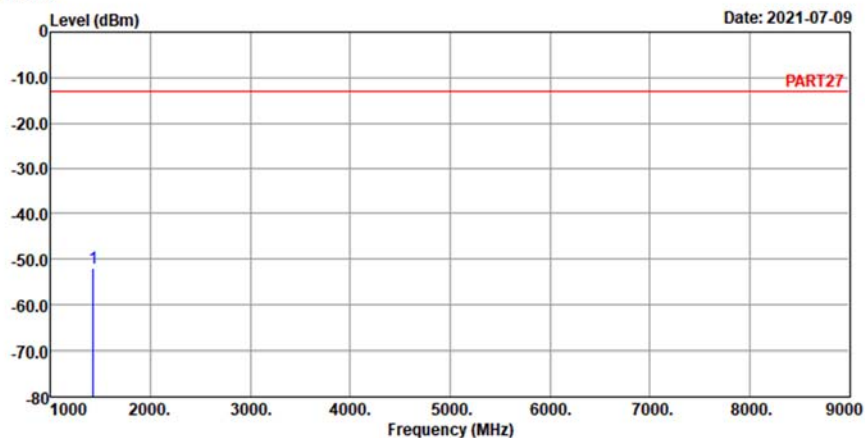


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 85 QPSK_5M Link_H-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1427.00 -52.07 -39.82 -13.00 -12.25 -39.07 Peak

Cat-M1 Band 85, Channel Bandwidth 10MHz Low Channel

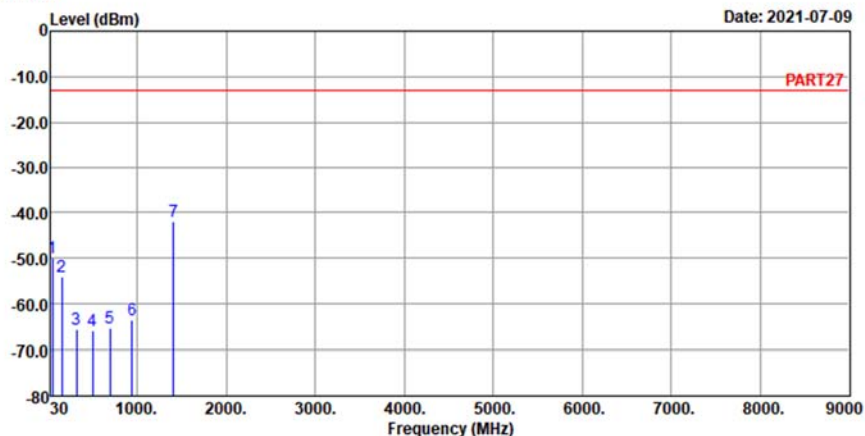


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 85 QPSK_10M Link_L-CH

Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	44.55	-49.79	-47.80	-13.00	-1.99	-36.79	Peak
2	153.19	-54.10	-47.34	-13.00	-6.76	-41.10	Peak
3	320.03	-65.58	-58.88	-13.00	-6.70	-52.58	Peak
4	500.45	-65.76	-61.15	-13.00	-4.61	-52.76	Peak
5	696.39	-65.22	-65.06	-13.00	-0.16	-52.22	Peak
6	938.89	-63.61	-65.14	-13.00	1.53	-50.61	Peak
7 pp	1406.00	-41.96	-30.00	-13.00	-11.96	-28.96	Peak

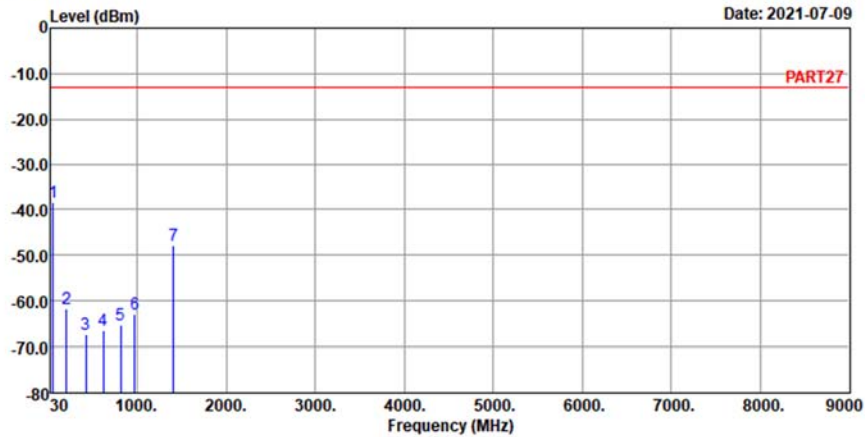


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 VERTICAL

Remak : Cat-M1 Band 85 QPSK_10M Link_L-CH

Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	dB	Limit Remark
1 pp	53.28	-38.48	-32.67	-13.00	-5.81	-25.48 Peak
2	205.57	-61.55	-53.76	-13.00	-7.79	-48.55 Peak
3	426.73	-67.29	-61.56	-13.00	-5.73	-54.29 Peak
4	620.73	-66.49	-65.68	-13.00	-0.81	-53.49 Peak
5	813.76	-65.23	-65.84	-13.00	0.61	-52.23 Peak
6	971.87	-62.83	-65.42	-13.00	2.59	-49.83 Peak
7	1406.00	-47.81	-35.85	-13.00	-11.96	-34.81 Peak

Mid Channel

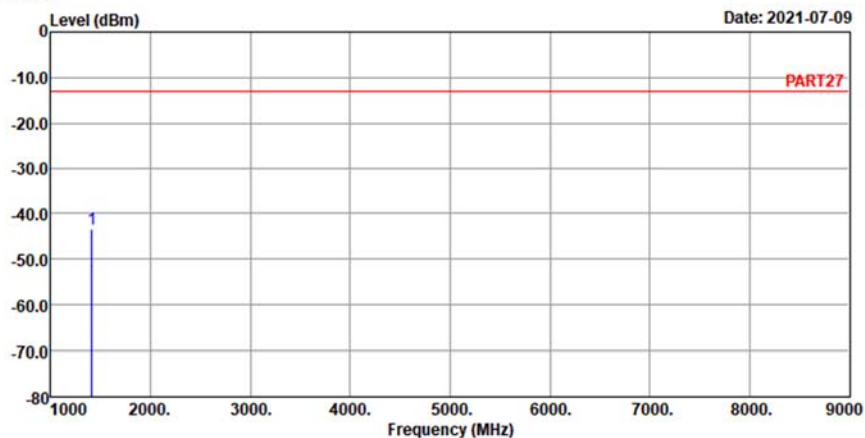


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 85 QPSK_10M Link_M-CH

Tested by: Cookie Ku

		Read	Limit	Over	
Freq	Level	Level	Line	Factor	Limit Remark
MHz	dBm	dBm	dBm	dB	dB

1 pp 1414.00 -43.36 -31.28 -13.00 -12.08 -30.36 Peak

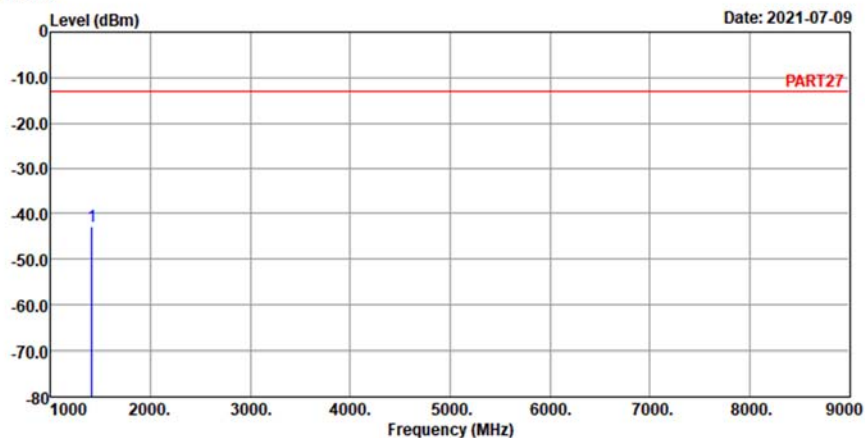


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART27 VERTICAL
 Remak : Cat-M1 Band 85 QPSK_10M Link_M-CH
 Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1414.00 -42.73 -30.65 -13.00 -12.08 -29.73 Peak

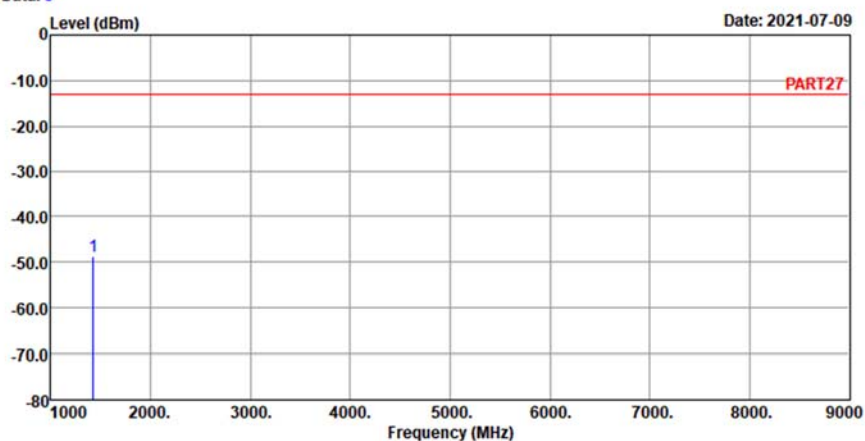
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5

Condition: PART27 HORIZONTAL

Remak : Cat-M1 Band 85 QPSK_10M Link_H-CH

Tested by: Cookie Ku

		Read	Limit		Over	
Freq	Level	Level	Line	Factor	Limit	Remark
MHz	dBm	dBm	dBm	dB	dB	
1 pp 1422.00	-48.58	-36.39	-13.00	-12.19	-35.58	Peak

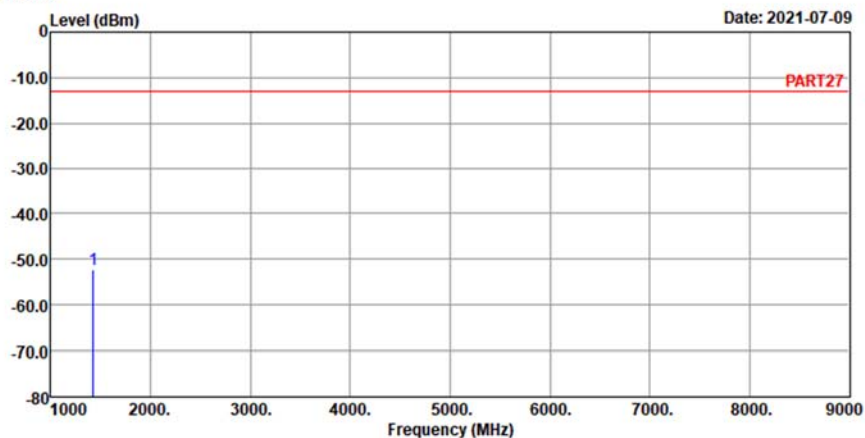


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART27 VERTICAL
Remak : Cat-M1 Band 85 QPSK_10M Link_H-CH
Tested by: Cookie Ku

Freq	Level	Read	Limit	Over	
MHz	dBm	Level	Line	Factor	Limit Remark
		dBm	dBm	dB	dB

1 pp 1422.00 -52.20 -40.01 -13.00 -12.19 -39.20 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 and approved 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 ---