

Partial FCC Test Report (Part 22 – GSM, Cat-M1 B5/B26)

Report No.: RFBCKS-WTW-P21050677-6

FCC ID: 2ASE7-BIOHB02CTM10

Test Model: ME910G1-WW

Received Date: May 18, 2021

Test Date: Jul. 09 ~ Jul. 13, 2021

Issued Date: Oct. 08, 2021

Applicant: BioIntelliSense, Inc

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



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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P21050677-6	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. 13, 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 : 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 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective radiated power	Pass	Meet the requirement of limit.
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -14.88dB at 2546.40MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Radiated Emissions up to 1 GHz	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	GPRS: GMSK EDGE: GMSK, 8PSK Cat-M1: QPSK, 16QAM		
Operating Frequency	GPRS/EDGE	824.2MHz ~ 848.8MHz	
	Cat-M1 Band 5 (Channel Bandwidth 1.4MHz)	824.7MHz ~ 848.3MHz	
	Cat-M1 Band 5 (Channel Bandwidth 3MHz)	825.5MHz ~ 847.5MHz	
	Cat-M1 Band 5 (Channel Bandwidth 5MHz)	826.5MHz ~ 846.5MHz	
	Cat-M1 Band 5 (Channel Bandwidth 10MHz)	829.0MHz ~ 844.0MHz	
	Cat-M1 Band 26 (Channel Bandwidth 1.4MHz)	824.7MHz ~ 848.3MHz	
	Cat-M1 Band 26 (Channel Bandwidth 3MHz)	825.5MHz ~ 847.5MHz	
	Cat-M1 Band 26 (Channel Bandwidth 5MHz)	826.5MHz ~ 846.5MHz	
	Cat-M1 Band 26 (Channel Bandwidth 10MHz)	829.0MHz ~ 844.0MHz	
	Cat-M1 Band 26 (Channel Bandwidth 15MHz)	831.5MHz ~ 841.5MHz	
Max. ERP Power	GPRS	924.698mW (29.66dBm)	
	EDGE	238.232mW (23.77dBm)	
		QPSK	16QAM
	Cat-M1 Band 5 (Channel Bandwidth 1.4MHz)	99.770mW (19.99dBm)	83.176mW (19.20dBm)
	Cat-M1 Band 5 (Channel Bandwidth 3MHz)	99.770mW (19.99dBm)	78.705mW (18.96dBm)
	Cat-M1 Band 5 (Channel Bandwidth 5MHz)	98.628mW (19.94dBm)	97.949mW (19.91dBm)
	Cat-M1 Band 5 (Channel Bandwidth 10MHz)	99.770mW (19.99dBm)	97.499mW (19.89dBm)
	Cat-M1 Band 26 (Channel Bandwidth 1.4MHz)	134.276mW (21.28dBm)	110.408mW (20.43dBm)
	Cat-M1 Band 26 (Channel Bandwidth 3MHz)	136.773mW (21.36dBm)	111.429mW (20.47dBm)
	Cat-M1 Band 26 (Channel Bandwidth 5MHz)	141.579mW (21.51dBm)	136.773mW (21.36dBm)
	Cat-M1 Band 26 (Channel Bandwidth 10MHz)	139.316mW (21.44dBm)	135.831mW (21.33dBm)
	Cat-M1 Band 26 (Channel Bandwidth 15MHz)	134.586mW (21.29dBm)	132.739mW (21.23dBm)

Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
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 and STS1912245W03 for module (Brand: Telit, Model: ME910G1-WW).
2. The following antennas were provided to the EUT.

Original antenna

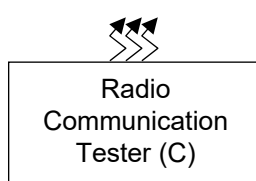
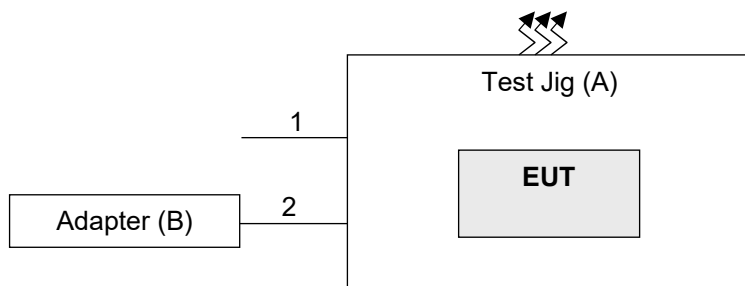
Antenna Type	Antenna gain (dBi)										
	GPRS 850	GPRS 1900	Cat-M1 B2	Cat-M1 B4	Cat-M1 B5	Cat-M1 B12	Cat-M1 B13	Cat-M1 B25	Cat-M1 B26	Cat-M1 B66	Cat-M1 B85
External	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14

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
GPRS/EDGE	Z-plane
Cat-M1 Band 5	Y-plane
Cat-M1 Band 26	Y-plane

GPRS/EDGE Mode

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	128 to 251	128 (824.2MHz), 189 (836.4MHz), 251 (848.8MHz)	GPRS, EDGE
-	Radiated Emission Below 1GHz	128 to 251	189 (836.4MHz)	GPRS, EDGE
-	Radiated Emission Above 1GHz	128 to 251	128 (824.2MHz), 189 (836.4MHz), 251 (848.8MHz)	GPRS, EDGE

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

Cat-M1 Band 5

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	20407 to 20643	20407 (824.7MHz), 20525 (836.5MHz), 20643 (848.3MHz)	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
		20415 to 20635	20415 (825.5MHz), 20525 (836.5MHz), 20635 (847.5MHz)	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
		20425 to 20625	20425 (826.5MHz), 20525 (836.5MHz), 20625 (846.5MHz)	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
		20450 to 20600	20450 (829.0MHz), 20525 (836.5MHz), 20600 (844.0MHz)	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	20450 to 20600	20450 (829.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	20407 to 20643	20407 (824.7MHz), 20525 (836.5MHz), 20643 (848.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		20425 to 20625	20425 (826.5MHz), 20525 (836.5MHz), 20625 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20450 (829.0MHz), 20525 (836.5MHz), 20600 (844.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

- For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
- 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.
- 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 26

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	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
		26805 to 27025	26805 (825.5MHz), 26915 (836.5MHz), 27025 (847.5MHz)	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
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	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
		26840 to 26990	26840 (829.0MHz), 26915 (836.5MHz), 26990 (844.0MHz)	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
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	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

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	26865 to 26965	26965 (841.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	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.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
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:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

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 and recorded as per the above standards.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

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

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with GSM and 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)

Band	GSM850		
Channel	128	189	251
Frequency	824.2	836.4	848.8
GPRS	32.58	32.53	33.03
EDGE	27.14	27.01	27.05

Cat-M1 Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	22.89	23.05	23.41
		1	5	22.81	23.01	23.40
		3	0	22.53	22.45	22.55
		3	3	22.44	22.51	22.60
		6	0	22.01	22.02	22.34
10M	16QAM	1	0	23.24	23.31	23.13
		1	5	23.21	23.20	23.12
		3	0	22.29	22.30	22.24
		3	3	22.22	22.33	22.27
		5	0	21.94	21.93	21.97
		5	1	21.87	21.85	21.88
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.05	23.05	23.35
		1	5	23.01	23.01	23.31
		3	0	22.49	22.48	22.48
		3	3	22.41	22.50	21.80
		6	0	22.21	22.01	21.79
5M	16QAM	1	0	23.28	23.23	23.20
		1	5	23.26	23.14	23.26
		3	0	22.26	22.25	22.21
		3	3	22.28	22.28	21.11
		5	0	21.25	21.17	21.10
		5	1	21.18	21.10	21.09
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.41	23.16	23.07
		1	5	23.40	23.14	23.01
		3	0	22.57	22.59	22.40
		3	3	22.53	22.47	22.56
		6	0	21.28	21.01	21.25
3M	16QAM	1	0	21.56	22.06	22.38
		1	5	21.52	22.04	22.37
		3	0	22.33	22.01	22.27
		3	3	22.21	22.02	22.26
		5	0	20.95	21.05	21.11
		5	1	20.91	21.01	21.05

Cat-M1 Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.18	23.40	23.33
		1	5	23.11	23.35	23.29
		3	0	22.52	22.45	22.56
		3	3	22.48	22.58	22.55
		6	0	21.05	21.15	21.43
1.4M	16QAM	1	0	22.61	22.30	21.81
		1	5	22.51	22.28	21.79
		3	0	22.34	22.25	22.40
		3	3	22.37	22.27	22.40
		5	0	21.37	21.31	21.09
		5	1	21.35	21.28	21.03

Cat-M1 Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	23.34	23.06	23.26
		1	5	23.31	23.02	23.20
		3	0	22.52	22.57	22.46
		3	3	22.40	22.50	22.53
		6	0	22.45	22.60	22.56
15M	16QAM	1	0	23.13	23.28	23.27
		1	5	23.03	23.20	23.26
		3	0	22.31	22.23	22.32
		3	3	22.36	22.21	22.33
		5	0	22.50	22.66	22.56
		5	1	22.53	22.52	22.99
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.01	23.18	23.49
		1	5	22.93	23.11	23.46
		3	0	22.44	22.53	22.41
		3	3	22.49	22.48	22.57
		6	0	22.28	22.32	22.58
10M	16QAM	1	0	23.38	23.32	23.36
		1	5	23.34	23.31	23.20
		3	0	22.36	22.23	22.30
		3	3	22.40	22.27	22.34
		5	0	21.51	21.69	21.52
		5	1	21.52	21.50	21.69
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.56	23.31	23.42
		1	5	23.52	23.25	23.35
		3	0	22.44	22.50	22.41
		3	3	22.41	22.41	22.52
		6	0	22.41	22.43	22.44
5M	16QAM	1	0	23.41	23.37	23.25
		1	5	23.35	23.22	23.21
		3	0	22.37	22.36	22.38
		3	3	22.28	22.33	21.39
		5	0	21.45	21.27	21.29
		5	1	21.44	21.24	21.23

Cat-M1 Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.09	23.41	23.33
		1	5	23.05	23.40	23.24
		3	0	22.52	22.46	22.59
		3	3	22.51	22.54	22.49
		6	0	21.17	21.27	21.04
3M	16QAM	1	0	22.35	22.36	22.52
		1	5	22.33	22.28	22.46
		3	0	22.28	22.32	22.36
		3	3	22.30	22.21	22.39
		5	0	21.31	21.40	21.27
		5	1	21.24	21.38	21.21
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.31	23.32	23.33
		1	5	23.22	23.31	23.25
		3	0	22.57	22.59	22.44
		3	3	22.54	22.48	22.44
		6	0	22.44	21.25	21.09
1.4M	16QAM	1	0	22.25	22.36	22.48
		1	5	22.21	22.25	22.40
		3	0	22.16	22.28	22.33
		3	3	22.14	22.30	22.25
		5	0	21.33	21.15	20.97
		5	1	21.30	21.17	20.89

ERP Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency	824.2	836.4	848.8
GPRS	29.21	29.16	29.66
EDGE	23.77	23.64	23.68

Cat-M1 Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	19.52	19.68	20.04
		1	5	19.44	19.64	20.03
		3	0	19.16	19.08	19.18
		3	3	19.07	19.14	19.23
		6	0	18.64	18.65	18.97
10M	16QAM	1	0	19.87	19.94	19.76
		1	5	19.84	19.83	19.75
		3	0	18.92	18.93	18.87
		3	3	18.85	18.96	18.90
		5	0	18.57	18.56	18.60
		5	1	18.50	18.48	18.51
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	19.68	19.68	19.98
		1	5	19.64	19.64	19.94
		3	0	19.12	19.11	19.11
		3	3	19.04	19.13	18.43
		6	0	18.84	18.64	18.42
5M	16QAM	1	0	19.91	19.86	19.83
		1	5	19.89	19.77	19.89
		3	0	18.89	18.88	18.84
		3	3	18.91	18.91	17.74
		5	0	17.88	17.80	17.73
		5	1	17.81	17.73	17.72
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	20.04	19.79	19.70
		1	5	20.03	19.77	19.64
		3	0	19.20	19.22	19.03
		3	3	19.16	19.10	19.19
		6	0	17.91	17.64	17.88
3M	16QAM	1	0	18.19	18.69	19.01
		1	5	18.15	18.67	19.00
		3	0	18.96	18.64	18.90
		3	3	18.84	18.65	18.89
		5	0	17.58	17.68	17.74
		5	1	17.54	17.64	17.68

Cat-M1 Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	19.81	20.03	19.96
		1	5	19.74	19.98	19.92
		3	0	19.15	19.08	19.19
		3	3	19.11	19.21	19.18
		6	0	17.68	17.78	18.06
1.4M	16QAM	1	0	19.24	18.93	18.44
		1	5	19.14	18.91	18.42
		3	0	18.97	18.88	19.03
		3	3	19.00	18.90	19.03
		5	0	18.00	17.94	17.72
		5	1	17.98	17.91	17.66

Cat-M1 Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	21.29	21.01	21.21
		1	5	21.26	20.97	21.15
		3	0	20.47	20.52	20.41
		3	3	20.35	20.45	20.48
		6	0	20.40	20.55	20.51
15M	16QAM	1	0	21.08	21.23	21.22
		1	5	20.98	21.15	21.21
		3	0	20.26	20.18	20.27
		3	3	20.31	20.16	20.28
		5	0	20.45	20.61	20.51
		5	1	20.48	20.47	20.94
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	20.96	21.13	21.44
		1	5	20.88	21.06	21.41
		3	0	20.39	20.48	20.36
		3	3	20.44	20.43	20.52
		6	0	20.23	20.27	20.53
10M	16QAM	1	0	21.33	21.27	21.31
		1	5	21.29	21.26	21.15
		3	0	20.31	20.18	20.25
		3	3	20.35	20.22	20.29
		5	0	19.46	19.64	19.47
		5	1	19.47	19.45	19.64
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	21.51	21.26	21.37
		1	5	21.47	21.20	21.30
		3	0	20.39	20.45	20.36
		3	3	20.36	20.36	20.47
		6	0	20.36	20.38	20.39
5M	16QAM	1	0	21.36	21.32	21.20
		1	5	21.30	21.17	21.16
		3	0	20.32	20.31	20.33
		3	3	20.23	20.28	19.34
		5	0	19.40	19.22	19.24
		5	1	19.39	19.19	19.18

Cat-M1 Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	21.04	21.36	21.28
		1	5	21.00	21.35	21.19
		3	0	20.47	20.41	20.54
		3	3	20.46	20.49	20.44
		6	0	19.12	19.22	18.99
3M	16QAM	1	0	20.30	20.31	20.47
		1	5	20.28	20.23	20.41
		3	0	20.23	20.27	20.31
		3	3	20.25	20.16	20.34
		5	0	19.26	19.35	19.22
		5	1	19.19	19.33	19.16
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	21.26	21.27	21.28
		1	5	21.17	21.26	21.20
		3	0	20.52	20.54	20.39
		3	3	20.49	20.43	20.39
		6	0	20.39	19.20	19.04
1.4M	16QAM	1	0	20.20	20.31	20.43
		1	5	20.16	20.20	20.35
		3	0	20.11	20.23	20.28
		3	3	20.09	20.25	20.20
		5	0	19.28	19.10	18.92
		5	1	19.25	19.12	18.84

4.2 Radiated Emission Measurement

4.2.1 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 equal to -13dBm .

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. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. 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, $\text{E.R.P power} = \text{E.I.R.P power} - 2.15\text{dBi}$.

Note:

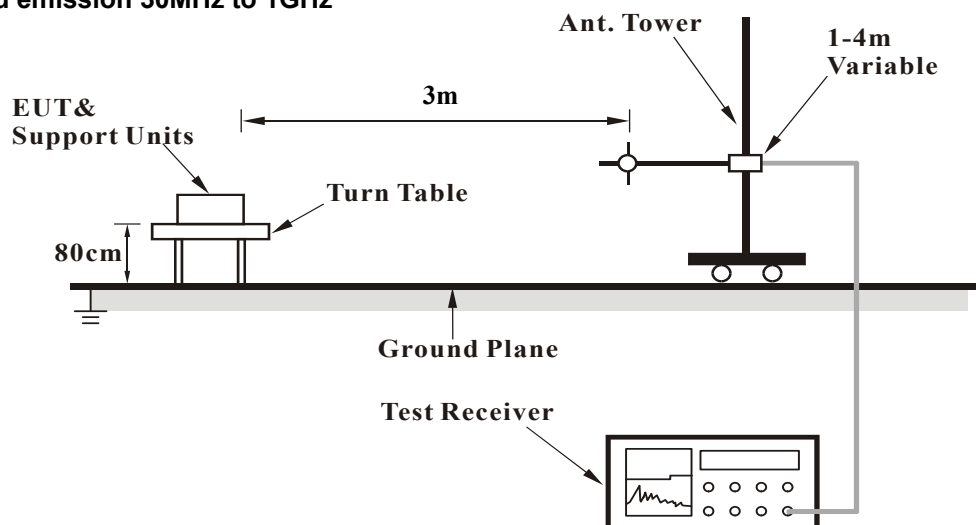
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.3 Deviation from Test Standard

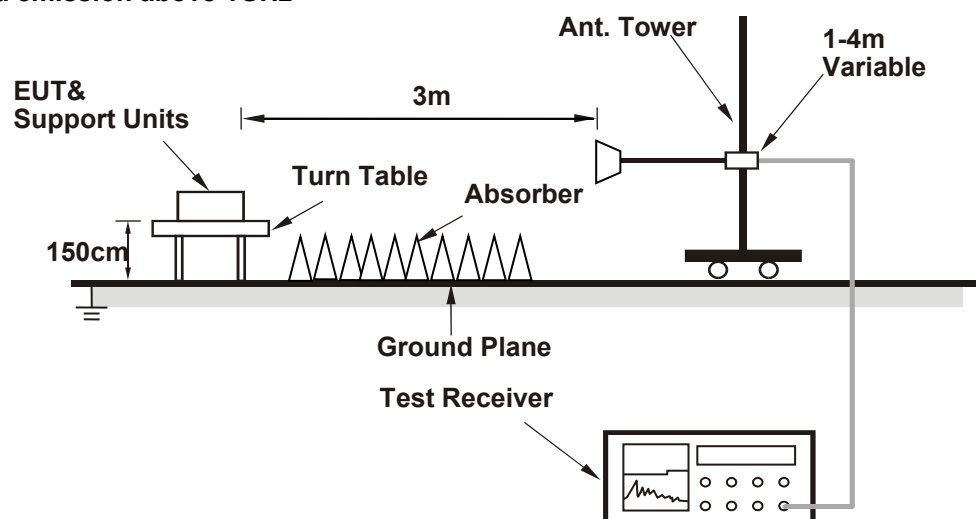
No deviation.

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

GPRS

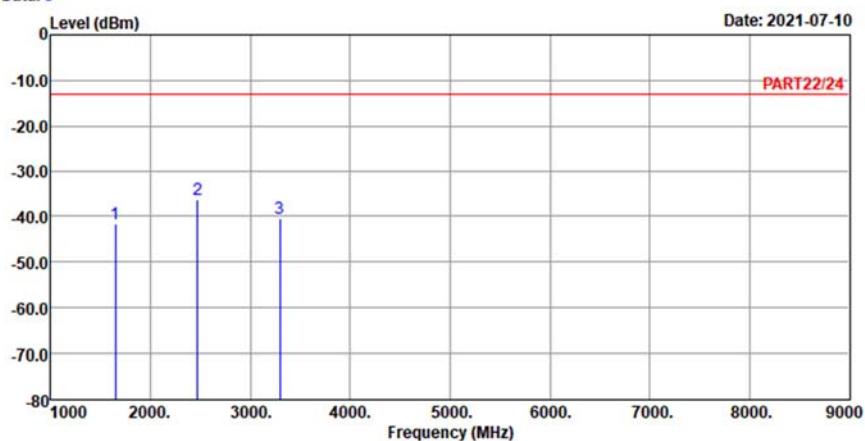
Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



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

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-41.52	-27.78	-13.00	-13.74	-28.52	Peak
2 pp	2472.60	-36.35	-26.33	-13.00	-10.02	-23.35	Peak
3	3296.80	-40.39	-31.53	-13.00	-8.86	-27.39	Peak

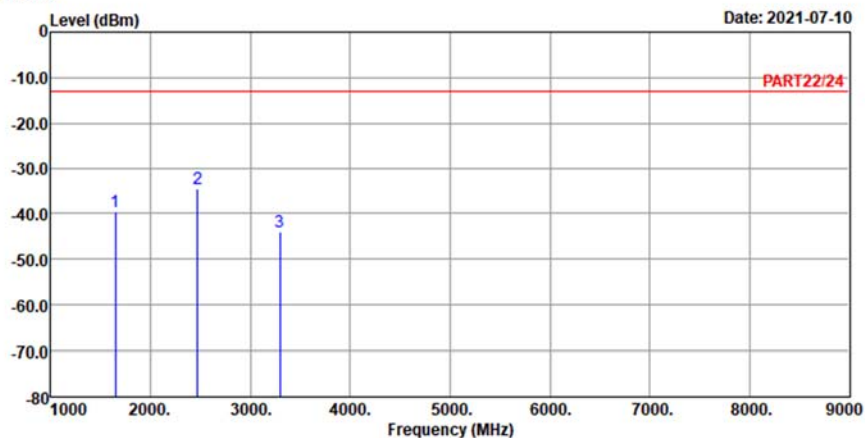


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-10



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

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-39.69	-25.95	-13.00	-13.74	-26.69	Peak
2 pp	2472.60	-34.42	-24.40	-13.00	-10.02	-21.42	Peak
3	3296.80	-43.90	-35.04	-13.00	-8.86	-30.90	Peak

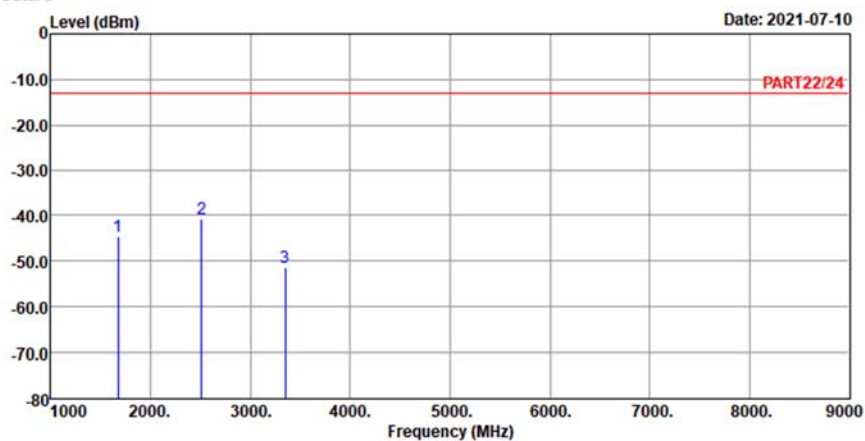
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



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

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1672.80	-44.59	-30.69	-13.00	-13.90	-31.59	Peak
2 pp	2509.20	-40.77	-30.69	-13.00	-10.08	-27.77	Peak
3	3345.60	-51.24	-42.48	-13.00	-8.76	-38.24	Peak

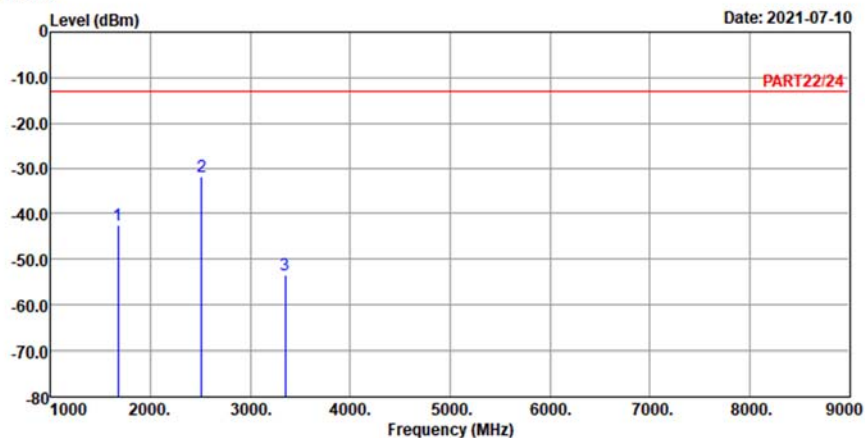


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-10



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

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1672.80	-42.42	-28.52	-13.00	-13.90	-29.42	Peak
2 pp	2509.20	-32.02	-21.94	-13.00	-10.08	-19.02	Peak
3	3345.60	-53.47	-44.71	-13.00	-8.76	-40.47	Peak

High Channel

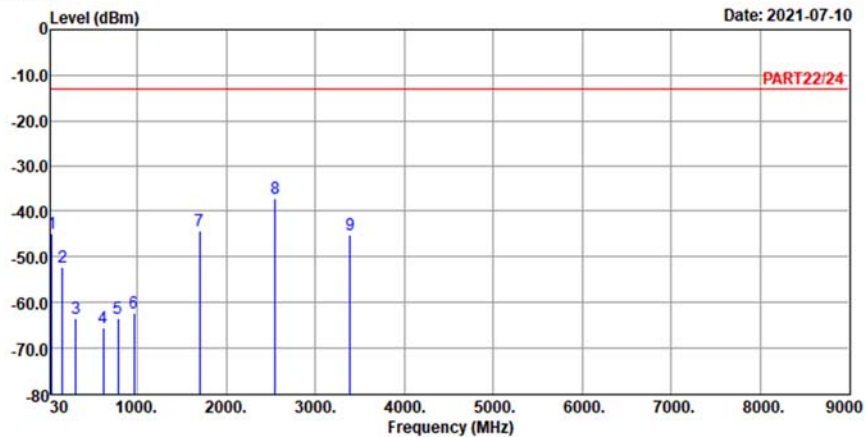


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-10



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

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	Factor	Limit Remark
1	37.76	-44.74	-44.30	-13.00	-0.44	-31.74 Peak
2	158.04	-52.25	-46.86	-13.00	-5.39	-39.25 Peak
3	310.33	-63.35	-56.50	-13.00	-6.85	-50.35 Peak
4	615.88	-65.45	-64.66	-13.00	-0.79	-52.45 Peak
5	784.66	-63.54	-64.32	-13.00	0.78	-50.54 Peak
6	964.11	-62.35	-64.66	-13.00	2.31	-49.35 Peak
7	1697.60	-44.20	-30.15	-13.00	-14.05	-31.20 Peak
8 pp	2546.40	-37.11	-27.05	-13.00	-10.06	-24.11 Peak
9	3395.20	-45.09	-36.49	-13.00	-8.60	-32.09 Peak

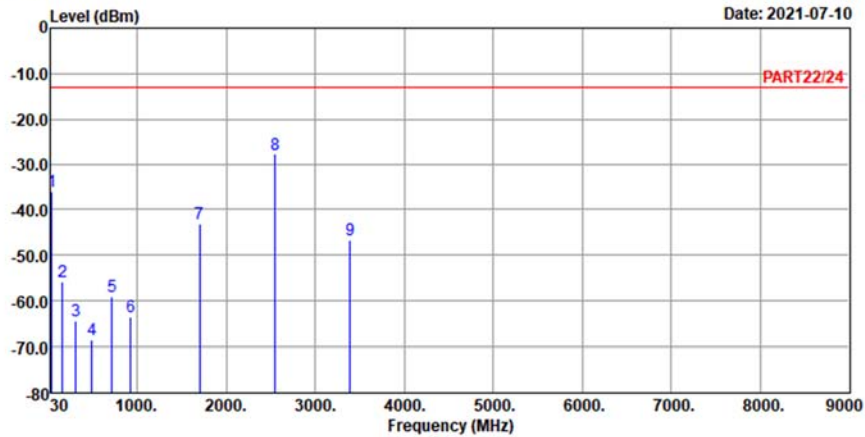


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-10



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

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	42.61	-35.91	-34.97	-13.00	-0.94	-22.91	Peak
2	159.01	-55.75	-50.63	-13.00	-5.12	-42.75	Peak
3	309.36	-64.32	-57.46	-13.00	-6.86	-51.32	Peak
4	490.75	-68.47	-63.68	-13.00	-4.79	-55.47	Peak
5	712.88	-59.06	-59.21	-13.00	0.15	-46.06	Peak
6	926.28	-63.33	-64.55	-13.00	1.22	-50.33	Peak
7	1697.60	-43.12	-29.07	-13.00	-14.05	-30.12	Peak
8 pp	2546.40	-27.88	-17.82	-13.00	-10.06	-14.88	Peak
9	3395.20	-46.55	-37.95	-13.00	-8.60	-33.55	Peak

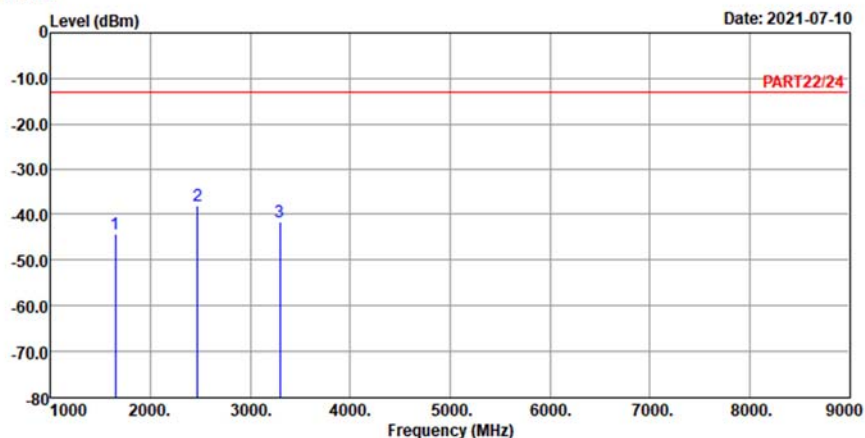
EDGE Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remark : EDGE 850 Link_L-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-44.22	-30.48	-13.00	-13.74	-31.22	Peak
2 pp	2472.60	-37.94	-27.92	-13.00	-10.02	-24.94	Peak
3	3296.80	-41.64	-32.78	-13.00	-8.86	-28.64	Peak

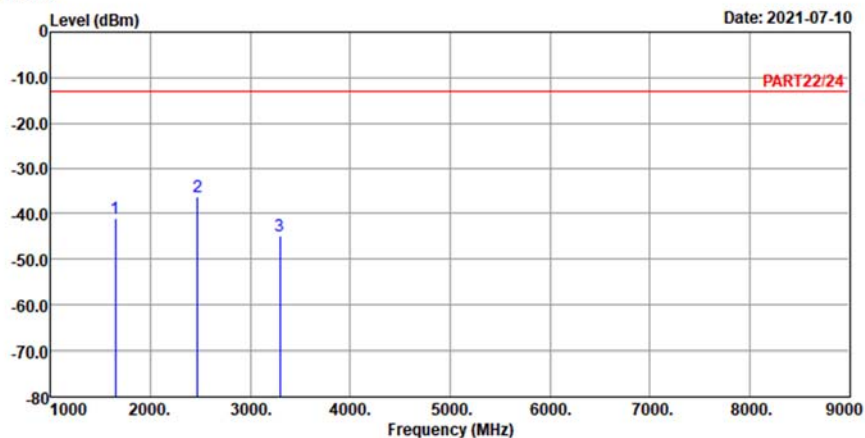


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-10



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remark : EDGE 850 Link_L-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1648.40	-40.97	-27.23	-13.00	-13.74	-27.97	Peak
2 pp	2472.60	-36.31	-26.29	-13.00	-10.02	-23.31	Peak
3	3296.80	-44.92	-36.06	-13.00	-8.86	-31.92	Peak

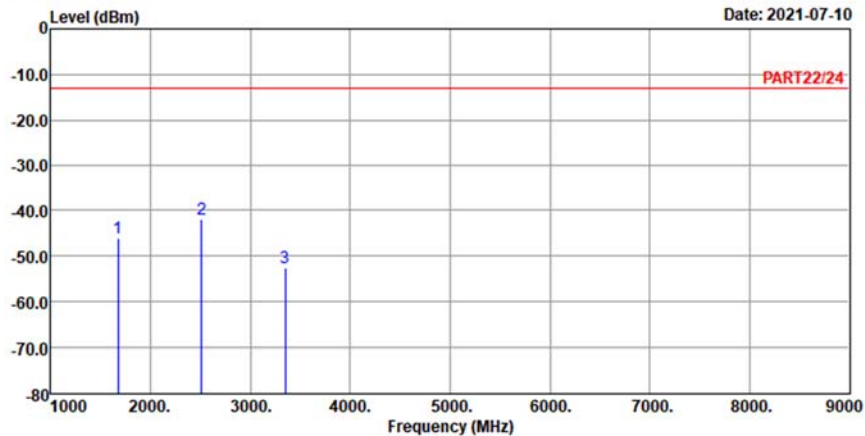
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remark : EDGE 850 Link_M-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Line Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1672.80	-46.15	-32.25	-13.00	-13.90	-33.15	Peak
2 pp	2509.20	-41.89	-31.81	-13.00	-10.08	-28.89	Peak
3	3345.60	-52.52	-43.76	-13.00	-8.76	-39.52	Peak

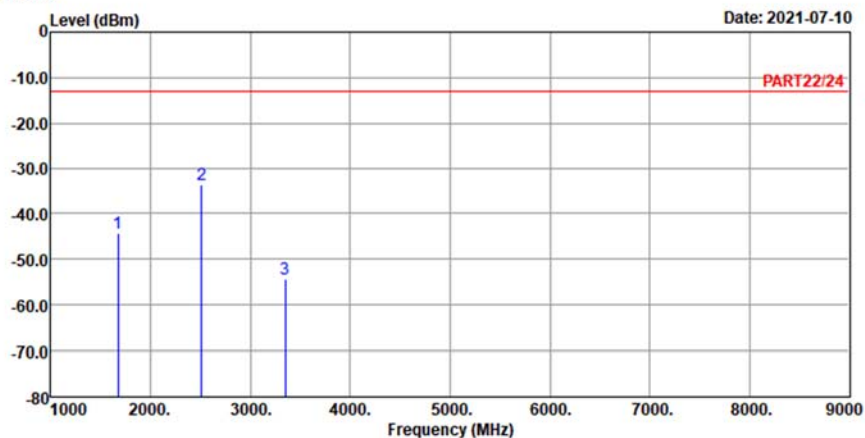


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A D T

Data: 4

Date: 2021-07-10



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remark : EDGE 850 Link_M-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1672.80	-44.37	-30.47	-13.00	-13.90	-31.37	Peak
2 pp	2509.20	-33.80	-23.72	-13.00	-10.08	-20.80	Peak
3	3345.60	-54.22	-45.46	-13.00	-8.76	-41.22	Peak

High Channel

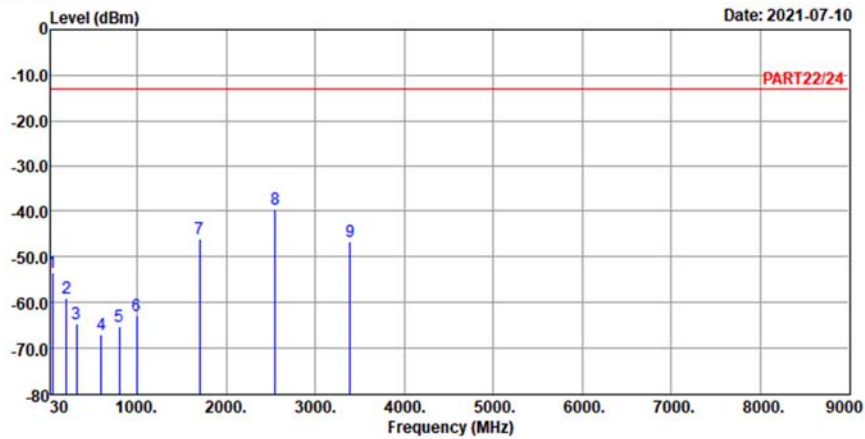


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-10



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remark : EDGE 850 Link_H-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	Line	Factor	Limit Remark
				dBm	dB	dB
1	43.58	-53.54	-52.07	-13.00	-1.47	-40.54 Peak
2	204.60	-58.94	-51.11	-13.00	-7.83	-45.94 Peak
3	321.00	-64.79	-58.10	-13.00	-6.69	-51.79 Peak
4	599.39	-66.89	-66.10	-13.00	-0.79	-53.89 Peak
5	801.15	-65.34	-66.07	-13.00	0.73	-52.34 Peak
6	992.24	-62.80	-66.10	-13.00	3.30	-49.80 Peak
7	1697.60	-46.20	-32.15	-13.00	-14.05	-33.20 Peak
8 pp	2546.40	-39.51	-29.45	-13.00	-10.06	-26.51 Peak
9	3395.20	-46.59	-37.99	-13.00	-8.60	-33.59 Peak

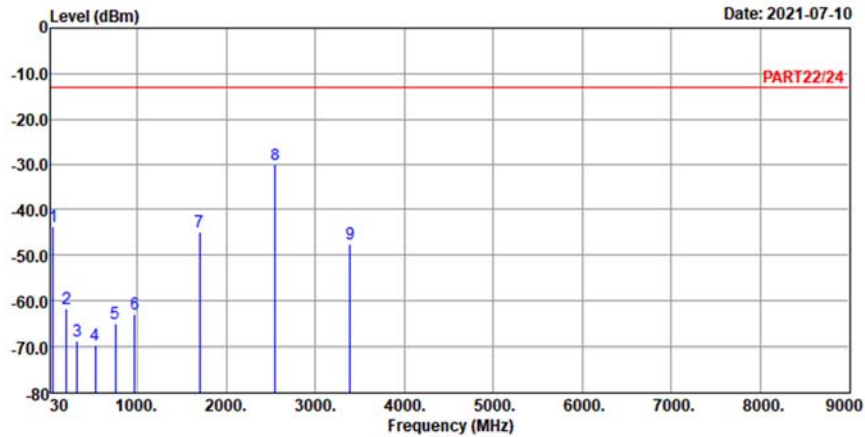


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-10



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remark : EDGE 850 Link_H-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Line	Over Factor	Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	55.22	-43.59	-37.25	-13.00	-6.34	-30.59	Peak
2	205.57	-61.59	-53.80	-13.00	-7.79	-48.59	Peak
3	327.79	-68.84	-62.26	-13.00	-6.58	-55.84	Peak
4	525.67	-69.56	-65.85	-13.00	-3.71	-56.56	Peak
5	752.65	-65.05	-65.92	-13.00	0.87	-52.05	Peak
6	973.81	-62.98	-65.63	-13.00	2.65	-49.98	Peak
7	1697.60	-44.92	-30.87	-13.00	-14.05	-31.92	Peak
8 pp	2546.40	-30.06	-20.00	-13.00	-10.06	-17.06	Peak
9	3395.20	-47.65	-39.05	-13.00	-8.60	-34.65	Peak

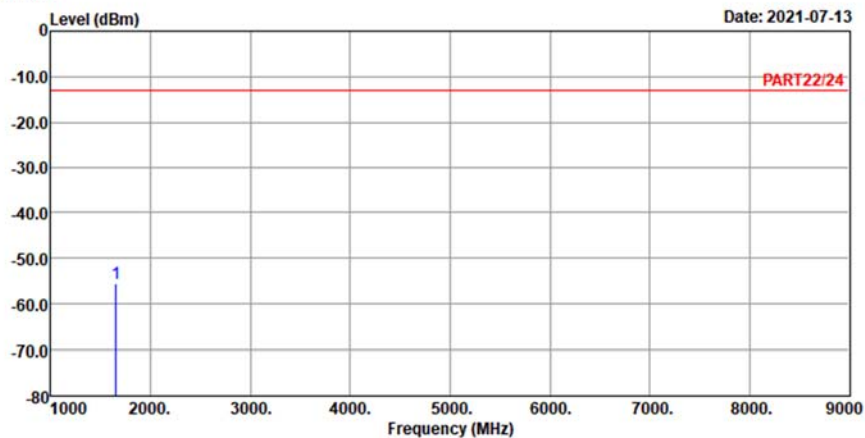
Cat-M1 Band 5, Channel Bandwidth 1.4MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : Cat-M1 Band 5 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

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

1 pp 1649.40 -55.57 -41.83 -13.00 -13.74 -42.57 Peak

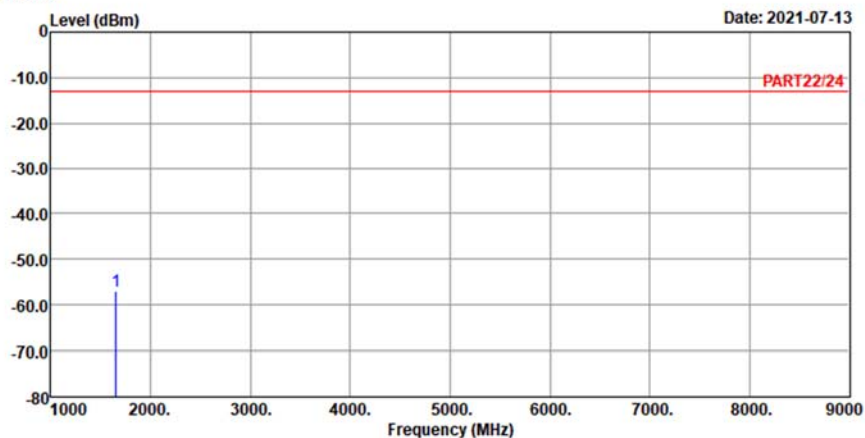


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 5 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 1649.40 -56.87 -43.13 -13.00 -13.74 -43.87 Peak

Mid Channel

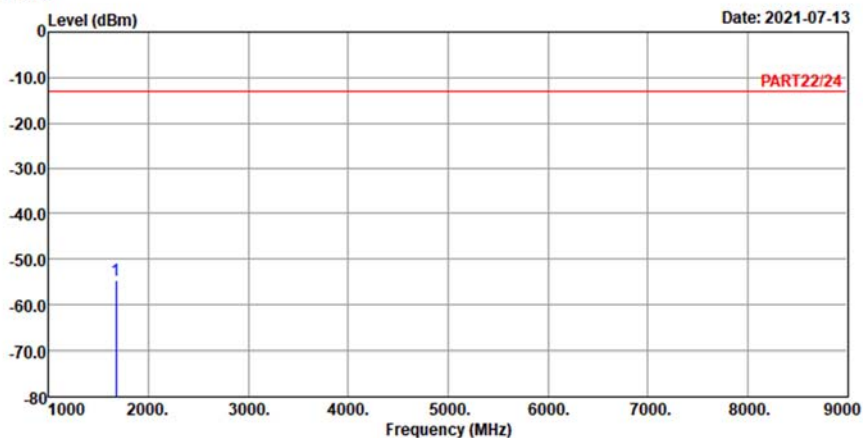


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-13



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : Cat-M1 Band 5 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 1673.00 -54.66 -40.76 -13.00 -13.90 -41.66 Peak

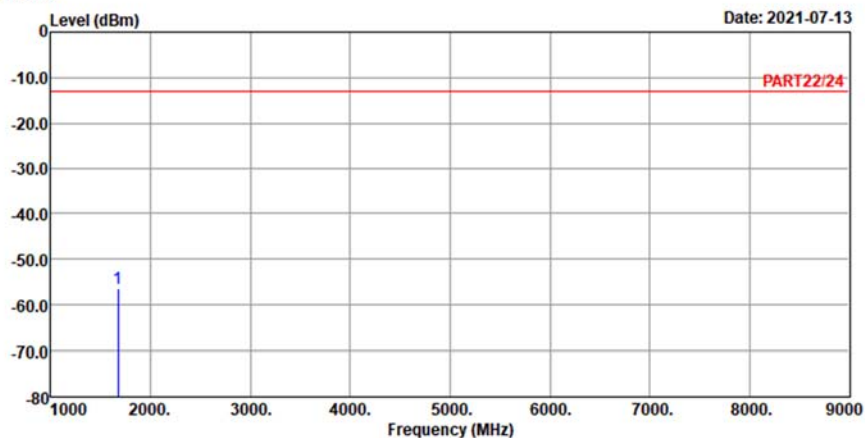


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5

Condition: PART22/24 VERTICAL

Remak : Cat-M1 Band 5 QPSK_1.4M 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 1673.00 -56.52 -42.62 -13.00 -13.90 -43.52 Peak

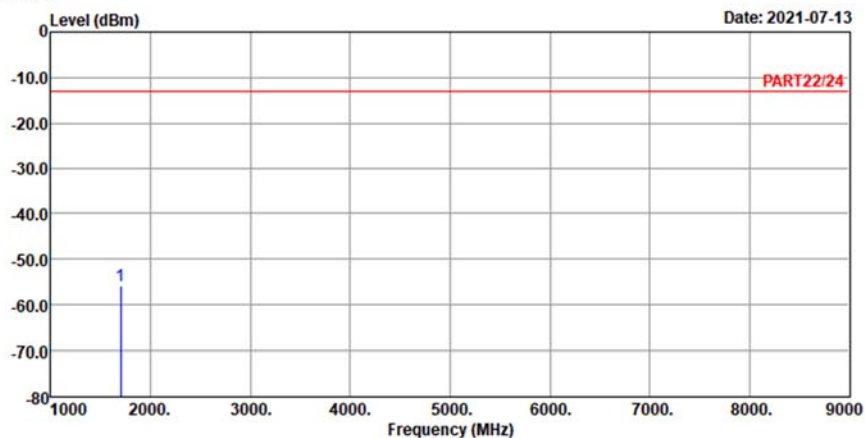
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 5 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 1696.60 -55.84 -41.82 -13.00 -14.02 -42.84 Peak

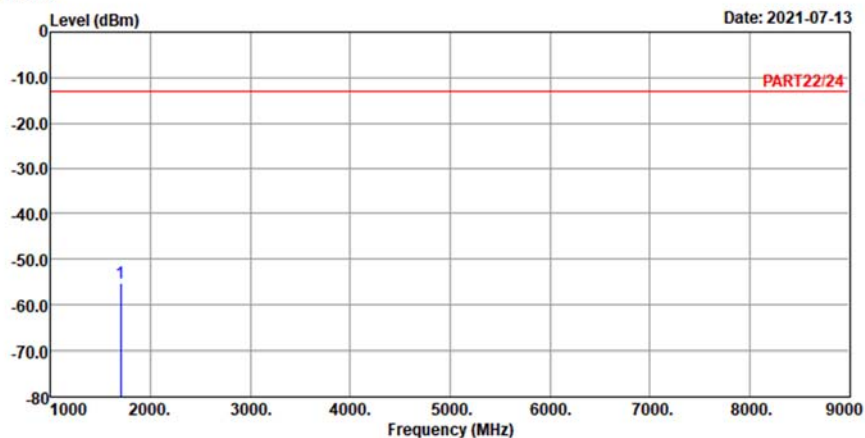


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 5 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 1696.60 -55.12 -41.10 -13.00 -14.02 -42.12 Peak

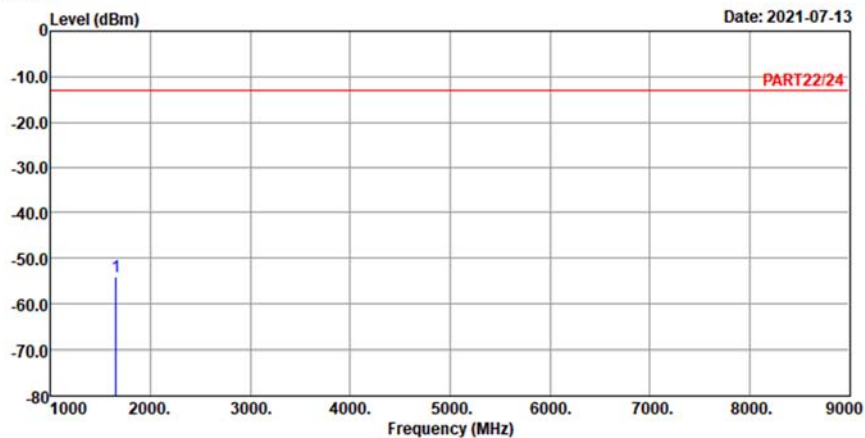
Cat-M1 Band 5, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : Cat-M1 Band 5 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 1653.00 -53.96 -40.19 -13.00 -13.77 -40.96 Peak

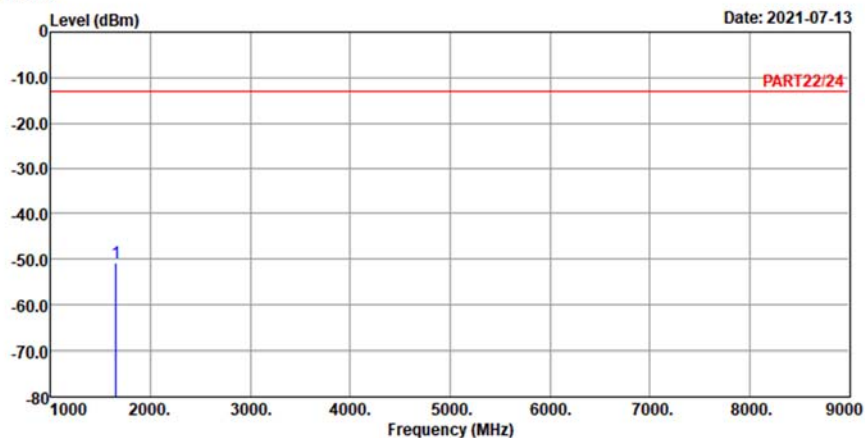


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 5 QPSK_5M Link_L-CH
Tested by: Cookie Ku

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

1 pp 1653.00 -50.90 -37.13 -13.00 -13.77 -37.90 Peak

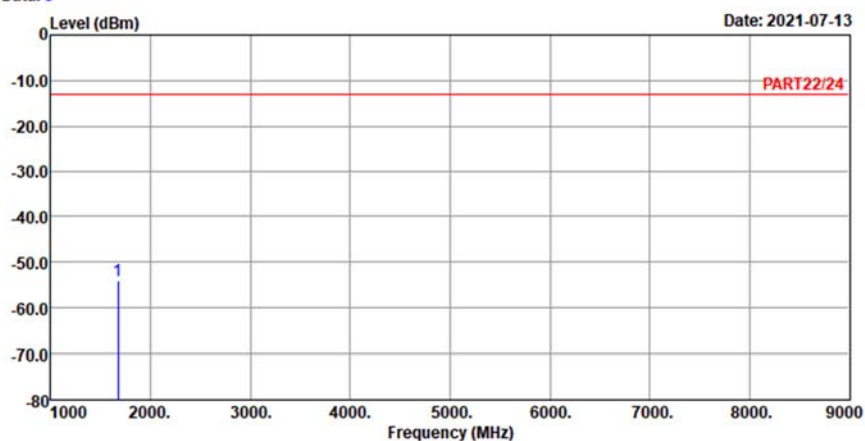
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 5 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 1673.00	-54.13	-40.23	-13.00	-13.90	-41.13 Peak

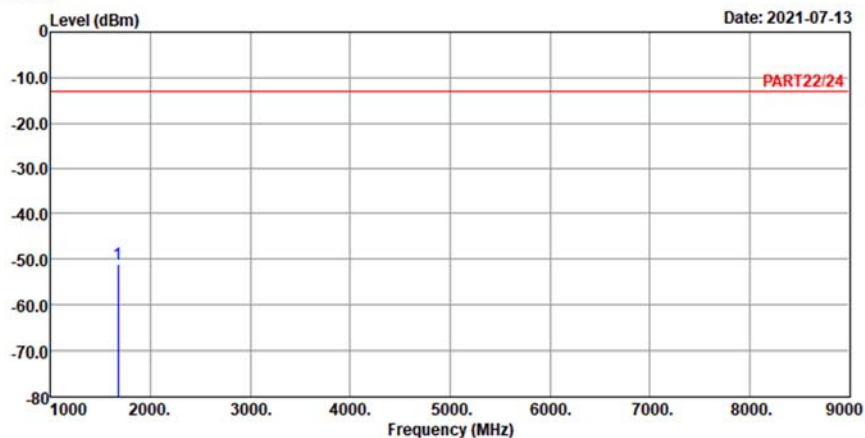


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 5 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 1673.00 -51.01 -37.11 -13.00 -13.90 -38.01 Peak

High Channel

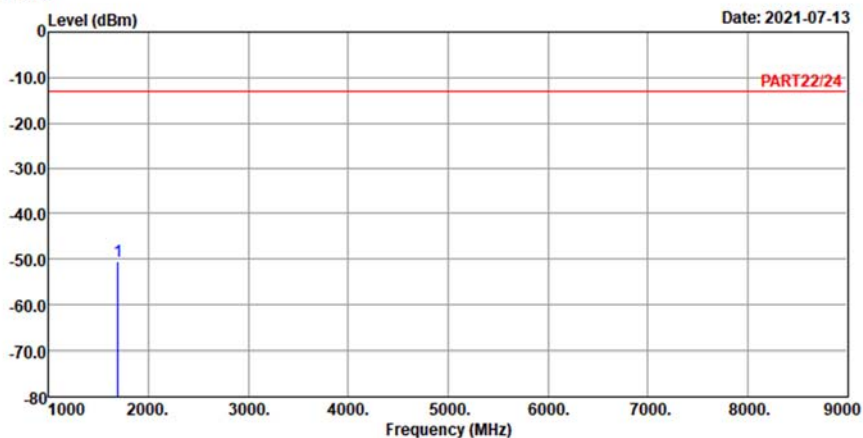


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3

Date: 2021-07-13



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : Cat-M1 Band 5 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 1693.00 -50.42 -36.40 -13.00 -14.02 -37.42 Peak

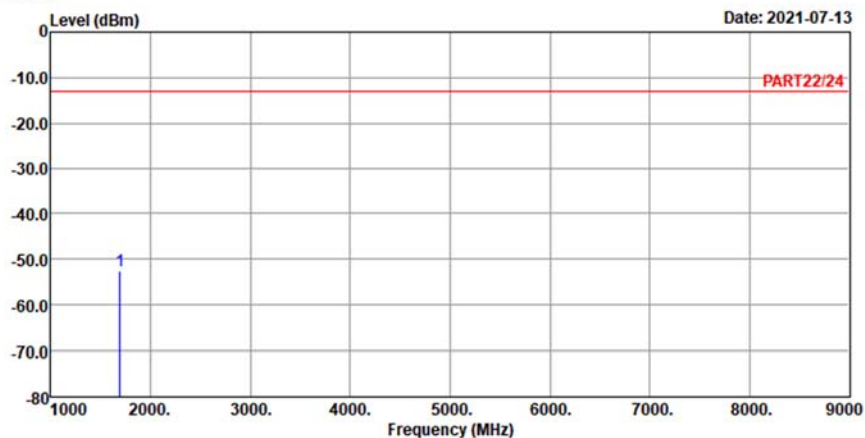


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 5 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 1693.00 -52.62 -38.60 -13.00 -14.02 -39.62 Peak

Cat-M1 Band 5, Channel Bandwidth 10MHz

Low Channel

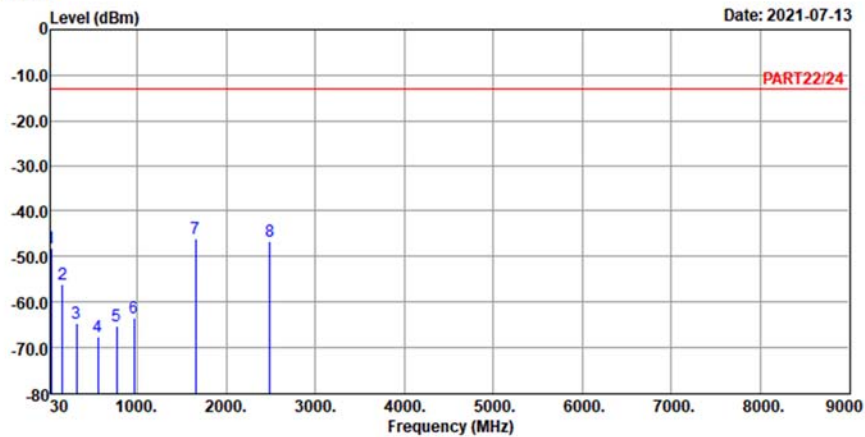


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-13



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : Cat-M1 Band 5 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	35.82	-48.16	-46.63	-13.00	-1.53	-35.16	Peak
2	160.95	-56.15	-51.24	-13.00	-4.91	-43.15	Peak
3	320.03	-64.70	-58.00	-13.00	-6.70	-51.70	Peak
4	561.56	-67.50	-65.13	-13.00	-2.37	-54.50	Peak
5	768.17	-65.26	-66.09	-13.00	0.83	-52.26	Peak
6	966.05	-63.47	-65.85	-13.00	2.38	-50.47	Peak
7 pp	1658.00	-46.09	-32.29	-13.00	-13.80	-33.09	Peak
8	2487.00	-46.69	-36.64	-13.00	-10.05	-33.69	Peak

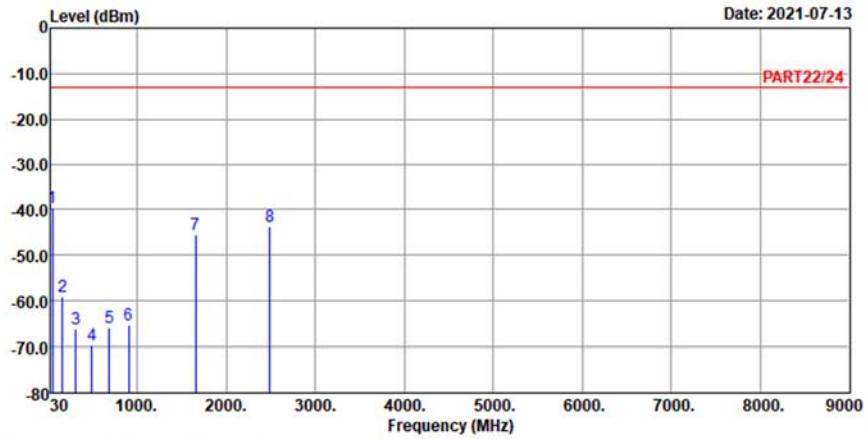


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-13



Site : 966 Chamber 5

Condition: PART22/24 VERTICAL

Remak : Cat-M1 Band 5 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 pp	43.58	-39.54	-38.07	-13.00	-1.47	-26.54	Peak
2	159.98	-59.10	-54.26	-13.00	-4.84	-46.10	Peak
3	309.36	-66.03	-59.17	-13.00	-6.86	-53.03	Peak
4	490.75	-69.68	-64.89	-13.00	-4.79	-56.68	Peak
5	685.72	-65.96	-65.63	-13.00	-0.33	-52.96	Peak
6	903.00	-65.31	-65.95	-13.00	0.64	-52.31	Peak
7	1658.00	-45.57	-31.77	-13.00	-13.80	-32.57	Peak
8	2487.00	-43.63	-33.58	-13.00	-10.05	-30.63	Peak

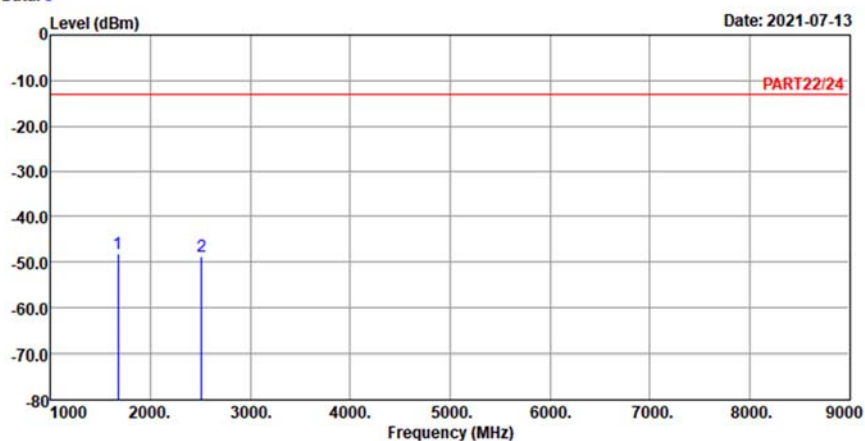
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 5 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 pp	1673.00	-48.02	-34.12	-13.00	-13.90	-35.02 Peak
2	2509.50	-48.79	-38.71	-13.00	-10.08	-35.79 Peak

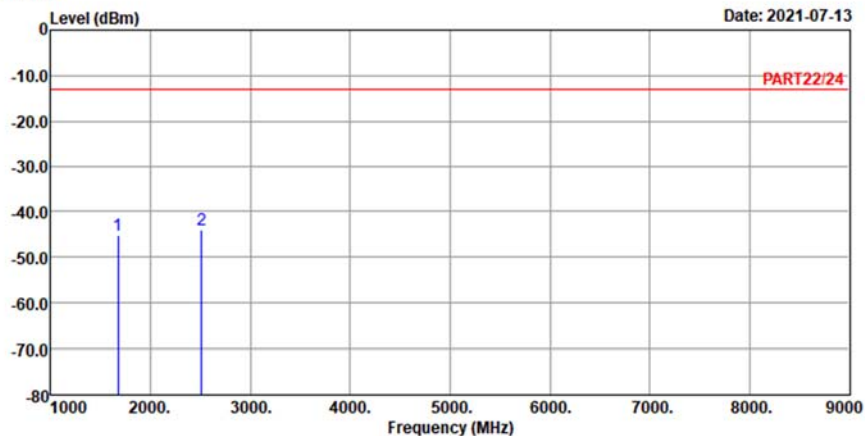


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 5 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	1673.00	-45.30	-31.40	-13.00	-13.90	-32.30	Peak
2 pp	2509.50	-44.07	-33.99	-13.00	-10.08	-31.07	Peak

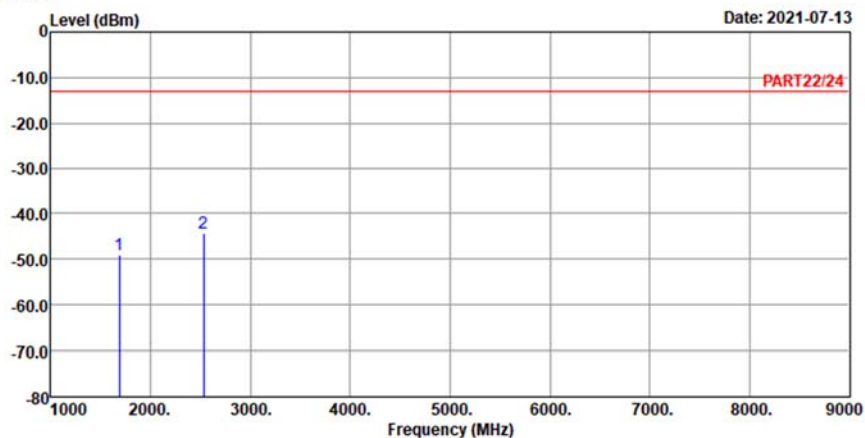
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 5 QPSK_10M Link_H-CH
 Tested by: Cookie Ku

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	
1	1688.00	-48.99	-35.00	-13.00	-13.99	-35.99 Peak
2 pp	2532.00	-44.37	-34.30	-13.00	-10.07	-31.37 Peak

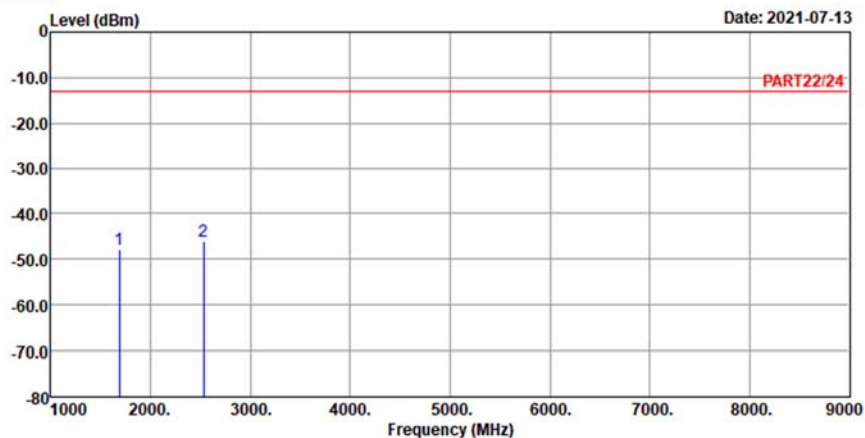


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-13



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 5 QPSK_10M Link_H-CH
Tested by: Cookie Ku

	Freq	Level	Read Level	Limit Line	Factor	Over Limit	Remark
	MHz	dBm	dBm	dBm	dB	dB	
1	1688.00	-47.70	-33.71	-13.00	-13.99	-34.70	Peak
2 pp	2532.00	-46.13	-36.06	-13.00	-10.07	-33.13	Peak

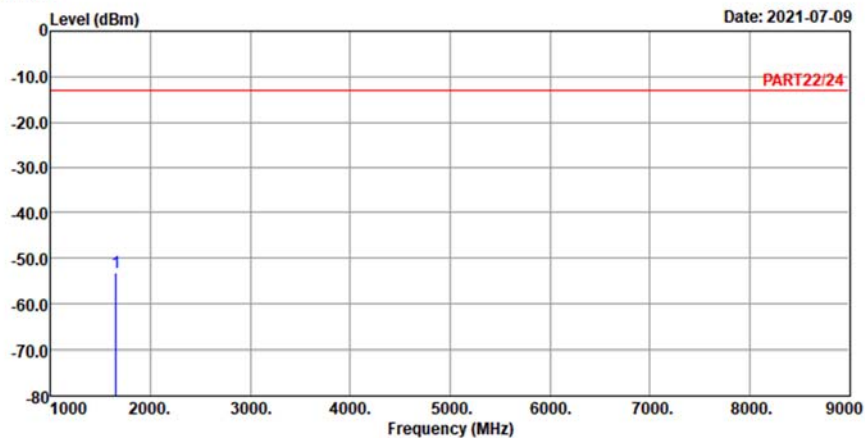
Cat-M1 Band 26, Channel Bandwidth 1.4MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : Cat-M1 Band 26 QPSK_1.4M Link_L-CH
Tested by: Cookie Ku

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

1 pp 1649.40 -53.23 -39.49 -13.00 -13.74 -40.23 Peak

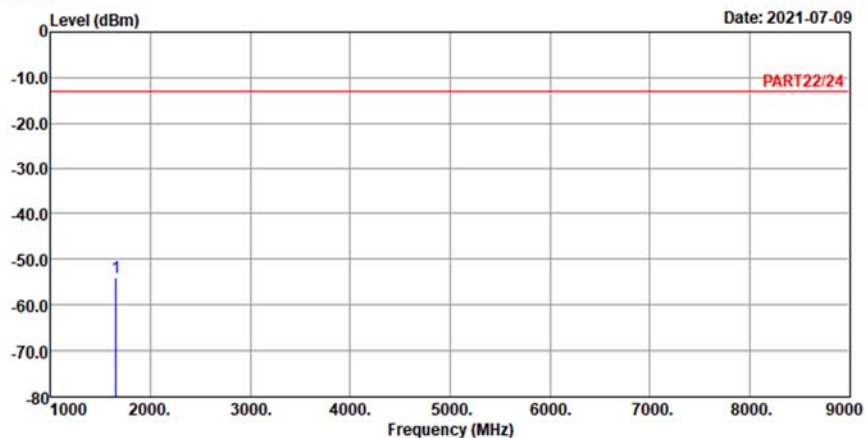


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 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 1649.40 -53.88 -40.14 -13.00 -13.74 -40.88 Peak

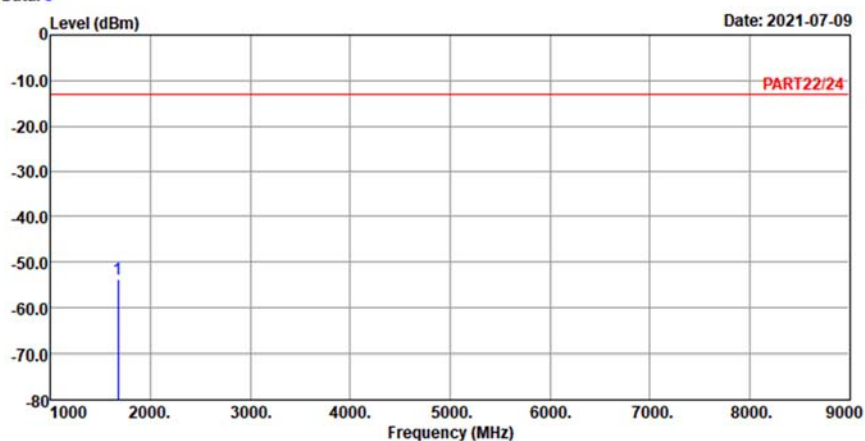
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 26 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 1673.00 -53.74 -39.84 -13.00 -13.90 -40.74 Peak

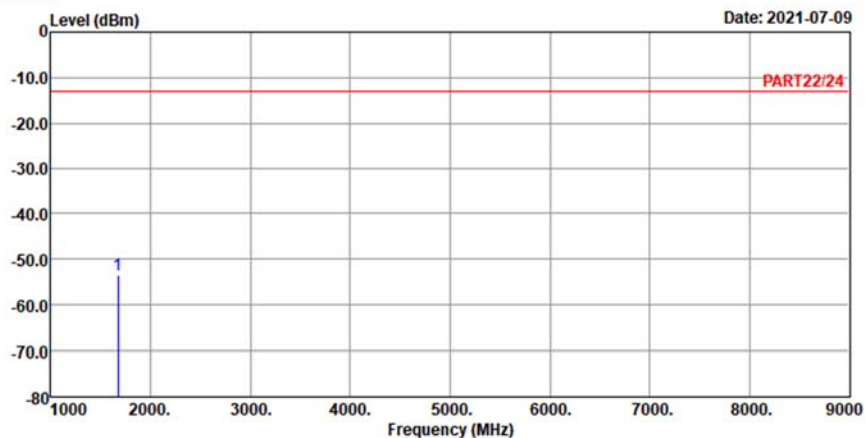


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 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 1673.00 -53.43 -39.53 -13.00 -13.90 -40.43 Peak

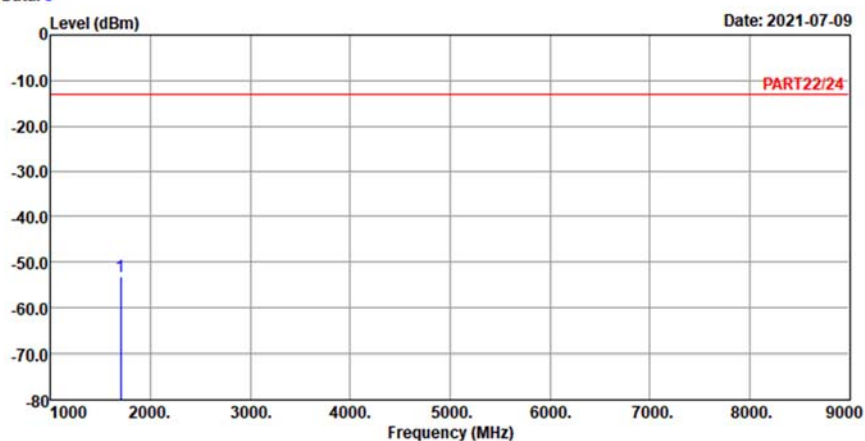
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 26 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 1696.60 -53.21 -39.19 -13.00 -14.02 -40.21 Peak

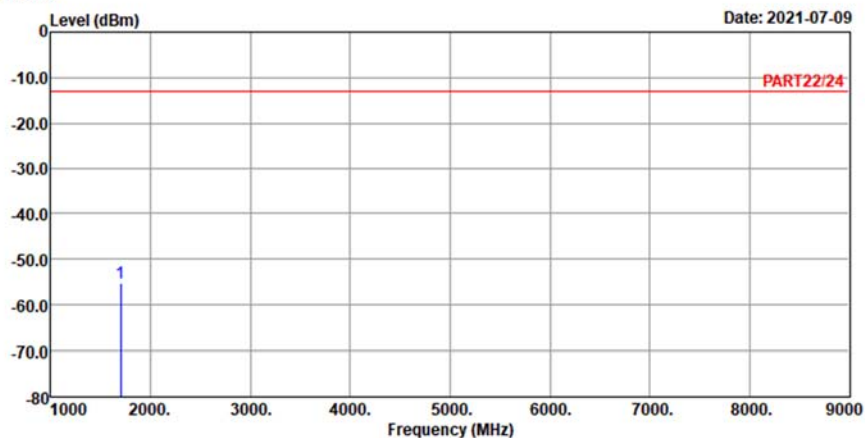


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 26 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 1696.60 -55.11 -41.09 -13.00 -14.02 -42.11 Peak

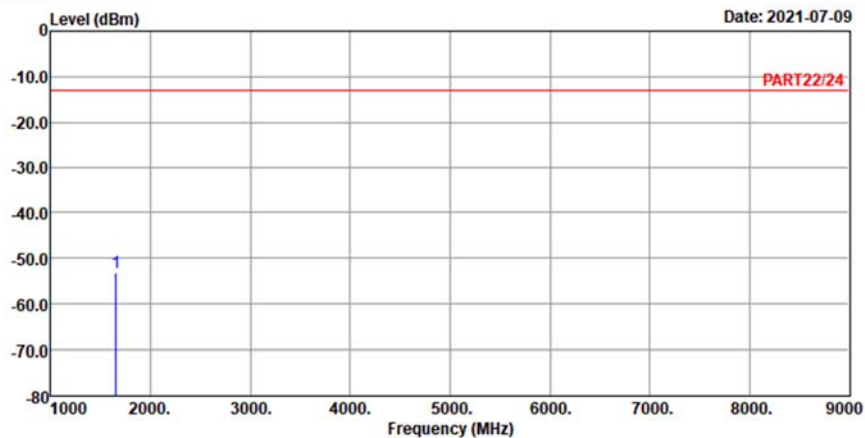
Cat-M1 Band 26, Channel Bandwidth 5MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : Cat-M1 Band 26 QPSK_5M Link_L-CH
Tested by: Cookie Ku

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

1 pp 1653.00 -53.24 -39.47 -13.00 -13.77 -40.24 Peak

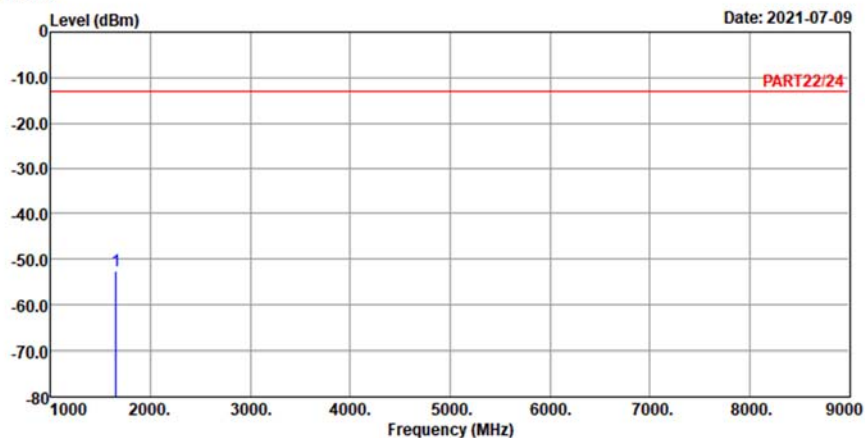


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 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 1653.00 -52.50 -38.73 -13.00 -13.77 -39.50 Peak

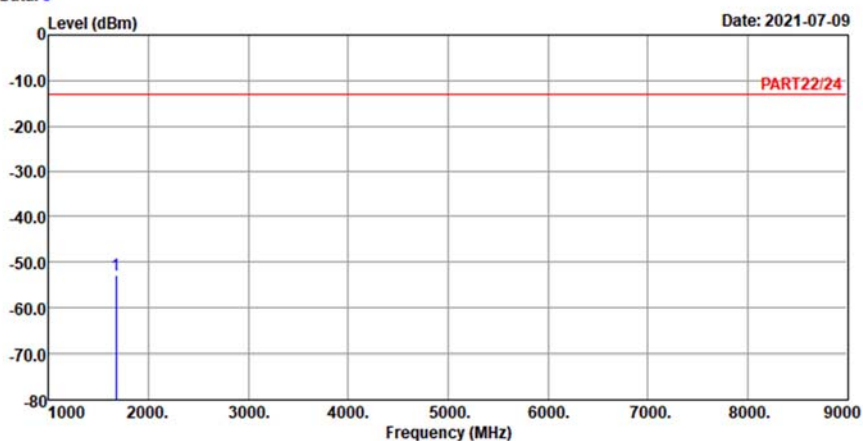
Mid Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 26 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 1673.00 -52.77 -38.87 -13.00 -13.90 -39.77 Peak

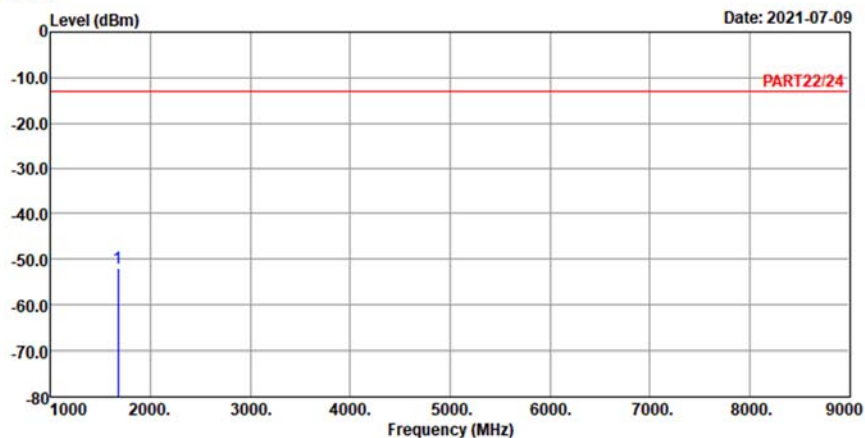


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
Condition: PART22/24 VERTICAL
Remak : Cat-M1 Band 26 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 1673.00 -51.99 -38.09 -13.00 -13.90 -38.99 Peak

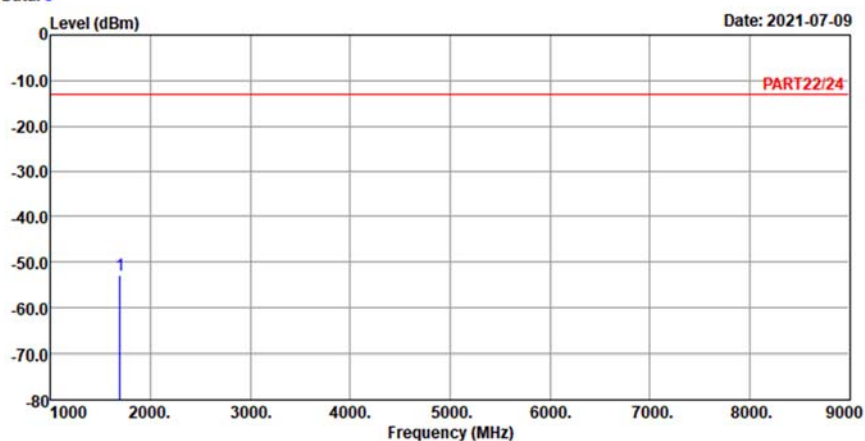
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 26 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 1693.00 -52.93 -38.91 -13.00 -14.02 -39.93 Peak

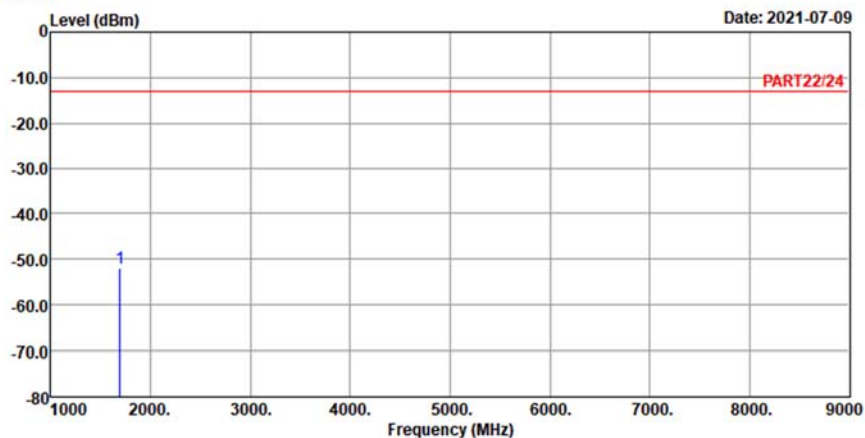


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 QPSK_5M Link_H-CH
 Tested by: Cookie Ku

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

1 pp 1693.00 -51.86 -37.84 -13.00 -14.02 -38.86 Peak

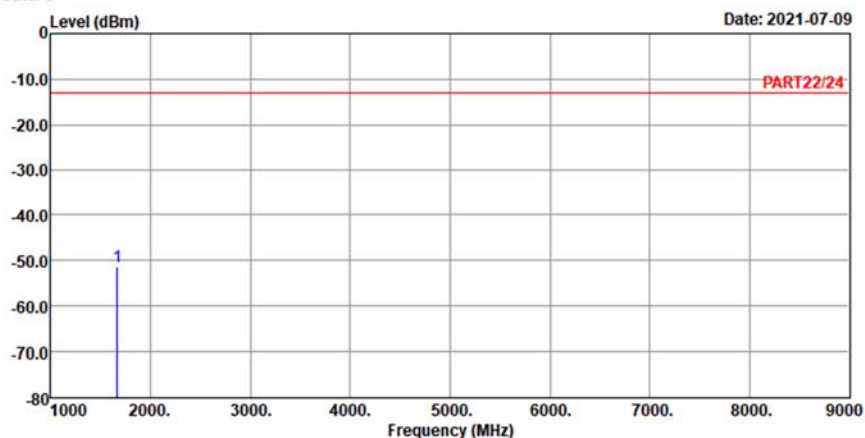
Cat-M1 Band 26, Channel Bandwidth 15MHz Low Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
Condition: PART22/24 HORIZONTAL
Remak : Cat-M1 Band 26 QPSK_15M Link_L-CH
Tested by: Cookie Ku

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

1 pp 1663.00 -51.30 -37.47 -13.00 -13.83 -38.30 Peak

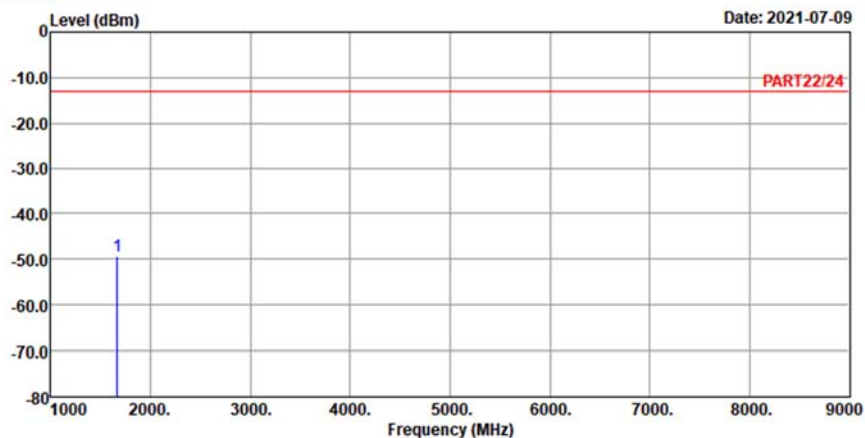


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 QPSK_15M Link_L-CH
 Tested by: Cookie Ku

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

1 pp 1663.00 -49.41 -35.58 -13.00 -13.83 -36.41 Peak

Mid Channel

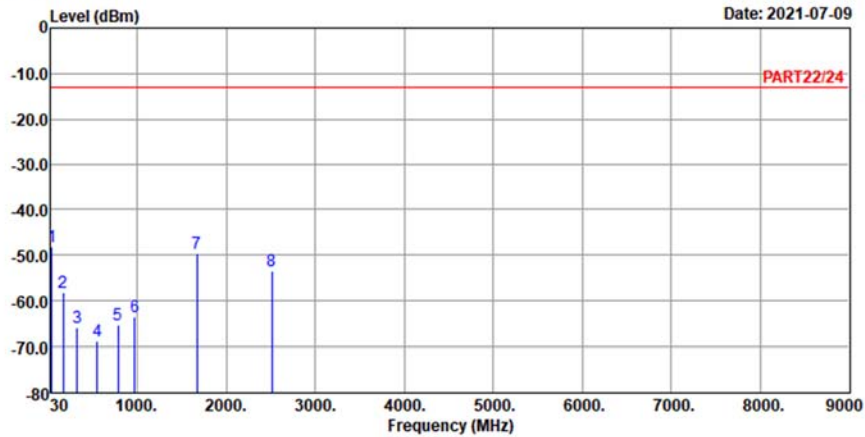


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART22/24 HORIZONTAL

Remak : Cat-M1 Band 26 QPSK_15M Link_M-CH

Tested by: Cookie Ku

	Freq	Level	Read	Limit	Over	
	MHz	dBm	Level	Line	Factor	Limit Remark
			dBm	dBm	dB	
1 pp	38.73	-48.03	-48.13	-13.00	0.10	-35.03 Peak
2	164.83	-58.18	-52.99	-13.00	-5.19	-45.18 Peak
3	322.94	-65.69	-59.03	-13.00	-6.66	-52.69 Peak
4	552.83	-68.76	-66.03	-13.00	-2.73	-55.76 Peak
5	786.60	-65.23	-66.00	-13.00	0.77	-52.23 Peak
6	969.93	-63.36	-65.88	-13.00	2.52	-50.36 Peak
7	1673.00	-49.45	-35.55	-13.00	-13.90	-36.45 Peak
8	2509.50	-53.52	-43.44	-13.00	-10.08	-40.52 Peak

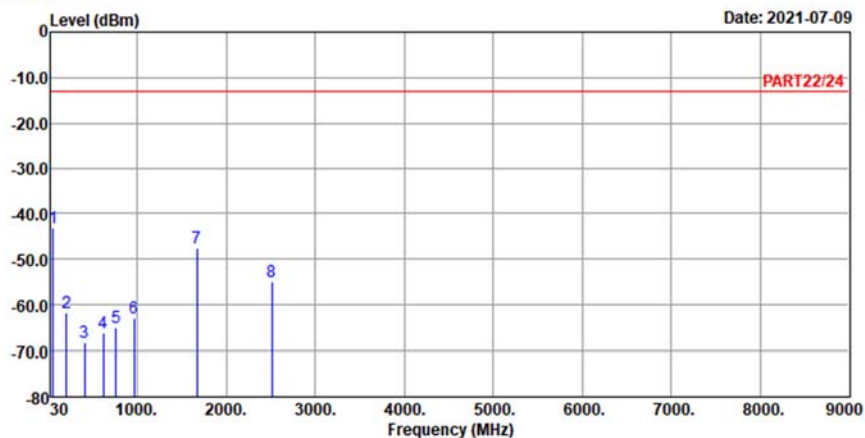


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6

Date: 2021-07-09



Site : 966 Chamber 5

Condition: PART22/24 VERTICAL

Remak : Cat-M1 Band 26 QPSK_15M Link_M-CH

Tested by: Cookie Ku

	Freq	Level	Read Level	Limit	Over	
	MHz	dBm	dBm	dBm	dB	Limit Remark
1 pp	55.22	-43.16	-36.82	-13.00	-6.34	-30.16 Peak
2	203.63	-61.84	-53.98	-13.00	-7.86	-48.84 Peak
3	411.21	-68.27	-62.41	-13.00	-5.86	-55.27 Peak
4	618.79	-66.17	-65.37	-13.00	-0.80	-53.17 Peak
5	762.35	-64.84	-65.68	-13.00	0.84	-51.84 Peak
6	967.02	-62.99	-65.40	-13.00	2.41	-49.99 Peak
7	1673.00	-47.55	-33.65	-13.00	-13.90	-34.55 Peak
8	2509.50	-54.96	-44.88	-13.00	-10.08	-41.96 Peak

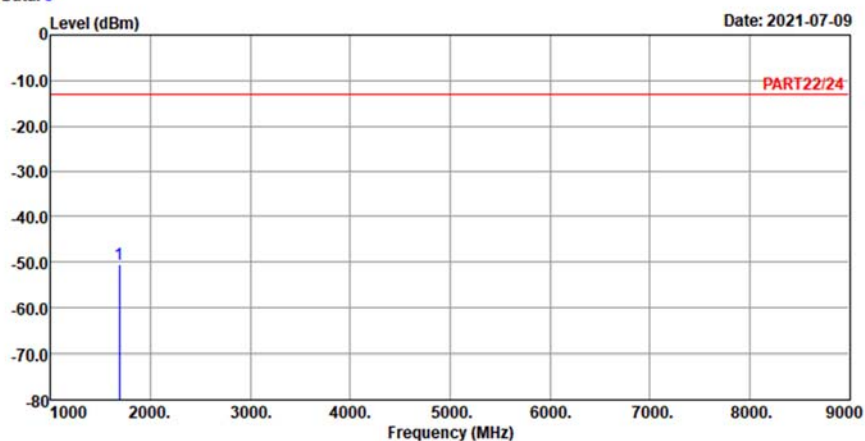
High Channel



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 3



Site : 966 Chamber 5
 Condition: PART22/24 HORIZONTAL
 Remak : Cat-M1 Band 26 QPSK_15M 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 1683.00	-50.42	-36.46	-13.00	-13.96	-37.42 Peak

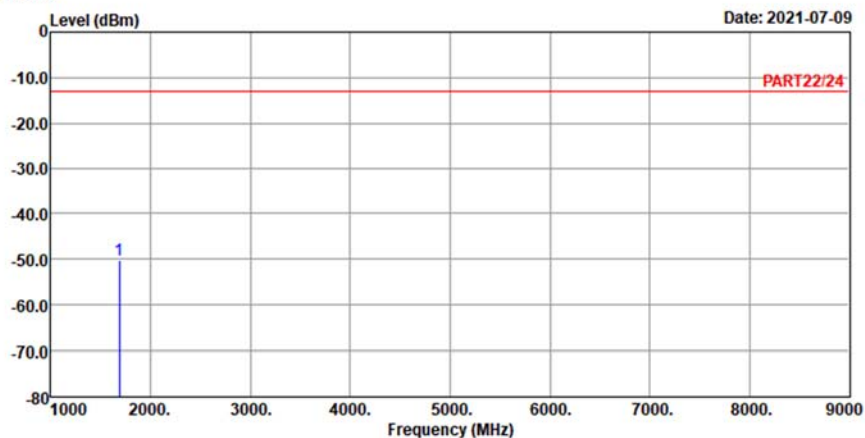


Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 4

Date: 2021-07-09



Site : 966 Chamber 5
 Condition: PART22/24 VERTICAL
 Remak : Cat-M1 Band 26 QPSK_15M 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 1683.00 -50.12 -36.16 -13.00 -13.96 -37.12 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:

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Web Site: www.bureauveritas-adt.com

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

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