RADIO TEST REPORT

Report No.:STS2208323W01

Issued for

Mueller Systems, LLC

1200 Abernathy Road NE, Suite 1200 Atlanta, GA, United States 30328

Product Name:	Smart Hydrant Solutions
Brand Name:	N/A
Model Name:	Gateway Generation 4
Series Model:	N/A
FCC ID:	SM6-SH-GW-V4
Test Standard:	47 CFR Part 2, 22, 24(E), 27, 90

Shenzhen STS Test Services Co., Ltd.
A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China
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TEST RESULT CERTIFICATION

Applicant's Name.....:	Mueller Systems, LLC
Address .....:	1200 Abernathy Road NE, Suite 1200 Atlanta, GA, United States 30328
Manufacturer's Name.....:	Shanghai New Age Co.,Ltd
Address .....:	Room 303, #1 Building A, No.3000 Longdong Avenue, Pudong District, Shanghai, China.

Product Description

Product Name .....:	Smart Hydrant Solutions
Brand Name .....:	N/A
Model Name.....:	Gateway Generation 4
Series Model .....:	N/A
Test Standards.....:	47 CFR Part 2, 22, 24(E), 27, 90
Test Procedure .....:	KDB 971168 D01 v03r01, ANSI C63.26 2015

This device described above has been tested by STS, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.
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Date of Test.....:	
Date of receipt of test item.....:	28 Mar. 2022
Date (s) of performance of tests .:	28 Mar. 2022 ~ 07 Nov. 2022
Date of Issue .....:	04 Nov. 2022
Test Result .....:	Pass

Testing Engineer : Chris Chen
(Chris Chen)

Technical Manager : Sean She
(Sean she)

Authorized Signatory : Bovey Yang
(Bovey Yang)

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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	14 July 2022	STS2203180W01	ALL	Initial Issue
00	07 Nov. 2022	STS2208323W01	ALL	Updated radiated spurious emission intermodulation, receiver spurious emissions, bandwidth and PAR test data.

1. TEST FACTORY & MEASUREMENT UNCERTAINTY

1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD
Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China
FCC test Firm Registration Number: 625569
IC test Firm Registration Number: 12108A
A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	RF output power, conducted	±0.68Db
2	Unwanted Emissions, conducted	±2.988Db
3	All emissions, radiated 30-1GHz	±5.6Db
4	All emissions, radiated 1G-6GHz	±5.5Db
5	All emissions, radiated>6G	±5.8Db
6	Conducted Emission (9KHz-150KHz)	±3.37Db
7	Conducted Emission (150KHz-30MHz)	±3.83Db

2. GENERAL INFORMATION

2.1 TECHNICAL SPECIFICATIONS AND REGULATIONS

2.1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Name	Smart Hydrant Solutions
Trade Name	N/A
Model Name	Gateway Generation 4
Series Model	N/A
Model Difference	N/A
Frequency Bands	U.S. Bands: LTE FDD Band 2 LTE FDD Band 4 LTE FDD Band 5 LTE FDD Band 12 LTE FDD Band 13 LTE FDD Band 25 LTE FDD Band 26 LTE FDD Band 66
SIM Card	Only support single SIM Card.
Antenna	PIFA
Antenna gain	Band2/4/66: 3.8dBi Band5/12/13/26: 3.5dBi
Rating:	Input: DC 3.6V 1A
Extreme Vol. Limits	3.24V to 3.96V (Nominal 3.6V)
Extreme Temp. Tolerance	-30℃ to +50℃
Hardware version number	870-xxx-001
Software version number	sh_gateway_newage_2.8.0-a

2.1.2 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Product Specification Subjective To This Standard	
Tx Frequency	LTE Band 2:1850~1910MHz LTE Band 4:1710~1755MHz LTE Band 5:824~849MHz LTE Band 12:699~716MHz LTE Band 13:777~787MHz LTE Band 25:1850~1915MHz LTE Band 26:814~849MHz LTE Band 66:1710~1780MHz
Rx Frequency	LTE Band 2:1930 ~1990MHz LTE Band 4:2110~2155MHz LTE Band 5:869~894MHz LTE Band 12:729~746MHz LTE Band 13:746~756MHz LTE Band 25:1930~1995MHz LTE Band 26:859~894MHz LTE Band 66:2110~2200MHz
Bandwidth	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13: 5MHz / 10MHz LTE Band 25: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz/15MHz LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz /20MHz
Maximum Output Power	LTE Band 2: 20.32 dBm LTE Band 4: 19.48 dBm LTE Band 5: 18.04 dBm LTE Band 12: 18.94 dBm LTE Band 13: 18.88 dBm LTE Band 25: 20.26 dBm LTE Band 26: 18.29 dBm LTE Band 66: 19.09 dBm
Type of Modulation	QPSK /16QAM

2.1.3 EMISSION DESIGNATOR

CAT-M Band 2	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M11G7D	1M11W7D
10	1M11G7D	1M10W7D
15	1M14G7D	1M14W7D
20	1M14G7D	1M14W7D
CAT-M Band 4	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M11G7D	1M11W7D
10	1M11G7D	1M12W7D
15	1M16G7D	1M16W7D
20	1M16G7D	1M16W7D
CAT-M Band 5	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M10G7D	1M11W7D
10	1M11G7D	1M11W7D
CAT-M Band 12	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M10G7D	1M10W7D
10	1M11G7D	1M10W7D
CAT-M Band 13	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
5	1M10G7D	1M10W7D
10	1M11G7D	1M11W7D
CAT-M Band 25	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M10G7D	1M11W7D
10	1M11G7D	1M16W7D
15	1M13G7D	1M13W7D
20	1M13G7D	1M13W7D
CAT-M Band 26 (Part 22)	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M11G7D	1M10W7D
10	1M11G7D	1M11W7D
15	1M12G7D	1M12W7D

CAT-M Band 26 (Part 90)	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M10G7D	1M11W7D
10	1M11G7D	1M11W7D
CAT-M Band 66	Emission Designator	Emission Designator
BW(MHz)	(99%OBW)QPSK	(99%OBW)16QAM
1.4	1M10G7D	1M10W7D
3	1M10G7D	1M10W7D
5	1M10G7D	1M10W7D
10	1M10G7D	1M11W7D
15	1M13G7D	1M14W7D
20	1M13G7D	1M12W7D

2.1.4 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 v03r01 and ANSI C63.26 2015 Power Meas. License Digital Systems with maximum output power. Radiated measurements are performed by rotating the EUT in three different orthogonal test planes tofind the maximum emission.

Remark:

1. The mark ‘v’means that this configuration is chosen for testing
2. The mark ‘-’means that this bandwidth is not supported.
3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated.

ITEMS	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v			v	v	v	v	v	v	v	v
	12	v	v	v	v			v	v	v	v	v	v	v	v
	13			v	v			v	v	v	v	v		v	
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v		v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak&Avera Ratio	2	v	v	v	v	v	v	v	v	v		v		v	
	4	v	v	v	v	v	v	v	v	v		v		v	
	5	v	v	v	v			v	v	v		v		v	
	12	v	v	v	v			v	v	v		v		v	
	13			v	v			v	v	v		v		v	
	25	v	v	v	v	v	v	v	v	v		v		v	
	26	v	v	v	v	v		v	v	v		v		v	
	66	v	v	v	v	v	v	v	v	v		v		v	
26dB&99% Bandwidth	2	v	v	v	v	v	v	v	v			v		v	
	4	v	v	v	v	v	v	v	v			v		v	
	5	v	v	v	v			v	v			v		v	
	12	v	v	v	v			v	v			v		v	
	13			v	v			v	v			v		v	
	25	v	v	v	v	v	v	v	v			v		v	
	26	v	v	v	v	v		v	v			v		v	
	66	v	v	v	v	v	v	v	v			v		v	

Conducted Band Edge	2	v	v	v	v	v	v	v	v	v		v	v		v
	4	v	v	v	v	v	v	v	v	v		v	v		v
	5	v	v	v	v			v	v	v		v	v		v
	12	v	v	v	v			v	v	v		v	v		v
	13			v	v			v	v	v		v		v	
	25	v	v	v	v	v	v	v	v	v		v	v		v
	26	v	v	v	v	v		v	v	v		v	v		v
	66	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	2	v	v	v	v	v	v	v	v	v		v	v		v
	4	v	v	v	v	v	v	v	v	v		v	v		v
	5	v	v	v	v			v	v	v		v	v		v
	12	v	v	v	v			v	v	v		v	v		v
	13			v	v			v	v	v		v		v	
	25	v	v	v	v	v	v	v	v	v		v	v		v
	26	v	v	v	v	v		v	v	v		v	v		v
	66	v	v	v	v	v	v	v	v	v		v	v		v
Frequency Stability	2				v			v				v		v	
	4				v			v				v		v	
	5				v			v				v		v	
	12				v			v				v		v	
	13				v			v				v		v	
	25				v			v				v		v	
	26				v			v				v		v	
	66				v			v				v		v	
E.R.P.& E.I.R.P.	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v			v	v	v	v	v	v	v	v
	12	v	v	v	v			v	v	v	v	v	v	v	v
	13			v	v			v	v	v	v	v		v	
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v		v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v			v	v	v
	4	v	v	v	v	v	v	v		v			v	v	v
	5	v	v	v	v			v		v			v	v	v
	12	v	v	v	v			v		v			v	v	v
	13			v	v			v		v				v	
	25	v	v	v	v	v	v	v		v			v	v	v
	26	v	v	v	v	v		v		v			v	v	v
	66	v	v	v	v	v	v	v		v			v	v	v

2.1.5 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for filing to comply with the 47 CFR Part 2, 22, 24(E), 27, 90.

2.1.6 SPECIAL ACCESSORIES

The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with eut intended for fcc grant together.

2.1.7 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission’s requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.1.8 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

2.1.9 CONFIGURATION OF EUT SYSTEM

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

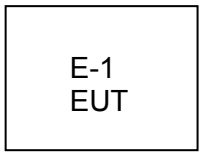


Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	Length	Note
N/A	N/A	N/A	N/A	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.1.10 MEASUREMENT INSTRUMENTS

The radiated emission testing was performed according to the procedures of ANSI C63.26 2015 and FCC CFR 47 rules of 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057.

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
Signal Analyzer	R&S	FSV 40-N	101823	2021.09.30	2022.09.29
Signal Generator	Agilent	83752A	3610A02740	2021.09.30	2022.09.29
Wireless Communications Test Set	R&S	CMW 500	131428	2022.03.01	2023.02.28
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10
Bilog Antenna	TESEQ	CBL6111D	45873	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1343	2020.10.12	2022.10.11
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11
Pre-Amplifier(0.1M-3GHz)	EM	EM330	060665	2021.10.08	2022.10.07
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27
Turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Temperature & Humidity	HH660	Mieo	N/A	2021.10.09	2022.10.08
Test SW	BULUN	BL410-E/18.905			

RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Universal Radio communication tester	R&S	CMU200	111058	2021.09.29	2022.09.28
Wireless Communications Test Set	R&S	CMW 500	131428	2022.03.01	2023.02.28
Signal Analyzer	Agilent	N9020A	MY52440124	2022.03.01	2023.02.28
Temperature& Humidity test chamber	Safety test	AG80L	171200018	2022.03.01	2023.02.28
Programmable power supply	Agilent	E3642A	MY40002025	2021.10.08	2022.10.07
Temperature & Humidity	SW-108	SuWei	N/A	2022.03.02	2023.03.01
Test SW	FARAD	LZ-RF /LzRf-3A3			

2.1.11 MEASUREMENT RESULTS EXPLANATION EXAMPLE

For all conducted test items:
The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factorbetween EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF Cable Loss + Attenuator Factor.

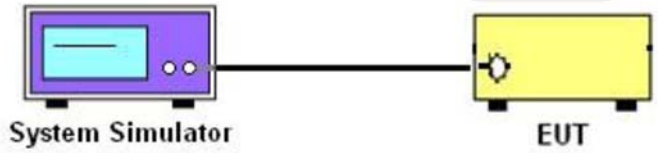
3. CONDUCTED OUTPUT POWER&RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER

3.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

3.1.1 MEASUREMENT METHOD

CONDUCTED OUTPUT POWER:
A system simulator was used to establish communication with the eut. Its parameters were set to force the eut transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.
Configuration follows KDB 971168 D01 v03r01.
C63.26 2015 Section 5.2.5.5.
In many cases, RF output power limits are specified in terms of the ERP or the EIRP. Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are defined as the product of the power supplied to the antenna and its gain (relative to a dipole antenna in the case of ERP, and relative to an isotropic antenna in the case of EIRP); however, when working in decibels (i.e., logarithmic scale), the ERP and EIRP represent the sum of the transmit antenna gain (in dBd or dBi, respectively) and the conducted RF output power (expressed in dB relative to watts or milliwatts).
The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:
(1) ERP or EIRP = PMeas + GT
ERP= EIRP-2.15
where
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as PMeas, e.g., dBm or dBW)
PMeas measured transmitter output power or PSD, in dBm or dBW
GT gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)
For devices utilizing multiple antennas, see 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.
The following equations demonstrate the mathematical relationship between ERP and EIRP:
a) ERP = EIRP − 2.15, where ERP and EIRP are expressed in consistent units.
b) EIRP = ERP + 2.15, where ERP and EIRP are expressed in consistent units.

3.1.2 TEST SETUP



3.1.3 TEST PROCEDURES

1. The transmitter output port was connected to system simulator.

2. Set EUT at maximum power through the system simulator.

3. Select lowest/middle/highest channels for each band and different modulation.

4. Measure and record the power level from the system simulator.

3.1.4 TEST RESULTS

Note: The test data please reference to attachment “STS2203180W01_Appendix CAT-M”.

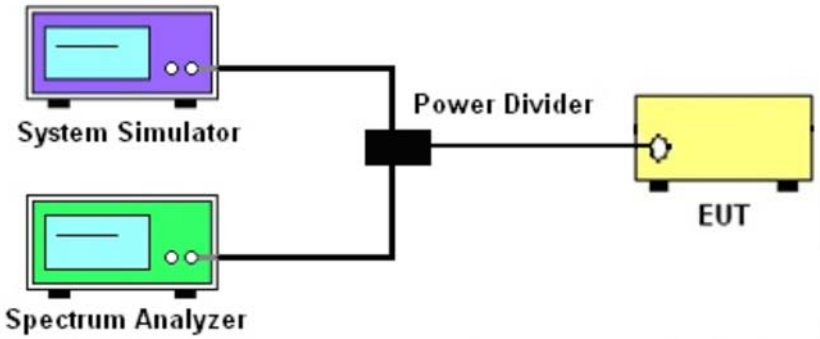
4. PEAK-TO-AVERAGE RATIO

4.1 DESCRIPTION OF THE CONDUCTED OUTPUT POWER MEASUREMENT

4.1.1 MEASUREMENT METHOD

Use one of the procedures presented in 4.1.3 to measure the total peak power and record as PPk. Use one of the applicable procedures presented 4.1.3 to measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:
PAPR (dB) = PPk (dBm) - PAvg (dBm).

4.1.2 TEST SETUP



4.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 5.7 and ANSI C63.26 2015 Section 5.2.6.

2. The EUT was connected to spectrum and system simulator via a power divider

3. Select lowest, middle, and highest channels for each band and different modulation.

4. Set the test probe and measure the peak and average power of the spectrum analyzer

5. Record the deviation as Peak to Average Ratio.

4.1.4 TEST RESULTS

Note: The test data please reference to attachment “STS2203180W01_Appendix CAT-M”.

5. OCCUPIED BANDWIDTH

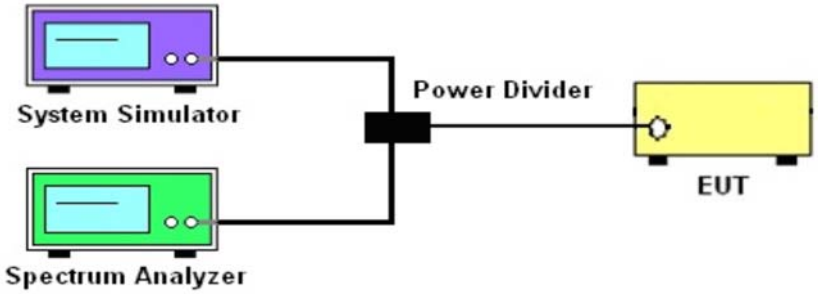
5.1 DESCRIPTION OF OCCUPIED BANDWIDTH MEASUREMENT

5.1.1 MEASUREMENT METHOD

1.The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

2.The 26 db emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 db below the maximum in-band spectral density of the modulated signal. spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

5.1.2 TEST SETUP



5.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.2 and 4.3.

2. The EUT was connected to spectrum and system simulator via a power divider.

3. Select lowest, middle, and highest channels for each band and different modulation.

4. Set the test probe and measure the Occupied Bandwidth of the spectrum analyzer.

5. Measure and record the Occupied Bandwidth from the Spectrum Analyzer.

5.1.4 MEASUREMENT RESULT

Note: The test data please reference to attachment “STS2203180W01_Appendix CAT-M”.

6. CONDUCTED BAND EDGE

6.1 DESCRIPTION OF CONDUCTED BAND EDGE MEASUREMENT

6.1.1 MEASUREMENT METHOD

1. §22.917(a)
For operations in the 824 – 849 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

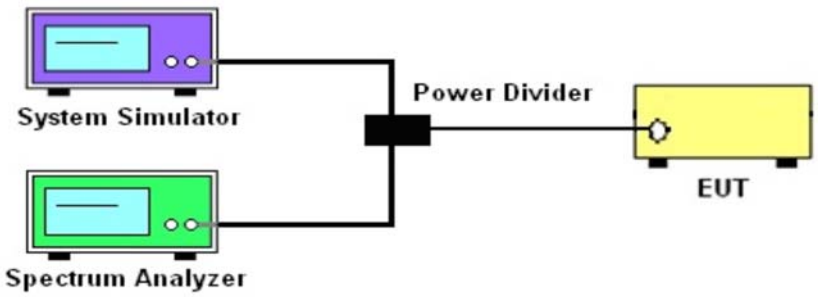
2. §24.238 (a)
For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

3. §27.53 (h)
For operations in the 1710 – 1755 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

4. §27.53(m)(4)
For operations in the 2500 MHz ~ 2570 MHz band this section, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHzand 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licenseesoperating on frequencies below 2495 MHz may also submit a documented interference complaintagainst BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

5. §27.53 (g)
For operations in the 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

6.1.2 TEST SETUP



6.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.7.

2. The EUT was connected to spectrum analyzer and system simulator via a power divider.

3. The band edges of low and high channels for the highest RF powers were measured. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.

4. Set spectrum analyzer with RMS/AVG detector.

5. The RF fundamental frequency should be excluded against the limit line in the operating frquency band.

6.The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
= P(W)- [43 + 10log(P)] (dB)
= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
= -13dBm.

Band 7:
= P(W)- [55 + 10log(P)] (dB)
= [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)
= -25dBm.

6.1.4 MEASUREMENT RESULT

Note: The test data please reference to attachment “STS2203180W01_Appendix CAT-M”.

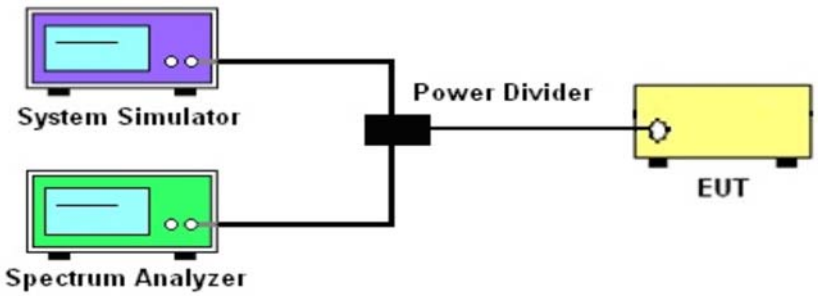
7. CONDUCTED SPURIOUS EMISSION

7.1 DESCRIPTION OF CONDUCTED SPURIOUS EMISSION MEASUREMENT

7.1.1 MEASUREMENT METHOD

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.
For Band 7:
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

7.1.2 TEST SETUP



7.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26 2015 Section 5.7.

2. The EUT was connected to spectrum analyzer and system simulator via a power divider.

3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement
4. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
5. The RF fundamental frequency should be excluded against the limit line in the operating frquency band.
6.The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
= P(W)- [43 + 10log(P)] (dB) = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
= -13dBm.
For Band 7: P(W)- [43 + 10log(P)] (dB) =-25dBm

7.1.4 TEST RESULTS

Note: The test data please reference to attachment “STS2203180W01_Appendix CAT-M”.

8. RADIATED SPURIOUS EMISSION

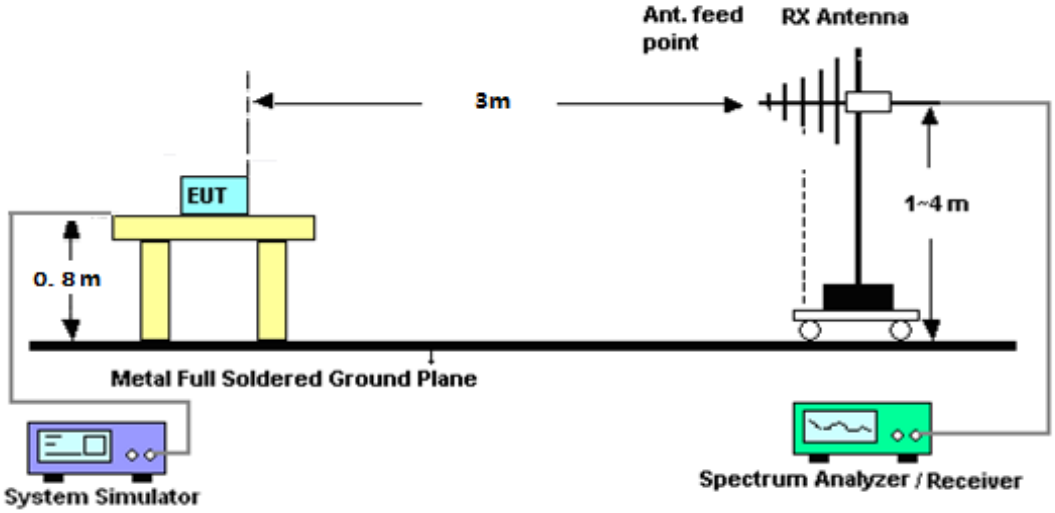
8.1 DESCRIPTION OF RADIATED SPURIOUS EMISSION

8.1.1 MEASUREMENT METHOD

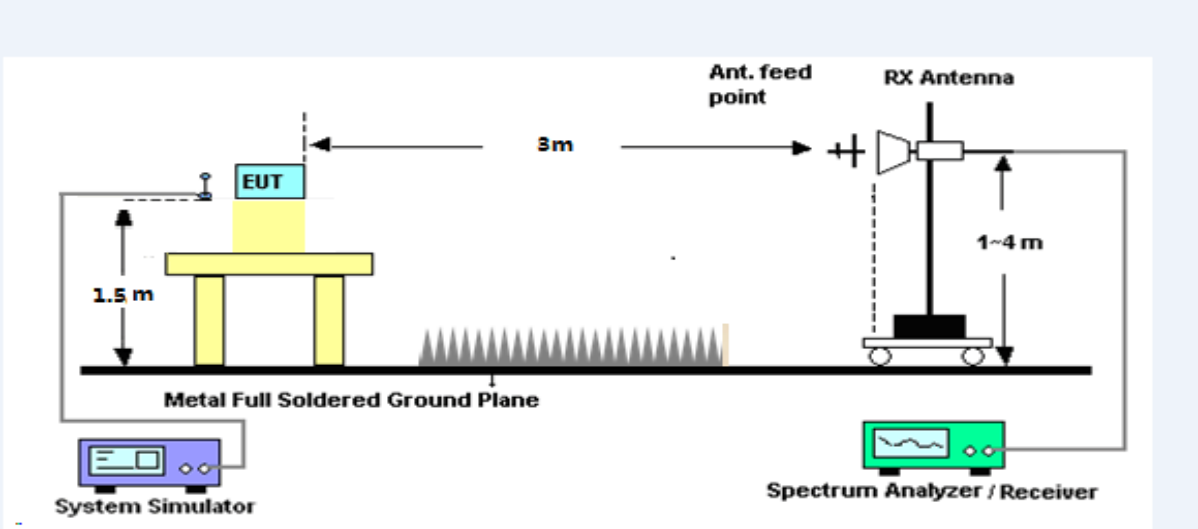
The radiated spurious emission was measured by substitution method according to ANSI C63.26 2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.
For Band 7 The power of any emission outside of the authorized operating frequency ranges must attenuated below the transmitter power (P) by a factor of at least 55 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

8.1.2 TEST SETUP

The procedure of radiated spurious emissions is as follows:
a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as, RSE=Rx (dBuV) +CL (dB) +SA (dB) +Gain (dBi) -107 (dBuV to dBm) The SA is calibrated using following setup.
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.
Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.
The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of “reference path loss”, and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below:
Power=PMea+ARpl
For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



8.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 Section 7 and ANSI C63.26 2015 Section 5.5.

2. The EUT was placed on a rotatable wooden table with 1.5 meter above ground.

3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.

4. The table was rotated 360 degrees to determine the position of the highest spurious emission.

5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations

6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.

7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.

8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.

9. Taking the record of output power at antenna port.

10. Repeat step 7 to step 8 for another polarization.

11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
= P(W)- [43 + 10log(P)] (dB)
= [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
= -13dBm
.
For Band 7:
The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
= [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)
= -25dBm
EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
ERP (dBm) = EIRP - 2.15

8.1.4 TEST RESULTS

CAT-M Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3701.09	-34.46	12.60	12.93	-34.79	-13.00	-21.79	H
5552.09	-34.85	13.10	17.11	-38.86	-13.00	-25.86	H
7402.92	-33.13	11.50	22.20	-43.83	-13.00	-30.83	H
3701.09	-35.83	12.60	12.93	-36.16	-13.00	-23.16	V
5552.09	-35.16	13.10	17.11	-39.17	-13.00	-26.17	V
7402.92	-31.79	11.50	22.20	-42.49	-13.00	-29.49	V
CAT-M Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3760.22	-34.15	12.60	12.93	-34.48	-13.00	-21.48	H
5640.01	-34.52	13.10	17.11	-38.53	-13.00	-25.53	H
7519.98	-33.38	11.50	22.20	-44.08	-13.00	-31.08	H
3760.22	-35.45	12.60	12.93	-35.78	-13.00	-22.78	V
5640.01	-34.65	13.10	17.11	-38.66	-13.00	-25.66	V
7519.98	-32.47	11.50	22.20	-43.17	-13.00	-30.17	V
CAT-M Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3818.21	-33.96	12.60	12.93	-34.29	-13.00	-21.29	H
5727.61	-34.78	13.10	17.11	-38.79	-13.00	-25.79	H
7637.15	-32.83	11.50	22.20	-43.53	-13.00	-30.53	H
3818.21	-34.53	12.60	12.93	-34.86	-13.00	-21.86	V
5727.61	-34.66	13.10	17.11	-38.67	-13.00	-25.67	V
7637.15	-32.31	11.50	22.20	-43.01	-13.00	-30.01	V

CAT-M Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3703.49	-33.69	12.60	12.93	-34.02	-13.00	-21.02	H
5554.30	-34.36	13.10	17.11	-38.37	-13.00	-25.37	H
7406.85	-33.38	11.50	22.20	-44.08	-13.00	-31.08	H
3703.49	-35.59	12.60	12.93	-35.92	-13.00	-22.92	V
5554.30	-34.73	13.10	17.11	-38.74	-13.00	-25.74	V
7406.85	-32.52	11.50	22.20	-43.22	-13.00	-30.22	V
CAT-M Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3760.24	-34.64	12.60	12.93	-34.97	-13.00	-21.97	H
5640.24	-34.41	13.10	17.11	-38.42	-13.00	-25.42	H
7520.05	-32.61	11.50	22.20	-43.31	-13.00	-30.31	H
3760.24	-35.63	12.60	12.93	-35.96	-13.00	-22.96	V
5640.24	-34.26	13.10	17.11	-38.27	-13.00	-25.27	V
7520.05	-31.72	11.50	22.20	-42.42	-13.00	-29.42	V
CAT-M Band 2 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3816.46	-34.57	12.60	12.93	-34.90	-13.00	-21.90	H
5724.83	-34.44	13.10	17.11	-38.45	-13.00	-25.45	H
7633.28	-33.52	11.50	22.20	-44.22	-13.00	-31.22	H
3816.46	-35.68	12.60	12.93	-36.01	-13.00	-23.01	V
5724.83	-33.88	13.10	17.11	-37.89	-13.00	-24.89	V
7633.28	-32.48	11.50	22.20	-43.18	-13.00	-30.18	V

CAT-M Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3705.41	-33.87	12.60	12.93	-34.20	-13.00	-21.20	H
5557.72	-34.89	13.10	17.11	-38.90	-13.00	-25.90	H
7410.50	-33.08	11.50	22.20	-43.78	-13.00	-30.78	H
3705.41	-34.99	12.60	12.93	-35.32	-13.00	-22.32	V
5557.72	-35.01	13.10	17.11	-39.02	-13.00	-26.02	V
7410.50	-32.76	11.50	22.20	-43.46	-13.00	-30.46	V
CAT-M Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3760.24	-34.75	12.60	12.93	-35.08	-13.00	-22.08	H
5640.12	-35.13	13.10	17.11	-39.14	-13.00	-26.14	H
7519.81	-33.48	11.50	22.20	-44.18	-13.00	-31.18	H
3760.24	-34.83	12.60	12.93	-35.16	-13.00	-22.16	V
5640.12	-33.91	13.10	17.11	-37.92	-13.00	-24.92	V
7519.81	-32.54	11.50	22.20	-43.24	-13.00	-30.24	V
CAT-M Band 2 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3814.23	-33.81	12.60	12.93	-34.14	-13.00	-21.14	H
5721.28	-34.17	13.10	17.11	-38.18	-13.00	-25.18	H
7628.79	-32.21	11.50	22.20	-42.91	-13.00	-29.91	H
3814.23	-35.88	12.60	12.93	-36.21	-13.00	-23.21	V
5721.28	-34.44	13.10	17.11	-38.45	-13.00	-25.45	V
7628.79	-31.81	11.50	22.20	-42.51	-13.00	-29.51	V

CAT-M Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3710.29	-34.05	12.60	12.93	-34.38	-13.00	-21.38	H
5565.95	-34.87	13.10	17.11	-38.88	-13.00	-25.88	H
7421.26	-33.00	11.50	22.20	-43.70	-13.00	-30.70	H
3710.29	-34.68	12.60	12.93	-35.01	-13.00	-22.01	V
5565.95	-34.81	13.10	17.11	-38.82	-13.00	-25.82	V
7421.26	-32.12	11.50	22.20	-42.82	-13.00	-29.82	V
CAT-M Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3759.88	-34.85	12.60	12.93	-35.18	-13.00	-22.18	H
5640.10	-35.05	13.10	17.11	-39.06	-13.00	-26.06	H
7520.14	-33.50	11.50	22.20	-44.20	-13.00	-31.20	H
3759.88	-35.65	12.60	12.93	-35.98	-13.00	-22.98	V
5640.10	-35.22	13.10	17.11	-39.23	-13.00	-26.23	V
7520.14	-32.87	11.50	22.20	-43.57	-13.00	-30.57	V
CAT-M Band 2 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3809.03	-34.26	12.60	12.93	-34.59	-13.00	-21.59	H
5713.65	-34.54	13.10	17.11	-38.55	-13.00	-25.55	H
7617.86	-32.72	11.50	22.20	-43.42	-13.00	-30.42	H
3809.03	-34.83	12.60	12.93	-35.16	-13.00	-22.16	V
5713.65	-34.85	13.10	17.11	-38.86	-13.00	-25.86	V
7617.86	-32.24	11.50	22.20	-42.94	-13.00	-29.94	V

CAT-M Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3716.18	-34.32	12.60	12.93	-34.65	-13.00	-21.65	H
5574.30	-35.35	13.10	17.11	-39.36	-13.00	-26.36	H
7618.40	-33.44	11.50	22.20	-44.14	-13.00	-31.14	H
3716.18	-35.28	12.60	12.93	-35.61	-13.00	-22.61	V
5574.30	-34.87	13.10	17.11	-38.88	-13.00	-25.88	V
7618.40	-32.88	11.50	22.20	-43.58	-13.00	-30.58	V
CAT-M Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3759.94	-33.67	12.60	12.93	-34.00	-13.00	-21.00	H
5640.04	-35.03	13.10	17.11	-39.04	-13.00	-26.04	H
7520.21	-32.67	11.50	22.20	-43.37	-13.00	-30.37	H
3759.94	-35.91	12.60	12.93	-36.24	-13.00	-23.24	V
5640.04	-34.22	13.10	17.11	-38.23	-13.00	-25.23	V
7520.21	-33.09	11.50	22.20	-43.79	-13.00	-30.79	V
CAT-M Band 2 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3803.60	-34.13	12.60	12.93	-34.46	-13.00	-21.46	H
5705.66	-35.18	13.10	17.11	-39.19	-13.00	-26.19	H
7607.59	-33.35	11.50	22.20	-44.05	-13.00	-31.05	H
3803.60	-35.64	12.60	12.93	-35.97	-13.00	-22.97	V
5705.66	-34.05	13.10	17.11	-38.06	-13.00	-25.06	V
7607.59	-32.91	11.50	22.20	-43.61	-13.00	-30.61	V

CAT-M Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3721.17	-34.17	12.60	12.93	-34.50	-13.00	-21.50	H
5581.52	-35.46	13.10	17.11	-39.47	-13.00	-26.47	H
7442.02	-33.12	11.50	22.20	-43.82	-13.00	-30.82	H
3721.17	-35.89	12.60	12.93	-36.22	-13.00	-23.22	V
5581.52	-35.20	13.10	17.11	-39.21	-13.00	-26.21	V
7442.02	-32.43	11.50	22.20	-43.13	-13.00	-30.13	V
CAT-M Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3759.95	-34.39	12.60	12.93	-34.72	-13.00	-21.72	H
5640.11	-34.00	13.10	17.11	-38.01	-13.00	-25.01	H
7519.92	-33.04	11.50	22.20	-43.74	-13.00	-30.74	H
3759.95	-35.73	12.60	12.93	-36.06	-13.00	-23.06	V
5640.11	-34.84	13.10	17.11	-38.85	-13.00	-25.85	V
7519.92	-32.94	11.50	22.20	-43.64	-13.00	-30.64	V
CAT-M Band 2 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3798.14	-33.63	12.60	12.93	-33.96	-13.00	-20.96	H
5697.28	-34.67	13.10	17.11	-38.68	-13.00	-25.68	H
7597.00	-32.34	11.50	22.20	-43.04	-13.00	-30.04	H
3798.14	-35.19	12.60	12.93	-35.52	-13.00	-22.52	V
5697.28	-33.79	13.10	17.11	-37.80	-13.00	-24.80	V
7597.00	-33.17	11.50	22.20	-43.87	-13.00	-30.87	V

CAT-M Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3421.15	-34.29	12.90	12.56	-33.95	-13.00	-20.95	H
5131.89	-34.95	13.10	16.32	-38.17	-13.00	-25.17	H
6842.36	-33.11	12.33	21.13	-41.91	-13.00	-28.91	H
3421.15	-35.47	12.90	12.56	-35.13	-13.00	-22.13	V
5131.89	-34.11	13.10	16.32	-37.33	-13.00	-24.33	V
6842.36	-32.94	12.33	21.13	-41.74	-13.00	-28.74	V
CAT-M Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3464.85	-34.60	12.90	12.56	-34.26	-13.00	-21.26	H
5196.99	-35.38	13.10	16.32	-38.60	-13.00	-25.60	H
6930.12	-32.93	12.33	21.13	-41.73	-13.00	-28.73	H
3464.85	-35.51	12.90	12.56	-35.17	-13.00	-22.17	V
5196.99	-34.30	13.10	16.32	-37.52	-13.00	-24.52	V
6930.12	-31.74	12.33	21.13	-40.54	-13.00	-27.54	V
CAT-M Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3508.18	-34.81	12.90	12.56	-34.47	-13.00	-21.47	H
5262.72	-34.91	13.10	16.32	-38.13	-13.00	-25.13	H
7016.15	-33.26	12.33	21.13	-42.06	-13.00	-29.06	H
3508.18	-35.94	12.90	12.56	-35.60	-13.00	-22.60	V
5262.72	-35.06	13.10	16.32	-38.28	-13.00	-25.28	V
7016.15	-32.66	12.33	21.13	-41.46	-13.00	-28.46	V

CAT-M Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3424.16	-34.50	12.90	12.56	-34.16	-13.00	-21.16	H
5136.30	-34.63	13.10	16.32	-37.85	-13.00	-24.85	H
6848.84	-32.76	12.33	21.13	-41.56	-13.00	-28.56	H
3424.16	-35.08	12.90	12.56	-34.74	-13.00	-21.74	V
5136.30	-34.10	13.10	16.32	-37.32	-13.00	-24.32	V
6848.84	-32.36	12.33	21.13	-41.16	-13.00	-28.16	V
CAT-M Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3465.15	-33.60	12.90	12.56	-33.26	-13.00	-20.26	H
5197.26	-34.85	13.10	16.32	-38.07	-13.00	-25.07	H
6930.03	-33.24	12.33	21.13	-42.04	-13.00	-29.04	H
3465.15	-35.19	12.90	12.56	-34.85	-13.00	-21.85	V
5197.26	-34.38	13.10	16.32	-37.60	-13.00	-24.60	V
6930.03	-31.71	12.33	21.13	-40.51	-13.00	-27.51	V
CAT-M Band 4 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3506.64	-33.59	12.90	12.56	-33.25	-13.00	-20.25	H
5262.27	-35.46	13.10	16.32	-38.68	-13.00	-25.68	H
7012.84	-32.51	12.33	21.13	-41.31	-13.00	-28.31	H
3506.64	-34.90	12.90	12.56	-34.56	-13.00	-21.56	V
5262.27	-35.21	13.10	16.32	-38.43	-13.00	-25.43	V
7012.84	-32.58	12.33	21.13	-41.38	-13.00	-28.38	V

CAT-M Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3425.01	-34.06	12.90	12.56	-33.72	-13.00	-20.72	H
5137.46	-34.51	13.10	16.32	-37.73	-13.00	-24.73	H
6850.25	-32.99	12.33	21.13	-41.79	-13.00	-28.79	H
3425.01	-34.59	12.90	12.56	-34.25	-13.00	-21.25	V
5137.46	-34.99	13.10	16.32	-38.21	-13.00	-25.21	V
6850.25	-32.85	12.33	21.13	-41.65	-13.00	-28.65	V
CAT-M Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3464.92	-34.07	12.90	12.56	-33.73	-13.00	-20.73	H
5196.91	-34.14	13.10	16.32	-37.36	-13.00	-24.36	H
6930.15	-33.16	12.33	21.13	-41.96	-13.00	-28.96	H
3464.92	-34.57	12.90	12.56	-34.23	-13.00	-21.23	V
5196.91	-33.92	13.10	16.32	-37.14	-13.00	-24.14	V
6930.15	-32.20	12.33	21.13	-41.00	-13.00	-28.00	V
CAT-M Band 4 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3505.47	-33.65	12.90	12.56	-33.31	-13.00	-20.31	H
5257.18	-34.93	13.10	16.32	-38.15	-13.00	-25.15	H
7009.98	-33.18	12.33	21.13	-41.98	-13.00	-28.98	H
3505.47	-35.31	12.90	12.56	-34.97	-13.00	-21.97	V
5257.18	-34.69	13.10	16.32	-37.91	-13.00	-24.91	V
7009.98	-31.98	12.33	21.13	-40.78	-13.00	-27.78	V

CAT-M Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3430.49	-34.34	12.90	12.56	-34.00	-13.00	-21.00	H
5145.52	-35.19	13.10	16.32	-38.41	-13.00	-25.41	H
6860.46	-32.92	12.33	21.13	-41.72	-13.00	-28.72	H
3430.49	-35.52	12.90	12.56	-35.18	-13.00	-22.18	V
5145.52	-34.34	13.10	16.32	-37.56	-13.00	-24.56	V
6860.46	-32.53	12.33	21.13	-41.33	-13.00	-28.33	V
CAT-M Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3464.99	-34.08	12.90	12.56	-33.74	-13.00	-20.74	H
5197.28	-34.69	13.10	16.32	-37.91	-13.00	-24.91	H
6930.26	-32.17	12.33	21.13	-40.97	-13.00	-27.97	H
3464.99	-34.72	12.90	12.56	-34.38	-13.00	-21.38	V
5197.28	-34.31	13.10	16.32	-37.53	-13.00	-24.53	V
6930.26	-32.29	12.33	21.13	-41.09	-13.00	-28.09	V
CAT-M Band 4 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3500.55	-34.15	12.90	12.56	-33.81	-13.00	-20.81	H
5250.40	-34.96	13.10	16.32	-38.18	-13.00	-25.18	H
7000.14	-33.37	12.33	21.13	-42.17	-13.00	-29.17	H
3500.55	-35.38	12.90	12.56	-35.04	-13.00	-22.04	V
5250.40	-34.61	13.10	16.32	-37.83	-13.00	-24.83	V
7000.14	-32.32	12.33	21.13	-41.12	-13.00	-28.12	V

CAT-M Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3435.39	-33.88	12.90	12.56	-33.54	-13.00	-20.54	H
5152.52	-35.35	13.10	16.32	-38.57	-13.00	-25.57	H
6870.47	-32.67	12.33	21.13	-41.47	-13.00	-28.47	H
3435.39	-35.07	12.90	12.56	-34.73	-13.00	-21.73	V
5152.52	-35.06	13.10	16.32	-38.28	-13.00	-25.28	V
6870.47	-31.98	12.33	21.13	-40.78	-13.00	-27.78	V
CAT-M Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3464.91	-34.61	12.90	12.56	-34.27	-13.00	-21.27	H
5196.89	-34.76	13.10	16.32	-37.98	-13.00	-24.98	H
6929.83	-33.18	12.33	21.13	-41.98	-13.00	-28.98	H
3464.91	-34.73	12.90	12.56	-34.39	-13.00	-21.39	V
5196.89	-34.98	13.10	16.32	-38.20	-13.00	-25.20	V
6929.83	-33.10	12.33	21.13	-41.90	-13.00	-28.90	V
CAT-M Band 4 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3495.70	-34.65	12.90	12.56	-34.31	-13.00	-21.31	H
5242.13	-35.17	13.10	16.32	-38.39	-13.00	-25.39	H
6990.71	-33.41	12.33	21.13	-42.21	-13.00	-29.21	H
3495.70	-35.00	12.90	12.56	-34.66	-13.00	-21.66	V
5242.13	-34.57	13.10	16.32	-37.79	-13.00	-24.79	V
6990.71	-33.08	12.33	21.13	-41.88	-13.00	-28.88	V

CAT-M Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3440.17	-33.95	12.90	12.56	-33.61	-13.00	-20.61	H
5160.45	-34.44	13.10	16.32	-37.66	-13.00	-24.66	H
6880.88	-32.27	12.33	21.13	-41.07	-13.00	-28.07	H
3440.17	-34.89	12.90	12.56	-34.55	-13.00	-21.55	V
5160.45	-34.21	13.10	16.32	-37.43	-13.00	-24.43	V
6880.88	-31.96	12.33	21.13	-40.76	-13.00	-27.76	V
CAT-M Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3465.07	-34.76	12.90	12.56	-34.42	-13.00	-21.42	H
5197.23	-34.95	13.10	16.32	-38.17	-13.00	-25.17	H
6930.10	-32.31	12.33	21.13	-41.11	-13.00	-28.11	H
3465.07	-35.51	12.90	12.56	-35.17	-13.00	-22.17	V
5197.23	-35.24	13.10	16.32	-38.46	-13.00	-25.46	V
6930.10	-31.99	12.33	21.13	-40.79	-13.00	-27.79	V
CAT-M Band 4 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.74	-33.86	12.90	12.56	-33.52	-13.00	-20.52	H
5235.42	-34.34	13.10	16.32	-37.56	-13.00	-24.56	H
6980.00	-32.97	12.33	21.13	-41.77	-13.00	-28.77	H
3490.74	-35.53	12.90	12.56	-35.19	-13.00	-22.19	V
5235.42	-34.73	13.10	16.32	-37.95	-13.00	-24.95	V
6980.00	-32.47	12.33	21.13	-41.27	-13.00	-28.27	V

CAT-M Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1648.99	-34.42	9.56	9.72	-34.58	-13.00	-21.58	H
2474.05	-34.69	10.50	10.86	-35.05	-13.00	-22.05	H
3298.53	-32.87	12.78	11.57	-31.66	-13.00	-18.66	H
1648.99	-35.70	9.56	9.72	-35.86	-13.00	-22.86	V
2474.05	-34.20	10.50	10.86	-34.56	-13.00	-21.56	V
3298.53	-31.79	12.78	11.57	-30.58	-13.00	-17.58	V
CAT-M Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1672.78	-34.31	9.56	9.72	-34.47	-13.00	-21.47	H
2509.19	-34.20	10.50	10.86	-34.56	-13.00	-21.56	H
3345.64	-32.28	12.78	11.57	-31.07	-13.00	-18.07	H
1672.78	-35.42	9.56	9.72	-35.58	-13.00	-22.58	V
2509.19	-34.80	10.50	10.86	-35.16	-13.00	-22.16	V
3345.64	-32.77	12.78	11.57	-31.56	-13.00	-18.56	V
CAT-M Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1696.22	-33.89	9.56	9.72	-34.05	-13.00	-21.05	H
2544.64	-35.35	10.50	10.86	-35.71	-13.00	-22.71	H
3393.15	-33.50	12.78	11.57	-32.29	-13.00	-19.29	H
1696.22	-34.80	9.56	9.72	-34.96	-13.00	-21.96	V
2544.64	-34.12	10.50	10.86	-34.48	-13.00	-21.48	V
3393.15	-32.73	12.78	11.57	-31.52	-13.00	-18.52	V

CAT-M Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1650.62	-33.84	9.56	9.72	-34.00	-13.00	-21.00	H
2476.13	-34.11	10.50	10.86	-34.47	-13.00	-21.47	H
3301.95	-33.12	12.78	11.57	-31.91	-13.00	-18.91	H
1650.62	-35.64	9.56	9.72	-35.80	-13.00	-22.80	V
2476.13	-34.34	10.50	10.86	-34.70	-13.00	-21.70	V
3301.95	-32.49	12.78	11.57	-31.28	-13.00	-18.28	V
CAT-M Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1672.57	-34.22	9.56	9.72	-34.38	-13.00	-21.38	H
2509.07	-34.94	10.50	10.86	-35.30	-13.00	-22.30	H
3345.58	-32.60	12.78	11.57	-31.39	-13.00	-18.39	H
1672.57	-34.69	9.56	9.72	-34.85	-13.00	-21.85	V
2509.07	-33.96	10.50	10.86	-34.32	-13.00	-21.32	V
3345.58	-32.03	12.78	11.57	-30.82	-13.00	-17.82	V
CAT-M Band 5 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1694.84	-34.54	9.56	9.72	-34.70	-13.00	-21.70	H
2542.17	-34.37	10.50	10.86	-34.73	-13.00	-21.73	H
3389.95	-32.67	12.78	11.57	-31.46	-13.00	-18.46	H
1694.84	-35.05	9.56	9.72	-35.21	-13.00	-22.21	V
2542.17	-35.03	10.50	10.86	-35.39	-13.00	-22.39	V
3389.95	-32.96	12.78	11.57	-31.75	-13.00	-18.75	V

CAT-M Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.90	-34.67	9.56	9.72	-34.83	-13.00	-21.83	H
2479.40	-34.17	10.50	10.86	-34.53	-13.00	-21.53	H
3305.89	-32.58	12.78	11.57	-31.37	-13.00	-18.37	H
1652.90	-34.96	9.56	9.72	-35.12	-13.00	-22.12	V
2479.40	-34.99	10.50	10.86	-35.35	-13.00	-22.35	V
3305.89	-32.43	12.78	11.57	-31.22	-13.00	-18.22	V
CAT-M Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1672.67	-34.60	9.56	9.72	-34.76	-13.00	-21.76	H
2509.45	-35.20	10.50	10.86	-35.56	-13.00	-22.56	H
3345.69	-32.29	12.78	11.57	-31.08	-13.00	-18.08	H
1672.67	-35.16	9.56	9.72	-35.32	-13.00	-22.32	V
2509.45	-35.13	10.50	10.86	-35.49	-13.00	-22.49	V
3345.69	-32.84	12.78	11.57	-31.63	-13.00	-18.63	V
CAT-M Band 5 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1692.81	-34.06	9.56	9.72	-34.22	-13.00	-21.22	H
2539.29	-34.41	10.50	10.86	-34.77	-13.00	-21.77	H
3385.92	-33.19	12.78	11.57	-31.98	-13.00	-18.98	H
1692.81	-35.80	9.56	9.72	-35.96	-13.00	-22.96	V
2539.29	-34.58	10.50	10.86	-34.94	-13.00	-21.94	V
3385.92	-32.76	12.78	11.57	-31.55	-13.00	-18.55	V

CAT-M Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1657.72	-34.07	9.56	9.72	-34.23	-13.00	-21.23	H
2486.55	-34.43	10.50	10.86	-34.79	-13.00	-21.79	H
3315.65	-32.46	12.78	11.57	-31.25	-13.00	-18.25	H
1657.72	-34.96	9.56	9.72	-35.12	-13.00	-22.12	V
2486.55	-34.67	10.50	10.86	-35.03	-13.00	-22.03	V
3315.65	-31.93	12.78	11.57	-30.72	-13.00	-17.72	V
CAT-M Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1672.84	-34.63	9.56	9.72	-34.79	-13.00	-21.79	H
2509.35	-34.32	10.50	10.86	-34.68	-13.00	-21.68	H
3345.61	-33.47	12.78	11.57	-32.26	-13.00	-19.26	H
1672.84	-34.74	9.56	9.72	-34.90	-13.00	-21.90	V
2509.35	-34.82	10.50	10.86	-35.18	-13.00	-22.18	V
3345.61	-31.75	12.78	11.57	-30.54	-13.00	-17.54	V
CAT-M Band 5 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1687.91	-34.90	9.56	9.72	-35.06	-13.00	-22.06	H
2531.96	-34.84	10.50	10.86	-35.20	-13.00	-22.20	H
3375.78	-32.54	12.78	11.57	-31.33	-13.00	-18.33	H
1687.91	-35.97	9.56	9.72	-36.13	-13.00	-23.13	V
2531.96	-35.24	10.50	10.86	-35.60	-13.00	-22.60	V
3375.78	-32.12	12.78	11.57	-30.91	-13.00	-17.91	V

CAT-M Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1398.98	-34.55	8.17	9.34	-35.72	-13.00	-22.72	H
2098.84	-35.38	9.53	10.42	-36.27	-13.00	-23.27	H
2798.55	-32.32	11.27	11.12	-32.17	-13.00	-19.17	H
1398.98	-34.56	8.17	9.34	-35.73	-13.00	-22.73	V
2098.84	-34.17	9.53	10.42	-35.06	-13.00	-22.06	V
2798.55	-32.70	11.27	11.12	-32.55	-13.00	-19.55	V
CAT-M Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1415.00	-33.87	8.17	9.34	-35.04	-13.00	-22.04	H
2122.42	-34.20	9.53	10.42	-35.09	-13.00	-22.09	H
2829.93	-33.07	11.27	11.12	-32.92	-13.00	-19.92	H
1415.00	-34.60	8.17	9.34	-35.77	-13.00	-22.77	V
2122.42	-34.88	9.53	10.42	-35.77	-13.00	-22.77	V
2829.93	-32.93	11.27	11.12	-32.78	-13.00	-19.78	V
CAT-M Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1430.43	-34.61	8.17	9.34	-35.78	-13.00	-22.78	H
2145.56	-34.13	9.53	10.42	-35.02	-13.00	-22.02	H
2861.20	-33.02	11.27	11.12	-32.87	-13.00	-19.87	H
1430.43	-34.90	8.17	9.34	-36.07	-13.00	-23.07	V
2145.56	-33.97	9.53	10.42	-34.86	-13.00	-21.86	V
2861.20	-32.97	11.27	11.12	-32.82	-13.00	-19.82	V

CAT-M Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1400.71	-34.75	8.17	9.34	-35.92	-13.00	-22.92	H
2101.50	-34.61	9.53	10.42	-35.50	-13.00	-22.50	H
2801.80	-32.66	11.27	11.12	-32.51	-13.00	-19.51	H
1400.71	-34.68	8.17	9.34	-35.85	-13.00	-22.85	V
2101.50	-34.00	9.53	10.42	-34.89	-13.00	-21.89	V
2801.80	-32.74	11.27	11.12	-32.59	-13.00	-19.59	V
CAT-M Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1414.91	-34.65	8.17	9.34	-35.82	-13.00	-22.82	H
2122.40	-35.39	9.53	10.42	-36.28	-13.00	-23.28	H
2829.62	-33.41	11.27	11.12	-33.26	-13.00	-20.26	H
1414.91	-34.69	8.17	9.34	-35.86	-13.00	-22.86	V
2122.40	-34.12	9.53	10.42	-35.01	-13.00	-22.01	V
2829.62	-32.76	11.27	11.12	-32.61	-13.00	-19.61	V
CAT-M Band 12 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1428.64	-34.80	8.17	9.34	-35.97	-13.00	-22.97	H
2143.02	-34.10	9.53	10.42	-34.99	-13.00	-21.99	H
2857.77	-32.31	11.27	11.12	-32.16	-13.00	-19.16	H
1428.64	-35.82	8.17	9.34	-36.99	-13.00	-23.99	V
2143.02	-34.56	9.53	10.42	-35.45	-13.00	-22.45	V
2857.77	-32.32	11.27	11.12	-32.17	-13.00	-19.17	V

CAT-M Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1402.78	-34.79	8.17	9.34	-35.96	-13.00	-22.96	H
2104.06	-35.13	9.53	10.42	-36.02	-13.00	-23.02	H
2805.70	-33.24	11.27	11.12	-33.09	-13.00	-20.09	H
1402.78	-35.04	8.17	9.34	-36.21	-13.00	-23.21	V
2104.06	-33.89	9.53	10.42	-34.78	-13.00	-21.78	V
2805.70	-32.03	11.27	11.12	-31.88	-13.00	-18.88	V
CAT-M Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1414.60	-34.63	8.17	9.34	-35.80	-13.00	-22.80	H
2122.12	-35.38	9.53	10.42	-36.27	-13.00	-23.27	H
2829.56	-32.17	11.27	11.12	-32.02	-13.00	-19.02	H
1414.60	-34.64	8.17	9.34	-35.81	-13.00	-22.81	V
2122.12	-33.97	9.53	10.42	-34.86	-13.00	-21.86	V
2829.56	-31.75	11.27	11.12	-31.60	-13.00	-18.60	V
CAT-M Band 12 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1426.95	-33.99	8.17	9.34	-35.16	-13.00	-22.16	H
2140.50	-35.45	9.53	10.42	-36.34	-13.00	-23.34	H
2853.66	-32.98	11.27	11.12	-32.83	-13.00	-19.83	H
1426.95	-34.76	8.17	9.34	-35.93	-13.00	-22.93	V
2140.50	-35.20	9.53	10.42	-36.09	-13.00	-23.09	V
2853.66	-32.05	11.27	11.12	-31.90	-13.00	-18.90	V

CAT-M Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1407.90	-34.81	8.17	9.34	-35.98	-13.00	-22.98	H
2111.79	-34.83	9.53	10.42	-35.72	-13.00	-22.72	H
2815.77	-32.59	11.27	11.12	-32.44	-13.00	-19.44	H
1407.90	-35.08	8.17	9.34	-36.25	-13.00	-23.25	V
2111.79	-35.24	9.53	10.42	-36.13	-13.00	-23.13	V
2815.77	-33.09	11.27	11.12	-32.94	-13.00	-19.94	V
CAT-M Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1414.96	-34.36	8.17	9.34	-35.53	-13.00	-22.53	H
2122.03	-34.21	9.53	10.42	-35.10	-13.00	-22.10	H
2829.65	-32.95	11.27	11.12	-32.80	-13.00	-19.80	H
1414.96	-35.37	8.17	9.34	-36.54	-13.00	-23.54	V
2122.03	-34.16	9.53	10.42	-35.05	-13.00	-22.05	V
2829.65	-33.13	11.27	11.12	-32.98	-13.00	-19.98	V
CAT-M Band 12 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1421.85	-34.07	8.17	9.34	-35.24	-13.00	-22.24	H
2132.64	-35.45	9.53	10.42	-36.34	-13.00	-23.34	H
2843.59	-33.06	11.27	11.12	-32.91	-13.00	-19.91	H
1421.85	-35.68	8.17	9.34	-36.85	-13.00	-23.85	V
2132.64	-33.91	9.53	10.42	-34.80	-13.00	-21.80	V
2843.59	-33.13	11.27	11.12	-32.98	-13.00	-19.98	V

CAT-M Band 13 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1559.14	-47.64	8.17	9.34	-48.81	-40.00	-8.81	H
2338.35	-46.98	9.53	10.42	-47.87	-13.00	-34.87	H
3117.88	-45.43	11.27	11.12	-45.28	-13.00	-32.28	H
1559.14	-47.57	8.17	9.34	-48.74	-40.00	-8.74	V
2338.35	-46.60	9.53	10.42	-47.49	-13.00	-34.49	V
3117.88	-46.41	11.27	11.12	-46.26	-13.00	-33.26	V
CAT-M Band 13 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1564.19	-48.85	8.17	9.34	-50.02	-40.00	-10.02	H
2346.01	-46.50	9.53	10.42	-47.39	-13.00	-34.39	H
3127.77	-46.43	11.27	11.12	-46.28	-13.00	-33.28	H
1564.19	-47.52	8.17	9.34	-48.69	-40.00	-8.69	V
2346.01	-47.31	9.53	10.42	-48.20	-13.00	-35.20	V
3127.77	-46.05	11.27	11.12	-45.90	-13.00	-32.90	V
CAT-M Band 13 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1568.78	-47.82	8.17	9.34	-48.99	-40.00	-8.99	H
2353.40	-47.04	9.53	10.42	-47.93	-13.00	-34.93	H
3138.09	-46.62	11.27	11.12	-46.47	-13.00	-33.47	H
1568.78	-47.54	8.17	9.34	-48.71	-40.00	-8.71	V
2353.40	-46.63	9.53	10.42	-47.52	-13.00	-34.52	V
3138.09	-45.94	11.27	11.12	-45.79	-13.00	-32.79	V

CAT-M Band 13 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1563.94	-48.87	8.17	9.34	-50.04	-40.00	-10.04	H
2345.89	-47.07	9.53	10.42	-47.96	-13.00	-34.96	H
3128.06	-46.20	11.27	11.12	-46.05	-13.00	-33.05	H
1563.94	-48.18	8.17	9.34	-49.35	-40.00	-9.35	V
2345.89	-47.20	9.53	10.42	-48.09	-13.00	-35.09	V
3128.06	-46.20	11.27	11.12	-46.05	-13.00	-33.05	V

CAT-M Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3701.03	-34.33	12.60	12.93	-34.66	-13.00	-21.66	H
5551.89	-34.62	13.10	17.11	-38.63	-13.00	-25.63	H
7402.77	-33.57	11.50	22.20	-44.27	-13.00	-31.27	H
3701.03	-35.31	12.60	12.93	-35.64	-13.00	-22.64	V
5551.89	-34.86	13.10	17.11	-38.87	-13.00	-25.87	V
7402.77	-32.04	11.50	22.20	-42.74	-13.00	-29.74	V
CAT-M Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3765.20	-34.71	12.60	12.93	-35.04	-13.00	-22.04	H
5647.22	-34.00	13.10	17.11	-38.01	-13.00	-25.01	H
7529.98	-33.19	11.50	22.20	-43.89	-13.00	-30.89	H
3765.20	-35.20	12.60	12.93	-35.53	-13.00	-22.53	V
5647.22	-35.10	13.10	17.11	-39.11	-13.00	-26.11	V
7529.98	-32.62	11.50	22.20	-43.32	-13.00	-30.32	V
CAT-M Band 25 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3828.34	-34.65	12.60	12.93	-34.98	-13.00	-21.98	H
5727.80	-35.04	13.10	17.11	-39.05	-13.00	-26.05	H
7657.21	-33.27	11.50	22.20	-43.97	-13.00	-30.97	H
3828.34	-35.53	12.60	12.93	-35.86	-13.00	-22.86	V
5727.80	-33.95	13.10	17.11	-37.96	-13.00	-24.96	V
7657.21	-32.89	11.50	22.20	-43.59	-13.00	-30.59	V

CAT-M Band 25 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3703.29	-33.66	12.60	12.93	-33.99	-13.00	-20.99	H
5554.33	-34.84	13.10	17.11	-38.85	-13.00	-25.85	H
7406.15	-33.45	11.50	22.20	-44.15	-13.00	-31.15	H
3703.29	-35.99	12.60	12.93	-36.32	-13.00	-23.32	V
5554.33	-34.74	13.10	17.11	-38.75	-13.00	-25.75	V
7406.15	-31.88	11.50	22.20	-42.58	-13.00	-29.58	V
CAT-M Band 25 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3765.12	-34.73	12.60	12.93	-35.06	-13.00	-22.06	H
5647.07	-34.30	13.10	17.11	-38.31	-13.00	-25.31	H
7530.05	-33.00	11.50	22.20	-43.70	-13.00	-30.70	H
3765.12	-35.80	12.60	12.93	-36.13	-13.00	-23.13	V
5647.07	-34.79	13.10	17.11	-38.80	-13.00	-25.80	V
7530.05	-32.47	11.50	22.20	-43.17	-13.00	-30.17	V
CAT-M Band 25 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3826.89	-34.36	12.60	12.93	-34.69	-13.00	-21.69	H
5739.99	-34.78	13.10	17.11	-38.79	-13.00	-25.79	H
7654.24	-33.55	11.50	22.20	-44.25	-13.00	-31.25	H
3826.89	-34.68	12.60	12.93	-35.01	-13.00	-22.01	V
5739.99	-34.87	13.10	17.11	-38.88	-13.00	-25.88	V
7654.24	-32.01	11.50	22.20	-42.71	-13.00	-29.71	V

CAT-M Band 25 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3705.29	-33.48	12.60	12.93	-33.81	-13.00	-20.81	H
5557.27	-35.09	13.10	17.11	-39.10	-13.00	-26.10	H
7410.15	-32.73	11.50	22.20	-43.43	-13.00	-30.43	H
3705.29	-34.92	12.60	12.93	-35.25	-13.00	-22.25	V
5557.27	-34.02	13.10	17.11	-38.03	-13.00	-25.03	V
7410.15	-32.38	11.50	22.20	-43.08	-13.00	-30.08	V
CAT-M Band 25 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3764.82	-34.63	12.60	12.93	-34.96	-13.00	-21.96	H
5647.27	-34.42	13.10	17.11	-38.43	-13.00	-25.43	H
7530.19	-32.98	11.50	22.20	-43.68	-13.00	-30.68	H
3764.82	-34.66	12.60	12.93	-34.99	-13.00	-21.99	V
5647.27	-33.85	13.10	17.11	-37.86	-13.00	-24.86	V
7530.19	-31.81	11.50	22.20	-42.51	-13.00	-29.51	V
CAT-M Band 25 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3825.16	-33.71	12.60	12.93	-34.04	-13.00	-21.04	H
5737.13	-34.99	13.10	17.11	-39.00	-13.00	-26.00	H
7650.58	-32.76	11.50	22.20	-43.46	-13.00	-30.46	H
3825.16	-35.64	12.60	12.93	-35.97	-13.00	-22.97	V
5737.13	-35.13	13.10	17.11	-39.14	-13.00	-26.14	V
7650.58	-32.42	11.50	22.20	-43.12	-13.00	-30.12	V

CAT-M Band 25 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3710.11	-34.40	12.60	12.93	-34.73	-13.00	-21.73	H
5565.04	-34.92	13.10	17.11	-38.93	-13.00	-25.93	H
7419.95	-32.68	11.50	22.20	-43.38	-13.00	-30.38	H
3710.11	-34.72	12.60	12.93	-35.05	-13.00	-22.05	V
5565.04	-34.59	13.10	17.11	-38.60	-13.00	-25.60	V
7419.95	-31.96	11.50	22.20	-42.66	-13.00	-29.66	V
CAT-M Band 25 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3765.18	-33.72	12.60	12.93	-34.05	-13.00	-21.05	H
5647.12	-35.19	13.10	17.11	-39.20	-13.00	-26.20	H
7530.11	-33.27	11.50	22.20	-43.97	-13.00	-30.97	H
3765.18	-35.72	12.60	12.93	-36.05	-13.00	-23.05	V
5647.12	-34.10	13.10	17.11	-38.11	-13.00	-25.11	V
7530.11	-31.88	11.50	22.20	-42.58	-13.00	-29.58	V
CAT-M Band 25 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3819.97	-34.89	12.60	12.93	-35.22	-13.00	-22.22	H
5729.85	-35.30	13.10	17.11	-39.31	-13.00	-26.31	H
7640.22	-32.59	11.50	22.20	-43.29	-13.00	-30.29	H
3819.97	-35.34	12.60	12.93	-35.67	-13.00	-22.67	V
5729.85	-34.43	13.10	17.11	-38.44	-13.00	-25.44	V
7640.22	-31.81	11.50	22.20	-42.51	-13.00	-29.51	V

CAT-M Band 25 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3715.16	-34.43	12.60	12.93	-34.76	-13.00	-21.76	H
5572.44	-33.99	13.10	17.11	-38.00	-13.00	-25.00	H
7430.38	-32.19	11.50	22.20	-42.89	-13.00	-29.89	H
3715.16	-35.74	12.60	12.93	-36.07	-13.00	-23.07	V
5572.44	-34.13	13.10	17.11	-38.14	-13.00	-25.14	V
7430.38	-31.96	11.50	22.20	-42.66	-13.00	-29.66	V
CAT-M Band 25 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3764.98	-34.62	12.60	12.93	-34.95	-13.00	-21.95	H
5647.25	-35.19	13.10	17.11	-39.20	-13.00	-26.20	H
7430.01	-33.51	11.50	22.20	-44.21	-13.00	-31.21	H
3764.98	-34.85	12.60	12.93	-35.18	-13.00	-22.18	V
5647.25	-34.40	13.10	17.11	-38.41	-13.00	-25.41	V
7430.01	-32.82	11.50	22.20	-43.52	-13.00	-30.52	V
CAT-M Band 25 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3815.62	-33.47	12.60	12.93	-33.80	-13.00	-20.80	H
5722.41	-34.68	13.10	17.11	-38.69	-13.00	-25.69	H
7630.53	-32.65	11.50	22.20	-43.35	-13.00	-30.35	H
3815.62	-35.19	12.60	12.93	-35.52	-13.00	-22.52	V
5722.41	-34.83	13.10	17.11	-38.84	-13.00	-25.84	V
7630.53	-32.27	11.50	22.20	-42.97	-13.00	-29.97	V

CAT-M Band 25 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3720.35	-33.84	12.60	12.93	-34.17	-13.00	-21.17	H
5580.11	-34.69	13.10	17.11	-38.70	-13.00	-25.70	H
7439.77	-33.01	11.50	22.20	-43.71	-13.00	-30.71	H
3720.35	-34.99	12.60	12.93	-35.32	-13.00	-22.32	V
5580.11	-35.23	13.10	17.11	-39.24	-13.00	-26.24	V
7439.77	-33.10	11.50	22.20	-43.80	-13.00	-30.80	V
CAT-M Band 25 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3765.09	-34.19	12.60	12.93	-34.52	-13.00	-21.52	H
5647.01	-35.49	13.10	17.11	-39.50	-13.00	-26.50	H
7529.98	-32.19	11.50	22.20	-42.89	-13.00	-29.89	H
3765.09	-35.44	12.60	12.93	-35.77	-13.00	-22.77	V
5647.01	-34.41	13.10	17.11	-38.42	-13.00	-25.42	V
7529.98	-32.86	11.50	22.20	-43.56	-13.00	-30.56	V
CAT-M Band 25 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3810.60	-34.06	12.60	12.93	-34.39	-13.00	-21.39	H
5715.48	-34.41	13.10	17.11	-38.42	-13.00	-25.42	H
7619.74	-33.41	11.50	22.20	-44.11	-13.00	-31.11	H
3810.60	-34.79	12.60	12.93	-35.12	-13.00	-22.12	V
5715.48	-35.09	13.10	17.11	-39.10	-13.00	-26.10	V
7619.74	-32.41	11.50	22.20	-43.11	-13.00	-30.11	V

CAT-M Band 26(Part 22) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1649.18	-34.07	9.56	9.72	-34.23	-13.00	-21.23	H
2473.44	-35.38	10.50	10.86	-35.74	-13.00	-22.74	H
3298.78	-32.45	12.78	11.57	-31.24	-13.00	-18.24	H
1649.18	-34.59	9.56	9.72	-34.75	-13.00	-21.75	V
2473.44	-34.39	10.50	10.86	-34.75	-13.00	-21.75	V
3298.78	-31.83	12.78	11.57	-30.62	-13.00	-17.62	V
CAT-M Band 26(Part 22) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.07	-34.02	9.56	9.72	-34.18	-13.00	-21.18	H
2509.28	-34.82	10.50	10.86	-35.18	-13.00	-22.18	H
3345.85	-32.67	12.78	11.57	-31.46	-13.00	-18.46	H
1673.07	-34.99	9.56	9.72	-35.15	-13.00	-22.15	V
2509.28	-33.81	10.50	10.86	-34.17	-13.00	-21.17	V
3345.85	-32.99	12.78	11.57	-31.78	-13.00	-18.78	V
CAT-M Band 26(Part 22) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1696.44	-34.30	9.56	9.72	-34.46	-13.00	-21.46	H
2544.88	-34.58	10.50	10.86	-34.94	-13.00	-21.94	H
3392.86	-33.23	12.78	11.57	-32.02	-13.00	-19.02	H
1696.44	-35.35	9.56	9.72	-35.51	-13.00	-22.51	V
2544.88	-34.89	10.50	10.86	-35.25	-13.00	-22.25	V
3392.86	-31.90	12.78	11.57	-30.69	-13.00	-17.69	V

CAT-M Band 26(Part 22) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1651.48	-33.44	9.56	9.72	-33.60	-13.00	-20.60	H
2476.49	-35.07	10.50	10.86	-35.43	-13.00	-22.43	H
3301.68	-32.90	12.78	11.57	-31.69	-13.00	-18.69	H
1651.48	-35.40	9.56	9.72	-35.56	-13.00	-22.56	V
2476.49	-33.88	10.50	10.86	-34.24	-13.00	-21.24	V
3301.68	-32.76	12.78	11.57	-31.55	-13.00	-18.55	V
CAT-M Band 26(Part 22) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.17	-34.42	9.56	9.72	-34.58	-13.00	-21.58	H
2509.16	-34.36	10.50	10.86	-34.72	-13.00	-21.72	H
3346.12	-32.47	12.78	11.57	-31.26	-13.00	-18.26	H
1673.17	-34.83	9.56	9.72	-34.99	-13.00	-21.99	V
2509.16	-35.05	10.50	10.86	-35.41	-13.00	-22.41	V
3346.12	-32.92	12.78	11.57	-31.71	-13.00	-18.71	V
CAT-M Band 26(Part 22) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1695.56	-33.59	9.56	9.72	-33.75	-13.00	-20.75	H
2542.26	-35.35	10.50	10.86	-35.71	-13.00	-22.71	H
3390.23	-32.73	12.78	11.57	-31.52	-13.00	-18.52	H
1695.56	-34.79	9.56	9.72	-34.95	-13.00	-21.95	V
2542.26	-35.07	10.50	10.86	-35.43	-13.00	-22.43	V
3390.23	-32.83	12.78	11.57	-31.62	-13.00	-18.62	V

CAT-M Band 26(Part 22) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.67	-34.31	9.56	9.72	-34.47	-13.00	-21.47	H
2479.41	-35.30	10.50	10.86	-35.66	-13.00	-22.66	H
3306.60	-32.62	12.78	11.57	-31.41	-13.00	-18.41	H
1652.67	-34.84	9.56	9.72	-35.00	-13.00	-22.00	V
2479.41	-34.08	10.50	10.86	-34.44	-13.00	-21.44	V
3306.60	-33.07	12.78	11.57	-31.86	-13.00	-18.86	V
CAT-M Band 26(Part 22) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.04	-34.81	9.56	9.72	-34.97	-13.00	-21.97	H
2508.88	-35.46	10.50	10.86	-35.82	-13.00	-22.82	H
3346.25	-33.62	12.78	11.57	-32.41	-13.00	-19.41	H
1673.04	-35.14	9.56	9.72	-35.30	-13.00	-22.30	V
2508.88	-34.46	10.50	10.86	-34.82	-13.00	-21.82	V
3346.25	-32.77	12.78	11.57	-31.56	-13.00	-18.56	V
CAT-M Band 26(Part 22) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1693.35	-34.60	9.56	9.72	-34.76	-13.00	-21.76	H
2539.02	-34.58	10.50	10.86	-34.94	-13.00	-21.94	H
3385.98	-32.31	12.78	11.57	-31.10	-13.00	-18.10	H
1693.35	-35.23	9.56	9.72	-35.39	-13.00	-22.39	V
2539.02	-33.97	10.50	10.86	-34.33	-13.00	-21.33	V
3385.98	-32.34	12.78	11.57	-31.13	-13.00	-18.13	V

CAT-M Band 26(Part 22) / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1658.09	-34.67	9.56	9.72	-34.83	-13.00	-21.83	H
2486.63	-34.45	10.50	10.86	-34.81	-13.00	-21.81	H
3315.51	-33.21	12.78	11.57	-32.00	-13.00	-19.00	H
1658.09	-35.09	9.56	9.72	-35.25	-13.00	-22.25	V
2486.63	-34.18	10.50	10.86	-34.54	-13.00	-21.54	V
3315.51	-32.87	12.78	11.57	-31.66	-13.00	-18.66	V
CAT-M Band 26(Part 22) / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1673.18	-34.25	9.56	9.72	-34.41	-13.00	-21.41	H
2508.90	-34.01	10.50	10.86	-34.37	-13.00	-21.37	H
3345.95	-32.17	12.78	11.57	-30.96	-13.00	-17.96	H
1673.18	-35.73	9.56	9.72	-35.89	-13.00	-22.89	V
2508.90	-33.84	10.50	10.86	-34.20	-13.00	-21.20	V
3345.95	-32.84	12.78	11.57	-31.63	-13.00	-18.63	V
CAT-M Band 26(Part 22) / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1688.45	-34.68	9.56	9.72	-34.84	-13.00	-21.84	H
2532.50	-35.22	10.50	10.86	-35.58	-13.00	-22.58	H
3375.84	-32.85	12.78	11.57	-31.64	-13.00	-18.64	H
1688.45	-34.64	9.56	9.72	-34.80	-13.00	-21.80	V
2532.50	-34.71	10.50	10.86	-35.07	-13.00	-22.07	V
3375.84	-32.23	12.78	11.57	-31.02	-13.00	-18.02	V

CAT-M Band 26(Part 22) / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1663.39	-33.65	9.56	9.72	-33.81	-13.00	-20.81	H
2494.63	-34.78	10.50	10.86	-35.14	-13.00	-22.14	H
3325.74	-32.54	12.78	11.57	-31.33	-13.00	-18.33	H
1663.39	-35.45	9.56	9.72	-35.61	-13.00	-22.61	V
2494.63	-34.19	10.50	10.86	-34.55	-13.00	-21.55	V
3325.74	-32.85	12.78	11.57	-31.64	-13.00	-18.64	V
CAT-M Band 26(Part 22) / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1672.87	-34.29	9.56	9.72	-34.45	-13.00	-21.45	H
2509.26	-35.17	10.50	10.86	-35.53	-13.00	-22.53	H
3345.98	-33.55	12.78	11.57	-32.34	-13.00	-19.34	H
1672.87	-34.85	9.56	9.72	-35.01	-13.00	-22.01	V
2509.26	-33.89	10.50	10.86	-34.25	-13.00	-21.25	V
3345.98	-31.91	12.78	11.57	-30.70	-13.00	-17.70	V
CAT-M Band 26(Part 22) / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1683.76	-34.59	9.56	9.72	-34.75	-13.00	-21.75	H
2524.02	-34.14	10.50	10.86	-34.50	-13.00	-21.50	H
3366.59	-33.28	12.78	11.57	-32.07	-13.00	-19.07	H
1683.76	-35.68	9.56	9.72	-35.84	-13.00	-22.84	V
2524.02	-34.01	10.50	10.86	-34.37	-13.00	-21.37	V
3366.59	-32.39	12.78	11.57	-31.18	-13.00	-18.18	V

CAT-M Band 26(Part 90) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1629.03	-33.54	9.56	9.72	-33.70	-13.00	-20.70	H
2443.78	-34.43	10.50	10.86	-34.79	-13.00	-21.79	H
3258.47	-32.65	12.78	11.57	-31.44	-13.00	-18.44	H
1629.03	-35.84	9.56	9.72	-36.00	-13.00	-23.00	V
2443.78	-34.05	10.50	10.86	-34.41	-13.00	-21.41	V
3258.47	-33.18	12.78	11.57	-31.97	-13.00	-18.97	V
CAT-M Band 26(Part 90) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1638.22	-34.41	9.56	9.72	-34.57	-13.00	-21.57	H
2457.06	-34.22	10.50	10.86	-34.58	-13.00	-21.58	H
3275.85	-32.31	12.78	11.57	-31.10	-13.00	-18.10	H
1638.22	-34.55	9.56	9.72	-34.71	-13.00	-21.71	V
2457.06	-34.90	10.50	10.86	-35.26	-13.00	-22.26	V
3275.85	-32.02	12.78	11.57	-30.81	-13.00	-17.81	V
CAT-M Band 26(Part 90) / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1646.53	-34.39	9.56	9.72	-34.55	-13.00	-21.55	H
2456.56	-34.43	10.50	10.86	-34.79	-13.00	-21.79	H
3258.07	-32.67	12.78	11.57	-31.46	-13.00	-18.46	H
1646.53	-35.77	9.56	9.72	-35.93	-13.00	-22.93	V
2456.56	-34.88	10.50	10.86	-35.24	-13.00	-22.24	V
3258.07	-31.93	12.78	11.57	-30.72	-13.00	-17.72	V

CAT-M Band 26(Part 90) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1631.38	-33.74	9.56	9.72	-33.90	-13.00	-20.90	H
2446.39	-34.10	10.50	10.86	-34.46	-13.00	-21.46	H
3261.55	-33.02	12.78	11.57	-31.81	-13.00	-18.81	H
1631.38	-34.81	9.56	9.72	-34.97	-13.00	-21.97	V
2446.39	-34.09	10.50	10.86	-34.45	-13.00	-21.45	V
3261.55	-31.94	12.78	11.57	-30.73	-13.00	-17.73	V
CAT-M Band 26(Part 90) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1637.85	-33.75	9.56	9.72	-33.91	-13.00	-20.91	H
2457.21	-35.22	10.50	10.86	-35.58	-13.00	-22.58	H
3276.02	-32.98	12.78	11.57	-31.77	-13.00	-18.77	H
1637.85	-35.64	9.56	9.72	-35.80	-13.00	-22.80	V
2457.21	-34.67	10.50	10.86	-35.03	-13.00	-22.03	V
3276.02	-32.95	12.78	11.57	-31.74	-13.00	-18.74	V
CAT-M Band 26(Part 90) / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1644.76	-33.67	9.56	9.72	-33.83	-13.00	-20.83	H
2467.32	-34.11	10.50	10.86	-34.47	-13.00	-21.47	H
3276.11	-33.14	12.78	11.57	-31.93	-13.00	-18.93	H
1644.76	-34.55	9.56	9.72	-34.71	-13.00	-21.71	V
2467.32	-34.14	10.50	10.86	-34.50	-13.00	-21.50	V
3276.11	-32.46	12.78	11.57	-31.25	-13.00	-18.25	V

CAT-M Band 26(Part 90) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1632.85	-34.29	9.56	9.72	-34.45	-13.00	-21.45	H
2449.47	-35.34	10.50	10.86	-35.70	-13.00	-22.70	H
3266.80	-32.99	12.78	11.57	-31.78	-13.00	-18.78	H
1632.85	-35.01	9.56	9.72	-35.17	-13.00	-22.17	V
2449.47	-34.07	10.50	10.86	-34.43	-13.00	-21.43	V
3266.80	-32.20	12.78	11.57	-30.99	-13.00	-17.99	V
CAT-M Band 26(Part 90) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1637.80	-34.68	9.56	9.72	-34.84	-13.00	-21.84	H
2457.07	-34.53	10.50	10.86	-34.89	-13.00	-21.89	H
3275.85	-32.75	12.78	11.57	-31.54	-13.00	-18.54	H
1637.80	-34.76	9.56	9.72	-34.92	-13.00	-21.92	V
2457.07	-35.19	10.50	10.86	-35.55	-13.00	-22.55	V
3275.85	-32.81	12.78	11.57	-31.60	-13.00	-18.60	V
CAT-M Band 26(Part 90) / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1642.84	-33.72	9.56	9.72	-33.88	-13.00	-20.88	H
2464.45	-35.27	10.50	10.86	-35.63	-13.00	-22.63	H
3285.89	-32.16	12.78	11.57	-30.95	-13.00	-17.95	H
1642.84	-35.54	9.56	9.72	-35.70	-13.00	-22.70	V
2464.45	-34.91	10.50	10.86	-35.27	-13.00	-22.27	V
3285.89	-31.77	12.78	11.57	-30.56	-13.00	-17.56	V

CAT-M Band 26(Part 90) / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1637.98	-34.04	9.56	9.72	-34.20	-13.00	-21.20	H
2457.22	-34.57	10.50	10.86	-34.93	-13.00	-21.93	H
3275.84	-33.12	12.78	11.57	-31.91	-13.00	-18.91	H
1637.98	-35.72	9.56	9.72	-35.88	-13.00	-22.88	V
2457.22	-34.70	10.50	10.86	-35.06	-13.00	-22.06	V
3275.84	-32.50	12.78	11.57	-31.29	-13.00	-18.29	V

CAT-M Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3421.36	-34.86	12.90	12.56	-34.52	-13.00	-21.52	H
5131.70	-34.80	13.10	16.32	-38.02	-13.00	-25.02	H
6842.65	-33.61	12.33	21.13	-42.41	-13.00	-29.41	H
3421.36	-35.95	12.90	12.56	-35.61	-13.00	-22.61	V
5131.70	-34.77	13.10	16.32	-37.99	-13.00	-24.99	V
6842.65	-33.15	12.33	21.13	-41.95	-13.00	-28.95	V
CAT-M Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3489.88	-33.70	12.90	12.56	-33.36	-13.00	-20.36	H
5234.96	-34.06	13.10	16.32	-37.28	-13.00	-24.28	H
6980.03	-33.18	12.33	21.13	-41.98	-13.00	-28.98	H
3489.88	-34.56	12.90	12.56	-34.22	-13.00	-21.22	V
5234.96	-34.72	13.10	16.32	-37.94	-13.00	-24.94	V
6980.03	-32.75	12.33	21.13	-41.55	-13.00	-28.55	V
CAT-M Band 66 / 1.4MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3558.20	-33.95	12.90	12.56	-33.61	-13.00	-20.61	H
5336.98	-34.81	13.10	16.32	-38.03	-13.00	-25.03	H
7117.03	-33.42	12.33	21.13	-42.22	-13.00	-29.22	H
3558.20	-35.25	12.90	12.56	-34.91	-13.00	-21.91	V
5336.98	-34.49	13.10	16.32	-37.71	-13.00	-24.71	V
7117.03	-32.85	12.33	21.13	-41.65	-13.00	-28.65	V

CAT-M Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3422.89	-34.90	12.90	12.56	-34.56	-13.00	-21.56	H
5134.42	-34.99	13.10	16.32	-38.21	-13.00	-25.21	H
6845.97	-32.63	12.33	21.13	-41.43	-13.00	-28.43	H
3422.89	-35.26	12.90	12.56	-34.92	-13.00	-21.92	V
5134.42	-35.21	13.10	16.32	-38.43	-13.00	-25.43	V
6845.97	-32.99	12.33	21.13	-41.79	-13.00	-28.79	V
CAT-M Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.25	-33.71	12.90	12.56	-33.37	-13.00	-20.37	H
5235.13	-35.44	13.10	16.32	-38.66	-13.00	-25.66	H
6979.82	-32.95	12.33	21.13	-41.75	-13.00	-28.75	H
3490.25	-34.71	12.90	12.56	-34.37	-13.00	-21.37	V
5235.13	-34.77	13.10	16.32	-37.99	-13.00	-24.99	V
6979.82	-33.13	12.33	21.13	-41.93	-13.00	-28.93	V
CAT-M Band 66 / 3MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3556.79	-33.46	12.90	12.56	-33.12	-13.00	-20.12	H
5262.23	-35.33	13.10	16.32	-38.55	-13.00	-25.55	H
7114.18	-33.04	12.33	21.13	-41.84	-13.00	-28.84	H
3556.79	-36.02	12.90	12.56	-35.68	-13.00	-22.68	V
5262.23	-35.03	13.10	16.32	-38.25	-13.00	-25.25	V
7114.18	-32.41	12.33	21.13	-41.21	-13.00	-28.21	V

CAT-M Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3425.33	-33.96	12.90	12.56	-33.62	-13.00	-20.62	H
5137.36	-34.70	13.10	16.32	-37.92	-13.00	-24.92	H
6850.12	-32.91	12.33	21.13	-41.71	-13.00	-28.71	H
3425.33	-34.69	12.90	12.56	-34.35	-13.00	-21.35	V
5137.36	-33.95	13.10	16.32	-37.17	-13.00	-24.17	V
6850.12	-31.80	12.33	21.13	-40.60	-13.00	-27.60	V
CAT-M Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.09	-33.93	12.90	12.56	-33.59	-13.00	-20.59	H
5235.21	-35.29	13.10	16.32	-38.51	-13.00	-25.51	H
6980.28	-32.21	12.33	21.13	-41.01	-13.00	-28.01	H
3490.09	-35.09	12.90	12.56	-34.75	-13.00	-21.75	V
5235.21	-34.96	13.10	16.32	-38.18	-13.00	-25.18	V
6980.28	-33.09	12.33	21.13	-41.89	-13.00	-28.89	V
CAT-M Band 66 / 5MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3557.79	-34.92	12.90	12.56	-34.58	-13.00	-21.58	H
52353.72	-34.07	13.10	16.32	-37.29	-13.00	-24.29	H
7109.95	-33.13	12.33	21.13	-41.93	-13.00	-28.93	H
3557.79	-35.34	12.90	12.56	-35.00	-13.00	-22.00	V
52353.72	-35.23	13.10	16.32	-38.45	-13.00	-25.45	V
7109.95	-31.84	12.33	21.13	-40.64	-13.00	-27.64	V

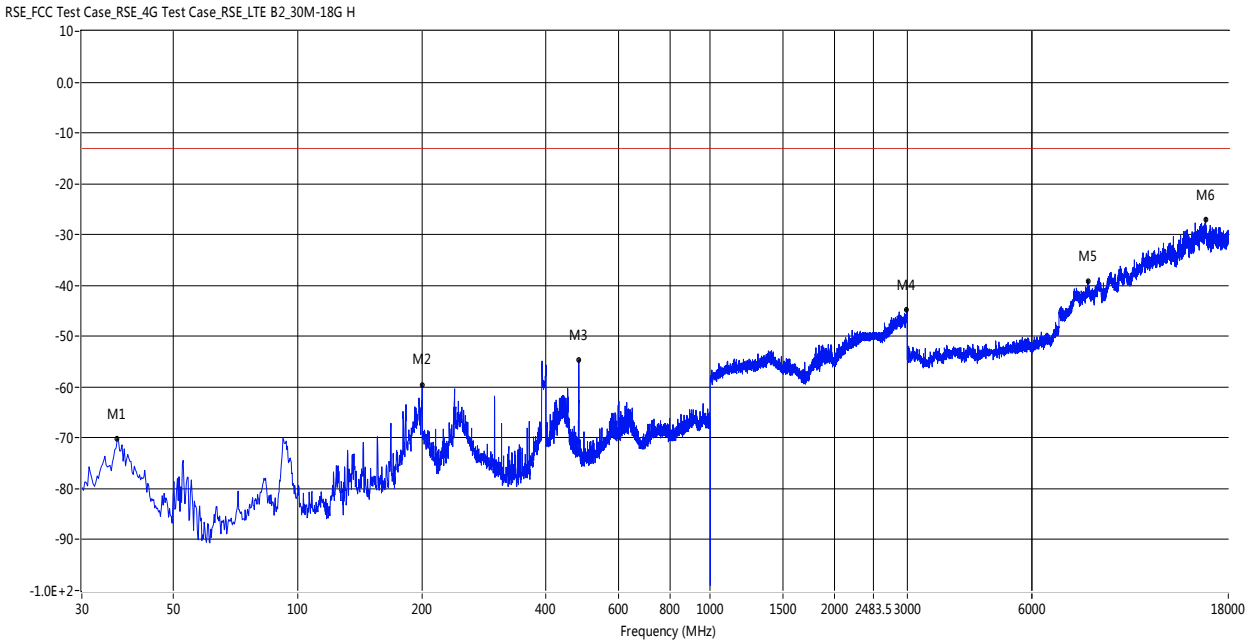
CAT-M Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3430.00	-34.38	12.90	12.56	-34.04	-13.00	-21.04	H
5144.95	-34.46	13.10	16.32	-37.68	-13.00	-24.68	H
6879.82	-33.10	12.33	21.13	-41.90	-13.00	-28.90	H
3430.00	-35.38	12.90	12.56	-35.04	-13.00	-22.04	V
5144.95	-34.73	13.10	16.32	-37.95	-13.00	-24.95	V
6879.82	-32.11	12.33	21.13	-40.91	-13.00	-27.91	V
CAT-M Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.19	-33.72	12.90	12.56	-33.38	-13.00	-20.38	H
5235.27	-35.05	13.10	16.32	-38.27	-13.00	-25.27	H
6980.16	-33.17	12.33	21.13	-41.97	-13.00	-28.97	H
3490.19	-35.96	12.90	12.56	-35.62	-13.00	-22.62	V
5235.27	-35.20	13.10	16.32	-38.42	-13.00	-25.42	V
6980.16	-32.10	12.33	21.13	-40.90	-13.00	-27.90	V
CAT-M Band 66 / 10MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3550.40	-34.24	12.90	12.56	-33.90	-13.00	-20.90	H
5235.31	-34.81	13.10	16.32	-38.03	-13.00	-25.03	H
7100.13	-32.48	12.33	21.13	-41.28	-13.00	-28.28	H
3550.40	-35.71	12.90	12.56	-35.37	-13.00	-22.37	V
5235.31	-33.77	13.10	16.32	-36.99	-13.00	-23.99	V
7100.13	-32.45	12.33	21.13	-41.25	-13.00	-28.25	V

CAT-M Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3435.16	-33.96	12.90	12.56	-33.62	-13.00	-20.62	H
5152.55	-35.31	13.10	16.32	-38.53	-13.00	-25.53	H
6869.86	-32.29	12.33	21.13	-41.09	-13.00	-28.09	H
3435.16	-34.87	12.90	12.56	-34.53	-13.00	-21.53	V
5152.55	-34.31	13.10	16.32	-37.53	-13.00	-24.53	V
6869.86	-31.77	12.33	21.13	-40.57	-13.00	-27.57	V
CAT-M Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.10	-34.73	12.90	12.56	-34.39	-13.00	-21.39	H
5234.93	-35.21	13.10	16.32	-38.43	-13.00	-25.43	H
6979.84	-32.51	12.33	21.13	-41.31	-13.00	-28.31	H
3490.10	-34.65	12.90	12.56	-34.31	-13.00	-21.31	V
5234.93	-34.88	13.10	16.32	-38.10	-13.00	-25.10	V
6979.84	-32.28	12.33	21.13	-41.08	-13.00	-28.08	V
CAT-M Band 66 / 15MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3544.85	-33.53	12.90	12.56	-33.19	-13.00	-20.19	H
5332.53	-34.98	13.10	16.32	-38.20	-13.00	-25.20	H
7089.79	-32.98	12.33	21.13	-41.78	-13.00	-28.78	H
3544.85	-34.80	12.90	12.56	-34.46	-13.00	-21.46	V
5332.53	-34.81	13.10	16.32	-38.03	-13.00	-25.03	V
7089.79	-31.74	12.33	21.13	-40.54	-13.00	-27.54	V

CAT-M Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Lowest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3440.12	-33.80	12.90	12.56	-33.46	-13.00	-20.46	H
5160.27	-34.35	13.10	16.32	-37.57	-13.00	-24.57	H
6879.90	-32.50	12.33	21.13	-41.30	-13.00	-28.30	H
3440.12	-35.37	12.90	12.56	-35.03	-13.00	-22.03	V
5160.27	-34.58	13.10	16.32	-37.80	-13.00	-24.80	V
6879.90	-33.06	12.33	21.13	-41.86	-13.00	-28.86	V
CAT-M Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Middle							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3490.14	-34.72	12.90	12.56	-34.38	-13.00	-21.38	H
5234.90	-34.03	13.10	16.32	-37.25	-13.00	-24.25	H
6980.25	-32.26	12.33	21.13	-41.06	-13.00	-28.06	H
3490.14	-35.39	12.90	12.56	-35.05	-13.00	-22.05	V
5234.90	-34.79	13.10	16.32	-38.01	-13.00	-25.01	V
6980.25	-32.28	12.33	21.13	-41.08	-13.00	-28.08	V
CAT-M Band 66 / 20MHz / QPSK / RB Size 1 Offset 0/ The Worst Test Results for Highest							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
3539.98	-34.84	12.90	12.56	-34.50	-13.00	-21.50	H
5309.85	-34.64	13.10	16.32	-37.86	-13.00	-24.86	H
7080.74	-33.00	12.33	21.13	-41.80	-13.00	-28.80	H
3539.98	-35.30	12.90	12.56	-34.96	-13.00	-21.96	V
5309.85	-34.42	13.10	16.32	-37.64	-13.00	-24.64	V
7080.74	-32.98	12.33	21.13	-41.78	-13.00	-28.78	V

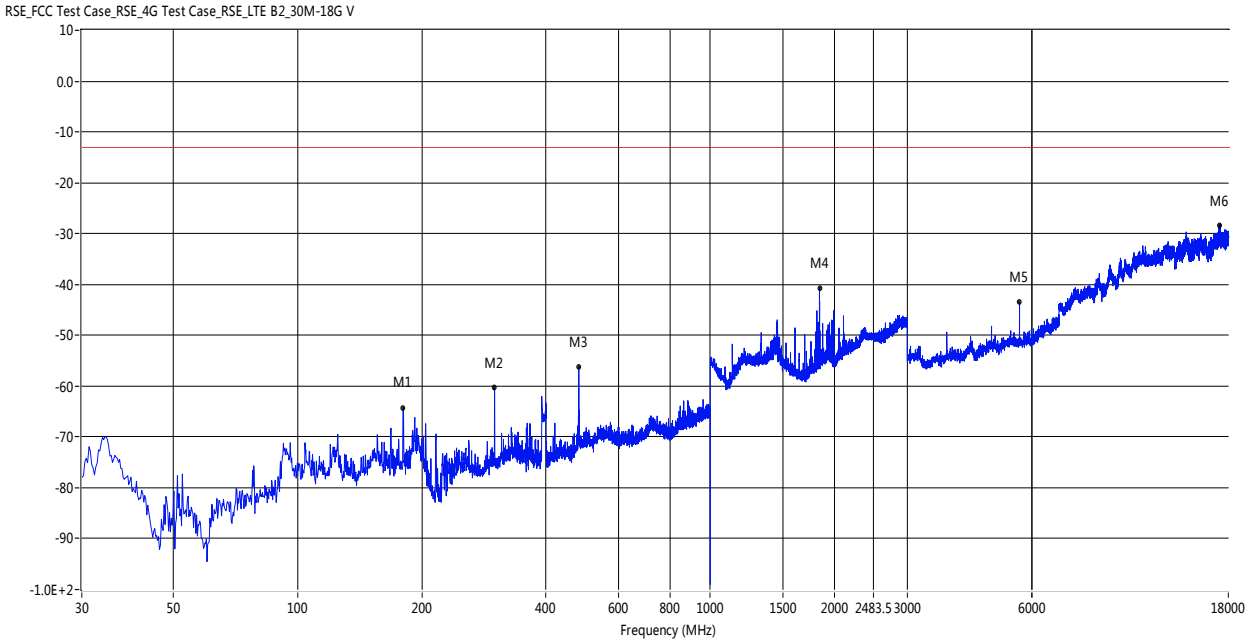
Radiated spurious emission intermodulation

RSE-L-BLE+CAT-M B2-H



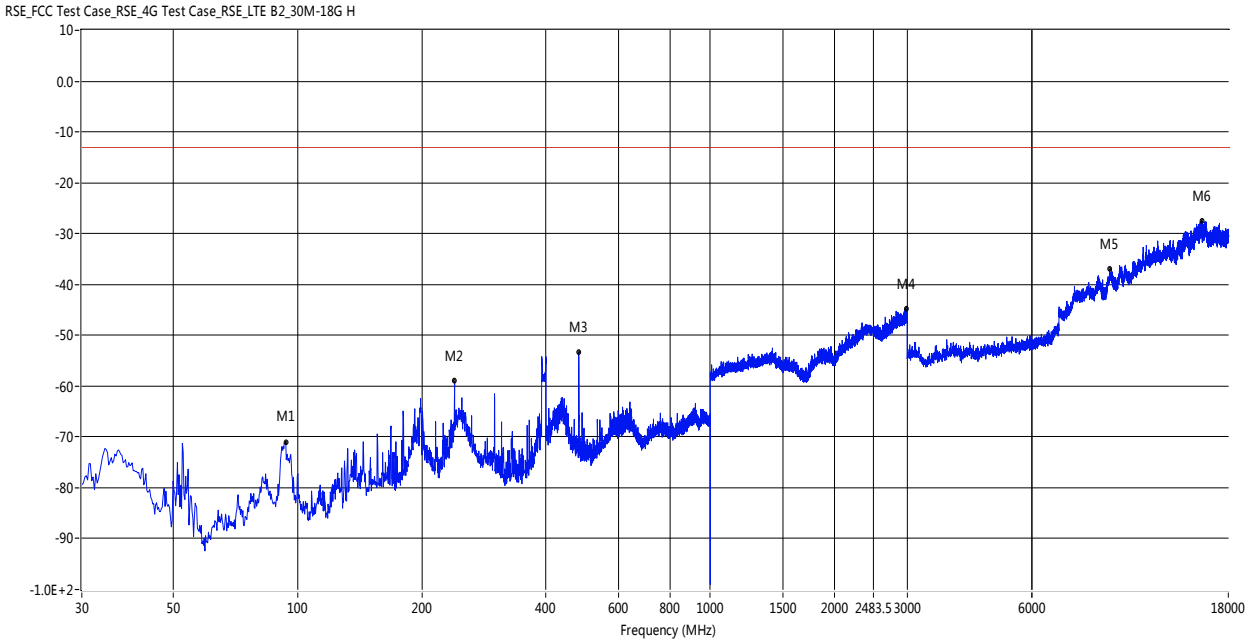
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
36.547	-70.10	-4.29	-13.0	-57.10	254.90	Horizontal	Vertical	Pass
200.477	-59.54	-11.82	-13.0	-46.54	191.00	Horizontal	Vertical	Pass
480.080	-54.68	1.18	-13.0	-41.68	226.80	Horizontal	Vertical	Pass
2989.500	-44.77	21.19	-13.0	-31.77	285.50	Horizontal	Vertical	Pass
8225.000	-39.08	15.38	-13.0	-26.08	1.40	Horizontal	Vertical	Pass
15847.500	-27.03	27.36	-13.0	-14.03	173.00	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B2-V



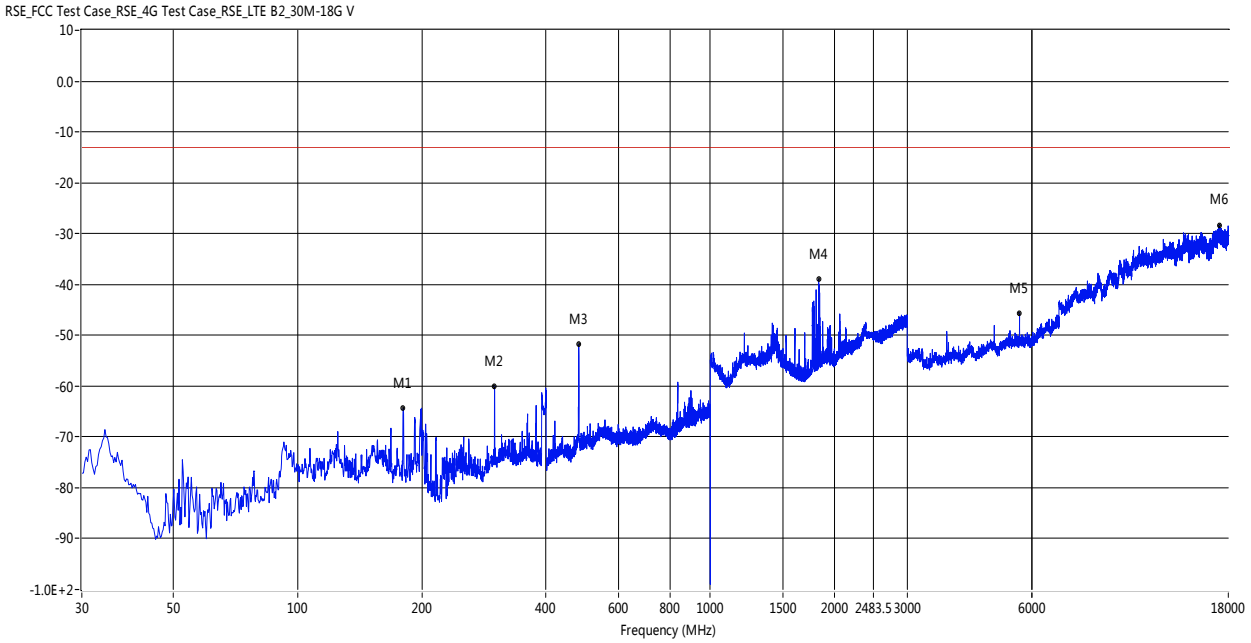
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
180.108	-64.25	-8.36	-13.0	-51.25	89.00	Vertical	Vertical	Pass
299.902	-60.22	-3.50	-13.0	-47.22	358.80	Vertical	Vertical	Pass
480.080	-56.23	4.13	-13.0	-43.23	245.40	Vertical	Vertical	Pass
1839.000	-40.74	13.33	-13.0	-27.74	117.10	Vertical	Vertical	Pass
5615.000	-43.52	7.12	-13.0	-30.52	304.70	Vertical	Vertical	Pass
17171.250	-28.43	26.51	-13.0	-15.43	24.80	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B2-H



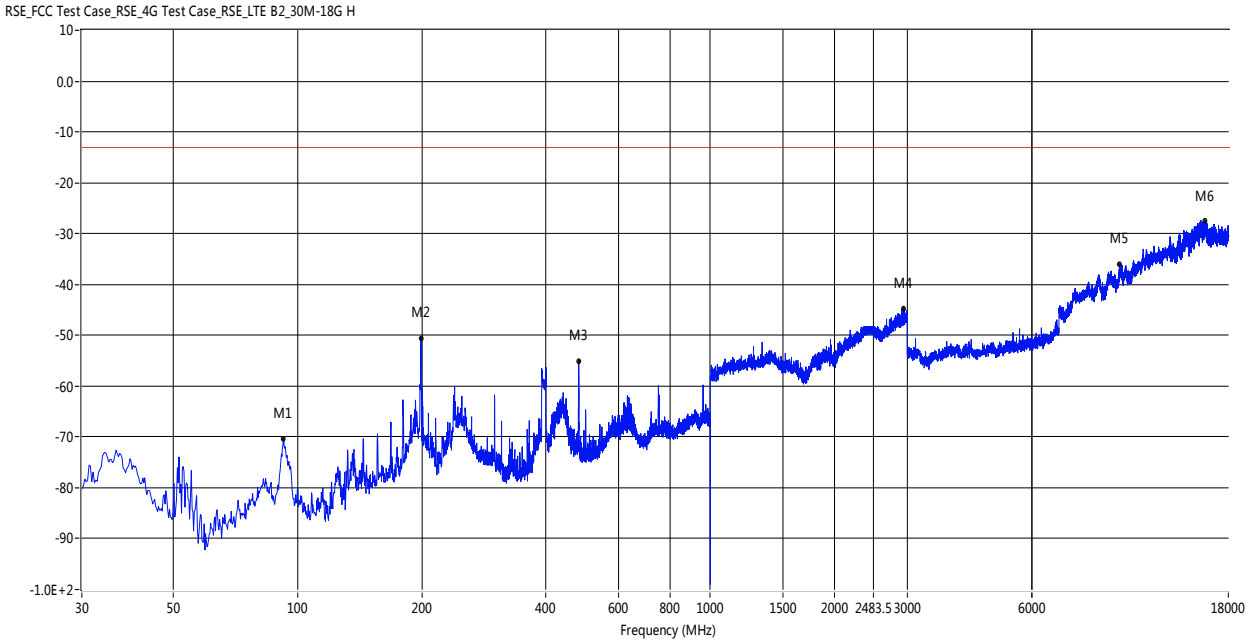
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
93.535	-70.97	-14.36	-13.0	-57.97	255.90	Horizontal	Vertical	Pass
240.005	-59.01	-1.95	-13.0	-46.01	95.50	Horizontal	Vertical	Pass
480.080	-53.37	1.18	-13.0	-40.37	134.70	Horizontal	Vertical	Pass
2980.500	-44.76	21.15	-13.0	-31.76	146.50	Horizontal	Vertical	Pass
9292.500	-37.02	18.11	-13.0	-24.02	358.30	Horizontal	Vertical	Pass
15508.750	-27.51	28.07	-13.0	-14.51	20.20	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B2-V



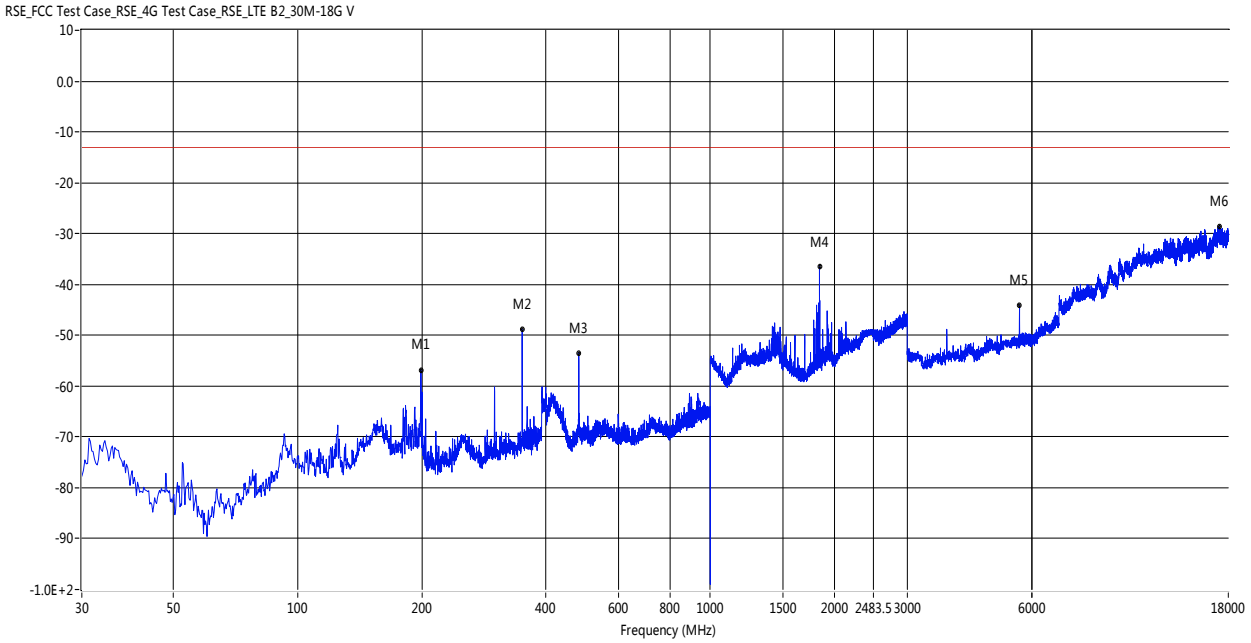
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
180.108	-64.41	-8.36	-13.0	-51.41	106.60	Vertical	Vertical	Pass
299.902	-60.06	-3.50	-13.0	-47.06	357.80	Vertical	Vertical	Pass
480.080	-51.80	4.13	-13.0	-38.80	87.10	Vertical	Vertical	Pass
1830.500	-38.98	13.08	-13.0	-25.98	316.30	Vertical	Vertical	Pass
5615.000	-46.36	7.12	-13.0	-33.36	117.40	Vertical	Vertical	Pass
17101.250	-28.43	26.95	-13.0	-15.43	91.80	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B2-H



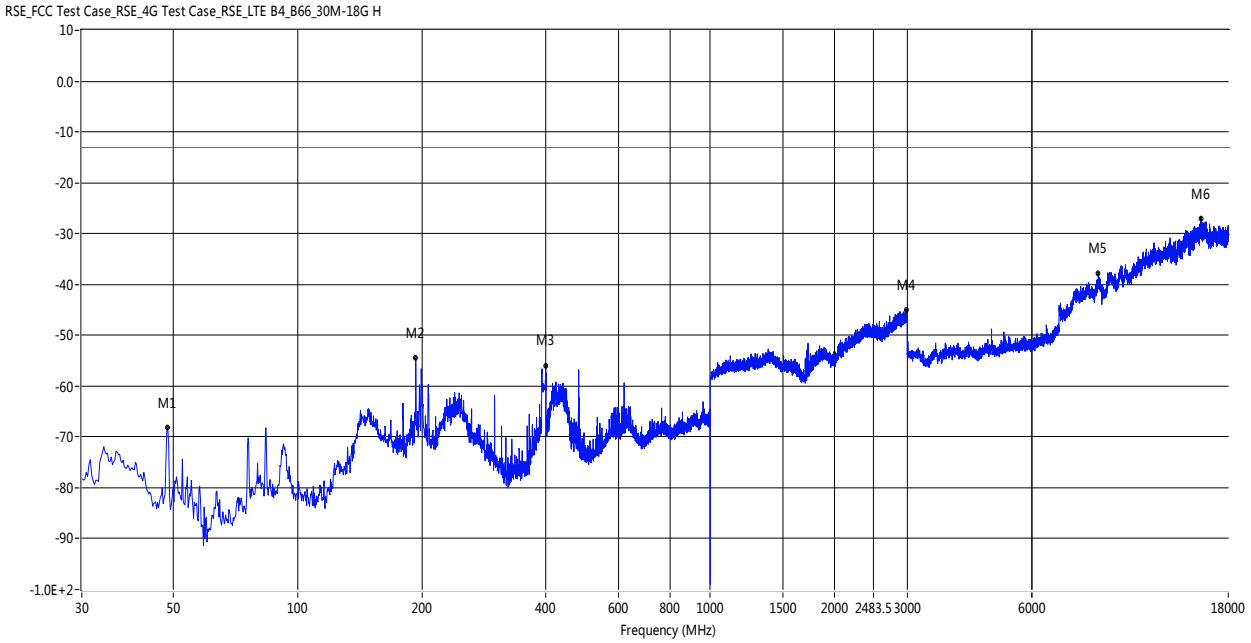
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
92.323	-70.43	-14.48	-13.0	-57.43	227.90	Horizontal	Vertical	Pass
199.023	-50.50	-11.83	-13.0	-37.50	214.00	Horizontal	Vertical	Pass
479.838	-55.00	1.18	-13.0	-42.00	71.40	Horizontal	Vertical	Pass
2943.500	-44.68	20.94	-13.0	-31.68	108.80	Horizontal	Vertical	Pass
9822.500	-35.95	18.59	-13.0	-22.95	115.10	Horizontal	Vertical	Pass
15797.500	-27.47	27.83	-13.0	-14.47	67.70	Horizontal	Vertical	Pass

RSE-H-BLE+CAT-M B2-V



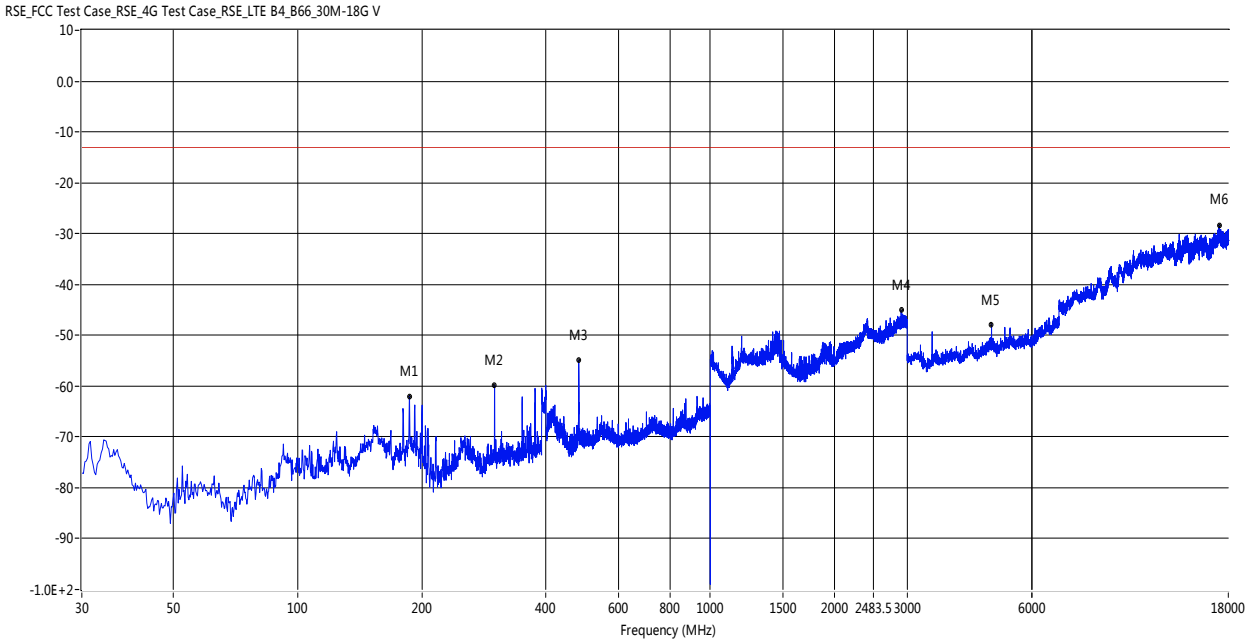
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
199.023	-56.79	-12.25	-13.0	-43.79	247.10	Vertical	Vertical	Pass
350.100	-48.88	-2.14	-13.0	-35.88	182.60	Vertical	Vertical	Pass
480.080	-53.44	4.13	-13.0	-40.44	325.50	Vertical	Vertical	Pass
1839.000	-36.45	13.33	-13.0	-23.45	162.30	Vertical	Vertical	Pass
5615.000	-44.14	7.12	-13.0	-31.14	309.00	Vertical	Vertical	Pass
17111.250	-28.71	26.89	-13.0	-15.71	233.20	Vertical	Vertical	Pass

RSE-L-BLE+CAT-M B4-H



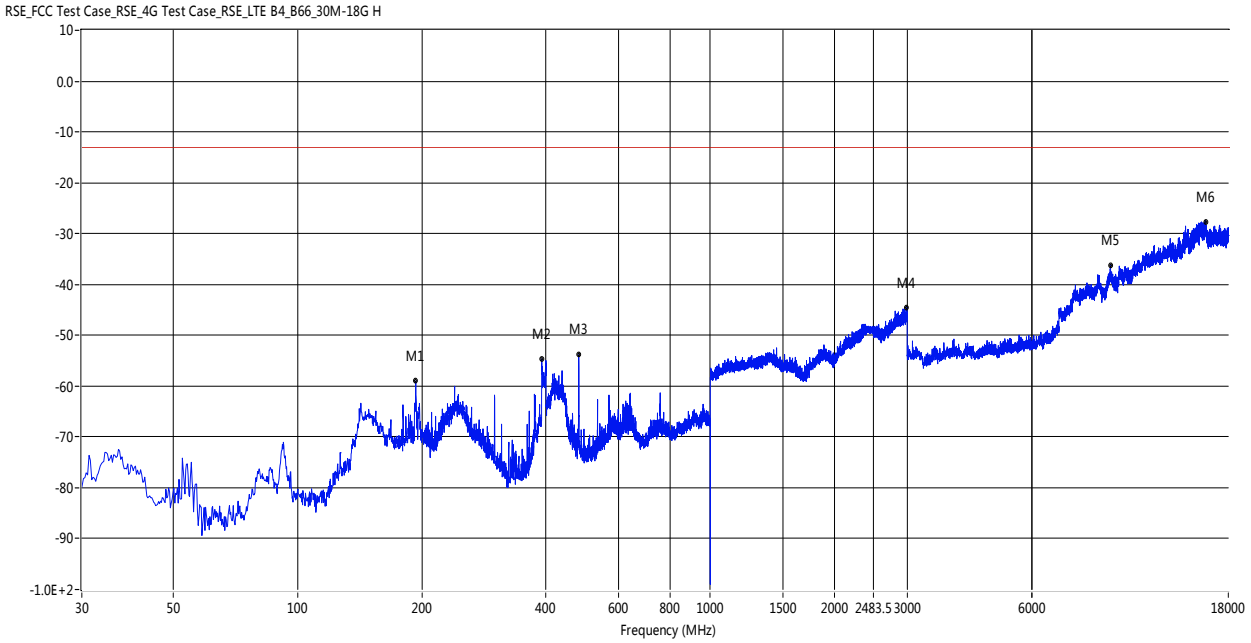
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
48.430	-68.18	-10.55	-13.0	-55.18	7.30	Horizontal	Vertical	Pass
193.202	-54.52	-11.46	-13.0	-41.52	26.00	Horizontal	Vertical	Pass
399.085	-55.94	1.06	-13.0	-42.94	193.50	Horizontal	Vertical	Pass
2995.000	-44.95	21.22	-13.0	-31.95	36.80	Horizontal	Vertical	Pass
8717.500	-37.91	17.15	-13.0	-24.91	1.00	Horizontal	Vertical	Pass
15455.000	-27.01	28.05	-13.0	-14.01	72.40	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B4-V



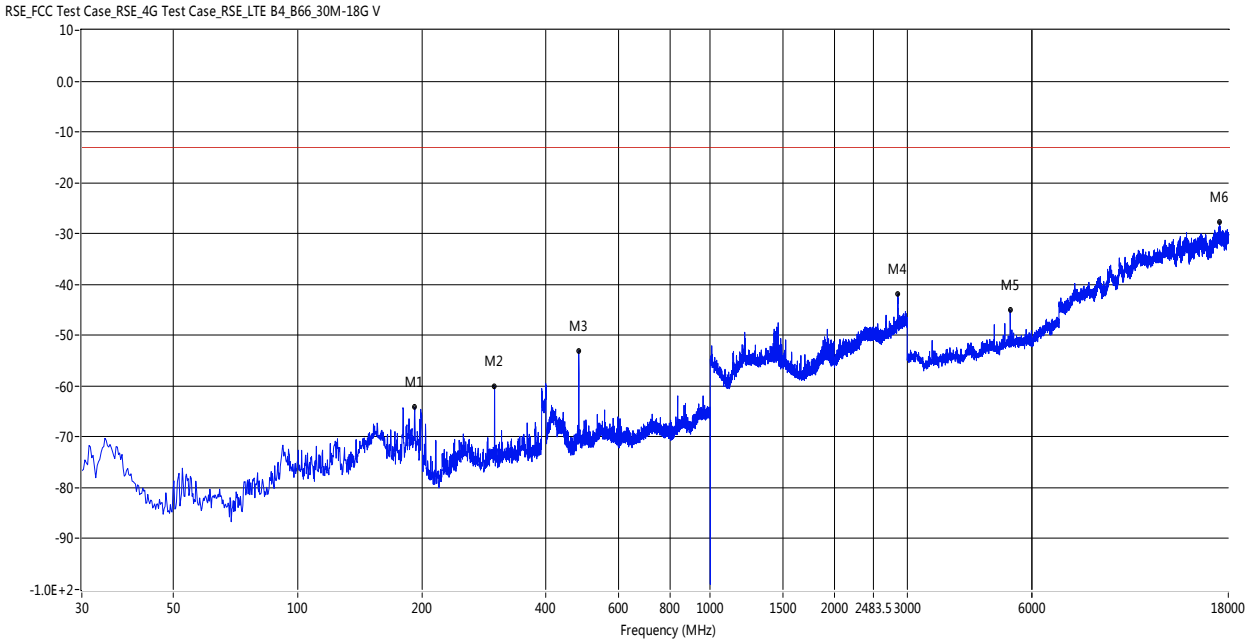
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
186.413	-61.97	-9.66	-13.0	-48.97	85.60	Vertical	Vertical	Pass
299.902	-59.81	-3.50	-13.0	-46.81	359.20	Vertical	Vertical	Pass
480.080	-54.97	4.13	-13.0	-41.97	337.40	Vertical	Vertical	Pass
2902.000	-45.09	20.24	-13.0	-32.09	359.70	Vertical	Vertical	Pass
4802.500	-48.02	5.48	-13.0	-35.02	76.00	Vertical	Vertical	Pass
17107.500	-28.32	26.91	-13.0	-15.32	221.80	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B4-H



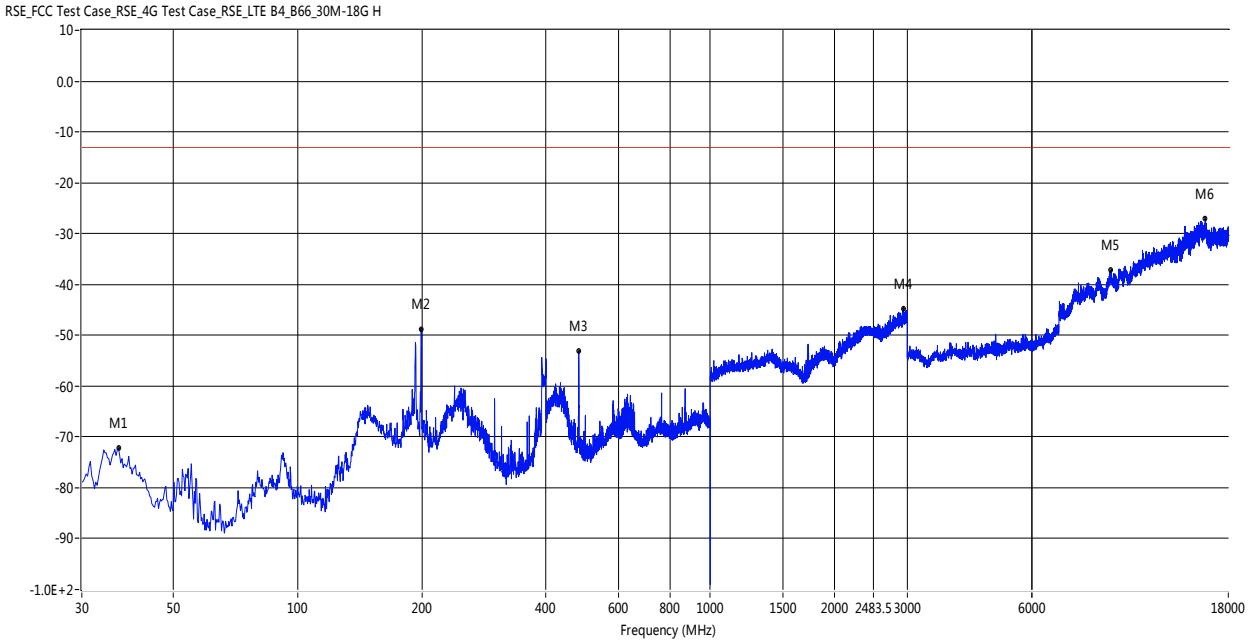
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
193.202	-58.98	-11.46	-13.0	-45.98	224.40	Horizontal	Vertical	Pass
390.598	-54.66	0.35	-13.0	-41.66	202.10	Horizontal	Vertical	Pass
480.080	-53.82	1.18	-13.0	-40.82	210.50	Horizontal	Vertical	Pass
2995.000	-44.54	21.22	-13.0	-31.54	221.50	Horizontal	Vertical	Pass
9332.500	-36.20	17.90	-13.0	-23.20	5.20	Horizontal	Vertical	Pass
15865.000	-27.78	27.18	-13.0	-14.78	9.00	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B4-V



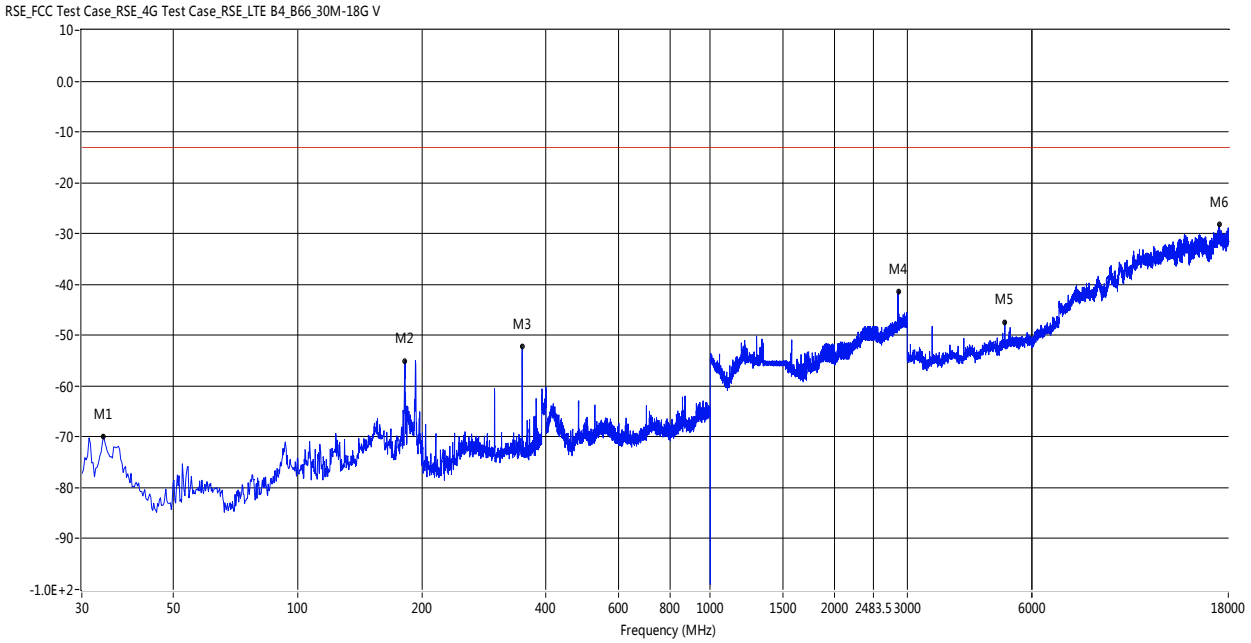
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
192.232	-64.13	-10.85	-13.0	-51.13	154.40	Vertical	Vertical	Pass
299.902	-60.08	-3.50	-13.0	-47.08	357.00	Vertical	Vertical	Pass
479.838	-53.06	4.11	-13.0	-40.06	73.50	Vertical	Vertical	Pass
2849.000	-41.86	20.02	-13.0	-28.86	246.90	Vertical	Vertical	Pass
5330.000	-45.04	6.80	-13.0	-32.04	235.80	Vertical	Vertical	Pass
17152.500	-27.74	26.63	-13.0	-14.74	280.20	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B4-H



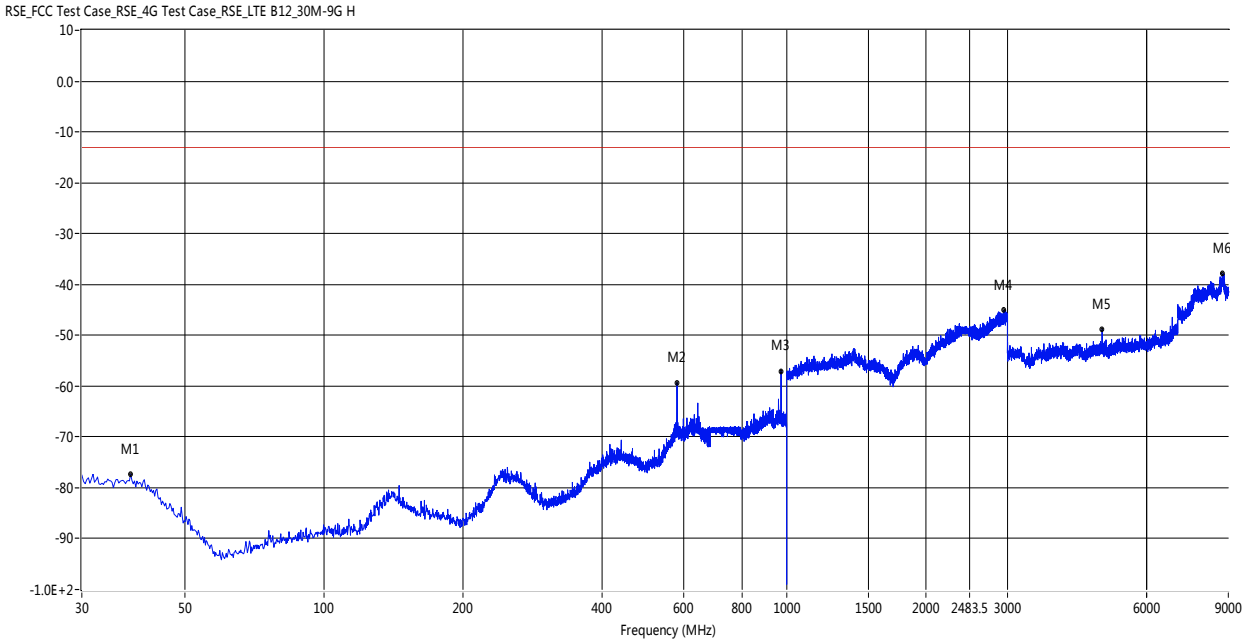
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
36.790	-72.14	-4.29	-13.0	-59.14	238.80	Horizontal	Vertical	Pass
199.265	-48.89	-11.84	-13.0	-35.89	298.40	Horizontal	Vertical	Pass
480.080	-53.10	1.18	-13.0	-40.10	298.40	Horizontal	Vertical	Pass
2935.500	-44.71	20.89	-13.0	-31.71	13.10	Horizontal	Vertical	Pass
9337.500	-37.25	17.86	-13.0	-24.25	358.20	Horizontal	Vertical	Pass
15845.000	-27.08	27.39	-13.0	-14.08	259.20	Horizontal	Vertical	Pass

RSE-H-BLE+CAT-M B4-V



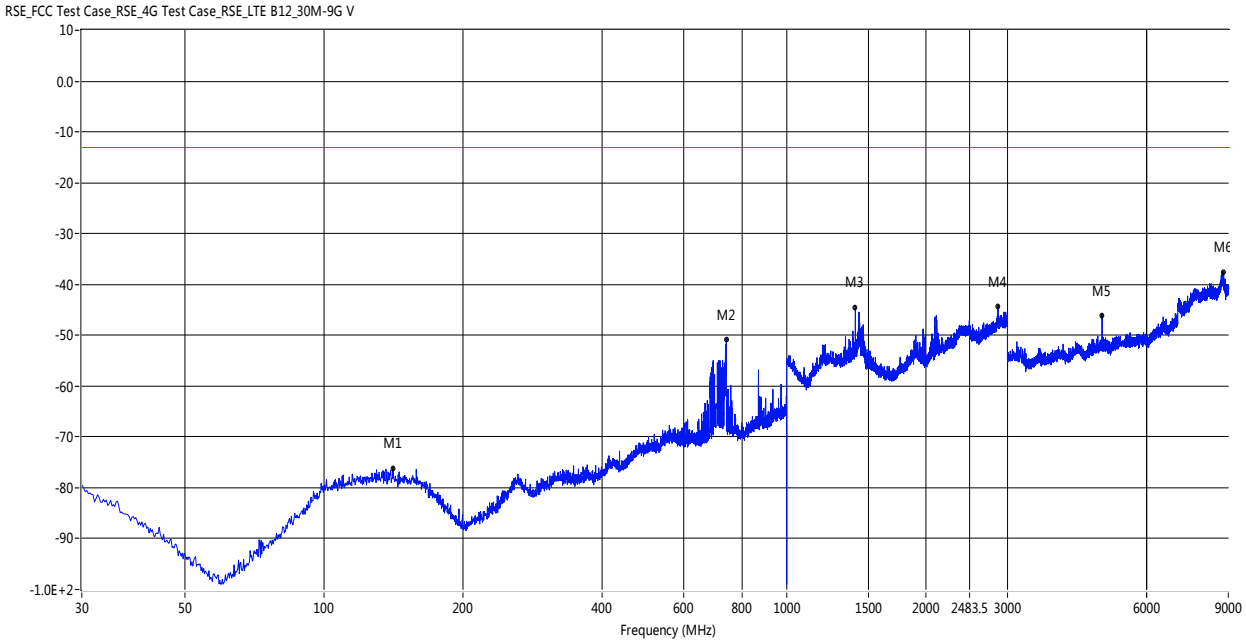
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
33.880	-69.95	-8.61	-13.0	-56.95	295.80	Vertical	Vertical	Pass
182.048	-55.02	-8.76	-13.0	-42.02	165.60	Vertical	Vertical	Pass
350.100	-52.30	-2.14	-13.0	-39.30	285.00	Vertical	Vertical	Pass
2854.500	-41.41	20.05	-13.0	-28.41	245.30	Vertical	Vertical	Pass
5172.500	-47.44	6.56	-13.0	-34.44	330.90	Vertical	Vertical	Pass
17096.250	-28.24	26.93	-13.0	-15.24	46.40	Vertical	Vertical	Pass

RSE-L-BLE+CAT-M B12-H



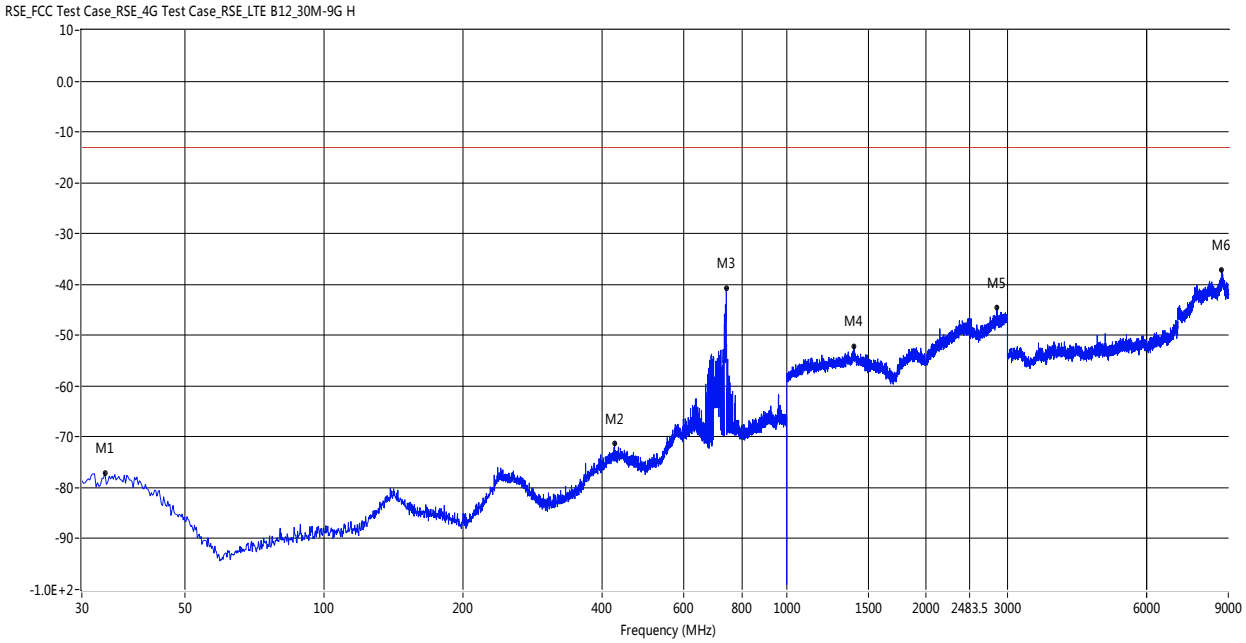
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
38.245	-77.33	-1.85	-13.0	-64.33	20.50	Horizontal	Vertical	Pass
579.748	-59.31	6.69	-13.0	-46.31	28.80	Horizontal	Vertical	Pass
972.355	-57.05	9.26	-13.0	-44.05	174.10	Horizontal	Vertical	Pass
2948.500	-45.09	20.97	-13.0	-32.09	69.60	Horizontal	Vertical	Pass
4803.000	-48.93	4.75	-13.0	-35.93	297.50	Horizontal	Vertical	Pass
8761.500	-37.91	16.74	-13.0	-24.91	40.80	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B12-V



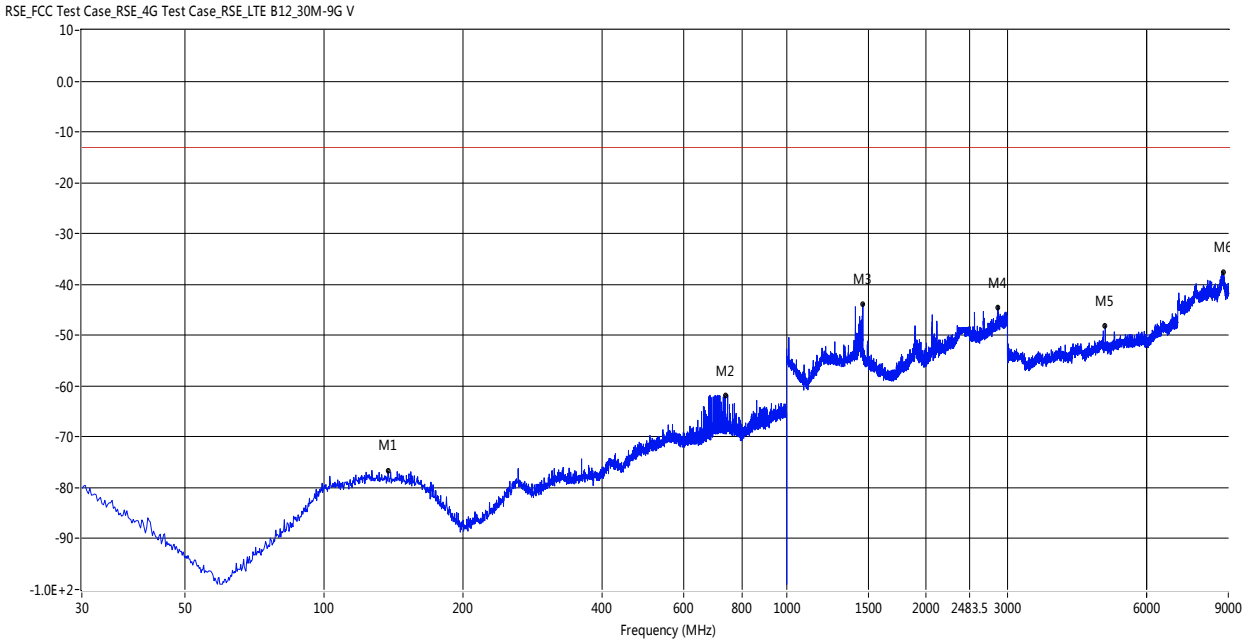
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
141.065	-76.19	-1.19	-13.0	-63.19	84.80	Vertical	Vertical	Pass
740.525	-50.91	7.68	-13.0	-37.91	162.00	Vertical	Vertical	Pass
1407.500	-44.59	13.77	-13.0	-31.59	47.50	Vertical	Vertical	Pass
2861.500	-44.35	20.08	-13.0	-31.35	151.50	Vertical	Vertical	Pass
4803.000	-46.03	5.48	-13.0	-33.03	77.00	Vertical	Vertical	Pass
8794.500	-37.60	16.47	-13.0	-24.60	248.70	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B12-H



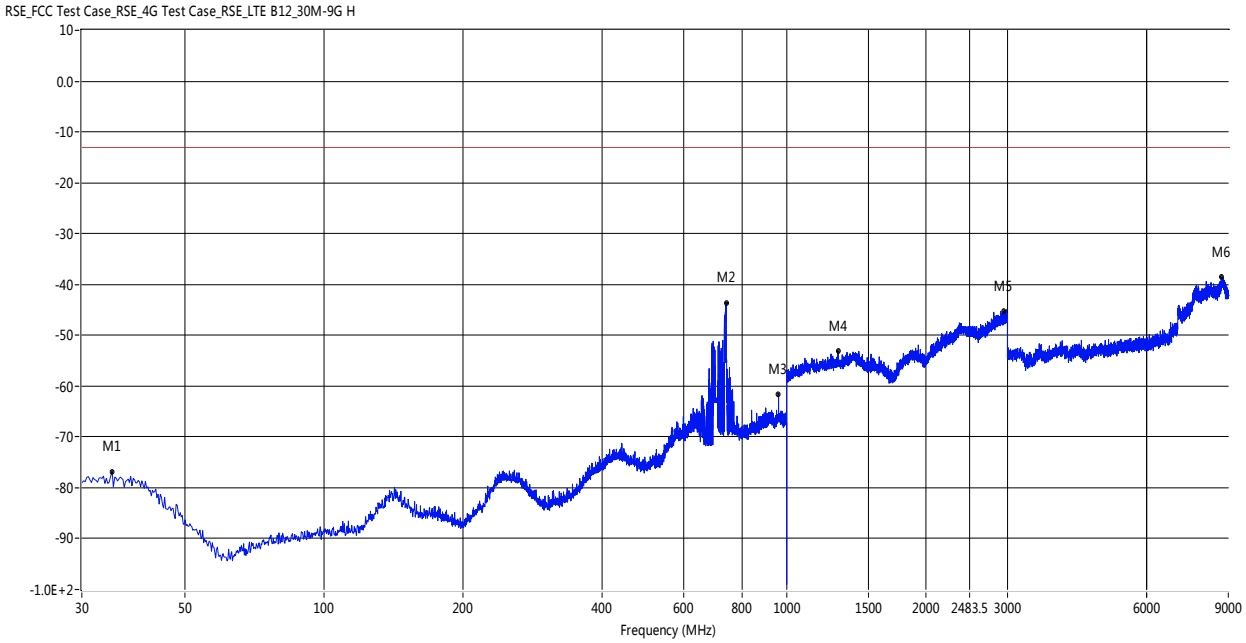
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
33.638	-77.14	-1.89	-13.0	-64.14	322.50	Horizontal	Vertical	Pass
424.790	-71.23	3.01	-13.0	-58.23	286.10	Horizontal	Vertical	Pass
740.767	-40.79	7.08	-13.0	-27.79	26.30	Horizontal	Vertical	Pass
1397.000	-52.19	14.12	-13.0	-39.19	254.90	Horizontal	Vertical	Pass
2848.500	-44.57	20.69	-13.0	-31.57	27.50	Horizontal	Vertical	Pass
8706.000	-37.13	17.26	-13.0	-24.13	47.00	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B12-V



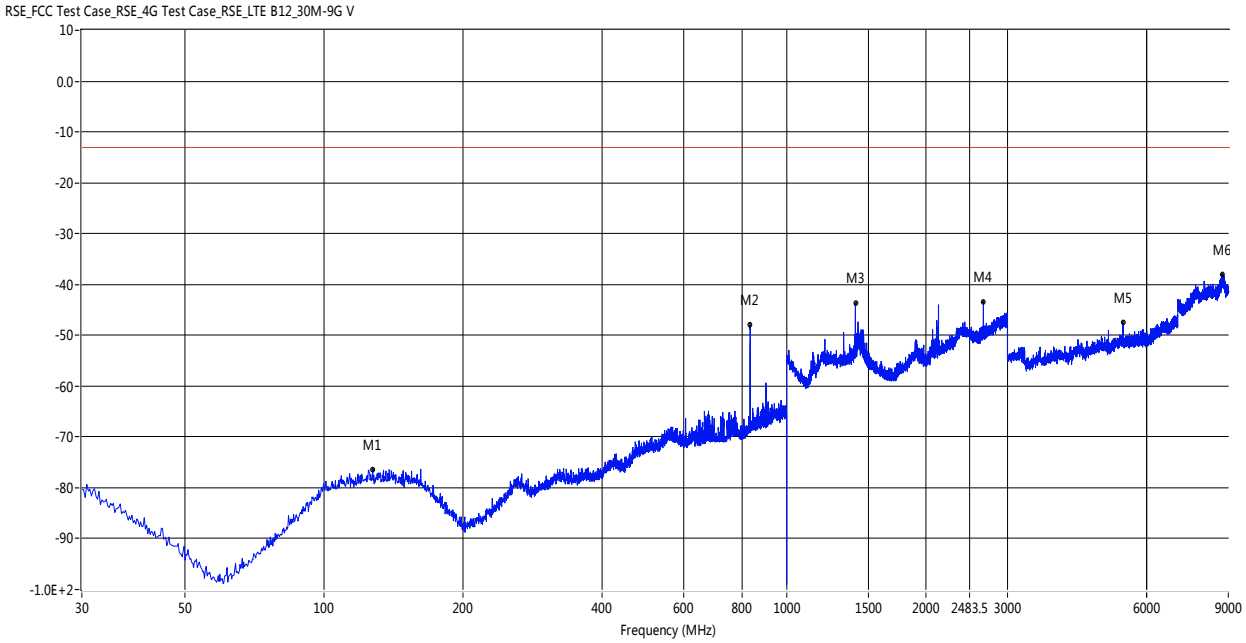
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
137.670	-76.76	-1.23	-13.0	-63.76	26.20	Vertical	Vertical	Pass
736.645	-61.93	7.79	-13.0	-48.93	76.20	Vertical	Vertical	Pass
1460.500	-43.83	13.32	-13.0	-30.83	282.10	Vertical	Vertical	Pass
2860.500	-44.50	20.07	-13.0	-31.50	200.30	Vertical	Vertical	Pass
4879.500	-48.11	5.65	-13.0	-35.11	68.30	Vertical	Vertical	Pass
8772.000	-37.61	16.71	-13.0	-24.61	330.30	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B12-H



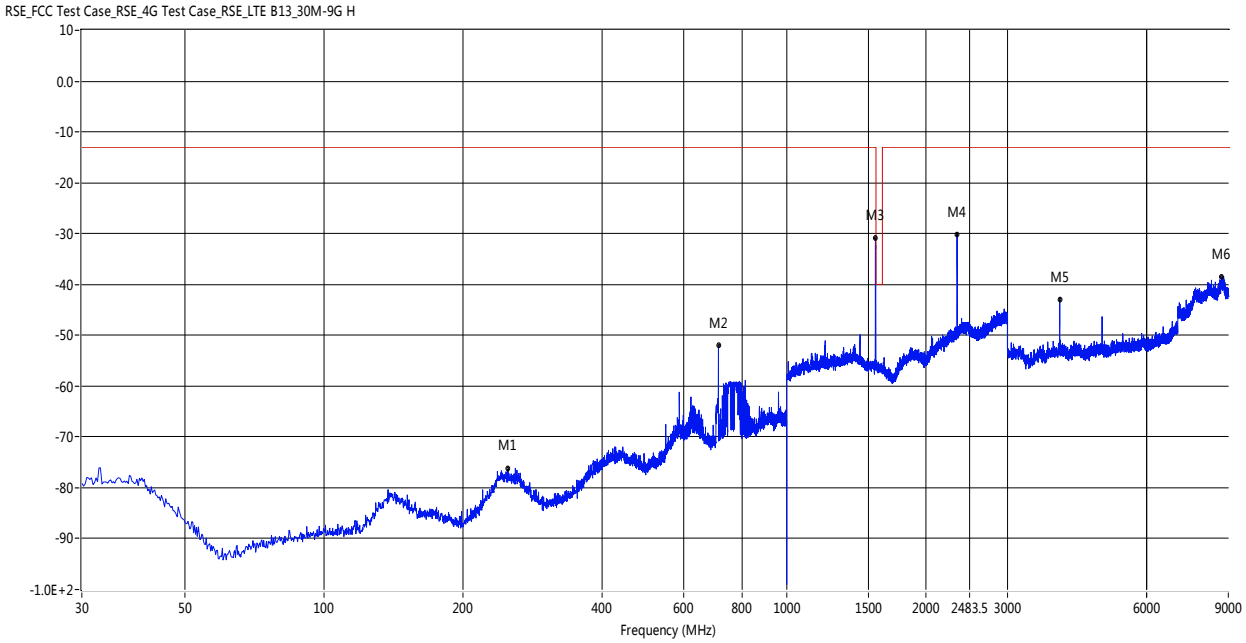
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
34.850	-76.82	-1.88	-13.0	-63.82	334.60	Horizontal	Vertical	Pass
740.767	-43.57	7.08	-13.0	-30.57	40.20	Horizontal	Vertical	Pass
960.230	-61.58	9.63	-13.0	-48.58	309.20	Horizontal	Vertical	Pass
1291.500	-53.10	12.83	-13.0	-40.10	164.70	Horizontal	Vertical	Pass
2937.500	-45.31	20.90	-13.0	-32.31	357.60	Horizontal	Vertical	Pass
8691.000	-38.49	17.19	-13.0	-25.49	57.50	Horizontal	Vertical	Pass

RSE-H-BLE+CAT-M B12-V



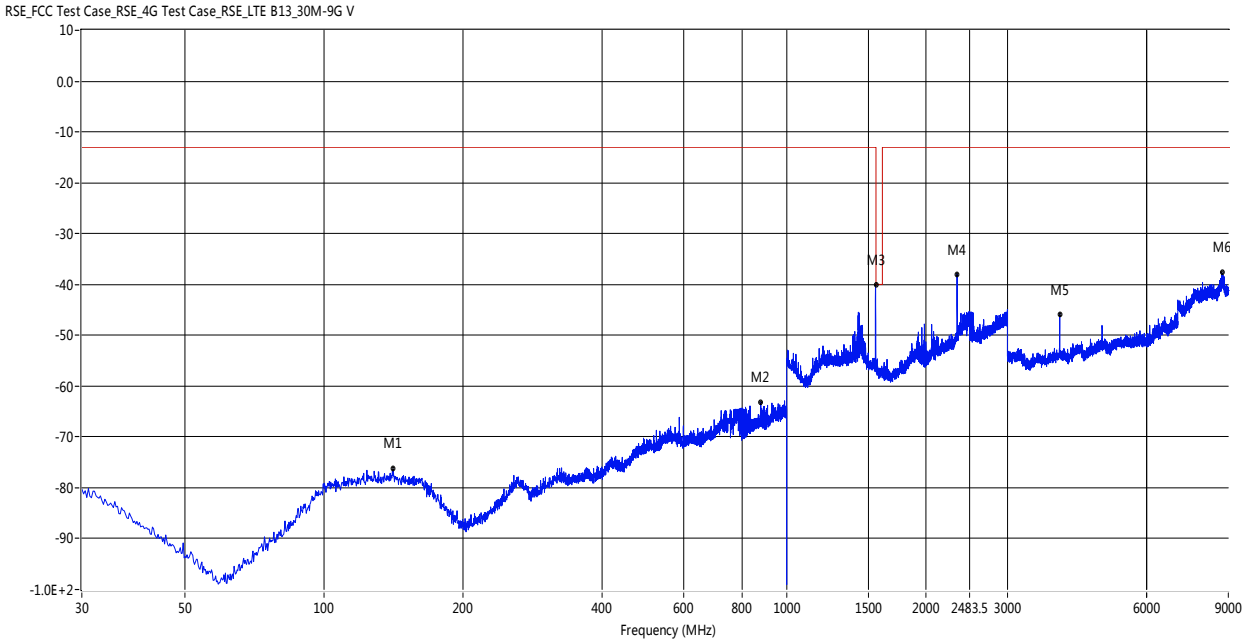
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
127.485	-76.45	-1.62	-13.0	-63.45	358.60	Vertical	Vertical	Pass
834.130	-48.02	7.39	-13.0	-35.02	53.20	Vertical	Vertical	Pass
1408.000	-43.70	13.76	-13.0	-30.70	54.70	Vertical	Vertical	Pass
2661.000	-43.41	18.42	-13.0	-30.41	159.10	Vertical	Vertical	Pass
5331.000	-47.58	6.80	-13.0	-34.58	329.90	Vertical	Vertical	Pass
8761.500	-38.01	16.83	-13.0	-25.01	55.40	Vertical	Vertical	Pass

RSE-L-BLE+CAT-M B13-H



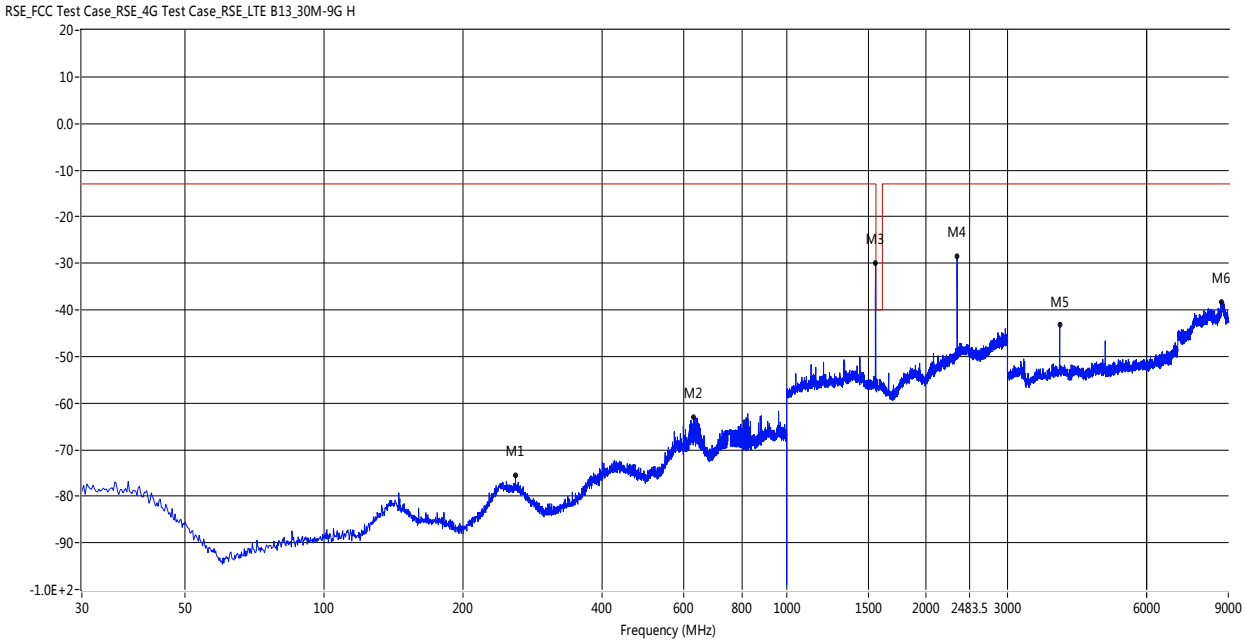
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
249.947	-76.30	-1.15	-13.0	-63.30	141.60	Horizontal	Vertical	Pass
711.910	-52.05	5.71	-13.0	-39.05	0.00	Horizontal	Vertical	Pass
1556.000	-30.96	12.77	-13.0	-17.96	334.20	Horizontal	Vertical	Pass
2335.500	-30.21	18.56	-13.0	-17.21	0.00	Horizontal	Vertical	Pass
3891.000	-43.03	4.06	-13.0	-30.03	357.50	Horizontal	Vertical	Pass
8707.500	-38.56	17.25	-13.0	-25.56	47.30	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B13-V



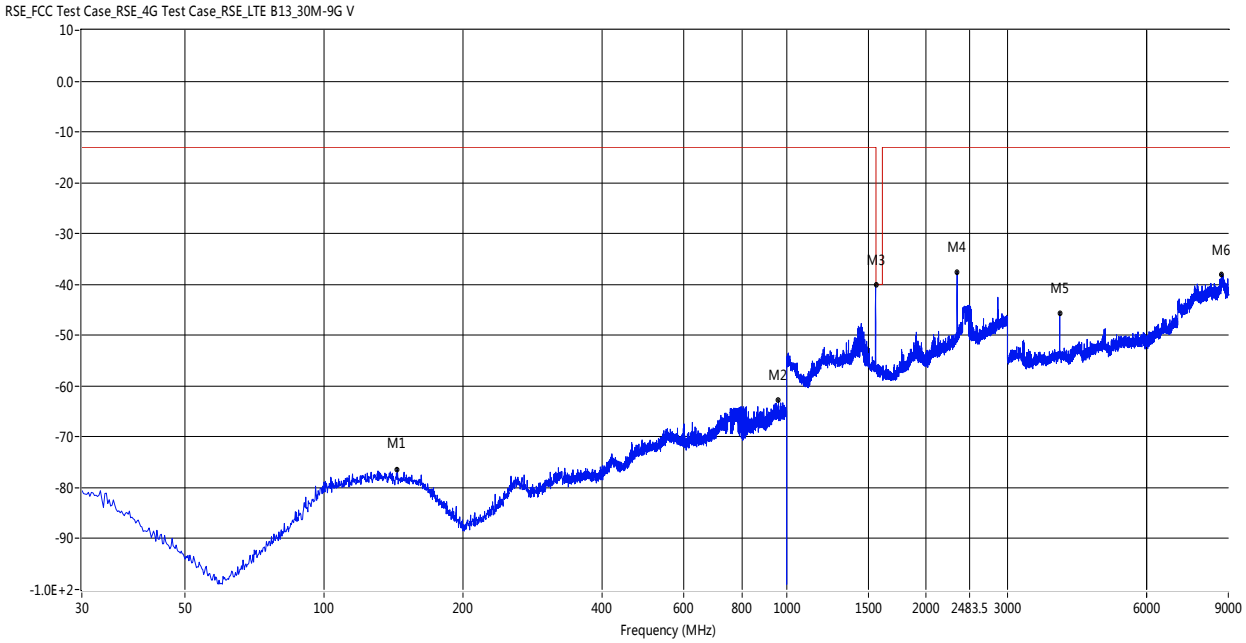
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
141.307	-76.31	-1.20	-13.0	-63.31	166.40	Vertical	Vertical	Pass
878.993	-63.15	8.24	-13.0	-50.15	196.70	Vertical	Vertical	Pass
1556.500	-40.08	12.34	-13.0	-27.08	187.00	Vertical	Vertical	Pass
2334.000	-38.03	17.82	-13.0	-25.03	7.80	Vertical	Vertical	Pass
3891.000	-45.85	3.15	-13.0	-32.85	100.20	Vertical	Vertical	Pass
8724.000	-37.69	17.23	-13.0	-24.69	180.70	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B13-H



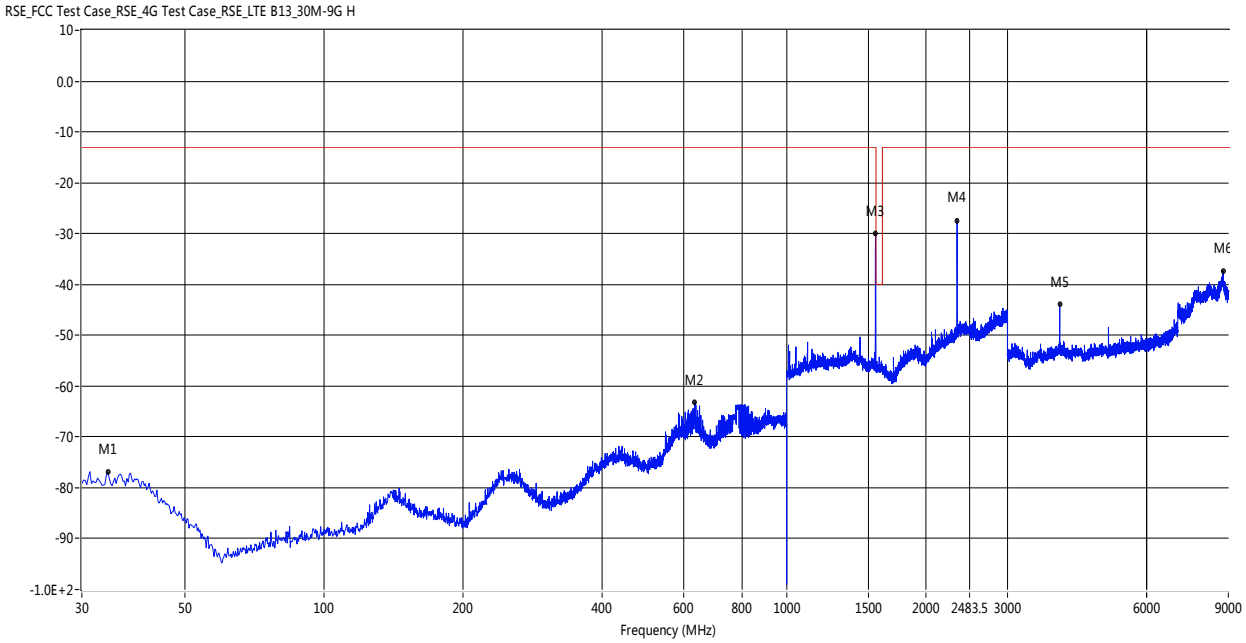
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
259.405	-75.41	-1.51	-13.0	-62.41	283.30	Horizontal	Vertical	Pass
628.975	-62.92	7.27	-13.0	-49.92	203.70	Horizontal	Vertical	Pass
1556.500	-29.85	12.77	-13.0	-16.85	83.80	Horizontal	Vertical	Pass
2335.500	-28.38	18.56	-13.0	-15.38	359.10	Horizontal	Vertical	Pass
3889.500	-43.08	4.05	-13.0	-30.08	359.80	Horizontal	Vertical	Pass
8718.000	-38.19	17.15	-13.0	-25.19	229.70	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B13-V



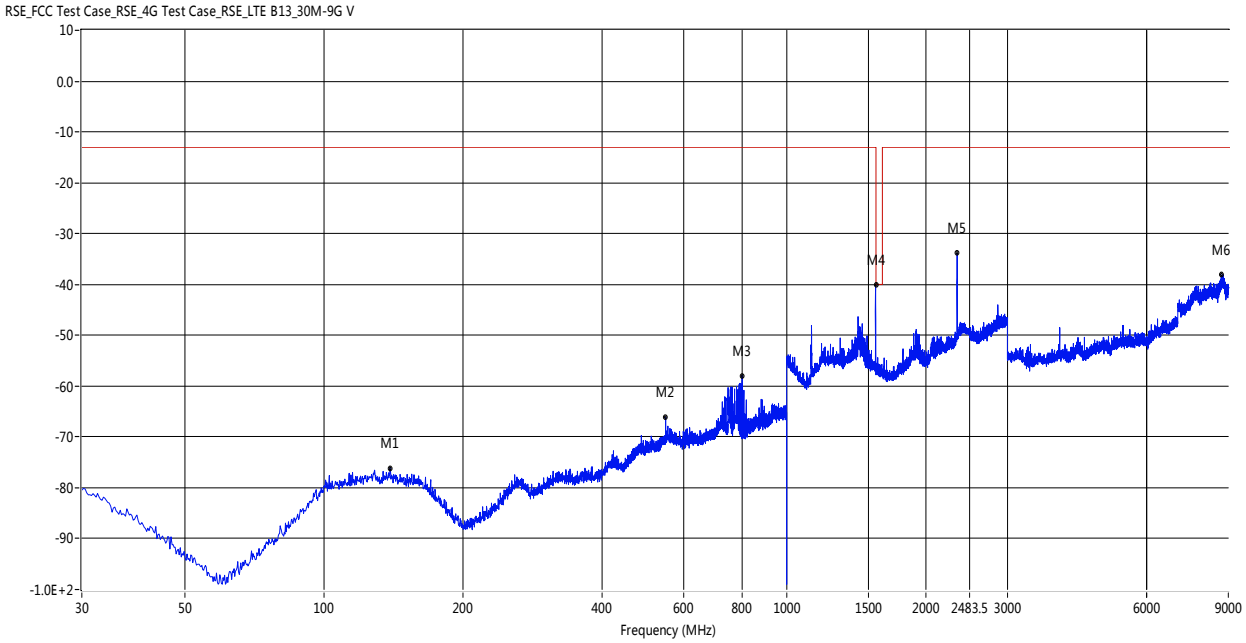
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
143.975	-76.34	-1.32	-13.0	-63.34	304.90	Vertical	Vertical	Pass
960.230	-62.80	10.02	-13.0	-49.80	166.50	Vertical	Vertical	Pass
1557.000	-40.32	12.34	-13.0	-27.32	191.10	Vertical	Vertical	Pass
2335.000	-37.58	17.86	-13.0	-24.58	7.30	Vertical	Vertical	Pass
3891.000	-47.55	3.15	-13.0	-34.55	140.00	Vertical	Vertical	Pass
8721.000	-37.99	17.26	-13.0	-24.99	170.90	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B13-H



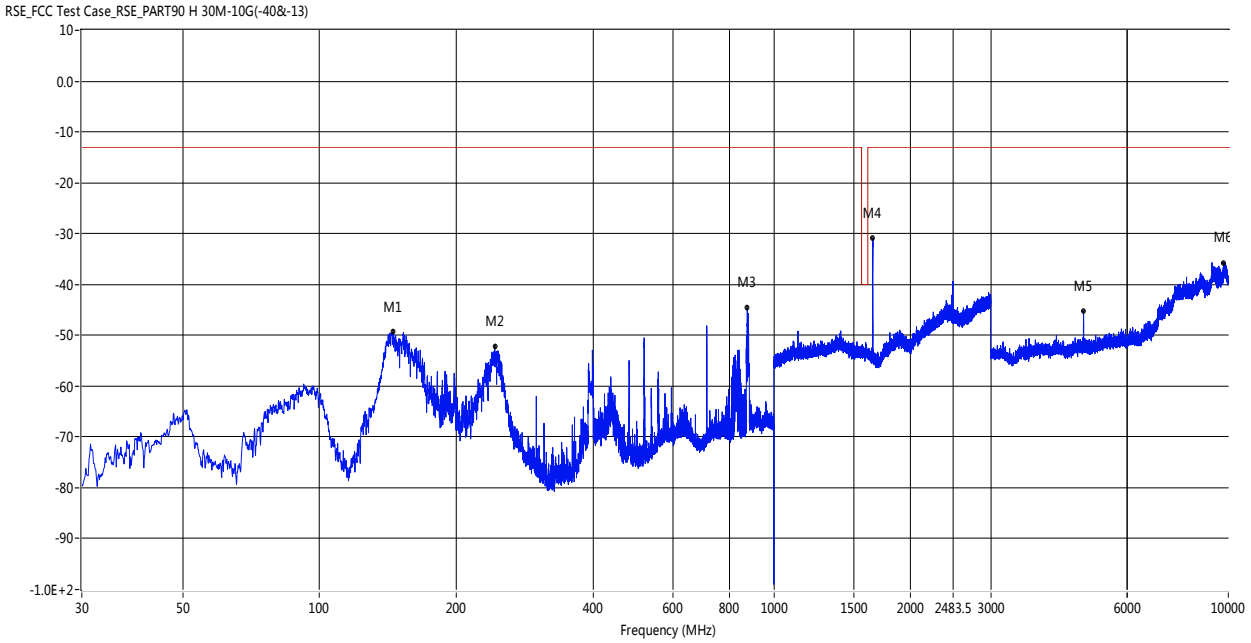
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
34.123	-76.93	-1.88	-13.0	-63.93	237.00	Horizontal	Vertical	Pass
632.855	-63.27	7.26	-13.0	-50.27	64.40	Horizontal	Vertical	Pass
1556.500	-29.98	12.77	-13.0	-16.98	331.30	Horizontal	Vertical	Pass
2335.000	-27.45	18.55	-13.0	-14.45	2.40	Horizontal	Vertical	Pass
3891.000	-43.95	4.06	-13.0	-30.95	356.40	Horizontal	Vertical	Pass
8770.500	-37.38	16.65	-13.0	-24.38	252.40	Horizontal	Vertical	Pass

RSE-H-BLE+CAT-M B13-V



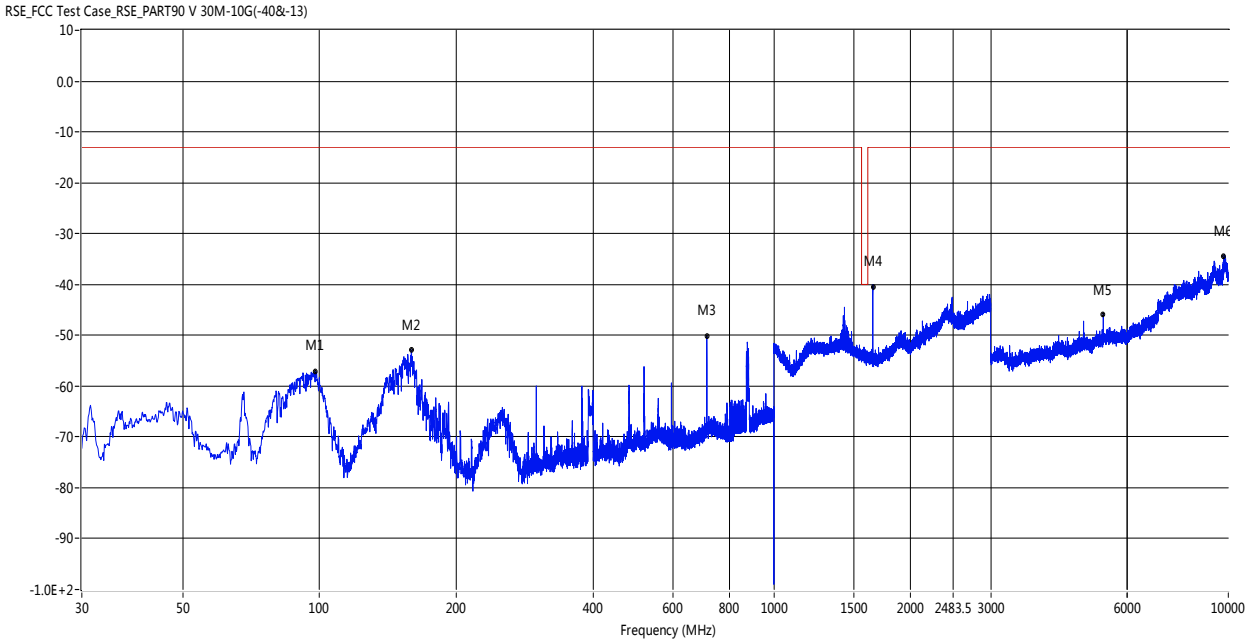
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
138.883	-76.14	-1.18	-13.0	-63.14	254.30	Vertical	Vertical	Pass
547.737	-66.08	6.22	-13.0	-53.08	226.50	Vertical	Vertical	Pass
801.393	-57.94	5.86	-13.0	-44.94	111.40	Vertical	Vertical	Pass
1556.500	-40.20	12.34	-13.0	-27.20	68.10	Vertical	Vertical	Pass
2335.000	-33.87	17.86	-13.0	-20.87	9.10	Vertical	Vertical	Pass
8711.999	-38.11	17.36	-13.0	-25.11	239.20	Vertical	Vertical	Pass

RSE-L-BLE+CAT-M B26(Part 22)-H



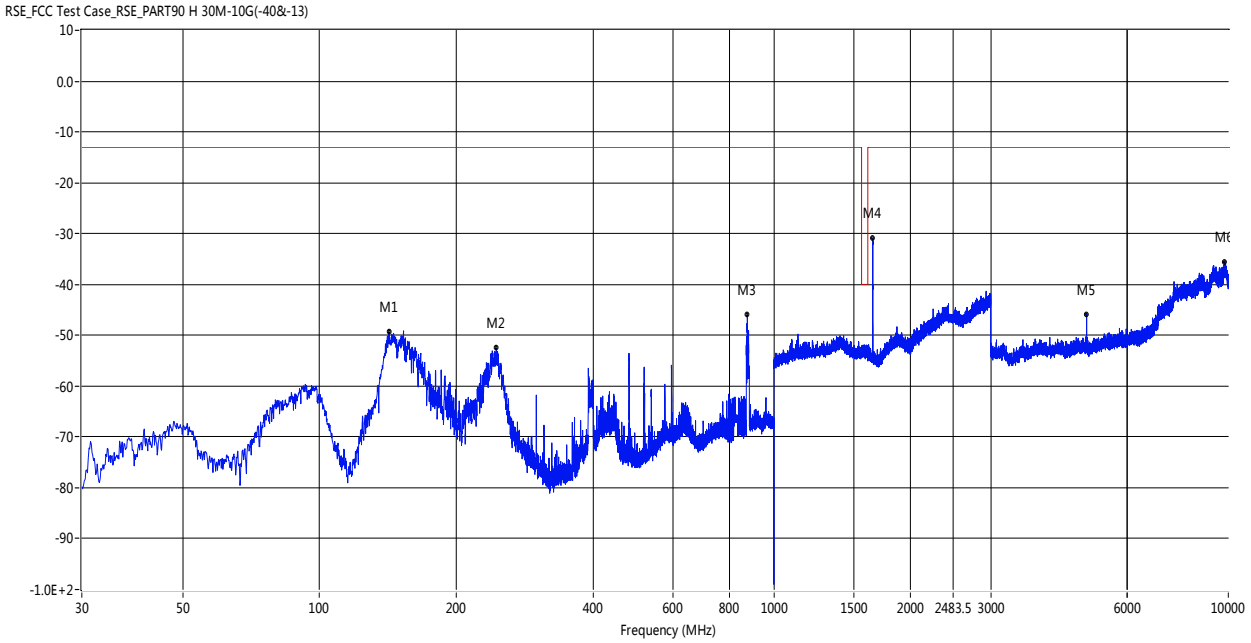
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
145.066	-49.30	-7.15	-13.0	-36.30	182.20	Horizontal	Vertical	Pass
243.036	-52.23	-2.05	-13.0	-39.23	328.90	Horizontal	Vertical	Pass
873.900	-44.65	7.82	-13.0	-31.65	290.30	Horizontal	Vertical	Pass
1651.250	-30.91	12.09	-13.0	-17.91	27.90	Horizontal	Vertical	Pass
4803.375	-45.34	4.75	-13.0	-32.34	222.80	Horizontal	Vertical	Pass
9772.500	-35.74	18.13	-13.0	-22.74	82.10	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B26(Part 22)-V



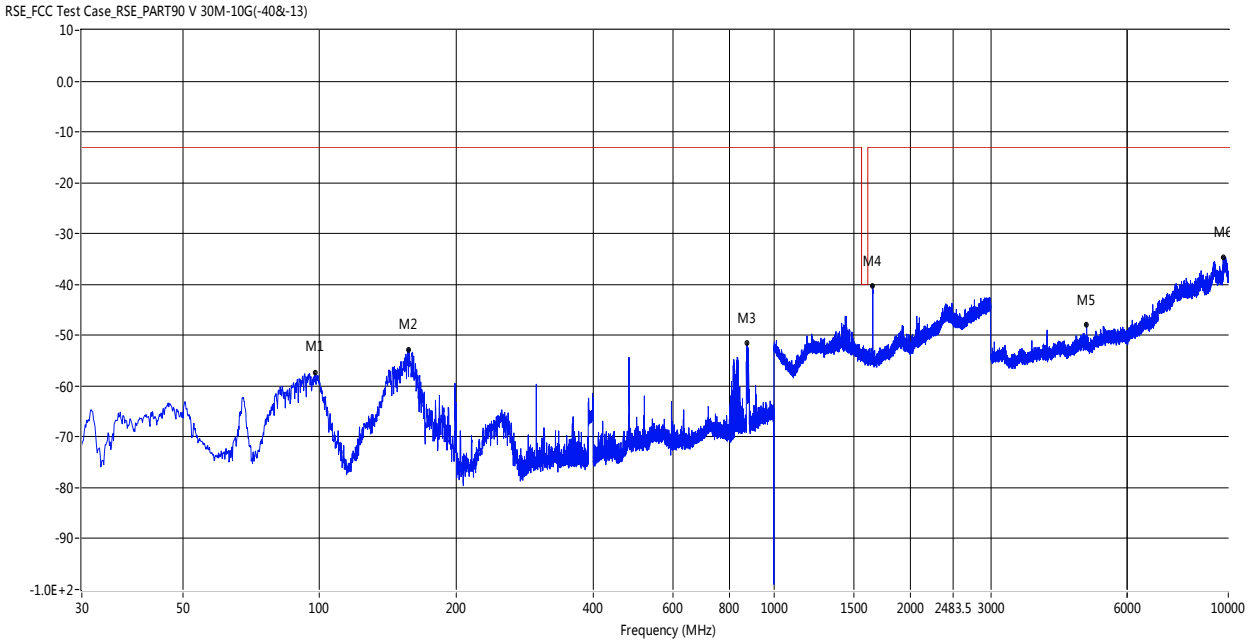
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
98.021	-57.04	-5.91	-13.0	-44.04	264.90	Vertical	Vertical	Pass
159.252	-52.83	-3.70	-13.0	-39.83	235.30	Vertical	Vertical	Pass
712.031	-50.09	7.67	-13.0	-37.09	75.10	Vertical	Vertical	Pass
1651.750	-40.51	11.82	-13.0	-27.51	139.10	Vertical	Vertical	Pass
5309.125	-45.79	6.83	-13.0	-32.79	272.20	Vertical	Vertical	Pass
9772.500	-34.56	19.12	-13.0	-21.56	148.20	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B26(Part 22)-H



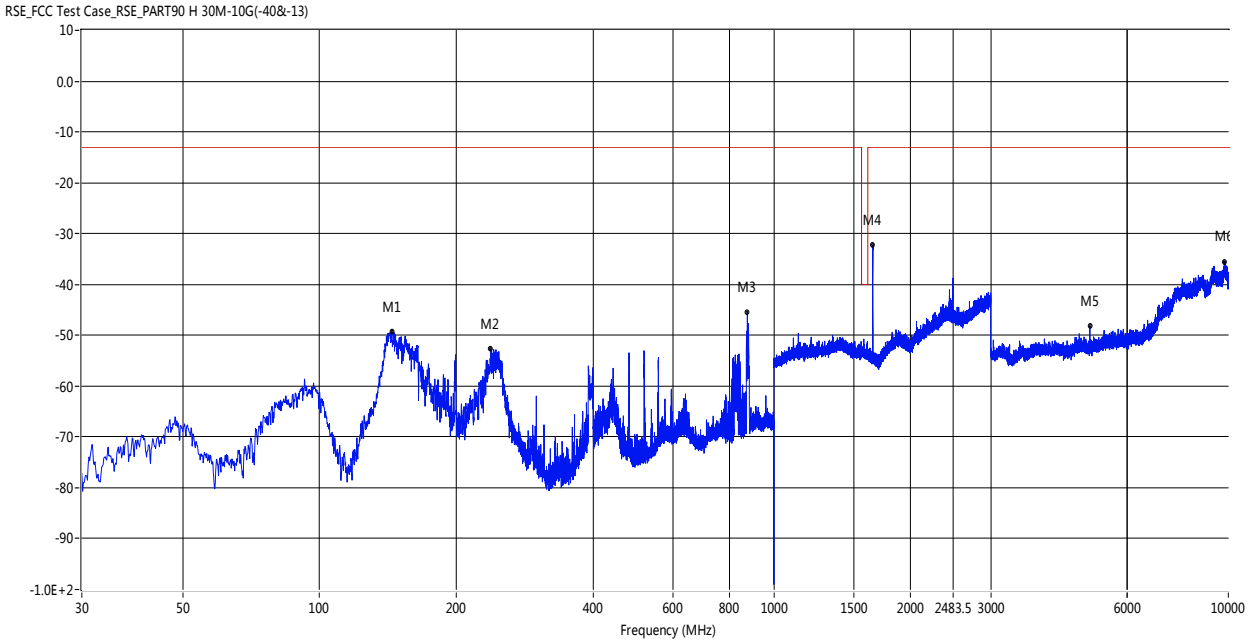
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
142.399	-49.36	-6.65	-13.0	-36.36	194.50	Horizontal	Vertical	Pass
244.855	-52.50	-2.12	-13.0	-39.50	339.50	Horizontal	Vertical	Pass
874.021	-46.00	7.82	-13.0	-33.00	42.40	Horizontal	Vertical	Pass
1651.000	-30.97	12.09	-13.0	-17.97	27.90	Horizontal	Vertical	Pass
4879.500	-45.90	4.79	-13.0	-32.90	302.50	Horizontal	Vertical	Pass
9817.125	-35.47	18.61	-13.0	-22.47	172.50	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B26(Part 22)-V



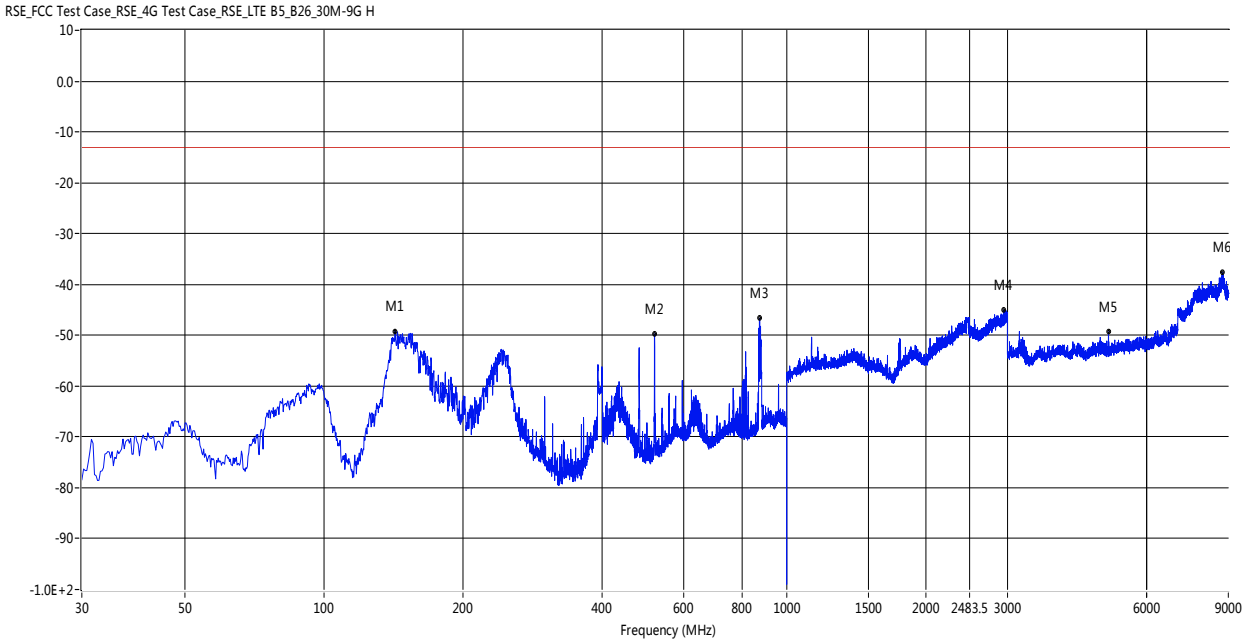
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
97.658	-57.41	-6.09	-13.0	-44.41	276.30	Vertical	Vertical	Pass
157.434	-52.77	-3.63	-13.0	-39.77	236.70	Vertical	Vertical	Pass
874.143	-51.60	8.23	-13.0	-38.60	0.00	Vertical	Vertical	Pass
1650.750	-40.24	11.83	-13.0	-27.24	145.00	Vertical	Vertical	Pass
4880.375	-47.92	5.65	-13.0	-34.92	66.80	Vertical	Vertical	Pass
9776.000	-34.66	19.22	-13.0	-21.66	127.00	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B26(Part 22)-H



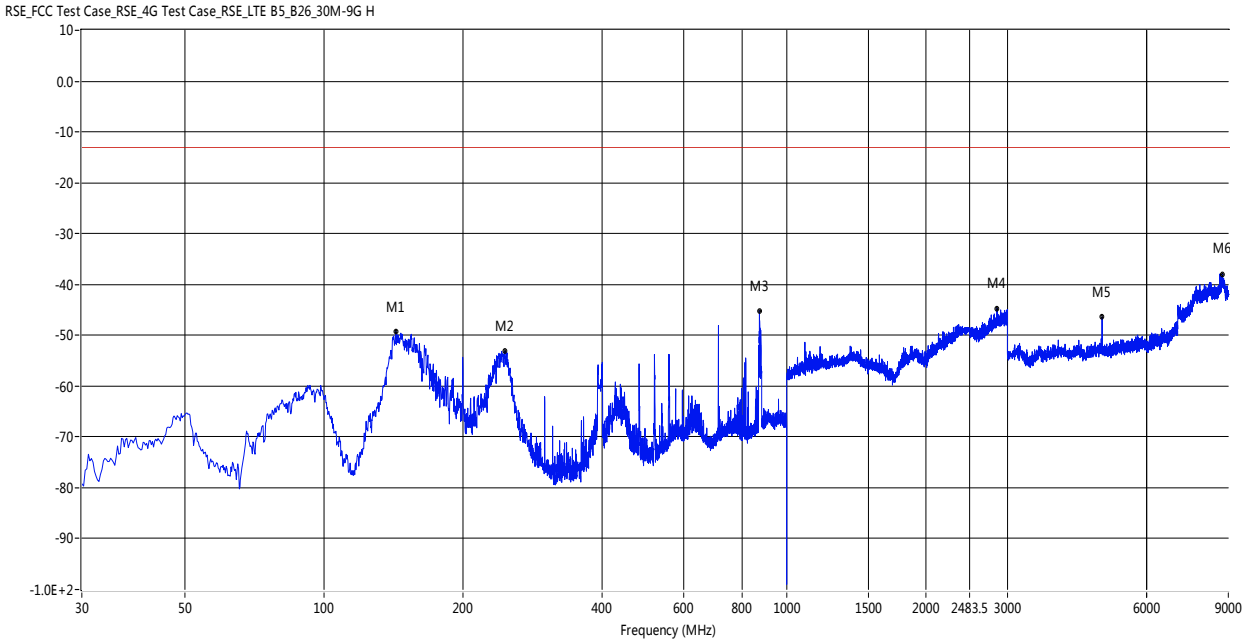
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
144.339	-49.26	-7.02	-13.0	-36.26	190.10	Horizontal	Vertical	Pass
238.186	-52.64	-2.57	-13.0	-39.64	328.00	Horizontal	Vertical	Pass
874.021	-45.56	7.82	-13.0	-32.56	271.20	Horizontal	Vertical	Pass
1651.250	-32.20	12.09	-13.0	-19.20	29.10	Horizontal	Vertical	Pass
4960.000	-48.21	4.83	-13.0	-35.21	301.90	Horizontal	Vertical	Pass
9799.625	-35.50	18.69	-13.0	-22.50	313.90	Horizontal	Vertical	Pass

RSE-H-BLE+CAT-M B26(Part 22)-V



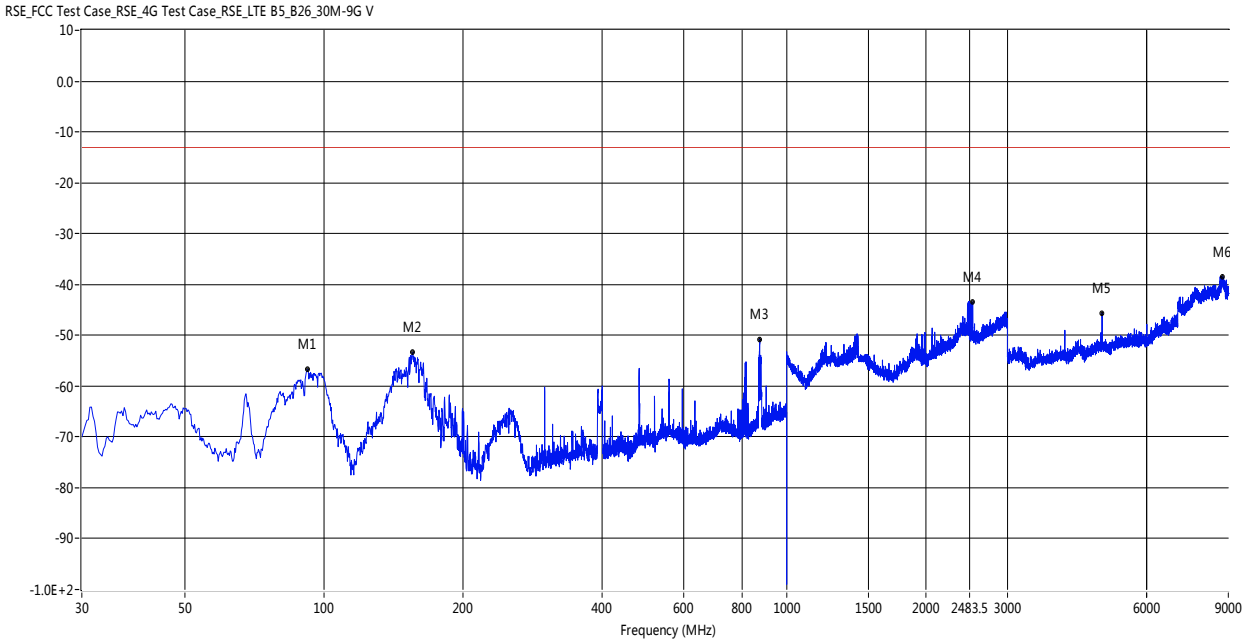
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
142.520	-49.21	-6.68	-13.0	-36.21	182.30	Horizontal	Vertical	Pass
518.395	-49.73	1.41	-13.0	-36.73	341.70	Horizontal	Vertical	Pass
874.143	-46.64	7.83	-13.0	-33.64	145.60	Horizontal	Vertical	Pass
2944.000	-45.05	20.94	-13.0	-32.05	4.70	Horizontal	Vertical	Pass
4960.500	-49.32	4.83	-13.0	-36.32	264.40	Horizontal	Vertical	Pass
8757.000	-37.69	16.78	-13.0	-24.69	186.00	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B26(Part 90)-H



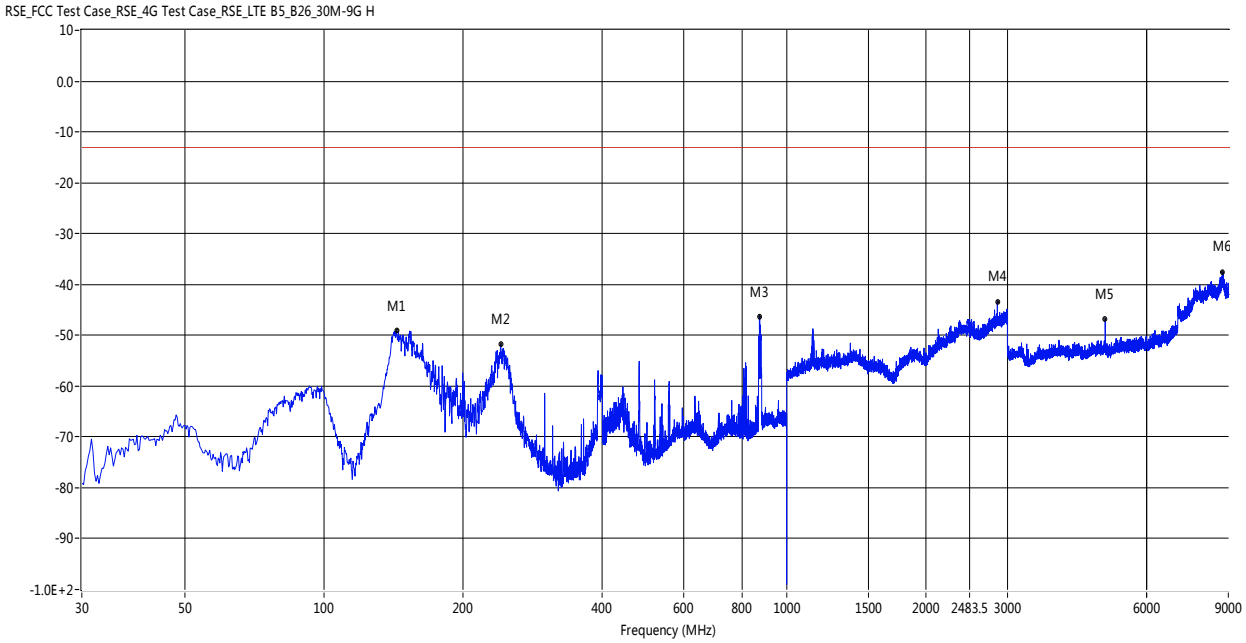
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
143.005	-49.24	-6.77	-13.0	-36.24	186.30	Horizontal	Vertical	Pass
246.310	-53.08	-2.17	-13.0	-40.08	327.50	Horizontal	Vertical	Pass
873.415	-45.20	7.79	-13.0	-32.20	269.10	Horizontal	Vertical	Pass
2849.000	-44.67	20.69	-13.0	-31.67	203.20	Horizontal	Vertical	Pass
4803.000	-46.39	4.75	-13.0	-33.39	242.50	Horizontal	Vertical	Pass
8745.000	-37.95	16.89	-13.0	-24.95	116.50	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B26(Part 90)-V



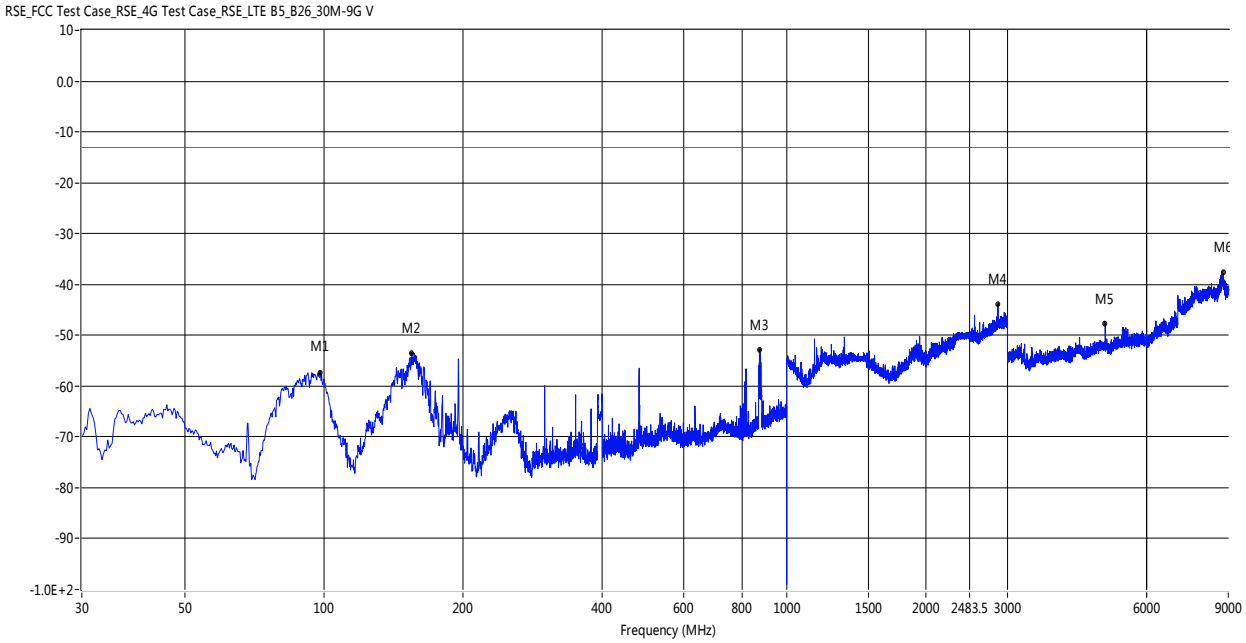
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
92.323	-56.72	-8.76	-13.0	-43.72	254.90	Vertical	Vertical	Pass
155.615	-53.38	-3.56	-13.0	-40.38	196.20	Vertical	Vertical	Pass
874.385	-50.73	8.23	-13.0	-37.73	354.10	Vertical	Vertical	Pass
2520.500	-49.03	17.89	-13.0	-36.03	290.50	Vertical	Vertical	Pass
4803.000	-45.65	5.48	-13.0	-32.65	77.90	Vertical	Vertical	Pass
8743.500	-38.44	17.02	-13.0	-25.44	201.40	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B26(Part 90)-H



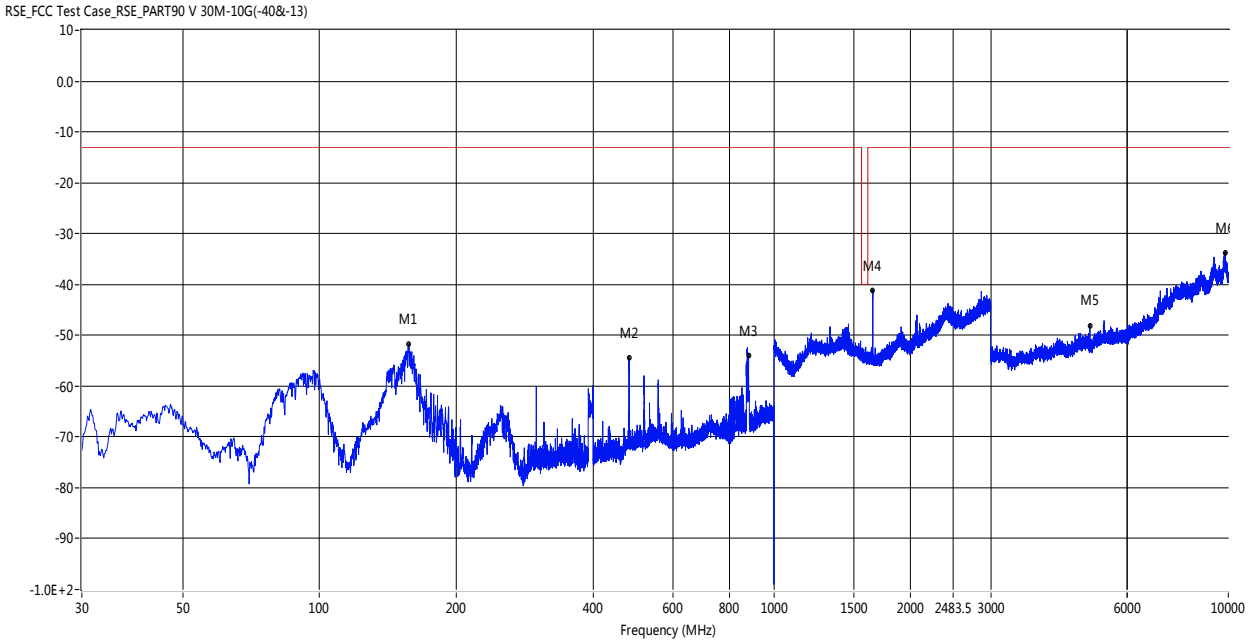
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
143.490	-49.06	-6.86	-13.0	-36.06	192.20	Horizontal	Vertical	Pass
240.975	-51.79	-1.98	-13.0	-38.79	332.10	Horizontal	Vertical	Pass
874.143	-46.31	7.83	-13.0	-33.31	253.60	Horizontal	Vertical	Pass
2853.000	-43.32	20.69	-13.0	-30.32	268.50	Horizontal	Vertical	Pass
4879.500	-46.86	4.79	-13.0	-33.86	296.60	Horizontal	Vertical	Pass
8760.001	-37.57	16.75	-13.0	-24.57	2.00	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B26(Part 90)-V



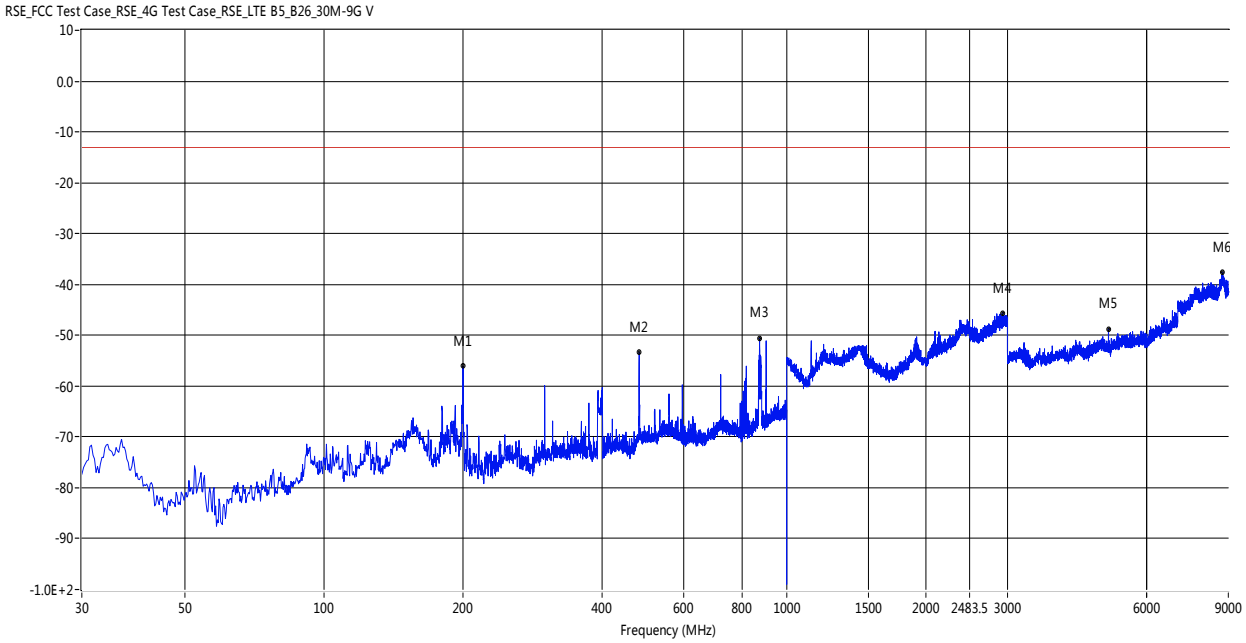
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
98.143	-57.24	-5.85	-13.0	-44.24	270.30	Vertical	Vertical	Pass
154.888	-53.55	-3.53	-13.0	-40.55	209.50	Vertical	Vertical	Pass
873.657	-52.85	8.23	-13.0	-39.85	336.10	Vertical	Vertical	Pass
2861.500	-43.91	20.08	-13.0	-30.91	263.70	Vertical	Vertical	Pass
4879.500	-47.63	5.65	-13.0	-34.63	58.50	Vertical	Vertical	Pass
8764.500	-37.69	16.79	-13.0	-24.69	55.70	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B26(Part 90)-H



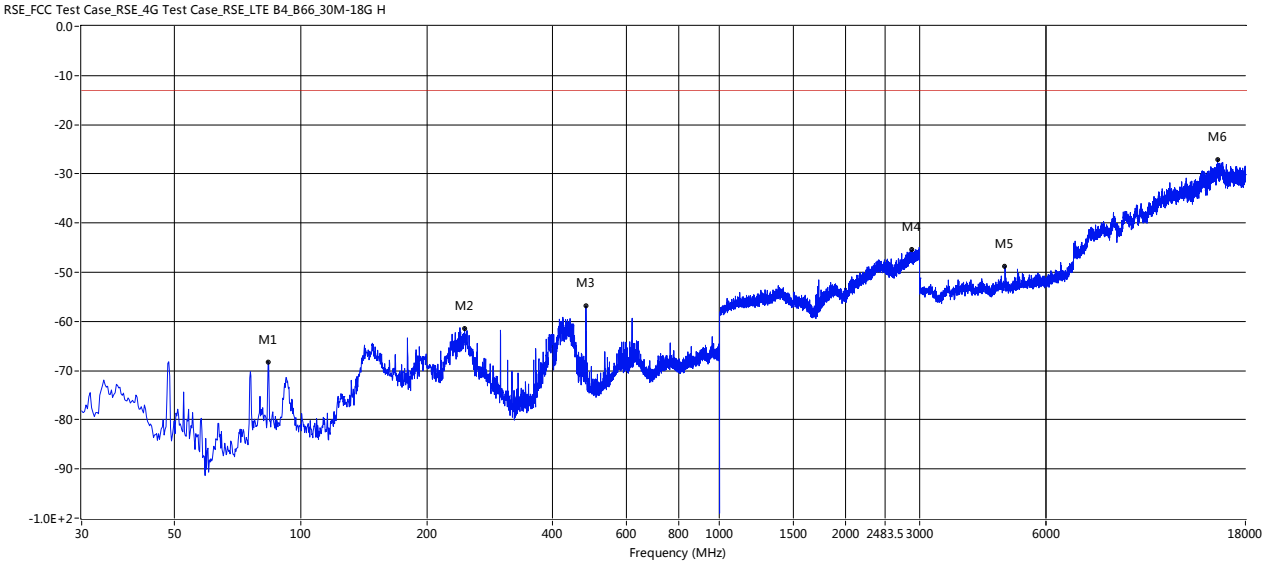
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
157.312	-51.80	-3.63	-13.0	-38.80	229.70	Vertical	Vertical	Pass
480.201	-54.48	4.13	-13.0	-41.48	98.80	Vertical	Vertical	Pass
879.599	-54.00	8.24	-13.0	-41.00	247.60	Vertical	Vertical	Pass
1651.500	-41.21	11.82	-13.0	-28.21	151.10	Vertical	Vertical	Pass
4959.125	-48.15	5.31	-13.0	-35.15	97.00	Vertical	Vertical	Pass
9851.250	-33.74	19.48	-13.0	-20.74	356.20	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B26(Part 90)-V



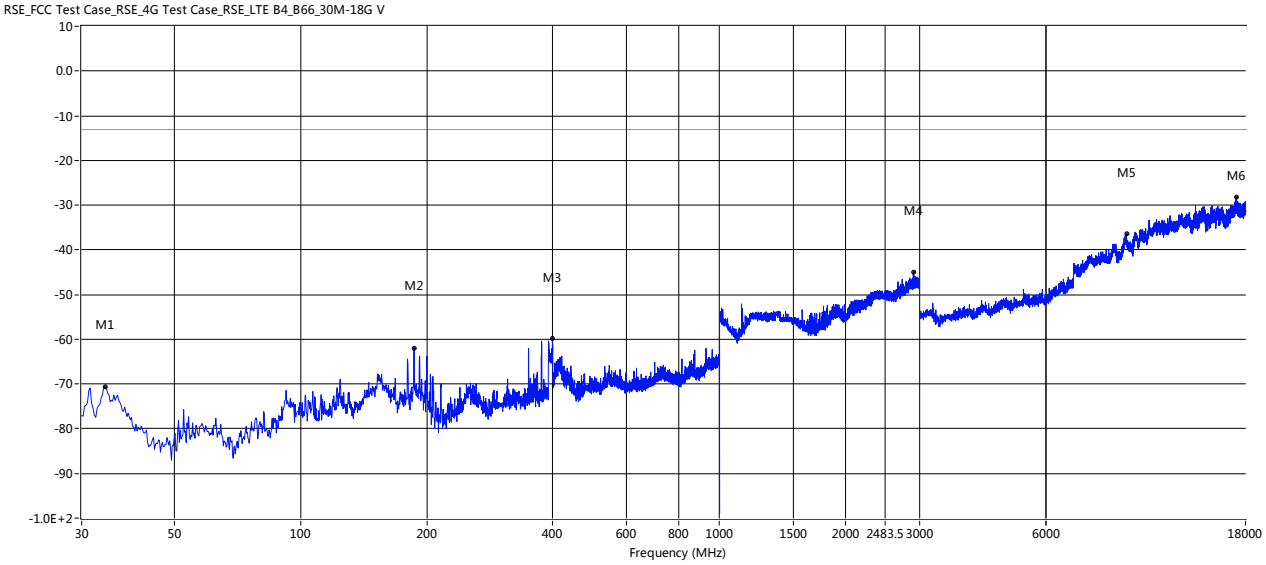
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
199.750	-56.10	-12.40	-13.0	-43.10	162.90	Vertical	Vertical	Pass
480.080	-53.41	4.13	-13.0	-40.41	322.30	Vertical	Vertical	Pass
873.900	-50.53	8.23	-13.0	-37.53	356.50	Vertical	Vertical	Pass
2925.000	-45.58	20.29	-13.0	-32.58	85.80	Vertical	Vertical	Pass
4960.500	-48.73	5.30	-13.0	-35.73	90.60	Vertical	Vertical	Pass
8754.000	-37.66	16.91	-13.0	-24.66	102.00	Vertical	Vertical	Pass

RSE-L-BLE+CAT-M B66-H



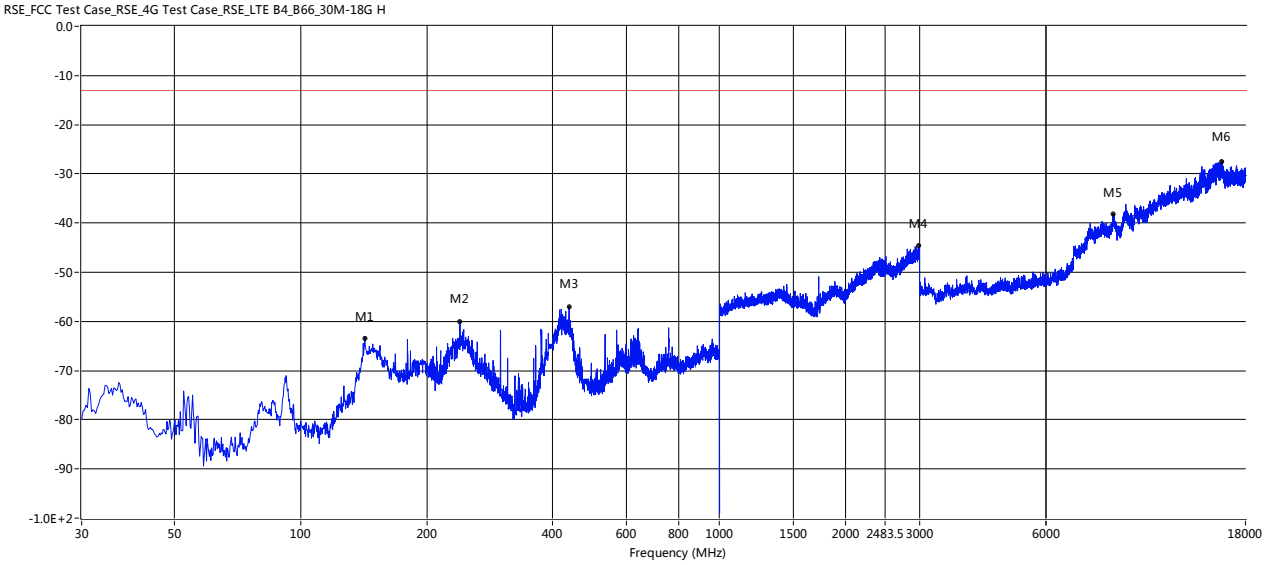
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
83.592	-68.20	-15.39	-13.0	-55.20	7.30	Horizontal	Vertical	Pass
246.310	-61.36	-2.17	-13.0	-48.36	115.50	Horizontal	Vertical	Pass
479.838	-56.80	1.18	-13.0	-43.80	143.30	Horizontal	Vertical	Pass
2883.000	-45.31	20.67	-13.0	-32.31	360.00	Horizontal	Vertical	Pass
4802.500	-48.77	4.75	-13.0	-35.77	238.60	Horizontal	Vertical	Pass
15455.000	-27.01	28.05	-13.0	-14.01	72.40	Horizontal	Vertical	Pass

RSE-L-BLE+CAT-M B66-V



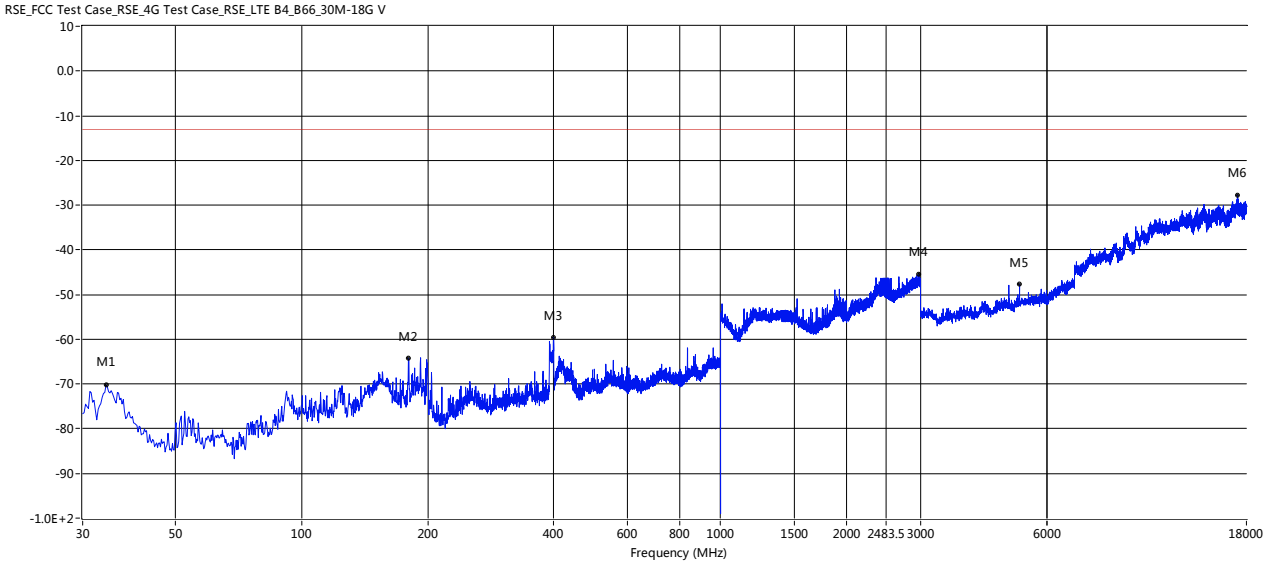
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
34.123	-70.70	-8.77	-13.0	-57.70	149.50	Vertical	Vertical	Pass
186.413	-61.97	-9.66	-13.0	-48.97	85.60	Vertical	Vertical	Pass
399.085	-59.87	-0.70	-13.0	-46.87	210.60	Vertical	Vertical	Pass
2902.000	-45.09	20.24	-13.0	-32.09	359.70	Vertical	Vertical	Pass
9362.500	-36.48	18.13	-13.0	-23.48	10.60	Vertical	Vertical	Pass
17107.500	-28.32	26.91	-13.0	-15.32	221.80	Vertical	Vertical	Pass

RSE-M-BLE+CAT-M B66-H



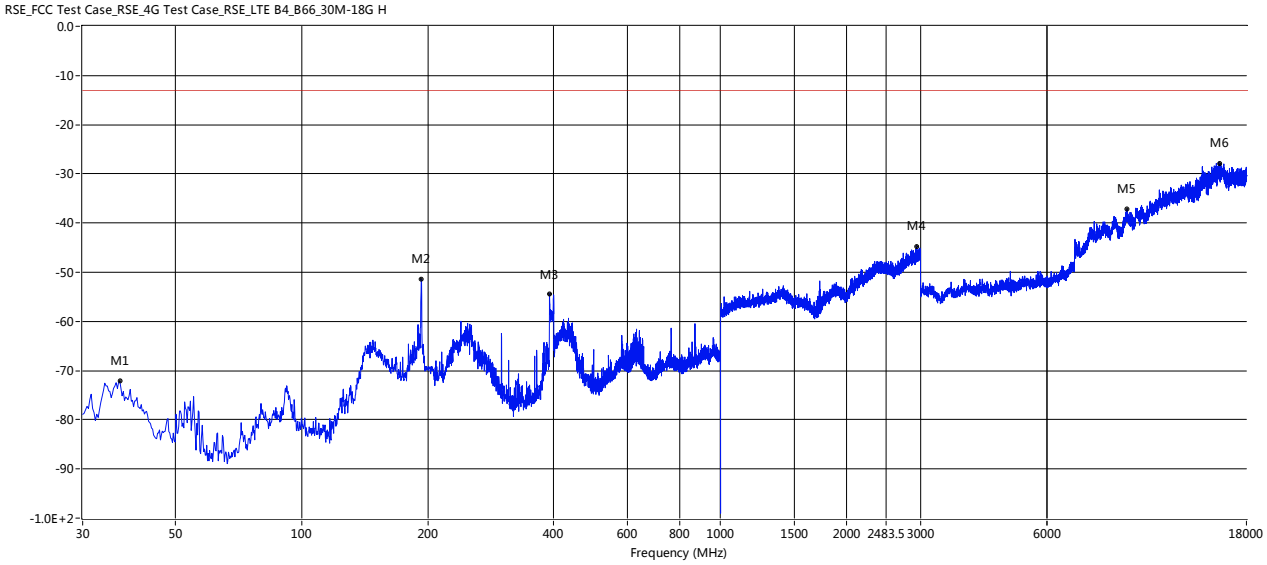
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
142.278	-63.37	-6.63	-13.0	-50.37	185.20	Horizontal	Vertical	Pass
240.005	-60.05	-1.95	-13.0	-47.05	115.10	Horizontal	Vertical	Pass
437.158	-56.96	3.26	-13.0	-43.96	213.30	Horizontal	Vertical	Pass
2994.500	-44.59	21.22	-13.0	-31.59	221.50	Horizontal	Vertical	Pass
8695.000	-38.11	17.25	-13.0	-25.11	316.20	Horizontal	Vertical	Pass
15835.000	-27.44	27.49	-13.0	-14.44	0.70	Horizontal	Vertical	Pass

RSE-M-BLE+CAT-M B66-V



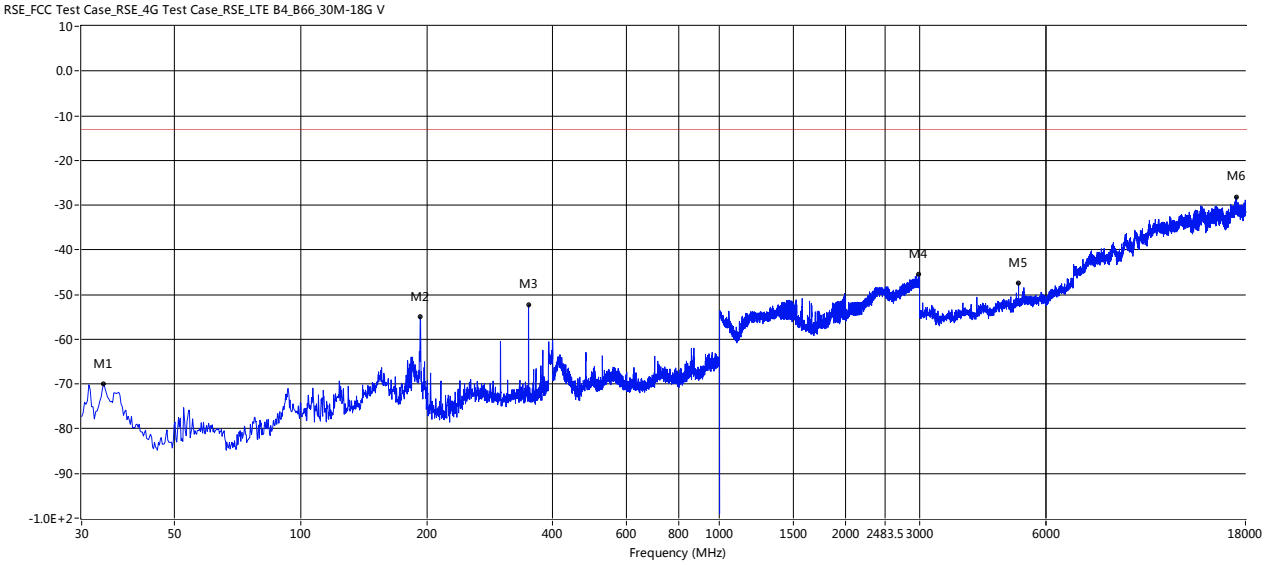
Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
34.123	-70.23	-8.77	-13.0	-57.23	26.60	Vertical	Vertical	Pass
179.865	-64.23	-8.31	-13.0	-51.23	165.80	Vertical	Vertical	Pass
399.085	-59.48	-0.70	-13.0	-46.48	222.90	Vertical	Vertical	Pass
2969.500	-45.33	20.36	-13.0	-32.33	0.00	Vertical	Vertical	Pass
5172.500	-47.69	6.56	-13.0	-34.69	113.60	Vertical	Vertical	Pass
17152.500	-27.74	26.63	-13.0	-14.74	280.20	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B66-H



Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
36.790	-72.14	-4.29	-13.0	-59.14	238.80	Vertical	Vertical	Pass
192.960	-51.42	-11.44	-13.0	-38.42	227.70	Vertical	Vertical	Pass
390.598	-54.36	0.35	-13.0	-41.36	203.00	Vertical	Vertical	Pass
2935.500	-44.71	20.89	-13.0	-31.71	13.10	Vertical	Vertical	Pass
9337.500	-37.25	17.86	-13.0	-24.25	358.20	Vertical	Vertical	Pass
15551.250	-27.87	28.28	-13.0	-14.87	140.90	Vertical	Vertical	Pass

RSE-H-BLE+CAT-M B66-V



Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
33.880	-69.95	-8.61	-13.0	-56.95	295.80	Vertical	Vertical	Pass
192.960	-54.96	-11.00	-13.0	-41.96	98.00	Vertical	Vertical	Pass
350.100	-52.30	-2.14	-13.0	-39.30	285.00	Vertical	Vertical	Pass
2993.000	-45.50	20.38	-13.0	-32.50	43.30	Vertical	Vertical	Pass
5172.500	-47.44	6.56	-13.0	-34.44	330.90	Vertical	Vertical	Pass
17096.250	-28.24	26.93	-13.0	-15.24	46.40	Vertical	Vertical	Pass

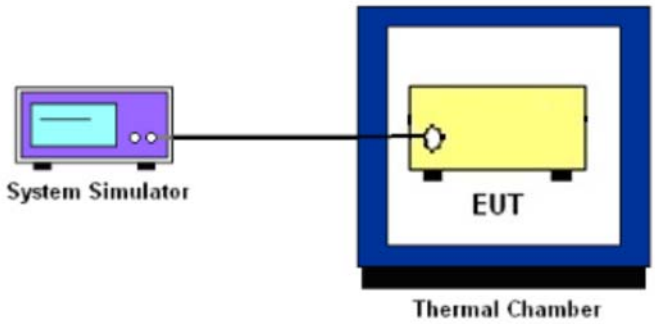
9. FREQUENCY STABILITY

9.1 DESCRIPTION OF FREQUENCY STABILITY MEASUREMENT

9.1.1 MEASUREMENT METHOD

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

9.1.2 TEST SETUP



9.1.3 TEST PROCEDURES FOR TEMPERATURE VARIATION

1. The EUT was set up in the thermal chamber and connected with the system simulator.

2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

9.1.4 TEST PROCEDURES FOR VOLTAGE VARIATION

1. The testing follows FCC KDB 971168 D01v01r03 Section 9.

2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simlator.

3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.

4. The variation in frequency was measured for the worst case.

9.1.5 TEST RESULTS

CAT-M Band 2 (QPSK) / 1880MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.90	0.010	2.5ppm	PASS
40		35.47	0.019		
30		14.68	0.008		
20		30.46	0.016		
10		12.92	0.007		
0		22.38	0.012		
-10		20.82	0.011		
-20		12.47	0.007		
-30		34.07	0.018		
20	Maximum Voltage	23.09	0.012		
20	BEP	14.06	0.007		

CAT-M Band 2 (QPSK) / 1880MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.14	0.016	2.5ppm	PASS
40		28.23	0.015		
30		20.85	0.011		
20		31.66	0.017		
10		14.27	0.008		
0		12.26	0.007		
-10		21.23	0.011		
-20		12.76	0.007		
-30		14.56	0.008		
20	Maximum Voltage	32.52	0.017		
20	BEP	21.05	0.011		

CAT-M Band 4 (QPSK) / 1733MHz / BW10M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	31.55	0.018	2.5ppm	PASS
40		36.24	0.021		
30		16.80	0.010		
20		17.64	0.010		
10		28.78	0.017		
0		11.62	0.007		
-10		29.61	0.017		
-20		14.37	0.008		
-30		21.42	0.012		
20	Maximum Voltage	31.40	0.018		
20	BEP	30.04	0.017		

CAT-M Band 4 (QPSK) / 1733MHz / BW20M					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	33.89	0.020	2.5ppm	PASS
40		27.93	0.016		
30		35.48	0.020		
20		34.24	0.020		
10		12.45	0.007		
0		22.99	0.013		
-10		18.75	0.011		
-20		15.30	0.009		
-30		15.32	0.009		
20	Maximum Voltage	26.74	0.015		
20	BEP	30.39	0.018		

CAT-M Band 5 (QPSK) / 836.5MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	14.11	0.020	2.5ppm	PASS
40		21.38	0.030		
30		15.01	0.021		
20		25.47	0.036		
10		21.46	0.030		
0		13.27	0.019		
-10		27.08	0.004		
-20		32.37	0.046		
-30		29.50	0.042		
20	Maximum Voltage	22.98	0.032		
20	BEP	32.20	0.045		

CAT-M Band 5 (QPSK) / 836.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	32.55	0.046	2.5ppm	PASS
40		26.40	0.037		
30		19.91	0.028		
20		12.80	0.018		
10		17.81	0.025		
0		14.84	0.021		
-10		19.95	0.003		
-20		31.07	0.044		
-30		12.24	0.017		
20	Maximum Voltage	26.66	0.038		
20	BEP	17.98	0.025		

CAT-M Band 12 (QPSK) / 707.5MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	22.31	0.031	2.5ppm	PASS
40		20.73	0.029		
30		17.29	0.024		
20		23.71	0.033		
10		16.05	0.023		
0		13.66	0.019		
-10		18.93	0.003		
-20		13.17	0.019		
-30		15.65	0.022		
20	Maximum Voltage	23.97	0.034		
20	BEP	13.67	0.019		

CAT-M Band 12 (QPSK) / 707.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	34.05	0.048	2.5ppm	PASS
40		19.16	0.027		
30		33.91	0.048		
20		22.58	0.032		
10		36.38	0.051		
0		17.48	0.025		
-10		20.19	0.003		
-20		16.14	0.023		
-30		16.07	0.023		
20	Maximum Voltage	25.82	0.036		
20	BEP	21.74	0.031		

CAT-M Band 13 (QPSK) / 782MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	34.60	0.049	2.5ppm	PASS
40		12.39	0.017		
30		29.81	0.042		
20		31.32	0.044		
10		12.62	0.018		
0		32.84	0.046		
-10		35.31	0.005		
-20		17.68	0.025		
-30		25.13	0.035		
20	Maximum Voltage	34.80	0.049		
20	BEP	33.31	0.047		

CAT-M Band 13 (QPSK) / 782MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	36.04	0.051	2.5ppm	PASS
40		16.80	0.024		
30		35.88	0.051		
20		22.27	0.031		
10		20.09	0.028		
0		30.70	0.043		
-10		25.82	0.004		
-20		18.67	0.026		
-30		29.08	0.041		
20	Maximum Voltage	20.47	0.029		
20	BEP	28.81	0.041		

CAT-M Band 25 (QPSK) / 1882.5MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	12.61	0.007	2.5ppm	PASS
40		14.68	0.008		
30		12.96	0.007		
20		18.41	0.010		
10		35.72	0.019		
0		19.20	0.010		
-10		32.18	0.017		
-20		25.69	0.014		
-30		32.73	0.017		
20	Maximum Voltage	33.97	0.018		
20	BEP	16.45	0.009		

CAT-M Band 25 (QPSK) / 1882.5MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.75	0.016	2.5ppm	PASS
40		34.34	0.018		
30		22.24	0.012		
20		26.64	0.014		
10		34.18	0.018		
0		19.06	0.010		
-10		35.63	0.019		
-20		15.23	0.008		
-30		17.87	0.010		
20	Maximum Voltage	29.41	0.016		
20	BEP	17.73	0.009		

CAT-M Band 26(Part 22) (QPSK) / 1733MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	27.60	0.016	2.5ppm	PASS
40		28.54	0.016		
30		17.34	0.010		
20		14.20	0.008		
10		22.70	0.013		
0		32.00	0.018		
-10		17.24	0.010		
-20		14.03	0.008		
-30		22.82	0.013		
20	Maximum Voltage	26.95	0.016		
20	BEP	26.64	0.015		

CAT-M Band 26(Part 22) (QPSK) / 1733MHz / BW15M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	19.75	0.011	2.5ppm	PASS
40		26.69	0.015		
30		21.65	0.012		
20		34.22	0.020		
10		15.27	0.009		
0		15.64	0.009		
-10		27.13	0.016		
-20		28.09	0.016		
-30		29.46	0.017		
20	Maximum Voltage	34.68	0.020		
20	BEP	11.51	0.007		

CAT-M Band 26(Part 90) (QPSK) / 819MHz / BW5M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	21.96	0.013	2.5ppm	PASS
40		34.39	0.020		
30		20.96	0.012		
20		27.66	0.016		
10		25.25	0.015		
0		25.67	0.015		
-10		14.38	0.008		
-20		13.93	0.008		
-30		19.20	0.011		
20	Maximum Voltage	18.26	0.011		
20	BEP	19.51	0.011		

CAT-M Band 26(Part 90) (QPSK) / 819MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	22.87	0.013	2.5ppm	PASS
40		27.47	0.016		
30		23.80	0.014		
20		22.48	0.013		
10		36.42	0.021		
0		23.59	0.014		
-10		21.26	0.012		
-20		12.51	0.007		
-30		12.33	0.007		
20	Maximum Voltage	27.12	0.016		
20	BEP	17.81	0.010		

CAT-M Band 66 (QPSK) / 1745MHz / BW10M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	30.29	0.017	2.5ppm	PASS
40		21.93	0.013		
30		18.52	0.011		
20		24.29	0.014		
10		13.10	0.008		
0		30.15	0.017		
-10		22.03	0.013		
-20		15.52	0.009		
-30		19.84	0.011		
20	Maximum Voltage	18.76	0.011		
20	BEP	21.90	0.013		

CAT-M Band 66 (QPSK) / 1745MHz / BW20M					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	23.43	0.014	2.5ppm	PASS
40		30.41	0.018		
30		11.66	0.007		
20		35.67	0.021		
10		13.74	0.008		
0		29.97	0.017		
-10		25.69	0.015		
-20		31.43	0.018		
-30		16.92	0.010		
20	Maximum Voltage	28.95	0.017		
20	BEP	28.01	0.016		

APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

※※※※※END OF THE REPORT※※※※※