TEST REPORT

Application No.:	SZCR2404001564AT
Applicant:	Hon Lin Technology Co., Ltd.
Address of Applicant:	11F, No.32, Jihu Rd., Neihu Dist., Taipei City, 114 Taiwan
Manufacturer:	Foxconn Industrial Internet Co., Ltd
Address of Manufacturer:	Building C1, Foxconn Technology Park, Donghuan 2nd Road 2nd Floor, Longhua Street, Longhua District, Shenzhen, 518109, Guangdong, China
Factory:	Fuyu Precision Component Company Limited
Address of Factory:	Lot M1, Lot F and Lot T1, Quang Chau Industrial Park, Van Trung Commune, Viet Yen District, Bac Giang Province,Viet Nam
Equipment Under Test (EUT):	
EUT Name:	LTE GPS Tracker
Model No.:	QTS110GW
Trade Mark:	Qualcomm Aware
FCC ID:	2AQ68-QTS110GW
Standard(s) :	47 CFR Part 2 47 CFR Part 22 subpart H 47 CFR Part 24 subpart E 47 CFR Part 27 subpart C 47 CFR Part 90 subpart R 47 CFR Part 90 subpart S
Date of Receipt:	2024-04-28
Date of Test:	2024-05-11 to 2024-06-13
Date of Issue:	2024-06-20
Test Result:	**Pass**

* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu
EMC Laboratory Manager

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2024-06-20		Original

Authorized for issue by:				
		Calvin Weng **Calvin Weng/Project Engineer**		
		Eric Fu **Eric Fu/Reviewer**		

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2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Output Power Data	§2.1046 §22.913 §24.232 §27.50(b) §27.50(c) §27.50(d) §90.542(a) §90.635	ERP≤ 7W(Cat M1 B5,19,26b/Cat NB B5,19,26b) EIRP≤ 2W(Cat M1 B2,25/Cat NB B2,25) ERP≤ 3W(Cat M1 B13/Cat NB B13) ERP≤ 3W(Cat M1 B12,85/Cat NB B12,85) EIRP≤ 1W(Cat M1 B4,66/Cat NB B4,66) ERP≤ 30W(Cat M1 B14) ERP≤ 100W(Cat M1 B26a/Cat NB B26a)	PASS
Peak-Average Ratio	§22.913 §24.232 §27.50(d)	≤13dB	PASS
Bandwidth	§2.1049(h)	OBW: No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051 §22.917 §24.238 §27.50(c) §27.50(g) §27.50(h) §90.543(e) §90.691	≤ -13dBm (Cat M1 B5,19,26b/Cat NB B5,19,26b) ≤ -13dBm (Cat M1 B2,25/Cat NB B2,25) Refer to clause 6.4 for Cat M1 B13/Cat NB B13 ≤ -13dBm (Cat M1 B12,85/Cat NB B12,85) ≤ -13dBm (Cat M1 B4,66/Cat NB B4,66) Refer to clause 6.4 for Cat M1 B14 Refer to clause 6.4 for Cat M1 B26a/Cat NB B26a	PASS
Spurious emissions at antenna terminals	§2.1051 §22.917 §24.238 §27.50(c) §27.50(g) §27.50(h) §90.543(e) §90.691	≤ -13dBm (Cat M1 B5,19,26b/Cat NB B5,19,26b) ≤ -13dBm (Cat M1 B2,25/Cat NB B2,25) Refer to clause 6.5 for Cat M1 B13/Cat NB B13 ≤ -13dBm (Cat M1 B12,85/Cat NB B12,85) ≤ -13dBm (Cat M1 B4,66/Cat NB B4,66) Refer to clause 6.5 for Cat M1 B14 Refer to clause 6.5 for Cat M1 B26a/Cat NB B26a	PASS
Field strength of spurious radiation	§2.1051 §22.917 §24.238 §27.50(c) §27.50(g) §27.50(h) §90.543(e) §90.691	≤ -13dBm (Cat M1 B5,19,26b/Cat NB B5,19,26b) ≤ -13dBm (Cat M1 B2,25/Cat NB B2,25) Refer to clause 6.6 for Cat M1 B13/Cat NB B13 ≤ -13dBm (Cat M1 B12,85/Cat NB B12,85) ≤ -13dBm (Cat M1 B4,66/Cat NB B4,66) Refer to clause 6.6 for Cat M1 B14 Refer to clause 6.6 for Cat M1 B26a/Cat NB B26a	PASS
Frequency stability	§2.1055 §22.355 §24.235 §27.54 §90.213	≤ ±2.5ppm.	PASS

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Remark: Final product will be equipped with normal SIM card or eSIM, which will not affect the EMC and RF performance according to declaration letter. For this project, normal SIM card was used to test.

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3 Contents

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4 General Information

4.1 Details of E.U.T.

Power supply:	DC3.7V by li-ion battery Recharged input: DC5V/1.5A
Sample Type:	Mobile production
LTE Operation Frequency Band:	LTE Cat M1 B2,4,5,12,13,14,19,25,26,66,85 LTE Cat NB B2,4,5,12,13,19,25,26,66,85
Modulation Type:	QPSK, 16QAM For Cat M1 BPSK, QPSK for Cat NB
LTE Power Class:	Class 5(Rated Power: 20dBm)
Antenna Type:	PIFA Antenna
Antenna Gain:	B2: 2.65dBi B4: 3.05dBi B5: 3.53dBi B12: 1.95dBi B13: 1.22dBi B14: 2.54dBi B19: 3.48dBi B25: 2.65dBi B26: 3.53dBi B66: 3.05dBi B85: 1.95dBi

Remark:The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Test Frequency

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Cat M1 Band 2	1.4	1850.7	1880.0	1909.3
	3	1851.5	1880.0	1908.5
	5	1852.5	1880.0	1907.5
	10	1855.0	1880.0	1905.0
	15	1857.5	1880.0	1902.5
	20	1860.0	1880.0	1900.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715.0	1732.5	1750.0
	15	1717.5	1732.5	1747.5
	20	1720.0	1732.5	1745.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704.0	707.5	711.0

Test mode:	Nominal Bandwidth (MHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Cat M1 Band 13	5	779.5	782.0	784.5
	10	/	782.0	/
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 14	5	790.5	793.0	795.5
	10	/	793.0	/
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 19	5	832.5	837.5	842.5
	10	835.0	837.5	840.0
	15	/	837.5	/
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 25	1.4	1850.7	1882.5	1914.3
	3	1851.5	1882.5	1913.5
	5	1852.5	1882.5	1912.5
	10	1855.0	1882.5	1910.0
	15	1857.5	1882.5	1907.5
	20	1860.0	1882.5	1905.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 26a	1.4	814.7	819.0	823.3
	3	815.5	819.0	822.5
	5	816.5	819.0	822
	10	/	819.0	/
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
	1.4	824.7	836.5	848.3

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LTE Cat M1 Band 26b	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829.0	836.5	844.0
	15	831.5	836.5	841.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 66	1.4	1710.7	1745.0	1779.3
	3	1711.5	1745.0	1778.5
	5	1712.5	1745.0	1777.5
	10	1715.0	1745.0	1775.0
	15	1717.5	1745.0	1772.5
	20	1720.0	1745.0	1770.0
Test mode:	**Nominal Bandwidth (MHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat M1 Band 85	5	700.5	707.0	713.5
	10	703.0	707.0	711.0

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Test mode:	Sub Carrier Spacing (KHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Cat NB Band 2	3.75	1850.1	1880.0	1909.9
	15	1850.1	1880.0	1909.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 4	3.75	1710.1	1732.5	1754.9
	15	1710.1	1732.5	1754.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 5	3.75	824.1	836.5	848.9
	15	824.1	836.5	848.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 12	3.75	699.1	707.5	715.9
	15	699.1	707.5	715.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 13	3.75	777.1	782.0	786.9
	15	777.1	782.0	786.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 19	3.75	830.1	837.5	844.9
	15	830.1	837.5	844.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 25	3.75	1850.1	1882.5	1914.9
	15	1850.1	1882.5	1914.9

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Test mode:	Sub Carrier Spacing (KHz)	RF Channel		
		Low (L)	Middle (M)	High (H)
		MHz	MHz	MHz
LTE Cat NB Band 26a	3.75	814.2	819.0	823.8
	15	814.2	819.0	823.8
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 26b	3.75	824.1	836.5	848.9
	15	824.1	836.5	848.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 66	3.75	1710.1	1745.0	1779.9
	15	1710.1	1745.0	1779.9
Test mode:	**Sub Carrier Spacing (KHz)**	**RF Channel**		
		Low (L)	**Middle (M)**	**High (H)**
		MHz	**MHz**	**MHz**
LTE Cat NB Band 85	3.75	698.1	707.0	715.9
	15	698.1	707.0	715.9

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4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Temperature:	TL	-30°C
	TN	+20°C
	TH	+50°C
Voltage:	VL	DC3.2 V
	VN	DC3.7 V
	VH	DC4.2 V

NOTE: VL= lower extreme test voltage
VN= nominal voltage
VH= upper extreme test voltage
TL= lower extreme test temperature
TN= normal temperature
TH= upper extreme test temperature

4.4 Description of Support Units

The EUT has been tested independent unit.

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 5.4 x 10^{-8}
2	Duty cycle	± 0.3%
3	Occupied Bandwidth	± 3%
4	RF conducted power	± 0.8dB
5	RF power density	± 0.4dB
6	Conducted Spurious emissions	± 2.7dB
7	Radiated Spurious emission test	± 3.1dB (Below 1GHz)
		± 4.4dB (Above 1GHz)
8	Temperature test	± 1°C
9	Humidity test	± 3%
10	Supply voltages	± 1.5%
11	Time	± 3%

4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch
No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.
Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None

5 Equipment List

RF conducted test					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date**	**Cal. Due date**
Programmable DC Source	Chroma	62024P-80-60	SEM011-09	2023-07-11	2024-07-10
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2024-03-20	2025-03-19
MXA Signal Analyzer	KEYSIGHT	N9020B	SEM004-24	2024-3-14	2025-3-13
Measurement Software	TST	TST PASS V2.0	N/A	N/A	N/A
Attenuator	Huber+Suhner	6620_SMA-50-1	SEM021-09	2024-3-27	2025-3-26
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2024-03-27	2025-03-26
Universal Radio Communication Tester	Anritsu	MT8000A	SEM010-10	2024-3-14	2025-3-13
Programmable Temperature & Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2024-3-19	2025-3-18
Power Sensor	KEYSIGHT	U2021XA	SEM009-15	2024-03-20	2025-03-19

RE in Chamber					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. Date**	**Cal. Due date**
3m Fully-Anechoic Chamber	AUDIX	N/A	SEM001-02	2024-5-11	2027-5-10
Signal Analyzer	Rohde & Schwarz	FSV40	SEM008-04	2024-03-15	2025-03-14
Horn Antenna	Rohde&Schwarz	HF907	SEM003-07	2023-07-23	2025-07-22
Microwave system amplifier	Agilent	83017A	SEM005-25	2023-09-19	2024-09-18
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2023-07-07	2024-07-06
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	SEM003-15	2022-08-10	2024-08-09
Pre-Amplifier	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2024-03-15	2025-03-14
Signal Generator(9kHz-40GHz)	N5173B	MY53270267	Agilent	2023-9-19	2024-9-18
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120D	SEM003-32	2021-09-26	2024-09-25

Pre-amplifier	Rohde & Schwarz	CH14-H052	SEM005-17	2024-03-15	2025-03-14
Substitution Antenna	Rohde & Schwarz	HF907	SEM003-06	2022-08-07	2024-08-06
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2024-03-27	2025-03-26

General used equipment					
Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal Date**	**Cal Due Date**
Humidity- Temperature Indicator	deli	8838	SEM002-32	2023-07-28	2024-07-27
Humidity- Temperature Indicator	deli	8838	SEM002-33	2023-07-28	2024-07-27
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2024-03-22	2025-03-21

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6 Radio Spectrum Matter Test Results

6.1 Effective (Isotropic) Radiated Output Power Data

Test Requirement: §2.1046,§22.913,§24.232,§27.50(b),§27.50(c),§27.50(d),§90.542(a), §90.635

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ERP≤ 7W(Cat M1 B5,19,26b/Cat NB B5,19,26b)
EIRP≤ 2W(Cat M1 B2,25/Cat NB B2,25)
ERP≤ 3W(Cat M1 B13/Cat NB B13)
ERP≤ 3W(Cat M1 B12,85/Cat NB B12,85)
EIRP≤ 1W(Cat M1 B4,66/Cat NB B4,66)
ERP≤ 30W(Cat M1 B14)
ERP≤ 100W(Cat M1 B26a/Cat NB B26a)

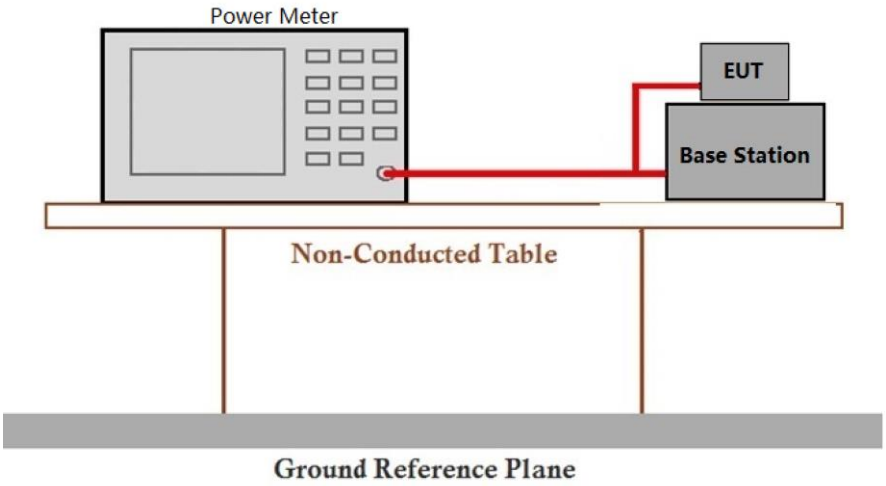
6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 52 % RH Atmospheric Pressure: 1020 mbar

Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.1.2 Test Setup Diagram



6.1.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB RF power test data.

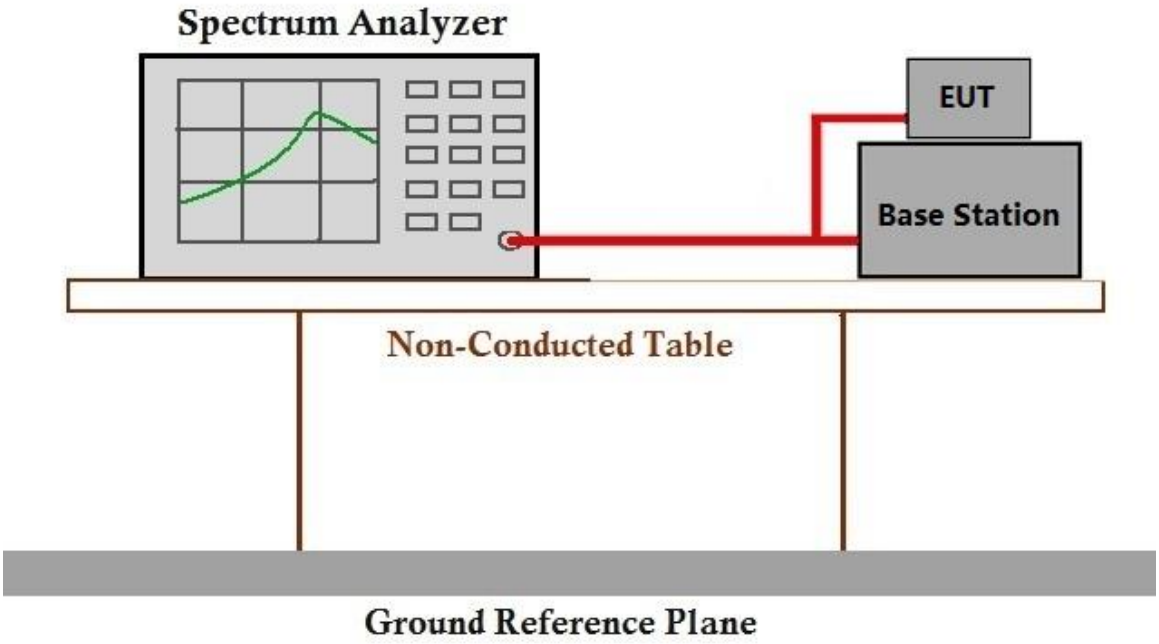
6.2 Peak-Average Ratio

Test Requirement: §22.913,§24.232,§27.50(d)
Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
Limit: ≤13dB

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar
Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB PAR test data.

6.3 Bandwidth

Test Requirement: §2.1049(h)

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: OBW: No limit
EBW: No limit

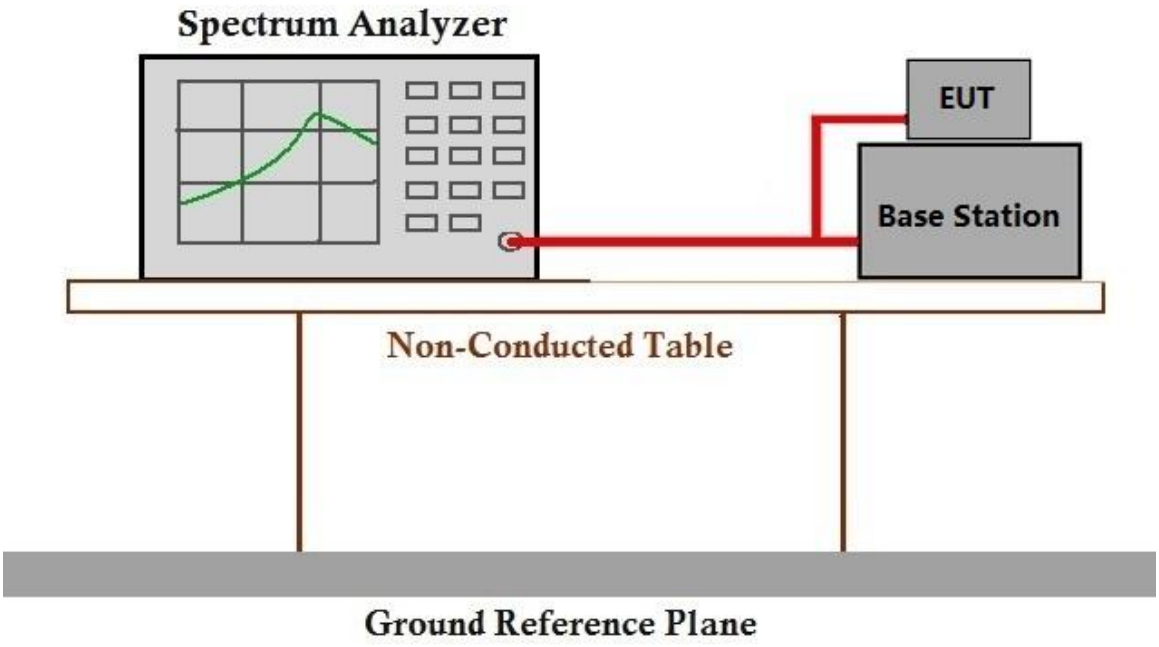
6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.3.2 Test Setup Diagram



6.3.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB bandwidth test data.

6.4 Band Edge Compliance

Test Requirement: §2.1051,§22.917,§24.238,§27.50(c),§27.50(g),§27.50(h),§90.543(e) §90.691

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ≤ -13dBm (**LTE Band2,4,5,12,19,25,26b,66,85**)

For **band 13**:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations

For **Band 14:**

On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz(-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals.

For **Band26a**:

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

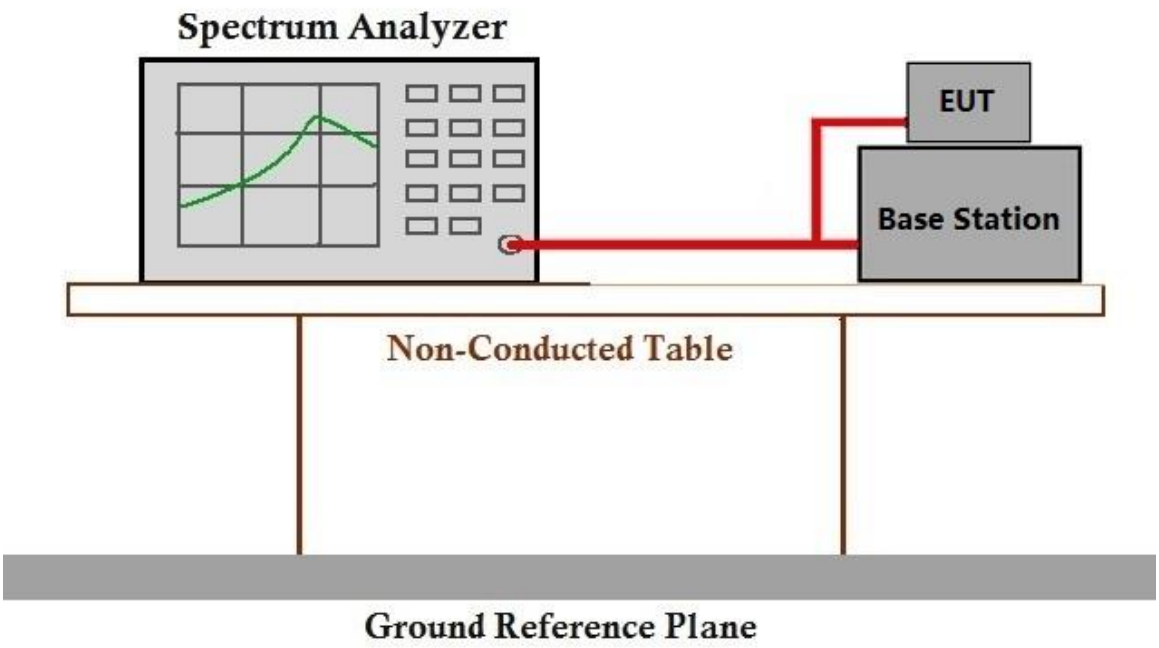
6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.4.2 Test Setup Diagram



6.4.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB bandedge test data.

6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051,§22.917,§24.238,§27.50(c),§27.50(g),§27.50(h),§90.543(e) §90.691

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ≤ -13dBm (**LTE Band2,4,5,12,19,25,26b,66,85**)

For **band 13**:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations

For **Band 14:**

On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz(-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals.

For **Band26a**:

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

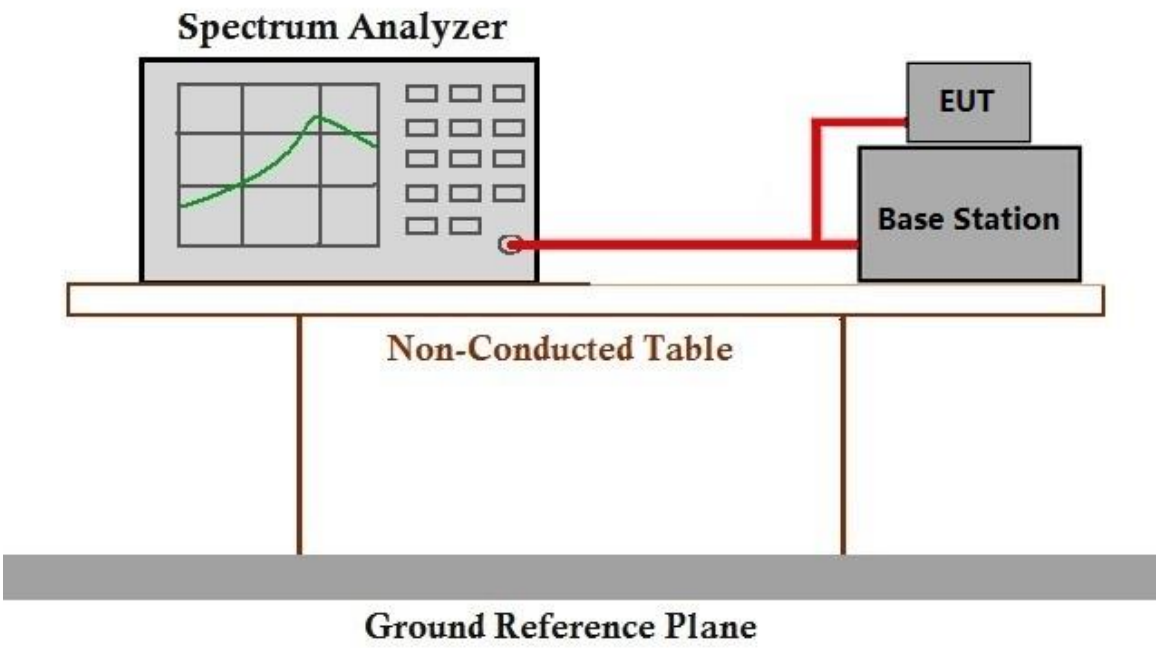
6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar

Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.5.2 Test Setup Diagram



6.5.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB CSE test data.

6.6 Field strength of spurious radiation

Test Requirement: §2.1051,§22.917,§24.238,§27.50(c),§27.50(g),§27.50(h),§90.543(e) §90.691

Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01

Limit: ≤ -13dBm (**LTE Band2,4,5,12,19,25,26b,66,85**)

For **band 13**:

(1) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations

For **Band 14:**

On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz(-40dBm/MHz) equivalent isotropically radiated power (EIRP) for wideband signals.

For **Band26a**:

For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

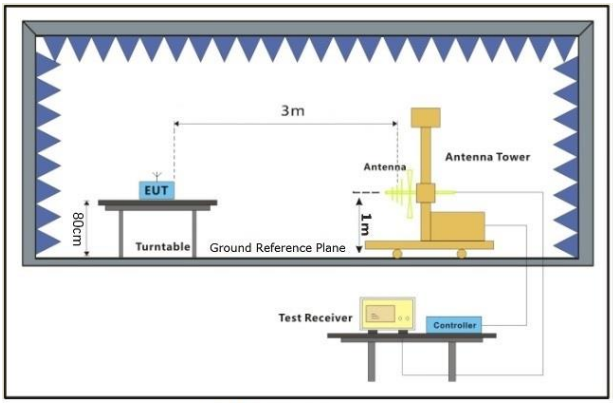
6.6.1 E.U.T. Operation

Operating Environment:

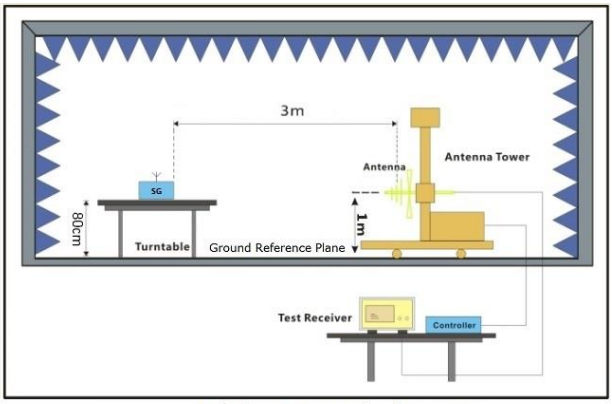
Temperature: 21 °C Humidity: 50 % RH Atmospheric Pressure: 1020 mbar

Test mode 30: Tx mode, Keep the EUT in transmitting mode.

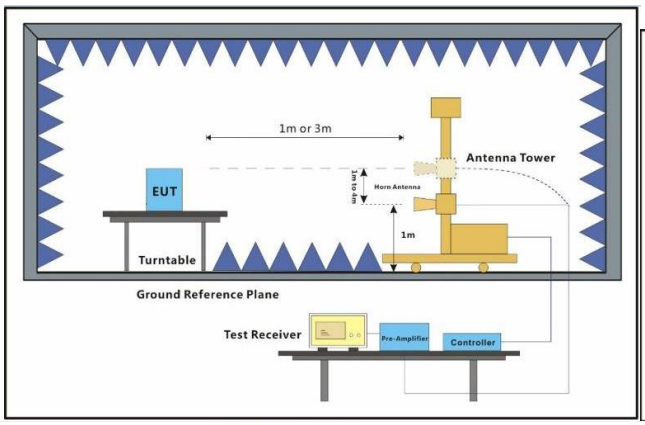
6.6.2 Test Setup Diagram



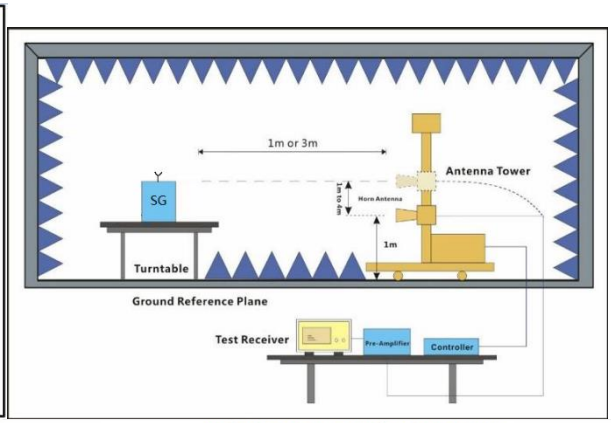
EUT



Substiute Antenna+Signal Generator



EUT



Substiute Antenna+Signal Generator

6.6.3 Measurement Procedure and Data

Test Procedure:

(1)On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
(2)The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
(3)The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
(4)The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
(5)The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
(6)The transmitter shall than be rotated through 360°in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
(7)The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
(8)The maximum signal level detected by the measuring receiver shall be noted.
(9)The measurement shall be repeated with the test antenna set to horizontal polarization.
(10) Replace the antenna with a proper Antenna (substitution antenna).
(11)The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
(12)The substitution antenna shall be connected to a calibrated signal generator.
(13)If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
(14)The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
(15)The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
(16)The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
(17)The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.

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CAT M1:

CAT M Band 2-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
3192.366	-65.04	-13	-52.04	-69.35	3.09	7.4	Horizontal	Pass
5009.426	-60.55	-13	-47.55	-66.44	4.26	10.15	Horizontal	Pass
9465.979	-60.14	-13	-47.14	-68.58	4.8	13.24	Horizontal	Pass
2920.248	-65.68	-13	-52.68	-69.51	2.91	6.74	Vertical	Pass
5034.994	-61.13	-13	-48.13	-67.03	4.26	10.16	Vertical	Pass
9490.104	-60.4	-13	-47.4	-68.82	4.82	13.24	Vertical	Pass

CAT M Band 2- Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
3747.656	-48.33	-13	-35.33	-53.38	3.45	8.5	Horizontal	Pass
5631.725	-53.84	-13	-40.84	-60.06	4.23	10.45	Horizontal	Pass
7209.015	-60.49	-13	-47.49	-67.67	4.2	11.38	Horizontal	Pass
3747.656	-56.26	-13	-43.26	-61.31	3.45	8.5	Vertical	Pass
6001.768	-53.41	-13	-40.41	-59.64	4.22	10.45	Vertical	Pass
7209.015	-53.16	-13	-40.16	-60.34	4.2	11.38	Vertical	Pass

CAT M Band 2- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
3088.453	-64.84	-13	-51.84	-68.96	3.02	7.14	Horizontal	Pass
5022.194	-60.81	-13	-47.81	-66.7	4.26	10.15	Horizontal	Pass
9490.104	-60.23	-13	-47.23	-68.65	4.82	13.24	Horizontal	Pass
2868.674	-65.68	-13	-52.68	-69.43	2.88	6.63	Vertical	Pass
5009.426	-60.95	-13	-47.95	-66.84	4.26	10.15	Vertical	Pass
9465.979	-60.33	-13	-47.33	-68.77	4.8	13.24	Vertical	Pass

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CAT M Band 4-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2957.654	-64.87	-13	-51.87	-68.77	2.93	6.83	Horizontal	Pass
4996.69	-60.48	-13	-47.48	-66.36	4.26	10.14	Horizontal	Pass
9490.104	-60.45	-13	-47.45	-68.87	4.82	13.24	Horizontal	Pass
3308.185	-65.16	-13	-52.16	-69.69	3.16	7.69	Vertical	Pass
5125.515	-60.73	-13	-47.73	-66.7	4.25	10.22	Vertical	Pass
9490.104	-60.43	-13	-47.43	-68.85	4.82	13.24	Vertical	Pass

CAT M Band 4- Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3454.486	-48.83	-13	-35.83	-53.63	3.26	8.06	Horizontal	Pass
5191.168	-43.98	-13	-30.98	-49.99	4.25	10.26	Horizontal	Pass
9465.979	-59.6	-13	-46.6	-68.04	4.8	13.24	Horizontal	Pass
3454.486	-55.01	-13	-42.01	-59.81	3.26	8.06	Vertical	Pass
5191.168	-46.34	-13	-33.34	-52.35	4.25	10.26	Vertical	Pass
9465.979	-59.39	-13	-46.39	-67.83	4.8	13.24	Vertical	Pass

CAT M Band 4- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2950.135	-64.97	-13	-51.97	-68.85	2.93	6.81	Horizontal	Pass
4983.987	-60.91	-13	-47.91	-66.78	4.25	10.12	Horizontal	Pass
9514.293	-60.43	-13	-47.43	-68.83	4.83	13.23	Horizontal	Pass
2950.135	-65.52	-13	-52.52	-69.4	2.93	6.81	Vertical	Pass
4983.987	-60.92	-13	-47.92	-66.79	4.25	10.12	Vertical	Pass
7154.172	-62.11	-13	-49.11	-69.23	4.2	11.32	Vertical	Pass

CAT M Band 5-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
8615.126	-61.79	-13	-48.79	-70.34	4.44	12.99	Horizontal	Pass
3472.118	-64.09	-13	-51.09	-68.92	3.27	8.1	Horizontal	Pass
6903.705	-61.62	-13	-48.62	-68.44	4.19	11.01	Horizontal	Pass
12653.0	-62.51	-13	-49.51	-70.4	5.43	13.32	Vertical	Pass
2789.463	-65.72	-13	-52.72	-69.35	2.83	6.46	Vertical	Pass
5532.263	-62.71	-13	-49.71	-68.92	4.24	10.45	Vertical	Pass

CAT M Band 5- Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
11370.05	-62.65	-13	-49.65	-70.84	5.06	13.25	Horizontal	Pass
1663.803	-46.29	-13	-33.29	-49.65	2.11	5.47	Horizontal	Pass
2425.032	-17.75	-13	-4.75	-20.78	2.61	5.64	Horizontal	Pass
7282.792	-43.36	-13	-30.36	-50.63	4.21	11.48	Vertical	Pass
1663.803	-56.0	-13	-43.0	-59.36	2.11	5.47	Vertical	Pass
2425.032	-17.3	-13	-4.3	-20.33	2.61	5.64	Vertical	Pass

CAT M Band 5- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
4958.678	-35.16	-13	-22.16	-41.01	4.23	10.08	Horizontal	Pass
3072.77	-65.18	-13	-52.18	-69.27	3.01	7.1	Horizontal	Pass
4688.616	-62.75	-13	-49.75	-68.37	4.06	9.68	Horizontal	Pass
8615.126	-61.56	-13	-48.56	-70.11	4.44	12.99	Vertical	Pass
2796.573	-66.09	-13	-53.09	-69.72	2.84	6.47	Vertical	Pass
5762.235	-63.28	-13	-50.28	-69.5	4.23	10.45	Vertical	Pass

CAT M Band 12-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10480.59	-62.51	-13	-49.51	-70.55	5.08	13.12	Horizontal	Pass
2754.185	-66.27	-13	-53.27	-69.84	2.81	6.38	Horizontal	Pass
4983.987	-60.73	-13	-47.73	-66.6	4.25	10.12	Horizontal	Pass
8637.084	-61.73	-13	-48.73	-70.28	4.45	13.0	Vertical	Pass
3662.775	-64.47	-13	-51.47	-69.46	3.4	8.39	Vertical	Pass
7338.621	-59.17	-13	-46.17	-66.5	4.21	11.54	Vertical	Pass

CAT M Band 12- Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10778.21	-62.3	-13	-49.3	-70.43	5.07	13.2	Horizontal	Pass
2657.761	-54.35	-13	-41.35	-57.77	2.75	6.17	Horizontal	Pass
4996.69	-60.41	-13	-47.41	-66.29	4.26	10.14	Horizontal	Pass
9417.908	-59.46	-13	-46.46	-67.92	4.78	13.24	Vertical	Pass
1715.411	-64.17	-13	-51.17	-67.36	2.15	5.34	Vertical	Pass
5112.485	-59.88	-13	-46.88	-65.83	4.26	10.21	Vertical	Pass

CAT M Band 12- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
9465.979	-59.66	-13	-46.66	-68.1	4.8	13.24	Horizontal	Pass
5434.559	-62.8	-13	-49.8	-68.97	4.24	10.41	Horizontal	Pass
8593.224	-61.66	-13	-48.66	-70.2	4.43	12.97	Horizontal	Pass
10860.83	-62.52	-13	-49.52	-70.68	5.07	13.23	Vertical	Pass
2538.731	-66.81	-13	-53.81	-70.04	2.68	5.91	Vertical	Pass
4996.69	-60.75	-13	-47.75	-66.63	4.26	10.14	Vertical	Pass

CAT M Band 13-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
12429.54	-62.72	-13	-49.72	-70.65	5.3	13.23	Horizontal	Pass
1561.221	-64.62	-13	-51.62	-68.31	2.04	5.73	Horizontal	Pass
2346.097	-64.43	-13	-51.43	-67.32	2.56	5.45	Horizontal	Pass
6001.768	-57.06	-13	-44.06	-63.29	4.22	10.45	Vertical	Pass
1561.221	-67.37	-13	-54.37	-71.06	2.04	5.73	Vertical	Pass
6001.768	-57.23	-13	-44.23	-63.46	4.22	10.45	Vertical	Pass

CAT M Band 14-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
12685.25	-62.61	-13	-49.61	-70.49	5.45	13.33	Horizontal	Pass
1525.86	-66.85	-13	-53.85	-70.64	2.02	5.81	Horizontal	Pass
2376.148	-65.15	-13	-52.15	-68.09	2.58	5.52	Horizontal	Pass
11457.21	-59.05	-13	-46.05	-67.23	5.06	13.24	Vertical	Pass
1525.86	-65.69	-13	-52.69	-69.48	2.02	5.81	Vertical	Pass
2376.148	-66.23	-13	-53.23	-69.17	2.58	5.52	Vertical	Pass

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CAT M Band 19-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7282.792	-62.43	-13	-49.43	-69.7	4.21	11.48	Horizontal	Pass
2987.923	-64.54	-13	-51.54	-68.48	2.95	6.89	Horizontal	Pass
4983.987	-60.72	-13	-47.72	-66.59	4.25	10.12	Horizontal	Pass
9465.979	-60.35	-13	-47.35	-68.79	4.8	13.24	Vertical	Pass
3472.118	-64.17	-13	-51.17	-69.0	3.27	8.1	Vertical	Pass
7527.826	-60.09	-13	-47.09	-67.64	4.22	11.77	Vertical	Pass

CAT M Band 19-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
9514.293	-59.94	-13	-46.94	-68.34	4.83	13.23	Horizontal	Pass
1764.123	-63.92	-13	-50.92	-66.95	2.18	5.21	Horizontal	Pass
4410.75	-60.97	-13	-47.97	-66.39	3.88	9.3	Horizontal	Pass
7081.697	-57.33	-13	-44.33	-64.37	4.19	11.23	Vertical	Pass
1764.123	-65.9	-13	-52.9	-68.93	2.18	5.21	Vertical	Pass
3525.555	-62.39	-13	-49.39	-67.28	3.31	8.2	Vertical	Pass

CAT M Band 19- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7063.693	-58.98	-13	-45.98	-66.0	4.19	11.21	Horizontal	Pass
2898.032	-65.54	-13	-52.54	-69.34	2.9	6.7	Horizontal	Pass
5009.426	-60.66	-13	-47.66	-66.55	4.26	10.15	Horizontal	Pass
9490.104	-60.58	-13	-47.58	-69.0	4.82	13.24	Vertical	Pass
2861.381	-65.76	-13	-52.76	-69.5	2.88	6.62	Vertical	Pass
4996.69	-60.59	-13	-47.59	-66.47	4.26	10.14	Vertical	Pass

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CAT M Band 25-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
9441.913	-60.54	-13	-47.54	-68.99	4.79	13.24	Horizontal	Pass
2400.466	-66.39	-13	-53.39	-69.37	2.6	5.58	Horizontal	Pass
4958.678	-60.39	-13	-47.39	-66.24	4.23	10.08	Horizontal	Pass
9490.104	-60.28	-13	-47.28	-68.7	4.82	13.24	Vertical	Pass
2571.25	-67.16	-13	-54.16	-70.44	2.7	5.98	Vertical	Pass
4996.69	-60.69	-13	-47.69	-66.57	4.26	10.14	Vertical	Pass

CAT M Band 25-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
9465.979	-60.35	-13	-47.35	-68.79	4.8	13.24	Horizontal	Pass
3757.208	-48.6	-13	-35.6	-53.65	3.46	8.51	Horizontal	Pass
5631.725	-51.81	-13	-38.81	-58.03	4.23	10.45	Horizontal	Pass
9490.104	-59.77	-13	-46.77	-68.19	4.82	13.24	Vertical	Pass
3757.208	-52.67	-13	-39.67	-57.72	3.46	8.51	Vertical	Pass
5631.725	-56.08	-13	-43.08	-62.3	4.23	10.45	Vertical	Pass

CAT M Band 25- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
9465.979	-59.53	-13	-46.53	-67.97	4.8	13.24	Horizontal	Pass
2113.586	-67.12	-13	-54.12	-69.59	2.42	4.89	Horizontal	Pass
4366.067	-64.28	-13	-51.28	-69.68	3.85	9.25	Horizontal	Pass
6868.647	-61.5	-13	-48.5	-68.27	4.19	10.96	Vertical	Pass
2987.923	-65.21	-13	-52.21	-69.15	2.95	6.89	Vertical	Pass
4996.69	-60.62	-13	-47.62	-66.5	4.26	10.14	Vertical	Pass

CAT M Band 26-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7154.172	-62.06	-13	-49.06	-69.18	4.2	11.32	Horizontal	Pass
1899.278	-66.87	-13	-53.87	-69.46	2.28	4.87	Horizontal	Pass
5009.426	-60.96	-13	-47.96	-66.85	4.26	10.15	Horizontal	Pass
9490.104	-60.31	-13	-47.31	-68.73	4.82	13.24	Vertical	Pass
1993.395	-67.12	-13	-54.12	-69.41	2.35	4.64	Vertical	Pass
3543.55	-64.69	-13	-51.69	-69.6	3.32	8.23	Vertical	Pass

CAT M Band 26-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
6903.705	-61.66	-13	-48.66	-68.48	4.19	11.01	Horizontal	Pass
1659.574	-66.52	-13	-53.52	-69.89	2.11	5.48	Horizontal	Pass
3325.07	-59.94	-13	-46.94	-64.5	3.17	7.73	Horizontal	Pass
12461.22	-55.02	-13	-42.02	-62.93	5.32	13.23	Vertical	Pass
1663.803	-65.37	-13	-52.37	-68.73	2.11	5.47	Vertical	Pass
3507.652	-62.21	-13	-49.21	-67.09	3.3	8.18	Vertical	Pass

CAT M Band 26- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7009.956	-57.32	-13	-44.32	-64.27	4.19	11.14	Horizontal	Pass
5009.426	-60.79	-13	-47.79	-66.68	4.26	10.15	Horizontal	Pass
6868.647	-61.99	-13	-48.99	-68.76	4.19	10.96	Horizontal	Pass
9538.543	-60.48	-13	-47.48	-68.86	4.84	13.22	Vertical	Pass
2754.185	-66.41	-13	-53.41	-69.98	2.81	6.38	Vertical	Pass
4920.955	-60.72	-13	-47.72	-66.53	4.21	10.02	Vertical	Pass

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CAT M Band 66-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10860.83	-62.55	-13	-49.55	-70.71	5.07	13.23	Horizontal	Pass
2775.298	-65.54	-13	-52.54	-69.14	2.83	6.43	Horizontal	Pass
5895.771	-63.1	-13	-50.1	-69.33	4.22	10.45	Horizontal	Pass
8441.459	-62.43	-13	-49.43	-70.9	4.38	12.85	Vertical	Pass
2013.795	-67.73	-13	-54.73	-70.02	2.36	4.65	Vertical	Pass
3316.617	-64.77	-13	-51.77	-69.31	3.17	7.71	Vertical	Pass

CAT M Band 66-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5986.509	-63.14	-13	-50.14	-69.37	4.22	10.45	Horizontal	Pass
3489.84	-61.5	-13	-48.5	-66.36	3.28	8.14	Horizontal	Pass
4920.955	-59.49	-13	-46.49	-65.3	4.21	10.02	Horizontal	Pass
10723.47	-60.07	-13	-47.07	-68.18	5.08	13.19	Vertical	Pass
4288.958	-61.32	-13	-48.32	-66.68	3.8	9.16	Vertical	Pass
6974.358	-59.72	-13	-46.72	-66.63	4.19	11.1	Vertical	Pass

CAT M Band 66- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10723.47	-57.14	-13	-44.14	-65.25	5.08	13.19	Horizontal	Pass
1719.783	-67.67	-13	-54.67	-70.85	2.15	5.33	Horizontal	Pass
3419.491	-64.8	-13	-51.8	-69.53	3.24	7.97	Horizontal	Pass
7154.172	-62.0	-13	-49.0	-69.12	4.2	11.32	Vertical	Pass
3463.291	-63.85	-13	-50.85	-68.66	3.27	8.08	Vertical	Pass
7432.622	-61.34	-13	-48.34	-68.78	4.22	11.66	Vertical	Pass

CAT M Band 85-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10723.47	-62.53	-13	-49.53	-70.64	5.08	13.19	Horizontal	Pass
1711.05	-68.68	-13	-55.68	-71.88	2.15	5.35	Horizontal	Pass
2754.185	-66.42	-13	-53.42	-69.99	2.81	6.38	Horizontal	Pass
5420.742	-62.07	-13	-49.07	-68.23	4.24	10.4	Vertical	Pass
1800.416	-67.12	-13	-54.12	-70.03	2.21	5.12	Vertical	Pass
5986.509	-62.97	-13	-49.97	-69.2	4.22	10.45	Vertical	Pass

CAT M Band 85-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10400.86	-62.05	-13	-49.05	-70.07	5.08	13.1	Horizontal	Pass
1472.44	-66.71	-13	-53.71	-70.44	1.98	5.71	Horizontal	Pass
3534.541	-61.22	-13	-48.22	-66.13	3.31	8.22	Horizontal	Pass
11056.09	-60.4	-13	-47.4	-68.6	5.07	13.27	Vertical	Pass
1472.44	-67.69	-13	-54.69	-71.42	1.98	5.71	Vertical	Pass
3681.469	-61.98	-13	-48.98	-66.98	3.41	8.41	Vertical	Pass

CAT M Band 85- High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
10614.84	-59.94	-13	-46.94	-68.01	5.08	13.15	Horizontal	Pass
2400.466	-64.09	-13	-51.09	-67.07	2.6	5.58	Horizontal	Pass
5009.426	-60.61	-13	-47.61	-66.5	4.26	10.15	Horizontal	Pass
10860.83	-62.07	-13	-49.07	-70.23	5.07	13.23	Vertical	Pass
1702.361	-66.01	-13	-53.01	-69.24	2.14	5.37	Vertical	Pass
3112.129	-64.38	-13	-51.38	-68.55	3.03	7.2	Vertical	Pass

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Cat NB:

CAT NB Band 2-Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
2868.674	-65.47	-13	-52.47	-69.22	2.88	6.63	Horizontal	Pass
4996.69	-60.64	-13	-47.64	-66.52	4.26	10.14	Horizontal	Pass
8637.084	-61.67	-13	-48.67	-70.22	4.45	13.0	Horizontal	Pass
1728.561	-68.57	-13	-55.57	-71.71	2.16	5.3	Vertical	Pass
3525.555	-63.85	-13	-50.85	-68.74	3.31	8.2	Vertical	Pass
5865.832	-62.95	-13	-49.95	-69.17	4.23	10.45	Vertical	Pass

CAT NB Band 2- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
3747.656	-59.33	-13	-46.33	-64.38	3.45	8.5	Horizontal	Pass
6001.768	-57.97	-13	-44.97	-64.2	4.22	10.45	Horizontal	Pass
9490.104	-59.63	-13	-46.63	-68.05	4.82	13.24	Horizontal	Pass
3747.656	-58.26	-13	-45.26	-63.31	3.45	8.5	Vertical	Pass
5631.725	-56.47	-13	-43.47	-62.69	4.23	10.45	Vertical	Pass
7209.015	-51.16	-13	-38.16	-58.34	4.2	11.38	Vertical	Pass

CAT NB Band 2- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1764.123	-67.24	-13	-54.24	-70.27	2.18	5.21	Horizontal	Pass
4354.967	-63.97	-13	-50.97	-69.36	3.85	9.24	Horizontal	Pass
7394.878	-62.37	-13	-49.37	-69.77	4.21	11.61	Horizontal	Pass
3402.126	-64.22	-13	-51.22	-68.92	3.23	7.93	Vertical	Pass
6109.67	-63.3	-13	-50.3	-69.54	4.22	10.46	Vertical	Pass
10750.81	-62.5	-13	-49.5	-70.63	5.07	13.2	Vertical	Pass

CAT NB Band 4-Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
5009.426	-60.38	-13	-47.38	-66.27	4.26	10.15	Horizontal	Pass
7301.355	-62.24	-13	-49.24	-69.53	4.21	11.5	Horizontal	Pass
10860.83	-62.4	-13	-49.4	-70.56	5.07	13.23	Horizontal	Pass
2400.466	-65.15	-13	-52.15	-68.13	2.6	5.58	Vertical	Pass
3308.185	-64.52	-13	-51.52	-69.05	3.16	7.69	Vertical	Pass
5865.832	-63.1	-13	-50.1	-69.32	4.23	10.45	Vertical	Pass

CAT NB Band 4- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3463.291	-60.11	-13	-47.11	-64.92	3.27	8.08	Horizontal	Pass
5191.168	-55.98	-13	-42.98	-61.99	4.25	10.26	Horizontal	Pass
7063.693	-61.04	-13	-48.04	-68.06	4.19	11.21	Horizontal	Pass
3454.486	-59.01	-13	-46.01	-63.81	3.26	8.06	Vertical	Pass
7154.172	-61.08	-13	-48.08	-68.2	4.2	11.32	Vertical	Pass
11994.38	-60.29	-13	-47.29	-68.5	5.05	13.26	Vertical	Pass

CAT NB Band 4- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2597.564	-67.05	-13	-54.05	-70.36	2.72	6.03	Horizontal	Pass
3757.208	-64.19	-13	-51.19	-69.24	3.46	8.51	Horizontal	Pass
5986.509	-62.84	-13	-49.84	-69.07	4.22	10.45	Horizontal	Pass
1998.475	-65.5	-13	-52.5	-67.77	2.35	4.62	Vertical	Pass
2597.564	-65.65	-13	-52.65	-68.96	2.72	6.03	Vertical	Pass
10860.83	-61.91	-13	-48.91	-70.07	5.07	13.23	Vertical	Pass

CAT NB Band 5-Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1899.278	-67.68	-13	-54.68	-70.27	2.28	4.87	Horizontal	Pass
4399.537	-64.21	-13	-51.21	-69.62	3.88	9.29	Horizontal	Pass
7527.826	-60.51	-13	-47.51	-68.06	4.22	11.77	Horizontal	Pass
1702.361	-66.51	-13	-53.51	-69.74	2.14	5.37	Vertical	Pass
3333.545	-64.4	-13	-51.4	-68.97	3.18	7.75	Vertical	Pass
6017.064	-62.94	-13	-49.94	-69.17	4.22	10.45	Vertical	Pass

CAT NB Band 5- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3333.545	-52.95	-13	-39.95	-57.52	3.18	7.75	Horizontal	Pass
4809.499	-53.42	-13	-40.42	-59.14	4.14	9.86	Horizontal	Pass
9611.663	-55.49	-13	-42.49	-63.8	4.88	13.19	Horizontal	Pass
3333.545	-60.89	-13	-47.89	-65.46	3.18	7.75	Vertical	Pass
6903.705	-61.35	-13	-48.35	-68.17	4.19	11.01	Vertical	Pass
12397.94	-49.31	-13	-36.31	-57.27	5.28	13.24	Vertical	Pass

CAT NB Band 5- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2624.148	-67.39	-13	-54.39	-70.75	2.73	6.09	Horizontal	Pass
3588.939	-64.14	-13	-51.14	-69.08	3.35	8.29	Horizontal	Pass
7301.355	-62.04	-13	-49.04	-69.33	4.21	11.5	Horizontal	Pass
2097.507	-67.47	-13	-54.47	-69.91	2.41	4.85	Vertical	Pass
5986.509	-62.79	-13	-49.79	-69.02	4.22	10.45	Vertical	Pass
10805.68	-62.19	-13	-49.19	-70.33	5.07	13.21	Vertical	Pass

CAT NB Band 12-Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1983.272	-67.58	-13	-54.58	-69.9	2.34	4.66	Horizontal	Pass
3026.195	-64.82	-13	-51.82	-68.83	2.98	6.99	Horizontal	Pass
4366.067	-64.33	-13	-51.33	-69.73	3.85	9.25	Horizontal	Pass
1998.475	-66.76	-13	-53.76	-69.03	2.35	4.62	Vertical	Pass
3913.393	-64.11	-13	-51.11	-69.27	3.56	8.72	Vertical	Pass
7009.956	-61.62	-13	-48.62	-68.57	4.19	11.14	Vertical	Pass

CAT NB Band 12- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2108.213	-66.66	-13	-53.66	-69.12	2.42	4.88	Horizontal	Pass
3662.775	-63.82	-13	-50.82	-68.81	3.4	8.39	Horizontal	Pass
9157.857	-60.75	-13	-47.75	-69.32	4.65	13.22	Horizontal	Pass
2316.426	-66.48	-13	-53.48	-69.31	2.55	5.38	Vertical	Pass
4996.69	-59.95	-13	-46.95	-65.83	4.26	10.14	Vertical	Pass
11370.05	-61.19	-13	-48.19	-69.38	5.06	13.25	Vertical	Pass

CAT NB Band 12- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1800.416	-64.37	-13	-51.37	-67.28	2.21	5.12	Horizontal	Pass
3543.55	-64.03	-13	-51.03	-68.94	3.32	8.23	Horizontal	Pass
9393.966	-60.57	-13	-47.57	-69.03	4.77	13.23	Horizontal	Pass
2412.718	-66.7	-13	-53.7	-69.7	2.61	5.61	Vertical	Pass
4321.837	-64.22	-13	-51.22	-69.59	3.83	9.2	Vertical	Pass
7027.823	-61.63	-13	-48.63	-68.6	4.19	11.16	Vertical	Pass

CAT NB Band 13- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2218.323	-67.4	-13	-54.4	-70.05	2.49	5.14	Horizontal	Pass
5986.509	-63.04	-13	-50.04	-69.27	4.22	10.45	Horizontal	Pass
9251.58	-61.24	-13	-48.24	-69.77	4.7	13.23	Horizontal	Pass
2400.466	-63.7	-13	-50.7	-66.68	2.6	5.58	Vertical	Pass
4410.75	-64.14	-13	-51.14	-69.56	3.88	9.3	Vertical	Pass
7547.013	-62.41	-13	-49.41	-69.99	4.22	11.8	Vertical	Pass

CAT NB Band 13- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2003.569	-67.69	-13	-54.69	-69.97	2.35	4.63	Horizontal	Pass
5099.487	-60.76	-13	-47.76	-66.7	4.26	10.2	Horizontal	Pass
9490.104	-60.36	-13	-47.36	-68.78	4.82	13.24	Horizontal	Pass
2212.683	-67.25	-13	-54.25	-69.9	2.48	5.13	Vertical	Pass
3913.393	-61.48	-13	-48.48	-66.64	3.56	8.72	Vertical	Pass
9490.104	-60.54	-13	-47.54	-68.96	4.82	13.24	Vertical	Pass

CAT NB Band 13- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2545.202	-66.55	-13	-53.55	-69.78	2.69	5.92	Horizontal	Pass
4688.616	-62.92	-13	-49.92	-68.54	4.06	9.68	Horizontal	Pass
9490.104	-60.03	-13	-47.03	-68.45	4.82	13.24	Horizontal	Pass
2223.977	-66.84	-13	-53.84	-69.51	2.49	5.16	Vertical	Pass
3903.444	-64.03	-13	-51.03	-69.18	3.56	8.71	Vertical	Pass
6886.154	-61.38	-13	-48.38	-68.17	4.19	10.98	Vertical	Pass

CAT NB Band 19- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2400.466	-66.5	-13	-53.5	-69.48	2.6	5.58	Horizontal	Pass
6868.647	-61.77	-13	-48.77	-68.54	4.19	10.96	Horizontal	Pass
9490.104	-60.48	-13	-47.48	-68.9	4.82	13.24	Horizontal	Pass
1998.475	-67.85	-13	-54.85	-70.12	2.35	4.62	Vertical	Pass
4971.316	-60.44	-13	-47.44	-66.3	4.24	10.1	Vertical	Pass
9441.913	-60.07	-13	-47.07	-68.52	4.79	13.24	Vertical	Pass

CAT NB Band 19- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1764.123	-65.92	-13	-52.92	-68.95	2.18	5.21	Horizontal	Pass
3525.555	-64.26	-13	-51.26	-69.15	3.31	8.2	Horizontal	Pass
9514.293	-60.32	-13	-47.32	-68.72	4.83	13.23	Horizontal	Pass
2310.537	-67.15	-13	-54.15	-69.98	2.54	5.37	Vertical	Pass
5009.426	-60.56	-13	-47.56	-66.45	4.26	10.15	Vertical	Pass
9465.979	-60.5	-13	-47.5	-68.94	4.8	13.24	Vertical	Pass

CAT NB Band 19- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1899.278	-66.94	-13	-53.94	-69.53	2.28	4.87	Horizontal	Pass
4676.696	-63.07	-13	-50.07	-68.68	4.05	9.66	Horizontal	Pass
9019.05	-60.92	-13	-47.92	-69.55	4.58	13.21	Horizontal	Pass
1993.395	-67.75	-13	-54.75	-70.04	2.35	4.64	Vertical	Pass
3561.636	-64.06	-13	-51.06	-68.98	3.33	8.25	Vertical	Pass
6921.301	-62.26	-13	-49.26	-69.1	4.19	11.03	Vertical	Pass

CAT NB Band 25- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1998.475	-67.09	-13	-54.09	-69.36	2.35	4.62	Horizontal	Pass
3561.636	-64.04	-13	-51.04	-68.96	3.33	8.25	Horizontal	Pass
5703.861	-62.49	-13	-49.49	-68.71	4.23	10.45	Horizontal	Pass
1698.033	-65.73	-13	-52.73	-68.97	2.14	5.38	Vertical	Pass
2875.986	-65.12	-13	-52.12	-68.88	2.89	6.65	Vertical	Pass
4846.367	-62.23	-13	-49.23	-67.98	4.16	9.91	Vertical	Pass

CAT NB Band 25- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
3923.367	-58.74	-13	-45.74	-63.91	3.57	8.74	Horizontal	Pass
5603.126	-57.91	-13	-44.91	-64.12	4.24	10.45	Horizontal	Pass
9490.104	-59.77	-13	-46.77	-68.19	4.82	13.24	Horizontal	Pass
3757.208	-59.67	-13	-46.67	-64.72	3.46	8.51	Vertical	Pass
6001.768	-50.95	-13	-37.95	-57.18	4.22	10.45	Vertical	Pass
9465.979	-59.53	-13	-46.53	-67.97	4.8	13.24	Vertical	Pass

CAT NB Band 25- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1998.475	-67.78	-13	-54.78	-70.05	2.35	4.62	Horizontal	Pass
4971.316	-60.59	-13	-47.59	-66.45	4.24	10.1	Horizontal	Pass
6851.185	-61.62	-13	-48.62	-68.37	4.19	10.94	Horizontal	Pass
1800.416	-62.71	-13	-49.71	-65.62	2.21	5.12	Vertical	Pass
3472.118	-63.99	-13	-50.99	-68.82	3.27	8.1	Vertical	Pass
6851.185	-61.62	-13	-48.62	-68.37	4.19	10.94	Vertical	Pass

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CAT NB Band 26- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2218.323	-66.83	-13	-53.83	-69.48	2.49	5.14	Horizontal	Pass
3598.087	-63.79	-13	-50.79	-68.74	3.35	8.3	Horizontal	Pass
6868.647	-61.43	-13	-48.43	-68.2	4.19	10.96	Horizontal	Pass
2113.586	-67.06	-13	-54.06	-69.53	2.42	4.89	Vertical	Pass
4996.69	-60.56	-13	-47.56	-66.44	4.26	10.14	Vertical	Pass
7282.792	-61.48	-13	-48.48	-68.75	4.21	11.48	Vertical	Pass

CAT NB Band 26- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2229.645	-67.78	-13	-54.78	-70.46	2.49	5.17	Horizontal	Pass
4996.69	-60.54	-13	-47.54	-66.42	4.26	10.14	Horizontal	Pass
9514.293	-60.28	-13	-47.28	-68.68	4.83	13.23	Horizontal	Pass
2184.699	-68.06	-13	-55.06	-70.66	2.46	5.06	Vertical	Pass
5177.971	-60.66	-13	-47.66	-66.66	4.25	10.25	Vertical	Pass
9490.104	-60.1	-13	-47.1	-68.52	4.82	13.24	Vertical	Pass

CAT NB Band 26- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2124.374	-66.92	-13	-53.92	-69.41	2.43	4.92	Horizontal	Pass
4676.696	-61.23	-13	-48.23	-66.84	4.05	9.66	Horizontal	Pass
7009.956	-59.96	-13	-46.96	-66.91	4.19	11.14	Horizontal	Pass
2092.175	-67.12	-13	-54.12	-69.55	2.41	4.84	Vertical	Pass
3570.714	-63.94	-13	-50.94	-68.86	3.34	8.26	Vertical	Pass
5546.364	-62.24	-13	-49.24	-68.45	4.24	10.45	Vertical	Pass

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CAT NB Band 66- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1993.395	-67.79	-13	-54.79	-70.08	2.35	4.64	Horizontal	Pass
3316.617	-64.72	-13	-51.72	-69.26	3.17	7.71	Horizontal	Pass
4958.678	-60.75	-13	-47.75	-66.6	4.23	10.08	Horizontal	Pass
1750.702	-65.83	-13	-52.83	-68.9	2.18	5.25	Vertical	Pass
3903.444	-63.73	-13	-50.73	-68.88	3.56	8.71	Vertical	Pass
8593.224	-61.41	-13	-48.41	-69.95	4.43	12.97	Vertical	Pass

CAT NB Band 66- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2201.447	-67.04	-13	-54.04	-69.67	2.47	5.1	Horizontal	Pass
4920.955	-59.49	-13	-46.49	-65.3	4.21	10.02	Horizontal	Pass
10723.47	-58.07	-13	-45.07	-66.18	5.08	13.19	Horizontal	Pass
3049.394	-65.45	-13	-52.45	-69.5	2.99	7.04	Vertical	Pass
4288.958	-58.32	-13	-45.32	-63.68	3.8	9.16	Vertical	Pass
9465.979	-60.65	-13	-47.65	-69.09	4.8	13.24	Vertical	Pass

CAT NB Band 66- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2235.328	-66.86	-13	-53.86	-69.54	2.5	5.18	Horizontal	Pass
8593.224	-61.53	-13	-48.53	-70.07	4.43	12.97	Horizontal	Pass
10860.83	-62.11	-13	-49.11	-70.27	5.07	13.23	Horizontal	Pass
2400.466	-64.13	-13	-51.13	-67.11	2.6	5.58	Vertical	Pass
4676.696	-63.93	-13	-50.93	-69.54	4.05	9.66	Vertical	Pass
6851.185	-62.12	-13	-49.12	-68.87	4.19	10.94	Vertical	Pass

CAT NB Band 85- Low channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1875.258	-67.76	-13	-54.76	-70.43	2.26	4.93	Horizontal	Pass
3552.582	-64.01	-13	-51.01	-68.93	3.32	8.24	Horizontal	Pass
4996.69	-60.76	-13	-47.76	-66.64	4.26	10.14	Horizontal	Pass
2118.973	-67.15	-13	-54.15	-69.64	2.42	4.91	Vertical	Pass
3570.714	-63.87	-13	-50.87	-68.79	3.34	8.26	Vertical	Pass
4971.316	-60.6	-13	-47.6	-66.46	4.24	10.1	Vertical	Pass

CAT NB Band 85- Middle channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
2304.663	-67.38	-13	-54.38	-70.19	2.54	5.35	Horizontal	Pass
4983.987	-60.43	-13	-47.43	-66.3	4.25	10.12	Horizontal	Pass
9441.913	-60.2	-13	-47.2	-68.65	4.79	13.24	Horizontal	Pass
1472.44	-65.69	-13	-52.69	-69.42	1.98	5.71	Vertical	Pass
4958.678	-60.45	-13	-47.45	-66.3	4.23	10.08	Vertical	Pass
9490.104	-60.34	-13	-47.34	-68.76	4.82	13.24	Vertical	Pass

CAT NB Band 85- High channel, Modulation: QPSK, SCS: 15KHz, 1@0								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1998.475	-67.13	-13	-54.13	-69.4	2.35	4.62	Horizontal	Pass
4983.987	-60.12	-13	-47.12	-65.99	4.25	10.12	Horizontal	Pass
6903.705	-61.58	-13	-48.58	-68.4	4.19	11.01	Horizontal	Pass
1998.475	-66.51	-13	-53.51	-68.78	2.35	4.62	Vertical	Pass
3428.206	-63.84	-13	-50.84	-68.59	3.24	7.99	Vertical	Pass
6903.705	-61.58	-13	-48.58	-68.4	4.19	11.01	Vertical	Pass

Note: All modes have been tested and we found QPSK test mode has the worst test result. Only record the worst test result.

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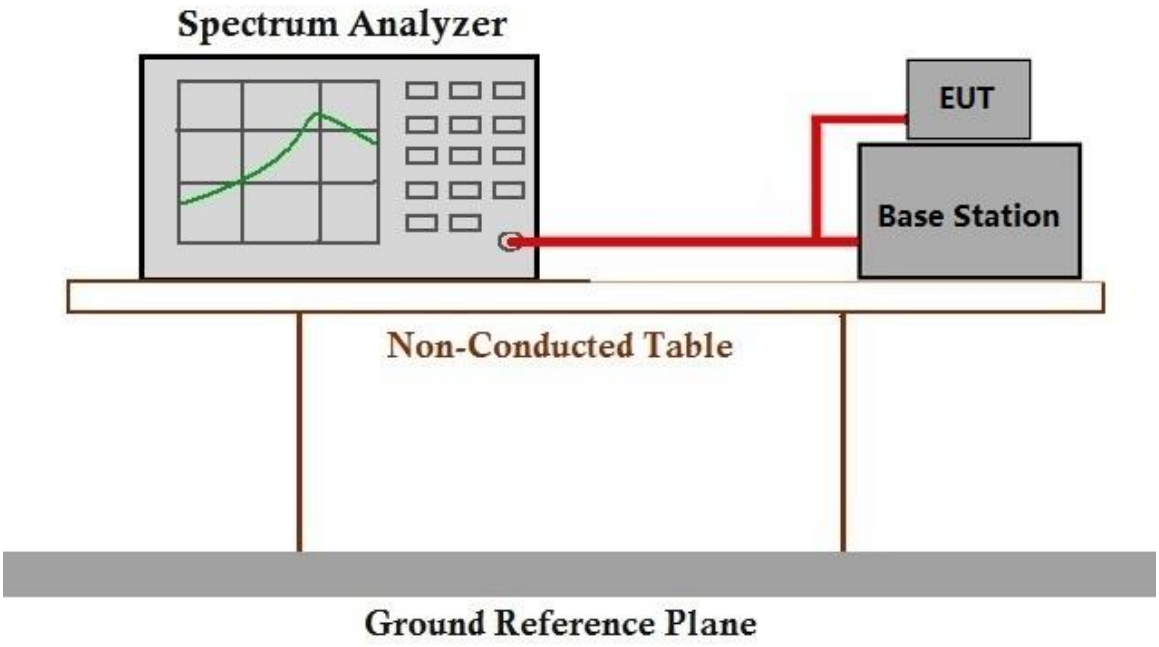
6.7 Frequency stability

Test Requirement: §2.1055,§22.355,§24.235,§27.54,§90.213
Test Method: ANSI C63.26-2015, KDB 971168 D01 v03r01
Limit: ≤ ±2.5ppm.

6.7.1 E.U.T. Operation

Operating Environment:
Temperature: 22 °C Humidity: 53.5 % RH Atmospheric Pressure: 1020 mbar
Test mode 30: Tx mode, Keep the EUT in transmitting mode.

6.7.2 Test Setup Diagram



6.7.3 Measurement Data

Please refer to Appendix for LTE Cat M & Cat NB FE test data.

7 Test Setup Photo

Refer to Appendix – WWAN Test Setup Photo for SZCR2404001564AT

8 EUT Constructional Details (EUT Photos)

Refer to Appendix – External and Internal Photos for SZCR2404001564AT

- End of the Report -

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