

FCC Radio Test Report

FCC ID: 2AJN7-TP00160AL

Report No. : BTL-FCCP-2-2311T076
Equipment : Notebook Computer
Model Name : TP00160AL
Brand Name : Lenovo
Applicant : LC Future Center
Address : 7F., No. 780, Beian Rd., Zhongshan Dist., Taipei City 104, Taiwan
Manufacturer : Lenovo PC HK Limited
Address : 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong, P.R. China

Radio Function : WCDMA Band II, LTE Band 2, 25

FCC Rule Part(s) : FCC CFR Title 47, Part 24, Subpart E

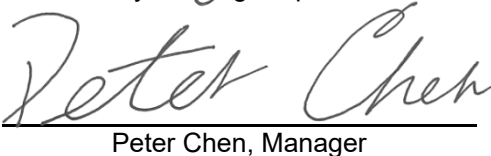
Date of Receipt : 2023/11/16
Date of Test : 2023/11/28 ~ 2023/12/7
Issued Date : 2024/1/15

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2311T076	R00	Original Report.	2024/1/15	Valid

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

Standard(s) Section	Description	Test Result	Judgement	Remark
2.1046 24.232(c)	Effective Isotropic Radiated Power	APPENDIX A	Pass	-----
24.232(d)	Peak To Average Ratio	NOTE (3)	Pass	-----
2.1049	Occupied Bandwidth	NOTE (3)	Pass	-----
2.1051 24.238(a)	Band Edge Measurements	NOTE (3)	Pass	-----
2.1051 24.238(a)	Conducted Spurious Emissions	NOTE (3)	Pass	-----
2.1055 24.235	Frequency Stability	NOTE (3)	Pass	-----
2.1053 24.238(a)	Radiated Spurious Emissions	APPENDIX B	Pass	-----

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.
- (3) This item is demonstrated to full compliance referring to the test report number SEWM2304000133RG01 of the integrated module (model name: EM061K-GL, FCC ID: XMR2023EM061KGL), according to KDB 996369 D02 Q1 a) 2).
- (4) The ac power lines conducted emissions and radiated emissions are tested to demonstrate full compliance of both module integrated into the host and host itself.

1.1 REFERENCE TEST GUIDANCE

ANSI C63.26-2015
 ANSI/TIA-603-E-2016
 FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

1.2 TEST FACILITY

The test locations stated below are under the TAF Accreditation Number 0659.

The test location(s) used to collect the test data in this report are:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
 (FCC DN: TW0659)

C05 SR10 SR11

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
 (FCC DN: TW0659)

C06 CB21 CB22

1.3 MEASUREMENT UNCERTAINTY

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

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

A. Radiated emissions test :

Test Site	Measurement Frequency Range	U,(dB)
CB21	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.21
	6 GHz ~ 18 GHz	5.51
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.4 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
Effective Isotropic Radiated Power	23.2 °C, 42 %	AC 120V	Jerry Chuang
Radiated Spurious Emissions	Refer to data	AC 120V	Mark Wang Kevin Zhen

2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Notebook Computer				
Model Name	TP00160AL				
Brand Name	Lenovo				
Model Difference	N/A				
Power Source	DC voltage supplied from External Power Supply. (Lenovo/ ADLX65YSDC2A)				
Power Rating	I/P: 100-240V~ 1.8A 50-60Hz O/P: 20.0VDC 3.25A 65.0W / 15.0VDC 3.0A / 9.0VDC 3.0A / 5.0VDC 3.0A 15.0W				
WWAN Module	Quectel / EM061K-GL				
Operation Frequency	Band	UL Frequency (MHz)	DL Frequency (MHz)		
	WCDMA II	1850 ~ 1910	1930 ~ 1990		
	LTE 2	1850 ~ 1910	1930 ~ 1990		
	LTE 25	1850 ~ 1915	1930 ~ 1995		
Maximum EIRP	Band	BW (MHz)	Mode	Power (W)	
	WCDMA II	-	-	0.101	
	LTE 2	1.4	-	QPSK	0.108
				16QAM	0.090
		3	-	QPSK	0.110
				16QAM	0.091
		5	-	QPSK	0.111
				16QAM	0.093
		10	-	QPSK	0.112
				16QAM	0.094
	15	-	QPSK	0.114	
			16QAM	0.095	
	LTE 25	1.4	-	QPSK	0.109
				16QAM	0.092
		3	-	QPSK	0.110
				16QAM	0.094
		5	-	QPSK	0.111
				16QAM	0.095
		10	-	QPSK	0.112
				16QAM	0.096
	15	-	QPSK	0.114	
			16QAM	0.097	
	20	-	QPSK	0.115	
			16QAM	0.098	
Test Model	TP00160AL				
Sample Status	Engineering Sample				
EUT Modification(s)	N/A				

NOTE:

- (1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

(2) Table for Filed Antenna:

Antenna	Manufacture	Parts Number	Type	Connector	Gain (dBi)	Note
Main	Luxshare-ICT	DC33022F20	PIFA	I-PEX	-2.96	WCDMA Band II
					-2.88	LTE Band 2
Aux	Luxshare-ICT	DC33022F20	PIFA	I-PEX	-	LTE Band 25
						RX only

Antenna	Manufacture	Parts Number	Type	Connector	Gain (dBi)	Note
Main	SPEEDWIRE	DC33022J60	PIFA	I-PEX	-2.96	WCDMA Band II
					-2.88	LTE Band 2
Aux	SPEEDWIRE	DC33022J60	PIFA	I-PEX	-	LTE Band 25
						RX only

(3) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2 TEST MODES

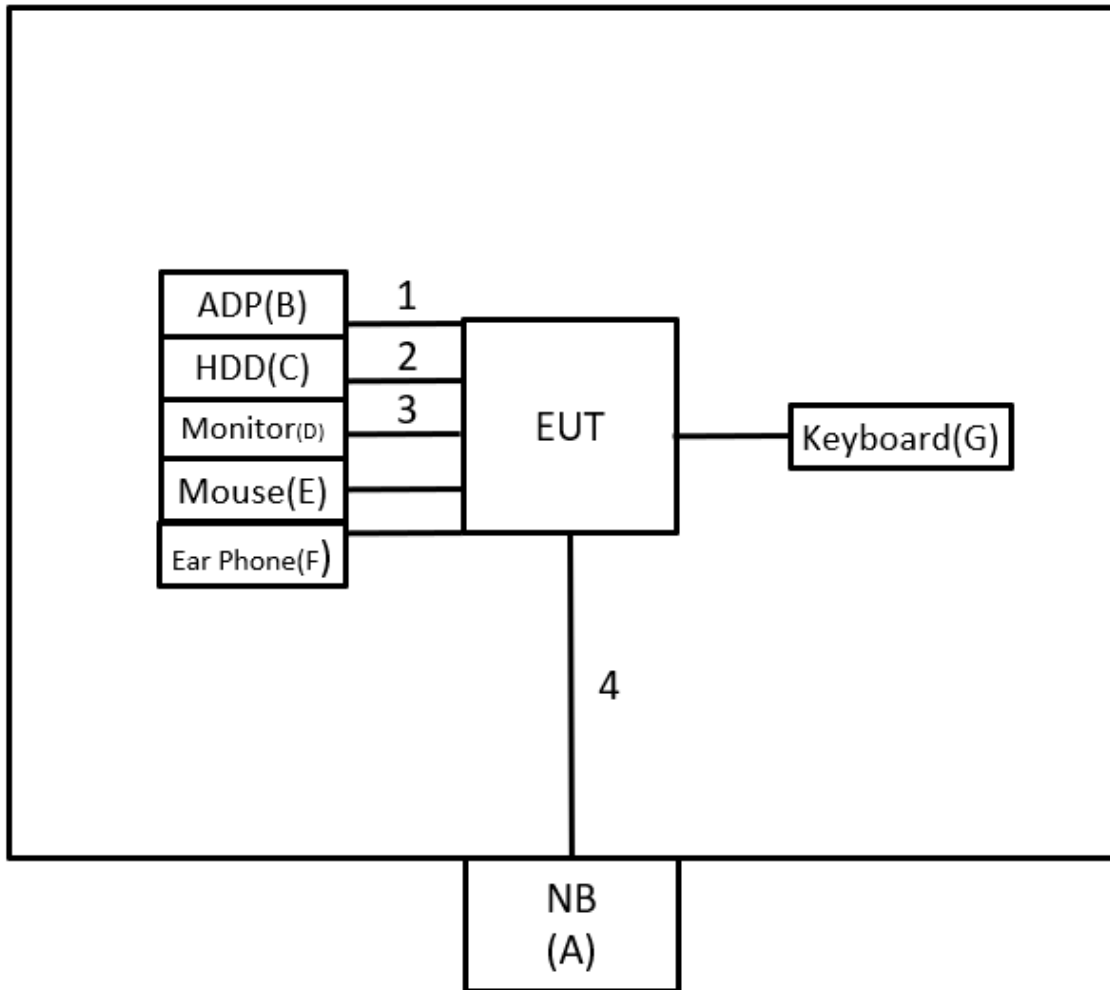
Test Items	Band	Test Mode	Note
Effective Radiated Power	WCDMA Band II	Refer to APPENDIX A	-
	LTE Band 2		
	LTE Band 25		
Radiated Spurious Emissions (Below 1G)	WCDMA Band II	TX Mode (CH 9538)	-
	LTE Band 2	TX Mode (CH 19100)	-
	LTE Band 25	TX Mode (CH 26590)	-
Radiated Spurious Emissions (Above 1G)	WCDMA Band II	TX Mode (CH 9262/9400/9538)	-
	LTE Band 2	TX Mode (CH 18700/18900/19100)	-
	LTE Band 25	TX Mode (CH 26140/26365/26590)	-
Radiated Spurious Emissions (Above 18G)	WCDMA Band II	TX Mode (CH 9538)	-
	LTE Band 2	TX Mode (CH 19100)	-
	LTE Band 25	TX Mode (CH 26590)	-

NOTE:

- (1) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.
- (2) For Radiated Spurious Emissions both QPSK and 16QAM are evaluated, but only the worst case (QPSK) is recorded.

2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	NB	HP	TPN-I119	N/A	Furnished by test lab.
B	ADP	Lenovo	ADLX65YSDC2A	N/A	Supplied by test requester.
C	USB 2.5" HDD	TOSIBA	XS700	483B60M9KQSS	Furnished by test lab.
D	27" 4K Monitor	DELL	U2720Q	CN-083VF-WSL 00-0B7-332L	Furnished by test lab.
E	Mouse	Lenovo	SM-8823	N/A	Furnished by test lab.
F	Ear Phone	HTC	N/A	N/A	Furnished by test lab.
G	Keyboard	Bloody	KB-8	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	0.9m	Power Cord	Supplied by test requester.
2	N/A	N/A	1m	Type C to USB Cable	Furnished by test lab.
3	N/A	N/A	1.8m	HDMI	Furnished by test lab.
4	N/A	N/A	10m	RJ45 Cable	Furnished by test lab.

3 EFFECTIVE ISOTROPICAL RADIATED POWER MEASUREMENT

3.1 LIMIT

Mobile / Portable station are limited to 2 watts e.i.r.p.

3.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.8.

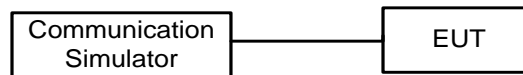
- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G
- c. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn.}$
- d. ERP can be calculated form EIRP by subtracting the gain of dipole, $ERP = EIPR - 2.15\text{dBi.}$
- e. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

3.3 DEVIATION FROM TEST STANDARD

No deviation.

3.4 TEST SETUP

Conducted Measurement:



3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

3.6 TEST RESULT

Please refer to the APPENDIX A.

4 RADIATED SPURIOUS EMISSIONS MEASUREMENT

4.1 LIMIT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. The emission limit equal to -13dBm.

NOTE:

(1) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level (dBm)		Correct Factor (dB/m)		Measurement Value (dBm)
-50.43	+	-2.11	=	-52.54

Measurement Value (dBm)		Limit Value (dBm)		Margin Level (dB)
-52.54	-	-13	=	-39.54

4.2 TEST PROCEDURE

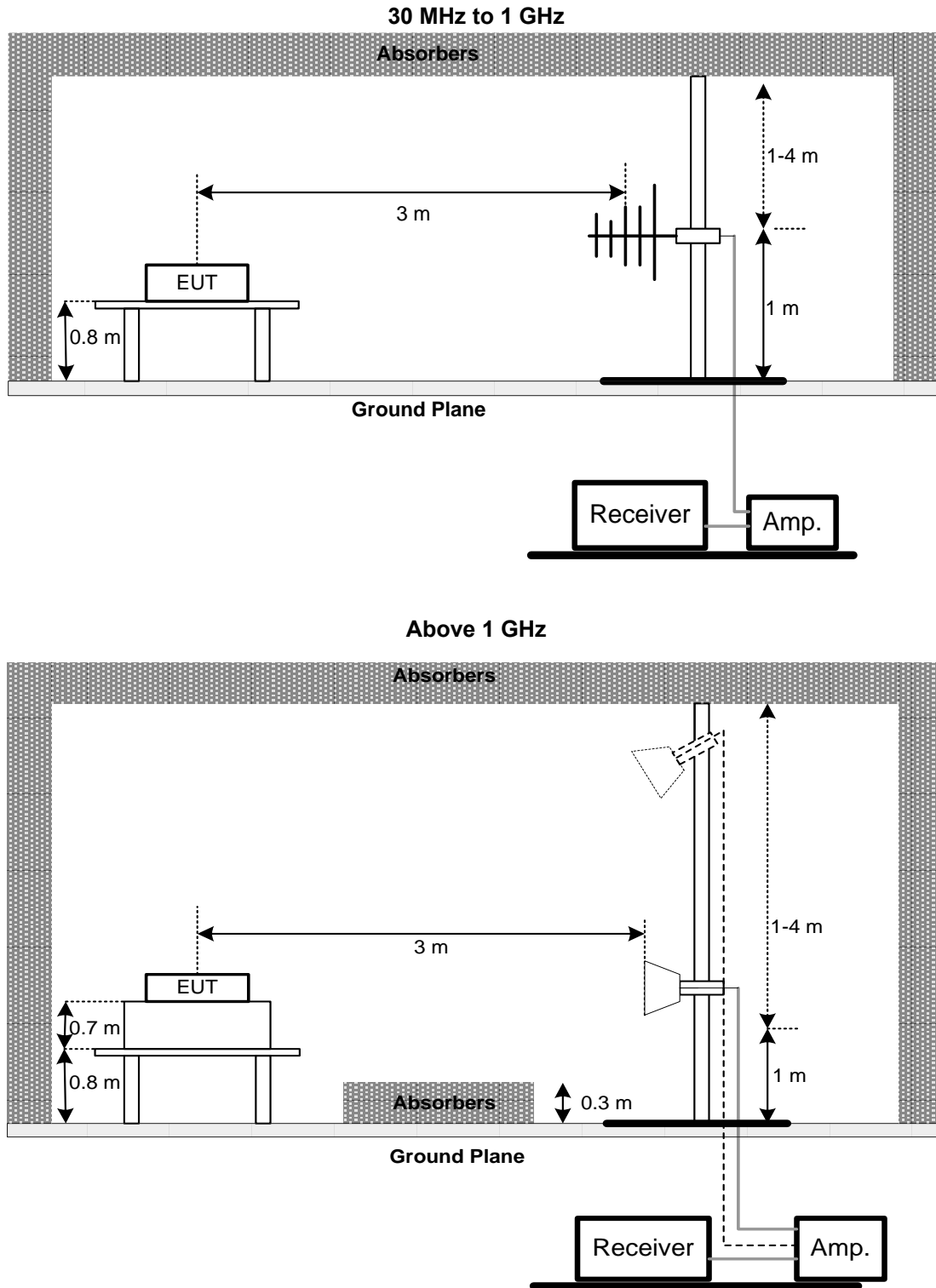
The testing follows FCC KDB 971168 v03r01 Section 6.2.

- f. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- g. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value " of step a. Record the power level of S.G
- h. EIRP = Output power level of S.G - TX cable loss + Antenna gain of substitution horn.
- i. ERP power can be calculated form EIRP power by subtracting the gain of dipole,
ERP power = EIRP power - 2.15 dBi.
- j. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz / 3 MHz.

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT

Please refer to the APPENDIX B.

5 LIST OF MEASURING EQUIPMENTS

Effective Isotropic Radiated Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2023/7/4	2024/7/3
2	Radio Communication Analyzer	ANRITSU	MT8820C	6201381608	2022/12/22	2023/12/21
3	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2023/11/22	2024/11/21

Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC330N	980850	2023/9/6	2024/9/5
2	Preamplifier	EMCI	EMC118A45SE	980819	2023/3/7	2024/3/6
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2023/9/21	2024/9/20
4	Test Cable	EMCI	EMC104-SM-1000	180809	2023/7/10	2024/7/9
5	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2023/3/14	2024/3/13
6	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2023/3/14	2024/3/13
7	EXA Signal Analyzer	keysight	N9020B	MY57120120	2023/2/24	2024/2/23
8	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2023/5/12	2024/5/11
9	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2023/5/12	2024/5/11
10	Log-bicon Antenna	Schwarzbeck	VULB9168	1369	2023/5/9	2024/5/8
11	6dB Attenuator	EMCI	EMCI-N-6-06	AT-06001	2023/5/9	2024/5/8
12	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2023/3/14	2024/3/13
13	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2023/3/14	2024/3/13
14	WIRELESS COMMUNICATION TEST SET	Agilent	E5515C	GB47390193	2023/7/4	2024/7/3
15	Radio Communication Analyzer	ANRITSU	MT8820C	6201381608	2022/12/22	2023/12/21
16	Radio Communication Test Station	ANRITSU	MT8821C	6262044728	2023/11/22	2024/11/21
17	Wideband Radio Communication Tester	R&S	CMW500	154121	2023/1/12	2024/1/11
18	Measurement Software	EZ	EZ EMC (Version NB-03A1-01)	N/A	N/A	N/A

Remark: "N/A" denotes no model name, no serial no. or no calibration specified.
All calibration period of equipment list is one year.

6 EUT TEST PHOTO

Please refer to document Appendix No.: TP-2311T076-FCCP-1 (APPENDIX-TEST PHOTOS).

7 EUT PHOTOS

Please refer to document Appendix No.: EP-2311T076-1 (APPENDIX-EUT PHOTOS).

APPENDIX A EFFECTIVE ISOTROPIC RADIATED POWER

WCDMA Band II Power:

Band	Mode	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
WCDMA Band II	Rel 99	9262/9662	1852.4	22.99	20.03	0.101
		9400/9800	1880.0	22.79	19.83	0.096
		9538/9938	1907.6	22.83	19.87	0.097

Band	Sub-test	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
HSDPA II	1	9262/9662	1852.4	22.78	19.82	0.096
		9400/9800	1880.0	22.61	19.65	0.092
		9538/9938	1907.6	22.68	19.72	0.094
	2	9262/9662	1852.4	22.28	19.32	0.086
		9400/9800	1880.0	22.11	19.15	0.082
		9538/9938	1907.6	22.18	19.22	0.084
	3	9262/9662	1852.4	21.78	18.82	0.076
		9400/9800	1880.0	21.61	18.65	0.073
		9538/9938	1907.6	21.68	18.72	0.074
	4	9262/9662	1852.4	21.78	18.82	0.076
		9400/9800	1880.0	21.61	18.65	0.073
		9538/9938	1907.6	21.68	18.72	0.074

Band	Sub-test	UL/DL Channel No.	Frequency(MHz)	Average power(dBm)	EIRP power (dBm)	EIRP power (W)
HSUPA II	1	9262/9662	1852.4	22.90	19.94	0.099
		9400/9800	1880.0	22.72	19.76	0.095
		9538/9938	1907.6	22.81	19.85	0.097
	2	9262/9662	1852.4	20.90	17.94	0.062
		9400/9800	1880.0	20.72	17.76	0.060
		9538/9938	1907.6	20.81	17.85	0.061
	3	9262/9662	1852.4	21.90	18.94	0.078
		9400/9800	1880.0	21.72	18.76	0.075
		9538/9938	1907.6	21.81	18.85	0.077
	4	9262/9662	1852.4	20.90	17.94	0.062
		9400/9800	1880.0	20.72	17.76	0.060
		9538/9938	1907.6	20.81	17.85	0.061
	5	9262/9662	1852.4	22.90	19.94	0.099
		9400/9800	1880.0	22.72	19.76	0.095
		9538/9938	1907.6	22.81	19.85	0.097

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

LTE Band 2 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
2	1.4	18607	1850.7	QPSK	1	0	0	22.94	19.98	0.100
					1	2	0	23.31	20.35	0.108
					1	5	0	22.87	19.91	0.098
					6	0	1	22.19	19.23	0.084
				16QAM	1	0	1	22.17	19.21	0.083
					1	2	1	22.28	19.32	0.086
		18900	1880.0	QPSK	1	2	0	23.07	20.11	0.103
					1	5	0	23.08	20.12	0.103
					6	0	1	22.27	19.31	0.085
					1	0	1	22.52	19.56	0.090
				16QAM	1	2	1	22.34	19.38	0.087
					1	5	1	22.38	19.42	0.087
	19193	1909.3	QPSK	6	0	2	21.27	18.31	0.068	
				1	0	0	23.11	20.15	0.104	
				1	2	0	23.14	20.18	0.104	
				1	5	0	22.83	19.87	0.097	
				6	0	1	22.29	19.33	0.086	
				1	0	1	22.41	19.45	0.088	
			16QAM	1	2	1	22.48	19.52	0.090	
				1	5	1	22.08	19.12	0.082	
				6	0	2	21.32	18.36	0.069	

NOTE:

(1) EIRP = Average power + Antenna gain.

(2) ERP = EIRP - 2.15.

 (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)	
2	3	18615	1851.5	QPSK	1	8	0	22.98	20.02	0.100	
					1	14	0	23.36	20.40	0.110	
					1	15	0	22.94	19.98	0.100	
				16QAM	15	6	1	22.23	19.27	0.085	
					1	8	1	22.22	19.26	0.084	
					1	14	1	22.34	19.38	0.087	
		18900	1880.0	QPSK	1880.0	1	15	1	21.99	19.03	0.080
						15	6	2	21.13	18.17	0.066
						1	8	0	23.21	20.25	0.106
				16QAM	1	14	0	23.12	20.16	0.104	
					1	15	0	23.13	20.17	0.104	
					15	6	1	22.33	19.37	0.086	
	19185	1908.5	QPSK	1908.5	1	8	1	22.57	19.61	0.091	
					1	14	1	22.40	19.44	0.088	
					1	15	1	22.44	19.48	0.089	
			16QAM	15	6	2	21.32	18.36	0.069		
				1	8	0	23.18	20.22	0.105		
				1	14	0	23.18	20.22	0.105		
			QPSK	1908.5	1	15	0	22.90	19.94	0.099	
					15	6	1	22.37	19.41	0.087	
					1	8	1	22.47	19.51	0.089	
			16QAM	1	14	1	22.52	19.56	0.090		
				1	15	1	22.12	19.16	0.082		
				15	6	2	21.38	18.42	0.070		

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10)} / 1000$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
2	5	18625	1852.5	QPSK	1	0	0	23.05	20.09	0.102
					1	12	0	23.42	20.46	0.111
					1	24	0	23.00	20.04	0.101
					25	0	1	22.28	19.32	0.086
				16QAM	1	0	1	22.29	19.33	0.086
					1	12	1	22.40	19.44	0.088
					1	24	1	22.07	19.11	0.081
					25	0	2	21.20	18.24	0.067
		18900	1880.0	QPSK	1	0	0	23.27	20.31	0.107
					1	12	0	23.19	20.23	0.105
					1	24	0	23.19	20.23	0.105
					25	0	1	22.37	19.41	0.087
				16QAM	1	0	1	22.63	19.67	0.093
					1	12	1	22.44	19.48	0.089
					1	24	1	22.50	19.54	0.090
					25	0	2	21.38	18.42	0.070
		19175	1907.5	QPSK	1	0	0	23.24	20.28	0.107
					1	12	0	23.22	20.26	0.106
					1	24	0	22.97	20.01	0.100
					25	0	1	22.42	19.46	0.088
				16QAM	1	0	1	22.52	19.56	0.090
					1	12	1	22.58	19.62	0.092
					1	24	1	22.20	19.24	0.084
					25	0	2	21.46	18.50	0.071

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10)} / 1000$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
2	10	18650	1855.0	QPSK	1	0	0	23.11	20.15	0.104
					1	24	0	23.46	20.50	0.112
					1	49	0	23.06	20.10	0.102
					50	0	1	22.33	19.37	0.086
				16QAM	1	0	1	22.36	19.40	0.087
					1	24	1	22.45	19.49	0.089
					1	49	1	22.14	19.18	0.083
					50	0	2	21.27	18.31	0.068
		18900	1880.0	QPSK	1	0	0	23.34	20.38	0.109
					1	24	0	23.24	20.28	0.107
					1	49	0	23.26	20.30	0.107
					50	0	1	22.42	19.46	0.088
				16QAM	1	0	1	22.69	19.73	0.094
					1	24	1	22.52	19.56	0.090
					1	49	1	22.55	19.59	0.091
					50	0	2	21.42	18.46	0.070
		19150	1905.0	QPSK	1	0	0	23.31	20.35	0.108
					1	24	0	23.28	20.32	0.108
					1	49	0	23.03	20.07	0.102
					50	0	1	22.47	19.51	0.089
				16QAM	1	0	1	22.57	19.61	0.091
					1	24	1	22.66	19.70	0.093
					1	49	1	22.25	19.29	0.085
					50	0	2	21.54	18.58	0.072

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
2	15	18675	1857.5	QPSK	1	0	0	23.15	20.19	0.104
					1	38	0	23.52	20.56	0.114
					1	74	0	23.13	20.17	0.104
					75	0	1	22.38	19.42	0.087
				16QAM	1	0	1	22.42	19.46	0.088
					1	38	1	22.50	19.54	0.090
					1	74	1	22.22	19.26	0.084
					75	0	2	21.34	18.38	0.069
		18900	1880.0	QPSK	1	0	0	23.41	20.45	0.111
					1	38	0	23.30	20.34	0.108
					1	74	0	23.33	20.37	0.109
					75	0	1	22.47	19.51	0.089
				16QAM	1	0	1	22.73	19.77	0.095
					1	38	1	22.59	19.63	0.092
					1	74	1	22.62	19.66	0.092
					100	0	2	21.48	18.52	0.071
		19125	1902.5	QPSK	1	0	0	23.38	20.42	0.110
					1	38	0	23.33	20.37	0.109
					1	74	0	23.11	20.15	0.104
					75	0	1	22.53	19.57	0.091
				16QAM	1	0	1	22.63	19.67	0.093
					1	38	1	22.72	19.76	0.095
					1	74	1	22.33	19.37	0.086
					75	0	2	21.60	18.64	0.073

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10)} / 1000$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
2	20	18700	1860.0	QPSK	1	0	0	23.21	20.25	0.106
					1	49	0	23.59	20.63	0.116
					1	99	0	23.20	20.24	0.106
					100	0	1	22.44	19.48	0.089
				16QAM	1	0	1	22.47	19.51	0.089
					1	49	1	22.56	19.60	0.091
					1	99	1	22.30	19.34	0.086
					100	0	2	21.39	18.43	0.070
		18900	1880.0	QPSK	1	0	0	23.45	20.49	0.112
					1	49	0	23.37	20.41	0.110
					1	99	0	23.40	20.44	0.111
					100	0	1	22.53	19.57	0.091
				16QAM	1	0	1	22.77	19.81	0.096
					1	49	1	22.63	19.67	0.093
					1	99	1	22.70	19.74	0.094
					100	0	2	21.54	18.58	0.072
		19100	1900.0	QPSK	1	0	0	23.45	20.49	0.112
					1	49	0	23.40	20.44	0.111
					1	99	0	23.15	20.19	0.104
					100	0	1	22.61	19.65	0.092
				16QAM	1	0	1	22.68	19.72	0.094
					1	49	1	22.77	19.81	0.096
					1	99	1	22.38	19.42	0.087
					100	0	2	21.65	18.69	0.074

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10)} / 1000$

LTE Band 25 Power:

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
25	1.4	26047	1850.7	QPSK	1	0	0	23.00	20.12	0.103
					1	2	0	23.07	20.19	0.104
					1	5	0	22.96	20.08	0.102
					6	0	1	22.22	19.34	0.086
				16QAM	1	0	1	22.28	19.40	0.087
					1	2	1	22.36	19.48	0.089
					1	5	1	22.23	19.35	0.086
					6	0	2	21.18	18.30	0.068
		26365	1882.5	QPSK	1	0	0	22.75	19.87	0.097
					1	2	0	22.71	19.83	0.096
					1	5	0	22.67	19.79	0.095
					6	0	1	22.18	19.30	0.085
				16QAM	1	0	1	21.10	18.22	0.066
					1	2	1	22.38	19.50	0.089
					1	5	1	22.23	19.35	0.086
					6	0	2	20.76	17.88	0.061
		26683	1914.3	QPSK	1	0	0	23.15	20.27	0.106
					1	2	0	23.24	20.36	0.109
					1	5	0	22.55	19.67	0.093
					6	0	1	22.33	19.45	0.088
				16QAM	1	0	1	22.53	19.65	0.092
					1	2	1	22.48	19.60	0.091
					1	5	1	21.85	18.97	0.079
					6	0	2	21.40	18.52	0.071

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10)} / 1000$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)	
25	3	26055	1851.5	QPSK	1	8	0	23.04	20.16	0.104	
					1	14	0	23.12	20.24	0.106	
					1	15	0	23.03	20.15	0.104	
				16QAM	15	6	1	22.26	19.38	0.087	
					1	8	1	22.33	19.45	0.088	
					1	14	1	22.42	19.54	0.090	
		26365	1882.5	QPSK	1	1	15	1	22.29	19.41	0.087
						15	6	2	21.24	18.36	0.069
						1	8	0	22.79	19.91	0.098
				16QAM	1	14	0	22.76	19.88	0.097	
					1	15	0	22.72	19.84	0.096	
					15	6	1	22.24	19.36	0.086	
	26675	1913.5	QPSK	1	1	8	1	21.15	18.27	0.067	
					1	14	1	22.44	19.56	0.090	
					1	15	1	22.29	19.41	0.087	
			16QAM	15	6	2	20.81	17.93	0.062		
				1	8	0	23.22	20.34	0.108		
				1	14	0	23.28	20.40	0.110		
			QPSK	1	1	15	0	22.62	19.74	0.094	
					15	6	1	22.41	19.53	0.090	
					1	8	1	22.59	19.71	0.094	
			16QAM	1	14	1	22.52	19.64	0.092		
				1	15	1	21.89	19.01	0.080		
				15	6	2	21.46	18.58	0.072		

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
25	5	26065	1852.5	QPSK	1	0	0	23.11	20.23	0.105
					1	12	0	23.18	20.30	0.107
					1	24	0	23.09	20.21	0.105
					25	0	1	22.31	19.43	0.088
				16QAM	1	0	1	22.40	19.52	0.090
					1	12	1	22.48	19.60	0.091
					1	24	1	22.37	19.49	0.089
					25	0	2	21.31	18.43	0.070
		26365	1882.5	QPSK	1	0	0	22.85	19.97	0.099
					1	12	0	22.83	19.95	0.099
					1	24	0	22.78	19.90	0.098
					25	0	1	22.28	19.40	0.087
				16QAM	1	0	1	21.21	18.33	0.068
					1	12	1	22.48	19.60	0.091
					1	24	1	22.35	19.47	0.089
					25	0	2	20.87	17.99	0.063
		26665	1912.5	QPSK	1	0	0	23.28	20.40	0.110
					1	12	0	23.32	20.44	0.111
					1	24	0	22.69	19.81	0.096
					25	0	1	22.46	19.58	0.091
				16QAM	1	0	1	22.64	19.76	0.095
					1	12	1	22.58	19.70	0.093
					1	24	1	21.97	19.09	0.081
					25	0	2	21.54	18.66	0.073

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
25	10	26090	1855.0	QPSK	1	0	0	23.17	20.29	0.107
					1	24	0	23.22	20.34	0.108
					1	49	0	23.15	20.27	0.106
					50	0	1	22.36	19.48	0.089
				16QAM	1	0	1	22.47	19.59	0.091
					1	24	1	22.53	19.65	0.092
					1	49	1	22.44	19.56	0.090
					50	0	2	21.38	18.50	0.071
		26365	1882.5	QPSK	1	0	0	22.92	20.04	0.101
					1	24	0	22.88	20.00	0.100
					1	49	0	22.85	19.97	0.099
					50	0	1	22.33	19.45	0.088
				16QAM	1	0	1	21.27	18.39	0.069
					1	24	1	22.56	19.68	0.093
					1	49	1	22.40	19.52	0.090
					50	0	2	20.91	18.03	0.064
		26640	1910.0	QPSK	1	0	0	23.35	20.47	0.111
					1	24	0	23.38	20.50	0.112
					1	49	0	22.75	19.87	0.097
					50	0	1	22.51	19.63	0.092
				16QAM	1	0	1	22.69	19.81	0.096
					1	24	1	22.66	19.78	0.095
					1	49	1	22.02	19.14	0.082
					50	0	2	21.62	18.74	0.075

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10) / 1000}$

Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)		
25	15	26115	1857.5	QPSK	1	0	0	23.21	20.33	0.108		
					1	38	0	23.28	20.40	0.110		
					1	74	0	23.22	20.34	0.108		
				16QAM	75	0	1	22.41	19.53	0.090		
					1	0	1	22.53	19.65	0.092		
					1	38	1	22.58	19.70	0.093		
		26365	1882.5	QPSK	1882.5	QPSK	1	0	0	22.99	20.11	0.103
							1	38	0	22.94	20.06	0.101
							1	74	0	22.92	20.04	0.101
				16QAM	75	0	1	22.38	19.50	0.089		
					1	0	1	21.31	18.43	0.070		
					1	38	1	22.63	19.75	0.094		
	26615	1907.5	QPSK	1907.5	QPSK	1	0	0	22.47	19.59	0.091	
						1	74	1	22.47	19.59	0.091	
						100	0	2	20.97	18.09	0.064	
			16QAM	1	0	0	23.42	20.54	0.113			
				1	38	0	23.43	20.55	0.114			
				1	74	0	22.83	19.95	0.099			
	75	0	1	22.57	19.69	0.093						
	1	0	1	22.75	19.87	0.097						
	1	38	1	22.72	19.84	0.096						
1	74	1	22.10	19.22	0.084							
75	0	2	21.68	18.80	0.076							

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) $P(W) = 1 W \cdot 10^{(P(dBm) / 10)} / 1000$

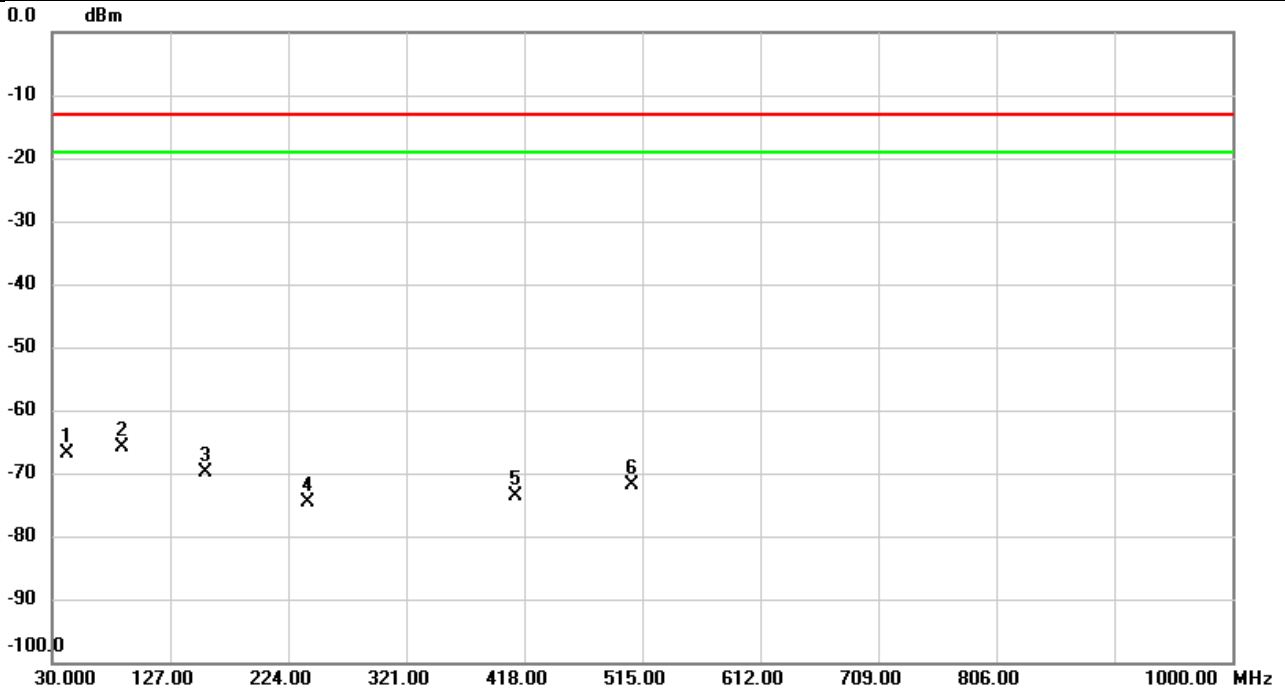
Band	BW (MHz)	Channel	Frequency (MHz)	Mode	UL RB Allocation	UL RB Offset	MPR	Average power (dBm)	EIRP power (dBm)	EIRP power (W)
25	20	26140	1860.0	QPSK	1	0	0	23.27	20.39	0.109
					1	49	0	23.35	20.47	0.111
					1	99	0	23.29	20.41	0.110
					100	0	1	22.47	19.59	0.091
				16QAM	1	0	1	22.58	19.70	0.093
					1	49	1	22.64	19.76	0.095
					1	99	1	22.60	19.72	0.094
					100	0	2	21.50	18.62	0.073
		26365	1882.5	QPSK	1	0	0	23.03	20.15	0.104
					1	49	0	23.01	20.13	0.103
					1	99	0	22.99	20.11	0.103
					100	0	1	22.44	19.56	0.090
				16QAM	1	0	1	22.50	19.62	0.092
					1	49	1	22.67	19.79	0.095
					1	99	1	22.55	19.67	0.093
					100	0	2	21.03	18.15	0.065
		26590	1905.0	QPSK	1	0	0	23.49	20.61	0.115
					1	49	0	23.50	20.62	0.115
					1	99	0	22.87	19.99	0.100
					100	0	1	22.65	19.77	0.095
				16QAM	1	0	1	22.80	19.92	0.098
					1	49	1	22.77	19.89	0.097
					1	99	1	22.15	19.27	0.085
					100	0	2	21.73	18.85	0.077

NOTE:

- (1) EIRP = Average power + Antenna gain.
- (2) ERP = EIRP - 2.15.
- (3) P(W) = $1 \text{ W} \cdot 10^{(P(\text{dBm}) / 10)} / 1000$

APPENDIX B RADIATED SPURIOUS EMISSIONS

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9538	Polarization	Vertical
Temp	23°C	Hum.	56%

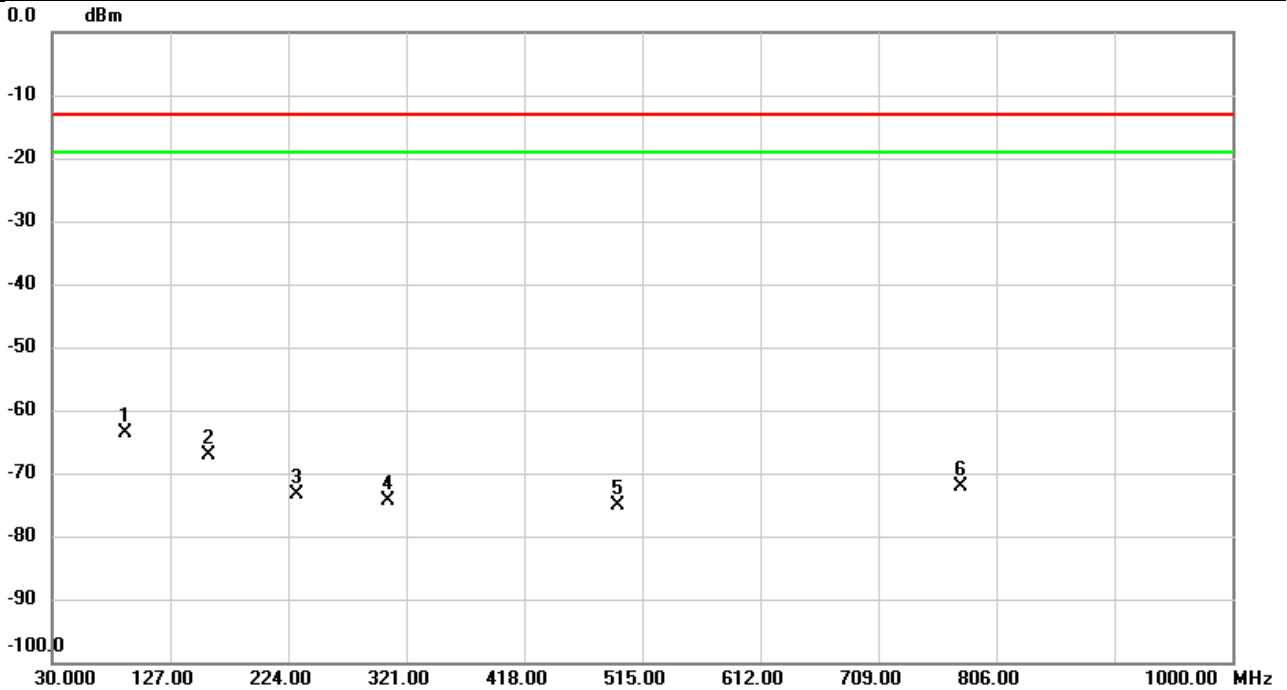


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		42.7070	-58.32	-8.46	-66.78	-13.00	-53.78	peak	
2	*	87.5857	-60.17	-5.69	-65.86	-13.00	-52.86	peak	
3		156.3263	-67.45	-2.36	-69.81	-13.00	-56.81	peak	
4		240.4900	-72.37	-2.37	-74.74	-13.00	-61.74	peak	
5		410.6280	-71.60	-2.06	-73.66	-13.00	-60.66	peak	
6		506.1730	-72.28	0.34	-71.94	-13.00	-58.94	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9538	Polarization	Horizontal
Temp	23°C	Hum.	56%

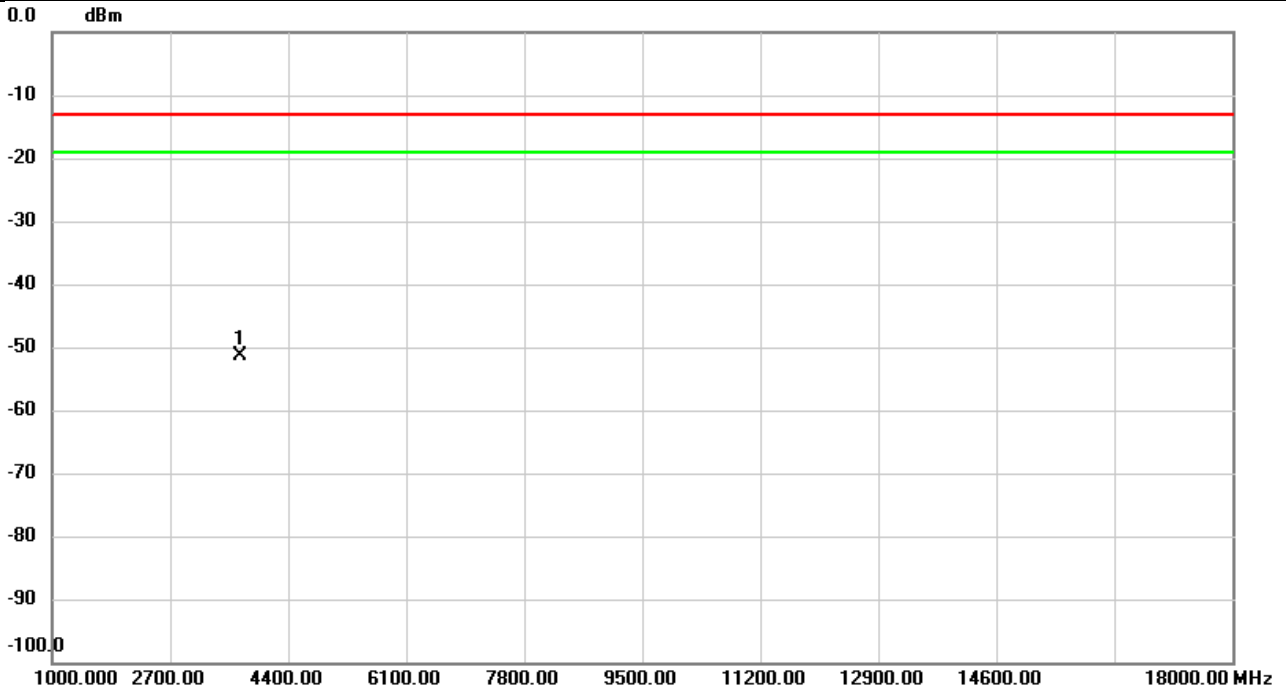


No.	Mk.	Freq. (MHz)	Reading Level (dBm)	Correct Factor (dB)	Measurement (dBm)	Limit (dBm)	Over (dB)	Detector	Comment
1	*	89.7520	-55.31	-8.33	-63.64	-13.00	-50.64	peak	
2		158.2017	-61.10	-5.98	-67.08	-13.00	-54.08	peak	
3		231.5660	-65.42	-7.92	-73.34	-13.00	-60.34	peak	
4		306.5470	-68.62	-5.65	-74.27	-13.00	-61.27	peak	
5		495.3090	-73.58	-1.60	-75.18	-13.00	-62.18	peak	
6		776.8677	-75.91	3.67	-72.24	-13.00	-59.24	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9262	Polarization	Vertical
Temp	23°C	Hum.	56%

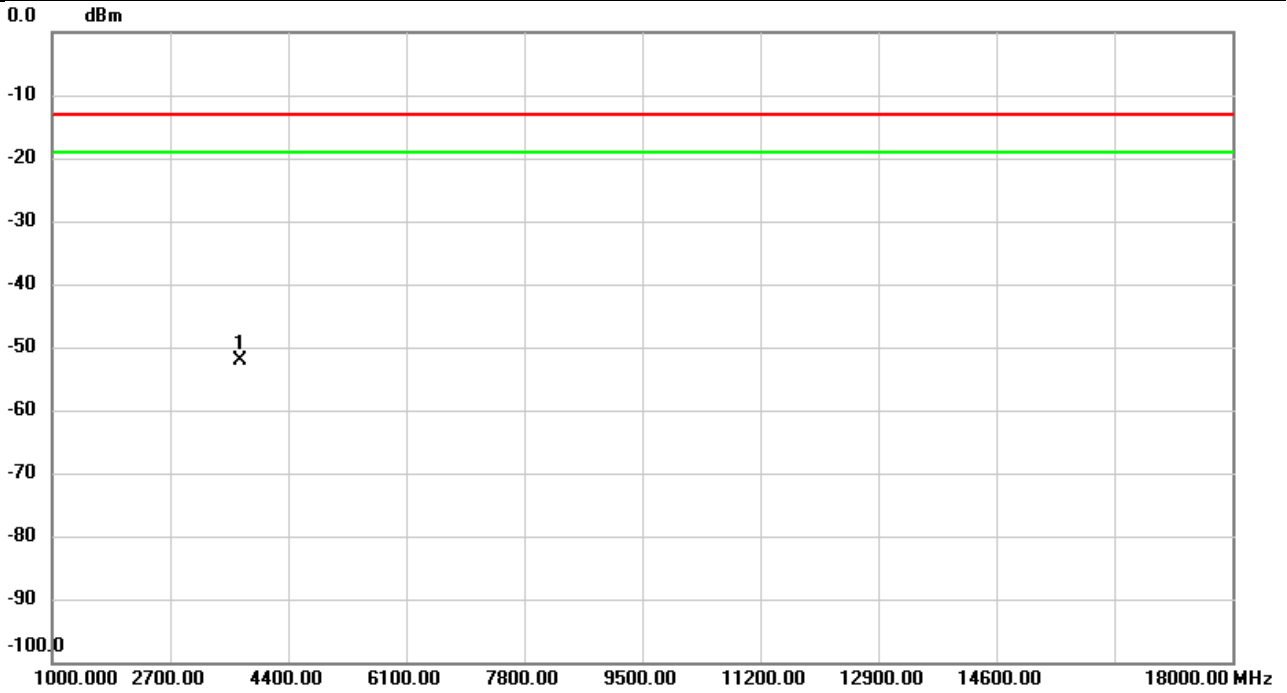


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	3704.800	-63.08	11.59	-51.49	-13.00	-38.49	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9262	Polarization	Horizontal
Temp	23°C	Hum.	56%

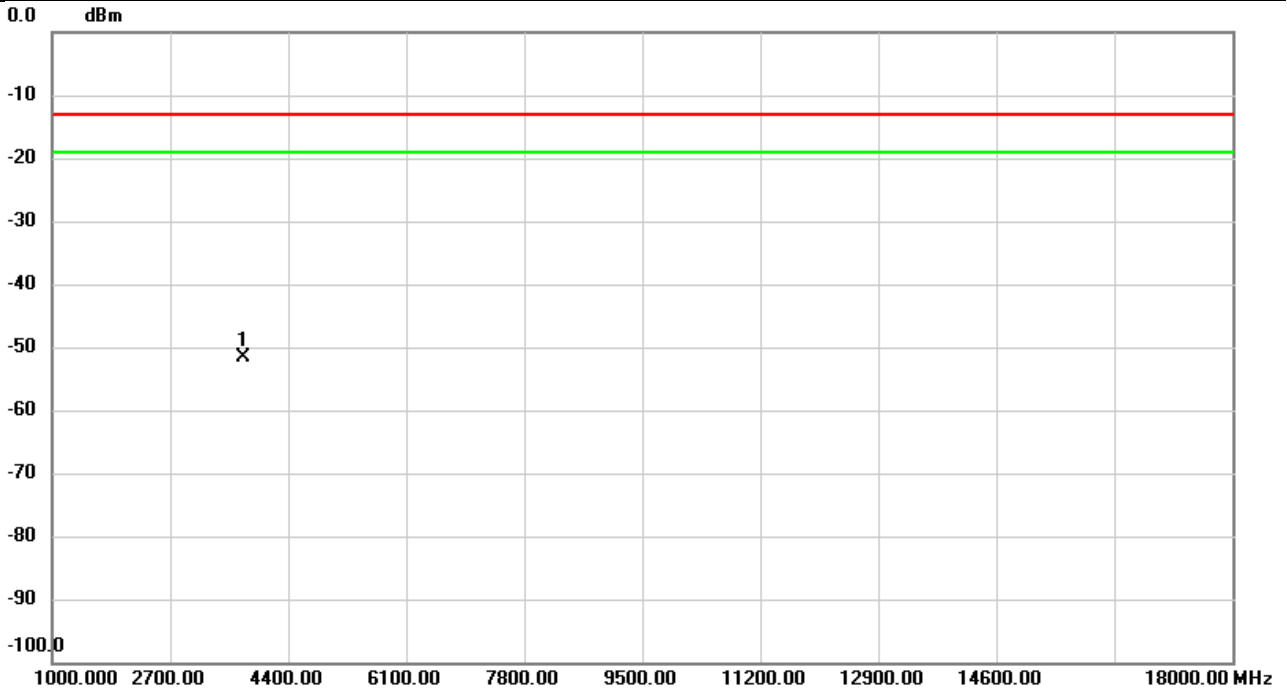


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	3704.800	-63.36	11.22	-52.14	-13.00	-39.14	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9400	Polarization	Vertical
Temp	23°C	Hum.	56%

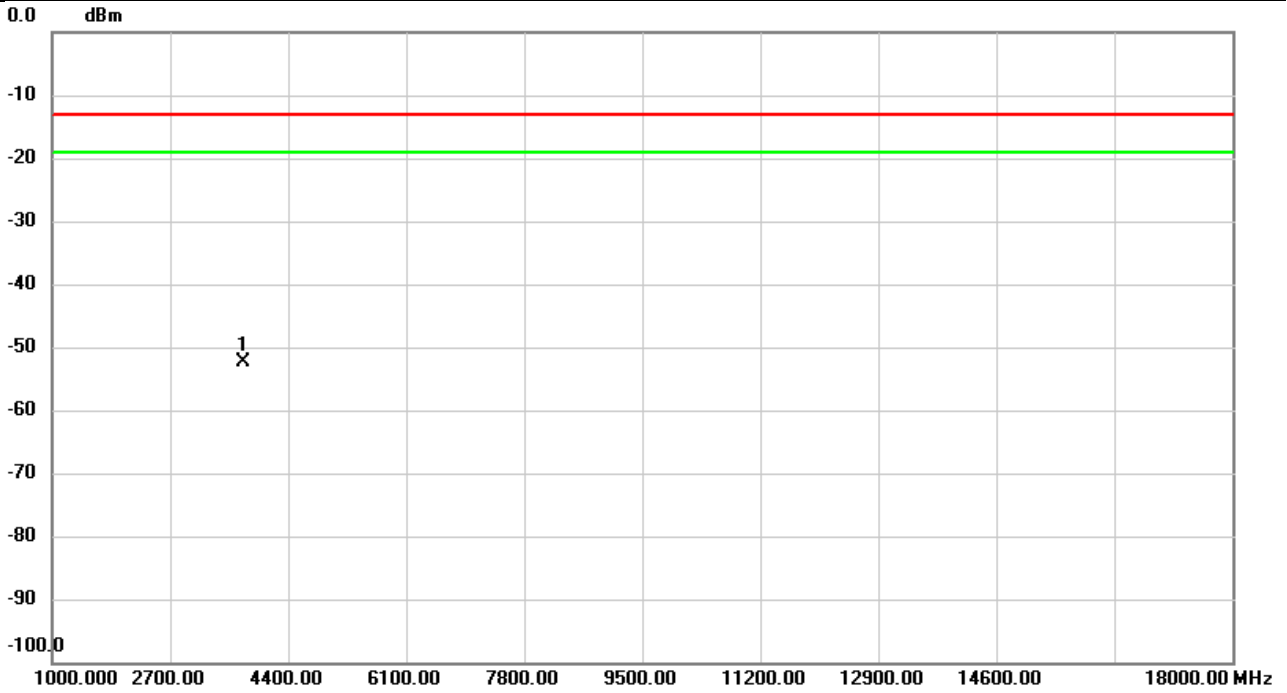


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	3760.000	-63.03	11.44	-51.59	-13.00	-38.59	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9400	Polarization	Horizontal
Temp	23°C	Hum.	56%

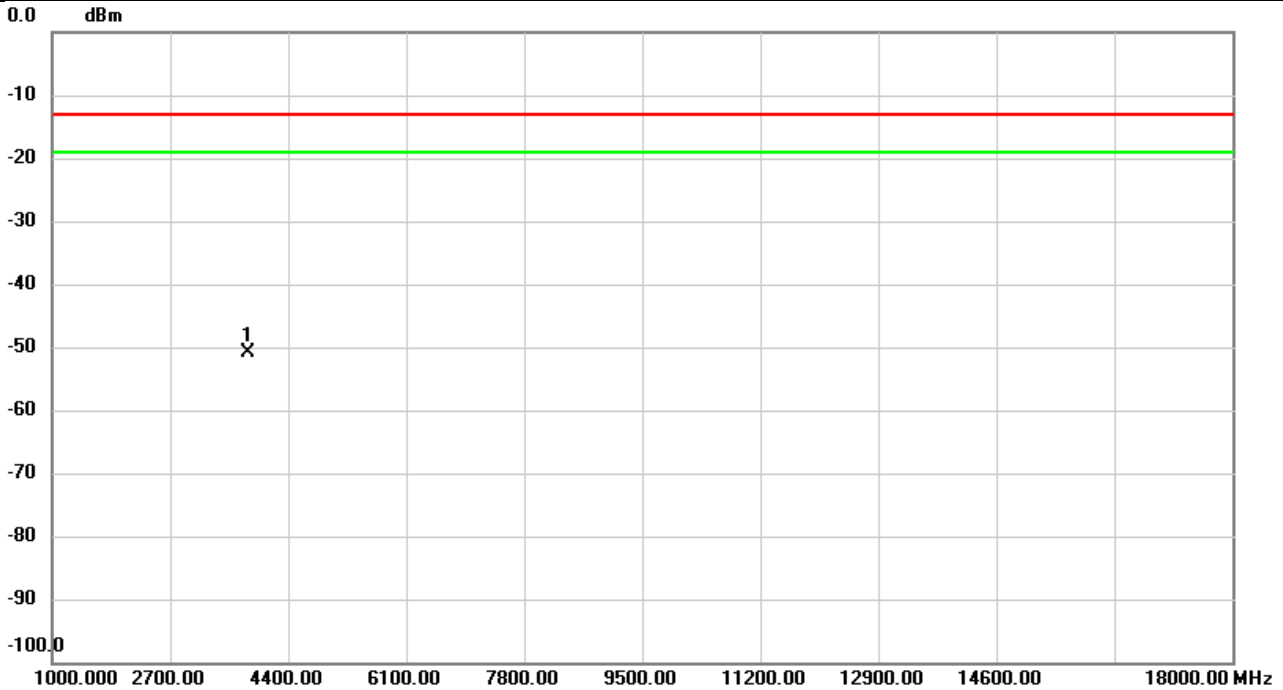


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	3760.000	-63.79	11.31	-52.48	-13.00	-39.48	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9538	Polarization	Vertical
Temp	23°C	Hum.	56%

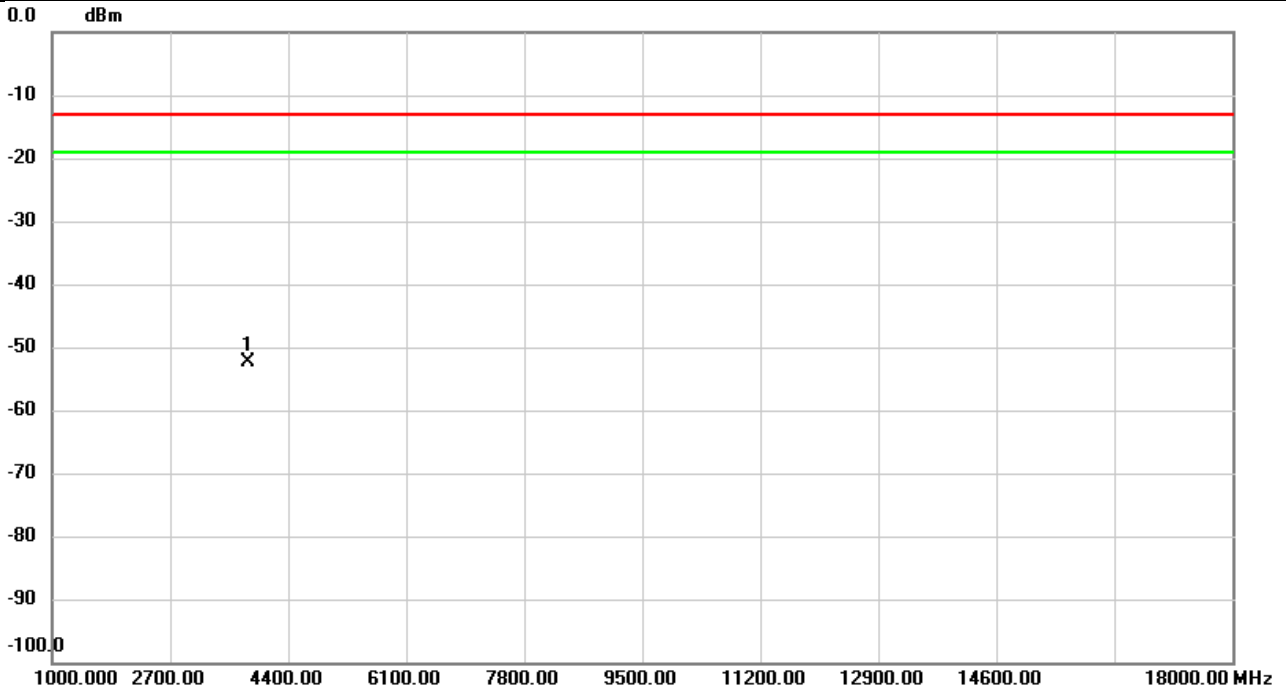


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	3814.000	-62.41	11.66	-50.75	-13.00	-37.75	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/29
Test Channel	CH9538	Polarization	Horizontal
Temp	23°C	Hum.	56%

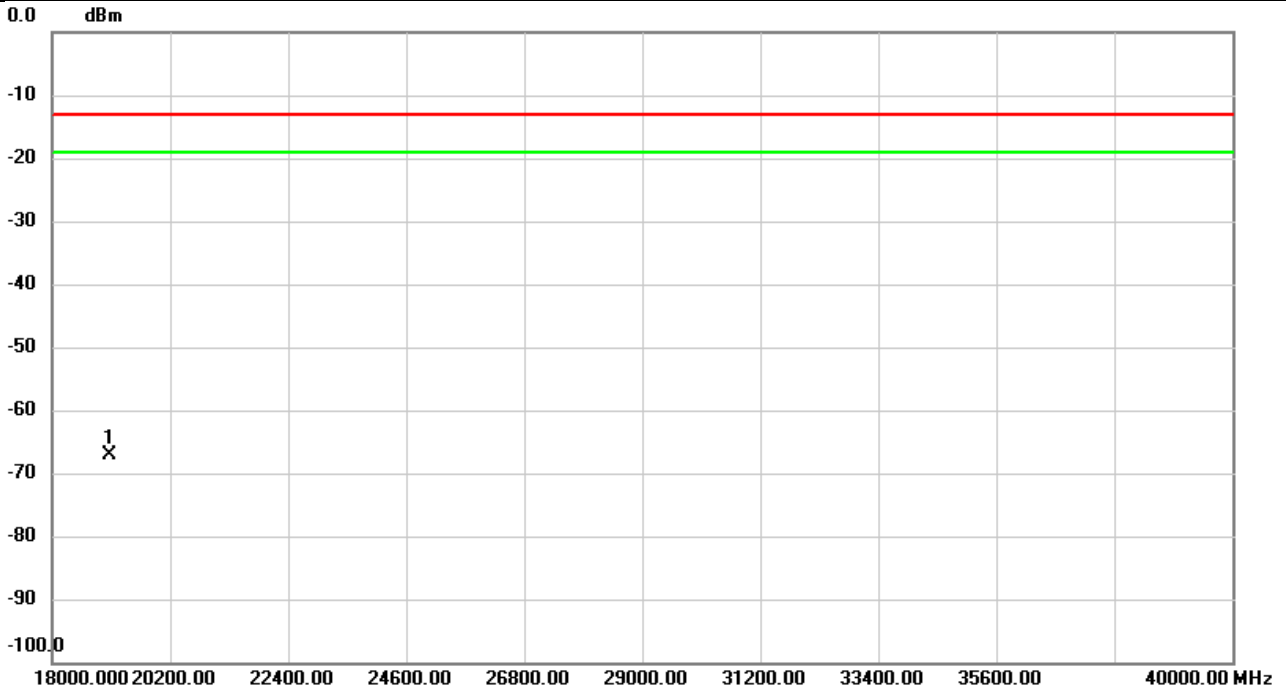


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	3814.000	-64.00	11.71	-52.29	-13.00	-39.29	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/30
Test Channel	CH9538	Polarization	Vertical
Temp	22°C	Hum.	59%

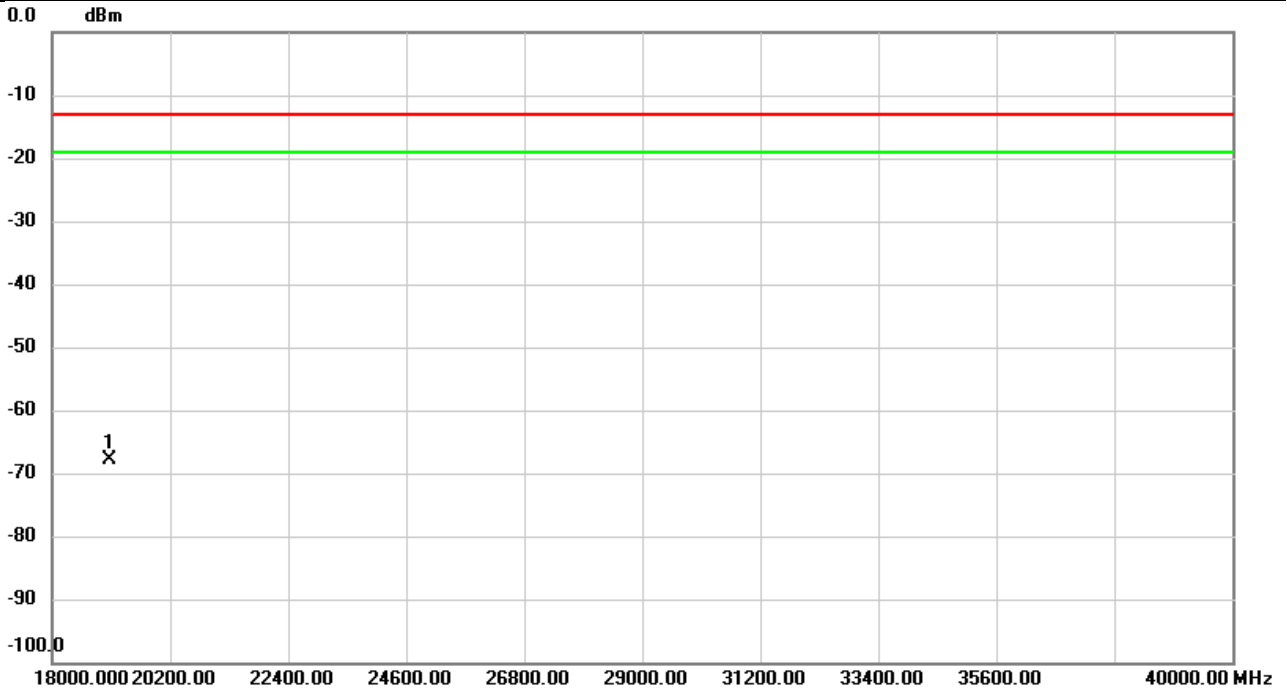


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	19070.00	-60.02	-7.01	-67.03	-13.00	-54.03	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	WCDMA Band II	Test Date	2023/11/30
Test Channel	CH9538	Polarization	Horizontal
Temp	22°C	Hum.	59%

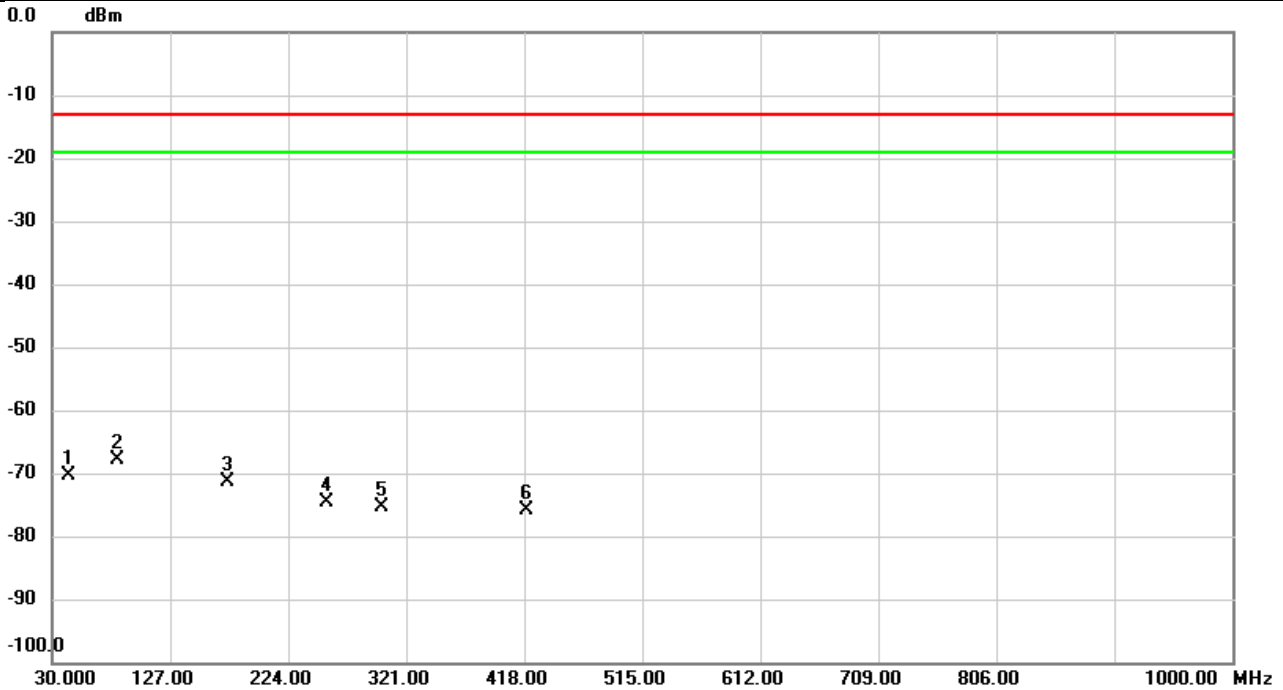


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	19070.00	-60.96	-7.01	-67.97	-13.00	-54.97	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/29
Test Channel	CH19100	Polarization	Vertical
Temp	23°C	Hum.	56%

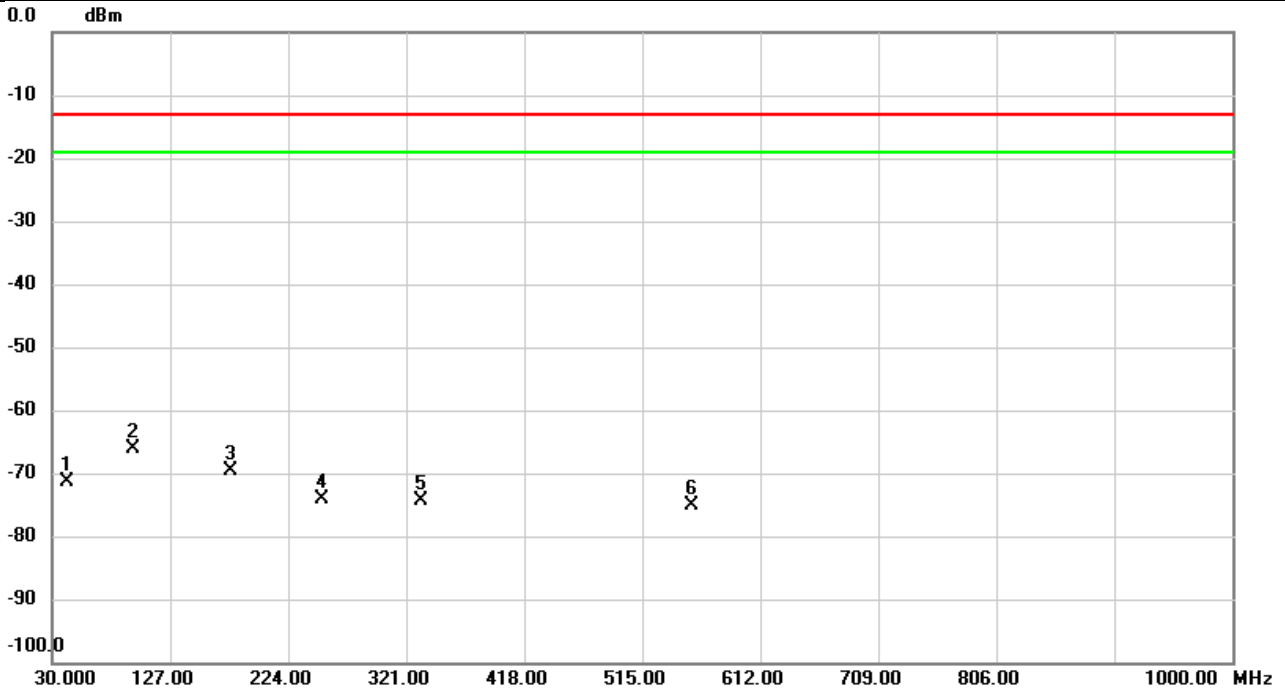


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1		43.0627	-61.91	-8.47	-70.38	-13.00	-57.38	peak	
2	*	84.1583	-62.10	-5.86	-67.96	-13.00	-54.96	peak	
3		173.9803	-69.07	-2.20	-71.27	-13.00	-58.27	peak	
4		255.6867	-71.51	-3.01	-74.52	-13.00	-61.52	peak	
5		301.1797	-72.02	-3.29	-75.31	-13.00	-62.31	peak	
6		419.7460	-74.06	-1.90	-75.96	-13.00	-62.96	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/29
Test Channel	CH19100	Polarization	Horizontal
Temp	23°C	Hum.	56%

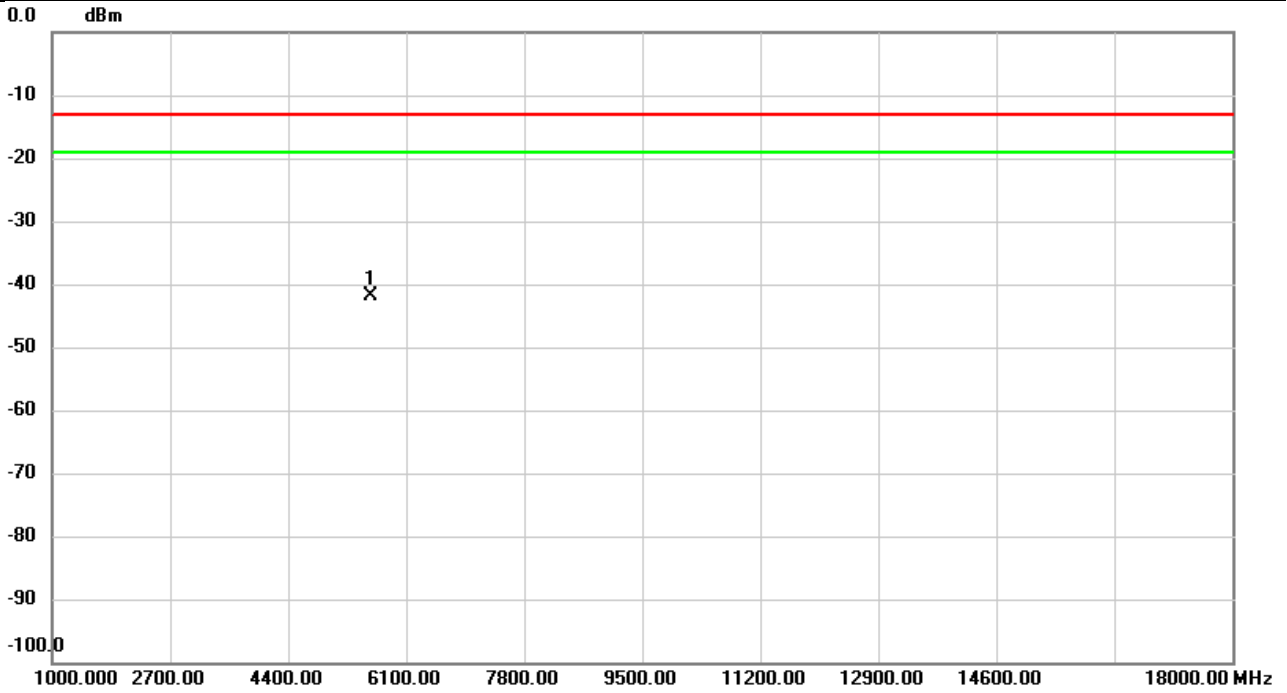


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1		42.4160	-72.94	1.55	-71.39	-13.00	-58.39	peak	
2	*	96.9300	-58.19	-7.98	-66.17	-13.00	-53.17	peak	
3		177.3430	-63.25	-6.33	-69.58	-13.00	-56.58	peak	
4		252.0330	-66.08	-7.92	-74.00	-13.00	-61.00	peak	
5		333.0603	-70.58	-3.81	-74.39	-13.00	-61.39	peak	
6		555.2550	-74.49	-0.59	-75.08	-13.00	-62.08	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH18700	Polarization	Vertical
Temp	22°C	Hum.	56%

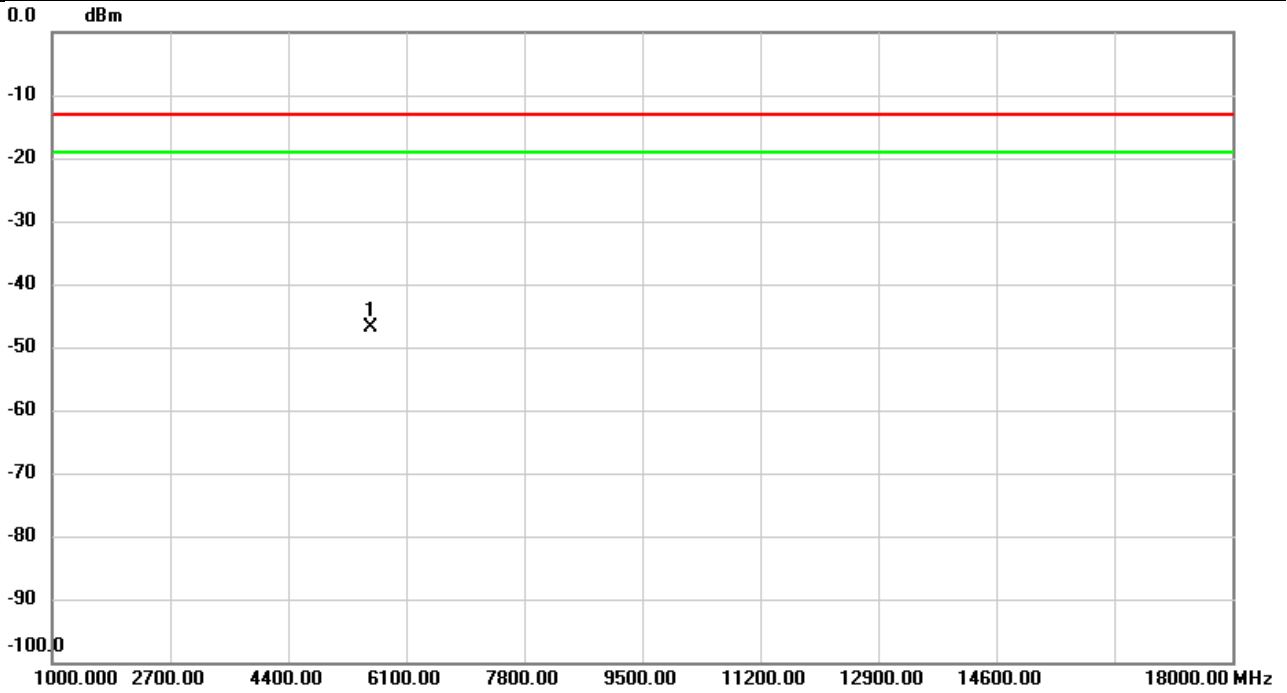


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5592.267	-56.90	14.97	-41.93	-13.00	-28.93	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH18700	Polarization	Horizontal
Temp	22°C	Hum.	56%

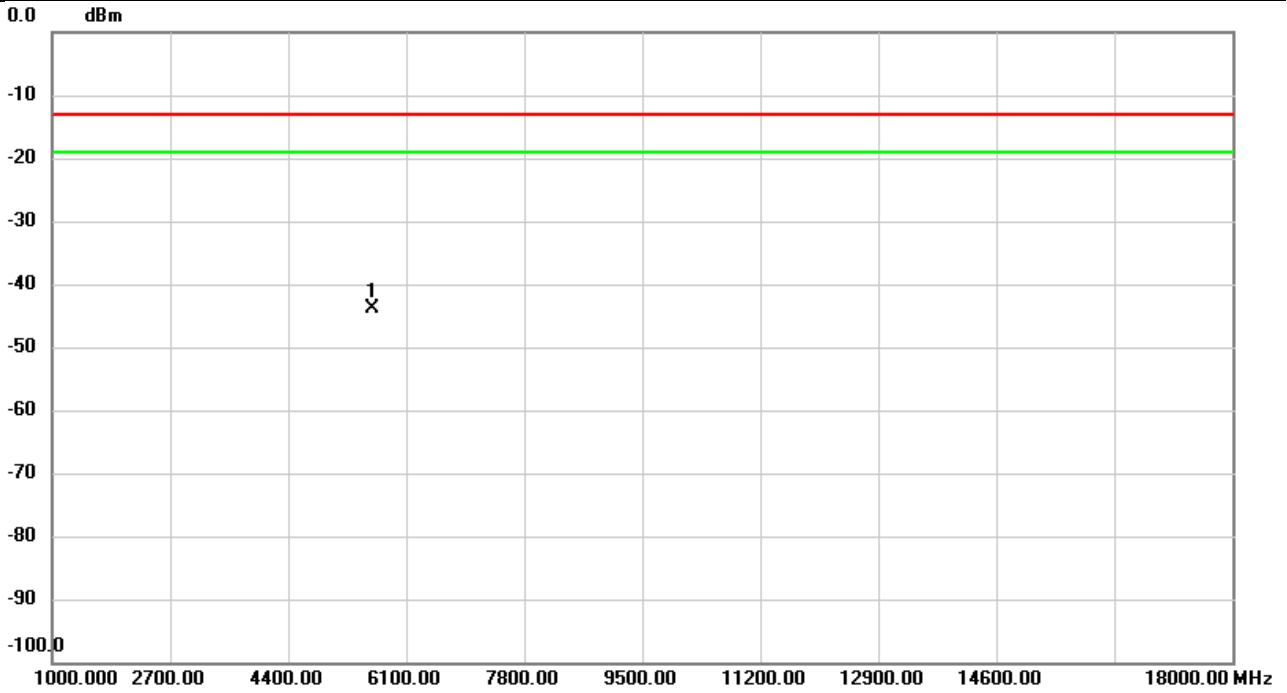


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5580.000	-61.50	14.55	-46.95	-13.00	-33.95	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH18900	Polarization	Vertical
Temp	22°C	Hum.	56%

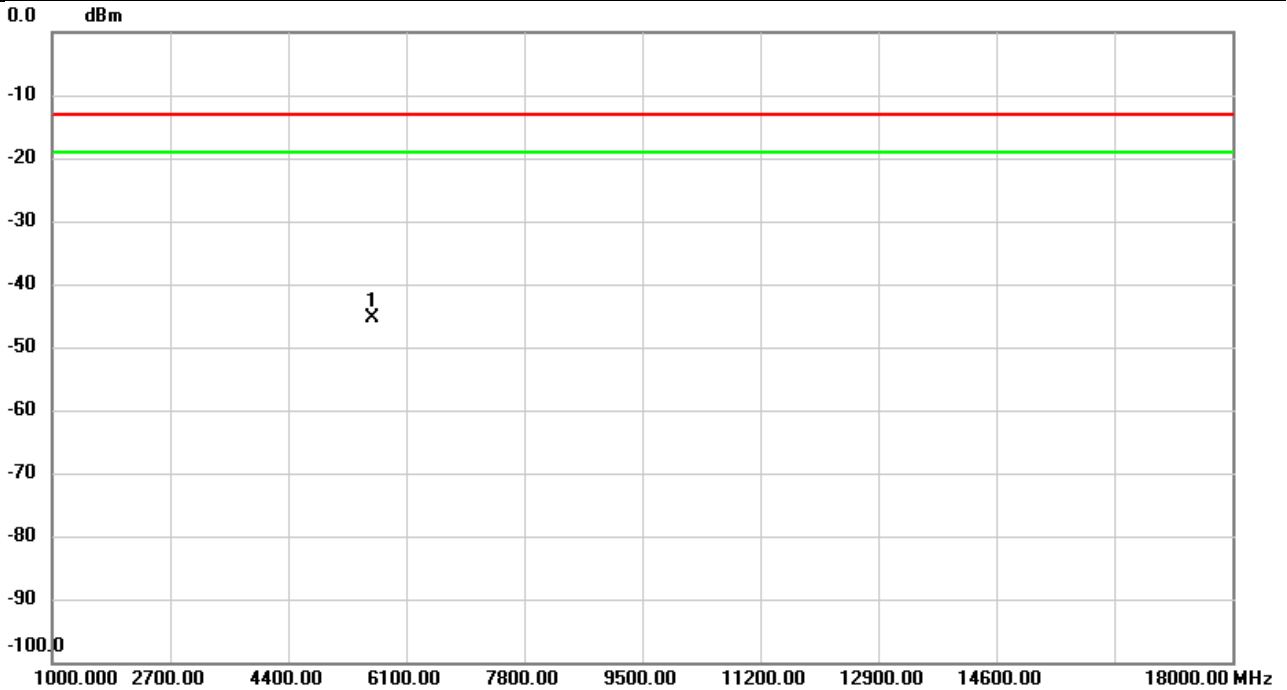


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5613.233	-58.94	15.04	-43.90	-13.00	-30.90	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH18900	Polarization	Horizontal
Temp	22°C	Hum.	56%

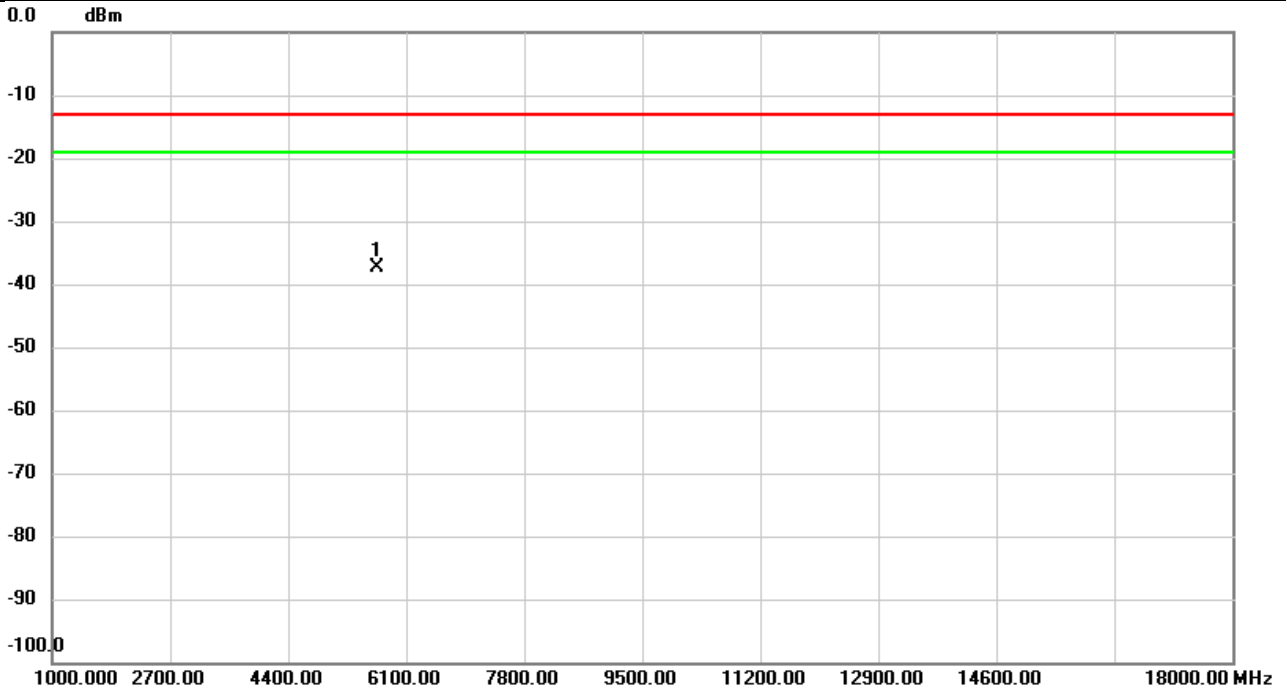


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	5613.233	-60.21	14.83	-45.38	-13.00	-32.38	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH19100	Polarization	Vertical
Temp	22°C	Hum.	56%

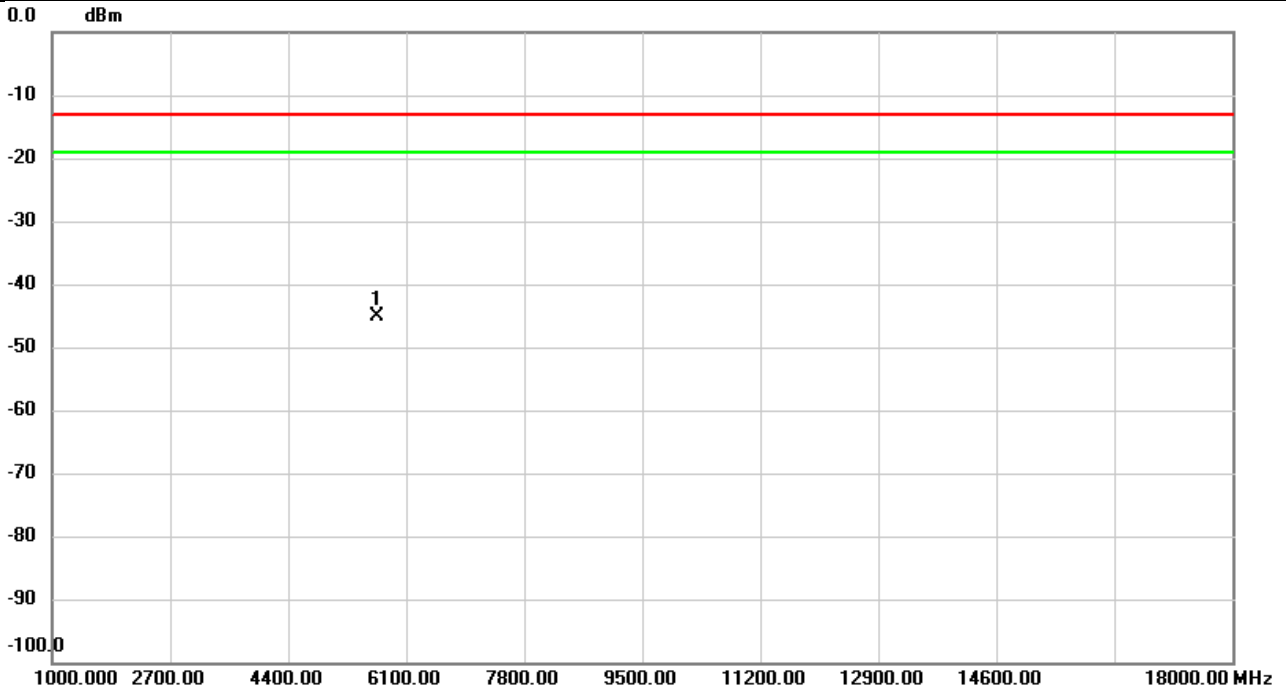


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5673.300	-52.13	14.79	-37.34	-13.00	-24.34	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/28
Test Channel	CH19100	Polarization	Horizontal
Temp	22°C	Hum.	56%

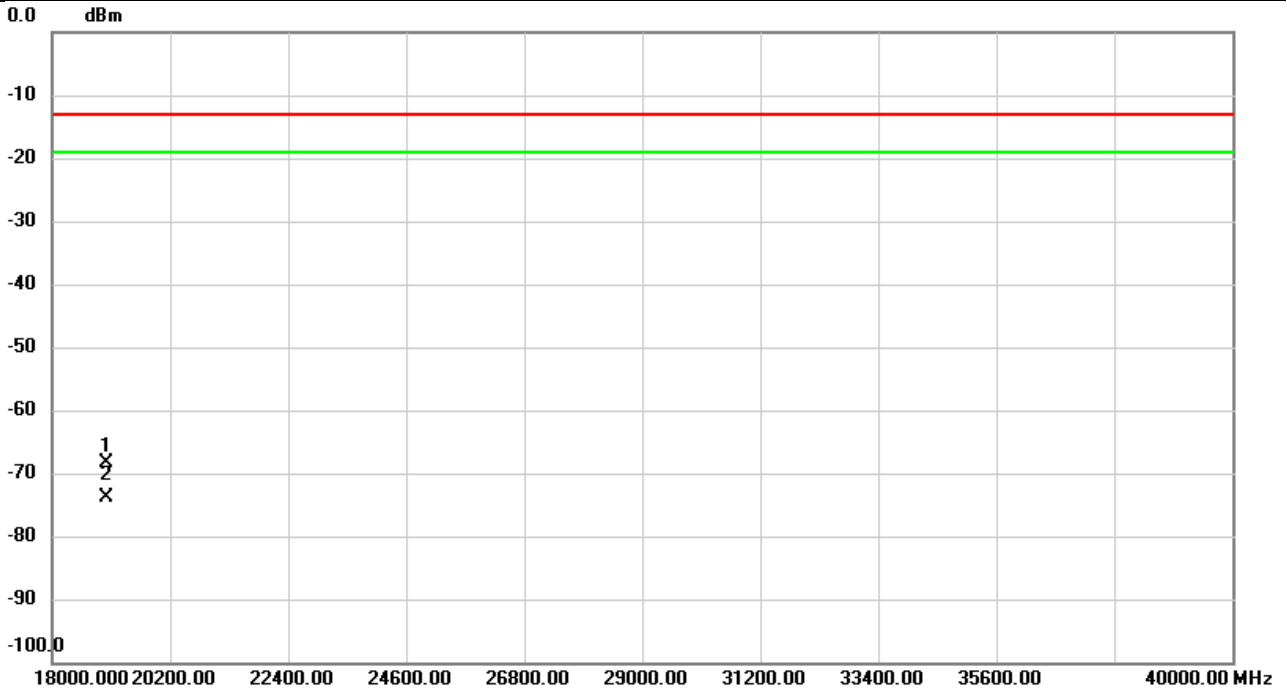


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5673.300	-59.77	14.56	-45.21	-13.00	-32.21	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/30
Test Channel	CH19100	Polarization	Vertical
Temp	22°C	Hum.	59%

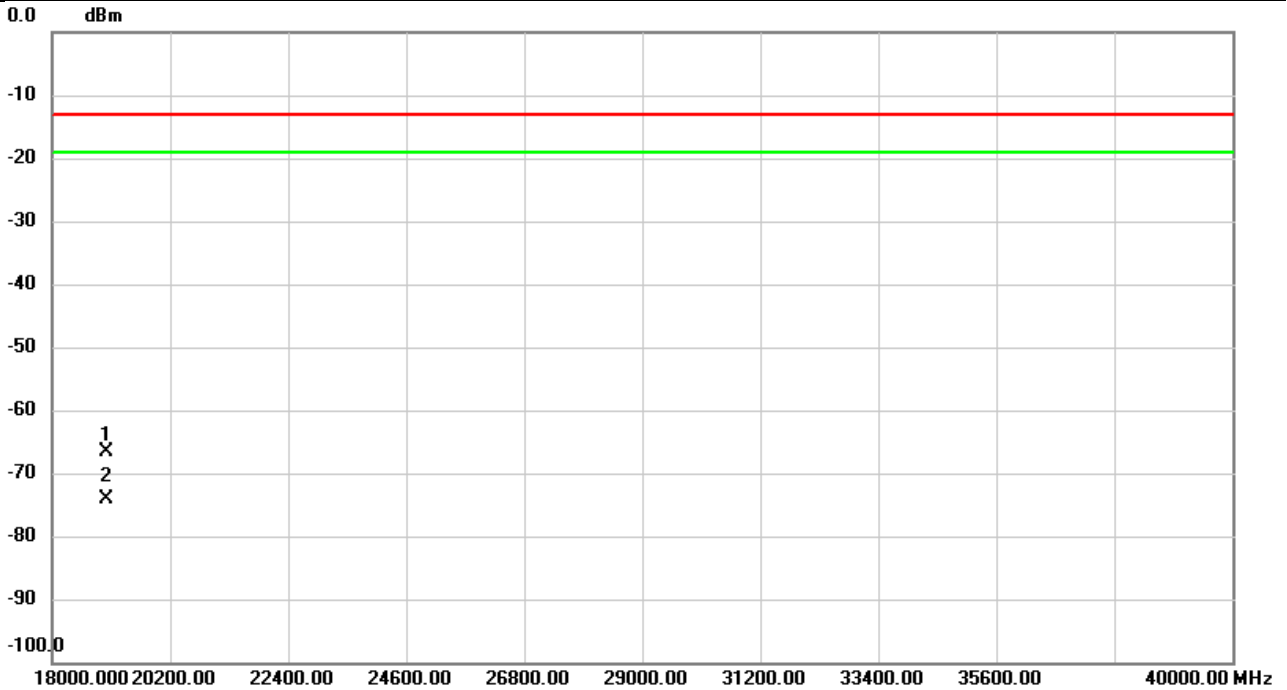


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	19000.00	-61.56	-6.91	-68.47	-13.00	-55.47	peak	
2		19000.00	-66.95	-6.91	-73.86	-13.00	-60.86	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 2	Test Date	2023/11/30
Test Channel	CH19100	Polarization	Horizontal
Temp	22°C	Hum.	59%

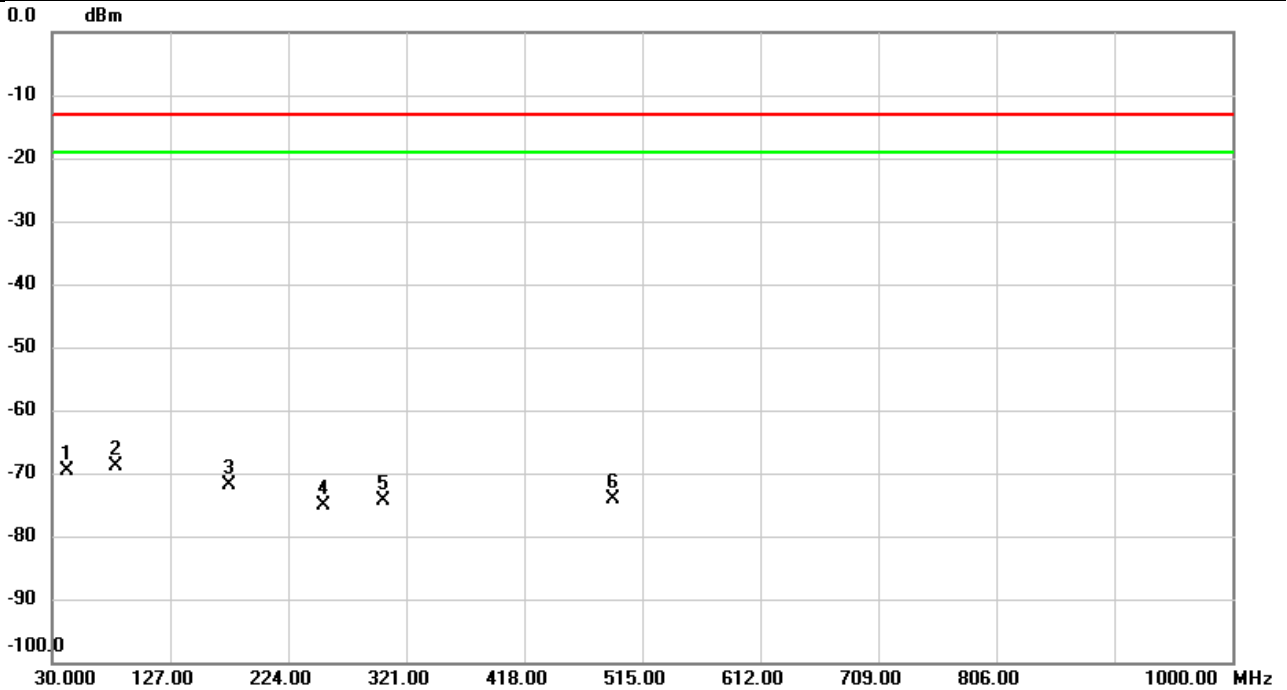


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	19000.00	-59.59	-6.91	-66.50	-13.00	-53.50	peak	
2		19000.00	-67.26	-6.91	-74.17	-13.00	-61.17	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/29
Test Channel	CH26590	Polarization	Vertical
Temp	23°C	Hum.	56%

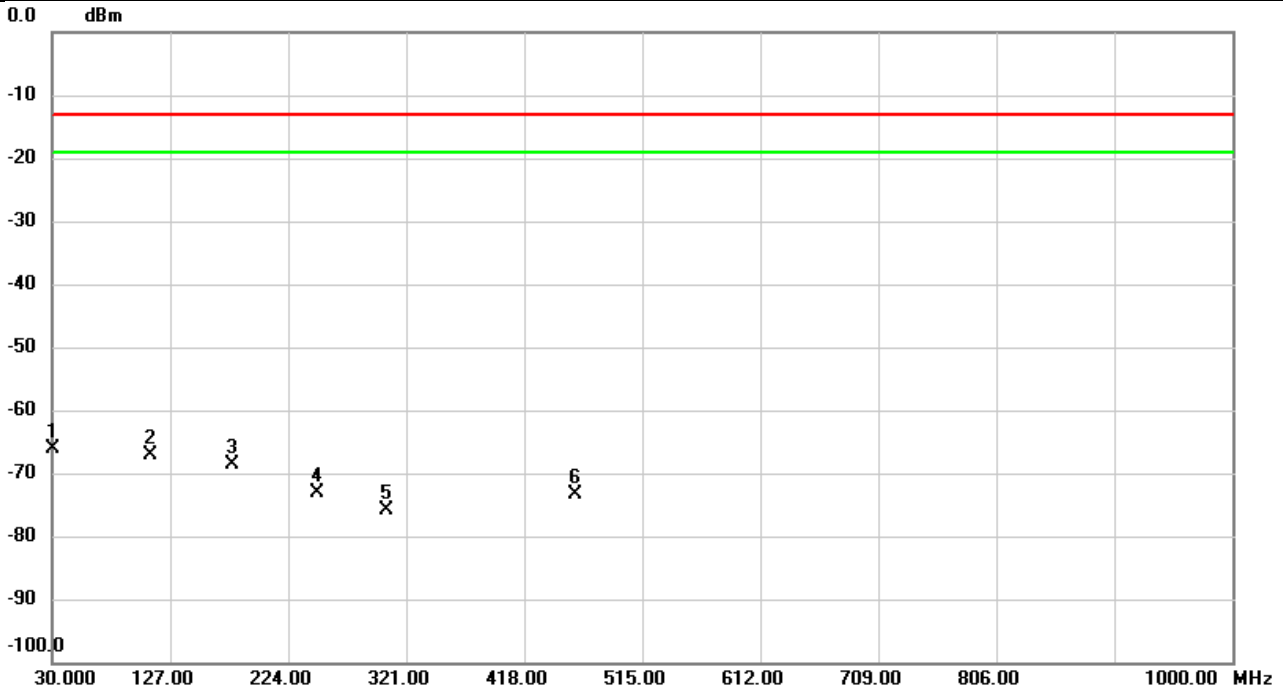


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		42.7717	-61.23	-8.46	-69.69	-13.00	-56.69	peak	
2	*	82.8003	-62.83	-5.93	-68.76	-13.00	-55.76	peak	
3		176.0173	-69.52	-2.38	-71.90	-13.00	-58.90	peak	
4		252.9060	-72.20	-2.99	-75.19	-13.00	-62.19	peak	
5		301.9233	-71.21	-3.28	-74.49	-13.00	-61.49	peak	
6		491.5260	-73.90	-0.24	-74.14	-13.00	-61.14	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/29
Test Channel	CH26590	Polarization	Horizontal
Temp	23°C	Hum.	56%

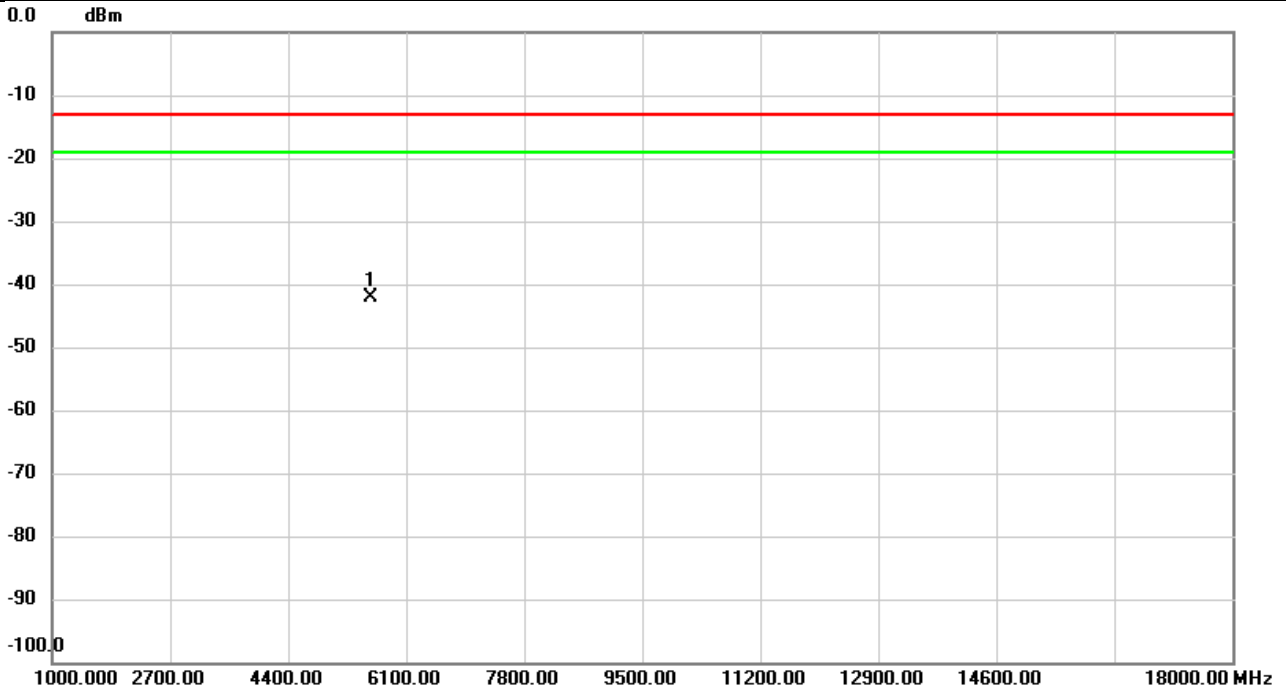


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	31.0347	-68.83	2.76	-66.07	-13.00	-53.07	peak	
2		110.3160	-58.96	-8.10	-67.06	-13.00	-54.06	peak	
3		177.8603	-62.33	-6.38	-68.71	-13.00	-55.71	peak	
4		247.3447	-65.16	-8.03	-73.19	-13.00	-60.19	peak	
5		304.8333	-70.11	-5.77	-75.88	-13.00	-62.88	peak	
6		460.5830	-71.33	-1.92	-73.25	-13.00	-60.25	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26140	Polarization	Vertical
Temp	22°C	Hum.	56%

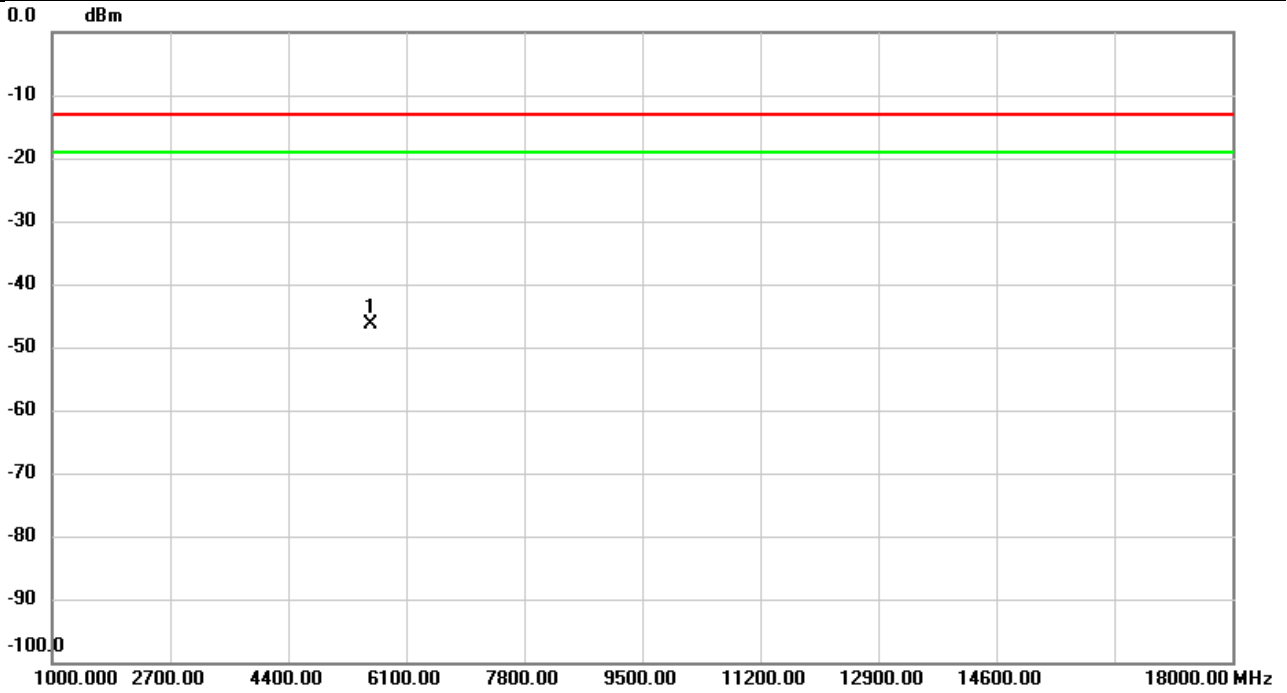


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5593.400	-57.17	15.00	-42.17	-13.00	-29.17	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26140	Polarization	Horizontal
Temp	22°C	Hum.	56%

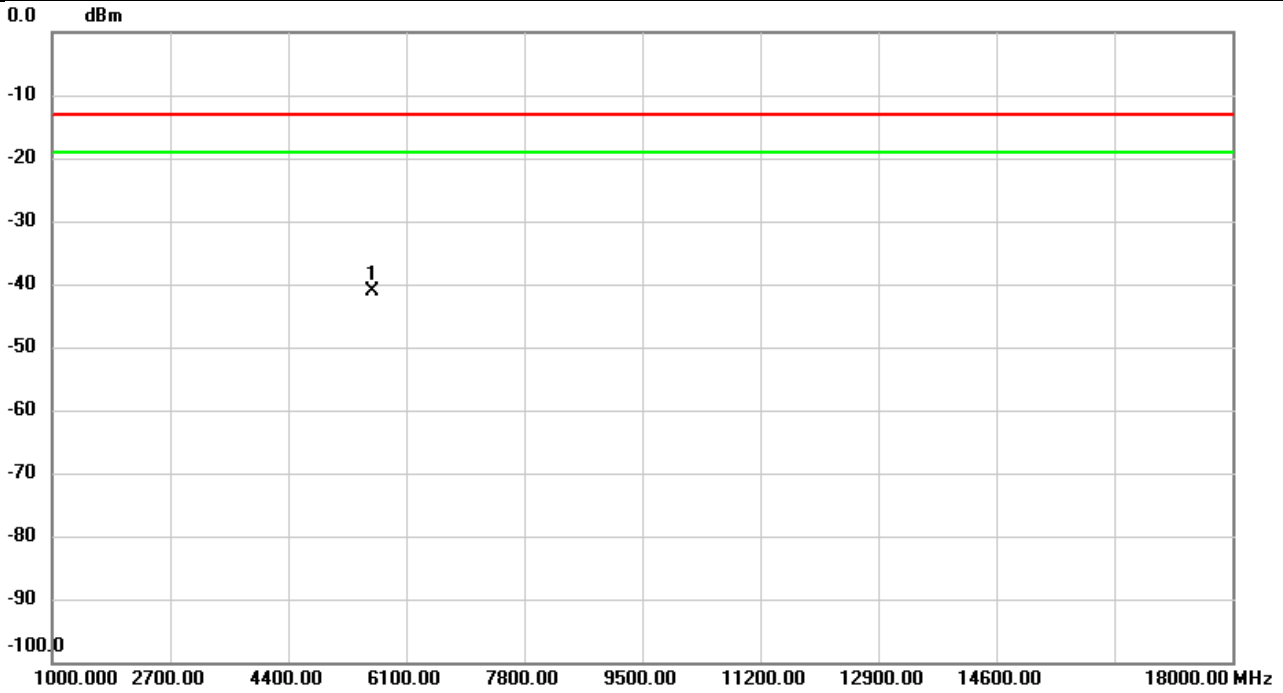


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5593.400	-61.24	14.84	-46.40	-13.00	-33.40	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26365	Polarization	Vertical
Temp	22°C	Hum.	56%

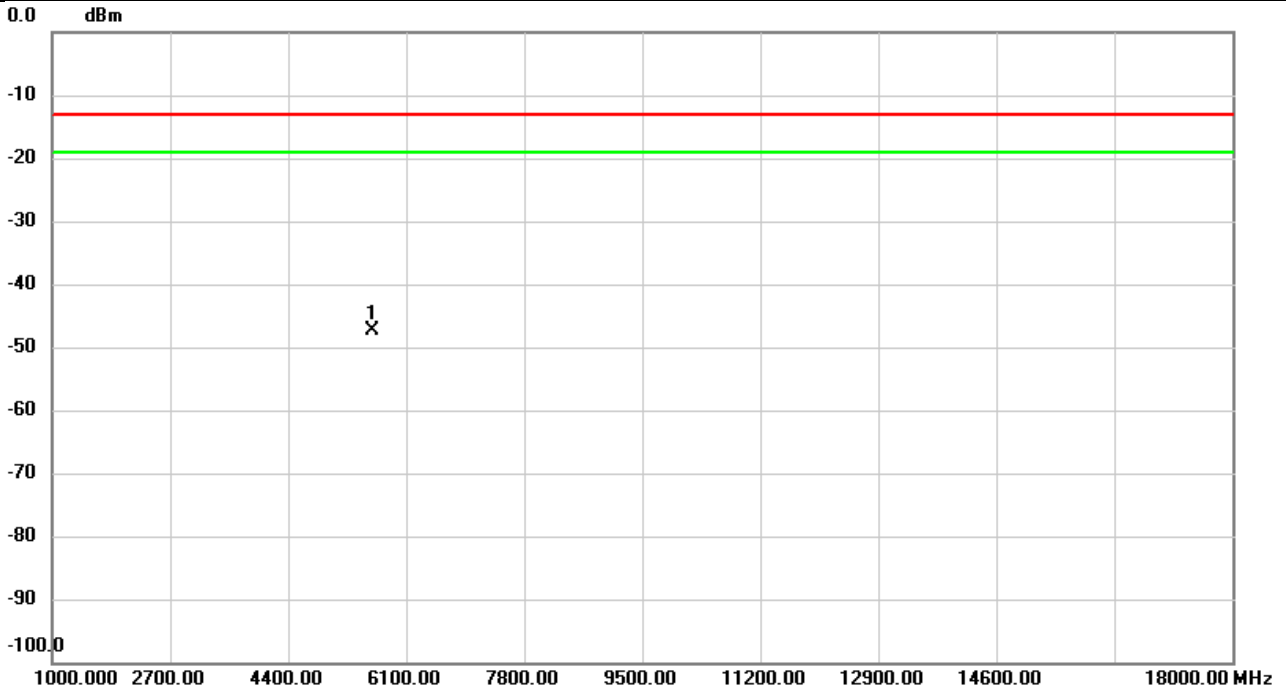


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5620.600	-56.18	14.97	-41.21	-13.00	-28.21	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26365	Polarization	Horizontal
Temp	22°C	Hum.	56%

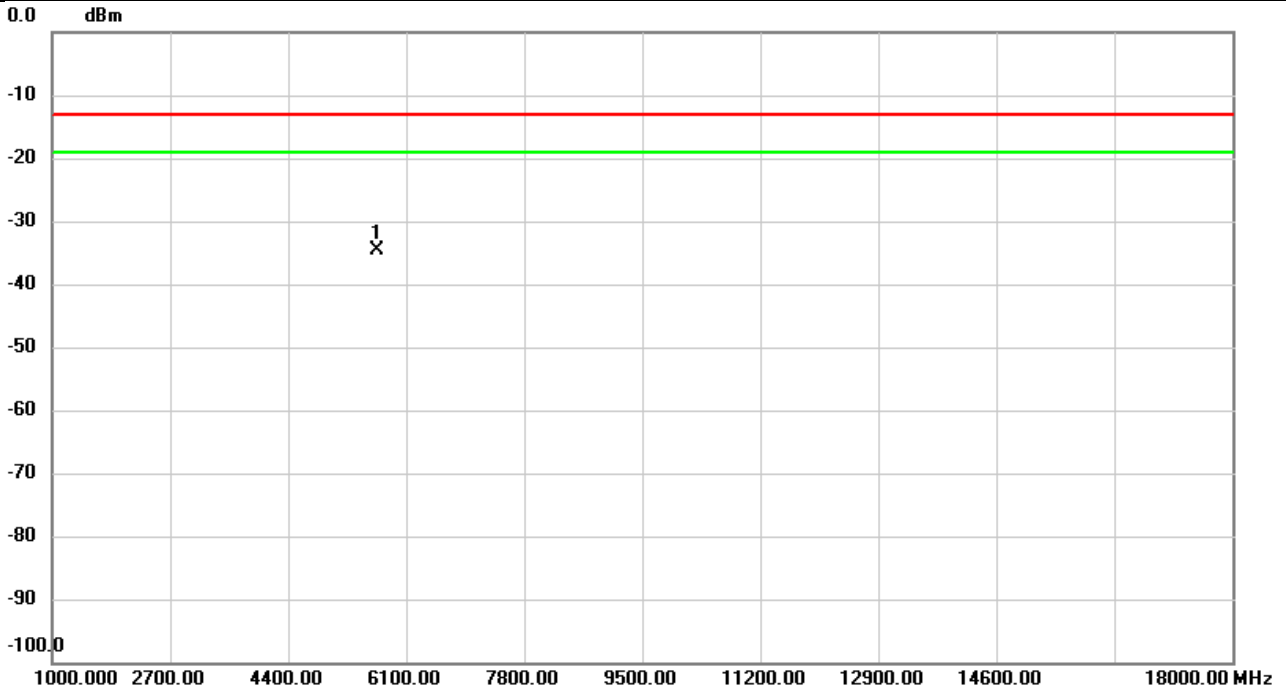


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5621.167	-62.10	14.74	-47.36	-13.00	-34.36	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26590	Polarization	Vertical
Temp	22°C	Hum.	56%

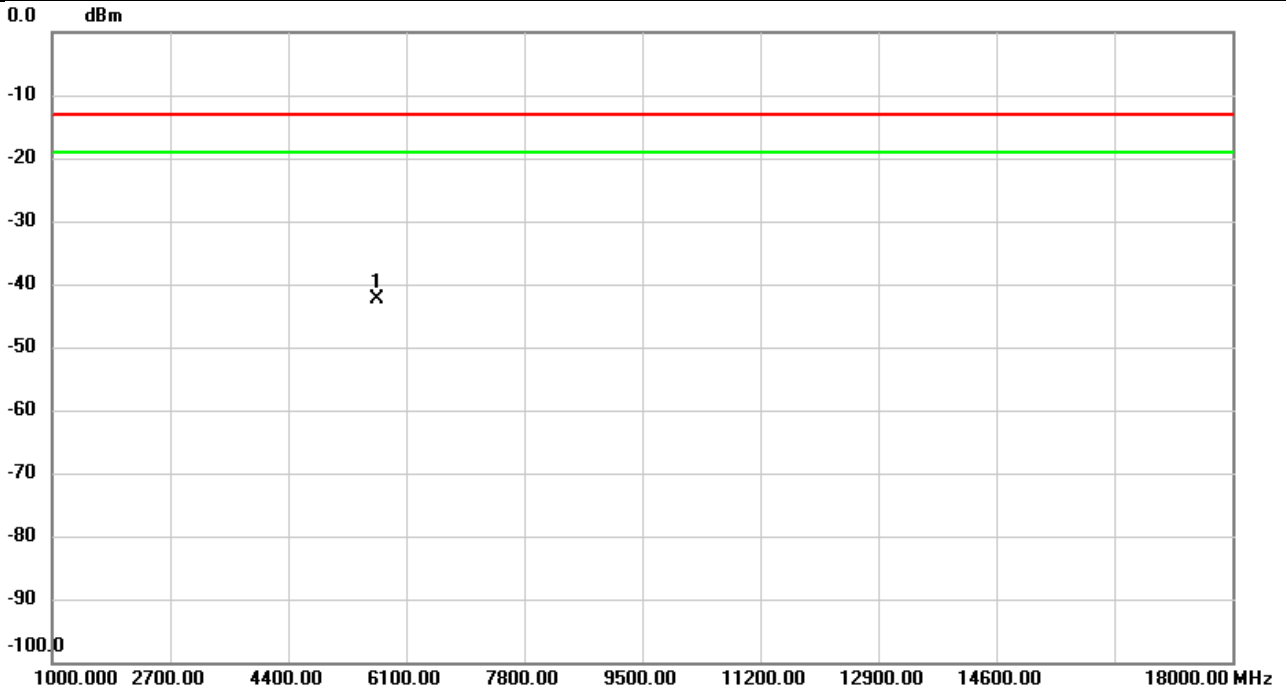


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5688.600	-49.60	14.86	-34.74	-13.00	-21.74	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/28
Test Channel	CH26590	Polarization	Horizontal
Temp	22°C	Hum.	56%

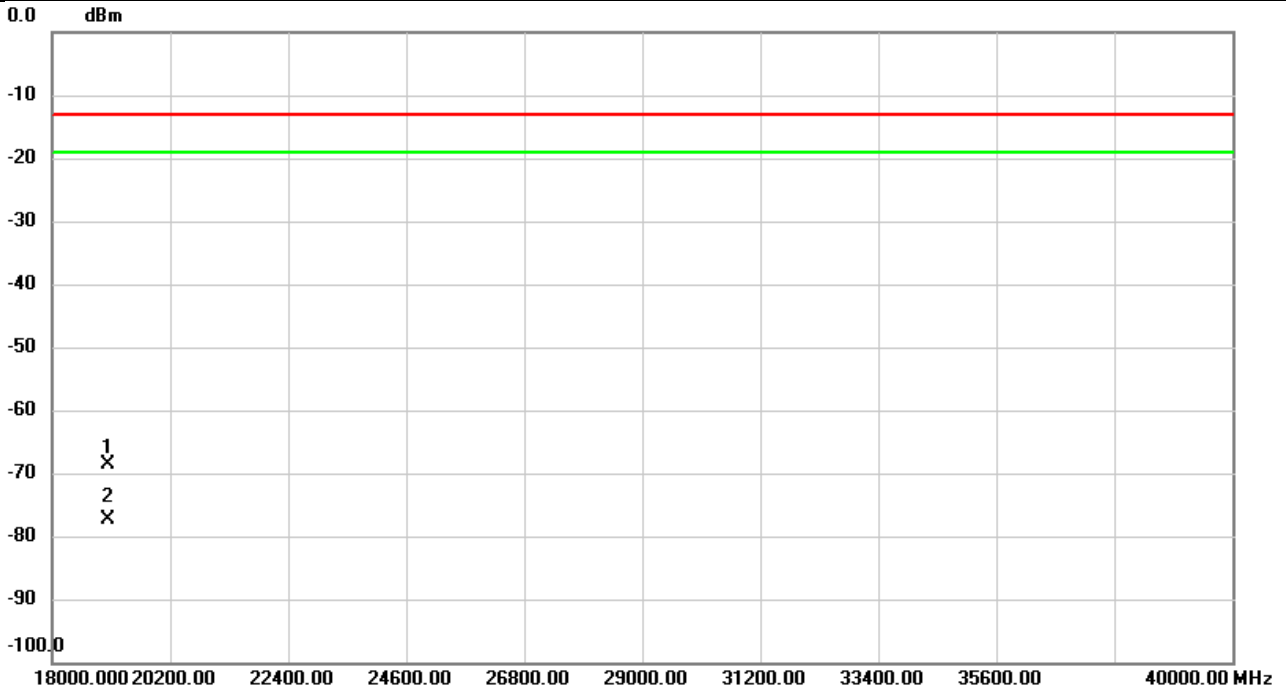


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5688.600	-56.97	14.68	-42.29	-13.00	-29.29	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/30
Test Channel	CH26590	Polarization	Vertical
Temp	22°C	Hum.	59%

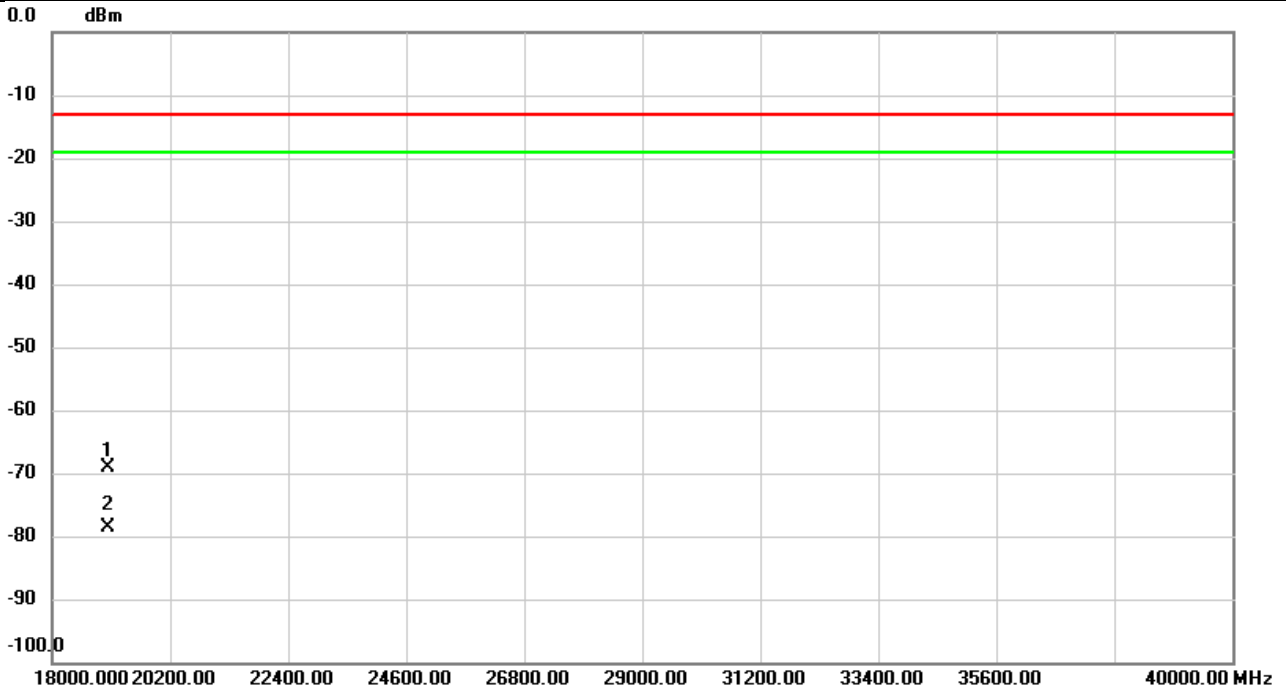


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	19050.00	-61.59	-6.98	-68.57	-13.00	-55.57	peak	
2		19050.00	-70.35	-6.98	-77.33	-13.00	-64.33	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 25	Test Date	2023/11/30
Test Channel	CH26590	Polarization	Horizontal
Temp	22°C	Hum.	59%



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1	*	19050.00	-62.22	-6.98	-69.20	-13.00	-56.20	peak	
2		19050.00	-71.60	-6.98	-78.58	-13.00	-65.58	AVG	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

End of Test Report