TESTREPORT

Applicant Name :	Franklin Technology Inc.
Address :	906 JEI Platz, 186, Gasan digital 1-ro, Gumcheon-Gu Seoul South Korea
Report Number:	SZNS1220929-44611E-RF-00
FCC ID:	XHG-T720G

Test Standard (s)

FCC PART 27; FCC PART 22H; FCC PART 24E

Sample Description

Product Type:	Home Phone Connect
Model No.:	T720G
Multiple Model(s) No.:	N/A
Trade Mark:	N/A
Date Received:	2022/09/29
Report Date:	2022/11/14

Test Result:	Pass*

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

Prepared and Checked By:

Nick Fang
EMC Engineer

Approved By:

Candy Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★ ".
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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	CDMA BC0: 824-849MHz(TX); 869-894MHz(RX) CDMA BC1: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 13: 777-787MHz(TX); 746-756MHz(RX) LTE Band 25: 1850-1915MHz(TX); 1930-1995MHz(RX) LTE Band 41: 2496-2690MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX)
Modulation Technique	CDMA: OQPSK 4G: QPSK, 16QAM
Antenna Specification*	CDMA BC0/ LTE B5: 4.88dBi; CDMA BC1/ LTE B2/B25: 4.89dBi; LTE B4/B66: 4.25dBi; LTE B12: 3.77dBi; LTE B13: 5.63dBi; LTE B41: 5.19dBi (provided by the applicant)
Voltage Range	DC 3.8V from battery or DC 5V from adapter
Sample serial number	SZNS1220929-44611E-RF-S1 (Assigned by ATC)
Sample/EUT Status	Good condition
Normal/Extreme Condition	N.V.: Nominal Voltage: 3.8V_{DC} L.V.: Low Voltage 3.45V_{DC} H.V.: High Voltage 4.45V_{DC}
Adapter information	Model: APS-V010050200W-G Input: AC 100-240V, 50/60Hz, 0.35A Max Output: DC 5V, 2.0A

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H,Part24-Subpart E, and Part 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of the EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services
Part 27 - Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF Frequency		$0.082*10^{-7}$
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz -26.5GHz	5.06dB
	26.5GHz -40GHz	4.72dB
Temperature		1℃
Humidity		6%
Supply voltages		0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358,the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The final qualification test was performed with the EUT operating at normal mode.

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
CDMA BC0	1.23	824.7	836.52	848.31
CDMA BC1	1.23	1851.25	1880	1908.75
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
	20	1720	1732.5	1745
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B12	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
LTE B13	5	779.5	782	784.5
	10	/	782	/
LTE B25	1.4	1850.7	1882.5	1914.3
	3	1851.5	1882.5	1913.5
	5	1852.5	1882.5	1912.5
	10	1855	1882.5	1910
	15	1857.5	1882.5	1907.5
	20	1860	1882.5	1905

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B41	5	2498.5	2593	2687.5
	10	2501	2593	2685
	15	2503.5	2593	2682.5
	20	2506	2593	2680
LTE B66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770

Equipment Modifications

No modification was made to the EUT.

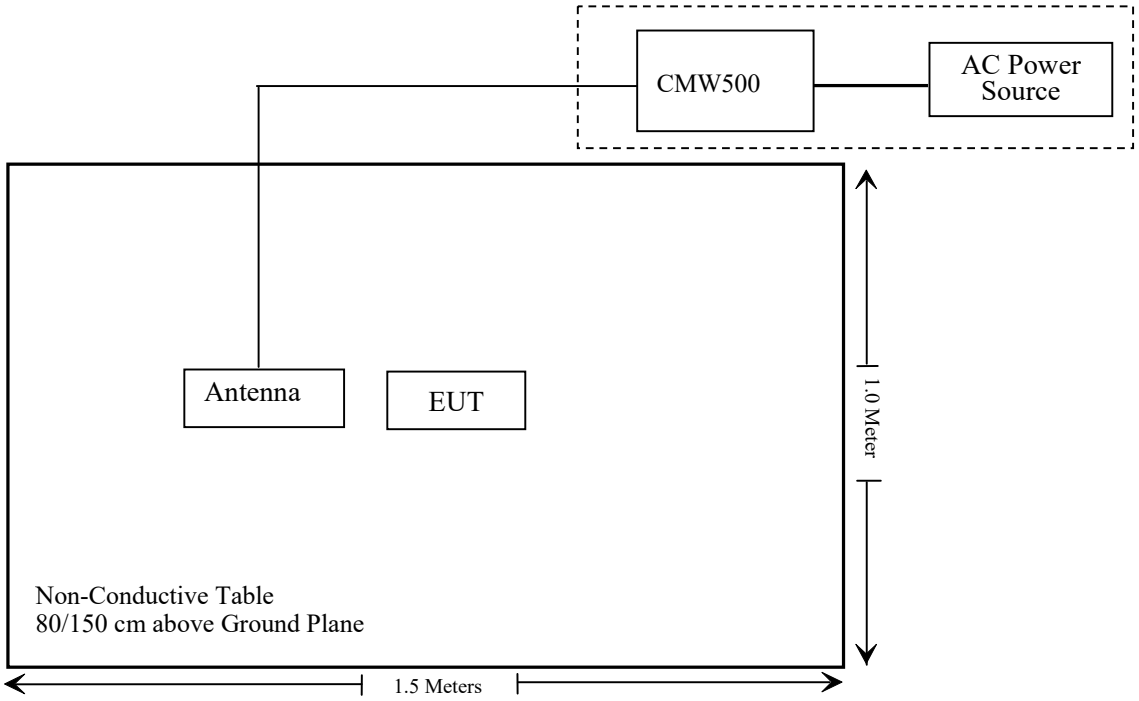
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	1201.002K50-116218-UY

Support Cable Description

Cable Description	Length (m)	From / Port	To
Unshielded Un-detachable AC cable	1.2	AC Power	CMW500

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§ 1.1307 ,§2.1091	RF Exposure	Compliant
§2.1046; § 22.913 (a) (d); § 24.232 (c) (d); §27.50 (b) (c) (d)(h);	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53	Occupied Bandwidth	Compliant
§ 2.1051; §22.917 (a); § 24.238 (a); §27.53;	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliant
§ 22.917 (a); § 24.238 (a); §27.53 (c)(f)(g)(h) (m)	Band Edge	Compliant
§ 2.1055; § 22.355; § 24.235; §27.54;	Frequency stability	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2021/11/11	2022/11/10
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2020/01/05	2023/01/04
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2020/01/05	2023/01/04
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-024-1)	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-025-1)	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9850/2F-20	720 (ATC-BA-024)	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9850/2F-20	720 (ATC-BA-025)	2020/01/05	2023/01/04
Agilent	Signal Generator	N5183A	MY51040755	2021/12/13	2022/12/12

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
SPECTRUM ANALYZER	Rohde & Schwarz	FSU26	200982	2022/07/05	2023/07/04
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101948	2021/12/13	2022/12/12
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2021/12/13	2022/12/12
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2021/12/14	2022/12/13
Gongwen	Temp. & Humid. Chamber	HSD-500	109	2022/10/13	2023/10/12
WEINSCHEL	10dB Attenuator	5324	AU 3842	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	/
Fluke	Multi Meter	45	7664009	2021/12/14	2022/12/13
Manson	DC Power Source	KPS-6604	ATCS-205	NCR	NCR

* Statement of Traceability: Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC§15.247 (I), §1.1307 (B) (3) &§2.1093 – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b) (3), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB 447498 D04 Interim General RF Exposure Guidance

SAR-Based Exemption:

SAR-based thresholds are derived based on frequency, power, and separation distance of the RF source. The formula defines the thresholds in general for either available maximum timeaveraged power or maximum time-averaged ERP, whichever is greater.

Per § 1.1307(b)(3)(i)(B), for single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th}\ (\text{mW}) = \begin{cases} ERP_{20\ cm}(d/20\ \text{cm})^{x} & d \le 20\ \text{cm} \\ ERP_{20\ cm} & 20\ \text{cm} < d \le 40\ \text{cm} \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\ cm}\sqrt{f}}\right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20\ cm}\ (\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

d = the separation distance (cm);

Finally, when 10-g extremity SAR applies, SAR test exemption may be considered by applying a factor of 2.5 to the SAR-based exemption thresholds.

For worst case:

Band	Frequency (MHz)	Tune up conducted power		Antenna Gain		ERP		Evaluation Distance (m)	Pth (mW)
		(dBm)	(W)	(dBi)	(dBd)	(dBm)	(mW)		
CDMA BC0	824-849	23.0	199.53	4.88	2.73	25.73	374.11	0.2	1681
CDMA BC1	1850-1910	23.0	199.53	4.89	2.74	25.74	374.97	0.2	3060
LTE B2	1850-1910	24.0	251.19	4.89	2.74	26.74	472.06	0.2	3060
LTE B4	1710-1755	24.0	251.19	4.25	2.1	26.1	407.38	0.2	3060
LTE B5	824-849	24.0	251.19	4.88	2.73	26.73	470.98	0.2	1681
LTE B12	699-716	24.0	251.19	3.77	1.62	25.62	364.75	0.2	1426
LTE B13	777-787	24.0	251.19	5.63	3.48	27.48	559.76	0.2	1585
LTE B25	1850-1915	22.5	177.83	4.89	2.74	25.24	334.20	0.2	3060
LTE B41	2496-2690	22.0	158.49	5.19	3.04	25.04	319.15	0.2	3060
LTE B66	1710-1780	22.5	177.83	4.25	2.1	24.6	288.40	0.2	3060

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant.

FCC§2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H,24E&27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, §22.913 (a) (d)& §24.232 (c) (d); §27.50(b)(c)(d)(h)- RF OUTPUT POWER

Applicable Standard

According to FCC §2.1046 and §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC §2.1046 and §24.232 (c),mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

According to §27.50(b), Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

According to §27.50(c), Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP. And Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

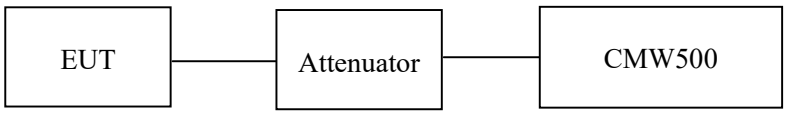
According to §27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

According to §27.50(h), the maximum EIRP must not exceed 2Watts (33dBm) for 2496-2690MHz.

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



Note: the path loss (cable loss and attenuator) has including in result.

ANSI C63.26-2015 Section 5.5.

Test Data

Environmental Conditions

Temperature:	27.2~26.1 ℃
Relative Humidity:	52.4~56.2 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Cat Kang from 2022-10-07 to 2022-11-01.

Cellular Band (Part 22H)

2G:

RC1+SO55:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA 1xRTT (BC0)	1013	824.70	21.76	24.49	38.45
	384	836.52	21.42	24.15	38.45
	777	848.31	21.12	23.85	38.45

RC3+SO55:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA 1xRTT (BC0)	1013	824.70	21.27	24.00	38.45
	384	836.52	21.06	23.79	38.45
	777	848.31	21.02	23.75	38.45

RC3+SO32(FCH):

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA 1xRTT (BC0)	1013	824.70	21.15	23.88	38.45
	384	836.52	21.51	24.24	38.45
	777	848.31	21.42	24.15	38.45

RC3+SO32(SCH):

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA 1xRTT (BC0)	1013	824.70	21.23	23.96	38.45
	384	836.52	21.35	24.08	38.45
	777	848.31	21.17	23.90	38.45

3G:

RTAP 153.6kbps Subtype 0:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA EV-DO (BC0)	1013	824.70	21.11	23.84	38.45
	384	836.52	21.13	23.86	38.45
	777	848.31	21.18	23.91	38.45

RETAP 4096pbs Subtype 2:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP (dBm)	Limit (dBm)
CDMA EV-DO (BC0)	1013	824.70	21.29	24.02	38.45
	384	836.52	21.28	24.01	38.45
	777	848.31	21.06	23.79	38.45

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band5: Antenna Gain = 4.88dBi = 2.73dBd (0dBd=2.15dBi)
Limit: ERP≤38.45dBm

PCS Band (Part 24E)

2G:

RC1+SO55:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA 1xRTT (BC1)	25	1851.25	21.70	26.59	33
	600	1880.00	21.60	26.49	33
	1175	1908.75	21.38	26.27	33

RC3+SO55:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA 1xRTT (BC1)	25	1851.25	21.98	26.87	33
	600	1880.00	21.92	26.81	33
	1175	1908.75	22.08	26.97	33

RC3+SO32(FCH):

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA 1xRTT (BC1)	25	1851.25	21.14	26.03	33
	600	1880.00	21.26	26.15	33
	1175	1908.75	21.41	26.30	33

RC3+SO32(SCH):

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA 1xRTT (BC1)	25	1851.25	21.34	26.23	33
	600	1880.00	21.47	26.36	33
	1175	1908.75	21.52	26.41	33

3G:

RTAP 153.6kbps Subtype 0:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA EV-DO (BC1)	25	1851.25	21.21	26.10	33
	600	1880.00	20.99	25.88	33
	1175	1908.75	21.02	25.91	33

RETAP 4096pbs Subtype:

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
CDMA EV-DO (BC1)	25	1851.25	21.39	26.28	33
	600	1880.00	20.91	25.80	33
	1175	1908.75	20.98	25.87	33

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band2: Antenna Gain = 4.89dB
Limit: EIRP≤33dBm

LTE

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	23.42	22.45	22.94	28.31	27.34	27.83
		RB1#3	23.51	22.51	22.99	28.40	27.40	27.88
		RB1#5	23.47	22.47	22.95	28.36	27.36	27.84
		RB3#0	23.35	22.34	22.90	28.24	27.23	27.79
		RB3#3	23.39	22.31	23.00	28.28	27.20	27.89
		RB6#0	22.42	21.35	21.96	27.31	26.24	26.85
	16QAM	RB1#0	22.54	21.52	22.60	27.43	26.41	27.49
		RB1#3	22.51	21.61	22.37	27.40	26.50	27.26
		RB1#5	22.51	21.50	22.71	27.40	26.39	27.60
		RB3#0	22.53	21.50	22.37	27.42	26.39	27.26
		RB3#3	22.54	21.41	22.49	27.43	26.30	27.38
		RB6#0	21.27	20.29	21.35	26.16	25.18	26.24
3.0	QPSK	RB1#0	23.52	23.18	23.31	28.41	28.07	28.20
		RB1#8	23.65	23.09	23.38	28.54	27.98	28.27
		RB1#14	23.74	23.01	23.38	28.63	27.90	28.27
		RB6#0	22.48	22.18	22.26	27.37	27.07	27.15
		RB6#9	22.42	22.27	22.34	27.31	27.16	27.23
		RB15#0	22.38	22.15	22.28	27.27	27.04	27.17
	16QAM	RB1#0	22.57	22.54	22.65	27.46	27.43	27.54
		RB1#8	22.51	22.47	22.75	27.40	27.36	27.64
		RB1#14	22.22	22.32	22.97	27.11	27.21	27.86
		RB6#0	21.23	21.14	21.30	26.12	26.03	26.19
		RB6#9	21.35	21.16	21.50	26.24	26.05	26.39
		RB15#0	21.56	21.27	21.29	26.45	26.16	26.18

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.37	23.08	22.35	28.26	27.97	27.24
		RB1#13	23.26	23.19	22.50	28.15	28.08	27.39
		RB1#24	23.25	23.09	22.54	28.14	27.98	27.43
		RB15#0	22.40	22.38	21.42	27.29	27.27	26.31
		RB15#10	22.34	22.29	21.60	27.23	27.18	26.49
		RB25#0	22.38	22.31	21.47	27.27	27.20	26.36
	16QAM	RB1#0	22.56	21.92	21.80	27.45	26.81	26.69
		RB1#13	22.32	21.98	22.15	27.21	26.87	27.04
		RB1#24	22.27	21.94	22.28	27.16	26.83	27.17
		RB15#0	21.35	21.29	20.53	26.24	26.18	25.42
		RB15#10	21.31	21.22	20.64	26.20	26.11	25.53
		RB25#0	21.38	21.28	20.44	26.27	26.17	25.33
10.0	QPSK	RB1#0	23.52	22.79	23.31	28.41	27.68	28.20
		RB1#25	23.71	23.02	23.33	28.60	27.91	28.22
		RB1#49	23.28	22.62	23.36	28.17	27.51	28.25
		RB25#0	22.34	21.93	22.46	27.23	26.82	27.35
		RB25#25	22.46	21.86	22.52	27.35	26.75	27.41
		RB50#0	22.42	21.87	22.41	27.31	26.76	27.30
	16QAM	RB1#0	22.47	22.39	22.97	27.36	27.28	27.86
		RB1#25	23.19	22.94	23.51	28.08	27.83	28.40
		RB1#49	22.11	21.84	22.83	27.00	26.73	27.72
		RB25#0	21.52	20.87	21.60	26.41	25.76	26.49
		RB25#25	21.56	20.91	21.66	26.45	25.80	26.55
		RB50#0	21.49	20.96	21.47	26.38	25.85	26.36

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	23.31	22.65	22.62	28.20	27.54	27.51
		RB1#38	23.39	22.72	22.68	28.28	27.61	27.57
		RB1#74	23.08	22.58	22.74	27.97	27.47	27.63
		RB36#0	22.34	21.82	21.83	27.23	26.71	26.72
		RB36#39	22.36	21.75	21.69	27.25	26.64	26.58
		RB75#0	22.34	21.82	21.81	27.23	26.71	26.70
	16QAM	RB1#0	22.48	22.36	22.34	27.37	27.25	27.23
		RB1#38	22.32	22.11	22.06	27.21	27.00	26.95
		RB1#74	22.39	21.55	22.03	27.28	26.44	26.92
		RB36#0	21.35	20.72	20.86	26.24	25.61	25.75
		RB36#39	21.43	20.67	20.76	26.32	25.56	25.65
		RB75#0	21.53	20.76	20.76	26.42	25.65	25.65
20.0	QPSK	RB1#0	23.24	23.02	23.18	28.13	27.91	28.07
		RB1#50	23.47	23.30	23.77	28.36	28.19	28.66
		RB1#99	23.03	22.94	23.44	27.92	27.83	28.33
		RB50#0	22.47	22.19	22.53	27.36	27.08	27.42
		RB50#50	22.34	22.21	22.40	27.23	27.10	27.29
		RB100#0	22.40	22.12	22.38	27.29	27.01	27.27
	16QAM	RB1#0	22.74	22.48	22.58	27.63	27.37	27.47
		RB1#50	23.62	23.00	22.56	28.51	27.89	27.45
		RB1#99	22.99	22.72	22.31	27.88	27.61	27.20
		RB50#0	21.52	21.31	21.49	26.41	26.20	26.38
		RB50#50	21.41	21.19	21.46	26.30	26.08	26.35
		RB100#0	21.52	21.19	21.29	26.41	26.08	26.18

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band2: Antenna Gain = 4.89dB
Limit: EIRP≤33dBm

LTE Band 4

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.43	23.42	22.73	26.68	27.67	26.98
		RB1#3	22.43	23.57	22.93	26.68	27.82	27.18
		RB1#5	22.40	23.56	22.90	26.65	27.81	27.15
		RB3#0	22.46	23.49	22.76	26.71	27.74	27.01
		RB3#3	22.47	23.70	22.60	26.72	27.95	26.85
		RB6#0	21.49	22.55	21.59	25.74	26.80	25.84
	16QAM	RB1#0	21.63	22.61	21.83	25.88	26.86	26.08
		RB1#3	21.81	22.63	21.99	26.06	26.88	26.24
		RB1#5	22.41	22.36	21.78	26.66	26.61	26.03
		RB3#0	21.60	22.57	21.58	25.85	26.82	25.83
		RB3#3	21.56	22.61	21.57	25.81	26.86	25.82
		RB6#0	20.68	21.47	20.55	24.93	25.72	24.80
3.0	QPSK	RB1#0	23.10	23.60	22.62	27.35	27.85	26.87
		RB1#8	23.12	23.56	22.59	27.37	27.81	26.84
		RB1#14	23.19	23.38	22.76	27.44	27.63	27.01
		RB6#0	22.06	22.45	21.52	26.31	26.70	25.77
		RB6#9	21.99	22.39	21.71	26.24	26.64	25.96
		RB15#0	22.10	22.44	21.72	26.35	26.69	25.97
	16QAM	RB1#0	22.43	22.35	21.83	26.68	26.60	26.08
		RB1#8	22.52	22.13	21.95	26.77	26.38	26.20
		RB1#14	22.59	22.21	22.04	26.84	26.46	26.29
		RB6#0	21.47	21.25	20.51	25.72	25.50	24.76
		RB6#9	21.47	21.13	20.78	25.72	25.38	25.03
		RB15#0	21.43	21.16	20.88	25.68	25.41	25.13

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.01	22.56	22.19	27.26	26.81	26.44
		RB1#13	23.19	22.49	22.33	27.44	26.74	26.58
		RB1#24	23.07	22.39	22.26	27.32	26.64	26.51
		RB15#0	22.09	21.61	21.33	26.34	25.86	25.58
		RB15#10	22.22	21.49	21.33	26.47	25.74	25.58
		RB25#0	22.24	21.53	21.28	26.49	25.78	25.53
	16QAM	RB1#0	22.19	21.33	21.75	26.44	25.58	26.00
		RB1#13	22.35	21.25	21.87	26.60	25.50	26.12
		RB1#24	22.25	21.14	22.04	26.50	25.39	26.29
		RB15#0	21.06	20.50	20.17	25.31	24.75	24.42
		RB15#10	21.24	20.45	20.34	25.49	24.70	24.59
		RB25#0	21.21	20.63	20.27	25.46	24.88	24.52
10.0	QPSK	RB1#0	23.55	22.63	23.15	27.80	26.88	27.40
		RB1#25	23.40	22.75	23.48	27.65	27.00	27.73
		RB1#49	23.56	22.42	23.21	27.81	26.67	27.46
		RB25#0	22.25	21.75	22.16	26.50	26.00	26.41
		RB25#25	22.23	21.50	22.17	26.48	25.75	26.42
		RB50#0	22.30	21.53	22.2	26.55	25.78	26.45
	16QAM	RB1#0	22.39	22.16	22.54	26.64	26.41	26.79
		RB1#25	23.00	22.22	22.68	27.25	26.47	26.93
		RB1#49	22.15	21.83	22.89	26.40	26.08	27.14
		RB25#0	21.52	20.81	21.33	25.77	25.06	25.58
		RB25#25	21.49	20.38	21.39	25.74	24.63	25.64
		RB50#0	21.39	20.57	21.23	25.64	24.82	25.48

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	23.25	22.81	23.44	27.50	27.06	27.69
		RB1#38	23.3	22.66	23.29	27.55	26.91	27.54
		RB1#74	23.56	22.34	23.42	27.81	26.59	27.67
		RB36#0	22.23	21.77	22.42	26.48	26.02	26.67
		RB36#39	22.44	21.45	22.14	26.69	25.70	26.39
		RB75#0	22.48	21.54	22.25	26.73	25.79	26.50
	16QAM	RB1#0	23.00	22.47	22.76	27.25	26.72	27.01
		RB1#38	23.32	21.84	22.53	27.57	26.09	26.78
		RB1#74	23.08	21.89	22.02	27.33	26.14	26.27
		RB36#0	21.36	20.77	21.22	25.61	25.02	25.47
		RB36#39	21.50	20.42	21.26	25.75	24.67	25.51
		RB75#0	21.58	20.48	21.32	25.83	24.73	25.57
20.0	QPSK	RB1#0	23.20	23.39	23.11	27.45	27.64	27.36
		RB1#50	23.44	23.19	23.28	27.69	27.44	27.53
		RB1#99	23.38	23.29	22.75	27.63	27.54	27.00
		RB50#0	22.38	22.24	22.29	26.63	26.49	26.54
		RB50#50	22.62	21.88	21.75	26.87	26.13	26.00
		RB100#0	22.57	22.03	21.83	26.82	26.28	26.08
	16QAM	RB1#0	22.80	22.65	22.46	27.05	26.90	26.71
		RB1#50	23.49	22.83	21.91	27.74	27.08	26.16
		RB1#99	23.37	22.02	21.63	27.62	26.27	25.88
		RB50#0	21.53	21.31	21.13	25.78	25.56	25.38
		RB50#50	21.48	20.94	20.90	25.73	25.19	25.15
		RB100#0	21.56	21.07	20.91	25.81	25.32	25.16

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band4: Antenna Gain = 4.25dBi
Limit: EIRP≤30dBm

LTE Band5

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	23.44	23.21	23.03	26.17	25.94	25.76
		RB1#3	23.59	23.39	23.08	26.32	26.12	25.81
		RB1#5	23.55	23.21	22.78	26.28	25.94	25.51
		RB3#0	23.08	23.07	22.88	25.81	25.80	25.61
		RB3#3	23.11	23.30	22.91	25.84	26.03	25.64
		RB6#0	22.27	22.11	22.05	25.00	24.84	24.78
	16QAM	RB1#0	22.2	22.35	22.43	24.93	25.08	25.16
		RB1#3	22.23	22.55	22.55	24.96	25.28	25.28
		RB1#5	22.23	22.38	22.51	24.96	25.11	25.24
		RB3#0	22.15	22.18	22.11	24.88	24.91	24.84
		RB3#3	22.14	22.04	21.74	24.87	24.77	24.47
		RB6#0	21.43	21.01	20.95	24.16	23.74	23.68
3.0	QPSK	RB1#0	23.27	23.03	22.79	26.00	25.76	25.52
		RB1#8	23.30	22.96	22.89	26.03	25.69	25.62
		RB1#14	23.51	23.06	22.82	26.24	25.79	25.55
		RB6#0	22.36	22.20	22.03	25.09	24.93	24.76
		RB6#9	22.27	22.04	22.14	25.00	24.77	24.87
		RB15#0	22.27	22.25	22.08	25.00	24.98	24.81
	16QAM	RB1#0	22.16	22.47	22.41	24.89	25.20	25.14
		RB1#8	22.07	22.49	22.38	24.80	25.22	25.11
		RB1#14	21.88	22.34	22.55	24.61	25.07	25.28
		RB6#0	21.21	21.20	21.06	23.94	23.93	23.79
		RB6#9	21.24	20.96	20.69	23.97	23.69	23.42
		RB15#0	21.41	21.16	21.09	24.14	23.89	23.82

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.11	22.79	22.86	25.84	25.52	25.59
		RB1#13	23.15	22.95	22.98	25.88	25.68	25.71
		RB1#24	22.98	22.75	22.54	25.71	25.48	25.27
		RB15#0	22.31	22.20	22.05	25.04	24.93	24.78
		RB15#10	22.46	22.05	22.05	25.19	24.78	24.78
		RB25#0	22.40	22.21	21.99	25.13	24.94	24.72
	16QAM	RB1#0	21.94	22.4	21.56	24.67	25.13	24.29
		RB1#13	21.77	22.6	21.64	24.50	25.33	24.37
		RB1#24	21.62	22.47	21.67	24.35	25.20	24.40
		RB15#0	21.33	21.14	21.07	24.06	23.87	23.80
		RB15#10	21.28	21.01	21.03	24.01	23.74	23.76
		RB25#0	21.36	21.16	21.06	24.09	23.89	23.79
10.0	QPSK	RB1#0	23.16	22.59	23.12	25.89	25.32	25.85
		RB1#25	23.44	22.81	22.98	26.17	25.54	25.71
		RB1#49	23.33	22.68	22.79	26.06	25.41	25.52
		RB25#0	22.32	21.90	21.99	25.05	24.63	24.72
		RB25#25	22.28	21.69	22.16	25.01	24.42	24.89
		RB50#0	22.26	21.8	22.04	24.99	24.53	24.77
	16QAM	RB1#0	22.17	22.09	22.68	24.90	24.82	25.41
		RB1#25	22.38	22.81	22.54	25.11	25.54	25.27
		RB1#49	21.98	21.84	22.33	24.71	24.57	25.06
		RB25#0	21.46	20.96	21.13	24.19	23.69	23.86
		RB25#25	21.34	20.68	21.17	24.07	23.41	23.90
		RB50#0	21.27	20.81	21.07	24.00	23.54	23.80

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band5: Antenna Gain = 4.88dBi = 2.73dBd (0dBd=2.15dBi)
Limit: ERP≤38.45dBm

LTE Band 12

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	23.83	22.46	22.42	25.45	24.08	24.04
		RB1#3	23.89	22.65	22.63	25.51	24.27	24.25
		RB1#5	23.79	22.73	22.58	25.41	24.35	24.20
		RB3#0	23.91	22.61	22.55	25.53	24.23	24.17
		RB3#3	23.70	22.76	22.44	25.32	24.38	24.06
		RB6#0	22.80	21.65	21.46	24.42	23.27	23.08
	16QAM	RB1#0	23.34	21.57	21.72	24.96	23.19	23.34
		RB1#3	23.40	21.76	21.75	25.02	23.38	23.37
		RB1#5	23.39	21.69	21.56	25.01	23.31	23.18
		RB3#0	22.20	21.74	21.71	23.82	23.36	23.33
		RB3#3	21.86	21.77	21.58	23.48	23.39	23.20
		RB6#0	20.83	20.82	20.47	22.45	22.44	22.09
3.0	QPSK	RB1#0	22.61	22.55	21.91	24.23	24.17	23.53
		RB1#8	22.53	22.70	21.76	24.15	24.32	23.38
		RB1#14	22.42	22.54	21.69	24.04	24.16	23.31
		RB6#0	21.75	21.67	21.07	23.37	23.29	22.69
		RB6#9	21.80	21.72	20.96	23.42	23.34	22.58
		RB15#0	21.88	21.68	21.04	23.50	23.30	22.66
	16QAM	RB1#0	22.13	21.65	21.51	23.75	23.27	23.13
		RB1#8	22.12	21.78	21.24	23.74	23.40	22.86
		RB1#14	22.12	21.84	21.02	23.74	23.46	22.64
		RB6#0	21.02	20.38	20.08	22.64	22.00	21.70
		RB6#9	20.94	20.35	19.87	22.56	21.97	21.49
		RB15#0	20.95	20.73	20.07	22.57	22.35	21.69

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.40	22.39	22.21	24.02	24.01	23.83
		RB1#13	22.42	22.70	22.23	24.04	24.32	23.85
		RB1#24	22.23	22.58	21.98	23.85	24.20	23.60
		RB15#0	21.75	21.67	21.60	23.37	23.29	23.22
		RB15#10	21.76	21.73	21.47	23.38	23.35	23.09
		RB25#0	21.76	21.66	21.48	23.38	23.28	23.10
	16QAM	RB1#0	21.94	21.64	20.84	23.56	23.26	22.46
		RB1#13	21.96	21.77	20.76	23.58	23.39	22.38
		RB1#24	21.95	21.28	20.49	23.57	22.90	22.11
		RB15#0	20.80	20.59	20.47	22.42	22.21	22.09
		RB15#10	20.72	20.63	20.34	22.34	22.25	21.96
		RB25#0	20.76	20.59	20.57	22.38	22.21	22.19
10.0	QPSK	RB1#0	22.51	21.97	22.56	24.13	23.59	24.18
		RB1#25	22.58	22.34	22.90	24.20	23.96	24.52
		RB1#49	22.36	21.97	22.20	23.98	23.59	23.82
		RB25#0	21.55	21.18	21.66	23.17	22.80	23.28
		RB25#25	21.67	21.29	21.49	23.29	22.91	23.11
		RB50#0	21.61	21.32	21.59	23.23	22.94	23.21
	16QAM	RB1#0	21.90	21.83	21.57	23.52	23.45	23.19
		RB1#25	22.72	21.84	21.56	24.34	23.46	23.18
		RB1#49	21.93	21.83	20.95	23.55	23.45	22.57
		RB25#0	20.66	20.33	20.92	22.28	21.95	22.54
		RB25#25	20.66	20.29	20.59	22.28	21.91	22.21
		RB50#0	20.52	20.34	20.60	22.14	21.96	22.22

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band12: Antenna Gain = 3.77dBi = 1.62dBd (0dBd=2.15dBi)
Limit: ERP≤34.77dBm

LTE Band 13

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.24	22.96	23.03	26.72	26.44	26.51
		RB1#13	23.04	23.23	23.18	26.52	26.71	26.66
		RB1#24	22.86	23.32	23.21	26.34	26.80	26.69
		RB15#0	22.39	22.32	22.33	25.87	25.80	25.81
		RB15#10	22.23	22.38	22.44	25.71	25.86	25.92
		RB25#0	22.42	22.34	22.43	25.90	25.82	25.91
	16QAM	RB1#0	23.01	22.37	22.04	26.49	25.85	25.52
		RB1#13	22.90	22.57	22.03	26.38	26.05	25.51
		RB1#24	22.84	22.25	21.79	26.32	25.73	25.27
		RB15#0	21.31	21.32	21.23	24.79	24.80	24.71
		RB15#10	21.25	21.36	21.42	24.73	24.84	24.90
		RB25#0	21.22	21.51	21.44	24.70	24.99	24.92
10.0	QPSK	RB1#0	/	23.34	/	/	26.82	/
		RB1#25	/	23.60	/	/	27.08	/
		RB1#49	/	23.30	/	/	26.78	/
		RB25#0	/	21.43	/	/	24.91	/
		RB25#25	/	21.44	/	/	24.92	/
		RB50#0	/	21.32	/	/	24.80	/
	16QAM	RB1#0	/	22.05	/	/	25.53	/
		RB1#25	/	21.96	/	/	25.44	/
		RB1#49	/	21.75	/	/	25.23	/
		RB25#0	/	20.25	/	/	23.73	/
		RB25#25	/	20.49	/	/	23.97	/
		RB50#0	/	20.37	/	/	23.85	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band13: Antenna Gain = 5.63dBi =3.48dBd (0dBd=2.15dBi)
Limit: ERP≤34.77dBm

LTE Band 25

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	21.46	21.84	21.49	26.35	26.73	26.38
		RB1#3	21.73	21.68	21.74	26.62	26.57	26.63
		RB1#5	21.78	21.76	21.51	26.67	26.65	26.4
		RB3#0	21.45	21.53	21.58	26.34	26.42	26.47
		RB3#3	21.73	21.46	21.53	26.62	26.35	26.42
		RB6#0	21.53	21.81	21.71	26.42	26.7	26.6
	16QAM	RB1#0	21.73	21.73	21.56	26.62	26.62	26.45
		RB1#3	21.84	21.58	21.64	26.73	26.47	26.53
		RB1#5	21.61	21.64	21.55	26.5	26.53	26.44
		RB3#0	21.58	21.75	21.44	26.47	26.64	26.33
		RB3#3	21.62	21.71	21.7	26.51	26.6	26.59
		RB6#0	21.64	21.7	21.52	26.53	26.59	26.41
3.0	QPSK	RB1#0	21.54	21.54	21.63	26.43	26.43	26.52
		RB1#8	21.73	21.57	21.47	26.62	26.46	26.36
		RB1#14	21.59	21.78	21.61	26.48	26.67	26.5
		RB6#0	21.41	21.68	21.44	26.3	26.57	26.33
		RB6#9	21.51	21.58	21.52	26.4	26.47	26.41
		RB15#0	21.79	21.63	21.56	26.68	26.52	26.45
	16QAM	RB1#0	21.67	21.41	21.78	26.56	26.3	26.67
		RB1#8	21.57	21.8	21.35	26.46	26.69	26.24
		RB1#14	21.45	21.35	21.62	26.34	26.24	26.51
		RB6#0	21.47	21.66	21.54	26.36	26.55	26.43
		RB6#9	21.64	21.55	21.57	26.53	26.44	26.46
		RB15#0	21.54	21.77	21.6	26.43	26.66	26.49

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	21.49	21.6	21.35	26.38	26.49	26.24
		RB1#13	21.53	21.66	21.63	26.42	26.55	26.52
		RB1#24	21.48	21.82	21.79	26.37	26.71	26.68
		RB15#0	21.77	21.59	21.43	26.66	26.48	26.32
		RB15#10	21.85	21.7	21.56	26.74	26.59	26.45
		RB25#0	21.57	21.64	21.52	26.46	26.53	26.41
	16QAM	RB1#0	21.84	21.61	21.49	26.73	26.5	26.38
		RB1#13	21.45	21.46	21.59	26.34	26.35	26.48
		RB1#24	21.54	21.65	21.48	26.43	26.54	26.37
		RB15#0	21.55	21.8	21.59	26.44	26.69	26.48
		RB15#10	21.67	21.6	21.54	26.56	26.49	26.43
		RB25#0	21.76	21.61	21.83	26.65	26.5	26.72
10.0	QPSK	RB1#0	21.65	21.86	21.55	26.54	26.75	26.44
		RB1#25	21.61	21.64	21.47	26.5	26.53	26.36
		RB1#49	21.69	21.4	21.58	26.58	26.29	26.47
		RB25#0	21.63	21.65	21.52	26.52	26.54	26.41
		RB25#25	21.72	21.51	21.56	26.61	26.4	26.45
		RB50#0	21.8	21.33	21.69	26.69	26.22	26.58
	16QAM	RB1#0	21.42	21.6	21.73	26.31	26.49	26.62
		RB1#25	21.57	21.67	21.69	26.46	26.56	26.58
		RB1#49	21.68	21.5	21.46	26.57	26.39	26.35
		RB25#0	21.83	21.62	21.5	26.72	26.51	26.39
		RB25#25	21.52	21.59	21.38	26.41	26.48	26.27
		RB50#0	21.62	21.66	21.58	26.51	26.55	26.47

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	21.43	21.4	21.65	26.32	26.29	26.54
		RB1#38	21.67	21.75	21.65	26.56	26.64	26.54
		RB1#74	21.57	21.5	21.42	26.46	26.39	26.31
		RB36#0	21.59	21.67	21.46	26.48	26.56	26.35
		RB36#39	21.81	21.52	21.68	26.7	26.41	26.57
		RB75#0	21.44	21.67	21.59	26.33	26.56	26.48
	16QAM	RB1#0	21.73	21.64	21.6	26.62	26.53	26.49
		RB1#38	21.64	21.78	21.61	26.53	26.67	26.5
		RB1#74	21.45	21.68	21.63	26.34	26.57	26.52
		RB36#0	21.55	21.79	21.6	26.44	26.68	26.49
		RB36#39	21.51	21.63	21.54	26.4	26.52	26.43
		RB75#0	21.6	21.6	21.6	26.49	26.49	26.49
20.0	QPSK	RB1#0	21.56	21.49	21.84	26.45	26.38	26.73
		RB1#50	21.57	21.37	21.46	26.46	26.26	26.35
		RB1#99	21.63	21.64	21.64	26.52	26.53	26.53
		RB50#0	21.6	21.33	21.78	26.49	26.22	26.67
		RB50#50	21.77	21.68	21.68	26.66	26.57	26.57
		RB100#0	21.66	21.78	21.61	26.55	26.67	26.5
	16QAM	RB1#0	21.66	21.67	21.36	26.55	26.56	26.25
		RB1#50	21.63	21.6	21.71	26.52	26.49	26.6
		RB1#99	21.7	21.74	21.55	26.59	26.63	26.44
		RB50#0	21.61	21.68	21.68	26.5	26.57	26.57
		RB50#50	21.73	21.61	21.51	26.62	26.5	26.4
		RB100#0	21.58	21.59	21.74	26.47	26.48	26.63

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band25: Antenna Gain = 4.89dBi
Limit: EIRP≤33dBm

LTE Band 41

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	21.76	21.36	21.33	26.95	26.55	26.52
		RB1#13	21.66	21.60	21.29	26.85	26.79	26.48
		RB1#24	21.77	21.63	21.18	26.96	26.82	26.37
		RB15#0	20.87	20.84	20.49	26.06	26.03	25.68
		RB15#10	20.87	20.94	20.62	26.06	26.13	25.81
		RB25#0	20.81	20.73	20.54	26.00	25.92	25.73
	16QAM	RB1#0	20.82	20.22	20.77	26.01	25.41	25.96
		RB1#13	21.08	20.48	20.94	26.27	25.67	26.13
		RB1#24	20.96	20.40	20.70	26.15	25.59	25.89
		RB15#0	19.75	19.55	19.46	24.94	24.74	24.65
		RB15#10	19.76	19.66	19.41	24.95	24.85	24.60
		RB25#0	19.73	19.70	19.54	24.92	24.89	24.73
10.0	QPSK	RB1#0	21.84	21.57	21.50	27.03	26.76	26.69
		RB1#25	21.81	21.91	21.56	27.00	27.10	26.75
		RB1#49	21.66	21.73	21.47	26.85	26.92	26.66
		RB25#0	20.87	20.66	20.61	26.06	25.85	25.80
		RB25#25	20.88	20.81	20.55	26.07	26.00	25.74
		RB50#0	20.86	20.80	20.53	26.05	25.99	25.72
	16QAM	RB1#0	21.17	20.38	20.94	26.36	25.57	26.13
		RB1#25	21.61	20.74	21.15	26.80	25.93	26.34
		RB1#49	21.26	20.80	20.90	26.45	25.99	26.09
		RB25#0	19.97	19.59	19.46	25.16	24.78	24.65
		RB25#25	20.03	19.71	19.47	25.22	24.90	24.66
		RB50#0	19.86	19.88	19.40	25.05	25.07	24.59

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	21.72	21.50	21.56	26.91	26.69	26.75
		RB1#38	21.81	21.70	21.57	27.00	26.89	26.76
		RB1#74	21.70	21.64	21.44	26.89	26.83	26.63
		RB36#0	20.69	20.58	20.54	25.88	25.77	25.73
		RB36#39	20.67	20.98	20.51	25.86	26.17	25.70
		RB75#0	20.66	20.73	20.44	25.85	25.92	25.63
	16QAM	RB1#0	21.14	20.63	20.38	26.33	25.82	25.57
		RB1#38	21.25	20.84	20.51	26.44	26.03	25.70
		RB1#74	21.09	20.84	20.10	26.28	26.03	25.29
		RB36#0	19.78	19.55	19.43	24.97	24.74	24.62
		RB36#39	19.70	19.72	19.45	24.89	24.91	24.64
		RB75#0	19.80	19.79	19.38	24.99	24.98	24.57
20.0	QPSK	RB1#0	21.71	21.69	21.42	26.90	26.88	26.61
		RB1#50	22.04	22.01	21.44	27.23	27.20	26.63
		RB1#99	21.66	21.76	21.24	26.85	26.95	26.43
		RB50#0	20.79	20.56	20.51	25.98	25.75	25.70
		RB50#50	20.69	20.82	20.55	25.88	26.01	25.74
		RB100#0	20.76	20.83	20.53	25.95	26.02	25.72
	16QAM	RB1#0	20.37	20.94	20.89	25.56	26.13	26.08
		RB1#50	20.56	21.47	21.07	25.75	26.66	26.26
		RB1#99	20.31	21.22	20.75	25.50	26.41	25.94
		RB50#0	19.87	19.62	19.67	25.06	24.81	24.86
		RB50#50	19.84	19.79	19.62	25.03	24.98	24.81
		RB100#0	19.81	19.63	19.69	25.00	24.82	24.88

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band41: Antenna Gain = 5.19dBi
Limit: EIRP≤33dBm

LTE Band 66:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	21.61	21.6	21.42	25.86	25.85	25.67
		RB1#3	21.85	21.37	21.55	26.1	25.62	25.8
		RB1#5	21.59	21.86	21.6	25.84	26.11	25.85
		RB3#0	21.67	21.59	21.58	25.92	25.84	25.83
		RB3#3	21.74	21.4	21.48	25.99	25.65	25.73
		RB6#0	21.58	21.57	21.77	25.83	25.82	26.02
	16QAM	RB1#0	21.58	21.83	21.68	25.83	26.08	25.93
		RB1#3	21.66	21.62	21.79	25.91	25.87	26.04
		RB1#5	21.79	21.82	21.53	26.04	26.07	25.78
		RB3#0	21.74	21.57	21.66	25.99	25.82	25.91
		RB3#3	21.77	21.66	21.52	26.02	25.91	25.77
		RB6#0	21.58	21.5	21.43	25.83	25.75	25.68
3.0	QPSK	RB1#0	21.73	21.63	21.71	25.98	25.88	25.96
		RB1#8	21.62	21.59	21.6	25.87	25.84	25.85
		RB1#14	21.74	21.7	21.55	25.99	25.95	25.8
		RB6#0	21.69	21.7	21.65	25.94	25.95	25.9
		RB6#9	21.65	21.54	21.38	25.9	25.79	25.63
		RB15#0	21.52	21.56	21.41	25.77	25.81	25.66
	16QAM	RB1#0	21.72	21.56	21.49	25.97	25.81	25.74
		RB1#8	21.56	21.57	21.58	25.81	25.82	25.83
		RB1#14	21.7	21.54	21.59	25.95	25.79	25.84
		RB6#0	21.59	21.49	21.71	25.84	25.74	25.96
		RB6#9	21.74	21.58	21.61	25.99	25.83	25.86
		RB15#0	21.47	21.72	21.58	25.72	25.97	25.83

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	21.64	21.78	21.4	25.89	26.03	25.65
		RB1#13	21.82	21.75	21.78	26.07	26	26.03
		RB1#24	21.46	21.73	21.87	25.71	25.98	26.12
		RB15#0	21.8	21.61	21.56	26.05	25.86	25.81
		RB15#10	21.75	21.75	21.33	26	26	25.58
		RB25#0	21.7	21.82	21.71	25.95	26.07	25.96
	16QAM	RB1#0	21.59	21.51	21.46	25.84	25.76	25.71
		RB1#13	21.58	21.46	21.41	25.83	25.71	25.66
		RB1#24	21.7	21.62	21.85	25.95	25.87	26.1
		RB15#0	21.71	21.55	21.5	25.96	25.8	25.75
		RB15#10	21.75	21.46	21.85	26	25.71	26.1
		RB25#0	21.6	21.76	21.6	25.85	26.01	25.85
10.0	QPSK	RB1#0	21.57	21.55	21.77	25.82	25.8	26.02
		RB1#25	21.33	21.5	21.63	25.58	25.75	25.88
		RB1#49	21.39	21.55	21.59	25.64	25.8	25.84
		RB25#0	21.74	21.48	21.78	25.99	25.73	26.03
		RB25#25	21.42	21.68	21.67	25.67	25.93	25.92
		RB50#0	21.65	21.75	21.55	25.9	26	25.8
	16QAM	RB1#0	21.45	21.66	21.65	25.7	25.91	25.9
		RB1#25	21.65	21.74	21.82	25.9	25.99	26.07
		RB1#49	21.69	21.6	21.59	25.94	25.85	25.84
		RB25#0	21.38	21.48	21.49	25.63	25.73	25.74
		RB25#25	21.45	21.47	21.64	25.7	25.72	25.89
		RB50#0	21.36	21.71	21.5	25.61	25.96	25.75

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	21.39	21.43	21.68	25.64	25.68	25.93
		RB1#38	21.8	21.54	21.41	26.05	25.79	25.66
		RB1#74	21.47	21.59	21.76	25.72	25.84	26.01
		RB36#0	21.83	21.59	21.81	26.08	25.84	26.06
		RB36#39	21.42	21.8	21.37	25.67	26.05	25.62
		RB75#0	21.67	21.48	21.55	25.92	25.73	25.8
	16QAM	RB1#0	21.57	21.71	21.68	25.82	25.96	25.93
		RB1#38	21.54	21.72	21.6	25.79	25.97	25.85
		RB1#74	21.43	21.44	21.4	25.68	25.69	25.65
		RB36#0	21.75	21.68	21.58	26	25.93	25.83
		RB36#39	21.51	21.63	21.55	25.76	25.88	25.8
		RB75#0	21.76	21.74	21.83	26.01	25.99	26.08
20.0	QPSK	RB1#0	21.54	21.43	21.68	25.79	25.68	25.93
		RB1#50	21.62	21.45	21.46	25.87	25.7	25.71
		RB1#99	21.36	21.65	21.78	25.61	25.9	26.03
		RB50#0	21.55	21.55	21.63	25.8	25.8	25.88
		RB50#50	21.31	21.53	21.63	25.56	25.78	25.88
		RB100#0	21.64	21.77	21.6	25.89	26.02	25.85
	16QAM	RB1#0	21.64	21.7	21.7	25.89	25.95	25.95
		RB1#50	21.7	21.44	21.62	25.95	25.69	25.87
		RB1#99	21.77	21.61	21.8	26.02	25.86	26.05
		RB50#0	21.66	21.52	21.49	25.91	25.77	25.74
		RB50#50	21.65	21.51	21.62	25.9	25.76	25.87
		RB100#0	21.41	21.51	21.53	25.66	25.76	25.78

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band 66: Antenna Gain = 4.25dBi
Limit: EIRP≤30dBm

Peak-to-average ratio (PAR)

Cellular Band

Mode	Channel	PAR (dB)	Limit (dB)
CDMA 1*RTT (BC0)	Low	1.35	13
	Middle	1.37	13
	High	1.46	13

Mode	Channel	PAR (dB)	Limit (dB)
CDMA EV-DO (BC0)	Low	1.36	13
	Middle	1.41	13
	High	1.42	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
CDMA 1*RTT (BC1)	Low	2.22	13
	Middle	2.14	13
	High	2.13	13

Mode	Channel	PAR (dB)	Limit (dB)
CDMA EV-DO (BC1)	Low	2.15	13
	Middle	2.14	13
	High	2.11	13

LTE Band 2 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.25	7.26	7.19	13	Pass
QPSK (100RB Size)	6.54	6.66	6.29	13	Pass
16QAM (1RB Size)	5.25	5.17	5.36	13	Pass
16QAM (100RB Size)	4.76	4.85	4.93	13	Pass

LTE Band 4 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.36	3.95	3.75	13	Pass
QPSK (100RB Size)	5.16	6.35	5.38	13	Pass
16QAM (1RB Size)	4.29	4.65	4.78	13	Pass
16QAM (100RB Size)	5.72	6.27	6.88	13	Pass

LTE Band 5 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.37	6.91	8.75	13	Pass
QPSK (50RB Size)	5.16	5.35	8.36	13	Pass
16QAM (1RB Size)	4.29	6.85	5.72	13	Pass
16QAM (50RB Size)	7.13	6.89	7.77	13	Pass

LTE Band 12 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.15	8.75	8.76	13	Pass
QPSK (50RB Size)	9.12	9.14	9.55	13	Pass
16QAM (1RB Size)	10.10	10.26	10.38	13	Pass
16QAM (50RB Size)	9.85	9.62	9.64	13	Pass

LTE Band 13 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	8.56	/	13	Pass
QPSK (50RB Size)	/	8.55	/	13	Pass
16QAM (1RB Size)	/	9.36	/	13	Pass
16QAM (50RB Size)	/	9.78	/	13	Pass

LTE Band 25 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.77	7.56	7.88	13	Pass
QPSK (100RB Size)	6.98	6.92	6.54	13	Pass
16QAM (1RB Size)	7.52	7.32	7.46	13	Pass
16QAM (100RB Size)	7.48	7.55	7.69	13	Pass

LTE Band 41 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	10.12	10.33	10.28	13	Pass
QPSK (100RB Size)	10.25	10.24	10.36	13	Pass
16QAM (1RB Size)	8.69	8.26	8.14	13	Pass
16QAM (100RB Size)	9.64	9.55	9.42	13	Pass

LTE Band 66 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	7.77	7.56	7.88	13	Pass
QPSK (100RB Size)	6.98	6.92	6.54	13	Pass
16QAM (1RB Size)	7.52	7.32	7.46	13	Pass
16QAM (100RB Size)	7.48	7.55	7.69	13	Pass

FCC §2.1049, §22.917, §22.905 & §24.238&§27.53 - OCCUPIED BANDWIDTH

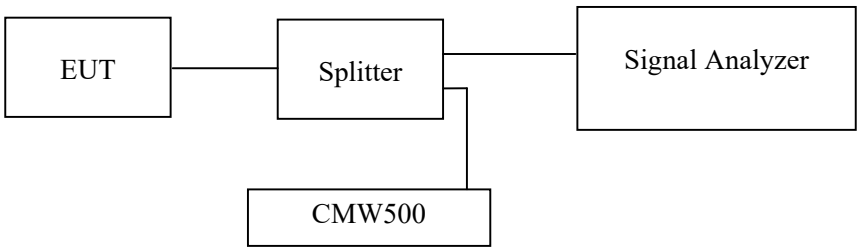
Applicable Standard

FCC 47 §2.1049, §22.917, §22.905, §24.238 and §27.53.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range was added into plots.

Test Data

Environmental Conditions

Temperature:	27.2~26.1 ℃
Relative Humidity:	52.4~56.2 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Cat Kang from 2022-10-07 to 2022-11-02.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables and plots.

Cellular Band (Part 22H)

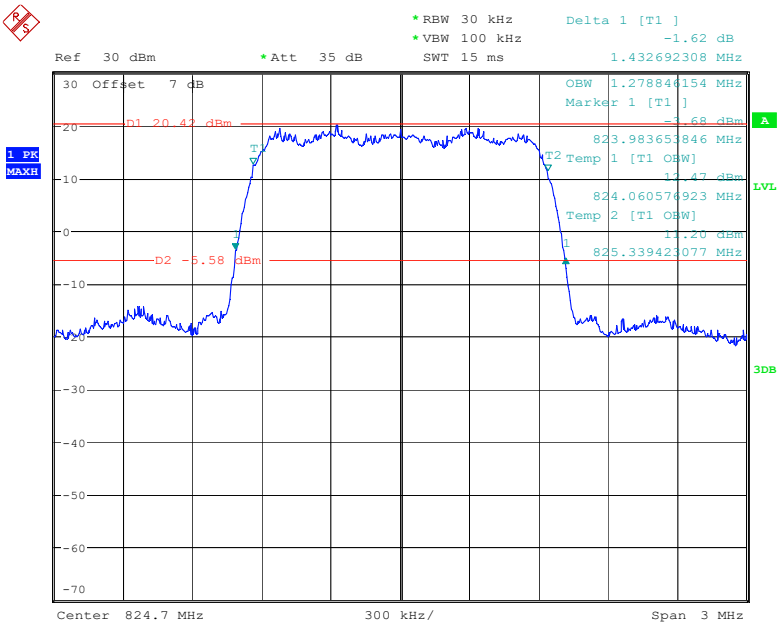
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
CDMA (1xRTT) BC0	824.70	1.279	1.433
CDMA (1xRTT) BC0	836.52	1.274	1.442
CDMA (1xRTT) BC0	848.31	1.279	1.433
CDMA (EV-DO) BC0	824.70	1.278	1.439
CDMA (EV-DO) BC0	836.52	1.278	1.438
CDMA (EV-DO) BC0	848.31	1.278	1.440

PCS Band (Part 24E)

Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
CDMA (1xRTT) BC0	1851.25	1.279	1.452
CDMA (1xRTT) BC0	1880.00	1.279	1.442
CDMA (1xRTT) BC0	1908.75	1.278	1.444
CDMA (EV-DO) BC0	1851.25	1.284	1.439
CDMA (EV-DO) BC0	1880.00	1.278	1.438
CDMA (EV-DO) BC0	1908.75	1.278	1.452

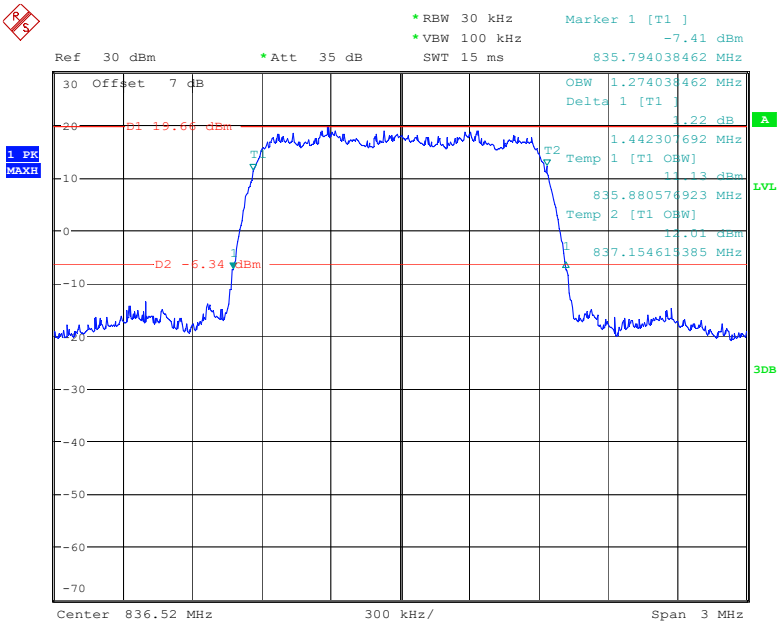
Cellular Band (Part 22H)

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, Low channel



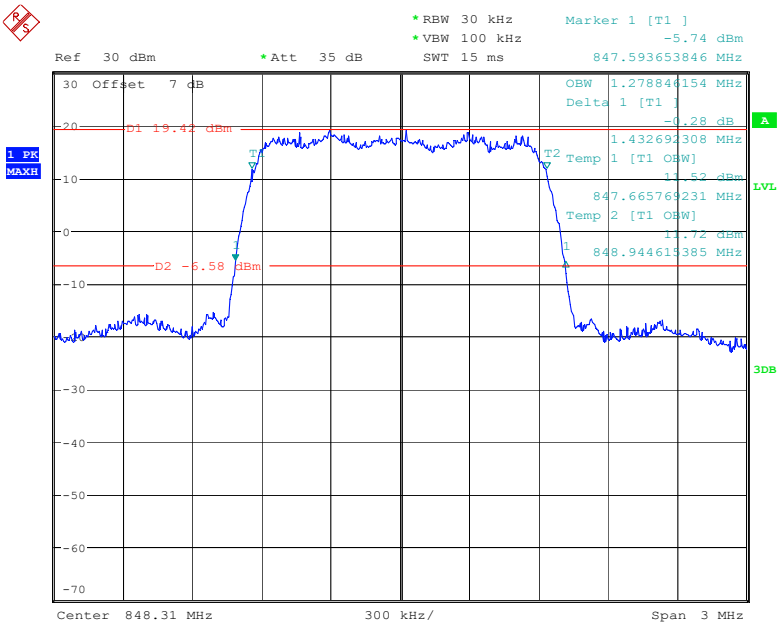
Date: 10.OCT.2022 10:36:54

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, Middle channel



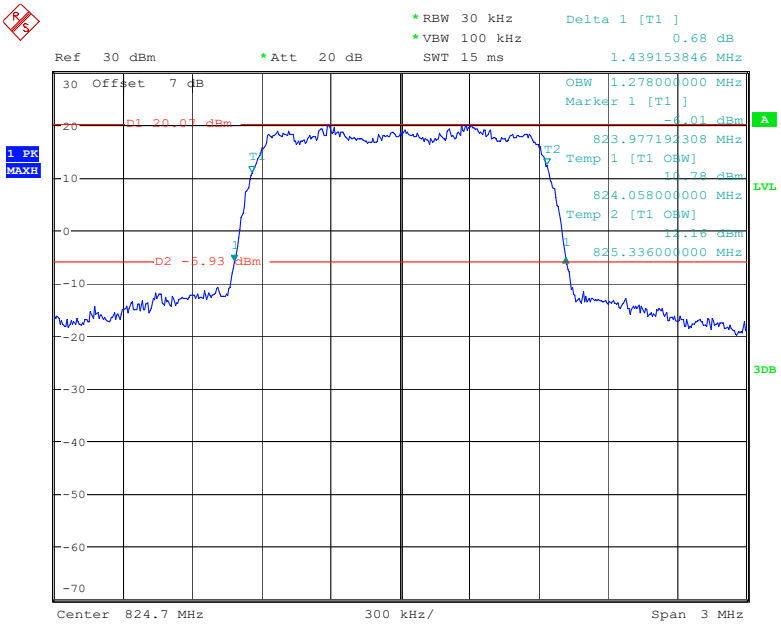
Date: 10.OCT.2022 10:34:28

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, High channel



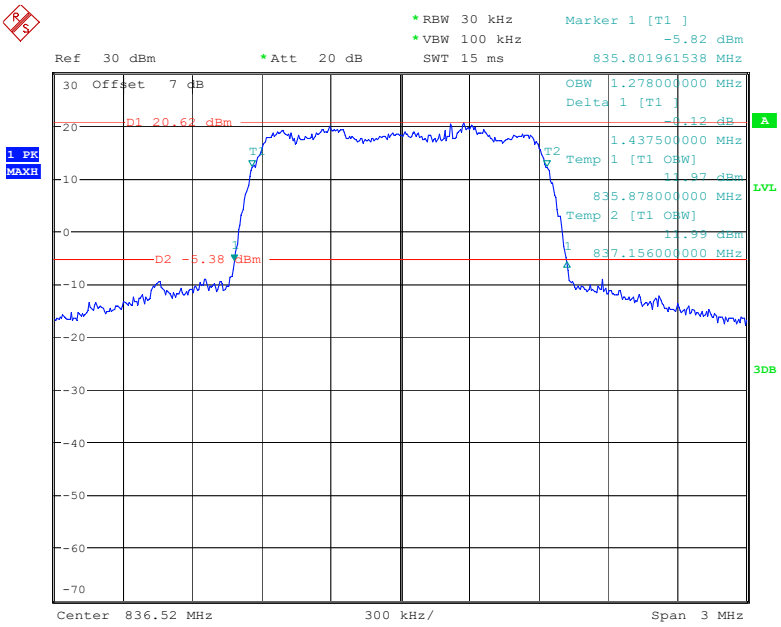
Date: 10.OCT.2022 10:38:56

26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, Low channel



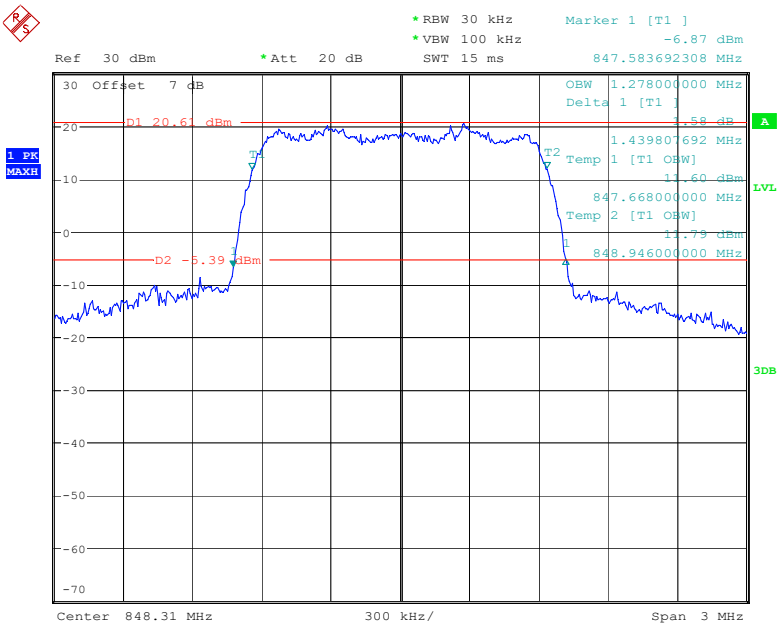
Date: 17.OCT.2022 19:38:48

26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, Middle channel



Date: 17.OCT.2022 19:36:35

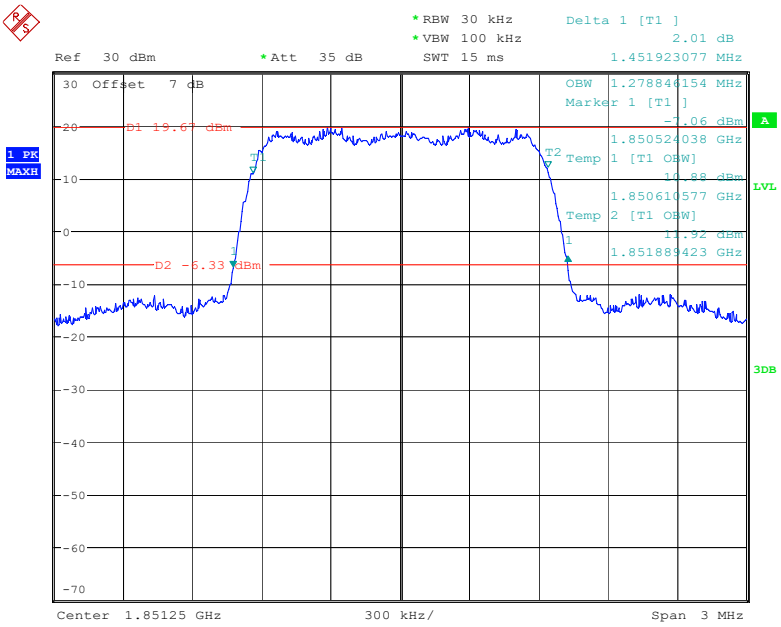
26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, High channel



Date: 17.OCT.2022 19:40:54

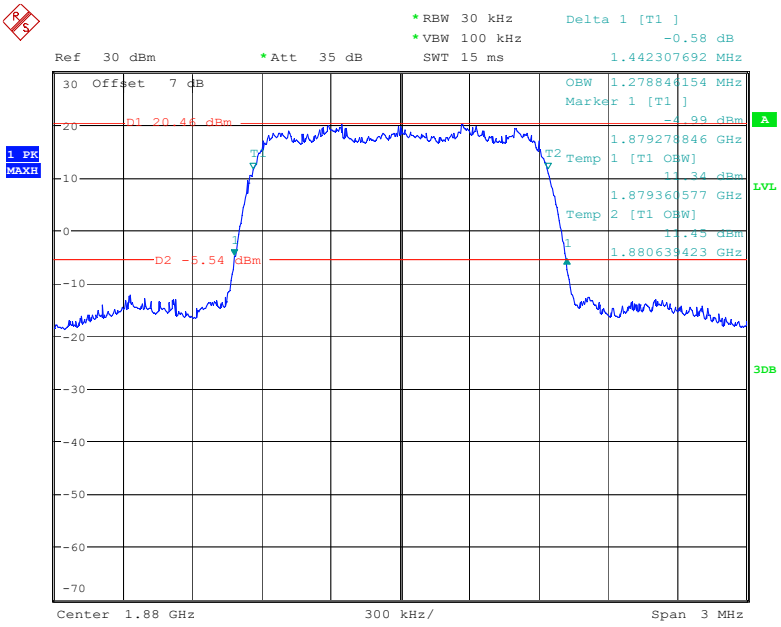
PCS Band (Part 24E)

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, Low channel



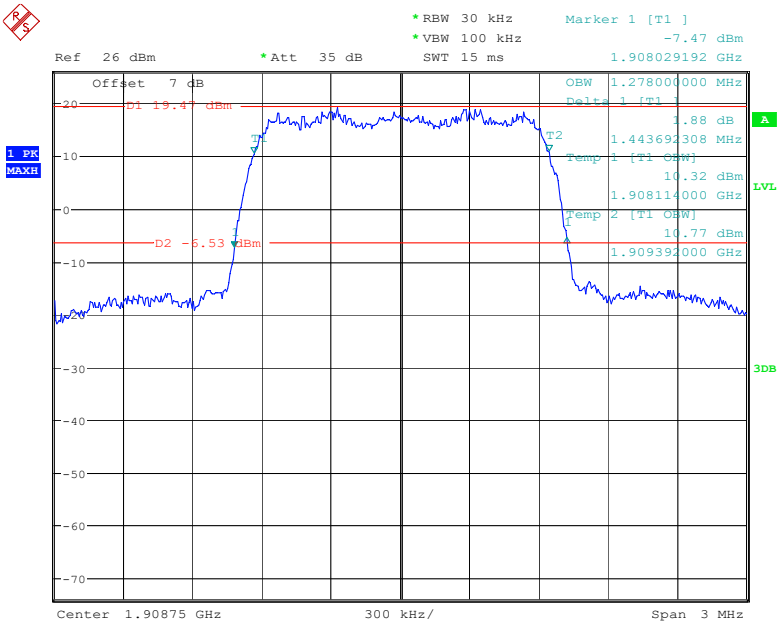
Date: 10.OCT.2022 10:45:33

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, Middle channel



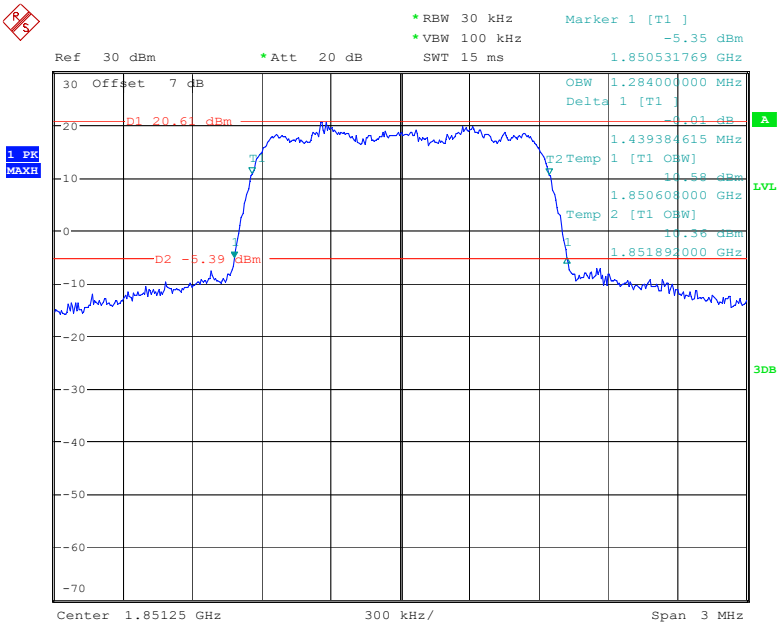
Date: 10.OCT.2022 10:43:35

26 dB Emissions &99% Occupied Bandwidth for 1xRTT Mode, High channel



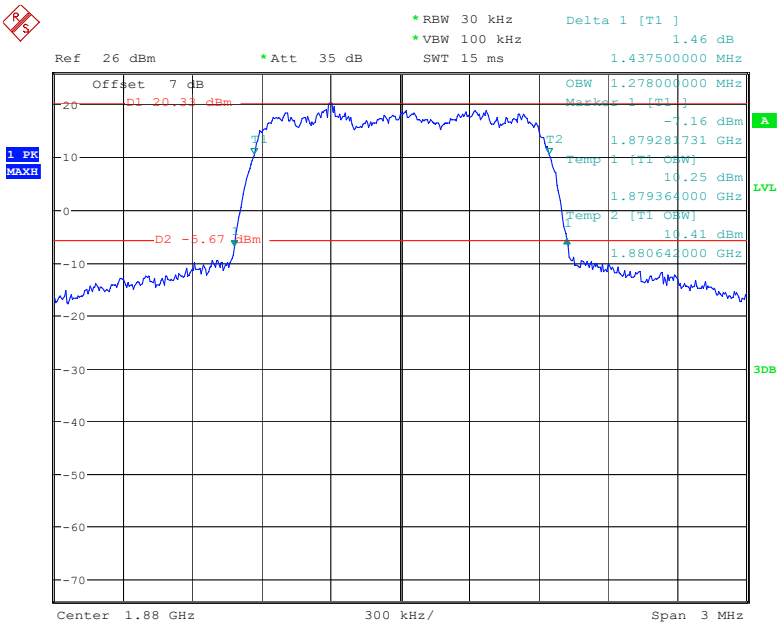
Date: 28.OCT.2022 16:13:20

26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, Low channel



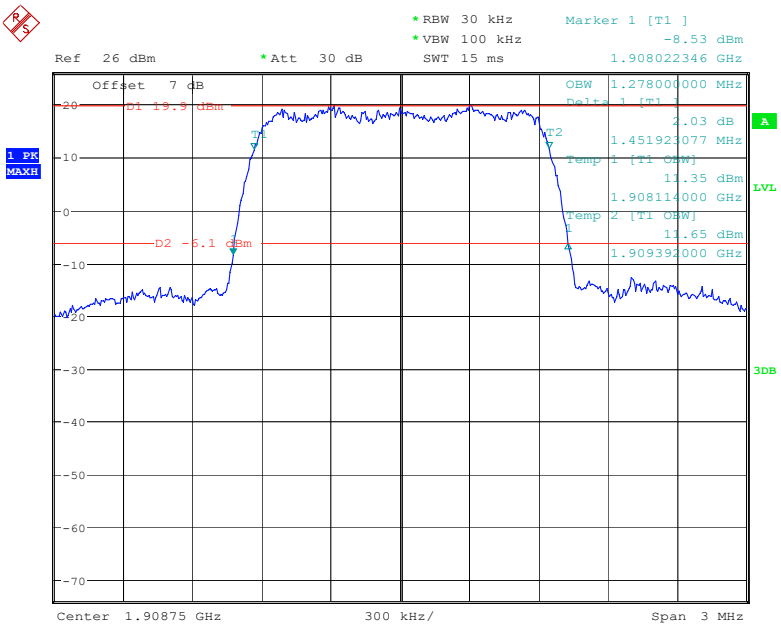
Date: 18.OCT.2022 09:12:02

26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, Middle channel



Date: 28.OCT.2022 17:10:39

26 dB Emissions &99% Occupied Bandwidth for EV-DO Mode, High channel



Date: 2.NOV.2022 13:40:06

LTE Band 2:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.104	1.254	1.110	1.350	1.110	1.308
	16QAM	1.110	1.332	1.104	1.314	1.098	1.338
3 MHz	QPSK	2.700	2.952	2.700	2.952	2.700	2.964
	16QAM	2.700	2.952	2.700	2.976	2.688	2.964
5 MHz	QPSK	4.520	5.100	4.560	5.060	4.540	5.060
	16QAM	4.540	5.060	4.520	5.000	4.520	5.020
10 MHz	QPSK	9.000	9.680	8.960	9.840	8.960	9.760
	16QAM	8.920	9.680	8.960	9.720	8.960	9.680
15 MHz	QPSK	13.500	15.000	13.560	14.940	13.560	15.060
	16QAM	13.500	14.820	13.560	14.940	13.560	14.940
20 MHz	QPSK	17.840	19.600	18.080	19.520	17.920	19.520
	16QAM	17.840	19.280	18.080	19.520	17.920	19.440

LTE Band 4:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.110	1.386	1.110	1.314	1.104	1.308
	16QAM	1.104	1.308	1.104	1.326	1.110	1.314
3 MHz	QPSK	2.700	2.940	2.700	2.940	2.700	2.952
	16QAM	2.700	2.964	2.688	2.964	2.688	2.940
5 MHz	QPSK	4.520	5.040	4.520	5.040	4.500	5.020
	16QAM	4.520	5.000	4.540	5.020	4.540	5.060
10 MHz	QPSK	8.920	9.680	8.920	9.640	9.000	9.800
	16QAM	8.960	9.720	8.960	9.720	8.920	9.600
15 MHz	QPSK	13.500	15.000	13.500	14.940	13.500	14.820
	16QAM	13.560	14.880	13.500	14.820	13.560	14.820
20 MHz	QPSK	17.920	19.360	17.920	19.360	18.000	19.600
	16QAM	18.000	19.440	17.920	19.440	17.920	19.520

LTE Band 5:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.110	1.326	1.104	1.344	1.104	1.326
	16QAM	1.104	1.338	1.110	1.314	1.104	1.296
3 MHz	QPSK	2.700	2.952	2.688	2.940	2.688	2.964
	16QAM	2.688	2.976	2.700	3.000	2.688	2.952
5 MHz	QPSK	4.500	5.000	4.540	5.000	4.500	5.040
	16QAM	4.540	5.060	4.520	5.000	4.500	5.020
10 MHz	QPSK	8.960	9.680	8.960	9.720	8.960	9.720
	16QAM	8.960	9.720	8.960	9.680	8.960	9.600

LTE Band 12:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.110	1.362	1.116	1.302	1.104	1.344
	16QAM	1.104	1.314	1.098	1.332	1.110	1.314
3 MHz	QPSK	2.700	2.976	2.700	2.976	2.700	2.940
	16QAM	2.688	2.940	2.688	2.952	2.688	2.976
5 MHz	QPSK	4.540	5.060	4.540	5.000	4.520	5.020
	16QAM	4.540	5.040	4.540	5.040	4.520	5.020
10 MHz	QPSK	8.960	9.760	9.000	9.840	8.920	9.680
	16QAM	9.000	9.760	8.960	9.560	8.920	9.520

LTE Band 13:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.520	5.020	4.520	5.020	4.540	5.060
	16QAM	4.520	5.020	4.560	5.060	4.520	5.060
10 MHz	QPSK	/	/	8.960	9.800	/	/
	16QAM	/	/	8.960	9.680	/	/

LTE Band 25

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.110	1.398	1.116	1.314	1.122	1.956
	16QAM	1.110	1.320	1.104	1.344	1.116	1.374
3 MHz	QPSK	2.700	2.976	2.700	2.952	2.712	3.024
	16QAM	2.688	2.976	2.700	2.988	2.700	2.964
5 MHz	QPSK	4.540	5.040	4.520	5.060	4.540	5.040
	16QAM	4.540	5.080	4.520	5.020	4.540	5.000
10 MHz	QPSK	8.960	9.800	8.960	9.920	8.960	9.680
	16QAM	8.920	9.680	8.960	9.720	8.920	9.640
15 MHz	QPSK	13.500	14.820	13.560	14.880	13.500	15.000
	16QAM	13.440	14.940	13.560	14.880	13.500	14.760
20 MHz	QPSK	17.840	18.960	18.000	19.520	17.920	19.600
	16QAM	17.920	19.360	18.000	19.600	18.000	19.440

LTE Band 41

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.520	5.180	4.520	5.000	4.520	5.020
	16QAM	4.520	5.040	4.520	5.300	4.520	5.240
10 MHz	QPSK	8.960	10.000	9.000	10.640	8.960	9.720
	16QAM	8.960	12.480	8.960	9.840	8.960	9.560
15 MHz	QPSK	13.620	19.440	13.620	17.160	13.500	14.880
	16QAM	13.560	19.800	13.620	16.860	13.560	18.600
20 MHz	QPSK	17.920	20.080	18.000	19.280	17.920	19.360
	16QAM	17.920	19.760	17.920	19.280	17.920	20.880

LTE Band 66

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
1.4 MHz	QPSK	1.104	1.344	1.098	1.320	1.110	1.338
	16QAM	1.104	1.314	1.104	1.326	1.110	1.314
3 MHz	QPSK	2.700	2.952	2.700	2.952	2.700	2.964
	16QAM	2.700	2.964	2.688	2.952	2.688	2.976
5 MHz	QPSK	4.520	5.040	4.520	5.040	4.520	4.980
	16QAM	4.520	5.040	4.540	5.080	4.520	5.060
10 MHz	QPSK	8.960	9.760	8.960	9.720	9.000	9.760
	16QAM	8.920	9.600	8.960	9.720	9.000	9.680
15 MHz	QPSK	13.500	14.880	13.500	14.880	13.500	14.880
	16QAM	13.500	14.880	13.500	14.880	13.500	14.760
20 MHz	QPSK	17.840	19.200	18.000	19.520	17.840	19.520
	16QAM	17.840	19.360	18.080	19.600	17.920	19.440

The test plots of LTE band please refer to the Appendix A.

FCC §2.1051, §22.917(a) & §24.238(a)& §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

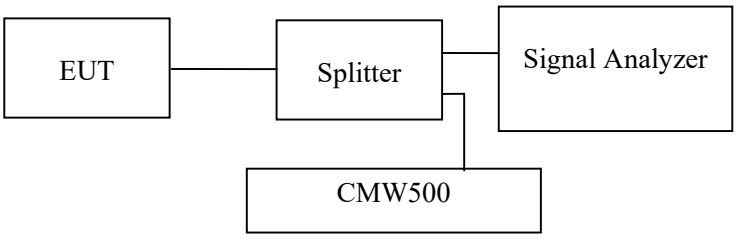
Applicable Standard

FCC §2.1051, §22.917(a) & §24.238(a)&§27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz. Sufficient scans were taken to show any out of band emissions up to 10^{th} harmonic.



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range was added into plots.

Test Data

Environmental Conditions

Temperature:	27.2~26.1 ℃
Relative Humidity:	52.4~56.2 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Cat Kang from 2022-10-07 to 2022-11-14.

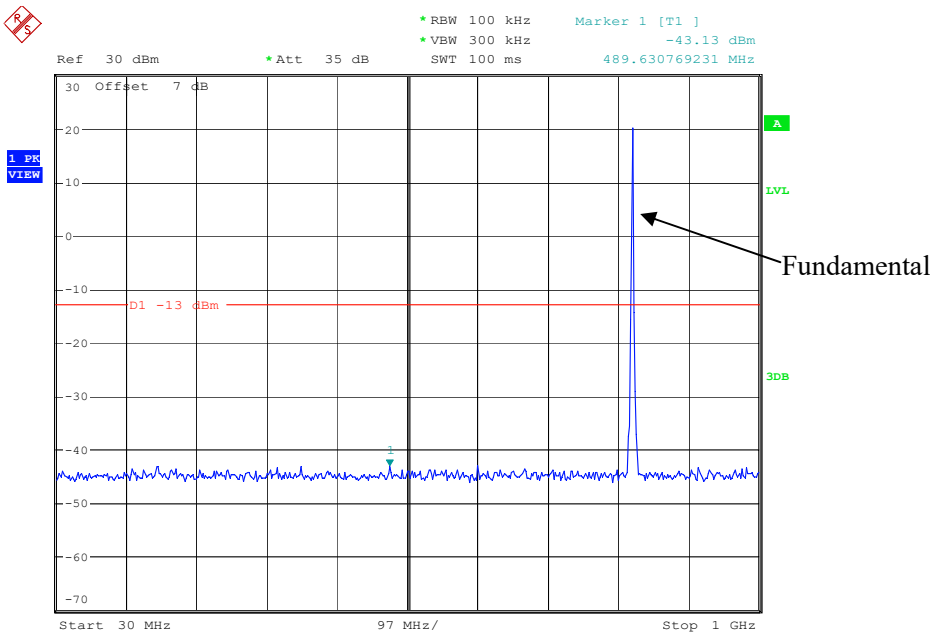
EUT operation mode: Transmitting

Test result: Pass

Please refer to the following plots.

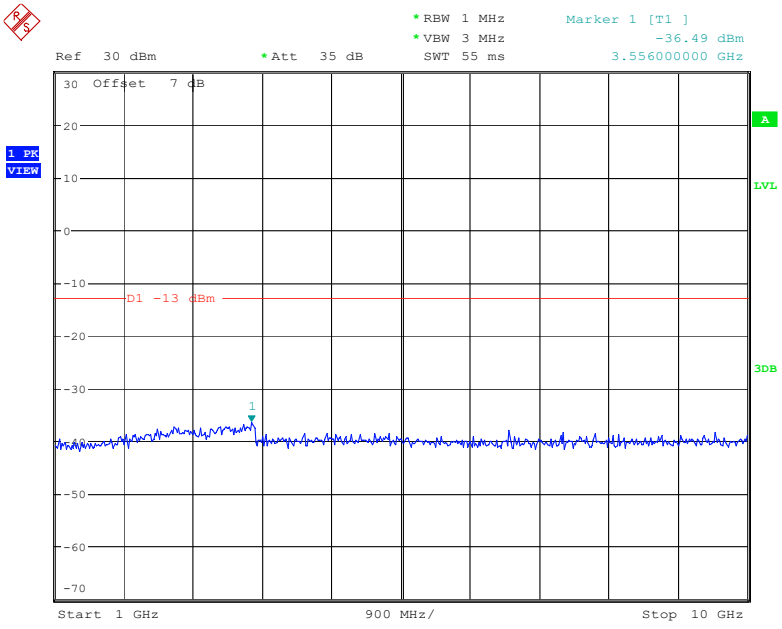
Cellular Band
Low Channel:

30 MHz – 1 GHz (1xRTT Mode)



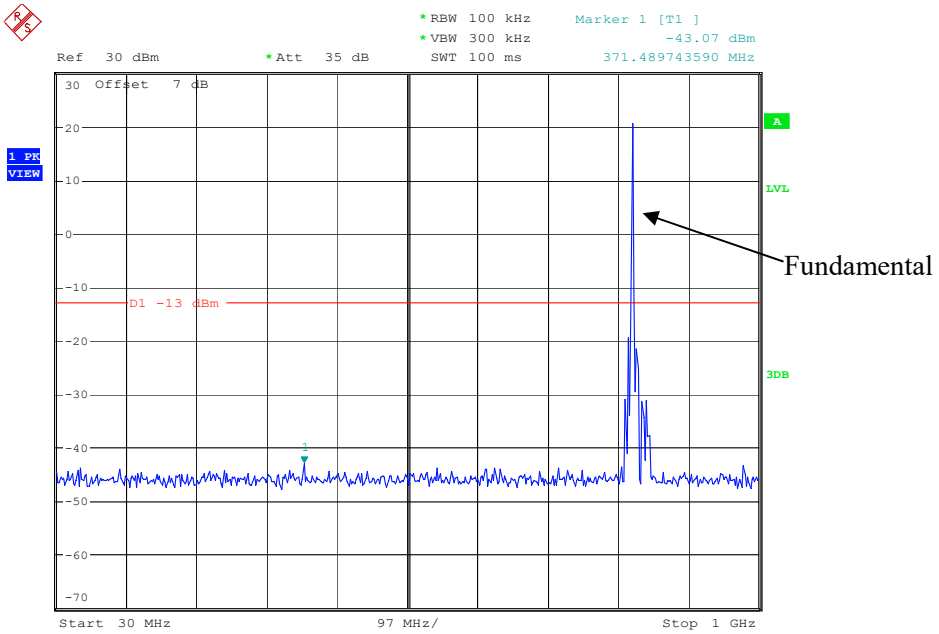
Date: 1.NOV.2022 15:48:28

1 GHz – 10 GHz (1xRTT Mode)



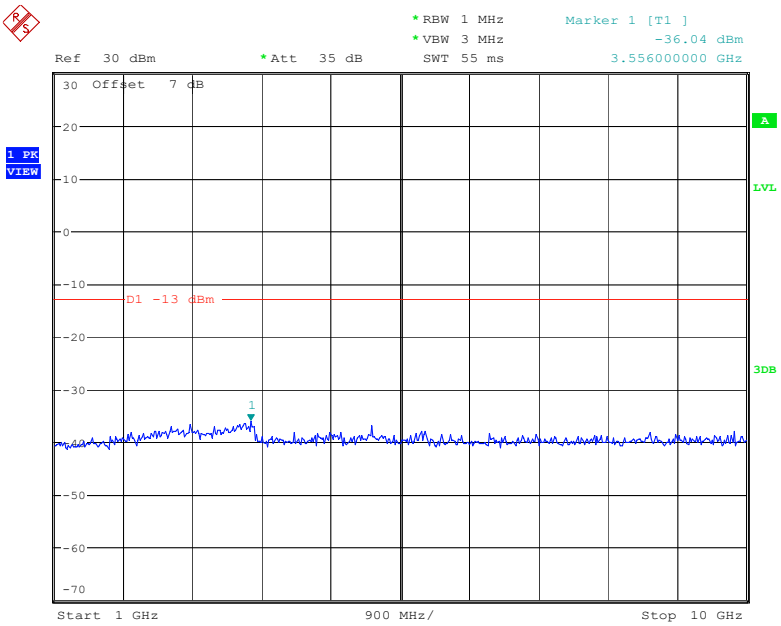
Date: 1.NOV.2022 15:43:29

30 MHz – 1 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:22:56

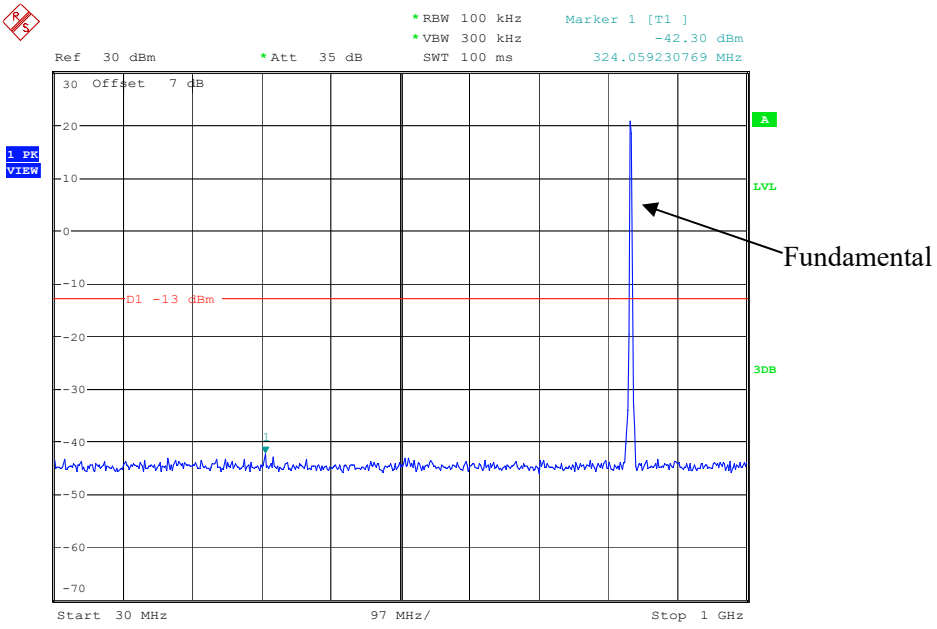
1 GHz – 10 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:19:55

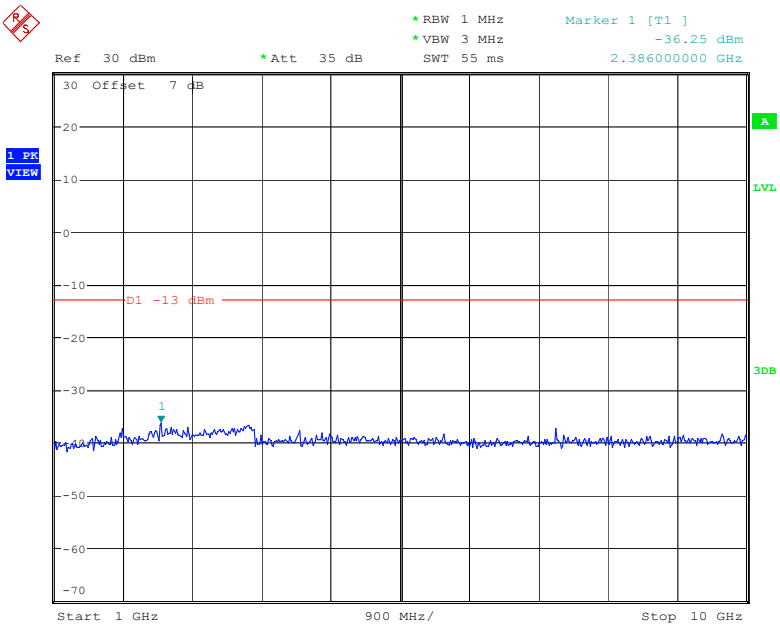
Middle Channel:

30 MHz – 10 GHz (1xRTT Mode)



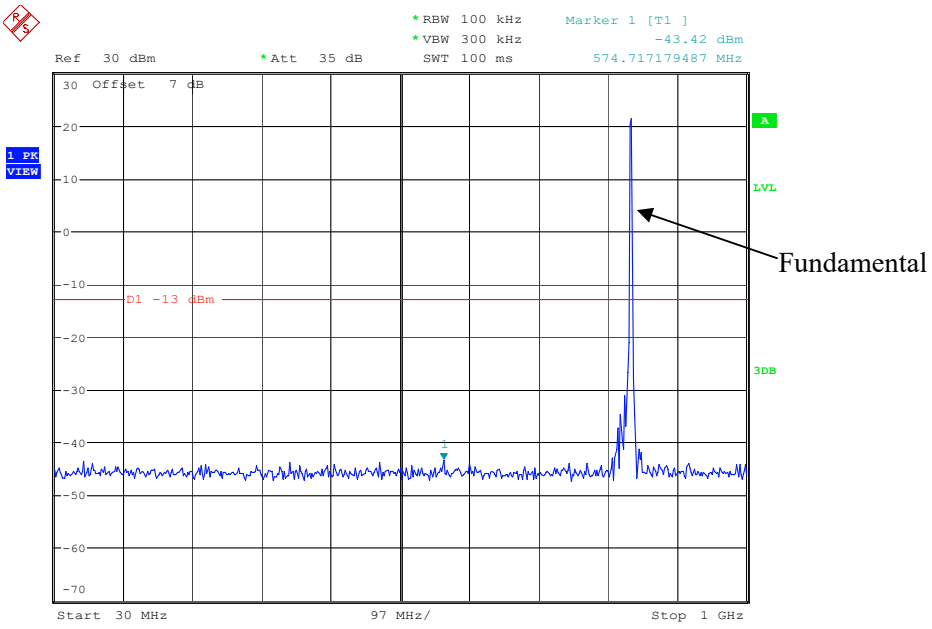
Date: 1.NOV.2022 15:46:01

1 GHz – 10 GHz (1xRTT Mode)



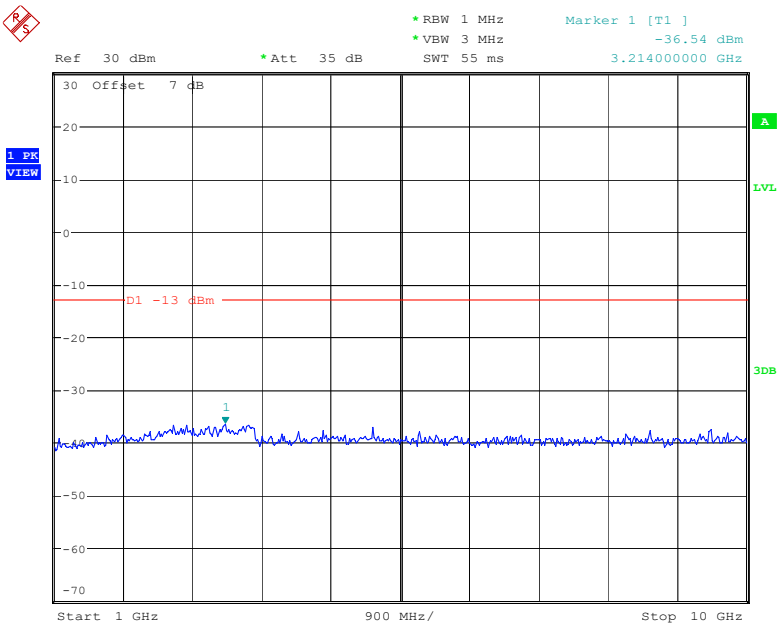
Date: 1.NOV.2022 15:44:29

30 MHz – 1 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:21:59

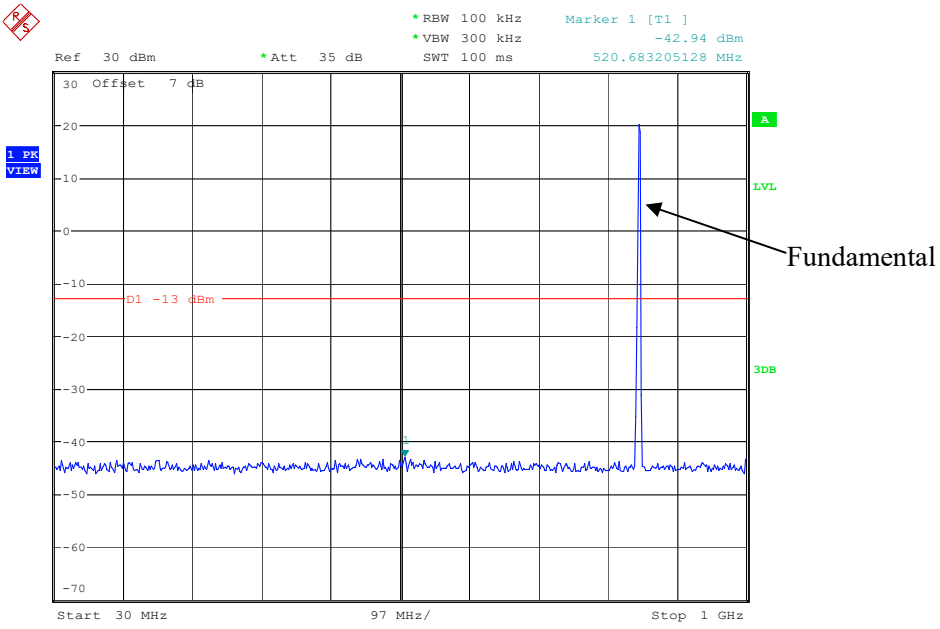
1 GHz – 10 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:19:15

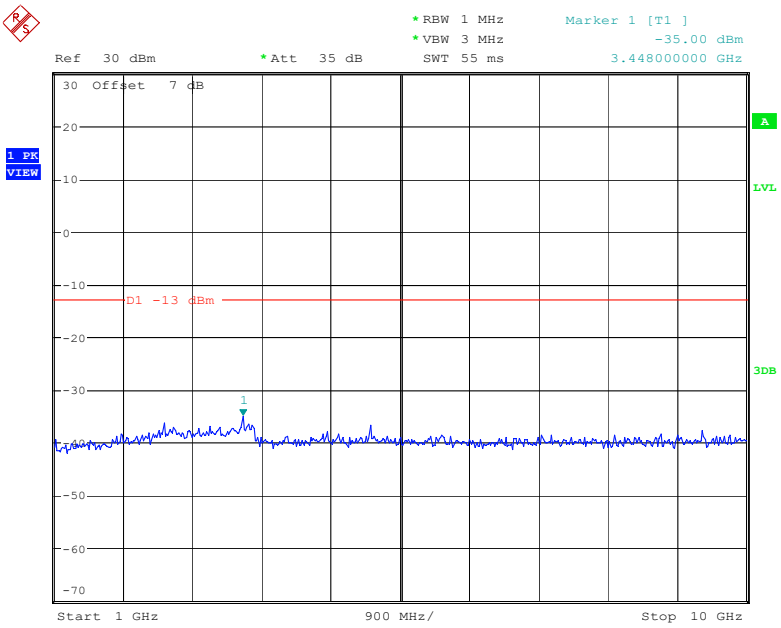
High Channel:

30 MHz – 10 GHz (1xRTT Mode)



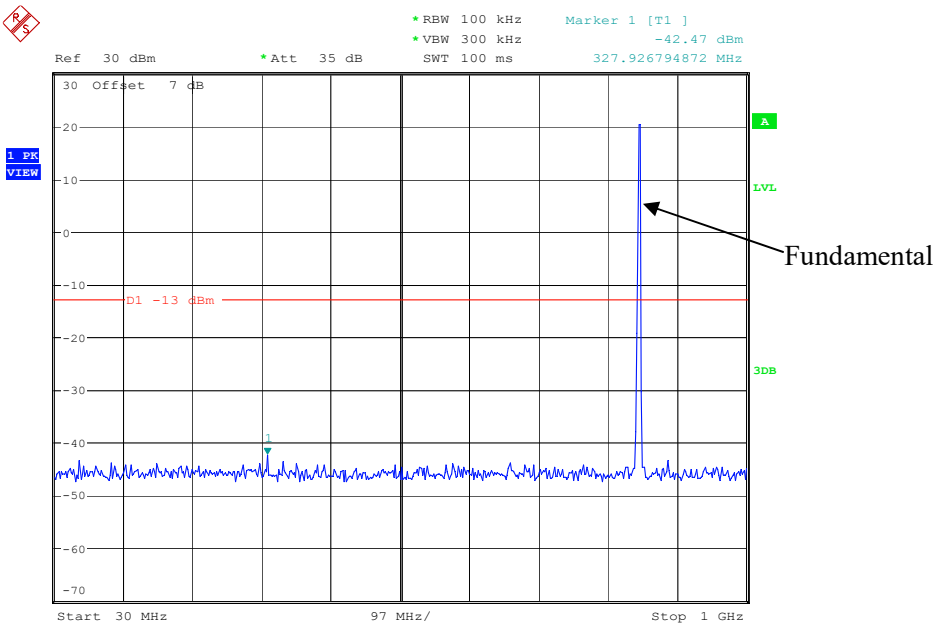
Date: 1.NOV.2022 15:46:59

1 GHz – 10 GHz (1xRTT Mode)



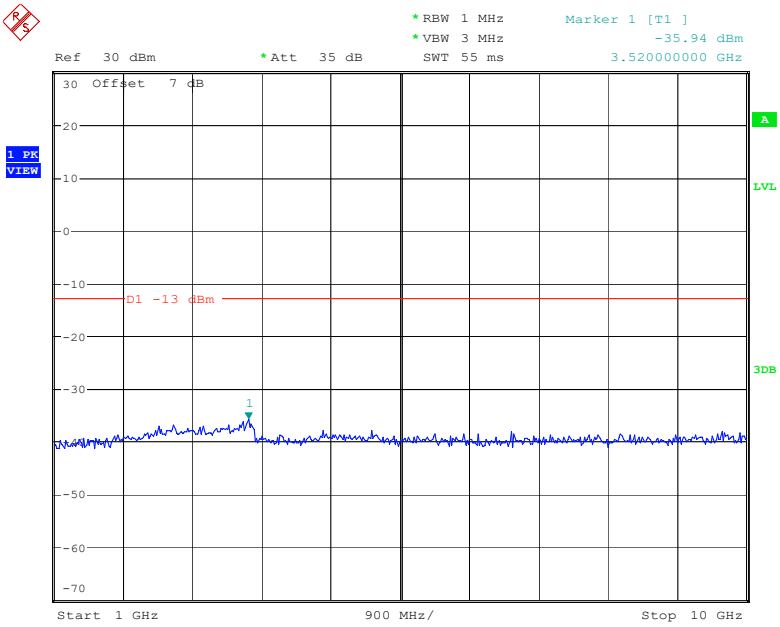
Date: 1.NOV.2022 15:43:52

30 MHz – 1 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:21:26

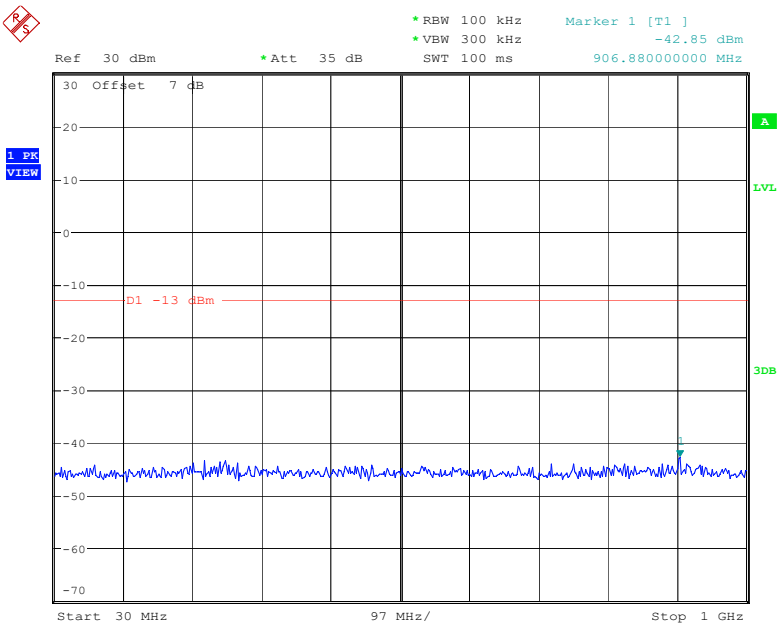
1 GHz – 10 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:20:20

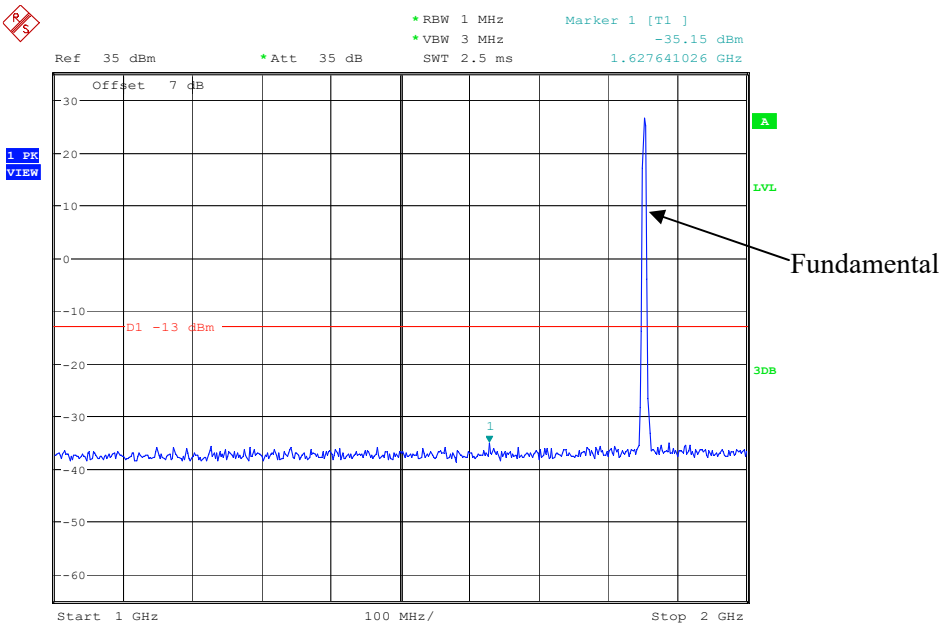
PCS Band
Low Channel:

30 MHz – 1 GHz (1xRTT Mode)



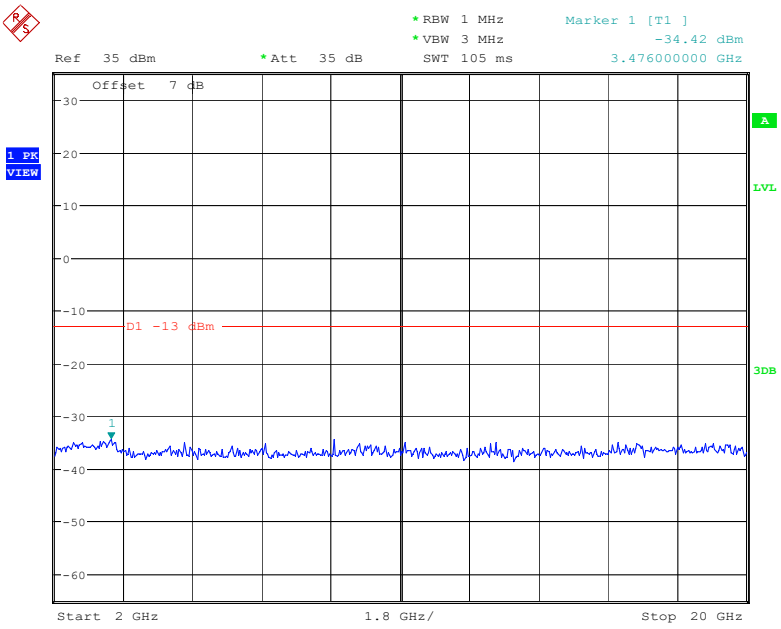
Date: 1.NOV.2022 16:11:55

1 GHz – 2 GHz (1xRTT Mode)



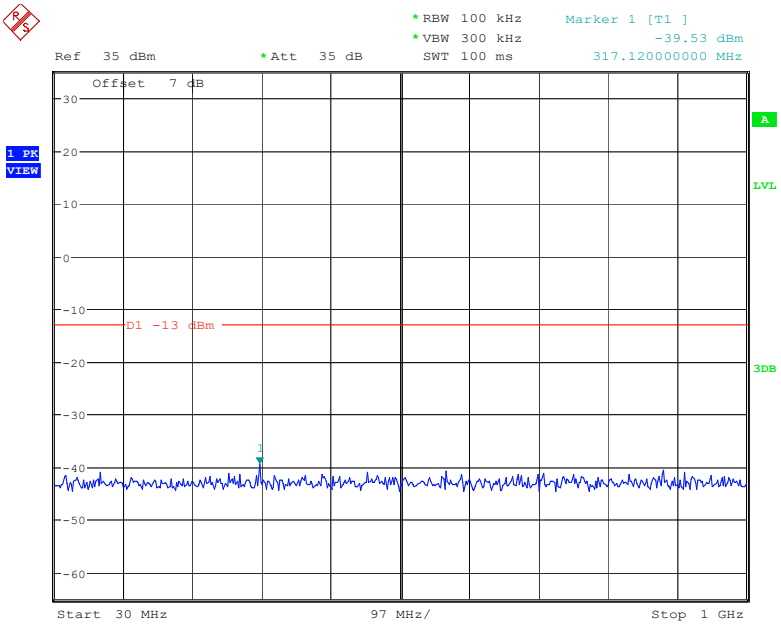
Date: 1.NOV.2022 16:13:01

2 GHz – 20 GHz (1xRTT Mode)



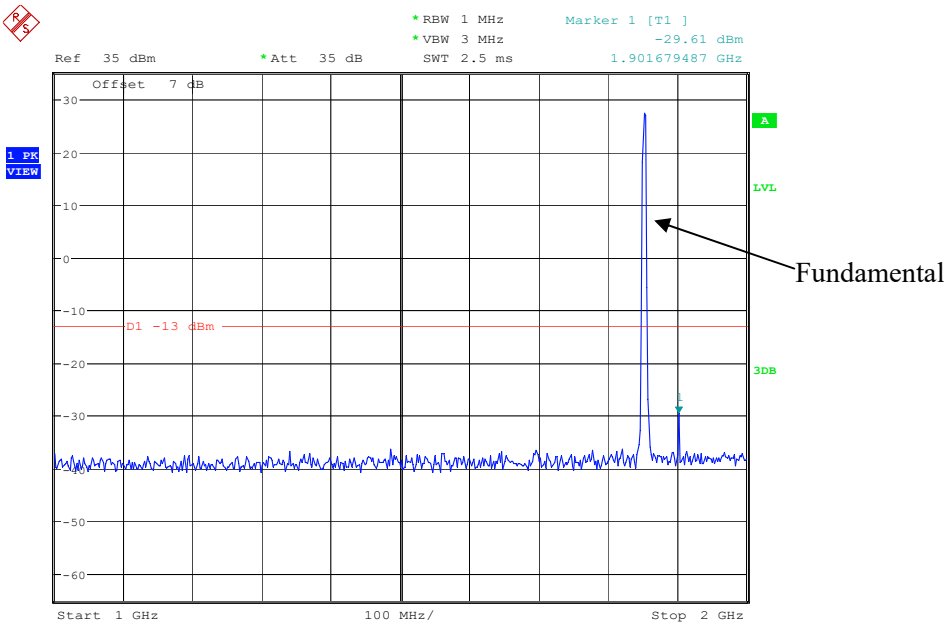
Date: 1.NOV.2022 16:15:54

30MHz – 1 GHz (EV-DO Mode)



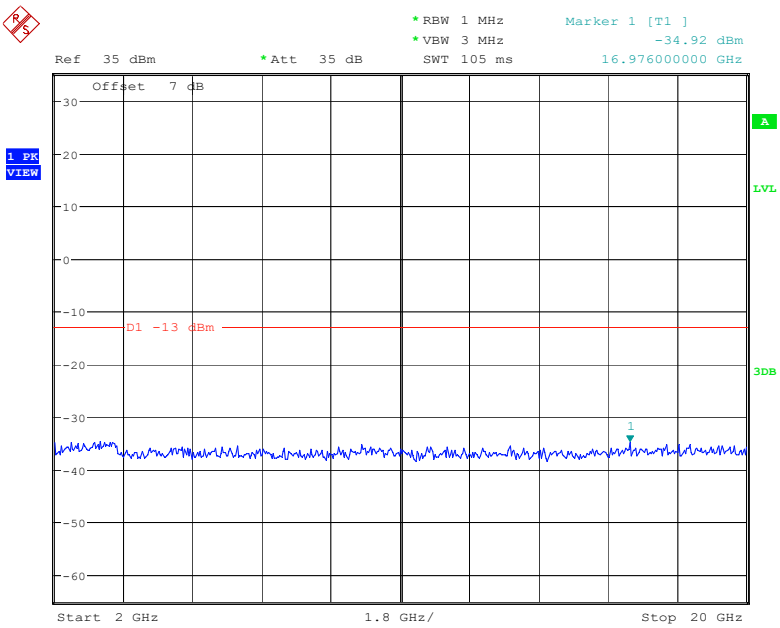
Date: 1.NOV.2022 16:24:46

1 GHz – 2 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:27:13

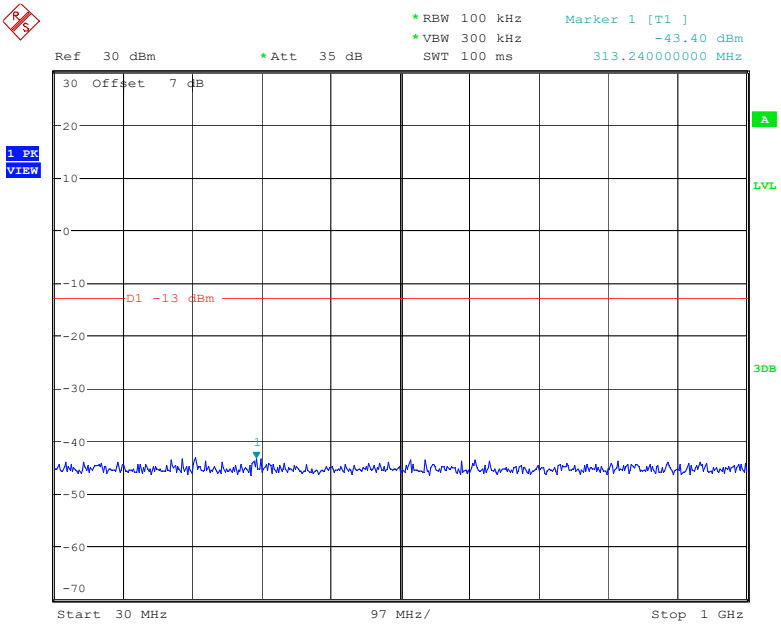
2 GHz – 20 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:27:44

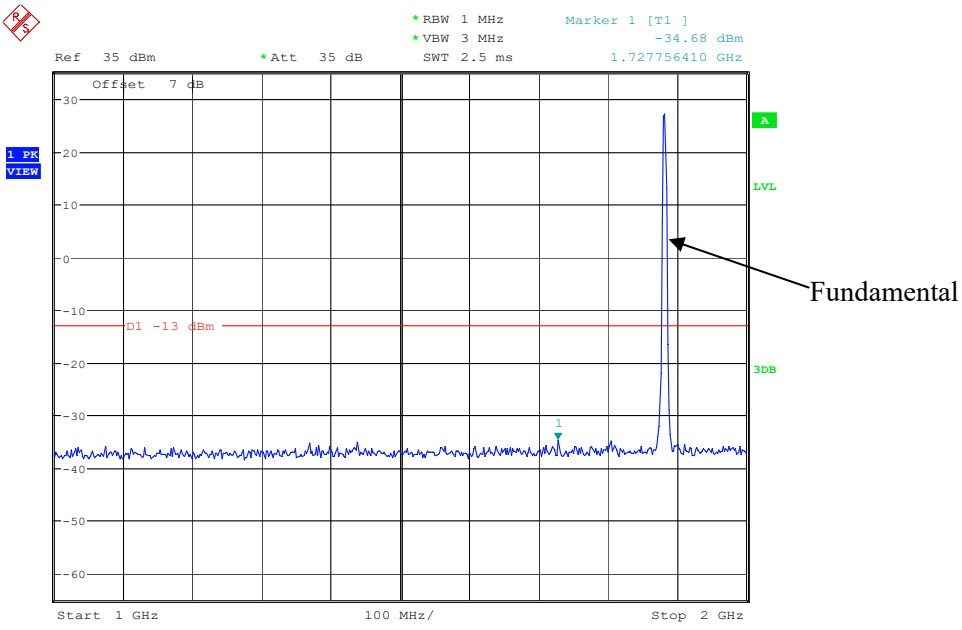
Middle Channel:

30 MHz – 1 GHz (1xRTT Mode)



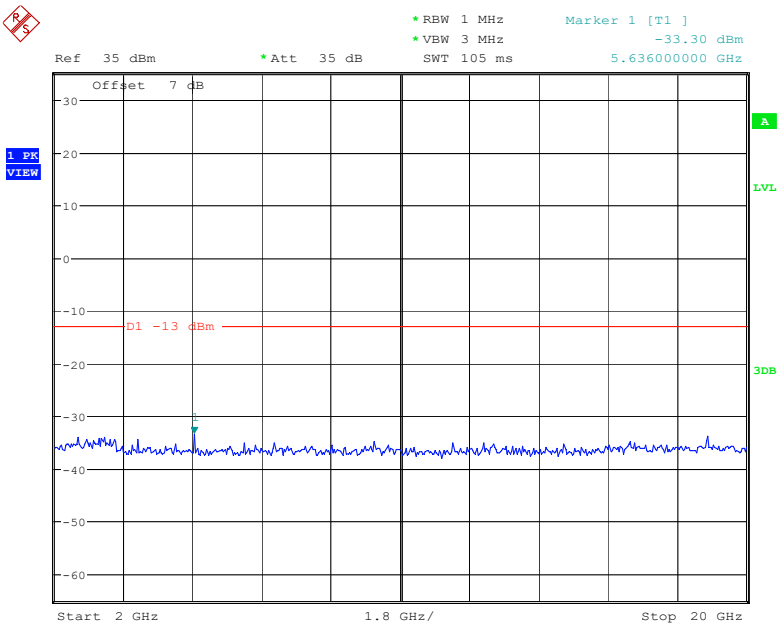
Date: 1.NOV.2022 16:09:50

1 GHz – 2 GHz (1xRTT Mode)



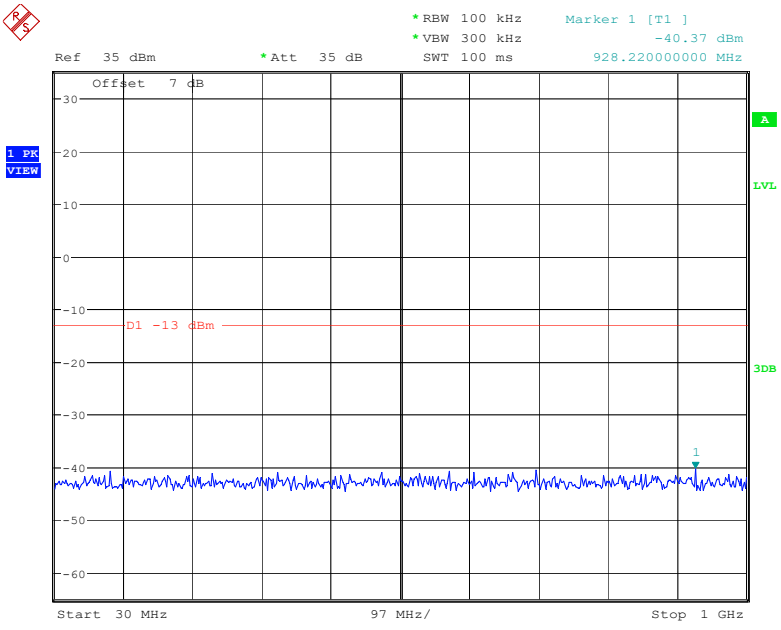
Date: 1.NOV.2022 16:14:03

2 GHz – 20 GHz (1xRTT Mode)



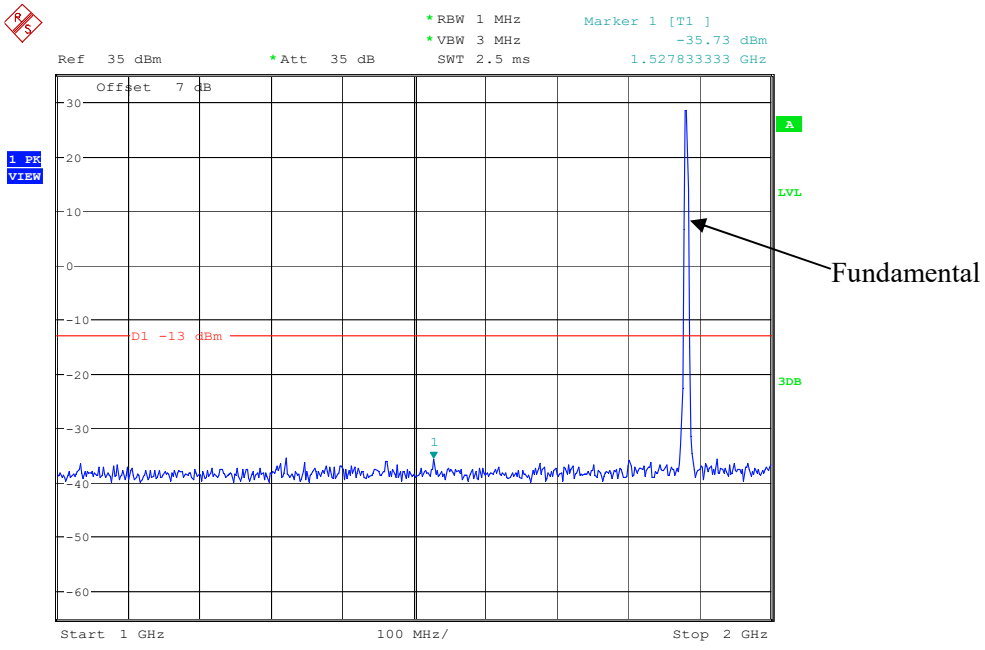
Date: 1.NOV.2022 16:15:30

30 MHz – 1 GHz (EV-DO Mode)



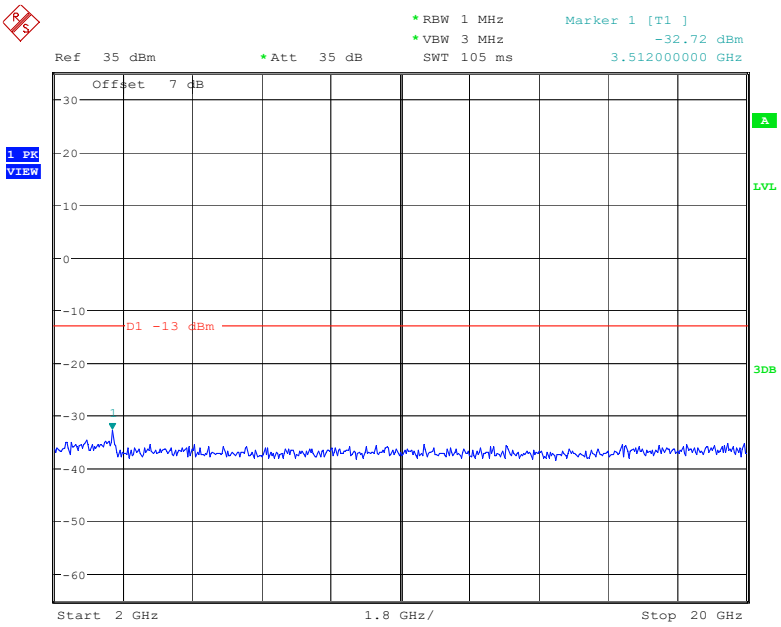
Date: 1.NOV.2022 16:24:10

1 GHz – 2 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:26:41

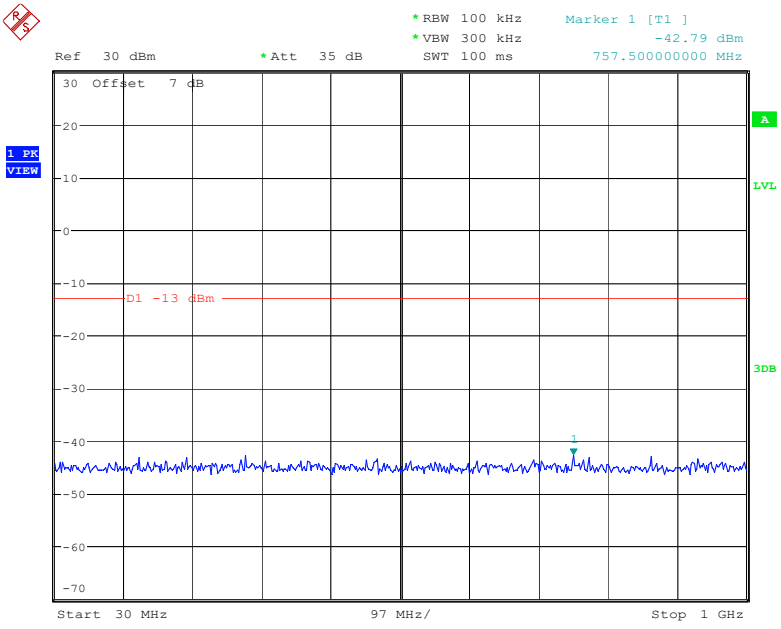
2 GHz – 20 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:28:17

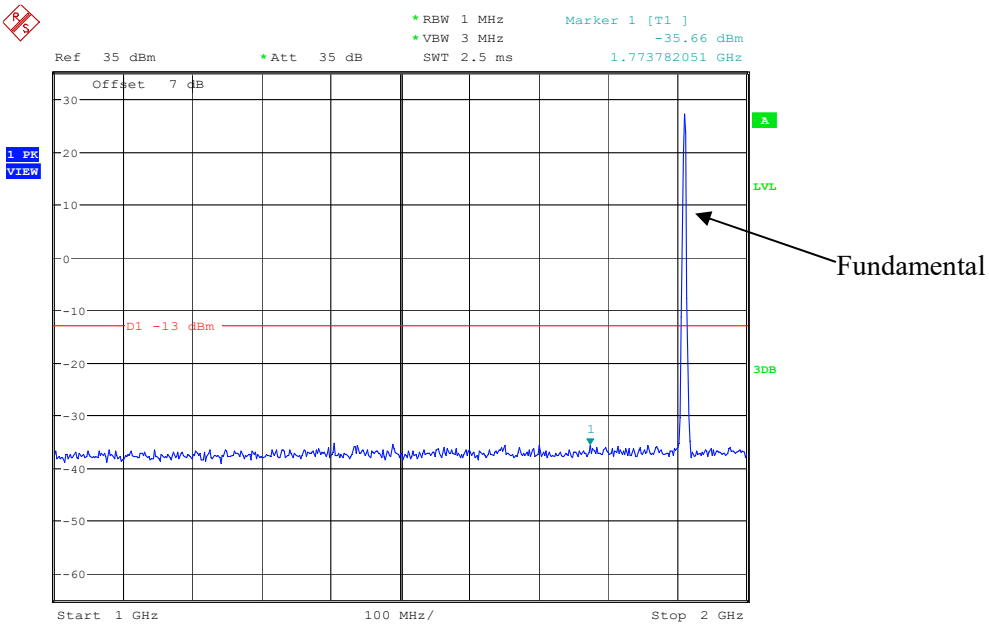
High Channel:

30 MHz – 1 GHz (1xRTT Mode)



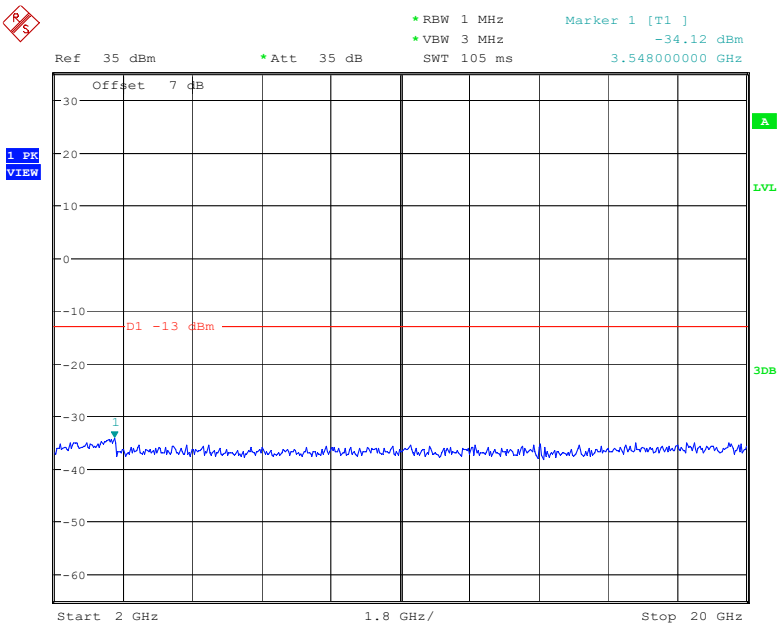
Date: 1.NOV.2022 16:11:12

1 GHz – 2 GHz (1xRTT Mode)



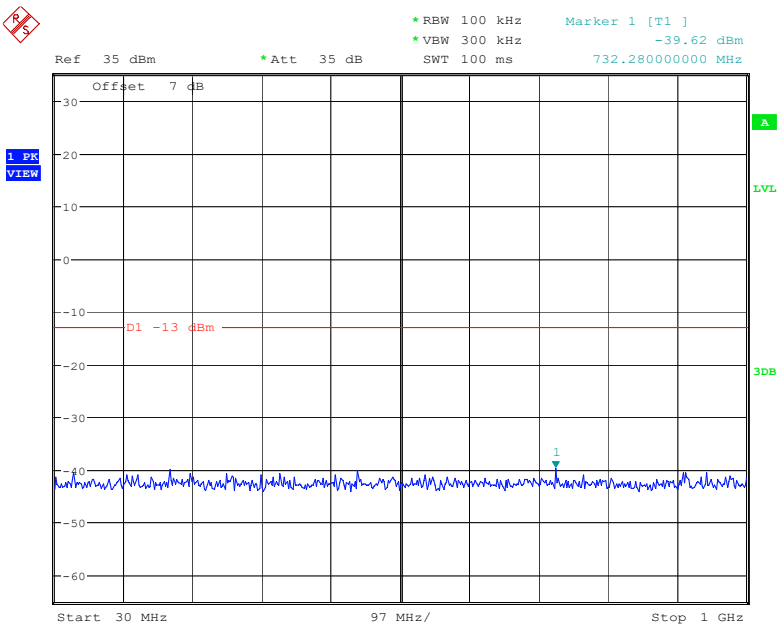
Date: 1.NOV.2022 16:14:39

2 GHz – 20 GHz (1xRTT Mode)



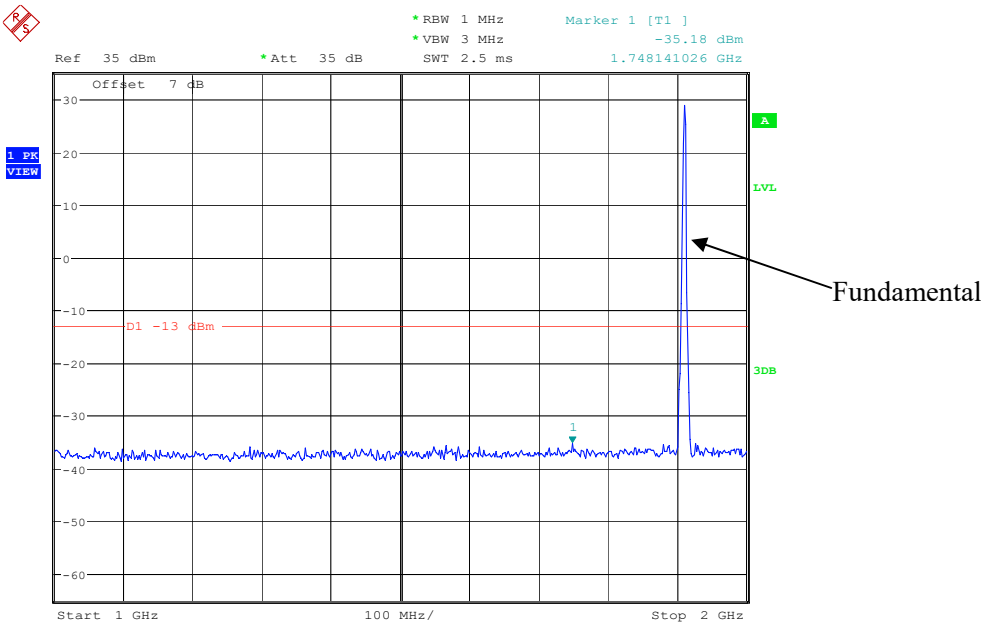
Date: 1.NOV.2022 16:15:00

30 MHz – 1 GHz (EV-DO Mode)



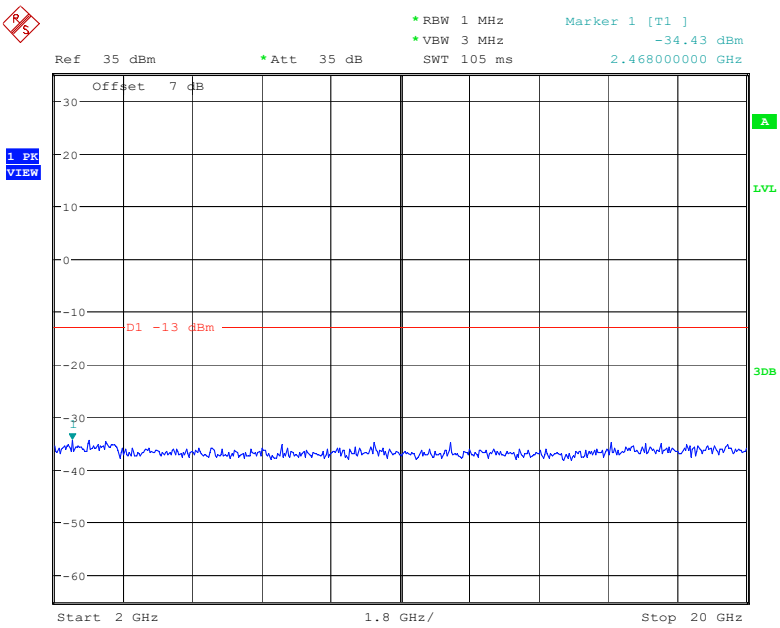
Date: 1.NOV.2022 16:25:12

1 GHz – 2 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:26:00

2 GHz – 20 GHz (EV-DO Mode)



Date: 1.NOV.2022 16:28:46

The test plots of LTE band please refer to the Appendix B.

FCC § 2.1053; § 22.917 (a);§ 24.238 (a); §27.53 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917(a)& § 24.238(a) &§ 27.53.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	23.4~27.6 ℃
Relative Humidity:	51~62 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Level Li on from 2022-10-11 to 2022-10-14.

EUT operation mode: Transmitting (Scan with X-AXIS, Y-AXIS, Z-AXIS, the worst case Y-AXIS was recorded)

The worst case is as below:

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
CDMA BC0 1xRTT								
Test frequency range: 30MHz-10GHz								
824.7MHz								
960.9	-75.21	265	1.4	H	9.6	-65.61	-13	-52.61
960.9	-72.58	69	1.8	V	11.7	-60.88	-13	-47.88
1649.4	-60.00	174	1.8	H	3.5	-56.50	-13	-43.50
1649.4	-59.30	71	2.2	V	3.1	-56.20	-13	-43.20
2474.1	-52.90	50	2.3	H	6.6	-46.30	-13	-33.30
2474.1	-52.60	329	2.3	V	5.8	-46.80	-13	-33.80
3298.8	-52.90	163	1.6	H	6.4	-46.50	-13	-33.50
3298.8	-52.10	336	1.7	V	5.7	-46.40	-13	-33.40
836.52MHz								
949.9	-75.07	107	1.9	H	9.6	-65.47	-13	-52.47
949.9	-72.95	101	1.6	V	11.7	-61.25	-13	-48.25
1673.0	-57.90	31	1	H	3.8	-54.10	-13	-41.10
1673.0	-57.00	65	2	V	3.1	-53.90	-13	-40.90
2509.6	-52.70	298	1.7	H	6.2	-46.50	-13	-33.50
2509.6	-53.20	317	1.7	V	5.6	-47.60	-13	-34.60
3346.1	-53.10	78	2.2	H	6.6	-46.50	-13	-33.50
3346.1	-52.10	77	1.4	V	5.4	-46.70	-13	-33.70
848.31 MHz								
948.4	-75.13	153	2	H	9.6	-65.53	-13	-52.53
948.4	-73.87	263	1.3	V	11.7	-62.17	-13	-49.17
1696.62	-58.00	312	1.1	H	4.1	-53.90	-13	-40.90
1696.62	-57.20	249	2.0	V	3.1	-54.10	-13	-41.10
2544.93	-52.10	356	2.0	H	6.1	-46.00	-13	-33.00
2544.93	-53.70	21	2.5	V	5.8	-47.90	-13	-34.90
3393.24	-52.80	127	2.4	H	6.2	-46.60	-13	-33.60
3393.24	-51.30	234	1.9	V	5.4	-45.90	-13	-32.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
CDMA BC0 EV-DO								
Test frequency range: 30MHz-10GHz								
824.7MHz								
961.7	-75.31	103	1.1	H	9.6	-65.71	-13	-52.71
961.7	-74.53	108	2	V	11.7	-62.83	-13	-49.83
1649.4	-54.1	320	2.0	H	3.5	-50.6	-13	-37.6
1649.4	-54.0	266	2.5	V	3.1	-50.9	-13	-37.9
2474.1	-48.2	92	2.1	H	6.6	-41.6	-13	-28.6
2474.1	-48.9	242	2.4	V	5.8	-43.1	-13	-30.1
3298.8	-52.5	300	1.6	H	6.4	-46.1	-13	-33.1
3298.8	-51.3	97	1.2	V	5.7	-45.6	-13	-32.6
836.52MHz								
962.2	-73.42	6	1.9	H	9.6	-63.82	-13	-50.82
962.2	-73.83	186	1.2	V	11.7	-62.13	-13	-49.13
1673	-51.6	1	1.2	H	3.8	-47.8	-13	-34.8
1673	-52.2	81	1.6	V	3.1	-49.1	-13	-36.1
2509.6	-47.5	33	1.3	H	6.2	-41.3	-13	-28.3
2509.6	-46.2	104	2.1	V	5.5	-40.7	-13	-27.7
3346.1	-51.8	29	2.5	H	6.6	-45.2	-13	-32.2
3346.1	-50.4	228	2.1	V	5.4	-45.0	-13	-32.0
848.31MHz								
956.5	-74.11	99	2.2	H	9.6	-64.51	-13	-51.51
956.5	-74.26	307	1.1	V	11.7	-62.56	-13	-49.56
1696.62	-51.1	109	1.3	H	4.1	-47.0	-13	-34.0
1696.62	-51.8	118	2.3	V	3.1	-48.7	-13	-35.7
2544.93	-52.6	209	1.2	H	6.1	-46.5	-13	-33.5
2544.93	-49.7	205	1.1	V	5.8	-43.9	-13	-30.9
3393.24	-51.2	243	1.8	H	6.2	-45.0	-13	-32.0
3393.24	-51.2	345	2.1	V	5.4	-45.8	-13	-32.8

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
CDMA BC1 1xRTT								
Test frequency range: 30MHz-20GHz								
1851.25MHz								
949.7	-74.38	57	1	H	9.6	-64.78	-13	-51.78
949.7	-72.83	339	1.8	V	11.7	-61.13	-13	-48.13
3702.5	-55.50	153	1.4	H	8.1	-47.40	-13	-34.40
3702.5	-53.60	51	1.5	V	7.6	-46.00	-13	-33.00
1880 MHz								
955.2	-75.27	39	2.2	H	9.6	-65.67	-13	-52.67
955.2	-73.16	158	2.2	V	11.7	-61.46	-13	-48.46
3760	-55.70	304	1.9	H	8.8	-46.90	-13	-33.90
3760	-54.90	251	2.5	V	8	-46.90	-13	-33.90
1908.75 MHz								
954.4	-75.5	160	1.3	H	9.6	-65.9	-13	-52.9
954.4	-73.82	268	2.2	V	11.7	-62.12	-13	-49.12
3817.5	-56.30	359	1	H	8.7	-47.60	-13	-34.60
3817.5	-55.00	75	2.5	V	7.9	-47.10	-13	-34.10

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
CDMA BC1 EV-DO								
Test frequency range: 30MHz-20GHz								
1851.25MHZ								
958.8	-73.85	32	1.7	H	9.6	-64.25	-13	-51.25
958.8	-74.67	260	2	V	11.7	-62.97	-13	-49.97
3702.5	-53.6	250	1.8	H	8.1	-45.5	-13	-32.5
3702.5	-49.9	76	2.0	V	7.6	-42.3	-13	-29.3
1880 MHZ								
950.8	-74.52	87	2.1	H	9.6	-64.92	-13	-51.92
950.8	-73.83	130	1.6	V	11.7	-62.13	-13	-49.13
3760	-54.8	158	1.5	H	8.8	-46.0	-13	-33.0
3760	-51.1	96	1.4	V	8	-43.1	-13	-30.1
1908.75 MHZ								
946.5	-75.49	140	1.9	H	9.6	-65.89	-13	-52.89
946.5	-72.91	6	1	V	11.7	-61.21	-13	-48.21
3817.5	-53.9	197	1.1	H	8.7	-45.2	-13	-32.2
3817.5	-52.2	342	2.1	V	7.9	-44.3	-13	-31.3

LTE Bands: (pre-scan all bandwidth/modulation, the worst case as below)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 2								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, QPSK, low channel 1850.7 MHz								
960.5	-74.63	225	1.7	H	9.6	-65.03	-13	-52.03
960.5	-73.93	267	2.1	V	11.7	-62.23	-13	-49.23
3701.4	-54.60	66	2.3	H	8.1	-46.50	-13	-33.50
3701.4	-52.70	191	1.9	V	7.6	-45.10	-13	-32.10
5552.1	-47.10	232	1.5	H	9.6	-37.50	-13	-24.50
5552.1	-42.80	141	2.5	V	9.1	-33.70	-13	-20.70
1.4MHz bandwidth, QPSK, middle channel 1880 MHz								
960.8	-73.82	121	2.1	H	9.6	-64.22	-13	-51.22
960.8	-73.45	229	1.2	V	11.7	-61.75	-13	-48.75
3760	-56.40	76	1.4	H	8.8	-47.60	-13	-34.60
3760	-53.70	325	2	V	8	-45.70	-13	-32.70
5640	-48.50	179	1.3	H	10.2	-38.30	-13	-25.30
5640	-43.30	159	2.2	V	9.4	-33.90	-13	-20.90
1.4MHz bandwidth, QPSK, high channel 1909.3 MHz								
946.1	-74.28	6	1.4	H	9.6	-64.68	-13	-51.68
946.1	-73.18	182	1.3	V	11.7	-61.48	-13	-48.48
3818.6	-55.80	192	2.1	H	8.7	-47.10	-13	-34.10
3818.6	-53.70	121	2.3	V	7.9	-45.80	-13	-32.80
5727.9	-48.80	151	2.2	H	10.6	-38.20	-13	-25.20
5727.9	-44.40	57	2.2	V	10.2	-34.20	-13	-21.20

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 4								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, QPSK, low channel 1710.7 MHz								
954.7	-73.83	142	1.9	H	9.6	-64.23	-13	-51.23
954.7	-73.64	273	2.2	V	11.7	-61.94	-13	-48.94
3421.4	-49.40	284	1	H	6.4	-43.00	-13	-30.00
3421.4	-45.50	322	1.2	V	5.8	-39.70	-13	-26.70
5132.1	-51.50	207	2.4	H	11.4	-40.10	-13	-27.10
5132.1	-48.40	7	1	V	10.8	-37.60	-13	-24.60
1.4MHz bandwidth, QPSK, middle channel 1732.5 MHz								
949.6	-73.59	319	2.1	H	9.6	-63.99	-13	-50.99
949.6	-74.5	282	1.1	V	11.7	-62.8	-13	-49.8
3465	-49.9	60	2.5	H	7	-42.90	-13	-29.90
3465	-47	316	1.1	V	6.2	-40.80	-13	-27.80
5197.5	-50.6	170	2.4	H	10.4	-40.20	-13	-27.20
5197.5	-48.8	305	1.9	V	9.8	-39.00	-13	-26.00
1.4MHz bandwidth, QPSK, high channel 1754.3 MHz								
946.3	-73.74	138	1.7	H	9.6	-64.14	-13	-51.14
946.3	-73.36	146	1.7	V	11.7	-61.66	-13	-48.66
3508.6	-50.60	63	1.7	H	7.8	-42.80	-13	-29.80
3508.6	-47.20	271	1.1	V	6.5	-40.70	-13	-27.70
5262.9	-48.40	44	2.4	H	9.4	-39.00	-13	-26.00
5262.9	-47.30	322	1.9	V	9	-38.30	-13	-25.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 5								
Test frequency range: 30MHz-10GHz								
1.4MHz bandwidth, QPSK, low channel 824.7 MHz								
955.3	-74.45	21	1.9	H	9.6	-64.85	-13	-51.85
955.3	-72.96	61	1.8	V	11.7	-61.26	-13	-48.26
1649.4	-57.90	312	1.5	H	3.5	-54.40	-13	-41.40
1649.4	-57.90	330	2.3	V	3.1	-54.80	-13	-41.80
2474.1	-51.50	135	2.2	H	6.6	-44.90	-13	-31.90
2474.1	-52.70	43	2.2	V	5.8	-46.90	-13	-33.90
3298.8	-52.50	261	2.3	H	6.4	-46.10	-13	-33.10
3298.8	-51.60	51	1.6	V	5.7	-45.90	-13	-32.90
1.4MHz bandwidth, QPSK, middle channel 836.5 MHz								
952	-75.28	30	2.2	H	9.6	-65.68	-13	-52.68
952	-74.69	32	1.7	V	11.7	-62.99	-13	-49.99
1673.0	-55.70	139	2.5	H	3.8	-51.90	-13	-38.90
1673.0	-55.50	225	2.2	V	3.1	-52.40	-13	-39.40
2509.5	-50.20	337	1.9	H	6.2	-44.00	-13	-31.00
2509.5	-51.30	246	1.4	V	5.6	-45.70	-13	-32.70
3346.0	-52.60	217	1.7	H	6.6	-46.00	-13	-33.00
3346.0	-52.00	171	1.7	V	5.4	-46.60	-13	-33.60
1.4MHz bandwidth, QPSK, high channel 848.3 MHz								
947.2	-75.37	132	1.8	H	9.6	-65.77	-13	-52.77
947.2	-74.7	268	1.3	V	11.7	-63	-13	-50
1696.6	-56.10	137	2.3	H	4.1	-52.00	-13	-39.00
1696.6	-55.30	352	2.0	V	3.1	-52.20	-13	-39.20
2544.9	-50.60	110	2.2	H	6.1	-44.50	-13	-31.50
2544.9	-51.10	346	1.2	V	5.8	-45.30	-13	-32.30
3393.2	-52.80	150	1.7	H	6.2	-46.60	-13	-33.60
3393.2	-51.30	302	2.0	V	5.4	-45.90	-13	-32.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 12								
Test frequency range: 30MHz-10GHz								
1.4MHz bandwidth, QPSK, Low Channel 699.7MHz								
957.9	-73.41	242	2.2	H	9.6	-63.81	-13	-50.81
957.9	-73.12	85	1.8	V	11.7	-61.42	-13	-48.42
1399.4	-57.1	261	1.2	H	6.3	-50.80	-13	-37.80
1399.4	-55.5	117	1.1	V	5.7	-49.80	-13	-36.80
2099.1	-51.7	58	1.8	H	4.9	-46.80	-13	-33.80
2099.1	-52.3	127	1.2	V	3.9	-48.40	-13	-35.40
2798.8	-56.2	165	1.6	H	6.6	-49.60	-13	-36.60
2798.8	-55.6	121	1.7	V	6	-49.60	-13	-36.60
1.4MHz bandwidth, QPSK, Middle Channel 707.5MHz								
960.6	-73.78	249	1.5	H	9.6	-64.18	-13	-51.18
960.6	-73.86	107	1.9	V	11.7	-62.16	-13	-49.16
1415	-56.6	202	1.9	H	5.9	-50.70	-13	-37.70
1415	-55.7	322	2.3	V	5.9	-49.80	-13	-36.80
2122.5	-54.7	196	1.4	H	6.3	-48.40	-13	-35.40
2122.5	-54.2	26	1.2	V	5.1	-49.10	-13	-36.10
2830	-56.1	89	2.4	H	6.7	-49.40	-13	-36.40
2830	-56.6	100	1.1	V	6.7	-49.90	-13	-36.90
1.4MHz bandwidth, QPSK, High Channel 715.3MHz								
960.2	-74.39	267	1.2	H	9.6	-64.79	-13	-51.79
960.2	-74.49	16	1.4	V	11.7	-62.79	-13	-49.79
1430.6	-55.7	170	1.2	H	5.9	-49.80	-13	-36.80
1430.6	-53.3	238	2.2	V	5.9	-47.40	-13	-34.40
2145.9	-54.2	312	1.1	H	6.3	-47.90	-13	-34.90
2145.9	-54.6	312	1.3	V	5.1	-49.50	-13	-36.50
2861.2	-56.5	300	1.8	H	6.7	-49.80	-13	-36.80
2861.2	-58.1	335	1.5	V	6.7	-51.40	-13	-38.40

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 13								
Test frequency range: 30MHz-10GHz								
5MHz bandwidth, QPSK, low channel 779.5 MHz								
947.1	-75.4	198	1.7	H	9.6	-65.8	-13	-52.8
947.1	-74.25	209	1.7	V	11.7	-62.55	-13	-49.55
1559	-59.6	195	1.3	H	4.2	-55.4	-40	-15.40
1559	-58.6	219	1.9	V	3.3	-55.3	-40	-15.30
2338.5	-56.2	100	2.2	H	7.3	-48.9	-13	-35.90
2338.5	-53.7	329	1.7	V	6.5	-47.2	-13	-34.20
5MHz bandwidth, QPSK, middle channel 782 MHz								
952.3	-74.13	355	2.1	H	9.6	-64.53	-13	-51.53
952.3	-74.17	29	1.3	V	11.7	-62.47	-13	-49.47
1564	-59.2	96	2	H	4.2	-55	-40	-15.00
1564	-58.2	236	2.1	V	3.3	-54.9	-40	-14.90
2346	-57.4	155	1.4	H	7.3	-50.1	-13	-37.10
2346	-54.3	204	2.2	V	6.4	-47.9	-13	-34.90
5MHz bandwidth, QPSK, high channel 784.5 MHz								
961.3	-74.54	47	1.2	H	9.6	-64.94	-13	-51.94
961.3	-72.8	54	1.4	V	11.7	-61.1	-13	-48.1
1569	-59.7	56	1.5	H	4.2	-55.5	-40	-15.50
1569	-58.7	270	2	V	3.3	-55.4	-40	-15.40
2353.5	-55.8	312	1.6	H	7.3	-48.5	-13	-35.50
2353.5	-52.4	55	2	V	6.4	-46	-13	-33.00
LTE Band 25								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, Low Channel 1850.7MHz								
950.6	-75.12	273	1.1	H	9.6	-65.52	-13	-52.52
950.6	-74.17	212	1.7	V	11.7	-62.47	-13	-49.47
3701.4	-54.7	359	2.1	H	8.1	-46.60	-13	-33.60
3701.4	-54.5	155	1.2	V	7.6	-46.90	-13	-33.90
1.4MHz bandwidth, Middle Channel 1882.5MHz								
960.8	-73.99	71	1.6	H	9.6	-64.39	-13	-51.39
960.8	-73.18	11	1.6	V	11.7	-61.48	-13	-48.48
3765	-55.6	359	2.1	H	8.8	-46.80	-13	-33.80
3765	-54.5	155	1.2	V	8	-46.50	-13	-33.50
1.4MHz bandwidth, High Channel 1914.3MHz								
959.3	-73.94	127	2	H	9.6	-64.34	-13	-51.34
959.3	-74.26	203	1.7	V	11.7	-62.56	-13	-49.56
3828.6	-56	359	2.1	H	8.7	-47.30	-13	-34.30
3828.6	-54.7	155	1.2	V	7.9	-46.80	-13	-33.80

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 41								
Test frequency range: 30MHz-27GHz								
5MHz bandwidth, QPSK, Low Channel 2498.5MHz								
952	-74.38	188	1.6	H	9.6	-64.78	-25	-39.78
952	-73.92	332	1.1	V	11.7	-62.22	-25	-37.22
4997	-54.9	24	2	H	10.8	-44.10	-25	-19.10
4997	-52.2	15	1	V	10.1	-42.10	-25	-17.10
5MHz bandwidth, QPSK, Middle Channel 2595MHz								
959.7	-73.44	17	1.6	H	9.6	-63.84	-25	-38.84
959.7	-72.93	274	1.6	V	11.7	-61.23	-25	-36.23
5190	-53.8	33	2.1	H	10.5	-43.30	-25	-18.30
5190	-51.9	216	1.1	V	10	-41.90	-25	-16.90
5MHz bandwidth, QPSK, High Channel 2687.5MHz								
946.7	-74.21	300	1.9	H	9.6	-64.61	-25	-39.61
946.7	-74.3	142	1.5	V	11.7	-62.6	-25	-37.6
5375	-51.5	162	1	H	9.5	-42.00	-25	-17.00
5375	-48.8	1	1.6	V	8.9	-39.90	-25	-14.90

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
Band 66								
Test frequency range: 30MHz-20GHz								
1.4MHz bandwidth, low channel 1710.7 MHz								
960.7	-75.52	317	1.3	H	9.6	-65.92	-13	-52.92
960.7	-72.74	224	1.6	V	11.7	-61.04	-13	-48.04
3421.4	-45.9	24	1.6	H	6.4	-39.50	-13	-26.5
3421.4	-39.5	65	2.3	V	5.7	-33.80	-13	-20.8
5132.1	-50.1	127	2.3	H	11.7	-38.40	-13	-25.4
5132.1	-48.3	263	1.6	V	10.8	-37.50	-13	-24.5
1.4MHz bandwidth, middle channel 1745 MHz								
955.8	-74.59	164	1.4	H	9.6	-64.99	-13	-51.99
955.8	-73.39	7	1.7	V	11.7	-61.69	-13	-48.69
3510	-50.3	50	2.0	H	7.8	-42.50	-13	-29.5
3510	-42.6	328	1.6	V	6.6	-36.00	-13	-23.0
5265	-49.1	183	2.4	H	9.5	-39.60	-13	-26.6
5265	-46.9	317	1.1	V	8.9	-38.00	-13	-25.0
1.4MHz bandwidth, high channel 1779.3 MHz								
947.9	-74.05	266	1.8	H	9.6	-64.45	-13	-51.45
947.9	-73.91	340	1.1	V	11.7	-62.21	-13	-49.21
3558.6	-50.9	357	2.4	H	7.8	-43.10	-13	-30.1
3558.6	-43.0	15	2.5	V	7	-36.00	-13	-23.0
5337.9	-47.0	4	2.5	H	9.4	-37.60	-13	-24.6
5337.9	-45.1	273	1.8	V	8.7	-36.40	-13	-23.4

Note:
Absolute Level = Reading Level + Substituted Factor
Substituted Factor contains: SG Level - Cable loss+ Antenna Gain
Margin = Absolute Level - Limit

FCC§ 22.917 (a);§ 24.238 (a); §27.53 (c)(f)(g)(h)(m) - BAND EDGES

Applicable Standard

According to § 22.917(a), the power of any emissions 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.

According to §24.238(a), the power of any emissions 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.

According to FCC §27.53 (c), For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
(1) On any frequency outside the 746-758 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 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;
(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
(4) 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;

According to FCC §27.53 (f), For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

According to FCC §27.53 (g), For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

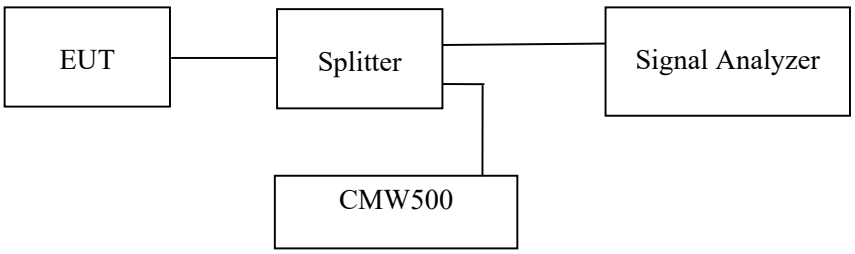
According to FCC §27.53 (h), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

According to FCC §27.53 (m), For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5MHz.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range was added into plots.

Test Data

Environmental Conditions

Temperature:	27.2~26.1 ℃
Relative Humidity:	52.4~56.2 %
ATM Pressure:	100.0~101.0 kPa

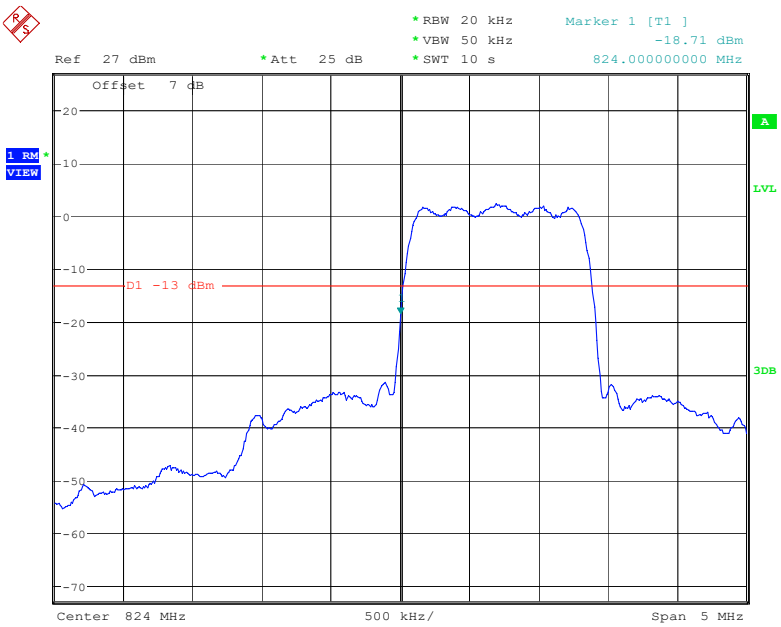
The testing was performed by Cat Kang from 2022-10-07 to 2022-11-01.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

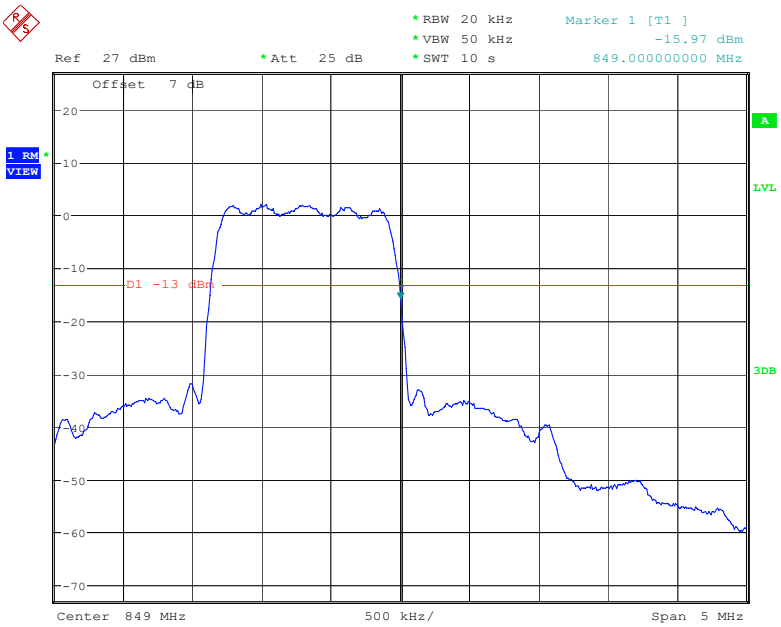
Please refer to the following plots.

Cellular Band, Left Band Edge for 1xRTT Mode



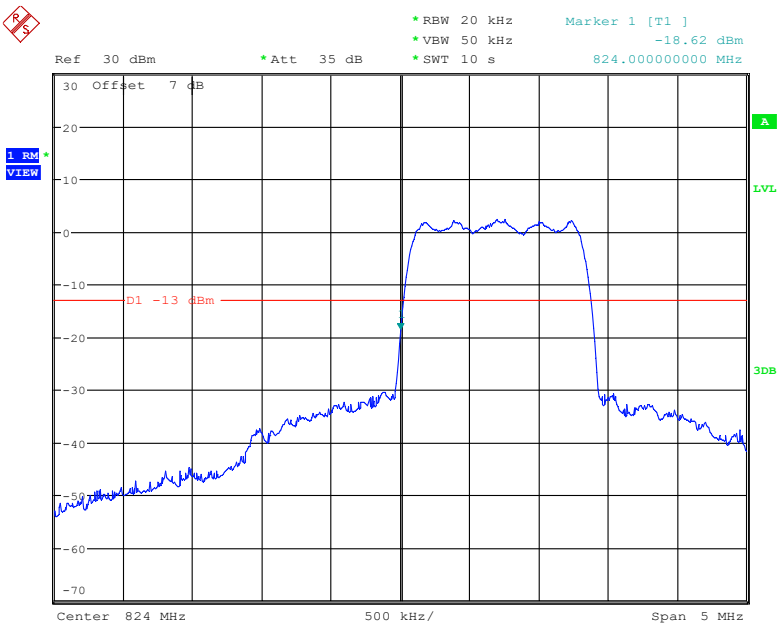
Date: 25.OCT.2022 13:41:24

Cellular Band, Right Band Edge for 1xRTT Mode



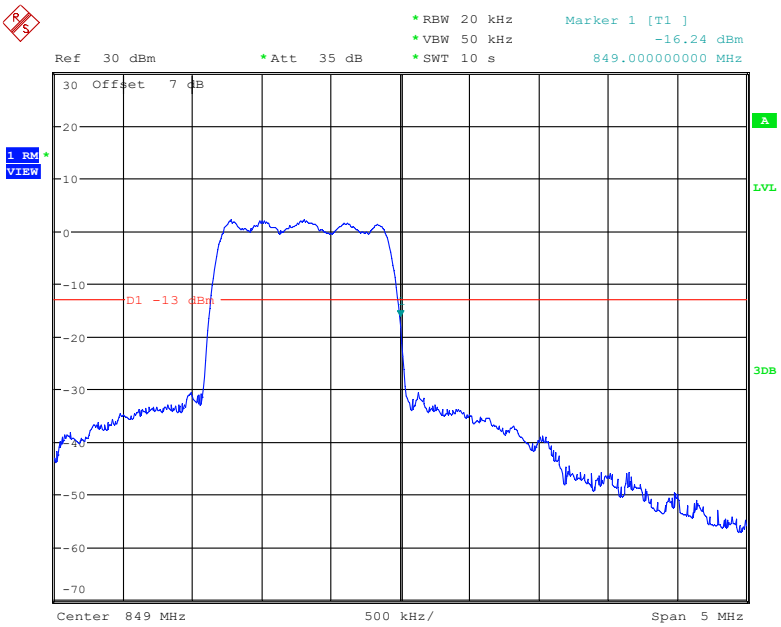
Date: 25.OCT.2022 13:42:11

Cellular Band, Left Band Edge for EV-DO Mode



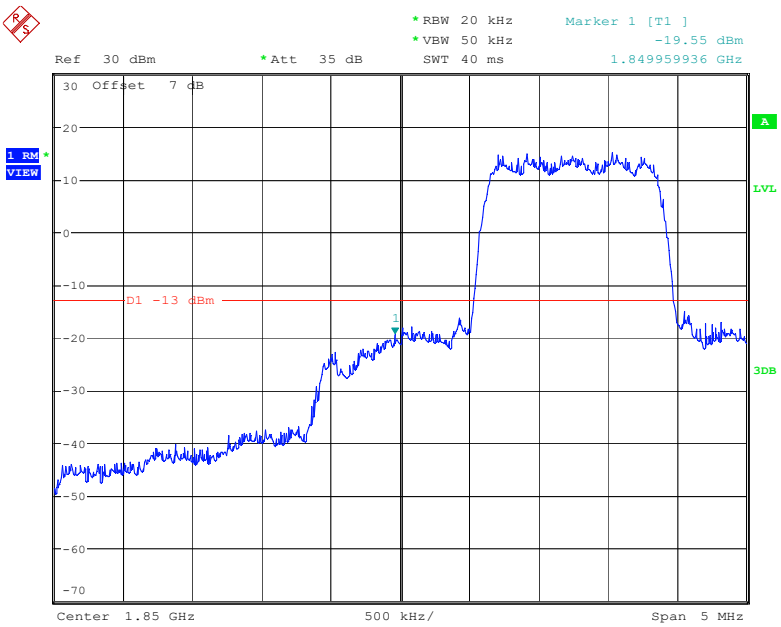
Date: 22.OCT.2022 18:22:32

Cellular Band, Right Band Edge for EV-DO Mode



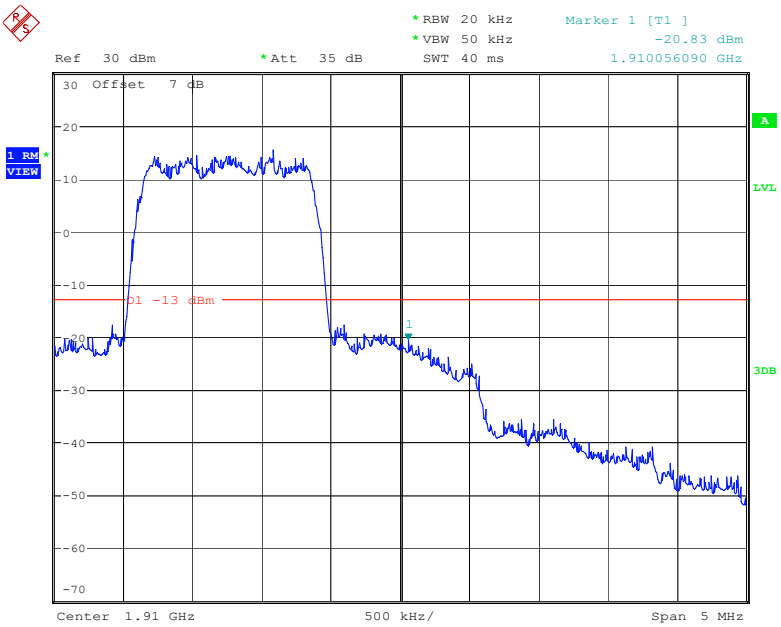
Date: 22.OCT.2022 18:21:06

PCS Band, Left Band Edge for 1xRTT Mode



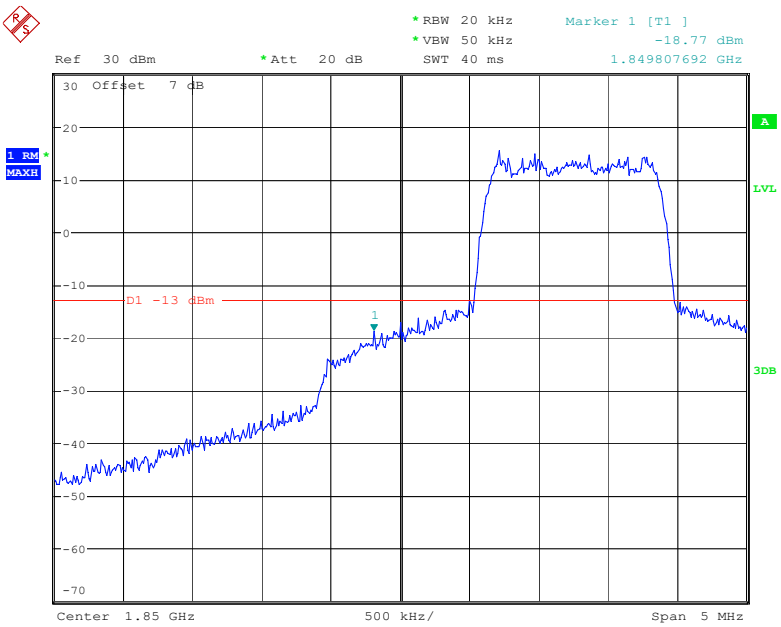
Date: 10.OCT.2022 11:15:30

PCS Band, Right Band Edge for 1xRTT Mode

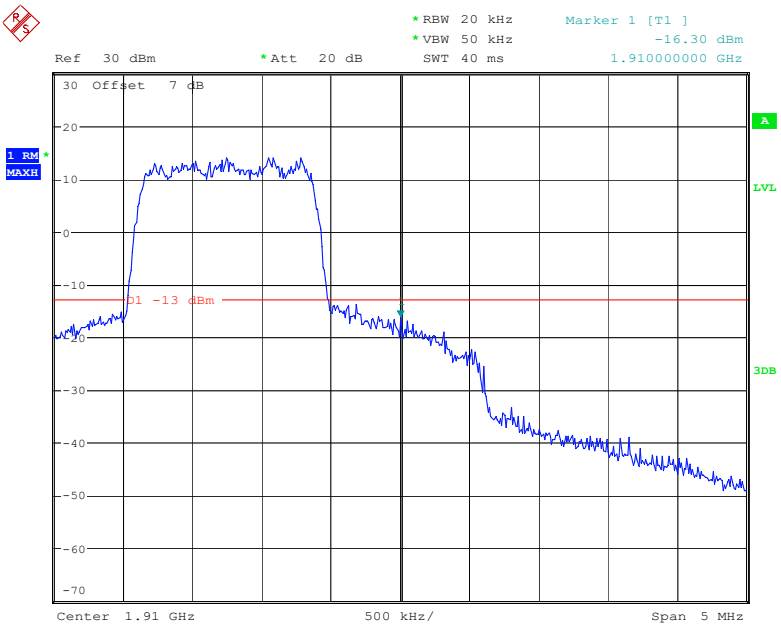


Date: 10.OCT.2022 11:16:27

PCS Band, Left Band Edge for EV-DO Mode



PCS Band, Right Band Edge for EV-DO Mode



The test plots of LTE bands please refer to the Appendix C.

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055, §22.355, §24.235&§27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

Frequency Tolerance for Transmitters in the Public Mobile Services

Frequency Range (MHz)	Base, fixed (ppm)	Mobile ≤ 3 watts (ppm)	Mobile > 3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929.	5.0	N/A	N/A
929 to 960.	1.5	N/A	N/A
2110 to 2220	10.0	N/A	N/A

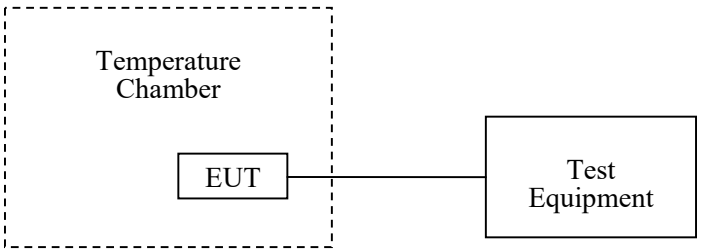
According to §24.235&§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external AC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The AC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data

Environmental Conditions

Temperature:	27.2~26.1 ℃
Relative Humidity:	52.4~56.2 %
ATM Pressure:	100.0~101.0 kPa

The testing was performed by Cat Kang from 2022-10-07 to 2022-11-01.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

Cellular Band (Part 22H)

CDMA (1*RTT) Mode

Middle Channel, f_0=836.52MHz				
Temperature (℃)	**Power Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	1.32	0.0016	2.5
-20		1.52	0.0018	2.5
-10		1.46	0.0017	2.5
0		1.39	0.0017	2.5
10		1.53	0.0018	2.5
20		1.20	0.0014	2.5
30		1.44	0.0017	2.5
40		1.49	0.0018	2.5
50		1.54	0.0018	2.5
20	L.V.	1.38	0.0016	2.5
	H.V.	1.42	0.0017	2.5

CDMA (EV-DO) Mode

Middle Channel, f_0=836.52MHz				
Temperature (℃)	**Power Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	2.5	0.0030	2.5
-20		3.2	0.0038	2.5
-10		1.7	0.0020	2.5
0		2.2	0.0026	2.5
10		2.4	0.0029	2.5
20		3.6	0.0043	2.5
30		2.6	0.0031	2.5
40		1.8	0.0022	2.5
50		1.7	0.0020	2.5
20	L.V.	2.3	0.0027	2.5
	H.V.	2.4	0.0029	2.5

PCS Band (Part 24E)

CDMA (1*RTT) Mode

Middle Channel, f_o=1880.0MHz				
Temperature (℃)	**Power Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	1.42	0.0008	pass
-20		1.35	0.0007	pass
-10		1.25	0.0007	pass
0		2.21	0.0012	pass
10		2.24	0.0012	pass
20		1.29	0.0007	pass
30		1.33	0.0007	pass
40		1.38	0.0007	pass
50		1.42	0.0008	Pass
20	L.V.	1.36	0.0007	pass
	H.V.	1.28	0.0007	Pass

CDMA (EV-DO) Mode

Middle Channel, f_o=1880.0MHz				
Temperature (℃)	**Power Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	2.25	0.0012	pass
-20		2.14	0.0011	pass
-10		2.33	0.0012	pass
0		2.26	0.0012	pass
10		2.34	0.0012	pass
20		2.50	0.0013	pass
30		2.28	0.0012	pass
40		2.26	0.0012	pass
50		2.37	0.0013	Pass
20	L.V.	2.41	0.0013	pass
	H.V.	2.39	0.0013	Pass

LTE:
QPSK:
Band 2:

10.0 MHz Middle Channel, f_o =1880MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	-3.53	-0.0019	pass
-20		7.52	0.0040	pass
-10		5.15	0.0027	pass
0		-8.80	-0.0047	pass
10		-6.99	-0.0037	pass
20		7.44	0.0040	pass
30		5.44	0.0029	pass
40		-5.86	-0.0031	pass
50		9.48	0.0050	pass
20	L.V.	-5.02	-0.0027	pass
	H.V.	-9.32	-0.0050	pass

Band 4:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.1166	1754.8738	1710	1755
-20		1710.1158	1754.8736	1710	1755
-10		1710.1152	1754.8737	1710	1755
0		1710.1154	1754.8738	1710	1755
10		1710.1147	1754.8757	1710	1755
20		1710.1142	1754.8755	1710	1755
30		1710.1139	1754.8754	1710	1755
40		1710.1130	1754.8756	1710	1755
50		1710.1129	1754.8749	1710	1755
20	L.V.	1710.1128	1754.8748	1710	1755
	H.V.	1710.1024	1754.8742	1710	1755

Band 5:

10.0 MHz Middle Channel, f_o =836.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-0.37	-0.0004	2.5
-20		-8.44	-0.0101	2.5
-10		-6.92	-0.0083	2.5
0		-9.16	-0.0110	2.5
10		-9.86	-0.0118	2.5
20		5.23	0.0063	2.5
30		5.11	0.0061	2.5
40		-6.40	-0.0077	2.5
50		-9.88	-0.0118	2.5
20	L.V.	6.75	0.0081	2.5
	H.V.	-8.65	-0.0103	2.5

Band 12:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	699.0633	715.8872	699	716
-20		699.0641	715.8728	699	716
-10		699.1523	715.8458	699	716
0		699.0427	715.8632	699	716
10		699.0232	715.8417	699	716
20		699.1421	715.9284	699	716
30		699.1289	715.8323	699	716
40		699.1347	715.8314	699	716
50		699.1242	715.8454	699	716
20	L.V.	699.1372	715.8672	699	716
	H.V.	699.1374	715.8678	699	716

Band 13:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (VDC)**	**FL (MHz)**	**FH (MHz)**	**FL Limit (MHz)**	**FH Limit (MHz)**
-30	N.V.	777.7895	786.9836	777	787
-20		777.7729	786.9825	777	787
-10		777.7368	786.9725	777	787
0		777.7218	786.8898	777	787
10		777.7326	786.8875	777	787
20		777.7265	786.8794	777	787
30		777.7435	786.8972	777	787
40		777.7532	786.8881	777	787
50		777.7232	786.8847	777	787
20	L.V.	777.7447	786.8826	777	787
	H.V.	777.7335	786.8799	777	787

Band 25:

10.0 MHz Middle Channel, f_o =1882.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	-2.66	-0.0014	pass
-20		7.00	0.0037	pass
-10		5.06	0.0027	pass
0		-9.30	-0.0049	pass
10		-7.01	-0.0037	pass
20		8.12	0.0043	pass
30		4.74	0.0025	pass
40		-6.57	-0.0035	pass
50		9.95	0.0053	pass
20	L.V.	-5.19	-0.0028	pass
	H.V.	-8.52	-0.0045	pass

Band 41:

10 MHz Bandwidth					
Temperature (°C)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	2496.0758	2689.8871	2496	2690
-20		2496.0678	2689.8852	2496	2690
-10		2496.0565	2689.8766	2496	2690
0		2496.0425	2689.8652	2496	2690
10		2496.0327	2689.8556	2496	2690
20		2496.1228	2689.9438	2496	2690
30		2496.1159	2689.9351	2496	2690
40		2496.1157	2689.9237	2496	2690
50		2496.0939	2689.9065	2496	2690
20	L.V.	2496.0622	2689.9032	2496	2690
	H.V.	2496.0524	2689.9012	2496	2690

Band 66:

10 MHz Bandwidth					
Temperature (°C)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.0241	1779.9728	1710	1780
-20		1710.0238	1779.9727	1710	1780
-10		1710.0236	1779.9839	1710	1780
0		1710.0235	1779.9756	1710	1780
10		1710.0237	1779.9755	1710	1780
20		1710.0228	1779.9747	1710	1780
30		1710.0257	1779.9749	1710	1780
40		1710.0256	1779.9756	1710	1780
50		1710.0229	1779.9828	1710	1780
20	L.V.	1710.0225	1779.9727	1710	1780
	H.V.	1710.0226	1779.9775	1710	1780

16QAM:

Band 2:

10.0 MHz Middle Channel, f_o =1880MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	-4.55	-0.0024	pass
-20		-6.26	-0.0033	pass
-10		-9.19	-0.0049	pass
0		7.81	0.0042	pass
10		-6.43	-0.0034	pass
20		9.50	0.0051	pass
30		6.49	0.0035	pass
40		-6.49	-0.0035	pass
50		-7.34	-0.0039	pass
20	L.V.	6.63	0.0035	pass
	H.V.	-8.99	-0.0048	pass

Band 4:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.2966	1754.7672	1710	1755
-20		1710.2958	1754.7562	1710	1755
-10		1710.2751	1754.7672	1710	1755
0		1710.2652	1754.7452	1710	1755
10		1710.2633	1754.7435	1710	1755
20		1710.2643	1754.7626	1710	1755
30		1710.2572	1754.7625	1710	1755
40		1710.2658	1754.7652	1710	1755
50		1710.2636	1754.7752	1710	1755
20	L.V.	1710.2621	1754.7536	1710	1755
	H.V.	1710.2715	1754.7524	1710	1755

Band 5:

10.0 MHz Middle Channel, f_o =836.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-1.3	-0.0016	2.5
-20		-8.4	-0.0101	2.5
-10		6.8	0.0081	2.5
0		6.6	0.0079	2.5
10		-9.6	-0.0114	2.5
20		6.4	0.0077	2.5
30		8.0	0.0096	2.5
40		-8.0	-0.0096	2.5
50		7.6	0.0091	2.5
20	L.V.	5.6	0.0067	2.5
	H.V.	5.8	0.0069	2.5

Band 12:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	699.3125	715.7364	699	716
-20		699.3133	715.6225	699	716
-10		699.3015	715.5954	699	716
0		699.2919	715.6124	699	716
10		699.1724	715.3909	699	716
20		699.2913	715.3776	699	716
30		699.0781	715.4815	699	716
40		699.1839	715.4806	699	716
50		699.2734	715.3946	699	716
20	L.V.	699.1864	715.4164	699	716
	H.V.	699.1866	715.4176	699	716

Band 13:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (VDC)**	**FL (MHz)**	**FH (MHz)**	**FL Limit (MHz)**	**FH Limit (MHz)**
-30	N.V.	777.0387	786.9328	777	787
-20		777.1221	786.9317	777	787
-10		777.0862	786.9217	777	787
0		777.0713	786.9394	777	787
10		777.0818	786.9367	777	787
20		777.0757	786.9286	777	787
30		777.0927	786.9464	777	787
40		777.1024	786.9373	777	787
50		777.0724	786.9339	777	787
20	L.V.	777.0939	786.9318	777	787
	H.V.	777.0827	786.9291	777	787

Band 25:

10.0 MHz Middle Channel, f_o=1882.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	-4.33	-0.0023	pass
-20		8.10	0.0043	pass
-10		5.53	0.0029	pass
0		-8.33	-0.0044	pass
10		-7.18	-0.0038	pass
20		7.43	0.0039	pass
30		5.67	0.0030	pass
40		-5.32	-0.0028	pass
50		9.60	0.0051	pass
20	L.V.	-4.52	-0.0024	pass
	H.V.	-8.51	-0.0045	pass

Band 41:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	2496.0456	2689.9655	2496	2690
-20		2496.0442	2689.9582	2496	2690
-10		2496.0372	2689.9486	2496	2690
0		2496.0266	2689.9375	2496	2690
10		2496.0138	2689.9284	2496	2690
20		2496.0175	2689.9382	2496	2690
30		2496.0488	2689.9587	2496	2690
40		2496.0482	2689.9986	2496	2690
50		2496.0429	2689.9882	2496	2690
20	L.V.	2496.0418	2689.9765	2496	2690
	H.V.	2496.0572	2689.9544	2496	2690

Band 66:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.0277	1779.8392	1710	1780
-20		1710.0249	1779.8444	1710	1780
-10		1710.0246	1779.8363	1710	1780
0		1710.0275	1779.8358	1710	1780
10		1710.0265	1779.8362	1710	1780
20		1710.0239	1779.8333	1710	1780
30		1710.0225	1779.8341	1710	1780
40		1710.0246	1779.8368	1710	1780
50		1710.0233	1779.8376	1710	1780
20	L.V.	1710.0258	1779.8356	1710	1780
	H.V.	1710.0252	1779.8354	1710	1780

******* END OF REPORT *******