TESTREPORT

Applicant Name :	Sun Cupid Technology (HK) Ltd.
Address :	16/F,CEO Tower,77 Wing Hong Street,Cheung Sha Wan,Kowloon,Hong Kong
Report Number :	SZNS220627-28792E-RF-00E
FCC ID:	2ADINN6501L

Test Standard (s)

FCC PART 27; FCC PART 22H; FCC PART 24E; FCC PART 90

Sample Description

Product Type:	5G Smart Phone
Model No.:	N6501L
Multiple Model(s) No.:	B20(Please refer to DOS for Model difference)
Trade Mark:	NUU
Date Received:	2022/06/27
Report Date:	2022/08/31

Test Result:	Pass*

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

Prepared and Checked By:

Andy Yu
EMC Engineer

Approved By:

Candy Li
EMC Engineer

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Shenzhen Accurate Technology Co., Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA* or any agency of the Federal Government. * This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "*".
This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	GSM 850: 824-849MHz(TX); 869-894MHz(RX) PCS 1900: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(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 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 13: 777-787MHz(TX); 746-756MHz(RX) LTE Band 17: 704-716MHz(TX); 734-746MHz(RX) LTE Band 25: 1850-1915MHz(TX);1930-1995MHz(RX) LTE Band 26(Part 22): 824-849MHz(TX); 869-894MHz(RX) LTE Band 26(Part 90): 814-824MHz(TX); 859-869MHz(RX) LTE Band 41: 2496-2690MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX) LTE Band 71: 663-698MHz(TX); 617-652MHz(RX)
Modulation Technique	2G: GMSK, 8PSK 3G: BPSK, QPSK, 16QAM 4G: QPSK, 16QAM
Antenna Specification*	PCS1900/WCDMA Band2/LTE Band2/ LTE Band 25: 0.8dBi ; GSM850/WCDMA Band 5/LTE Band 5/LTE Band26:0.6dBi; WCDMA Band 4/LTE Band 66:0.6dBi; LTE Band 12/13/17: 0.2dBi ; LTE Band7/41 :1.2dBi ; LTE Band 71: 0.1dBi(provided by the applicant)
Voltage Range	DC 3.85V from battery or DC 3.6-12V from adapter
Sample serial number	SZNS220627-28792E-RF-S1 for Radiated Emissions SZNS220627-28792E-RF-S2 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Extreme condition*	L.V.: Low Voltage 3.5V N.V.: Normal Voltage 3.85V H.V.: High Voltage 4.4V (provided by the applicant)
Adapter information	Model: TPA-10S120150UU01 Input: AC 100-240V,50/60Hz,0.6A Output: DC 3.6-6V 3A;6-9V 2A;9-12V 1.5A

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part24-Subpart E, Part 27, and Part 90 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
Part 90 – Private Land Mobile Radio 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 output power, conducted		±0.73dB
Unwanted Emission, conducted		±1.6dB
RF Frequency		$\pm 0.082*10^{-7}$
Emissions, Radiated	30MHz - 1GHz	±4.28dB
	1GHz - 18GHz	±4.98dB
	18GHz - 26.5GHz	±5.06dB
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.

Test was performed as below table:

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
GSM850	0.25	824.2	836.6	848.8
PCS1900	0.25	1850.2	1880	1909.8
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B4	4.2	1712.4	1732.6	1752.6
WCDMA B5	4.2	826.4	836.4	846.6
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& LTE B26(Part 22H)	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 B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
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	707.5	711
LTE B13	5	779.5	782	784.5
	10	/	782	/
LTE B17	5	706.5	710	713.5
	10	709	710	711

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
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
LTE B26(Part 90S)	1.4	814.7	819	823.3
	3	815.5	819	822.5
	5	816.5	819	821.5
	10	/	819	/
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
LTE B71	5	665.5	680.5	695.5
	10	668	680.5	693
	15	670.5	680.5	690.5
	20	673	680.5	688

Equipment Modifications

No modification was made to the EUT.

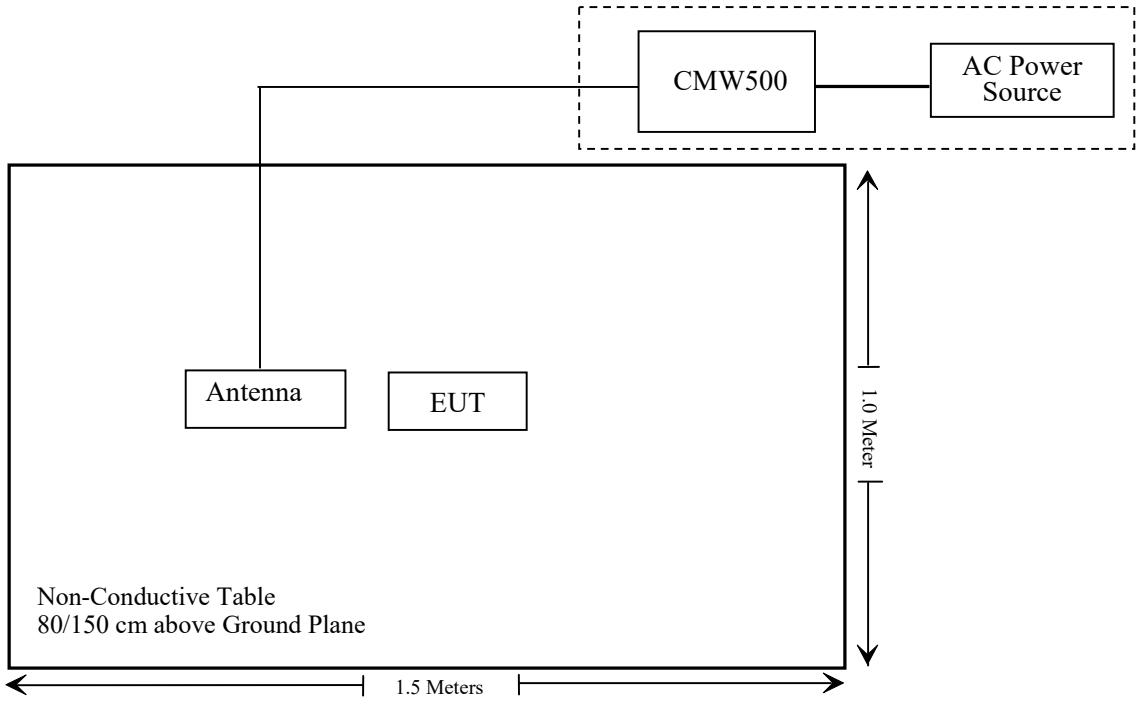
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606

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 ,§2.1093	RF Exposure (SAR)	Compliant*
§2.1046; § 22.913 (a); § 24.232 (c); §27.50(b)(c) (d) (h); §90.635	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917; § 24.238; §27.53 §90.209	Occupied Bandwidth	Compliant
§ 2.1051; §22.917 (a); § 24.238 (a); §27.53; §90.691	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053; § 22.917 (a); § 24.238 (a); §27.53 §90.691	Field Strength of Spurious Radiation	Compliant
§ 22.917 (a); § 24.238 (a); §27.53(c)(g) (h) (m) §90.691	Band Edge	Compliant
§ 2.1055; § 22.355; § 24.235; §27.54; §90.213	Frequency stability	Compliant

Note: * Please refer to SAR report number: SZNS220627-28792E-SA.

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-184055 36-J0	15964001002	2021/11/11	2022/11/10
Radiated Emission Test Software: e3 19821b (V9)					
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
Wainwright	High Pass Filter	WHKX3.6/18 G-10SS	5	2021/12/14	2022/12/13
CD	High Pass Filter	HPM-1.2/18G -60	110	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N200	2021/12/14	2022/12/13
Agilent	Signal Generator	N5183A	MY51040755	2021/12/13	2022/12/12

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101948	2021/12/13	2022/12/12
SPECTRUM ANALYZER	Rohde & Schwarz	FSU26	200982	2022/07/06	2023/07/05
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2021/12/13	2022/12/12
WEINSCHEL	10dB Attenuator	5324	AU 3842	2021/12/14	2022/12/13
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2021/12/14	2022/12/13
Gongwen	Temp. & Humid. Chamber	HSD-500	109	2021/10/14	2022/10/13
Fluke	Multi Meter	45	7664009	2021/12/14	2022/12/13
Manson	DC Power Source	KPS-6604	ATCS-205	NCR	NCR
Unknown	RF Coaxial Cable	No.33	RF-03	Each time	

* 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 §1.1307(b)&§2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: SZNS220627-28792E-SA.

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)&§ 24.232(c); §27.50(b) (c)(d)(h); §90.635- 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), 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.

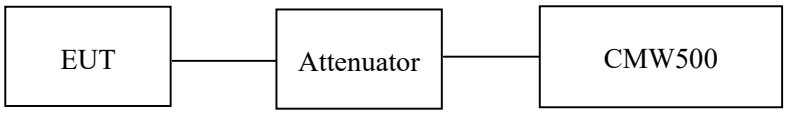
According to §27.50(h), the maximum EIRP must not exceed 2Watts (33dBm) for 2496-2690 MHz.

According to §90.635, the maximum ERP must not exceed 100Watts (50dBm) for 814-824MHz.

Test Procedure

Conducted method:

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



Test Data

Environmental Conditions

Temperature:	25~28 ℃
Relative Humidity:	55~60 %
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-07-30 to 2022-08-05.

Cellular Band (Part 22H)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	ERP(dBm)	Limit (dBm)
GSM	128	824.2	32.84	30.79	38.45
	190	836.6	33.08	31.03	38.45
	251	848.8	33.10	31.05	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	128	824.2	33.45	32.59	30.81	29.43	31.40	30.54	28.76	27.38	38.45
	190	836.6	33.57	32.91	31.19	29.81	31.52	30.86	29.14	27.76	38.45
	251	848.8	33.64	32.79	30.98	29.66	31.59	30.74	28.93	27.61	38.45

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				ERP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EGPRS	128	824.2	26.74	26.01	23.80	22.76	24.69	23.96	21.75	20.71	38.45
	190	836.6	26.82	25.91	23.75	22.75	24.77	23.86	21.70	20.70	38.45
	251	848.8	26.35	25.74	23.70	22.72	24.30	23.69	21.65	20.67	38.45

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 5)	RMC12.2k		22.93	23.03	23.14	20.88	20.98	**21.09**
	HSDPA	1	21.75	21.91	22.15	19.70	19.86	20.10
		2	21.63	21.62	22.14	19.58	19.57	20.09
		3	21.56	21.84	21.94	19.51	19.79	19.89
		4	21.53	21.55	22.07	19.48	19.50	20.02
	HSUPA	1	21.31	21.93	22.03	19.26	19.88	19.98
		2	21.12	21.92	21.89	19.07	19.87	19.84
		3	21.09	21.76	22.02	19.04	19.71	19.97
		4	21.06	21.75	21.87	19.01	19.70	19.82
		5	21.24	21.90	22.03	19.19	19.85	19.98
	HSPA+	1	20.95	20.84	21.00	18.90	18.79	18.95

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable loss(dB)
For GSM850 / WCDMA Band5: Antenna Gain = 0.6dBi = -1.55dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
Limit: ERP≤38.45dBm

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)	EIRP(dBm)	Limit (dBm)
GSM	512	1850.2	29.84	**30.64**	33
	661	1880.0	29.53	30.33	33
	810	1909.8	29.26	30.06	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
GPRS	512	1850.2	29.35	28.63	26.77	25.56	30.15	29.43	27.57	26.36	33
	661	1880.0	29.03	28.28	26.37	25.09	29.83	29.08	27.17	25.89	33
	810	1909.8	28.78	27.95	26.00	24.75	29.58	28.75	26.80	25.55	33

Mode	Channel	Frequency (MHz)	Average Output Power (dBm)				EIRP(dBm)				Limit (dBm)
			1 slot	2 slots	3 slots	4 slots	1 slot	2 slots	3 slots	4 slots	
EGPRS	512	1850.2	26.94	25.88	24.88	22.59	27.74	26.68	25.68	23.39	33
	661	1880.0	26.87	25.89	24.93	22.68	27.67	26.69	25.73	23.48	33
	810	1909.8	26.96	25.90	24.97	22.73	**27.76**	26.70	25.77	23.53	33

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		21.70	21.74	21.70	22.50	22.54	22.50
	HSDPA	1	21.69	21.74	21.71	22.49	22.54	22.51
		2	21.70	21.75	21.71	22.50	22.55	22.51
		3	21.72	21.76	21.69	22.52	22.56	22.49
		4	21.73	21.78	21.68	22.53	**22.58**	22.48
	HSUPA	1	21.75	21.77	21.70	22.55	22.57	22.50
		2	21.74	21.76	21.70	22.54	22.56	22.50
		3	21.73	21.75	21.68	22.53	22.55	22.48
		4	21.72	21.77	21.66	22.52	22.57	22.46
		5	21.70	21.75	21.67	22.50	22.55	22.47
	HSPA+	1	21.68	21.75	21.68	22.48	22.55	22.48

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For PCS1900 / WCDMA Band2: Antenna Gain = 0.8dBi
Limit: EIRP≤33dBm

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		22.63	22.61	22.65	23.23	23.21	**23.25**
	HSDPA	1	22.40	22.51	22.41	23.00	23.11	23.01
		2	22.34	22.45	22.39	22.94	23.05	22.99
		3	22.26	22.38	22.27	22.86	22.98	22.87
		4	22.20	22.40	22.22	22.80	23.00	22.82
	HSUPA	1	22.21	22.34	22.13	22.81	22.94	22.73
		2	22.21	22.39	22.19	22.81	22.99	22.79
		3	22.26	22.43	22.26	22.86	23.03	22.86
		4	22.25	22.43	22.32	22.85	23.03	22.92
		5	22.30	22.39	22.29	22.90	22.99	22.89
	HSPA+	1	22.28	22.39	22.28	22.88	22.99	22.88

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For WCDMA Band4: Antenna Gain = 0.6dBi
Limit: EIRP≤30dBm

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	19.42	19.45	18.94	20.22	20.25	19.74
		RB1#3	19.39	19.46	18.93	20.19	20.26	19.73
		RB1#5	19.43	19.46	18.95	20.23	20.26	19.75
		RB3#0	19.43	19.50	18.99	20.23	**20.30**	19.79
		RB3#3	19.41	19.49	19.00	20.21	20.29	19.80
		RB6#0	18.46	18.52	18.00	19.26	19.32	18.80
	16QAM	RB1#0	18.55	18.51	17.96	19.35	19.31	18.76
		RB1#3	18.56	18.51	17.96	19.36	19.31	18.76
		RB1#5	18.55	18.54	17.97	19.35	19.34	18.77
		RB3#0	18.42	18.59	18.14	19.22	**19.39**	18.94
		RB3#3	18.44	18.56	18.18	19.24	19.36	18.98
		RB6#0	17.45	17.43	17.13	18.25	18.23	17.93
3.0	QPSK	RB1#0	19.39	18.98	18.82	20.19	19.78	19.62
		RB1#8	19.38	18.92	18.86	20.18	19.72	19.66
		RB1#14	19.47	18.86	18.83	20.27	19.66	19.63
		RB6#0	18.46	18.05	17.90	19.26	18.85	18.70
		RB6#9	18.42	17.92	17.91	19.22	18.72	18.71
		RB15#0	18.46	17.99	17.84	19.26	18.79	18.64
	16QAM	RB1#0	18.46	18.59	18.01	19.26	19.39	18.81
		RB1#8	18.42	18.55	17.99	19.22	19.35	18.79
		RB1#14	18.47	18.52	17.98	19.27	19.32	18.78
		RB6#0	17.38	17.08	17.10	18.18	17.88	17.90
		RB6#9	17.41	16.97	17.05	18.21	17.77	17.85
		RB15#0	17.49	17.03	16.94	18.29	17.83	17.74

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	19.41	18.73	18.88	20.21	19.53	19.68
		RB1#13	19.39	18.72	18.80	20.19	19.52	19.60
		RB1#24	19.32	18.65	18.85	20.12	19.45	19.65
		RB15#0	18.32	17.72	17.90	19.12	18.52	18.70
		RB15#10	18.26	17.57	17.75	19.06	18.37	18.55
		RB25#0	18.27	17.67	17.83	19.07	18.47	18.63
	16QAM	RB1#0	18.15	18.01	17.93	18.95	18.81	18.73
		RB1#13	18.16	18.02	17.85	18.96	18.82	18.65
		RB1#24	18.15	17.92	17.86	18.95	18.72	18.66
		RB15#0	17.34	16.69	17.08	18.14	17.49	17.88
		RB15#10	17.29	16.52	16.94	18.09	17.32	17.74
		RB25#0	17.31	16.61	16.97	18.11	17.41	17.77
10.0	QPSK	RB1#0	19.25	18.66	18.54	20.05	19.46	19.34
		RB1#25	19.29	18.70	18.59	20.09	19.50	19.39
		RB1#49	19.24	18.51	18.51	20.04	19.31	19.31
		RB25#0	18.26	17.74	17.67	19.06	18.54	18.47
		RB25#25	18.30	17.59	17.50	19.10	18.39	18.30
		RB50#0	18.29	17.64	17.60	19.09	18.44	18.40
	16QAM	RB1#0	18.28	18.24	17.67	19.08	19.04	18.47
		RB1#25	18.29	18.24	17.72	19.09	19.04	18.52
		RB1#49	18.23	18.08	17.64	19.03	18.88	18.44
		RB25#0	17.36	16.79	16.82	18.16	17.59	17.62
		RB25#25	17.37	16.63	16.64	18.17	17.43	17.44
		RB50#0	17.33	16.62	16.74	18.13	17.42	17.54

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	19.15	19.05	19.00	19.95	19.85	19.80
		RB1#38	19.18	19.07	18.94	**19.98**	19.87	19.74
		RB1#74	19.08	18.85	18.88	19.88	19.65	19.68
		RB36#0	18.21	18.13	18.05	19.01	18.93	18.85
		RB36#39	18.22	17.94	17.92	19.02	18.74	18.72
		RB75#0	18.28	18.06	18.02	19.08	18.86	18.82
	16QAM	RB1#0	18.77	18.21	18.47	19.57	19.01	19.27
		RB1#38	18.83	18.21	18.41	**19.63**	19.01	19.21
		RB1#74	18.71	18.02	18.37	19.51	18.82	19.17
		RB36#0	17.21	17.16	17.18	18.01	17.96	17.98
		RB36#39	17.22	17.11	17.05	18.02	17.91	17.85
		RB75#0	17.24	17.06	17.13	18.04	17.86	17.93
20.0	QPSK	RB1#0	19.19	19.06	18.52	19.99	19.86	19.32
		RB1#50	19.24	19.13	18.50	**20.04**	19.93	19.30
		RB1#99	19.11	18.88	18.39	19.91	19.68	19.19
		RB50#0	18.21	18.23	17.53	19.01	19.03	18.33
		RB50#50	18.24	17.97	17.38	19.04	18.77	18.18
		RB100#0	18.24	18.10	17.43	19.04	18.90	18.23
	16QAM	RB1#0	18.52	18.28	18.09	19.32	19.08	18.89
		RB1#50	18.58	18.33	18.09	**19.38**	19.13	18.89
		RB1#99	18.41	18.12	17.99	19.21	18.92	18.79
		RB50#0	17.15	17.19	16.66	17.95	17.99	17.46
		RB50#50	17.18	17.13	16.50	17.98	17.93	17.30
		RB100#0	17.21	17.06	16.58	18.01	17.86	17.38

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band2: Antenna Gain = 0.8dBi
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	18.83	19.55	19.29	19.43	20.15	19.89
		RB1#3	18.79	19.55	19.25	19.39	20.15	19.85
		RB1#5	18.81	19.57	19.24	19.41	20.17	19.84
		RB3#0	18.77	19.58	19.33	19.37	20.18	19.93
		RB3#3	18.78	19.63	19.33	19.38	**20.23**	19.93
		RB6#0	17.86	18.60	18.36	18.46	19.20	18.96
	16QAM	RB1#0	17.98	18.60	18.34	18.58	19.20	18.94
		RB1#3	17.99	18.62	18.32	18.59	19.22	18.92
		RB1#5	18.01	18.62	18.34	18.61	19.22	18.94
		RB3#0	17.83	18.62	18.48	18.43	19.22	19.08
		RB3#3	17.83	18.64	18.52	18.43	**19.24**	19.12
		RB6#0	17.06	17.64	17.49	17.66	18.24	18.09
3.0	QPSK	RB1#0	19.34	18.95	18.54	**19.94**	19.55	19.14
		RB1#8	19.30	18.96	18.47	19.90	19.56	19.07
		RB1#14	19.29	18.93	18.51	19.89	19.53	19.11
		RB6#0	18.34	18.01	17.54	18.94	18.61	18.14
		RB6#9	18.34	18.01	17.51	18.94	18.61	18.11
		RB15#0	18.34	17.98	17.51	18.94	18.58	18.11
	16QAM	RB1#0	18.97	18.16	17.63	**19.57**	18.76	18.23
		RB1#8	18.92	18.11	17.54	19.52	18.71	18.14
		RB1#14	18.90	18.13	17.54	19.50	18.73	18.14
		RB6#0	17.56	17.18	16.61	18.16	17.78	17.21
		RB6#9	17.43	17.21	16.62	18.03	17.81	17.22
		RB15#0	17.41	17.05	16.69	18.01	17.65	17.29

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	19.28	18.87	19.06	19.88	19.47	19.66
		RB1#13	19.31	18.89	19.04	19.91	19.49	19.64
		RB1#24	19.31	18.91	18.97	19.91	19.51	19.57
		RB15#0	18.28	17.88	17.89	18.88	18.48	18.49
		RB15#10	18.28	17.85	17.82	18.88	18.45	18.42
		RB25#0	18.24	17.87	17.82	18.84	18.47	18.42
	16QAM	RB1#0	18.63	17.87	17.76	19.23	18.47	18.36
		RB1#13	18.58	17.91	17.75	19.18	18.51	18.35
		RB1#24	18.59	17.91	17.71	19.19	18.51	18.31
		RB15#0	17.23	17.06	17.06	17.83	17.66	17.66
		RB15#10	17.22	16.87	16.96	17.82	17.47	17.56
		RB25#0	17.38	17.02	17.01	17.98	17.62	17.61
10.0	QPSK	RB1#0	19.24	18.94	19.28	19.84	19.54	19.88
		RB1#25	19.26	18.99	19.23	19.86	19.59	19.83
		RB1#49	19.16	18.98	19.19	19.76	19.58	19.79
		RB25#0	18.19	17.95	18.22	18.79	18.55	18.82
		RB25#25	18.23	17.95	18.24	18.83	18.55	18.84
		RB50#0	18.26	17.96	18.25	18.86	18.56	18.85
	16QAM	RB1#0	18.41	18.01	18.86	19.01	18.61	19.46
		RB1#25	18.44	18.03	18.80	19.04	18.63	19.40
		RB1#49	18.30	18.00	18.77	18.90	18.60	19.37
		RB25#0	17.35	17.19	17.42	17.95	17.79	18.02
		RB25#25	17.41	17.19	17.47	18.01	17.79	18.07
		RB50#0	17.38	17.09	17.36	17.98	17.69	17.96

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	19.16	19.12	18.74	19.76	19.72	19.34
		RB1#38	19.22	19.21	18.75	19.82	19.81	19.35
		RB1#74	19.18	19.21	18.71	19.78	19.81	19.31
		RB36#0	18.18	18.18	17.81	18.78	18.78	18.41
		RB36#39	18.16	18.22	17.86	18.76	18.82	18.46
		RB75#0	18.20	18.24	17.86	18.80	18.84	18.46
	16QAM	RB1#0	18.79	18.29	18.26	19.39	18.89	18.86
		RB1#38	18.87	18.38	18.26	19.47	18.98	18.86
		RB1#74	18.78	18.32	18.24	19.38	18.92	18.84
		RB36#0	17.32	17.36	16.96	17.92	17.96	17.56
		RB36#39	17.30	17.35	16.97	17.90	17.95	17.57
		RB75#0	17.37	17.38	16.96	17.97	17.98	17.56
20.0	QPSK	RB1#0	19.11	19.17	18.71	19.71	19.77	19.31
		RB1#50	19.10	19.26	18.84	19.70	**19.86**	19.44
		RB1#99	19.11	19.18	18.69	19.71	19.78	19.29
		RB50#0	18.19	18.27	17.75	18.79	18.87	18.35
		RB50#50	18.19	18.21	17.78	18.79	18.81	18.38
		RB100#0	18.17	18.26	17.79	18.77	18.86	18.39
	16QAM	RB1#0	18.80	18.50	17.93	19.40	19.10	18.53
		RB1#50	18.80	18.60	18.09	**19.40**	19.20	18.69
		RB1#99	18.78	18.52	17.90	19.38	19.12	18.50
		RB50#0	17.30	17.35	16.88	17.90	17.95	17.48
		RB50#50	17.28	17.34	16.89	17.88	17.94	17.49
		RB100#0	17.29	17.40	16.90	17.89	18.00	17.50

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band4: Antenna Gain = 0.6dBi
Limit: EIRP≤30dBm

LTE Band 5 & Band 26(Part 22)

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	21.97	22.75	22.18	19.92	20.70	20.13
		RB1#3	21.91	22.79	22.10	19.86	20.74	20.05
		RB1#5	22.01	22.79	22.06	19.96	20.74	20.01
		RB3#0	21.97	22.80	22.23	19.92	20.75	20.18
		RB3#3	22.08	22.80	22.14	20.03	20.75	20.09
		RB6#0	21.01	21.85	21.15	18.96	19.80	19.10
	16QAM	RB1#0	20.96	21.76	21.34	18.91	19.71	19.29
		RB1#3	21.04	21.78	21.31	18.99	19.73	19.26
		RB1#5	21.10	21.80	21.27	19.05	19.75	19.22
		RB3#0	21.04	21.97	21.19	18.99	19.92	19.14
		RB3#3	21.08	22.00	21.14	19.03	19.95	19.09
		RB6#0	19.94	20.76	20.23	17.89	18.71	18.18
3.0	QPSK	RB1#0	22.07	22.16	22.11	20.02	20.11	20.06
		RB1#8	22.12	22.22	22.03	20.07	20.17	19.98
		RB1#14	22.15	22.13	21.89	20.10	20.08	19.84
		RB6#0	21.04	21.23	21.19	18.99	19.18	19.14
		RB6#9	21.15	21.14	20.93	19.10	19.09	18.88
		RB15#0	21.05	21.14	21.08	19.00	19.09	19.03
	16QAM	RB1#0	21.56	21.29	21.22	19.51	19.24	19.17
		RB1#8	21.70	21.35	21.08	19.65	19.30	19.03
		RB1#14	21.62	21.30	20.95	19.57	19.25	18.90
		RB6#0	20.07	20.23	20.09	18.02	18.18	18.04
		RB6#9	20.22	20.19	19.92	18.17	18.14	17.87
		RB15#0	20.11	20.03	20.15	18.06	17.98	18.10

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	22.04	22.69	21.83	19.99	20.64	19.78
		RB1#13	22.30	22.80	21.66	20.25	20.75	19.61
		RB1#24	22.46	22.74	21.45	20.41	20.69	19.40
		RB15#0	20.98	21.87	20.91	18.93	19.82	18.86
		RB15#10	21.29	21.64	20.40	19.24	19.59	18.35
		RB25#0	21.16	21.78	20.68	19.11	19.73	18.63
	16QAM	RB1#0	20.80	21.96	20.85	18.75	19.91	18.80
		RB1#13	20.92	22.05	20.68	18.87	20.00	18.63
		RB1#24	21.22	22.00	20.48	19.17	19.95	18.43
		RB15#0	20.03	20.89	19.91	17.98	18.84	17.86
		RB15#10	20.35	20.61	19.45	18.30	18.56	17.40
		RB25#0	20.19	20.75	19.71	18.14	18.70	17.66
10.0	QPSK	RB1#0	21.89	22.42	22.84	19.84	20.37	**20.79**
		RB1#25	22.31	22.74	22.64	20.26	20.69	20.59
		RB1#49	22.62	22.58	22.18	20.57	20.53	20.13
		RB25#0	20.97	21.88	21.46	18.92	19.83	19.41
		RB25#25	21.48	21.65	21.14	19.43	19.60	19.09
		RB50#0	21.30	21.75	21.31	19.25	19.70	19.26
	16QAM	RB1#0	21.07	21.41	22.28	19.02	19.36	**20.23**
		RB1#25	21.48	21.72	22.00	19.43	19.67	19.95
		RB1#49	21.73	21.63	21.66	19.68	19.58	19.61
		RB25#0	20.02	20.99	20.54	17.97	18.94	18.49
		RB25#25	20.52	20.74	20.21	18.47	18.69	18.16
		RB50#0	20.32	20.78	20.34	18.27	18.73	18.29

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band5: Antenna Gain = 0.6dBi = -1.55dBd (0dBd=2.15dBi)
Cable Loss=0.5dB*(provided by the applicant)
Limit: ERP≤38.45dBm

LTE Band 7

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	15.78	16.15	16.31	16.98	17.35	17.51
		RB1#13	15.78	16.13	16.32	16.98	17.33	**17.52**
		RB1#24	15.80	16.11	16.32	17.00	17.31	17.52
		RB15#0	15.06	15.16	15.25	16.26	16.36	16.45
		RB15#10	14.94	15.07	15.13	16.14	16.27	16.33
		RB25#0	14.99	15.12	15.19	16.19	16.32	16.39
	16QAM	RB1#0	15.20	15.14	15.03	16.40	16.34	16.23
		RB1#13	15.19	15.15	15.00	16.39	16.35	16.20
		RB1#24	15.22	15.11	15.05	**16.42**	16.31	16.25
		RB15#0	14.07	14.32	14.41	15.27	15.52	15.61
		RB15#10	13.91	14.25	14.30	15.11	15.45	15.50
		RB25#0	14.03	14.28	14.39	15.23	15.48	15.59
10.0	QPSK	RB1#0	16.14	15.77	16.07	17.34	16.97	17.27
		RB1#25	16.16	15.83	16.07	**17.36**	17.03	17.27
		RB1#49	16.08	15.78	16.06	17.28	16.98	17.26
		RB25#0	15.38	14.87	15.14	16.58	16.07	16.34
		RB25#25	15.25	14.79	15.09	16.45	15.99	16.29
		RB50#0	15.35	14.88	15.12	16.55	16.08	16.32
	16QAM	RB1#0	15.70	15.07	15.09	16.90	16.27	16.29
		RB1#25	15.74	14.99	15.10	**16.94**	16.19	16.30
		RB1#49	15.74	14.95	15.10	16.94	16.15	16.30
		RB25#0	14.41	14.06	14.36	15.61	15.26	15.56
		RB25#25	14.28	13.98	14.31	15.48	15.18	15.51
		RB50#0	14.31	14.03	14.29	15.51	15.23	15.49

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	15.95	16.02	15.76	17.15	17.22	16.96
		RB1#38	15.99	16.14	15.75	17.19	17.34	16.95
		RB1#74	16.02	16.07	15.77	17.22	17.27	16.97
		RB36#0	15.25	15.13	14.77	16.45	16.33	15.97
		RB36#39	15.21	15.09	14.78	16.41	16.29	15.98
		RB75#0	15.25	15.10	14.83	16.45	16.30	16.03
	16QAM	RB1#0	15.51	15.67	14.90	16.71	16.87	16.10
		RB1#38	15.59	15.67	14.95	16.79	16.87	16.15
		RB1#74	15.59	15.61	14.94	16.79	16.81	16.14
		RB36#0	14.27	14.27	13.96	15.47	15.47	15.16
		RB36#39	14.20	14.22	13.92	15.40	15.42	15.12
		RB75#0	14.23	14.25	13.98	15.43	15.45	15.18
20.0	QPSK	RB1#0	15.97	15.79	16.01	17.17	16.99	17.21
		RB1#50	16.08	15.86	16.09	17.28	17.06	17.29
		RB1#99	16.11	15.81	16.01	**17.31**	17.01	17.21
		RB50#0	15.36	15.04	15.08	16.56	16.24	16.28
		RB50#50	15.38	14.81	15.11	16.58	16.01	16.31
		RB100#0	15.41	14.83	15.07	16.61	16.03	16.27
	16QAM	RB1#0	15.39	15.11	15.60	16.59	16.31	16.80
		RB1#50	15.51	15.09	15.68	16.71	16.29	16.88
		RB1#99	15.47	15.04	15.71	16.67	16.24	**16.91**
		RB50#0	14.35	14.00	14.19	15.55	15.20	15.39
		RB50#50	14.35	13.87	14.27	15.55	15.07	15.47
		RB100#0	14.41	13.99	14.19	15.61	15.19	15.39

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band7: Antenna Gain = 1.20dBi
Limit: EIRP≤33dBm

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	22.13	21.79	21.20	19.68	19.34	18.75
		RB1#3	22.16	21.76	21.20	19.71	19.31	18.75
		RB1#5	22.14	21.74	21.21	19.69	19.29	18.76
		RB3#0	22.19	21.86	21.27	19.74	19.41	18.82
		RB3#3	22.22	21.81	21.29	19.77	19.36	18.84
		RB6#0	21.14	20.79	20.30	18.69	18.34	17.85
	16QAM	RB1#0	21.17	20.85	20.37	18.72	18.40	17.92
		RB1#3	21.21	20.83	20.42	18.76	18.38	17.97
		RB1#5	21.20	20.81	20.42	18.75	18.36	17.97
		RB3#0	21.24	20.99	20.23	18.79	18.54	17.78
		RB3#3	21.23	21.00	20.26	18.78	18.55	17.81
		RB6#0	20.08	19.81	19.33	17.63	17.36	16.88
3.0	QPSK	RB1#0	22.15	21.49	22.09	19.70	19.04	19.64
		RB1#8	22.17	21.34	22.04	**19.72**	18.89	19.59
		RB1#14	22.14	21.33	22.09	19.69	18.88	19.64
		RB6#0	21.16	20.46	21.10	18.71	18.01	18.65
		RB6#9	21.16	20.41	21.14	18.71	17.96	18.69
		RB15#0	21.19	20.37	21.13	18.74	17.92	18.68
	16QAM	RB1#0	21.20	21.02	21.26	18.75	18.57	**18.81**
		RB1#8	21.16	20.92	21.21	18.71	18.47	18.76
		RB1#14	21.18	20.88	21.25	18.73	18.43	18.80
		RB6#0	20.09	19.49	20.08	17.64	17.04	17.63
		RB6#9	20.09	19.44	20.19	17.64	16.99	17.74
		RB15#0	20.21	19.45	20.05	17.76	17.00	17.60

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	22.23	21.47	21.51	**19.78**	19.02	19.06
		RB1#13	22.19	21.41	21.47	19.74	18.96	19.02
		RB1#24	22.17	21.37	21.54	19.72	18.92	19.09
		RB15#0	21.21	20.3	20.49	18.76	17.85	18.04
		RB15#10	21.16	20.31	20.47	18.71	17.86	18.02
		RB25#0	21.13	20.26	20.54	18.68	17.81	18.09
	16QAM	RB1#0	21.24	20.24	20.76	**18.79**	17.79	18.31
		RB1#13	21.23	20.22	20.72	18.78	17.77	18.27
		RB1#24	21.19	20.17	20.81	18.74	17.72	18.36
		RB15#0	20.18	19.32	19.56	17.73	16.87	17.11
		RB15#10	20.17	19.32	19.45	17.72	16.87	17.00
		RB25#0	20.16	19.33	19.52	17.71	16.88	17.07
10.0	QPSK	RB1#0	22.17	21.27	21.25	**19.72**	18.82	18.80
		RB1#25	22.15	21.22	21.18	19.70	18.77	18.73
		RB1#49	22.04	21.23	21.22	19.59	18.78	18.77
		RB25#0	21.12	20.07	20.17	18.67	17.62	17.72
		RB25#25	21.23	20.15	20.13	18.78	17.70	17.68
		RB50#0	21.17	20.13	20.18	18.72	17.68	17.73
	16QAM	RB1#0	21.16	20.76	20.34	**18.71**	18.31	17.89
		RB1#25	21.1	20.7	20.31	18.65	18.25	17.86
		RB1#49	21.02	20.73	20.36	18.57	18.28	17.91
		RB25#0	20.22	19.14	19.2	17.77	16.69	16.75
		RB25#25	20.28	19.19	19.18	17.83	16.74	16.73
		RB50#0	20.15	19.11	19.13	17.70	16.66	16.68

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band12: Antenna Gain = 0.2dBi = -1.95dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
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	21.40	21.13	21.19	**18.95**	18.68	18.74
		RB1#13	21.19	20.97	20.96	18.74	18.52	18.51
		RB1#24	21.07	20.71	20.69	18.62	18.26	18.24
		RB15#0	20.11	19.93	19.99	17.66	17.48	17.54
		RB15#10	20.22	19.89	19.77	17.77	17.44	17.32
		RB25#0	20.15	19.88	19.84	17.70	17.43	17.39
	16QAM	RB1#0	20.68	20.20	20.01	**18.23**	17.75	17.56
		RB1#13	20.47	20.03	19.83	18.02	17.58	17.38
		RB1#24	20.30	19.77	19.55	17.85	17.32	17.10
		RB15#0	19.03	18.96	19.01	16.58	16.51	16.56
		RB15#10	19.15	18.86	18.78	16.70	16.41	16.33
		RB25#0	19.16	18.94	18.91	16.71	16.49	16.46
10.0	QPSK	RB1#0	/	21.46	/	/	**19.01**	/
		RB1#25	/	17.58	/	/	15.13	/
		RB1#49	/	20.60	/	/	18.15	/
		RB25#0	/	20.06	/	/	17.61	/
		RB25#25	/	19.80	/	/	17.35	/
		RB50#0	/	19.87	/	/	17.42	/
	16QAM	RB1#0	/	20.54	/	/	**18.09**	/
		RB1#25	/	20.19	/	/	17.74	/
		RB1#49	/	19.71	/	/	17.26	/
		RB25#0	/	19.07	/	/	16.62	/
		RB25#25	/	18.80	/	/	16.35	/
		RB50#0	/	18.88	/	/	16.43	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band13: Antenna Gain = 0.2dBi = -1.95dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
Limit: ERP≤34.77dBm

LTE Band 17

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	22.30	22.21	22.25	19.85	19.76	19.80
		RB1#13	22.31	22.24	22.27	19.86	19.79	19.82
		RB1#24	22.43	22.26	22.32	**19.98**	19.81	19.87
		RB15#0	21.15	21.20	21.32	18.70	18.75	18.87
		RB15#10	21.26	21.17	21.15	18.81	18.72	18.70
		RB25#0	21.19	21.20	21.23	18.74	18.75	18.78
	16QAM	RB1#0	21.09	21.47	21.32	18.64	19.02	18.87
		RB1#13	21.10	21.51	21.31	18.65	19.06	18.86
		RB1#24	21.21	21.52	21.33	18.76	**19.07**	18.88
		RB15#0	20.21	20.15	20.31	17.76	17.70	17.86
		RB15#10	20.32	20.13	20.16	17.87	17.68	17.71
		RB25#0	20.21	20.20	20.22	17.76	17.75	17.77
10.0	QPSK	RB1#0	22.16	22.15	22.13	19.71	19.70	19.68
		RB1#25	22.29	22.22	22.26	**19.84**	19.77	19.81
		RB1#49	22.22	22.22	22.24	19.77	19.77	19.79
		RB25#0	21.03	21.05	21.12	18.58	18.60	18.67
		RB25#25	21.18	21.12	21.04	18.73	18.67	18.59
		RB50#0	21.13	21.13	21.14	18.68	18.68	18.69
	16QAM	RB1#0	21.69	21.25	21.12	19.24	18.80	18.67
		RB1#25	21.80	21.38	21.24	**19.35**	18.93	18.79
		RB1#49	21.72	21.36	21.26	19.27	18.91	18.81
		RB25#0	20.09	20.11	20.23	17.64	17.66	17.78
		RB25#25	20.24	20.11	20.15	17.79	17.66	17.70
		RB50#0	20.11	20.11	20.10	17.66	17.66	17.65

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band17: Antenna Gain = 0.2dBi = -1.95dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
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	18.84	19.08	18.73	19.64	19.88	19.53
		RB1#3	18.83	19.09	18.66	19.63	19.89	19.46
		RB1#5	18.84	19.10	18.70	19.64	19.90	19.50
		RB3#0	18.83	19.07	18.82	19.63	19.87	19.62
		RB3#3	18.82	19.11	18.80	19.62	19.91	19.60
		RB6#0	17.86	18.09	17.84	18.66	18.89	18.64
	16QAM	RB1#0	17.99	18.14	17.87	18.79	18.94	18.67
		RB1#3	17.97	18.13	17.77	18.77	18.93	18.57
		RB1#5	17.99	18.14	17.77	18.79	18.94	18.57
		RB3#0	17.86	18.18	17.95	18.66	18.98	18.75
		RB3#3	17.87	18.14	17.98	18.67	18.94	18.78
		RB6#0	16.89	17.17	16.93	17.69	17.97	17.73
3.0	QPSK	RB1#0	19.27	18.63	18.74	20.07	19.43	19.54
		RB1#8	19.30	18.61	18.75	**20.10**	19.41	19.55
		RB1#14	18.38	17.66	17.81	19.18	18.46	18.61
		RB6#0	18.39	17.61	17.81	19.19	18.41	18.61
		RB6#9	18.36	17.59	17.77	19.16	18.39	18.57
		RB15#0	18.94	17.82	17.83	19.74	18.62	18.63
	16QAM	RB1#0	18.90	17.74	17.83	19.70	18.54	18.63
		RB1#8	18.89	17.74	17.84	19.69	18.54	18.64
		RB1#14	17.44	16.79	16.89	18.24	17.59	17.69
		RB6#0	17.43	16.79	16.85	18.23	17.59	17.65
		RB6#9	17.43	16.67	16.98	18.23	17.47	17.78
		RB15#0	19.27	18.63	18.74	**20.07**	19.43	19.54

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	19.32	18.35	18.71	**20.12**	19.15	19.51
		RB1#13	19.32	18.33	18.71	20.12	19.13	19.51
		RB1#24	19.26	18.36	18.72	20.06	19.16	19.52
		RB15#0	18.26	17.32	17.74	19.06	18.12	18.54
		RB15#10	18.16	17.29	17.56	18.96	18.09	18.36
		RB25#0	18.18	17.33	17.65	18.98	18.13	18.45
	16QAM	RB1#0	18.07	17.68	17.77	18.87	18.48	18.57
		RB1#13	18.09	17.64	17.74	**18.89**	18.44	18.54
		RB1#24	18.06	17.64	17.72	18.86	18.44	18.52
		RB15#0	17.27	16.43	16.88	18.07	17.23	17.68
		RB15#10	17.18	16.40	16.75	17.98	17.20	17.55
		RB25#0	17.24	16.46	16.81	18.04	17.26	17.61
10.0	QPSK	RB1#0	19.16	18.53	18.58	19.96	19.33	19.38
		RB1#25	19.17	18.52	18.57	19.97	19.32	19.37
		RB1#49	19.08	18.48	18.48	19.88	19.28	19.28
		RB25#0	18.19	17.56	17.55	18.99	18.36	18.35
		RB25#25	18.20	17.50	17.52	19.00	18.30	18.32
		RB50#0	18.24	17.58	17.60	19.04	18.38	18.40
	16QAM	RB1#0	18.74	17.67	17.61	19.54	18.47	18.41
		RB1#25	18.76	17.65	17.59	19.56	18.45	18.39
		RB1#49	18.68	17.60	17.52	19.48	18.40	18.32
		RB25#0	17.25	16.73	16.81	18.05	17.53	17.61
		RB25#25	17.24	16.69	16.76	18.04	17.49	17.56
		RB50#0	17.21	16.69	16.71	18.01	17.49	17.51

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	19.10	18.64	18.66	19.90	19.44	19.46
		RB1#38	19.15	18.63	18.65	19.95	19.43	19.45
		RB1#74	19.04	18.54	18.66	19.84	19.34	19.46
		RB36#0	18.12	17.74	17.80	18.92	18.54	18.60
		RB36#39	18.13	17.65	17.67	18.93	18.45	18.47
		RB75#0	18.15	17.70	17.77	18.95	18.50	18.57
	16QAM	RB1#0	18.27	18.14	18.28	19.07	18.94	19.08
		RB1#38	18.31	18.12	18.27	19.11	18.92	19.07
		RB1#74	18.19	17.97	18.12	18.99	18.77	18.92
		RB36#0	17.16	16.86	16.95	17.96	17.66	17.75
		RB36#39	17.15	16.79	16.80	17.95	17.59	17.60
		RB75#0	17.16	16.78	16.91	17.96	17.58	17.71
20.0	QPSK	RB1#0	19.06	18.64	18.32	19.86	19.44	19.12
		RB1#50	19.13	18.64	18.34	**19.93**	19.44	19.14
		RB1#99	18.95	18.37	18.10	19.75	19.17	18.90
		RB50#0	18.14	17.71	17.43	18.94	18.51	18.23
		RB50#50	18.20	17.58	17.25	19.00	18.38	18.05
		RB100#0	18.14	17.65	17.36	18.94	18.45	18.16
	16QAM	RB1#0	18.64	17.94	17.52	19.44	18.74	18.32
		RB1#50	18.69	17.95	17.55	**19.49**	18.75	18.35
		RB1#99	18.56	17.68	17.34	19.36	18.48	18.14
		RB50#0	17.10	16.82	16.54	17.90	17.62	17.34
		RB50#50	17.16	16.70	16.39	17.96	17.50	17.19
		RB100#0	17.11	16.75	16.49	17.91	17.55	17.29

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band25: Antenna Gain = 0.8Bi
Limit: EIRP≤33dBm

LTE Band 26(Part 90S)

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	21.75	21.11	21.53	19.70	19.06	19.48
		RB1#3	21.73	21.10	21.53	19.68	19.05	19.48
		RB1#5	21.76	21.11	21.53	19.71	19.06	19.48
		RB3#0	21.78	21.16	21.62	19.73	19.11	19.57
		RB3#3	21.73	21.15	21.61	19.68	19.10	19.56
		RB6#0	20.77	20.14	20.58	18.72	18.09	18.53
	16QAM	RB1#0	20.90	20.20	20.59	18.85	18.15	18.54
		RB1#3	20.88	20.17	20.62	18.83	18.12	18.57
		RB1#5	20.89	20.17	20.57	18.84	18.12	18.52
		RB3#0	20.71	20.20	20.76	18.66	18.15	18.71
		RB3#3	20.73	20.19	20.78	18.68	18.14	18.73
		RB6#0	19.81	19.07	19.57	17.76	17.02	17.52
3.0	QPSK	RB1#0	21.79	21.66	21.72	**19.74**	19.61	19.67
		RB1#8	21.76	21.67	21.68	19.71	19.62	19.63
		RB1#14	21.71	21.64	21.63	19.66	19.59	19.58
		RB6#0	20.78	20.68	20.71	18.73	18.63	18.66
		RB6#9	20.76	20.67	20.69	18.71	18.62	18.64
		RB15#0	20.74	20.68	20.69	18.69	18.63	18.64
	16QAM	RB1#0	20.91	20.73	21.27	18.86	18.68	**19.22**
		RB1#8	20.88	20.70	21.27	18.83	18.65	19.22
		RB1#14	20.83	20.66	21.23	18.78	18.61	19.18
		RB6#0	19.78	19.60	19.75	17.73	17.55	17.70
		RB6#9	19.75	19.58	19.73	17.70	17.53	17.68
		RB15#0	19.71	19.70	19.77	17.66	17.65	17.72

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	21.06	21.32	21.76	19.01	19.27	19.71
		RB1#13	20.99	21.30	21.64	18.94	19.25	19.59
		RB1#24	20.97	21.20	21.59	18.92	19.15	19.54
		RB15#0	19.96	20.28	20.55	17.91	18.23	18.50
		RB15#10	19.97	20.29	20.54	17.92	18.24	18.49
		RB25#0	19.98	20.25	20.57	17.93	18.20	18.52
	16QAM	RB1#0	20.32	20.40	20.51	18.27	18.35	18.46
		RB1#13	20.24	20.34	20.43	18.19	18.29	18.38
		RB1#24	20.23	20.26	20.40	18.18	18.21	18.35
		RB15#0	18.92	19.28	19.58	16.87	17.23	17.53
		RB15#10	18.94	19.28	19.59	16.89	17.23	17.54
		RB25#0	18.99	19.29	19.61	16.94	17.24	17.56
10.0	QPSK	RB1#0	/	21.08	/	/	**19.03**	/
		RB1#25	/	21.01	/	/	18.96	/
		RB1#49	/	20.86	/	/	18.81	/
		RB25#0	/	19.96	/	/	17.91	/
		RB25#25	/	19.96	/	/	17.91	/
		RB50#0	/	20.04	/	/	17.99	/
	16QAM	RB1#0	/	20.19	/	/	**18.14**	/
		RB1#25	/	20.15	/	/	18.10	/
		RB1#49	/	19.96	/	/	17.91	/
		RB25#0	/	19.01	/	/	16.96	/
		RB25#25	/	19.02	/	/	16.97	/
		RB50#0	/	19.01	/	/	16.96	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band26: Antenna Gain = 0.6dBi = -1.55dBd (0dBd=2.15dBi)
Cable Loss=0.5dB* (provided by the applicant)
Limit: ERP≤50dBm

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	21.92	21.23	20.51	23.12	22.43	21.71
		RB1#13	21.92	21.23	20.57	23.12	22.43	21.77
		RB1#24	21.91	21.26	20.66	23.11	22.46	21.86
		RB15#0	21.91	21.18	20.61	23.11	22.38	21.81
		RB15#10	21.86	21.18	20.59	23.06	22.38	21.79
		RB25#0	21.87	21.17	20.59	23.07	22.37	21.79
	16QAM	RB1#0	22.11	21.17	20.58	23.31	22.37	21.78
		RB1#13	22.10	21.20	20.62	23.30	22.40	21.82
		RB1#24	22.15	21.18	20.70	23.35	22.38	21.90
		RB15#0	21.90	21.13	20.62	23.10	22.33	21.82
		RB15#10	21.90	21.11	20.61	23.10	22.31	21.81
		RB25#0	21.86	21.19	20.63	23.06	22.39	21.83
10.0	QPSK	RB1#0	21.91	21.20	20.47	23.11	22.40	21.67
		RB1#25	21.94	21.21	20.55	23.14	22.41	21.75
		RB1#49	21.95	21.18	20.66	23.15	22.38	21.86
		RB25#0	21.85	21.17	20.50	23.05	22.37	21.70
		RB25#25	21.95	21.16	20.54	23.15	22.36	21.74
		RB50#0	21.93	21.20	20.56	23.13	22.40	21.76
	16QAM	RB1#0	22.05	21.38	20.33	23.25	22.58	21.53
		RB1#25	22.08	21.40	20.42	23.28	22.60	21.62
		RB1#49	22.07	21.39	20.54	23.27	22.59	21.74
		RB25#0	21.91	21.19	20.56	23.11	22.39	21.76
		RB25#25	22.00	21.16	20.60	23.20	22.36	21.80
		RB50#0	21.92	21.17	20.56	23.12	22.37	21.76

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	21.84	21.12	20.26	23.04	22.32	21.46
		RB1#38	21.91	21.19	20.44	23.11	22.39	21.64
		RB1#74	21.84	21.09	20.54	23.04	22.29	21.74
		RB36#0	21.82	21.16	20.36	23.02	22.36	21.56
		RB36#39	21.90	21.16	20.46	23.10	22.36	21.66
		RB75#0	21.90	21.19	20.47	23.10	22.39	21.67
	16QAM	RB1#0	22.04	21.32	20.19	23.24	22.52	21.39
		RB1#38	22.11	21.40	20.37	23.31	22.60	21.57
		RB1#74	22.06	21.30	20.47	23.26	22.50	21.67
		RB36#0	21.91	21.15	20.40	23.11	22.35	21.60
		RB36#39	21.97	21.14	20.46	23.17	22.34	21.66
		RB75#0	21.91	21.15	20.46	23.11	22.35	21.66
20.0	QPSK	RB1#0	21.86	21.07	20.16	23.06	22.27	21.36
		RB1#50	22.03	21.20	20.38	**23.23**	22.40	21.58
		RB1#99	21.90	21.08	20.48	23.10	22.28	21.68
		RB50#0	21.89	21.20	20.37	23.09	22.40	21.57
		RB50#50	21.99	21.14	20.42	23.19	22.34	21.62
		RB100#0	21.94	21.17	20.40	23.14	22.37	21.60
	16QAM	RB1#0	22.10	21.15	20.14	23.30	22.35	21.34
		RB1#50	22.23	21.24	20.35	**23.43**	22.44	21.55
		RB1#99	22.11	21.13	20.48	23.31	22.33	21.68
		RB50#0	21.87	21.19	20.41	23.07	22.39	21.61
		RB50#50	21.99	21.13	20.45	23.19	22.33	21.65
		RB100#0	21.93	21.15	20.42	23.13	22.35	21.62

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band41: Antenna Gain = 1.2dBi
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	18.54	19.40	19.22	19.14	20.00	19.82
		RB1#3	18.56	19.43	19.20	19.16	20.03	19.80
		RB1#5	18.59	19.43	19.16	19.19	20.03	19.76
		RB3#0	18.53	19.48	19.34	19.13	**20.08**	19.94
		RB3#3	18.52	19.48	19.35	19.12	20.08	19.95
		RB6#0	17.60	18.47	18.32	18.20	19.07	18.92
	16QAM	RB1#0	17.74	18.50	18.14	18.34	19.10	18.74
		RB1#3	17.72	18.52	18.30	18.32	**19.12**	18.90
		RB1#5	17.73	18.49	18.23	18.33	19.09	18.83
		RB3#0	17.57	18.51	18.47	18.17	19.11	19.07
		RB3#3	17.57	18.50	18.50	18.17	19.10	19.10
		RB6#0	16.79	17.49	17.47	17.39	18.09	18.07
3.0	QPSK	RB1#0	19.29	18.47	19.21	19.89	19.07	19.81
		RB1#8	19.25	18.48	19.19	19.85	19.08	19.79
		RB1#14	19.25	18.45	19.19	19.85	19.05	19.79
		RB6#0	18.27	17.53	18.31	18.87	18.13	18.91
		RB6#9	18.32	17.52	18.29	18.92	18.12	18.89
		RB15#0	18.32	17.50	18.30	18.92	18.10	18.90
	16QAM	RB1#0	18.89	17.66	18.31	19.49	18.26	18.91
		RB1#8	18.86	17.64	18.21	19.46	18.24	18.81
		RB1#14	18.86	17.65	18.22	19.46	18.25	18.82
		RB6#0	17.48	16.70	17.39	18.08	17.30	17.99
		RB6#9	17.52	16.72	17.34	18.12	17.32	17.94
		RB15#0	17.52	16.60	17.48	18.12	17.20	18.08

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	19.41	18.90	19.44	20.01	19.50	20.04
		RB1#13	19.40	18.90	19.41	20.00	19.50	20.01
		RB1#24	19.40	18.91	19.22	20.00	19.51	19.82
		RB15#0	18.29	17.84	18.45	18.89	18.44	19.05
		RB15#10	18.22	17.82	18.38	18.82	18.42	18.98
		RB25#0	18.25	17.84	18.42	18.85	18.44	19.02
	16QAM	RB1#0	18.11	18.19	18.11	18.71	18.79	18.71
		RB1#13	18.12	18.15	18.19	18.72	18.75	18.79
		RB1#24	18.12	18.17	18.24	18.72	18.77	18.84
		RB15#0	17.44	16.96	17.62	18.04	17.56	18.22
		RB15#10	17.41	16.92	17.57	18.01	17.52	18.17
		RB25#0	17.46	16.98	17.59	18.06	17.58	18.19
10.0	QPSK	RB1#0	19.24	18.35	19.09	19.84	18.95	19.69
		RB1#25	19.27	18.41	19.16	19.87	19.01	19.76
		RB1#49	19.20	18.35	18.97	19.80	18.95	19.57
		RB25#0	18.20	17.37	18.13	18.80	17.97	18.73
		RB25#25	18.25	17.41	18.21	18.85	18.01	18.81
		RB50#0	18.26	17.44	18.20	18.86	18.04	18.80
	16QAM	RB1#0	18.80	17.52	17.62	19.40	18.12	18.22
		RB1#25	18.81	17.56	17.69	19.41	18.16	18.29
		RB1#49	18.78	17.52	17.78	19.38	18.12	18.38
		RB25#0	17.38	16.55	17.37	17.98	17.15	17.97
		RB25#25	17.45	16.59	17.41	18.05	17.19	18.01
		RB50#0	17.41	16.58	17.33	18.01	17.18	17.93

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	19.08	19.35	19.00	19.68	19.95	19.60
		RB1#38	19.15	19.40	19.11	19.75	**20.00**	19.71
		RB1#74	19.07	19.35	19.05	19.67	19.95	19.65
		RB36#0	18.10	18.40	18.11	18.70	19.00	18.71
		RB36#39	18.18	18.39	18.17	18.78	18.99	18.77
		RB75#0	18.18	18.43	18.14	18.78	19.03	18.74
	16QAM	RB1#0	18.62	18.95	18.18	19.22	19.55	18.78
		RB1#38	18.63	19.01	18.28	19.23	**19.61**	18.88
		RB1#74	18.58	18.96	18.27	19.18	19.56	18.87
		RB36#0	17.26	16.85	17.28	17.86	17.45	17.88
		RB36#39	17.35	16.87	17.36	17.95	17.47	17.96
		RB75#0	17.28	16.87	17.28	17.88	17.47	17.88
20.0	QPSK	RB1#0	19.17	18.77	18.57	19.77	19.37	19.17
		RB1#50	19.23	18.85	18.58	**19.83**	19.45	19.18
		RB1#99	19.15	18.57	18.51	19.75	19.17	19.11
		RB50#0	18.20	17.95	18.20	18.80	18.55	18.80
		RB50#50	18.14	17.97	18.21	18.74	18.57	18.81
		RB100#0	18.17	18.01	18.18	18.77	18.61	18.78
	16QAM	RB1#0	18.52	17.64	18.12	19.12	18.24	18.72
		RB1#50	18.54	17.91	18.21	**19.14**	18.51	18.81
		RB1#99	18.48	17.78	18.20	19.08	18.38	18.80
		RB50#0	17.27	17.10	17.32	17.87	17.70	17.92
		RB50#50	17.22	17.08	17.35	17.82	17.68	17.95
		RB100#0	17.28	17.10	17.29	17.88	17.70	17.89

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band66: Antenna Gain = 0.6dBi
Limit: EIRP≤30dBm

LTE Band 71

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	22.12	22.12	22.18	19.57	19.57	19.63
		RB1#13	22.14	22.13	22.15	19.59	19.58	19.60
		RB1#24	22.20	22.14	22.24	19.65	19.59	19.69
		RB15#0	21.00	21.13	21.13	18.45	18.58	18.58
		RB15#10	21.08	21.10	21.06	18.53	18.55	18.51
		RB25#0	21.03	21.10	21.09	18.48	18.55	18.54
	16QAM	RB1#0	21.40	21.17	20.97	18.85	18.62	18.42
		RB1#13	21.41	21.17	20.96	18.86	18.62	18.41
		RB1#24	21.47	21.20	21.04	18.92	18.65	18.49
		RB15#0	19.98	20.11	20.15	17.43	17.56	17.60
		RB15#10	20.06	20.11	20.08	17.51	17.56	17.53
		RB25#0	20.06	20.12	20.15	17.51	17.57	17.60
10.0	QPSK	RB1#0	22.14	22.09	22.07	19.59	19.54	19.52
		RB1#25	22.25	22.13	22.13	**19.70**	19.58	19.58
		RB1#49	22.17	22.07	22.15	19.62	19.52	19.60
		RB25#0	21.11	21.07	21.07	18.56	18.52	18.52
		RB25#25	21.17	21.11	21.13	18.62	18.56	18.58
		RB50#0	21.12	21.09	21.11	18.57	18.54	18.56
	16QAM	RB1#0	21.64	21.19	21.04	19.09	18.64	18.49
		RB1#25	21.73	21.27	21.11	**19.18**	18.72	18.56
		RB1#49	21.72	21.18	21.13	19.17	18.63	18.58
		RB25#0	20.14	20.10	20.18	17.59	17.55	17.63
		RB25#25	20.22	20.09	20.18	17.67	17.54	17.63
		RB50#0	20.10	20.08	20.12	17.55	17.53	17.57

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.09	22.14	22.04	19.54	19.59	19.49
		RB1#38	22.11	22.14	22.03	19.56	19.59	19.48
		RB1#74	22.07	22.06	22.06	19.52	19.51	19.51
		RB36#0	21.14	21.00	21.03	18.59	18.45	18.48
		RB36#39	21.22	21.11	21.10	18.67	18.56	18.55
		RB75#0	21.21	21.10	21.11	18.66	18.55	18.56
	16QAM	RB1#0	21.64	21.27	21.46	19.09	18.72	18.91
		RB1#38	21.68	21.23	21.44	19.13	18.68	18.89
		RB1#74	21.61	21.18	21.48	19.06	18.63	18.93
		RB36#0	20.17	20.03	20.05	17.62	17.48	17.50
		RB36#39	20.33	20.14	20.09	17.78	17.59	17.54
		RB75#0	20.19	20.10	20.08	17.64	17.55	17.53
20.0	QPSK	RB1#0	22.04	22.12	21.98	19.49	19.57	19.43
		RB1#50	22.24	22.16	22.07	**19.69**	19.61	19.52
		RB1#99	22.04	22.06	22.06	19.49	19.51	19.51
		RB50#0	21.18	20.96	21.13	18.63	18.41	18.58
		RB50#50	21.24	21.12	21.15	18.69	18.57	18.60
		RB100#0	21.20	21.04	21.11	18.65	18.49	18.56
	16QAM	RB1#0	21.31	21.33	21.56	18.76	18.78	19.01
		RB1#50	21.50	21.36	21.64	18.95	18.81	19.09
		RB1#99	21.34	21.29	21.65	18.79	18.74	**19.10**
		RB50#0	20.15	19.95	20.15	17.60	17.40	17.60
		RB50#50	20.20	20.12	20.10	17.65	17.57	17.55
		RB100#0	20.20	20.01	20.09	17.65	17.46	17.54

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)
For Band 71: Antenna Gain = 0.1dBi = -2.05dBd (0dBd=2.15dBi)
Cable Loss=0.5dB*(provided by the applicant)
Limit: ERP≤34.77dBm

Peak-to-average ratio (PAR)

Cellular Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	6.62	13
	Middle	6.80	13
	High	6.62	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	7.55	13
	Middle	7.58	13
	High	7.55	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.13	13
	Middle	3.04	13
	High	3.04	13
HSDPA (16QAM)	Low	3.86	13
	Middle	4.87	13
	High	3.28	13
HSUPA (BPSK)	Low	3.83	13
	Middle	3.28	13
	High	3.77	13
HSPA+	Low	3.42	13
	Middle	3.57	13
	High	3.33	13

PCS Band

Mode	Channel	PAR (dB)	Limit (dB)
GSM	Low	6.74	13
	Middle	6.71	13
	High	6.74	13

Mode	Channel	PAR (dB)	Limit (dB)
EGPRS	Low	7.30	13
	Middle	7.74	13
	High	7.39	13

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	3.07	13
	Middle	2.99	13
	High	2.99	13
HSDPA (16QAM)	Low	3.80	13
	Middle	3.86	13
	High	3.88	13
HSUPA (BPSK)	Low	3.39	13
	Middle	3.45	13
	High	3.80	13
HSPA+	Low	3.54	13
	Middle	3.87	13
	High	3.52	13

AWS Band

Mode	Channel	PAR (dB)	Limit (dB)
RMC (BPSK)	Low	2.96	13
	Middle	2.78	13
	High	2.81	13
HSDPA (16QAM)	Low	3.33	13
	Middle	3.13	13
	High	3.19	13
HSUPA (BPSK)	Low	3.36	13
	Middle	3.22	13
	High	3.71	13
HSPA+	Low	3.48	13
	Middle	3.60	13
	High	3.62	13

LTE Band 2 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.16	5.16	5.10	13	Pass
QPSK (100RB Size)	5.77	5.77	5.83	13	Pass
16QAM (1RB Size)	6.44	5.93	6.25	13	Pass
16QAM (100RB Size)	6.57	6.70	6.60	13	Pass

LTE Band 4 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.90	4.65	4.90	13	Pass
QPSK (100RB Size)	5.61	5.58	5.77	13	Pass
16QAM (1RB Size)	6.06	5.35	6.06	13	Pass
16QAM (100RB Size)	6.57	6.47	6.57	13	Pass

LTE Band 5&Band 26(Part 22H) 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	8.36	8.33	8.69	13	Pass
QPSK (50RB Size)	8.46	8.65	8.43	13	Pass
16QAM (1RB Size)	8.49	8.40	8.56	13	Pass
16QAM (50RB Size)	8.59	8.61	8.43	13	Pass

LTE Band 7 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.53	4.49	4.71	13	Pass
QPSK (100RB Size)	5.26	5.35	5.48	13	Pass
16QAM (1RB Size)	4.39	5.06	5.96	13	Pass
16QAM (100RB Size)	6.12	6.19	6.25	13	Pass

LTE Band 12 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.84	4.87	5.1	13	Pass
QPSK (50RB Size)	5.58	5.35	5.48	13	Pass
16QAM (1RB Size)	6.09	5.61	6.25	13	Pass
16QAM (50RB Size)	6.41	6.28	6.28	13	Pass

LTE Band 13 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	8.51	/	13	Pass
QPSK (50RB Size)	/	8.77	/	13	Pass
16QAM (1RB Size)	/	8.35	/	13	Pass
16QAM (50RB Size)	/	8.49	/	13	Pass

LTE Band 17 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.78	4.84	4.84	13	Pass
QPSK (50RB Size)	5.35	5.45	5.35	13	Pass
16QAM (1RB Size)	5.67	6.19	6.22	13	Pass
16QAM (50RB Size)	6.25	6.28	6.28	13	Pass

LTE Band 25 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	5.16	5.13	5.58	13	Pass
QPSK (100RB Size)	5.77	5.77	5.80	13	Pass
16QAM (1RB Size)	6.44	5.99	6.51	13	Pass
16QAM (100RB Size)	6.73	6.60	6.63	13	Pass

LTE Band 26(Part 90S) 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	5.10	/	13	Pass
QPSK (50RB Size)	/	5.54	/	13	Pass
16QAM (1RB Size)	/	6.38	/	13	Pass
16QAM (50RB Size)	/	6.47	/	13	Pass

LTE Band 41 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	6.12	5.93	6.32	13	Pass
QPSK (100RB Size)	7.85	7.92	8.01	13	Pass
16QAM (1RB Size)	6.82	6.90	7.02	13	Pass
16QAM (100RB Size)	6.99	7.03	7.12	13	Pass

LTE Band 66 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.84	4.74	4.52	13	Pass
QPSK (100RB Size)	5.64	5.64	5.54	13	Pass
16QAM (1RB Size)	6.03	5.64	5.80	13	Pass
16QAM (100RB Size)	6.57	6.57	6.38	13	Pass

LTE Band 71 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	4.84	5.48	5.13	13	Pass
QPSK (100RB Size)	5.42	5.54	5.54	13	Pass
16QAM (1RB Size)	5.74	6.54	6.63	13	Pass
16QAM (100RB Size)	6.22	6.25	6.25	13	Pass

FCC §2.1049, §22.917, §22.905 & §24.238&§27.53 &§90.209- OCCUPIED BANDWIDTH

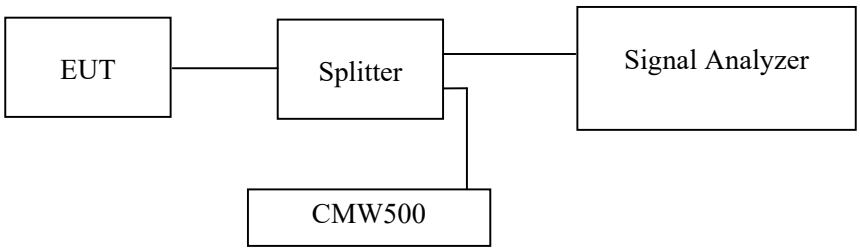
Applicable Standard

FCC 47 §2.1049, §22.917, §22.905, §24.238, §27.53 and §90.209.

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.



Test Data

Environmental Conditions

Temperature:	25~28 ℃
Relative Humidity:	55~60 %
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-07-28 to 2022-08-05.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables and plots.

Cellular Band (Part 22H)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM(GMSK)	128	824.2	243.76	319.00
	190	836.6	242.76	321.00
	251	848.8	243.76	320.00
EDGE	128	824.2	250.75	325.00
	190	836.6	252.75	331.00
	251	848.8	249.75	326.00

Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	826.4	4.14	4.71
	836.4	4.14	4.71
	846.6	4.14	4.73
HSDPA	826.4	4.15	4.73
	836.4	4.15	4.71
	846.6	4.15	4.73
HSUPA	826.4	4.15	4.71
	836.4	4.15	4.71
	846.6	4.14	4.71

PCS Band (Part 24E)

Mode	Channel	Frequency (MHz)	99% Occupied Bandwidth (kHz)	26 dB Emission Bandwidth (kHz)
GSM(GMSK)	512	1850.2	242.76	318.00
	661	1880.0	242.76	319.00
	810	1909.8	242.76	322.00
EGPRS(8DPSK)	512	1850.2	273.73	368.00
	661	1880.0	271.73	382.00
	810	1909.8	268.73	383.00

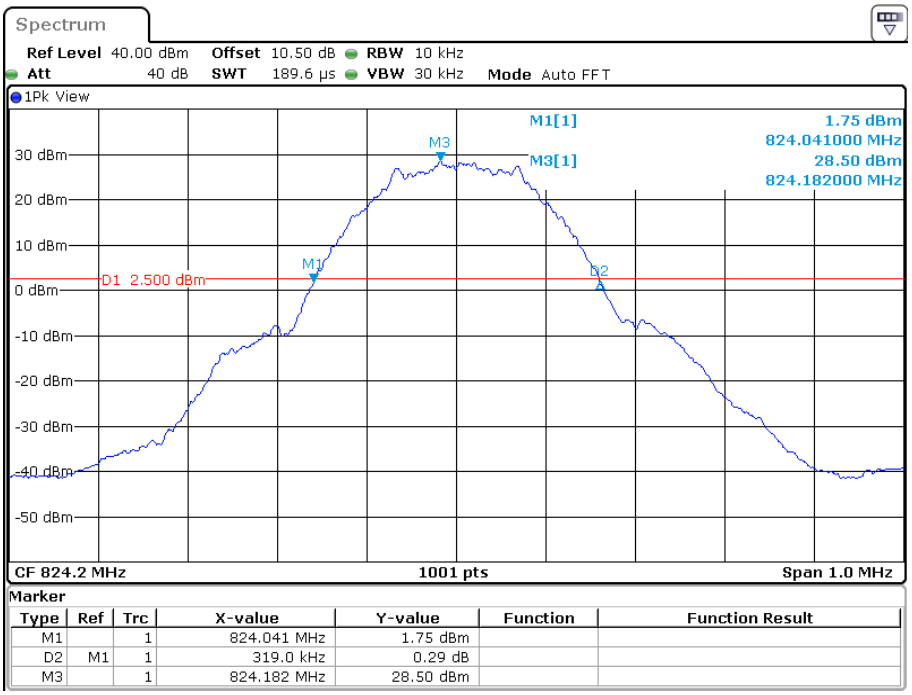
Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1852.4	4.14	4.73
	1880.0	4.15	4.73
	1907.6	4.14	4.73
HSDPA	1852.4	4.14	4.71
	1880.0	4.15	4.73
	1907.6	4.17	4.73
HSUPA	1852.4	4.15	4.70
	1880.0	4.15	4.71
	1907.6	4.15	4.71

AWS Band (Part 27)

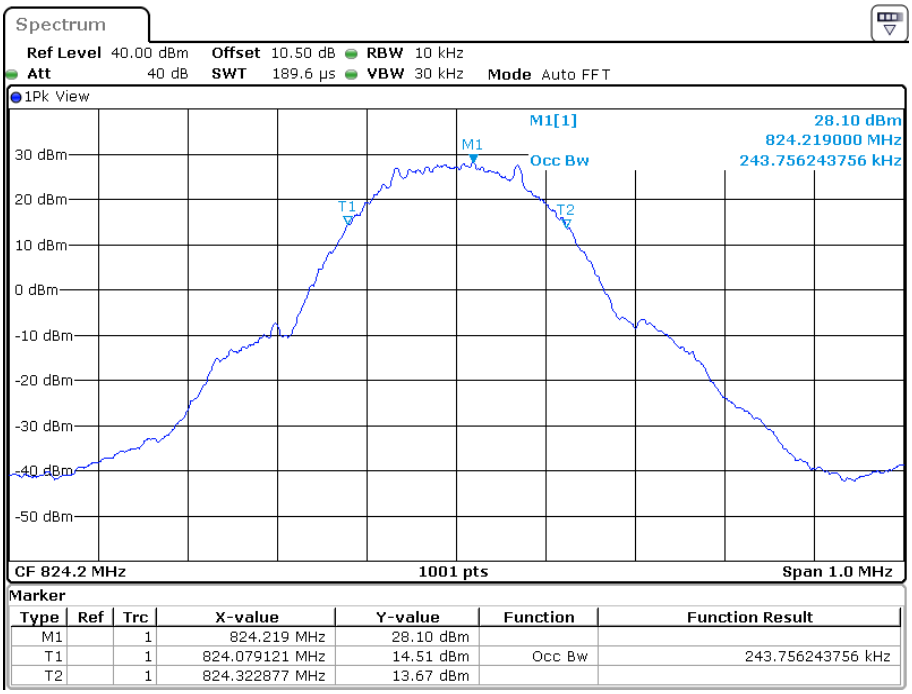
Frequency (MHz)		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)
RMC	1712.4	4.14	4.71
	1732.6	4.15	4.74
	1752.6	4.15	4.74
HSDPA	1712.4	4.14	4.71
	1732.6	4.15	4.71
	1752.6	4.15	4.73
HSUPA	1712.4	4.14	4.73
	1732.6	4.15	4.71
	1752.6	4.15	4.71

Cellular Band (Part 22H)

26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel

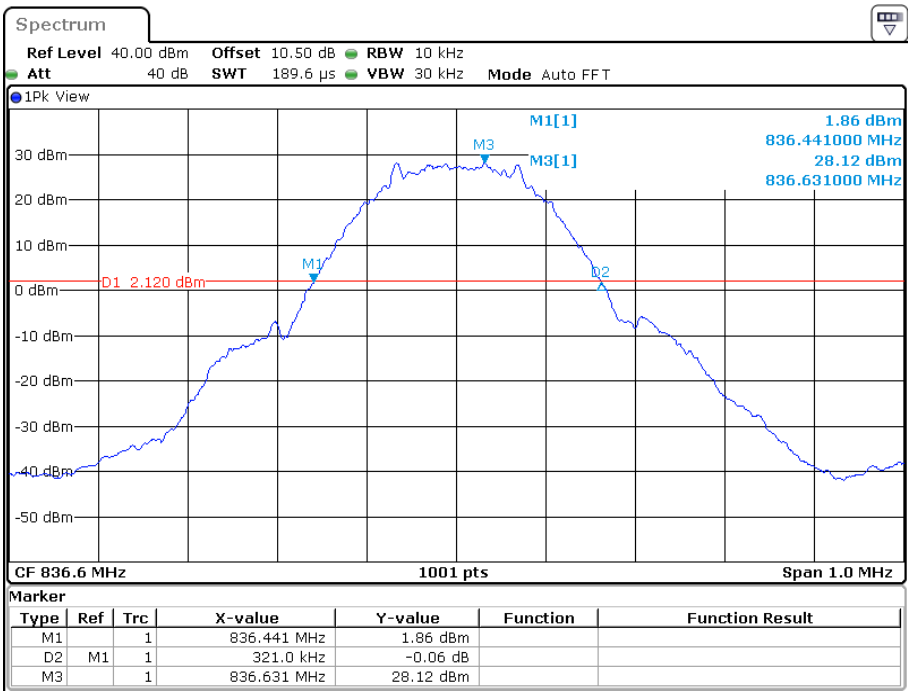


Date: 5.AUG.2022 10:01:05

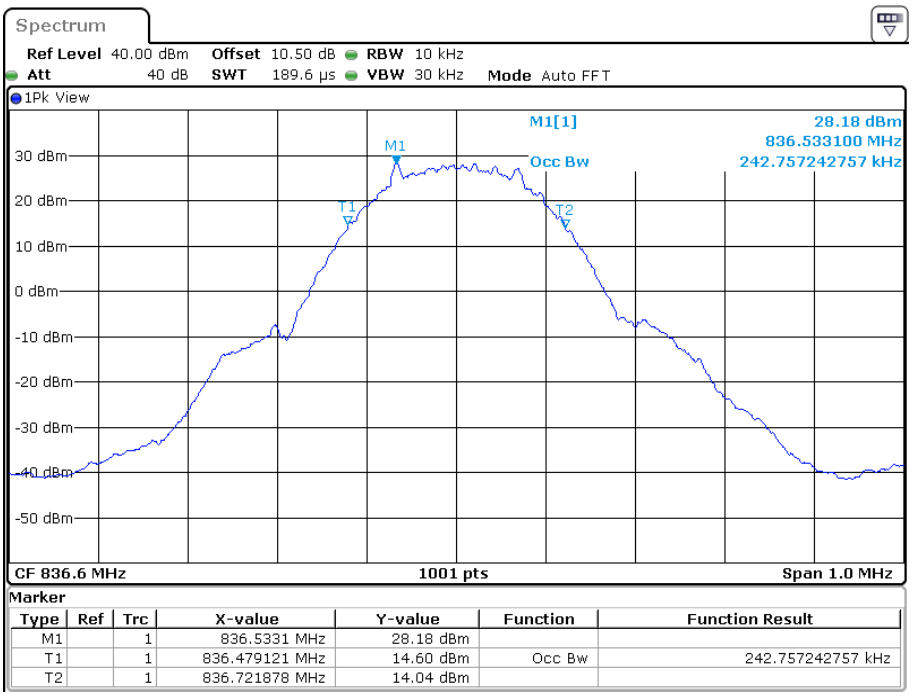


Date: 5.AUG.2022 10:00:23

26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel

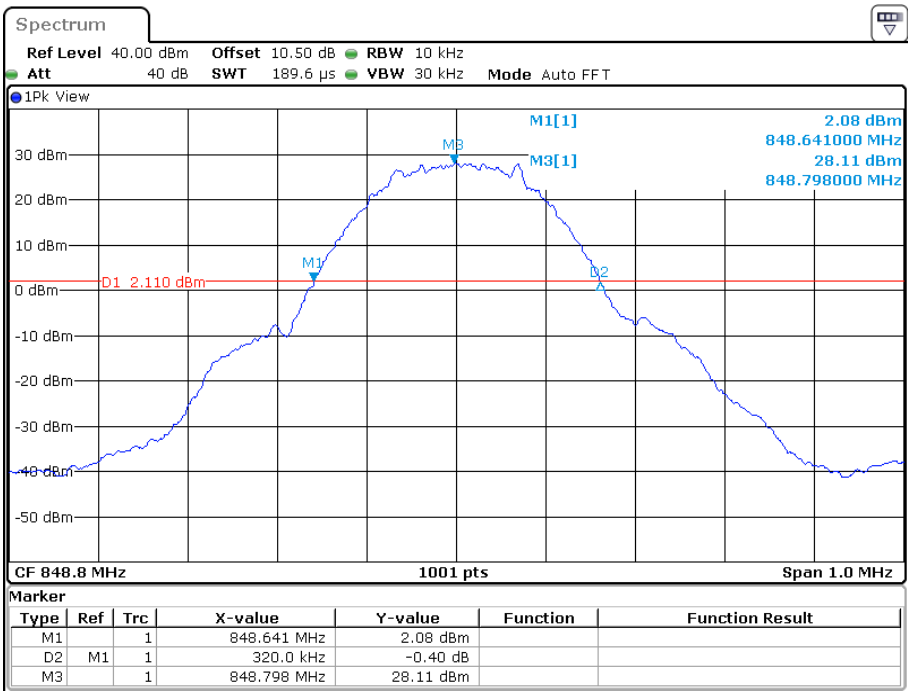


Date: 5.AUG.2022 09:58:13



Date: 5.AUG.2022 09:57:33

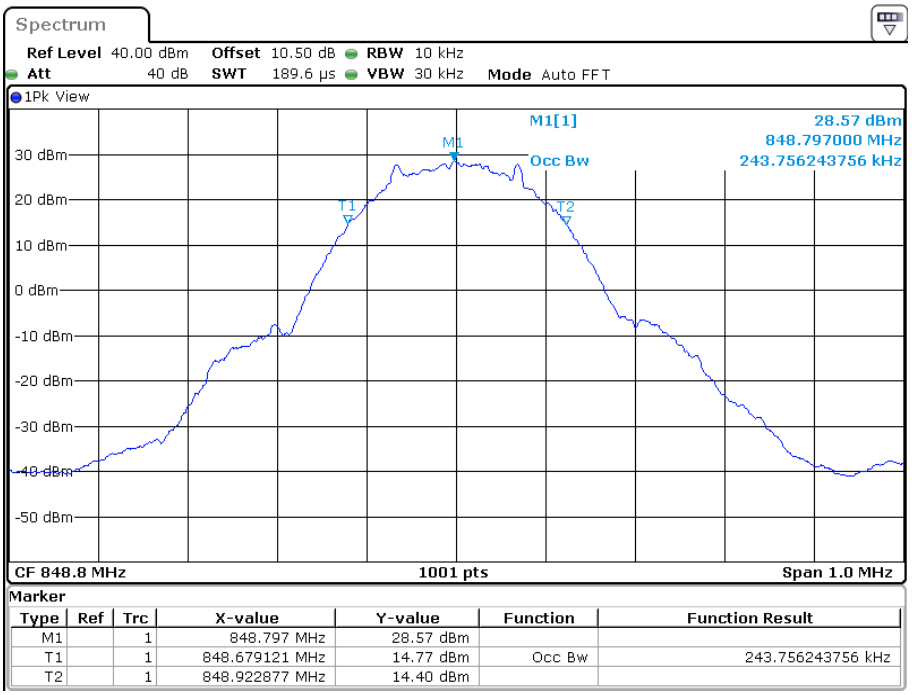
26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, High channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.641 MHz	2.08 dBm		
D2	M1	1	320.0 kHz	-0.40 dB		
M3		1	848.798 MHz	28.11 dBm		

Date: 5.AUG.2022 10:08:32

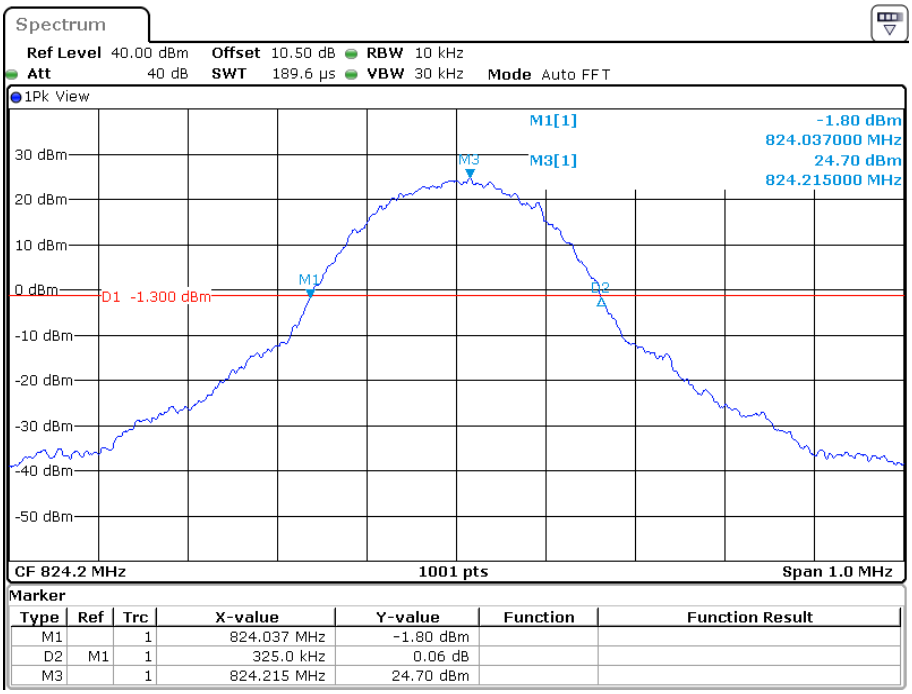


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.797 MHz	28.57 dBm		
T1		1	848.679121 MHz	14.77 dBm	Occ Bw	243.756243756 kHz
T2		1	848.922877 MHz	14.40 dBm		

Date: 5.AUG.2022 10:07:50

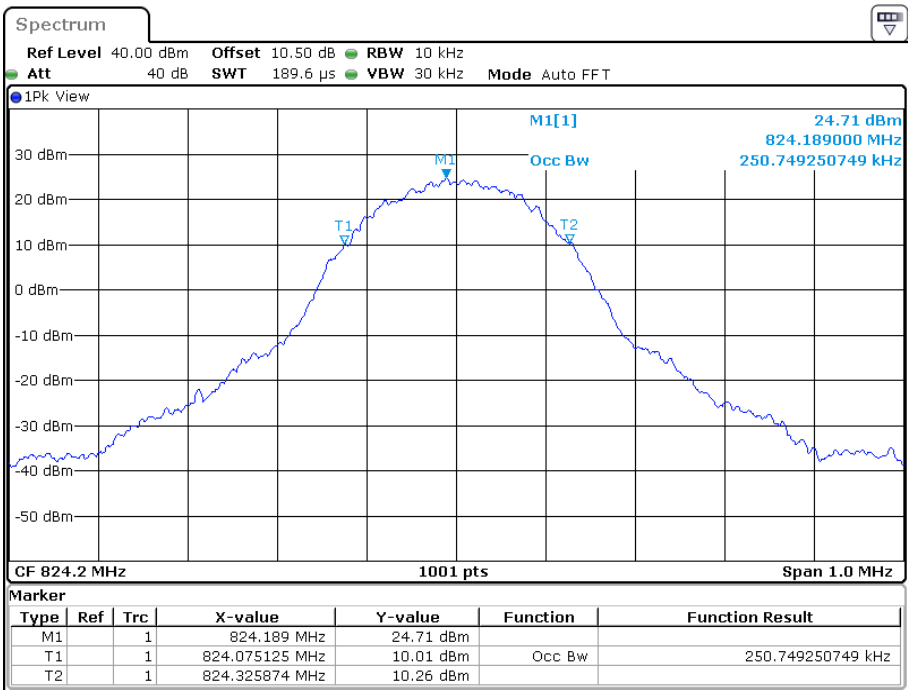
26 dB Emissions &99% Occupied Bandwidth for EDGE Mode, Low channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	824.037 MHz	-1.80 dBm		
D2	M1	1	325.0 kHz	0.06 dB		
M3		1	824.215 MHz	24.70 dBm		

Date: 5.AUG.2022 09:25:44

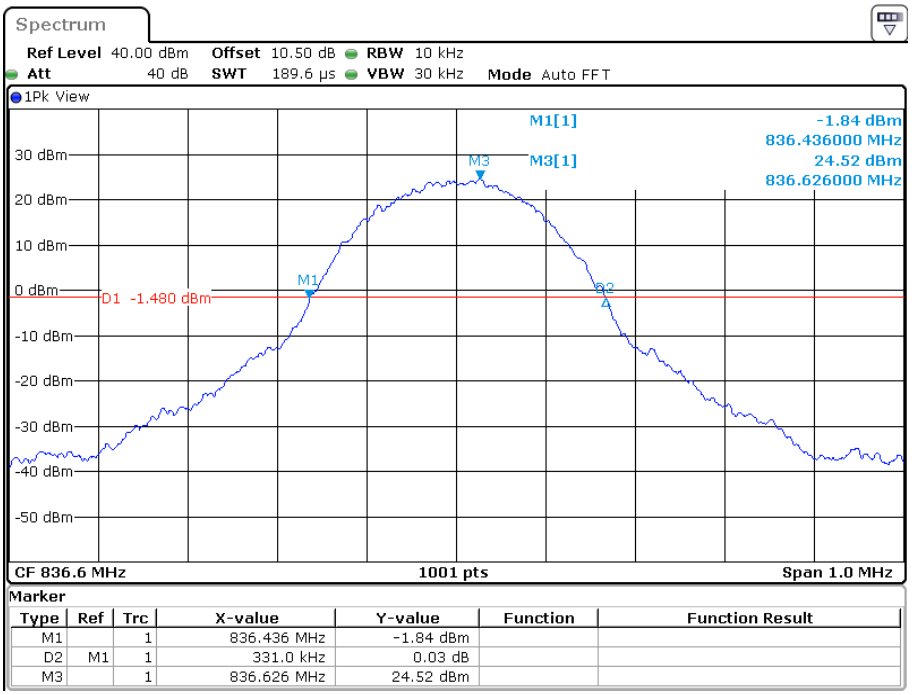


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	824.189 MHz	24.71 dBm		
T1		1	824.075125 MHz	10.01 dBm	Occ Bw	250.749250749 kHz
T2		1	824.325874 MHz	10.26 dBm		

Date: 5.AUG.2022 09:25:02

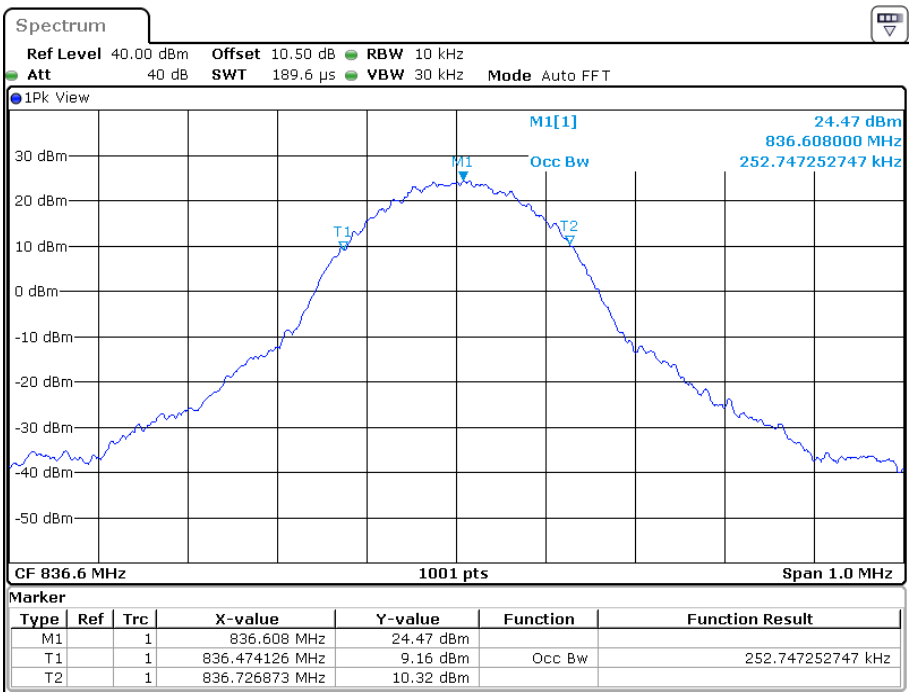
26 dB Emissions &99% Occupied Bandwidth for EDGE Mode, Middle channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	836.436 MHz	-1.84 dBm		
D2	M1	1	331.0 kHz	0.03 dB		
M3		1	836.626 MHz	24.52 dBm		

Date: 5.AUG.2022 09:40:52

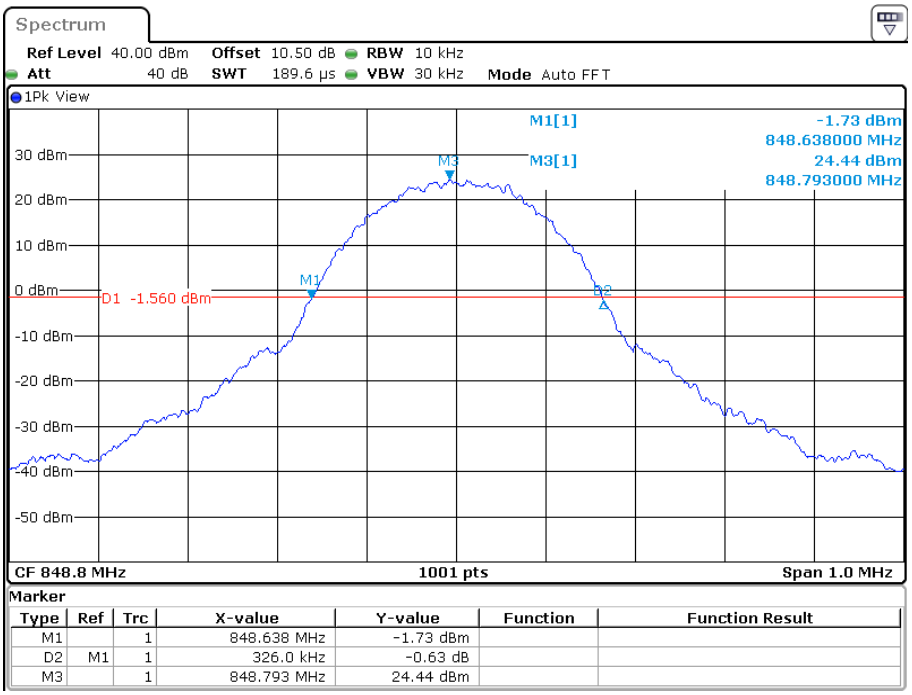


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	836.608 MHz	24.47 dBm		
T1		1	836.474126 MHz	9.16 dBm	Occ Bw	252.747252747 kHz
T2		1	836.726873 MHz	10.32 dBm		

Date: 5.AUG.2022 09:40:10

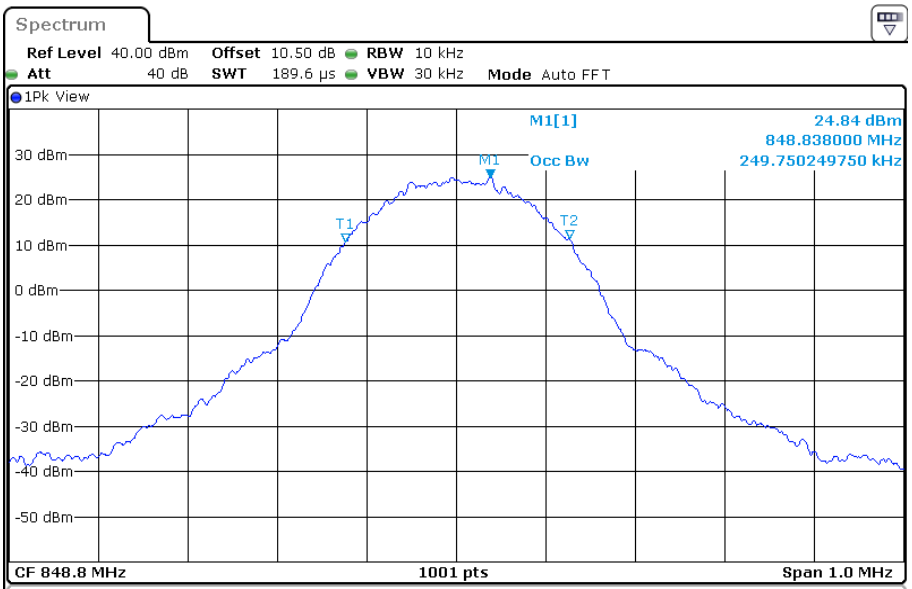
26 dB Emissions &99% Occupied Bandwidth for EDGE Mode, High channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.638 MHz	-1.73 dBm		
D2	M1	1	326.0 kHz	-0.63 dB		
M3		1	848.793 MHz	24.44 dBm		

Date: 5.AUG.2022 09:45:16

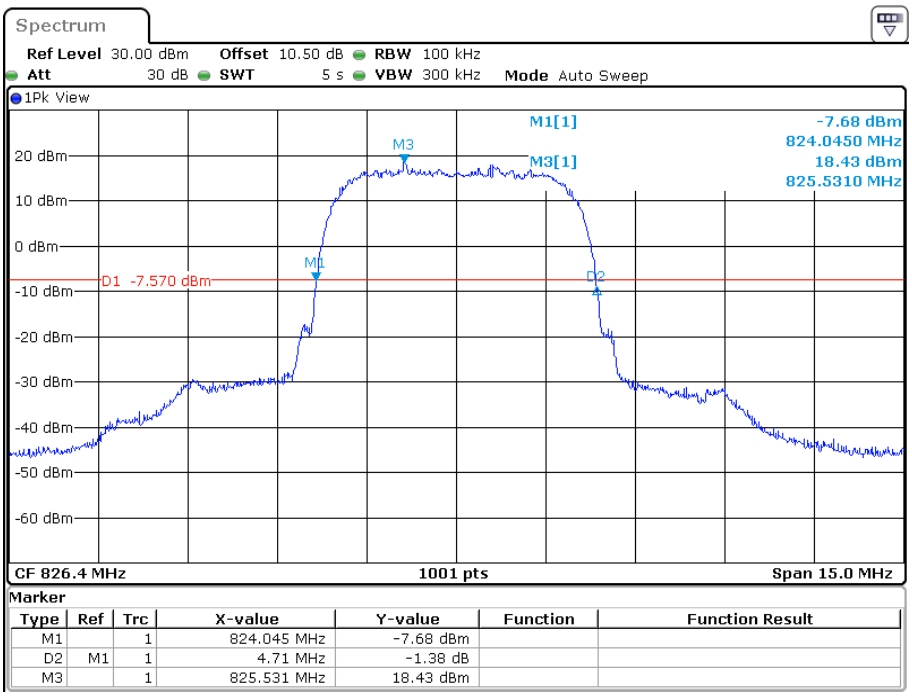


Marker

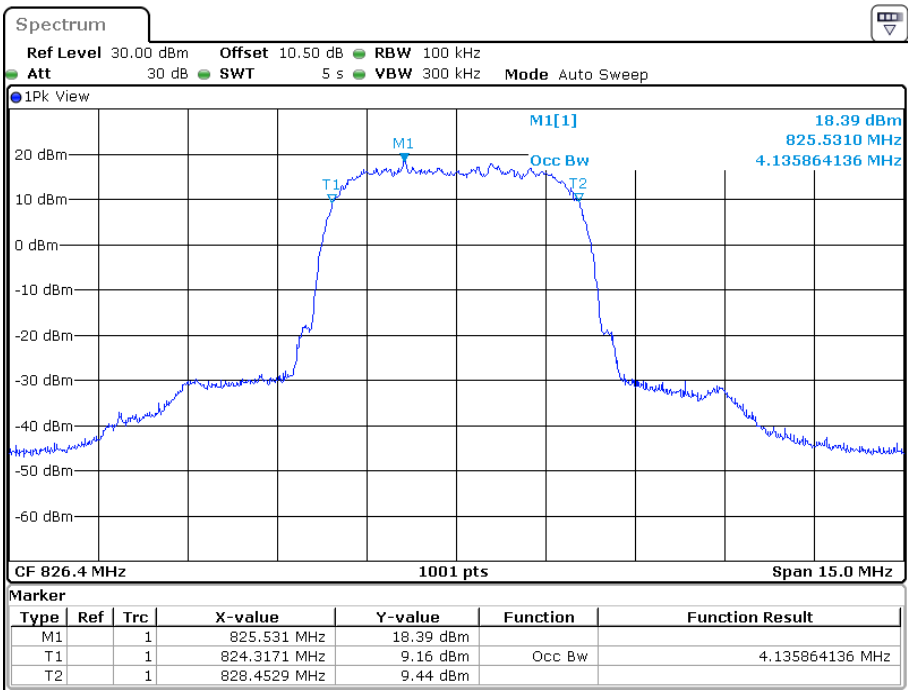
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	848.838 MHz	24.84 dBm		
T1		1	848.676124 MHz	10.62 dBm	Occ Bw	249.75024975 kHz
T2		1	848.925874 MHz	11.29 dBm		

Date: 5.AUG.2022 09:44:34

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

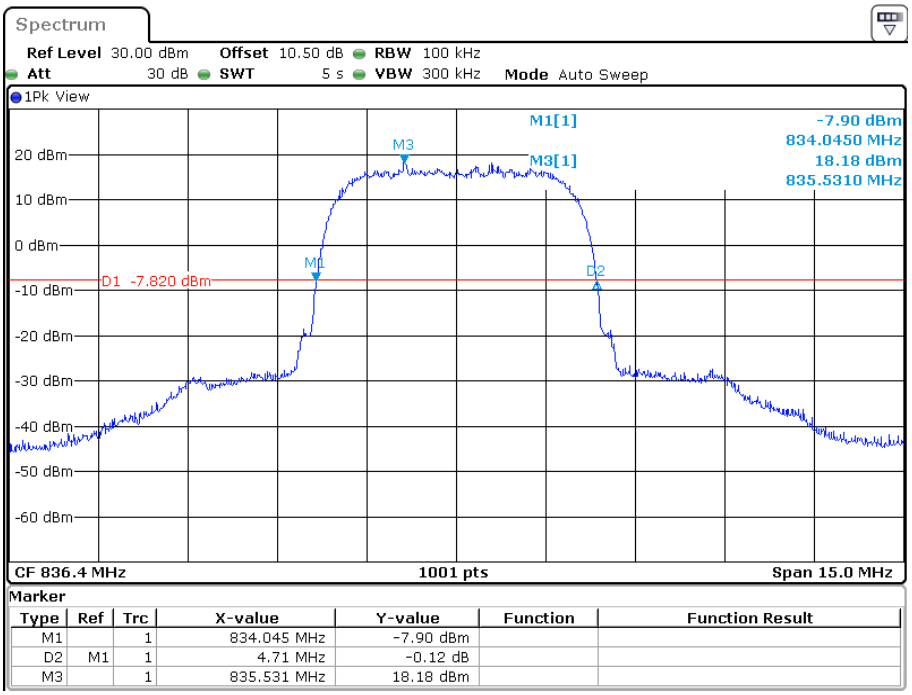


Date: 3.AUG.2022 16:08:23

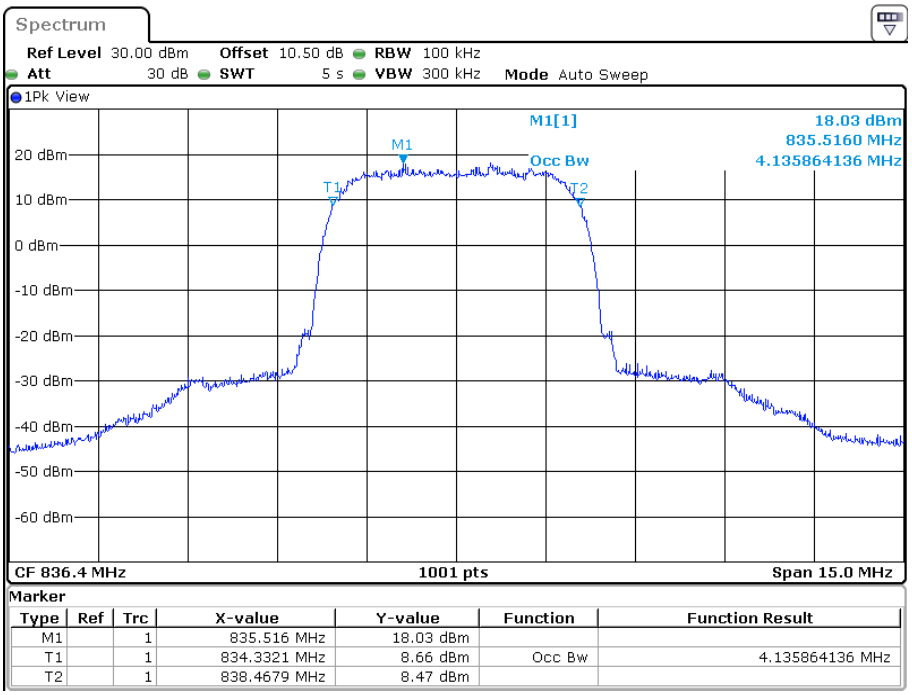


Date: 3.AUG.2022 16:07:42

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel

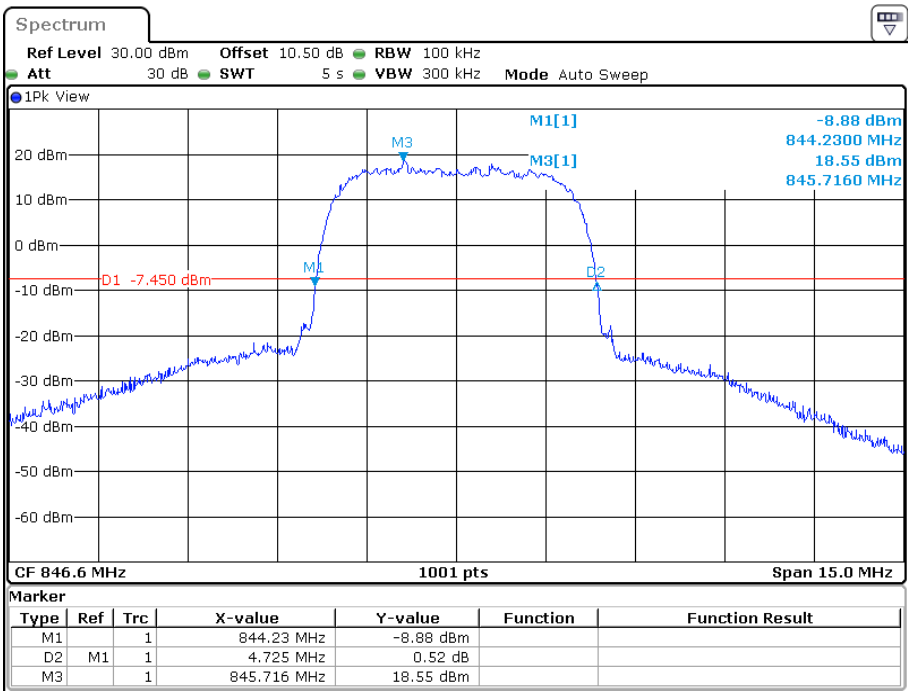


Date: 3.AUG.2022 16:13:02



Date: 3.AUG.2022 16:12:22

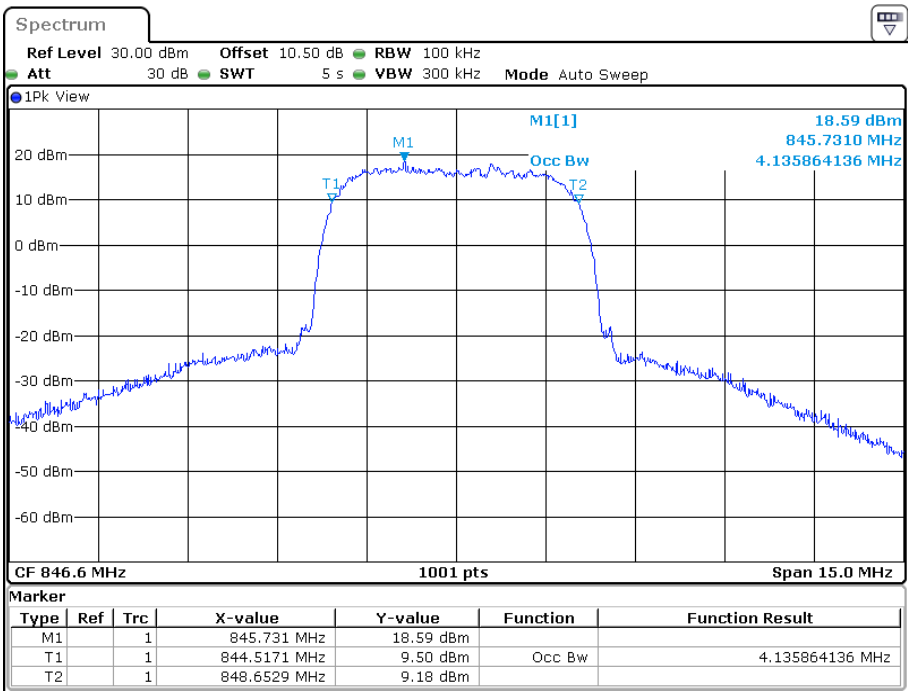
26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, High channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	844.23 MHz	-8.88 dBm		
D2	M1	1	4.725 MHz	0.52 dB		
M3		1	845.716 MHz	18.55 dBm		

Date: 3.AUG.2022 16:16:17

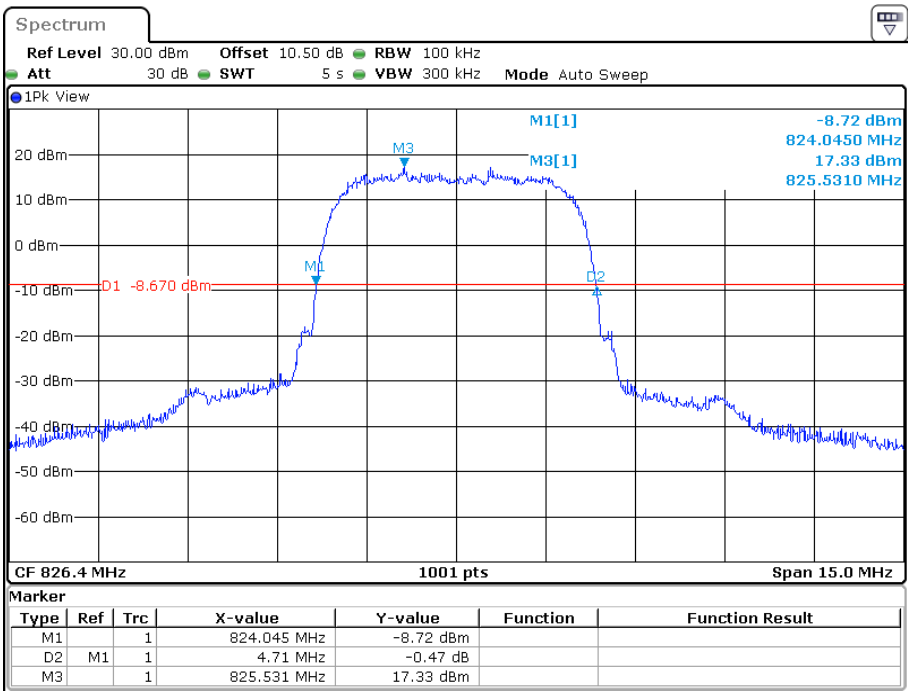


Marker

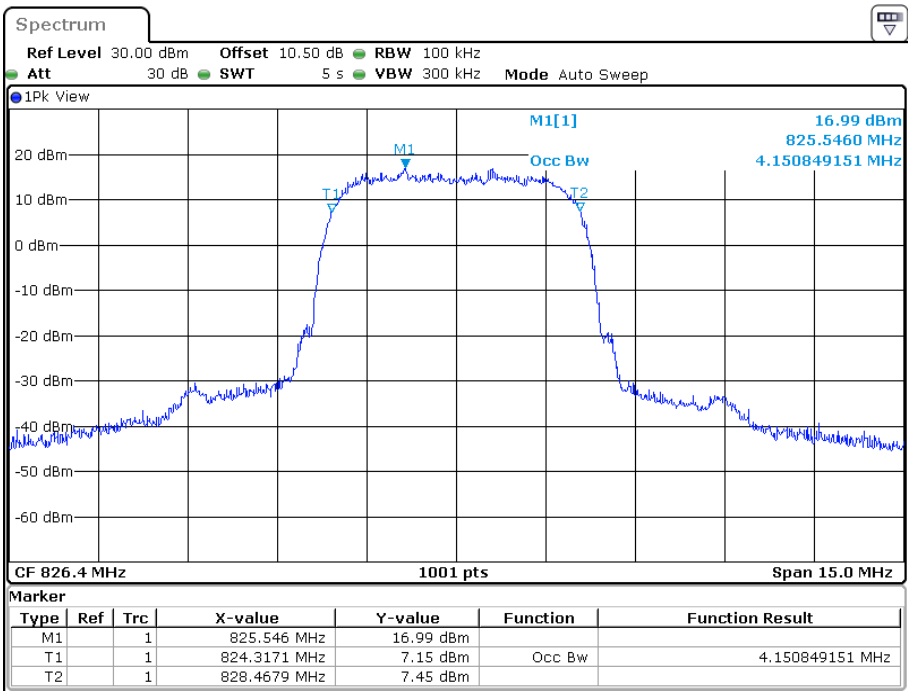
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	845.731 MHz	18.59 dBm		
T1		1	844.5171 MHz	9.50 dBm	Occ Bw	4.135864136 MHz
T2		1	848.6529 MHz	9.18 dBm		

Date: 3.AUG.2022 16:15:37

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

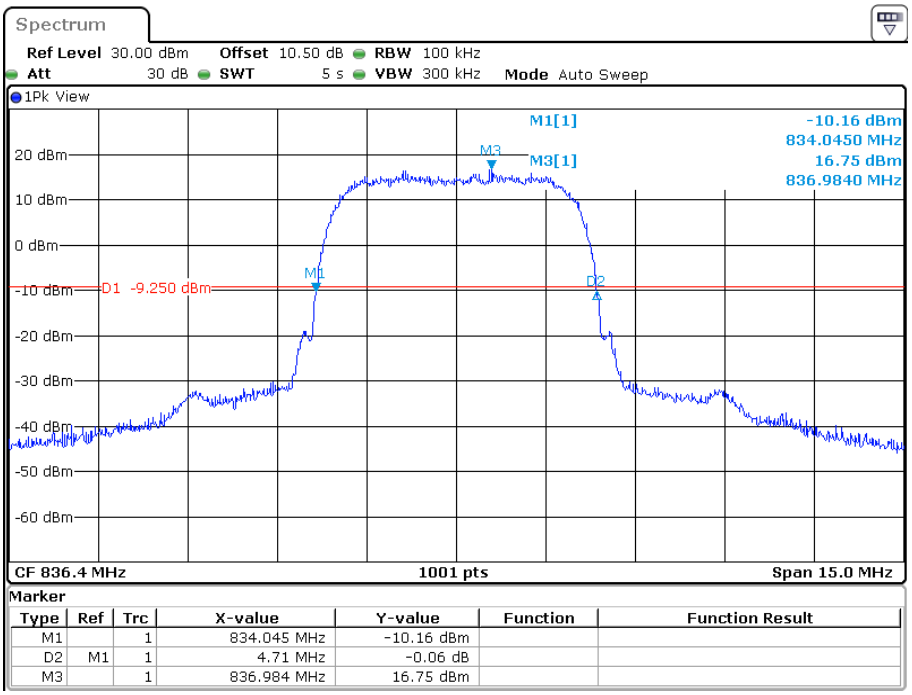


Date: 3.AUG.2022 16:59:19

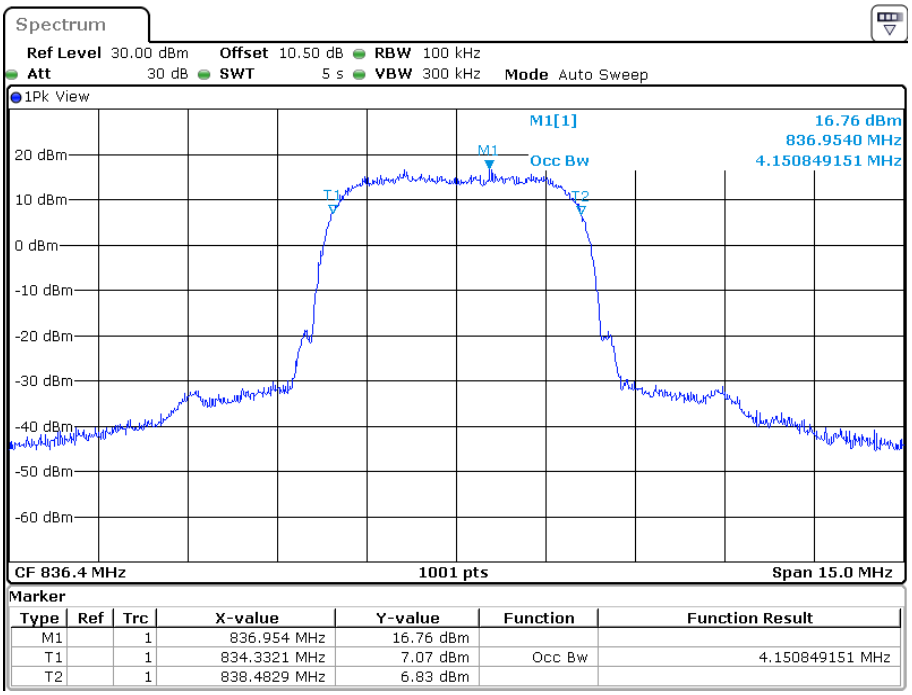


Date: 3.AUG.2022 16:58:39

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel

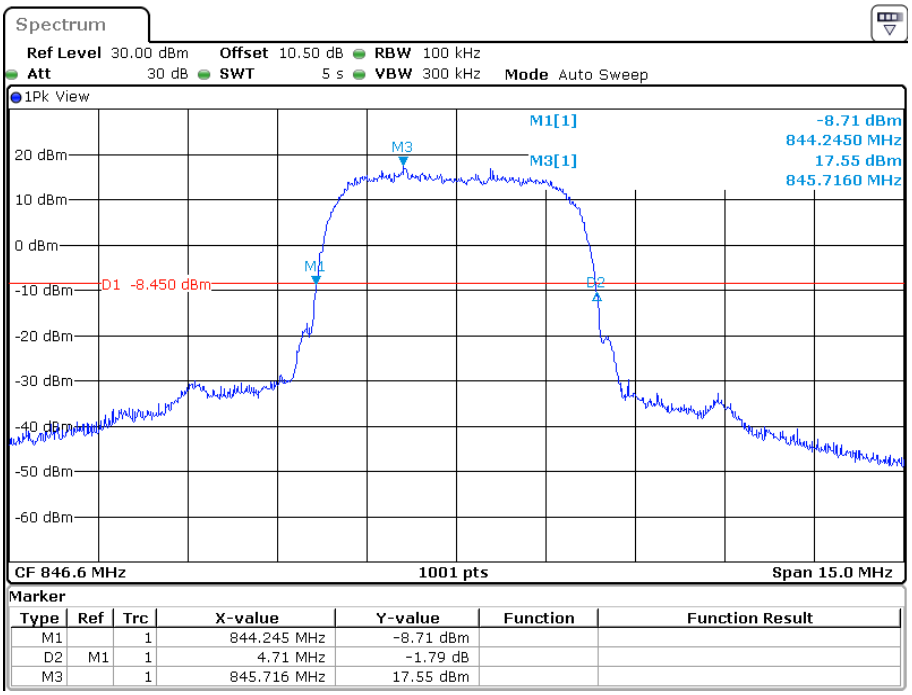


Date: 3.AUG.2022 17:03:19

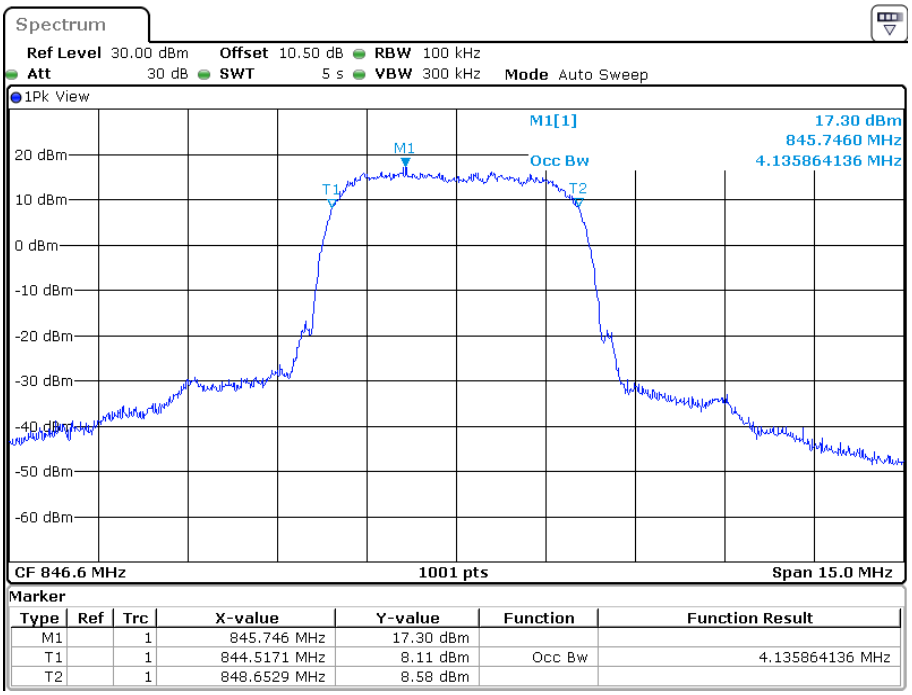


Date: 3.AUG.2022 17:02:39

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel

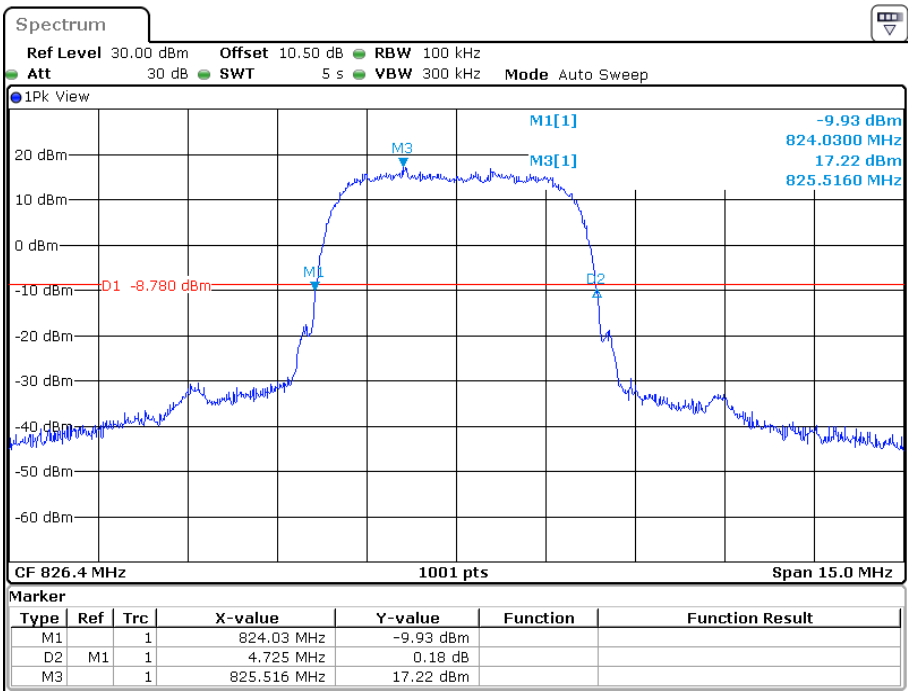


Date: 3.AUG.2022 17:07:35



Date: 3.AUG.2022 17:12:06

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



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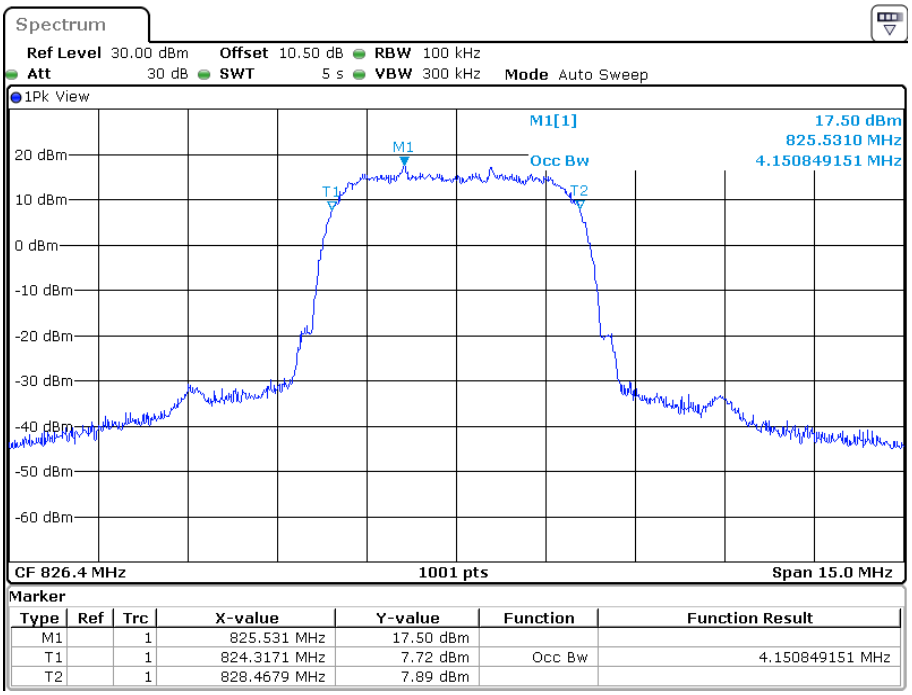
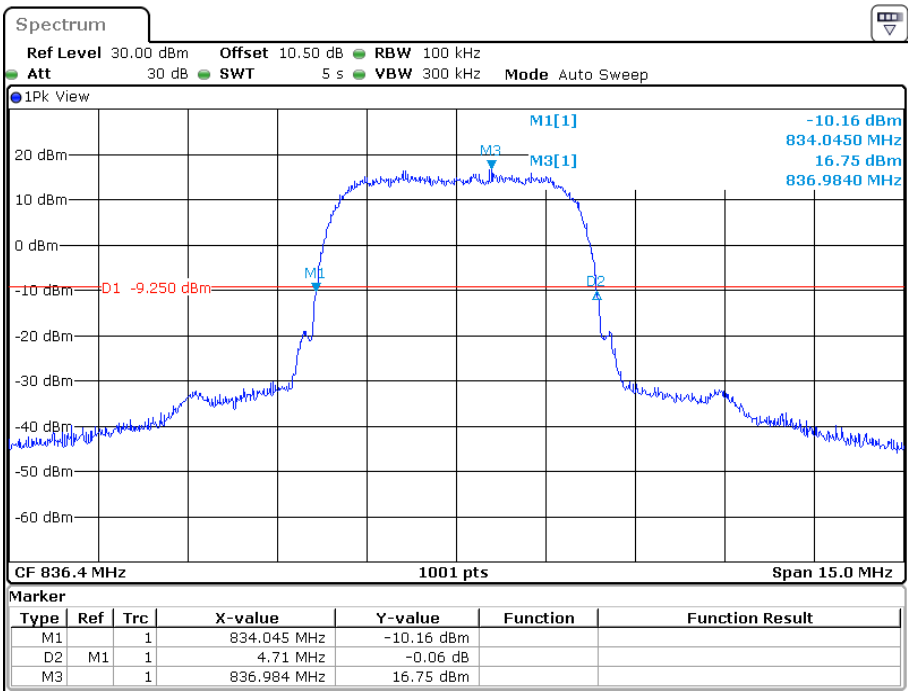


Date: 3.AUG.2022 17:32:56

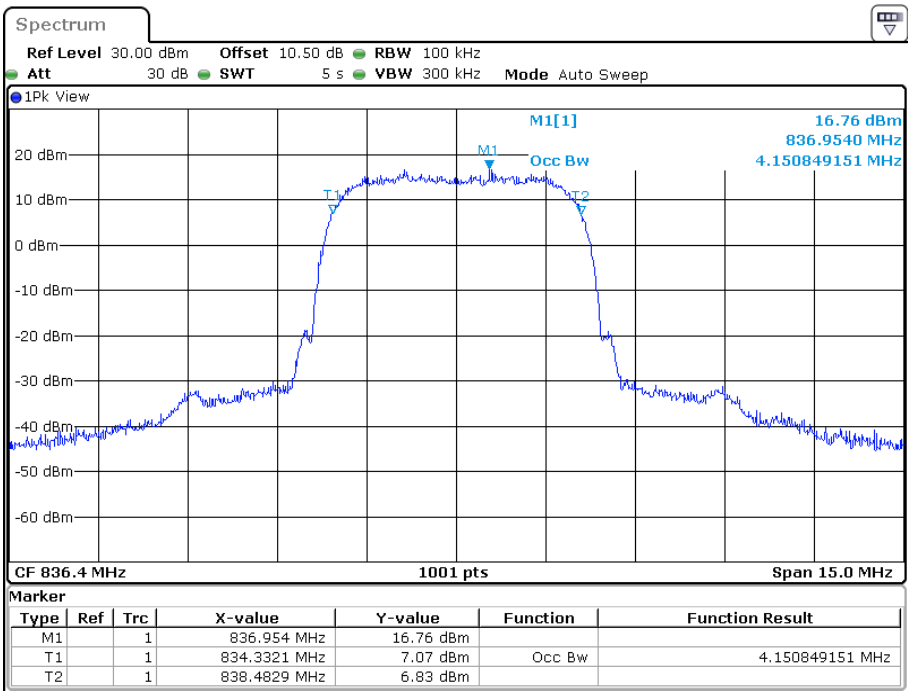
26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	834.045 MHz	-10.16 dBm		
D2	M1	1	4.71 MHz	-0.06 dB		
M3		1	836.984 MHz	16.75 dBm		

Date: 3.AUG.2022 17:03:19

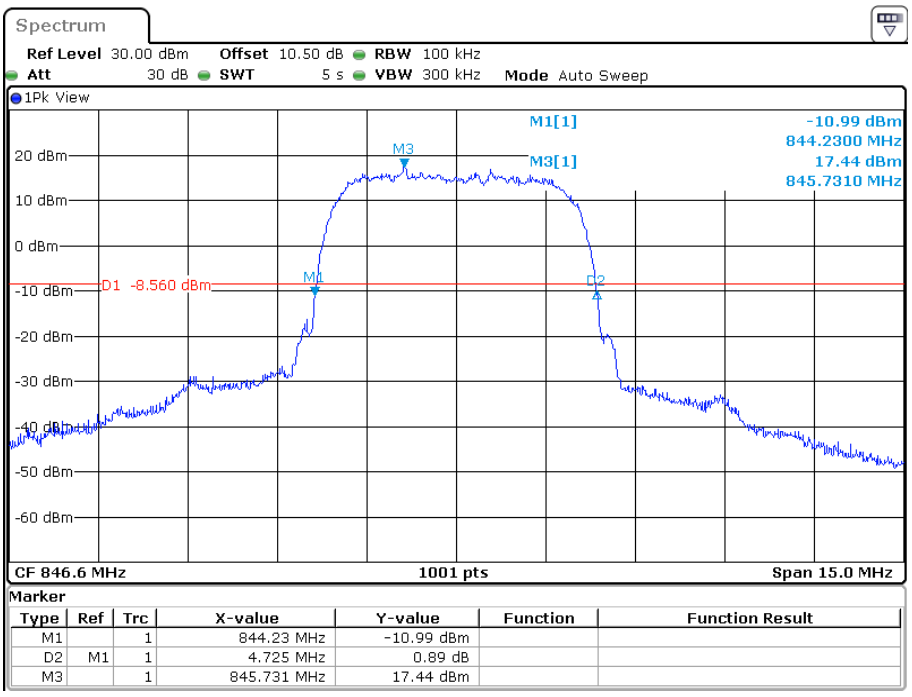


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	836.954 MHz	16.76 dBm		
T1		1	834.3321 MHz	7.07 dBm	Occ Bw	4.150849151 MHz
T2		1	838.4829 MHz	6.83 dBm		

Date: 3.AUG.2022 17:02:39

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



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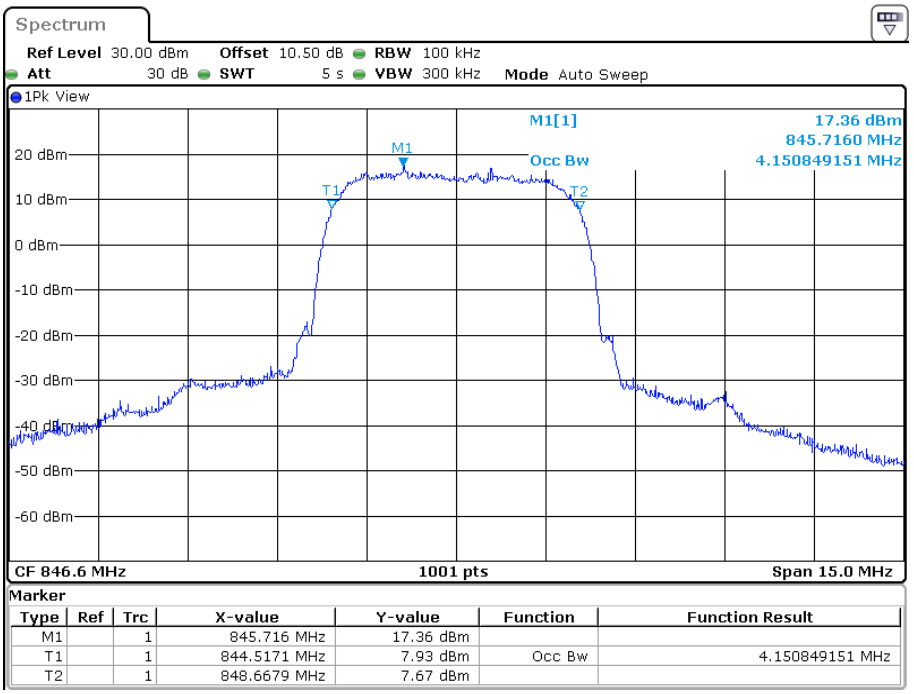
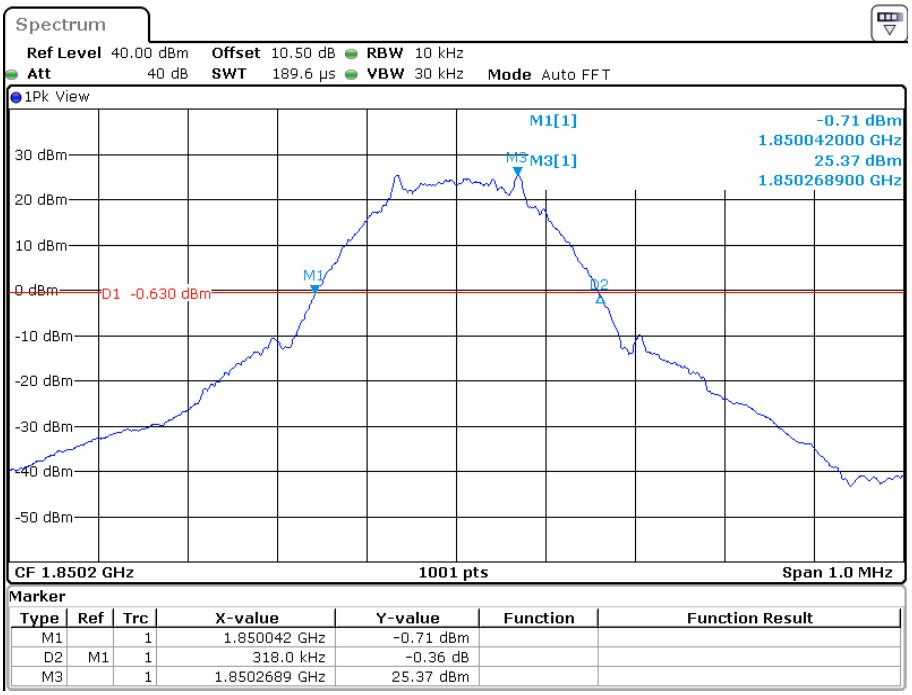


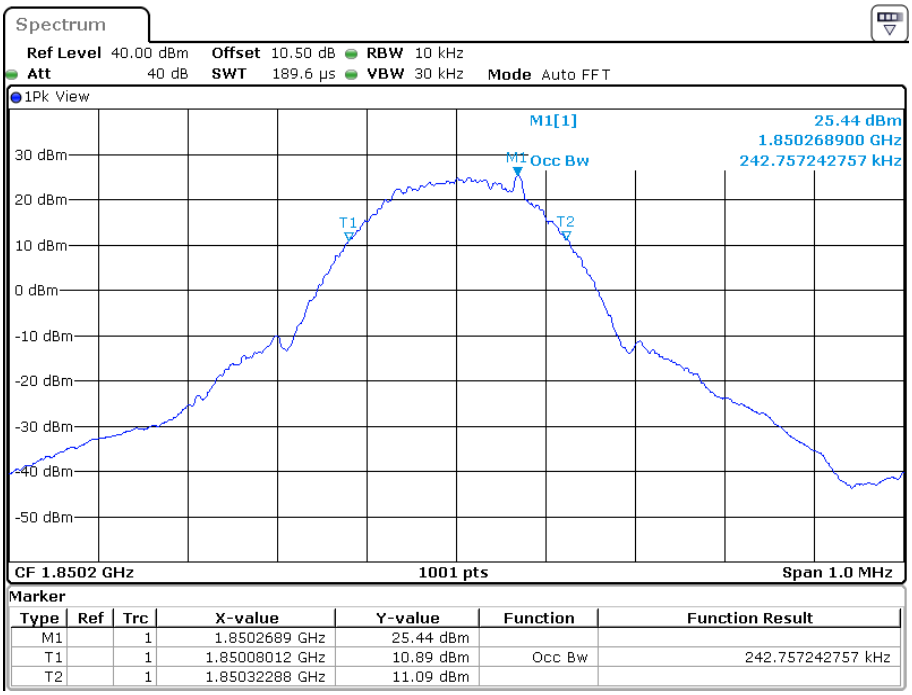
Date: 3.AUG.2022 17:13:03

PCS Band (Part 24E)

26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, Low channel

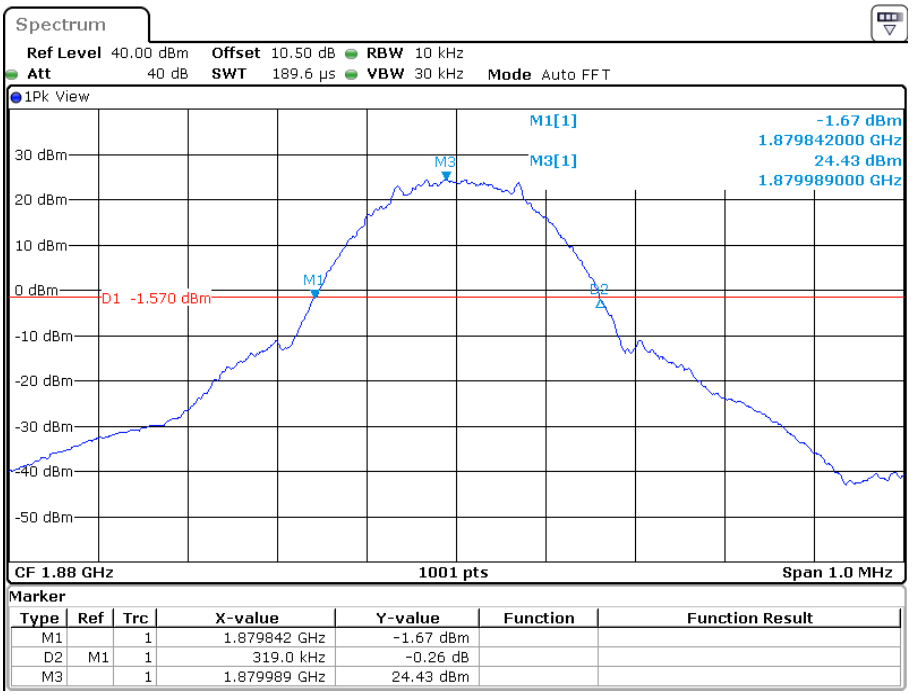


Date: 5.AUG.2022 10:39:55

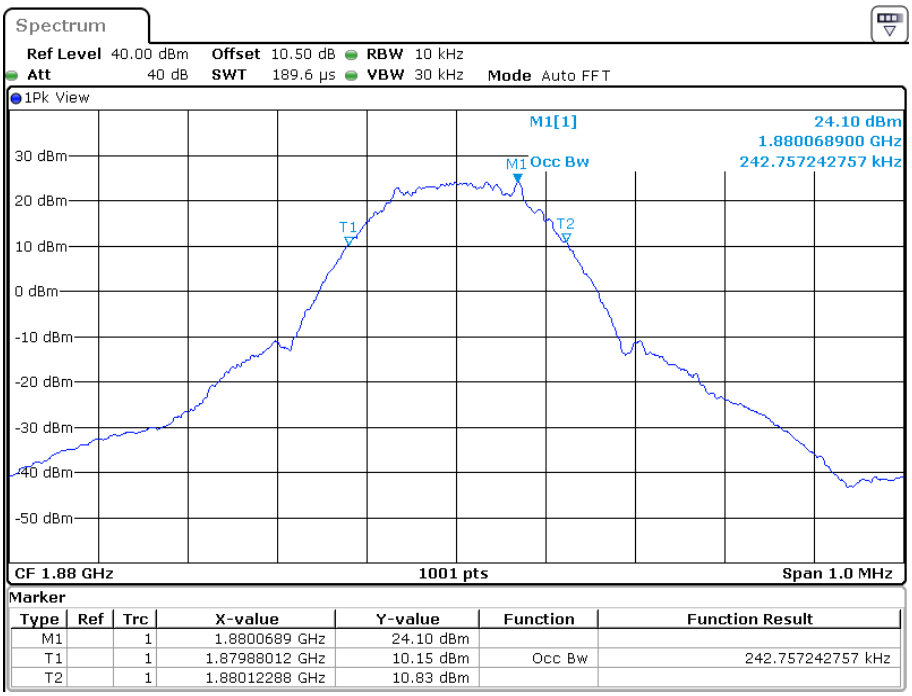


Date: 5.AUG.2022 10:39:15

26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, Middle channel

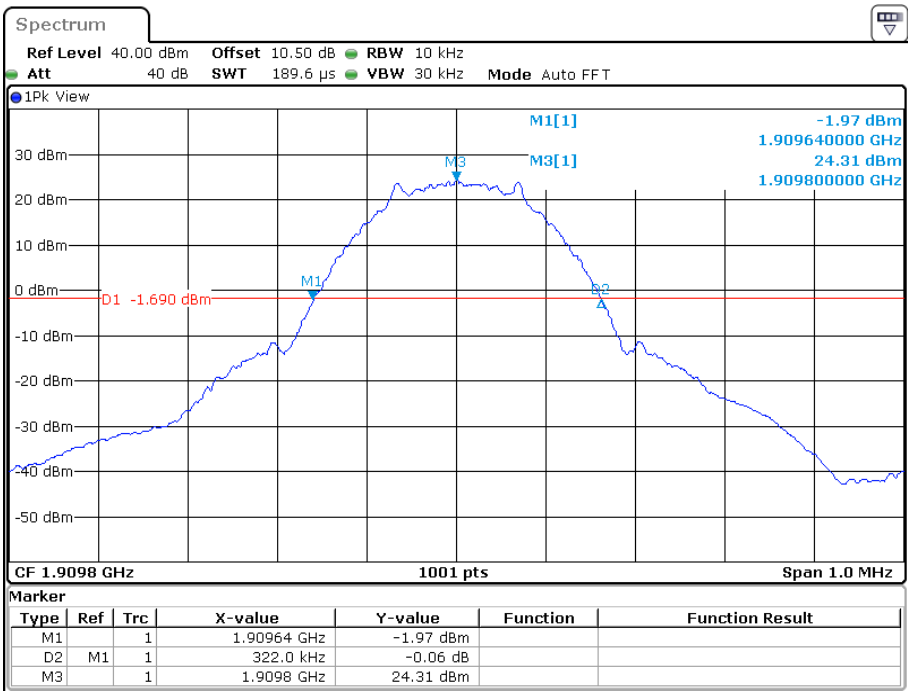


Date: 5.AUG.2022 10:46:15

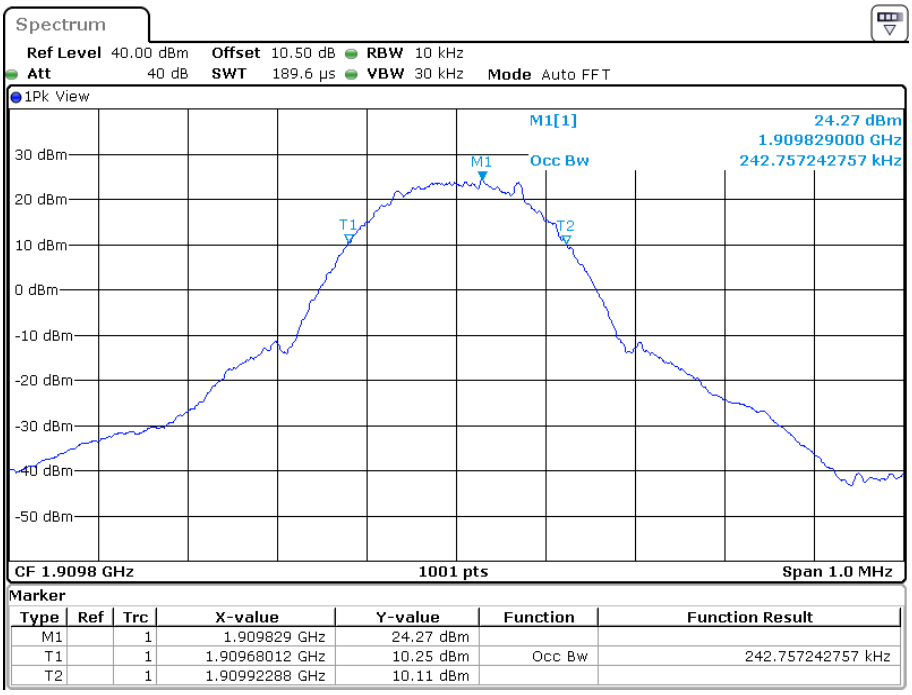


Date: 5.AUG.2022 10:45:35

26 dB Emissions &99% Occupied Bandwidth for GSM (GMSK) Mode, High channel

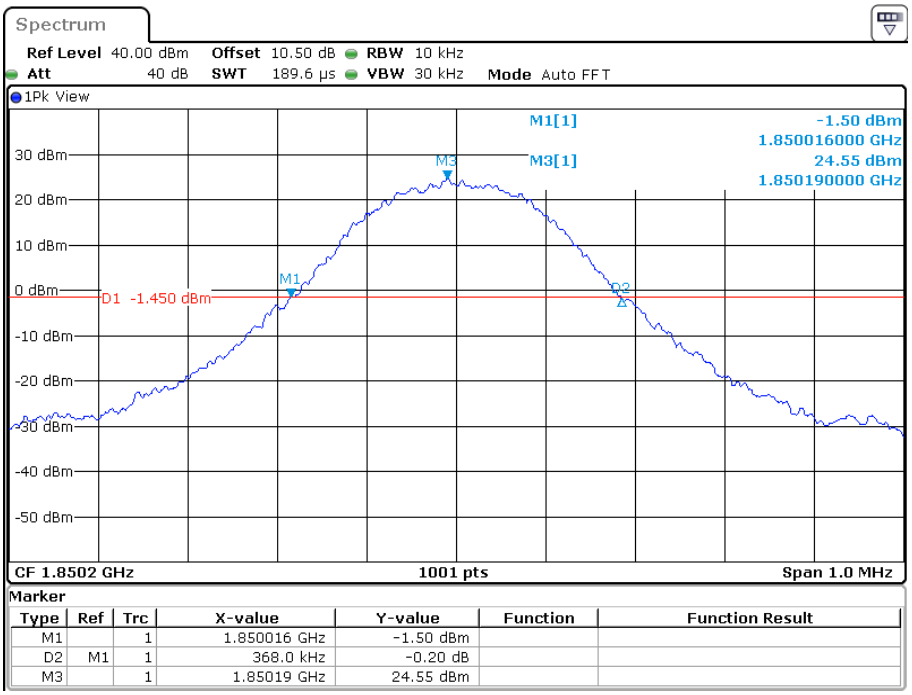


Date: 5.AUG.2022 10:51:35

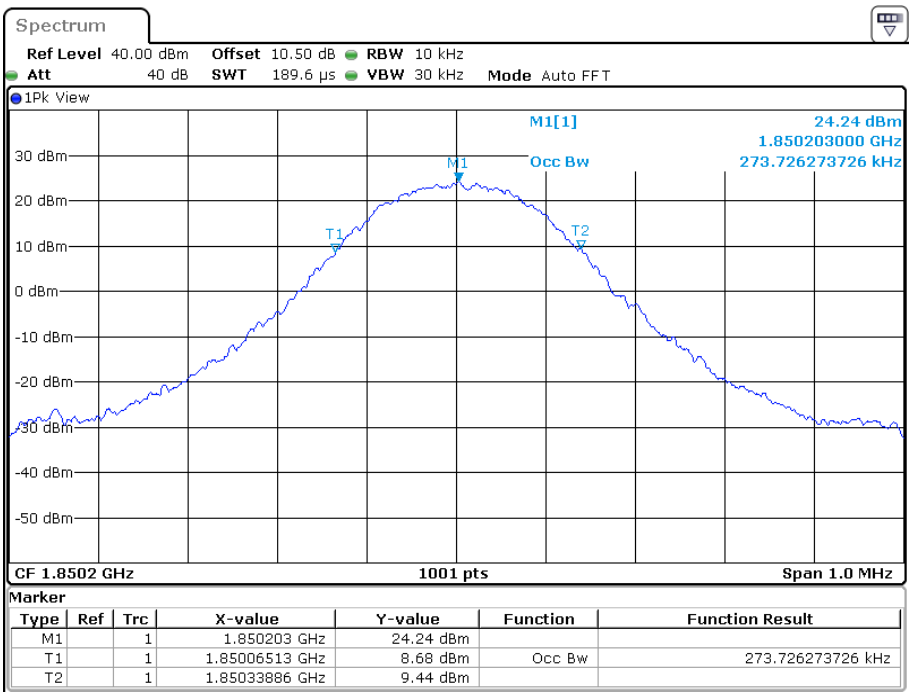


Date: 5.AUG.2022 10:50:55

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

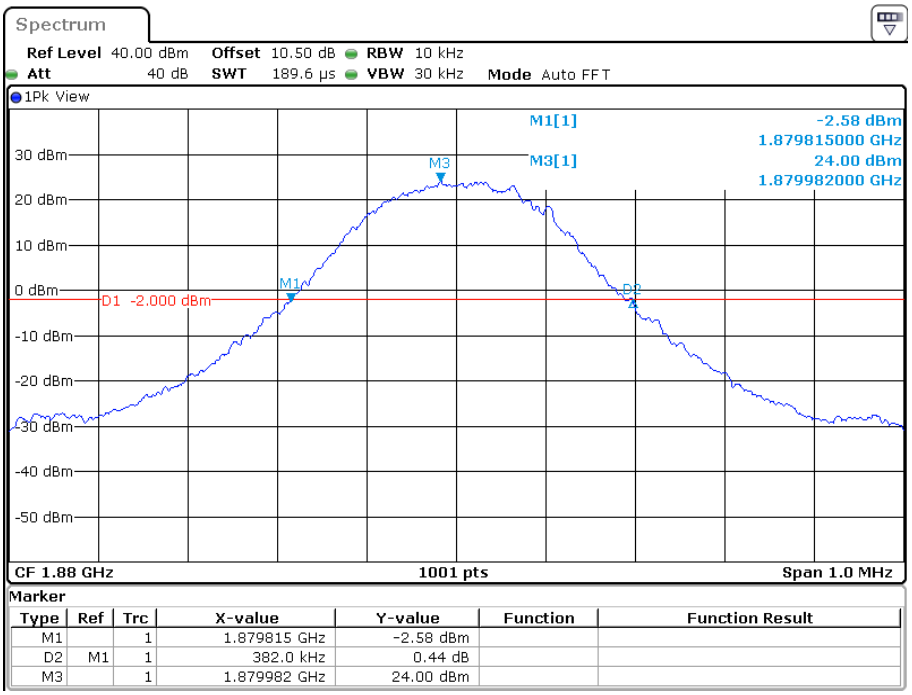


Date: 5.AUG.2022 11:32:43



Date: 5.AUG.2022 11:32:03

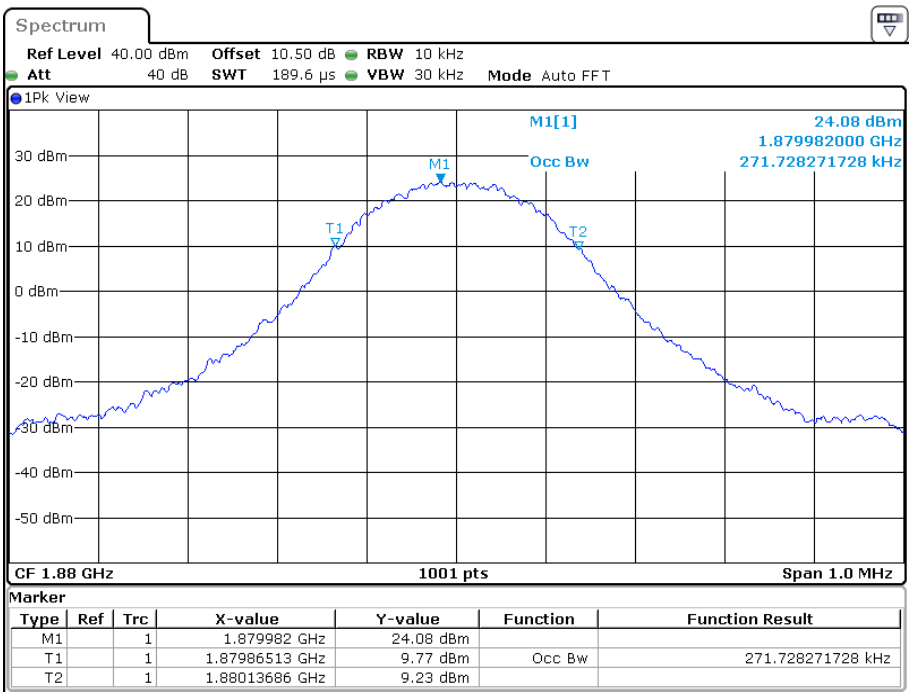
26 dB Emissions &99% Occupied Bandwidth for EDGE Mode, Middle channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.879815 GHz	-2.58 dBm		
D2	M1	1	382.0 kHz	0.44 dB		
M3		1	1.879982 GHz	24.00 dBm		

Date: 5.AUG.2022 11:40:07

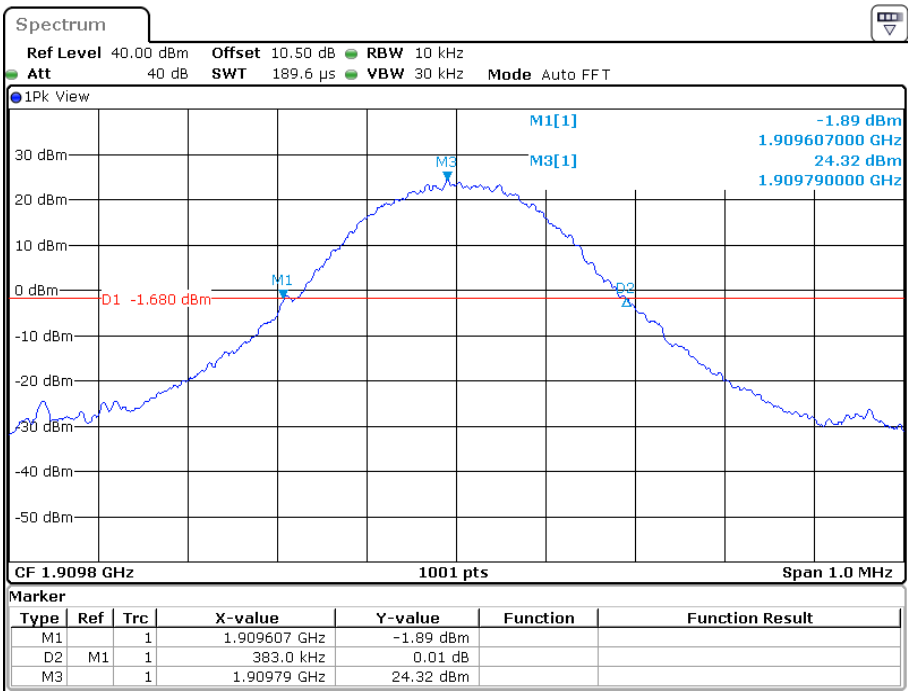


Marker

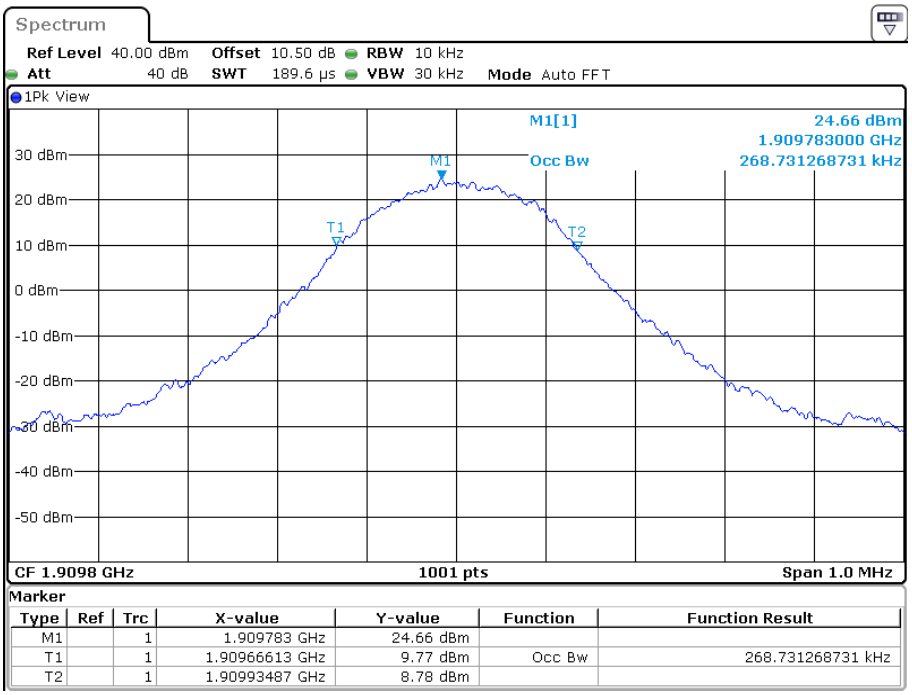
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.879982 GHz	24.08 dBm		
T1		1	1.87986513 GHz	9.77 dBm	Occ Bw	271.728271728 kHz
T2		1	1.88013686 GHz	9.23 dBm		

Date: 5.AUG.2022 11:39:28

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

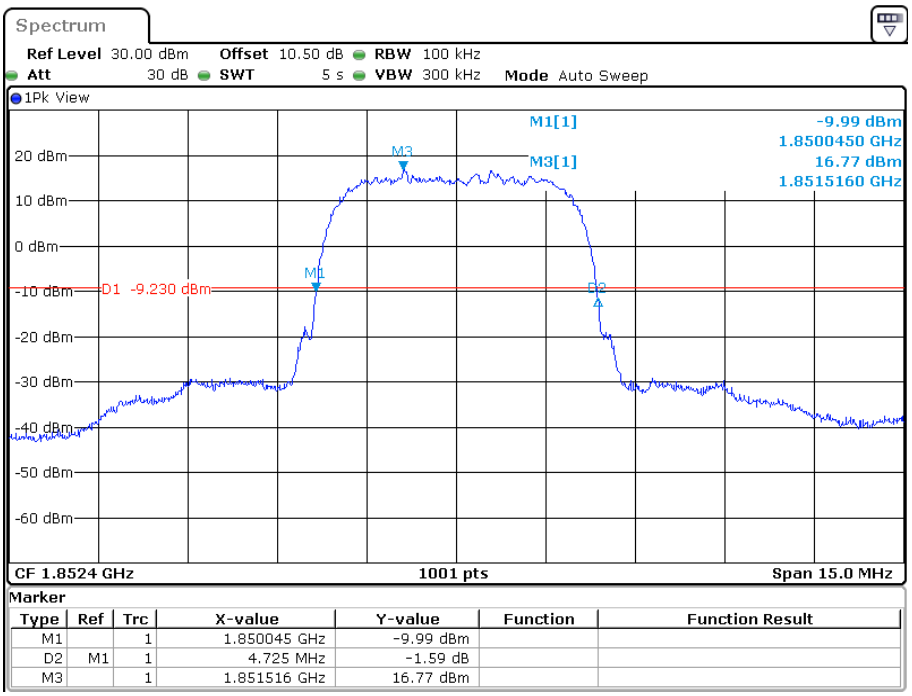


Date: 5.AUG.2022 11:47:31

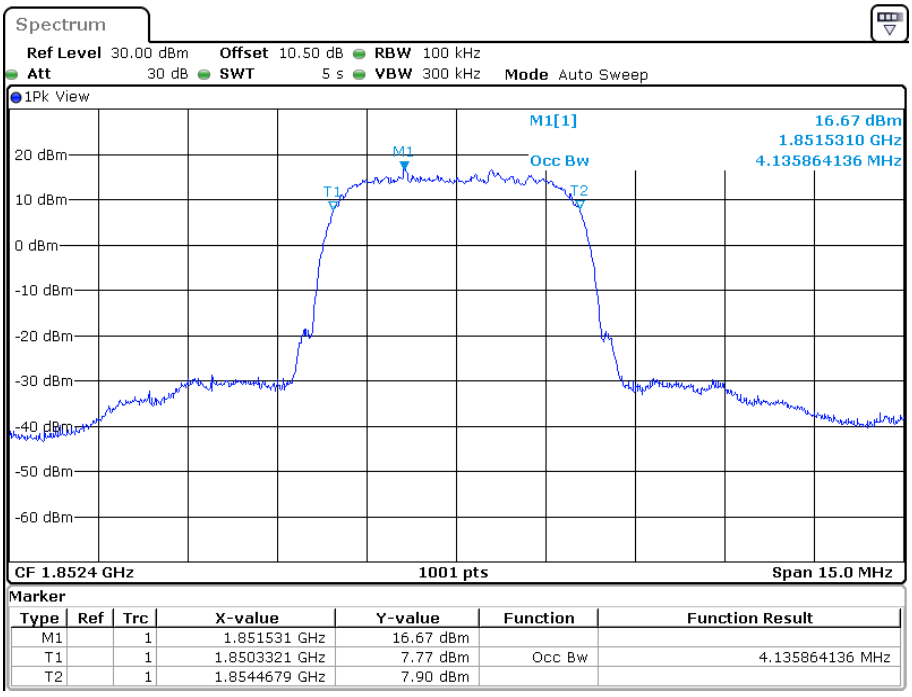


Date: 5.AUG.2022 11:46:50

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

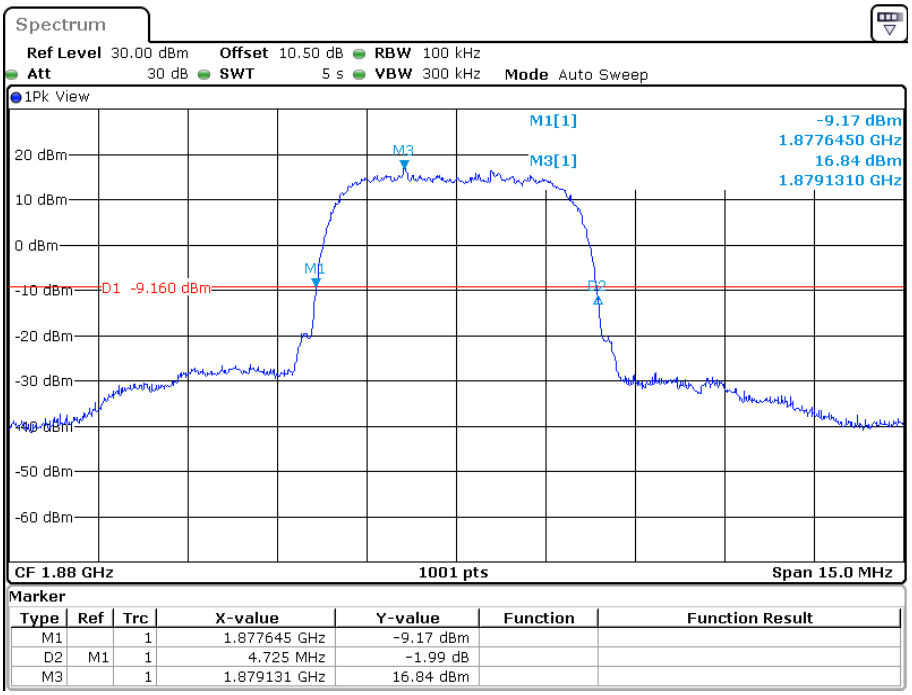


Date: 4.AUG.2022 09:13:12

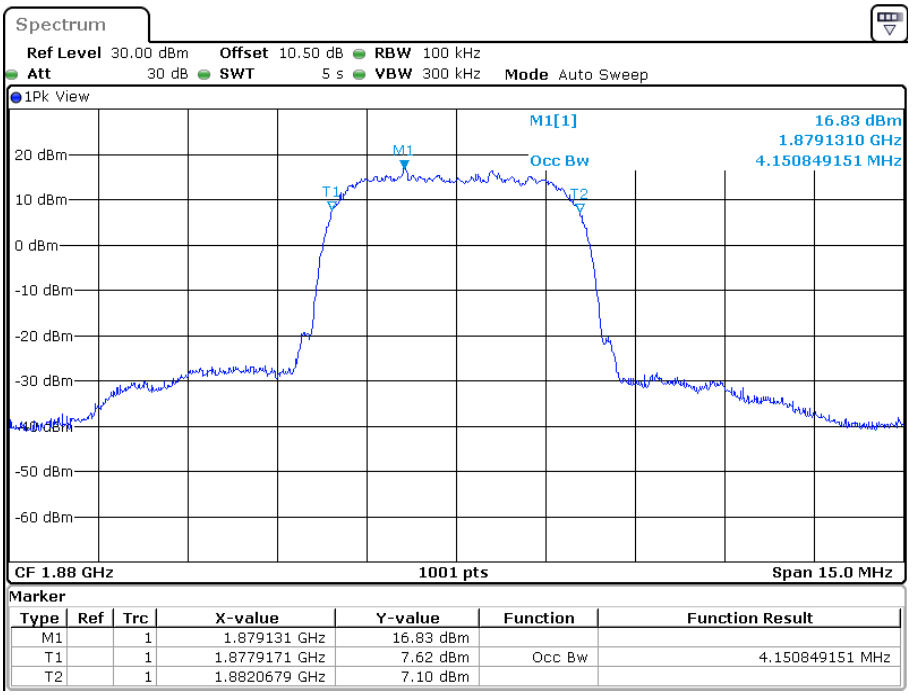


Date: 4.AUG.2022 09:12:31

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel

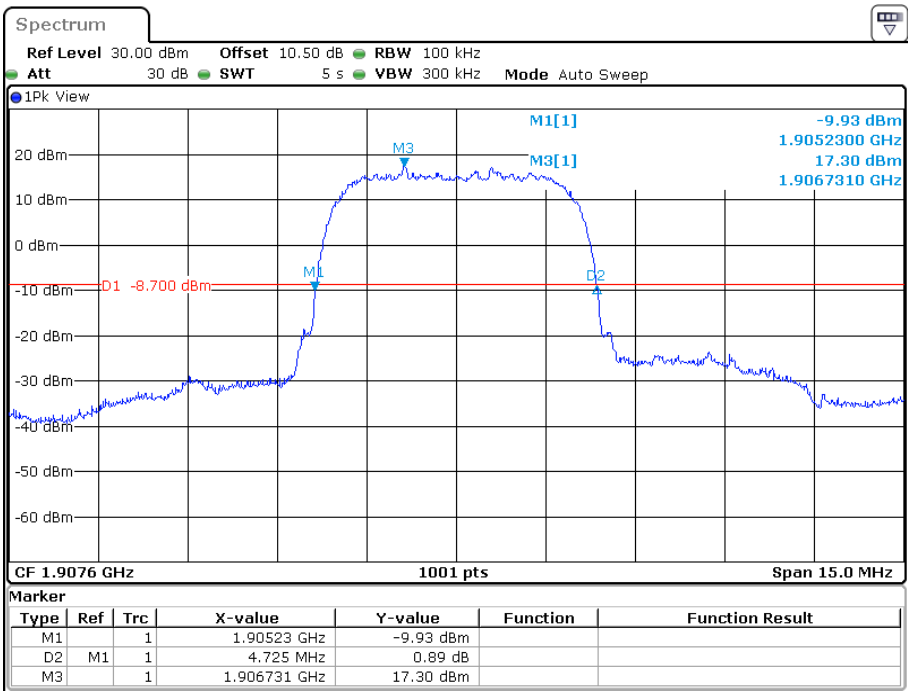


Date: 4.AUG.2022 09:08:39

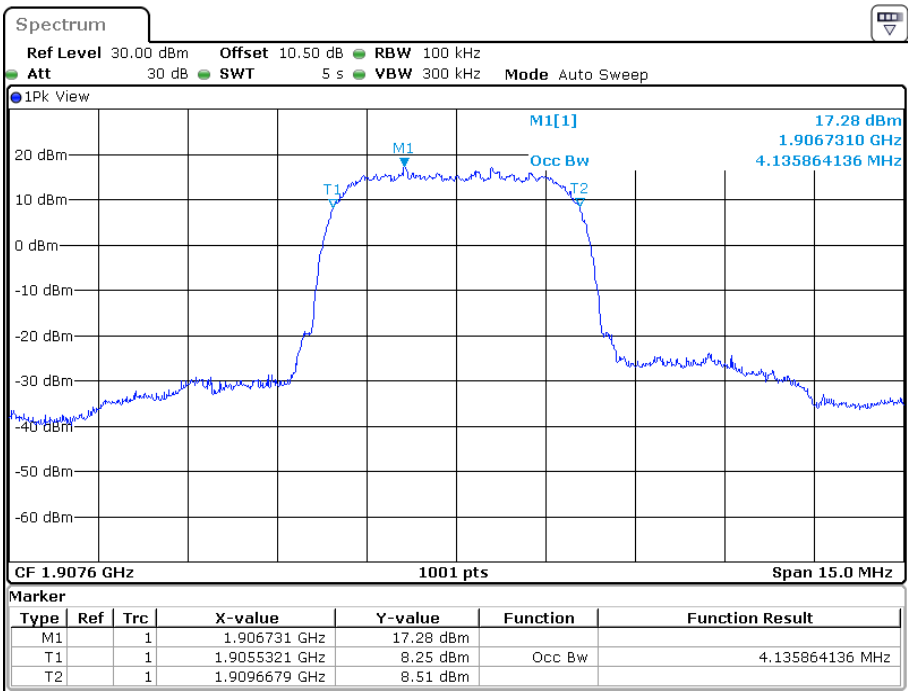


Date: 4.AUG.2022 09:07:59

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, High channel

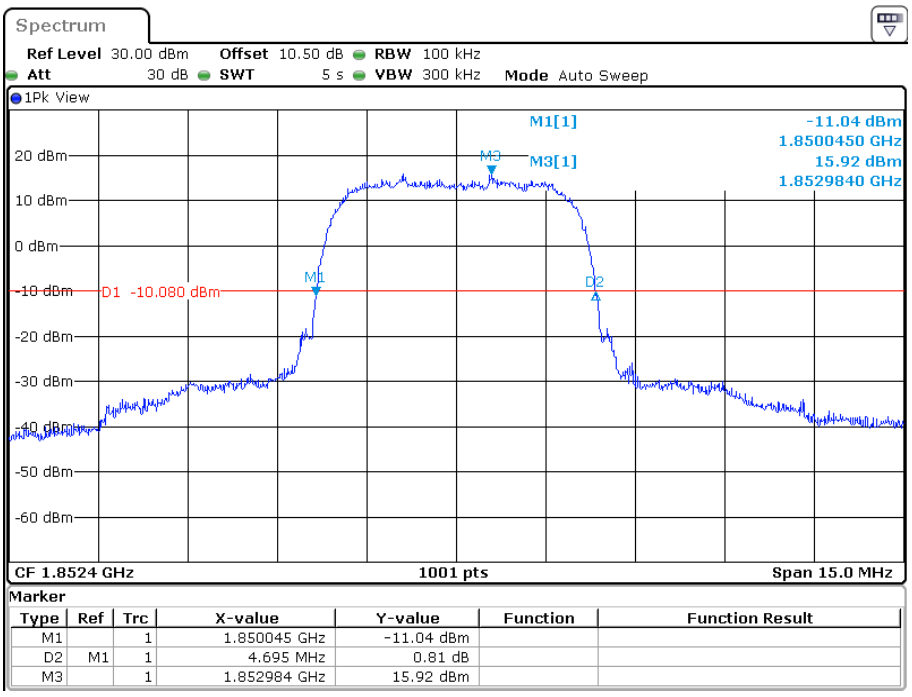


Date: 3.AUG.2022 18:59:01

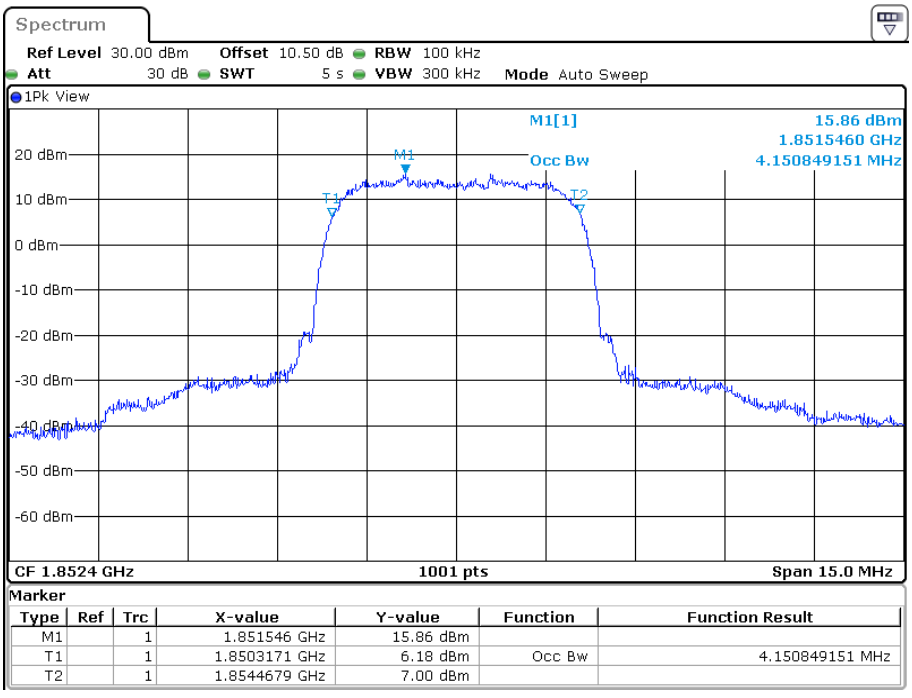


Date: 3.AUG.2022 18:58:21

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

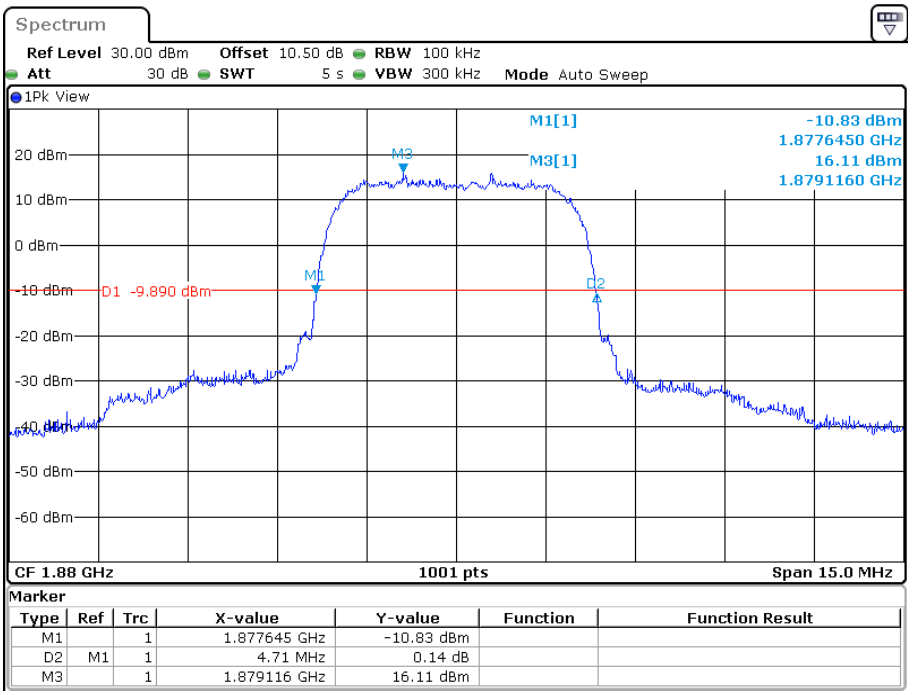


Date: 4.AUG.2022 09:55:57

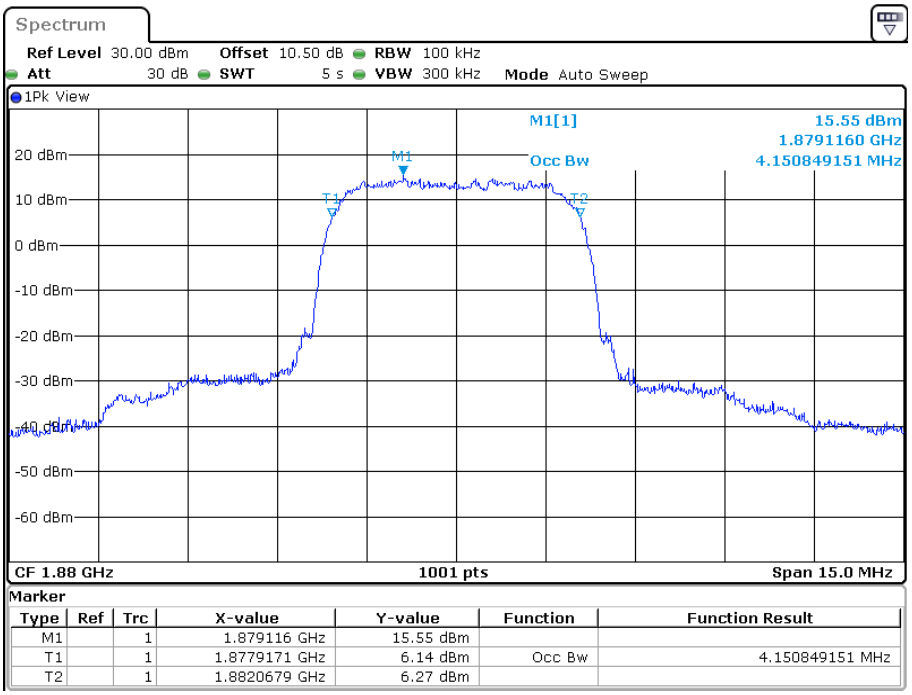


Date: 4.AUG.2022 09:55:16

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel

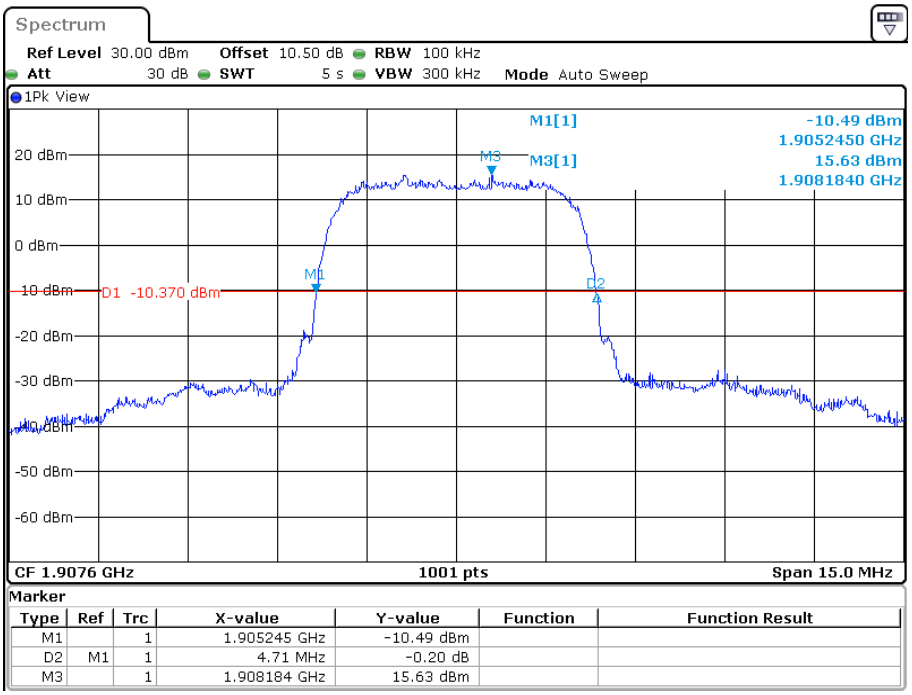


Date: 4.AUG.2022 09:51:57

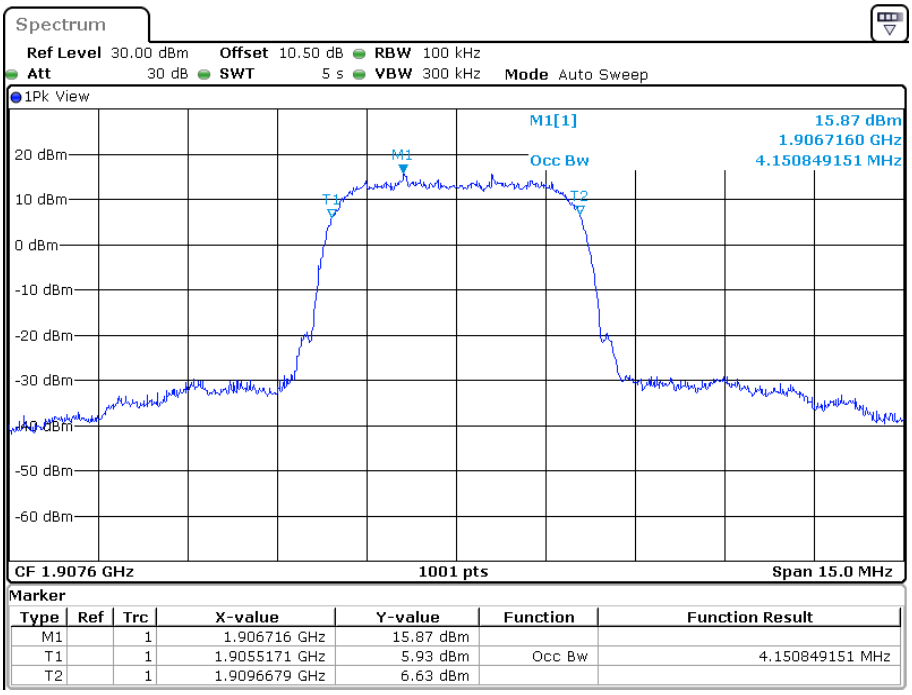


Date: 4.AUG.2022 09:51:16

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel

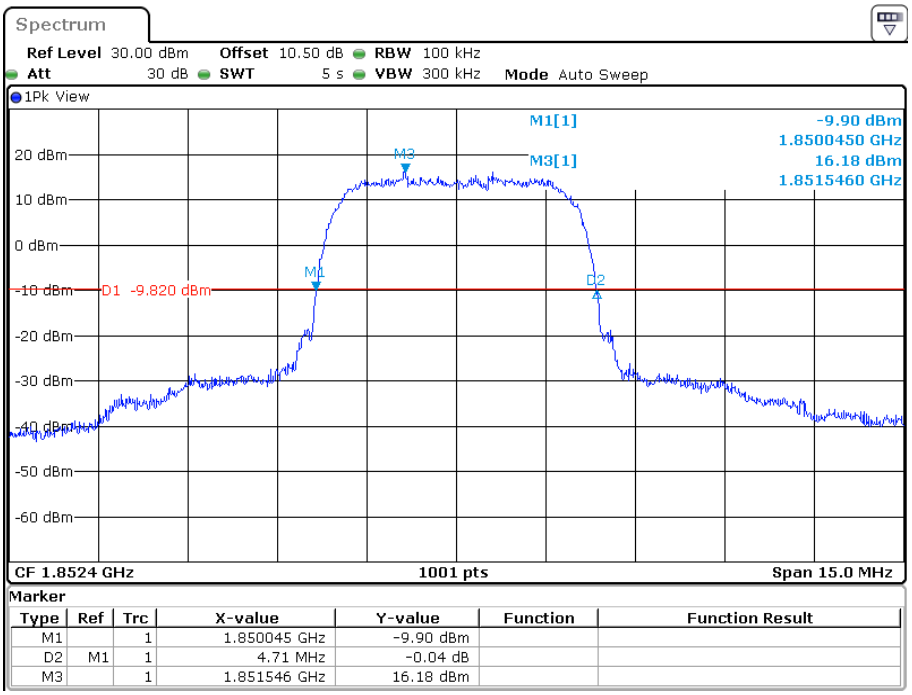


Date: 4.AUG.2022 09:46:21



Date: 4.AUG.2022 09:45:41

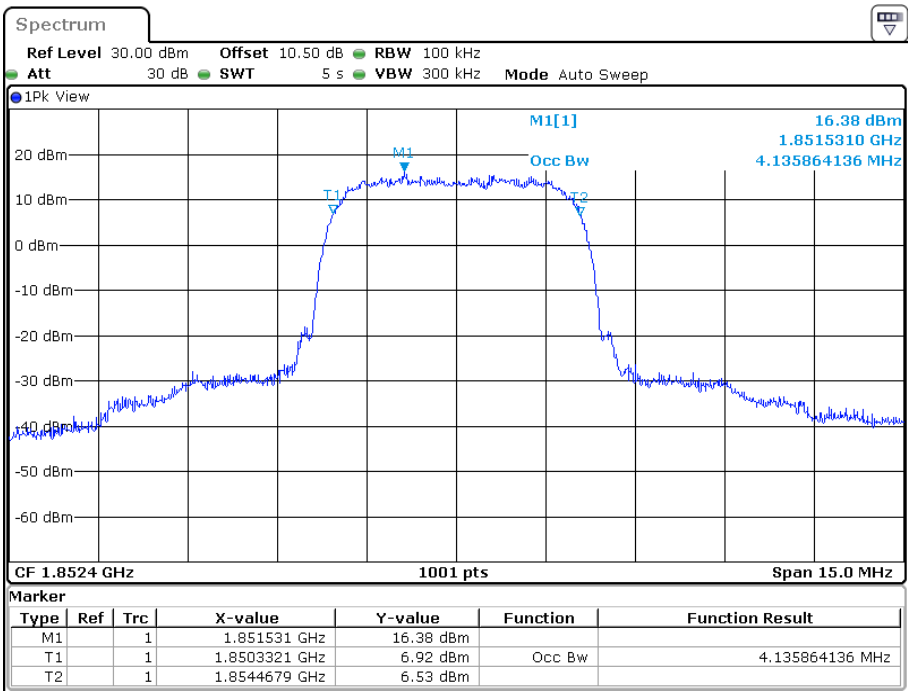
26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.850045 GHz	-9.90 dBm		
D2	M1	1	4.71 MHz	-0.04 dB		
M3		1	1.851546 GHz	16.18 dBm		

Date: 3.AUG.2022 18:42:42

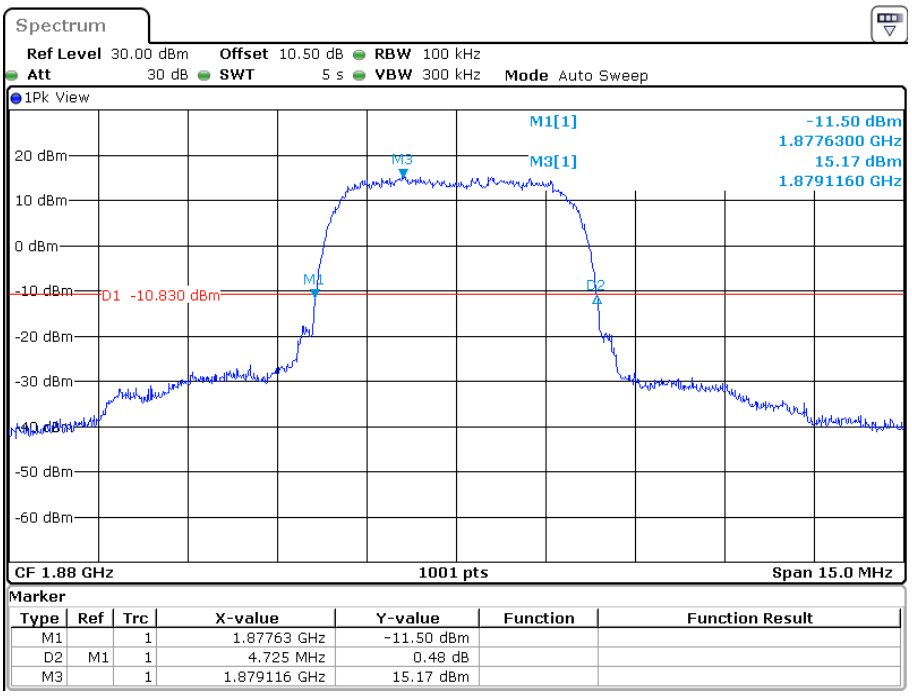


Marker

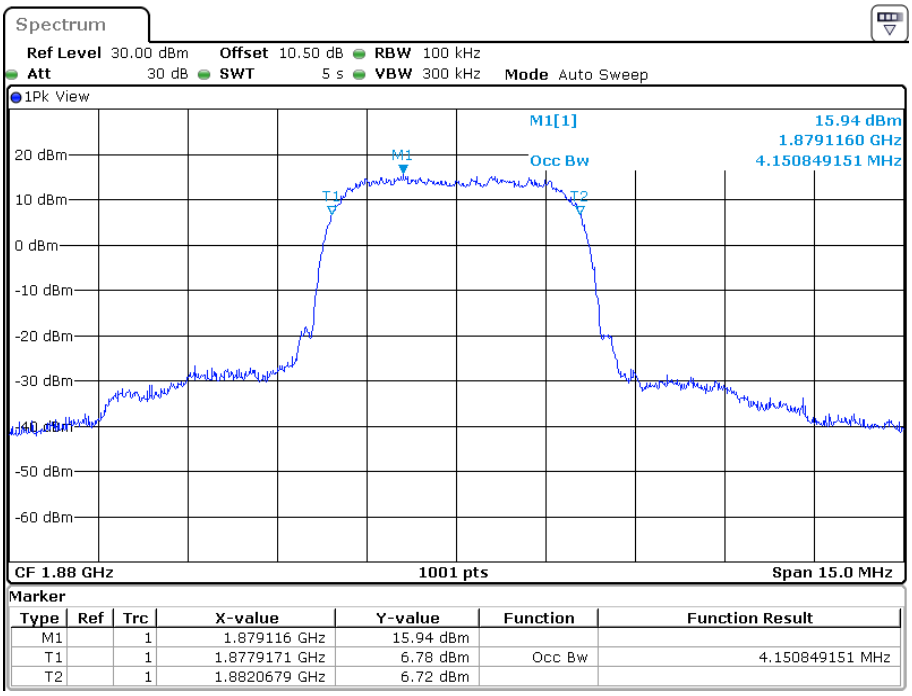
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.851531 GHz	16.38 dBm		
T1		1	1.8503321 GHz	6.92 dBm	Occ Bw	4.135864136 MHz
T2		1	1.8544679 GHz	6.53 dBm		

Date: 3.AUG.2022 18:42:02

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

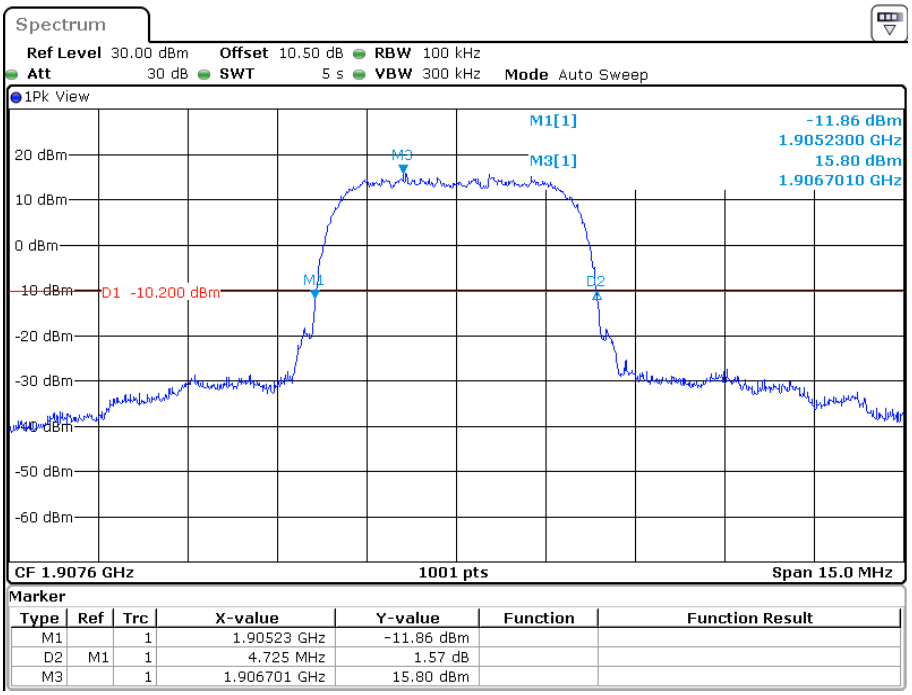


Date: 3.AUG.2022 18:47:24

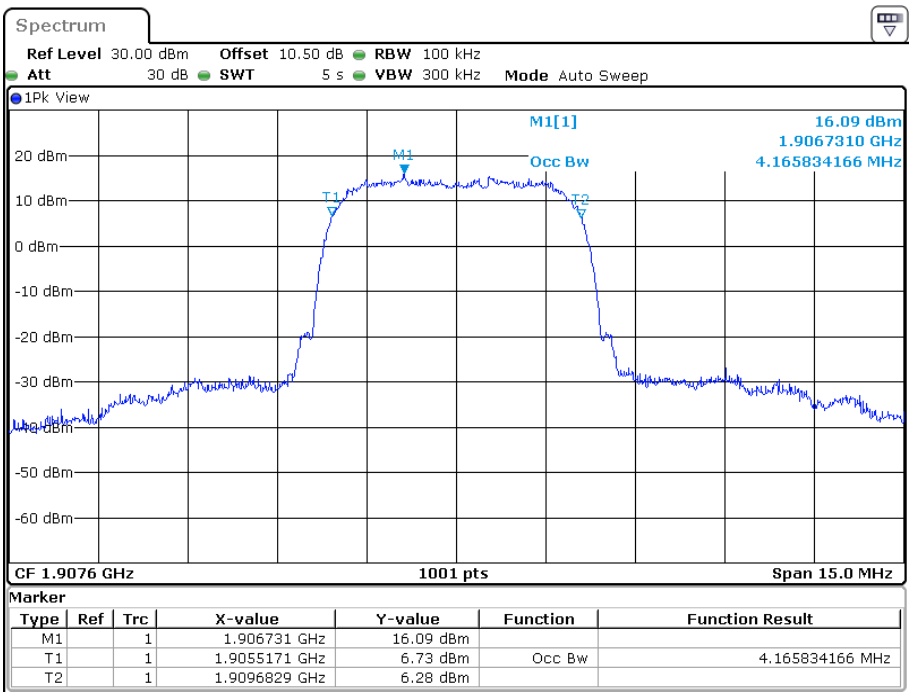


Date: 3.AUG.2022 18:46:44

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



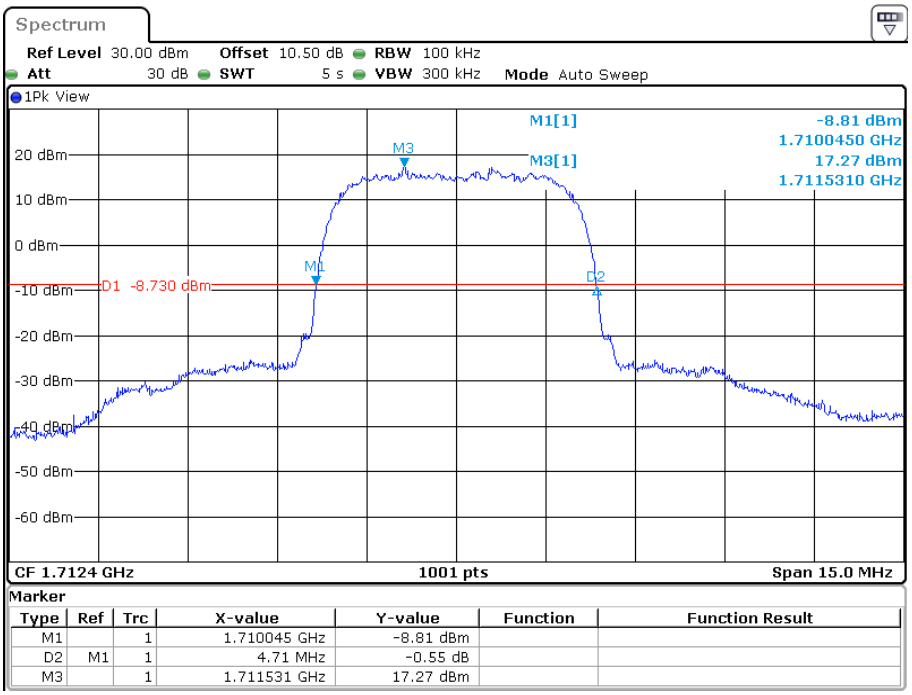
Date: 3.AUG.2022 18:52:12



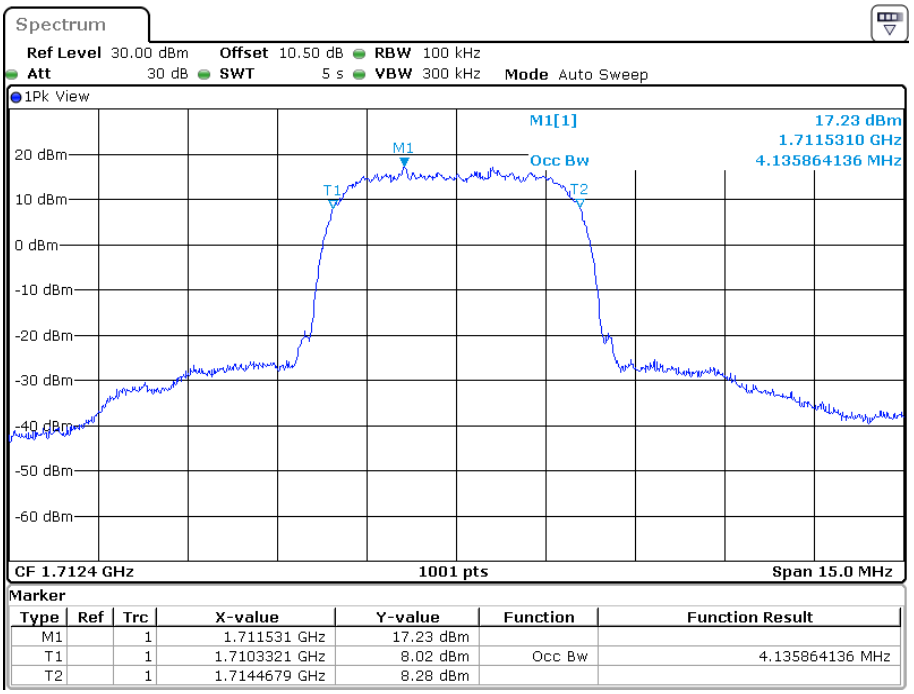
Date: 3.AUG.2022 18:51:32

AWS Band (Part 27)

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Low channel

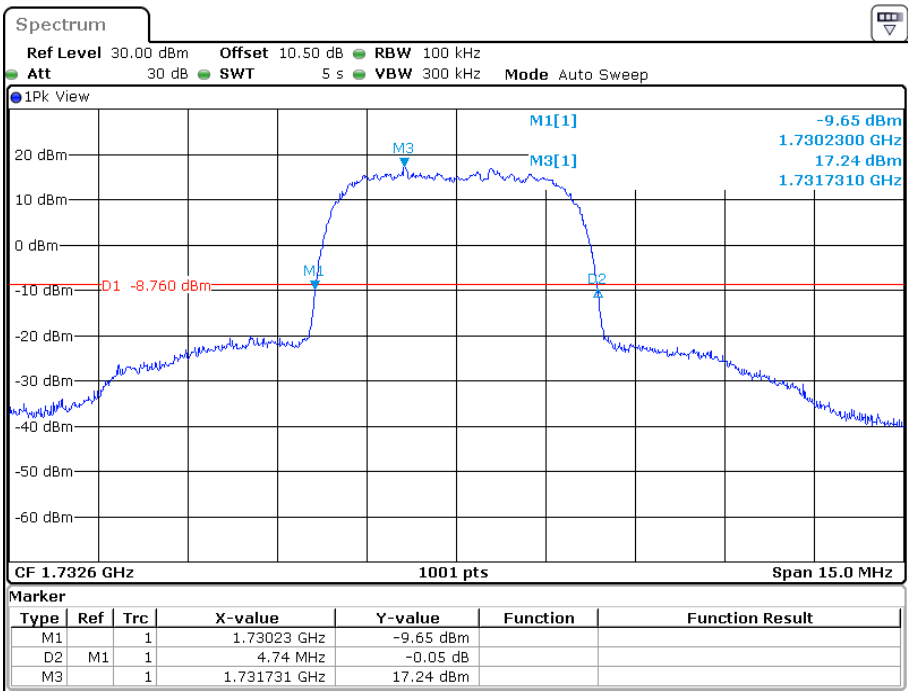


Date: 3.AUG.2022 17:45:25

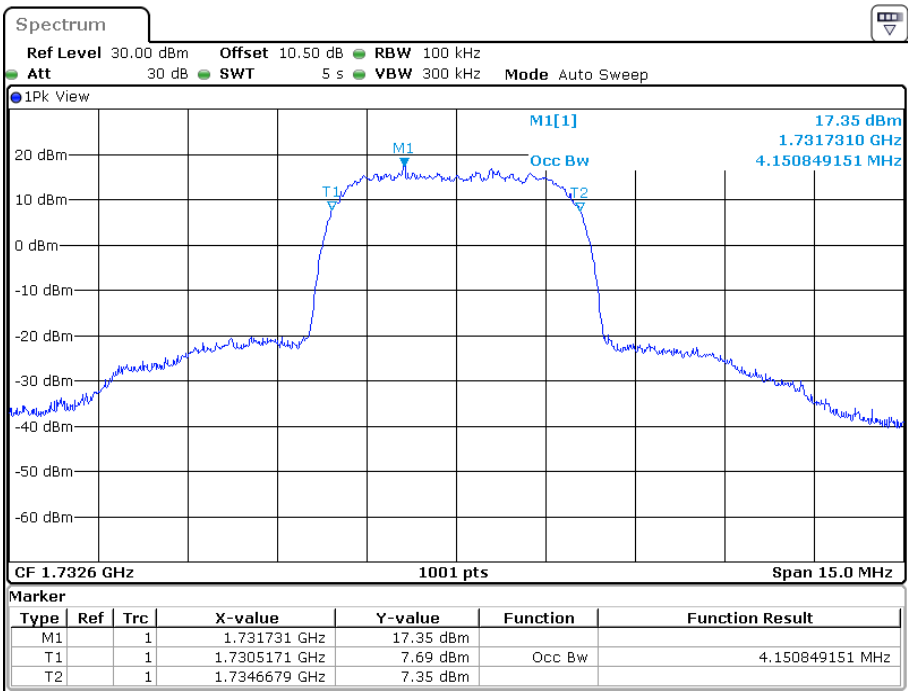


Date: 3.AUG.2022 17:44:45

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, Middle channel

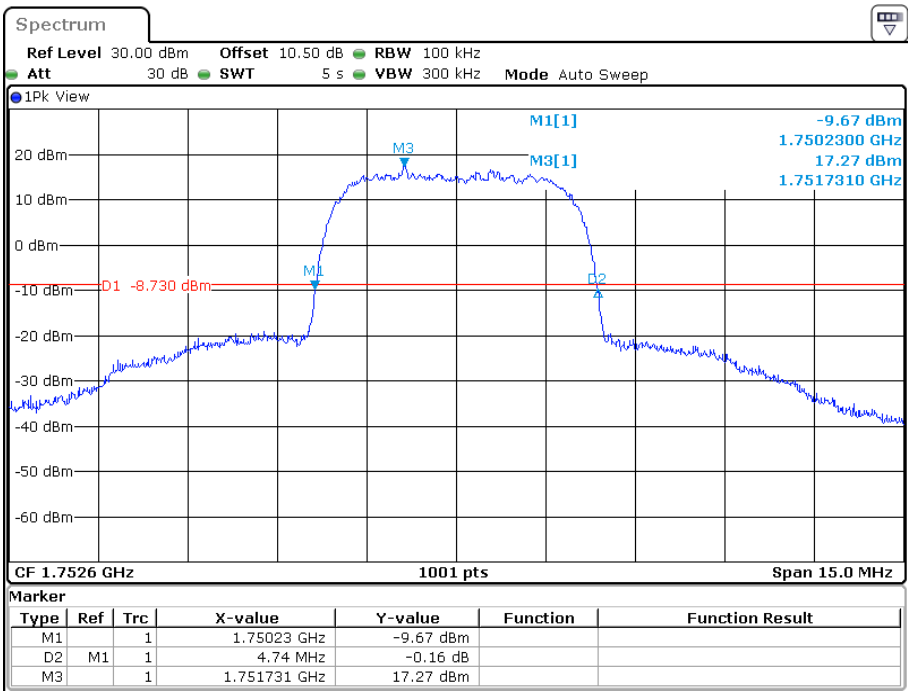


Date: 3.AUG.2022 17:50:00

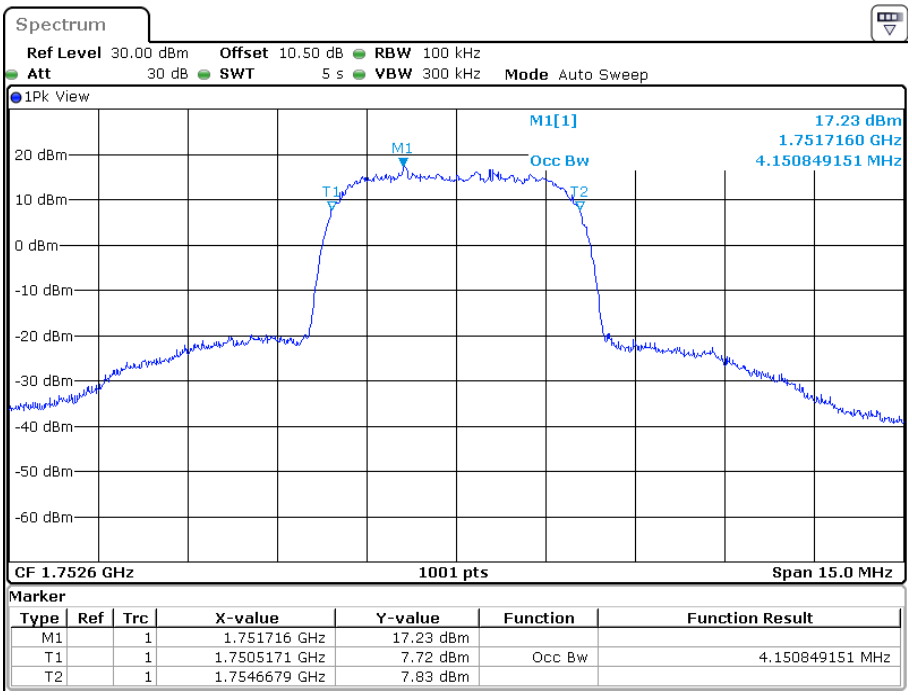


Date: 3.AUG.2022 17:49:21

26 dB Emissions &99% Occupied Bandwidth for RMC (BPSK) Mode, High channel

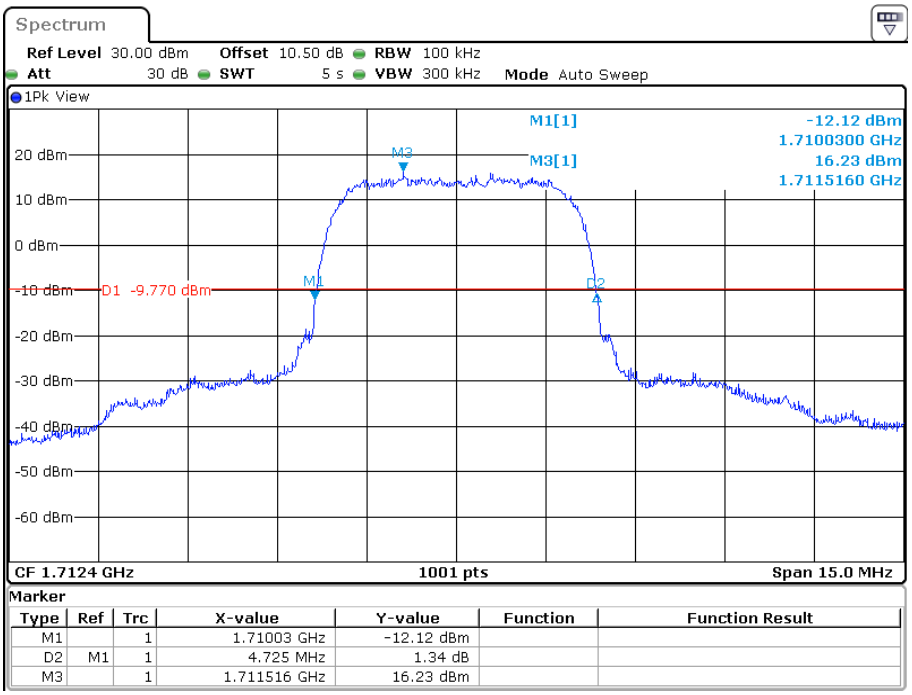


Date: 3.AUG.2022 17:56:32

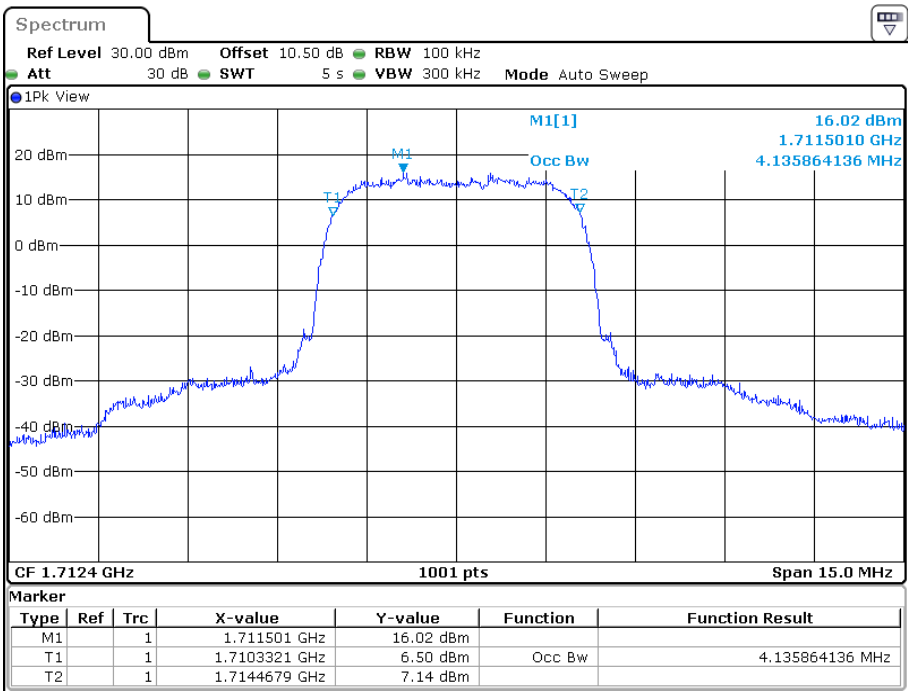


Date: 3.AUG.2022 17:55:52

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Low channel

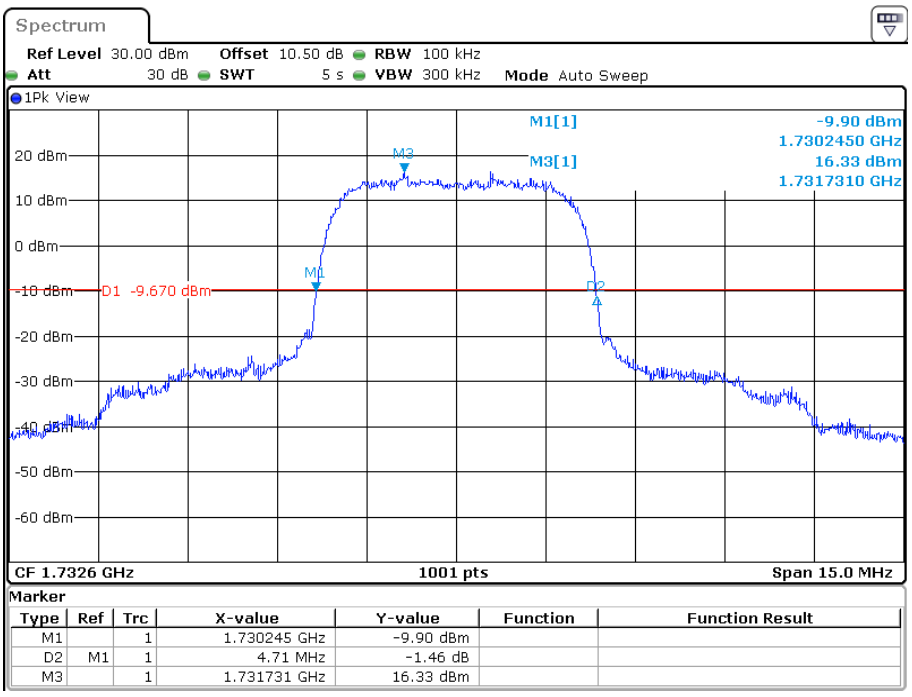


Date: 3.AUG.2022 18:24:32

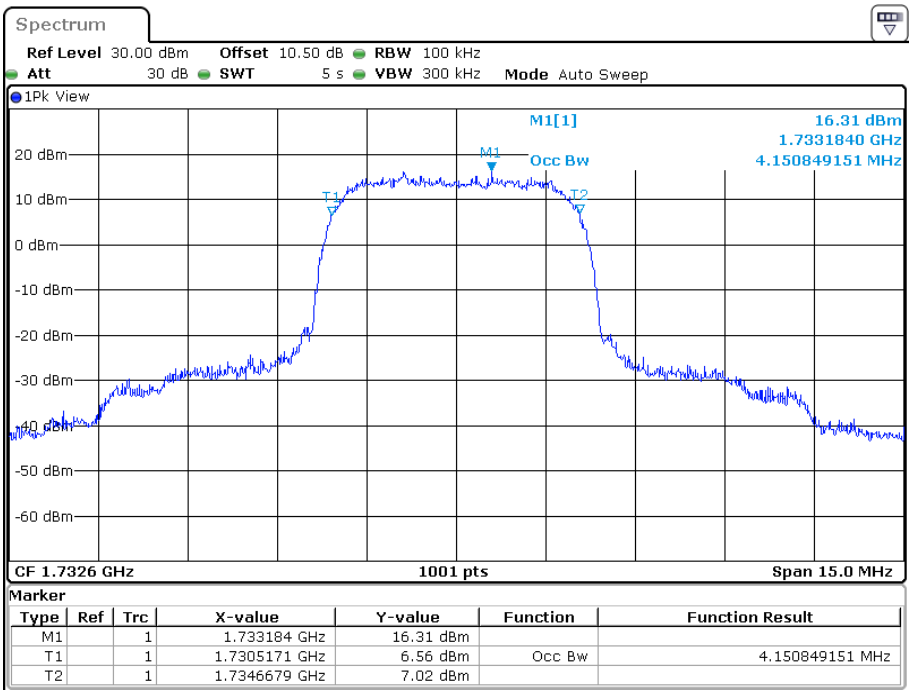


Date: 3.AUG.2022 18:23:52

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, Middle channel

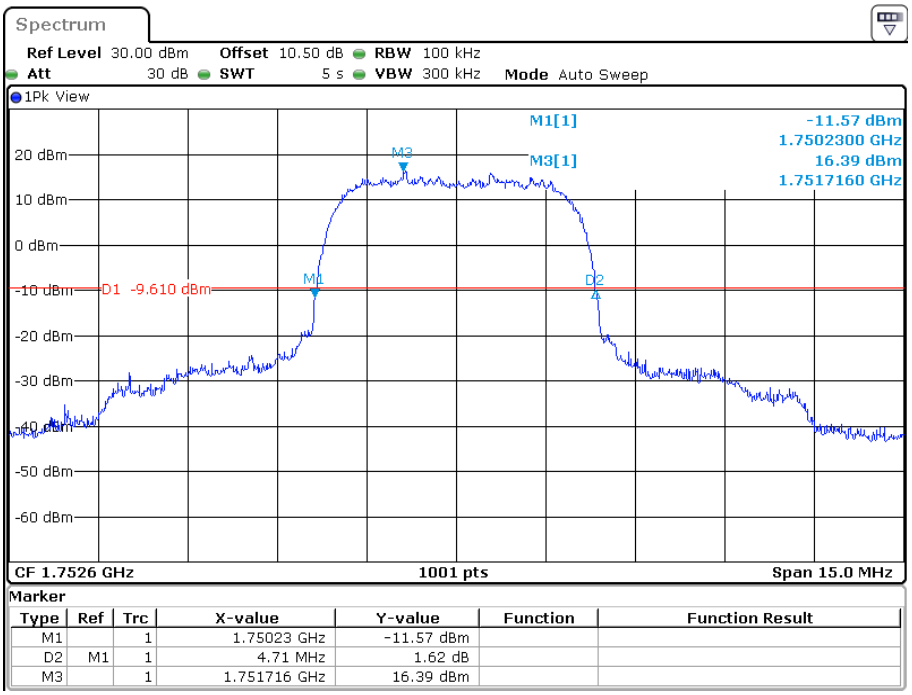


Date: 3.AUG.2022 18:28:49

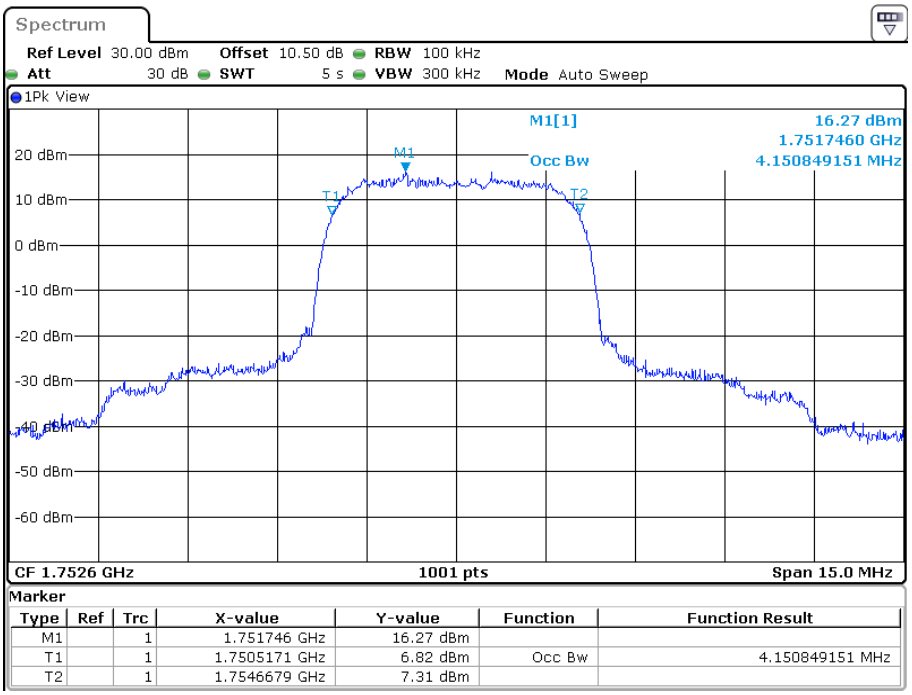


Date: 3.AUG.2022 18:28:09

26 dB Emissions &99% Occupied Bandwidth for HSUPA (QPSK) Mode, High channel

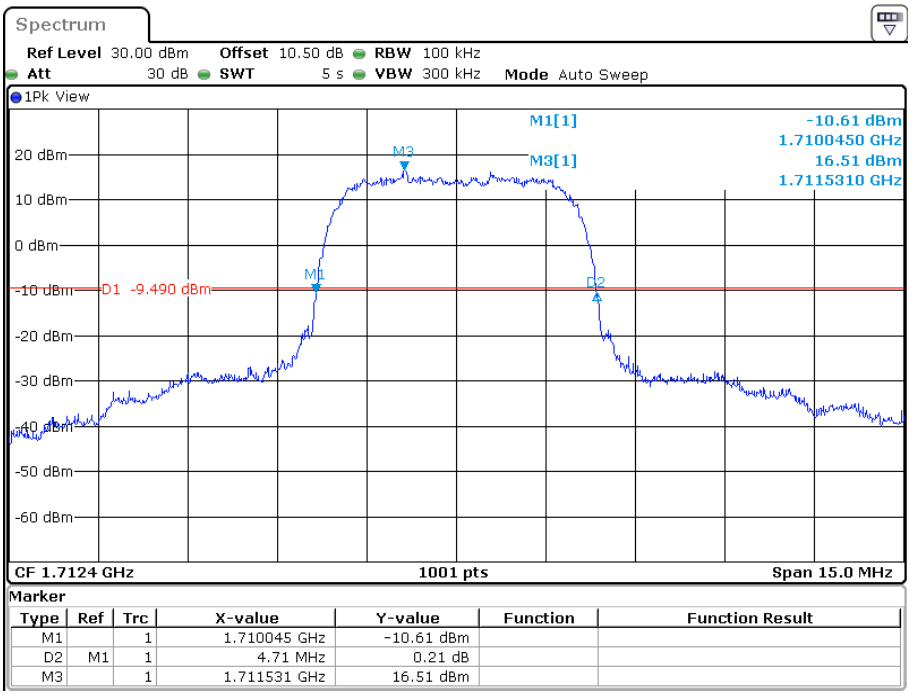


Date: 3.AUG.2022 18:32:28

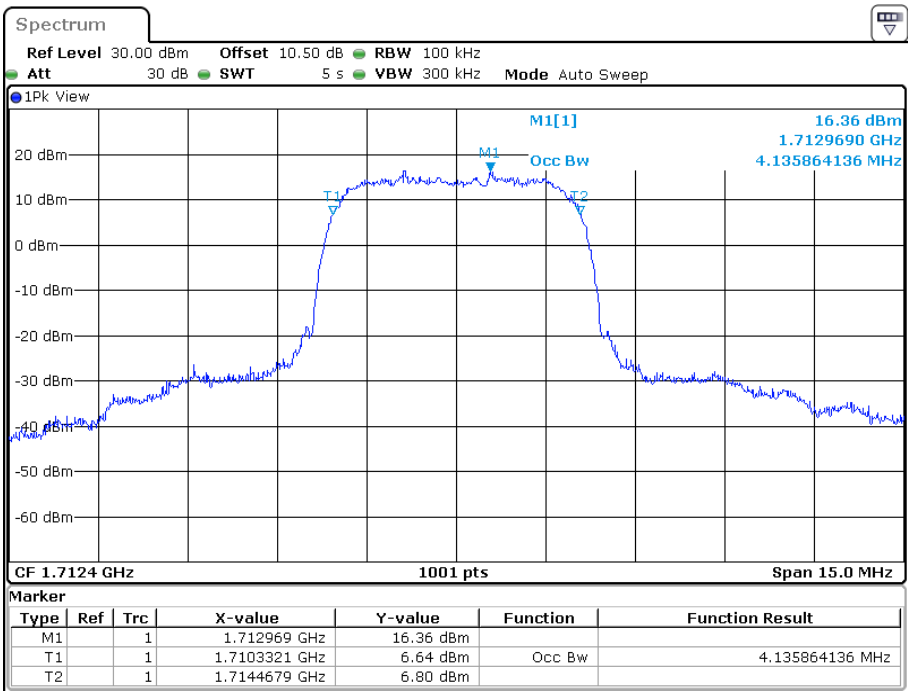


Date: 3.AUG.2022 18:31:49

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Low channel

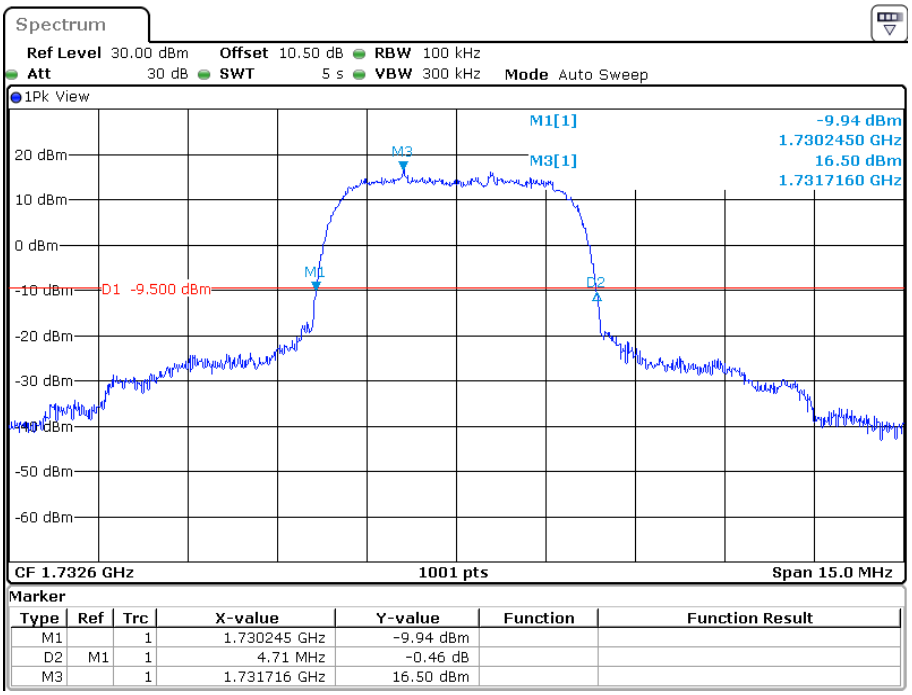


Date: 3.AUG.2022 18:12:19

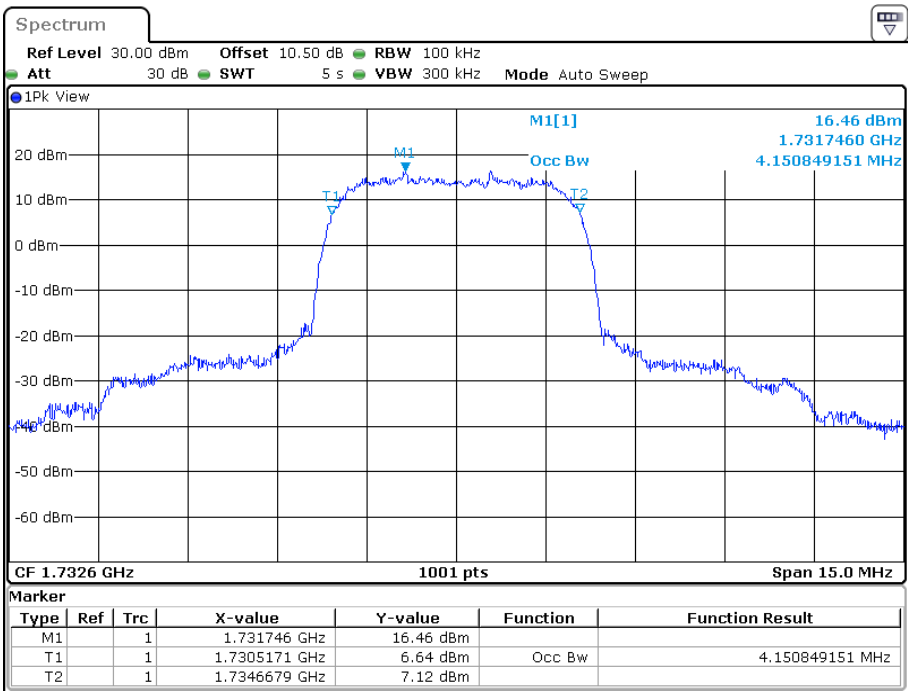


Date: 3.AUG.2022 18:11:40

26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, Middle channel

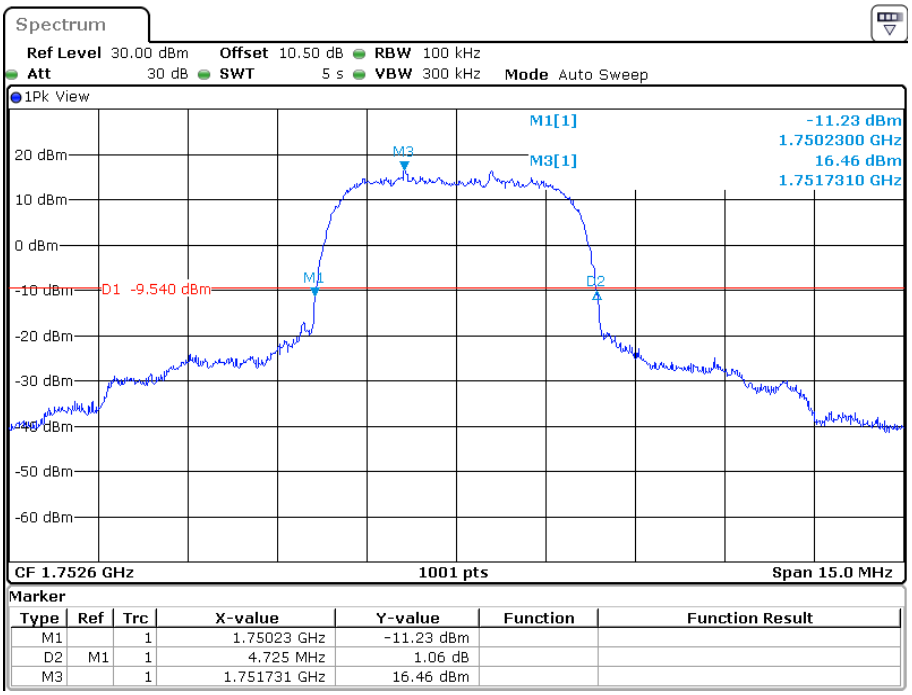


Date: 3.AUG.2022 18:08:32



Date: 3.AUG.2022 18:07:52

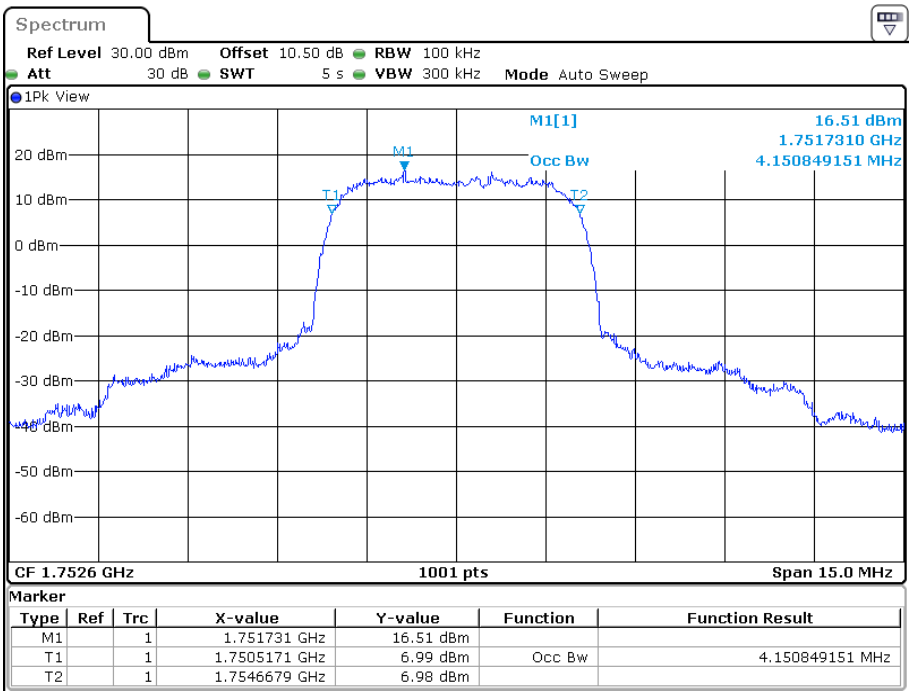
26 dB Emissions &99% Occupied Bandwidth for HSDPA (16QAM) Mode, High channel



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.75023 GHz	-11.23 dBm		
D2	M1	1	4.725 MHz	1.06 dB		
M3		1	1.751731 GHz	16.46 dBm		

Date: 3.AUG.2022 18:01:42



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.751731 GHz	16.51 dBm		
T1		1	1.7505171 GHz	6.99 dBm	Occ Bw	4.150849151 MHz
T2		1	1.7546679 GHz	6.98 dBm		

Date: 3.AUG.2022 18:01:01

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	1.098	1.314	1.110	1.332	1.104	1.296
	16QAM	1.110	1.308	1.098	1.308	1.104	1.314
3 MHz	QPSK	2.688	2.904	2.688	2.892	2.700	2.916
	16QAM	2.688	2.904	2.688	2.916	2.688	2.904
5 MHz	QPSK	4.520	5.000	4.520	4.960	4.520	4.940
	16QAM	4.520	4.980	4.520	4.960	4.520	5.000
10 MHz	QPSK	8.960	9.640	8.960	9.760	8.960	9.680
	16QAM	8.960	9.680	8.960	9.680	8.960	9.640
15 MHz	QPSK	13.500	14.880	13.560	15.000	13.560	14.820
	16QAM	13.560	14.820	13.500	14.940	13.500	14.820
20 MHz	QPSK	18.000	19.680	18.000	19.440	17.920	19.280
	16QAM	17.920	19.440	18.000	19.440	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	1.104	1.308	1.116	1.296	1.104	1.320
	16QAM	1.098	1.296	1.104	1.296	1.110	1.308
3 MHz	QPSK	2.688	2.892	2.688	2.916	2.688	2.904
	16QAM	2.688	2.904	2.688	2.904	2.688	2.904
5 MHz	QPSK	4.520	4.980	4.520	5.020	4.520	4.960
	16QAM	4.520	5.000	4.520	4.940	4.520	4.960
10 MHz	QPSK	8.960	9.680	8.960	9.640	8.960	9.680
	16QAM	8.960	9.560	8.960	9.680	8.960	9.800
15 MHz	QPSK	13.560	14.820	13.500	14.820	13.500	14.820
	16QAM	13.500	14.820	13.560	14.820	13.500	14.820
20 MHz	QPSK	17.920	19.520	17.920	19.360	17.920	19.440
	16QAM	18.000	19.280	18.000	19.440	18.000	19.440

LTE Band 5& LTE Band 26(Part 22H):

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	1.098	1.308	1.104	1.326	1.104	1.296
	16QAM	1.104	1.314	1.092	1.290	1.104	1.302
3 MHz	QPSK	2.688	2.904	2.688	2.892	2.688	2.916
	16QAM	2.688	2.928	2.688	2.904	2.688	2.904
5 MHz	QPSK	4.520	4.980	4.500	4.980	4.520	4.940
	16QAM	4.500	4.940	4.520	4.980	4.520	4.960
10 MHz	QPSK	8.960	9.600	8.960	9.560	8.960	9.600
	16QAM	9.000	9.560	8.960	9.680	8.960	9.560

LTE Band 7:

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	5.060	4.520	4.980	4.520	4.980
	16QAM	4.520	4.960	4.520	5.020	4.520	4.980
10 MHz	QPSK	8.960	9.760	8.960	9.600	8.960	9.680
	16QAM	8.960	9.640	8.960	9.680	8.960	9.600
15 MHz	QPSK	13.620	14.820	13.500	14.640	13.500	14.820
	16QAM	13.560	14.820	13.500	14.760	13.500	14.760
20 MHz	QPSK	18.000	19.440	17.920	19.360	17.920	19.280
	16QAM	18.000	19.600	18.000	19.360	18.000	19.280

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	1.104	1.314	1.104	1.290	1.092	1.290
	16QAM	1.098	1.296	1.098	1.308	1.110	1.320
3 MHz	QPSK	2.688	2.916	2.688	2.904	2.688	2.904
	16QAM	2.688	2.892	2.688	2.904	2.688	2.904
5 MHz	QPSK	4.520	4.960	4.500	4.940	4.520	4.980
	16QAM	4.520	5.020	4.500	5.000	4.500	5.980
10 MHz	QPSK	8.960	10.120	8.960	9.640	8.960	9.520
	16QAM	8.960	9.720	8.920	9.520	8.960	9.600

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	5.000	4.520	4.940	4.500	5.000
	16QAM	4.520	4.940	4.540	5.020	4.500	4.940
10 MHz	QPSK	/	/	9.040	9.640	/	/
	16QAM	/	/	8.960	9.680	/	/

LTE Band 17:

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	4.500	4.940	4.520	4.960	4.520	5.000
	16QAM	4.500	4.960	4.500	4.940	4.520	4.980
10 MHz	QPSK	8.960	9.600	8.960	9.720	8.960	9.520
	16QAM	8.960	9.640	8.920	9.520	8.960	9.640

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	1.326	1.104	1.296	1.092	1.314
	16QAM	1.098	1.290	1.104	1.302	1.110	1.320
3 MHz	QPSK	2.688	2.904	2.688	2.904	2.688	2.892
	16QAM	2.688	2.904	2.688	2.904	2.688	2.916
5 MHz	QPSK	4.520	4.980	4.520	5.000	4.500	4.960
	16QAM	4.520	5.020	4.520	4.920	4.520	4.980
10 MHz	QPSK	9.000	9.640	8.960	9.680	8.960	9.600
	16QAM	8.960	9.560	8.960	9.680	8.960	9.680
15 MHz	QPSK	13.620	14.820	13.500	14.760	13.560	14.820
	16QAM	13.500	14.760	13.500	14.760	13.560	14.880
20 MHz	QPSK	17.920	19.440	18.000	19.520	18.000	19.440
	16QAM	18.000	19.520	18.000	19.360	18.000	19.280

LTE Band 26(Part 90S):

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	1.098	1.290	1.110	1.326	1.104	1.302
	16QAM	1.110	1.326	1.092	1.296	1.104	1.308
3 MHz	QPSK	2.688	2.904	2.688	2.904	2.700	2.892
	16QAM	2.688	2.904	2.688	2.904	2.688	2.916
5 MHz	QPSK	4.520	5.000	4.500	4.980	4.520	5.000
	16QAM	4.520	5.000	4.500	5.000	4.500	4.960
10 MHz	QPSK	/	/	8.960	9.560	/	/
	16QAM	/	/	9.000	9.680	/	/

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	5.400	4.520	5.060	4.540	5.620
	16QAM	4.500	5.040	4.520	5.060	4.520	5.060
10 MHz	QPSK	9.000	9.640	8.960	9.680	8.960	9.560
	16QAM	9.000	9.440	8.960	9.480	8.960	9.640
15 MHz	QPSK	13.560	14.940	13.500	15.600	13.500	15.060
	16QAM	13.560	15.240	13.560	14.820	13.560	15.420
20 MHz	QPSK	18.000	19.520	18.000	19.280	18.000	19.680
	16QAM	18.000	19.520	17.920	19.440	18.000	20.080

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	1.320	1.110	1.302	1.110	1.314
	16QAM	1.098	1.302	1.104	1.314	1.110	1.314
3 MHz	QPSK	2.688	2.904	2.700	2.880	2.688	2.904
	16QAM	2.688	2.904	2.700	2.928	2.688	2.916
5 MHz	QPSK	4.520	5.000	4.520	4.940	4.500	4.980
	16QAM	4.520	4.980	4.540	4.980	4.540	5.020
10 MHz	QPSK	9.000	9.600	8.960	9.600	8.960	9.680
	16QAM	8.960	9.520	8.960	9.680	8.960	9.680
15 MHz	QPSK	13.560	14.940	13.500	14.700	13.500	14.880
	16QAM	13.560	14.760	13.500	14.760	13.560	14.760
20 MHz	QPSK	17.920	19.280	18.000	19.520	18.000	19.280
	16QAM	18.000	19.280	18.000	19.280	18.000	19.440

LTE Band 71:

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	4.500	4.960	4.520	4.940	4.520	4.960
	16QAM	4.500	5.000	4.520	5.040	4.520	4.960
10 MHz	QPSK	8.960	9.600	9.000	9.640	8.960	9.600
	16QAM	8.960	9.680	8.960	9.520	8.960	9.600
15 MHz	QPSK	13.560	14.760	13.500	14.760	13.500	14.760
	16QAM	13.500	14.760	13.500	14.700	13.500	14.760
20 MHz	QPSK	17.920	19.360	17.920	19.280	18.000	19.360
	16QAM	17.920	19.360	17.920	19.360	17.920	19.520

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

FCC §2.1051, §22.917(a) & §24.238(a)& §27.53& §90.691 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

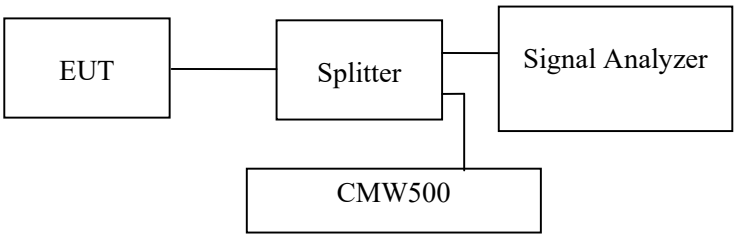
Applicable Standard

FCC §2.1051, §22.917(a) & §24.238(a), §27.53 and §90.691.

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.



Test Data

Environmental Conditions

Temperature:	25~28 ℃
Relative Humidity:	55~60 %
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-07-29 to 2022-08-16.

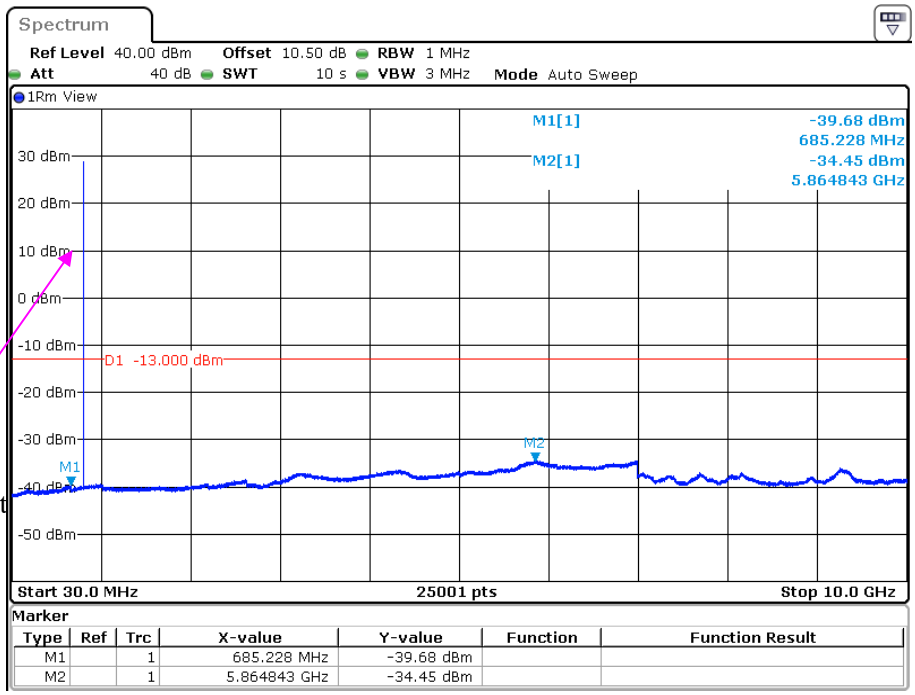
EUT operation mode: Transmitting

Test result: Pass

Please refer to the following plots.

Cellular Band (Part 22H)
Low Channel:

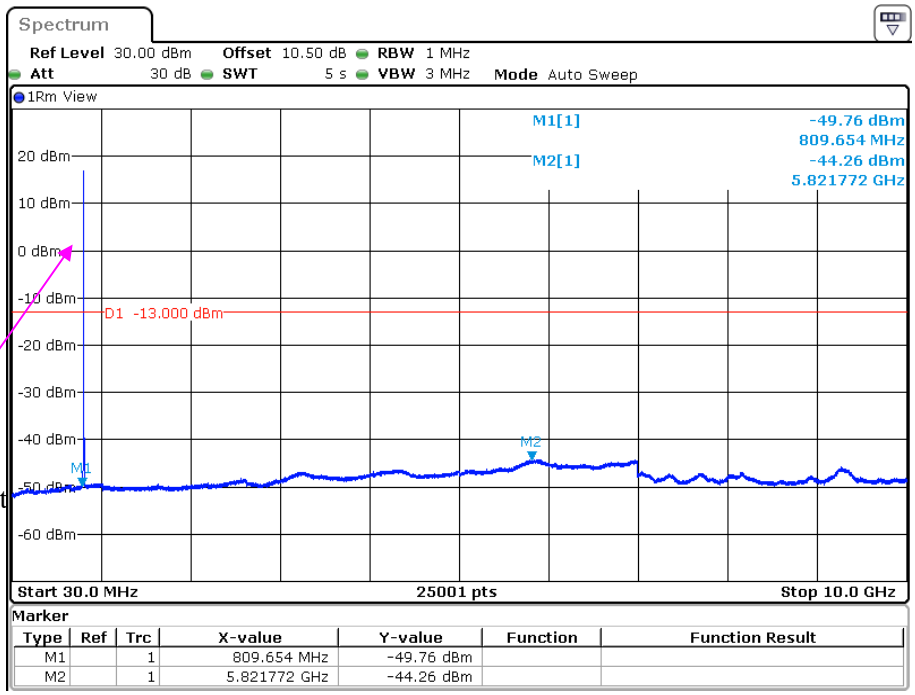
30 MHz – 10 GHz (GSM Mode)



Fundamental test

Date: 5.AUG.2022 10:04:32

30 MHz – 10 GHz (WCDMA Mode)

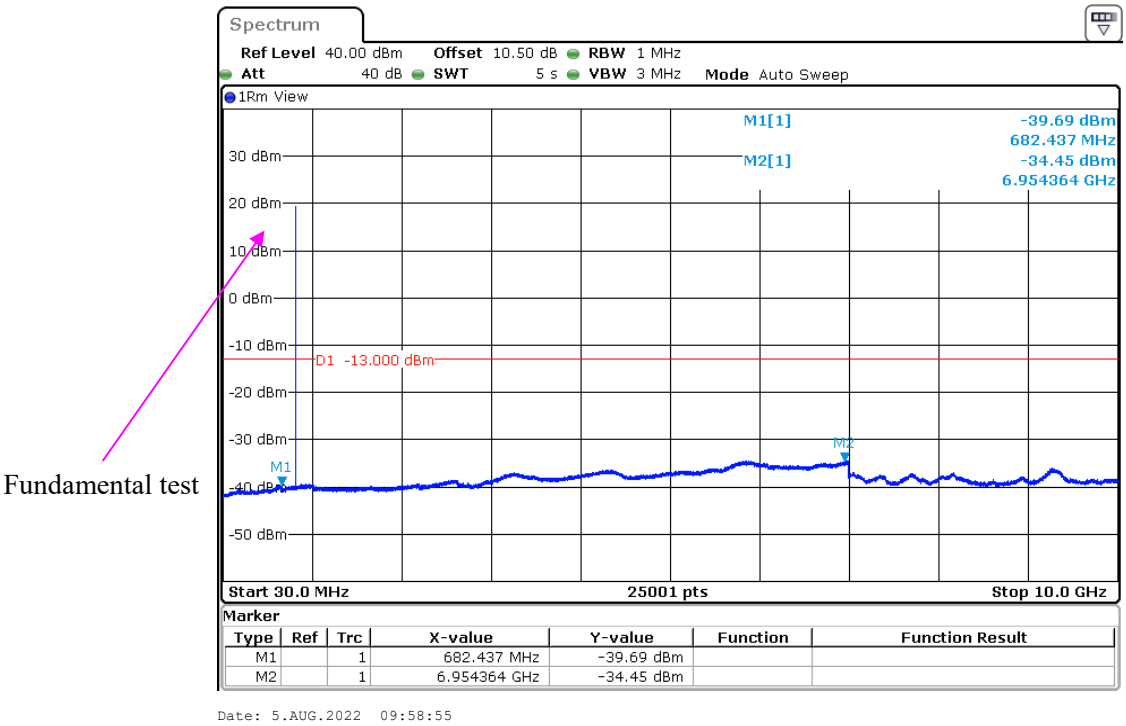


Fundamental test

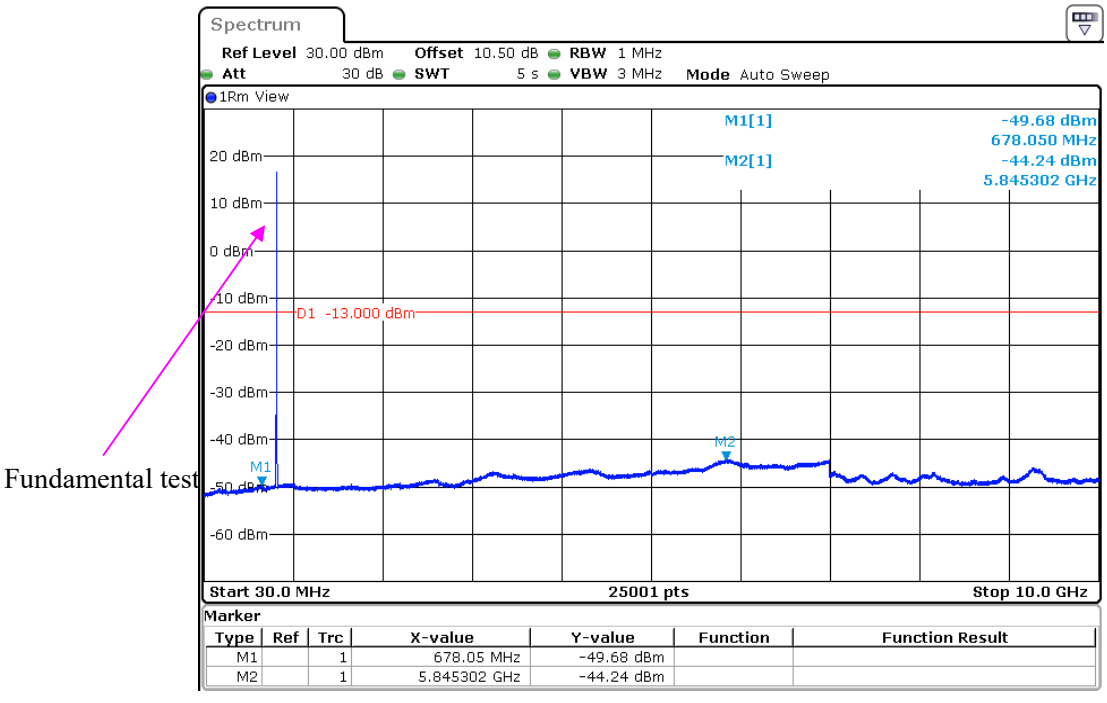
Date: 3.AUG.2022 16:09:46

Middle Channel:

30 MHz – 10 GHz (GSM Mode)

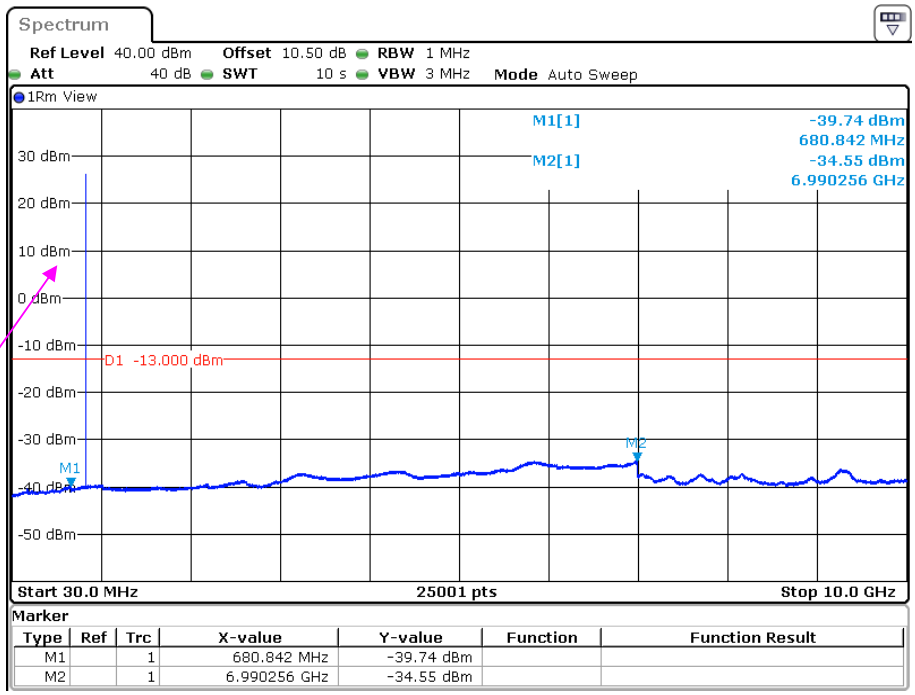


30 MHz – 10 GHz (WCDMA Mode)



High Channel:

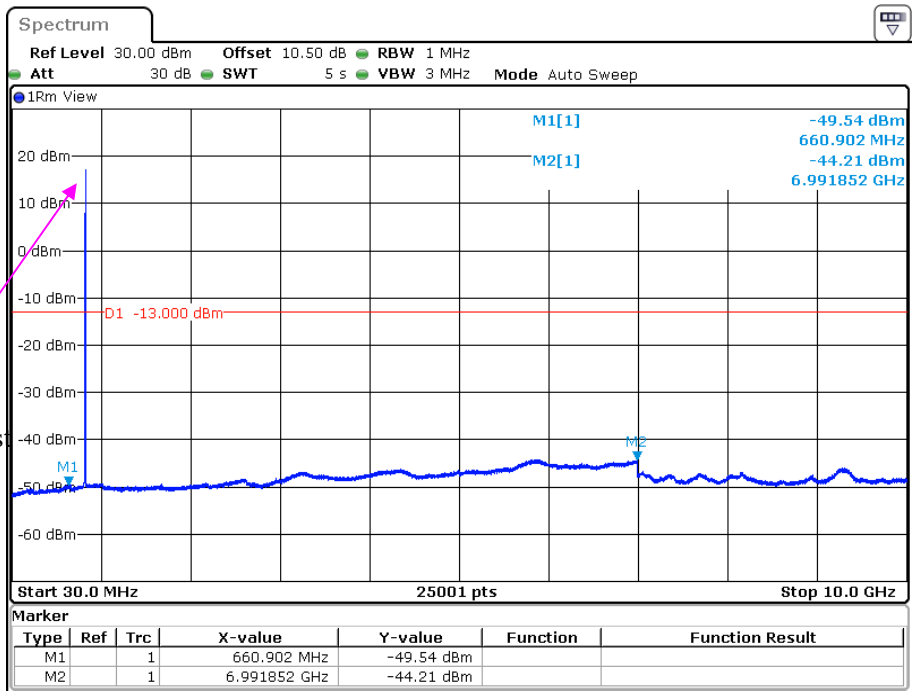
30 MHz – 10 GHz (GSM Mode)



Fundamental test

Date: 5.AUG.2022 10:11:15

30 MHz – 10 GHz (WCDMA Mode)

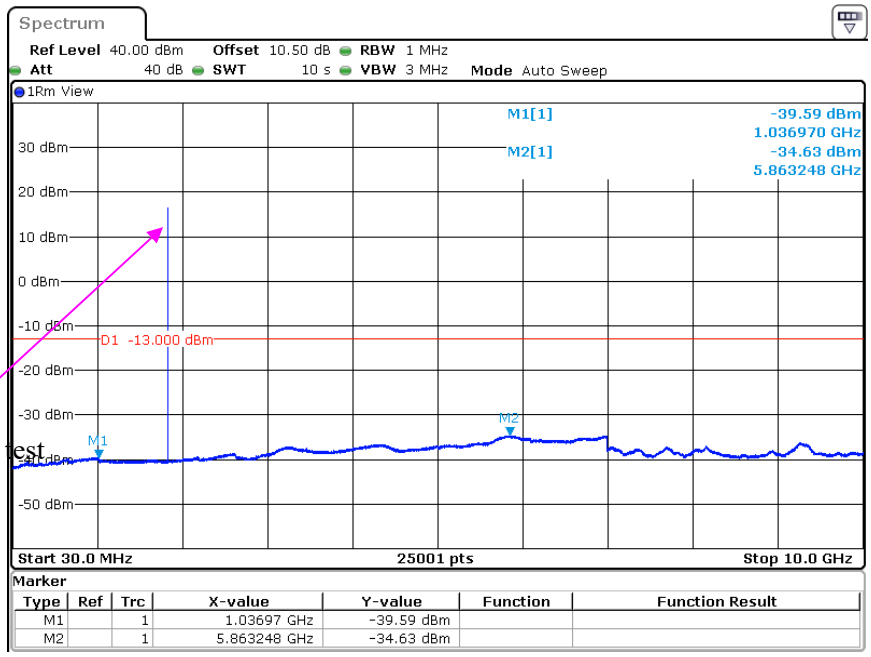


Fundamental test

Date: 3.AUG.2022 16:17:39

PCS Band (Part 24E)
Low Channel:

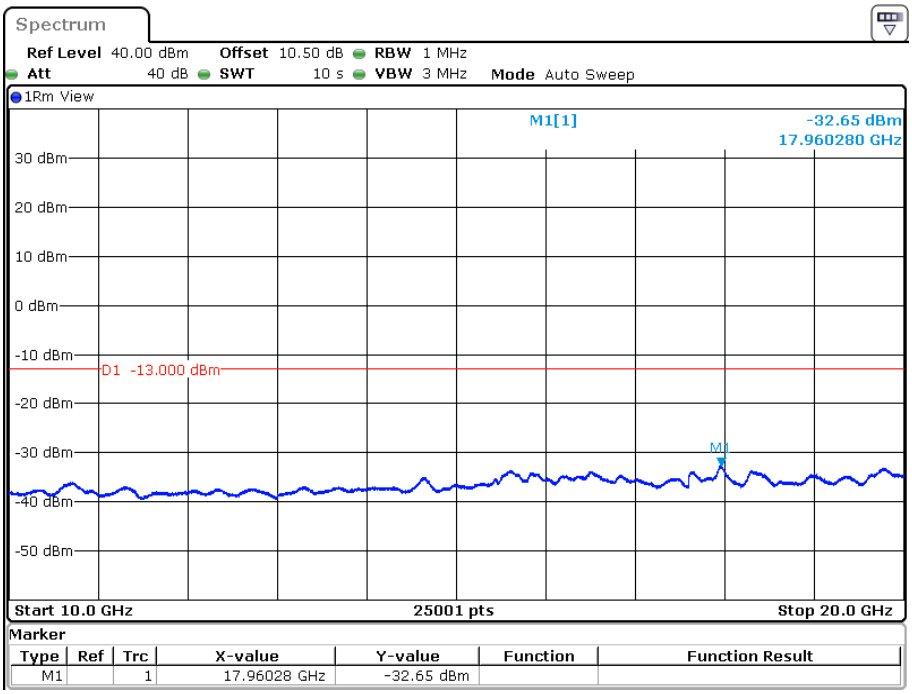
30 MHz – 10 GHz (GSM Mode)



Fundamental test

Date: 5.AUG.2022 10:42:39

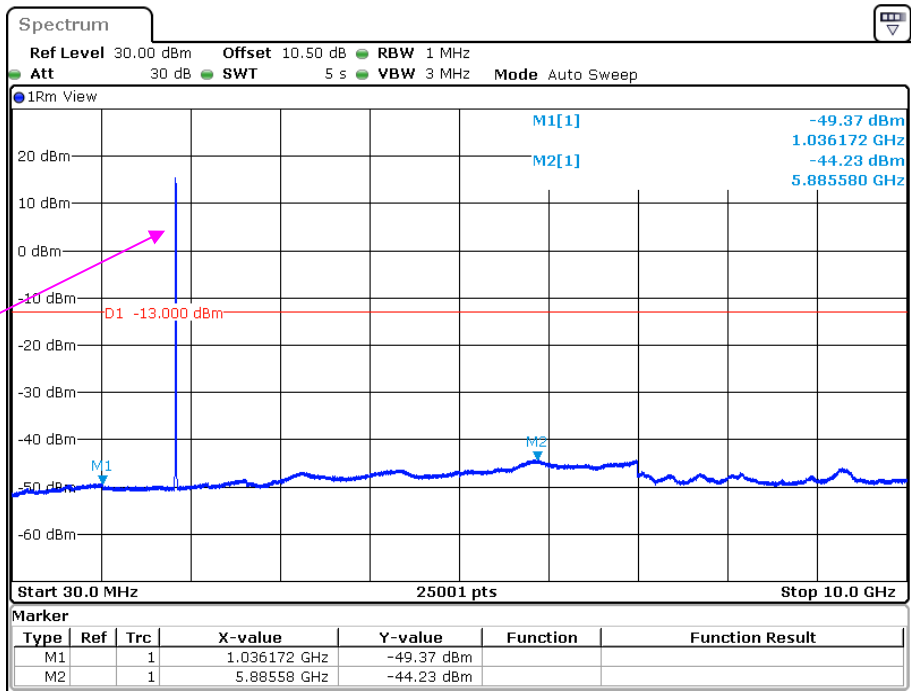
10 GHz – 20 GHz (GSM Mode)



Date: 5.AUG.2022 10:43:51

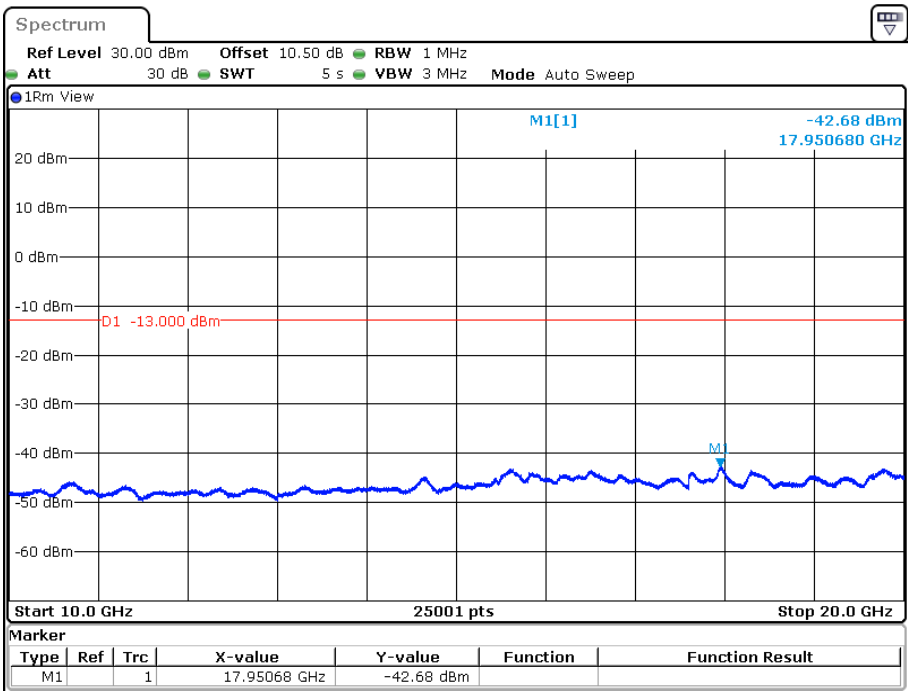
30 MHz – 10 GHz (WCDMA Mode)

Fundamental test



Date: 4.AUG.2022 09:14:32

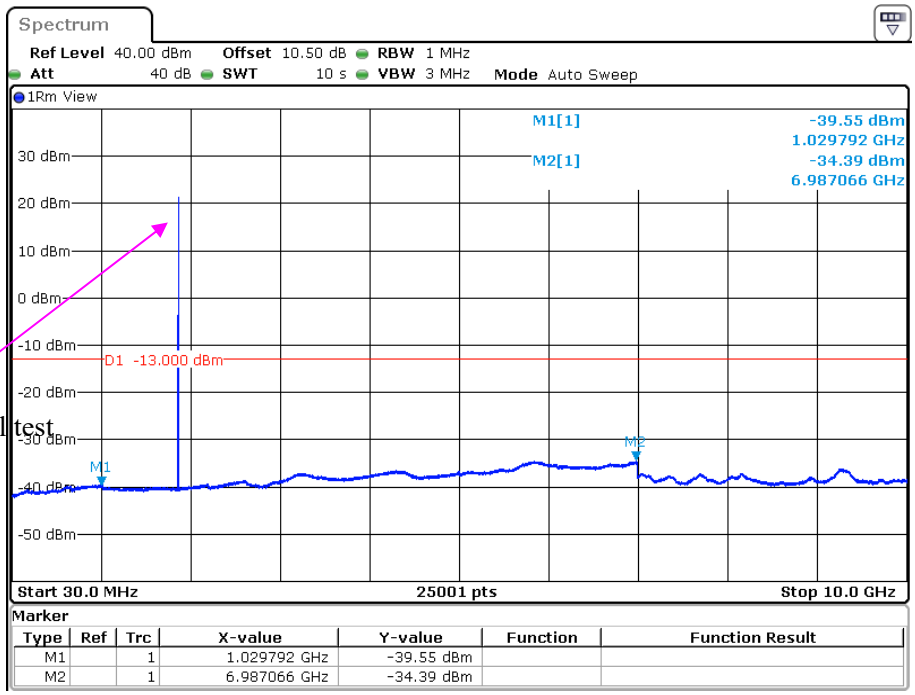
10 GHz – 20 GHz (WCDMA Mode)



Date: 4.AUG.2022 09:15:14

Middle Channel:

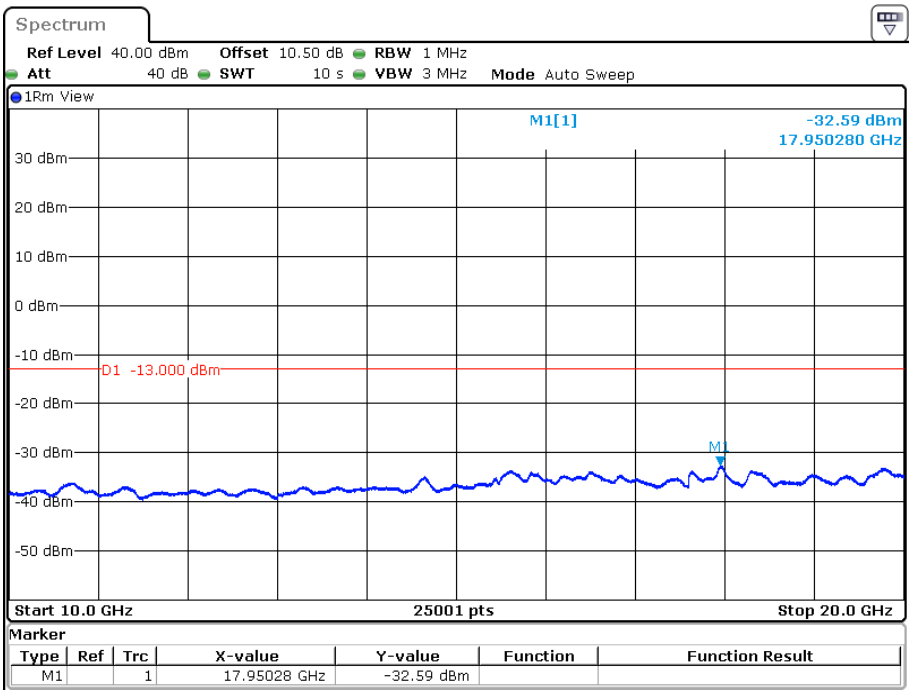
30 MHz – 10 GHz (GSM Mode)



Fundamental test

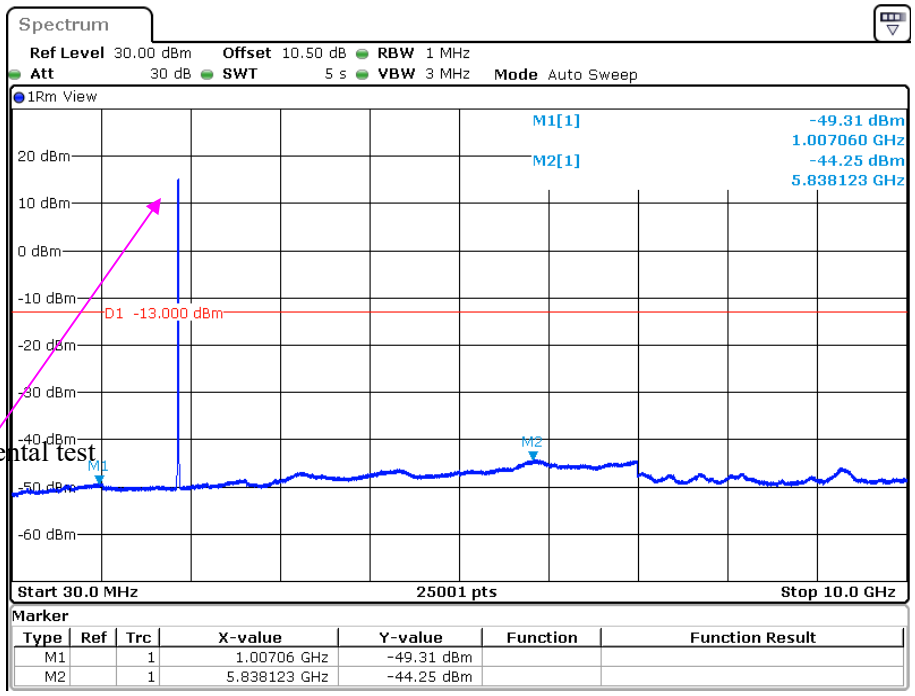
Date: 5.AUG.2022 10:47:28

10GHz – 20GHz (GSM Mode)



Date: 5.AUG.2022 10:48:40

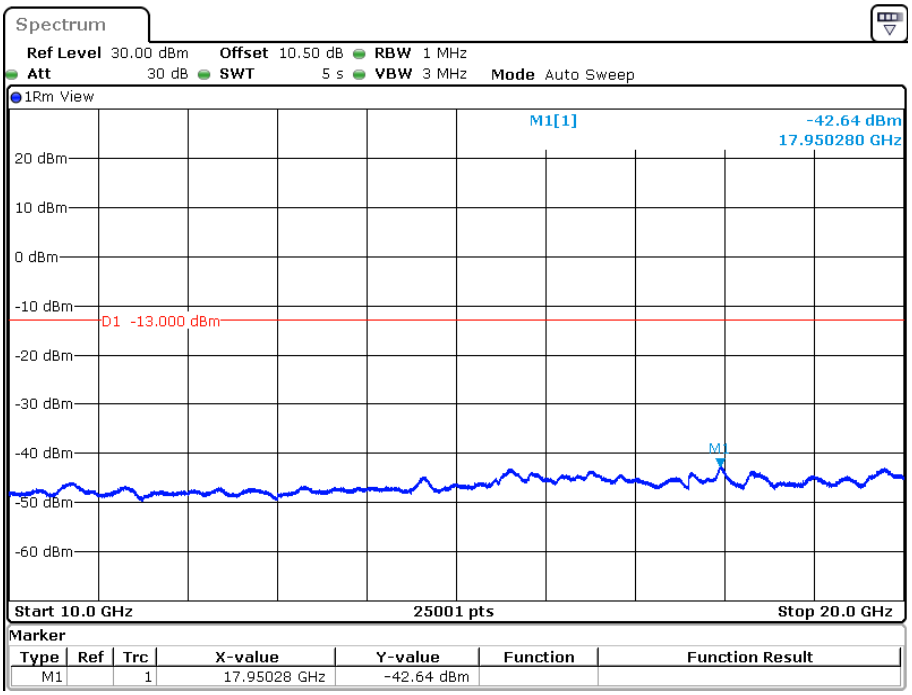
30 MHz – 10 GHz (WCDMA Mode)



Fundamental test

Date: 4.AUG.2022 09:09:20

10 GHz – 20 GHz (WCDMA Mode)

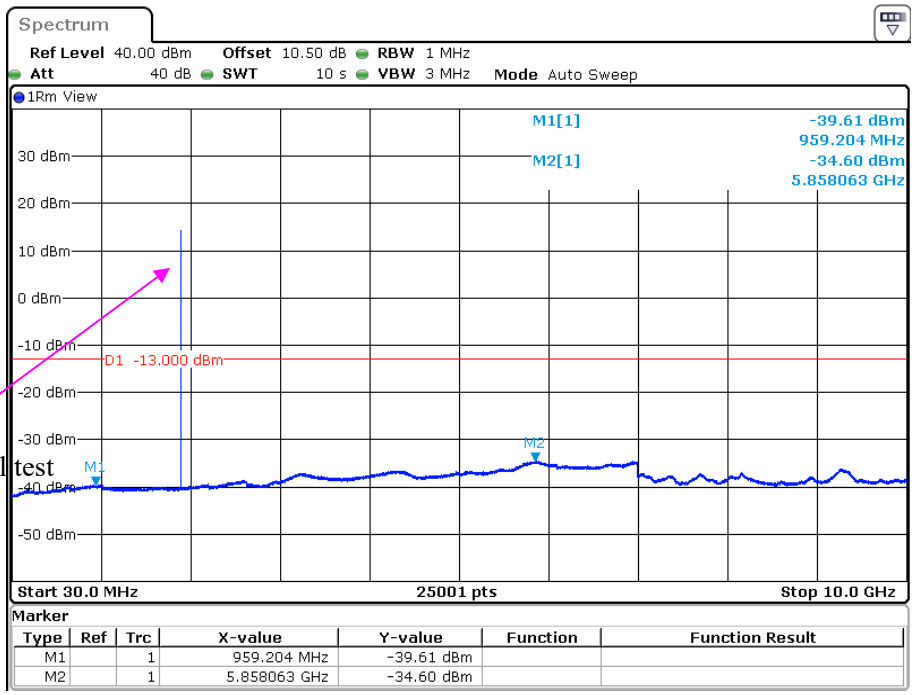


Date: 4.AUG.2022 09:10:03

High Channel:

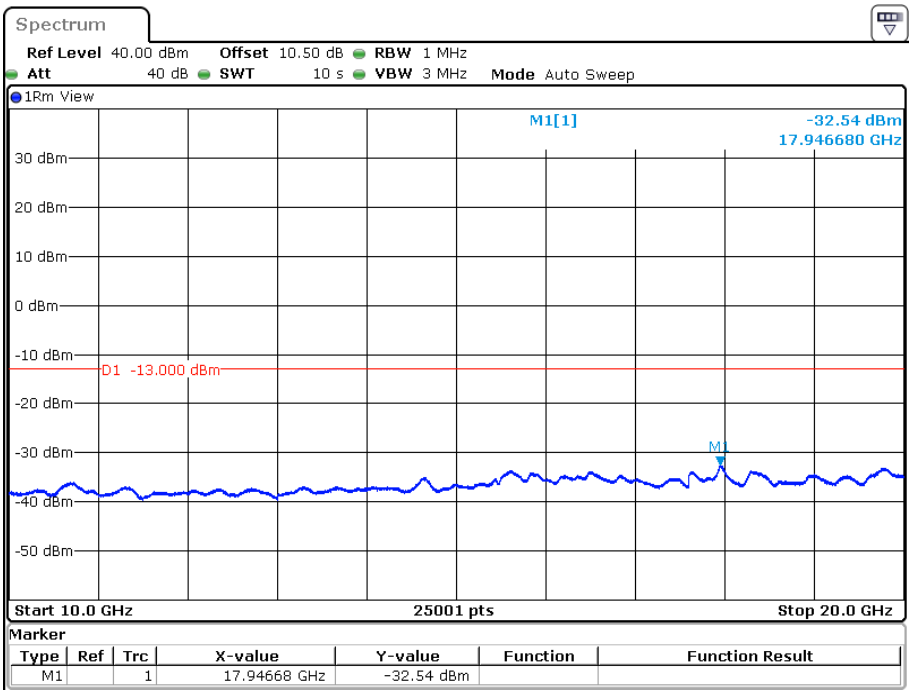
30 MHz – 10 GHz (GSM Mode)

Fundamental test



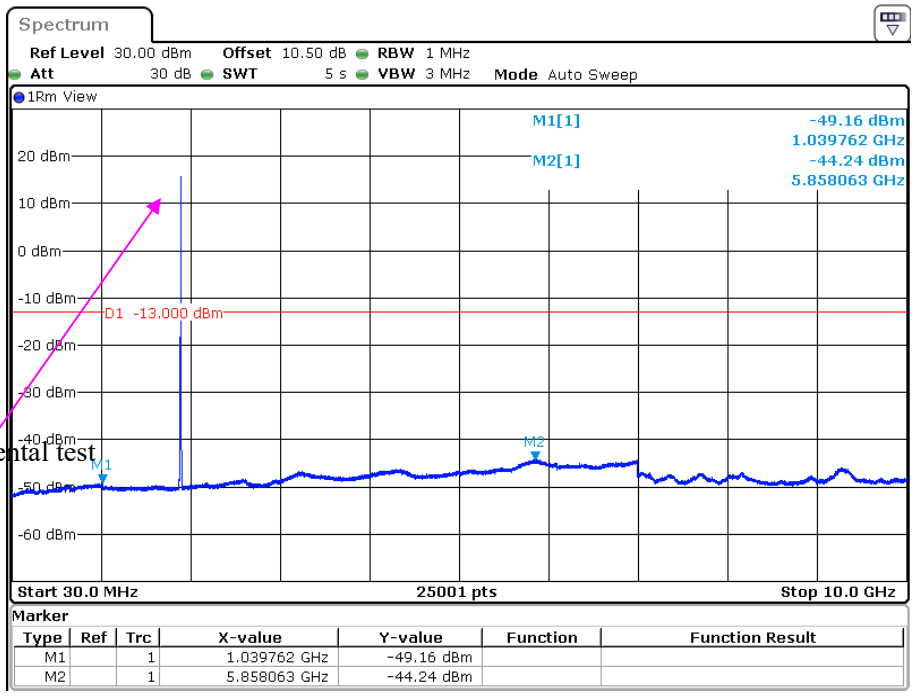
Date: 5.AUG.2022 10:54:19

10 GHz – 20 GHz (GSM Mode)



Date: 5.AUG.2022 10:55:32

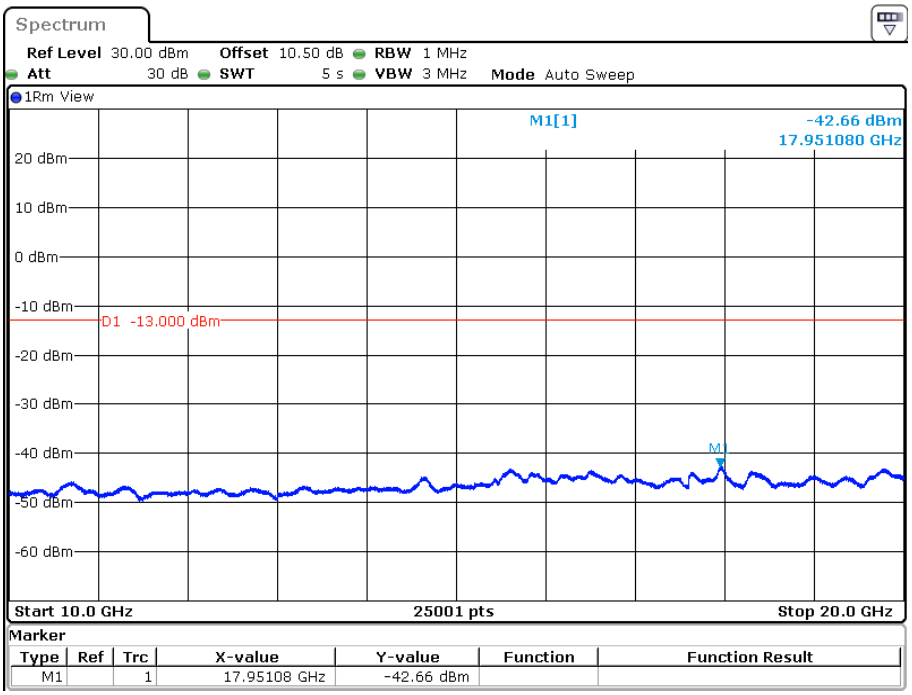
30 MHz – 10 GHz (WCDMA Mode)



Fundamental test

Date: 3.AUG.2022 19:00:24

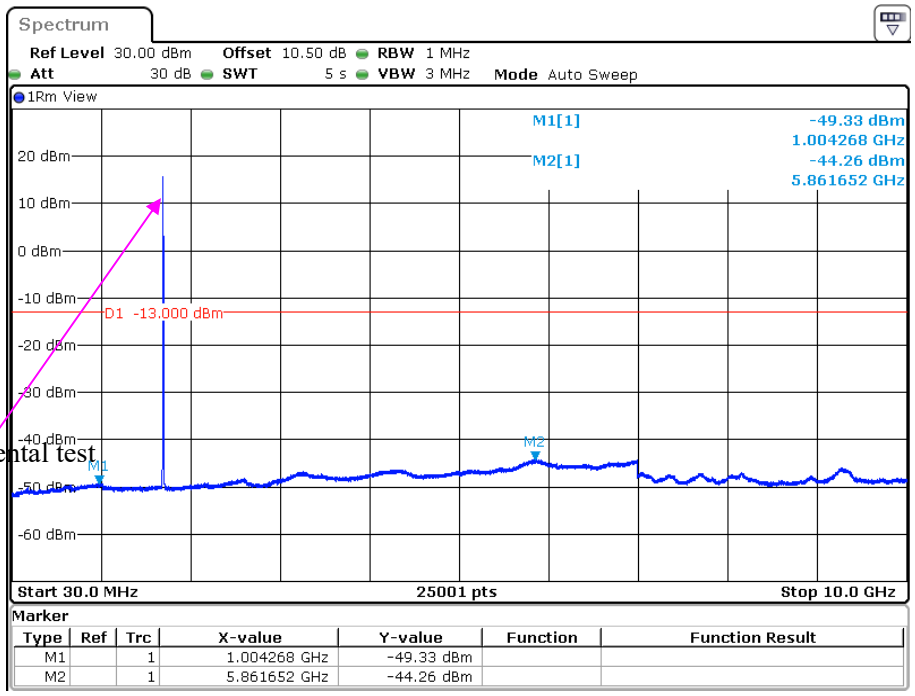
10 GHz – 20 GHz (WCDMA Mode)



Date: 3.AUG.2022 19:01:06

AWS Band (Part 27)
Low Channel:

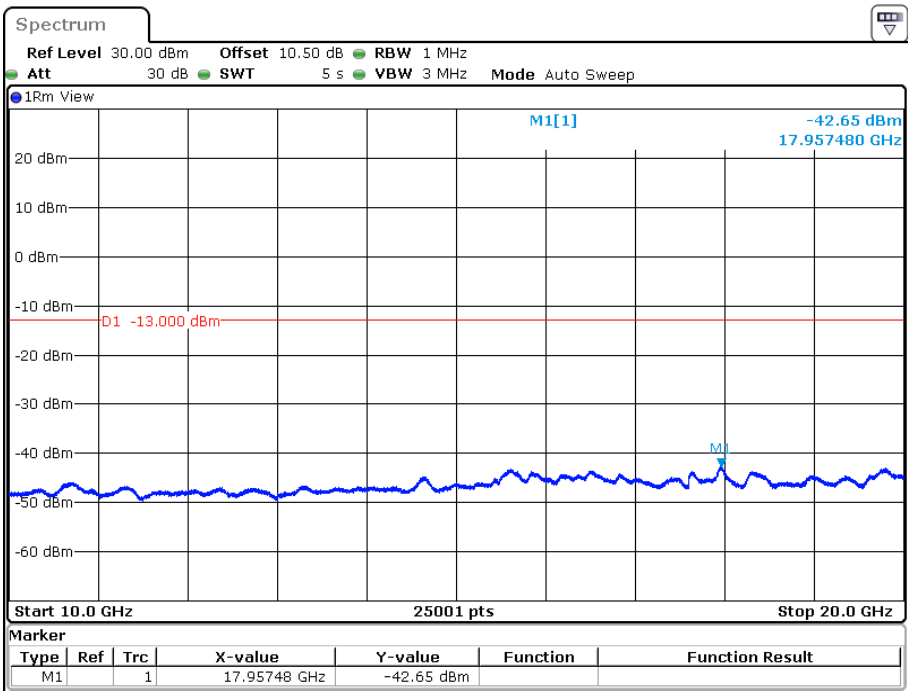
30 MHz – 10 GHz (WCDMA Mode)



Fundamental test

Date: 3.AUG.2022 17:46:47

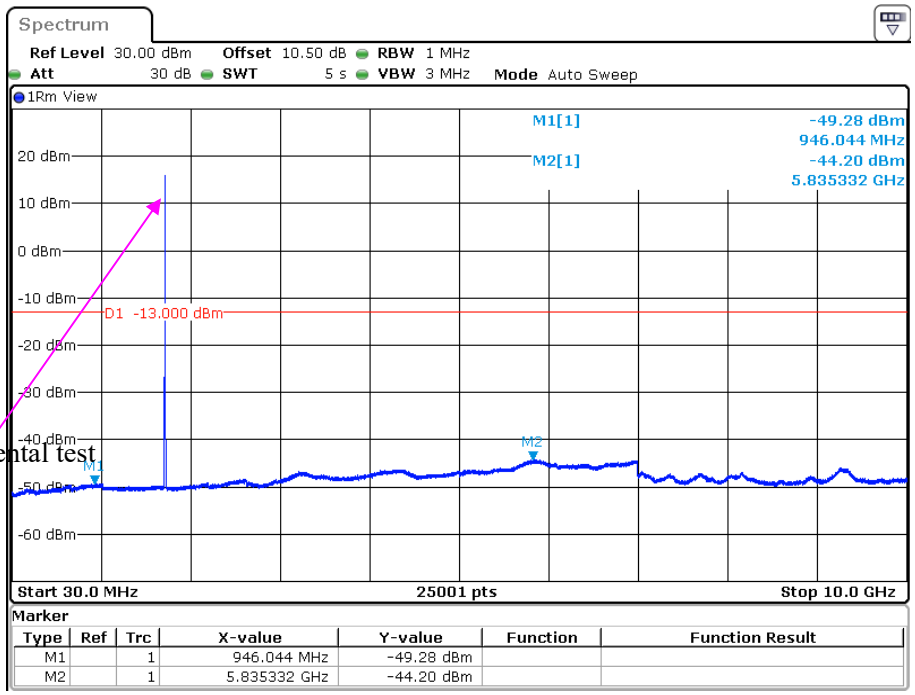
10 GHz – 20 GHz (WCDMA Mode)



Date: 3.AUG.2022 17:47:29

Middle Channel

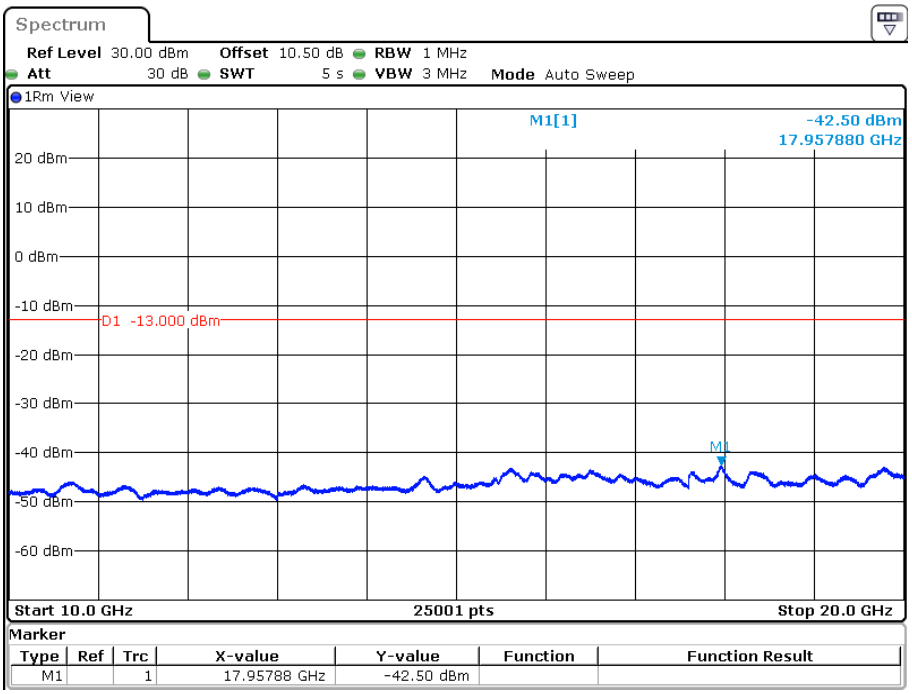
30 MHz – 10 GHz (WCDMA Mode)



Fundamental test

Date: 3.AUG.2022 17:50:41

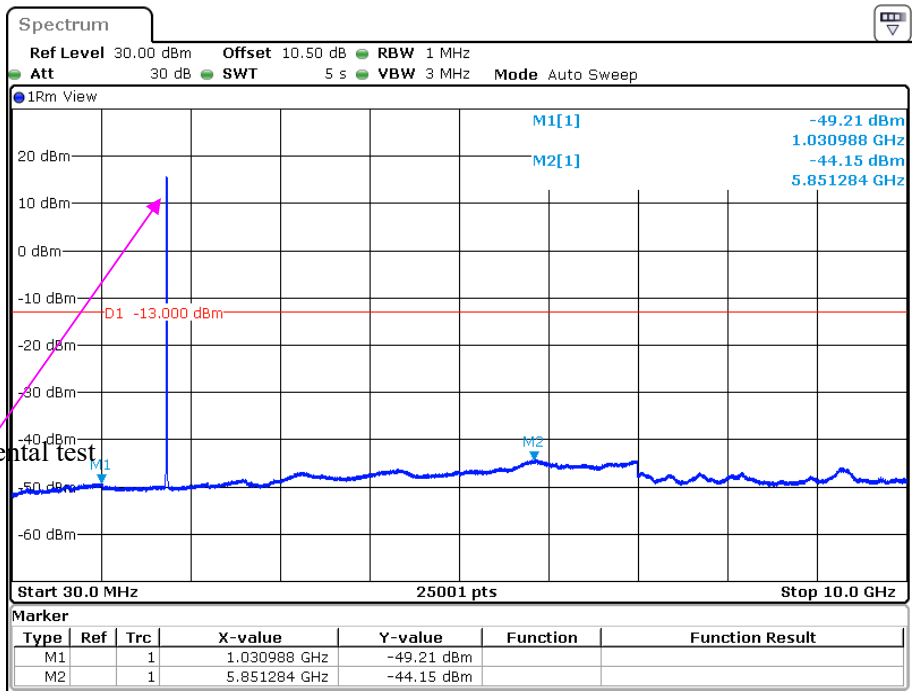
10 GHz – 20 GHz (WCDMA Mode)



Date: 3.AUG.2022 17:51:23

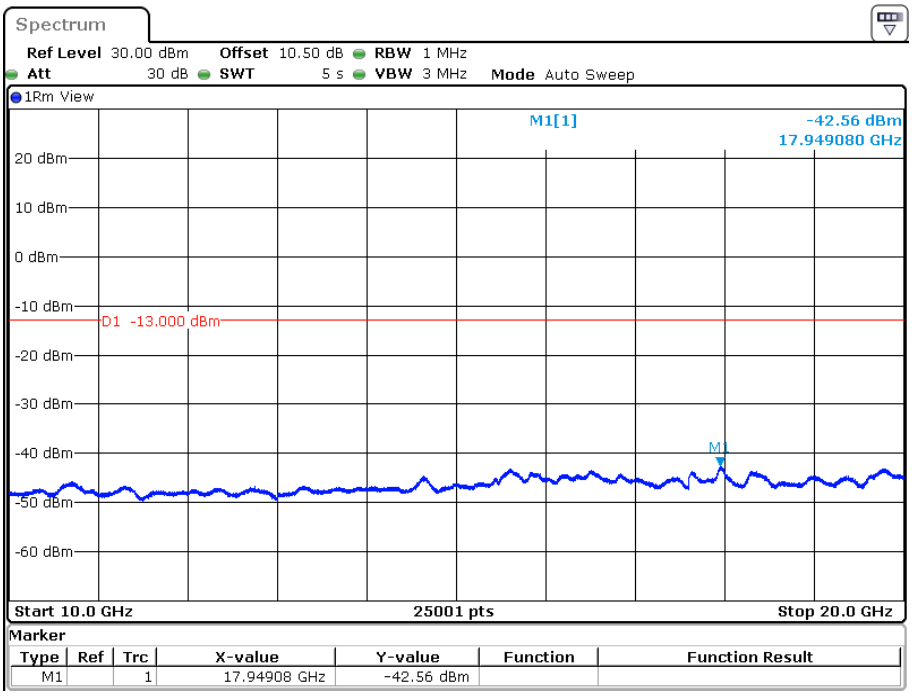
High Channel:

30 MHz – 10 GHz (WCDMA Mode)



Fundamental test

10 GHz – 20 GHz (WCDMA Mode)



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

FCC § 2.1053; § 22.917 (a);§ 24.238 (a); §27.53; §90.691- SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, §22.917(a)& § 24.238(a) &§ 27.53&§90.691.

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:	27~27.6 ℃
Relative Humidity:	56~62 %
ATM Pressure:	101.0 kPa

The testing was performed by Level Li on 2022-07-29 for below 1GHz and by Leo Li on 2022-07-10 for above 1GHz.

Test mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

The worst case is as below:

Cellular Band (Part 22H)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM 850								
Test frequency range: 30MHz-10GHz								
Low Channel								
961.34	-62.18	311	2.4	H	10	-52.18	-13	-39.18
961.34	-63.57	228	1.3	V	11.7	-51.87	-13	-38.87
1648.4	-37.20	137	2.4	H	3.5	-33.70	-13	-20.70
1648.4	-43.80	268	2.4	V	3.1	-40.70	-13	-27.70
2472.6	-40.70	9	1.1	H	6.6	-34.10	-13	-21.10
2472.6	-42.20	82	2.2	V	5.8	-36.40	-13	-23.40
3296.8	-30.20	310	2.4	H	6.4	-23.80	-13	-10.80
3296.8	-39.30	99	2	V	5.7	-33.60	-13	-20.60
Middle Channel								
961.75	-62.3	232	1.7	H	10	-52.3	-13	-39.3
961.75	-63.78	272	2.2	V	11.7	-52.08	-13	-39.08
1673.2	-35.20	283	1.8	H	3.8	-31.40	-13	-18.40
1673.2	-42.10	232	1.5	V	3.1	-39.00	-13	-26.00
2509.8	-42.40	2	2.1	H	6.2	-36.20	-13	-23.20
2509.8	-43.70	21	1.7	V	5.6	-38.10	-13	-25.10
3346.4	-27.60	333	1.5	H	6.6	-21.00	-13	-8.00
3346.4	-36.80	187	2	V	5.4	-31.40	-13	-18.40
High Channel								
961.7	-61.79	216	1.8	H	10	-51.79	-13	-38.79
961.7	-63.49	79	2.2	V	11.7	-51.79	-13	-38.79
1697.6	-36.90	319	1.9	H	4.1	-32.80	-13	-19.80
1697.6	-42.40	76	2.4	V	3.1	-39.30	-13	-26.30
2546.4	-39.90	182	1.5	H	6.1	-33.80	-13	-20.80
2546.4	-46.30	315	2.0	V	5.8	-40.50	-13	-27.50
3395.2	-27.30	335	1.7	H	6.2	-21.10	-13	-8.10
3395.2	-35.00	339	2.3	V	5.4	-29.60	-13	-16.60

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 5								
Test frequency range: 30MHz-10GHz								
Low Channel								
1652.8	-56.70	240	2.5	H	3.5	-53.20	-13	-40.20
1652.8	-55.00	243	2.3	V	3.1	-51.90	-13	-38.90
961.56	-62.37	179	1.3	H	10	-52.37	-13	-39.37
961.56	-63.12	330	2.3	V	11.7	-51.42	-13	-38.42
Middle Channel								
1672.8	-54.30	170	2.4	H	3.8	-50.50	-13	-37.50
1672.8	-51.70	139	1.5	V	3.1	-48.60	-13	-35.60
961.51	-62.68	270	1.9	H	10	-52.68	-13	-39.68
961.51	-63.96	251	2.1	V	11.7	-52.26	-13	-39.26
High Channel								
1693.2	-57.40	311	1.7	H	4.1	-53.30	-13	-40.30
1693.2	-54.60	85	1.1	V	3.1	-51.50	-13	-38.50
961.83	-61.87	174	1.2	H	10	-51.87	-13	-38.87
961.83	-63.05	282	2.4	V	11.7	-51.35	-13	-38.35

PCS Band (Part 24E)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
GSM 1900								
Test frequency range: 30MHz-20GHz								
Low Channel								
961.92	-62.72	260	2.2	H	10	-52.72	-13	-39.72
961.92	-62.97	346	1.7	V	11.7	-51.27	-13	-38.27
3700.4	-40.30	58	1.1	H	8.1	-32.20	-13	-19.20
3700.4	-45.70	269	1.2	V	7.6	-38.10	-13	-25.10
5550.6	-43.80	112	2.2	H	9.6	-34.20	-13	-21.20
5550.6	-47.40	76	1.4	V	9.1	-38.30	-13	-25.30
Middle Channel								
962.18	-62.9	66	2	H	10	-52.9	-13	-39.9
962.18	-63.58	264	2	V	11.7	-51.88	-13	-38.88
3760	-44.40	169	1.8	H	8.8	-35.60	-13	-22.60
3760	-47.30	263	1.2	V	8	-39.30	-13	-26.30
5640	-44.50	129	2.1	H	10.2	-34.30	-13	-21.30
5640	-47.00	261	1.5	V	9.4	-37.60	-13	-24.60
High Channel								
961.36	-62.48	34	2.4	H	10	-52.48	-13	-39.48
961.36	-62.79	88	1.3	V	11.7	-51.09	-13	-38.09
3819.6	-43.70	58	2.2	H	8.7	-35.00	-13	-22.00
3819.6	-48.30	315	2	V	7.9	-40.40	-13	-27.40
5729.4	-44.10	225	1.7	H	10.6	-33.50	-13	-20.50
5729.4	-47.50	18	2.2	V	10.2	-37.30	-13	-24.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2								
Test frequency range: 30MHz-20GHz								
Low Channel (1852.4MHz)								
3704.8	-54.50	189	2.0	H	8.1	-46.40	-13	-33.40
3704.8	-53.80	237	1.8	V	7.6	-46.20	-13	-33.20
961.6	-62.62	75	2.4	H	10	-52.62	-13	-39.62
961.6	-63.58	181	1.7	V	11.7	-51.88	-13	-38.88
Middle Channel								
3760	-55.20	43	1.2	H	8.8	-46.40	-13	-33.40
3760	-54.50	292	1.3	V	8	-46.50	-13	-33.50
962.24	-62.72	296	1.2	H	10	-52.72	-13	-39.72
962.24	-63.87	250	2.2	V	11.7	-52.17	-13	-39.17
High Channel								
3815.2	-54.10	288	1.6	H	8.7	-45.40	-13	-32.40
3815.2	-54.70	257	2.3	V	7.9	-46.80	-13	-33.80
961.41	-62.51	146	1.3	H	10	-52.51	-13	-39.51
961.41	-63.16	169	1.8	V	11.7	-51.46	-13	-38.46

AWS Band (Part 27E)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 4								
Test frequency range: 30MHz-20GHz								
LOW Channel								
3424.8	-51.00	142	1.3	H	6.4	-44.60	-13	-31.60
3424.8	-50.60	132	1.5	V	5.8	-44.80	-13	-31.80
961.64	-61.88	186	1.9	H	10	-51.88	-13	-38.88
961.64	-62.83	218	1.1	V	11.7	-51.13	-13	-38.13
Middle Channel								
3465.2	-51	234	1	H	7	-44.00	-13	-31.00
3465.2	-51.3	100	1.9	V	6.2	-45.10	-13	-32.10
961.36	-62.73	306	1.1	H	10	-52.73	-13	-39.73
961.36	-63.91	340	1.9	V	11.7	-52.21	-13	-39.21
High Channel								
3505.2	-51.70	198	1.1	H	7.8	-43.90	-13	-30.90
3505.2	-51.30	353	1.2	V	6.5	-44.80	-13	-31.80
961.46	-62.28	326	1.7	H	10	-52.28	-13	-39.28
961.46	-63.31	344	1.2	V	11.7	-51.61	-13	-38.61

LTE Band: *(Pre-scan with all the bandwidth and modulation, and 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)				
LTE Band2								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, Low Channel								
962.02	-62.36	210	1.5	H	10	-52.36	-13	-39.36
962.02	-63.6	13	1.3	V	11.7	-51.9	-13	-38.9
3701.4	-49.50	162	2.1	H	8.1	-41.40	-13	-28.40
3701.4	-50.50	331	1.2	V	7.6	-42.90	-13	-29.90
QPSK, 1.4MHz, Middle Channel								
962.25	-62.28	106	2.1	H	10	-52.28	-13	-39.28
962.25	-63.69	92	2.1	V	11.7	-51.99	-13	-38.99
3760	-46.90	88	2.1	H	8.8	-38.10	-13	-25.10
3760	-49.50	103	2.1	V	8	-41.50	-13	-28.50
QPSK, 1.4MHz, High Channel								
961.65	-62.3	267	1.7	H	10	-52.3	-13	-39.3
961.65	-62.7	22	2	V	11.7	-51	-13	-38
3818.6	-45.90	31	1.3	H	8.7	-37.20	-13	-24.20
3818.6	-47.30	256	1.2	V	7.9	-39.40	-13	-26.40

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 4								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, Low Channel								
961.84	-62.07	26	1.3	H	10	-52.07	-13	-39.07
961.84	-63.61	201	1.8	V	11.7	-51.91	-13	-38.91
3421.4	-50.30	283	1.9	H	6.4	-43.90	-13	-30.90
3421.4	-50.50	293	2.2	V	5.8	-44.70	-13	-31.70
QPSK, 1.4MHz, Middle Channel								
962.14	-63.03	155	2.1	H	10	-53.03	-13	-40.03
962.14	-63.91	57	1.4	V	11.7	-52.21	-13	-39.21
3465	-50.5	87	2	H	7	-43.50	-13	-30.50
3465	-51.2	38	2	V	6.2	-45.00	-13	-32.00
QPSK, 1.4MHz, High Channel								
961.47	-62.23	354	1.8	H	10	-52.23	-13	-39.23
961.47	-63.65	257	1.7	V	11.7	-51.95	-13	-38.95
3508.6	-50.20	115	2.2	H	7.8	-42.40	-13	-29.40
3508.6	-50.80	125	1.4	V	6.5	-44.30	-13	-31.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band5								
Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz, Low Channel								
961.95	-62.64	214	2	H	10	-52.64	-13	-39.64
961.95	-63.73	333	2.2	V	11.7	-52.03	-13	-39.03
1649.4	-53.40	193	1.8	H	3.5	-49.90	-13	-36.90
1649.4	-56.50	176	2.4	V	3.1	-53.40	-13	-40.40
2474.1	-32.40	211	1.4	H	6.6	-25.80	-13	-12.80
2474.1	-34.20	151	2.1	V	5.8	-28.40	-13	-15.40
3298.8	-52.60	349	1.6	H	6.4	-46.20	-13	-33.20
3298.8	-51.00	168	2	V	5.7	-45.30	-13	-32.30
QPSK, 1.4MHz, Middle Channel								
962.22	-62.67	308	1.4	H	10	-52.67	-13	-39.67
962.22	-63.84	281	1.7	V	11.7	-52.14	-13	-39.14
1673.0	-51.30	262	2	H	3.8	-47.50	-13	-34.50
1673.0	-53.80	185	2.3	V	3.1	-50.70	-13	-37.70
2509.5	-30.90	23	1.7	H	6.2	-24.70	-13	-11.70
2509.5	-32.80	38	2.3	V	5.6	-27.20	-13	-14.20
3346.0	-52.50	13	1.6	H	6.6	-45.90	-13	-32.90
3346.0	-50.50	121	2.2	V	5.4	-45.10	-13	-32.10
QPSK, 1.4MHz, High Channel								
962.07	-62.65	130	1.7	H	10	-52.65	-13	-39.65
962.07	-63.26	173	2.1	V	11.7	-51.56	-13	-38.56
1696.6	-51.10	246	1.1	H	4.1	-47.00	-13	-34.00
1696.6	-52.60	69	2.1	V	3.1	-49.50	-13	-36.50
2544.9	-31.10	155	2.2	H	6.1	-25.00	-13	-12.00
2544.9	-32.10	344	1.8	V	5.8	-26.30	-13	-13.30
3393.2	-51.90	258	1.8	H	6.2	-45.70	-13	-32.70
3393.2	-50.10	298	1.7	V	5.4	-44.70	-13	-31.70

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 Band7								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz, Low Channel								
960.03	-62.23	4	1.2	H	10	-52.23	-25	-27.23
960.03	-63.03	278	1.8	V	11.7	-51.33	-25	-26.33
5005	-55.20	46	2.1	H	10.8	-44.40	-25	-19.40
5005	-55.20	360	1.9	V	10.2	-45.00	-25	-20.00
7507.5	-59.40	141	2.2	H	20.4	-39.00	-25	-14.00
7507.5	-61.60	280	1.4	V	20.1	-41.50	-25	-16.50
QPSK, 5MHz, Middle Channel								
960.23	-62.66	100	1.4	H	10	-52.66	-25	-27.66
960.23	-63.31	18	1.7	V	11.7	-51.61	-25	-26.61
5070	-54.50	161	1.5	H	11.1	-43.40	-25	-18.40
5070	-56.10	235	2.1	V	10.8	-45.30	-25	-20.30
7605	-61.80	281	2	H	21.2	-40.60	-25	-15.60
7605	-63.20	149	1.8	V	20.1	-43.10	-25	-18.10
QPSK, 5MHz, High Channel								
960.03	-62.23	4	1.2	H	10	-52.23	-25	-27.23
960.03	-63.03	278	1.8	V	11.7	-51.33	-25	-26.33
5135	-52.90	136	2.2	H	11.3	-41.60	-25	-16.60
5135	-55.00	333	2.3	V	10.8	-44.20	-25	-19.20
7702.5	-60.70	295	1.4	H	21.2	-39.50	-25	-14.50
7702.5	-63.60	318	1.1	V	21	-42.60	-25	-17.60

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								
QPSK, 5MHz, Low Channel								
961.79	-62.42	339	2.3	H	10	-52.42	-13	-39.42
961.79	-63.53	168	1.7	V	11.7	-51.83	-13	-38.83
1399.4	-60.5	84	1.1	H	5.9	-54.60	-13	-41.60
1399.4	-61.8	44	1	V	5.9	-55.90	-13	-42.90
2099.1	-39.5	134	1.7	H	6.3	-33.20	-13	-20.20
2099.1	-42.2	164	2.3	V	5.1	-37.10	-13	-24.10
2798.8	-57.3	95	2.2	H	6.7	-50.60	-13	-37.60
2798.8	-56.3	124	1	V	6.7	-49.60	-13	-36.60
QPSK, 5MHz, Middle Channel								
961.91	-62.7	166	1.3	H	10	-52.7	-13	-39.7
961.91	-63.46	277	2.3	V	11.7	-51.76	-13	-38.76
1415	-61.5	60	2	H	5.9	-55.60	-13	-42.60
1415	-62.5	167	2.2	V	5.9	-56.60	-13	-43.60
2122.5	-38.2	82	2.3	H	6.3	-31.90	-13	-18.90
2122.5	-42.4	235	2	V	5.1	-37.30	-13	-24.30
2830	-57.2	250	1.8	H	6.7	-50.50	-13	-37.50
2830	-56	343	2	V	6.7	-49.30	-13	-36.30
QPSK, 5MHz, High Channel								
961.61	-62.03	108	1.4	H	10	-52.03	-13	-39.03
961.61	-62.95	194	2.2	V	11.7	-51.25	-13	-38.25
1430.6	-60.9	272	2.4	H	5.9	-55.00	-13	-42.00
1430.6	-62.6	148	1.3	V	5.9	-56.70	-13	-43.70
2145.9	-37.2	25	2	H	6.3	-30.90	-13	-17.90
2145.9	-41	128	2.1	V	5.1	-35.90	-13	-22.90
2861.2	-57.3	298	2	H	6.7	-50.60	-13	-37.60
2861.2	-56.5	337	1.8	V	6.7	-49.80	-13	-36.80

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 13								
Test frequency range: 30MHz-10GHz								
QPSK, 5MHz , Low Channel								
961.35	-62.82	314	1.7	H	10	-52.82	-13	-39.82
961.35	-63.59	147	1.3	V	11.7	-51.89	-13	-38.89
1559	-49.39	359	2.1	H	-2.81	-52.20	-40	-12.20
1559	-47.61	155	1.2	V	-2.89	-50.50	-40	-10.50
2338.5	-27.82	270	1.9	H	1.22	-26.60	-13	-13.60
2338.5	-30.18	117	2.3	V	1.18	-29.00	-13	-16.00
3118	-48.74	22	1.5	H	2.84	-45.90	-13	-32.90
3118	-49.07	184	2.3	V	2.97	-46.10	-13	-33.10
QPSK, 5MHz , Middle Channel								
960.37	-63.22	262	1	H	10	-53.22	-13	-40.22
960.37	-63.59	172	1.5	V	11.7	-51.89	-13	-38.89
1564	-49.09	359	2.1	H	-2.81	-51.90	-40	-11.90
1564	-47.21	155	1.2	V	-2.89	-50.10	-40	-10.10
2346	-26.62	270	1.9	H	1.22	-25.40	-13	-12.40
2346	-29.08	117	2.3	V	1.18	-27.90	-13	-14.90
3128	-48.24	22	1.5	H	2.84	-45.40	-13	-32.40
3128	-48.97	184	2.3	V	2.97	-46.00	-13	-33.00
QPSK, 5MHz , High Channel								
959.76	-61.95	130	2	H	10	-51.95	-13	-38.95
959.76	-62.8	116	2.5	V	11.7	-51.1	-13	-38.1
1569	-48.69	359	2.1	H	-2.81	-51.50	-40	-11.50
1569	-46.41	155	1.2	V	-2.89	-49.30	-40	-9.30
2353.5	-25.32	270	1.9	H	1.22	-24.10	-13	-11.10
2353.5	-26.58	117	2.3	V	1.18	-25.40	-13	-12.40
3138	-47.94	22	1.5	H	2.84	-45.10	-13	-32.10
3138	-48.87	184	2.3	V	2.97	-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 17								
Test frequency range: 30MHz-10GHz								
QPSK, 5MHz , Low Channel								
961.54	-62.12	29	1.6	H	10	-52.12	-13	-39.12
961.54	-63.39	217	2.3	V	11.7	-51.69	-13	-38.69
1413	-56.07	162	2.5	H	-0.53	-56.60	-13	-43.60
1413	-56.46	18	1.5	V	-0.74	-57.20	-13	-44.20
2119.5	-24.91	228	1.7	H	-0.89	-25.80	-13	-12.80
2119.5	-30.08	151	1.2	V	-1.12	-31.20	-13	-18.20
2826	-52.94	345	1.4	H	2.24	-50.70	-13	-37.70
2826	-52.43	8	1.8	V	2.33	-50.10	-13	-37.10
QPSK, 5MHz , Middle Channel								
960.32	-62.45	89	1	H	10	-52.45	-13	-39.45
960.32	-63.89	27	2.3	V	11.7	-52.19	-13	-39.19
1420	-55.87	333	1.6	H	-0.53	-56.40	-13	-43.40
1420	-56.26	19	1.6	V	-0.74	-57.00	-13	-44.00
2130	-23.41	230	2.3	H	-0.89	-24.30	-13	-11.30
2130	-28.98	342	1.4	V	-1.12	-30.10	-13	-17.10
2840	-53.04	274	1.1	H	2.24	-50.80	-13	-37.80
2840	-52.63	288	1.9	V	2.33	-50.30	-13	-37.30
QPSK, 5MHz , High Channel								
959.86	-62.37	4	1.8	H	10	-52.37	-13	-39.37
959.86	-63.33	41	1.2	V	11.7	-51.63	-13	-38.63
1427	-54.67	64	2.2	H	-0.53	-55.20	-13	-42.20
1427	-55.36	154	1.8	V	-0.74	-56.10	-13	-43.10
2140.5	-21.61	86	1	H	-0.89	-22.50	-13	-9.50
2140.5	-27.28	204	1.2	V	-1.12	-28.40	-13	-15.40
2854	-52.74	79	1.5	H	2.24	-50.50	-13	-37.50
2854	-52.33	345	2.1	V	2.33	-50.00	-13	-37.00

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 25								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, Low Channel								
960.63	-62.62	172	1.8	H	10	-52.62	-13	-39.62
960.63	-63.18	56	1.2	V	11.7	-51.48	-13	-38.48
3701.4	-48.70	113	2.3	H	8.1	-40.60	-13	-27.60
3701.4	-50.00	168	1.5	V	7.6	-42.40	-13	-29.40
QPSK, 1.4MHz, Middle Channel								
960.63	-62.94	20	1.6	H	10	-52.94	-13	-39.94
960.63	-63.86	296	1.2	V	11.7	-52.16	-13	-39.16
3765	-48.80	349	1.1	H	8.8	-40.00	-13	-27.00
3765	-49.60	306	2	V	8	-41.60	-13	-28.60
QPSK, 1.4MHz, High Channel								
959.98	-62.42	152	1.2	H	10	-52.42	-13	-39.42
959.98	-63.22	39	2.1	V	11.7	-51.52	-13	-38.52
3828.6	-47.70	280	2.2	H	8.7	-39.00	-13	-26.00
3828.6	-48.50	316	1.4	V	7.9	-40.60	-13	-27.60

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 26								
Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz, Low Channel								
961.13	-62.23	342	2.1	H	10	-52.23	-13	-39.23
961.13	-63.58	80	2	V	11.7	-51.88	-13	-38.88
1629.4	-44.90	177	2.3	H	3.5	-41.40	-13	-28.40
1629.4	-50.70	70	1.8	V	3.1	-47.60	-13	-34.60
2444.1	-22.80	258	1.7	H	6.6	-16.20	-13	-3.20
2444.1	-23.20	202	2.5	V	5.8	-17.40	-13	-4.40
3258.8	-52.20	88	2.3	H	6.4	-45.80	-13	-32.80
3258.8	-51.10	144	2.3	V	5.7	-45.40	-13	-32.40
QPSK, 1.4MHz, Middle Channel								
960.83	-63.13	229	2	H	10	-53.13	-13	-40.13
960.83	-63.83	141	1.2	V	11.7	-52.13	-13	-39.13
1638.0	-42.60	134	1.8	H	3.5	-39.10	-13	-26.10
1638.0	-48.10	310	1.2	V	3.1	-45.00	-13	-32.00
2457.0	-22.90	131	2.1	H	6.6	-16.30	-13	-3.30
2457.0	-23.60	177	1.2	V	5.8	-17.80	-13	-4.80
3276.0	-52.40	273	2.5	H	6.4	-46.00	-13	-33.00
3276.0	-51.30	310	1	V	5.7	-45.60	-13	-32.60
QPSK, 1.4MHz, High Channel								
960.04	-62.1	19	2.2	H	10	-52.1	-13	-39.1
960.04	-63.45	321	1.4	V	11.7	-51.75	-13	-38.75
1646.6	-42.00	296	1.8	H	3.8	-38.20	-13	-25.20
1646.6	-47.00	153	1.7	V	3.1	-43.90	-13	-30.90
2469.9	-22.20	329	1.4	H	6.2	-16.00	-13	-3.00
2469.9	-22.90	234	1.3	V	5.6	-17.30	-13	-4.30
3293.2	-52.40	210	1.6	H	6.6	-45.80	-13	-32.80
3293.2	-50.40	344	2.2	V	5.4	-45.00	-13	-32.00

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 41								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz, Low Channel								
960.92	-62.36	143	1.7	H	10	-52.36	-25	-27.36
960.92	-63.7	167	1.9	V	11.7	-52	-25	-27
4997	-54.6	135	2.4	H	10.8	-43.80	-25	-18.80
4997	-54.5	124	2.3	V	10.1	-44.40	-25	-19.40
QPSK, 5MHz, Middle Channel								
960.28	-62.48	178	1.7	H	10	-52.48	-25	-27.48
960.28	-63.8	227	1.5	V	11.7	-52.1	-25	-27.1
5186	-54.3	165	2.3	H	10.5	-43.80	-25	-18.80
5186	-53.5	167	1	V	10	-43.50	-25	-18.50
QPSK, 5MHz, High Channel								
959.32	-61.67	234	1.7	H	10	-51.67	-25	-26.67
959.32	-63.37	26	2.4	V	11.7	-51.67	-25	-26.67
5375	-51.5	341	2.1	H	9.5	-42.00	-25	-17.00
5375	-51.1	27	2	V	8.9	-42.20	-25	-17.20

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 66								
Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, Low Channel								
961.58	-62.69	272	1.1	H	10	-52.69	-13	-39.69
961.58	-63.18	281	2.1	V	11.7	-51.48	-13	-38.48
3421.4	-49.50	220	1.8	H	6.4	-43.10	-13	-30.10
3421.4	-49.50	339	2.4	V	5.8	-43.70	-13	-30.70
QPSK, 1.4MHz, Middle Channel								
960.11	-62.7	123	1.7	H	10	-52.7	-13	-39.7
960.11	-64.08	159	1.9	V	11.7	-52.38	-13	-39.38
3490	-49.4	28	1.1	H	7	-42.40	-13	-29.40
3490	-50.5	322	1.2	V	6.2	-44.30	-13	-31.30
QPSK, 1.4MHz, High Channel								
959.21	-61.67	299	2.1	H	10	-51.67	-13	-38.67
959.21	-63.72	65	1.9	V	11.7	-52.02	-13	-39.02
3558.6	-50.10	348	1.5	H	7.8	-42.30	-13	-29.30
3558.6	-49.90	71	1.9	V	7.0	-42.90	-13	-29.90

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 71								
Test frequency range: 30MHz-10GHz								
QPSK, 5MHz, Low Channel								
960.9	-62.93	353	1.2	H	10	-52.93	-13	-39.93
960.9	-63.64	141	1.4	V	11.7	-51.94	-13	-38.94
1331.0	-61.4	221	2.3	H	6.4	-55.00	-13	-42.00
1331.0	-61.2	179	1.2	V	5.4	-55.80	-13	-42.80
1996.5	-37.3	237	2.1	H	4.3	-33.00	-13	-20.00
1996.5	-39.6	160	2.2	V	3.3	-36.30	-13	-23.30
QPSK, 5MHz, Middle Channel								
960.63	-63.27	260	1.3	H	10	-53.27	-13	-40.27
960.63	-63.57	211	1.3	V	11.7	-51.87	-13	-38.87
1361.0	-59.7	264	2.1	H	6.3	-53.40	-13	-40.40
1361.0	-60.2	34	1.6	V	5.7	-54.50	-13	-41.50
2041.5	-36.8	269	1.5	H	4.9	-31.90	-13	-18.90
2041.5	-38.7	130	1.1	V	3.9	-34.80	-13	-21.80
QPSK, 5MHz, High Channel								
959.95	-62.35	119	1.4	H	10	-52.35	-13	-39.35
959.95	-63.04	110	1.4	V	11.7	-51.34	-13	-38.34
1391.0	-58.5	352	2.5	H	5.9	-52.60	-13	-39.60
1391.0	-59.7	127	1.5	V	5.9	-53.80	-13	-40.80
2086.5	-38.2	97	1.3	H	6.3	-31.90	-13	-18.90
2086.5	-40.2	43	2.3	V	5.1	-35.10	-13	-22.10

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

FCC§ 22.917 (a);§ 24.238 (a); §27.53(c) (g) (h)(m); §90.691 - 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 (g)(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), 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 2490.5 MHz.

According to § 90.691, (a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

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

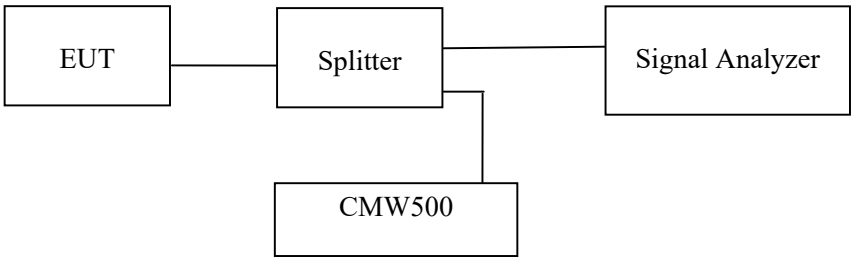
(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section

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



Test Data

Environmental Conditions

Temperature:	25~28 ℃
Relative Humidity:	55~60 %
ATM Pressure:	101.0 kPa

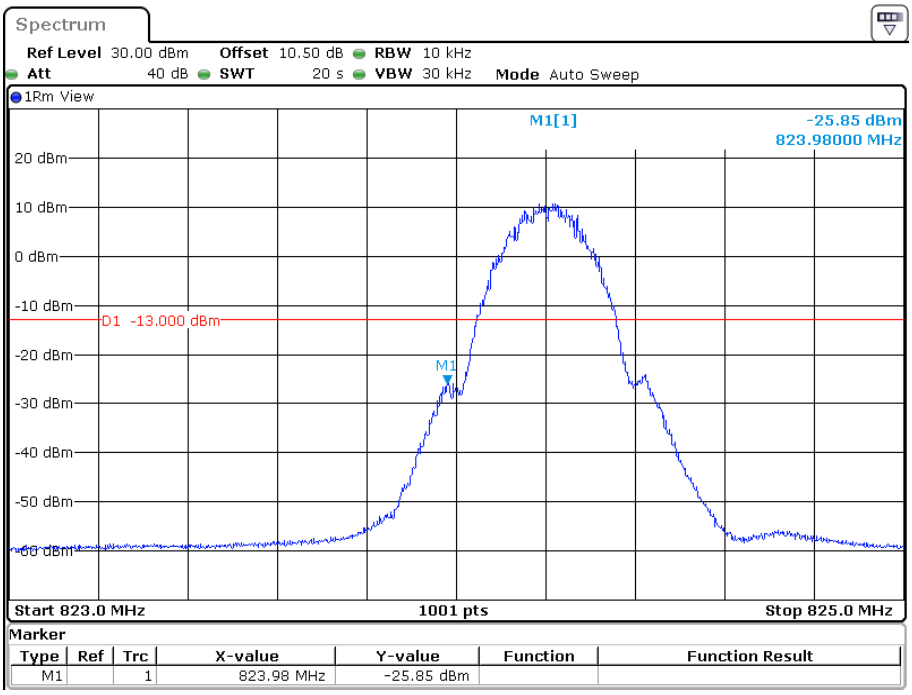
The testing was performed by Cat Kang from 2022-07-28 to 2022-08-31.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

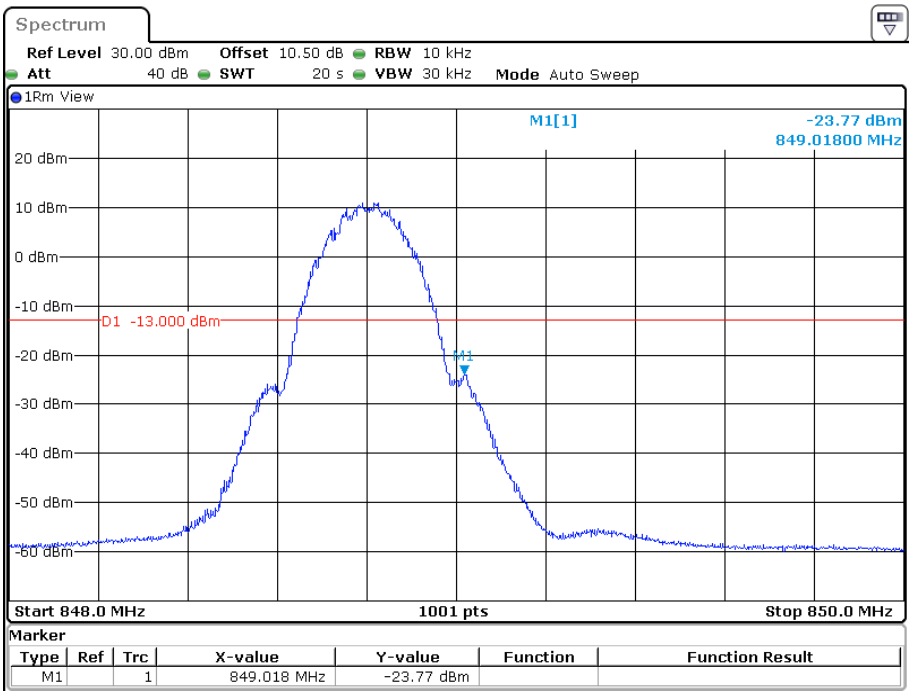
Please refer to the following plots.

Cellular Band, Left Band Edge for GSM (GMSK) Mode



Date: 5.AUG.2022 10:03:50

Cellular Band, Right Band Edge for GSM (GMSK) Mode



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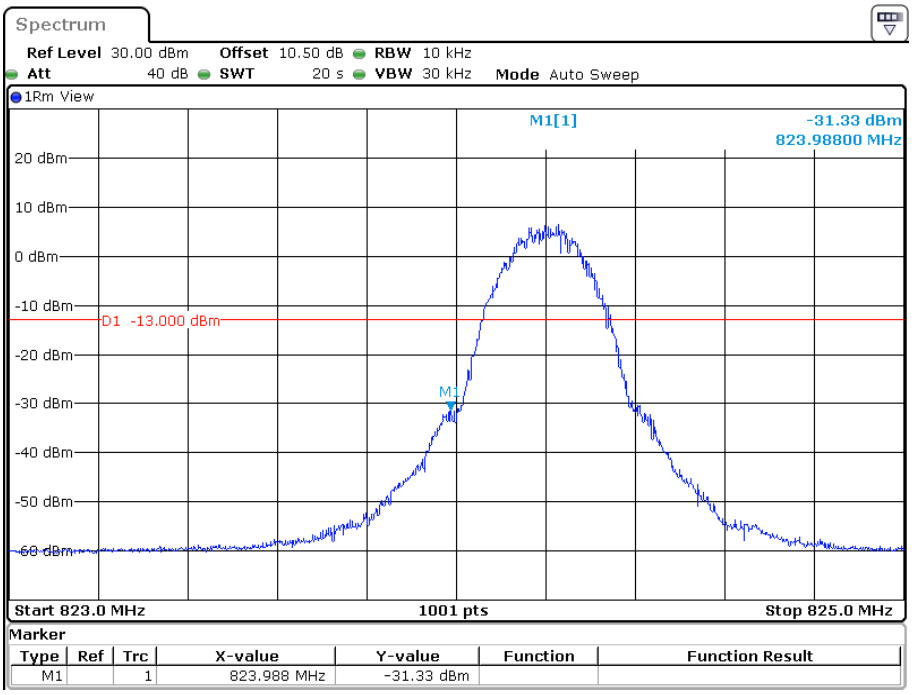
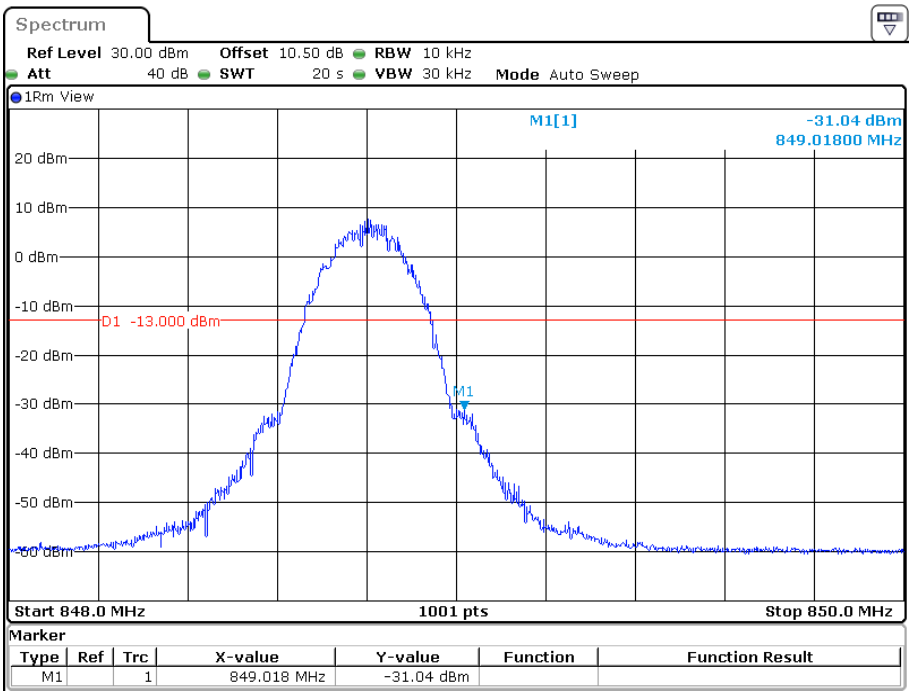
Cellular Band, Left Band Edge for EDGE Mode



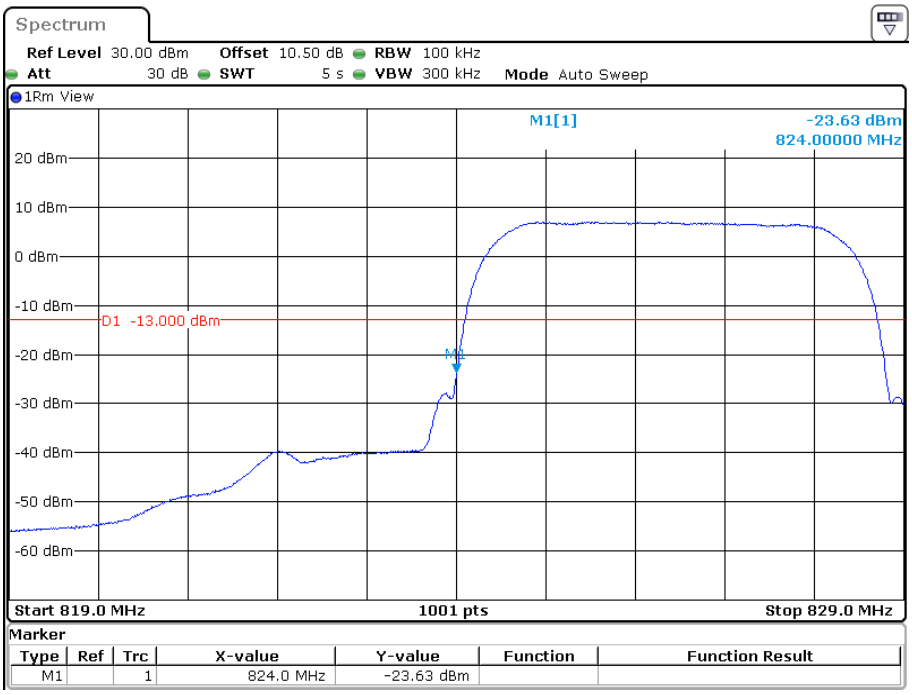
Date: 5.AUG.2022 09:30:09

Cellular Band, Right Band Edge for EDGE Mode



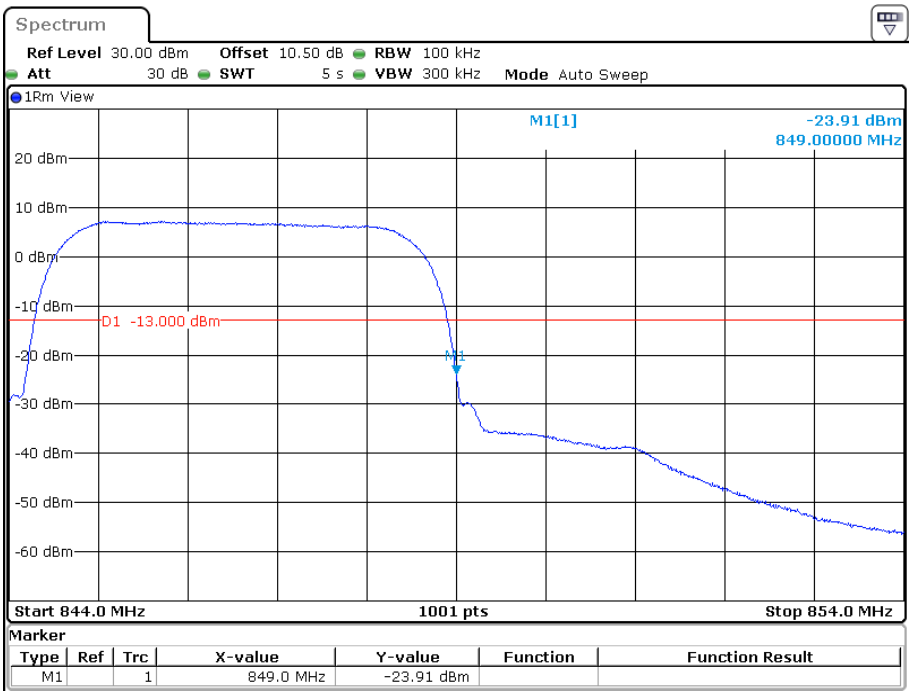
Date: 5.AUG.2022 09:45:56

Cellular Band, Left Band Edge for RMC (BPSK) Mode



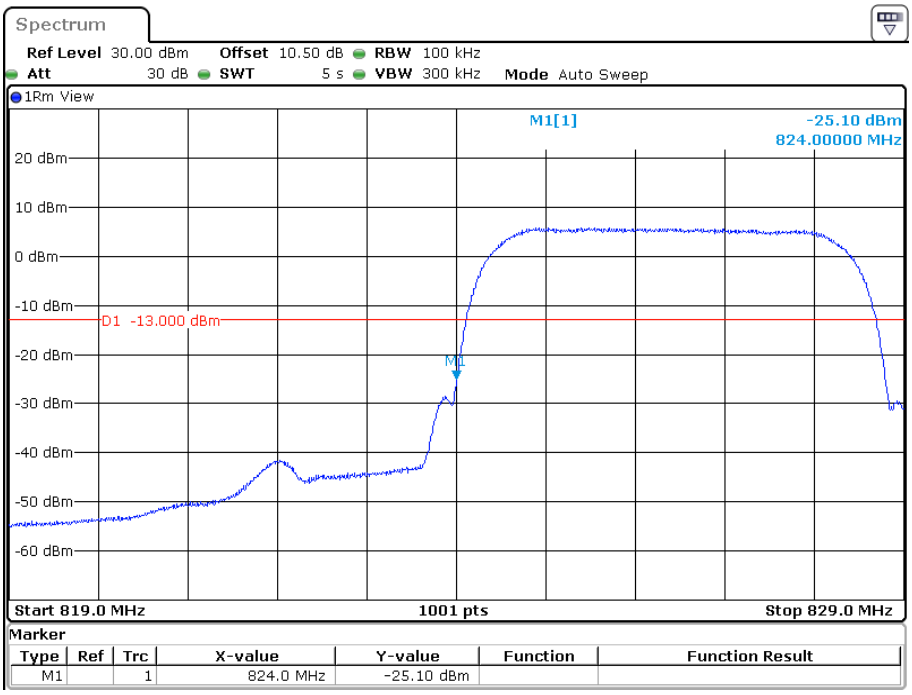
Date: 3.AUG.2022 16:09:04

Cellular Band, Right Band Edge for RMC (BPSK) Mode



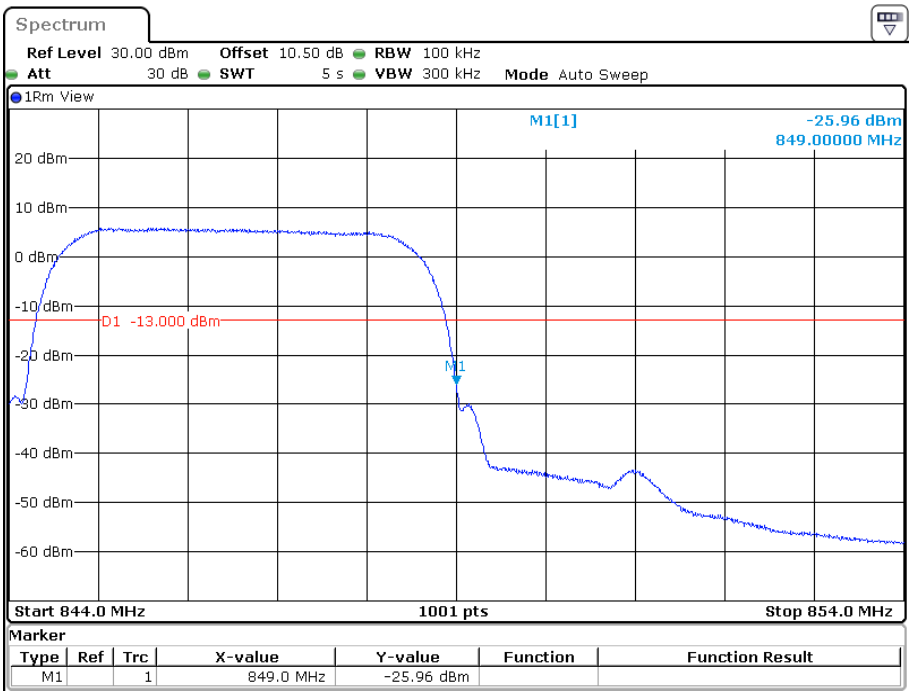
Date: 3.AUG.2022 16:16:58

Cellular Band, Left Band Edge for HSDPA(16QAM) Mode



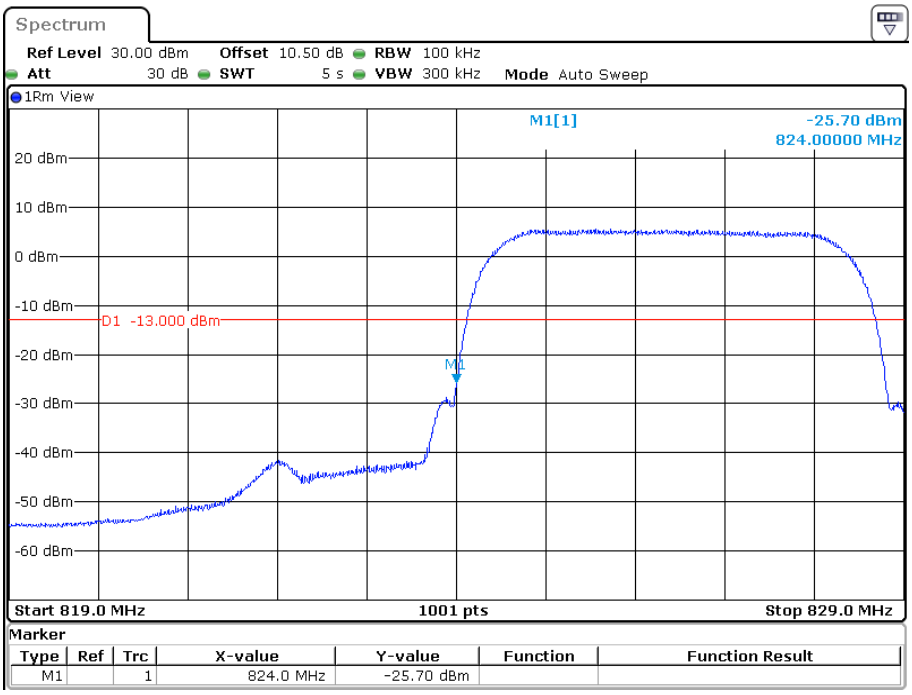
Date: 3.AUG.2022 17:34:16

Cellular Band, Right Band Edge for HSDPA (16QAM) Mode



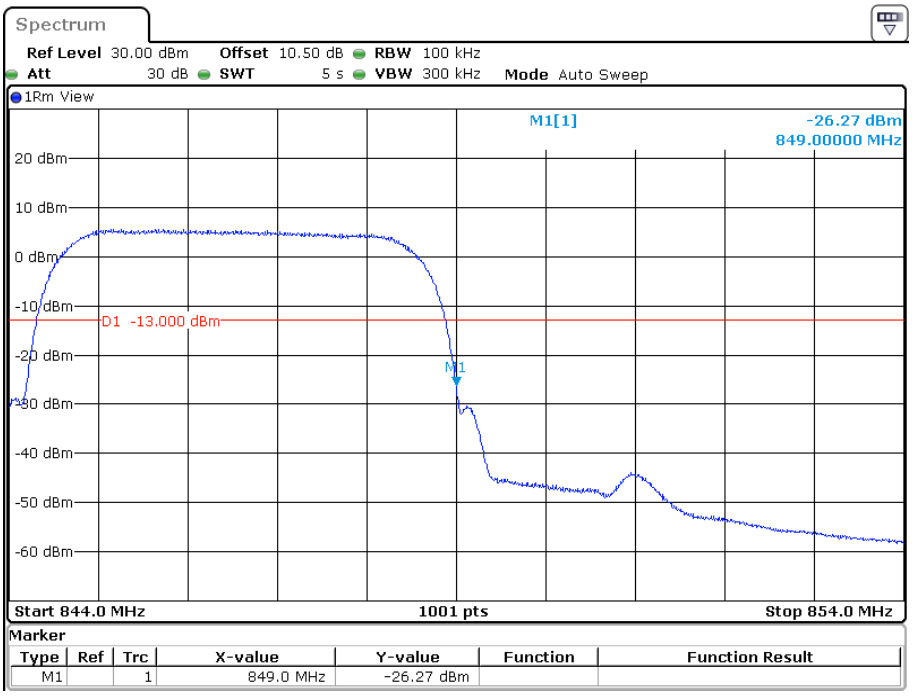
Date: 3.AUG.2022 17:14:25

Cellular Band, Left Band Edge for HSUPA (BPSK) Mode



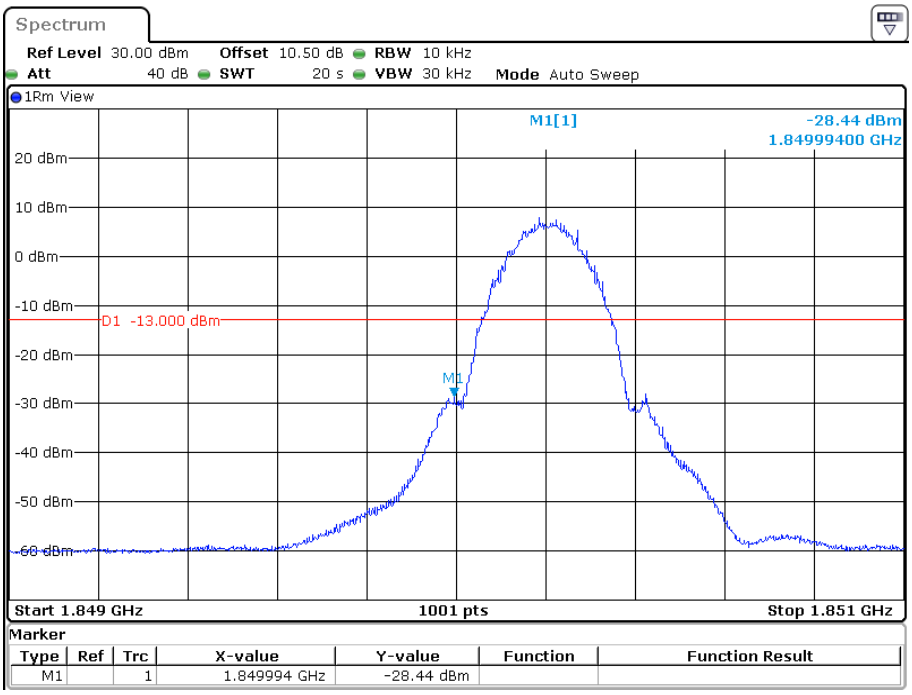
Date: 3.AUG.2022 16:59:59

Cellular Band, Right Band Edge for HSUPA (BPSK) Mode



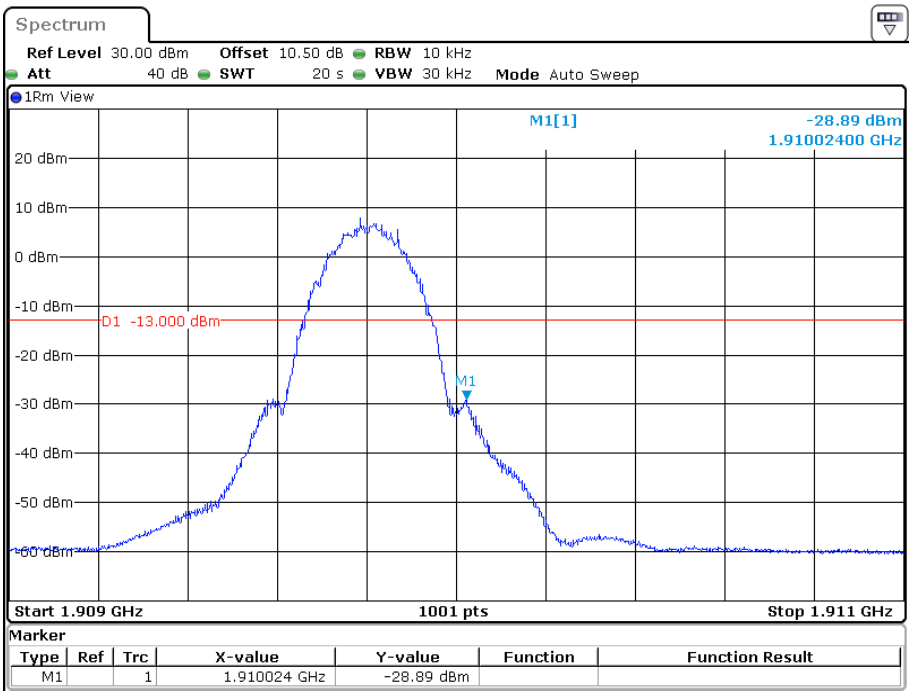
Date: 3.AUG.2022 17:08:17

PCS Band, Left Band Edge for GSM (GMSK) Mode



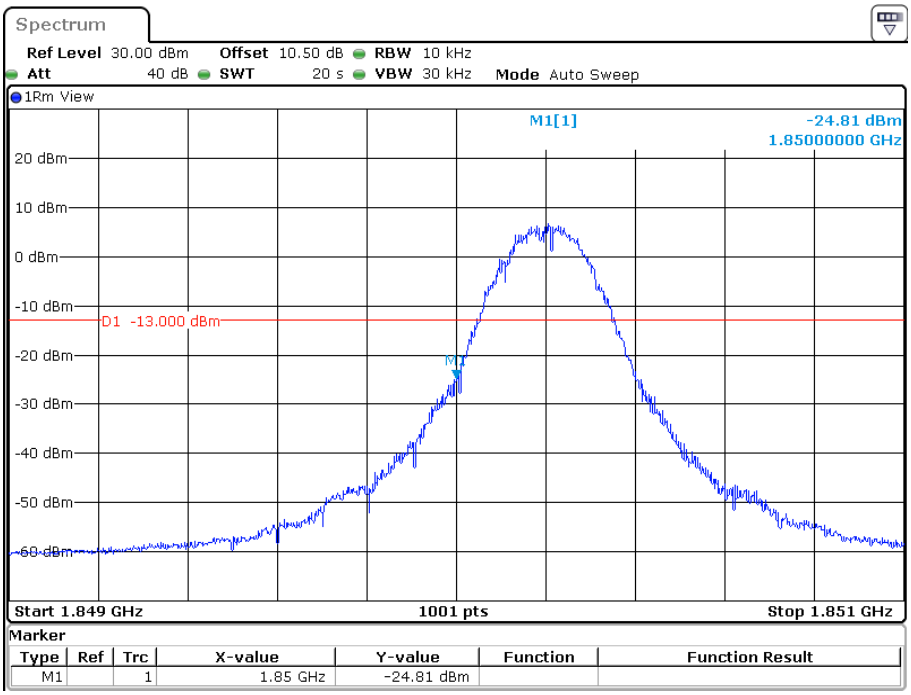
Date: 5.AUG.2022 10:41:26

PCS Band, Right Band Edge for GSM (GMSK) Mode



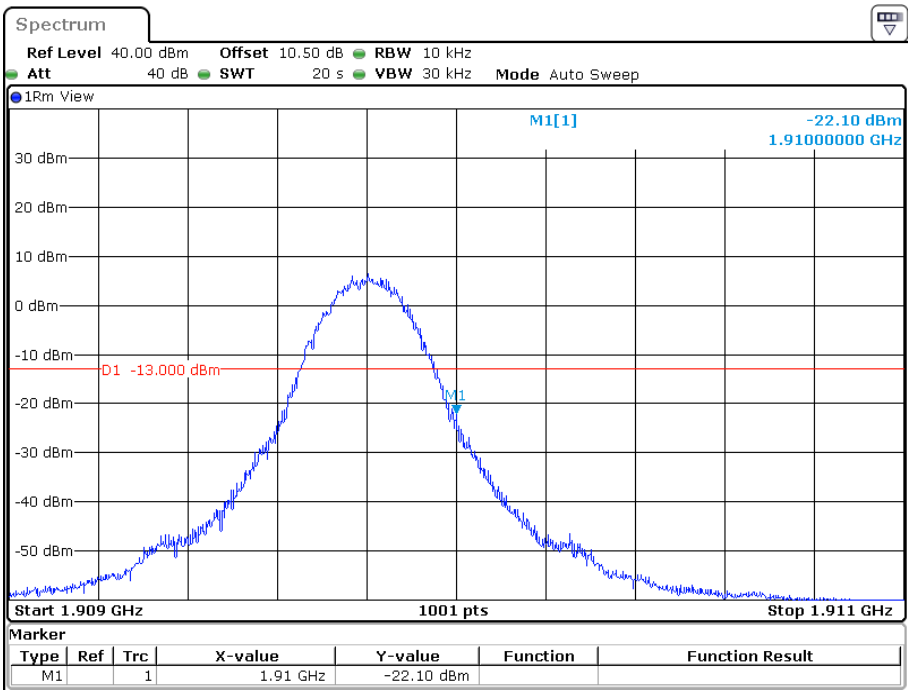
Date: 5.AUG.2022 10:53:07

Cellular Band, Left Band Edge for EDGE Mode



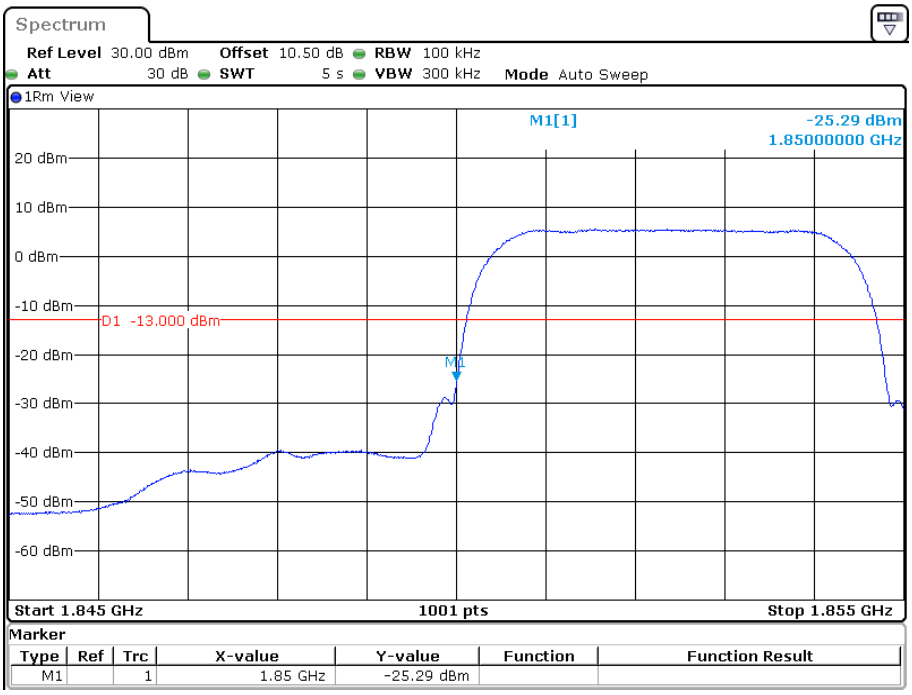
Date: 5.AUG.2022 11:35:39

Cellular Band, Right Band Edge for EDGE Mode



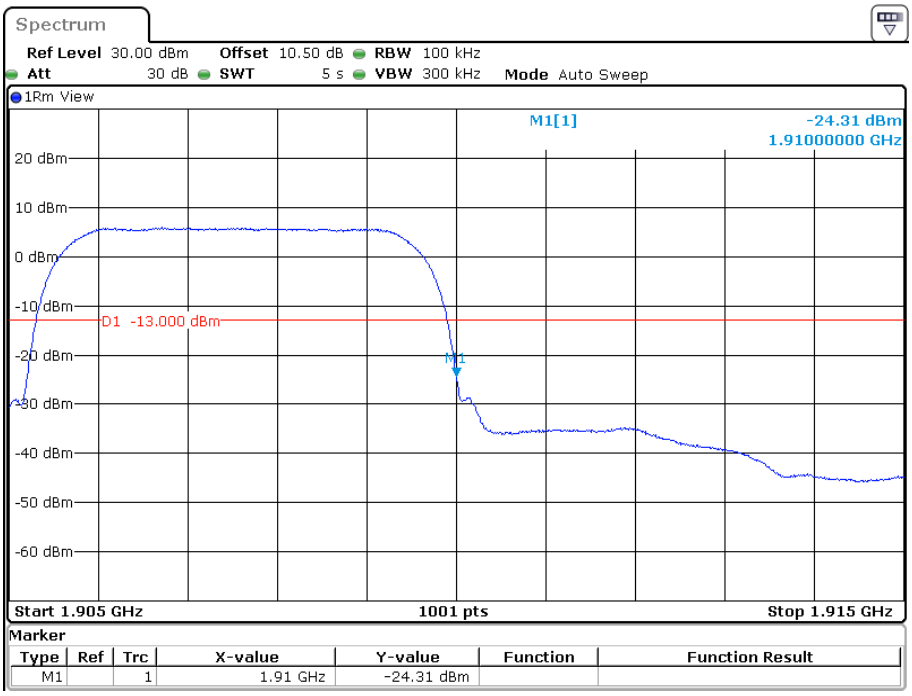
Date: 5.AUG.2022 11:49:02

PCS Band, Left Band Edge for RMC (BPSK) Mode



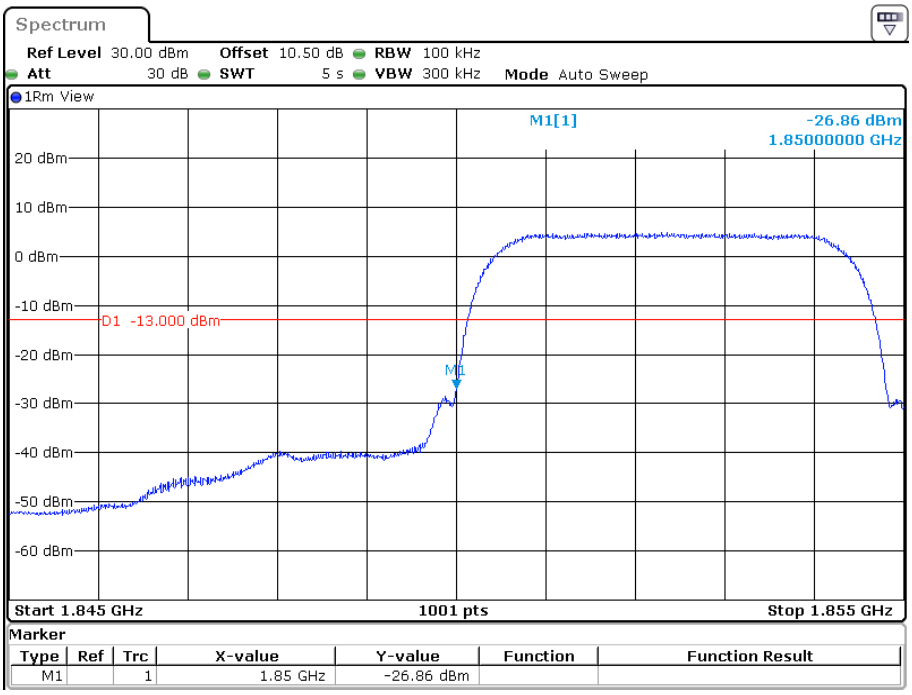
Date: 4.AUG.2022 09:13:52

PCS Band, Right Band Edge for RMC (BPSK) Mode



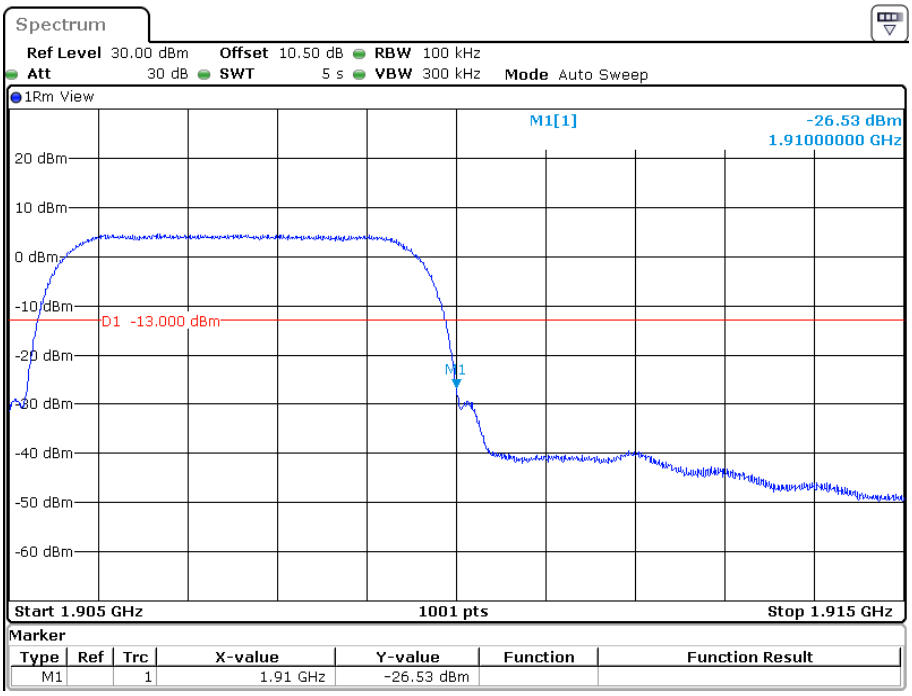
Date: 3.AUG.2022 18:59:42

PCS Band, Left Band Edge for HSDPA(16QAM) Mode



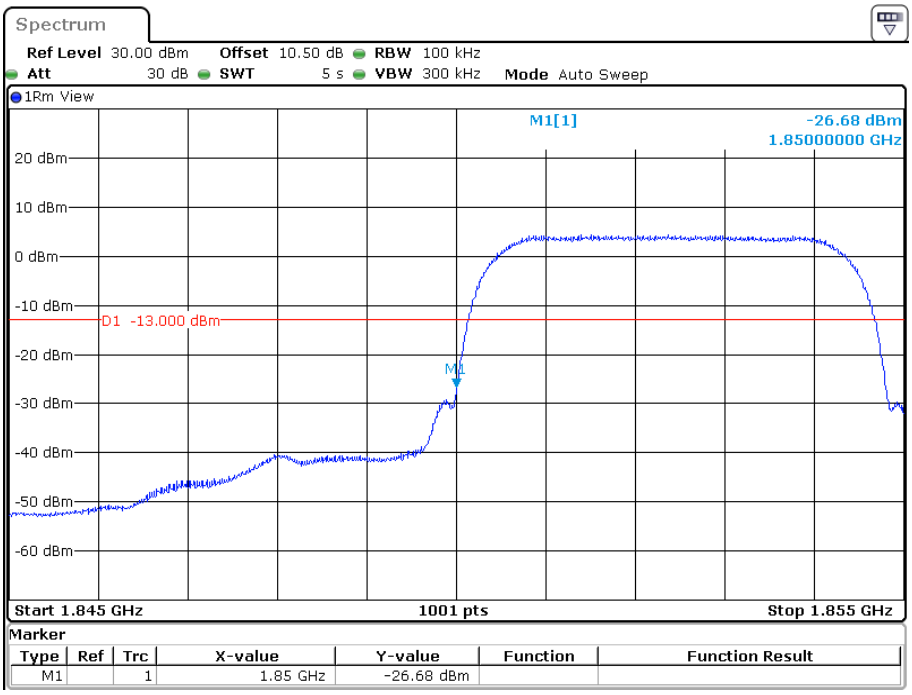
Date: 3.AUG.2022 18:43:22

PCS Band, Right Band Edge for HSDPA (16QAM) Mode



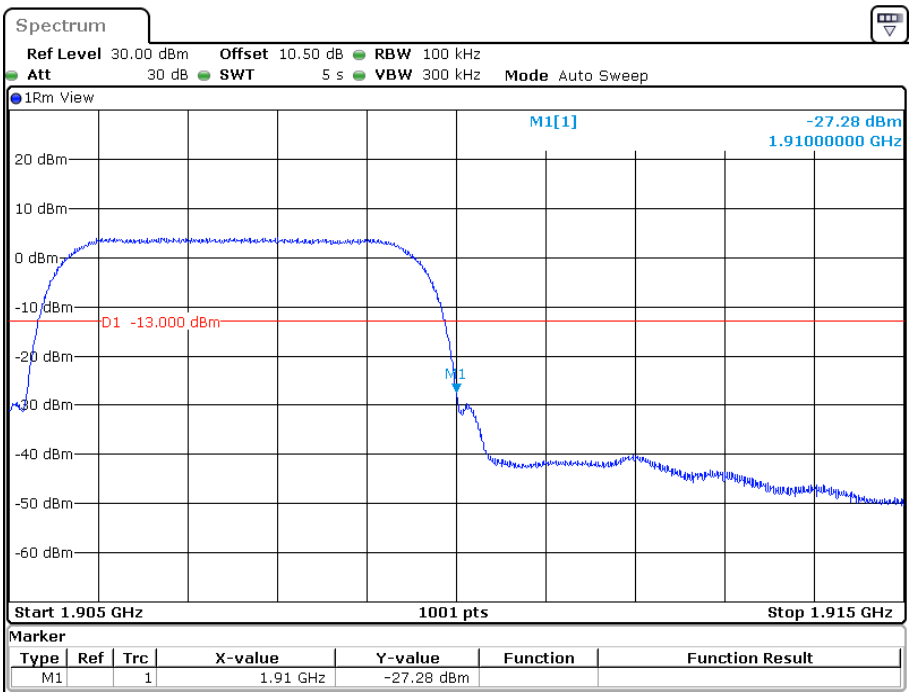
Date: 3.AUG.2022 18:52:53

PCS Band, Left Band Edge for HSUPA (QPSK) Mode



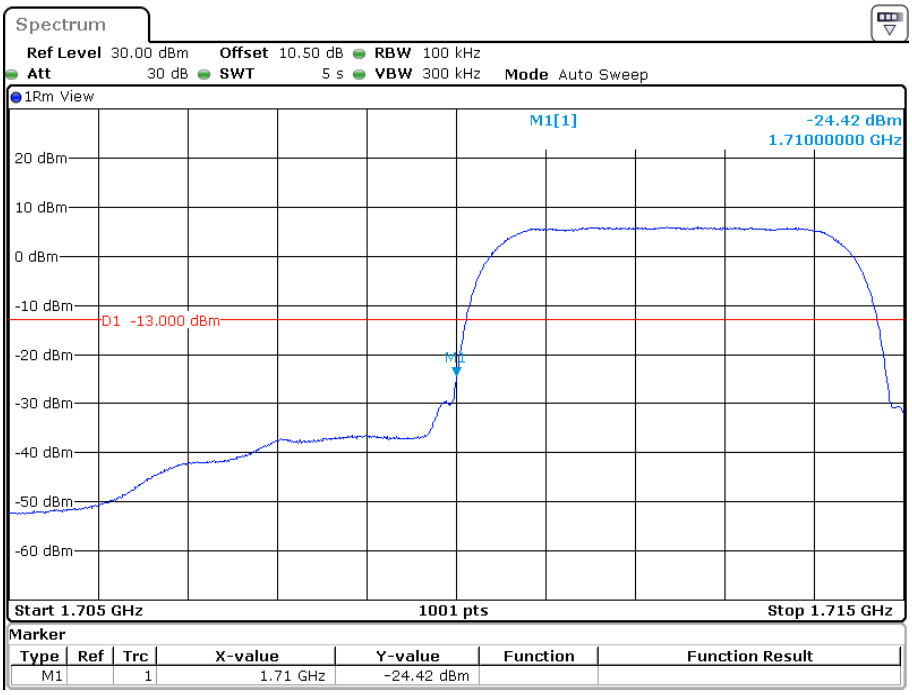
Date: 4.AUG.2022 09:56:37

PCS Band, Right Band Edge for HSUPA (QPSK) Mode



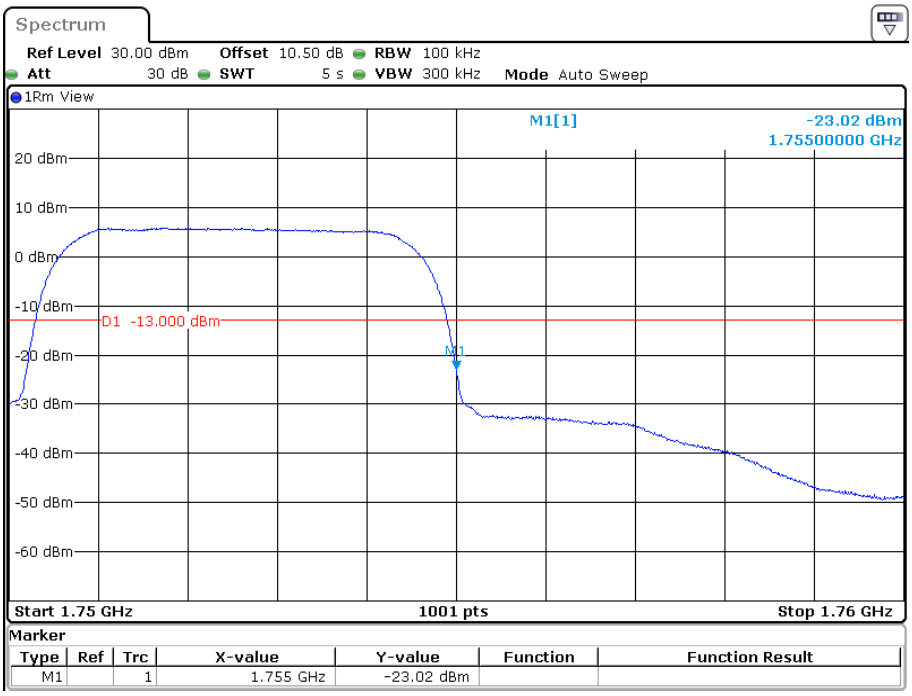
Date: 4.AUG.2022 09:47:01

AWS Band, Left Band Edge for RMC (BPSK) Mode



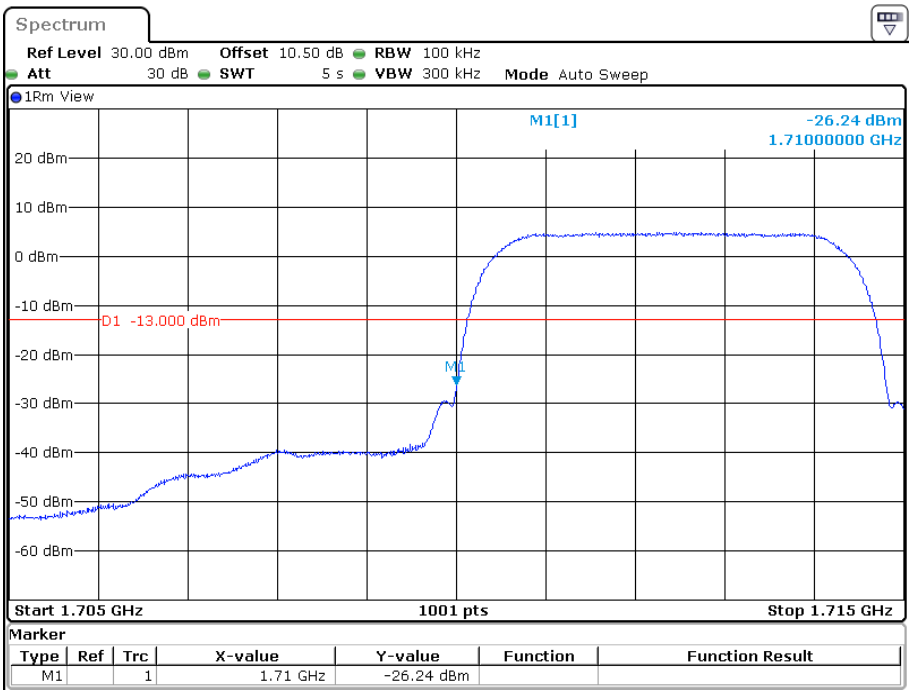
Date: 3.AUG.2022 17:46:05

AWS Band, Right Band Edge for RMC (BPSK) Mode



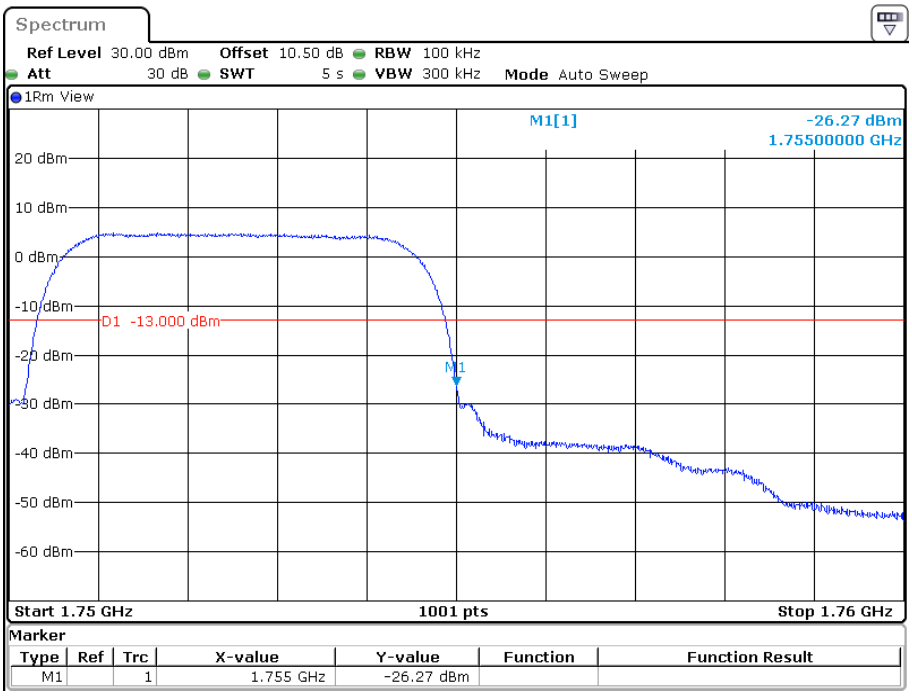
Date: 3.AUG.2022 17:57:13

AWS Band, Left Band Edge for HSDPA(16QAM) Mode



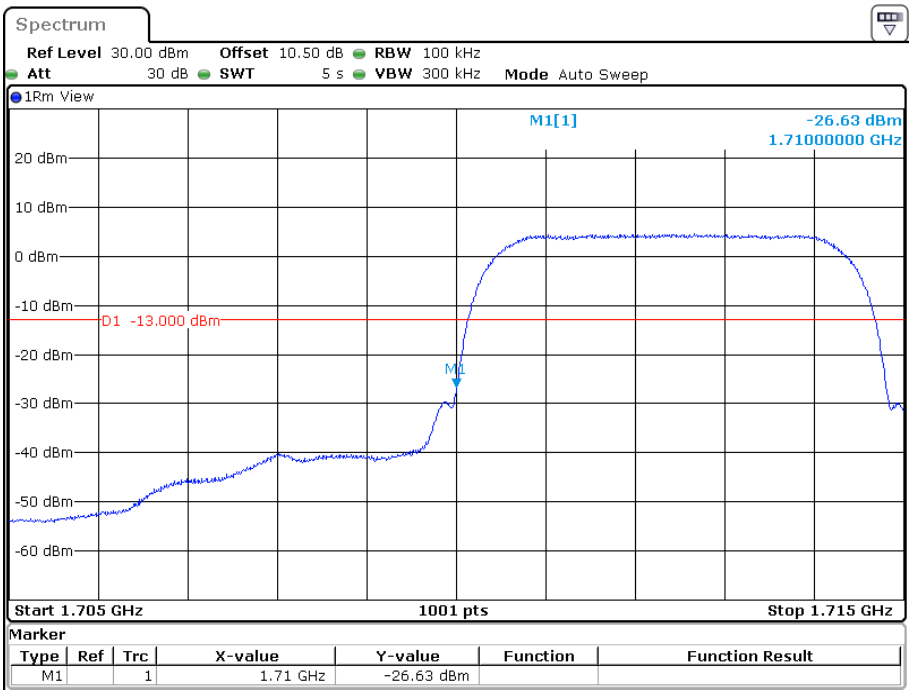
Date: 3.AUG.2022 18:13:00

AWS Band, Right Band Edge for HSDPA (16QAM) Mode



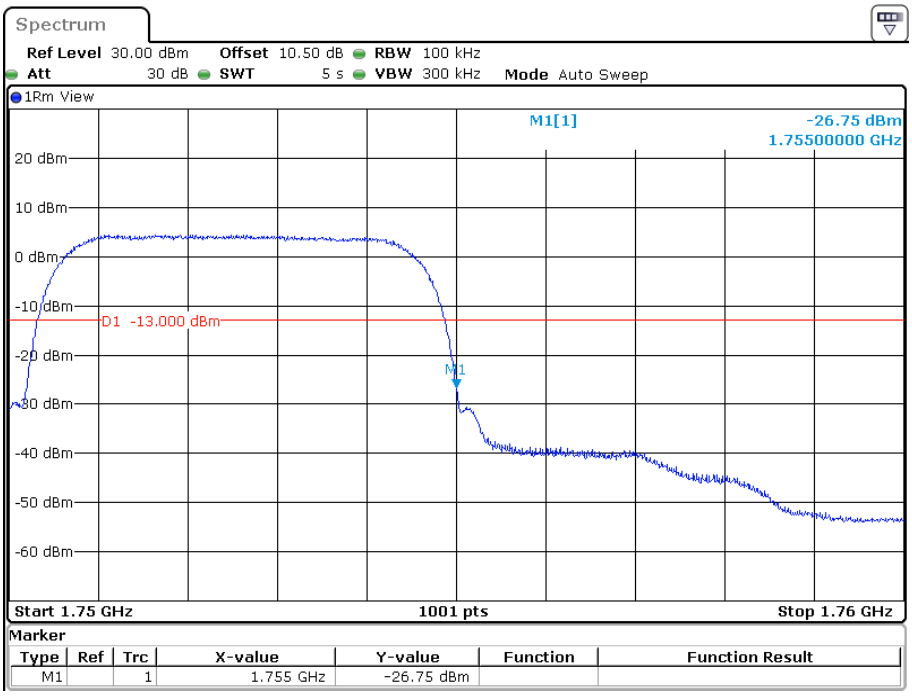
Date: 3.AUG.2022 18:02:23

AWS Band, Left Band Edge for HSUPA (QPSK) Mode



Date: 3.AUG.2022 18:25:12

AWS Band, Right Band Edge for HSUPA (QPSK) Mode



Date: 3.AUG.2022 18:33:08

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

FCC § 2.1055; § 22.355; § 24.235; §27.54; §90.213- FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055, §22.355, §24.235&§27.54&§90.213.

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.

According to §90.213, unless noted elsewhere, transmitters used in the services governed by this part must have a minimum frequency stability as specified in the following table:

TABLE 1 TO §90.213(a)—MINIMUM FREQUENCY STABILITY

[Parts per million (ppm)]

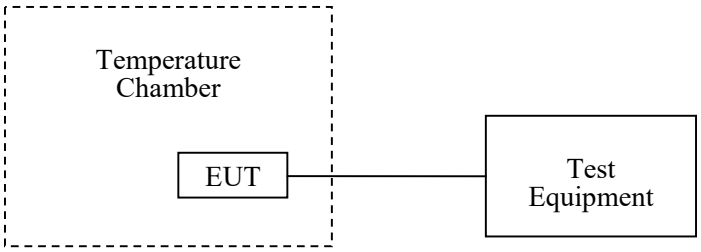
Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
Below 25	[1] [2] [3] 100	100	200
25-50	20	20	50
72-76	5		50
150-174	[5] [11] 5	[6] 5	[4] [6] 50
216-220	1.0		1.0
220-222 [12]	0.1	1.5	1.5
421-512	[7] [11] [14] 2.5	[8] 5	[8] 5
806-809	[14] 1.0	1.5	1.5
809-824	[14] 1.5	2.5	2.5
851-854	1.0	1.5	1.5
854-869	1.5	2.5	2.5
896-901	[14] 0.1	1.5	1.5
902-928	2.5	2.5	2.5
902-928 [13]	2.5	2.5	2.5
929-930	1.5		
935-940	0.1	1.5	1.5
1427-1435	[9] 300	300	300
Above 2450 [10]			

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:	25~28 ℃
Relative Humidity:	55~60 %
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-07-30 to 2022-08-05.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

Cellular Band (Part 22H)

GSM Mode

Middle Channel, f_o =836.6MHz				
Temperature (℃)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-1.86	-0.00222	2.5
-20		-2.18	-0.00261	2.5
-10		4.88	0.00583	2.5
0		6.23	0.00745	2.5
10		-3.46	-0.00414	2.5
20		3.77	0.00451	2.5
30		-1.43	-0.00171	2.5
40		-3.69	-0.00441	2.5
50		-2.96	-0.00354	2.5
20	L.V.	-2.16	-0.00258	2.5
	H.V.	-1.87	-0.00224	2.5

EDGE Mode

Middle Channel, f_o =836.6MHz				
Temperature (℃)	Voltage Supplied (V_{DC})	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
-30	N.V.	-2.36	-0.00282	2.5
-20		-2.54	-0.00304	2.5
-10		-3.62	-0.00433	2.5
0		-3.45	-0.00412	2.5
10		-4.28	-0.00512	2.5
20		-3.30	-0.00394	2.5
30		-2.28	-0.00273	2.5
40		-3.55	-0.00424	2.5
50		-4.41	-0.00527	2.5
20	L.V.	-2.33	-0.00279	2.5
	H.V.	-2.26	-0.00270	2.5

WCDMA Mode

Middle Channel, f_o =836.4MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-1.64	-0.00196	2.5
-20		-1.96	-0.00234	2.5
-10		5.11	0.00611	2.5
0		6.46	0.00772	2.5
10		-3.24	-0.00387	2.5
20		4.00	0.00478	2.5
30		-1.21	-0.00145	2.5
40		-3.47	-0.00415	2.5
50		-2.74	-0.00328	2.5
20	L.V.	-1.94	-0.00232	2.5
	H.V.	-1.65	-0.00197	2.5

PCS Band (Part 24E)

GSM Mode

Middle Channel, f_o =1880.0 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	3.05	0.00162	pass
-20		3.05	0.00162	pass
-10		1.44	0.00077	pass
0		-3.62	-0.00193	pass
10		2.14	0.00114	pass
20		-5.26	-0.00280	pass
30		3.89	0.00207	pass
40		0.31	0.00016	pass
50		0.39	0.00021	pass
20	L.V.	0.77	0.00041	pass
	H.V.	1.48	0.00079	pass

EDGE Mode

Middle Channel, f_o =1880.0 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	2.48	0.00132	pass
-20		1.35	0.00072	pass
-10		2.41	0.00128	pass
0		4.55	0.00242	pass
10		2.69	0.00143	pass
20		3.40	0.00181	pass
30		2.56	0.00136	pass
40		3.38	0.00180	pass
50		4.55	0.00242	pass
20	L.V.	3.34	0.00178	pass
	H.V.	3.17	0.00169	pass

WCDMA Mode

Middle Channel, f_o =1880.0 MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	5.18	0.00276	pass
-20		5.17	0.00275	pass
-10		-1.32	-0.00070	pass
0		1.87	0.00099	pass
10		2.02	0.00107	pass
20		-4.13	-0.00220	pass
30		-1.52	-0.00081	pass
40		4.49	0.00239	pass
50		-1.05	-0.00056	pass
20	L.V.	-0.58	-0.00031	pass
	H.V.	0.15	0.00008	pass

AWS Band (Part 27)

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.	1710.5206	1754.4912	1710	1755
-20		1710.5211	1754.4915	1710	1755
-10		1710.5206	1754.4916	1710	1755
0		1710.5203	1754.4907	1710	1755
10		1710.5212	1754.4935	1710	1755
20		1710.5207	1754.4943	1710	1755
30		1710.5190	1754.4944	1710	1755
40		1710.5190	1754.4926	1710	1755
50		1710.5205	1754.4928	1710	1755
20	L.V.	1710.5202	1754.4921	1710	1755
	H.V.	1710.5191	1754.4920	1710	1755

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.	-3.88	-0.0021	pass
-20		-9.97	-0.0053	pass
-10		-6.13	-0.0033	pass
0		6.17	0.0033	pass
10		7.92	0.0042	pass
20		6.46	0.0034	pass
30		-6.52	-0.0035	pass
40		7.18	0.0038	pass
50		-9.69	-0.0052	pass
20	L.V.	-8.17	-0.0043	pass
	H.V.	-7.05	-0.0038	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.	1710.5957	1754.3711	1710	1755
-20		1710.5958	1754.3705	1710	1755
-10		1710.5968	1754.3712	1710	1755
0		1710.5961	1754.3727	1710	1755
10		1710.5969	1754.3723	1710	1755
20		1710.5950	1754.3729	1710	1755
30		1710.5953	1754.3711	1710	1755
40		1710.5967	1754.3723	1710	1755
50		1710.5958	1754.3711	1710	1755
20	L.V.	1710.5987	1754.3683	1710	1755
	H.V.	1710.5967	1754.3702	1710	1755

Band 5& Band 26(Part 22H):

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.	-2.59	-0.0031	2.5
-20		-9.97	-0.0119	2.5
-10		-6.13	-0.0073	2.5
0		6.17	0.0074	2.5
10		7.92	0.0095	2.5
20		6.46	0.0077	2.5
30		-6.52	-0.0078	2.5
40		7.18	0.0086	2.5
50		-9.69	-0.0116	2.5
20	L.V.	-8.17	-0.0098	2.5
	H.V.	-7.05	-0.0084	2.5

Band 7:

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.	2500.4001	2569.6285	2500	2570
-20		2500.3996	2569.6289	2500	2570
-10		2500.3979	2569.6288	2500	2570
0		2500.3988	2569.6309	2500	2570
10		2500.4001	2569.6300	2500	2570
20		2500.3975	2569.6303	2500	2570
30		2500.3977	2569.6294	2500	2570
40		2500.3997	2569.6303	2500	2570
50		2500.3975	2569.6291	2500	2570
20	L.V.	2500.4242	2569.6125	2500	2570
	H.V.	2500.3904	2569.6054	2500	2570

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.	699.1198	715.8396	699	716
-20		699.1192	715.8386	699	716
-10		699.1188	715.8445	699	716
0		699.1141	715.8430	699	716
10		699.1170	715.8413	699	716
20		699.1207	715.8441	699	716
30		699.1201	715.8431	699	716
40		699.1202	715.8459	699	716
50		699.1191	715.8420	699	716
20	L.V.	699.1161	715.8442	699	716
	H.V.	699.1197	715.8406	699	716

Band 13:

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.	777.7267	786.2014	777	787
-20		777.7280	786.2004	777	787
-10		777.7271	786.1997	777	787
0		777.7281	786.2000	777	787
10		777.7294	786.2020	777	787
20		777.7284	786.1991	777	787
30		777.7293	786.2025	777	787
40		777.7292	786.2020	777	787
50		777.7282	786.2024	777	787
20	L.V.	777.7284	786.2000	777	787
	H.V.	777.7277	786.1998	777	787

Band 17:

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.	704.7118	715.3733	704	716
-20		704.7131	715.3723	704	716
-10		704.7122	715.3716	704	716
0		704.7132	715.3719	704	716
10		704.7145	715.3739	704	716
20		704.7135	715.3710	704	716
30		704.7144	715.3744	704	716
40		704.7143	715.3739	704	716
50		704.7133	715.3743	704	716
20	L.V.	704.7135	715.3719	704	716
	H.V.	704.7128	715.3717	704	716

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.	5.55	0.00295	pass
-20		6.62	0.00352	pass
-10		2.87	0.00152	pass
0		2.92	0.00155	pass
10		4.84	0.00257	pass
20		3.17	0.00168	pass
30		3.34	0.00177	pass
40		3.96	0.00210	pass
50		6.34	0.00337	pass
20	L.V.	5.03	0.00267	pass
	H.V.	3.63	0.00193	pass

LTE Band 26(Part 90S)

Middle Channel, f_o =819MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-7.43	-0.00907	2.5
-20		-8.02	-0.00979	2.5
-10		-4.91	-0.00600	2.5
0		5.01	0.00612	2.5
10		6.69	0.00817	2.5
20		5.31	0.00648	2.5
30		-5.27	-0.00643	2.5
40		-5.84	-0.00713	2.5
50		7.94	0.00969	2.5
20	L.V.	7.01	0.00856	2.5
	H.V.	5.72	0.00698	2.5

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.	2496.6939	2689.2576	2496	2690
-20		2496.6933	2689.2552	2496	2690
-10		2496.6937	2689.2556	2496	2690
0		2496.6919	2689.2556	2496	2690
10		2496.6946	2689.2581	2496	2690
20		2496.6942	2689.2557	2496	2690
30		2496.6924	2689.2562	2496	2690
40		2496.6938	2689.2571	2496	2690
50		2496.6946	2689.2557	2496	2690
20	L.V.	2496.6922	2689.2587	2496	2690
	H.V.	2496.6950	2689.2559	2496	2690

Band 66:

20 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.5935	1779.4789	1710	1780
-20		1710.5924	1779.4789	1710	1780
-10		1710.5919	1779.4807	1710	1780
0		1710.5948	1779.4815	1710	1780
10		1710.5948	1779.4817	1710	1780
20		1710.5922	1779.4795	1710	1780
30		1710.5928	1779.4808	1710	1780
40		1710.5936	1779.4798	1710	1780
50		1710.5925	1779.4804	1710	1780
20	L.V.	1710.5944	1779.4815	1710	1780
	H.V.	1710.5932	1779.4808	1710	1780

Band 71:

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.	663.5449	697.2362	663	698
-20		663.5459	697.2375	663	698
-10		663.5448	697.2368	663	698
0		663.5457	697.2362	663	698
10		663.5474	697.2391	663	698
20		663.5465	697.2390	663	698
30		663.5459	697.2373	663	698
40		663.5468	697.2368	663	698
50		663.5470	697.2388	663	698
20	L.V.	663.5468	697.2382	663	698
	H.V.	663.5465	697.2399	663	698

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.	-1.20	-0.0006	pass
-20		-6.68	-0.0036	pass
-10		9.77	0.0052	pass
0		-7.62	-0.0041	pass
10		-9.91	-0.0053	pass
20		-9.82	-0.0052	pass
30		-6.68	-0.0036	pass
40		-8.85	-0.0047	pass
50		5.67	0.0030	pass
20	L.V.	6.05	0.0032	pass
	H.V.	7.52	0.0040	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.	1710.6189	1754.4977	1710	1755
-20		1710.6218	1754.4993	1710	1755
-10		1710.6164	1754.5017	1710	1755
0		1710.6217	1754.5010	1710	1755
10		1710.6189	1754.4998	1710	1755
20		1710.6233	1754.5039	1710	1755
30		1710.6217	1754.4989	1710	1755
40		1710.6162	1754.4980	1710	1755
50		1710.6200	1754.5027	1710	1755
20	L.V.	1710.6234	1754.5003	1710	1755
	H.V.	1710.6192	1754.4974	1710	1755

Band 5:

10.0 MHz Middle ,Middle Channel, f_o =836.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-1.03	-0.0012	2.5
-20		-6.68	-0.0080	2.5
-10		9.77	0.0117	2.5
0		-7.62	-0.0091	2.5
10		-9.91	-0.0118	2.5
20		-9.82	-0.0117	2.5
30		-6.68	-0.0080	2.5
40		-8.85	-0.0106	2.5
50		5.67	0.0068	2.5
20	L.V.	6.05	0.0072	2.5
	H.V.	7.52	0.0090	2.5

Band 7:

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.	2500.5921	2569.2933	2500	2570
-20		2500.6804	2569.2959	2500	2570
-10		2500.6793	2569.2840	2500	2570
0		2500.6702	2569.2938	2500	2570
10		2500.6821	2569.3651	2500	2570
20		2500.6694	2569.3292	2500	2570
30		2500.6803	2569.3278	2500	2570
40		2500.6791	2569.2850	2500	2570
50		2500.6792	2569.2871	2500	2570
20	L.V.	2500.6699	2569.3758	2500	2570
	H.V.	2500.5893	2569.3681	2500	2570

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.	699.3212	715.8241	699	716
-20		699.3218	715.8207	699	716
-10		699.3224	715.8210	699	716
0		699.3220	715.8202	699	716
10		699.3203	715.8222	699	716
20		699.3196	715.8203	699	716
30		699.3238	715.8227	699	716
40		699.3184	715.8203	699	716
50		699.3240	715.8195	699	716
20	L.V.	699.3226	715.8207	699	716
	H.V.	699.3239	715.8222	699	716

Band 13:

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.	777.7213	786.2040	777	787
-20		777.7226	786.2030	777	787
-10		777.7217	786.2023	777	787
0		777.7227	786.2026	777	787
10		777.7240	786.2046	777	787
20		777.7230	786.2017	777	787
30		777.7239	786.2051	777	787
40		777.7238	786.2046	777	787
50		777.7228	786.2050	777	787
20	L.V.	777.7230	786.2026	777	787
	H.V.	777.7223	786.2024	777	787

Band 17:

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.	704.7064	715.3759	704	716
-20		704.7077	715.3749	704	716
-10		704.7068	715.3742	704	716
0		704.7078	715.3745	704	716
10		704.7091	715.3765	704	716
20		704.7081	715.3736	704	716
30		704.7090	715.3770	704	716
40		704.7089	715.3765	704	716
50		704.7079	715.3769	704	716
20	L.V.	704.7081	715.3745	704	716
	H.V.	704.7074	715.3743	704	716

Band 25:

10.0 MHz Middle Channel, f_0 =1882.5MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Result**
-30	N.V.	5.36	0.00285	pass
-20		6.26	0.00333	pass
-10		2.77	0.00147	pass
0		2.82	0.00150	pass
10		4.77	0.00253	pass
20		2.91	0.00155	pass
30		3.23	0.00172	pass
40		3.67	0.00195	pass
50		5.95	0.00316	pass
20	L.V.	4.89	0.00260	pass
	H.V.	3.41	0.00181	pass

LTE Band 26(Part 90S)

Middle Channel, f_o =819MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	N.V.	-7.62	-0.00930	2.5
-20		-8.11	-0.00990	2.5
-10		-5.19	-0.00634	2.5
0		4.95	0.00604	2.5
10		6.32	0.00772	2.5
20		4.99	0.00609	2.5
30		-5.27	-0.00643	2.5
40		-6.06	-0.00740	2.5
50		7.81	0.00954	2.5
20	L.V.	6.71	0.00819	2.5
	H.V.	5.50	0.00672	2.5

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.	2496.4747	2689.5599	2496	2690
-20		2496.4759	2689.5611	2496	2690
-10		2496.4743	2689.5602	2496	2690
0		2496.4744	2689.5593	2496	2690
10		2496.4765	2689.5615	2496	2690
20		2496.4751	2689.5611	2496	2690
30		2496.4741	2689.5593	2496	2690
40		2496.4744	2689.5601	2496	2690
50		2496.4757	2689.5591	2496	2690
20	L.V.	2496.4740	2689.5613	2496	2690
	H.V.	2496.4744	2689.5619	2496	2690

Band 66:

20 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	N.V.	1710.4916	1779.5787	1710	1780
-20		1710.4930	1779.5784	1710	1780
-10		1710.4927	1779.5770	1710	1780
0		1710.4935	1779.5790	1710	1780
10		1710.4944	1779.5790	1710	1780
20		1710.4925	1779.5788	1710	1780
30		1710.4923	1779.5777	1710	1780
40		1710.4930	1779.5787	1710	1780
50		1710.4944	1779.5776	1710	1780
20	L.V.	1710.4930	1779.5790	1710	1780
	H.V.	1710.4925	1779.5787	1710	1780

Band 71:

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.	663.6037	697.4637	663	698
-20		663.6040	697.4645	663	698
-10		663.6054	697.4630	663	698
0		663.6032	697.4643	663	698
10		663.6057	697.4657	663	698
20		663.6034	697.4643	663	698
30		663.6027	697.4640	663	698
40		663.6047	697.4641	663	698
50		663.6033	697.4642	663	698
20	L.V.	663.6037	697.4630	663	698
	H.V.	663.6044	697.4660	663	698

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