

	RB25#0	20.43	20.14	19.98		
	RB25#25	20.44	20.17	19.81		
	RB50#0	20.47	20.13	19.86		
10MHz 16QAM	RB1#0	20.5	20.77	19.88	23.51	33
	RB1#25	20.62	20.84	20.11		
	RB1#49	20.39	20.52	19.81		
	RB25#0	19.51	19.24	18.97		
	RB25#25	19.58	19.12	18.87		
	RB50#0	19.5	18.87	18.88		
15MHz QPSK	RB1#0	21.5	20.53	20.78	24.17	33
	RB1#38	21.5	20.49	20.75		
	RB1#74	21.29	20.19	20.62		
	RB36#0	20.52	19.55	19.95		
	RB36#39	20.49	19.45	19.81		
	RB75#0	20.5	19.46	19.87		
15MHz 16QAM	RB1#0	20.9	20.15	19.91	23.57	33
	RB1#38	20.9	20.1	19.91		
	RB1#74	20.59	19.85	19.79		
	RB36#0	19.45	18.57	18.98		
	RB36#39	19.42	18.4	18.74		
	RB75#0	19.48	18.5	18.83		
20MHz QPSK	RB1#0	21.26	20.66	20.72	24.28	33
	RB1#50	21.61	20.8	20.95		
	RB1#99	21.08	20.28	20.51		
	RB50#0	20.5	19.86	19.97		
	RB50#50	20.35	19.66	19.62		
	RB100#0	20.41	19.75	19.83		
20MHz 16QAM	RB1#0	20.86	19.93	19.91	23.81	33
	RB1#50	21.14	20.13	20.11		
	RB1#99	20.65	19.55	19.66		
	RB50#0	19.5	18.9	18.98		
	RB50#50	19.4	18.65	18.61		
	RB100#0	19.43	18.75	18.83		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + G_T(dBi)**Result:****Pass****Peak-to-average Ratio(PAR)**

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	9.87	9.65	9.97	13
	RB100#0	6.51	6.41	6.28	13
20MHz 16QAM	RB1#0	9.33	9.26	9.52	13
	RB100#0	7.21	7.28	7.12	13
				Result:	Pass

FCC §2.1049, §24.238:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
1.4MHz QPSK	1.098	1.104	1.098	1.302	1.29	1.302
1.4MHz 16QAM	1.092	1.104	1.104	1.284	1.296	1.32
3MHz QPSK	2.687	2.687	2.676	2.88	2.868	2.856
3MHz 16QAM	2.687	2.687	2.687	2.88	2.892	2.868
5MHz QPSK	4.52	4.56	4.52	5.16	5.42	5.14
5MHz 16QAM	4.54	4.54	4.52	5.22	5.44	5.16
10MHz QPSK	8.96	9	9.04	10	9.8	9.92
10MHz 16QAM	8.96	8.96	8.96	9.88	9.88	9.92
15MHz QPSK	13.56	13.5	13.62	15.12	14.94	15.24
15MHz 16QAM	13.56	13.56	13.62	15.06	15.18	15.24
20MHz QPSK	18	18	18	19.68	19.36	19.68
20MHz 16QAM	18	18.08	18	19.52	19.52	19.52
Note: The test plots please refer to the Plots of Occupied Bandwidth						

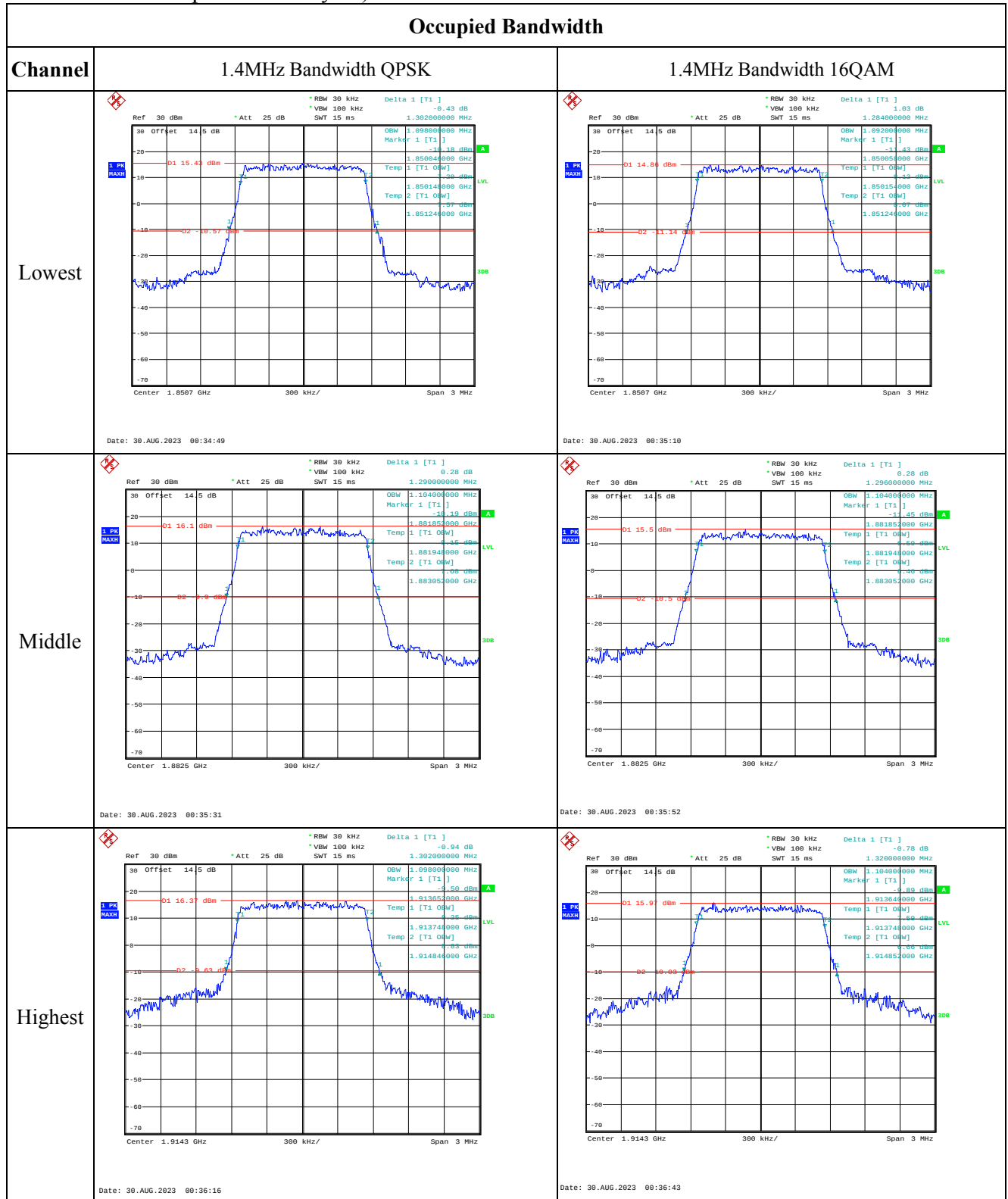
FCC §2.1051, § 24.238 (a):Spurious Emissions at Antenna Terminal	
Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.

FCC §2.1051, § 24.238 (a):Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §24.235: Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	1851.014	1850.000	1914.062	1915.000
	-20	12	1851.015	1850.000	1914.056	1915.000
	-10	12	1851.024	1850.000	1914.054	1915.000
	0	12	1851.024	1850.000	1914.055	1915.000
	10	12	1851.016	1850.000	1914.050	1915.000
	20	12	1851.040	1850.000	1914.040	1915.000
	30	12	1851.026	1850.000	1914.052	1915.000
	40	12	1851.025	1850.000	1914.045	1915.000
	50	12	1851.014	1850.000	1914.059	1915.000
Frequency Stability vs. Voltage	20	6	1851.016	1850.000	1914.058	1915.000
	20	36	1851.021	1850.000	1914.068	1915.000
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	1851.036	1850.000	1913.972	1915.000
	-20	12	1851.017	1850.000	1913.988	1915.000
	-10	12	1851.037	1850.000	1913.971	1915.000
	0	12	1851.013	1850.000	1913.981	1915.000
	10	12	1851.038	1850.000	1913.962	1915.000
	20	12	1851.040	1850.000	1913.960	1915.000
	30	12	1851.012	1850.000	1913.962	1915.000
	40	12	1851.034	1850.000	1913.988	1915.000
	50	12	1851.018	1850.000	1913.977	1915.000
Frequency Stability vs. Voltage	20	6	1851.023	1850.000	1913.980	1915.000
	20	36	1851.023	1850.000	1913.973	1915.000
					Result:	Pass

Test Plots (Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



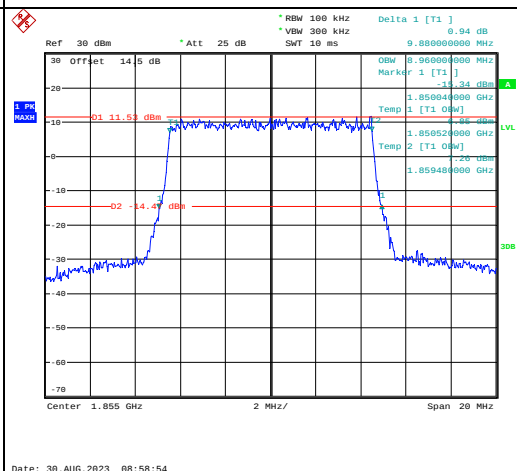
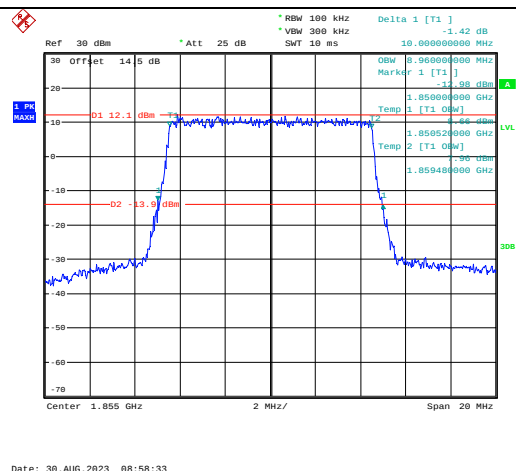
Occupied Bandwidth

Channel

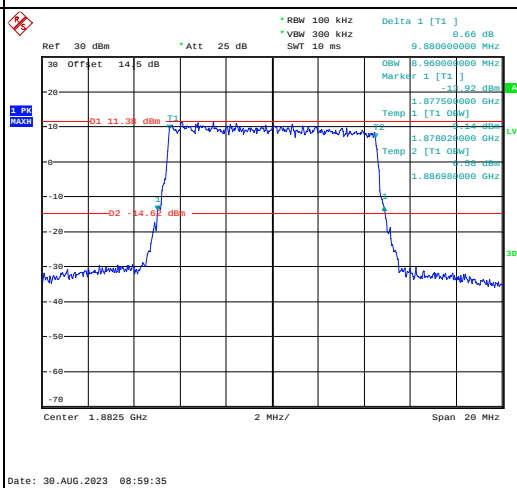
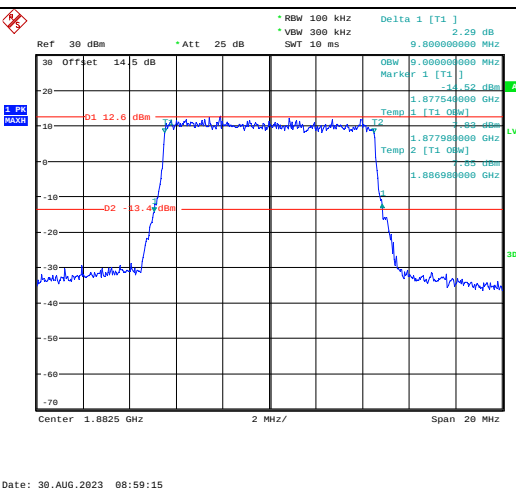
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

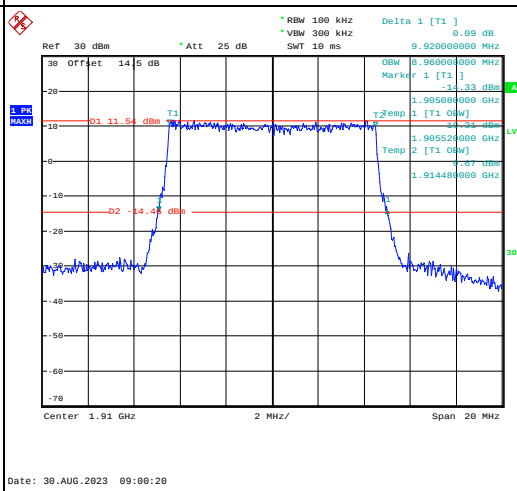
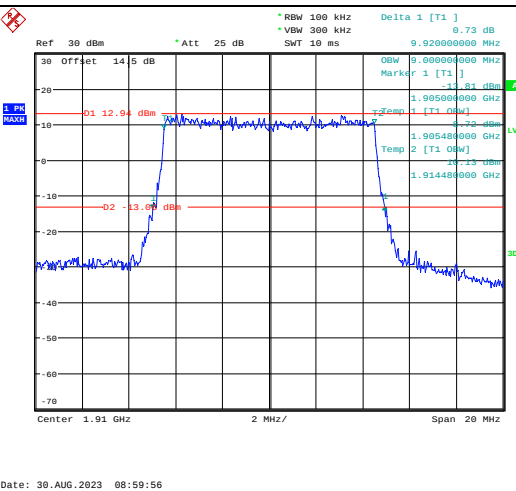
Lowest



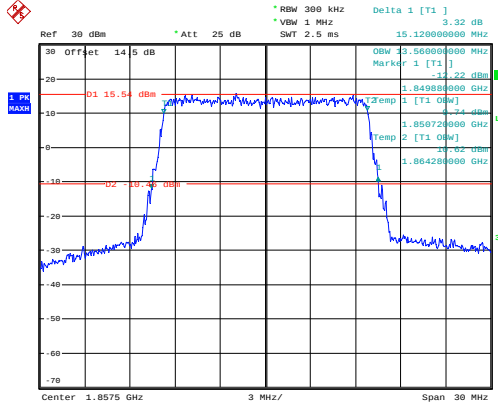
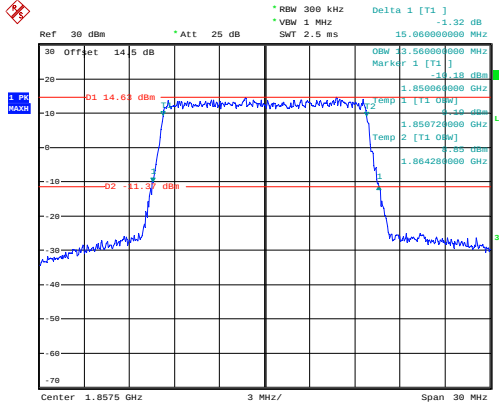
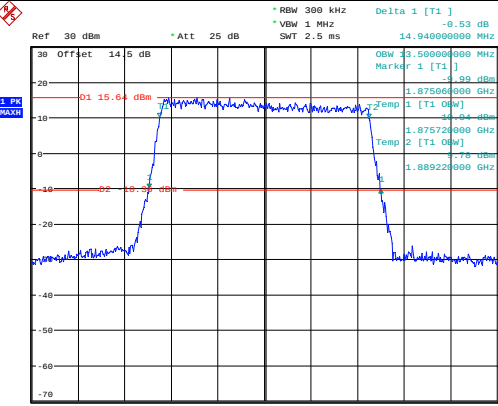
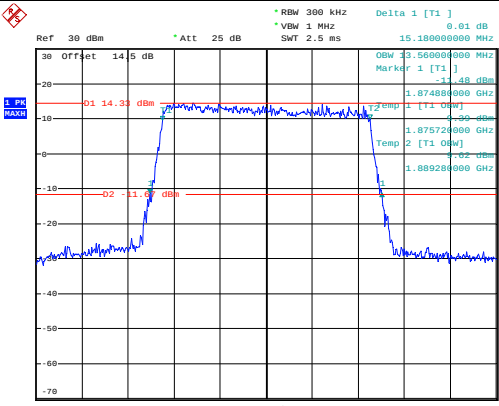
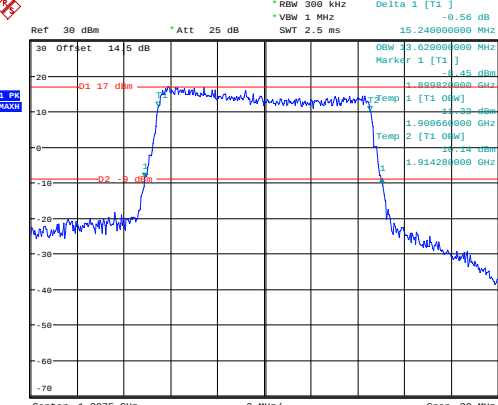
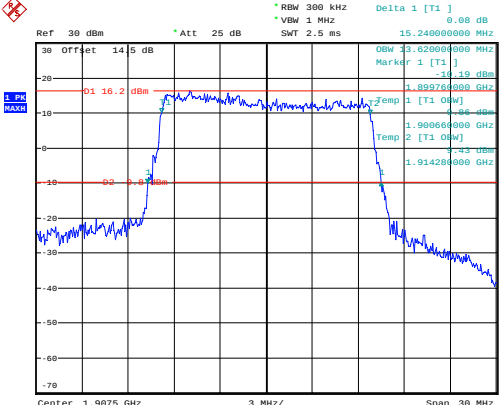
Middle



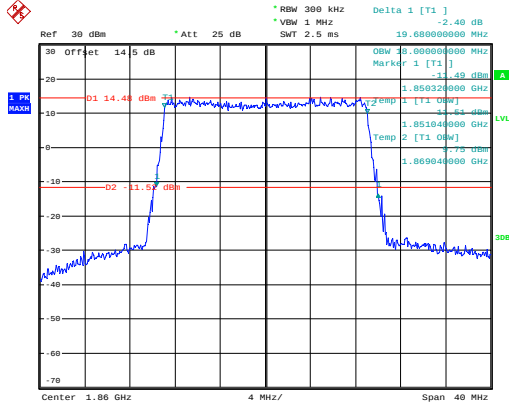
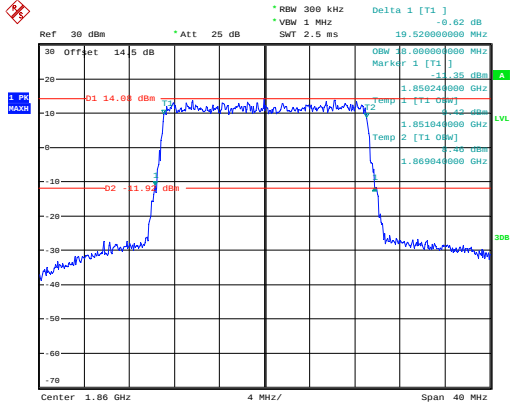
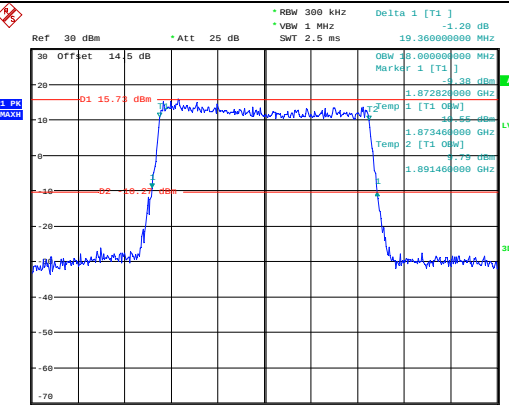
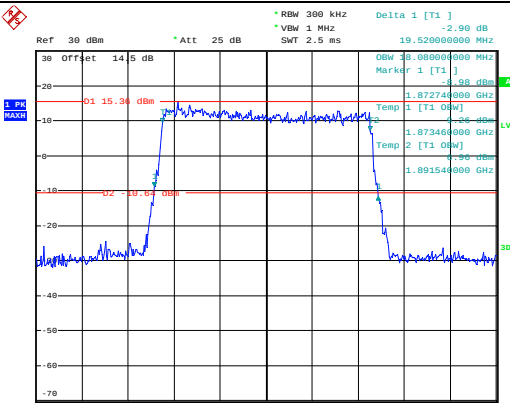
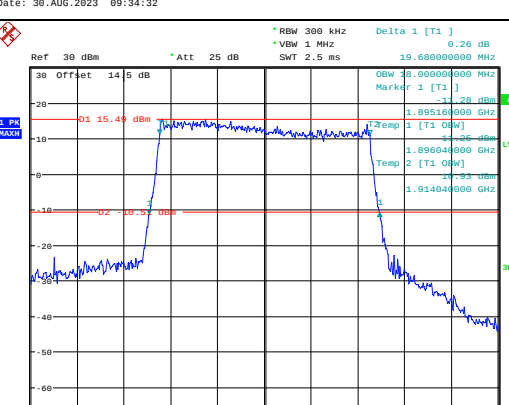
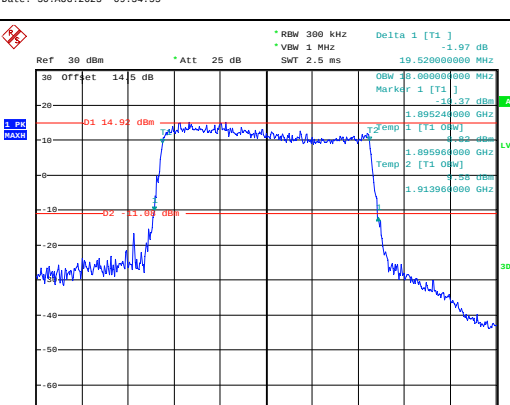
Highest



Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 15.120000000 MHz Marker 1 [T1] 15.122 dBm 1.849800000 GHz 1.850720000 GHz 1.864280000 GHz Center 1.8575 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:03:56	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 15.060000000 MHz Marker 1 [T1] 15.062 dBm 1.850000000 GHz 1.850720000 GHz 1.864280000 GHz Center 1.8575 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:04:16
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 14.940000000 MHz Marker 1 [T1] 14.942 dBm 1.875000000 GHz 1.875720000 GHz 1.889280000 GHz Center 1.8825 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:04:37	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 15.180000000 MHz Marker 1 [T1] 15.182 dBm 1.874880000 GHz 1.875720000 GHz 1.889280000 GHz Center 1.8825 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:04:57
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 15.240000000 MHz Marker 1 [T1] 15.242 dBm 1.900000000 GHz 1.900660000 GHz 1.914280000 GHz Center 1.9075 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:05:18	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 3.22 dB VBW 1 MHz SWT 2.5 ms OBW 15.240000000 MHz Marker 1 [T1] 15.242 dBm 1.899780000 GHz 1.900660000 GHz 1.914280000 GHz Center 1.9075 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 09:05:41

Occupied Bandwidth

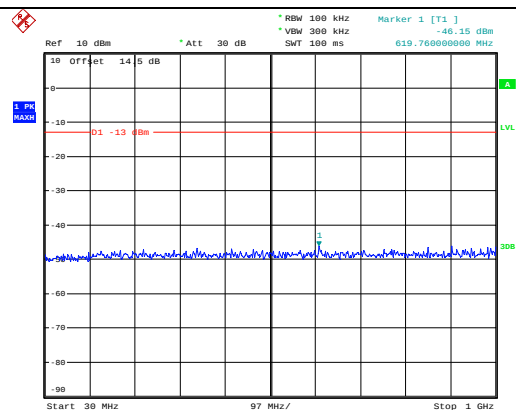
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.680000000 MHz Marker 1 [T1] 1.850320000 GHz Temp 1 [T1 0dB] -11.49 dBm Temp 2 [T1 0dB] -11.57 dBm Temp 1 [T1 0dB] 1.851040000 GHz Temp 2 [T1 0dB] 1.869040000 GHz Center 1.86 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:33:43	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.520000000 MHz Marker 1 [T1] 1.850240000 GHz Temp 1 [T1 0dB] -11.35 dBm Temp 2 [T1 0dB] -11.02 dBm Temp 1 [T1 0dB] 1.851040000 GHz Temp 2 [T1 0dB] 1.869040000 GHz Center 1.86 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:34:08
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.360000000 MHz Marker 1 [T1] 1.872620000 GHz Temp 1 [T1 0dB] -11.20 dBm Temp 2 [T1 0dB] -11.20 dBm Temp 1 [T1 0dB] 1.873460000 GHz Temp 2 [T1 0dB] 1.891460000 GHz Center 1.8825 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:34:32	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.520000000 MHz Marker 1 [T1] 1.872740000 GHz Temp 1 [T1 0dB] -11.98 dBm Temp 2 [T1 0dB] -11.07 dBm Temp 1 [T1 0dB] 1.873460000 GHz Temp 2 [T1 0dB] 1.891540000 GHz Center 1.8825 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:34:55
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.680000000 MHz Marker 1 [T1] 1.895360000 GHz Temp 1 [T1 0dB] -11.28 dBm Temp 2 [T1 0dB] -11.28 dBm Temp 1 [T1 0dB] 1.896040000 GHz Temp 2 [T1 0dB] 1.914040000 GHz Center 1.905 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:35:22	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 19.520000000 MHz Marker 1 [T1] 1.895240000 GHz Temp 1 [T1 0dB] -11.97 dBm Temp 2 [T1 0dB] -11.07 dBm Temp 1 [T1 0dB] 1.895960000 GHz Temp 2 [T1 0dB] 1.913960000 GHz Center 1.905 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:35:48

Spurious Emissions at Antenna Terminal

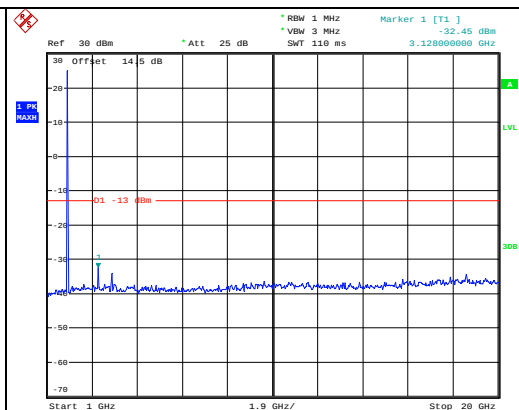
Channel

1.4MHz Bandwidth QPSK

Lowest

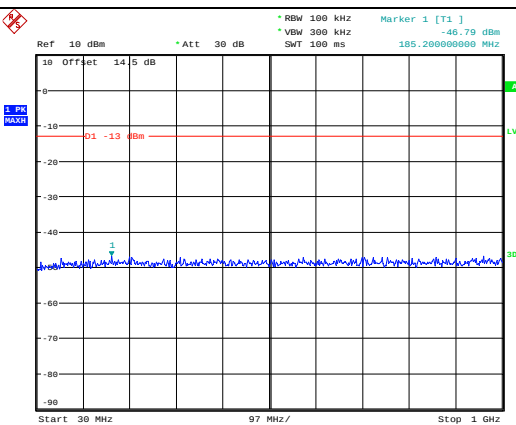


Date: 30.AUG.2023 18:25:12

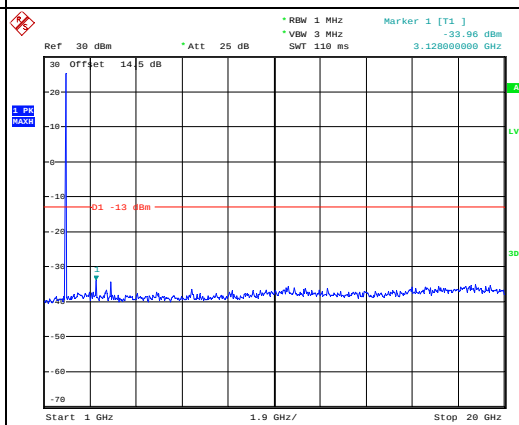


Date: 30.AUG.2023 18:25:23

Middle

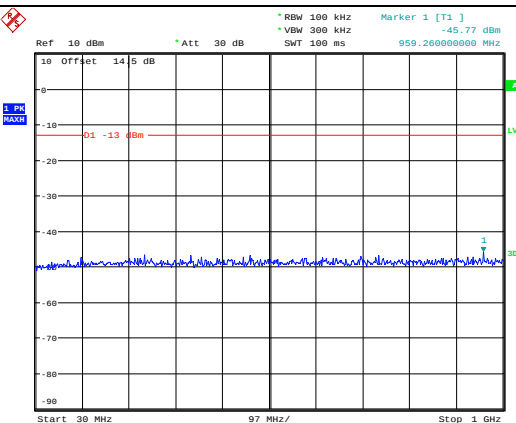


Date: 30.AUG.2023 18:25:37

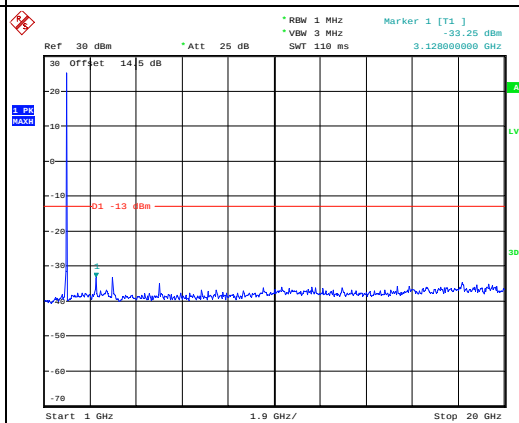


Date: 30.AUG.2023 18:25:48

Highest



Date: 30.AUG.2023 18:26:02



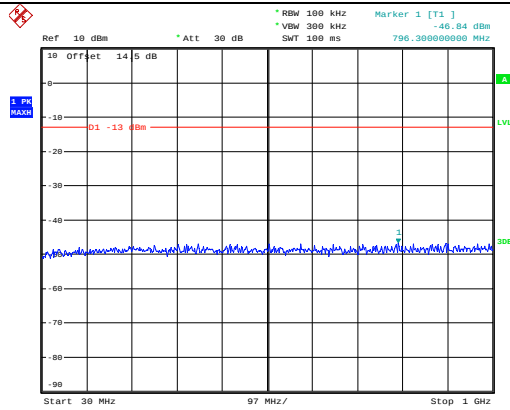
Date: 30.AUG.2023 18:26:13

Spurious Emissions at Antenna Terminal

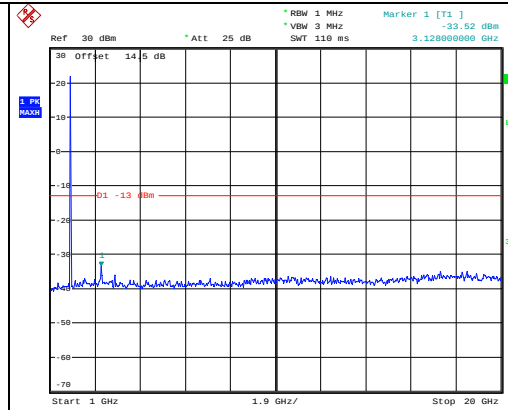
Channel

3MHz Bandwidth QPSK

Lowest

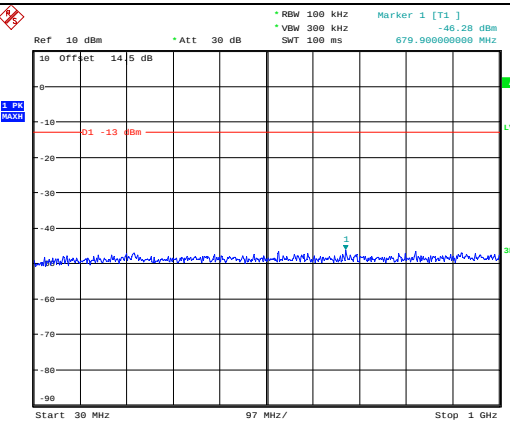


Date: 30.AUG.2023 18:27:08

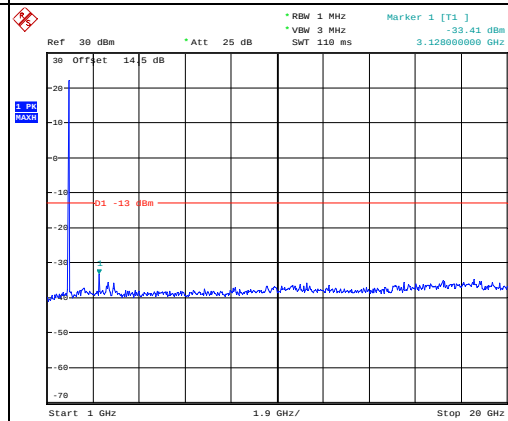


Date: 30.AUG.2023 18:27:19

Middle

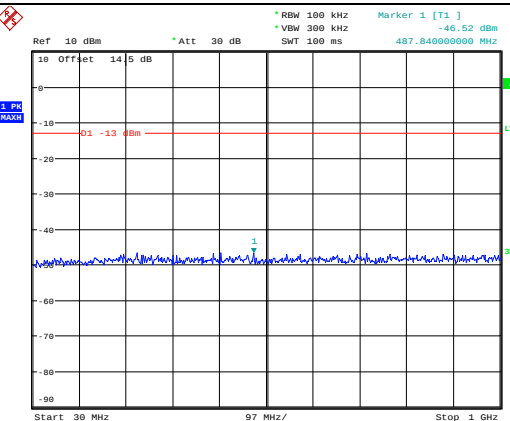


Date: 30.AUG.2023 18:27:33

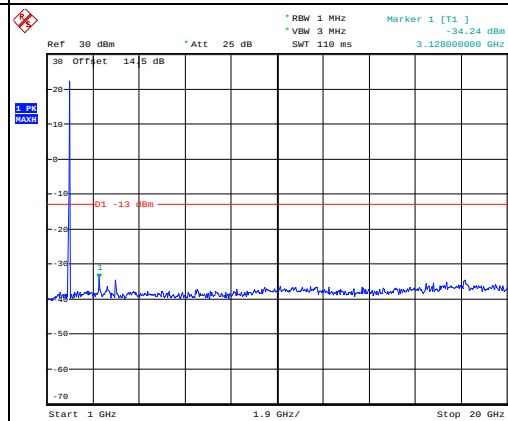


Date: 30.AUG.2023 18:27:44

Highest



Date: 30.AUG.2023 18:28:00



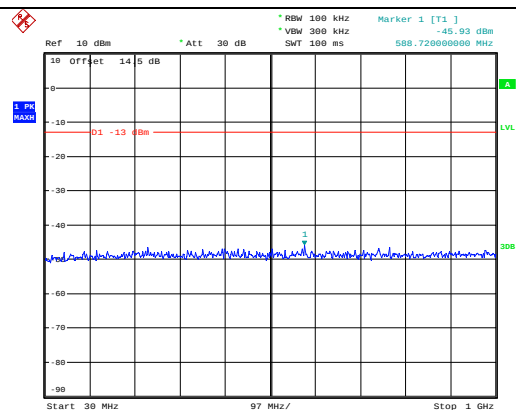
Date: 30.AUG.2023 18:28:11

Spurious Emissions at Antenna Terminal

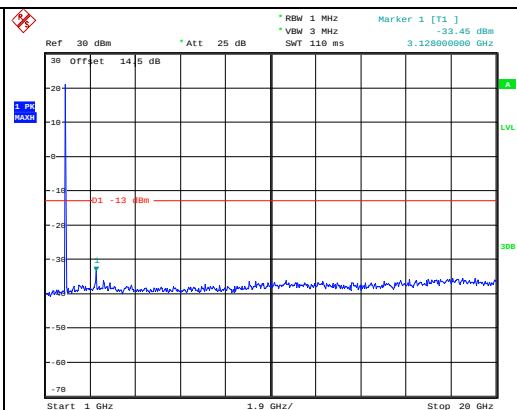
Channel

5MHz Bandwidth QPSK

Lowest

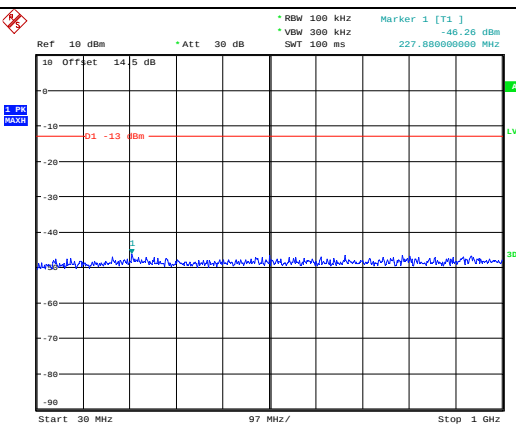


Date: 30.AUG.2023 18:29:06

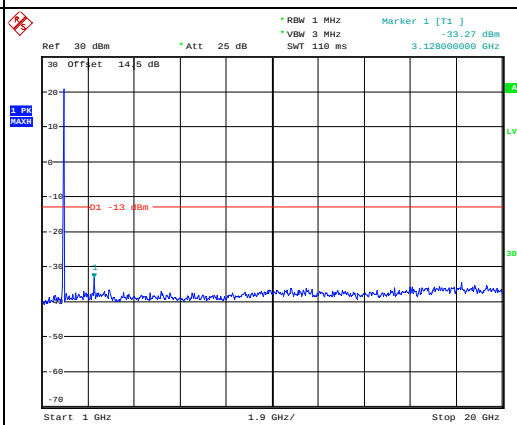


Date: 30.AUG.2023 18:29:17

Middle

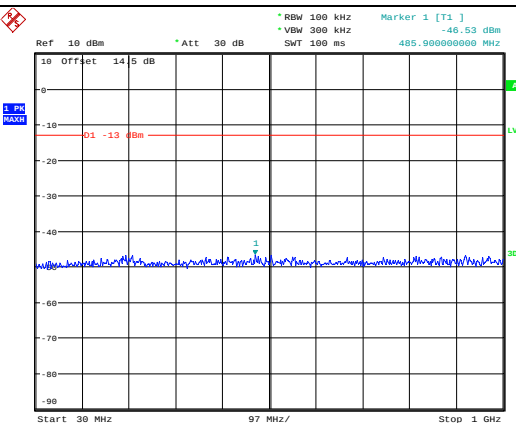


Date: 30.AUG.2023 18:29:34

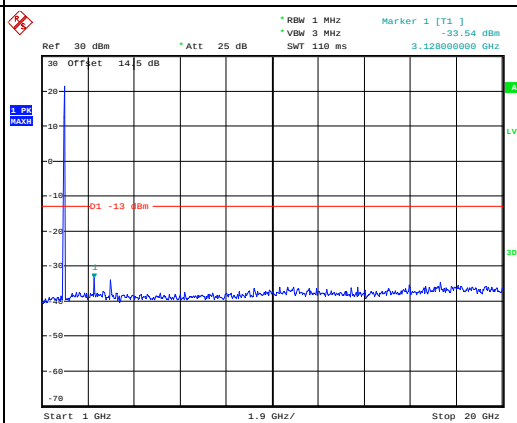


Date: 30.AUG.2023 18:29:45

Highest

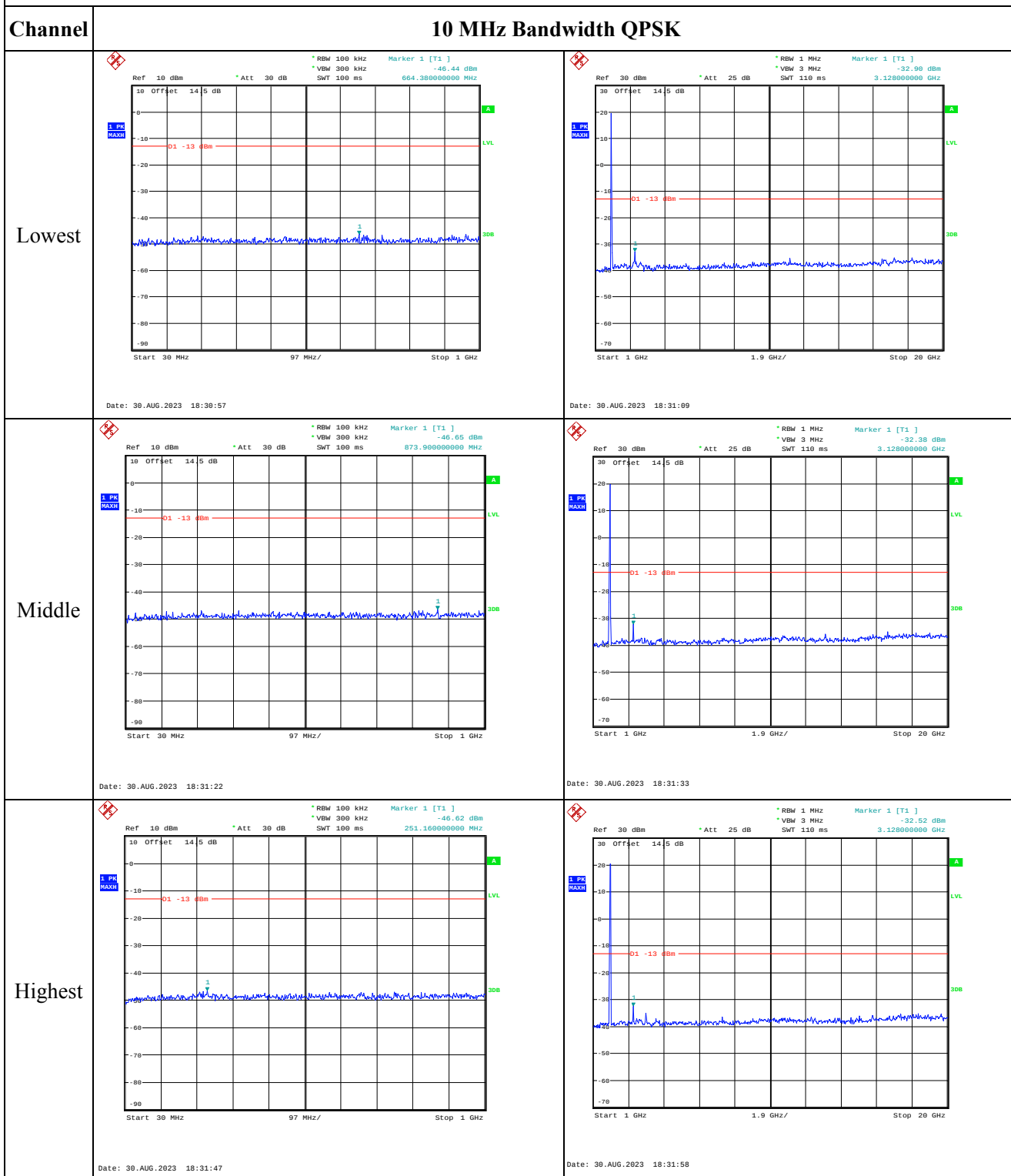


Date: 30.AUG.2023 18:29:59



Date: 30.AUG.2023 18:30:10

Spurious Emissions at Antenna Terminal

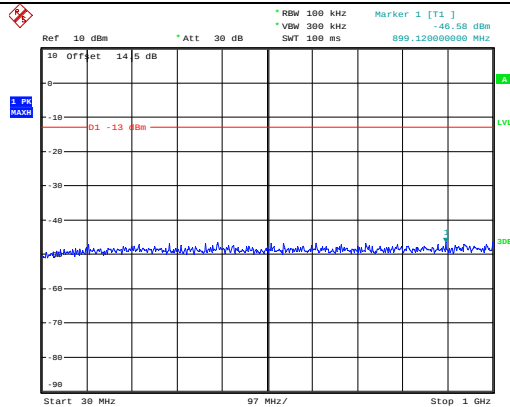


Spurious Emissions at Antenna Terminal

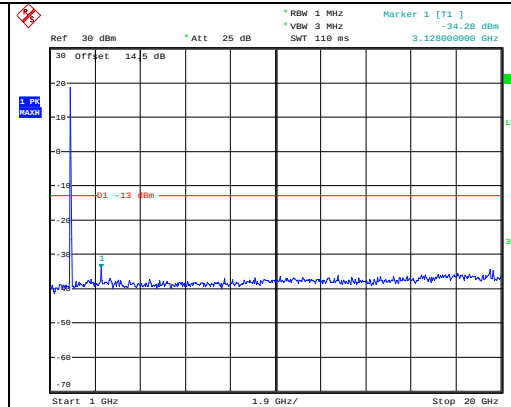
Channel

15MHz Bandwidth QPSK

Lowest

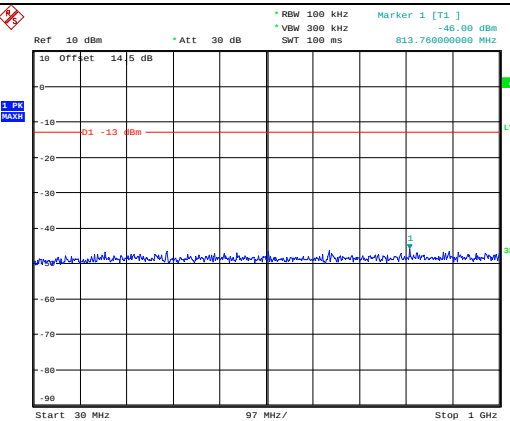


Date: 30.AUG.2023 18:32:53

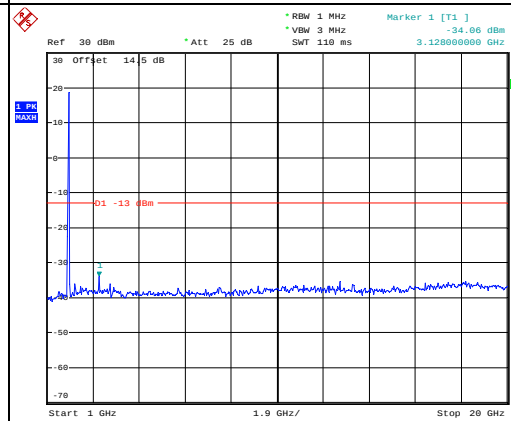


Date: 30.AUG.2023 18:33:04

Middle

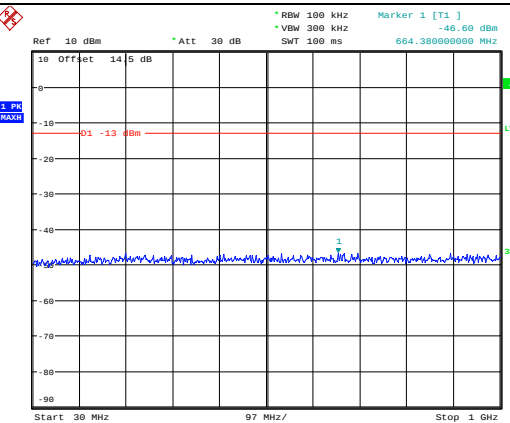


Date: 30.AUG.2023 18:33:21

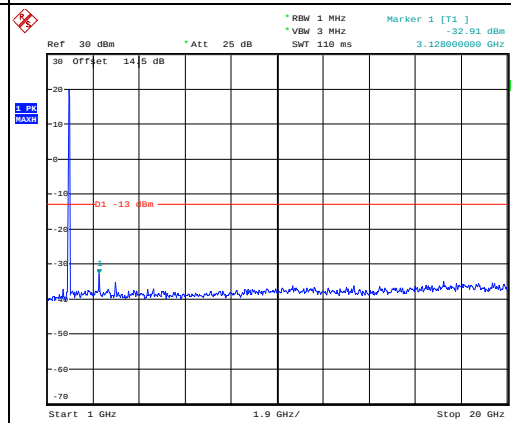


Date: 30.AUG.2023 18:33:32

Highest



Date: 30.AUG.2023 18:33:49



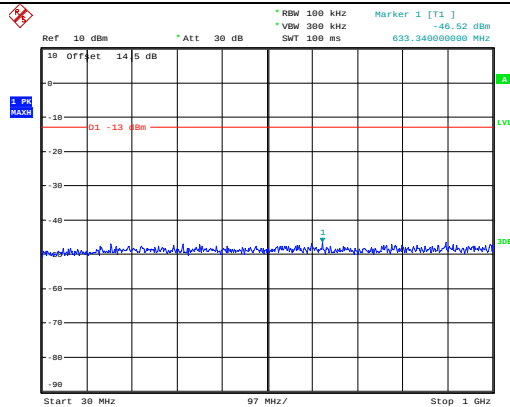
Date: 30.AUG.2023 18:34:00

Spurious Emissions at Antenna Terminal

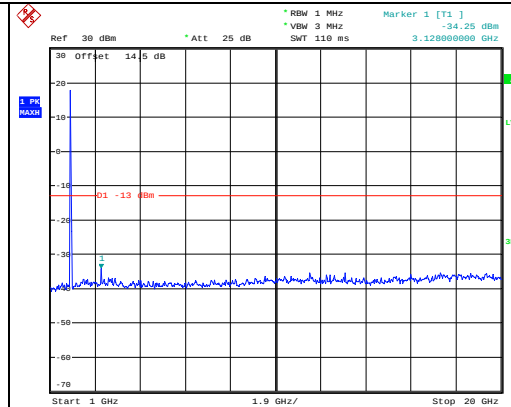
Channel

20MHz Bandwidth QPSK

Lowest

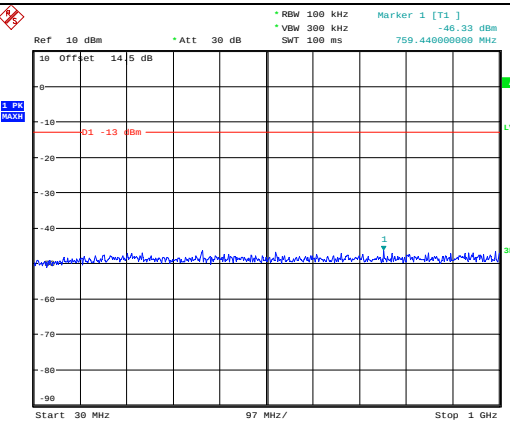


Date: 30.AUG.2023 18:34:47

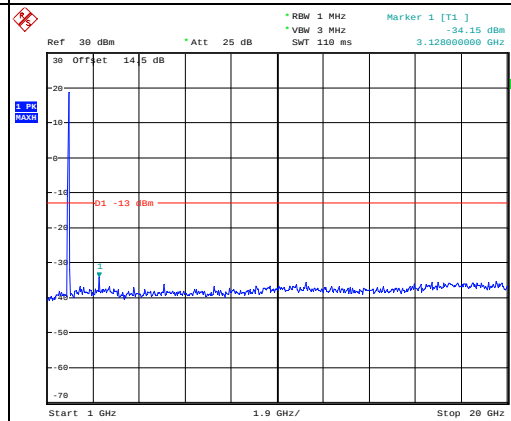


Date: 30.AUG.2023 18:34:58

Middle

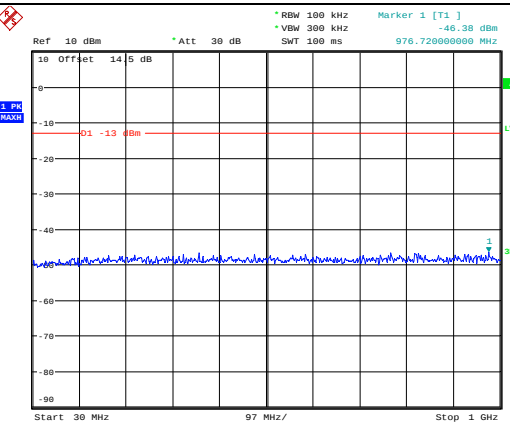


Date: 30.AUG.2023 18:35:12

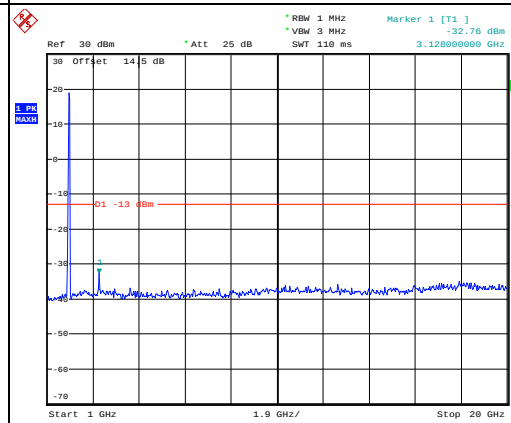


Date: 30.AUG.2023 18:35:23

Highest

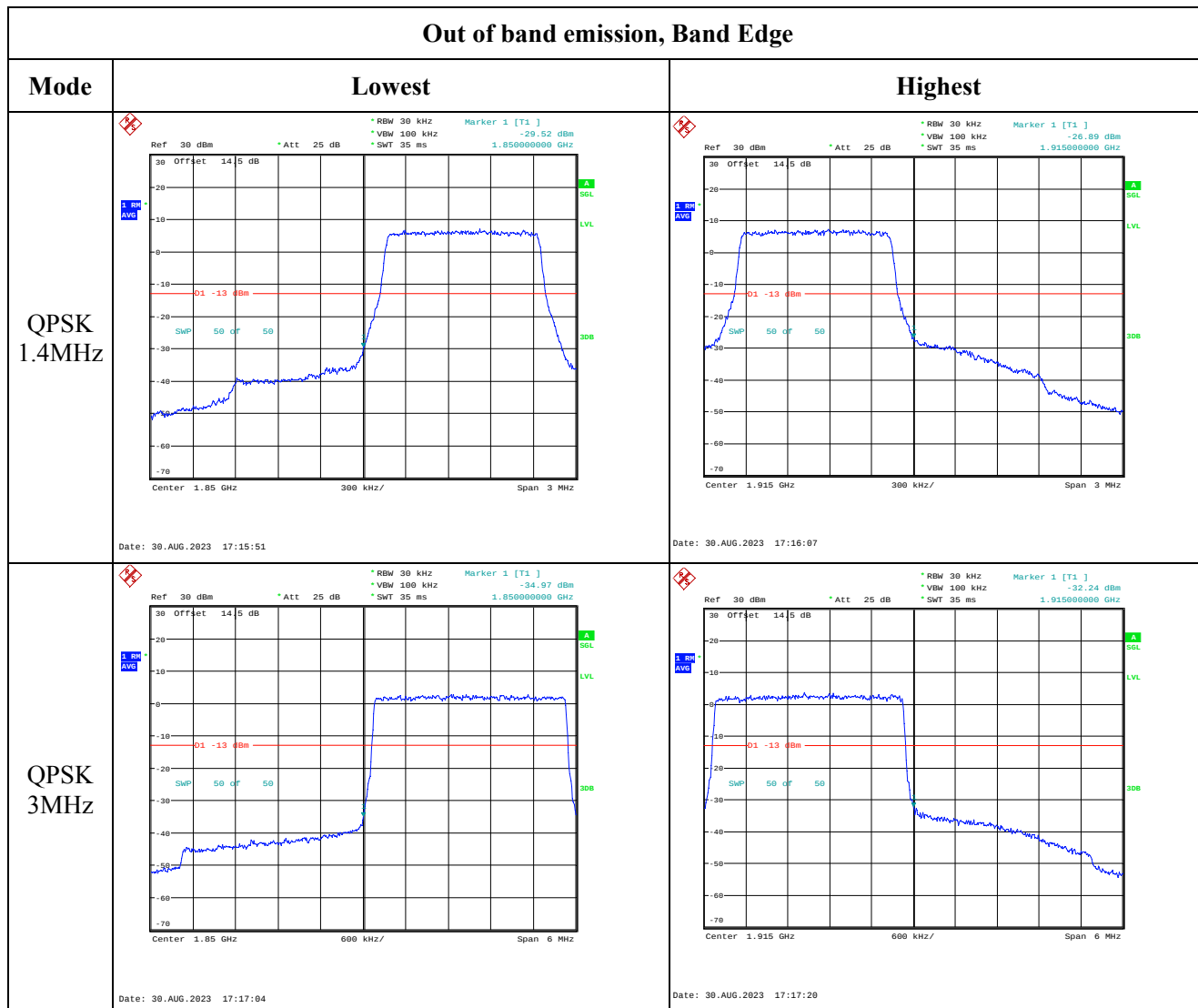


Date: 30.AUG.2023 18:35:40

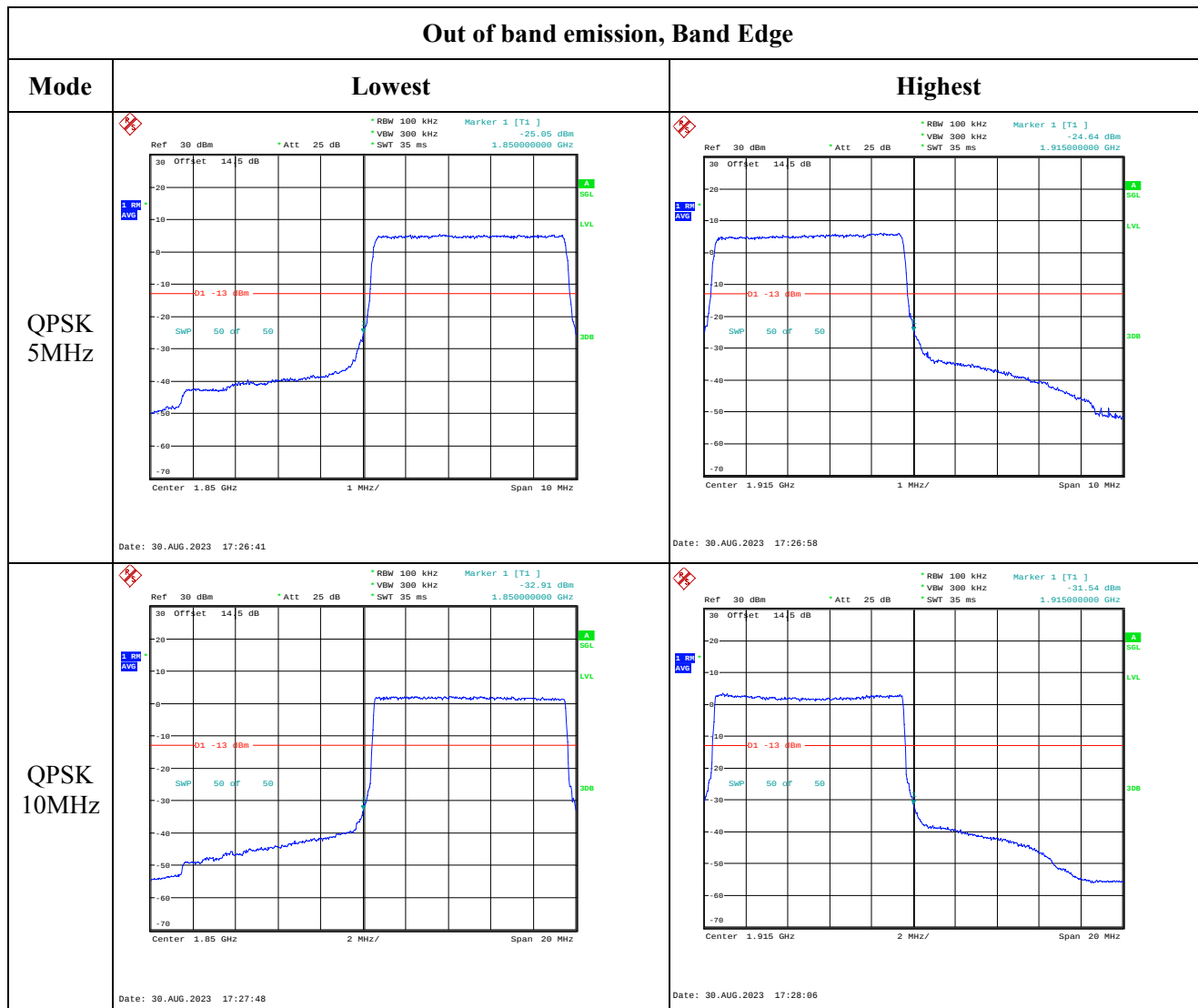


Date: 30.AUG.2023 18:35:51

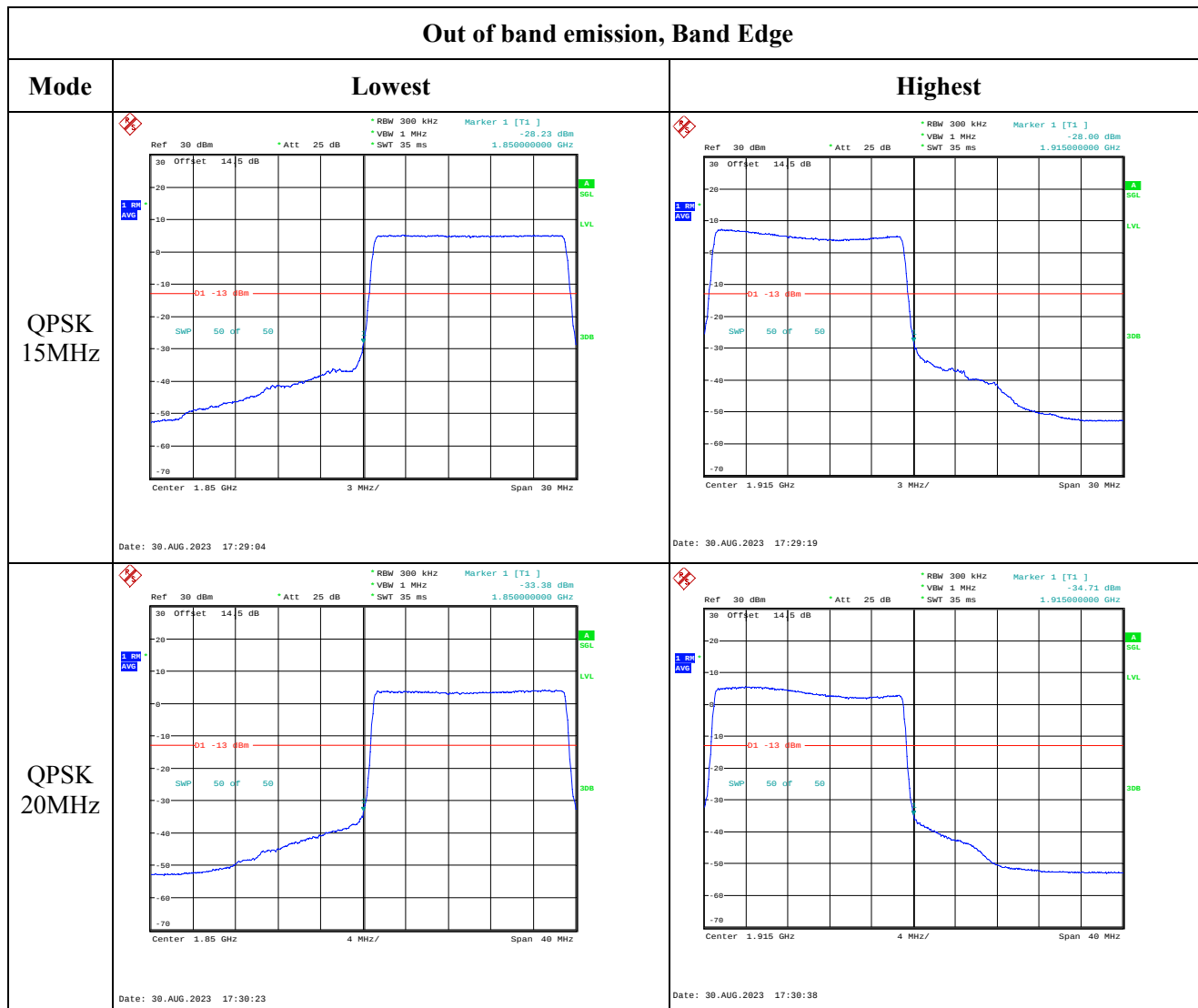
Out of band emission, Band Edge



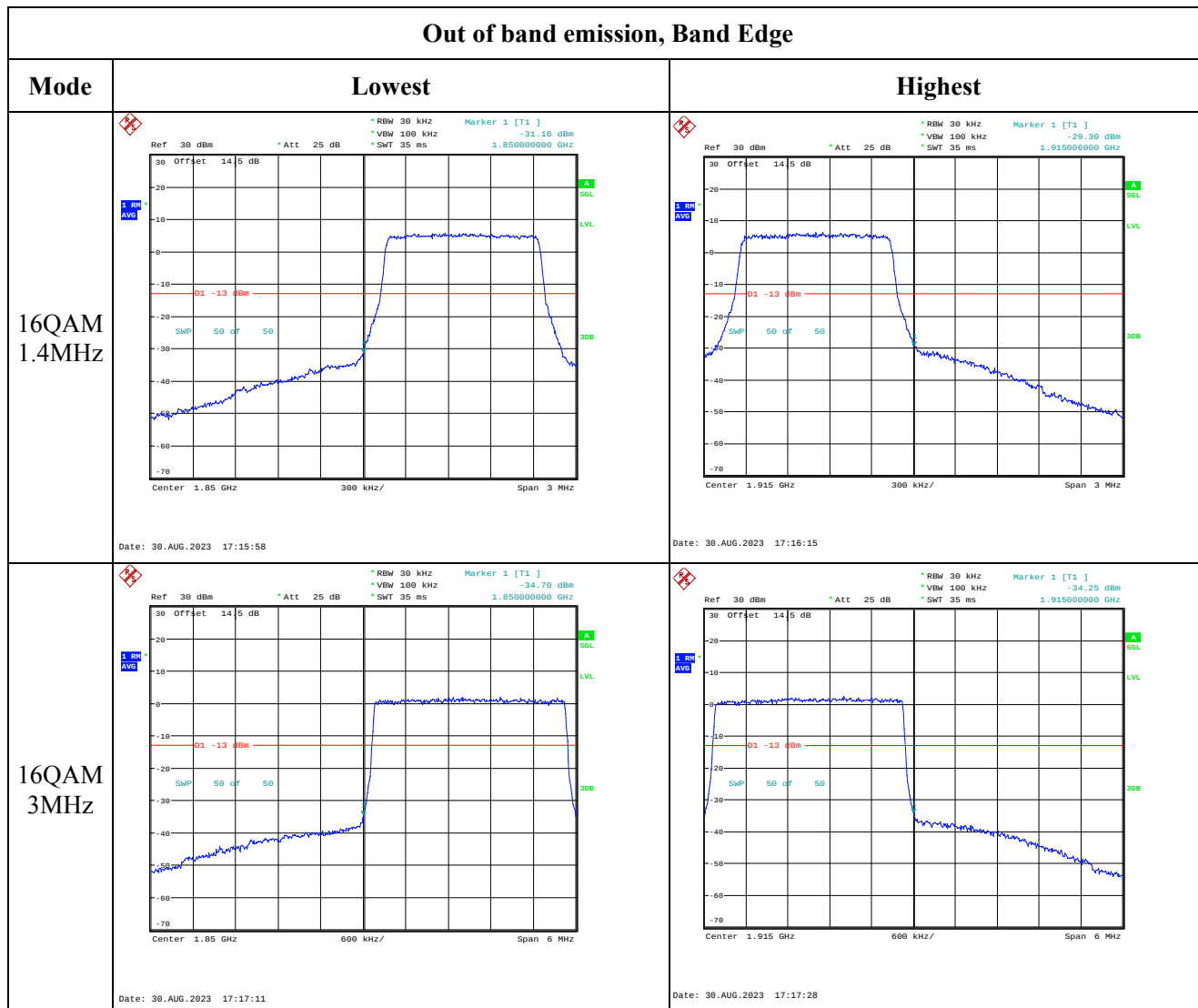
Out of band emission, Band Edge



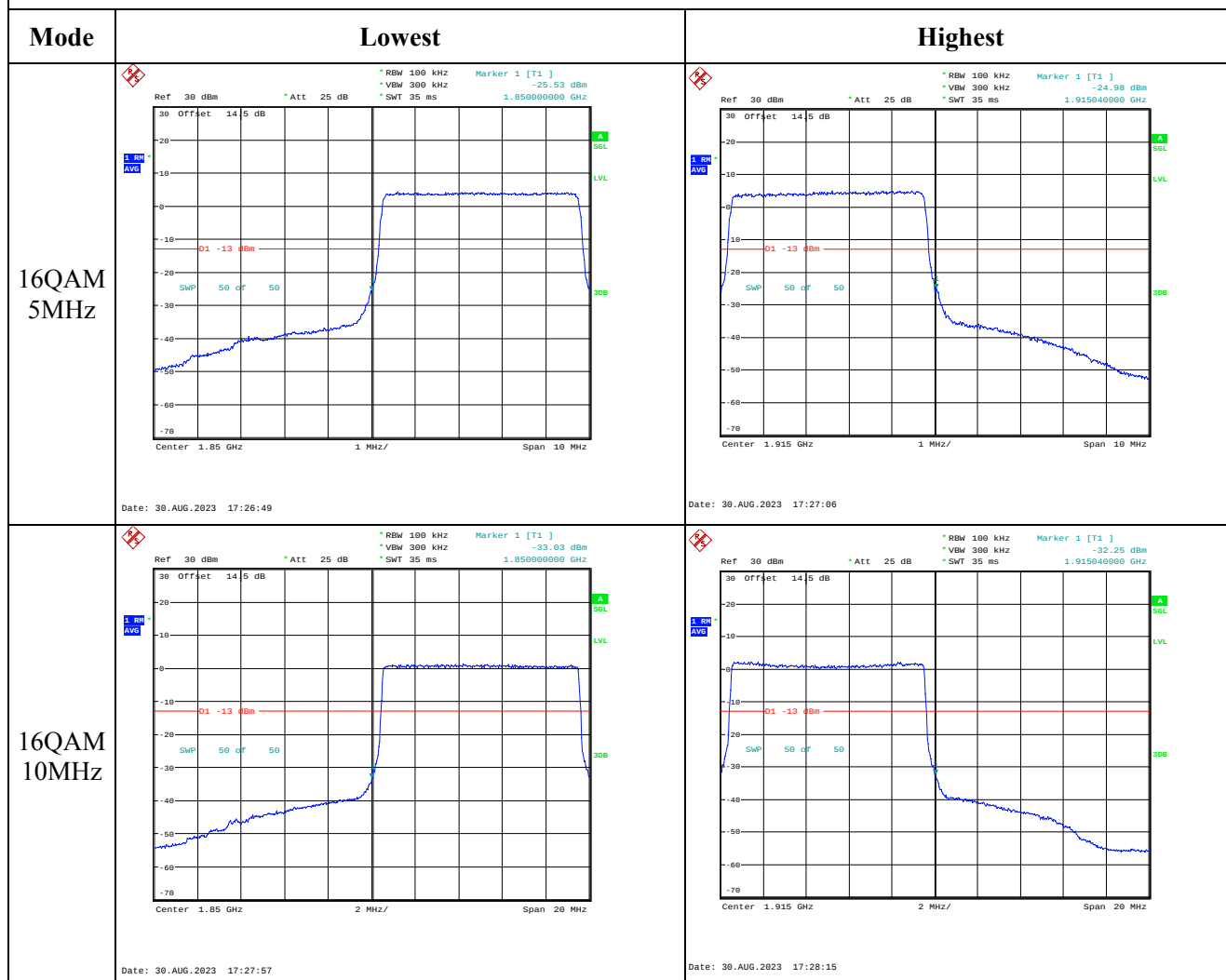
Out of band emission, Band Edge



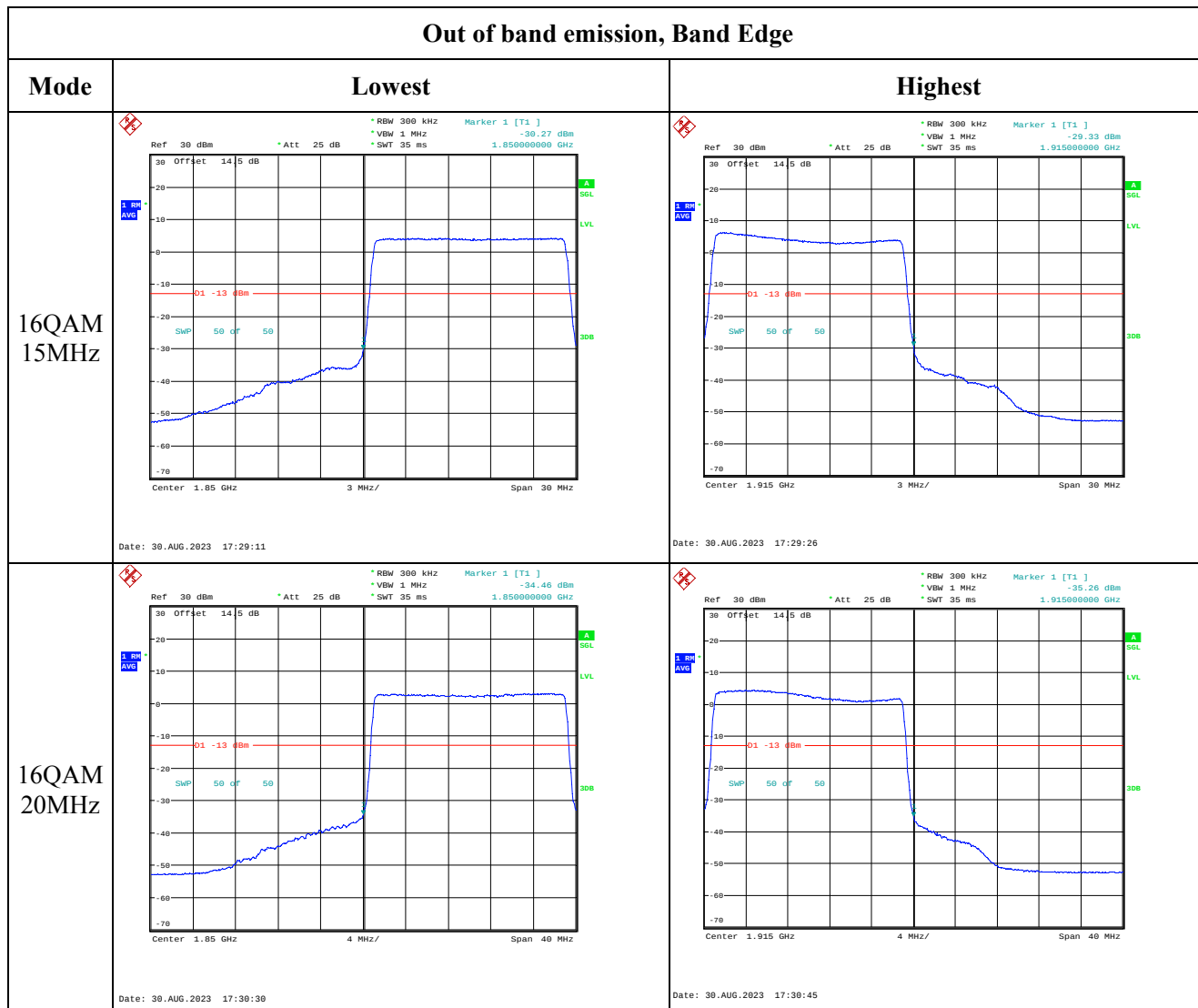
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.13 Antenna Port Test Data and Results for LTE Band 38

Serial Number:	28LK-1	Test Date:	2023/8/29-2023/8/31
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	45-58	ATM Pressure: (kPa)	99.7-100.3
----------------------	-----------	---------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
Unknown	Coaxial tee connector	Unknown	2204005	Each time	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Frequency For Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2572.5	2595	2617.5
10MHz	2575	2595	2615
15MHz	2577.5	2595	2612.5
20MHz	2580	2595	2610

Test Data:**FCC§2.1046;§ 27.50(h)(2)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	18.05	17.93	17.3	19.9	33
	RB1#13	18.14	18	17.41		
	RB1#24	18.01	17.84	17.31		
	RB15#0	17.04	16.96	16.33		
	RB15#10	17.05	16.89	16.37		
	RB25#0	17.03	16.91	16.34		
5MHz 16QAM	RB1#0	17.28	16.92	16.36	19.13	33
	RB1#13	17.37	16.97	16.45		
	RB1#24	17.27	16.81	16.34		
	RB15#0	16.15	15.94	15.35		
	RB15#10	16.15	15.9	15.38		
	RB25#0	16.11	16.01	15.36		
10MHz QPSK	RB1#0	18.13	18.04	17.8	20.15	33
	RB1#25	18.39	18.22	17.99		
	RB1#49	18.11	17.84	17.67		
	RB25#0	17.13	16.99	16.68		
	RB25#25	17.08	16.9	16.69		
	RB50#0	17.09	16.92	16.67		
10MHz 16QAM	RB1#0	17.22	17.21	16.67	19.22	33
	RB1#25	17.46	17.44	16.88		
	RB1#49	17.17	17.06	16.56		
	RB25#0	16.22	16.04	15.71		
	RB25#25	16.2	15.91	15.71		
	RB50#0	16.16	15.99	15.66		
15MHz QPSK	RB1#0	18.08	18.21	17.65	19.97	33
	RB1#38	18.12	18.15	17.61		
	RB1#74	17.96	17.93	17.46		
	RB36#0	17.09	17.22	16.61		
	RB36#39	17.05	17.06	16.52		
	RB75#0	17.11	17.13	16.58		
15MHz 16QAM	RB1#0	17.31	17.36	16.58	19.12	33
	RB1#38	17.33	17.32	16.52		
	RB1#74	17.15	17.09	16.39		
	RB36#0	16.15	16.23	15.54		
	RB36#39	16.11	16.07	15.43		
	RB75#0	16.13	16.12	15.53		
20MHz QPSK	RB1#0	18	17.45	17.63	20.14	33
	RB1#50	18.38	17.75	17.94		

	RB1#99	17.86	17.16	17.43		
	RB50#0	17.03	16.55	16.73		
	RB50#50	16.94	16.38	16.62		
	RB100#0	17.01	16.48	16.69		
20MHz 16QAM	RB1#0	17.21	16.53	16.58	19.34	33
	RB1#50	17.58	16.8	16.93		
	RB1#99	17.06	16.21	16.39		
	RB50#0	16.13	15.6	15.75		
	RB50#50	16.02	15.46	15.67		
	RB100#0	16.08	15.55	15.69		
Note: EIRP=Conducted Power(dBm) - Lc(dB) + G _T (dBi)						
				Result:	Pass	

Peak-to-average Ratio(PAR)					
Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	6.74	5.66	6.35	13
	RB100#0	6.53	6.65	6.53	13
20MHz 16QAM	RB1#0	7.75	6.58	7.02	13
	RB100#0	7.47	7.61	7.37	13
				Result:	Pass

FCC §2.1049, §27.53:Occupied Bandwidth						
Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.52	4.52	4.52	4.94	4.96	5.1
5MHz 16QAM	4.5	4.5	4.5	4.98	4.9	4.94
10MHz QPSK	8.96	8.96	8.96	9.68	9.68	9.8
10MHz 16QAM	8.96	8.96	8.96	9.52	9.52	10.16
15MHz QPSK	13.56	13.5	13.5	15.24	15.36	15.54
15MHz 16QAM	13.56	13.62	13.62	16.02	15.66	17.1
20MHz QPSK	17.92	17.92	17.92	19.36	19.2	19.6
20MHz 16QAM	17.92	18	17.92	19.44	19.44	19.2
Note: The test plots please refer to the Plots of Occupied Bandwidth						

FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal	
Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.

FCC §2.1051, § 27.53:Out of band emission, Band Edge	
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.

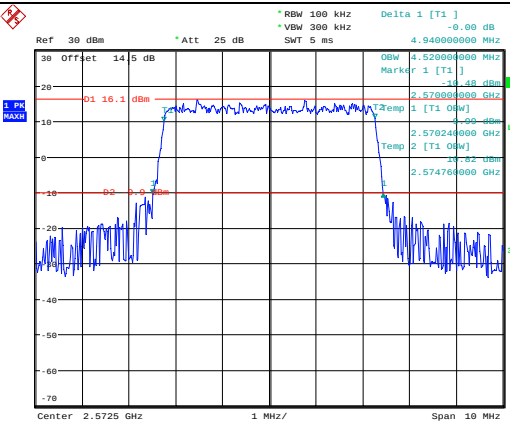
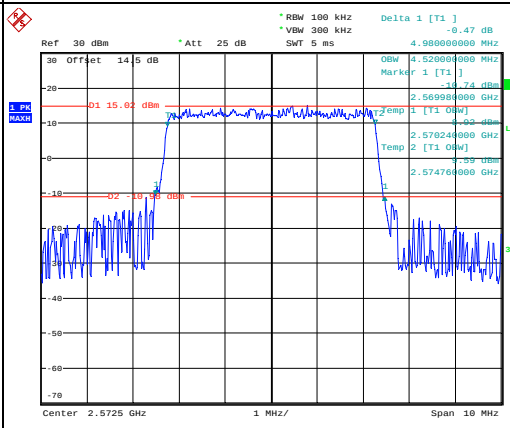
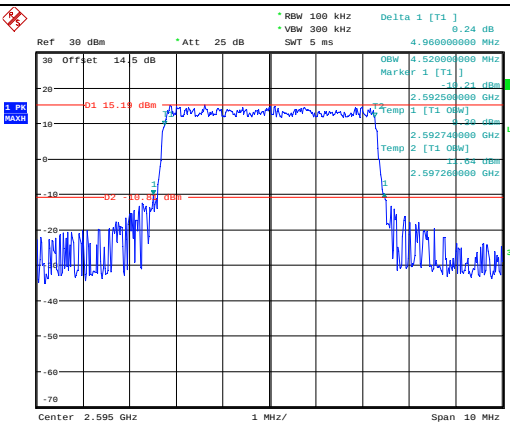
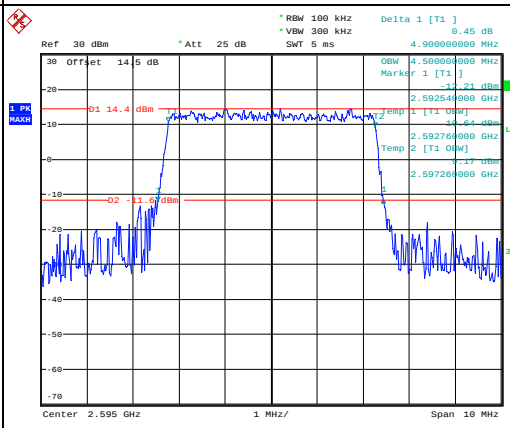
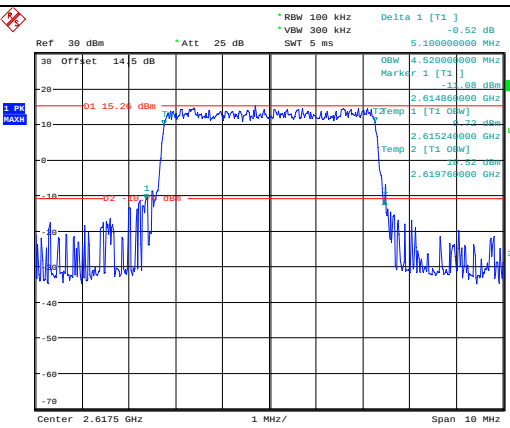
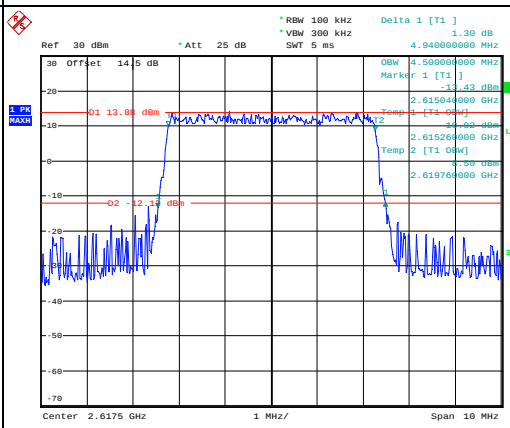
FCC §2.1055, §27.54: Frequency Stability	
--	--

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2571.028	2570.00	2618.966	2620
	-20	12	2571.033	2570.00	2618.964	2620
	-10	12	2571.012	2570.00	2618.979	2620
	0	12	2571.031	2570.00	2618.963	2620
	10	12	2571.033	2570.00	2618.987	2620
	20	12	2571.040	2570.00	2618.960	2620
	30	12	2571.034	2570.00	2618.967	2620
	40	12	2571.024	2570.00	2618.981	2620
	50	12	2571.023	2570.00	2618.967	2620
Frequency Stability vs. Voltage	20	6	2571.039	2570.00	2618.968	2620
	20	36	2571.014	2570.00	2618.977	2620
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2571.023	2570.00	2618.963	2620
	-20	12	2571.034	2570.00	2618.964	2620
	-10	12	2571.019	2570.00	2618.963	2620
	0	12	2571.020	2570.00	2618.976	2620
	10	12	2571.033	2570.00	2618.975	2620
	20	12	2571.040	2570.00	2618.960	2620
	30	12	2571.030	2570.00	2618.987	2620
	40	12	2571.034	2570.00	2618.960	2620
	50	12	2571.024	2570.00	2618.968	2620
Frequency Stability vs. Voltage	20	6	2571.027	2570.00	2618.961	2620
	20	36	2571.036	2570.00	2618.967	2620
					Result:	Pass

Test Plots(Note: The 14.5dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz -0.00 dB SWT 5 ms 4.94000000 MHz OBW Marker 1 [T1] 1 [T1] 16.1 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.57000000 GHz Temp 2 [T1] 2.57024000 GHz Temp 3 [T1] 2.57048000 GHz Temp 4 [T1] 2.57072000 GHz Temp 5 [T1] 2.57096000 GHz Center 2.5725 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:36:39	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz -0.47 dB SWT 5 ms 4.98000000 MHz OBW Marker 1 [T1] 1 [T1] 15.02 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.56998000 GHz Temp 2 [T1] 2.57024000 GHz Temp 3 [T1] 2.57048000 GHz Temp 4 [T1] 2.57072000 GHz Temp 5 [T1] 2.57096000 GHz Center 2.5725 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:37:12
Middle	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz 0.24 dB SWT 5 ms 4.96000000 MHz OBW Marker 1 [T1] 1 [T1] 15.19 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.59250000 GHz Temp 2 [T1] 2.59274000 GHz Temp 3 [T1] 2.59298000 GHz Temp 4 [T1] 2.59322000 GHz Temp 5 [T1] 2.59346000 GHz Center 2.595 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:37:40	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz 0.45 dB SWT 5 ms 4.96000000 MHz OBW Marker 1 [T1] 1 [T1] 14.4 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.59250000 GHz Temp 2 [T1] 2.59274000 GHz Temp 3 [T1] 2.59298000 GHz Temp 4 [T1] 2.59322000 GHz Temp 5 [T1] 2.59346000 GHz Center 2.595 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:38:05
Highest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz -0.52 dB SWT 5 ms 5.10000000 MHz OBW Marker 1 [T1] 1 [T1] 15.20 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.61480000 GHz Temp 2 [T1] 2.61520000 GHz Temp 3 [T1] 2.61560000 GHz Temp 4 [T1] 2.61600000 GHz Temp 5 [T1] 2.61640000 GHz Center 2.6175 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:38:30	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] *VBW 300 kHz 1.30 dB SWT 5 ms 4.94000000 MHz OBW Marker 1 [T1] 1 [T1] 13.88 dBm 2 [T1] 10.0 dBm Temp 1 [T1] 2.61500000 GHz Temp 2 [T1] 2.61520000 GHz Temp 3 [T1] 2.61540000 GHz Temp 4 [T1] 2.61560000 GHz Temp 5 [T1] 2.61580000 GHz Center 2.6175 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 09:38:54

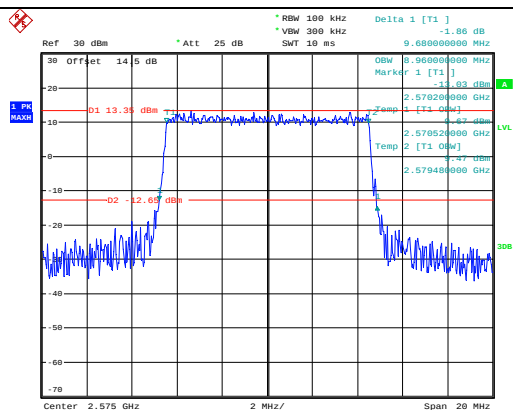
Occupied Bandwidth

Channel

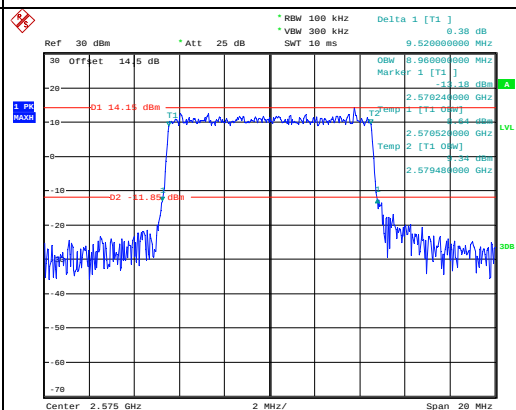
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

Lowest

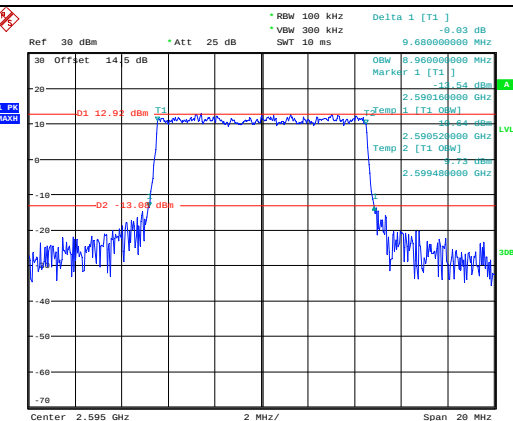


Date: 30.AUG.2023 09:40:44

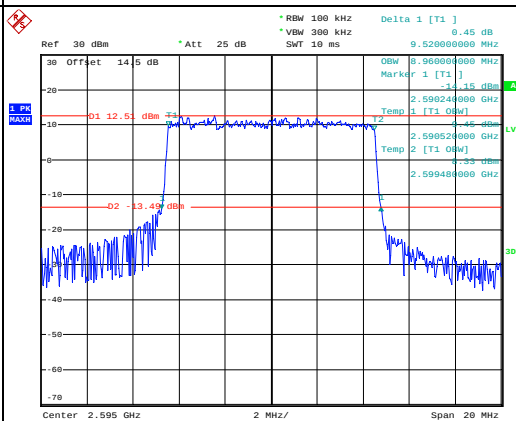


Date: 30.AUG.2023 09:41:15

Middle

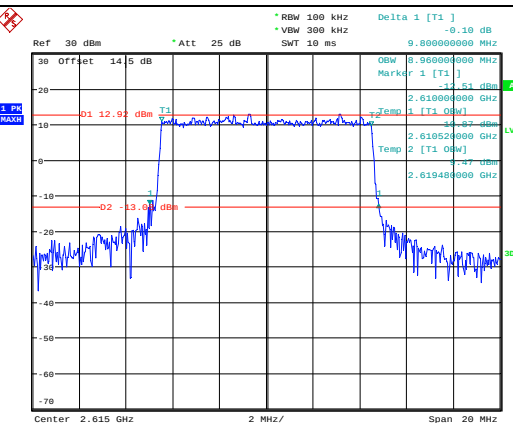


Date: 30.AUG.2023 09:41:42

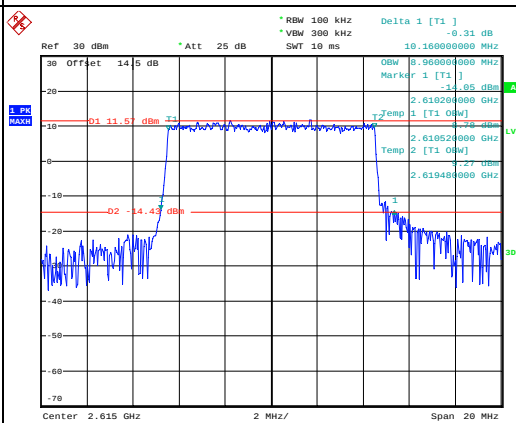


Date: 30.AUG.2023 09:42:09

Highest



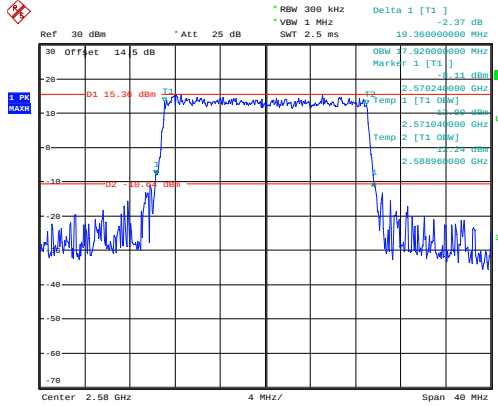
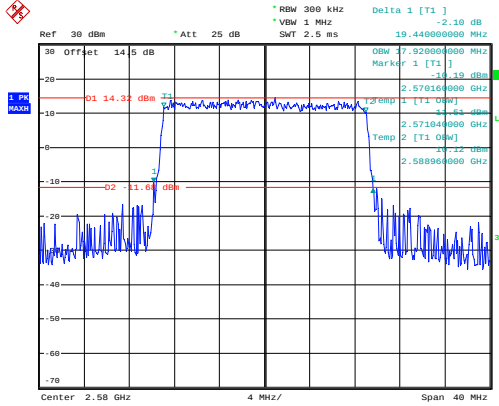
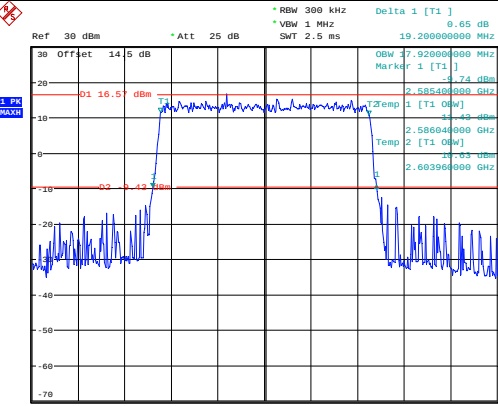
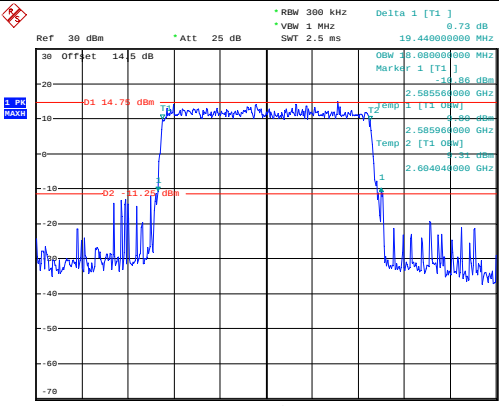
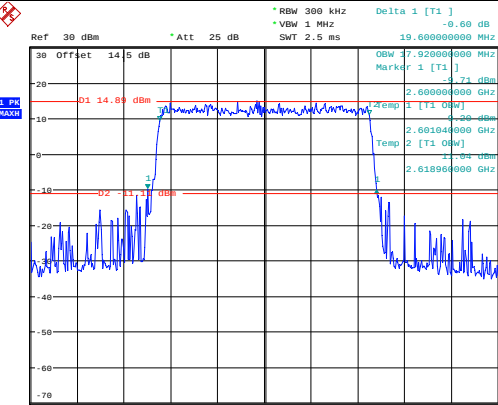
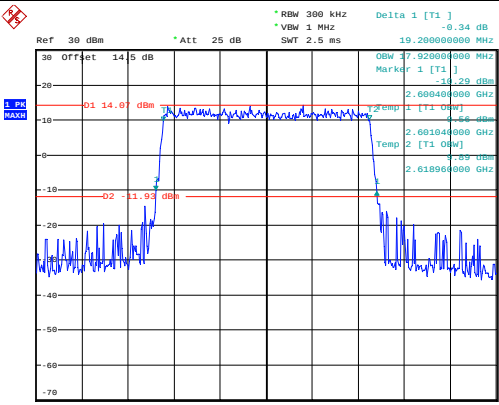
Date: 30.AUG.2023 09:42:40



Date: 30.AUG.2023 09:43:04

Page 188 of 250

Occupied Bandwidth

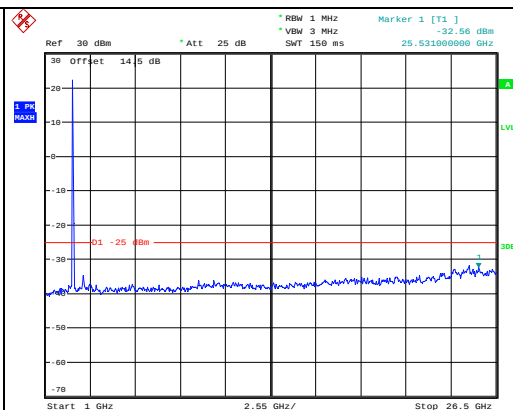
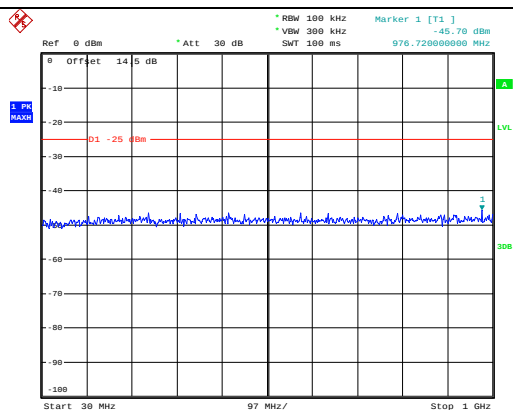
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.65 dB VBW 1 MHz SWT 2.5 ms 19.360000000 MHz Marker 1 [T1] -15.36 dBm 1 [T1] 0.65 dB 2 [T1] 0.65 dB Temp 1 [T1] 0.65 dB Temp 2 [T1] 0.65 dB Center 2.58 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:58:13	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.65 dB VBW 1 MHz SWT 2.5 ms 19.440000000 MHz Marker 1 [T1] -14.32 dBm 1 [T1] 0.65 dB 2 [T1] 0.65 dB Temp 1 [T1] 0.65 dB Temp 2 [T1] 0.65 dB Center 2.58 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:58:44
Middle	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.65 dB VBW 1 MHz SWT 2.5 ms 19.200000000 MHz Marker 1 [T1] -16.5 dBm 1 [T1] 0.65 dB 2 [T1] 0.65 dB Temp 1 [T1] 0.65 dB Temp 2 [T1] 0.65 dB Center 2.595 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:59:18	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.73 dB VBW 1 MHz SWT 2.5 ms 19.440000000 MHz Marker 1 [T1] -14.72 dBm 1 [T1] 0.73 dB 2 [T1] 0.73 dB Temp 1 [T1] 0.73 dB Temp 2 [T1] 0.73 dB Center 2.595 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 09:59:38
Highest	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.60 dB VBW 1 MHz SWT 2.5 ms 19.600000000 MHz Marker 1 [T1] -14.89 dBm 1 [T1] 0.60 dB 2 [T1] 0.60 dB Temp 1 [T1] 0.60 dB Temp 2 [T1] 0.60 dB Center 2.61 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 10:00:05	 Ref 30 dBm Offset 14.5 dB Att 25 dB RBW 300 kHz Delta 1 [T1] 0.34 dB VBW 1 MHz SWT 2.5 ms 19.200000000 MHz Marker 1 [T1] -14.07 dBm 1 [T1] 0.34 dB 2 [T1] 0.34 dB Temp 1 [T1] 0.34 dB Temp 2 [T1] 0.34 dB Center 2.61 GHz 4 MHz/ Span 40 MHz Date: 30.AUG.2023 10:00:32

Spurious Emissions at Antenna Terminal

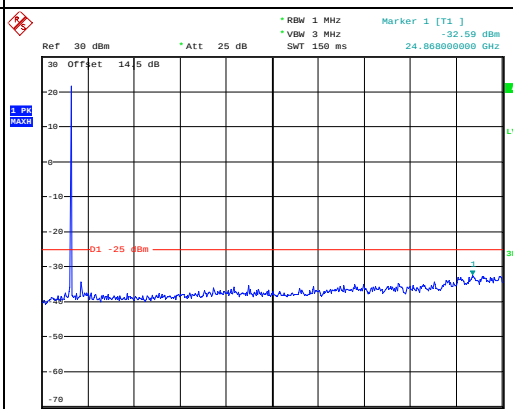
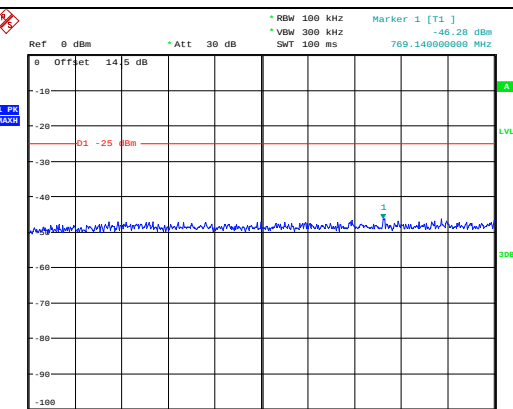
Channel

5MHz Bandwidth QPSK

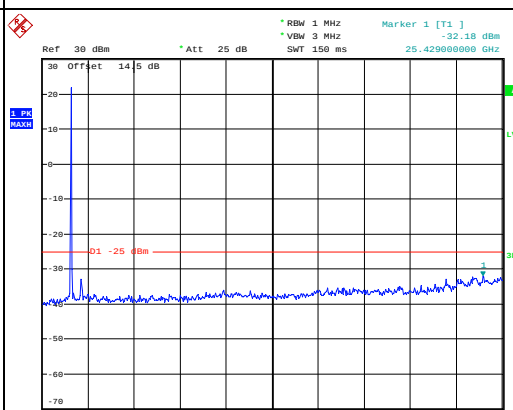
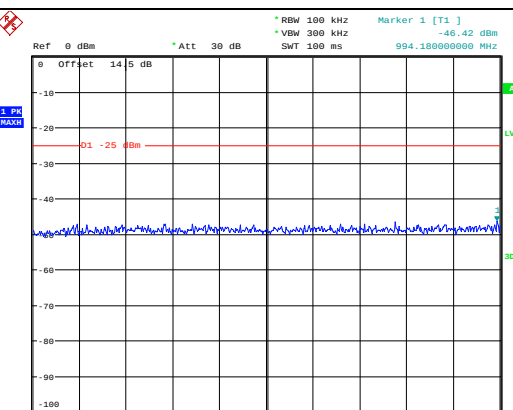
Lowest



Middle



Highest

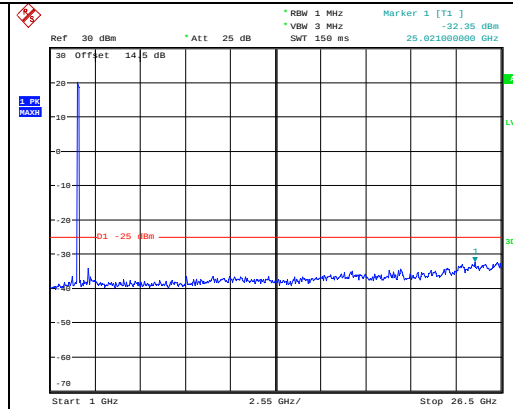
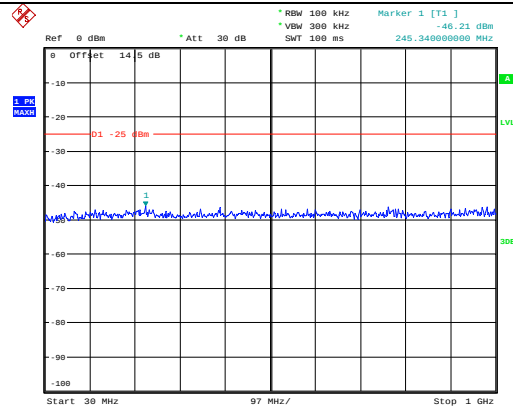


Spurious Emissions at Antenna Terminal

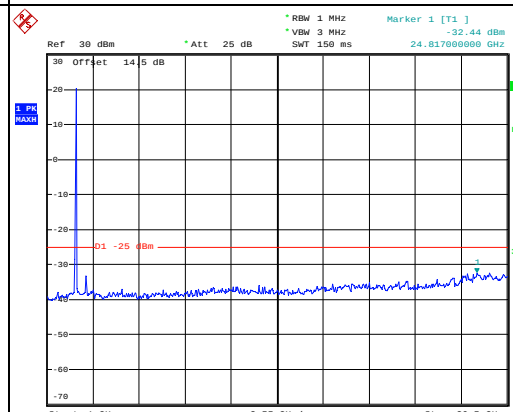
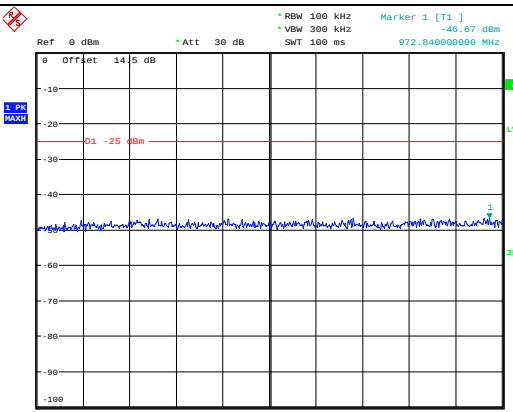
Channel

10MHz Bandwidth QPSK

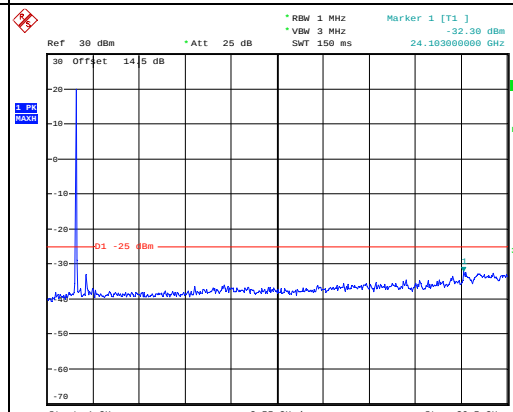
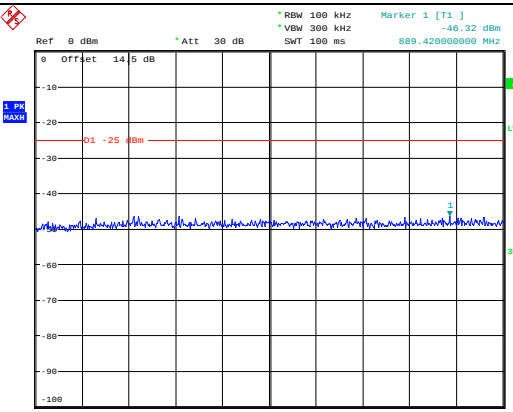
Lowest



Middle



Highest

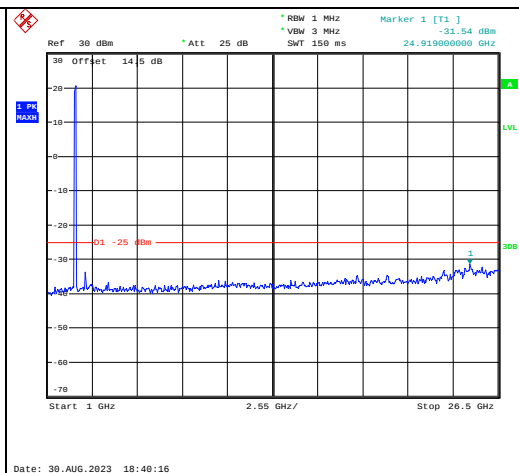
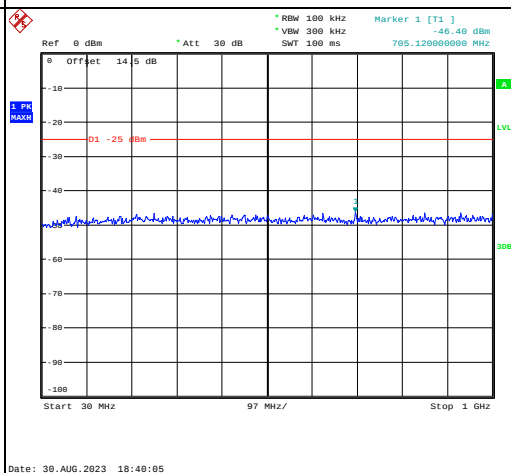


Spurious Emissions at Antenna Terminal

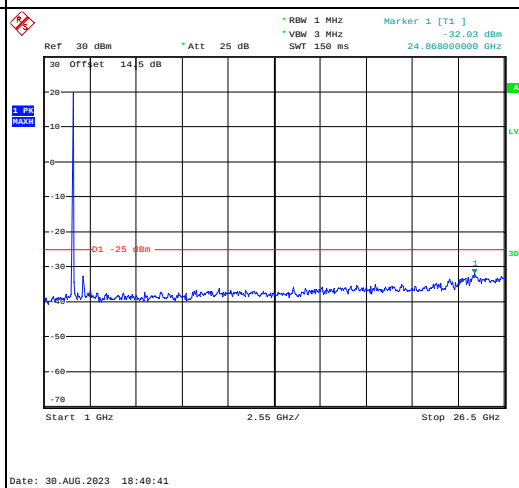
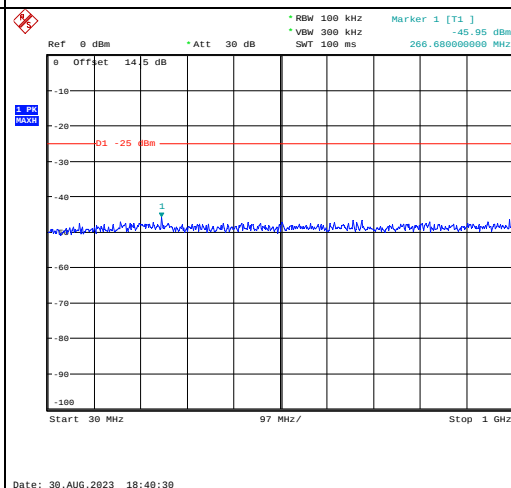
Channel

15MHz Bandwidth QPSK

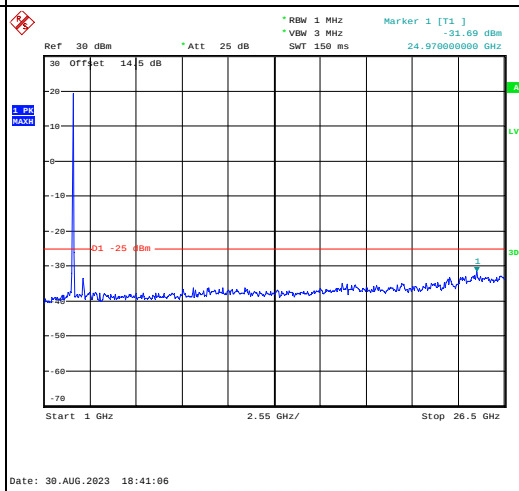
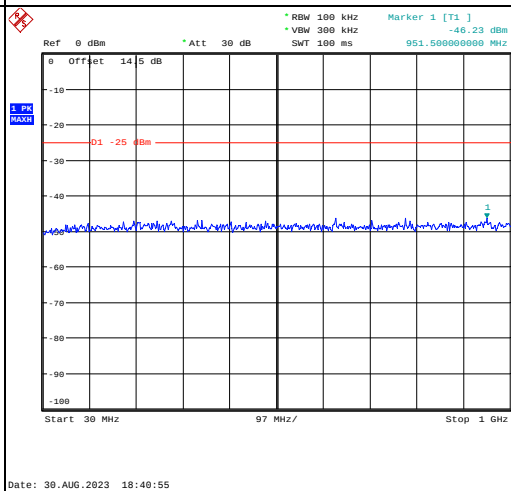
Lowest



Middle



Highest

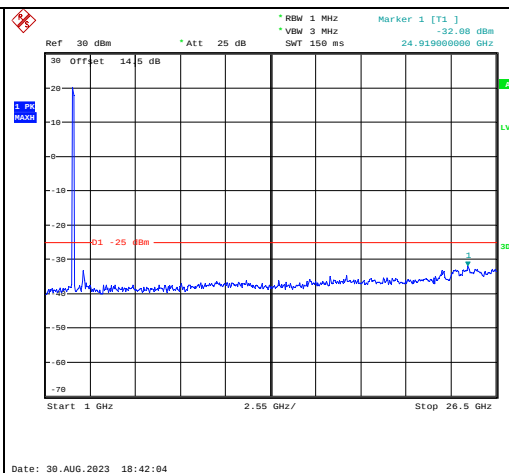
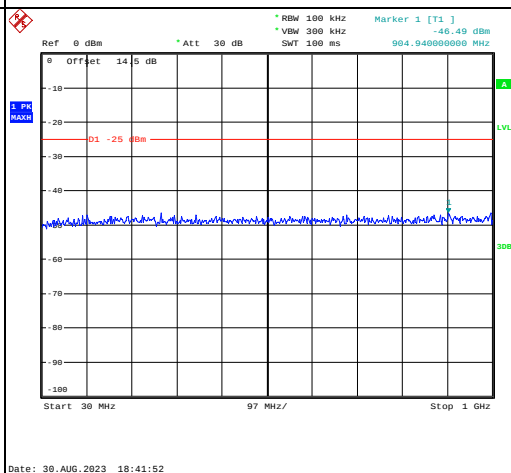


Spurious Emissions at Antenna Terminal

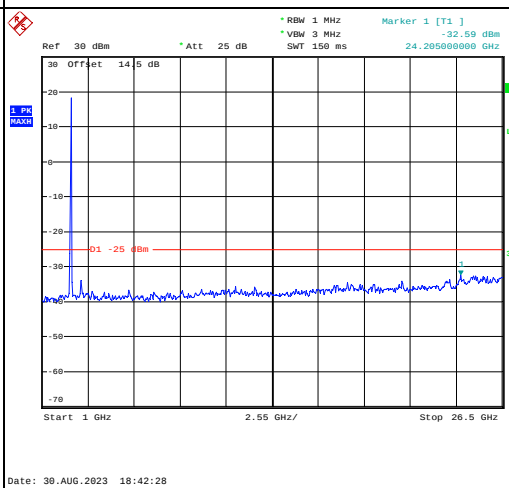
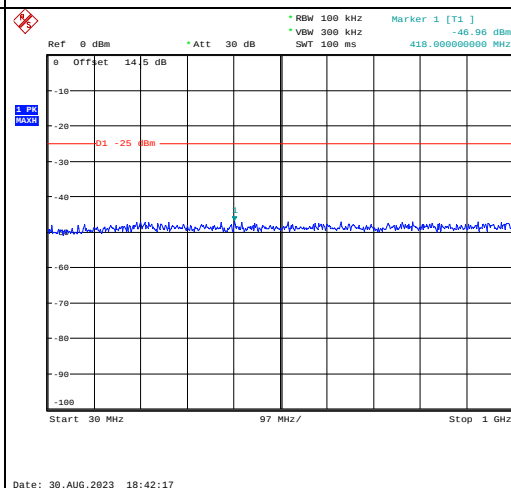
Channel

20MHz Bandwidth QPSK

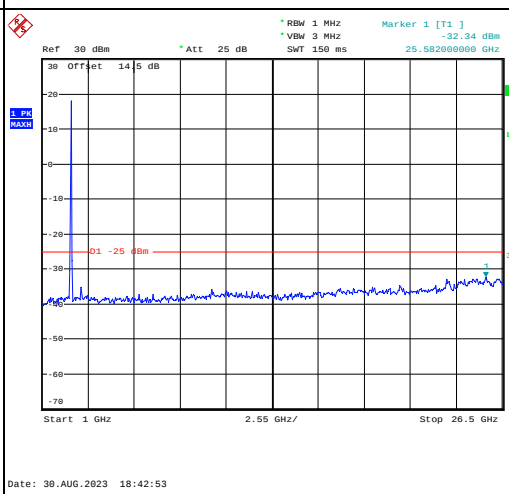
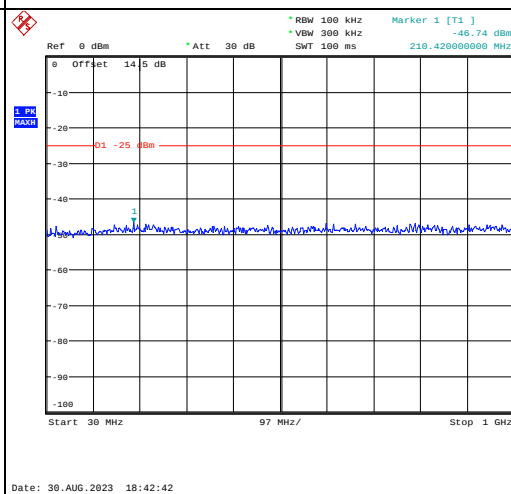
Lowest



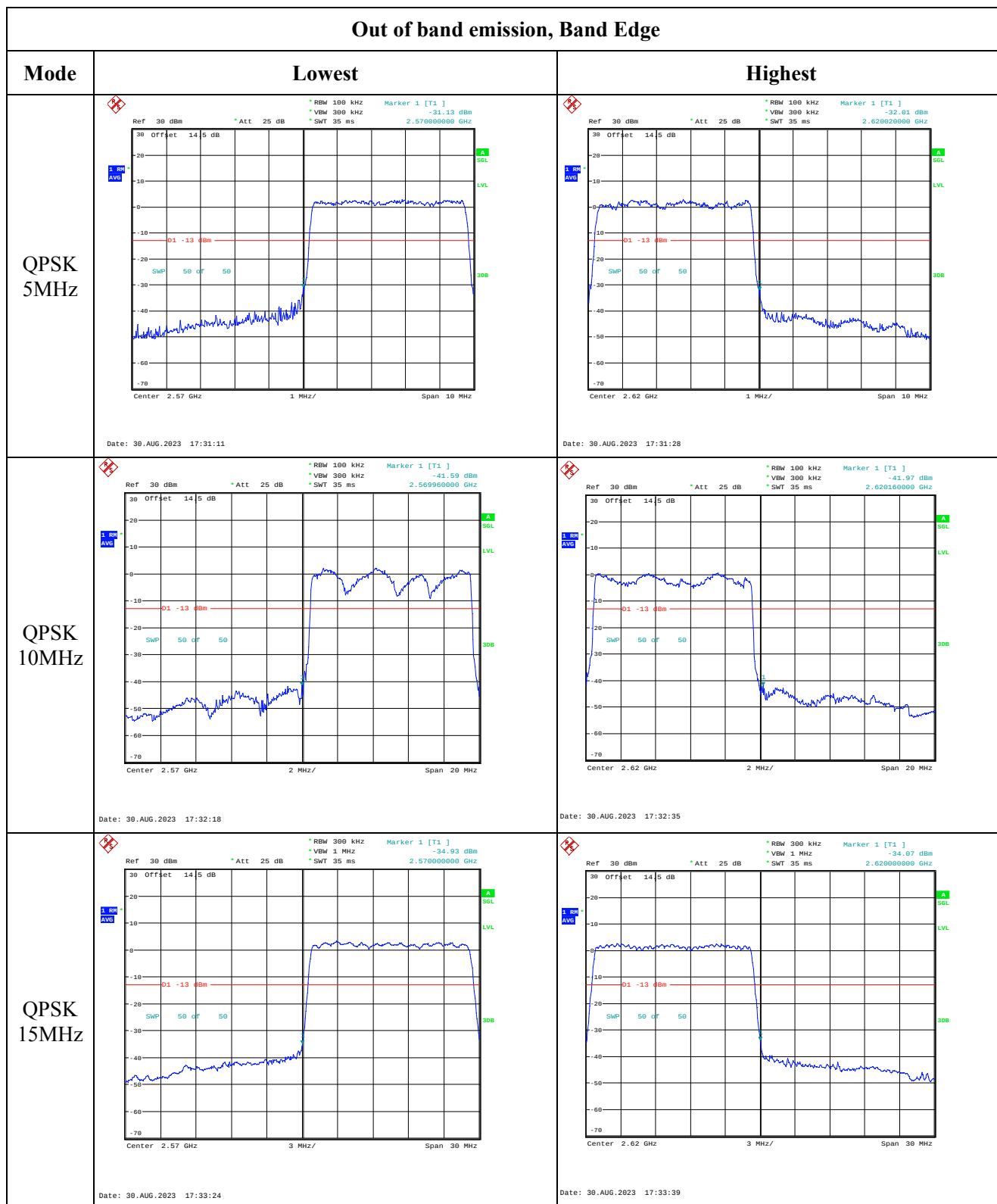
Middle

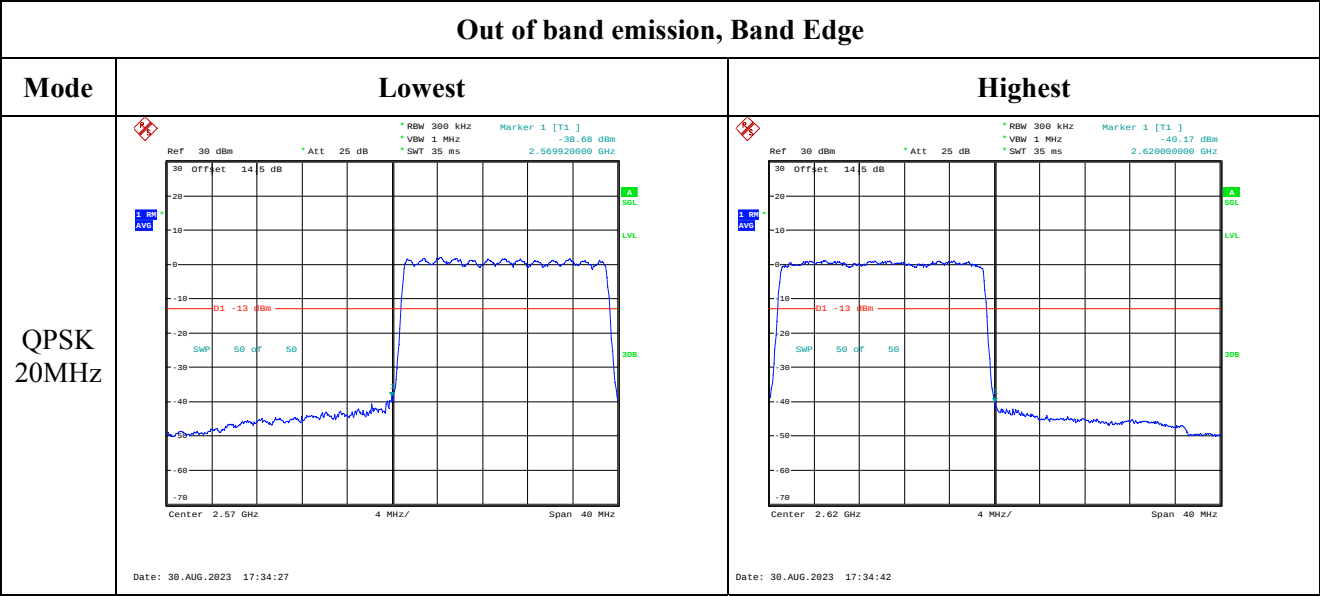


Highest

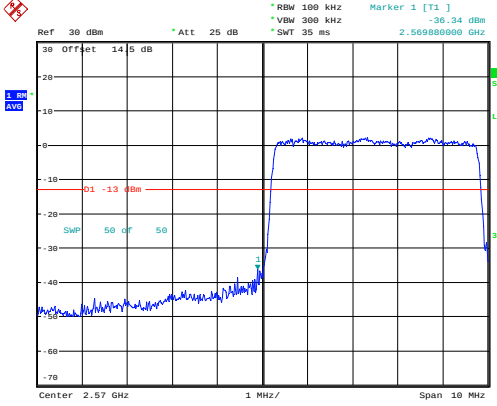
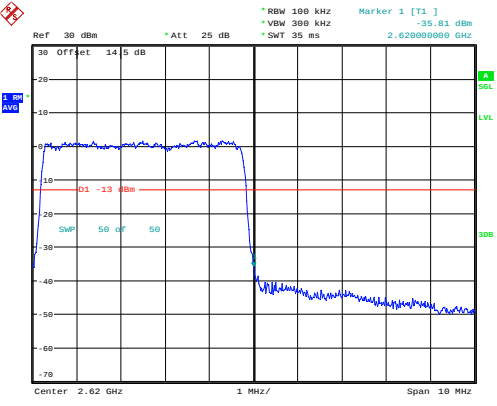
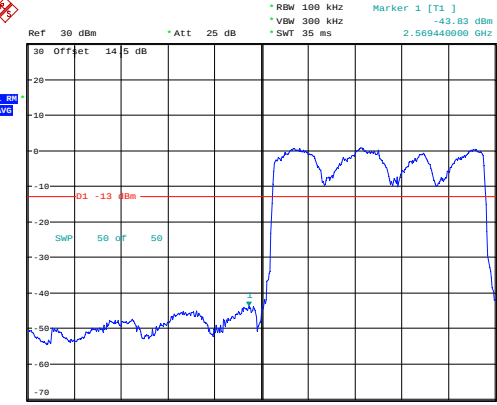
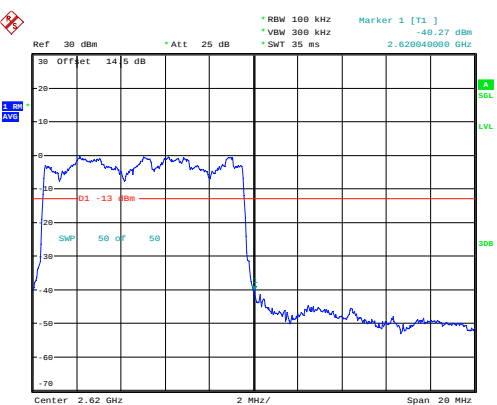
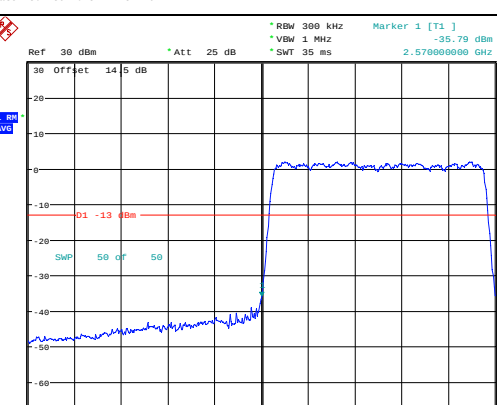
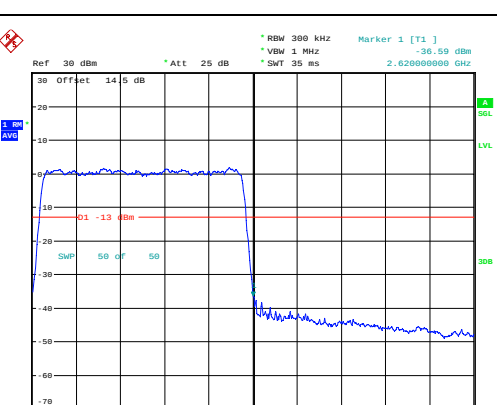


Out of band emission, Band Edge

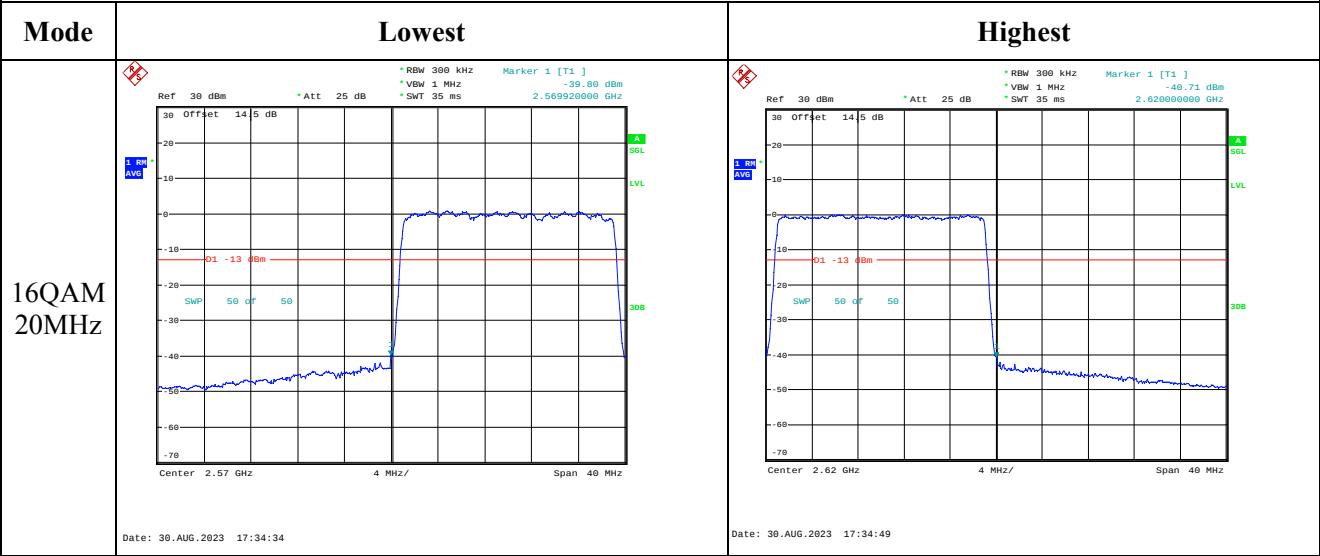




Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz	 Ref 30 dBm *Att 25 dB RBW 100 kHz Marker 1 [T1] VBW 300 kHz -36.34 dBm SWT 35 ms 2.569880000 GHz Center 2.57 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 17:31:19	 Ref 30 dBm *Att 25 dB RBW 100 kHz Marker 1 [T1] VBW 300 kHz -35.81 dBm SWT 35 ms 2.620000000 GHz Center 2.62 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 17:31:35
16QAM 10MHz	 Ref 30 dBm *Att 25 dB RBW 100 kHz Marker 1 [T1] VBW 300 kHz -43.83 dBm SWT 35 ms 2.569440000 GHz Center 2.57 GHz 2 MHz/ Span 20 MHz Date: 30.AUG.2023 17:32:26	 Ref 30 dBm *Att 25 dB RBW 100 kHz Marker 1 [T1] VBW 300 kHz -49.27 dBm SWT 35 ms 2.620040000 GHz Center 2.62 GHz 2 MHz/ Span 20 MHz Date: 30.AUG.2023 17:32:43
16QAM 15MHz	 Ref 30 dBm *Att 25 dB RBW 300 kHz Marker 1 [T1] VBW 1 MHz -35.79 dBm SWT 35 ms 2.570000000 GHz Center 2.57 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 17:33:31	 Ref 30 dBm *Att 25 dB RBW 300 kHz Marker 1 [T1] VBW 1 MHz -36.59 dBm SWT 35 ms 2.620000000 GHz Center 2.62 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 17:33:46

Out of band emission, Band Edge



4.14 Antenna Port Test Data and Results for LTE Band 40

Serial Number:	28LK-1	Test Date:	2023/8/29-2023/10/23
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.8	Relative Humidity: (%)	45-61	ATM Pressure: (kPa)	99.7-101
----------------------	-----------	---------------------------	-------	------------------------	----------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
Unknown	Coaxial tee connector	Unknown	2204005	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Frequency For Each Mode:

Operation Band	Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
LTE Band 40 Lower 2305-2315MHz	5MHz	2307.5	/	2312.5
	10MHz	/	2310	/
LTE Band 40 Upper	5MHz	2352.5	/	2357.5
	10MHz	/	2355	/

Test Data:

(Note:Uplink Downlink configuration 3 was tested)

FCC§2.1046;§ 27.50(a)(3)**LTE Band 40 Lower:****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	19.09	/	18.39	19.79	24
	RB1#13	19.19	/	18.51		
	RB1#24	19.02	/	18.37		
	RB15#0	18.19	/	17.45		
	RB15#10	18.16	/	17.56		
	RB25#0	18.11	/	17.41		
5MHz 16QAM	RB1#0	18.32	/	17.47	19	24
	RB1#13	18.4	/	17.57		
	RB1#24	18.25	/	17.42		
	RB15#0	17.21	/	16.52		
	RB15#10	17.29	/	16.6		
	RB25#0	17.06	/	16.63		
10MHz QPSK	RB1#0	/	19.27	/	20.06	24
	RB1#25	/	19.46	/		
	RB1#49	/	19.19	/		
	RB25#0	/	18.24	/		
	RB25#25	/	18.17	/		
	RB50#0	/	18.32	/		
10MHz 16QAM	RB1#0	/	18.18	/	18.95	24
	RB1#25	/	18.35	/		
	RB1#49	/	18.09	/		
	RB25#0	/	17.33	/		
	RB25#25	/	17.29	/		
	RB50#0	/	17.31	/		

EIRP PSD in 5MHz:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted PSD(dBm/5MHz)			Maximum EIRP PSD (dBm/5MHz)	Limit (dBm/5MHz)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	/	19.27	/	20.06	24
	RB1#25	/	19.46	/		
	RB1#49	/	19.19	/		
	RB25#0	/	18.24	/		
	RB25#25	/	18.17	/		
	RB50#0	/	17.05	/		
10MHz 16QAM	RB1#0	/	18.18	/	18.95	24
	RB1#25	/	18.35	/		

	RB1#49	/	18.09	/		
	RB25#0	/	17.33	/		
	RB25#25	/	17.29	/		
	RB50#0	/	16.13	/		

Note:

For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.

EIRP=Conducted Power(dBm) - Lc(dB) + Gt(dBi)

EIRP PSD=Conducted PSD(dBm/5MHz) - Lc(dB) + Gt(dBi)

LTE Band 40 Upper:**RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	18.91	/	18.73	19.63	24
	RB1#13	19.03	/	18.8		
	RB1#24	18.89	/	18.64		
	RB15#0	17.93	/	17.79		
	RB15#10	17.96	/	17.76		
	RB25#0	17.92	/	17.7		
5MHz 16QAM	RB1#0	17.99	/	17.72	18.67	24
	RB1#13	18.07	/	17.81		
	RB1#24	17.93	/	17.67		
	RB15#0	17.02	/	16.75		
	RB15#10	17.07	/	16.71		
	RB25#0	17.04	/	16.82		
10MHz QPSK	RB1#0	/	19.12	/	19.9	24
	RB1#25	/	19.3	/		
	RB1#49	/	18.97	/		
	RB25#0	/	17.99	/		
	RB25#25	/	17.97	/		
	RB50#0	/	17.99	/		
10MHz 16QAM	RB1#0	/	18.02	/	18.84	24
	RB1#25	/	18.24	/		
	RB1#49	/	17.94	/		
	RB25#0	/	17.22	/		
	RB25#25	/	17.1	/		
	RB50#0	/	17.07	/		

EIRP PSD in 5MHz:

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted PSD(dBm/5MHz)			Maximum EIRP PSD (dBm/5MHz)	Limit (dBm/5MHz)
		Lowest Channel	Middle Channel	Highest Channel		
10MHz QPSK	RB1#0	/	19.12	/	19.9	24
	RB1#25	/	19.3	/		
	RB1#49	/	18.97	/		

10MHz 16QAM	RB25#0	/	17.99	/	18.84	24
	RB25#25	/	17.97	/		
	RB50#0	/	16.84	/		
	RB1#0	/	18.02	/		
	RB1#25	/	18.24	/		
	RB1#49	/	17.94	/		
	RB25#0	/	17.22	/		
	RB25#25	/	17.1	/		
	RB50#0	/	16.02	/		

Note:

For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.

EIRP=Conducted Power(dBm) - Lc(dB) + Gt(dBi)

EIRP PSD=Conducted PSD(dBm/5MHz) - Lc(dB) + Gt(dBi)

Result:**Pass****Duty Cycle**

Duty Cycle						
Operation Band	Modulation	Bandwidth	Ton (ms)	Ton+off (ms)	Duty Cycle (%)	Limit (%)
LTE Band 40 Lower	QPSK	5M	3.141	10.051	31.25	38
		10M	3.141	9.923	31.65	38
	16QAM	5M	3.141	9.987	31.45	38
		10M	3.141	9.987	31.45	38
LTE Band 40 Upper	QPSK	5M	3.141	9.987	31.45	38
		10M	3.141	9.372	33.51	38
	16QAM	5M	3.205	10.115	31.69	38
		10M	3.141	9.987	31.45	38
					Result:	Pass

FCC §2.1049, §27.53:Occupied Bandwidth**LTE Band 40 Lower:**

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle channel	High Channel
5MHz QPSK	4.54	/	4.52	5.16	/	5.08
5MHz 16QAM	4.52	/	4.52	5.24	/	5.22
10MHz QPSK	/	8.96	/	/	9.88	/
10MHz 16QAM	/	8.96	/	/	9.72	/

LTE Band 40 Upper:

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle channel	High Channel
5MHz QPSK	4.52	/	4.52	5.14	/	5.08

5MHz 16QAM	4.5	/	4.52	5.12	/	5.18
10MHz QPSK	/	8.96	/	/	9.84	/
10MHz 16QAM	/	8.96	/	/	9.72	/

Note: The test plots please refer to the Plots of Occupied Bandwidth

FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal

Result: Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.

FCC §2.1051, § 27.53:Out of band emission, Band Edge

Result: Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §27.54: Frequency Stability

LTE Band 40 Lower:

Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2305.500	2305.000	2314.488	2315.000
	-20	12	2305.502	2305.000	2314.480	2315.000
	-10	12	2305.494	2305.000	2314.508	2315.000
	0	12	2305.502	2305.000	2314.497	2315.000
	10	12	2305.516	2305.000	2314.487	2315.000
	20	12	2305.520	2305.000	2314.480	2315.000
	30	12	2305.508	2305.000	2314.500	2315.000
	40	12	2305.500	2305.000	2314.508	2315.000
	50	12	2305.500	2305.000	2314.500	2315.000
Frequency Stability vs. Voltage	20	6	2305.493	2305.000	2314.506	2315.000
	20	36	2305.492	2305.000	2314.501	2315.000
Result:					Pass	

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2305.519	2305.000	2314.488	2315.000
	-20	12	2305.505	2305.000	2314.487	2315.000
	-10	12	2305.491	2305.000	2314.486	2315.000
	0	12	2305.511	2305.000	2314.492	2315.000
	10	12	2305.503	2305.000	2314.505	2315.000
	20	12	2305.520	2305.000	2314.480	2315.000
	30	12	2305.497	2305.000	2314.509	2315.000
	40	12	2305.518	2305.000	2314.496	2315.000
	50	12	2305.504	2305.000	2314.491	2315.000
Frequency	20	6	2305.518	2305.000	2314.507	2315.000

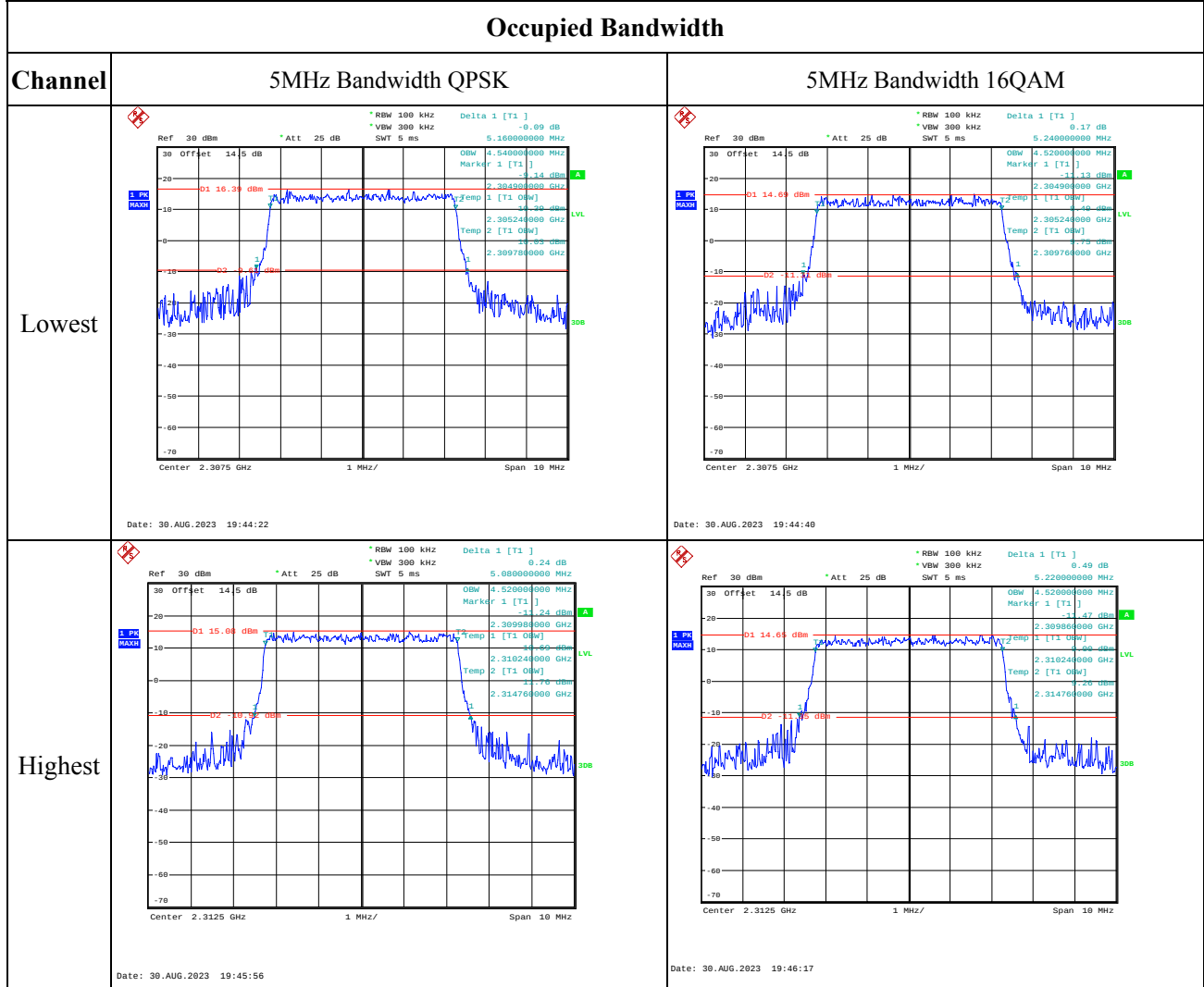
Stability vs. Voltage	20	36	2305.500	2305.000	2314.501	2315.000
					Result:	Pass

LTE Band 40 Upper:

Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2350.517	2350.000	2359.503	2360.000
	-20	12	2350.492	2350.000	2359.486	2360.000
	-10	12	2350.501	2350.000	2359.497	2360.000
	0	12	2350.504	2350.000	2359.483	2360.000
	10	12	2350.504	2350.000	2359.489	2360.000
	20	12	2350.520	2350.000	2359.480	2360.000
	30	12	2350.507	2350.000	2359.492	2360.000
	40	12	2350.505	2350.000	2359.488	2360.000
	50	12	2350.511	2350.000	2359.506	2360.000
Frequency Stability vs. Voltage	20	6	2350.505	2350.000	2359.494	2360.000
	20	36	2350.497	2350.000	2359.506	2360.000
					Result:	Pass

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2350.514	2350.000	2359.504	2360.000
	-20	12	2350.514	2350.000	2359.499	2360.000
	-10	12	2350.511	2350.000	2359.483	2360.000
	0	12	2350.504	2350.000	2359.501	2360.000
	10	12	2350.496	2350.000	2359.483	2360.000
	20	12	2350.520	2350.000	2359.480	2360.000
	30	12	2350.508	2350.000	2359.492	2360.000
	40	12	2350.510	2350.000	2359.504	2360.000
	50	12	2350.501	2350.000	2359.485	2360.000
Frequency Stability vs. Voltage	20	6	2350.494	2350.000	2359.481	2360.000
	20	36	2350.507	2350.000	2359.488	2360.000
					Result:	Pass

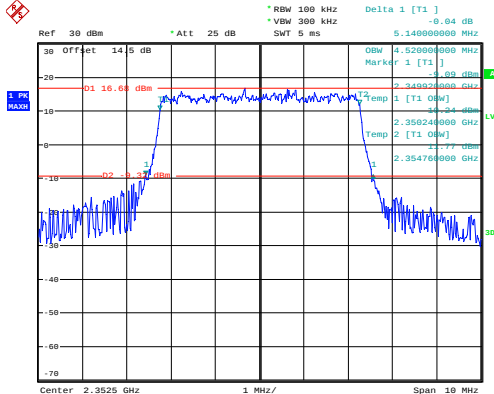
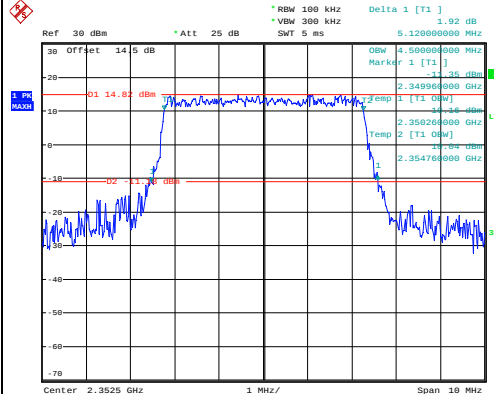
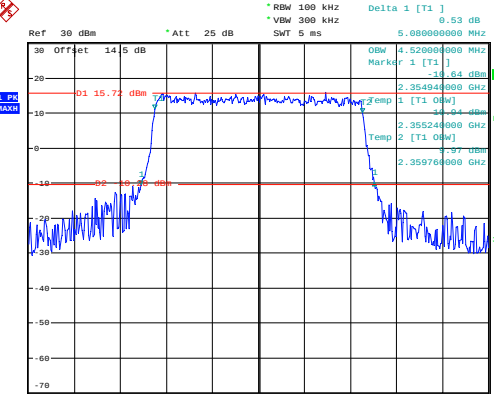
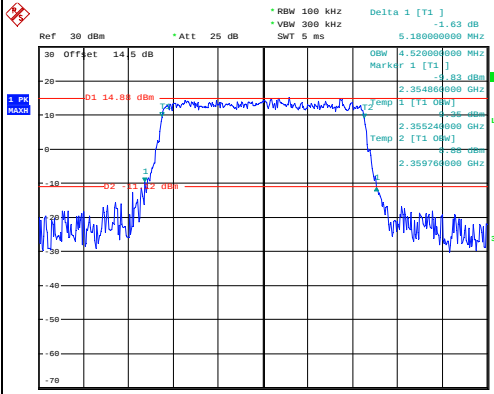
Test Plots (Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):
2305-2315 MHz:

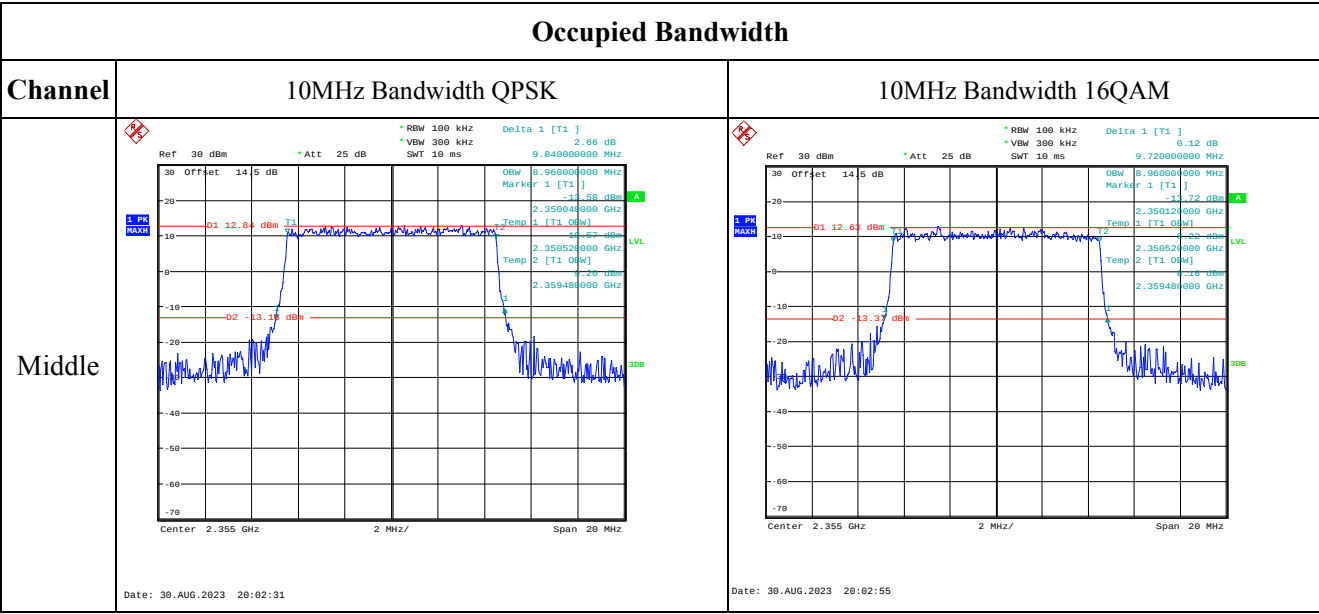


Page 205 of 250

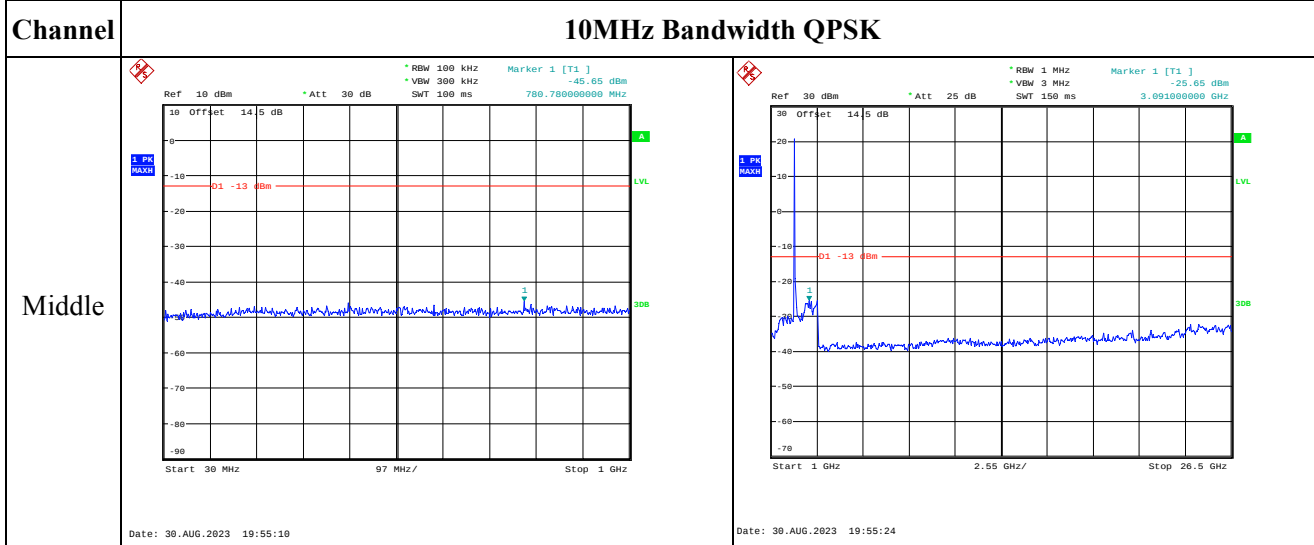
2350-2360 MHz:

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] 0.53 dB *VBW 300 kHz SWT 5 ms 5.140000000 MHz Marker 1 [T1] -10.84 dBm OBW 4.520000000 MHz 2.349920000 GHz 1 [T1 0dB] 2.350240000 GHz Temp 2 [T1 0dB] 2.354760000 GHz LVL 30B Center 2.3525 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 20:00:03	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] 1.92 dB *VBW 300 kHz SWT 5 ms 5.120000000 MHz Marker 1 [T1] -14.25 dBm OBW 4.500000000 MHz 2.349920000 GHz 1 [T1 0dB] 2.350240000 GHz Temp 2 [T1 0dB] 2.354760000 GHz LVL 30B Center 2.3525 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 20:00:24
Highest	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] 0.53 dB *VBW 300 kHz SWT 5 ms 5.000000000 MHz Marker 1 [T1] -10.84 dBm OBW 4.520000000 MHz 2.354940000 GHz 1 [T1 0dB] 2.355240000 GHz Temp 2 [T1 0dB] 2.359760000 GHz LVL 30B Center 2.3575 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 20:01:37	 Ref 30 dBm *Att 25 dB *RBW 100 kHz Delta 1 [T1] -1.63 dB *VBW 300 kHz SWT 5 ms 5.180000000 MHz Marker 1 [T1] -14.83 dBm OBW 4.520000000 MHz 2.354860000 GHz 1 [T1 0dB] 2.355240000 GHz Temp 2 [T1 0dB] 2.359760000 GHz LVL 30B Center 2.3575 GHz 1 MHz/ Span 10 MHz Date: 30.AUG.2023 20:02:04

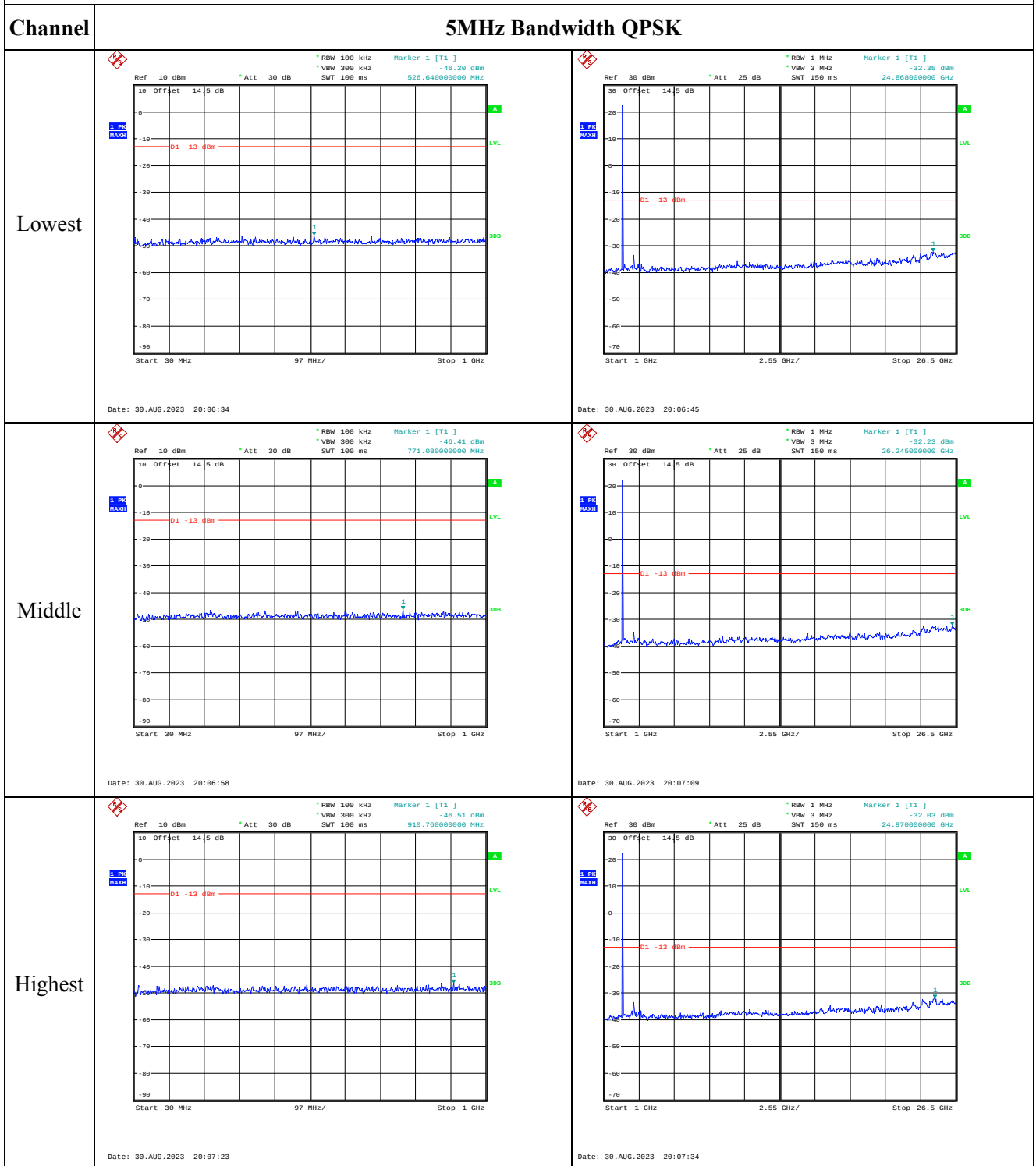


Spurious Emissions at Antenna Terminal



2350-2360 MHz:

Spurious Emissions at Antenna Terminal

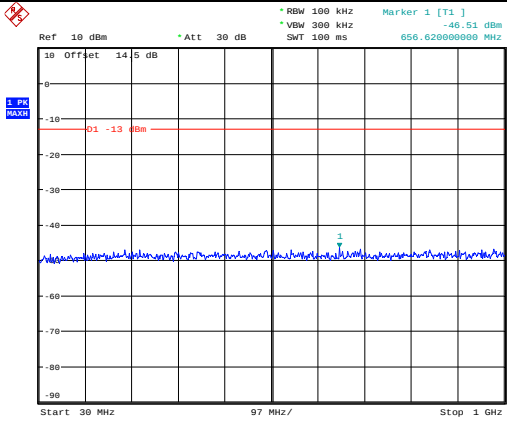


Spurious Emissions at Antenna Terminal

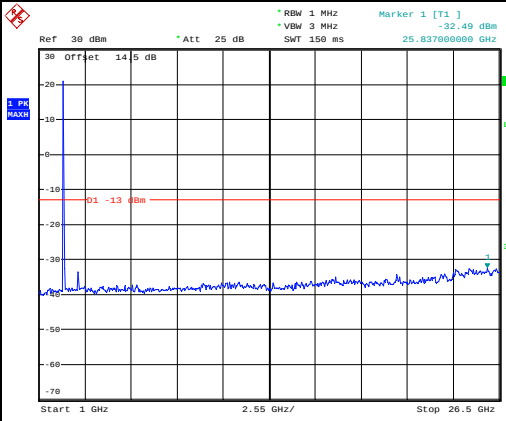
Channel

10MHz Bandwidth QPSK

Middle



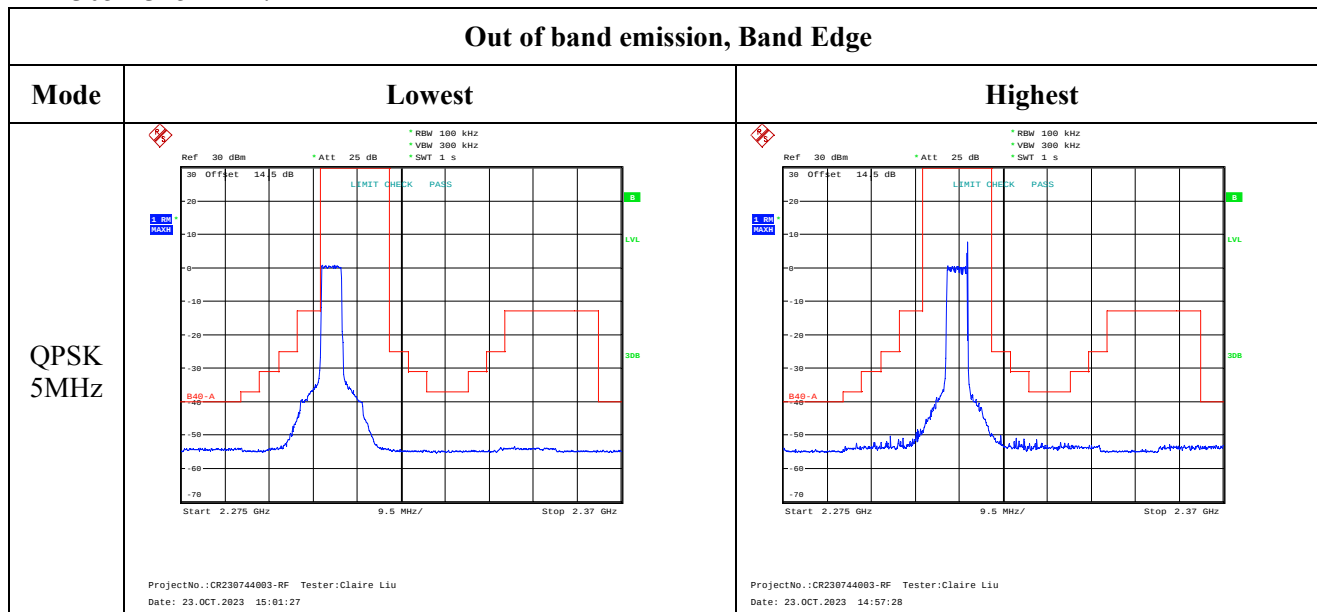
Date: 30.AUG.2023 20:07:50



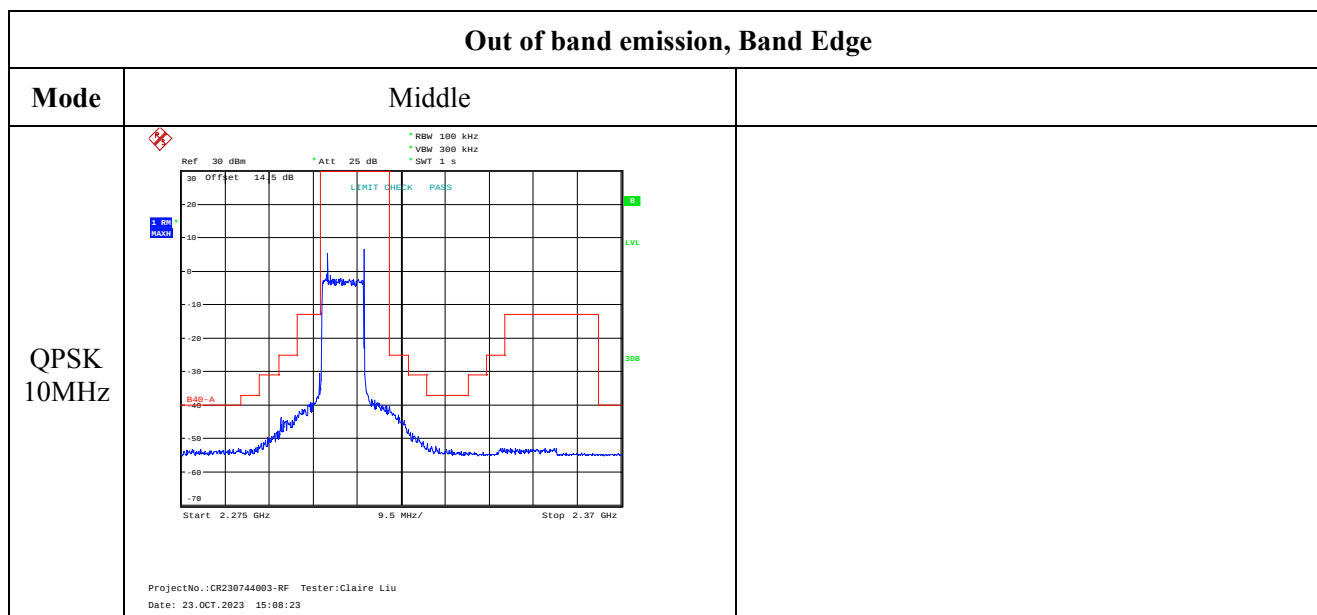
Date: 30.AUG.2023 20:08:01

2305-2315 MHz:

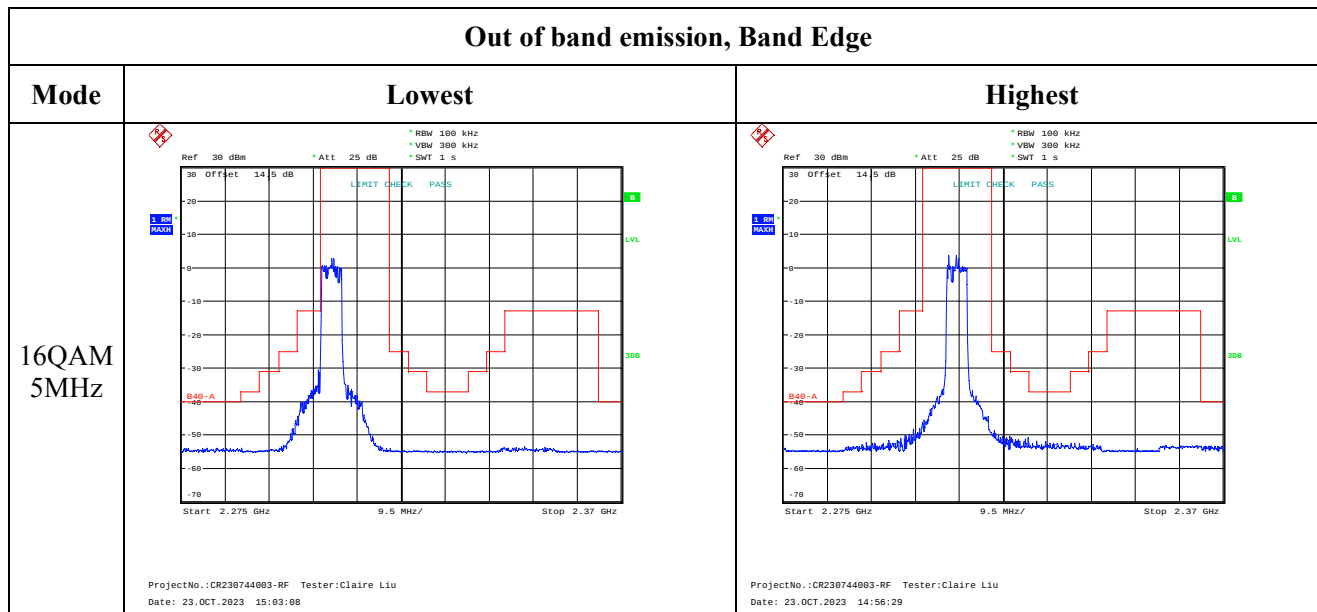
Out of band emission, Band Edge



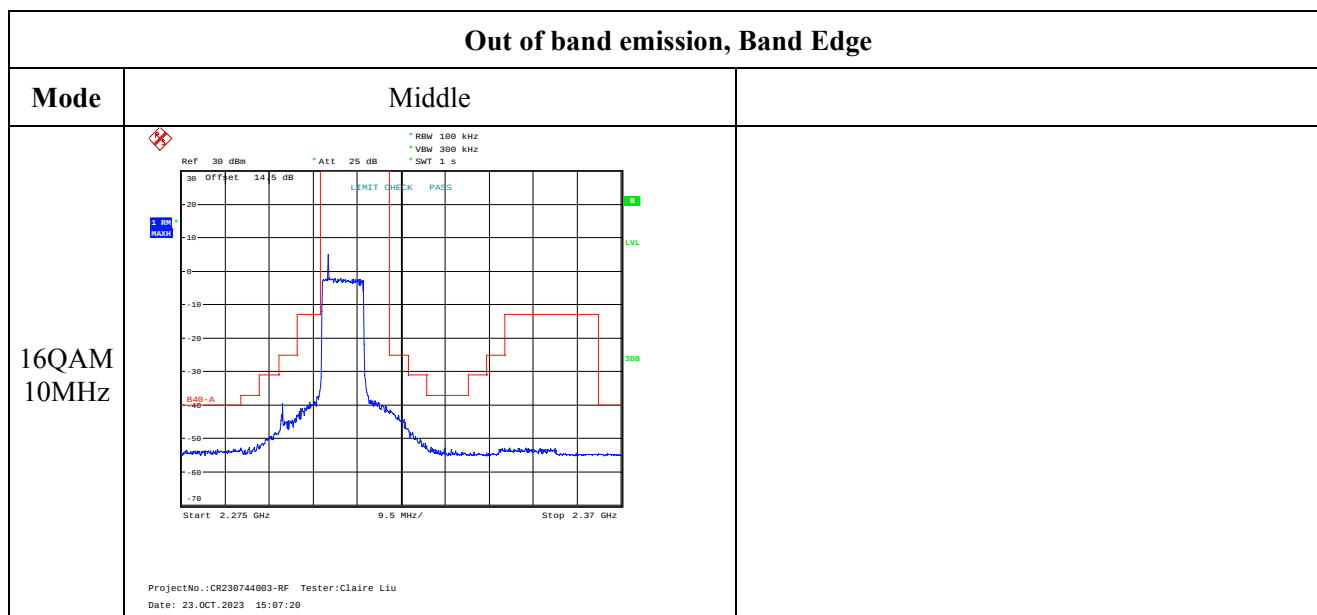
Out of band emission, Band Edge



Out of band emission, Band Edge

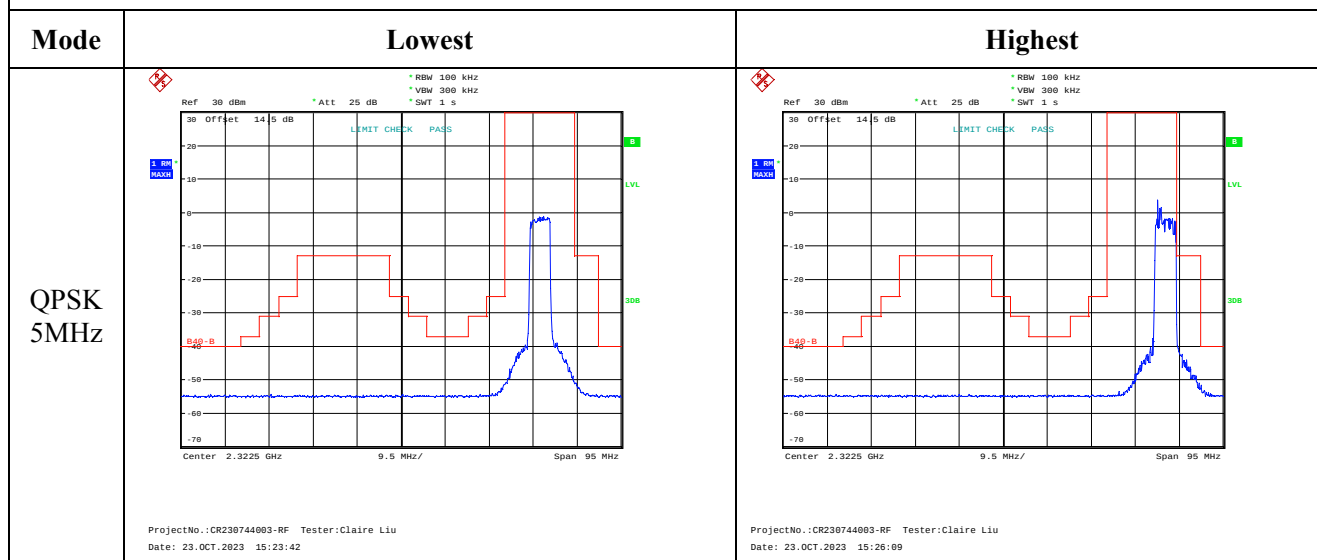


Out of band emission, Band Edge

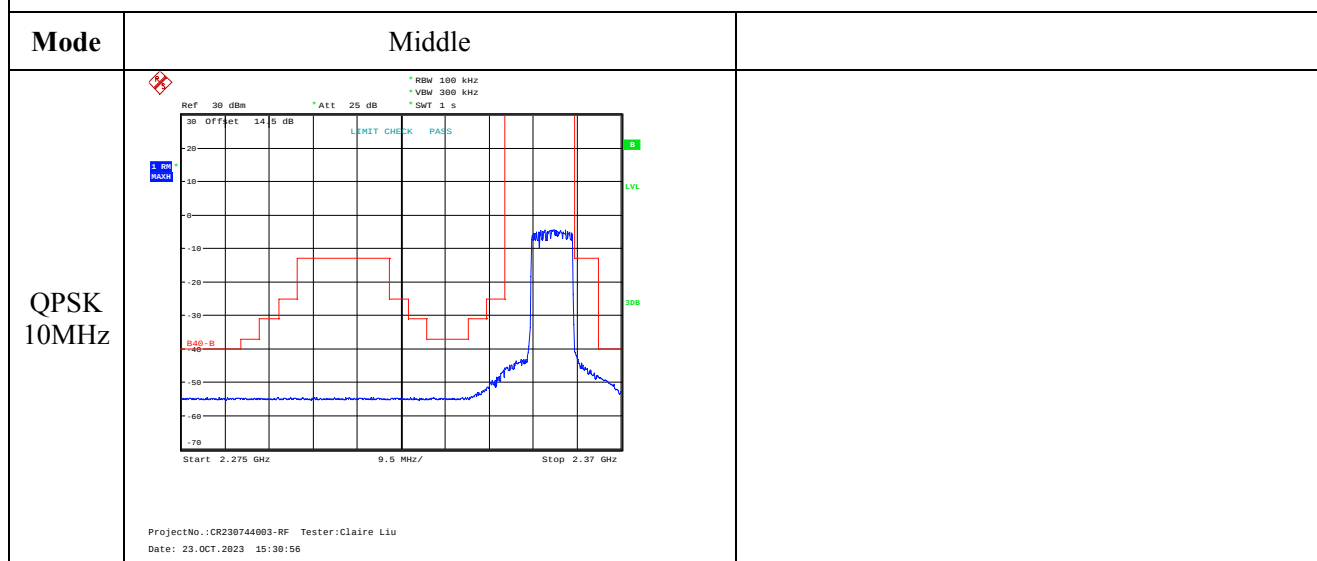


2350-2360 MHz:

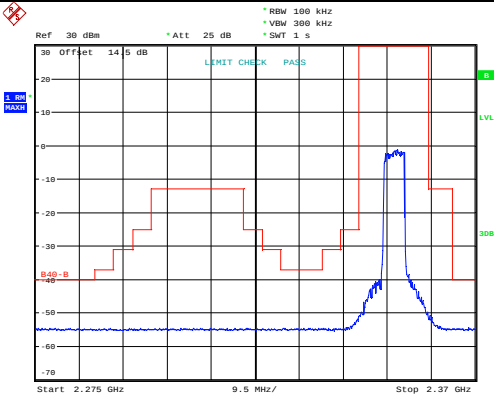
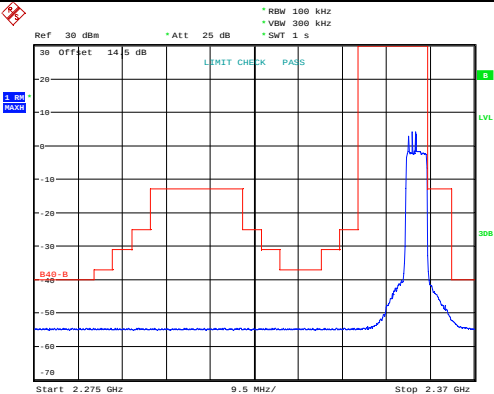
Out of band emission, Band Edge



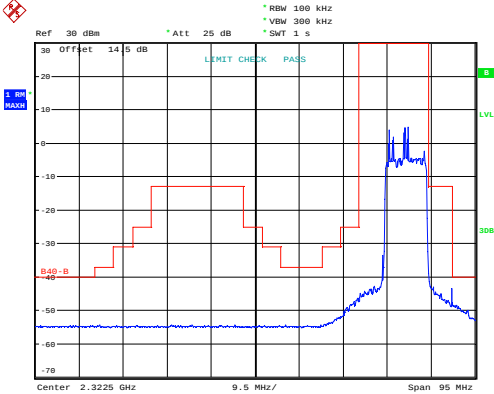
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz	 Ref: 30 dBm, Offset: 14.5 dB, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 1 s Start: 2.275 GHz, 9.5 MHz/, Stop: 2.37 GHz ProjectNo.:CR230744003-RF Tester:Claire Liu Date: 23.OCT.2023 15:24:23	 Ref: 30 dBm, Offset: 14.5 dB, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 1 s Start: 2.275 GHz, 9.5 MHz/, Stop: 2.37 GHz ProjectNo.:CR230744003-RF Tester:Claire Liu Date: 23.OCT.2023 15:36:55

Out of band emission, Band Edge

Mode	Middle	
16QAM 10MHz	 Ref: 30 dBm, Offset: 14.5 dB, Att: 25 dB, RBW: 100 kHz, VBW: 300 kHz, SWT: 1 s Center: 2.3225 GHz, 9.5 MHz/, Span: 95 MHz ProjectNo.:CR230744003-RF Tester:Claire Liu Date: 23.OCT.2023 15:34:11	

4.15 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	28LK-1	Test Date:	2023/8/29-2023/8/31
Test Site:	RF	Test Mode:	Transmitting
Tester:	Claire Liu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.5-26.3	Relative Humidity: (%)	45-58	ATM Pressure: (kPa)	99.7-100.3
----------------------	-----------	---------------------------	-------	------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
Unknown	Coaxial tee connector	Unknown	2204005	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Frequency for Each Mode:

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	2557.5	2605	2652.5
10MHz	2560	2605	2650
15MHz	2562.5	2605	2647.5
20MHz	2565	2605	2645

Test Data:**FCC§2.1046;§ 27.50(h)(2)****RF Output Power:**

Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum EIRP (dBm)	EIRP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	17.89	17.67	17.6	19.74	33
	RB1#13	17.98	17.78	17.77		
	RB1#24	17.85	17.67	17.65		
	RB15#0	16.95	16.7	16.66		
	RB15#10	16.95	16.7	16.65		
	RB25#0	16.95	16.7	16.66		
5MHz 16QAM	RB1#0	16.95	16.91	16.59	18.82	33
	RB1#13	17.06	17	16.74		
	RB1#24	16.91	16.89	16.62		
	RB15#0	16.04	15.71	15.66		
	RB15#10	16.05	15.76	15.6		
	RB25#0	16.06	15.67	15.68		
10MHz QPSK	RB1#0	18.04	17.86	17.57	20.02	33
	RB1#25	18.26	18.07	17.84		
	RB1#49	18.01	17.72	17.6		
	RB25#0	17.04	16.79	16.59		
	RB25#25	16.98	16.77	16.54		
	RB50#0	16.98	16.76	16.6		
10MHz 16QAM	RB1#0	16.93	16.92	16.77	18.92	33
	RB1#25	17.16	17.15	17.03		
	RB1#49	16.91	16.8	16.81		
	RB25#0	16.12	15.8	15.58		
	RB25#25	16.09	15.76	15.53		
	RB50#0	16.06	15.8	15.59		
15MHz QPSK	RB1#0	17.4	17.96	17.61	19.72	33
	RB1#38	17.4	17.9	17.7		
	RB1#74	17.38	17.74	17.6		
	RB36#0	16.42	16.94	16.72		
	RB36#39	16.37	16.86	16.7		
	RB75#0	16.4	16.9	16.73		
15MHz 16QAM	RB1#0	16.3	17.18	16.79	18.94	33
	RB1#38	16.35	17.1	16.88		
	RB1#74	16.29	16.91	16.83		
	RB36#0	15.39	15.94	15.67		
	RB36#39	15.38	15.87	15.66		
	RB75#0	15.45	15.9	15.63		
20MHz QPSK	RB1#0	17.19	17.81	17.07	19.87	33
	RB1#50	17.62	18.11	17.52		
	RB1#99	17.21	17.55	17.15		

20MHz 16QAM	RB50#0	16.38	16.8	16.25	19.07	33
	RB50#50	16.38	16.73	16.16		
	RB100#0	16.4	16.78	16.22		
	RB1#0	16.2	17.01	16.14		
	RB1#50	16.61	17.31	16.59		
	RB1#99	16.22	16.72	16.2		
	RB50#0	15.48	15.81	15.27		
	RB50#50	15.47	15.72	15.14		
	RB100#0	15.44	15.77	15.22		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + G_T(dBi)**Result:****Pass****Peak-to-average Ratio(PAR)**

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Channel	Middle Channel	Highest Channel	
20MHz QPSK	RB1#0	6.64	5.78	6.35	13
	RB100#0	6.96	6.35	6.25	13
20MHz 16QAM	RB1#0	7.35	6.45	7.37	13
	RB100#0	7.26	7.36	7.56	13
				Result:	Pass

FCC §2.1049, §27.53:Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.5	4.52	4.5	4.94	5.16	5.14
5MHz 16QAM	4.52	4.52	4.5	5.08	5.18	4.92
10MHz QPSK	8.96	8.96	8.96	9.6	9.68	10.08
10MHz 16QAM	8.96	8.96	8.96	9.48	10.16	9.52
15MHz QPSK	13.5	13.5	13.56	15.18	15.36	15.48
15MHz 16QAM	13.5	13.56	13.56	15.72	15.36	15.78
20MHz QPSK	17.92	17.92	18	19.28	19.92	19.44
20MHz 16QAM	18	17.92	17.92	20.24	19.76	19.36

Note: The test plots please refer to the Plots of Occupied Bandwidth

FCC §2.1051, § 27.53:Spurious Emissions at Antenna Terminal**Result:**

Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.

FCC §2.1051, § 27.53:Out of band emission, Band Edge**Result:**

Pass, Please refer to the test plots of Out of band emission, Band Edge.

FCC §2.1055, §27.54: Frequency Stability

Test Mode:

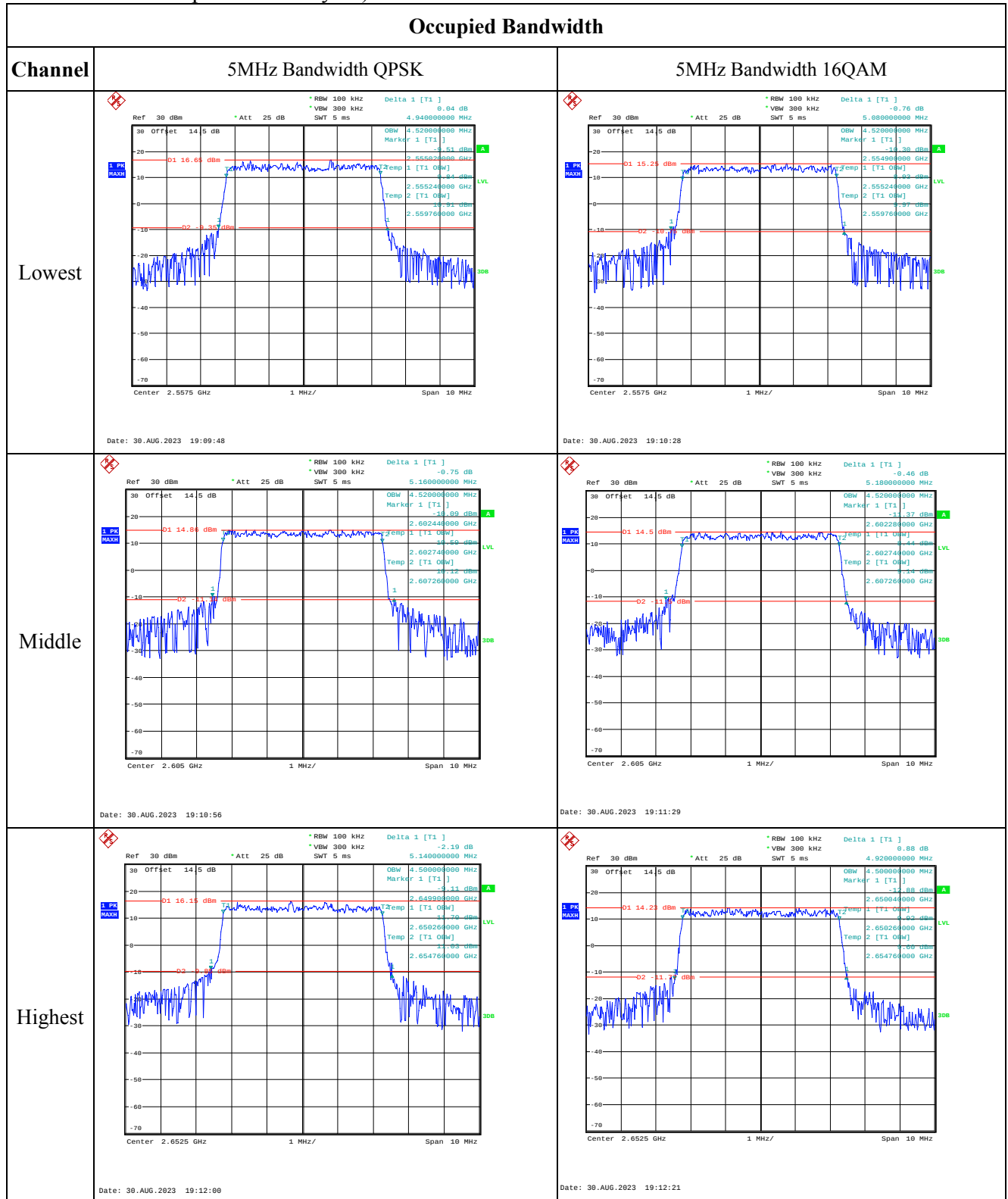
20M QPSK

Test Channel: Lowest for Lower Edge,Highest for Upper Edge

Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2556.037	2555.00	2653.977	2655
	-20	12	2556.038	2555.00	2653.987	2655
	-10	12	2556.039	2555.00	2653.968	2655
	0	12	2556.012	2555.00	2653.972	2655
	10	12	2556.032	2555.00	2653.985	2655
	20	12	2556.040	2555.00	2653.960	2655
	30	12	2556.018	2555.00	2653.966	2655
	40	12	2556.014	2555.00	2653.979	2655
	50	12	2556.037	2555.00	2653.967	2655
Frequency Stability vs. Voltage	20	6	2556.033	2555.00	2653.981	2655
	20	36	2556.019	2555.00	2653.964	2655
					Result:	Pass

Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	12	2556.029	2555.00	2653.980	2655
	-20	12	2556.024	2555.00	2653.986	2655
	-10	12	2556.013	2555.00	2653.964	2655
	0	12	2556.032	2555.00	2653.985	2655
	10	12	2556.036	2555.00	2653.981	2655
	20	12	2556.040	2555.00	2653.960	2655
	30	12	2556.019	2555.00	2653.978	2655
	40	12	2556.022	2555.00	2653.982	2655
	50	12	2556.036	2555.00	2653.984	2655
Frequency Stability vs. Voltage	20	6	2556.032	2555.00	2653.967	2655
	20	36	2556.033	2555.00	2653.967	2655
					Result:	Pass

Test Plots (Note: The 14.5 dB is the Insertion loss of the RF cable and Power Splitter, which was offset into the Spectrum Analyzer):



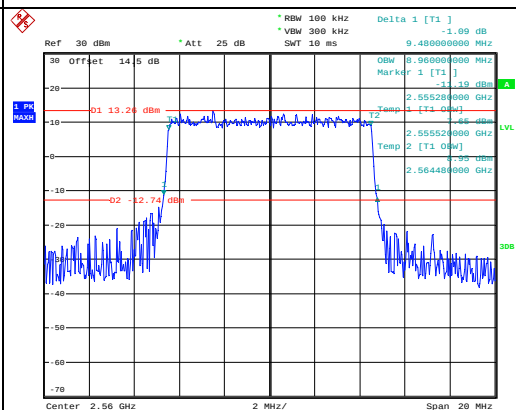
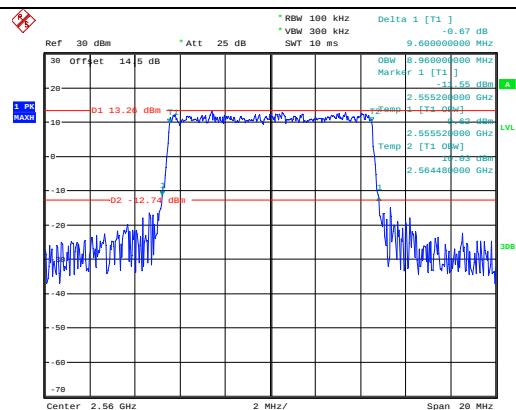
Occupied Bandwidth

Channel

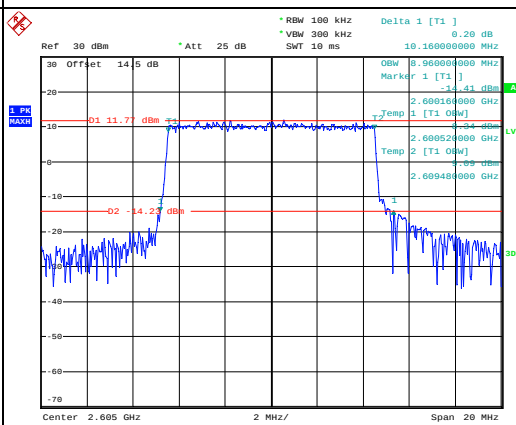
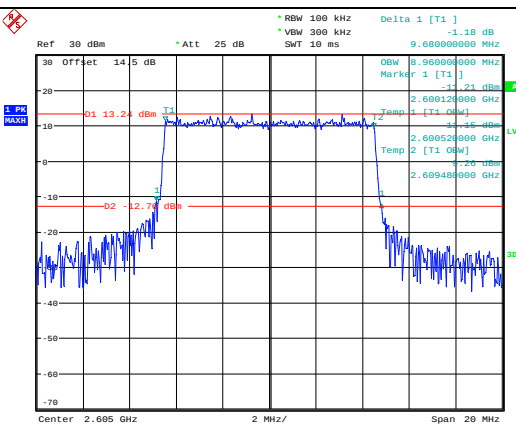
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

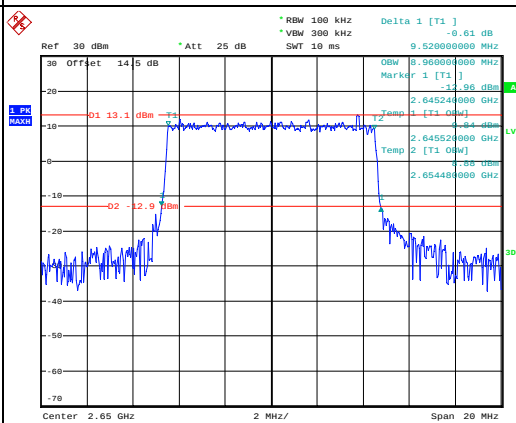
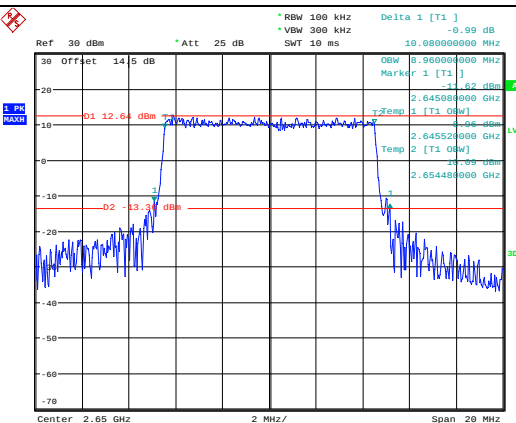
Lowest



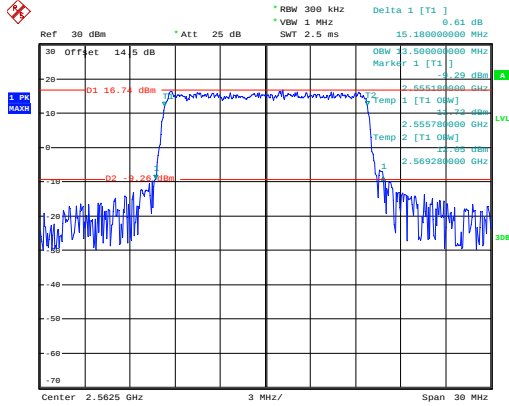
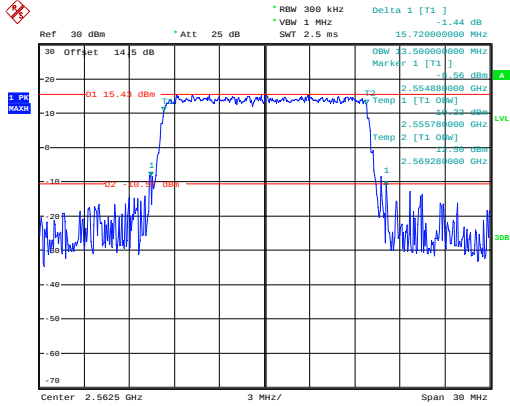
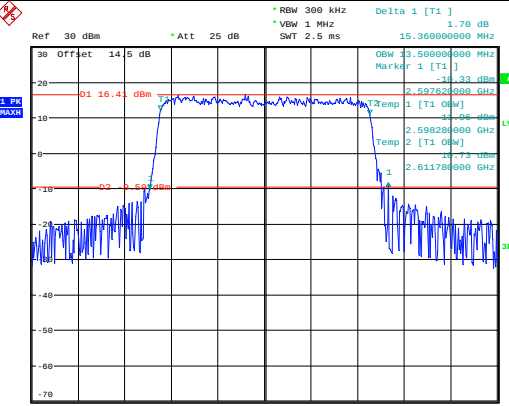
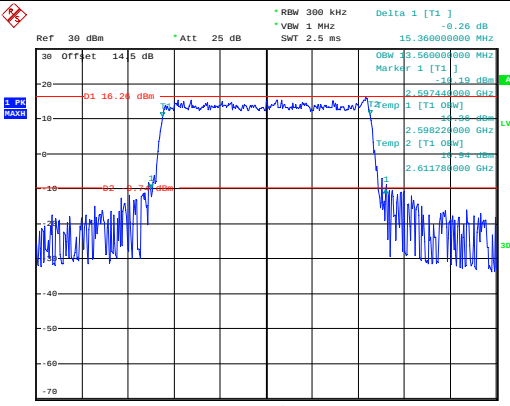
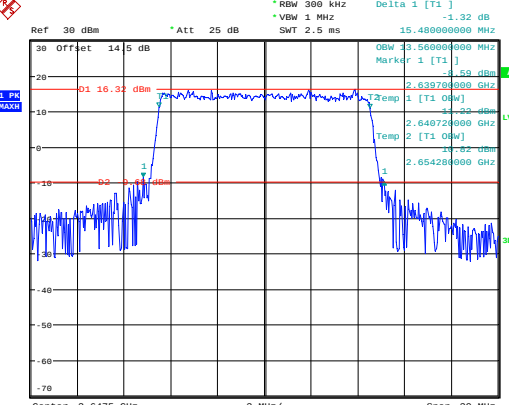
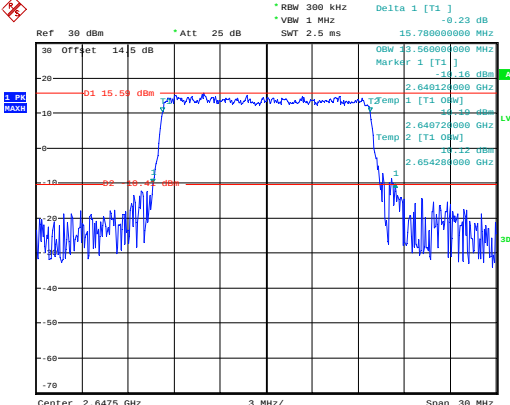
Middle



Highest



Occupied Bandwidth

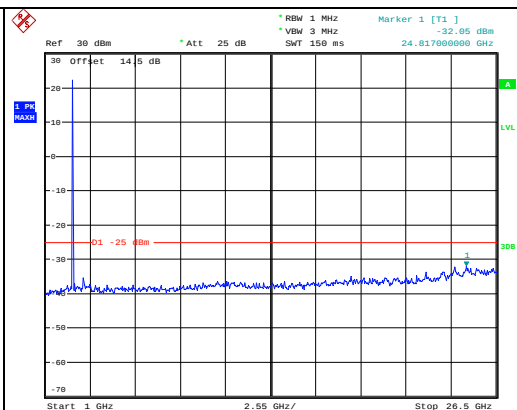
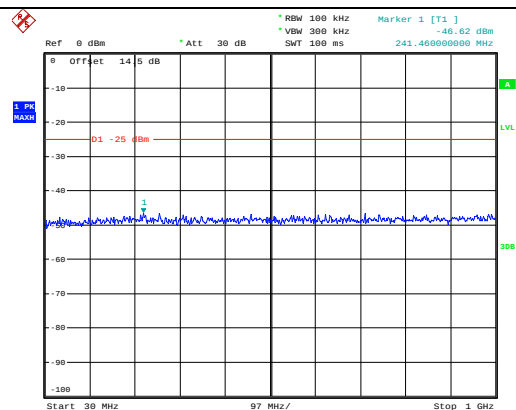
Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM
Lowest	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] 0.61 dB * VBW 1 MHz SWT 2.5 ms 15.180000000 MHz Marker 1 [T1] 2.555100000 GHz -10.20 dBm Temp 1 [T1 0dB] 2.555100000 GHz -10.20 dBm Temp 2 [T1 0dB] 2.555700000 GHz -10.20 dBm Temp 3 [T1 0dB] 2.569200000 GHz -10.20 dBm Center 2.5625 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:15:41	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] -1.44 dB * VBW 1 MHz SWT 2.5 ms 15.720000000 MHz Marker 1 [T1] 2.554800000 GHz -10.50 dBm Temp 1 [T1 0dB] 2.554800000 GHz -10.50 dBm Temp 2 [T1 0dB] 2.555700000 GHz -10.50 dBm Temp 3 [T1 0dB] 2.569200000 GHz -10.50 dBm Center 2.5625 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:16:05
Middle	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] 1.70 dB * VBW 1 MHz SWT 2.5 ms 15.360000000 MHz Marker 1 [T1] 2.597600000 GHz -10.33 dBm Temp 1 [T1 0dB] 2.597600000 GHz -10.33 dBm Temp 2 [T1 0dB] 2.598200000 GHz -10.33 dBm Temp 3 [T1 0dB] 2.611700000 GHz -10.33 dBm Center 2.605 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:16:39	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] -0.26 dB * VBW 1 MHz SWT 2.5 ms 15.360000000 MHz Marker 1 [T1] 2.597400000 GHz -10.10 dBm Temp 1 [T1 0dB] 2.597400000 GHz -10.10 dBm Temp 2 [T1 0dB] 2.598200000 GHz -10.10 dBm Temp 3 [T1 0dB] 2.611700000 GHz -10.10 dBm Center 2.605 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:17:03
Highest	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] -1.32 dB * VBW 1 MHz SWT 2.5 ms 15.480000000 MHz Marker 1 [T1] 2.639700000 GHz -10.00 dBm Temp 1 [T1 0dB] 2.639700000 GHz -10.00 dBm Temp 2 [T1 0dB] 2.640720000 GHz -10.00 dBm Temp 3 [T1 0dB] 2.654200000 GHz -10.00 dBm Center 2.6475 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:17:41	 Ref 30 dBm * Att 25 dB * RBW 300 kHz Delta 1 [T1] -0.23 dB * VBW 1 MHz SWT 2.5 ms 15.780000000 MHz Marker 1 [T1] 2.640120000 GHz -10.10 dBm Temp 1 [T1 0dB] 2.640120000 GHz -10.10 dBm Temp 2 [T1 0dB] 2.640720000 GHz -10.10 dBm Temp 3 [T1 0dB] 2.654200000 GHz -10.10 dBm Center 2.6475 GHz 3 MHz/ Span 30 MHz Date: 30.AUG.2023 19:18:18

Spurious Emissions at Antenna Terminal

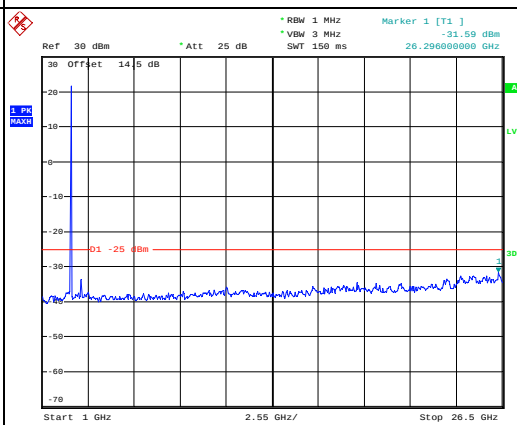
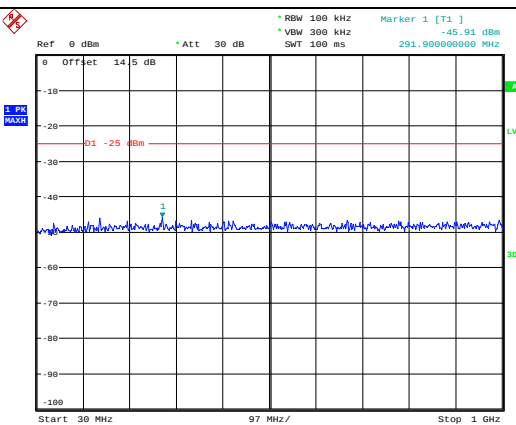
Channel

5MHz Bandwidth QPSK

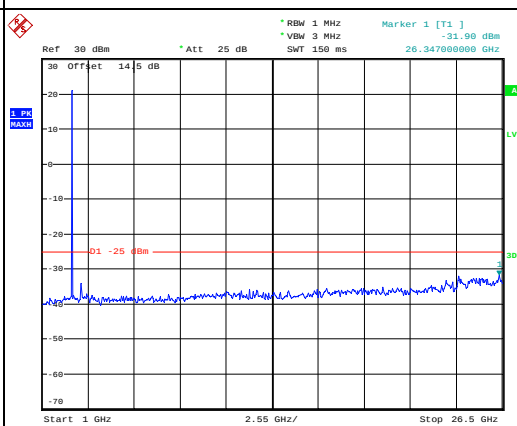
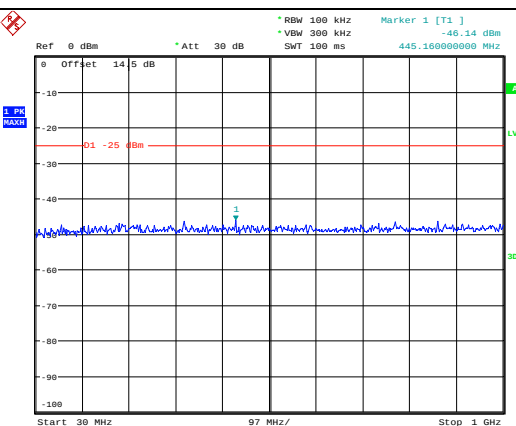
Lowest



Middle



Highest

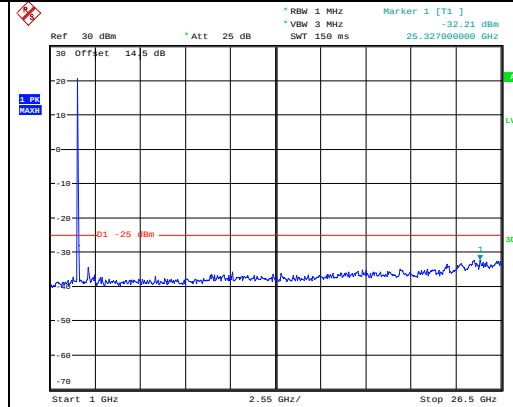
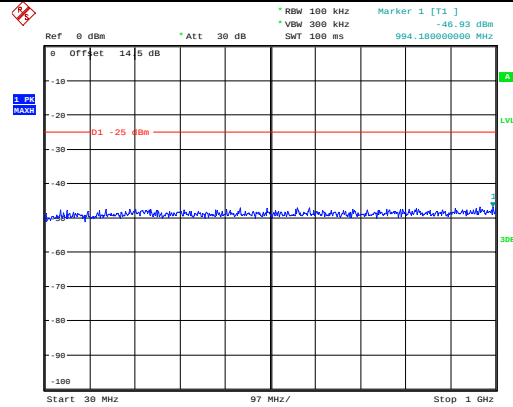


Spurious Emissions at Antenna Terminal

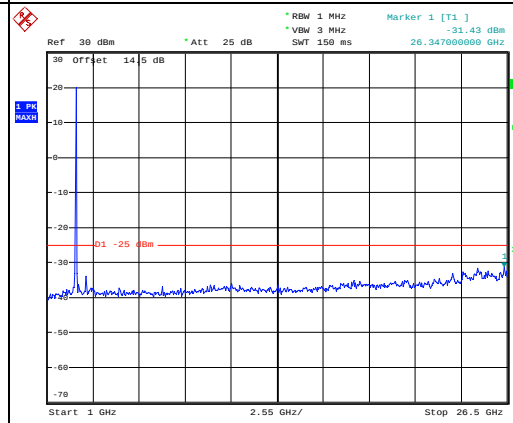
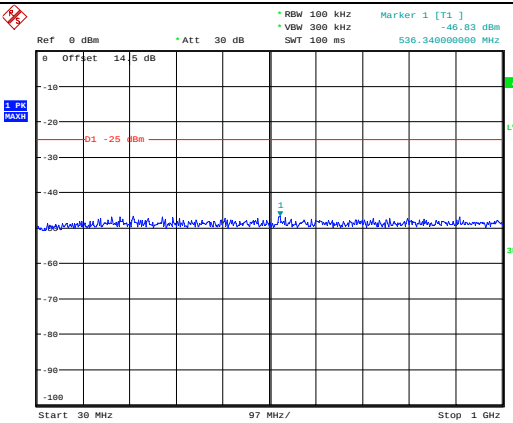
Channel

10MHz Bandwidth QPSK

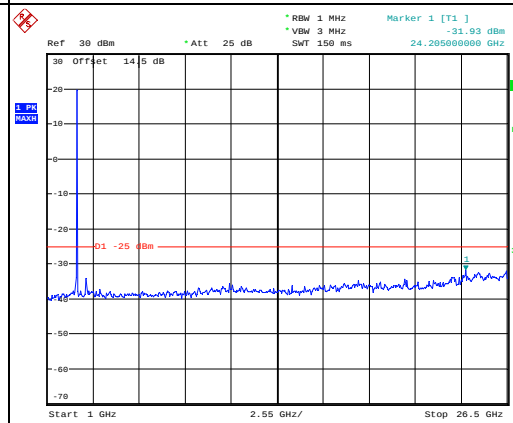
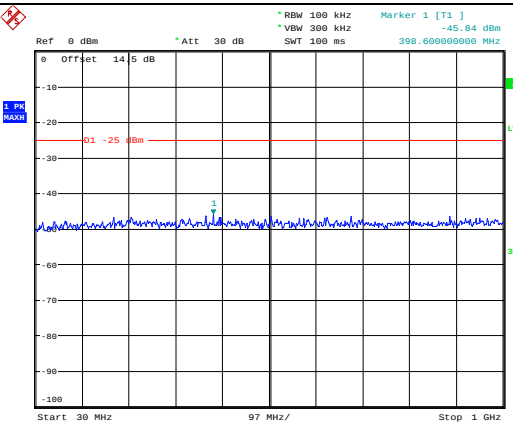
Lowest



Middle



Highest

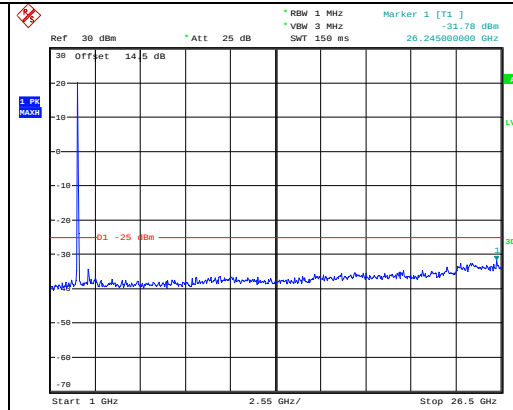
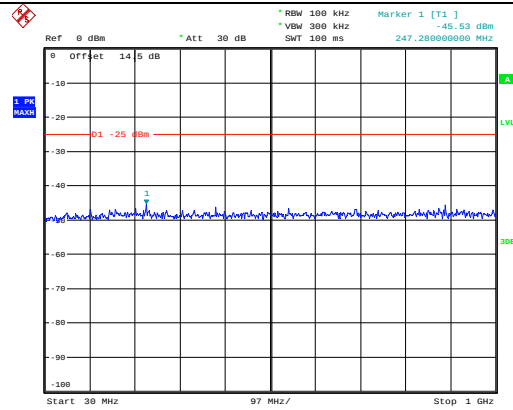


Spurious Emissions at Antenna Terminal

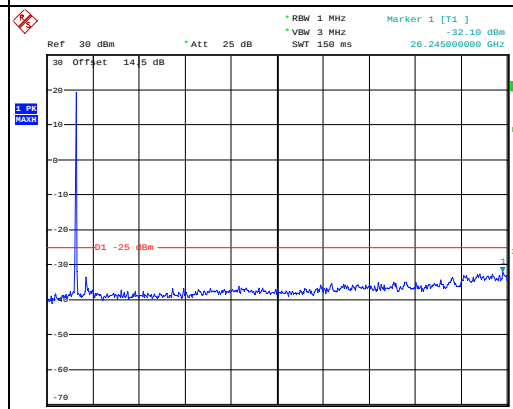
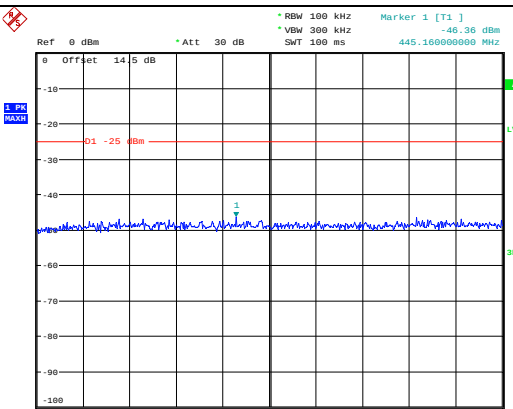
Channel

15MHz Bandwidth QPSK

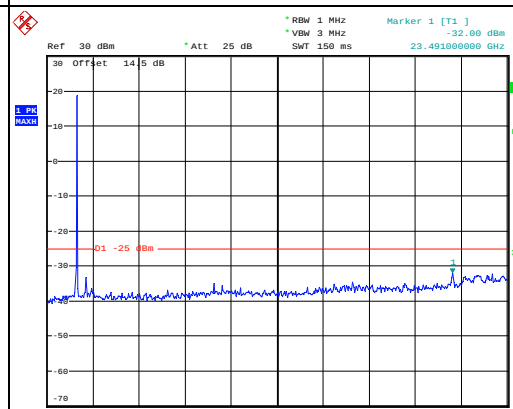
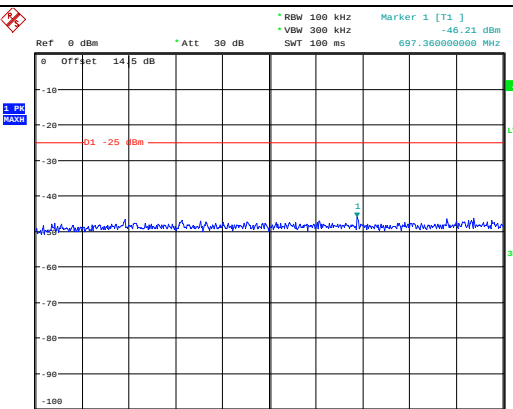
Lowest



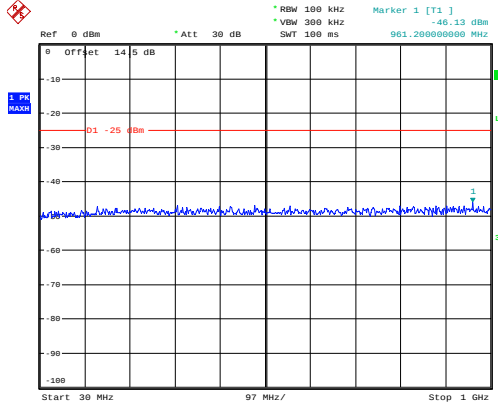
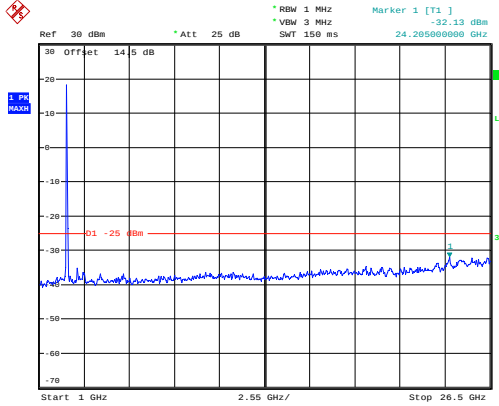
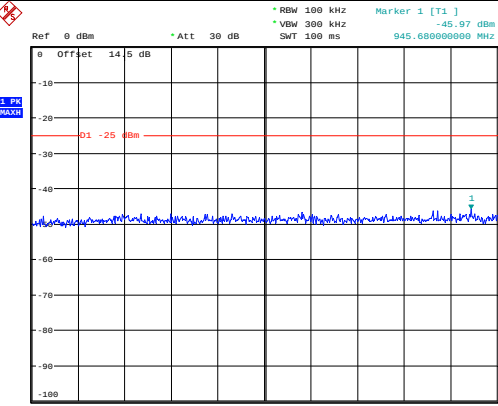
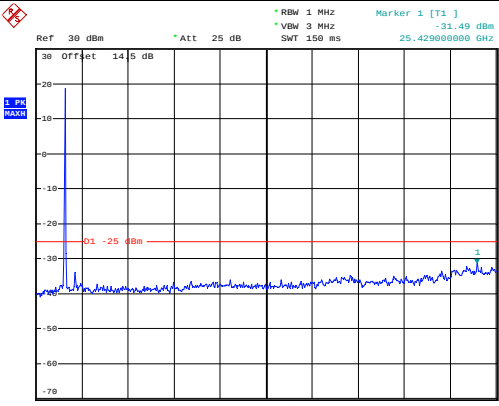
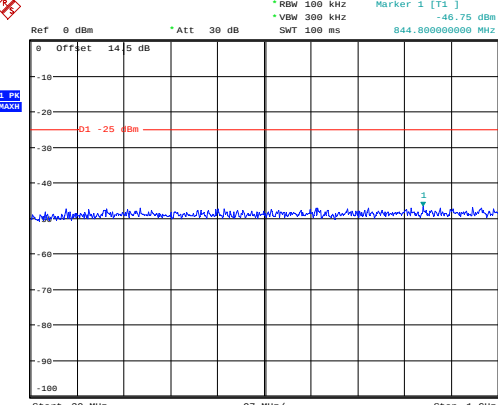
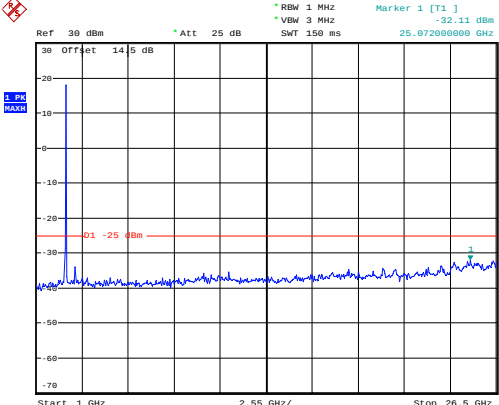
Middle



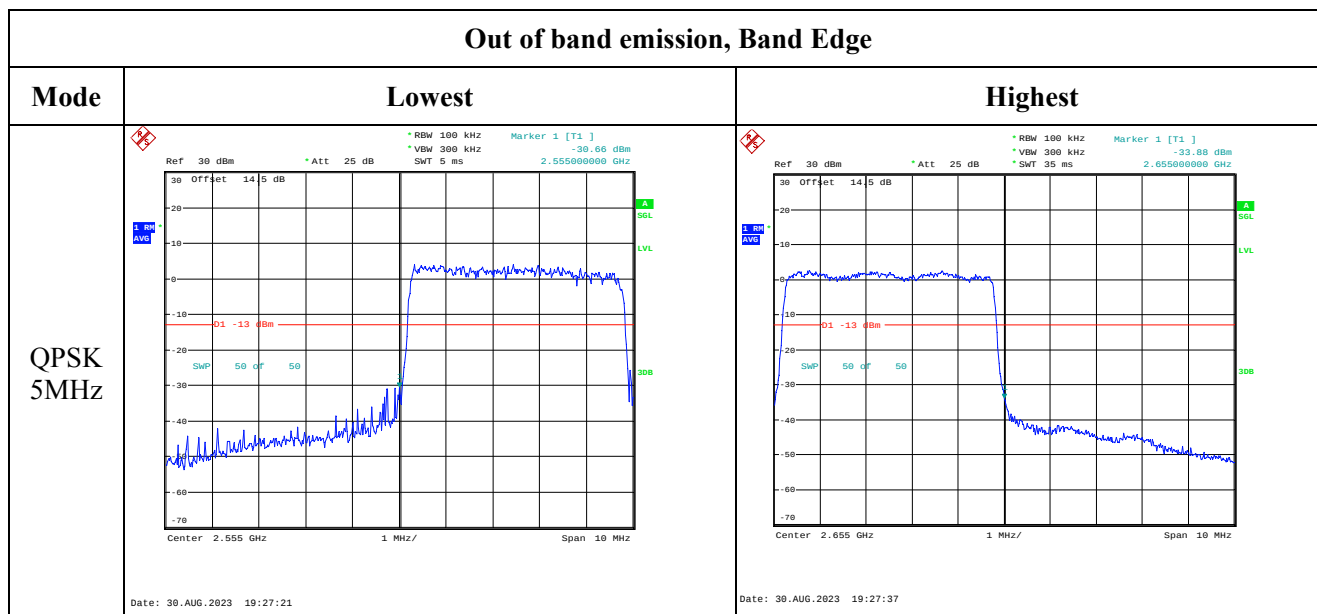
Highest



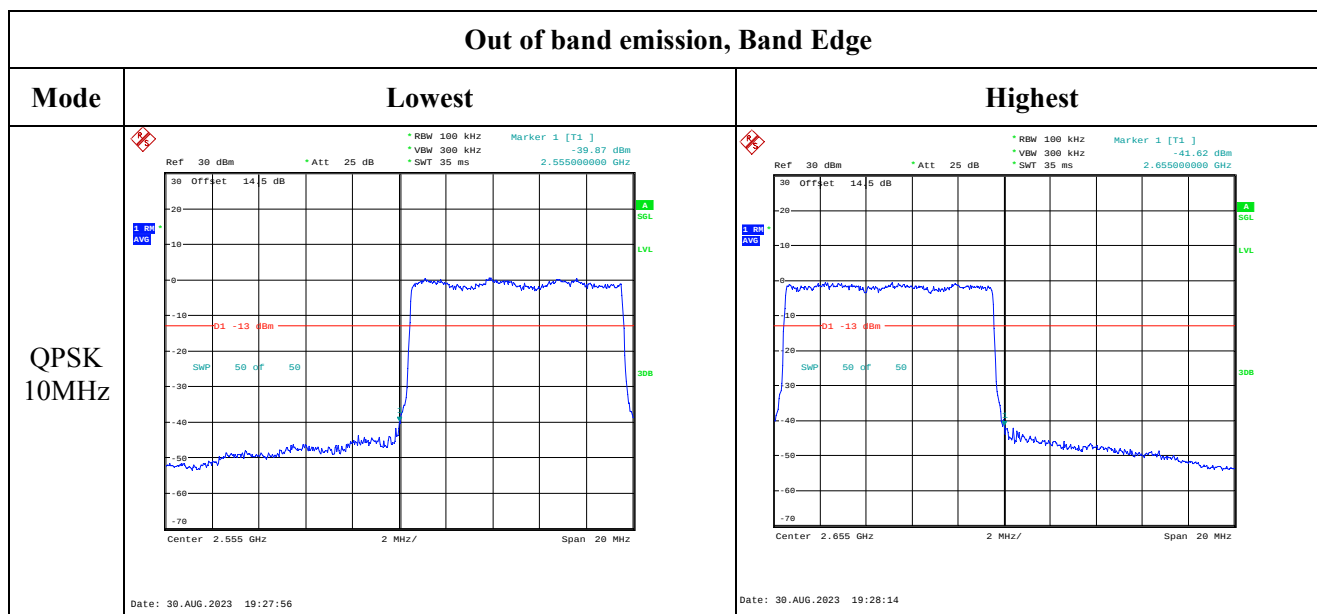
Spurious Emissions at Antenna Terminal

Channel	20MHz Bandwidth QPSK	
Lowest	 Ref 0 dBm * Att 30 dB * RBW 100 kHz Marker 1 [T1] * VBW 300 kHz -46.13 dBm SWT 100 ms 961.200000000 MHz 0 Offset 14.5 dB -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 30 MHz 97 MHz/ Stop 1 GHz Date: 30.AUG.2023 19:34:50	 Ref 30 dBm * Att 25 dB * RBW 1 MHz Marker 1 [T1] * VBW 3 MHz -32.13 dBm SWT 150 ms 24.205000000 GHz 30 Offset 14.5 dB -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 30.AUG.2023 19:35:02
Middle	 Ref 0 dBm * Att 30 dB * RBW 100 kHz Marker 1 [T1] * VBW 300 kHz -45.97 dBm SWT 100 ms 945.680000000 MHz 0 Offset 14.5 dB -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 30 MHz 97 MHz/ Stop 1 GHz Date: 30.AUG.2023 19:35:15	 Ref 30 dBm * Att 25 dB * RBW 1 MHz Marker 1 [T1] * VBW 3 MHz -31.49 dBm SWT 150 ms 25.425000000 GHz 30 Offset 14.5 dB -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 30.AUG.2023 19:35:26
Highest	 Ref 0 dBm * Att 30 dB * RBW 100 kHz Marker 1 [T1] * VBW 300 kHz -46.75 dBm SWT 100 ms 844.800000000 MHz 0 Offset 14.5 dB -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 30 MHz 97 MHz/ Stop 1 GHz Date: 30.AUG.2023 19:35:40	 Ref 30 dBm * Att 25 dB * RBW 1 MHz Marker 1 [T1] * VBW 3 MHz -32.11 dBm SWT 150 ms 25.072000000 GHz 30 Offset 14.5 dB -20 -30 -40 -50 -60 -70 -80 -90 -100 1 PK MAX D1 -25 dBm 30B Start 1 GHz 2.55 GHz/ Stop 26.5 GHz Date: 30.AUG.2023 19:35:51

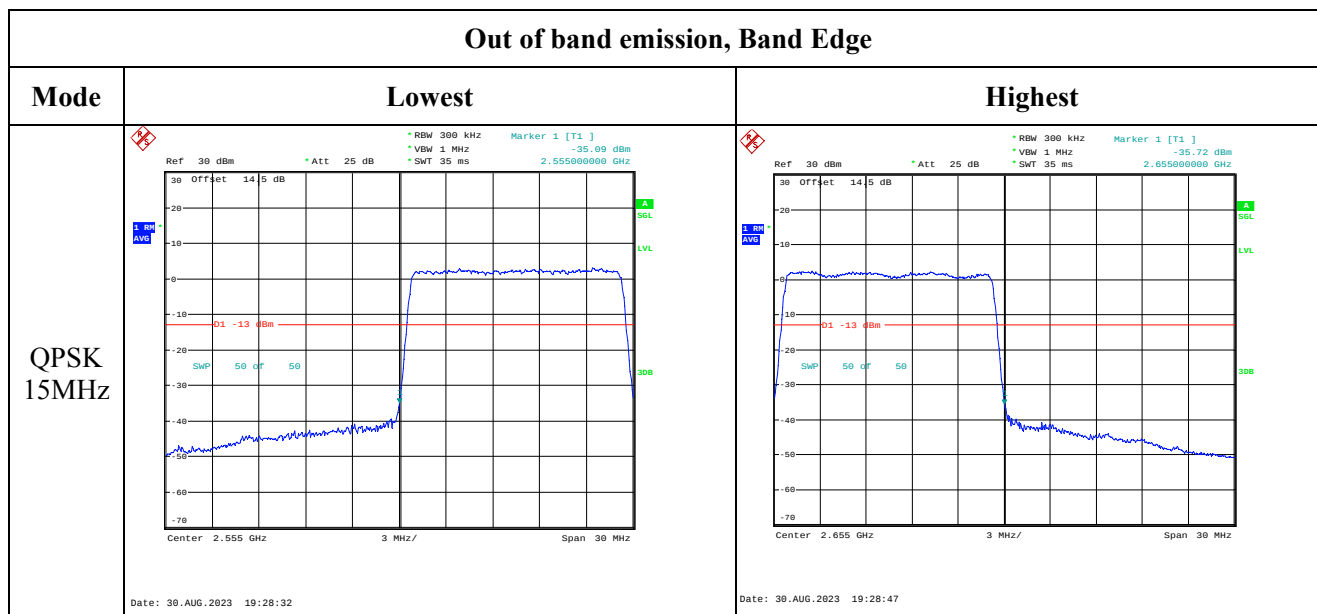
Out of band emission, Band Edge



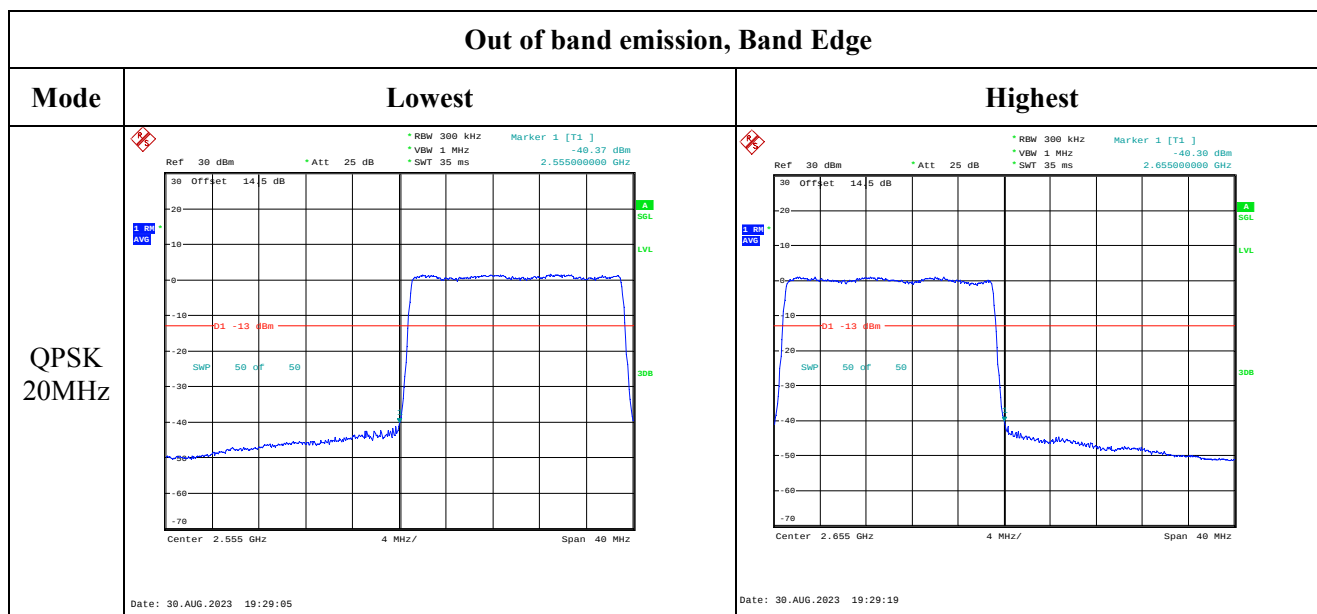
Out of band emission, Band Edge



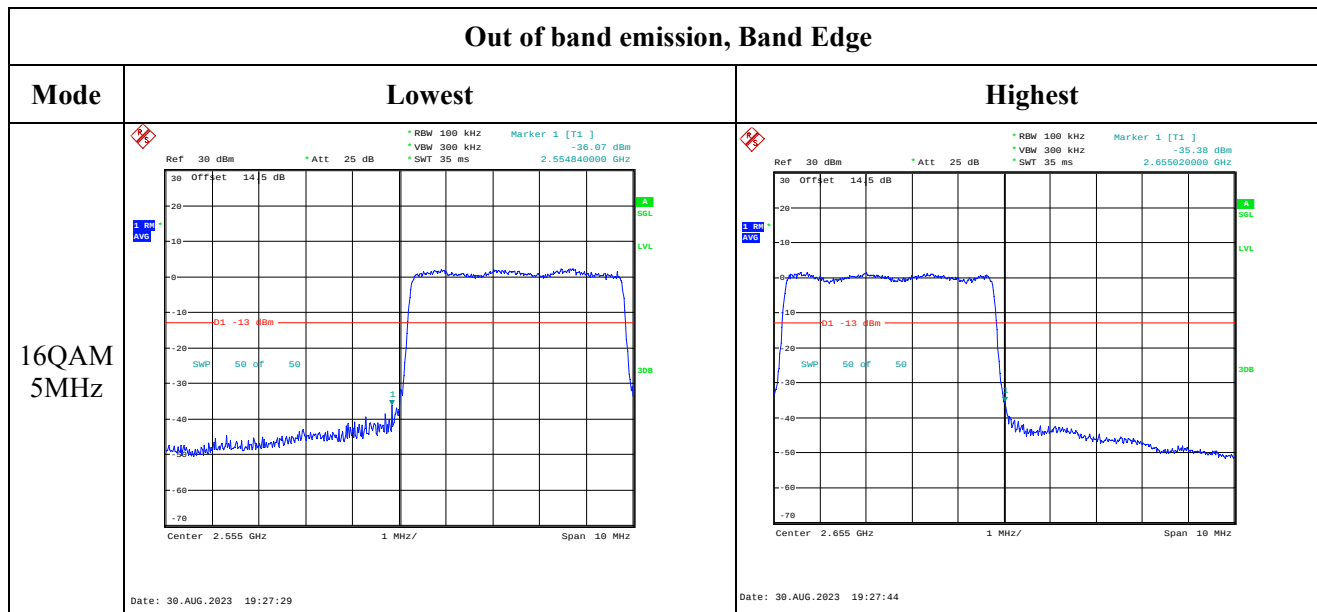
Out of band emission, Band Edge



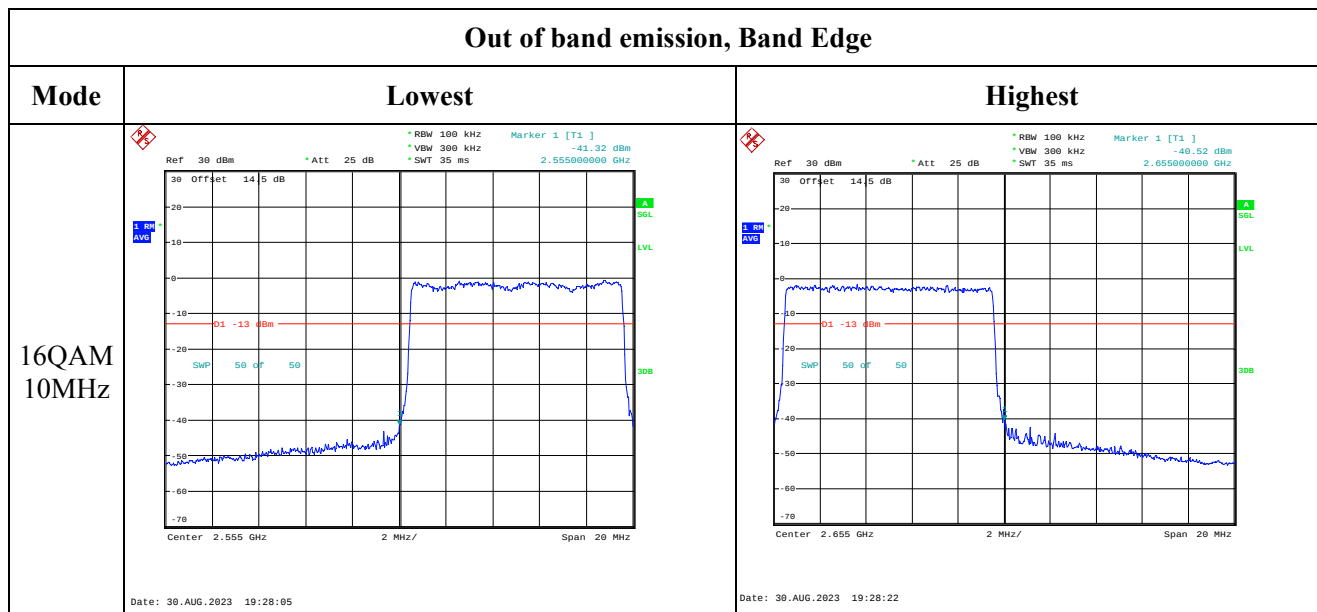
Out of band emission, Band Edge



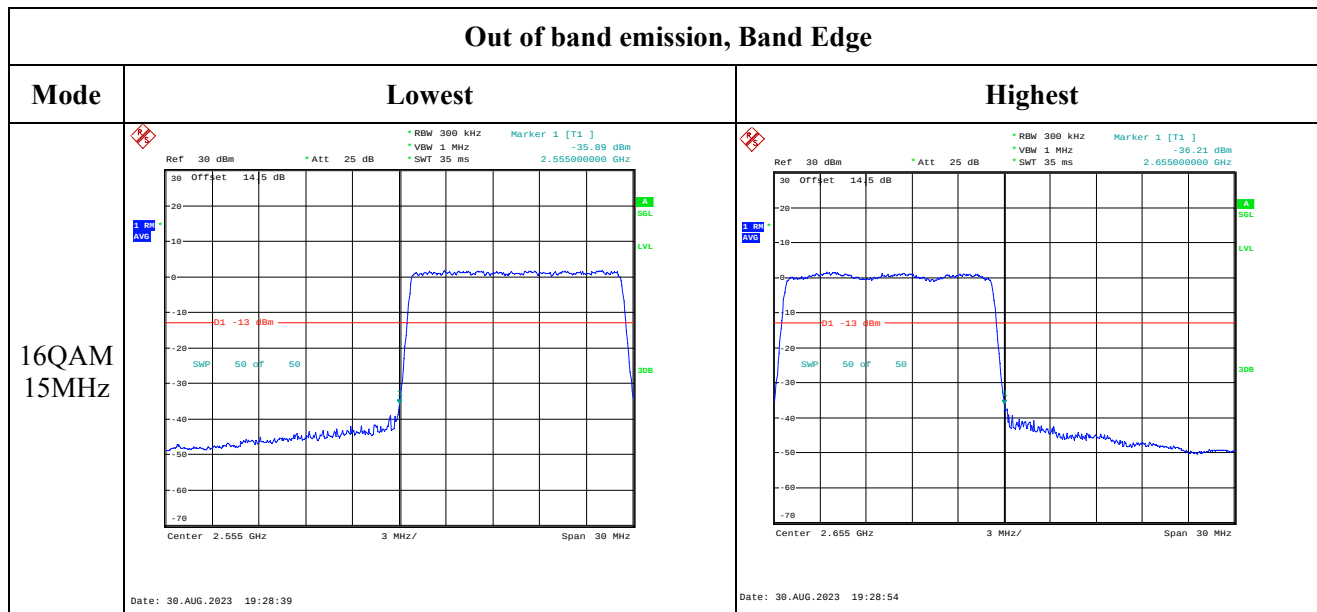
Out of band emission, Band Edge



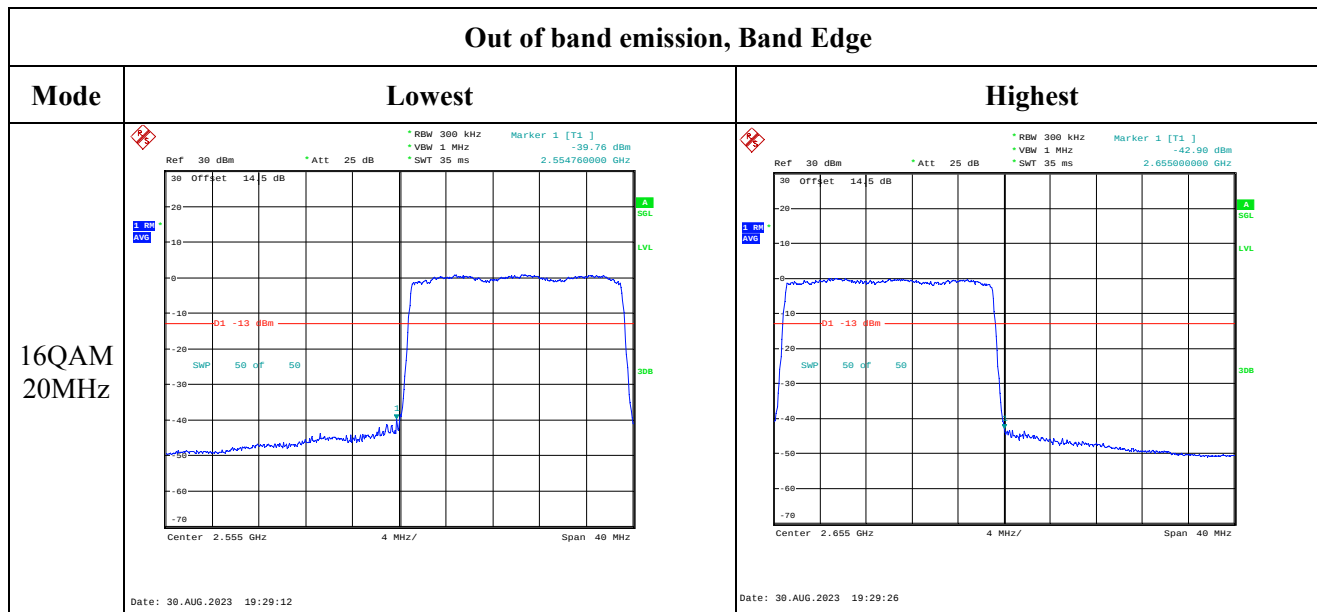
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.16 Radiated Spurious Emissions/

Serial Number:	28LK-1	Test Date:	2023/8/26~2023/8/29
Test Site:	966-2,966-1	Test Mode:	Transmitting
Tester:	Carl Xue, Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.3~26.7	Relative Humidity: (%)	57~65	ATM Pressure: (kPa)	99.7~100.2
----------------------	-----------	---------------------------	-------	---------------------------	------------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/16	2024/7/15
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021/10/18	2024/10/17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022/7/16	2024/7/15
Agilent	Signal Generator	E8247C	MY43321352	2022/11/18	2023/11/17
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2022/9/16	2023/9/15
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9850/2F-20	072002	2021/2/5	2024/2/4
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5

*** Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Please refer to the below table and plots.

Note: The device can be mounted in multiple orientations, test was performed with X, Y, Z Axis according to C63.26 figure 5, the worst orientation was photographed and it's data was recorded.

Cellular Band (30MHz-10GHz)

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850 Frequency:824.2MHz								
714.36	H	20.75	-52.28	0.00	0.50	-52.78	-13.00	39.78
694.41	V	20.83	-49.19	0.00	0.55	-49.74	-13.00	36.74
1648.400	H	54.14	-50.19	8.68	0.80	-42.31	-13.00	29.31
1648.400	V	53.96	-50.45	8.68	0.80	-42.57	-13.00	29.57
2472.600	H	61.95	-38.83	9.38	1.00	-30.45	-13.00	17.45
2472.600	V	64.48	-36.25	9.38	1.00	-27.87	-13.00	14.87
3296.800	H	36.47	-60.21	10.32	1.15	-51.04	-13.00	38.04
3296.800	V	39.92	-56.52	10.32	1.15	-47.35	-13.00	34.35
GSM 850 Frequency:836.6MHz								
647.62	H	20.86	-52.74	0.00	0.52	-53.26	-13.00	40.26
721.69	V	20.87	-48.58	0.00	0.50	-49.08	-13.00	36.08
1673.200	H	50.85	-53.46	8.71	0.85	-45.60	-13.00	32.60
1673.200	V	47.71	-56.70	8.71	0.85	-48.84	-13.00	35.84
2509.800	H	50.62	-49.99	9.42	1.01	-41.58	-13.00	28.58
2509.800	V	51.60	-49.02	9.42	1.01	-40.61	-13.00	27.61
3346.400	H	37.14	-60.03	10.34	1.16	-50.85	-13.00	37.85
3346.400	V	42.84	-54.19	10.34	1.16	-45.01	-13.00	32.01
GSM 850 Frequency:848.8MHz								
709.37	H	21.14	-51.99	0.00	0.52	-52.51	-13.00	39.51
721.88	V	20.76	-48.68	0.00	0.50	-49.18	-13.00	36.18
1697.600	H	48.01	-56.28	8.74	0.90	-48.44	-13.00	35.44
1697.600	V	48.15	-56.27	8.74	0.90	-48.43	-13.00	35.43
2546.400	H	44.70	-55.63	9.47	1.01	-47.17	-13.00	34.17
2546.400	V	52.07	-48.21	9.47	1.01	-39.75	-13.00	26.75
3395.200	H	37.41	-60.28	10.36	1.19	-51.11	-13.00	38.11
3395.200	V	45.34	-52.32	10.36	1.19	-43.15	-13.00	30.15

PCS Band (30MHz-20GHz)

1850.2 Band (GSM 1900)								
Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 1900 Frequency:1850.2MHz								
114.91	H	35.93	-76.23	0.00	0.20	-76.43	-13.00	63.43
77.59	V	38.16	-68.98	-1.21	0.16	-70.35	-13.00	57.35
3700.400	H	45.69	-51.63	10.60	1.25	-42.28	-13.00	29.28
3700.400	V	45.71	-51.59	10.60	1.25	-42.24	-13.00	29.24
5550.600	H	47.03	-46.23	11.44	1.49	-36.28	-13.00	23.28
5550.600	V	44.14	-48.96	11.44	1.49	-39.01	-13.00	26.01
GSM 1900 Frequency:1880MHz								
280.02	H	36.07	-75.12	0.00	0.32	-75.44	-13.00	62.44
87.40	V	37.85	-71.29	0.00	0.17	-71.46	-13.00	58.46
3760.000	H	41.47	-54.94	10.66	1.24	-45.52	-13.00	32.52
3760.000	V	48.21	-48.08	10.66	1.24	-38.66	-13.00	25.66
5640.000	H	43.42	-50.03	11.33	1.54	-40.24	-13.00	27.24
5640.000	V	41.82	-51.51	11.33	1.54	-41.72	-13.00	28.72
GSM 1900 Frequency:1909.8MHz								
116.94	H	35.89	-76.24	0.00	0.20	-76.44	-13.00	63.44
78.68	V	38.11	-69.68	-0.66	0.16	-70.50	-13.00	57.50
3819.600	H	41.88	-53.98	10.72	1.29	-44.55	-13.00	31.55
3819.600	V	48.11	-47.61	10.72	1.29	-38.18	-13.00	25.18
5729.400	H	39.12	-54.36	11.22	1.59	-44.73	-13.00	31.73
5729.400	V	36.42	-56.94	11.22	1.59	-47.31	-13.00	34.31

WCDMA Band 2(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band II, Frequency:1852.4 MHz								
280.02	H	36.17	-75.02	0.00	0.32	-75.34	-13.00	62.34
77.87	V	37.95	-69.36	-1.07	0.16	-70.59	-13.00	57.59
3704.800	H	45.30	-51.96	10.60	1.25	-42.61	-13.00	29.61
3704.800	V	48.79	-48.44	10.60	1.25	-39.09	-13.00	26.09
5557.200	H	41.37	-51.91	11.43	1.49	-41.97	-13.00	28.97
5557.200	V	37.41	-55.72	11.43	1.49	-45.78	-13.00	32.78
WCDMA Band II, Frequency:1880 MHz								
280.02	H	36.36	-74.83	0.00	0.32	-75.15	-13.00	62.15
86.80	V	37.94	-71.15	0.00	0.17	-71.32	-13.00	58.32
3760.000	H	47.70	-48.71	10.66	1.24	-39.29	-13.00	26.29
3760.000	V	49.95	-46.34	10.66	1.24	-36.92	-13.00	23.92
5640.000	H	43.76	-49.69	11.33	1.54	-39.90	-13.00	26.90
5640.000	V	42.09	-51.24	11.33	1.54	-41.45	-13.00	28.45
WCDMA Band II, Frequency:1907.6MHz								
113.71	H	36.18	-76.00	0.00	0.19	-76.19	-13.00	63.19
85.29	V	37.91	-71.07	0.00	0.17	-71.24	-13.00	58.24
3815.200	H	51.62	-44.23	10.72	1.29	-34.80	-13.00	21.80
3815.200	V	55.23	-40.46	10.72	1.29	-31.03	-13.00	18.03
5722.800	H	46.05	-47.44	11.23	1.58	-37.79	-13.00	24.79
5722.800	V	44.85	-48.50	11.23	1.58	-38.85	-13.00	25.85

WCDMA Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Frequency:			1712.4	MHz				
280.02	H	36.15	-75.04	0.00	0.32	-75.36	-13.00	62.36
77.60	V	37.90	-69.25	-1.20	0.16	-70.61	-13.00	57.61
3424.800	H	58.44	-39.33	10.37	1.17	-30.13	-13.00	17.13
3424.800	V	66.21	-31.53	10.37	1.17	-22.33	-13.00	9.33
5137.200	H	35.46	-58.16	11.28	1.46	-48.34	-13.00	35.34
5137.200	V	36.02	-57.48	11.28	1.46	-47.66	-13.00	34.66
Frequency:			1732.6	MHz				
942.13	H	35.99	-62.04	0.00	0.62	-62.66	-13.00	49.66
88.34	V	37.89	-71.32	0.00	0.17	-71.49	-13.00	58.49
3465.200	H	59.61	-38.20	10.39	1.15	-28.96	-13.00	15.96
3465.200	V	65.88	-31.89	10.39	1.15	-22.65	-13.00	9.65
5197.800	H	36.11	-58.02	11.32	1.44	-48.14	-13.00	35.14
5197.800	V	35.36	-58.62	11.32	1.44	-48.74	-13.00	35.74
Frequency:			1752.6	MHz				
114.91	H	36.05	-76.11	0.00	0.20	-76.31	-13.00	63.31
87.41	V	38.04	-71.10	0.00	0.17	-71.27	-13.00	58.27
3505.200	H	58.21	-39.62	10.41	1.18	-30.39	-13.00	17.39
3505.200	V	62.25	-35.52	10.41	1.18	-26.29	-13.00	13.29
5257.800	H	36.74	-56.99	11.35	1.47	-47.11	-13.00	34.11
5257.800	V	36.14	-57.37	11.35	1.47	-47.49	-13.00	34.49

WCDMA Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
WCDMA Band 5 Frequency:826.4 MHz								
726.80	H	21.30	-51.48	0.00	0.52	-52.00	-13.00	39.00
714.33	V	20.82	-48.79	0.00	0.50	-49.29	-13.00	36.29
1652.800	H	44.07	-60.26	8.68	0.81	-52.39	-13.00	39.39
1652.800	V	42.79	-61.62	8.68	0.81	-53.75	-13.00	40.75
2479.200	H	36.11	-64.65	9.39	1.01	-56.27	-13.00	43.27
2479.200	V	37.11	-63.62	9.39	1.01	-55.24	-13.00	42.24
3305.600	H	35.94	-60.79	10.32	1.15	-51.62	-13.00	38.62
3305.600	V	35.38	-61.12	10.32	1.15	-51.95	-13.00	38.95
WCDMA Band 5 Frequency:836.6MHz								
689.60	H	20.90	-52.48	0.00	0.54	-53.02	-13.00	40.02
701.93	V	21.05	-48.83	0.00	0.55	-49.38	-13.00	36.38
1673.200	H	41.07	-63.24	8.71	0.85	-55.38	-13.00	42.38
1673.200	V	40.02	-64.39	8.71	0.85	-56.53	-13.00	43.53
2509.800	H	37.14	-63.47	9.42	1.01	-55.06	-13.00	42.06
2509.800	V	36.33	-64.29	9.42	1.01	-55.88	-13.00	42.88
3346.400	H	36.10	-61.07	10.34	1.16	-51.89	-13.00	38.89
3346.400	V	35.42	-61.61	10.34	1.16	-52.43	-13.00	39.43
WCDMA Band 5 Frequency:846.6MHz								
668.19	H	21.37	-52.12	0.00	0.50	-52.62	-13.00	39.62
709.34	V	20.94	-48.78	0.00	0.52	-49.30	-13.00	36.30
1693.200	H	43.68	-60.62	8.73	0.89	-52.78	-13.00	39.78
1693.200	V	42.34	-62.08	8.73	0.89	-54.24	-13.00	41.24
2539.800	H	41.69	-58.69	9.46	1.01	-50.24	-13.00	37.24
2539.800	V	38.43	-61.91	9.46	1.01	-53.46	-13.00	40.46
3386.400	H	35.45	-62.14	10.35	1.18	-52.97	-13.00	39.97
3386.400	V	36.01	-61.53	10.35	1.18	-52.36	-13.00	39.36

LTE Bands:

(The Worst modulation and bandwidth was below)

LTE Band 2(30MHz-20GHz) :

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency:1850.7 MHz								
114.51	H	36.28	-75.89	0.00	0.20	-76.09	-13.00	63.09
79.24	V	38.04	-70.09	-0.38	0.16	-70.63	-13.00	57.63
3701.400	H	48.74	-48.57	10.60	1.25	-39.22	-13.00	26.22
3701.400	V	52.05	-45.24	10.60	1.25	-35.89	-13.00	22.89
5552.100	H	43.13	-50.14	11.44	1.49	-40.19	-13.00	27.19
5552.100	V	40.62	-52.48	11.44	1.49	-42.53	-13.00	29.53
QPSK, 1.4MHz,Frequency:1880 MHz								
115.72	H	36.15	-76.00	0.00	0.20	-76.20	-13.00	63.20
89.57	V	37.86	-71.44	0.00	0.18	-71.62	-13.00	58.62
3760.000	H	51.35	-45.06	10.66	1.24	-35.64	-13.00	22.64
3760.000	V	55.38	-40.91	10.66	1.24	-31.49	-13.00	18.49
5640.000	H	46.19	-47.26	11.33	1.54	-37.47	-13.00	24.47
5640.000	V	44.03	-49.30	11.33	1.54	-39.51	-13.00	26.51
QPSK, 1.4MHz,Frequency:1909.3 MHz								
113.71	H	36.05	-76.13	0.00	0.19	-76.32	-13.00	63.32
87.71	V	37.99	-71.17	0.00	0.17	-71.34	-13.00	58.34
3818.600	H	54.90	-40.96	10.72	1.29	-31.53	-13.00	18.53
3818.600	V	57.93	-37.78	10.72	1.29	-28.35	-13.00	15.35
5727.900	H	49.99	-43.49	11.23	1.59	-33.85	-13.00	20.85
5727.900	V	49.32	-44.04	11.23	1.59	-34.40	-13.00	21.40

LTE Band 4(30MHz-20GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1710.7 MHz								
942.13	H	35.87	-62.16	0.00	0.62	-62.78	-13.00	49.78
78.41	V	38.01	-69.62	-0.80	0.16	-70.58	-13.00	57.58
3421.400	H	63.09	-34.67	10.37	1.17	-25.47	-13.00	12.47
3421.400	V	69.93	-27.80	10.37	1.17	-18.60	-13.00	5.60
5132.100	H	36.01	-57.56	11.28	1.47	-47.75	-13.00	34.75
5132.100	V	35.23	-58.23	11.28	1.47	-48.42	-13.00	35.42
1.4MHz QPSK, Frequency: 1732.5 MHz								
275.15	H	36.23	-75.08	0.00	0.32	-75.40	-13.00	62.40
77.32	V	38.26	-68.72	-1.34	0.16	-70.22	-13.00	57.22
3465.000	H	62.58	-35.23	10.39	1.15	-25.99	-13.00	12.99
3465.000	V	69.08	-28.69	10.39	1.15	-19.45	-13.00	6.45
5197.500	H	36.01	-58.12	11.32	1.44	-48.24	-13.00	35.24
5197.500	V	35.44	-58.54	11.32	1.44	-48.66	-13.00	35.66
1.4MHz QPSK, Frequency: 1754.3 MHz								
280.02	H	36.03	-75.16	0.00	0.32	-75.48	-13.00	62.48
88.03	V	37.90	-71.28	0.00	0.17	-71.45	-13.00	58.45
3508.600	H	63.87	-33.95	10.41	1.19	-24.73	-13.00	11.73
3508.600	V	67.57	-30.19	10.41	1.19	-20.97	-13.00	7.97
5262.900	H	36.02	-57.68	11.36	1.47	-47.79	-13.00	34.79
5262.900	V	35.45	-58.02	11.36	1.47	-48.13	-13.00	35.13

LTE Band 5(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency: 824.7 MHz								
726.80	H	21.05	-51.73	0.00	0.52	-52.25	-13.00	39.25
729.35	V	20.94	-48.34	0.00	0.53	-48.87	-13.00	35.87
1649.400	H	50.04	-54.29	8.68	0.80	-46.41	-13.00	33.41
1649.400	V	44.22	-60.19	8.68	0.80	-52.31	-13.00	39.31
2474.100	H	45.45	-55.33	9.38	1.00	-46.95	-13.00	33.95
2474.100	V	50.14	-50.59	9.38	1.00	-42.21	-13.00	29.21
3298.800	H	35.12	-61.56	10.32	1.15	-52.39	-13.00	39.39
3298.800	V	36.31	-60.13	10.32	1.15	-50.96	-13.00	37.96
QPSK, 1.4MHz, Frequency: 836.5 MHz								
687.18	H	20.94	-52.45	0.00	0.53	-52.98	-13.00	39.98
704.37	V	20.90	-48.92	0.00	0.55	-49.47	-13.00	36.47
1673.000	H	46.40	-57.91	8.71	0.85	-50.05	-13.00	37.05
1673.000	V	43.68	-60.73	8.71	0.85	-52.87	-13.00	39.87
2509.500	H	38.41	-62.20	9.42	1.01	-53.79	-13.00	40.79
2509.500	V	49.63	-50.99	9.42	1.01	-42.58	-13.00	29.58
3346.000	H	36.24	-60.92	10.34	1.16	-51.74	-13.00	38.74
3346.000	V	35.46	-61.56	10.34	1.16	-52.38	-13.00	39.38
QPSK, 1.4MHz, Frequency: 848.3 MHz								
701.78	H	20.85	-52.43	0.00	0.55	-52.98	-13.00	39.98
716.82	V	20.95	-48.60	0.00	0.50	-49.10	-13.00	36.10
1696.600	H	46.33	-57.96	8.74	0.89	-50.11	-13.00	37.11
1696.600	V	51.29	-53.13	8.74	0.89	-45.28	-13.00	32.28
2544.900	H	42.57	-57.77	9.47	1.01	-49.31	-13.00	36.31
2544.900	V	47.59	-52.71	9.47	1.01	-44.25	-13.00	31.25
3393.200	H	36.58	-61.09	10.36	1.19	-51.92	-13.00	38.92
3393.200	V	37.10	-60.53	10.36	1.19	-51.36	-13.00	38.36

LTE Band 7(30MHz-26GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2502.5 MHz								
114.91	H	36.17	-75.99	0.00	0.20	-76.19	-25.00	51.19
86.80	V	37.96	-71.13	0.00	0.17	-71.30	-25.00	46.30
5005.000	H	35.41	-57.55	11.20	1.47	-47.82	-25.00	22.82
5005.000	V	35.11	-57.71	11.20	1.47	-47.98	-25.00	22.98
7507.500	H	36.02	-53.77	10.90	1.95	-44.82	-25.00	19.82
7507.500	V	35.78	-54.51	10.90	1.95	-45.56	-25.00	20.56
5MHz QPSK, Frequency: 2535 MHz								
280.02	H	36.16	-75.03	0.00	0.32	-75.35	-25.00	50.35
77.84	V	38.05	-69.24	-1.08	0.16	-70.48	-25.00	45.48
5070.000	H	35.46	-57.73	11.24	1.47	-47.96	-25.00	22.96
5070.000	V	36.11	-56.98	11.24	1.47	-47.21	-25.00	22.21
7605.000	H	36.37	-53.10	10.88	2.01	-44.23	-25.00	19.23
7605.000	V	35.07	-55.12	10.88	2.01	-46.25	-25.00	21.25
5MHz QPSK, Frequency: 2567.5 MHz								
280.02	H	36.23	-74.96	0.00	0.32	-75.28	-25.00	50.28
77.29	V	37.75	-69.21	-1.36	0.16	-70.73	-25.00	45.73
5135.000	H	35.13	-58.47	11.28	1.47	-48.66	-25.00	23.66
5135.000	V	35.85	-57.64	11.28	1.47	-47.83	-25.00	22.83
7702.500	H	36.01	-53.51	10.86	1.97	-44.62	-25.00	19.62
7702.500	V	34.89	-55.29	10.86	1.97	-46.40	-25.00	21.40

LTE Band 12(30MHz-10GHz):

DTE Band 12 (699.7-715.3 MHz)								
Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 1.4MHz, Frequency: 699.7 MHz								
485.89	H	20.67	-55.45	0.00	0.43	-55.88	-13.00	42.88
508.43	V	20.53	-51.06	0.00	0.45	-51.51	-13.00	38.51
1399.400	H	45.45	-58.25	8.22	0.71	-50.74	-13.00	37.74
1399.400	V	50.09	-53.66	8.22	0.71	-46.15	-13.00	33.15
2099.100	H	41.79	-60.09	9.16	0.91	-51.84	-13.00	38.84
2099.100	V	38.10	-63.73	9.16	0.91	-55.48	-13.00	42.48
2798.800	H	36.07	-63.86	9.88	1.04	-55.02	-13.00	42.02
2798.800	V	36.05	-63.75	9.88	1.04	-54.91	-13.00	41.91
QPSK, 1.4MHz, Frequency: 707.5 MHz								
547.35	H	20.78	-54.12	0.00	0.47	-54.59	-13.00	41.59
556.91	V	20.52	-51.15	0.00	0.48	-51.63	-13.00	38.63
1415.000	H	44.01	-59.66	8.26	0.72	-52.12	-13.00	39.12
1415.000	V	46.66	-57.06	8.26	0.72	-49.52	-13.00	36.52
2122.500	H	48.42	-53.57	9.17	0.92	-45.32	-13.00	32.32
2122.500	V	44.93	-57.04	9.17	0.92	-48.79	-13.00	35.79
2830.000	H	35.44	-64.36	9.93	1.06	-55.49	-13.00	42.49
2830.000	V	36.98	-62.75	9.93	1.06	-53.88	-13.00	40.88
QPSK, 1.4MHz, Frequency: 715.3 MHz								
580.90	H	20.81	-53.43	0.00	0.46	-53.89	-13.00	40.89
574.75	V	20.64	-51.05	0.00	0.46	-51.51	-13.00	38.51
1430.600	H	42.84	-60.79	8.31	0.73	-53.21	-13.00	40.21
1430.600	V	45.70	-57.99	8.31	0.73	-50.41	-13.00	37.41
2145.900	H	56.08	-46.02	9.19	0.93	-37.76	-13.00	24.76
2145.900	V	52.30	-49.81	9.19	0.93	-41.55	-13.00	28.55
2861.200	H	35.44	-64.21	9.98	1.07	-55.30	-13.00	42.30
2861.200	V	36.42	-63.25	9.98	1.07	-54.34	-13.00	41.34

LTE Band 17(30MHz-10GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 5MHz, Frequency: 706.5 MHz								
517.84	H	20.66	-54.82	0.00	0.42	-55.24	-13.00	42.24
547.24	V	20.72	-50.93	0.00	0.47	-51.40	-13.00	38.40
1413.000	H	37.45	-66.22	8.26	0.72	-58.68	-13.00	45.68
1413.000	V	37.46	-66.26	8.26	0.72	-58.72	-13.00	45.72
2119.500	H	39.11	-62.86	9.17	0.92	-54.61	-13.00	41.61
2119.500	V	37.11	-64.84	9.17	0.92	-56.59	-13.00	43.59
2826.000	H	36.13	-63.68	9.92	1.06	-54.82	-13.00	41.82
2826.000	V	35.34	-64.40	9.92	1.06	-55.54	-13.00	42.54
QPSK, 5MHz, Frequency:710 MHz								
454.60	H	20.53	-56.23	0.00	0.42	-56.65	-13.00	43.65
513.80	V	20.64	-50.96	0.00	0.44	-51.40	-13.00	38.40
1420.000	H	37.98	-65.68	8.28	0.73	-58.13	-13.00	45.13
1420.000	V	41.77	-61.94	8.28	0.73	-54.39	-13.00	41.39
2130.000	H	46.01	-56.01	9.18	0.92	-47.75	-13.00	34.75
2130.000	V	43.37	-58.64	9.18	0.92	-50.38	-13.00	37.38
2840.000	H	36.20	-63.55	9.94	1.06	-54.67	-13.00	41.67
2840.000	V	35.46	-64.25	9.94	1.06	-55.37	-13.00	42.37
QPSK, 5MHz, Frequency: 713.5 MHz								
572.85	H	20.54	-53.85	0.00	0.46	-54.31	-13.00	41.31
586.96	V	20.80	-50.91	0.00	0.47	-51.38	-13.00	38.38
1427.000	H	37.41	-66.23	8.30	0.73	-58.66	-13.00	45.66
1427.000	V	42.49	-61.20	8.30	0.73	-53.63	-13.00	40.63
2140.500	H	48.73	-53.34	9.18	0.93	-45.09	-13.00	32.09
2140.500	V	43.99	-58.09	9.18	0.93	-49.84	-13.00	36.84
2854.000	H	36.01	-63.68	9.97	1.07	-54.78	-13.00	41.78
2854.000	V	35.43	-64.25	9.97	1.07	-55.35	-13.00	42.35

LTE Band 25:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
1.4MHz QPSK, Frequency: 1850.4 MHz								
942.13	H	36.04	-61.99	0.00	0.62	-62.61	-13.00	49.61
86.80	V	37.93	-71.16	0.00	0.17	-71.33	-13.00	58.33
3700.800	H	48.68	-48.64	10.60	1.25	-39.29	-13.00	26.29
3700.800	V	52.11	-45.19	10.60	1.25	-35.84	-13.00	22.84
5551.200	H	45.31	-47.95	11.44	1.49	-38.00	-13.00	25.00
5551.200	V	45.78	-47.32	11.44	1.49	-37.37	-13.00	24.37
1.4MHz QPSK, Frequency: 1882.5 MHz								
115.32	H	35.93	-76.23	0.00	0.20	-76.43	-13.00	63.43
88.03	V	38.03	-71.15	0.00	0.17	-71.32	-13.00	58.32
3765.000	H	51.53	-44.80	10.67	1.25	-35.38	-13.00	22.38
3765.000	V	54.80	-41.41	10.67	1.25	-31.99	-13.00	18.99
5647.500	H	46.70	-46.75	11.32	1.55	-36.98	-13.00	23.98
5647.500	V	44.98	-48.35	11.32	1.55	-38.58	-13.00	25.58
1.4MHz QPSK, Frequency: 1914.3 MHz								
114.11	H	35.86	-76.31	0.00	0.19	-76.50	-13.00	63.50
942.13	V	37.85	-57.66	0.00	0.62	-58.28	-13.00	45.28
3828.600	H	50.05	-45.85	10.73	1.28	-36.40	-13.00	23.40
3828.600	V	51.78	-43.99	10.73	1.28	-34.54	-13.00	21.54
5742.900	H	43.39	-50.09	11.21	1.60	-40.48	-13.00	27.48
5742.900	V	42.07	-51.29	11.21	1.60	-41.68	-13.00	28.68

LTE Band 38 5MHz QPSK:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2572.5 MHz								
280.02	H	35.94	-75.25	0.00	0.32	-75.57	-25.00	50.57
88.34	V	37.87	-71.34	0.00	0.17	-71.51	-25.00	46.51
5145.000	H	37.11	-56.57	11.29	1.44	-46.72	-25.00	21.72
5145.000	V	36.56	-57.01	11.29	1.44	-47.16	-25.00	22.16
7717.500	H	35.23	-54.28	10.86	1.99	-45.41	-25.00	20.41
7717.500	V	36.19	-53.94	10.86	1.99	-45.07	-25.00	20.07
5MHz QPSK, Frequency: 2595 MHz								
942.13	H	35.88	-62.15	0.00	0.62	-62.77	-25.00	37.77
77.33	V	37.94	-69.05	-1.34	0.16	-70.55	-25.00	45.55
5190.000	H	36.23	-57.84	11.31	1.44	-47.97	-25.00	22.97
5190.000	V	37.90	-56.02	11.31	1.44	-46.15	-25.00	21.15
7785.000	H	36.04	-53.45	10.84	1.99	-44.60	-25.00	19.60
7785.000	V	35.46	-54.46	10.84	1.99	-45.61	-25.00	20.61
5MHz QPSK, Frequency: 2617.5 MHz								
115.23	H	35.82	-76.34	0.00	0.20	-76.54	-25.00	51.54
87.41	V	38.02	-71.12	0.00	0.17	-71.29	-25.00	46.29
5235.000	H	38.10	-55.80	11.34	1.46	-45.92	-25.00	20.92
5235.000	V	37.45	-56.26	11.34	1.46	-46.38	-25.00	21.38
7852.500	H	35.66	-53.53	10.83	2.03	-44.73	-25.00	19.73
7852.500	V	36.24	-53.34	10.83	2.03	-44.54	-25.00	19.54

LTE Band 40 Lower(30MHz-24GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2307.5 MHz								
942.13	H	36.10	-61.93	0.00	0.62	-62.55	-40.00	22.55
87.11	V	37.79	-71.32	0.00	0.17	-71.49	-40.00	31.49
4615.000	H	37.96	-57.40	10.74	1.41	-48.07	-40.00	8.07
4615.000	V	35.41	-59.81	10.74	1.41	-50.48	-40.00	10.48
6922.500	H	36.44	-54.58	11.22	1.88	-45.24	-40.00	5.24
6922.500	V	35.39	-55.50	11.22	1.88	-46.16	-40.00	6.16
5MHz QPSK, Frequency: 2312.5 MHz								
113.31	H	36.13	-76.05	0.00	0.20	-76.25	-40.00	36.25
76.25	V	37.98	-68.36	-1.88	0.16	-70.40	-40.00	30.40
4625.000	H	37.11	-58.18	10.75	1.41	-48.84	-40.00	8.84
4625.000	V	39.51	-55.66	10.75	1.41	-46.32	-40.00	6.32
6937.500	H	36.49	-54.49	11.21	1.90	-45.18	-40.00	5.18
6937.500	V	35.78	-55.06	11.21	1.90	-45.75	-40.00	5.75

LTE Band 40 Upper(30MHz-24GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
5MHz QPSK, Frequency: 2352.5 MHz								
280.02	H	36.25	-74.94	0.00	0.32	-75.26	-40.00	35.26
85.59	V	38.12	-70.88	0.00	0.17	-71.05	-40.00	31.05
4705.000	H	35.46	-59.32	10.85	1.41	-49.88	-40.00	9.88
4705.000	V	36.01	-58.79	10.85	1.41	-49.35	-40.00	9.35
7057.500	H	36.66	-53.35	11.17	1.92	-44.10	-40.00	4.10
7057.500	V	35.23	-54.67	11.17	1.92	-45.42	-40.00	5.42
5MHz QPSK, Frequency: 2357.5 MHz								
114.11	H	35.92	-76.25	0.00	0.19	-76.44	-40.00	36.44
80.07	V	37.90	-70.69	0.00	0.16	-70.85	-40.00	30.85
4715.000	H	36.11	-58.60	10.86	1.41	-49.15	-40.00	9.15
4715.000	V	37.69	-57.02	10.86	1.41	-47.57	-40.00	7.57
7072.500	H	35.23	-54.57	11.16	1.91	-45.32	-40.00	5.32
7072.500	V	36.10	-53.61	11.16	1.91	-44.36	-40.00	4.36

LTE Band 41(30MHz-26.55GHz):

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, 5MHz, Frequency: 2537.5 MHz								
116.13	H	35.86	-76.28	0.00	0.20	-76.48	-25.00	51.48
77.87	V	37.71	-69.60	-1.07	0.16	-70.83	-25.00	45.83
5115.000	H	36.91	-56.52	11.27	1.51	-46.76	-25.00	21.76
5115.000	V	40.42	-52.91	11.27	1.51	-43.15	-25.00	18.15
7672.500	H	36.02	-53.49	10.87	2.03	-44.65	-25.00	19.65
7672.500	V	35.44	-54.75	10.87	2.03	-45.91	-25.00	20.91
QPSK, 5MHz, Frequency: 2595 MHz								
114.51	H	36.14	-76.03	0.00	0.20	-76.23	-25.00	51.23
85.90	V	37.77	-71.25	0.00	0.17	-71.42	-25.00	46.42
5210.000	H	36.12	-57.96	11.33	1.45	-48.08	-25.00	23.08
5210.000	V	43.83	-50.09	11.33	1.45	-40.21	-25.00	15.21
7815.000	H	35.77	-53.63	10.84	1.99	-44.78	-25.00	19.78
7815.000	V	36.01	-53.78	10.84	1.99	-44.93	-25.00	19.93
QPSK, 5MHz, Frequency: 2652.5 MHz								
280.02	H	36.04	-75.15	0.00	0.32	-75.47	-25.00	50.47
87.72	V	37.69	-71.47	0.00	0.17	-71.64	-25.00	46.64
5305.000	H	37.11	-56.33	11.38	1.46	-46.41	-25.00	21.41
5305.000	V	41.39	-51.79	11.38	1.46	-41.87	-25.00	16.87
7957.500	H	36.45	-51.97	10.81	2.09	-43.25	-25.00	18.25
7957.500	V	35.63	-53.24	10.81	2.09	-44.52	-25.00	19.52

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit-Absolute Level

5. EUT PHOTOGRAPHS

Please refer to the attachment CR230744003-EXP EUT EXTERNAL PHOTOGRAPHS and
CR230744003-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230744003-00F-TSP TEST SETUP PHOTOGRAPHS.

==== END OF REPORT =====