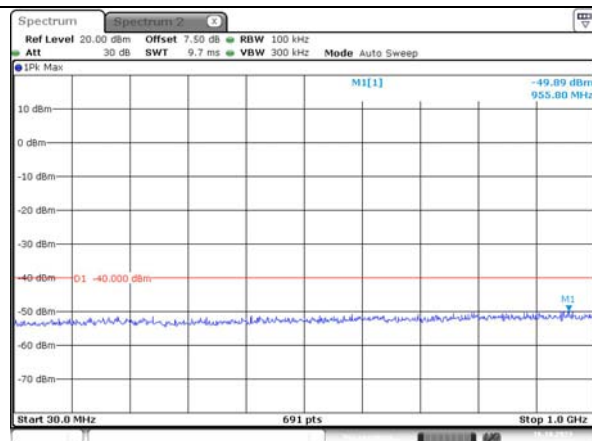


Spurious Emissions at Antenna Terminal

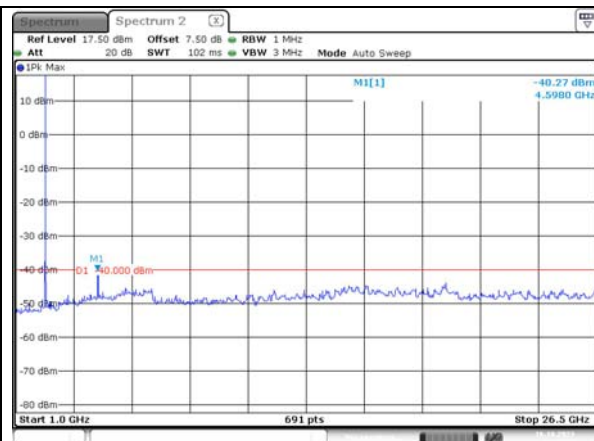
Channel

5MHz Bandwidth QPSK

Lowest

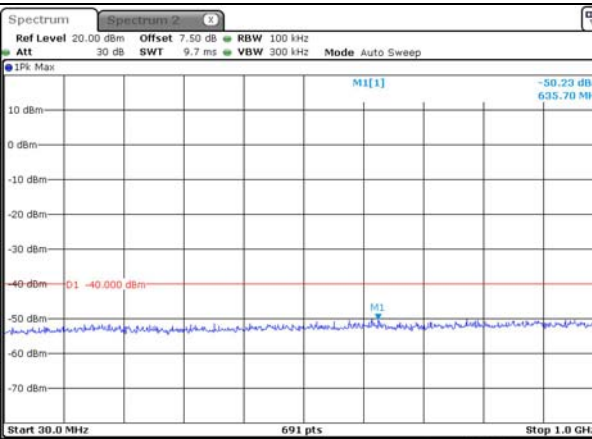


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:13:24

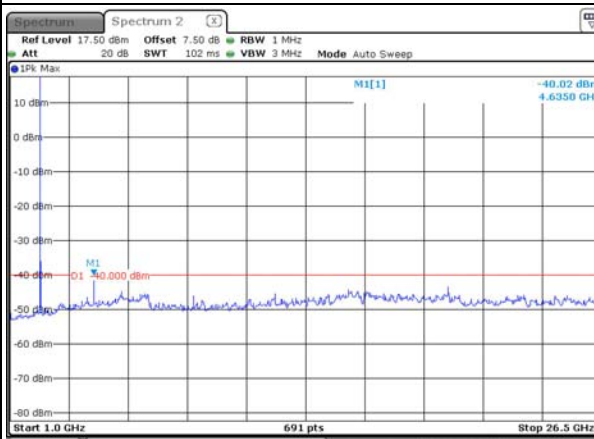


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:18:28

Highest



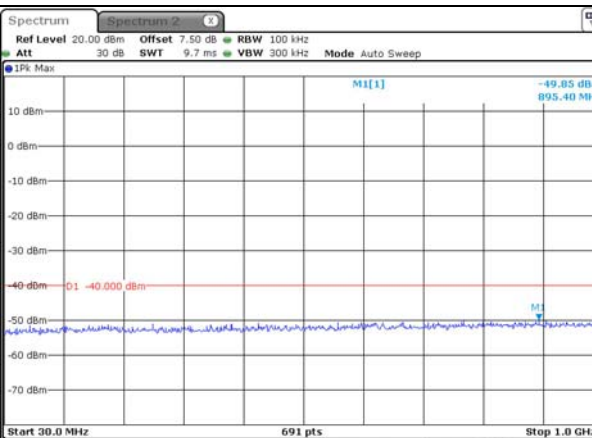
ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:19:21



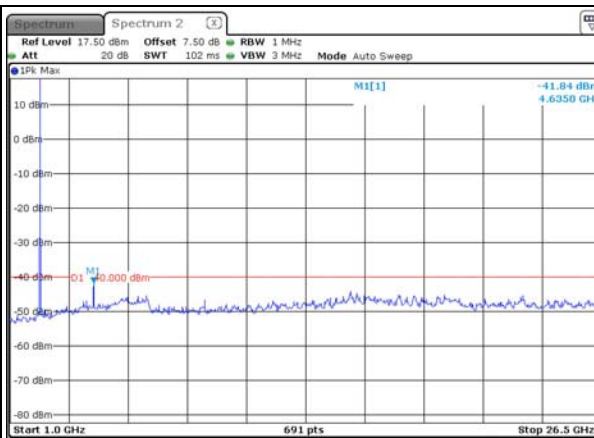
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Date: 16.OCT.2023 16:17:47

Channel

10MHz Bandwidth QPSK

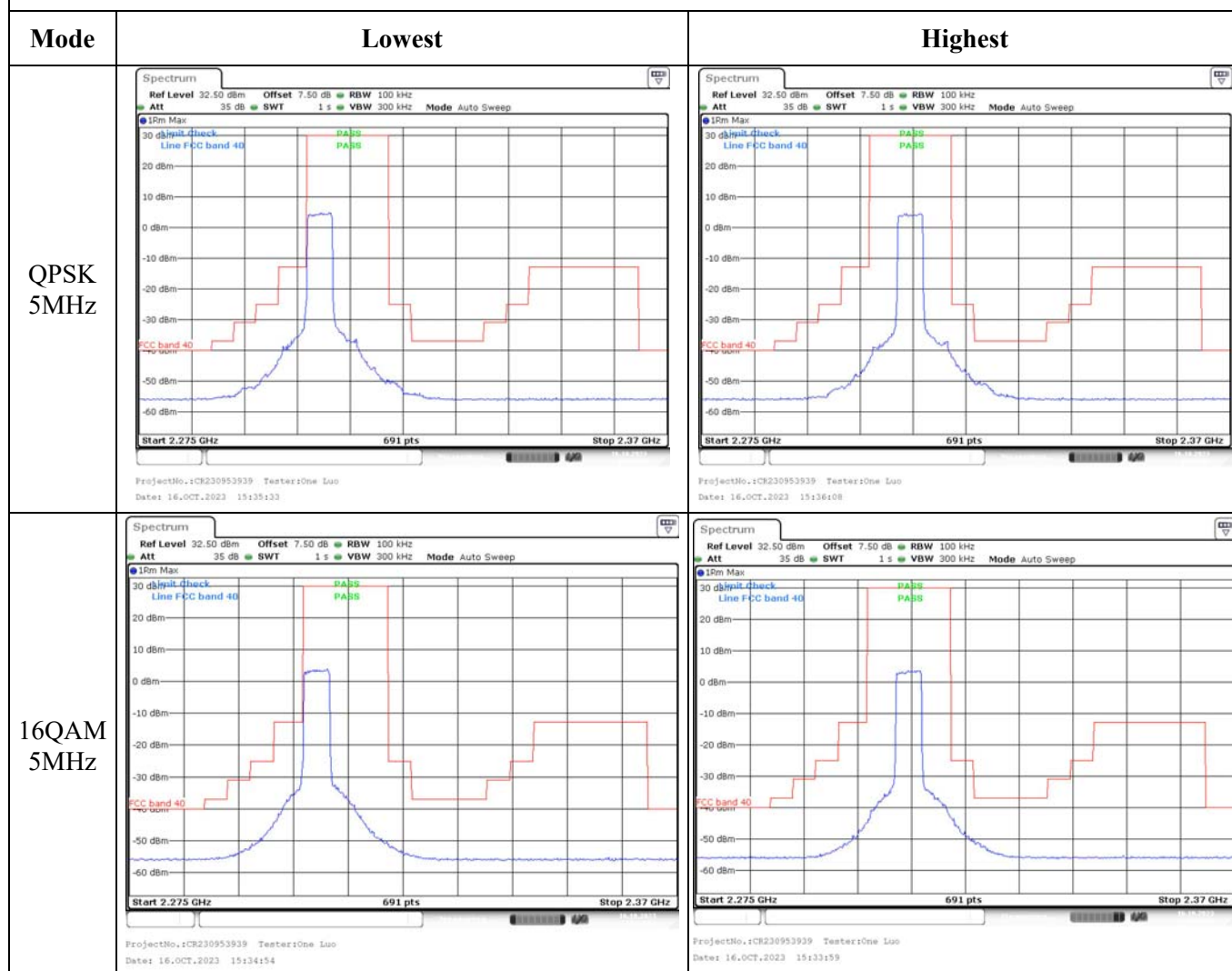


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:20:33

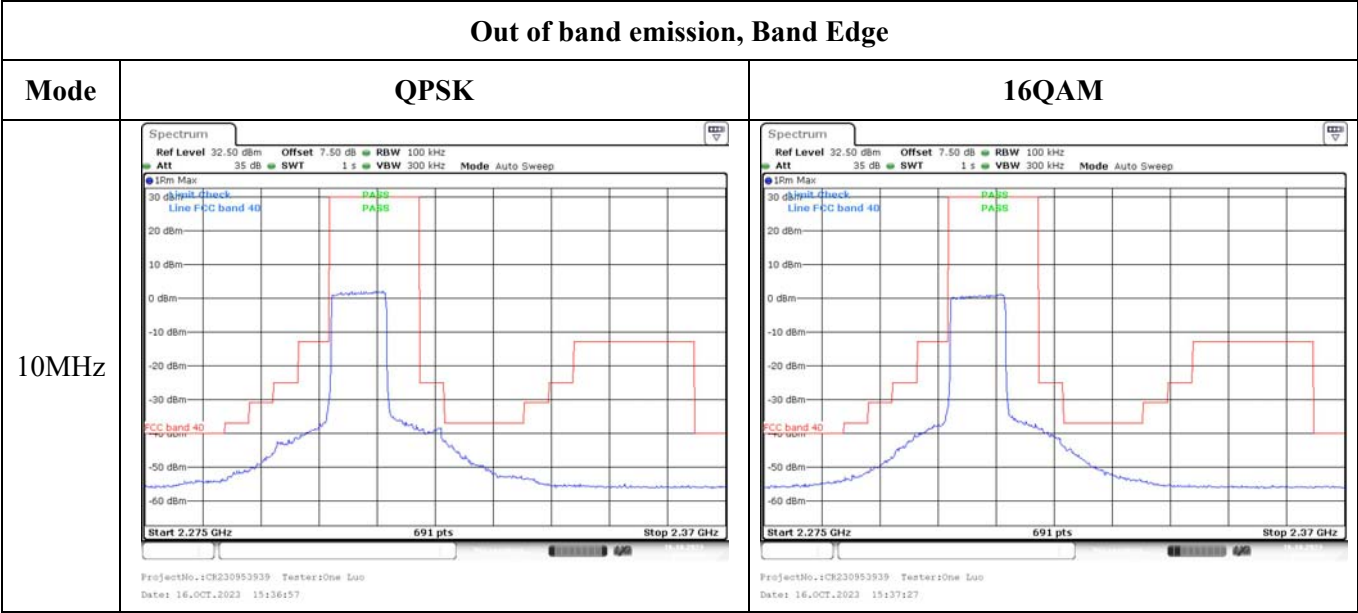


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:20:51

Out of band emission, Band Edge



Out of band emission, Band Edge



2) Band 40 Lower:

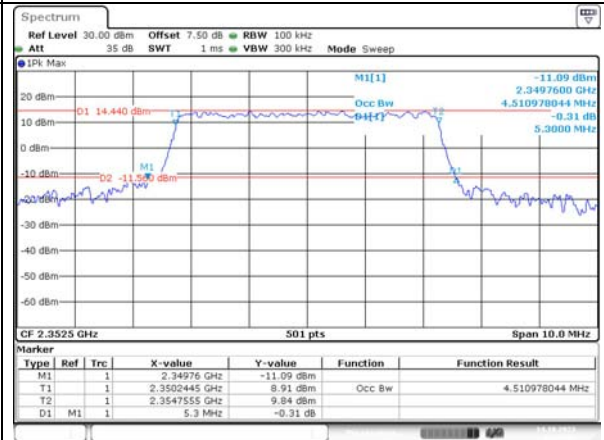
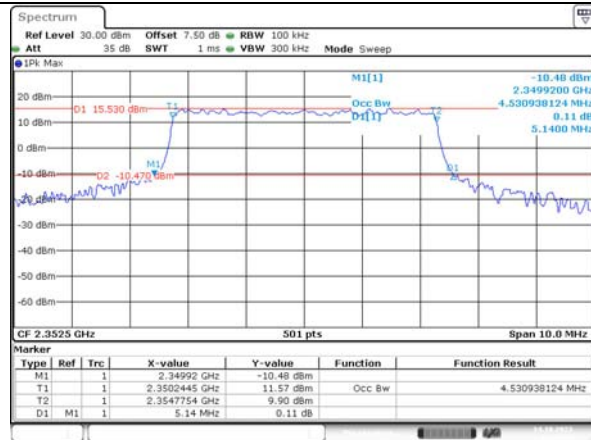
Occupied Bandwidth

Channel

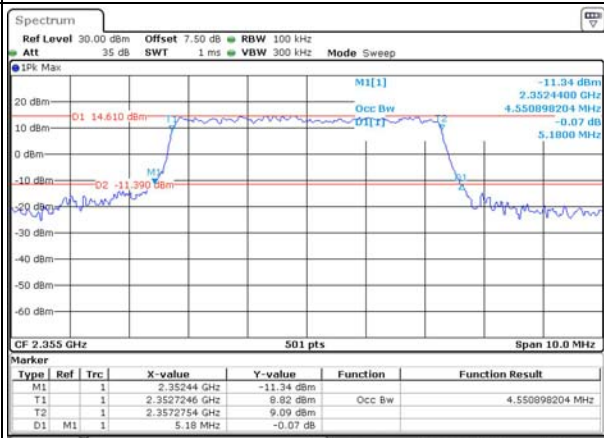
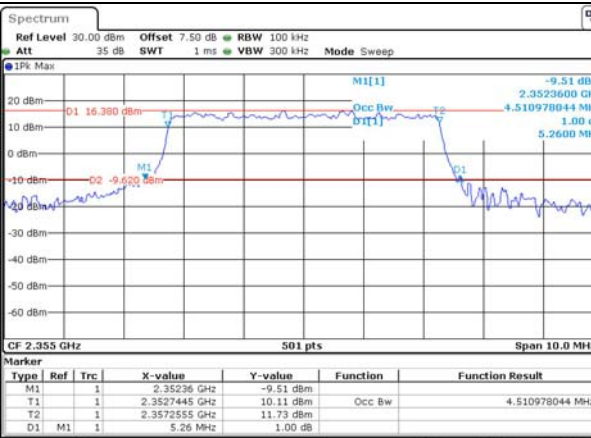
5MHz Bandwidth QPSK

5MHz Bandwidth 16QAM

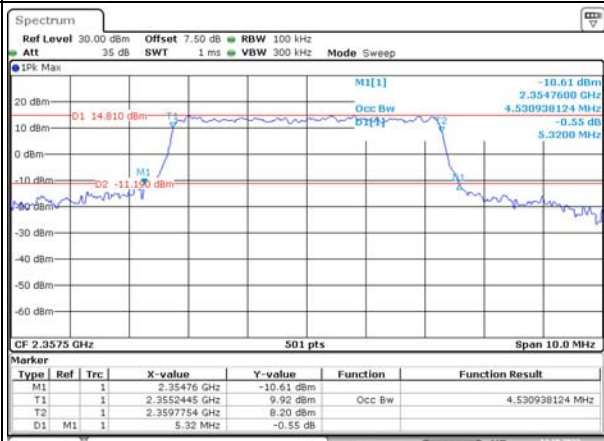
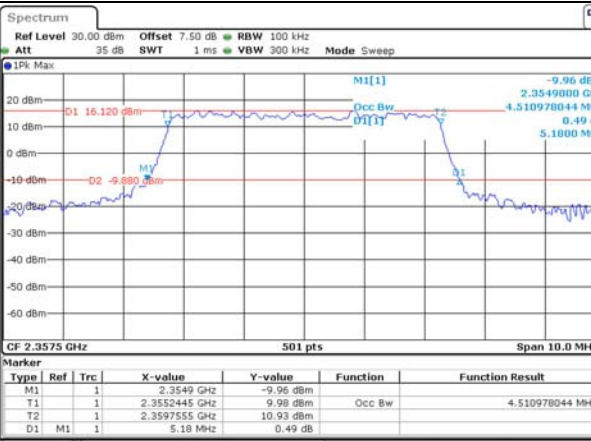
Lowest



Middle



Highest



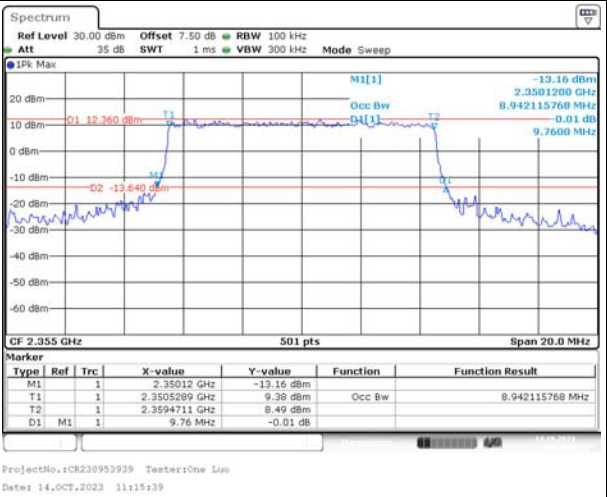
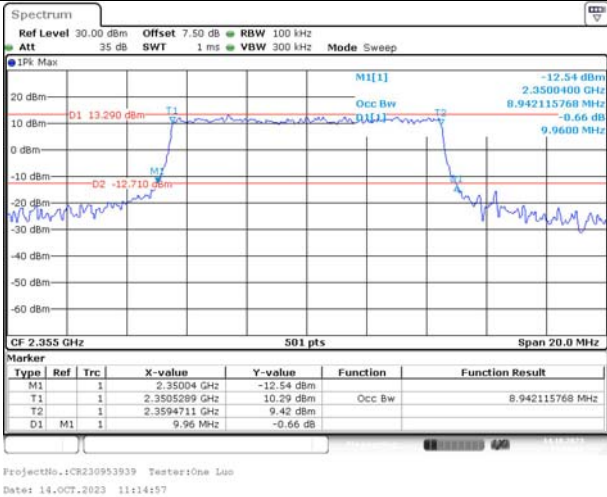
Occupied Bandwidth

Channel

20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

Middle

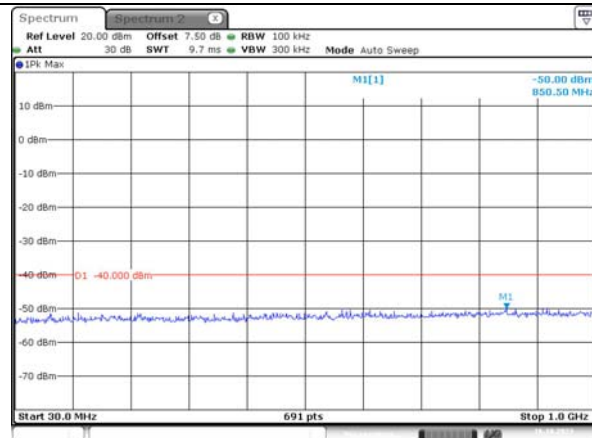


Spurious Emissions at Antenna Terminal

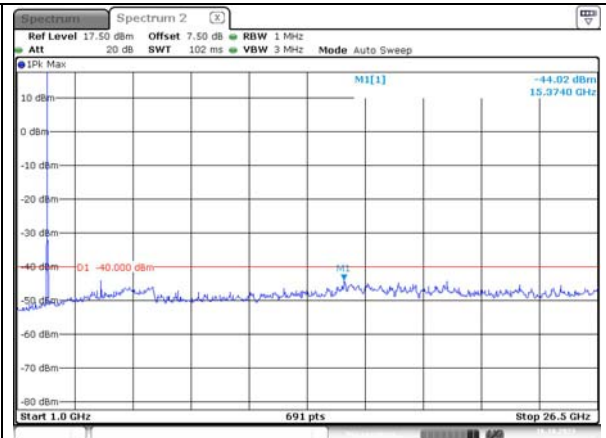
Channel

5MHz Bandwidth QPSK

Lowest

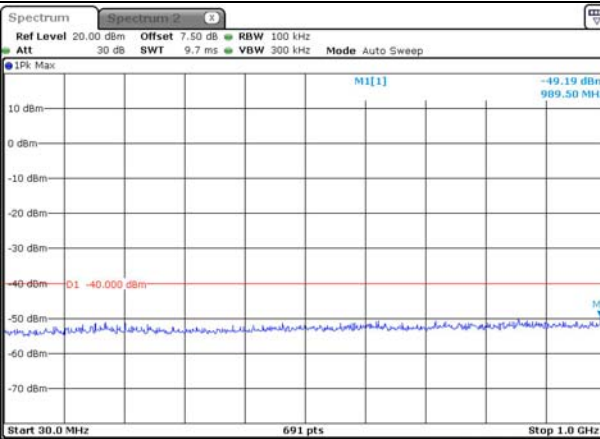


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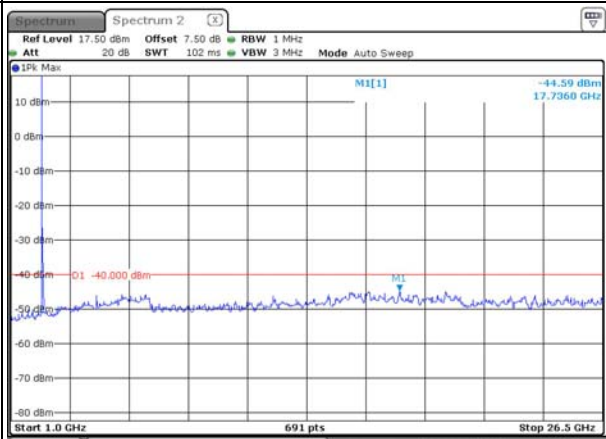


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:23:21

Highest



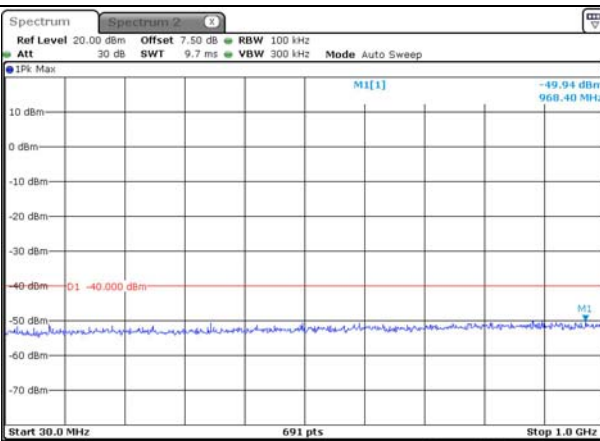
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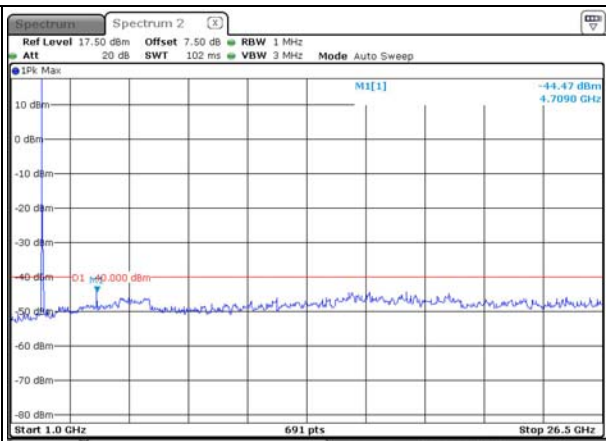
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Channel

10MHz Bandwidth QPSK

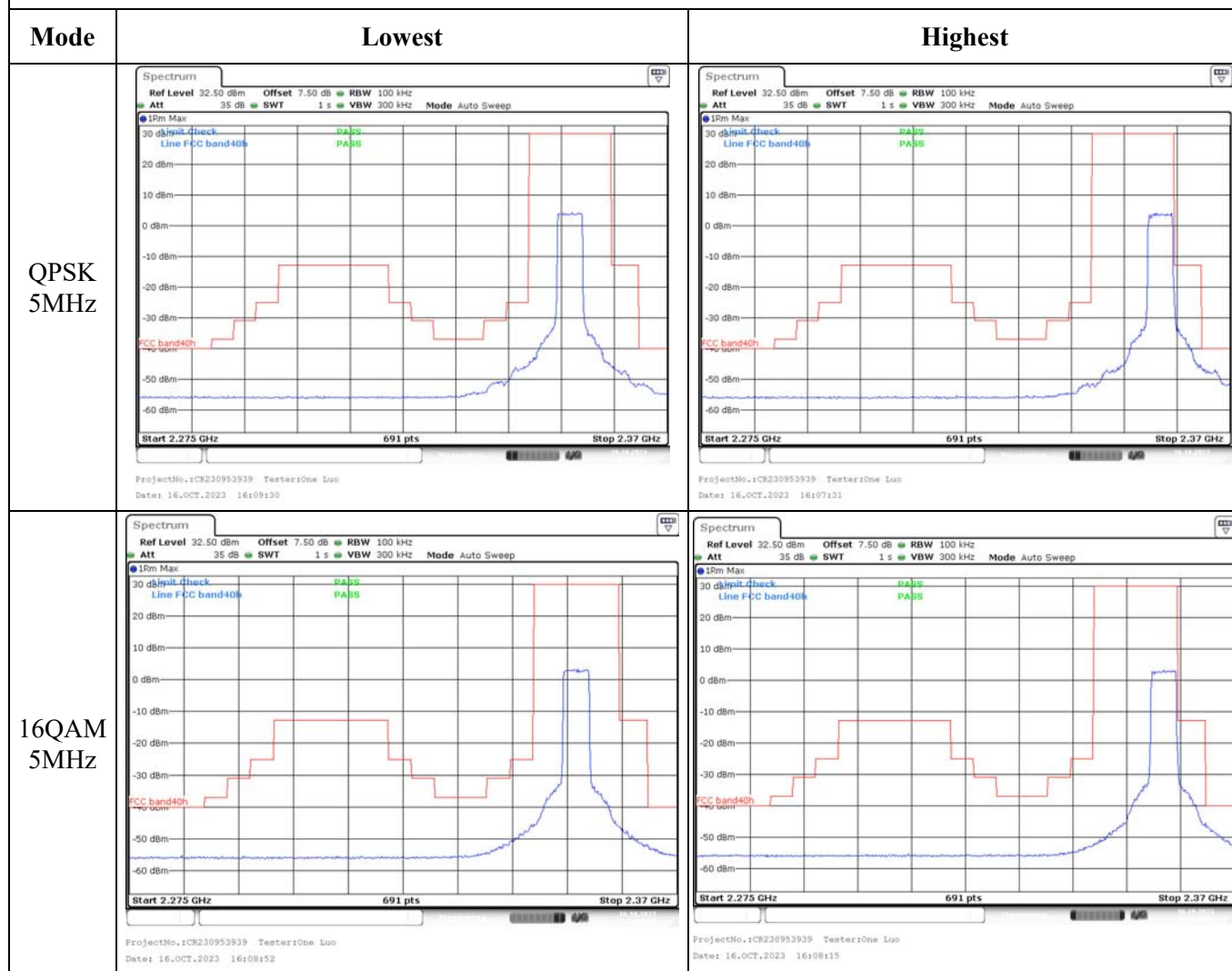


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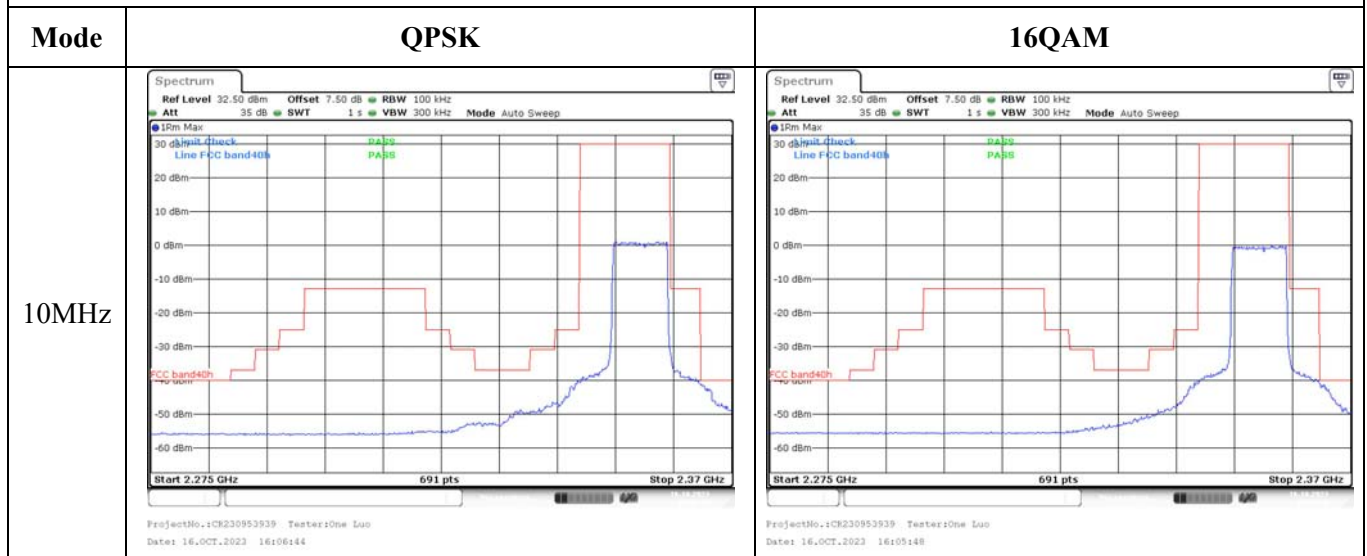


ProjectNo.:CR230953939 Tester:One Luo
Date: 16.OCT.2023 16:21:43

Out of band emission, Band Edge



Out of band emission, Band Edge



4.12 Antenna Port Test Data and Results for LTE Band 41

Serial Number:	2B7U-2	Test Date:	2023/10/12~2023/10/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2~27.5	Relative Humidity: (%)	42~52	ATM Pressure: (kPa)	100.5~101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Weinschel	Power Splitter	1515	RA914	Each time	N/A
R&S	Wideband Radio Communication Tester	CMW500	143458	2023/3/31	2024/3/30
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/29	2024/9/28
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386	N/A	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	2537.5	2595	2652.5
10MHz	2540	2595	2650
15MHz	2542.5	2595	2647.5
20MHz	2545	2595	2645

Test Data:**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	21.50	22.09	22.19	24.23	33
	RB1#13	21.65	22.31	22.37		
	RB1#24	21.55	22.05	22.20		
	RB15#0	20.58	21.14	21.26		
	RB15#10	20.71	21.06	21.28		
	RB25#0	20.62	21.11	21.28		
5MHz 16QAM	RB1#0	20.57	21.30	21.19	23.23	33
	RB1#13	20.74	21.37	21.31		
	RB1#24	20.65	21.30	21.20		
	RB15#0	19.69	20.17	20.22		
	RB15#10	19.68	20.16	20.23		
	RB25#0	19.71	20.11	20.32		
10MHz QPSK	RB1#0	21.60	22.19	22.20	24.37	33
	RB1#25	21.94	22.47	22.51		
	RB1#49	21.73	22.10	22.24		
	RB25#0	20.62	21.17	21.27		
	RB25#25	20.74	21.18	21.33		
	RB50#0	20.67	21.14	21.31		
10MHz 16QAM	RB1#0	20.50	21.26	21.37	23.57	33
	RB1#25	20.89	21.50	21.71		
	RB1#49	20.67	21.23	21.47		
	RB25#0	19.68	20.20	20.29		
	RB25#25	19.82	20.22	20.30		
	RB50#0	19.71	20.19	20.30		
15MHz QPSK	RB1#0	21.53	22.14	22.12	24.17	33
	RB1#38	21.70	22.19	22.31		
	RB1#74	21.81	22.03	22.23		
	RB36#0	20.62	21.17	21.26		
	RB36#39	20.82	21.19	21.36		
	RB75#0	20.71	21.16	21.32		
15MHz 16QAM	RB1#0	20.48	21.33	21.31	23.35	33
	RB1#38	20.66	21.38	21.49		
	RB1#74	20.80	21.24	21.40		
	RB36#0	19.59	20.22	20.24		
	RB36#39	19.78	20.22	20.29		
	RB75#0	19.70	20.17	20.27		
20MHz QPSK	RB1#0	21.34	22.07	21.89	24.33	33
	RB1#50	21.99	22.46	22.47		

	RB1#99	21.68	21.93	22.08		
	RB50#0	20.59	21.10	21.19		
	RB50#50	20.86	21.14	21.29		
	RB100#0	20.78	21.12	21.24		
20MHz 16QAM	RB1#0	20.34	21.27	20.98	23.54	33
	RB1#50	21.00	21.68	21.55		
	RB1#99	20.70	21.16	21.15		
	RB50#0	19.68	20.14	20.18		
	RB50#50	19.95	20.20	20.31		
	RB100#0	19.80	20.17	20.24		

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	8.61	8.67	8.49	13
	RB100#0	8.58	9.13	9.51	13
20MHz 16QAM	RB1#0	8.64	9.33	10	13
	RB100#0	9.57	9.65	9.83	13
				Result:	Pass

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	4.511	4.491	4.491	5.24	5.1	4.96
5MHz 16QAM	4.491	4.511	4.511	4.96	4.92	5.1
10MHz QPSK	8.942	8.942	8.942	9.96	9.56	9.72
10MHz 16QAM	8.942	8.981	8.942	9.56	10.08	9.52
15MHz QPSK	13.533	13.473	13.533	17.4	15.6	15.42
15MHz 16QAM	13.593	13.593	13.533	18.96	16.68	16.02
20MHz QPSK	17.964	17.964	18.044	19.36	19.6	19.52
20MHz 16QAM	17.964	17.964	17.964	20.48	19.52	19.76

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

Spurious Emissions at Antenna Terminal

Result:	Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.
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Out of band emission, Band Edge

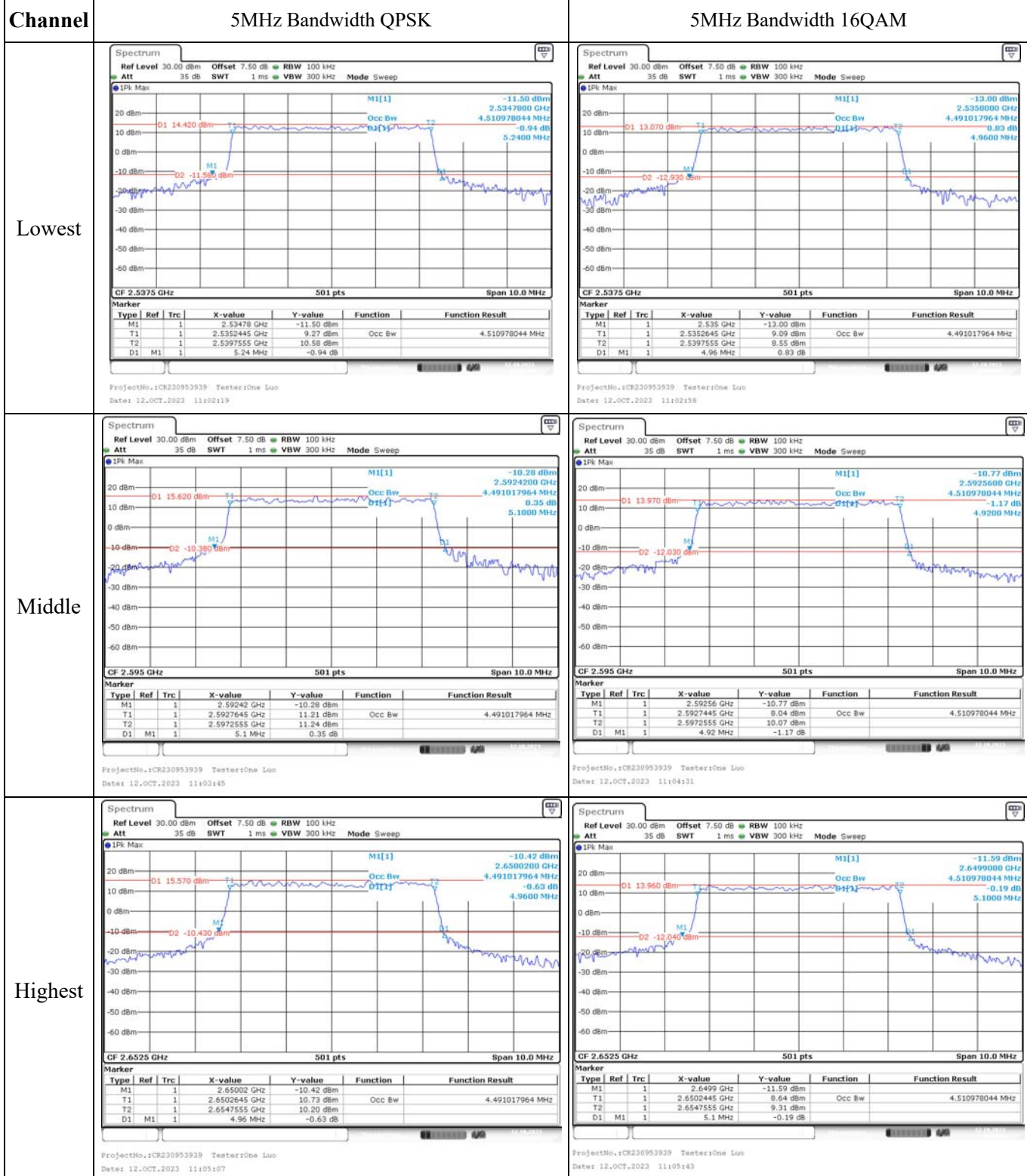
Result:	Pass, Please refer to the test plots of Out of band emission, Band Edge.
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Frequency Stability						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V _{DC})	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2536.098	2535.00	2654.015	2655
	-20	3.8	2536.064	2535.00	2654.091	2655
	-10	3.8	2536.061	2535.00	2654.061	2655
	0	3.8	2536.091	2535.00	2654.081	2655
	10	3.8	2536.084	2535.00	2654.042	2655
	20	3.8	2536.058	2535.00	2654.022	2655
	30	3.8	2536.054	2535.00	2654.051	2655
	40	3.8	2536.011	2535.00	2654.014	2655
	50	3.8	2536.097	2535.00	2654.066	2655
Frequency Stability vs. Voltage	20	3.6	2536.029	2535.00	2654.100	2655
	20	4.35	2536.084	2535.00	2654.071	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	3.8	2536.030	2535.00	2654.057	2655
	-20	3.8	2536.023	2535.00	2654.074	2655
	-10	3.8	2536.077	2535.00	2654.094	2655
	0	3.8	2536.039	2535.00	2654.037	2655
	10	3.8	2536.025	2535.00	2654.060	2655
	20	3.8	2536.058	2535.00	2654.022	2655
	30	3.8	2536.041	2535.00	2654.020	2655
	40	3.8	2536.094	2535.00	2654.054	2655
	50	3.8	2536.064	2535.00	2654.022	2655
Frequency Stability vs. Voltage	20	3.6	2536.073	2535.00	2654.095	2655
	20	4.35	2536.019	2535.00	2654.011	2655
					Result:	Pass

Test Plots(Note: The 7.5dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer):

Occupied Bandwidth



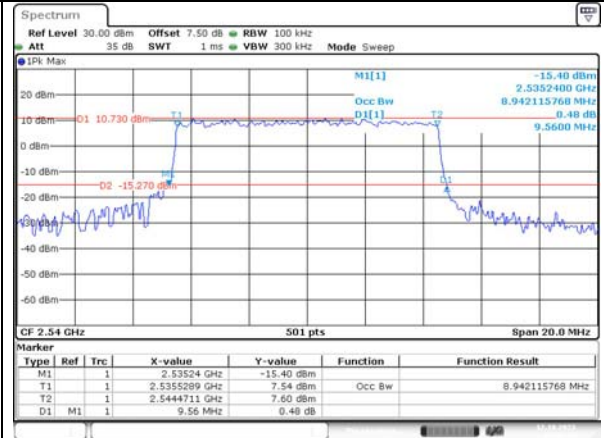
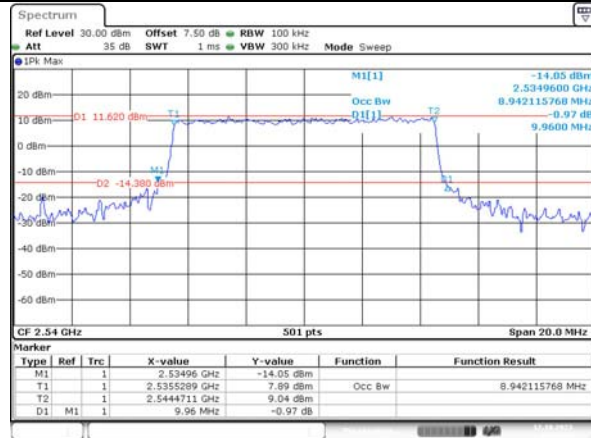
Occupied Bandwidth

Channel

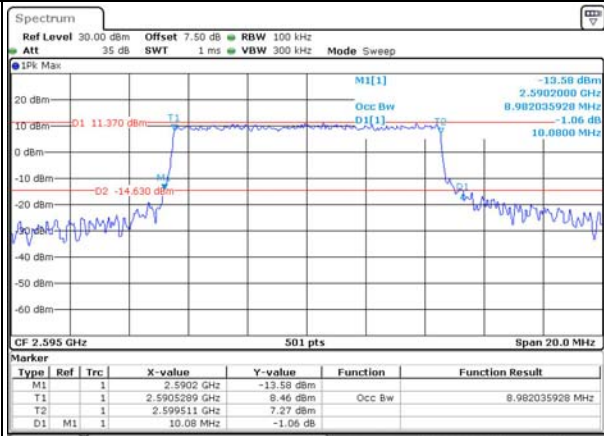
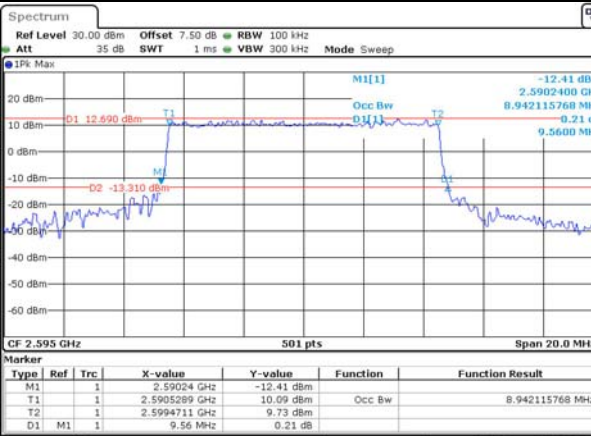
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

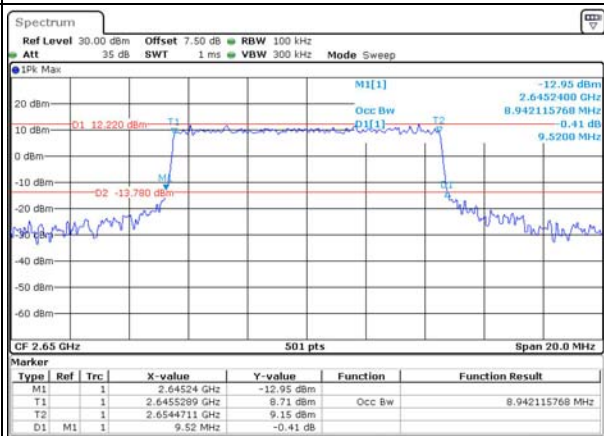
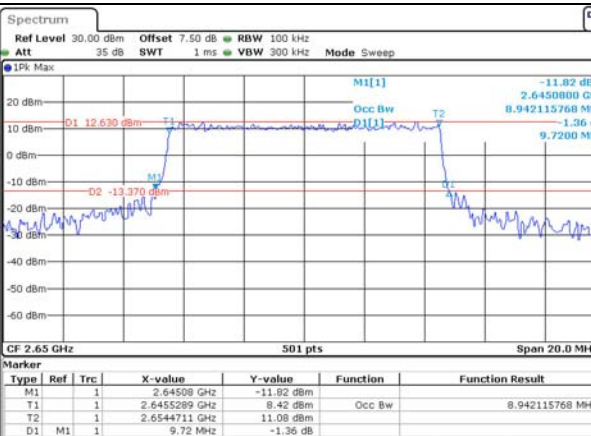
Lowest



Middle



Highest



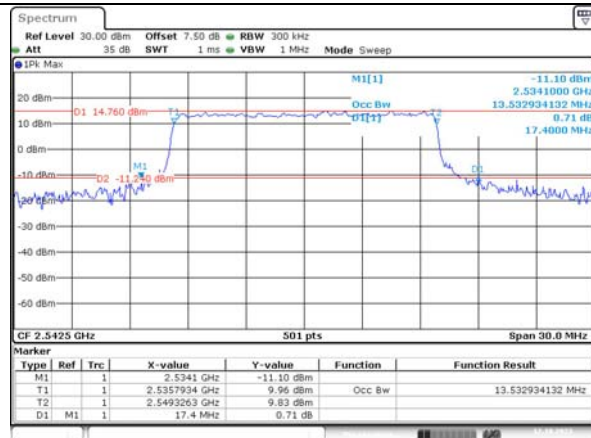
Occupied Bandwidth

Channel

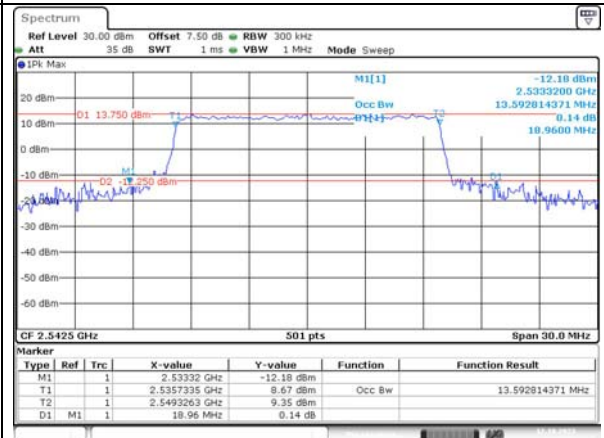
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

Lowest

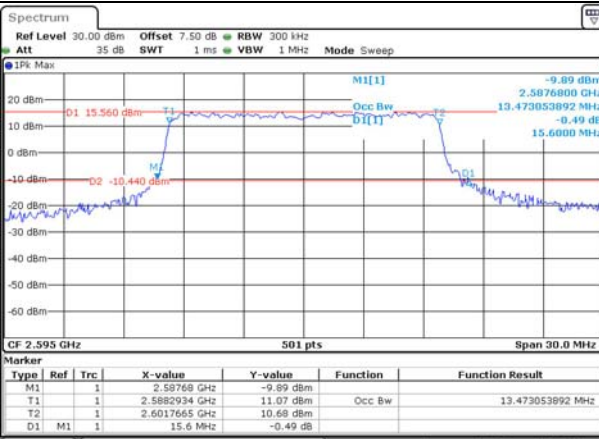


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 11:11:29

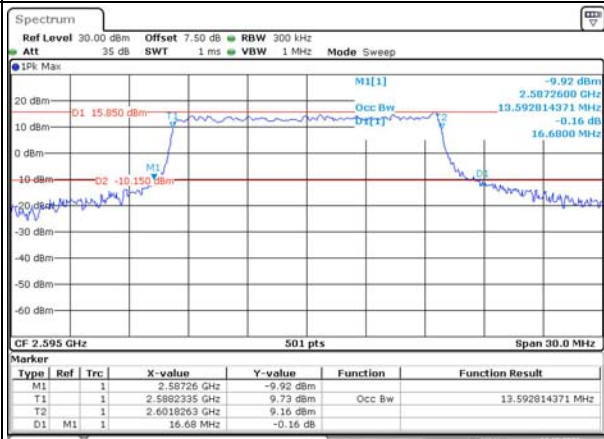


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 11:11:09

Middle

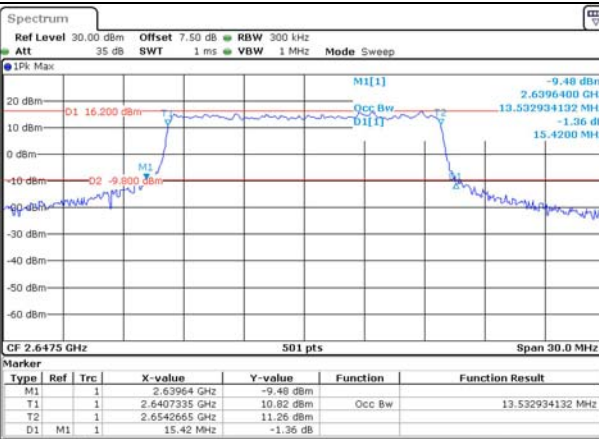


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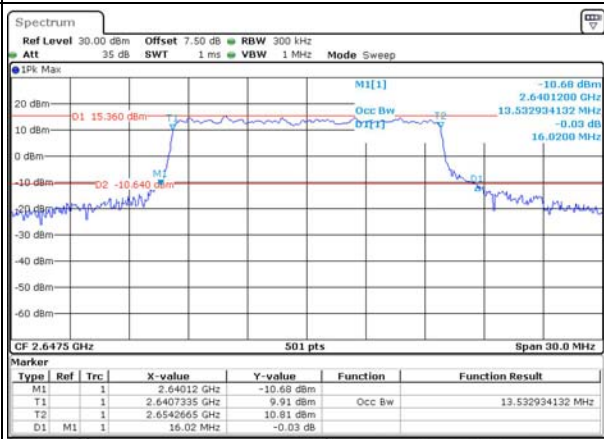


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 11:12:17

Highest



ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 11:13:04



ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 11:13:44

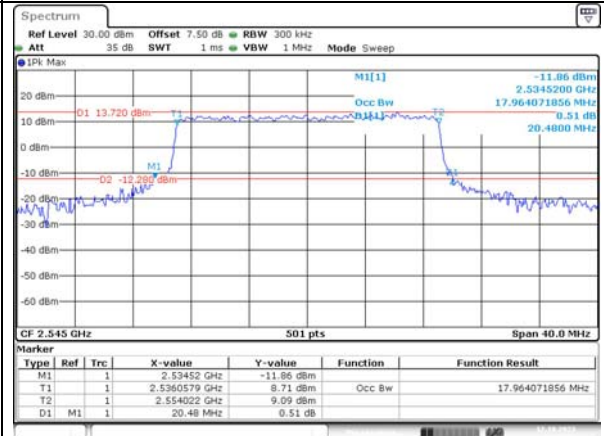
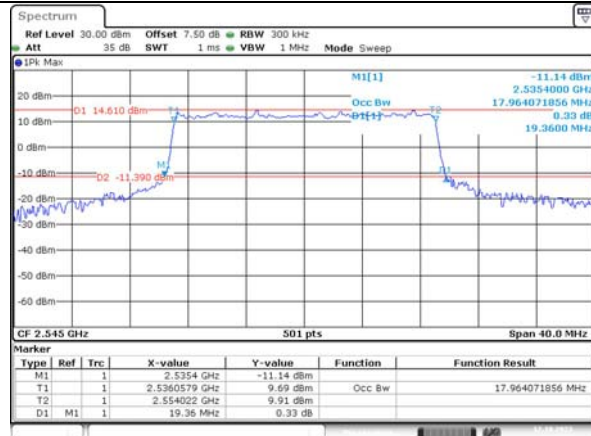
Occupied Bandwidth

Channel

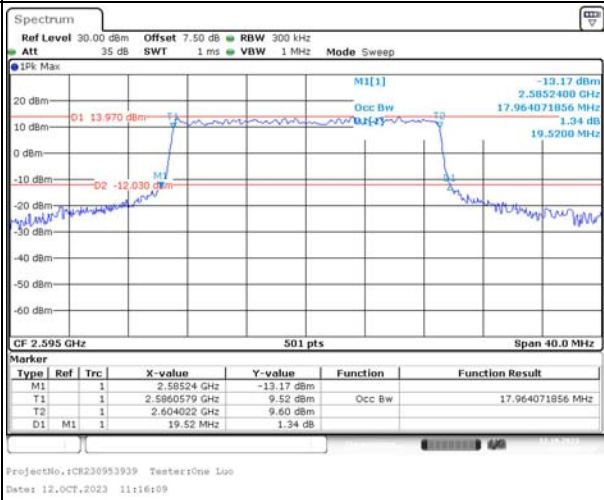
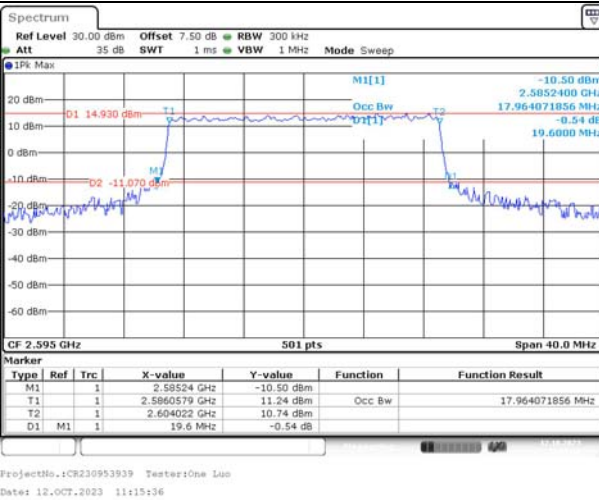
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

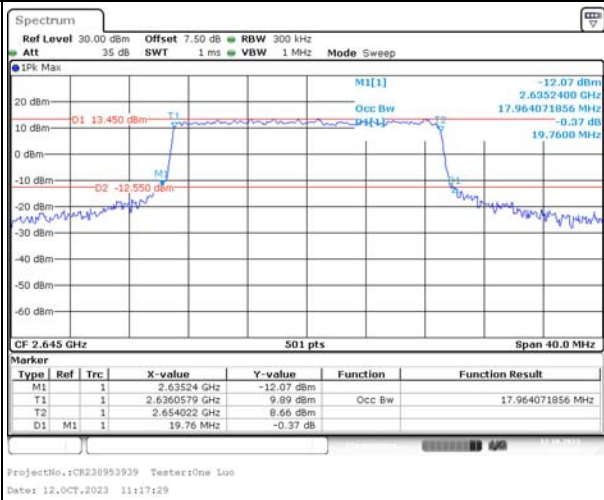
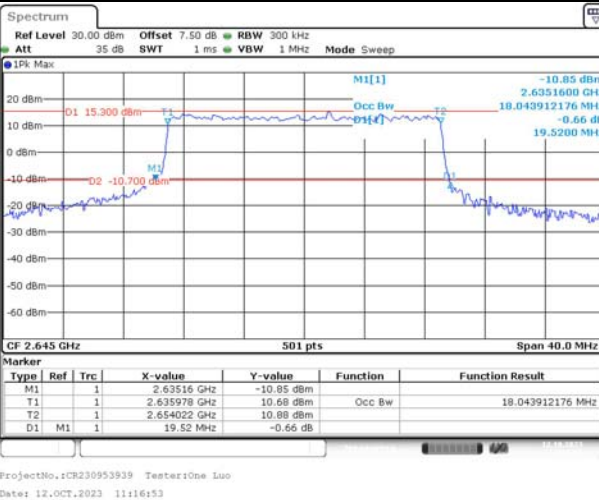
Lowest



Middle



Highest

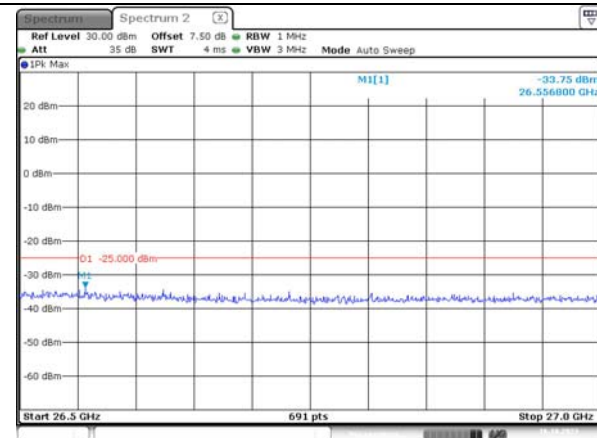


Spurious Emissions at Antenna Terminal

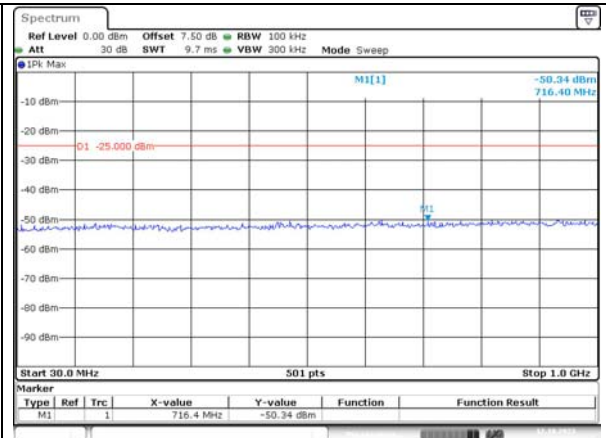
Channel

5MHz Bandwidth QPSK

Lowest

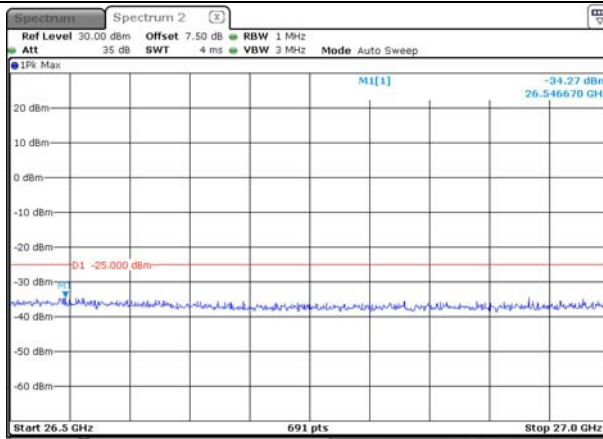


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Date: 16.OCT.2023 16:26:25

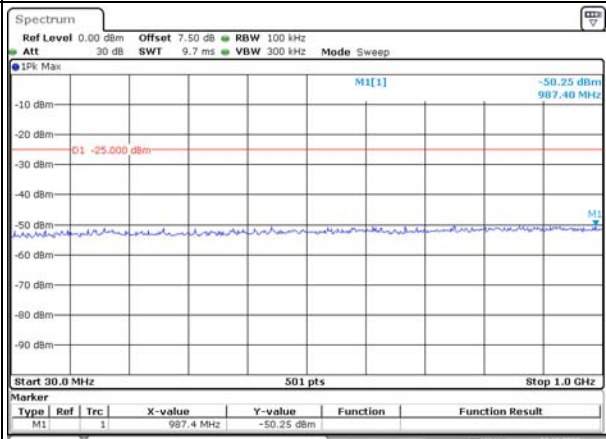


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:43:54

Middle

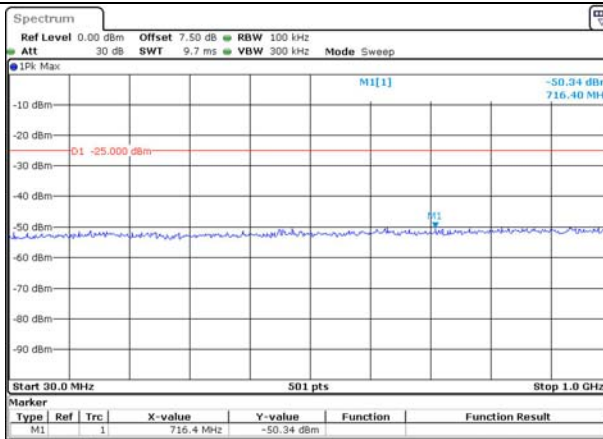


ProjectNo.:CR230953939 Testers:One Luo
Date: 16.OCT.2023 16:26:52

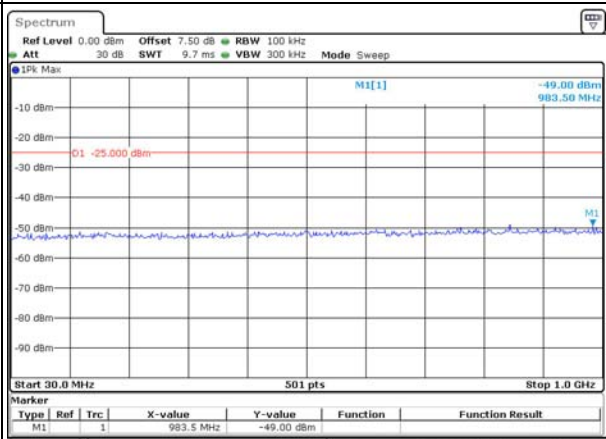


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:44:42

Highest



ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:43:54



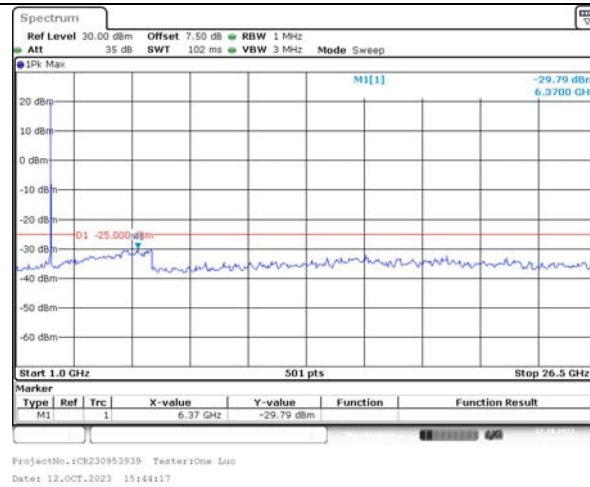
ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:45:42

Spurious Emissions at Antenna Terminal

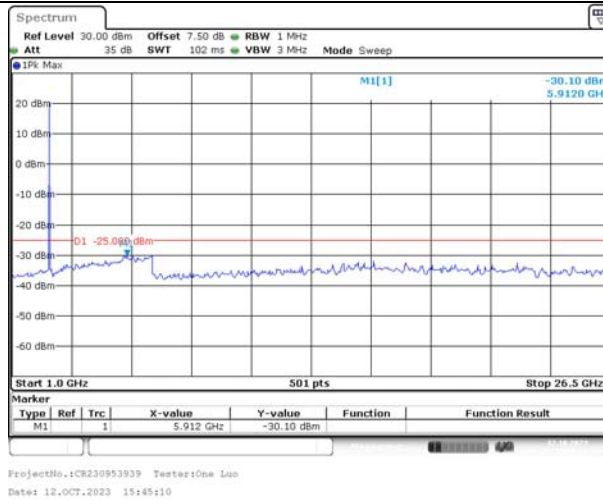
Channel

5MHz Bandwidth QPSK

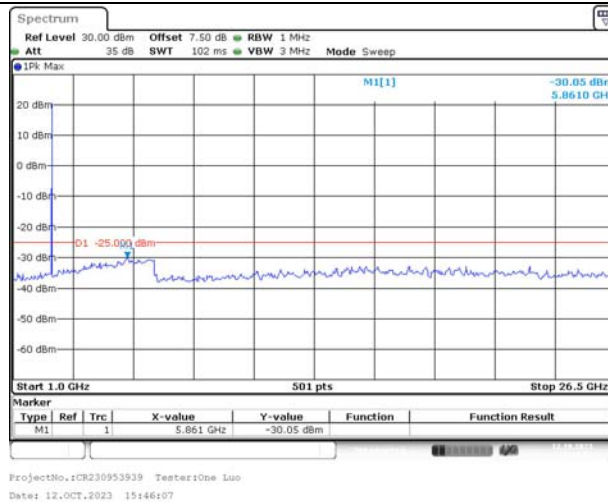
Lowest



Middle



Highest

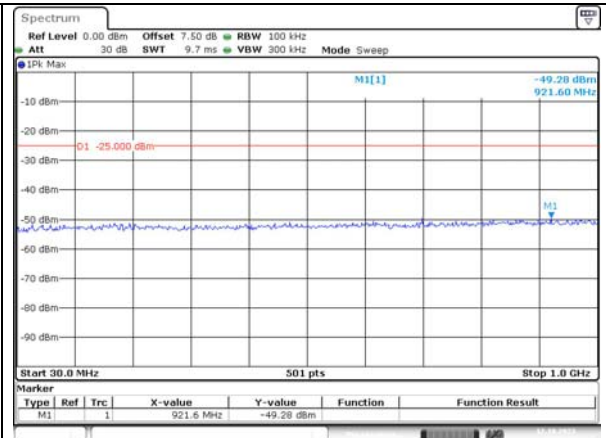
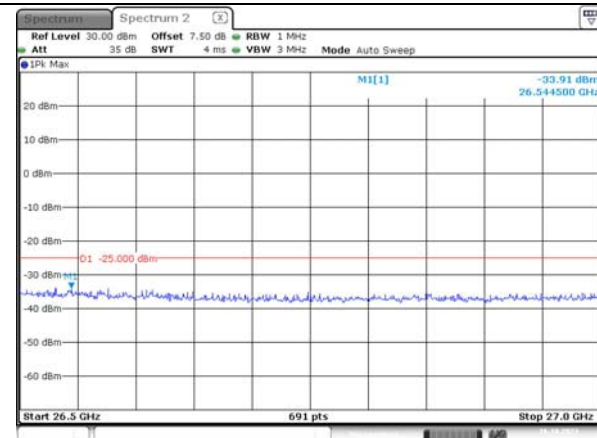


Spurious Emissions at Antenna Terminal

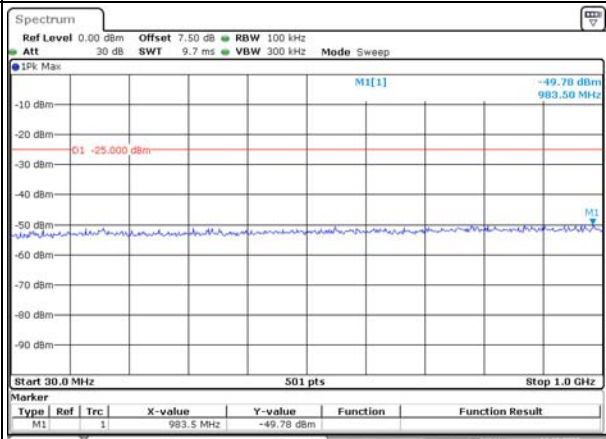
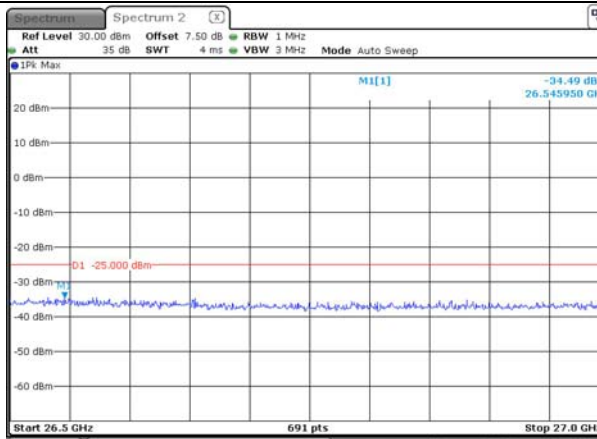
Channel

10MHz Bandwidth QPSK

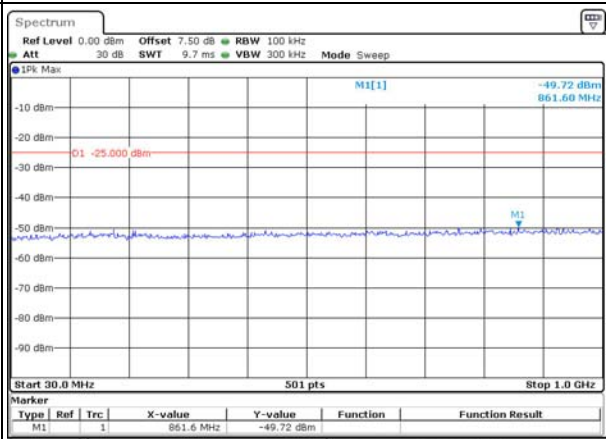
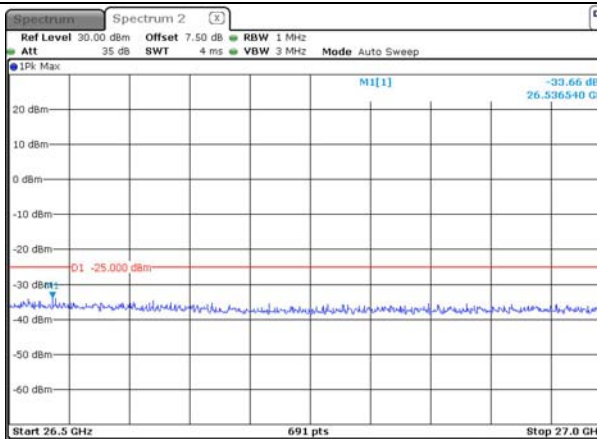
Lowest



Middle



Highest

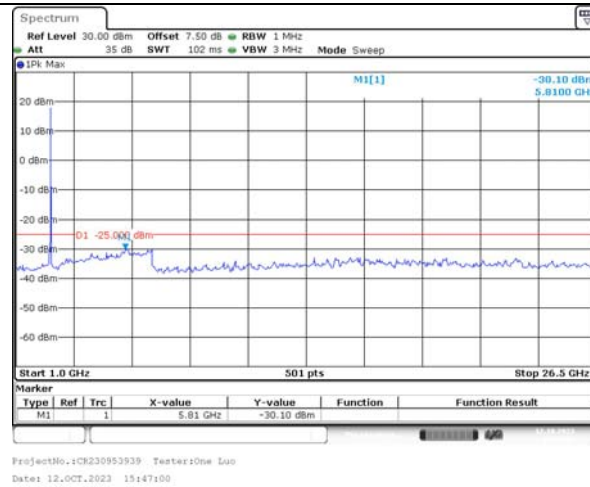


Spurious Emissions at Antenna Terminal

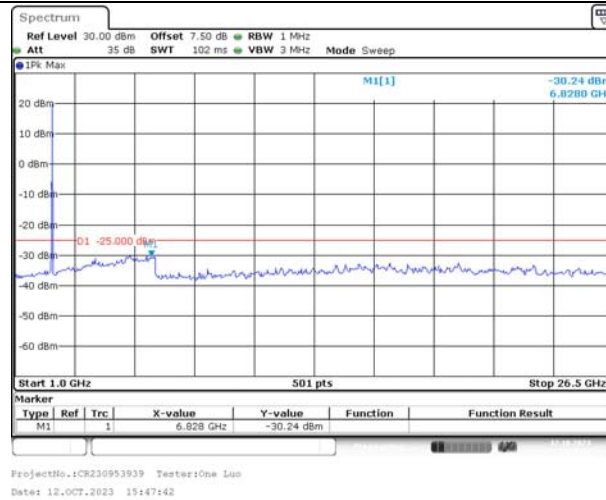
Channel

10MHz Bandwidth QPSK

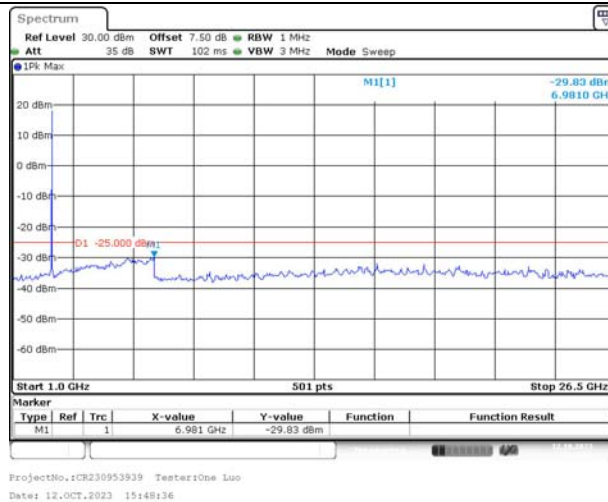
Lowest



Middle



Highest

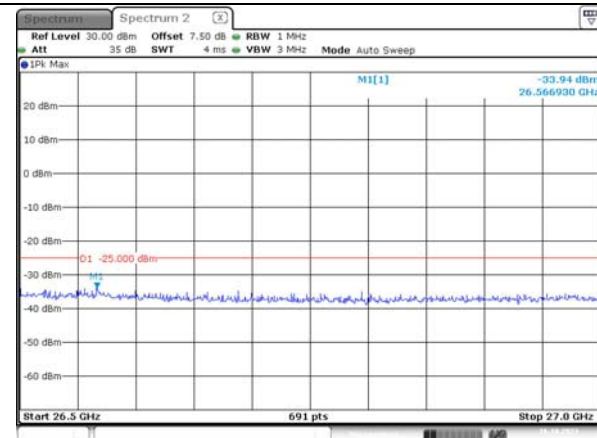


Spurious Emissions at Antenna Terminal

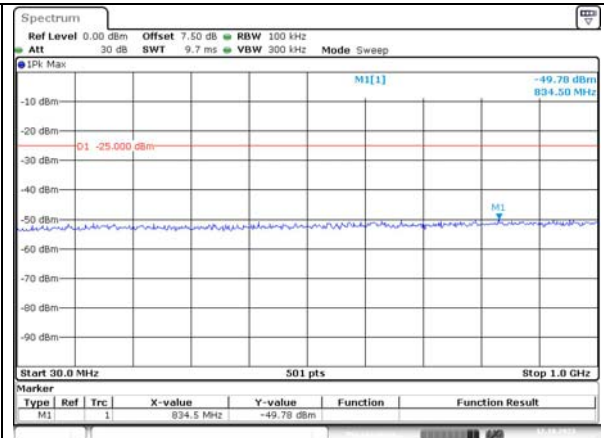
Channel

15MHz Bandwidth QPSK

Lowest

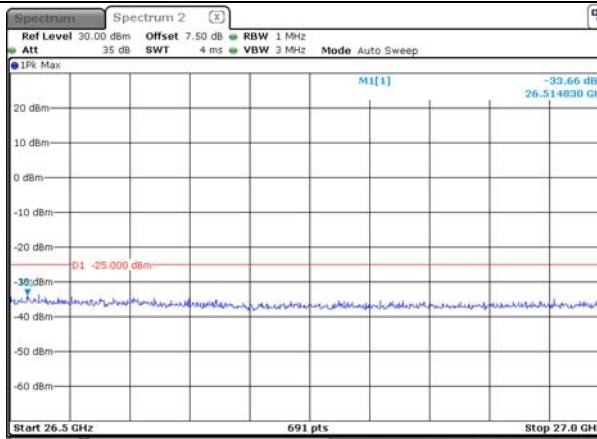


ProjectNo.:CR230953939 TesteriOne Luo
Date: 16.OCT.2023 16:29:25

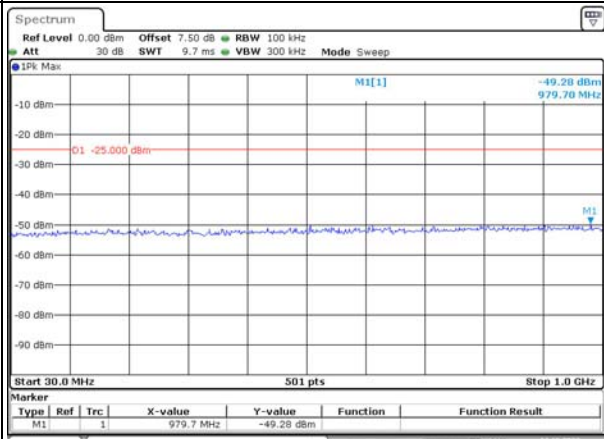


ProjectNo.:CR230953939 TesteriOne Luo
Date: 12.OCT.2023 15:49:07

Middle

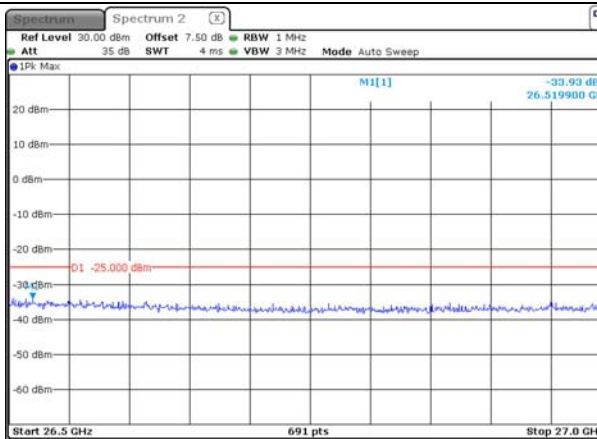


ProjectNo.:CR230953939 TesteriOne Luo
Date: 16.OCT.2023 16:30:03

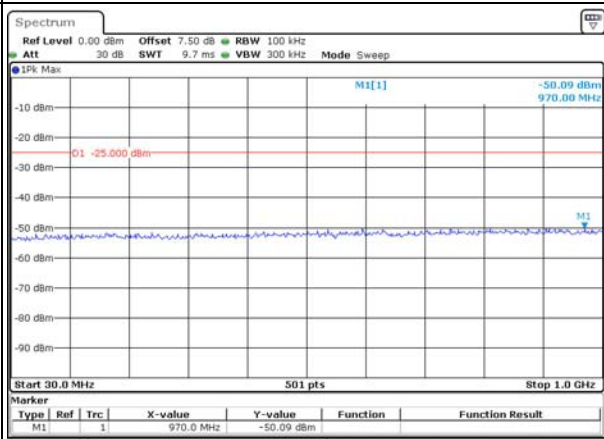


ProjectNo.:CR230953939 TesteriOne Luo
Date: 12.OCT.2023 15:49:59

Highest



ProjectNo.:CR230953939 TesteriOne Luo
Date: 16.OCT.2023 16:30:35



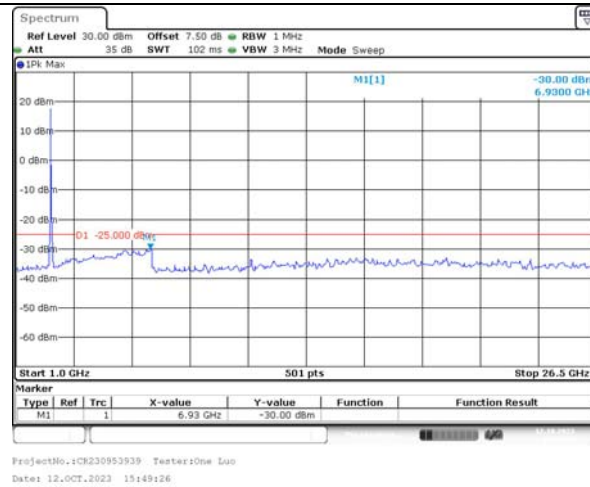
ProjectNo.:CR230953939 TesteriOne Luo
Date: 12.OCT.2023 15:50:50

Spurious Emissions at Antenna Terminal

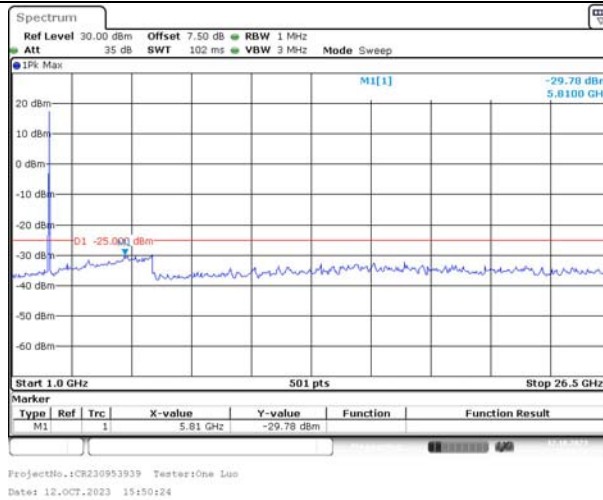
Channel

15MHz Bandwidth QPSK

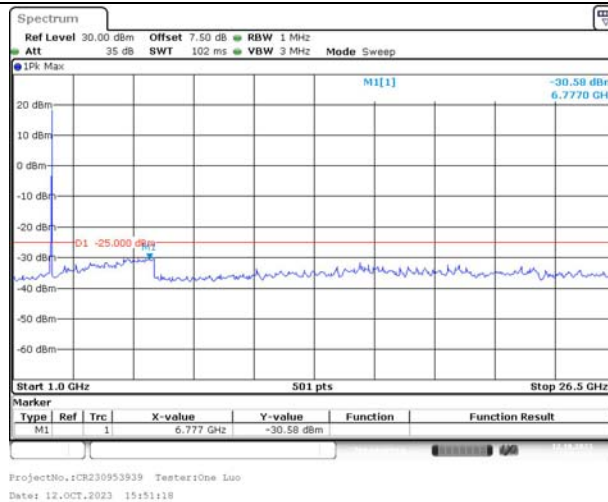
Lowest



Middle



Highest

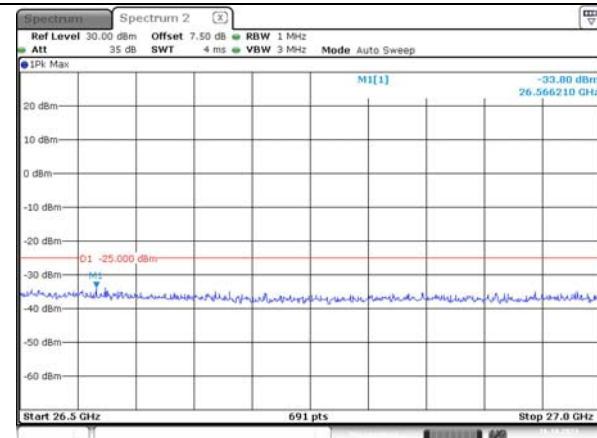


Spurious Emissions at Antenna Terminal

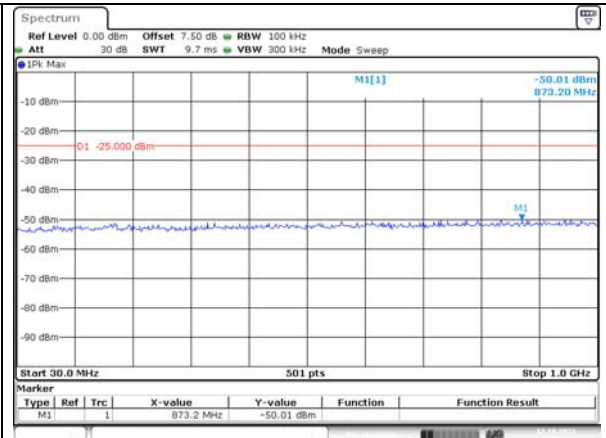
Channel

20MHz Bandwidth QPSK

Lowest

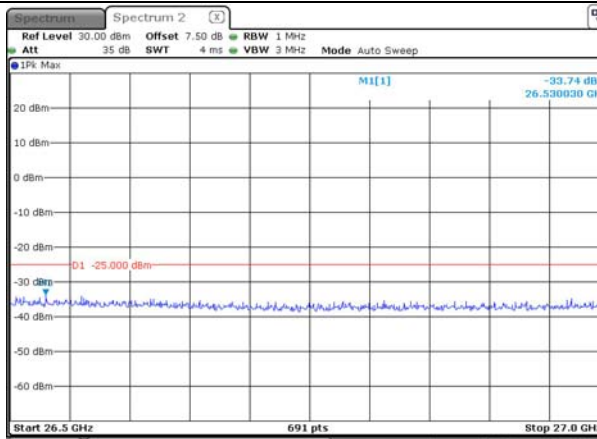


ProjectNo.:CR230953939 Testers:One Luo
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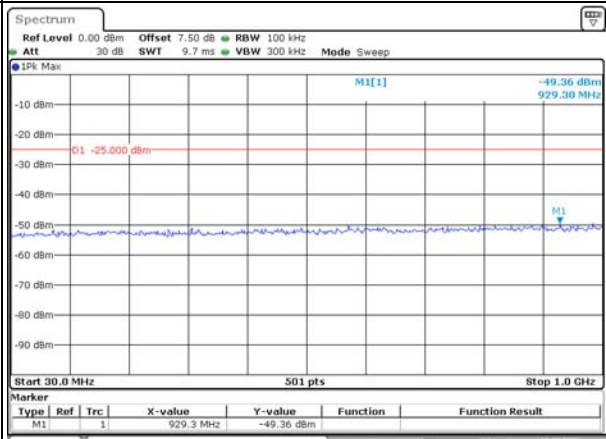


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:51:44

Middle

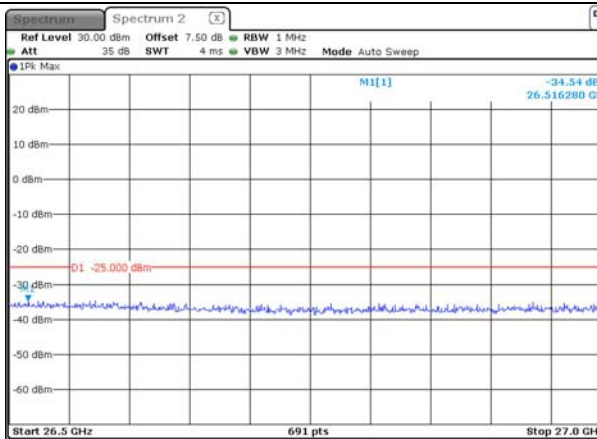


ProjectNo.:CR230953939 Testers:One Luo
Date: 16.OCT.2023 16:31:23

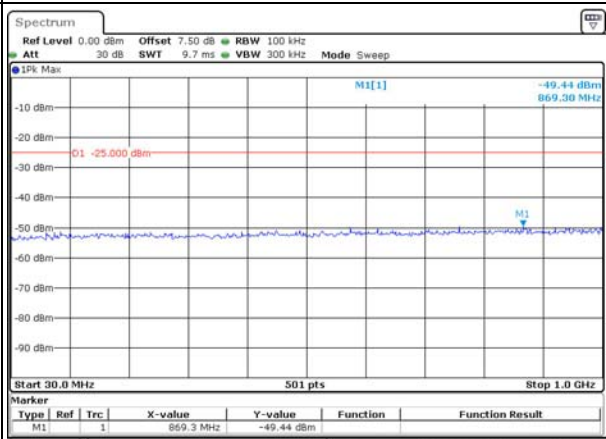


ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:52:41

Highest



ProjectNo.:CR230953939 Testers:One Luo
Date: 16.OCT.2023 16:31:49



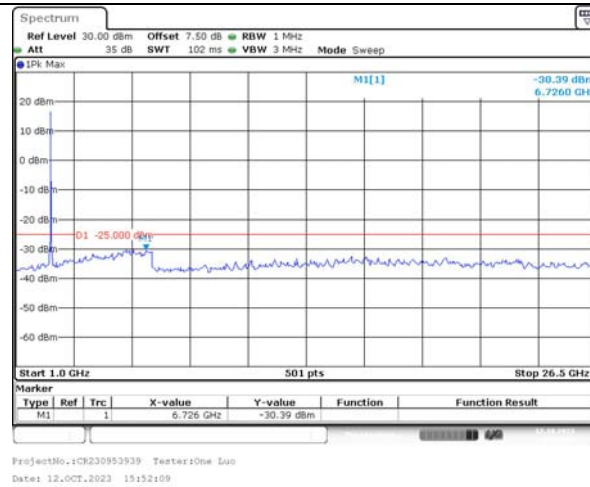
ProjectNo.:CR230953939 Testers:One Luo
Date: 12.OCT.2023 15:53:41

Spurious Emissions at Antenna Terminal

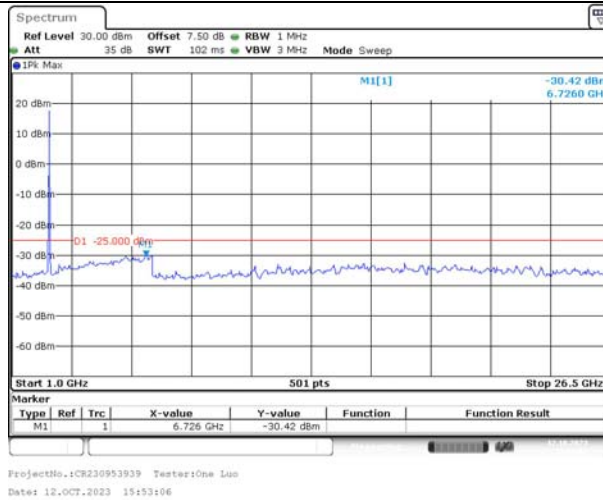
Channel

20MHz Bandwidth QPSK

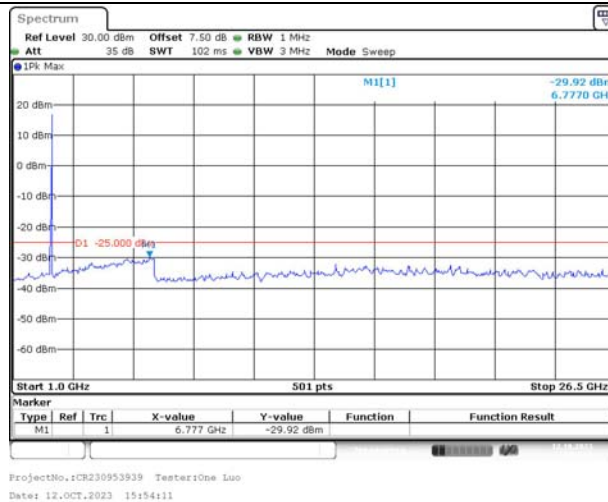
Lowest



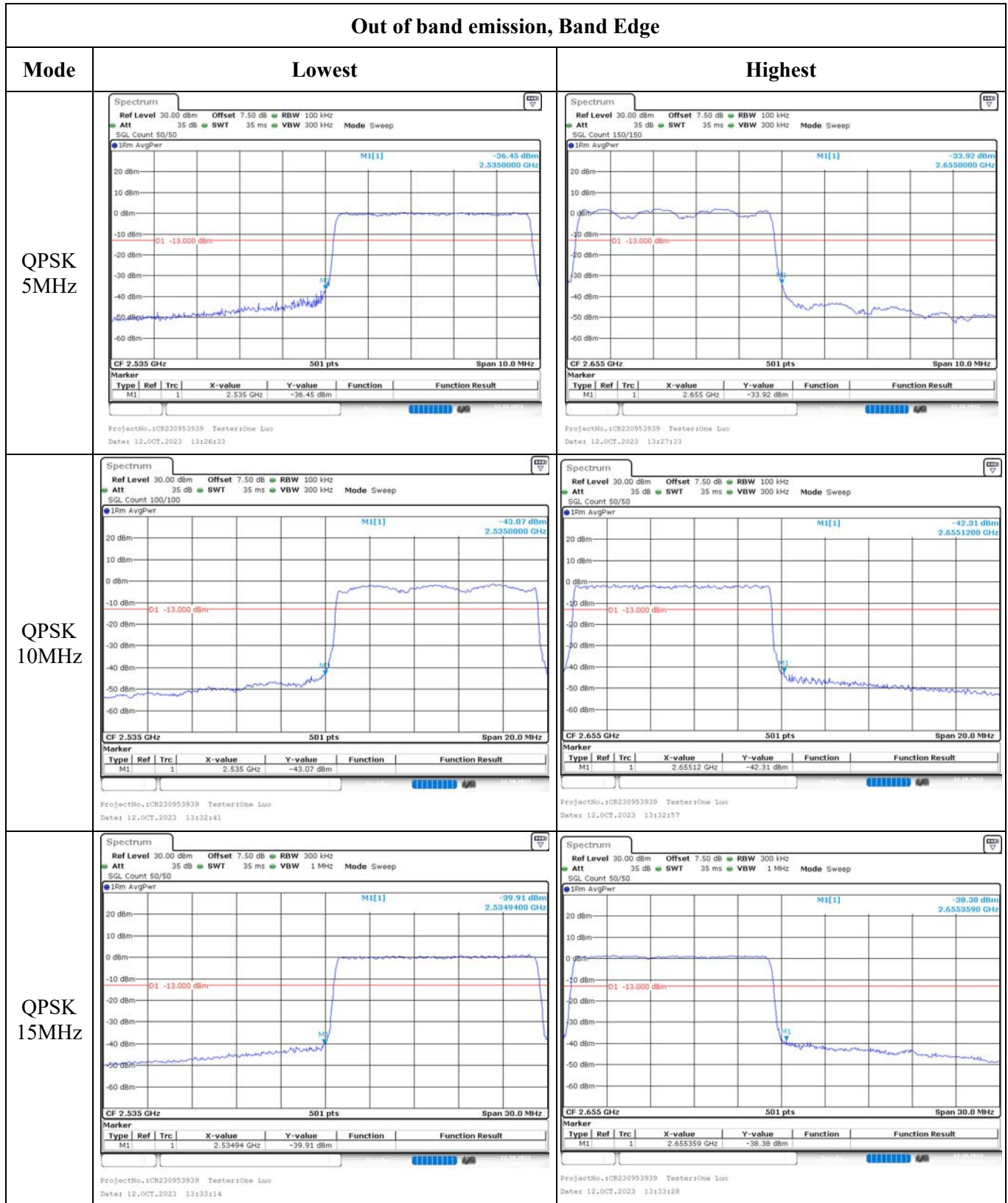
Middle



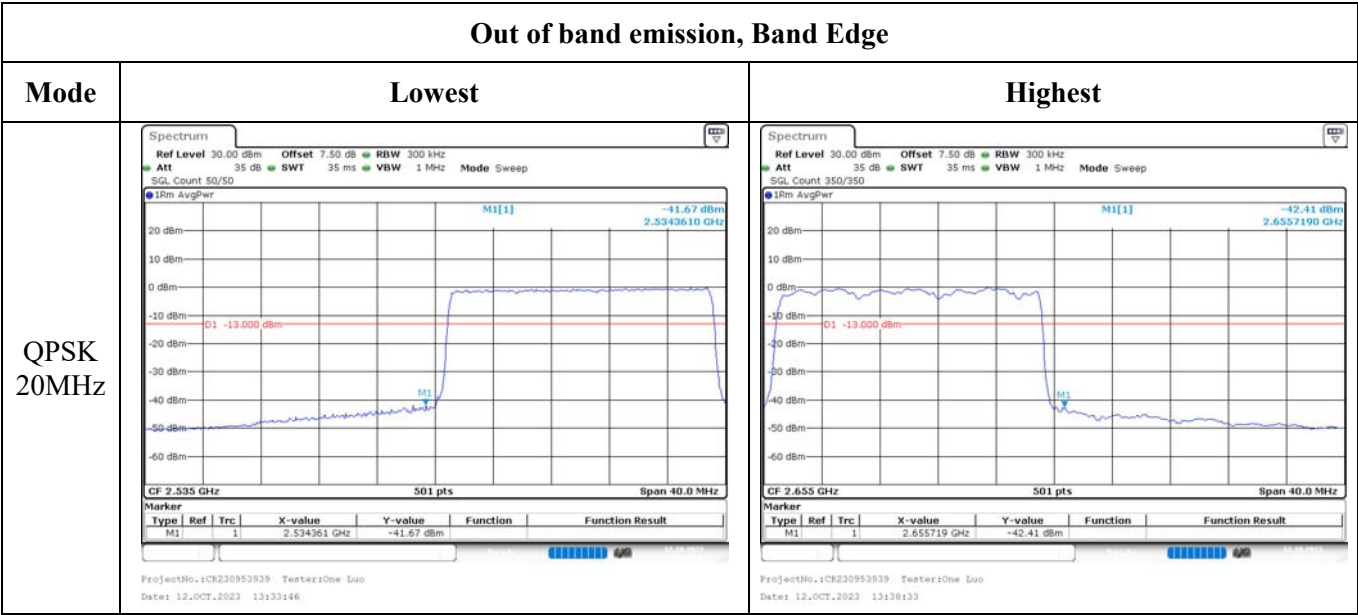
Highest



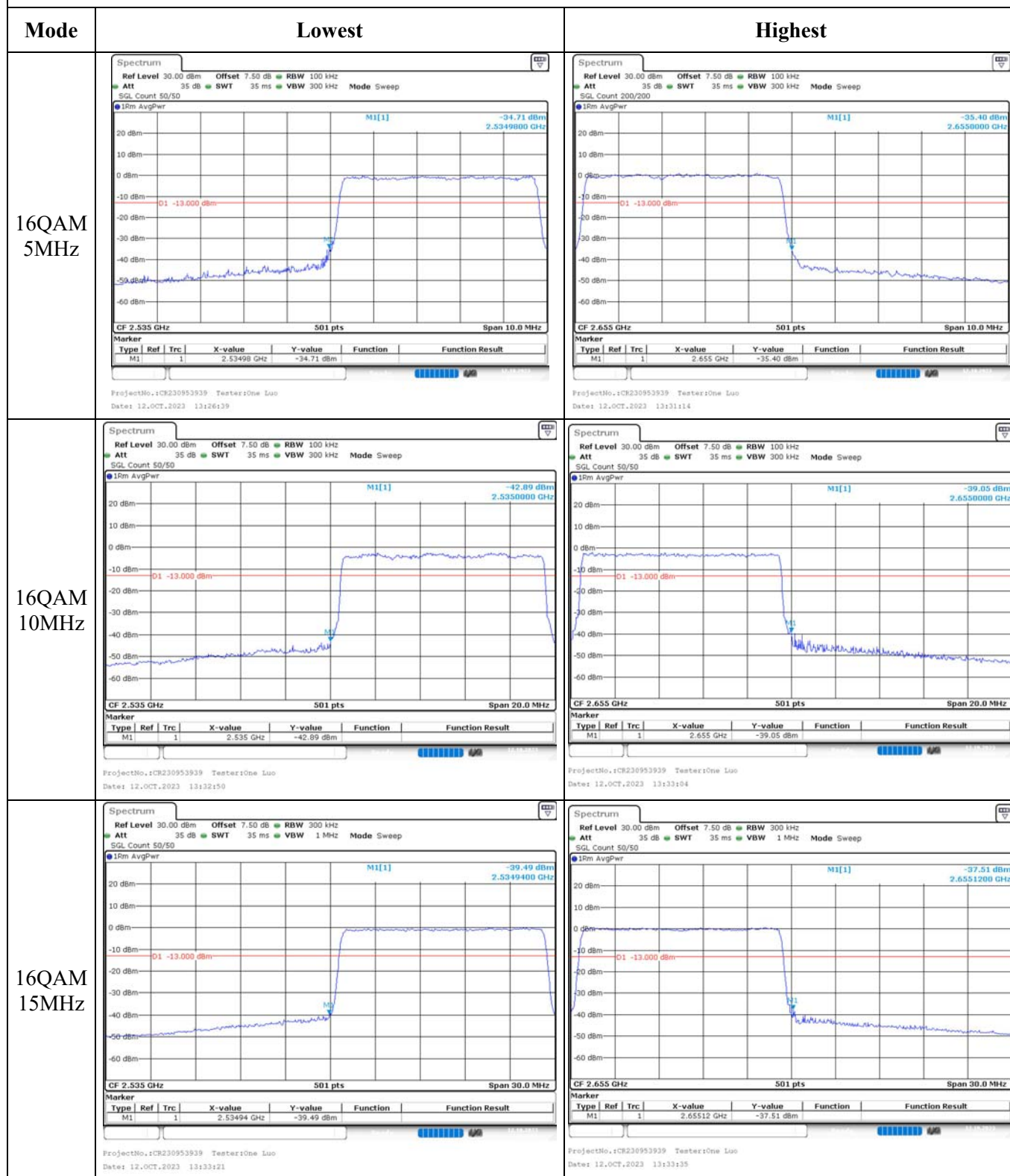
Out of band emission, Band Edge



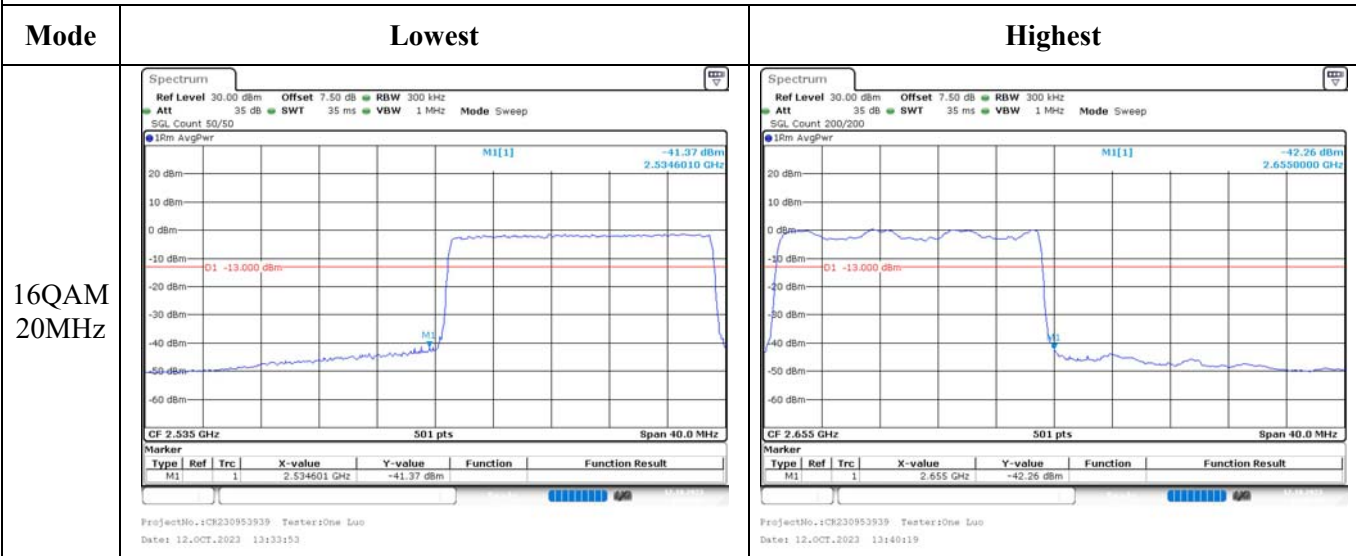
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.13 Radiated Spurious Emissions

Serial Number:	2B7U-1	Test Date:	2023/10/4~2023/10/7
Test Site:	966-1,966-2	Test Mode:	Transmitting
Tester:	Carl Xue ,coco Tian	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.2~26.6	Relative Humidity: (%)	54~55	ATM Pressure: (kPa)	100.4
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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
Agilent	Signal Generator	E8247C	MY43321352	2022/11/18	2023/11/17
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
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	2023/9/15	2024/9/14
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:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Cellular Band (PART 22H)**GSM850:**

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:			824.2	MHz				
711.67	H	20.99	-52.09	0.00	0.51	-52.60	-13.00	39.60
716.69	V	20.85	-48.71	0.00	0.50	-49.21	-13.00	36.21
1648.400	H	52.47	-51.86	8.68	0.80	-43.98	-13.00	30.98
1648.400	V	66.23	-38.18	8.68	0.80	-30.30	-13.00	17.30
2472.600	H	53.49	-47.29	9.38	1.00	-38.91	-13.00	25.91
2472.600	V	43.97	-56.76	9.38	1.00	-48.38	-13.00	35.38
3296.800	H	46.67	-50.01	10.32	1.15	-40.84	-13.00	27.84
3296.800	V	45.26	-51.18	10.32	1.15	-42.01	-13.00	29.01
Frequency:			836.6	MHz				
704.23	H	21.29	-51.94	0.00	0.55	-52.49	-13.00	39.49
709.20	V	20.73	-48.99	0.00	0.52	-49.51	-13.00	36.51
1673.200	H	64.62	-39.69	8.71	0.85	-31.83	-13.00	18.83
1673.200	V	69.03	-35.38	8.71	0.85	-27.52	-13.00	14.52
2509.800	H	55.71	-44.90	9.42	1.01	-36.49	-13.00	23.49
2509.800	V	50.23	-50.39	9.42	1.01	-41.98	-13.00	28.98
3346.400	H	45.55	-51.62	10.34	1.16	-42.44	-13.00	29.44
3346.400	V	41.49	-55.54	10.34	1.16	-46.36	-13.00	33.36
Frequency:			848.8	MHz				
692.00	H	20.93	-52.43	0.00	0.54	-52.97	-13.00	39.97
721.73	V	21.15	-48.30	0.00	0.50	-48.80	-13.00	35.80
1697.600	H	65.48	-38.81	8.74	0.90	-30.97	-13.00	17.97
1697.600	V	66.73	-37.69	8.74	0.90	-29.85	-13.00	16.85
2546.400	H	55.67	-44.66	9.47	1.01	-36.20	-13.00	23.20
2546.400	V	52.69	-47.59	9.47	1.01	-39.13	-13.00	26.13
3395.200	H	42.87	-54.82	10.36	1.19	-45.65	-13.00	32.65
3395.200	V	39.87	-57.79	10.36	1.19	-48.62	-13.00	35.62

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								
682.34	H	20.97	-52.45	0.00	0.52	-52.97	-13.00	39.97
701.93	V	20.90	-48.98	0.00	0.55	-49.53	-13.00	36.53
1652.800	H	50.46	-53.87	8.68	0.81	-46.00	-13.00	33.00
1652.800	V	42.16	-62.25	8.68	0.81	-54.38	-13.00	41.38
2479.200	H	42.35	-58.41	9.39	1.01	-50.03	-13.00	37.03
2479.200	V	43.12	-57.61	9.39	1.01	-49.23	-13.00	36.23
3305.600	H	35.12	-61.61	10.32	1.15	-52.44	-13.00	39.44
3305.600	V	34.77	-61.73	10.32	1.15	-52.56	-13.00	39.56
WCDMA Band 5 Frequency:836.6MHz								
724.21	H	21.06	-51.77	0.00	0.51	-52.28	-13.00	39.28
713.59	V	21.13	-48.49	0.00	0.51	-49.00	-13.00	36.00
1673.200	H	51.23	-53.08	8.71	0.85	-45.22	-13.00	32.22
1673.200	V	52.44	-51.97	8.71	0.85	-44.11	-13.00	31.11
2509.800	H	40.53	-60.08	9.42	1.01	-51.67	-13.00	38.67
2509.800	V	42.76	-57.86	9.42	1.01	-49.45	-13.00	36.45
3346.400	H	34.69	-62.48	10.34	1.16	-53.30	-13.00	40.30
3346.400	V	34.73	-62.30	10.34	1.16	-53.12	-13.00	40.12
WCDMA Band 5 Frequency:846.6MHz								
719.16	H	20.83	-52.10	0.00	0.49	-52.59	-13.00	39.59
729.50	V	20.93	-48.35	0.00	0.53	-48.88	-13.00	35.88
1693.200	H	50.75	-53.54	8.73	0.89	-45.70	-13.00	32.70
1693.200	V	51.65	-52.77	8.73	0.89	-44.93	-13.00	31.93
2539.800	H	41.57	-58.81	9.46	1.01	-50.36	-13.00	37.36
2539.800	V	42.65	-57.69	9.46	1.01	-49.24	-13.00	36.24
3386.400	H	34.38	-63.21	10.35	1.18	-54.04	-13.00	41.04
3386.400	V	34.29	-63.25	10.35	1.18	-54.08	-13.00	41.08

GSM1900:

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: 1850.2 MHz								
276.12	H	37.51	-73.77	0.00	0.32	-74.09	-13.00	61.09
53.31	V	41.42	-61.39	-13.38	0.13	-74.90	-13.00	61.90
3700.400	H	41.19	-56.13	10.60	1.25	-46.78	-13.00	33.78
3700.400	V	42.36	-54.94	10.60	1.25	-45.59	-13.00	32.59
5550.600	H	36.02	-57.24	11.44	1.49	-47.29	-13.00	34.29
5550.600	V	35.78	-57.32	11.44	1.49	-47.37	-13.00	34.37
Frequency: 1880 MHz								
273.23	H	37.14	-74.21	0.00	0.32	-74.53	-13.00	61.53
53.50	V	41.38	-61.52	-13.29	0.13	-74.94	-13.00	61.94
3760.000	H	42.35	-54.06	10.66	1.24	-44.64	-13.00	31.64
3760.000	V	44.15	-52.14	10.66	1.24	-42.72	-13.00	29.72
5640.000	H	35.23	-58.22	11.33	1.54	-48.43	-13.00	35.43
5640.000	V	34.87	-58.46	11.33	1.54	-48.67	-13.00	35.67
Frequency: 1909.8 MHz								
281.07	H	36.94	-74.23	0.00	0.32	-74.55	-13.00	61.55
54.64	V	41.52	-61.93	-12.77	0.13	-74.83	-13.00	61.83
3819.600	H	40.25	-55.61	10.72	1.29	-46.18	-13.00	33.18
3819.600	V	41.88	-53.84	10.72	1.29	-44.41	-13.00	31.41
5729.400	H	34.80	-58.69	11.22	1.59	-49.06	-13.00	36.06
5729.400	V	35.23	-58.13	11.22	1.59	-48.50	-13.00	35.50

PCS Band (PART 24E)

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								
275.16	H	37.35	-73.96	0.00	0.32	-74.28	-13.00	61.28
53.39	V	41.34	-61.51	-13.34	0.13	-74.98	-13.00	61.98
3704.800	H	39.67	-57.59	10.60	1.25	-48.24	-13.00	35.24
3704.800	V	41.35	-55.88	10.60	1.25	-46.53	-13.00	33.53
5557.200	H	34.65	-58.63	11.43	1.49	-48.69	-13.00	35.69
5557.200	V	34.75	-58.38	11.43	1.49	-48.44	-13.00	35.44
WCDMA Band II, Frequency:1880 MHz								
270.38	H	37.10	-74.32	0.00	0.31	-74.63	-13.00	61.63
54.45	V	41.16	-62.20	-12.85	0.13	-75.18	-13.00	62.18
3760.000	H	40.25	-56.16	10.66	1.24	-46.74	-13.00	33.74
3760.000	V	41.65	-54.64	10.66	1.24	-45.22	-13.00	32.22
5640.000	H	34.55	-58.90	11.33	1.54	-49.11	-13.00	36.11
5640.000	V	35.13	-58.20	11.33	1.54	-48.41	-13.00	35.41
WCDMA Band II, Frequency:1907.6MHz								
278.06	H	37.13	-74.11	0.00	0.32	-74.43	-13.00	61.43
52.20	V	41.29	-60.99	-13.89	0.13	-75.01	-13.00	62.01
3815.200	H	40.87	-54.98	10.72	1.29	-45.55	-13.00	32.55
3815.200	V	42.36	-53.33	10.72	1.29	-43.90	-13.00	30.90
5722.800	H	35.12	-58.37	11.23	1.58	-48.72	-13.00	35.72
5722.800	V	34.87	-58.48	11.23	1.58	-48.83	-13.00	35.83

AWS Band(Part 27)

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 IV Frequency:			1712.4	MHz				
281.99	H	36.71	-74.44	0.00	0.32	-74.76	-13.00	61.76
53.69	V	41.56	-61.43	-13.20	0.13	-74.76	-13.00	61.76
3424.800	H	40.26	-57.51	10.37	1.17	-48.31	-13.00	35.31
3424.800	V	39.68	-58.06	10.37	1.17	-48.86	-13.00	35.86
5137.200	H	34.57	-59.05	11.28	1.46	-49.23	-13.00	36.23
5137.200	V	35.11	-58.39	11.28	1.46	-48.57	-13.00	35.57
Frequency:			1732.6	MHz				
275.16	H	36.84	-74.47	0.00	0.32	-74.79	-13.00	61.79
52.94	V	41.12	-61.52	-13.55	0.13	-75.20	-13.00	62.20
3465.200	H	39.67	-58.14	10.39	1.15	-48.90	-13.00	35.90
3465.200	V	40.59	-57.18	10.39	1.15	-47.94	-13.00	34.94
5197.800	H	35.23	-58.90	11.32	1.44	-49.02	-13.00	36.02
5197.800	V	35.41	-58.57	11.32	1.44	-48.69	-13.00	35.69
Frequency:			1752.6	MHz				
279.04	H	37.09	-74.12	0.00	0.32	-74.44	-13.00	61.44
55.60	V	41.29	-62.62	-12.32	0.14	-75.08	-13.00	62.08
3505.200	H	40.19	-57.64	10.41	1.18	-48.41	-13.00	35.41
3505.200	V	41.08	-56.69	10.41	1.18	-47.46	-13.00	34.46
5257.800	H	34.66	-59.07	11.35	1.47	-49.19	-13.00	36.19
5257.800	V	34.73	-58.78	11.35	1.47	-48.90	-13.00	35.90

LTE Bands:
(The Worst modulation and bandwidth was below)

LTE Band 2 (30MHz-20GHz):

EYE Band 1 (50-100 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,Frequency:1850.7 MHz								
280.02	H	37.39	-73.80	0.00	0.32	-74.12	-13.00	61.12
55.41	V	41.07	-62.75	-12.41	0.13	-75.29	-13.00	62.29
3701.400	H	40.35	-56.96	10.60	1.25	-47.61	-13.00	34.61
3701.400	V	38.76	-58.53	10.60	1.25	-49.18	-13.00	36.18
5552.100	H	37.88	-55.39	11.44	1.49	-45.44	-13.00	32.44
5552.100	V	37.92	-55.18	11.44	1.49	-45.23	-13.00	32.23
QPSK,Frequency:1880 MHz								
277.09	H	37.46	-73.80	0.00	0.32	-74.12	-13.00	61.12
54.26	V	41.05	-62.22	-12.94	0.13	-75.29	-13.00	62.29
3760.000	H	39.69	-56.72	10.66	1.24	-47.30	-13.00	34.30
3760.000	V	38.64	-57.65	10.66	1.24	-48.23	-13.00	35.23
5640.000	H	37.45	-56.00	11.33	1.54	-46.21	-13.00	33.21
5640.000	V	38.70	-54.63	11.33	1.54	-44.84	-13.00	31.84
QPSK,Frequency:1909.3 MHz								
282.98	H	36.93	-74.19	0.00	0.32	-74.51	-13.00	61.51
50.41	V	40.93	-60.50	-14.71	0.12	-75.33	-13.00	62.33
3818.600	H	41.02	-54.84	10.72	1.29	-45.41	-13.00	32.41
3818.600	V	39.51	-56.20	10.72	1.29	-46.77	-13.00	33.77
5727.900	H	36.78	-56.70	11.23	1.59	-47.06	-13.00	34.06
5727.900	V	37.71	-55.65	11.23	1.59	-46.01	-13.00	33.01

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)			
QPSK,Frequency:1710.7 MHz								
281.96	H	37.28	-73.87	0.00	0.32	-74.19	-13.00	61.19
53.83	V	41.30	-61.76	-13.14	0.13	-75.03	-13.00	62.03
3421.400	H	47.12	-50.64	10.37	1.17	-41.44	-13.00	28.44
3421.400	V	49.56	-48.17	10.37	1.17	-38.97	-13.00	25.97
5132.100	H	34.39	-59.18	11.28	1.47	-49.37	-13.00	36.37
5132.100	V	35.11	-58.35	11.28	1.47	-48.54	-13.00	35.54
QPSK,Frequency:1732.5 MHz								
280.02	H	36.85	-74.34	0.00	0.32	-74.66	-13.00	61.66
50.94	V	41.06	-60.62	-14.47	0.13	-75.22	-13.00	62.22
3465.000	H	48.67	-49.14	10.39	1.15	-39.90	-13.00	26.90
3465.000	V	50.79	-46.98	10.39	1.15	-37.74	-13.00	24.74
5197.500	H	34.59	-59.54	11.32	1.44	-49.66	-13.00	36.66
5197.500	V	34.63	-59.35	11.32	1.44	-49.47	-13.00	36.47
QPSK,Frequency:1754.3MHz								
273.22	H	36.93	-74.42	0.00	0.32	-74.74	-13.00	61.74
53.13	V	40.96	-61.77	-13.46	0.13	-75.36	-13.00	62.36
3508.600	H	49.13	-48.69	10.41	1.19	-39.47	-13.00	26.47
3508.600	V	50.27	-47.49	10.41	1.19	-38.27	-13.00	25.27
5262.900	H	34.36	-59.34	11.36	1.47	-49.45	-13.00	36.45
5262.900	V	34.75	-58.72	11.36	1.47	-48.83	-13.00	35.83

LTE Band 5(30MHz-10GHz):

LTE Band 5 (800MHz-1000MHz)								
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, Frequency: 824.7 MHz								
726.93	H	20.87	-51.91	0.00	0.52	-52.43	-13.00	39.43
668.19	V	21.06	-49.44	0.00	0.50	-49.94	-13.00	36.94
1649.400	H	52.13	-52.20	8.68	0.80	-44.32	-13.00	31.32
1649.400	V	55.47	-48.94	8.68	0.80	-41.06	-13.00	28.06
2474.100	H	44.79	-55.99	9.38	1.00	-47.61	-13.00	34.61
2474.100	V	43.54	-57.19	9.38	1.00	-48.81	-13.00	35.81
3298.800	H	34.56	-62.12	10.32	1.15	-52.95	-13.00	39.95
3298.800	V	34.71	-61.73	10.32	1.15	-52.56	-13.00	39.56
QPSK, Frequency: 836.5 MHz								
456.19	H	21.02	-55.70	0.00	0.42	-56.12	-13.00	43.12
706.71	V	20.89	-48.88	0.00	0.54	-49.42	-13.00	36.42
1673.000	H	50.46	-53.85	8.71	0.85	-45.99	-13.00	32.99
1673.000	V	54.64	-49.77	8.71	0.85	-41.91	-13.00	28.91
2509.500	H	45.67	-54.94	9.42	1.01	-46.53	-13.00	33.53
2509.500	V	42.77	-57.85	9.42	1.01	-49.44	-13.00	36.44
3346.000	H	34.26	-62.90	10.34	1.16	-53.72	-13.00	40.72
3346.000	V	35.03	-61.99	10.34	1.16	-52.81	-13.00	39.81
QPSK, Frequency: 848.3 MHz								
716.81	H	20.94	-52.04	0.00	0.50	-52.54	-13.00	39.54
721.72	V	21.23	-48.22	0.00	0.50	-48.72	-13.00	35.72
1696.600	H	48.59	-55.70	8.74	0.89	-47.85	-13.00	34.85
1696.600	V	52.69	-51.73	8.74	0.89	-43.88	-13.00	30.88
2544.900	H	42.65	-57.69	9.47	1.01	-49.23	-13.00	36.23
2544.900	V	37.61	-62.69	9.47	1.01	-54.23	-13.00	41.23
3393.200	H	34.33	-63.34	10.36	1.19	-54.17	-13.00	41.17
3393.200	V	34.55	-63.08	10.36	1.19	-53.91	-13.00	40.91

LTE Band 7:

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								
281.07	H	37.41	-73.76	0.00	0.32	-74.08	-25.00	49.08
54.07	V	41.26	-61.92	-13.03	0.13	-75.08	-25.00	50.08
5005.000	H	35.64	-57.32	11.20	1.47	-47.59	-25.00	22.59
5005.000	V	34.79	-58.03	11.20	1.47	-48.30	-25.00	23.30
7507.500	H	34.34	-55.45	10.90	1.95	-46.50	-25.00	21.50
7507.500	V	35.27	-55.02	10.90	1.95	-46.07	-25.00	21.07
5MHz QPSK, Frequency: 2535 MHz								
276.12	H	37.32	-73.96	0.00	0.32	-74.28	-25.00	49.28
52.21	V	41.10	-61.19	-13.88	0.13	-75.20	-25.00	50.20
5070.000	H	34.56	-58.63	11.24	1.47	-48.86	-25.00	23.86
5070.000	V	35.15	-57.94	11.24	1.47	-48.17	-25.00	23.17
7605.000	H	34.76	-54.71	10.88	2.01	-45.84	-25.00	20.84
7605.000	V	35.29	-54.90	10.88	2.01	-46.03	-25.00	21.03
5MHz QPSK, Frequency: 2567.5 MHz								
272.28	H	37.33	-74.04	0.00	0.31	-74.35	-25.00	49.35
51.12	V	41.04	-60.73	-14.38	0.13	-75.24	-25.00	50.24
5135.000	H	35.57	-58.03	11.28	1.47	-48.22	-25.00	23.22
5135.000	V	34.99	-58.50	11.28	1.47	-48.69	-25.00	23.69
7702.500	H	34.28	-55.24	10.86	1.97	-46.35	-25.00	21.35
7702.500	V	34.61	-55.57	10.86	1.97	-46.68	-25.00	21.68

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								
280.24	H	37.34	-73.85	0.00	0.32	-74.17	-25.00	49.17
52.02	V	41.37	-60.83	-13.97	0.13	-74.93	-25.00	49.93
5145.000	H	40.15	-53.53	11.29	1.44	-43.68	-25.00	18.68
5145.000	V	37.45	-56.12	11.29	1.44	-46.27	-25.00	21.27
7717.500	H	34.69	-54.82	10.86	1.99	-45.95	-25.00	20.95
7717.500	V	34.82	-55.31	10.86	1.99	-46.44	-25.00	21.44
5MHz QPSK, Frequency: 2595 MHz								
277.09	H	36.86	-74.40	0.00	0.32	-74.72	-25.00	49.72
54.26	V	41.16	-62.11	-12.94	0.13	-75.18	-25.00	50.18
5190.000	H	39.87	-54.20	11.31	1.44	-44.33	-25.00	19.33
5190.000	V	36.45	-57.47	11.31	1.44	-47.60	-25.00	22.60
7785.000	H	34.65	-54.84	10.84	1.99	-45.99	-25.00	20.99
7785.000	V	35.14	-54.78	10.84	1.99	-45.93	-25.00	20.93
5MHz QPSK, Frequency: 2617.5 MHz								
271.33	H	37.13	-74.27	0.00	0.31	-74.58	-25.00	49.58
55.02	V	41.09	-62.54	-12.59	0.13	-75.26	-25.00	50.26
5235.000	H	42.18	-51.72	11.34	1.46	-41.84	-25.00	16.84
5235.000	V	37.86	-55.85	11.34	1.46	-45.97	-25.00	20.97
7852.500	H	34.58	-54.61	10.83	2.03	-45.81	-25.00	20.81
7852.500	V	34.37	-55.21	10.83	2.03	-46.41	-25.00	21.41

LTE Band 40 Lower:

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								
281.99	H	36.97	-74.18	0.00	0.32	-74.50	-40.00	34.50
52.39	V	41.47	-60.90	-13.80	0.13	-74.83	-40.00	34.83
4615.000	H	40.98	-54.38	10.74	1.41	-45.05	-40.00	5.05
4615.000	V	42.85	-52.37	10.74	1.41	-43.04	-40.00	3.04
6922.500	H	34.52	-56.50	11.22	1.88	-47.16	-40.00	7.16
6922.500	V	34.77	-56.12	11.22	1.88	-46.78	-40.00	6.78
5MHz QPSK, Frequency: 2312.5 MHz								
279.04	H	37.16	-74.05	0.00	0.32	-74.37	-40.00	34.37
53.50	V	41.40	-61.50	-13.29	0.13	-74.92	-40.00	34.92
4625.000	H	39.87	-55.42	10.75	1.41	-46.08	-40.00	6.08
4625.000	V	44.53	-50.64	10.75	1.41	-41.30	-40.00	1.30
6937.500	H	34.65	-56.33	11.21	1.90	-47.02	-40.00	7.02
6937.500	V	34.72	-56.12	11.21	1.90	-46.81	-40.00	6.81

LTE Band 40 Upper:

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								
281.08	H	37.03	-74.14	0.00	0.32	-74.46	-40.00	34.46
52.94	V	41.45	-61.19	-13.55	0.13	-74.87	-40.00	34.87
4705.000	H	36.78	-58.00	10.85	1.41	-48.56	-40.00	8.56
4705.000	V	38.52	-56.28	10.85	1.41	-46.84	-40.00	6.84
7057.500	H	34.62	-55.39	11.17	1.92	-46.14	-40.00	6.14
7057.500	V	34.37	-55.53	11.17	1.92	-46.28	-40.00	6.28
5MHz QPSK, Frequency: 2357.5 MHz								
278.07	H	37.14	-74.10	0.00	0.32	-74.42	-40.00	34.42
54.83	V	41.31	-62.23	-12.68	0.13	-75.04	-40.00	35.04
4715.000	H	36.75	-57.96	10.86	1.41	-48.51	-40.00	8.51
4715.000	V	37.84	-56.87	10.86	1.41	-47.42	-40.00	7.42
7072.500	H	34.21	-55.59	11.16	1.91	-46.34	-40.00	6.34
7072.500	V	34.23	-55.48	11.16	1.91	-46.23	-40.00	6.23

LTE Band 41:

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: 2235 MHz								
279.04	H	36.94	-74.27	0.00	0.32	-74.59	-25.00	49.59
53.31	V	41.28	-61.53	-13.38	0.13	-75.04	-25.00	50.04
4470.000	H	35.71	-60.01	10.62	1.37	-50.76	-25.00	25.76
4470.000	V	36.11	-59.44	10.62	1.37	-50.19	-25.00	25.19
6705.000	H	34.39	-56.93	11.26	1.86	-47.53	-25.00	22.53
6705.000	V	35.07	-55.98	11.26	1.86	-46.58	-25.00	21.58
5MHz QPSK, Frequency: 2593 MHz								
284.97	H	37.39	-73.68	0.00	0.32	-74.00	-25.00	49.00
54.64	V	41.04	-62.41	-12.77	0.13	-75.31	-25.00	50.31
5186.000	H	35.76	-58.27	11.31	1.44	-48.40	-25.00	23.40
5186.000	V	36.12	-57.77	11.31	1.44	-47.90	-25.00	22.90
7779.000	H	34.27	-55.22	10.84	1.99	-46.37	-25.00	21.37
7779.000	V	34.82	-55.12	10.84	1.99	-46.27	-25.00	21.27
5MHz QPSK, Frequency: 2655 MHz								
273.24	H	37.21	-74.14	0.00	0.32	-74.46	-25.00	49.46
52.57	V	41.45	-61.01	-13.72	0.13	-74.86	-25.00	49.86
5310.000	H	35.29	-58.15	11.39	1.46	-48.22	-25.00	23.22
5310.000	V	34.88	-58.33	11.39	1.46	-48.40	-25.00	23.40
7965.000	H	34.46	-53.89	10.81	2.09	-45.17	-25.00	20.17
7965.000	V	34.96	-53.85	10.81	2.09	-45.13	-25.00	20.13

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 CR230953939-EXP EUT EXTERNAL PHOTOGRAPHS and
CR230953939-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230953939-00G-TSP TEST SETUP PHOTOGRAPHS.

==== END OF REPORT ====