

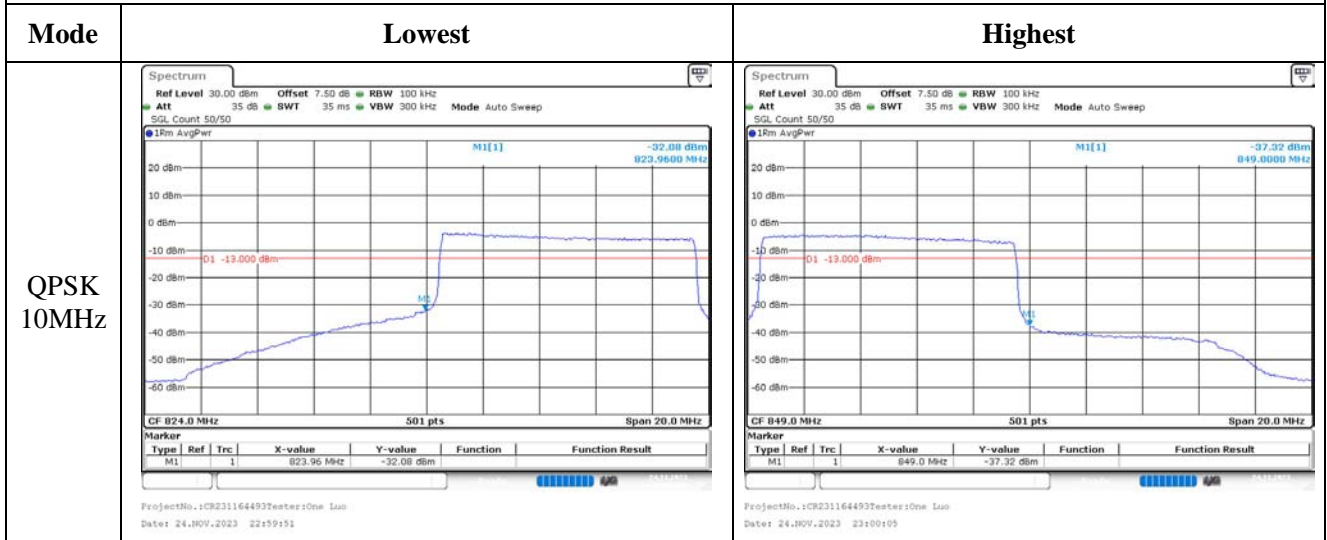
Spurious Emissions at Antenna Terminal

Channel	10MHz Bandwidth QPSK	
Lowest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:38:02</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:38:25</p>
Middle	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:38:55</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:39:21</p>
Highest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:39:54</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:40:20</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:56:40</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:56:52</p>
QPSK 3MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:57:51</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:58:04</p>
QPSK 5MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:58:51</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:59:04</p>

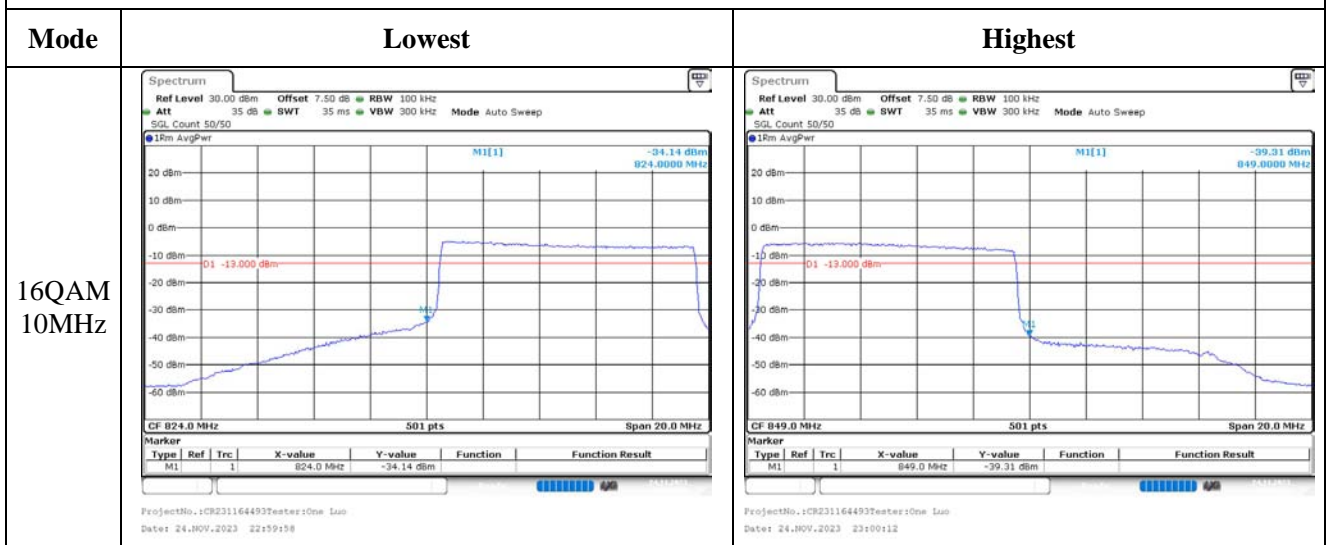
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:56:46</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:56:58</p>
16QAM 3MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:57:57</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:58:10</p>
16QAM 5MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:58:57</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 22:59:10</p>

Out of band emission, Band Edge



**4.9 Antenna Port Test Data and Results for LTE Band 7**

Serial Number:	2D1L-2	Test Date:	2023/11/24~2023/12/20
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	22.3~25.8	Relative Humidity: (%)	31~52	ATM Pressure: (kPa)	100.9~101.9
----------------------	-----------	---------------------------	-------	------------------------	-------------

**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	2502.5	2535	2567.5
10MHz	2505	2535	2565
15MHz	2507.5	2535	2562.5
20MHz	2510	2535	2560

**Test Data:**

<b>RF Output Power</b>						
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	23.32	23.19	23.21	26.58	33
	RB1#13	<b>23.38</b>	23.32	23.32		
	RB1#24	23.32	23.18	23.22		
	RB15#0	22.32	22.25	22.3		
	RB15#10	22.34	22.3	22.3		
	RB25#0	22.31	22.25	22.24		
5MHz 16QAM	RB1#0	22.48	22.19	22.05	25.76	33
	RB1#13	<b>22.56</b>	22.28	22.17		
	RB1#24	22.44	22.19	22.1		
	RB15#0	21.26	21.25	21.28		
	RB15#10	21.3	21.25	21.25		
	RB25#0	21.29	21.25	21.25		
10MHz QPSK	RB1#0	23.45	23.26	23.32	26.8	33
	RB1#25	<b>23.6</b>	23.48	23.5		
	RB1#49	23.41	23.29	23.31		
	RB25#0	22.3	22.26	22.37		
	RB25#25	22.36	22.35	22.34		
	RB50#0	22.35	22.33	22.34		
10MHz 16QAM	RB1#0	22.3	22.7	22.36	26.1	33
	RB1#25	22.44	<b>22.9</b>	22.49		
	RB1#49	22.31	22.73	22.34		
	RB25#0	21.35	21.27	21.29		
	RB25#25	21.38	21.37	21.31		
	RB50#0	21.32	21.29	21.28		
15MHz QPSK	RB1#0	23.38	23.3	23.28	26.62	33
	RB1#38	<b>23.42</b>	23.32	23.32		
	RB1#74	23.27	23.2	23.27		
	RB36#0	22.44	22.38	22.46		
	RB36#39	22.45	22.41	22.39		
	RB75#0	22.48	22.41	22.46		
15MHz 16QAM	RB1#0	22.69	22.33	22.5	25.97	33
	RB1#38	<b>22.77</b>	22.43	22.57		
	RB1#74	22.65	22.27	22.49		
	RB36#0	21.4	21.36	21.35		
	RB36#39	21.41	21.38	21.33		
	RB75#0	21.38	21.35	21.32		
20MHz QPSK	RB1#0	23.87	23.72	23.21	27.28	33
	RB1#50	<b>24.08</b>	23.74	23.47		
	RB1#99	23.7	23.17	23.2		
	RB50#0	22.89	22.33	22.44		

	RB50#50	22.89	22.4	22.33		
	RB100#0	22.87	22.4	22.42		
20MHz 16QAM	RB1#0	22.88	22.7	22.38	26.35	33
	RB1#50	<b>23.15</b>	22.97	22.74		
	RB1#99	22.84	22.67	22.37		
	RB50#0	21.88	21.32	21.43		
	RB50#50	21.85	21.39	21.25		
	RB100#0	21.85	21.36	21.37		

Note: EIRP=Conducted Power(dBm) - Lc(dB) + Gr(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	
10MHz QPSK	RB1#0	2.99	3.62	3.16	13
	RB50#0	4.14	4.58	4.35	13
10MHz 16QAM	RB1#0	4.09	4.55	4.12	13
	RB50#0	5.13	5.57	5.28	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	4.531	4.531	4.551	5.22	5.26	5.34
5MHz 16QAM	4.551	4.551	4.531	5.24	5.24	5.28
10MHz QPSK	8.942	8.942	9.022	9.88	9.92	10.36
10MHz 16QAM	8.942	8.942	8.981	9.96	9.92	9.88
15MHz QPSK	13.533	13.473	13.593	14.88	14.82	15.18
15MHz 16QAM	13.533	13.533	13.533	14.76	14.76	14.82
20MHz QPSK	17.884	17.964	17.964	19.6	19.44	19.68
20MHz 16QAM	17.964	17.964	17.964	19.84	19.84	20

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.**

### Out of band emission, Band Edge

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

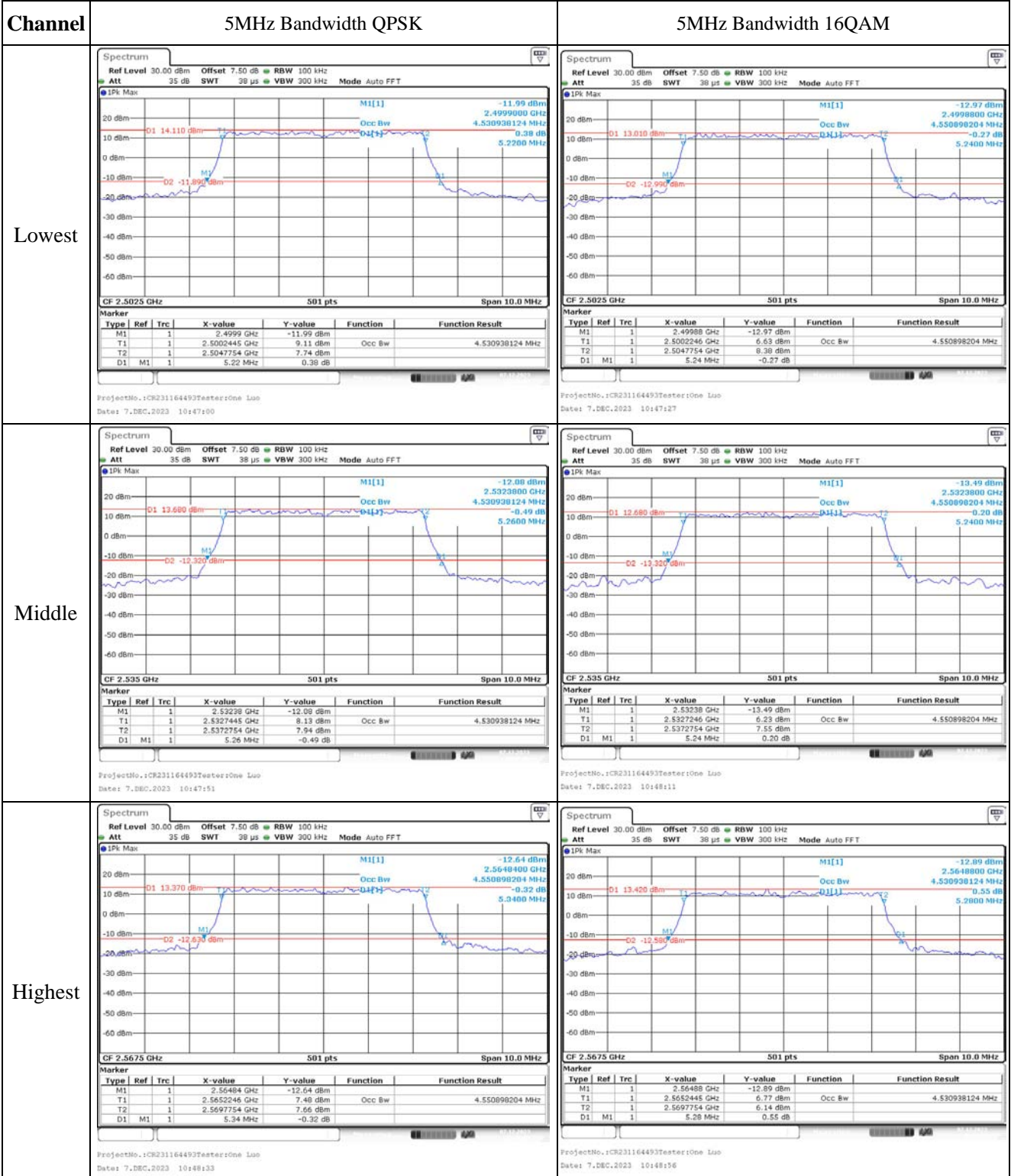


<b>Frequency Stability</b>						
Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2501.055	2500.00	2568.920	2570
	-20	3.8	2501.091	2500.00	2568.978	2570
	-10	3.8	2501.033	2500.00	2568.977	2570
	0	3.8	2501.092	2500.00	2568.929	2570
	10	3.8	2501.050	2500.00	2568.994	2570
	20	3.8	2501.058	2500.00	2568.942	2570
	30	3.8	2501.012	2500.00	2568.964	2570
	40	3.8	2501.054	2500.00	2568.968	2570
	50	3.8	2501.088	2500.00	2568.993	2570
Frequency Stability vs. Voltage	20	3.2	2501.015	2500.00	2568.965	2570
	20	4.4	2501.082	2500.00	2568.938	2570
					<b>Result:</b>	<b>Pass</b>

<b>Frequency Stability</b>						
Test Mode:	20M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	2501.012	2500.00	2568.904	2570
	-20	3.8	2501.059	2500.00	2568.931	2570
	-10	3.8	2501.001	2500.00	2568.974	2570
	0	3.8	2501.015	2500.00	2568.931	2570
	10	3.8	2501.008	2500.00	2568.915	2570
	20	3.8	2501.058	2500.00	2568.942	2570
	30	3.8	2501.046	2500.00	2568.927	2570
	40	3.8	2501.030	2500.00	2568.915	2570
	50	3.8	2501.024	2500.00	2568.952	2570
Frequency Stability vs. Voltage	20	3.2	2501.097	2500.00	2568.985	2570
	20	4.4	2501.092	2500.00	2568.946	2570
					<b>Result:</b>	<b>Pass</b>

**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	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.50008 GHz</td> <td>-14.22 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5005269 GHz</td> <td>7.97 dBm</td> <td>Occ Bw</td> <td>8.942115768 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5094711 GHz</td> <td>9.24 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>9.88 MHz</td> <td>0.07 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.50008 GHz	-14.22 dBm			T1	1		2.5005269 GHz	7.97 dBm	Occ Bw	8.942115768 MHz	T2	1		2.5094711 GHz	9.24 dBm			D1	M1	1	9.88 MHz	0.07 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.49996 GHz</td> <td>-15.38 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5005269 GHz</td> <td>7.50 dBm</td> <td>Occ Bw</td> <td>8.942115768 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5094711 GHz</td> <td>7.88 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>9.96 MHz</td> <td>-0.58 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.49996 GHz	-15.38 dBm			T1	1		2.5005269 GHz	7.50 dBm	Occ Bw	8.942115768 MHz	T2	1		2.5094711 GHz	7.88 dBm			D1	M1	1	9.96 MHz	-0.58 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.50008 GHz	-14.22 dBm																																																																				
T1	1		2.5005269 GHz	7.97 dBm	Occ Bw	8.942115768 MHz																																																																		
T2	1		2.5094711 GHz	9.24 dBm																																																																				
D1	M1	1	9.88 MHz	0.07 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.49996 GHz	-15.38 dBm																																																																				
T1	1		2.5005269 GHz	7.50 dBm	Occ Bw	8.942115768 MHz																																																																		
T2	1		2.5094711 GHz	7.88 dBm																																																																				
D1	M1	1	9.96 MHz	-0.58 dB																																																																				
Middle	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.53008 GHz</td> <td>-14.07 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5305289 GHz</td> <td>9.15 dBm</td> <td>Occ Bw</td> <td>8.942115768 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5394711 GHz</td> <td>8.12 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>9.92 MHz</td> <td>-0.60 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.53008 GHz	-14.07 dBm			T1	1		2.5305289 GHz	9.15 dBm	Occ Bw	8.942115768 MHz	T2	1		2.5394711 GHz	8.12 dBm			D1	M1	1	9.92 MHz	-0.60 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.53004 GHz</td> <td>-15.26 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5305289 GHz</td> <td>7.27 dBm</td> <td>Occ Bw</td> <td>8.942115768 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5394711 GHz</td> <td>7.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>9.92 MHz</td> <td>0.04 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.53004 GHz	-15.26 dBm			T1	1		2.5305289 GHz	7.27 dBm	Occ Bw	8.942115768 MHz	T2	1		2.5394711 GHz	7.09 dBm			D1	M1	1	9.92 MHz	0.04 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.53008 GHz	-14.07 dBm																																																																				
T1	1		2.5305289 GHz	9.15 dBm	Occ Bw	8.942115768 MHz																																																																		
T2	1		2.5394711 GHz	8.12 dBm																																																																				
D1	M1	1	9.92 MHz	-0.60 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.53004 GHz	-15.26 dBm																																																																				
T1	1		2.5305289 GHz	7.27 dBm	Occ Bw	8.942115768 MHz																																																																		
T2	1		2.5394711 GHz	7.09 dBm																																																																				
D1	M1	1	9.92 MHz	0.04 dB																																																																				
Highest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.55988 GHz</td> <td>-15.00 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.560489 GHz</td> <td>5.98 dBm</td> <td>Occ Bw</td> <td>9.021956088 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.569511 GHz</td> <td>6.14 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>10.36 MHz</td> <td>0.44 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.55988 GHz	-15.00 dBm			T1	1		2.560489 GHz	5.98 dBm	Occ Bw	9.021956088 MHz	T2	1		2.569511 GHz	6.14 dBm			D1	M1	1	10.36 MHz	0.44 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.56004 GHz</td> <td>-15.41 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5605289 GHz</td> <td>7.54 dBm</td> <td>Occ Bw</td> <td>8.982035928 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.569511 GHz</td> <td>5.06 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>9.88 MHz</td> <td>1.15 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.56004 GHz	-15.41 dBm			T1	1		2.5605289 GHz	7.54 dBm	Occ Bw	8.982035928 MHz	T2	1		2.569511 GHz	5.06 dBm			D1	M1	1	9.88 MHz	1.15 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.55988 GHz	-15.00 dBm																																																																				
T1	1		2.560489 GHz	5.98 dBm	Occ Bw	9.021956088 MHz																																																																		
T2	1		2.569511 GHz	6.14 dBm																																																																				
D1	M1	1	10.36 MHz	0.44 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.56004 GHz	-15.41 dBm																																																																				
T1	1		2.5605289 GHz	7.54 dBm	Occ Bw	8.982035928 MHz																																																																		
T2	1		2.569511 GHz	5.06 dBm																																																																				
D1	M1	1	9.88 MHz	1.15 dB																																																																				

Occupied Bandwidth

Channel	15MHz Bandwidth QPSK	15MHz Bandwidth 16QAM																																																																						
Lowest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.50006 GHz</td> <td>-11.74 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5007325 GHz</td> <td>9.43 dBm</td> <td>Occ Bw</td> <td>13.532934132 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5142665 GHz</td> <td>9.56 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>14.88 MHz</td> <td>0.55 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.50006 GHz	-11.74 dBm			T1	1		2.5007325 GHz	9.43 dBm	Occ Bw	13.532934132 MHz	T2	1		2.5142665 GHz	9.56 dBm			D1	M1	1	14.88 MHz	0.55 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.50012 GHz</td> <td>-12.33 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5007325 GHz</td> <td>9.90 dBm</td> <td>Occ Bw</td> <td>13.532934132 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5142665 GHz</td> <td>9.62 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>14.76 MHz</td> <td>1.33 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.50012 GHz	-12.33 dBm			T1	1		2.5007325 GHz	9.90 dBm	Occ Bw	13.532934132 MHz	T2	1		2.5142665 GHz	9.62 dBm			D1	M1	1	14.76 MHz	1.33 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.50006 GHz	-11.74 dBm																																																																				
T1	1		2.5007325 GHz	9.43 dBm	Occ Bw	13.532934132 MHz																																																																		
T2	1		2.5142665 GHz	9.56 dBm																																																																				
D1	M1	1	14.88 MHz	0.55 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.50012 GHz	-12.33 dBm																																																																				
T1	1		2.5007325 GHz	9.90 dBm	Occ Bw	13.532934132 MHz																																																																		
T2	1		2.5142665 GHz	9.62 dBm																																																																				
D1	M1	1	14.76 MHz	1.33 dB																																																																				
Middle	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.52762 GHz</td> <td>-11.90 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5282934 GHz</td> <td>10.06 dBm</td> <td>Occ Bw</td> <td>13.473053892 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5417665 GHz</td> <td>9.47 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>14.82 MHz</td> <td>-0.81 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.52762 GHz	-11.90 dBm			T1	1		2.5282934 GHz	10.06 dBm	Occ Bw	13.473053892 MHz	T2	1		2.5417665 GHz	9.47 dBm			D1	M1	1	14.82 MHz	-0.81 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.52762 GHz</td> <td>-11.56 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5282934 GHz</td> <td>7.49 dBm</td> <td>Occ Bw</td> <td>13.532934132 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5417665 GHz</td> <td>9.13 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>14.76 MHz</td> <td>-0.22 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.52762 GHz	-11.56 dBm			T1	1		2.5282934 GHz	7.49 dBm	Occ Bw	13.532934132 MHz	T2	1		2.5417665 GHz	9.13 dBm			D1	M1	1	14.76 MHz	-0.22 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.52762 GHz	-11.90 dBm																																																																				
T1	1		2.5282934 GHz	10.06 dBm	Occ Bw	13.473053892 MHz																																																																		
T2	1		2.5417665 GHz	9.47 dBm																																																																				
D1	M1	1	14.82 MHz	-0.81 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.52762 GHz	-11.56 dBm																																																																				
T1	1		2.5282934 GHz	7.49 dBm	Occ Bw	13.532934132 MHz																																																																		
T2	1		2.5417665 GHz	9.13 dBm																																																																				
D1	M1	1	14.76 MHz	-0.22 dB																																																																				
Highest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.555 GHz</td> <td>-11.42 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5556737 GHz</td> <td>7.92 dBm</td> <td>Occ Bw</td> <td>13.592814371 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5692665 GHz</td> <td>8.94 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>15.18 MHz</td> <td>-0.52 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.555 GHz	-11.42 dBm			T1	1		2.5556737 GHz	7.92 dBm	Occ Bw	13.592814371 MHz	T2	1		2.5692665 GHz	8.94 dBm			D1	M1	1	15.18 MHz	-0.52 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.55506 GHz</td> <td>-13.03 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5557335 GHz</td> <td>9.45 dBm</td> <td>Occ Bw</td> <td>13.532934132 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5692665 GHz</td> <td>7.90 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>14.82 MHz</td> <td>1.78 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.55506 GHz	-13.03 dBm			T1	1		2.5557335 GHz	9.45 dBm	Occ Bw	13.532934132 MHz	T2	1		2.5692665 GHz	7.90 dBm			D1	M1	1	14.82 MHz	1.78 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.555 GHz	-11.42 dBm																																																																				
T1	1		2.5556737 GHz	7.92 dBm	Occ Bw	13.592814371 MHz																																																																		
T2	1		2.5692665 GHz	8.94 dBm																																																																				
D1	M1	1	15.18 MHz	-0.52 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.55506 GHz	-13.03 dBm																																																																				
T1	1		2.5557335 GHz	9.45 dBm	Occ Bw	13.532934132 MHz																																																																		
T2	1		2.5692665 GHz	7.90 dBm																																																																				
D1	M1	1	14.82 MHz	1.78 dB																																																																				

Occupied Bandwidth

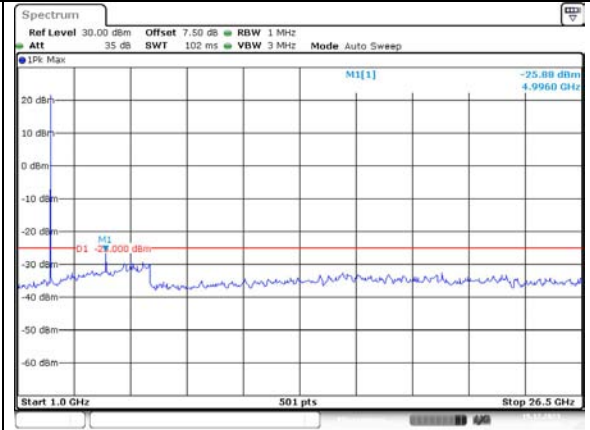
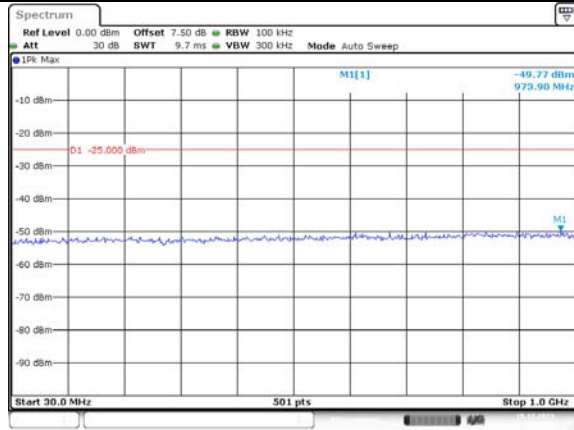
Channel	20MHz Bandwidth QPSK	20MHz Bandwidth 16QAM																																																																						
Lowest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.50008 GHz</td> <td>-12.95 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5010579 GHz</td> <td>8.80 dBm</td> <td>Occ Bw</td> <td>17.884231537 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5189421 GHz</td> <td>9.20 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>19.6 MHz</td> <td>0.71 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.50008 GHz	-12.95 dBm			T1	1		2.5010579 GHz	8.80 dBm	Occ Bw	17.884231537 MHz	T2	1		2.5189421 GHz	9.20 dBm			D1	M1	1	19.6 MHz	0.71 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.50016 GHz</td> <td>-14.30 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5010579 GHz</td> <td>8.12 dBm</td> <td>Occ Bw</td> <td>17.964071856 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5190222 GHz</td> <td>6.57 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>19.84 MHz</td> <td>0.76 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.50016 GHz	-14.30 dBm			T1	1		2.5010579 GHz	8.12 dBm	Occ Bw	17.964071856 MHz	T2	1		2.5190222 GHz	6.57 dBm			D1	M1	1	19.84 MHz	0.76 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.50008 GHz	-12.95 dBm																																																																				
T1	1		2.5010579 GHz	8.80 dBm	Occ Bw	17.884231537 MHz																																																																		
T2	1		2.5189421 GHz	9.20 dBm																																																																				
D1	M1	1	19.6 MHz	0.71 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.50016 GHz	-14.30 dBm																																																																				
T1	1		2.5010579 GHz	8.12 dBm	Occ Bw	17.964071856 MHz																																																																		
T2	1		2.5190222 GHz	6.57 dBm																																																																				
D1	M1	1	19.84 MHz	0.76 dB																																																																				
Middle	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.52532 GHz</td> <td>-11.91 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.526078 GHz</td> <td>9.32 dBm</td> <td>Occ Bw</td> <td>17.964071856 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5439421 GHz</td> <td>10.27 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>19.44 MHz</td> <td>-0.18 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.52532 GHz	-11.91 dBm			T1	1		2.526078 GHz	9.32 dBm	Occ Bw	17.964071856 MHz	T2	1		2.5439421 GHz	10.27 dBm			D1	M1	1	19.44 MHz	-0.18 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.52524 GHz</td> <td>-13.81 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.5260578 GHz</td> <td>7.49 dBm</td> <td>Occ Bw</td> <td>17.964071856 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5440222 GHz</td> <td>7.02 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>19.84 MHz</td> <td>-0.76 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.52524 GHz	-13.81 dBm			T1	1		2.5260578 GHz	7.49 dBm	Occ Bw	17.964071856 MHz	T2	1		2.5440222 GHz	7.02 dBm			D1	M1	1	19.84 MHz	-0.76 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.52532 GHz	-11.91 dBm																																																																				
T1	1		2.526078 GHz	9.32 dBm	Occ Bw	17.964071856 MHz																																																																		
T2	1		2.5439421 GHz	10.27 dBm																																																																				
D1	M1	1	19.44 MHz	-0.18 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.52524 GHz	-13.81 dBm																																																																				
T1	1		2.5260578 GHz	7.49 dBm	Occ Bw	17.964071856 MHz																																																																		
T2	1		2.5440222 GHz	7.02 dBm																																																																				
D1	M1	1	19.84 MHz	-0.76 dB																																																																				
Highest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.55016 GHz</td> <td>-12.27 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.550978 GHz</td> <td>8.04 dBm</td> <td>Occ Bw</td> <td>17.964071856 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5689421 GHz</td> <td>8.50 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>19.68 MHz</td> <td>-0.14 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.55016 GHz	-12.27 dBm			T1	1		2.550978 GHz	8.04 dBm	Occ Bw	17.964071856 MHz	T2	1		2.5689421 GHz	8.50 dBm			D1	M1	1	19.68 MHz	-0.14 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.55008 GHz</td> <td>-13.52 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.550978 GHz</td> <td>7.57 dBm</td> <td>Occ Bw</td> <td>17.964071856 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.5689421 GHz</td> <td>7.65 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>20.0 MHz</td> <td>-0.85 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.55008 GHz	-13.52 dBm			T1	1		2.550978 GHz	7.57 dBm	Occ Bw	17.964071856 MHz	T2	1		2.5689421 GHz	7.65 dBm			D1	M1	1	20.0 MHz	-0.85 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.55016 GHz	-12.27 dBm																																																																				
T1	1		2.550978 GHz	8.04 dBm	Occ Bw	17.964071856 MHz																																																																		
T2	1		2.5689421 GHz	8.50 dBm																																																																				
D1	M1	1	19.68 MHz	-0.14 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		2.55008 GHz	-13.52 dBm																																																																				
T1	1		2.550978 GHz	7.57 dBm	Occ Bw	17.964071856 MHz																																																																		
T2	1		2.5689421 GHz	7.65 dBm																																																																				
D1	M1	1	20.0 MHz	-0.85 dB																																																																				

Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

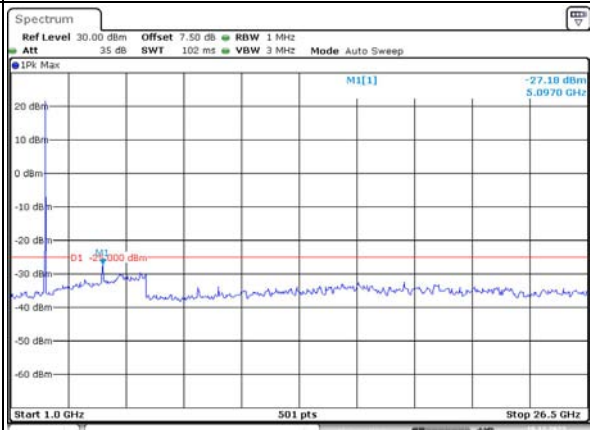
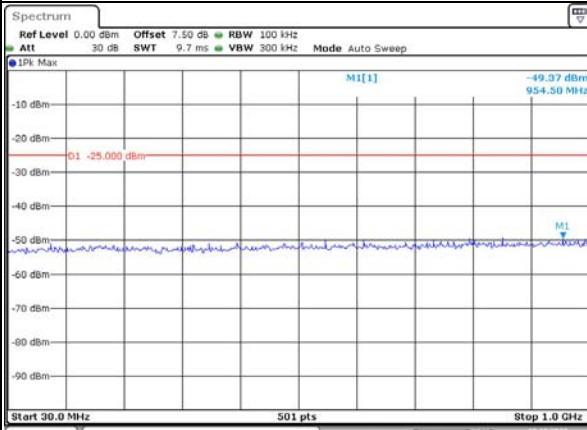
Lowest



ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 12:41:01

ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 12:41:27

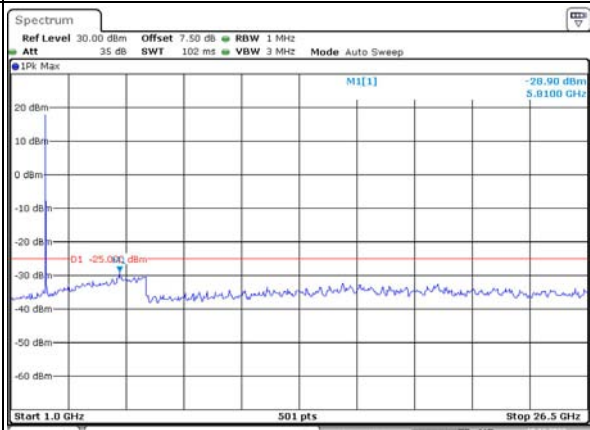
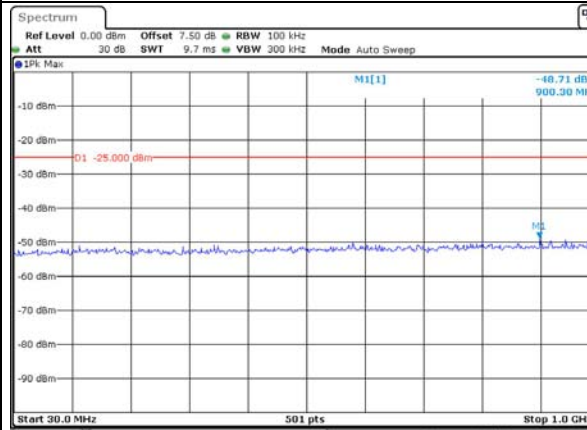
Middle



ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 12:41:57

ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 12:42:16

Highest



ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 14:11:39

ProjectNo.:CR231164493 Testers:One Luo  
Date: 19.DEC.2023 14:23:04

Spurious Emissions at Antenna Terminal

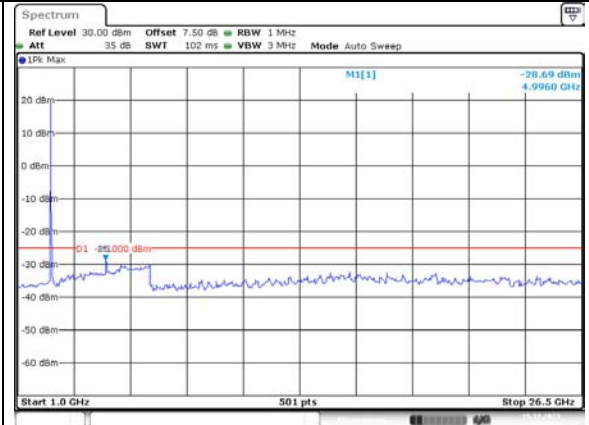
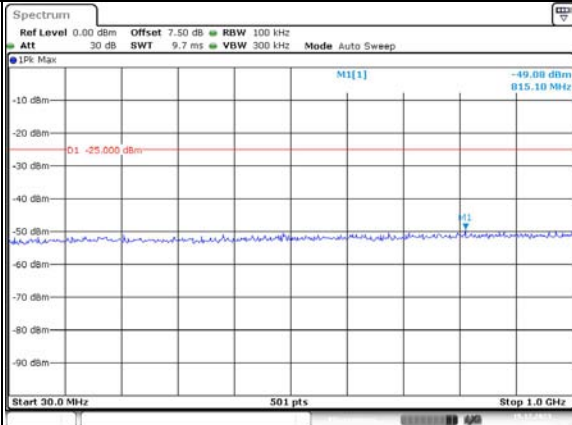
Channel	10MHz Bandwidth QPSK	
Lowest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:43:58</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:44:26</p>
Middle	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:44:57</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:45:22</p>
Highest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:45:46</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:46:06</p>

Spurious Emissions at Antenna Terminal

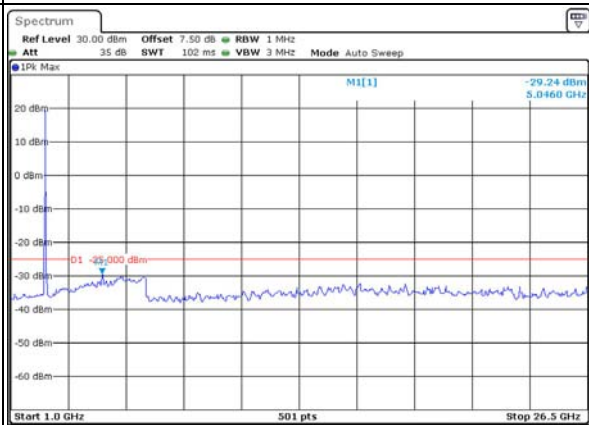
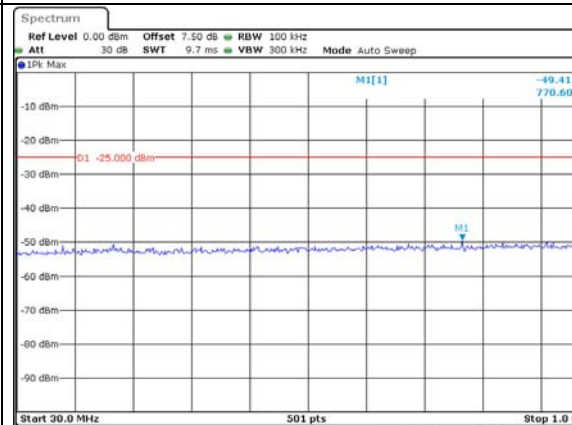
Channel

15MHz Bandwidth QPSK

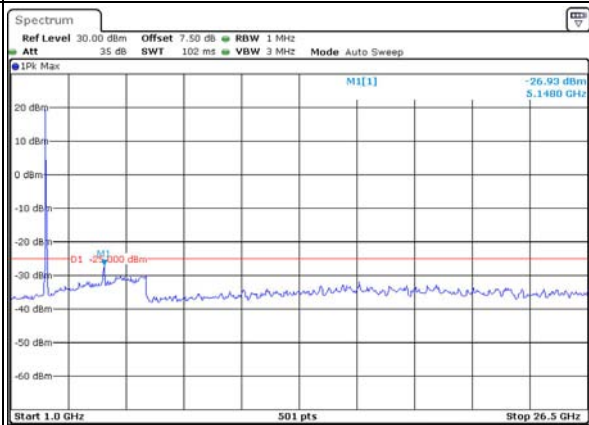
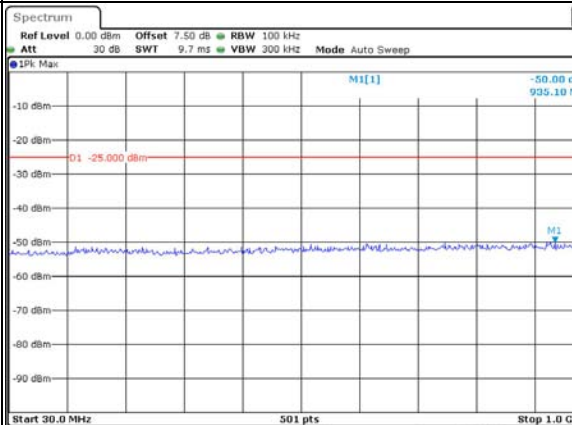
Lowest



Middle



Highest



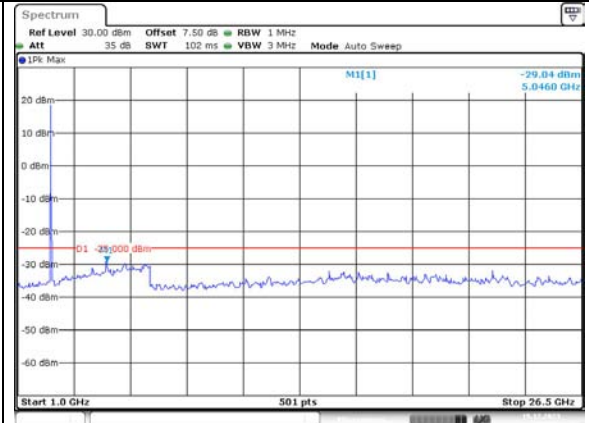
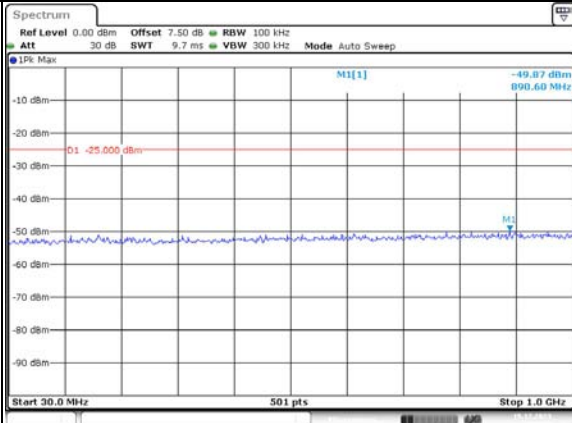


Spurious Emissions at Antenna Terminal

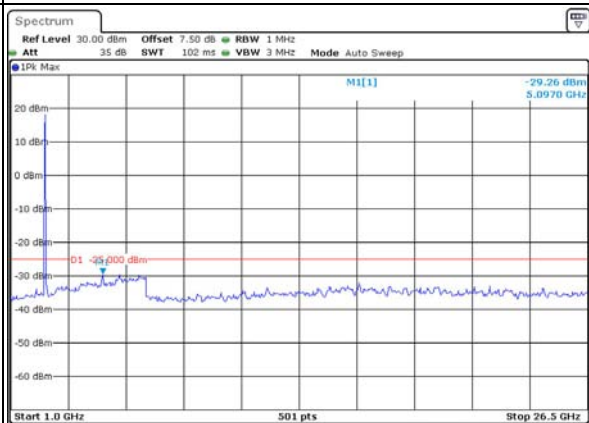
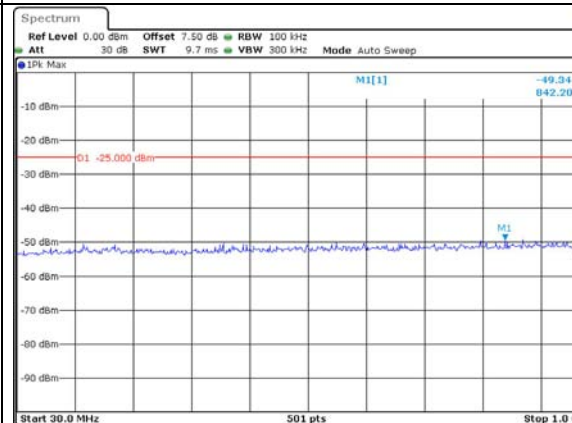
Channel

20MHz Bandwidth QPSK

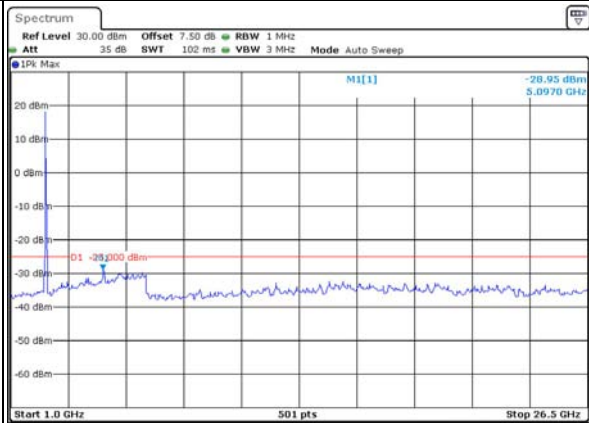
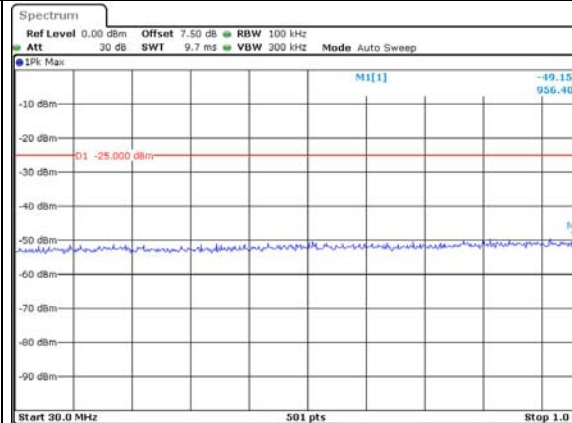
Lowest



Middle



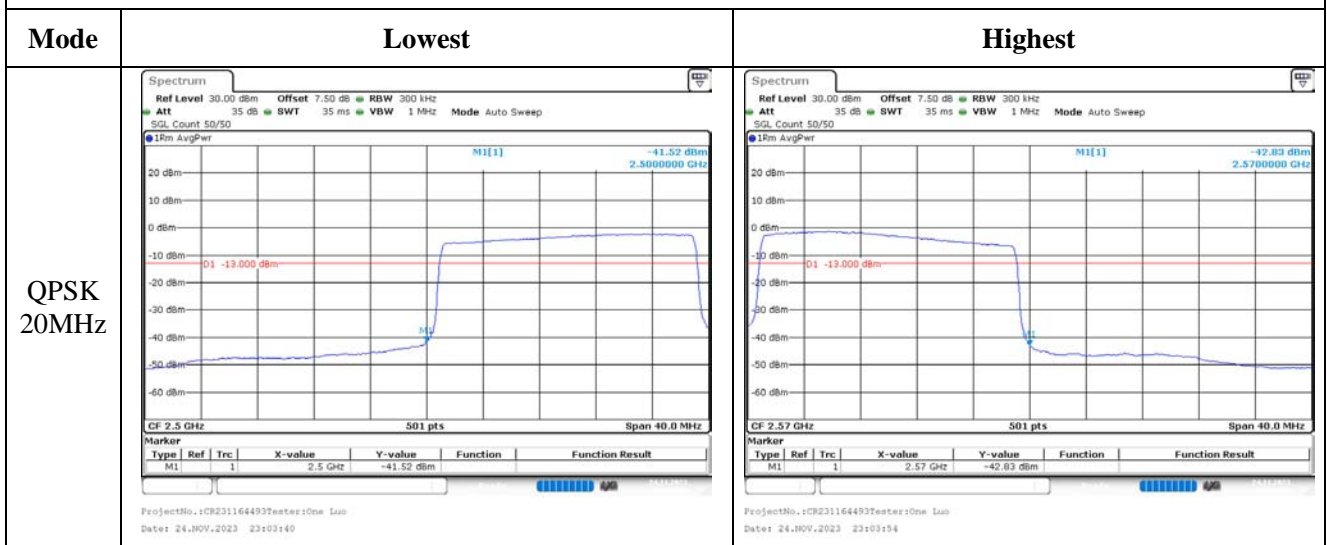
Highest



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:00:24</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:00:37</p>
QPSK 10MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:01:16</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:01:30</p>
QPSK 15MHz	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:02:22</p>	<p>ProjectNo.:CR231164493Tester:One Luo Date: 24.NOV.2023 23:02:37</p>

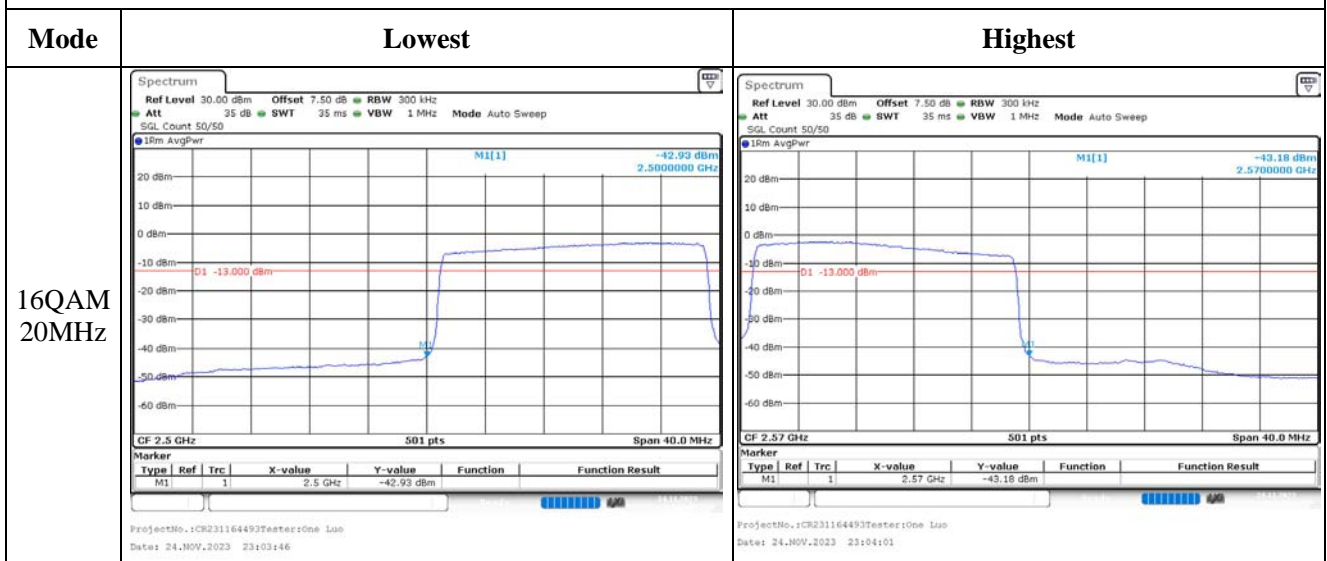
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 5MHz		
16QAM 10MHz		
16QAM 15MHz		

Out of band emission, Band Edge



**4.10 Antenna Port Test Data and Results for LTE Band 12**

Serial Number:	2D1L-2	Test Date:	2023/11/24~2023/12/20
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	22.3~25.8	Relative Humidity: (%)	31~52	ATM Pressure: (kPa)	100.9~101.9
----------------------	-----------	---------------------------	-------	------------------------	-------------

**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)
1.4MHz	699.7	707.5	715.3
3MHz	700.5	707.5	714.5
5MHz	701.5	707.5	713.5
10MHz	704	707.5	711

**Test Data:**

<b>RF Output Power</b>						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
1.4MHz QPSK	RB1#0	24.04	23.52	23.43	16.75	34.77
	RB1#3	<b>24.16</b>	23.63	23.6		
	RB1#5	24.02	23.44	23.43		
	RB3#0	24	23.56	23.51		
	RB3#3	23.61	23.54	23.51		
	RB6#0	22.84	22.58	22.51		
1.4MHz 16QAM	RB1#0	22.49	22.57	22.38	15.4	34.77
	RB1#3	<b>22.81</b>	22.72	22.62		
	RB1#5	22.55	22.58	22.47		
	RB3#0	22.77	22.5	22.55		
	RB3#3	22.76	22.55	22.55		
	RB6#0	21.66	21.55	21.44		
3MHz QPSK	RB1#0	<b>24.19</b>	24.07	23.57	16.78	34.77
	RB1#8	24.15	23.61	23.58		
	RB1#14	24.11	23.61	23.56		
	RB6#0	23.13	22.54	22.54		
	RB6#9	23.06	22.57	22.57		
	RB15#0	23.11	22.55	22.57		
3MHz 16QAM	RB1#0	23.14	<b>23.17</b>	22.65	15.76	34.77
	RB1#8	23.11	23.13	22.65		
	RB1#14	23.1	23.07	22.68		
	RB6#0	22.06	21.59	21.57		
	RB6#9	21.98	21.58	21.58		
	RB15#0	22.17	21.61	21.5		
5MHz QPSK	RB1#0	24.09	23.61	23.49	16.78	34.77
	RB1#13	<b>24.19</b>	23.65	23.65		
	RB1#24	24.06	23.50	23.48		
	RB15#0	23.32	22.48	22.75		
	RB15#10	23.10	22.66	22.60		
	RB25#0	23.17	22.56	22.65		
5MHz 16QAM	RB1#0	23.05	22.43	22.69	15.83	34.77
	RB1#13	<b>23.24</b>	22.52	22.89		
	RB1#24	22.95	22.37	22.76		
	RB15#0	22.13	21.53	21.70		
	RB15#10	21.83	21.69	21.56		
	RB25#0	22.01	21.59	21.67		
10MHz QPSK	RB1#0	24.2	23.61	23.62	16.86	34.77
	RB1#25	<b>24.27</b>	23.71	23.66		
	RB1#49	24.13	23.52	23.61		

	RB25#0	23.37	22.51	22.57		
	RB25#25	23.41	22.57	22.45		
	RB50#0	23.4	22.52	22.49		
10MHz 16QAM	RB1#0	23.03	23.18	22.72	15.86	34.77
	RB1#25	22.96	<b>23.27</b>	22.81		
	RB1#49	22.62	23.05	22.71		
	RB25#0	21.95	21.55	21.54		
	RB25#25	21.95	21.62	21.44		
	RB50#0	21.91	21.55	21.47		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + Gr(dBd)

Gr(dBd)=Gr(dBi)-2.15

**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	
10MHz QPSK	RB1#0	4.58	5.22	5.83	13
	RB50#0	5.54	5.19	5.1	13
10MHz 16QAM	RB1#0	5.57	5.88	6.72	13
	RB50#0	6.35	6.14	5.97	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
1.4MHz QPSK	1.096	1.096	1.102	1.302	1.314	1.302
1.4MHz 16QAM	1.096	1.09	1.096	1.32	1.284	1.296
3MHz QPSK	2.683	2.683	2.683	2.88	2.868	2.88
3MHz 16QAM	2.683	2.683	2.683	2.892	2.868	2.88
5MHz QPSK	4.531	4.531	4.531	5.22	5.18	5.22
5MHz 16QAM	4.531	4.531	4.551	5.16	5.2	5.26
10MHz QPSK	9.022	8.942	8.942	10	9.8	9.92
10MHz 16QAM	9.022	8.942	8.942	9.8	9.92	9.88

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

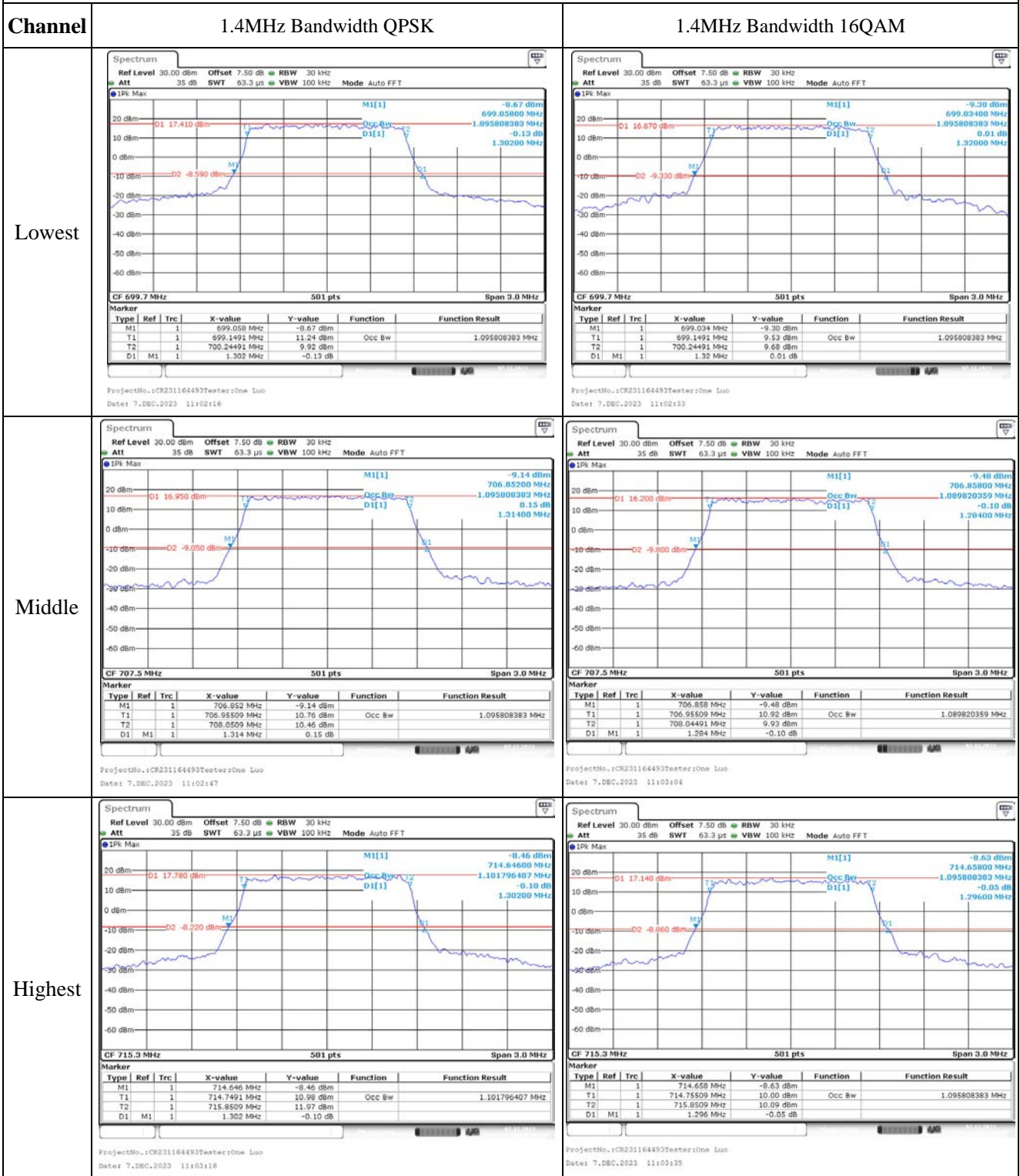


Frequency Stability						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	699.458	699.00	715.411	716.00
	-20	3.8	699.416	699.00	715.421	716.00
	-10	3.8	699.495	699.00	715.442	716.00
	0	3.8	699.489	699.00	715.489	716.00
	10	3.8	699.407	699.00	715.469	716.00
	20	3.8	699.485	699.00	715.471	716.00
	30	3.8	699.445	699.00	715.405	716.00
	40	3.8	699.473	699.00	715.491	716.00
	50	3.8	699.451	699.00	715.491	716.00
Frequency Stability vs. Voltage	20	3.2	699.449	699.00	715.455	716.00
	20	4.4	699.441	699.00	715.440	716.00
					<b>Result:</b>	<b>Pass</b>

Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	699.458	699.00	715.474	716.00
	-20	3.8	699.447	699.00	715.460	716.00
	-10	3.8	699.411	699.00	715.480	716.00
	0	3.8	699.402	699.00	715.405	716.00
	10	3.8	699.458	699.00	715.474	716.00
	20	3.8	699.489	699.00	715.471	716.00
	30	3.8	699.463	699.00	715.421	716.00
	40	3.8	699.423	699.00	715.466	716.00
	50	3.8	699.453	699.00	715.472	716.00
Frequency Stability vs. Voltage	20	3.2	699.406	699.00	715.420	716.00
	20	4.4	699.456	699.00	715.433	716.00
					<b>Result:</b>	<b>Pass</b>

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

**Occupied Bandwidth**



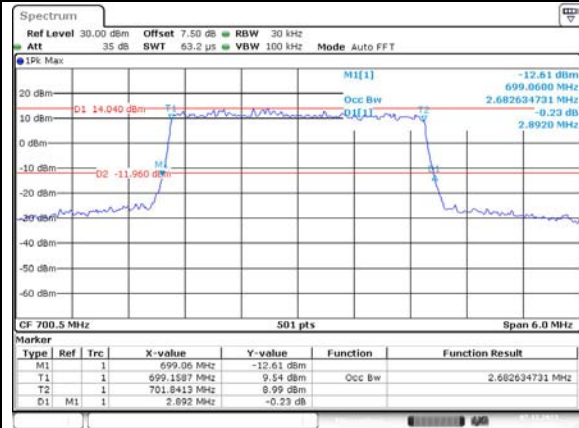
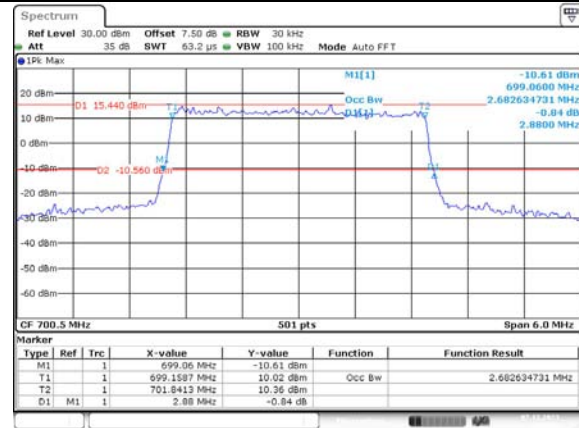
Occupied Bandwidth

Channel

3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

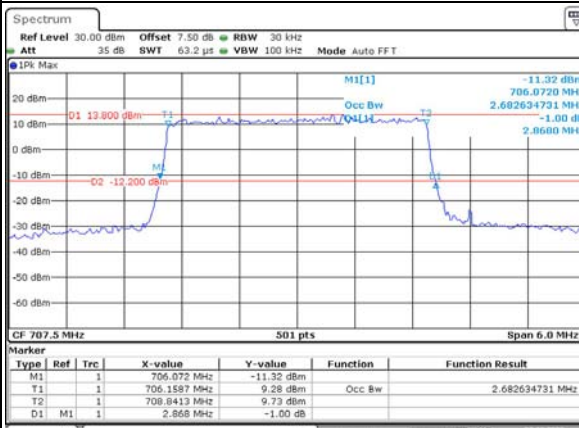
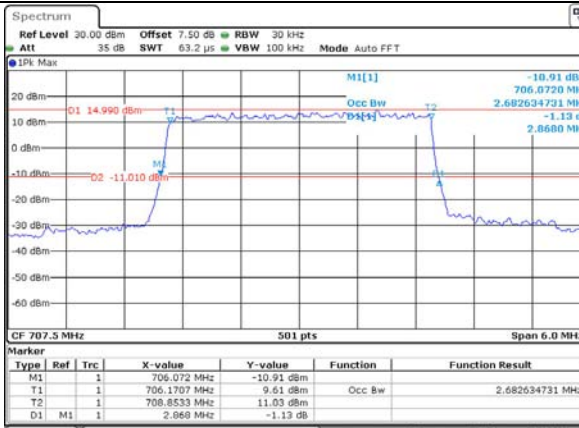
Lowest



ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:04:31

ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:04:48

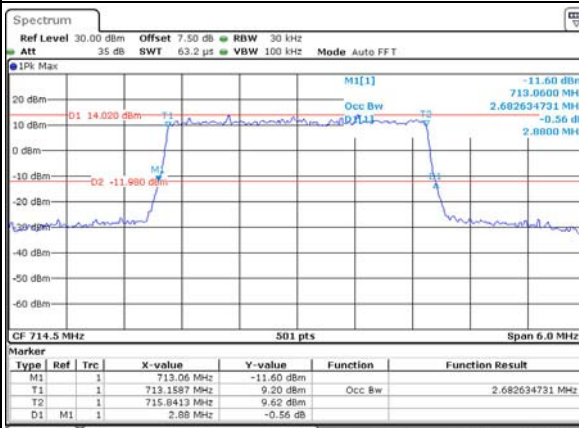
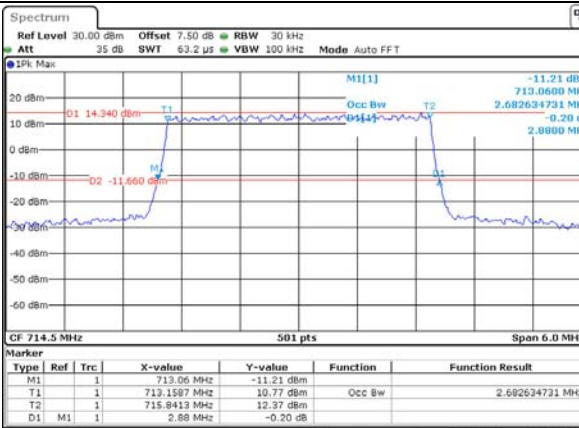
Middle



ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:05:05

ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:05:22

Highest



ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:05:37

ProjectNo.:CR231164493Tester:One Luo  
Date: 7.DEC.2023 11:05:53

Occupied Bandwidth

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM																																																																						
Lowest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>698.86 MHz</td> <td>-8.11 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>699.2245 MHz</td> <td>12.45 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>703.7555 MHz</td> <td>11.87 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.22 MHz</td> <td>-0.10 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		698.86 MHz	-8.11 dBm			T1	1		699.2245 MHz	12.45 dBm	Occ Bw	4.530938124 MHz	T2	1		703.7555 MHz	11.87 dBm			D1	M1	1	5.22 MHz	-0.10 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>698.88 MHz</td> <td>-9.40 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>699.2245 MHz</td> <td>10.18 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>703.7555 MHz</td> <td>9.75 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.16 MHz</td> <td>0.55 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		698.88 MHz	-9.40 dBm			T1	1		699.2245 MHz	10.18 dBm	Occ Bw	4.530938124 MHz	T2	1		703.7555 MHz	9.75 dBm			D1	M1	1	5.16 MHz	0.55 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		698.86 MHz	-8.11 dBm																																																																				
T1	1		699.2245 MHz	12.45 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		703.7555 MHz	11.87 dBm																																																																				
D1	M1	1	5.22 MHz	-0.10 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		698.88 MHz	-9.40 dBm																																																																				
T1	1		699.2245 MHz	10.18 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		703.7555 MHz	9.75 dBm																																																																				
D1	M1	1	5.16 MHz	0.55 dB																																																																				
Middle	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>704.92 MHz</td> <td>-8.98 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>705.2445 MHz</td> <td>11.31 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>709.7754 MHz</td> <td>10.88 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.19 MHz</td> <td>0.17 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		704.92 MHz	-8.98 dBm			T1	1		705.2445 MHz	11.31 dBm	Occ Bw	4.530938124 MHz	T2	1		709.7754 MHz	10.88 dBm			D1	M1	1	5.19 MHz	0.17 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>704.92 MHz</td> <td>-10.40 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>705.2445 MHz</td> <td>10.12 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>709.7754 MHz</td> <td>11.29 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.2 MHz</td> <td>0.45 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		704.92 MHz	-10.40 dBm			T1	1		705.2445 MHz	10.12 dBm	Occ Bw	4.530938124 MHz	T2	1		709.7754 MHz	11.29 dBm			D1	M1	1	5.2 MHz	0.45 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		704.92 MHz	-8.98 dBm																																																																				
T1	1		705.2445 MHz	11.31 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		709.7754 MHz	10.88 dBm																																																																				
D1	M1	1	5.19 MHz	0.17 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		704.92 MHz	-10.40 dBm																																																																				
T1	1		705.2445 MHz	10.12 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		709.7754 MHz	11.29 dBm																																																																				
D1	M1	1	5.2 MHz	0.45 dB																																																																				
Highest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>710.88 MHz</td> <td>-8.31 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>711.2246 MHz</td> <td>10.77 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>715.7555 MHz</td> <td>12.99 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.22 MHz</td> <td>0.19 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		710.88 MHz	-8.31 dBm			T1	1		711.2246 MHz	10.77 dBm	Occ Bw	4.530938124 MHz	T2	1		715.7555 MHz	12.99 dBm			D1	M1	1	5.22 MHz	0.19 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>710.86 MHz</td> <td>-9.89 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>711.2246 MHz</td> <td>10.42 dBm</td> <td>Occ Bw</td> <td>4.550898204 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>715.7554 MHz</td> <td>10.37 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.26 MHz</td> <td>-0.44 dB</td> <td></td> <td></td> </tr> </tbody> </table>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		710.86 MHz	-9.89 dBm			T1	1		711.2246 MHz	10.42 dBm	Occ Bw	4.550898204 MHz	T2	1		715.7554 MHz	10.37 dBm			D1	M1	1	5.26 MHz	-0.44 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		710.88 MHz	-8.31 dBm																																																																				
T1	1		711.2246 MHz	10.77 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		715.7555 MHz	12.99 dBm																																																																				
D1	M1	1	5.22 MHz	0.19 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		710.86 MHz	-9.89 dBm																																																																				
T1	1		711.2246 MHz	10.42 dBm	Occ Bw	4.550898204 MHz																																																																		
T2	1		715.7554 MHz	10.37 dBm																																																																				
D1	M1	1	5.26 MHz	-0.44 dB																																																																				

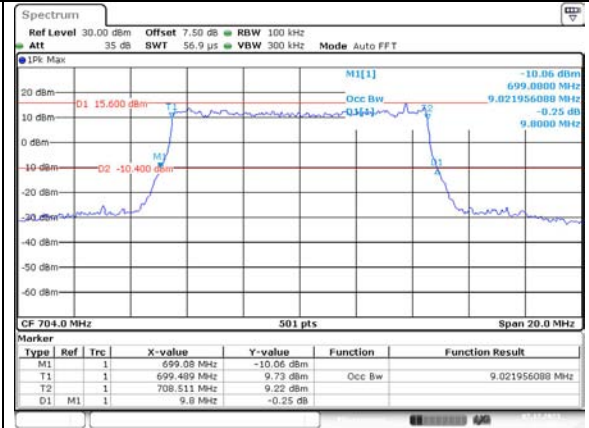
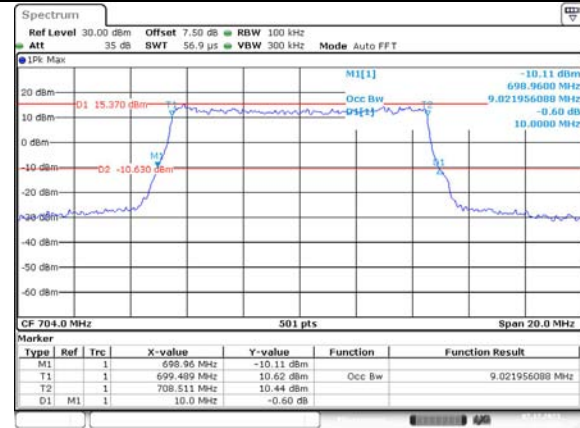
### Occupied Bandwidth

Channel

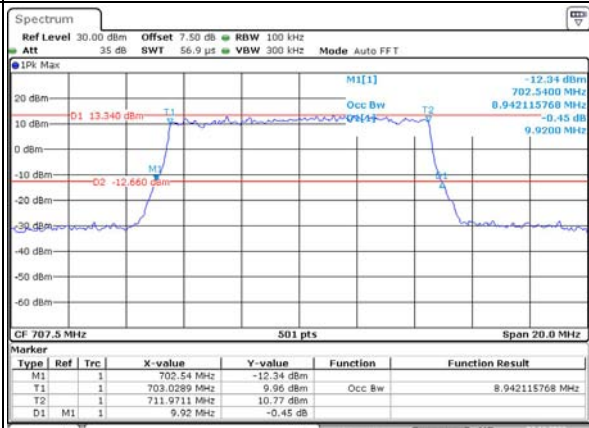
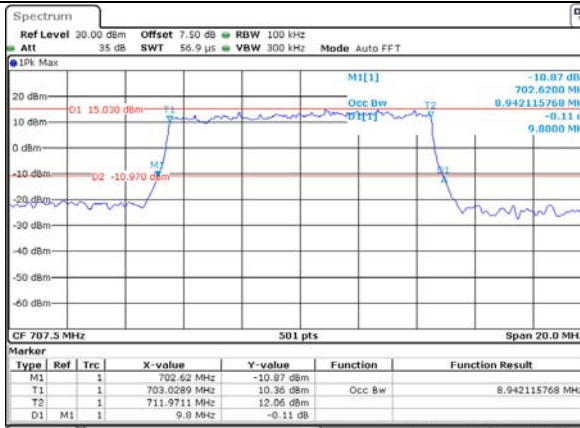
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

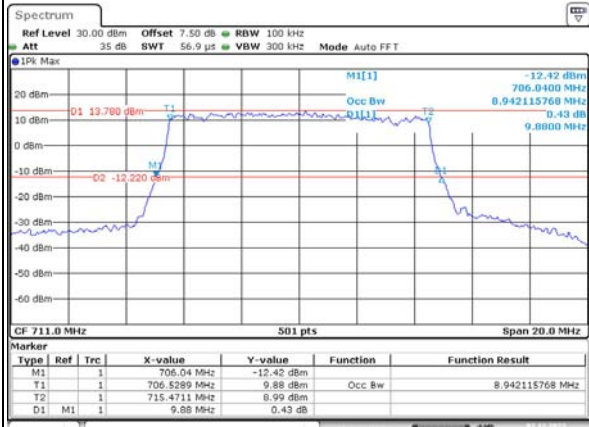
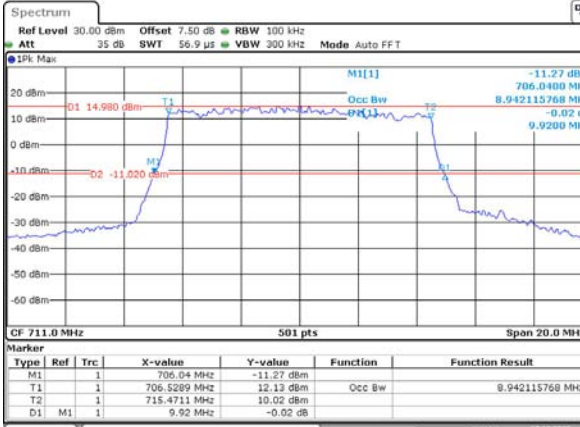
Lowest



Middle



Highest

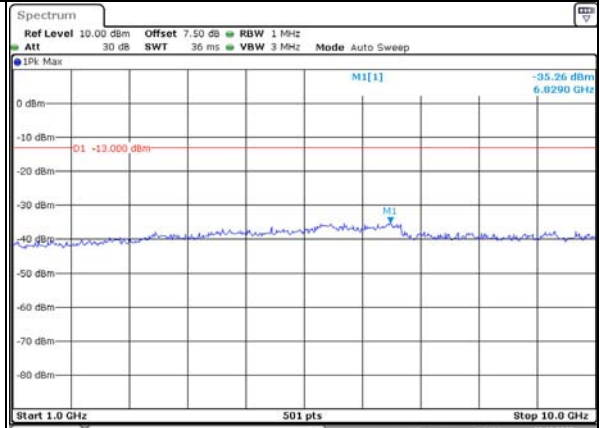
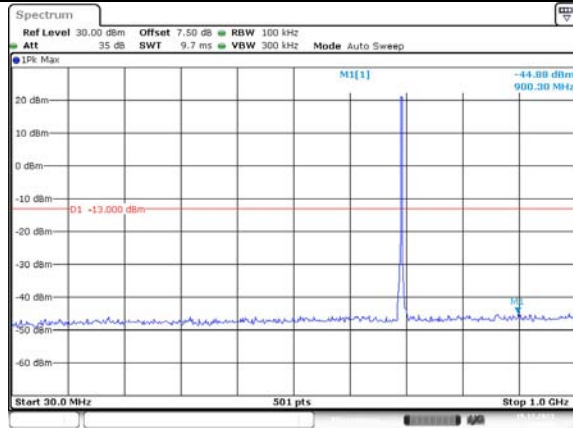


Spurious Emissions at Antenna Terminal

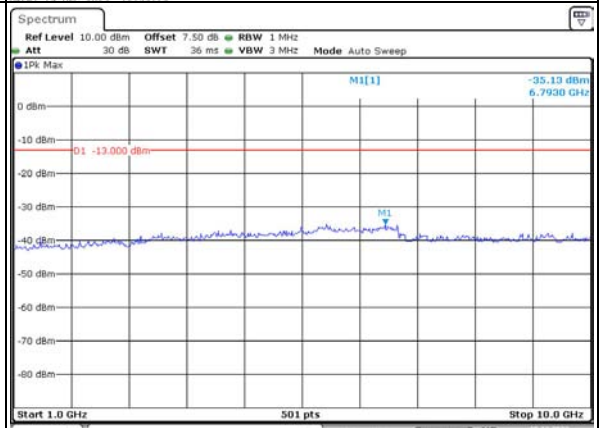
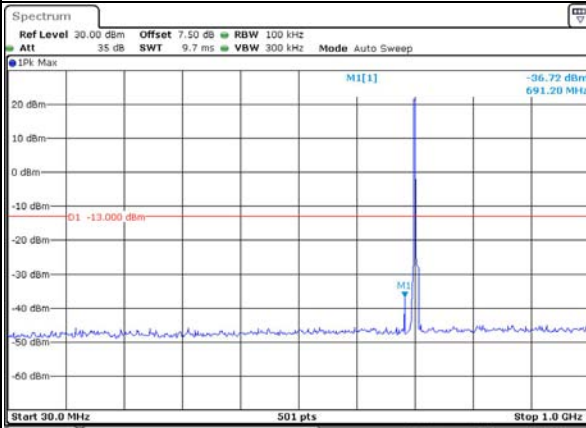
Channel

1.4MHz Bandwidth QPSK

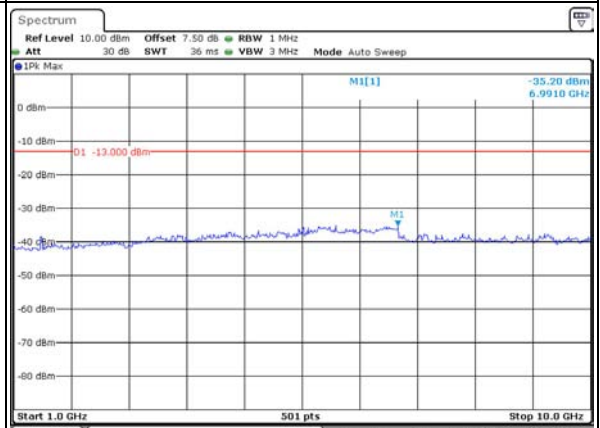
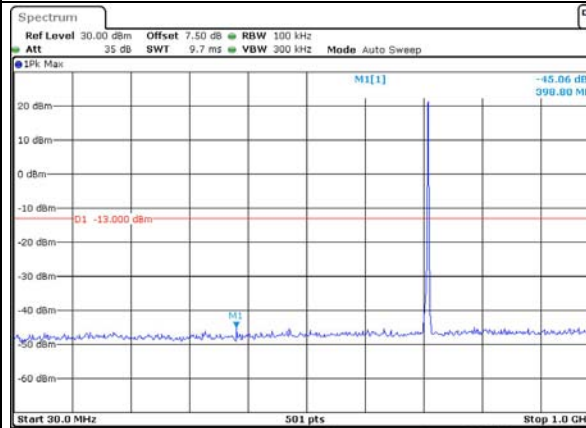
Lowest



Middle



Highest



Spurious Emissions at Antenna Terminal

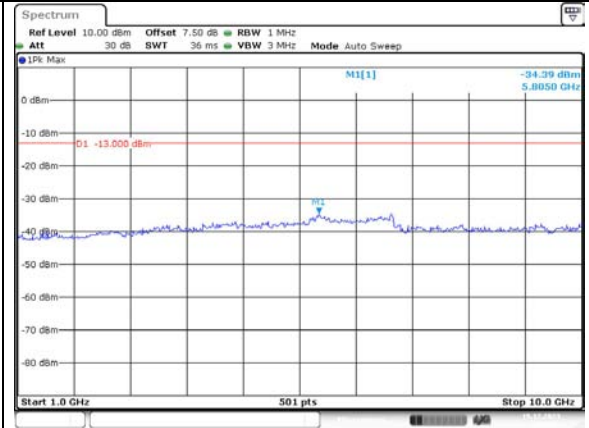
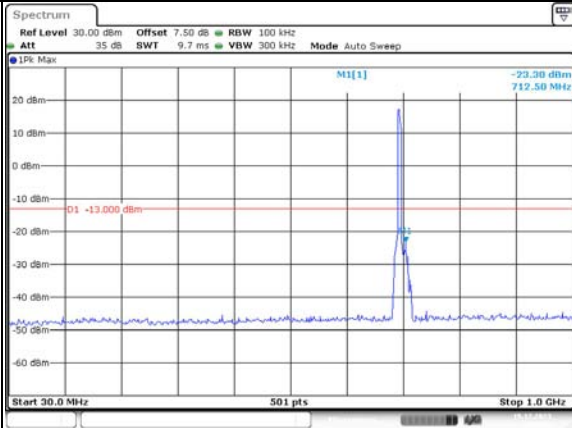
Channel	3MHz Bandwidth QPSK	
Lowest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:58:41</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:59:09</p>
Middle	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 12:59:39</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 13:00:01</p>
Highest	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 13:00:27</p>	<p>ProjectNo.:CR231164493 Testers:One Luo Date: 19.DEC.2023 13:00:56</p>

Spurious Emissions at Antenna Terminal

Channel

5MHz Bandwidth QPSK

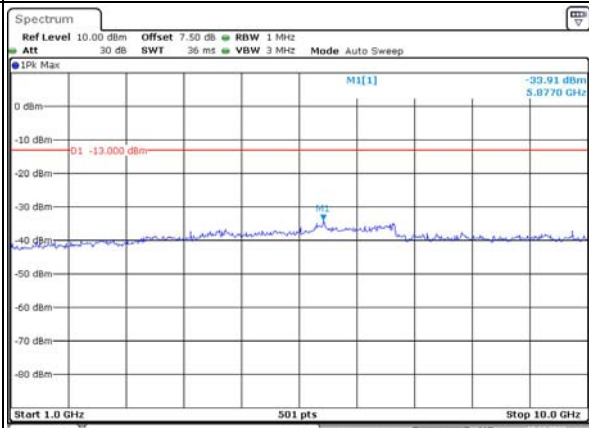
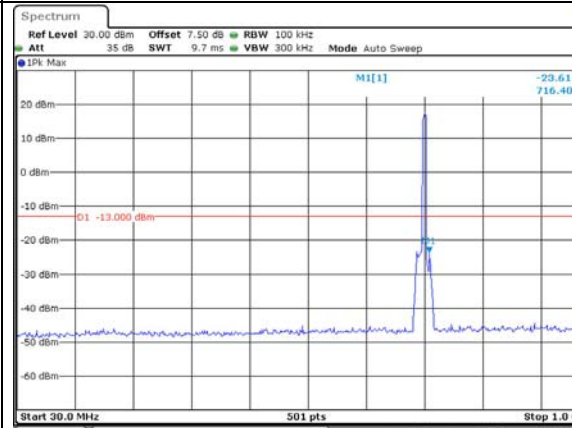
Lowest



ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:08:35

ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:09:03

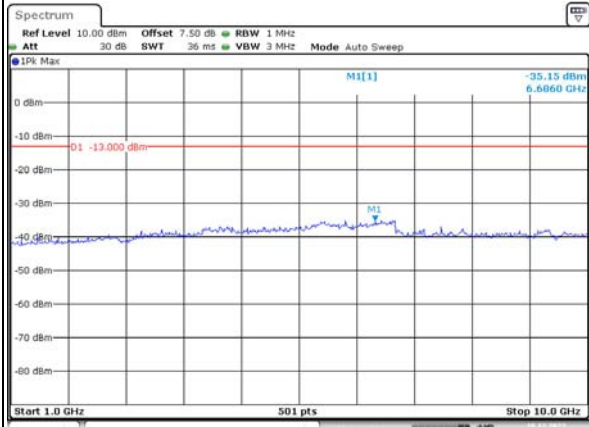
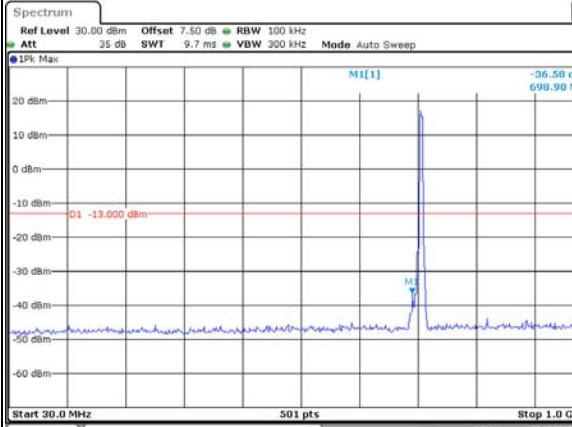
Middle



ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:09:42

ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:10:08

Highest



ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:10:41

ProjectNo.:CR231164493 TesteriOne Luo  
Date: 19.DEC.2023 13:11:12

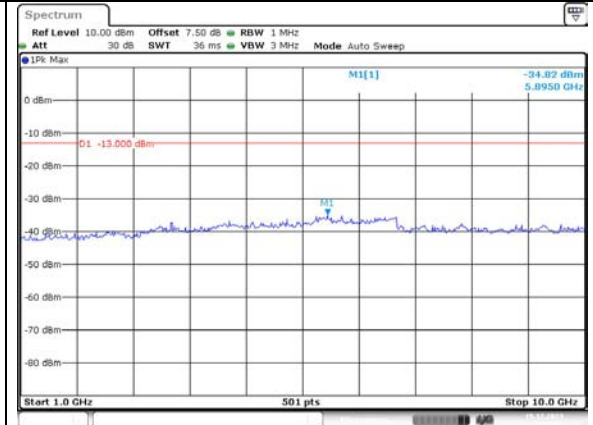
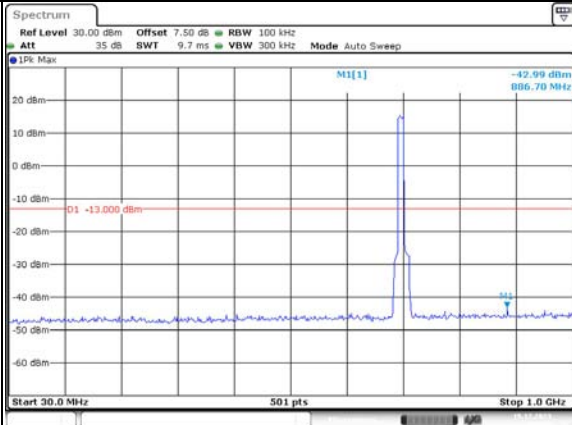


Spurious Emissions at Antenna Terminal

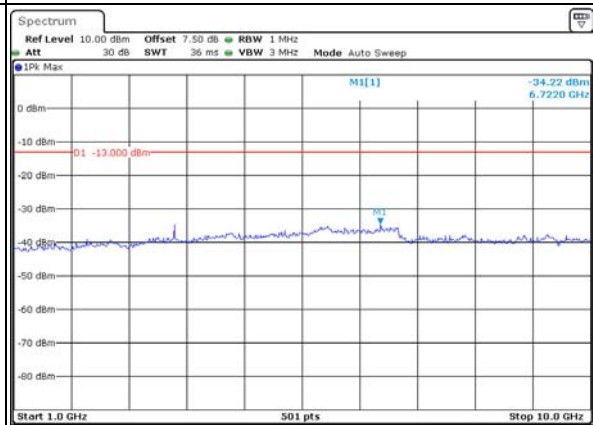
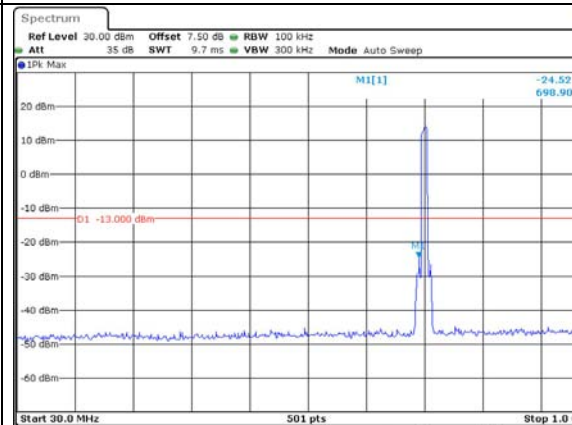
Channel

10MHz Bandwidth QPSK

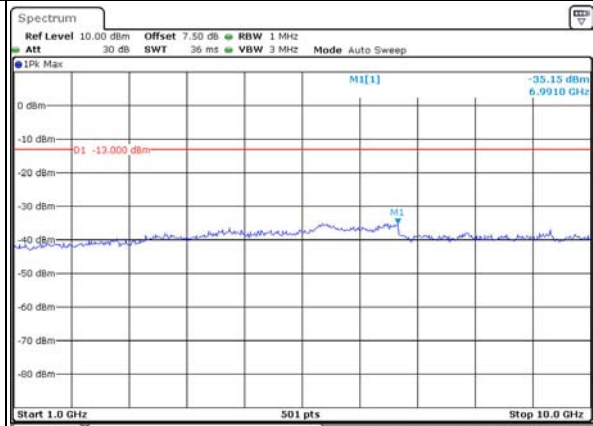
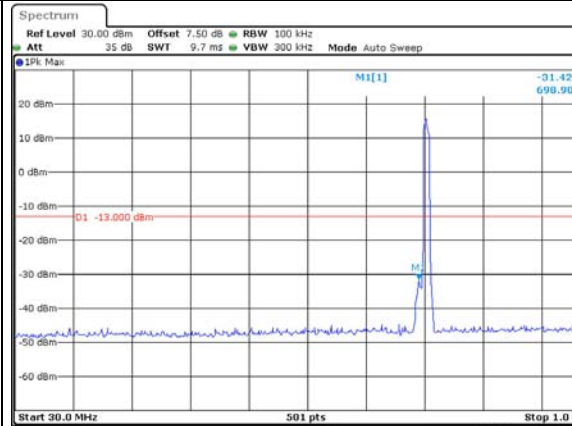
Lowest



Middle



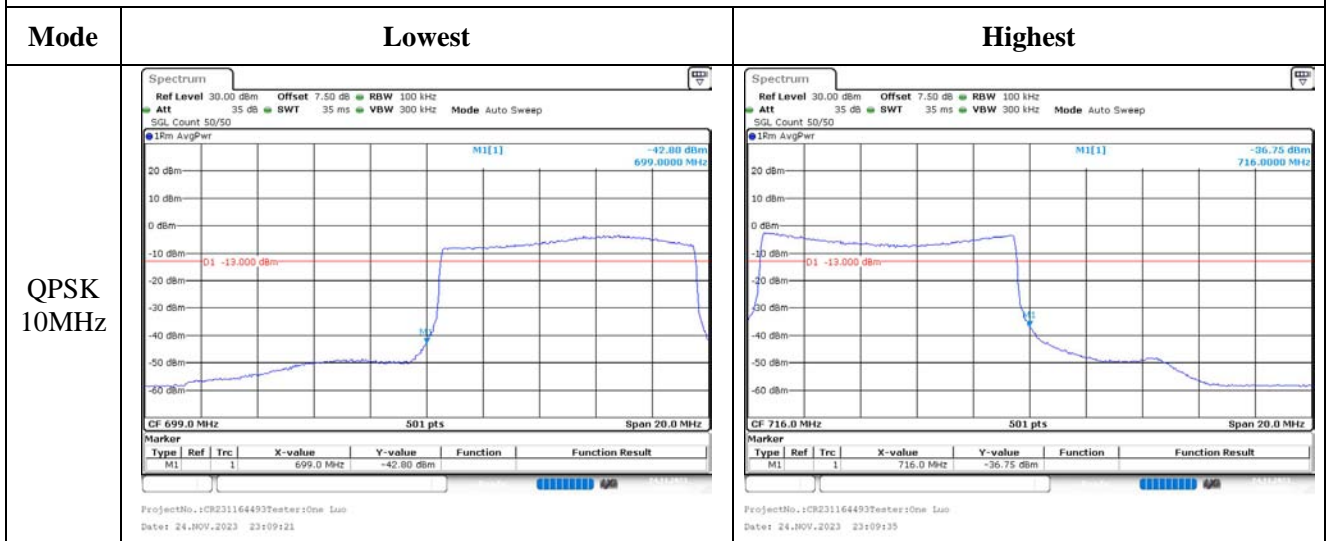
Highest



Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 1.4MHz		
QPSK 3MHz		
QPSK 5MHz		

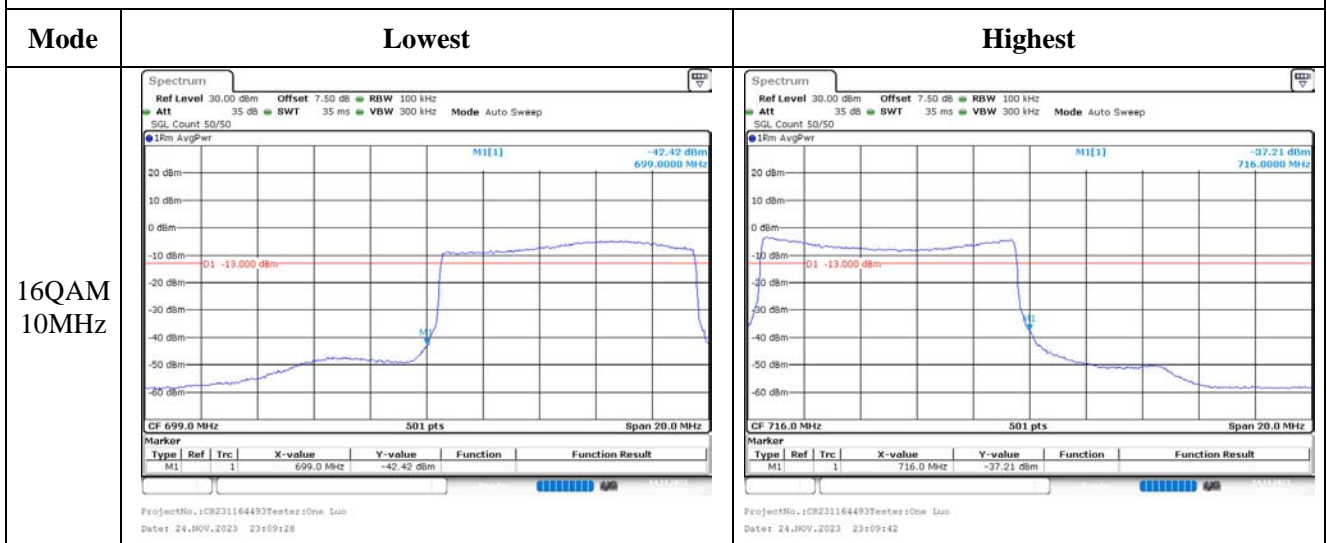
Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz		
16QAM 3MHz		
16QAM 5MHz		

Out of band emission, Band Edge



**4.11 Antenna Port Test Data and Results for LTE Band 17**

Serial Number:	2D1L-2	Test Date:	2023/11/24~2023/12/20
Test Site:	RF	Test Mode:	Transmitting
Tester:	One Luo	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	22.3~25.8	Relative Humidity: (%)	31~52	ATM Pressure: (kPa)	100.9~101.9
----------------------	-----------	---------------------------	-------	------------------------	-------------

**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	706.5	710	713.5
10MHz	709	710	711

**Test Data:**

<b>RF Output Power</b>						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Channel	Middle Channel	Highest Channel		
5MHz QPSK	RB1#0	23.59	23.51	23.48	16.04	34.77
	RB1#13	<b>23.69</b>	23.65	23.63		
	RB1#24	23.52	23.44	23.52		
	RB15#0	22.51	22.58	22.77		
	RB15#10	22.72	22.43	22.65		
	RB25#0	22.62	22.45	22.63		
5MHz 16QAM	RB1#0	22.87	22.61	22.33	15.27	34.77
	RB1#13	<b>22.92</b>	22.65	22.5		
	RB1#24	22.76	22.47	22.38		
	RB15#0	21.48	21.59	21.8		
	RB15#10	21.69	21.49	21.66		
	RB25#0	21.64	21.49	21.7		
10MHz QPSK	RB1#0	24.14	23.64	23.65	16.58	34.77
	RB1#25	<b>24.23</b>	23.74	23.72		
	RB1#49	24.05	23.62	23.64		
	RB25#0	22.89	22.43	22.53		
	RB25#25	22.7	22.37	22.43		
	RB50#0	22.75	22.4	22.48		
10MHz 16QAM	RB1#0	23.2	22.76	22.62	15.63	34.77
	RB1#25	<b>23.28</b>	22.75	22.7		
	RB1#49	23.1	22.72	22.58		
	RB25#0	21.48	21.46	21.62		
	RB25#25	21.39	21.33	21.52		
	RB50#0	21.41	21.39	21.51		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + Gr(dBd)

Gr(dBd)=Gr(dBi)-2.15

**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	
10MHz QPSK	RB1#0	5.65	5.62	5.8	13
	RB50#0	5.07	5.01	5.13	13
10MHz 16QAM	RB1#0	6.64	6.23	6.7	13
	RB50#0	6	6	5.97	13
				<b>Result:</b>	<b>Pass</b>

<b>Occupied Bandwidth</b>						
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	4.531	4.511	4.551	5.18	5.16	5.24
5MHz 16QAM	4.531	4.551	4.531	5.22	5.22	5.22
10MHz QPSK	8.942	8.942	8.942	9.92	9.72	9.88
10MHz 16QAM	8.942	8.942	8.982	9.8	9.8	9.84

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

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

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

<b>Frequency Stability</b>						
Test Mode:	10M QPSK	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	704.534	704.00	715.441	716.00
	-20	3.8	704.501	704.00	715.497	716.00
	-10	3.8	704.591	704.00	715.473	716.00
	0	3.8	704.532	704.00	715.410	716.00
	10	3.8	704.584	704.00	715.400	716.00
	20	3.8	704.529	704.00	715.471	716.00
	30	3.8	704.593	704.00	715.427	716.00
	40	3.8	704.551	704.00	715.454	716.00
Frequency Stability vs. Voltage	20	3.2	704.558	704.00	715.443	716.00
	20	4.4	704.560	704.00	715.436	716.00
					<b>Result:</b>	<b>Pass</b>



Test Mode:	10M 16QAM	Test Channel: Lowest for Lower Edge, Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	704.548	704.00	715.455	716.00
	-20	3.8	704.507	704.00	715.438	716.00
	-10	3.8	704.503	704.00	715.411	716.00
	0	3.8	704.541	704.00	715.432	716.00
	10	3.8	704.541	704.00	715.440	716.00
	20	3.8	704.529	704.00	715.471	716.00
	30	3.8	704.522	704.00	715.421	716.00
	40	3.8	704.515	704.00	715.437	716.00
	50	3.8	704.520	704.00	715.470	716.00
Frequency Stability vs. Voltage	20	3.2	704.580	704.00	715.442	716.00
	20	4.4	704.518	704.00	715.415	716.00
					<b>Result:</b>	<b>Pass</b>

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

**Occupied Bandwidth**

Channel	5MHz Bandwidth QPSK	5MHz Bandwidth 16QAM																																																																						
Lowest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>703.92 MHz</td> <td>-8.88 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>704.2445 MHz</td> <td>11.59 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>706.7754 MHz</td> <td>11.00 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.18 MHz</td> <td>-0.25 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:14:13</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		703.92 MHz	-8.88 dBm			T1	1		704.2445 MHz	11.59 dBm	Occ Bw	4.530938124 MHz	T2	1		706.7754 MHz	11.00 dBm			D1	M1	1	5.18 MHz	-0.25 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>703.92 MHz</td> <td>-10.01 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>704.2445 MHz</td> <td>10.46 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>706.7754 MHz</td> <td>11.00 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.22 MHz</td> <td>-0.20 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:14:40</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		703.92 MHz	-10.01 dBm			T1	1		704.2445 MHz	10.46 dBm	Occ Bw	4.530938124 MHz	T2	1		706.7754 MHz	11.00 dBm			D1	M1	1	5.22 MHz	-0.20 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		703.92 MHz	-8.88 dBm																																																																				
T1	1		704.2445 MHz	11.59 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		706.7754 MHz	11.00 dBm																																																																				
D1	M1	1	5.18 MHz	-0.25 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		703.92 MHz	-10.01 dBm																																																																				
T1	1		704.2445 MHz	10.46 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		706.7754 MHz	11.00 dBm																																																																				
D1	M1	1	5.22 MHz	-0.20 dB																																																																				
Middle	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>707.42 MHz</td> <td>-9.25 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>707.7445 MHz</td> <td>11.42 dBm</td> <td>Occ Bw</td> <td>4.510978044 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>712.2555 MHz</td> <td>12.00 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.16 MHz</td> <td>-0.36 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:15:01</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		707.42 MHz	-9.25 dBm			T1	1		707.7445 MHz	11.42 dBm	Occ Bw	4.510978044 MHz	T2	1		712.2555 MHz	12.00 dBm			D1	M1	1	5.16 MHz	-0.36 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>707.38 MHz</td> <td>-10.54 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>707.7245 MHz</td> <td>8.86 dBm</td> <td>Occ Bw</td> <td>4.550898204 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>712.2754 MHz</td> <td>9.58 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.22 MHz</td> <td>-0.11 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:15:21</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		707.38 MHz	-10.54 dBm			T1	1		707.7245 MHz	8.86 dBm	Occ Bw	4.550898204 MHz	T2	1		712.2754 MHz	9.58 dBm			D1	M1	1	5.22 MHz	-0.11 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		707.42 MHz	-9.25 dBm																																																																				
T1	1		707.7445 MHz	11.42 dBm	Occ Bw	4.510978044 MHz																																																																		
T2	1		712.2555 MHz	12.00 dBm																																																																				
D1	M1	1	5.16 MHz	-0.36 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		707.38 MHz	-10.54 dBm																																																																				
T1	1		707.7245 MHz	8.86 dBm	Occ Bw	4.550898204 MHz																																																																		
T2	1		712.2754 MHz	9.58 dBm																																																																				
D1	M1	1	5.22 MHz	-0.11 dB																																																																				
Highest	<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>710.86 MHz</td> <td>-9.44 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>711.2245 MHz</td> <td>12.47 dBm</td> <td>Occ Bw</td> <td>4.550898204 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>715.7754 MHz</td> <td>11.06 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.24 MHz</td> <td>0.24 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:15:49</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		710.86 MHz	-9.44 dBm			T1	1		711.2245 MHz	12.47 dBm	Occ Bw	4.550898204 MHz	T2	1		715.7754 MHz	11.06 dBm			D1	M1	1	5.24 MHz	0.24 dB			<table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</th> <th>Y-value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>710.86 MHz</td> <td>-9.48 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>711.2245 MHz</td> <td>10.16 dBm</td> <td>Occ Bw</td> <td>4.530938124 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>715.7554 MHz</td> <td>10.59 dBm</td> <td></td> <td></td> </tr> <tr> <td>D1</td> <td>M1</td> <td>1</td> <td>5.22 MHz</td> <td>0.16 dB</td> <td></td> <td></td> </tr> </tbody> </table> <p>ProjectNo.:CR231164493Tester:One Luo Date: 7.DEC.2023 11:16:09</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		710.86 MHz	-9.48 dBm			T1	1		711.2245 MHz	10.16 dBm	Occ Bw	4.530938124 MHz	T2	1		715.7554 MHz	10.59 dBm			D1	M1	1	5.22 MHz	0.16 dB		
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		710.86 MHz	-9.44 dBm																																																																				
T1	1		711.2245 MHz	12.47 dBm	Occ Bw	4.550898204 MHz																																																																		
T2	1		715.7754 MHz	11.06 dBm																																																																				
D1	M1	1	5.24 MHz	0.24 dB																																																																				
Type	Ref	Trc	X-value	Y-value	Function	Function Result																																																																		
M1	1		710.86 MHz	-9.48 dBm																																																																				
T1	1		711.2245 MHz	10.16 dBm	Occ Bw	4.530938124 MHz																																																																		
T2	1		715.7554 MHz	10.59 dBm																																																																				
D1	M1	1	5.22 MHz	0.16 dB																																																																				

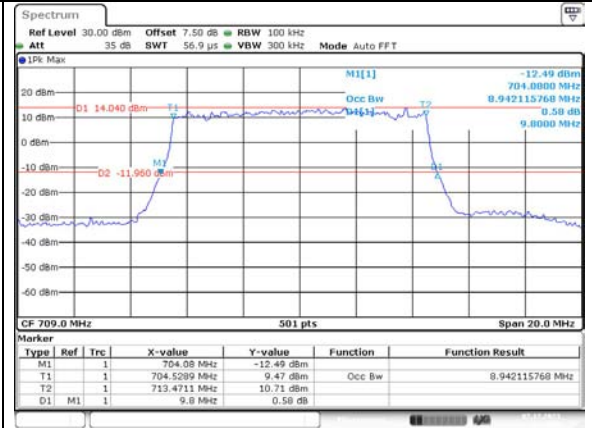
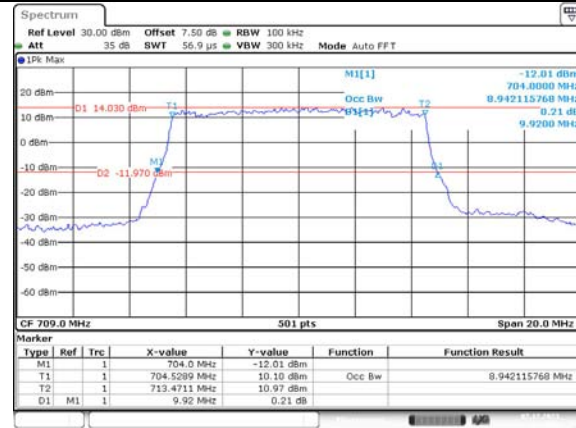
### Occupied Bandwidth

Channel

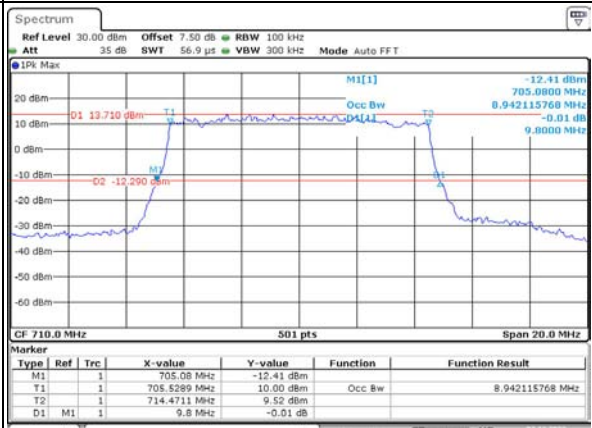
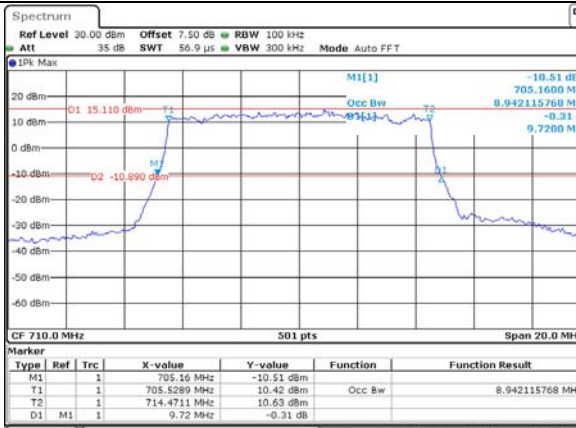
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

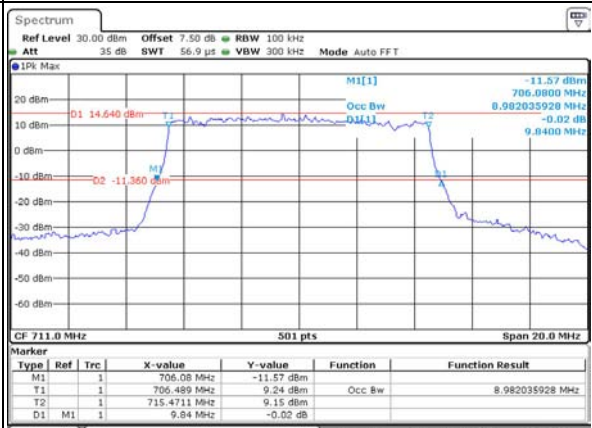
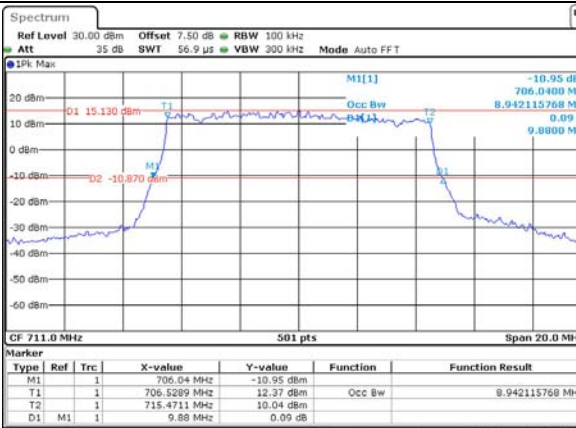
Lowest



Middle



Highest



Spurious Emissions at Antenna Terminal

Channel	5MHz Bandwidth QPSK	
Lowest	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:17:01</p>	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:17:26</p>
Middle	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:17:56</p>	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:18:25</p>
Highest	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:18:51</p>	<p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:19:17</p>

Spurious Emissions at Antenna Terminal

Channel	10MHz Bandwidth QPSK	
Lowest	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -91.19 dBm 695.10 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:21:40</p>	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -35.00 dBm 6.9970 GHz</p> <p>Start 1.0 GHz 501 pts Stop 10.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:22:09</p>
Middle	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -31.06 dBm 697.00 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:22:32</p>	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -35.74 dBm 6.9930 GHz</p> <p>Start 1.0 GHz 501 pts Stop 10.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:22:58</p>
Highest	<p>Ref Level 30.00 dBm Offset 7.50 dB RBW 100 kHz Att 35 dB SWT 9.7 ms VBW 300 kHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -44.32 dBm 857.70 MHz</p> <p>Start 30.0 MHz 501 pts Stop 1.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:23:22</p>	<p>Ref Level 10.00 dBm Offset 7.50 dB RBW 1 MHz Att 30 dB SWT 36 ms VBW 3 MHz Mode Auto Sweep</p> <p>1Pk Max MI[1] -35.07 dBm 6.9930 GHz</p> <p>Start 1.0 GHz 501 pts Stop 10.0 GHz</p> <p>ProjectNo.:CR231164493 Tester:One Luo Date: 19.DEC.2023 13:23:47</p>

Out of band emission, Band Edge

