

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz		
QPSK 15MHz		
QPSK 20MHz		

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 1.4MHz	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz                      Att 40 dB SWT 35 ms VBW 100 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -32.57 dBm                      1.7100000 GHz                      -13.000 dBm                      CF 1.71 GHz 501 pts Span 3.0 MHz                      Date: 1.SEP.2022 01:29:51</p>	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz                      Att 40 dB SWT 35 ms VBW 100 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -30.54 dBm                      1.7800000 GHz                      -13.000 dBm                      CF 1.78 GHz 501 pts Span 3.0 MHz                      Date: 1.SEP.2022 01:30:03</p>
16QAM 3MHz	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz                      Att 40 dB SWT 35 ms VBW 100 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -28.15 dBm                      1.7100000 GHz                      -13.000 dBm                      CF 1.71 GHz 501 pts Span 6.0 MHz                      Date: 1.SEP.2022 01:30:19</p>	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 30 kHz                      Att 40 dB SWT 35 ms VBW 100 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -27.11 dBm                      1.7800000 GHz                      -13.000 dBm                      CF 1.78 GHz 501 pts Span 6.0 MHz                      Date: 1.SEP.2022 01:30:32</p>
16QAM 5MHz	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz                      Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -30.54 dBm                      1.7100000 GHz                      -13.000 dBm                      CF 1.71 GHz 501 pts Span 10.0 MHz                      Date: 1.SEP.2022 01:30:48</p>	<p>Spectrum                      Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz                      Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep                      SQL Count 50/50                      1Rm AvgPwr                      M1[1] -28.48 dBm                      1.7800000 GHz                      -13.000 dBm                      CF 1.78 GHz 501 pts Span 10.0 MHz                      Date: 1.SEP.2022 01:31:01</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -37.28 dBm 1.7100000 GHz -13.000 dBm CF 1.71 GHz 501 pts Span 20.0 MHz Date: 1.SEP.2022 01:31:18</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -35.80 dBm 1.7800000 GHz -13.000 dBm CF 1.78 GHz 501 pts Span 20.0 MHz Date: 1.SEP.2022 01:31:32</p>
16QAM 15MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -32.61 dBm 1.7100000 GHz -13.000 dBm CF 1.71 GHz 501 pts Span 30.0 MHz Date: 1.SEP.2022 01:31:50</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -32.00 dBm 1.7800000 GHz -13.000 dBm CF 1.78 GHz 501 pts Span 30.0 MHz Date: 1.SEP.2022 01:32:04</p>
16QAM 20MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -34.42 dBm 1.7100000 GHz -13.000 dBm CF 1.71 GHz 501 pts Span 40.0 MHz Date: 1.SEP.2022 01:32:22</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -34.84 dBm 1.7800000 GHz -13.000 dBm CF 1.78 GHz 501 pts Span 40.0 MHz Date: 1.SEP.2022 01:32:37</p>

**4.14 Antenna Port Test Data and Results for LTE Band 71**

Serial Number:	CR22080045-RF-S1	Test Date:	2022-08-31~2022-09-02
Test Site:	RF	Test Mode:	Transmitting
Tester:	George Chen	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	25.2~25.9	Relative Humidity: (%)	53~61	ATM Pressure: (kPa)	100.1~100.6
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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	2022-07-15	2023-07-14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Unknown	Coaxial tee connector	Unknown	2204004	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
R&S	Wideband Radio Communication Tester	CMW500	149218	2022-07-15	2023-07-14
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2022-04-06	2023-04-05
UNI-T	Multimeter	UT39A+	C210582554	2021-09-30	2022-09-29
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).

**EUT Information@ LTE Band 71▲:**

Antenna Gain (dBi):	0.17	Antenna Gain (dBd):	-1.98	Path Loss L <sub>c</sub> (dB):	0.2
Operation Voltage(V <sub>DC</sub> ):					
Lowest:	3.5	Normal:	3.8	Highest:	4.35

**Test Frequency For Each Mode:**

Operation Bandwidth	Lowest Frequency (MHz)	Middle Frequency (MHz)	Highest Frequency (MHz)
5MHz	665.5	680.5	695.5
10MHz	668	680.5	693
15MHz	670.5	680.5	690.5
20MHz	673	680.5	688

**Test Data:**

<b>FCC§2.1046;§ 27.50(c) (10)</b>						
<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	22.37	21.72	21.83	20.19	34.77
	RB1#13	22.08	21.82	21.74		
	RB1#24	22.06	21.88	21.82		
	RB15#0	21.03	20.97	20.85		
	RB15#10	21.08	20.93	20.9		
	RB25#0	21.03	20.85	20.86		
5MHz 16QAM	RB1#0	20.02	20.74	20.7	18.71	34.77
	RB1#13	20.01	20.73	20.67		
	RB1#24	20.02	20.89	20.85		
	RB15#0	20.54	20.41	20.42		
	RB15#10	20.65	20.51	20.52		
	RB25#0	20.71	20.59	20.45		
10MHz QPSK	RB1#0	22.02	21.92	21.66	19.9	34.77
	RB1#25	21.99	21.91	21.7		
	RB1#49	22.08	21.88	21.87		
	RB25#0	21.07	20.92	20.82		
	RB25#25	21.19	21.04	20.92		
	RB50#0	21.15	20.94	20.84		
10MHz 16QAM	RB1#0	21.27	20.97	20.85	19.09	34.77
	RB1#25	21.18	20.91	20.89		
	RB1#49	21.15	20.93	20.97		
	RB25#0	20.66	20.46	20.31		
	RB25#25	20.57	20.48	20.37		
	RB50#0	20.57	20.56	20.42		
15MHz QPSK	RB1#0	22.21	21.95	21.84	20.03	34.77
	RB1#38	22.13	21.8	21.86		
	RB1#74	22.13	21.93	21.91		
	RB36#0	21.21	20.97	20.83		
	RB36#39	21.07	20.87	21.05		
	RB75#0	21.06	20.97	20.86		
15MHz 16QAM	RB1#0	21.4	20.99	20.78	19.24	34.77
	RB1#38	21.34	20.97	20.83		
	RB1#74	21.42	20.93	20.98		
	RB36#0	20.71	20.53	20.44		
	RB36#39	20.59	20.49	20.53		
	RB75#0	20.58	20.48	20.51		
20MHz QPSK	RB1#0	22.32	21.96	21.92	20.14	34.77
	RB1#50	22.31	21.98	21.98		

	RB1#99	22.3	21.98	22.03		
	RB50#0	21.03	21	20.83		
	RB50#50	21.11	20.96	20.91		
	RB100#0	21.16	20.96	20.84		
20MHz 16QAM	RB1#0	21.26	21.53	20.83	19.35	34.77
	RB1#50	21.27	21.47	20.77		
	RB1#99	21.38	21.52	20.88		
	RB50#0	20.56	20.53	20.5		
	RB50#50	20.6	20.47	20.44		
	RB100#0	20.64	20.52	20.47		

Note: ERP=Conducted Power(dBm) - Cable loss(dB) + Antenna Gain(dBd)

**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	4.96	5.57	6.14	13
	RB100#0	5.83	5.59	5.45	13
20MHz 16QAM	RB1#0	6.14	6.58	7.01	13
	RB100#0	6.58	6.46	6.38	13
<b>Result:</b>					<b>Pass</b>

### FCC §2.1049, §27.53:Occupied Bandwidth

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Low Channel	Middle channel	High Channel	Low Channel	Middle Channel	High Channel
5MHz QPSK	4.511	4.511	4.511	4.98	4.98	5
5MHz 16QAM	4.491	4.511	4.511	4.96	4.98	5.04
10MHz QPSK	8.982	8.942	8.902	9.76	9.72	9.68
10MHz 16QAM	8.982	8.982	8.902	9.76	9.76	9.8
15MHz QPSK	13.533	13.413	13.533	14.94	15	15
15MHz 16QAM	13.593	13.473	13.533	15.18	14.94	14.94
20MHz QPSK	17.964	17.964	18.124	19.44	19.36	19.84
20MHz 16QAM	17.964	17.964	18.124	19.6	19.6	19.84

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

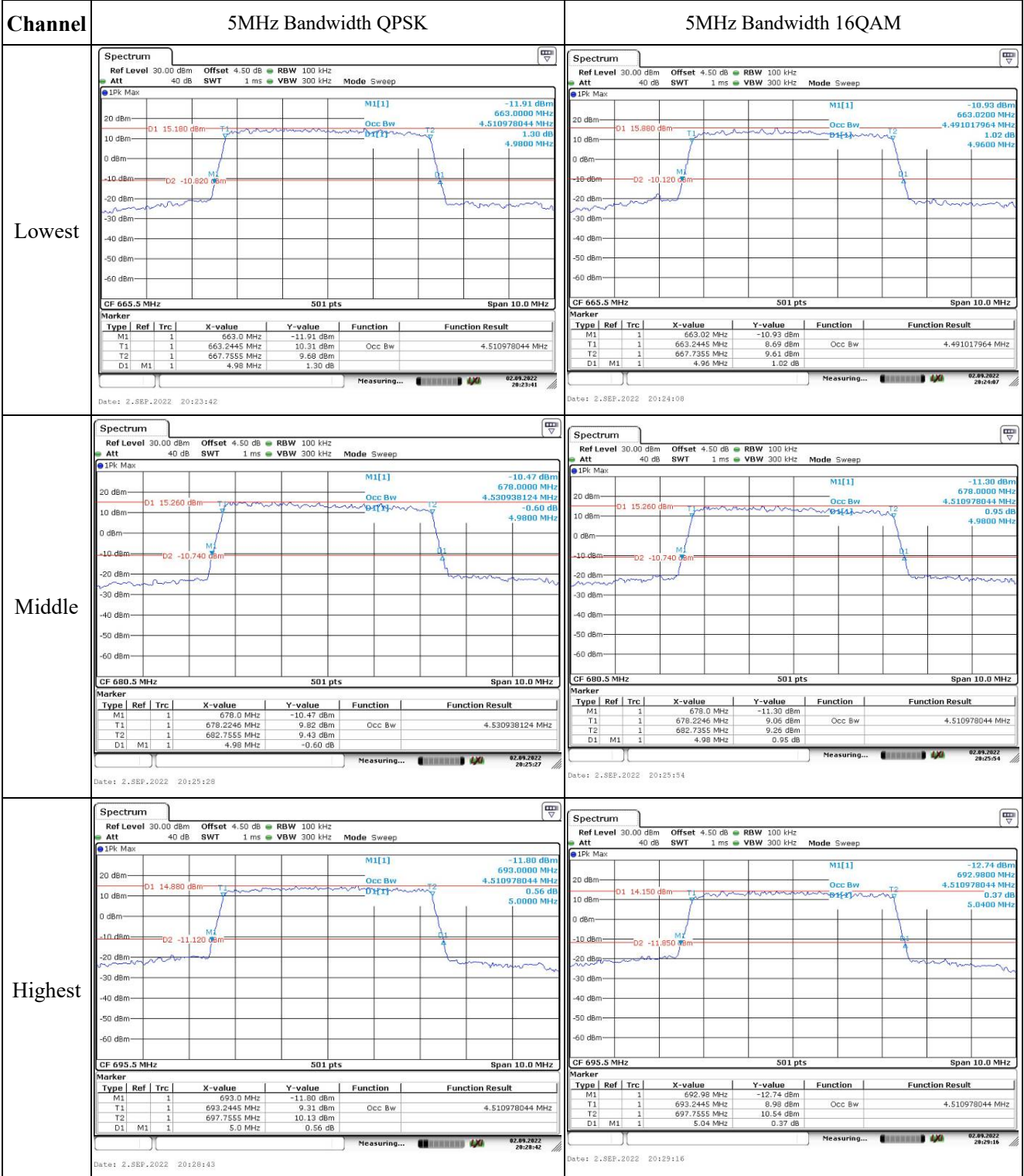
**FCC §2.1051, §27.53:Spurious Emissions at Antenna Terminal****Result: Pass, Please refer to the test plots of Spurious Emissions at Antenna Terminal.****FCC §2.1051, §27.53:Out of band emission, Band Edge****Result: Pass, Please refer to the test plots of Out of band emission, Band Edge.****FCC §2.1055, §27.54: Frequency Stability**

Test Mode:	20M QPSK	Test Channel: Lowest for Lower Edge,Highest for Upper Edge				
Test Item	Temperature (°C)	Voltage (V <sub>DC</sub> )	Lower Edge (MHz)		Upper Edge (MHz)	
			Result	Limit	Result	Limit
Frequency Stability vs. Temperature	-30	3.8	664.016	663.00	697.170	698.00
	-20	3.8	664.058	663.00	697.136	698.00
	-10	3.8	664.071	663.00	697.130	698.00
	0	3.8	664.084	663.00	697.153	698.00
	10	3.8	664.075	663.00	697.096	698.00
	20	3.8	664.058	663.00	697.102	698.00
	30	3.8	664.067	663.00	697.107	698.00
	40	3.8	664.051	663.00	697.122	698.00
Frequency Stability vs. Voltage	20	3.5	664.012	663.00	697.161	698.00
	20	4.35	664.046	663.00	697.104	698.00
<b>Result:</b>					<b>Pass</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	664.097	663.00	697.100	698.00
	-20	3.8	664.015	663.00	697.129	698.00
	-10	3.8	664.055	663.00	697.107	698.00
	0	3.8	664.017	663.00	697.092	698.00
	10	3.8	664.022	663.00	697.108	698.00
	20	3.8	664.058	663.00	697.102	698.00
	30	3.8	664.085	663.00	697.092	698.00
	40	3.8	664.044	663.00	697.136	698.00
Frequency Stability vs. Voltage	20	3.5	664.003	663.00	697.102	698.00
	20	4.35	664.055	663.00	697.103	698.00
<b>Result:</b>					<b>Pass</b>	

Test Plots:

Occupied Bandwidth





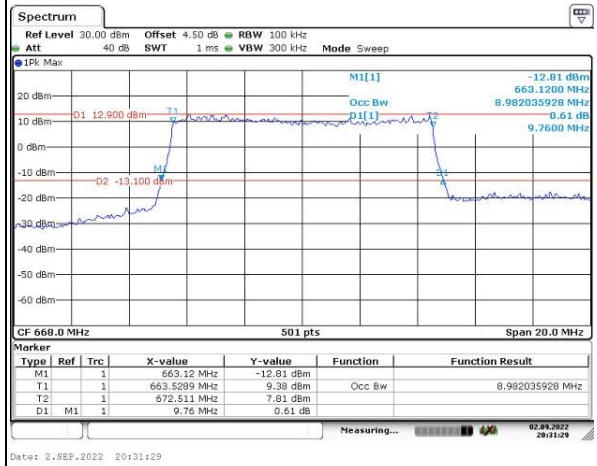
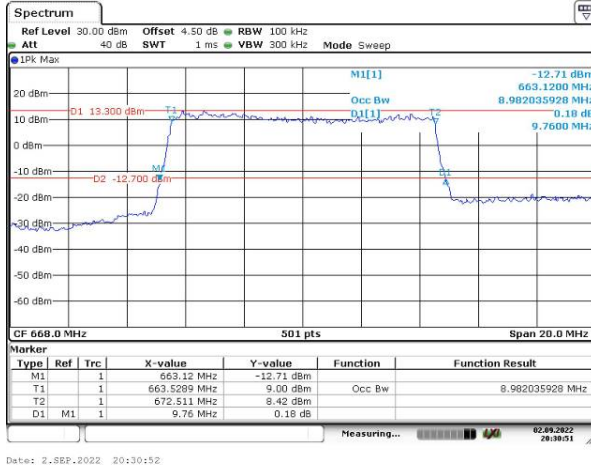
### Occupied Bandwidth

Channel

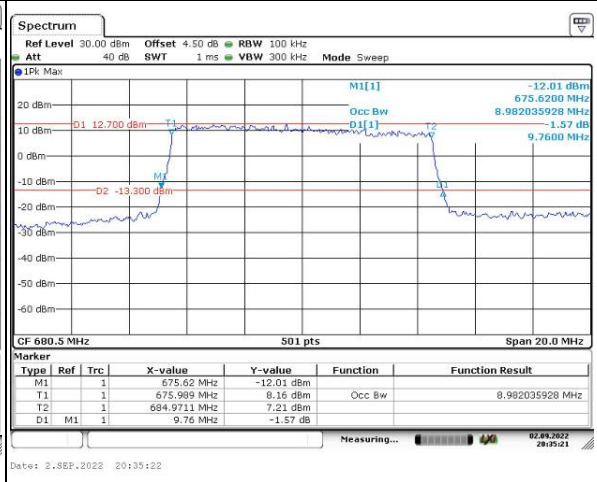
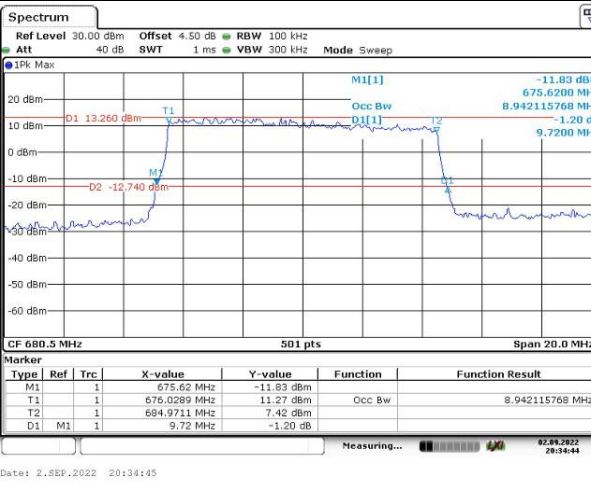
10MHz Bandwidth QPSK

10MHz Bandwidth 16QAM

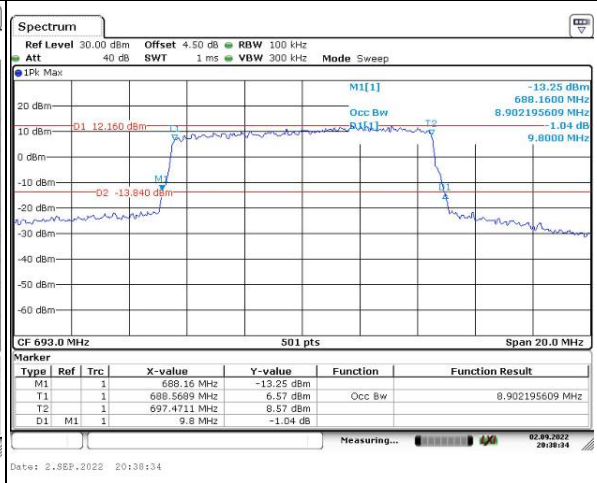
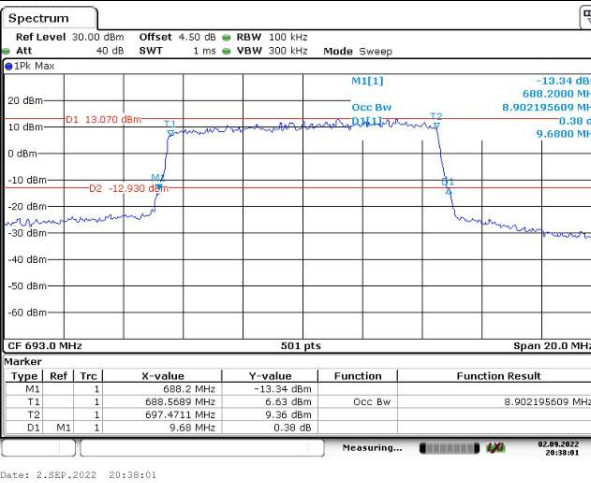
Lowest



Middle



Highest



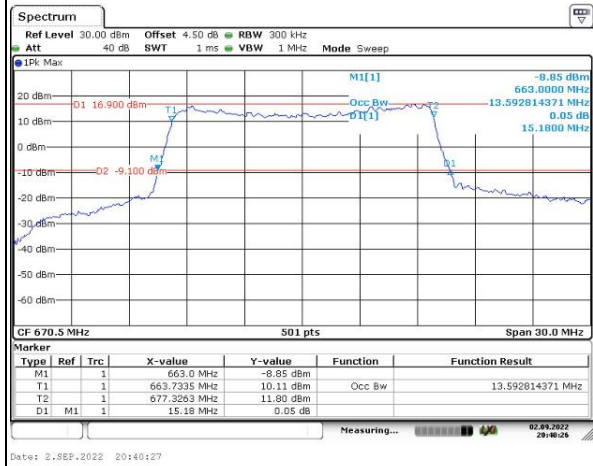
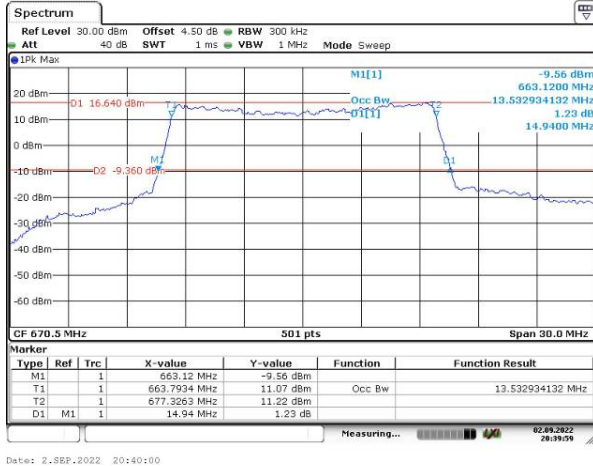
Occupied Bandwidth

Channel

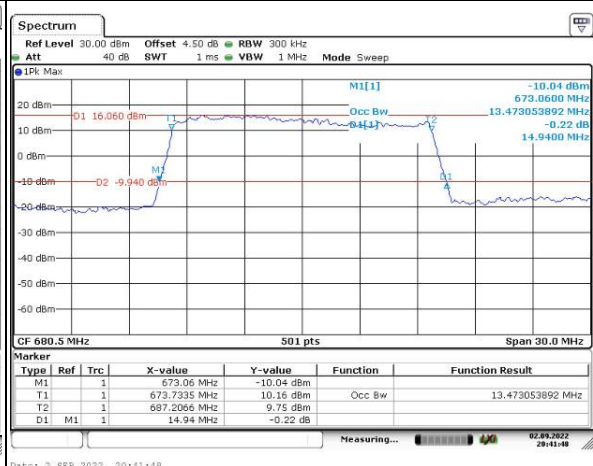
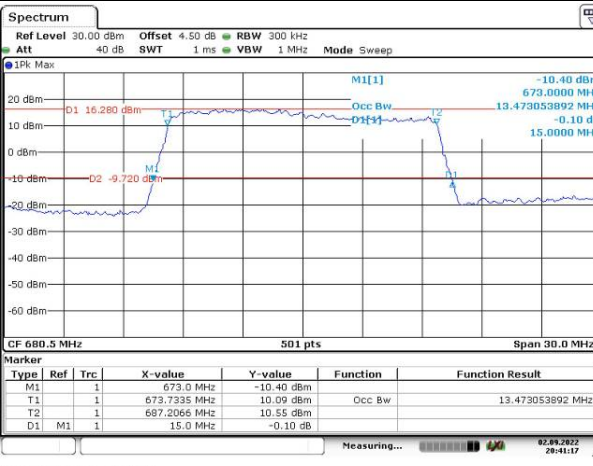
15MHz Bandwidth QPSK

15MHz Bandwidth 16QAM

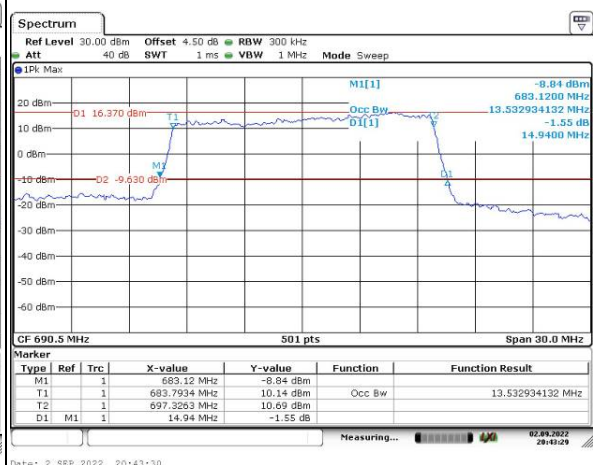
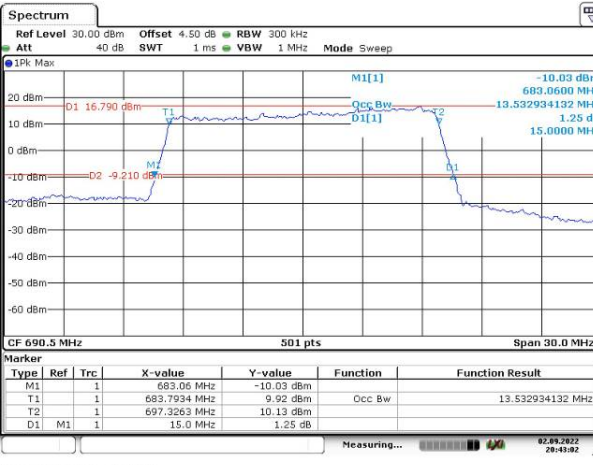
Lowest



Middle



Highest



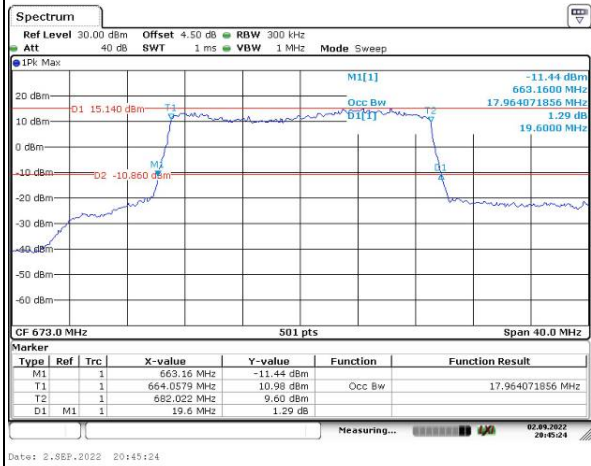
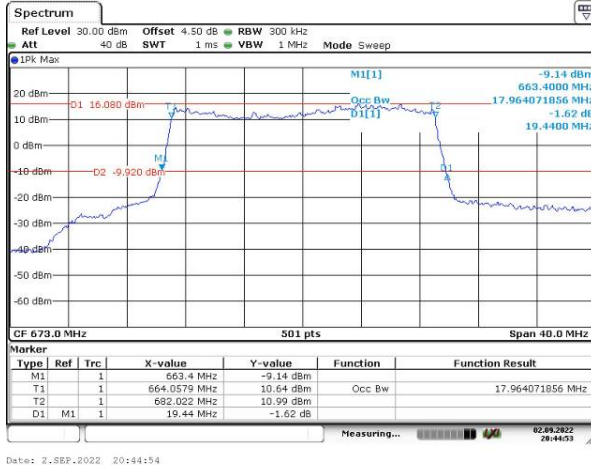
### Occupied Bandwidth

Channel

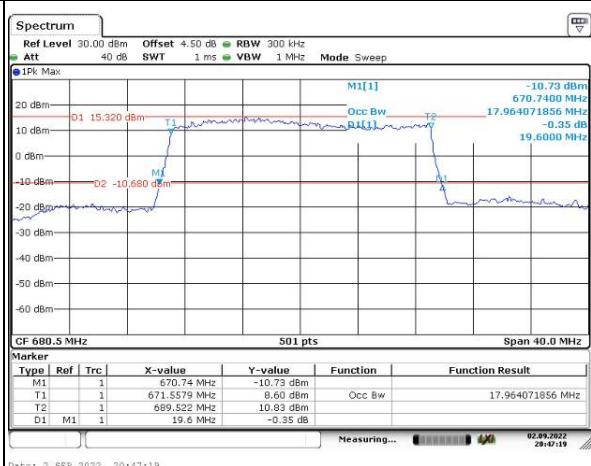
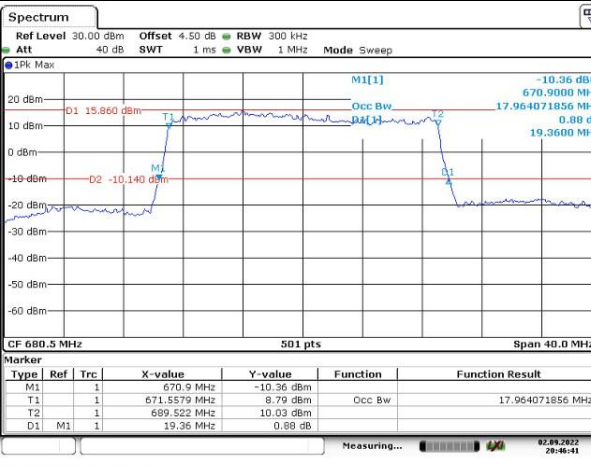
20MHz Bandwidth QPSK

20MHz Bandwidth 16QAM

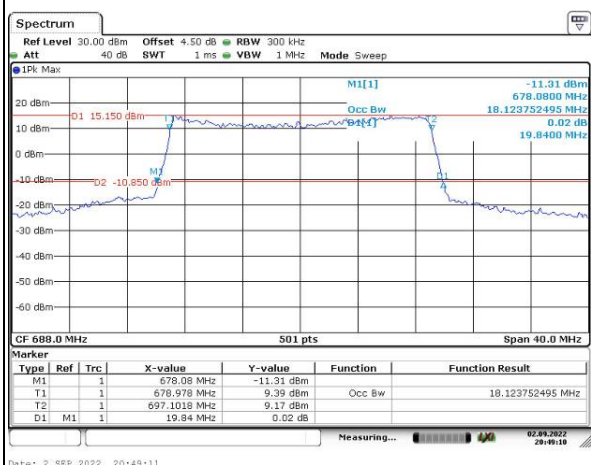
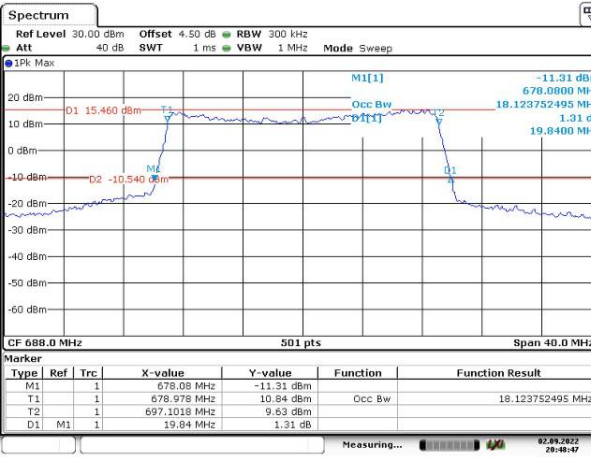
Lowest



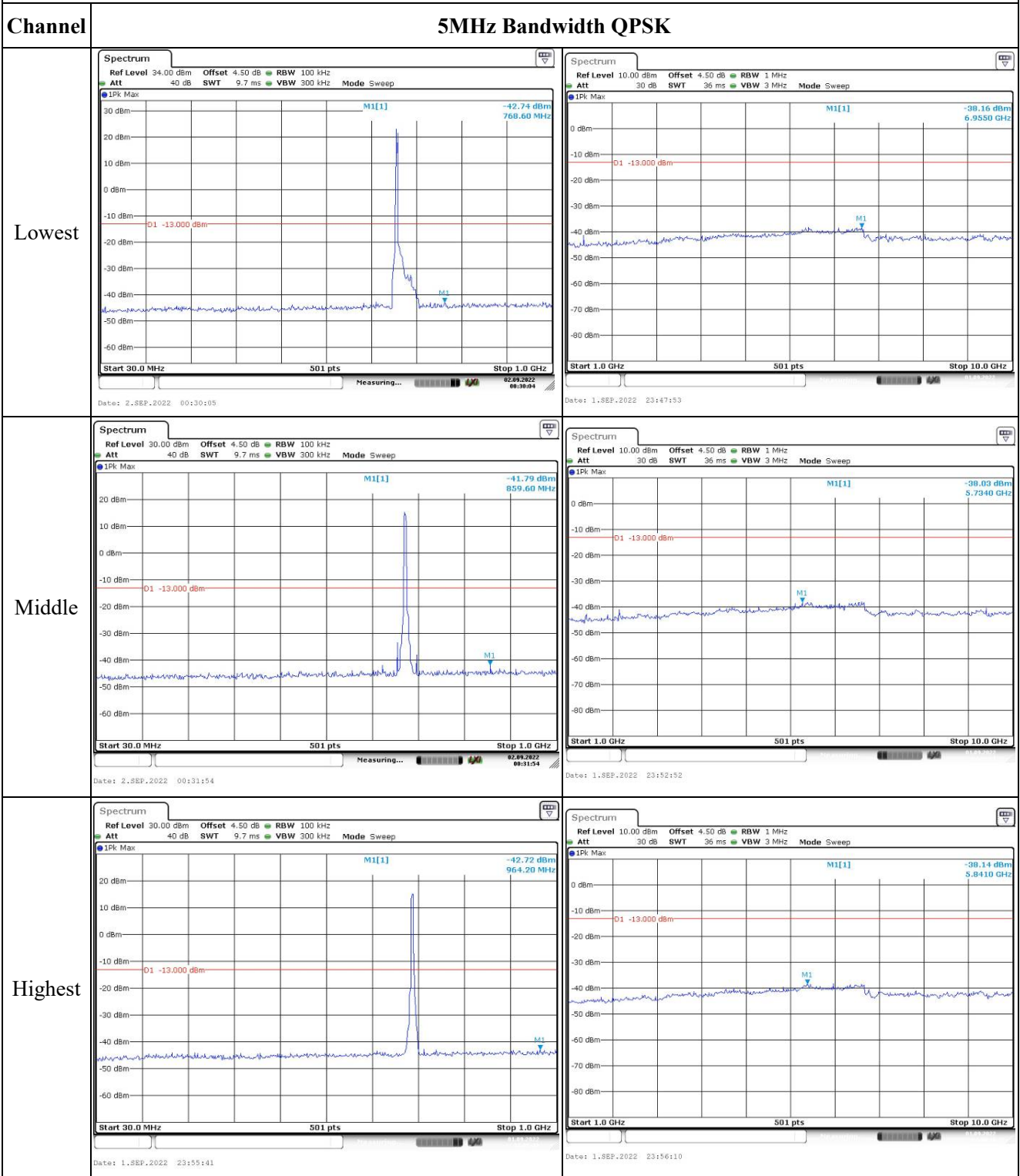
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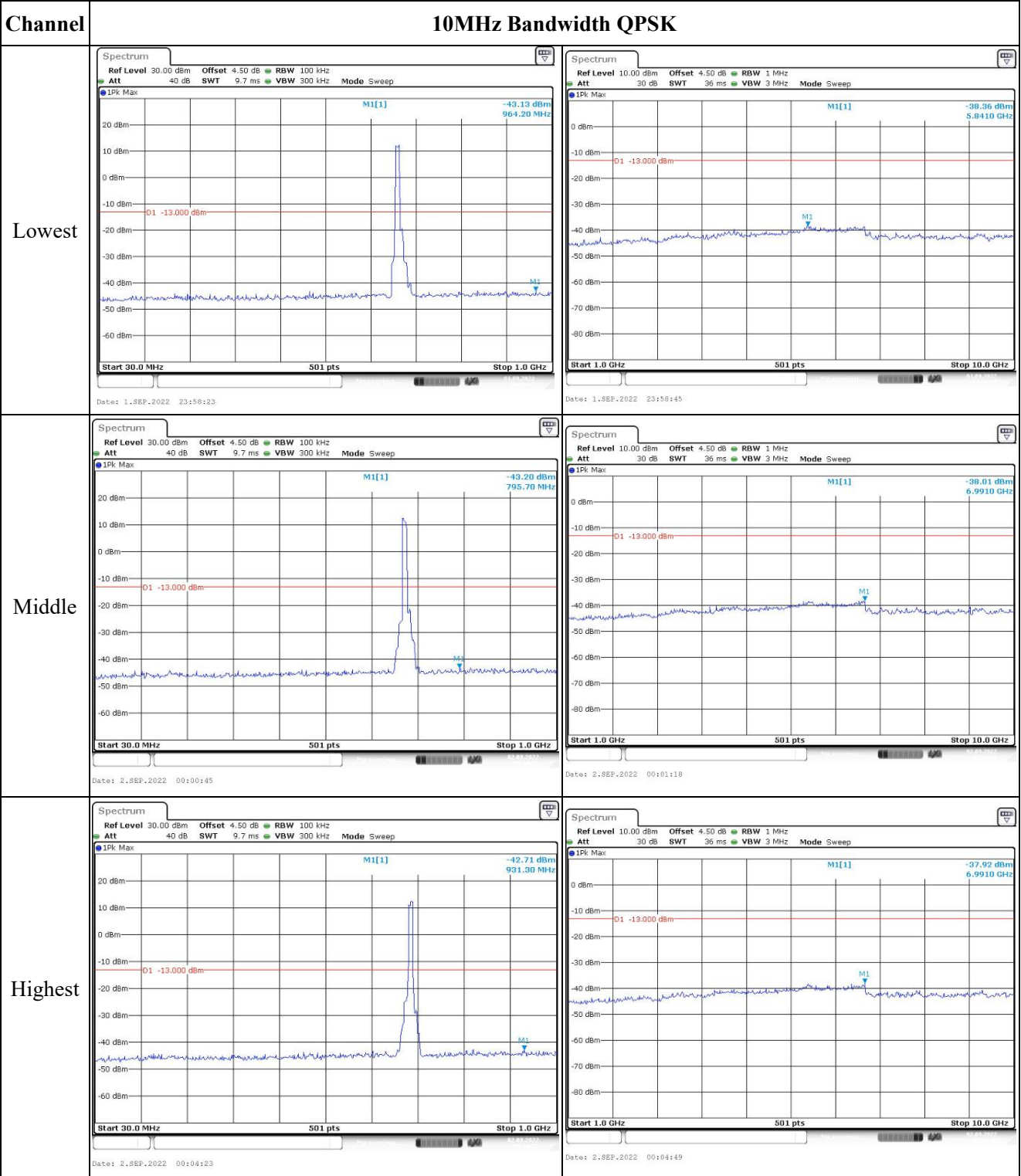
Highest



Spurious Emissions at Antenna Terminal



Spurious Emissions at Antenna Terminal

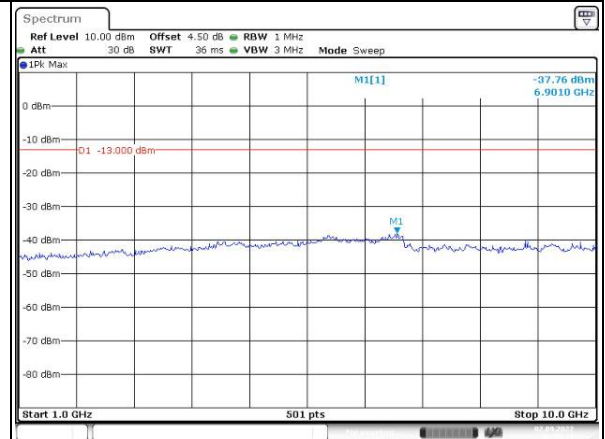
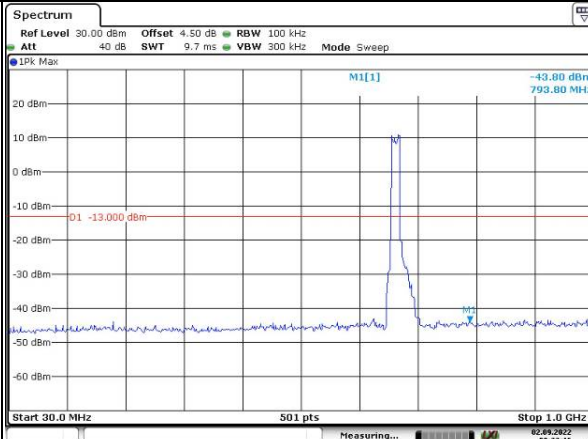


Spurious Emissions at Antenna Terminal

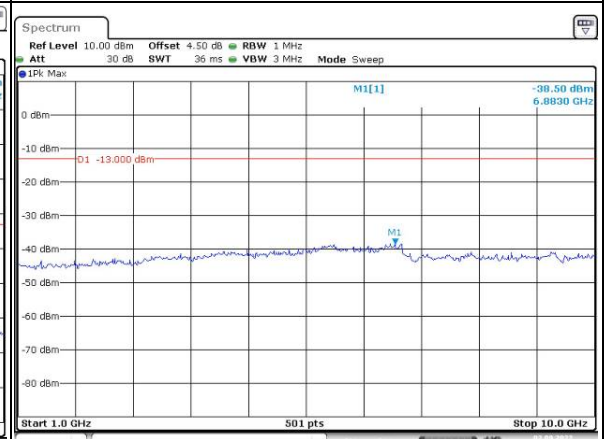
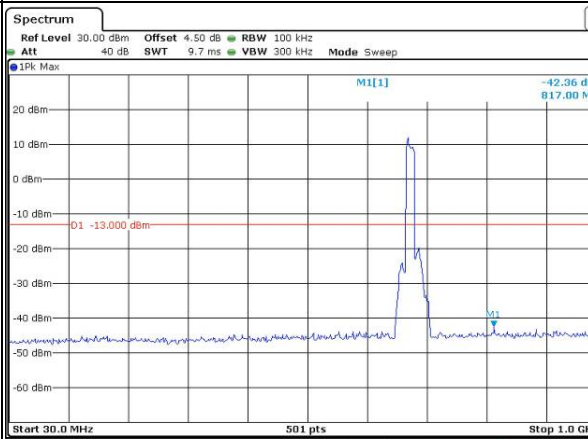
Channel

15MHz Bandwidth QPSK

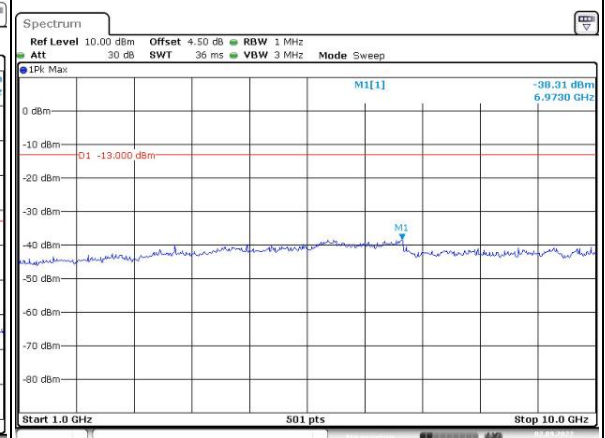
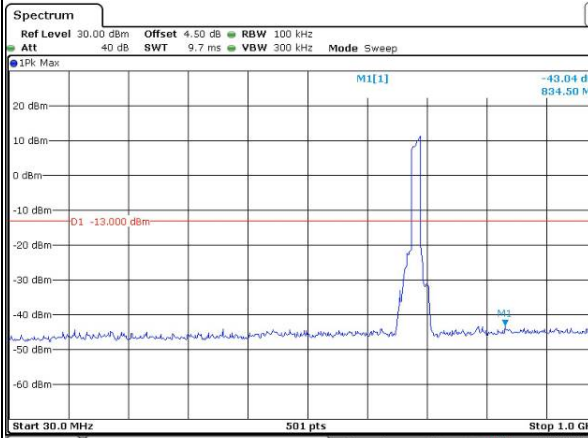
Lowest



Middle



Highest



Spurious Emissions at Antenna Terminal

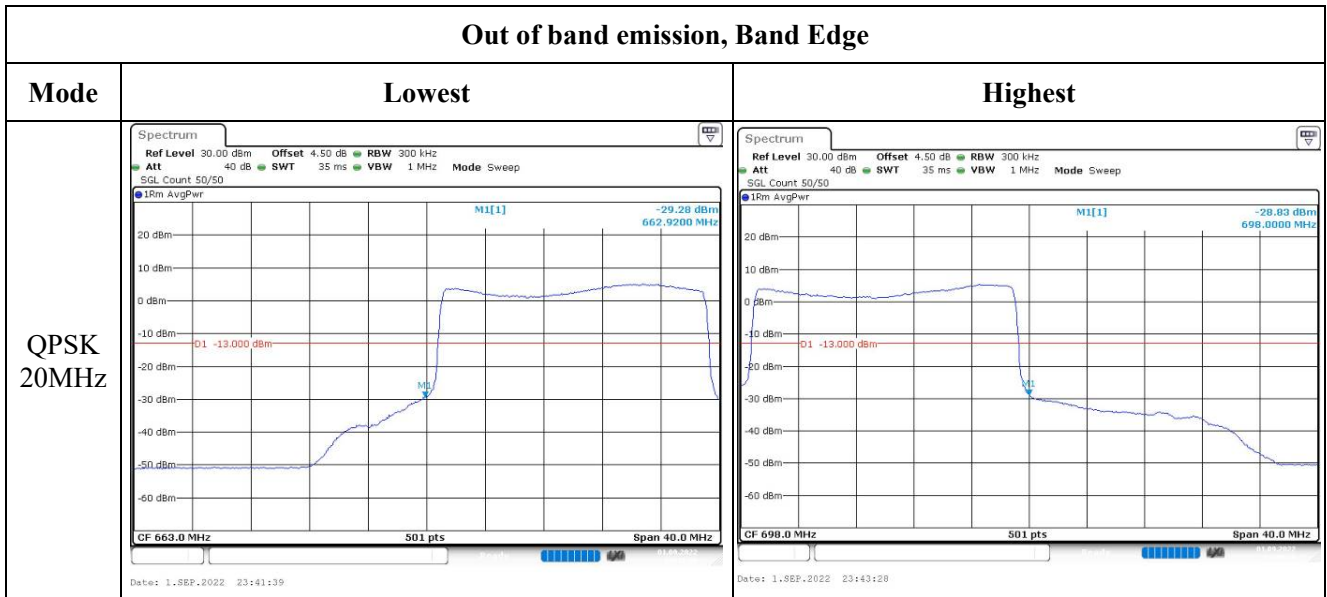
Channel	20MHz Bandwidth QPSK	
Lowest	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz                      Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      1Pk Max                      M1[1] -42.92 dBm 830.60 MHz                      D1 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 2.SEP.2022 00:42:16</p>	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz                      Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep                      1Pk Max                      M1[1] -37.53 dBm 6.7220 GHz                      D1 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 10.0 GHz                      Date: 2.SEP.2022 00:19:06</p>
Middle	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz                      Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      1Pk Max                      M1[1] -43.02 dBm 857.70 MHz                      D1 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 2.SEP.2022 00:43:46</p>	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz                      Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep                      1Pk Max                      M1[1] -38.70 dBm 6.8470 GHz                      D1 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 10.0 GHz                      Date: 2.SEP.2022 00:22:30</p>
Highest	<p><b>Spectrum</b>                      Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz                      Att 40 dB SWT 9.7 ms VBW 300 kHz Mode Sweep                      1Pk Max                      M1[1] -43.10 dBm 840.30 MHz                      D1 -13.000 dBm                      Start 30.0 MHz 501 pts Stop 1.0 GHz                      Date: 2.SEP.2022 00:44:50</p>	<p><b>Spectrum</b>                      Ref Level 10.00 dBm Offset 4.50 dB RBW 1 MHz                      Att 30 dB SWT 36 ms VBW 3 MHz Mode Sweep                      1Pk Max                      M1[1] -38.53 dBm 5.8410 GHz                      D1 -13.000 dBm                      Start 1.0 GHz 501 pts Stop 10.0 GHz                      Date: 2.SEP.2022 00:25:48</p>

Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 5MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -27.83 dBm 663.0000 MHz -13.000 dBm CF 663.0 MHz 501 pts Span 10.0 MHz Date: 1.SEP.2022 23:18:55</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -26.18 dBm 698.0200 MHz -13.000 dBm CF 698.0 MHz 501 pts Span 10.0 MHz Date: 1.SEP.2022 23:21:21</p>
QPSK 10MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -33.60 dBm 663.0000 MHz -13.000 dBm CF 663.0 MHz 501 pts Span 20.0 MHz Date: 1.SEP.2022 23:31:14</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 100 kHz Att 40 dB SWT 35 ms VBW 300 kHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -31.51 dBm 698.0000 MHz -13.000 dBm CF 698.0 MHz 501 pts Span 20.0 MHz Date: 1.SEP.2022 23:35:50</p>
QPSK 15MHz	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -27.67 dBm 663.0000 MHz -13.000 dBm CF 663.0 MHz 501 pts Span 30.0 MHz Date: 1.SEP.2022 23:37:38</p>	<p>Ref Level 30.00 dBm Offset 4.50 dB RBW 300 kHz Att 40 dB SWT 35 ms VBW 1 MHz Mode Sweep SQL Count 50/50 1Rm AvgPwr M1[1] -28.02 dBm 698.0000 MHz -13.000 dBm CF 698.0 MHz 501 pts Span 30.0 MHz Date: 1.SEP.2022 23:38:39</p>



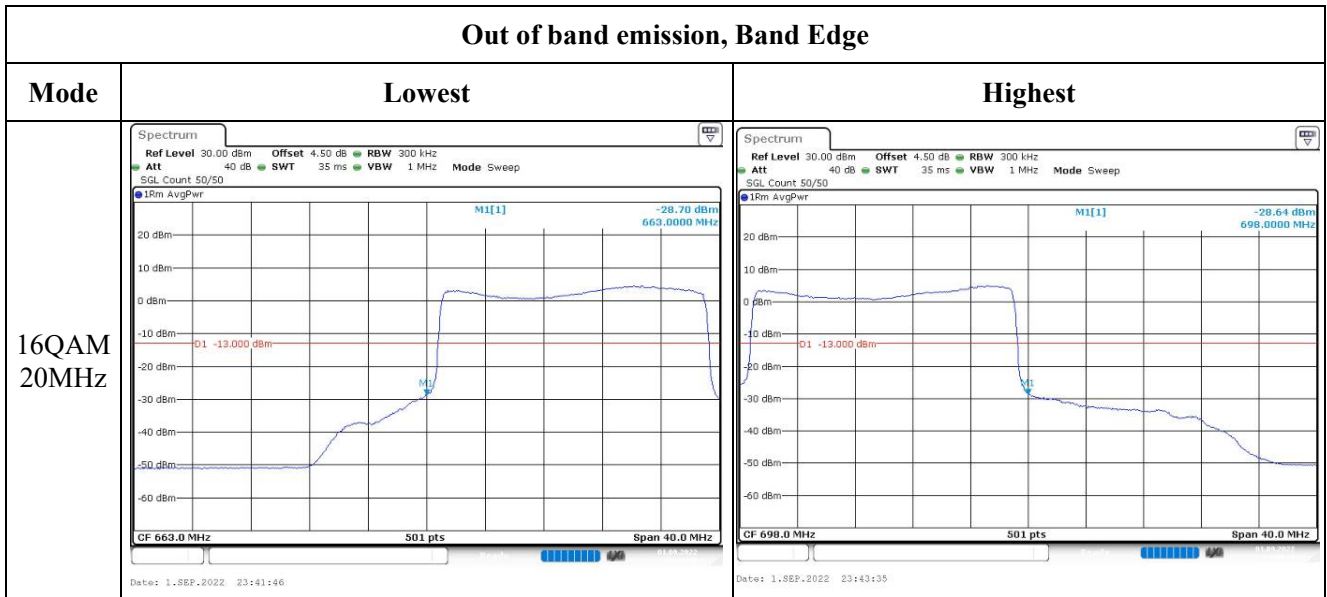
Out of band emission, Band Edge



Out of band emission, Band Edge

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

Out of band emission, Band Edge



**4.15 Radiated Spurious Emissions**

Serial Number:	CR22080045-RF-S1	Test Date:	2022-09-08~2022-09-17
Test Site:	966-2/966-1	Test Mode:	Transmitting
Tester:	Gary Ling, Mack Huang	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	25.5~26.5	Relative Humidity: (%)	55~56	ATM Pressure: (kPa)	100.1~100.8
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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	2022-07-15	2023-07-14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022-07-17	2023-07-16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022-07-17	2023-07-16
Sonoma	Amplifier	310N	186165	2022-07-17	2023-07-16
EMCO	Adjustable Dipole Antenna	3121C	9109-756	N/A	N/A
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022-07-17	2023-07-16
Agilent	Signal Generator	E8247C	MY43321352	2022-04-01	2023-03-31
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020-10-13	2023-10-12
R&S	Spectrum Analyzer	FSV40	101591	2022-07-15	2023-07-14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022-08-07	2023-08-06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022-08-07	2023-08-06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2021-11-10	2022-11-09
AH	Double Ridge Guide Horn Antenna	SAS-571	1396	2021-10-18	2024-10-17
MICRO-COAX	Coaxial Cable	UFA210B-0-0720-300300	99G1448	2022-07-17	2023-07-16
Agilent	Signal Generator	E8247C	MY43321352	2022-04-01	2023-03-31
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021-02-05	2024-02-04
PASTERNAK	Horn Antenna	PE9852/2F-20	112001	2021-02-05	2024-02-04
AH	Preamplifier	PAM-1840VH	190	2021-11-19	2022-11-18
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2022-08-07	2023-08-06
Mini Circuits	High Pass Filter	VHF-6010+	31119	2022/08/07	2023/08/06
Mini Circuits	High Pass Filter	VHF-3100+	31251	2022/08/07	2023/08/06

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

**Test Data:**

Please refer to the below table and plots.

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

**Cellular Band (PART 22H)****30 MHz-10 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 850 Frequency:824.2MHz								
66.26	H	32.90	-70.92	-6.98	0.15	-78.05	-13.00	65.05
65.80	V	41.89	-62.15	-7.23	0.15	-69.53	-13.00	56.53
1648.40	H	57.90	-46.43	8.68	0.80	-38.55	-13.00	25.55
1648.40	V	55.71	-48.70	8.68	0.80	-40.82	-13.00	27.82
2472.60	H	55.35	-45.43	9.38	1.00	-37.05	-13.00	24.05
2472.60	V	57.92	-42.81	9.38	1.00	-34.43	-13.00	21.43
3296.80	H	37.90	-58.78	10.32	1.15	-49.61	-13.00	36.61
3296.80	V	37.71	-58.73	10.32	1.15	-49.56	-13.00	36.56
GSM 850 Frequency:836.6MHz								
66.43	H	34.07	-69.75	-6.89	0.15	-76.79	-13.00	63.79
44.56	V	41.61	-54.12	-20.38	0.12	-74.62	-13.00	61.62
1673.20	H	60.32	-43.99	8.71	0.85	-36.13	-13.00	23.13
1673.20	V	58.76	-45.65	8.71	0.85	-37.79	-13.00	24.79
2509.80	H	55.75	-44.86	9.42	1.01	-36.45	-13.00	23.45
2509.80	V	57.84	-42.78	9.42	1.01	-34.37	-13.00	21.37
3346.40	H	38.56	-58.61	10.34	1.16	-49.43	-13.00	36.43
3346.40	V	39.30	-57.73	10.34	1.16	-48.55	-13.00	35.55
GSM 850 Frequency:848.8MHz								
76.96	H	32.58	-75.38	-1.52	0.16	-77.06	-13.00	64.06
45.21	V	41.03	-55.48	-19.59	0.12	-75.19	-13.00	62.19
1697.60	H	59.95	-44.34	8.74	0.90	-36.50	-13.00	23.50
1697.60	V	57.76	-46.66	8.74	0.90	-38.82	-13.00	25.82
2546.40	H	52.55	-47.78	9.47	1.01	-39.32	-13.00	26.32
2546.40	V	54.34	-45.94	9.47	1.01	-37.48	-13.00	24.48
3395.20	H	36.67	-61.02	10.36	1.19	-51.85	-13.00	38.85
3395.20	V	37.60	-60.06	10.36	1.19	-50.89	-13.00	37.89

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								
45.22	H	34.25	-58.41	-19.58	0.12	-78.11	-13.00	65.11
44.59	V	43.86	-51.91	-20.34	0.12	-72.37	-13.00	59.37
1652.80	H	35.12	-69.21	8.68	0.81	-61.34	-13.00	48.34
1652.80	V	35.14	-69.27	8.68	0.81	-61.40	-13.00	48.40
2479.20	H	36.34	-64.42	9.39	1.01	-56.04	-13.00	43.04
2479.20	V	36.12	-64.61	9.39	1.01	-56.23	-13.00	43.23
3305.60	H	40.60	-56.13	10.32	1.15	-46.96	-13.00	33.96
3305.60	V	43.39	-53.11	10.32	1.15	-43.94	-13.00	30.94
WCDMA Band 5 Frequency:836.6MHz								
45.36	H	34.69	-58.21	-19.45	0.12	-77.78	-13.00	64.78
66.47	V	40.10	-63.71	-6.87	0.15	-70.73	-13.00	57.73
1673.20	H	35.13	-69.18	8.71	0.85	-61.32	-13.00	48.32
1673.20	V	35.75	-68.66	8.71	0.85	-60.80	-13.00	47.80
2509.80	H	36.20	-64.41	9.42	1.01	-56.00	-13.00	43.00
2509.80	V	42.39	-58.23	9.42	1.01	-49.82	-13.00	36.82
3346.40	H	45.79	-51.38	10.34	1.16	-42.20	-13.00	29.20
3346.40	V	49.15	-47.88	10.34	1.16	-38.70	-13.00	25.70
WCDMA Band 5 Frequency:846.6MHz								
46.01	H	32.86	-61.16	-18.81	0.12	-80.09	-13.00	67.09
43.51	V	40.22	-54.15	-21.77	0.12	-76.04	-13.00	63.04
1693.20	H	36.75	-67.55	8.73	0.89	-59.71	-13.00	46.71
1693.20	V	35.84	-68.58	8.73	0.89	-60.74	-13.00	47.74
2539.80	H	35.67	-64.71	9.46	1.01	-56.26	-13.00	43.26
2539.80	V	37.30	-63.04	9.46	1.01	-54.59	-13.00	41.59
3386.40	H	44.77	-52.82	10.35	1.18	-43.65	-13.00	30.65
3386.40	V	49.59	-47.95	10.35	1.18	-38.78	-13.00	25.78

## PCS Band (PART 24E)

## 30 MHz-20 GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
GSM 1900 Frequency:1850.2MHz								
872.18	H	33.90	-66.24	0.00	0.59	-66.83	-13.00	53.83
45.06	V	42.64	-53.72	-19.74	0.12	-73.58	-13.00	60.58
3700.40	H	37.04	-60.28	10.60	1.25	-50.93	-13.00	37.93
3700.40	V	38.55	-58.75	10.60	1.25	-49.40	-13.00	36.40
5550.60	H	34.12	-59.14	11.44	1.49	-49.19	-13.00	36.19
5550.60	V	35.28	-57.82	11.44	1.49	-47.87	-13.00	34.87
GSM 1900 Frequency:1880MHz								
152.48	H	31.93	-79.93	0.00	0.23	-80.16	-13.00	67.16
44.58	V	41.86	-53.90	-20.35	0.12	-74.37	-13.00	61.37
3760.00	H	37.44	-58.97	10.66	1.24	-49.55	-13.00	36.55
3760.00	V	37.73	-58.56	10.66	1.24	-49.14	-13.00	36.14
5640.00	H	34.30	-59.15	11.33	1.54	-49.36	-13.00	36.36
5640.00	V	35.79	-57.54	11.33	1.54	-47.75	-13.00	34.75
GSM 1900 Frequency:1909.8MHz								
66.26	H	33.92	-69.90	-6.98	0.15	-77.03	-13.00	64.03
45.21	V	41.95	-54.56	-19.59	0.12	-74.27	-13.00	61.27
3819.60	H	37.77	-58.09	10.72	1.29	-48.66	-13.00	35.66
3819.60	V	39.35	-56.37	10.72	1.29	-46.94	-13.00	33.94
5729.40	H	35.41	-58.07	11.22	1.59	-48.44	-13.00	35.44
5729.40	V	34.47	-58.89	11.22	1.59	-49.26	-13.00	36.26

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	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								
84.00	H	33.37	-77.71	0.00	0.17	-77.88	-13.00	64.88
65.57	V	40.96	-63.16	-7.35	0.15	-70.66	-13.00	57.66
3704.80	H	38.64	-58.62	10.60	1.25	-49.27	-13.00	36.27
3704.80	V	44.93	-52.30	10.60	1.25	-42.95	-13.00	29.95
5557.20	H	34.28	-59.00	11.43	1.49	-49.06	-13.00	36.06
5557.20	V	34.16	-58.97	11.43	1.49	-49.03	-13.00	36.03
WCDMA Band II, Frequency:1880 MHz								
839.18	H	34.56	-66.58	0.00	0.61	-67.19	-13.00	54.19
44.59	V	42.35	-53.42	-20.34	0.12	-73.88	-13.00	60.88
3760.00	H	35.46	-60.95	10.66	1.24	-51.53	-13.00	38.53
3760.00	V	40.98	-55.31	10.66	1.24	-45.89	-13.00	32.89
5640.00	H	34.28	-59.17	11.33	1.54	-49.38	-13.00	36.38
5640.00	V	35.12	-58.21	11.33	1.54	-48.42	-13.00	35.42
WCDMA Band II, Frequency:1907.6MHz								
839.18	H	34.78	-66.36	0.00	0.61	-66.97	-13.00	53.97
44.59	V	43.15	-52.62	-20.34	0.12	-73.08	-13.00	60.08
3815.20	H	35.36	-60.49	10.72	1.29	-51.06	-13.00	38.06
3815.20	V	38.77	-56.92	10.72	1.29	-47.49	-13.00	34.49
5722.80	H	35.29	-58.20	11.23	1.58	-48.55	-13.00	35.55
5722.80	V	34.78	-58.57	11.23	1.58	-48.92	-13.00	35.92



**AWS Band(Part 27)****30 MHz-20 GHz:**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dB $\mu$ V)	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								
74.91	H	32.34	-74.39	-2.55	0.16	-77.10	-13.00	64.10
66.03	V	42.70	-61.26	-7.10	0.15	-68.51	-13.00	55.51
3424.80	H	35.82	-61.95	10.37	1.17	-52.75	-13.00	39.75
3424.80	V	35.16	-62.58	10.37	1.17	-53.38	-13.00	40.38
5137.20	H	34.57	-59.05	11.28	1.46	-49.23	-13.00	36.23
5137.20	V	35.63	-57.87	11.28	1.46	-48.05	-13.00	35.05
WCDMA Band IV, Frequency:1732.6 MHz								
55.18	H	33.41	-69.02	-12.52	0.13	-81.67	-13.00	68.67
66.27	V	40.93	-62.95	-6.98	0.15	-70.08	-13.00	57.08
3465.20	H	35.23	-62.58	10.39	1.15	-53.34	-13.00	40.34
3465.20	V	35.19	-62.58	10.39	1.15	-53.34	-13.00	40.34
5197.80	H	34.67	-59.46	11.32	1.44	-49.58	-13.00	36.58
5197.80	V	35.29	-58.69	11.32	1.44	-48.81	-13.00	35.81
WCDMA Band IV, Frequency:1752.6MHz								
55.18	H	33.71	-68.72	-12.52	0.13	-81.37	-13.00	68.37
45.36	V	41.25	-55.40	-19.45	0.12	-74.97	-13.00	61.97
3505.20	H	36.13	-61.70	10.41	1.18	-52.47	-13.00	39.47
3505.20	V	35.29	-62.48	10.41	1.18	-53.25	-13.00	40.25
5257.80	H	35.76	-57.97	11.35	1.47	-48.09	-13.00	35.09
5257.80	V	36.11	-57.40	11.35	1.47	-47.52	-13.00	34.52

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

**LTE Band 2 (30MHz-20GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 1850.7 MHz								
75.41	H	32.70	-74.33	-2.30	0.16	-76.79	-13.00	63.79
44.60	V	41.81	-53.97	-20.33	0.12	-74.42	-13.00	61.42
3701.40	H	39.56	-57.75	10.60	1.25	-48.40	-13.00	35.40
3701.40	V	48.07	-49.22	10.60	1.25	-39.87	-13.00	26.87
5552.10	H	34.76	-58.51	11.44	1.49	-48.56	-13.00	35.56
5552.10	V	35.23	-57.87	11.44	1.49	-47.92	-13.00	34.92
QPSK, Frequency: 1880 MHz								
75.70	H	32.69	-74.51	-2.15	0.16	-76.82	-13.00	63.82
46.54	V	41.64	-56.18	-18.29	0.12	-74.59	-13.00	61.59
3760.00	H	38.93	-57.48	10.66	1.24	-48.06	-13.00	35.06
3760.00	V	44.39	-51.90	10.66	1.24	-42.48	-13.00	29.48
5640.00	H	34.56	-58.89	11.33	1.54	-49.10	-13.00	36.10
5640.00	V	35.28	-58.05	11.33	1.54	-48.26	-13.00	35.26
QPSK, Frequency: 1909.3 MHz								
74.31	H	32.53	-73.84	-2.85	0.16	-76.85	-13.00	63.85
46.36	V	41.52	-56.12	-18.47	0.12	-74.71	-13.00	61.71
3818.60	H	36.56	-59.30	10.72	1.29	-49.87	-13.00	36.87
3818.60	V	41.07	-54.64	10.72	1.29	-45.21	-13.00	32.21
5727.90	H	36.13	-57.35	11.23	1.59	-47.71	-13.00	34.71
5727.90	V	35.23	-58.13	11.23	1.59	-48.49	-13.00	35.49

**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								
75.33	H	33.47	-73.51	-2.34	0.16	-76.01	-13.00	63.01
45.06	V	43.81	-52.55	-19.74	0.12	-72.41	-13.00	59.41
3421.40	H	37.38	-60.38	10.37	1.17	-51.18	-13.00	38.18
3421.40	V	36.13	-61.60	10.37	1.17	-52.40	-13.00	39.40
5132.10	H	35.49	-58.08	11.28	1.47	-48.27	-13.00	35.27
5132.10	V	36.23	-57.23	11.28	1.47	-47.42	-13.00	34.42
QPSK, Frequency: 1732.5 MHz								
75.43	H	33.52	-73.52	-2.29	0.16	-75.97	-13.00	62.97
45.06	V	42.42	-53.94	-19.74	0.12	-73.80	-13.00	60.80
3465.00	H	36.43	-61.38	10.39	1.15	-52.14	-13.00	39.14
3465.00	V	35.16	-62.61	10.39	1.15	-53.37	-13.00	40.37
5197.50	H	35.27	-58.86	11.32	1.44	-48.98	-13.00	35.98
5197.50	V	36.29	-57.69	11.32	1.44	-47.81	-13.00	34.81
QPSK, Frequency: 1752.6MHz								
75.58	H	33.13	-74.00	-2.21	0.16	-76.37	-13.00	63.37
45.06	V	43.30	-53.06	-19.74	0.12	-72.92	-13.00	59.92
3505.20	H	36.73	-61.10	10.41	1.18	-51.87	-13.00	38.87
3505.20	V	38.32	-59.45	10.41	1.18	-50.22	-13.00	37.22
5257.80	H	35.11	-58.62	11.35	1.47	-48.74	-13.00	35.74
5257.80	V	34.86	-58.65	11.35	1.47	-48.77	-13.00	35.77

**LTE Band 5(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 824.7 MHz								
75.41	H	33.27	-73.76	-2.30	0.16	-76.22	-13.00	63.22
45.22	V	41.61	-54.91	-19.58	0.12	-74.61	-13.00	61.61
1649.40	H	36.27	-68.06	8.68	0.80	-60.18	-13.00	47.18
1649.40	V	37.26	-67.15	8.68	0.80	-59.27	-13.00	46.27
2474.10	H	40.61	-60.17	9.38	1.00	-51.79	-13.00	38.79
2474.10	V	37.22	-63.51	9.38	1.00	-55.13	-13.00	42.13
3298.80	H	45.63	-51.05	10.32	1.15	-41.88	-13.00	28.88
3298.80	V	48.93	-47.51	10.32	1.15	-38.34	-13.00	25.34
QPSK, Frequency: 836.5 MHz								
65.80	H	33.62	-70.20	-7.23	0.15	-77.58	-13.00	64.58
66.27	V	41.86	-62.02	-6.98	0.15	-69.15	-13.00	56.15
1673.00	H	35.12	-69.19	8.71	0.85	-61.33	-13.00	48.33
1673.00	V	39.66	-64.75	8.71	0.85	-56.89	-13.00	43.89
2509.50	H	39.03	-61.58	9.42	1.01	-53.17	-13.00	40.17
2509.50	V	37.28	-63.34	9.42	1.01	-54.93	-13.00	41.93
3346.00	H	50.16	-47.00	10.34	1.16	-37.82	-13.00	24.82
3346.00	V	55.31	-41.71	10.34	1.16	-32.53	-13.00	19.53
QPSK, Frequency: 848.3 MHz								
74.69	H	32.15	-74.44	-2.66	0.16	-77.26	-13.00	64.26
65.36	V	41.09	-63.10	-7.46	0.14	-70.70	-13.00	57.70
1696.60	H	36.49	-67.80	8.74	0.89	-59.95	-13.00	46.95
1696.60	V	38.39	-66.03	8.74	0.89	-58.18	-13.00	45.18
2544.90	H	35.27	-65.07	9.47	1.01	-56.61	-13.00	43.61
2544.90	V	37.13	-63.17	9.47	1.01	-54.71	-13.00	41.71
3393.20	H	45.49	-52.18	10.36	1.19	-43.01	-13.00	30.01
3393.20	V	56.24	-41.39	10.36	1.19	-32.22	-13.00	19.22

**LTE Band 12 (30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 699.7 MHz								
30.32	H	42.86	-28.88	-26.15	0.10	-55.13	-13.00	42.13
43.20	V	42.23	-51.74	-22.18	0.12	-74.04	-13.00	61.04
1399.40	H	34.12	-69.58	8.22	0.71	-62.07	-13.00	49.07
1399.40	V	35.63	-68.12	8.22	0.71	-60.61	-13.00	47.61
2099.10	H	34.75	-67.13	9.16	0.91	-58.88	-13.00	45.88
2099.10	V	37.36	-64.47	9.16	0.91	-56.22	-13.00	43.22
2798.80	H	35.26	-64.67	9.88	1.04	-55.83	-13.00	42.83
2798.80	V	34.12	-65.68	9.88	1.04	-56.84	-13.00	43.84
QPSK, Frequency:707.5 MHz								
32.07	H	49.26	-24.58	-25.35	0.10	-50.03	-13.00	37.03
45.06	V	42.36	-54.00	-19.74	0.12	-73.86	-13.00	60.86
1415.00	H	36.78	-66.89	8.26	0.72	-59.35	-13.00	46.35
1415.00	V	40.56	-63.16	8.26	0.72	-55.62	-13.00	42.62
2122.50	H	34.28	-67.71	9.17	0.92	-59.46	-13.00	46.46
2122.50	V	34.39	-67.58	9.17	0.92	-59.33	-13.00	46.33
2830.00	H	38.31	-61.49	9.93	1.06	-52.62	-13.00	39.62
2830.00	V	34.71	-65.02	9.93	1.06	-56.15	-13.00	43.15
QPSK, Frequency: 715.3 MHz								
31.54	H	43.13	-30.07	-25.59	0.10	-55.76	-13.00	42.76
45.06	V	43.56	-52.80	-19.74	0.12	-72.66	-13.00	59.66
1430.60	H	39.38	-64.25	8.31	0.73	-56.67	-13.00	43.67
1430.60	V	42.29	-61.40	8.31	0.73	-53.82	-13.00	40.82
2145.90	H	35.29	-66.81	9.19	0.93	-58.55	-13.00	45.55
2145.90	V	34.26	-67.85	9.19	0.93	-59.59	-13.00	46.59
2861.20	H	34.84	-64.81	9.98	1.07	-55.90	-13.00	42.90
2861.20	V	35.23	-64.44	9.98	1.07	-55.53	-13.00	42.53

**LTE Band 13 (30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 779.5 MHz								
31.42	H	42.64	-30.42	-25.65	0.10	-56.17	-13.00	43.17
45.06	V	43.16	-53.20	-19.74	0.12	-73.06	-13.00	60.06
1559.00	H	35.82	-68.17	8.57	0.80	-60.40	-40.00	20.40
1559.00	V	34.84	-69.21	8.57	0.80	-61.44	-40.00	21.44
2338.50	H	34.13	-67.46	9.30	0.97	-59.13	-13.00	46.13
2338.50	V	35.28	-66.08	9.30	0.97	-57.75	-13.00	44.75
3118.00	H	34.56	-62.93	10.25	1.13	-53.81	-13.00	40.81
3118.00	V	35.17	-62.18	10.25	1.13	-53.06	-13.00	40.06
QPSK, Frequency:784.5 MHz								
31.40	H	42.61	-30.43	-25.66	0.10	-56.19	-13.00	43.19
44.59	V	42.67	-53.10	-20.34	0.12	-73.56	-13.00	60.56
1569.00	H	34.23	-69.85	8.58	0.81	-62.08	-40.00	22.08
1569.00	V	35.17	-68.96	8.58	0.81	-61.19	-40.00	21.19
2353.50	H	36.23	-65.22	9.31	0.97	-56.88	-13.00	43.88
2353.50	V	39.81	-61.41	9.31	0.97	-53.07	-13.00	40.07
3138.00	H	35.36	-62.04	10.26	1.14	-52.92	-13.00	39.92
3138.00	V	34.14	-63.09	10.26	1.14	-53.97	-13.00	40.97

**LTE Band 17(30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 706.5 MHz								
32.95	H	42.13	-32.76	-24.94	0.11	-57.81	-13.00	44.81
45.06	V	43.85	-52.51	-19.74	0.12	-72.37	-13.00	59.37
1413.00	H	36.82	-66.85	8.26	0.72	-59.31	-13.00	46.31
1413.00	V	39.44	-64.28	8.26	0.72	-56.74	-13.00	43.74
2119.50	H	35.46	-66.51	9.17	0.92	-58.26	-13.00	45.26
2119.50	V	34.28	-67.67	9.17	0.92	-59.42	-13.00	46.42
2826.00	H	36.13	-63.68	9.92	1.06	-54.82	-13.00	41.82
2826.00	V	35.21	-64.53	9.92	1.06	-55.67	-13.00	42.67
QPSK, Frequency: 710 MHz								
31.40	H	43.39	-29.65	-25.66	0.10	-55.41	-13.00	42.41
45.06	V	43.87	-52.49	-19.74	0.12	-72.35	-13.00	59.35
1420.00	H	37.02	-66.64	8.28	0.73	-59.09	-13.00	46.09
1420.00	V	36.28	-67.43	8.28	0.73	-59.88	-13.00	46.88
2130.00	H	34.96	-67.06	9.18	0.92	-58.80	-13.00	45.80
2130.00	V	34.38	-67.63	9.18	0.92	-59.37	-13.00	46.37
2840.00	H	34.97	-64.78	9.94	1.06	-55.90	-13.00	42.90
2840.00	V	35.26	-64.45	9.94	1.06	-55.57	-13.00	42.57
QPSK, Frequency: 713.5 MHz								
30.11	H	45.26	-26.23	-26.25	0.10	-52.58	-13.00	39.58
43.35	V	40.44	-53.72	-21.98	0.12	-75.82	-13.00	62.82
1427.00	H	36.45	-67.19	8.30	0.73	-59.62	-13.00	46.62
1427.00	V	39.81	-63.88	8.30	0.73	-56.31	-13.00	43.31
2140.50	H	34.67	-67.40	9.18	0.93	-59.15	-13.00	46.15
2140.50	V	35.26	-66.82	9.18	0.93	-58.57	-13.00	45.57
2854.00	H	34.23	-65.46	9.97	1.07	-56.56	-13.00	43.56
2854.00	V	35.28	-64.40	9.97	1.07	-55.50	-13.00	42.50

**LTE Band 41 (30MHz-26.5GHz):**

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: 2557.5 MHz								
75.36	H	34.13	-72.87	-2.32	0.16	-75.35	-25.00	50.35
45.06	V	41.46	-54.90	-19.74	0.12	-74.76	-25.00	49.76
5115.00	H	35.23	-58.20	11.27	1.51	-48.44	-25.00	23.44
5115.00	V	34.67	-58.66	11.27	1.51	-48.90	-25.00	23.90
7672.50	H	35.46	-54.05	10.87	2.03	-45.21	-25.00	20.21
7672.50	V	35.76	-54.43	10.87	2.03	-45.59	-25.00	20.59
QPSK, Frequency:26.5 MHz								
76.85	H	31.67	-76.22	-1.58	0.16	-77.96	-25.00	52.96
44.68	V	41.22	-54.67	-20.22	0.12	-75.01	-25.00	50.01
5210.00	H	35.67	-58.41	11.33	1.45	-48.53	-25.00	23.53
5210.00	V	36.12	-57.80	11.33	1.45	-47.92	-25.00	22.92
7815.00	H	35.46	-53.94	10.84	1.99	-45.09	-25.00	20.09
7815.00	V	35.67	-54.12	10.84	1.99	-45.27	-25.00	20.27
QPSK, Frequency: 2652.5 MHz								
75.36	H	32.03	-74.97	-2.32	0.16	-77.45	-25.00	52.45
44.68	V	43.39	-52.50	-20.22	0.12	-72.84	-25.00	47.84
5305.00	H	36.13	-57.31	11.38	1.46	-47.39	-25.00	22.39
5305.00	V	35.67	-57.51	11.38	1.46	-47.59	-25.00	22.59
7957.50	H	35.43	-52.99	10.81	2.09	-44.27	-25.00	19.27
7957.50	V	35.29	-53.58	10.81	2.09	-44.86	-25.00	19.86



**LTE Band 66(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								
75.36	H	33.48	-73.52	-2.32	0.16	-76.00	-13.00	63.00
45.06	V	41.28	-55.08	-19.74	0.12	-74.94	-13.00	61.94
3421.40	H	36.43	-61.33	10.37	1.17	-52.13	-13.00	39.13
3421.40	V	35.17	-62.56	10.37	1.17	-53.36	-13.00	40.36
5132.10	H	35.36	-58.21	11.28	1.47	-48.40	-13.00	35.40
5132.10	V	36.47	-56.99	11.28	1.47	-47.18	-13.00	34.18
QPSK, Frequency:1745 MHz								
75.36	H	33.80	-73.20	-2.32	0.16	-75.68	-13.00	62.68
44.59	V	40.71	-55.06	-20.34	0.12	-75.52	-13.00	62.52
3490.00	H	35.47	-62.37	10.40	1.17	-53.14	-13.00	40.14
3490.00	V	35.11	-62.67	10.40	1.17	-53.44	-13.00	40.44
5235.00	H	34.89	-59.01	11.34	1.46	-49.13	-13.00	36.13
5235.00	V	35.76	-57.95	11.34	1.46	-48.07	-13.00	35.07
QPSK, Frequency: 1779.3 MHz								
75.36	H	33.72	-73.28	-2.32	0.16	-75.76	-13.00	62.76
44.85	V	41.19	-54.92	-20.00	0.12	-75.04	-13.00	62.04
3558.60	H	34.63	-63.04	10.46	1.22	-53.80	-13.00	40.80
3558.60	V	36.27	-61.30	10.46	1.22	-52.06	-13.00	39.06
5337.90	H	35.23	-58.24	11.40	1.47	-48.31	-13.00	35.31
5337.90	V	35.76	-57.57	11.40	1.47	-47.64	-13.00	34.64

**LTE Band 71 (30MHz-10GHz):**

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
QPSK, Frequency: 665.5 MHz								
75.36	H	32.78	-74.22	-2.32	0.16	-76.70	-13.00	63.70
45.56	V	41.69	-55.16	-19.25	0.12	-74.53	-13.00	61.53
1331.00	H	36.30	-66.73	8.03	0.76	-59.46	-13.00	46.46
1331.00	V	35.24	-68.12	8.03	0.76	-60.85	-13.00	47.85
1996.50	H	34.93	-67.23	9.10	0.89	-59.02	-13.00	46.02
1996.50	V	35.12	-66.42	9.10	0.89	-58.21	-13.00	45.21
2662.00	H	34.28	-65.68	9.66	1.06	-57.08	-13.00	44.08
2662.00	V	35.26	-64.62	9.66	1.06	-56.02	-13.00	43.02
QPSK, Frequency:680.5 MHz								
75.36	H	33.85	-73.15	-2.32	0.16	-75.63	-13.00	62.63
45.06	V	43.41	-52.95	-19.74	0.12	-72.81	-13.00	59.81
1361.00	H	35.63	-67.70	8.11	0.77	-60.36	-13.00	47.36
1361.00	V	34.58	-68.95	8.11	0.77	-61.61	-13.00	48.61
2041.50	H	34.67	-67.36	9.12	0.91	-59.15	-13.00	46.15
2041.50	V	35.64	-66.00	9.12	0.91	-57.79	-13.00	44.79
2722.00	H	34.56	-65.41	9.76	1.05	-56.70	-13.00	43.70
2722.00	V	34.59	-65.32	9.76	1.05	-56.61	-13.00	43.61
QPSK, Frequency: 695.5 MHz								
75.36	H	33.24	-73.76	-2.32	0.16	-76.24	-13.00	63.24
44.69	V	42.05	-53.85	-20.21	0.12	-74.18	-13.00	61.18
1391.00	H	35.41	-68.21	8.19	0.72	-60.74	-13.00	47.74
1391.00	V	35.67	-68.03	8.19	0.72	-60.56	-13.00	47.56
2086.50	H	34.00	-67.91	9.15	0.91	-59.67	-13.00	46.67
2086.50	V	34.69	-67.10	9.15	0.91	-58.86	-13.00	45.86
2782.00	H	35.16	-64.78	9.85	1.05	-55.98	-13.00	42.98
2782.00	V	36.23	-63.60	9.85	1.05	-54.80	-13.00	41.80

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

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