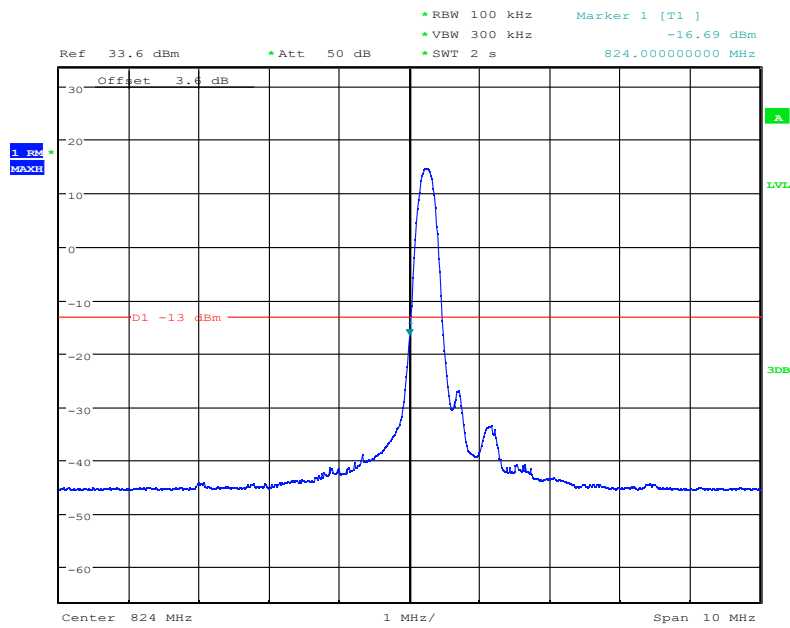
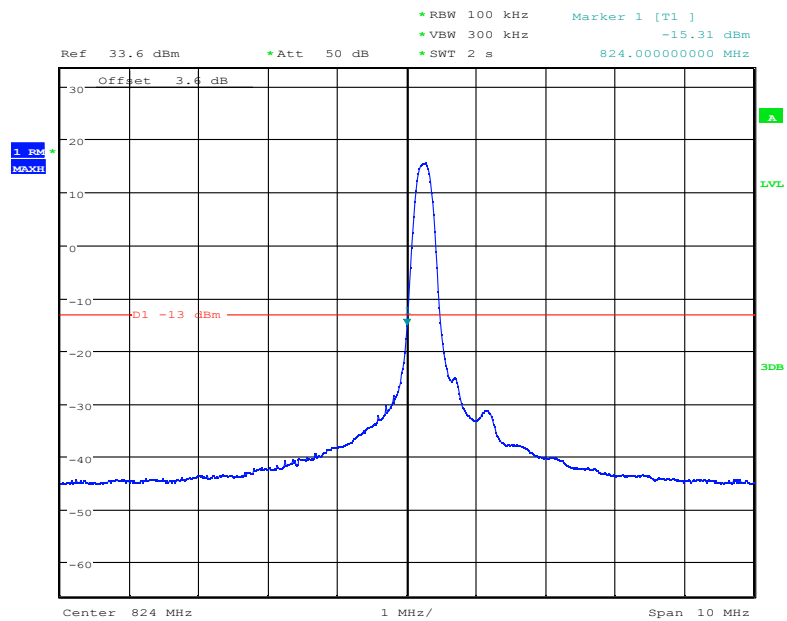




Report No.: I22W00051-WWAN RF-Rev4



Band26-Low Channel-1.4MHz Bandwidth-1RB-16QAM

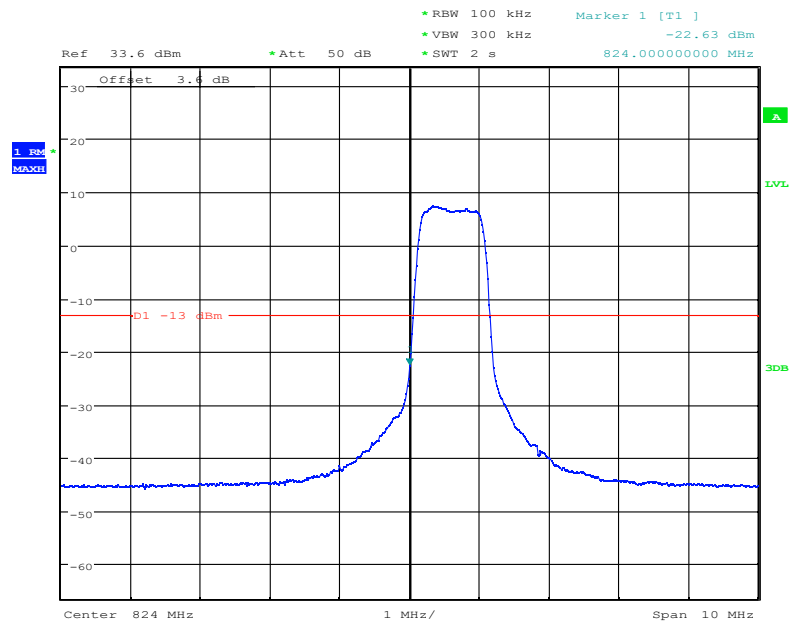


Band26-Low Channel-1.4MHz Bandwidth-1RB-QPSK

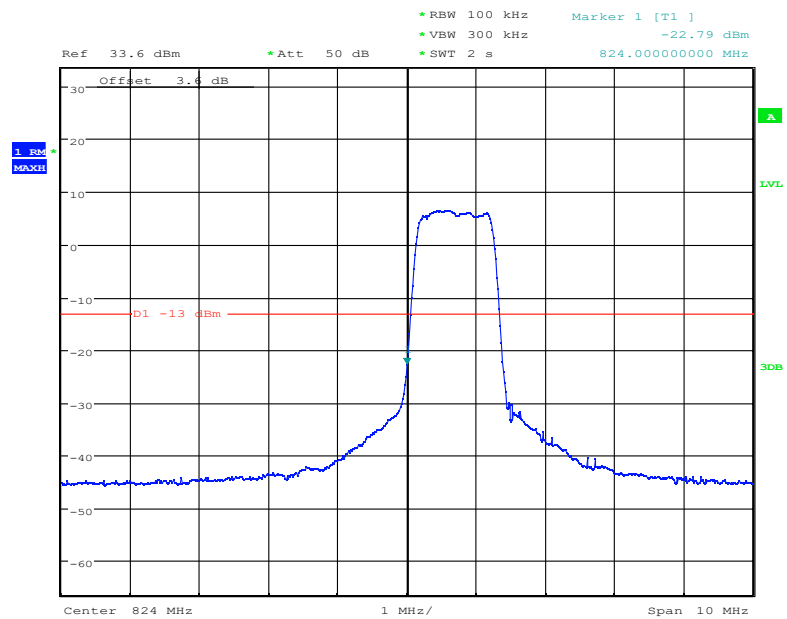
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Report No.: I22W00051-WWAN RF-Rev4



Band26-Low Channel-1.4MHz Bandwidth-5RB-16QAM

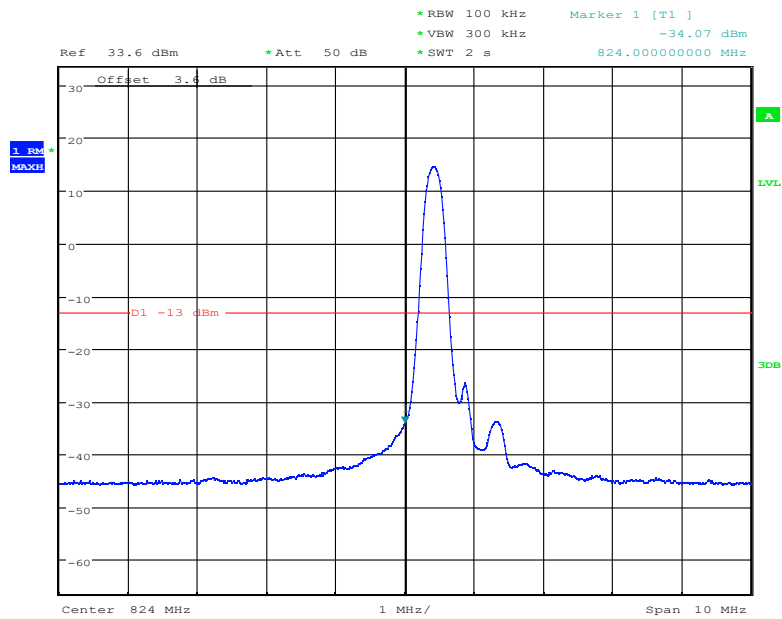


Band26-Low Channel-1.4MHz Bandwidth-6RB-QPSK

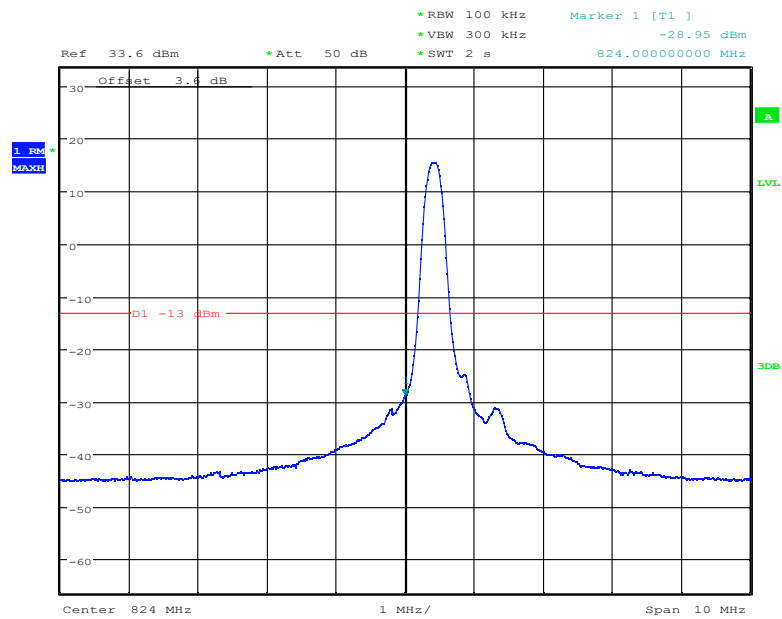
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Report No.: I22W00051-WWAN RF-Rev4



Band26-Low Channel-3MHz Bandwidth-1RB-16QAM

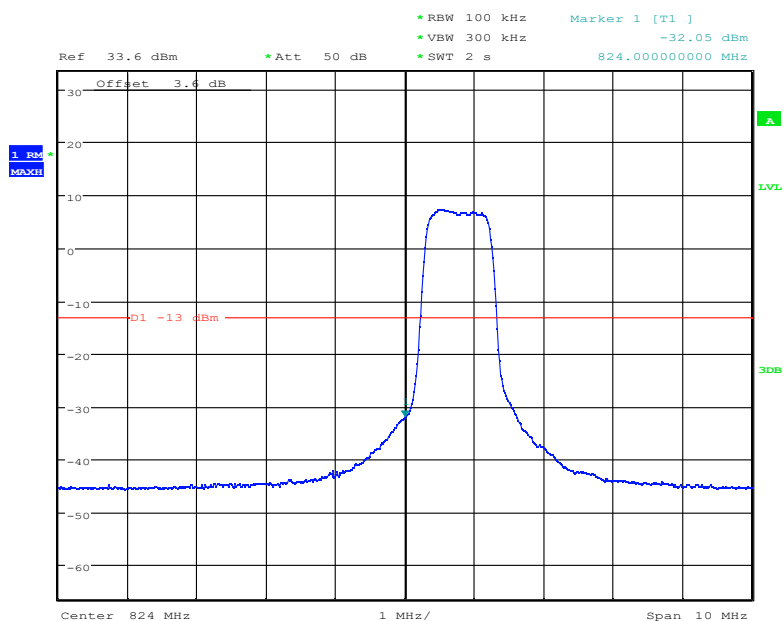


Band26-Low Channel-3MHz Bandwidth-1RB-QPSK

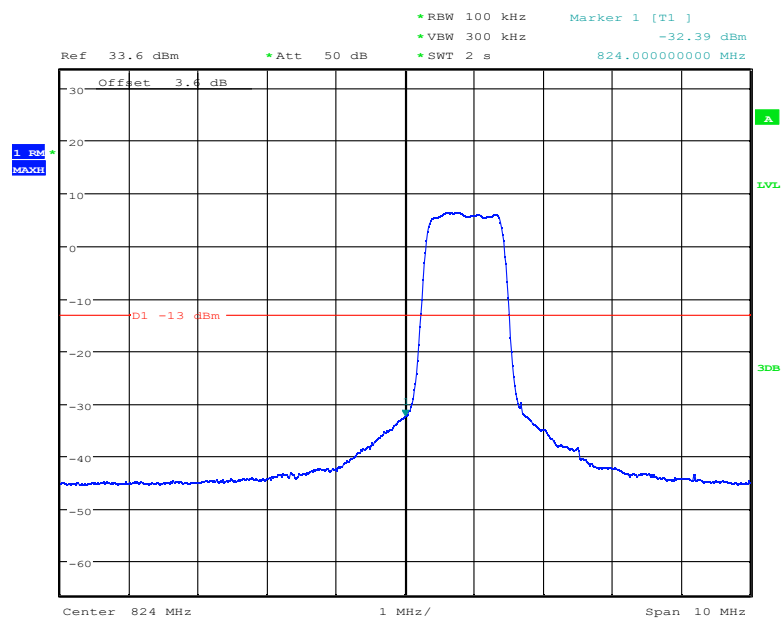
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Report No.: I22W00051-WWAN RF-Rev4



Band26-Low Channel-3MHz Bandwidth-5RB-16QAM



Band26-Low Channel-3MHz Bandwidth-6RB-QPSK

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Ref 33.6 dBm • Att 50 dB • RBW 100 kHz Marker 1 [T1] -28.61 dBm
 • VBW 300 kHz • SWT 2 s 824.00000000 MHz

Offset 3.6 dB

1 RBW
MAXH

D1 -13 dBm

Center 824 MHz 1 MHz/ Span 10 MHz

Ref 33.6 dBm * Att 50 dB * RBW 100 kHz VBW 300 kHz SWT 2 s Marker 1 [T1] -25.68 dBm 824.00000000 MHz

Offset 3.6 dB

1 MHz

Span 10 MHz

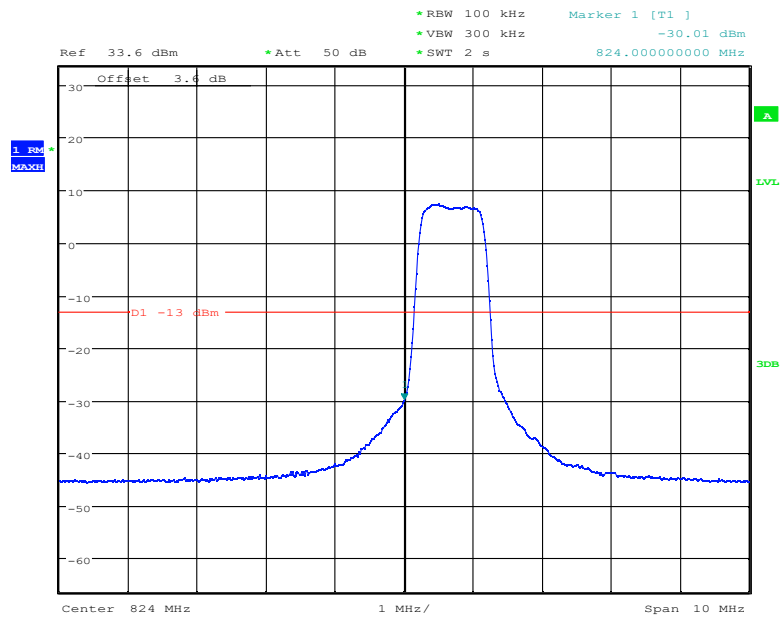
Center 824 MHz

3D1 -13 dBm

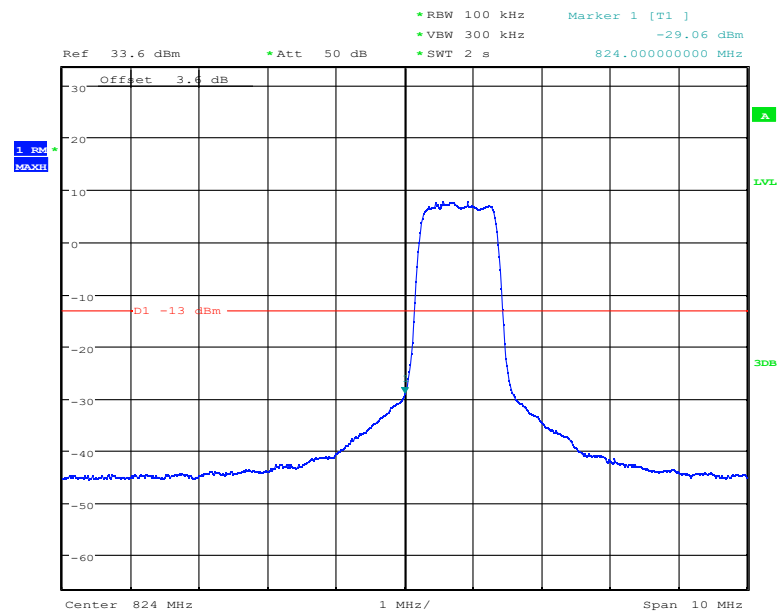
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Report No.: I22W00051-WWAN RF-Rev4



Band26-Low Channel-5MHz Bandwidth-5RB-16QAM

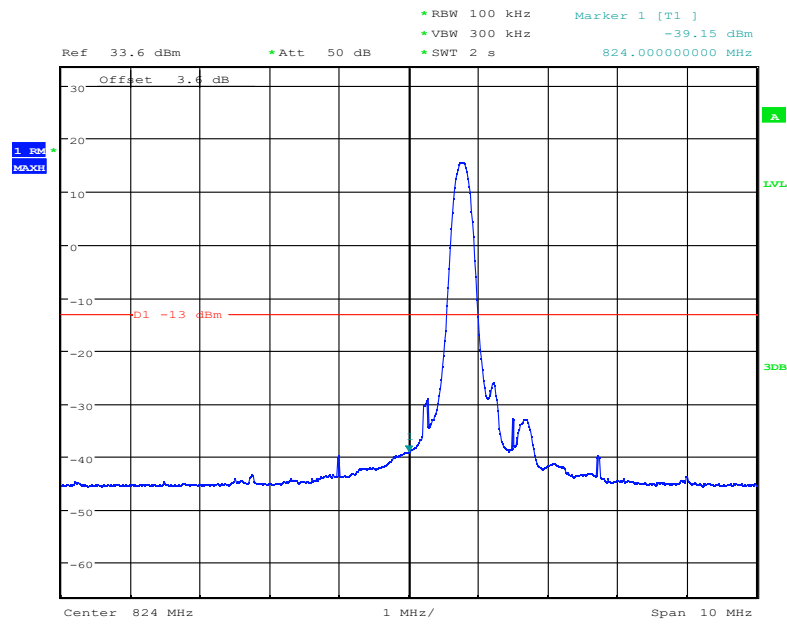


Band26-Low Channel-5MHz Bandwidth-6RB-QPSK

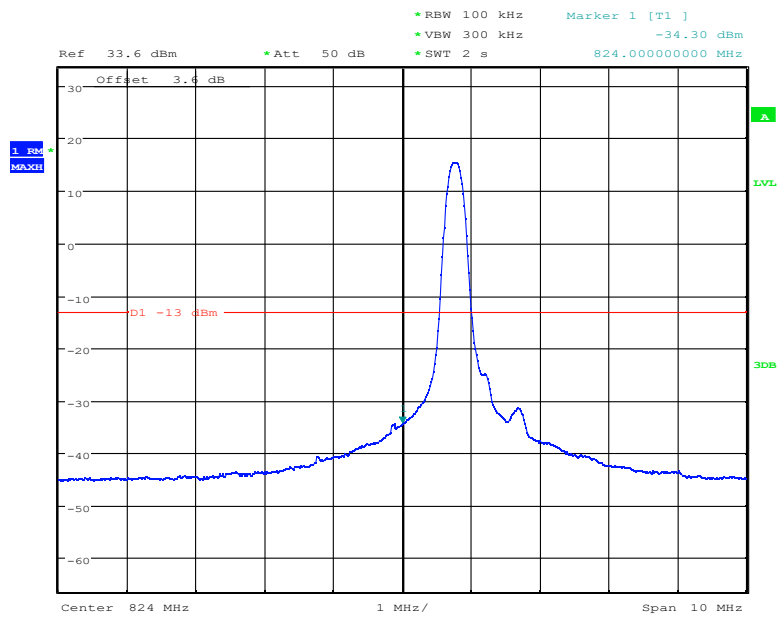
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Tel: 0086-23-88069965 FAX:0086-23-88608777

Report No.: I22W00051-WWAN RF-Rev4



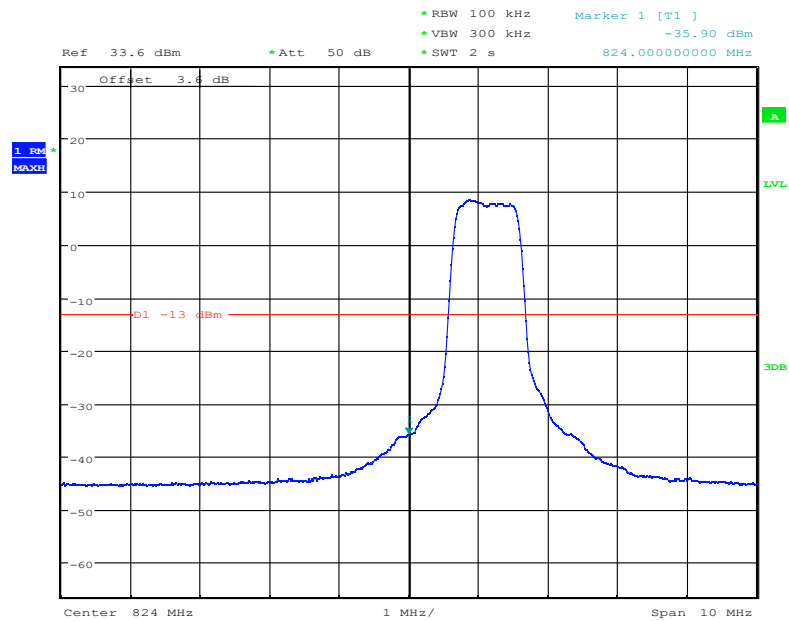
Band26-Low Channel-10MHz Bandwidth-1RB-16QAM



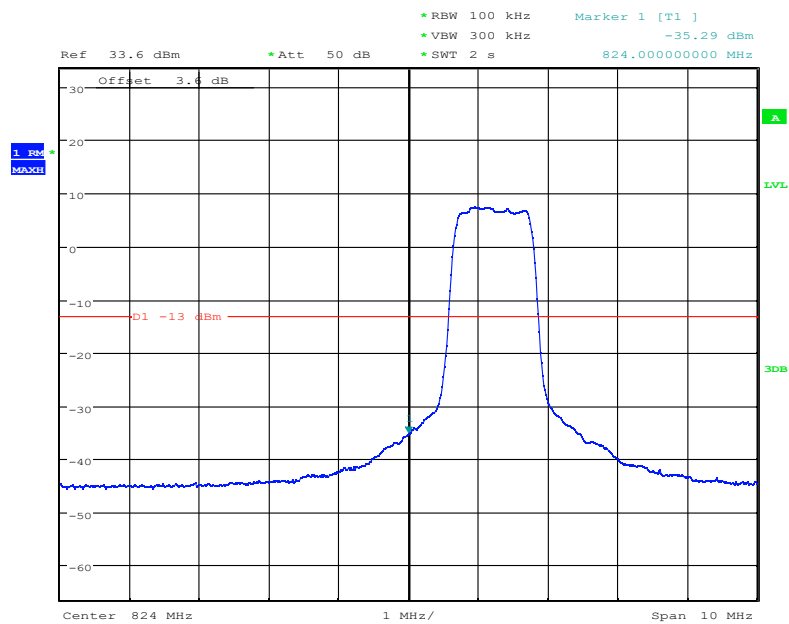
Band26-Low Channel-10MHz Bandwidth-1RB-QPSK

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Band26-Low Channel-10MHz Bandwidth-5RB-16QAM



Band26-Low Channel-10MHz Bandwidth-6RB-QPSK

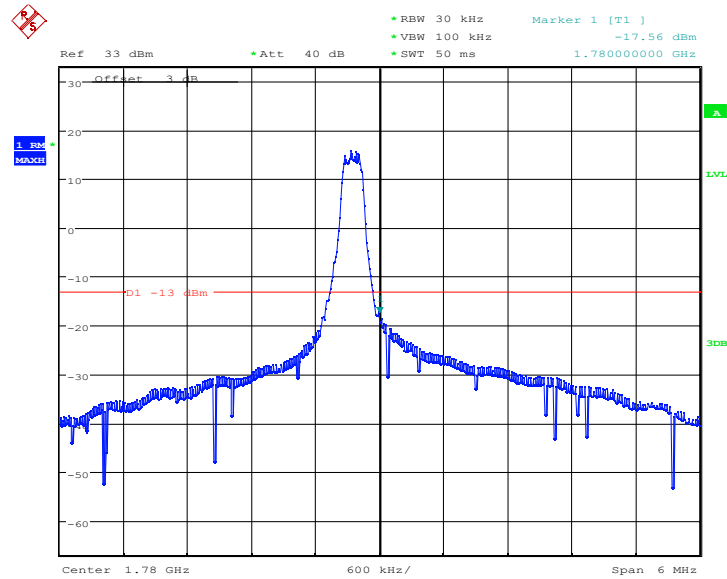
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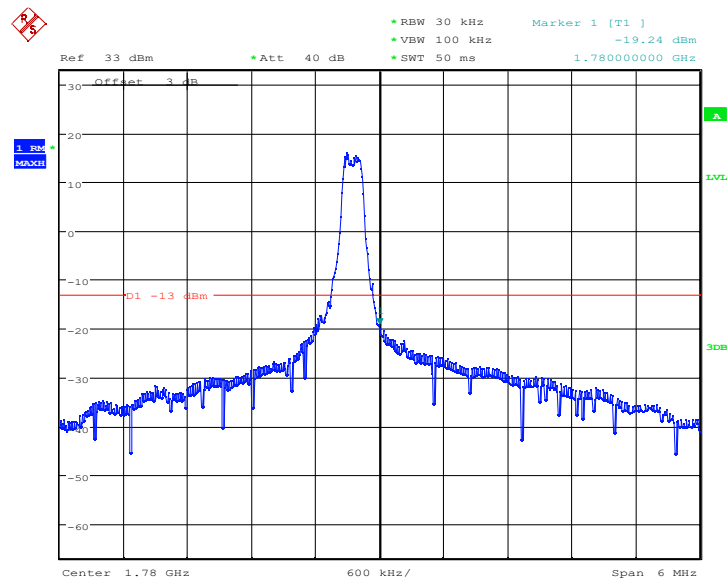
Report No.: I22W00051-WWAN RF-Rev4

6.7.16 CAT-M Band66 Edge Results



Date: 18.JUL.2022 19:23:13

Band66-High Channel-1.4MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:25:02

Band66-High Channel-1.4MHz Bandwidth-1RB-QPSK

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Ref 33 dBm • Att 40 dB • RBW 30 kHz Marker 1 [T1] -23.45 dBm
 • VBW 100 kHz • SWT 50 ms 1.780000000 GHz

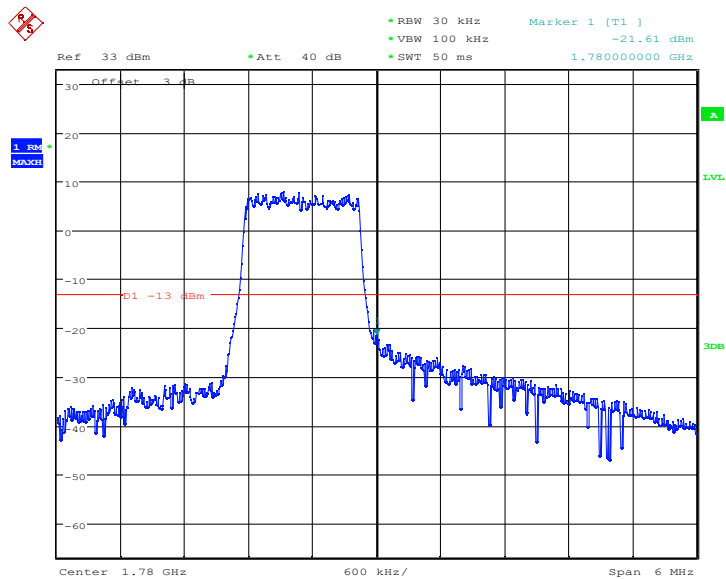
Offset 3 dB

1.78 GHz

D1 -13 dBm

Center 1.78 GHz 600 kHz/ Span 6 MHz

Band66-High Channel-1.4MHz Bandwidth-5RB-16QAM

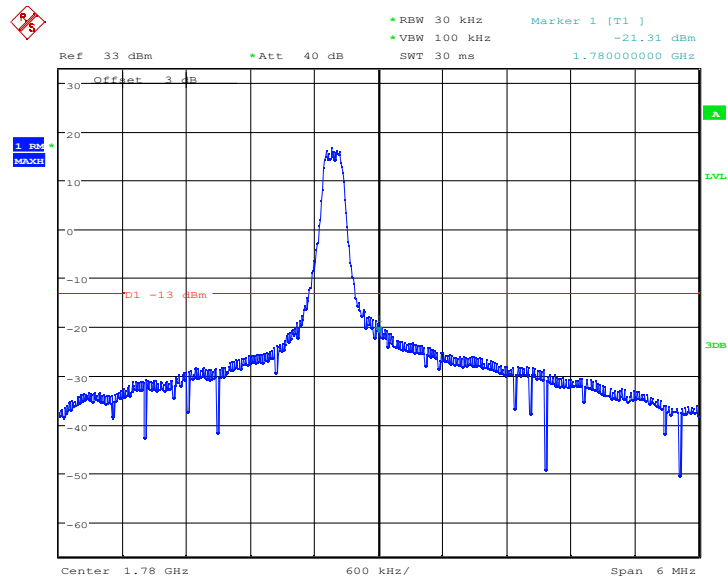


Band66-High Channel-1.4MHz Bandwidth-6RB-QPSK

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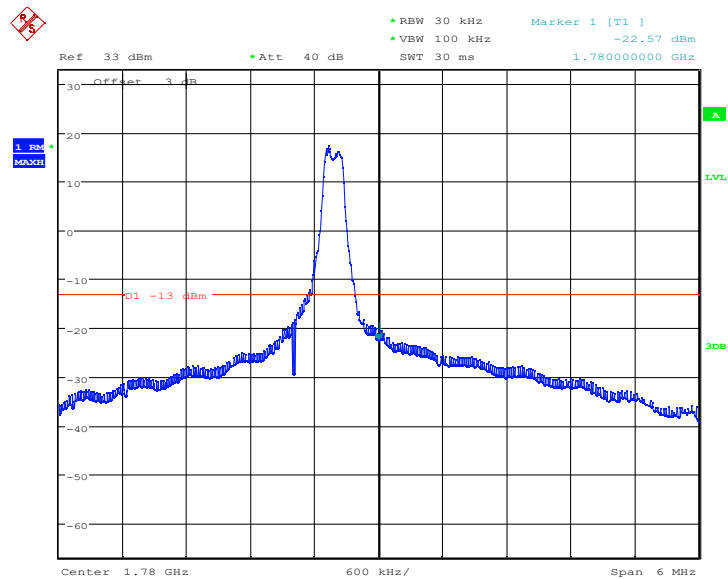


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:29:36

Band66-High Channel-3MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:28:19

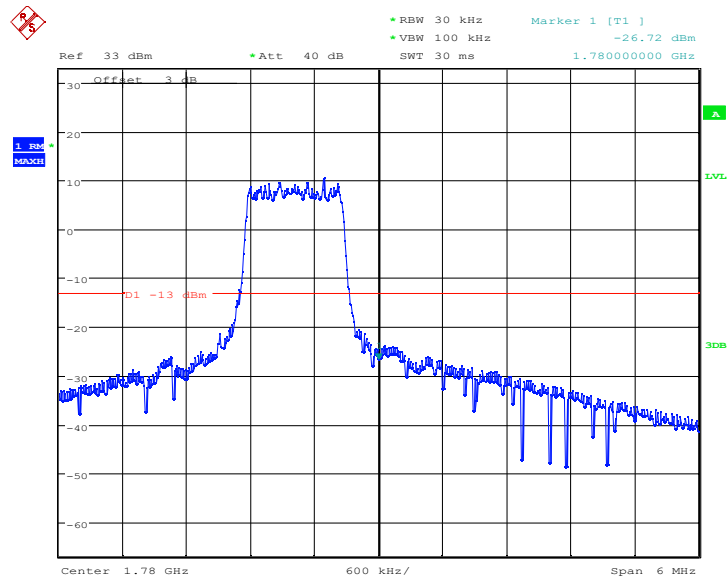
Band66-High Channel-3MHz Bandwidth-1RB-QPSK

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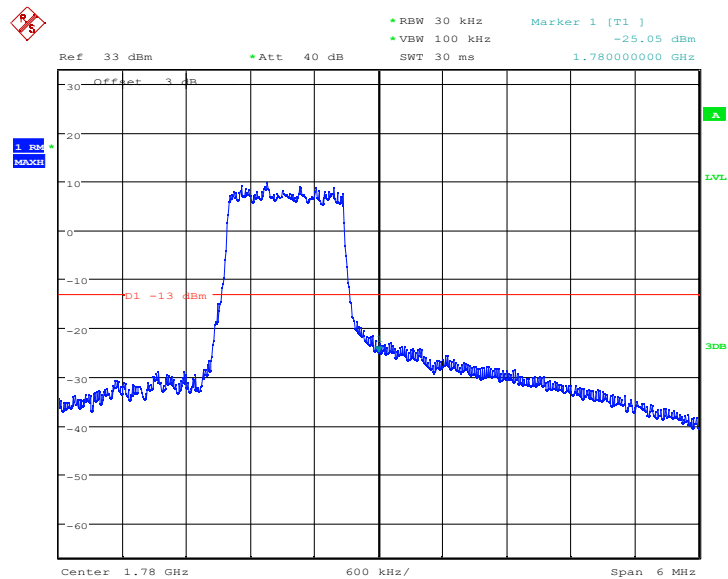


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:30:19

Band66-High Channel-3MHz Bandwidth-5RB-16QAM



Date: 18.JUL.2022 19:27:05

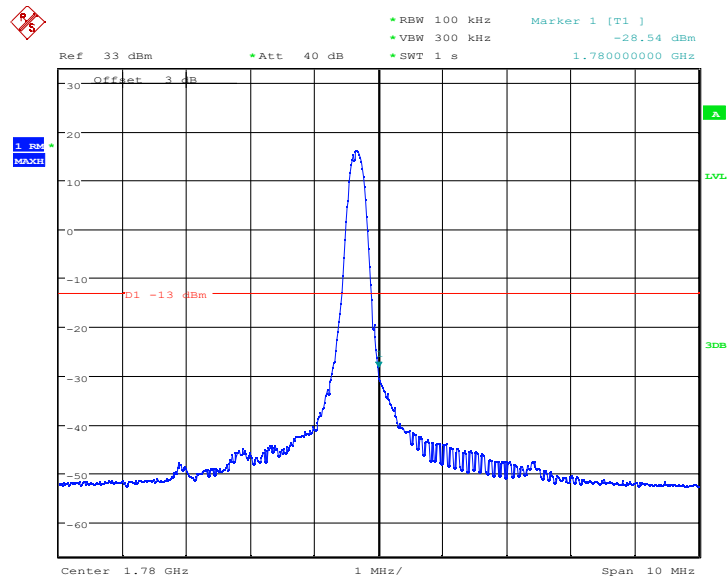
Band66-High Channel-3MHz Bandwidth-6RB-QPSK

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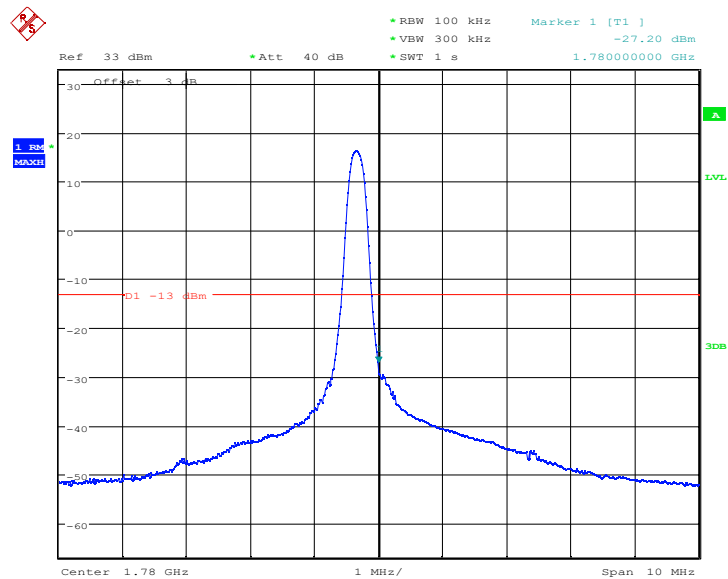


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:37:26

Band66-High Channel-5MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:37:52

Band66-High Channel-5MHz Bandwidth-1RB-QPSK

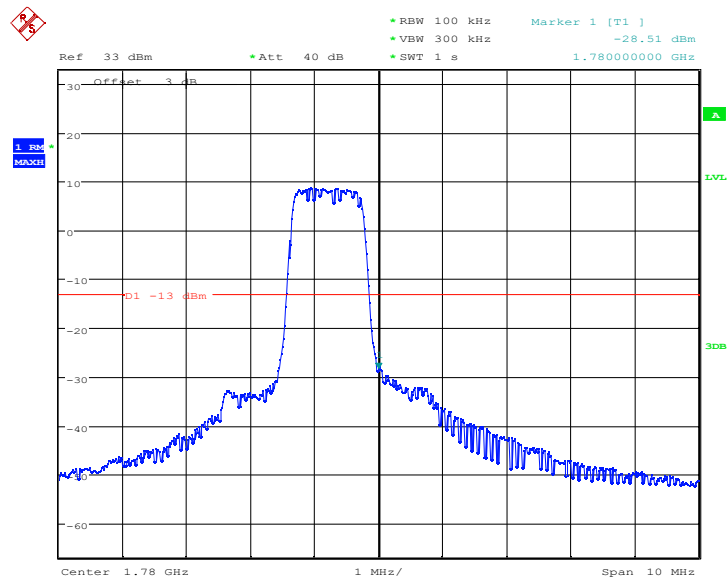
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The screenshot displays a spectrum analyzer interface. At the top, a red diamond icon with a white '9' is in the upper left corner. The main display area shows a blue trace of a signal centered at 1.78 GHz. The signal has a sharp peak reaching approximately -13 dBm. A red horizontal line is drawn across the plot at the -13 dBm level, labeled 'D1 -13 dBm'. The x-axis is labeled 'Center 1.78 GHz' and 'Span 10 MHz'. The y-axis is labeled 'Ref 33 dBm' and 'Att 40 dB'. The right side of the plot shows a green trace labeled 'Marker 1 [T1]' with a value of '-25.60 dBm'. The bottom status bar shows 'RBW 100 kHz', 'VBW 300 kHz', 'SWT 1 s', and '1.780000000 GHz'.

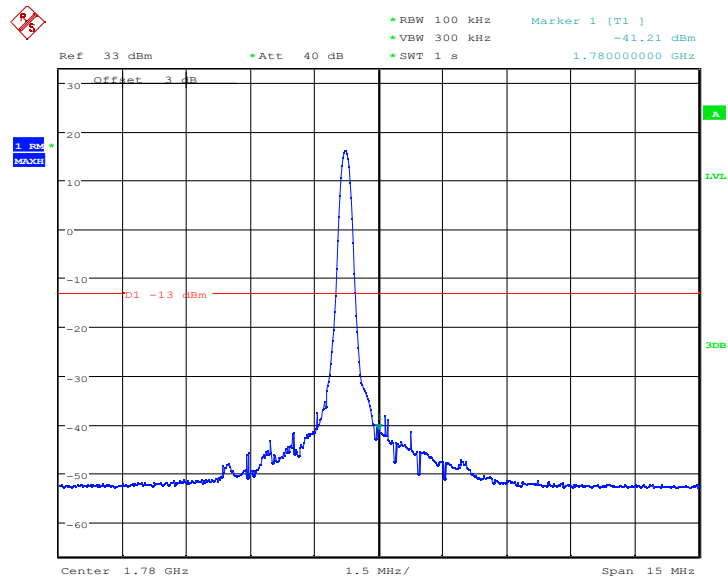
Band66-High Channel-5MHz Bandwidth-5RB-16QAM



Band66-High Channel-5MHz Bandwidth-6RB-QPSK

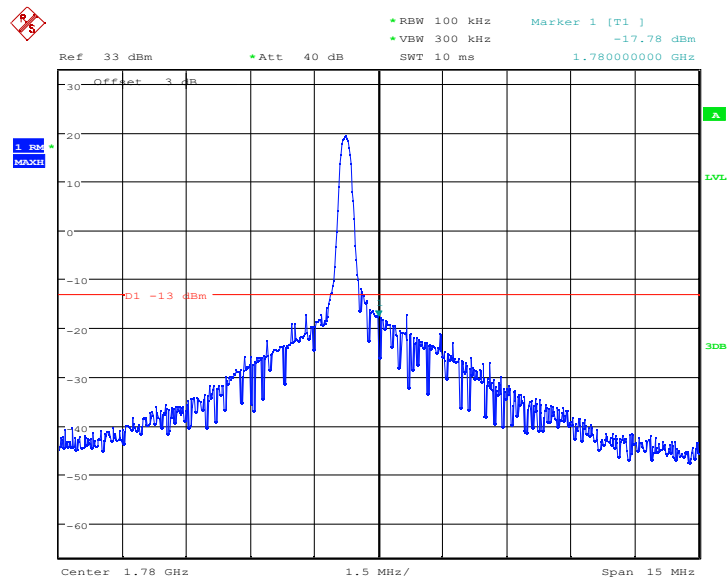
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Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:42:00

Band66-High Channel-10MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:40:40

Band66-High Channel-10MHz Bandwidth-1RB-QPSK

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Ref 33 dBm • Att 40 dB • RBW 100 kHz Marker 1 [T1] -27.90 dBm
 • VBW 300 kHz • SWT 1 s 1.780000000 GHz

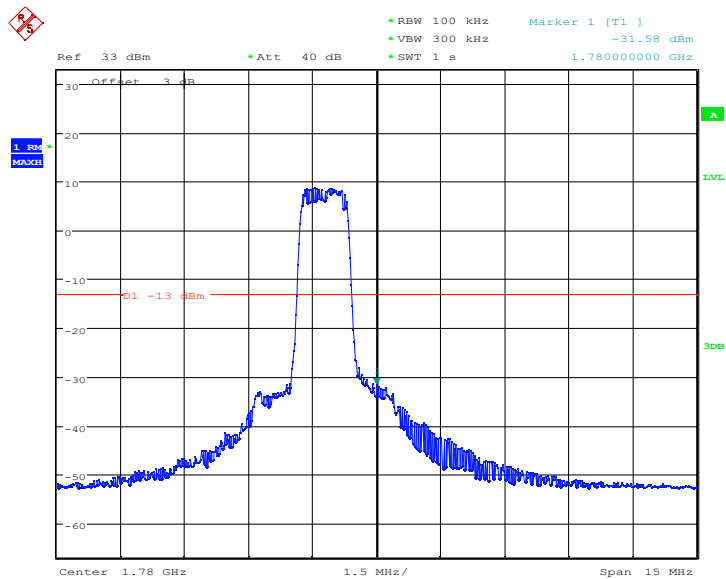
Offset 3 dB

1.78 GHz 15 MHz

D1 -13 dBm

Center 1.78 GHz 1.5 MHz/ Span 15 MHz

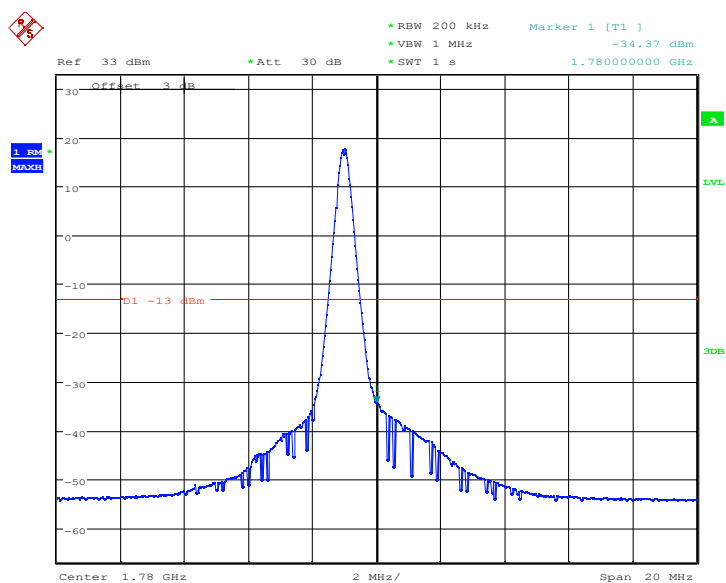
Band66-High Channel-10MHz Bandwidth-5RB-16QAM



Band66-High Channel-10MHz Bandwidth-6RB-QPSK

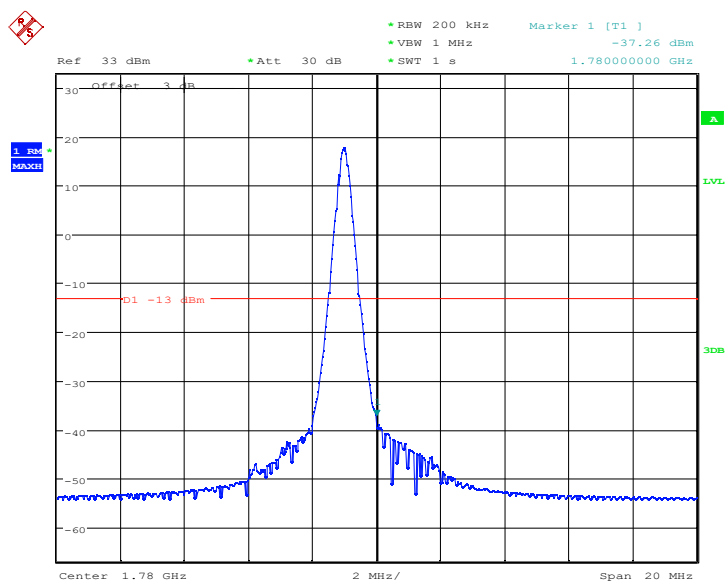
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Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:53:14

Band66-High Channel-15MHz Bandwidth-1RB-16QAM



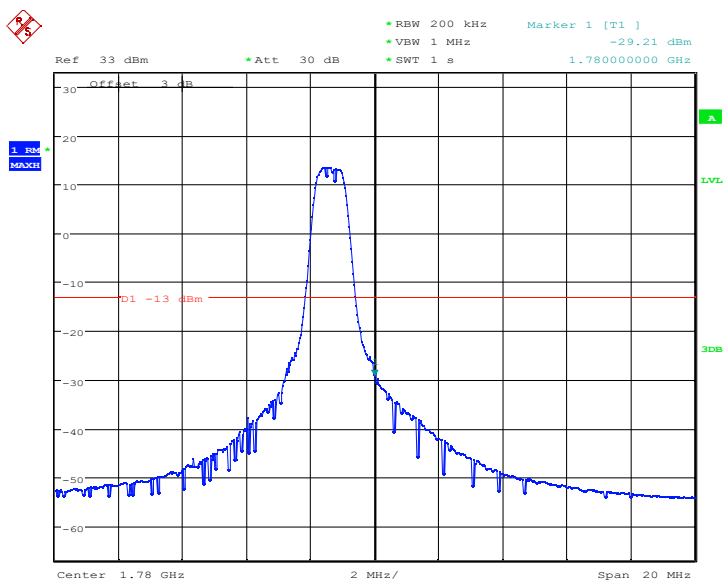
Date: 18.JUL.2022 19:54:08

Band66-High Channel-15MHz Bandwidth-1RB-QPSK

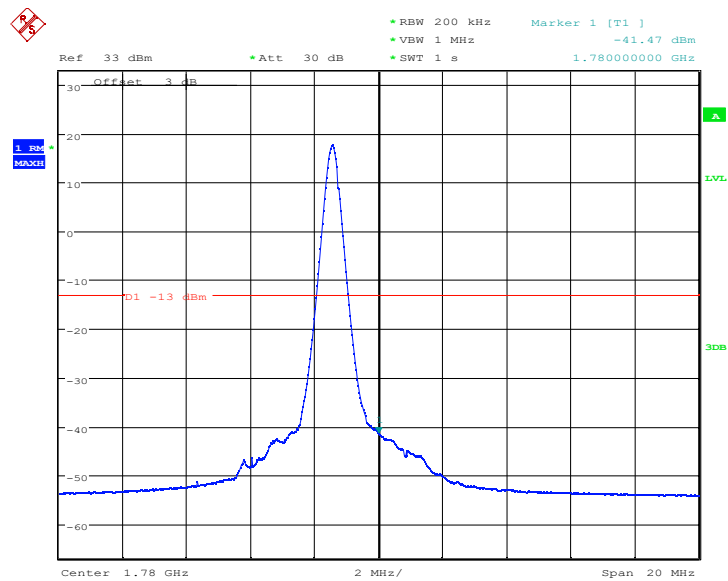
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Report No.: I22W00051-WWAN RF-Rev4

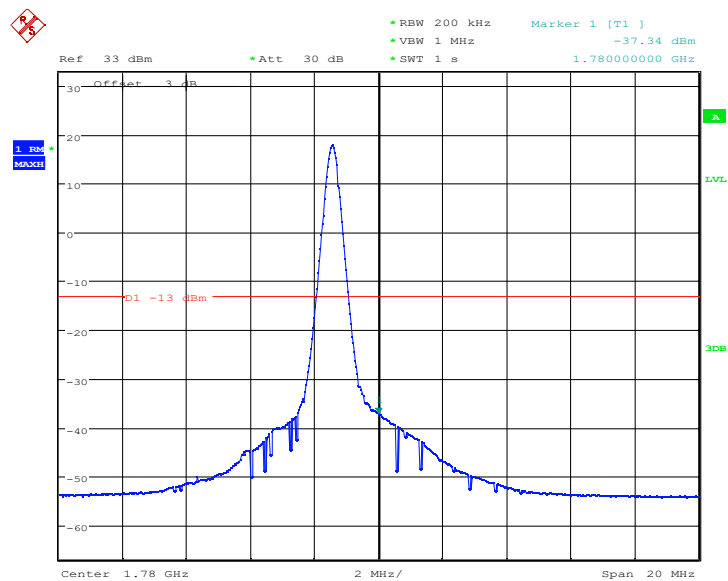


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:56:01

Band66-High Channel-20MHz Bandwidth-1RB-16QAM



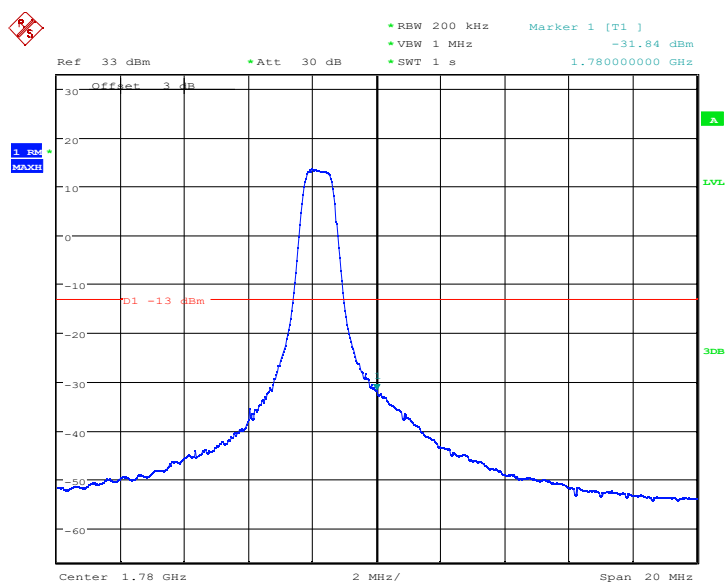
Date: 18.JUL.2022 19:57:45

Band66-High Channel-20MHz Bandwidth-1RB-QPSK

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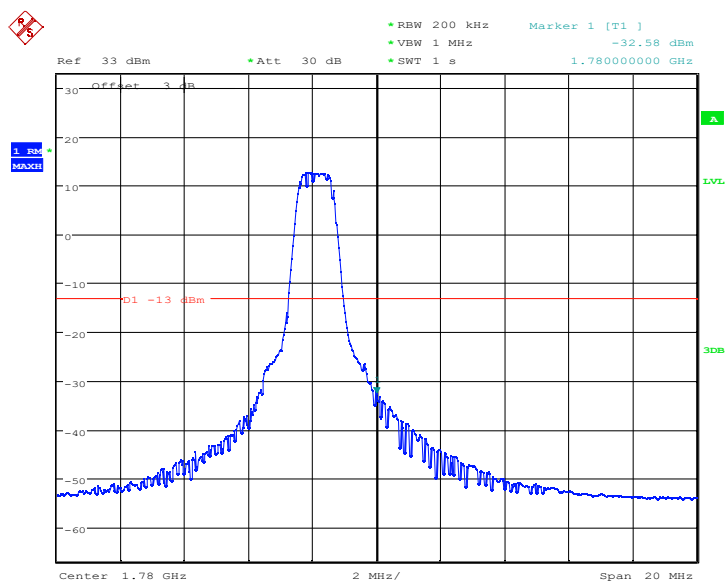
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Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:56:24

Band66-High Channel-20MHz Bandwidth-5RB-16QAM



Date: 18.JUL.2022 19:56:49

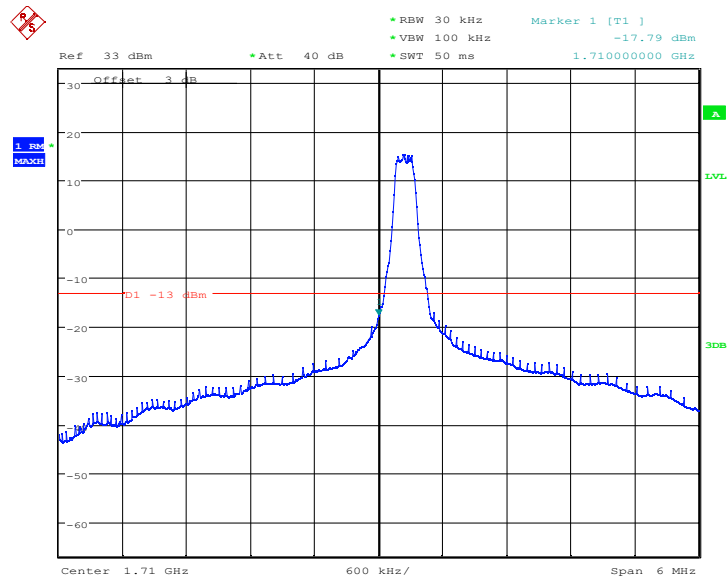
Band66-High Channel-20MHz Bandwidth-6RB-QPSK

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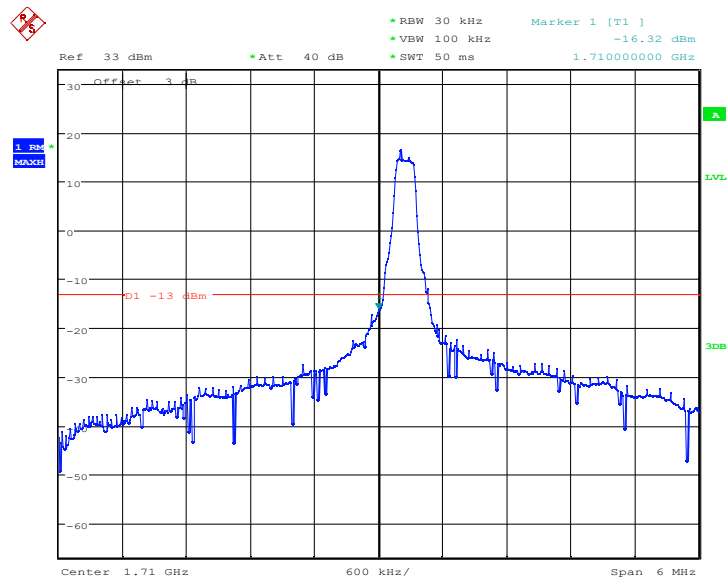


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:22:13

Band66-Low Channel-1.4MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:19:04

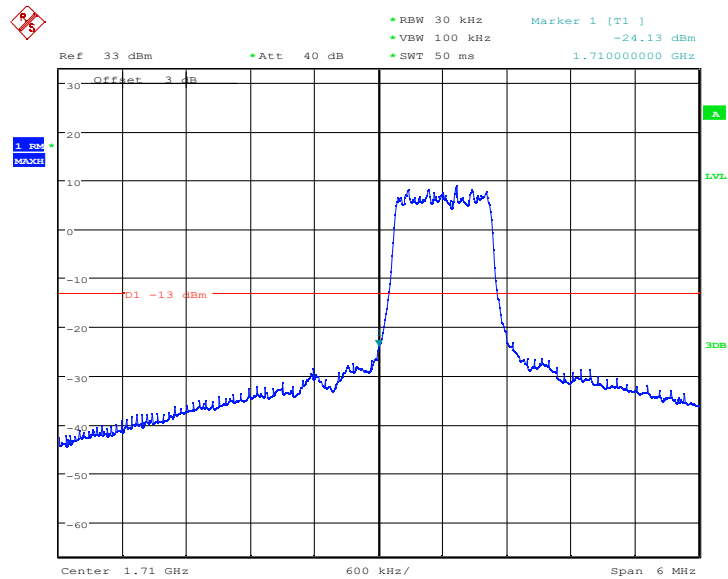
Band66-Low Channel-1.4MHz Bandwidth-1RB-QPSK

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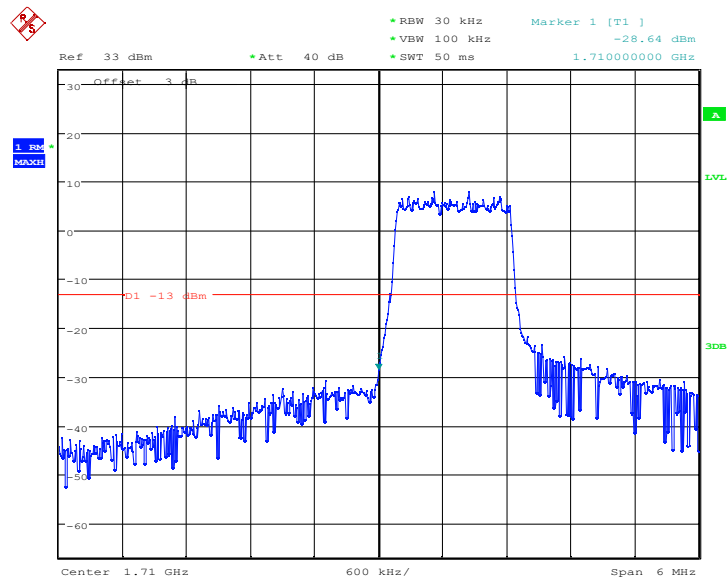


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:20:52

Band66-Low Channel-1.4MHz Bandwidth-5RB-16QAM



Date: 18.JUL.2022 19:19:27

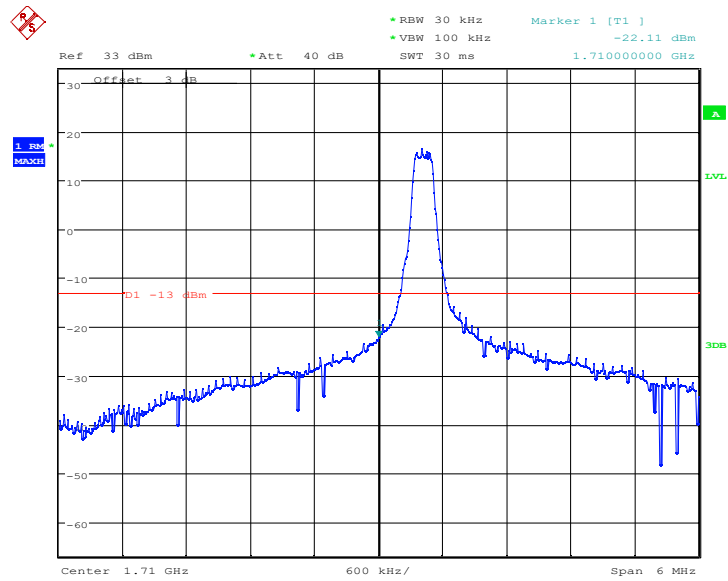
Band66-Low Channel-1.4MHz Bandwidth-6RB-QPSK

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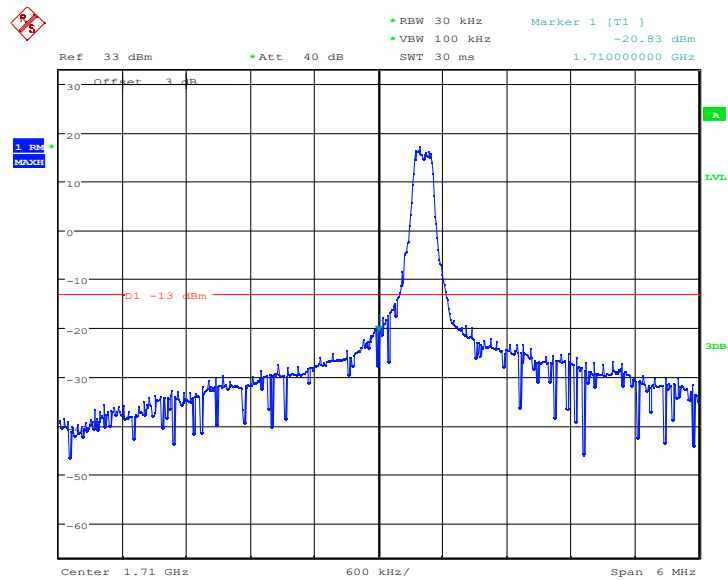


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:32:16

Band66-Low Channel-3MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:32:56

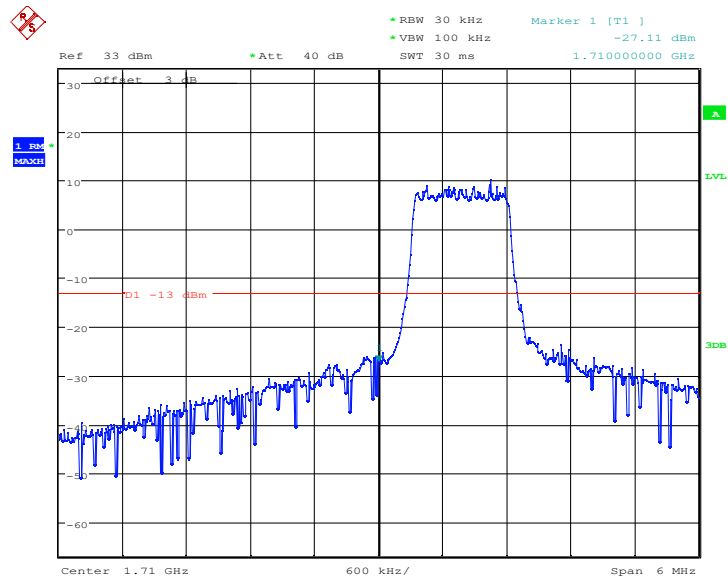
Band66-Low Channel-3MHz Bandwidth-1RB-QPSK

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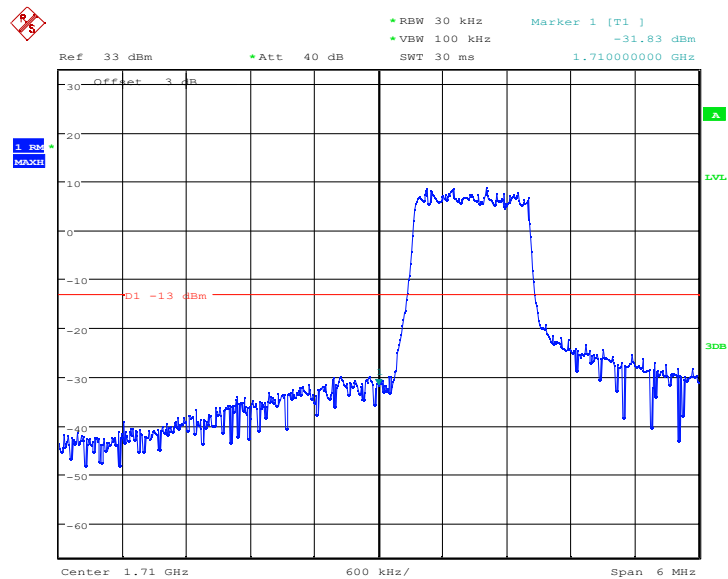


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:31:26

Band66-Low Channel-3MHz Bandwidth-5RB-16QAM



Date: 18.JUL.2022 19:33:32

Band66-Low Channel-3MHz Bandwidth-6RB-QPSK

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Ref 33 dBm Att 40 dB RBW 100 kHz VBW 300 kHz SWT 500 ms Marker 1 [T1] -26.91 dBm 1.71000000 GHz

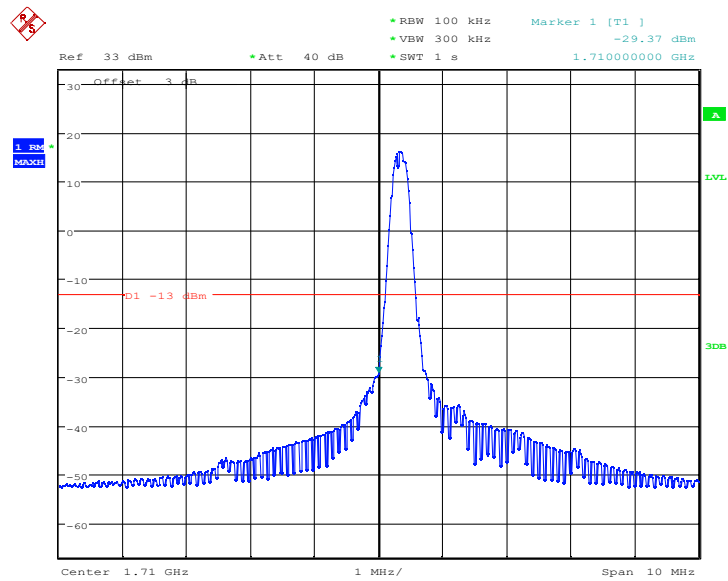
Offset 3 dB

1.500 MHz

D1 -13 dBm

Center 1.71 GHz 1 MHz/ Span 10 MHz

Band66-Low Channel-5MHz Bandwidth-1RB-16QAM

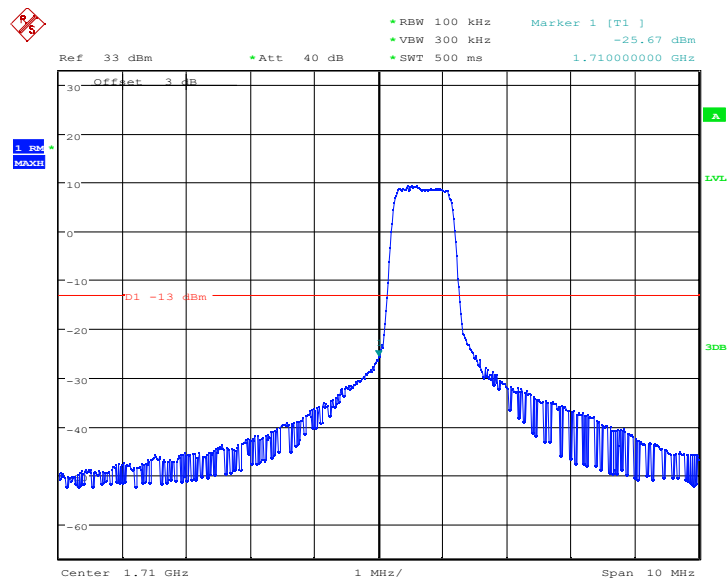


Band66-Low Channel-5MHz Bandwidth-1RB-QPSK

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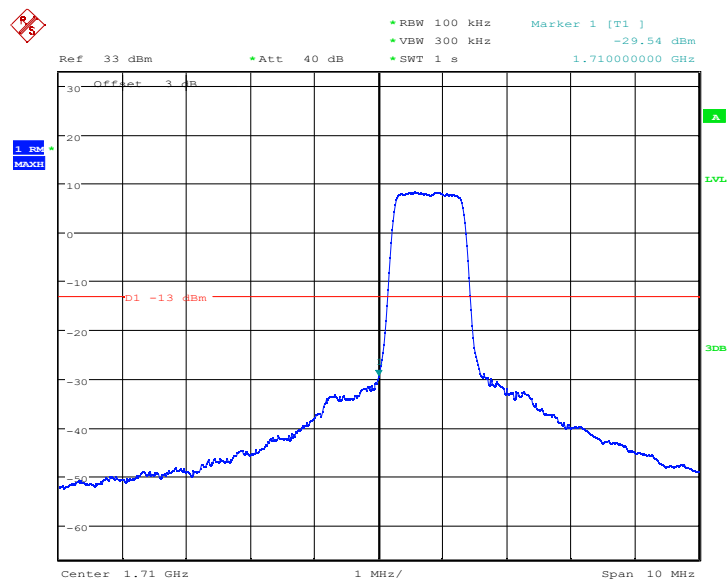


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:36:15

Band66-Low Channel-5MHz Bandwidth-5RB-16QAM



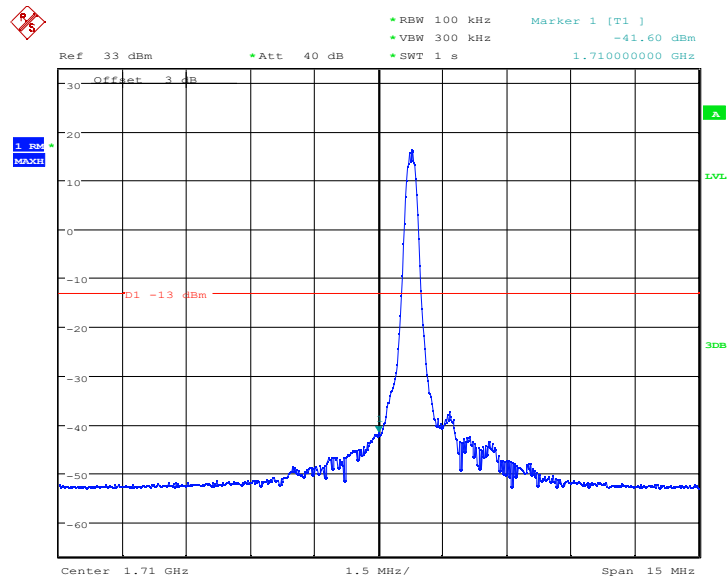
Date: 18.JUL.2022 19:34:53

Band66-Low Channel-5MHz Bandwidth-6RB-QPSK

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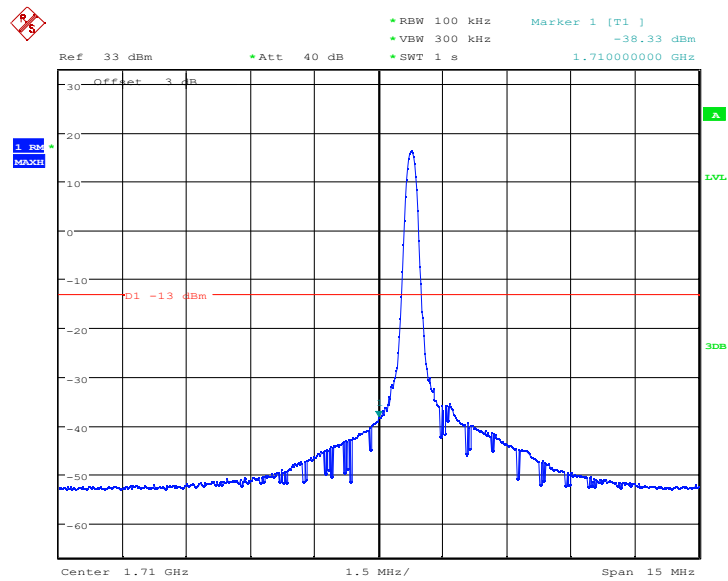
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Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 19:42:37

Band66-Low Channel-10MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:43:37

Band66-Low Channel-10MHz Bandwidth-1RB-QPSK

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Ref 33 dBm Att 40 dB RBW 100 kHz VBW 300 kHz SWT 1 s Marker 1 [T1] -28.31 dBm 1.71000000 GHz

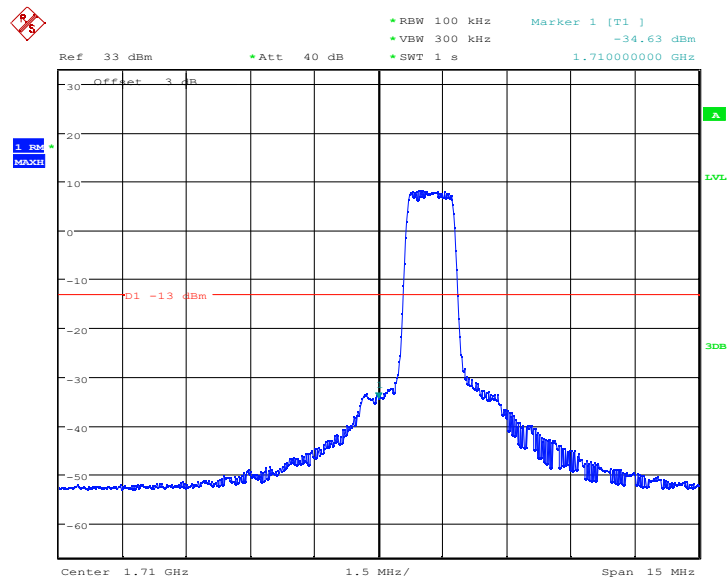
Offset 3 dB

1.535 MHz

D1 -13 dBm

Center 1.71 GHz 1.5 MHz/ Span 15 MHz

Band66-Low Channel-10MHz Bandwidth-5RB-16QAM

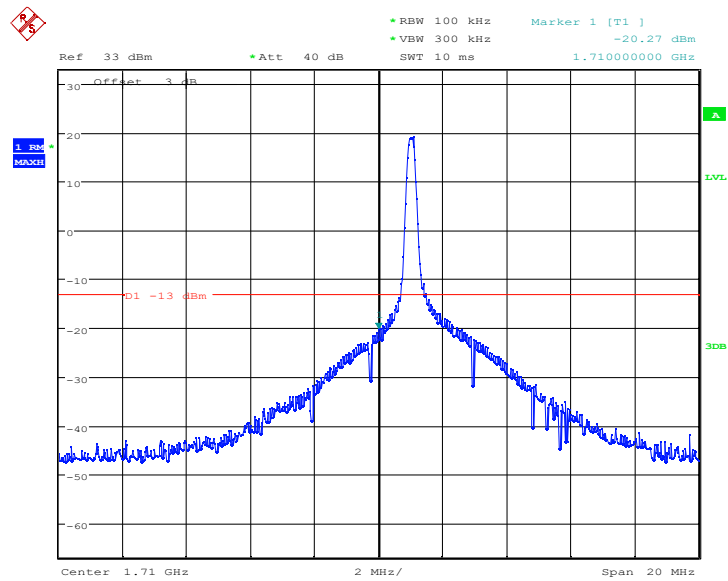


Band66-Low Channel-10MHz Bandwidth-6RB-QPSK

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[illegible]

Band66-Low Channel-15MHz Bandwidth-1RB-16QAM



Band66-Low Channel-15MHz Bandwidth-1RB-QPSK

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Ref 33 dBm • Att 40 dB • RBW 100 kHz Marker 1 [T1] -18.69 dBm
 • VBW 300 kHz SWT 10 ms 1.710000000 GHz

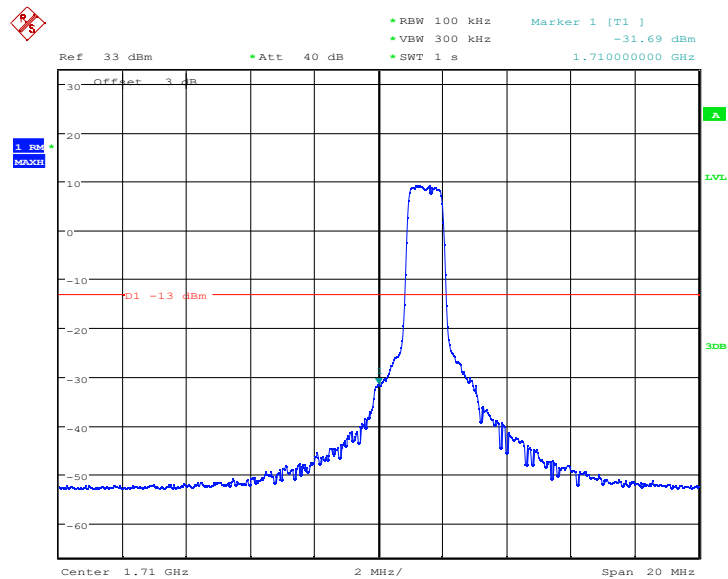
Offset 3 dB

1.71 GHz

D1 -13 dBm

Center 1.71 GHz 2 MHz/ Span 20 MHz

Band66-Low Channel-15MHz Bandwidth-5RB-16QAM

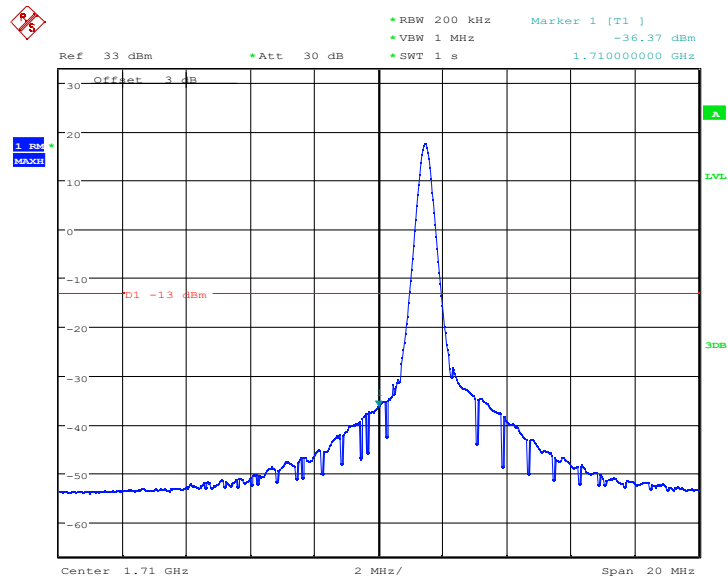


Band66-Low Channel-15MHz Bandwidth-6RB-QPSK

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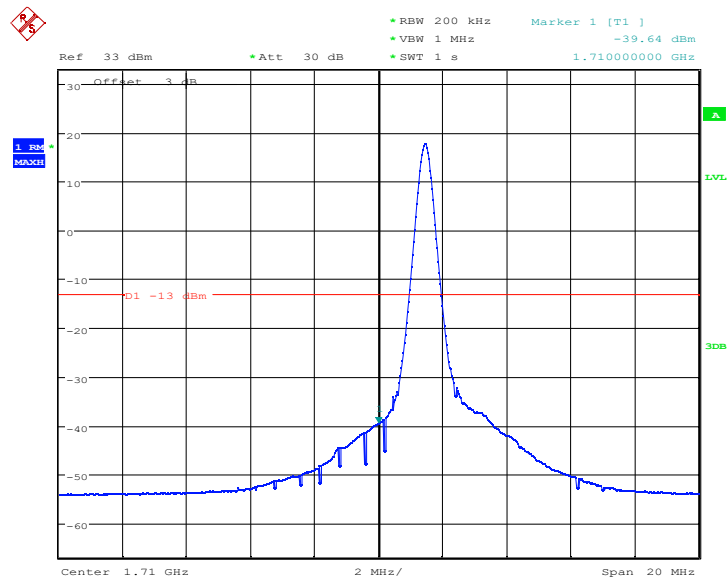


Report No.: I22W00051-WWAN RF-Rev4



Date: 18.JUL.2022 20:02:35

Band66-Low Channel-20MHz Bandwidth-1RB-16QAM



Date: 18.JUL.2022 19:58:44

Band66-Low Channel-20MHz Bandwidth-1RB-QPSK

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Ref 33 dBm Att 30 dB

RBW 200 kHz VBW 1 MHz SWT 1 s

Marker 1 [T1] -35.79 dBm

1.71000000 GHz

Offset 3 dB

1.71 GHz

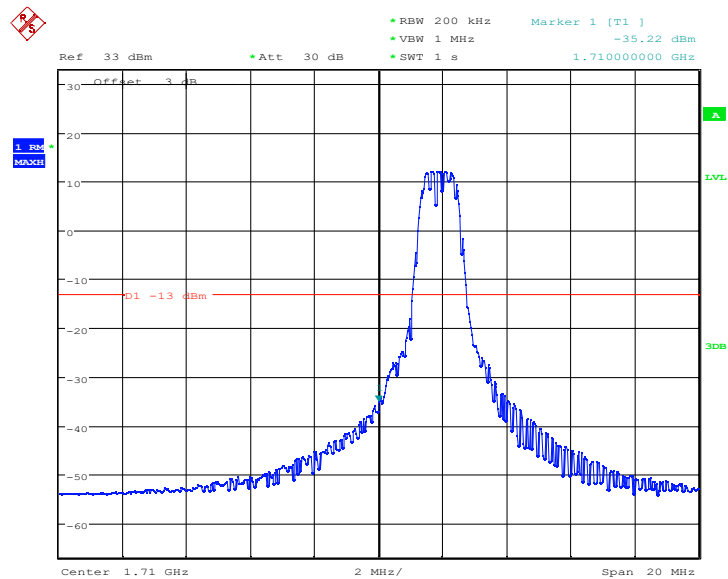
20 MHz

Center 1.71 GHz Span 20 MHz

2 MHz/

D1 -13 dBm

Band66-Low Channel-20MHz Bandwidth-5RB-16QAM



Band66-Low Channel-20MHz Bandwidth-6RB-QPSK

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6.8. Frequency Stability

Specifications:	FCC Part 2.1055, 22.355,24.235, 27.54,90.213
DUT Serial Number:	865456056939661
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit	
Frequency deviation [ppm]	±2.5

Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	1.54 Hz (k=2)

Test Method

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as FL and FH respectively.

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a “call mode”. This is accomplished with the use of CMW500.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500, and in a simulated call on middle channel for each LTE band, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.

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6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the center channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 °C increments from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

6.8.1 Frequency Stability over Temperature Variation Results

6.8.1.1 NB-IoT Band Frequency Stability over Temperature Variation Results

Band	Reference channel frequency (MHz)	Offset	Temperature[°C]								
			-30	-20	-10	0	10	20	30	40	50
2	1880	Hz	-2.85	10.33	9.66	7.02	-2.52	-1.00	-6.54	-21.90	-19.77
		ppm	-0.002	0.005	0.005	0.004	-0.001	-0.001	-0.003	-0.012	-0.011
4	1732.5	Hz	-10.77	-5.24	6.09	8.01	-1.29	-6.67	-13.43	-24.55	-23.62
		ppm	-0.006	-0.003	0.004	0.005	-0.001	-0.004	-0.008	-0.014	-0.014
12	707.5	Hz	-5.19	3.96	8.97	7.01	7.31	1.47	-2.55	-3.69	-8.42
		ppm	-0.007	0.006	0.013	0.010	0.010	0.002	-0.004	-0.005	-0.012
13	782	Hz	-5.65	1.10	4.16	3.15	1.02	-1.03	-8.05	-9.68	-13.03
		ppm	-0.007	0.001	0.005	0.004	0.001	-0.001	-0.010	-0.012	-0.017
25	1882.5	Hz	-12.46	11.60	12.90	9.93	6.57	-5.16	-11.97	-19.53	-20.37

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		ppm	-0.007	0.006	0.007	0.005	0.003	-0.003	-0.006	-0.010	-0.011
26	819	Hz	-12.16	-3.20	0.30	-0.94	-1.46	-4.32	-10.57	-15.58	-15.28
		ppm	-0.015	-0.004	0.000	-0.001	-0.002	-0.005	-0.013	-0.019	-0.019
	836.5	Hz	-9.06	2.16	3.38	2.06	3.46	-2.42	-6.37	-10.53	-12.22
		ppm	-0.011	0.003	0.004	0.002	0.004	-0.003	-0.008	-0.013	-0.015
66	1745	Hz	0.74	12.66	17.47	17.38	2.82	2.56	-5.78	-8.25	-19.18
		ppm	0.000	0.007	0.010	0.010	0.002	0.001	-0.003	-0.005	-0.011
71	680.5	Hz	-7.97	1.36	3.37	3.45	3.33	-2.00	-5.12	-7.77	-9.98
		ppm	-0.012	0.002	0.005	0.005	0.005	-0.003	-0.008	-0.011	-0.015

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6.8.1.2 CAT-M Band Frequency Stability over Temperature Variation Results

Band	Reference channel frequency (MHz)	Offset	Temperature[°C]								
			-30	-20	-10	0	10	20	30	40	50
2	1880	Hz	17.27	8.05	1.76	-1.27	-1.1	4.98	9.98	14.62	17.22
		ppm	0.009	0.004	0.001	-0.001	-0.001	0.003	0.005	0.008	0.009
4	1732.5	Hz	16.71	6.68	-0.36	-1.92	0.66	4.35	7.55	12.96	14.39
		ppm	0.010	0.004	0.000	-0.001	0.000	0.003	0.004	0.007	0.008
12	707.5	Hz	11.09	-1.99	-7.94	-11.39	-6.72	-5.15	1.43	6.19	9.58
		ppm	0.016	-0.003	-0.011	-0.016	-0.009	-0.007	0.002	0.009	0.014
13	782	Hz	12.97	-1.76	-8.83	-11.62	-8.41	-5.26	0.64	3.64	11.2
		ppm	0.017	-0.002	-0.011	-0.015	-0.011	-0.007	0.001	0.005	0.014
14	793	Hz	12.29	-0.49	-9.71	-9.76	-9.57	-4.45	-0.2	6.42	-9.03
		ppm	0.015	-0.001	-0.012	-0.012	-0.012	-0.006	0.000	0.008	-0.011
25	1882.5	Hz	9.5	-4.69	-8.91	-13.66	-10.36	-7.58	-2.7	1.99	9.36
		ppm	0.005	-0.002	-0.005	-0.007	-0.006	-0.004	-0.001	0.001	0.005
26	819	Hz	8.94	7.36	-9.56	-11.43	-9.98	-3.71	-0.53	4.62	7.1
		ppm	0.011	0.009	-0.012	-0.014	-0.012	-0.005	-0.001	0.006	0.009
	836.5	Hz	11.74	-1.93	-9.23	-11.42	-9.57	-5.52	0.06	5.38	10.81
		ppm	0.014	-0.002	-0.011	-0.014	-0.011	-0.007	0.000	0.006	0.013
66	1745	Hz	12.23	-0.4	-5.34	-4.19	-3.54	2.09	3.75	7.44	10.54
		ppm	0.007	0.000	-0.003	-0.002	-0.002	0.001	0.002	0.004	0.006

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6.8.2 Frequency Stability over Voltage Variation

6.8.2.1 NB-IoT Band Frequency Stability over Voltage Variation Results

Test data:

Band	Reference channel frequency (MHz)	Offset	Voltage (V)		
			3.4	3.8	4.2
2	1880	Hz	-10.6	-5.94	-3.68
		ppm	-0.006	-0.003	-0.002
4	1732.5	Hz	-6.78	-6.32	-9.54
		ppm	-0.004	-0.004	-0.006
12	707.5	Hz	-0.36	-0.36	-0.04
		ppm	-0.001	-0.001	0.000
13	782	Hz	-3.05	-4.09	-4.01
		ppm	-0.004	-0.005	-0.005
25	1882.5	Hz	-2.2	-6.24	-6.92
		ppm	-0.001	-0.003	-0.004
26	819	Hz	-7.54	-8.81	-5.35
		ppm	-0.009	-0.011	-0.007
	836.5	Hz	4.69	-4.82	-4.15
		ppm	0.006	-0.006	-0.005
66	1745	Hz	-1.17	-0.59	-1.83
		ppm	-0.001	0.000	-0.001
71	680.5	Hz	-1.03	-0.53	-3.16
		ppm	-0.002	-0.001	-0.005

6.8.2.2 CAT-M Band Frequency Stability over Voltage Variation Results

Test data:

Band	Reference channel frequency (MHz)	Offset	Voltage (V)		
			3.4	3.8	4.2
2	1880	Hz	6.90	7.98	7.40
		ppm	0.004	0.004	0.004
4	1732.5	Hz	6.47	8.28	5.02
		ppm	0.004	0.005	0.003
12	707.5	Hz	-2.43	-1.97	-1.50
		ppm	-0.003	-0.003	-0.002
13	782	Hz	-2.19	-3.22	-2.47
		ppm	-0.003	-0.004	-0.003
14	793	Hz	-2.42	-2.30	-1.65
		ppm	-0.003	-0.003	-0.002
25	1882.5	Hz	-3.48	-4.05	-4.82
		ppm	-0.002	-0.002	-0.003
26	819	Hz	-4.66	-4.02	-2.45
		ppm	-0.006	-0.005	-0.003
	836.5	Hz	-2.52	-3.32	-3.20
		ppm	-0.003	-0.004	-0.004
66	1745	Hz	0.53	1.04	-0.20
		ppm	0.000	0.001	0.000

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6.9. Peak to Average Ratio

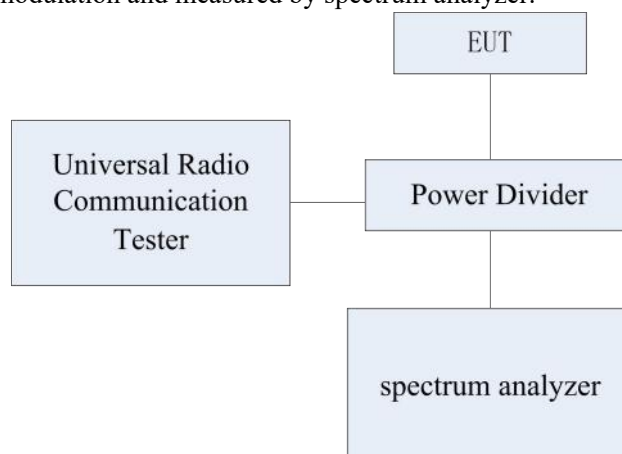
Specifications:	FCC Part 24.232, 27.50
DUT Serial Number:	865456056939661
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit

The EUT meets the requirement of having a peak to average ratio of less than 13dB.

Test Setup

During the test, the EUT was controlled via the Wireless Communications Test Set to ensure max power transmission and proper modulation and measured by spectrum analyzer.



Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	0.62 dB (k=2)

Test Method

The transmitter output was connected to a CMW500 through a coaxial RF cable and directional coupler, and configured to operate at maximum power. The peak to average ratio was measured at the required operating frequencies in each Band on the Spectrum Analyzer.

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6.9.1 NB-IoT Peak to Average Ratio Results

Mode	Channel	Frequency (MHz)	PAPR(dB)	PAPR(dB)
			QPSK	BPSK
Band2	18900	1880	6.11	6.21
Band4	20175	1732.5	6.08	5.85
Band12	23095	707.5	6.77	6.06
Band13	23230	782.0	6.32	6.24
Band25	26365	1882.5	6.27	6.16
Band26 (814MH-824MHz)	26740	819	6.18	6.35
Band26 (824MH-849MHz)	26915	836.5	6.51	6.09
Band66	132322	1745	6.26	6.27
Band71	133297	680.5	6.18	5.61

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6.9.2 CAT-M Peak to Average Ratio Results

Mode	Bandwidth h	Modulation	Channel/Frequency (MHz)	PAPR (dB)
Band2	1.4MHz	QPSK	18900/1880	12.08
		16QAM	18900/1880	11.38
	3MHz	QPSK	18900/1880	10.19
		16QAM	18900/1880	9.26
	5MHz	QPSK	18900/1880	11.51
		16QAM	18900/1880	8.43
	10MHz	QPSK	18900/1880	10.90
		16QAM	18900/1880	8.49
	15MHz	QPSK	18900/1880	8.69
		16QAM	18900/1880	8.94
	20MHz	QPSK	18900/1880	11.73
		16QAM	18900/1880	7.82
Band4	1.4MHz	QPSK	20175/1732.5	10.83
		16QAM	20175/1732.5	12.85
	3MHz	QPSK	20175/1732.5	12.05
		16QAM	20175/1732.5	10.83
	5MHz	QPSK	20175/1732.5	10.80
		16QAM	20175/1732.5	10.80
	10MHz	QPSK	20175/1732.5	10.93
		16QAM	20175/1732.5	10.87
	15MHz	QPSK	20175/1732.5	8.78
		16QAM	20175/1732.5	9.13
	20MHz	QPSK	20175/1732.5	8.78
		16QAM	20175/1732.5	7.98
Band12	1.4MHz	QPSK	23095/707.5	11.92
		16QAM	23095/707.5	10.74
	3MHz	QPSK	23095/707.5	10.71
		16QAM	23095/707.5	10.71
	5MHz	QPSK	23095/707.5	11.63
		16QAM	23095/707.5	10.77
	10MHz	QPSK	23095/707.5	10.87
		16QAM	23095/707.5	10.83
Band13	5MHz	QPSK	23230/782.0	12.02
		16QAM	23230/782.0	10.83
	10MHz	QPSK	23230/782.0	11.92

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		16QAM	23230/782.0	12.92
Band14	5MHz	QPSK	23330/793.0	9.74
		16QAM	23330/793.0	10.03
	10MHz	QPSK	23330/793.0	10.13
		16QAM	23330/793.0	10.10
Band25	1.4MHz	QPSK	26365/1882.5	9.20
		16QAM	26365/1882.5	11.60
	3MHz	QPSK	26365/1882.5	8.53
		16QAM	26365/1882.5	11.76
	5MHz	QPSK	26365/1882.5	9.46
		16QAM	26365/1882.5	10.87
	10MHz	QPSK	26365/1882.5	10.19
		16QAM	26365/1882.5	9.49
	15MHz	QPSK	26365/1882.5	9.71
		16QAM	26365/1882.5	10.06
Band26 (814MHz- 824MHz)	1.4MHz	QPSK	26740/819	10.80
		16QAM	26740/819	10.90
	3MHz	QPSK	26740/819	10.83
		16QAM	26740/819	10.77
	5MHz	QPSK	26740/819	11.86
		16QAM	26740/819	10.83
Band26 (824MHz- 849MHz)	1.4MHz	QPSK	26915/836.5	10.87
		16QAM	26915/836.5	10.77
	3MHz	QPSK	26915/836.5	10.80
		16QAM	26915/836.5	10.83
	5MHz	QPSK	26915/836.5	11.76
		16QAM	26915/836.5	12.21
Band66	1.4MHz	QPSK	18900/1880	10.87
		16QAM	18900/1880	10.83
	3MHz	QPSK	18900/1880	10.80
		16QAM	18900/1880	10.80

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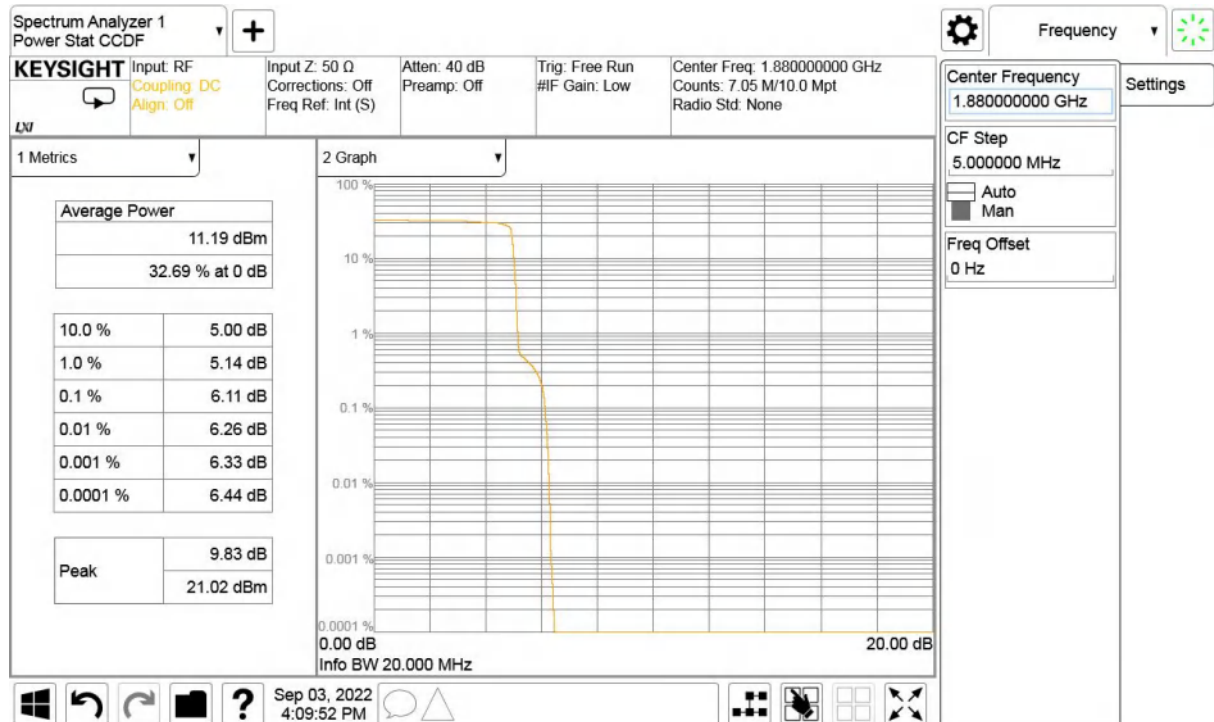
Report No.: I22W00051-WWAN RF-Rev4

	5MHz	QPSK	18900/1880	10.87
		16QAM	18900/1880	11.47
	10MHz	QPSK	18900/1880	11.03
		16QAM	18900/1880	11.89
	15MHz	QPSK	18900/1880	8.85
		16QAM	18900/1880	11.31
	20MHz	QPSK	18900/1880	10.22
		16QAM	18900/1880	10.54

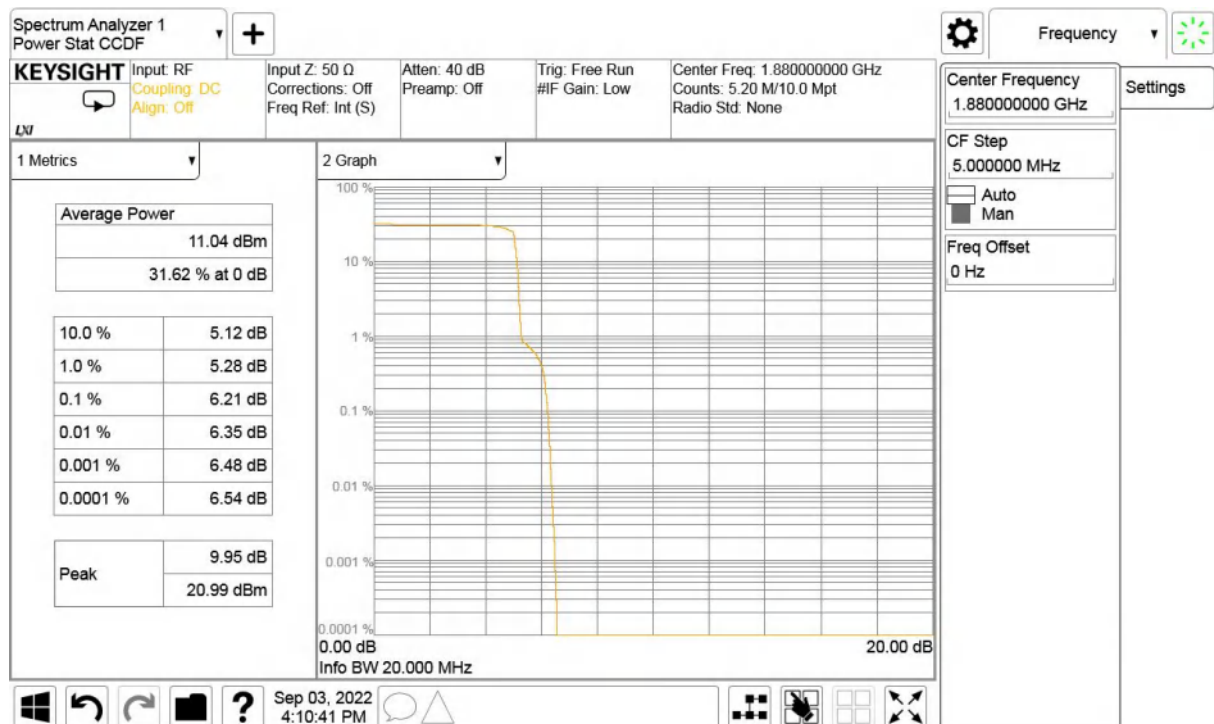
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Graphical for Peak to Average Ratio Results for NB-IoT:



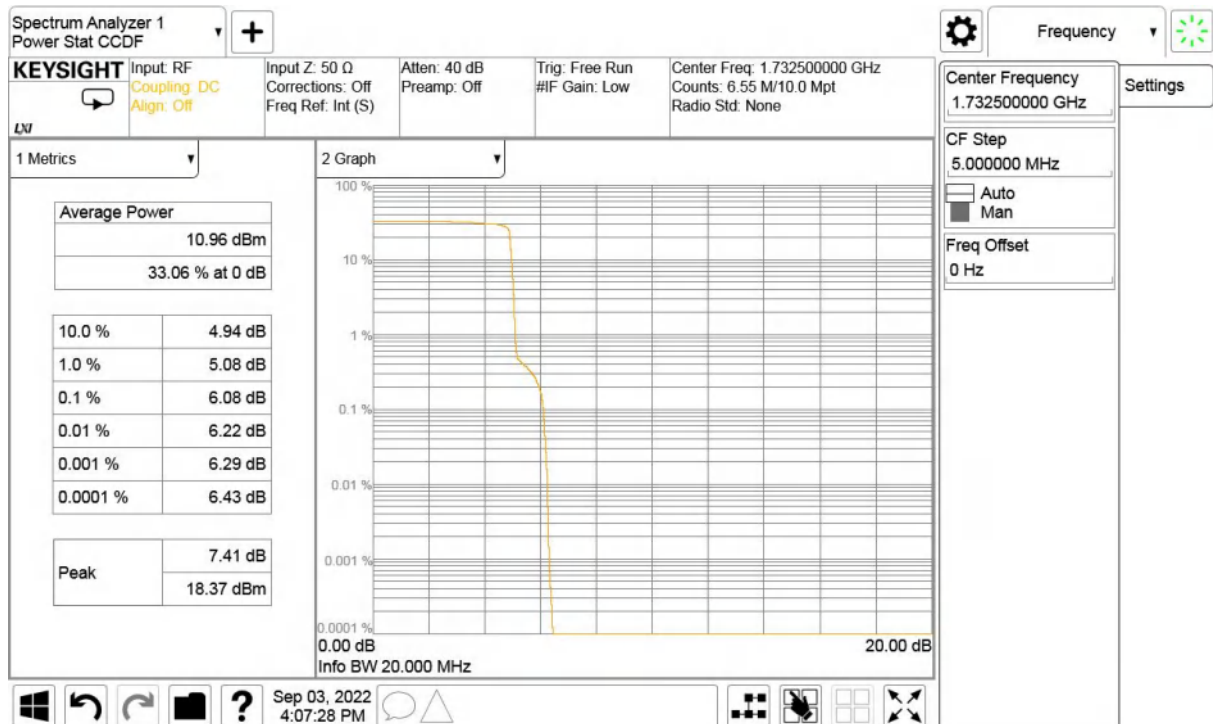
Band2-CH18900-1880MHz-QPSK



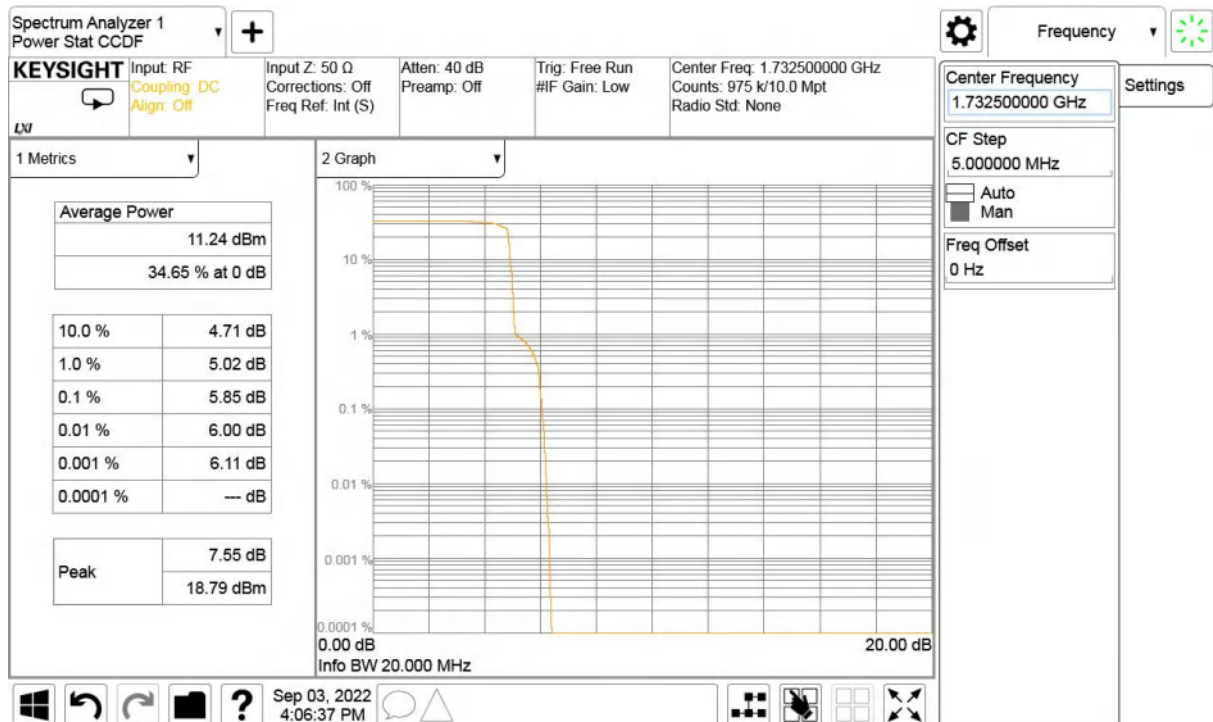
Band2-CH18900-1880MHz-BPSK

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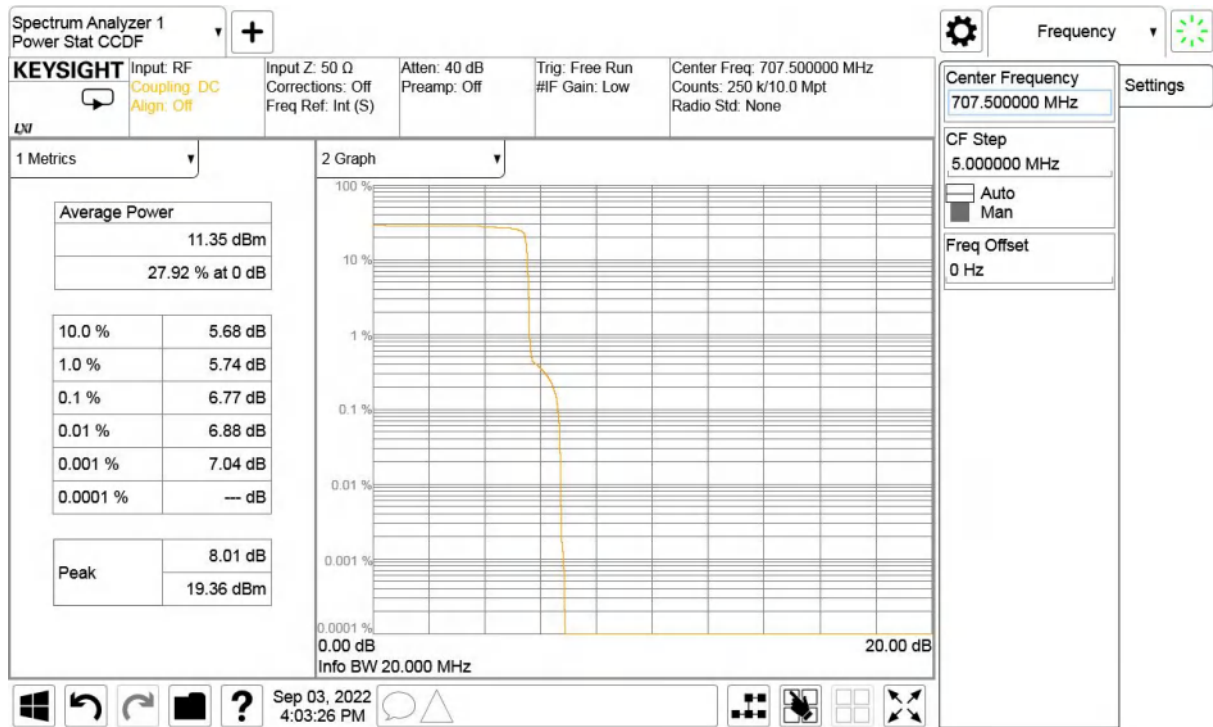
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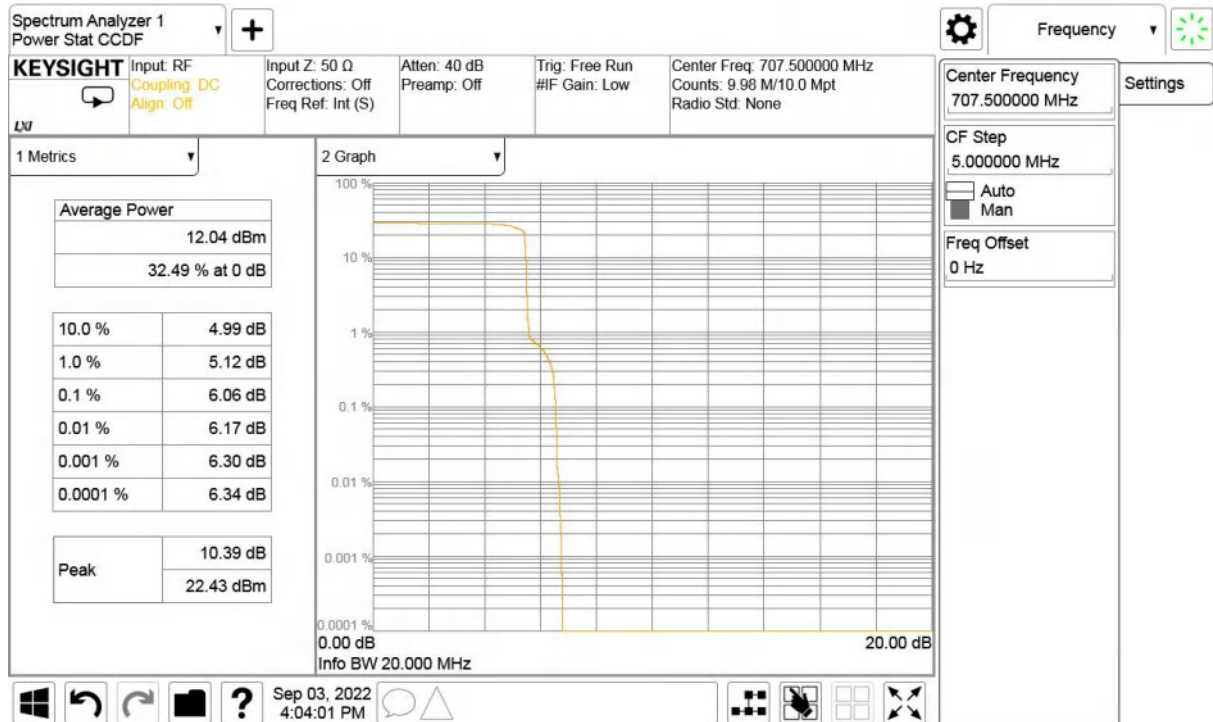
Band4-CH20175-1732.5MHz-QPSK



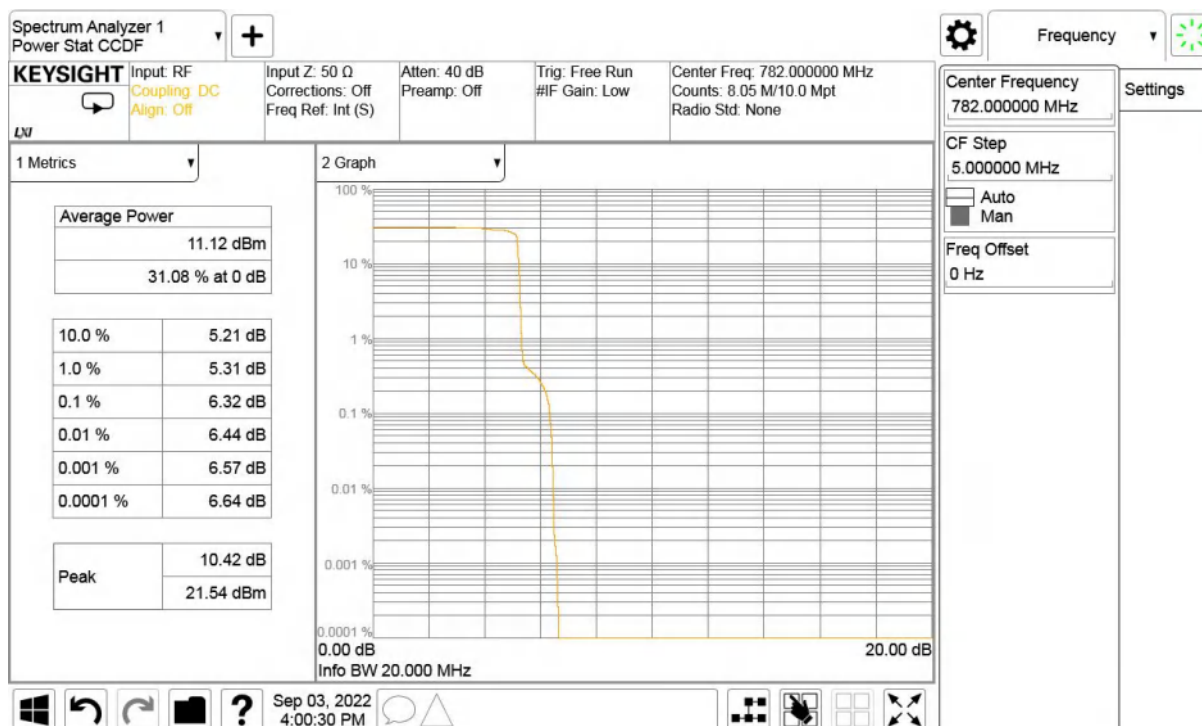
Band4- CH20175-1732.5MHz -BPSK



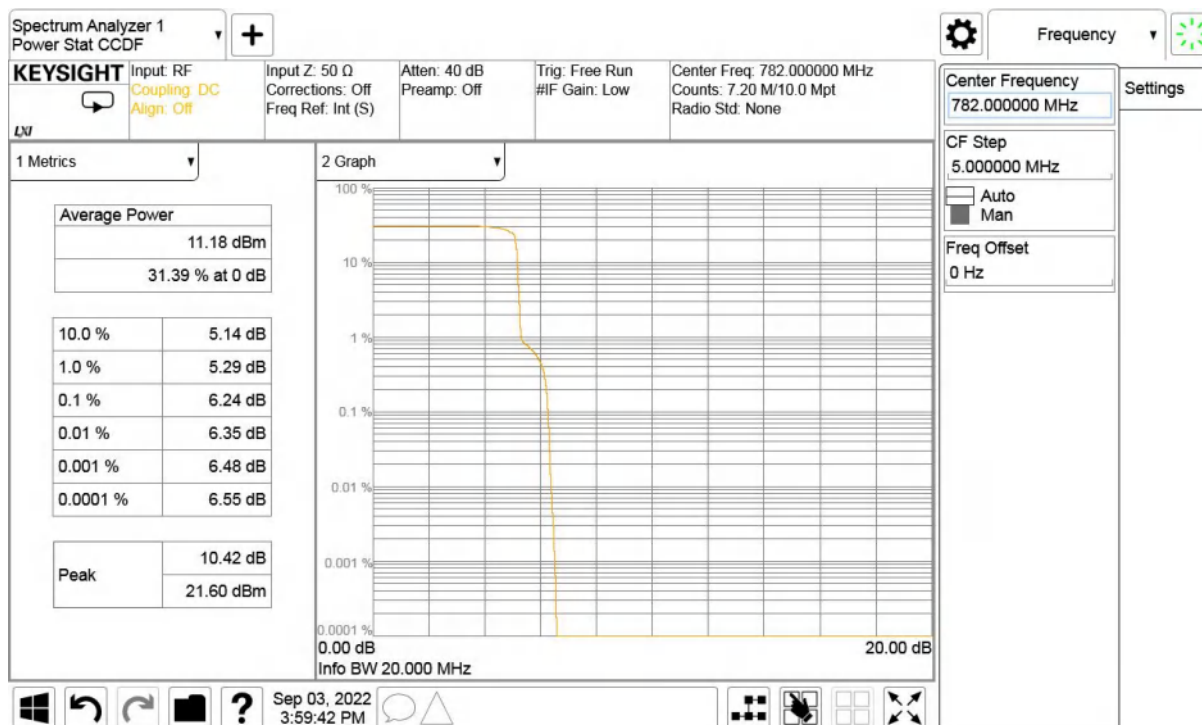
Band12-CH23095-707.5MHz-QPSK



Band12- CH23095-707.5MHz -BPSK



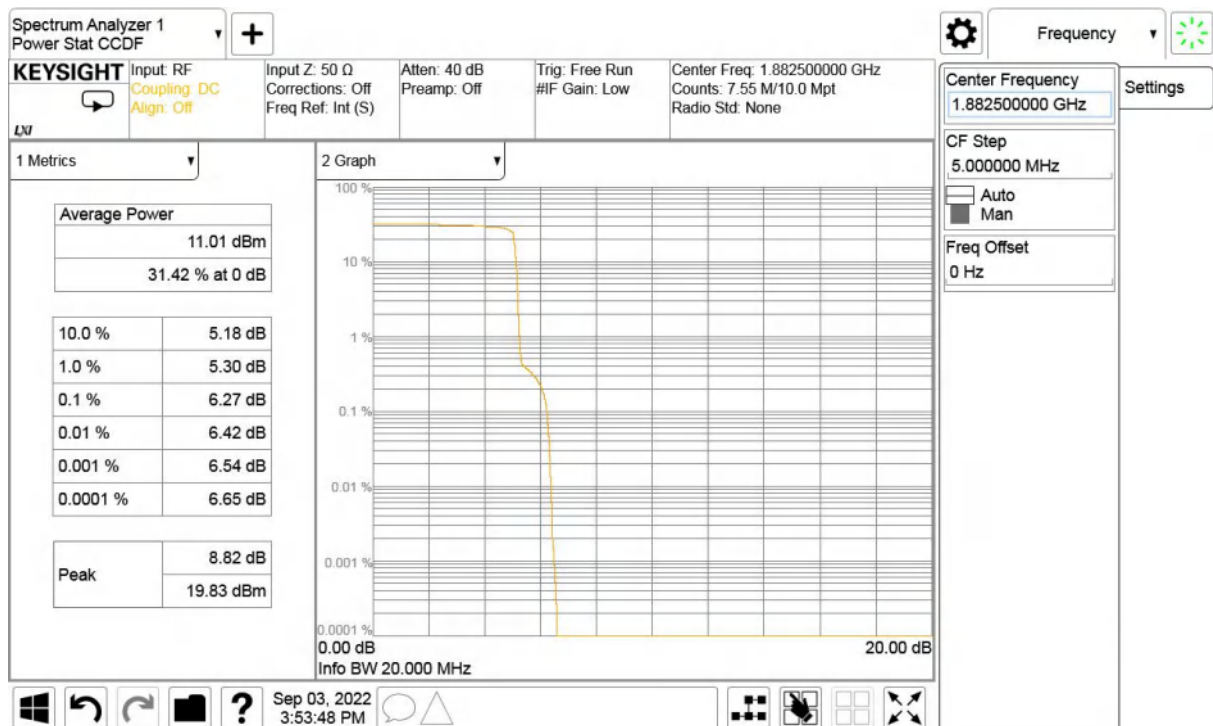
Band13-CH23230-782MHz-QPSK



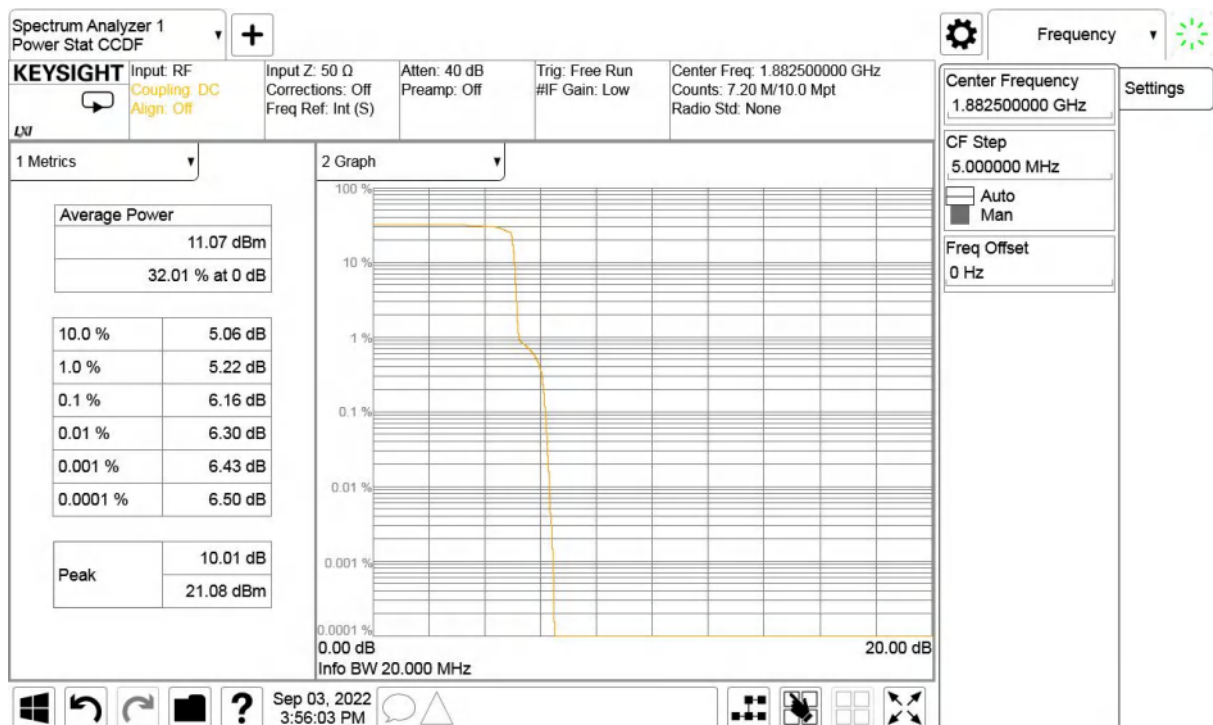
Band13- CH23230-782MHz -BPSK

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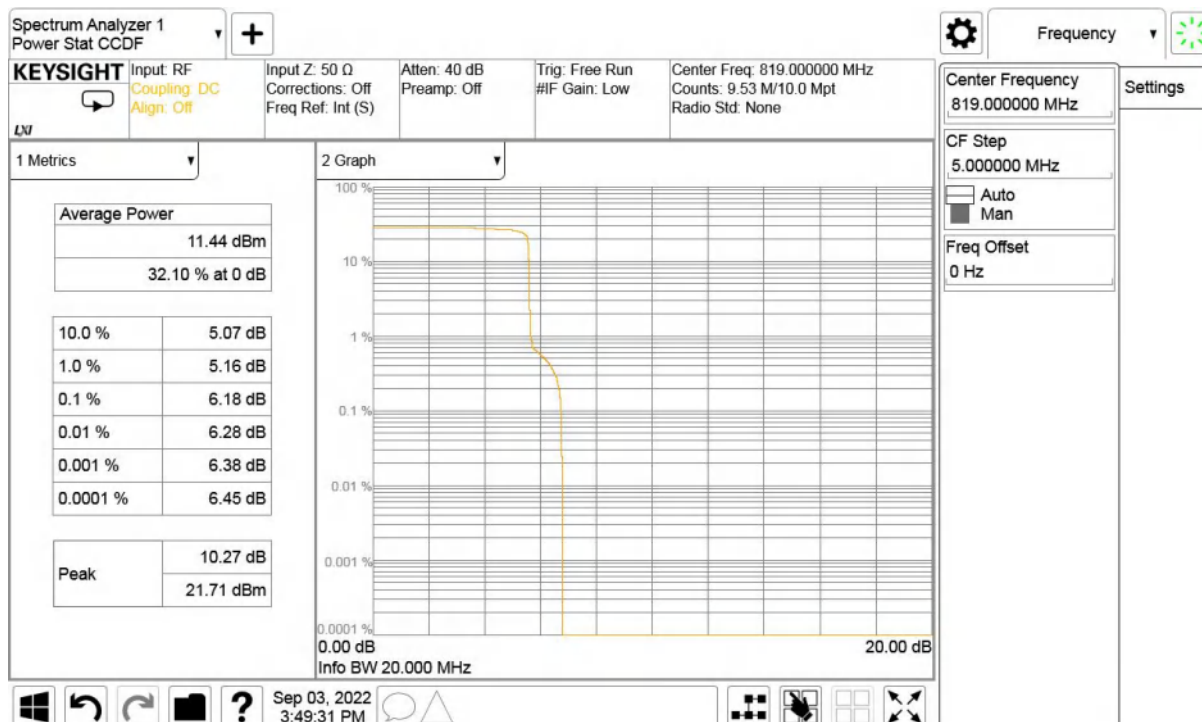


Band25-CH26365-1882.5MHz-QPSK

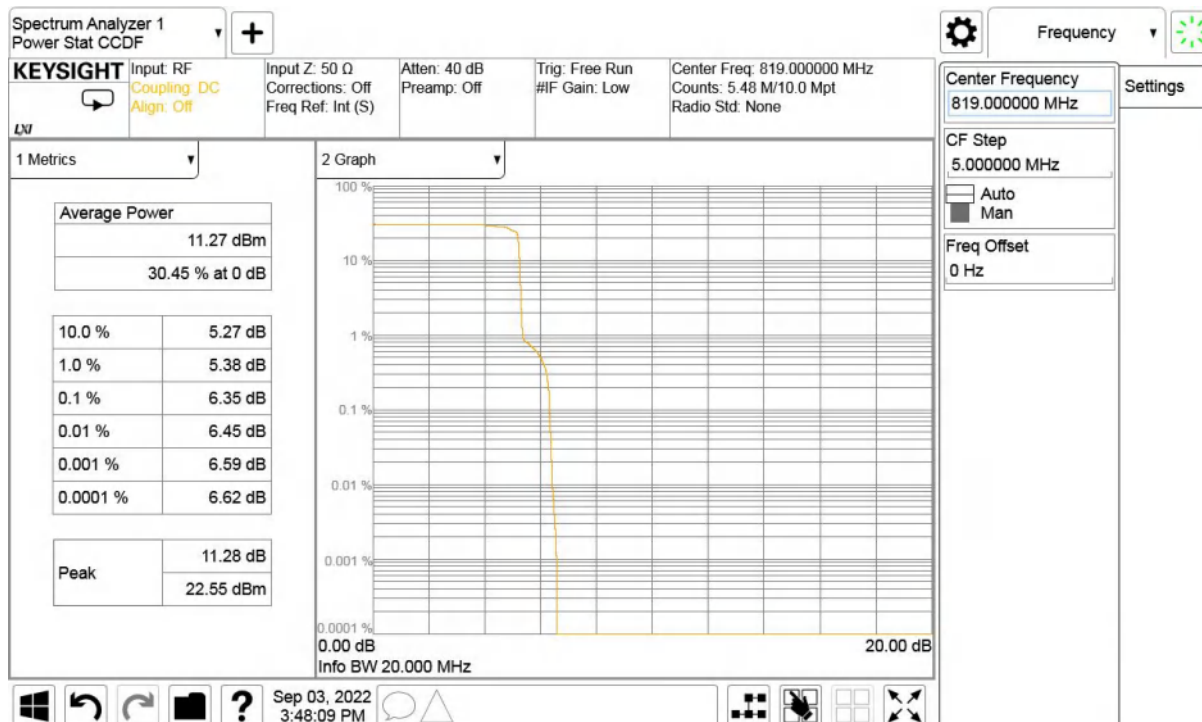


Band25- CH26365-1882.5MHz -BPSK

Part(814MHz-824MHz)



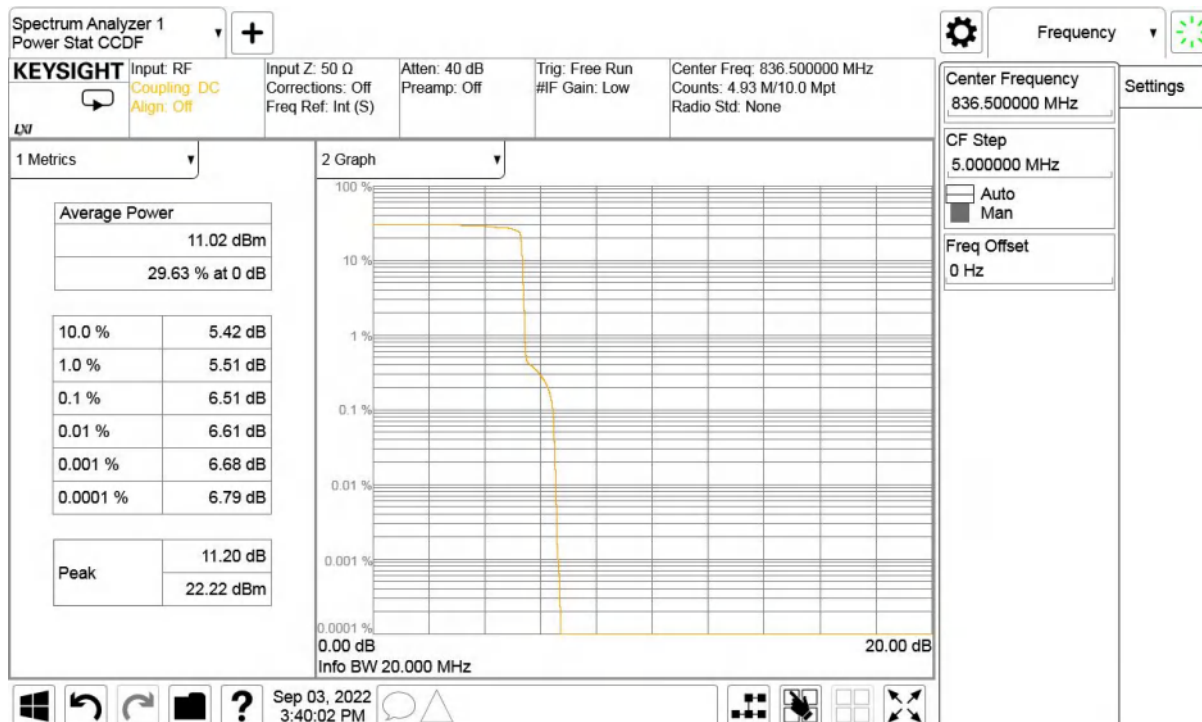
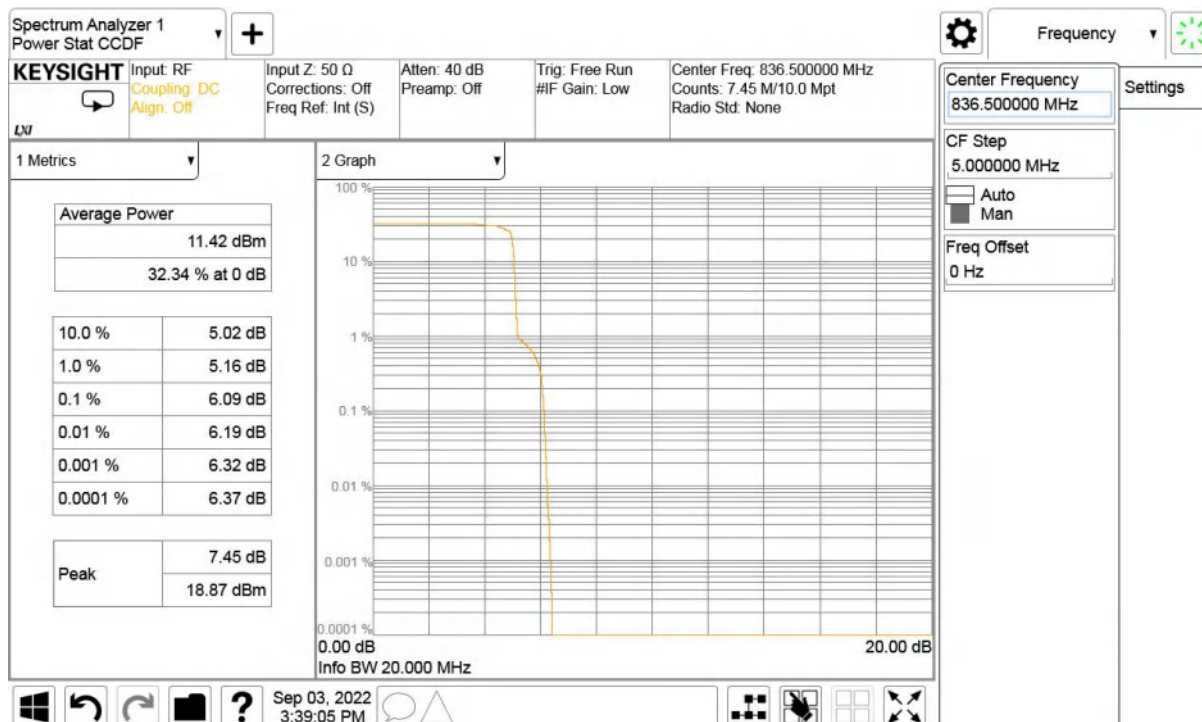
Band26-CH26740-819MHz-QPSK



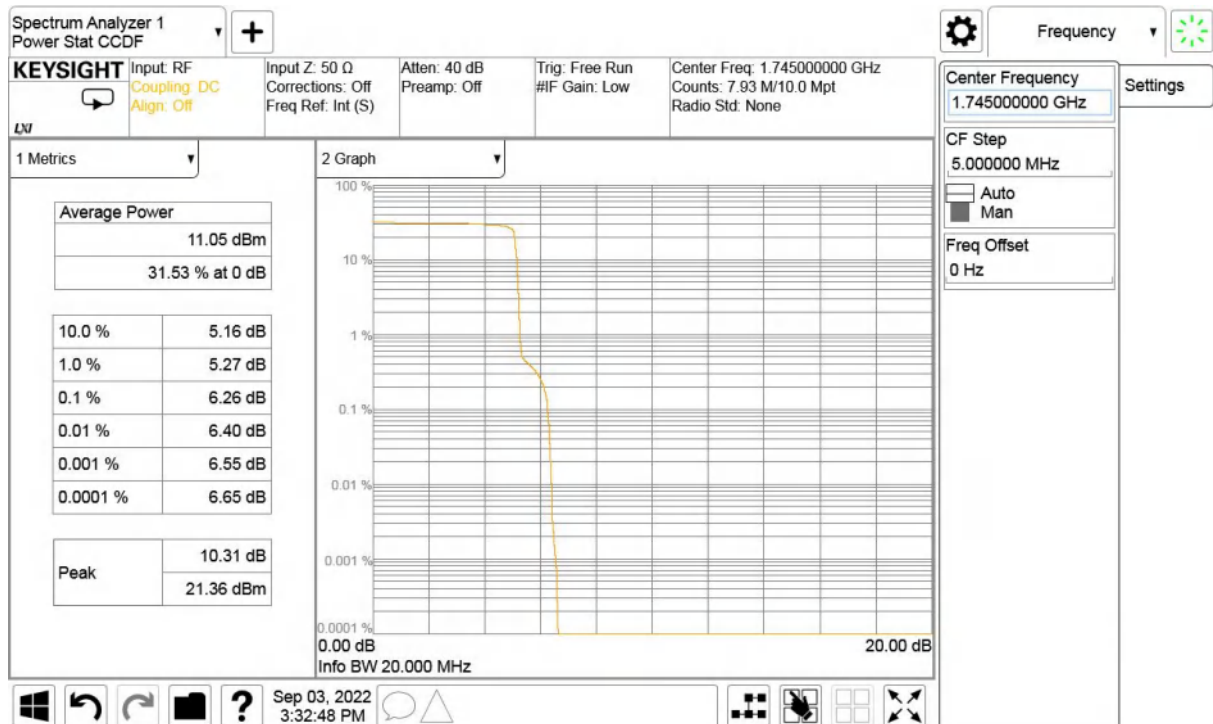
Band26-CH26740-819MHz-BPSK

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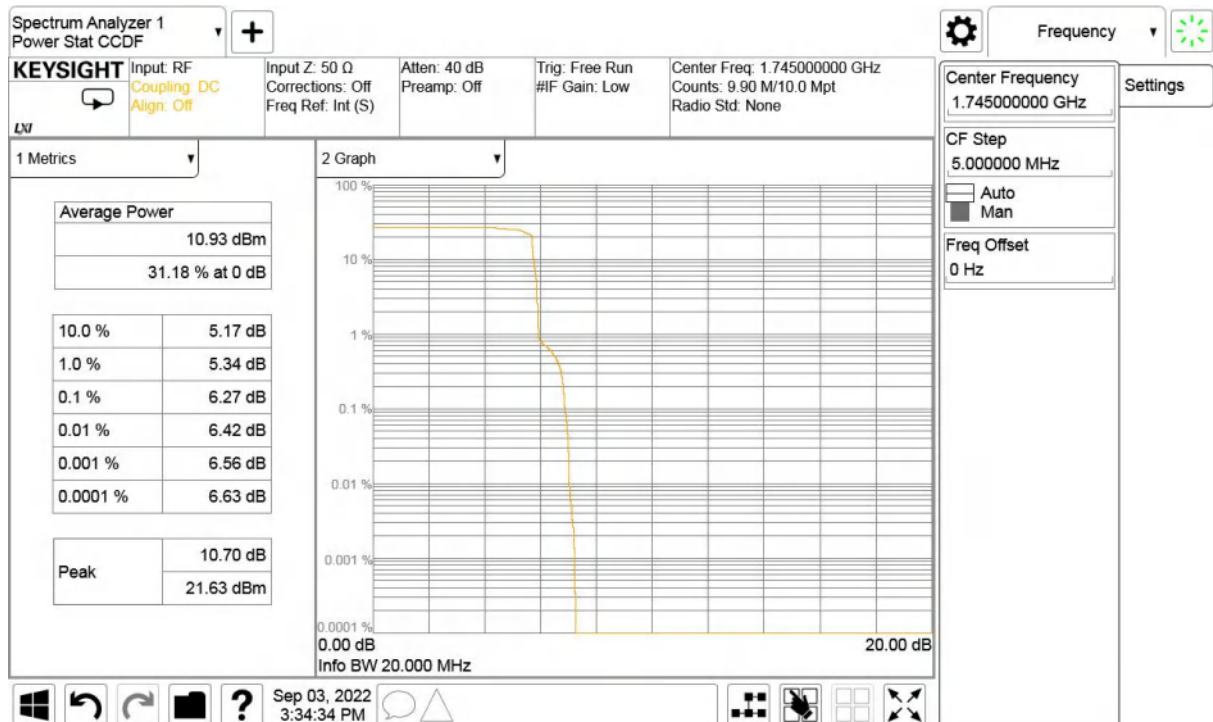
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**Part(824MHz-849MHz)****Band26-CH26915-836.5MHz-QPSK****Band26-CH26915-836.5MHz-BPSK****Chongqing Academy of Information and Communication Technology**

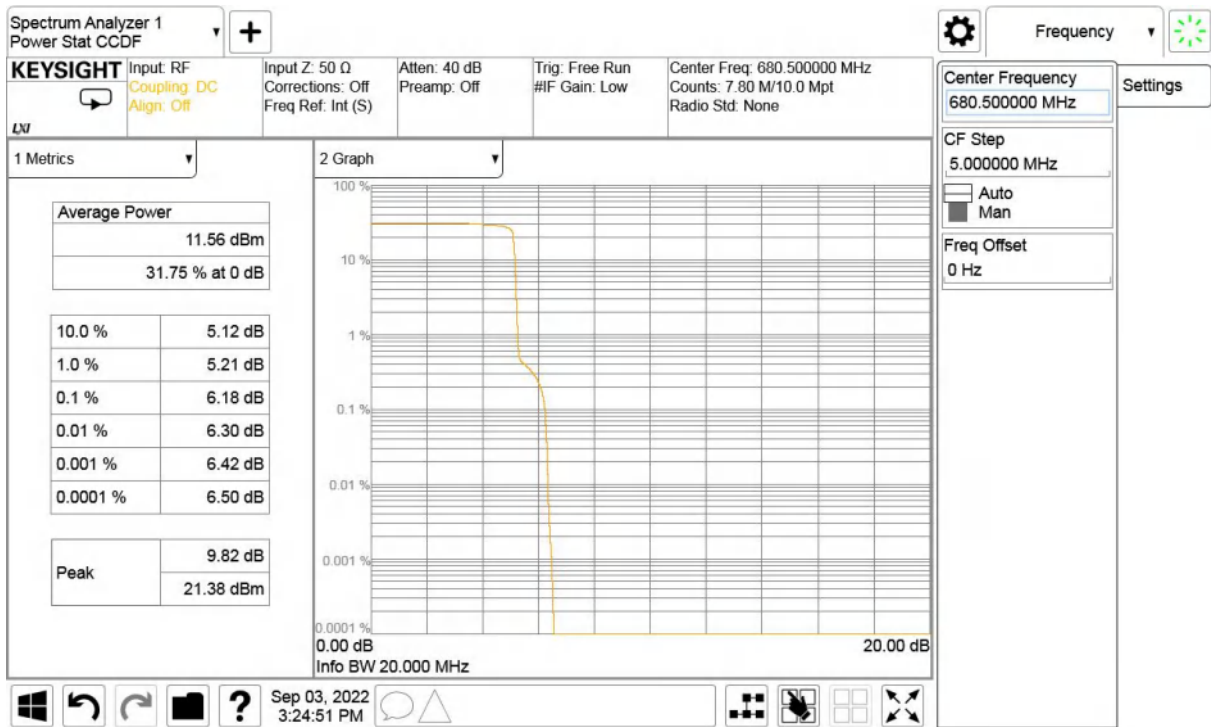
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Tel: 0086-23-88069965 FAX:0086-23-88608777



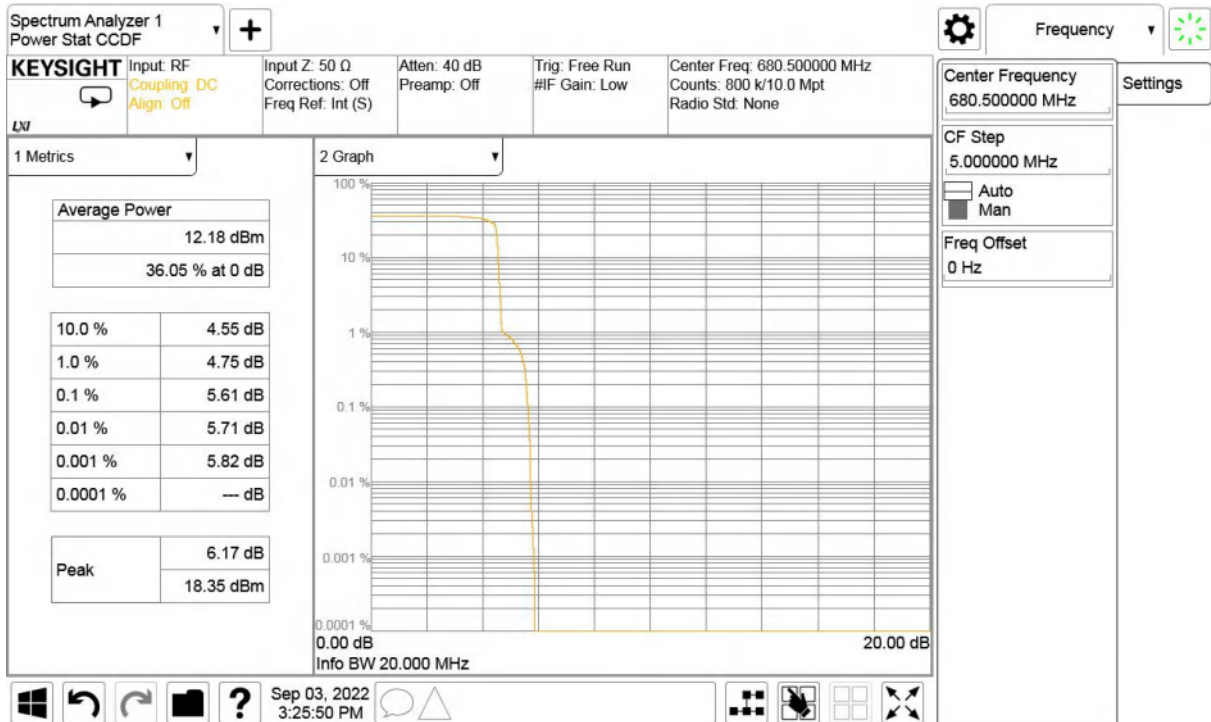
Band66-CH132322-1745MHz-QPSK



Band66- CH132322-1745MHz -BPSK



Band71-CH133297-680.5MHz-QPSK

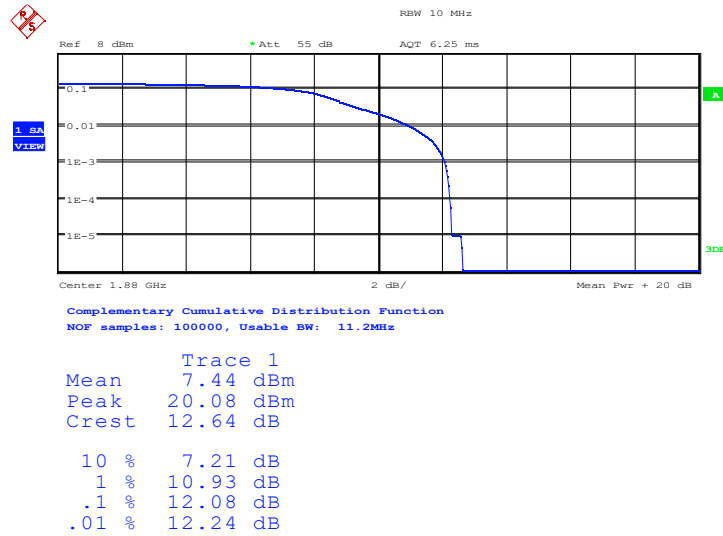


Band71- CH133297-680.5MHz -BPSK



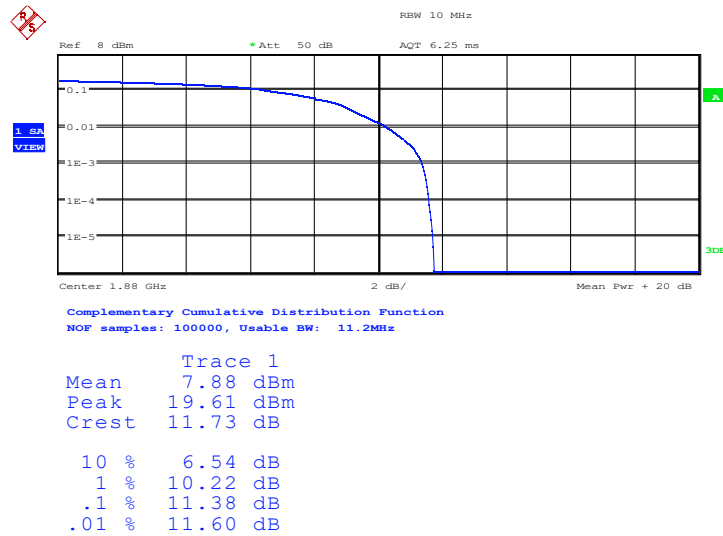
Report No.: I22W00051-WWAN RF-Rev4

Graphical for Peak to Average Ratio Results for CAT-M:



Date: 13.JUL.2022 16:50:14

Band2-CH18900-1880MHz-1.4MHz Bandwidth-QPSK



Date: 13.JUL.2022 16:40:20

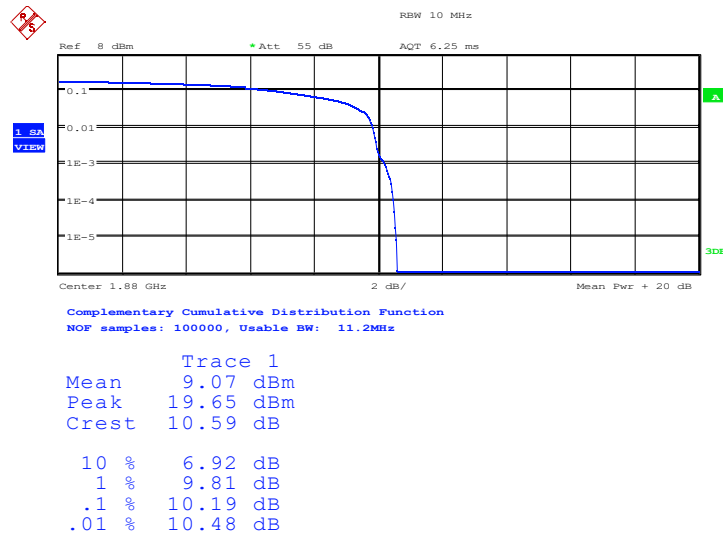
Band2-CH18900-1880MHz-1.4MHz Bandwidth-16QAM

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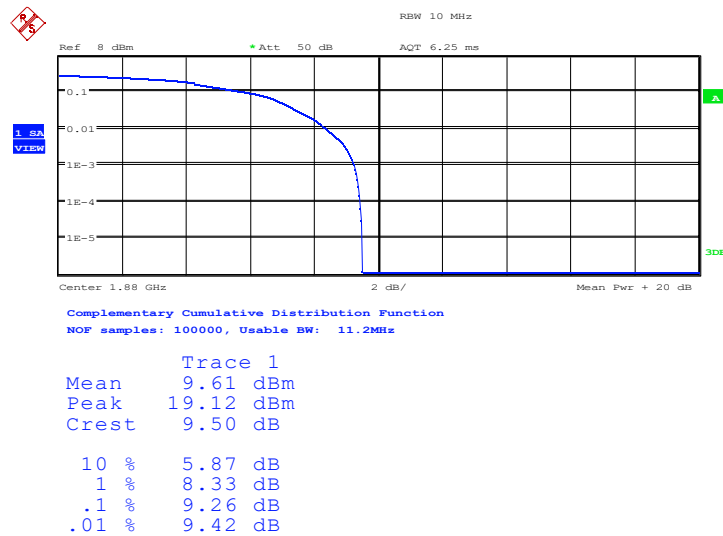


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 16:50:42

Band2-CH18900-1880MHz-3MHz Bandwidth-QPSK

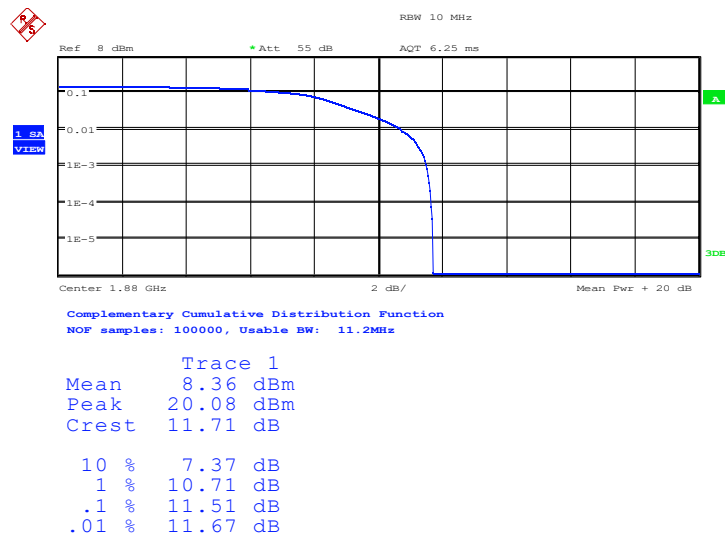


Date: 13.JUL.2022 16:40:50

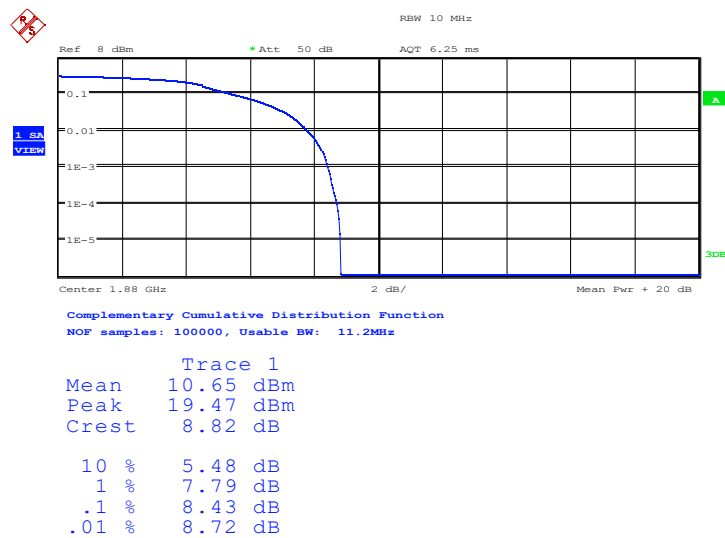
Band2-CH18900-1880MHz-3MHz Bandwidth-16QAM

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Date: 13.JUL.2022 16:51:35

Band2-CH18900-1880MHz-5MHz Bandwidth-QPSK

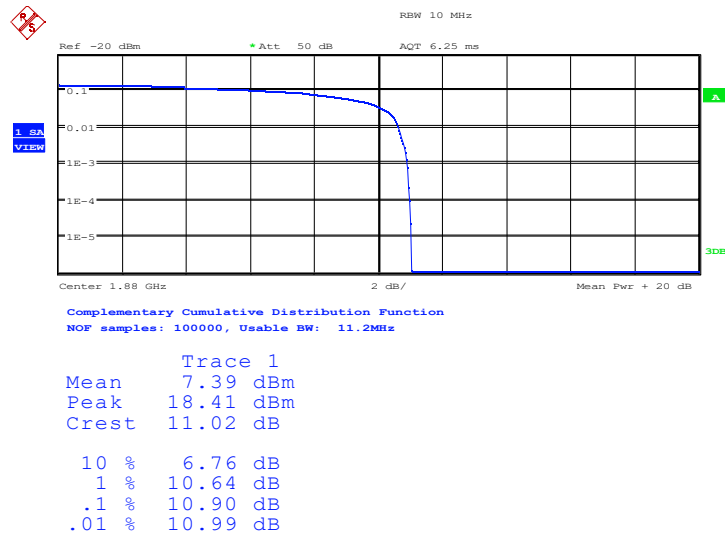
Date: 13.JUL.2022 16:41:17

Band2-CH18900-1880MHz-5MHz Bandwidth-16QAM**Chongqing Academy of Information and Communication Technology**

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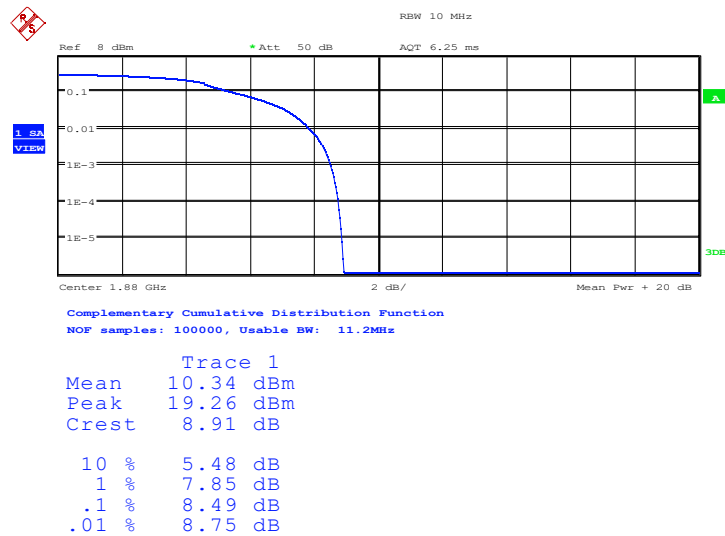


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 16:59:40

Band2-CH18900-1880MHz-10MHz Bandwidth-QPSK



Date: 13.JUL.2022 16:41:48

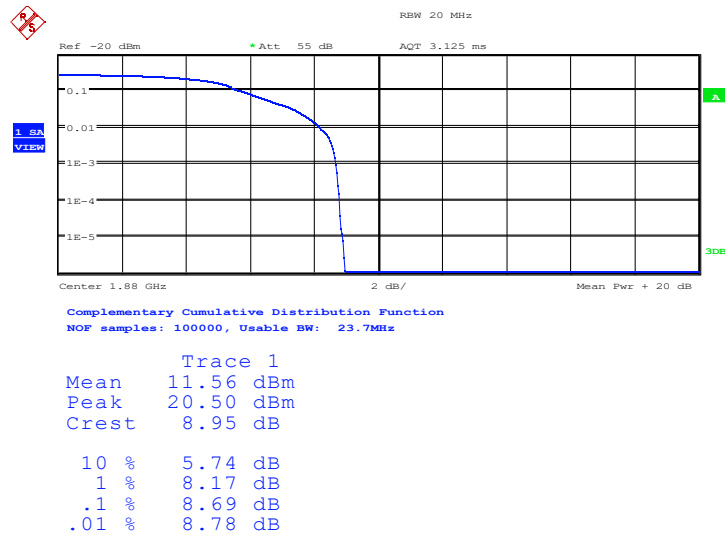
Band2-CH18900-1880MHz-10MHz Bandwidth-16QAM

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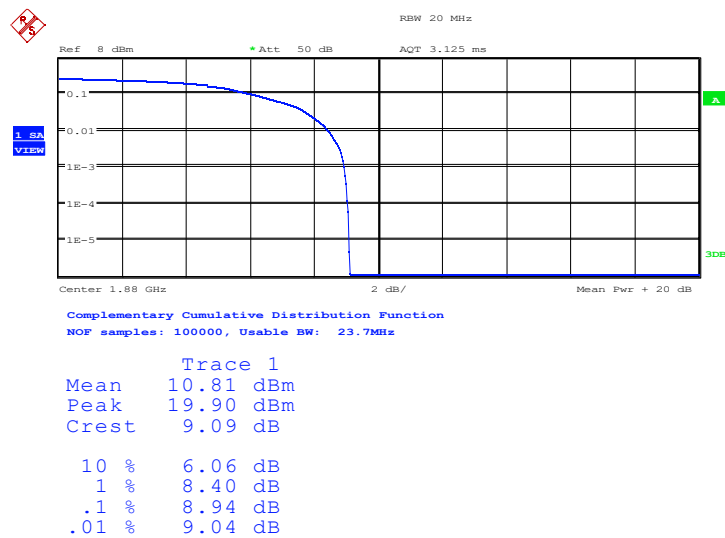


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 16:58:15

Band2-CH18900-1880MHz-15MHz Bandwidth-QPSK



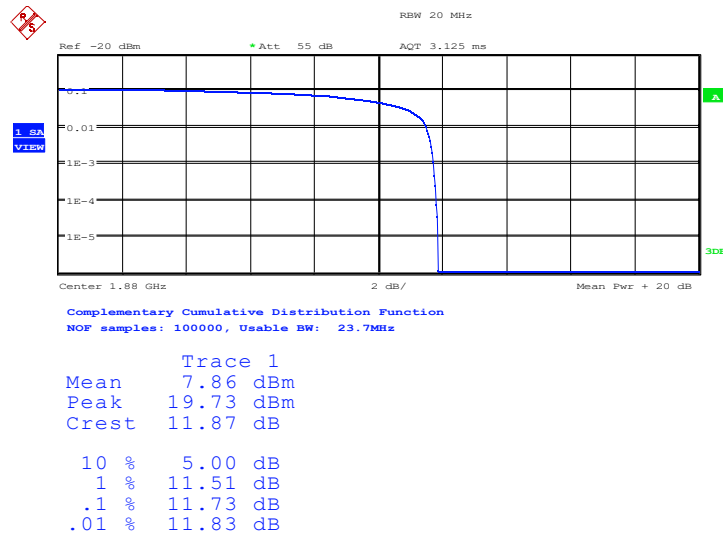
Date: 13.JUL.2022 16:46:01

Band2-CH18900-1880MHz-15MHz Bandwidth-16QAM

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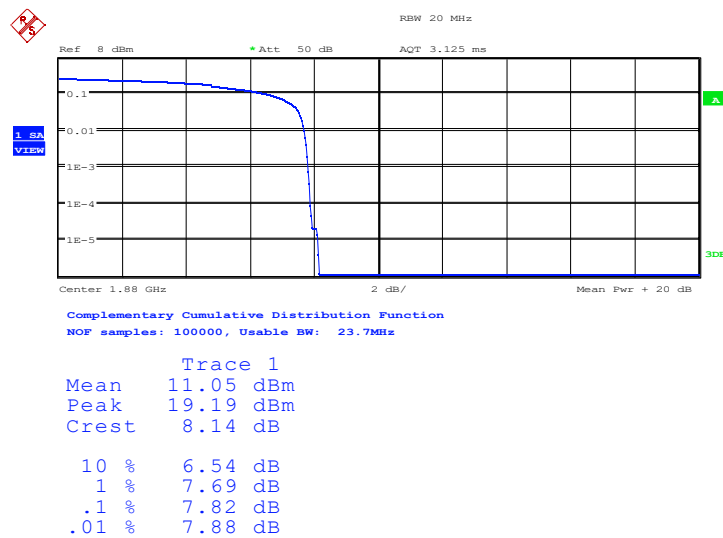
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Date: 13.JUL.2022 16:57:46

Band2-CH18900-1880MHz-20MHz Bandwidth-QPSK



Date: 13.JUL.2022 16:46:32

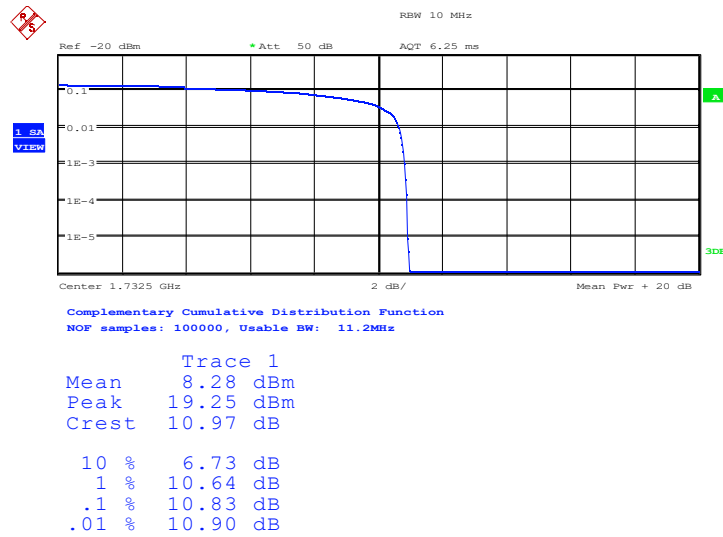
Band2-CH18900-1880MHz-20MHz Bandwidth-16QAM

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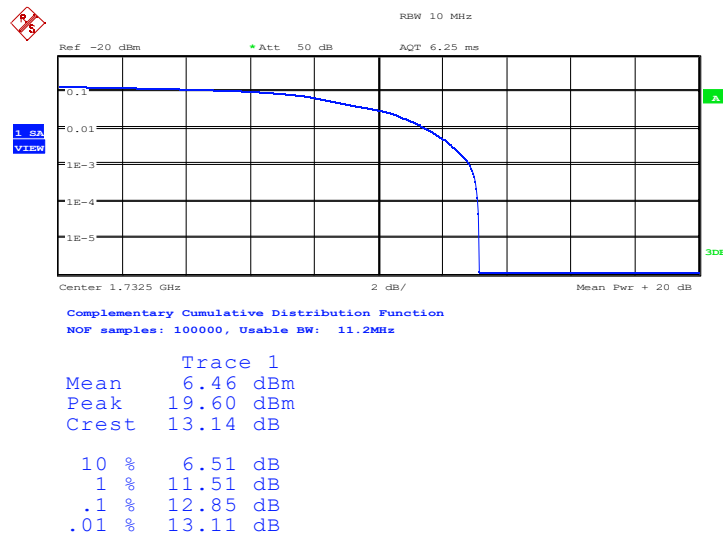


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:03:02

Band4-CH20175-707.5MHz -1.4MHz Bandwidth-QPSK



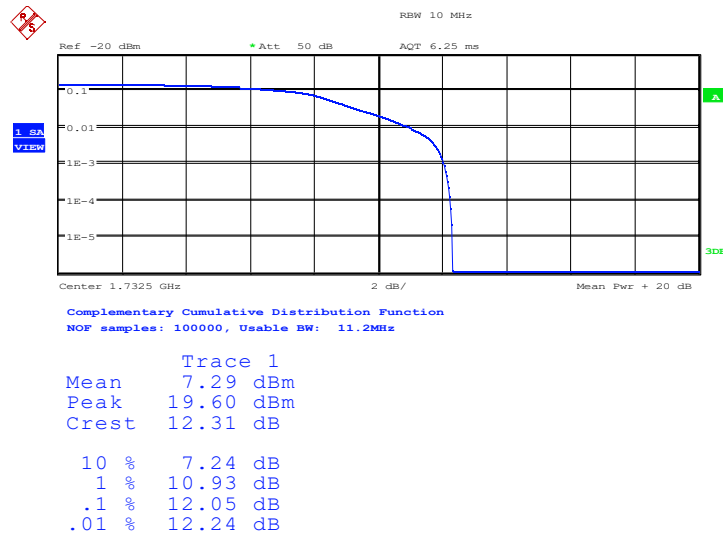
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Band4-CH20175-707.5MHz -1.4MHz Bandwidth-16QAM

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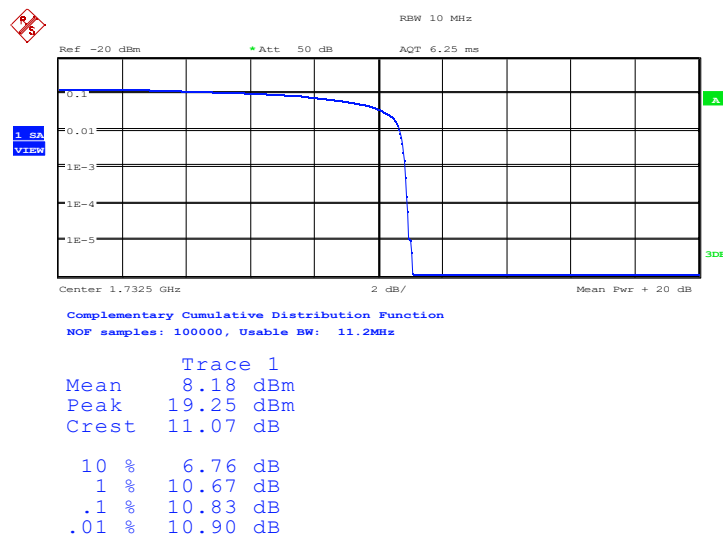
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Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:02:06

Band4-CH20175-707.5MHz -3MHz Bandwidth-QPSK



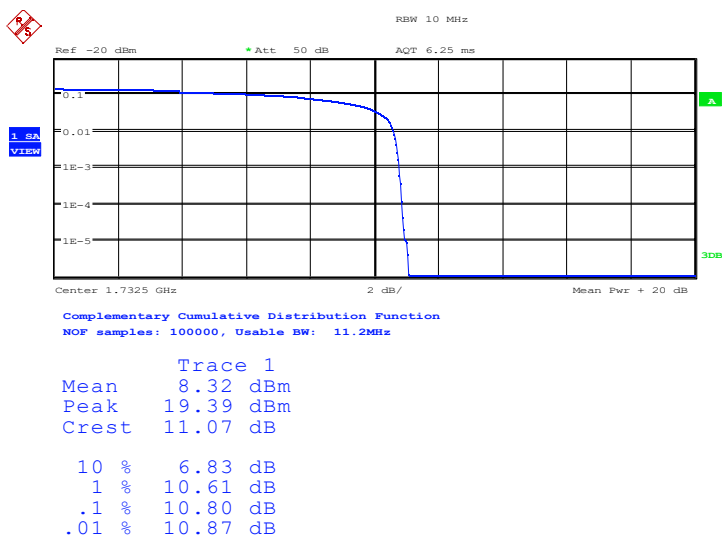
Date: 13.JUL.2022 17:05:04

Band4-CH20175-707.5MHz -3MHz Bandwidth-16QAM

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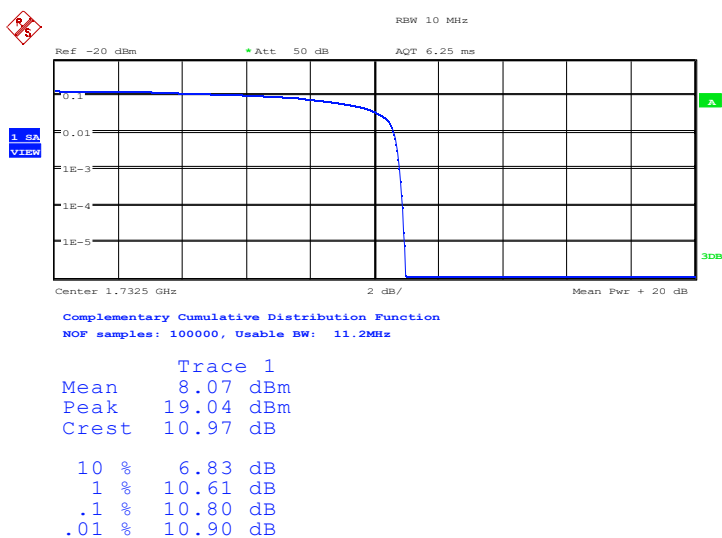
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Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:01:38

Band4-CH20175-707.5MHz -5MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:05:49

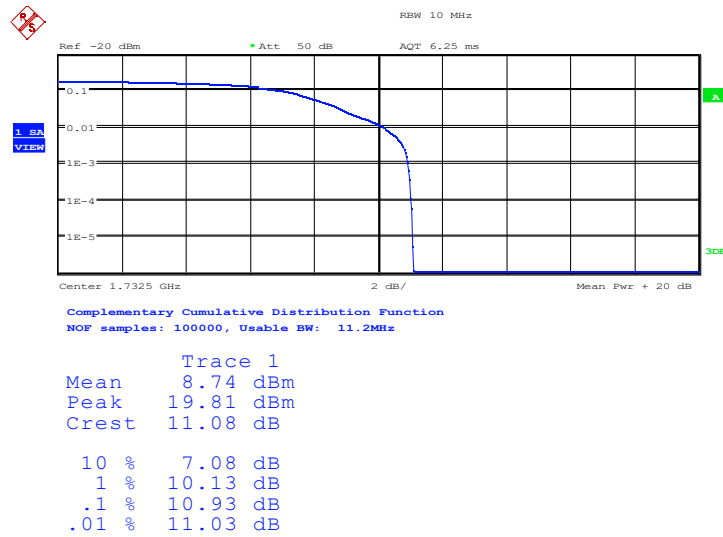
Band4-CH20175-707.5MHz-5MHz Bandwidth-16QAM

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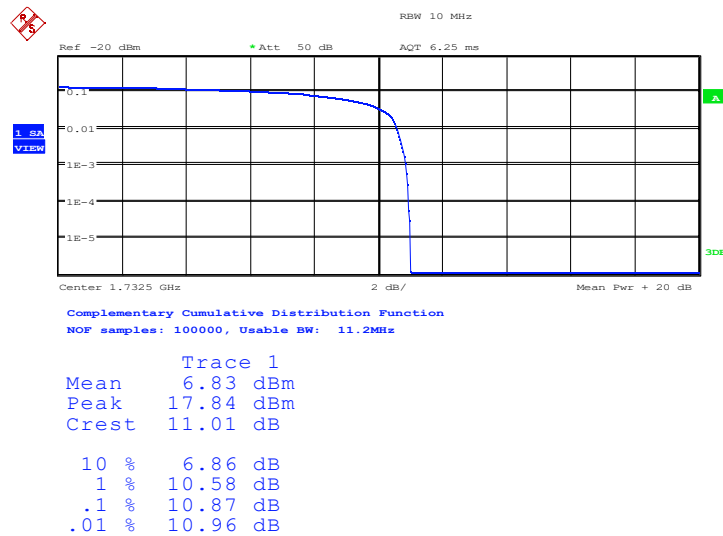


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:01:02

Band4-CH20175-707.5MHz-10MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:06:15

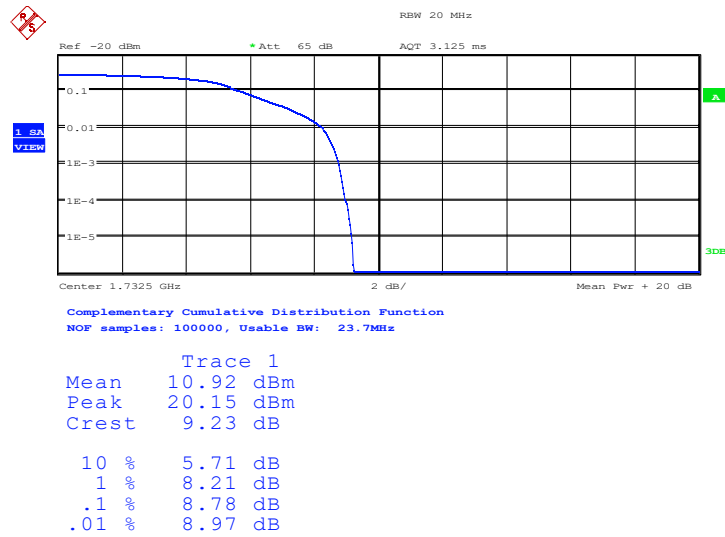
Band4-CH20175-707.5MHz-10MHz Bandwidth-16QAM

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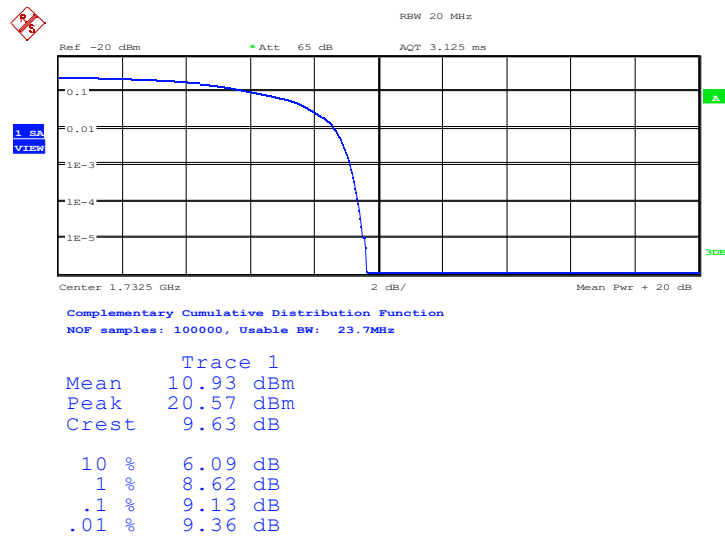


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:11:04

Band4-CH20175-707.5MHz -15MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:08:01

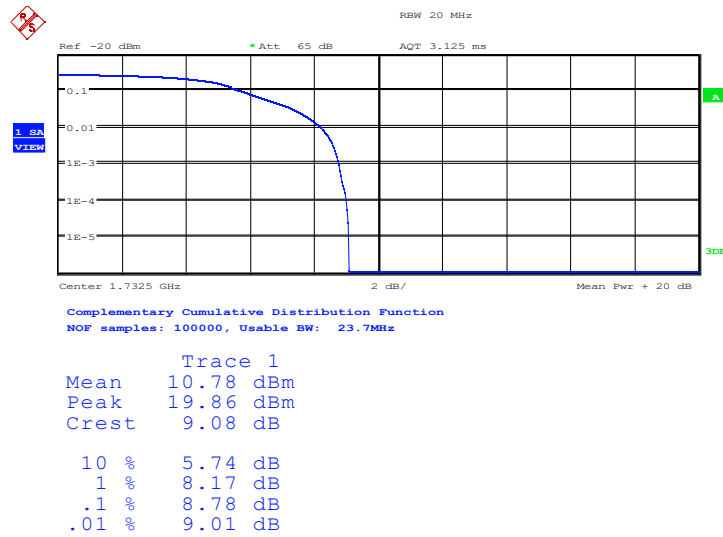
Band4-CH20175-707.5MHz-15MHz Bandwidth-16QAM

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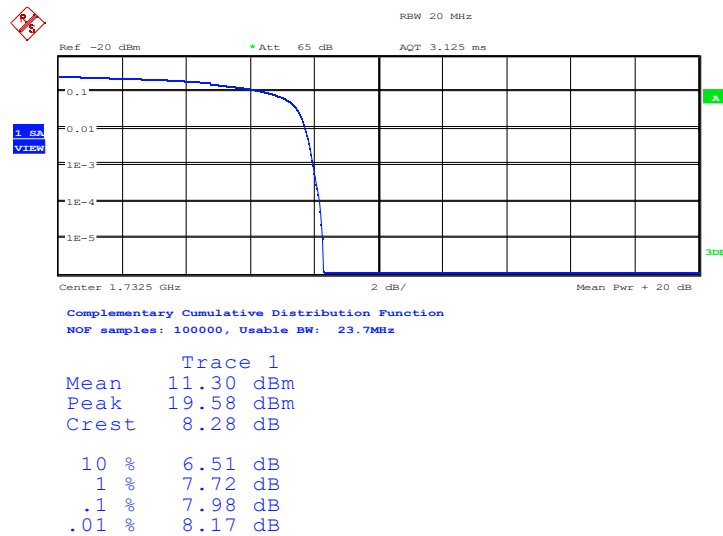


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:12:18

Band4-CH20175-707.5MHz-20MHz Bandwidth-QPSK

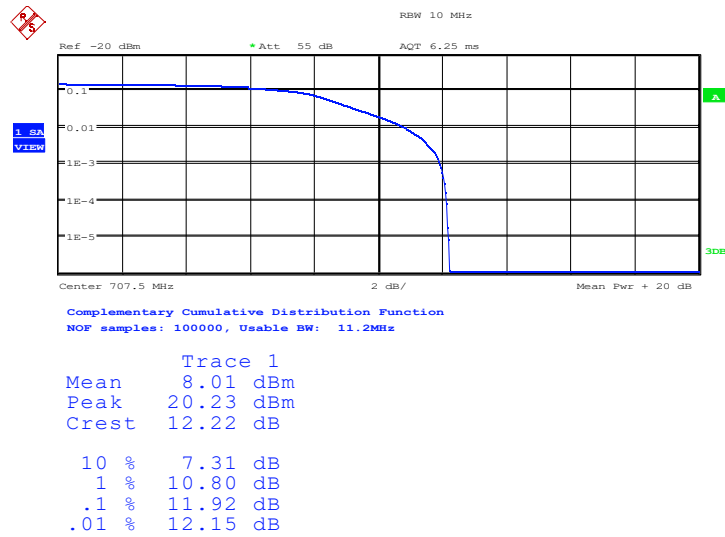


Date: 13.JUL.2022 17:10:07

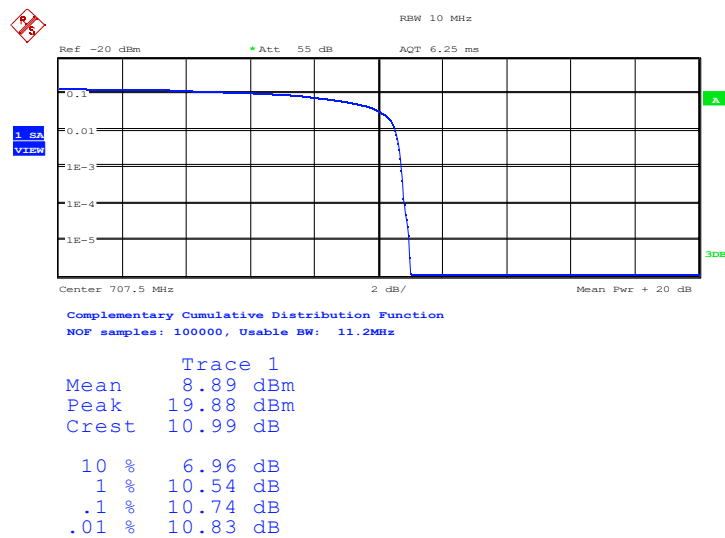
Band4-CH20175-707.5MHz-20MHz Bandwidth-16QAM

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**Report No.: I22W00051-WWAN RF-Rev4**

Date: 13.JUL.2022 17:22:17

Band12-CH23095-707.5MHz-1.4MHz Bandwidth-QPSK

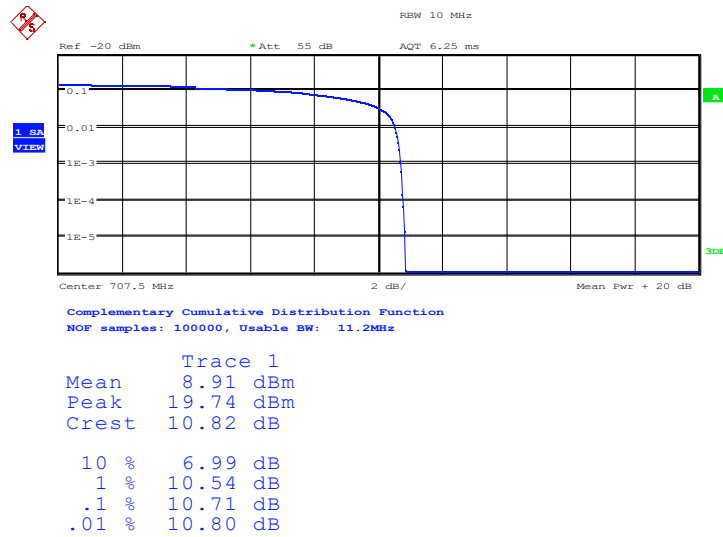
Date: 13.JUL.2022 17:25:02

Band12-CH23095-707.5MHz-1.4MHz Bandwidth-16QAM**Chongqing Academy of Information and Communication Technology**

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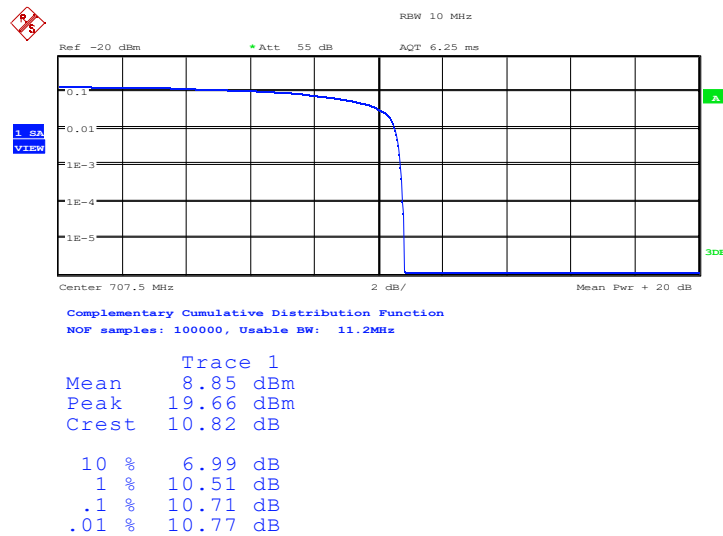


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:22:39

Band12-CH23095-707.5MHz-3MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:25:44

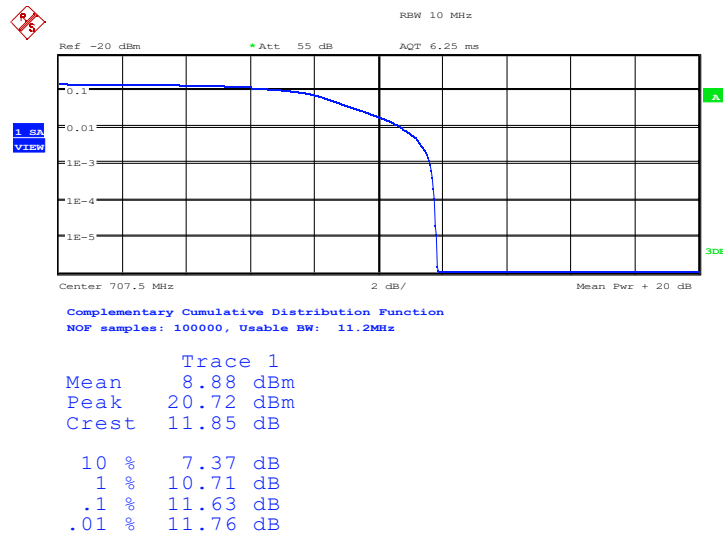
Band12-CH23095-707.5MHz-3MHz Bandwidth-16QAM

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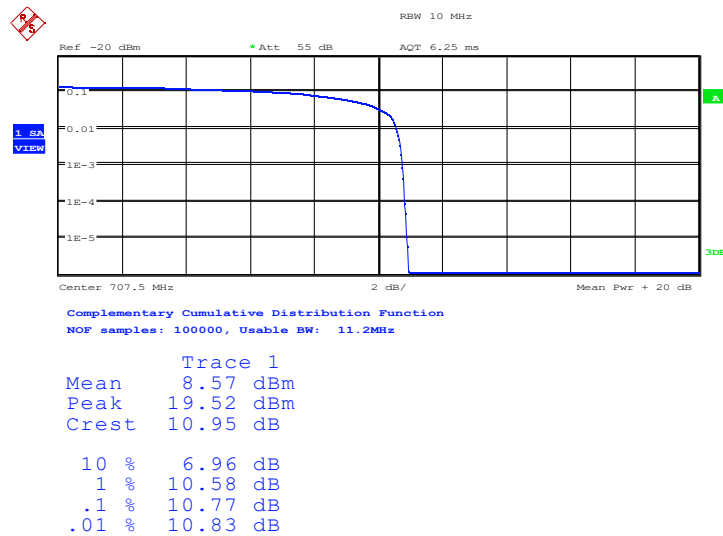


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:23:57

Band12-CH23095-707.5MHz-5MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:26:44

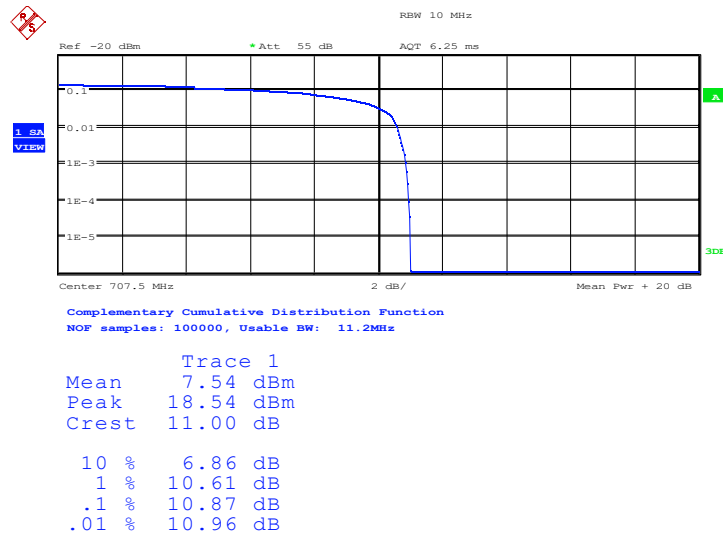
Band12-CH23095-707.5MHz-5MHz Bandwidth-16QAM

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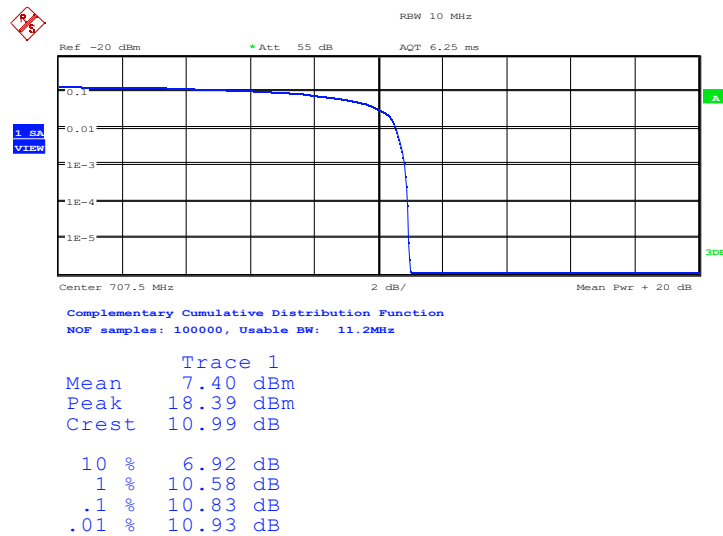


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:24:23

Band12-CH23095-707.5MHz-10MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:27:06

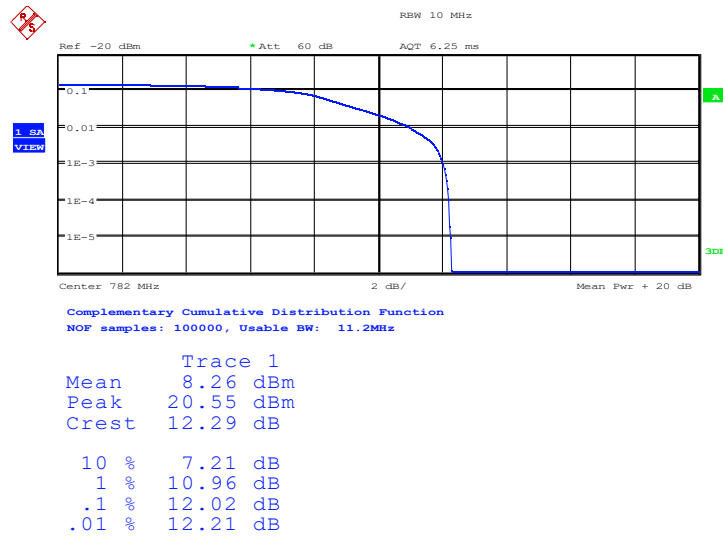
Band12-CH23095-707.5MHz-10MHz Bandwidth-16QAM

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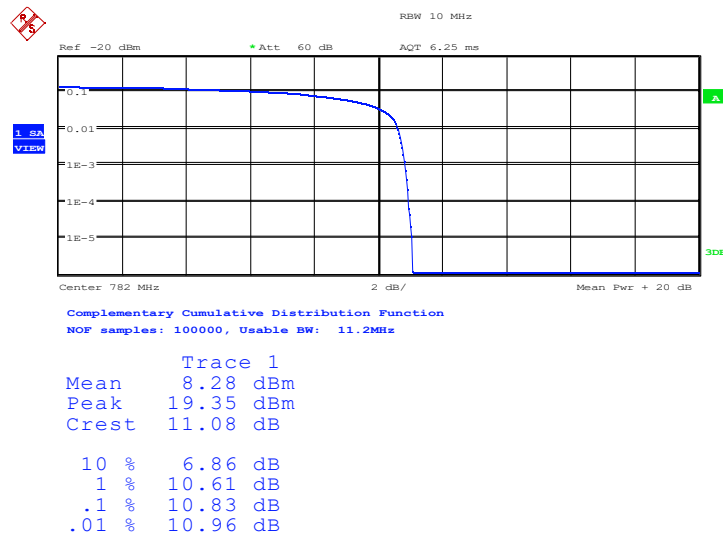


Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:30:38

Band13-CH23230-782MHz-5MHz Bandwidth-QPSK



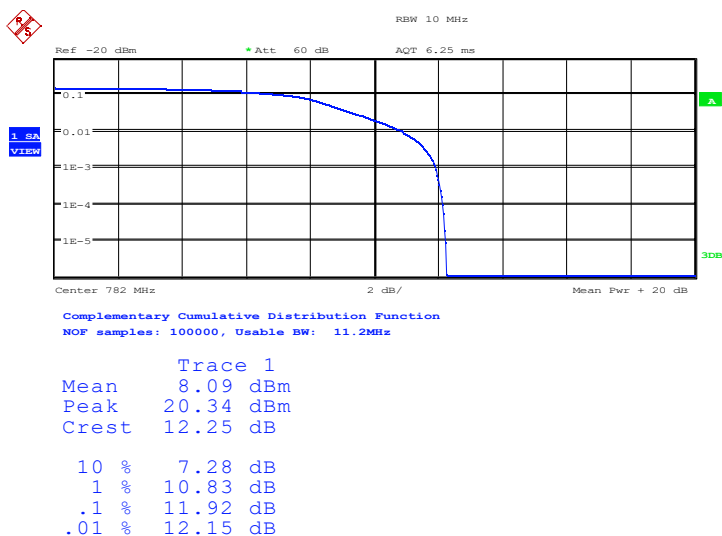
Date: 13.JUL.2022 17:28:56

Band13-CH23230-782MHz-5MHz Bandwidth-16QAM

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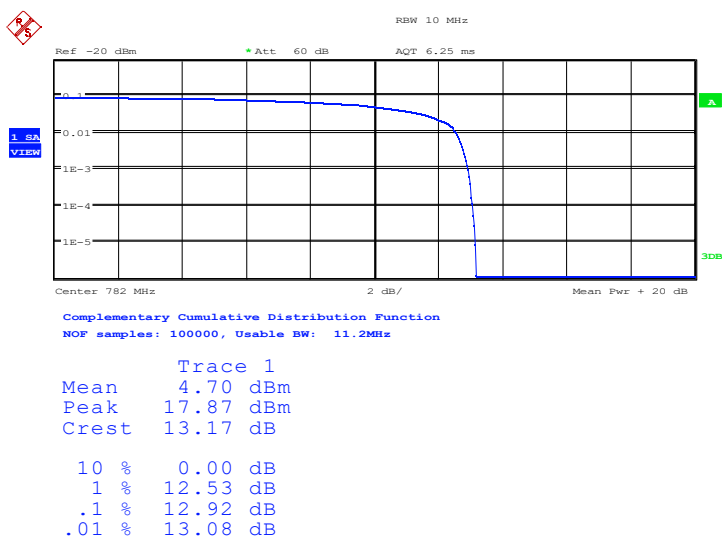
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Report No.: I22W00051-WWAN RF-Rev4



Date: 13.JUL.2022 17:30:03

Band13-CH23230-782MHz-10MHz Bandwidth-QPSK



Date: 13.JUL.2022 17:29:25

Band13-CH23230-782MHz-10MHz Bandwidth-16QAM

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