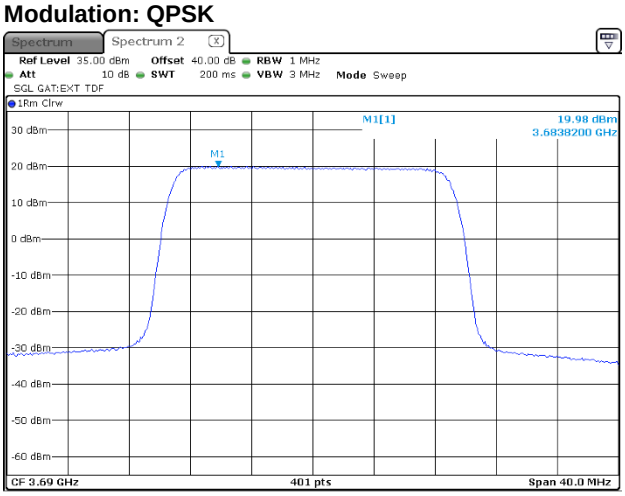
Test specification:	Section 96.41(b), Maximum EIRP and maximum power spectral density		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Apr-20 – 26-Nov-20		
Temperature: 24 ºC	Relative Humidity: 55 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

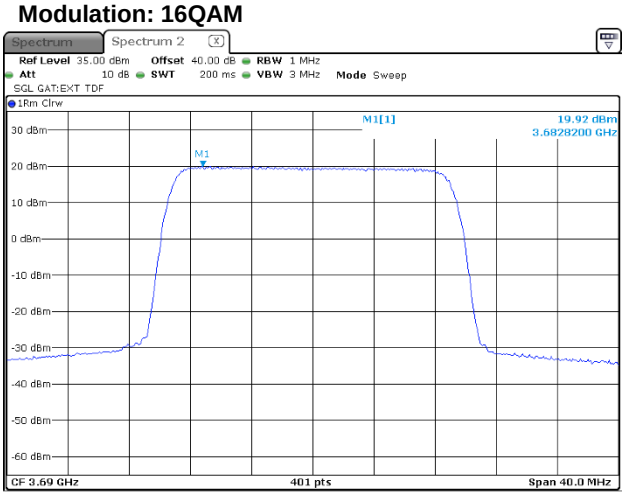
Plot 7.1.21 Peak spectral power density at high frequency

CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 3

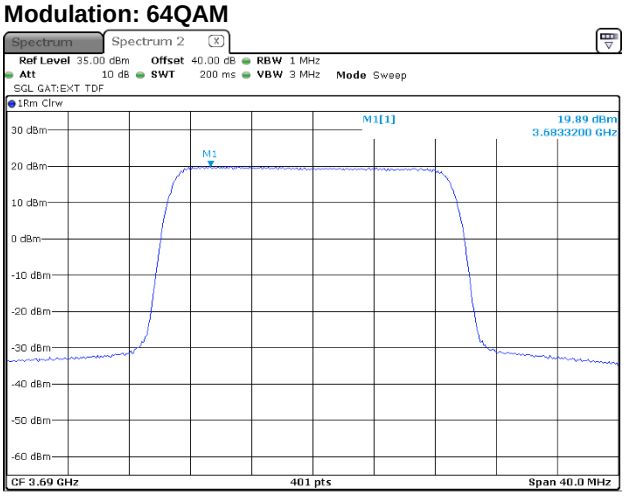
Modulation: QPSK



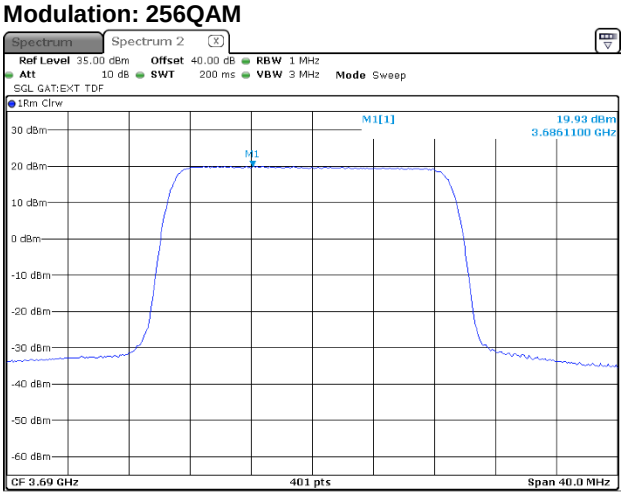
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

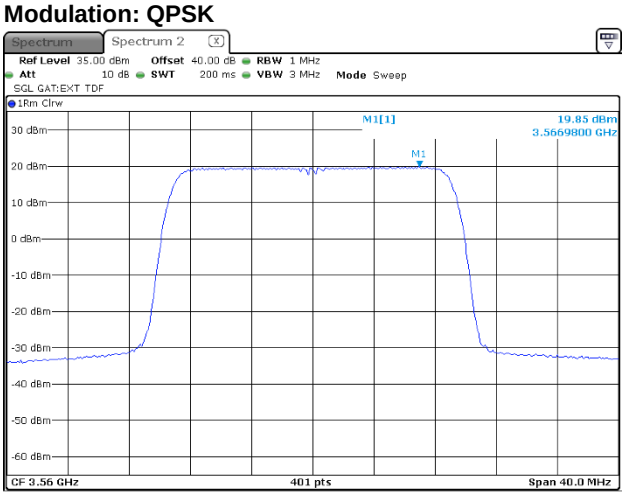


Test specification:	Section 96.41(b), Maximum EIRP and maximum power spectral density		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Apr-20 – 26-Nov-20		
Temperature: 24 ºC	Relative Humidity: 55 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

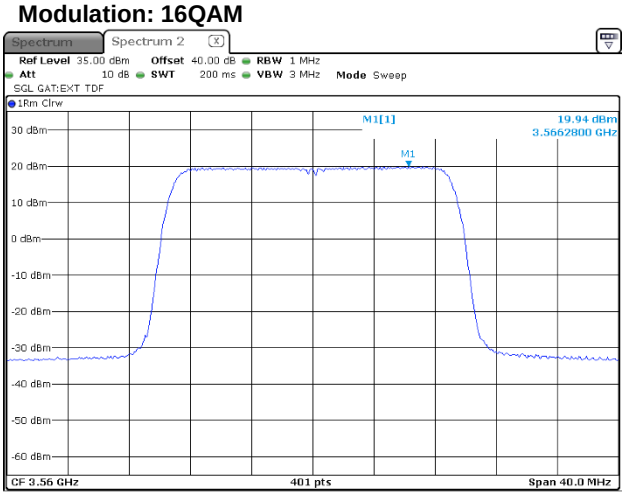
Plot 7.1.22 Peak spectral power density at low frequency

CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 4

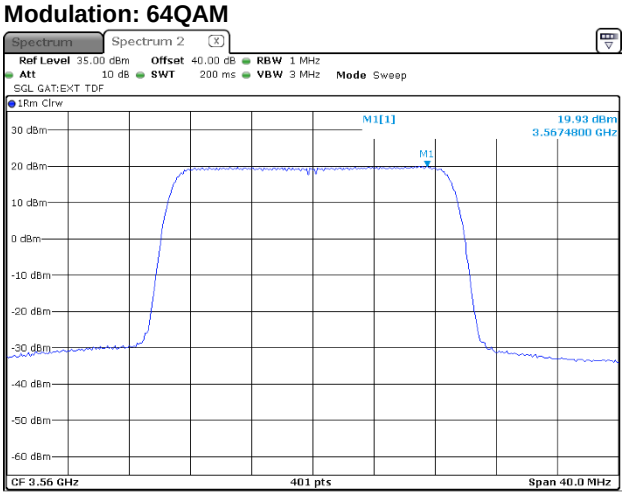
Modulation: QPSK



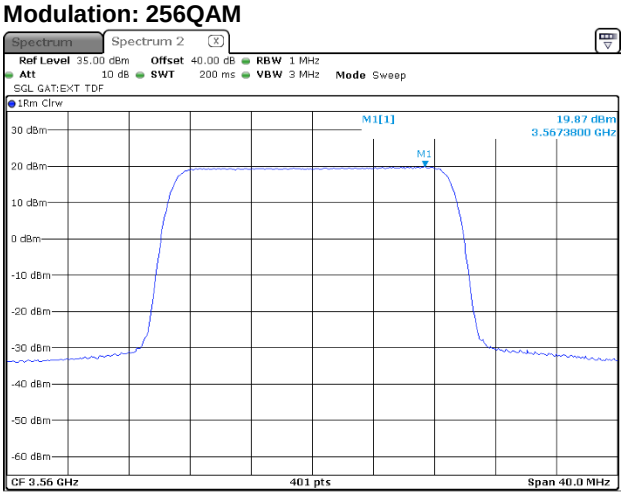
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

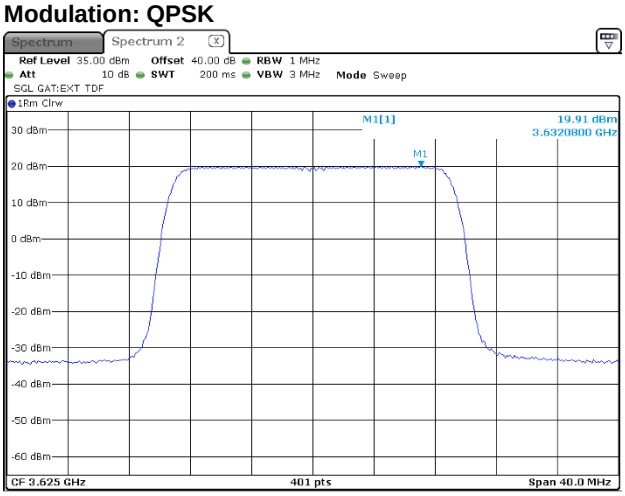


Test specification:	Section 96.41(b), Maximum EIRP and maximum power spectral density		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Apr-20 – 26-Nov-20		
Temperature: 24 ºC	Relative Humidity: 55 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

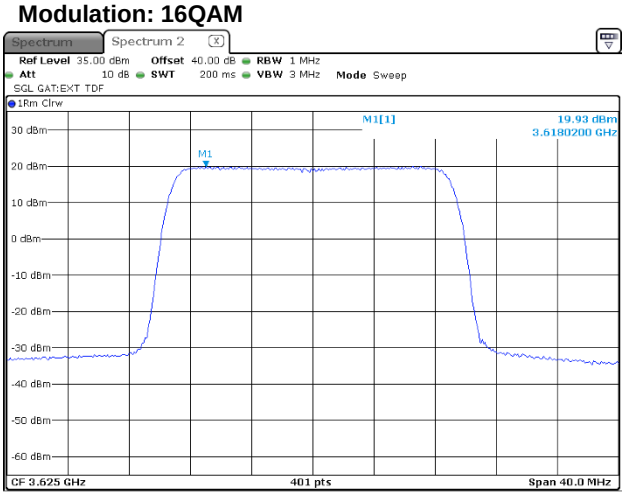
Plot 7.1.23 Peak spectral power density at mid frequency

CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 4

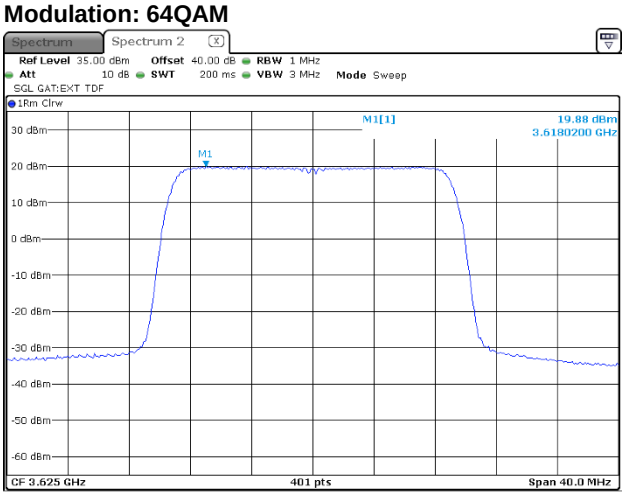
Modulation: QPSK



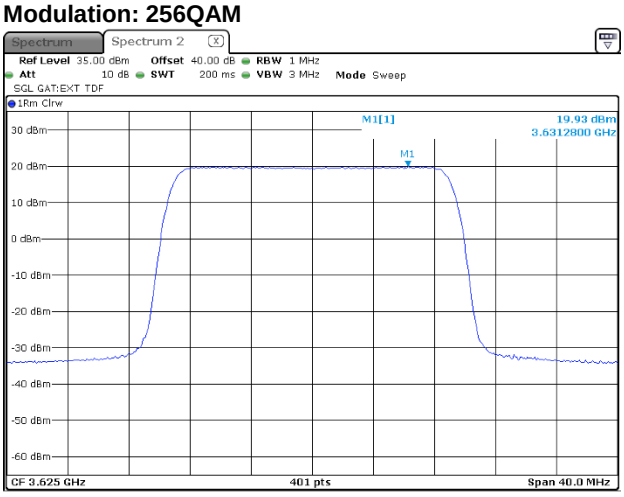
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

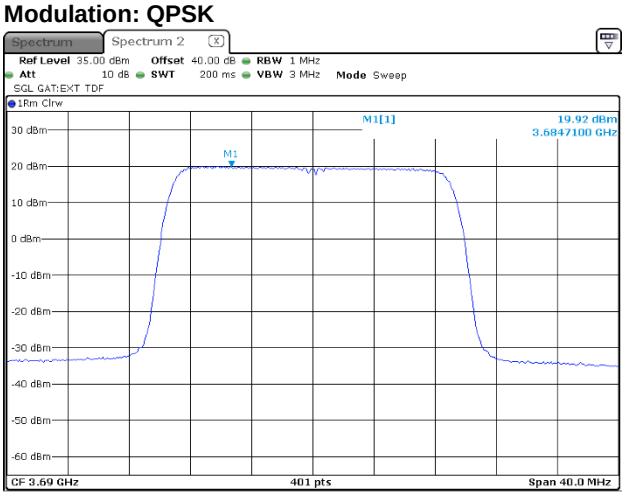


Test specification:	Section 96.41(b), Maximum EIRP and maximum power spectral density		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Apr-20 – 26-Nov-20		
Temperature: 24 ºC	Relative Humidity: 55 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

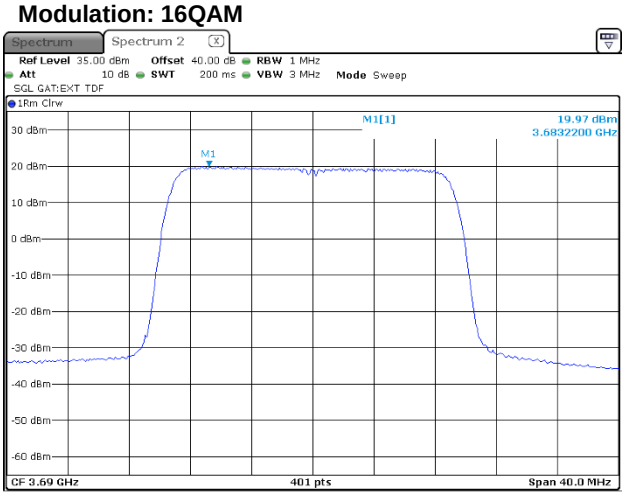
Plot 7.1.24 Peak spectral power density at high frequency

CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 4

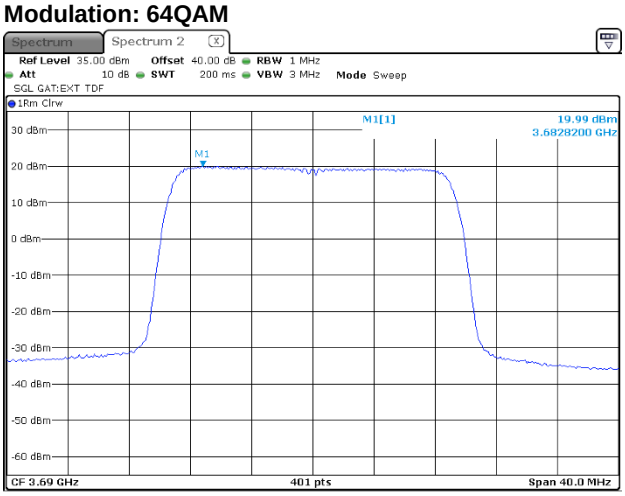
Modulation: QPSK



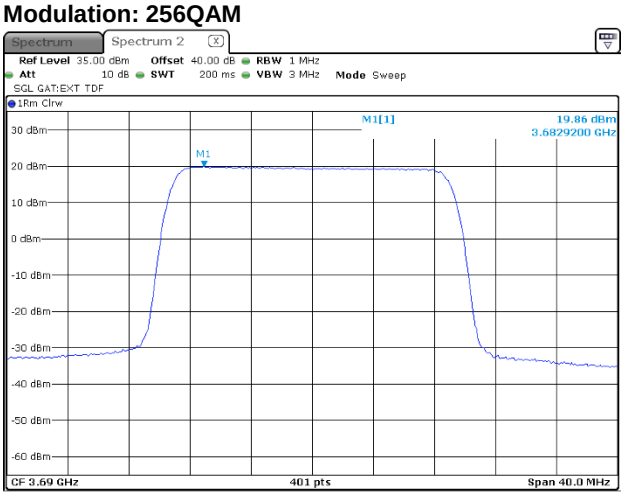
Modulation: 16QAM



Modulation: 64QAM

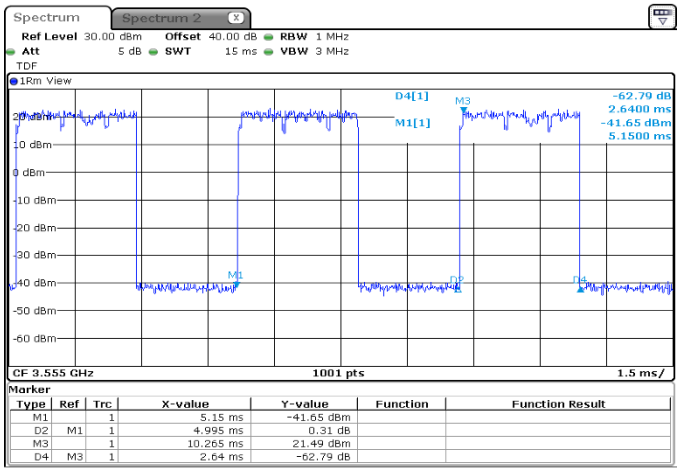


Modulation: 256QAM



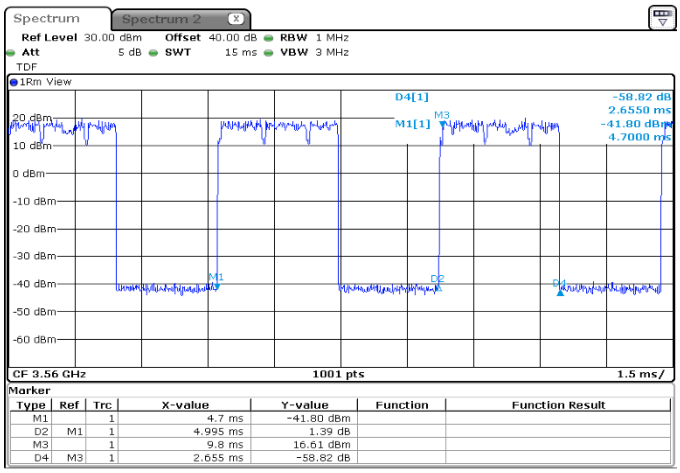
Test specification:	Section 96.41(b), Maximum EIRP and maximum power spectral density		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Apr-20 – 26-Nov-20		
Temperature: 24 ºC	Relative Humidity: 55 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.1.25 Transmission pulse duration and pulse period at 10 MHz RF channel spacing



Duty cycle factor = 10*log(2.64/5.00) = -2.77

Plot 7.1.26 Transmission pulse duration and pulse period at 20 MHz RF channel spacing



Duty cycle factor = 10*log(2.66/5.00) = -2.74

Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

7.2 Peak-to-average power ratio (PAPR) test

7.2.1 General

This test was performed to measure the peak to average power ratio at RF antenna connector. Specification test limits are given in Table 7.2.1.

Table 7.2.1 Peak-to-average power ratio limits

Assigned frequency range, MHz	Peak to average power ratio limit	
	Probability, %	dB
3550.0 – 3700.0	0.1	13.0

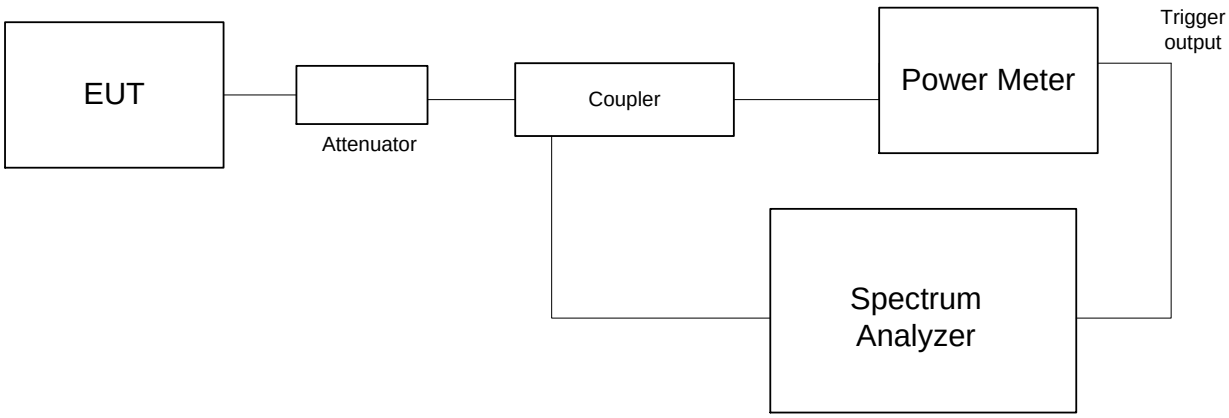
7.2.2 Test procedure

7.2.2.1 The EUT was set up as shown in Figure 7.2.1, energized and its proper operation was checked.

7.2.2.2 The EUT was adjusted to produce maximum available to the end user RF output power.

7.2.2.3 The peak to average power ratio was measured with power meter as provided in Table 7.2.2 and the associated plots.

Figure 7.2.1 Peak-to-average power ratio test setup



Test specification:	**Section 96.41(g), Peak-to- average power ratio**		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	**Relative Humidity:** 48 %	**Air Pressure:** 1010 hPa	**Power:** 48 VDC
Remarks:			

Table 7.2.2 Peak-to-average power ratio test results

OPERATING FREQUENCY RANGE: 3550 – 3700 MHz
DETECTOR USED: Peak/Average
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: Maximum

Carrier frequency, MHz	Peak to average ratio, dB	Limit, dBm	Margin, dB	Verdict
Channel spacing 10 MHz				
Modulation QPSK				
3555.0	8.12	13.0	-4.88	Pass
3625.0	8.14	13.0	-4.86	Pass
3695.0	8.17	13.0	-4.74	Pass
Modulation 16QAM				
3555.0	8.20	13.0	-4.80	Pass
3625.0	8.14	13.0	-4.86	Pass
3695.0	8.23	13.0	-4.77	Pass
Modulation 64QAM				
3555.0	8.26	13.0	-4.74	Pass
3625.0	8.29	13.0	-4.71	Pass
3695.0	8.23	13.0	-4.77	Pass
Modulation 256QAM				
3555.0	7.83	13.0	-5.17	Pass
3625.0	7.88	13.0	-5.12	Pass
3695.0	7.80	13.0	-5.20	Pass
Channel spacing 20 MHz				
Modulation QPSK				
3560.0	7.86	13.0	-5.14	Pass
3625.0	7.88	13.0	-5.12	Pass
3690.0	7.94	13.0	-5.06	Pass
Modulation 16QAM				
3560.0	7.94	13.0	-5.06	Pass
3625.0	7.97	13.0	-5.03	Pass
3690.0	7.91	13.0	-5.09	Pass
Modulation 64QAM				
3560.0	7.88	13.0	-5.12	Pass
3625.0	7.91	13.0	-5.09	Pass
3690.0	7.94	13.0	-5.06	Pass
Modulation 256QAM				
3560.0	7.62	13.0	-5.38	Pass
3625.0	7.59	13.0	-5.41	Pass
3690.0	7.65	13.0	-5.35	Pass

Reference numbers of test equipment used

HL 4355	HL 3901	HL 4366	HL 3301	HL 3302			

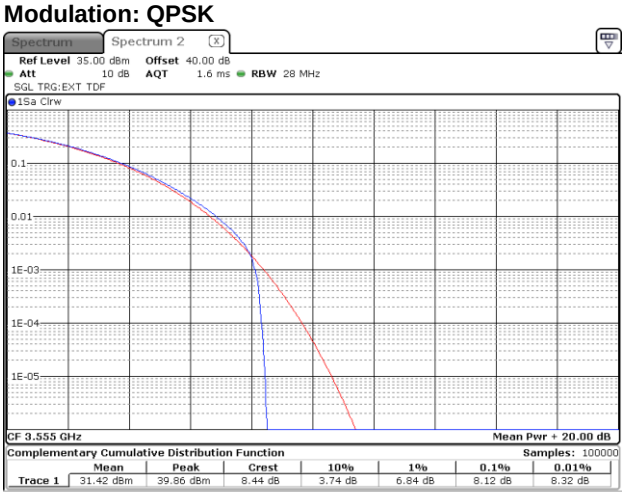
Full description is given in Appendix A.

Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

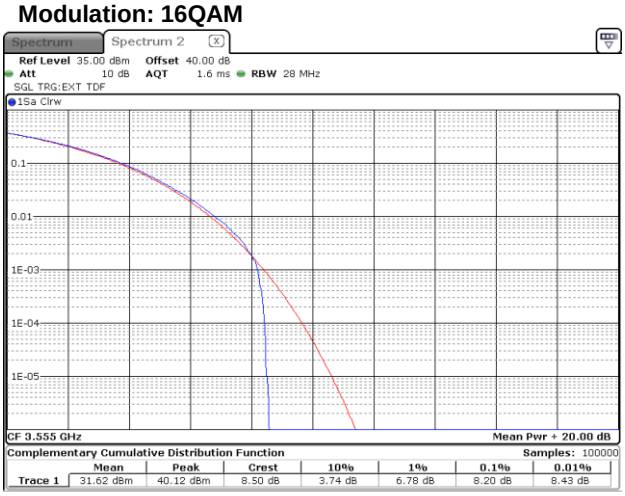
Plot 7.2.1 Peak-to-average power ratio test results at low frequency

CHANNEL SPACING: 10 MHz
ANTENNA PORT: 1

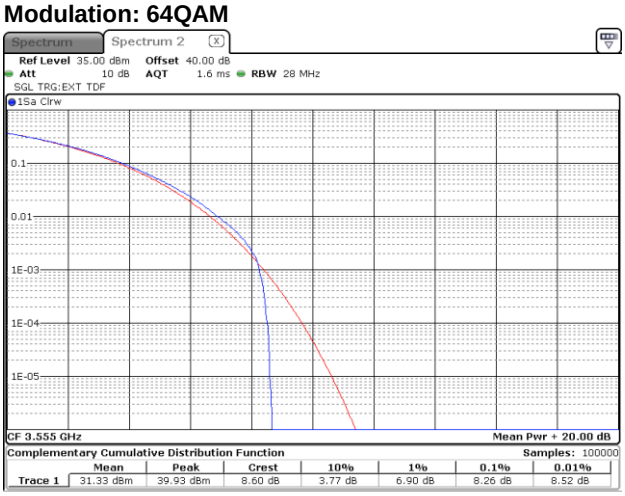
Modulation: QPSK



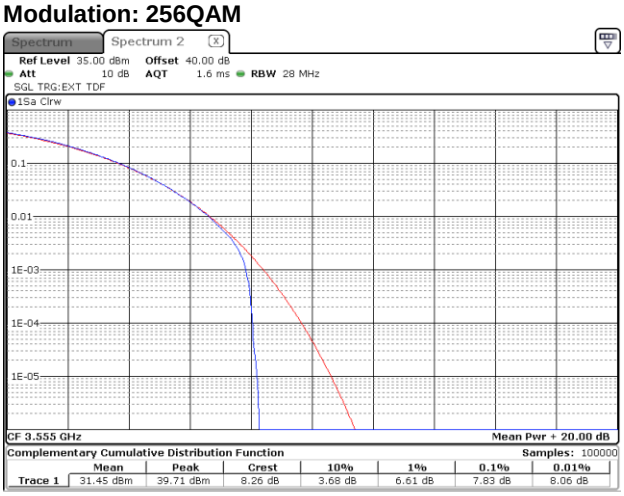
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

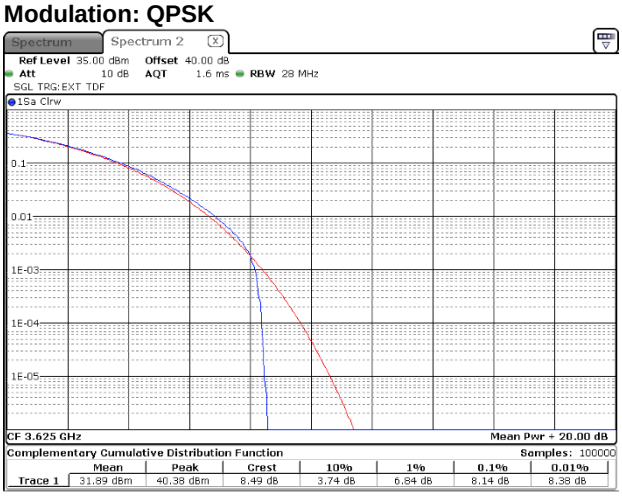


Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

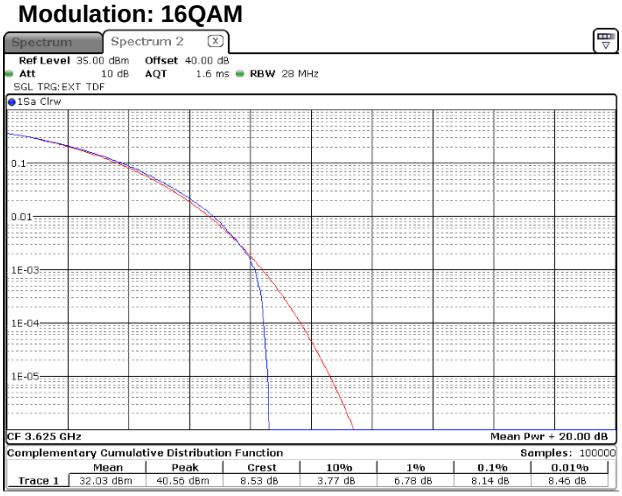
Plot 7.2.2 Peak-to-average power ratio test results at mid frequency

CHANNEL SPACING: 10 MHz
ANTENNA PORT: 1

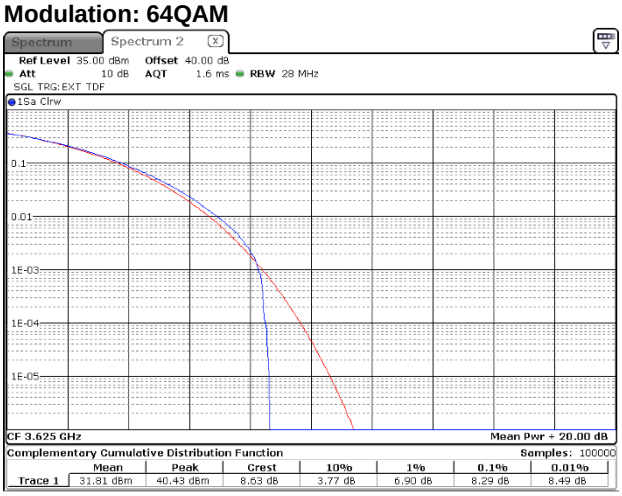
Modulation: QPSK



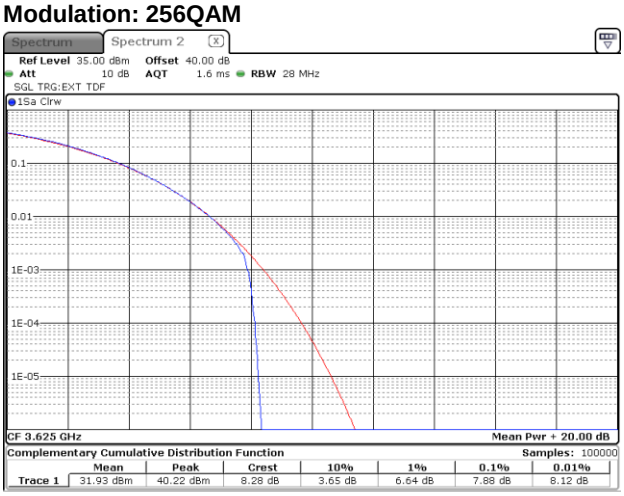
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

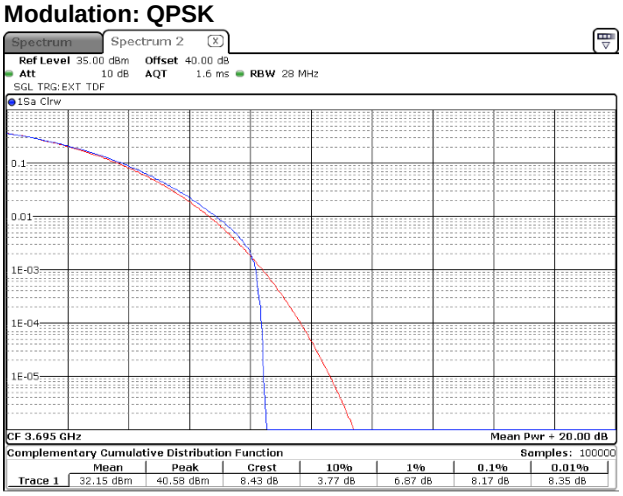


Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

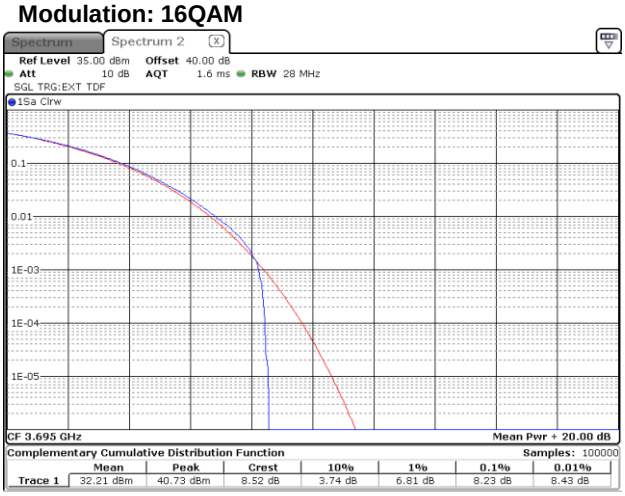
Plot 7.2.3 Peak-to-average power ratio test results at high frequency

CHANNEL SPACING: 10 MHz
ANTENNA PORT: 1

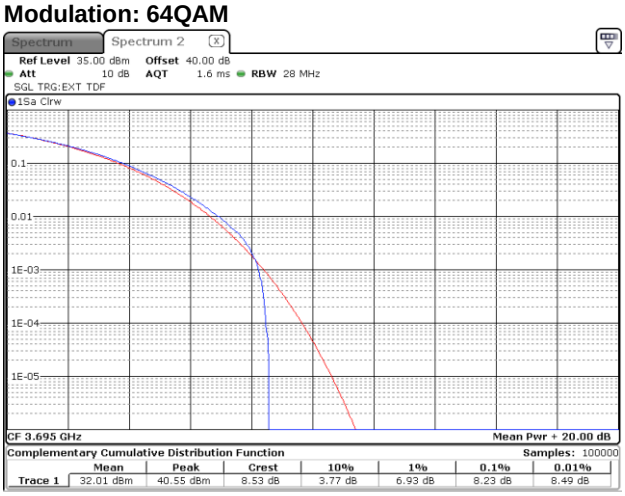
Modulation: QPSK



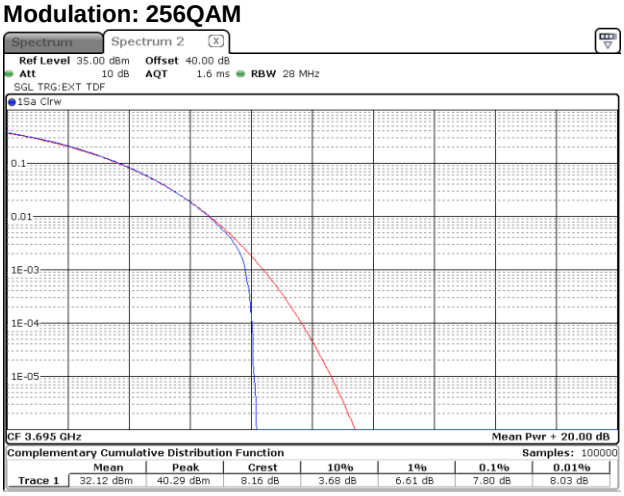
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

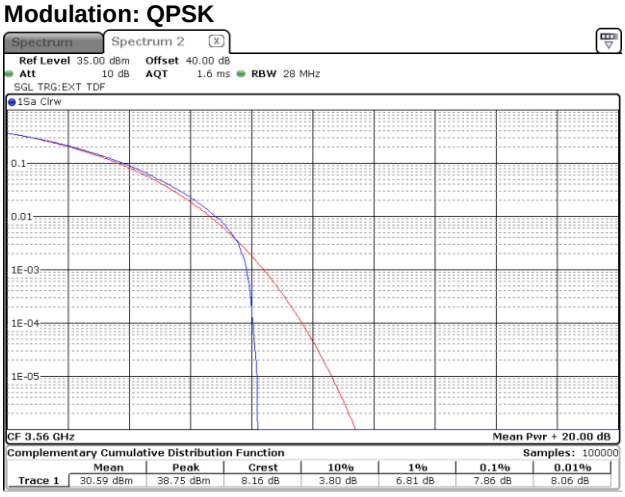


Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

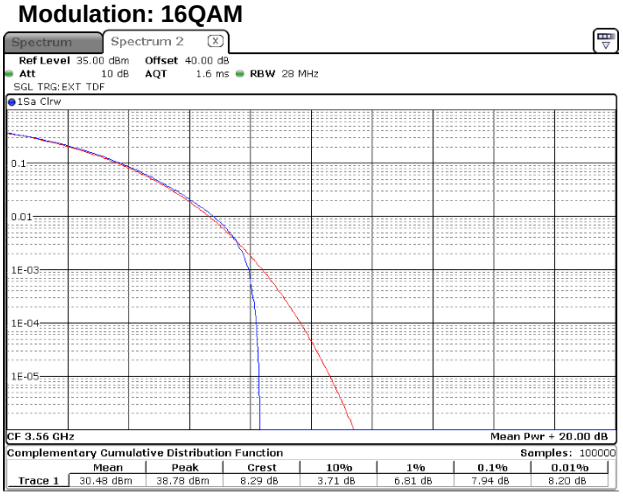
Plot 7.2.4 Peak-to-average power ratio test results at low frequency

CHANNEL SPACING: 20 MHz
ANTENNA PORT: 1

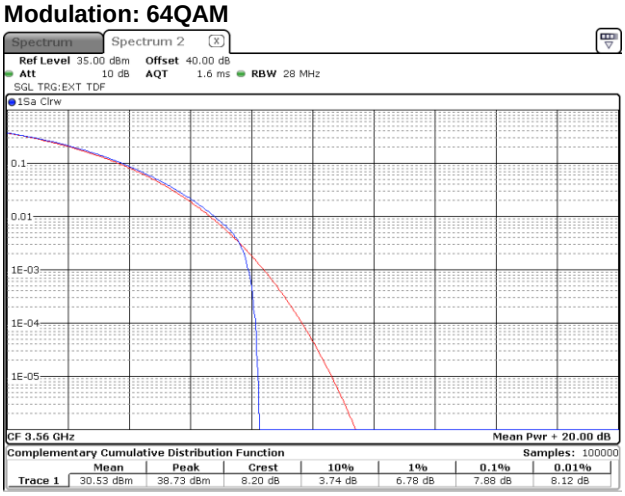
Modulation: QPSK



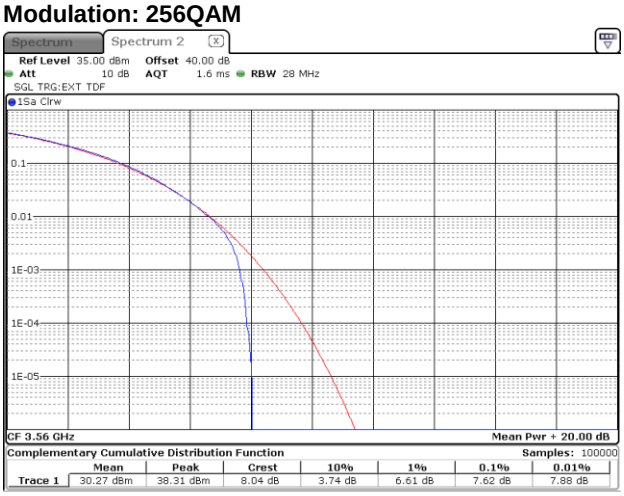
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

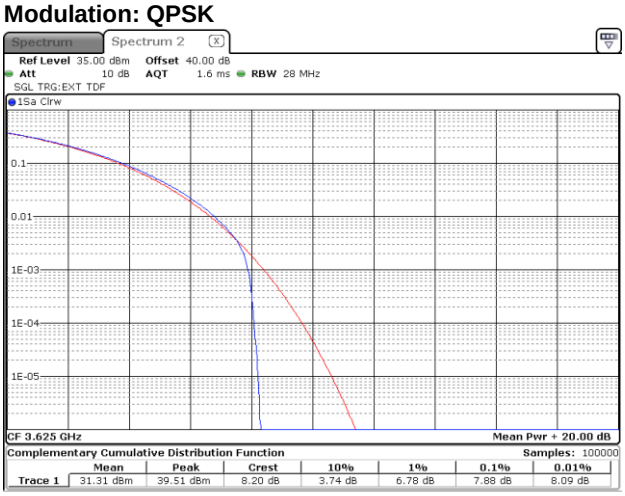


Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

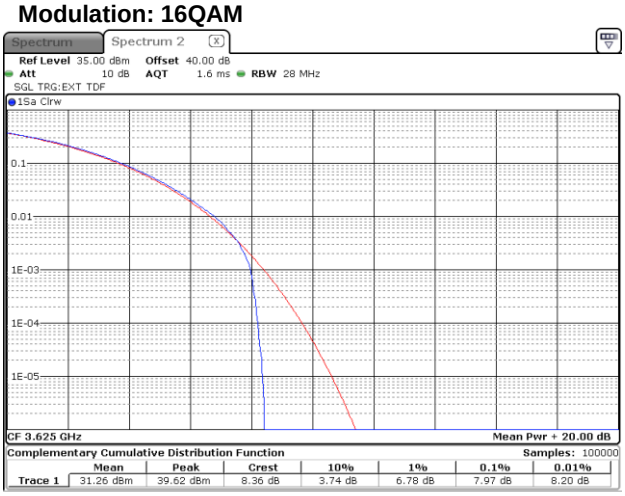
Plot 7.2.5 Peak-to-average power ratio test results at mid frequency

CHANNEL SPACING: 20 MHz
ANTENNA PORT: 1

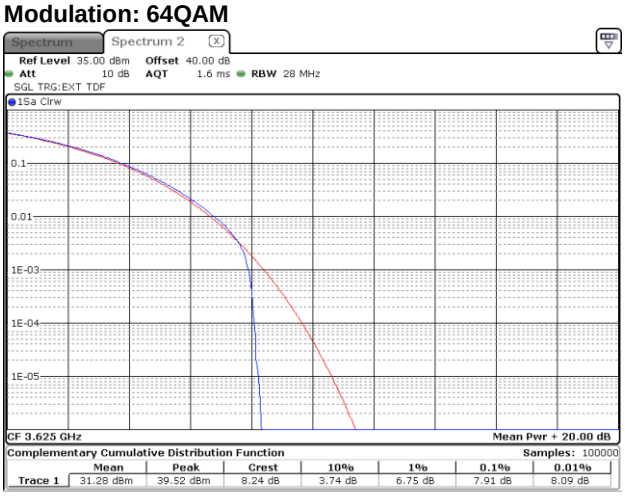
Modulation: QPSK



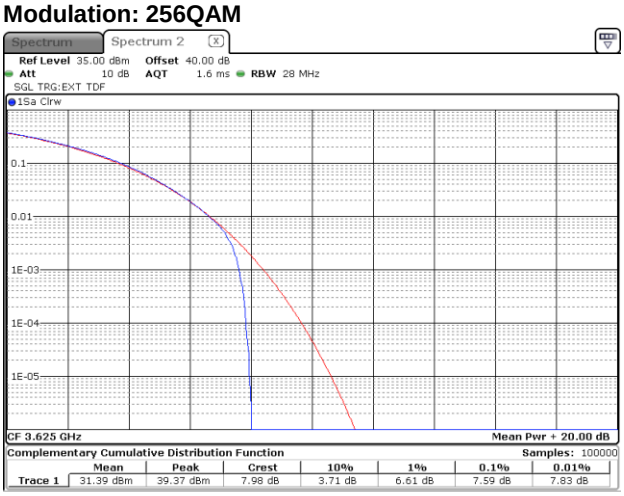
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM

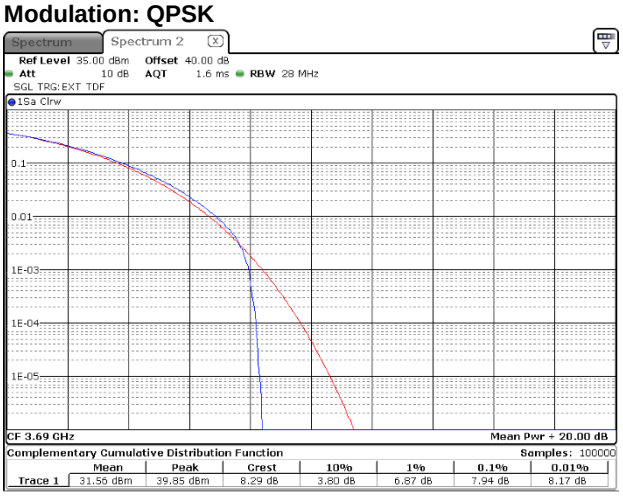


Test specification:	Section 96.41(g), Peak-to- average power ratio		
Test procedure:	Section 96.41(g)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	21-Jul-20 - 29-Nov-20		
Temperature: 24.3. ºC	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

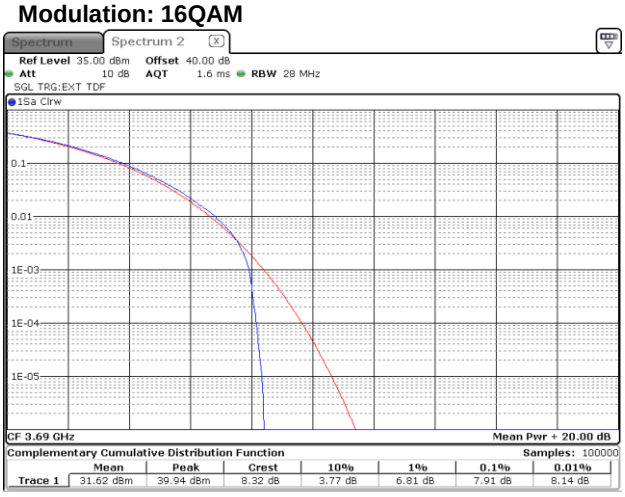
Plot 7.2.6 Peak-to-average power ratio test results at high frequency

CHANNEL SPACING: 20 MHz
ANTENNA PORT: 1

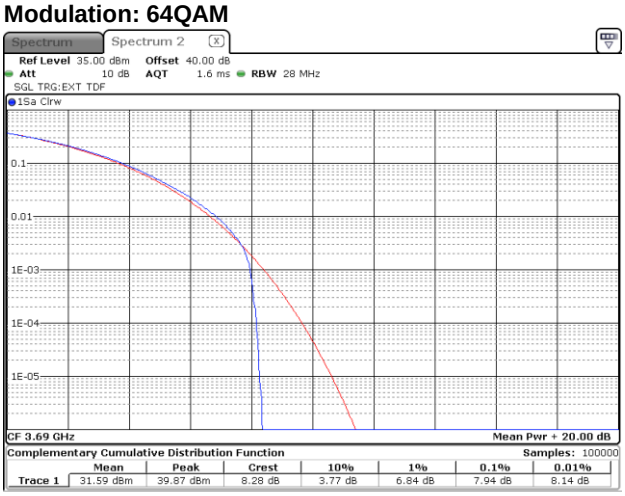
Modulation: QPSK



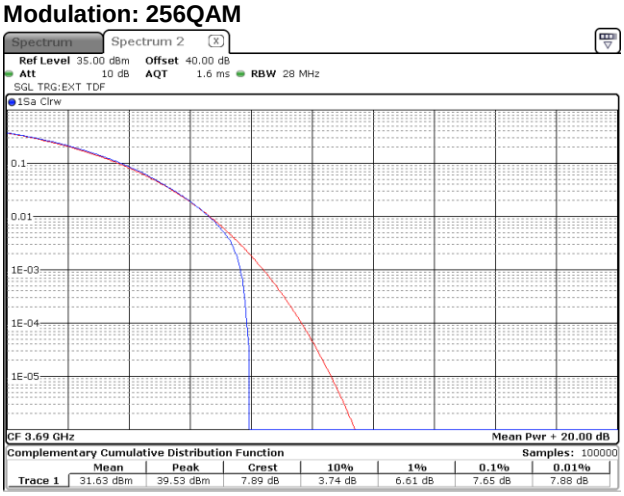
Modulation: 16QAM



Modulation: 64QAM



Modulation: 256QAM



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

7.3 Occupied bandwidth test

7.3.1 General

This test was performed to measure transmitter occupied bandwidth. Specification test limits are given in Table 7.3.1.

Table 7.3.1 Occupied bandwidth limits

Assigned frequency, MHz	Modulation envelope reference points*, %	Maximum allowed bandwidth, MHz
3550 - 3700	99	10 / 20 MHz

* - Modulation envelope reference points are provided in terms of attenuation below the unmodulated carrier.

7.3.2 Test procedure

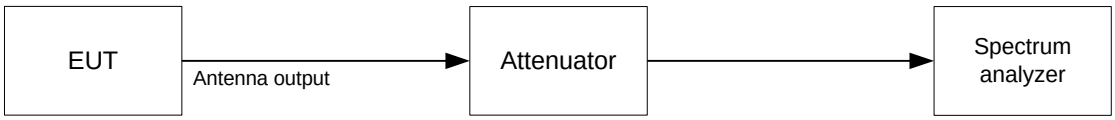
7.3.2.1 The EUT was set up as shown in Figure 7.3.1, energized and its proper operation was checked.

7.3.2.2 The EUT was set to transmit the unmodulated carrier and the reference peak power level was measured.

7.3.2.3 The EUT was set to transmit the normally modulated carrier.

7.3.2.4 The transmitter occupied bandwidth was measured with spectrum analyzer as a frequency delta between the reference points on modulation envelope and provided in Table 7.3.2 and the associated plots.

Figure 7.3.1 Occupied bandwidth test setup



Test specification:	**Section2.1049, Occupied bandwidth**		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	**Relative Humidity:** 52 %	**Air Pressure:** 1012 hPa	**Power:** 48 VDC
Remarks:			

Table 7.3.2 Occupied bandwidth test results

DETECTOR USED: Peak hold
RESOLUTION BANDWIDTH: 1 – 5% of the OBW
VIDEO BANDWIDTH: > RBW
MODULATION ENVELOPE REFERENCE POINTS: 99%

Carrier frequency, MHz	Occupied bandwidth, MHz	Limit, MHz	Margin, MHz	Verdict
Channel spacing 10 MHz				
Modulation QPSK				
3555.0	9.0113	10.0	-0.9887	Pass
3625.0	9.0188	10.0	-0.9812	Pass
3695.0	9.0138	10.0	-0.9862	Pass
Modulation 16QAM				
3555.0	9.0113	10.0	-0.9887	Pass
3625.0	9.0088	10.0	-0.9912	Pass
3695.0	9.0038	10.0	-0.9962	Pass
Modulation 64QAM				
3555.0	8.9988	10.0	-1.0012	Pass
3625.0	9.0013	10.0	-0.9987	Pass
3695.0	8.9988	10.0	-1.0012	Pass
Modulation 256QAM				
3555.0	9.0038	10.0	-0.9962	Pass
3625.0	9.0013	10.0	-0.9987	Pass
3695.0	8.9938	10.0	-1.0062	Pass
Channel spacing 20 MHz				
Modulation QPSK				
3560.0	17.8227	20.0	-2.1773	Pass
3625.0	17.8127	20.0	-2.1873	Pass
3690.0	17.8077	20.0	-2.1923	Pass
Modulation 16QAM				
3560.0	17.8427	20.0	-2.1573	Pass
3625.0	17.8327	20.0	-2.1673	Pass
3690.0	17.8127	20.0	-2.1873	Pass
Modulation 64QAM				
3560.0	17.7727	20.0	-2.2273	Pass
3625.0	17.8027	20.0	-2.1973	Pass
3690.0	17.7927	20.0	-2.2073	Pass
Modulation 256QAM				
3560.0	17.7827	20.0	-2.2173	Pass
3625.0	17.7977	20.0	-2.2023	Pass
3690.0	17.7927	20.0	-2.2073	Pass

Reference numbers of test equipment used

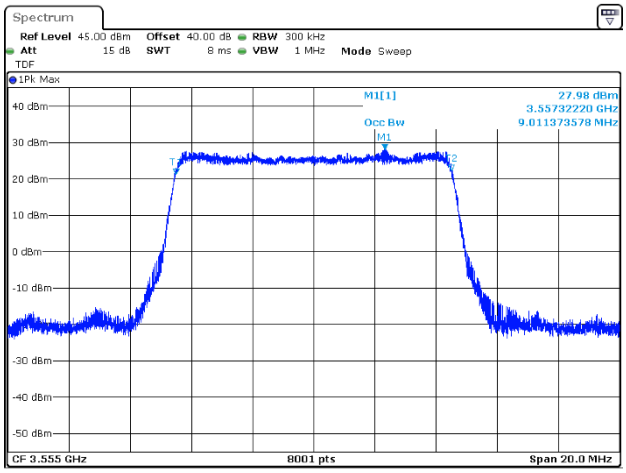
HL 4355	HL 3901	HL 5608					

Full description is given in Appendix A.

Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

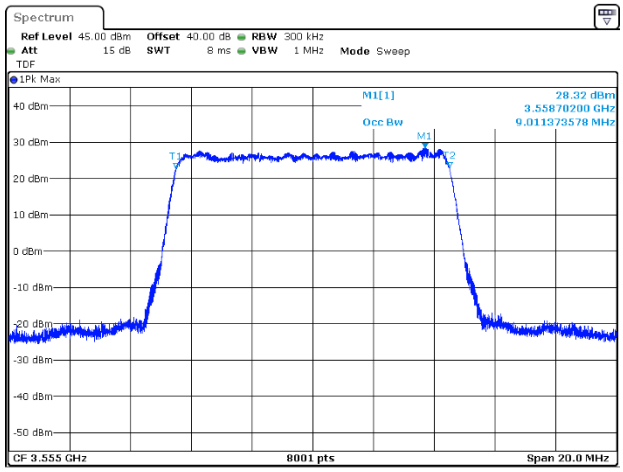
Plot 7.3.1 Occupied bandwidth test result at low frequency

MODULATION: QPSK
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.2 Occupied bandwidth test result at low frequency

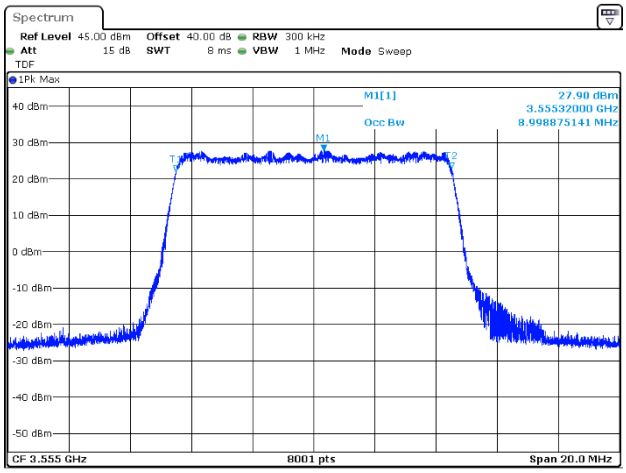
MODULATION: 16QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

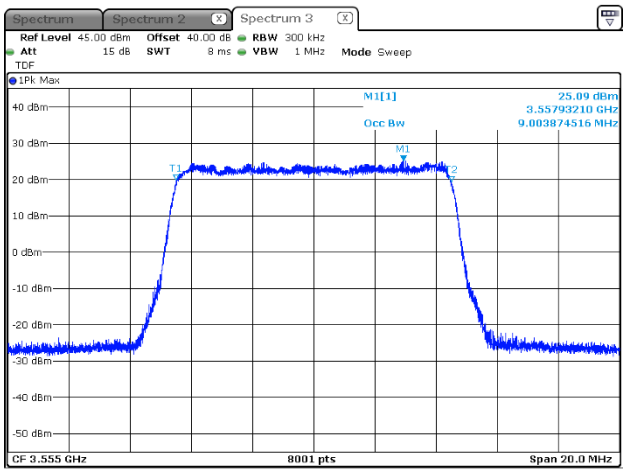
Plot 7.3.3 Occupied bandwidth test result at low frequency

MODULATION: 64QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.4 Occupied bandwidth test result at low frequency

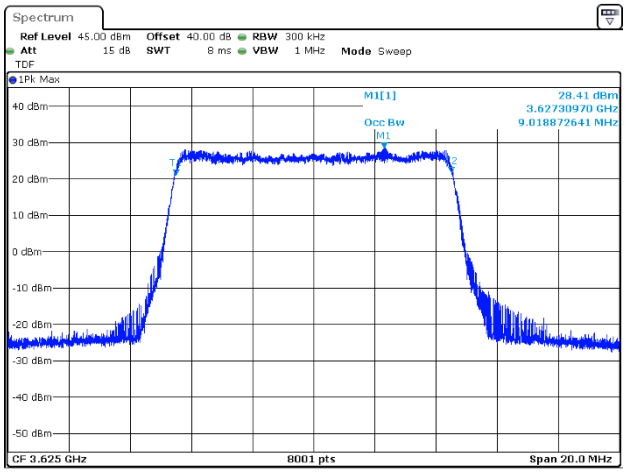
MODULATION: 256QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

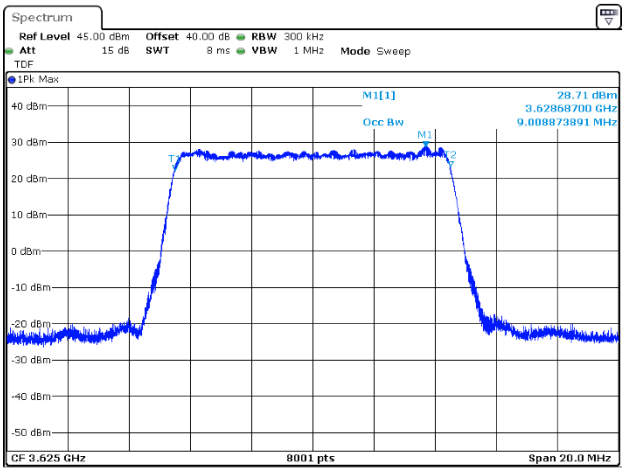
Plot 7.3.5 Occupied bandwidth test result at mid frequency

MODULATION: QPSK
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.6 Occupied bandwidth test result at mid frequency

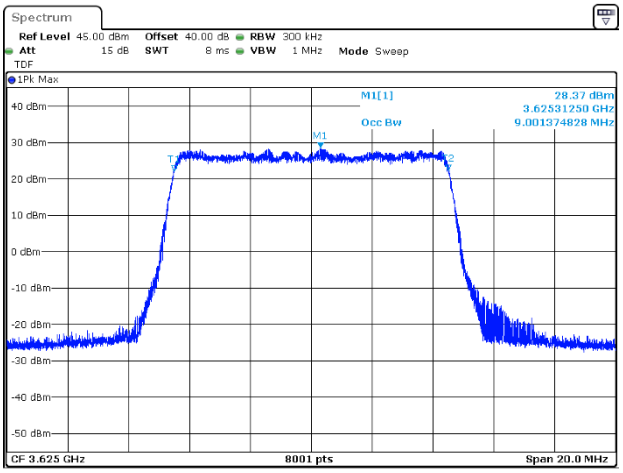
MODULATION: 16QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

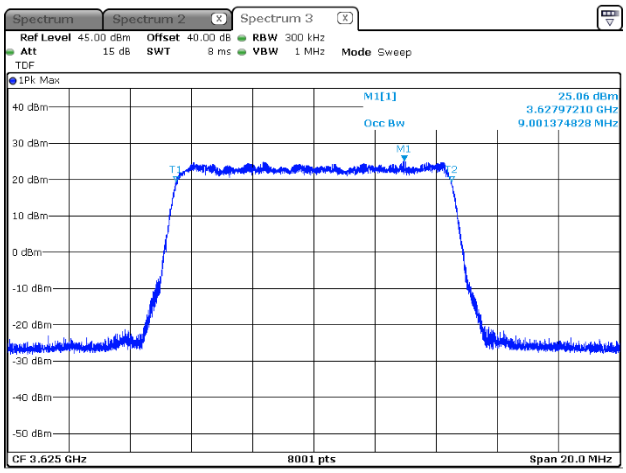
Plot 7.3.7 Occupied bandwidth test result at mid frequency

MODULATION: 64QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.8 Occupied bandwidth test result at mid frequency

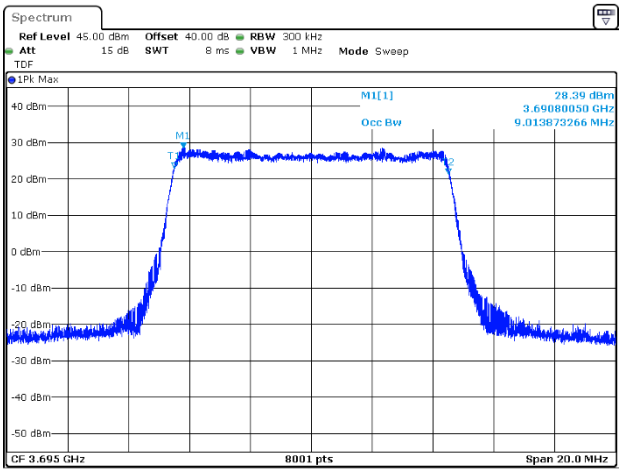
MODULATION: 256QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

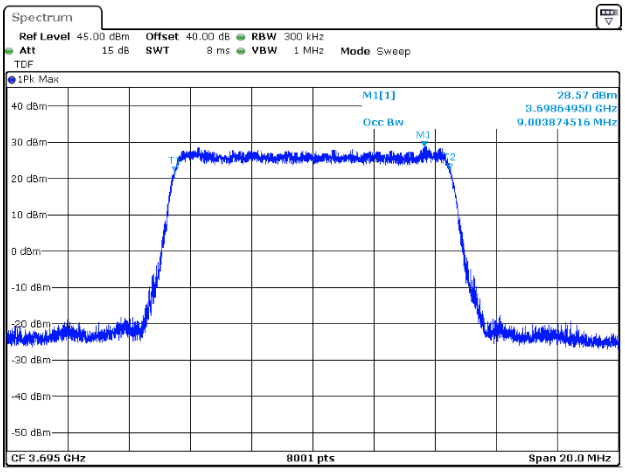
Plot 7.3.9 Occupied bandwidth test result at high frequency

MODULATION: QPSK
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.10 Occupied bandwidth test result at high frequency

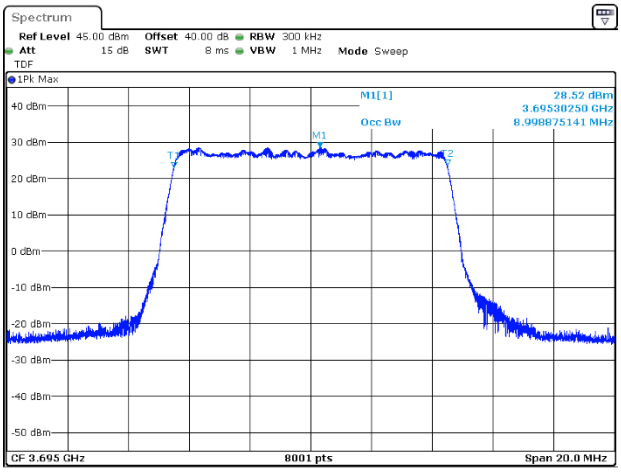
MODULATION: 16QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

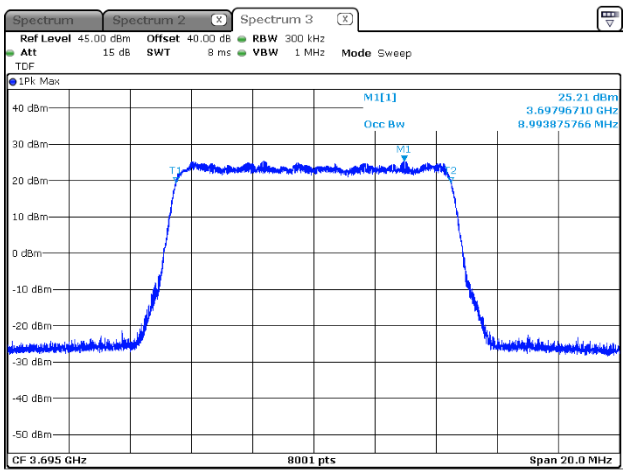
Plot 7.3.11 Occupied bandwidth test result at high frequency

MODULATION: 64QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Plot 7.3.12 Occupied bandwidth test result at high frequency

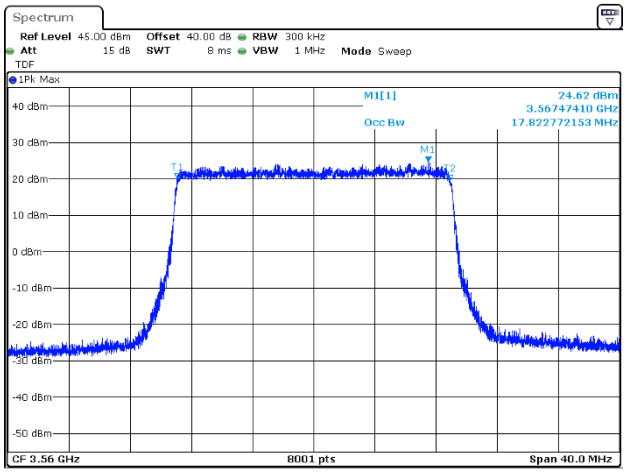
MODULATION: 256QAM
CHANNEL SPACING: 10 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

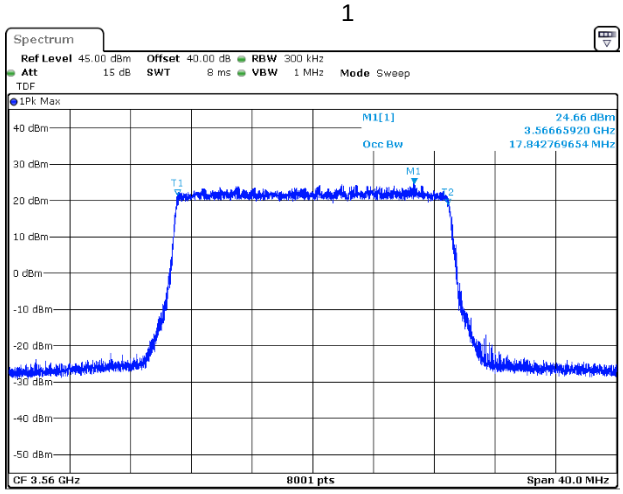
Plot 7.3.13 Occupied bandwidth test result at low frequency

MODULATION: QPSK
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.14 Occupied bandwidth test result at low frequency

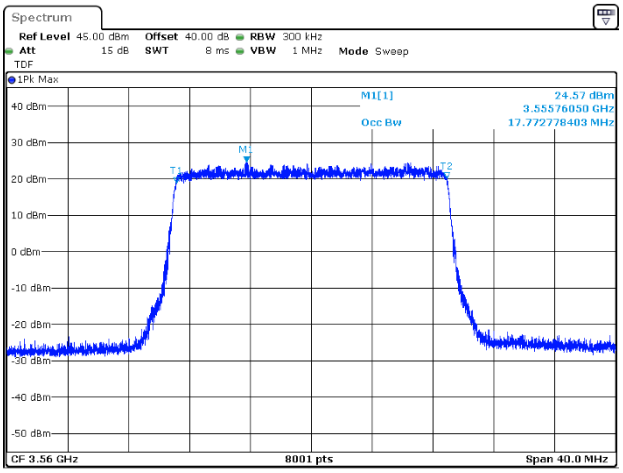
MODULATION: 16QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

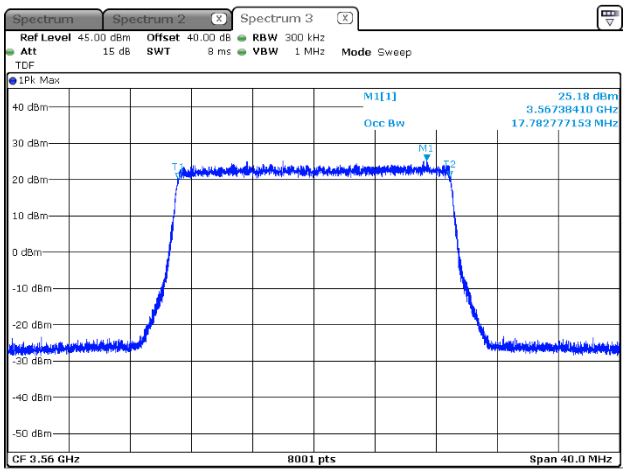
Plot 7.3.15 Occupied bandwidth test result at low frequency

MODULATION: 64QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.16 Occupied bandwidth test result at low frequency

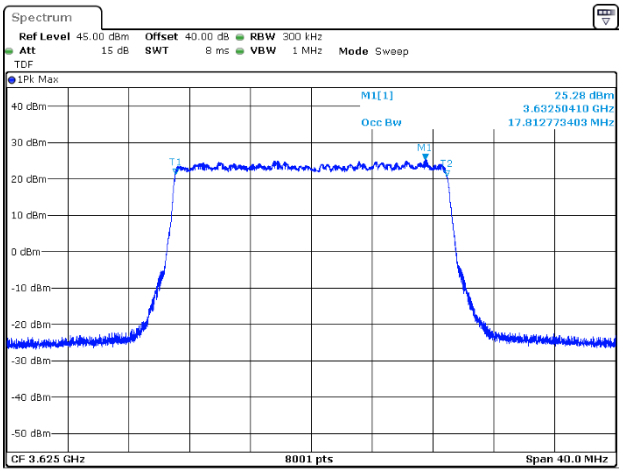
MODULATION: 256QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

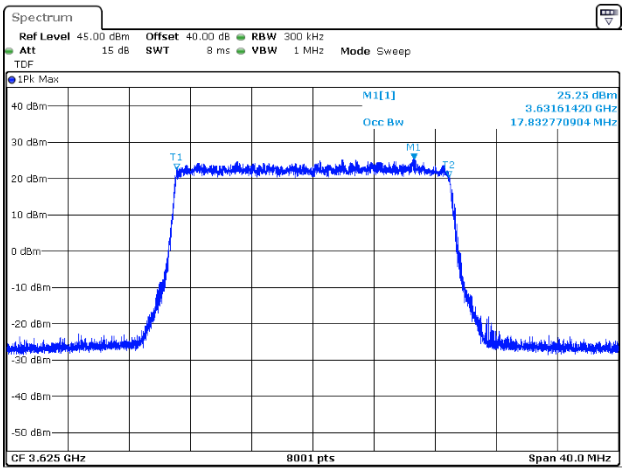
Plot 7.3.17 Occupied bandwidth test result at mid frequency

MODULATION: QPSK
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.18 Occupied bandwidth test result at mid frequency

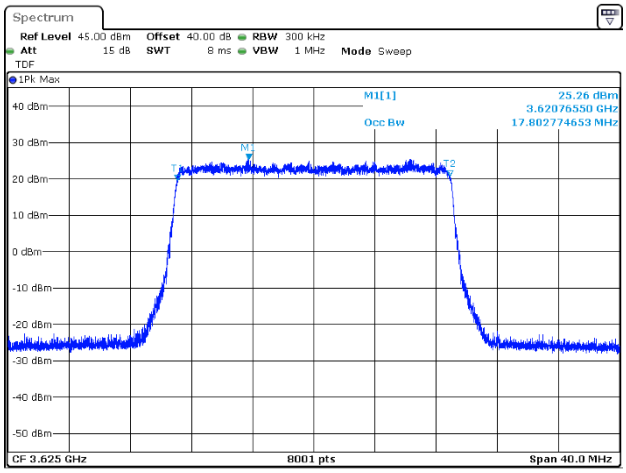
MODULATION: 16QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

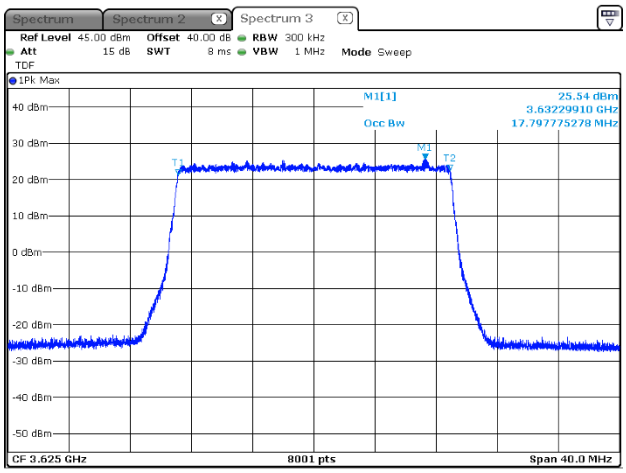
Plot 7.3.19 Occupied bandwidth test result at mid frequency

MODULATION: 64QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.20 Occupied bandwidth test result at mid frequency

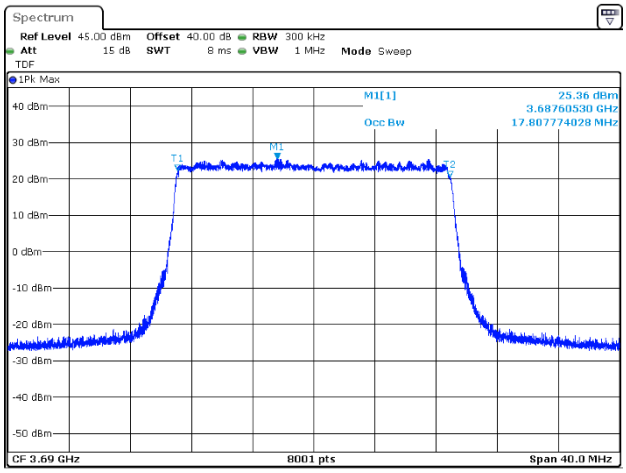
MODULATION: 256QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

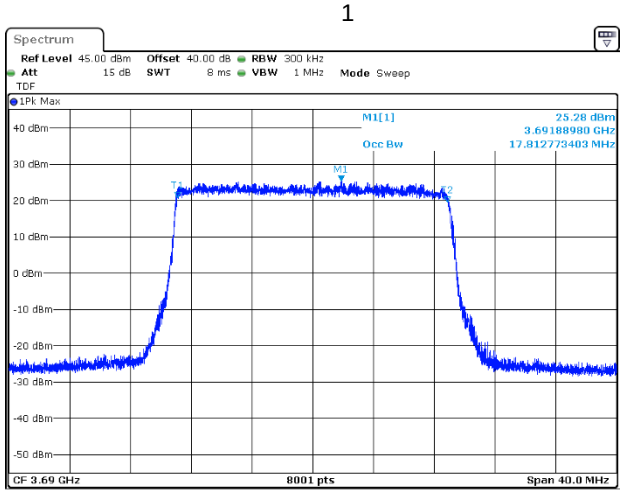
Plot 7.3.21 Occupied bandwidth test result at high frequency

MODULATION: QPSK
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.22 Occupied bandwidth test result at high frequency

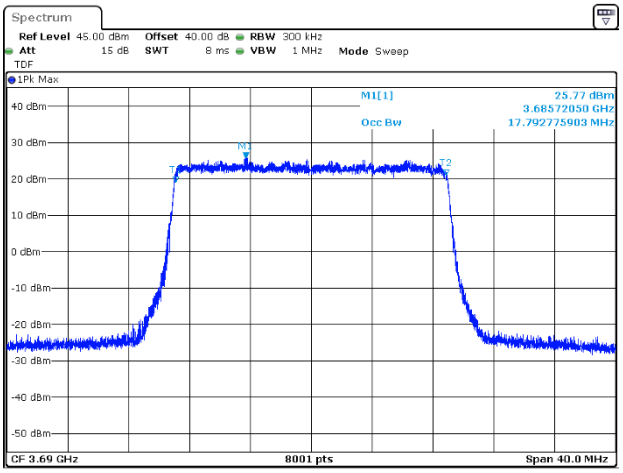
MODULATION: 16QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section2.1049, Occupied bandwidth		
Test procedure:	47 CFR, Section 2.1049		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Apr-20 - 29-Nov-20		
Temperature: 24 ºC	Relative Humidity: 52 %	Air Pressure: 1012 hPa	Power: 48 VDC
Remarks:			

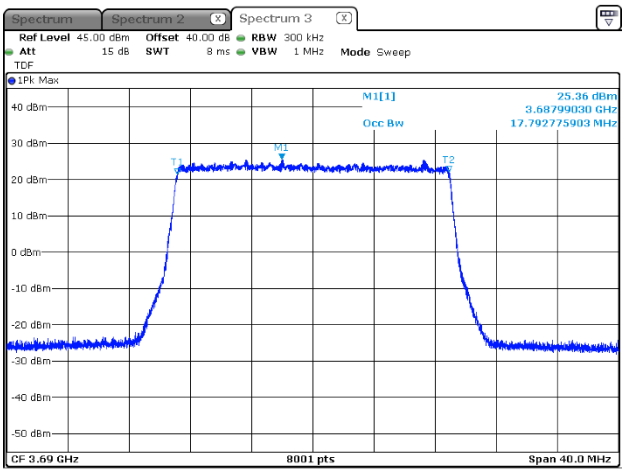
Plot 7.3.23 Occupied bandwidth test result at high frequency

MODULATION: 64QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Plot 7.3.24 Occupied bandwidth test result at high frequency

MODULATION: 256QAM
CHANNEL SPACING: 20 MHz
ANTENNA CHAIN: 1



Test specification:	Section 96.41(e), Emission mask		
Test procedure:	Section 96.41(e)(3)		
Test mode:	Compliance	Verdict:	PASS
Date(s):	19-Jul-20 - 29-Nov-20		
Temperature: 24.2 ºC	Relative Humidity: 49 %	Air Pressure: 1010 hPa	Power: 48 VDC
Remarks:			

7.4 Emission outside the fundamental test

7.4.1 General

This test was performed to measure Emission outside the fundamental at RF antenna connector. Specification test limits are given in Table 7.4.1.

Table 7.4.1 Emission outside the fundamental limits

Frequency displacement from frequency block	Limit*, dBm/MHz	RBW, kHz
Channel Spacing 10 MHz		
0 – 1 MHz	- 13	100
0 – 10 MHz	- 13	1000
10 – 20 MHz	- 25	1000
Above 3530 MHz and below 3720 MHz	- 25	1000
Below 3530 MHz and above 3720 MHz	- 40	1000
Channel Spacing 20 MHz		
0 – 1 MHz	- 13	100
0 – 10 MHz	- 13	1000
10 – 20 MHz	- 25	1000
Above 3530 MHz and below 3720 MHz	- 25	1000
Below 3530 MHz and above 3720 MHz	- 40	1000

* - Limit at each antenna connector (amount of antennas N = 2)

7.4.2 Test procedure

7.4.2.1 The EUT was set up as shown in Figure 7.4.1, energized and its proper operation was checked.

7.4.2.2 The Emission outside the fundamental was measured with spectrum analyzer as provided in Table 7.4.2, Table 7.4.3 and the the associated plots.

Figure 7.4.1 Emission outside the fundamental test setup