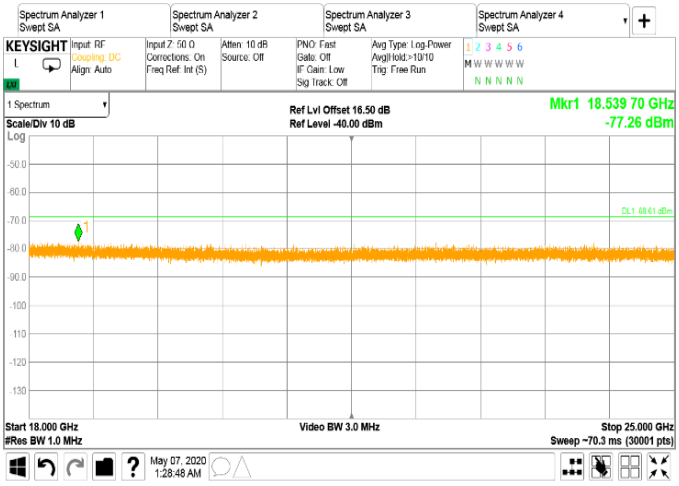
Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

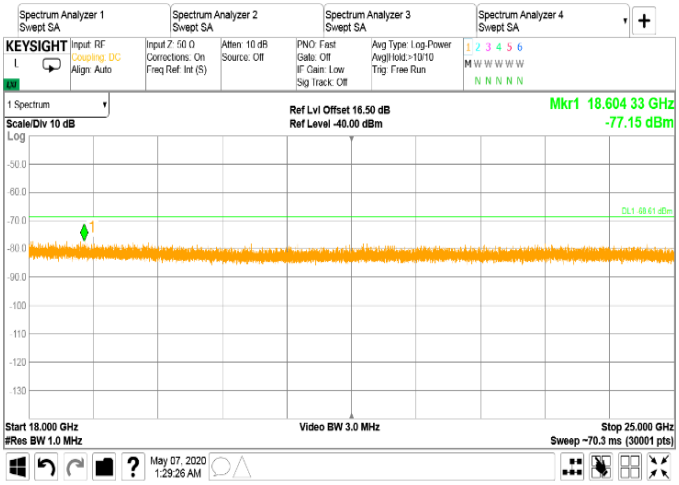
Plot 7.5.215 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #8



Plot 7.5.216 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

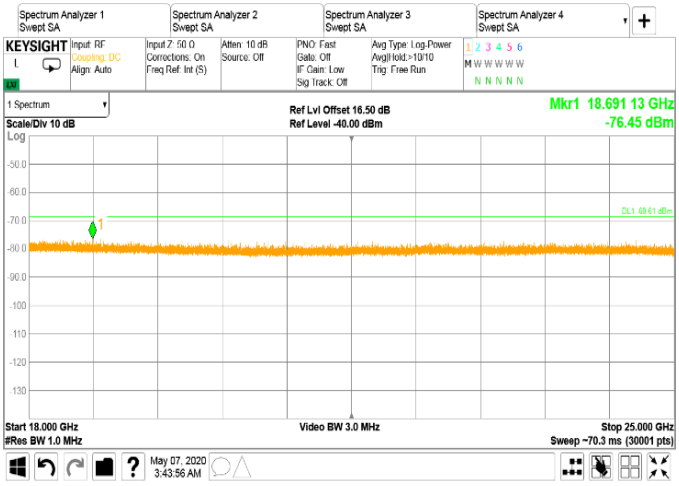
CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #8



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

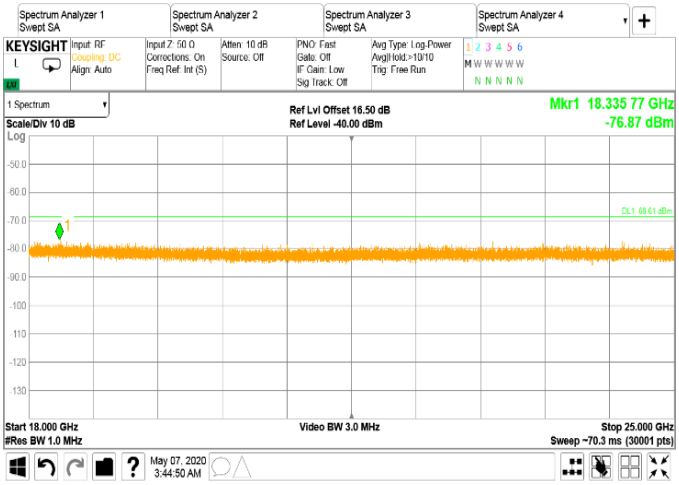
Plot 7.5.217 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #1



Plot 7.5.218 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

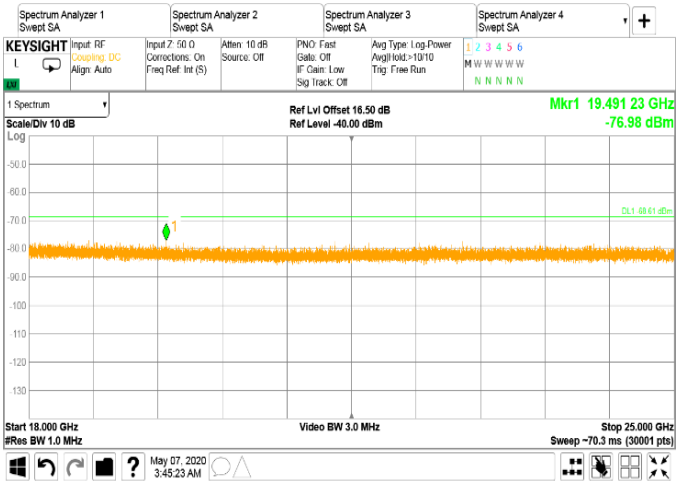
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #1



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

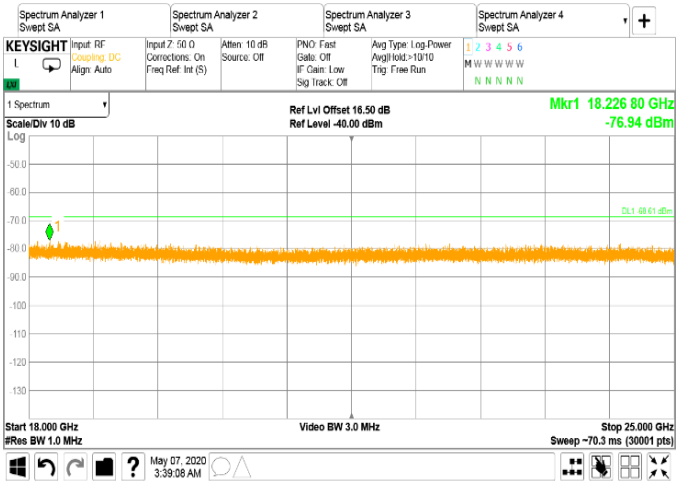
Plot 7.5.219 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #1



Plot 7.5.220 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

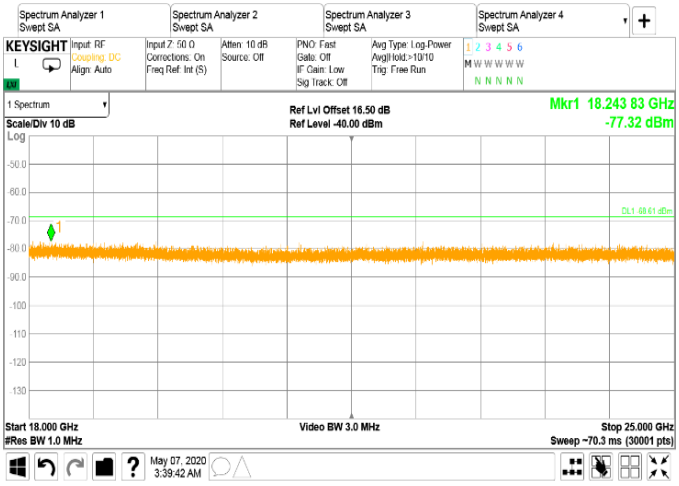
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #2



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

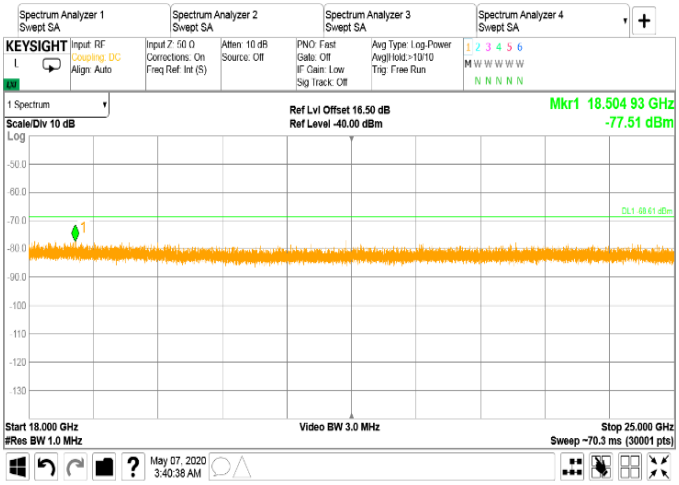
Plot 7.5.221 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #2



Plot 7.5.222 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

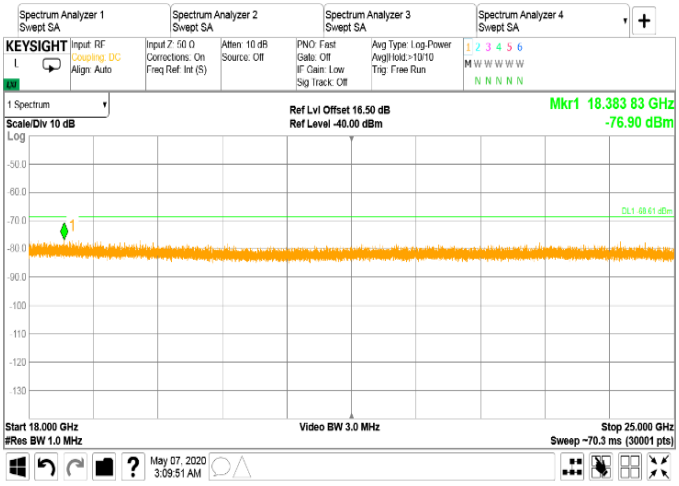
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #2



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

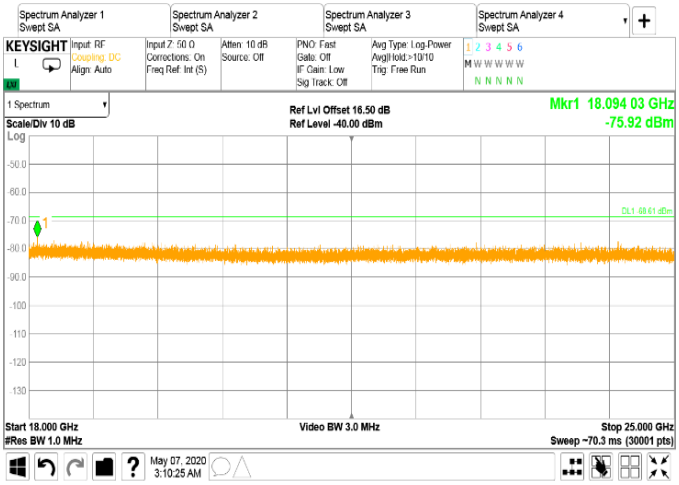
Plot 7.5.223 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #3



Plot 7.5.224 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

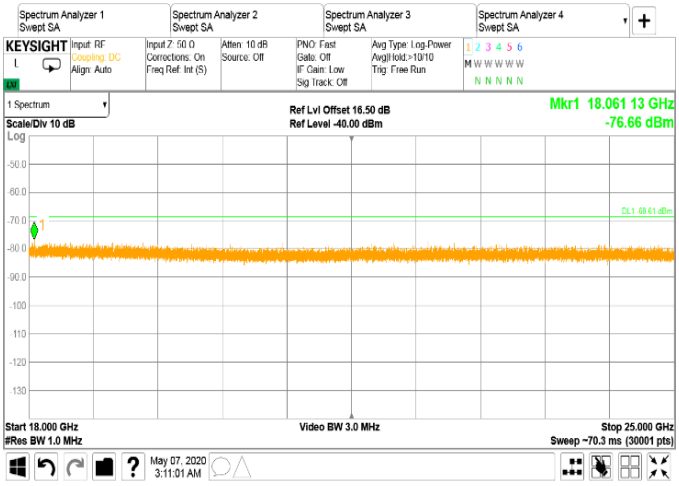
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #3



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

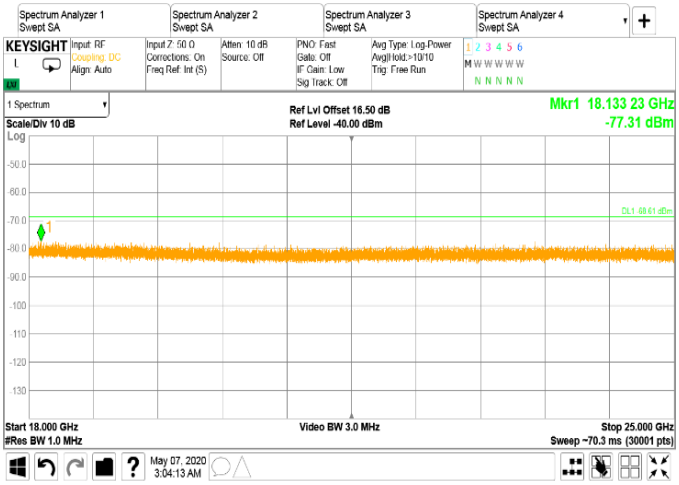
Plot 7.5.225 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #3



Plot 7.5.226 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

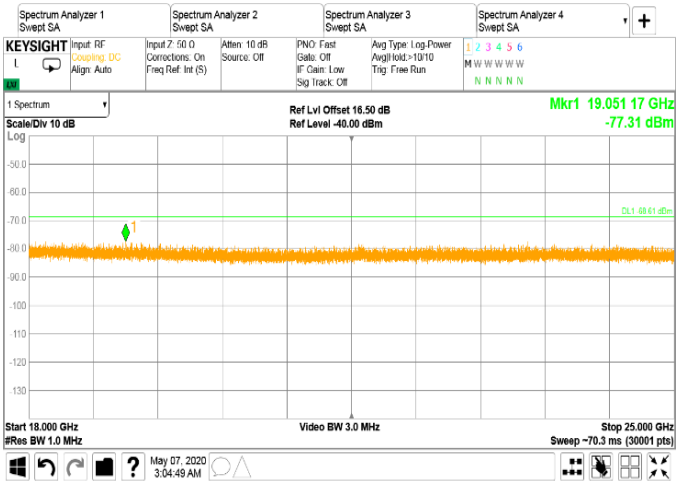
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #4



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

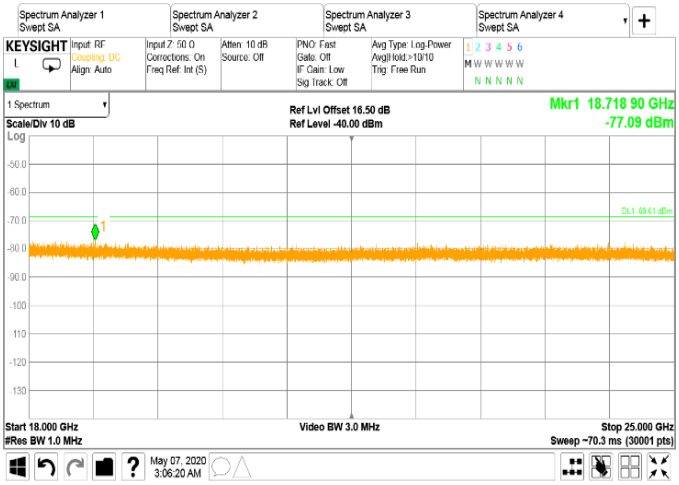
Plot 7.5.227 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #4



Plot 7.5.228 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

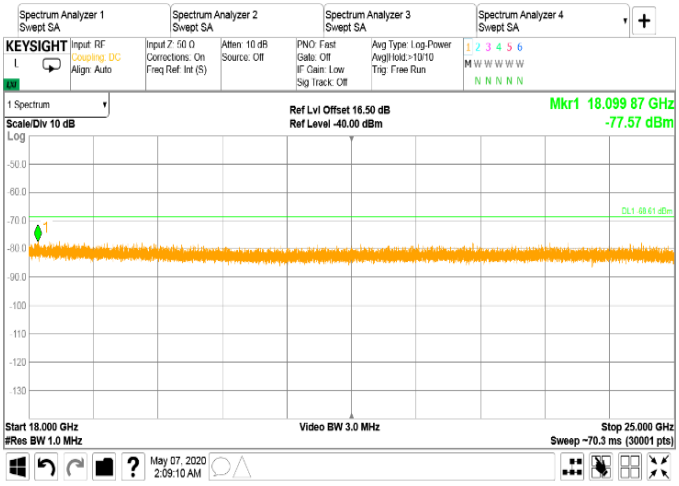
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #4



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

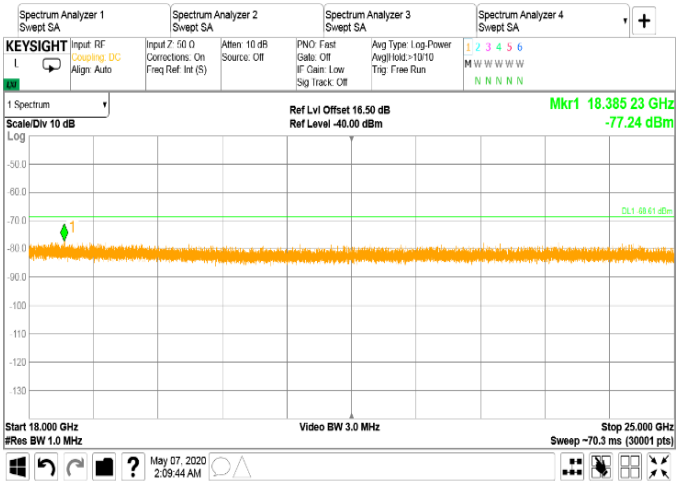
Plot 7.5.229 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #5



Plot 7.5.230 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

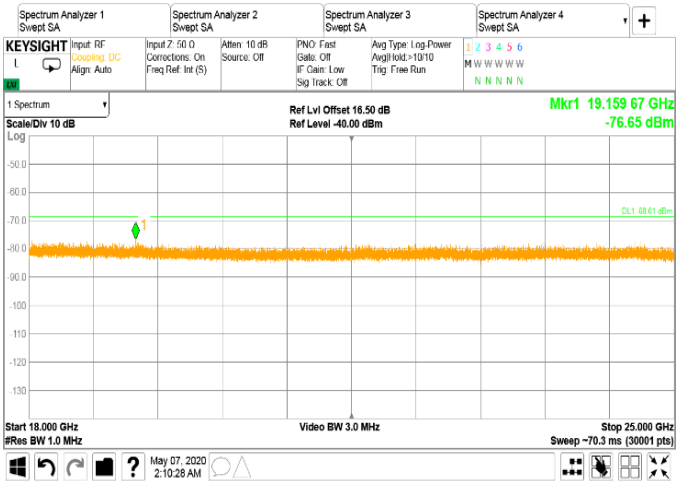
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #5



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

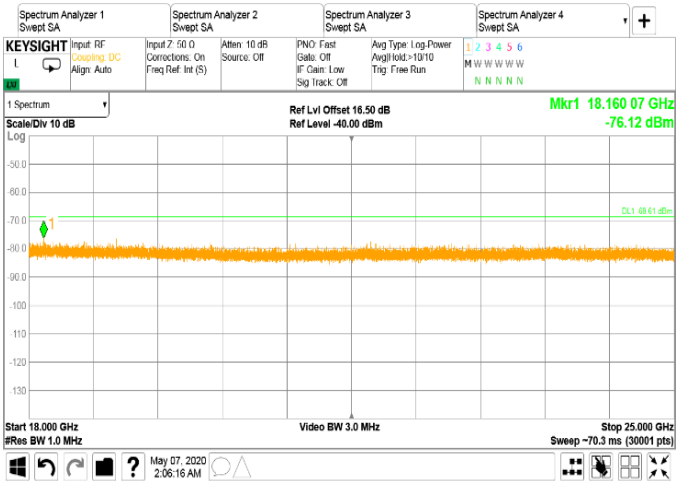
Plot 7.5.231 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #5



Plot 7.5.232 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

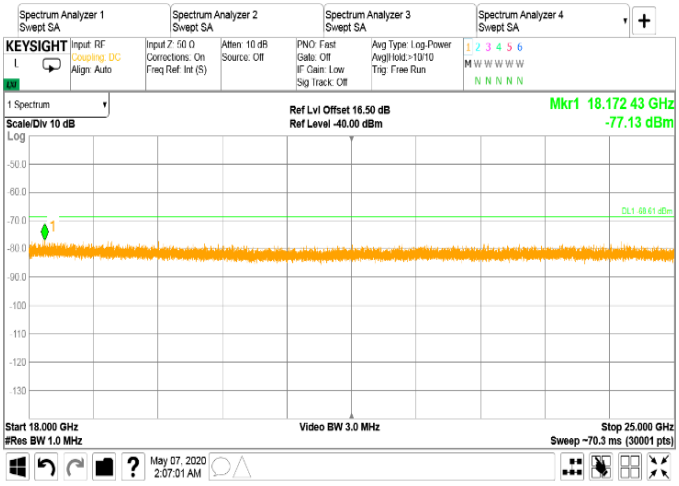
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #6



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

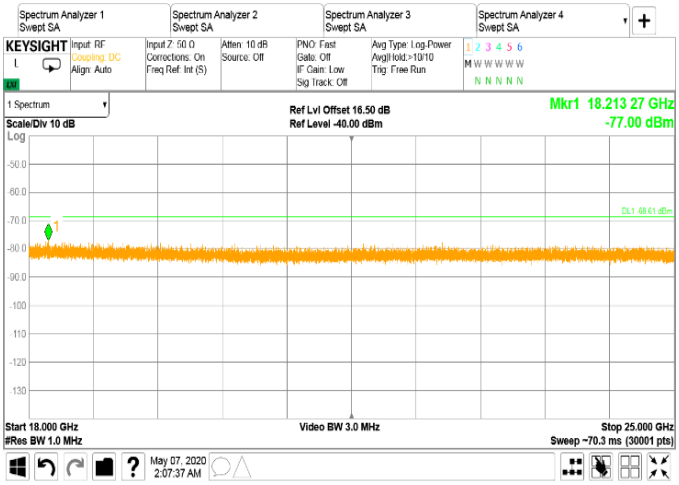
Plot 7.5.233 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #6



Plot 7.5.234 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

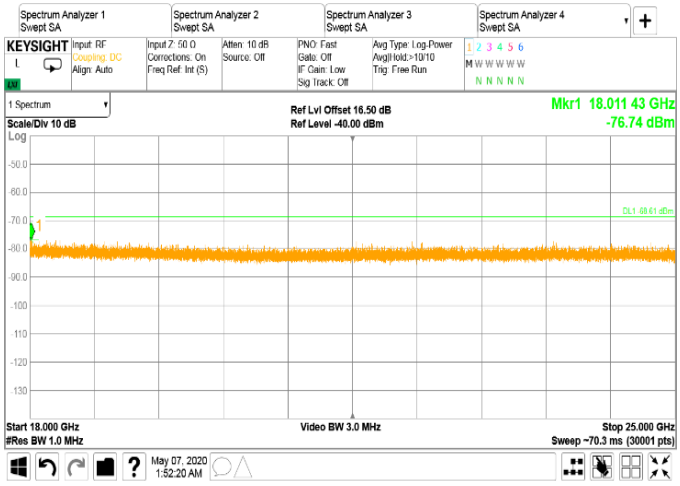
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #6



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

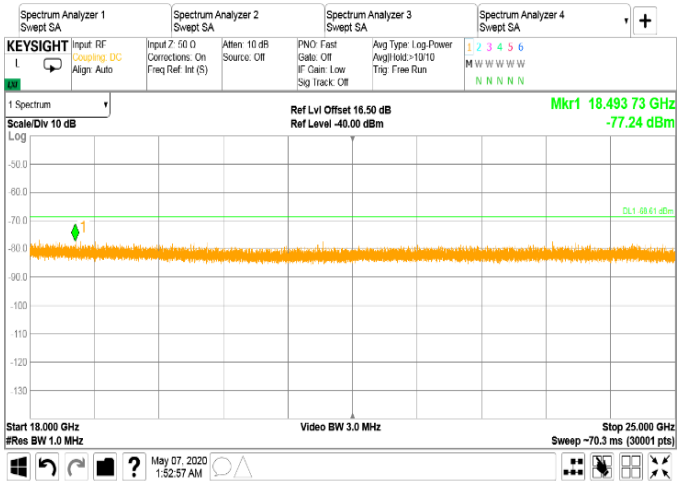
Plot 7.5.235 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #7



Plot 7.5.236 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

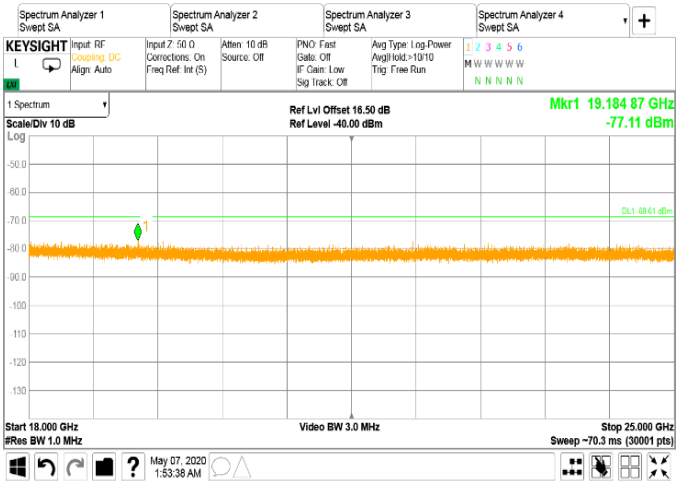
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #7



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

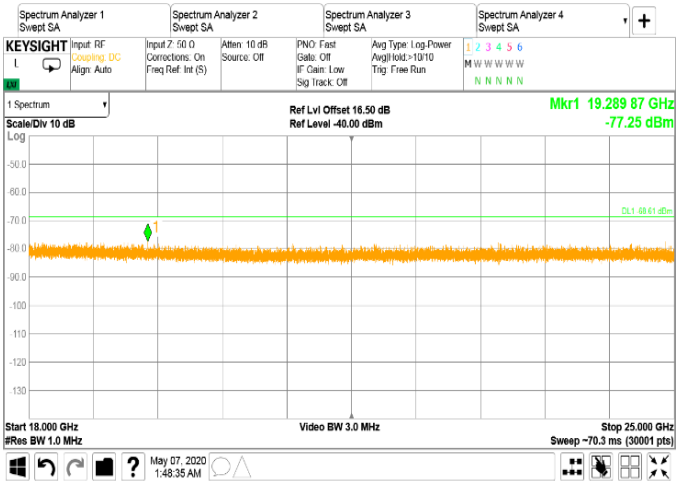
Plot 7.5.237 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #7



Plot 7.5.238 Spurious emission measurements in 18 - 25 GHz range at low carrier frequency

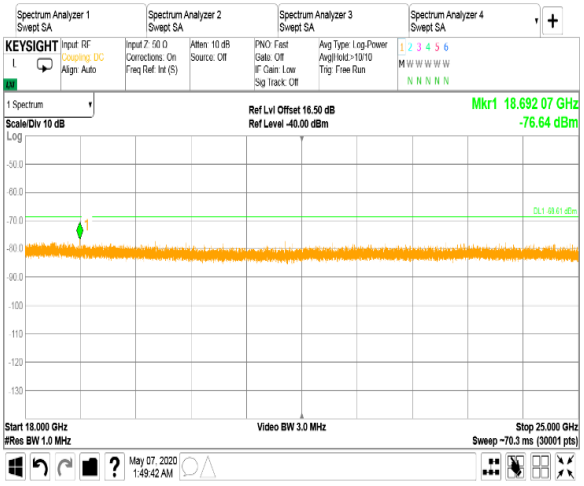
CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #8



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Conducted spurious emissions		
Test procedure:	ANSI C63.10 section 11.12.2		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

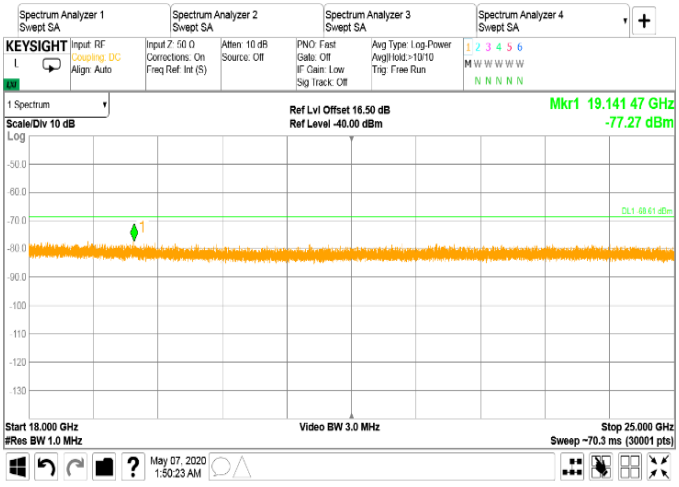
Plot 7.5.239 Spurious emission measurements in 18 - 25 GHz range at mid carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #8



Plot 7.5.240 Spurious emission measurements in 18 - 25 GHz range at high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 3 Non-Overlapping Beams
ANTENNA PORT: #8



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

7.6 Band edge emissions at RF antenna connector for one beam configuration

7.6.1 General

This test was performed to measure band edge emissions at RF antenna connector. Specification test limits are given in Table 7.6.1.

Table 7.6.1 Band edge emission limits

Output power	Assigned frequency, MHz	Attenuation below carrier*, dBc
Peak	902.0 – 928.0	20.0
	2400.0 – 2483.5	
	5725.0 – 5850.0	
Averaged over a time interval	902.0 – 928.0	**30.0**
	2400.0 – 2483.5	
	5725.0 – 5850.0	

* - Band edge emission limit is provided in terms of attenuation below the peak of modulated carrier measured with the same resolution bandwidth.

7.6.2 Test procedure

7.6.2.1 The EUT was set up as shown in Figure 7.6.1, energized normally modulated at the maximum data rate and its proper operation was checked.

7.6.2.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.

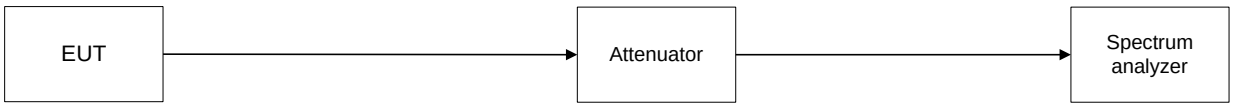
7.6.2.3 The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set wider than 1 % of the frequency span.

7.6.2.4 The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.

7.6.2.5 The maximum band edge emission and modulation product outside of the band were measured as provided in Table 7.6.2 and associated plots and referenced to the highest emission level measured within the authorized band.

7.6.2.6 The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the highest carrier frequency.

Figure 7.6.1 Band edge emission test setup



Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

Table 7.6.2 Band edge emission outside restricted band test results

ASSIGNED FREQUENCY RANGE: 2400 - 2483.5 MHz
DETECTOR USED: Peak
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: Maximum
RESOLUTION BANDWIDTH: 100 kHz
VIDEO BANDWIDTH: ≥ RBW
CONFIGURATION: 1 beam
CHANNEL SPACING: 5 MHz

Antenna port	Frequency, MHz	Band edge emission, dBm	Emission at carrier, dBm	Attenuation below carrier, dBc	Limit, dBc	Margin, dB*	Verdict
Modulation QPSK							
Chain #1	2399.7	-58.64	-2.04**	56.60	30.0	26.60	Pass
Chain #2	2399.4	-60.00	-2.04**	57.96	30.0	27.96	Pass
Chain #3	2400.0	-58.70	-2.04**	56.66	30.0	26.66	Pass
Chain #4	2399.1	-60.25	-2.04**	58.21	30.0	28.21	Pass
Chain #5	2400.0	-57.67	-2.04**	55.63	30.0	25.63	Pass
Chain #6	2400.0	-72.03	-2.04**	69.99	30.0	39.99	Pass
Chain #7	2399.1	-72.23	-2.04**	70.19	30.0	40.19	Pass
Chain #8	2399.1	-72.16	-2.04**	70.12	30.0	40.12	Pass
Modulation 64QAM							
Chain #1	2398.5	-62.13	-3.01**	59.12	30.0	29.12	Pass
Chain #2	2400.0	-58.37	-3.01**	55.36	30.0	25.36	Pass
Chain #3	2400.0	-57.20	-3.01**	54.19	30.0	24.19	Pass
Chain #4	2400.0	-58.55	-3.01**	55.54	30.0	25.54	Pass
Chain #5	2400.0	-58.89	-3.01**	55.88	30.0	25.88	Pass
Chain #6	2400.0	-72.18	-3.01**	69.17	30.0	39.17	Pass
Chain #7	2400.0	-72.16	-3.01**	69.15	30.0	39.15	Pass
Chain #8	2399.4	-72.33	-3.01**	69.32	30.0	39.32	Pass

*****- Margin = Attenuation below carrier – specification limit.
** - Was applied minimum reference level from 8 antenna chains

Test specification:	**Section 15.247(d) / RSS-247 section 5.5, Band edge emissions**		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	**Relative Humidity:** 44 %	**Air Pressure:** 1004 hPa	**Power:** 48 VDC
Remarks:			

CHANNEL SPACING: 10 MHz

Antenna port	Frequency, MHz	Band edge emission, dBm	Emission at carrier, dBm	Attenuation below carrier, dBc	Limit, dBc	Margin, dB*	Verdict
Modulation QPSK							
Chain #1	2398.8	-59.43	-5.10**	54.33	30.0	24.33	Pass
Chain #2	2399.4	-57.77	-5.10**	52.67	30.0	22.67	Pass
Chain #3	2400.0	-56.89	-5.10**	51.79	30.0	21.79	Pass
Chain #4	2399.1	-57.77	-5.10**	52.67	30.0	22.67	Pass
Chain #5	2400.0	-58.87	-5.10**	53.77	30.0	23.77	Pass
Chain #6	2400.0	-59.37	-5.10**	54.27	30.0	24.27	Pass
Chain #7	2399.1	-59.86	-5.10**	54.76	30.0	24.76	Pass
Chain #8	2399.7	-59.66	-5.10**	54.56	30.0	24.56	Pass
Modulation 64QAM							
Chain #1	2398.3	-72.31	-5.14**	67.27	30.0	27.27	Pass
Chain #2	2400.0	-57.33	-5.14**	52.19	30.0	22.19	Pass
Chain #3	2400.0	-57.66	-5.14**	52.52	30.0	22.52	Pass
Chain #4	2400.0	-60.41	-5.14**	55.27	30.0	25.27	Pass
Chain #5	2400.0	-58.35	-5.14**	53.21	30.0	23.21	Pass
Chain #6	2399.7	-59.24	-5.14**	54.10	30.0	24.10	Pass
Chain #7	2399.7	-60.39	-5.14**	55.25	30.0	25.25	Pass
Chain #8	2399.4	-60.52	-5.14**	55.38	30.0	25.38	Pass

*****- Margin = Attenuation below carrier – specification limit.
** - Was applied minimum reference level from 8 antenna chains

Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

Table 7.6.3 Low band edge emission within restricted band test results

ASSIGNED FREQUENCY RANGE: 2400 - 2483.5 MHz
DETECTOR USED: Peak / Average
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: Maximum
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: ≥ RBW
CONFIGURATION: 1 beam
CHANNEL SPACING: 5 MHz

Modulation	Band edge	SA Reading, dBm								Sum , dBm
		Chain #1	Chain #2	Chain #3	Chain #4	Chain #5	Chain #6	Chain #7	Chain #8	
Detector Peak										
QPSK	2390.0	-64.38	-64.06	-62.60	-63.12	-62.78	-60.89	-60.32	-60.25	-53.03
64QAM	2390.0	-62.97	-62.91	-63.98	-63.66	-63.62	-60.87	-59.88	-60.56	-53.03
Detector Average										
QPSK	2390.0	-75.38	-75.48	-75.46	-75.55	-75.52	-72.03	-72.23	-72.16	-64.91
64QAM	2390.0	-75.25	-75.33	-75.33	-75.17	-75.08	-71.91	-71.67	-72.00	-64.65

CHANNEL SPACING: 10 MHz

Detector Peak										
QPSK	2390.0	-58.38	-60.29	-60.50	-63.23	-62.76	-61.75	-60.46	-62.81	-51.99
64QAM	2390.0	-62.58	-62.48	-62.83	-63.75	-63.16	-62.00	-63.35	-63.81	-53.95
Detector Average										
QPSK	2390.0	-73.13	-73.23	-73.35	-74.27	-74.19	-74.06	-75.29	-74.88	-64.99
64QAM	2390.0	-75.29	-75.08	-74.40	-75.38	-75.27	-75.21	-75.03	-75.10	-66.08

CHANNEL SPACING: 5 MHz

Detector peak, dBm				Limit, dBm	Margin, dB*	Detector average, dBm,		Limit, dBm	Margin, dB*	Verdict
Frequency, MHz	Emission	Cable loss, dB	Band edge result			Emission	Band edge result			
Modulation QPSK										
2390.0	-53.03	1.23	-54.26	-39.58	-14.68	-64.91	-66.14	-59.58	-6.56	Pass
Modulation 64QAM										
2390.0	-53.03	1.23	-54.26	-39.58	-14.68	-64.65	-65.88	-59.58	-6.30	Pass

CHANNEL SPACING: 10 MHz

Modulation QPSK										
2390.0	-51.99	1.23	-53.22	-39.58	-13.64	-64.99	-66.22	-59.58	-6.64	Pass
Modulation 64QAM										
2390.0	-53.95	1.23	-55.18	-39.58	-15.60	-66.08	-67.31	-59.58	-7.73	Pass

Test specification:	**Section 15.247(d) / RSS-247 section 5.5, Band edge emissions**		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	**Relative Humidity:** 44 %	**Air Pressure:** 1004 hPa	**Power:** 48 VDC
Remarks:			

Table 7.6.4 High band edge emission within restricted band test results

ASSIGNED FREQUENCY RANGE: 2400 - 2483.5 MHz
DETECTOR USED: Peak / Average
MODULATING SIGNAL: PRBS
TRANSMITTER OUTPUT POWER SETTINGS: Maximum
RESOLUTION BANDWIDTH: 1 MHz
VIDEO BANDWIDTH: ≥ RBW
CONFIGURATION: 1 beam
CHANNEL SPACING: 5 MHz

Modulation	Band edge	SA Reading, dBm								Sum , dBm
		Chain #1	Chain #2	Chain #3	Chain #4	Chain #5	Chain #6	Chain #7	Chain #8	
Detector Peak										
QPSK	2483.5	-64.79	-64.58	-64.85	-64.58	-64.52	-64.24	-64.47	-64.98	-55.62
64QAM	2483.5	-64.85	-64.43	-65.08	-64.33	-64.24	-64.80	-64.29	-63.98	-55.49
Detector Average										
QPSK	2483.5	-77.23	-77.00	-77.48	-77.54	-77.67	-77.48	-77.57	-77.56	-68.44
64QAM	2483.5	-77.55	-77.38	-77.42	-77.62	-77.73	-77.53	-77.73	-77.68	-68.58

CHANNEL SPACING: 10 MHz

Detector Peak										
QPSK	2483.5	-64.68	-64.83	-64.88	-64.38	-63.99	-64.79	-64.89	-64.40	-55.59
64QAM	2483.5	-64.36	-64.41	-64.51	-64.46	-64.70	-64.45	-64.92	-64.03	-55.47
Detector Average										
QPSK	2483.5	-77.45	-77.59	-77.56	-77.29	-77.52	-77.53	-77.57	-77.34	-68.48
64QAM	2483.5	-77.46	-77.61	-77.57	-77.52	-77.51	-77.64	-77.40	-77.60	-68.54

CHANNEL SPACING: 5 MHz

Detector peak, dBm				Limit, dBm**	Margin, dB*	Detector average, dBm,		Limit, dBm	Margin, dB*	Verdict
Frequency, MHz	Emission	Cable loss, dB	Band edge result			Emission	Band edge result			
High band edge										
Modulation QPSK										
2483.5	-55.62	1.23	-56.85	-39.58	-17.27	-68.44	-69.67	-59.58	-10.09	Pass
Modulation 64QAM										
2483.5	-55.49	1.23	-56.72	-39.58	-17.14	-68.58	-69.81	-59.58	-10.23	Pass

CHANNEL SPACING: 10 MHz

Modulation QPSK										
2483.5	-55.59	1.23	-56.82	-39.58	-17.24	-68.48	-69.71	-59.58	-10.13	Pass
Modulation 64QAM										
2483.5	-55.47	1.23	-56.70	-39.58	-17.12	-68.54	-69.77	-59.58	-10.19	Pass

Reference numbers of test equipment used

HL 3901	HL 4070	HL 4366	HL 5376	HL	HL	HL	HL

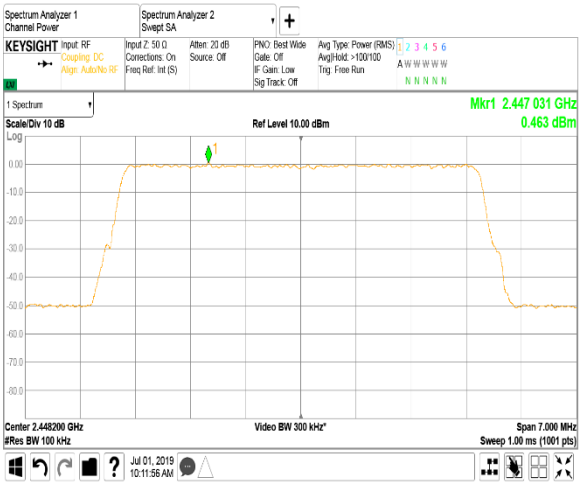
Full description is given in Appendix A.

Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

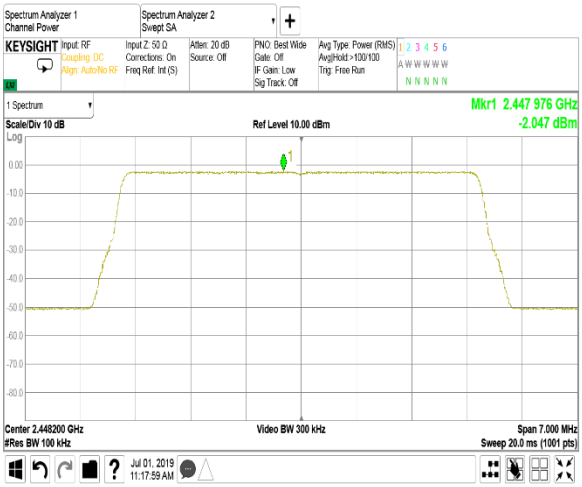
Plot 7.6.1 Spurious emission measurements at reference level, low carrier frequency

CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 1beam
MODULATION: QPSK

ANTENNA CHAIN # 1: Maximum level



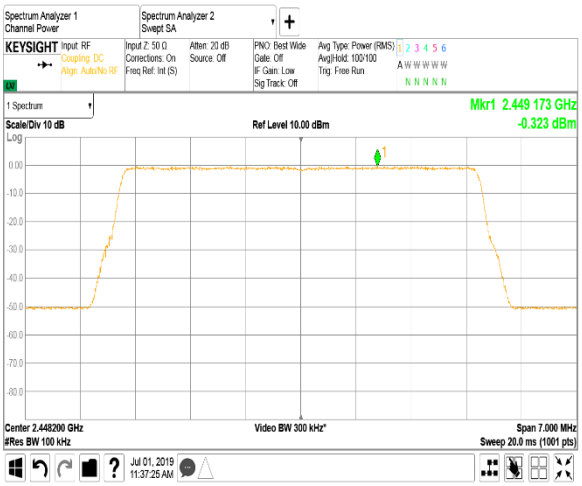
ANTENNA CHAIN # 5: Minimum level



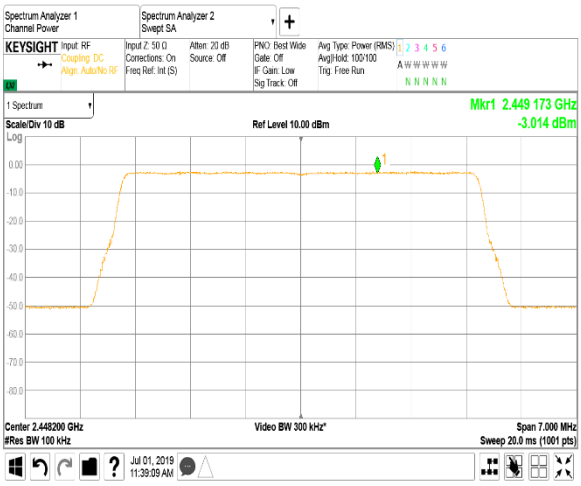
Plot 7.6.2 Spurious emission measurements at reference level, low carrier frequency

CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 1beam
MODULATION: 64QAM

ANTENNA CHAIN # 1: Maximum level



ANTENNA CHAIN # 5: Minimum level

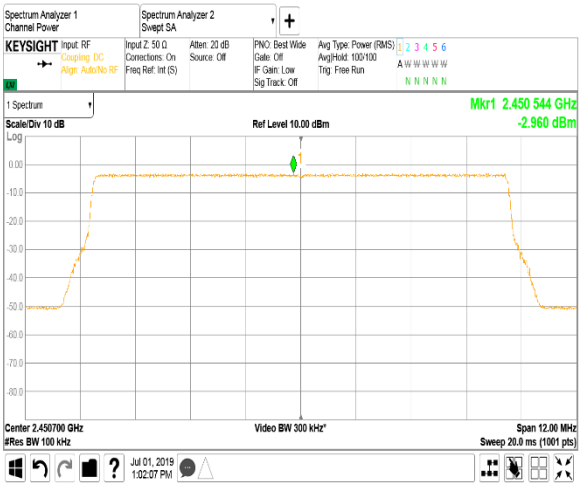


Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

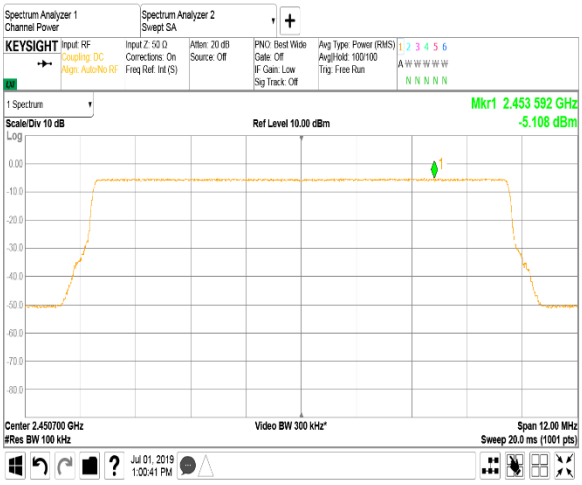
Plot 7.6.3 Spurious emission measurements at reference level, low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 1beam
MODULATION: QPSK

ANTENNA CHAIN # 1: Maximum level



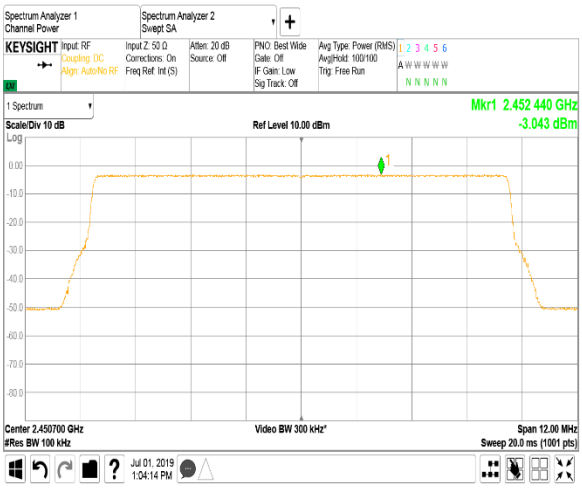
ANTENNA CHAIN # 5: Minimum level



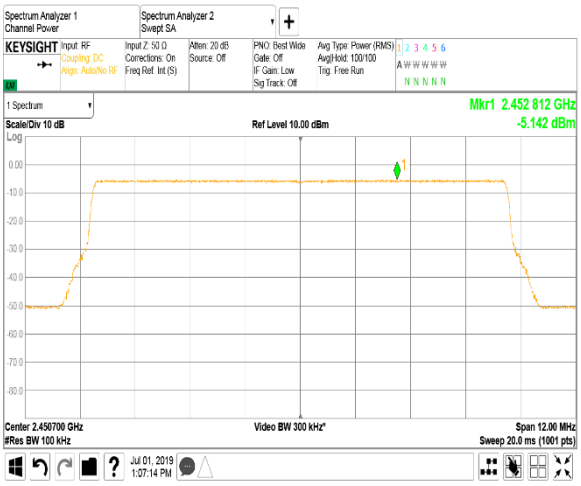
Plot 7.6.4 Spurious emission measurements at reference level, low carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 1beam
MODULATION: 64QAM

ANTENNA CHAIN # 1: Maximum level



ANTENNA CHAIN # 5: Minimum level

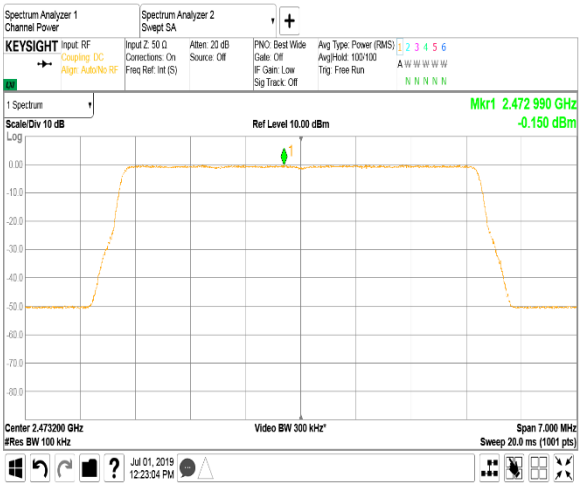


Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

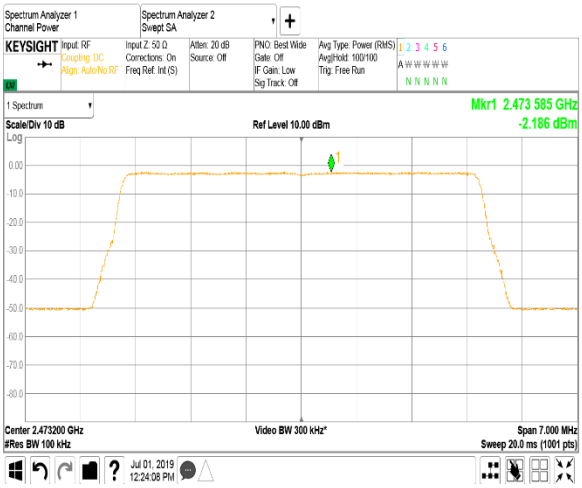
Plot 7.6.5 Spurious emission measurements at reference level, high carrier frequency

CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 1beam
MODULATION: QPSK

ANTENNA CHAIN # 1: Maximum level



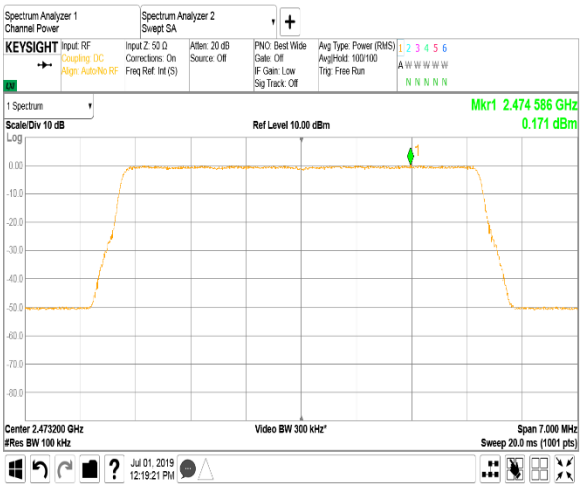
ANTENNA CHAIN # 6: Minimum level



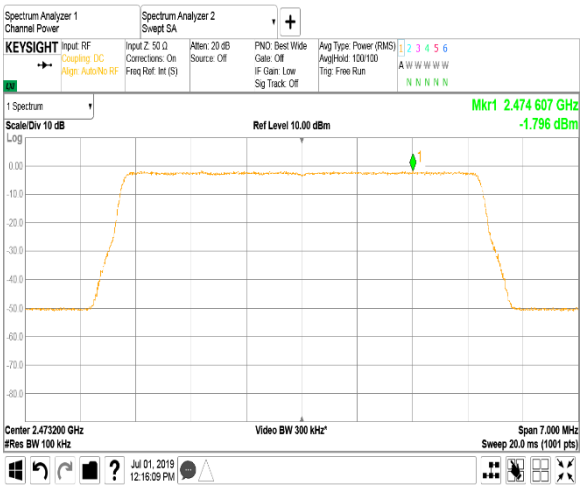
Plot 7.6.6 Spurious emission measurements at reference level, high carrier frequency

CHANNEL BANDWIDTH: 5 MHz
CONFIGURATION: 1beam
MODULATION: 64QAM

ANTENNA CHAIN # 1: Maximum level



ANTENNA CHAIN # 6: Minimum level

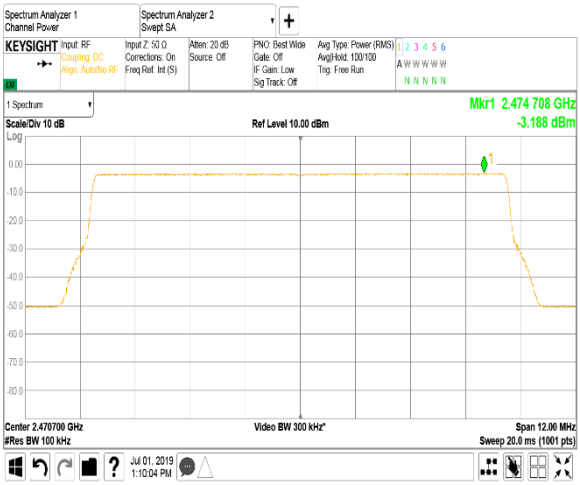


Test specification:	Section 15.247(d) / RSS-247 section 5.5, Band edge emissions		
Test procedure:	ANSI C63.10 section 11.12.1		
Test mode:	Compliance	Verdict:	PASS
Date(s):	28-Jul-19		
Temperature: 24 ºC	Relative Humidity: 44 %	Air Pressure: 1004 hPa	Power: 48 VDC
Remarks:			

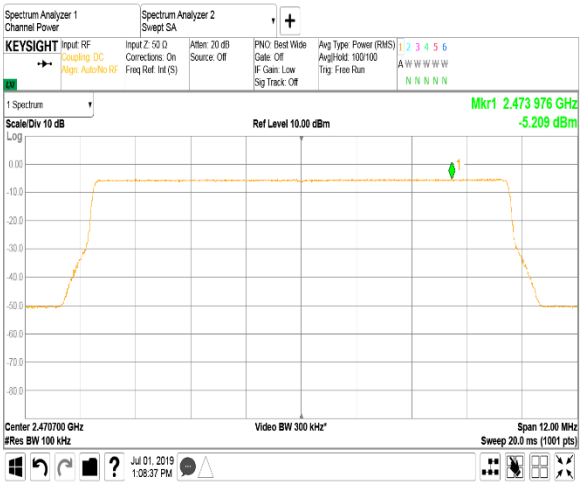
Plot 7.6.7 Spurious emission measurements at reference level, high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 1beam
MODULATION: QPSK

ANTENNA CHAIN # 1: Maximum level



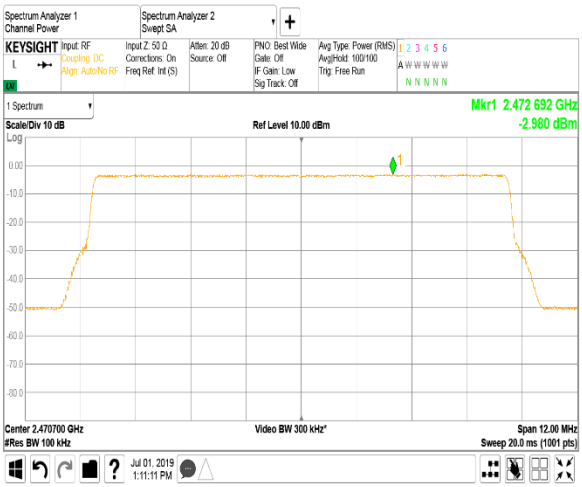
ANTENNA CHAIN # 6: Minimum level



Plot 7.6.8 Spurious emission measurements at reference level, high carrier frequency

CHANNEL BANDWIDTH: 10 MHz
CONFIGURATION: 1beam
MODULATION: 64QAM

ANTENNA CHAIN # 1: Maximum level



ANTENNA CHAIN # 6: Minimum level