Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

7.4 Out of band radiated emissions above 40 GHz up to 200 GHz

7.4.1 General

This test was performed to measure radiated spurious emissions from the EUT. Specification test limits are given in Table 7.4.1.

Table 7.4.1 Spurious emission field strength limits

Frequency, GHz	Power density at 3 m distance pW/cm^2	Distance, m	Field strength dB(μV/m)*, peak	Field strength dB(μV/m)*, average
40 – 200	90.0	3.0	105.30	85.30
71 - 75	90.0	1.0	114.84	94.84
75 - 110	90.0	0.50	120.90**	100.90**
110 - 140	90.0	0.05	140.90**	120.90**
140 - 200	90.0	0.01	154.80**	134.80**

* - Field strength was calculated per equation (26) of ANSI C63.10-2013 section 9 as follows: E=sqrt(PD×377), where PD is the power density at the distance specified by the limit in W/m^2, E- field strength in V/m.
**- The limit for other test distance was calculated using the inverse distance extrapolation factor as follows: $Lim_{S2} = Lim_{S1} + 20 \log (S_1/S_2)$, where S_1 and S_2 – standard defined and test distance respectively in meters.

7.4.2 Test procedure for spurious emission field strength measurements

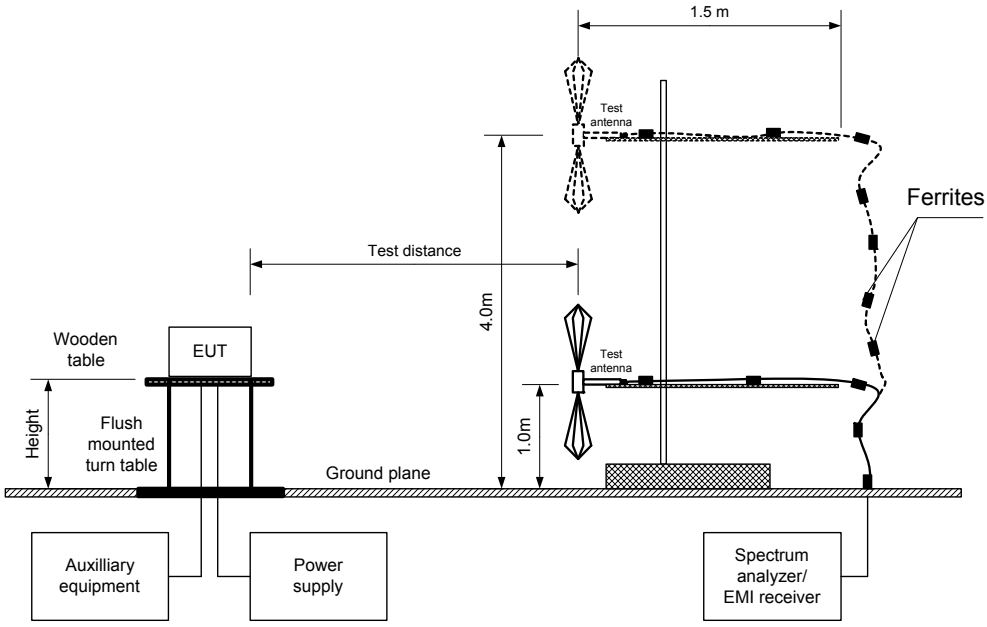
7.4.2.1 The EUT was set up as shown in Figure 7.4.1, energized and the performance check was conducted.

7.4.2.2 The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360^0, the measuring antenna height was changed from 1 to 4 m, its polarization was switched from vertical to horizontal.

7.4.2.3 The test results were recorded in Table 7.4.2 and are shown in the associated plots.

Test specification:	**FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz**		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	**Relative Humidity:** 43 %	**Air Pressure:** 1011 hPa	**Power:** 48 VDC
Remarks:			

Figure 7.4.1 Spurious emission field strength above 40 GHz test set up



Test specification:	**FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz**		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	**Relative Humidity:** 43 %	**Air Pressure:** 1011 hPa	**Power:** 48 VDC
Remarks:			

Table 7.4.2 Out of band radiated emissions test results

TEST DISTANCE:	0.05 - 3 m
EUT POSITION:	Typical (Vertical)
MODULATION:	16QAM
TRANSMITTER OUTPUT POWER:	Maximum
INVESTIGATED FREQUENCY RANGE:	40 – 200 GHz
RESOLUTION BANDWIDTH:	1000 kHz
VIDEO BANDWIDTH:	≥ Resolution bandwidth
TEST ANTENNA TYPE:	Standard Gain Horn 24dB (40-60 GHz) Standard Gain Horn 24dB (50-75 GHz) Standard Gain Horn 24dB (75-110 GHz) Standard Gain Horn 24dB (90-140 GHz) Standard Gain Horn 24dB (140-220 GHz)

Frequency, MHz	Antenna		Azimuth, degrees*	Peak field strength(VBW=3 MHz)			Average field strength(VBW=10 kHz)			Verdict
	Polariz.	Height, m		Measured, dB(μV/m)	Limit, dB(μV/m)	Margin, dB**	Measured, dB(μV/m)	Limit, dB(μV/m)	Margin, dB**	
Low carrier frequency										
48774.26	Vert	1.5	5	85.12	105.30	-20.18	81.67	85.30	-3.63	Pass
Mid carrier frequency										
No emissions were found										Pass
High carrier frequency										
No emissions were found										Pass

*- EUT front panel refer to 0 degrees position of turntable.
**- Margin = Measured emission - specification limit.

Reference numbers of test equipment used

HL 0747	HL0770	HL 0771	HL 0772	HL1312	HL 2909	HL 3235	HL 3290
HL 3291	HL 3305	HL 3306	HL3329	HL 3433	HL 3434	HL 3536	HL 5376

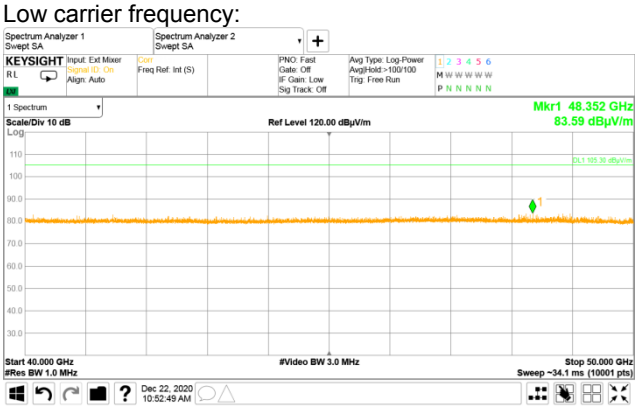
Full description is given in Appendix A.

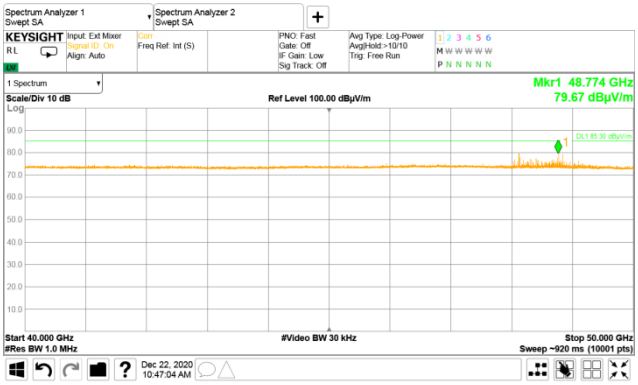
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.1 Spurious emission measurements in 40 – 50 GHz range

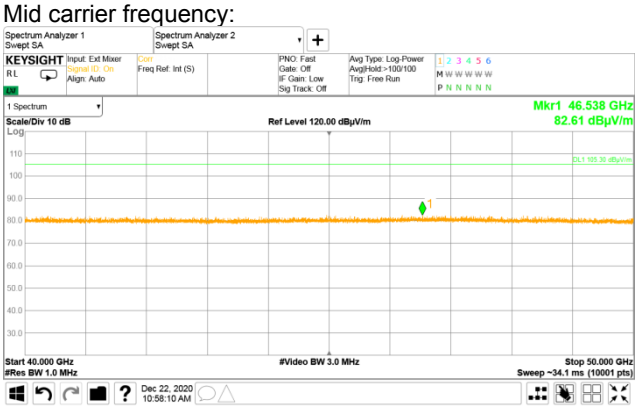
TEST SITE: OATS
TEST DISTANCE: 3 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

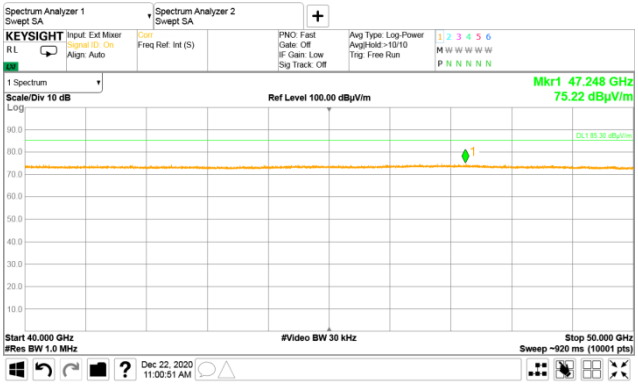
Low carrier frequency: 58320 MHz



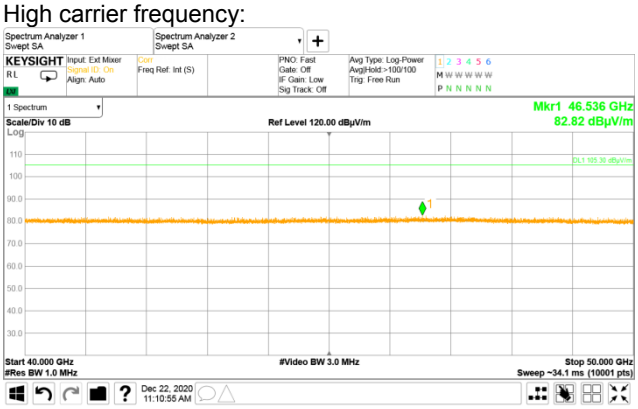


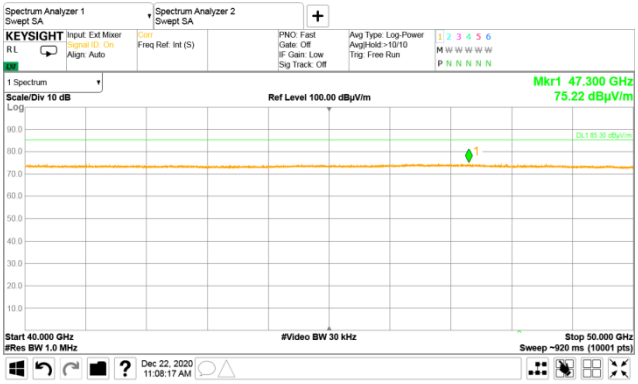
Mid carrier frequency: 62640 MHz





High carrier frequency: 64800 MHz



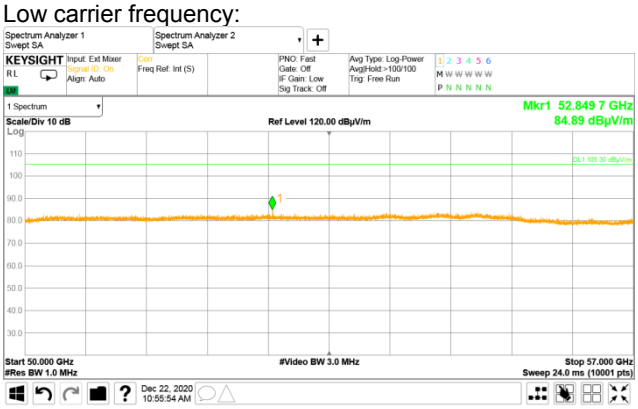


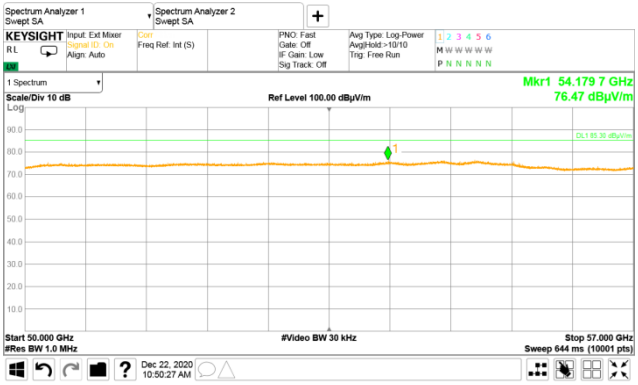
Test specification:	**FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz**		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	**Verdict:**	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	**Relative Humidity:** 43 %	**Air Pressure:** 1011 hPa	**Power:** 48 VDC
Remarks:			

Plot 7.4.2 Spurious emission measurements in 50 – 57 GHz range

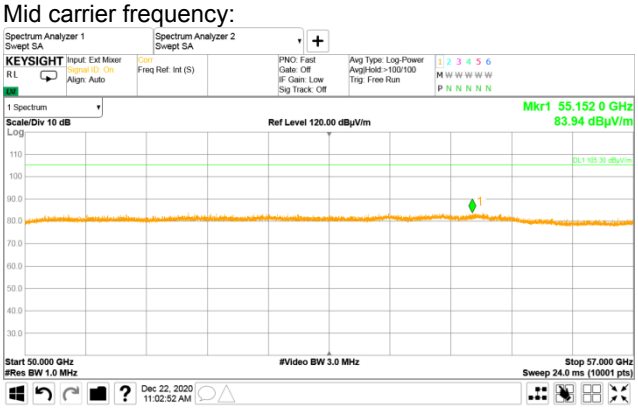
TEST SITE: OATS
TEST DISTANCE: 3 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

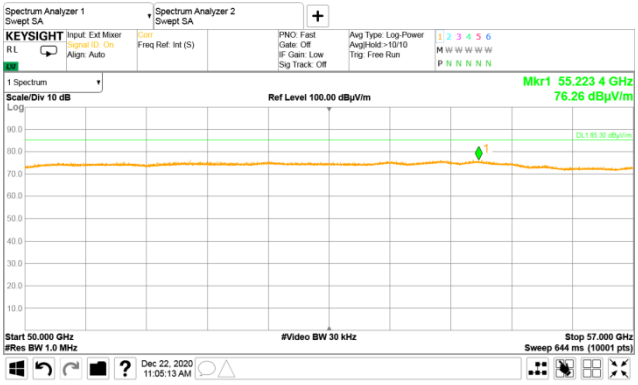
Low carrier frequency: 58320 MHz



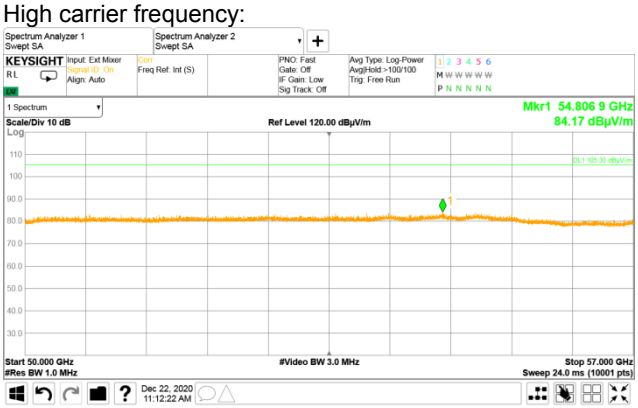


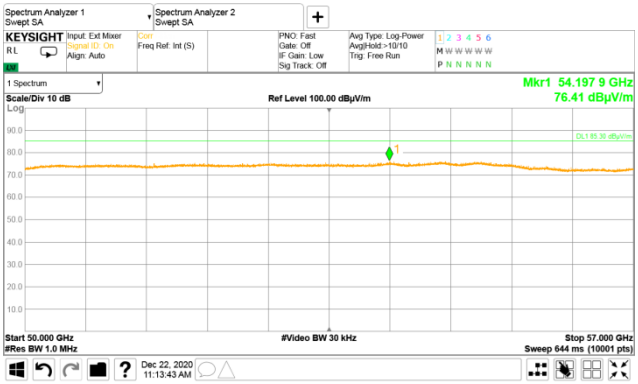
Mid carrier frequency: 62640 MHz





High carrier frequency: 64800 MHz

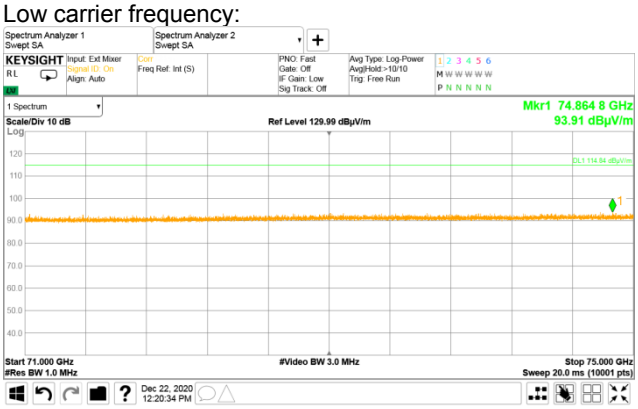


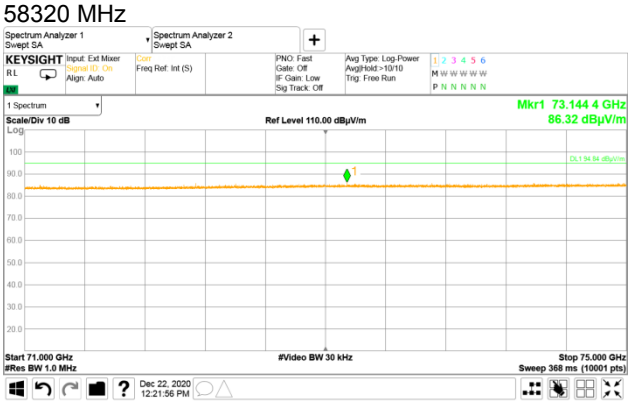


Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

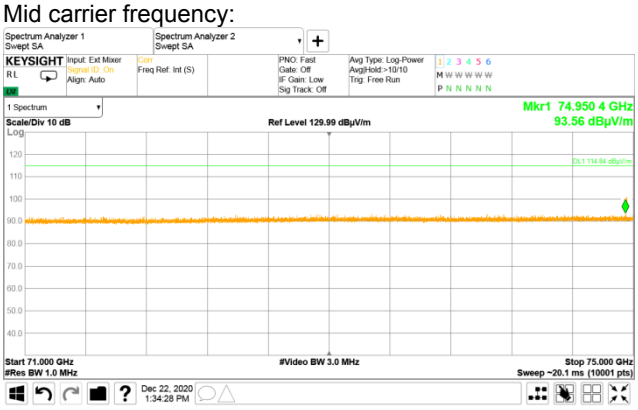
Plot 7.4.3 Spurious emission measurements in 71 – 75 GHz range

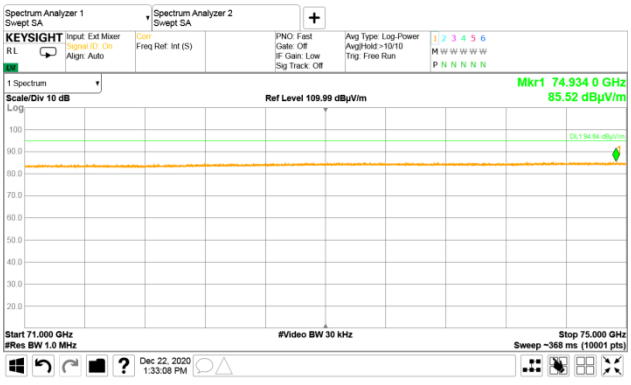
TEST SITE: OATS
TEST DISTANCE: 1 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
Low carrier frequency: 58320 MHz



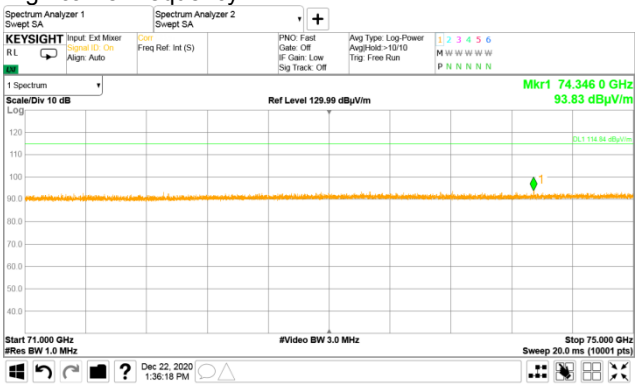


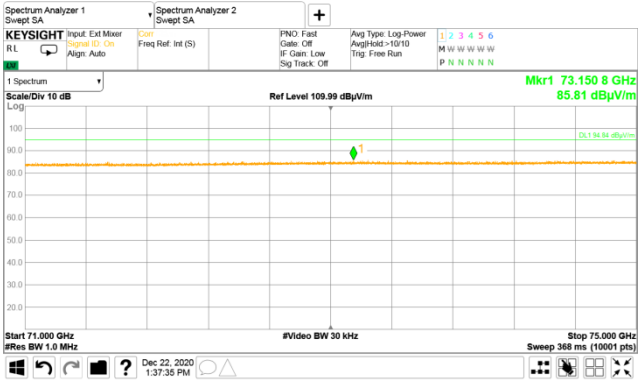
Mid carrier frequency: 62640 MHz





High carrier frequency: 64800 MHz

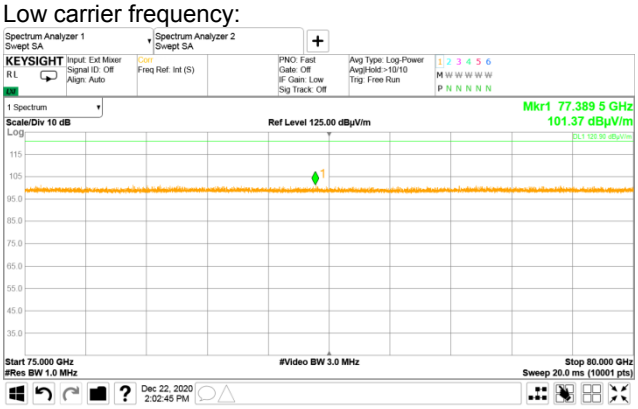


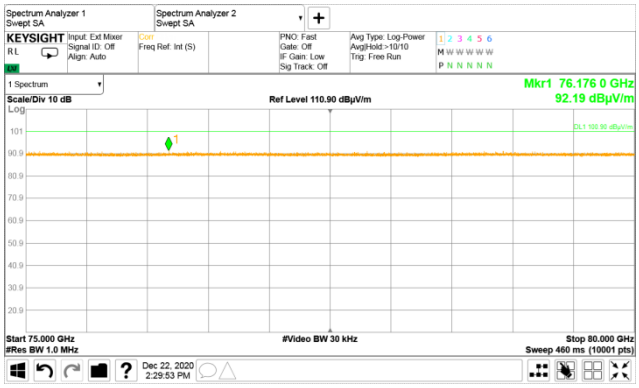


Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

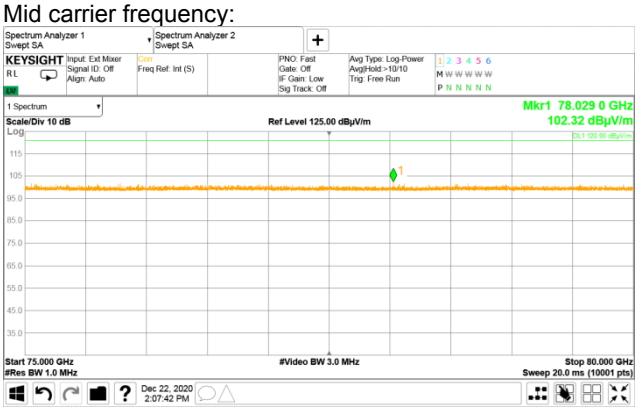
Plot 7.4.4 Spurious emission measurements in 75 – 80 GHz range

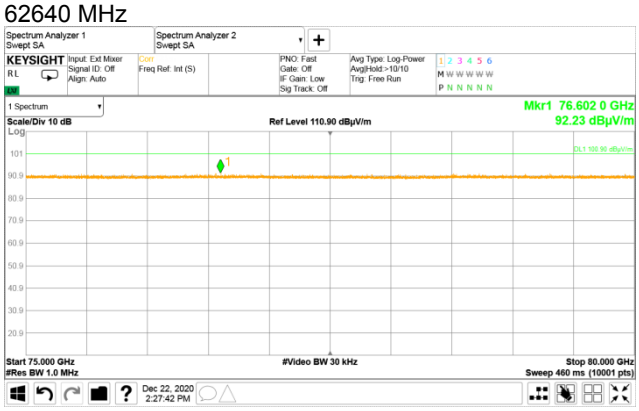
TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
Low carrier frequency: 58320 MHz



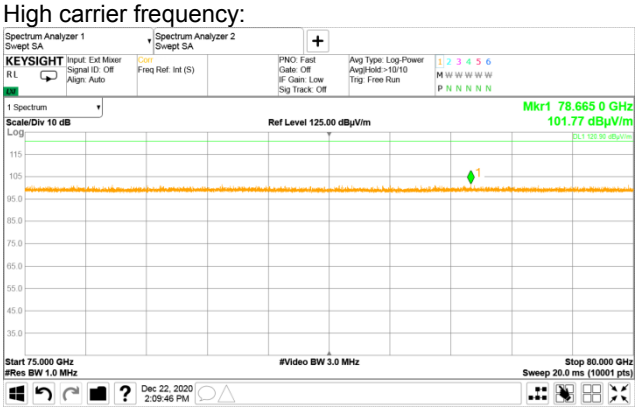


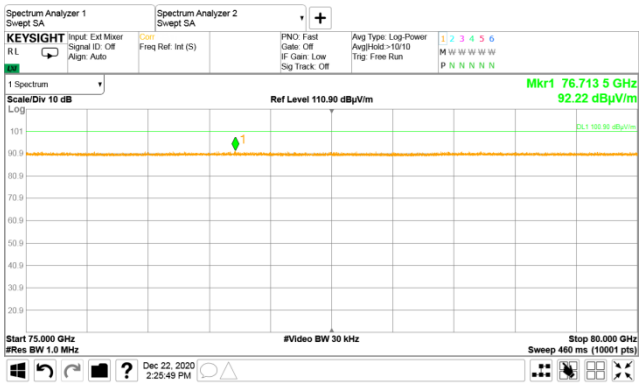
Mid carrier frequency: 62640 MHz





High carrier frequency: 64800 MHz

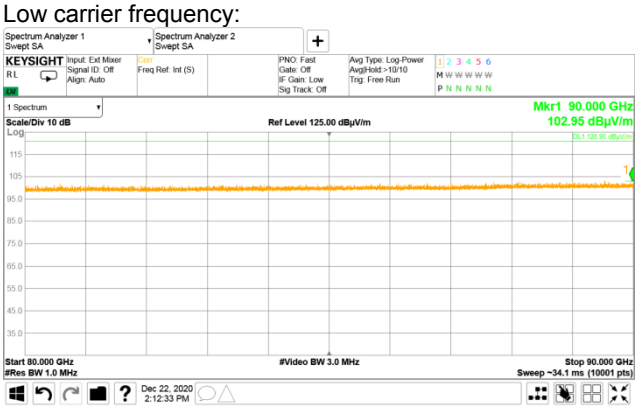


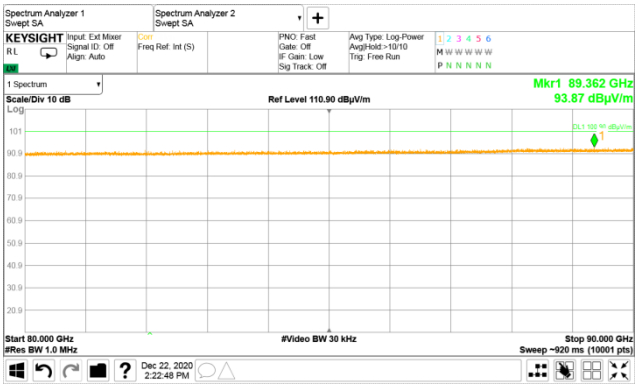


Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

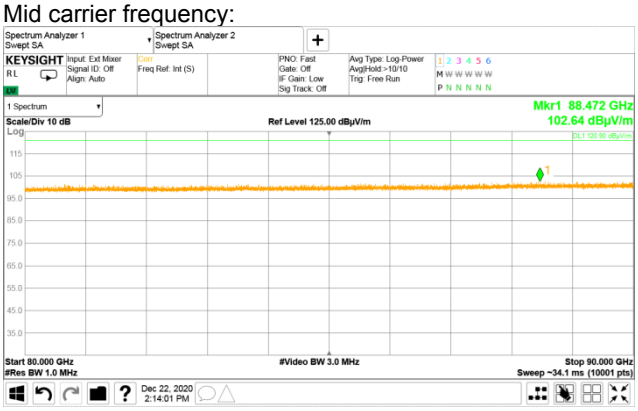
Plot 7.4.5 Spurious emission measurements in 80 – 90 GHz range

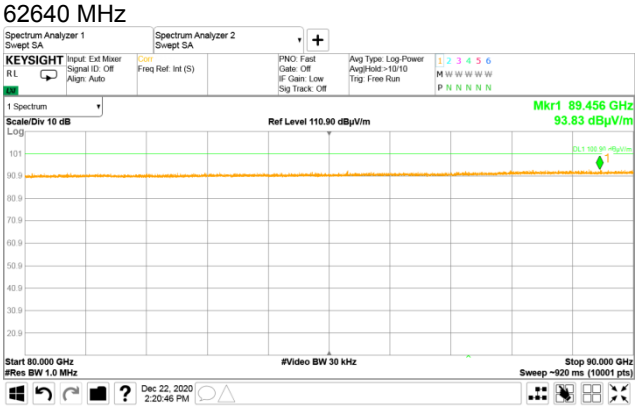
TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
Low carrier frequency: 58320 MHz



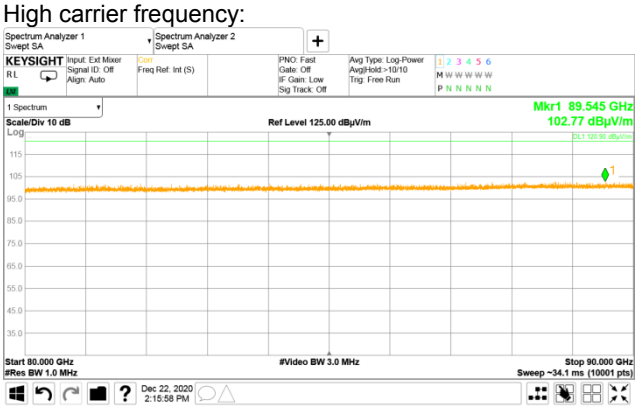


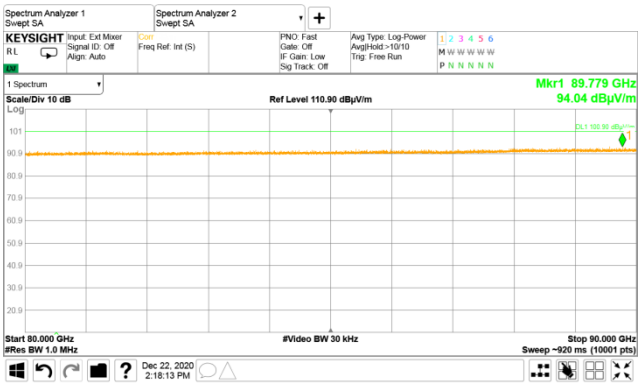
Mid carrier frequency: 62640 MHz





High carrier frequency: 64800 MHz

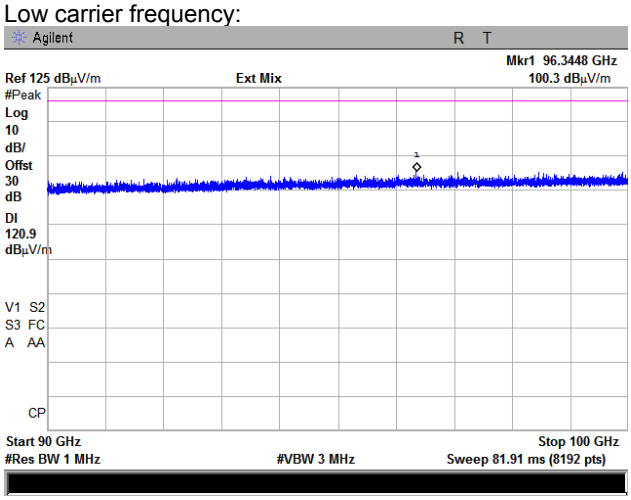


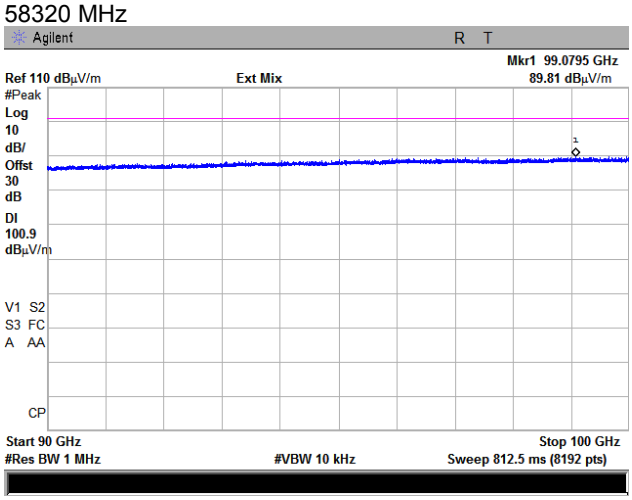


Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

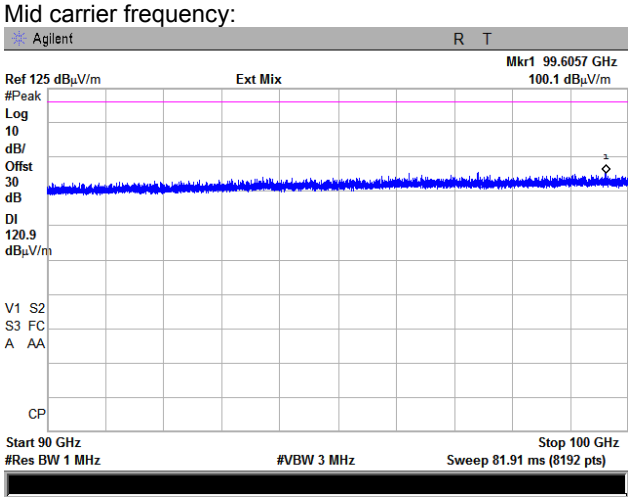
Plot 7.4.6 Spurious emission measurements in 90 - 100 GHz range

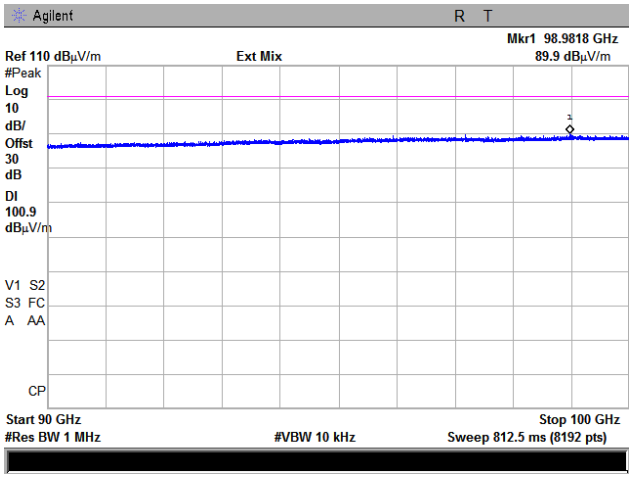
TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



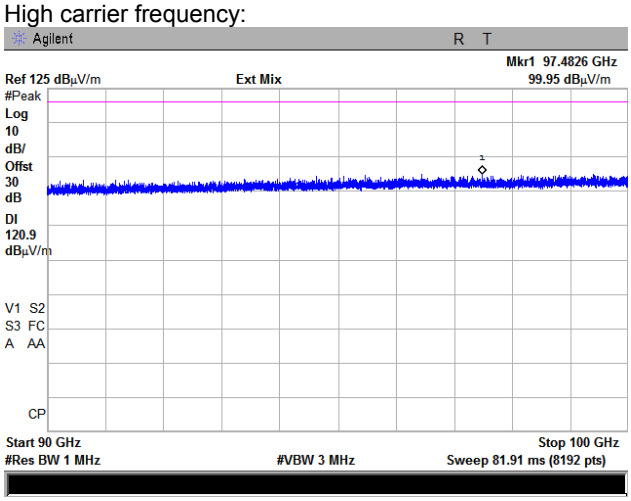


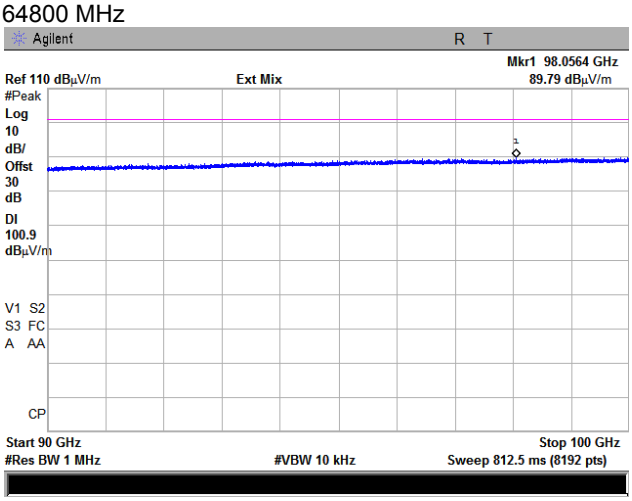
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.7 Spurious emission measurements in 90 - 100 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz

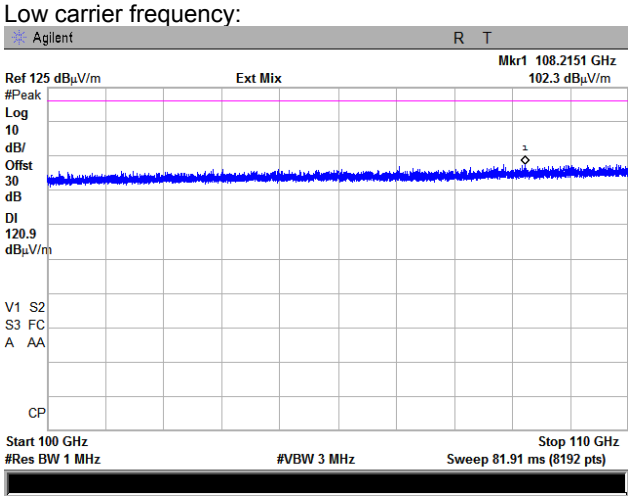




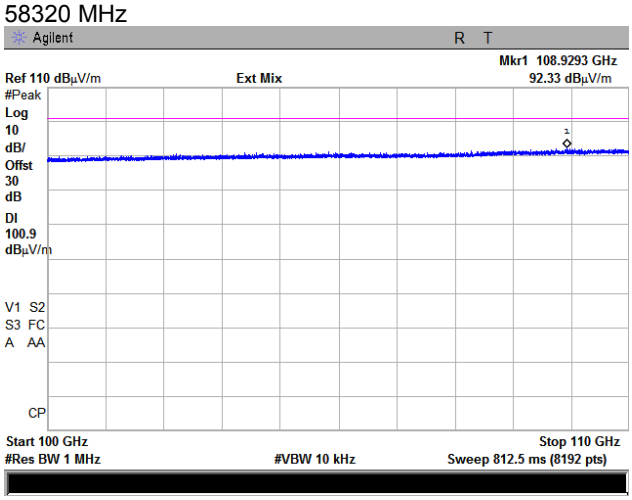
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.8 Spurious emission measurements in 100 - 110 GHz range

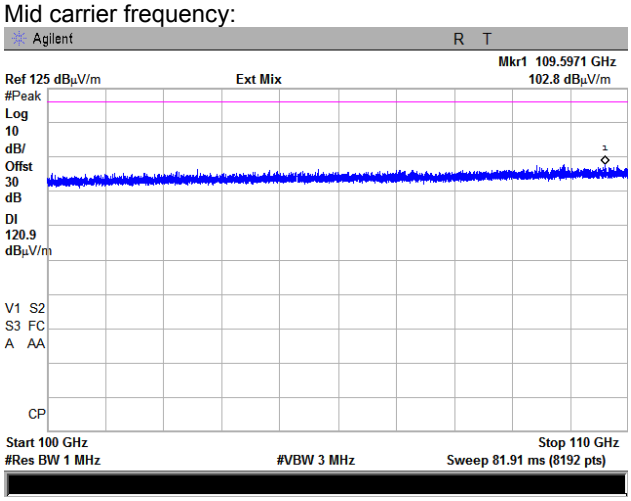
TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
Low carrier frequency:

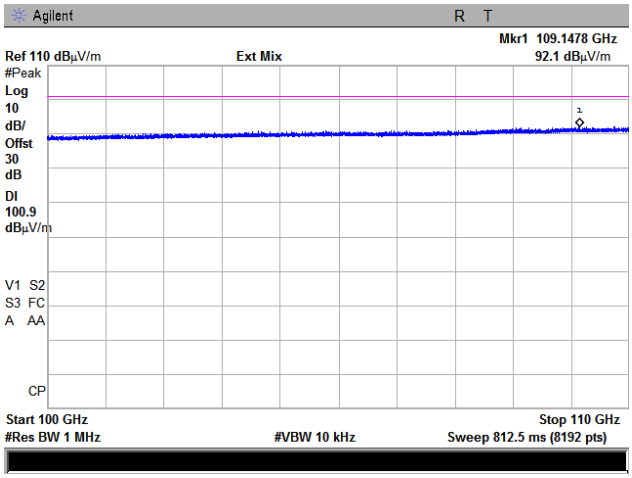


DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz
58320 MHz



Mid carrier frequency:
62640 MHz



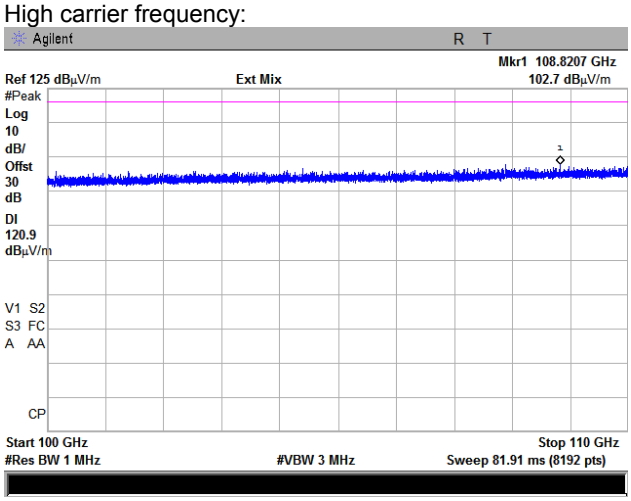


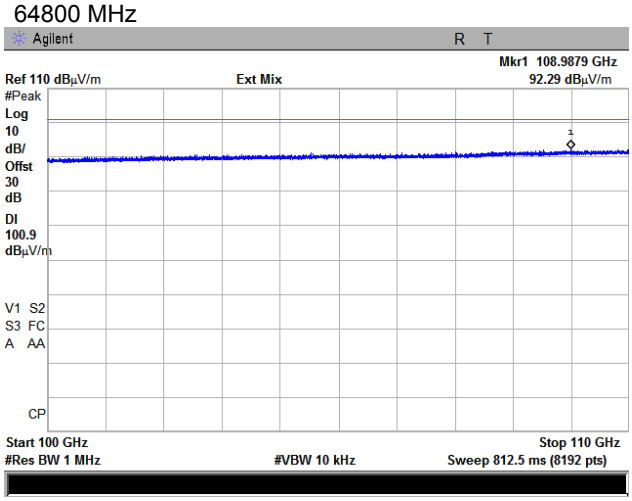
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.9 Spurious emission measurements in 100 - 110 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.5 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



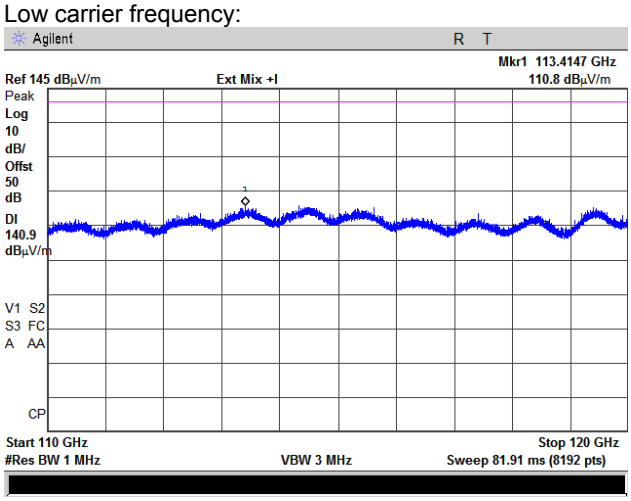


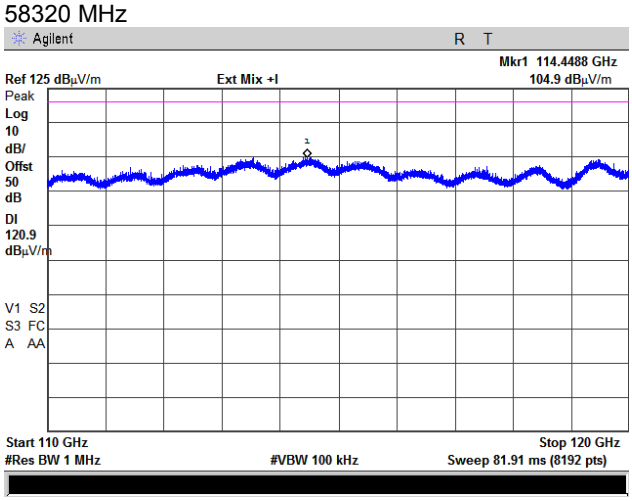
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.10 Spurious emission measurements in 110 - 120 GHz range

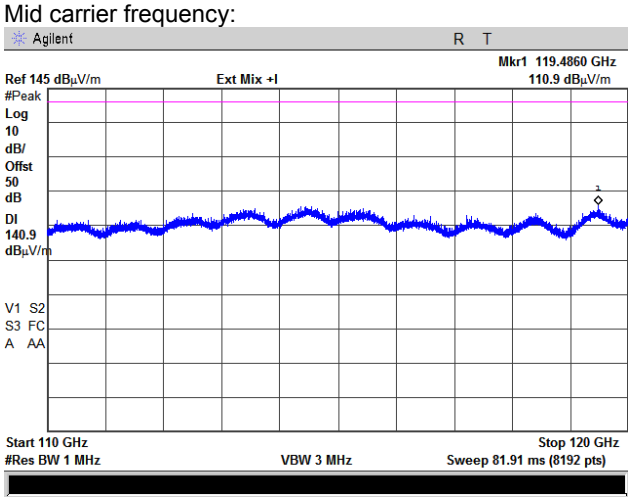
TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

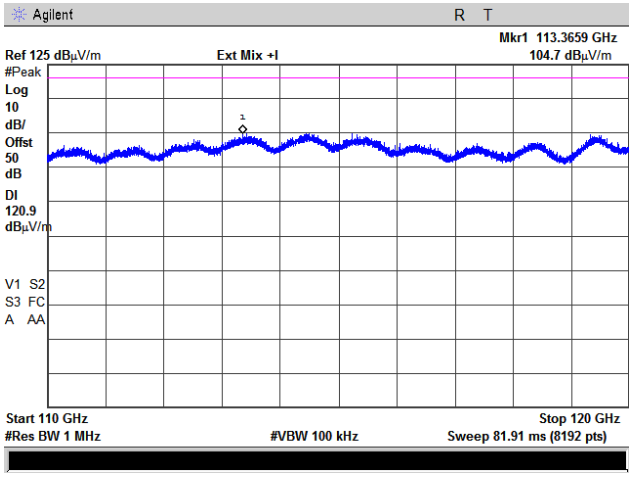
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



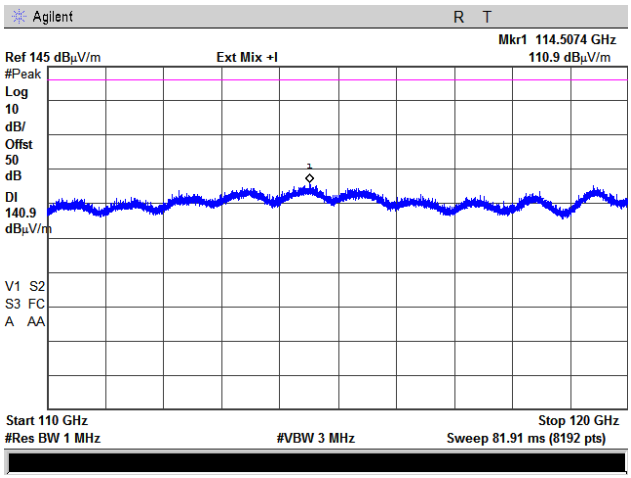


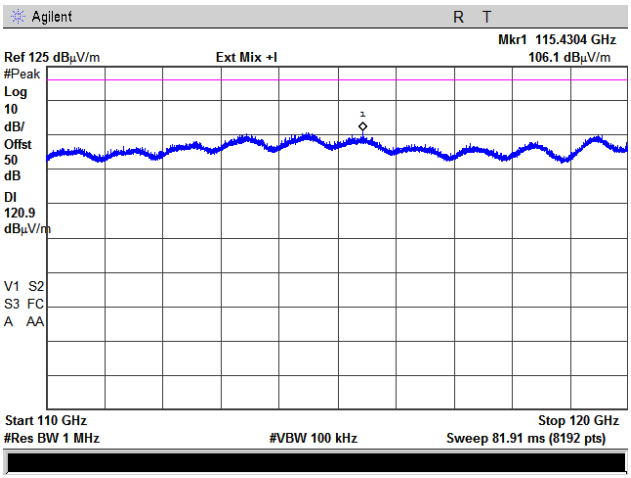
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.11 Spurious emission measurements in 110 - 120 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



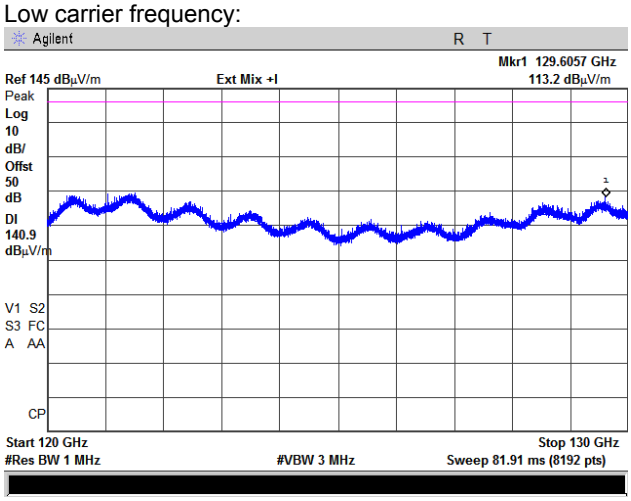


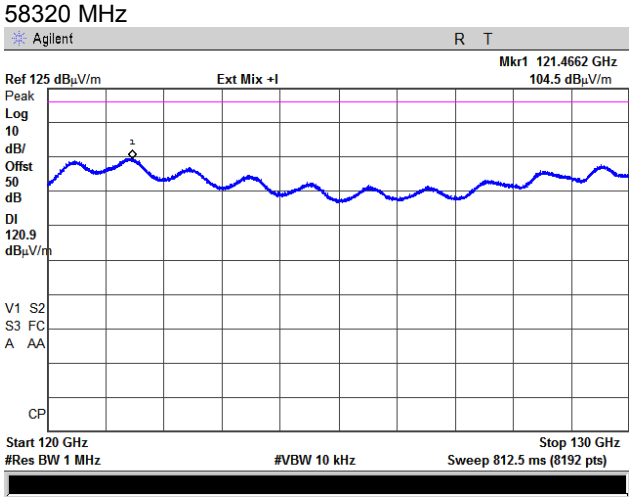
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.12 Spurious emission measurements in 120 - 130 GHz range

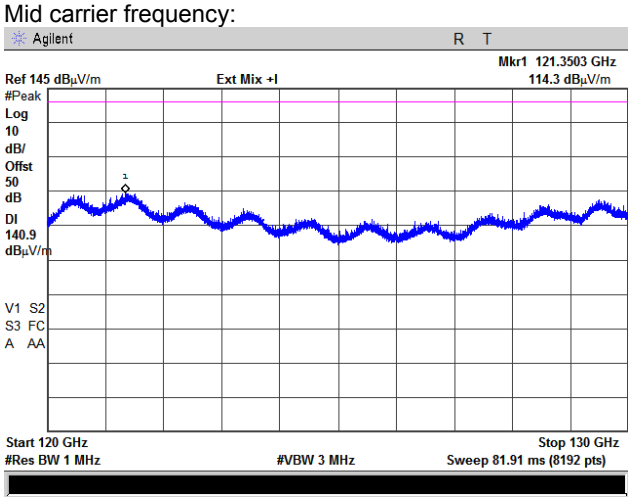
TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

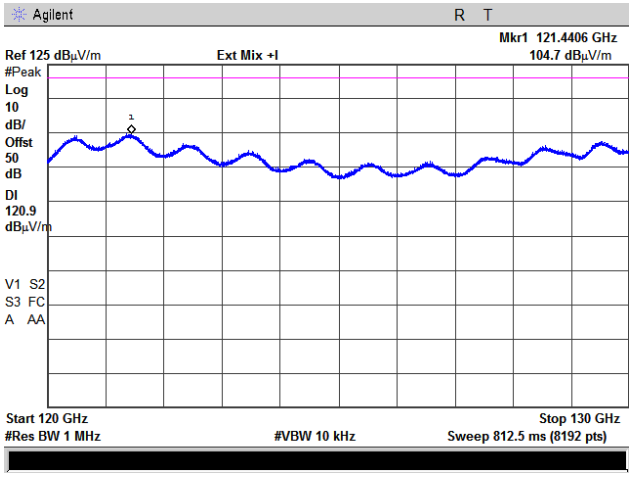
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



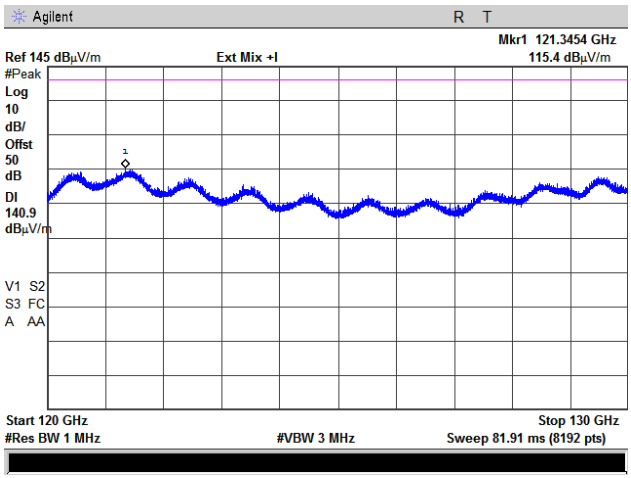


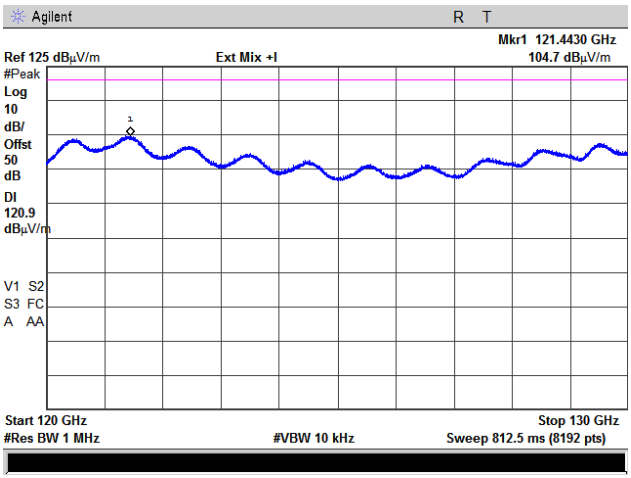
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.13 Spurious emission measurements in 120 - 130 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



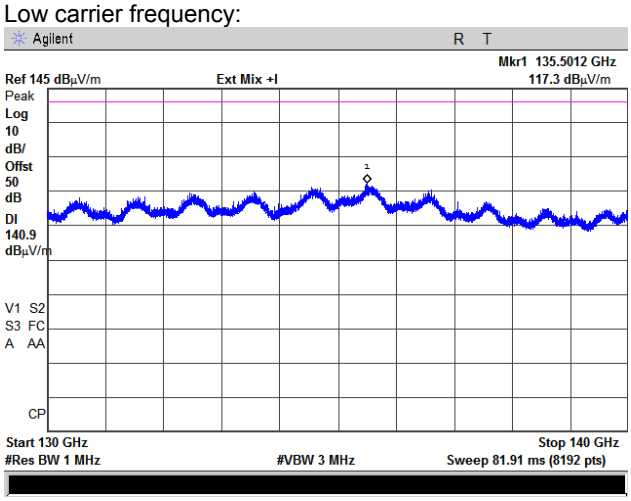


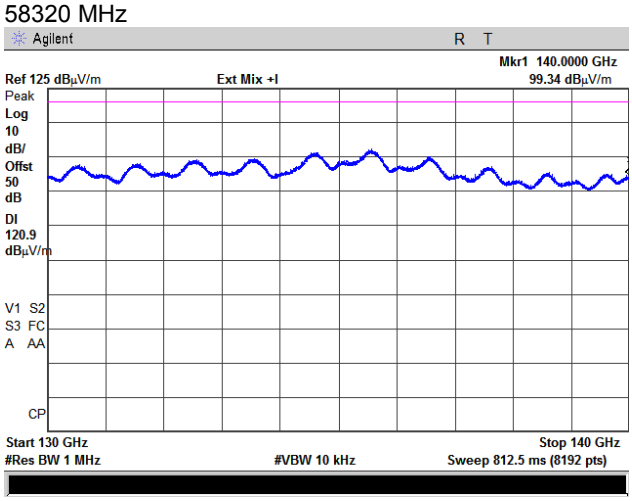
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.14 Spurious emission measurements in 130 - 140 GHz range

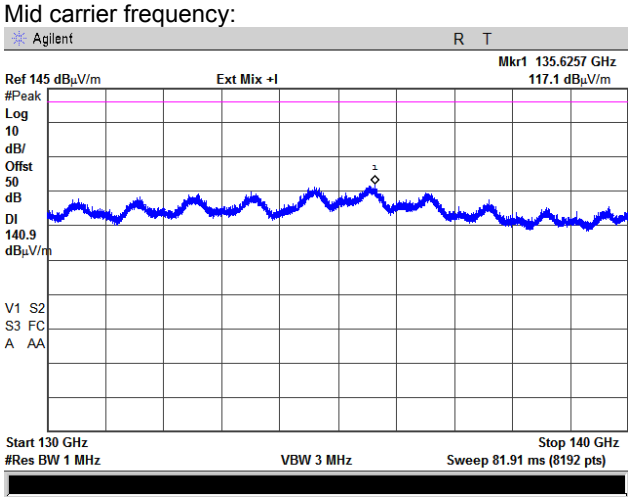
TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

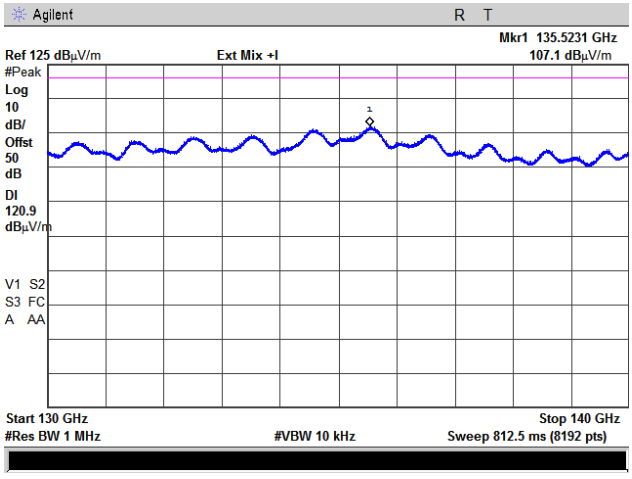
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



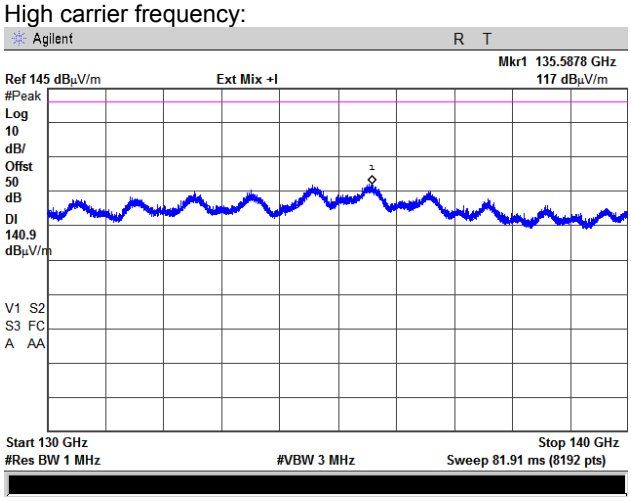


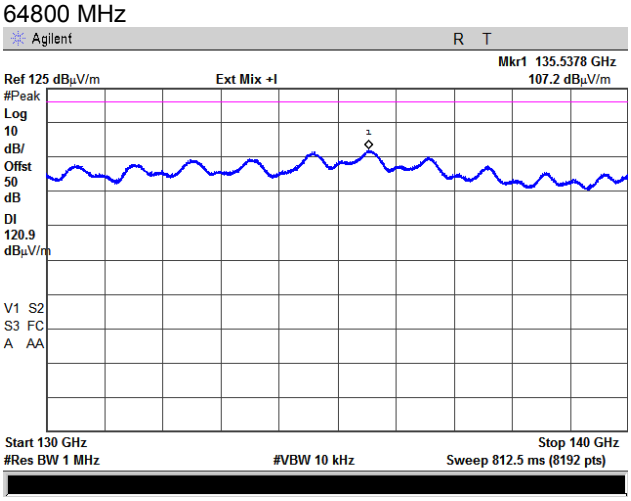
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.15 Spurious emission measurements in 130 - 140 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.05 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



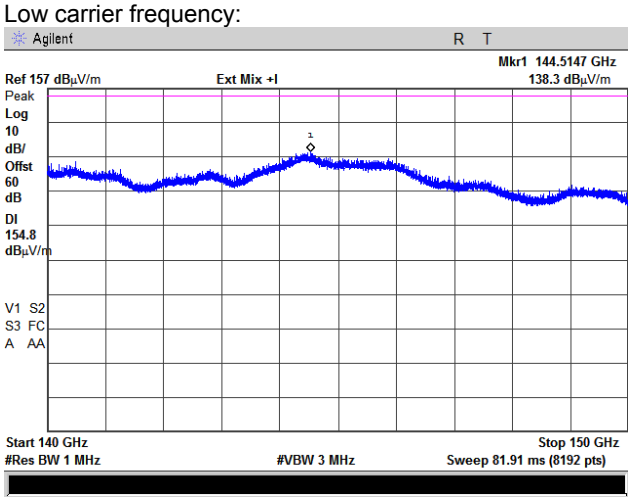


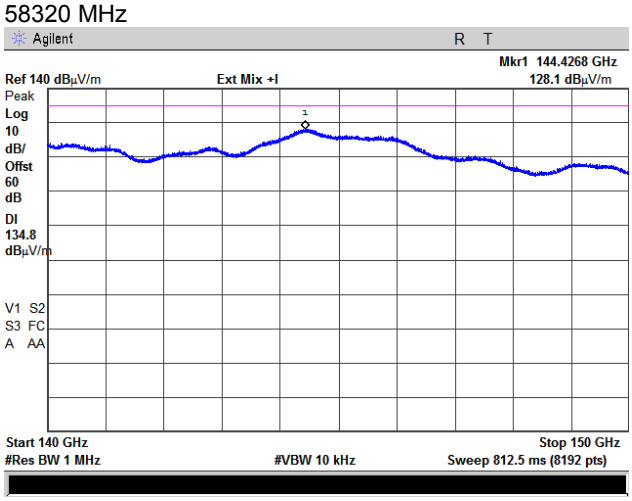
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.16 Spurious emission measurements in 140 - 150 GHz range

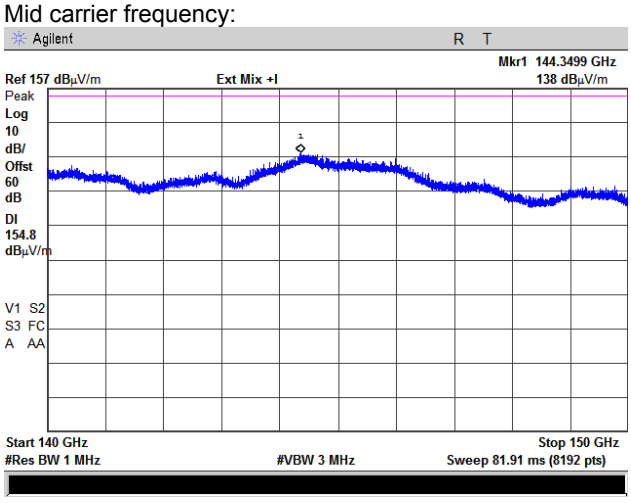
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

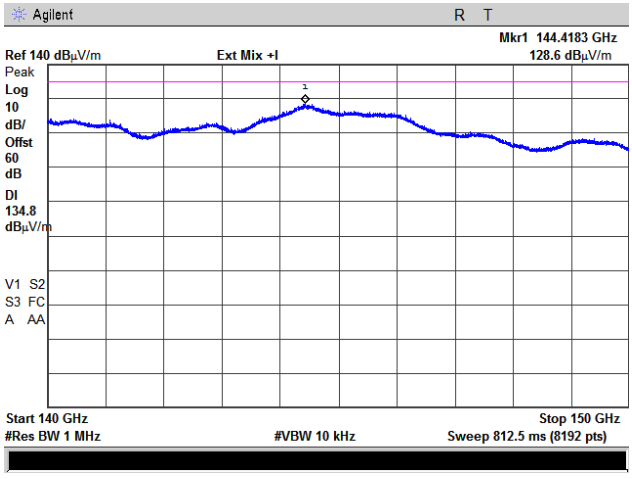
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



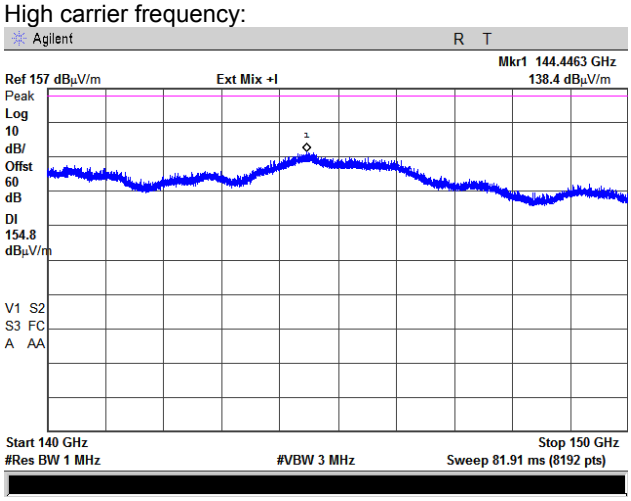


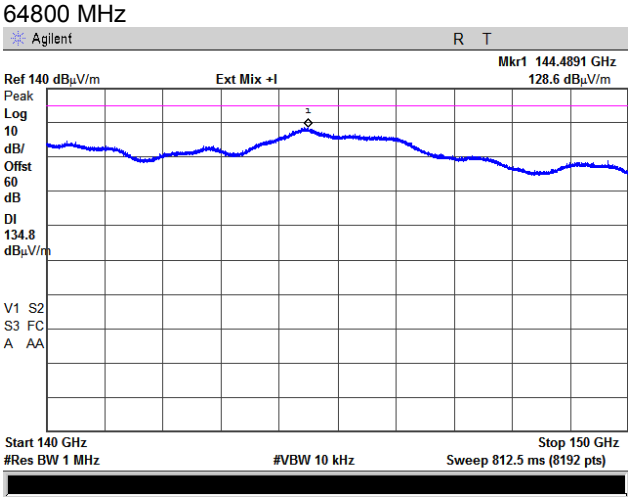
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.17 Spurious emission measurements in 140 - 150 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



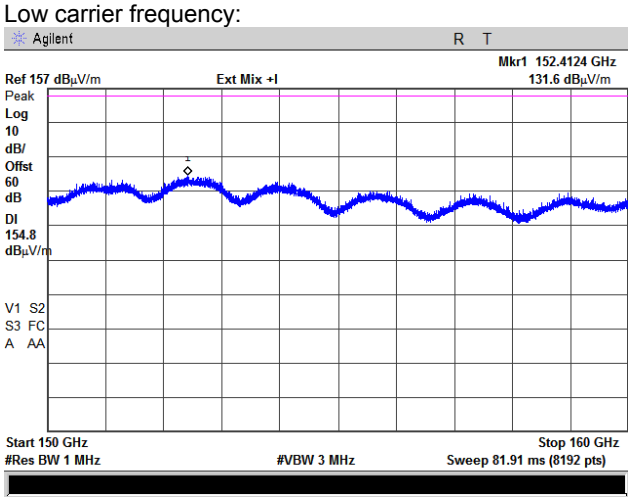


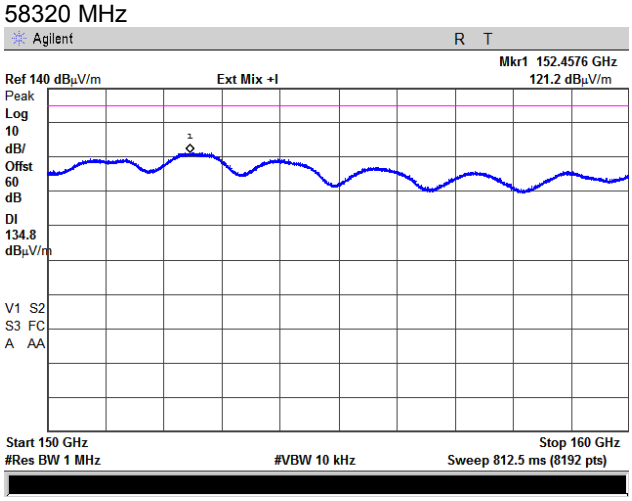
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.18 Spurious emission measurements in 150 - 160 GHz range

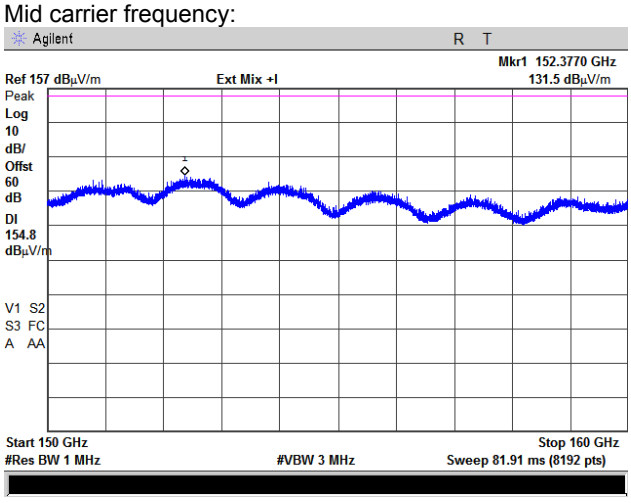
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

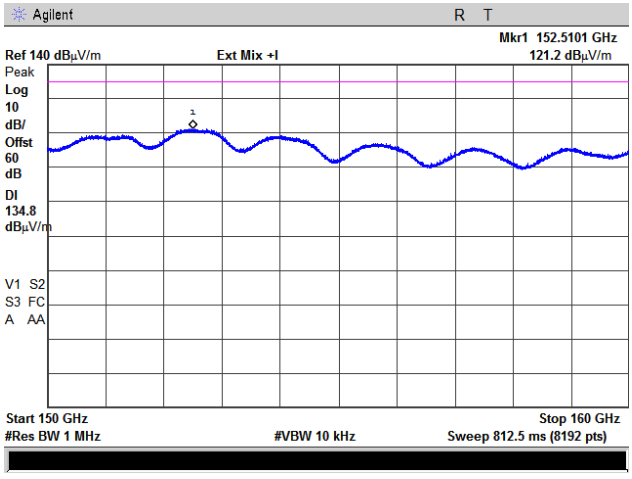
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



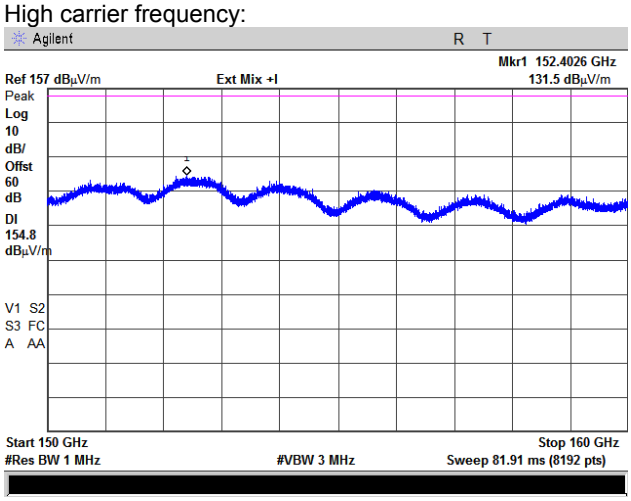


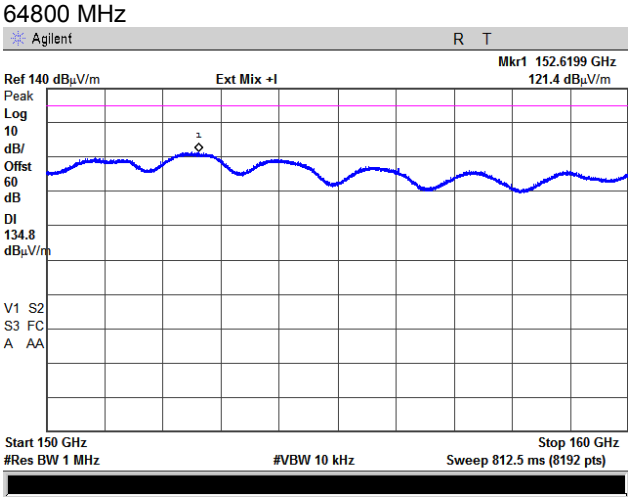
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.19 Spurious emission measurements in 150 - 160 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



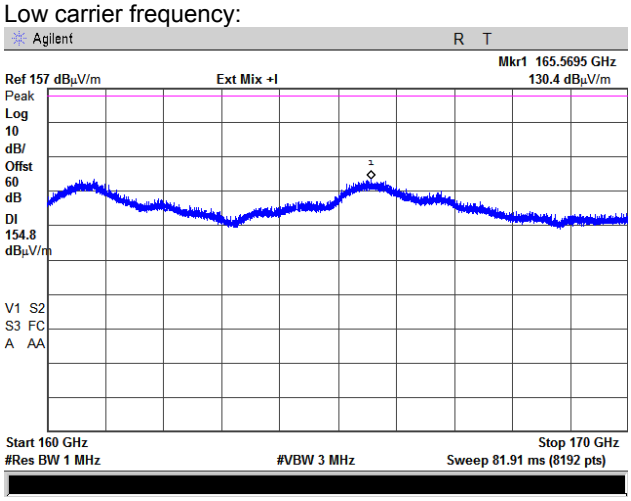


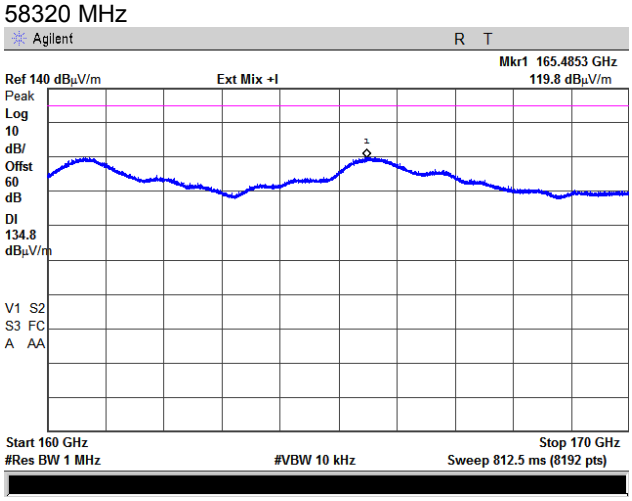
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.20 Spurious emission measurements in 160 - 170 GHz range

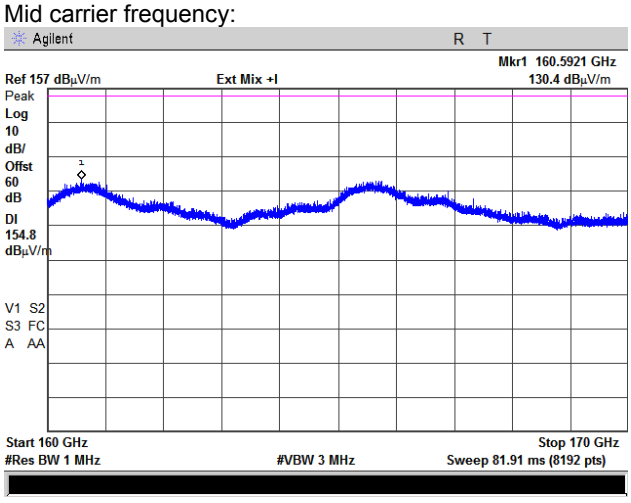
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

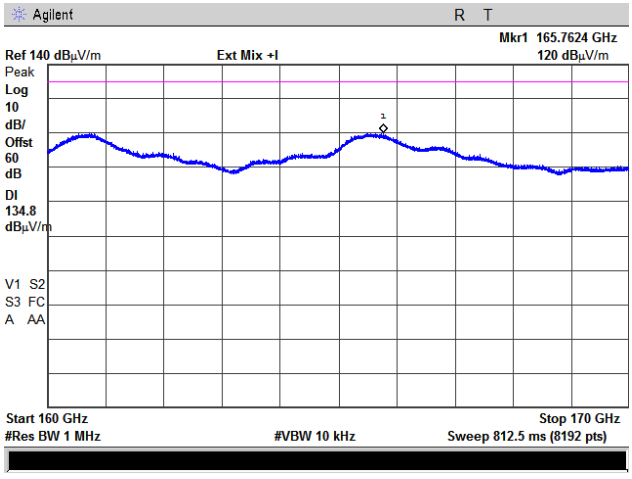
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



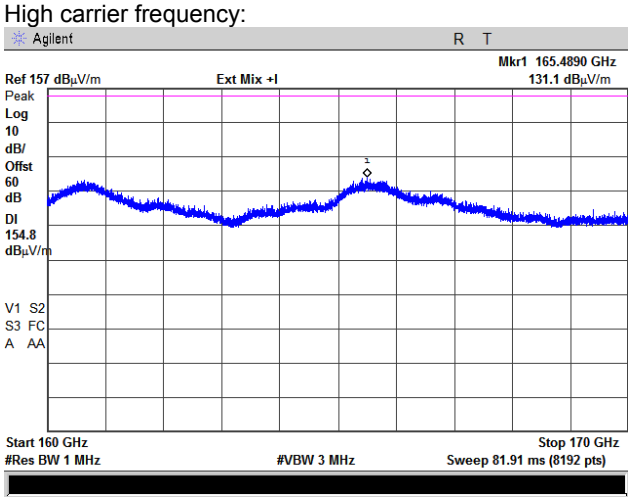


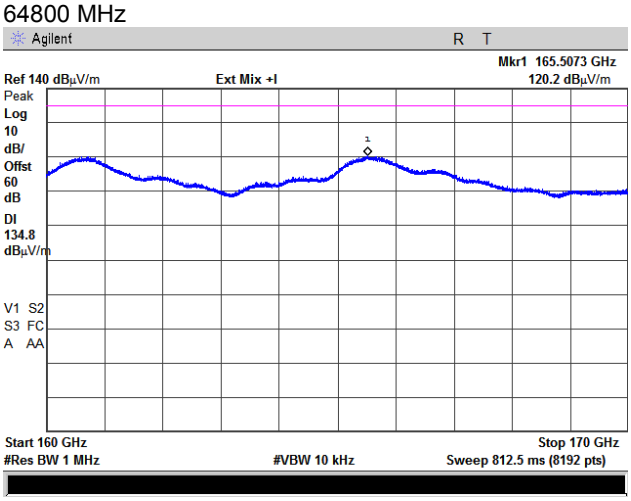
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.21 Spurious emission measurements in 160 - 170 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



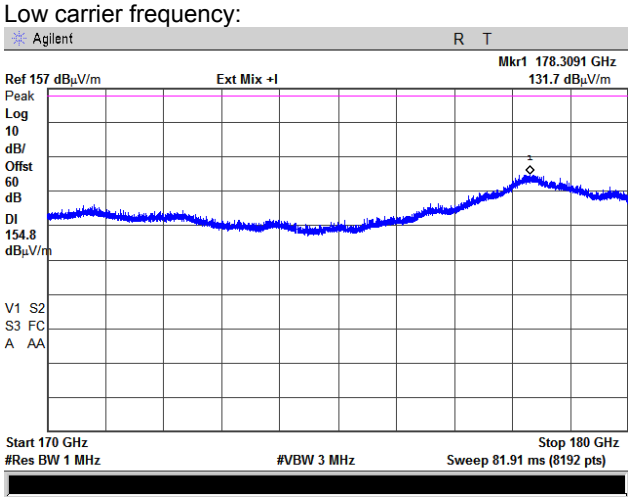


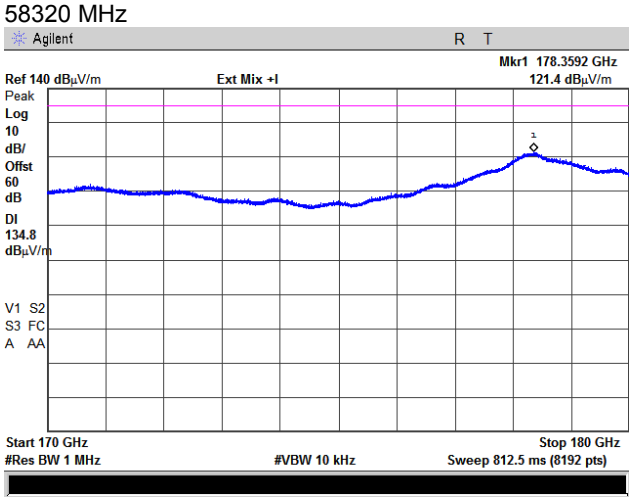
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.22 Spurious emission measurements in 170 - 180 GHz range

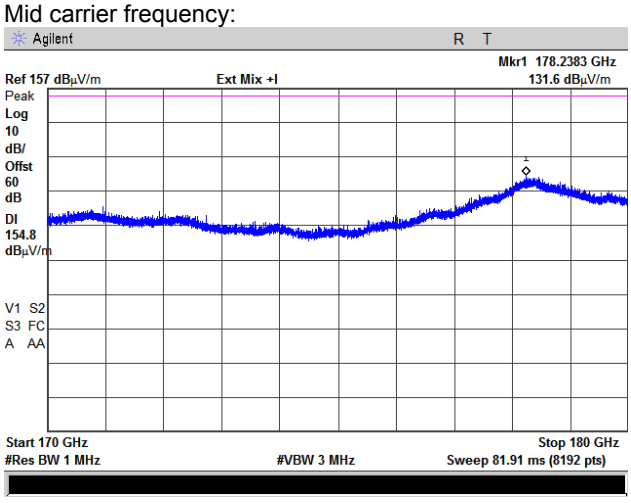
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

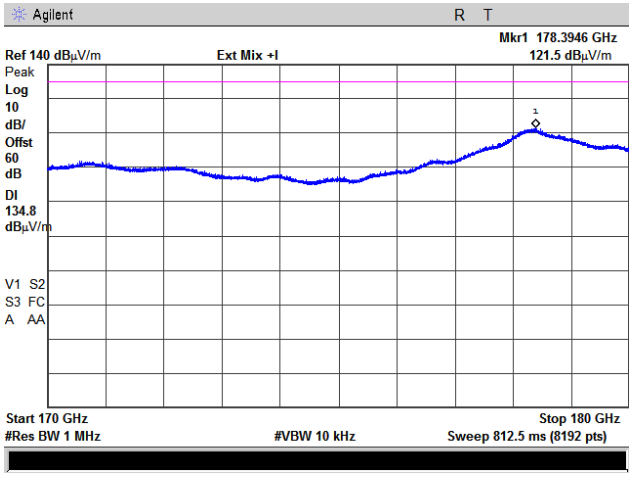
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



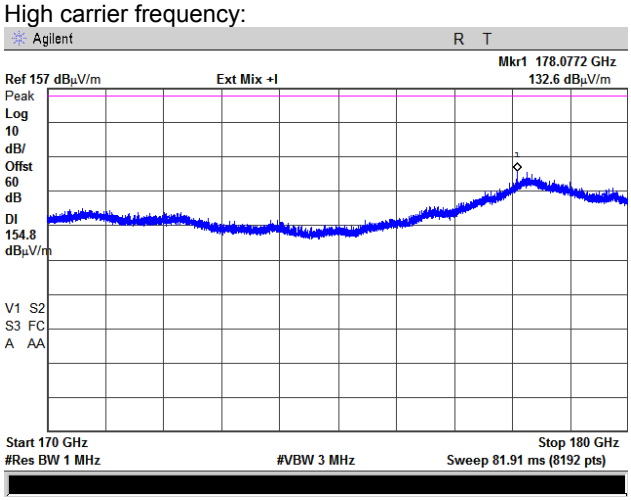


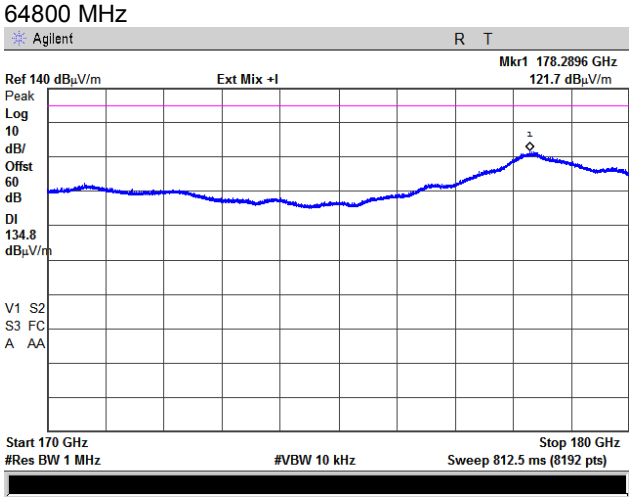
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.23 Spurious emission measurements in 170 - 180 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



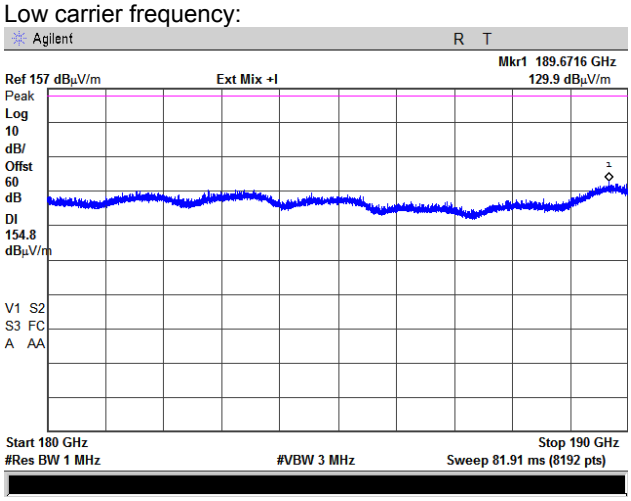


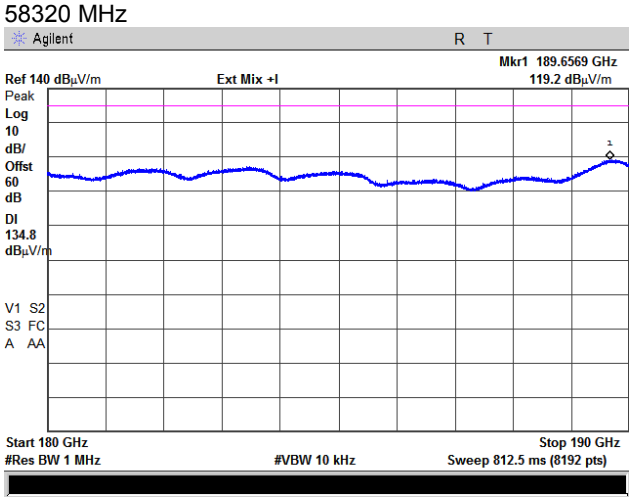
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.24 Spurious emission measurements in 180 - 190 GHz range

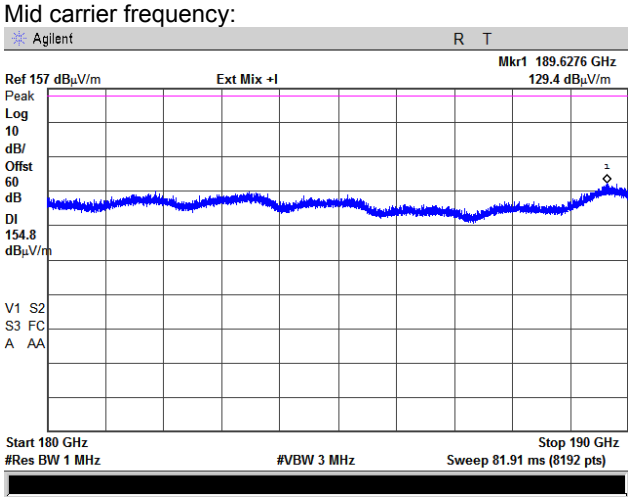
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

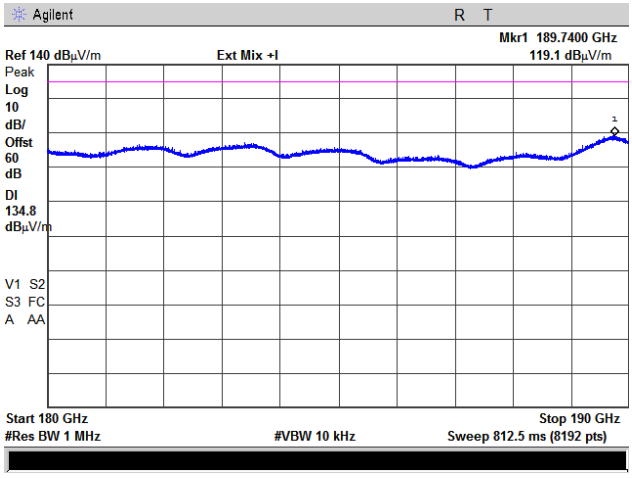
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz



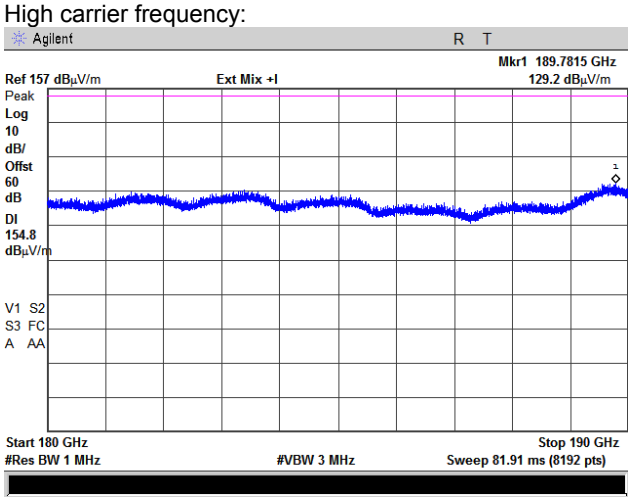


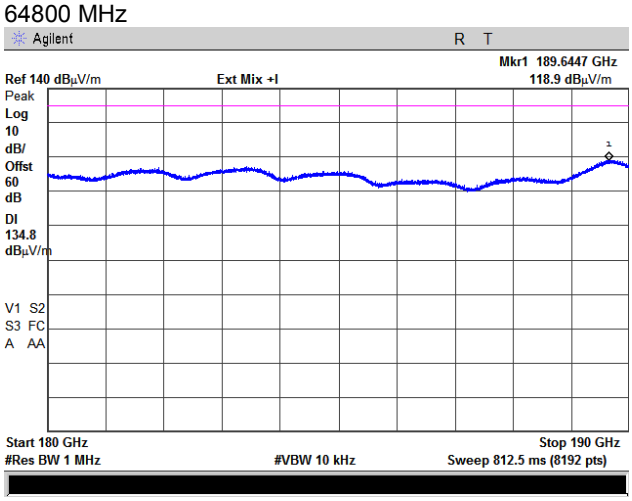
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.25 Spurious emission measurements in 180 - 190 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz



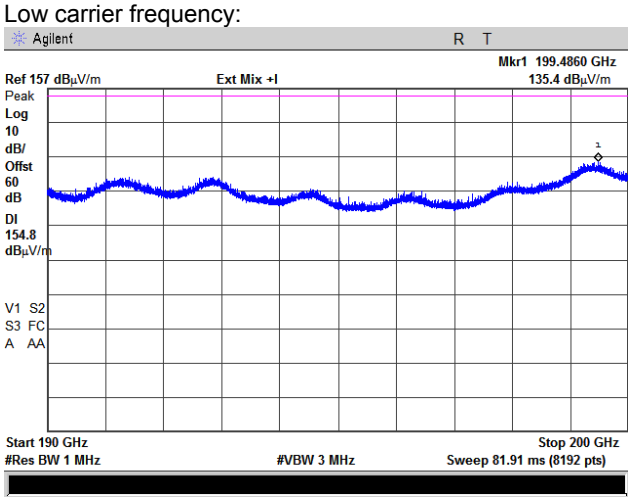


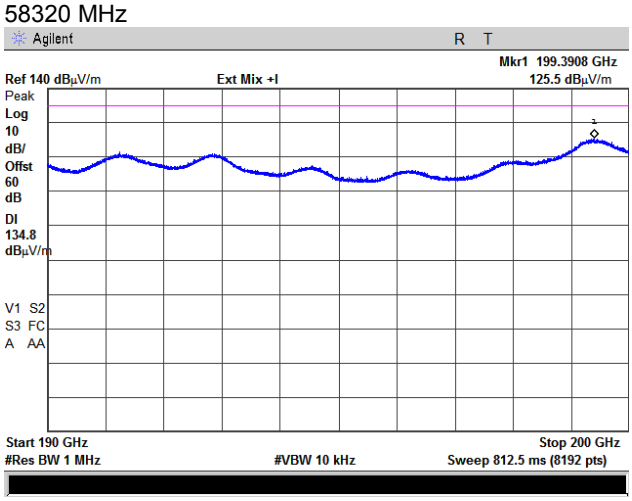
Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.26 Spurious emission measurements in 190 - 200 GHz range

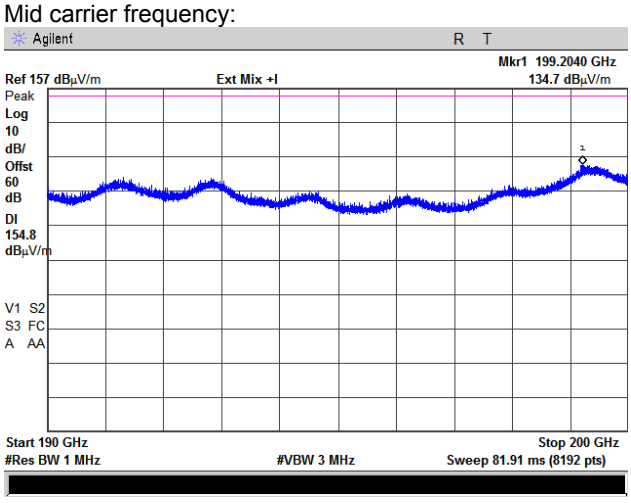
TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

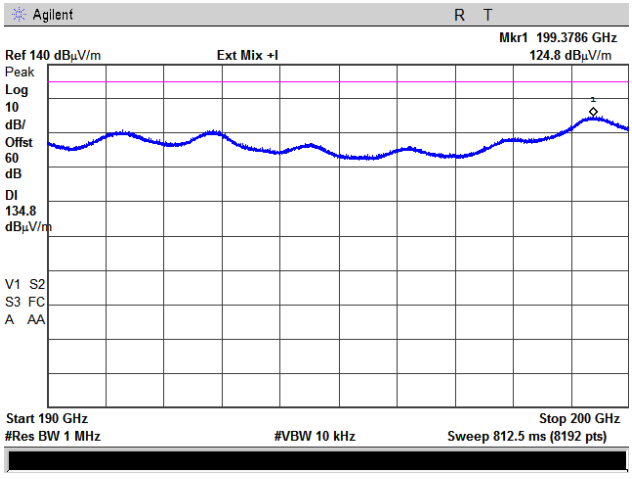
Low carrier frequency: 58320 MHz





Mid carrier frequency: 62640 MHz





Test specification:	FCC Section 15.255(d)(3), RSS-210 section J.3, Out of band radiated emissions above 40 GHz		
Test procedure:	ANSI C63.10, Sections 9.9, 9.12		
Test mode:	Compliance	Verdict:	PASS
Date(s):	22-Dec -20		
Temperature: 20 ºC	Relative Humidity: 43 %	Air Pressure: 1011 hPa	Power: 48 VDC
Remarks:			

Plot 7.4.27 Spurious emission measurements in 190 - 200 GHz range

TEST SITE: OATS
TEST DISTANCE: 0.01 m
MODULATION: 16QAM
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak RBW = 1 MHz; VBW = 3 MHz
DETECTOR: Peak RBW = 1 MHz; VBW = 10 kHz

High carrier frequency: 64800 MHz