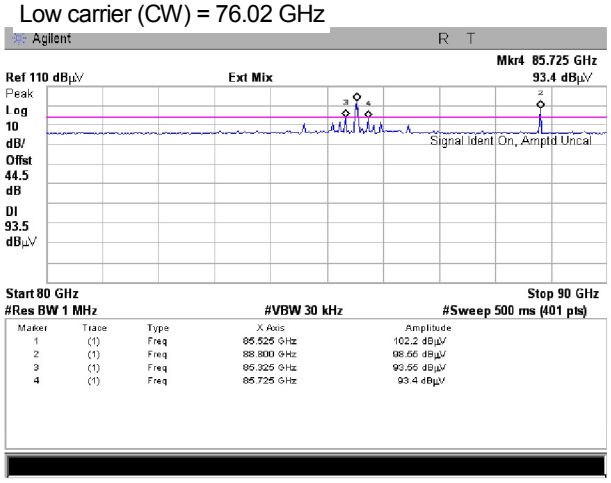
Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 °C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

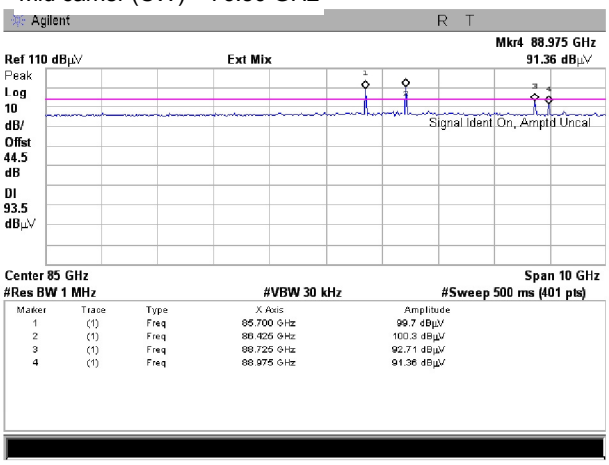
Plot 7.3.10 Radiated emission measurements from 80 to 90 GHz

TEST SITE: OATS
TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 30 kHz

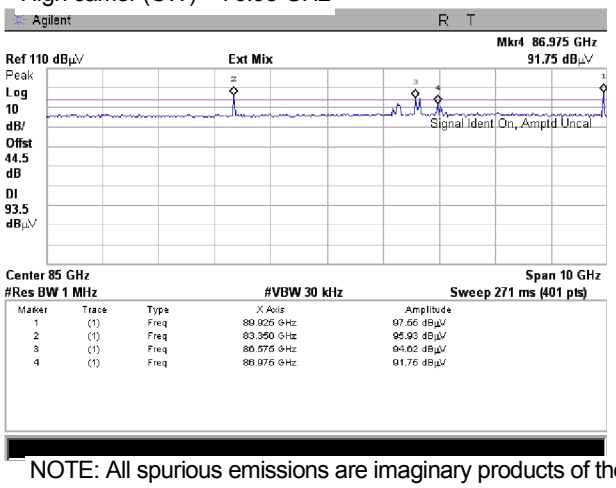
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



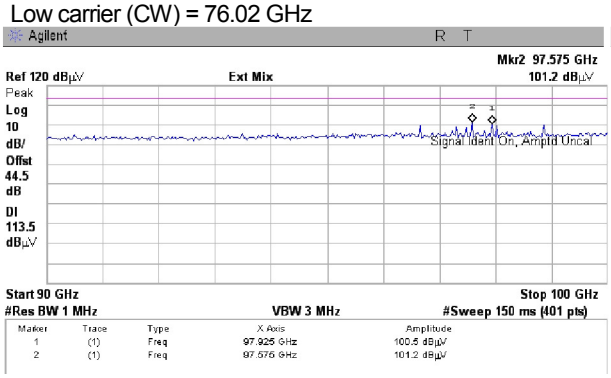
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

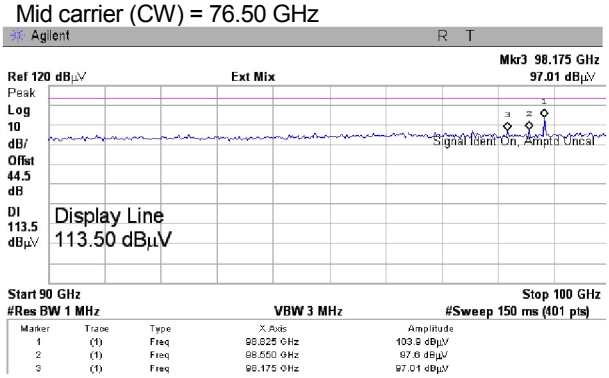
Plot 7.3.11 Radiated emission measurements from 90 to 100 GHz

TEST SITE: OATS
TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak

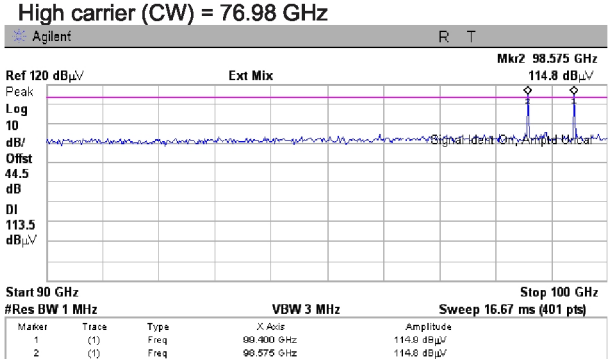
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



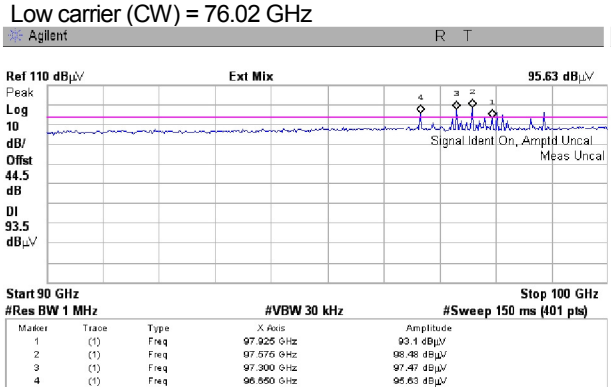
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

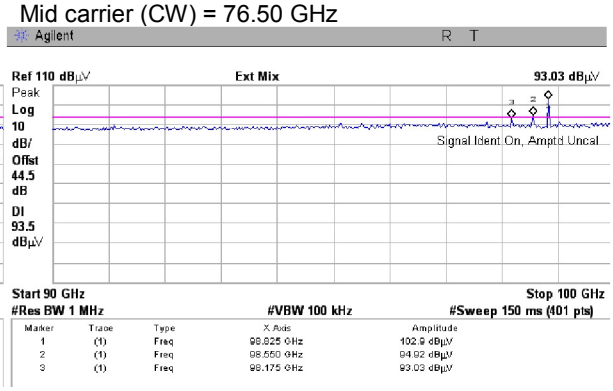
Plot 7.3.12 Radiated emission measurements from 90 to 100 GHz

TEST SITE: OATS
TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 30 kHz

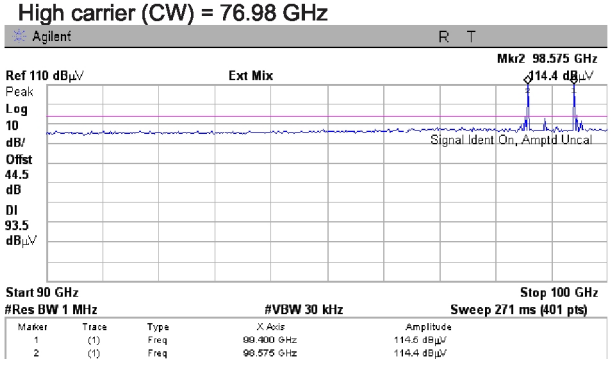
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



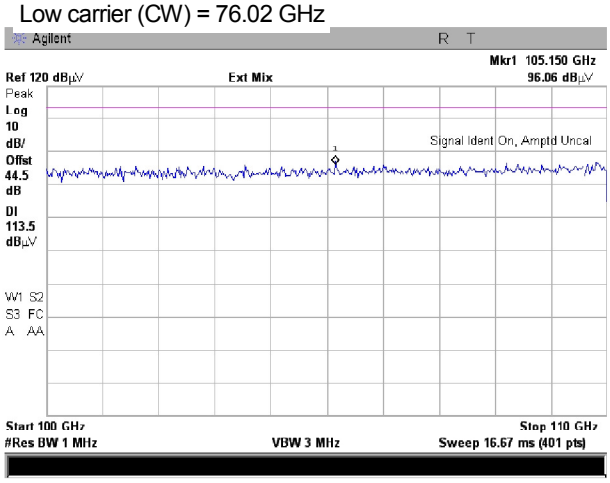
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 °C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

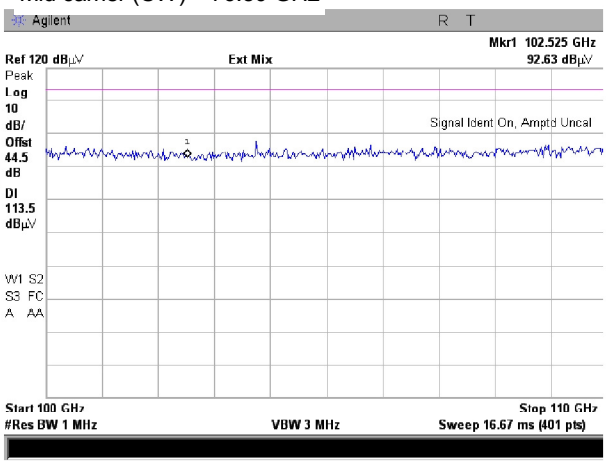
Plot 7.3.13 Radiated emission measurements from 100 to 110 GHz

TEST SITE: OATS
TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak

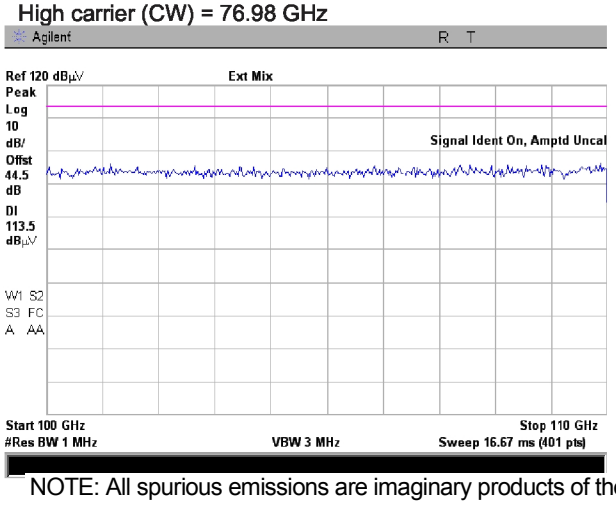
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



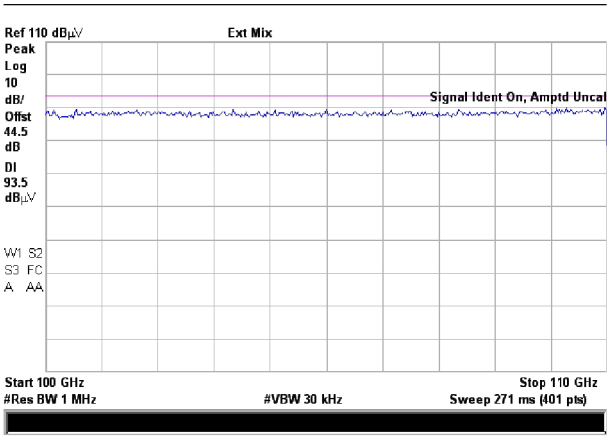
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

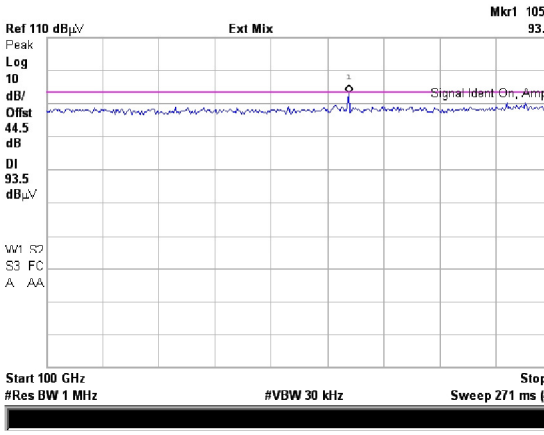
Plot 7.3.14 Radiated emission measurements from 100 to 110 GHz

TEST SITE: OATS
TEST DISTANCE: 3 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 30 kHz

Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz

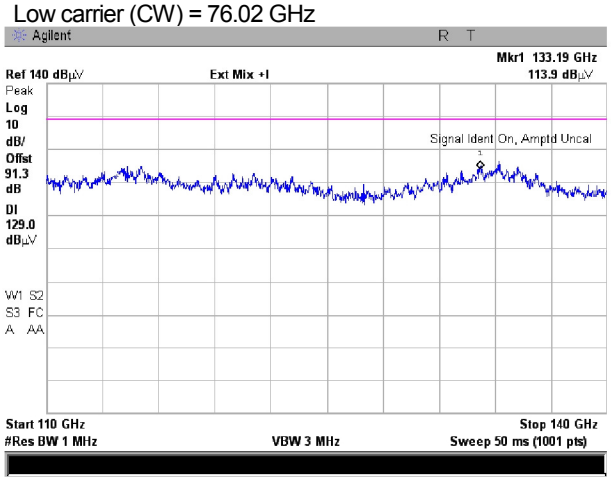
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

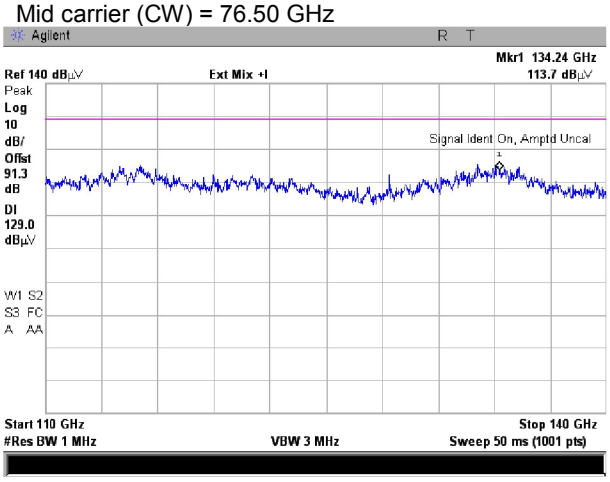
Plot 7.3.15 Radiated emission measurements from 110 to 140 GHz

TEST SITE: OATS
TEST DISTANCE: 0.5 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak hold

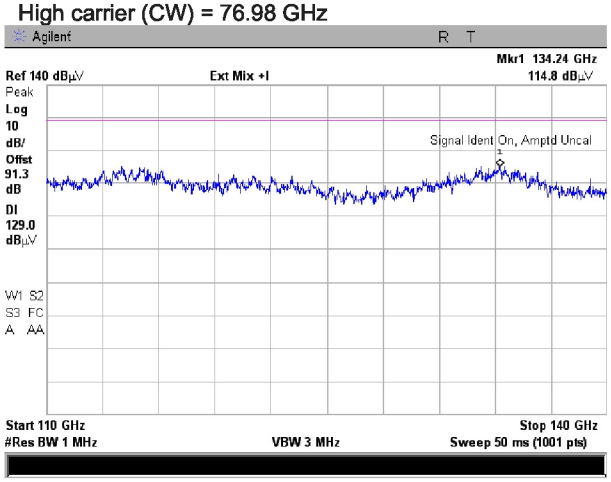
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



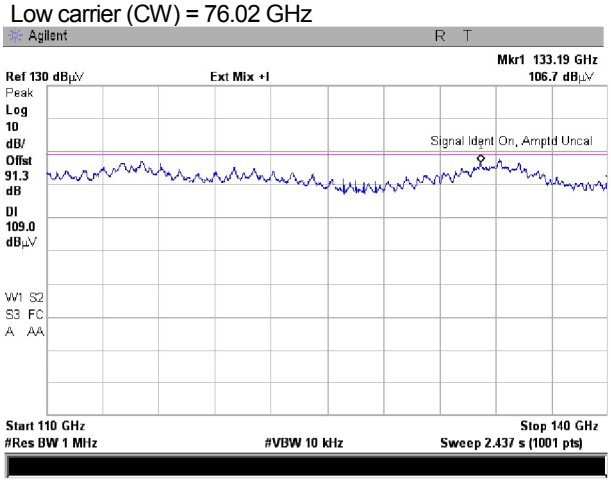
Reference level offset = Antenna Factor (90-140GHz Standard Gain Horn)+Average mixer loss = =
46.41 + 44.9 = 91.31 dB

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

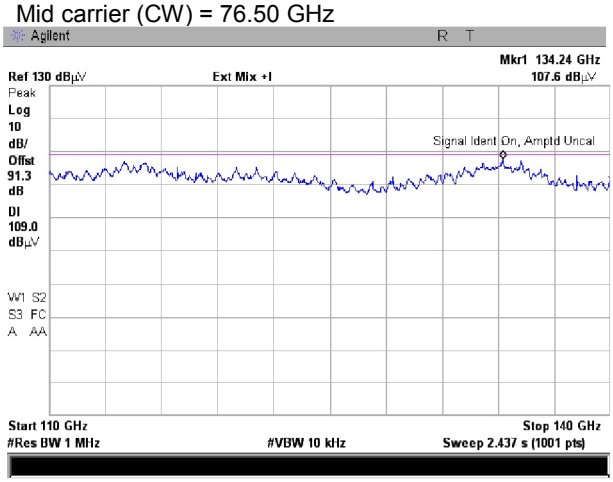
Plot 7.3.16 Radiated emission measurements from 110 to 140 GHz

TEST SITE: OATS
TEST DISTANCE: 0.5 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 10 kHz

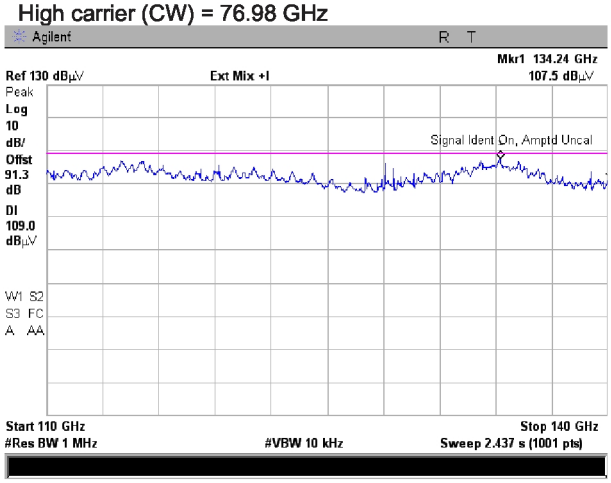
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



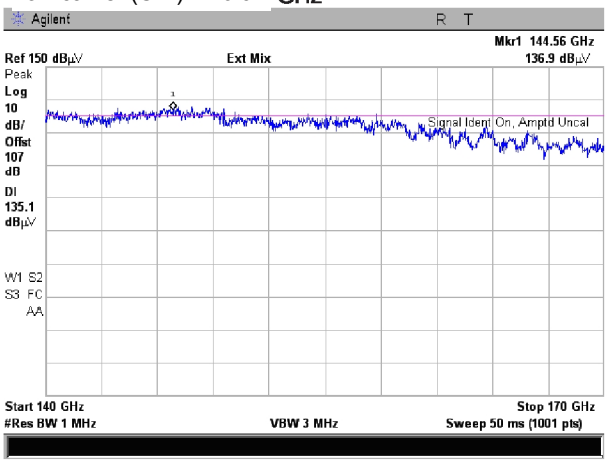
Reference level offset = Antenna Factor (90-140GHz horn)+Average mixer loss = 46.41 + 44.9 = 91.31 dB
NOTE: All spurious emissions are imaginary products of the mixing process.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

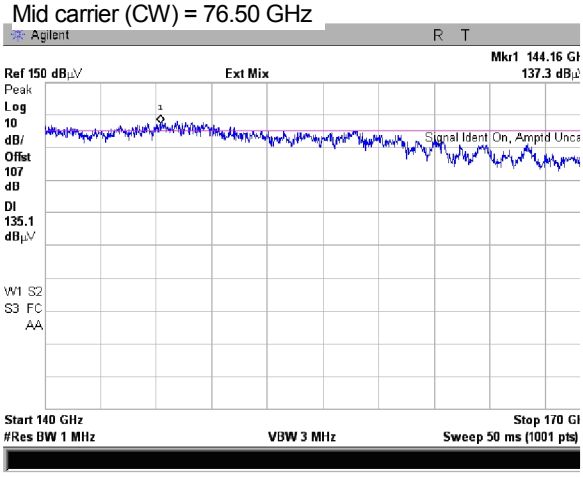
Plot 7.3.17 Radiated emission measurements from 140 to 170 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak

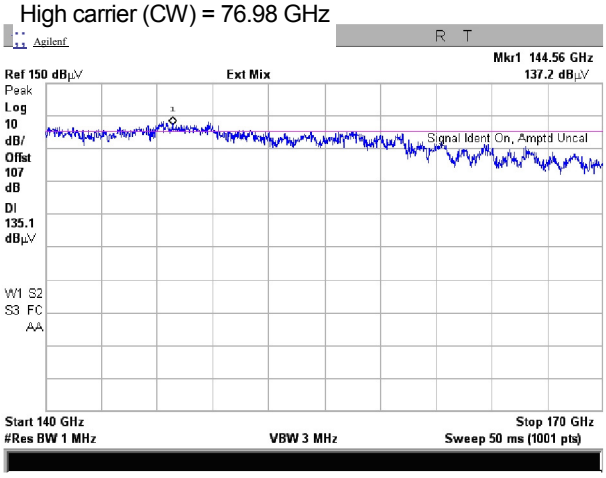
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



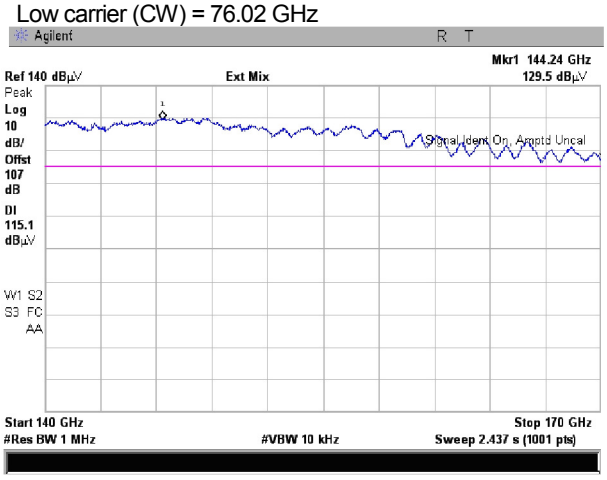
Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 +56.4 = 106.7dB
No spurious were found
Limit 152.16 dBµV/m shall be applied at the distance 0.08m.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

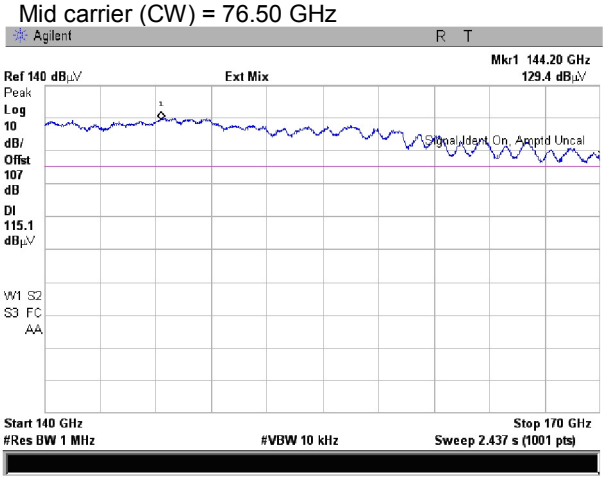
Plot 7.3.18 Radiated emission measurements from 140 to 170 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 10 kHz

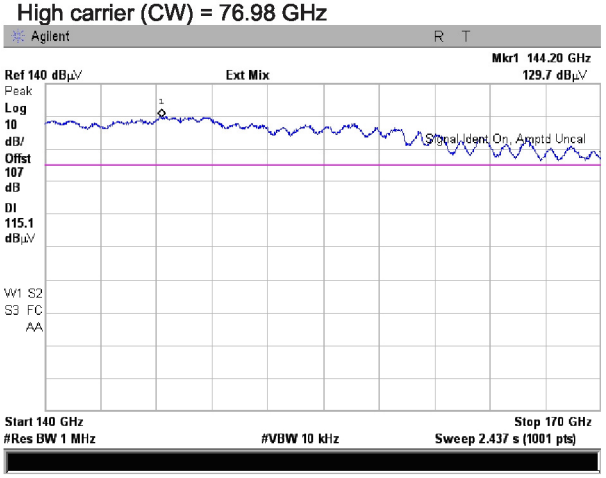
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



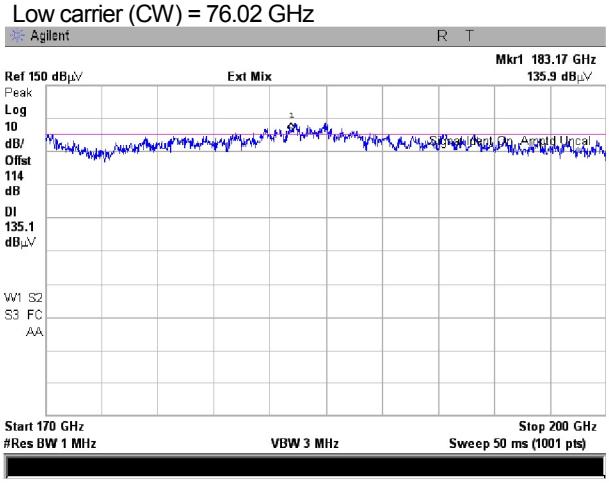
Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 + 56.4 = 106.7 dB No spurious were found
Limit 132.16 dBµV/m shall be applied at the distance 0.08m.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

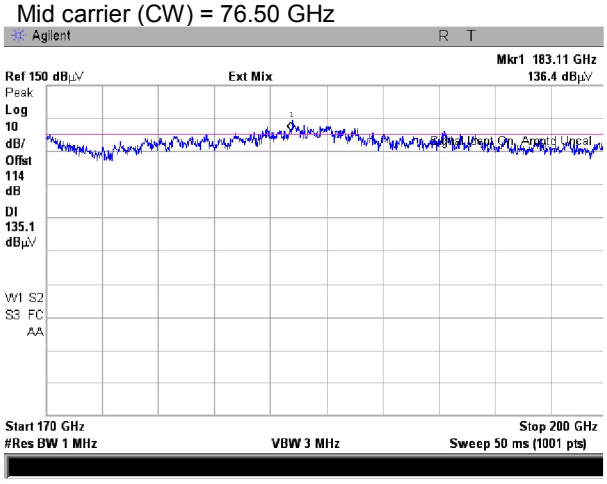
Plot 7.3.19 Radiated emission measurements from 170 to 200 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak Hold

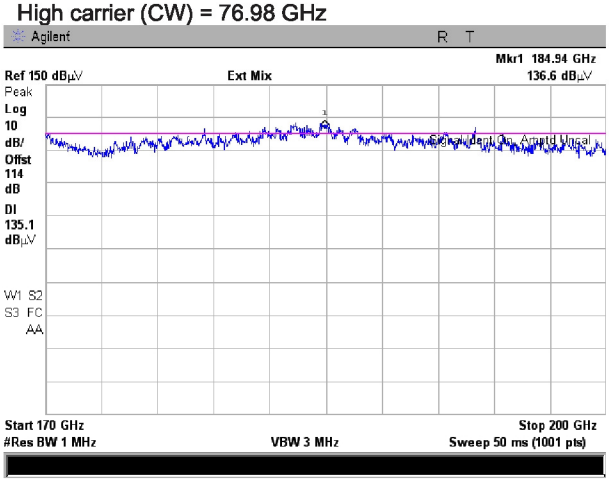
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



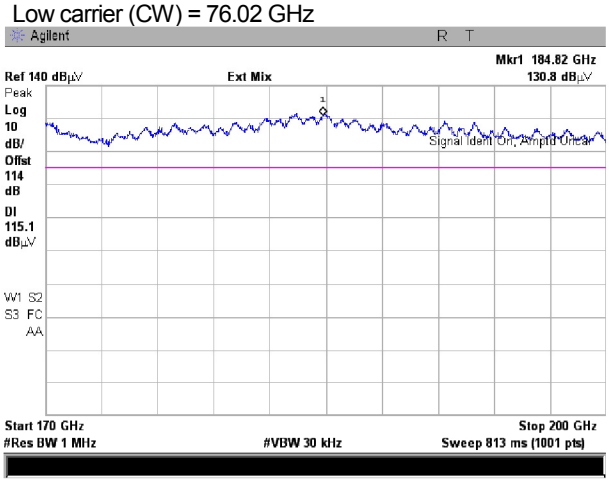
Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 + 63.68 = 114.0 dB
No spurious were found.
Limit 153.85 dBµV/m shall be applied at the distance 0.08m.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

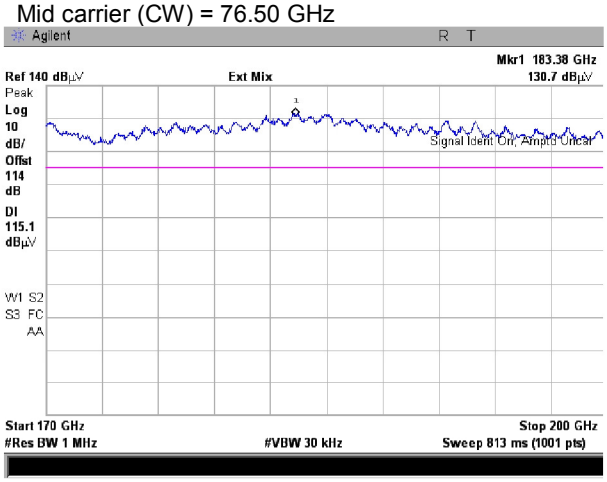
Plot 7.3.20 Radiated emission measurements from 170 to 200 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 100 kHz

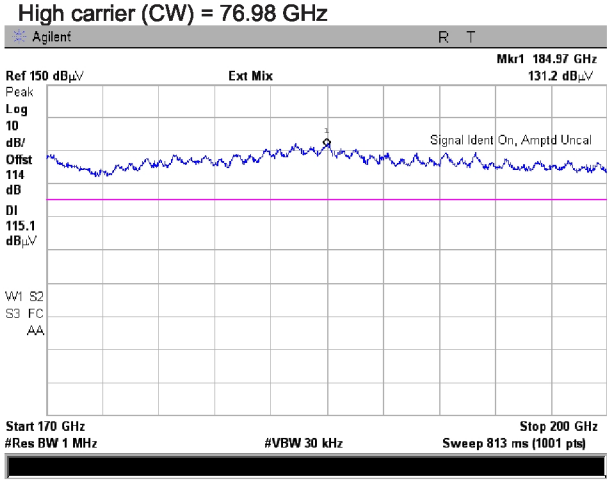
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



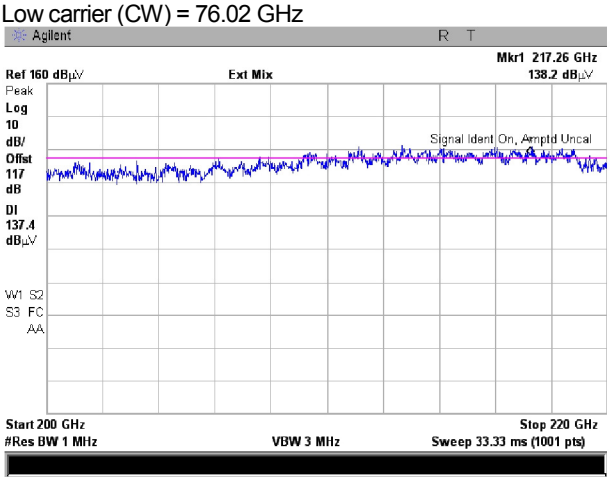
Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 + 63.68 = 114.0 dB
No spurious were found
Limit 133.85 dBµV/m shall be applied at the distance 0.08m.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

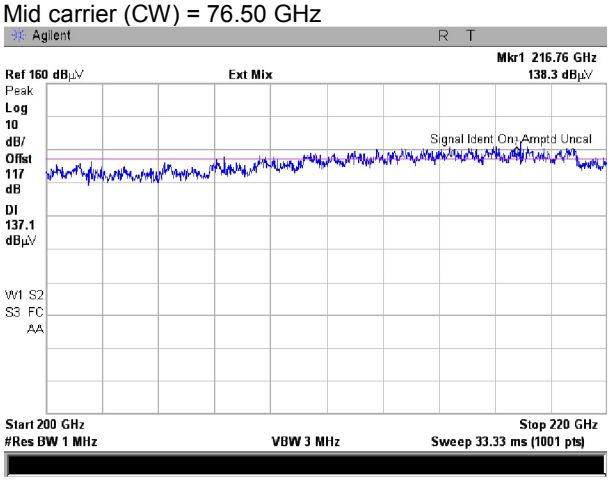
Plot 7.3.21 Radiated emission measurements from 200 to 220 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: Peak Hold

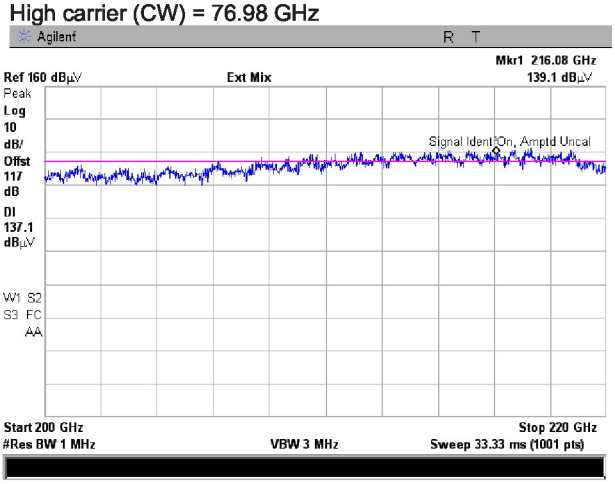
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



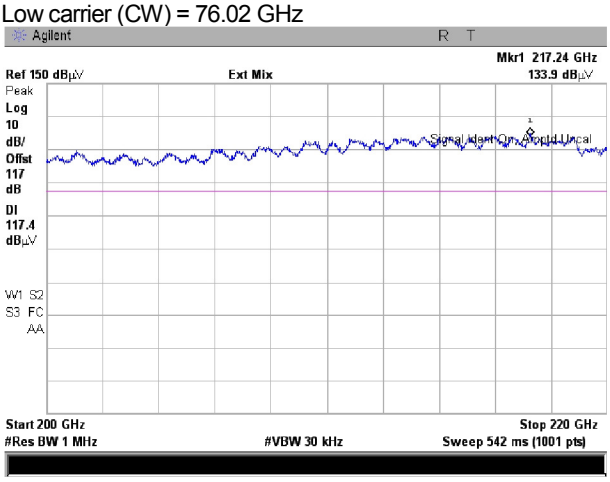
Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 + 67.14 = 117.44dB
No spurious were found
Limit 157.56 dBµV/m shall be applied at the distance 0.08 m.

Test specification:	Section 15.253(e)(2)(ii), (3), Out of band radiated emissions above 40 GHz		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 21.2 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 43 %	Power Supply: 120 VAC
Remarks:			

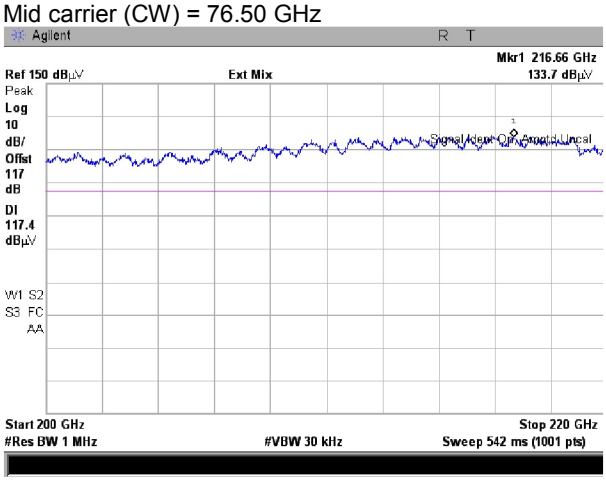
Plot 7.3.22 Radiated emission measurements from 200 to 220 GHz

TEST SITE: OATS
TEST DISTANCE: 0.08 m
ANTENNA POLARIZATION: Vertical and Horizontal
DETECTOR: VBW = 30 kHz

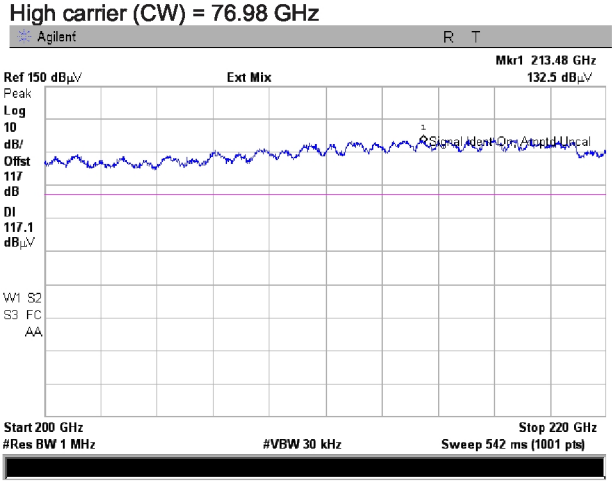
Low carrier (CW) = 76.02 GHz



Mid carrier (CW) = 76.50 GHz



High carrier (CW) = 76.98 GHz



Reference level offset = Antenna Factor (140-220GHz horn) + Average mixer conversion loss = 50.30 + 67.14 = 117.44dB
No spurious were found
Limit 157.56 dBµV/m (peak) and 137.56 dBµV/m (average) shall be applied at the distance 0.08 m.

Test specification:	Section 15.253(f), Frequency stability		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/15/2012		
Temperature: 20.1 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 44 %	Power Supply: 120 VAC
Remarks:			

7.4 Frequency stability test

7.4.1 General

This test was performed to measure frequency stability of transmitter RF carrier. Specification test limits are given in Table 7.4.1. The test results are provided in Table 7.4.2.

Assigned frequency,	Maximum allowed frequency
76.0 – 77.0	Fundamental emissions shall be contained within the frequency band

Table 7.4.1 Frequency stability limits

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.

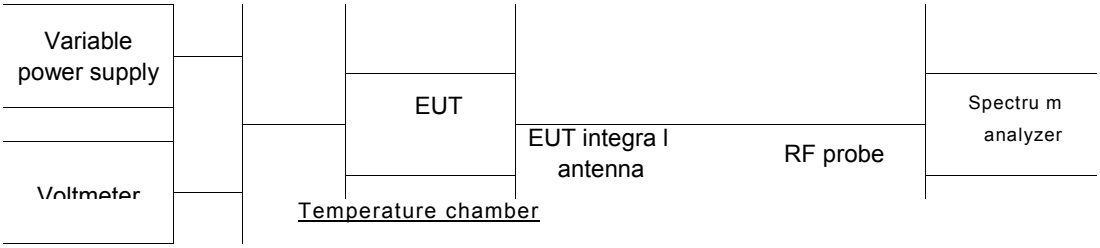
7.4.2.2 The EUT power was turned off. Temperature within test chamber was set to the required one and a period of time sufficient to stabilize all of the oscillator circuit components was allowed.

7.4.2.3 The EUT was powered on and carrier frequency was measured at start up moment and then after 2, 5 and 10 minutes. The EUT was powered off.

7.4.2.4 The above procedure was repeated at the rest of the test temperatures and voltages as provided in Table 7.4.2.

7.4.2.5 Frequency displacement was calculated and compared with the limit as provided in Table 7.4.2.

Figure 7.4.1 Frequency stability test setup



Test specification:	Section 15.253(f), Frequency stability		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	Verdict:	PASS
Date:	1/15/2012		
Temperature: 20.1 ˚C	Air Pressure: 1021 hPa	Relative Humidity: 44 %	Power Supply: 120 VAC
Remarks:			

Photograph 7.4.1 Setup for frequency stability

Test specification:	**Section 15.253(f), Frequency stability**		
Test procedure:	Millimeter wave test procedure accepted by FCC Lab		
Test mode:	Compliance	**Verdict:**	PASS
Date:	1/15/2012		
Temperature: 20.1 ˚C	**Air Pressure:** 1021 hPa	**Relative Humidity:** 44 %	**Power Supply:** 120 VAC
Remarks:			

Table 7.4.2 Frequency stability test results under extreme temperature conditions

OPERATING FREQUENCY:	76.0 – 77.0 GHz
NOMINAL POWER VOLTAGE:	120 VAC
TEMPERATURE STABILIZATION PERIOD:	20 min
POWER DURING TEMPERATURE TRANSITION:	Off
SPECTRUM ANALYZER MODE:	Counter
RESOLUTION BANDWIDTH:	100 Hz
VIDEO BANDWIDTH:	1 kHz
MODULATION:	Unmodulated

T, ºC	Voltage, V	Frequency, MHz				Max frequency drift, kHz	
		Start up	2nd min	5th min	10th min	Positive	Negative
EUT stopped at 76020.0 MHz							
-30	nominal	76020.011380	76020.004130	76020.009240	76020.007340	6.89	-0.36
20	15% VAC	76020.014190	76020.012860	76020.009770	76020.005520	9.70	0
20	nominal	76020.017040	76020.014150	76020.009120	76020.004490	12.55	0
20	-15% VAC	76020.010600	76020.009830	76020.008670	76020.019080	14.59	0
50	nominal	76020.008810	76020.004450	76020.006150	76020.004630	4.32	-0.04
EUT stopped at 76960.0 MHz							
-30	nominal	76980.015640	76980.004150	76980.011120	76980.004150	11.76	0
20	15% VAC	76980.008870	76980.008120	76980.007760	76980.007270	4.99	0
20	nominal	76980.004970	76980.004680	76980.004120	76980.003880	1.09	0
20	-15% VAC	76980.016950	76980.014470	76980.010756	76980.006780	13.07	0
50	nominal	76980.007860	76980.011620	76980.014410	76980.014290	10.53	0

Reference numbers of test equipment used

HL 0771	HL 1194	HL 2358	HL 2909	HL 3286	HL 3306	HL 3433	HL 3434

Full description is given in Appendix A.

Test specification:	Section 15.215(c), Occupied bandwidth		
Test procedure:	ANSI C63.4, Section 13.1.7		
Test mode:	Compliance	Verdict:	PASS
Date:	1/08/2012		
Temperature: 21.6 ˚C	Air Pressure: 1015 hPa	Relative Humidity: 42 %	Power Supply: 120 VAC
Remarks:			

7.5 Occupied bandwidth test

7.5.1 General

This test was performed to verify that the 26 dB bandwidth of the emissions was contained within the standard specified frequency band according to FCC §15.253 requirements. Specification test limits are given in Table 7.5.1.

Table 7.5.1 Occupied bandwidth limits

Assigned frequency,	Modulation envelope reference points*,
76.0 – 77.0	26

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

7.5.2 Test procedure

7.5.2.1 The EUT was set up as shown in Figure 7.5.1, energized and its proper operation was checked.

7.5.2.2 The spectrum analyzer sweep time and bandwidth were set to capture all major modulation sidebands of emission and sweep time was set sufficiently slow to ensure peak measurements. Spectrum analyzer was set in peak hold mode and time sufficient for trace stabilization was allowed.

7.5.2.3 The peak of emission was measured. The transmitter occupied bandwidth was measured with spectrum analyzer as frequency delta between reference points on modulation envelope and provided in Table 7.5.3 and associated plot.

7.5.2.4 Modulation bandwidth was calculated by adding of the negative frequency drift to the lower measured frequency and the positive frequency drift to the higher measured frequency. The obtained modulation bandwidth was verified to be within the allowed frequency range.

Figure 7.5.1 Occupied bandwidth test setup

Test specification:	**Section 15.215(c), Occupied bandwidth**		
Test procedure:	ANSI C63.4, Section 13.1.7		
Test mode:	Compliance	**Verdict:**	PASS
Date:	1/08/2012		
Temperature: 21.6 ˚C	**Air Pressure:** 1015 hPa	**Relative Humidity:** 42 %	**Power Supply:** 120 VAC
Remarks:			

Photograph 7.5.1 Setup for occupied bandwidth measurements

Test specification:	**Section 15.215(c), Occupied bandwidth**		
Test procedure:	ANSI C63.4, Section 13.1.7		
Test mode:	Compliance	**Verdict:**	PASS
Date:	1/08/2012		
Temperature: 21.6 ˚C	**Air Pressure:** 1015 hPa	**Relative Humidity:** 42 %	**Power Supply:** 120 VAC
Remarks:			

Table 7.5.2 The 26 dB bandwidth test results

ASSIGNED FREQUENCY BAND	76.0 – 77.0 GHz
DETECTOR USED:	Peak hold
RESOLUTION BANDWIDTH:	1000 kHz
VIDEO BANDWIDTH:	3000 kHz 26
MODULATION ENVELOPE REFERENCE POINTS:	dBc
MODULATION:	Liner chirp FM
MODULATING SIGNAL:	Enable

Carrier			
.0qu76980 .0Hz	26 dB ba973.75 th, MHz	LimNAkHz	MargNnA, kHz

Table 7.5.3 Occupied bandwidth test results

ASSIGNED FREQUENCY BAND	76.0 – 77.0 GHz
DETECTOR USED:	Peak hold
RESOLUTION BANDWIDTH:	1000 kHz
VIDEO BANDWIDTH:	3000 kHz 26
MODULATION ENVELOPE REFERENCE POINTS:	dBc
MODULATION:	Liner chirp FM
MODULATING SIGNAL:	Enable

Band edge	Cross point frequency, MHz	Frequency drift, MHz		Modulation band edge, MHz	Assigned band edge, MHz	Verdict
		Negative	Positive			
Low	76012.50	0.0004	NA	76012.4996	76000.0	Pass
High	76986.25	NA	0.0146	76986.2646	77000.0	Pass

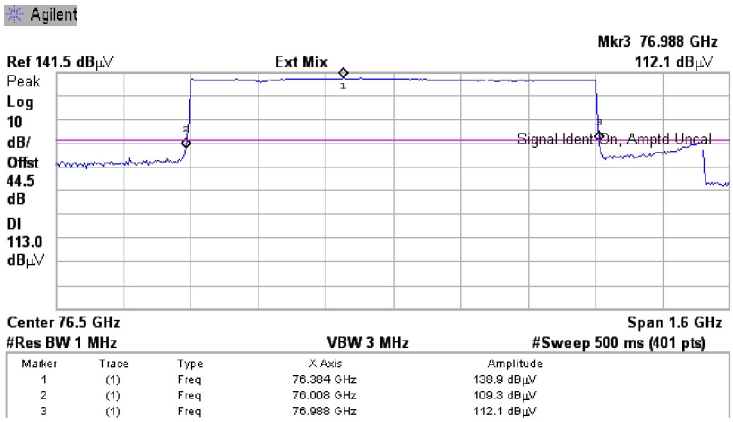
Reference numbers of test equipment used

HL 0772	HL 2909	HL 3306	HL 3433	HL 3434			

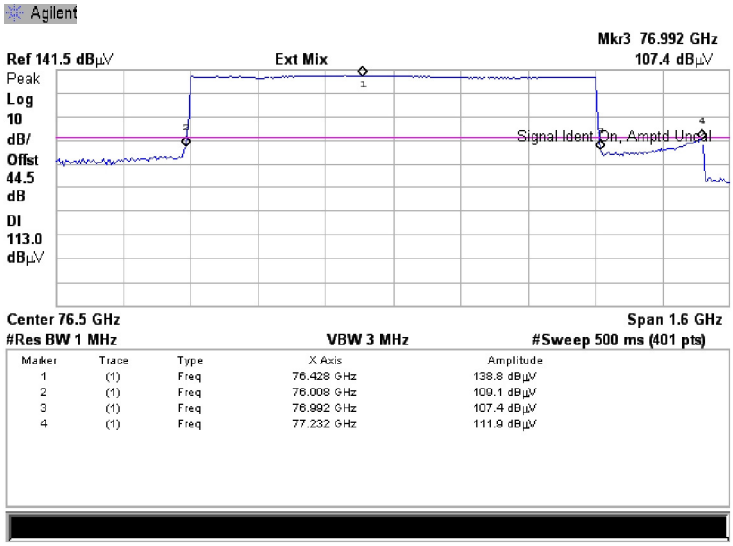
Full description is given in Appendix A

Test specification:	Section 15.215(c), Occupied bandwidth		
Test procedure:	ANSI C63.4, Section 13.1.7		
Test mode:	Compliance	Verdict:	PASS
Date:	1/08/2012		
Temperature: 21.6 ˚C	Air Pressure: 1015 hPa	Relative Humidity: 42 %	Power Supply: 120 VAC
Remarks:			

Plot 7.5.1 Occupied bandwidth test result

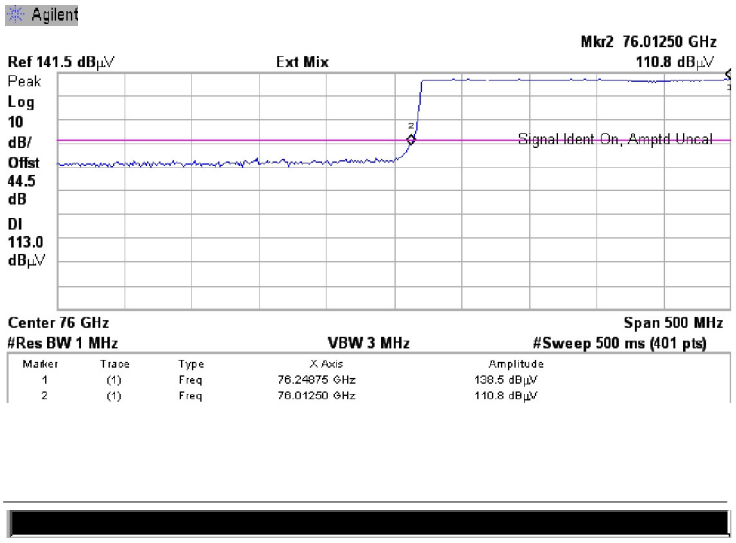


Plot 7.5.2 Occupied bandwidth test result

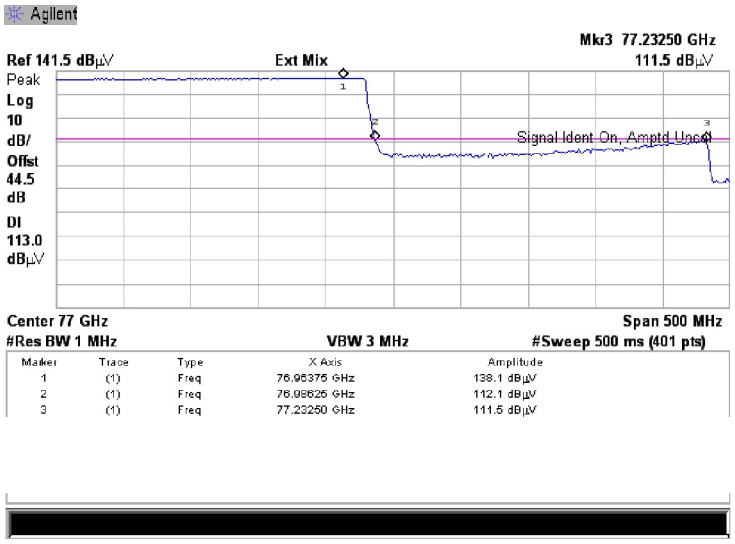


Test specification:	Section 15.215(c), Occupied bandwidth		
Test procedure:	ANSI C63.4, Section 13.1.7		
Test mode:	Compliance	Verdict:	PASS
Date:	1/08/2012		
Temperature: 21.6 ˚C	Air Pressure: 1015 hPa	Relative Humidity: 42 %	Power Supply: 120 VAC
Remarks:			

Plot 7.5.3 Occupied bandwidth test result, low edge at 26 dBc attenuation



Plot 7.5.4 Occupied bandwidth test result, high edge at 26 dBc attenuation



Test specification:	Section 15.207(a), Conducted emission		
Test procedure:	ANSI C63.4, Section 13.3		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 19.2 °C	Air Pressure: 1017 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

7.6 Conducted emissions

7.6.1 General

This test was performed to measure common mode conducted emissions at the power port. The specification test limits are given in Table 7.6.1.

Table 7.6.1 Limits for conducted emissions

Frequency, MHz	Class B limit, dB(μV)	
	QP	AVRG
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5.0	56	46
5.0 - 30	60	50

* The limit decreases linearly with the logarithm of frequency.

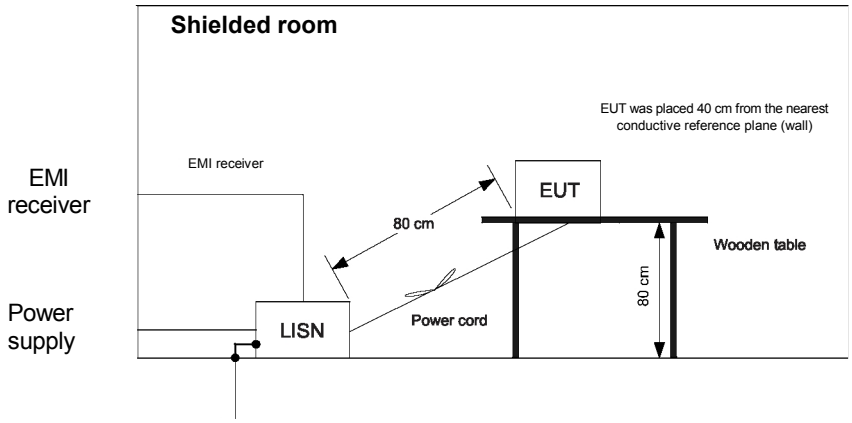
7.6.2 Test procedure

7.6.2.1 The EUT was set up as shown in Figure 7.6.1, energized and the performance check was conducted.

7.6.2.2 The measurements were performed at power terminals with the LISN, connected to a spectrum analyzer in the frequency range referred to in Table 7.6.2. Unused coaxial connector of the LISN was terminated with 50 Ohm. Quasi-peak and average detectors were used throughout the testing.

7.6.2.3 The position of the device cables was varied to determine maximum emission level.

Figure 7.6.1 Setup for conducted emission measurements, table-top equipment



Test specification:	Section 15.207(a), Conducted emission		
Test procedure:	ANSI C63.4, Section 13.3		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 19.2 ˚C	Air Pressure: 1017 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Photograph 7.6.1 Setup for conducted emission measurements

Test specification:	**Section 15.207(a), Conducted emission**		
Test procedure:	ANSI C63.4, Section 13.3		
Test mode:	Compliance	**Verdict:**	PASS
Date:	1/16/2012		
Temperature: 19.2 ˚C	**Air Pressure:** 1017 hPa	**Relative Humidity:** 46 %	**Power Supply:** 120 VAC
Remarks:			

Table 7.6.2 Conducted emission test results

LINE: AC mains
EUT SET UP: TABLE-TOP
TEST SITE: SHIELDED ROOM
DETECTORS USED: PEAK / QUASI-PEAK / AVERAGE
FREQUENCY RANGE: 150 kHz - 30 MHz
RESOLUTION BANDWIDTH: 9 kHz

Frequency, MHz	Peak emission, dB(µV)	Quasi-peak			Average			Line ID	Verdict
		Measured emission, dB(µV)	Limit, dB(µV)	Margin, dB*	Measured emission, dB(µV)	Limit, dB(µV)	Margin, dB*		
0.150325	54.10	47.68	65.98	-18.30	13.60	55.98	-42.38	L1	Pass
0.160075	53.19	47.04	65.51	-18.47	12.96	55.51	-42.55		
0.189950	50.84	43.89	64.05	-20.16	10.51	54.05	-43.54		
0.216475	48.88	42.22	63.02	-20.80	8.30	53.02	-44.72		
4.880000	34.16	33.34	56.00	-22.66	32.66	46.00	-13.34		
9.759340	46.43	45.36	60.00	-14.64	44.58	50.00	-5.42		
0.150775	54.54	47.95	65.96	-18.01	14.42	55.96	-41.54	L2	Pass
0.161875	53.10	46.64	65.42	-18.78	13.79	55.42	-41.63		
0.192750	50.89	44.14	63.93	-19.79	10.91	53.93	-43.02		
0.216350	49.37	42.50	63.03	-20.53	8.73	53.03	-44.30		
4.880000	35.49	34.85	56.00	-21.15	33.24	46.00	-12.76		
9.761000	47.55	46.64	60.00	-13.36	45.82	50.00	-4.18		

***-** Margin = Measured emission - specification limit.

Reference numbers of test equipment used

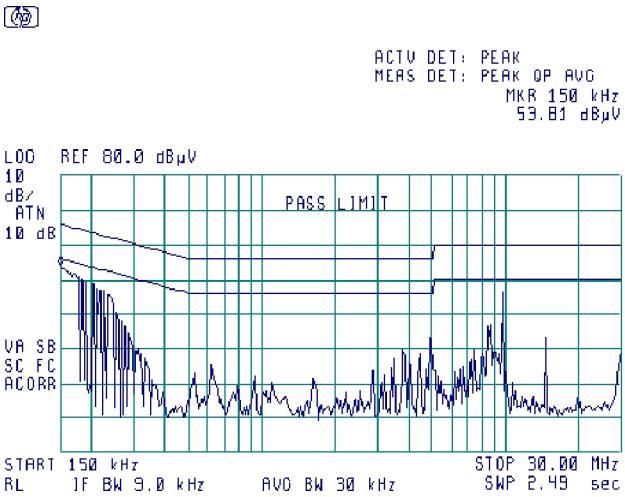
HL 0163	HL 0787	HL 1194	HL 1425	HL 1513	HL 2358	HL 3612	

Full description is given in Appendix A

Test specification:	Section 15.207(a), Conducted emission		
Test procedure:	ANSI C63.4, Section 13.3		
Test mode:	Compliance	Verdict:	PASS
Date:	1/16/2012		
Temperature: 19.2 ˚C	Air Pressure: 1017 hPa	Relative Humidity: 46 %	Power Supply: 120 VAC
Remarks:			

Plot 7.6.1 Conducted emission measurements

LINE: L1
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK
MODE: Transmit



Plot 7.6.2 Conducted emission measurements

LINE: L2
LIMIT: QUASI-PEAK, AVERAGE
DETECTOR: PEAK
MODE: Transmit