UNIFIED COMPLIANCE LABORATORY

427 West 12800 South
Draper, UT 84020

Test Report

Certification

FCC ID	SWX-WAVENANO
IC ID	6545A-WAVENANO
Equipment Under Test	Wave-Nano
Test Report Serial Number	TR6998_01
Date of Test(s)	23, 28 February and 1, 9, 10, 15 March 2022
Report Issue Date	11 May 2022

Test Specification	Applicant
47 CFR FCC Part 15, Subpart C	Ubiquiti Inc. 685 Third Avenue, 27th Floor New York, NY 10019 U.S.A.

NVLAP TESTING ilac-MRA

NVLAP LAB CODE 600241-0

Certification of Engineering Report

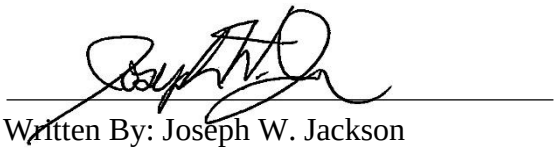
This report has been prepared by Unified Compliance Laboratory (UCL) to document compliance of the device described below with the requirement of Federal Communication Commissions (FCC) Part 15, Subpart C. This report may be reproduced in full. Partial reproduction of this report may only be made with the written consent of the laboratory. The results in this report apply only to the sample tested.

Applicant	Ubiquiti Inc.
Manufacturer	Ubiquiti Inc.
Brand Name	airFiber
Model Number	Wave-Nano
FCC ID	SWX-WAVENANO
IC ID	6545A-WAVENANO

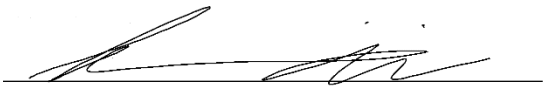
On this 11th day of May 2022, I individually and for Unified Compliance Laboratory certify that the statements made in this engineering report are true, complete, and correct to the best of my knowledge and are made in good faith.

Although NVLAP has accredited the Unified Compliance Laboratory testing facilities, this report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. federal government.

Unified Compliance Laboratory



Written By: Joseph W. Jackson



Reviewed By: Alex Macon

Revision History		
Revision	**Description**	**Date**
01	Original Report Release	11 May 2022

Table of Contents

1 Client Information

1.1 Applicant

Company	Ubiquiti Inc. 685 Third Avenue, 27th Floor New York, NY 10017 U.S.A.
Contact Name	Mark Feil
Title	Compliance Manager

1.2 Manufacturer

Company	Ubiquiti Inc. 685 Third Avenue, 27th Floor New York, NY 10017 U.S.A.
Contact Name	Mark Feil
Title	Compliance Manager

2 Equipment Under Test (EUT)

2.1 Identification of EUT

Brand Name	airFiber
Model Number	Wave-Nano
Serial Number	245A4C2F9E68
Dimensions (cm)	25.7 x 25.7 x 11.4

2.2 Description of EUT

The Wave-Nano is a 60 GHz point-to-multipoint customer premise equipment that features wave technology with a 1.5+ Gbps throughput rate. The Wave-Nano is also equipped with a 5 GHz WiFi 6 backup radio to sustain connectivity during a 60 GHz link disruption caused by inclement weather conditions. A Bluetooth LE transceiver is included for device management. The Wave-Nano is an outdoor device and has an Ethernet port which is used for data transfer and to provide power using an Ubiquiti U-POE-at 48 volt PoE power adapter.

This report covers the circuitry of the device subject to FCC Part 15, Subpart C. The circuitry of the device subject to FCC Part 15 Subpart B was found to be compliant and is covered under a separate Unified Compliance Laboratory test report.

2.3 EUT and Support Equipment

The EUT and support equipment used during the test are listed below.

Brand Name **Model Number** **Serial Number**	**Description**	**Name of Interface Ports / Interface Cables**
BN: airFiber MN: Wave-Nano (Note 1) SN: 245A4C2F9E68	Wireless Access Poing	See Section 2.4
BN: Ubiquiti MN: U-POE-at SN: N/A	PoE Power Adapter	Shielded or Un-shielded cat 5e cable
BN: Dell MN: XPS 13 SN: N/A	Laptop Computer	Shielded or Un-shielded cat 5e cable

Notes: (1) EUT
(2) Interface port connected to EUT (See Section 2.4)

The support equipment listed above was not modified in order to achieve compliance with this standard.

2.4 Interface Ports on EUT

Name of Ports	No. of Ports Fitted to EUT	Cable Description/Length
AC (PoE Injector)	1	3 conductor power cord/80cm
LAN (PoE Injector)	1	Shielded or Un-shielded cat 5e cable/1 meter
Data	1	Shielded or Un-shielded cat 5e cable/1 meter

2.5 Operating Environment

Power Supply	120 Volts ac to 48 Volts PoE
AC Mains Frequency	60 Hz
Temperature	21.9 – 22.2 °C
Humidity	16.6 – 24.3 %
Barometric Pressure	1007 - 1021 mBar

2.6 Operating Modes

The Wave-Nano was connected to a personal computer laptop and tested using test software in order to enable to constant duty cycle greater or equal to 98% of the WiFi transceiver. The measurements within this report are corrected to reference a 100% duty cycle.

2.7 EUT Exercise Software

EUT firmware version 1.0 was used to operate the transmitter using a constant transmit mode.

2.8 Block Diagram of Test Configuration

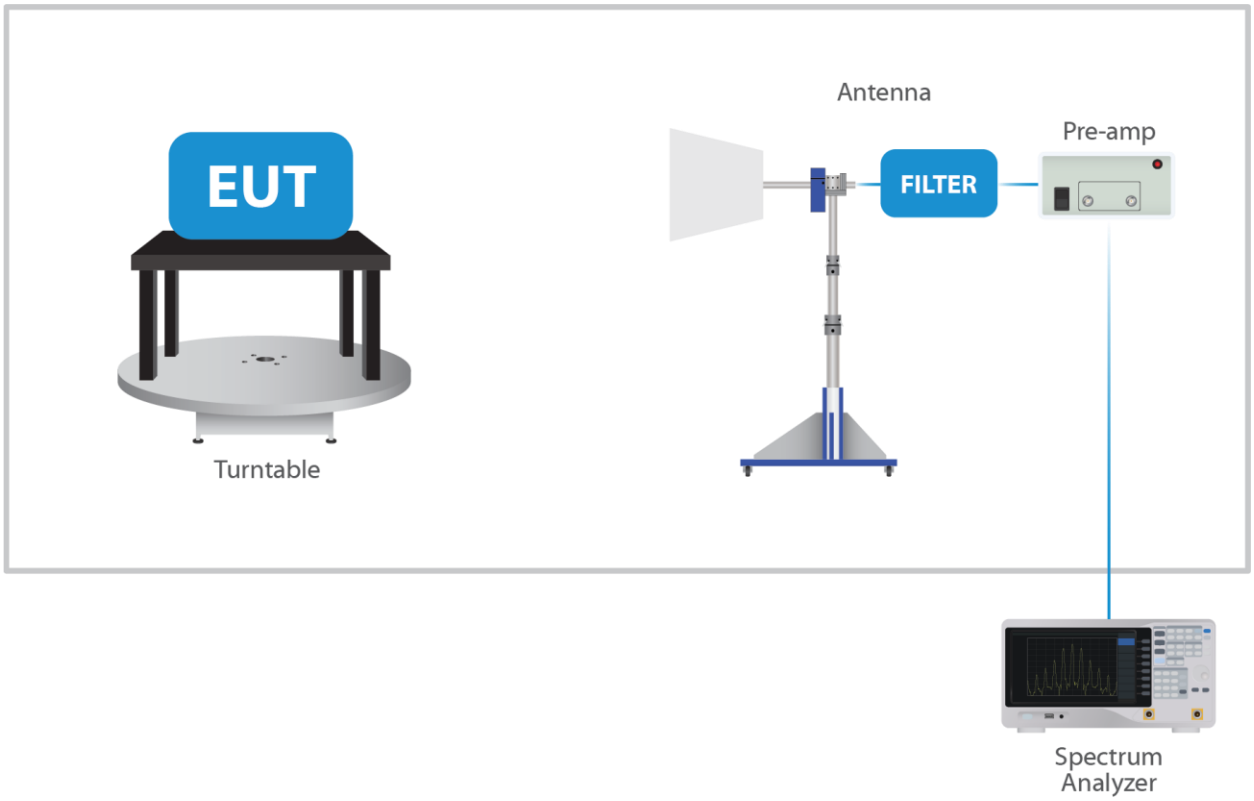


Diagram 1: Test Configuration Block Diagram

2.9 Modification Incorporated/Special Accessories on EUT

There were no modifications made to the EUT during testing to comply with the specification.

2.10 Deviation, Opinions Additional Information or Interpretations from Test Standard

There were no deviations, opinions, additional information or interpretations from the test specification.

3 Test Specification, Method and Procedures

3.1 Test Specification

Title	47 CFR FCC Part 15, Subpart C 15.203, 15.207 and 15.255 Limits and methods of measurement of radio interference characteristics of radio frequency devices.
Purpose of Test	The tests were performed to demonstrate initial compliance

3.2 Methods & Procedures

3.2.1 47 CFR FCC Part 15 Section 15.203

See test standard for details.

3.2.2 47 CFR FCC Part 15 Section 15.207

See test standard for details.

3.2.3 47 CFR FCC Part 15 Section 15.255

See test standard for details.

3.3 FCC Part 15, Subpart C

3.3.1 Summary of Tests

FCC Section	ISED Section	Environmental Phenomena	Frequency Range (MHZ)	Result
15.203	N/A	Antenna requirements	Structural Requirement	Compliant
15.207	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.255 (e)	RSS-210 § J.4	Bandwidth Requirement	57000 - 71000	Compliant
15.255 (c)	RSS-210 § J.4	Peak Output Power	57000 - 71000	Compliant
15.255 (d)	RSS-210 § J.3	Antenna Conducted Spurious Emissions	0.009 to 40000	Compliant
15.255 (d)	RSS-210 § J.3	Radiated Spurious Emissions	0.009 to 200000	Compliant
15.255 (c)	RSS-210 § J.4	Peak Power Spectral Density	57000 - 71000	Compliant
15.255 (f)	RSS-210 § J.6	Frequency Stability	57000 - 71000	Compliant
The testing was performed according to the procedures in ANSI C63.10-2013, KDB 558074 and 47 CFR Part 15.				

3.4 Results

In the configuration tested, the EUT complied with the requirements of the specification.

3.5 Test Location

Testing was performed at the Unified Compliance Laboratory 3-Meter and 10-Meter chambers located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2022. This site has also been registered with Innovations, Science and Economic Development (ISED) department and was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until 30 June 2022. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED.

4 Test Equipment

4.1 Conducted Emissions at Mains Ports

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	AFJ	FFT3010	UCL-6754	12/8/2021	12/8/2022
LISN	AFJ	LS16C/10	UCL-6749	12/6/2021	12/6/2023
Cat6 ISN	Teseq	ISN T8-Cat6	UCL-2971	1/30/2022	1/30/2023
ISN	Teseq	ISN T800	UCL-2974	6/4/2021	6/4/2022
LISN	Com-Power	LIN-120C	UCL-2612	1/6/2022	1/6/2023
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	UCL	Revision 1	UCL-3107	N/A	N/A

Table 1: List of equipment used for Conducted Emissions Testing at Mains Port

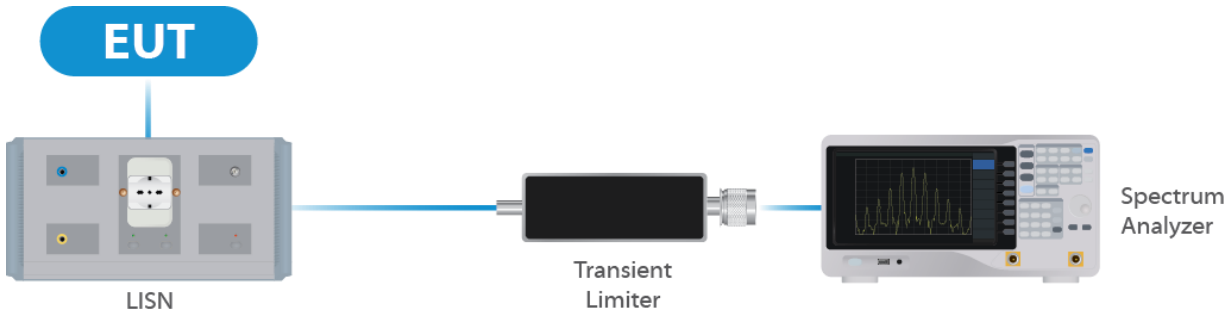


Figure 1: Conducted Emissions Test

4.2 Radiated Emissions

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	Keysight	N9038A	UCL-2778	6/21/2021	6/21/2022
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	10/7/2021	10/7/2022
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	7/8/2021	7/8/2022
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	11/16/2020	11/16/2022
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	5/21/2020	5/21/2022
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	10/7/2021	10/7/2022
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A
Conical Horn Antenna	VDI	WR15CH	UCL-5774	N/A	N/A

Conical Horn Antenna	VDI	WR12CH	UCL-4869	N/A	N/A
Conical Horn Antenna	VDI	WR19CH	UCL-4873	N/A	N/A
Conical Horn Antenna	VDI	WR5.1CH	UCL-4880	N/A	N/A
Conical Horn Antenna	VDI	WR8.0CH	UCL-4886	N/A	N/A
Spectrum Analyzer Extension Module	VDI	SAX 705	UCL-4887	N/A	N/A
Spectrum Analyzer Extension Module	VDI	SAX 706	UCL-4883	N/A	N/A
USB Switch	Keysight	U1816C	UCL-4957	N/A	N/A
Spectrum Analyzer	Keysight	N9041B	UCL-4964	1/28/2022	1/27/2023

Table 2: List of equipment used for Radiated Emissions

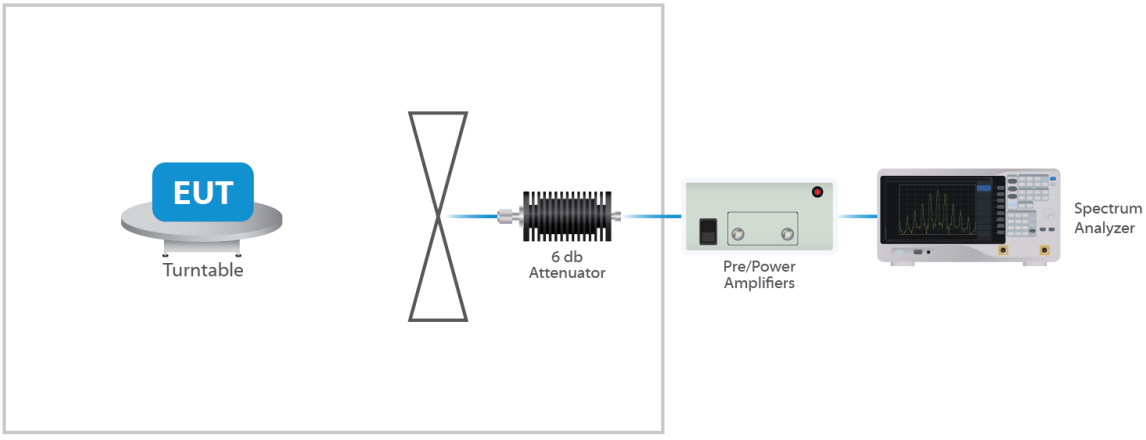


Figure 2: Radiated Emissions Test

4.3 Equipment Calibration

All applicable equipment is calibrated using either an independent calibration laboratory or Unified Compliance Laboratory personnel at intervals defined in ANSI C63.4:2014 following outlined calibration procedures. All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and is available for examination upon request.

4.4 Measurement Uncertainty

Test	Uncertainty (± dB)	Confidence (%)
Conducted Emissions	1.44	95
Radiated Emissions (9 kHz to 30 MHz)	2.50	95
Radiated Emissions (30 MHz to 1 GHz)	4.38	95
Radiated Emissions (1 GHz to 18 GHz)	4.37	95
Radiated Emissions (18 GHz to 40 GHz)	3.93	95
Direct Connect Tests	**K Factor**	**Value**
Emissions Bandwidth	2	2.0%
Output Power	2	1.0 dB
Peak Power Spectral Density	2	1.3 dB
Band Edge	2	0.8 dB
Transmitter Spurious Emissions	2	1.8 dB

5 Test Results

5.1 §15.203 Antenna Requirements

The EUT uses an integral dish antenna. The maximum gain of the antenna per chain is 41 dBi. This is an 802.11 device and utilizes CDD as described in KDB 662911 D01. The antenna is not user replaceable.

Results

The EUT complied with the specification

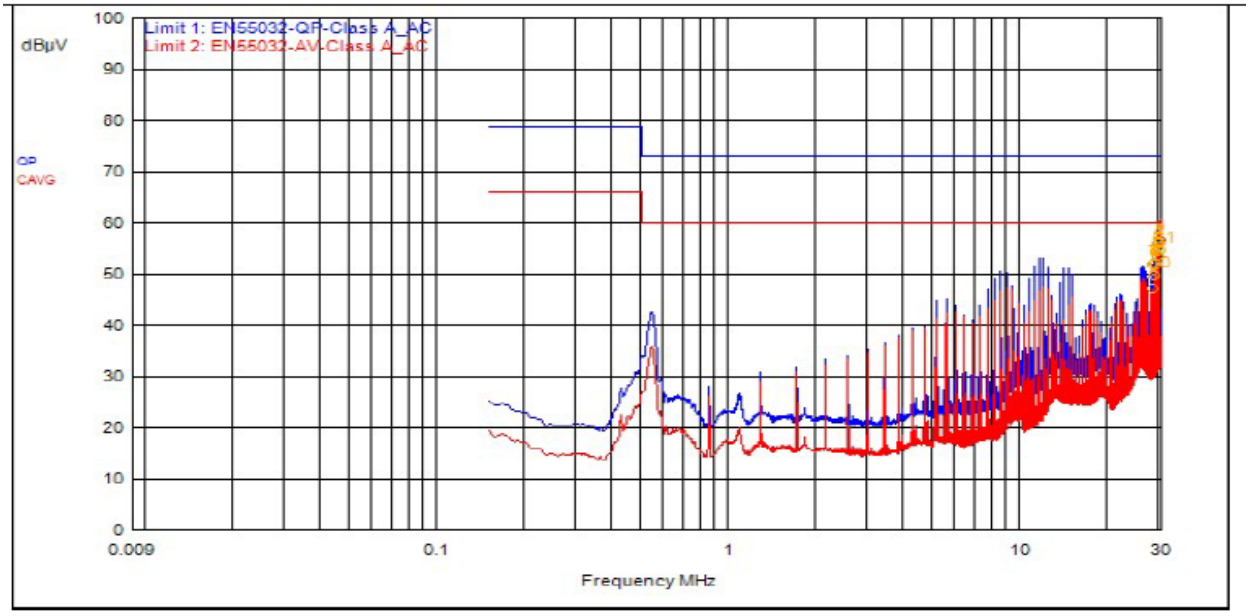
5.2 Conducted Emissions at Mains Ports Data

Frequency (MHZ)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
11.43	Hot Lead	Quasi-Peak (Note 2)	53.7	73.0	- 19.30
11.85	Hot Lead	Quasi-Peak (Note 2)	53.7	73.0	- 19.30
11.00	Hot Lead	Quasi-Peak (Note 2)	52.5	73.0	- 20.50
29.61	Hot Lead	Quasi-Peak (Note 2)	51.5	73.0	- 21.50
29.61	Neutral Lead	Quasi-Peak (Note 2)	56.7	73.0	- 16.30
29.61	Neutral Lead	Quasi-Peak (Note 2)	56.1	73.0	- 16.90
29.19	Neutral Lead	Quasi-Peak (Note 2)	56.0	73.0	- 17.00
28.77	Neutral Lead	Quasi-Peak (Note 2)	54.5	73.0	- 18.50
28.36	Neutral Lead	Quasi-Peak (Note 2)	52.3	73.0	- 20.70
27.93	Neutral Lead	Quasi-Peak (Note 2)	52.0	73.0	- 21.00
29.19	Neutral Lead	Average (Note 2)	53.7	60.0	- 6.30
28.77	Neutral Lead	Average (Note 2)	52.0	60.0	- 8.00
27.92	Neutral Lead	Average (Note 2)	47.3	60.0	- 12.70
28.34	Neutral Lead	Average (Note 2)	49.7	60.0	- 10.30
29.61	Neutral Lead	Average (Note 2)	54.6	60.0	- 5.40

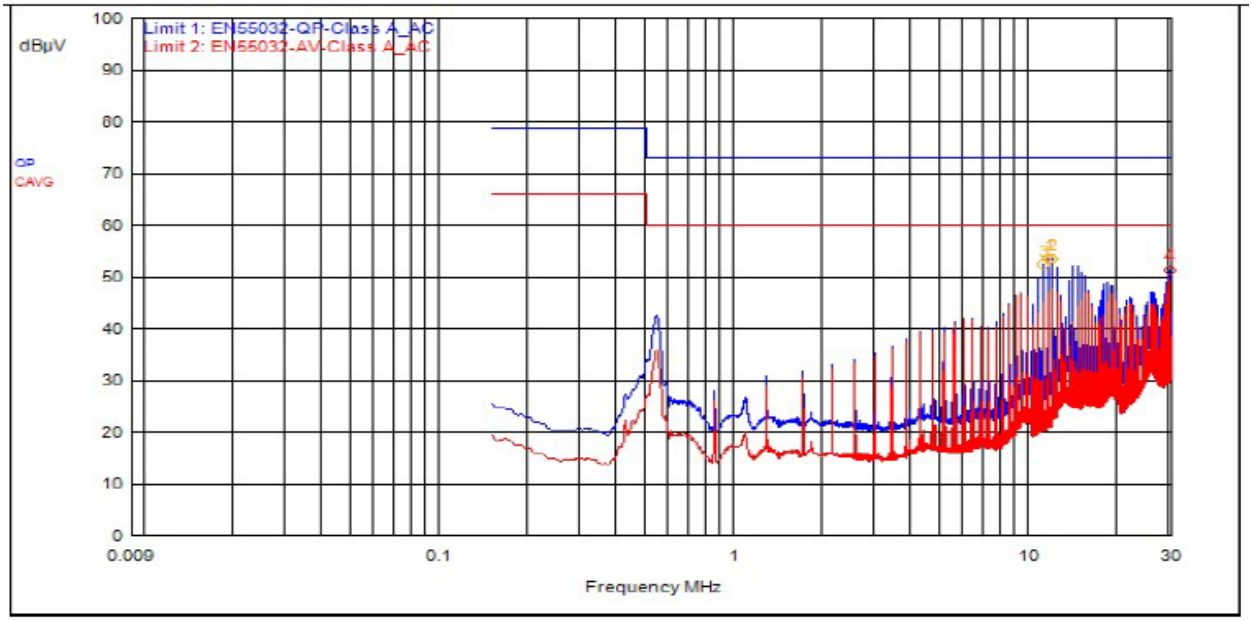
Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit: therefore, the EUT was deemed to meet both the average and quasi-peak limits.
Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.
Note 3: The device the transceiver is in is a Class A device and the limits shown are from §15.207 which are the same as the limits for a Class B device under §15.107. These emissions were investigated and were found to be at the same level regardless of whether the transceivers of the device were not powered, powered and idle, or powered and active, therefore, the conducted emissions of the transceivers were deemed compliant with the requirements of the standard.

Result

The EUT complied with the specification limit.



Graph 1: Conducted Emissions Plot - Neutral



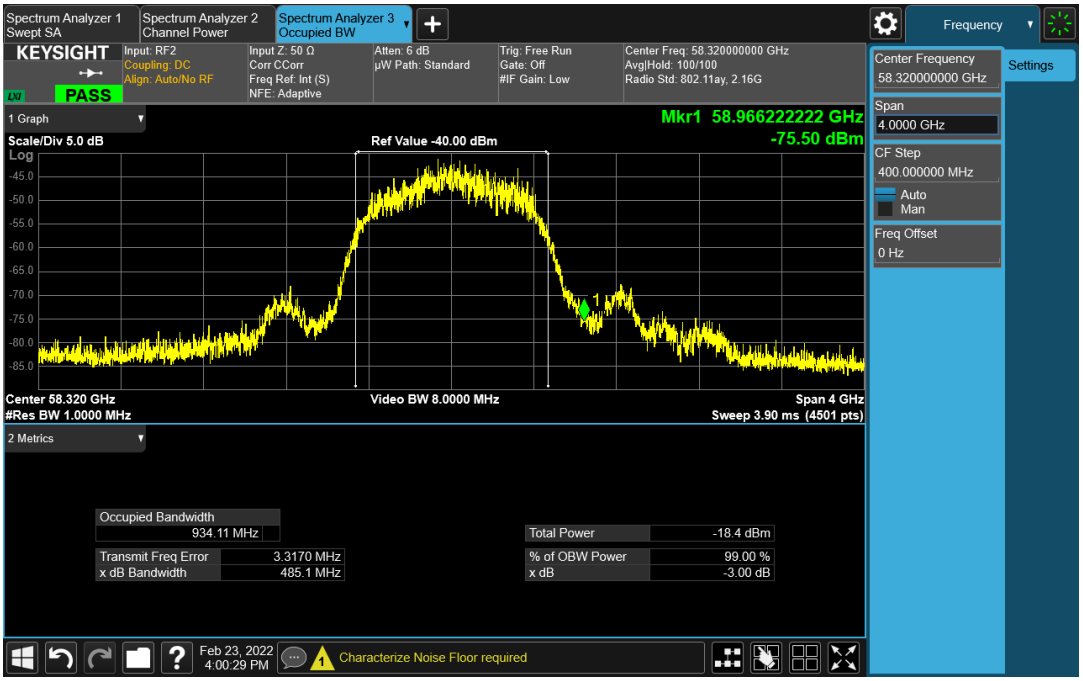
Graph 2: Conducted Emissions Plot – Line 1

5.3 Emissions Bandwidth

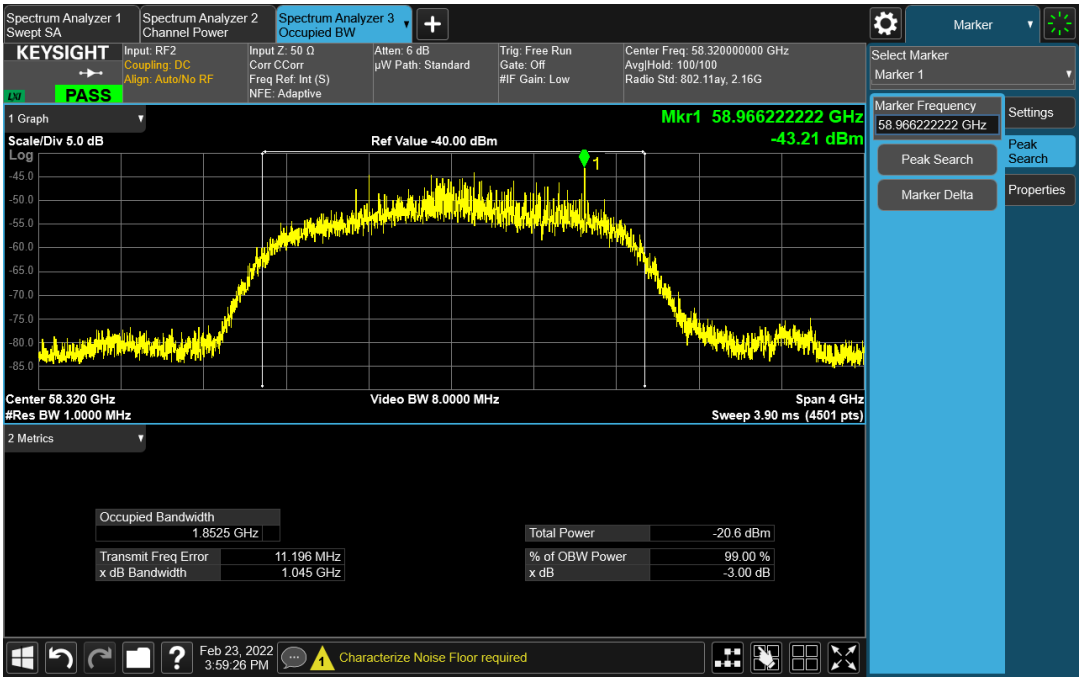
Channel Width (GHz)	Frequency (MHz)	Emissions 99% Bandwidth (MHz)
1.08	58320	934.11
	63720	920.07
	69120	917.98
	70200	933.05
2.16	58320	1852.5
	63720	1868.1
	69120	1875.1

Result

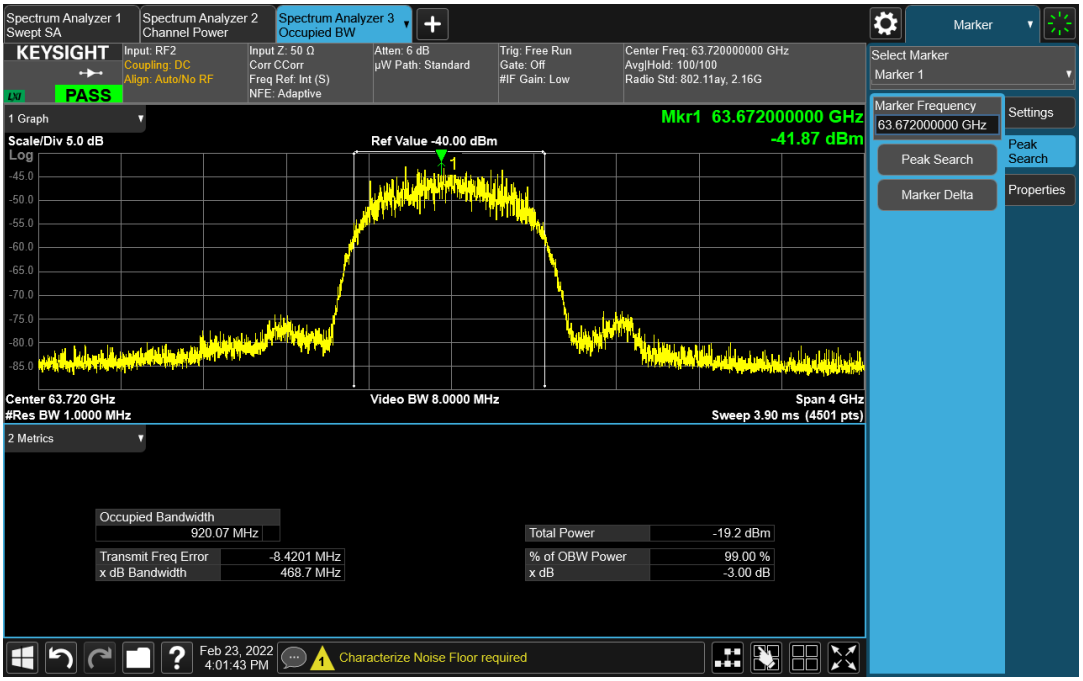
All chains were tested and the highest bandwidth per chain is reported above.
In the configuration tested, the 99% bandwidth was greater than 500 kHz; therefore, the EUT complied with the requirements of the specification. See below for Occupied Channel Bandwidth plots.



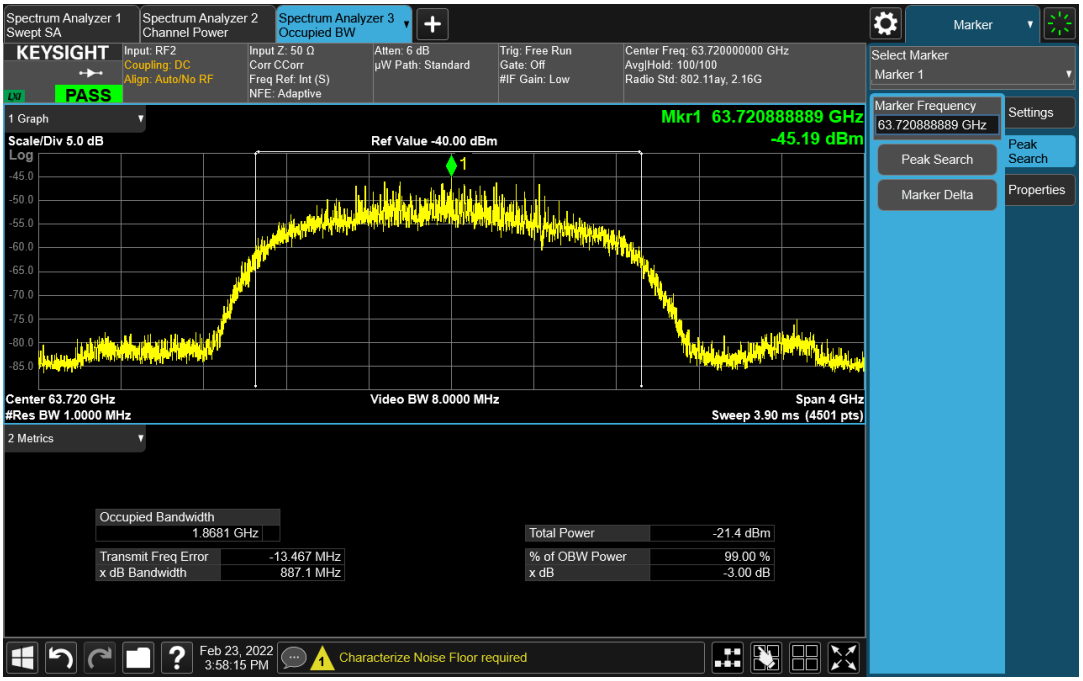
Occupied Channel Bandwidth Low Channel 1 GHz Bandwidth



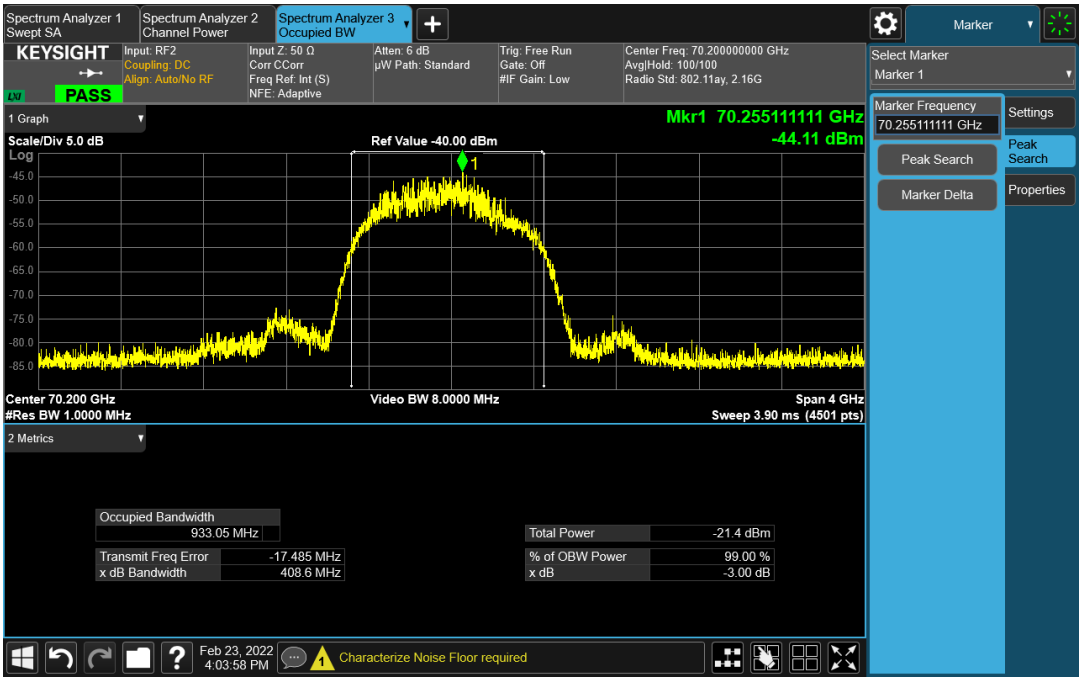
Occupied Channel Bandwidth Low Channel 2 GHz Bandwidth



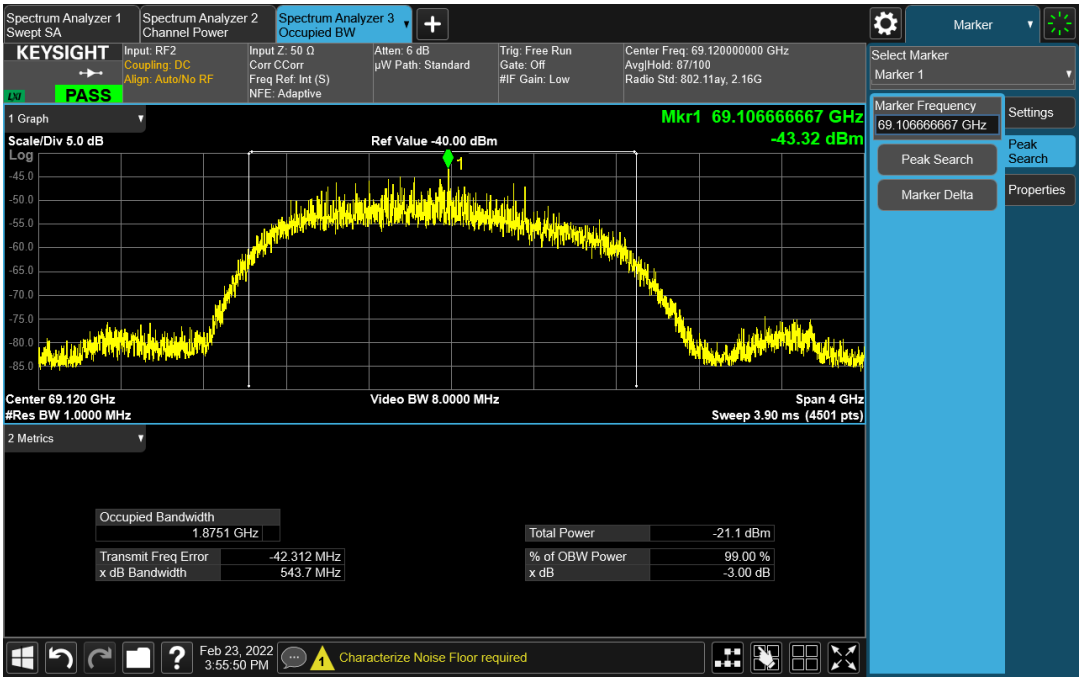
Occupied Channel Bandwidth Mid Channel 1 GHz Bandwidth



Occupied Channel Bandwidth Mid Channel 2 GHz Bandwidth



Occupied Channel Bandwidth High Channel 1 GHz Bandwidth



Occupied Channel Bandwidth High Channel 2 GHz Bandwidth

5.4 §15.255(c)(1)(i) Maximum Average Output Power

The maximum average RF EIRP measured for this device was 24.0 dBm or 0.251 Watts. For fixed point-to-point transmitters located outdoors, the average power of any emission shall not exceed 82 dBm, and shall be reduced by 2 dB for every dB that the antenna gain is less than 51 dBi. The peak power of any emission shall not exceed 85 dBm, and shall be reduced by 2 dB for every dB that the antenna gain is less than 51 dBi. The antenna has a gain of 41 dBi.

Nominal BW	Frequency (MHz)	Air Path Loss (dB)	Total Correction	Peak SA Reading	Conducted Peak	Peak Conducted Limit	EIRP Peak	Peak EIRP Limit
1.08	**58320**	77.6	56.4	-18.4	23.0	27	64.0	65
	63720	78.4	56.8	-19.2	22.6	27	63.6	65
	69120	79.1	57.5	-18.5	24.0	27	65.0	65
	70200	79.2	57.3	-21.4	20.9	27	61.9	65
2.16	**58320**	77.6	56.4	-20.6	20.8	27	61.8	65
	63720	78.4	56.8	-21.4	20.4	27	61.4	65
	69120	79.1	57.3	-21.1	21.2	27	62.2	65

Nominal BW	Frequency (MHz)	Air Path Loss (dB)	Total Correction	AvG SA Reading	EIRP Avg	Avg EIRP Limit	Avg Delta
1.08	**58320**	77.6	56.4	-23.4	59.0	62	3.0
	63720	78.4	56.8	-25.0	57.8	62	4.2
	69120	79.1	57.5	-23.9	59.6	62	2.4
	70200	79.2	57.3	-25.0	58.3	62	3.7
2.16	**58320**	77.6	56.4	-24.1	58.4	62	3.6
	63720	78.4	56.8	-25.0	57.8	62	4.2
	69120	79.1	57.3	-24.0	59.3	62	2.7

Result

In the configuration tested, the maximum average RF EIRP was less than 62 dBm; therefore, the EUT complied with the requirements of the specification.

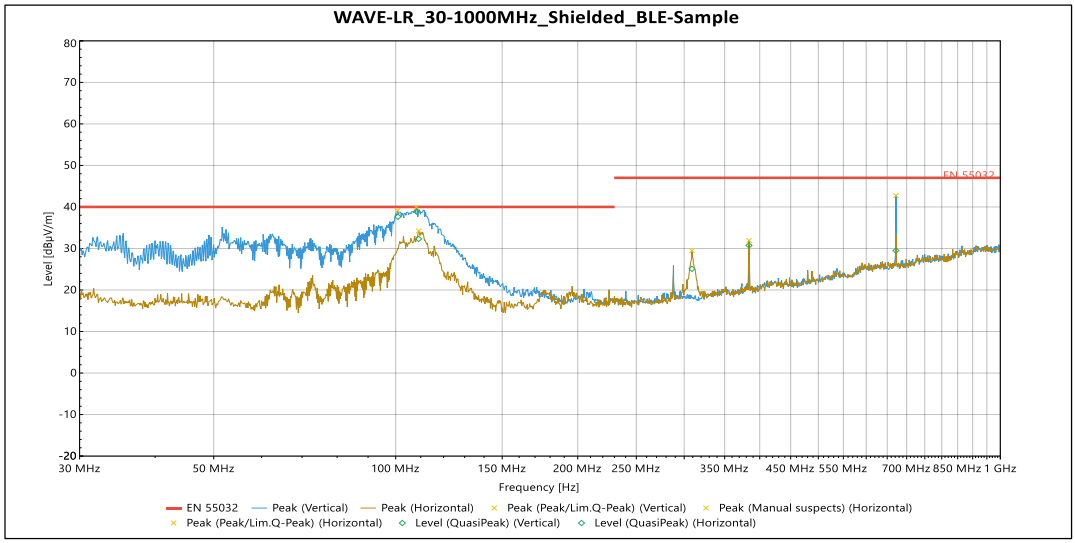
5.5 §15.255(d) Spurious Emissions

5.5.1 Radiated Spurious Emissions in the Restricted Bands of §15.205

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emissions was investigated to measure any radiated emissions in the restricted bands. The following tables show measurements of any emissions that fell into the restricted bands of §15.205. The tables show the worst-case emissions measured from the EUT. For frequencies between 18.0 and 40 GHz, a measurement distance of 1 meter was used. The noise floor was a minimum of 6 dB below the limits. The emissions in the restricted bands must meet the limits specified in §15.209. Tabular data for each of the spurious emissions is shown below for each of the units. The BLE radio and 60 GHz radio are active during all plots. The limit above 40 GHz is 90pW/cm2. The measurement distance above 40 GHz was 3 meters.

Result

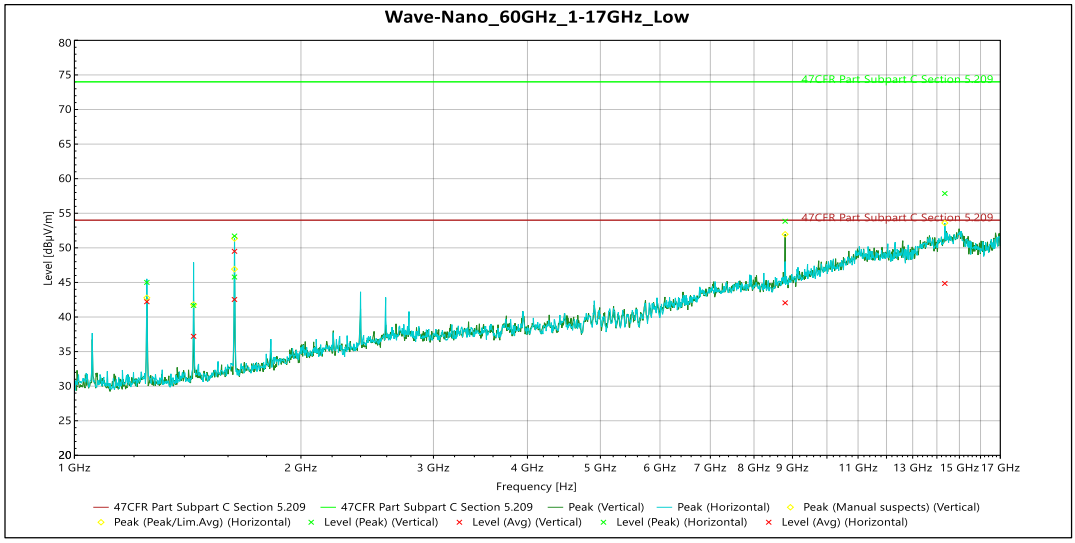
All emissions in the restricted bands of §15.205 met the limits specified in §15.209. All emissions met the limits set out in 15.255(d) therefore, the EUT complies with the specification.



QuasiPeak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Correction (dB)
100.83 MHz	37.627	40	-2.373	340	1.378	Vertical	-12.8
108.29 MHz	38.899	40	-1.101	102	1.053	Vertical	-13.591
671.94 MHz	29.487	47	-17.513	301	2.656	Vertical	-4.084
109.13 MHz	32.305	40	-7.695	56	3.826	Horizontal	-13.784
308.98 MHz	25.1	47	-21.9	183	2.535	Horizontal	-11.098
383.97 MHz	30.743	47	-16.257	163	1.791	Horizontal	-9.171

Table 3: 30 – 1000 MHz (worst case)



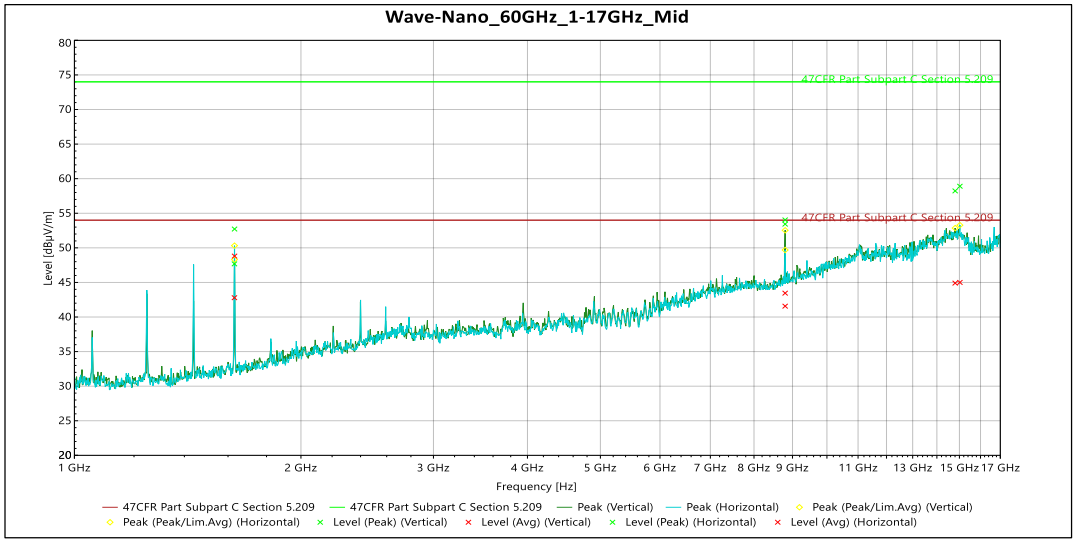
Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.2481 GHz	45	74	-29	140	1.852	Vertical	-10.244
1.44 GHz	41.674	74	-32.326	182	1.63	Vertical	-9.709
1.6319 GHz	45.78	74	-28.22	122	2	Vertical	-8.88
8.8003 GHz	53.851	74	-20.149	326	2.172	Vertical	9.995
1.6321 GHz	51.712	74	-22.288	244	2.398	Horizontal	-8.879
14.344 GHz	57.865	74	-16.135	78	1.636	Horizontal	15.866

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.2481 GHz	42.206	54	-11.794	140	1.852	Vertical	-10.244
1.44 GHz	37.206	54	-16.794	182	1.63	Vertical	-9.709
1.6319 GHz	42.533	54	-11.467	122	2	Vertical	-8.88
8.8003 GHz	42.05	54	-11.95	326	2.172	Vertical	9.995
1.6321 GHz	49.502	54	-4.498	244	2.398	Horizontal	-8.879
14.344 GHz	44.849	54	-9.151	78	1.636	Horizontal	15.866

Table 4: Transmitting at the Lowest Frequency



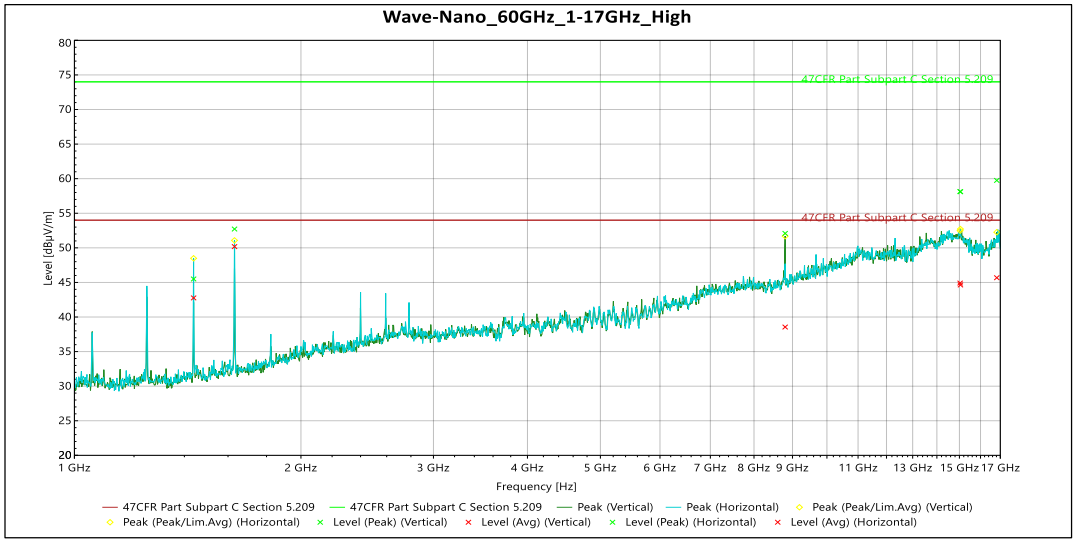
Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.6317 GHz	47.676	74	-26.324	293	3.455	Vertical	-8.881
8.8001 GHz	54.043	74	-19.957	38	3.6	Vertical	9.995
14.806 GHz	58.235	74	-15.765	53	1.523	Vertical	15.929
1.6323 GHz	52.723	74	-21.277	223	2.532	Horizontal	-8.878
8.8001 GHz	53.434	74	-20.566	116	2.35	Horizontal	9.995
15.022 GHz	58.912	74	-15.088	76	2.712	Horizontal	16.034

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
1.6317 GHz	42.794	54	-11.206	293	3.455	Vertical	-8.881
8.8001 GHz	43.447	54	-10.553	38	3.6	Vertical	9.995
14.806 GHz	44.905	54	-9.095	53	1.523	Vertical	15.929
1.6323 GHz	48.815	54	-5.185	223	2.532	Horizontal	-8.878
8.8001 GHz	41.572	54	-12.428	116	2.35	Horizontal	9.995
15.022 GHz	44.997	54	-9.003	76	2.712	Horizontal	16.034

Table 5:Transmitting at the Middle Frequency



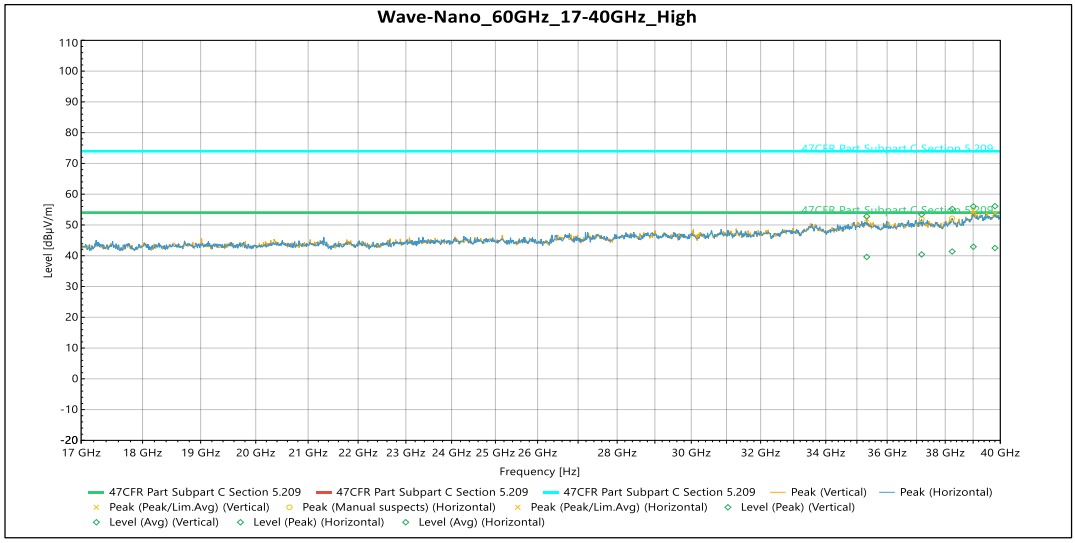
Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
8.8005 GHz	52.087	74	-21.913	314	2.402	Vertical	9.996
15.032 GHz	58.139	74	-15.861	204	4	Vertical	15.962
16.817 GHz	59.746	74	-14.254	359	3.075	Vertical	17.646
1.4401 GHz	45.503	74	-28.497	330	1.876	Horizontal	-9.708
1.6322 GHz	52.718	74	-21.282	224	2.537	Horizontal	-8.878
15.047 GHz	58.11	74	-15.89	111	3.797	Horizontal	15.853

Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
8.8005 GHz	38.555	54	-15.445	314	2.402	Vertical	9.996
15.032 GHz	44.907	54	-9.093	204	4	Vertical	15.962
16.817 GHz	45.685	54	-8.315	359	3.075	Vertical	17.646
1.4401 GHz	42.761	54	-11.239	330	1.876	Horizontal	-9.708
1.6322 GHz	50.177	54	-3.823	224	2.537	Horizontal	-8.878
15.047 GHz	44.631	54	-9.369	111	3.797	Horizontal	15.853

Table 6: Transmitting at the Highest Frequency



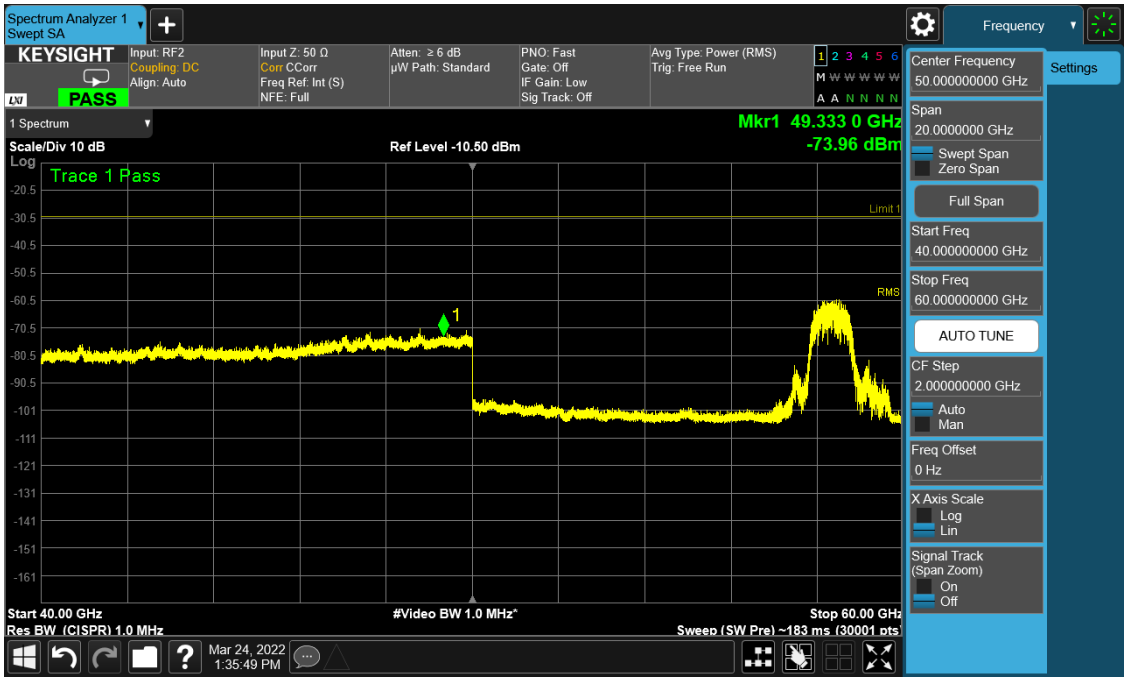
Peak

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
35.323 GHz	52.782	74	-21.218	2	Vertical	0.632
39.009 GHz	56.028	74	-17.972	282	Vertical	3.377
37.174 GHz	53.453	74	-20.547	44	Horizontal	1.024
38.246 GHz	55.209	74	-18.791	197	Horizontal	1.244
39.802 GHz	56.118	74	-17.882	72	Horizontal	3.485

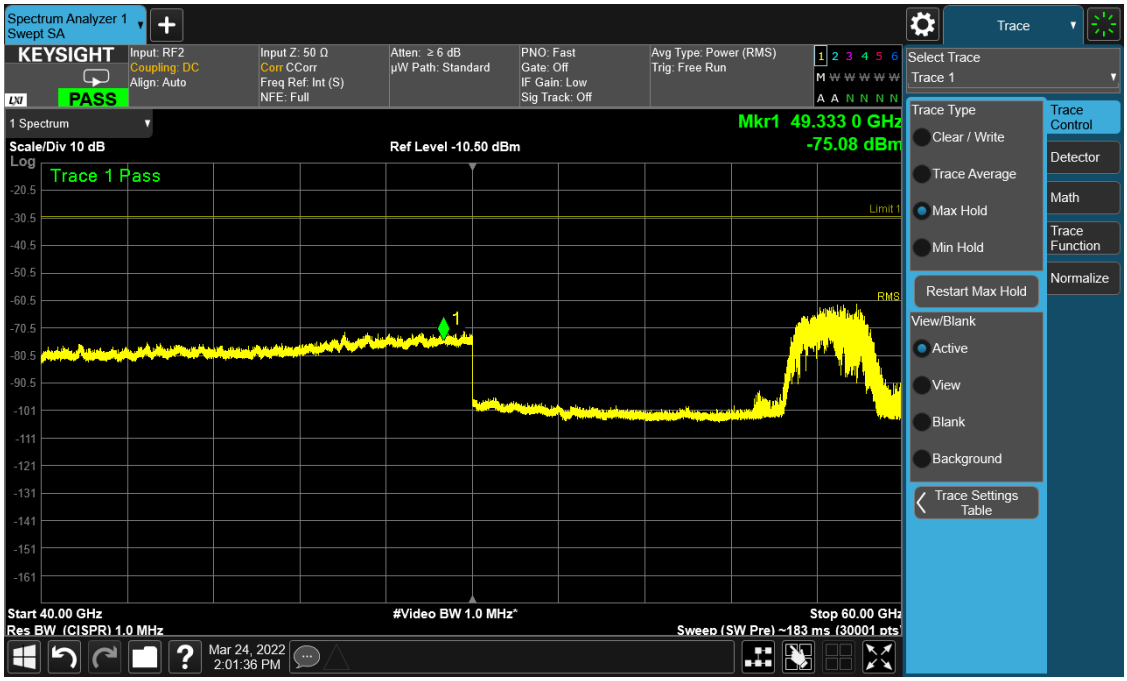
Avg

Frequency	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
35.323 GHz	39.601	54	-14.399	2	Vertical	0.632
39.009 GHz	42.918	54	-11.082	282	Vertical	3.377
37.174 GHz	40.417	54	-13.583	44	Horizontal	1.024
38.246 GHz	41.37	54	-12.63	197	Horizontal	1.244
39.802 GHz	42.515	54	-11.485	72	Horizontal	3.485

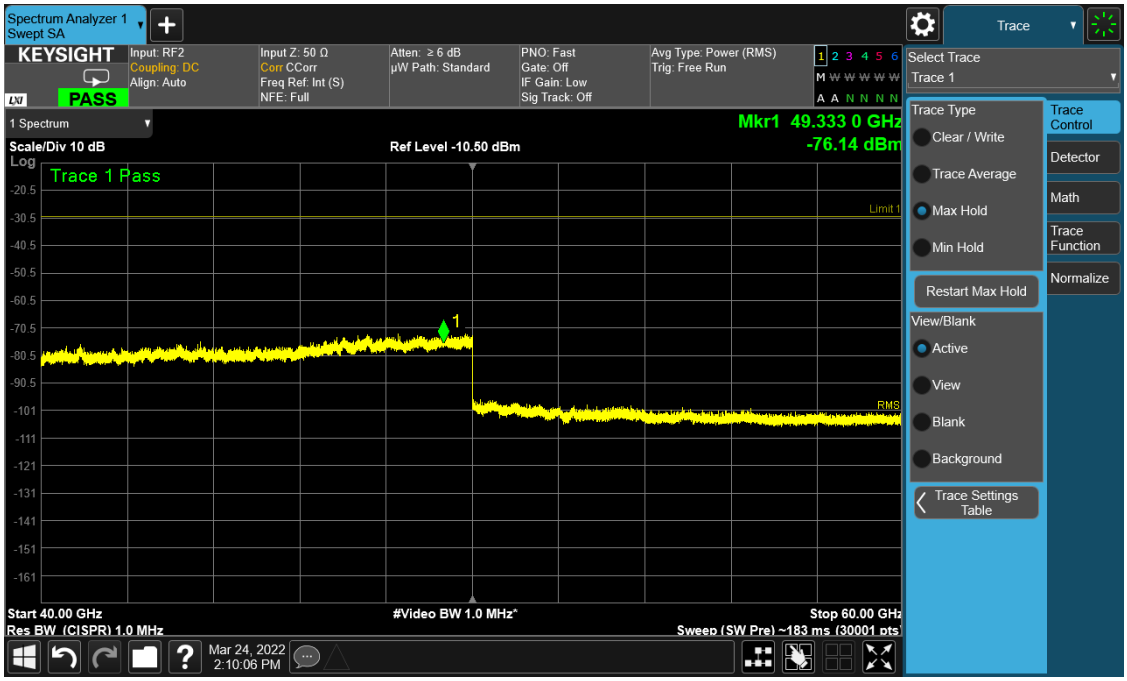
Table 7: Transmitting at the Highest Frequency 17 – 40 GHz (worst case)



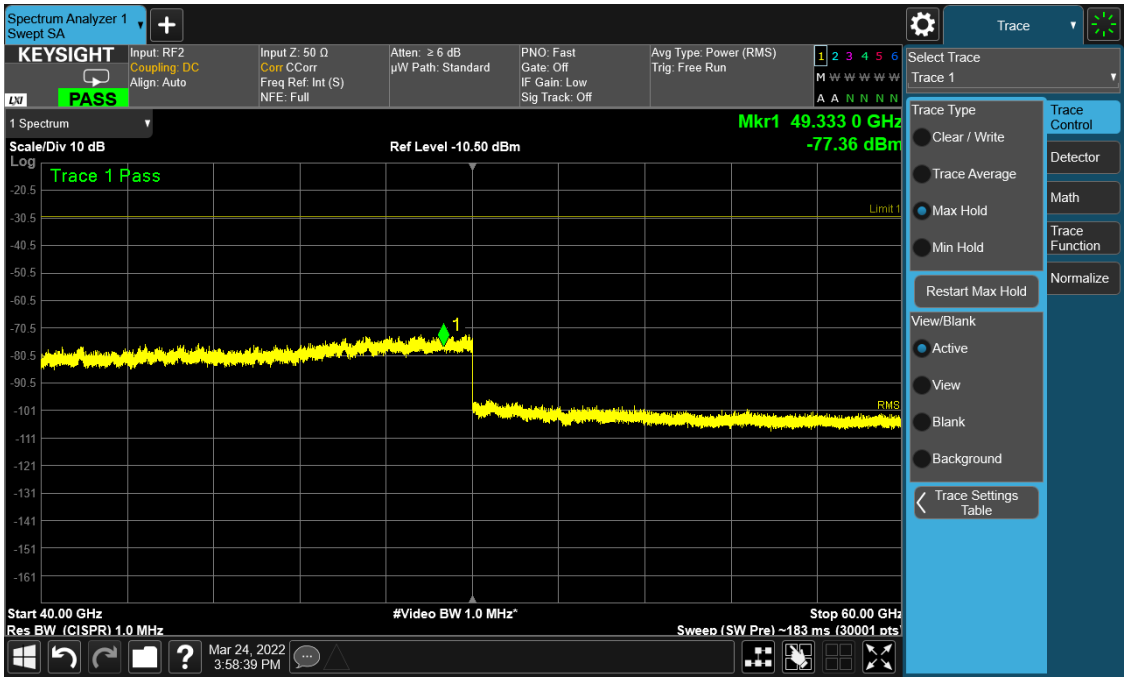
Low Channel 40 – 60 GHz 1 GHz Bandwidth



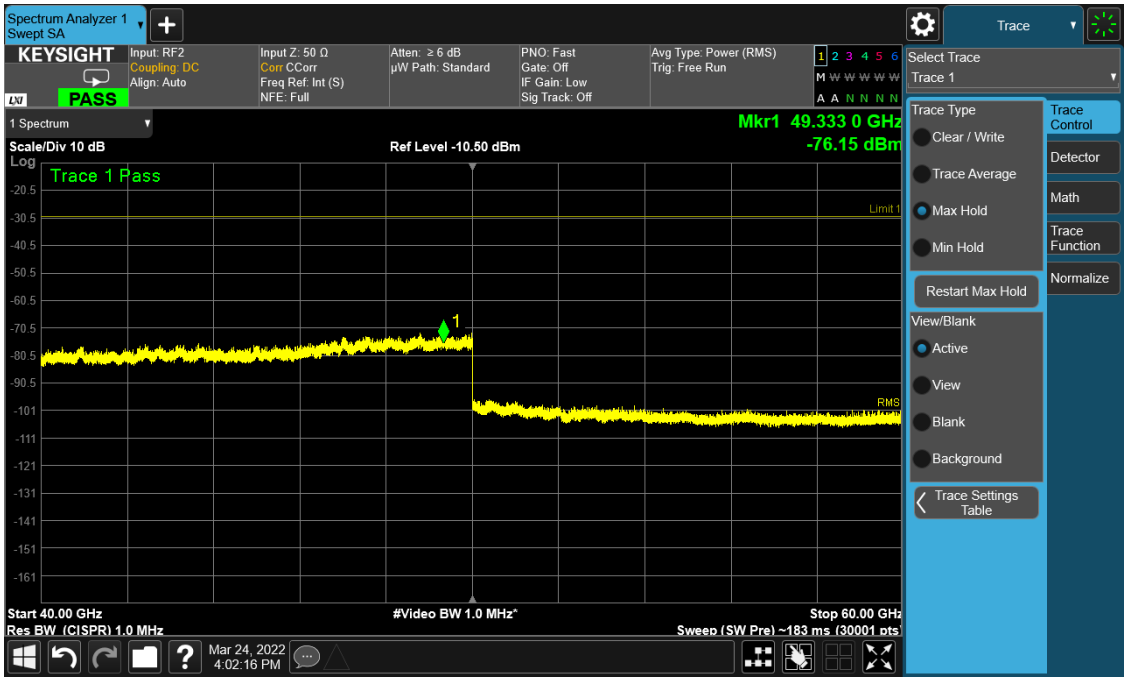
Low Channel 40 – 60 GHz 2 GHz Bandwidth



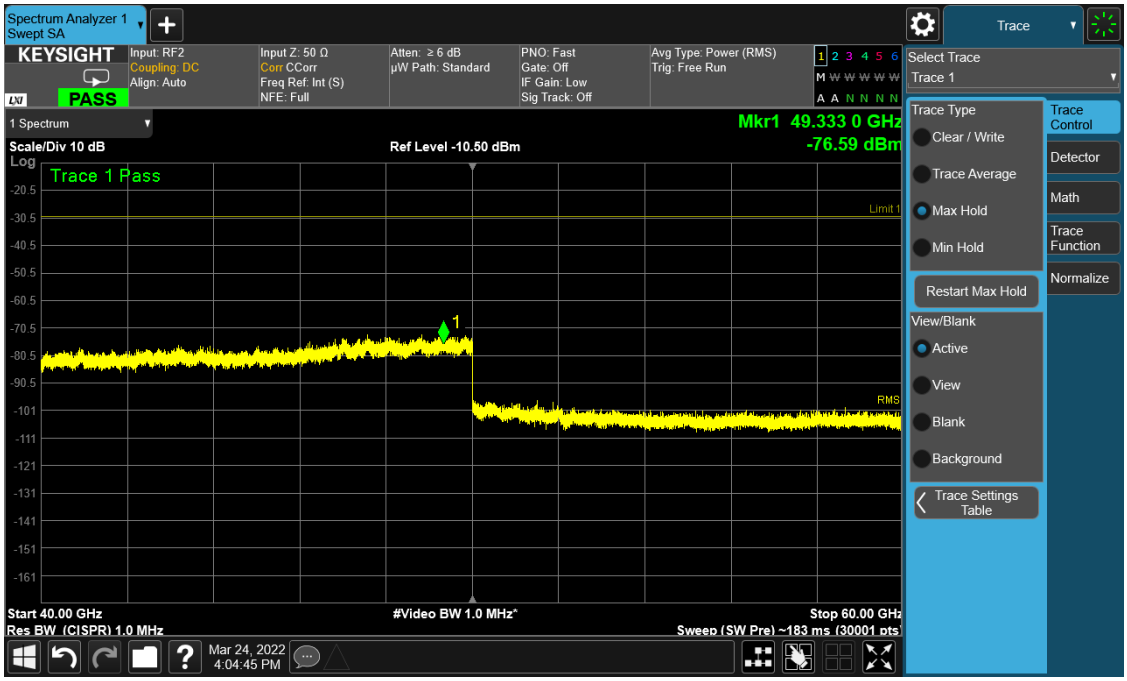
Mid Channel 40 – 60 GHz 1 GHz Bandwidth



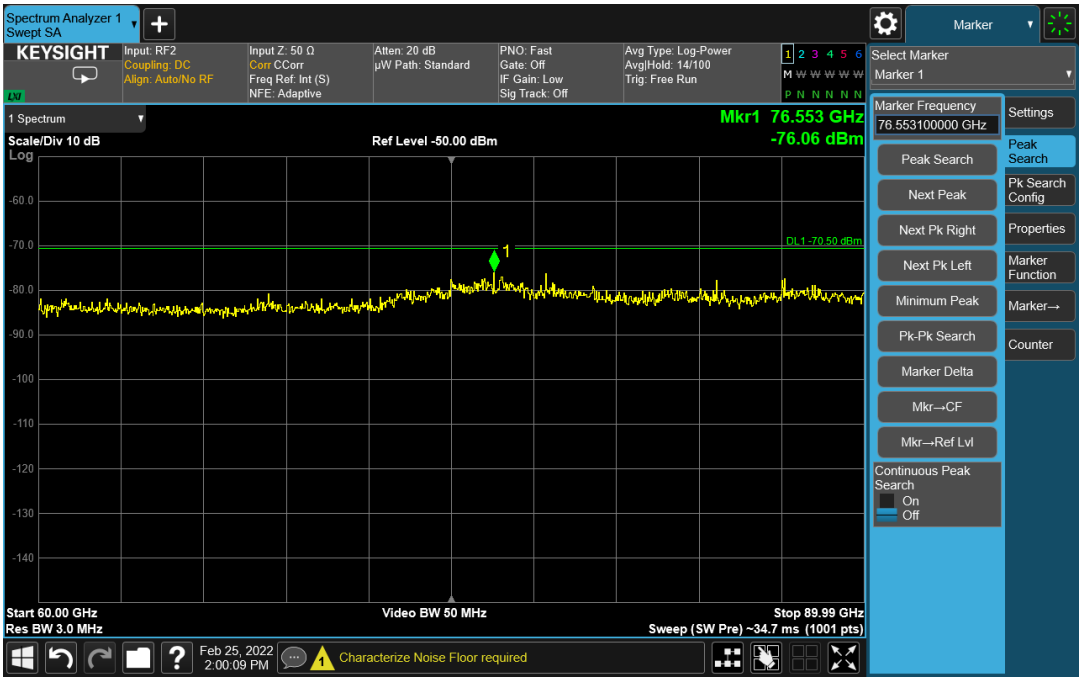
Mid Channel 40 – 60 GHz 2 GHz Bandwidth



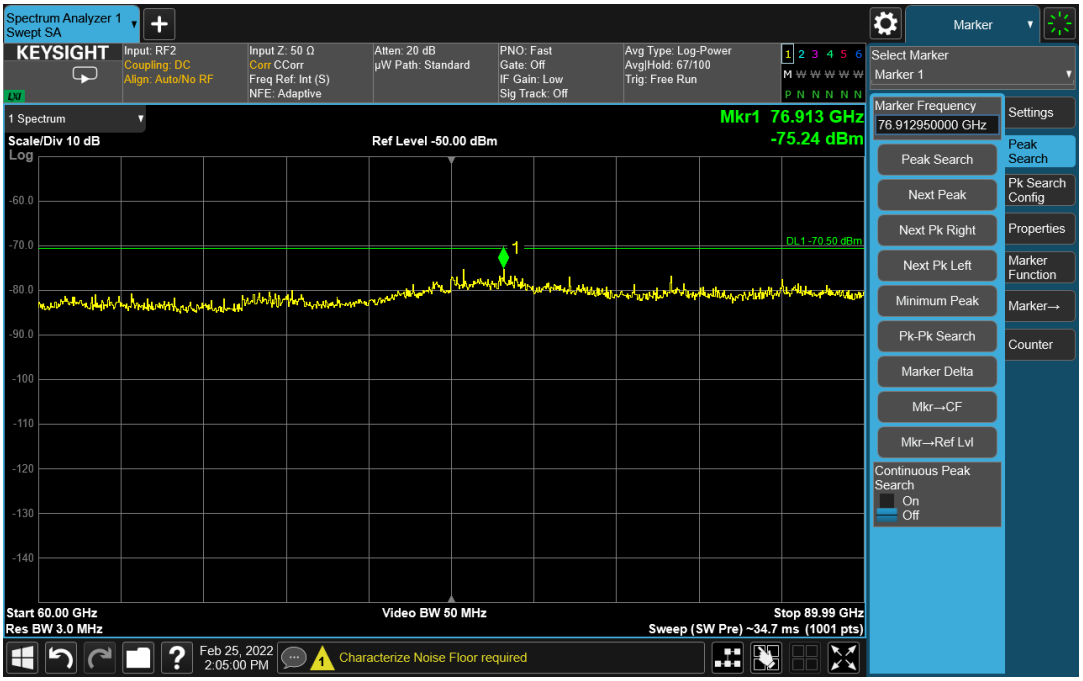
High Channel 40 – 60 GHz 1 GHz Bandwidth



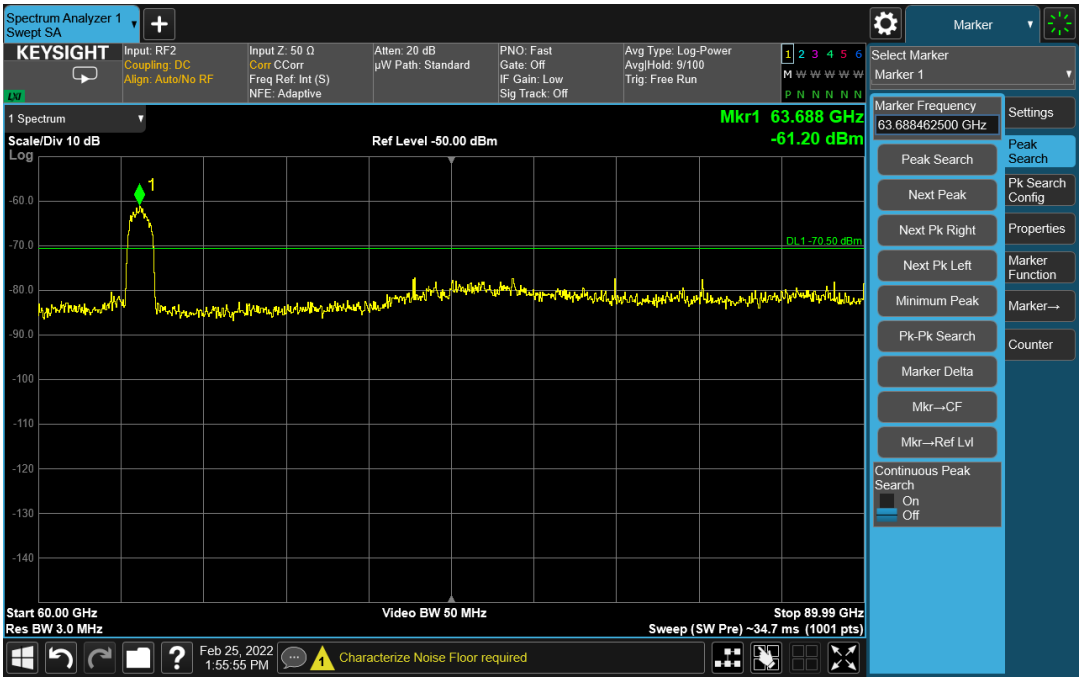
High Channel 40 – 60 GHz 2 GHz Bandwidth



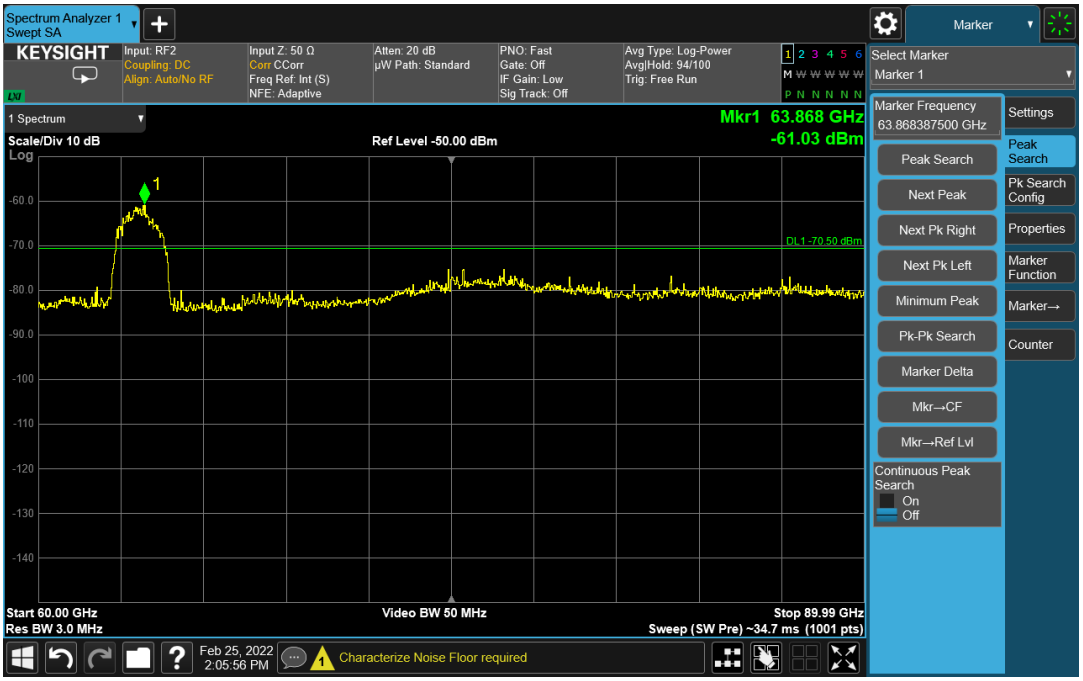
Low Channel 60 – 90 GHz 1 GHz Bandwidth



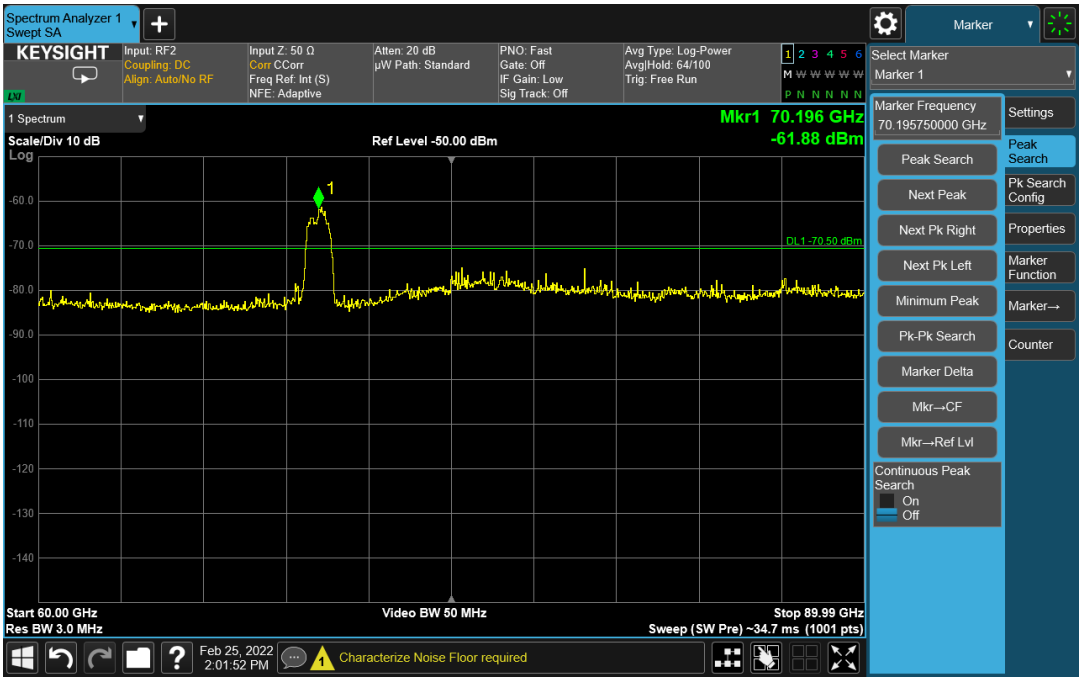
Low Channel 60 – 90 GHz 2 GHz Bandwidth



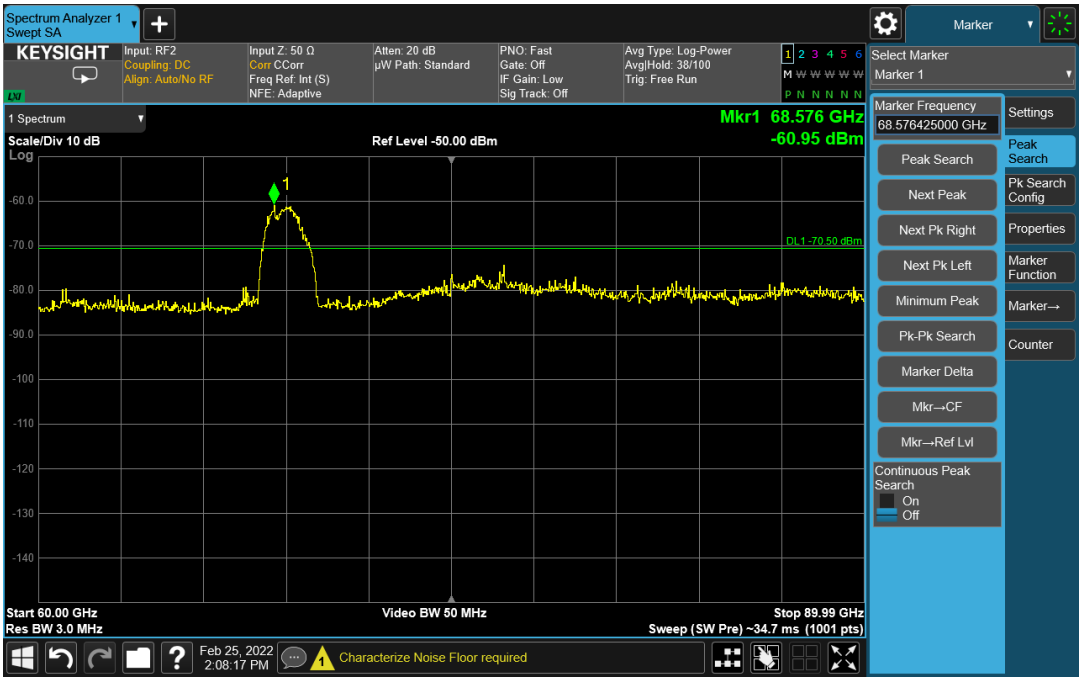
Mid Channel 60 – 90 GHz 1 GHz Bandwidth



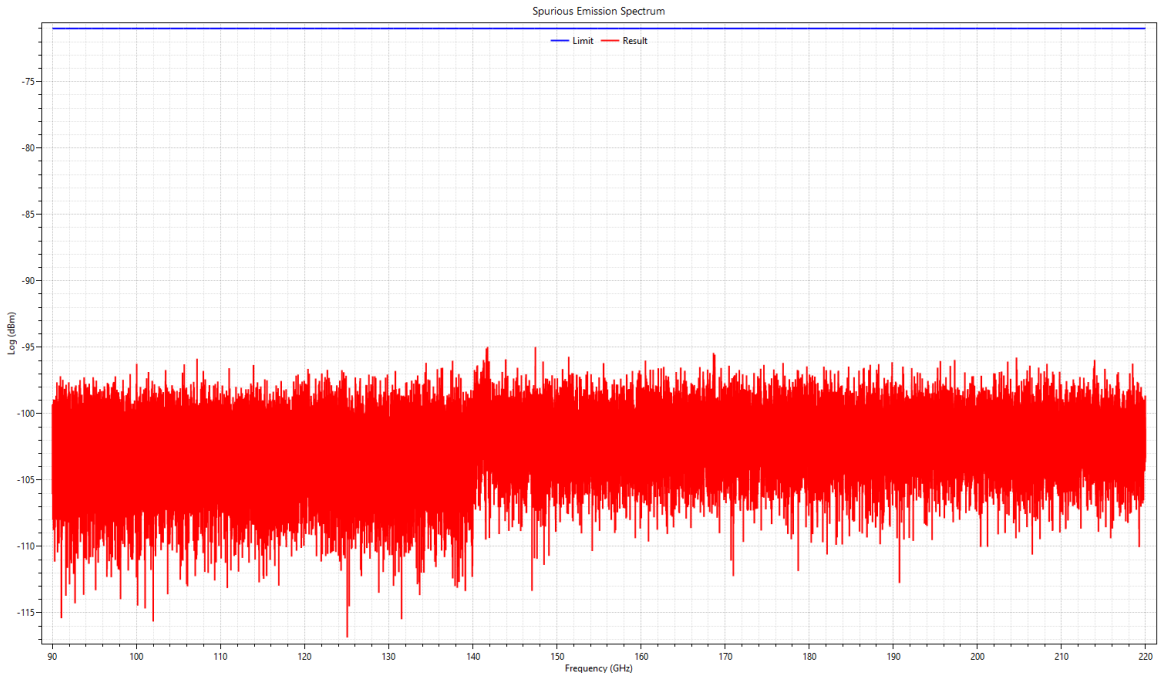
Mid Channel 60 – 90 GHz 2 GHz Bandwidth



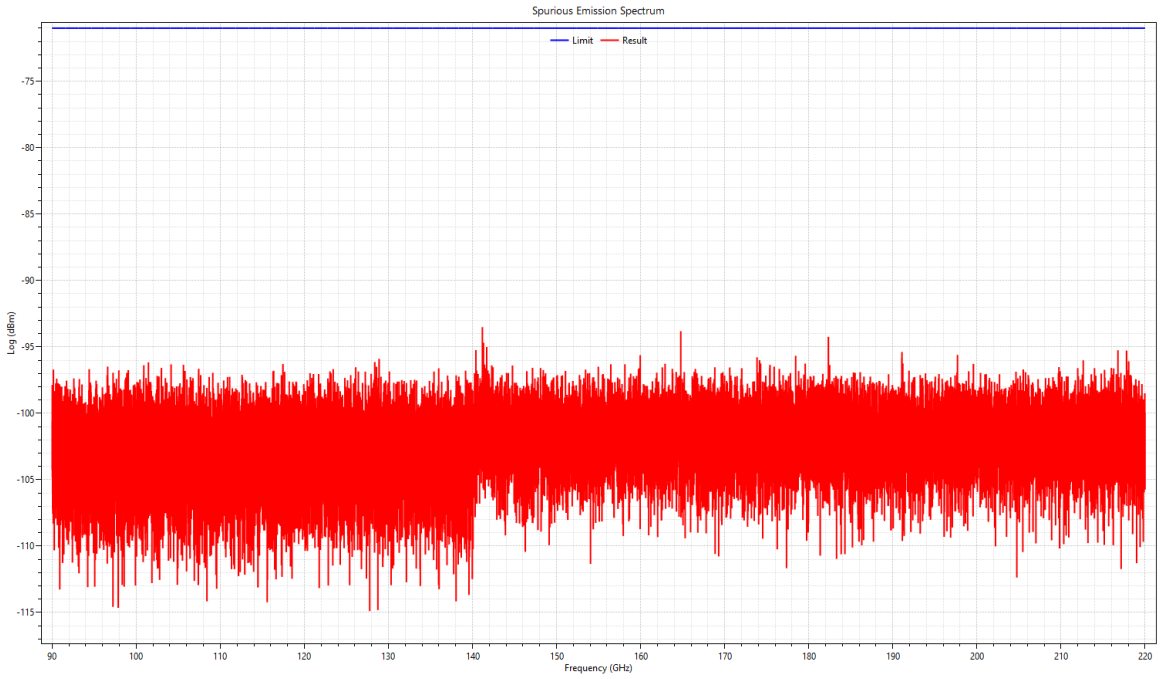
High Channel 60 – 90 GHz 1 GHz Bandwidth



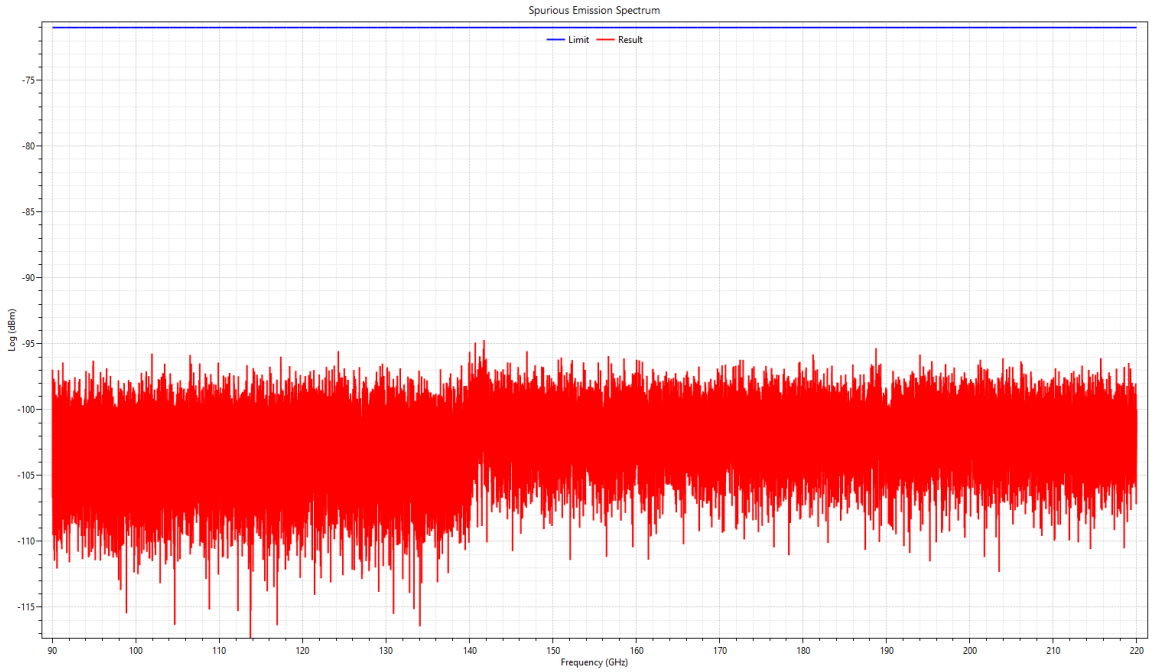
High Channel 60 – 90 GHz 2 GHz Bandwidth



Low Channel 90 – 220 GHz 1 GHz Bandwidth



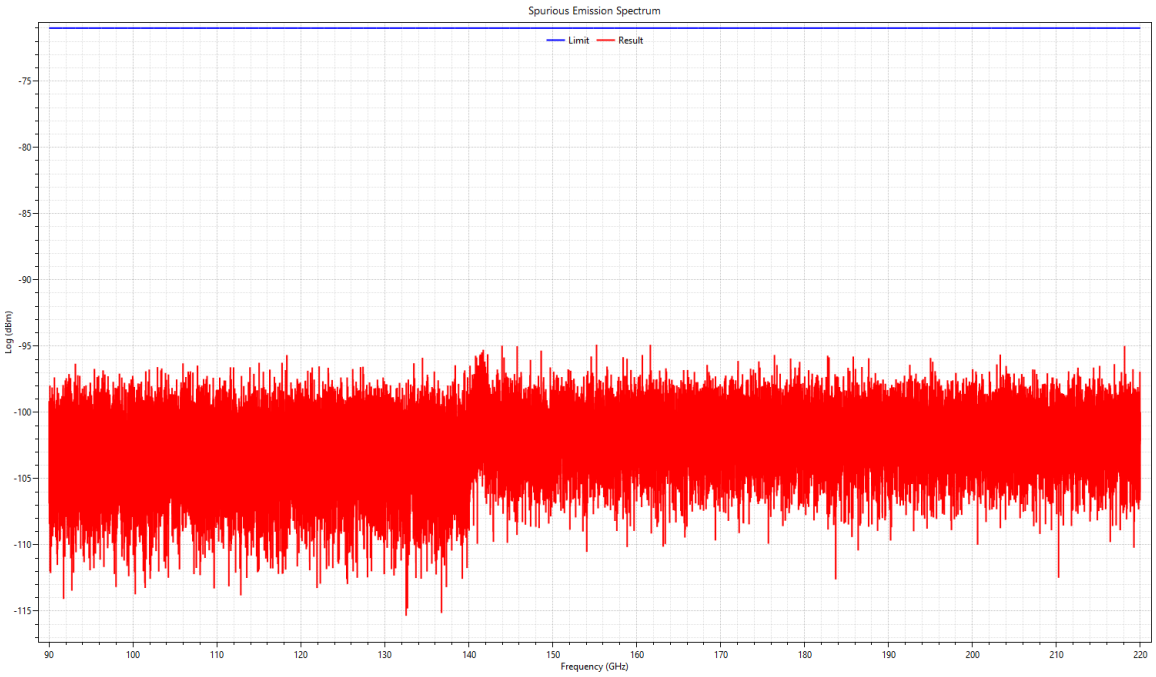
Low Channel 90 – 220 GHz 2 GHz Bandwidth



Mid Channel 90 – 220 GHz 1 GHz Bandwidth

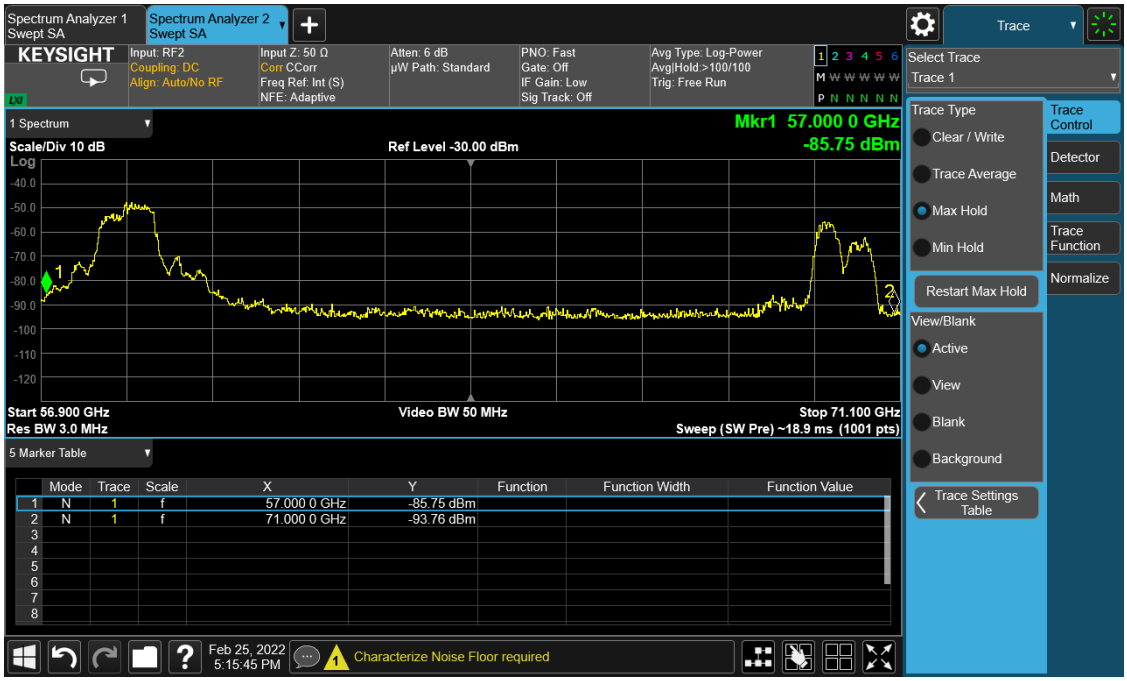
Mid Channel 90 – 220 GHz 2 GHz Bandwidth

High Channel 90 – 220 GHz 1 GHz Bandwidth

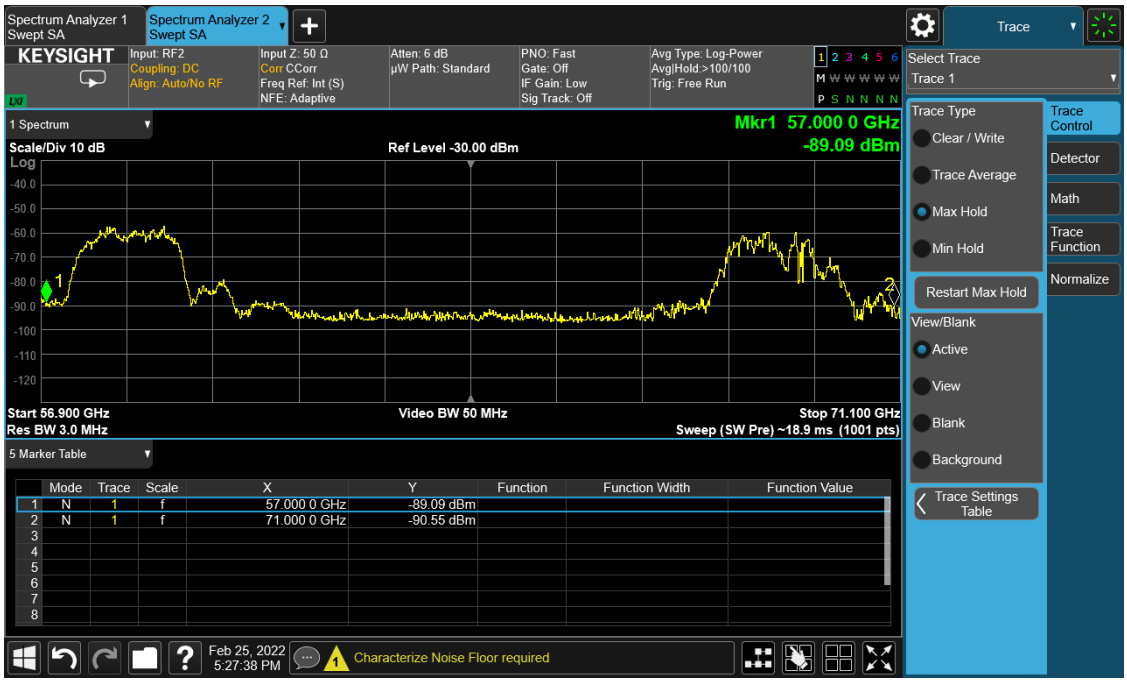


High Channel 90 – 220 GHz 2 GHz Bandwidth

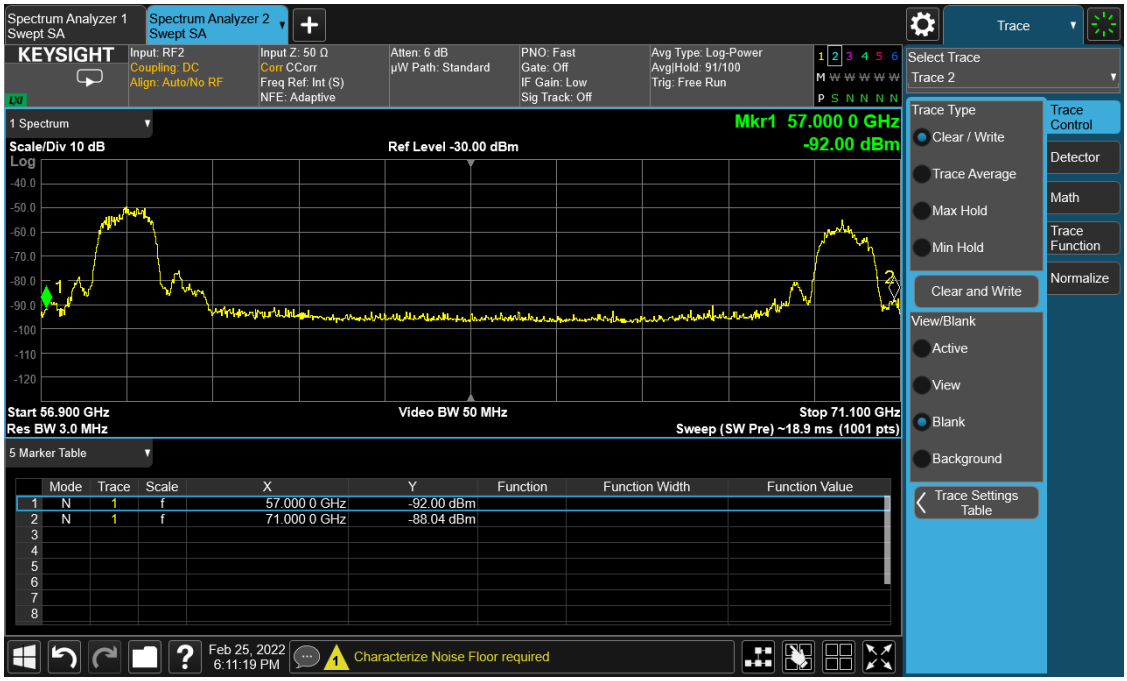
5.6 §15.255(f) Frequency Stability



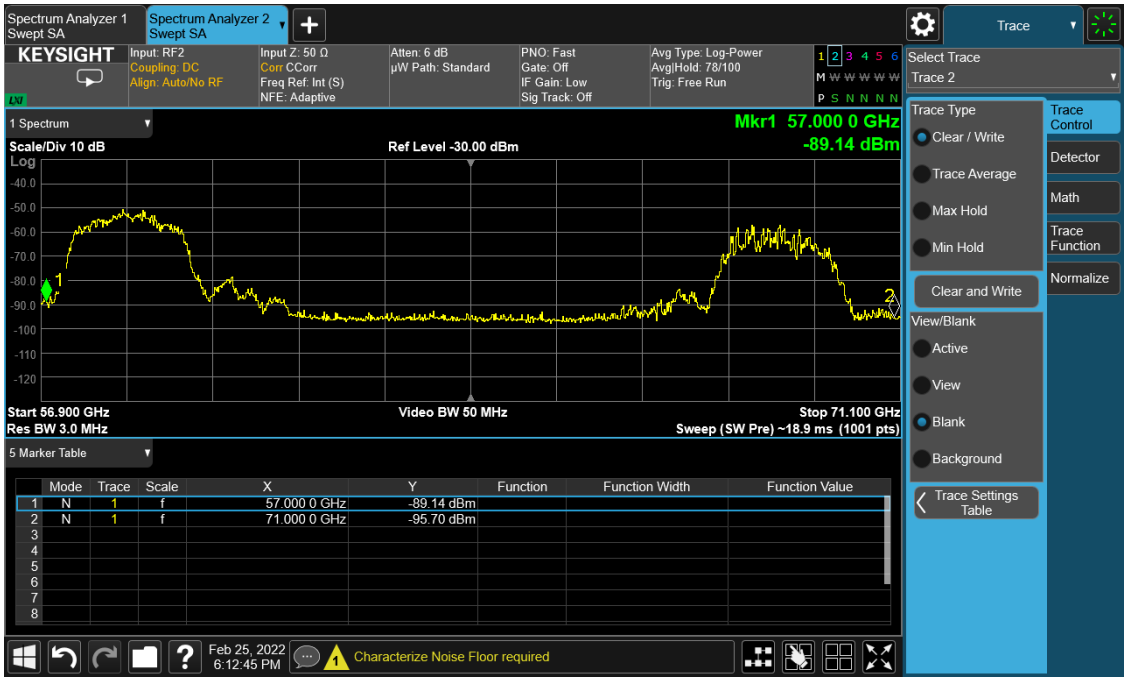
Frequency Stability -40 degrees 1 GHz Bandwidth



Frequency Stability -40 degrees 2 GHz Bandwidth



Frequency Stability +60 degrees 1 GHz Bandwidth



Frequency Stability +60 degrees 2 GHz Bandwidth

-- End of Test Report --