



REPORT No.: SZ25090043W04

TEST REPORT

APPLICANT : OnePlus Technology
(Shenzhen) Co., Ltd.

PRODUCT NAME : Smart Watch

MODEL NAME : OPWWE261

BRAND NAME : ONEPLUS

FCC ID : 2ABZ2-OPWWE261

STANDARD(S) : 47 CFR Part 15 Subpart E

RECEIPT DATE : 2025-09-08

TEST DATE : 2025-09-12 to 2025-09-26

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Edited by:

Peng Mi

Peng Mi (Rapporteur)

Approved by:

Shen Junsheng

Shen Junsheng (Supervisor)

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MORLAB

Shenzhen Morlab Communications Technology Co., Ltd.
FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

Tel: 86-755-36698555

Http://www.morlab.cn

Fax: 86-755-36698525

E-mail: service@morlab.cn





DIRECTORY

1. Summary of Test Result	4
1.1. Testing Applied Standards	5
1.2. Test Equipment List	6
1.3. Measurement Uncertainty	7
1.4. Testing Laboratory	8
2. General Description	9
2.1. Information of Applicant and Manufacturer	9
2.2. Information of EUT	9
2.3. Channel List of EUT	11
2.4. Test Configuration of EUT	12
2.5. Test Conditions	12
2.6. Test Setup Layout Diagram	13
3. Test Results	16
3.1. Antenna Requirement	16
3.2. Duty Cycle of Test Signal	17
3.3. Maximum Conducted Output Power	18
3.4. Emission Bandwidth	19
3.5. Peak Power Spectral Density	21
3.6. Frequency Stability	22
3.7. Dynamic Frequency Selection	23
3.8. Conducted Emission	28
3.9. Restricted Frequency Bands	29
3.10. Radiated Emission	31
Annex A Test Data and Result	33



REPORT No.: SZ25090043W04

Change History		
Version	Date	Reason for change
1.0	2025-10-16	First edition



1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	/
2	ANSI C63.10	Duty Cycle of the Test Signal	Sep. 15, 2025	Lin Haoyang	PASS	/
3	15.407(a)	Maximum Conducted Output Power	Sep. 15, 2025	Lin Haoyang	PASS	/
4	15.407(a) (e)	Emission Bandwidth	Sep. 15, 2025	Lin Haoyang	PASS	/
5	15.407(a)	Peak Power Spectral Density	Sep. 15, 2025	Lin Haoyang	PASS	/
6	15.407(g)	Frequency Stability	Sep. 15, 2025	Lin Haoyang	PASS	/
7	15.407(h)	DFS	Sep. 15, 2025	Lin Haoyang	PASS	/
8	15.207	Conducted Emission	Sep. 18, 2025	Wang Yapeng	PASS	/
9	15.407(b)	Restricted Frequency Bands	Sep. 18 to 20, 2025	Li Hanbin	PASS	/
10	15.407(b)	Radiated Emission	Sep. 18 to 20, 2025	Li Hanbin	PASS	/

Note 1: The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10 2020.

Note 2: These RF tests were performed according to the method of measurements prescribed in KDB 789033 D02 v02r01.

Note 3: These RF tests were performed according to the method of measurements prescribed in KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02.

Note 4: Any additions, deviation, or exclusions from the method shall be noted in the “Remark”.



1.1. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart E Radio Frequency Devices



1.2. Test Equipment List

1.2.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2025.01.15	2026.01.14
Power Sensor	MY54180008	U2021XA	Agilent	2025.09.03	2026.09.02
Temperature Chamber	12108015	DTL-003S101	YOMA	2025.09.03	2026.09.02
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	101052	ESPI	R&S	2025.05.15	2026.05.14
LISN	103131	ENV 216	R&S	2025.03.20	2026.03.19
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	R&S	2025.05.13	2026.05.12
RF Coaxial Cable (DC-100MHz)	EMC-CE-00514	N/A	N/A	2025.05.06	2026.05.05

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
JS32-RE	Tonscend	5.0.0
TS+ -[JS32-CE]	Tonscend	2.5.0.0

**1.2.4 Radiated Test Equipment**

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2025.05.13	2026.05.12
Test Antenna - Bi-Log	9163-274	VULB 9163	Schwarzbeck	2025.06.28	2026.06.27
Test Antenna - Loop	00131	FMZB1519B	Schwarzbeck	2025.09.08	2026.09.07
Test Antenna – Horn	9120D-963	BBHA 9120D	Schwarzbeck	2025.05.16	2026.05.15
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2025.06.20	2026.06.19
Preamplifier (10MHz-6GHz)	46732	S10M100L38 02	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (2GHz-18GHz)	61171/61172	S020180L32 03	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2025.09.03	2026.09.02
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.06.21	2028.06.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.11.30	2025.11.29



1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Output Power	$\pm 2.22\text{dB}$	Confidence levels of 95%
Power Spectral Density	$\pm 2.22\text{dB}$	Confidence levels of 95%
Bandwidth	$\pm 5\%$	Confidence levels of 95%
Restricted Frequency Bands	$\pm 5\%$	Confidence levels of 95%
Radiated Emission	$\pm 2.95\text{dB}$	Confidence levels of 95%
Conducted Emission	$\pm 2.44\text{dB}$	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525
FCC Designation Number:	CN1192
FCC Test Firm Registration Number:	226174



2. General Description

2.1. Information of Applicant and Manufacturer

Applicant:	OnePlus Technology (Shenzhen) Co., Ltd.
Applicant Address:	18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.
Manufacturer:	OnePlus Technology (Shenzhen) Co., Ltd.
Manufacturer Address:	18C02, 18C03, 18C04, and 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, P.R. China.

2.2. Information of EUT

Product Name:	Smart Watch	
Sample No.:	2#, 10#	
Hardware Version:	XL907	
Software Version:	OPWWE261_11_A.02	
Modulation Technology:	OFDM	
Modulation Mode:	802.11a, 802.11n (HT20)	
Operating Frequency Range:	5180MHz-5240MHz; 5260MHz-5320MHz; 5500MHz-5720MHz; 5745MHz-5825MHz	
DFS Function:	☒ Slave without radar detection ☐ Slave with radar detection ☐ Master	
Antenna Type:	Monopole Antenna	
Antenna Gain:	-0.5dBi	
Accessory Information:	Battery	
	Brand Name:	OPPO
	Model No.:	BLW022
	Serial No.:	N/A
	Capacity:	632mAh
	Rated Voltage:	3.86V
	Charge Limit:	4.55V
	Manufacturer:	Brich Electronic (Dong Guan) Limited

Note 1: The EUT description presented in the report are provided by applicant and/or manufacturer,



REPORT No.: SZ25090043W04

and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2.3.Channel List of EUT

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	36	5180	40	5200
	44	5220	48	5240
(U-NII-2A) 5260MHz-5320MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	52	5260	56	5280
	60	5300	64	5320
(U-NII-2C) 5500MHz-5720MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	100	5500	104	5520
	108	5540	112	5560
	116	5580	120	5600
	124	5620	128	5640
	132	5660	136	5680
	140	5700	144	5720
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		

Note 1: The black bold channels were selected for test.

2.4. Test Configuration of EUT

2.4.1. Modulation Type and Data Rate of EUT

Mode	Bandwidth (MHz)	Modulation Technology	Modulation Type	Data Rate
802.11a	20	OFDM	BPSK	6/9/12/18/24/36/48/54Mbps
			QPSK	
			16QAM	
			64QAM	
802.11n	20 (HT20)	OFDM	BPSK	MCS0~MCS7
			QPSK	
			16QAM	
			64QAM	

Note1: The worst-case mode (bold face) in all data rates has been determined during the pre-scan, only the test data of the worst-case were recorded in this report.

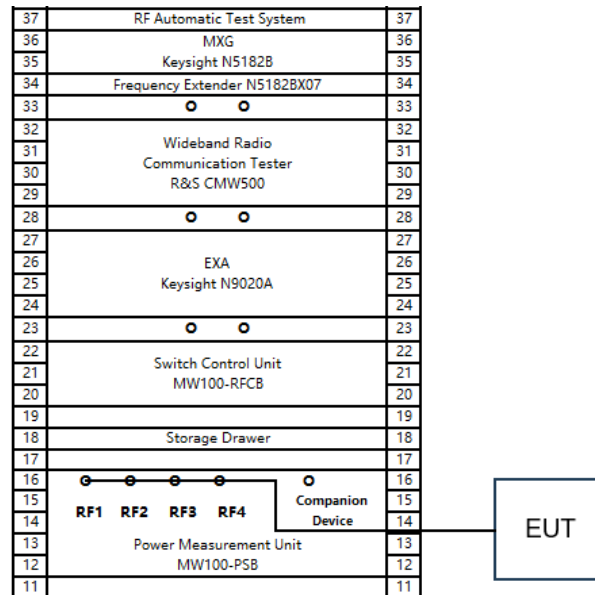
Note2: The RF signal transmission of EUT is controlled by the build-in engineering mode which is provided by the manufacturer. The recorded power setting value is the maximum that the engineering mode has configuration during testing.

2.5. Test Conditions

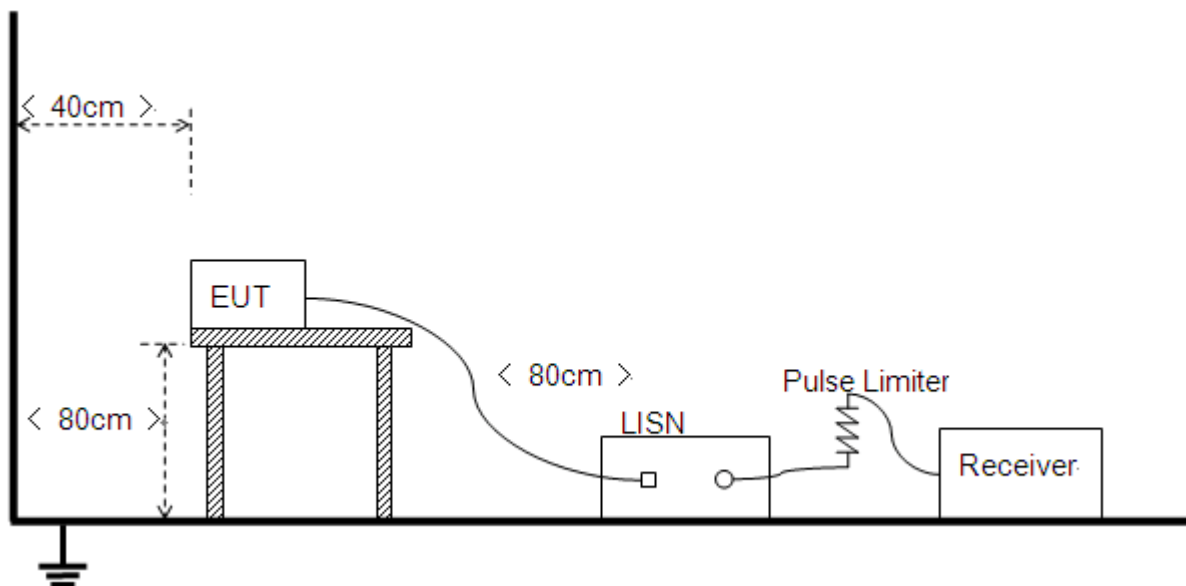
Temperature (°C):	15–35
Relative Humidity (%):	30–60
Atmospheric Pressure (kPa):	86–106

2.6. Test Setup Layout Diagram

2.6.1. Conducted Measurement

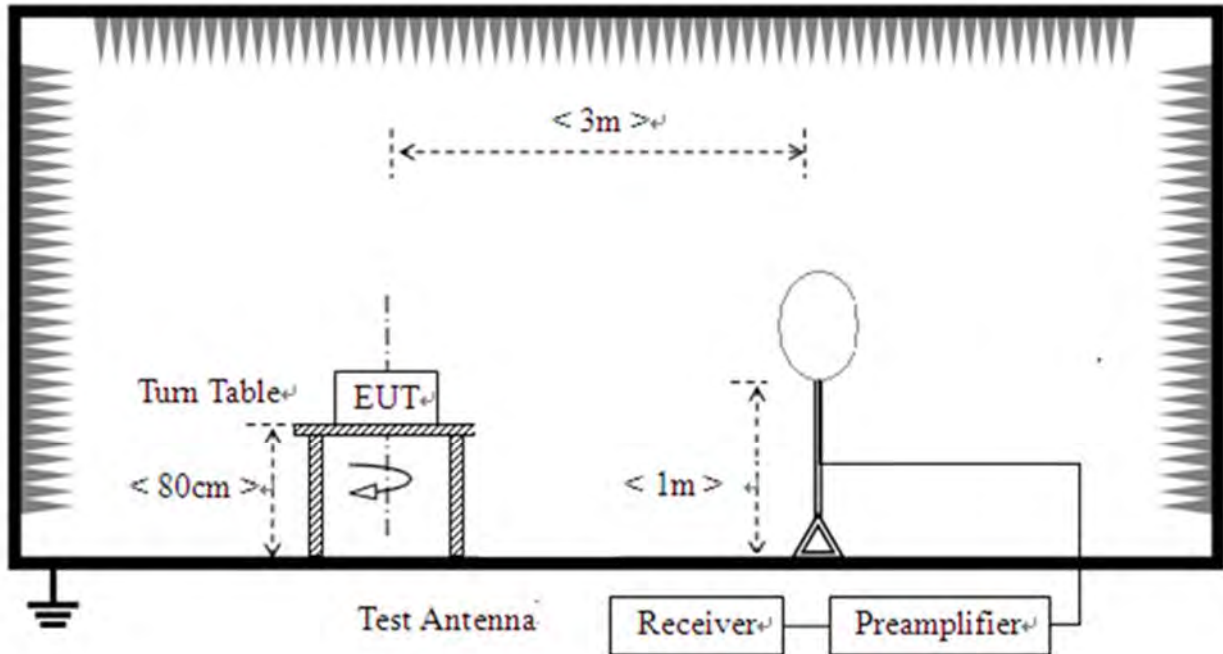


2.6.2. Conducted Emission Measurement

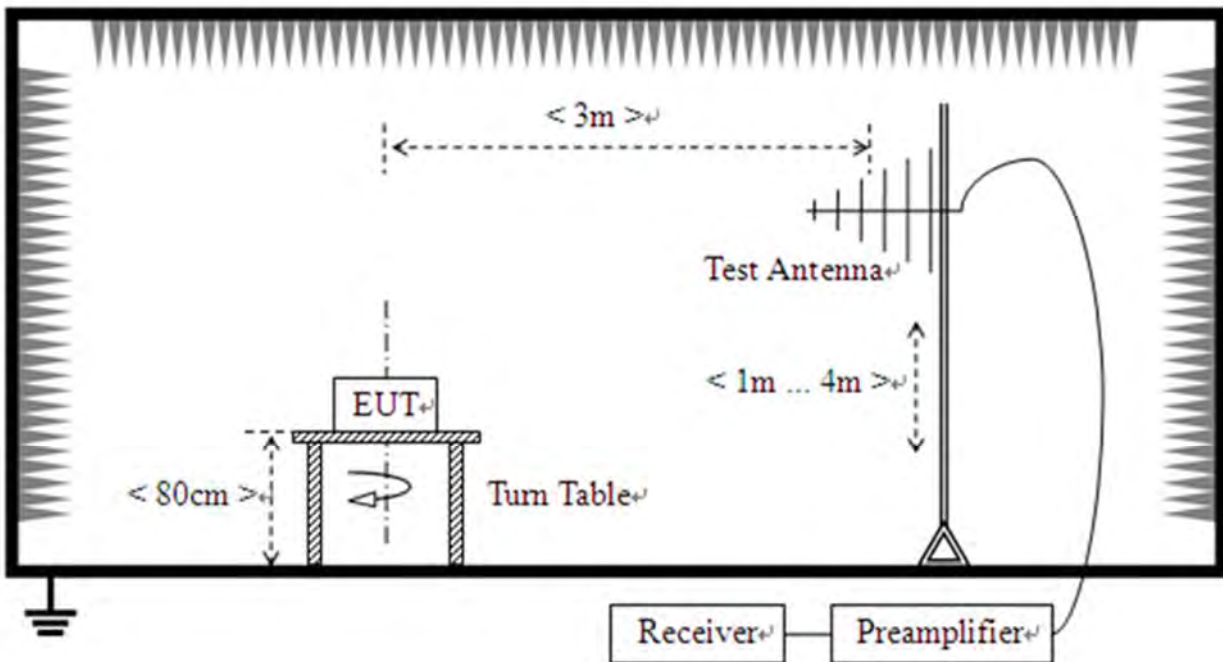


2.6.3.Radiation Measurement

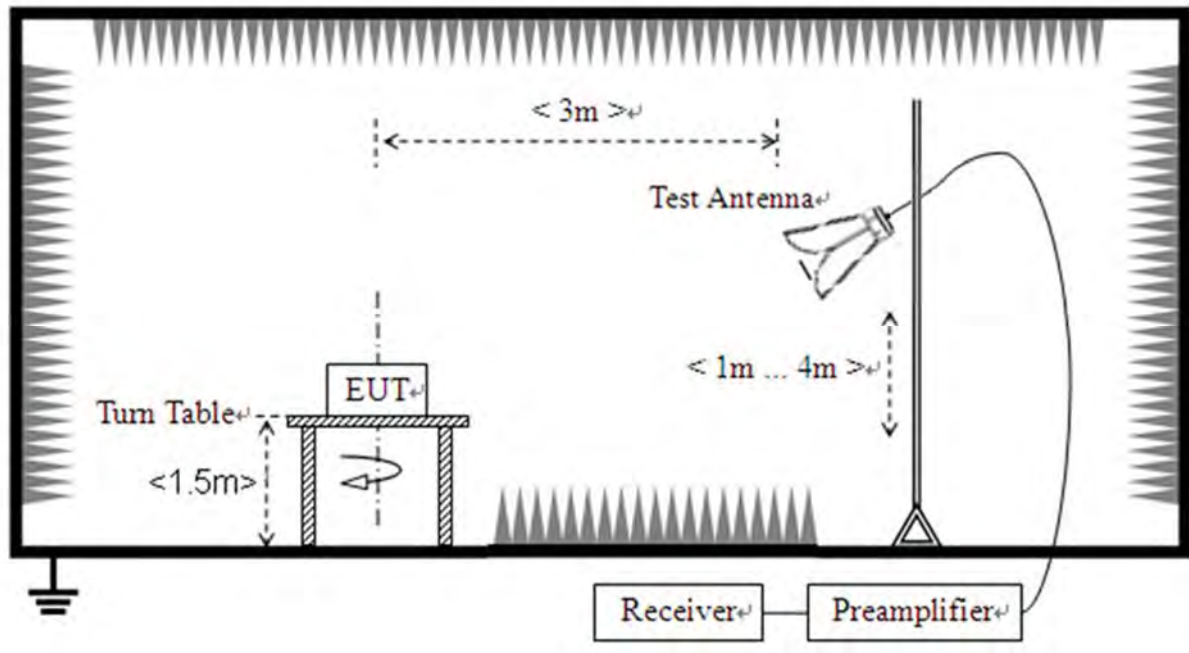
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz





3. Test Results

3.1. Antenna Requirement

3.1.1. Requirement

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.1.2. Test Result

Antenna location	Antenna Type	Coupling Method
☒ Internal ☐ External	☐ FPC Antenna ☐ Spring Antenna ☐ Ceramic Antenna ☐ Integrated Antenna ☐ Dipole Antenna ☐ PCB Antenna ☐ PIFA Antenna ☒ Monopole Antenna	☐ I-PEX Connector ☐ SMA Connector ☐ RP-SMA Connector ☒ Metal Shrapnel ☐ Layout



3.2. Duty Cycle of Test Signal

3.2.1. Requirement

Preferably, all measurements of maximum conducted (average) output power will be performed with the EUT transmitting continuously (i.e., with a duty cycle of greater than or equal to 98%). When continuous operation cannot be realized, then the use of sweep triggering/signal gating techniques can be used to ensure that measurements are made only during transmissions at the maximum power control level. Such sweep triggering/signal gating techniques will require knowledge of the minimum transmission duration (T) over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation. Sweep triggering/signal gating techniques can then be used if the measurement/sweep time of the analyzer can be set such that it does not exceed T at any time that data are being acquired (i.e., no transmitter OFF-time is to be considered).

When continuous transmission cannot be achieved and sweep triggering/signal gating cannot be implemented, alternative procedures are provided that can be used to measure the average power; however, they will require an additional measurement of the transmitter duty cycle (D). Within this sub clause, the duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. The duty cycle is considered to be constant if variations are less than $\pm 2\%$; otherwise, the duty cycle is considered to be non constant.

3.2.2. Test Result

Refer to Annex A.1 in this report.

3.3. Maximum Conducted Output Power

3.3.1. Requirement

(1) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250mW provided the maximum antenna gain does not exceed 6dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250mW or $11\text{dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(4) According to KDB662911D01 Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

3.3.2. Test Procedures

Based on method PM-G in Section II.E.3.b) of KDB 789033 D02.

3.3.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4. Test Result

Refer to Annex A.2 in this report.

3.4. Emission Bandwidth

3.4.1. Requirement

For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Determination of the emissions bandwidth is based on the use of measurement instrumentation employing a peak detector function with an instrument resolution bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement. Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

3.4.1. Test Procedures

1. KDB 789033 Section C) 1) Emission Bandwidth was used in order to prove compliance
 - a) Set RBW = approximately 1% of the emission bandwidth.
 - b) Set VBW > RBW.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
2. KDB 789033 Section C) 2) minimum emission bandwidth for the band 5.725-5.85GHz was used in order to prove compliance.

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

 - a) Set RBW = 100 kHz.
 - b) Set video bandwidth (VBW) $\geq 3 \times$ RBW.
 - c) Detector = Peak.
 - d) Trace mode = max hold.
 - e) Sweep = auto couple.
 - f) Allow the trace to stabilize.
 - g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



REPORT No.: SZ25090043W04

3.4.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.4.3.Test Result

Refer to Annex A.3 in this report.



3.5. Peak Power Spectral Density

3.5.1. Requirement

(1) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30dBm in any 500kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

(4) According to KDB662911D01 Measure-and-sum technique, the conducted emission level (e.g., transmit power or power in specified bandwidth) is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in units that are directly proportional to power.

3.5.2. Test Procedures

KDB 789033 Section F) Maximum Power Spectral Density (PSD) Method SA-3 was used in order to prove compliance

- 1) Set span to encompass the entire 26-dB emission bandwidth
- 2) Set RBW = 1MHz. Set VBW $\geq$ 3MHz
- 3) Number of points in sweep $\geq$ 2 Span / RBW. Sweep time = auto
- 4) Detector = Average
- 5) Trace mode=Max hold

Record the max value

3.5.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.5.4. Test Result

Refer to Annex A.4 in this report.



3.6. Frequency Stability

3.6.1. Requirement

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

3.6.2. Test Procedures

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between 5°C to 40°C. The temperature was incremented by 10° intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded. Data for the worst case channel is shown below.

3.6.3. Test Result

Refer to Annex A.5 in this report.

3.7. Dynamic Frequency Selection

3.7.1. Requirement

According to FCC section 15.407(h), (1) Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW. (2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. Operators shall only use equipment with a DFS mechanism that is turned on when operating in these bands. The device must sense for radar signals at 100 percent of its emission bandwidth. The minimum DFS detection threshold for devices with a maximum e.i.r.p. of 200 mW to 1 W is -64 dBm. For devices that operate with less than 200 mW e.i.r.p. and a power spectral density of less than 10 dBm in a 1 MHz band, the minimum detection threshold is -62 dBm. The detection threshold is the received power averaged over 1 microsecond referenced to a 0 dBi antenna. For the initial channel setting, the manufacturers shall be permitted to provide for either random channel selection or manual channel selection.

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.¹

Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.²

Tables 1 and 2 shown below summarize the information contained in sections 5.1.1 and 5.1.2.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode
-------------	------------------



	Master	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

The operational behavior and individual DFS requirements that are associated with these modes are as follows:

Master Devices

- The Master Device will use DFS in order to detect Radar Waveforms with received signal strength above the DFS Detection Threshold in the 5250 – 5350 MHz and 5470 – 5725 MHz bands. DFS is not required in the 5150 – 5250 MHz or 5725 – 5825 MHz bands.
- Before initiating a network on a Channel, the Master Device will perform a Channel Availability Check for specified time duration (Channel Availability Check Time) to ensure that there is no radar system operating on the Channel, using DFS described under subsection a) above.
- The Master Device initiates a U-NII network by transmitting control signals that will enable other U-NII devices to Associate with the Master Device.
- During normal operation, the Master Device will monitor the Channel (In-Service Monitoring) to ensure that there is no radar system operating on the Channel, using DFS described under a).
- If the Master Device has detected a Radar Waveform during In-Service Monitoring as described under d), the Operating Channel of the U-NII network is no longer an Available Channel. The Master Device will instruct all associated Client Device(s) to stop transmitting on this Channel within the Channel Move Time. The transmissions during the Channel Move Time will be limited to the Channel Closing Transmission Time.
- Once the Master Device has detected a Radar Waveform it will not utilize the Channel for the duration of the Non-Occupancy Period. 3.



g) If the Master Device delegates the In-Service Monitoring to a Client Device, then the combination will be tested to the requirements described under d) through f) above.

Client Devices

a) A Client Device will not transmit before having received appropriate control signals from a Master Device.

b) A Client Device will stop all its transmissions whenever instructed by a Master Device to which it is associated and will meet the Channel Move Time and Channel Closing Transmission Time requirements. The Client Device will not resume any transmissions until it has again received control signals from a Master Device.

c) If a Client Device is performing In-Service Monitoring and detects a Radar Waveform above the DFS Detection Threshold, it will inform the Master Device. This is equivalent to the Master Device detecting the Radar Waveform and d) through f) of section 5.1.1 apply.

d) Irrespective of Client Device or Master Device detection the Channel Move Time and Channel Closing Transmission Time requirements remain the same.

e) The client test frequency must be monitored to ensure no transmission of any type has occurred for 30 minutes. Note: If the client moves with the master, the device is considered compliant if nothing appears in the client non-occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear.

DFS Detection Thresholds

Table 3 below provides the DFS Detection Thresholds for Master Devices as well as Client Devices incorporating In-Service Monitoring.

Table 3: DFS Detection Thresholds for Master Devices and Client Devices with Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 mill watt	-64 dBm
EIRP < 200 mill watt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 mill watt that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna. Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response. Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Response Requirements

Table 4 provides the response requirements for Master and Client Devices incorporating DFS.

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

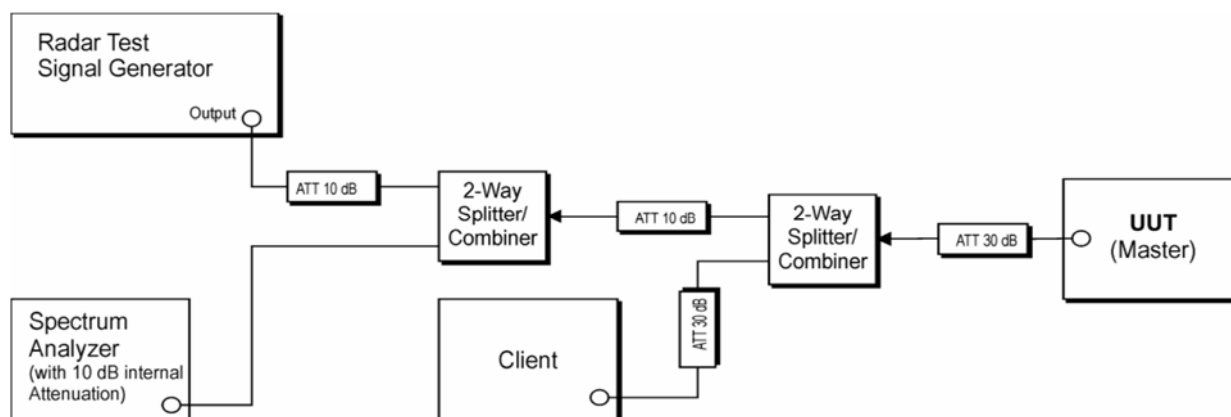
Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

3.7.2.Test Description

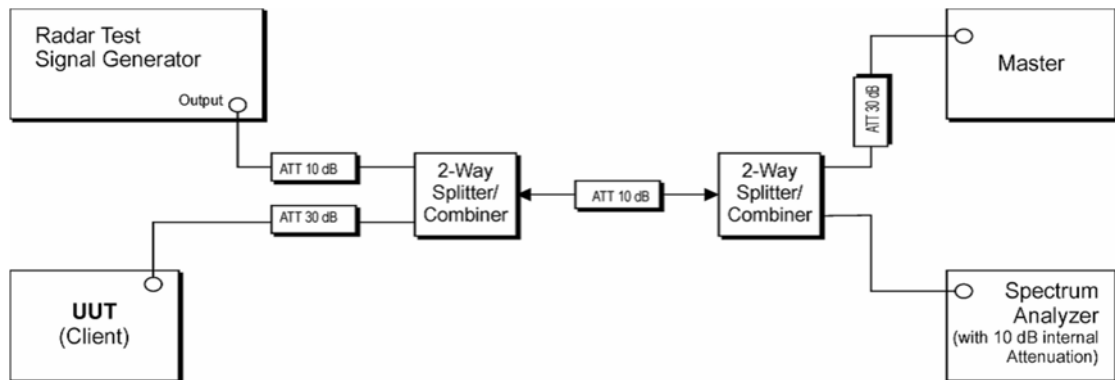
According to Section 7.2 of KDB 905462 D02 V01R01

1. Setup for Master with injection at the Master



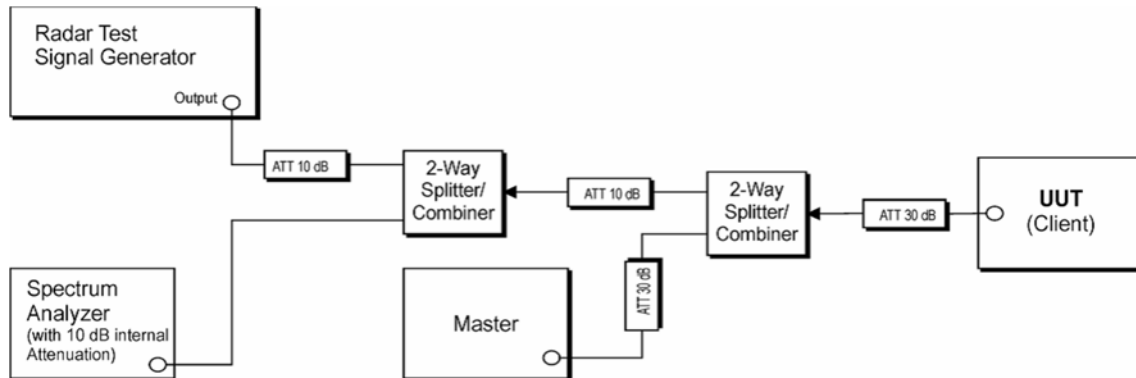
(Example Conducted Setup where UUT is a Master and Radar Test Waveforms are injected into the Master)

2. Setup for Client with injection at the Master



(Example Conducted Setup where UUT is a Client and Radar Test Waveforms are injected into the Master)

3. Setup for Client with injection at the Client



(Example Conducted Setup where UUT is a Client and Radar Test Waveforms are injected into the Client)

3.7.3.Information of Companion Device

Product Name:	Router
Manufacturer:	ASUS
FCC ID:	MSQ-RTAXJF00
Device Type:	Master Device
Operating Mode:	Master Mode
Serial No:	M3IAJF201046
Antenna Gain:	2.0dBi

3.7.4.Test Result

Refer to Annex A.6 in this report.

3.8. Conducted Emission

3.8.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

- (a) The lower limit shall apply at the band edges.
- (b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

3.8.2. Test Procedures

The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2020.

3.8.3. Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.8.4. Test Result

Refer to Annex A.7 in this report.

3.9. Restricted Frequency Bands

3.9.1. Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (3) For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \mu\text{V/m}$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m



Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

3.9.2.Test Procedures

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

KDB 789033 Section H) 3)5)6(d)) was used in order to prove compliance

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.

3.9.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.9.4.Test Result

Refer to Annex A.8 in this report.

3.10. Radiated Emission

3.10.1.Requirement

The peak emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (3) For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

The following formula is used to convert the equipment isotropic radiated power(e.i.r.p.) to field strength (dBμV/m);

$$E = 1000000 \times \sqrt{30P} / 3 \mu\text{V/m}$$

where P is the EIRP in Watts

Therefore: -27 dBm/MHz = 68.23 dBuV/m

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

3.10.2.Test Procedures

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

3.10.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.10.4.Test Result

Refer to Annex A.9 in this report.



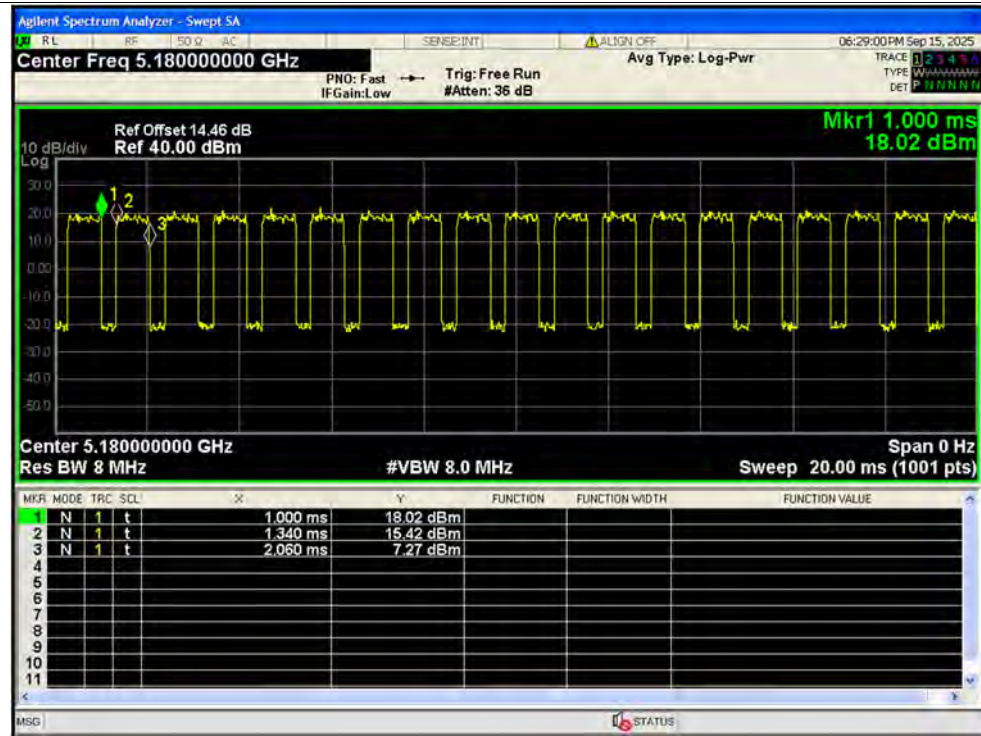
Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

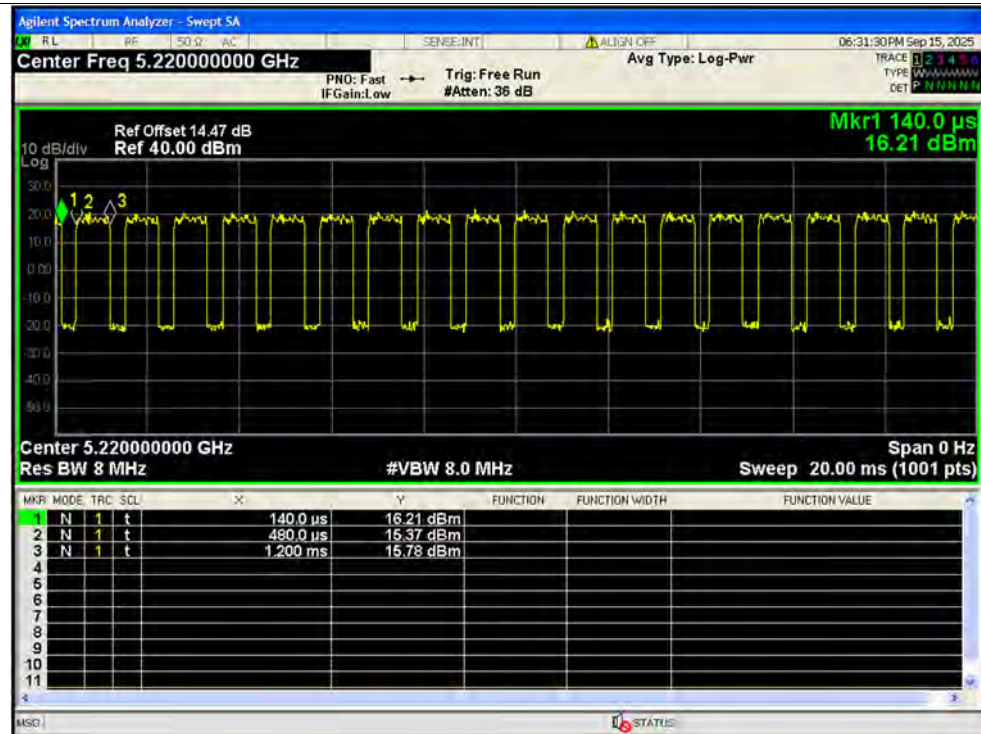
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	67.92	1.68	1.39
NVNT	a	5220	Ant1	67.92	1.68	1.39
NVNT	a	5240	Ant1	67.31	1.72	1.43
NVNT	a	5260	Ant1	66.04	1.8	1.43
NVNT	a	5300	Ant1	67.92	1.68	1.39
NVNT	a	5320	Ant1	67.92	1.68	1.39
NVNT	a	5500	Ant1	67.31	1.72	1.43
NVNT	a	5580	Ant1	66.04	1.8	1.43
NVNT	a	5720	Ant1	67.31	1.72	1.43
NVNT	a	5745	Ant1	67.31	1.72	1.43
NVNT	a	5785	Ant1	67.31	1.72	1.43
NVNT	a	5825	Ant1	66.04	1.8	1.43
NVNT	n20	5180	Ant1	63.46	1.97	1.52
NVNT	n20	5220	Ant1	62.26	2.06	1.52
NVNT	n20	5240	Ant1	64.15	1.93	1.47
NVNT	n20	5260	Ant1	63.46	1.97	1.52
NVNT	n20	5300	Ant1	64.15	1.93	1.47
NVNT	n20	5320	Ant1	64.15	1.93	1.47
NVNT	n20	5500	Ant1	63.46	1.97	1.52
NVNT	n20	5580	Ant1	63.46	1.97	1.52
NVNT	n20	5720	Ant1	64.15	1.93	1.47
NVNT	n20	5745	Ant1	64.15	1.93	1.47
NVNT	n20	5785	Ant1	64.15	1.93	1.47
NVNT	n20	5825	Ant1	63.46	1.97	1.52

Test Graphs

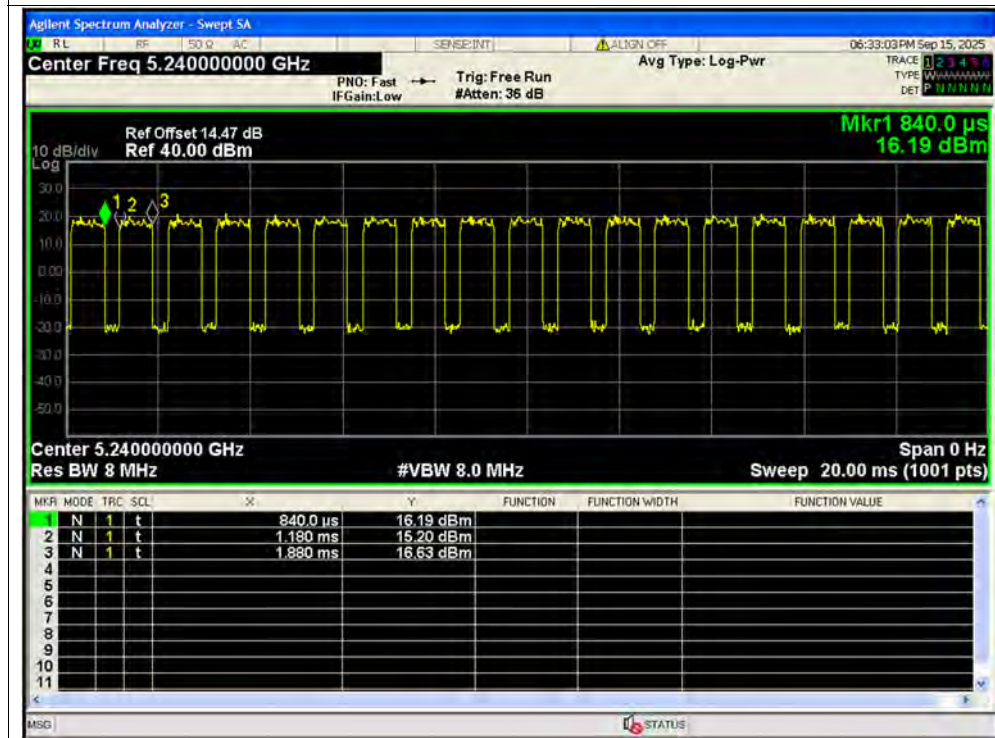
Duty Cycle NVNT a 5180MHz Ant1



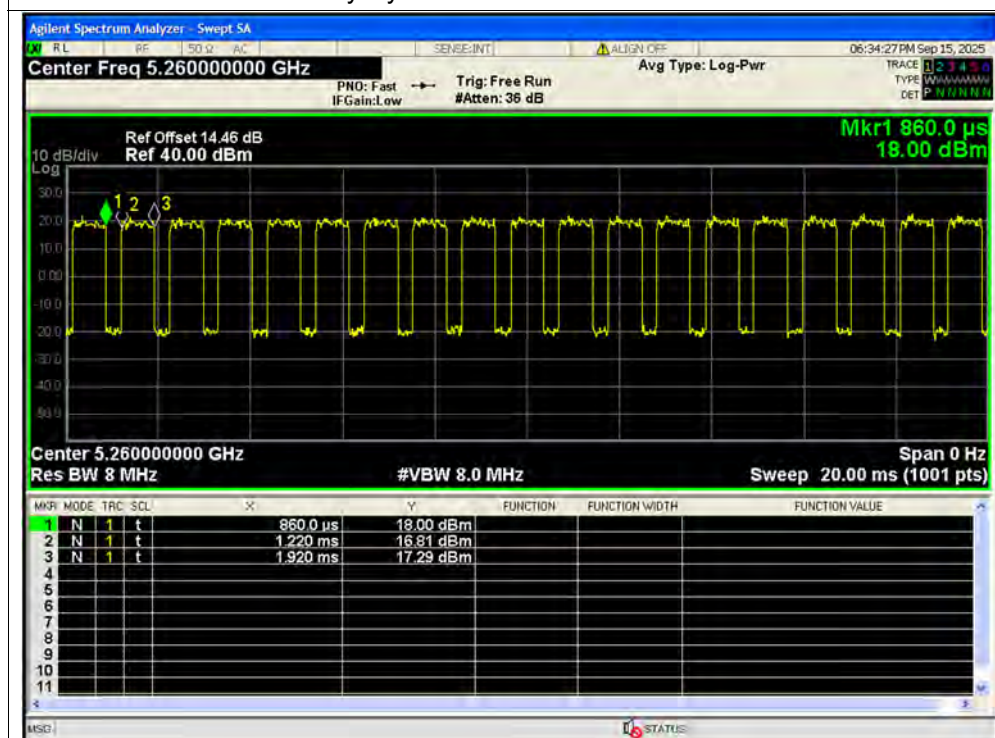
Duty Cycle NVNT a 5220MHz Ant1



Duty Cycle NVNT a 5240MHz Ant1

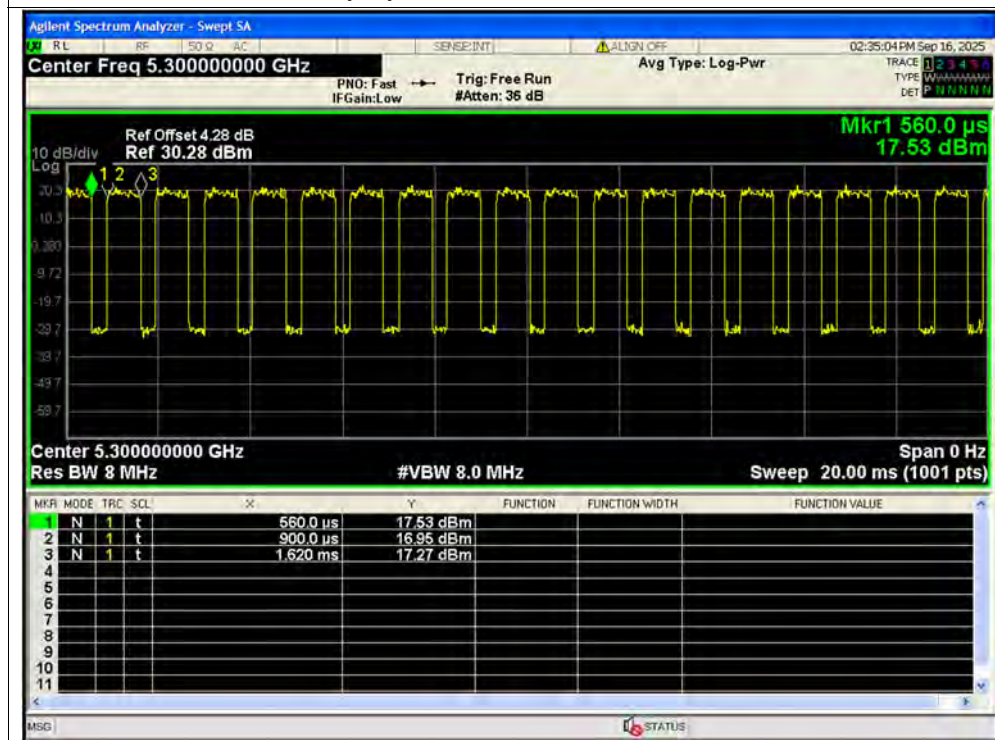


Duty Cycle NVNT a 5260MHz Ant1

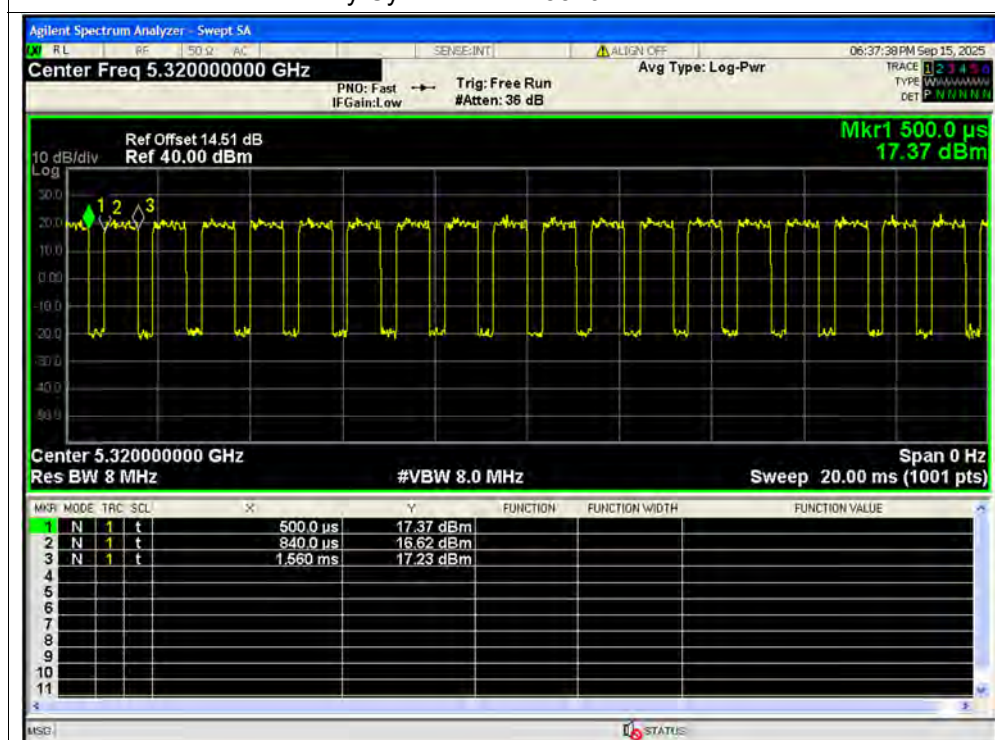




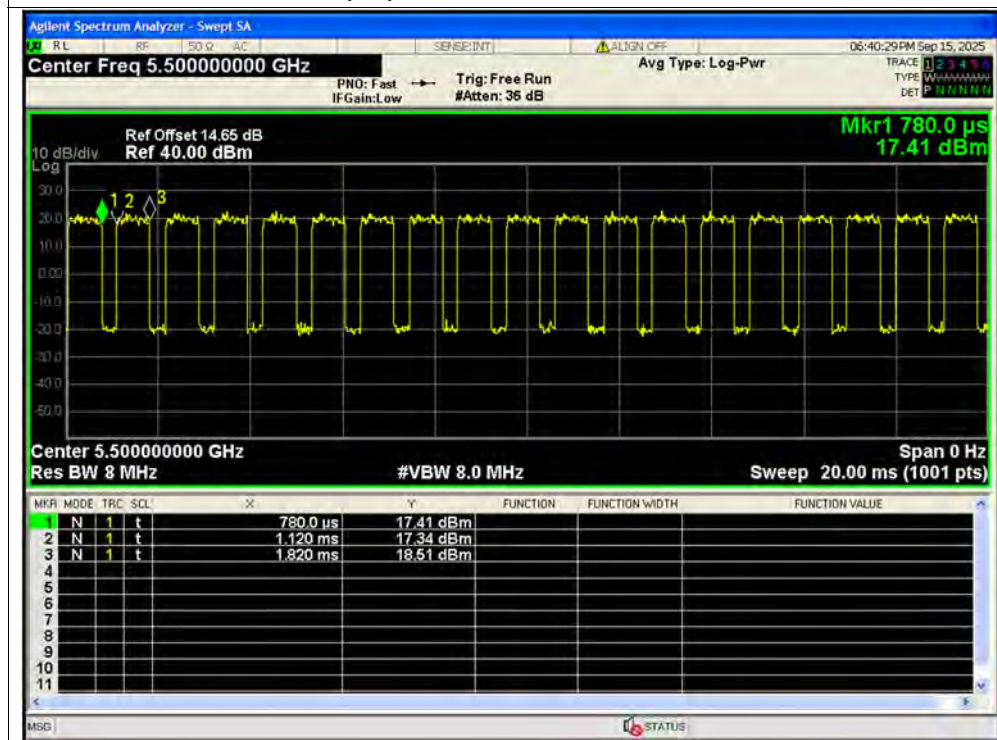
Duty Cycle NVNT a 5300MHz Ant1



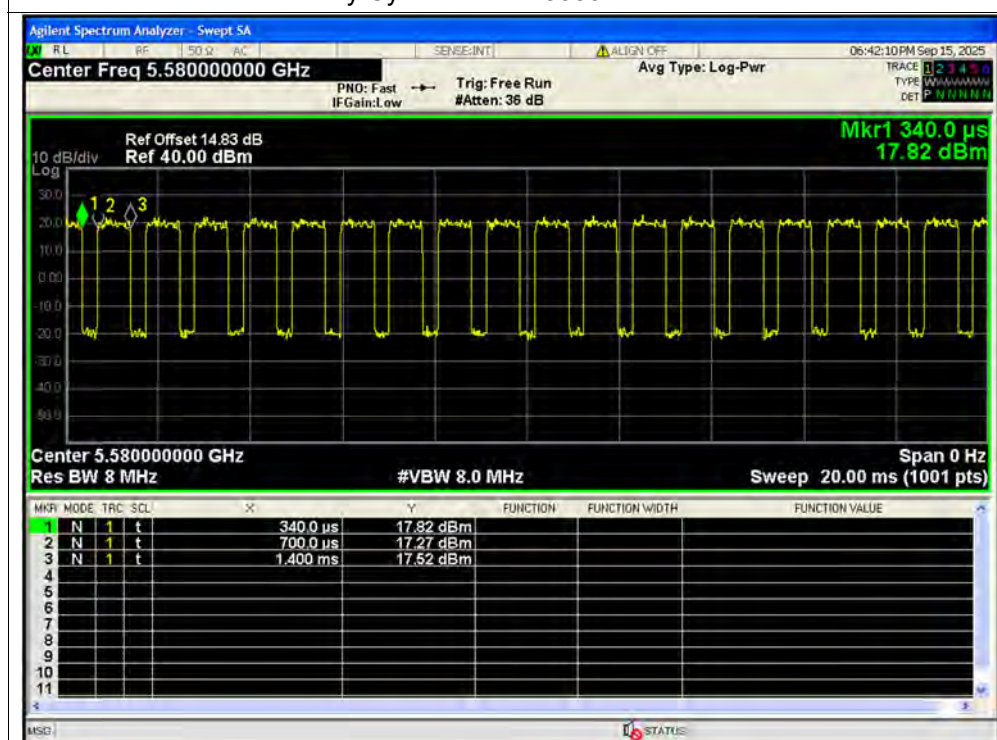
Duty Cycle NVNT a 5320MHz Ant1



Duty Cycle NVNT a 5500MHz Ant1

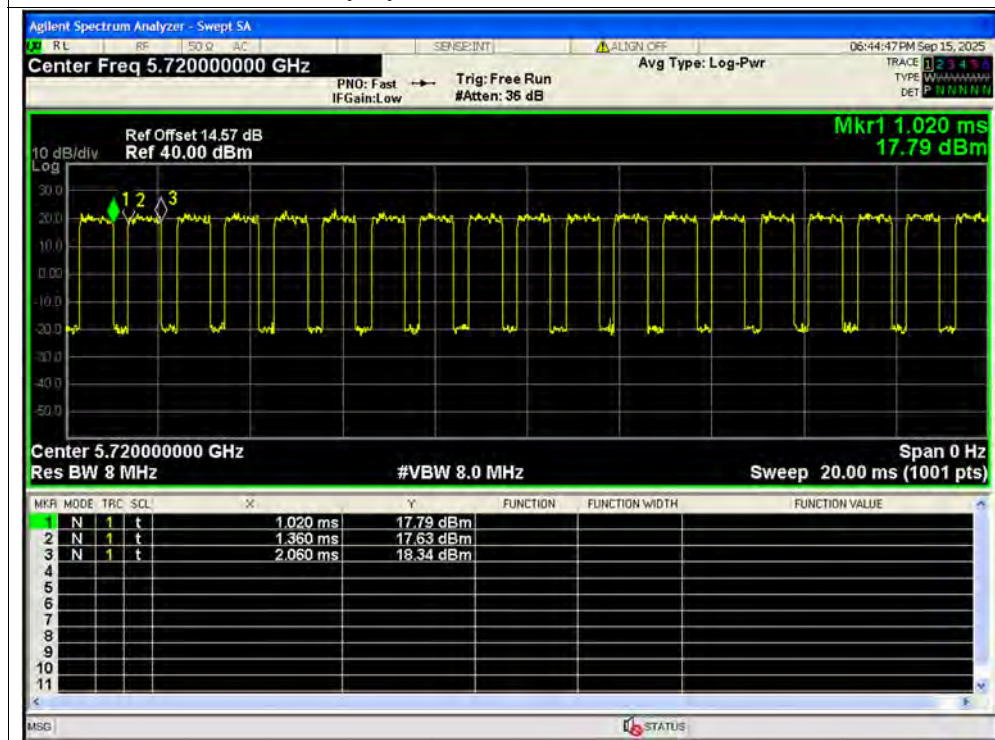


Duty Cycle NVNT a 5580MHz Ant1

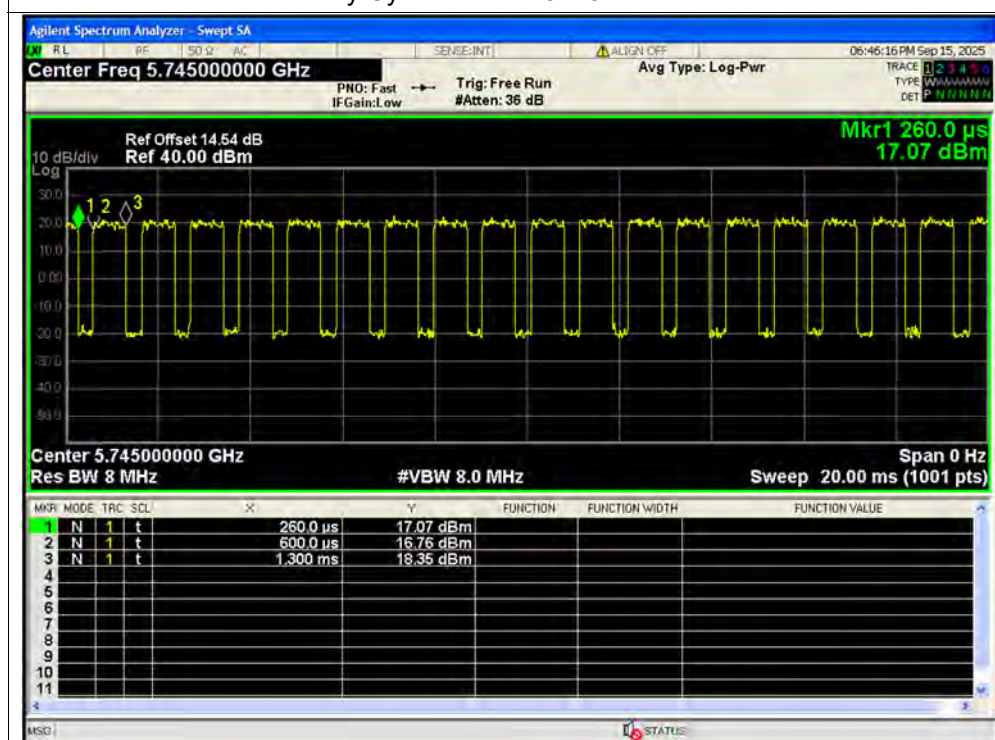




Duty Cycle NVNT a 5720MHz Ant1

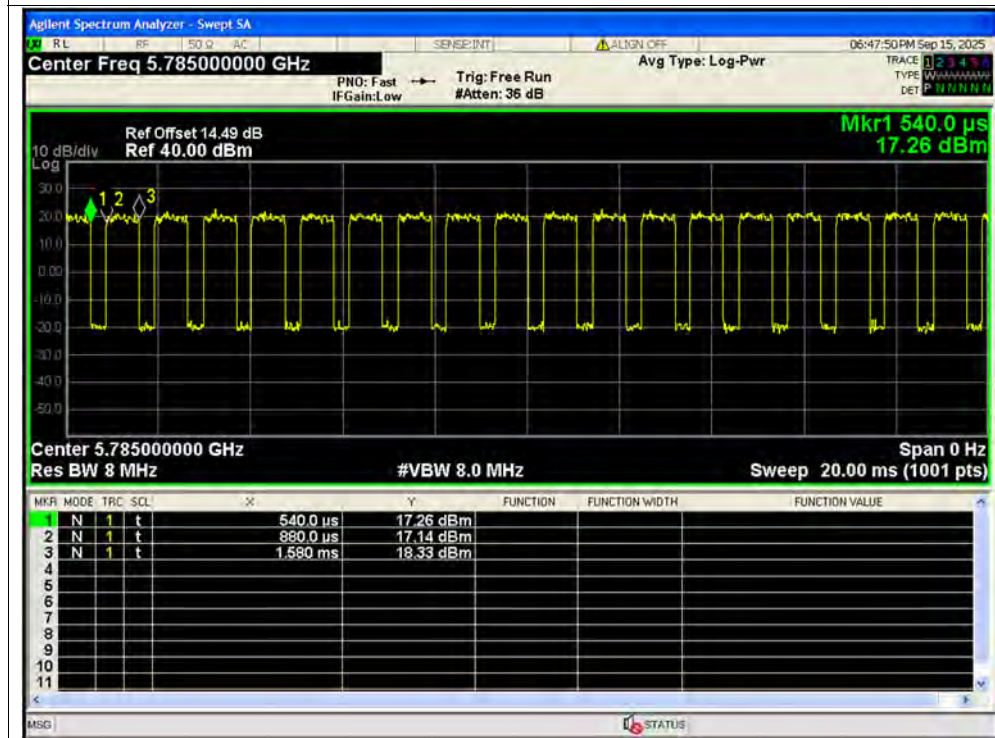


Duty Cycle NVNT a 5745MHz Ant1

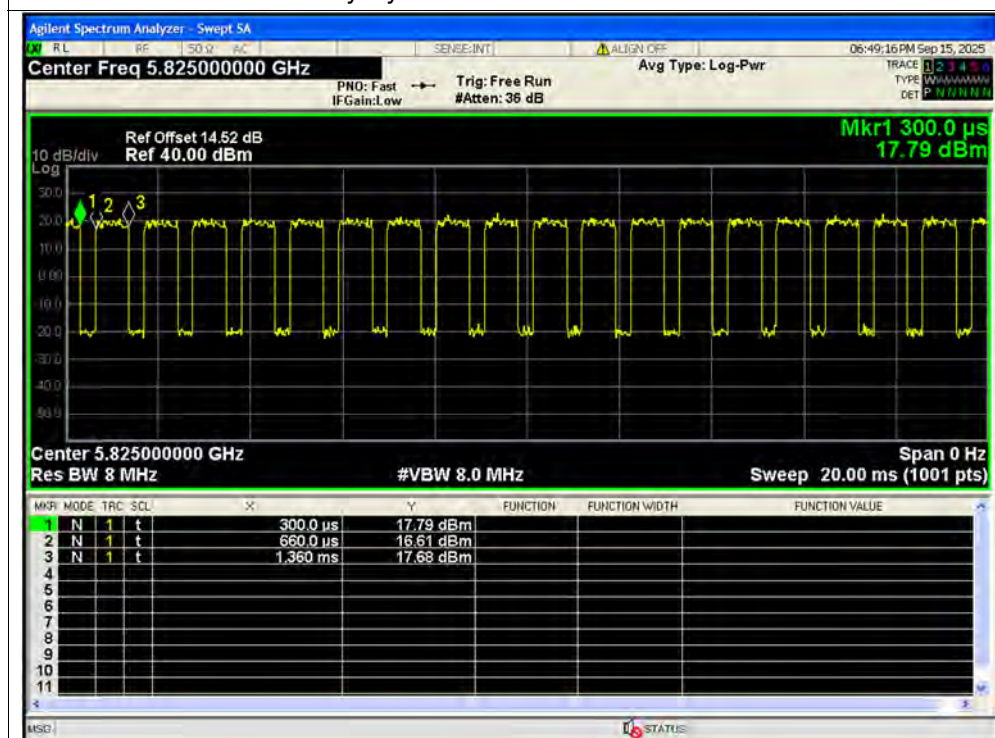




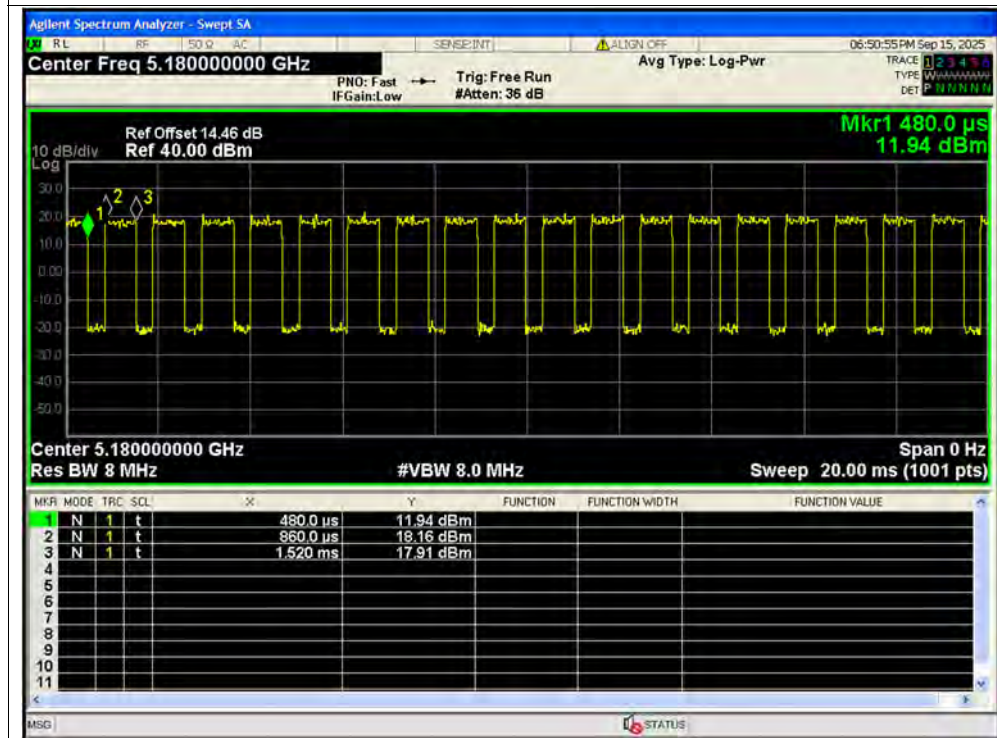
Duty Cycle NVNT a 5785MHz Ant1



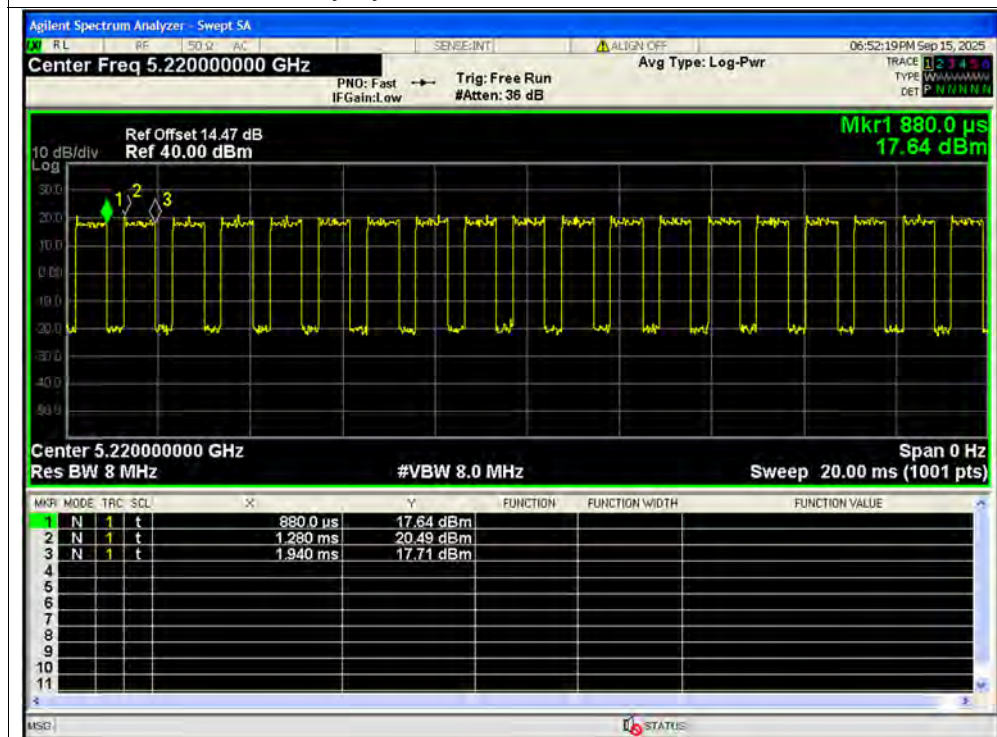
Duty Cycle NVNT a 5825MHz Ant1



Duty Cycle NVNT n20 5180MHz Ant1

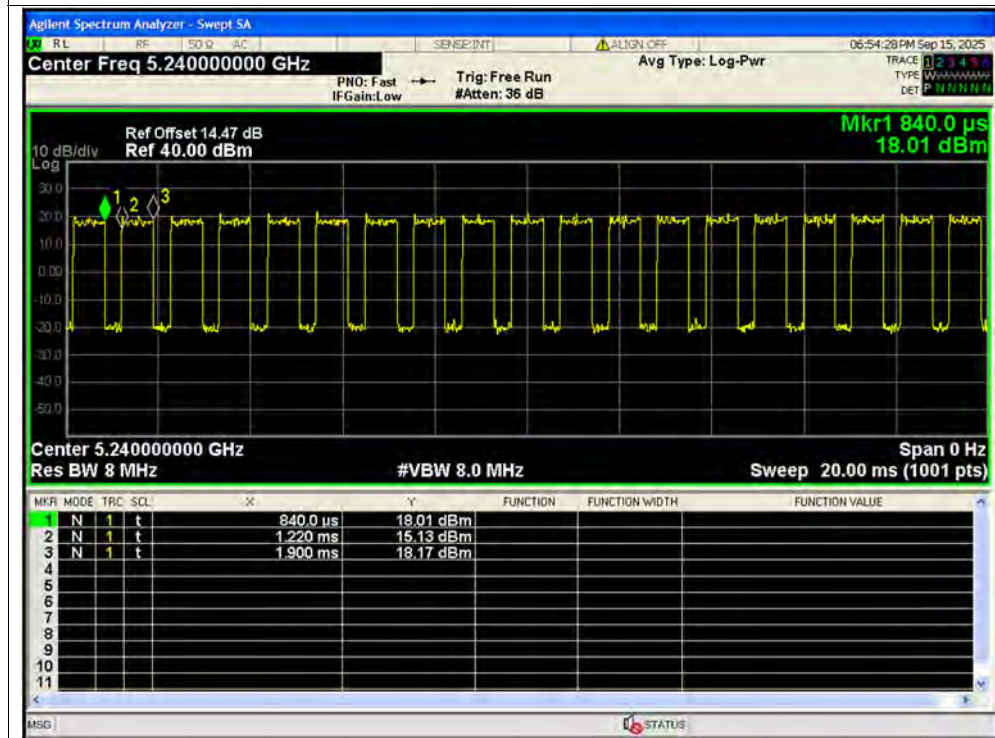


Duty Cycle NVNT n20 5220MHz Ant1

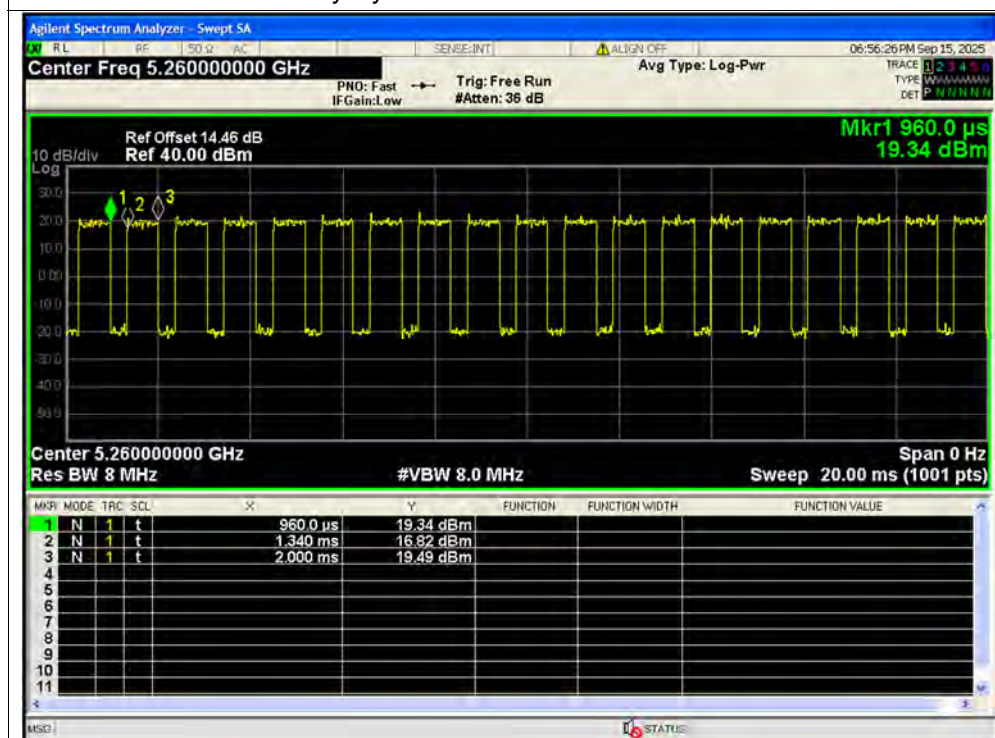




Duty Cycle NVNT n20 5240MHz Ant1

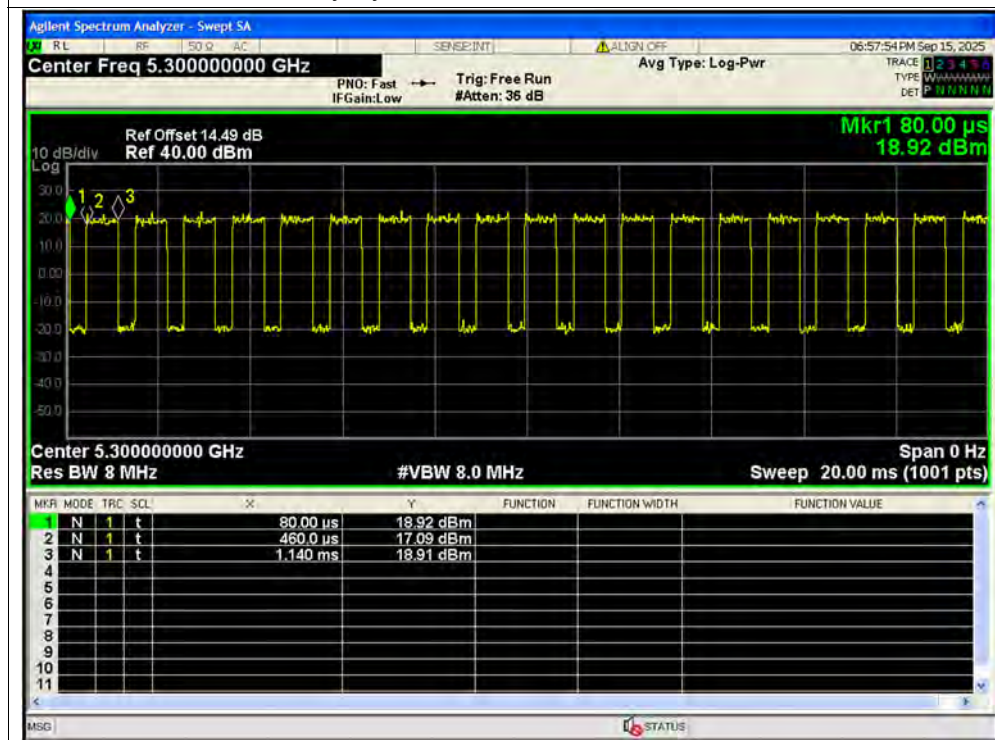


Duty Cycle NVNT n20 5260MHz Ant1

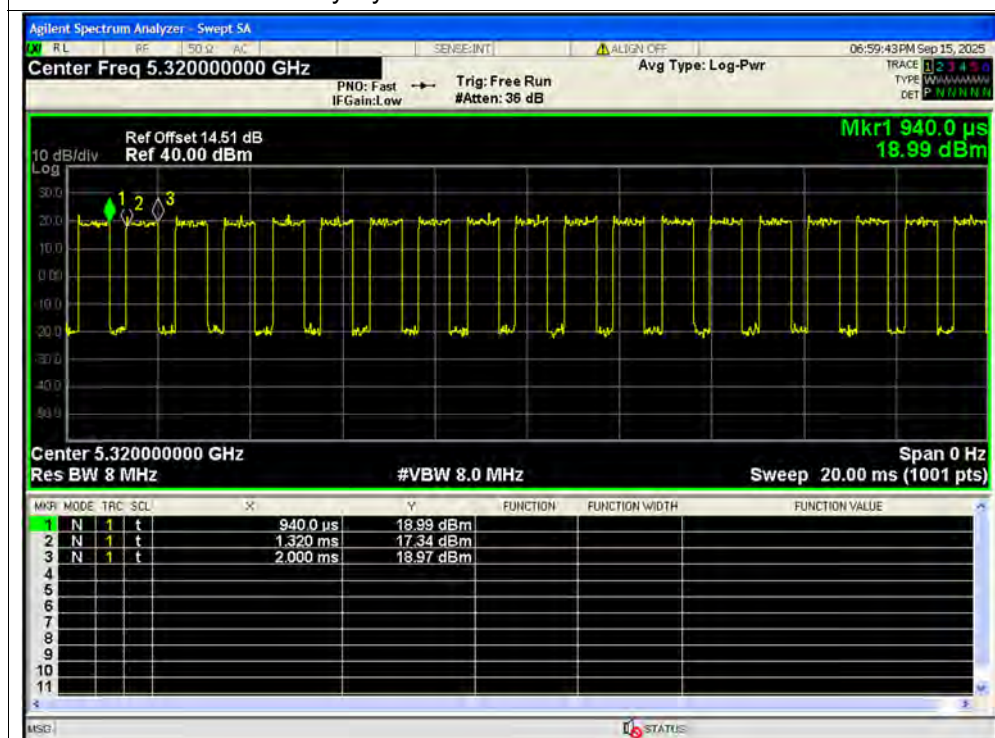




Duty Cycle NVNT n20 5300MHz Ant1

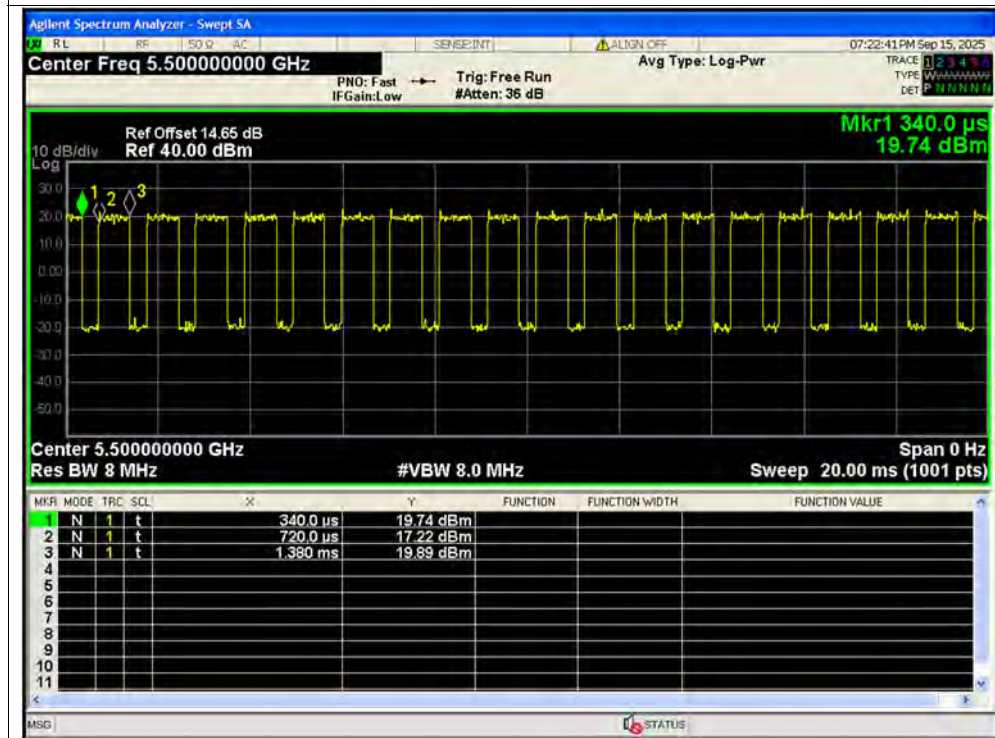


Duty Cycle NVNT n20 5320MHz Ant1

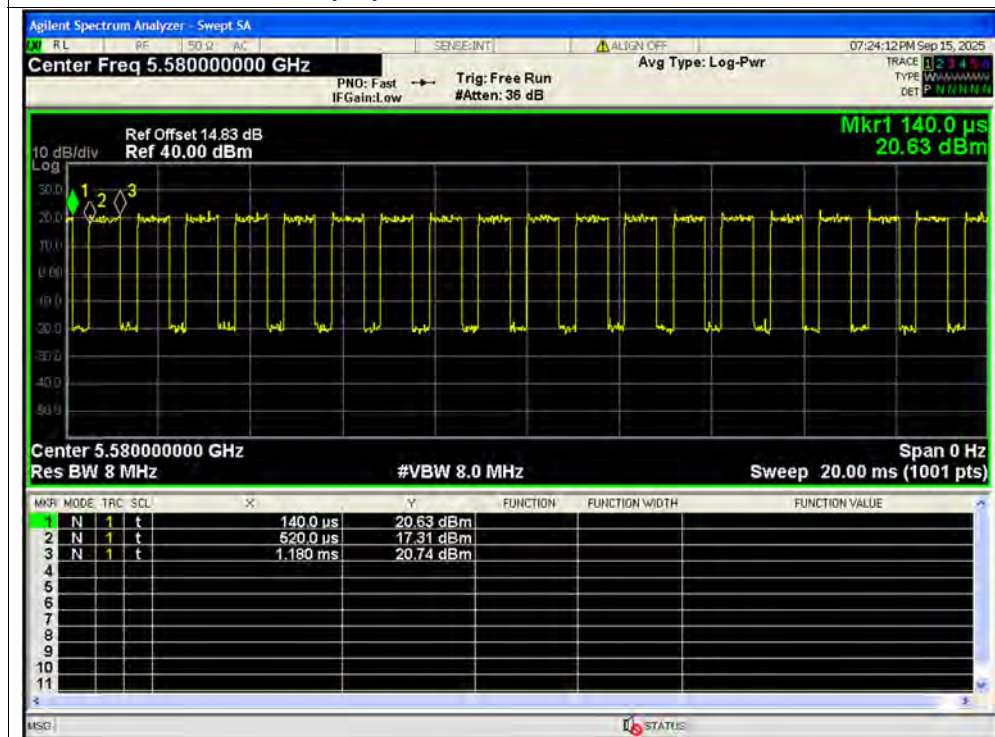




Duty Cycle NVNT n20 5500MHz Ant1

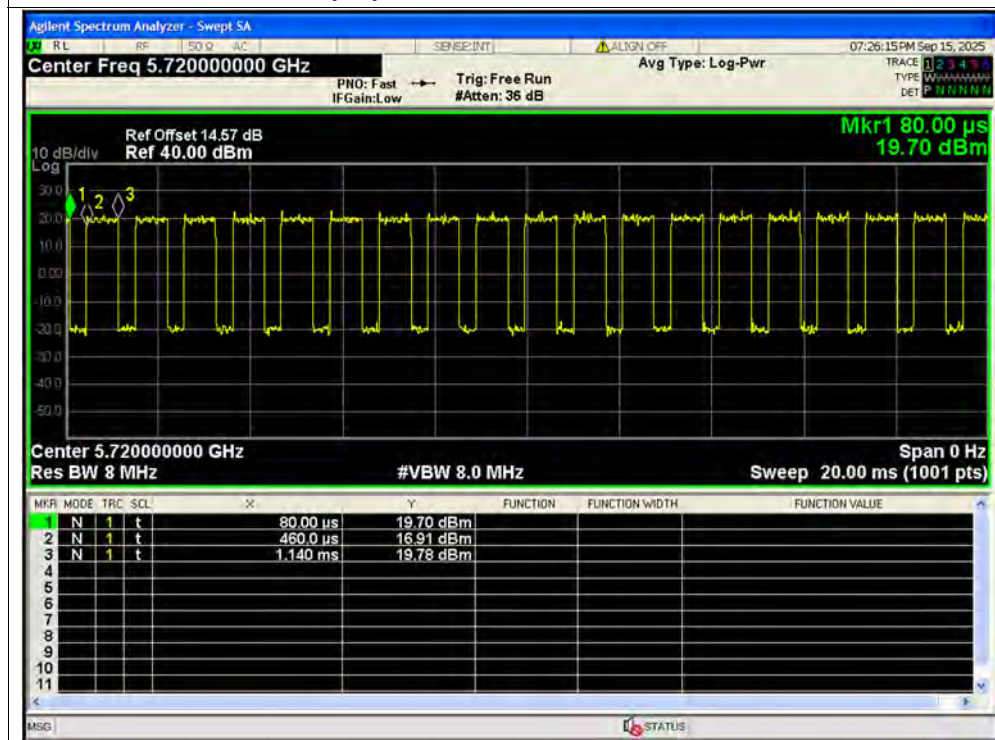


Duty Cycle NVNT n20 5580MHz Ant1

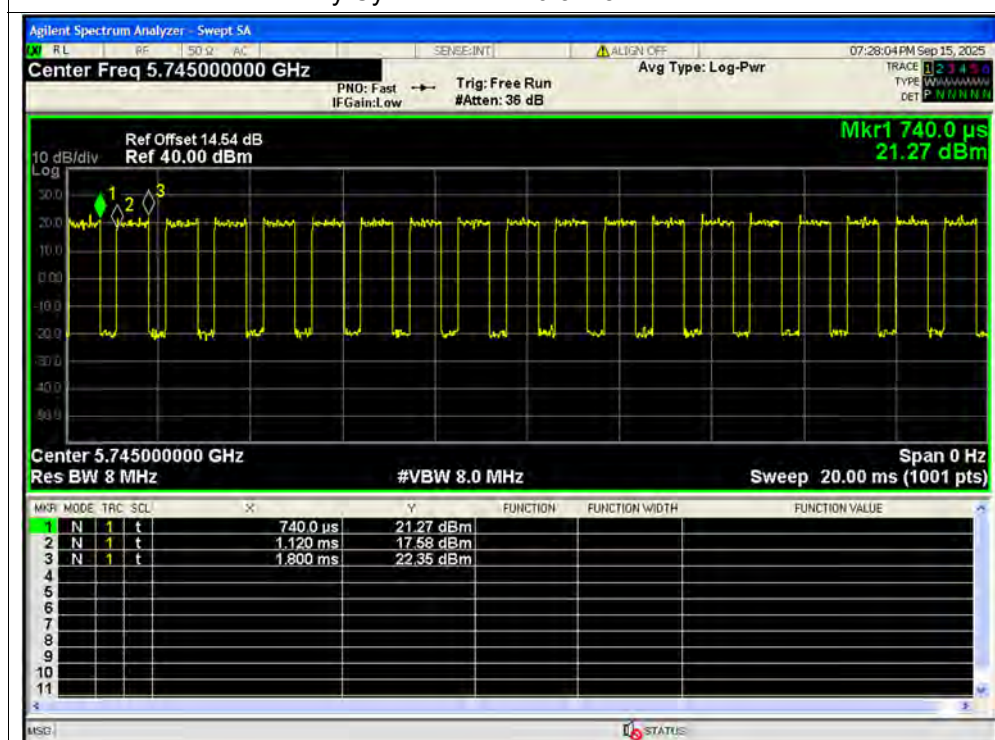




Duty Cycle NVNT n20 5720MHz Ant1

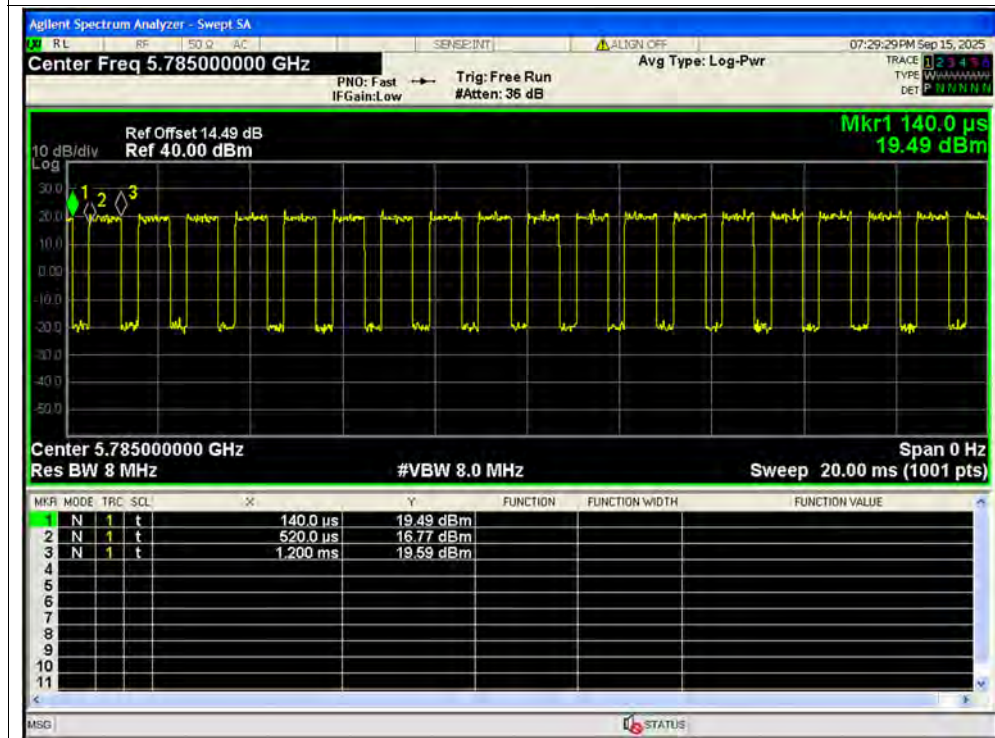


Duty Cycle NVNT n20 5745MHz Ant1

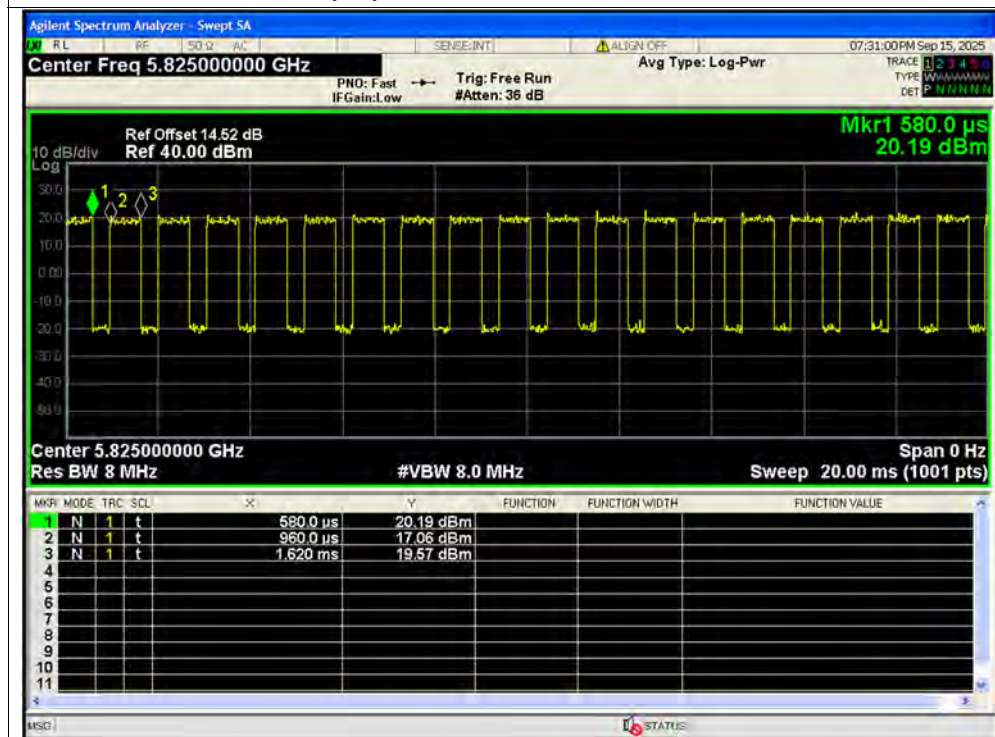




Duty Cycle NVNT n20 5785MHz Ant1



Duty Cycle NVNT n20 5825MHz Ant1



**A.2. Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	a	5180	Ant1	14.54	0.02844	24	Pass
NVNT	a	5220	Ant1	14.5	0.02818	24	Pass
NVNT	a	5240	Ant1	14.02	0.02523	24	Pass
NVNT	a	5260	Ant1	15.49	0.0354	24	Pass
NVNT	a	5300	Ant1	15.42	0.03483	23.95	Pass
NVNT	a	5320	Ant1	15.35	0.03428	24	Pass
NVNT	a	5500	Ant1	15.87	0.03864	24	Pass
NVNT	a	5580	Ant1	15.86	0.03855	23.97	Pass
NVNT	a	5720	Ant1	15.78	0.03784	24	Pass
NVNT	a	5745	Ant1	15.86	0.03855	30	Pass
NVNT	a	5785	Ant1	15.41	0.03475	30	Pass
NVNT	a	5825	Ant1	15.43	0.03491	30	Pass
NVNT	n20	5180	Ant1	14.41	0.02761	24	Pass
NVNT	n20	5220	Ant1	14.52	0.02831	24	Pass
NVNT	n20	5240	Ant1	14.1	0.0257	24	Pass
NVNT	n20	5260	Ant1	15.5	0.03548	24	Pass
NVNT	n20	5300	Ant1	15.13	0.03258	24	Pass
NVNT	n20	5320	Ant1	15.34	0.0342	24	Pass
NVNT	n20	5500	Ant1	15.86	0.03855	24	Pass
NVNT	n20	5580	Ant1	15.87	0.03864	24	Pass
NVNT	n20	5720	Ant1	15.73	0.03741	24	Pass
NVNT	n20	5745	Ant1	15.82	0.03819	30	Pass
NVNT	n20	5785	Ant1	15.4	0.03467	30	Pass
NVNT	n20	5825	Ant1	15.37	0.03443	30	Pass

**A.3. Emission Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)
NVNT	a	5180	Ant1	19.75
NVNT	a	5220	Ant1	19.57
NVNT	a	5240	Ant1	19.91
NVNT	a	5260	Ant1	19.98
NVNT	a	5300	Ant1	19.73
NVNT	a	5320	Ant1	20.02
NVNT	a	5500	Ant1	19.98
NVNT	a	5580	Ant1	19.83
NVNT	a	5720	Ant1	20.61
NVNT	n20	5180	Ant1	21.16
NVNT	n20	5220	Ant1	21.49
NVNT	n20	5240	Ant1	21.35
NVNT	n20	5260	Ant1	21.3
NVNT	n20	5300	Ant1	21.02
NVNT	n20	5320	Ant1	20.97
NVNT	n20	5500	Ant1	21.45
NVNT	n20	5580	Ant1	21.94
NVNT	n20	5720	Ant1	24.75



REPORT No.: SZ25090043W04

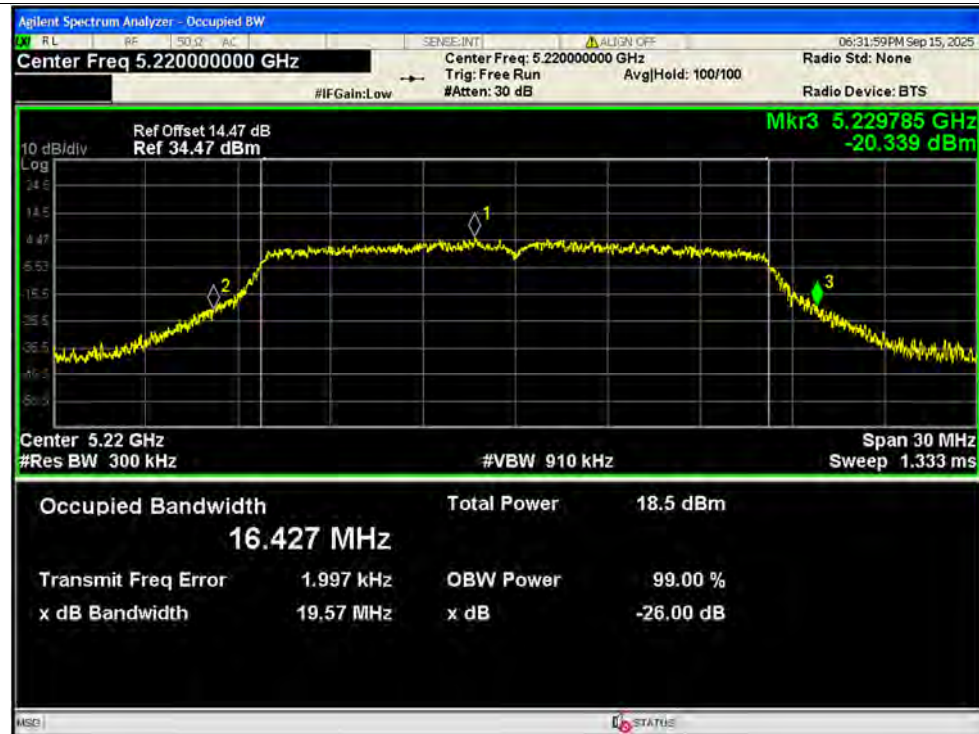
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.01	0.5	Pass
NVNT	a	5785	Ant1	14.57	0.5	Pass
NVNT	a	5825	Ant1	14.94	0.5	Pass
NVNT	n20	5745	Ant1	13.87	0.5	Pass
NVNT	n20	5785	Ant1	14.79	0.5	Pass
NVNT	n20	5825	Ant1	13.81	0.5	Pass

Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1



-26dB Bandwidth NVNT a 5220MHz Ant1



-26dB Bandwidth NVNT a 5240MHz Ant1



-26dB Bandwidth NVNT a 5260MHz Ant1



-26dB Bandwidth NVNT a 5300MHz Ant1



-26dB Bandwidth NVNT a 5320MHz Ant1



-26dB Bandwidth NVNT a 5500MHz Ant1



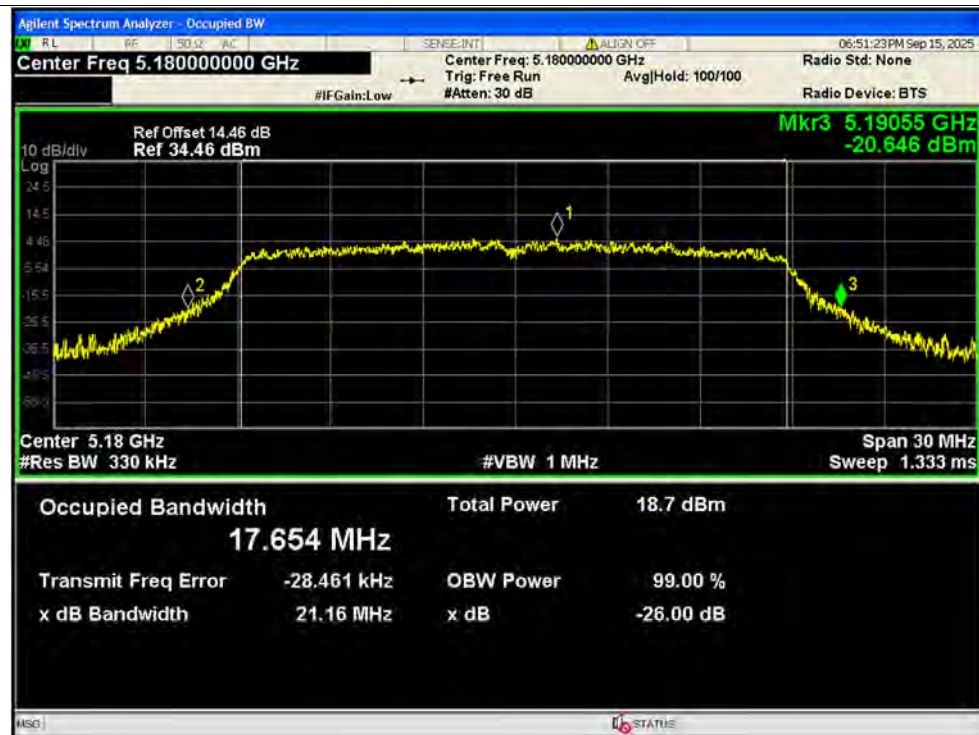
-26dB Bandwidth NVNT a 5580MHz Ant1



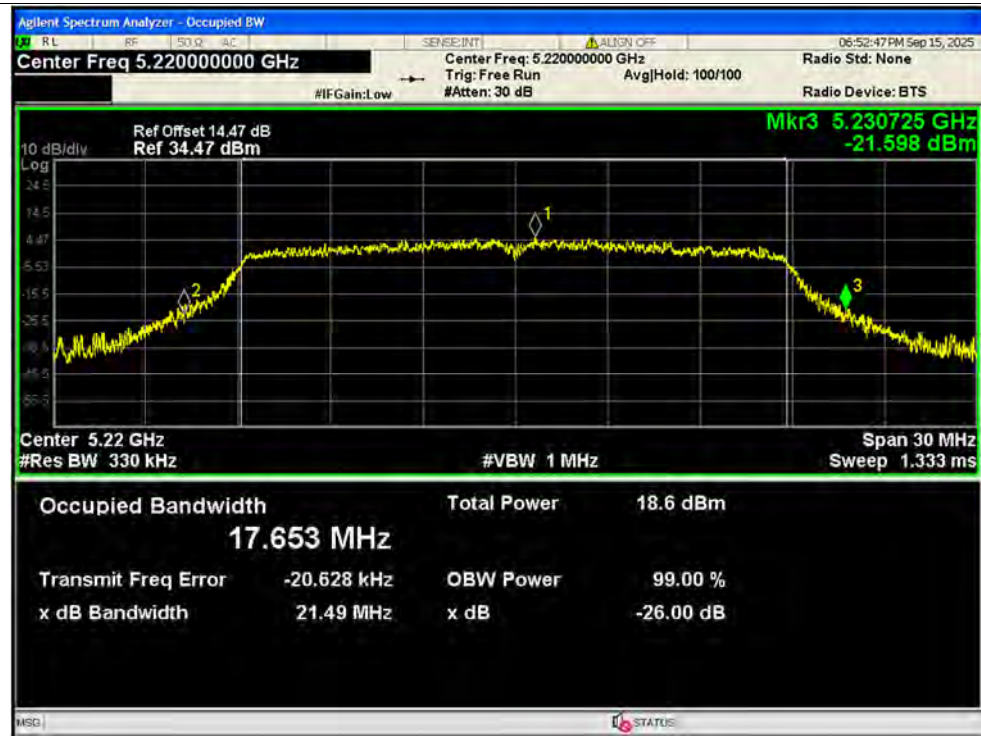
-26dB Bandwidth NVNT a 5720MHz Ant1



-26dB Bandwidth NVNT n20 5180MHz Ant1



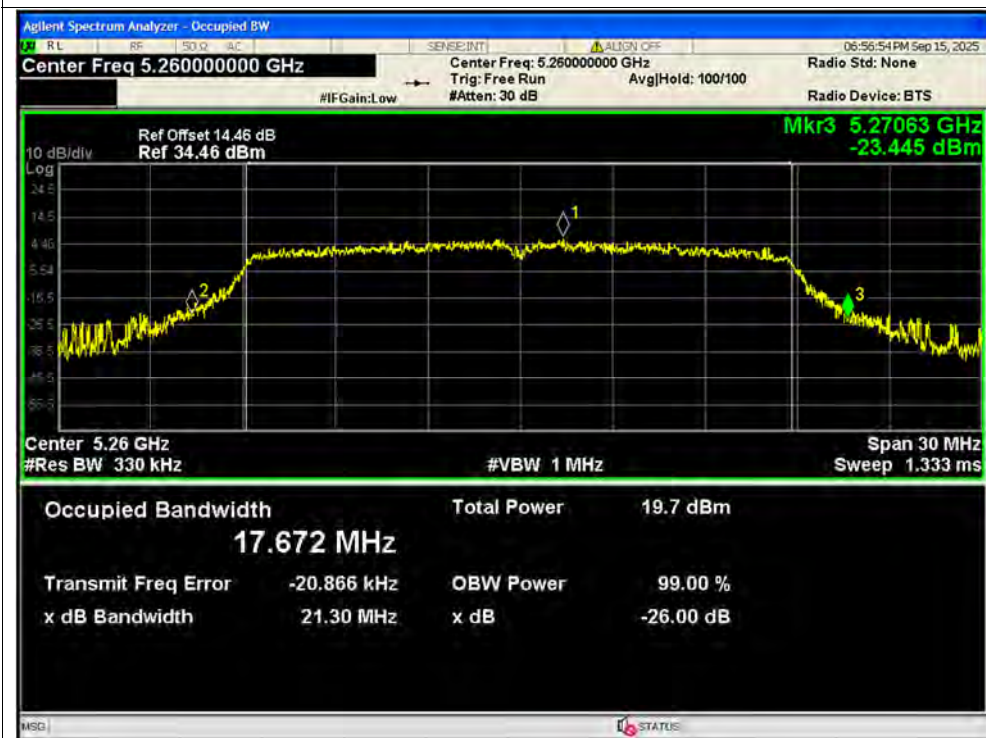
-26dB Bandwidth NVNT n20 5220MHz Ant1



-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n20 5260MHz Ant1



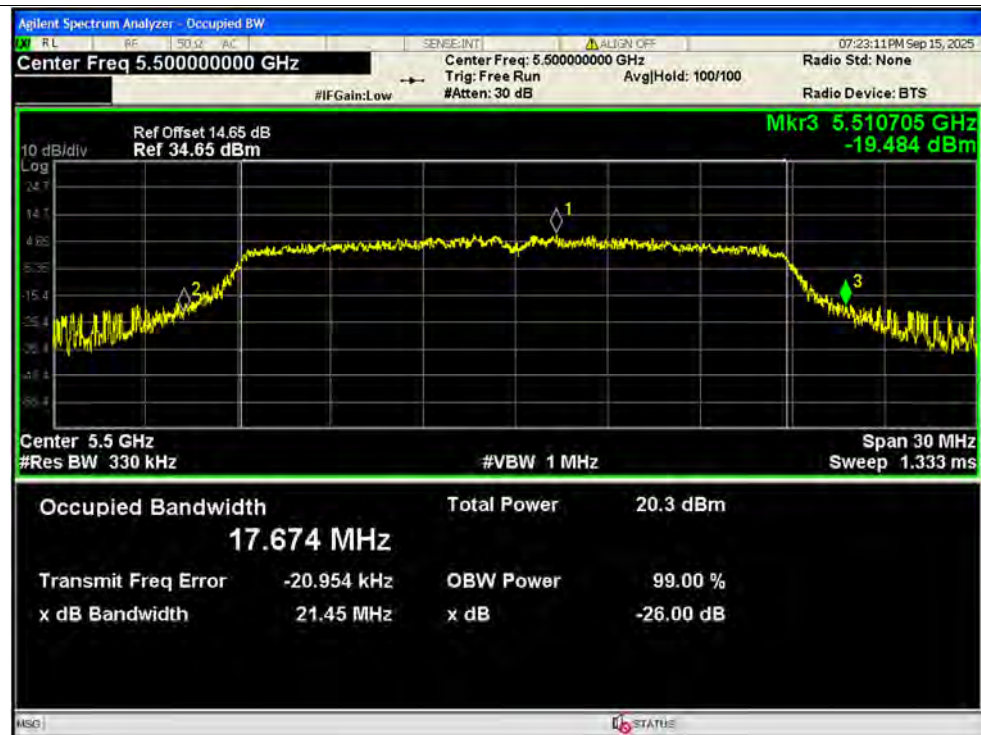
-26dB Bandwidth NVNT n20 5300MHz Ant1



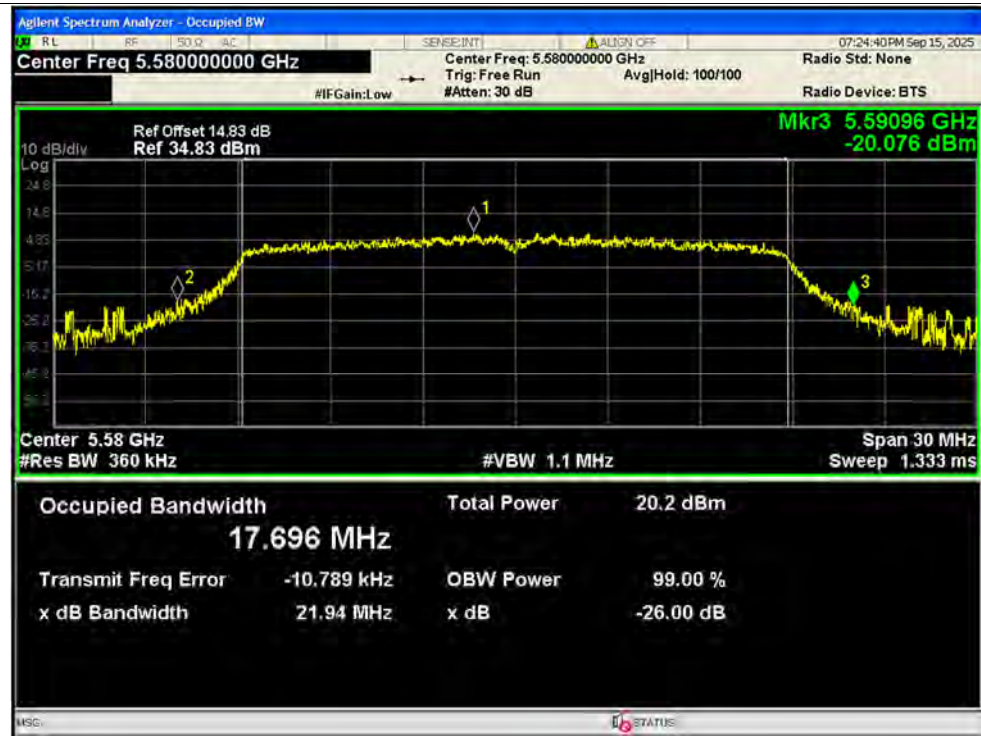
-26dB Bandwidth NVNT n20 5320MHz Ant1



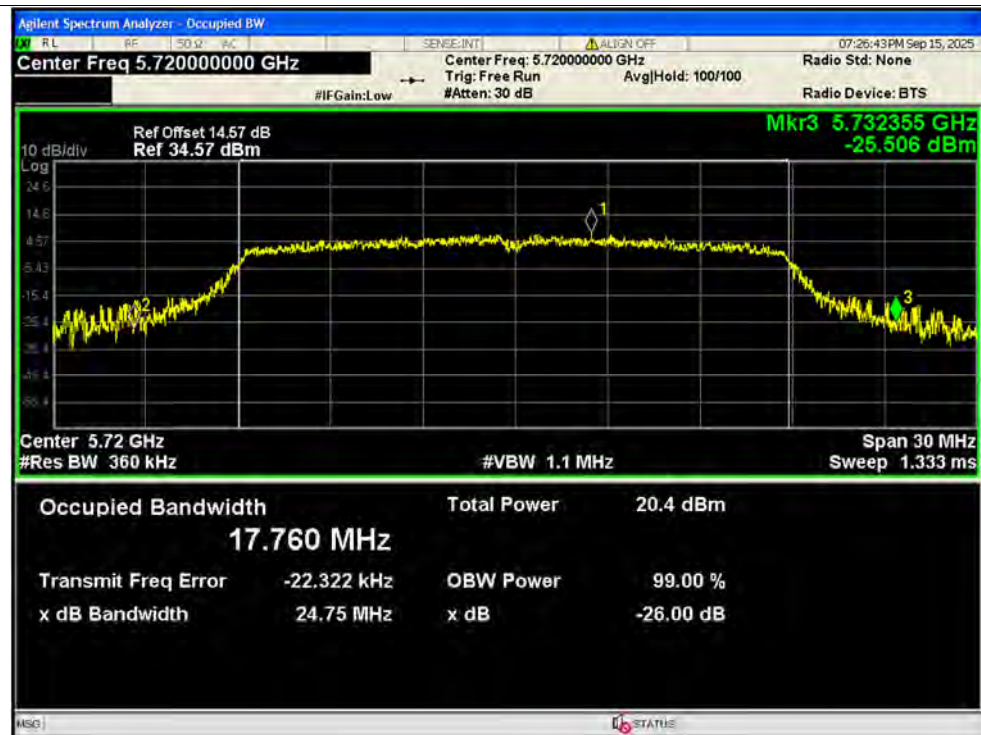
-26dB Bandwidth NVNT n20 5500MHz Ant1



-26dB Bandwidth NVNT n20 5580MHz Ant1



-26dB Bandwidth NVNT n20 5720MHz Ant1





Test Graphs

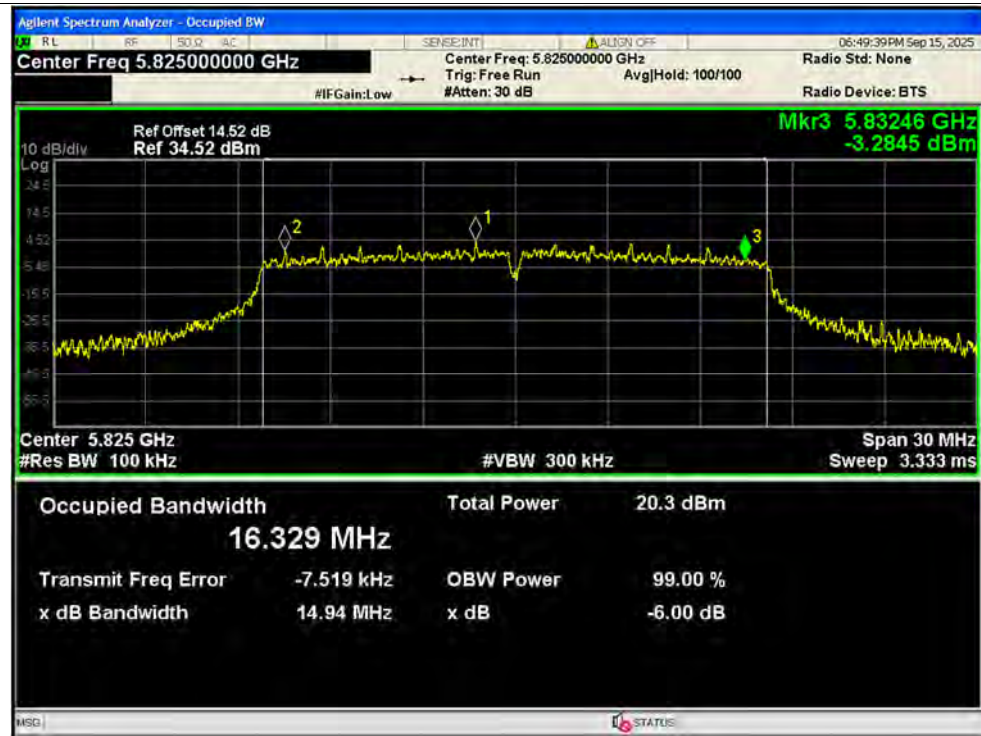
-6dB Bandwidth NVNT a 5745MHz Ant1



-6dB Bandwidth NVNT a 5785MHz Ant1



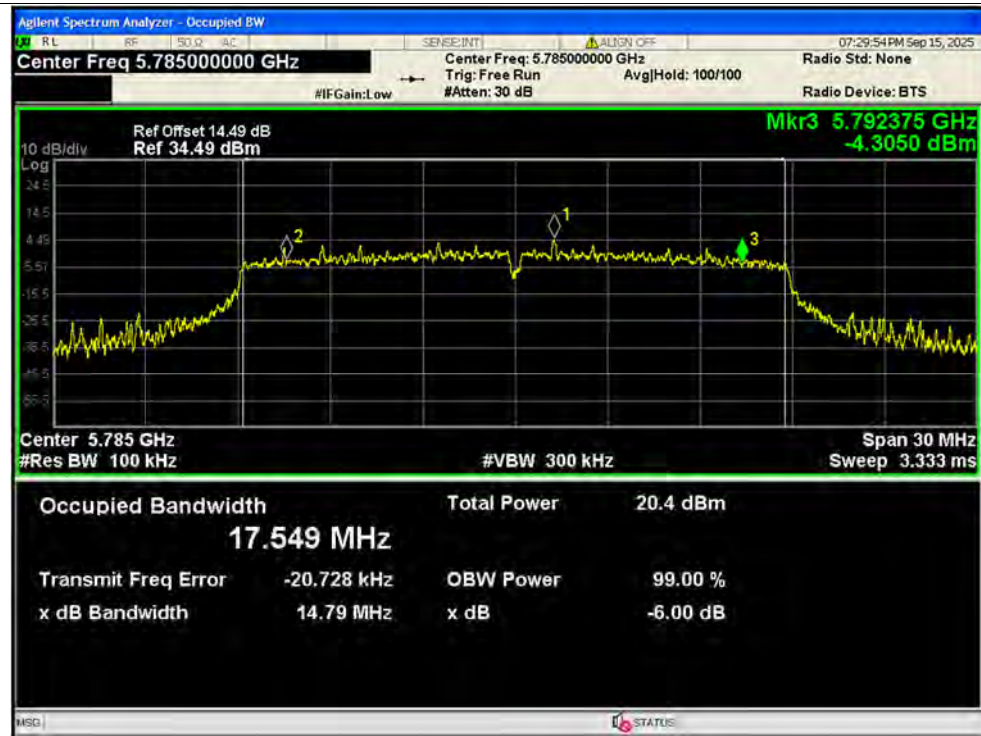
-6dB Bandwidth NVNT a 5825MHz Ant1



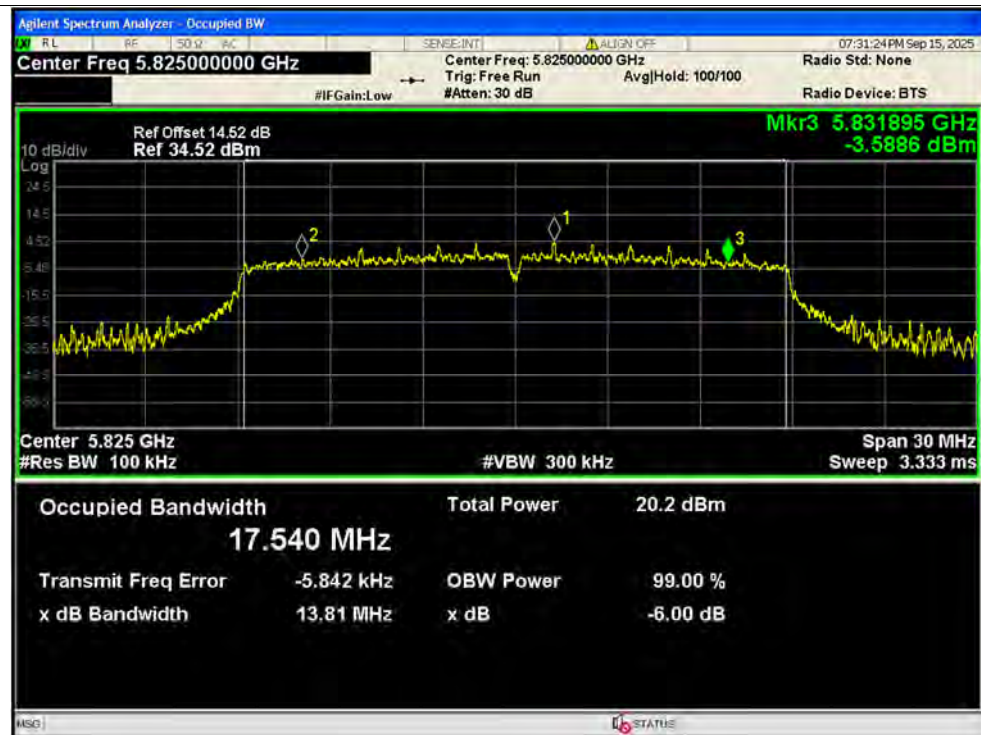
-6dB Bandwidth NVNT n20 5745MHz Ant1



-6dB Bandwidth NVNT n20 5785MHz Ant1



-6dB Bandwidth NVNT n20 5825MHz Ant1



**A.4. Peak Power Spectral Density**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total Conducted PSD (dBm)	Limit Conducted (dBm)	Verdict
NVNT	a	5180	Ant1	1.33	1.68	3.01	11	Pass
NVNT	a	5220	Ant1	1.31	1.68	2.99	11	Pass
NVNT	a	5240	Ant1	1.14	1.72	2.86	11	Pass
NVNT	a	5260	Ant1	2.4	1.8	4.2	11	Pass
NVNT	a	5300	Ant1	2.32	1.8	4.12	11	Pass
NVNT	a	5320	Ant1	2.24	1.68	3.92	11	Pass
NVNT	a	5500	Ant1	2.81	1.72	4.53	11	Pass
NVNT	a	5580	Ant1	3.05	1.8	4.85	11	Pass
NVNT	a	5720	Ant1	3.2	1.72	4.92	11	Pass
NVNT	a	5745	Ant1	0.21	1.72	1.93	30	Pass
NVNT	a	5785	Ant1	0.26	1.72	1.98	30	Pass
NVNT	a	5825	Ant1	-0.01	1.8	1.79	30	Pass
NVNT	n20	5180	Ant1	1.02	1.97	2.99	11	Pass
NVNT	n20	5220	Ant1	0.77	2.06	2.83	11	Pass
NVNT	n20	5240	Ant1	0.87	1.93	2.8	11	Pass
NVNT	n20	5260	Ant1	1.94	1.97	3.91	11	Pass
NVNT	n20	5300	Ant1	2.13	1.93	4.06	11	Pass
NVNT	n20	5320	Ant1	2.18	1.93	4.11	11	Pass
NVNT	n20	5500	Ant1	2.48	1.97	4.45	11	Pass
NVNT	n20	5580	Ant1	2.37	1.97	4.34	11	Pass
NVNT	n20	5720	Ant1	2.65	1.93	4.58	11	Pass
NVNT	n20	5745	Ant1	-0.18	1.93	1.75	30	Pass
NVNT	n20	5785	Ant1	-0.39	1.93	1.54	30	Pass
NVNT	n20	5825	Ant1	-0.81	1.97	1.16	30	Pass

Test Graphs

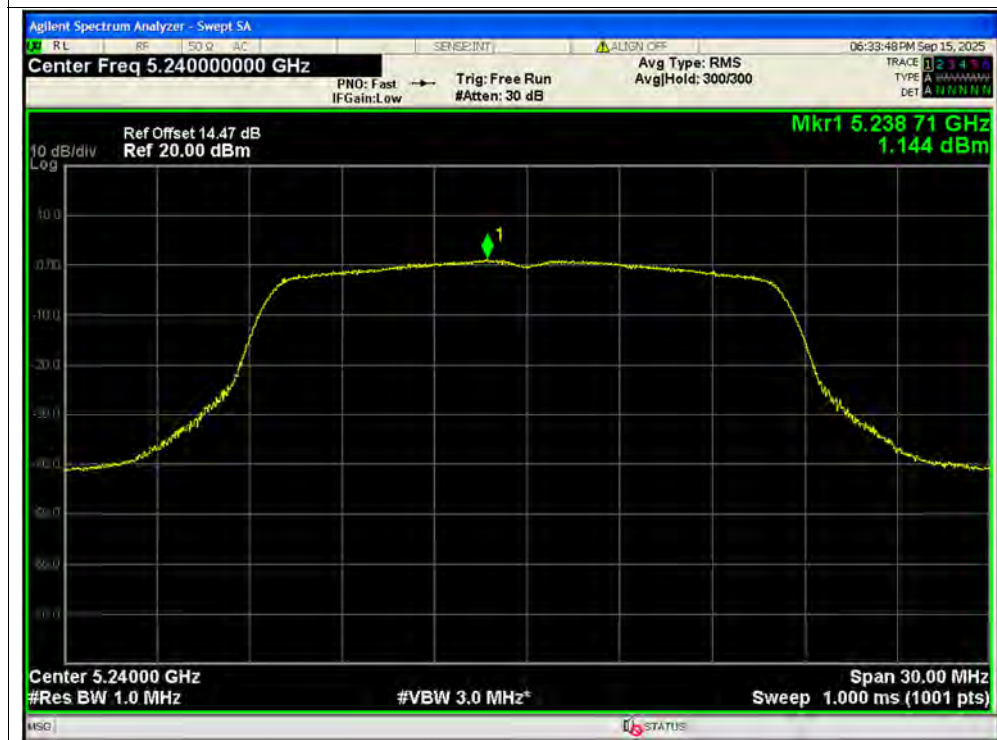
PSD NVNT a 5180MHz Ant1



PSD NVNT a 5220MHz Ant1



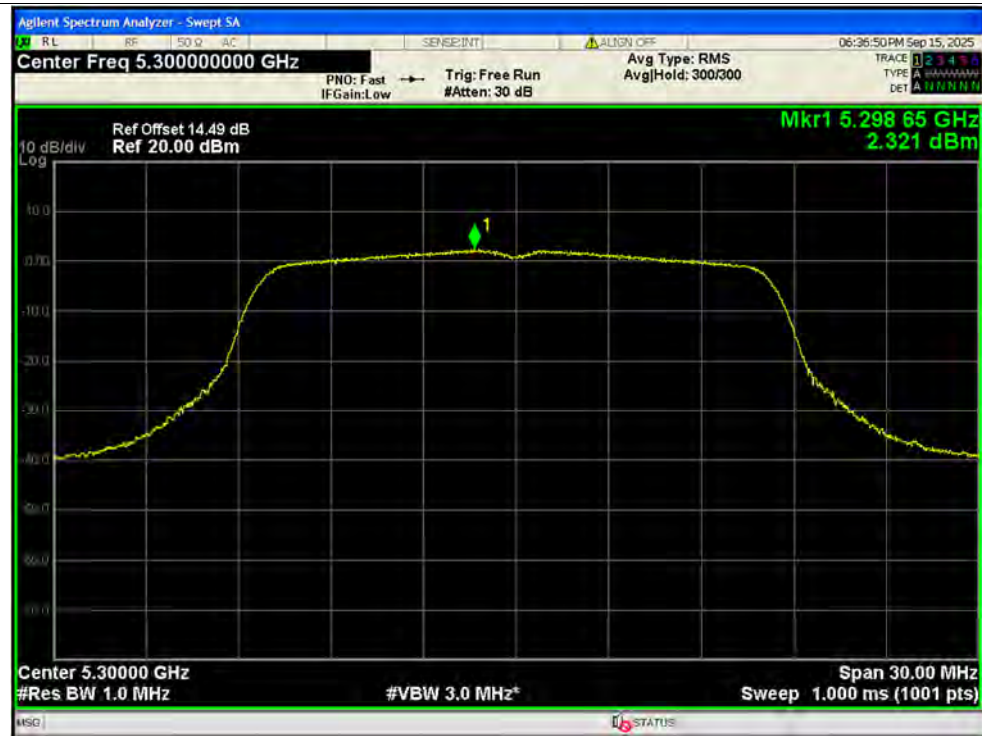
PSD NVNT a 5240MHz Ant1



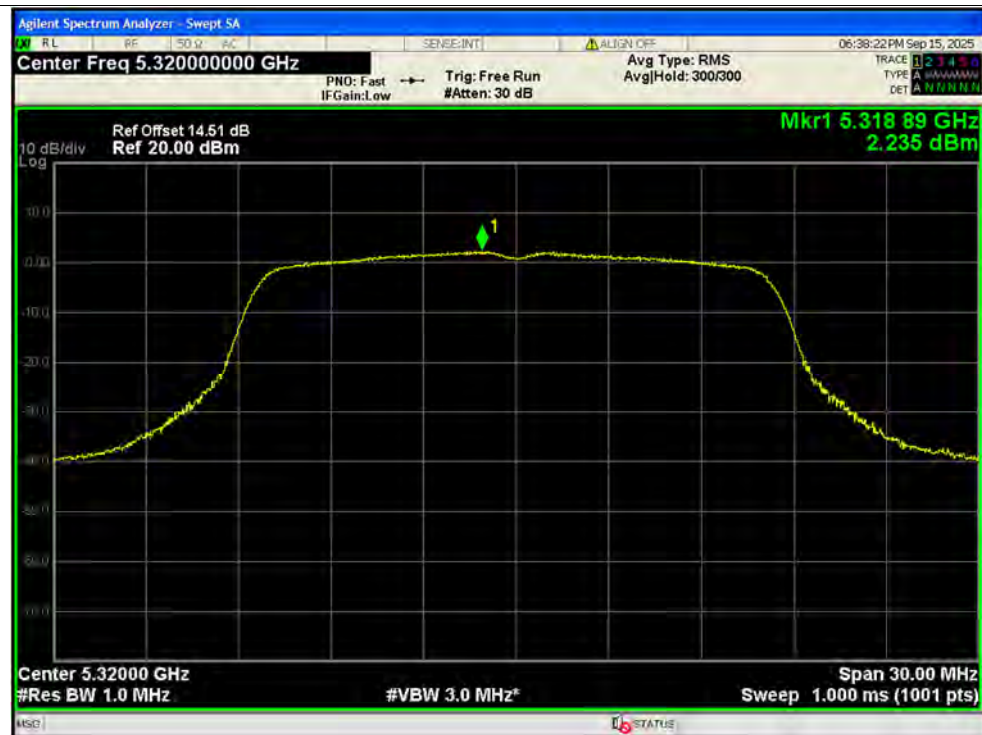
PSD NVNT a 5260MHz Ant1



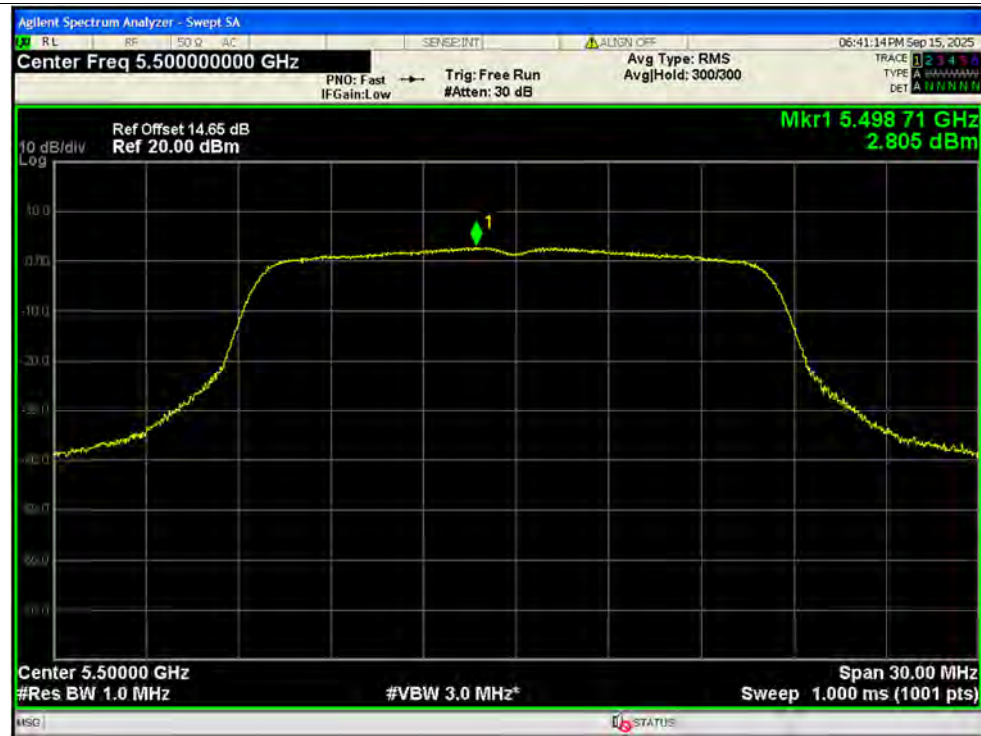
PSD NVNT a 5300MHz Ant1



PSD NVNT a 5320MHz Ant1



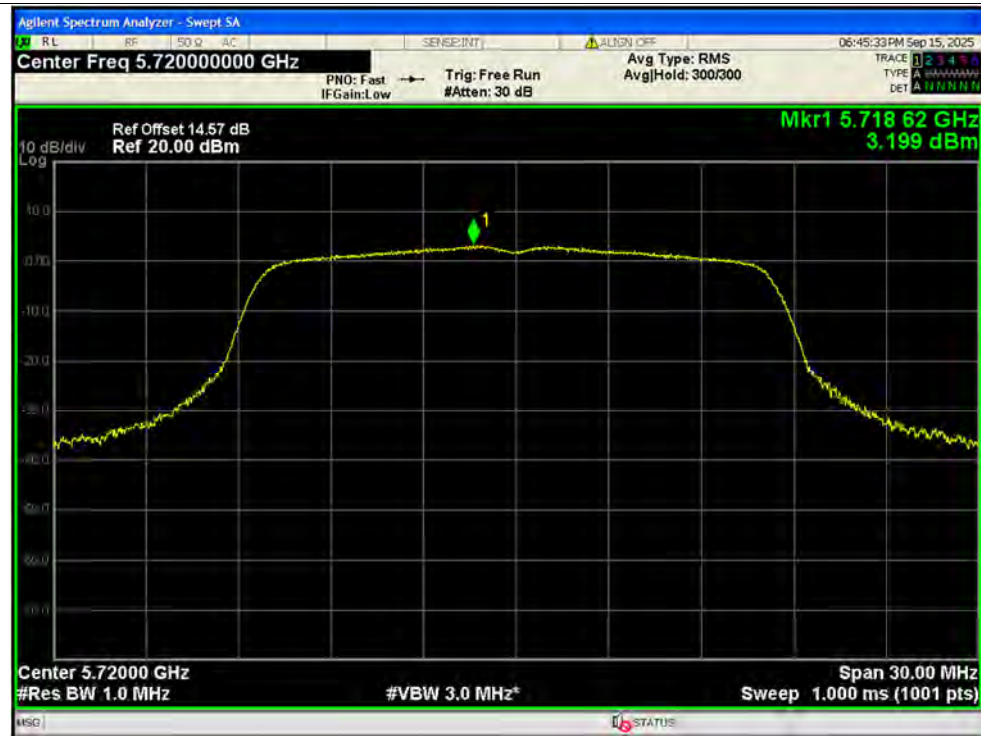
PSD NVNT a 5500MHz Ant1



PSD NVNT a 5580MHz Ant1



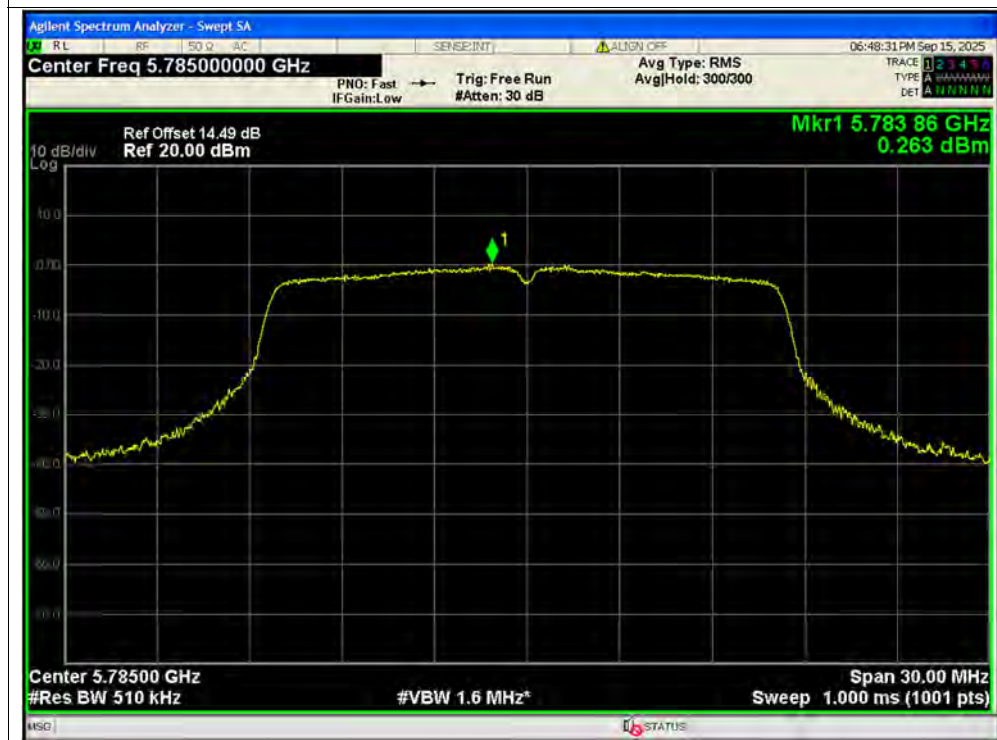
PSD NVNT a 5720MHz Ant1



PSD NVNT a 5745MHz Ant1



PSD NVNT a 5785MHz Ant1

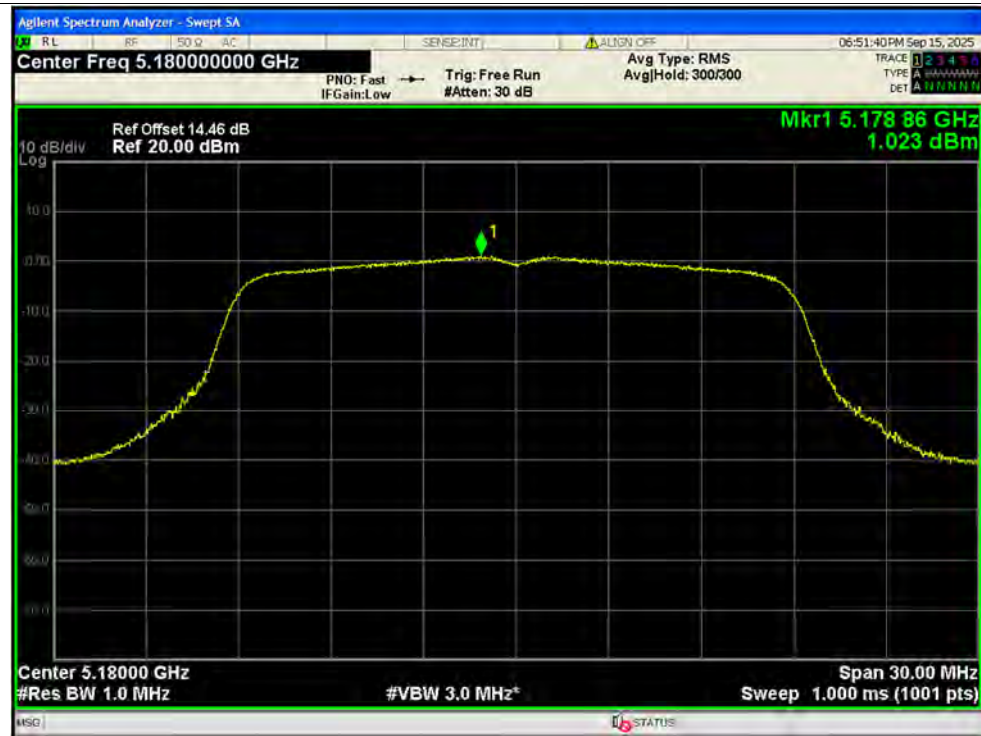


PSD NVNT a 5825MHz Ant1

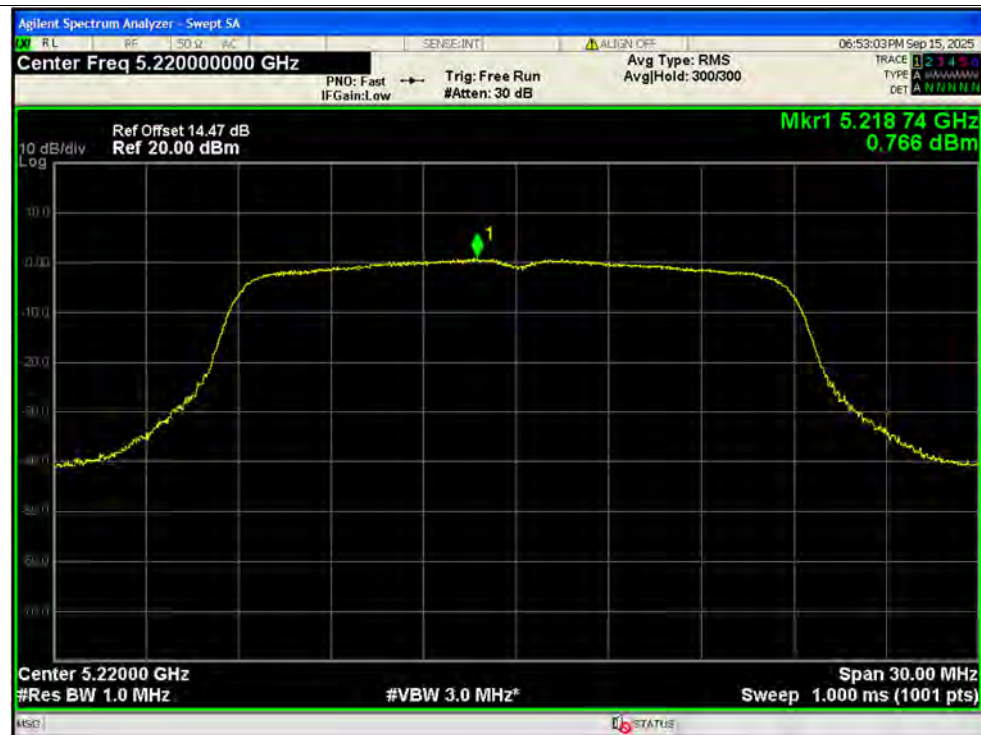




PSD NVNT n20 5180MHz Ant1



PSD NVNT n20 5220MHz Ant1



PSD NVNT n20 5240MHz Ant1

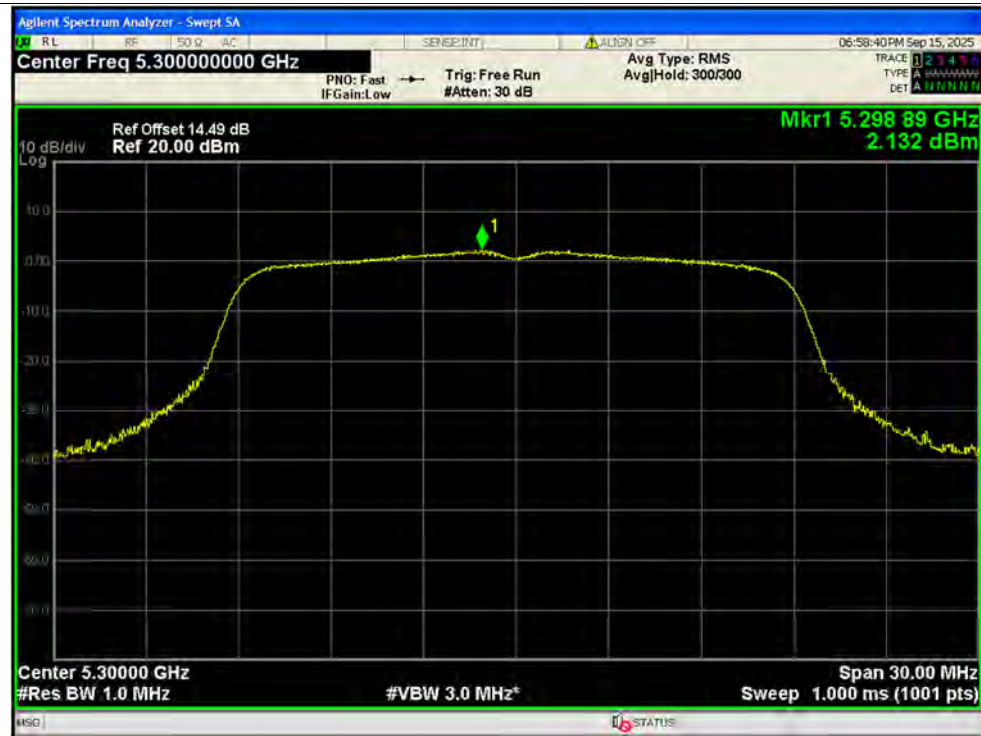


PSD NVNT n20 5260MHz Ant1





PSD NVNT n20 5300MHz Ant1



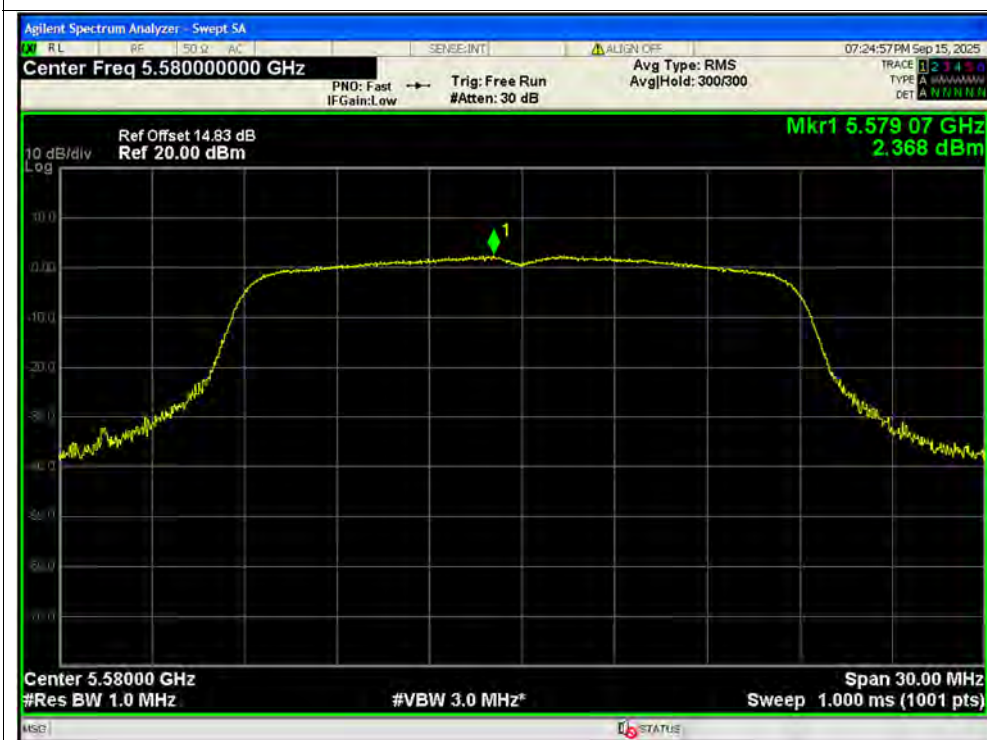
PSD NVNT n20 5320MHz Ant1



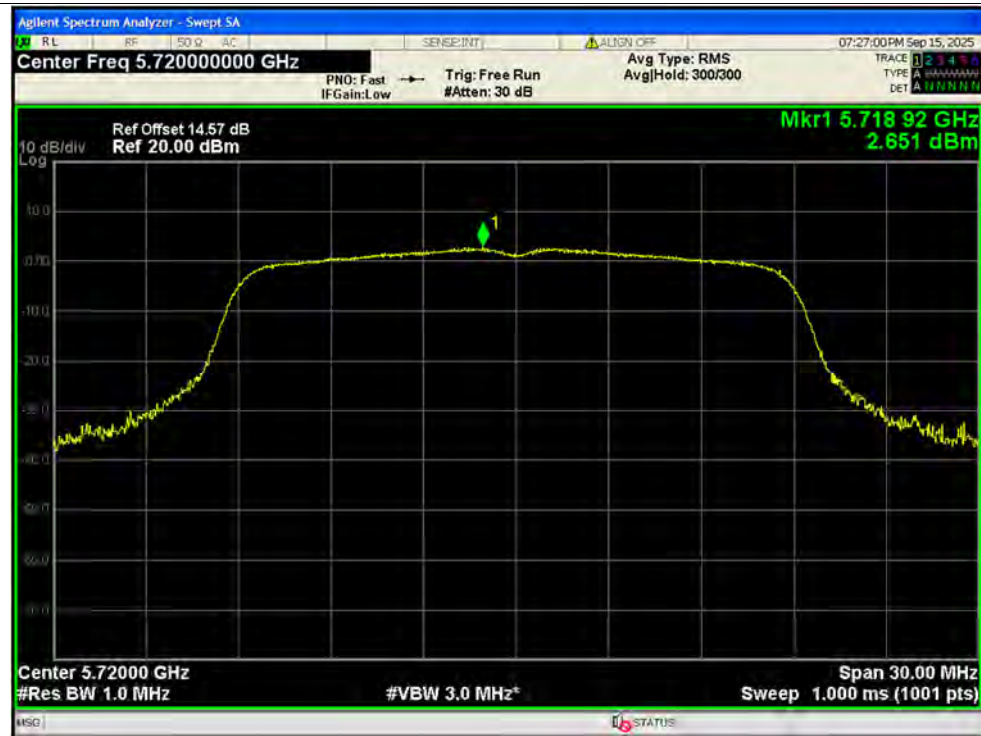
PSD NVNT n20 5500MHz Ant1



PSD NVNT n20 5580MHz Ant1



PSD NVNT n20 5720MHz Ant1



PSD NVNT n20 5745MHz Ant1





PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1



**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 3.0V	CW	5180	Ant1	5179.98	-20000	-3.86	25	Pass
20C V	CW	5180	Ant1	5179.98	-20000	-3.86	25	Pass
20C 3.86V	CW	5180	Ant1	5179.98	-20000	-3.86	25	Pass
20C 4.55V	CW	5180	Ant1	5179.98	-20000	-3.86	25	Pass
0C 3.86V	CW	5180	Ant1	5180	0	0	25	Pass
10C 3.86V	CW	5180	Ant1	5180	0	0	25	Pass
30C 3.86V	CW	5180	Ant1	5179.98	-20000	-3.86	25	Pass
40C 3.86V	CW	5180	Ant1	5180	0	0	25	Pass
20C 3.0V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
20C V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
20C 3.86V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
20C 4.55V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
0C 3.86V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
10C 3.86V	CW	5260	Ant1	5259.98	-20000	-3.8	25	Pass
30C 3.86V	CW	5260	Ant1	5259.96	-40000	-7.6	25	Pass
40C 3.86V	CW	5260	Ant1	5260	0	0	25	Pass
20C 3.0V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
20C V	CW	5500	Ant1	5500.02	20000	3.64	25	Pass
20C 3.86V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
20C 4.55V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
0C 3.86V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
10C 3.86V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
30C 3.86V	CW	5500	Ant1	5499.96	-40000	-7.27	25	Pass
40C 3.86V	CW	5500	Ant1	5499.98	-20000	-3.64	25	Pass
20C 3.0V	CW	5745	Ant1	5744.98	-20000	-3.48	25	Pass
20C V	CW	5745	Ant1	5744.96	-40000	-6.96	25	Pass
20C 3.86V	CW	5745	Ant1	5745	0	0	25	Pass
20C 4.55V	CW	5745	Ant1	5745	0	0	25	Pass
0C 3.86V	CW	5745	Ant1	5744.98	-20000	-3.48	25	Pass
10C 3.86V	CW	5745	Ant1	5745	0	0	25	Pass
30C 3.86V	CW	5745	Ant1	5744.98	-20000	-3.48	25	Pass
40C 3.86V	CW	5745	Ant1	5744.98	-20000	-3.48	25	Pass



REPORT No.: SZ25090043W04

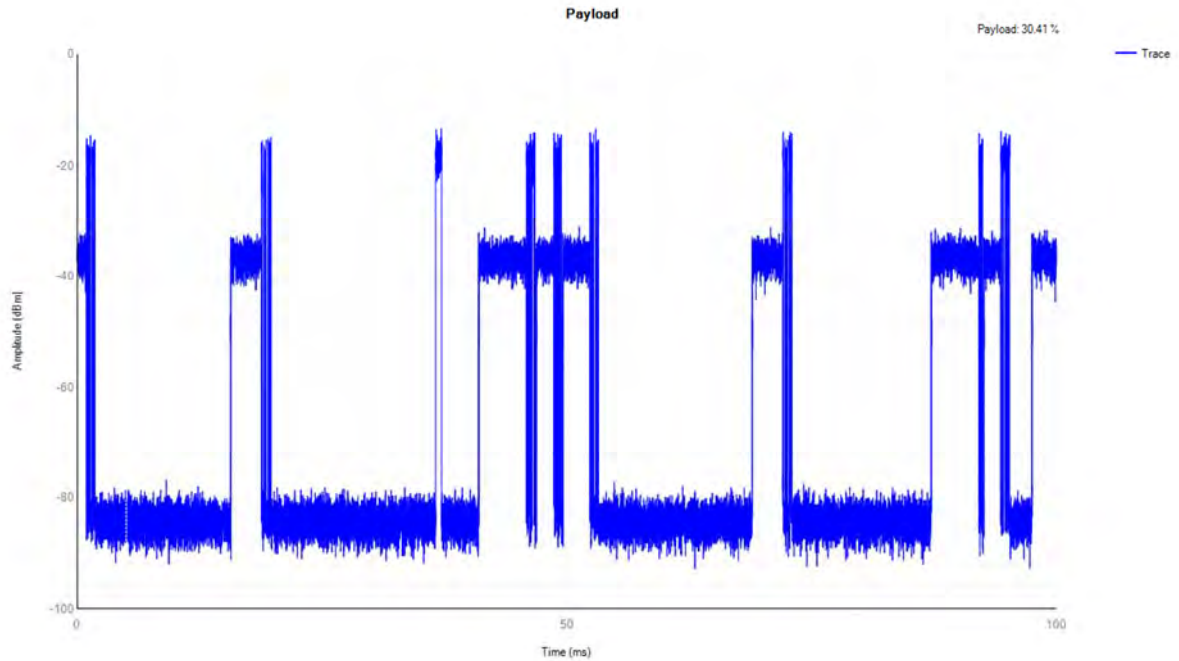
A.6. Dynamic Frequency Selection

Payload

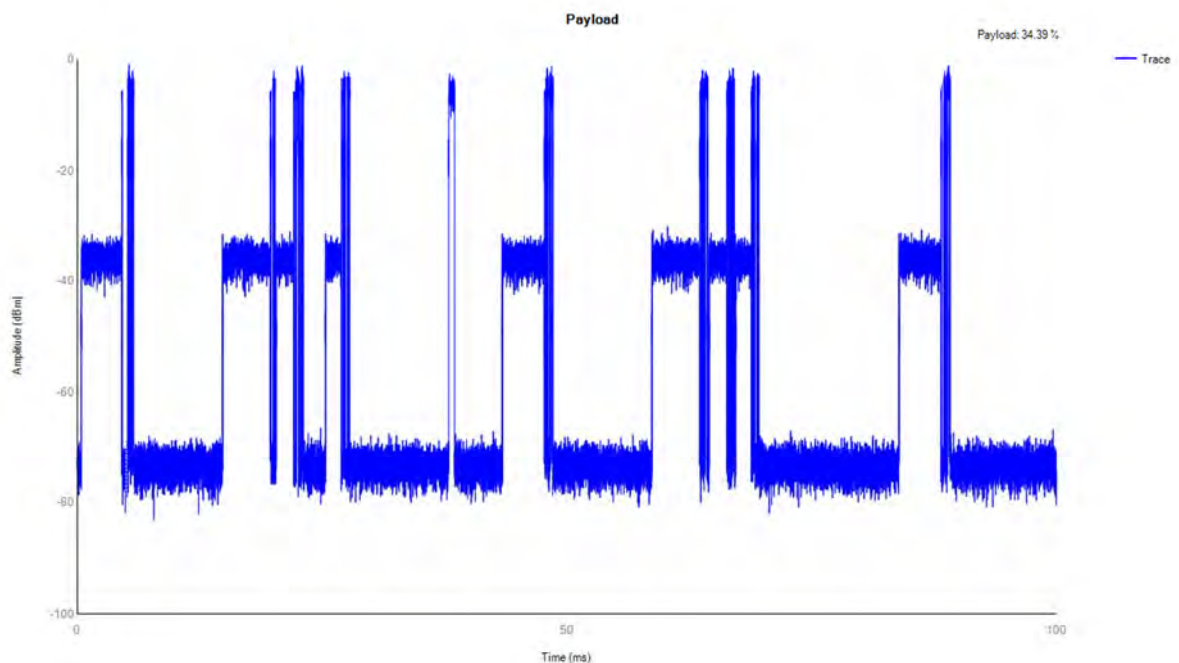
Mode	Frequency (MHz)	Result	Verdict
n20	5320	30.41	Pass
n20	5500	34.39	Pass

Test Graphs

n20 5320MHz Payload



n20 5500MHz Payload





REPORT No.: SZ25090043W04

Detection Thresholds

Mode	Frequency (MHz)	Type	Result	Verdict
n20	5320	DFS_FCC_T0	See test Graph	Pass
n20	5500	DFS_FCC_T0	See test Graph	Pass

Spectrum analyzer settings:

Span: Zero

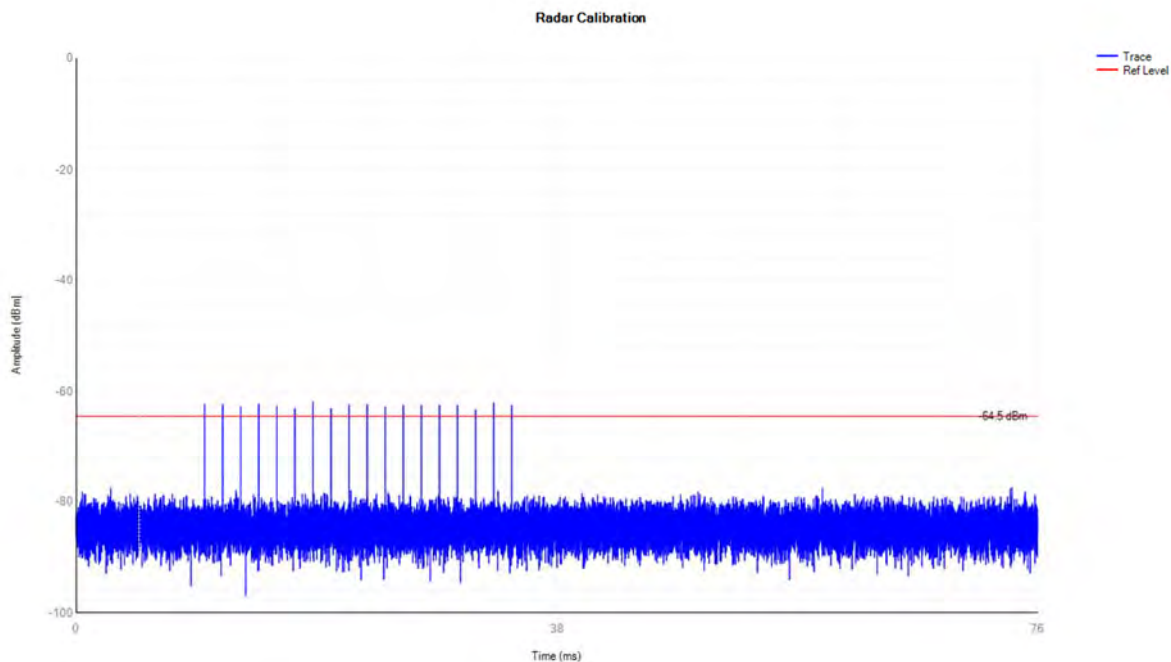
Detector Type: Peak

RBW: 3MHz

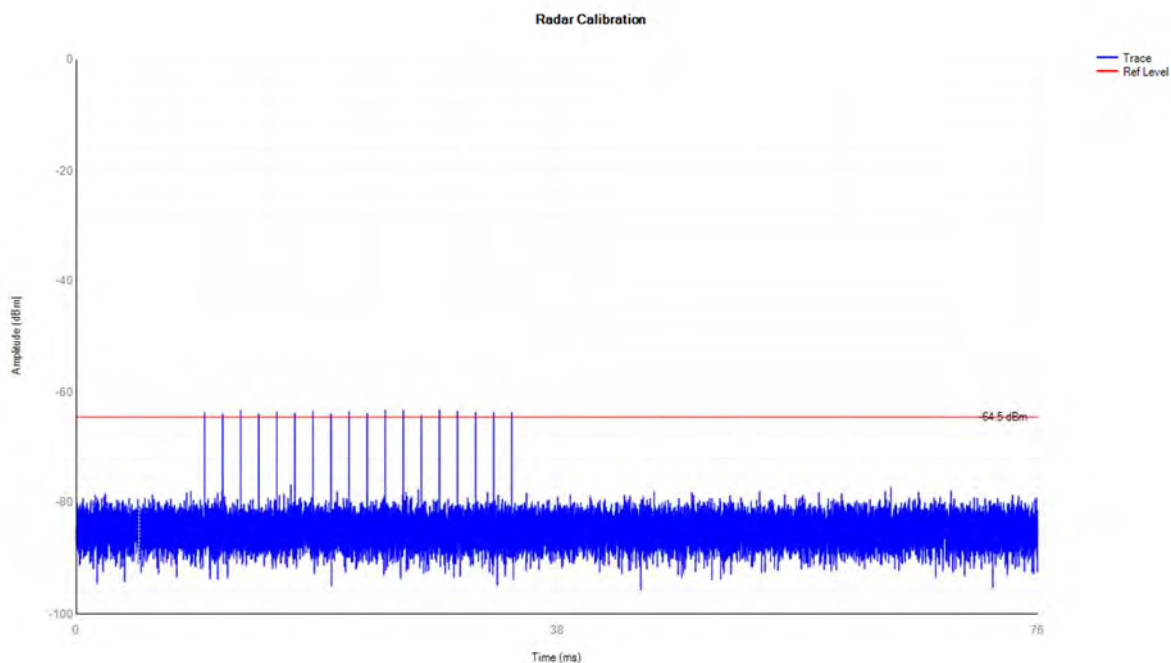
VBW: 3MHz

Test Graphs

5320MHz DFS_FCC_T0



5500MHz DFS_FCC_T0





Channel Move Time and Channel Closing Transmission Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
n20	5320	0.76	10	0.015	0.26	0.008	0.06	Pass
n20	5500	0.746	10	0.019	0.26	0.008	0.06	Pass

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

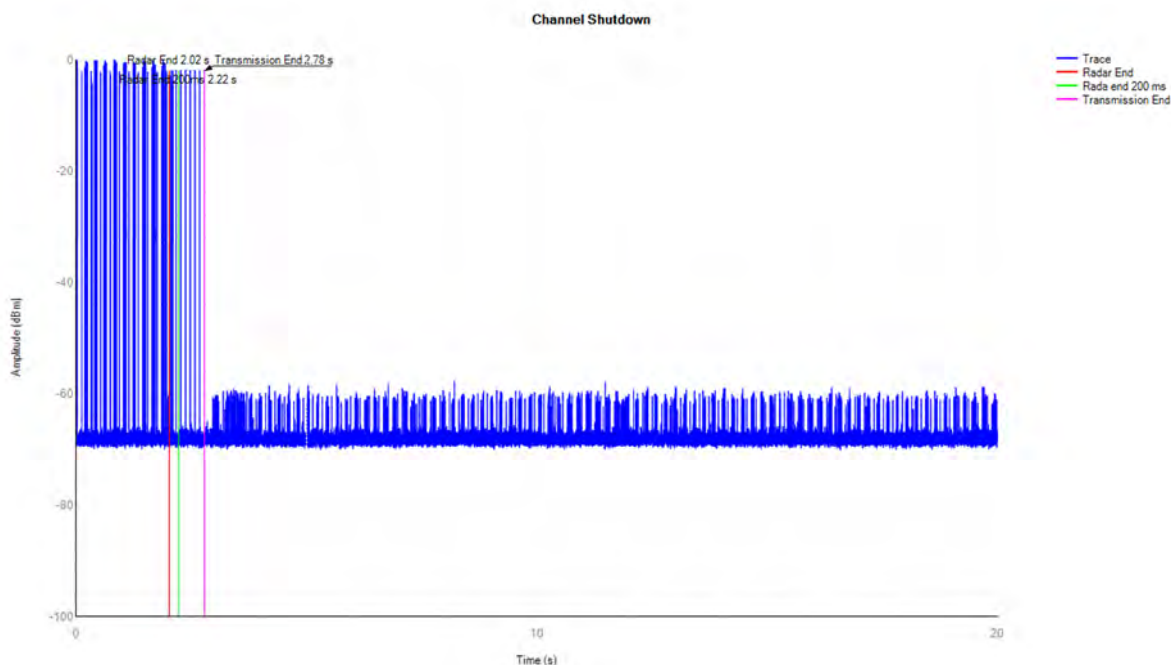
RBW: 3MHz

VBW: 3MHz

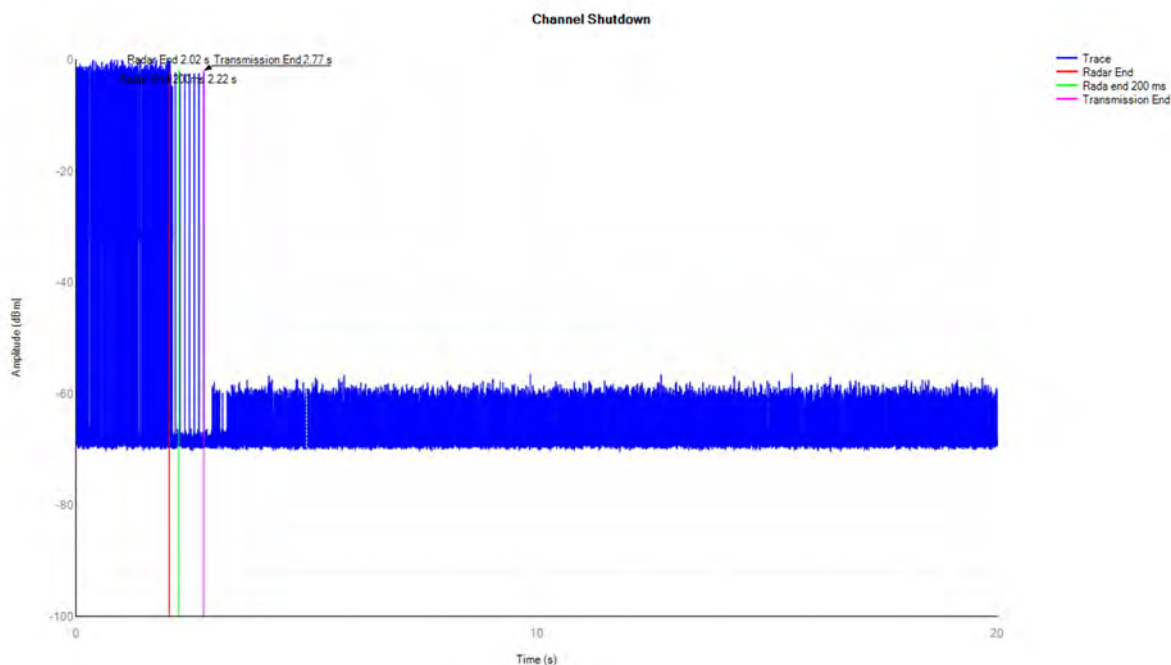
Sweep time: 20s

Test Graphs

n20 5320MHz Shutdown



n20 5500MHz Shutdown



Note: The signal above the noise floor after the radar signal ends is the signal which leaked from other channels that have been moved following the Master device.



REPORT No.: SZ25090043W04

Non-Occupancy Period

Mode	Frequency (MHz)	Result	Verdict
n20	5320	See test Graph	Pass
n20	5500	See test Graph	Pass

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

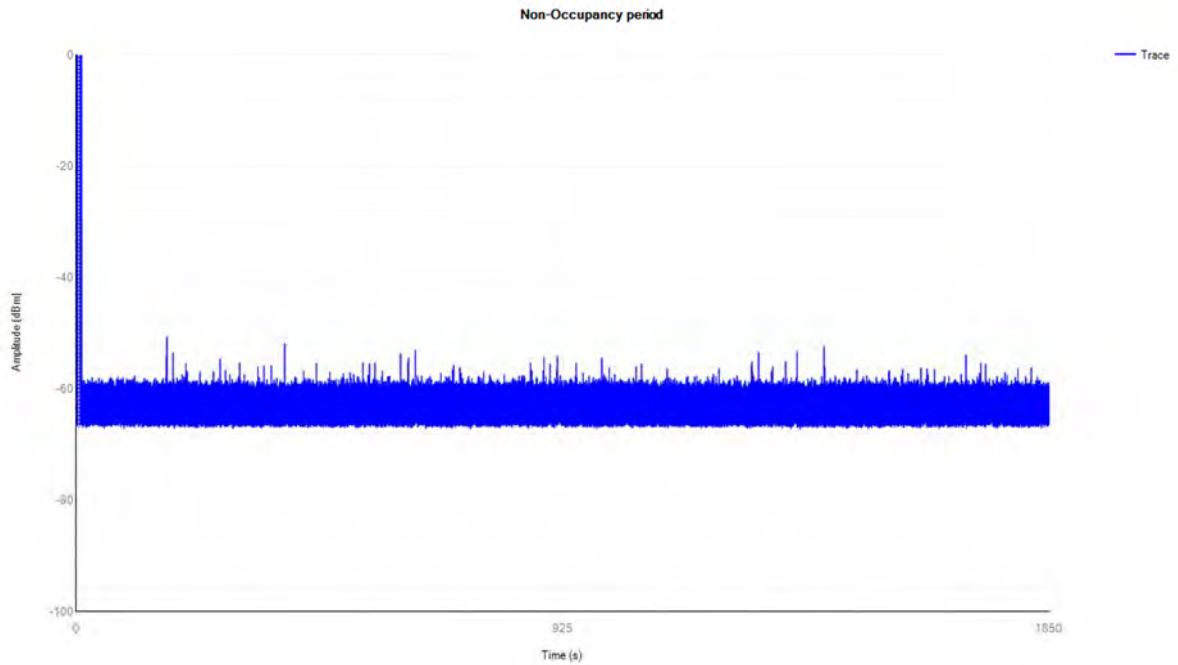
RBW: 3MHz

VBW: 3MHz

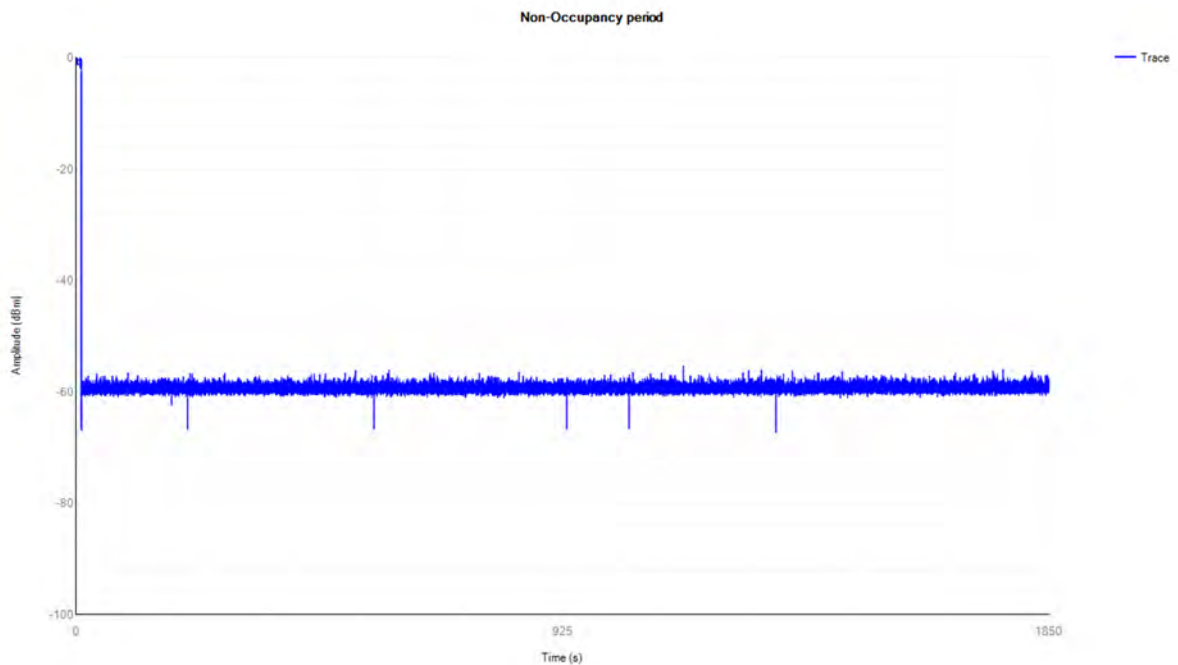
Sweep time: 1850s

Test Graphs

n20 5320MHz Non-Occupancy



n20 5500MHz Non-Occupancy





A.7. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode: EUT+Adapter+Data cable+Pogo pin seat charge+Router+Mobile phone +WIFI TX

Test voltage: AC 120V/60Hz

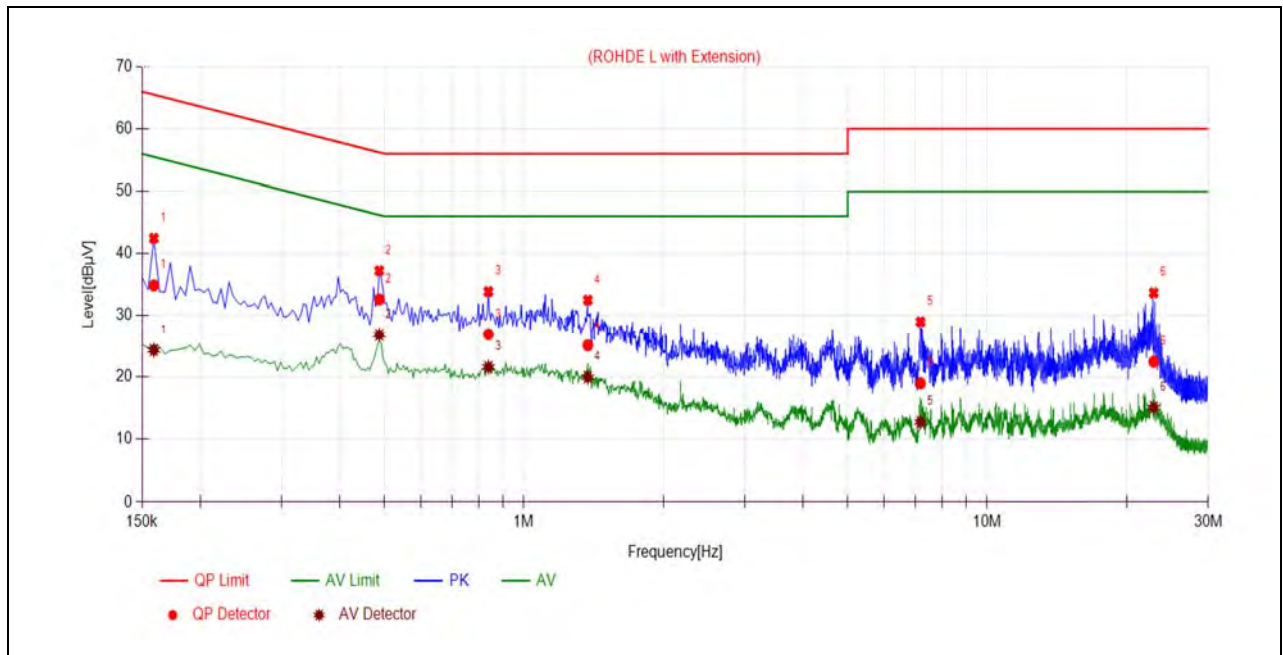
The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss}} \text{ [dB]} + A_{\text{Factor}}$$

U_R : Receiver Reading

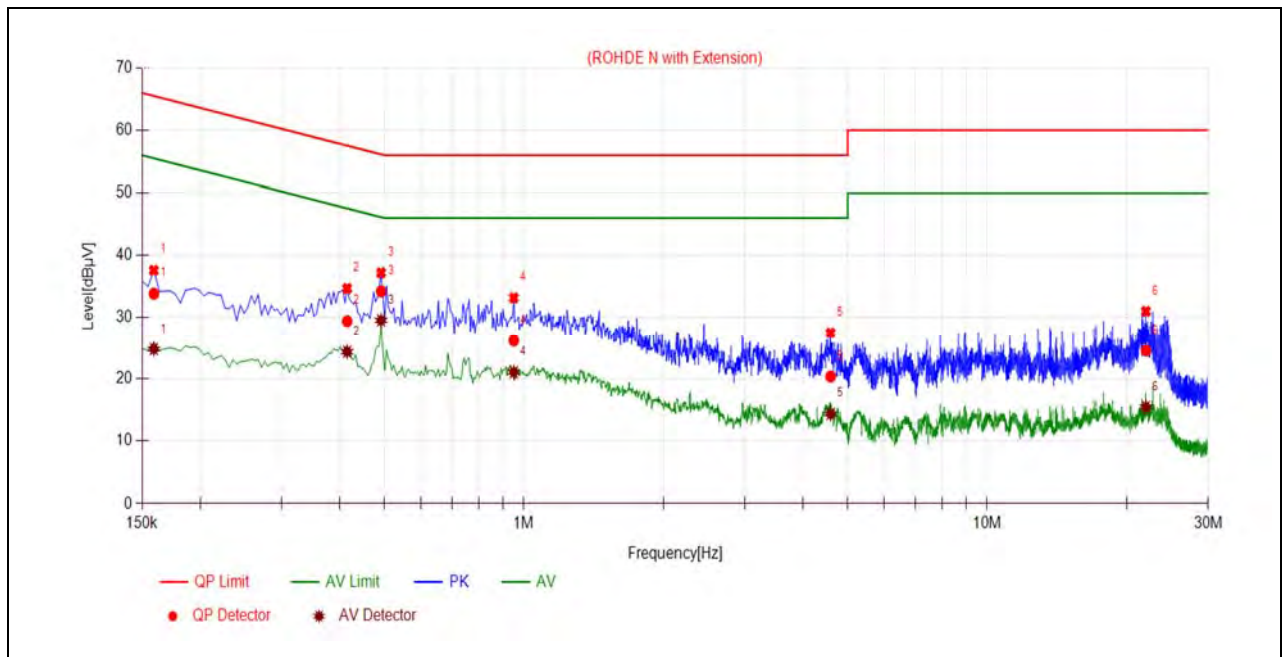
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	34.89	24.34	65.52	55.52	Line	PASS
2	0.4875	32.63	26.84	56.21	46.21		PASS
3	0.8386	26.94	21.62	56.00	46.00		PASS
4	1.3740	25.12	19.95	56.00	46.00		PASS
5	7.1828	19.00	12.78	60.00	50.00		PASS
6	22.8790	22.46	15.11	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	33.86	24.82	65.52	55.52	Neutral	PASS
2	0.4155	29.43	24.38	57.54	47.54		PASS
3	0.4920	34.24	29.57	56.13	46.13		PASS
4	0.9511	26.22	21.09	56.00	46.00		PASS
5	4.5919	20.38	14.37	56.00	46.00		PASS
6	22.0125	24.59	15.49	60.00	50.00		PASS

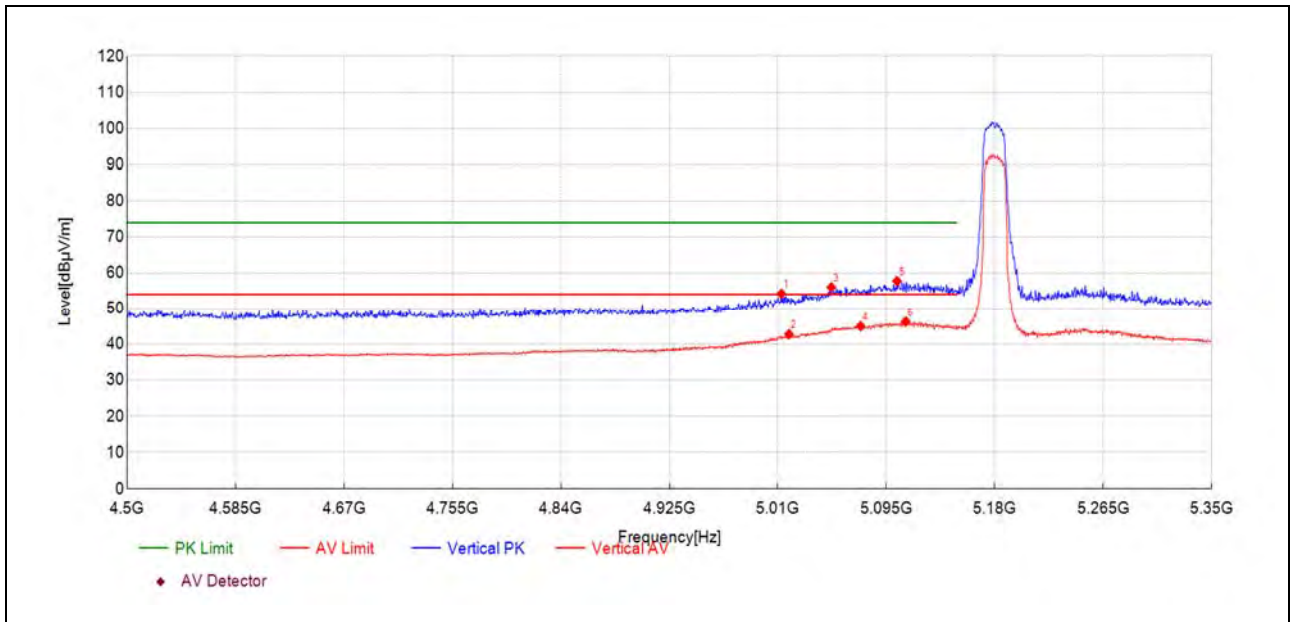
A.8. Restricted Frequency Bands

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Vertical) was recorded in this test report.

Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

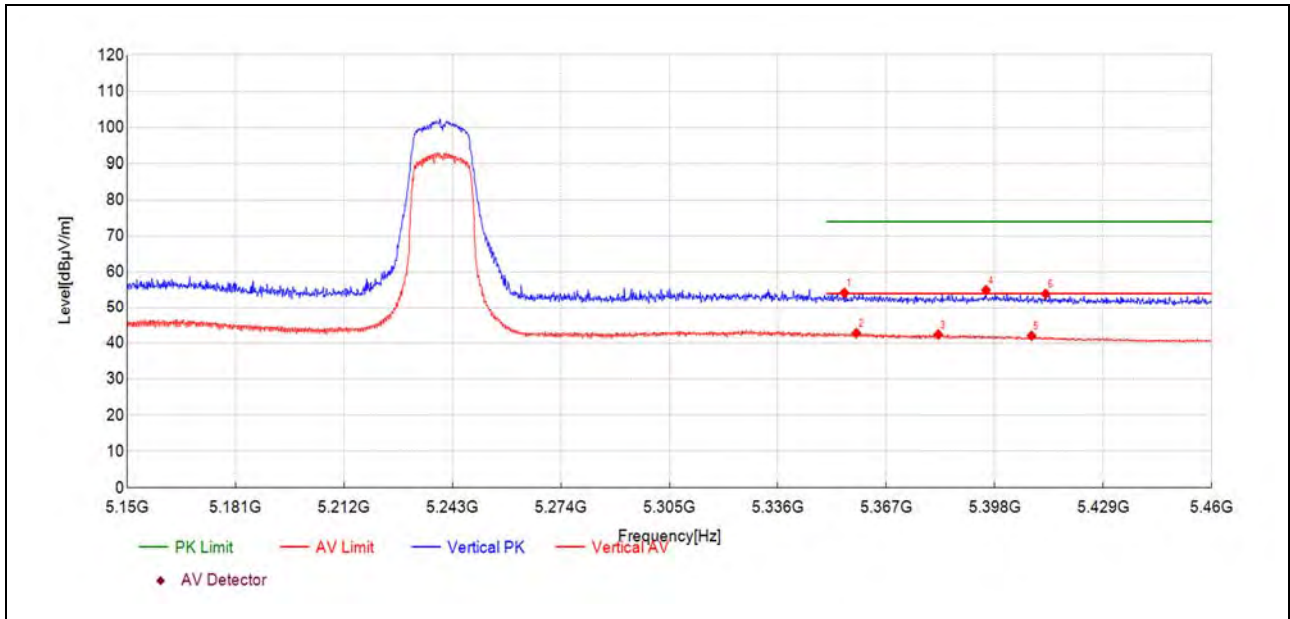
802.11a Mode

Plot for Channel 36



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5012.81	41.2	54.27	13.110	74.00	19.73	62	PK	Vertical	PASS
5018.76	29.7	42.81	13.150	54.00	11.19	67	AV	Vertical	PASS
5051.93	42.6	56.05	13.440	74.00	17.95	57	PK	Vertical	PASS
5074.89	31.5	45.01	13.560	54.00	8.99	43	AV	Vertical	PASS
5103.38	44.0	57.78	13.740	74.00	16.22	43	PK	Vertical	PASS
5110.18	32.5	46.33	13.860	54.00	7.67	57	AV	Vertical	PASS

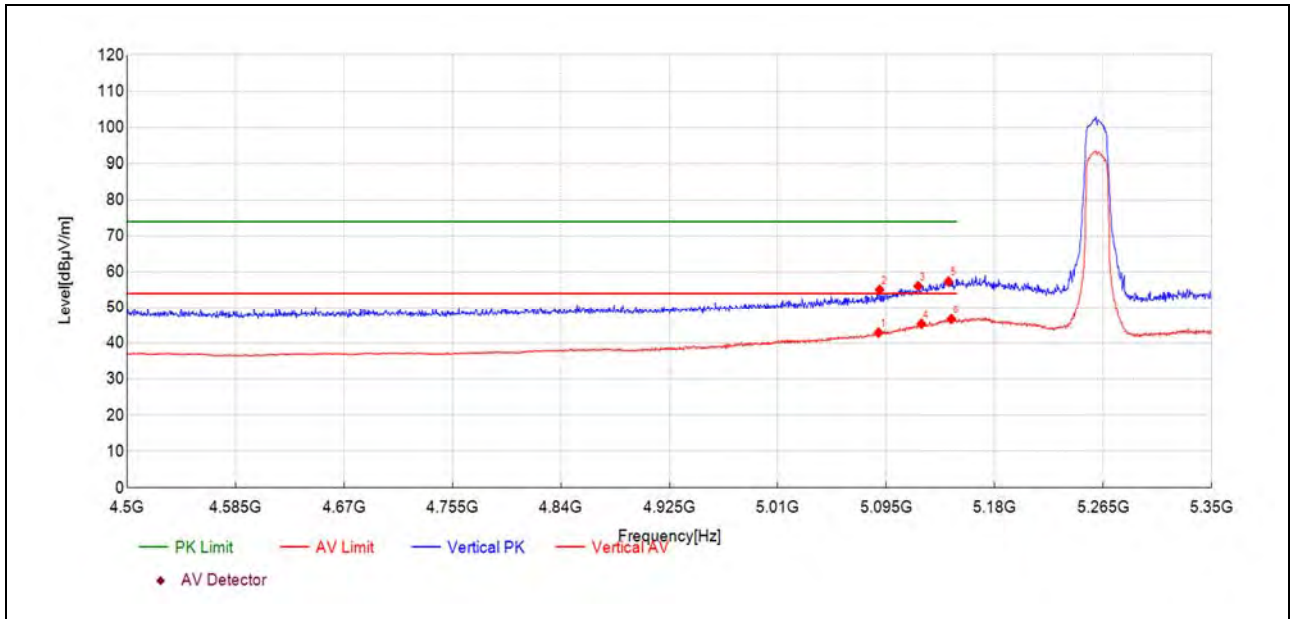
Plot for Channel 48



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5355.01	39.2	54.25	15.050	74.00	19.75	62	PK	Vertical	PASS
5358.42	27.7	42.77	15.100	54.00	11.23	62	AV	Vertical	PASS
5381.84	27.0	42.39	15.430	54.00	11.61	57	AV	Vertical	PASS
5395.49	39.4	54.98	15.620	74.00	19.02	311	PK	Vertical	PASS
5408.51	26.5	42.05	15.570	54.00	11.95	62	AV	Vertical	PASS
5412.55	38.4	53.94	15.530	74.00	20.06	349	PK	Vertical	PASS

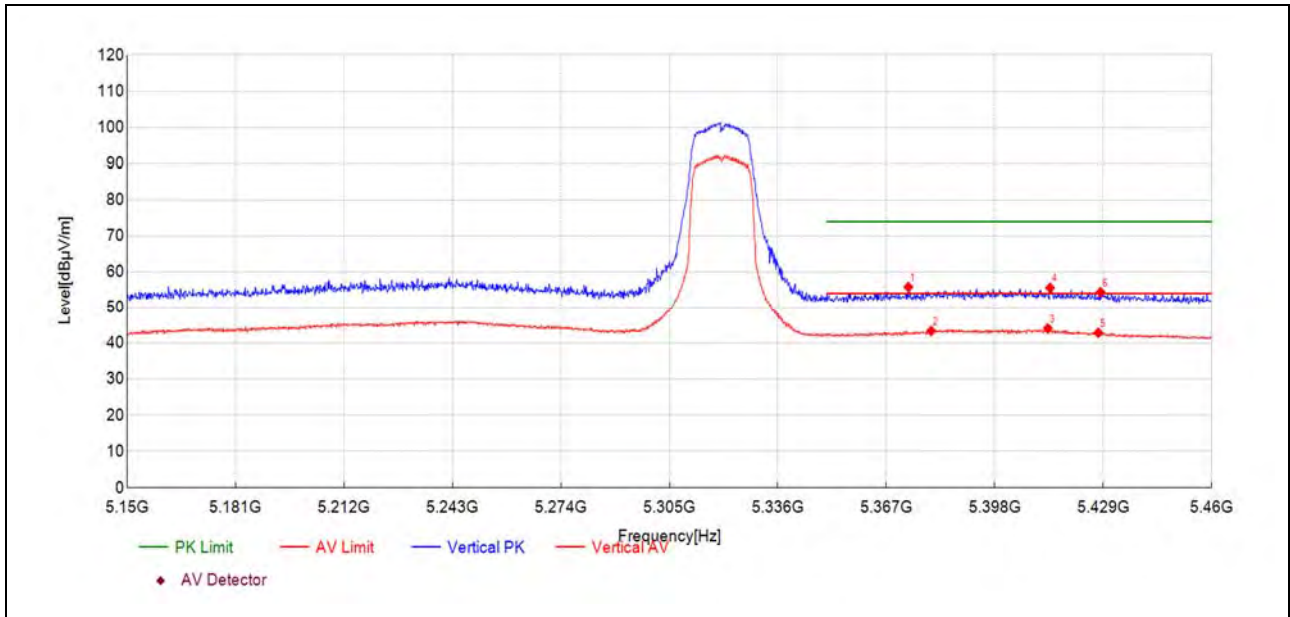


Plot for Channel 52



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5088.92	29.3	42.91	13.630	54.00	11.09	43	AV	Vertical	PASS
5089.77	41.5	55.08	13.630	74.00	18.92	57	PK	Vertical	PASS
5119.96	42.1	56.10	14.040	74.00	17.90	57	PK	Vertical	PASS
5122.51	31.3	45.36	14.090	54.00	8.64	57	AV	Vertical	PASS
5143.77	42.9	57.39	14.480	74.00	16.61	43	PK	Vertical	PASS
5145.90	32.2	46.72	14.520	54.00	7.28	43	AV	Vertical	PASS

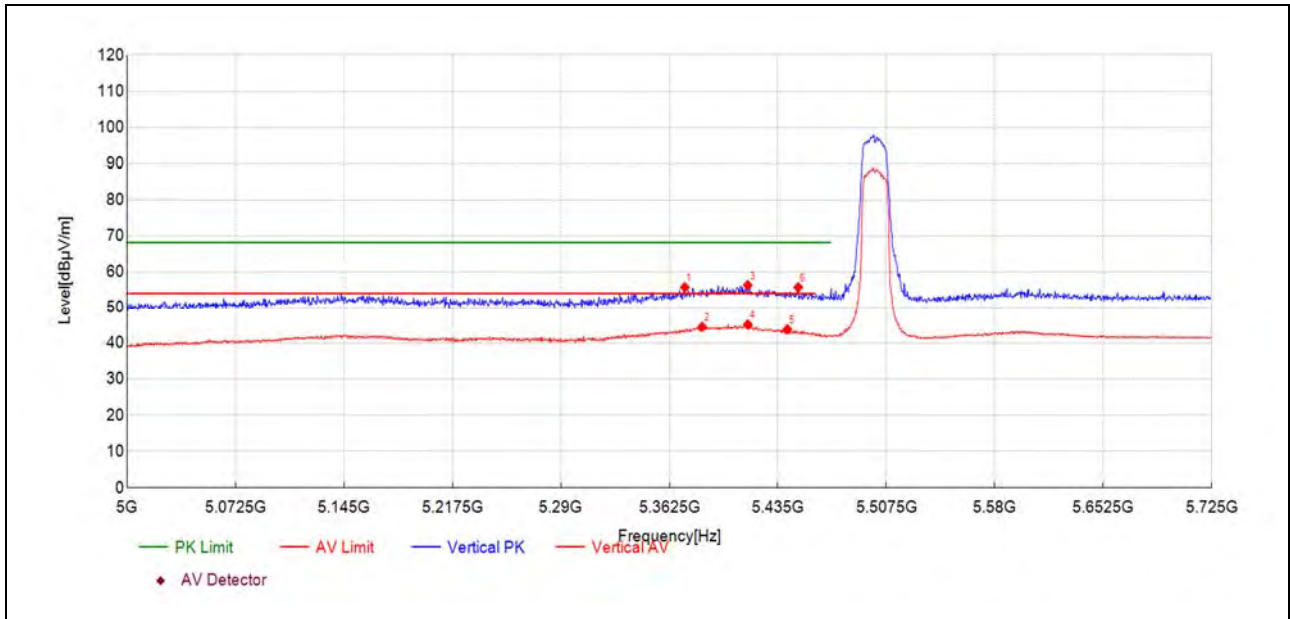
Plot for Channel 64



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5373.31	40.5	55.85	15.310	74.00	18.15	62	PK	Vertical	PASS
5379.82	28.0	43.40	15.400	54.00	10.60	62	AV	Vertical	PASS
5413.17	28.6	44.10	15.520	54.00	9.90	58	AV	Vertical	PASS
5413.79	40.1	55.64	15.510	74.00	18.36	62	PK	Vertical	PASS
5427.59	27.5	42.88	15.340	54.00	11.12	58	AV	Vertical	PASS
5428.21	39.1	54.41	15.340	74.00	19.59	53	PK	Vertical	PASS



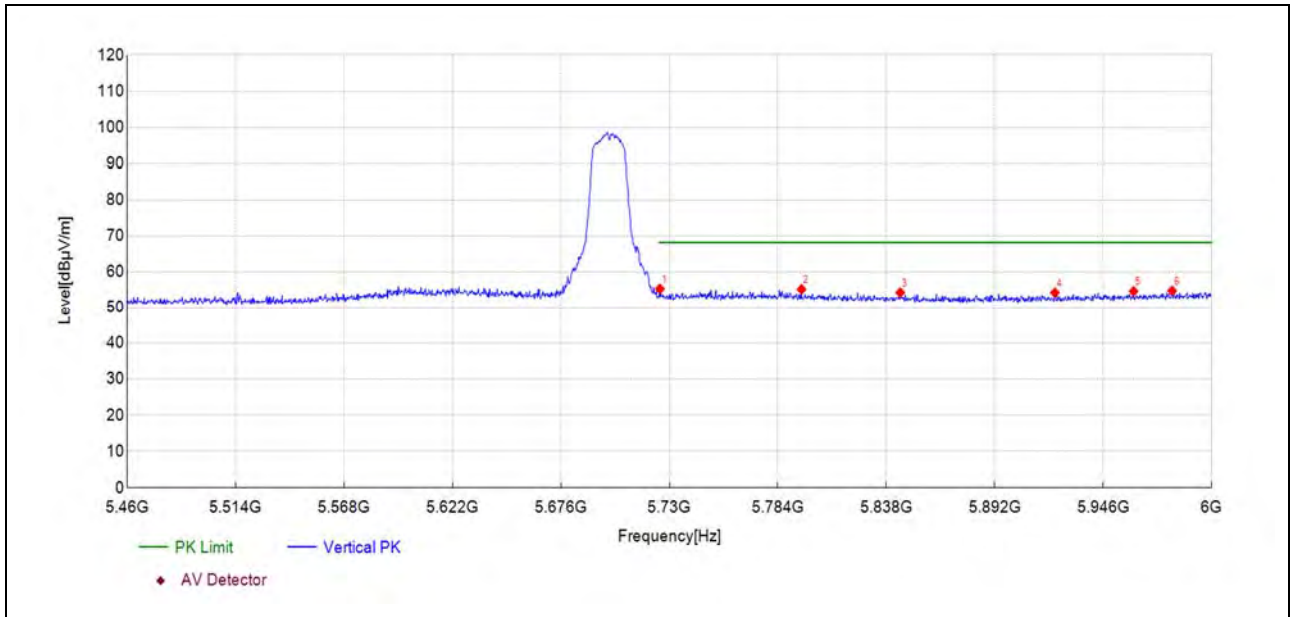
Plot for Channel 100



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5372.84	40.5	55.77	15.300	68.23	12.46	59	PK	Vertical	PASS
5384.44	29.1	44.52	15.460	54.00	9.48	54	AV	Vertical	PASS
5414.91	40.8	56.33	15.500	68.23	11.90	50	PK	Vertical	PASS
5414.91	29.7	45.17	15.500	54.00	8.83	59	AV	Vertical	PASS
5441.38	28.6	43.82	15.180	54.00	10.18	59	AV	Vertical	PASS
5448.64	40.7	55.75	15.080	68.23	12.48	59	PK	Vertical	PASS



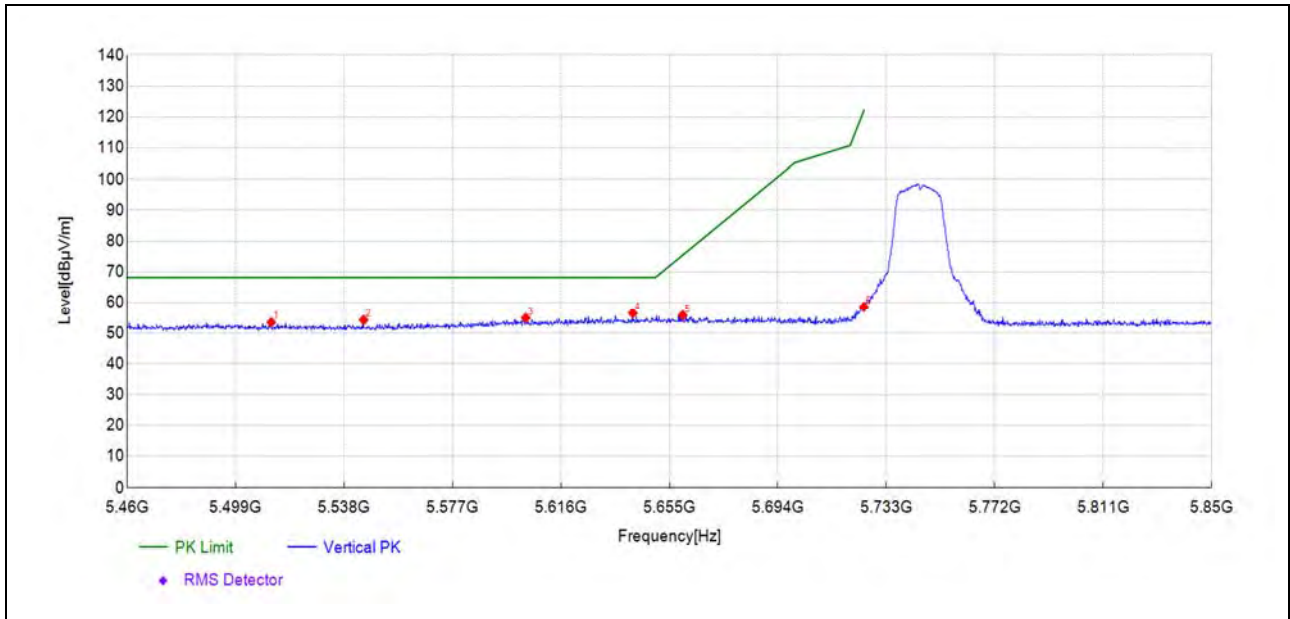
Plot for Channel 140



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5725.27	39.1	55.33	16.250	68.23	12.90	198	PK	Vertical	PASS
5795.78	39.2	55.20	16.010	68.23	13.03	185	PK	Vertical	PASS
5844.94	38.3	54.31	15.970	68.23	13.92	210	PK	Vertical	PASS
5921.93	37.9	54.26	16.320	68.23	13.97	3	PK	Vertical	PASS
5961.10	38.0	54.68	16.680	68.23	13.55	48	PK	Vertical	PASS
5980.28	37.9	54.81	16.910	68.23	13.42	85	PK	Vertical	PASS



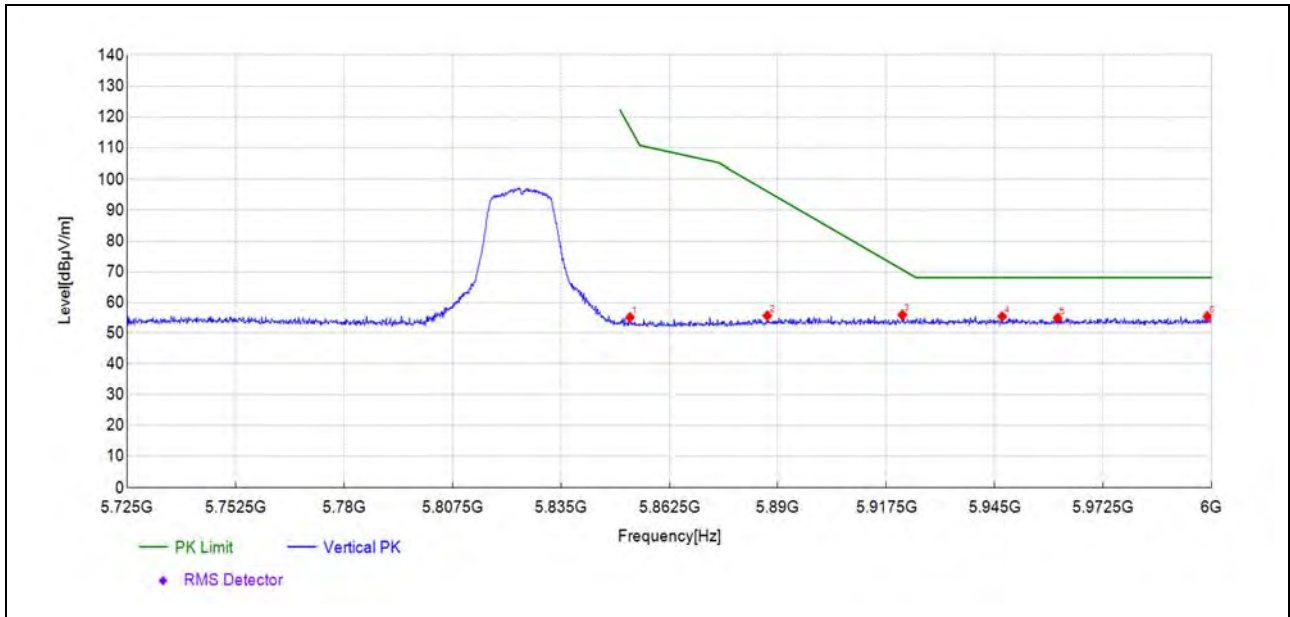
Plot for Channel 149



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5511.90	38.3	53.43	15.180	68.23	14.80	158	PK	Vertical	PASS
5545.06	39.3	54.22	14.970	68.23	14.01	204	PK	Vertical	PASS
5603.40	39.0	54.91	15.910	68.23	13.32	25	PK	Vertical	PASS
5641.83	40.6	56.44	15.820	68.23	11.79	346	PK	Vertical	PASS
5659.78	39.9	55.76	15.880	75.47	19.71	179	PK	Vertical	PASS
5724.94	42.3	58.55	16.250	122.10	63.55	12	PK	Vertical	PASS



Plot for Channel 165



Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5852.53	39.0	54.99	15.980	116.47	61.48	18	PK	Vertical	PASS
5887.33	39.4	55.53	16.110	96.10	40.57	30	PK	Vertical	PASS
5921.59	39.5	55.82	16.320	70.76	14.94	30	PK	Vertical	PASS
5946.90	38.8	55.30	16.520	68.23	12.93	35	PK	Vertical	PASS
5960.93	38.1	54.81	16.680	68.23	13.42	353	PK	Vertical	PASS
5998.90	38.2	55.35	17.140	68.23	12.88	269	PK	Vertical	PASS



A.9. Radiated Emission

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E [\text{dB}\mu\text{V/m}] = U_R + A_T + A_{\text{Factor}} [\text{dB}]; A_T = L_{\text{Cable loss}} [\text{dB}] - G_{\text{preamp}} [\text{dB}]$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 40GHz harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

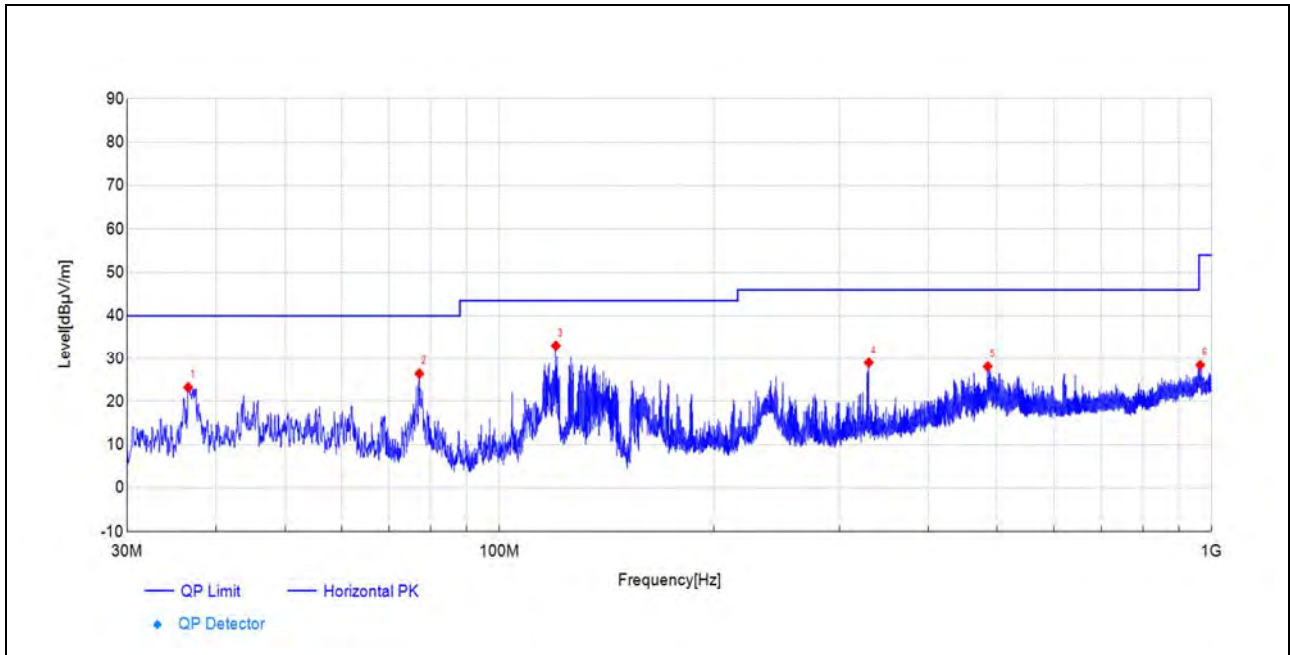
Field strength of fundamental:

Frequency [MHz]	Reading [dB μ V]	Level [dB μ V/m]	Factor [dB/m]	Detector	Polarity
5179.47	87.3	101.35	14.010	PK	Horizontal

The field strength (the lowest) of fundamental is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).

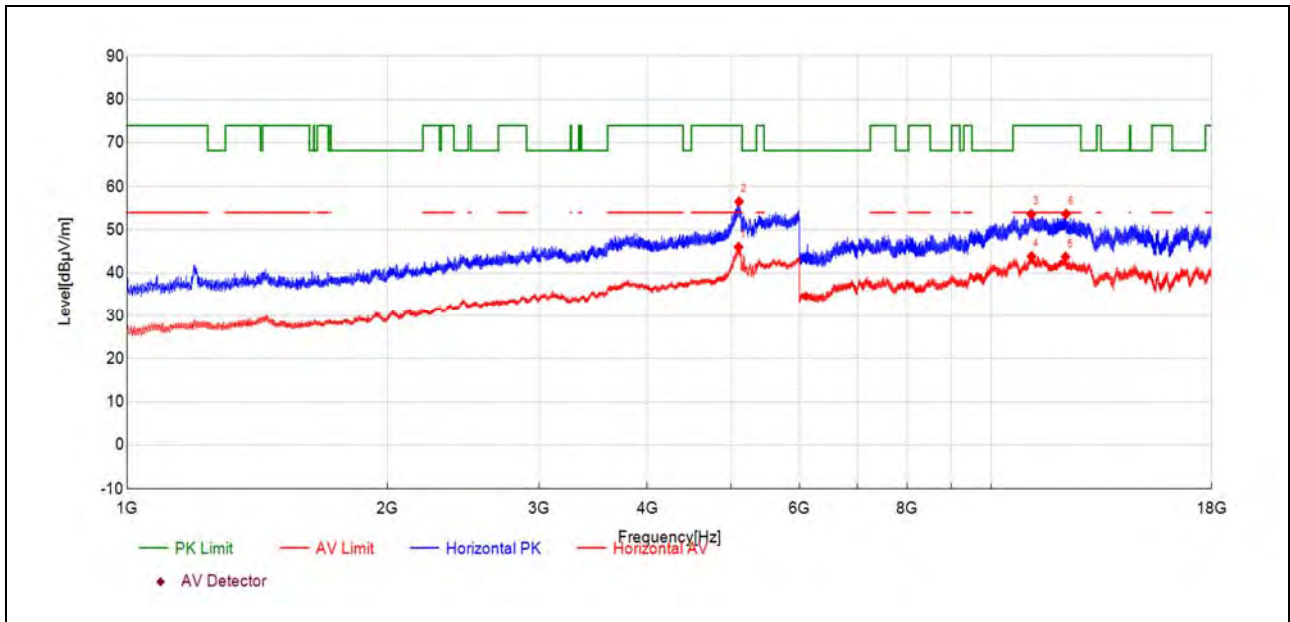
**802.11a Mode**

Plot for Channel 36



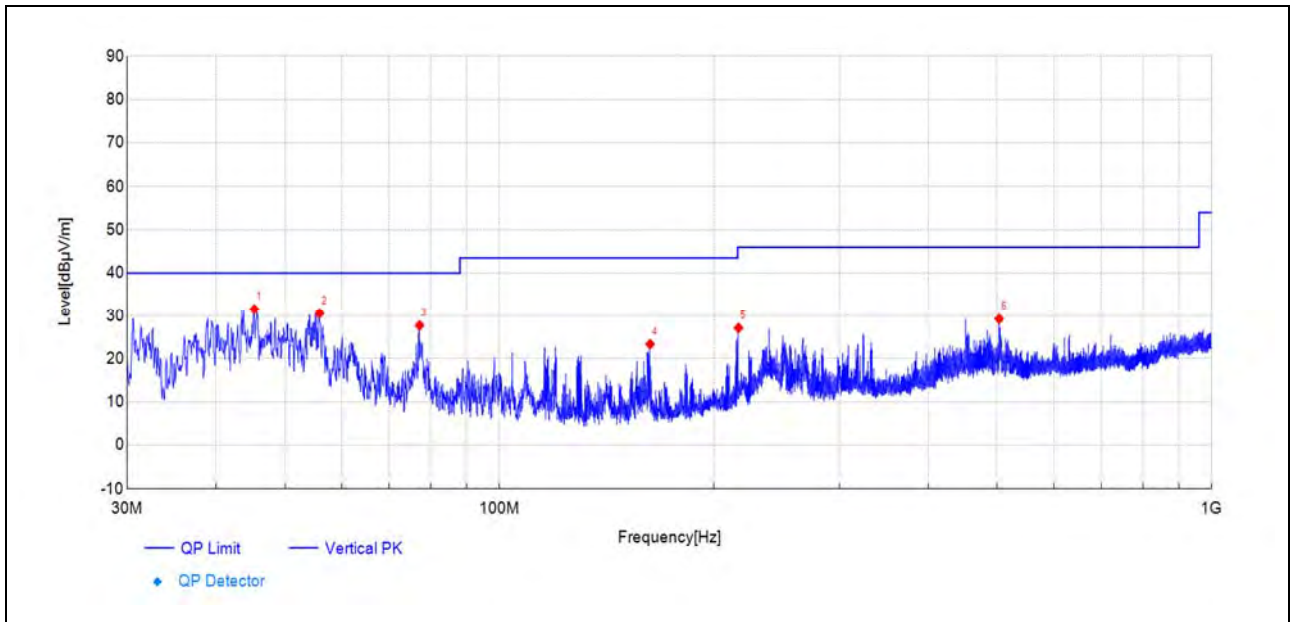
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
36.55	52.7	23.26	-29.420	40.00	16.74	254	PK	Horizontal	PASS
77.19	59.3	26.44	-32.900	40.00	13.56	152	PK	Horizontal	PASS
120.02	63.6	33.09	-30.500	43.50	10.41	105	PK	Horizontal	PASS
330.04	53.2	29.00	-24.220	46.00	17.00	50	PK	Horizontal	PASS
484.76	48.5	28.09	-20.440	46.00	17.91	356	PK	Horizontal	PASS
963.67	39.5	28.44	-11.080	54.00	25.56	91	PK	Horizontal	PASS



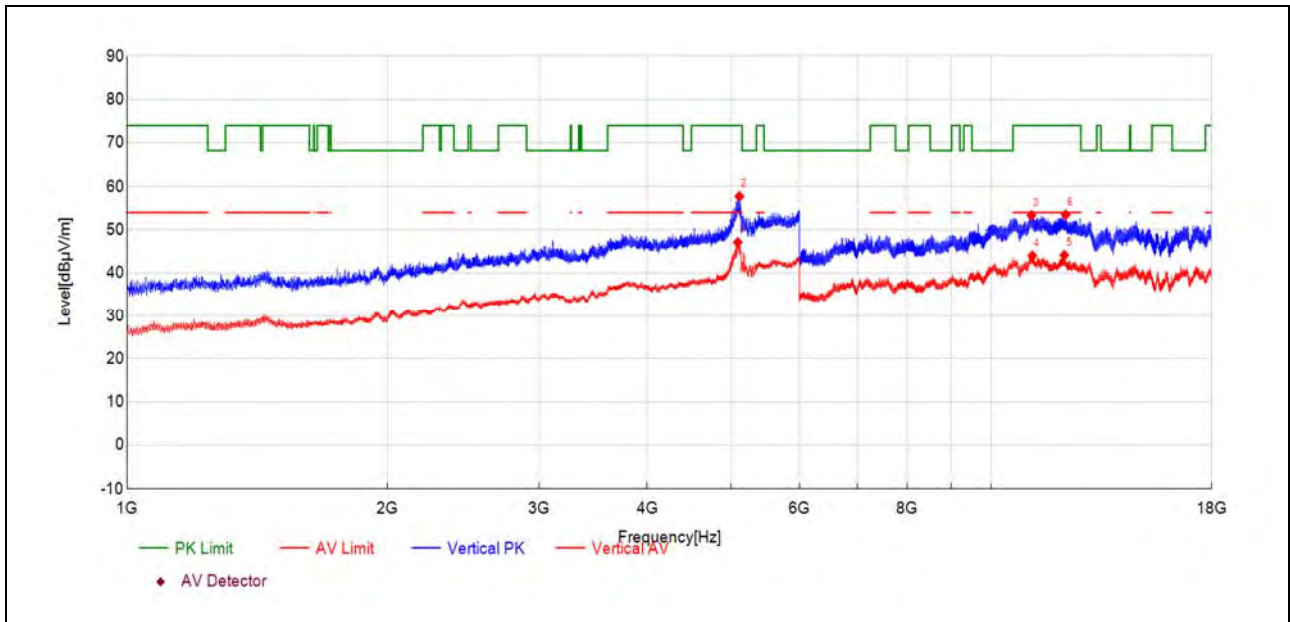
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5101.28	30.0	46.03	16.070	54.00	7.97	202	AV	Horizontal	PASS
5108.10	40.4	56.57	16.210	74.00	17.43	208	PK	Horizontal	PASS
11127.09	40.0	53.64	13.690	74.00	20.36	3	PK	Horizontal	PASS
11135.25	30.2	43.88	13.710	54.00	10.12	215	AV	Horizontal	PASS
12191.77	29.0	43.77	14.800	54.00	10.23	43	AV	Horizontal	PASS
12209.05	38.9	53.67	14.770	74.00	20.33	76	PK	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

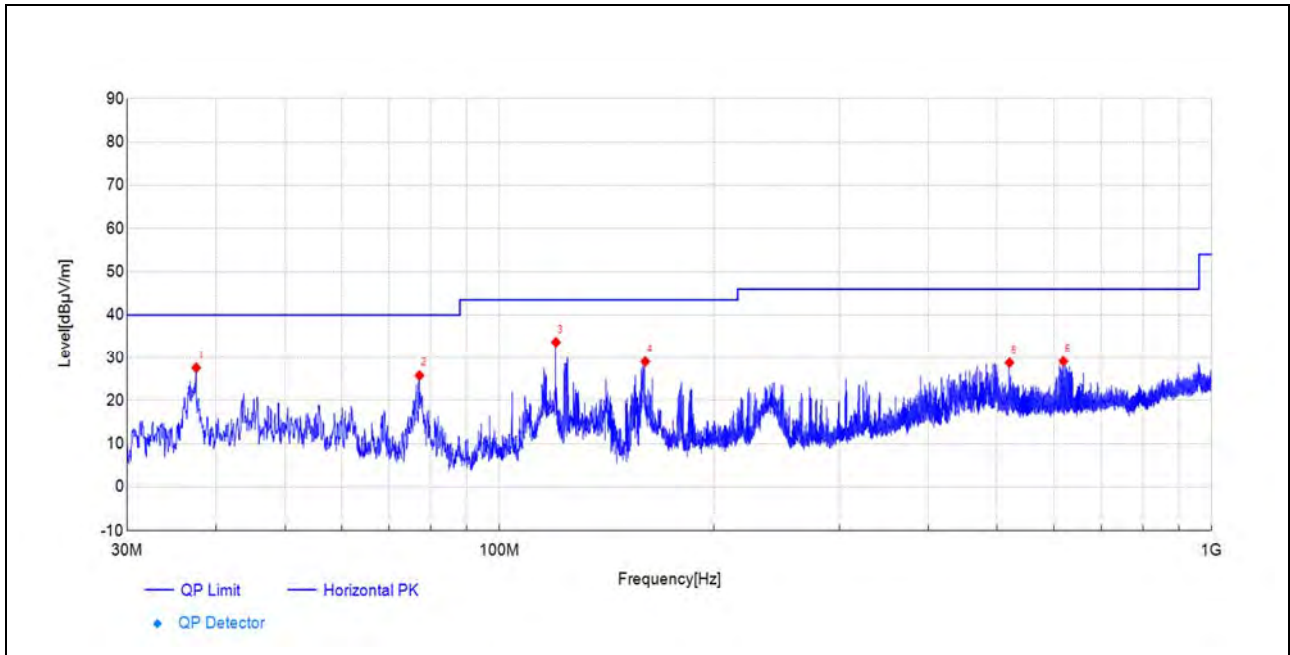
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
45.28	59.7	31.54	-28.200	40.00	8.46	50	PK	Vertical	PASS
55.90	58.6	30.56	-28.020	40.00	9.44	185	PK	Vertical	PASS
77.24	60.6	27.72	-32.900	40.00	12.28	4	PK	Vertical	PASS
162.70	54.5	23.33	-31.210	43.50	20.17	351	PK	Vertical	PASS
216.64	56.0	27.12	-28.860	46.00	18.88	185	PK	Vertical	PASS
502.95	49.7	29.24	-20.450	46.00	16.76	70	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

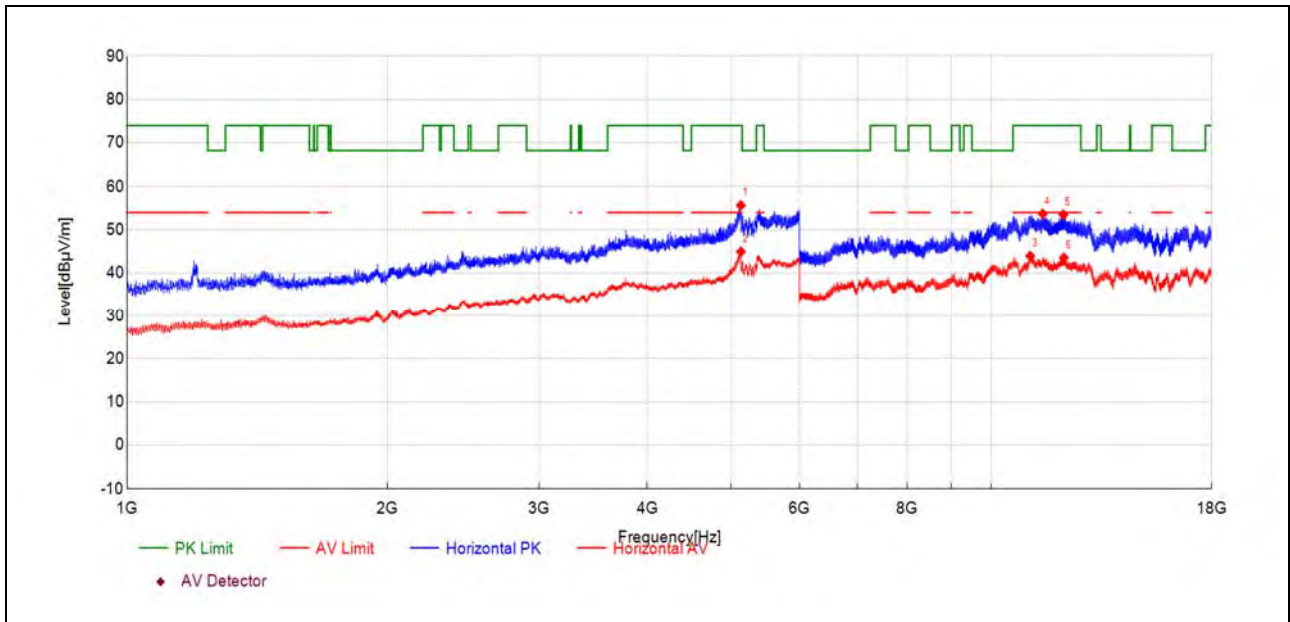
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5091.74	31.1	47.11	15.980	54.00	6.89	60	AV	Vertical	PASS
5113.10	41.5	57.76	16.310	74.00	16.24	68	PK	Vertical	PASS
11134.77	39.7	53.37	13.720	74.00	20.63	150	PK	Vertical	PASS
11158.77	30.2	44.02	13.780	54.00	9.98	269	AV	Vertical	PASS
12154.33	29.4	44.15	14.720	54.00	9.85	65	AV	Vertical	PASS
12198.49	38.7	53.49	14.820	74.00	20.51	140	PK	Vertical	PASS

Plot for Channel 52



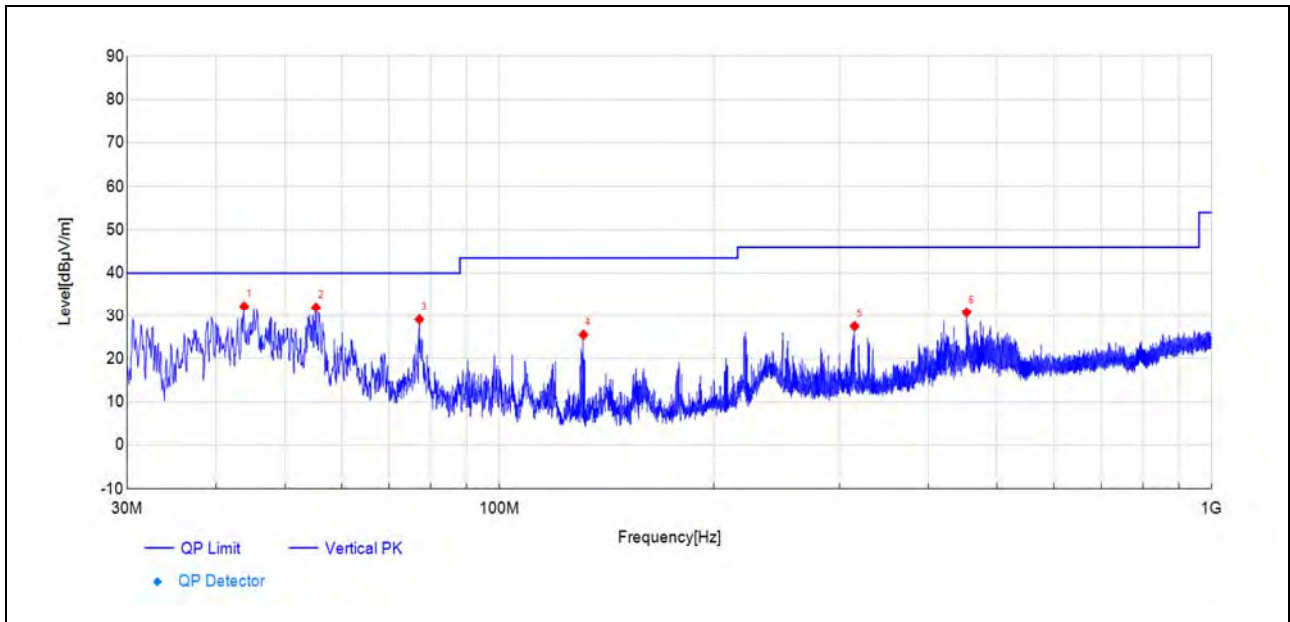
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
37.52	57.0	27.58	-29.420	40.00	12.42	16	PK	Horizontal	PASS
77.19	58.7	25.79	-32.900	40.00	14.21	159	PK	Horizontal	PASS
120.02	64.2	33.68	-30.500	43.50	9.82	98	PK	Horizontal	PASS
160.23	60.2	29.04	-31.160	43.50	14.46	275	PK	Horizontal	PASS
520.17	48.9	28.76	-20.090	46.00	17.24	29	PK	Horizontal	PASS
619.01	46.8	29.10	-17.660	46.00	16.90	50	PK	Horizontal	PASS



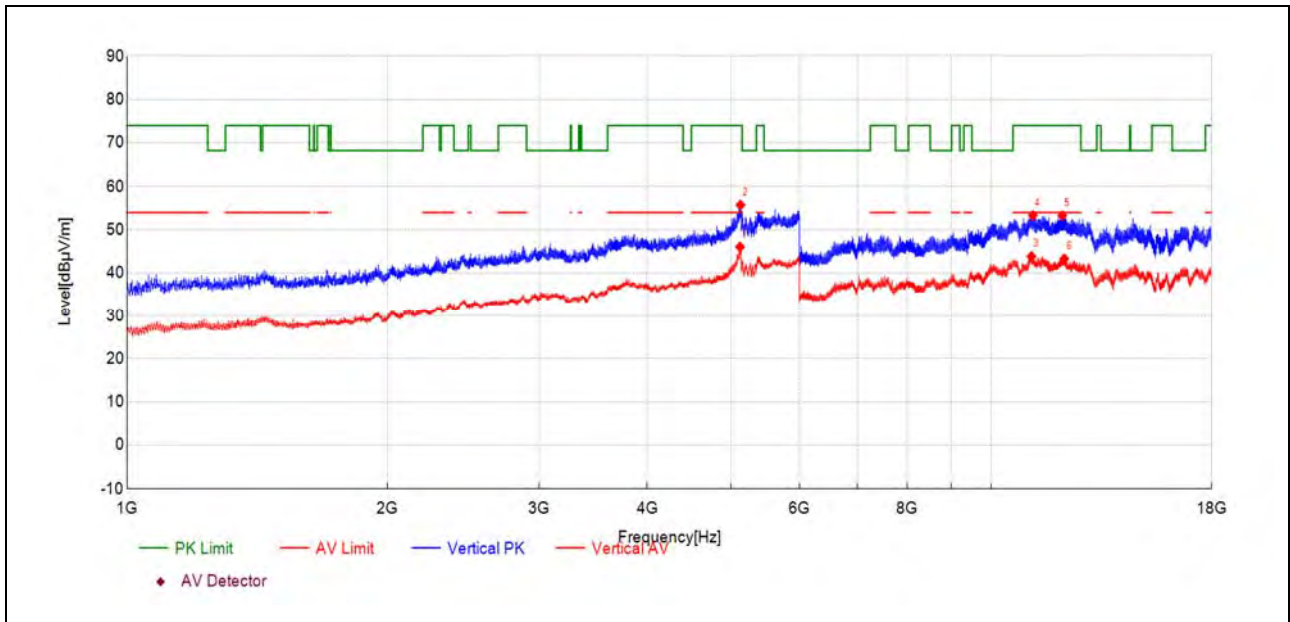
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5132.19	39.0	55.68	16.690	74.00	18.32	317	PK	Horizontal	PASS
5134.47	28.2	44.97	16.730	54.00	9.03	199	AV	Horizontal	PASS
11097.32	30.4	43.98	13.590	54.00	10.02	108	AV	Horizontal	PASS
11477.50	39.4	53.71	14.270	74.00	20.29	3	PK	Horizontal	PASS
12121.20	38.9	53.50	14.640	74.00	20.50	301	PK	Horizontal	PASS
12138.49	28.9	43.55	14.680	54.00	10.45	183	AV	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

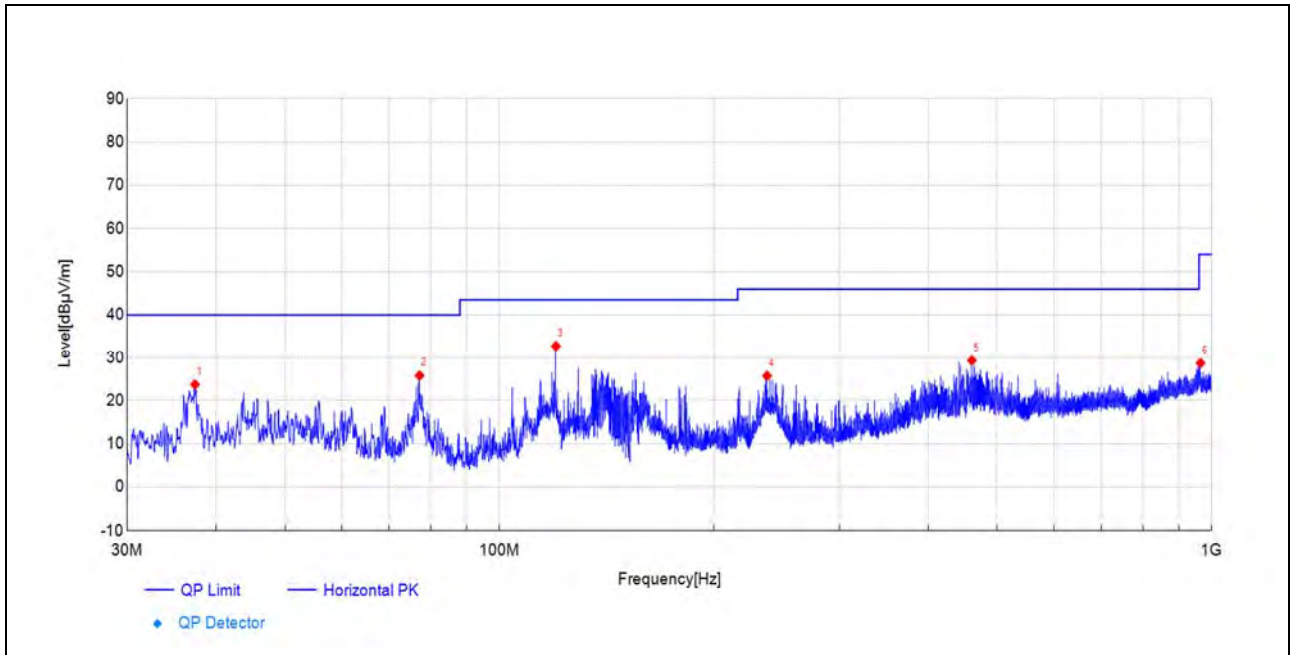
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
43.82	60.1	32.24	-27.860	40.00	7.76	0	PK	Vertical	PASS
55.27	59.8	31.96	-27.840	40.00	8.04	158	PK	Vertical	PASS
77.19	62.0	29.09	-32.900	40.00	10.91	9	PK	Vertical	PASS
131.22	57.4	25.52	-31.890	43.50	17.98	158	PK	Vertical	PASS
315.24	53.2	27.51	-25.640	46.00	18.49	165	PK	Vertical	PASS
452.80	52.4	30.78	-21.600	46.00	15.22	78	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

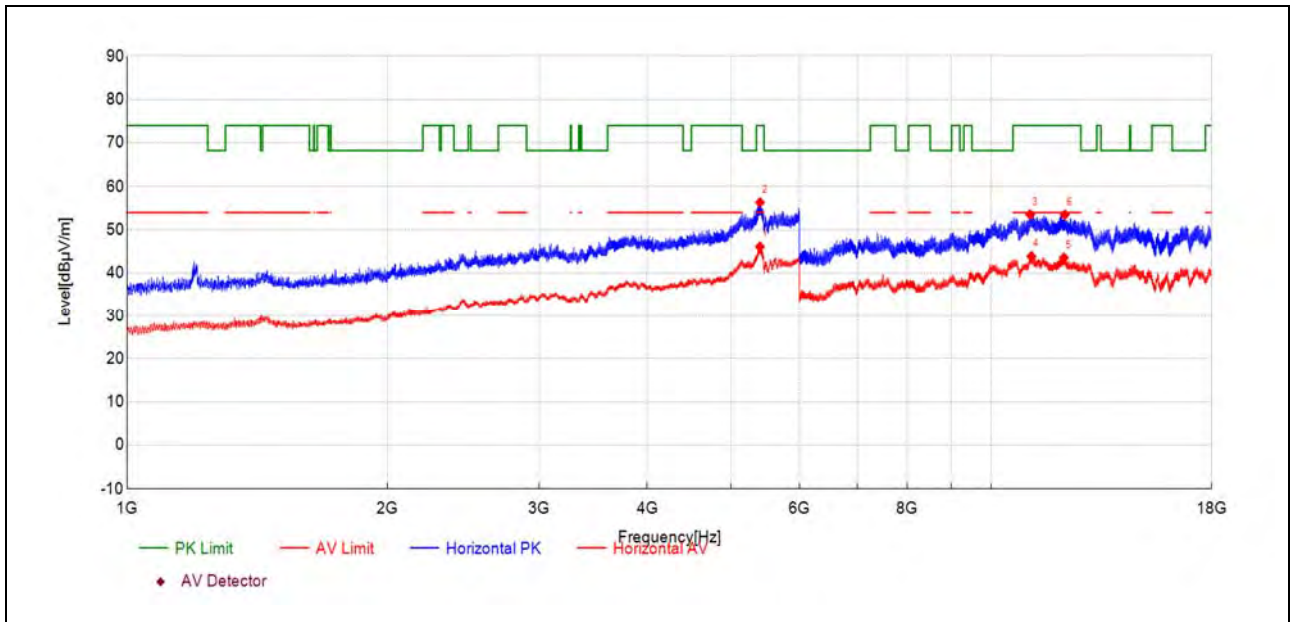
Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5121.74	29.6	46.08	16.480	54.00	7.92	61	AV	Vertical	PASS
5128.10	39.2	55.77	16.610	74.00	18.23	47	PK	Vertical	PASS
11135.25	30.2	43.88	13.710	54.00	10.12	75	AV	Vertical	PASS
11176.05	39.5	53.34	13.820	74.00	20.66	12	PK	Vertical	PASS
12086.64	38.8	53.29	14.530	74.00	20.71	22	PK	Vertical	PASS
12153.85	28.6	43.32	14.720	54.00	10.68	65	AV	Vertical	PASS

Plot for Channel 100



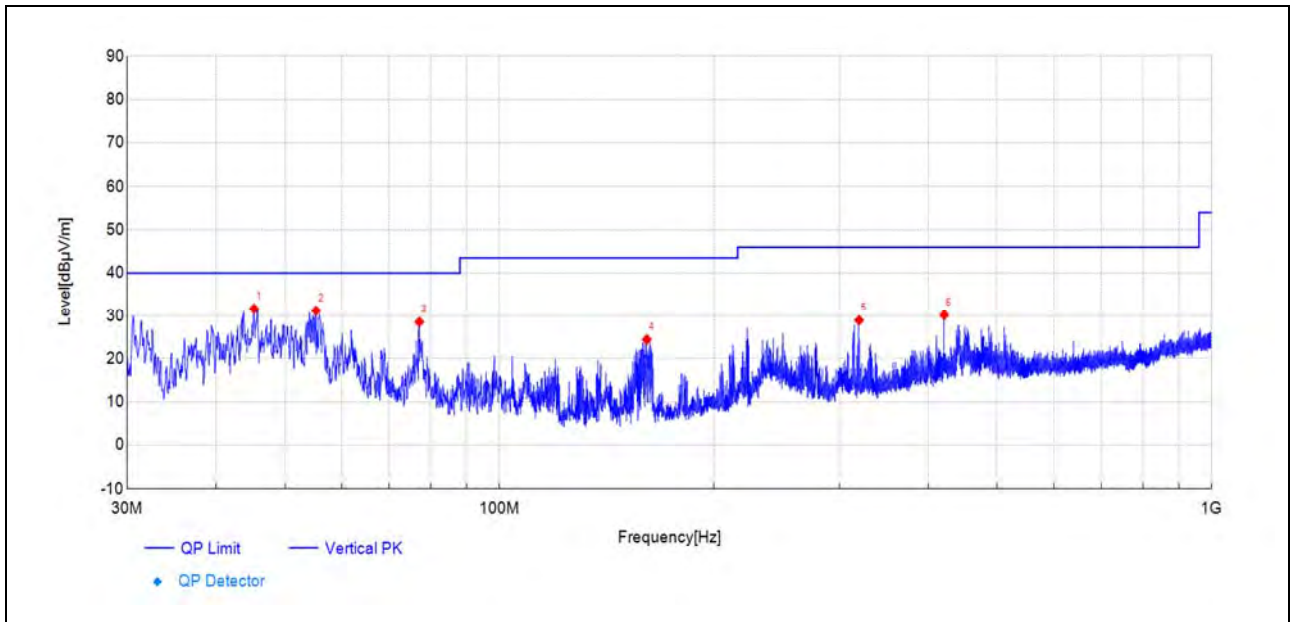
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
37.37	53.1	23.71	-29.370	40.00	16.29	105	PK	Horizontal	PASS
77.24	58.7	25.79	-32.900	40.00	14.21	139	PK	Horizontal	PASS
120.02	63.3	32.75	-30.500	43.50	10.75	71	PK	Horizontal	PASS
237.49	53.6	25.72	-27.900	46.00	20.28	248	PK	Horizontal	PASS
460.41	50.7	29.29	-21.420	46.00	16.71	30	PK	Horizontal	PASS
964.45	39.7	28.67	-11.020	54.00	25.33	9	PK	Horizontal	PASS



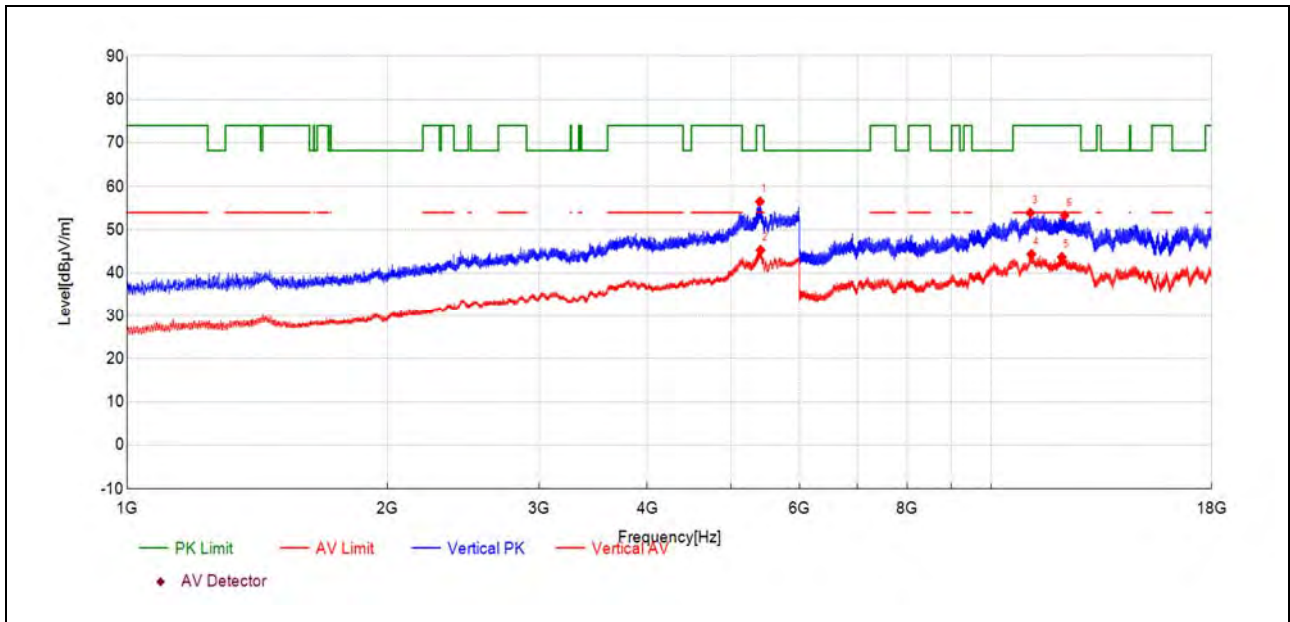
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5401.31	28.3	46.11	17.770	54.00	7.89	200	AV	Horizontal	PASS
5401.76	38.6	56.35	17.770	74.00	17.65	207	PK	Horizontal	PASS
11095.88	40.0	53.54	13.580	74.00	20.46	141	PK	Horizontal	PASS
11132.37	30.2	43.88	13.710	54.00	10.12	98	AV	Horizontal	PASS
12141.85	28.9	43.59	14.690	54.00	10.41	270	AV	Horizontal	PASS
12166.81	38.8	53.50	14.740	74.00	20.50	237	PK	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
45.23	59.8	31.63	-28.180	40.00	8.37	151	PK	Vertical	PASS
55.27	59.1	31.21	-27.840	40.00	8.79	179	PK	Vertical	PASS
77.19	61.4	28.52	-32.900	40.00	11.48	3	PK	Vertical	PASS
161.01	55.6	24.43	-31.150	43.50	19.07	316	PK	Vertical	PASS
319.85	54.0	28.93	-25.030	46.00	17.07	205	PK	Vertical	PASS
421.12	52.6	30.17	-22.420	46.00	15.83	82	PK	Vertical	PASS

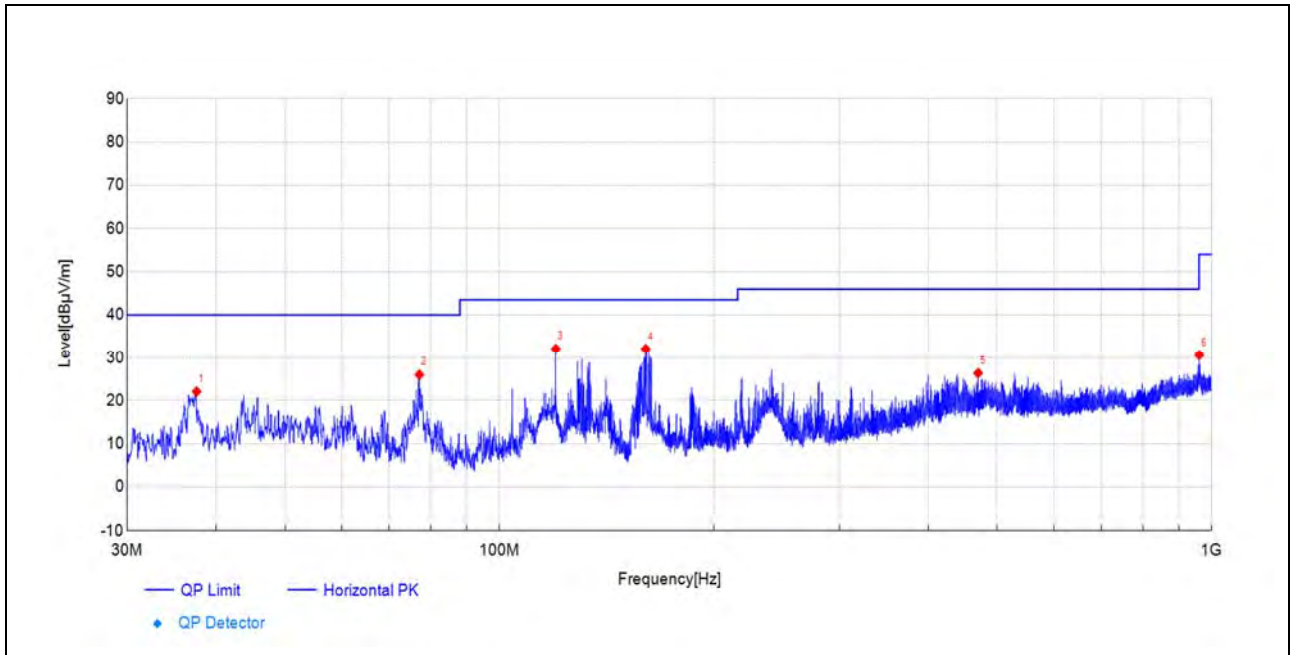


(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5399.04	38.8	56.54	17.780	74.00	17.46	68	PK	Vertical	PASS
5409.95	27.7	45.32	17.660	54.00	8.68	61	AV	Vertical	PASS
11101.16	40.3	53.93	13.620	74.00	20.07	333	PK	Vertical	PASS
11133.33	30.7	44.37	13.710	54.00	9.63	184	AV	Vertical	PASS
12072.24	29.2	43.71	14.480	54.00	10.29	280	AV	Vertical	PASS
12162.49	38.6	53.32	14.740	74.00	20.68	151	PK	Vertical	PASS

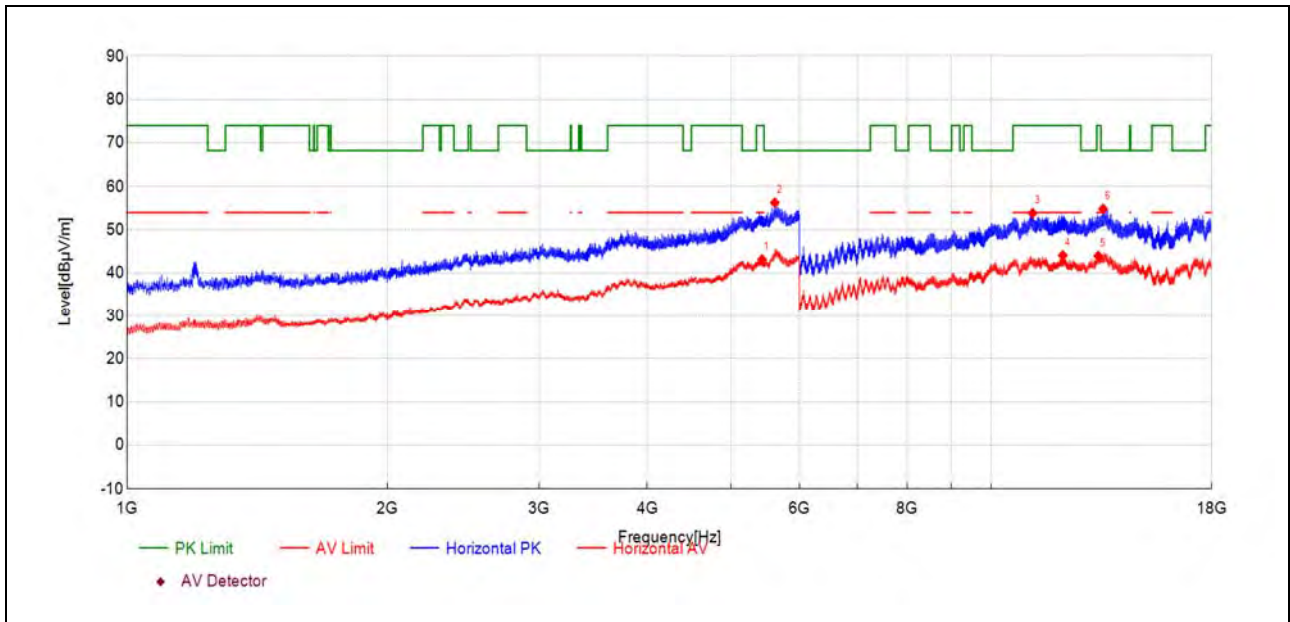


Plot for Channel 149



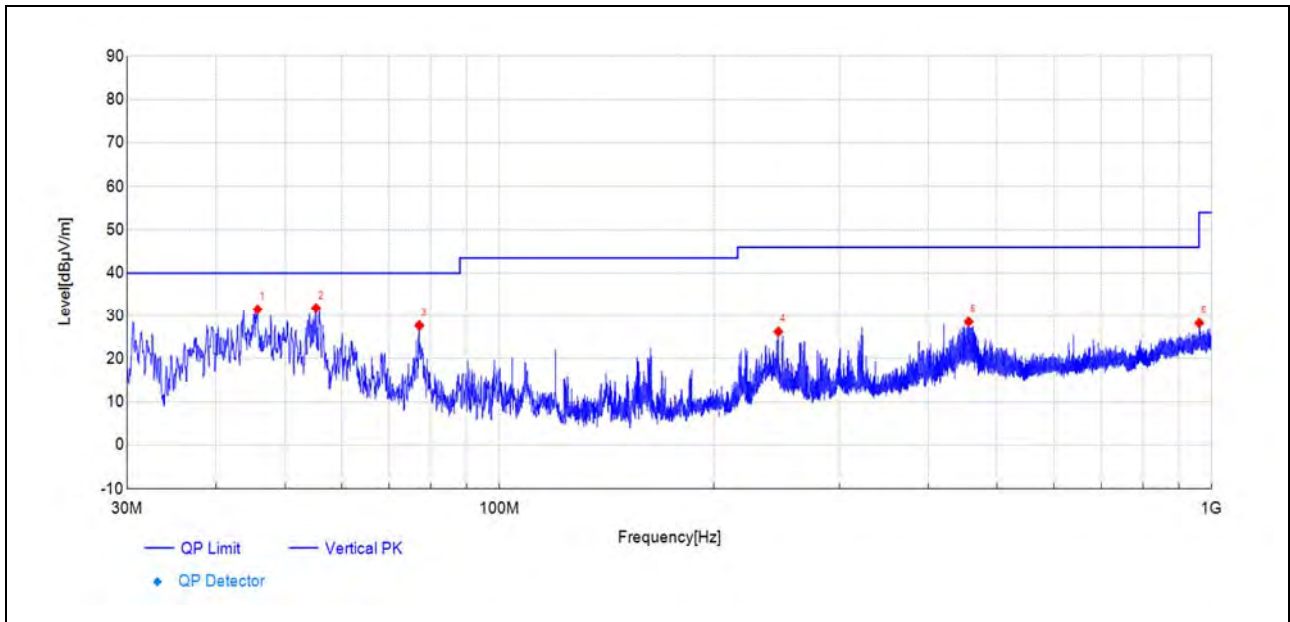
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
37.57	51.5	22.06	-29.430	40.00	17.94	37	PK	Horizontal	PASS
77.19	58.9	25.99	-32.900	40.00	14.01	180	PK	Horizontal	PASS
120.02	62.6	32.08	-30.500	43.50	11.42	105	PK	Horizontal	PASS
160.47	63.2	32.06	-31.160	43.50	11.44	51	PK	Horizontal	PASS
469.92	47.6	26.37	-21.190	46.00	19.63	120	PK	Horizontal	PASS
960.52	41.9	30.59	-11.290	54.00	23.41	98	PK	Horizontal	PASS



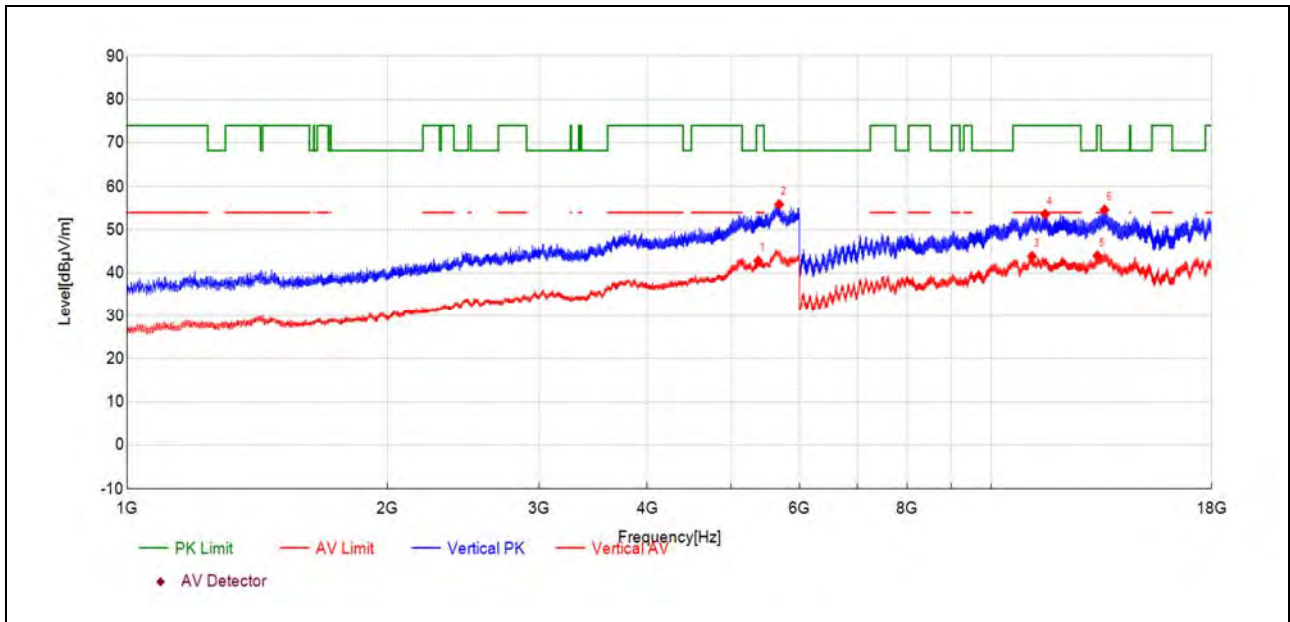
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5432.22	25.5	43.17	17.670	54.00	10.83	199	AV	Horizontal	PASS
5619.51	37.7	56.31	18.650	68.23	11.92	101	PK	Horizontal	PASS
11168.85	40.4	53.87	13.510	74.00	20.13	227	PK	Horizontal	PASS
12102.48	29.5	44.10	14.570	54.00	9.90	119	AV	Horizontal	PASS
13300.13	27.4	43.97	16.530	54.00	10.03	33	AV	Horizontal	PASS
13478.22	37.9	54.84	16.920	68.23	13.39	2	PK	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
45.76	59.9	31.49	-28.380	40.00	8.51	351	PK	Vertical	PASS
55.27	59.7	31.81	-27.840	40.00	8.19	152	PK	Vertical	PASS
77.19	60.6	27.70	-32.900	40.00	12.30	1	PK	Vertical	PASS
246.37	53.7	26.21	-27.450	46.00	19.79	303	PK	Vertical	PASS
455.75	50.1	28.53	-21.610	46.00	17.47	69	PK	Vertical	PASS
960.42	39.6	28.28	-11.290	54.00	25.72	124	PK	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Reading [dBμV]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Angle [°]	Detector	Polarity	Verdict
5375.40	25.2	42.85	17.670	54.00	11.15	194	AV	Vertical	PASS
5685.43	36.6	55.88	19.280	68.23	12.35	12	PK	Vertical	PASS
11148.21	30.4	43.90	13.520	54.00	10.10	1	AV	Vertical	PASS
11552.38	39.4	53.65	14.270	74.00	20.35	355	PK	Vertical	PASS
13275.17	27.8	44.03	16.270	54.00	9.97	246	AV	Vertical	PASS
13528.62	37.6	54.65	17.080	68.23	13.58	355	PK	Vertical	PASS

— END OF REPORT —