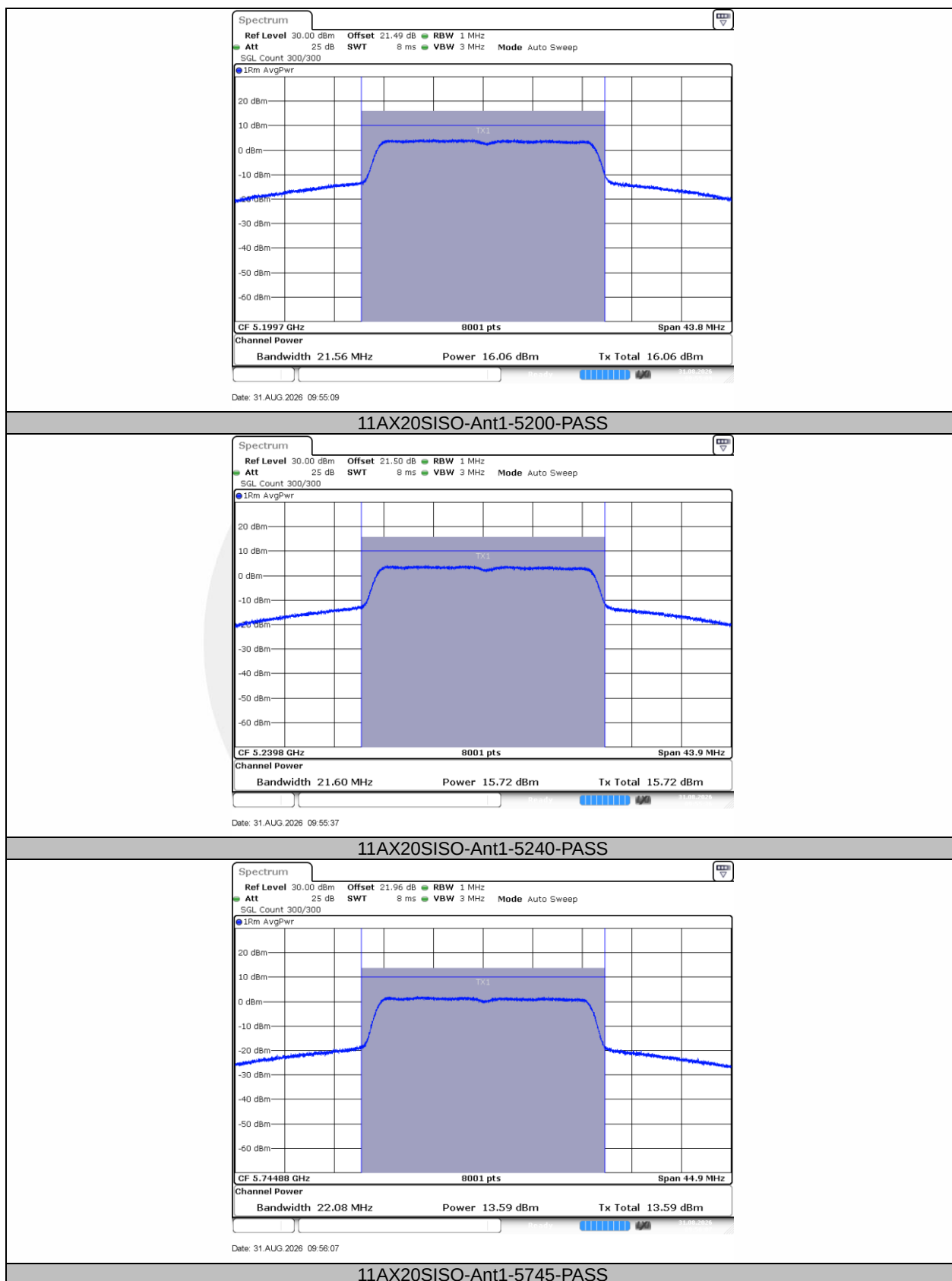
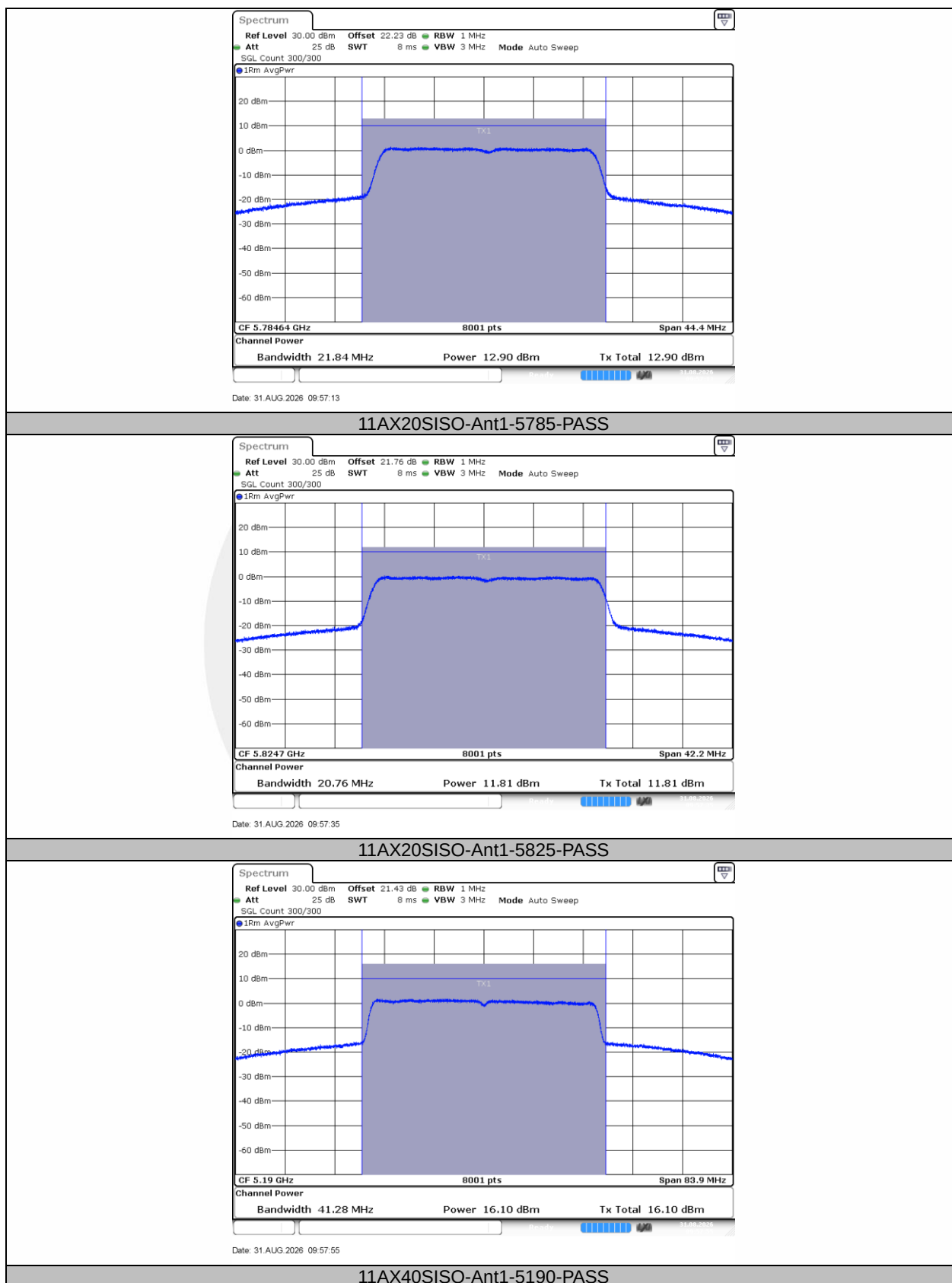
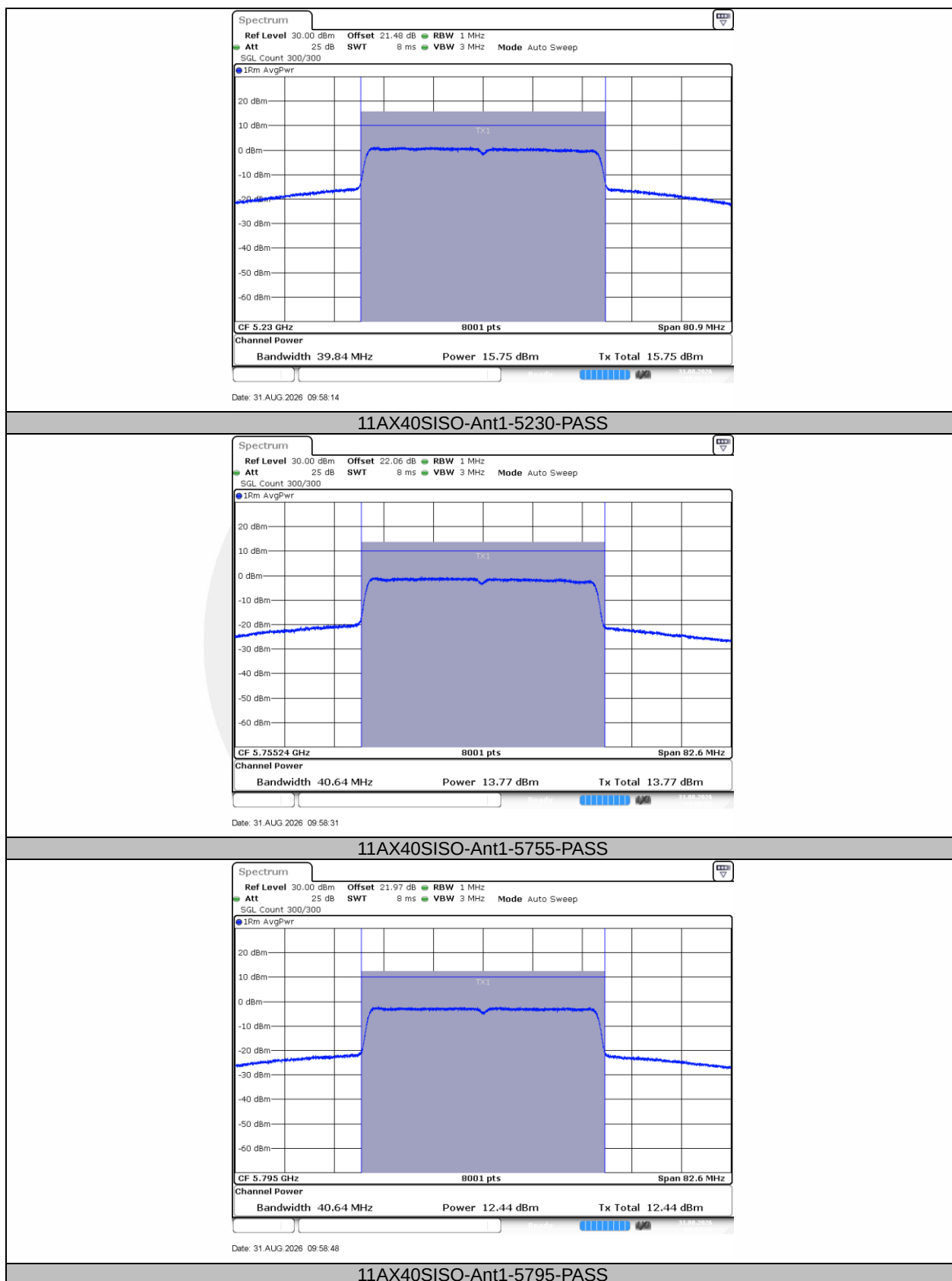








8.3 MAXIMUM PEAK POWER DENSITY

8.3.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I

According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C

According to FCC Part 15.407(a)(3) for UNII Band III

According to 789033 D02 Section II(F)

8.3.2 Conformance Limit

■ For the band 5.15-5.25 GHz

(a) (1) (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz

(b) (2) the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (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. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.3.3 Test Configuration

Test according to clause 6.1 radio frequency test setup 1.

8.3.4 Test Procedure

Methods refer to FCC KDB 789033.

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections.

5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

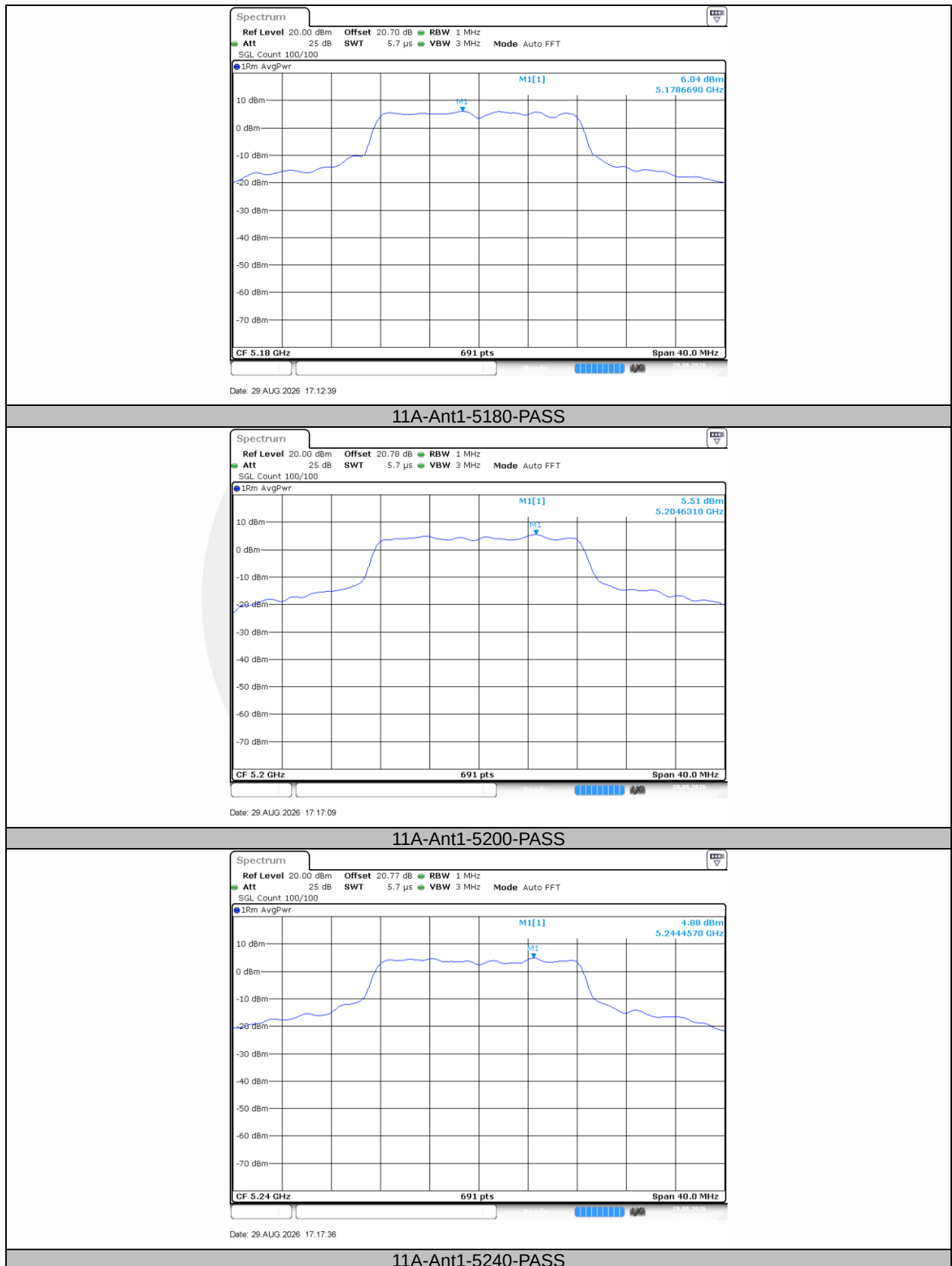
8.3.5 Test Results

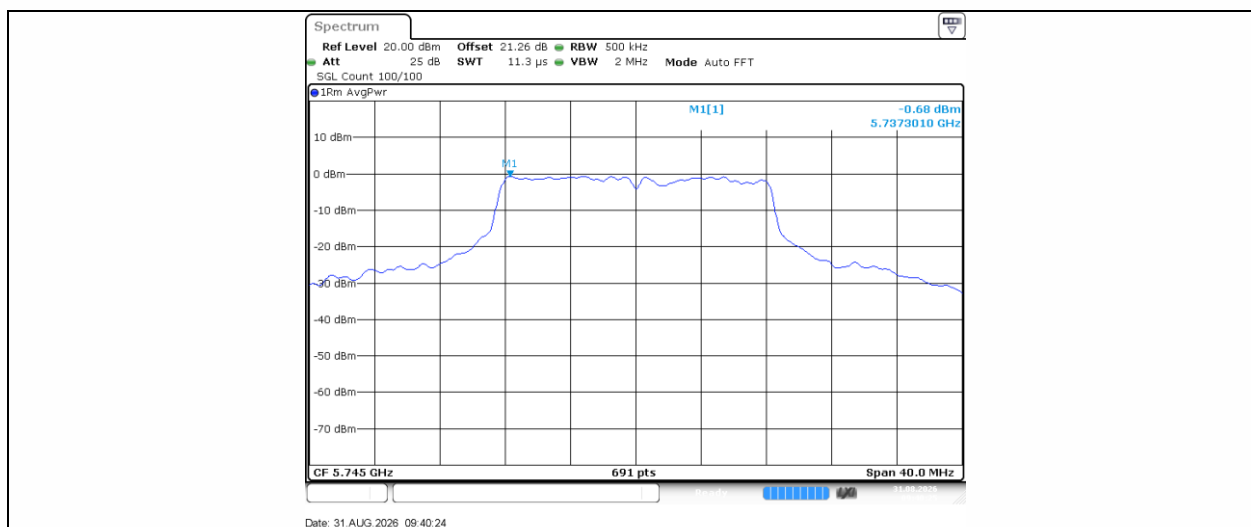
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Humidity : 53 %

ATM Pressure:: 1011 mbar
Test Engineer: LaiHuijie

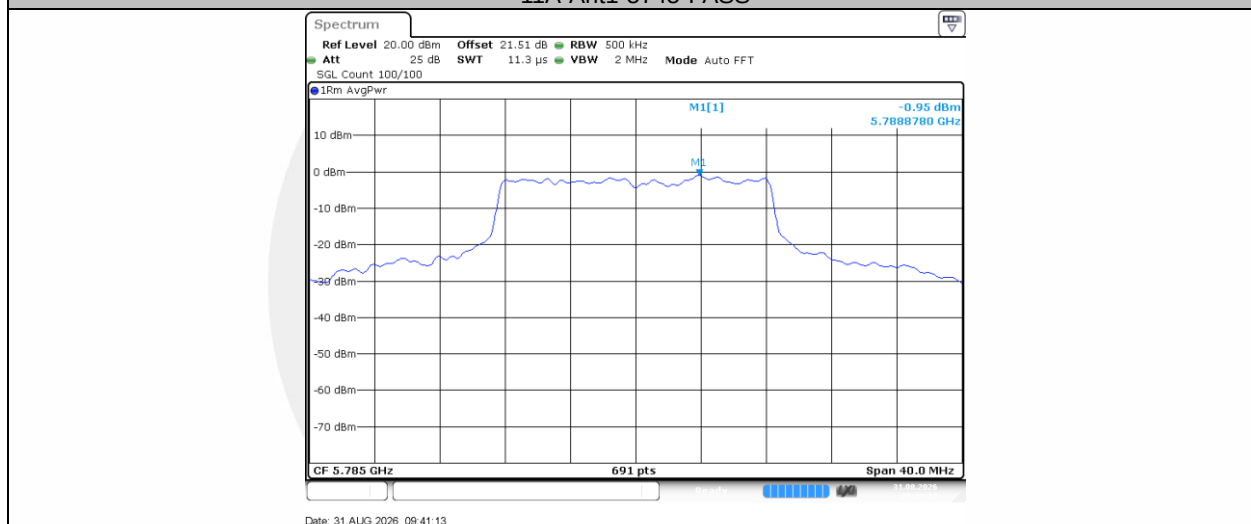
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.04	≤11.00	PASS
11A	Ant1	5200	5.51	≤11.00	PASS
11A	Ant1	5240	4.88	≤11.00	PASS
11A	Ant1	5745	-0.68	≤30.00	PASS
11A	Ant1	5785	-0.95	≤30.00	PASS
11A	Ant1	5825	-1.95	≤30.00	PASS
11N20SISO	Ant1	5180	5.79	≤11.00	PASS
11N20SISO	Ant1	5200	4.57	≤11.00	PASS
11N20SISO	Ant1	5240	4.23	≤11.00	PASS
11N20SISO	Ant1	5745	-0.58	≤30.00	PASS
11N20SISO	Ant1	5785	-0.81	≤30.00	PASS
11N20SISO	Ant1	5825	-2.21	≤30.00	PASS
11N40SISO	Ant1	5190	2.49	≤11.00	PASS
11N40SISO	Ant1	5230	1.95	≤11.00	PASS
11N40SISO	Ant1	5755	-3.25	≤30.00	PASS
11N40SISO	Ant1	5795	-3.88	≤30.00	PASS
11AC20SISO	Ant1	5180	5.10	≤11.00	PASS
11AC20SISO	Ant1	5200	4.73	≤11.00	PASS
11AC20SISO	Ant1	5240	4.39	≤11.00	PASS
11AC20SISO	Ant1	5745	-0.30	≤30.00	PASS
11AC20SISO	Ant1	5785	-1.28	≤30.00	PASS
11AC20SISO	Ant1	5825	-2.30	≤30.00	PASS
11AC40SISO	Ant1	5190	2.83	≤11.00	PASS
11AC40SISO	Ant1	5230	1.71	≤11.00	PASS
11AC40SISO	Ant1	5755	-3.21	≤30.00	PASS
11AC40SISO	Ant1	5795	-4.47	≤30.00	PASS
11AX20SISO	Ant1	5180	5.38	≤11.00	PASS
11AX20SISO	Ant1	5200	4.48	≤11.00	PASS
11AX20SISO	Ant1	5240	4.27	≤11.00	PASS
11AX20SISO	Ant1	5745	-0.64	≤30.00	PASS
11AX20SISO	Ant1	5785	-1.63	≤30.00	PASS
11AX20SISO	Ant1	5825	-2.00	≤30.00	PASS
11AX40SISO	Ant1	5190	2.26	≤11.00	PASS
11AX40SISO	Ant1	5230	1.47	≤11.00	PASS
11AX40SISO	Ant1	5755	-2.90	≤30.00	PASS
11AX40SISO	Ant1	5795	-4.46	≤30.00	PASS

Power Density Test Graphs

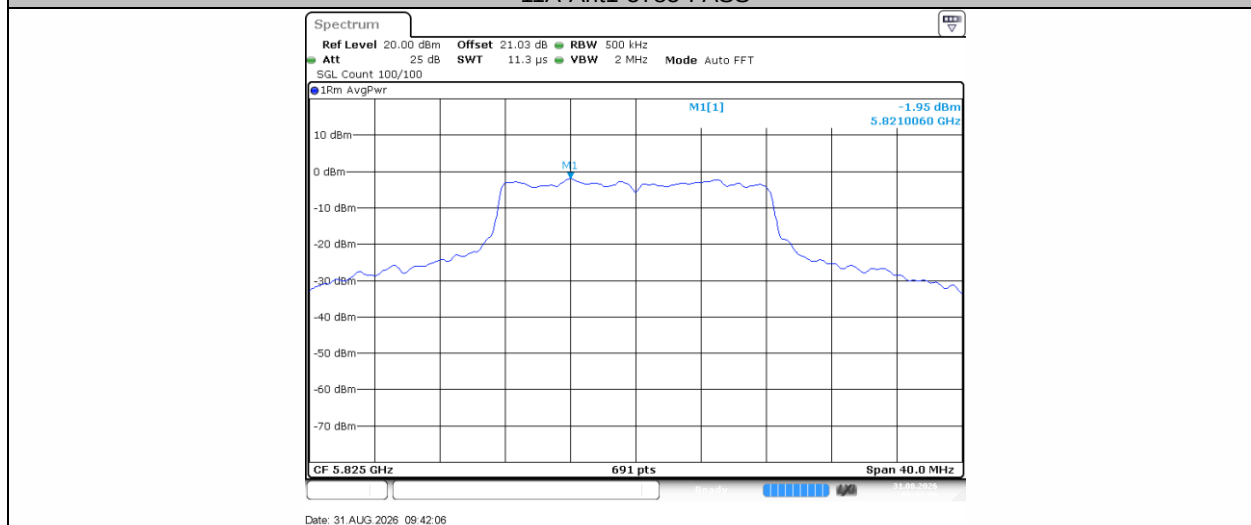




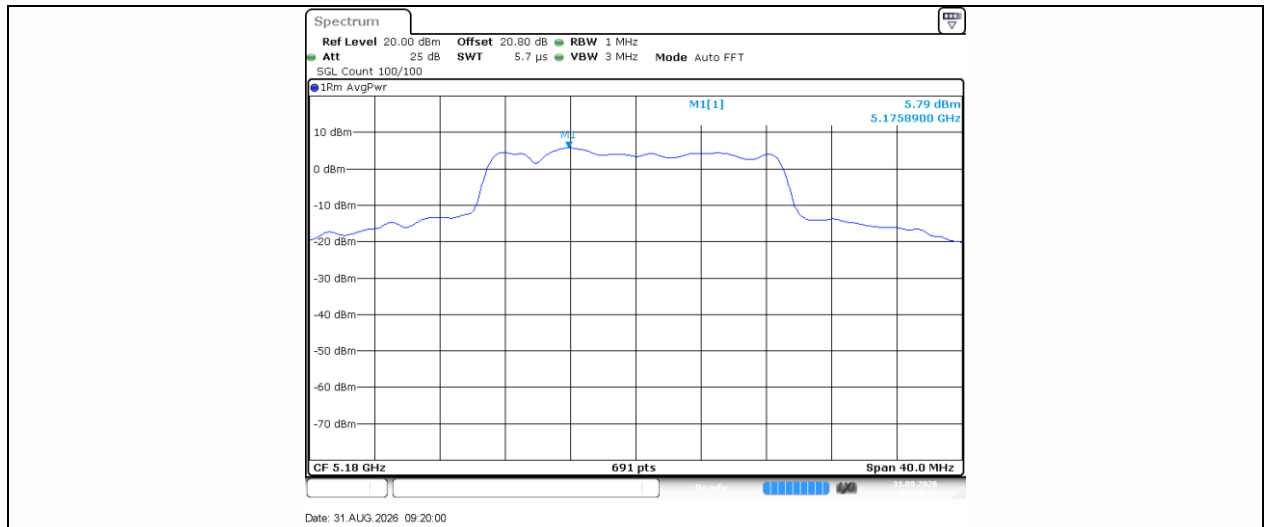
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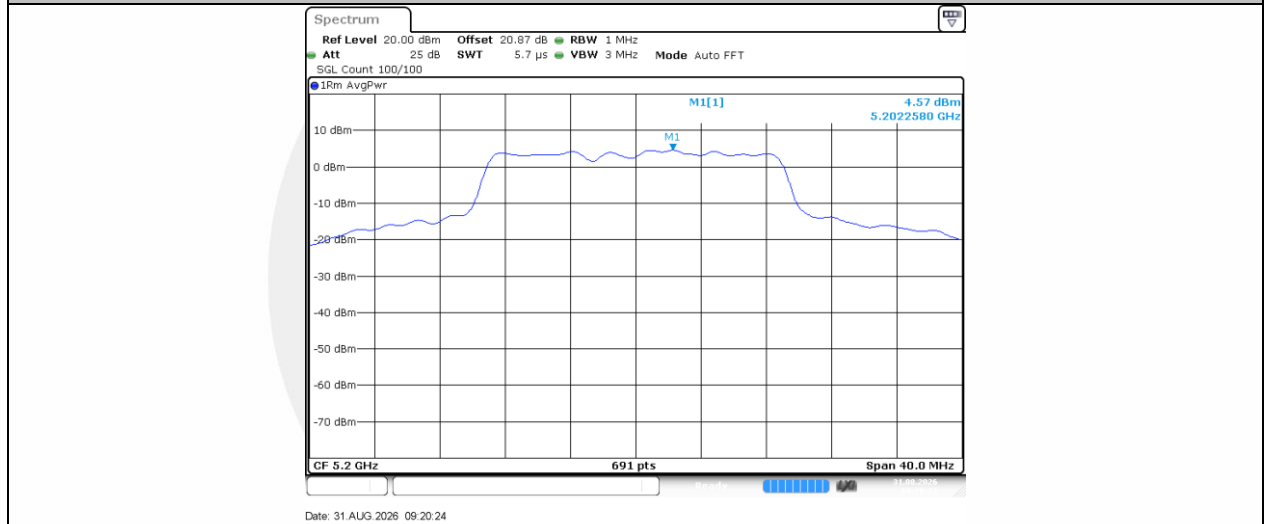
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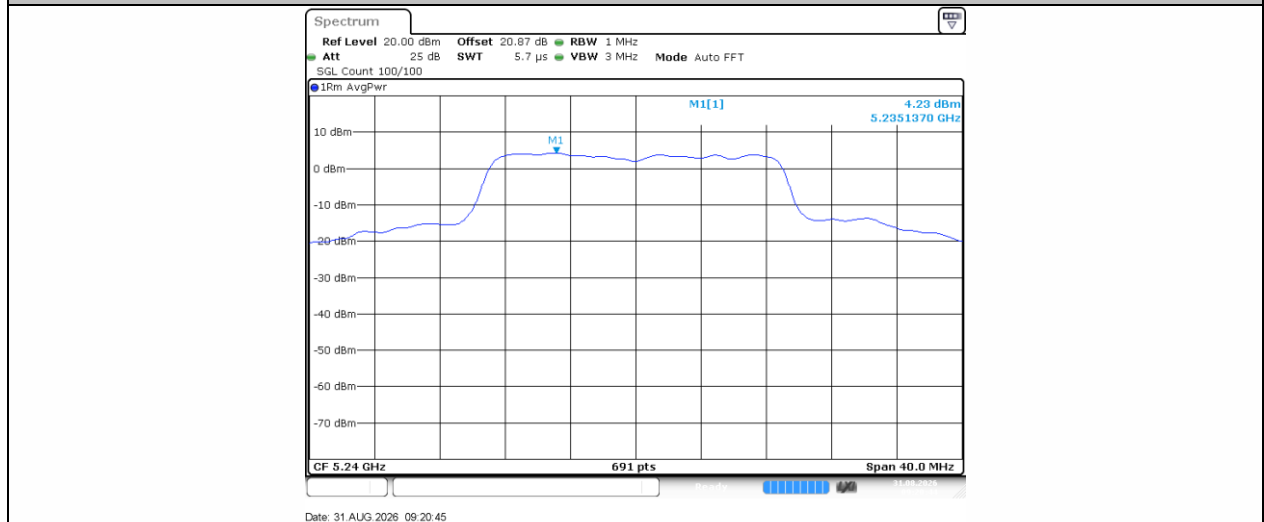
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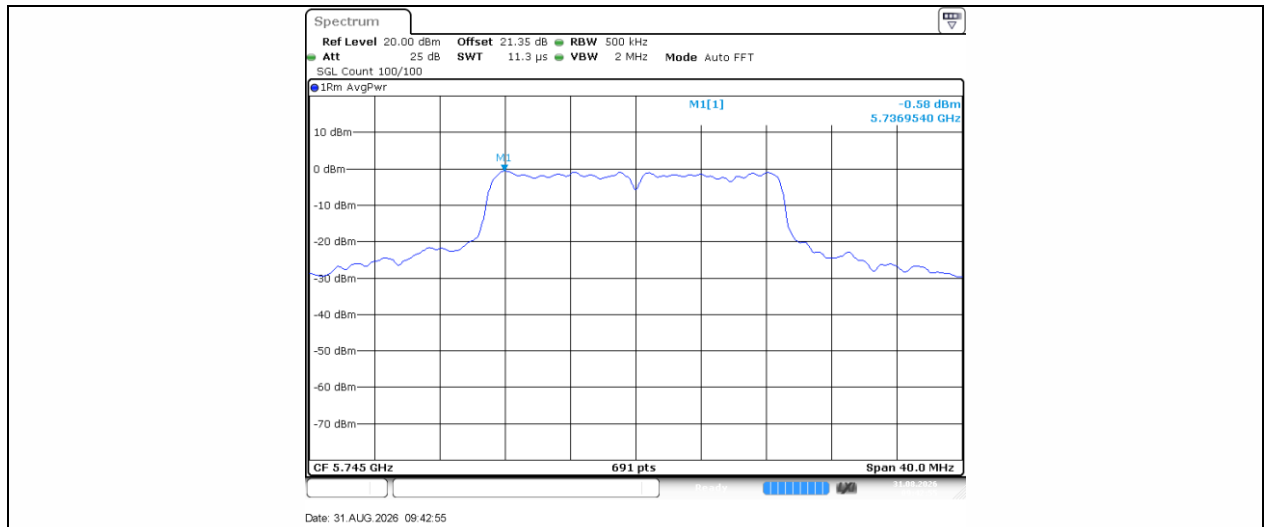
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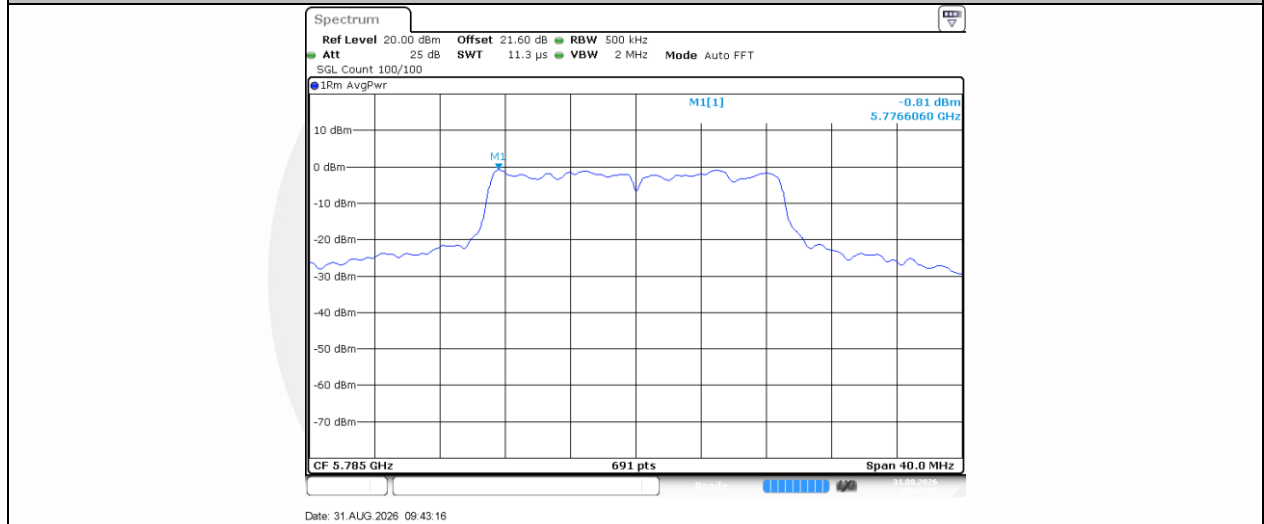
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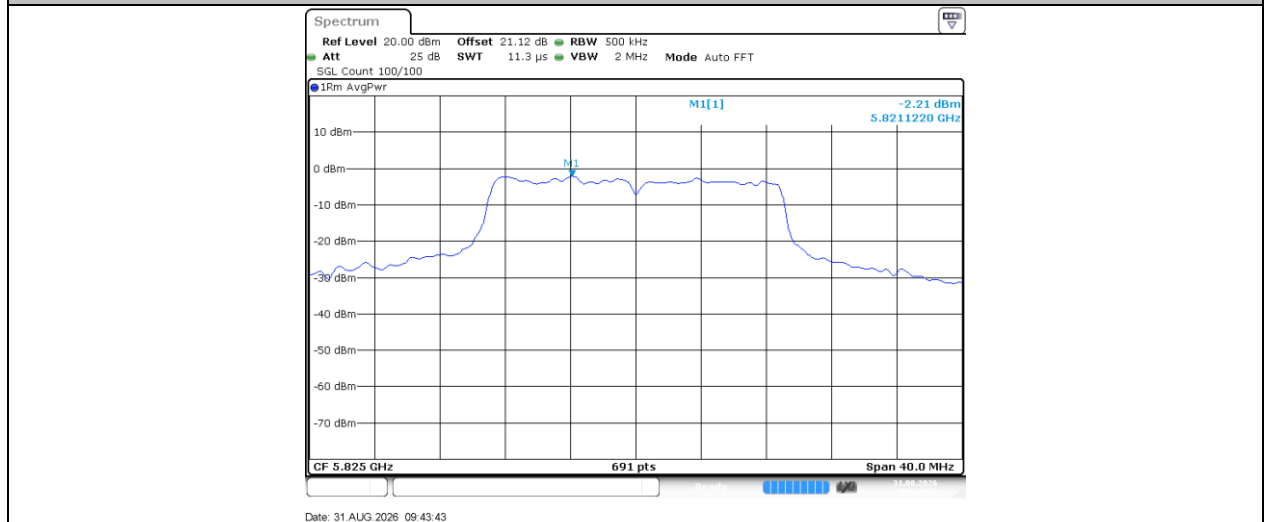
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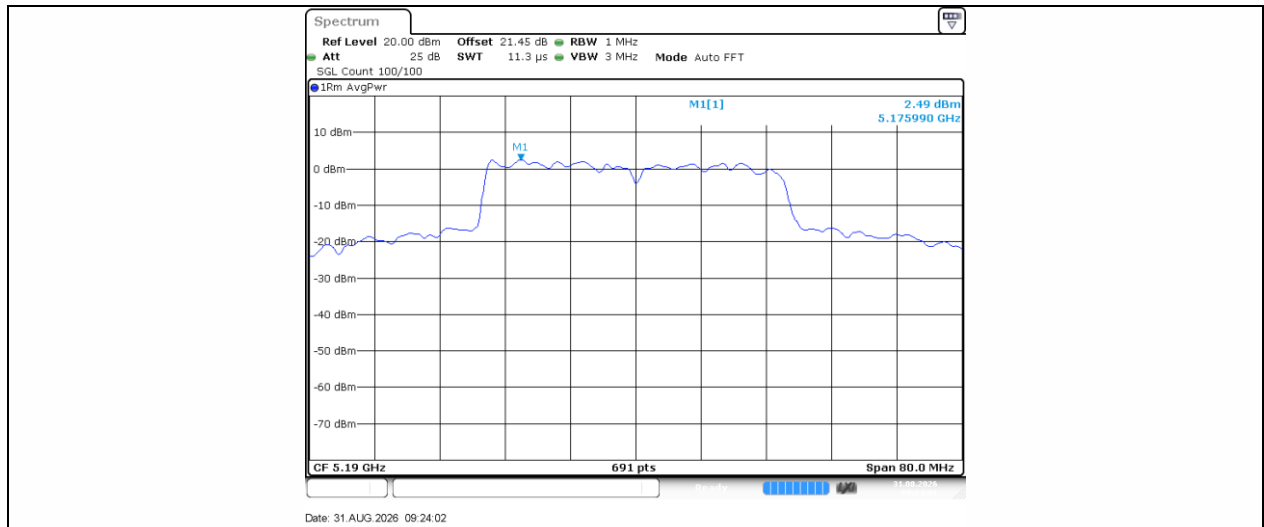
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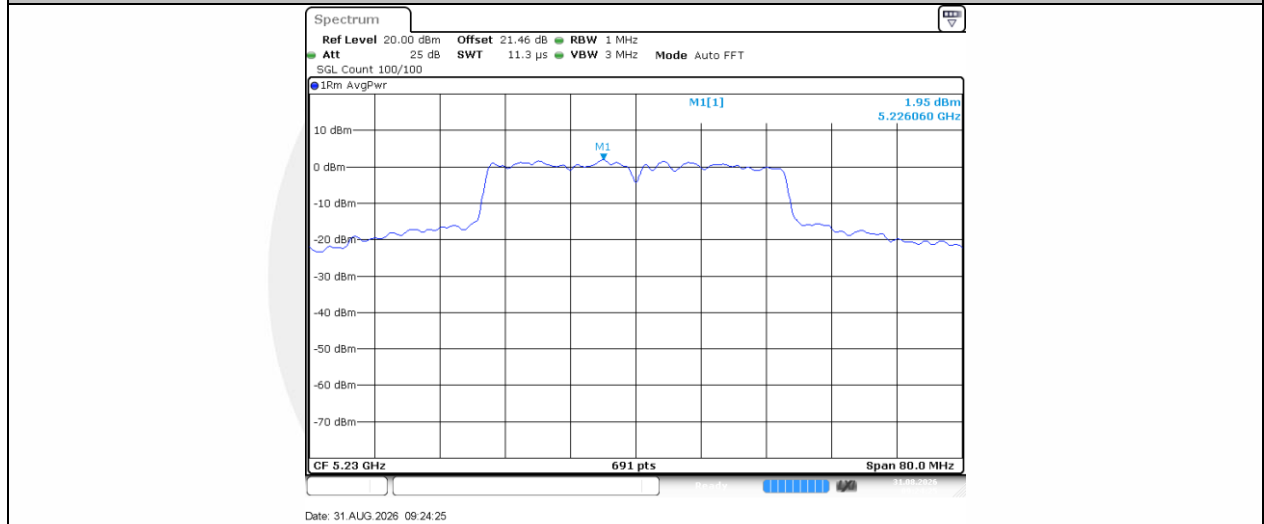
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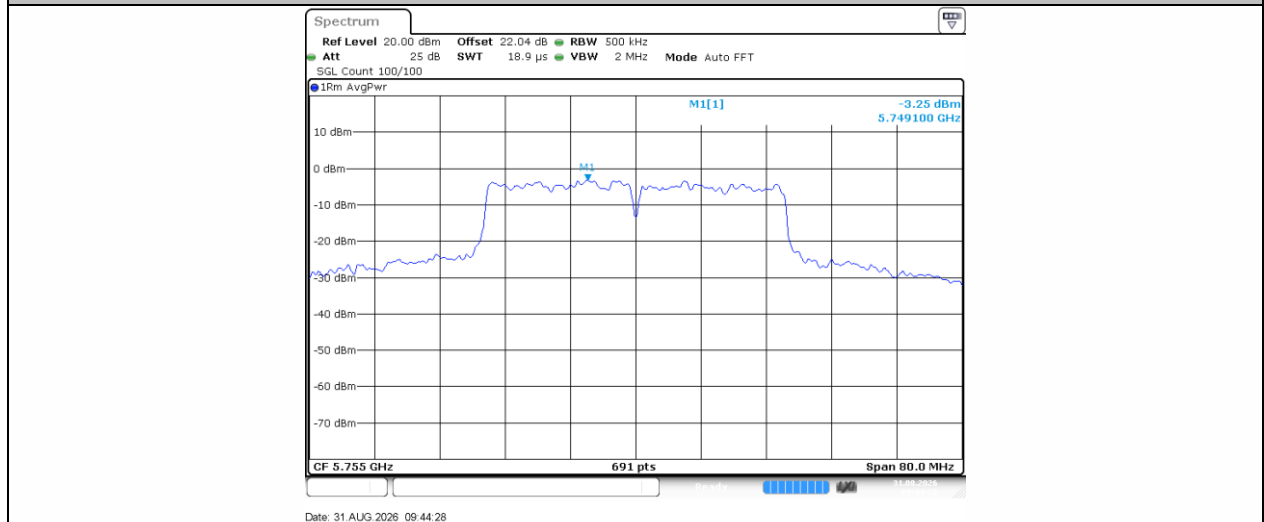
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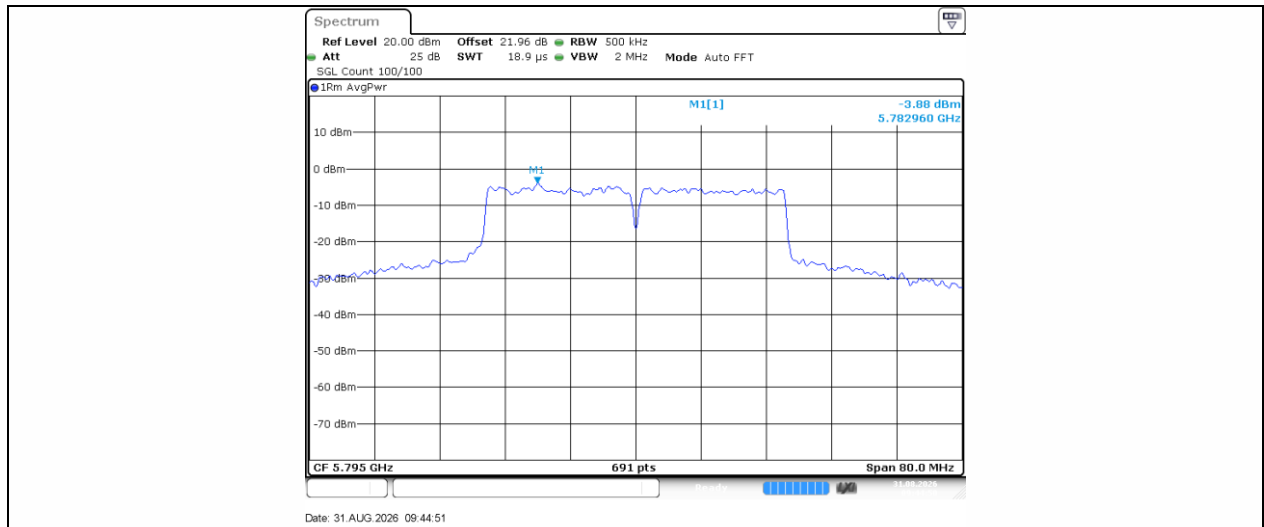
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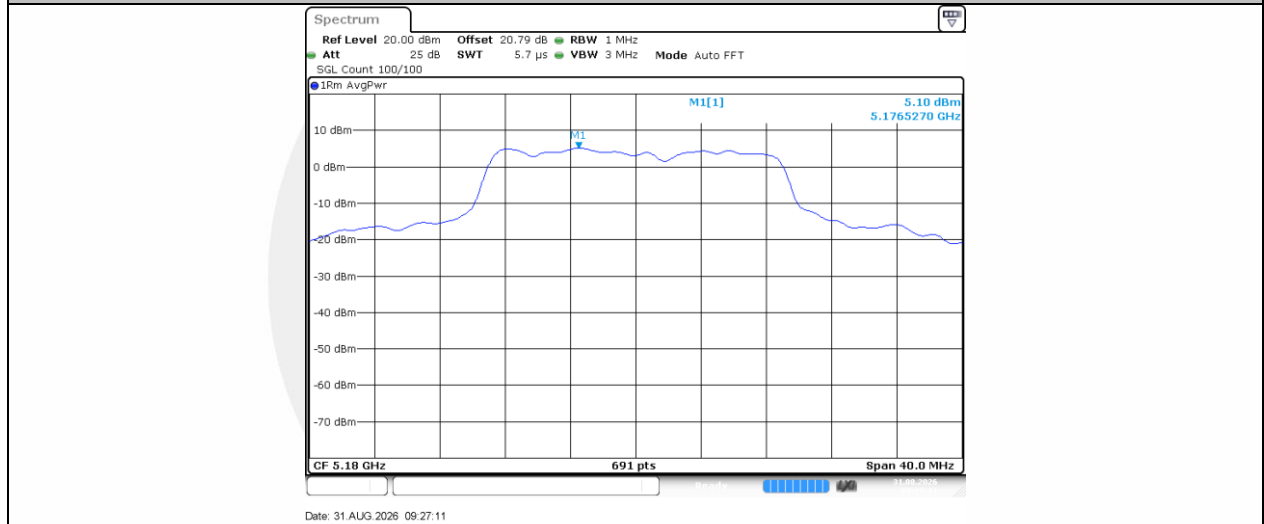
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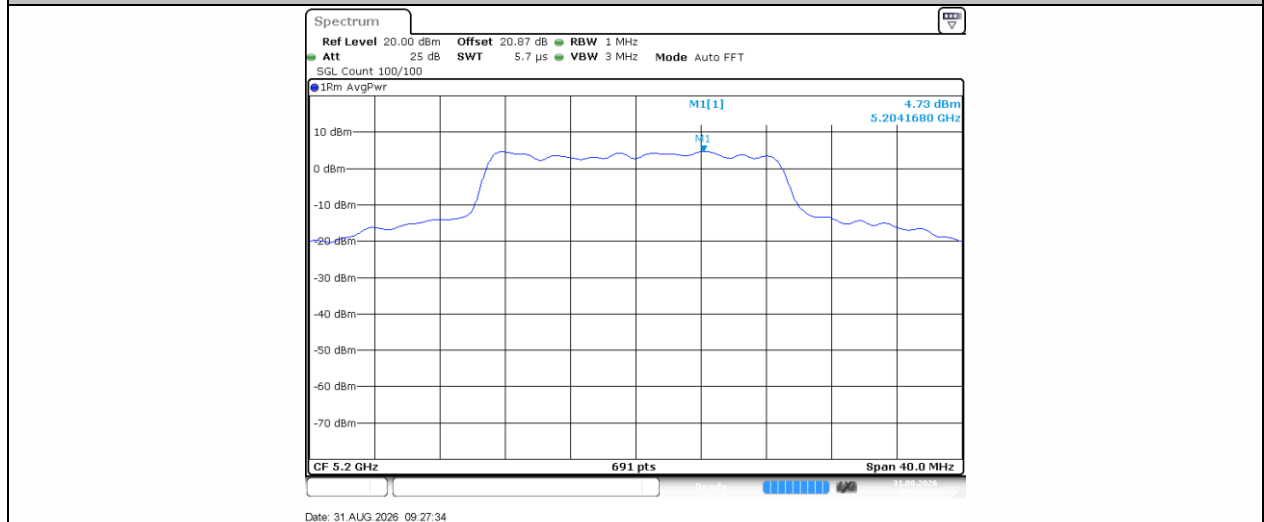
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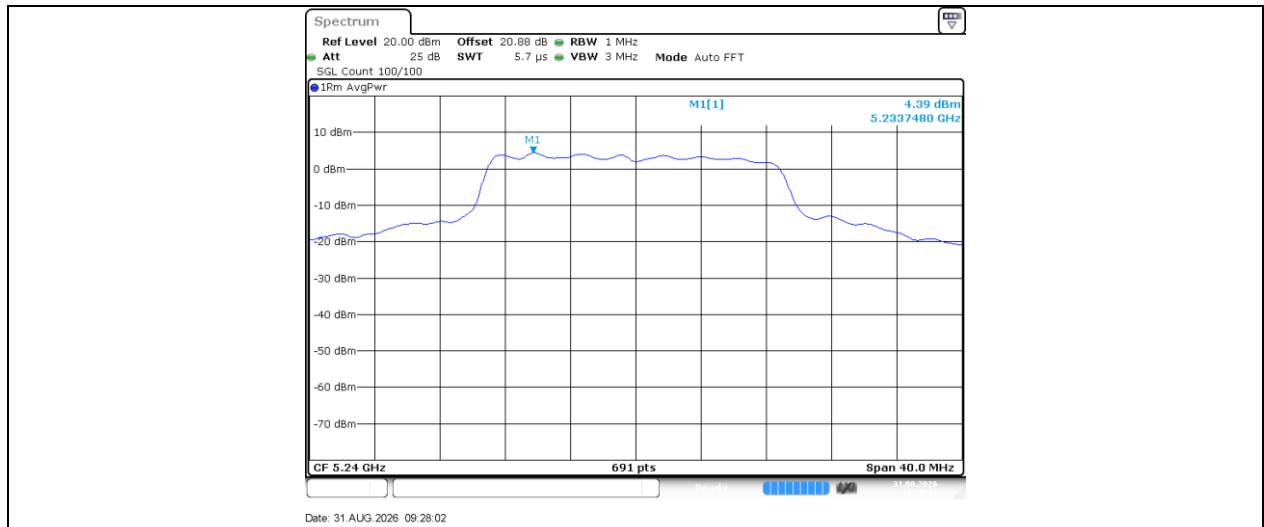
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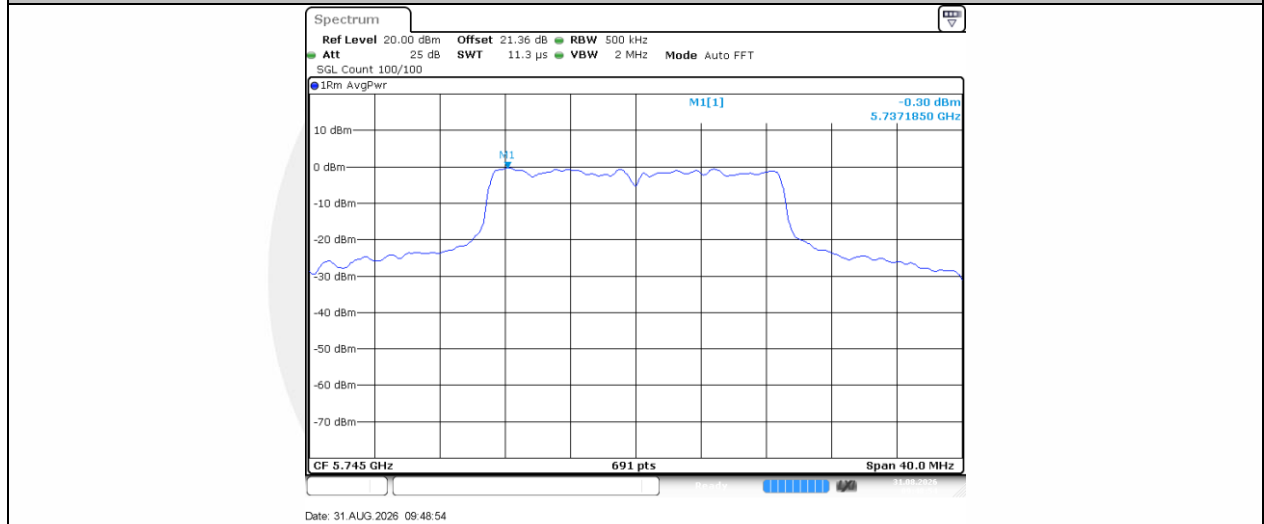
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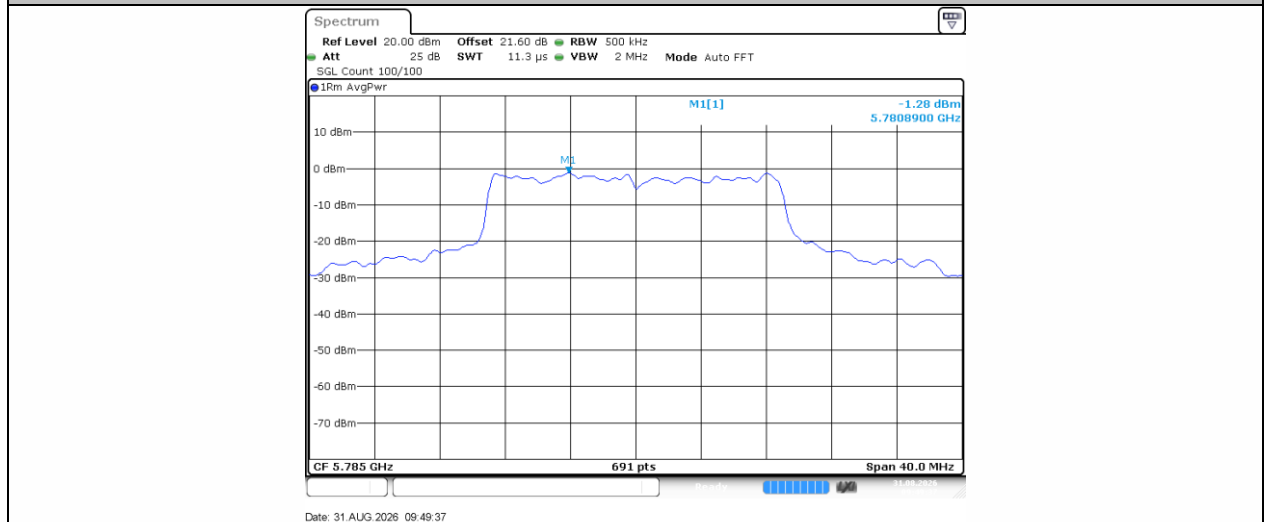
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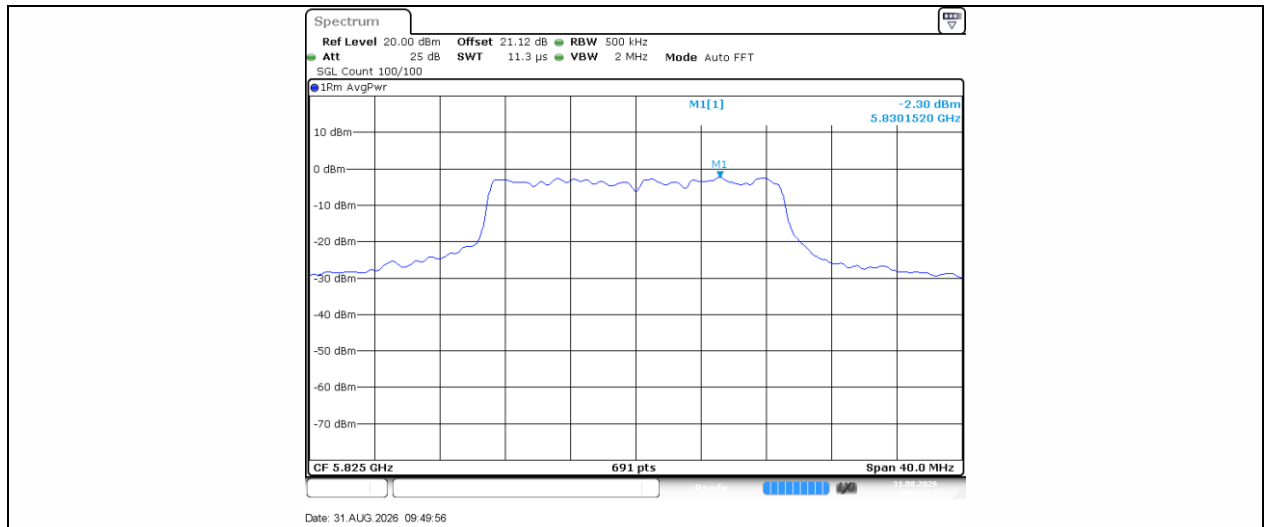
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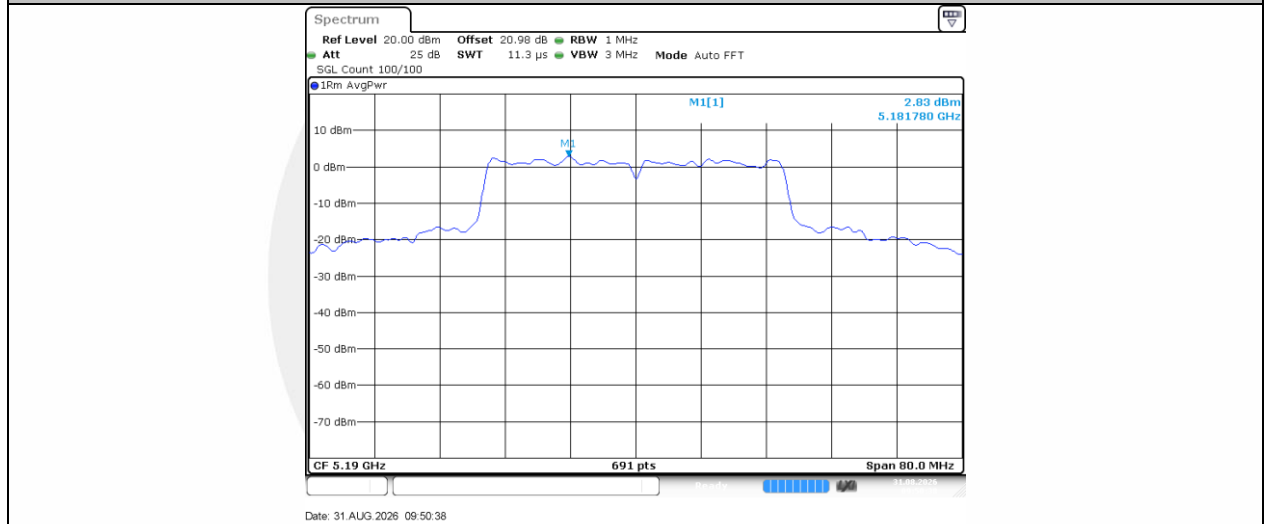
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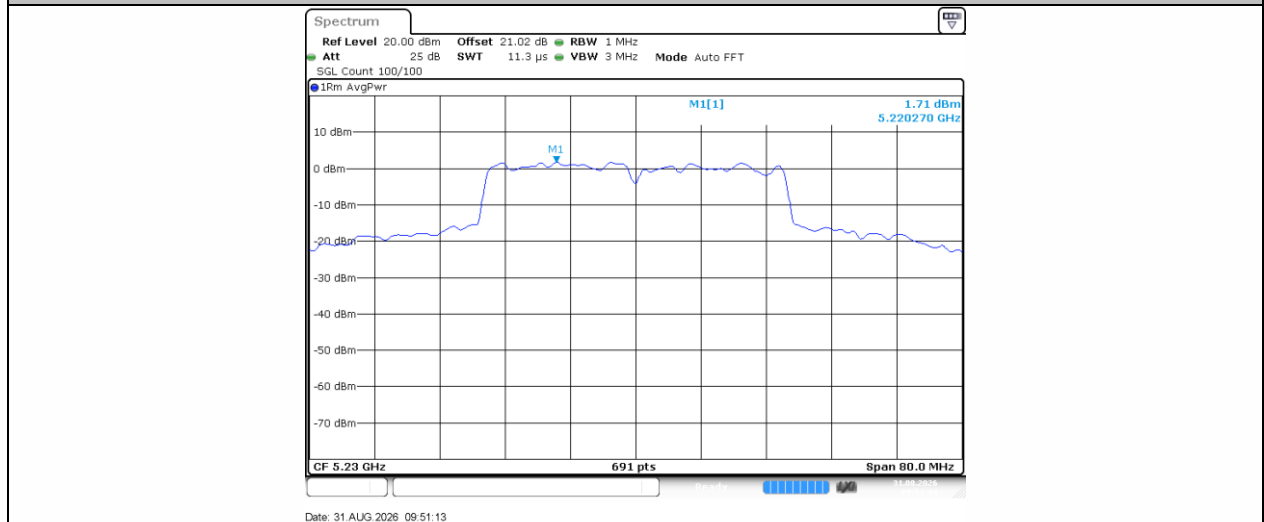
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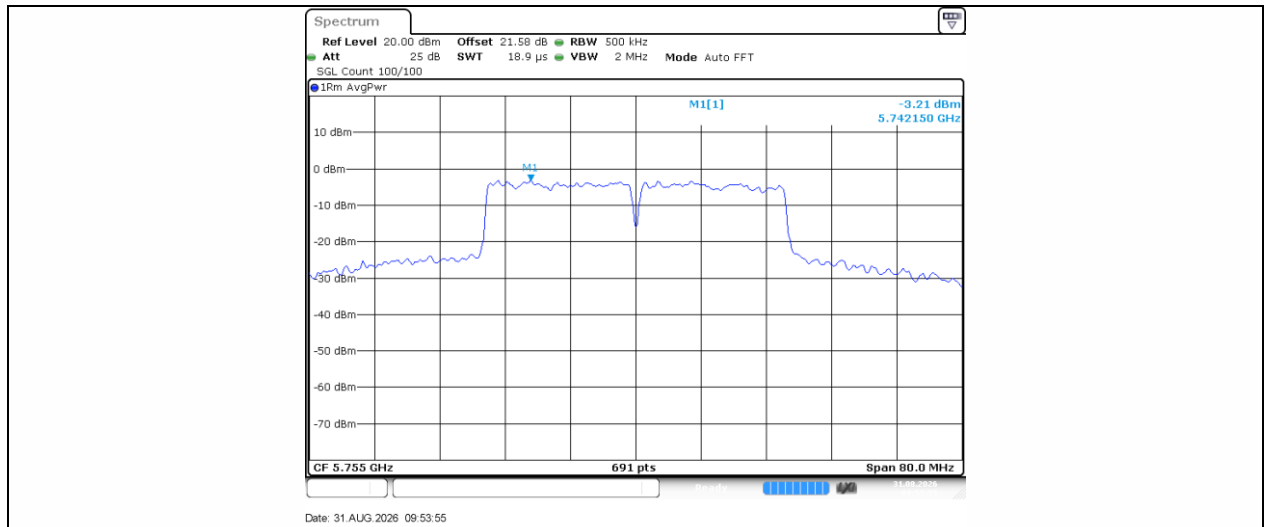
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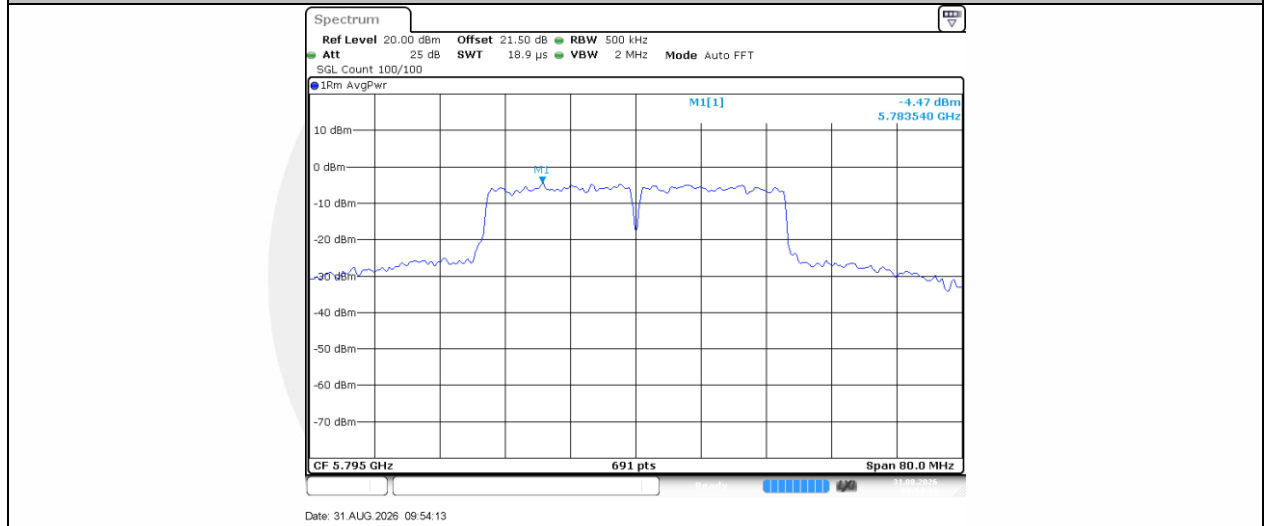
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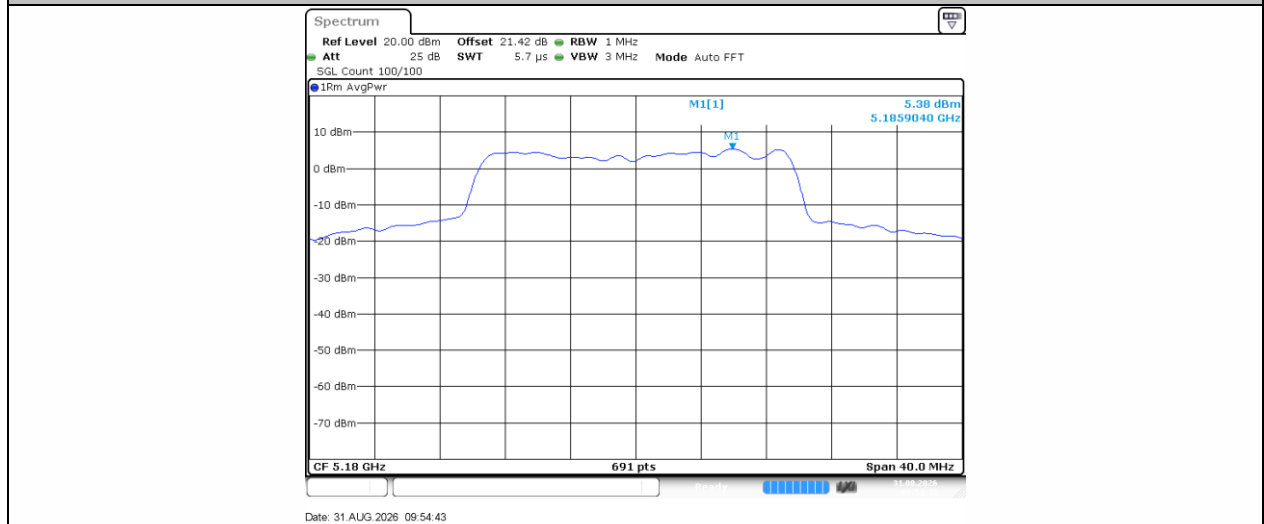
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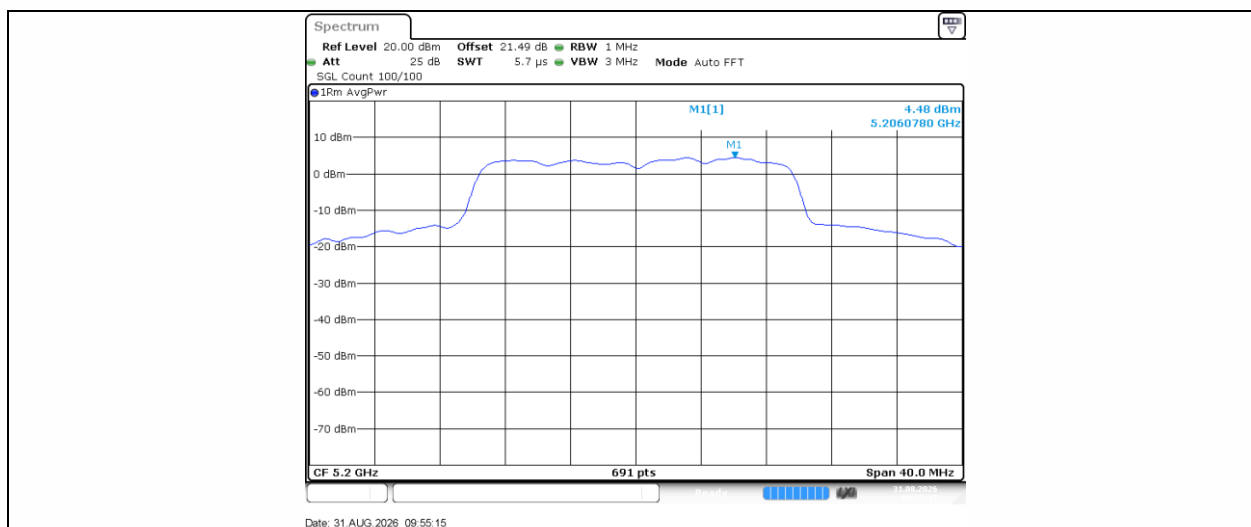
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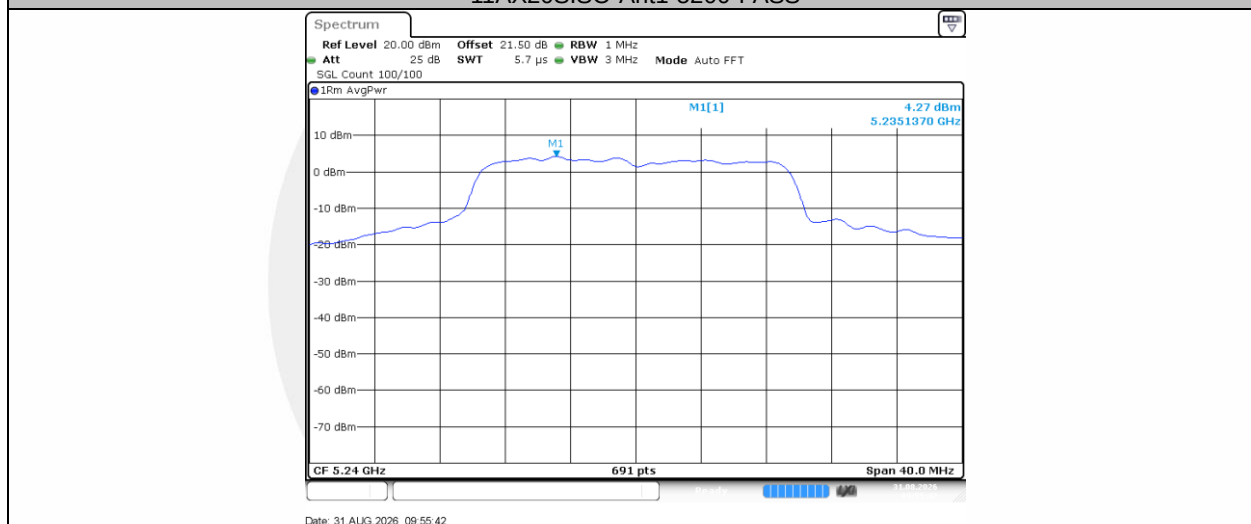
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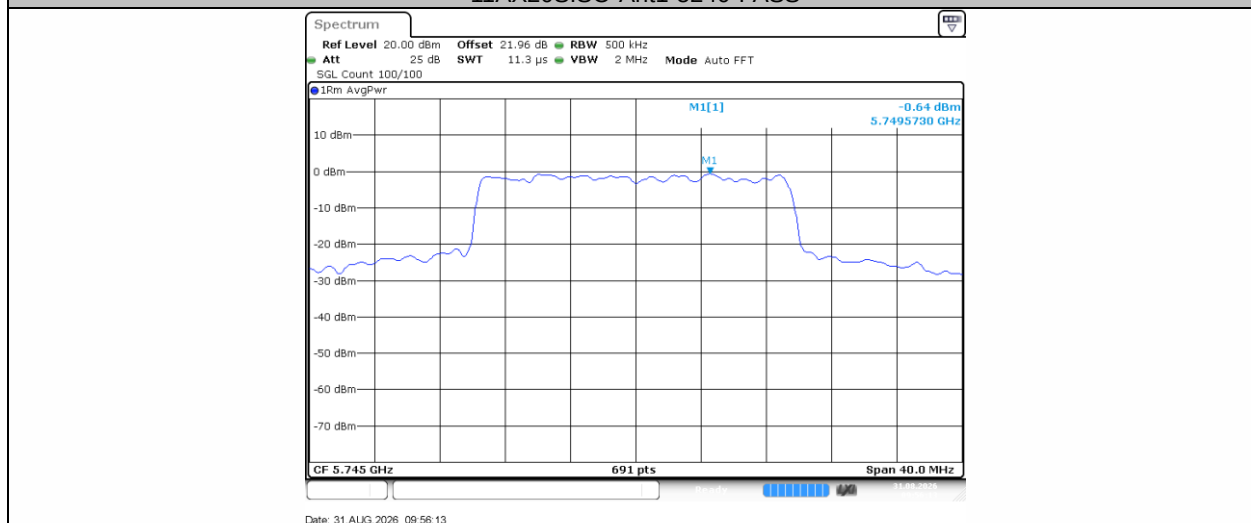
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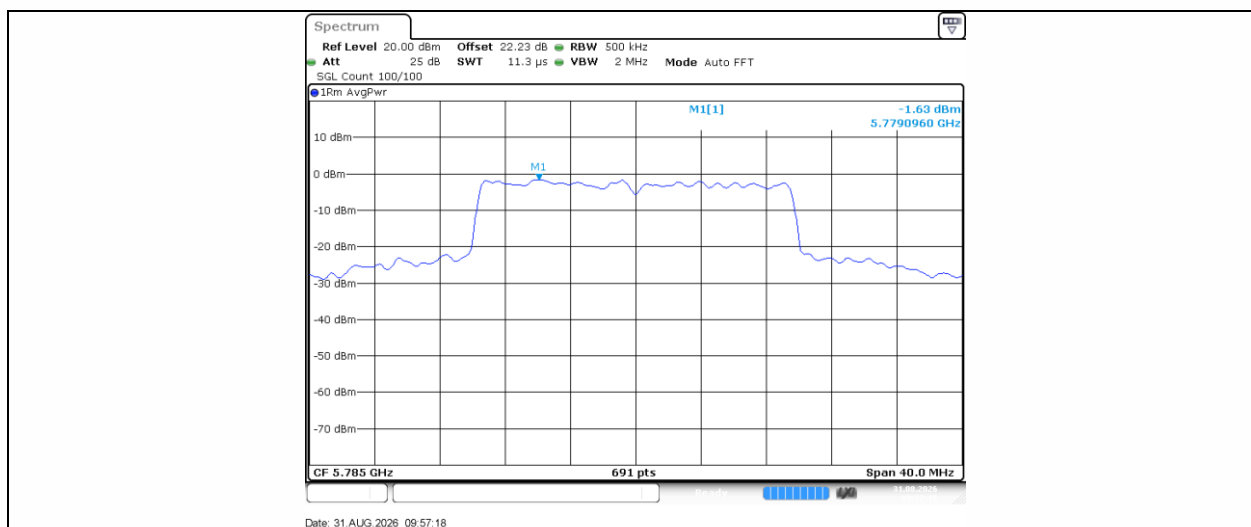
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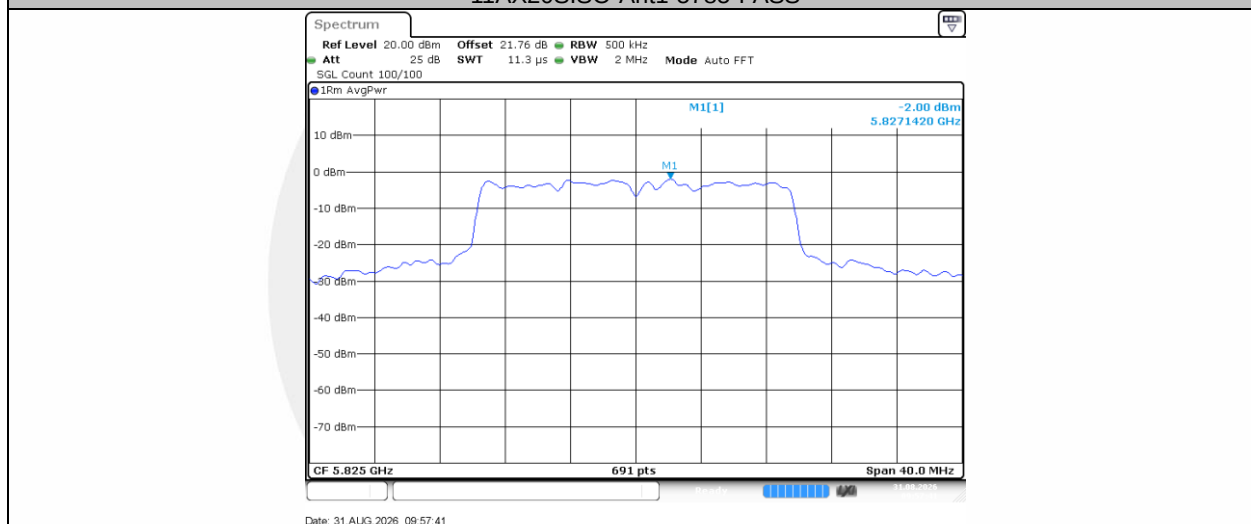
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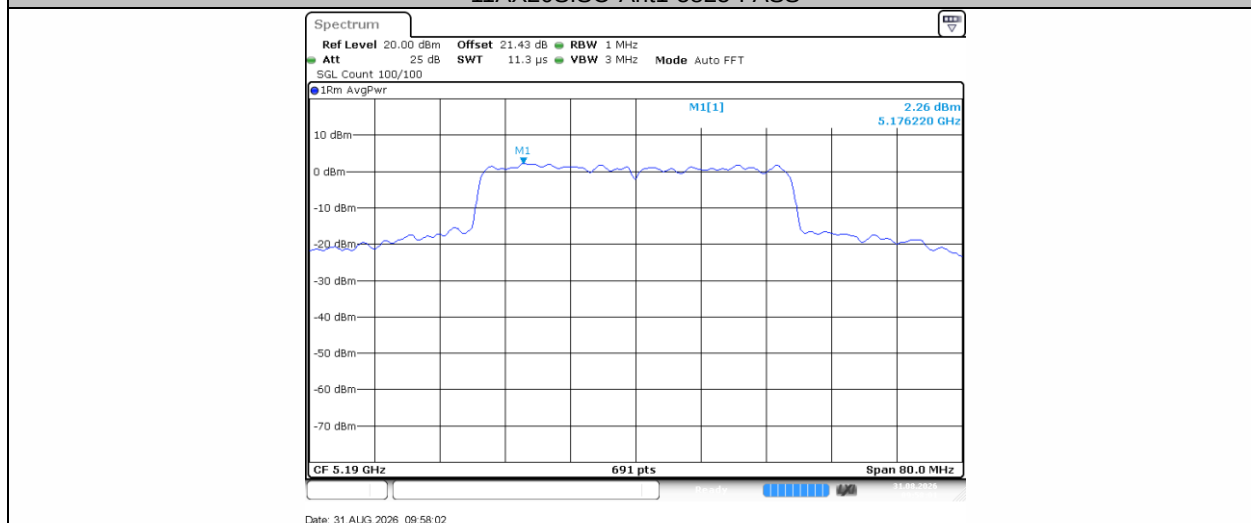
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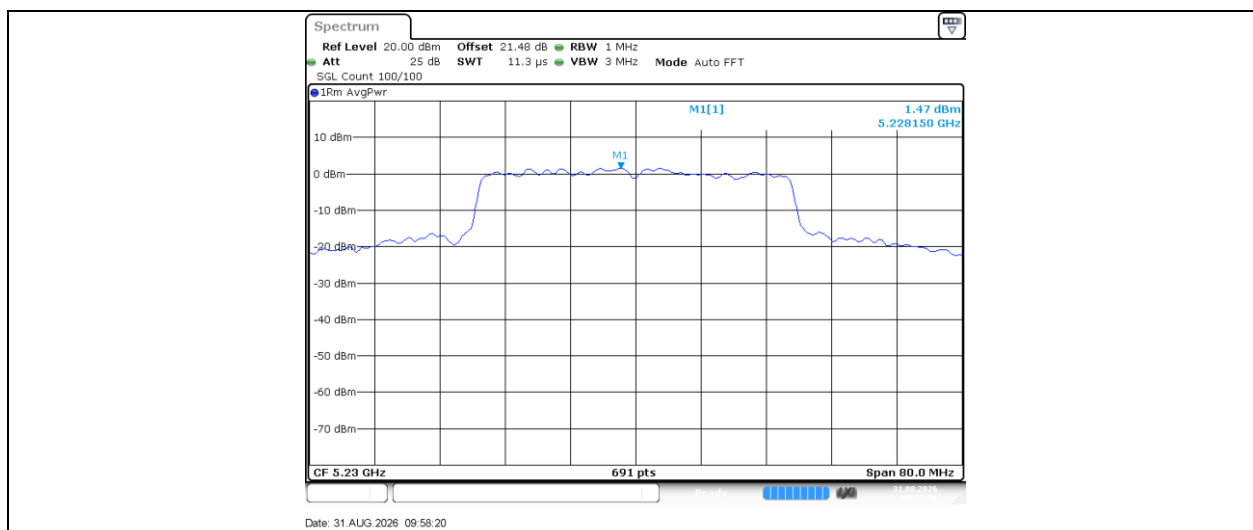
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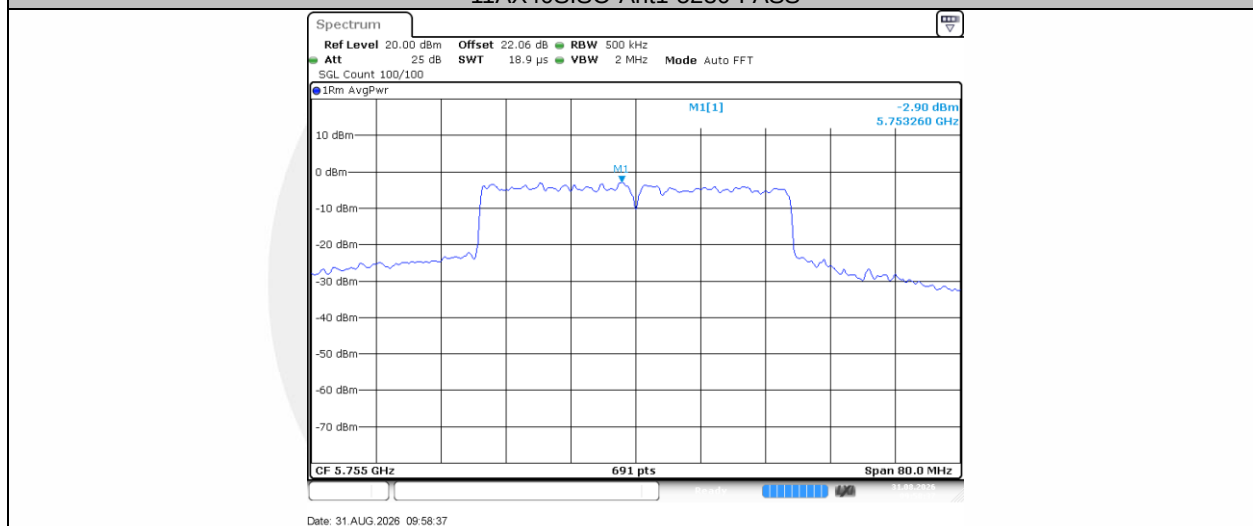
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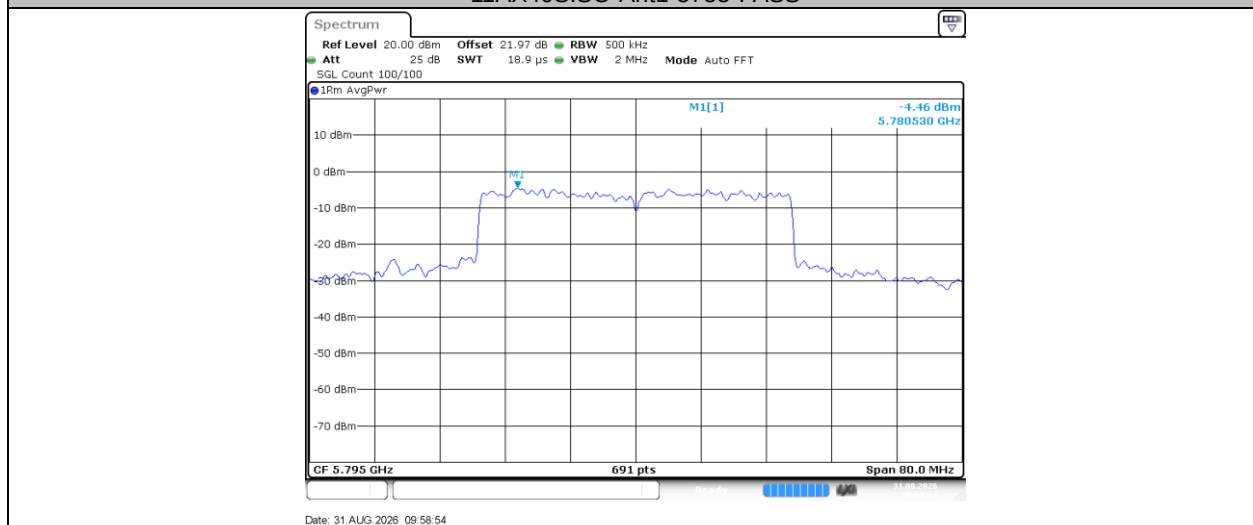
11AX40SISO-Ant1-5190-PASS



11AX40SISO-Ant1-5230-PASS



11AX40SISO-Ant1-5755-PASS



11AX40SISO-Ant1-5795-PASS

8.4 UNDESIRABLE RADIATED SPURIOUS EMISSION

8.4.1 Applicable Standard

According to FCC Part 15.407 (b)
According to 789033 D02 Section II(G)

8.4.2 Conformance Limit

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 e.i.r.p. of -27 dBm/MHz.

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 e.i.r.p. of -27 dBm/MHz.

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 e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: 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 emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	2400/F(KHz)	20 log (uV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The provisions of §15.205 apply to intentional radiators operating under this section,15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

Remark: 1. Emission level in dBuV/m= $20 \log(uV/m)$
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

8.4.3 Test Configuration

Test according to clause 6.2 radio frequency test setup 2.

8.4.4 Test Procedure

■ Unwanted Emissions Measurements below 1000 MHz

Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

The EUT was placed on a turn table which is 0.8m above ground plane.

And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Repeat above procedures until all frequency measured was complete.

We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes have been tested and the worst result was reported.

Use the following spectrum analyzer settings:

Set RBW=120kHz for $f < 1 \text{ GHz}$ (30MHz to 1GHz), 200Hz for $f < 150\text{KHz}$ (9KHz to 150KHz), 9KHz for $< 30\text{MHz}$ (150KHz to 30KHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10:2020+Cor.1:2023 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data.

Repeat above procedures until all frequency measured was complete.

■ Unwanted Maximum peak Emissions Measurements above 1000 MHz

Maximum emission levels are measured by setting the analyzer as follows:

RBW = 1 MHz.

VBW $\geq$ 3 MHz.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

■ Unwanted Average Emissions Measurements above 1000 MHz

Method VB (Averaging using reduced video bandwidth): Alternative method.

RBW = 1 MHz.

Video bandwidth. • If the EUT is configured to transmit with duty cycle $\geq$ 98 percent, set $\text{VBW} \leq \text{RBW}/100$ (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is < 98 percent, set $\text{VBW} \geq 1/T$, where T is defined in section II.B.1.a).

Video bandwidth mode or display mode • The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the transmit cycle, at least 50 traces shall be averaged).

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.

Marker-Delta Method.

The marker-delta method, as described in ANSI C63.10:2020+Cor.1:2023, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

8.4.5 Test Results

Temperature : 25°C
Humidity : 60 %

ATM Pressure:: 1011 mbar
Test Engineer: YiXingpeng

- ☒ For Undesirable radiated Spurious Emission in U-NII – 1
 - ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)
- All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test mode: 802.11A Frequency(MHz): 5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5190.2465	V	46.84	-48.39	-27	21.39
10636.5669	V	59.04	-36.19	-27	9.19
17997.9999	V	66.44	-28.79	-27	1.79
5259.2505	H	47.10	-48.13	-27	21.13
10652.5678	H	58.93	-36.30	-27	9.30
17977.9987	H	65.31	-29.92	-27	2.92

Test mode: 802.11A Frequency(MHz): 5200

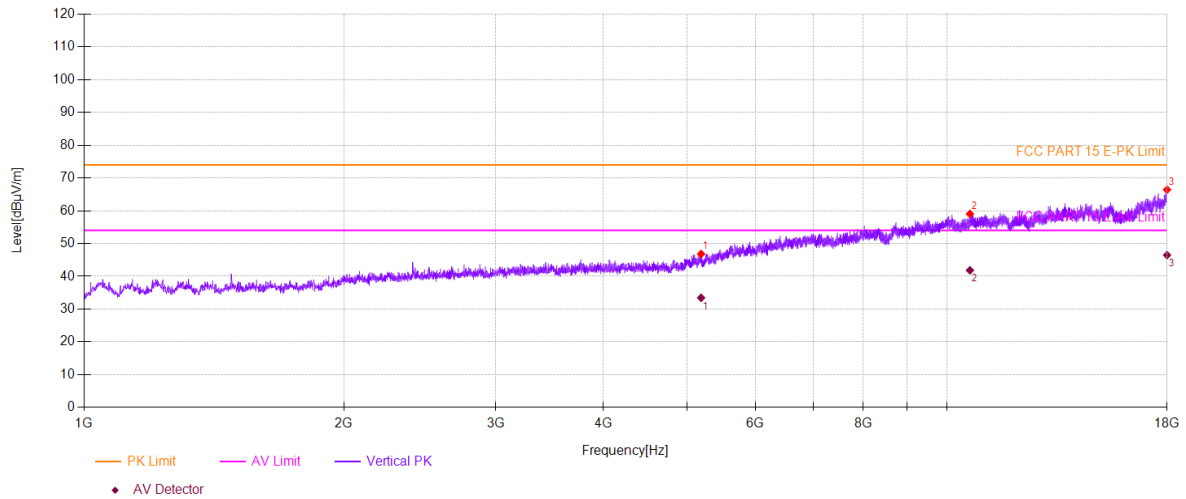
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5115.2421	V	46.86	-48.37	-27	21.37
10671.5689	V	58.29	-36.94	-27	9.94
17997.9999	V	66.09	-29.14	-27	2.14
5274.2514	H	48.29	-46.94	-27	19.94
10498.5587	H	57.82	-37.41	-27	10.41
17985.9992	H	67.20	-28.03	-27	1.03

Test mode: 802.11A Frequency(MHz): 5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5060.2388	V	46.07	-49.16	-27	22.16
10695.5703	V	58.72	-36.51	-27	9.51
17978.9988	V	66.13	-29.10	-27	2.10
5265.2509	H	47.22	-48.01	-27	21.01
10250.5442	H	58.61	-36.62	-27	9.62
17994.9997	H	65.43	-29.80	-27	2.80

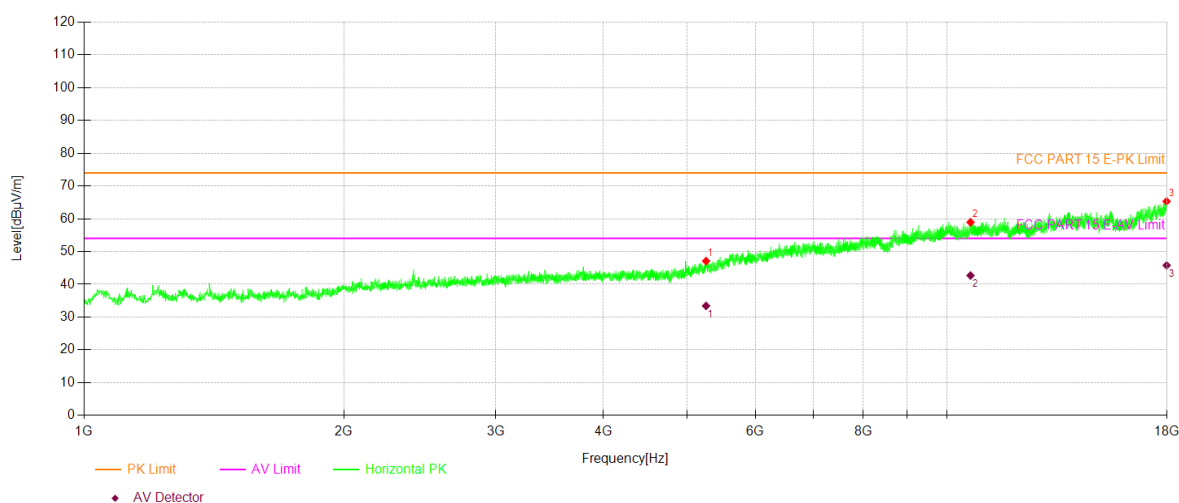
Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

Test mode: 802.11A Frequency(MHz): 5180



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5190.24	46.84	-9.19	74.00	27.16	PK	Vertical
2	10636.5	59.04	3.61	74.00	14.96	PK	Vertical
3	17997.9	66.44	11.16	74.00	7.56	PK	Vertical

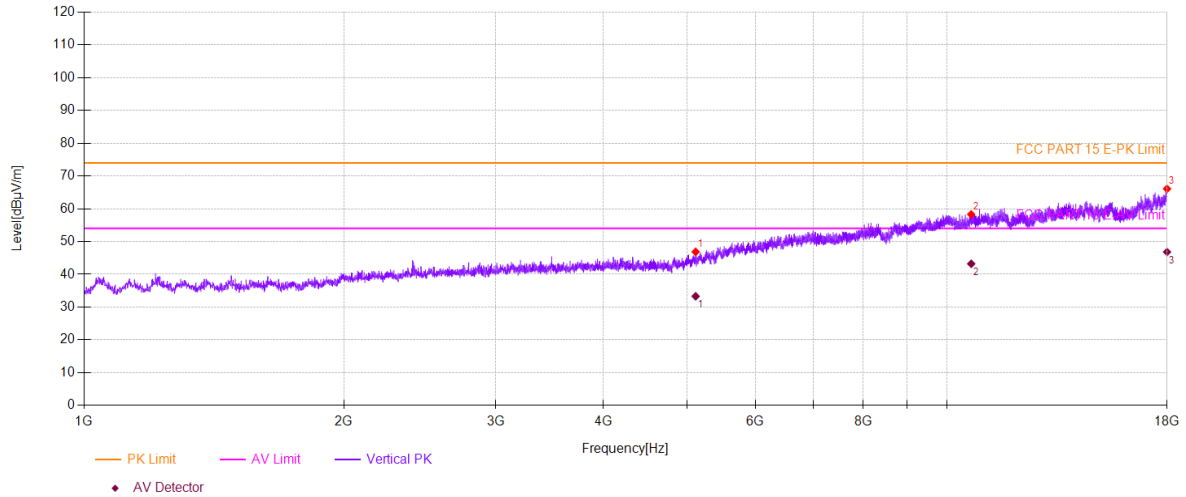
AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5190.246	33.46	54.00	20.54	AV	Vertical
2	10636.56	41.84	54.00	12.16	AV	Vertical
3	17997.99	46.47	54.00	7.53	AV	Vertical



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5259.25	47.10	-8.93	74.00	26.90	PK	Horizontal
2	10652.5	58.93	4.05	74.00	15.07	PK	Horizontal
3	17977.9	65.31	10.56	74.00	8.69	PK	Horizontal

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5259.250	33.43	54.00	20.57	AV	Horizontal
2	10652.56	42.69	54.00	11.31	AV	Horizontal
3	17977.99	45.79	54.00	8.21	AV	Horizontal

Test mode: 802.11A Frequency(MHz): 5200

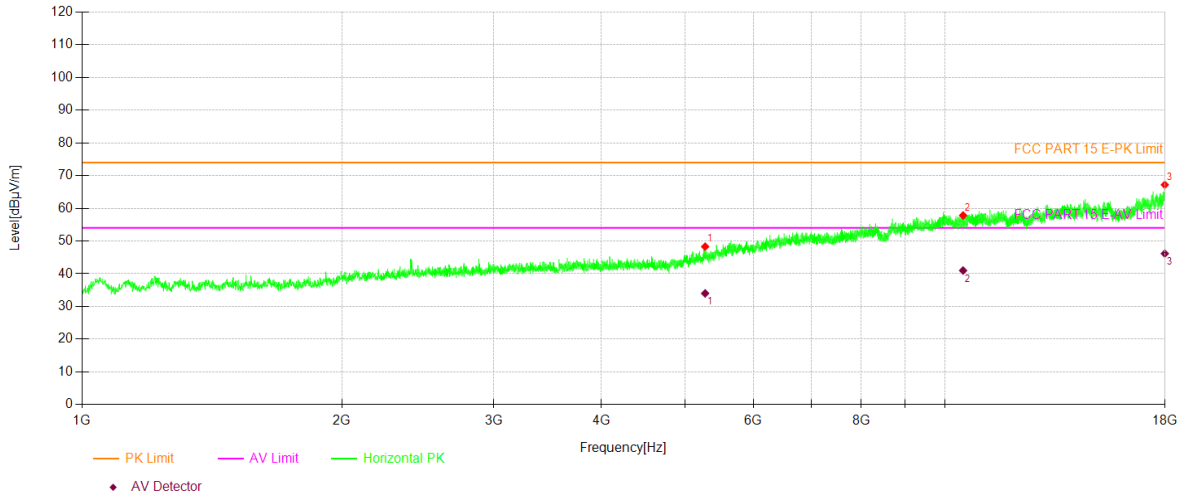


Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5115.24	46.86	-9.55	74.00	27.14	PK	Vertical
2	10671.5	58.29	4.58	74.00	15.71	PK	Vertical
3	17997.9	66.09	11.16	74.00	7.91	PK	Vertical

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5115.242	33.30	54.00	20.70	AV	Vertical
2	10671.56	43.22	54.00	10.78	AV	Vertical
3	17997.99	46.82	54.00	7.18	AV	Vertical



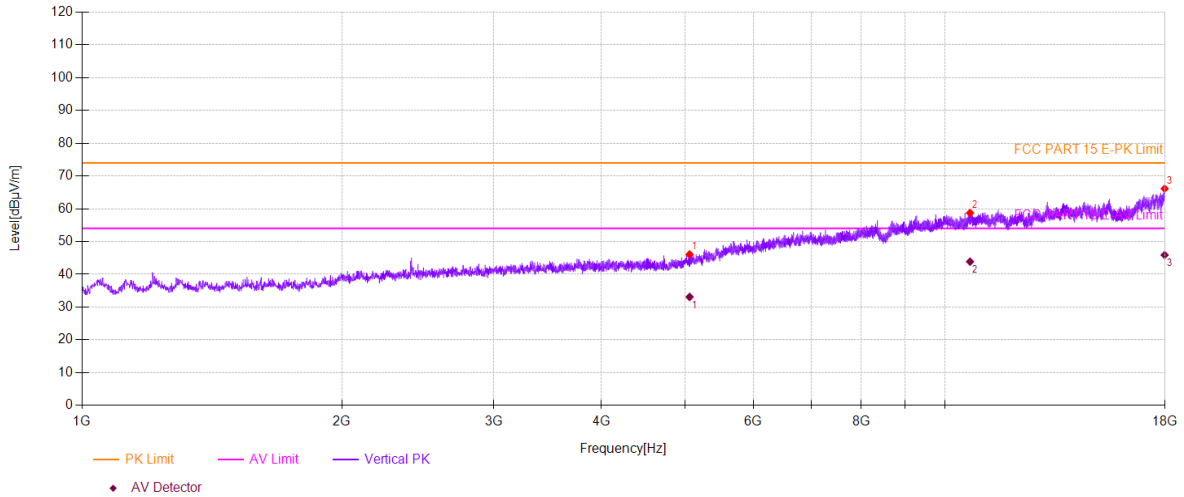
Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5274.25	48.29	-8.85	74.00	25.71	PK	Horizontal
2	10498.5	57.82	2.30	74.00	16.18	PK	Horizontal
3	17985.9	67.20	10.80	74.00	6.80	PK	Horizontal

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5274.251	34.01	54.00	19.99	AV	Horizontal
2	10498.55	40.99	54.00	13.01	AV	Horizontal
3	17985.99	46.16	54.00	7.84	AV	Horizontal

Test mode: 802.11A Frequency(MHz): 5240

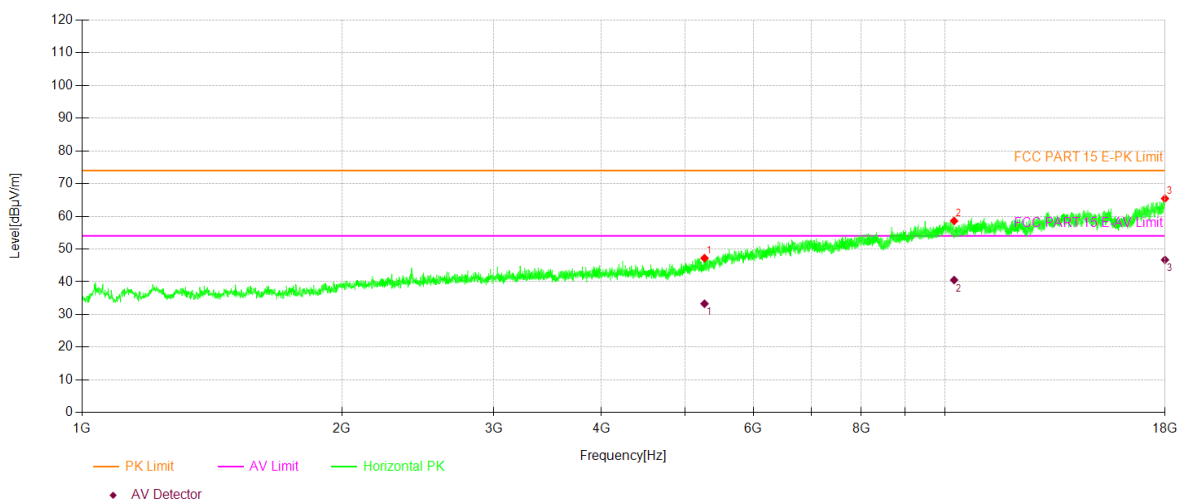


Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5060.23	46.07	-9.71	74.00	27.93	PK	Vertical
2	10695.5	58.72	5.25	74.00	15.28	PK	Vertical
3	17978.9	66.13	10.59	74.00	7.87	PK	Vertical

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5060.238	33.11	54.00	20.89	AV	Vertical
2	10695.57	43.87	54.00	10.13	AV	Vertical
3	17978.99	45.90	54.00	8.10	AV	Vertical



Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5265.25	47.22	-8.90	74.00	26.78	PK	Horizontal
2	10250.5	58.61	1.85	74.00	15.39	PK	Horizontal
3	17994.9	65.43	11.07	74.00	8.57	PK	Horizontal

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5265.250	33.29	54.00	20.71	AV	Horizontal
2	10250.54	40.54	54.00	13.46	AV	Horizontal
3	17994.99	46.69	54.00	7.31	AV	Horizontal

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).

(2) Emission Level= Reading Level+Correct Factor +Cable Loss.

(3) Correct Factor= Ant_F + Cab_L - Preamp

(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured

- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11A Frequency(MHz): 5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5044.53	V	53.80	-41.43	-27	Pass
5045.35	H	54.60	-40.63	-27	Pass

Test mode: 802.11A Frequency(MHz): 5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5361.57	V	53.07	-42.16	-27	Pass
5363.48	H	53.17	-42.06	-27	Pass

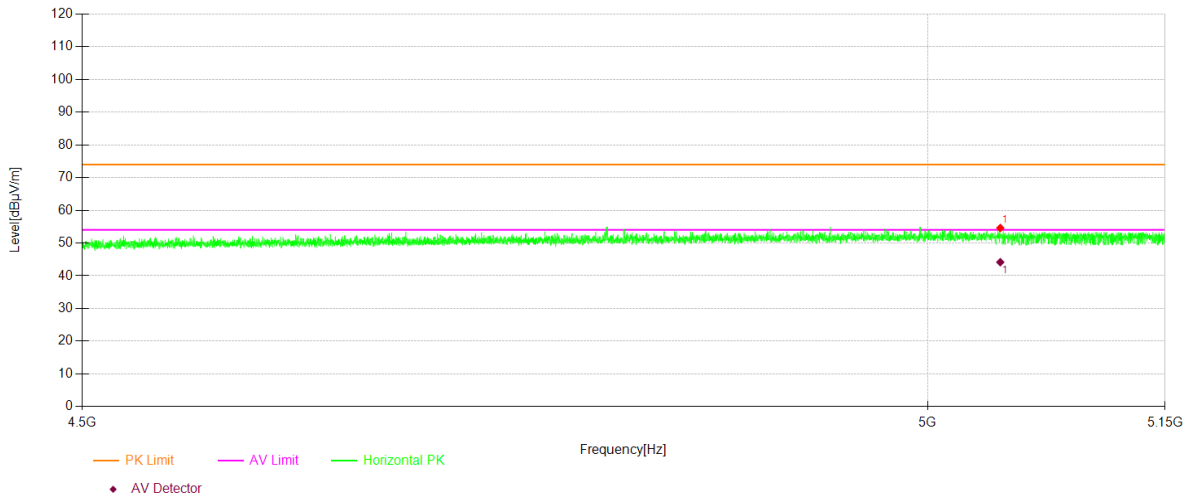
Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

U-NII - 1

Test Model Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

☐ 802.11a ☒ 802.11A ☐ 802.11n(HT40)

☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol H



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5045.35	54.60	37.76	74.00	19.40	PK	Horizontal

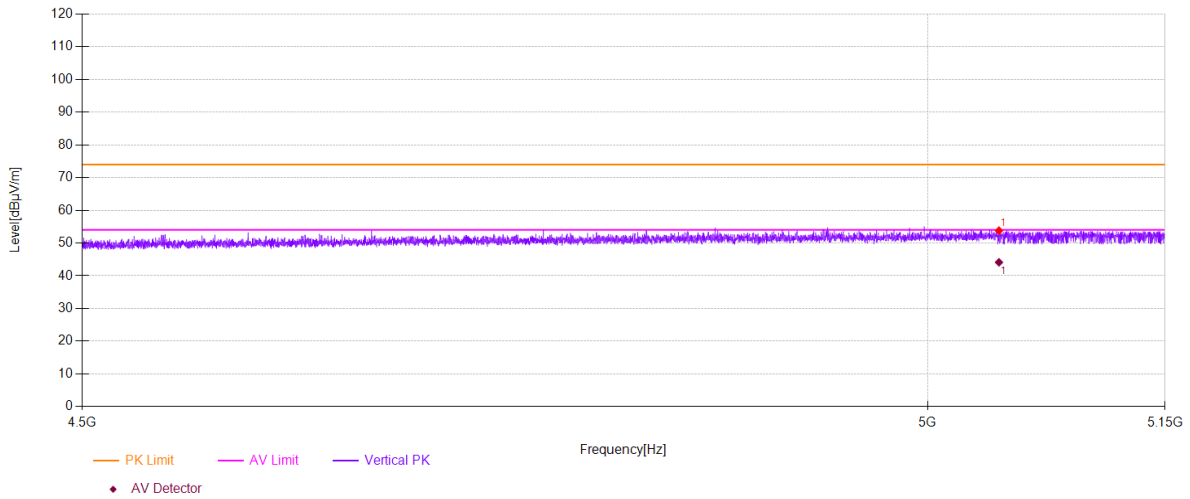
AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5045.35	44.15	54.00	9.85	AV	Horizontal

U-NII - 1

Test Model Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)

☐ 802.11a ☒ 802.11A ☐ 802.11n(HT40)

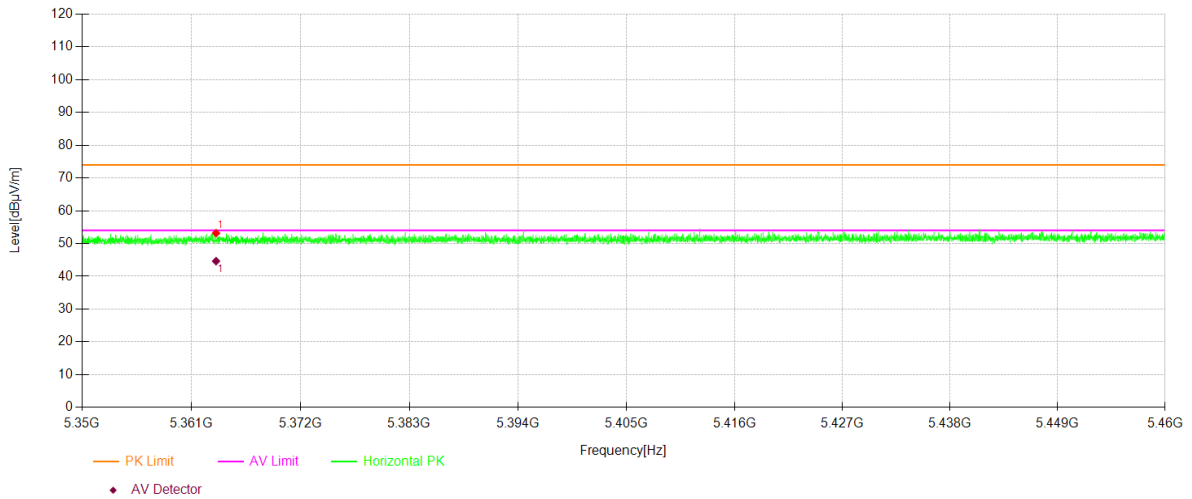
☒ 5180 ☐ 5200 ☐ 5240 Ant.Pol V



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5044.53	53.80	37.76	74.00	20.20	PK	Vertical

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5044.537	44.11	54.00	9.89	AV	Vertical

U-NII - 1							
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)						
	☐ 802.11a	☒ 802.11A	☐ 802.11n(HT40)				
	☐ 5180	☐ 5200	☒ 5240	Ant.Pol	H		



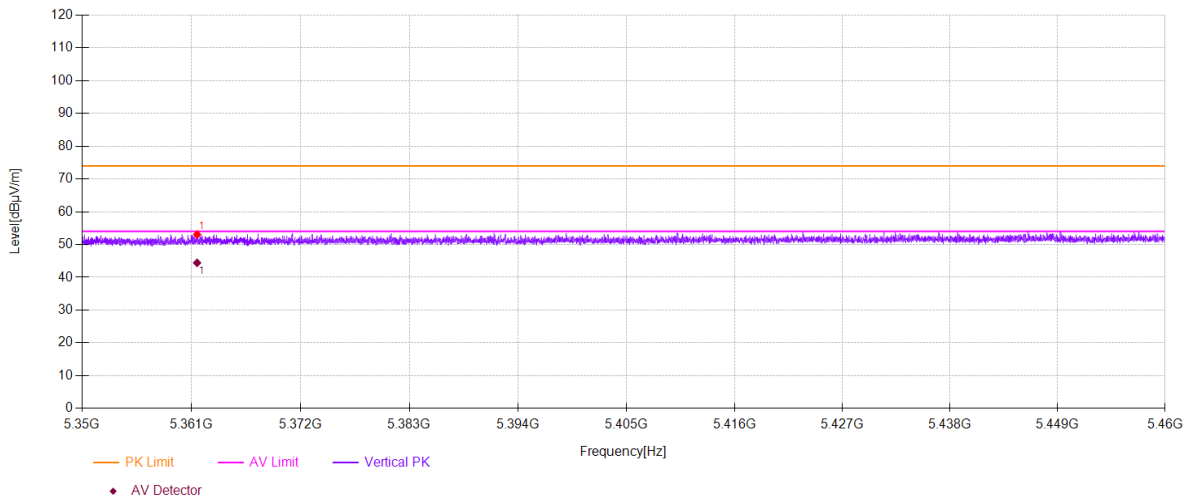
Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5363.48	53.17	38.01	74.00	20.83	PK	Horizontal

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5363.488	44.64	54.00	9.36	AV	Horizontal

U-NII - 1

Test Model Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)

☐ 802.11a ☒ 802.11a ☐ 802.11n(HT40)
☐ 5180 ☐ 5200 ☒ 5240 Ant. Pol V



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5361.57	53.07	38.00	74.00	20.93	PK	Vertical

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5361.577	44.42	54.00	9.58	AV	Vertical

- ☒ For Undesirable radiated Spurious Emission in U-NII -3
 - ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)
- All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test mode: 802.11A Frequency(MHz): 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5256.2504	V	47.48	-47.75	-27	20.75
10075.5339	V	58.62	-36.61	-27	9.61
18000	V	66.55	-28.68	-27	1.68
5113.242	H	47.25	-47.98	-27	20.98
10303.5473	H	57.96	-37.27	-27	10.27
17998.9999	H	66.29	-28.94	-27	1.94

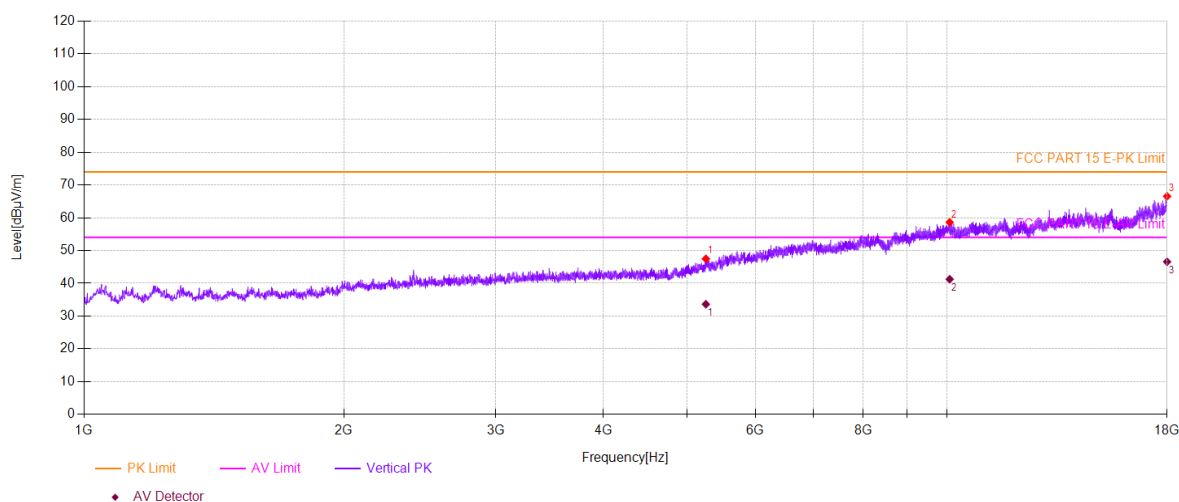
Test mode: 802.11A Frequency(MHz): 5785

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5173.2455	V	47.27	-47.96	-27	20.96
10196.541	V	57.95	-37.28	-27	10.28
17998.9999	V	66.30	-28.93	-27	1.93
5203.2472	H	46.79	-48.44	-27	21.44
10169.5394	H	58.18	-37.05	-27	10.05
17969.9982	H	65.36	-29.87	-27	2.87

Test mode: 802.11A Frequency(MHz): 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Margin(dB)
5279.2517	V	47.08	-48.15	-27	21.15
10156.5386	V	58.46	-36.77	-27	9.77
17981.9989	V	65.86	-29.37	-27	2.37
5177.2457	H	47.42	-47.81	-27	20.81
9998.5293	H	58.10	-37.13	-27	10.13
17895.9939	H	65.43	-29.80	-27	2.80

Test mode: 802.11A Frequency(MHz): 5745

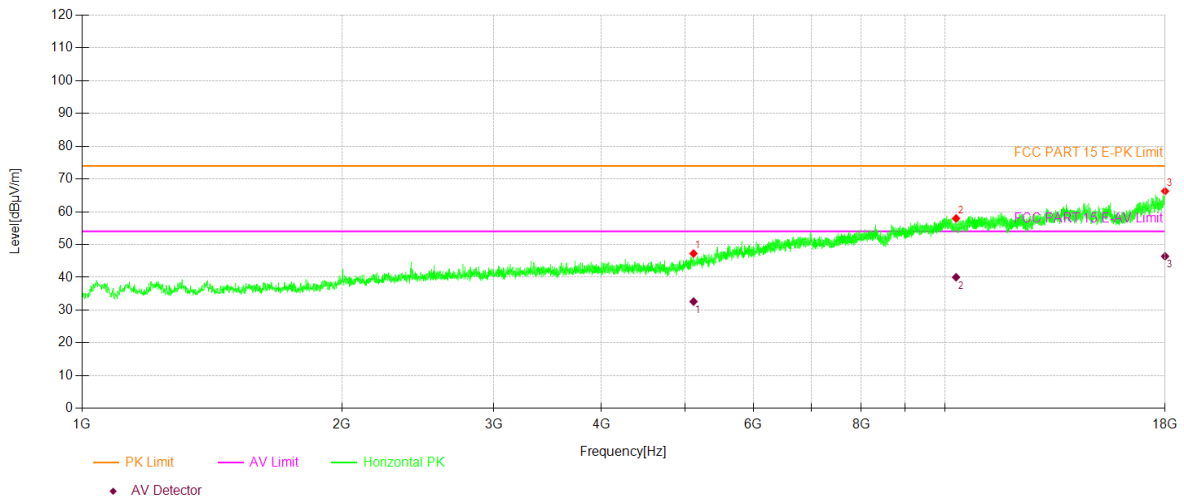


Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5256.25	47.48	-8.95	74.00	26.52	PK	Vertical
2	10075.5	58.62	2.63	74.00	15.38	PK	Vertical
3	18000	66.55	11.22	74.00	7.45	PK	Vertical

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5256.250	33.63	54.00	20.37	AV	Vertical
2	10075.53	41.25	54.00	12.75	AV	Vertical
3	18000	46.58	54.00	7.42	AV	Vertical



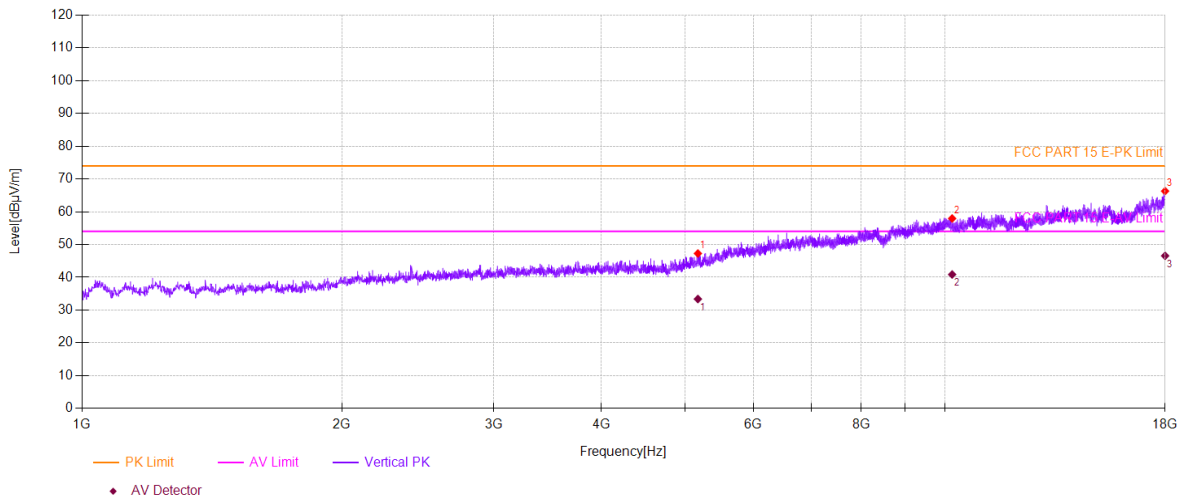
Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5113.24	47.25	-9.56	74.00	26.75	PK	Horizontal
2	10303.5	57.96	1.39	74.00	16.04	PK	Horizontal
3	17998.9	66.29	11.19	74.00	7.71	PK	Horizontal

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5113.242	32.61	54.00	21.39	AV	Horizontal
2	10303.54	40.03	54.00	13.97	AV	Horizontal
3	17998.99	46.41	54.00	7.59	AV	Horizontal

Test mode: 802.11A Frequency(MHz): 5785

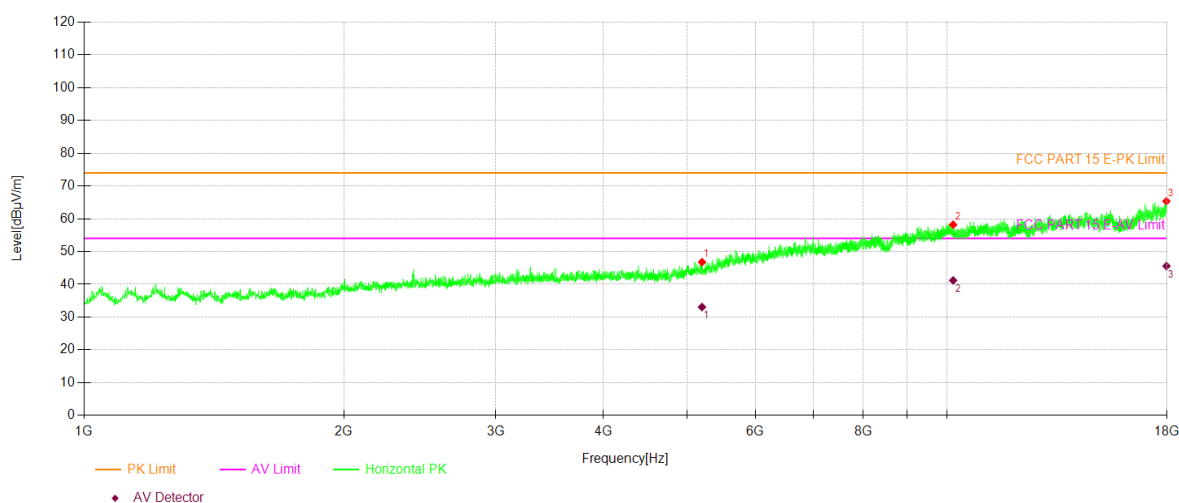


Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5173.24	47.27	-9.28	74.00	26.73	PK	Vertical
2	10196.5	57.95	2.35	74.00	16.05	PK	Vertical
3	17998.9	66.30	11.19	74.00	7.70	PK	Vertical

AV Final Data List

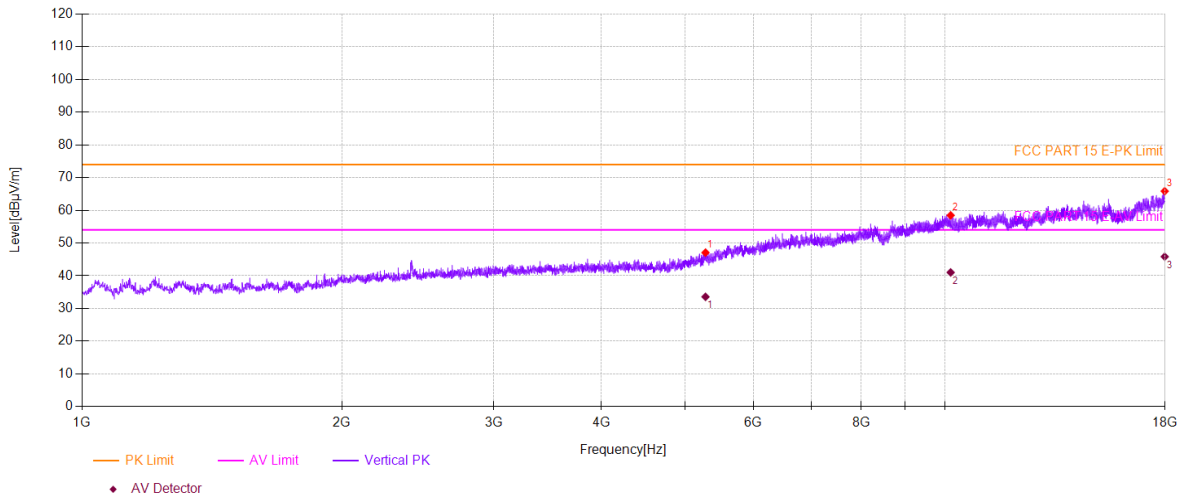
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5173.245	33.38	54.00	20.62	AV	Vertical
2	10196.54	40.87	54.00	13.13	AV	Vertical
3	17998.99	46.56	54.00	7.44	AV	Vertical



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5203.24	46.79	-9.12	74.00	27.21	PK	Horizontal
2	10169.5	58.18	2.46	74.00	15.82	PK	Horizontal
3	17969.9	65.36	10.32	74.00	8.64	PK	Horizontal

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5203.247	33.07	54.00	20.93	AV	Horizontal
2	10169.53	41.20	54.00	12.80	AV	Horizontal
3	17969.99	45.58	54.00	8.42	AV	Horizontal

Test mode: 802.11A Frequency(MHz): 5825

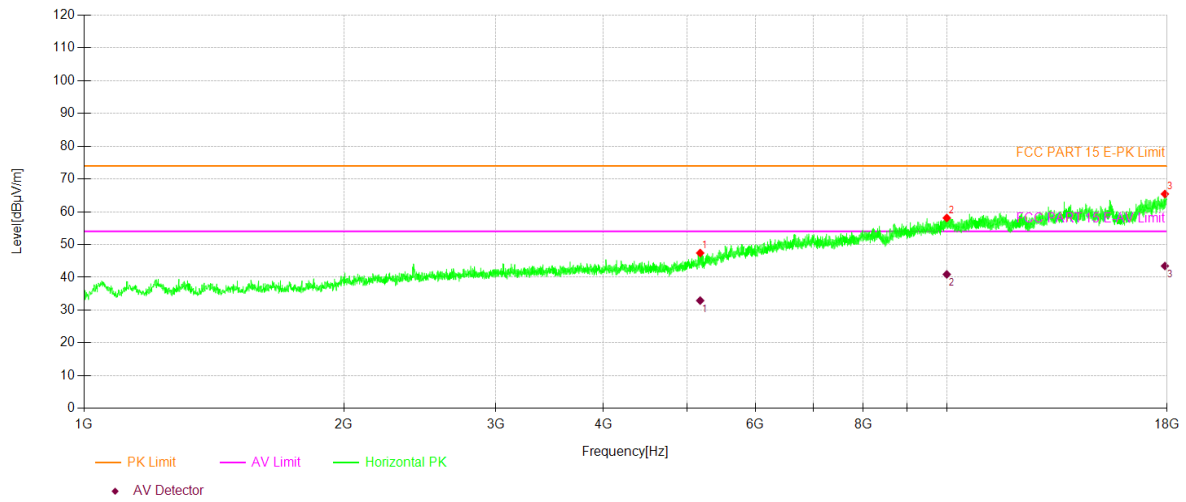


Suspected Data List

NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5279.25	47.08	-8.82	74.00	26.92	PK	Vertical
2	10156.5	58.46	2.51	74.00	15.54	PK	Vertical
3	17981.9	65.86	10.68	74.00	8.14	PK	Vertical

AV Final Data List

NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5279.251	33.57	54.00	20.43	AV	Vertical
2	10156.53	41.03	54.00	12.97	AV	Vertical
3	17981.99	45.84	54.00	8.16	AV	Vertical



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5177.24	47.42	-9.27	74.00	26.58	PK	Horizontal
2	9998.52	58.10	2.26	74.00	15.90	PK	Horizontal
3	17895.9	65.43	8.19	74.00	8.57	PK	Horizontal

AV Final Data List						
NO.	Freq. [MHz]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Detector	Polarity
1	5177.245	32.91	54.00	21.09	AV	Horizontal
2	9998.529	40.90	54.00	13.10	AV	Horizontal
3	17895.99	43.45	54.00	10.55	AV	Horizontal

- ☒ Undesirable radiated Spurious Emission in band edge

Test mode: 802.11A Frequency: 5745

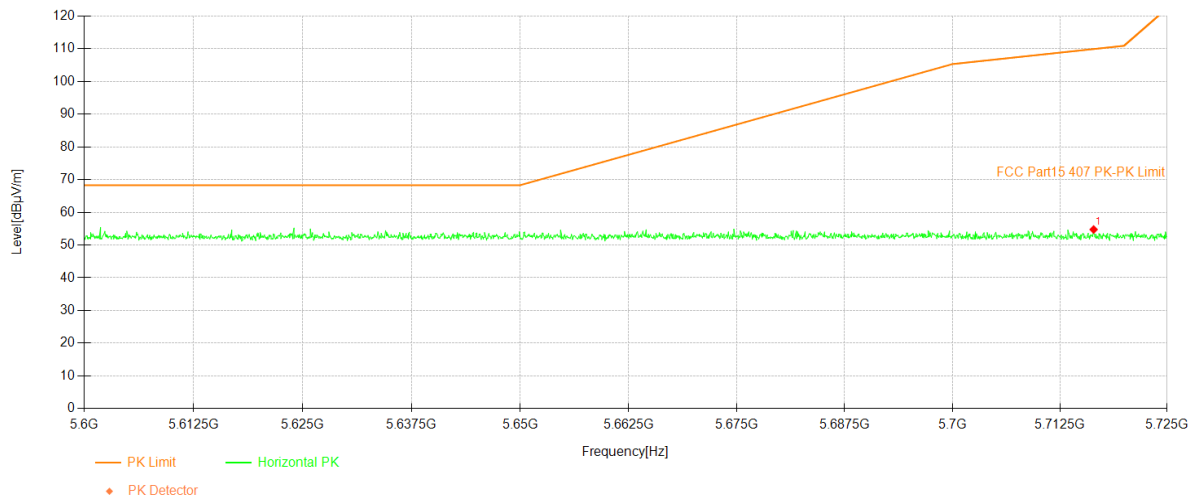
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5724.68	V	54.26	-40.97	-27	PASS
5716.43	H	54.75	-40.48	-27	PASS

Test mode: 802.11A Frequency: 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5858.19	V	54.60	-40.63	-27	PASS
5859.06	H	54.26	-40.97	-27	PASS

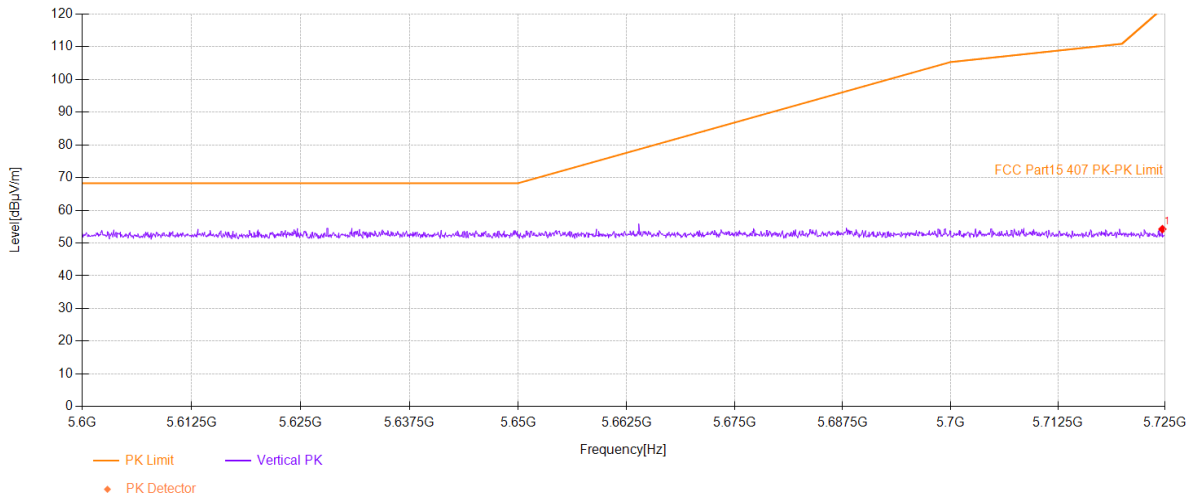
Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

Test Model U-NII -3
 Undesirable radiated ☐802.11a ☒5745 Undesirable radiated ☒802.11A Spurious Emission in Band Edge ☐802.11n(HT40)
 Ant.Pol H



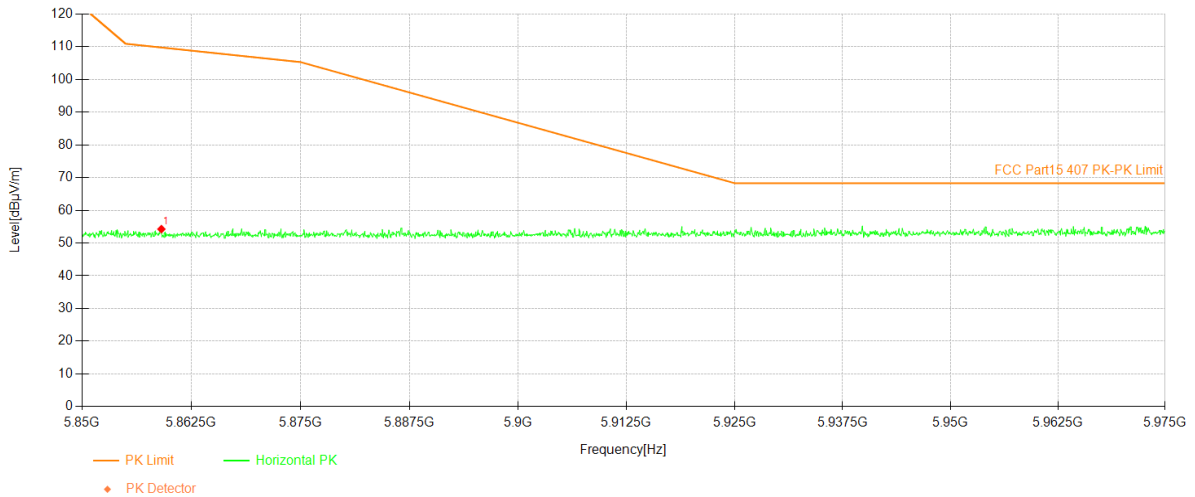
Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5716.43	54.75	39.01	109.90	55.15	PK	Horizontal

U-NII -3							
Test Model	Undesirable radiated Undesirable radiated Spurious Emission in Band Edge						
	☐ 802.11a	☒ 5745	☒ 802.11A	☐ 802.11n(HT40)	Ant.Pol		
				V			



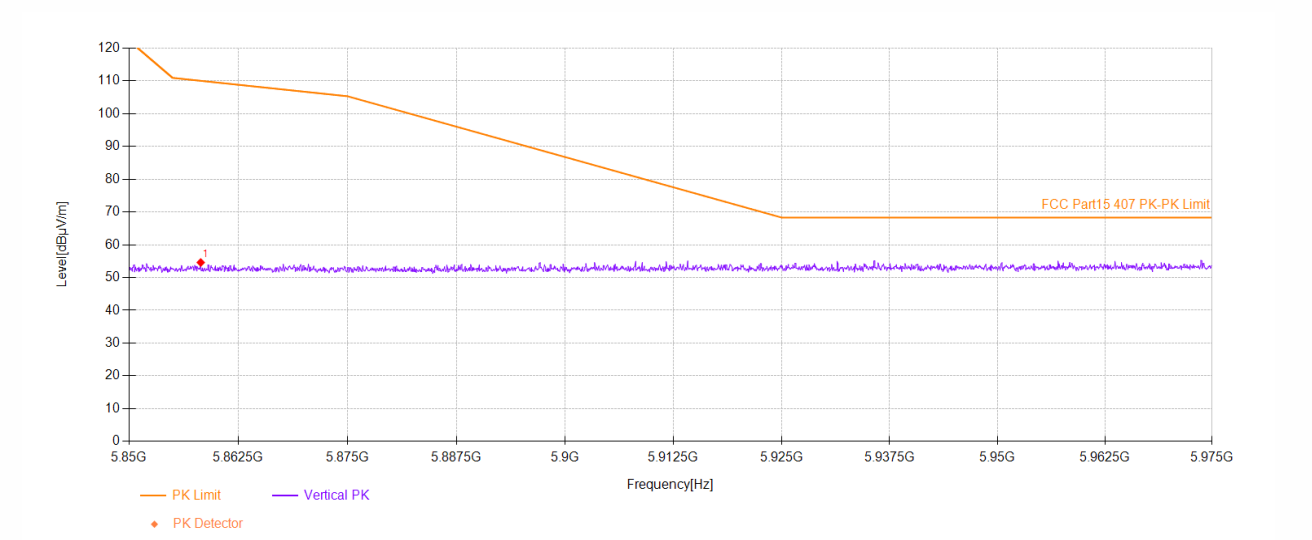
Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5724.68	54.26	39.04	121.59	67.33	PK	Vertical

Test Model U-NII -3
Undesirable radiated ☐802.11a Undesirable radiated ☒5825 Spurious Emission in Band Edge ☐802.11n(HT40)
Ant.Pol H



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5859.06	54.26	39.37	109.76	55.50	PK	Horizontal

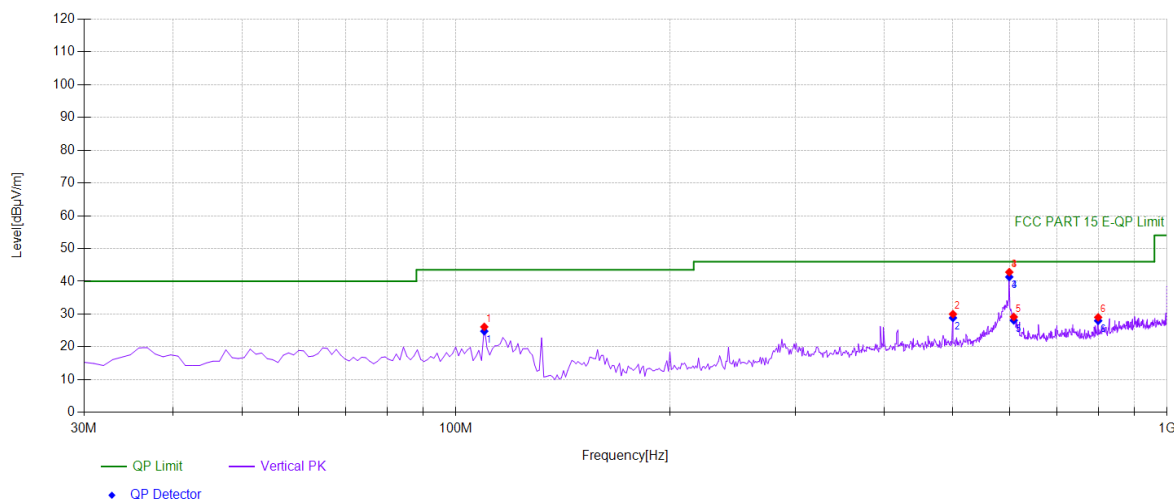
U-NII -3			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☐ 802.11a	☒ 802.11AX(HT20)	☐ 802.11n(HT40)
	☒ 5825		Ant. Pol V



Suspected Data List							
NO.	Freq. [MHz]	Level [dBμV/m]	Factor[dB/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5858.19	54.60	39.37	110.01	55.41	PK	Vertical

- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
All of the configurations or modes are tested, the data of the worst case is recorded in the report.

Test mode: 802.11A(20) Frequency(MHz): 5180

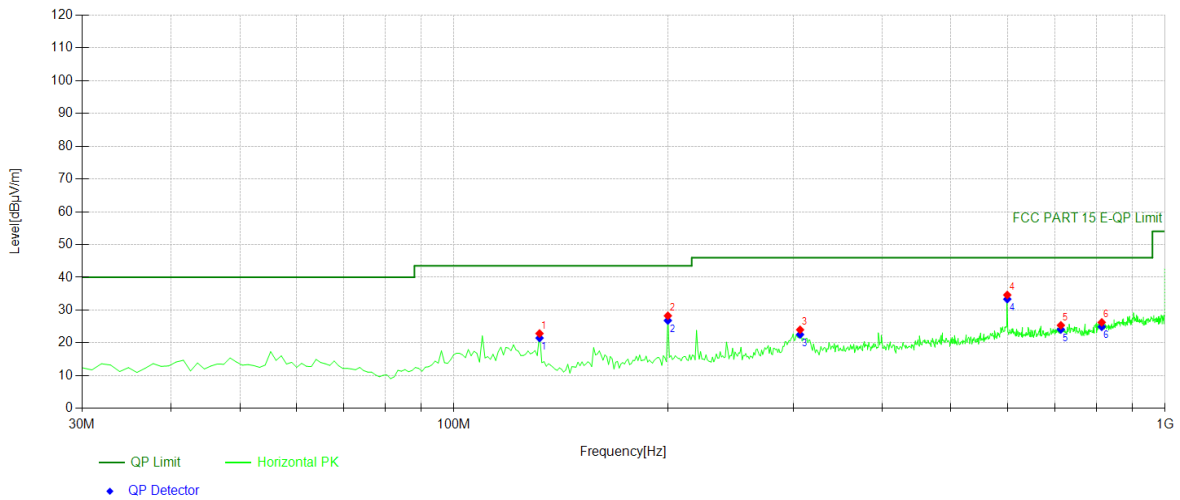


Suspected Data List

NO	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	109.6196	38.66	-12.55	26.11	PK	43.50	17.39	Vertical
2	499.95	34.09	-4.09	30.00	PK	46.00	16.00	Vertical
3	599.96	43.08	-0.27	42.81	PK	46.00	3.19	Vertical
4	599.96	43.08	-0.27	42.81	PK	46.00	3.19	Vertical
5	608.6987	29.94	-0.79	29.15	PK	46.00	16.85	Vertical
6	799.98	28.50	0.53	29.03	PK	46.00	16.97	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	109.6196	-12.55	24.78	43.50	18.72
2	499.95	-4.09	28.85	46.00	17.15
3	599.96	-0.27	41.33	46.00	4.67
4	599.96	-0.27	41.33	46.00	4.67
5	608.6987	-0.79	28.09	46.00	17.91
6	799.98	0.53	27.97	46.00	18.03



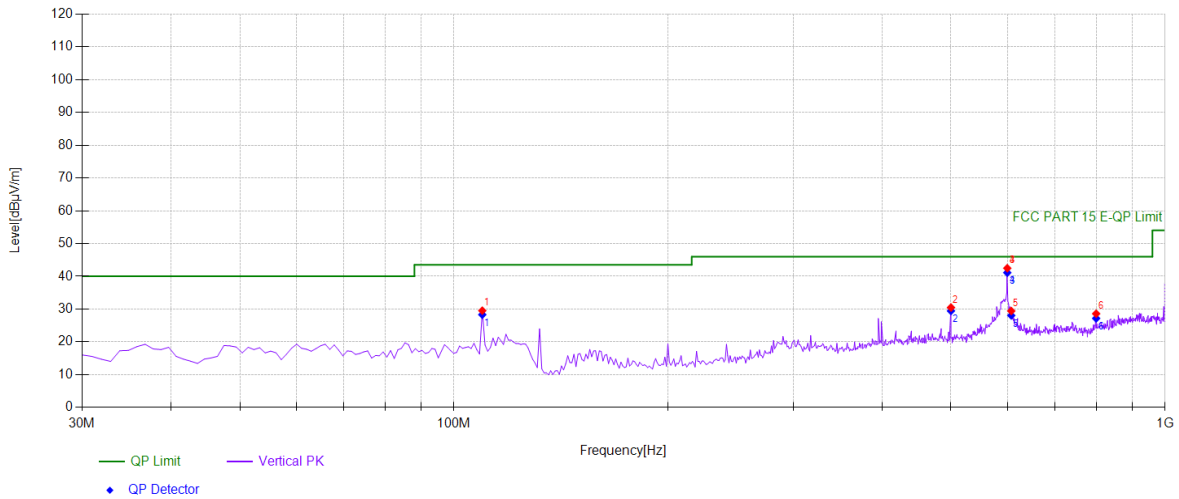
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	131.952	36.89	-14.02	22.87	PK	43.50	20.63	Horizontal
2	199.919	40.65	-12.37	28.28	PK	43.50	15.22	Horizontal
3	306.726	32.11	-8.10	24.01	PK	46.00	21.99	Horizontal
4	599.96	34.89	-0.27	34.62	PK	46.00	11.38	Horizontal
5	713.563	25.52	-0.16	25.36	PK	46.00	20.64	Horizontal
6	814.544	25.48	0.79	26.27	PK	46.00	19.73	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	131.952	-14.02	21.50	43.50	22.00
2	199.9199	-12.37	26.83	43.50	16.67
3	306.7267	-8.10	22.56	46.00	23.44
4	599.96	-0.27	33.35	46.00	12.65
5	713.5636	-0.16	24.09	46.00	21.91
6	814.5445	0.79	24.91	46.00	21.09

Test mode: 802.11A(20) Frequency(MHz): 5200

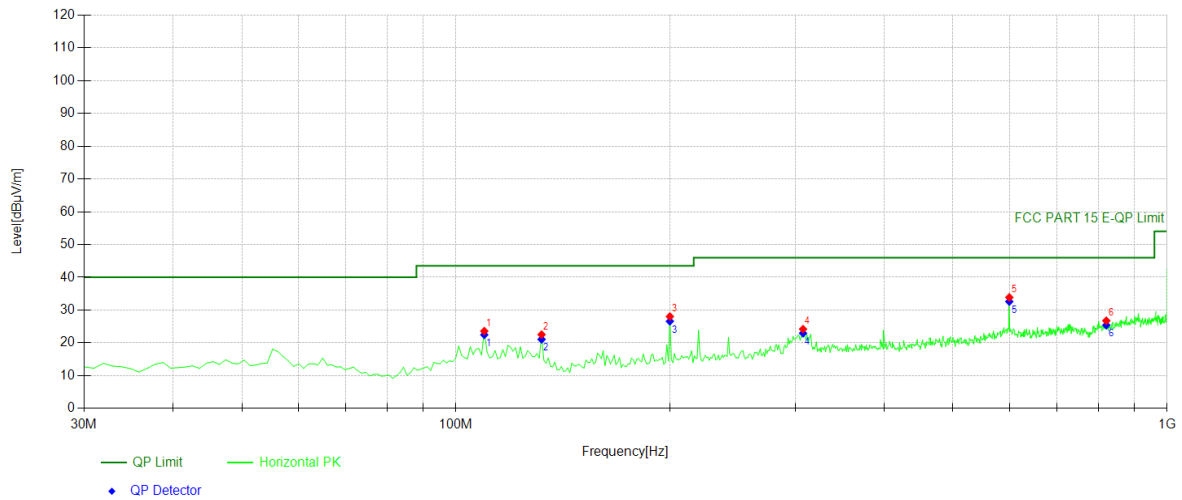


Suspected Data List

NO	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	109.6196	42.09	-12.55	29.54	PK	43.50	13.96	Vertical
2	499.95	34.58	-4.09	30.49	PK	46.00	15.51	Vertical
3	599.96	42.75	-0.27	42.48	PK	46.00	3.52	Vertical
4	599.96	42.75	-0.27	42.48	PK	46.00	3.52	Vertical
5	607.7277	30.16	-0.73	29.43	PK	46.00	16.57	Vertical
6	799.98	28.08	0.53	28.61	PK	46.00	17.39	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	109.6196	-12.55	28.32	43.50	15.18
2	499.95	-4.09	29.45	46.00	16.55
3	599.96	-0.27	41.12	46.00	4.88
4	599.96	-0.27	41.44	46.00	4.56
5	607.7277	-0.73	28.07	46.00	17.93
6	799.98	0.53	27.17	46.00	18.83



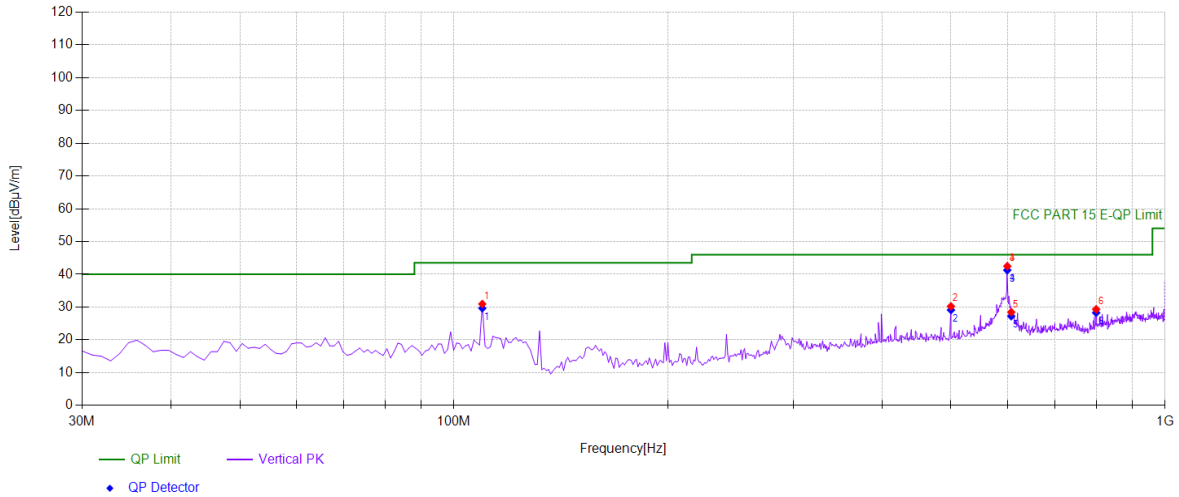
Suspected Data List

NO	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	109.6196	36.15	-12.55	23.60	PK	43.50	19.90	Horizontal
2	131.952	36.55	-14.02	22.53	PK	43.50	20.97	Horizontal
3	199.9199	40.42	-12.37	28.05	PK	43.50	15.45	Horizontal
4	307.6977	32.29	-8.08	24.21	PK	46.00	21.79	Horizontal
5	599.96	34.14	-0.27	33.87	PK	46.00	12.13	Horizontal
6	821.3413	25.92	0.84	26.76	PK	46.00	19.24	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	109.6196	-12.55	22.47	43.50	21.03
2	131.952	-14.02	21.08	43.50	22.42
3	199.9199	-12.37	26.60	43.50	16.90
4	307.6977	-8.08	22.94	46.00	23.06
5	599.96	-0.27	32.60	46.00	13.40
6	821.3413	0.84	25.41	46.00	20.59

Test mode: 802.11A(20) Frequency(MHz): 5240

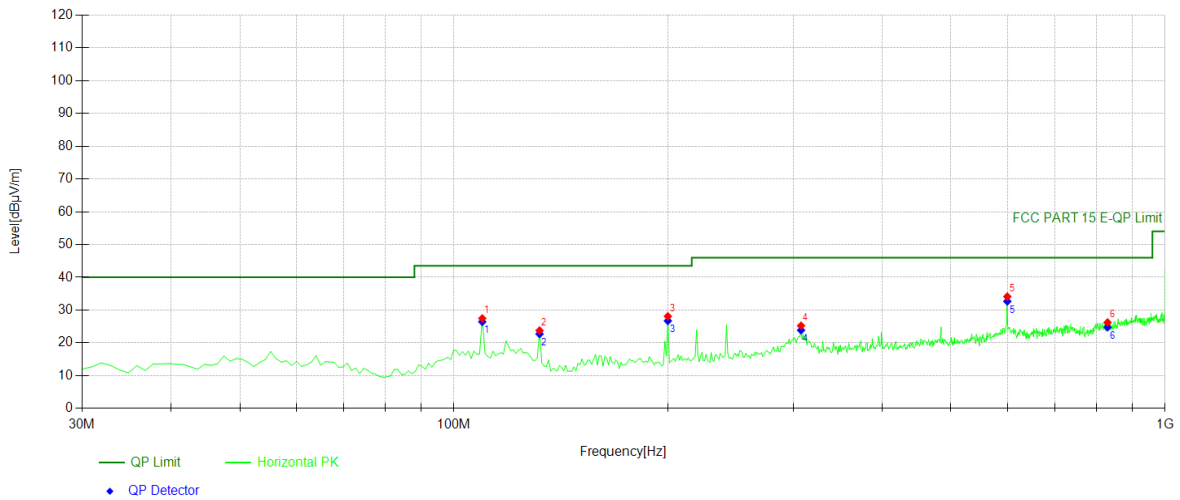


Suspected Data List

NO	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	109.6196	43.52	-12.55	30.97	PK	43.50	12.53	Vertical
2	499.95	34.34	-4.09	30.25	PK	46.00	15.75	Vertical
3	599.96	42.76	-0.27	42.49	PK	46.00	3.51	Vertical
4	599.96	42.76	-0.27	42.49	PK	46.00	3.51	Vertical
5	607.7277	29.19	-0.73	28.46	PK	46.00	17.54	Vertical
6	799.98	28.80	0.53	29.33	PK	46.00	16.67	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	109.6196	-12.55	29.66	43.50	13.84
2	499.95	-4.09	29.12	46.00	16.88
3	599.96	-0.27	41.27	46.00	4.73
4	599.96	-0.27	41.36	46.00	4.64
5	607.7277	-0.73	27.24	46.00	18.76
6	799.98	0.53	28.29	46.00	17.71



Suspected Data List

NO	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	109.6196	40.03	-12.55	27.48	PK	43.50	16.02	Horizontal
2	131.952	37.80	-14.02	23.78	PK	43.50	19.72	Horizontal
3	199.9199	40.47	-12.37	28.10	PK	43.50	15.40	Horizontal
4	307.6977	33.32	-8.08	25.24	PK	46.00	20.76	Horizontal
5	599.96	34.40	-0.27	34.13	PK	46.00	11.87	Horizontal
6	830.0801	25.36	0.88	26.24	PK	46.00	19.76	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	109.6196	-12.55	26.43	43.50	17.07
2	131.952	-14.02	22.73	43.50	20.77
3	199.9199	-12.37	26.73	43.50	16.77
4	307.6977	-8.08	23.87	46.00	22.13
5	599.96	-0.27	32.68	46.00	13.32
6	830.0801	0.88	24.79	46.00	21.21

8.5 POWER LINE CONDUCTED EMISSIONS

8.5.1 Applicable Standard

According to FCC Part 15.207(a).

8.5.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	79	66
0.5-30.0	73	60

Note: 1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.5.3 Test Configuration

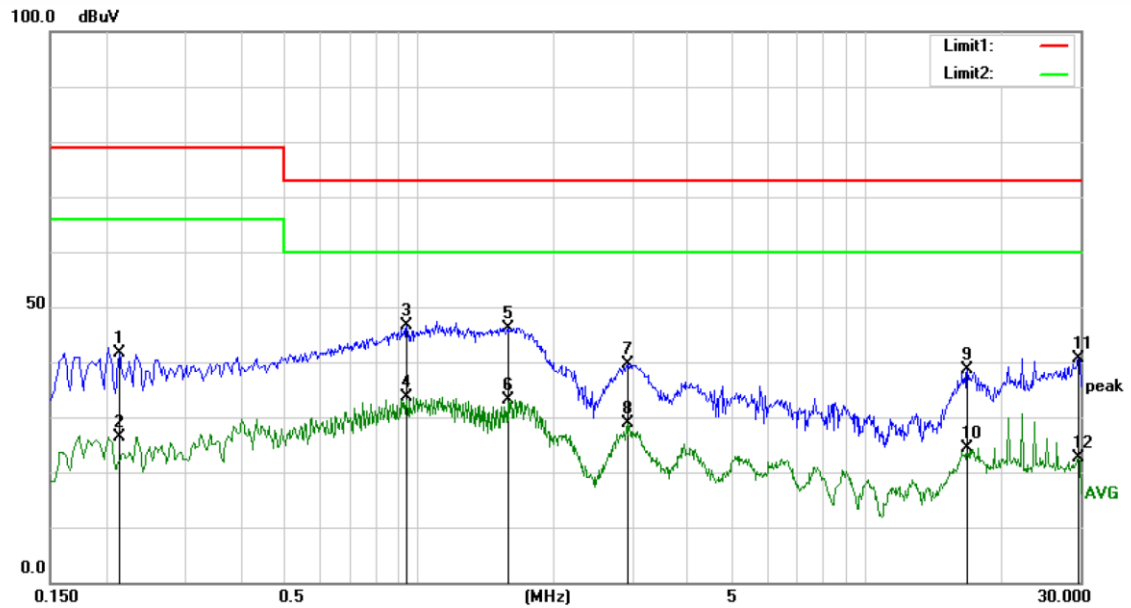
Test according to clause 6.3 conducted emission test setup

8.5.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.5.5 Test Results

Pass



Site Conduction #1

Phase: **N**

Temperature: 21.7

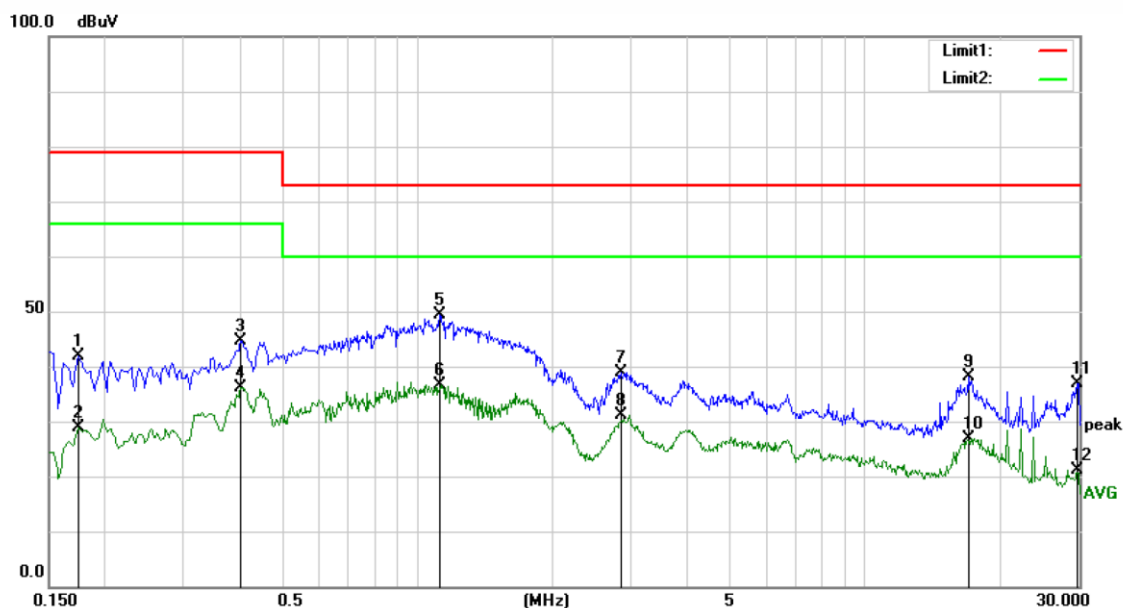
Limit: (CE)FCC PART 15 class A_QP

Power: AC 120V/60Hz

Humidity: 62 %

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2140	31.89	9.81	41.70	79.00	-37.30	QP	
2		0.2140	16.68	9.81	26.49	66.00	-39.51	AVG	
3	*	0.9420	36.85	9.82	46.67	73.00	-26.33	QP	
4		0.9420	23.72	9.82	33.54	60.00	-26.46	AVG	
5		1.5780	36.28	9.89	46.17	73.00	-26.83	QP	
6		1.5780	23.27	9.89	33.16	60.00	-26.84	AVG	
7		2.9460	29.71	9.93	39.64	73.00	-33.36	QP	
8		2.9460	19.00	9.93	28.93	60.00	-31.07	AVG	
9		16.8340	28.08	10.62	38.70	73.00	-34.30	QP	
10		16.8340	13.76	10.62	24.38	60.00	-35.62	AVG	
11		29.8380	27.64	12.96	40.60	73.00	-32.40	QP	
12		29.8380	9.75	12.96	22.71	60.00	-37.29	AVG	



Site Conduction #1

Phase: **L1**

Temperature: 21.7

Limit: (CE)FCC PART 15 class A_QP

Power: AC 120V/60Hz

Humidity: 62 %

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1740	32.27	9.63	41.90	79.00	-37.10	QP	
2		0.1740	19.33	9.63	28.96	66.00	-37.04	AVG	
3		0.4020	35.13	9.60	44.73	79.00	-34.27	QP	
4		0.4020	26.57	9.60	36.17	66.00	-29.83	AVG	
5		1.1220	39.49	9.89	49.38	73.00	-23.62	QP	
6	*	1.1220	26.74	9.89	36.63	60.00	-23.37	AVG	
7		2.8460	29.03	9.93	38.96	73.00	-34.04	QP	
8		2.8460	21.12	9.93	31.05	60.00	-28.95	AVG	
9		16.9580	27.52	10.63	38.15	73.00	-34.85	QP	
10		16.9580	16.28	10.63	26.91	60.00	-33.09	AVG	
11		29.7300	23.99	12.94	36.93	73.00	-36.07	QP	
12		29.7300	8.27	12.94	21.21	60.00	-38.79	AVG	

8.6 ANTENNA APPLICATION

8.6.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.6.2 Result

PASS

Temperature : 25°C ATM Pressure:: 1011 mbar
Humidity : 60 % Test Engineer: LMJ

- ☒ Antennas use a permanently attached antenna which is not replaceable.
- ☐ Not using a standard antenna jack or electrical connector for antenna replacement
- ☐ The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission:

Frequency(MHz)	Ant_F(dB)	Cab_L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5

--- End of Report ---

9 APPENDIX PHOTOGRAPHS OF EUT

Please refer to the file of External Photo and Internal Photo.



10 APPENDIX PHOTOGRAPHS OF TEST SETUP

Please refer to the file of Test Setup Photo.



声 明 Statement

1. 本报告无授权批准人签字及“检验检测专用章”无效。
1. This report is invalid without the signature of the authorized approver and "special seal for testing".
2. 未经许可本报告不得部分复制。
2. This report shall not be copied partly without authorization.
3. 本报告的检测结果仅对送测样品有效，委托方对样品的代表性和资料的真实性负责。
3. The test results or observations are applicable only to tested sample. Client shall be responsible for representativeness of the sample and authenticity of the material.
4. 本检测报告中检测项目标注有特殊符号则该项目不在资质认定范围内，仅作为客户委托、科研、教学或内部质量控制等目的使用。
4. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
5. 本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，本实验室不承担相关责任，特别约定、标准或规范中有明确规定的除外。
5. The test results or observations are provided in accordance with measured value, without taking risks caused by uncertainty into account. Without explicit stipulation in special agreements, standards or regulations, EMTEK shall not assume any responsibility.
6. 对本检验报告若有异议，请于收到报告之日起 20 日内提出。
6. Objections shall be raised within 20 days from the date receiving the report.