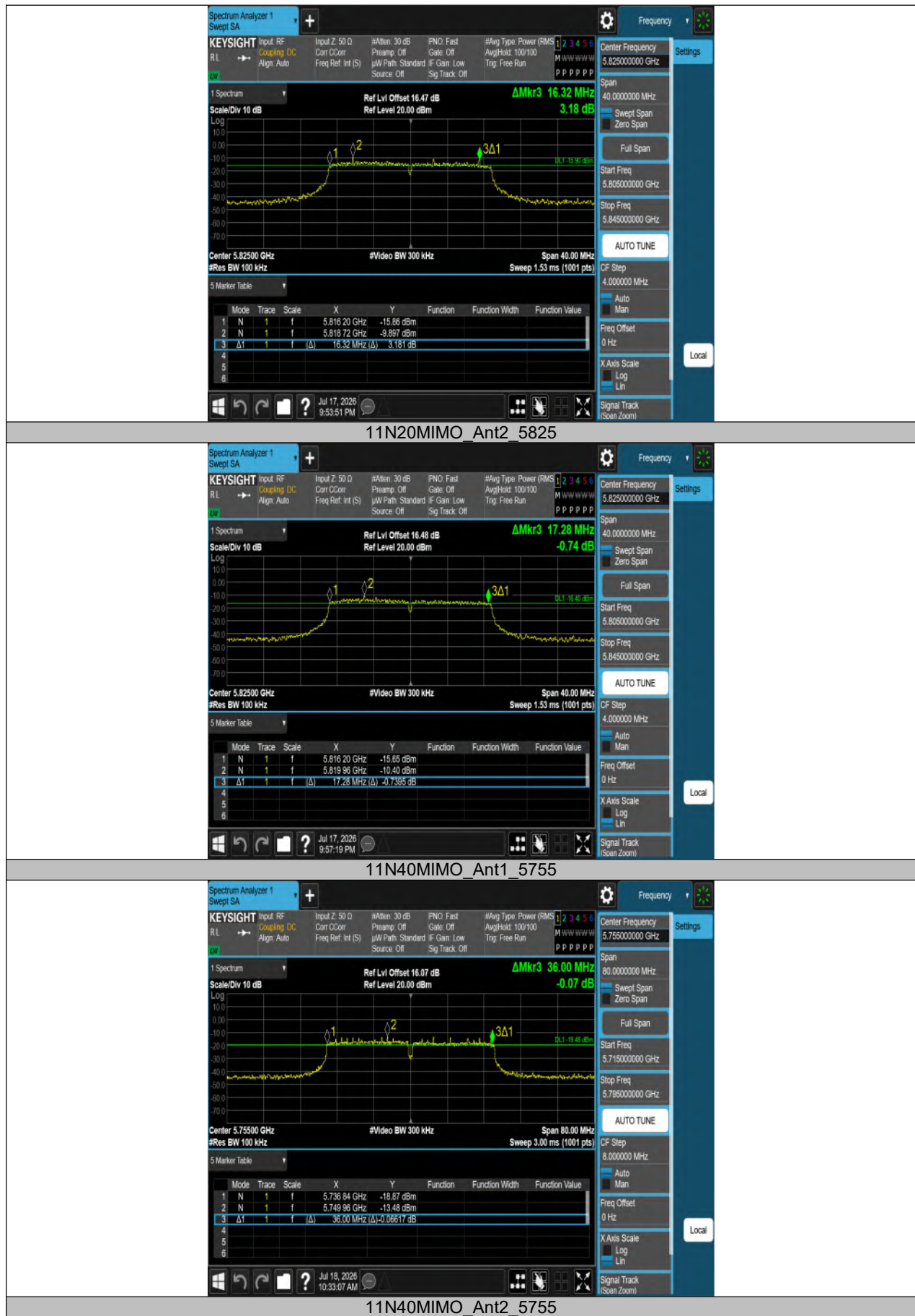






10. Maximum Output Power

10.1. Block Diagram of Test Setup

Same as section 8.1

10.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	☐ Outdoor Access Point: 1 W (30 dBm)	5150-5250
	☐ Indoor Access Point: 1 W (30 dBm)	
	☐ Fixed Point-To-Point Access Points: 1 W (30 dBm)	
	☒ Client Devices: 250 mW (24 dBm)	
	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250-5350 5470-5725
	Shall not exceed 1 Watt (30 dBm).	5725-5850
Note: For 802.11n, the EUT incorporates a MIMO function. The Antenna directional gain is 9.43 dBi. The Maximum Output Power limit is the above limits-(9.43-6)		

Note: The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

10.3. Test Procedure

Method PM is Measurement using an RF average power meter. The procedure for this method is as follows:

- (1) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - a) The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
 - b) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
 - c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- (2) If the transmitter does not transmit continuously, measure the duty cycle D of the transmitter output signal as described in 12.2.
- (3) Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- (4) Correct the measurement in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle {e.g., $[10 \log (1 / 0.25)]$, if the duty cycle is 25%}.

10.4. Test Result

Test Mode	Ant.	Freq. (MHz)	Channel Power (dBm)	DC Factor (dBm)	Result (dBm)	Limit (dBm)	Verdict
11A	Ant1	5180	-2.98	0.16	-2.82	≤23.56	PASS
	Ant2	5180	-2.32	0.16	-2.16	≤23.56	PASS
	Ant1	5200	-2.44	0.16	-2.28	≤23.56	PASS
	Ant2	5200	-1.70	0.16	-1.54	≤23.56	PASS
	Ant1	5240	-1.14	0.16	-0.98	≤23.56	PASS
	Ant2	5240	-1.44	0.13	-1.31	≤23.56	PASS
	Ant1	5745	1.95	0.16	2.11	≤29.58	PASS
	Ant2	5745	0.96	0.16	1.12	≤29.58	PASS
	Ant1	5785	2.11	0.16	2.27	≤29.58	PASS
	Ant2	5785	0.98	0.16	1.14	≤29.58	PASS
	Ant1	5825	1.57	0.13	1.70	≤29.58	PASS

11N20MIMO	Ant2	5825	0.70	0.16	0.86	≤29.58	PASS
	Ant1	5180	-1.68	0.13	-1.55	≤23.56	PASS
	Ant2	5180	-0.51	0.17	-0.34	≤23.56	PASS
	total	5180	---	---	2.11	≤20.55	PASS
	Ant1	5200	-1.04	0.17	-0.87	≤23.56	PASS
	Ant2	5200	0.08	0.13	0.21	≤23.56	PASS
	total	5200	---	---	2.71	≤20.55	PASS
	Ant1	5240	-0.45	0.13	-0.32	≤23.56	PASS
	Ant2	5240	0.27	0.13	0.40	≤23.56	PASS
	total	5240	---	---	3.07	≤20.55	PASS
	Ant1	5745	1.58	0.13	1.71	≤29.58	PASS
	Ant2	5745	1.33	0.13	1.46	≤29.58	PASS
	total	5745	---	---	4.60	≤26.57	PASS
	Ant1	5785	1.89	0.13	2.02	≤29.58	PASS
	Ant2	5785	1.63	0.13	1.76	≤29.58	PASS
	total	5785	---	---	4.90	≤26.57	PASS
	Ant1	5825	1.36	0.17	1.53	≤29.58	PASS
	Ant2	5825	1.16	0.13	1.29	≤29.58	PASS
	total	5825	---	---	4.42	≤26.57	PASS
11N40MIMO	Ant1	5190	-2.54	0.20	-2.34	≤23.56	PASS
	Ant2	5190	-1.19	0.27	-0.92	≤23.56	PASS
	total	5190	---	---	1.44	≤20.55	PASS
	Ant1	5230	-1.84	0.27	-1.57	≤23.56	PASS
	Ant2	5230	-0.91	0.20	-0.71	≤23.56	PASS
	total	5230	---	---	1.89	≤20.55	PASS
	Ant1	5755	1.30	0.20	1.50	≤29.58	PASS
	Ant2	5755	1.72	0.20	1.92	≤29.58	PASS
	total	5755	---	---	4.73	≤26.57	PASS
	Ant1	5795	1.55	0.20	1.75	≤29.58	PASS
	Ant2	5795	1.87	0.27	2.14	≤29.58	PASS
	total	5795	---	---	4.96	≤26.57	PASS

11. Power Spectral Density

11.1. Block Diagram of Test Setup

Same as section 8.1

11.2. Limits

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	☐ Outdoor Access Point: 17 dBm/MHz ☐ Indoor Access Point: 17 dBm/MHz ☐ Fixed Point-To-Point Access Points: 17 dBm/MHz ☐ Client Devices: 11 dBm/MHz	5150-5250
	11 dBm/MHz	5250-5350 5470-5725
	30 dBm/500 kHz	5725-5850
	Note: For 802.11n, the EUT incorporates a MIMO function. The Antenna directional gain is 9.43 dBi. The Power Spectral Density limit is the above limits-(9.43-6)	

Note: The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

11.3. Test Procedure

- a) Measure the duty cycle D of the transmitter output signal as described in 12.2.
- b) Set span to encompass the entire 99% OBW of the signal.
- c) Set RBW = 1 MHz.
- d) Set VBW $\geq$ 3 MHz.
- e) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$. (This gives bin-to-bin spacing $\leq \text{RBW} / 2$, so that narrowband signals are not lost between frequency bins.)
- f) Sweep time = auto.
- g) Detector = Power averaging (rms), if available. Otherwise, use sample detector mode.
- h) Do not use sweep triggering. Allow the sweep to "free run."
- i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the ON and OFF periods of the transmitter. then add $[10 \log (1 / D)]$, where D is the duty cycle, to the peak of the spectrum.
- j) The procedure in item a) through item i) requires the use of 1 MHz resolution bandwidth to satisfy the 1 MHz measurement bandwidth specified by some regulatory authorities.⁸⁵ This requirement also permits use of resolution bandwidths less than 1 MHz "provided that the measured power is integrated to show the total power over the measurement bandwidth" (i.e., 1 MHz). If measurements are performed using a reduced resolution bandwidth and integrated over 1 MHz bandwidth, the following adjustments to the procedures apply:
 - 1) Set RBW $\geq 1 / T$.
 - 2) Set VBW $\geq [3 \times \text{RBW}]$.
 - 3) Care shall be taken such that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Connect the UUT to the spectrum analyzer and use the following settings:

5150 MHz~5250 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$

Span	Encompass the entire emissions bandwidth (EBW) of the signal
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Sweep time	Auto

Note:

1. For UNII-3, according to KdB publication 789033 D02 General U-NII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.

2. The value measured with RBW=300kHz is to be added with $10\log(500\text{kHz}/300\text{kHz})$ which is 2.2dB. For example, if the measured value is +30 dBm using RBW=300kHz (that is +30 dBm/300kHz), then the converted value will be +32.2 dBm/1MHz.

3. Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

11.4. Test Result

Test Result for B1/2/3

Test Mode	Ant.	Freq. (MHz)	Raw Data (dBm/MHz)	DC Factor	Result (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	Ant1	5180	-14.19	0.16	-14.03	≤ 10.58	PASS
	Ant2	5180	-13.21	0.16	-13.05	≤ 10.58	PASS
	Ant1	5200	-13.56	0.16	-13.40	≤ 10.58	PASS
	Ant2	5200	-12.65	0.16	-12.49	≤ 10.58	PASS
	Ant1	5240	-12.28	0.16	-12.12	≤ 10.58	PASS
	Ant2	5240	-12.55	0.13	-12.42	≤ 10.58	PASS
11N20MIMO	Ant1	5180	-13.05	0.13	-12.92	≤ 10.58	PASS
	Ant2	5180	-11.35	0.17	-11.18	≤ 10.58	PASS
	total	5180	---	---	-8.95	≤ 7.57	PASS
	Ant1	5200	-12.08	0.17	-11.91	≤ 10.58	PASS
	Ant2	5200	-11.15	0.13	-11.02	≤ 10.58	PASS
	total	5200	---	---	-8.43	≤ 7.57	PASS
	Ant1	5240	-11.42	0.13	-11.29	≤ 10.58	PASS
	Ant2	5240	-11.09	0.13	-10.96	≤ 10.58	PASS
11N40MIMO	total	5240	---	---	-8.11	≤ 7.57	PASS
	Ant1	5190	-16.59	0.20	-16.39	≤ 10.58	PASS
	Ant2	5190	-15.73	0.27	-15.46	≤ 10.58	PASS
	total	5190	---	---	-12.89	≤ 7.57	PASS
	Ant1	5230	-15.52	0.27	-15.25	≤ 10.58	PASS
	Ant2	5230	-15.39	0.20	-15.19	≤ 10.58	PASS
	total	5230	---	---	-12.21	≤ 7.57	PASS

Note1: The EIRP = Result + Ant. Gain

Note2: Ant. Gain=9.43dBi

Note3: Offset=cable loss

Test Result for B4

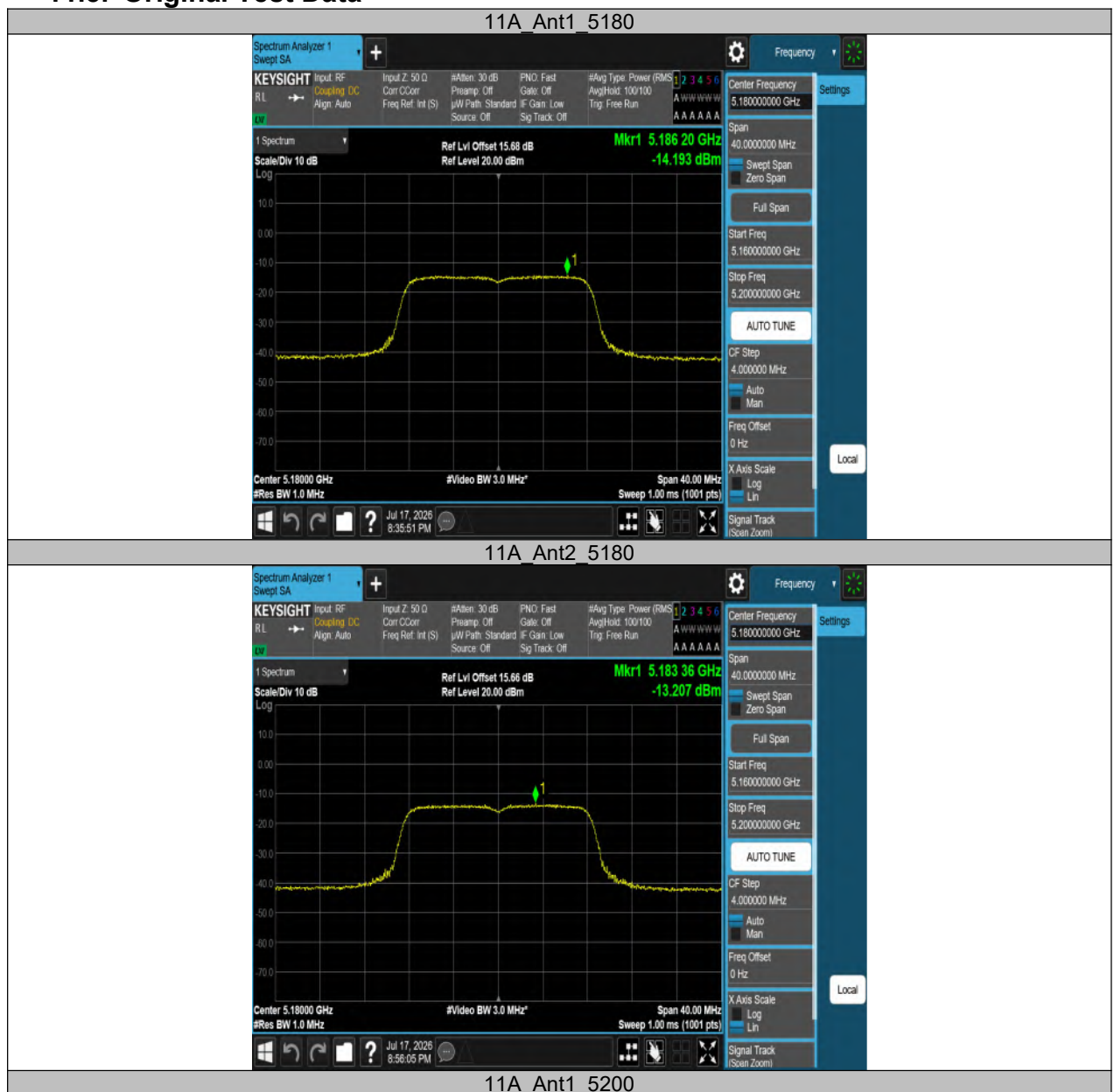
Test Mode	Ant.	Freq. (MHz)	Raw Data (dBm/300KHz)	DC Factor	RBW Factor	Result (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
11A	Ant1	5745	-14.1	0.16	2.22	-11.72	≤ 29.58	PASS
	Ant2	5745	-15.14	0.16	2.22	-12.76	≤ 29.58	PASS
	Ant1	5785	-13.93	0.16	2.22	-11.55	≤ 29.58	PASS
	Ant2	5785	-14.95	0.16	2.22	-12.57	≤ 29.58	PASS
	Ant1	5825	-14.16	0.13	2.22	-11.81	≤ 29.58	PASS
	Ant2	5825	-15.34	0.16	2.22	-12.96	≤ 29.58	PASS

11N20MIMO	Ant1	5745	-14.59	0.13	2.22	-12.24	≤29.58	PASS
	Ant2	5745	-14.89	0.13	2.22	-12.54	≤29.58	PASS
	total	5745	---	---	---	3.01	≤26.57	PASS
	Ant1	5785	-14.21	0.13	2.22	-11.86	≤29.58	PASS
	Ant2	5785	-14.53	0.13	2.22	-12.18	≤29.58	PASS
	total	5785	---	---	---	3.01	≤26.57	PASS
	Ant1	5825	-14.64	0.17	2.22	-12.25	≤29.58	PASS
	Ant2	5825	-14.29	0.13	2.22	-11.94	≤29.58	PASS
11N40MIMO	total	5825	---	---	---	3.01	≤26.57	PASS
	Ant1	5755	-17.96	0.20	2.22	-15.54	≤29.58	PASS
	Ant2	5755	-17.06	0.20	2.22	-14.64	≤29.58	PASS
	total	5755	---	---	---	3.01	≤26.57	PASS
	Ant1	5795	-17.66	0.20	2.22	-15.24	≤29.58	PASS
	Ant2	5795	-16.81	0.27	2.22	-14.32	≤29.58	PASS
	total	5795	---	---	---	3.01	≤26.57	PASS
	total	5795	---	---	---	3.01	≤26.57	PASS

Note1: .The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

Note2: The Duty Cycle Factor and RBW Factor is compensated in the graph.

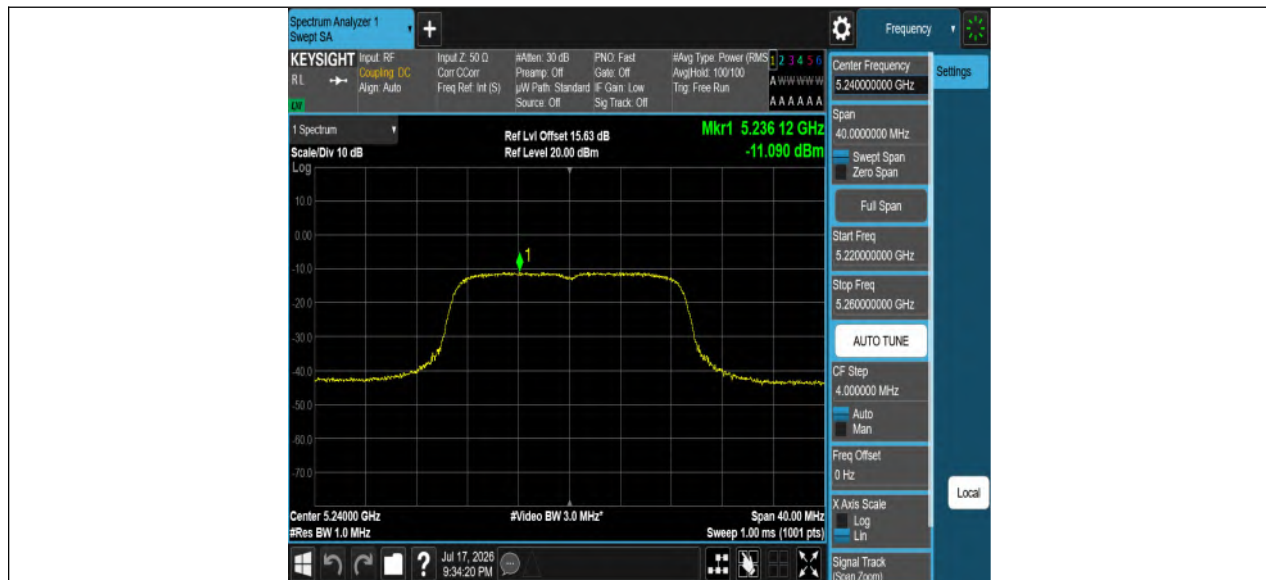
11.5. Original Test Data











11N40MIMO_Ant1_5190



11N40MIMO_Ant2_5190



11N40MIMO_Ant1_5230



12. Frequency Stability Measurement

12.1. Block Diagram of Test Setup

Same as section 8.1

12.2. Limit of Frequency Stability

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.

12.3. Test Procedures

(1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.

(2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.

(3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

12.4. Test Result

Voltage								
Test Mode	Ant.	Freq. (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11N20MI MO	Ant1	5180	NV	NT	-34000.00	-6.563707	20	PASS
			LV	NT	-34000.00	-6.563707	20	PASS
			HV	NT	-34000.00	-6.563707	20	PASS
		5200	NV	NT	-32000.00	-6.153846	20	PASS
			LV	NT	-32000.00	-6.153846	20	PASS
			HV	NT	-32000.00	-6.153846	20	PASS
		5240	NV	NT	-32000.00	-6.106870	20	PASS
			LV	NT	-32000.00	-6.106870	20	PASS
			HV	NT	-32000.00	-6.106870	20	PASS
		5745	NV	NT	-36000.00	-6.266319	20	PASS
			LV	NT	-36000.00	-6.266319	20	PASS
			HV	NT	-36000.00	-6.266319	20	PASS
		5785	NV	NT	-36000.00	-6.222990	20	PASS
			LV	NT	-36000.00	-6.222990	20	PASS
			HV	NT	-36000.00	-6.222990	20	PASS
		5825	NV	NT	-36000.00	-6.180258	20	PASS
			LV	NT	-36000.00	-6.180258	20	PASS
			HV	NT	-36000.00	-6.180258	20	PASS
11N40MI MO	Ant1	5190	NV	NT	-32000.00	-6.165703	20	PASS
			LV	NT	-32000.00	-6.165703	20	PASS
			HV	NT	-32000.00	-6.165703	20	PASS
		5230	NV	NT	-34000.00	-6.500956	20	PASS
			LV	NT	-34000.00	-6.500956	20	PASS
			HV	NT	-34000.00	-6.500956	20	PASS
		5755	NV	NT	-36000.00	-6.255430	20	PASS
			LV	NT	-38000.00	-6.602954	20	PASS
			HV	NT	-38000.00	-6.602954	20	PASS
		5795	NV	NT	-36000.00	-6.212252	20	PASS
			LV	NT	-36000.00	-6.212252	20	PASS
			HV	NT	-36000.00	-6.212252	20	PASS

Temperature								
Test Mode	Ant.	Freq. (MHz)	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict

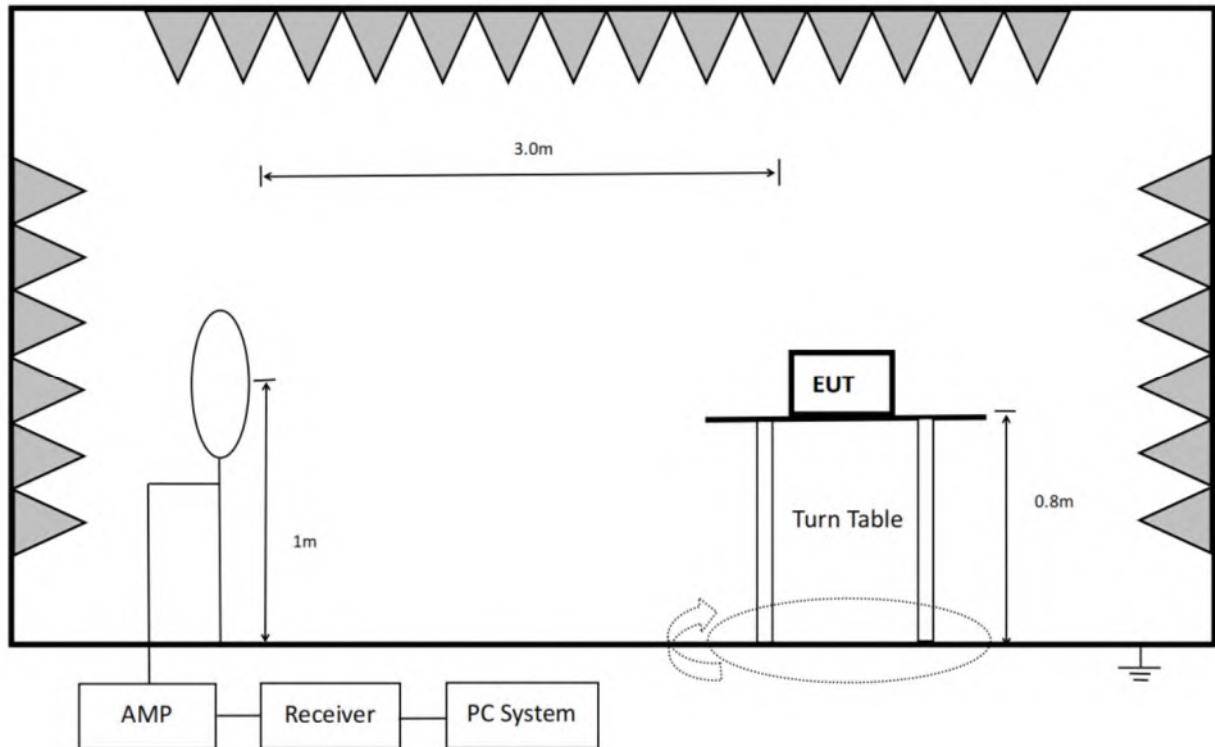
11N20MI MO	Ant1	5180	NV	-30	-34000.00	-6.563707	20	PASS
			NV	-20	-34000.00	-6.563707	20	PASS
			NV	-10	-34000.00	-6.563707	20	PASS
			NV	0	-34000.00	-6.563707	20	PASS
			NV	10	-34000.00	-6.563707	20	PASS
			NV	20	-34000.00	-6.563707	20	PASS
			NV	30	-34000.00	-6.563707	20	PASS
			NV	40	-34000.00	-6.563707	20	PASS
		5200	NV	50	-34000.00	-6.563707	20	PASS
			NV	-30	-32000.00	-6.153846	20	PASS
			NV	-20	-32000.00	-6.153846	20	PASS
			NV	-10	-32000.00	-6.153846	20	PASS
			NV	0	-32000.00	-6.153846	20	PASS
			NV	10	-32000.00	-6.153846	20	PASS
			NV	20	-34000.00	-6.538462	20	PASS
			NV	30	-34000.00	-6.538462	20	PASS
		5240	NV	40	-34000.00	-6.538462	20	PASS
			NV	50	-34000.00	-6.538462	20	PASS
			NV	-30	-32000.00	-6.106870	20	PASS
			NV	-20	-32000.00	-6.106870	20	PASS
			NV	-10	-32000.00	-6.106870	20	PASS
			NV	0	-32000.00	-6.106870	20	PASS
			NV	10	-32000.00	-6.106870	20	PASS
			NV	20	-34000.00	-6.488550	20	PASS
		5745	NV	30	-34000.00	-6.488550	20	PASS
			NV	40	-34000.00	-6.488550	20	PASS
			NV	50	-34000.00	-6.488550	20	PASS
			NV	-30	-36000.00	-6.266319	20	PASS
			NV	-20	-36000.00	-6.266319	20	PASS
			NV	-10	-36000.00	-6.266319	20	PASS
			NV	0	-36000.00	-6.266319	20	PASS
			NV	10	-36000.00	-6.266319	20	PASS
		5785	NV	20	-36000.00	-6.266319	20	PASS
			NV	30	-36000.00	-6.266319	20	PASS
			NV	40	-36000.00	-6.266319	20	PASS
			NV	50	-36000.00	-6.266319	20	PASS
			NV	-30	-36000.00	-6.222990	20	PASS
			NV	-20	-36000.00	-6.222990	20	PASS
			NV	-10	-36000.00	-6.222990	20	PASS
			NV	0	-36000.00	-6.222990	20	PASS
		5825	NV	10	-38000.00	-6.568712	20	PASS
			NV	20	-38000.00	-6.568712	20	PASS
			NV	30	-38000.00	-6.568712	20	PASS
			NV	40	-38000.00	-6.568712	20	PASS
			NV	50	-38000.00	-6.568712	20	PASS
			NV	-30	-36000.00	-6.180258	20	PASS
			NV	-20	-36000.00	-6.180258	20	PASS
			NV	-10	-38000.00	-6.523605	20	PASS
11N40MI MO	Ant1	5190	NV	0	-38000.00	-6.523605	20	PASS
			NV	10	-38000.00	-6.523605	20	PASS
			NV	20	-38000.00	-6.523605	20	PASS
			NV	30	-38000.00	-6.523605	20	PASS
			NV	40	-38000.00	-6.523605	20	PASS
			NV	50	-38000.00	-6.523605	20	PASS
			NV	-30	-32000.00	-6.165703	20	PASS
			NV	-20	-32000.00	-6.165703	20	PASS
		5230	NV	-10	-32000.00	-6.165703	20	PASS
			NV	0	-34000.00	-6.551060	20	PASS
			NV	10	-34000.00	-6.551060	20	PASS
			NV	20	-34000.00	-6.551060	20	PASS

			NV	10	-34000.00	-6.500956	20	PASS
			NV	20	-34000.00	-6.500956	20	PASS
			NV	30	-34000.00	-6.500956	20	PASS
			NV	40	-34000.00	-6.500956	20	PASS
			NV	50	-34000.00	-6.500956	20	PASS
		5755	NV	-30	-38000.00	-6.602954	20	PASS
			NV	-20	-38000.00	-6.602954	20	PASS
			NV	-10	-38000.00	-6.602954	20	PASS
			NV	0	-38000.00	-6.602954	20	PASS
			NV	10	-38000.00	-6.602954	20	PASS
			NV	20	-38000.00	-6.602954	20	PASS
			NV	30	-38000.00	-6.602954	20	PASS
			NV	40	-38000.00	-6.602954	20	PASS
			NV	50	-38000.00	-6.602954	20	PASS
		5795	NV	-30	-36000.00	-6.212252	20	PASS
			NV	-20	-36000.00	-6.212252	20	PASS
			NV	-10	-36000.00	-6.212252	20	PASS
			NV	0	-36000.00	-6.212252	20	PASS
			NV	10	-36000.00	-6.212252	20	PASS
			NV	20	-38000.00	-6.557377	20	PASS
			NV	30	-38000.00	-6.557377	20	PASS
			NV	40	-38000.00	-6.557377	20	PASS
			NV	50	-38000.00	-6.557377	20	PASS

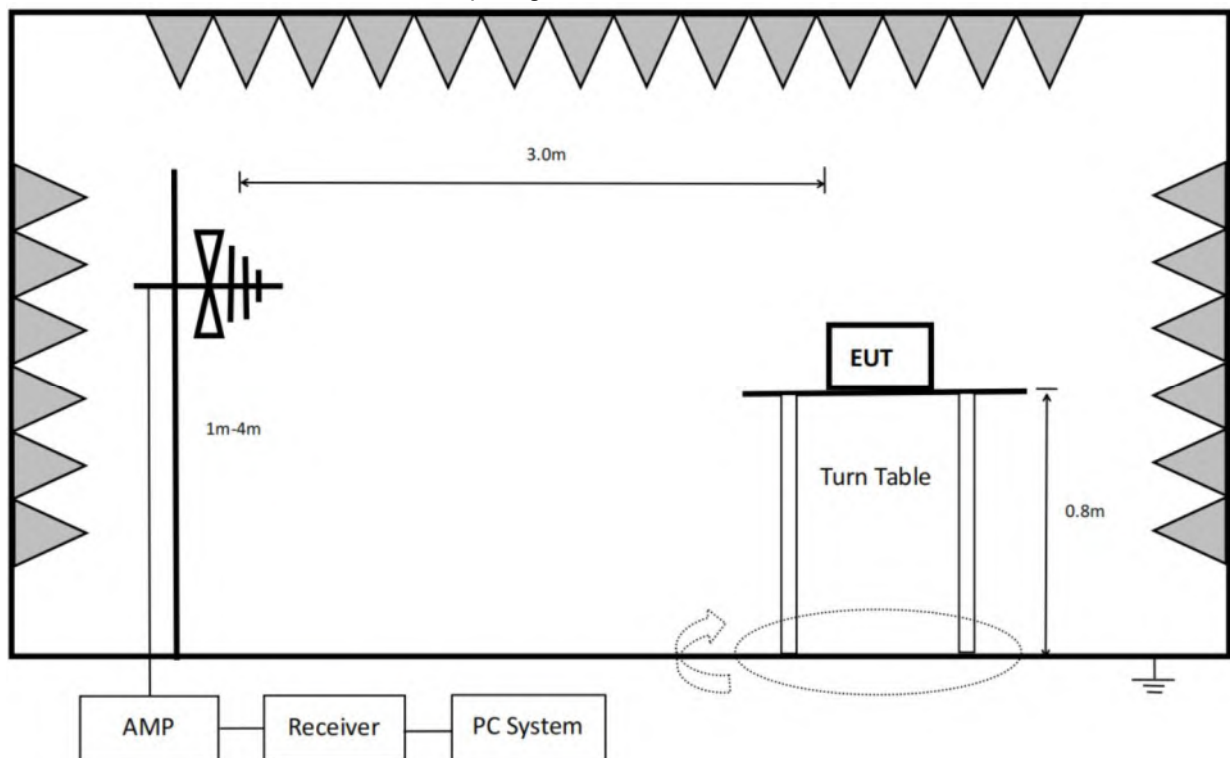
13. Radiated Emission

13.1. Block Diagram of Test Setup

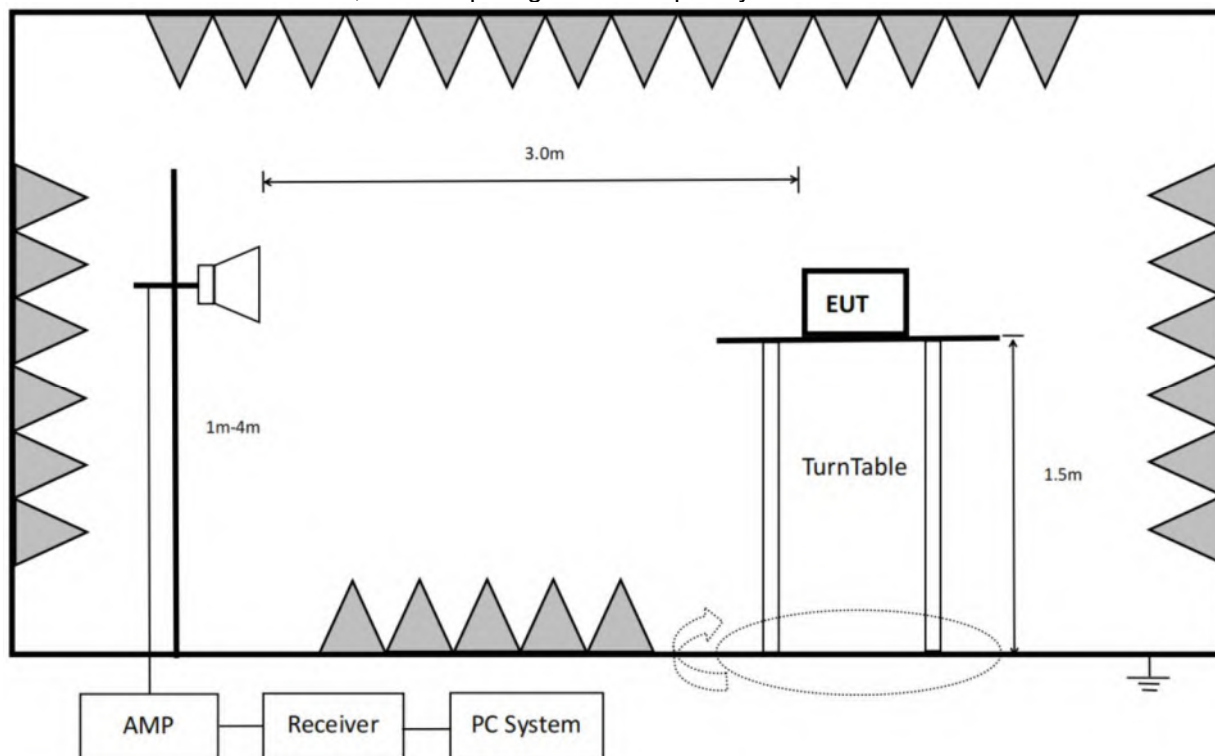
In 3 m Anechoic Chamber, test setup diagram for 9 kHz - 30 MHz:



In 3 m Anechoic Chamber, test setup diagram for 30 MHz - 1 GHz:



In 3 m Anechoic Chamber, test setup diagram for frequency above 1 GHz:



Note: For harmonic emissions test a band rejection filter was inserted in the input port of AMP.

13.2. Limit

(1) FCC 15.205 Restricted frequency band

(2) RSS-Gen section 8.10 Restricted frequency band.

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	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
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&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	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	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			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6

(3) FCC 15.209 Limit.

(4) RSS-Gen section 8.9 Limit.

Frequency MHz	Distance Meters	Field strengths limit	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 ~ 0.490	300	$2400/\text{F}(\text{kHz})$	$67.6-20\log(\text{F})$
0.490 ~ 1.705	30	$24000/\text{F}(\text{kHz})$	$87.6-20\log(\text{F})$
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

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

(5) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

(6) The provisions of §15.205 apply to intentional radiators operating under this section.

-27 dBm/MHz Limit = $95.2 + \text{EIRP}(\text{dBm}) = 95.2 - 27 = 68.2 \text{ dB}\mu\text{V}/\text{m}$

Note:

(1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3\text{m}}(\text{dB}\mu\text{V}/\text{m}) = \text{Limit}_{30\text{m}}(\text{dB}\mu\text{V}/\text{m}) + 40\log(30\text{m}/3\text{m})$$

(3) Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions or comply with 15.209 limits.

13.3. Test Procedure

Below 30 MHz:

The setting of the spectrum Analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm meter above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of 1 meter height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KdB 414788.

Below 1 GHz and above 30 MHz:

The setting of the spectrum Analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1 GHz:

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a band rejection filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video

bandwidth with peak detector for AVG measurements. For the Duty Cycle please refer to clause 8.1.ON TIME AND DUTY CYCLE.

7. Restriction band: Investigated frequency range from 5.15-5.25 GHz, 5250-5350 GHz, 5470-5725 GHz, 5.725-5.85 GHz.

All restriction band should comply with 15.209, other emission should be at least 20 dB below the fundamental.

Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

Note 2: The EUT does not support simultaneous transmission.

Note 3: The EUT was fully exercised with external accessories during the test. In the case of multiple accessory external ports, an external accessory shall be connected to one of each type of port.

13.4. Test Result

PASS. (See below detailed test result)

All the emissions except fundamental emission from 9kHz to 40GHz were comply with 15.209 limit.

Note1: According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz, so the final test was performed with frequency range from 30 MHz to 40 GHz and recorded in below.

Note2: For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in 11N40 mode.

Note3: For below test data, when the limit tabular marked “/” means this frequency point is the fundamental emission and no need comply with this limit.

Note 4: As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit

Note 5: For emissions Above 1 GHz, all mode have been tested, 11N40 mode is worse case and recorded in report.

Note 6: For emissions Above 18 GHz, the all the emission is ambient noise, so only show the worse case channel and recorded in report.

For upper edge of the 26 dB bandwidth and 5350 MHz unwanted emission data reference bellow:

Test Mode	Ant.	Channel (MHz)	Power (dBm)	Frequency Range	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
11A	Ant1	5180	3.60	5190.56~5350	5190.97	-28.35	≤-22.4	PASS
	Ant2	5180	4.26	5191.2~5350	5191.33	-28.60	≤-21.74	PASS
	Ant1	5240	5.44	5250.64~5350	5261.37	-37.92	≤-20.56	PASS
	Ant2	5240	5.11	5250.68~5350	5250.68	-26.44	≤-20.89	PASS
11N20MIMO	Ant1	5180	4.87	5190.76~5350	5191.94	-27.10	≤-21.13	PASS
	Ant2	5180	6.08	5191.32~5350	5191.84	-30.62	≤-19.92	PASS
	Ant1	5240	6.10	5251~5350	5251.00	-25.62	≤-19.9	PASS
	Ant2	5240	6.82	5251.08~5350	5251.91	-25.87	≤-19.18	PASS
11N40MIMO	Ant1	5190	4.08	5214~5350	5214.01	-34.72	≤-21.92	PASS
	Ant2	5190	5.50	5212~5350	5213.00	-29.30	≤-20.5	PASS
	Ant1	5230	4.85	5252.4~5350	5252.61	-30.16	≤-21.15	PASS
	Ant2	5230	5.71	5252.56~5350	5255.35	-32.15	≤-20.29	PASS

Note: This test only for 26dB bandwidth fall in 5250MHz ~ 5350MHz mode, So this is the conducted testing method used in this test and Diagram of test setup same as section 8.1.

13.5. Original Test Data

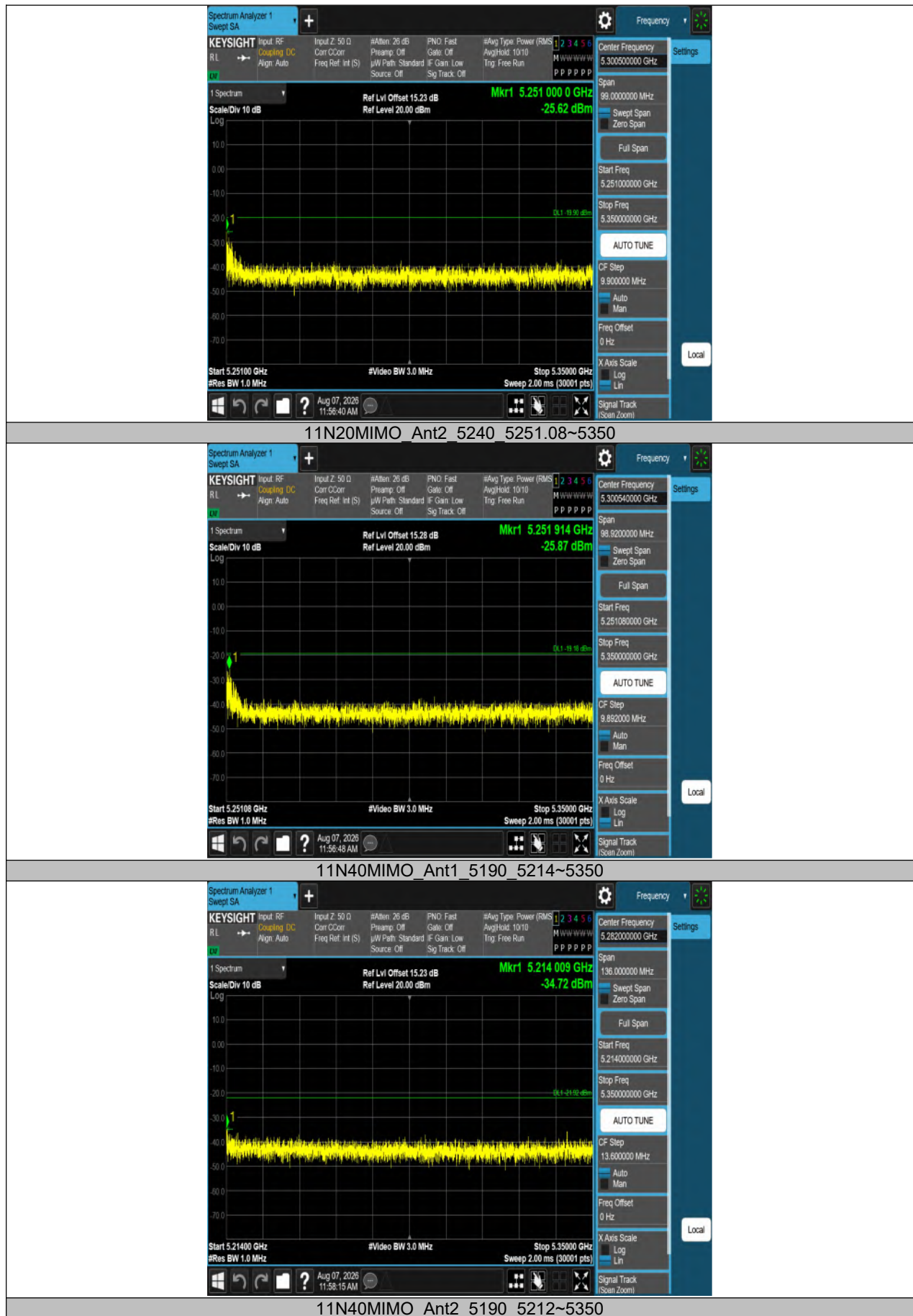
Below 1 GHz and above 30 MHz test data Refer to appendix A

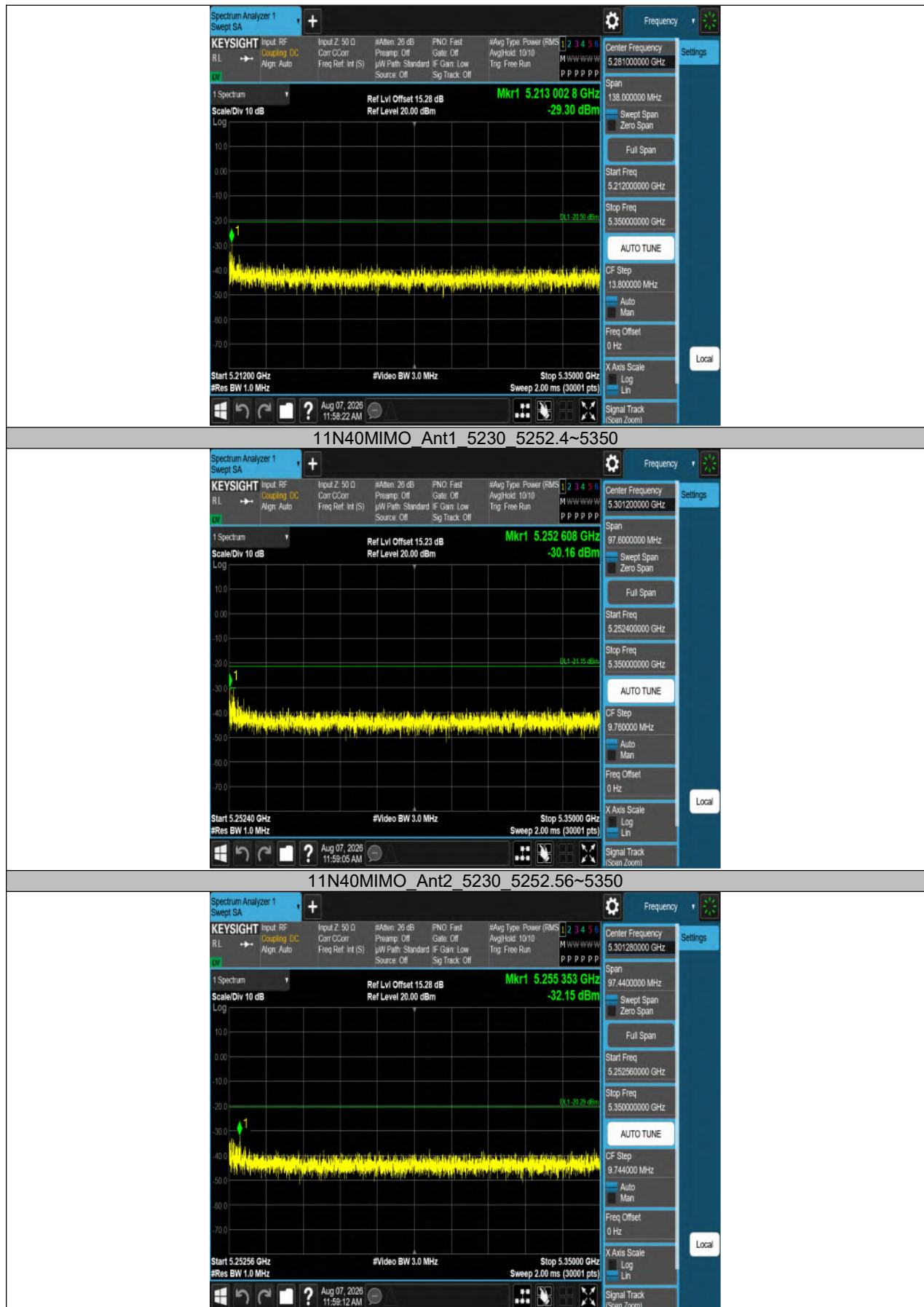
Above 1 GHz test data Refer to appendix B

For upper edge of the 26 dB bandwidth and 5350 MHz unwanted emission reference below:



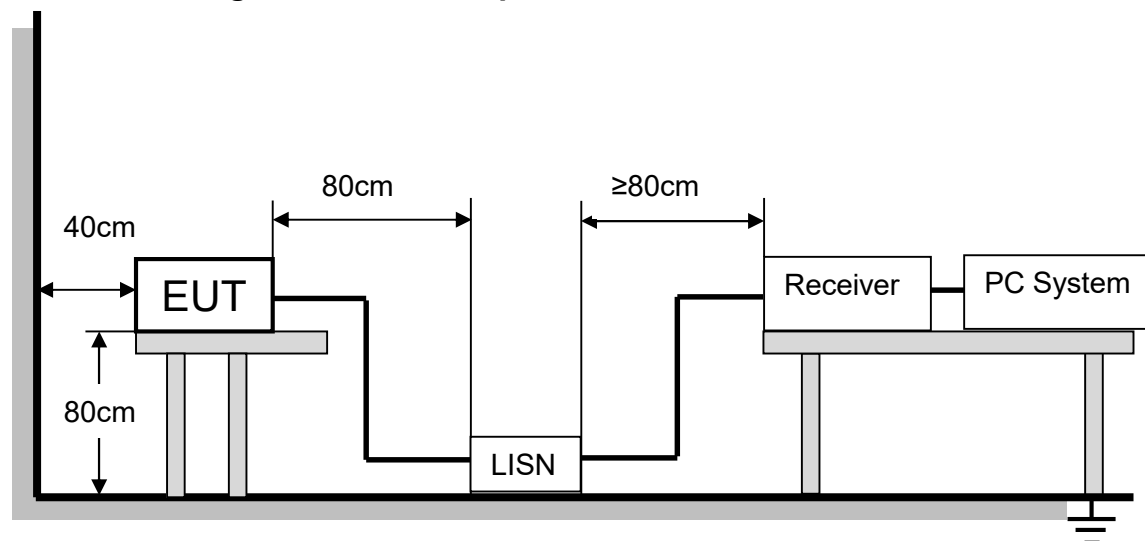






14. AC Power Line Conducted Emissions

14.1. Block Diagram of Test Setup



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2020. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

14.2. Limits

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8.

Frequency (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

14.3. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.4 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

14.4. Test Result

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.

Note2: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/50Hz, recorded worse case.

Note3: $\text{Measurement} = \text{Reading Level} + \text{Correct Factor}$

$\text{Over} = \text{Measurement} - \text{Limit}$

14.5. Original Test Data

AC Power Line Conducted Emission Test Data Refer to appendix C

15. Antenna Requirements

15.1. Applicable Requirements

Please refer 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. 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.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Please refer to RSS-GEN Clause 6.8

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.

Please refer to RSS-GEN Clause 6.8

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

15.2. Result

The device support 2T2R MIMO, the antennas both used for this product are dedicated External antennas and other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 6.42 dBi for antenna 1, 6.42 dBi for antenna 2, Only the N20 and N40 modes support MIMO.

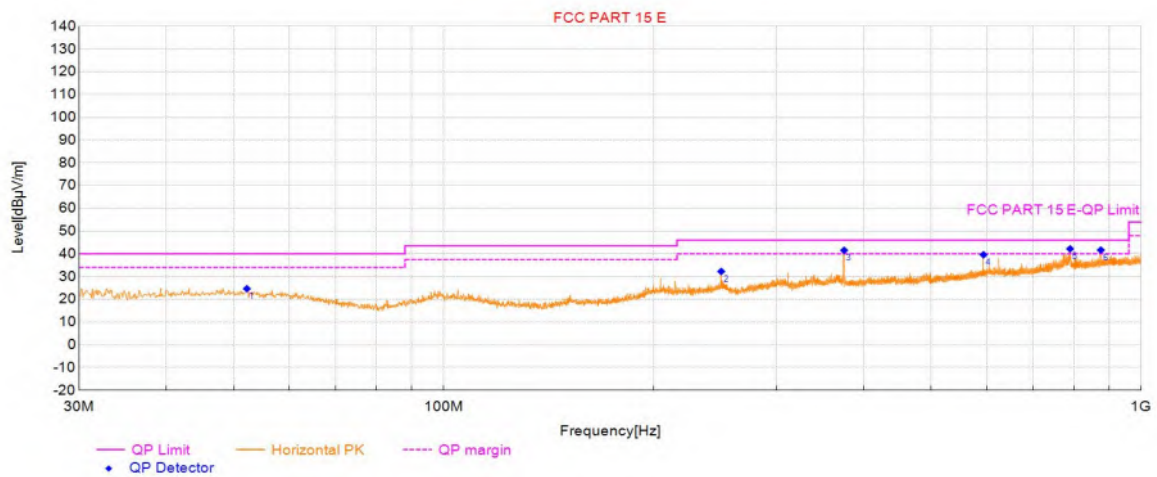
APPENDIX A - Radiated Emission Below 1GHz Test Data

Test Report

Project Information			
EUT:	Portable Capture Host		
Customer:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-18 11:29:36

Test Graph



Final Data List

NO.	Freq. (MHz)	QP Reading (dBμV/m)	Factor (dB)	QP Level (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity	Verdict
1	52.22	3.62	21.06	24.68	40.00	15.32	100	360	Horizontal	PASS
2	249.92	10.56	21.71	32.27	46.00	13.73	100	214	Horizontal	PASS
3	374.97	16.83	24.72	41.55	46.00	4.45	100	6	Horizontal	PASS
4	594.01	10.08	29.53	39.61	46.00	6.39	100	300	Horizontal	PASS
5	790.56	10.12	32.09	42.21	46.00	3.79	100	308	Horizontal	PASS
6	875.05	8.4	33.25	41.65	46.00	4.35	100	118	Horizontal	PASS

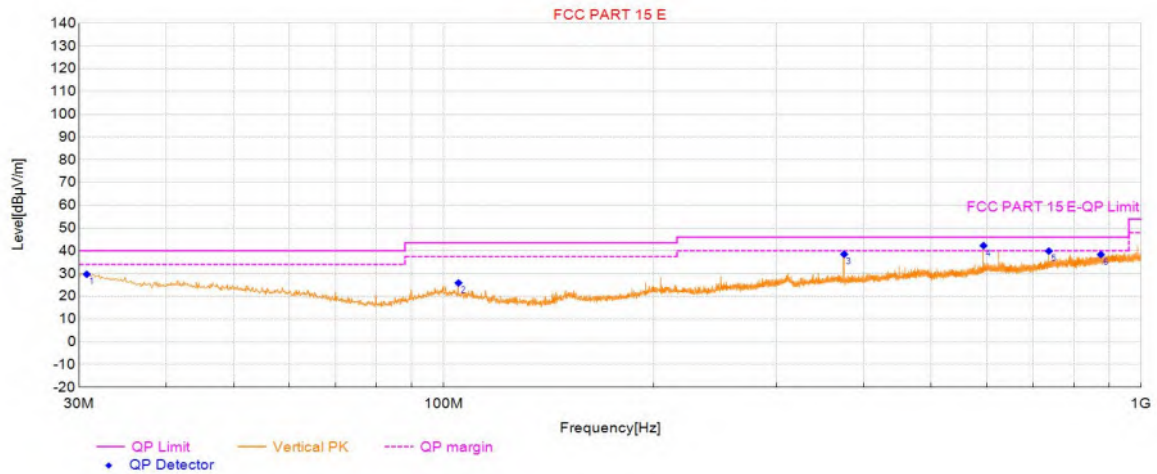
Note: Margin=QP Limit - QP Level, QP Level=Reading + Factor

Test Report

Project Information			
EUT:	Portable Capture Host		
Customer:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3°C 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-18 11:30:18

Test Graph



Final Data List

NO.	Freq. (MHz)	QP Reading (dBμV/m)	Factor (dB)	QP Level (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity	Verdict
1	30.78	12.19	17.51	29.70	40.00	10.30	100	55	Vertical	PASS
2	104.99	6.16	19.74	25.90	43.50	17.60	100	69	Vertical	PASS
3	374.97	13.78	24.72	38.50	46.00	7.50	100	358	Vertical	PASS
4	594.01	12.76	29.53	42.29	46.00	3.71	100	55	Vertical	PASS
5	737.01	8.2	31.69	39.89	46.00	6.11	100	55	Vertical	PASS
6	875.05	5.13	33.25	38.38	46.00	7.62	100	172	Vertical	PASS

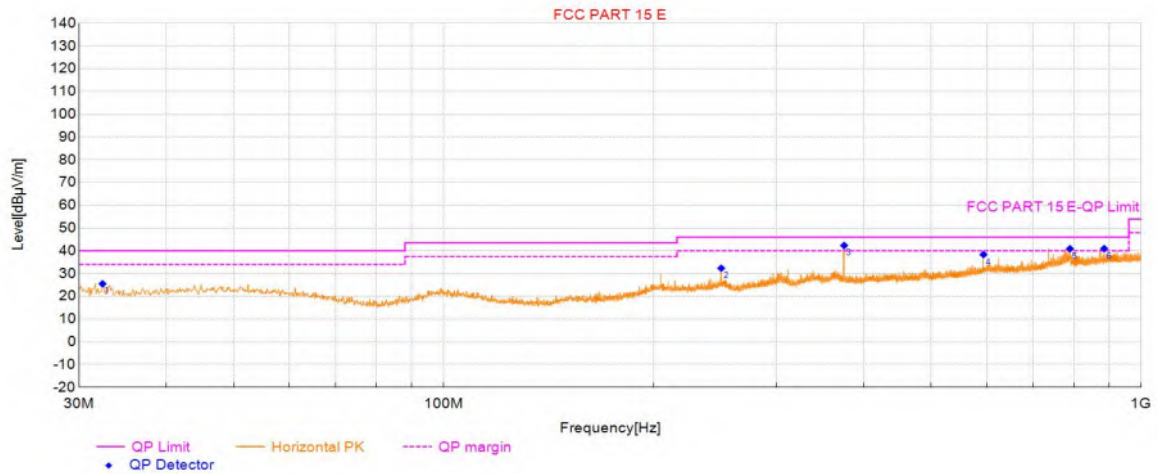
Note: Margin=QP Limit - QP Level, QP Level=Reading + Factor

Test Report

Project Information			
EUT:	Portable Capture Host		
Customer:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3°C 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-18 11:32:00

Test Graph



Final Data List

NO.	Freq. (MHz)	QP Reading (dBμV/m)	Factor (dB)	QP Level (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity	Verdict
1	32.43	7.83	17.67	25.50	40.00	14.50	100	1	Horizontal	PASS
2	249.92	10.65	21.71	32.36	46.00	13.64	100	176	Horizontal	PASS
3	374.97	17.63	24.72	42.35	46.00	3.65	100	359	Horizontal	PASS
4	594.01	8.84	29.53	38.37	46.00	7.63	100	262	Horizontal	PASS
5	790.27	8.82	32.09	40.91	46.00	5.09	100	224	Horizontal	PASS
6	884.75	7.58	33.41	40.99	46.00	5.01	100	65	Horizontal	PASS

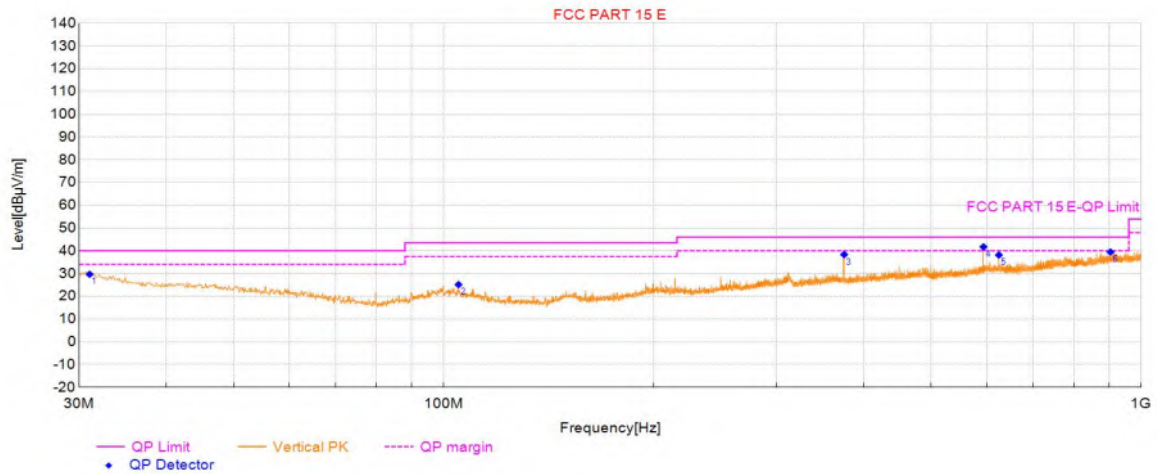
Note: Margin=QP Limit - QP Level, QP Level=Reading + Factor

Test Report

Project Information			
EUT:	Portable Capture Host		
Customer:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3°C 53%	Engineer:	Soho Liu
Remark:			

Start of Test: 2026-07-18 11:32:42

Test Graph



Final Data List

NO.	Freq. (MHz)	QP Reading (dBμV/m)	Factor (dB)	QP Level (dBμV/m)	QP Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity	Verdict
1	31.07	12.17	17.54	29.71	40.00	10.29	100	126	Vertical	PASS
2	104.99	5.42	19.74	25.16	43.50	18.34	100	34	Vertical	PASS
3	374.97	13.65	24.72	38.37	46.00	7.63	100	57	Vertical	PASS
4	594.01	12.21	29.53	41.74	46.00	4.26	100	21	Vertical	PASS
5	624.96	8.24	29.92	38.16	46.00	7.84	100	345	Vertical	PASS
6	903.09	5.78	33.70	39.48	46.00	6.52	100	139	Vertical	PASS

Note: Margin=QP Limit - QP Level, QP Level=Reading + Factor

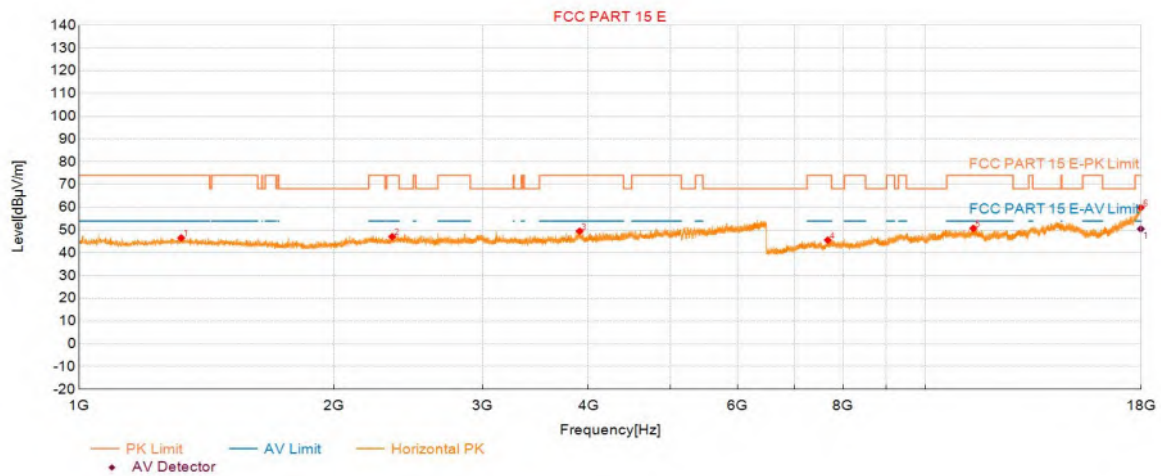
APPENDIX B – Radiated Emission Above 1GHz Test Data

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:14:54

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1320.68	42.51	46.57	4.06	74.00	27.43	150	156	Horizontal
2	2344.33	39.23	47.10	7.87	74.00	26.90	150	358	Horizontal
3	3904.29	36.44	49.52	13.08	74.00	24.48	150	276	Horizontal
4	7670.82	45.01	45.59	0.58	74.00	28.41	150	341	Horizontal
5	11396.04	42.85	50.76	7.91	74.00	23.24	150	359	Horizontal
6	17977.00	36.72	59.89	23.17	74.00	14.11	150	147	Horizontal

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17977.00	27.34	23.17	50.51	54.00	3.49	150	147	Horizontal

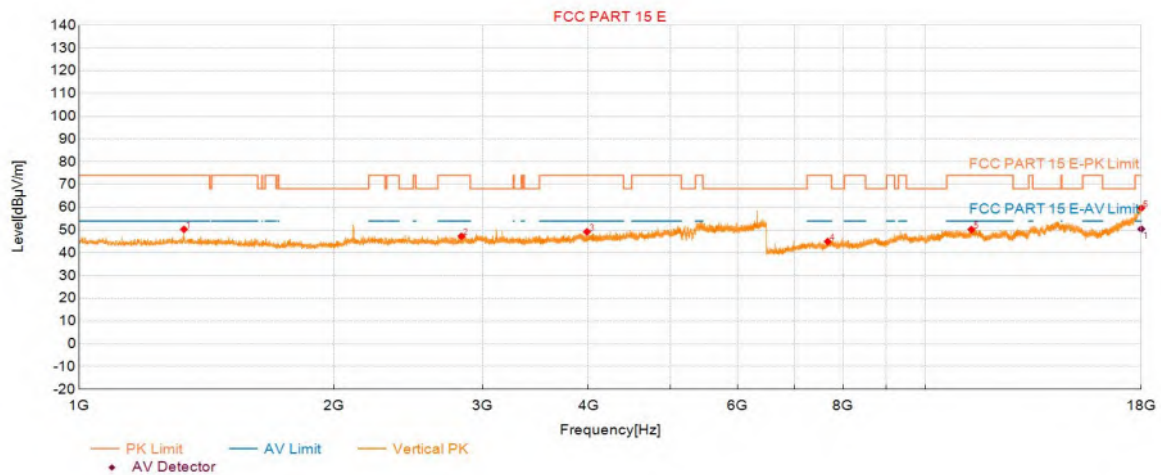
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:16:15

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1330.58	46.17	50.32	4.15	74.00	23.68	150	263	Vertical
2	2830.58	38.22	47.29	9.07	74.00	26.71	150	139	Vertical
3	3983.50	35.94	49.23	13.29	74.00	24.77	150	97	Vertical
4	7669.67	44.44	45.00	0.56	74.00	29.00	150	37	Vertical
5	11338.53	42.40	50.23	7.83	74.00	23.77	150	85	Vertical
6	18000.00	36.33	59.66	23.33	74.00	14.34	150	346	Vertical

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	18000.00	27.14	23.33	50.47	54.00	3.53	150	346	Vertical

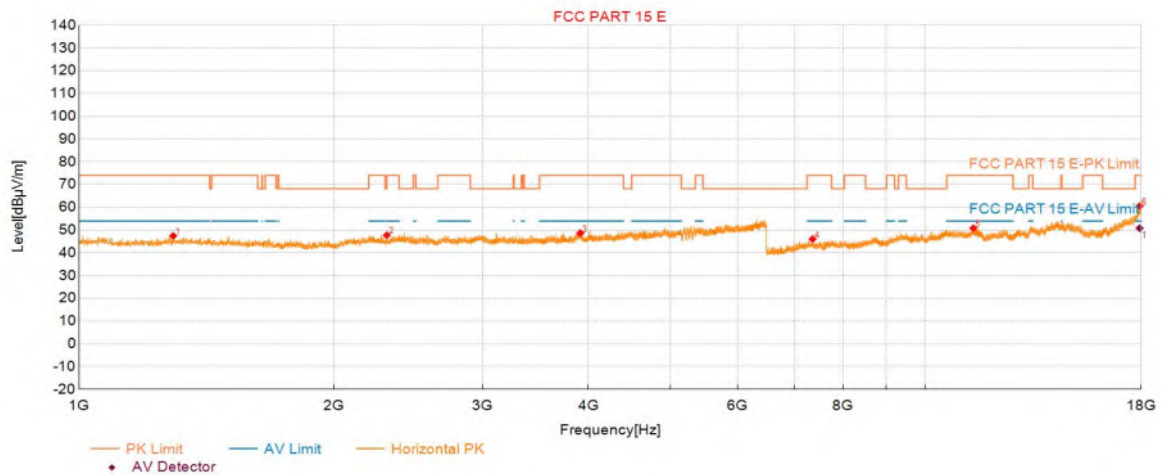
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5230	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:19:10

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1292.08	43.64	47.47	3.83	74.00	26.53	150	226	Horizontal
2	2310.78	39.66	47.74	8.08	74.00	26.26	150	51	Horizontal
3	3911.44	35.55	48.64	13.09	74.00	25.36	150	2	Horizontal
4	7359.14	45.89	46.05	0.16	74.00	27.95	150	157	Horizontal
5	11397.19	42.94	50.85	7.91	74.00	23.15	150	193	Horizontal
6	17916.04	37.80	60.53	22.73	74.00	13.47	150	284	Horizontal

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17916.04	28.10	22.73	50.83	54.00	3.17	150	284	Horizontal

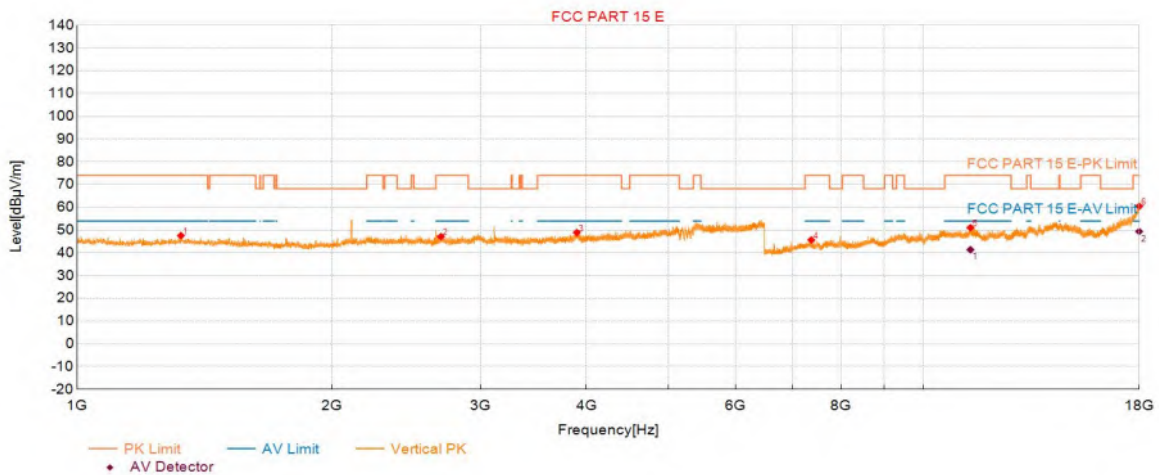
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5230	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:20:30

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1326.73	43.46	47.58	4.12	74.00	26.42	150	274	Vertical
2	2691.42	38.64	47.15	8.51	74.00	26.85	150	137	Vertical
3	3895.49	35.90	48.91	13.01	74.00	25.09	150	0	Vertical
4	7374.09	45.48	45.64	0.16	74.00	28.36	150	134	Vertical
5	11368.44	43.20	51.06	7.86	74.00	22.94	150	257	Vertical
6	17995.40	37.15	60.45	23.30	74.00	13.55	150	54	Vertical

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	11368.44	33.51	7.86	41.37	54.00	12.63	150	257	Vertical
2	17995.40	26.10	23.30	49.40	54.00	4.60	150	54	Vertical

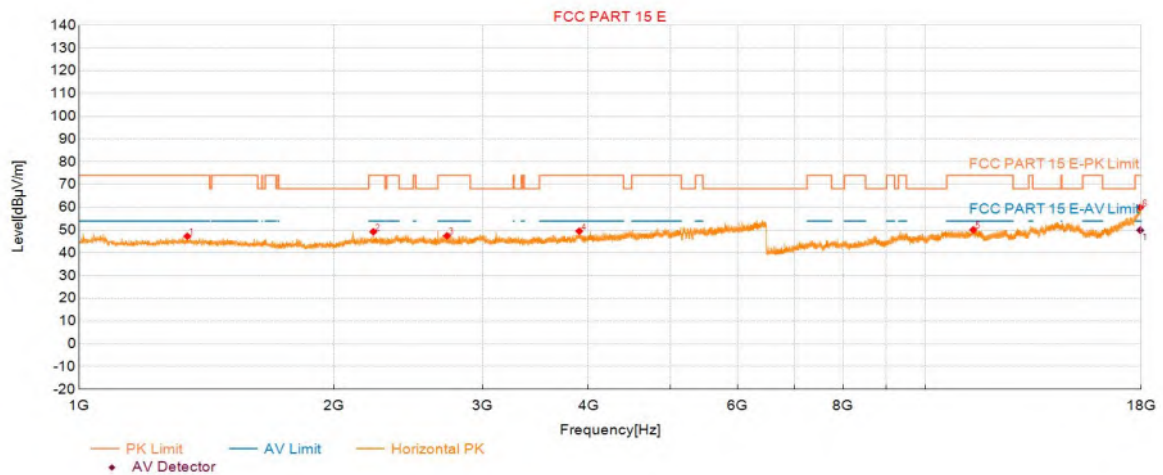
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5755	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:23:16

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1342.68	43.03	47.28	4.25	74.00	26.72	150	104	Horizontal
2	2227.17	41.14	49.26	8.12	74.00	24.74	150	141	Horizontal
3	2721.67	38.91	47.47	8.56	74.00	26.53	150	152	Horizontal
4	3900.44	36.49	49.56	13.07	74.00	24.44	150	133	Horizontal
5	11396.04	42.21	50.12	7.91	74.00	23.88	150	349	Horizontal
6	17948.24	36.99	59.95	22.96	74.00	14.05	150	18	Horizontal

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17948.24	26.99	22.96	49.95	54.00	4.05	150	18	Horizontal

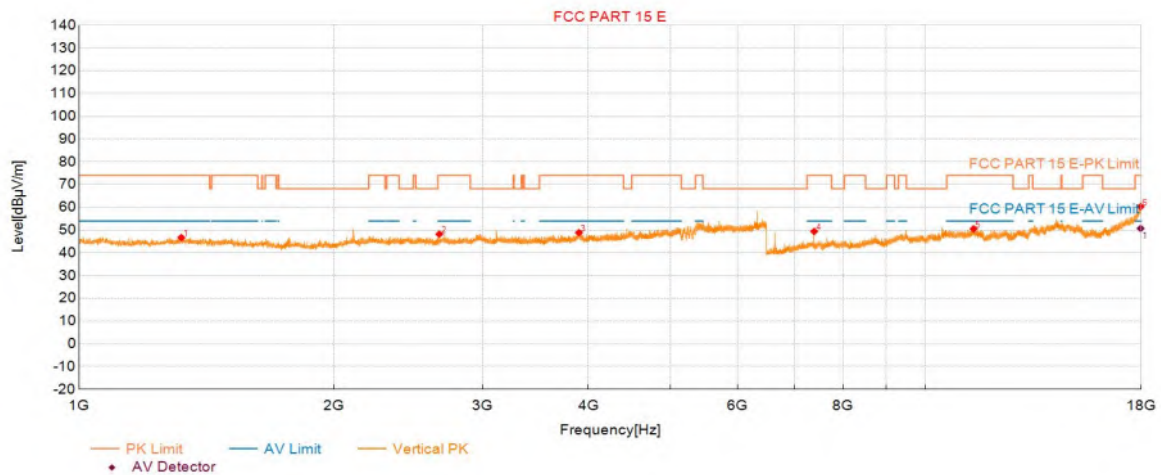
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5755	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:24:36

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1321.23	42.66	46.72	4.06	74.00	27.28	150	202	Vertical
2	2665.57	39.91	48.22	8.31	74.00	25.78	150	158	Vertical
3	3896.59	35.86	48.88	13.02	74.00	25.12	150	171	Vertical
4	7391.34	49.26	49.41	0.15	74.00	24.59	150	24	Vertical
5	11406.39	42.63	50.56	7.93	74.00	23.44	150	223	Vertical
6	17967.80	37.19	60.29	23.10	74.00	13.71	150	297	Vertical

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17967.80	27.63	23.10	50.73	54.00	3.27	150	297	Vertical

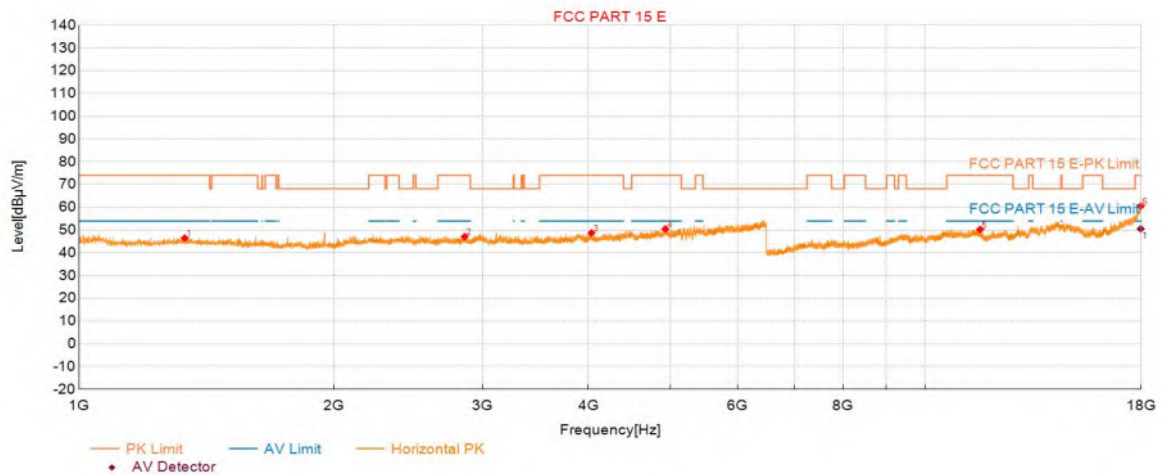
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:27:14

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1333.33	42.34	46.51	4.17	74.00	27.49	150	162	Horizontal
2	2855.34	38.00	47.08	9.08	74.00	26.92	150	151	Horizontal
3	4031.90	35.63	48.75	13.12	74.00	25.25	150	55	Horizontal
4	4930.14	33.41	50.48	17.07	74.00	23.52	150	103	Horizontal
5	11607.66	42.64	50.26	7.62	74.00	23.74	150	12	Horizontal
6	17971.25	37.34	60.46	23.12	74.00	13.54	150	342	Horizontal

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17971.25	27.43	23.12	50.55	54.00	3.45	150	342	Horizontal

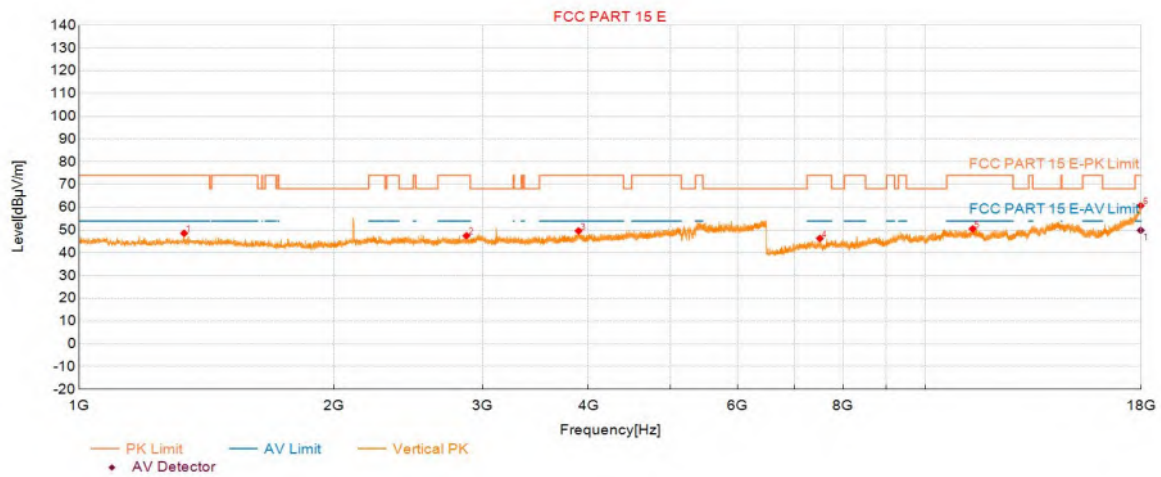
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-16 11:28:34

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	Level (dBμV/m)	Factor (dB)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	1331.13	44.43	48.58	4.15	74.00	25.42	150	257	Vertical
2	2869.64	38.44	47.51	9.07	74.00	26.49	150	49	Vertical
3	3892.74	36.67	49.65	12.98	74.00	24.35	150	352	Vertical
4	7507.50	45.92	46.33	0.41	74.00	27.67	150	271	Vertical
5	11375.34	42.68	50.56	7.88	74.00	23.44	150	197	Vertical
6	17973.55	37.58	60.72	23.14	74.00	13.28	150	128	Vertical

AV Final Data List

NO.	Freq. (MHz)	AV Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	17973.55	26.77	23.14	49.91	54.00	4.09	150	128	Vertical

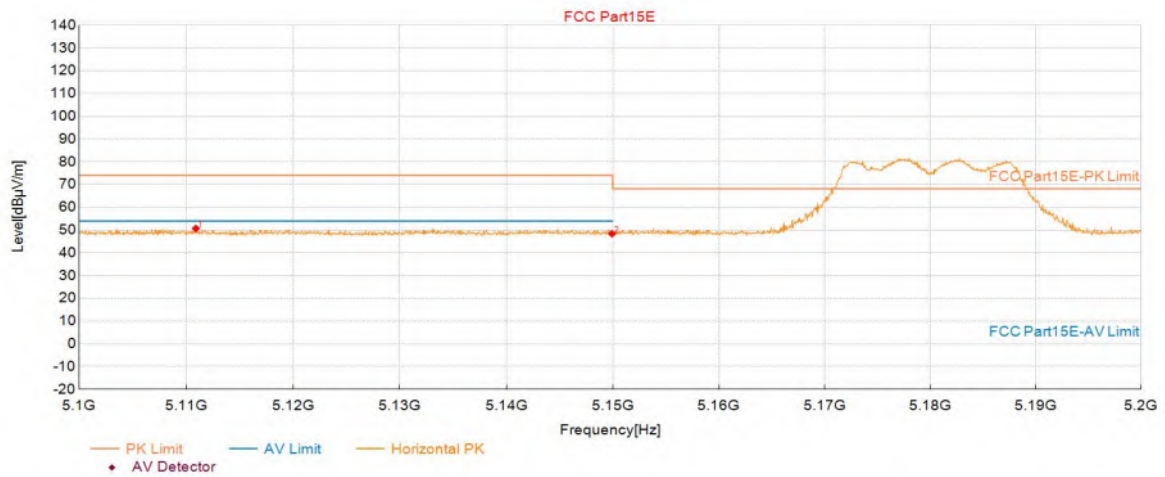
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5180	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:05:03

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5110.91	34.81	50.71	15.90	74.00	23.29	150	0	Horizontal
2	5149.92	32.40	48.37	15.97	74.00	25.63	150	138	Horizontal

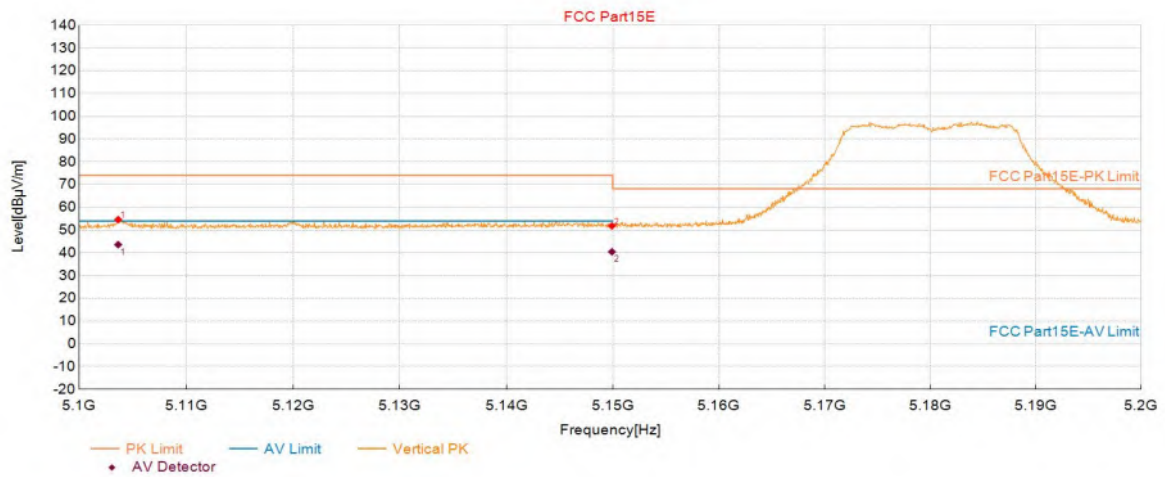
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5180	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:05:43

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5103.65	38.73	54.61	15.88	74.00	19.39	150	241	Vertical
2	5149.92	35.86	51.83	15.97	74.00	22.17	150	188	Vertical

AV Final Data List

NO.	Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5103.65	27.72	15.88	43.60	54.00	10.40	150	241	Vertical
2	5149.92	24.50	15.97	40.47	54.00	13.53	150	188	Vertical

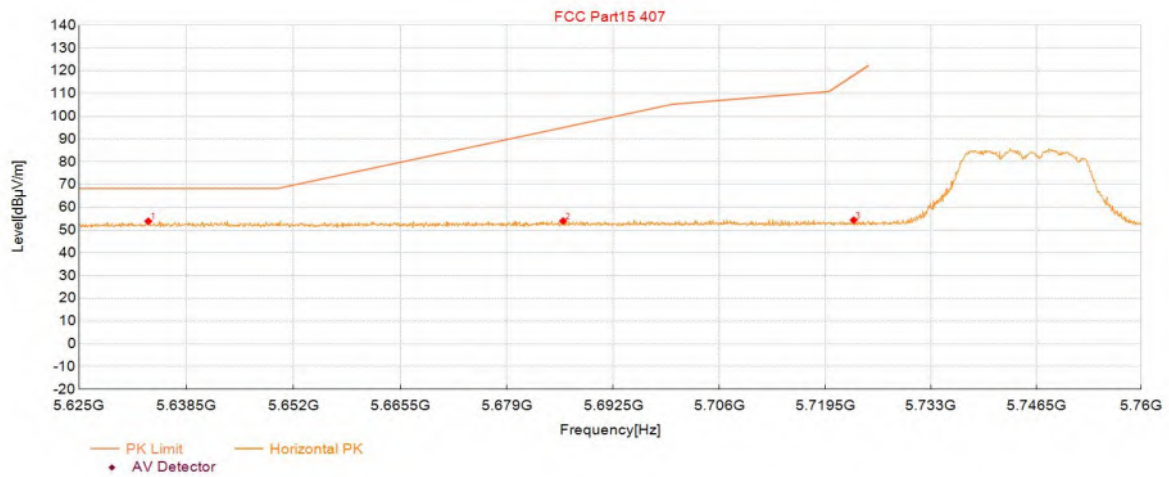
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5745	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:19:28

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5633.71	36.34	53.92	17.58	68.30	14.38	150	82	Horizontal
2	5686.12	36.20	54.01	17.81	95.06	41.05	150	357	Horizontal
3	5723.13	36.47	54.38	17.91	118.03	63.65	150	10	Horizontal

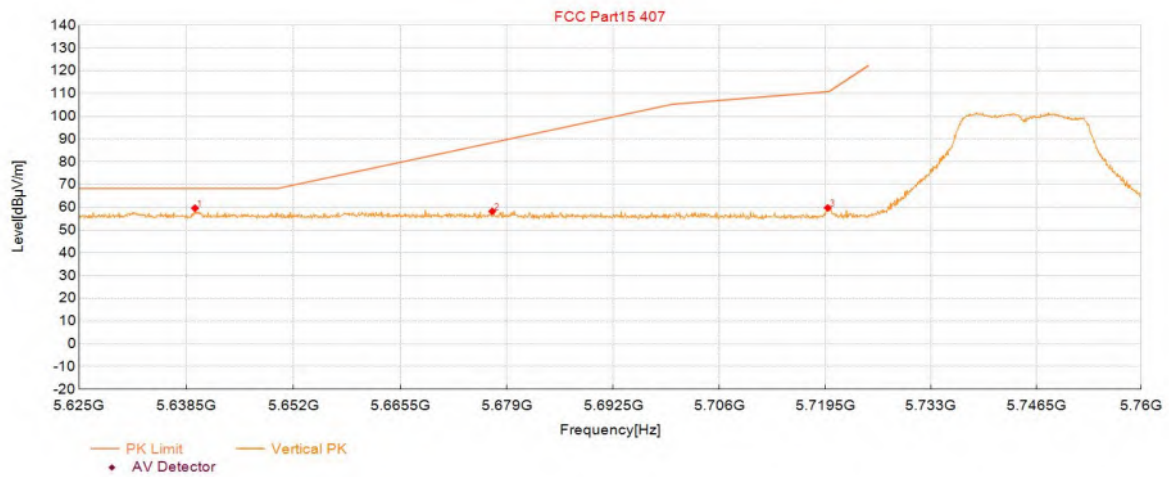
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5745	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:20:07

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5639.59	42.03	59.64	17.61	68.30	8.66	150	151	Vertical
2	5677.14	40.47	58.23	17.76	88.42	30.19	150	165	Vertical
3	5719.82	41.88	59.78	17.90	110.85	51.07	150	143	Vertical

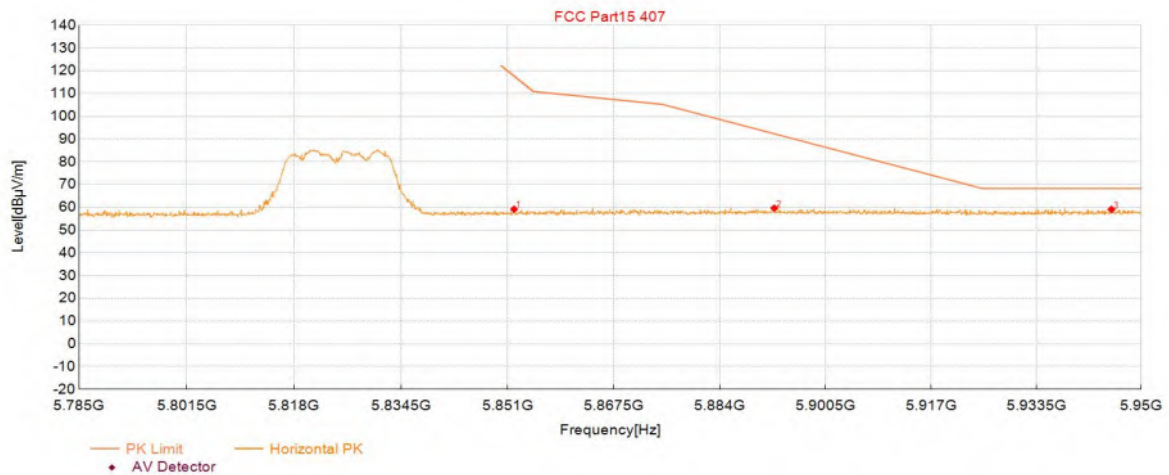
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5825	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:24:22

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5852.02	40.64	59.16	18.52	117.69	58.53	150	15	Horizontal
2	5892.47	40.78	59.64	18.86	92.34	32.70	150	50	Horizontal
3	5945.30	40.20	59.08	18.88	68.30	9.22	150	347	Horizontal

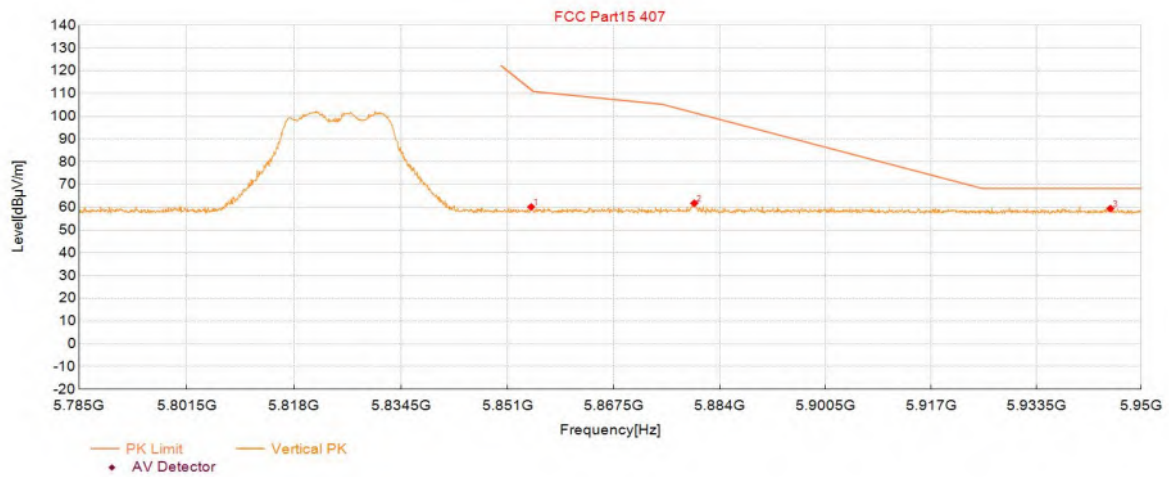
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11A_6Mps_5825	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:25:01

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5854.66	41.63	60.17	18.54	111.66	51.49	150	147	Vertical
2	5880.01	43.06	61.81	18.75	101.58	39.77	150	210	Vertical
3	5945.13	40.56	59.44	18.88	68.30	8.86	150	210	Vertical

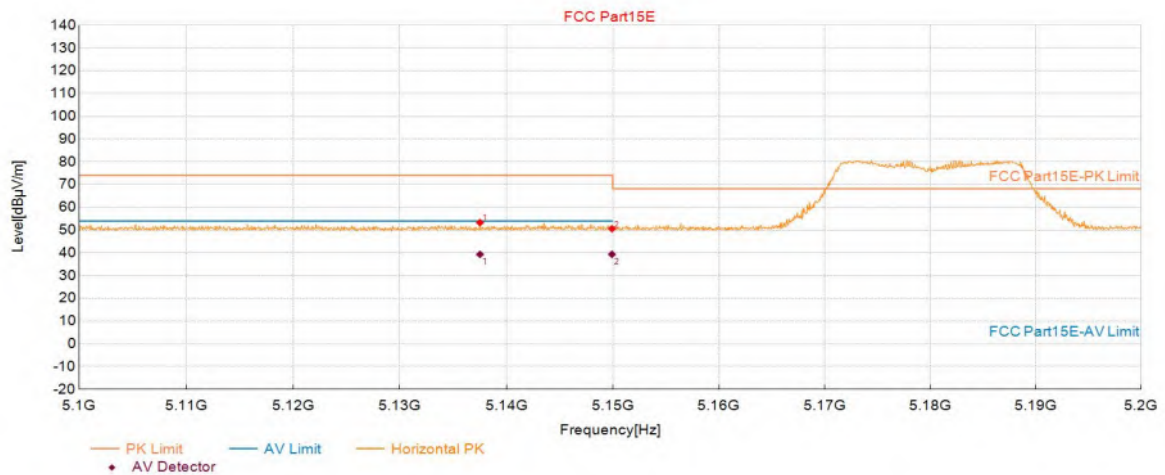
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5180	Voltage:	DC 24V
Environment:	25.3°C 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:29:16

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5137.52	37.35	53.30	15.95	74.00	20.70	150	221	Horizontal
2	5149.92	34.63	50.60	15.97	74.00	23.40	150	343	Horizontal

AV Final Data List

NO.	Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5137.52	23.39	15.95	39.34	54.00	14.66	150	221	Horizontal
2	5149.92	23.39	15.97	39.36	54.00	14.64	150	343	Horizontal

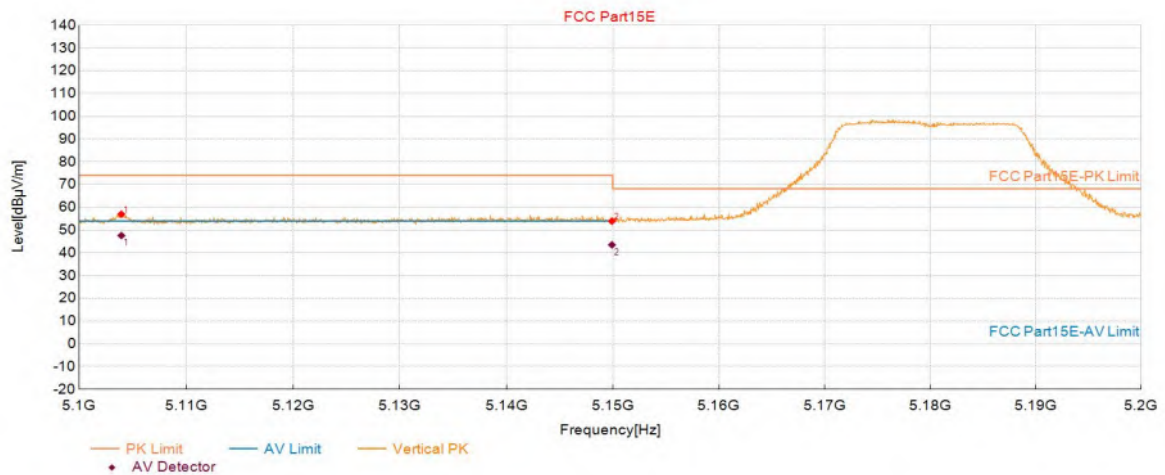
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5180	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:29:56

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5103.95	41.12	57.00	15.88	74.00	17.00	150	178	Vertical
2	5149.92	37.93	53.90	15.97	74.00	20.10	150	159	Vertical

AV Final Data List

NO.	Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5103.95	31.71	15.88	47.59	54.00	6.41	150	178	Vertical
2	5149.92	27.52	15.97	43.49	54.00	10.51	150	159	Vertical

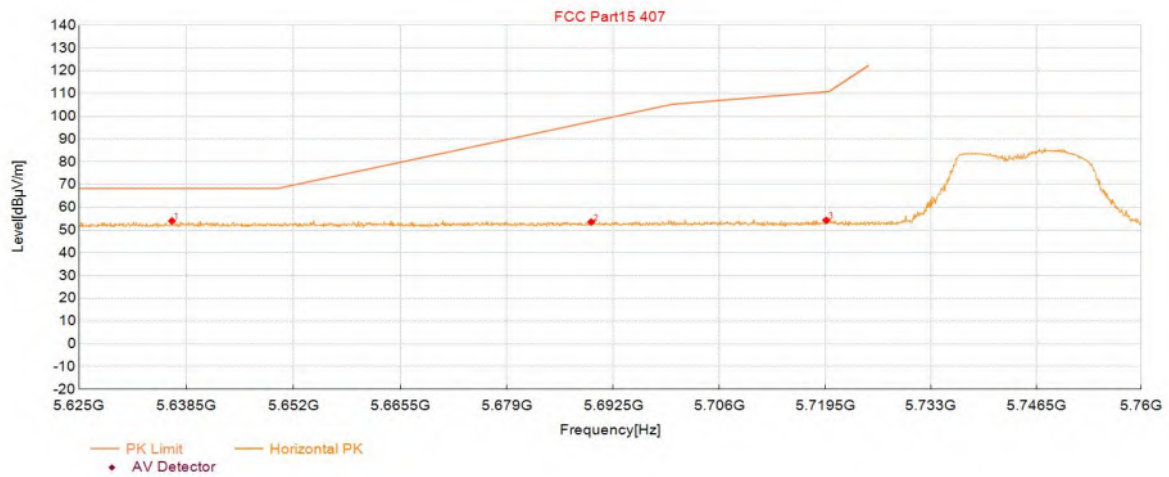
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5745	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:41:47

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5636.68	36.44	54.03	17.59	68.30	14.27	150	39	Horizontal
2	5689.70	35.75	53.56	17.81	97.70	44.14	150	170	Horizontal
3	5719.61	36.42	54.32	17.90	110.79	56.47	150	20	Horizontal

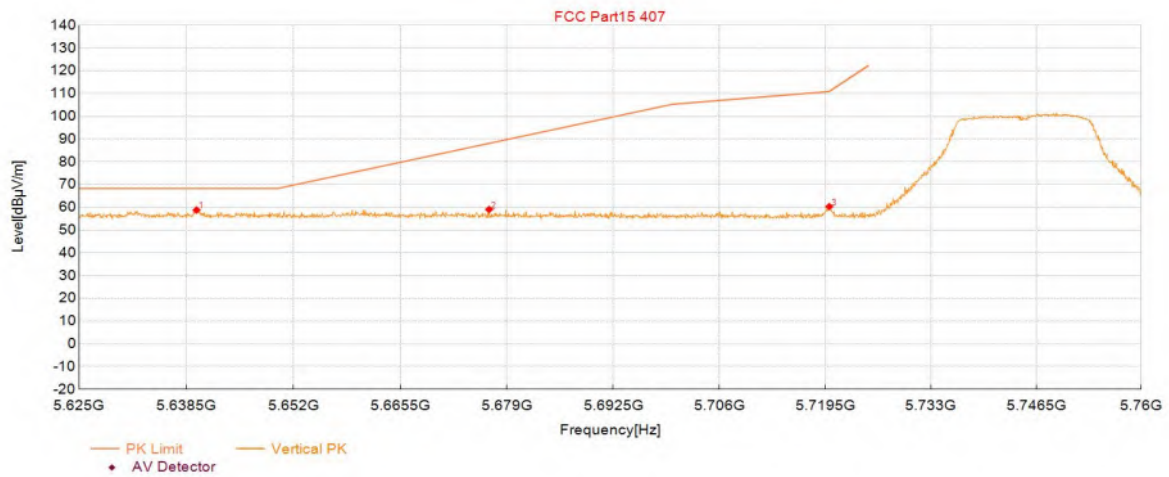
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5745	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:42:26

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5639.79	41.22	58.83	17.61	68.30	9.47	150	144	Vertical
2	5676.73	41.29	59.05	17.76	88.12	29.07	150	148	Vertical
3	5720.02	42.43	60.33	17.90	110.95	50.62	150	144	Vertical

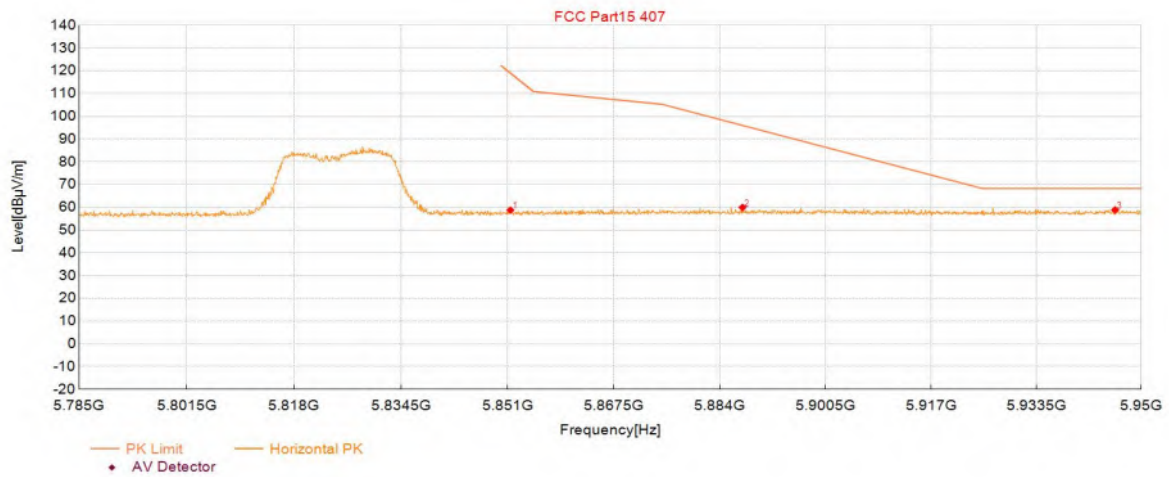
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5825	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:48:16

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5851.45	40.25	58.77	18.52	119.00	60.23	150	49	Horizontal
2	5887.52	41.17	59.98	18.81	96.01	36.03	150	246	Horizontal
3	5945.87	40.00	58.88	18.88	68.30	9.42	150	351	Horizontal

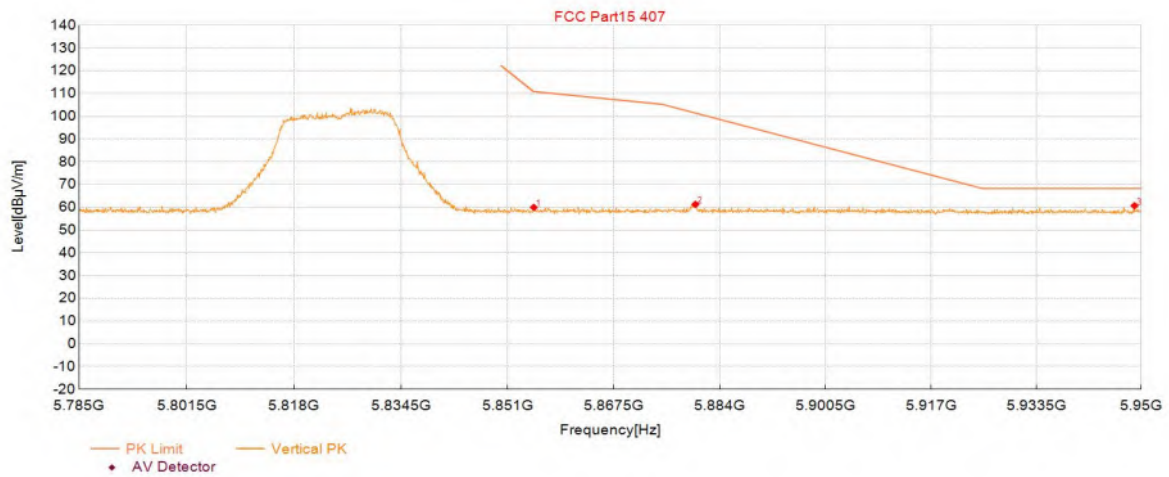
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N20_MCS0_5825	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:48:58

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5855.08	41.42	59.97	18.55	110.88	50.91	150	306	Vertical
2	5880.17	42.53	61.28	18.75	101.46	40.18	150	204	Vertical
3	5948.93	41.83	60.71	18.88	68.30	7.59	150	90	Vertical

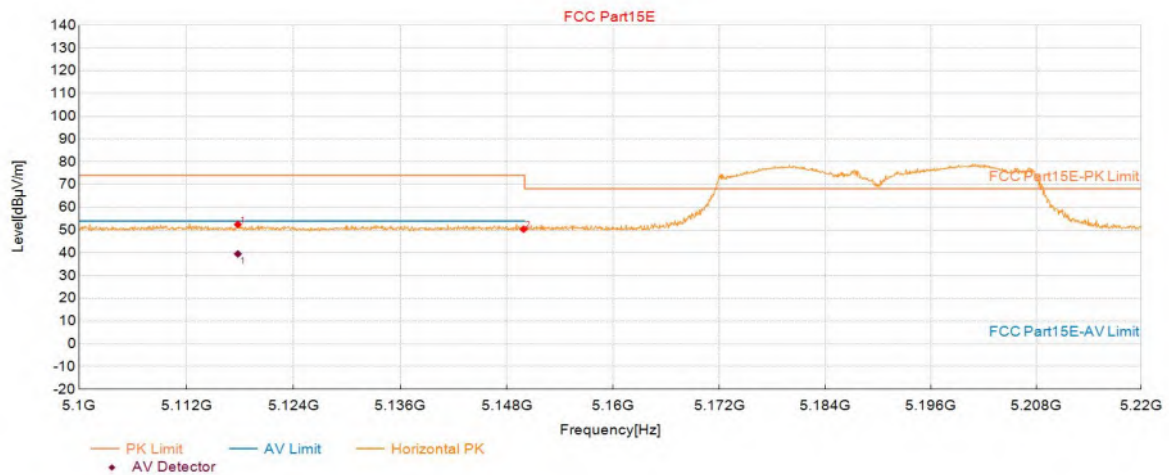
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:50:49

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5117.77	36.57	52.48	15.91	74.00	21.52	150	11	Horizontal
2	5149.88	34.41	50.38	15.97	74.00	23.62	150	328	Horizontal

AV Final Data List

NO.	Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5117.77	23.62	15.91	39.53	54.00	14.47	150	11	Horizontal

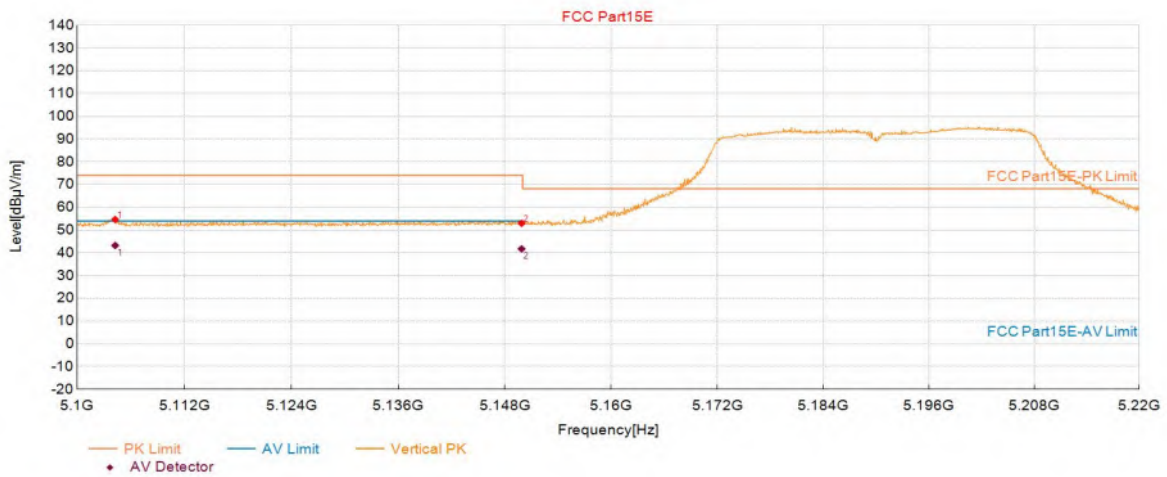
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5190	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-13 20:51:29

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5104.26	38.78	54.66	15.88	74.00	19.34	150	109	Vertical
2	5149.88	37.00	52.97	15.97	74.00	21.03	150	163	Vertical

AV Final Data List

NO.	Freq. (MHz)	Reading (dBμV/m)	Factor (dB)	AV Level (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5104.26	27.36	15.88	43.24	54.00	10.76	150	109	Vertical
2	5149.88	25.76	15.97	41.73	54.00	12.27	150	163	Vertical

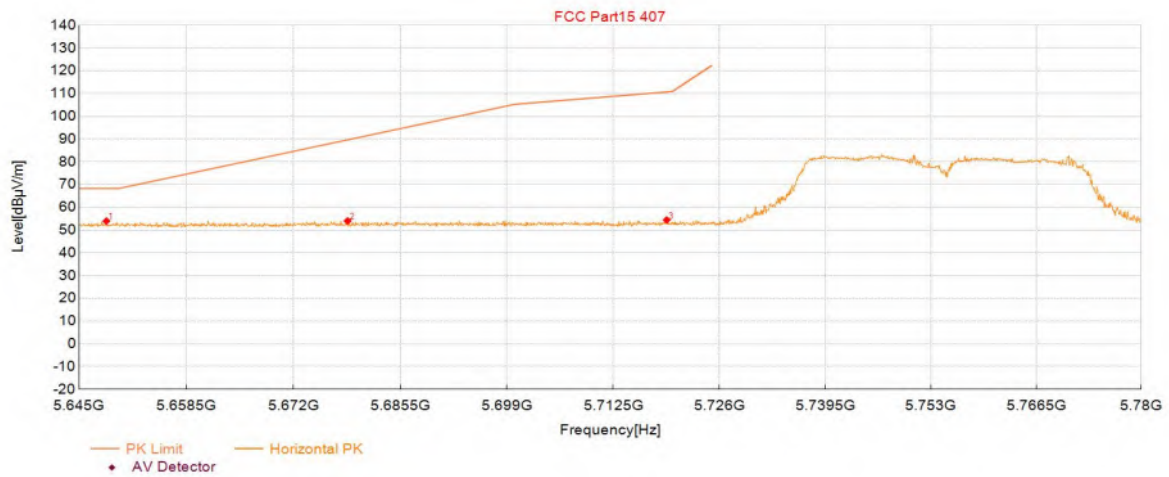
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5755	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-14 09:46:46

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5648.44	36.35	53.99	17.64	68.30	14.31	150	344	Horizontal
2	5678.83	36.26	54.03	17.77	89.68	35.65	150	200	Horizontal
3	5719.29	36.56	54.46	17.90	110.70	56.24	150	84	Horizontal

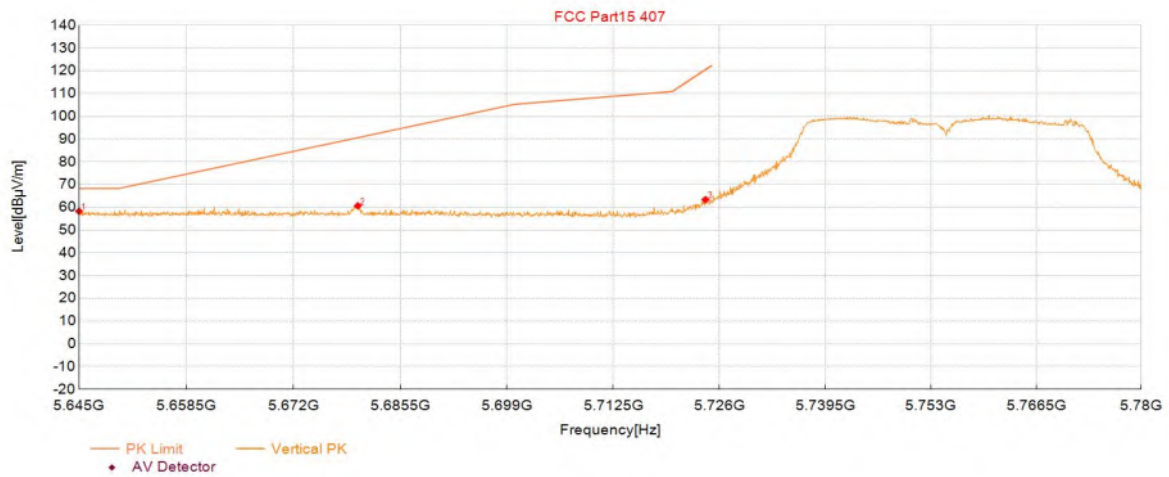
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5755	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-14 09:47:22

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading (dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5645.00	40.67	58.30	17.63	68.30	10.00	150	189	Vertical
2	5680.12	42.91	60.69	17.78	90.63	29.94	150	212	Vertical
3	5724.22	45.48	63.39	17.91	120.52	57.13	150	198	Vertical

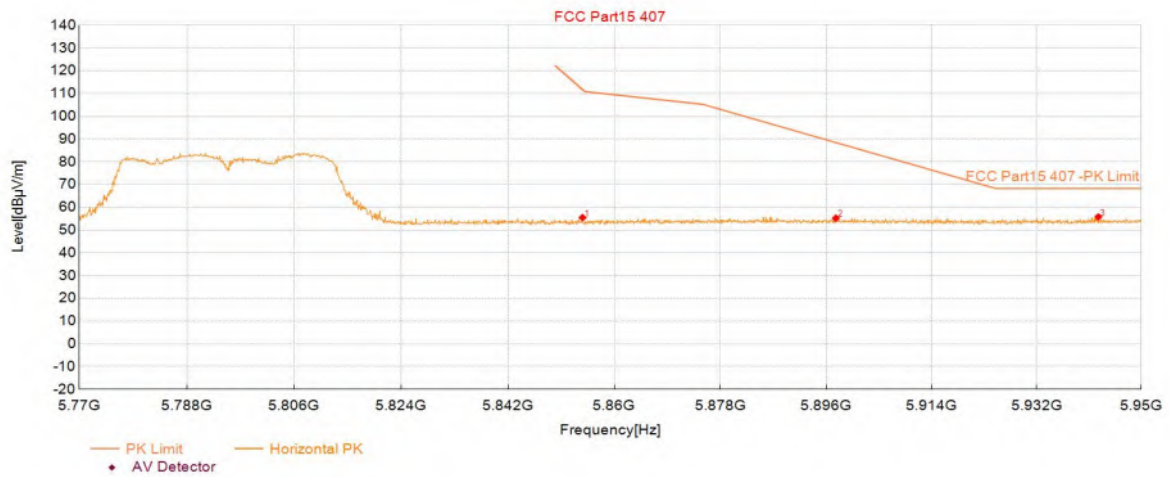
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-14 09:51:05

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5854.64	36.93	55.47	18.54	111.72	56.25	150	84	Horizontal
2	5897.68	36.35	55.25	18.90	88.48	33.23	150	54	Horizontal
3	5942.62	36.92	55.80	18.88	68.30	12.50	150	272	Horizontal

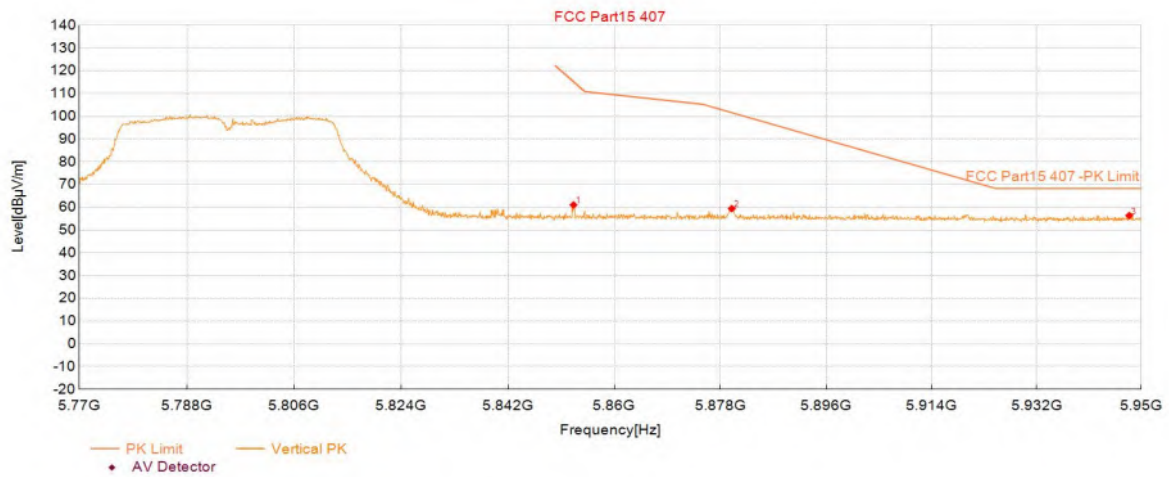
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
Customer:	Portable Capture Host		
EUT:			
Model:	CSP50	SN:	
Mode:	11N40_5795	Voltage:	DC 24V
Environment:	25.3℃ 53%	Engineer:	Soho Liu
Remark:			

Start of Test:2026-07-14 09:53:32

Test Graph



Suspected Data List

NO.	Frequency (MHz)	Reading(dBμV/m)	PK Level (dBμV/m)	Factor (dB)	PK Limit (dBμV/m)	Margin (dB)	Height (cm)	Angle (°)	Polarity
1	5853.11	42.54	61.07	18.53	115.20	54.13	150	66	Vertical
2	5879.94	40.68	59.43	18.75	101.63	42.20	150	149	Vertical
3	5947.93	37.55	56.43	18.88	68.30	11.87	150	149	Vertical

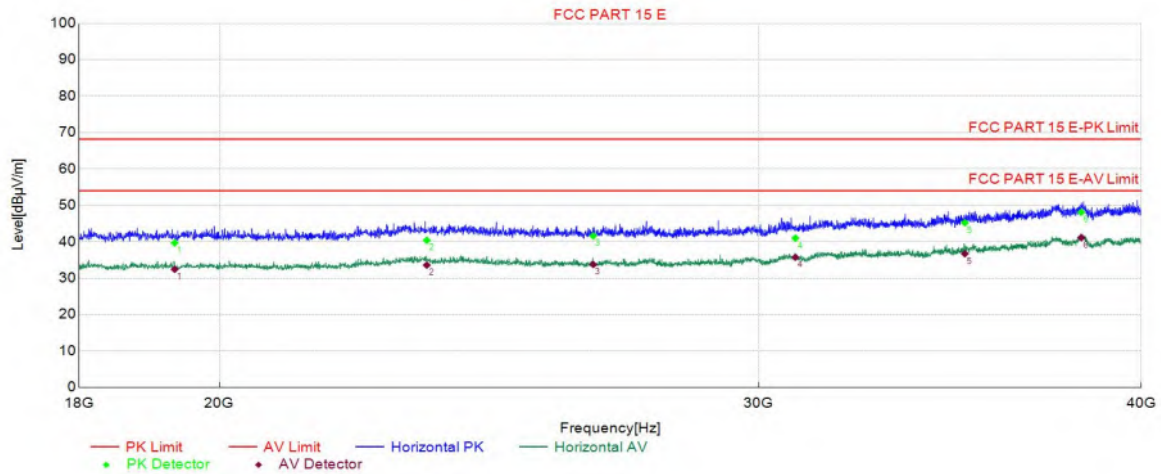
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
EUT:	Portable Capture Host		
Model:	CSP50		
Mode:	11N40_5190		
Environment:	25.1℃ / 49%	Engineer:	Soho Liu
Voltage:	DC 24V	SN:	
Remark:			

Start of Test:2026-07-15 19:46:39

Test Graph



PK Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	PKLevel (dBμV/m)	PK Limit (dBμV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	19342.268	3.13	39.68	68.20	28.52	150	58	Horizontal
2	23377.876	8.69	40.40	68.20	27.80	150	229	Horizontal
3	26493.699	5.38	41.62	68.20	26.58	150	306	Horizontal
4	30841.768	11.55	40.99	68.20	27.21	150	315	Horizontal
5	35031.406	13.48	45.21	68.20	22.99	150	172	Horizontal
6	38235.247	14.68	48.10	68.20	20.10	150	358	Horizontal

AV Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	AVLevel (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	19342.268	3.13	32.44	54.00	21.56	150	58	Horizontal
2	23377.876	8.69	33.57	54.00	20.43	150	229	Horizontal
3	26493.699	5.38	33.75	54.00	20.25	150	306	Horizontal
4	30841.768	11.55	35.74	54.00	18.26	150	315	Horizontal
5	35031.406	13.48	36.72	54.00	17.28	150	172	Horizontal
6	38235.247	14.68	41.12	54.00	12.88	150	358	Horizontal

Note1: Level=Reading+Factor, Margin=Limit - Level

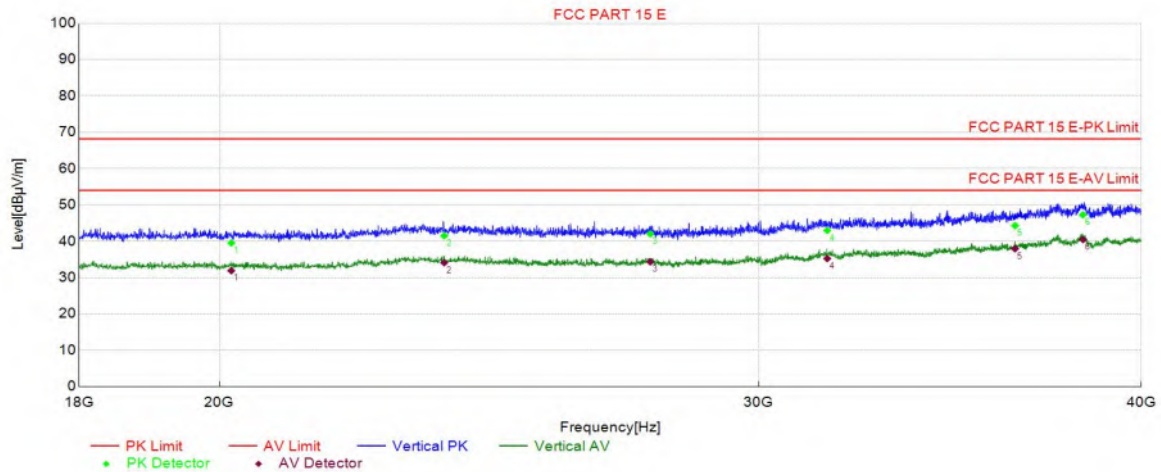
Test Report

Project Information

EUT:	Portable Capture Host		
Model:	CSP50		
Mode:	11N40_5190		
Environment:	25.1℃ / 49%	Engineer:	Soho Liu
Voltage:	DC 24V	SN:	
Remark:			

Start of Test:2026-07-15 19:47:24

Test Graph



PK Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	PKLevel (dBμV/m)	PK Limit (dBμV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	20182.837	3.51	39.51	68.20	28.69	150	187	Vertical
2	23685.937	8.93	41.51	68.20	26.69	150	228	Vertical
3	27655.531	4.96	42.03	68.20	26.17	150	360	Vertical
4	31589.918	12.05	42.95	68.20	25.25	150	352	Vertical
5	36378.076	14.51	44.30	68.20	23.90	150	360	Vertical
6	38283.657	14.63	47.27	68.20	20.93	150	216	Vertical

AV Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	AVLevel (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	20182.837	3.51	31.89	54.00	22.11	150	187	Vertical
2	23685.937	8.93	34.08	54.00	19.92	150	228	Vertical
3	27655.531	4.96	34.32	54.00	19.68	150	360	Vertical
4	31589.918	12.05	35.23	54.00	18.77	150	352	Vertical
5	36378.076	14.51	37.93	54.00	16.07	150	360	Vertical
6	38283.657	14.63	40.45	54.00	13.55	150	216	Vertical

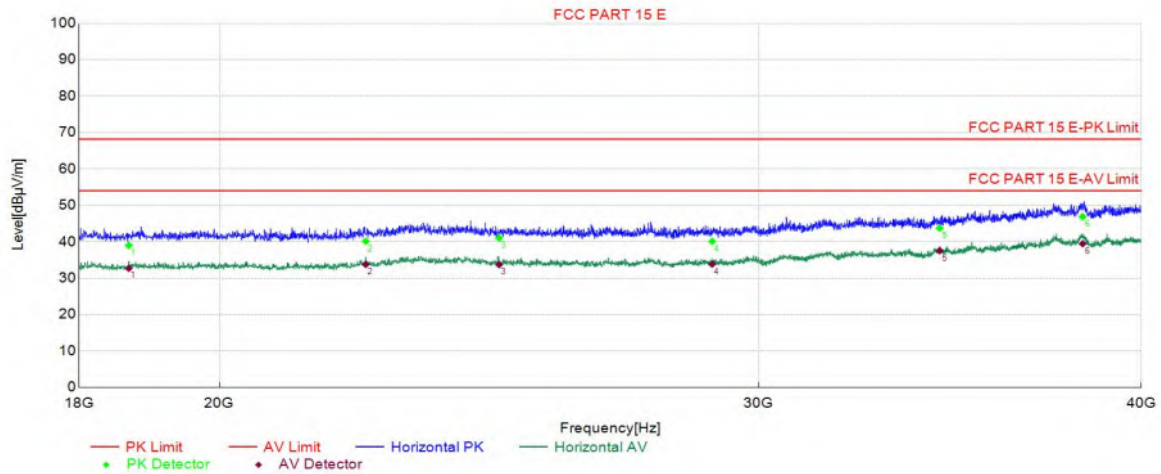
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
EUT:	Portable Capture Host		
Model:	CSP50		
Mode:	11N40_5795		
Environment:	25.1℃ / 49%	Engineer:	Soho Liu
Voltage:	DC 24V	SN:	
Remark:			

Start of Test:2026-07-15 19:49:17

Test Graph



PK Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	PKLevel (dBμV/m)	PK Limit (dBμV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	18686.537	2.81	39.00	68.20	29.20	150	36	Horizontal
2	22330.466	6.39	40.12	68.20	28.08	150	122	Horizontal
3	24684.937	8.49	41.01	68.20	27.19	150	153	Horizontal
4	28971.394	7.96	40.11	68.20	28.09	150	247	Horizontal
5	34375.675	12.23	43.71	68.20	24.49	150	45	Horizontal
6	38274.855	14.65	46.86	68.20	21.34	150	199	Horizontal

AV Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	AVLevel (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	18686.537	2.81	32.72	54.00	21.28	150	36	Horizontal
2	22330.466	6.39	33.79	54.00	20.21	150	122	Horizontal
3	24684.937	8.49	33.72	54.00	20.28	150	153	Horizontal
4	28971.394	7.96	33.85	54.00	20.15	150	247	Horizontal
5	34375.675	12.23	37.55	54.00	16.45	150	45	Horizontal
6	38274.855	14.65	39.47	54.00	14.53	150	199	Horizontal

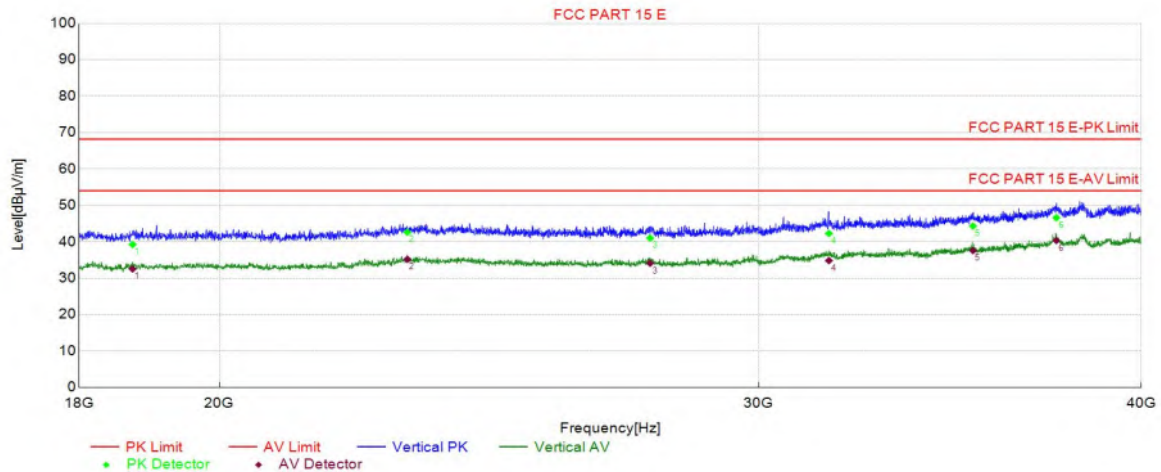
Note1: Level=Reading+Factor, Margin=Limit - Level

Test Report

Project Information			
EUT:	Portable Capture Host		
Model:	CSP50		
Mode:	11N40_5795		
Environment:	25.1℃ / 49%	Engineer:	Soho Liu
Voltage:	DC 24V	SN:	
Remark:			

Start of Test:2026-07-15 19:50:02

Test Graph



PK Final Data List

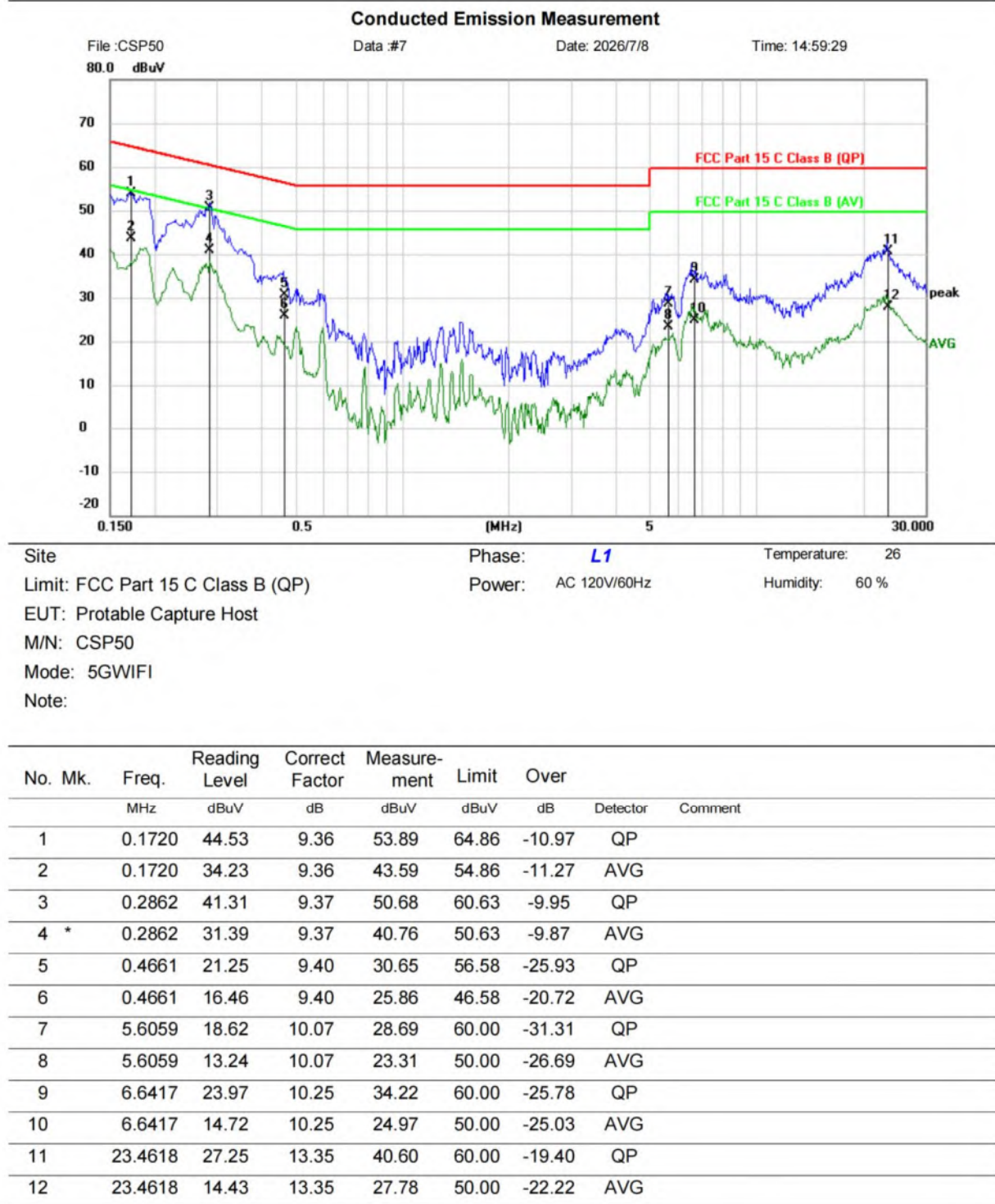
NO.	Freq. (MHz)	Factor (dB/m)	PKLevel (dBμV/m)	PK Limit (dBμV/m)	PK Margin (dB)	Height (cm)	Angle (°)	Polarity
1	18739.348	2.83	39.25	68.20	28.95	150	120	Vertical
2	23039.008	8.43	42.63	68.20	25.57	150	187	Vertical
3	27651.130	4.96	41.00	68.20	27.20	150	53	Vertical
4	31629.526	12.07	42.28	68.20	25.92	150	255	Vertical
5	35247.049	13.66	44.30	68.20	23.90	150	274	Vertical
6	37526.705	14.87	46.61	68.20	21.59	150	322	Vertical

AV Final Data List

NO.	Freq. (MHz)	Factor (dB/m)	AVLevel (dBμV/m)	AV Limit (dBμV/m)	AV Margin (dB)	Height (cm)	Angle (°)	Polarity
1	18739.348	2.83	32.53	54.00	21.47	150	120	Vertical
2	23039.008	8.43	35.19	54.00	18.81	150	187	Vertical
3	27651.130	4.96	34.10	54.00	19.90	150	53	Vertical
4	31629.526	12.07	34.82	54.00	19.18	150	255	Vertical
5	35247.049	13.66	37.57	54.00	16.43	150	274	Vertical
6	37526.705	14.87	40.35	54.00	13.65	150	322	Vertical

Note1: Level=Reading+Factor, Margin=Limit - Level

APPENDIX C – AC Power Line Conducted Emission Test Data



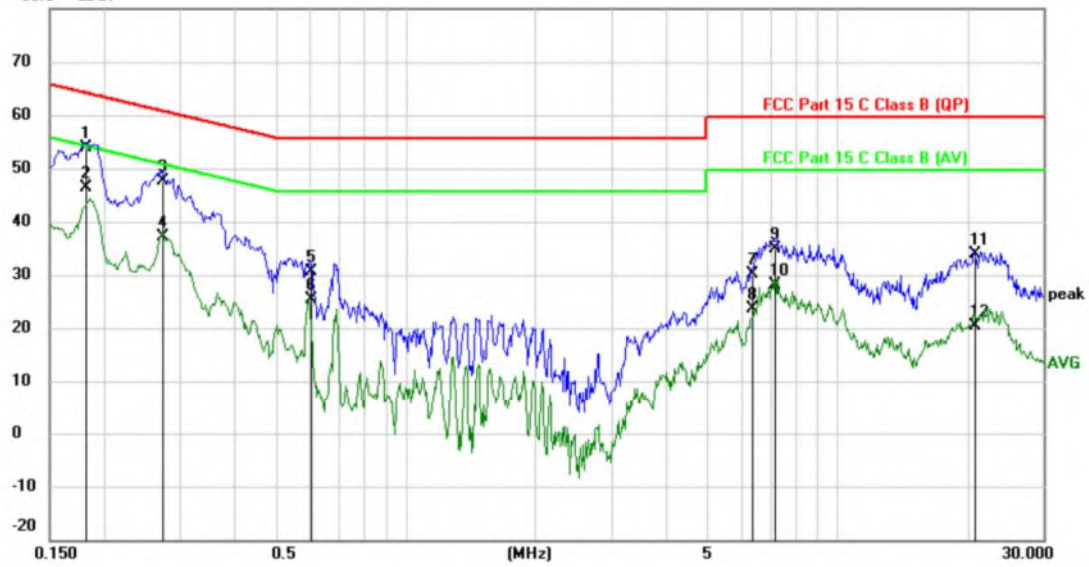
Conducted Emission Measurement

File :CSP50
80.0 dBuV

Data :#8

Date: 2026/7/8

Time: 15:05:57



Site

Phase: **N**

Temperature: 26

Limit: FCC Part 15 C Class B (QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: Portable Capture Host

M/N: CSP50

Mode: 5GWIFI

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1819	44.63	9.33	53.96	64.40	-10.44	peak	
2		0.1819	37.03	9.33	46.36	64.40	-18.04	peak	
3		0.2740	38.31	9.34	47.65	61.00	-13.35	peak	
4		0.2740	27.87	9.34	37.21	61.00	-23.79	peak	
5		0.6018	21.36	9.36	30.72	56.00	-25.28	peak	
6		0.6018	15.98	9.36	25.34	56.00	-30.66	peak	
7		6.3379	19.94	10.07	30.01	60.00	-29.99	peak	
8		6.3379	13.54	10.07	23.61	60.00	-36.39	peak	
9		7.1700	24.57	10.20	34.77	60.00	-25.23	peak	
10		7.1700	17.93	10.20	28.13	60.00	-31.87	peak	
11		20.7939	21.30	12.54	33.84	60.00	-26.16	peak	
12		20.7939	7.91	12.54	20.45	60.00	-39.55	peak	

END OF REPORT