



FCC - TEST REPORT

Report Number	: 709502506326-00C	Date of Issue:	August 27, 2025
Model	IPC-S2XEP-6M0S, IPC-S2XEN-6M0S, IPC-S2XEP-8M0S, IPC-S2XEN-8M0S, IPC-S2XEP-10M0S, IPC-S2XEN-10M0S, IPC-S2XEP-6M0S-imou, IPC-S2XEN-6M0S-imou, IPC-S2XEP-6M0S-V-imou, IPC-S2XEP-8M0S-imou, IPC-S2XEN-8M0S-imou, IPC-S2XEP-8M0S-V-imou, IPC-S2XEP-10M0S-imou, IPC-S2XEN-10M0S-imou, IPC-S2XEP-10M0S-V-imou		
Product Type	Consumer Camera		
FCC ID	2BQWU-S2XEXXM0S		
Applicant	Hangzhou Huacheng Software Technology Co., Ltd.		
Address	15th Floor, Building 3, No. 582, Liye Road, Changhe Street, Binjiang District, Hangzhou, China		
Manufacturer	Hangzhou Huacheng Software Technology Co., Ltd.		
Address	15th Floor, Building 3, No. 582, Liye Road, Changhe Street, Binjiang District, Hangzhou, China		

Test Result	: ☒ Positive ☐ Negative
Total pages including Appendices	: 102



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2 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
709502506326-00C	First Issue	08/25/2025

3 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
No.16 Lane, 1951 Du Hui Road,
Shanghai 201108,
P.R. China

Telephone: +86 21 6141 0123

Fax: +86 21 6140 8600

FCC Registration No.: 820234

FCC Designation Number: CN1183

ISED CAB identifier CN0101

IC Registration No.: 31668



4 Description of the Equipment under Test

Product:	Consumer Camera
Model no.:	IPC-S2XEP-6M0S, IPC-S2XEN-6M0S, IPC-S2XEP-8M0S, IPC-S2XEN-8M0S, IPC-S2XEP-10M0S, IPC-S2XEN-10M0S, IPC-S2XEP-6M0S-imou, IPC-S2XEN-6M0S-imou, IPC-S2XEP-6M0S-V-imou, IPC-S2XEP-8M0S-imou, IPC-S2XEN-8M0S-imou, IPC-S2XEP-8M0S-V-imou, IPC-S2XEP-10M0S-imou, IPC-S2XEN-10M0S-imou, IPC-S2XEP-10M0S-V-imou
FCC ID:	2BQWU-S2XEXXM0S
Options and accessories:	NA
Rating:	100~240V, 50/60Hz
RF Transmission Frequency:	For 2.4G Wi-Fi: 802.11b/g/n-HT20/ax-HE20: 2412~2462 MHz 802.11n-HT40/ax-HE40: 2422~2452 MHz For 5G Wi-Fi: 802.11a/n-HT20/ax-HE20/ac-VHT20: 5180~5240 MHz (U-NII-1) 802.11n-HT40/ax-HE40/ac-VHT40: 5190~5230 MHz (U-NII-1) 802.11a/n-HT20/ax-HE20/ac-VHT20: 5745~5825 MHz (U-NII-3) 802.11n-HT40/ax-HE40/ac-VHT40: 5755~5795 MHz (U-NII-3)
No. of Operated Channel:	For 2.4G Wi-Fi: 11 for 802.11b/802.11g/802.11n(H20)/802.11ax(HE20) 7 for 802.11n(HT20)/ 802.11ax(HE40) For 5G Wi-Fi: U-NII-1: 4 for 802.11a/n-HT20/ax-HE20/ac-VHT20 2 for 802.11n-HT40/ax-HE40/ac-VHT40 U-NII-3: 5 for 802.11a/n-HT20/ax-HE20/ac-VHT20 2 for 802.11n-HT40/ax-HE40/ac-VHT40
Modulation:	For 2.4G Wi-Fi: Direct Sequence Spread Spectrum (DSSS) for 802.11b Orthogonal Frequency Division Multiplexing (OFDM) for 802.11g/n Orthogonal Frequency-Division Multiple Access (OFDMA) for 802.11ax

For 5G Wi-Fi:

Orthogonal Frequency Division Multiplexing (OFDM) for 802.11a/n/ac
Orthogonal Frequency-Division Multiple Access (OFDMA) for 802.11ax

Hardware Version: V1.0

Software Version: V3.001.0000000.4.R.250514

Data speed:

- 11b 1-11Mbps
- 11g 6-54Mbps
- 11n(HT20) 6.5-72.2Mbps
- 11n(HT40) 13.5-150Mbps
- 11ac(VHT20) 6.5 ~ 86.7Mbps
- 11ac(VHT40) 13.5 ~ 200Mbps
- 11ax(HE20) 7.313 ~ 143.382Mbps
- 11ax(HE40) 14.625 ~ 286.765Mbps

Channel list:

For 2.4G Wi-Fi:

802.11b/g/n(HT20)/ax(HT20)			
Ch	Fre(MHz)	Ch	Fre(MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437		

802.11n(HT40)/ax(HT40)			
Ch	Fre(MHz)	Ch	Fre(MHz)
3	2422	7	2442
4	2427	8	2447
5	2432	9	2452
6	2437		

For 5G Wi-Fi:

Band (GHz)	Operating Channel Number	Channel center frequencies for 20MHz bandwidth (MHz)
5.15GHz~5.25GHz	36	5180
	40	5200
	44	5220
	48	5240
5.725GHz~5.825GHz	149	5745
	153	5765
	157	5785
	161	5805
	165	5825

Band (GHz)	Operating Channel Number	Channel center frequencies for 40MHz bandwidth (MHz)
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5.15GHz~5.25GHz	38	5190
	46	5230
5.725GHz~5.825GHz	151	5755
	159	5795

Antenna Type: PIFA antenna

Antenna Gain: For 2.4G Wi-Fi: 1.29 dBi
For 5G Wi-Fi: 2.86 dBi

Description of the EUT: The Equipment Under Test (EUT) is a Consumer Camera with Wi-Fi Module. The EUT support Wi-Fi operated at 2.4GHz and 5GHz.

Test sample no.: SHA-940006-3 (Radiated sample)
SHA-940006-2 (Conducted sample)

The sample's mentioned in this report is/are submitted/ supplied/ manufactured by client. The laboratory therefore assumes no responsibility for accuracy of information on the brand name, model number, origin of manufacture, consignment, antenna gain or any information supplied.



5 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart E, October 1, 2024 Edition	PART 15 - RADIO FREQUENCY DEVICES Subpart E - Unlicensed National Information Infrastructure Devices

Test Method:
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2020, American National Standard for Testing Unlicensed Wireless Devices



6 Summary of Test Results

Technical Requirements						
FCC Part 15 Subpart C & E						
Test Condition		Pages	Test Site	Test Result		
				Pass	Fail	N/A
§15.207	Conducted emission AC power port	14-16	Site 1	☒	☐	☐
§15.407(e)	Emission bandwidth	17-18	Site 1	☒	☐	☐
15.407(a)(i)	Maximum Conducted Output Power	19	Site 1	☒	☐	☐
15.407(a)(i)	Maximum Power Spectral Density	20	Site 1	☒	☐	☐
§15.407(g)	Frequencies Stability	21	Site 1	☒	☐	☐
§15.407(b)(1), 15.407(b)(2), 15.407(b)(3), 15.407(b)(4), 15.407(b)(5), 15.407(b)(6), 15.407(b)(7), 15.209	Spurious radiated emissions for transmitter	22-98	Site 1	☒	☐	☐
§15.203	Antenna requirement	See note 1		☒	☐	☐

Remark 1: N/A – Not Applicable.

Remark 2: The EUT only operation at 2.4G BT and 5G Wi-Fi U-NII-1 & U-NII-3 (5180MHz-5240MHz, 5745MHz-5825MHz).

Note 1: The EUT uses undetachable antennas, antenna information is listed in section 4. According to §15.203, it is considered sufficiently to comply with the provisions of this section.

15.203 requirement: 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, 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. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.



7 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2BQWU-S2XEXXM0S complies with Section 15.207, 15.209, 15.407 of the FCC Part 15, Subpart E Rules.

This report is only for 5GHz Wi-Fi, for the 2.4GHz Wi-Fi test report please refer to 709502506326-00B. The TX and RX range is 5180MHz-5240MHz, 5745MHz-5825MHz,

According to the client's declaration, all the models have the same OS, Motherboard, wireless module components etc.; The main difference between them is the Hardware Resolution which does not impact the RF functionality.

So model IPC-S2XEN-8M0S was chosen to perform all the tests.

We tested it and listed the worst data in this report.

SUMMARY:

All tests according to the regulations cited on page 8 were

■ - Performed

□ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: August 6, 2025

Testing Start Date: August 6, 2025

Testing End Date: August 25, 2025

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Reviewed by:

Prepared by:

Tested by:



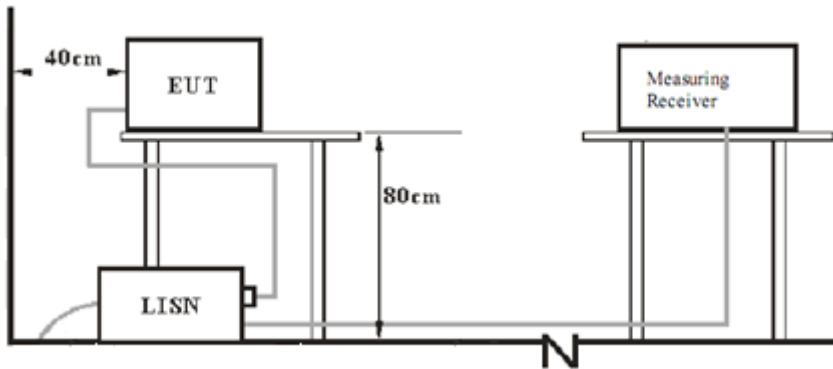
Hui TONG
Review Engineer

Wenqiang LU
Project Engineer

Doujun XU
Test Engineer

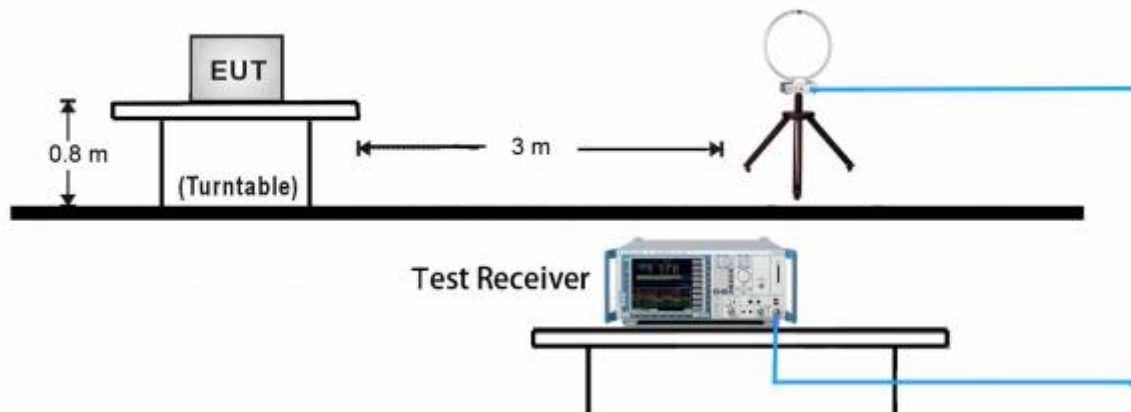
8 Test Setups

8.1 AC Power Line Conducted Emission test setups

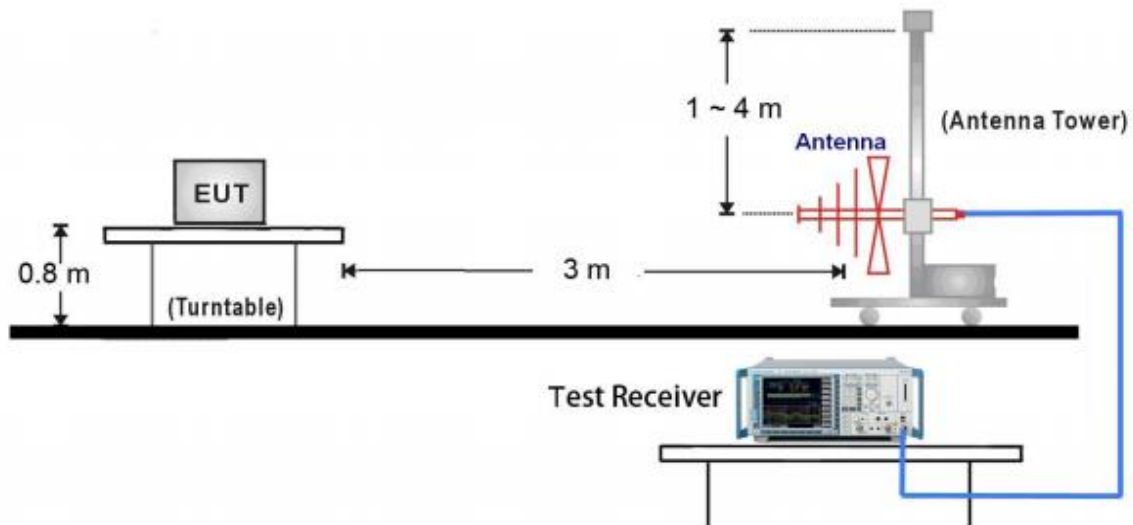


8.2 Radiated test setups

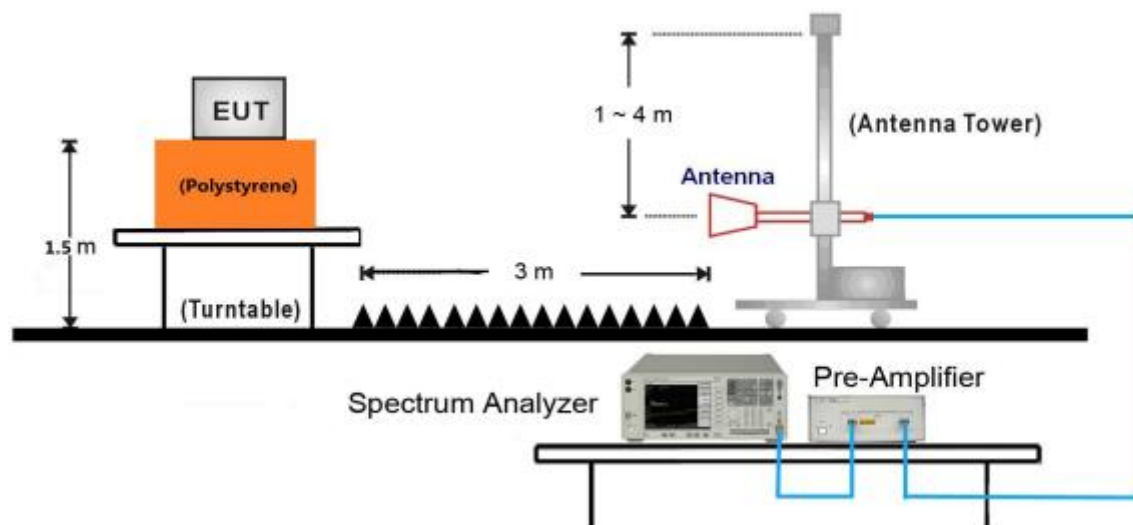
9kHz ~ 30MHz Test Setup:



30MHz ~ 1GHz Test Setup:

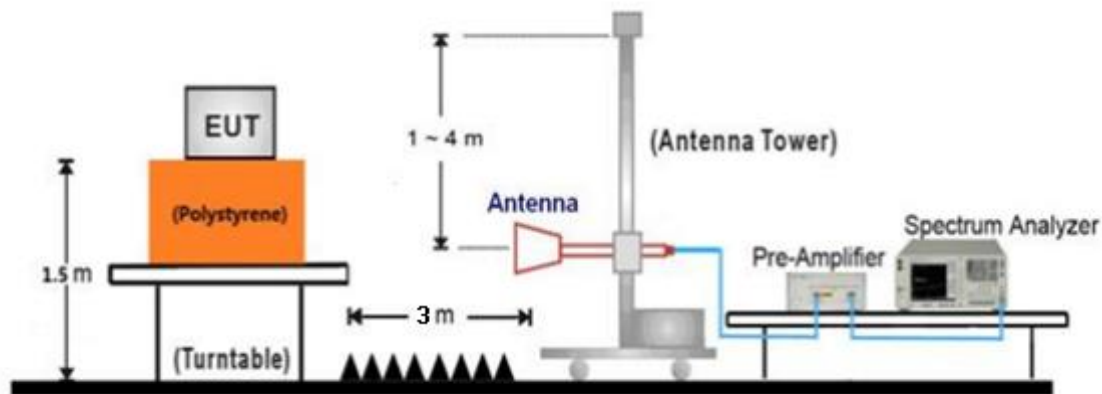


1GHz ~ 18GHz Test Setup:

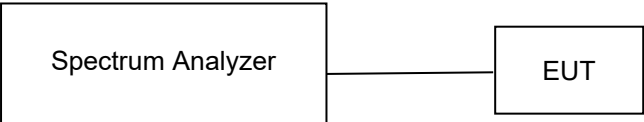




18GHz ~ 40GHz Test Setup:



8.3 Conducted RF test setups



9 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Notebook	Lenove	E470	PF-OU5TS7 17/09

Test software: SecureCRT.exe, which used to control the EUT in continues transmitting mode.

The system was configured to channel:

Test Mode	Channel (MHz)		
802.11a, 802.11n HT20 802.11ac VHT20 802.11ax HE20	5G WIFI-Band 1		
	CH36 (5180MHz)	CH40 (5200MHz)	CH48 (5240MHz)
	CH144 (5720MHz)		
	5G WIFI-Band 3		
	CH149 (5745MHz),	CH157 (5785MHz)	CH165 (5825MHz)

Test Mode	Channel (MHz)	
802.11ac VHT40 802.11ax HE40	5G WIFI-Band 1	
	CH38 (5190MHz)	CH46 (5230MHz)
	5G WIFI-Band 3	
	CH151 (5755MHz)	CH159 (5795MHz)

The pre-test has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

	Modulation Type	Data Rate	Index Value (Power level setting)
SISO	802.11a OFDM	6Mbps	default
	802.11n (HT20): OFDM	MCS0 (6.5Mbps)	default
	802.11ac (VHT20): OFDM	11ac 6.5Mbps	default
	802.11ax (HE20): OFDMA	11ax 7.313Mbps	default
	802.11n (HT40): OFDM	MCS0 (13.5Mbps)	default
	802.11ac (VHT40): OFDM	11ac 13.5Mbps	default
	802.11ax (HE40): OFDMA	11ax 14.625Mbps	default

10 Technical Requirement

10.1 Conducted Emission

Test Method

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. Both sides of AC line were checked for maximum conducted interference.
6. The frequency range from 150 kHz to 30 MHz was searched.
7. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively

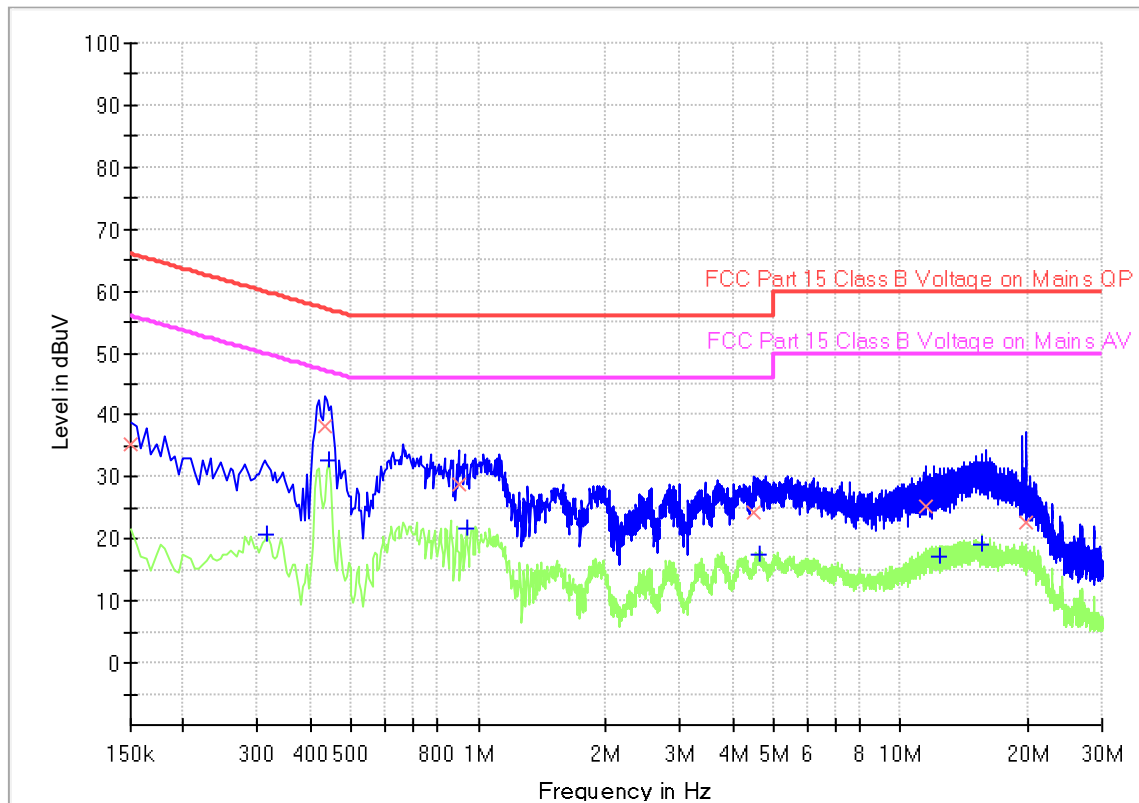
Limit

According to §15.207, conducted emissions limit as below:

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Remark: “*” Decreasing linearly with logarithm of the frequency

Product Type : Consumer Camera
 M/N : IPC-S2XEN-8M0S
 Operating Condition : Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
 Test Specification : L-line
 Comment : 120V~, 60Hz



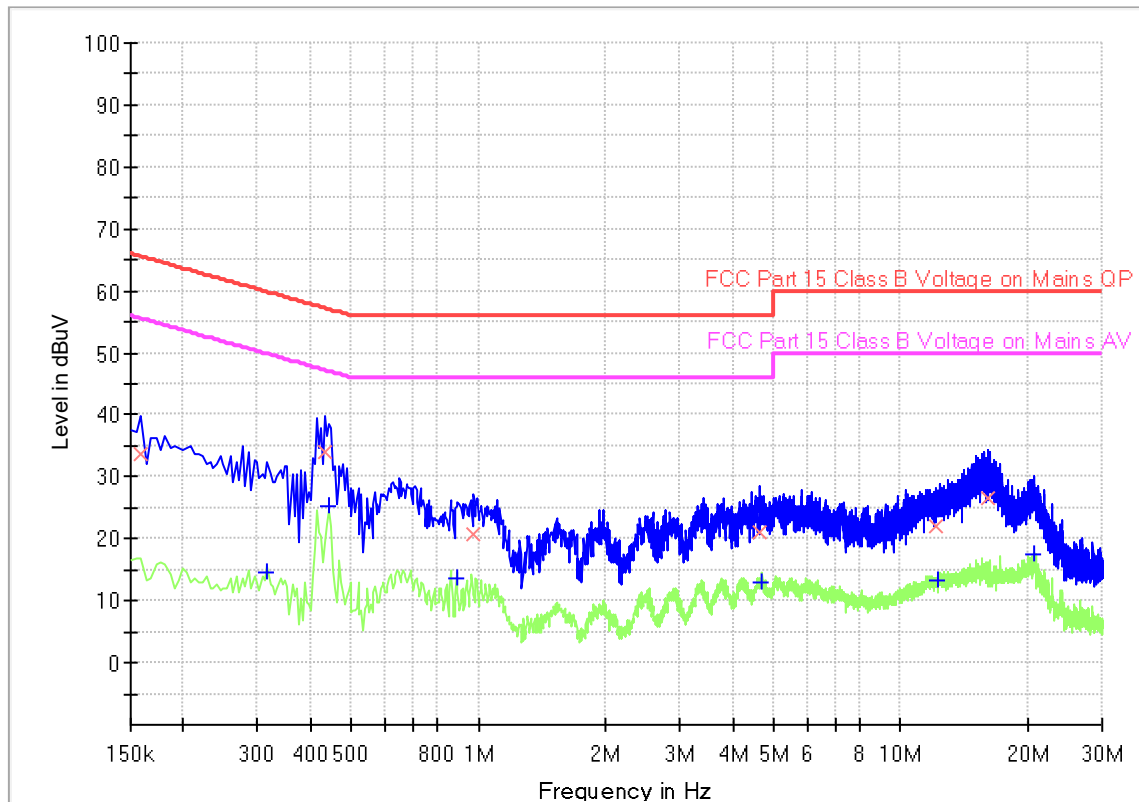
Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	35.24	---	66.00	30.76	1000.0	9.000	L1	19.5
0.316500	---	20.69	49.80	29.11	1000.0	9.000	L1	19.4
0.433500	38.34	---	57.19	18.85	1000.0	9.000	L1	19.4
0.442500	---	32.55	47.01	14.46	1000.0	9.000	L1	19.4
0.897000	28.79	---	56.00	27.21	1000.0	9.000	L1	19.4
0.937500	---	21.60	46.00	24.40	1000.0	9.000	L1	19.4
4.506000	24.26	---	56.00	31.74	1000.0	9.000	L1	19.5
4.614000	---	17.57	46.00	28.43	1000.0	9.000	L1	19.5
11.454000	25.14	---	60.00	34.86	1000.0	9.000	L1	19.6
12.381000	---	17.16	50.00	32.84	1000.0	9.000	L1	19.7
15.598500	---	19.20	50.00	30.80	1000.0	9.000	L1	19.8
19.860000	22.66	---	60.00	37.34	1000.0	9.000	L1	19.9

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB) + 10dB Attenuator

Product Type : Consumer Camera
 M/N : IPC-S2XEN-8M0S
 Operating Condition : Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
 Test Specification : N-line
 Comment : 120V~, 60Hz



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.159000	33.54	---	65.52	31.98	1000.0	9.000	N	19.5
0.316500	---	14.69	49.80	35.11	1000.0	9.000	N	19.4
0.433500	33.97	---	57.19	23.22	1000.0	9.000	N	19.5
0.442500	---	25.11	47.01	21.90	1000.0	9.000	N	19.5
0.888000	---	13.52	46.00	32.48	1000.0	9.000	N	19.4
0.973500	20.64	---	56.00	35.36	1000.0	9.000	N	19.4
4.623000	20.92	---	56.00	35.08	1000.0	9.000	N	19.5
4.708500	---	13.00	46.00	33.00	1000.0	9.000	N	19.5
12.093000	21.99	---	60.00	38.01	1000.0	9.000	N	19.7
12.228000	---	13.29	50.00	36.71	1000.0	9.000	N	19.7
16.080000	26.62	---	60.00	33.38	1000.0	9.000	N	19.8
20.719500	---	17.43	50.00	32.57	1000.0	9.000	N	19.9

Note 1: Measure Level = Reading Level + Factor
 Factor = Cable Loss + LISN Factor + 10dB Attenuator

10.2 Emission bandwidth

1、 Test Method of 26dB Bandwidth

According to KDB789033 D02

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

Limit: No limit

2、 Test Method of 6dB Bandwidth

According to KDB789033 D02

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

Limit: $\geq 500\text{KHz}$

3、 Test Method of 99% Bandwidth

According to KDB789033 D02

- a) Set center frequency to the nominal EUT channel center frequency
- b) Set span = 1.5 times to 5.0 times the OBW.
- c) Set RBW = 1 % to 5 % of the OBW
- d) Set VBW $\geq 3 \cdot$ RBW
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99 % power bandwidth function of the instrument (if available).
- g) If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Limit: No limit



26dB Bandwidth Test Result:

Test data should be referred to Appendix A for 709502506326-00C.

6dB Bandwidth Test Result:

Test data should be referred to Appendix A for 709502506326-00C.

99% Bandwidth Test Result

Test data should be referred to Appendix A for 709502506326-00C.

10.3 Maximum conducted output power

Test Method

According to C63.10, the EUT was placed on 0.8m height table, the RF output of EUT was connected to the Spectrum Analyzer by RF cable. The path loss was compensated to the results for each measurement.

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:
The EUT is configured to transmit continuously or to transmit with a consistent duty cycle. At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. 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, x , of the transmitter output signal as described in 12.2 in C63.10-2020.
3. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
4. Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

Limits:

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

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

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

Maximum conducted output power Test Result:

Test data should be referred to Appendix A for 709502506326-00C.

10.4 Maximum power spectral density

Test Method

Test Method (Method SA-2 in C63.10-2020)

The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement. (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. Measure the duty cycle.
2. Set span to encompass the entire emission bandwidth (EBW) of the signal.
3. Set RBW = 1 MHz.
4. Set VBW $\geq$ 3 MHz.
5. Number of points in sweep $\geq$ 2 Span / RBW.
6. Sweep time = auto.
7. Detector = RMS
8. Trace average at least 100 traces in power averaging mode.
9. Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

Limit:

The maximum power spectral density shall not exceed 11dBm for the 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725 GHz Band in any 1 megahertz band.

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

Test Result:

Test data should be referred to Appendix A for 709502506326-00C.



10.5 Frequencies Stability

Test Method

1. The EUT was placed on 0.8m height table, the RF output of EUT was connected to the test receiver by RF cable. The path loss was compensated to the results for each measurement. The EUT was placed inside the environmental test chamber.
2. Set center frequency of the channel under test.
3. Test the OBW and record the frequency of the left and right frequency point.
4. Repeat the test at temperature specified by manufacture as below by not more than 10 °C step by normal voltage.
5. Repeat the test at 85% and 115% of the nominal supply voltage as below under normal temperature (+15 °C to +25 °C).

User manual temperature is -10°C to +45°C, normal Temperature is +25°C.

Limit:

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 users manual.

Test Results (All conditions and all modes were performed, only list Worst-Case in the report)

Remark: NV is normal Voltage: 120Vac, HV is High Voltage: 138Vac, LV is Low Voltage: 102Vac, NT is normal Temperature: +25°C.

Test Result:

Test data should be referred to Appendix A for 709502506326-00C.

10.6 Spurious radiated emissions for transmitter

Transmitting spurious emission test result as below:

Test Method:

Radiated Mode:

1. The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned
5. Use the following spectrum analyzer settings According to C63.10:
 - 1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - 2) For Above 1GHz:
Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - 3) Procedures for Average Unwanted Emissions Measurements above 1000 MHz
 - a) RBW = 1 MHz.
 - b) VBW $\geq$ [3 $\times$ RBW].
 - c) Detector = Power averaging (rms), if [span / (# of points in sweep)] $\leq$ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.
 - d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)
 - e) Sweep time = auto.
 - f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)
 - g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the

emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

(1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is $[10 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

(2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is $[20 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels. If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Limit

The radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section 15.205, must comply with the radiated emission limits specified in section 15.209.

Frequency MHz	Field Strength uV/m	Field Strength dBuV/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

According to part 15.407b (1) (2) (3) (4)

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.

According to part 15.407b (9), Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

According to part 15.407b (10), The provisions of §15.205 apply to intentional radiators operating under this section.

Note: According to C63.10, the Conversion Factors between E[dBuV/m] and EIRP[dBm] as below: $E[dBuV/m] = EIRP[dBm] + 95.2$, for $d = 3$ meters.



According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

The only worse case listed in the report.

Transmitting spurious emission worse case test result:

Transmitting spurious emission test result as below:

Remark:

- (1) Above 1GHz Corrector factor= Antenna Factor +Cable Loss - Amp. Factor.
- (2) Below 1GHz Corrector factor= Antenna Factor +Cable Loss.
- (3) “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB μ V/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.
- (4) “#” is band edge band
- (5) Testing is carried out with frequency rang 30MHz to 40GHz, which data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (6) The Low frequency, which start from 9KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

Test result

The worst case of Radiated Emission below 1GHz: Only the worst case listed as below.

0.009-30MHz Radiated Emission

EUT Information

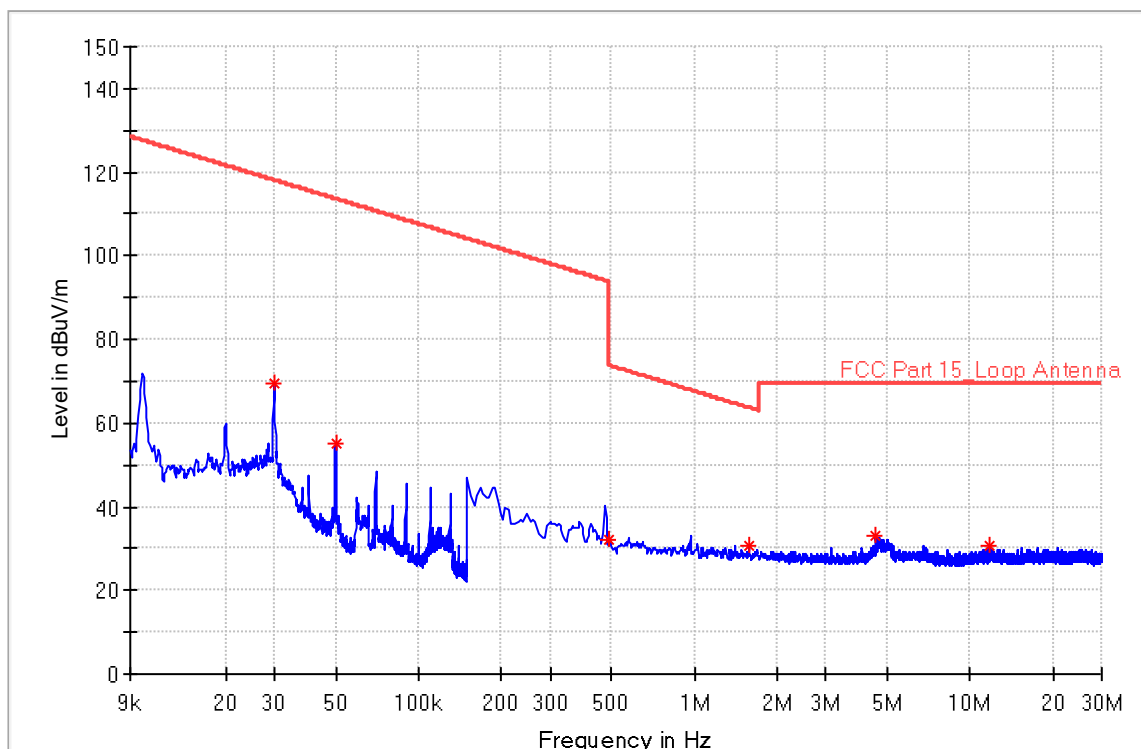
EUT Name:	Consumer Camera
Model:	IPC-S2XEN-8M0S
Client:	Hangzhou Huacheng Software Technology Co., Ltd.
Op Cond:	Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
Operator:	Doujun XU
Test Spec:	FCC Part 15.209(a)
Sample No:	SHA-940006-3

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup:	RE_Loop Antenna V
Receiver:	[ESR 3]
Level Unit:	dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamplifier
9 kHz - 150 kHz	88.125 Hz	PK+	200 Hz	0.01 s	0 dB
150 kHz - 30 MHz	4.39 kHz	PK+	9 kHz	0.01 s	0 dB

Full Spectrum



Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.029974	69.69	118.07	48.38	100.0	H	229.0	19.0
0.049978	55.10	113.63	58.53	100.0	H	258.0	19.0
0.492397	32.01	73.76	41.75	100.0	H	50.0	18.8
1.572265	30.66	63.67	33.01	100.0	H	230.0	19.0
4.566044	33.09	69.54	36.45	100.0	H	265.0	19.1
11.809059	30.71	69.54	38.83	100.0	H	198.0	18.8

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



0.009-30MHz Radiated Emission

EUT Information

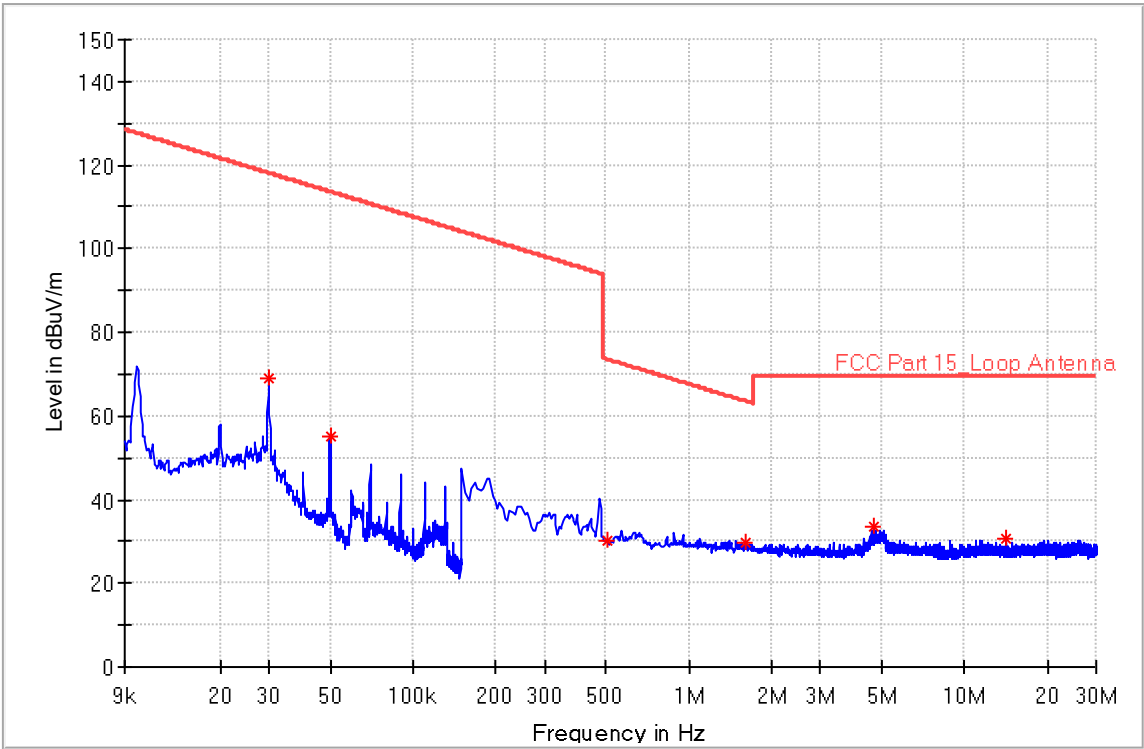
EUT Name: Consumer Camera
Model: IPC-S2XEN-8M0S
Client: Hangzhou Huacheng Software Technology Co., Ltd.
Op Cond: Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
Operator: Doujun XU
Test Spec: FCC Part 15.209(a)
Sample No: SHA-940006-3

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup: RE_Loop Antenna V
Receiver: [ESR 3]
Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 150 kHz	88.125 Hz	PK+	200 Hz	0.01 s	0 dB
150 kHz - 30 MHz	4.39 kHz	PK+	9 kHz	0.01 s	0 dB

Full Spectrum





Limit and Margin

Frequency (MHz)	MaxPeak (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.029974	69.20	118.07	48.87	100.0	Y	211.0	19.0
0.049978	55.06	113.63	58.56	100.0	Y	266.0	19.0
0.505566	30.25	73.53	43.28	100.0	Y	292.0	18.8
1.611772	29.94	63.46	33.51	100.0	Y	128.0	19.0
4.697735	33.38	69.54	36.16	100.0	Y	303.0	19.1
14.183890	30.76	69.54	38.78	100.0	Y	303.0	18.9

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
 Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

30-1000MHz Radiated Emission

EUT Information

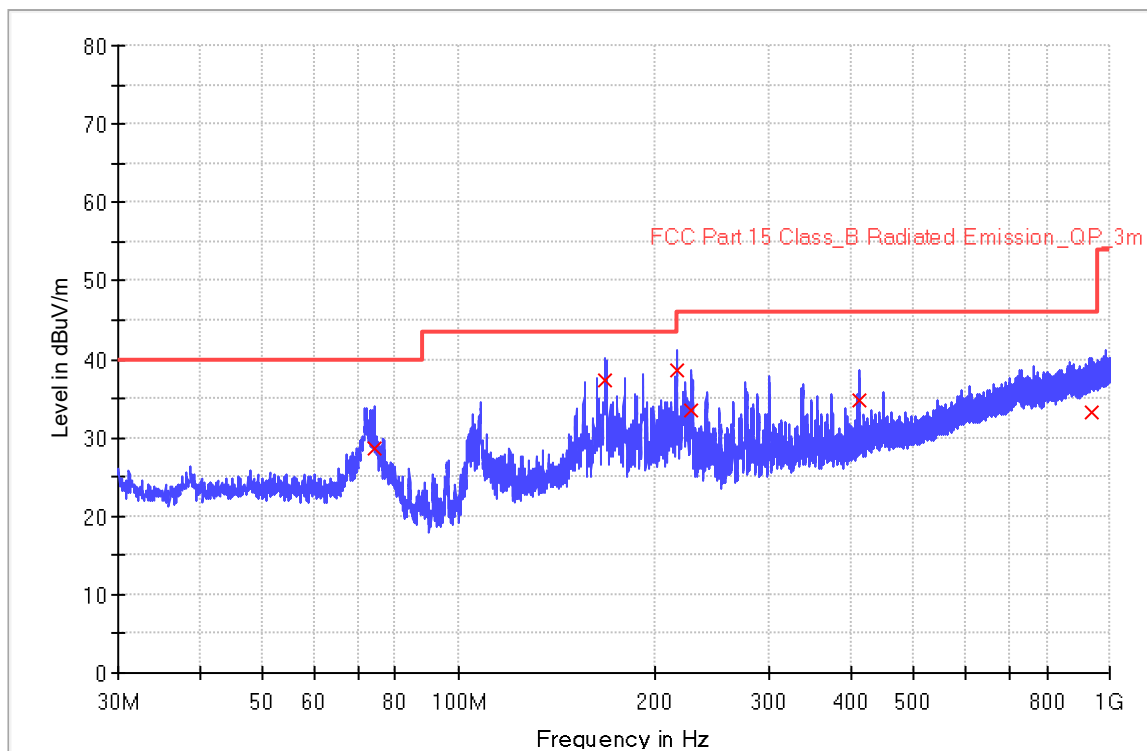
EUT Name: Consumer Camera
Model: IPC-S2XEN-8M0S
Client: Hangzhou Huacheng Software Technology Co., Ltd.
Op Cond: Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
Operator: Doujun XU
Test Spec: FCC Part 15.209(a)
Sample No: SHA-940006-3

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup: RE_VULB9168
Receiver: [ESR 3]
Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamplifier
30 MHz - 1 GHz	48.5 kHz	PK+	120 kHz	0.2 s	20 dB

RE_VULB9168_pre_Cont_30-1000





Limit and Margin

Frequency (MHz)	QuasiPeak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
74.200000	28.7	1000.0	120.000	150.0	H	243.0	17.8	11.3	40.0
168.320000	37.3	1000.0	120.000	200.0	H	101.0	20.5	6.2	43.5
216.000000	38.5	1000.0	120.000	100.0	H	148.0	17.7	7.5	46.0
228.080000	33.4	1000.0	120.000	220.0	H	159.0	17.9	12.6	46.0
412.080000	34.7	1000.0	120.000	200.0	H	234.0	24.6	11.3	46.0
937.920000	33.2	1000.0	120.000	300.0	H	302.0	34.2	12.8	46.0

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



30-1000MHz Radiated Emission

EUT Information

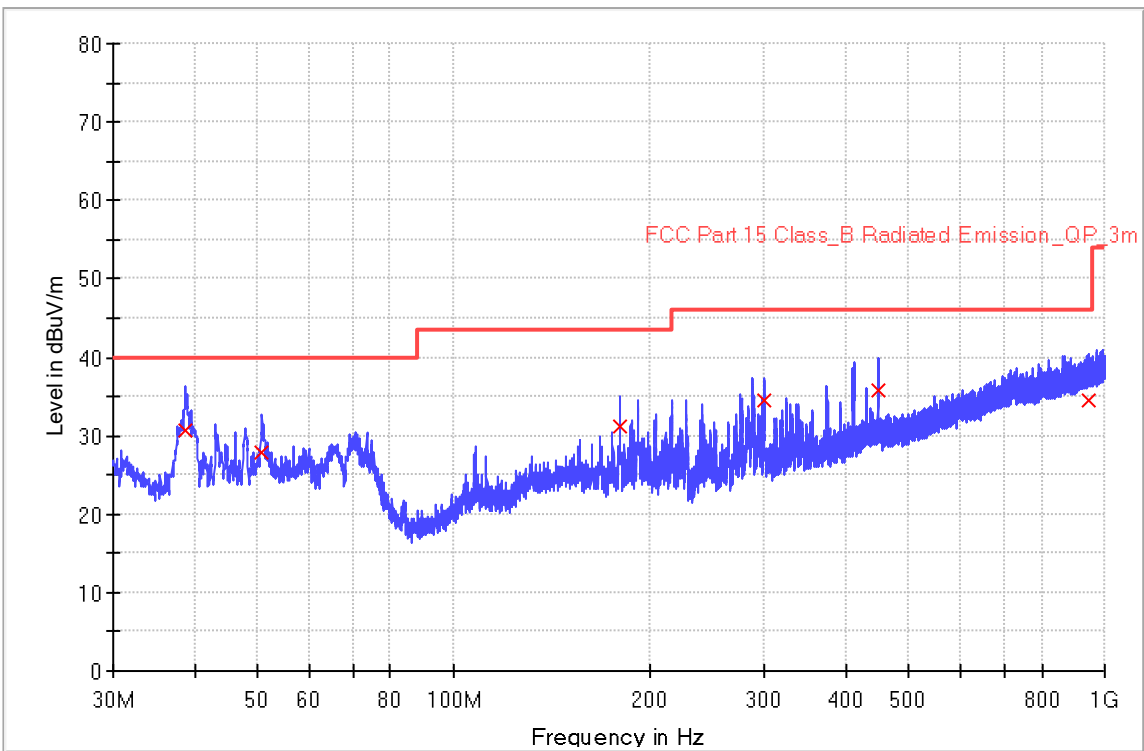
EUT Name: Consumer Camera
Model: IPC-S2XEN-8M0S
Client: Hangzhou Huacheng Software Technology Co., Ltd.
Op Cond: Mode 1: Tx_5240MHz at 802.11ac VHT20 (worse case)
Operator: Doujun XU
Test Spec: FCC Part 15.209(a)
Sample No: SHA-940006-3

Sweep Setup: RE_VULB9168_pre_Cont_30-1000 [EMI radiated]

Hardware Setup: RE_VULB9168
Receiver: [ESR 3]
Level Unit: dBuV/m

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	48.5 kHz	PK+	120 kHz	0.2 s	20 dB

RE_VULB9168_pre_Cont_30-1000





Limit and Margin

Frequency (MHz)	QuasiPeak (dBuV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBuV/m)
38.720000	30.8	1000.0	120.000	100.0	V	234.0	19.8	9.3	40.0
50.760000	27.8	1000.0	120.000	200.0	V	165.0	20.6	12.2	40.0
180.000000	31.3	1000.0	120.000	226.0	V	109.0	19.4	12.2	43.5
299.840000	34.6	1000.0	120.000	300.0	V	26.0	21.7	11.4	46.0
449.320000	35.9	1000.0	120.000	150.0	V	216.0	26.0	10.1	46.0
942.440000	34.5	1000.0	120.000	100.0	V	313.0	34.2	11.5	46.0

Note 1: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

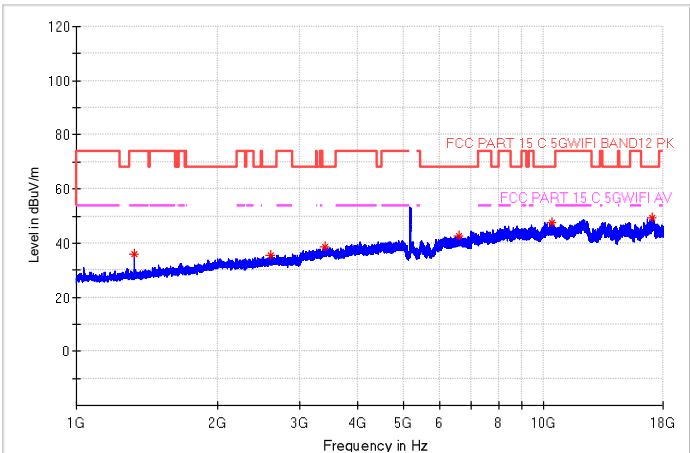
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



Radiated Emission 1-18GHz

Frequency: 802.11a 5180MHz

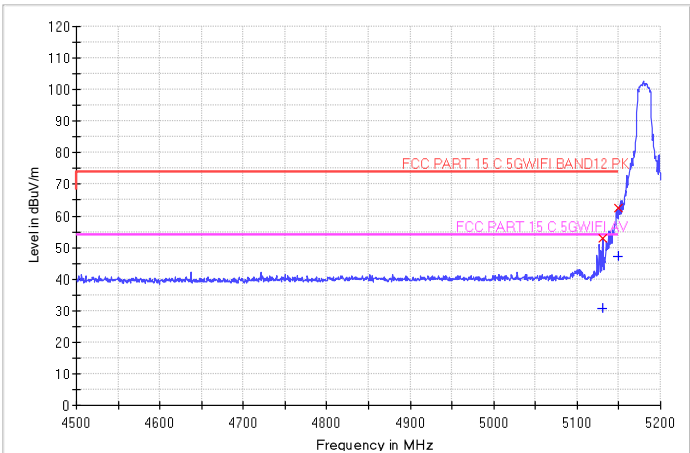
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	36.00	---	74.00	38.00	150.0	H	39.0	-18.0
2599.062500	35.51	---	68.20	32.69	200.0	H	337.0	-10.7
3408.156250	38.68	---	68.20	29.52	250.0	H	145.0	-7.3
6603.093750	42.78	---	68.20	25.42	300.0	H	144.0	-0.4
10408.968750	47.73	---	68.20	20.47	150.0	H	183.0	3.1
17084.125000	49.24	---	68.20	18.96	100.0	H	14.0	6.3

RE_HF907_BRF_Pre

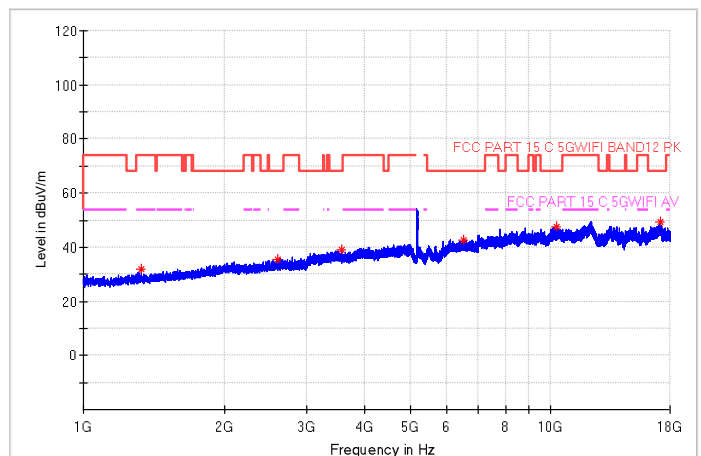


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5130.100000	53.0	30.8	250.0	H	234.0	-3.0	21.00	74.00	23.25	54.00
5150.000000	62.5	47.1	150.0	H	189.0	-3.0	11.50	74.00	6.90	54.00



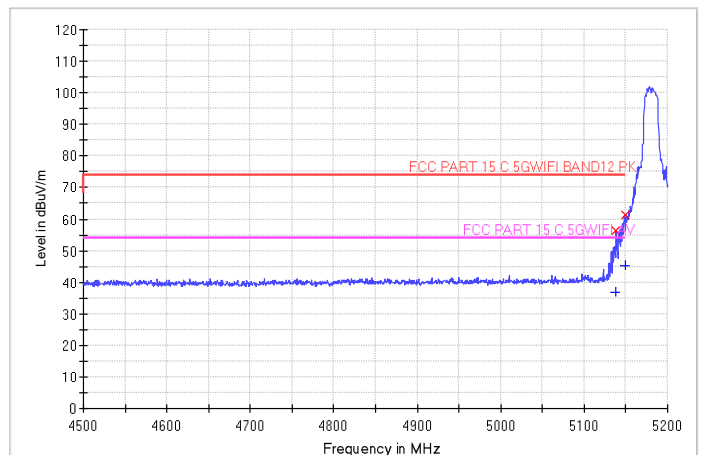
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	31.98	---	74.00	42.02	200.0	V	235.0	-18.0
2598.531250	35.31	---	68.20	32.89	150.0	V	284.0	-10.7
3577.625000	39.11	---	68.20	29.09	250.0	V	237.0	-6.9
6508.000000	42.69	---	68.20	25.51	300.0	V	201.0	-0.6
10320.250000	47.76	---	68.20	20.44	150.0	V	269.0	3.0
17122.375000	49.14	---	68.20	19.06	100.0	V	230.0	6.3

RE_HF907_BRF_Pre



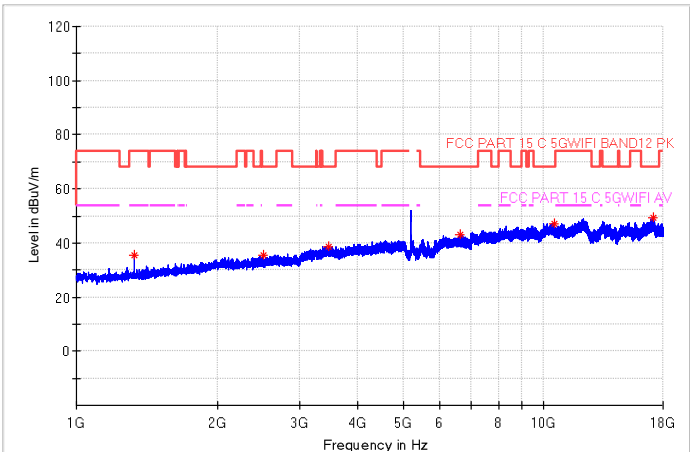
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5138.500000	56.3	36.7	250.0	V	241.0	-3.0	17.70	74.00	17.30	54.00
5150.000000	61.2	45.2	150.0	V	159.0	-3.0	12.80	74.00	8.80	54.00



Frequency: 802.11a 5200MHz

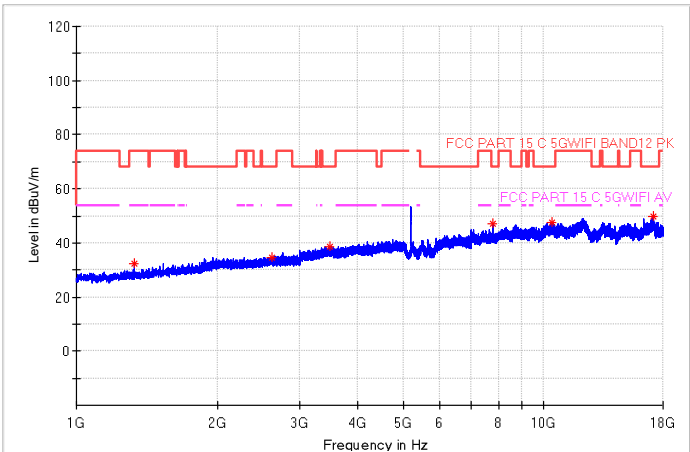
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	35.52	---	74.00	38.48	100.0	H	83.0	-18.0
2506.625000	35.28	---	68.20	32.92	100.0	H	272.0	-11.2
3473.500000	38.75	---	68.20	29.45	250.0	H	359.0	-7.2
6646.656250	42.88	---	68.20	25.32	300.0	H	185.0	-0.3
10511.500000	47.13	---	68.20	21.07	150.0	H	268.0	3.1
17148.937500	49.34	---	68.20	18.86	200.0	H	210.0	6.3

Full Spectrum



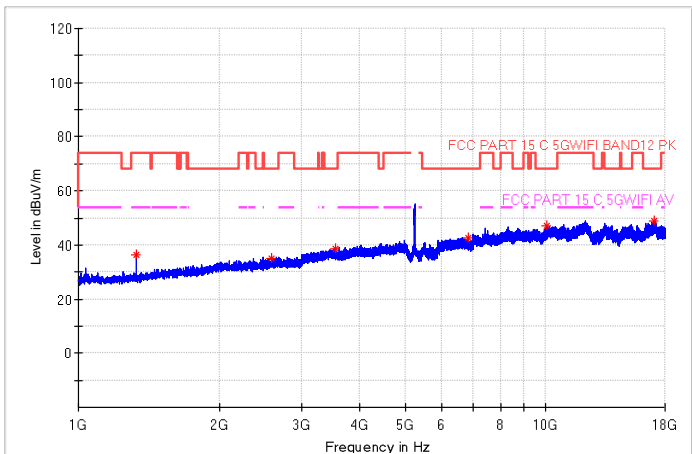
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	32.27	---	74.00	41.73	200.0	V	321.0	-18.0
2615.000000	34.77	---	68.20	33.43	150.0	V	152.0	-10.6
3492.093750	38.47	---	68.20	29.73	250.0	V	316.0	-7.2
7800.000000	47.03	---	68.20	21.17	300.0	V	90.0	-0.4
10397.812500	47.59	---	68.20	20.61	150.0	V	244.0	3.1
17147.875000	49.76	---	68.20	18.44	100.0	V	176.0	6.3



Frequency: 802.11a 5240MHz

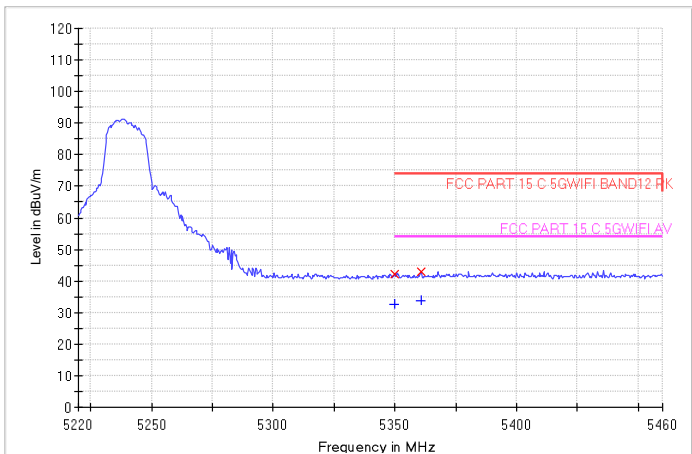
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	36.18	---	74.00	37.82	100.0	H	184.0	-18.0
2595.875000	35.16	---	68.20	33.04	100.0	H	184.0	-10.7
3540.437500	38.50	---	68.20	29.70	150.0	H	339.0	-6.9
6808.687500	42.56	---	68.20	25.64	220.0	H	343.0	-0.3
10067.375000	47.13	---	68.20	21.07	250.0	H	324.0	2.8
17100.062500	48.81	---	68.20	19.39	300.0	H	320.0	6.3

RE_HF907_BRF_Pre

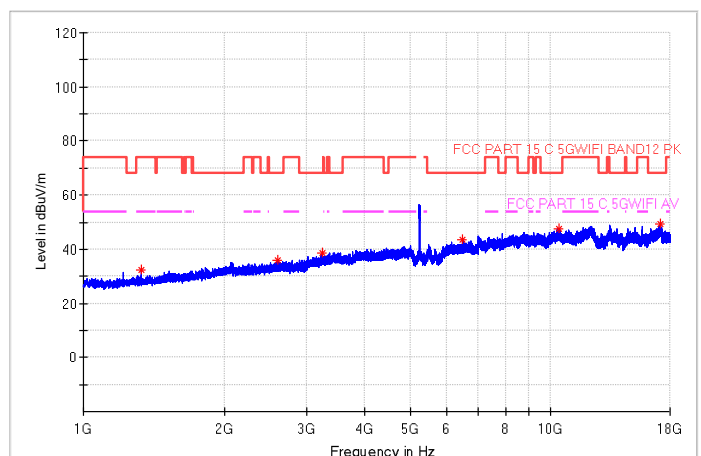


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	42.1	32.4	250.0	H	125.0	-2.6	31.93	74.00	21.60	54.00
5360.800000	43.1	33.9	330.0	H	239.0	-2.6	30.90	74.00	20.10	54.00



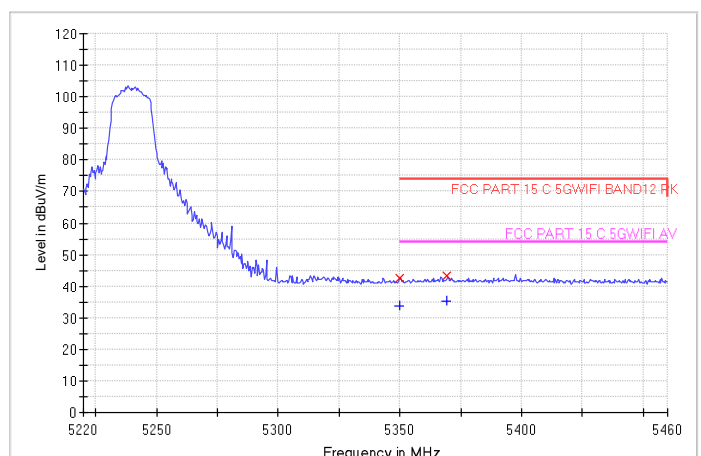
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	32.40	---	74.00	41.60	150.0	V	332.0	-18.0
2606.500000	35.84	---	68.20	32.36	100.0	V	213.0	-10.6
3252.500000	38.79	---	68.20	29.41	100.0	V	66.0	-7.7
6463.906250	43.31	---	68.20	24.89	150.0	V	133.0	-0.7
10444.562500	47.44	---	68.20	20.76	250.0	V	184.0	3.1
17156.906250	49.21	---	68.20	18.99	300.0	V	336.0	6.3

RE_HF907_BRF_Pre



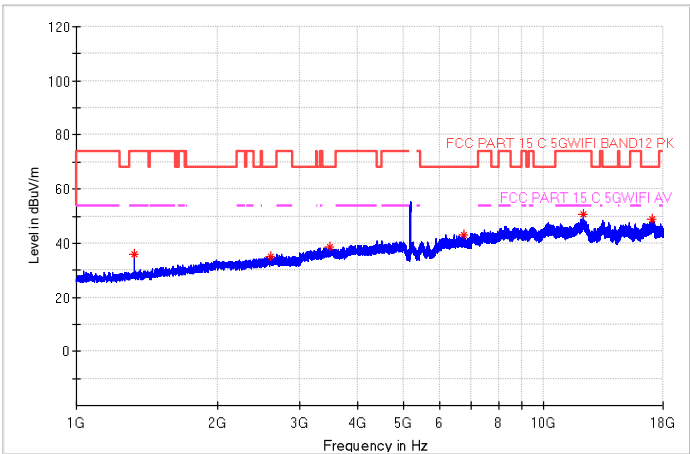
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	42.6	33.9	250.0	V	144.0	-2.6	31.40	74.00	20.10	54.00
5369.500000	43.3	35.1	150.0	V	267.0	-2.5	30.75	74.00	18.90	54.00



Frequency: 802.11n20 5180MHz

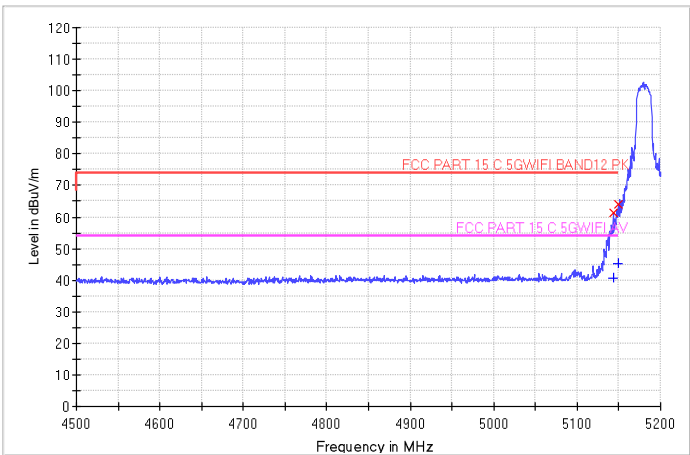
Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	36.12	---	74.00	37.90	100.0	H	162.0	-18.0
2599.593750	35.20	---	68.20	33.00	250.0	H	157.0	-10.7
3482.000000	38.58	---	68.20	29.62	100.0	H	224.0	-7.2
6766.187500	43.12	---	68.20	25.08	250.0	H	162.0	-0.3
12158.906250	50.85	---	74.00	23.15	300.0	H	151.0	2.9
17098.468750	48.88	---	68.20	19.32	150.0	H	95.0	6.3

RE_HF907_BRF_Pre

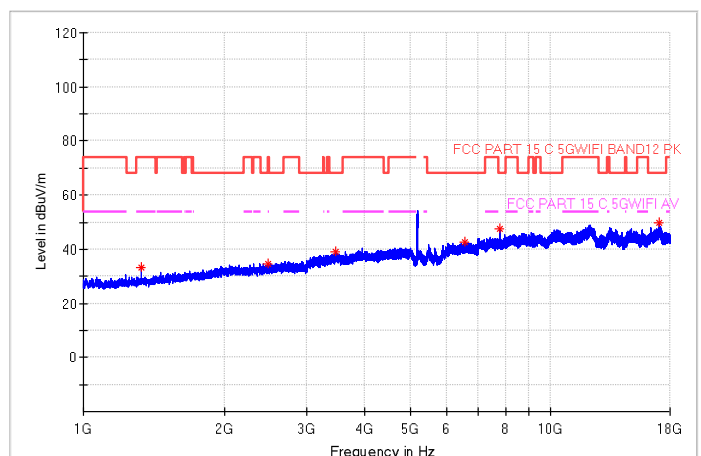


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5143.000000	61.3	40.6	100.0	H	179.0	-3.0	12.72	74.00	13.40	54.00
5150.000000	64.0	45.3	150.0	H	341.0	-3.0	10.00	74.00	8.70	54.00



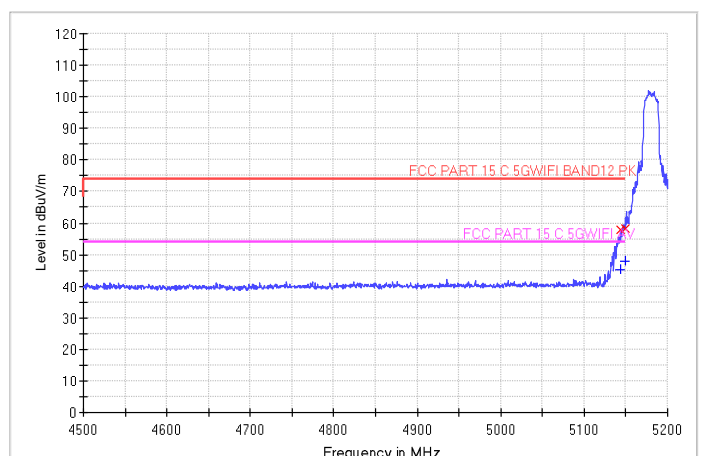
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.562500	33.27	---	74.00	40.73	150.0	V	162.0	-18.0
2481.125000	34.63	---	68.20	33.57	220.0	V	157.0	-11.4
3471.375000	39.13	---	68.20	29.07	250.0	V	100.0	-7.2
6565.906250	42.50	---	68.20	25.70	150.0	V	327.0	-0.5
7770.250000	47.49	---	68.20	20.71	100.0	V	317.0	0.7
17083.593750	49.60	---	68.20	18.60	200.0	V	61.0	6.3

RE_HF907_BRF_Pre

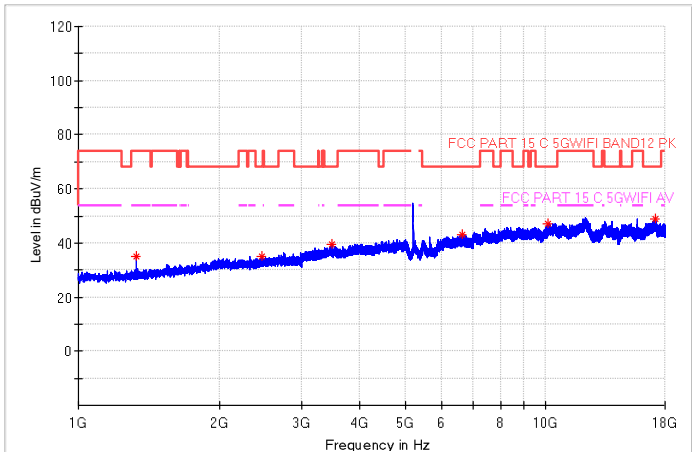


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5144.000000	57.7	45.2	250.0	V	231.0	-3.0	16.30	74.00	8.80	54.00
5150.000000	58.2	48.1	100.0	V	258.0	-3.0	15.80	74.00	5.90	54.00

Frequency: 802.11n20 5200MHz

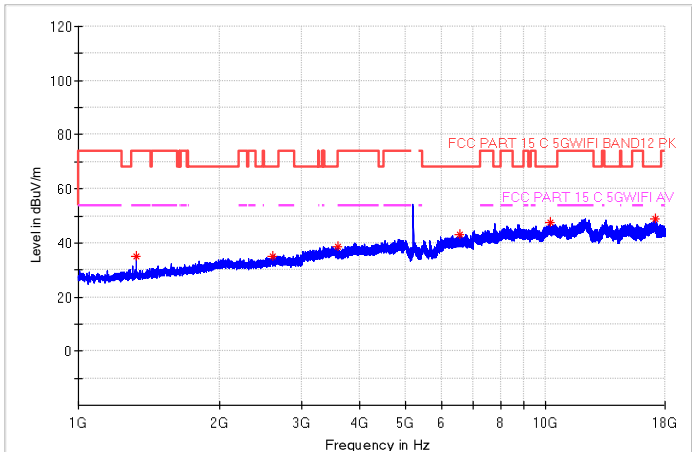
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	34.85	---	74.00	39.15	300.0	H	125.0	-18.0
2472.093750	34.93	---	68.20	33.27	150.0	H	158.0	-11.4
3496.343750	39.63	---	68.20	28.57	220.0	H	48.0	-7.2
6632.312500	42.99	---	68.20	25.21	200.0	H	183.0	-0.3
10083.312500	47.26	---	68.20	20.94	150.0	H	233.0	2.8
17114.406250	48.90	---	68.20	19.30	100.0	H	351.0	6.3

Full Spectrum



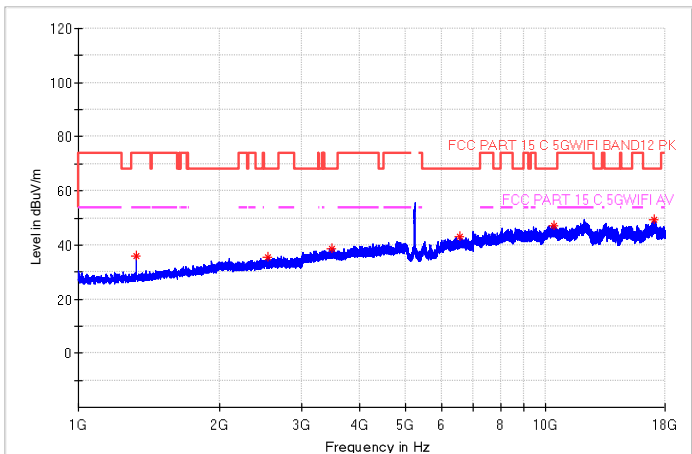
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	34.92	---	74.00	39.08	220.0	V	62.0	-18.0
2611.281250	34.91	---	68.20	33.29	150.0	V	113.0	-10.6
3597.281250	38.75	---	68.20	29.45	250.0	V	231.0	-6.9
6550.500000	42.99	---	68.20	25.21	150.0	V	201.0	-0.5
10235.250000	47.35	---	68.20	20.85	100.0	V	351.0	2.9
17144.687500	48.96	---	68.20	19.24	300.0	V	110.0	6.3



Frequency: 802.11n20 5240MHz

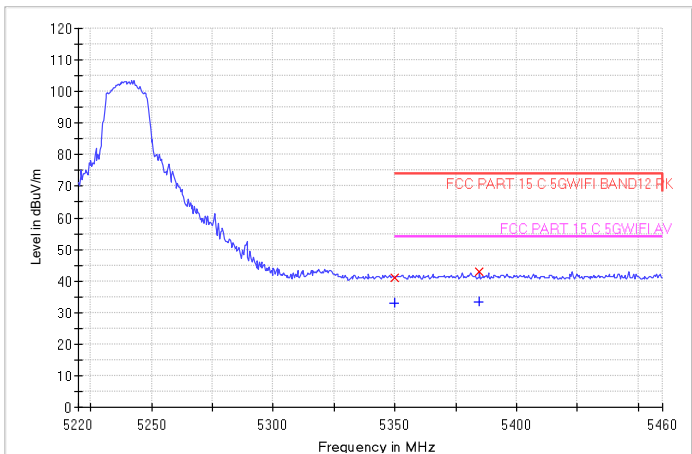
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	35.77	---	74.00	38.23	300.0	H	225.0	-18.0
2544.343750	35.30	---	68.20	32.90	250.0	H	230.0	-11.0
3492.093750	38.66	---	68.20	29.54	350.0	H	304.0	-7.2
6558.468750	43.23	---	68.20	24.97	200.0	H	138.0	-0.5
10399.406250	47.17	---	68.20	21.03	150.0	H	133.0	3.1
17075.093750	49.33	---	68.20	18.87	100.0	H	120.0	6.2

RE_HF907_BRF_Pre

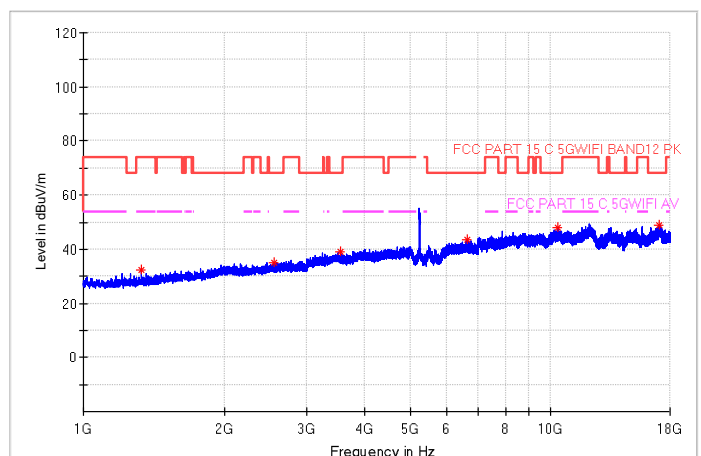


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	41.2	32.9	300.0	H	217.0	-2.6	32.80	74.00	21.10	54.00
5384.800000	43.1	33.2	250.0	H	153.0	-2.5	30.90	74.00	20.80	54.00



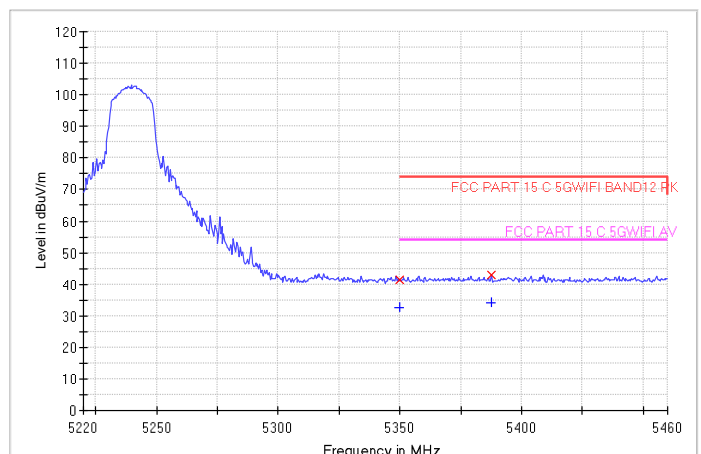
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	32.16	---	74.00	41.84	100.0	V	218.0	-18.0
2554.437500	35.04	---	68.20	33.16	150.0	V	118.0	-10.9
3548.406250	38.83	---	68.20	29.37	250.0	V	136.0	-6.9
6613.718750	43.41	---	68.20	24.79	300.0	V	112.0	-0.4
10345.218750	47.94	---	68.20	20.26	100.0	V	213.0	3.0
17106.437500	48.95	---	68.20	19.25	200.0	V	112.0	6.3

RE_HF907_BRF_Pre



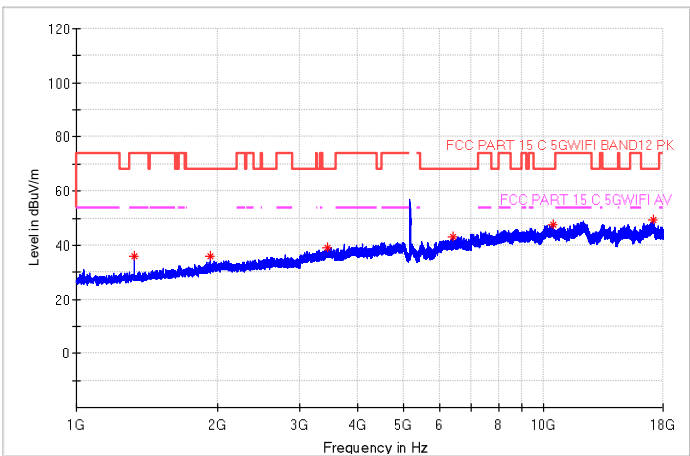
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	41.4	32.6	250.0	V	216.0	-2.6	32.60	74.00	21.40	54.00
5387.500000	42.9	34.2	100.0	V	297.0	-2.5	31.10	74.00	19.80	54.00



Frequency: 802.11ac20 5180MHz

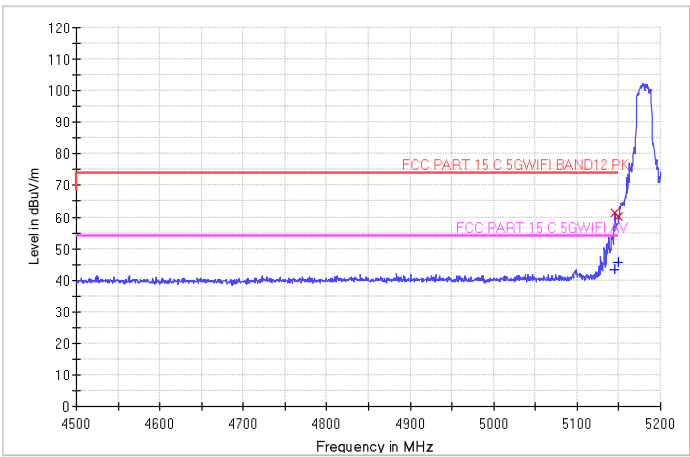
Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.562500	35.84	---	74.00	38.16	350.0	H	219.0	-18.0
1939.781250	35.72	---	68.20	32.48	200.0	H	191.0	-13.3
3446.406250	39.17	---	68.20	29.03	220.0	H	220.0	-7.3
6408.125000	43.28	---	68.20	24.92	150.0	H	113.0	-0.8
10464.750000	47.61	---	68.20	20.59	100.0	H	249.0	3.1
17153.718750	49.18	---	68.20	19.02	150.0	H	238.0	6.3

RE_HF907_BRF_Pre

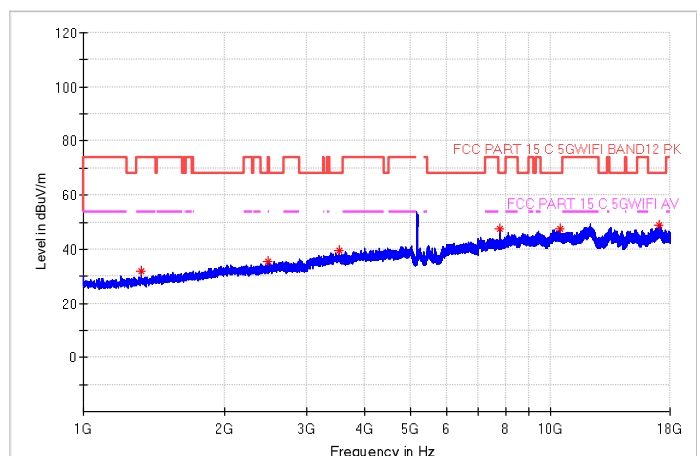


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5145.500000	61.2	43.5	200.0	H	143.0	-3.0	12.80	74.00	10.50	54.00
5150.000000	60.3	45.6	250.0	H	219.0	-3.0	13.75	74.00	8.40	54.00



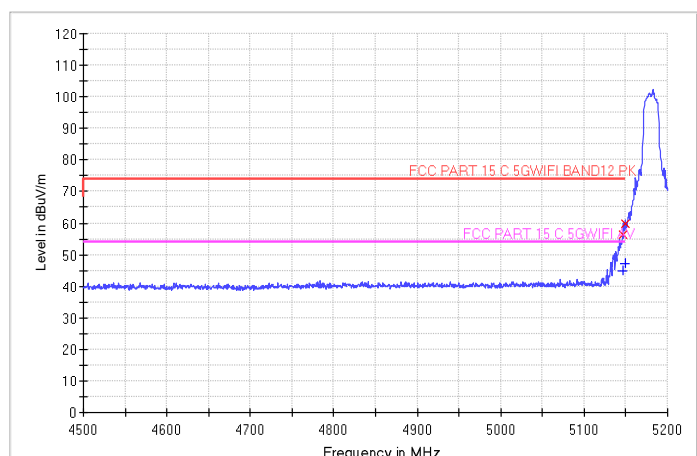
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	31.94	---	74.00	42.06	100.0	V	124.0	-18.0
2481.656250	35.35	---	68.20	32.85	240.0	V	161.0	-11.4
3533.000000	39.67	---	68.20	28.53	300.0	V	359.0	-7.0
7769.718750	47.34	---	68.20	20.86	350.0	V	238.0	-0.3
10465.281250	47.71	---	68.20	20.49	200.0	V	14.0	3.1
17078.281250	49.02	---	68.20	19.18	150.0	V	268.0	6.2

RE_HF907_BRF_Pre

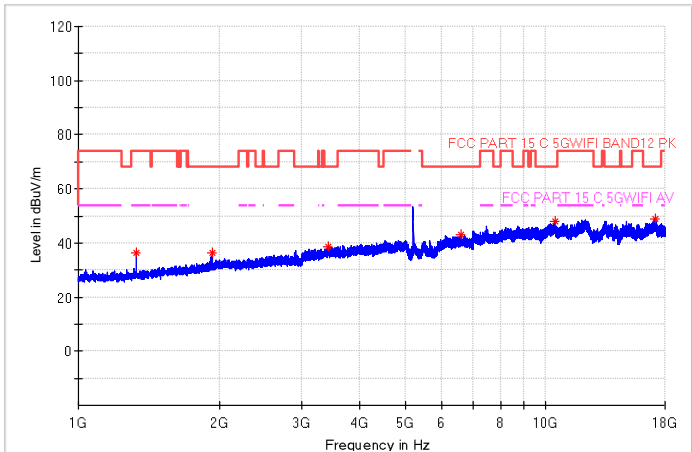


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5146.000000	56.5	44.9	200.0	V	211.0	-3.0	17.50	74.00	9.10	54.00
5150.000000	59.9	47.0	150.0	V	238.0	-3.0	14.10	74.00	7.00	54.00

Frequency: 802.11ac20 5200MHz

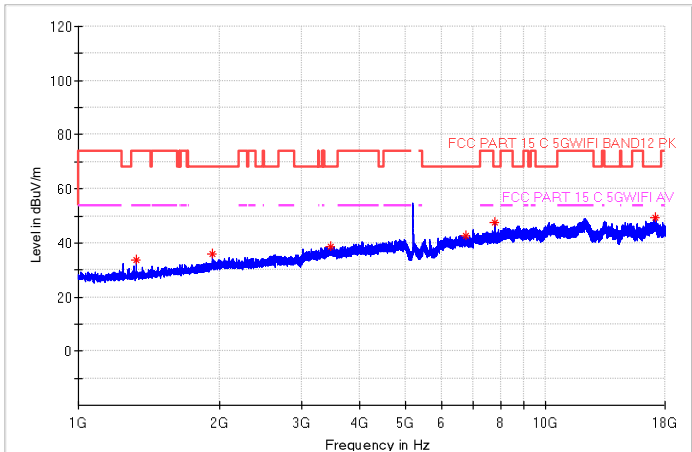
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	36.36	---	74.00	37.64	250.0	H	249.0	-18.0
1939.250000	36.37	---	68.20	31.83	310.0	H	235.0	-13.3
3415.593750	38.65	---	68.20	29.55	150.0	H	79.0	-7.3
6574.406250	43.26	---	68.20	24.94	200.0	H	245.0	-0.4
10467.406250	47.97	---	68.20	20.23	150.0	H	138.0	3.1
17125.562500	48.72	---	68.20	19.48	300.0	H	356.0	6.3

Full Spectrum



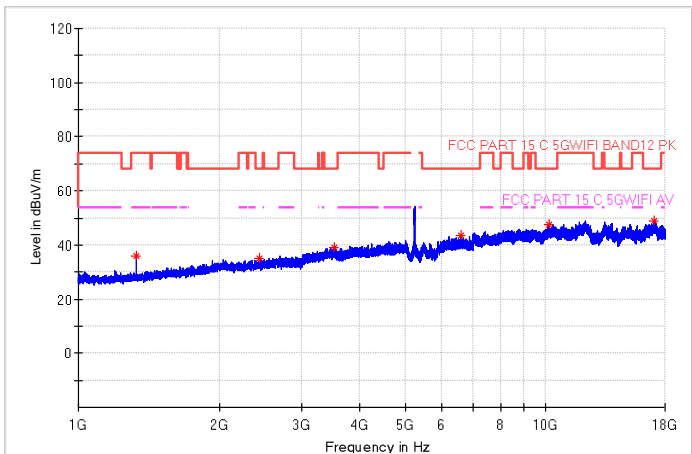
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.562500	33.46	---	74.00	40.54	100.0	V	233.0	-18.0
1936.593750	36.10	---	68.20	32.10	250.0	V	284.0	-13.3
3470.843750	38.74	---	68.20	29.46	300.0	V	179.0	-7.2
6741.750000	42.65	---	68.20	25.55	200.0	V	36.0	-0.3
7800.000000	47.47	---	68.20	20.73	150.0	V	311.0	0.7
17124.500000	49.43	---	68.20	18.77	150.0	V	346.0	6.3



Frequency: 802.11ac20 5240MHz

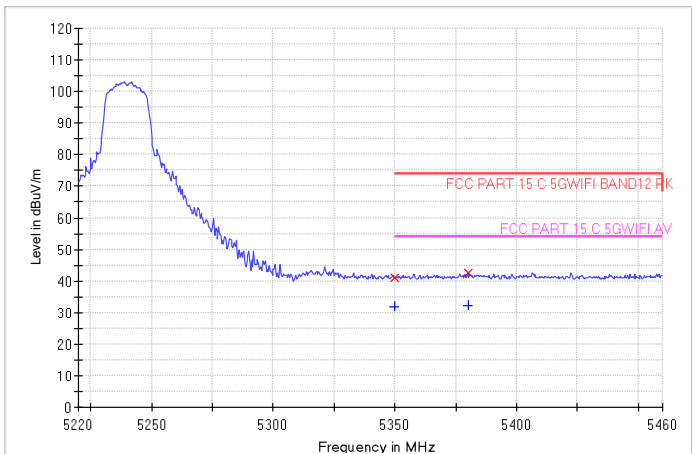
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	35.76	---	74.00	38.24	300.0	H	135.0	-18.0
2440.218750	35.16	---	68.20	33.04	150.0	H	266.0	-11.7
3537.250000	39.17	---	68.20	29.03	250.0	H	313.0	-6.9
6605.218750	43.34	---	68.20	24.86	150.0	H	7.0	-0.4
10166.187500	47.43	---	68.20	20.77	200.0	H	145.0	2.9
17099.000000	48.82	---	68.20	19.38	100.0	H	0.0	6.3

RE_HF907_BRF_Pre

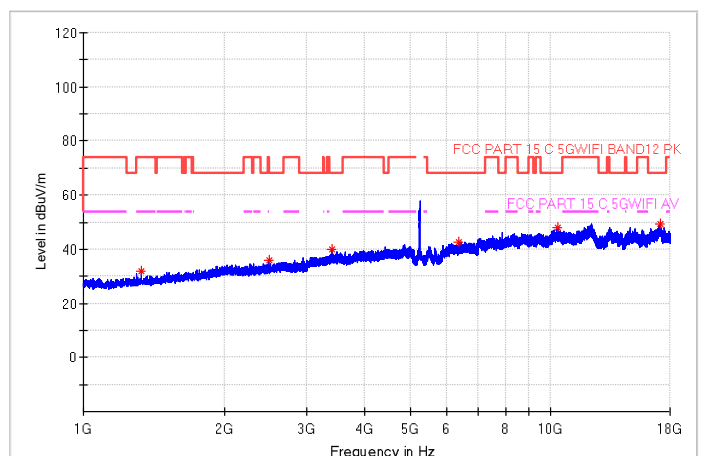


Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	41.0	31.9	240.0	H	147.0	-2.6	33.00	74.00	22.10	54.00
5380.000000	42.6	32.2	180.0	H	312.0	-2.5	31.40	74.00	21.80	54.00



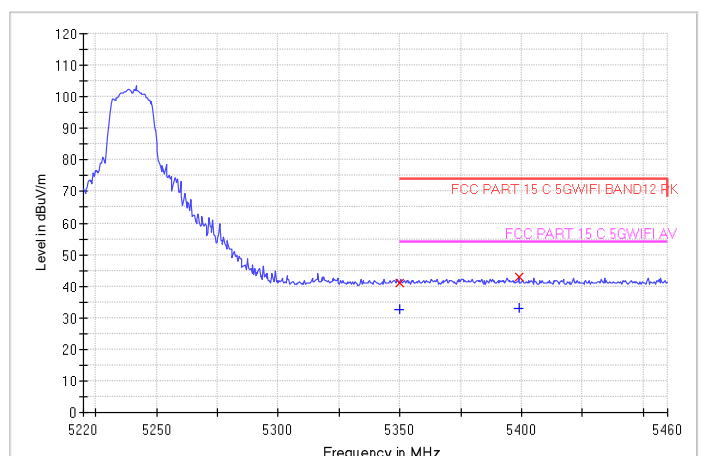
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	31.95	---	74.00	42.05	250.0	V	0.0	-18.0
2502.375000	35.76	---	68.20	32.44	150.0	V	149.0	-11.3
3412.406250	39.79	---	68.20	28.41	100.0	V	356.0	-7.3
6355.531250	42.74	---	68.20	25.46	100.0	V	244.0	-0.9
10350.000000	47.95	---	68.20	20.25	300.0	V	80.0	3.0
17159.562500	49.53	---	68.20	18.67	150.0	V	138.0	6.4

RE_HF907_BRF_Pre



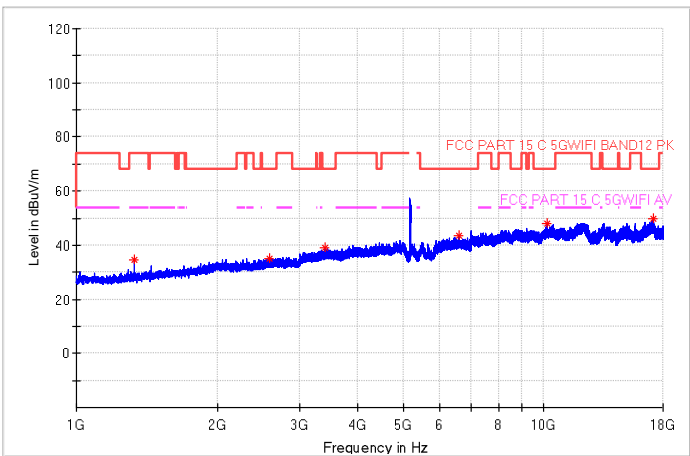
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5350.000000	41.2	32.5	100.0	V	159.0	-2.6	32.80	74.00	21.50	54.00
5398.900000	42.8	32.9	200.0	V	247.0	-2.4	31.20	74.00	21.10	54.00



Frequency: 802.11ax20 5180MHz

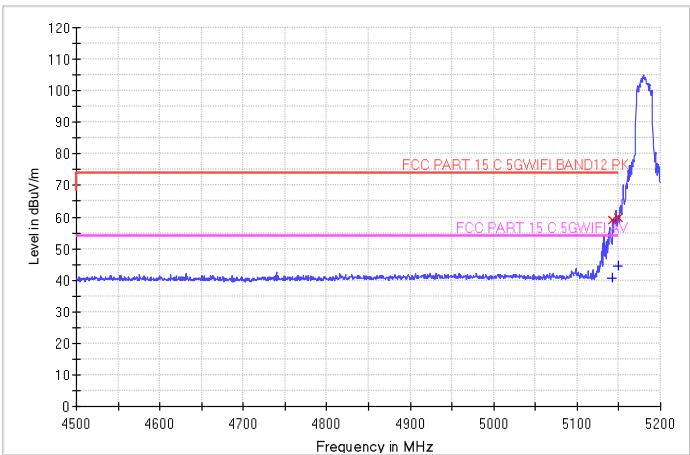
Full Spectrum



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	34.61	---	74.00	39.39	300.0	H	142.0	-18.0
2595.343750	34.86	---	68.20	33.34	200.0	H	260.0	-10.7
3411.343750	39.23	---	68.20	28.97	150.0	H	146.0	-7.3
6587.156250	43.68	---	68.20	24.52	350.0	H	112.0	-0.4
10160.343750	47.99	---	68.20	20.21	200.0	H	276.0	2.9
17155.312500	49.82	---	68.20	18.38	150.0	H	97.0	6.3

RE_HF907_BRF_Pre

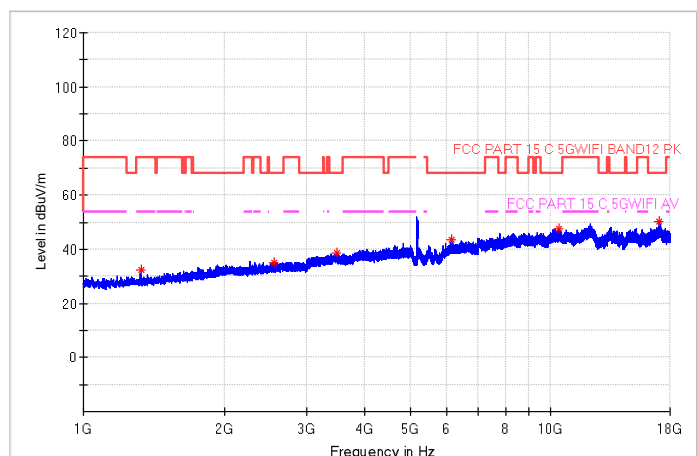


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5142.500000	59.1	40.7	220.0	H	239.0	-3.0	14.90	74.00	13.30	54.00
5150.000000	59.8	44.6	100.0	H	147.0	-3.0	14.20	74.00	9.40	54.00



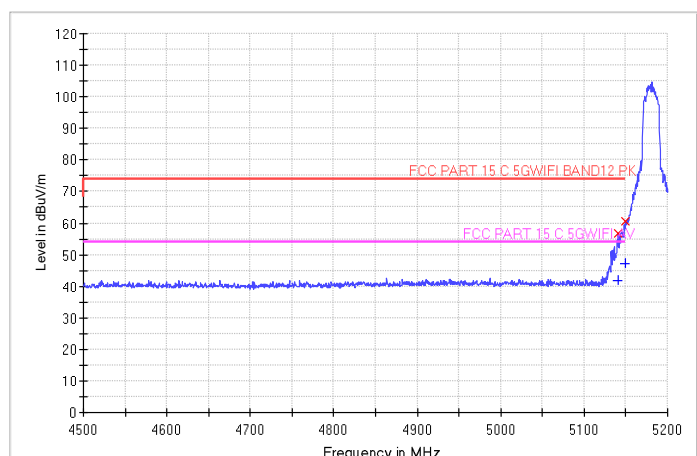
Full Spectrum



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1332.031250	32.25	---	74.00	41.75	300.0	V	52.0	-18.0
2565.062500	35.07	---	68.20	33.13	150.0	V	346.0	-10.8
3480.406250	38.80	---	68.20	29.40	200.0	V	132.0	-7.2
6147.812500	43.44	---	68.20	24.76	100.0	V	330.0	-1.1
10440.843750	47.39	---	68.20	20.81	250.0	V	109.0	3.1
17101.125000	50.09	---	68.20	18.11	150.0	V	47.0	6.3

RE_HF907_BRF_Pre



Critical Freqs

Frequency (MHz)	MaxPeak (dBuV/m)	Average (dBuV/m)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBuV/m)	Margin - RMS (dB)	Limit - RMS (dBuV/m)
5140.500000	56.7	41.9	200.0	V	303.0	-3.0	17.26	74.00	12.10	54.00
5150.000000	60.5	47.2	100.0	V	279.0	-3.0	13.50	74.00	6.80	54.00