

0 Hz

Scale Type

Log

Span 12.88 MHz Sweep 30.70 ms (1000 pts)



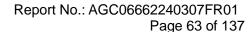


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Test\_Graph\_802.11b\_ANT2\_2437\_1Mbps\_PSD

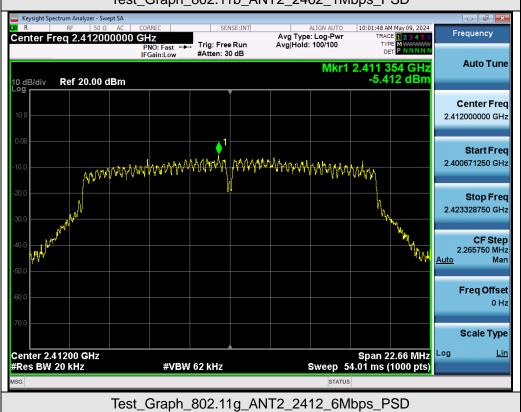
**#VBW** 62 kHz

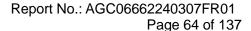
Center 2.437000 GHz #Res BW 20 kHz



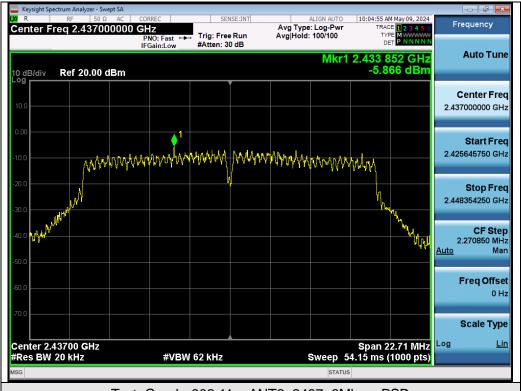




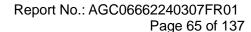












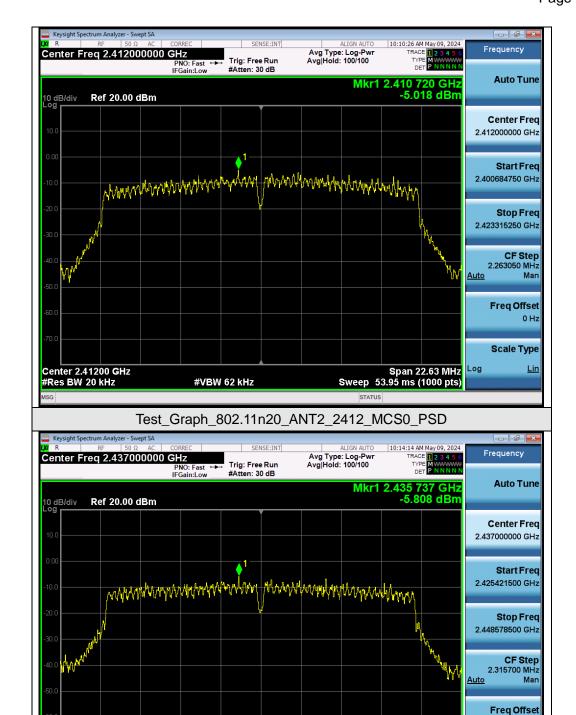
0 Hz

Scale Type

Log

Span 23.16 MHz Sweep 55.21 ms (1000 pts)



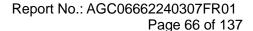


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Test\_Graph\_802.11n20\_ANT2\_2437\_MCS0\_PSD

#VBW 62 kHz

Center 2.43700 GHz #Res BW 20 kHz







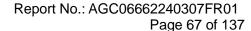
Test\_Graph\_802.11n40\_ANT2\_2422\_MCS0\_PSD

#VBW 62 kHz

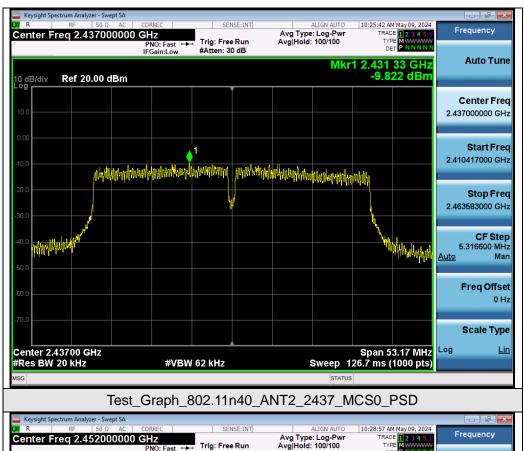
Span 46.95 MHz Sweep 112.0 ms (1000 pts)

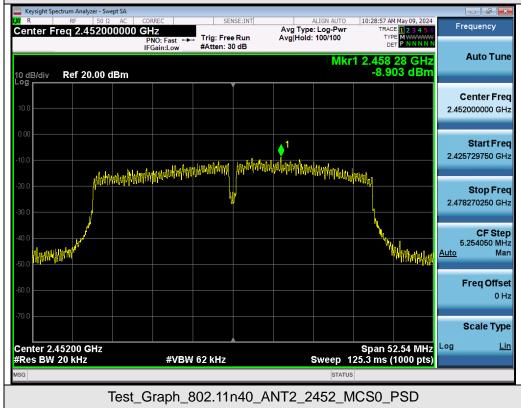
Log

Center 2.42200 GHz #Res BW 20 kHz











## 10. Conducted Band Edge and Out-of-Band Emissions

#### 10.1 Provisions Applicable

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

#### 10.2 Measurement Procedure

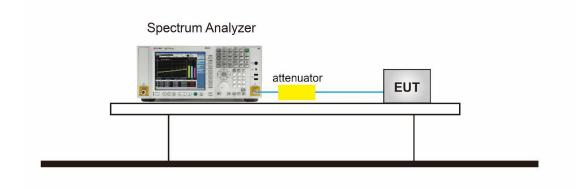
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

Use the following spectrum analyzer settings:

- Step 1: Measurement Procedure In-Band Reference Level
  - 1. Set instrument center frequency to DTS channel center frequency.
  - 2. Set the span to ≥ 1.5 times the DTS bandwidth.
  - 3. Set the RBW = 100 kHz.
  - 4. Set the VBW  $\geq$  3 x RBW.
  - 5. Detector = peak.
  - 6. Sweep time = auto couple.
  - 7. Trace mode = max hold.
  - 8. Allow trace to fully stabilize.
  - 9. Use the peak marker function to determine the maximum PSD level.
  - 10. Note that the channel found to contain the maximum PSD level can be used to establish the reference level.
- Step 2: Measurement Procedure Out of Band Emission
  - 1. Set RBW = 100 kHz.
  - 2. Set VBW ≥ 300 kHz.
  - 3. Detector = peak.
  - 4. Sweep = auto couple.
  - 5. Trace Mode = max hold.
  - 6. Allow trace to fully stabilize.
  - 7. Use the peak marker function to determine the maximum amplitude level.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

## 10.3 Measurement Setup (Block Diagram of Configuration)



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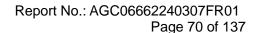
Report No.: AGC06662240307FR01

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#### 10.4 Measurement Result

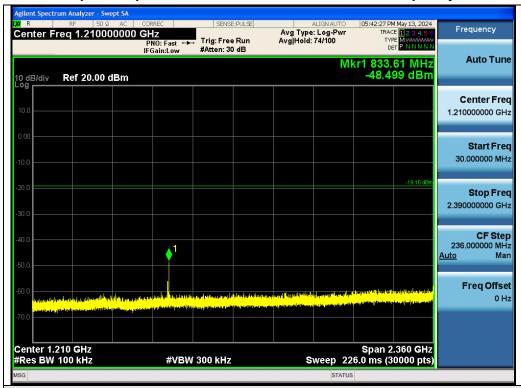
Test Mode	Test Frequency (MHz)	Reference level (dBm)	-20dB Limits (dBm)
IEEE 802.11b	2412	2.41299	-17.59
	2437	2.43649	-17.56
	2462	2.46149	-17.54
IEEE 802.11g	2412	2.41326	-17.59
	2437	2.43826	-17.56
	2462	2.46326	-17.54
IEEE 802.11n-HT20	2412	2.41326	-17.59
	2437	2.43826	-17.56
	2462	2.46326	-17.54
IEEE 802.11n-HT40	2422	2.41948	-17.58
	2437	2.43448	-17.57
	2452	2.45572	-17.54

Note: The reference level please see the power of DTS Bandwidth.



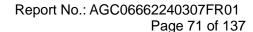


# Test Graphs of Spurious Emissions in Non-Restricted Frequency Bands

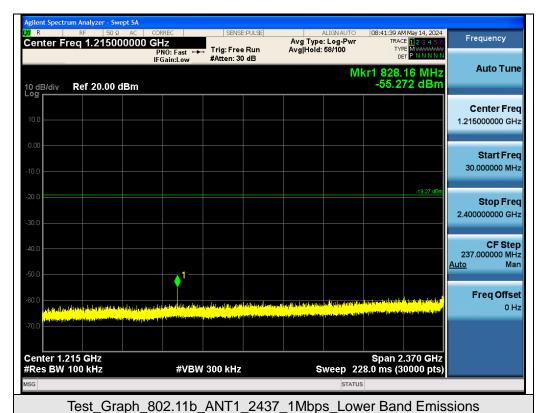


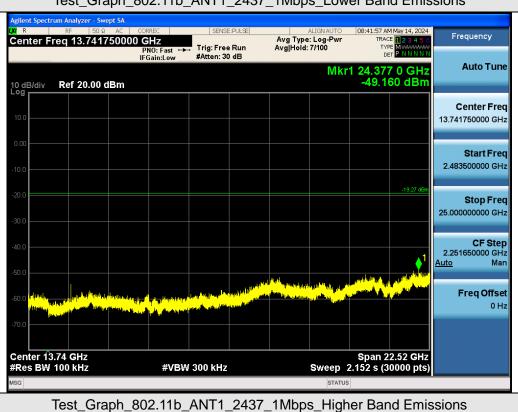
#### Test\_Graph\_802.11b\_ANT1\_2412\_1Mbps\_Lower Band Emissions

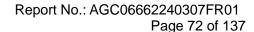




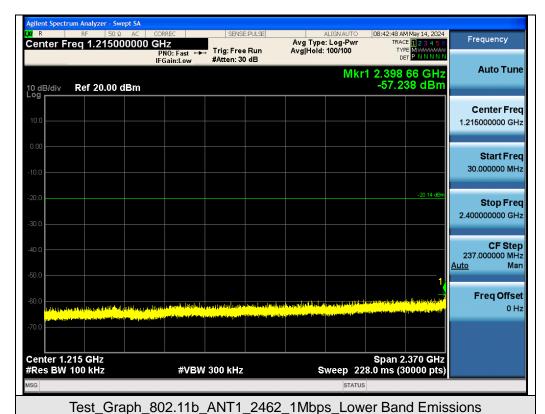




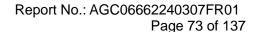




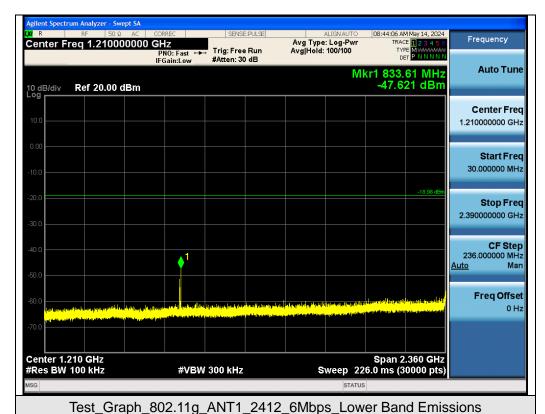




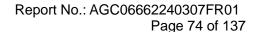




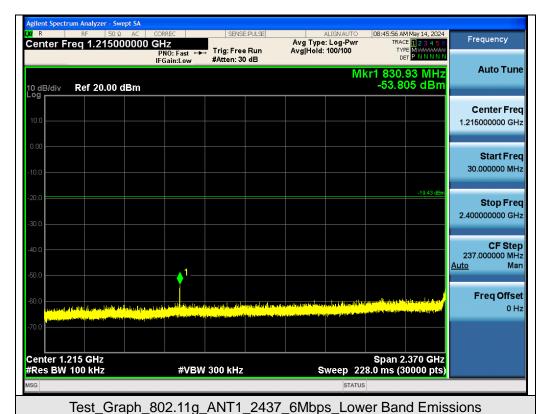




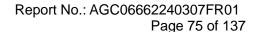




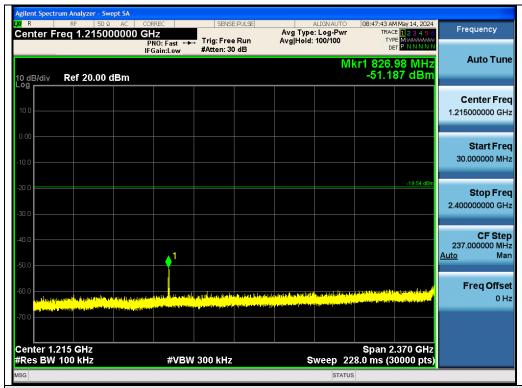


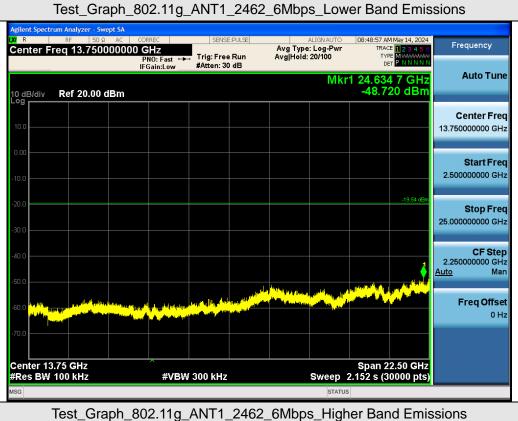


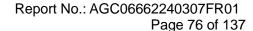




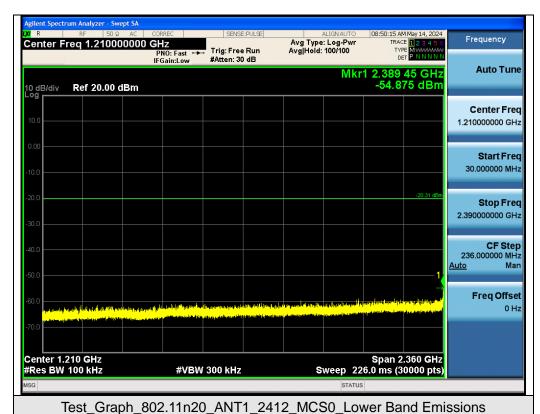




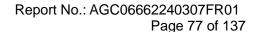




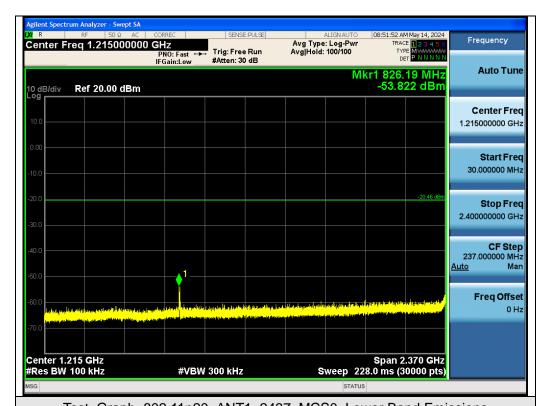




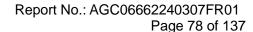




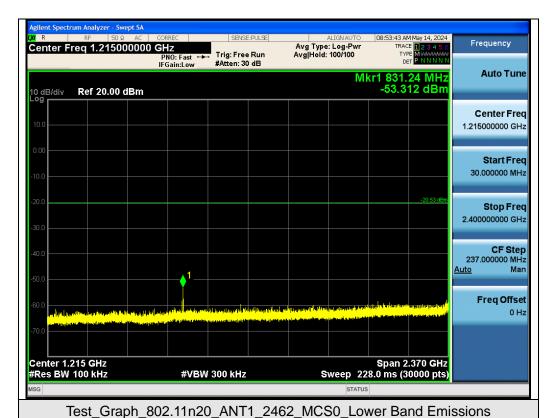




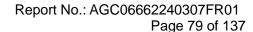




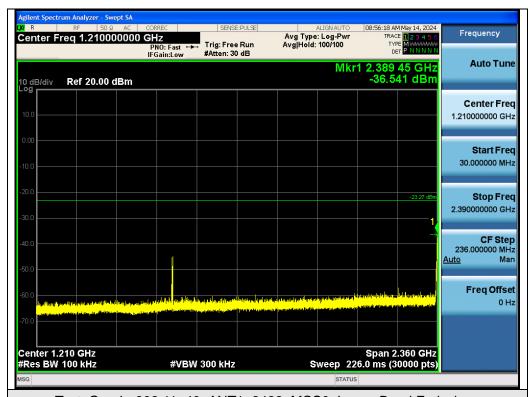




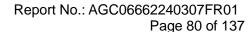




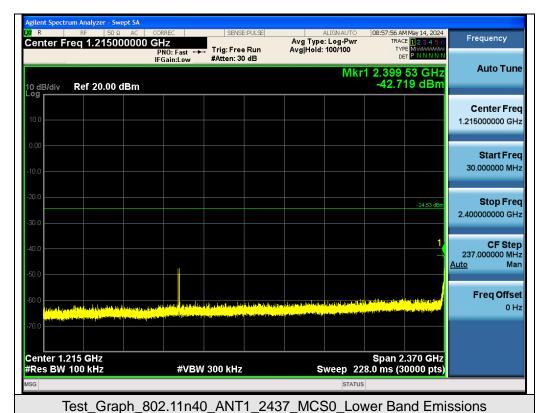




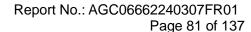




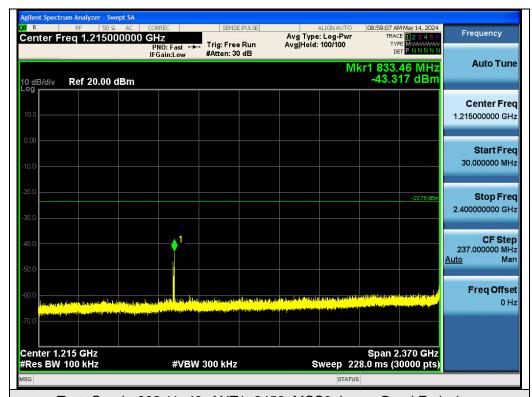




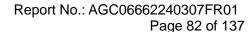




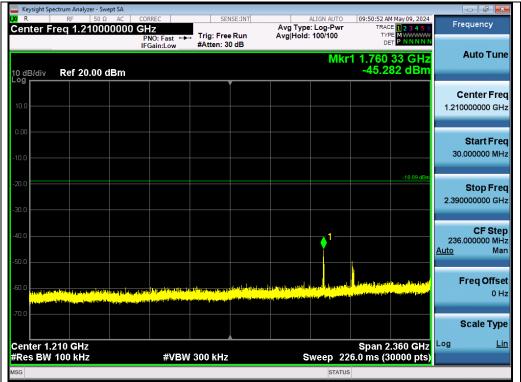


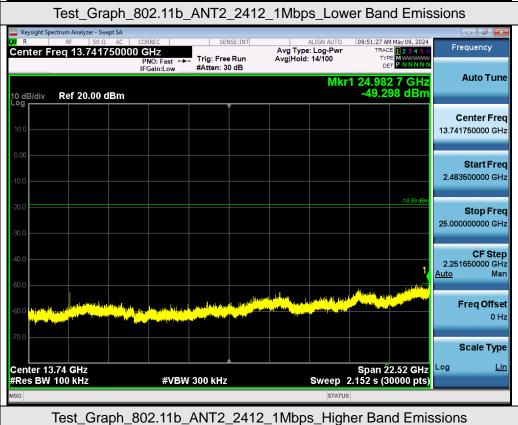


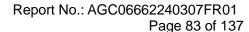




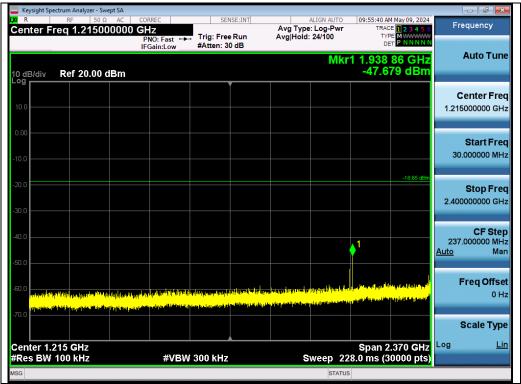


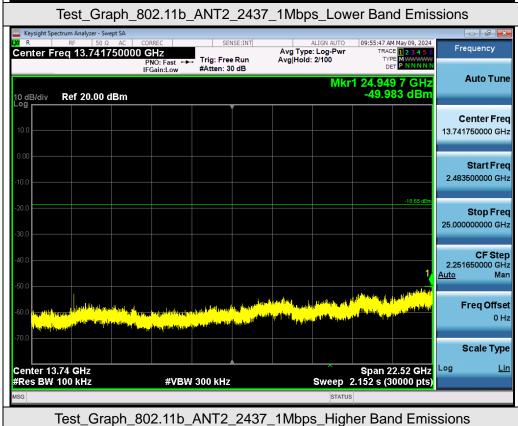


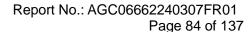






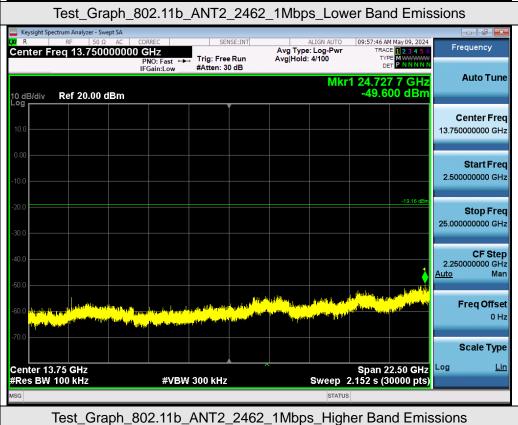


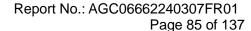




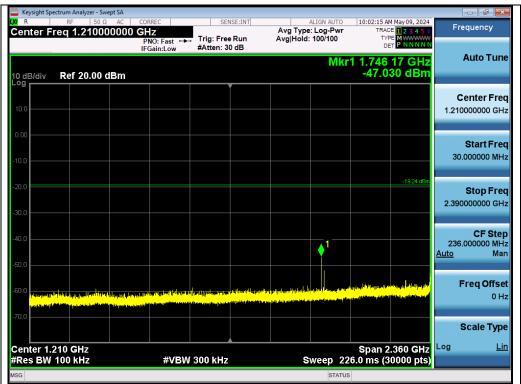


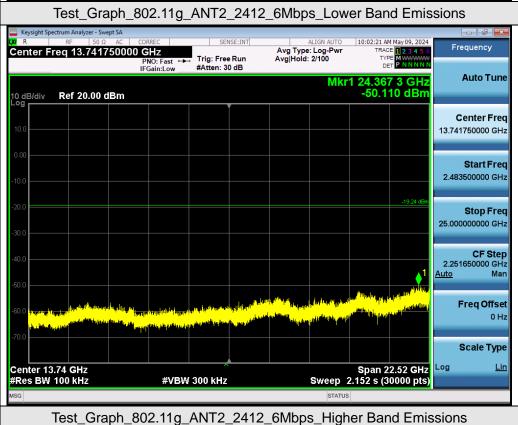


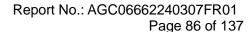




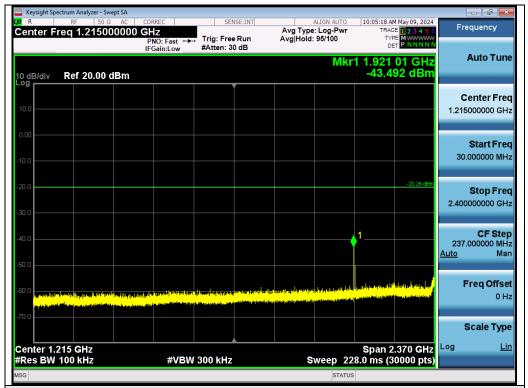


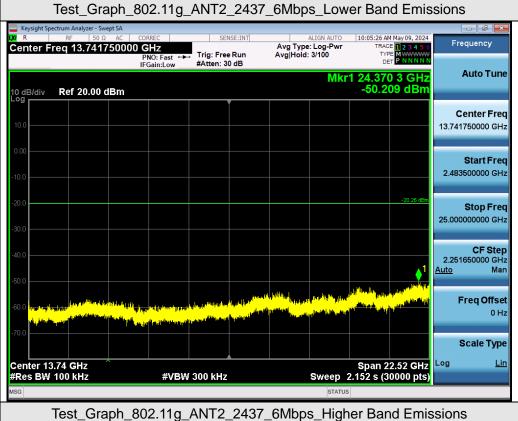


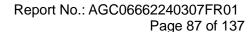






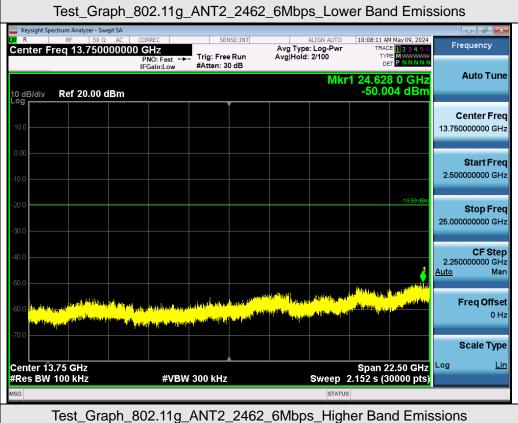


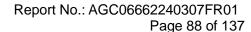




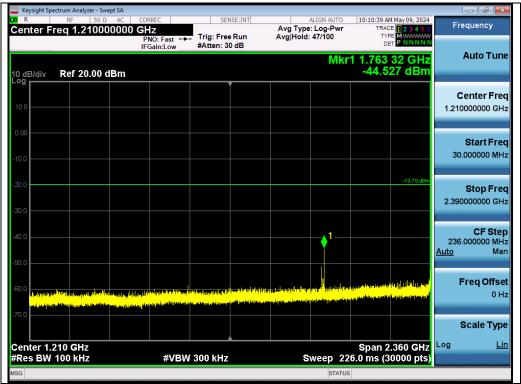




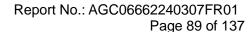




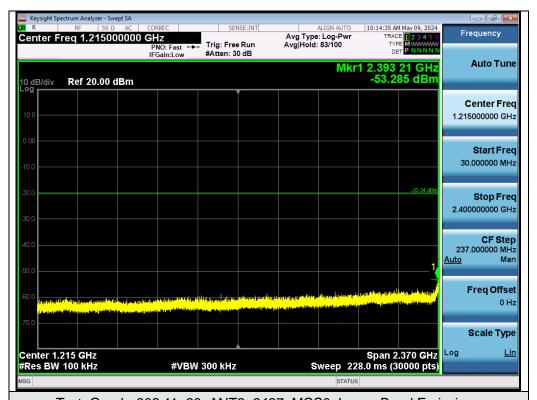




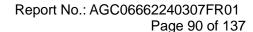




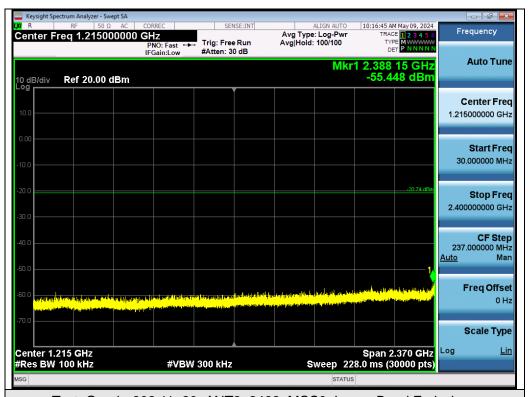


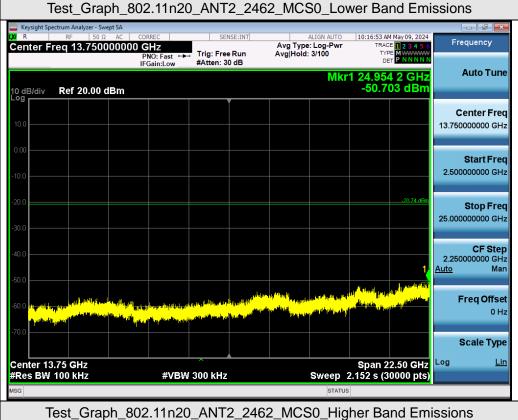


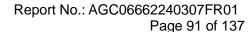




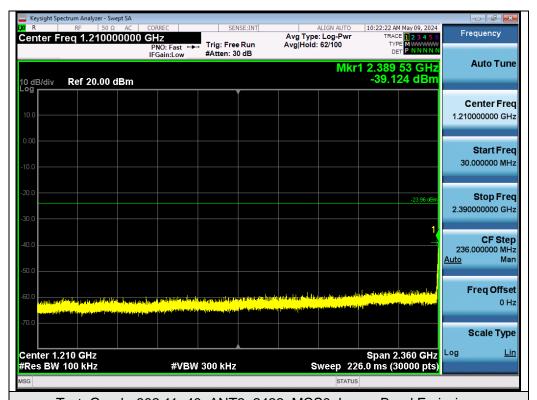


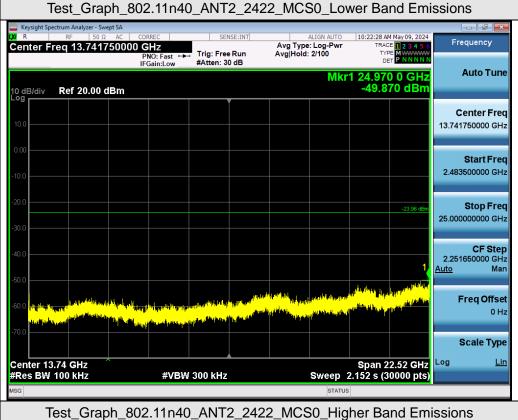


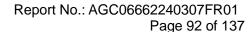




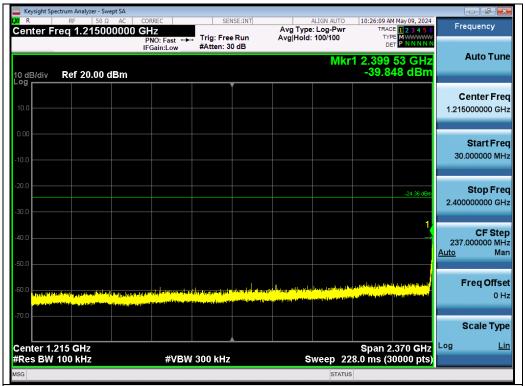




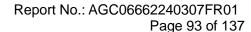




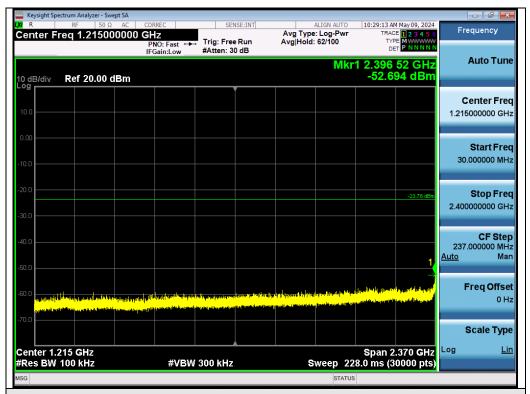


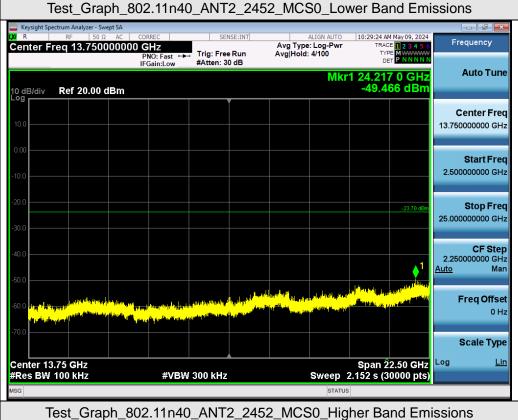


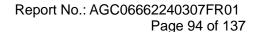














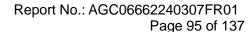
## Test Graphs of Band Edge Emissions in Non-Restricted Frequency Bands



Test\_Graph\_802.11b\_ANT1\_2412\_1Mbps\_Lower Band Edge Emissions

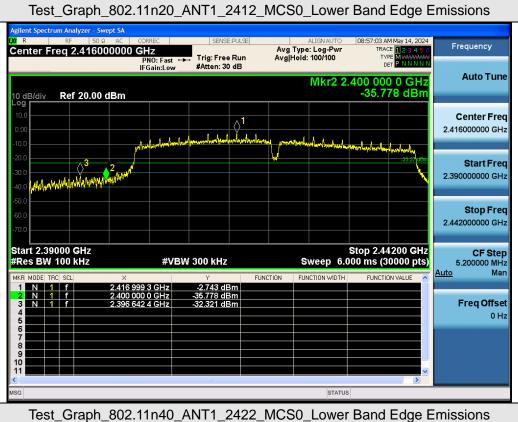


Test\_Graph\_802.11g\_ANT1\_2412\_6Mbps\_Lower Band Edge Emissions









Log





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Test\_Graph\_802.11g\_ANT2\_2412\_6Mbps\_Lower Band Edge Emissions





Note: Emissions from 2483.5-2500MHz which fall in the restricted bands had been considered with the radiated emission limits specified.



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# 11. Radiated Spurious Emission

#### 11.1 Measurement Limits

15.209(a) Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

#### 11.2 Measurement Procedure

- The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds.

Any reposphang alternative (provided the transmitter aloperates a for i longer hand) on the sample of pincases in where in the Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.



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pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.

- 8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.
- ◆ The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting		
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP		
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP		
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP		
Start Stan Fraguency	1GHz~26.5GHz		
Start ~Stop Frequency	1MHz/3MHz for Peak, 1MHz/3MHz for Average		

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP



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### Quasi-Peak Measurements below 1GHz

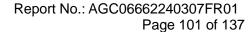
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = as shown in the table above
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

### • Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

## Average Measurements above 1GHz (Method VB)

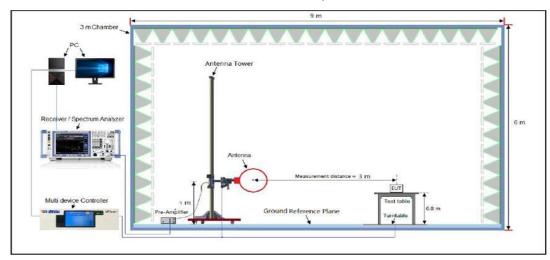
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW setting requirements are as follows:
- 4. If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.
- 5. If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
- 6. Detector = Peak
- 7. Sweep time = auto
- 8. Trace mode = max hold



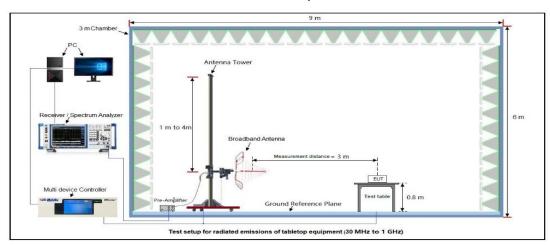


# 11.3 Measurement Setup (Block Diagram of Configuration)

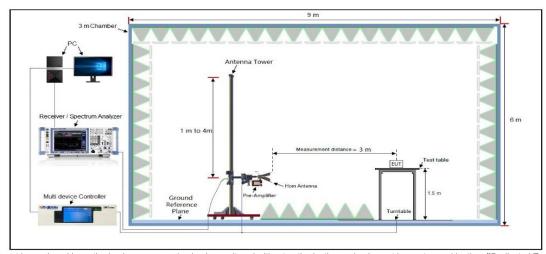
## Radiated Emission Test Setup 9kHz-30MHz



### Radiated Emission Test Setup 30MHz-1000MHz



## Radiated Emission Test Setup Above 1000MHz



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

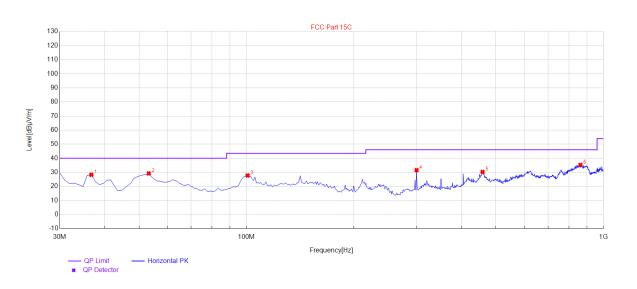


### 11.4 Measurement Result

### Radiated Emission at 9kHz-30MHz

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

Radiated Emission Test Results at 30MHz-1GHz					
EUT Name Wireless IP Camera Model Name C188					
Temperature	21.3° C	Relative Humidity	60.1%		
Pressure	960hPa	Test Voltage	DC 12V		
Test Mode	Mode 11	Antenna Polarity	Horizontal		

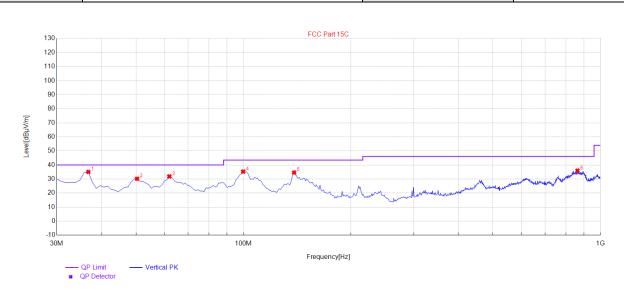


#### **Peak Data List**

NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.79	28.26	11.23	40.00	11.74	100	180	Horizontal
2	53.28	29.23	16.09	40.00	10.77	100	150	Horizontal
3	100.81	27.75	17.03	43.50	15.75	100	80	Horizontal
4	299.66	31.56	13.31	46.00	14.44	100	200	Horizontal
5	458.74	30.27	24.42	46.00	15.73	100	170	Horizontal
6	862.26	35.29	29.93	46.00	10.71	100	120	Horizontal



Radiated Emission Test Results at 30MHz-1GHz					
EUT Name	Wireless IP Camera	Model Name	C188		
Temperature	21.3° C	Relative Humidity	60.1%		
Pressure	960hPa	Test Voltage	DC 12V		
Test Mode	Mode 11	Antenna Polarity	Vertical		



Peak D	Peak Data List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	
1	36.79	35.07	11.23	40.00	4.93	100	180	Vertical	
2	50.37	30.20	15.32	40.00	9.80	100	150	Vertical	
3	62.01	31.87	17.23	40.00	8.13	100	80	Vertical	
4	99.84	35.30	17.03	43.50	8.20	100	200	Vertical	
5	138.64	34.63	15.90	43.50	8.87	100	170	Vertical	
6	862.26	35.96	29.93	46.00	10.04	100	120	Vertical	

## **RESULT: Pass**

Note: 1. Factor=Antenna Factor + Cable loss, Margin=Limit-Level.

2. All test modes had been pre-tested. The mode 11 is the worst case and recorded in the report.



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### **Radiated Emissions Test Results above 1 GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 1	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.26	0.08	46.34	74	-27.66	peak
4824.000	37.61	0.08	37.69	54	-16.31	AVG
7236.000	41.29	2.21	43.5	74	-30.5	peak
7236.000	32.52	2.21	34.73	54	-19.27	AVG
Pomark:						

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 1	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.39	0.08	46.47	74	-27.53	peak
4824.000	37.18	0.08	37.26	54	-16.74	AVG
7236.000	41.25	2.21	43.46	74	-30.54	peak
7236.000	32.49	2.21	34.7	54	-19.3	AVG
Remark:				•		

Temark.

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 2	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.79	0.14	45.93	74	-28.07	peak
4874.000	38.22	0.14	38.36	54	-15.64	AVG
7311.000	41.51	2.36	43.87	74	-30.13	peak
7311.000	34.36	2.36	36.72	54	-17.28	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 2	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.27	0.14	45.41	74	-28.59	peak
4874.000	37.59	0.14	37.73	54	-16.27	AVG
7311.000	40.91	2.36	43.27	74	-30.73	peak
7311.000	33.73	2.36	36.09	54	-17.91	AVG
Remark:						

# **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 3	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4924.000	46.55	0.22	46.77	74	-27.23	peak
4924.000	38.28	0.22	38.5	54	-15.5	AVG
7386.000	41.23	2.64	43.87	74	-30.13	peak
7386.000	32.78	2.64	35.42	54	-18.58	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 3	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4924.000	46.11	0.22	46.33	74	-27.67	peak
4924.000	38.59	0.22	38.81	54	-15.19	AVG
7386.000	40.75	2.64	43.39	74	-30.61	peak
7386.000	31.93	2.64	34.57	54	-19.43	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### Radiated Emissions Test Results above 1GHz

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 4	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.35	0.08	46.43	74	-27.57	peak
4824.000	37.48	0.08	37.56	54	-16.44	AVG
7236.000	41.36	2.21	43.57	74	-30.43	peak
7236.000	32.52	2.21	34.73	54	-19.27	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 4	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/-\ T
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.37	0.08	46.45	74	-27.55	peak
4824.000	37.48	0.08	37.56	54	-16.44	AVG
7236.000	41.32	2.21	43.53	74	-30.47	peak
7236.000	32.49	2.21	34.7	54	-19.3	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

# **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 5	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.69	0.14	45.83	74	-28.17	peak
4874.000	38.23	0.14	38.37	54	-15.63	AVG
7311.000	41.64	2.36	44	74	-30	peak
7311.000	34.27	2.36	36.63	54	-17.37	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 5	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.33	0.14	45.47	74	-28.53	peak
4874.000	37.56	0.14	37.7	54	-16.3	AVG
7311.000	40.91	2.36	43.27	74	-30.73	peak
7311.000	33.78	2.36	36.14	54	-17.86	AVG
Remark:	Remark:					

# **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 6	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4924.000	46.53	0.22	46.75	74	-27.25	peak
4924.000	38.41	0.22	38.63	54	-15.37	AVG
7386.000	41.25	2.64	43.89	74	-30.11	peak
7386.000	32.77	2.64	35.41	54	-18.59	AVG
Remark:						

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 6	Antenna Polarity	Vertical

Meter Reading	Factor	Emission Level	Limits	Margin	\ /- l T
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
46.22	0.22	46.44	74	-27.56	peak
38.57	0.22	38.79	54	-15.21	AVG
40.75	2.64	43.39	74	-30.61	peak
31.96	2.64	34.6	54	-19.4	AVG
	(dBµV) 46.22 38.57 40.75	(dBµV) (dB) 46.22 0.22 38.57 0.22 40.75 2.64	(dBμV) (dB) (dBμV/m)   46.22 0.22 46.44   38.57 0.22 38.79   40.75 2.64 43.39	(dBμV) (dB) (dBμV/m) (dBμV/m)   46.22 0.22 46.44 74   38.57 0.22 38.79 54   40.75 2.64 43.39 74	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m)   46.22 0.22 46.44 74 -27.56   38.57 0.22 38.79 54 -15.21   40.75 2.64 43.39 74 -30.61

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 7	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alua Tima
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.38	0.08	46.46	74	-27.54	peak
4824.000	37.47	0.08	37.55	54	-16.45	AVG
7236.000	41.39	2.21	43.6	74	-30.4	peak
7236.000	32.45	2.21	34.66	54	-19.34	AVG

#### Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 7	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4824.000	46.34	0.08	46.42	74	-27.58	peak
4824.000	37.46	0.08	37.54	54	-16.46	AVG
7236.000	41.39	2.21	43.6	74	-30.4	peak
7236.000	32.45	2.21	34.66	54	-19.34	AVG

#### Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

## **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 8	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.79	0.14	45.93	74	-28.07	peak
4874.000	38.22	0.14	38.36	54	-15.64	AVG
7311.000	41.66	2.36	44.02	74	-29.98	peak
7311.000	34.27	2.36	36.63	54	-17.37	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 8	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.31	0.14	45.45	74	-28.55	peak
4874.000	37.52	0.14	37.66	54	-16.34	AVG
7311.000	40.92	2.36	43.28	74	-30.72	peak
7311.000	33.83	2.36	36.19	54	-17.81	AVG
Remark:	Remark:					

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

# **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 9	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4924.000	46.52	0.22	46.74	74	-27.26	peak
4924.000	38.41	0.22	38.63	54	-15.37	AVG
7386.000	41.26	2.64	43.9	74	-30.1	peak
7386.000	32.89	2.64	35.53	54	-18.47	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 9	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	\/alva Tres
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4924.000	46.19	0.22	46.41	74	-27.59	peak
4924.000	38.57	0.22	38.79	54	-15.21	AVG
7386.000	40.83	2.64	43.47	74	-30.53	peak
7386.000	31.76	2.64	34.4	54	-19.6	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### Radiated Emissions Test Results above 1GHz

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 10	Antenna Polarity	Horizontal

Meter Reading	Factor	Emission Level	Limits	Margin	Volue Type
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
46.39	0.08	46.47	74	-27.53	peak
37.29	0.08	37.37	54	-16.63	AVG
41.34	2.21	43.55	74	-30.45	peak
32.27	2.21	34.48	54	-19.52	AVG
	(dBµV) 46.39 37.29 41.34	(dBµV) (dB) 46.39 0.08 37.29 0.08 41.34 2.21	(dBμV) (dB) (dBμV/m)   46.39 0.08 46.47   37.29 0.08 37.37   41.34 2.21 43.55	(dBμV) (dB) (dBμV/m) (dBμV/m)   46.39 0.08 46.47 74   37.29 0.08 37.37 54   41.34 2.21 43.55 74	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m)   46.39 0.08 46.47 74 -27.53   37.29 0.08 37.37 54 -16.63   41.34 2.21 43.55 74 -30.45

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 10	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4844.000	46.37	0.08	46.45	74	-27.55	peak
4844.000	37.48	0.08	37.56	54	-16.44	AVG
7266.000	41.39	2.21	43.6	74	-30.4	peak
7266.000	32.36	2.21	34.57	54	-19.43	AVG

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### **Radiated Emissions Test Results above 1GHz**

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 11	Antenna Polarity	Horizontal

Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
45.81	0.14	45.95	74	-28.05	peak
38.23	0.14	38.37	54	-15.63	AVG
41.59	2.36	43.95	74	-30.05	peak
34.43	2.36	36.79	54	-17.21	AVG
	(dBµV) 45.81 38.23 41.59	(dBµV) (dB) 45.81 0.14 38.23 0.14 41.59 2.36	(dBμV) (dB) (dBμV/m)   45.81 0.14 45.95   38.23 0.14 38.37   41.59 2.36 43.95	(dBμV) (dB) (dBμV/m) (dBμV/m)   45.81 0.14 45.95 74   38.23 0.14 38.37 54   41.59 2.36 43.95 74	(dBμV) (dB) (dBμV/m) (dBμV/m) (dBμV/m)   45.81 0.14 45.95 74 -28.05   38.23 0.14 38.37 54 -15.63   41.59 2.36 43.95 74 -30.05

Remark:

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 11	Antenna Polarity	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Time
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Value Type
4874.000	45.33	0.14	45.47	74	-28.53	peak
4874.000	37.59	0.14	37.73	54	-16.27	AVG
7311.000	40.97	2.36	43.33	74	-30.67	peak
7311.000	33.82	2.36	36.18	54	-17.82	AVG

<u>Remark:</u>

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**



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### Radiated Emissions Test Results above 1GHz

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 12	Antenna Polarity	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4904.000	46.63	0.22	46.85	74	-27.15	peak
4904.000	38.49	0.22	38.71	54	-15.29	AVG
7356.000	41.61	2.64	44.25	74	-29.75	peak
7356.000	32.73	2.64	35.37	54	-18.63	AVG
·						
Remark:						

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 12	Antenna Polarity	Vertical

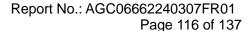
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Tree
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
4904.000	46.33	0.22	46.55	74	-27.45	peak
4904.000	38.49	0.22	38.71	54	-15.29	AVG
7356.000	40.52	2.64	43.16	74	-30.84	peak
7356.000	31.76	2.64	34.4	54	-19.6	AVG

Factor = Antenna Factor + Cable Loss - Pre-amplifier.

### **RESULT: Pass**

### Note:

- The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.
- 2. Factor = Antenna Factor + Cable loss - Pre-amplifier gain, Margin = Emission Level-Limit.
- 3. The "Factor" value can be calculated automatically by software of measurement system.





EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 1	Antenna Polarity	Horizontal

### Test Graph for Peak Measurement

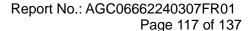


Test Graph for Average Measurement



### **RESULT: Pass**

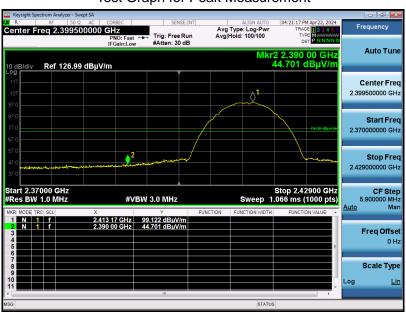
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EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 1	Antenna Polarity	Vertical

### Test Graph for Peak Measurement

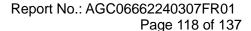


Test Graph for Average Measurement



### **RESULT: Pass**

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EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 3	Antenna Polarity	Horizontal

### Test Graph for Peak Measurement

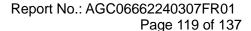


Test Graph for Average Measurement



### **RESULT: Pass**

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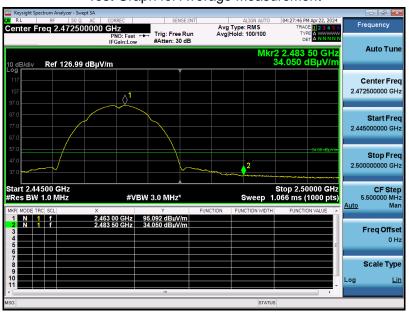


EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 3	Antenna Polarity	Vertical

### Test Graph for Peak Measurement

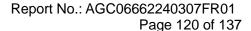


Test Graph for Average Measurement



### **RESULT: Pass**

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EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 4	Antenna Polarity	Horizontal

### Test Graph for Peak Measurement

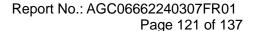


Test Graph for Average Measurement



### **RESULT: Pass**

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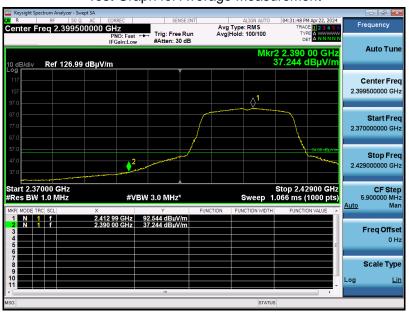


EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 4	Antenna Polarity	Vertical

### Test Graph for Peak Measurement

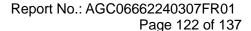


Test Graph for Average Measurement



### **RESULT: Pass**

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EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 6	Antenna Polarity	Horizontal

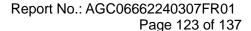
### Test Graph for Peak Measurement



Test Graph for Average Measurement



### **RESULT: Pass**



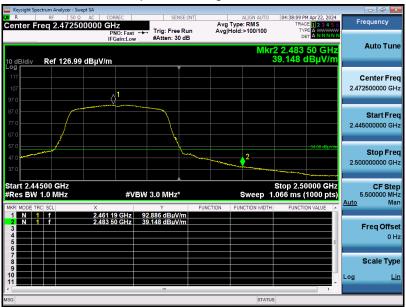


EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 6	Antenna Polarity	Vertical

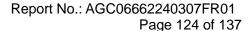
### Test Graph for Peak Measurement



Test Graph for Average Measurement



### **RESULT: Pass**





EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 7	Antenna Polarity	Horizontal

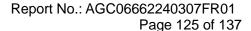
### Test Graph for Peak Measurement



Test Graph for Average Measurement



### **RESULT: Pass**



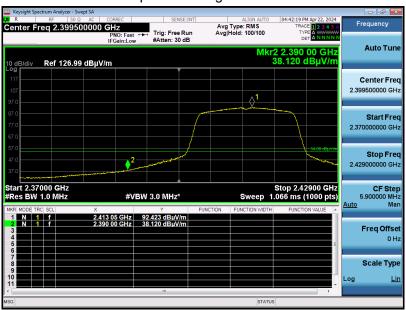


EUT Name	Wireless IP Camera	Model Name	C188
Temperature	21.3° C	Relative Humidity	60.1%
Pressure	960hPa	Test Voltage	DC 12V
Test Mode	Mode 7	Antenna Polarity	Vertical

### Test Graph for Peak Measurement



Test Graph for Average Measurement



### **RESULT: Pass**

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