



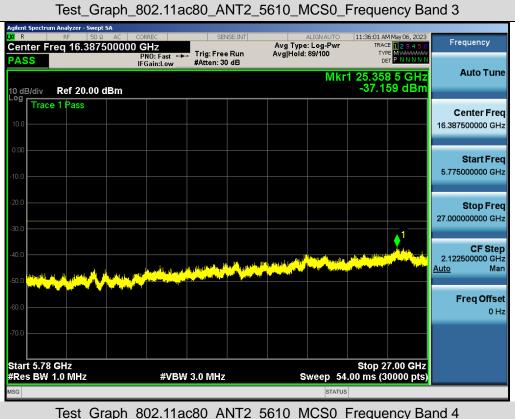


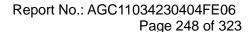


Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



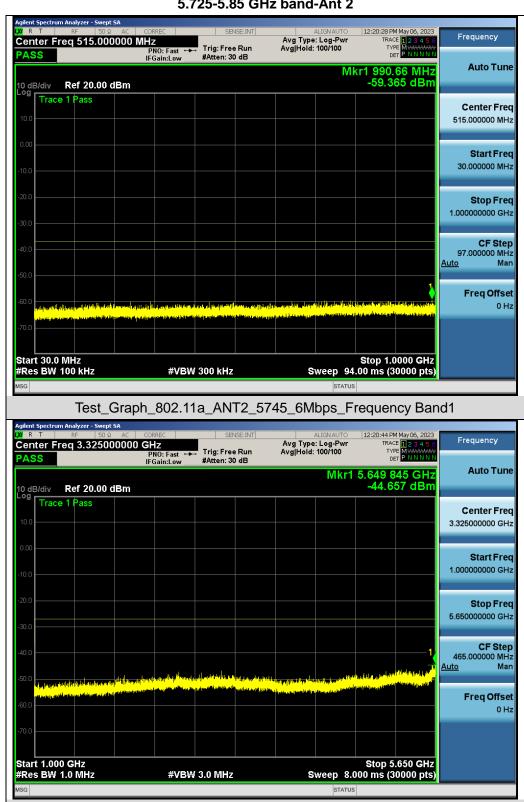








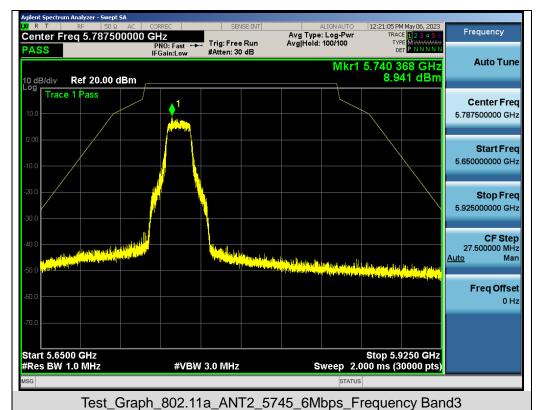
Test Graphs of Spurious Emissions outside of the 5.725-5.85 GHz band for transmitters operating in the 5.725-5.85 GHz band-Ant 2



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.

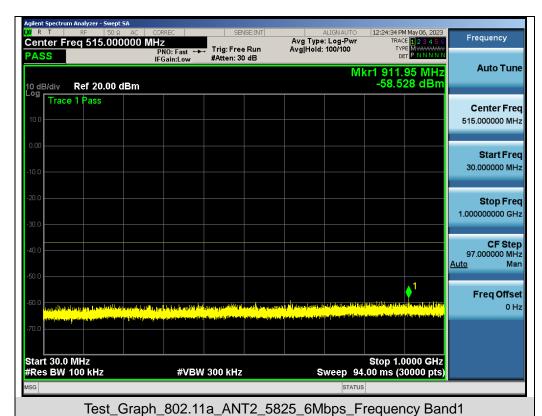
Test_Graph_802.11a_ANT2_5745_6Mbps_Frequency Band2

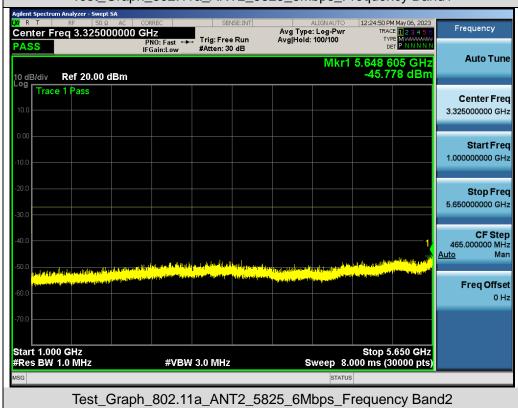






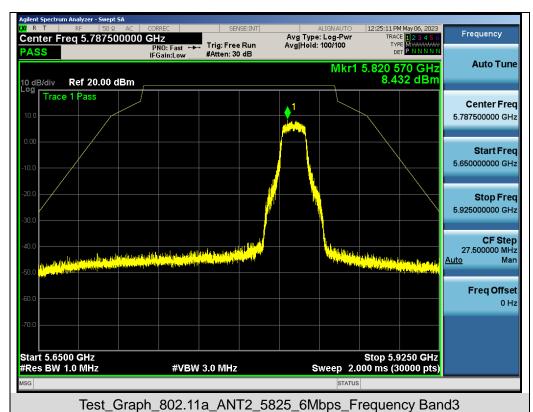






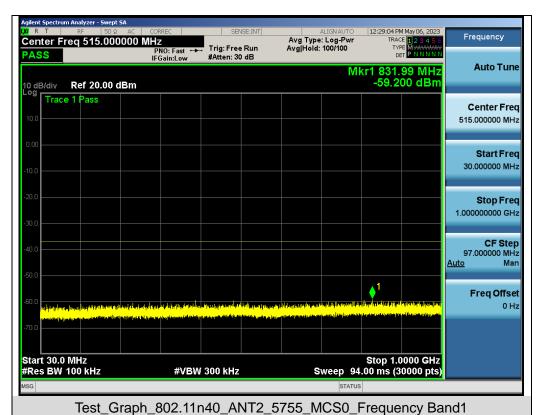
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/





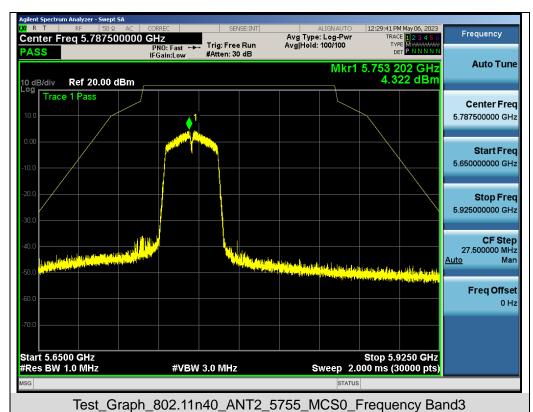






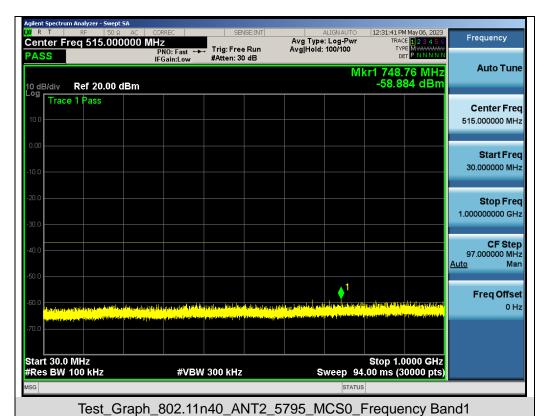








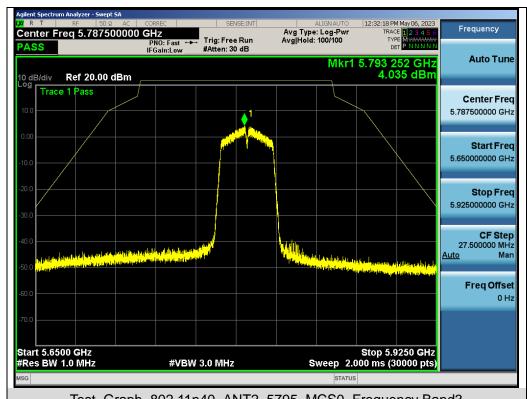






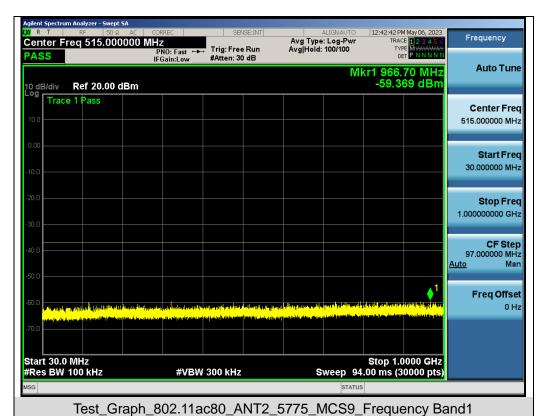
Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/





















10. RADIATED EMISSION

10.1 LIMITS OF RADIATED EMISSION TEST

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

Frequency (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:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.
- 3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Applicable to		Limit			
Restricted	789033 D02 General UNII Test	Field stre	ength at 3m (dBuV/m)		
bands	Procedures New Rules v02r01	PK: 74	AV: 54		
	Applicable to	EIRP Limit (dBm/MHz)	Equivalent field Strength at 3m (dBuV/m)		
Out of the	FCC 15.407(b)(1)		PK: 68.2		
restricted bands	15.407(b)(2)	PK: -27			
	15.407(b)(3)				
	15.407(b)(4)	See Note 2			

Note 1: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

E =
$$\frac{1000000 \sqrt{30 P}}{3}$$
 µV/m, where P is the eirp (Watts).

Note 2: 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.



Page 259 of 323

10.2 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. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the 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.



Page 260 of 323

The following table is the setting of spectrum analyzer and receiver.

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

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz:

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz:

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz:

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

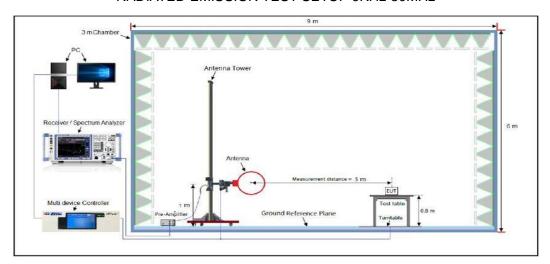
(4) Procedures for Average Unwanted Emissions Measurements Above 1000MHz:

- RBW = 1 MHz
- VBW = 3 MHz Detector = power averaging (rms), set span/(# of points in sweep) ≥ RBW/2.
- Averaging type = power averaging (RMS)
- The correction factor shall be offset is 10 $\log (1/x)$, where x is the duty cycle.

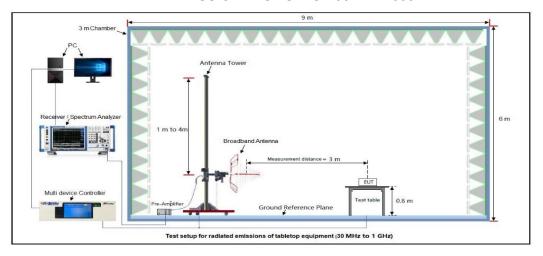


10.3 MEASUREMENT SETUP (BLOCK DIAGRAM OF CONFIGURATION)

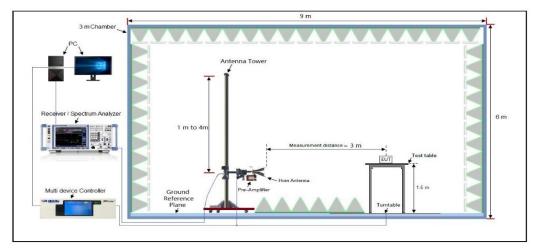
RADIATED EMISSION TEST SETUP 9KHz-30MHz



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.

Tel: +86-755 2523 4088 E-mail: agc@agccert.com Web: http://www.agccert.com/



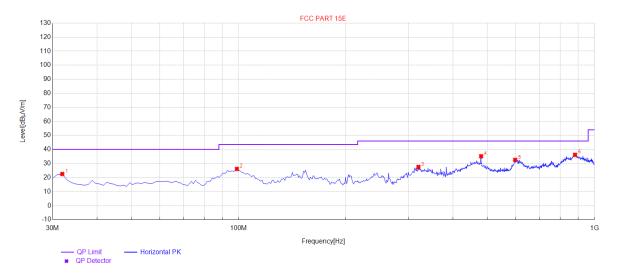
10.4 MEASUREMENT RESULT

Radiated Emission Below 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 from 30MHz to 1000MHz

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

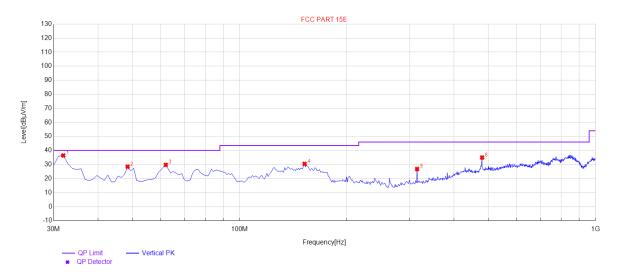


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	22.56	12.14	40.00	17.44	100	199	Horizontal
2	98.87	26.14	20.81	43.50	17.36	100	15	Horizontal
3	320.03	27.58	21.33	46.00	18.42	100	299	Horizontal
4	480.08	35.20	25.79	46.00	10.80	100	320	Horizontal
5	598.42	32.61	28.21	46.00	13.39	100	146	Horizontal
6	881.66	36.20	33.14	46.00	9.80	100	98	Horizontal

RESULT: PASS



EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical



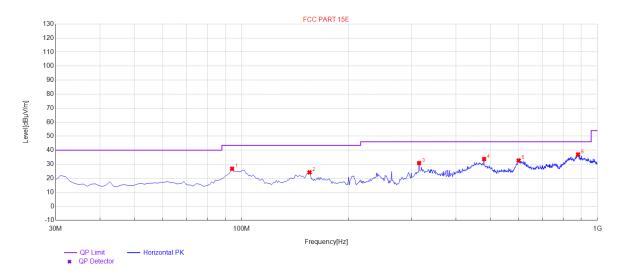
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	36.42	10.21	40.00	3.58	100	344	Vertical
2	48.43	28.42	13.07	40.00	11.58	100	75	Vertical
3	62.01	29.75	14.64	40.00	10.25	100	271	Vertical
4	152.22	30.48	21.12	43.50	13.02	100	59	Vertical
5	315.18	26.80	13.33	46.00	19.20	100	360	Vertical
6	480.08	34.99	22.61	46.00	11.01	100	149	Vertical

RESULT: PASS



Radiated emission from 30MHz to 1000MHz

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5260MHz	Antenna	Horizontal

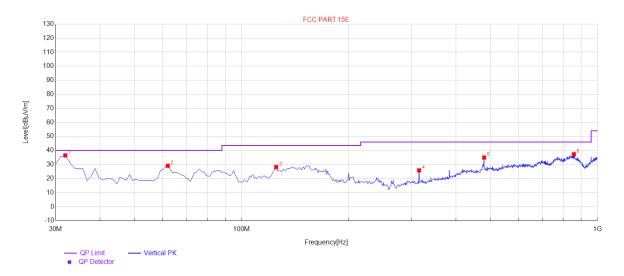


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	94.02	26.76	17.97	43.50	16.74	100	209	Horizontal
2	155.13	24.19	14.17	43.50	19.31	100	156	Horizontal
3	315.18	30.84	20.20	46.00	15.16	100	18	Horizontal
4	480.08	33.73	25.79	46.00	12.27	100	4	Horizontal
5	600.36	32.66	28.71	46.00	13.34	100	98	Horizontal
6	881.66	36.99	33.14	46.00	9.01	100	272	Horizontal

RESULT: PASS



EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5260MHz	Antenna	Vertical



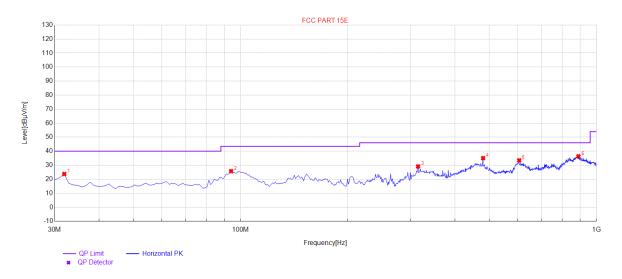
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	36.52	10.21	40.00	3.48	100	188	Vertical
2	62.01	29.12	14.64	40.00	10.88	100	50	Vertical
3	125.06	28.24	18.07	43.50	15.26	100	135	Vertical
4	315.18	25.84	13.33	46.00	20.16	100	8	Vertical
5	480.08	35.01	22.61	46.00	10.99	100	182	Vertical
6	858.38	37.39	32.05	46.00	8.61	100	299	Vertical

RESULT: PASS



Radiated emission from 30MHz to 1000MHz

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Horizontal

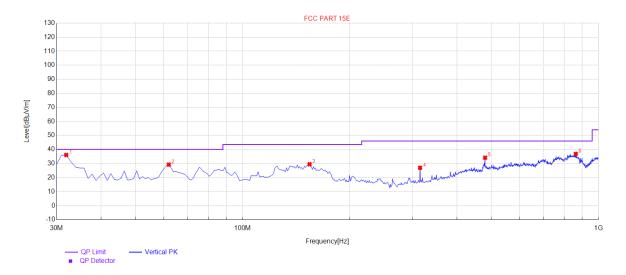


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	23.71	12.14	40.00	16.29	100	205	Horizontal
2	94.02	25.79	17.97	43.50	17.71	100	27	Horizontal
3	315.18	29.14	20.20	46.00	16.86	100	110	Horizontal
4	480.08	35.09	25.79	46.00	10.91	100	341	Horizontal
5	606.18	33.47	28.50	46.00	12.53	100	159	Horizontal
6	889.42	36.37	32.55	46.00	9.63	100	320	Horizontal

RESULT: PASS



EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Vertical



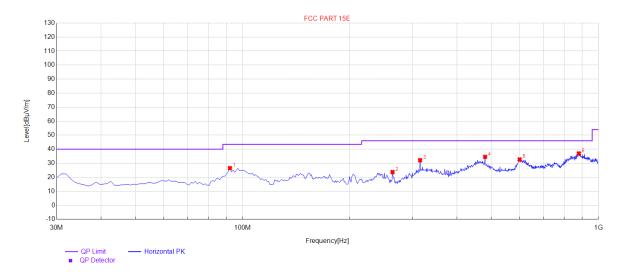
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	31.94	36.11	10.21	40.00	3.89	100	357	Vertical
2	62.01	29.25	14.64	40.00	10.75	100	56	Vertical
3	154.16	29.47	21.33	43.50	14.03	100	1	Vertical
4	315.18	27.00	13.33	46.00	19.00	100	8	Vertical
5	480.08	34.17	22.61	46.00	11.83	100	140	Vertical
6	863.23	36.88	31.76	46.00	9.12	100	108	Vertical

RESULT: PASS



Radiated emission from 30MHz to 1000MHz

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Horizontal

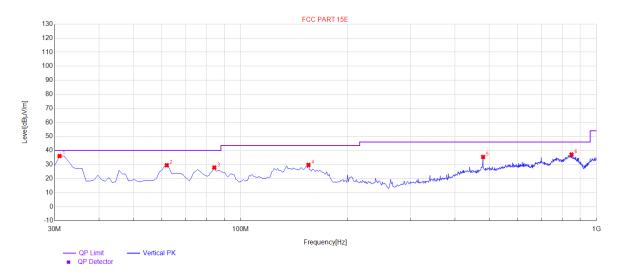


NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	92.08	26.50	16.84	43.50	17.00	100	225	Horizontal
2	263.77	23.72	13.42	46.00	22.28	100	114	Horizontal
3	315.18	32.17	20.20	46.00	13.83	100	352	Horizontal
4	480.08	34.57	25.79	46.00	11.43	100	315	Horizontal
5	600.36	32.67	28.71	46.00	13.33	100	257	Horizontal
6	880.69	37.00	33.22	46.00	9.00	100	1	Horizontal

RESULT: PASS



EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.97	36.03	10.03	40.00	3.97	100	146	Vertical
2	62.01	29.48	14.64	40.00	10.52	100	341	Vertical
3	84.32	27.83	12.30	40.00	12.17	100	56	Vertical
4	155.13	29.72	21.44	43.50	13.78	100	114	Vertical
5	480.08	35.38	22.61	46.00	10.62	100	151	Vertical
6	850.62	37.09	32.25	46.00	8.91	100	8	Vertical

RESULT: PASS

Note: All test channels had been tested. The 802.11a20 is the worst case and recorded in the test report. Factor = Antenna Factor + Cable loss - Amplifier gain, Margin= Limit-Level.

The "Factor" value can be calculated automatically by software of measurement system.



Page 270 of 323

Radiated emission above 1GHz

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C Relative Humidity		60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
10360.042	48.33	9.14	57.47	68.20	-10.73	peak		
15540.063	41.39	10.22	51.61	74.00	-22.39	peak		
15540.063	34.01	10.22	44.23	54.00	-9.77	AVG		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
10360.042	49.37	9.14	58.51	68.20	-9.69	peak
15540.063	42.11	10.22	52.33	74.00	-21.67	peak
15540.063	31.98	10.22	42.20	54.00	-11.80	AVG
Remark:						
Factor = Anter	na Factor + Cabl	e Loss – Pre-	amplifier.			



Page 271 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C Relative Humidity		60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5200MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
10400.042	47.31	9.14	56.45	68.20	-11.75	peak		
15600.063	39.77	10.22	49.99	74.00	-24.01	peak		
15600.063	33.52	10.22	43.74	54.00	-10.26	AVG		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
10400.042	46.98	9.14	56.12	68.20	-12.08	peak	
15600.063	40.25	10.22	50.47	74.00	-23.53	peak	
15600.063	32.98	10.22	43.20	54.00	-10.80	AVG	
Remark:							
Factor = Anter	na Factor + Cabl	e Loss – Pre-a	amplifier.				



Page 272 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro	
Temperature	25°C	Relative Humidity	60%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11a20 5240MHz	Antenna	Horizontal/Vertical	

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	
10480.042	47.24	9.27	56.51	68.20	-11.69	peak
15720.063	42.02	10.38	52.40	74.00	-21.60	peak
15720.063	32.68	10.38	43.06	54.00	-10.94	AVG
Remark:						
Factor = Anter	na Factor + Cab	le Loss – Pre-a	mplifier.			

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
10480.042	46.96	9.27	56.23	68.20	-11.97	peak	
15720.063	42.36	10.38	52.74	74.00	-21.26	peak	
15720.063	31.52	10.38	41.90	54.00	-12.10	AVG	
Remark:							
Factor = Anten	na Factor + Cabl	e Loss – Pre-	amplifier.				
			•				



Page 273 of 323

EUT	WiFi IP Camera Model Name		E1 Outdoor Pro	
Temperature	25°C	Relative Humidity	60%	
Pressure	960hPa	Test Voltage	Normal Voltage	
Test Mode	802.11a20 5260MHz	Antenna	Horizontal/Vertical	

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
10520.051	48.63	9.31	57.94	68.20	-10.26	peak	
15780.033	42.05	10.42	52.47	74.00	-21.53	peak	
15780.033	31.63	10.42	42.05	54.00	-11.95	AVG	
Remark:							
Factor = Anter	ına Factor + Cabl	le Loss – Pre-a	amplifier.				

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
10520.051	47.36	9.31	56.67	68.20	-11.53	peak	
15780.033	41.56	10.42	51.98	74.00	-22.02	peak	
15780.033	32.15	10.42	42.57	54.00	-11.43	AVG	
Remark:							
Factor = Anter	na Factor + Cabl	e Loss – Pre-	amplifier.				



Page 274 of 323

EUT	WiFi IP Camera	Model Name E1 Outdoor Pro	
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5300MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
10600.025	47.95	9.33	57.28	74.00	-16.72	peak
10600.025	31.28	9.33	40.61	54.00	-13.39	AVG
15900.036	46.33	10.44	56.77	74.00	-17.23	peak
15900.036	31.58	10.44	42.02	54.00	-11.98	AVG
Remark:	•		•		•	•
Factor = Anter	na Factor + Cabl	e Loss – Pre-ai	mplifier.	_	_	

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
10600.025	46.36	9.33	55.69	74.00	-18.31	peak
10600.025	34.05	9.33	43.38	54.00	-10.62	AVG
15900.036	46.35	10.44	56.79	74.00	-17.21	peak
15900.036	32.59	10.44	43.03	54.00	-10.97	AVG
Remark:						

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



Page 275 of 323

EUT	WiFi IP Camera	Model Name E1 Outdoor Pro	
Temperature	25°C	Relative Humidity 60%	
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5320MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
10640.055	49.45	9.35	58.80	74.00	-15.20	peak
10640.055	31.52	9.35	40.87	54.00	-13.13	AVG
15960.042	43.77	10.46	54.23	74.00	-19.77	peak
15960.042	30.89	10.46	41.35	54.00	-12.65	AVG
Remark:	!					
Factor = Anten	na Factor + Cabl	le Loss – Pre-ai	mplifier.			

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
10640.055	46.36	9.35	55.71	74.00	-18.29	peak
10640.055	32.41	9.35	41.76	54.00	-12.24	AVG
15960.042	42.33	10.46	52.79	74.00	-21.21	peak
15960.042	33.05	10.46	43.51	54.00	-10.49	AVG
Remark:						
-actor = Anter	nna Factor + Cabl	e Loss – Pre-a	mplifier.			



Report No.: AGC11034230404FE06 Page 276 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11000.024	50.32	9.38	59.70	74.00	-14.30	peak
11000.024	33.51	9.38	42.89	54.00	-11.11	AVG
16500.033	41.02	10.51	51.53	68.20	-16.67	peak
Remark:						
Factor = Anter	na Factor + Cab	le Loss – Pre-a	mplifier.			

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11000.024	46.74	9.38	56.12	74.00	-17.88	peak
11000.024	34.52	9.38	43.90	54.00	-10.10	AVG
16500.033	42.23	10.51	52.74	68.20	-15.46	peak
Remark:						
Factor = Anten	na Factor + Cabl	e Loss – Pre-ai	mplifier.			



Page 277 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5600MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11200.035	47.33	9.38	56.71	74.00	-17.29	peak
11200.035	31.74	9.38	41.12	54.00	-12.88	AVG
16800.041	39.58	10.51	50.09	68.20	-18.11	peak
Remark:						
Factor = Anten	na Factor + Cabl	e Loss – Pre-ar	mplifier.			

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11200.035	48.37	9.38	57.75	74.00	-16.25	peak
11200.035	32.65	9.38	42.03	54.00	-11.97	AVG
16800.041	40.11	10.51	50.62	68.20	-17.58	peak
Remark:						
Factor = Anten	na Factor + Cabl	e Loss – Pre-a	mplifier.			
			•			



Page 278 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5700MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)			
11400.058	48.25	9.41	57.66	74.00	-16.34	peak		
11400.058	32.55	9.41	41.96	54.00	-12.04	AVG		
17100.042	41.77	10.5	52.27	68.20	-15.93	peak		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
11400.058	46.37	9.41	55.78	74.00	-18.22	peak		
11400.058	31.89	9.41	41.30	54.00	-12.70	AVG		
17100.042	42.25	10.5	52.75	68.20	-15.45	peak		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								



Page 279 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5745MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	- Value Type
11400.058	49.31	9.42	58.73	74.00	-15.27	peak
11400.058	32.27	9.42	41.69	54.00	-12.31	AVG
17100.042	42.37	10.51	52.88	68.20	-15.32	peak
Remark:						
Factor = Anter	na Factor + Cabl	le Loss – Pre-ai	mplifier.			

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type		
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type		
11400.058	48.69	9.42	58.11	74.00	-15.89	peak		
11400.058	32.17	9.42	41.59	54.00	-12.41	AVG		
17100.042	38.74	10.51	49.25	68.20	-18.95	peak		
Remark:								
Factor = Antenna Factor + Cable Loss – Pre-amplifier.								



Page 280 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5785MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
11570.042	47.85	9.42	57.27	74.00	-16.73	peak	
11570.042	34.25	9.42	43.67	54.00	-10.33	AVG	
17355.063	33.64	10.51	44.15	68.20	-24.05	peak	
Remark:						•	
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11570.042	47.99	9.42	57.41	74.00	-16.59	peak
11570.042	32.15	9.42	41.57	54.00	-12.43	AVG
17355.063	32.43	10.51	42.94	68.20	-25.26	peak
Remark:						
Factor = Anten	na Factor + Cabl	e Loss – Pre-	amplifier.			



Page 281 of 323

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5825MHz	Antenna	Horizontal/Vertical

RADIATED EMISSION ABOVE 1GHZ-Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	- Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		
11650.042	48.51	9.62	58.13	74.00	-15.87	peak	
11650.042	32.88	9.62	42.50	54.00	-11.50	AVG	
17475.063	37.62	10.75	48.37	68.20	-19.83	peak	
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

RADIATED EMISSION ABOVE 1GHZ-Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
11650.042	48.37	9.62	57.99	74.00	-16.01	peak
11650.042	32.16	9.62	41.78	54.00	-12.22	AVG
17475.063	37.63	10.75	48.38	68.20	-19.82	peak
Remark:						
Factor = Anten	na Factor + Cab	le Loss – Pre-ar	mplifier.			

Note:

- 1. All test channels had been tested. The 802.11a20_ANT 1 is the worst case and recorded in the test report.
- 2. Other frequencies radiation emission from 1GHz to 40GHz at least have 20dB margin and not recorded in the test report.
- 3. Factor = Antenna Factor + Cable loss Amplifier gain, Margin= Level-Limit.
- 4. The "Factor" value can be calculated automatically by software of measurement system.



Test result for band edge emission at restricted bands 5.150GHz~5.250GHz-Ant 1

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

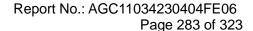
Test Graph for Peak Measurement



Test Graph for Average Measurement



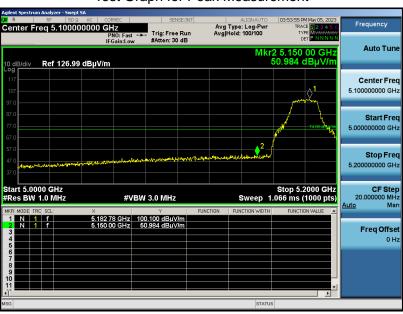
RESULT: PASS





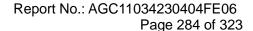
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

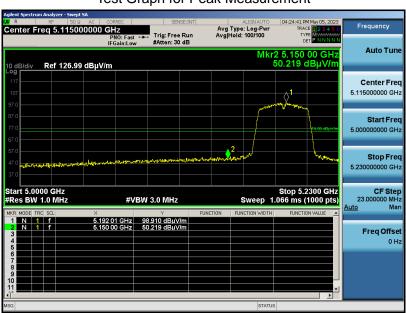




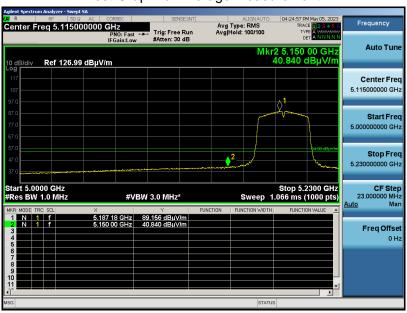


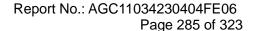
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

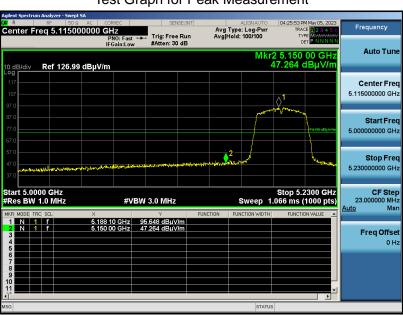




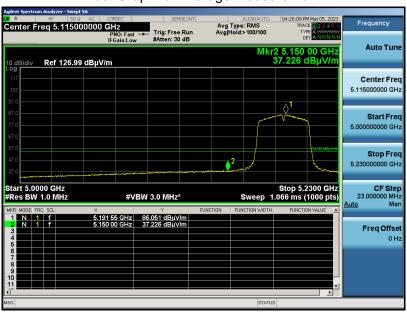


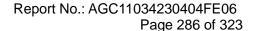
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

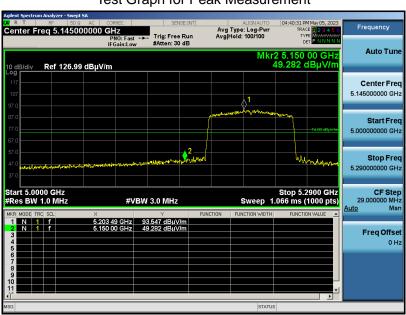




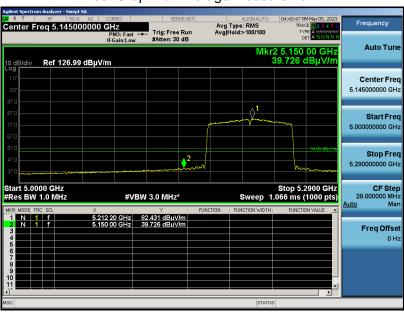


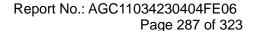
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

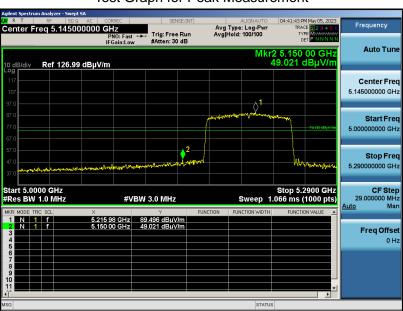




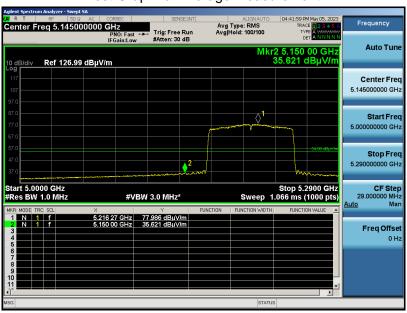


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

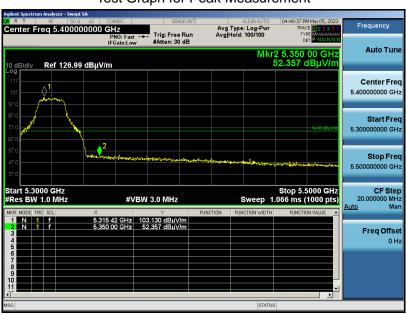




Test result for band edge emission at restricted bands 5.25GHz~5.35GHz-Ant 1

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5320MHz	Antenna	Horizontal

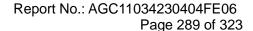
Test Graph for Peak Measurement



Test Graph for Average Measurement



RESULT: PASS





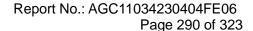
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5320MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

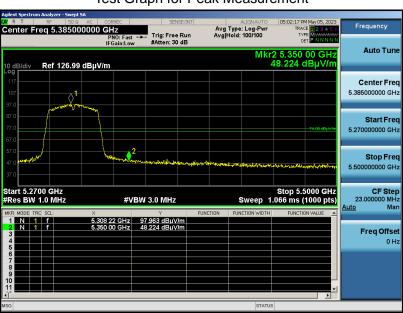




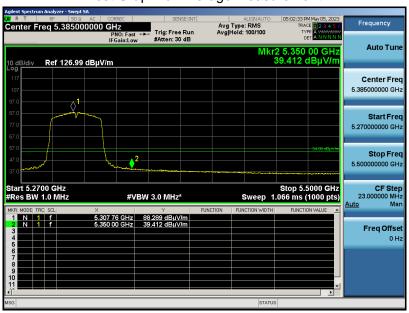


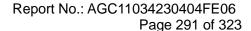
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5310MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

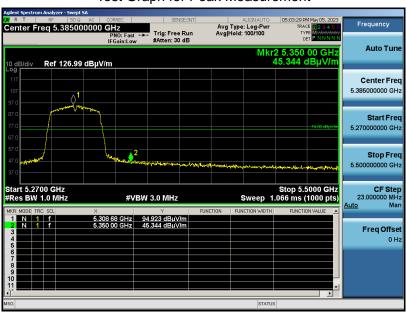




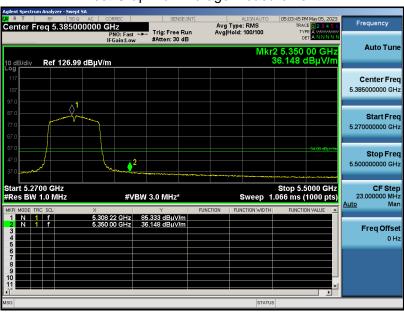


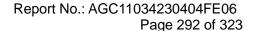
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5310MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

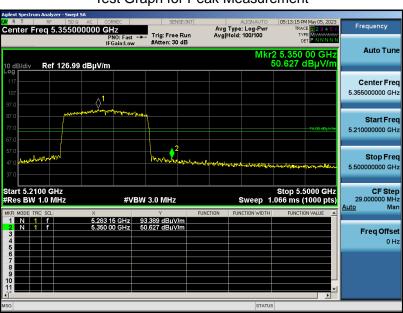






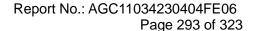
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

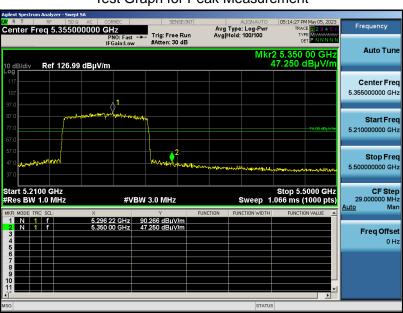




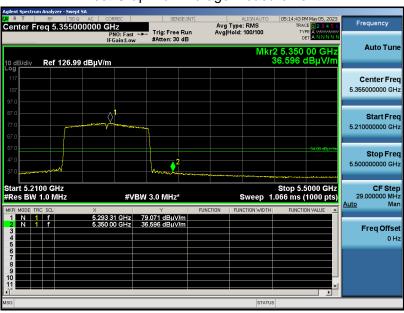


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





Test result for band edge emission at restricted bands 5.470GHz~5.725GHz-Ant 1

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Horizontal

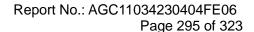
Test Graph for Peak Measurement



Test Graph for Average Measurement



RESULT: PASS





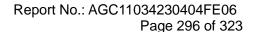
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





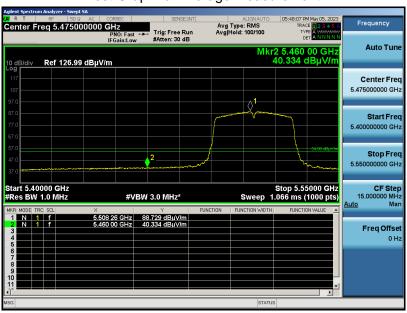


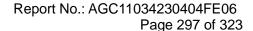
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5510MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





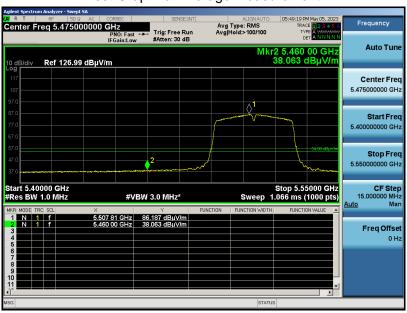


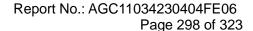
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5510MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

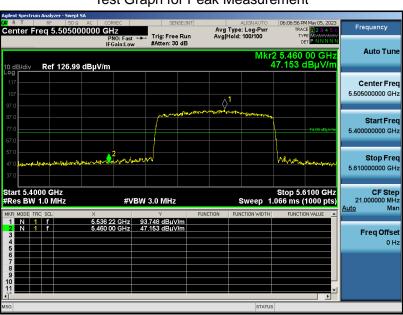




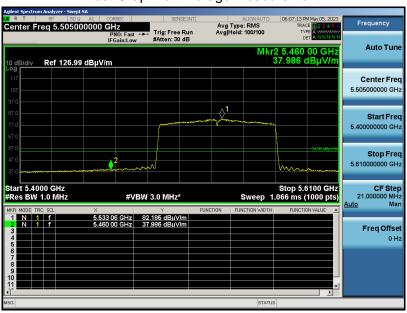


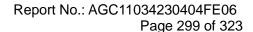
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

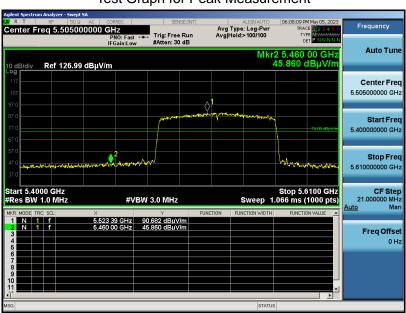




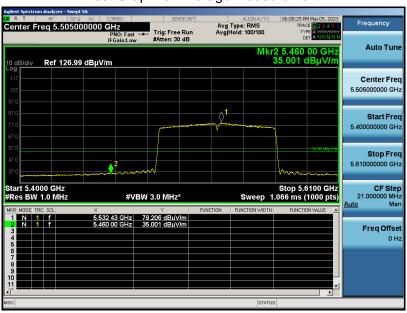


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





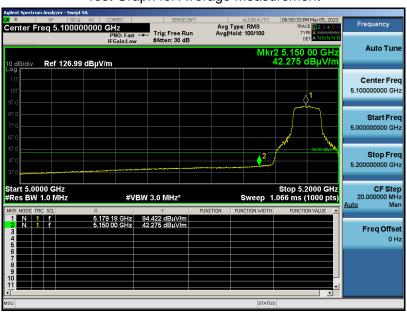
Test result for band edge emission at restricted bands 5.150GHz~5.250GHz-Ant 2

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Horizontal

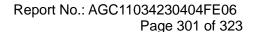
Test Graph for Peak Measurement



Test Graph for Average Measurement



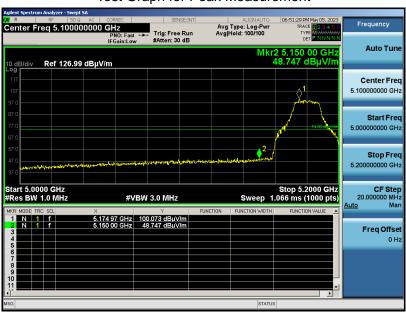
RESULT: PASS



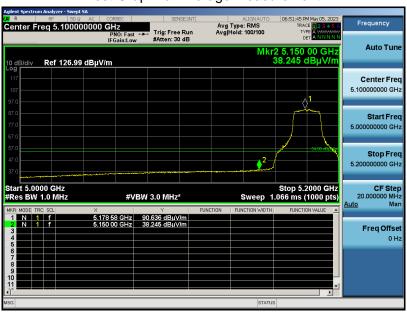


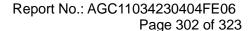
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5180MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

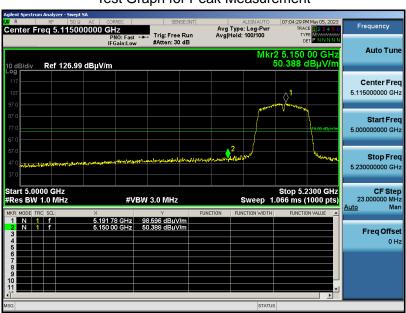




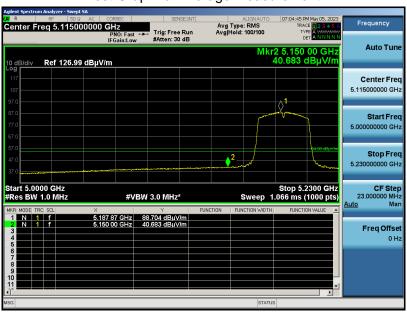


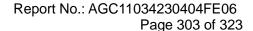
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





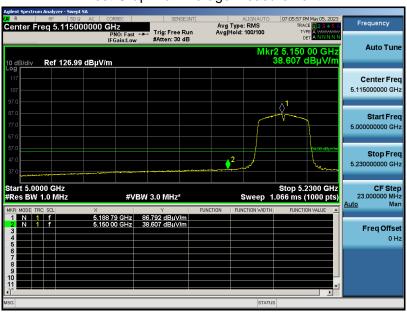


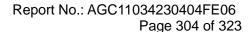
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5190MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

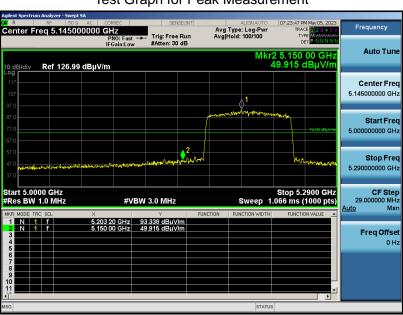




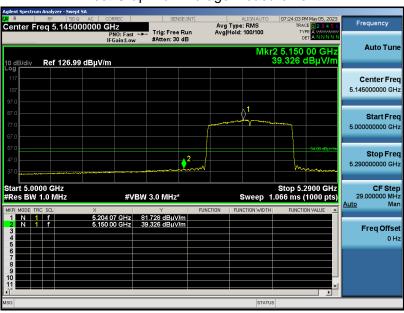


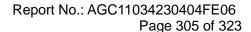
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

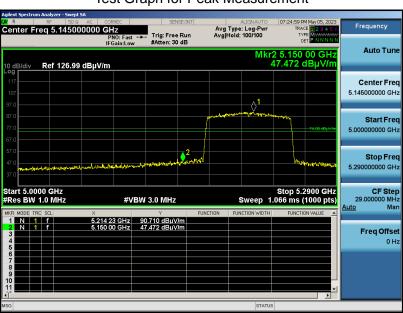




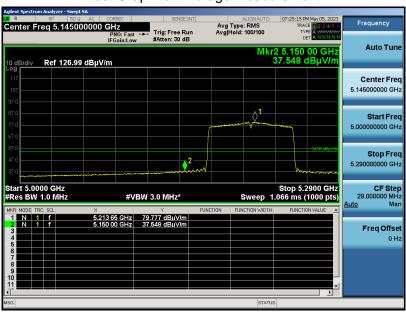


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5210MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

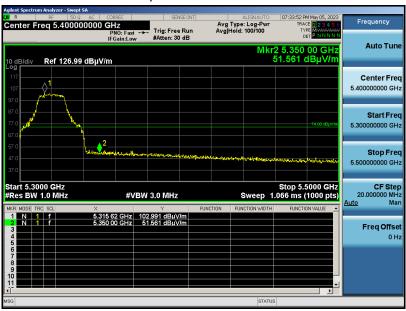




Test result for band edge emission at restricted bands 5.25GHz~5.35GHz-Ant 2

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5320MHz	Antenna	Horizontal

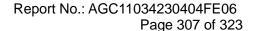
Test Graph for Peak Measurement



Test Graph for Average Measurement



RESULT: PASS





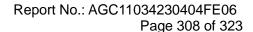
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5320MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

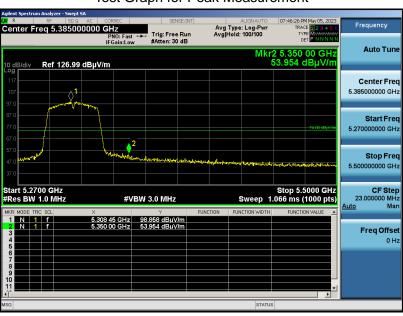




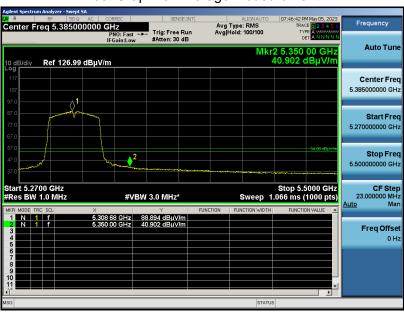


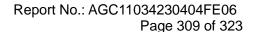
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5310MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

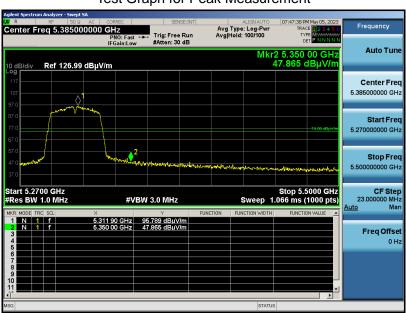




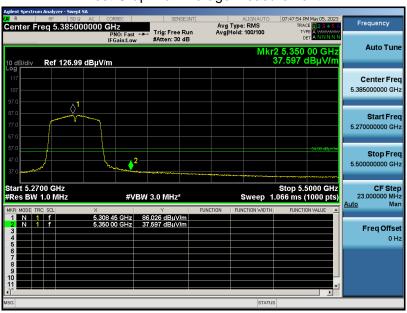


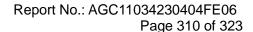
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5310MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





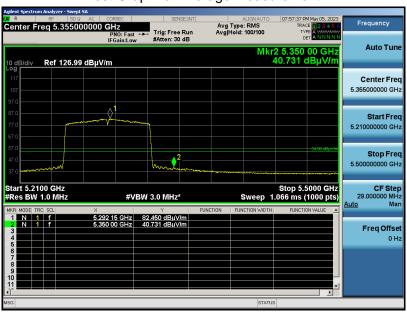


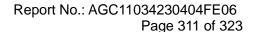
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





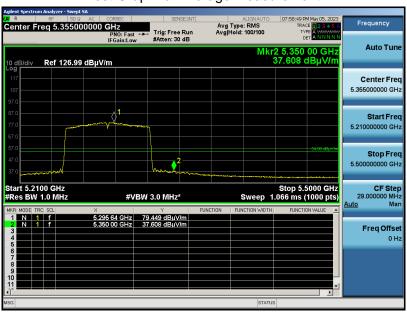


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5290MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





Test result for band edge emission at restricted bands 5.470GHz~5.725GHz-Ant 2

EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Horizontal

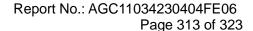
Test Graph for Peak Measurement



Test Graph for Average Measurement



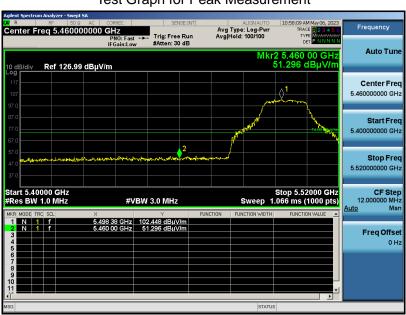
RESULT: PASS



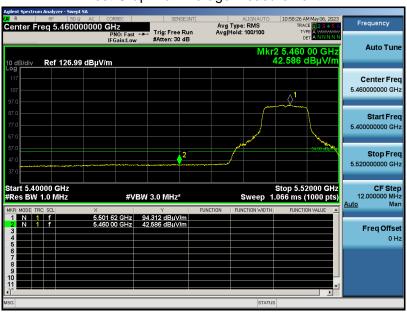


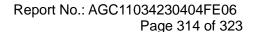
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11a20 5500MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

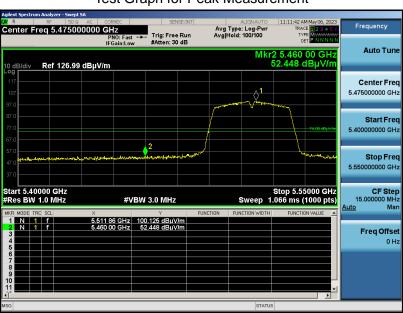




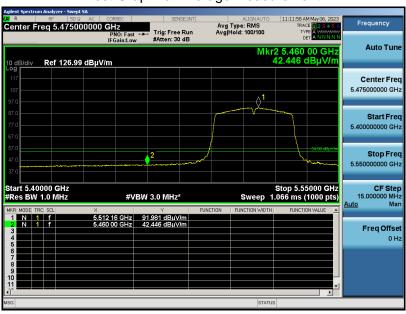


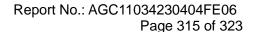
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5510MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement

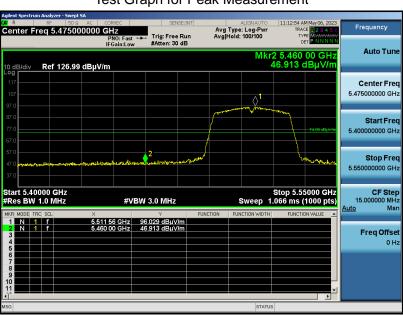




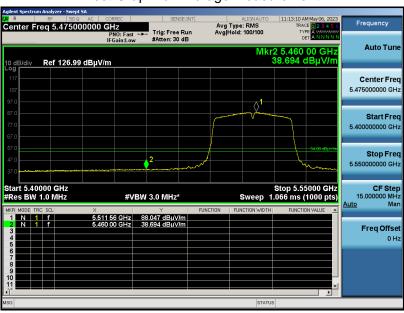


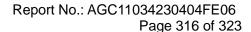
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11n40 5510MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement





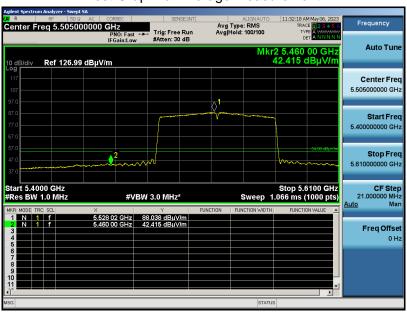


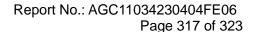
EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement





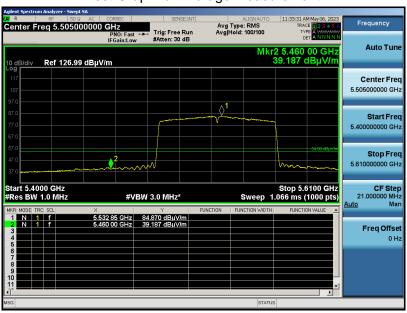


EUT	WiFi IP Camera	Model Name	E1 Outdoor Pro
Temperature	25°C	Relative Humidity	60%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	802.11ac80 5530MHz	Antenna	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement

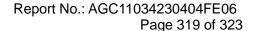




Page 318 of 323

Note:

- All antennas are tested for different bands, only the data of antenna 1+ antenna 2 in the worst mode is shown in the report
- 2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer.
- Only the data of band edge emission at the restricted band 4.5GHz-5.15GHz and 5.35GHz-5.46GHz
 record in the report. Other restricted band 7.25GHz-7.77GHz were considered as ambient noise. No
 recording in the test report.
- 4. The sideband standard of U NII-3 frequency band is not defined, the transmitted signal does not fall in the restricted band, and the edge signal is far away from the edge of other restricted bands, and it is not reco rded in the report.





11. AC POWER LINE CONDUCTED EMISSION TEST

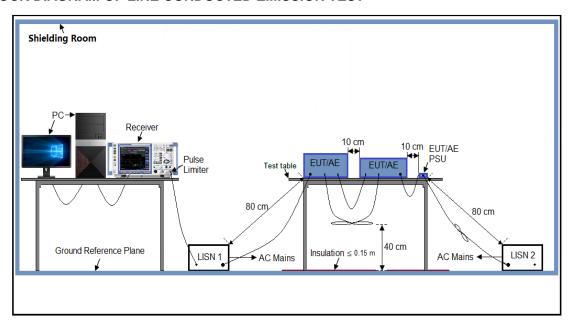
11.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P (dBμV)	Average (dBμV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

11.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST





Page 320 of 323

11.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipment received AC120V/60Hz power from a LISN, if any.
- 5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN.
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 Ohm load; the second scan had Line 1 connected to a 50 Ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

11.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less – 2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case was reported on the Summary Data page.
- 4. The worst mode is 802.11n20 5180MHz, antenna 1 and antenna 2 work together.