

Plot 7-152. Radiated Spurious Emissions 1-18GHz Antenna WF7a (HDR4, ePA - 5789MHz)

Mode: HDR4

Data Rate: 4Mbps

Distance of Measurements: 3 Meters

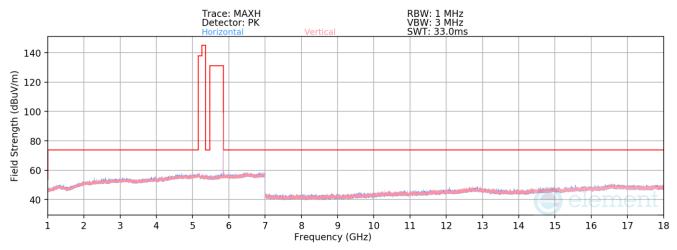
Operating Frequency: 5789MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11578.00	Average	V	-	-	-79.24	7.44	35.20	53.98	-18.78
*	11578.00	Peak	V	-	-	-67.58	7.44	46.86	73.98	-27.12
	17367.00	Peak	V	-	-	-71.72	14.88	50.16	68.20	-18.04

Table 7-32. Radiated Spurious Emissions Measurements Antenna WF7a

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 404 of 454
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Plot 7-153. Radiated Spurious Emissions 1-18GHz Antenna WF7a (HDR4, ePA - 5844MHz)

Mode: HDR4

Data Rate: 4Mbps

Distance of Measurements: 3 Meters

Operating Frequency: 5844MHz

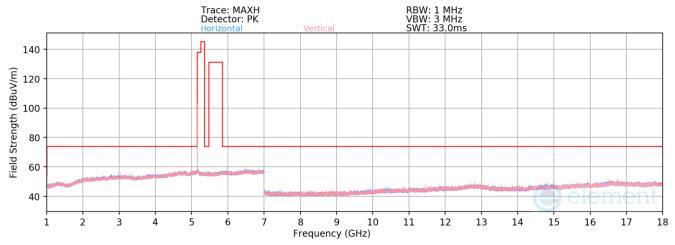
	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11688.00	Average	V	1	-	-79.66	7.86	35.20	53.98	-18.78
*	11688.00	Peak	V	-	-	-68.46	7.86	46.40	73.98	-27.58
	17532.00	Peak	V	-	-	-72.08	15.50	50.42	68.20	-17.78

Table 7-33. Radiated Spurious Emissions Measurements Antenna WF7a

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 151
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#### TxBF



Plot 7-154. Radiated Spurious Emissions 1-18GHz TxBF (HDR4, ePA - 5162MHz)

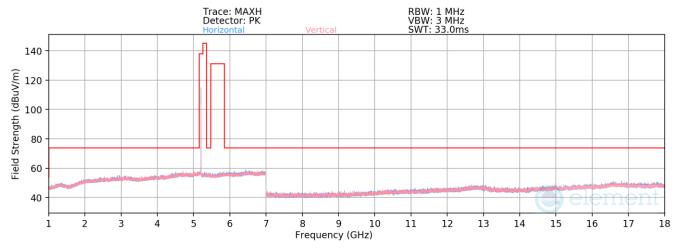
Mode:HDR4Data Rate:4MbpsDistance of Measurements:3 MetersOperating Frequency:5162MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10324.00	Peak	V		-	-67.15	5.91	45.76	68.20	-22.44
*	15486.00	Average	V	-	-	-81.91	12.24	37.33	53.98	-16.65
*	15486.00	Peak	V	-	-	-70.36	12.24	48.88	73.98	-25.10

Table 7-34. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 151
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Plot 7-155. Radiated Spurious Emissions 1-18GHz TxBF (HDR4, ePA - 5204MHz)

Mode: HDR4

Data Rate: 4Mbps

Distance of Measurements: 3 Meters

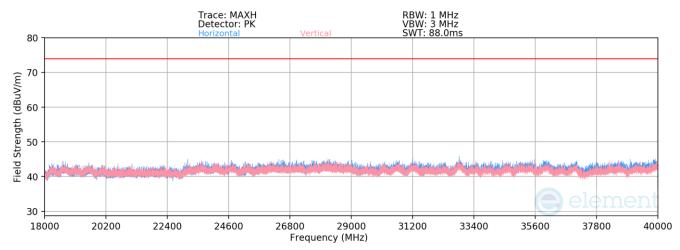
Operating Frequency: 5204MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10408.00	Peak	V	-	-	-67.90	6.27	45.37	68.20	-22.83
*	15612.00	Average	V	-	-	-81.70	12.66	37.96	53.98	-16.02
*	15612.00	Peak	V	-	-	-70.28	12.66	49.38	73.98	-24.60

Table 7-35. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 104 of 151
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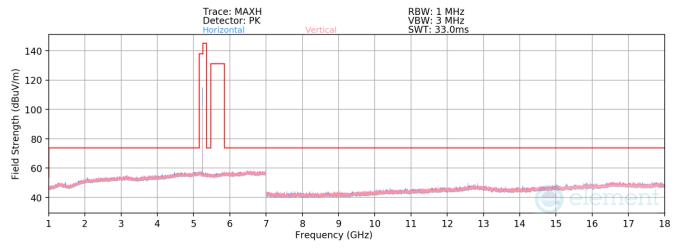




Plot 7-156. Radiated Spurious Emissions Above 18GHz TxBF (HDR4, ePA - 5204MHz)

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 405 of 454
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Plot 7-157. Radiated Spurious Emissions 1-18GHz TxBF (HDR4, ePA – 5245MHz)

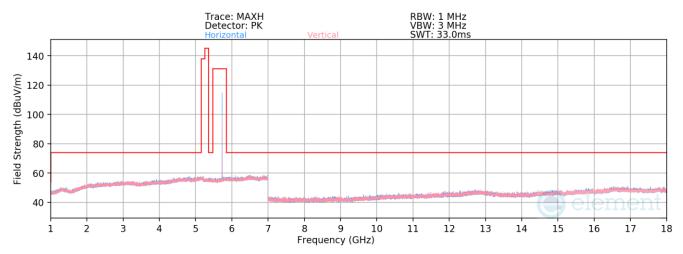
Mode: HDR4
Data Rate: 4Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 5245MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
	10490.00	Peak	٧	1	-	-68.07	6.51	45.44	68.20	-22.76
*	15735.00	Average	V	-	-	-82.06	13.10	38.04	53.98	-15.94
*	15735.00	Peak	V	-	-	-70.93	13.10	49.17	73.98	-24.81

Table 7-36. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 151
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Plot 7-158. Radiated Spurious Emissions 1-18GHz TxBF (HDR4, ePA – 5733MHz)

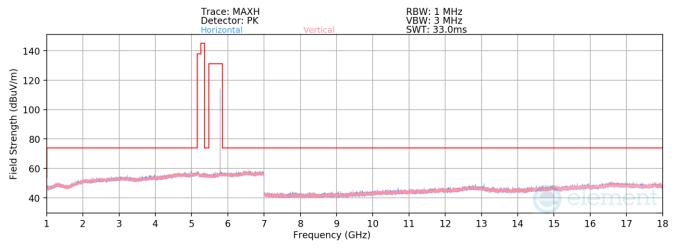
Mode: HDR4
Data Rate: 4Mbps
Distance of Measurements: 3 Meters
Operating Frequency: 5733MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11466.00	Average	V	-	-	-79.72	7.47	34.75	53.98	-19.23
*	11466.00	Peak	V	-	-	-68.44	7.47	46.03	73.98	-27.95
	17199.00	Peak	V	-	-	-71.66	14.96	50.30	68.20	-17.90

Table 7-37. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 407 of 454
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Plot 7-159. Radiated Spurious Emissions 1-18GHz TxBF (HDR4 - 5789MHz)

Mode: HDR4

Data Rate: 4Mbps

Distance of Measurements: 3 Meters

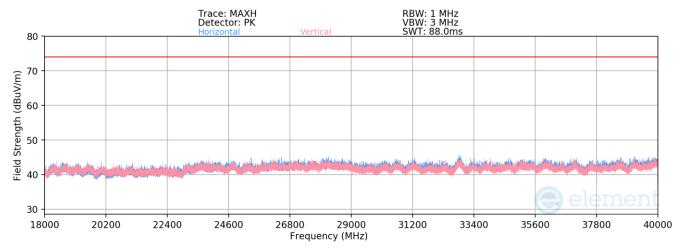
Operating Frequency: 5789MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11578.00	Average	V	-	-	-79.30	7.44	35.14	53.98	-18.84
*	11578.00	Peak	V	-	-	-67.90	7.44	46.54	73.98	-27.44
	17367.00	Peak	V	-	-	-71.71	14.88	50.17	68.20	-18.03

Table 7-38. Radiated Spurious Emissions Measurements TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 400 of 454
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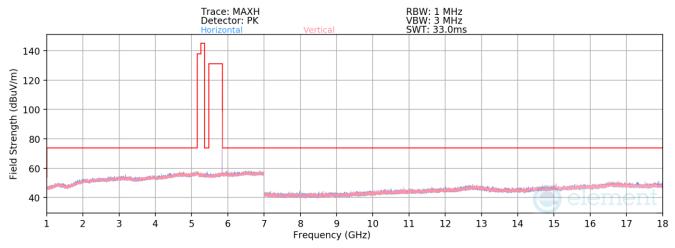




Plot 7-160. Radiated Spurious Emissions Above 18GHz TxBF (HDR4, ePA – 5789MHz)

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 100 of 151
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Plot 7-161. Radiated Spurious Emissions 1-18GHz TxBF (HDR4, ePA - 5844MHz)

Mode:HDR4Data Rate:4MbpsDistance of Measurements:3 MetersOperating Frequency:5844MHz

	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
*	11688.00	Average	V	1	-	-79.70	7.86	35.16	53.98	-18.82
*	11688.00	Peak	V	-	-	-68.48	7.86	46.38	73.98	-27.60
	17532.00	Peak	V	-	-	-72.39	15.50	50.11	68.20	-18.09

Table 7-39. Radiated Spurious Emissions Measurements TxBF

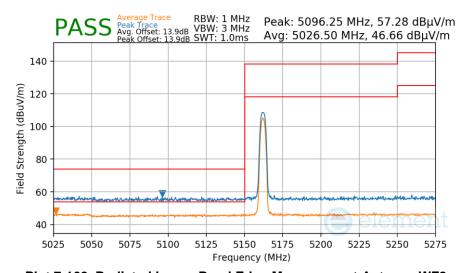
FCC ID: BCGA2902 IC: 579C-A2902	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogg 120 of 151
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# 7.6.2 Radiated Band Edge Measurements §15.407(b.1) §15.205 §15.209; RSS-Gen [8.9]

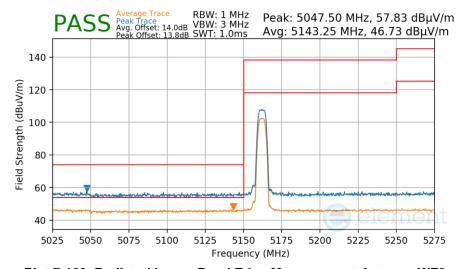
## **Antenna WF8**

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-162. Radiated Lower Band Edge Measurement Antenna WF8

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz

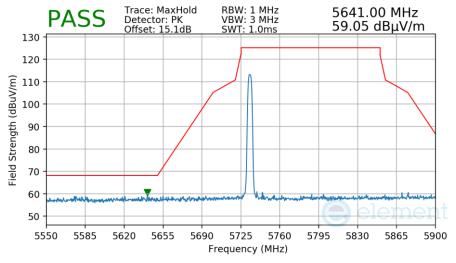


Plot 7-163. Radiated Lower Band Edge Measurement Antenna WF8

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	D 404 4454
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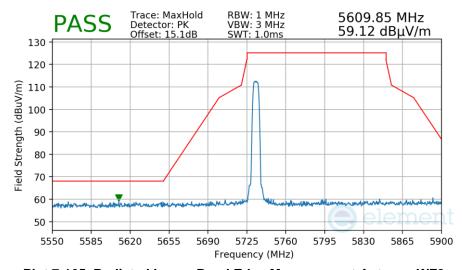


Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz



Plot 7-164. Radiated Lower Band Edge Measurement Antenna WF8

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

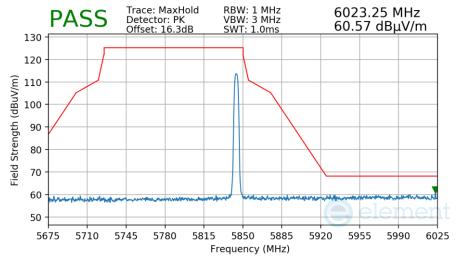


Plot 7-165. Radiated Lower Band Edge Measurement Antenna WF8

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 122 of 151
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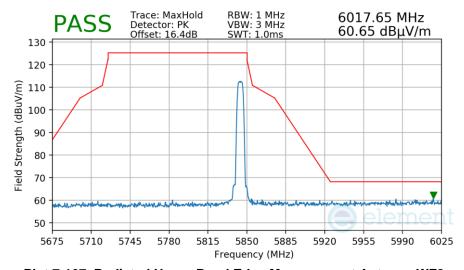


Mode: HDR4
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5844MHz



Plot 7-166. Radiated Upper Band Edge Measurement Antenna WF8

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



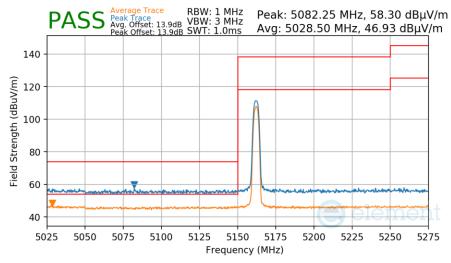
Plot 7-167. Radiated Upper Band Edge Measurement Antenna WF8

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 122 of 151
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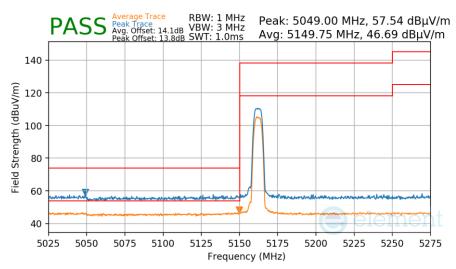
# **Antenna WF7a**

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



Plot 7-168. Radiated Lower Band Edge Measurement Antenna WF7a

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz

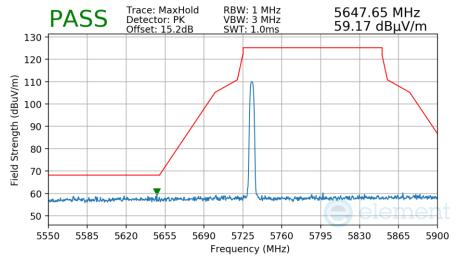


Plot 7-169. Radiated Lower Band Edge Measurement Antenna WF7a

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 124 of 151
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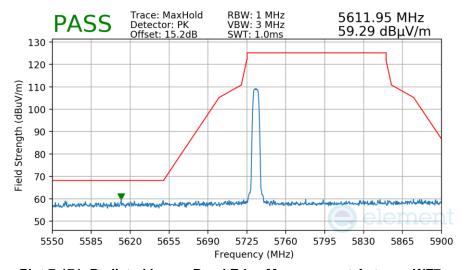


Mode: HDR4
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5733MHz



Plot 7-170. Radiated Lower Band Edge Measurement Antenna WF7a

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz



Plot 7-171. Radiated Lower Band Edge Measurement Antenna WF7a

FCC ID: BCGA2902 IC: 579C-A2902	element	element MEASUREMENT REPORT (CERTIFICATION)	
Test Report S/N:	Test Dates:	EUT Type:	Dogo 425 of 454
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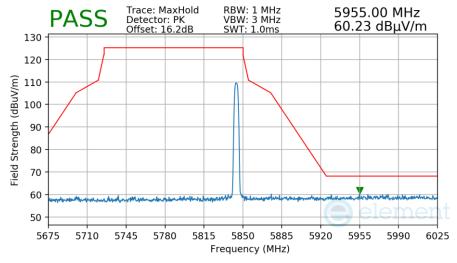


Mode: HDR4

Power Scheme: ePA

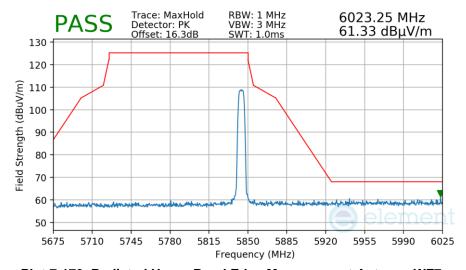
Measurement Distance: 3 Meters

Operating Frequency: 5844MHz



Plot 7-172. Radiated Upper Band Edge Measurement Antenna WF7a

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



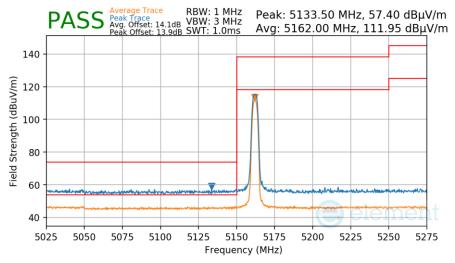
Plot 7-173. Radiated Upper Band Edge Measurement Antenna WF7a

FCC ID: BCGA2902 IC: 579C-A2902	element MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogo 420 of 454
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#### **TxRF**

Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5162MHz



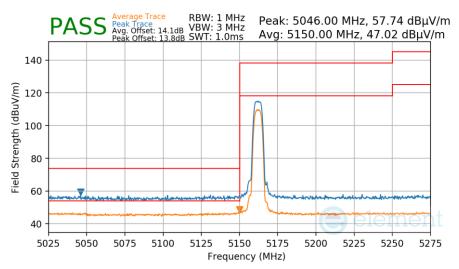
Plot 7-174. Radiated Lower Band Edge Measurement TxBF

Mode: HDR8

Power Scheme: ePA

Measurement Distance: 3 Meters

Operating Frequency: 5162MHz

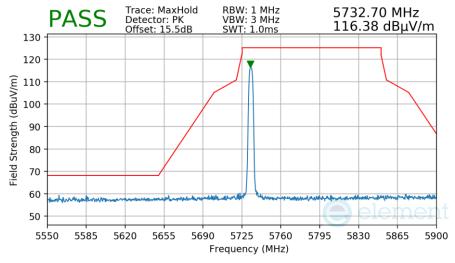


Plot 7-175. Radiated Lower Band Edge Measurement TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 427 of 454
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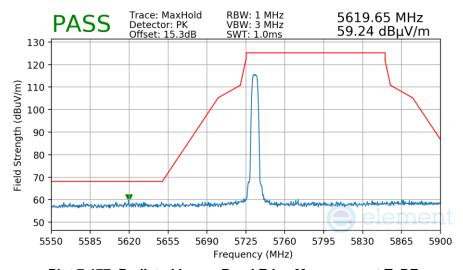


Mode: HDR4
Power Scheme: ePA
Measurement Distance: 3 Meters
Operating Frequency: 5733MHz



Plot 7-176. Radiated Lower Band Edge Measurement TxBF

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5733MHz

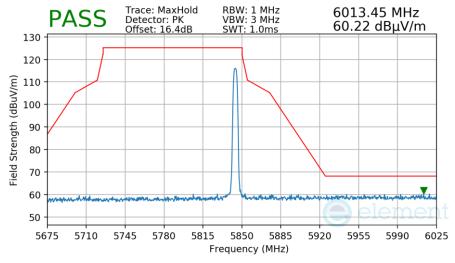


Plot 7-177. Radiated Lower Band Edge Measurement TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 120 of 151
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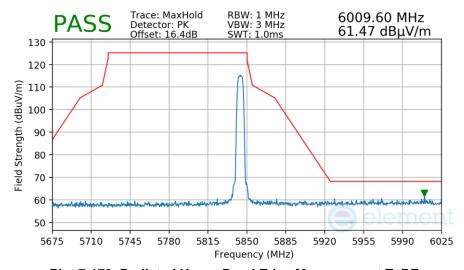


Mode:HDR4Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-178. Radiated Upper Band Edge Measurement TxBF

Mode:HDR8Power Scheme:ePAMeasurement Distance:3 MetersOperating Frequency:5844MHz



Plot 7-179. Radiated Upper Band Edge Measurement TxBF

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Dogg 120 of 151
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# 7.7 Radiated Spurious Emissions – Below 1GHz

§15.209; RSS-Gen [8.9]

#### **Test Overview and Limit**

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 7 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-40 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [μV/m]	Measured Distance [Meters]
0.009 - 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 7-40. Radiated Limits

# **Test Procedures Used**

ANSI C63.10-2013

#### **Test Settings**

#### **Quasi-Peak Field Strength Measurements**

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 120kHz (for emissions from 30MHz 1GHz)
- 3. Detector = quasi-peak
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

# Peak Field Strength Measurements

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- RBW = 120kHz (for emissions from 30MHz 1GHz)
- 3. VBW = 300kHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

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# **Test Setup**

The EUT and measurement equipment were set up as shown in the diagrams below.

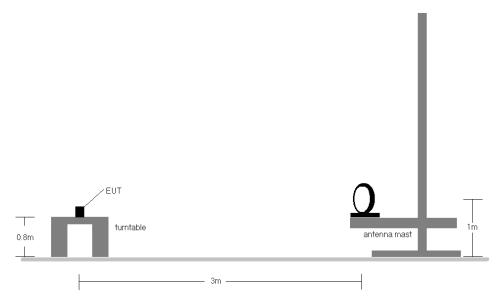


Figure 7-6. Radiated Test Setup < 30MHz

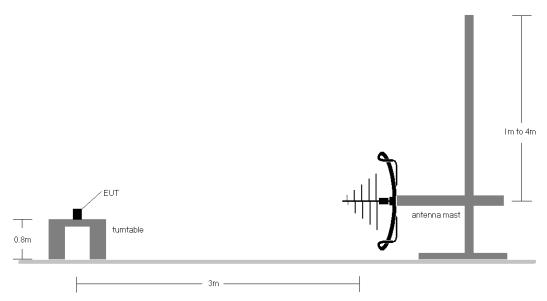


Figure 7-7. Radiated Test Setup < 1GHz

FCC ID: BCGA2902 IC: 579C-A2902	element	MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
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#### **Test Notes**

- 1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen(8.10) are below the limit shown in Table 7-40.
- The broadband receive antenna is manipulated through vertical and horizontal polarizations during the
  tests. The EUT is manipulated through three orthogonal planes. For below 30MHz the loop antenna was
  positioned in 3 orthogonal planes (X front, Y side, Z top) to determine the orientation resulting in the worst
  case emissions.
- 3. This unit was tested with its standard battery.
- 4. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector for emissions within 6dB of the limit.
- 5. Emissions were measured at a 3 meter test distance.
- 6. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
- 7. No spurious emissions were detected within 20dB of the limit below 30MHz.
- 8. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
- 9. All supported modulation and power schemes have been tested on the unit and only worst case configuration is reported.
- 10. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor to USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger

#### **Sample Calculations**

#### **Determining Spurious Emissions Levels**

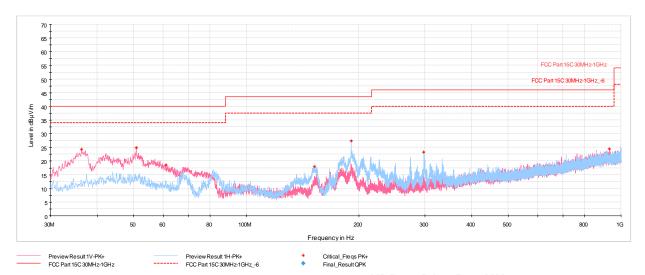
- Field Strength Level [dBμV/m] = Analyzer Level [dBm] + 107 + AFCL [dB/m]
- AFCL [dB/m] = Antenna Factor [dB/m] + Cable Loss [dB] Preamplifier Gain [dB]
- Margin [dB] = Field Strength Level [dBμV/m] Limit [dBμV/m]

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# **TxBF Radiated Spurious Emissions (Below 1GHz)**

§15.209; RSS-Gen [8.9]



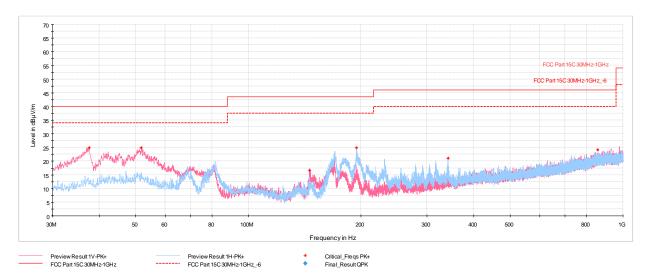
Plot 7-180. Radiated Spurious Emissions Below 1GHz TxBF (HDR4, ePA - 5204MHz), with AC/DC Adapter

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
36.31	Max-Peak	V	100	196	-67.33	-15.40	24.27	40.00	-15.73
50.86	Max-Peak	V	100	43	-69.00	-13.12	24.88	40.00	-15.12
152.22	Max-Peak	Н	100	232	-68.85	-20.10	18.05	43.52	-25.47
190.49	Max-Peak	Н	100	219	-62.23	-17.43	27.34	43.52	-16.18
297.48	Max-Peak	Н	100	0	-69.24	-14.54	23.22	46.02	-22.80
931.95	Max-Peak	V	300	206	-79.83	-2.73	24.44	46.02	-21.58

Table 7-41. Radiated Spurious Emissions Below 1GHz TxBF (HDR4, ePA – 5204MHz), with AC/DC Adapter

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Plot 7-181 Radiated Spurious Emissions Below 1GHz TxBF (HDR4, ePA - 5789MHz), with AC/DC Adapter

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
37.61	Max-Peak	V	100	296	-67.05	-15.09	24.86	40.00	-15.14
51.83	Max-Peak	V	100	12	-69.02	-13.13	24.85	40.00	-15.15
145.96	Max-Peak	V	100	173	-69.74	-20.54	16.72	43.52	-26.80
194.37	Max-Peak	Н	200	244	-65.30	-16.85	24.85	43.52	-18.67
341.03	Max-Peak	Н	100	27	-72.92	-12.98	21.10	46.02	-24.92
855.81	Max-Peak	Н	300	324	-79.27	-3.55	24.18	46.02	-21.84

Table 7-42. Radiated Spurious Emissions Below 1GHz TxBF (HDR4, ePA - 5789MHz), with AC/DC Adapter

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# 7.8 AC Line Conducted Emissions Measurement

§15.207; RSS-Gen [8.8]

#### **Test Overview and Limit**

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for AC Line conducted spurious emissions. All data rates and modes were investigated for AC Line conducted spurious emissions.

All conducted emissions must not exceed the limits shown in the table below, per Section 15.207 and RSS-Gen (8.8).

Frequency of emission	Conducted Limit (dBμV)			
(MHz)	Quasi-peak	Average		
0.15 – 0.5	66 to 56*	56 to 46*		
0.5 – 5	56	46		
5 – 30	60	50		

**Table 7-43. Conducted Limits** 

#### **Test Procedures Used**

ANSI C63.10-2013, Subclause 6.2

## **Test Settings**

#### **Quasi-Peak Measurements**

- 1. Analyzer center frequency was set to the frequency of the spurious emission of interest
- 2. RBW = 9kHz (for emissions from 150kHz 30MHz)
- 3. Detector = quasi-peak
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

# **Average Measurements**

- 1. Analyzer center frequency was set to the frequency of the spurious emission of interest
- RBW = 9kHz (for emissions from 150kHz 30MHz)
- 3. Detector = RMS
- 4. Sweep time = auto couple
- 5. Trace mode = max hold
- 6. Trace was allowed to stabilize

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<sup>\*</sup>Decreases with the logarithm of the frequency.



# **Test Setup**

The EUT and measurement equipment were set up as shown in the diagram below.

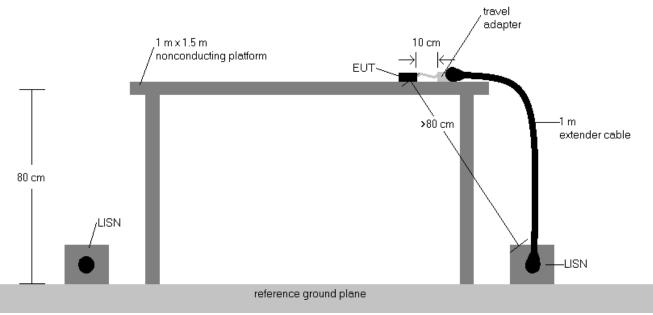


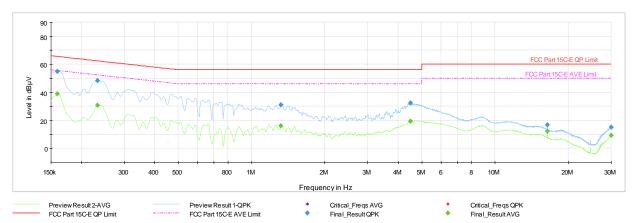
Figure 7-8. Test Instrument & Measurement Setup

# **Test Notes**

- All modes of operation were investigated and the worst-case emissions are reported. The emissions found were not affected by the choice of channel used during testing.
- 2. Both configurations below were investigated, and the worst case has been reported.
  - a. EUT powered by AC/DC adaptor to USB-C cable with wire charger
  - b. EUT powered by host PC via USB-C cable with wire charger
- 3. The limit for an intentional radiator from 150kHz to 30MHz are specified in 15.207.
- 4. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Correction Factor (dB)
- 6. Margin (dB) = QP/AV Level (dB $\mu$ V) QP/AV Limit (dB $\mu$ V)
- 7. Traces shown in plots are made using quasi-peak and average detectors.
- 8. Deviations to the Specifications: None.

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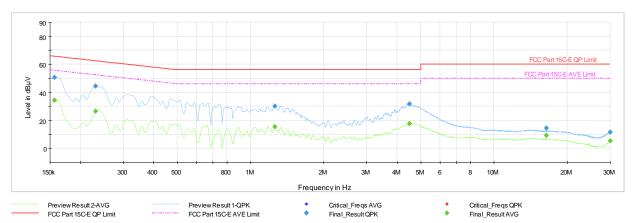
Plot 7-182. AC Line Conducted Plot TxBF (HDR4, ePA - 5204MHz) (L1) with AC/DC Adapter

Frequency [MHz]	Process State	QuasiPeak [dB <b>µ</b> V]	Averaqe [dBμV]	Limit [dBµ√]	Marqin [dB]	Line	PE
0.159	FINAL	_	38.84	55.52	-16.68	L1	GND
0.159	FINAL	54.9	_	65.52	-10.58	L1	GND
0.233	FINAL	_	30.83	52.33	-21.51	L1	GND
0.233	FINAL	48.3	_	62.33	-14.05	L1	GND
1.320	FINAL	_	16.03	46.00	-29.97	L1	GND
1.320	FINAL	31.0	_	56.00	-25.03	L1	GND
4.488	FINAL	32.4	_	56.00	-23.56	L1	GND
4.488	FINAL	_	19.38	46.00	-26.62	L1	GND
16.409	FINAL	16.8	_	60.00	-43.17	L1	GND
16.409	FINAL	_	12.11	50.00	-37.89	L1	GND
29.967	FINAL	_	9.12	50.00	-40.88	L1	GND
29.967	FINAL	15.2	_	60.00	-44.78	L1	GND

Table 7-44. AC Line Conducted TxBF (HDR4, ePA - 5204MHz) (L1) with AC/DC Adapter

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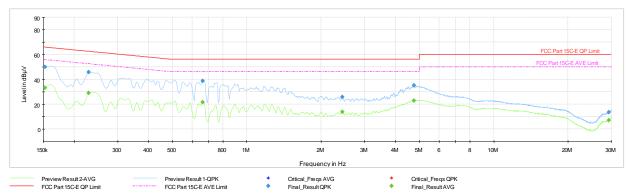
Plot 7-183. AC Line Conducted Plot TxBF (HDR4, ePA - 5204MHz) (N) with AC/DC Adapter

Frequency [MHz]	Process State	QuasiPeak [dB <b>µ</b> V]	Averaqe [dBμV]	Limit [dBµV]	Marqin [dB]	Line	PE
0.157	FINAL	_	34.24	55.63	-21.40	N	GND
0.157	FINAL	50.7	_	65.63	-14.90	Ν	GND
0.231	FINAL	_	26.64	52.41	-25.78	Ν	GND
0.231	FINAL	44.3	_	62.41	-18.14	N	GND
1.257	FINAL	_	15.49	46.00	-30.51	N	GND
1.257	FINAL	30.1	_	56.00	-25.91	N	GND
4.490	FINAL	31.7	_	56.00	-24.33	N	GND
4.493	FINAL	_	17.80	46.00	-28.20	N	GND
16.413	FINAL	14.5	_	60.00	-45.46	N	GND
16.413	FINAL	_	9.12	50.00	-40.88	N	GND
29.965	FINAL	_	5.18	50.00	-44.82	N	GND
29.965	FINAL	11.5	_	60.00	-48.53	N	GND

Table 7-45. AC Line Conducted TxBF (HDR4, ePA - 5204MHz) (N) with AC/DC Adapter

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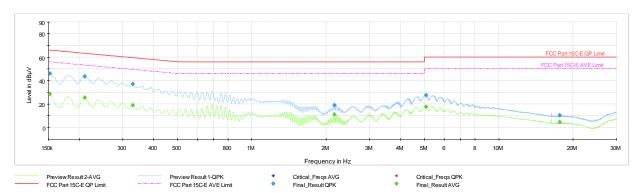
Plot 7-184. AC Line Conducted Plot TxBF (HDR4, ePA - 5789MHz) (L1) with AC/DC Adapter

Frequency [MHz]	Process State	QuasiPeak [dB <b>µ</b> V]	Average [dB <b>µ</b> V]	Limit [dB <b>µ</b> V]	Marqin [dB]	Line	PE
0.152	FINAL	_	33.30	55.88	-22.58	L1	GND
0.152	FINAL	50.0	_	65.88	-15.93	L1	GND
0.229	FINAL		28.90	52.50	-23.59	L1	GND
0.229	FINAL	45.8	_	62.50	-16.74	L1	GND
0.663	FINAL		21.72	46.00	-24.28	L1	GND
0.663	FINAL	38.6	_	56.00	-17.40	L1	GND
2.434	FINAL	25.7	_	56.00	-30.34	L1	GND
2.434	FINAL	_	13.84	46.00	-32.16	L1	GND
4.747	FINAL	35.2	_	56.00	-20.84	L1	GND
4.747	FINAL	_	23.04	46.00	-22.96	L1	GND
29.243	FINAL	_	7.25	50.00	-42.75	L1	GND
29.243	FINAL	13.4	_	60.00	-46.60	L1	GND

Table 7-46. AC Line Conducted TxBF (HDR4, ePA - 5789MHz) (L1) with AC/DC Adapter

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Plot 7-185. AC Line Conducted Plot TxBF (HDR4, ePA - 5789MHz) (N) with AC/DC Adapter

Frequency [MHz]	Process State	QuasiPeak [dB <b>µ</b> V]	Average [dBµV]	Limit [dBµV]	Marqin [dB]	Line	PE
0.152	FINAL	_	28.42	55.88	-27.45	N	GND
0.152	FINAL	45.9		65.88	-19.97	N	GND
0.211	FINAL	_	25.58	53.18	-27.60	Ν	GND
0.211	FINAL	43.5	_	63.18	-19.68	N	GND
0.330	FINAL	_	18.99	49.45	-30.47	N	GND
0.330	FINAL	37.2	_	59.45	-22.26	N	GND
2.164	FINAL	19.0	_	56.00	-36.96	N	GND
2.164	FINAL	_	11.01	46.00	-34.99	N	GND
5.080	FINAL	27.4		60.00	-32.58	N	GND
5.080	FINAL	_	17.51	50.00	-32.49	N	GND
17.693	FINAL	_	4.79	50.00	-45.21	N	GND
17.693	FINAL	10.6	_	60.00	-49.38	Ν	GND

Table 7-47. AC Line Conducted TxBF (HDR4, ePA - 5789MHz) (N) with AC/DC Adapter

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# 8.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA2902** and **IC: 579C-A2902** is in compliance with Part 15 Subpart E (15.407) of the FCC Rules and RSS-247 of the Innovation, Science and Economic Development Canada Rules.

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