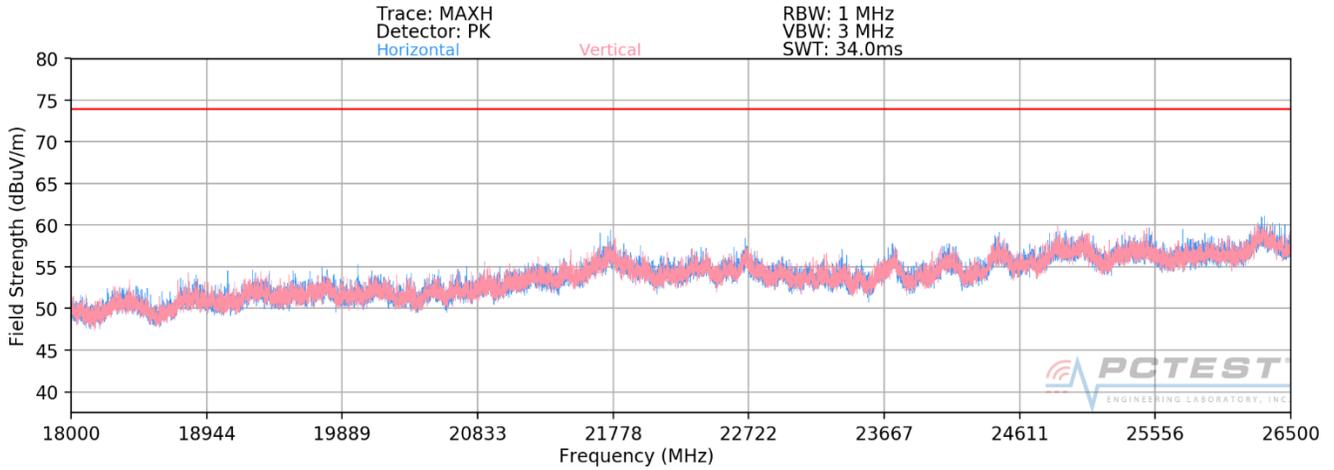
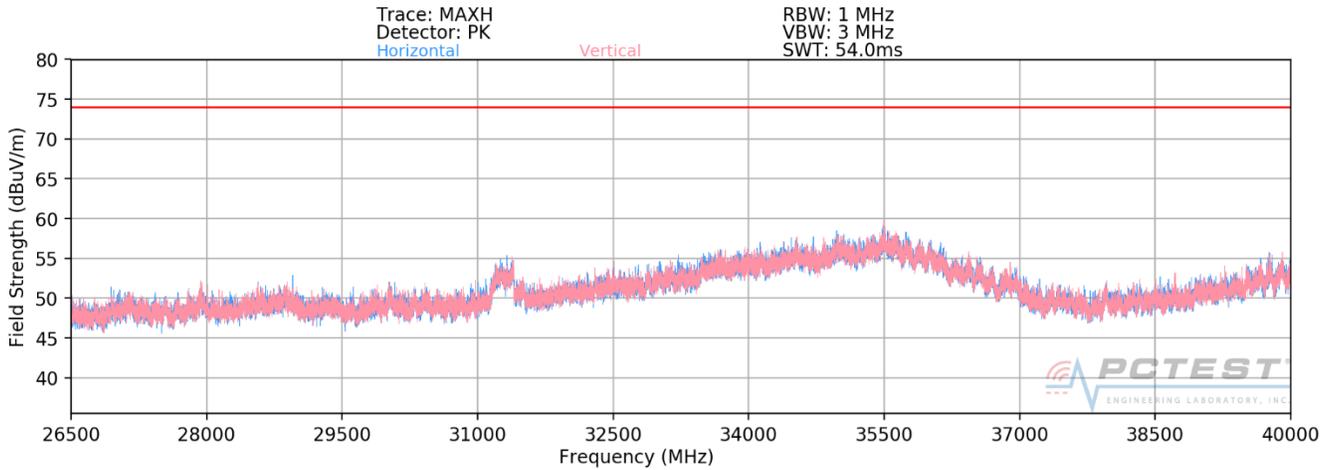


SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-179. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax – 26 Tones)



Plot 7-180. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax – 26 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 159 of 215

SISO Antenna-2 Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	107	64	-66.75	15.23	0.00	55.48	68.20	-12.72
* 15540.00	Average	H	-	-	-80.60	22.71	0.00	49.11	53.98	-4.87
* 15540.00	Peak	H	-	-	-69.08	22.71	0.00	60.63	73.98	-13.35
* 20720.00	Average	H	-	-	-79.23	17.51	-9.54	35.74	53.98	-18.24
* 20720.00	Peak	H	-	-	-67.29	17.51	-9.54	47.68	73.98	-26.30
25900.00	Peak	H	-	-	-66.44	19.88	-9.54	50.90	68.20	-17.30

Table 7-88. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	171	363	-66.30	15.67	0.00	56.37	68.20	-11.83
* 15600.00	Average	H	-	-	-80.62	22.46	0.00	48.84	53.98	-5.14
* 15600.00	Peak	H	-	-	-69.08	22.46	0.00	60.38	73.98	-13.60
* 20800.00	Average	H	-	-	-79.14	17.87	-9.54	36.18	53.98	-17.80
* 20800.00	Peak	H	-	-	-67.41	17.87	-9.54	47.91	73.98	-26.07
26000.00	Peak	H	-	-	-66.23	20.15	-9.54	51.37	68.20	-16.83

Table 7-89. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	 LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 160 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	172	359	-66.92	15.49	0.00	55.57	68.20	-12.63
* 15720.00	Average	H	-	-	-80.56	22.45	0.00	48.89	53.98	-5.09
* 15720.00	Peak	H	-	-	-69.50	22.45	0.00	59.95	73.98	-14.03
* 20960.00	Average	H	-	-	-79.39	18.06	-9.54	36.12	53.98	-17.85
* 20960.00	Peak	H	-	-	-68.09	18.06	-9.54	47.42	73.98	-26.55
26200.00	Peak	H	-	-	-66.26	20.23	-9.54	51.43	68.20	-16.77

Table 7-90. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	161	359	-67.79	15.86	0.00	55.07	68.20	-13.13
* 15780.00	Average	H	-	-	-80.87	22.77	0.00	48.90	53.98	-5.08
* 15780.00	Peak	H	-	-	-69.58	22.77	0.00	60.19	73.98	-13.79
* 21040.00	Average	H	-	-	-78.30	18.36	-9.54	37.51	53.98	-16.47
* 21040.00	Peak	H	-	-	-67.66	18.36	-9.54	48.15	73.98	-25.83
26300.00	Peak	H	-	-	-64.92	20.96	-9.54	53.49	68.20	-14.71

Table 7-91. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 161 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	H	161	359	-69.21	15.70	0.00	53.49	68.20	-14.71
* 15840.00	Average	H	-	-	-81.05	22.66	0.00	48.61	53.98	-5.37
* 15840.00	Peak	H	-	-	-70.24	22.66	0.00	59.42	73.98	-14.56
* 21120.00	Average	H	-	-	-78.64	18.17	-9.54	36.98	53.98	-16.99
* 21120.00	Peak	H	-	-	-67.30	18.17	-9.54	48.32	73.98	-25.65
26400.00	Peak	H	-	-	-66.07	20.65	-9.54	52.04	68.20	-16.16

Table 7-92. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	H	164	359	-80.14	16.03	0.00	42.89	53.98	-11.09
* 10640.00	Peak	H	164	359	-68.31	16.03	0.00	54.72	73.98	-19.26
* 15960.00	Average	H	-	-	-80.98	23.09	0.00	49.11	53.98	-4.87
* 15960.00	Peak	H	-	-	-69.44	23.09	0.00	60.65	73.98	-13.33
* 21280.00	Average	H	-	-	-78.64	18.57	-9.54	37.39	53.98	-16.59
* 21280.00	Peak	H	-	-	-66.75	18.57	-9.54	49.28	73.98	-24.70
26600.00	Peak	H	-	-	-52.44	5.16	-9.54	50.18	68.20	-18.02

Table 7-93. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 162 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	H	273	140	-79.77	16.51	0.00	43.74	53.98	-10.24
* 11000.00	Peak	H	-	-	-68.43	16.51	0.00	55.08	73.98	-18.90
16500.00	Peak	H	-	-	-69.53	24.17	0.00	61.64	68.20	-6.56
22000.00	Peak	H	-	-	-66.79	19.12	-9.54	49.78	68.20	-18.42
27500.00	Peak	H	-	-	-52.05	3.98	-9.54	49.39	68.20	-18.81

Table 7-94. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-80.46	16.73	0.00	43.27	53.98	-10.71
* 11200.00	Peak	H	-	-	-67.26	16.73	0.00	56.47	73.98	-17.51
16800.00	Peak	H	-	-	-69.68	24.00	0.00	61.32	68.20	-6.88
* 22400.00	Average	H	-	-	-79.03	20.03	-9.54	38.46	53.98	-15.52
* 22400.00	Peak	H	-	-	-67.91	20.03	-9.54	49.58	73.98	-24.40
28000.00	Peak	H	-	-	-52.46	4.70	-9.54	49.70	68.20	-18.50

Table 7-95. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 163 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-79.25	17.29	0.00	45.04	53.98	-8.94
* 11440.00	Peak	H	-	-	-68.19	17.29	0.00	56.10	73.98	-17.88
17160.00	Peak	H	-	-	-70.49	24.37	0.00	60.88	68.20	-7.32
* 22880.00	Average	H	-	-	-79.44	19.50	-9.54	37.52	53.98	-16.46
* 22880.00	Peak	H	-	-	-67.87	19.50	-9.54	49.09	73.98	-24.89
28600.00	Peak	H	-	-	-55.50	5.14	-9.54	47.10	68.20	-21.10

Table 7-96. Radiated Measurements SISO ANT2 (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11490.00	Average	H	-	-	-80.09	17.63	0.00	44.54	53.98	-9.43
* 11490.00	Peak	H	-	-	-68.36	17.63	0.00	56.27	73.98	-17.70
17235.00	Peak	H	-	-	-69.90	25.01	0.00	62.11	68.20	-6.09
* 22980.00	Average	H	-	-	-79.13	19.89	-9.54	38.21	53.98	-15.77
* 22980.00	Peak	H	-	-	-67.62	19.89	-9.54	49.72	73.98	-24.26
28725.00	Peak	H	-	-	-51.95	4.66	-9.54	50.17	68.20	-18.03

Table 7-97. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM	 MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 164 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	H	-	-	-81.16	17.35	0.00	43.19	53.98	-10.79
* 11570.00	Peak	H	-	-	-69.99	17.35	0.00	54.36	73.98	-19.62
17355.00	Peak	H	-	-	-68.26	26.08	0.00	64.82	68.20	-3.38
23140.00	Peak	H	-	-	-68.32	19.59	-9.54	48.73	68.20	-19.47
28925.00	Peak	H	-	-	-52.53	4.43	-9.54	49.36	68.20	-18.84

Table 7-98. Radiated Measurements SISO ANT2 (26 Tones)

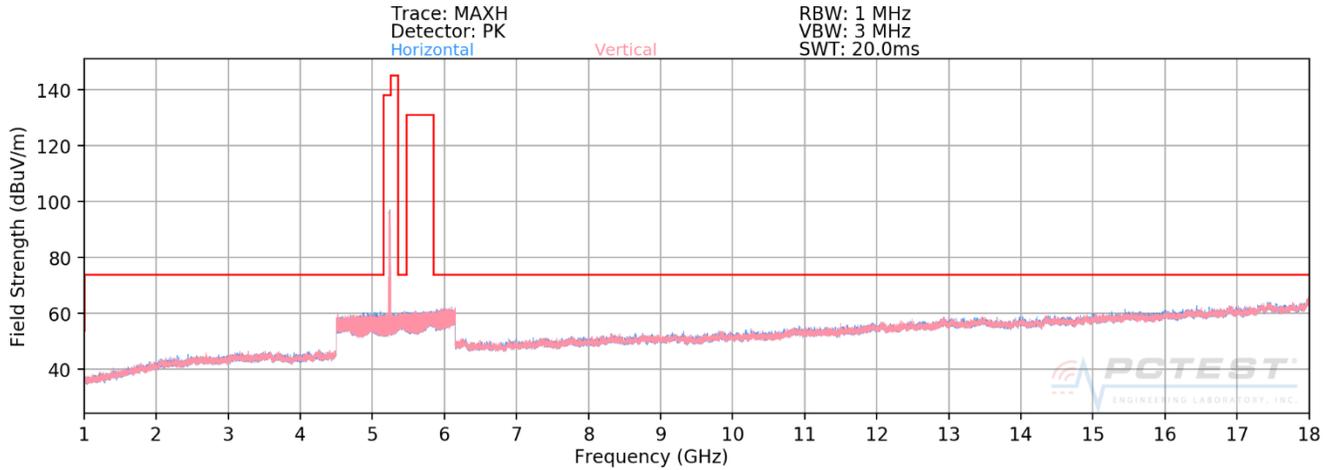
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	H	-	-	-80.46	17.57	0.00	44.11	53.98	-9.86
* 11650.00	Peak	H	-	-	-70.09	17.57	0.00	54.48	73.98	-19.49
17475.00	Peak	H	-	-	-68.26	26.23	0.00	64.97	68.20	-3.23
23300.00	Peak	H	-	-	-67.67	18.93	-9.54	48.72	68.20	-19.48
29125.00	Peak	H	-	-	-50.86	3.48	-9.54	50.08	68.20	-18.12

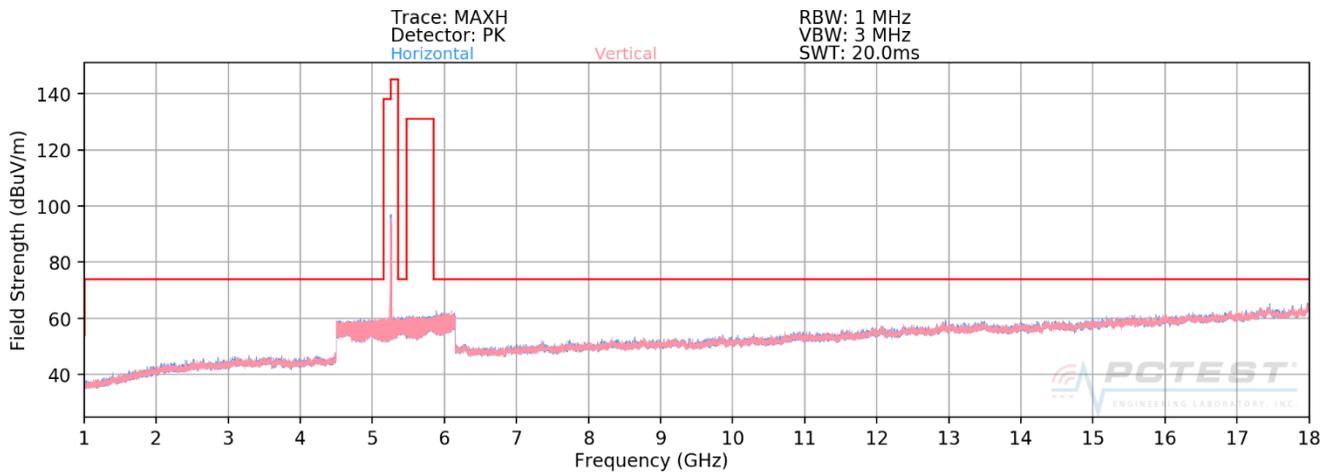
Table 7-99. Radiated Measurements SISO ANT2 (26 Tones)

FCC ID: ZNFV600VM			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 165 of 215	

242 Tones

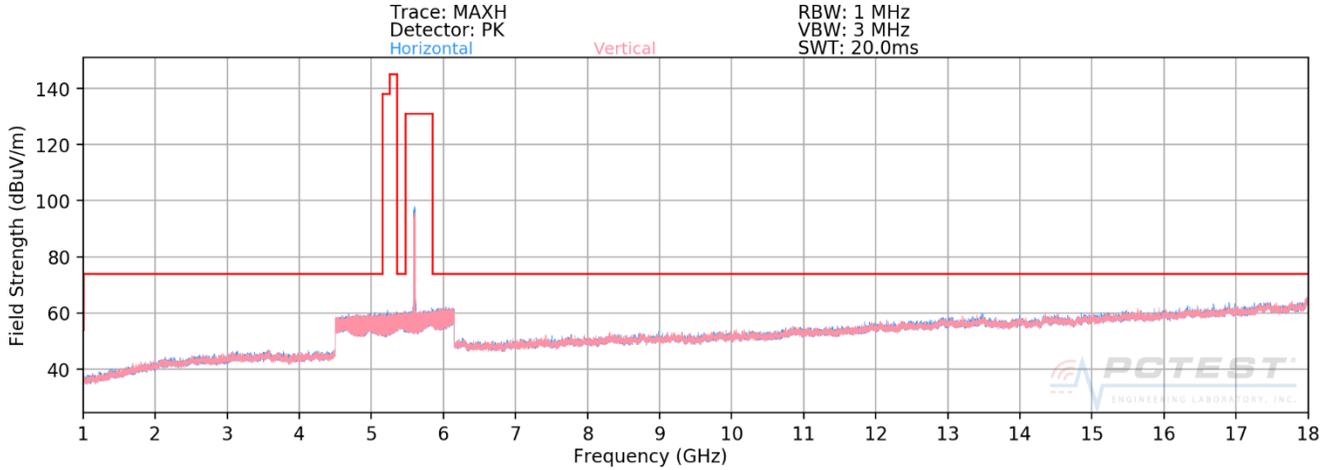


Plot 7-181. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 242 Tones)

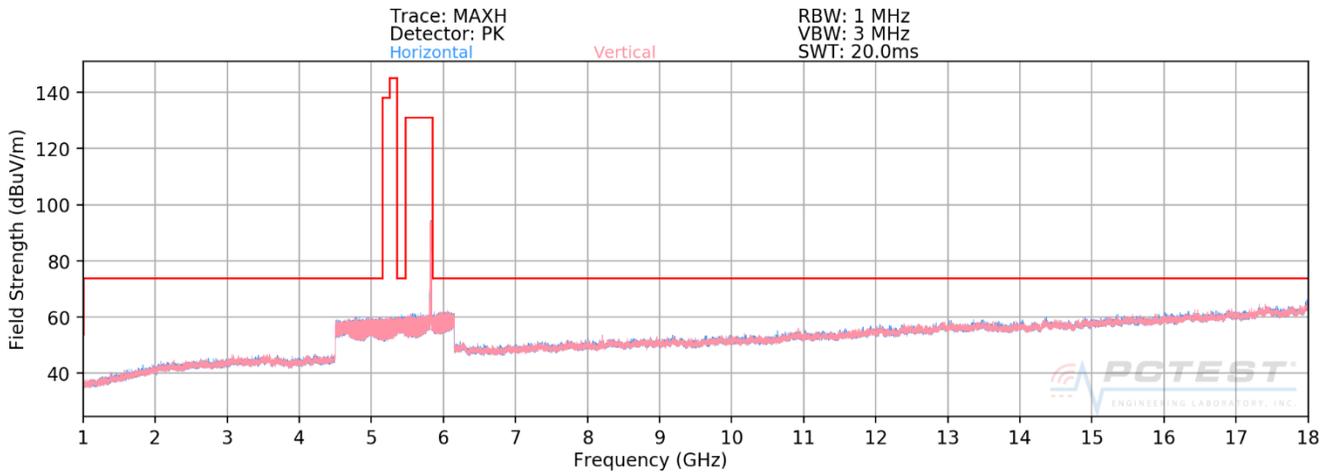


Plot 7-182. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 166 of 215



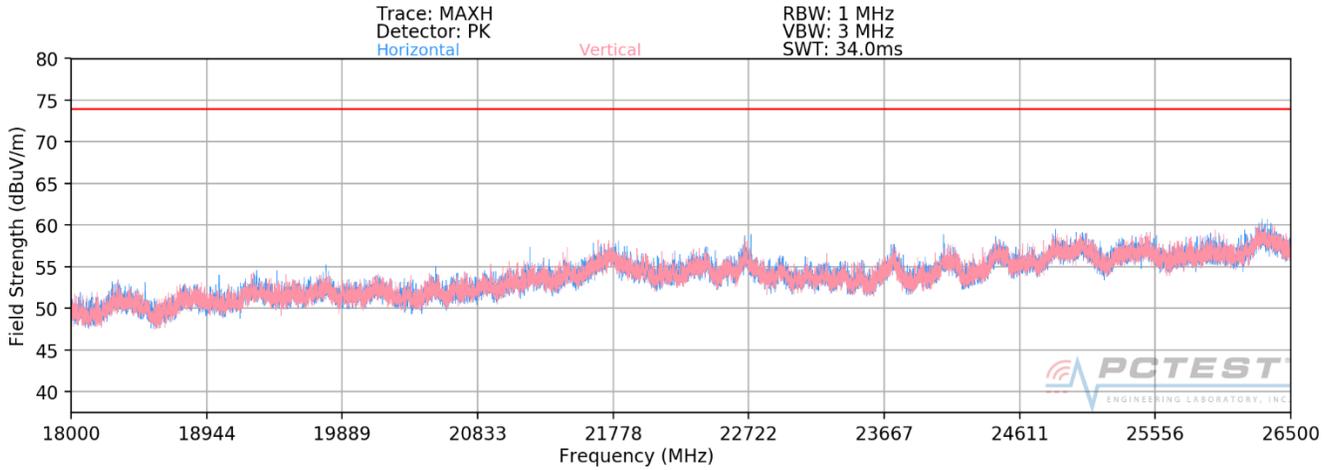
Plot 7-183. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 242 Tones)



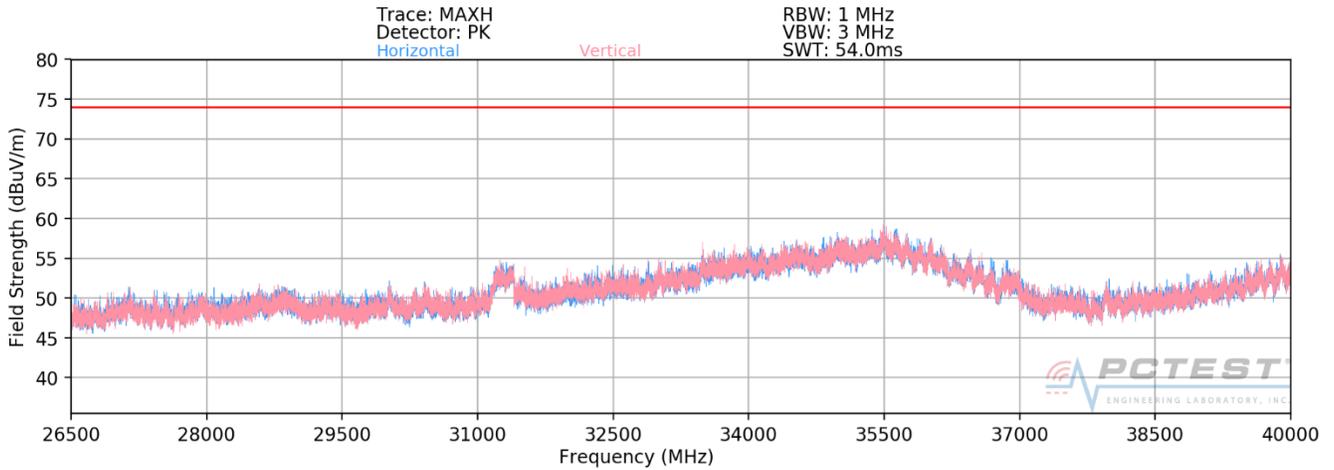
Plot 7-184. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 167 of 215

SISO Antenna-2 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-185. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax – 242 Tones)



Plot 7-186. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 168 of 215

SISO Antenna-2 Radiated Spurious Emission Measurements

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	-	-	-67.69	15.23	0.00	54.54	68.20	-13.66
* 15540.00	Average	H	-	-	-80.21	22.71	0.00	49.50	53.98	-4.48
* 15540.00	Peak	H	-	-	-69.99	22.71	0.00	59.72	73.98	-14.26
* 20720.00	Average	H	-	-	-79.48	17.51	-9.54	35.49	53.98	-18.49
* 20720.00	Peak	H	-	-	-68.18	17.51	-9.54	46.79	73.98	-27.19
25900.00	Peak	H	-	-	-66.16	19.88	-9.54	51.18	68.20	-17.02

Table 7-100. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	-	-	-70.22	15.67	0.00	52.45	68.20	-15.75
* 15600.00	Average	H	-	-	-81.26	22.46	0.00	48.20	53.98	-5.78
* 15600.00	Peak	H	-	-	-70.33	22.46	0.00	59.13	73.98	-14.85
* 20800.00	Average	H	-	-	-79.40	17.87	-9.54	35.92	53.98	-18.06
* 20800.00	Peak	H	-	-	-67.32	17.87	-9.54	48.00	73.98	-25.98
26000.00	Peak	H	-	-	-66.73	20.15	-9.54	50.87	68.20	-17.33

Table 7-101. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 169 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	-	-	-68.84	15.49	0.00	53.65	68.20	-14.55
* 15720.00	Average	H	-	-	-80.29	22.45	0.00	49.16	53.98	-4.82
* 15720.00	Peak	H	-	-	-70.36	22.45	0.00	59.09	73.98	-14.89
* 20960.00	Average	H	-	-	-79.47	18.06	-9.54	36.04	53.98	-17.93
* 20960.00	Peak	H	-	-	-67.61	18.06	-9.54	47.90	73.98	-26.07
26200.00	Peak	H	-	-	-65.91	20.23	-9.54	51.78	68.20	-16.42

Table 7-102. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	-	-	-69.29	15.86	0.00	53.57	68.20	-14.63
* 15780.00	Average	H	-	-	-81.09	22.77	0.00	48.68	53.98	-5.30
* 15780.00	Peak	H	-	-	-67.91	22.77	0.00	61.86	73.98	-12.12
* 21040.00	Average	H	-	-	-79.00	18.36	-9.54	36.81	53.98	-17.17
* 21040.00	Peak	H	-	-	-67.86	18.36	-9.54	47.95	73.98	-26.03
26300.00	Peak	H	-	-	-65.20	20.96	-9.54	53.21	68.20	-14.99

Table 7-103. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 170 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10560.00	Peak	H	-	-	-68.26	15.70	0.00	54.44	68.20	-13.76
* 15840.00	Average	H	-	-	-80.61	22.66	0.00	49.05	53.98	-4.93
* 15840.00	Peak	H	-	-	-68.24	22.66	0.00	61.42	73.98	-12.56
* 21120.00	Average	H	-	-	-79.08	18.17	-9.54	36.54	53.98	-17.43
* 21120.00	Peak	H	-	-	-68.55	18.17	-9.54	47.07	73.98	-26.90
26400.00	Peak	H	-	-	-66.90	20.65	-9.54	51.21	68.20	-16.99

Table 7-104. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 10640.00	Average	H	-	-	-80.05	16.03	0.00	42.98	53.98	-11.00
* 10640.00	Peak	H	-	-	-69.33	16.03	0.00	53.70	73.98	-20.28
* 15960.00	Average	H	-	-	-80.04	23.09	0.00	50.05	53.98	-3.93
* 15960.00	Peak	H	-	-	-67.69	23.09	0.00	62.40	73.98	-11.58
* 21280.00	Average	H	-	-	-78.47	18.57	-9.54	37.56	53.98	-16.42
* 21280.00	Peak	H	-	-	-67.28	18.57	-9.54	48.75	73.98	-25.23
26600.00	Peak	H	-	-	-53.05	5.16	-9.54	49.57	68.20	-18.63

Table 7-105. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 171 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	H	-	-	-80.26	16.51	0.00	43.25	53.98	-10.73
* 11000.00	Peak	H	-	-	-69.33	16.51	0.00	54.18	73.98	-19.80
16500.00	Peak	H	-	-	-68.24	24.17	0.00	62.93	68.20	-5.27
22000.00	Peak	H	-	-	-67.19	19.12	-9.54	49.38	68.20	-18.82
27500.00	Peak	H	-	-	-52.28	3.98	-9.54	49.16	68.20	-19.04

Table 7-106. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-81.33	16.73	0.00	42.40	53.98	-11.58
* 11200.00	Peak	H	-	-	-67.93	16.73	0.00	55.80	73.98	-18.18
16800.00	Peak	H	-	-	-68.66	24.00	0.00	62.34	68.20	-5.86
* 22400.00	Average	H	-	-	-78.81	20.03	-9.54	38.68	53.98	-15.30
* 22400.00	Peak	H	-	-	-67.39	20.03	-9.54	50.10	73.98	-23.88
28000.00	Peak	H	-	-	-51.73	4.70	-9.54	50.43	68.20	-17.77

Table 7-107. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 172 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-80.49	17.29	0.00	43.80	53.98	-10.18
* 11440.00	Peak	H	-	-	-68.33	17.29	0.00	55.96	73.98	-18.02
17160.00	Peak	H	-	-	-69.09	24.37	0.00	62.28	68.20	-5.92
* 22880.00	Average	H	-	-	-79.58	19.50	-9.54	37.38	53.98	-16.60
* 22880.00	Peak	H	-	-	-67.88	19.50	-9.54	49.08	73.98	-24.90
28600.00	Peak	H	-	-	-52.05	5.14	-9.54	50.55	68.20	-17.65

Table 7-108. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11490.00	Average	H	-	-	-81.26	17.63	0.00	43.37	53.98	-10.60
* 11490.00	Peak	H	-	-	-69.29	17.63	0.00	55.34	73.98	-18.63
17235.00	Peak	H	-	-	-71.27	25.01	0.00	60.74	68.20	-7.46
* 22980.00	Average	H	-	-	-79.05	19.89	-9.54	38.29	53.98	-15.69
* 22980.00	Peak	H	-	-	-67.96	19.89	-9.54	49.38	73.98	-24.60
28725.00	Peak	H	-	-	-52.28	4.66	-9.54	49.84	68.20	-18.36

Table 7-109. Radiated Measurements SISO ANT2 (242 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	 LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 173 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	H	-	-	-80.46	17.35	0.00	43.89	53.98	-10.09
* 11570.00	Peak	H	-	-	-70.26	17.35	0.00	54.09	73.98	-19.89
17355.00	Peak	H	-	-	-70.08	26.08	0.00	63.00	68.20	-5.20
23140.00	Peak	H	-	-	-67.99	19.59	-9.54	49.06	68.20	-19.14
28925.00	Peak	H	-	-	-52.34	4.43	-9.54	49.55	68.20	-18.65

Table 7-110. Radiated Measurements SISO ANT2 (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

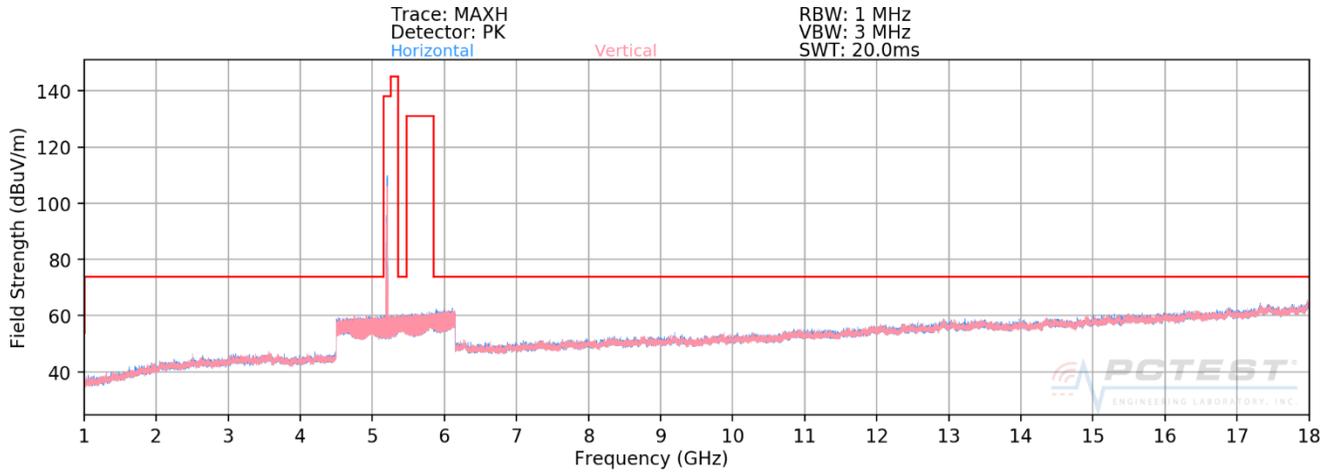
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	H	-	-	-81.23	17.57	0.00	43.34	53.98	-10.63
* 11650.00	Peak	H	-	-	-69.89	17.57	0.00	54.68	73.98	-19.29
17475.00	Peak	H	-	-	-68.21	26.23	0.00	65.02	68.20	-3.18
23300.00	Peak	H	-	-	-67.48	18.93	-9.54	48.91	68.20	-19.29
29125.00	Peak	H	-	-	-51.27	3.48	-9.54	49.67	68.20	-18.53

Table 7-111. Radiated Measurements SISO ANT2 (242 Tones)

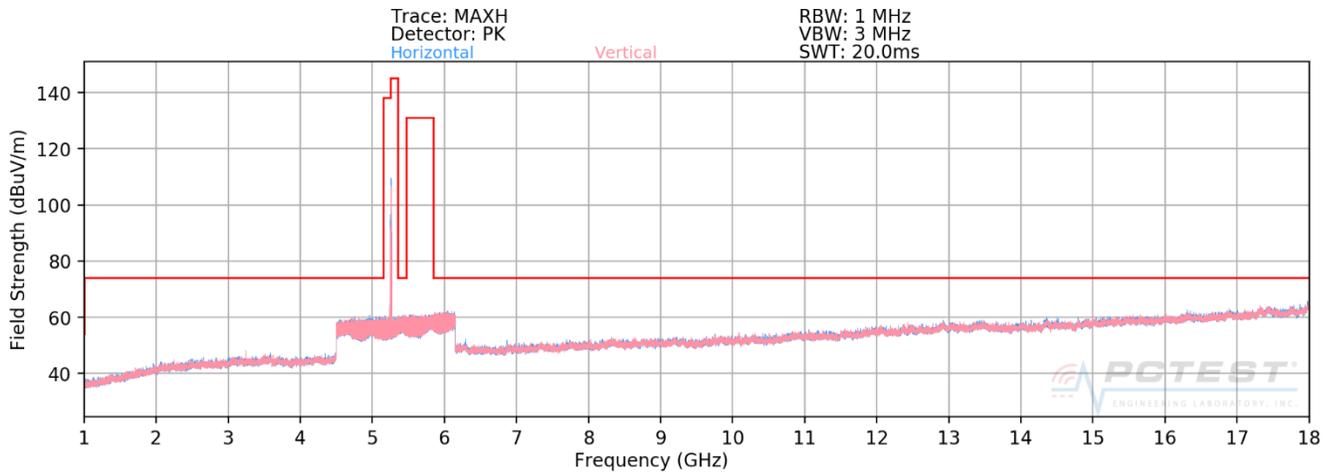
FCC ID: ZNFV600VM			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 174 of 215	

7.6.3 MIMO Radiated Spurious Emission Measurements

26 Tones

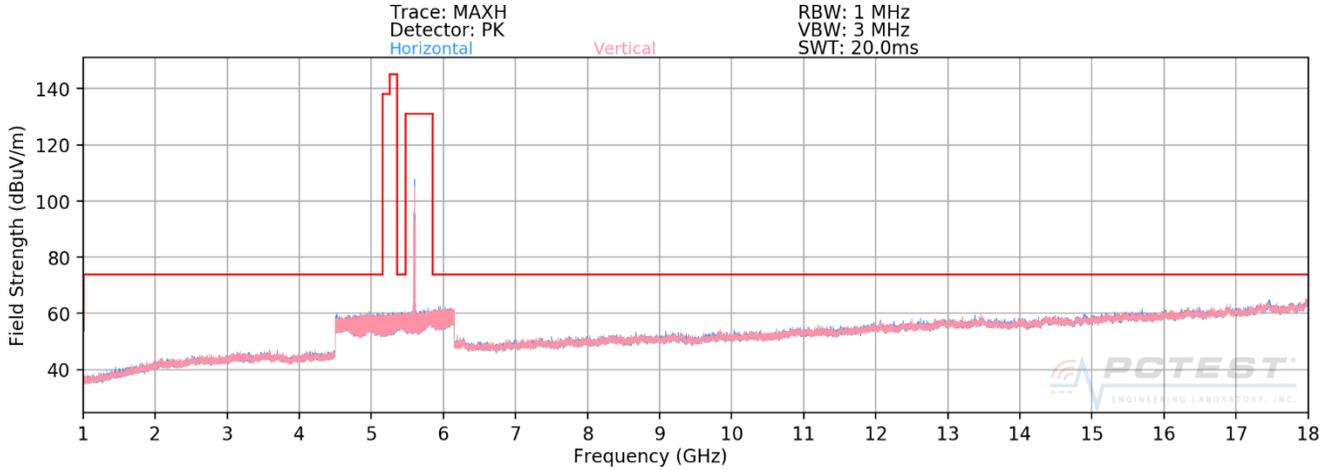


Plot 7-187. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 26 Tones)

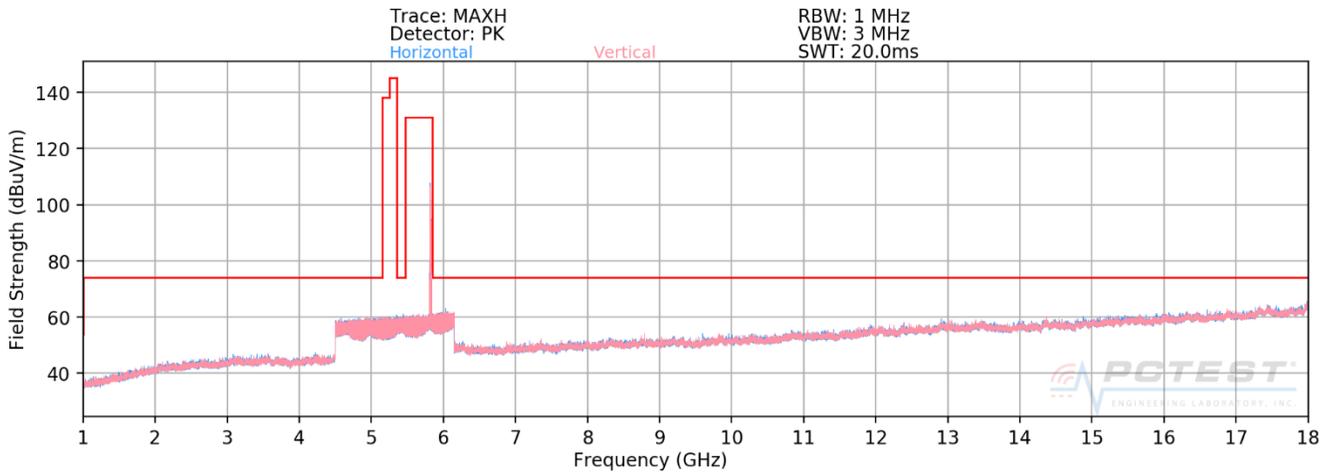


Plot 7-188. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 26 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 175 of 215



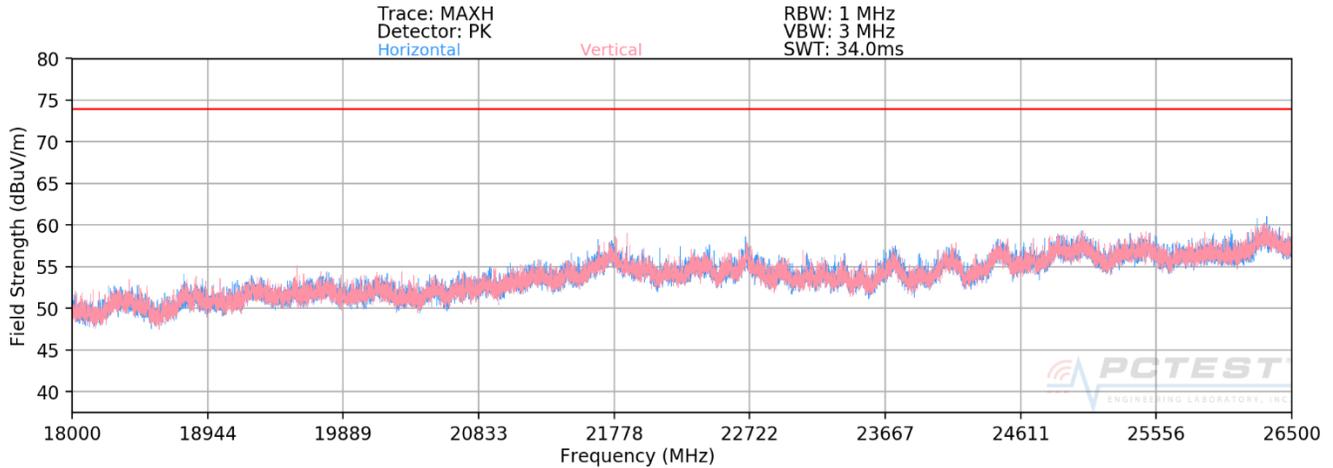
Plot 7-189. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)



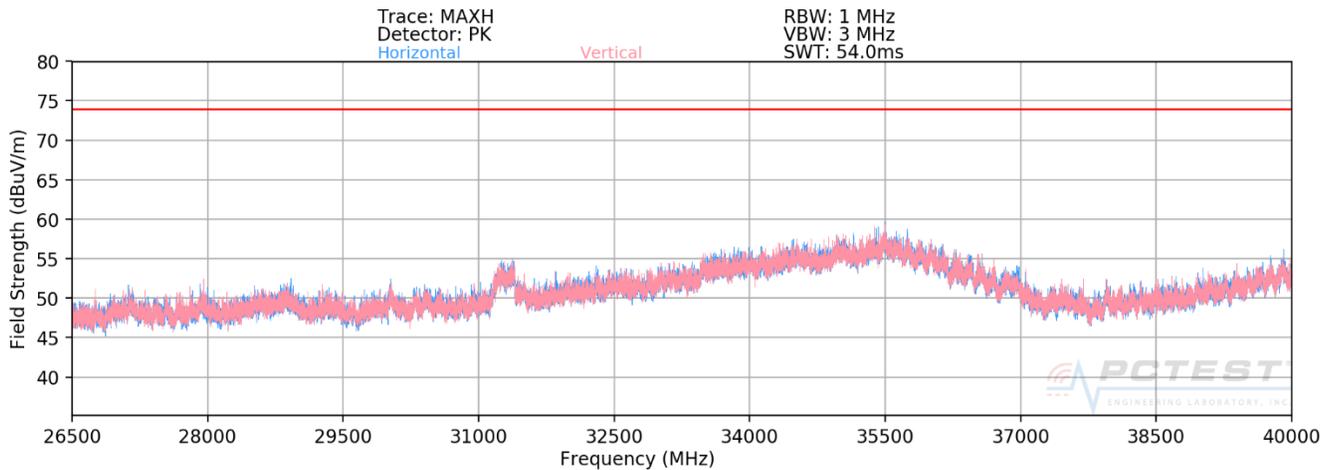
Plot 7-190. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 176 of 215

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-191. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 26 Tones)



Plot 7-192. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 177 of 215

MIMO Radiated Spurious Emission Measurements (26 Tones)

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	190	358	-63.49	15.23	0.00	58.74	68.20	-9.46
* 15540.00	Average	H	-	-	-80.71	22.71	0.00	49.00	53.98	-4.98
* 15540.00	Peak	H	-	-	-68.57	22.71	0.00	61.14	73.98	-12.84
* 20720.00	Average	H	-	-	-78.98	17.51	-9.54	35.99	53.98	-17.99
* 20720.00	Peak	H	-	-	-67.54	17.51	-9.54	47.43	73.98	-26.55
25900.00	Peak	H	-	-	-66.14	19.88	-9.54	51.20	68.20	-17.00

Table 7-112. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	184	360	-63.11	15.67	0.00	59.56	68.20	-8.64
* 15600.00	Average	H	-	-	-80.60	22.46	0.00	48.86	53.98	-5.12
* 15600.00	Peak	H	-	-	-69.47	22.46	0.00	59.99	73.98	-13.99
* 20800.00	Average	H	-	-	-78.97	17.87	-9.54	36.35	53.98	-17.63
* 20800.00	Peak	H	-	-	-68.01	17.87	-9.54	47.31	73.98	-26.67
26000.00	Peak	H	-	-	-66.77	20.15	-9.54	50.83	68.20	-17.37

Table 7-113. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	 LG	Approved by: Quality Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10480.00	Peak	H	171	362	-65.41	15.49	0.00	57.08	68.20	-11.12
* 15720.00	Average	H	-	-	-80.70	22.45	0.00	48.75	53.98	-5.23
* 15720.00	Peak	H	-	-	-69.34	22.45	0.00	60.11	73.98	-13.87
* 20960.00	Average	H	-	-	-79.24	18.06	-9.54	36.27	53.98	-17.70
* 20960.00	Peak	H	-	-	-67.56	18.06	-9.54	47.95	73.98	-26.02
26200.00	Peak	H	-	-	-65.21	20.23	-9.54	52.48	68.20	-15.72

Table 7-114. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10520.00	Peak	H	180	359	-65.76	15.86	0.00	57.10	68.20	-11.10
* 15780.00	Average	H	-	-	-80.70	22.77	0.00	49.07	53.98	-4.91
* 15780.00	Peak	H	-	-	-69.85	22.77	0.00	59.92	73.98	-14.06
* 21040.00	Average	H	-	-	-78.72	18.36	-9.54	37.09	53.98	-16.89
* 21040.00	Peak	H	-	-	-67.46	18.36	-9.54	48.35	73.98	-25.63
26300.00	Peak	H	-	-	-65.47	20.96	-9.54	52.94	68.20	-15.26

Table 7-115. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
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Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10560.00	Peak	H	195	358	-67.07	15.70	0.00	55.63	68.20	-12.57
* 15840.00	Average	H	-	-	-80.94	22.66	0.00	48.72	53.98	-5.26
* 15840.00	Peak	H	-	-	-69.70	22.66	0.00	59.96	73.98	-14.02
* 21120.00	Average	H	-	-	-78.65	18.17	-9.54	36.97	53.98	-17.00
* 21120.00	Peak	H	-	-	-67.44	18.17	-9.54	48.18	73.98	-25.79
26400.00	Peak	H	-	-	-66.58	20.65	-9.54	51.53	68.20	-16.67

Table 7-116. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 10640.00	Average	H	195	360	-79.35	16.03	0.00	43.68	53.98	-10.30
* 10640.00	Peak	H	195	360	-67.76	16.03	0.00	55.27	73.98	-18.71
* 15960.00	Average	H	-	-	-81.63	23.09	0.00	48.46	53.98	-5.52
* 15960.00	Peak	H	-	-	-71.56	23.09	0.00	58.53	73.98	-15.45
* 21280.00	Average	H	-	-	-78.15	18.57	-9.54	37.88	53.98	-16.10
* 21280.00	Peak	H	-	-	-67.13	18.57	-9.54	48.90	73.98	-25.08
26600.00	Peak	H	-	-	-53.43	5.16	-9.54	49.19	68.20	-19.01

Table 7-117. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 180 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11000.00	Average	H	190	282	-79.69	16.51	0.00	43.82	53.98	-10.16
* 11000.00	Peak	H	190	282	-68.48	16.51	0.00	55.03	73.98	-18.95
16500.00	Peak	H	-	-	-69.85	24.17	0.00	61.32	68.20	-6.88
22000.00	Peak	H	-	-	-67.52	19.12	-9.54	49.05	68.20	-19.15
27500.00	Peak	H	-	-	-52.40	3.98	-9.54	49.04	68.20	-19.16

Table 7-118. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-81.23	16.73	0.00	42.50	53.98	-11.48
* 11200.00	Peak	H	-	-	-68.63	16.73	0.00	55.10	73.98	-18.88
16800.00	Peak	H	-	-	-69.54	24.00	0.00	61.46	68.20	-6.74
* 22400.00	Average	H	-	-	-78.99	20.03	-9.54	38.50	53.98	-15.48
* 22400.00	Peak	H	-	-	-66.56	20.03	-9.54	50.93	73.98	-23.05
28000.00	Peak	H	-	-	-52.85	4.70	-9.54	49.31	68.20	-18.89

Table 7-119. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 181 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-79.90	17.29	0.00	44.39	53.98	-9.59
* 11440.00	Peak	H	-	-	-69.10	17.29	0.00	55.19	73.98	-18.79
17160.00	Peak	H	-	-	-68.66	24.37	0.00	62.71	68.20	-5.49
* 22880.00	Average	H	-	-	-79.20	19.50	-9.54	37.76	53.98	-16.22
* 22880.00	Peak	H	-	-	-67.91	19.50	-9.54	49.05	73.98	-24.93
28600.00	Peak	H	-	-	-51.64	5.14	-9.54	50.96	68.20	-17.24

Table 7-120. Radiated Measurements MIMO (26 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11490.00	Average	H	162	278	-80.04	17.63	0.00	44.59	53.98	-9.38
* 11490.00	Peak	H	162	278	-69.05	17.63	0.00	55.58	73.98	-18.39
17235.00	Peak	H	-	-	-70.07	25.01	0.00	61.94	68.20	-6.26
* 22980.00	Average	H	-	-	-79.23	19.89	-9.54	38.11	53.98	-15.87
* 22980.00	Peak	H	-	-	-66.97	19.89	-9.54	50.37	73.98	-23.61
28725.00	Peak	H	-	-	-51.78	4.66	-9.54	50.34	68.20	-17.86

Table 7-121. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 182 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	H	170	332	-79.48	17.35	0.00	44.87	53.98	-9.11
* 11570.00	Peak	H	170	332	-66.88	17.35	0.00	57.47	73.98	-16.51
17355.00	Peak	H	-	-	-69.09	26.08	0.00	63.99	68.20	-4.21
23140.00	Peak	H	-	-	-67.81	19.59	-9.54	49.24	68.20	-18.96
28925.00	Peak	H	-	-	-52.13	4.43	-9.54	49.76	68.20	-18.44

Table 7-122. Radiated Measurements MIMO (26 Tones)

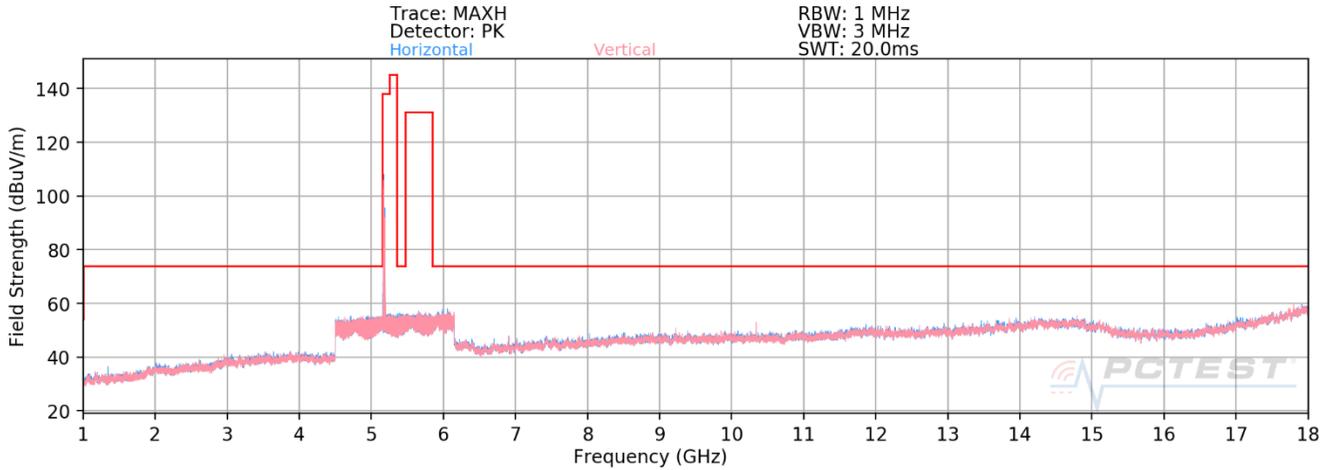
Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 4
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	H	322	12	-80.56	17.57	0.00	44.01	53.98	-9.96
* 11650.00	Peak	H	322	12	-69.64	17.57	0.00	54.93	73.98	-19.04
17475.00	Peak	H	-	-	-70.40	26.23	0.00	62.83	68.20	-5.37
23300.00	Peak	H	-	-	-67.79	18.93	-9.54	48.60	68.20	-19.60
29125.00	Peak	H	-	-	-50.49	3.48	-9.54	50.45	68.20	-17.75

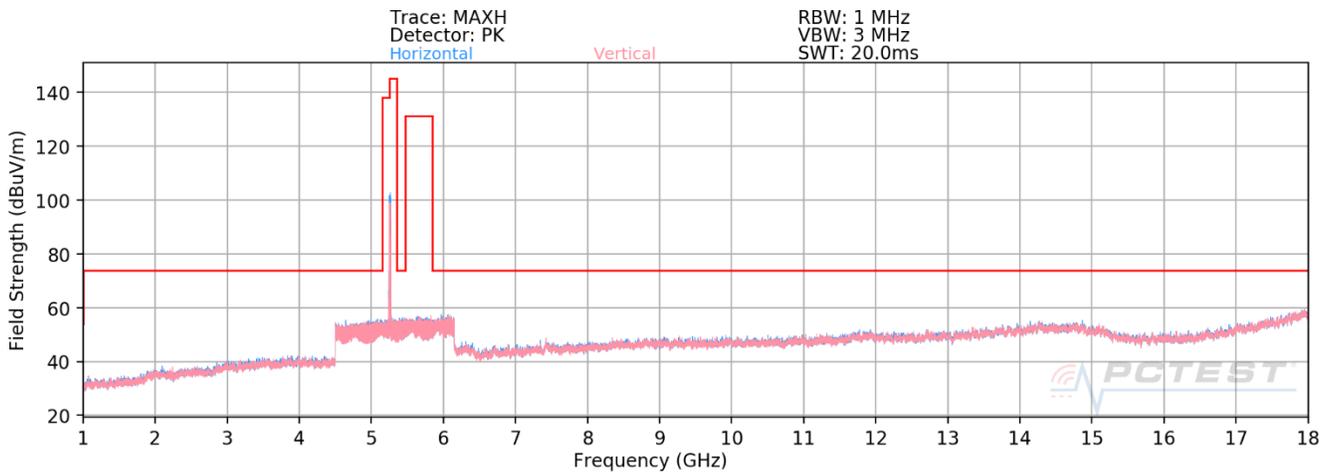
Table 7-123. Radiated Measurements MIMO (26 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 183 of 215	

242 Tones

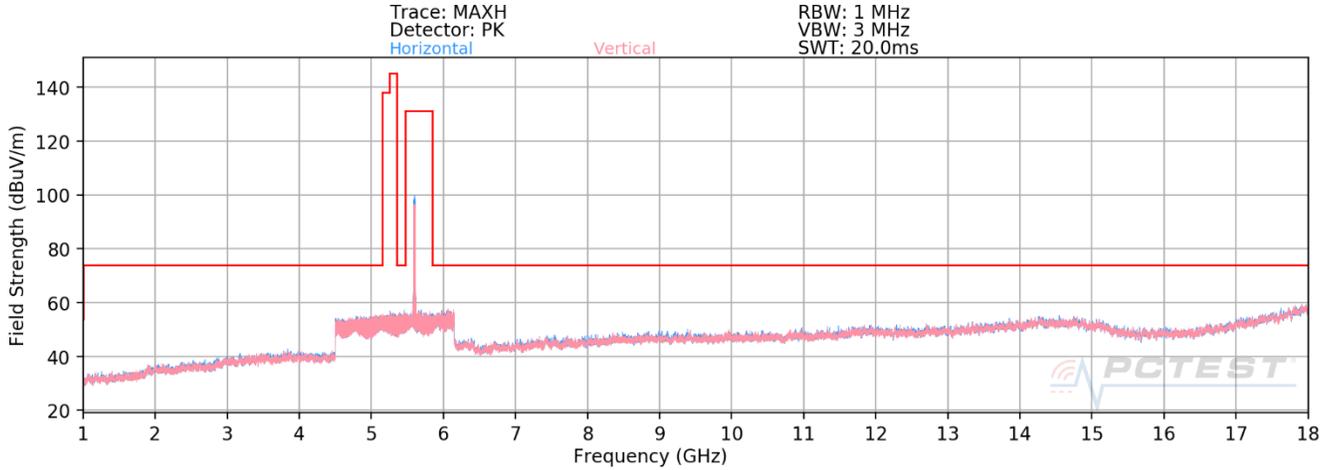


Plot 7-193. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)

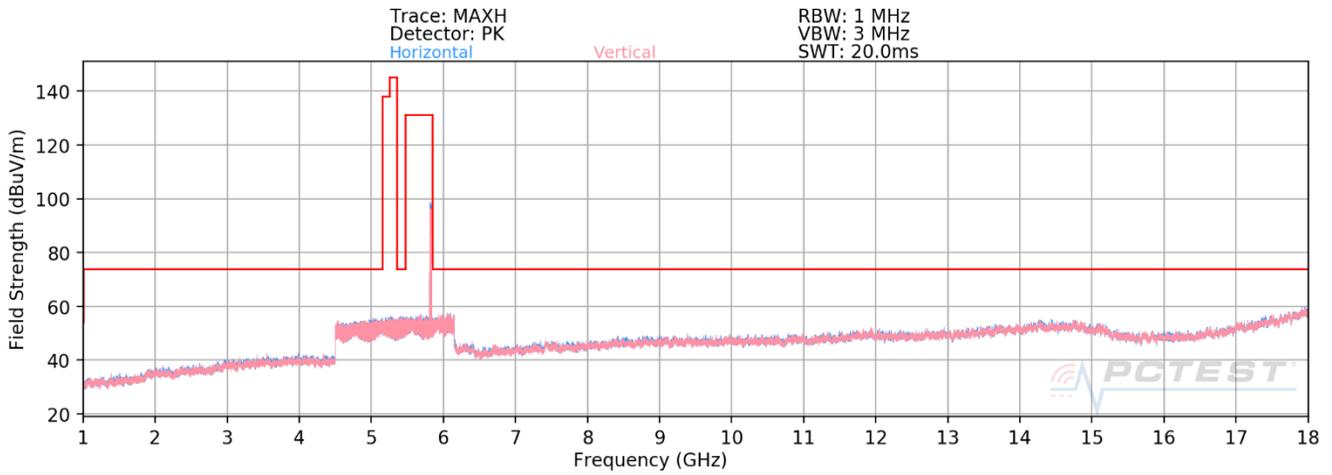


Plot 7-194. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 184 of 215



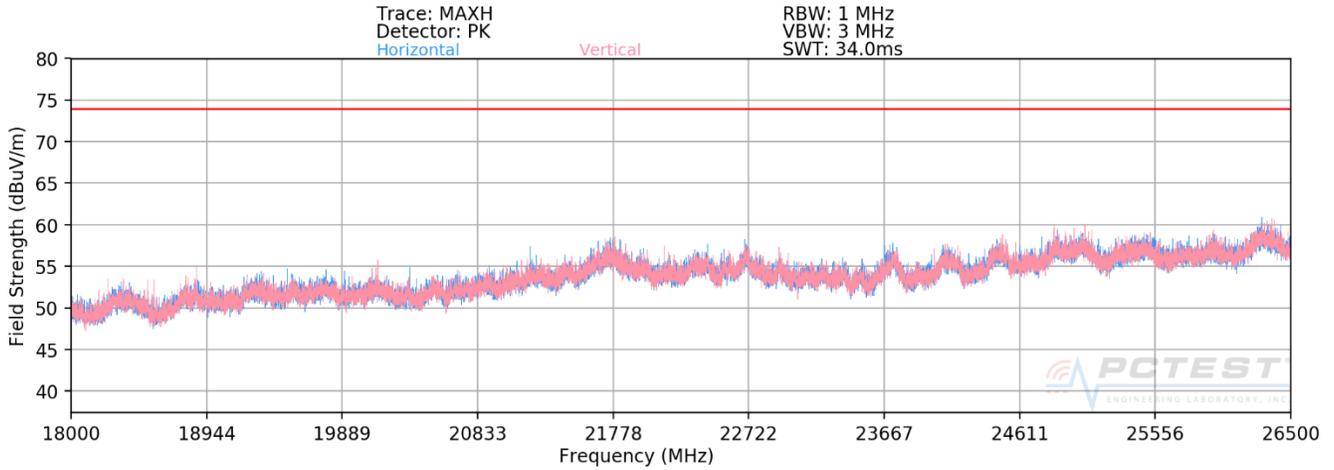
Plot 7-195. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)



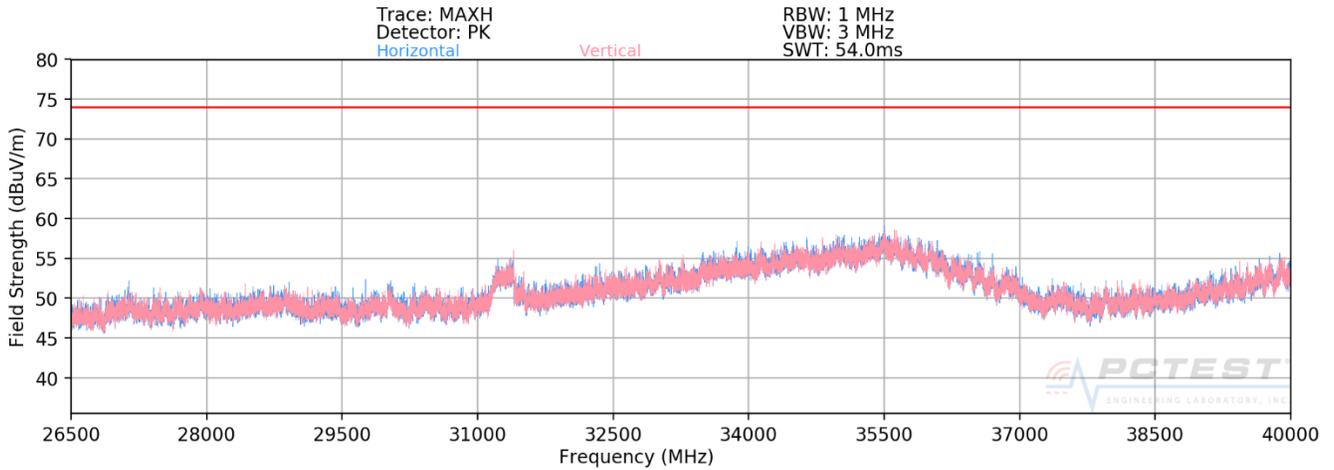
Plot 7-196. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 185 of 215

MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-197. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 242 Tones)



Plot 7-198. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 186 of 215

MIMO Radiated Spurious Emission Measurements (242 Tones)

§15.407(b) §15.205 & §15.209; RSS-Gen [8.9]

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10360.00	Peak	H	177	360	-67.43	15.23	0.00	54.80	68.20	-13.40
* 15540.00	Average	H	-	-	-80.62	22.71	0.00	49.09	53.98	-4.89
* 15540.00	Peak	H	-	-	-69.18	22.71	0.00	60.53	73.98	-13.45
* 20720.00	Average	H	-	-	-79.02	17.51	-9.54	35.95	53.98	-18.03
* 20720.00	Peak	H	-	-	-67.92	17.51	-9.54	47.05	73.98	-26.93
25900.00	Peak	H	-	-	-66.40	19.88	-9.54	50.94	68.20	-17.26

Table 7-124. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5200MHz
 Channel: 40

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10400.00	Peak	H	180	354	-68.30	15.67	0.00	54.37	68.20	-13.83
* 15600.00	Average	H	-	-	-80.56	22.46	0.00	48.90	53.98	-5.08
* 15600.00	Peak	H	-	-	-69.24	22.46	0.00	60.22	73.98	-13.76
* 20800.00	Average	H	-	-	-78.60	17.87	-9.54	36.72	53.98	-17.26
* 20800.00	Peak	H	-	-	-66.91	17.87	-9.54	48.41	73.98	-25.57
26000.00	Peak	H	-	-	-66.76	20.15	-9.54	50.84	68.20	-17.36

Table 7-125. Radiated Measurements MIMO (242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 187 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5240MHz
 Channel: 48

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10480.00	Peak	H	169	356	-68.97	15.49	0.00	53.52	68.20	-14.68
* 15720.00	Average	H	-	-	-80.81	22.45	0.00	48.64	53.98	-5.34
* 15720.00	Peak	H	-	-	-68.84	22.45	0.00	60.61	73.98	-13.37
* 20960.00	Average	H	-	-	-79.41	18.06	-9.54	36.10	53.98	-17.87
* 20960.00	Peak	H	-	-	-67.25	18.06	-9.54	48.26	73.98	-25.71
26200.00	Peak	H	-	-	-66.16	20.23	-9.54	51.53	68.20	-16.67

Table 7-126. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5260MHz
 Channel: 52

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
10520.00	Peak	H	183	358	-68.52	15.86	0.00	54.34	68.20	-13.86
* 15780.00	Average	H	-	-	-80.94	22.77	0.00	48.83	53.98	-5.15
* 15780.00	Peak	H	-	-	-70.02	22.77	0.00	59.75	73.98	-14.23
* 21040.00	Average	H	-	-	-78.86	18.36	-9.54	36.95	53.98	-17.03
* 21040.00	Peak	H	-	-	-67.19	18.36	-9.54	48.62	73.98	-25.36
26300.00	Peak	H	-	-	-65.62	20.96	-9.54	52.79	68.20	-15.41

Table 7-127. Radiated Measurements MIMO (242 Tones)

FCC ID: ZNFV600VM	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 188 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5280MHz
 Channel: 56

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
10560.00	Peak	H	177	350	-68.57	15.70	0.00	54.13	68.20	-14.07
* 15840.00	Average	H	-	-	-79.33	22.66	0.00	50.33	53.98	-3.65
* 15840.00	Peak	H	-	-	-71.00	22.66	0.00	58.66	73.98	-15.32
* 21120.00	Average	H	-	-	-78.79	18.17	-9.54	36.83	53.98	-17.14
* 21120.00	Peak	H	-	-	-66.02	18.17	-9.54	49.60	73.98	-24.37
* 26400.00	Peak	H	-	-	-65.10	20.65	-9.54	53.01	68.20	-15.19

Table 7-128. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5320MHz
 Channel: 64

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 10640.00	Average	H	174	365	-80.01	16.03	0.00	43.02	53.98	-10.96
* 10640.00	Peak	H	174	365	-69.23	16.03	0.00	53.80	73.98	-20.18
* 15960.00	Average	H	-	-	-81.22	23.09	0.00	48.87	53.98	-5.11
* 15960.00	Peak	H	-	-	-68.39	23.09	0.00	61.70	73.98	-12.28
* 21280.00	Average	H	-	-	-78.51	18.57	-9.54	37.52	53.98	-16.46
* 21280.00	Peak	H	-	-	-67.09	18.57	-9.54	48.94	73.98	-25.04
* 26600.00	Peak	H	-	-	-53.51	5.16	-9.54	49.11	68.20	-19.09

Table 7-129. Radiated Measurements MIMO (242 Tones)

FCC ID: ZNFV600VM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 189 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11000.00	Average	H	-	-	-79.74	16.51	0.00	43.77	53.98	-10.21
* 11000.00	Peak	H	-	-	-68.02	16.51	0.00	55.49	73.98	-18.49
16500.00	Peak	H	-	-	-69.33	24.17	0.00	61.84	68.20	-6.36
22000.00	Peak	H	-	-	-67.21	19.12	-9.54	49.36	68.20	-18.84
27500.00	Peak	H	-	-	-51.17	3.98	-9.54	50.27	68.20	-17.93

Table 7-130. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5600MHz
 Channel: 120

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11200.00	Average	H	-	-	-81.22	16.73	0.00	42.51	53.98	-11.47
* 11200.00	Peak	H	-	-	-69.36	16.73	0.00	54.37	73.98	-19.61
16800.00	Peak	H	-	-	-69.24	24.00	0.00	61.76	68.20	-6.44
* 22400.00	Average	H	-	-	-78.81	20.03	-9.54	38.68	53.98	-15.30
* 22400.00	Peak	H	-	-	-67.19	20.03	-9.54	50.30	73.98	-23.68
28000.00	Peak	H	-	-	-52.42	4.70	-9.54	49.74	68.20	-18.46

Table 7-131. Radiated Measurements MIMO (242 Tones)

FCC ID: ZNFV600VM			MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 190 of 215	

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11440.00	Average	H	-	-	-81.33	17.29	0.00	42.96	53.98	-11.02
* 11440.00	Peak	H	-	-	-70.09	17.29	0.00	54.20	73.98	-19.78
17160.00	Peak	H	-	-	-69.69	24.37	0.00	61.68	68.20	-6.52
* 22880.00	Average	H	-	-	-79.22	19.50	-9.54	37.74	53.98	-16.24
* 22880.00	Peak	H	-	-	-67.68	19.50	-9.54	49.28	73.98	-24.70
28600.00	Peak	H	-	-	-52.20	5.14	-9.54	50.40	68.20	-17.80

Table 7-132. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5745MHz
 Channel: 149

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11490.00	Average	H	134	300	-80.52	17.63	0.00	44.11	53.98	-9.86
* 11490.00	Peak	H	134	300	-69.03	17.63	0.00	55.60	73.98	-18.37
17235.00	Peak	H	-	-	-70.08	25.01	0.00	61.93	68.20	-6.27
* 22980.00	Average	H	-	-	-79.34	19.89	0.00	47.55	53.98	-6.43
* 22980.00	Peak	H	-	-	-67.73	19.89	-9.54	49.61	73.98	-24.37
28725.00	Peak	H	-	-	-51.84	4.66	-9.54	50.28	68.20	-17.92

Table 7-133. Radiated Measurements MIMO (242 Tones)

FCC ID: ZNFV600VM	 MEASUREMENT REPORT (CERTIFICATION) 		Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 191 of 215

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11570.00	Average	H	400	102	-80.22	17.35	0.00	44.13	53.98	-9.85
* 11570.00	Peak	H	400	102	-68.06	17.35	0.00	56.29	73.98	-17.69
17355.00	Peak	H	-	-	-69.33	26.08	0.00	63.75	68.20	-4.45
23140.00	Peak	H	-	-	-67.08	19.59	-9.54	49.97	68.20	-18.23
28925.00	Peak	H	-	-	-52.59	4.43	-9.54	49.30	68.20	-18.90

Table 7-134. Radiated Measurements MIMO (242 Tones)

Worst Case Mode: 802.11ax (20MHz BW)
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	H	-	-	-79.66	17.57	0.00	44.91	53.98	-9.06
* 11650.00	Peak	H	-	-	-69.24	17.57	0.00	55.33	73.98	-18.64
17475.00	Peak	H	-	-	-68.90	26.23	0.00	64.33	68.20	-3.87
23300.00	Peak	H	-	-	-67.84	18.93	-9.54	48.55	68.20	-19.65
29125.00	Peak	H	-	-	-51.12	3.48	-9.54	49.82	68.20	-18.38

Table 7-135. Radiated Measurements MIMO (242 Tones)

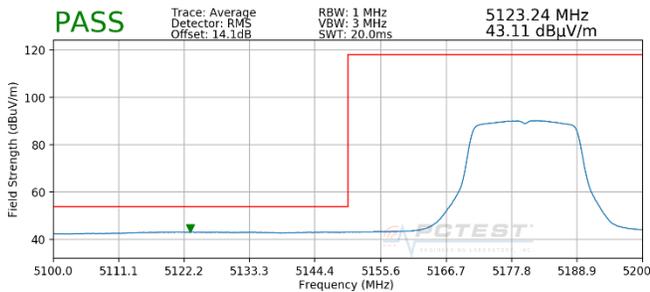
FCC ID: ZNFV600VM	 PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	 LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset	Page 192 of 215	

7.6.4 SISO Antenna-1 Radiated Band Edge Measurements (20MHz BW)

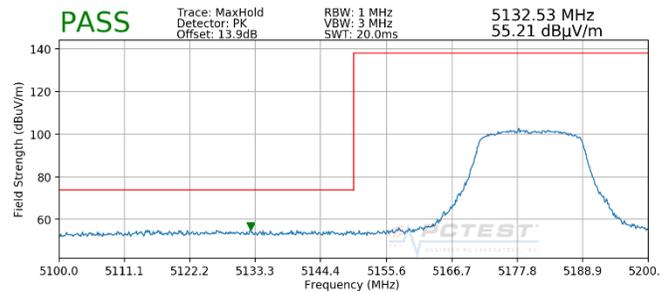
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]; RSS-Gen [8.9]

242 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

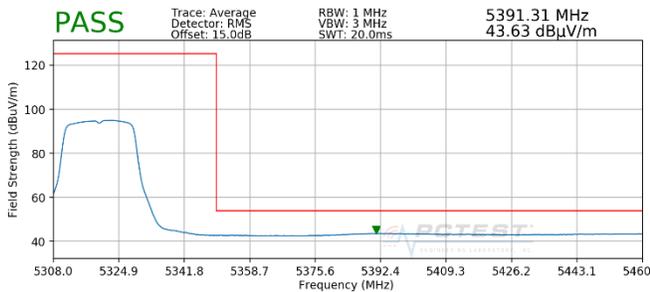


Plot 7-199. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 242 Tones)

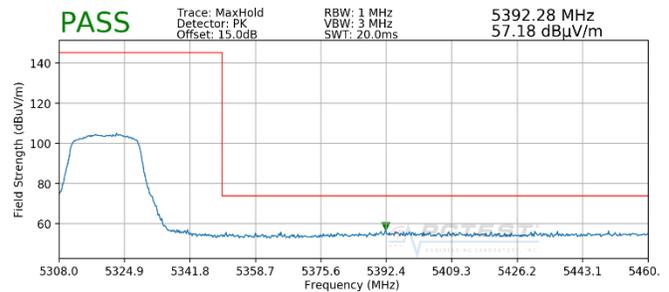


Plot 7-200. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



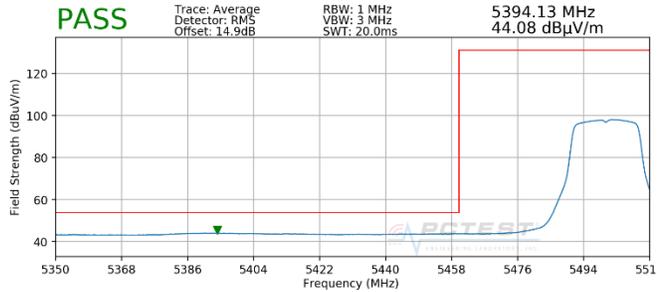
Plot 7-201. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 242 Tones)



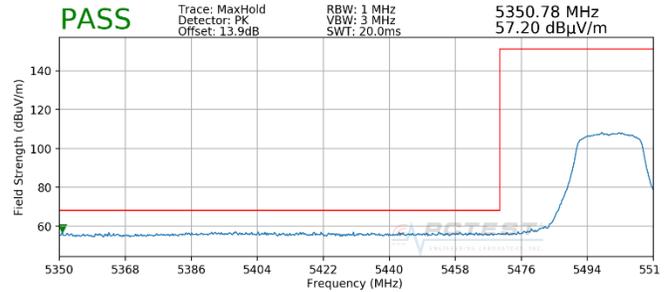
Plot 7-202. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 193 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

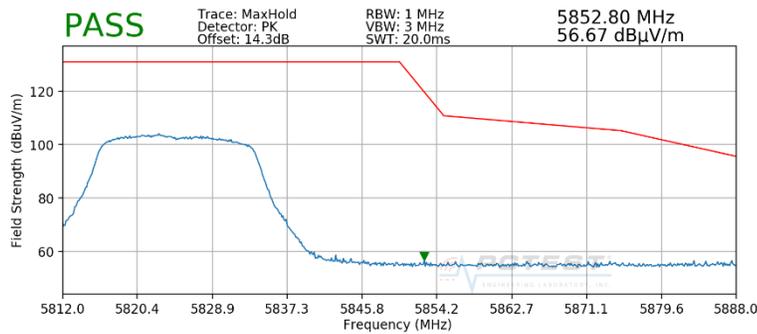


Plot 7-203. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 242 Tones)



Plot 7-204. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



Plot 7-205. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 242 Tones)

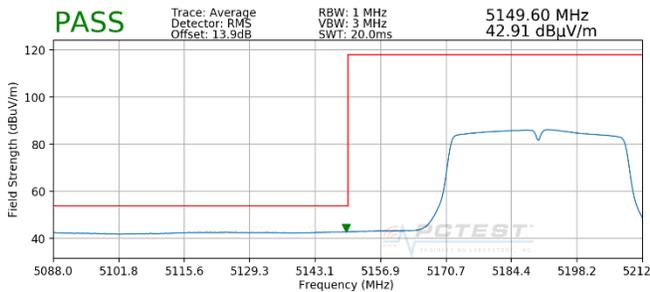
FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 194 of 215

7.6.5 SISO Antenna-1 Radiated Band Edge Measurements (40MHz BW)

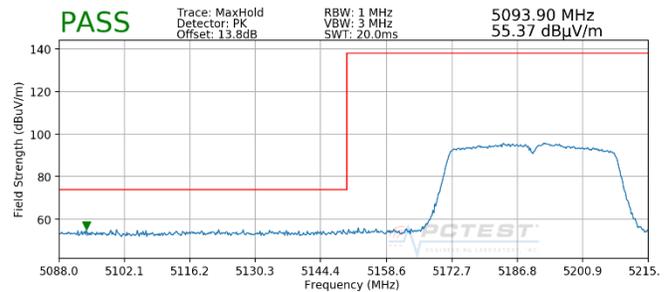
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	62
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38

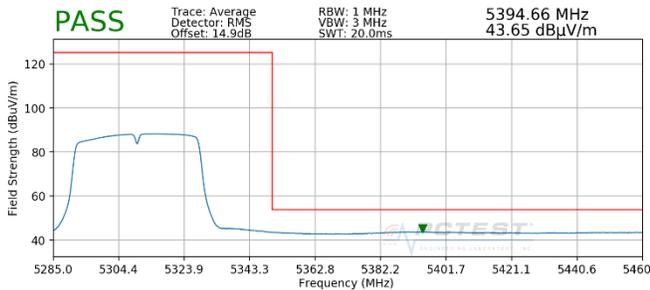


Plot 7-206. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 484 Tones)

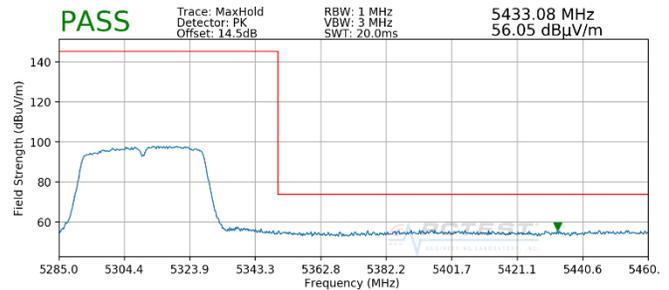


Plot 7-207. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	62
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62



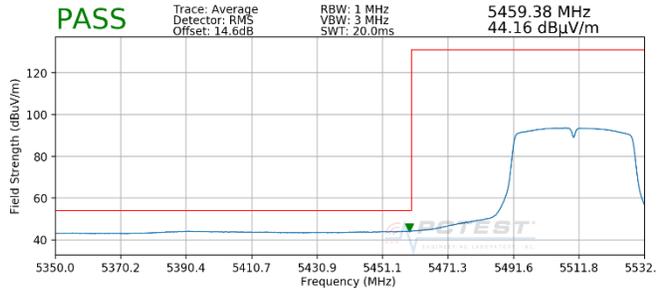
Plot 7-208. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 484 Tones)



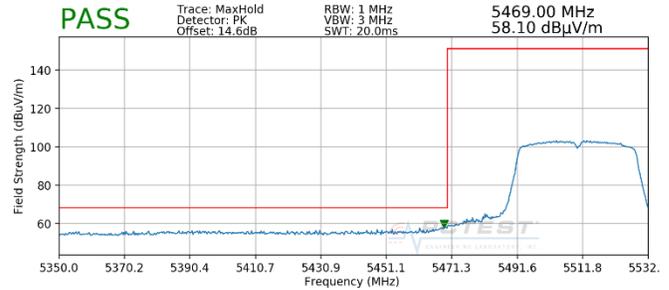
Plot 7-209. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 484 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 195 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

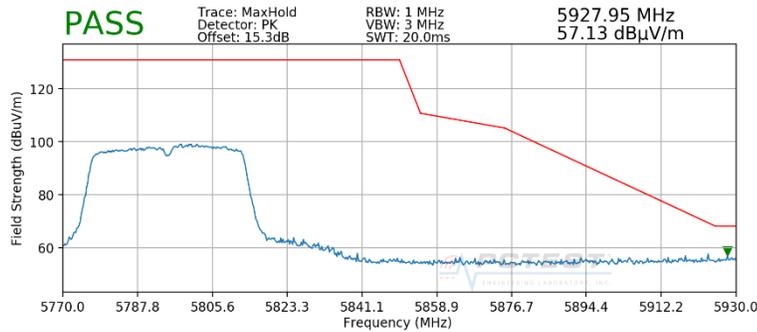


Plot 7-210. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 484 Tones)



Plot 7-211. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 484 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



Plot 7-212. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 484 Tones)

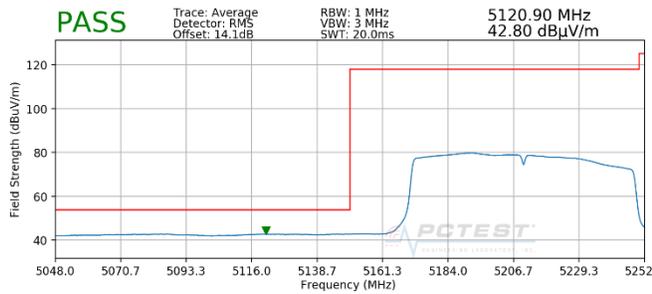
FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 196 of 215

7.6.6 SISO Antenna-1 Radiated Band Edge Measurements (80MHz BW)

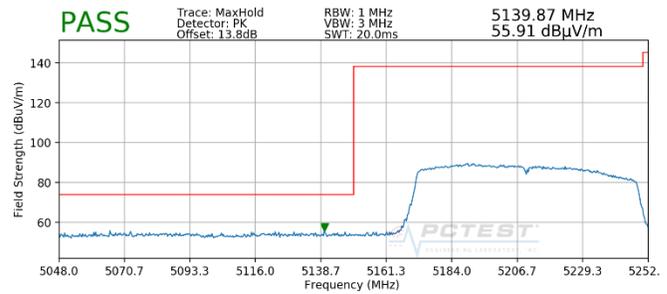
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	64
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

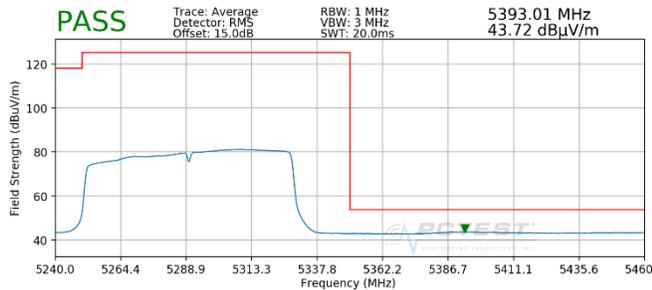


Plot 7-213. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 996 Tones)

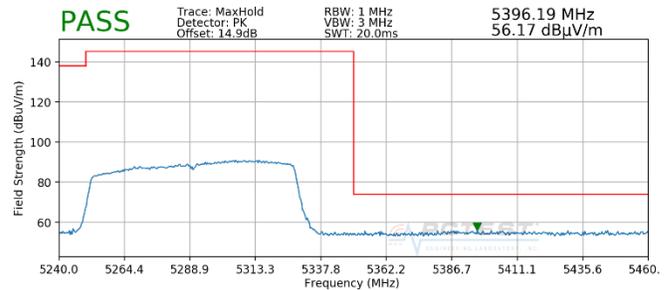


Plot 7-214. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	64
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



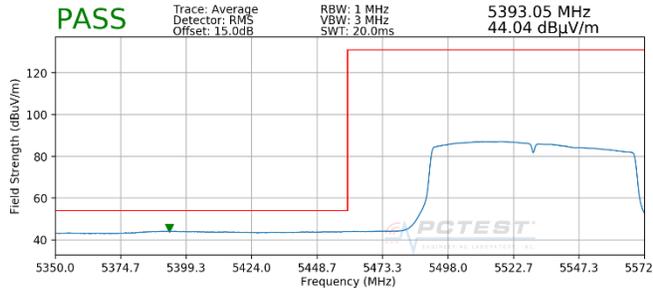
Plot 7-215. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 996 Tones)



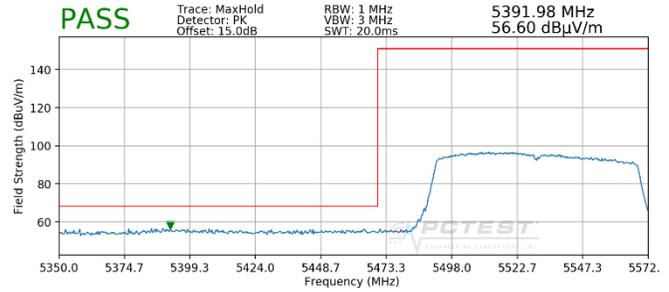
Plot 7-216. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 996 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 197 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

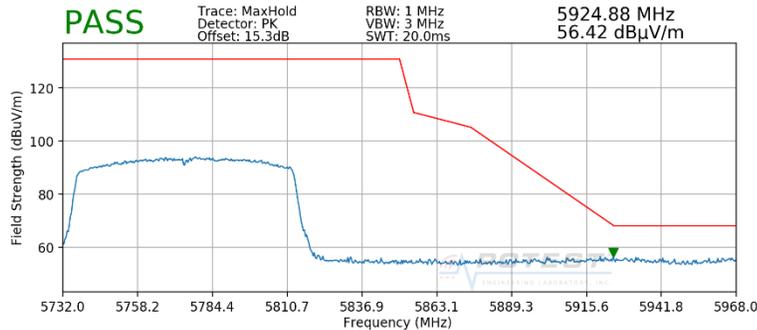


Plot 7-217. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 996 Tones)



Plot 7-218. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



Plot 7-219. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 996 Tones)

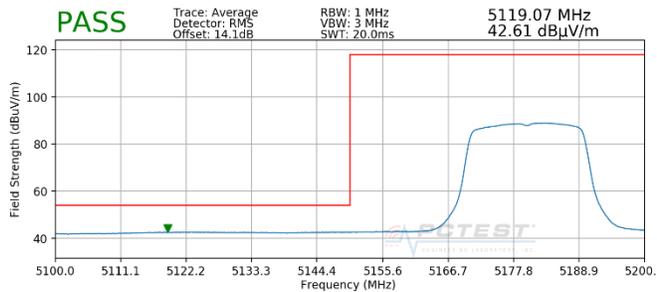
FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 198 of 215

7.6.7 SISO Antenna-2 Radiated Band Edge Measurements (20MHz BW)

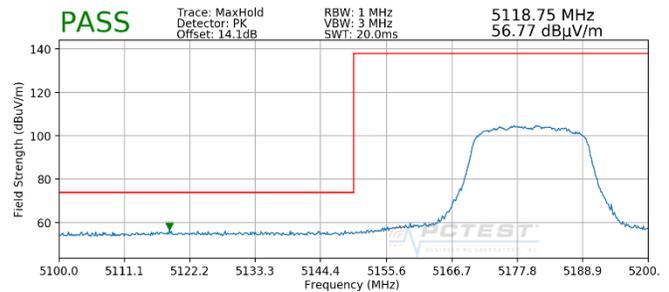
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

242 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5180MHz
Channel:	36

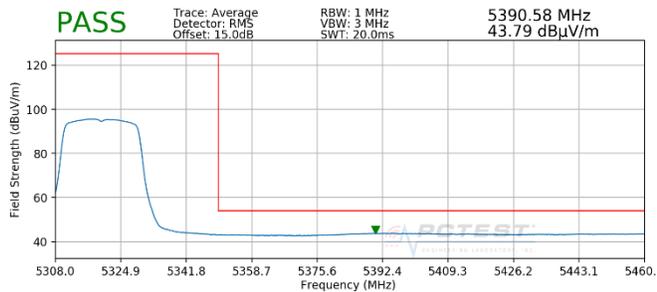


Plot 7-220. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 242 Tones)

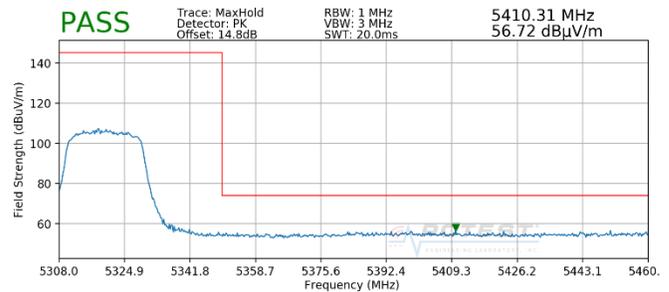


Plot 7-221. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 242 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	61
Distance of Measurements:	3 Meters
Operating Frequency:	5320MHz
Channel:	64



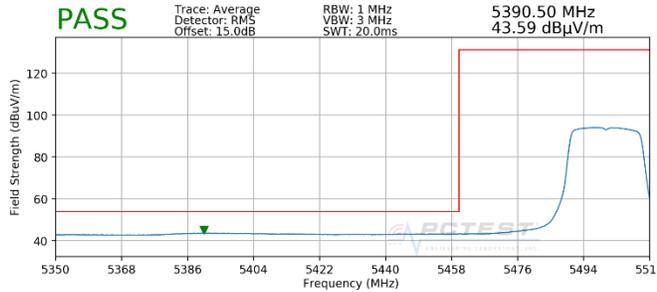
Plot 7-222. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 242 Tones)



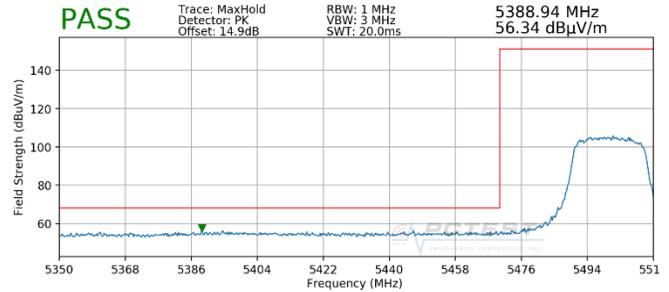
Plot 7-223. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 242 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 199 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

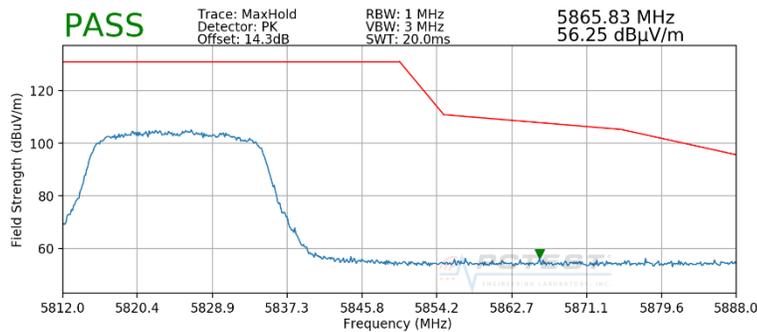


Plot 7-224. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 242 Tones)



Plot 7-225. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 242 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 61
 Distance of Measurements: 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165



Plot 7-226. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 242 Tones)

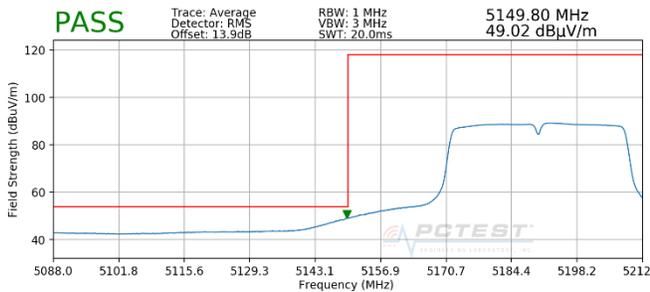
FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 200 of 215

7.6.8 SISO Antenna-2 Radiated Band Edge Measurements (40MHz BW)

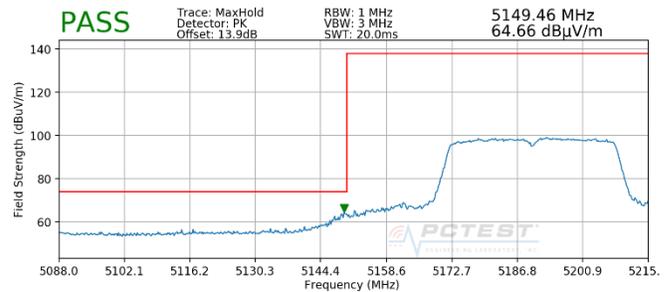
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

484 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	62
Distance of Measurements:	3 Meters
Operating Frequency:	5190MHz
Channel:	38

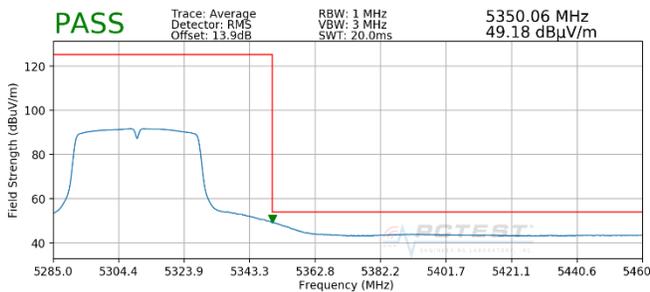


Plot 7-227. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 484 Tones)

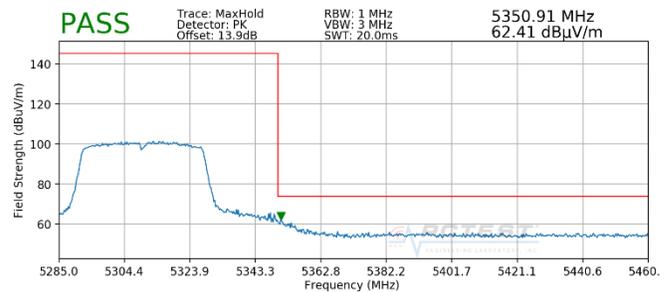


Plot 7-228. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 484 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	62
Distance of Measurements:	3 Meters
Operating Frequency:	5310MHz
Channel:	62



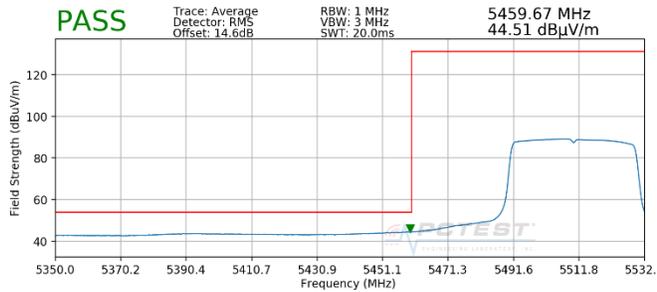
Plot 7-229. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 484 Tones)



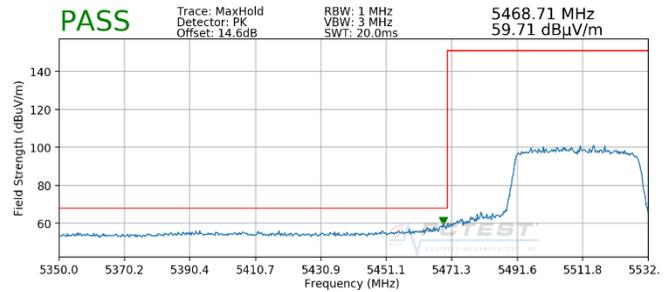
Plot 7-230. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 484 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 201 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

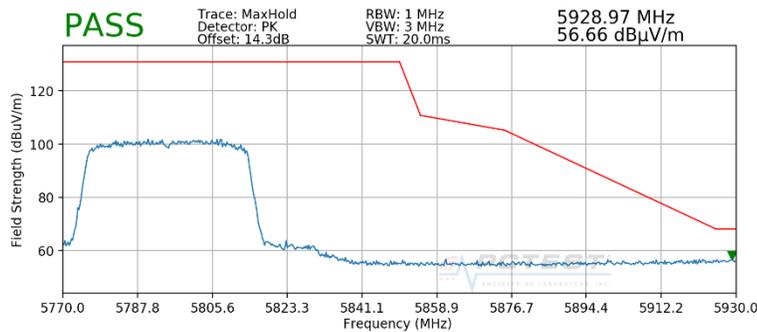


Plot 7-231. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 484 Tones)



Plot 7-232. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 484 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 62
 Distance of Measurements: 3 Meters
 Operating Frequency: 5795MHz
 Channel: 159



Plot 7-233. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 484 Tones)

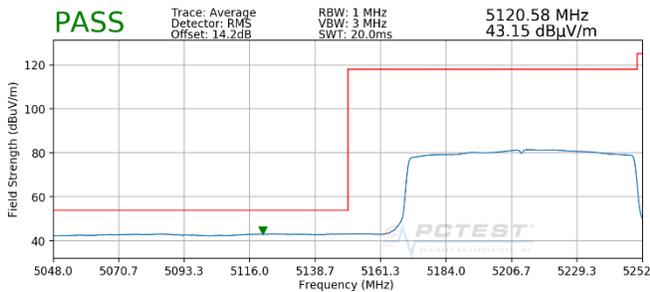
FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 202 of 215

7.6.9 SISO Antenna-2 Radiated Band Edge Measurements (80MHz BW)

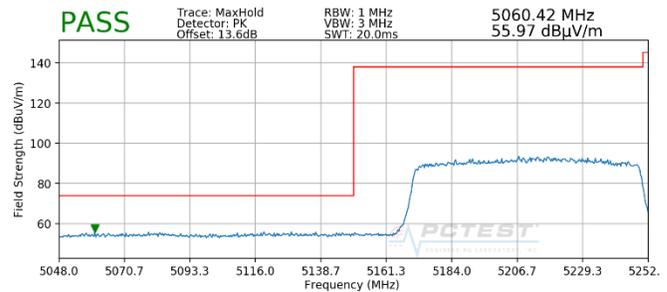
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

996 Tones

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	64
Distance of Measurements:	3 Meters
Operating Frequency:	5210MHz
Channel:	42

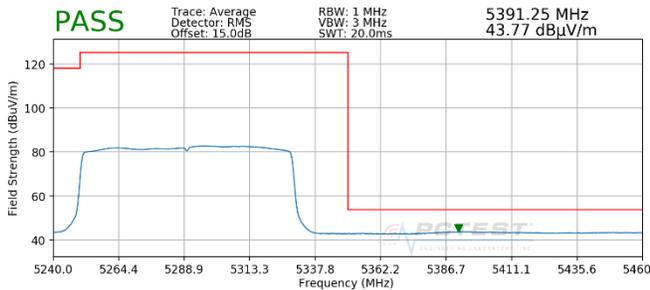


Plot 7-234. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 1 – 996 Tones)

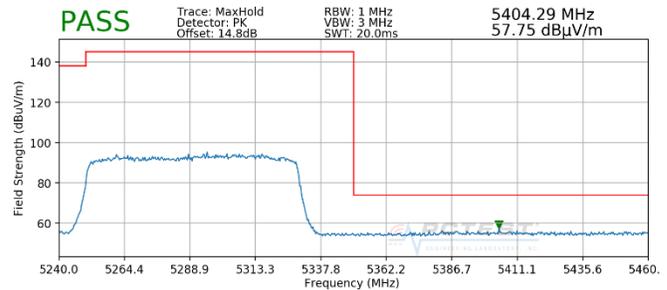


Plot 7-235. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 1 – 996 Tones)

Worst Case Mode:	802.11ax
Worst Case Transfer Rate:	MCS0
RU Index:	64
Distance of Measurements:	3 Meters
Operating Frequency:	5290MHz
Channel:	58



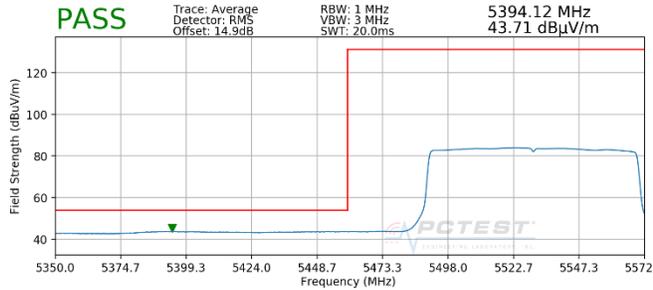
Plot 7-236. Radiated Upper Band Edge Plot SISO ANT2 (Average – UNII Band 2A – 996 Tones)



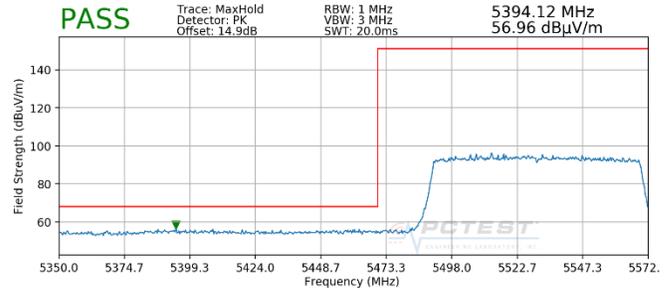
Plot 7-237. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 2A – 996 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 203 of 215

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

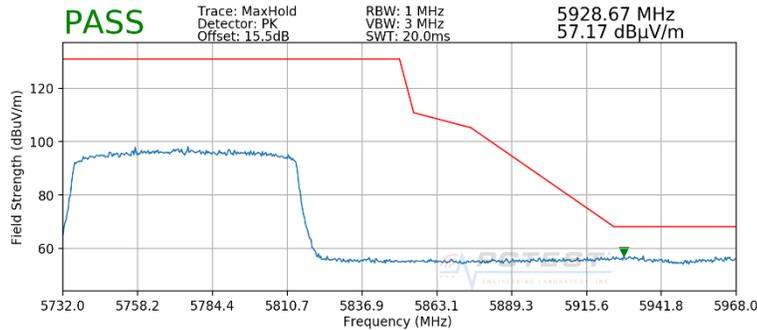


Plot 7-238. Radiated Lower Band Edge Plot SISO ANT2 (Average – UNII Band 2C – 996 Tones)



Plot 7-239. Radiated Lower Band Edge Plot SISO ANT2 (Peak – UNII Band 2C – 996 Tones)

Worst Case Mode: 802.11ax
 Worst Case Transfer Rate: MCS0
 RU Index: 64
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



Plot 7-240. Radiated Upper Band Edge Plot SISO ANT2 (Peak – UNII Band 3 – 996 Tones)

FCC ID: ZNFV600VM	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1911250199-09.ZNF	Test Dates: 11/25/2019-1/17/2020	EUT Type: Portable Handset		Page 204 of 215