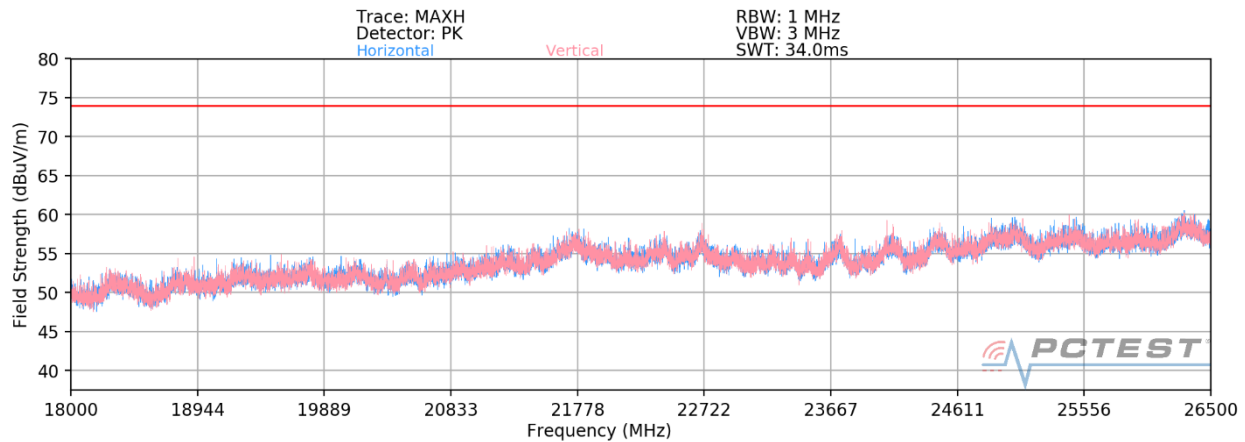
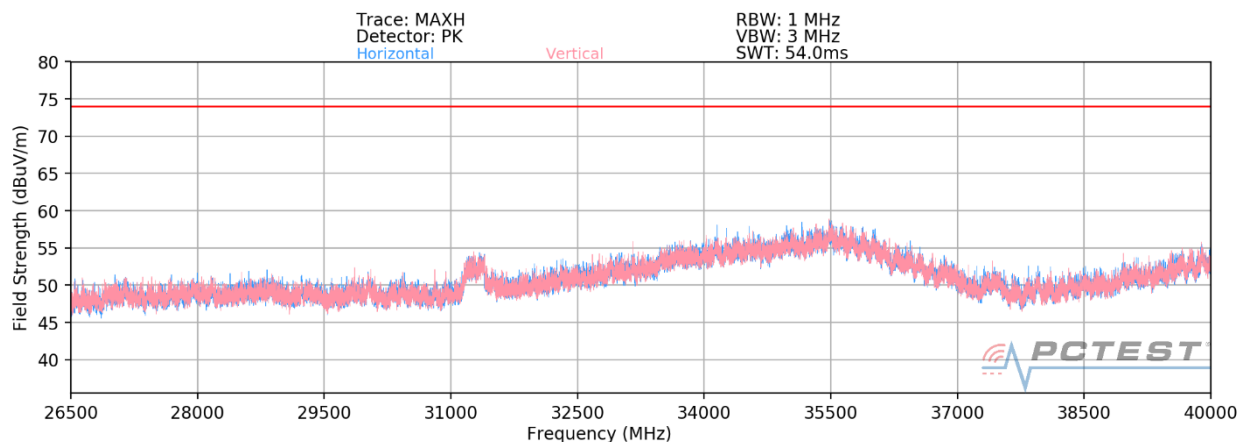


## SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



**Plot 7-221. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax – 26 Tones)**



**Plot 7-222. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax – 26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 175 of 249

## SISO Antenna-1 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	V	107	336	-64.59	15.23	0.00	57.64	68.20	-10.56
* 15540.00	Average	V	-	-	-79.58	22.71	0.00	50.13	53.98	-3.85
* 15540.00	Peak	V	-	-	-68.74	22.71	0.00	60.97	73.98	-13.01
* 20720.00	Average	V	-	-	-78.43	7.97	-9.54	27.00	53.98	-26.98
* 20720.00	Peak	V	-	-	-67.15	7.97	-9.54	38.28	73.98	-35.70
25900.00	Peak	V	-	-	-66.23	10.34	-9.54	41.57	68.20	-26.63

Table 7-68. Radiated Measurements SISO ANT1 (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	V	109	336	-65.25	15.67	0.00	57.42	68.20	-10.78
* 15600.00	Average	V	-	-	-79.36	22.46	0.00	50.10	53.98	-3.88
* 15600.00	Peak	V	-	-	-67.96	22.46	0.00	61.50	73.98	-12.48
* 20800.00	Average	V	-	-	-78.75	8.33	-9.54	27.04	53.98	-26.94
* 20800.00	Peak	V	-	-	-67.95	8.33	-9.54	37.84	73.98	-36.14
26000.00	Peak	V	-	-	-66.05	10.61	-9.54	42.02	68.20	-26.18

Table 7-69. Radiated Measurements SISO ANT1 (26 Tones)

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 176 of 249

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	V	101	334	-65.82	15.49	0.00	56.67	68.20	-11.53
* 15720.00	Average	V	-	-	-79.43	22.45	0.00	50.02	53.98	-3.96
* 15720.00	Peak	V	-	-	-68.96	22.45	0.00	60.49	73.98	-13.49
* 20960.00	Average	V	-	-	-79.00	8.52	-9.54	26.98	53.98	-27.00
* 20960.00	Peak	V	-	-	-68.14	8.52	-9.54	37.84	73.98	-36.14
26200.00	Peak	V	-	-	-65.90	10.69	-9.54	42.25	68.20	-25.95

**Table 7-70. Radiated Measurements SISO ANT1 (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	V	144	323	-67.30	15.86	0.00	55.56	68.20	-12.64
* 15780.00	Average	V	-	-	-79.43	22.77	0.00	50.34	53.98	-3.64
* 15780.00	Peak	V	-	-	-67.52	22.77	0.00	62.25	73.98	-11.73
* 21040.00	Average	V	-	-	-78.73	8.82	-9.54	27.55	53.98	-26.43
* 21040.00	Peak	V	-	-	-67.79	8.82	-9.54	38.49	73.98	-35.49
26300.00	Peak	V	-	-	-65.51	11.42	-9.54	43.37	68.20	-24.83

**Table 7-71. Radiated Measurements SISO ANT1 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 177 of 249

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	V	141	335	-66.82	15.70	0.00	55.88	68.20	-12.32
* 15840.00	Average	V	-	-	-79.58	22.66	0.00	50.08	53.98	-3.90
* 15840.00	Peak	V	-	-	-67.87	22.66	0.00	61.79	73.98	-12.19
* 21120.00	Average	V	-	-	-78.34	8.63	-9.54	27.75	53.98	-26.23
* 21120.00	Peak	V	-	-	-67.63	8.63	-9.54	38.46	73.98	-35.52
26400.00	Peak	V	-	-	-65.57	11.11	-9.54	43.00	68.20	-25.20

**Table 7-72. Radiated Measurements SISO ANT1 (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	V	130	322	-78.96	16.03	0.00	44.07	53.98	-9.91
* 10640.00	Peak	V	130	322	-67.12	16.03	0.00	55.91	73.98	-18.07
* 15960.00	Average	V	-	-	-79.43	23.09	0.00	50.66	53.98	-3.32
* 15960.00	Peak	V	-	-	-67.63	23.09	0.00	62.46	73.98	-11.52
* 21280.00	Average	V	-	-	-78.21	9.03	-9.54	28.28	53.98	-25.70
* 21280.00	Peak	V	-	-	-66.28	9.03	-9.54	40.21	73.98	-33.77
26600.00	Peak	V	-	-	-52.16	-4.38	-9.54	40.92	68.20	-27.28

**Table 7-73. Radiated Measurements SISO ANT1 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 178 of 249

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	V	-	-	-79.08	16.51	0.00	44.43	53.98	-9.55
* 11000.00	Peak	V	-	-	-67.16	16.51	0.00	56.35	73.98	-17.63
16500.00	Peak	V	-	-	-68.37	24.17	0.00	62.80	68.20	-5.40
22000.00	Peak	V	-	-	-66.52	9.58	-9.54	40.52	68.20	-27.68
27500.00	Peak	V	-	-	-50.37	-5.56	-9.54	41.53	68.20	-26.67

**Table 7-74. Radiated Measurements SISO ANT1 (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	V	-	-	-79.21	16.73	0.00	44.52	53.98	-9.46
* 11200.00	Peak	V	-	-	-67.04	16.73	0.00	56.69	73.98	-17.29
16800.00	Peak	V	-	-	-67.93	24.00	0.00	63.07	68.20	-5.13
* 22400.00	Average	V	-	-	-78.87	10.49	-9.54	29.08	53.98	-24.90
* 22400.00	Peak	V	-	-	-66.76	10.49	-9.54	41.19	73.98	-32.79
28000.00	Peak	V	-	-	-51.69	-4.84	-9.54	40.93	68.20	-27.27

**Table 7-75. Radiated Measurements SISO ANT1 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 179 of 249

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	V	-	-	-79.33	17.29	0.00	44.96	53.98	-9.02
* 11440.00	Peak	V	-	-	-67.51	17.29	0.00	56.78	73.98	-17.20
17160.00	Peak	V	-	-	-67.93	24.37	0.00	63.44	68.20	-4.76
* 22880.00	Average	V	-	-	-79.70	9.96	-9.54	27.72	53.98	-26.26
* 22880.00	Peak	V	-	-	-67.60	9.96	-9.54	39.82	73.98	-34.16
28600.00	Peak	V	-	-	-51.46	-4.40	-9.54	41.60	68.20	-26.60

**Table 7-76. Radiated Measurements SISO ANT1 (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	V	-	-	-79.26	17.63	0.00	45.37	53.98	-8.60
* 11490.00	Peak	V	-	-	-67.24	17.63	0.00	57.39	73.98	-16.58
17235.00	Peak	V	-	-	-68.25	25.01	0.00	63.76	68.20	-4.44
* 22980.00	Average	V	-	-	-79.07	10.35	-9.54	28.74	53.98	-25.24
* 22980.00	Peak	V	-	-	-67.69	10.35	-9.54	40.12	73.98	-33.86
28725.00	Peak	V	-	-	-51.56	-4.88	-9.54	41.02	68.20	-27.18

**Table 7-77. Radiated Measurements SISO ANT1 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 180 of 249

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	V	-	-	-79.44	17.35	0.00	44.91	53.98	-9.07
* 11570.00	Peak	V	-	-	-67.58	17.35	0.00	56.77	73.98	-17.21
17355.00	Peak	V	-	-	-69.22	26.08	0.00	63.86	68.20	-4.34
23140.00	Peak	V	-	-	-67.59	10.05	-9.54	39.92	68.20	-28.28
28925.00	Peak	V	-	-	-52.27	-5.11	-9.54	40.08	68.20	-28.12

**Table 7-78. Radiated Measurements SISO ANT1 (26 Tones)**

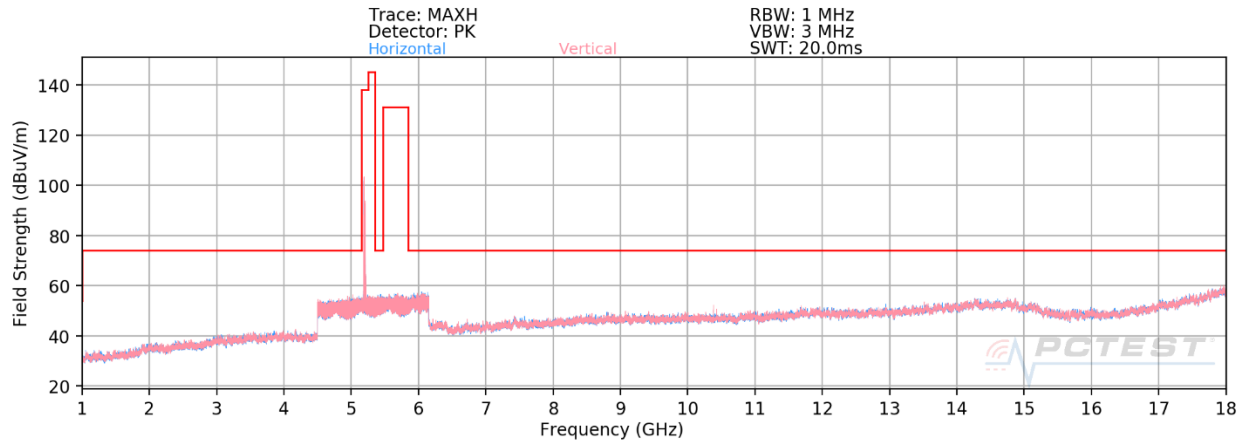
Worst Case Mode: 802.11ax (20MHz BW)  
 Worst Case Transfer Rate: MCS0  
 RU Index: 4  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5825MHz  
 Channel: 165

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	V	-	-	-79.22	17.57	0.00	45.35	53.98	-8.62
* 11650.00	Peak	V	-	-	-66.98	17.57	0.00	57.59	73.98	-16.38
17475.00	Peak	V	-	-	-70.01	26.23	0.00	63.22	68.20	-4.98
23300.00	Peak	V	-	-	-67.39	9.39	-9.54	39.46	68.20	-28.74
29125.00	Peak	V	-	-	-50.95	-6.06	-9.54	40.45	68.20	-27.75

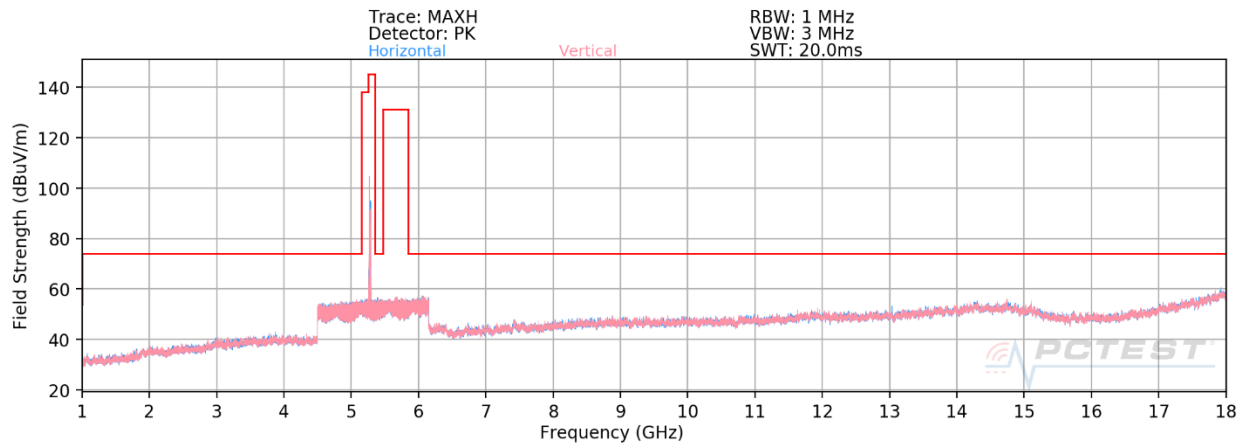
**Table 7-79. Radiated Measurements SISO ANT1 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 181 of 249

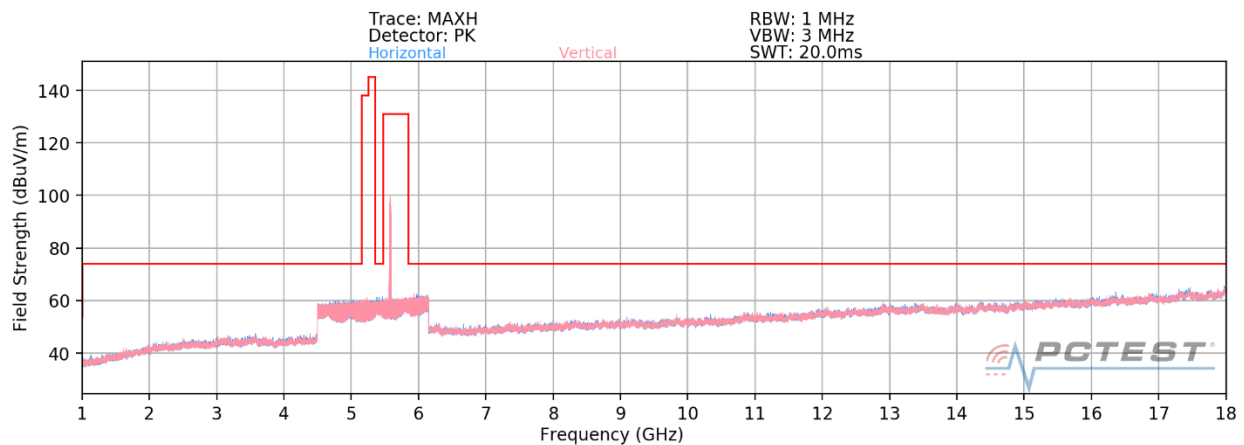
## 242 Tones



**Plot 7-223. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U1 Ch. 40 – 242 Tones)**



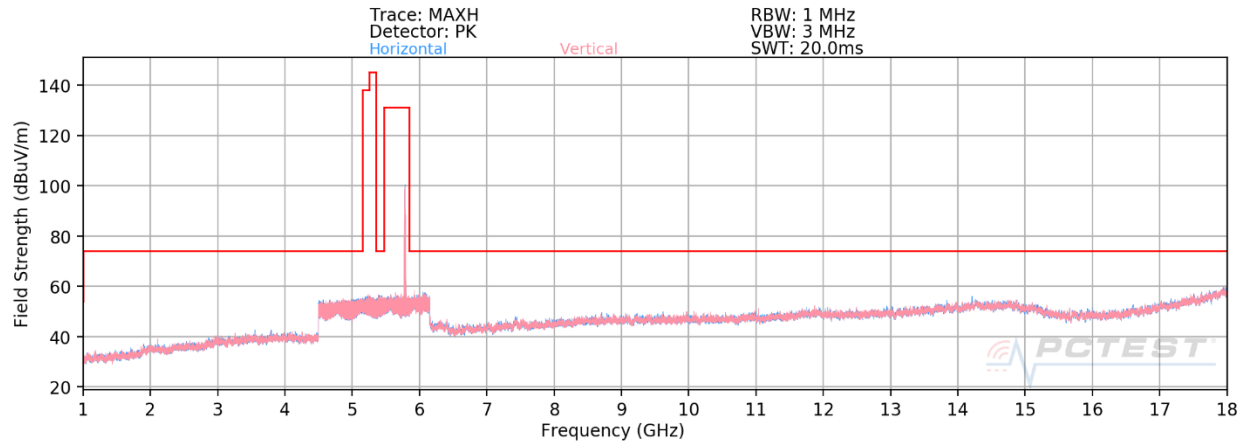
**Plot 7-224. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2A Ch. 56 – 242 Tones)**



**Plot 7-225. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U2C Ch. 120 – 242 Tones)**

FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 182 of 249

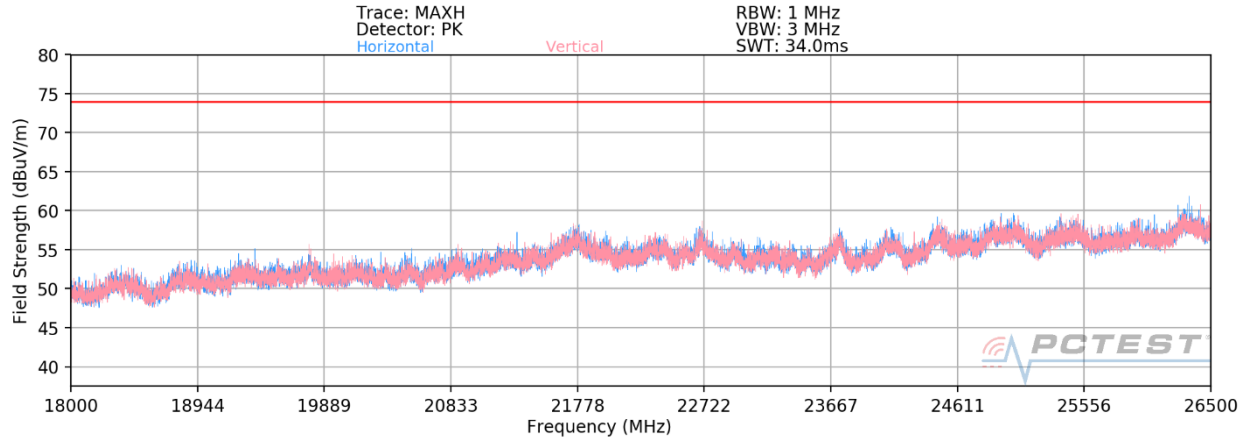




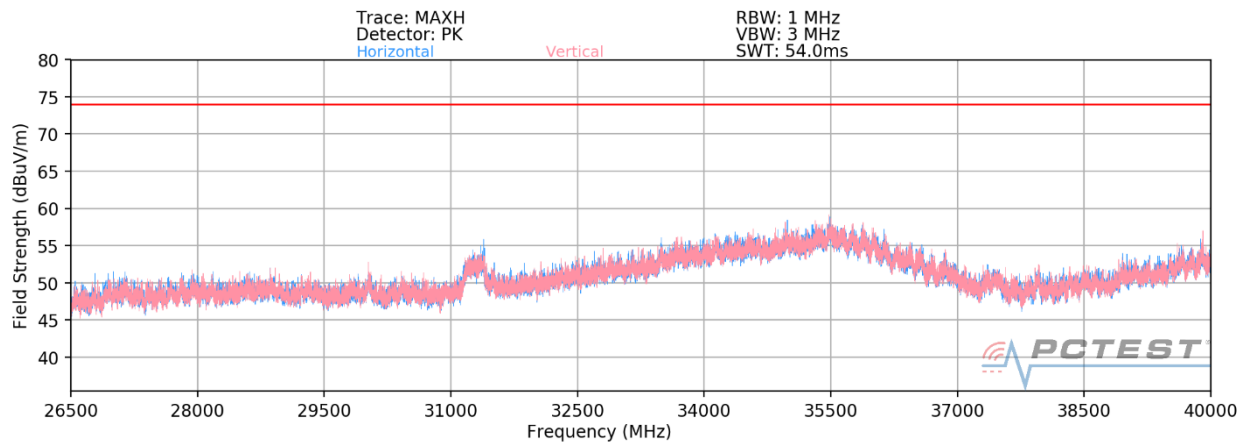
**Plot 7-226. Radiated Spurious Plot above 1GHz SISO ANT1 (802.11ax – U3 Ch. 157 – 242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 183 of 249

## SISO Antenna-1 Radiated Spurious Emissions Measurements (Above 18GHz)



Plot 7-227. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT1 (802.11ax - 242 Tones)



Plot 7-228. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT1 (802.11ax - 242 Tones)

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 184 of 249

## SISO Antenna-1 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	V	-	-	-67.33	15.23	0.00	54.90	68.20	-13.30
* 15540.00	Average	V	-	-	-79.77	22.71	0.00	49.94	53.98	-4.04
* 15540.00	Peak	V	-	-	-67.68	22.71	0.00	62.03	73.98	-11.95
* 20720.00	Average	V	-	-	-78.47	7.97	-9.54	26.96	53.98	-27.02
* 20720.00	Peak	V	-	-	-67.35	7.97	-9.54	38.08	73.98	-35.90
25900.00	Peak	V	-	-	-66.17	10.34	-9.54	41.63	68.20	-26.57

Table 7-80. Radiated Measurements SISO ANT1 (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	V	-	-	-67.64	15.67	0.00	55.03	68.20	-13.17
* 15600.00	Average	V	-	-	-79.56	22.46	0.00	49.90	53.98	-4.08
* 15600.00	Peak	V	-	-	-68.05	22.46	0.00	61.41	73.98	-12.57
* 20800.00	Average	V	-	-	-78.95	8.33	-9.54	26.84	53.98	-27.14
* 20800.00	Peak	V	-	-	-68.01	8.33	-9.54	37.78	73.98	-36.20
26000.00	Peak	V	-	-	-65.33	10.61	-9.54	42.74	68.20	-25.46

Table 7-81. Radiated Measurements SISO ANT1 (242 Tones)

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 185 of 249

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	V	-	-	-67.73	15.49	0.00	54.76	68.20	-13.44
* 15720.00	Average	V	-	-	-79.53	22.45	0.00	49.92	53.98	-4.06
* 15720.00	Peak	V	-	-	-71.87	22.45	0.00	57.58	73.98	-16.40
* 20960.00	Average	V	-	-	-79.27	8.52	-9.54	26.71	53.98	-27.27
* 20960.00	Peak	V	-	-	-68.05	8.52	-9.54	37.93	73.98	-36.05
26200.00	Peak	V	-	-	-66.22	10.69	-9.54	41.93	68.20	-26.27

**Table 7-82. Radiated Measurements SISO ANT1 (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	V	-	-	-67.45	15.86	0.00	55.41	68.20	-12.79
* 15780.00	Average	V	-	-	-79.54	22.77	0.00	50.23	53.98	-3.75
* 15780.00	Peak	V	-	-	-68.24	22.77	0.00	61.53	73.98	-12.45
* 21040.00	Average	V	-	-	-79.05	8.82	-9.54	27.23	53.98	-26.75
* 21040.00	Peak	V	-	-	-68.21	8.82	-9.54	38.07	73.98	-35.91
26300.00	Peak	V	-	-	-65.59	11.42	-9.54	43.29	68.20	-24.91

**Table 7-83. Radiated Measurements SISO ANT1 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 186 of 249

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	V	-	-	-67.78	15.70	0.00	54.92	68.20	-13.28
* 15840.00	Average	V	-	-	-79.48	22.66	0.00	50.18	53.98	-3.80
* 15840.00	Peak	V	-	-	-68.13	22.66	0.00	61.53	73.98	-12.45
* 21120.00	Average	V	-	-	-78.74	8.63	-9.54	27.35	53.98	-26.63
* 21120.00	Peak	V	-	-	-67.48	8.63	-9.54	38.61	73.98	-35.37
26400.00	Peak	V	-	-	-65.29	11.11	-9.54	43.28	68.20	-24.92

**Table 7-84. Radiated Measurements SISO ANT1 (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	V	-	-	-80.93	16.03	0.00	42.10	53.98	-11.88
* 10640.00	Peak	V	-	-	-69.35	16.03	0.00	53.68	73.98	-20.30
* 15960.00	Average	V	-	-	-81.45	23.09	0.00	48.64	53.98	-5.34
* 15960.00	Peak	V	-	-	-74.06	23.09	0.00	56.03	73.98	-17.95
* 21280.00	Average	V	-	-	-78.25	9.03	-9.54	28.24	53.98	-25.74
* 21280.00	Peak	V	-	-	-67.06	9.03	-9.54	39.43	73.98	-34.55
26600.00	Peak	V	-	-	-53.07	-4.38	-9.54	40.01	68.20	-28.19

**Table 7-85. Radiated Measurements SISO ANT1 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 187 of 249

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	V	-	-	-80.25	16.51	0.00	43.26	53.98	-10.72
* 11000.00	Peak	V	-	-	-68.64	16.51	0.00	54.87	73.98	-19.11
16500.00	Peak	V	-	-	-70.00	24.17	0.00	61.17	68.20	-7.03
22000.00	Peak	V	-	-	-66.99	9.58	-9.54	40.05	68.20	-28.15
27500.00	Peak	V	-	-	-50.48	-5.56	-9.54	41.42	68.20	-26.78

**Table 7-86. Radiated Measurements SISO ANT1 (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	V	-	-	-80.42	16.73	0.00	43.31	53.98	-10.67
* 11200.00	Peak	V	-	-	-69.21	16.73	0.00	54.52	73.98	-19.46
16800.00	Peak	V	-	-	-69.53	24.00	0.00	61.47	68.20	-6.73
* 22400.00	Average	V	-	-	-78.57	10.49	-9.54	29.38	53.98	-24.60
* 22400.00	Peak	V	-	-	-67.65	10.49	-9.54	40.30	73.98	-33.68
28000.00	Peak	V	-	-	-52.45	-4.84	-9.54	40.17	68.20	-28.03

**Table 7-87. Radiated Measurements SISO ANT1 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 188 of 249

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	V	-	-	-81.13	17.29	0.00	43.16	53.98	-10.82
* 11440.00	Peak	V	-	-	-69.82	17.29	0.00	54.47	73.98	-19.51
17160.00	Peak	V	-	-	-69.52	24.37	0.00	61.85	68.20	-6.35
* 22880.00	Average	V	-	-	-79.46	9.96	-9.54	27.96	53.98	-26.02
* 22880.00	Peak	V	-	-	-68.26	9.96	-9.54	39.16	73.98	-34.82
28600.00	Peak	V	-	-	-51.61	-4.40	-9.54	41.45	68.20	-26.75

**Table 7-88. Radiated Measurements SISO ANT1 (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	V	-	-	-81.23	17.63	0.00	43.40	53.98	-10.57
* 11490.00	Peak	V	-	-	-69.71	17.63	0.00	54.92	73.98	-19.05
17235.00	Peak	V	-	-	-69.82	25.01	0.00	62.19	68.20	-6.01
* 22980.00	Average	V	-	-	-79.11	10.35	-9.54	28.70	53.98	-25.28
* 22980.00	Peak	V	-	-	-67.88	10.35	-9.54	39.93	73.98	-34.05
28725.00	Peak	V	-	-	-50.72	-4.88	-9.54	41.86	68.20	-26.34

**Table 7-89. Radiated Measurements SISO ANT1 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 189 of 249

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	V	-	-	-82.01	17.35	0.00	42.34	53.98	-11.64
* 11570.00	Peak	V	-	-	-70.03	17.35	0.00	54.32	73.98	-19.66
17355.00	Peak	V	-	-	-70.65	26.08	0.00	62.43	68.20	-5.77
23140.00	Peak	V	-	-	-67.89	10.05	-9.54	39.62	68.20	-28.58
28925.00	Peak	V	-	-	-52.44	-5.11	-9.54	39.91	68.20	-28.29

**Table 7-90. Radiated Measurements SISO ANT1 (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	V	-	-	-81.07	17.57	0.00	43.50	53.98	-10.47
* 11650.00	Peak	V	-	-	-68.80	17.57	0.00	55.77	73.98	-18.20
17475.00	Peak	V	-	-	-69.26	26.23	0.00	63.97	68.20	-4.23
23300.00	Peak	V	-	-	-67.40	9.39	-9.54	39.45	68.20	-28.75
29125.00	Peak	V	-	-	-50.90	-6.06	-9.54	40.50	68.20	-27.70

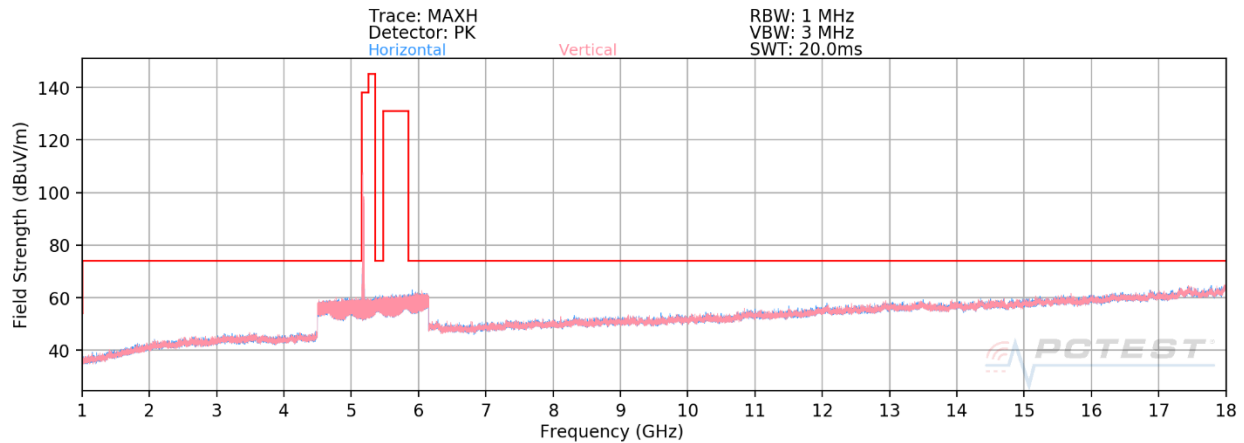
**Table 7-91. Radiated Measurements SISO ANT1 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 190 of 249

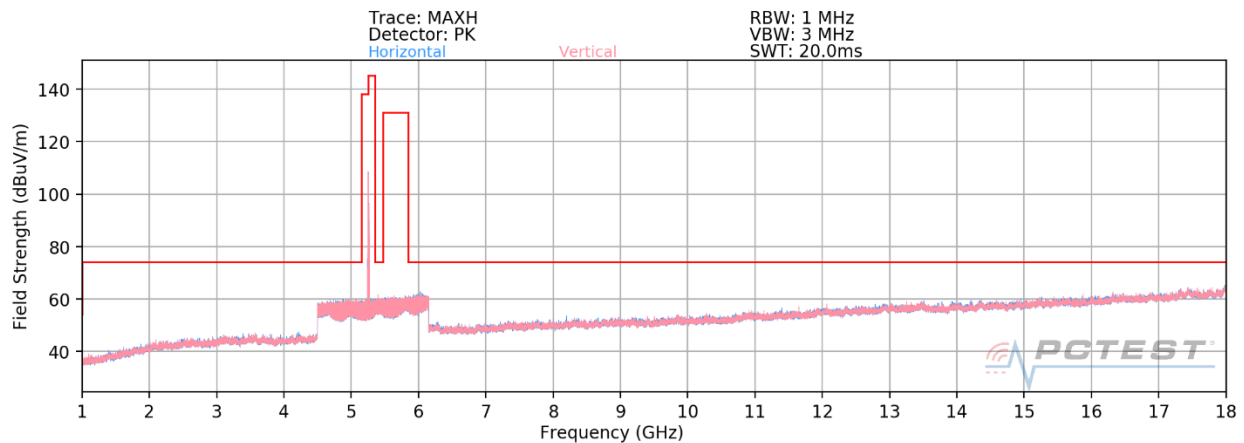


## 7.6.2 SISO Antenna-2 Radiated Spurious Emission Measurements

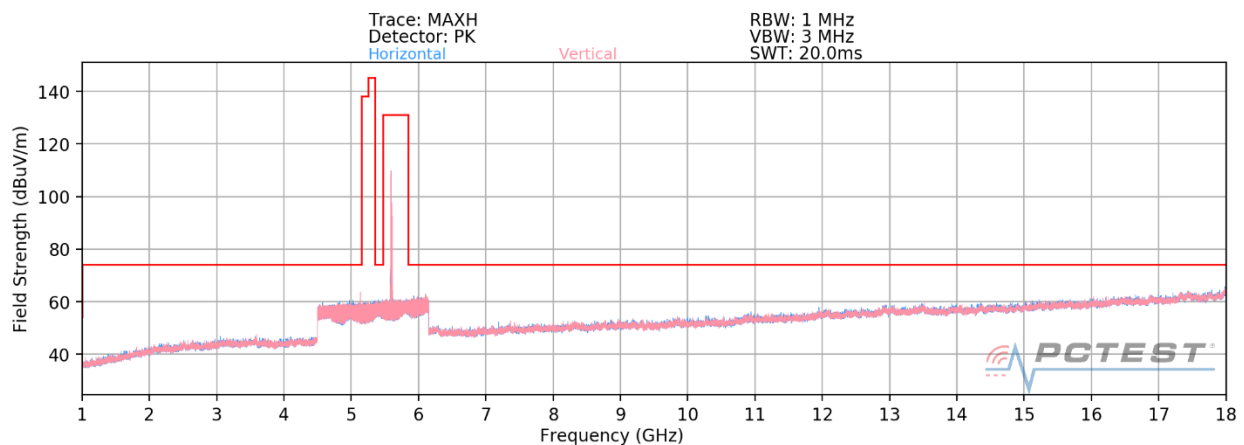
### 26 Tones



**Plot 7-229. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 26 Tones)**

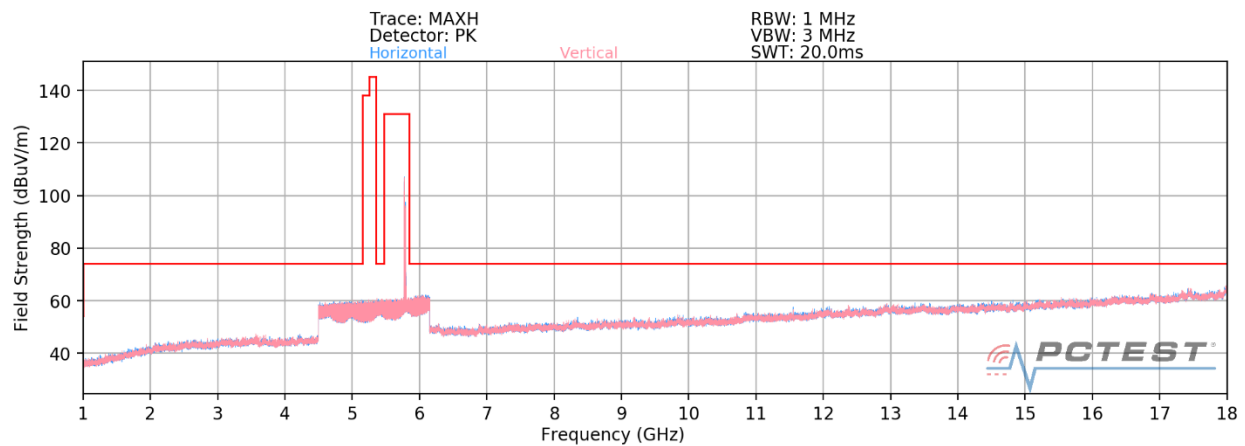


**Plot 7-230. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 26 Tones)**



**Plot 7-231. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 26 Tones)**

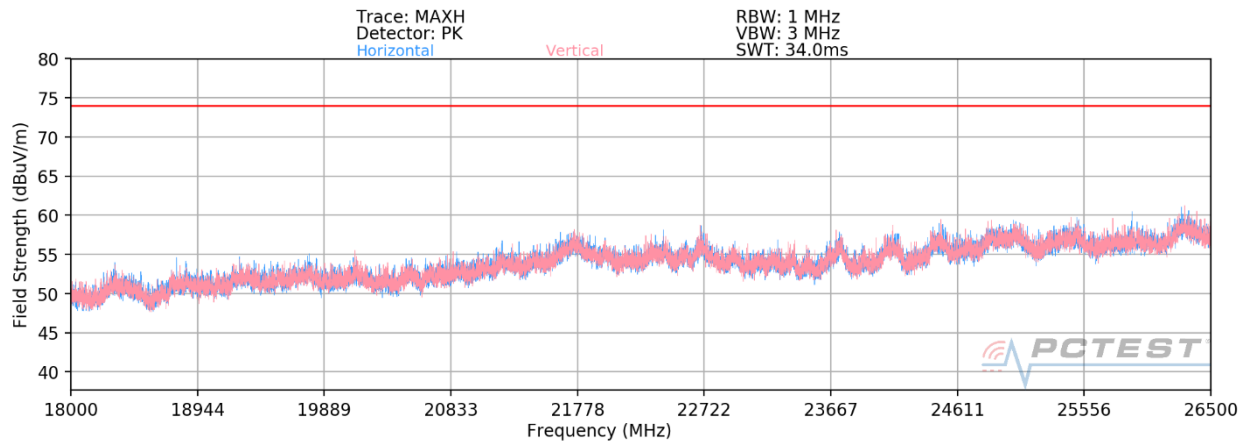
FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 191 of 249



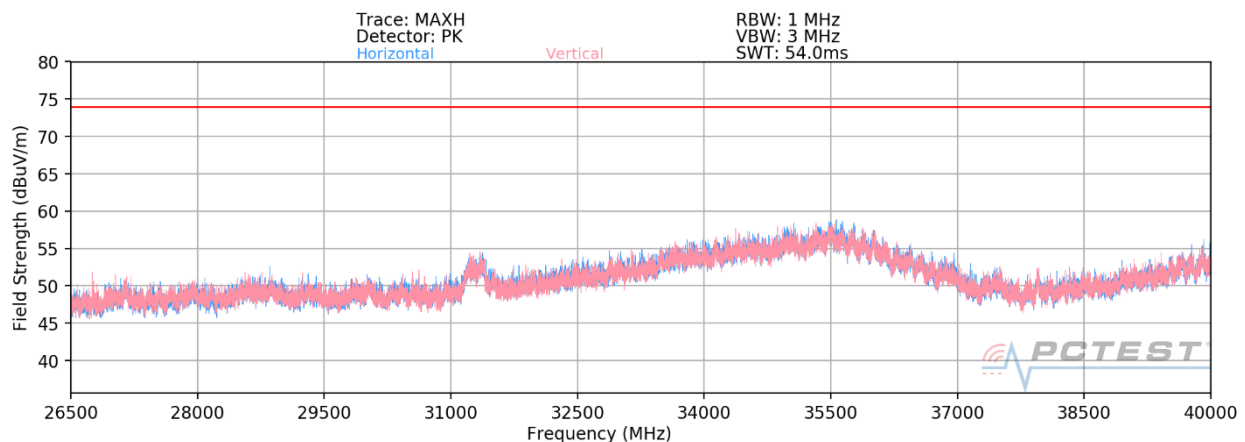
**Plot 7-232. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 192 of 249

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



**Plot 7-233. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax – 26 Tones)**



**Plot 7-234. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax – 26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 193 of 249

## 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	V	-	-	-69.35	15.23	0.00	52.88	68.20	-15.32
* 15540.00	Average	V	-	-	-81.18	22.71	0.00	48.53	53.98	-5.45
* 15540.00	Peak	V	-	-	-69.67	22.71	0.00	60.04	73.98	-13.94
* 20720.00	Average	V	-	-	-78.84	7.97	-9.54	26.59	53.98	-27.39
* 20720.00	Peak	V	-	-	-67.16	7.97	-9.54	38.27	73.98	-35.71
25900.00	Peak	V	-	-	-65.81	10.34	-9.54	41.99	68.20	-26.21

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:	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	V	107	6	-66.10	15.67	0.00	56.57	68.20	-11.63
* 15600.00	Average	V	-	-	-79.39	22.46	0.00	50.07	53.98	-3.91
* 15600.00	Peak	V	-	-	-67.29	22.46	0.00	62.17	73.98	-11.81
* 20800.00	Average	V	-	-	-78.98	8.33	-9.54	26.81	53.98	-27.17
* 20800.00	Peak	V	-	-	-66.71	8.33	-9.54	39.08	73.98	-34.90
26000.00	Peak	V	-	-	-66.31	10.61	-9.54	41.76	68.20	-26.44

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 194 of 249

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	V	107	358	-66.74	15.49	0.00	55.75	68.20	-12.45
* 15720.00	Average	V	-	-	-79.34	22.45	0.00	50.11	53.98	-3.87
* 15720.00	Peak	V	-	-	-68.11	22.45	0.00	61.34	73.98	-12.64
* 20960.00	Average	V	-	-	-78.85	8.52	-9.54	27.13	53.98	-26.85
* 20960.00	Peak	V	-	-	-67.80	8.52	-9.54	38.18	73.98	-35.80
26200.00	Peak	V	-	-	-66.51	10.69	-9.54	41.64	68.20	-26.56

**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: 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	V	128	1	-67.14	15.86	0.00	55.72	68.20	-12.48
* 15780.00	Average	V	-	-	-79.41	22.77	0.00	50.36	53.98	-3.62
* 15780.00	Peak	V	-	-	-67.48	22.77	0.00	62.29	73.98	-11.69
* 21040.00	Average	V	-	-	-78.78	8.82	-9.54	27.50	53.98	-26.48
* 21040.00	Peak	V	-	-	-67.31	8.82	-9.54	38.97	73.98	-35.01
26300.00	Peak	V	-	-	-65.99	11.42	-9.54	42.89	68.20	-25.31

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 195 of 249

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	V	101	287	-67.66	15.70	0.00	55.04	68.20	-13.16
* 15840.00	Average	V	-	-	-79.55	22.66	0.00	50.11	53.98	-3.87
* 15840.00	Peak	V	-	-	-67.66	22.66	0.00	62.00	73.98	-11.98
* 21120.00	Average	V	-	-	-78.57	8.63	-9.54	27.52	53.98	-26.46
* 21120.00	Peak	V	-	-	-67.25	8.63	-9.54	38.84	73.98	-35.14
26400.00	Peak	V	-	-	-65.26	11.11	-9.54	43.31	68.20	-24.89

**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: 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	V	-	-	-80.88	16.03	0.00	42.15	53.98	-11.83
* 10640.00	Peak	V	-	-	-69.22	16.03	0.00	53.81	73.98	-20.17
* 15960.00	Average	V	-	-	-81.34	23.09	0.00	48.75	53.98	-5.23
* 15960.00	Peak	V	-	-	-70.44	23.09	0.00	59.65	73.98	-14.33
* 21280.00	Average	V	-	-	-78.04	9.03	-9.54	28.45	53.98	-25.53
* 21280.00	Peak	V	-	-	-67.26	9.03	-9.54	39.23	73.98	-34.75
26600.00	Peak	V	-	-	-52.37	-4.38	-9.54	40.71	68.20	-27.49

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 196 of 249

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	V	-	-	-79.13	16.51	0.00	44.38	53.98	-9.60
* 11000.00	Peak	V	-	-	-66.81	16.51	0.00	56.70	73.98	-17.28
16500.00	Peak	V	-	-	-69.33	24.17	0.00	61.84	68.20	-6.36
22000.00	Peak	V	-	-	-66.89	9.58	-9.54	40.15	68.20	-28.05
27500.00	Peak	V	-	-	-51.28	-5.56	-9.54	40.62	68.20	-27.58

**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: 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	V	-	-	-79.15	16.73	0.00	44.58	53.98	-9.40
* 11200.00	Peak	V	-	-	-67.75	16.73	0.00	55.98	73.98	-18.00
16800.00	Peak	V	-	-	-69.39	24.00	0.00	61.61	68.20	-6.59
* 22400.00	Average	V	-	-	-78.86	10.49	-9.54	29.09	53.98	-24.89
* 22400.00	Peak	V	-	-	-67.21	10.49	-9.54	40.74	73.98	-33.24
28000.00	Peak	V	-	-	-52.18	-4.84	-9.54	40.44	68.20	-27.76

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 197 of 249

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	V	-	-	-79.33	17.29	0.00	44.96	53.98	-9.02
* 11440.00	Peak	V	-	-	-67.03	17.29	0.00	57.26	73.98	-16.72
17160.00	Peak	V	-	-	-71.71	24.37	0.00	59.66	68.20	-8.54
* 22880.00	Average	V	-	-	-79.08	9.96	-9.54	28.34	53.98	-25.64
* 22880.00	Peak	V	-	-	-67.64	9.96	-9.54	39.78	73.98	-34.20
28600.00	Peak	V	-	-	-51.72	-4.40	-9.54	41.34	68.20	-26.86

**Table 7-100. 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	V	-	-	-79.55	17.63	0.00	45.08	53.98	-8.89
* 11490.00	Peak	V	-	-	-67.61	17.63	0.00	57.02	73.98	-16.95
17235.00	Peak	V	-	-	-68.91	25.01	0.00	63.10	68.20	-5.10
* 22980.00	Average	V	-	-	-78.85	10.35	-9.54	28.96	53.98	-25.02
* 22980.00	Peak	V	-	-	-67.94	10.35	-9.54	39.87	73.98	-34.11
28725.00	Peak	V	-	-	-52.21	-4.88	-9.54	40.37	68.20	-27.83

**Table 7-101. Radiated Measurements SISO ANT2 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 198 of 249



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	V	-	-	-79.55	17.35	0.00	44.80	53.98	-9.18
* 11570.00	Peak	V	-	-	-67.38	17.35	0.00	56.97	73.98	-17.01
17355.00	Peak	V	-	-	-68.07	26.08	0.00	65.01	68.20	-3.19
23140.00	Peak	V	-	-	-68.00	10.05	-9.54	39.51	68.20	-28.69
28925.00	Peak	V	-	-	-52.55	-5.11	-9.54	39.80	68.20	-28.40

**Table 7-102. Radiated Measurements SISO ANT2 (26 Tones)**

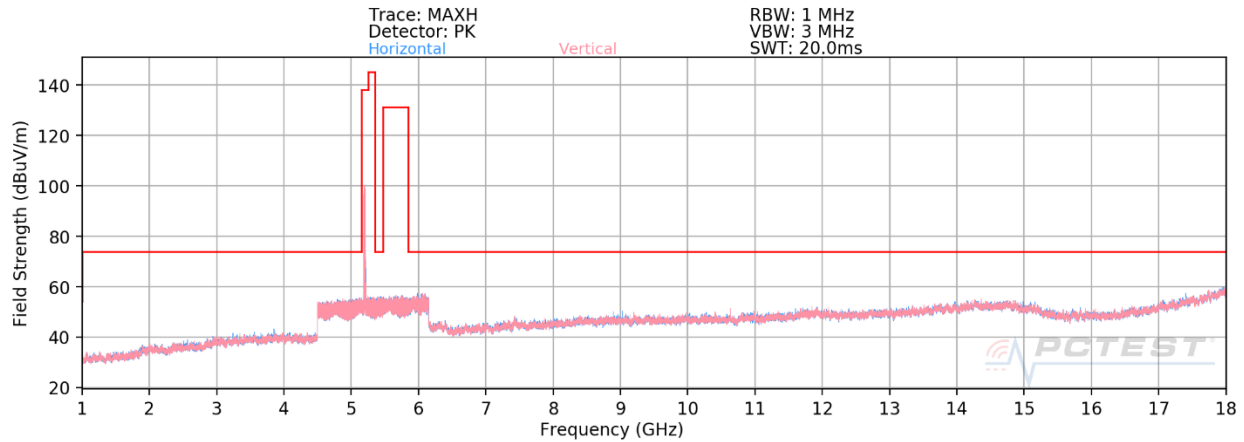
Worst Case Mode: 802.11ax (20MHz BW)  
 Worst Case Transfer Rate: MCS0  
 RU Index: 4  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5825MHz  
 Channel: 165

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	V	-	-	-79.43	17.57	0.00	45.14	53.98	-8.83
* 11650.00	Peak	V	-	-	-68.01	17.57	0.00	56.56	73.98	-17.41
17475.00	Peak	V	-	-	-71.84	26.23	0.00	61.39	68.20	-6.81
23300.00	Peak	V	-	-	-67.42	9.39	-9.54	39.43	68.20	-28.77
29125.00	Peak	V	-	-	-50.47	-6.06	-9.54	40.93	68.20	-27.27

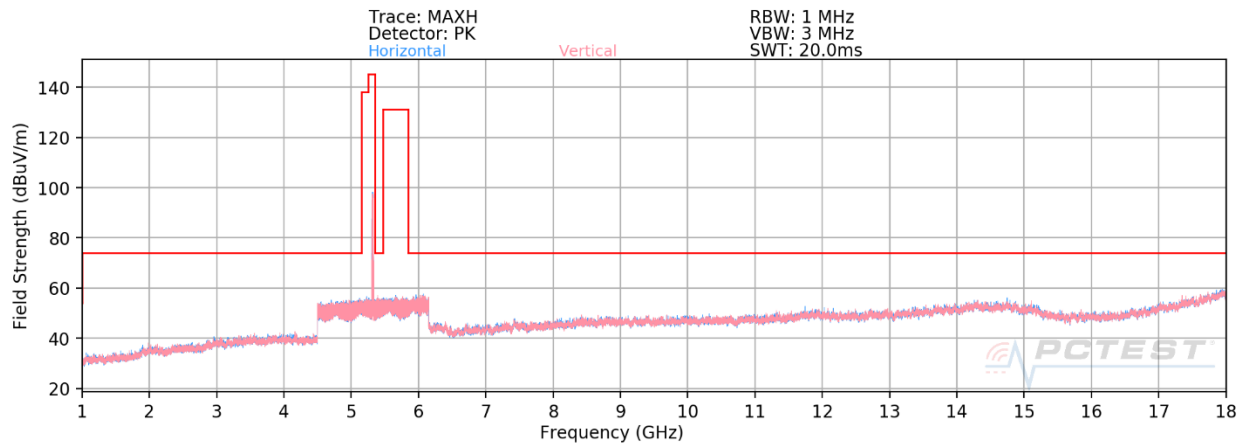
**Table 7-103. Radiated Measurements SISO ANT2 (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 199 of 249

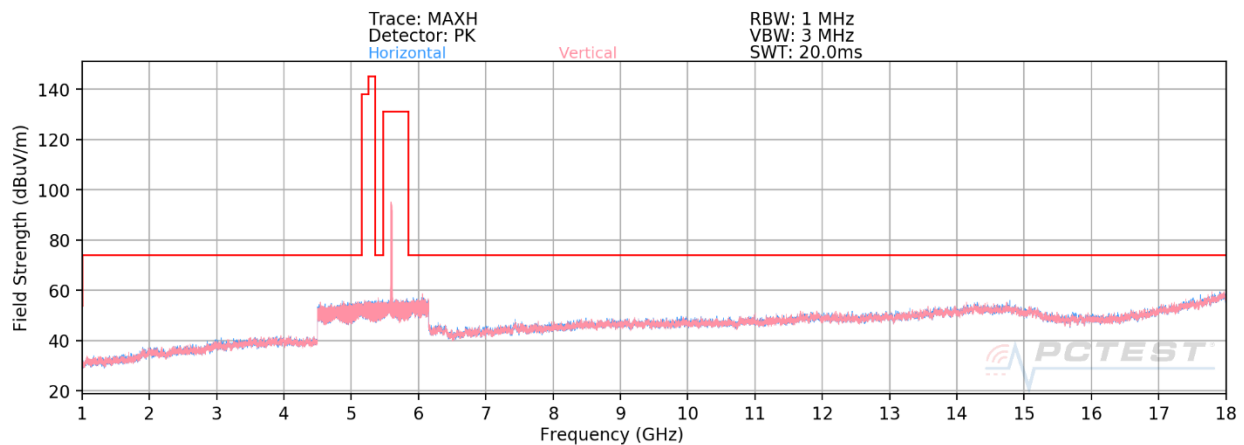
## 242 Tones



**Plot 7-235. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U1 Ch. 40 – 242 Tones)**

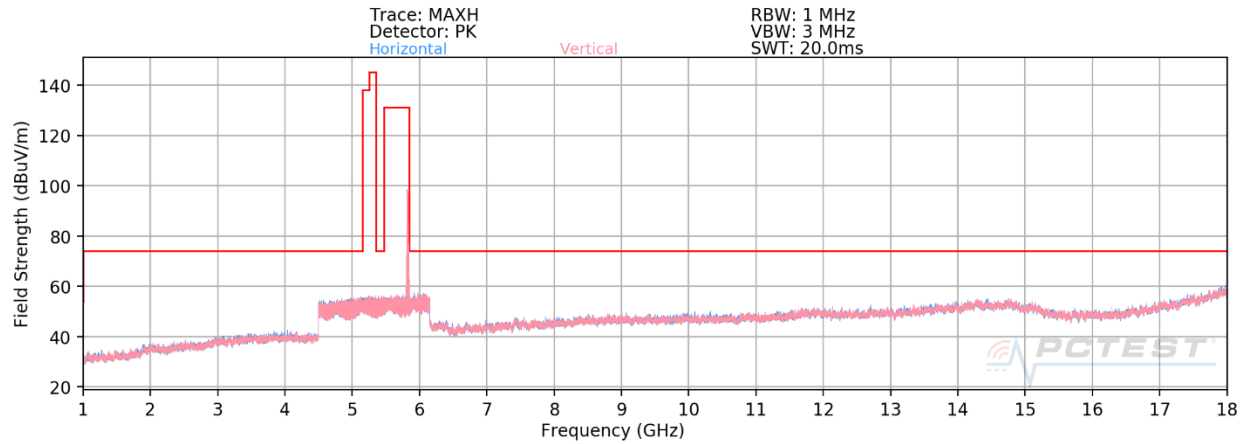


**Plot 7-236. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2A Ch. 56 – 242 Tones)**



**Plot 7-237. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U2C Ch. 120 – 242 Tones)**

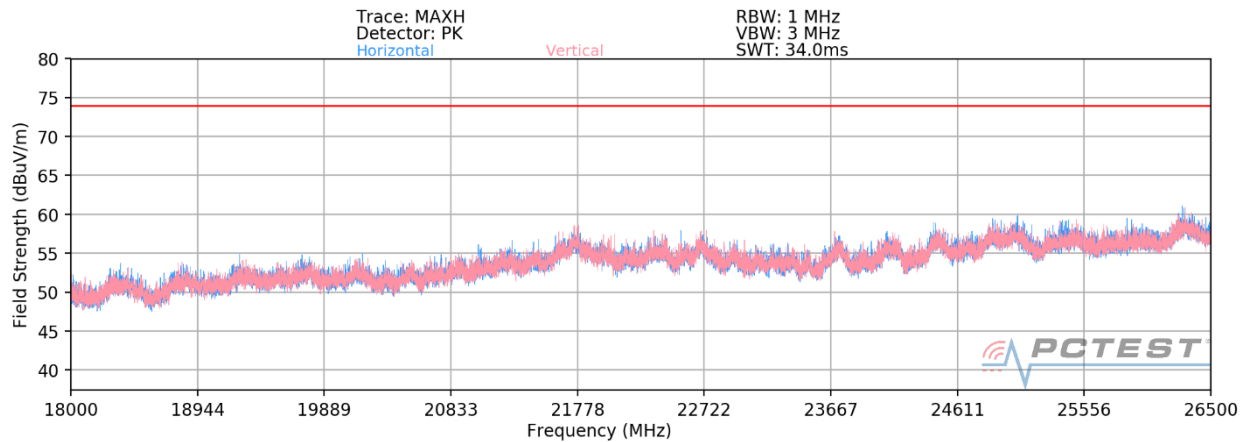
FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 200 of 249



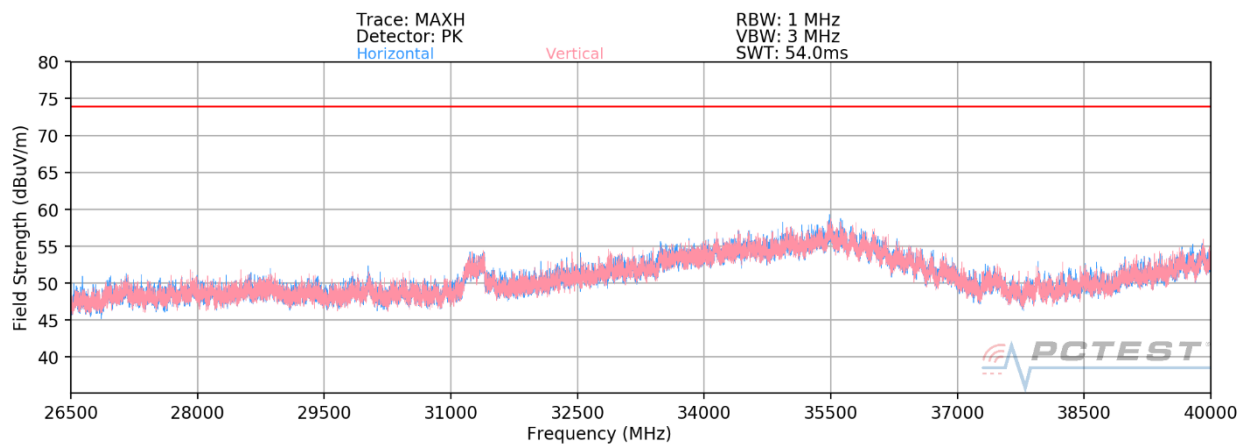
**Plot 7-238. Radiated Spurious Plot above 1GHz SISO ANT2 (802.11ax – U3 Ch. 157 – 242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 201 of 249

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



**Plot 7-239. Radiated Spurious Plot 18GHz - 26.5GHz SISO ANT2 (802.11ax - 242 Tones)**



**Plot 7-240. Radiated Spurious Plot 26.5GHz - 40GHz SISO ANT2 (802.11ax - 242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 202 of 249

## 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	V	-	-	-69.35	15.23	0.00	52.88	68.20	-15.32
* 15540.00	Average	V	-	-	-81.18	22.71	0.00	48.53	53.98	-5.45
* 15540.00	Peak	V	-	-	-69.67	22.71	0.00	60.04	73.98	-13.94
* 20720.00	Average	V	-	-	-78.84	7.97	-9.54	26.59	53.98	-27.39
* 20720.00	Peak	V	-	-	-67.16	7.97	-9.54	38.27	73.98	-35.71
25900.00	Peak	V	-	-	-65.81	10.34	-9.54	41.99	68.20	-26.21

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:	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	V	-	-	-69.57	15.67	0.00	53.10	68.20	-15.10
* 15600.00	Average	V	-	-	-80.93	22.46	0.00	48.53	53.98	-5.45
* 15600.00	Peak	V	-	-	-70.02	22.46	0.00	59.44	73.98	-14.54
* 20800.00	Average	V	-	-	-78.87	8.33	-9.54	26.92	53.98	-27.06
* 20800.00	Peak	V	-	-	-66.76	8.33	-9.54	39.03	73.98	-34.95
26000.00	Peak	V	-	-	-66.47	10.61	-9.54	41.60	68.20	-26.60

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 203 of 249

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	V	-	-	-69.03	15.49	0.00	53.46	68.20	-14.74
* 15720.00	Average	V	-	-	-81.19	22.45	0.00	48.26	53.98	-5.72
* 15720.00	Peak	V	-	-	-70.46	22.45	0.00	58.99	73.98	-14.99
* 20960.00	Average	V	-	-	-79.13	8.52	-9.54	26.85	53.98	-27.13
* 20960.00	Peak	V	-	-	-67.35	8.52	-9.54	38.63	73.98	-35.35
26200.00	Peak	V	-	-	-65.99	10.69	-9.54	42.16	68.20	-26.04

**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: 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	V	-	-	-69.56	15.86	0.00	53.30	68.20	-14.90
* 15780.00	Average	V	-	-	-81.18	22.77	0.00	48.59	53.98	-5.39
* 15780.00	Peak	V	-	-	-69.75	22.77	0.00	60.02	73.98	-13.96
* 21040.00	Average	V	-	-	-78.66	8.82	-9.54	27.62	53.98	-26.36
* 21040.00	Peak	V	-	-	-67.92	8.82	-9.54	38.36	73.98	-35.62
26300.00	Peak	V	-	-	-65.23	11.42	-9.54	43.65	68.20	-24.55

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 204 of 249

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	V	-	-	-68.39	15.70	0.00	54.31	68.20	-13.89
* 15840.00	Average	V	-	-	-81.20	22.66	0.00	48.46	53.98	-5.52
* 15840.00	Peak	V	-	-	-69.10	22.66	0.00	60.56	73.98	-13.42
* 21120.00	Average	V	-	-	-78.69	8.63	-9.54	27.40	53.98	-26.58
* 21120.00	Peak	V	-	-	-67.56	8.63	-9.54	38.53	73.98	-35.45
26400.00	Peak	V	-	-	-65.68	11.11	-9.54	42.89	68.20	-25.31

**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: 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	V	-	-	-80.88	16.03	0.00	42.15	53.98	-11.83
* 10640.00	Peak	V	-	-	-69.22	16.03	0.00	53.81	73.98	-20.17
* 15960.00	Average	V	-	-	-81.34	23.09	0.00	48.75	53.98	-5.23
* 15960.00	Peak	V	-	-	-70.44	23.09	0.00	59.65	73.98	-14.33
* 21280.00	Average	V	-	-	-78.04	9.03	-9.54	28.45	53.98	-25.53
* 21280.00	Peak	V	-	-	-67.26	9.03	-9.54	39.23	73.98	-34.75
26600.00	Peak	V	-	-	-52.37	-4.38	-9.54	40.71	68.20	-27.49

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 205 of 249

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	V	-	-	-80.33	16.51	0.00	43.18	53.98	-10.80
* 11000.00	Peak	V	-	-	-69.32	16.51	0.00	54.19	73.98	-19.79
16500.00	Peak	V	-	-	-70.31	24.17	0.00	60.86	68.20	-7.34
22000.00	Peak	V	-	-	-67.34	9.58	-9.54	39.70	68.20	-28.50
27500.00	Peak	V	-	-	-51.61	-5.56	-9.54	40.29	68.20	-27.91

**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: 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	V	-	-	-80.40	16.73	0.00	43.33	53.98	-10.65
* 11200.00	Peak	V	-	-	-69.21	16.73	0.00	54.52	73.98	-19.46
16800.00	Peak	V	-	-	-69.93	24.00	0.00	61.07	68.20	-7.13
* 22400.00	Average	V	-	-	-78.70	10.49	-9.54	29.25	53.98	-24.73
* 22400.00	Peak	V	-	-	-66.92	10.49	-9.54	41.03	73.98	-32.95
28000.00	Peak	V	-	-	-51.96	-4.84	-9.54	40.66	68.20	-27.54

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 206 of 249



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	V	-	-	-81.22	17.29	0.00	43.07	53.98	-10.91
* 11440.00	Peak	V	-	-	-69.62	17.29	0.00	54.67	73.98	-19.31
17160.00	Peak	V	-	-	-69.93	24.37	0.00	61.44	68.20	-6.76
* 22880.00	Average	V	-	-	-79.05	9.96	-9.54	28.37	53.98	-25.61
* 22880.00	Peak	V	-	-	-67.45	9.96	-9.54	39.97	73.98	-34.01
28600.00	Peak	V	-	-	-51.79	-4.40	-9.54	41.27	68.20	-26.93

**Table 7-112. 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	V	-	-	-81.73	17.63	0.00	42.90	53.98	-11.07
* 11490.00	Peak	V	-	-	-69.85	17.63	0.00	54.78	73.98	-19.19
17235.00	Peak	V	-	-	-70.28	25.01	0.00	61.73	68.20	-6.47
* 22980.00	Average	V	-	-	-79.01	10.35	-9.54	28.80	53.98	-25.18
* 22980.00	Peak	V	-	-	-67.56	10.35	-9.54	40.25	73.98	-33.73
28725.00	Peak	V	-	-	-52.48	-4.88	-9.54	40.10	68.20	-28.10

**Table 7-113. Radiated Measurements SISO ANT2 (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 207 of 249

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	V	-	-	-82.01	17.35	0.00	42.34	53.98	-11.64
* 11570.00	Peak	V	-	-	-69.54	17.35	0.00	54.81	73.98	-19.17
17355.00	Peak	V	-	-	-69.24	26.08	0.00	63.84	68.20	-4.36
23140.00	Peak	V	-	-	-67.58	10.05	-9.54	39.93	68.20	-28.27
28925.00	Peak	V	-	-	-52.08	-5.11	-9.54	40.27	68.20	-27.93

**Table 7-114. 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

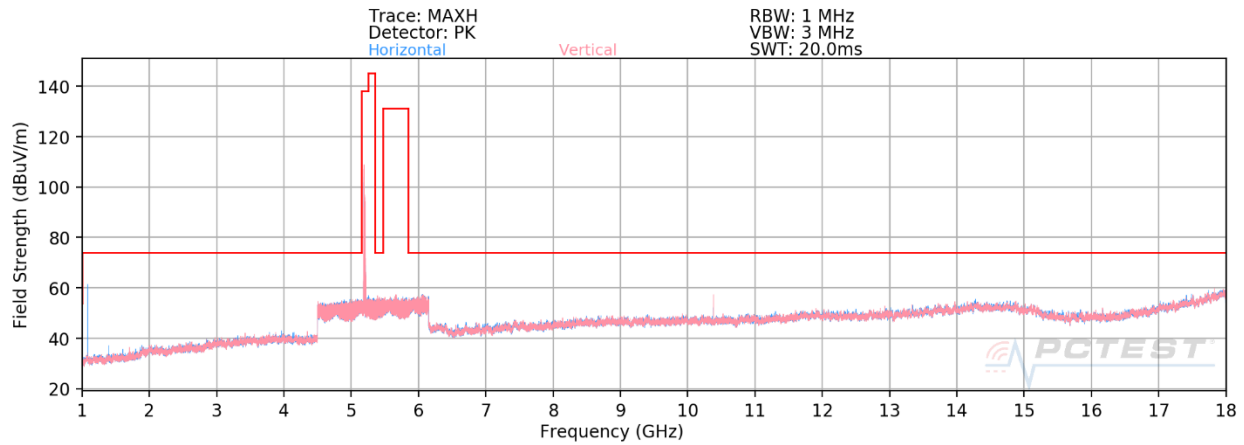
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBμV/m]	Limit [dBμV/m]	Margin [dB]
* 11650.00	Average	V	-	-	-81.49	17.57	0.00	43.08	53.98	-10.89
* 11650.00	Peak	V	-	-	-68.22	17.57	0.00	56.35	73.98	-17.62
17475.00	Peak	V	-	-	-69.66	26.23	0.00	63.57	68.20	-4.63
23300.00	Peak	V	-	-	-67.21	9.39	-9.54	39.64	68.20	-28.56
29125.00	Peak	V	-	-	-49.19	-6.06	-9.54	42.21	68.20	-25.99

**Table 7-115. Radiated Measurements SISO ANT2 (242 Tones)**

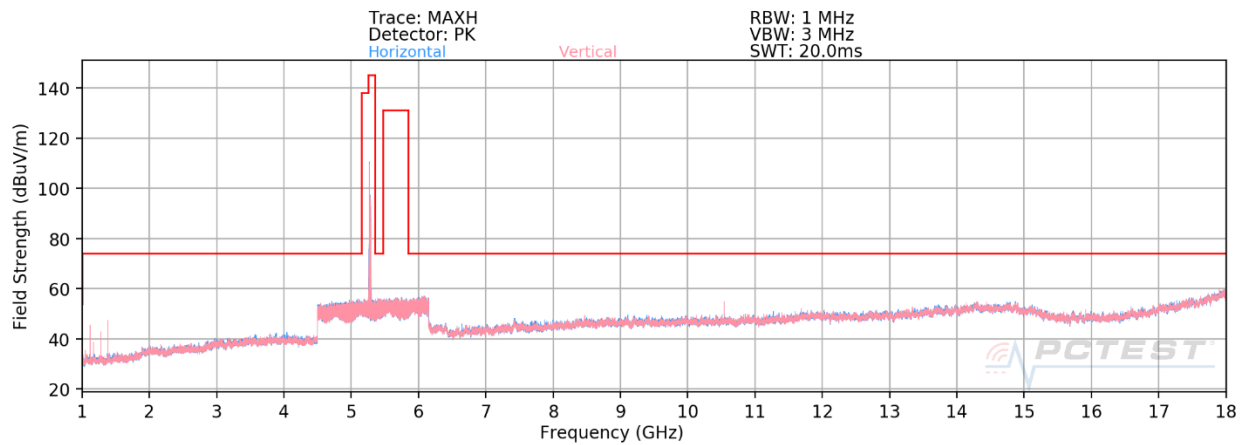
FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 208 of 249

## 7.6.3 MIMO Radiated Spurious Emission Measurements

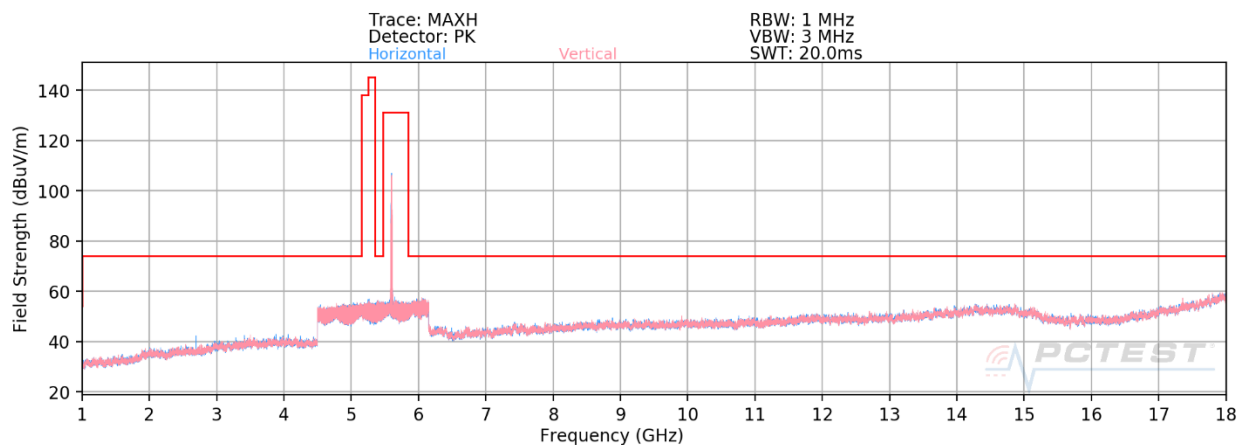
### 26 Tones



**Plot 7-241. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 26 Tones)**

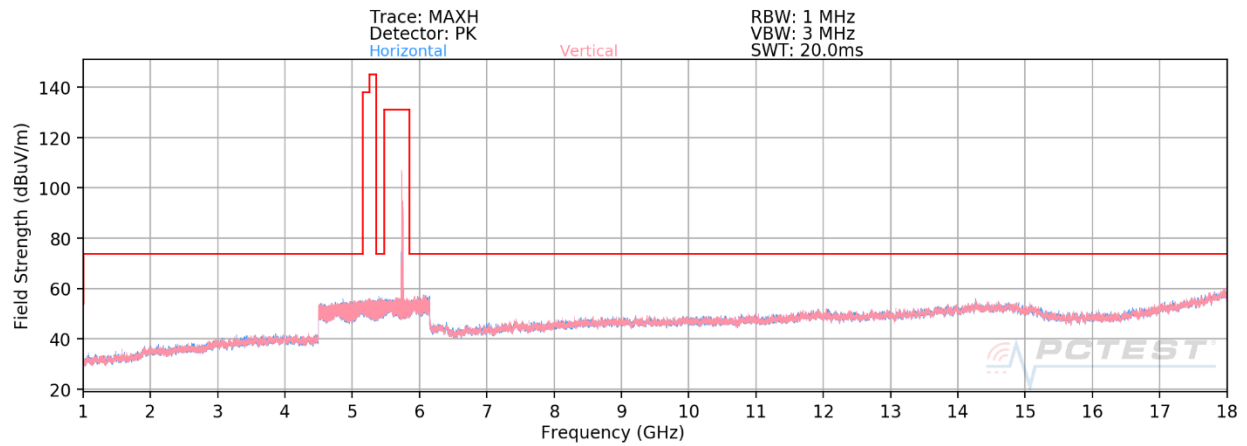


**Plot 7-242. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 26 Tones)**



**Plot 7-243. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 26 Tones)**

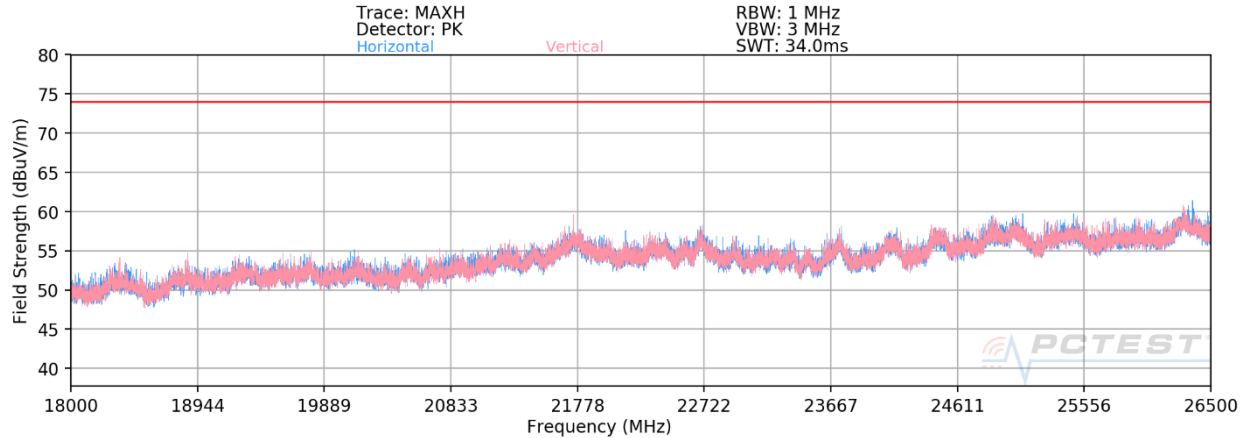
FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 209 of 249



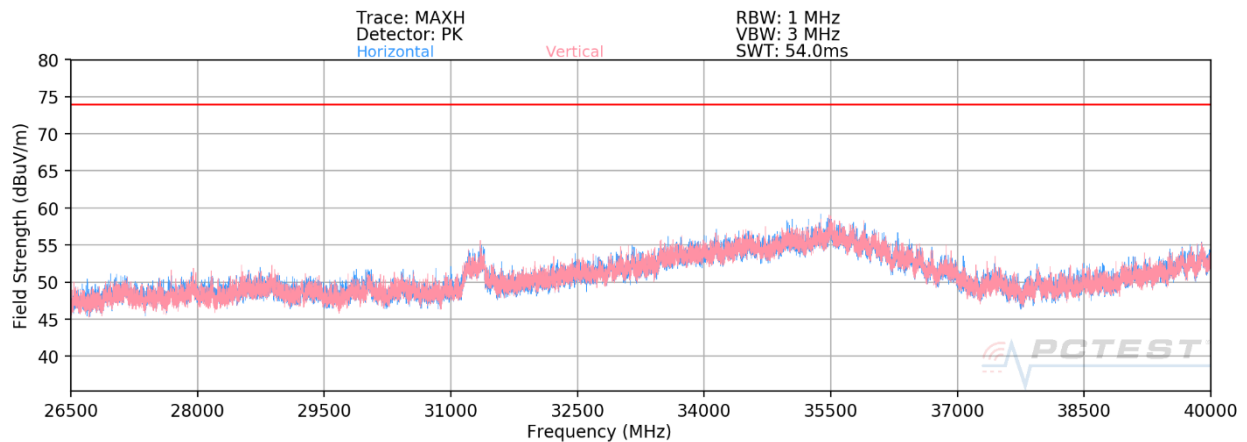
**Plot 7-244. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 210 of 249

## MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



**Plot 7-245. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 26 Tones)**



**Plot 7-246. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 211 of 249

## 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	V	131	331	-58.72	15.23	0.00	63.51	68.20	-4.69
* 15540.00	Average	V	-	-	-79.63	22.71	0.00	50.08	53.98	-3.90
* 15540.00	Peak	V	-	-	-67.97	22.71	0.00	61.74	73.98	-12.24
* 20720.00	Average	V	-	-	-78.67	7.97	-9.54	26.76	53.98	-27.22
* 20720.00	Peak	V	-	-	-67.08	7.97	-9.54	38.35	73.98	-35.63
25900.00	Peak	V	-	-	-66.37	10.34	-9.54	41.43	68.20	-26.77

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: 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	V	115	337	-62.22	15.67	0.00	60.45	68.20	-7.75
* 15600.00	Average	V	-	-	-78.69	22.46	0.00	50.77	53.98	-3.21
* 15600.00	Peak	V	-	-	-68.09	22.46	0.00	61.37	73.98	-12.61
* 20800.00	Average	V	-	-	-78.88	8.33	-9.54	26.91	53.98	-27.07
* 20800.00	Peak	V	-	-	-67.86	8.33	-9.54	37.93	73.98	-36.05
26000.00	Peak	V	-	-	-66.61	10.61	-9.54	41.46	68.20	-26.74

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 212 of 249

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	V	118	329	-64.04	15.49	0.00	58.45	68.20	-9.75
* 15720.00	Average	V	-	-	-79.41	22.45	0.00	50.04	53.98	-3.94
* 15720.00	Peak	V	-	-	-67.90	22.45	0.00	61.55	73.98	-12.43
* 20960.00	Average	V	-	-	-78.95	8.52	-9.54	27.03	53.98	-26.95
* 20960.00	Peak	V	-	-	-67.01	8.52	-9.54	38.97	73.98	-35.01
26200.00	Peak	V	-	-	-66.44	10.69	-9.54	41.71	68.20	-26.49

**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: 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	V	129	331	-66.15	15.86	0.00	56.71	68.20	-11.49
* 15780.00	Average	V	-	-	-79.53	22.77	0.00	50.24	53.98	-3.74
* 15780.00	Peak	V	-	-	-67.61	22.77	0.00	62.16	73.98	-11.82
* 21040.00	Average	V	-	-	-78.44	8.82	-9.54	27.84	53.98	-26.14
* 21040.00	Peak	V	-	-	-66.94	8.82	-9.54	39.34	73.98	-34.64
26300.00	Peak	V	-	-	-64.89	11.42	-9.54	43.99	68.20	-24.21

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 213 of 249

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	V	126	328	-66.75	15.70	0.00	55.95	68.20	-12.25
* 15840.00	Average	V	-	-	-79.42	22.66	0.00	50.24	53.98	-3.74
* 15840.00	Peak	V	-	-	-68.06	22.66	0.00	61.60	73.98	-12.38
* 21120.00	Average	V	-	-	-78.60	8.63	-9.54	27.49	53.98	-26.49
* 21120.00	Peak	V	-	-	-66.41	8.63	-9.54	39.68	73.98	-34.30
* 26400.00	Peak	V	-	-	-65.20	11.11	-9.54	43.37	68.20	-24.83

**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: 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	V	129	327	-78.62	16.03	0.00	44.41	53.98	-9.57
* 10640.00	Peak	V	129	327	-67.26	16.03	0.00	55.77	73.98	-18.21
* 15960.00	Average	V	-	-	-79.24	23.09	0.00	50.85	53.98	-3.13
* 15960.00	Peak	V	-	-	-67.68	23.09	0.00	62.41	73.98	-11.57
* 21280.00	Average	V	-	-	-78.22	9.03	-9.54	28.27	53.98	-25.71
* 21280.00	Peak	V	-	-	-67.29	9.03	-9.54	39.20	73.98	-34.78
* 26600.00	Peak	V	-	-	-52.57	-4.38	-9.54	40.51	68.20	-27.69

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 214 of 249



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	V	-	-	-78.25	16.51	0.00	45.26	53.98	-8.72
* 11000.00	Peak	V	-	-	-69.62	16.51	0.00	53.89	73.98	-20.09
16500.00	Peak	V	-	-	-68.49	24.17	0.00	62.68	68.20	-5.52
22000.00	Peak	V	-	-	-66.78	9.58	-9.54	40.26	68.20	-27.94
27500.00	Peak	V	-	-	-51.58	-5.56	-9.54	40.32	68.20	-27.88

**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: 5580MHz  
 Channel: 116

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	V	-	-	-78.86	16.73	0.00	44.87	53.98	-9.11
* 11200.00	Peak	V	-	-	-67.59	16.73	0.00	56.14	73.98	-17.84
16800.00	Peak	V	-	-	-69.99	24.00	0.00	61.01	68.20	-7.19
* 22400.00	Average	V	-	-	-78.57	10.49	-9.54	29.38	53.98	-24.60
* 22400.00	Peak	V	-	-	-67.49	10.49	-9.54	40.46	73.98	-33.52
28000.00	Peak	V	-	-	-52.81	-4.84	-9.54	39.81	68.20	-28.39

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 215 of 249

Worst Case Mode: 802.11ax (20MHz BW)  
 Worst Case Transfer Rate: MCS0  
 RU Index: 4  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5700MHz  
 Channel: 140

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	V	-	-	-78.59	17.29	0.00	45.70	53.98	-8.28
* 11440.00	Peak	V	-	-	-68.39	17.29	0.00	55.90	73.98	-18.08
17160.00	Peak	V	-	-	-68.54	24.37	0.00	62.83	68.20	-5.37
* 22880.00	Average	V	-	-	-79.34	9.96	-9.54	28.08	53.98	-25.90
* 22880.00	Peak	V	-	-	-68.43	9.96	-9.54	38.99	73.98	-34.99
28600.00	Peak	V	-	-	-52.40	-4.40	-9.54	40.66	68.20	-27.54

**Table 7-124. 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	V	-	-	-79.57	17.63	0.00	45.06	53.98	-8.91
* 11490.00	Peak	V	-	-	-68.51	17.63	0.00	56.12	73.98	-17.85
17235.00	Peak	V	-	-	-67.29	25.01	0.00	64.72	68.20	-3.48
* 22980.00	Average	V	-	-	-78.99	10.35	-9.54	28.82	53.98	-25.16
* 22980.00	Peak	V	-	-	-68.20	10.35	-9.54	39.61	73.98	-34.37
28725.00	Peak	V	-	-	-52.55	-4.88	-9.54	40.03	68.20	-28.17

**Table 7-125. Radiated Measurements MIMO (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 216 of 249

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	V	-	-	-78.69	17.35	0.00	45.66	53.98	-8.32
* 11570.00	Peak	V	-	-	-67.59	17.35	0.00	56.76	73.98	-17.22
17355.00	Peak	V	-	-	-68.44	26.08	0.00	64.64	68.20	-3.56
23140.00	Peak	V	-	-	-68.04	10.05	-9.54	39.47	68.20	-28.73
28925.00	Peak	V	-	-	-52.22	-5.11	-9.54	40.13	68.20	-28.07

**Table 7-126. Radiated Measurements MIMO (26 Tones)**

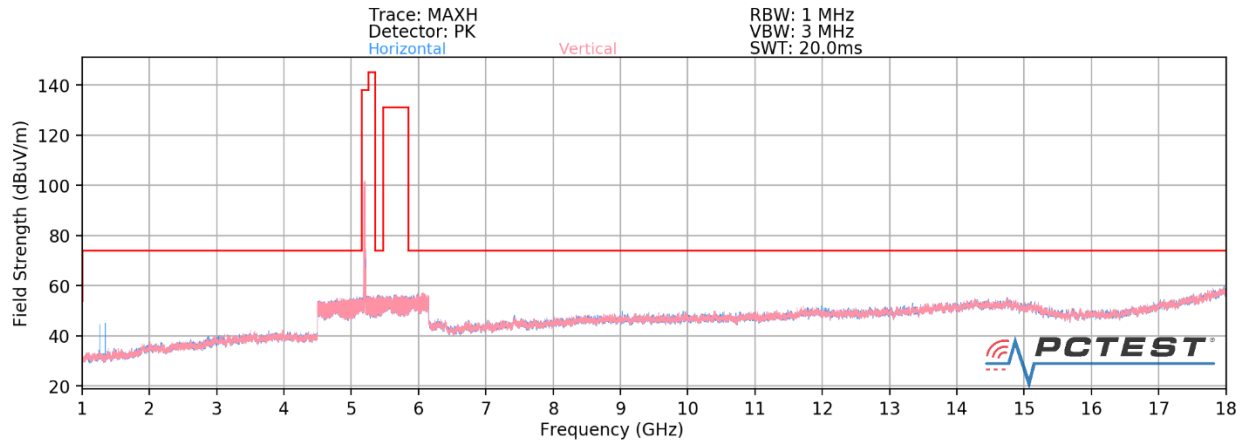
Worst Case Mode: 802.11ax (20MHz BW)  
 Worst Case Transfer Rate: MCS0  
 RU Index: 4  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5825MHz  
 Channel: 165

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	V	-	-	-79.52	17.57	0.00	45.05	53.98	-8.92
* 11650.00	Peak	V	-	-	-68.19	17.57	0.00	56.38	73.98	-17.59
17475.00	Peak	V	-	-	-72.33	26.23	0.00	60.90	68.20	-7.30
23300.00	Peak	V	-	-	-66.81	9.39	-9.54	40.04	68.20	-28.16
29125.00	Peak	V	-	-	-50.96	-6.06	-9.54	40.44	68.20	-27.76

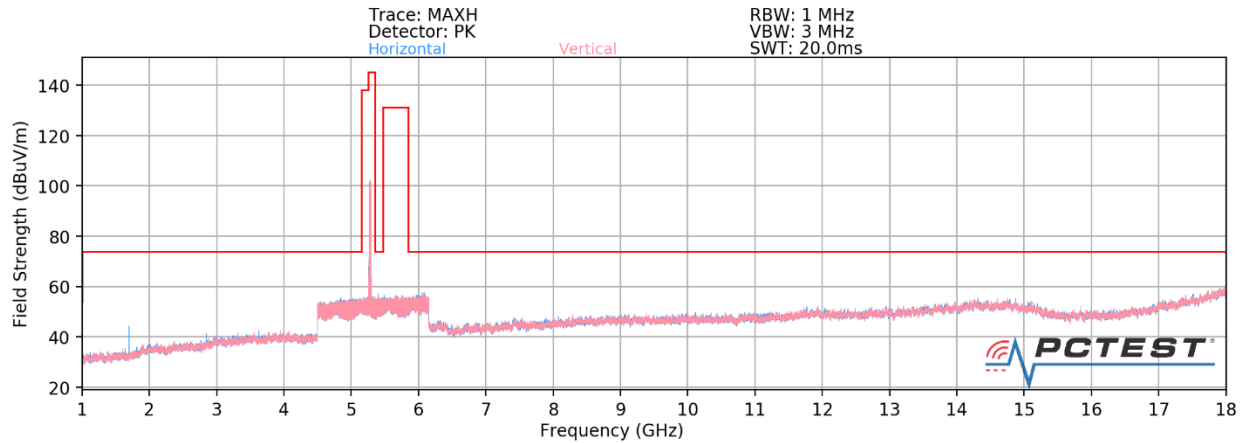
**Table 7-127. Radiated Measurements MIMO (26 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 217 of 249

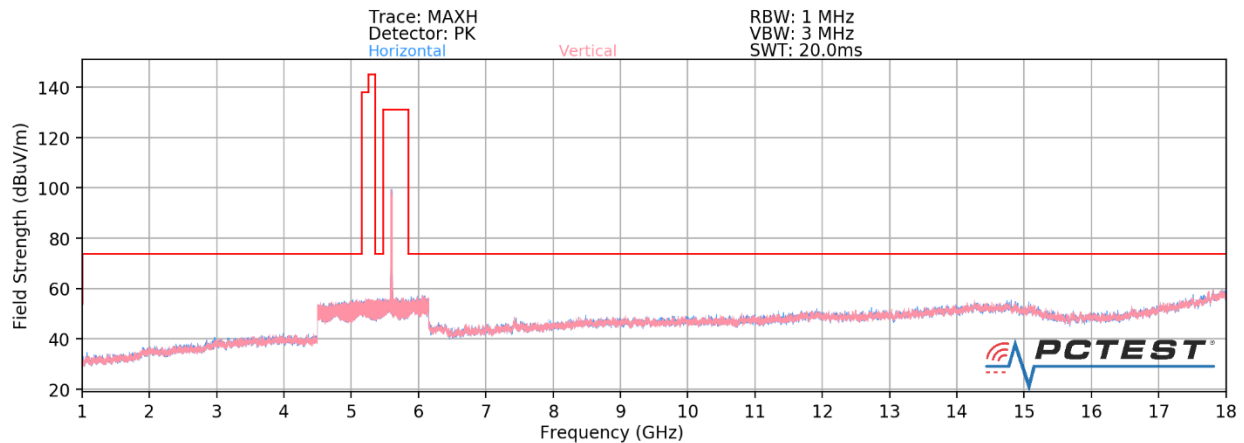
## 242 Tones



**Plot 7-247. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U1 Ch. 40 – 242 Tones)**

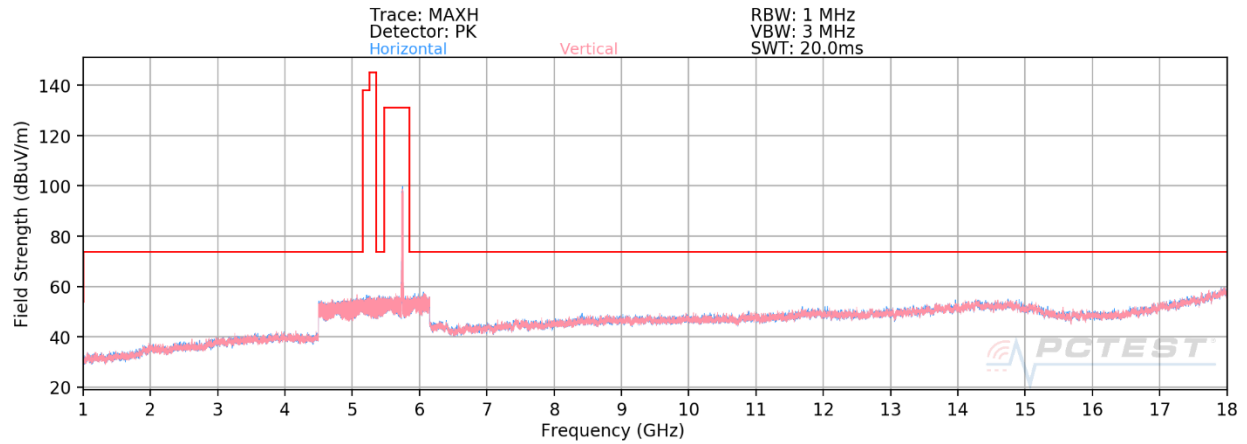


**Plot 7-248. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2A Ch. 56 – 242 Tones)**



**Plot 7-249. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U2C Ch. 120 – 242 Tones)**

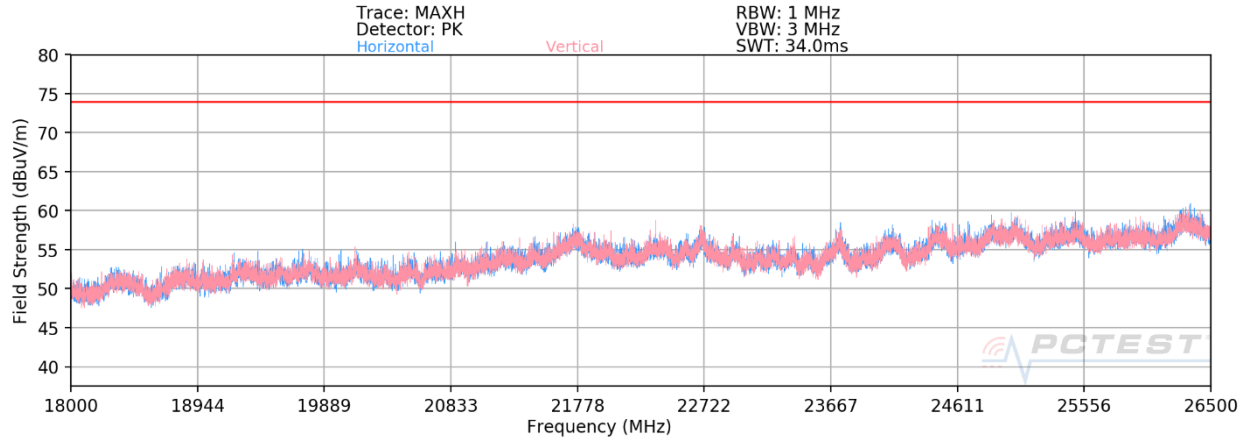
FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 218 of 249



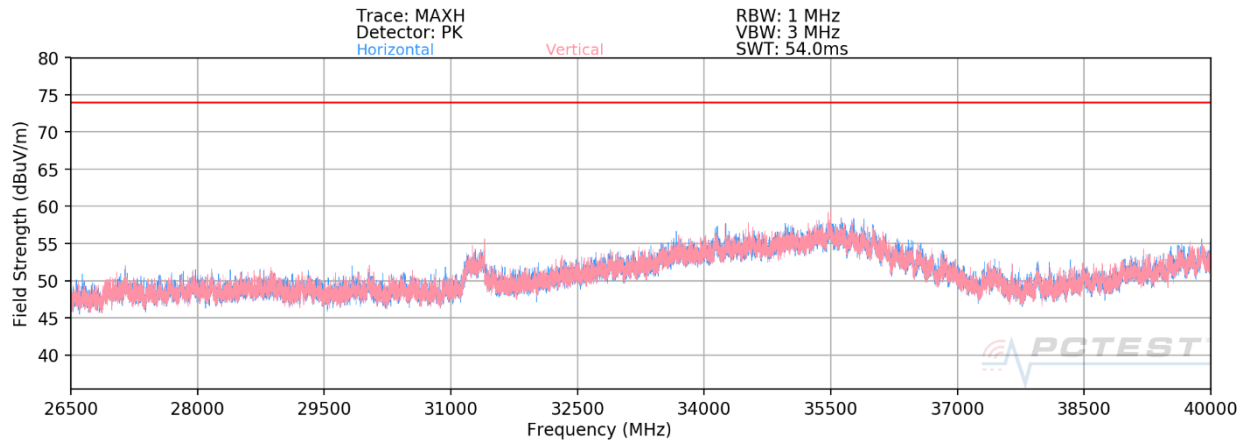
**Plot 7-250. Radiated Spurious Plot above 1GHz MIMO (802.11ax – U3 Ch. 157 – 242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 219 of 249

## MIMO Radiated Spurious Emissions Measurements (Above 18GHz)



**Plot 7-251. Radiated Spurious Plot 18GHz - 26.5GHz MIMO (802.11ax – 242 Tones)**



**Plot 7-252. Radiated Spurious Plot 26.5GHz - 40GHz MIMO (802.11ax – 242 Tones)**

FCC ID: ZNFV600AM	<b>PCTEST</b>	MEASUREMENT REPORT (CERTIFICATION)	LG	Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 220 of 249

## 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	V	124	337	-70.24	18.27	0.00	55.03	68.20	-13.17
* 15540.00	Average	V	-	-	-86.29	28.22	0.00	48.93	53.98	-5.05
* 15540.00	Peak	V	-	-	-75.42	28.22	0.00	59.80	73.98	-14.18
* 20720.00	Average	V	-	-	-78.85	7.97	-9.54	26.58	53.98	-27.40
* 20720.00	Peak	V	-	-	-67.11	7.97	-9.54	38.32	73.98	-35.66
25900.00	Peak	V	-	-	-65.60	10.34	-9.54	42.20	68.20	-26.00

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: 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	V	114	325	-71.65	18.76	0.00	54.11	68.20	-14.09
* 15600.00	Average	V	-	-	-86.60	27.97	0.00	48.37	53.98	-5.61
* 15600.00	Peak	V	-	-	-74.53	27.97	0.00	60.44	73.98	-13.54
* 20800.00	Average	V	-	-	-78.89	8.33	-9.54	26.90	53.98	-27.08
* 20800.00	Peak	V	-	-	-67.77	8.33	-9.54	38.02	73.98	-35.96
26000.00	Peak	V	-	-	-65.48	10.61	-9.54	42.59	68.20	-25.61

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 221 of 249

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	V	-	-	-74.65	19.02	0.00	51.37	68.20	-16.83
* 15720.00	Average	V	-	-	-86.42	27.74	0.00	48.32	53.98	-5.66
* 15720.00	Peak	V	-	-	-74.82	27.74	0.00	59.92	73.98	-14.06
* 20960.00	Average	V	-	-	-78.99	8.52	-9.54	26.99	53.98	-26.99
* 20960.00	Peak	V	-	-	-67.26	8.52	-9.54	38.72	73.98	-35.26
26200.00	Peak	V	-	-	-66.34	10.69	-9.54	41.81	68.20	-26.39

**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: 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	V	141	331	-72.79	18.89	0.00	53.10	68.20	-15.10
* 15780.00	Average	V	-	-	-86.55	27.43	0.00	47.88	53.98	-6.10
* 15780.00	Peak	V	-	-	-75.46	27.43	0.00	58.97	73.98	-15.01
* 21040.00	Average	V	-	-	-78.81	8.82	-9.54	27.47	53.98	-26.51
* 21040.00	Peak	V	-	-	-67.72	8.82	-9.54	38.56	73.98	-35.42
26300.00	Peak	V	-	-	-65.34	11.42	-9.54	43.54	68.20	-24.66

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 222 of 249



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	V	-	-	-73.92	18.87	0.00	51.95	68.20	-16.25
* 15840.00	Average	V	-	-	-86.42	28.80	0.00	49.38	53.98	-4.60
* 15840.00	Peak	V	-	-	-74.42	28.80	0.00	61.38	73.98	-12.60
* 21120.00	Average	V	-	-	-78.20	8.63	-9.54	27.89	53.98	-26.09
* 21120.00	Peak	V	-	-	-67.14	8.63	-9.54	38.95	73.98	-35.03
* 26400.00	Peak	V	-	-	-65.27	11.11	-9.54	43.30	68.20	-24.90

**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: 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	V	-	-	-84.86	19.05	0.00	41.19	53.98	-12.79
* 10640.00	Peak	V	-	-	-73.60	19.05	0.00	52.45	73.98	-21.53
* 15960.00	Average	V	-	-	-86.65	27.12	0.00	47.47	53.98	-6.51
* 15960.00	Peak	V	-	-	-75.61	27.12	0.00	58.51	73.98	-15.47
* 21280.00	Average	V	-	-	-78.21	9.03	-9.54	28.28	53.98	-25.70
* 21280.00	Peak	V	-	-	-66.98	9.03	-9.54	39.51	73.98	-34.47
* 26600.00	Peak	V	-	-	-53.16	-4.38	-9.54	39.92	68.20	-28.28

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 223 of 249

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	V	-	-	-85.09	19.60	0.00	41.51	53.98	-12.47
* 11000.00	Peak	V	-	-	-73.57	19.60	0.00	53.03	73.98	-20.95
16500.00	Peak	V	-	-	-74.94	28.33	0.00	60.39	68.20	-7.81
22000.00	Peak	V	-	-	-66.61	9.58	-9.54	40.43	68.20	-27.77
27500.00	Peak	V	-	-	-50.88	-5.56	-9.54	41.02	68.20	-27.18

**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: 5580MHz  
 Channel: 116

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	V	-	-	-85.04	19.94	0.00	41.90	53.98	-12.08
* 11200.00	Peak	V	-	-	-73.25	19.94	0.00	53.69	73.98	-20.29
16800.00	Peak	V	-	-	-75.18	30.43	0.00	62.25	68.20	-5.95
* 22400.00	Average	V	-	-	-78.55	10.49	-9.54	29.40	53.98	-24.58
* 22400.00	Peak	V	-	-	-67.26	10.49	-9.54	40.69	73.98	-33.29
28000.00	Peak	V	-	-	-52.09	-4.84	-9.54	40.53	68.20	-27.67

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

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 224 of 249

Worst Case Mode: 802.11ax (20MHz BW)  
 Worst Case Transfer Rate: MCS0  
 RU Index: 61  
 Distance of Measurements: 1 & 3 Meters  
 Operating Frequency: 5700MHz  
 Channel: 140

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	V	-	-	-84.69	19.66	0.00	41.97	53.98	-12.01
* 11440.00	Peak	V	-	-	-73.53	19.66	0.00	53.13	73.98	-20.85
17160.00	Peak	V	-	-	-75.03	30.32	0.00	62.29	68.20	-5.91
* 22880.00	Average	V	-	-	-79.08	9.96	-9.54	28.34	53.98	-25.64
* 22880.00	Peak	V	-	-	-67.69	9.96	-9.54	39.73	73.98	-34.25
28600.00	Peak	V	-	-	-52.04	-4.40	-9.54	41.02	68.20	-27.18

**Table 7-136. 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	V	-	-	-84.49	20.22	0.00	42.73	53.98	-11.25
* 11490.00	Peak	V	-	-	-73.14	20.22	0.00	54.08	73.98	-19.90
17235.00	Peak	V	-	-	-75.21	29.88	0.00	61.67	68.20	-6.53
* 22980.00	Average	V	-	-	-79.08	10.35	-9.54	28.73	53.98	-25.25
* 22980.00	Peak	V	-	-	-67.28	10.35	-9.54	40.53	73.98	-33.45
28725.00	Peak	V	-	-	-51.19	-4.88	-9.54	41.39	68.20	-26.81

**Table 7-137. Radiated Measurements MIMO (242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 225 of 249

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	V	-	-	-84.48	21.58	0.00	44.10	53.98	-9.88
* 11570.00	Peak	V	-	-	-73.32	21.58	0.00	55.26	73.98	-18.72
17355.00	Peak	V	-	-	-75.22	29.28	0.00	61.06	68.20	-7.14
23140.00	Peak	V	-	-	-67.70	10.05	-9.54	39.81	68.20	-28.39
28925.00	Peak	V	-	-	-52.80	-5.11	-9.54	39.55	68.20	-28.65

**Table 7-138. 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	V	-	-	-85.29	21.22	0.00	42.93	53.98	-11.05
* 11650.00	Peak	V	-	-	-74.49	21.22	0.00	53.73	73.98	-20.25
17475.00	Peak	V	-	-	-75.98	30.91	0.00	61.93	68.20	-6.27
23300.00	Peak	V	-	-	-67.60	9.39	-9.54	39.25	68.20	-28.95
29125.00	Peak	V	-	-	-50.83	-6.06	-9.54	40.57	68.20	-27.63

**Table 7-139. Radiated Measurements MIMO (242 Tones)**

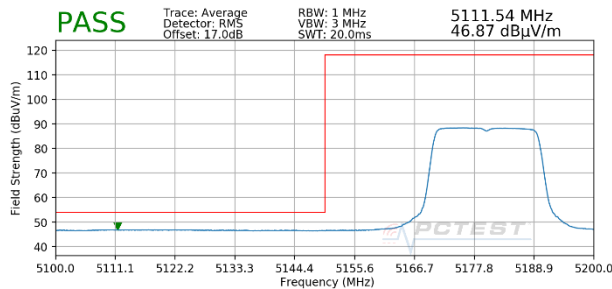
FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 226 of 249

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

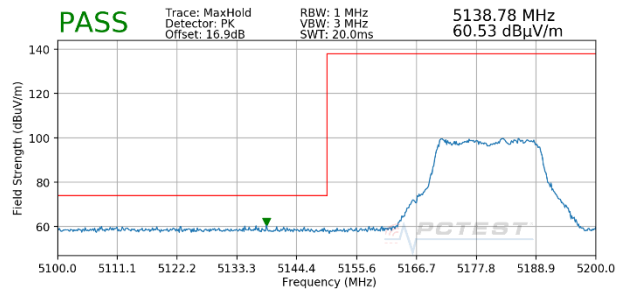
\$15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]; RSS-Gen [8.9]

### 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

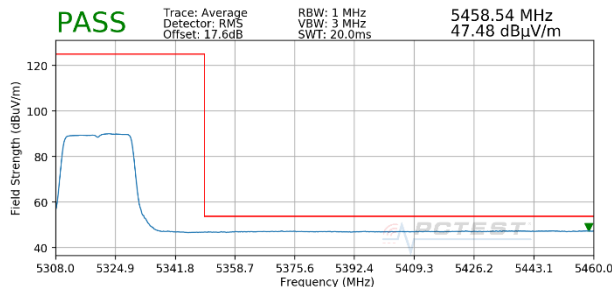


**Plot 7-253. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 242 Tones)**

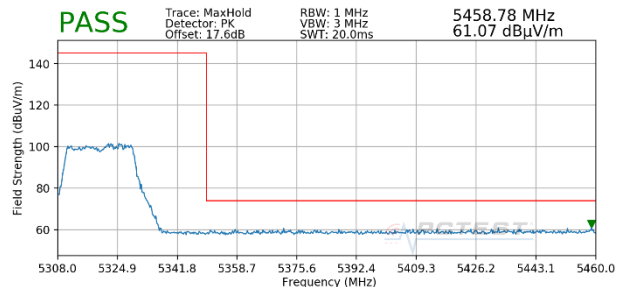


**Plot 7-254. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 242 Tones)**

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



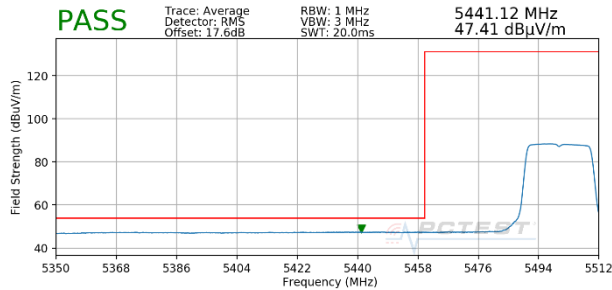
**Plot 7-255. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 242 Tones)**



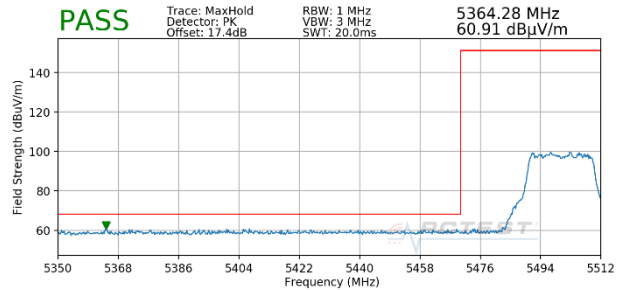
**Plot 7-256. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 242 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 227 of 249

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

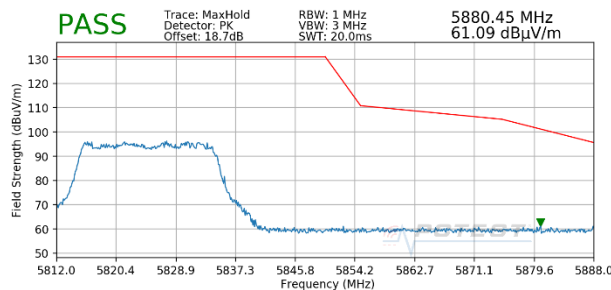


**Plot 7-257. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 2C – 242 Tones)**



**Plot 7-258. 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 7-259. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 3 – 242 Tones)**

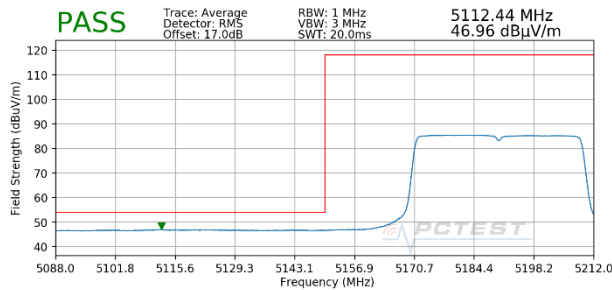
FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 228 of 249

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

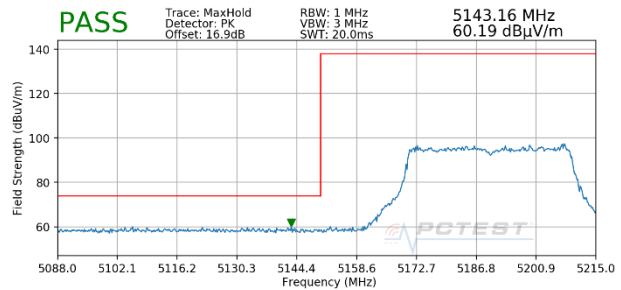
§15.407(b.1)(b.2) §15.205 §15.209; RSS-Gen [8.9]

### 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

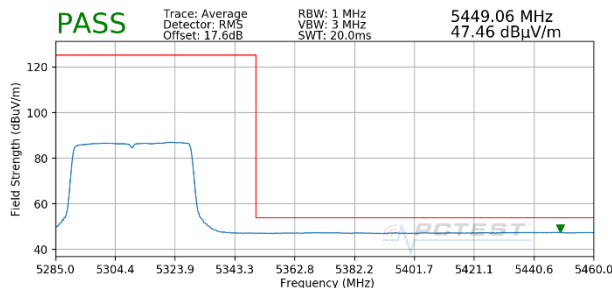


**Plot 7-260. Radiated Lower Band Edge Plot SISO ANT1 (Average – UNII Band 1 – 484 Tones)**

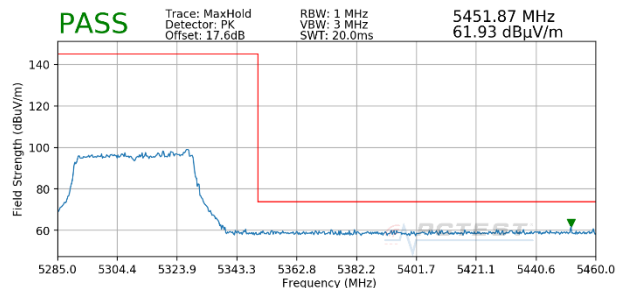


**Plot 7-261. Radiated Lower Band Edge Plot SISO ANT1 (Peak – UNII Band 1 – 484 Tones)**

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



**Plot 7-262. Radiated Upper Band Edge Plot SISO ANT1 (Average – UNII Band 2A – 484 Tones)**



**Plot 7-263. Radiated Upper Band Edge Plot SISO ANT1 (Peak – UNII Band 2A – 484 Tones)**

FCC ID: ZNFV600AM		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1912300229-08-R1.ZNF	Test Dates: 12/30/2019 - 2/03/2020	EUT Type: Portable Handset		Page 229 of 249