

Radiated Spurious Emission Measurements (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5785MHz
 Channel: 157

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11570.00	-111.15	Avg	H	50.24	0.00	46.10	53.98	-7.88
* 11570.00	-99.35	Peak	H	50.24	0.00	57.90	73.98	-16.08
17355.00	-125.00	Peak	H	59.73	0.00	41.73	68.20	-26.47
23140.00	-125.00	Peak	H	44.49	0.00	26.49	68.20	-41.71
28925.00	-125.00	Peak	H	42.76	0.00	24.76	68.20	-43.44

Table 6-26. Radiated Measurements

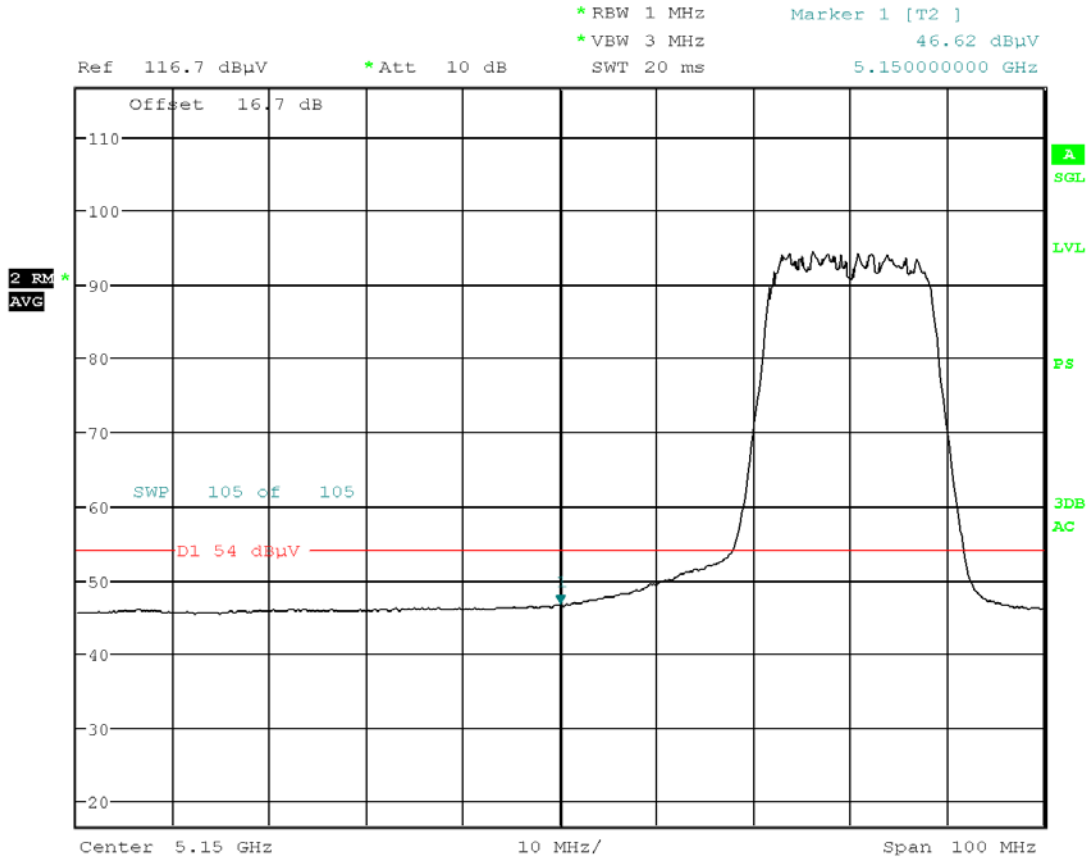
Worst Case Mode: 802.11a
 Worst Case Transfer Rate: 6 Mbps
 Distance of Measurements: 1 & 3 Meters
 Operating Frequency: 5825MHz
 Channel: 165

Frequency [MHz]	Analyzer Level [dBm]	Detector	Pol. [H/V]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
* 11650.00	-111.26	Avg	H	50.33	0.00	46.07	53.98	-7.91
* 11650.00	-99.59	Peak	H	50.33	0.00	57.74	73.98	-16.24
17475.00	-125.00	Peak	H	59.67	0.00	41.67	68.20	-26.53
23300.00	-125.00	Peak	H	44.47	0.00	26.47	68.20	-41.73
29125.00	-125.00	Peak	H	42.71	0.00	24.71	68.20	-43.49

Table 6-27. Radiated Measurements

6.8 Radiated Band Edge Measurements (20MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (20MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5180MHz
 Channel: 36

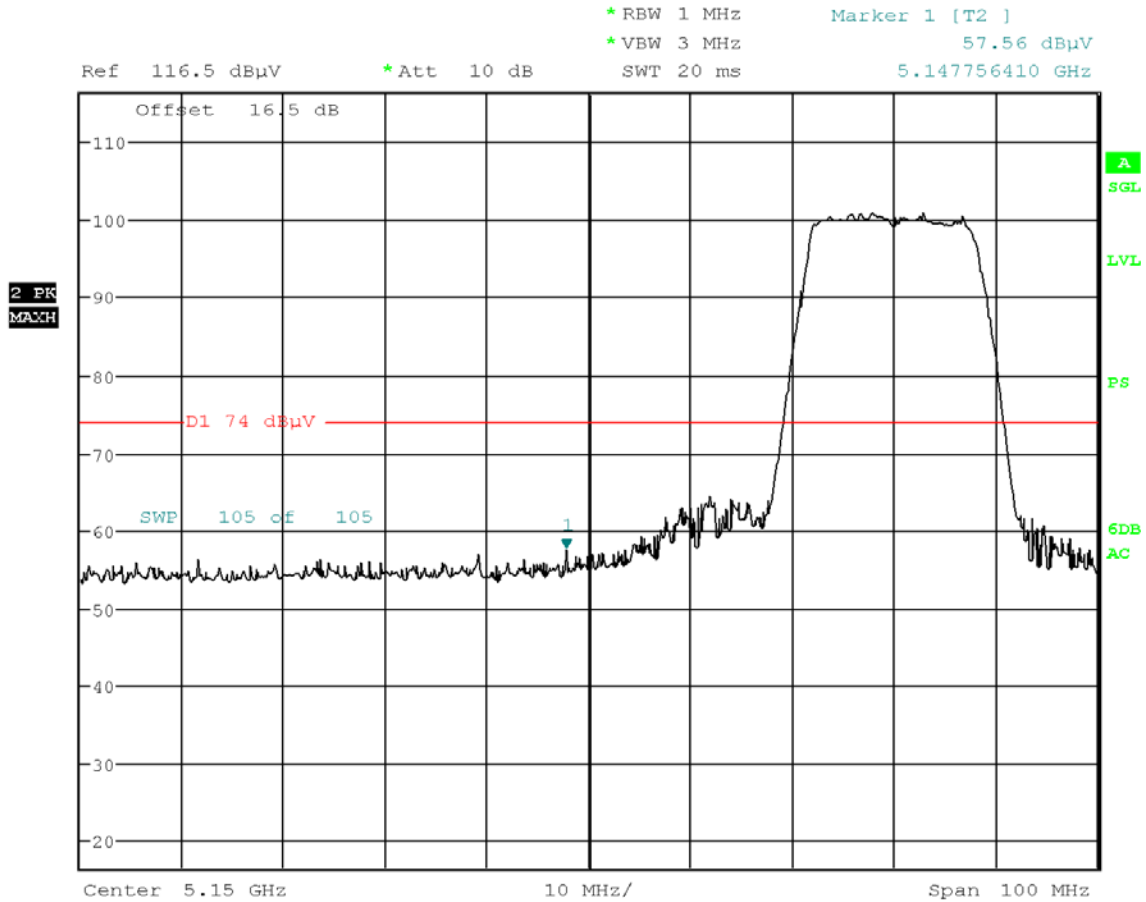


Date: 15.MAY.2013 15:52:33

Plot 6-79. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 73 of 107

Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 15.MAY.2013 15:53:52

Plot 6-80. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 74 of 107

Radiated Band Edge Measurements (20MHz BW) (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

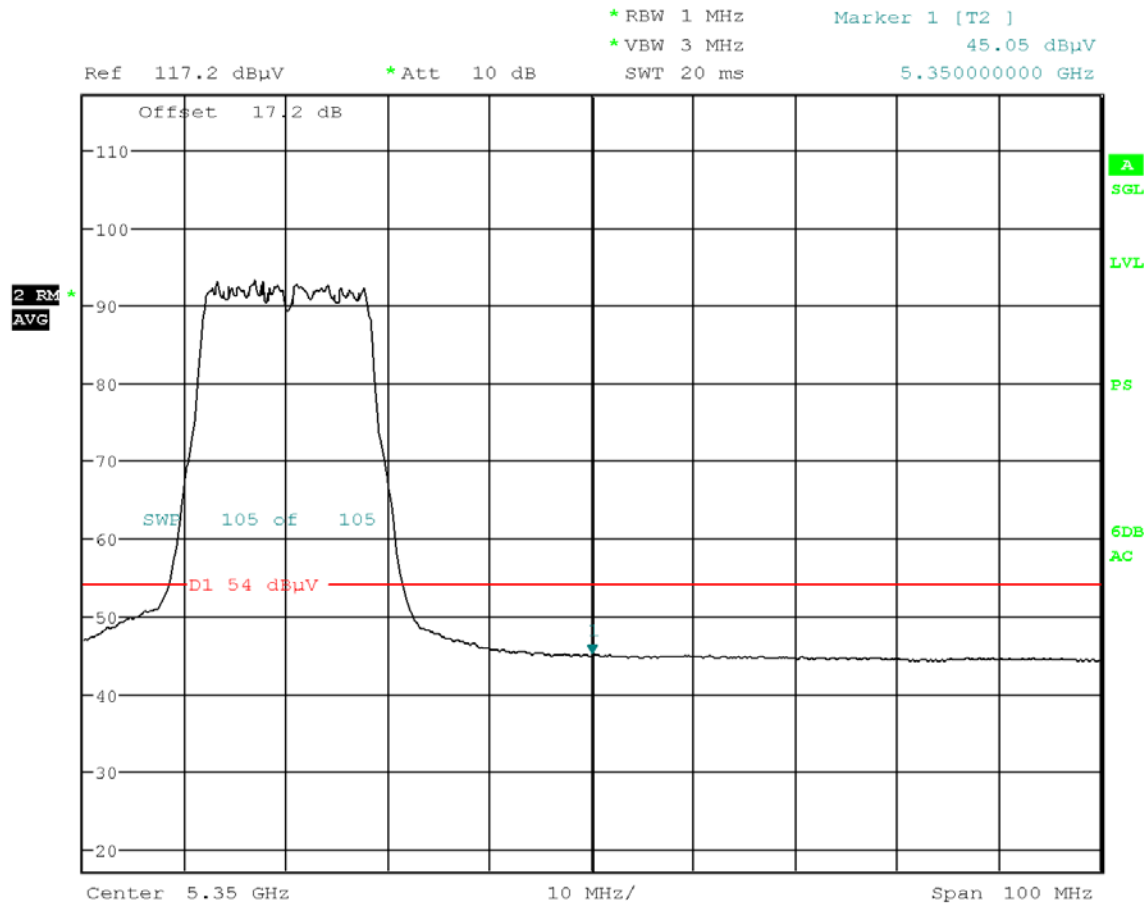
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64

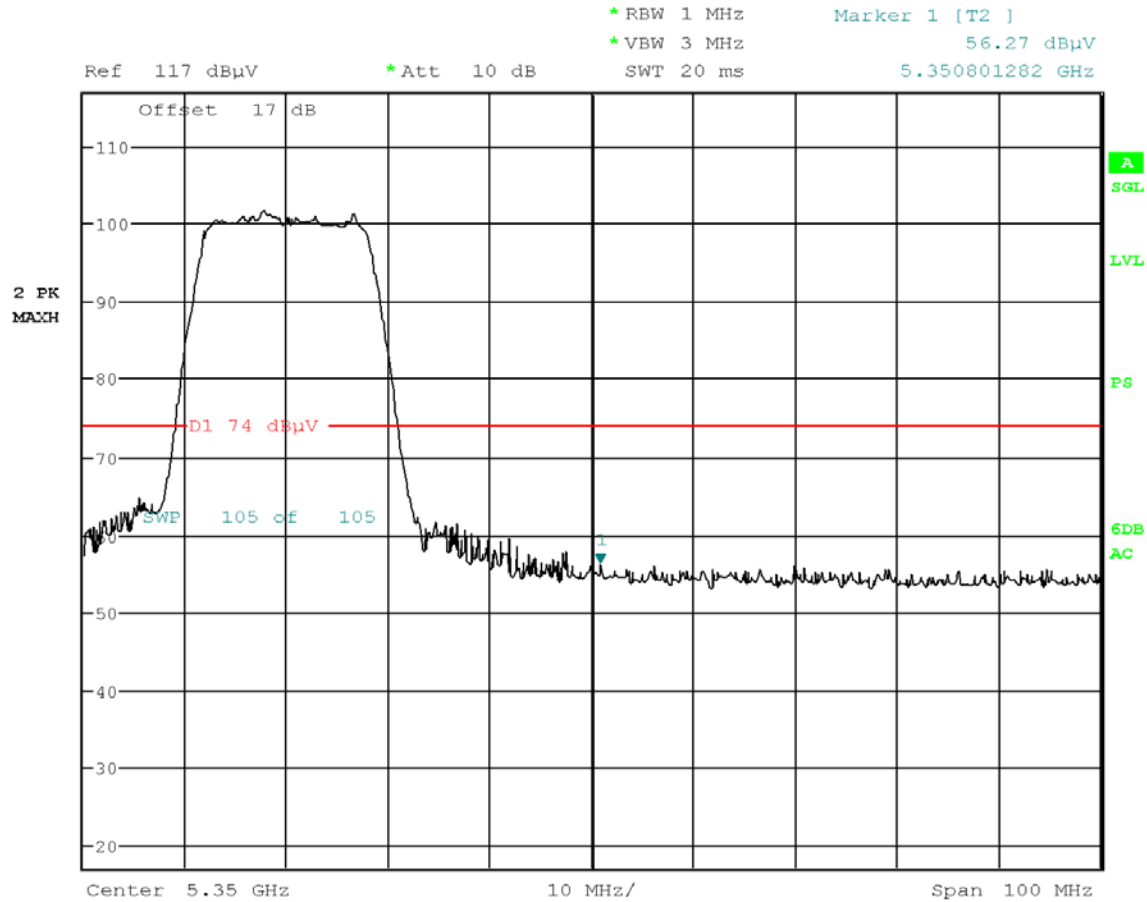


Date: 15.MAY.2013 16:07:53

Plot 6-81. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 75 of 107

Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



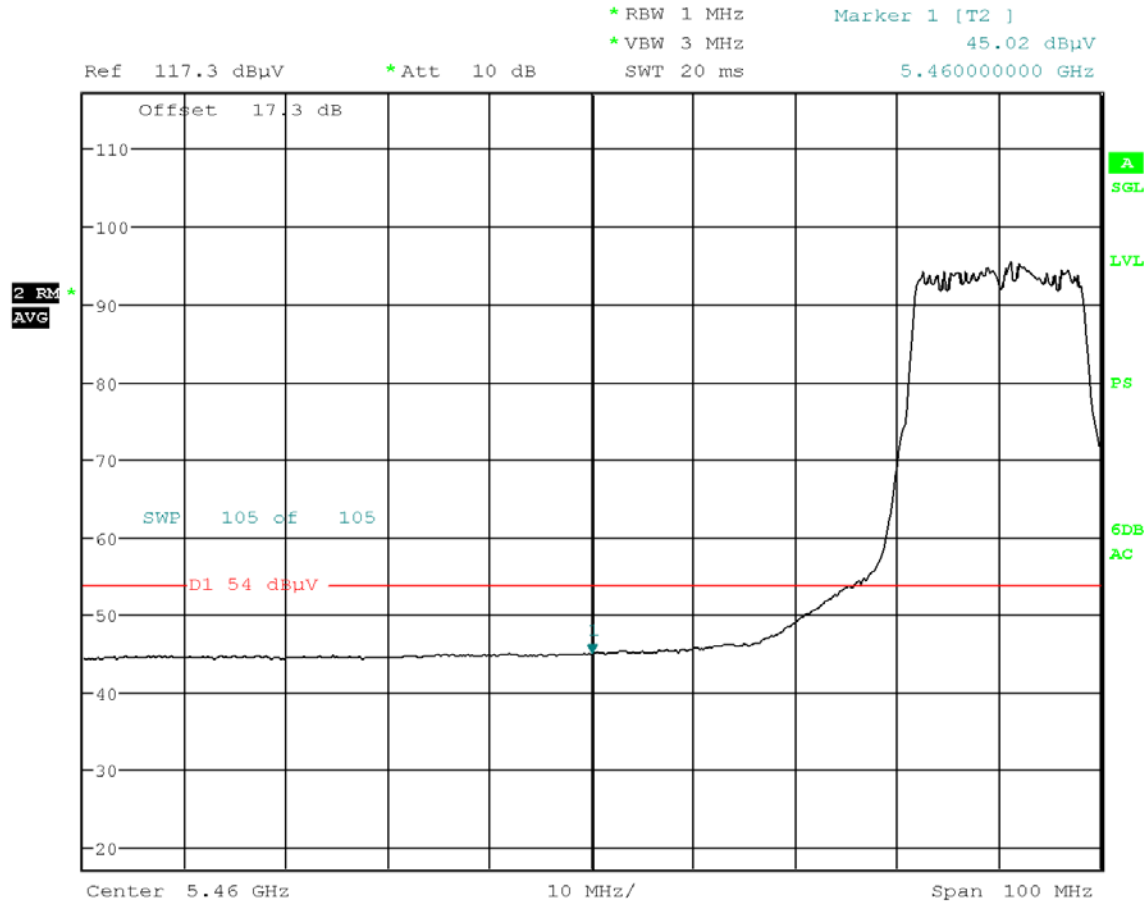
Date: 15.MAY.2013 16:06:22

Plot 6-82. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 76 of 107

Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (20MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5500MHz
 Channel: 100

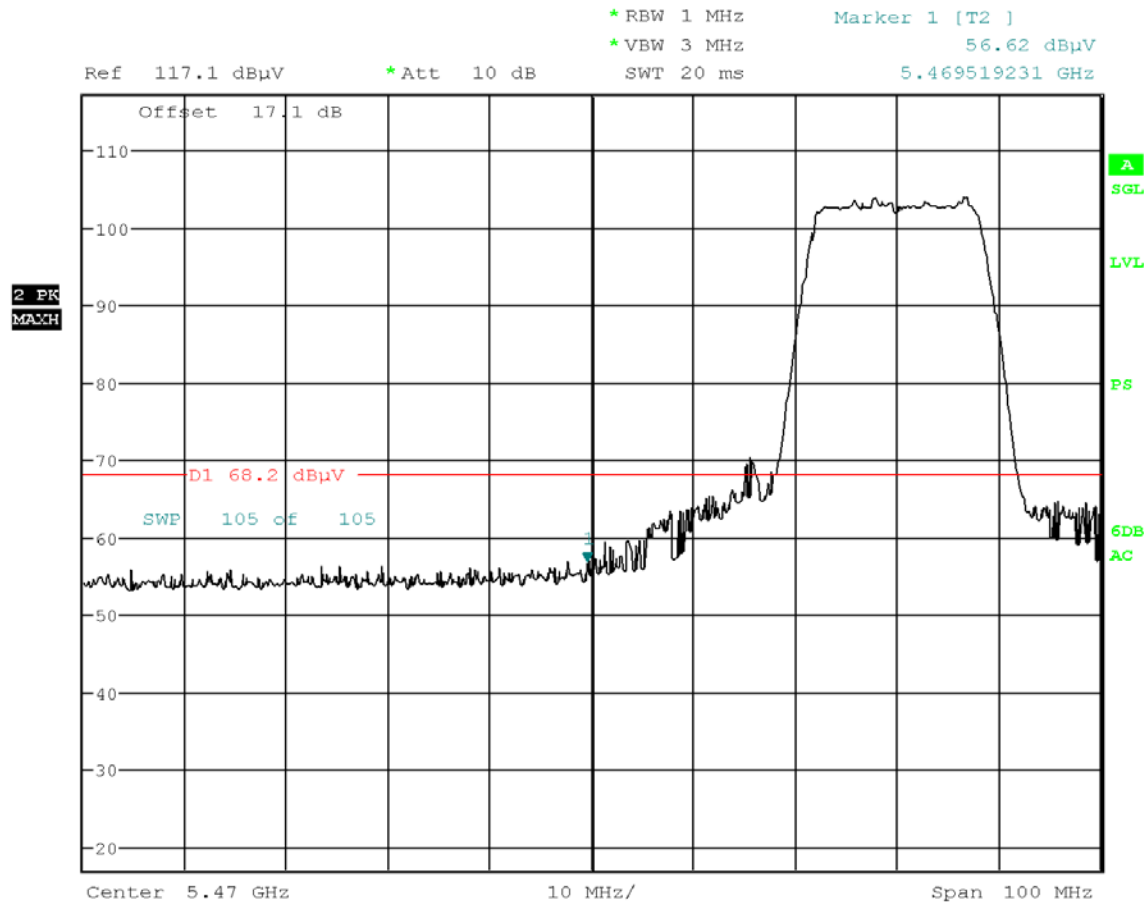


Date: 15.MAY.2013 16:28:11

Plot 6-83. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 77 of 107	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



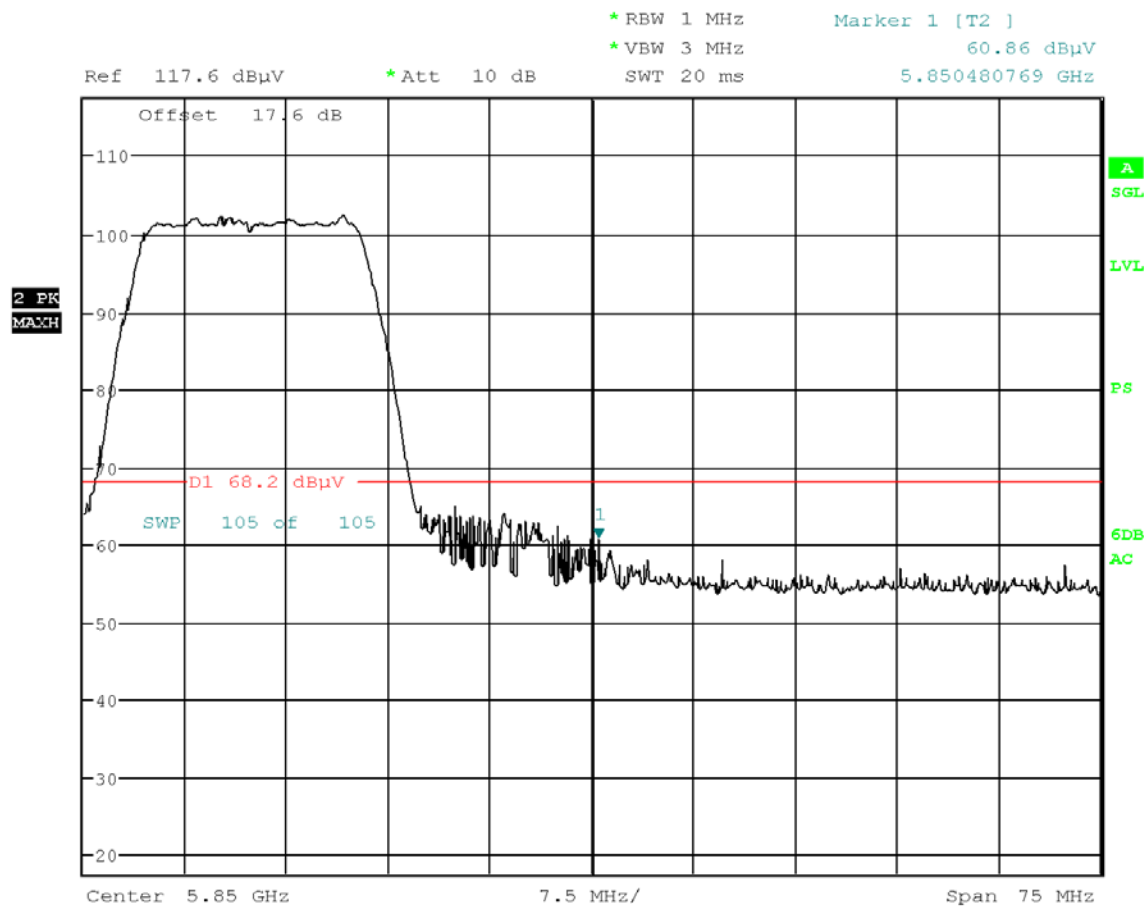
Date: 15.MAY.2013 16:27:24

Plot 6-84. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 78 of 107	

Radiated Band Edge Measurements (20MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (20MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5720MHz
 Channel: 144



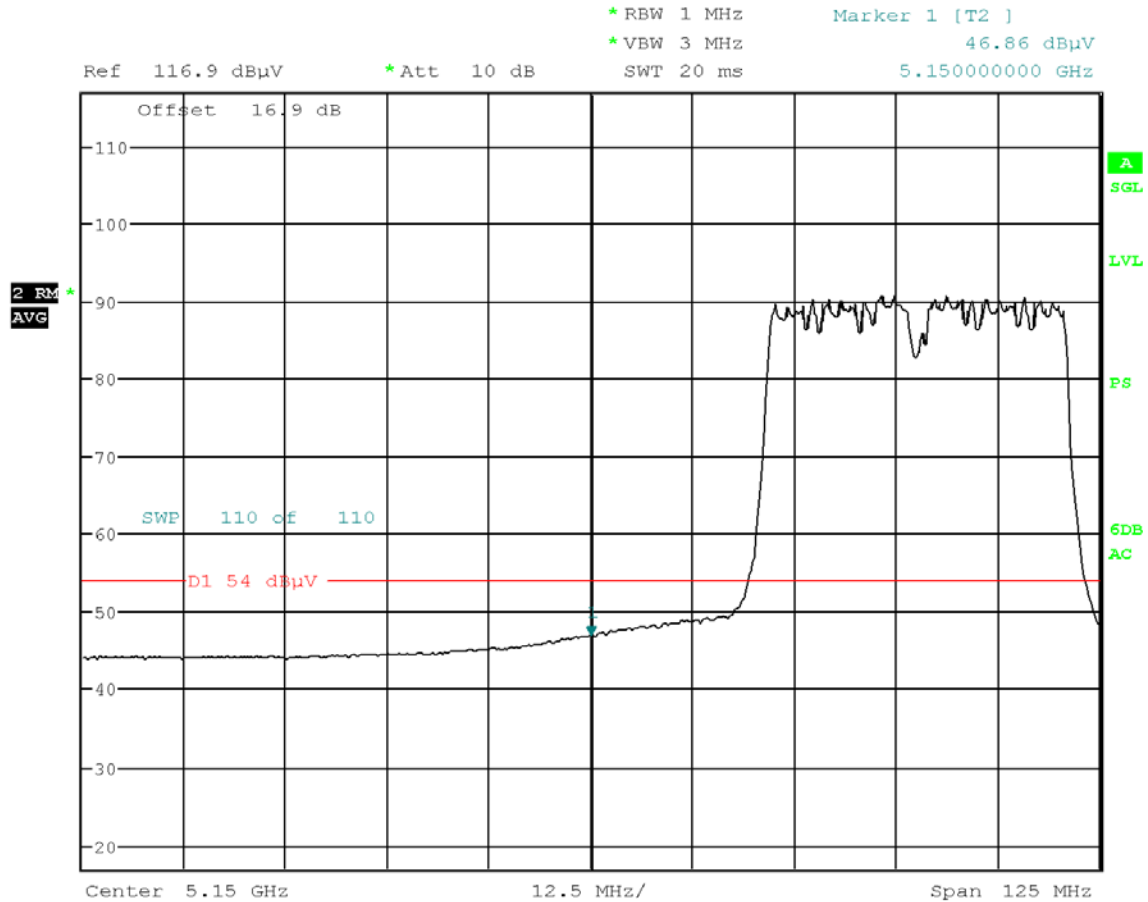
Date: 15.MAY.2013 16:50:05

Plot 6-85. Radiated Non-restricted Upper Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 79 of 107

6.9 Radiated Band Edge Measurements (40MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (40MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5190MHz
 Channel: 38

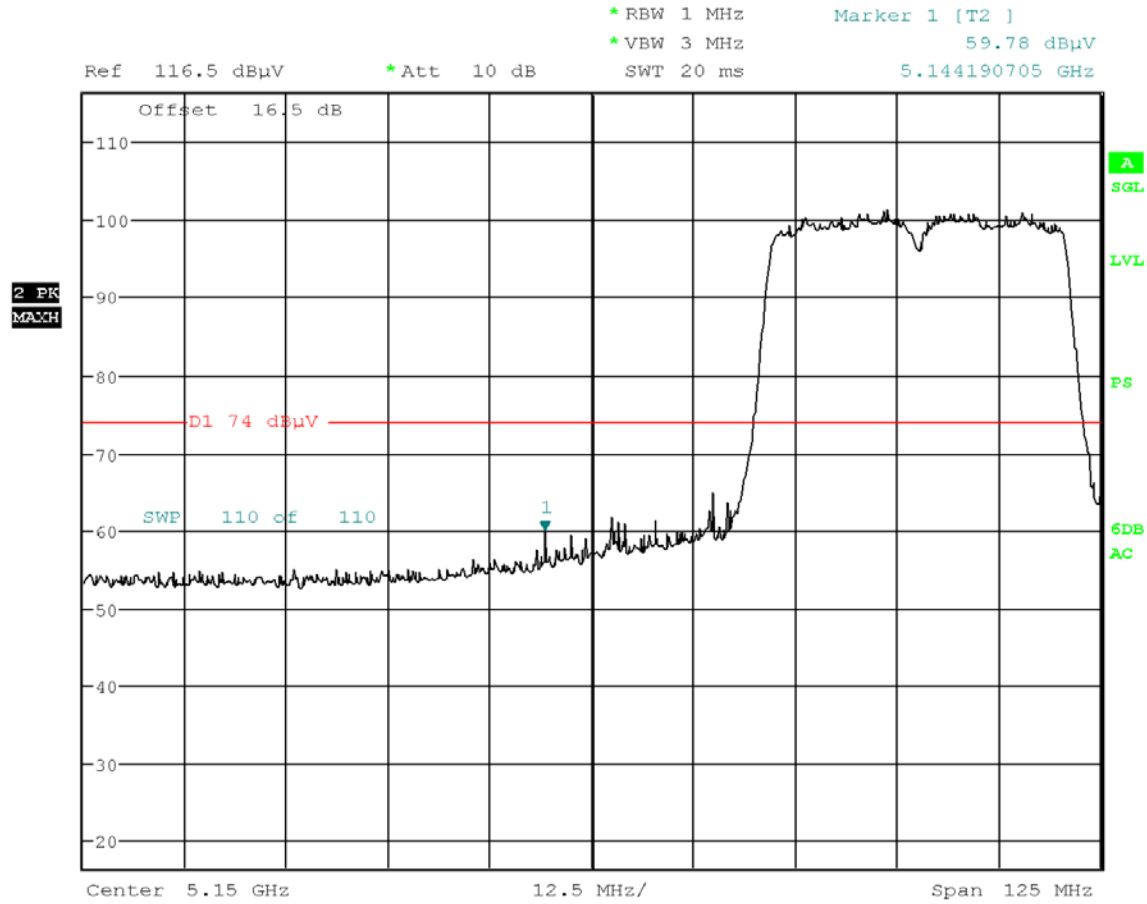


Date: 15.MAY.2013 17:24:23

Plot 6-86. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 80 of 107

Radiated Band Edge Measurements (40MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 15.MAY.2013 17:23:38

Plot 6-87. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 81 of 107

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

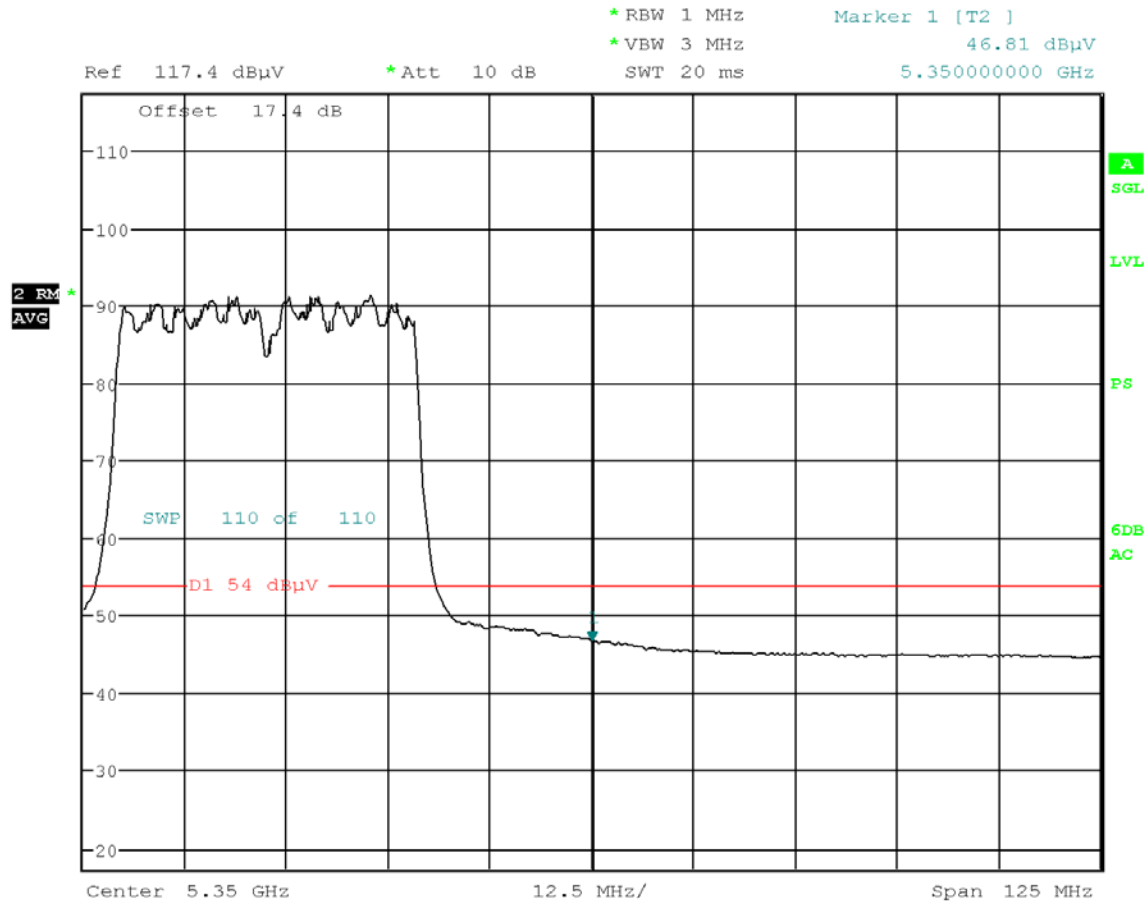
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters



Operating Frequency: 5310MHz

Channel: 62

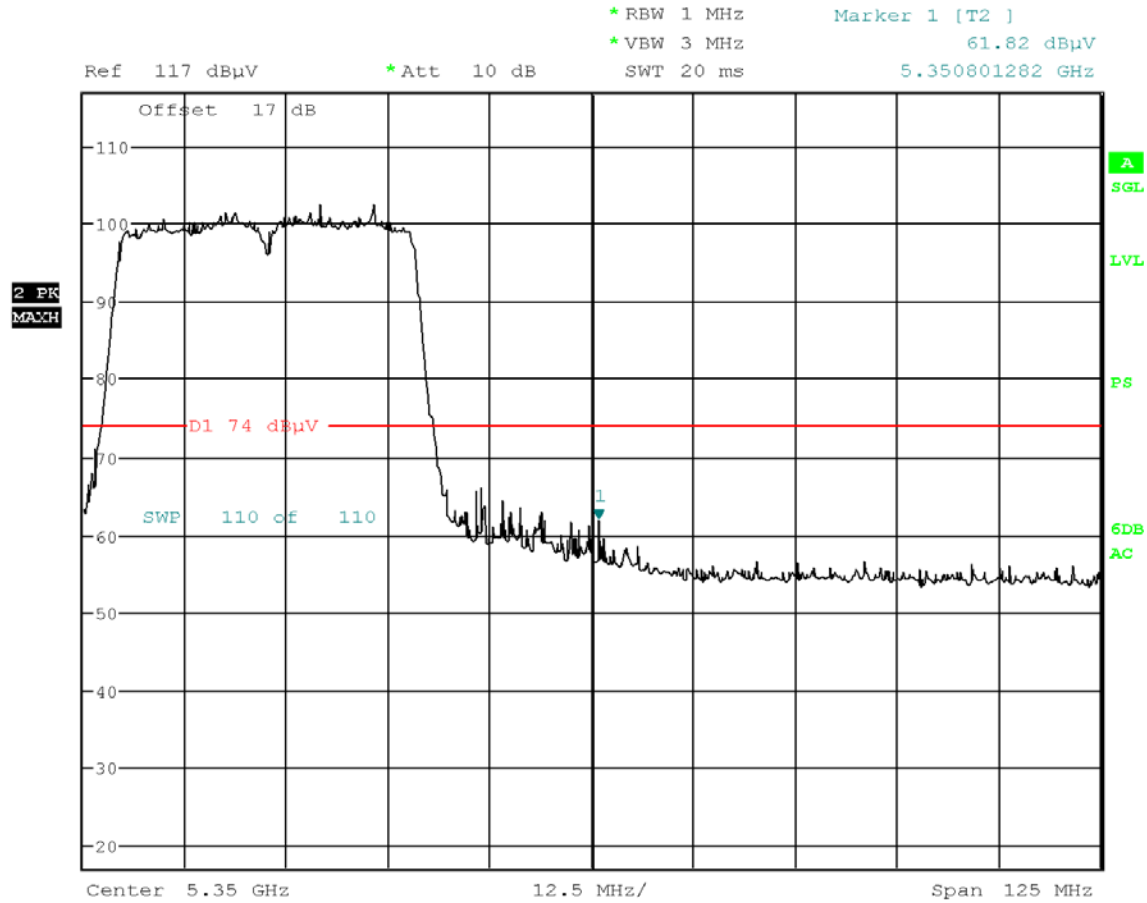


Date: 15.MAY.2013 17:05:29

Plot 6-88. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2)

FCC ID: ZNFLS980		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 82 of 107	

Radiated Band Edge Measurements (40MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



Date: 15.MAY.2013 17:04:43

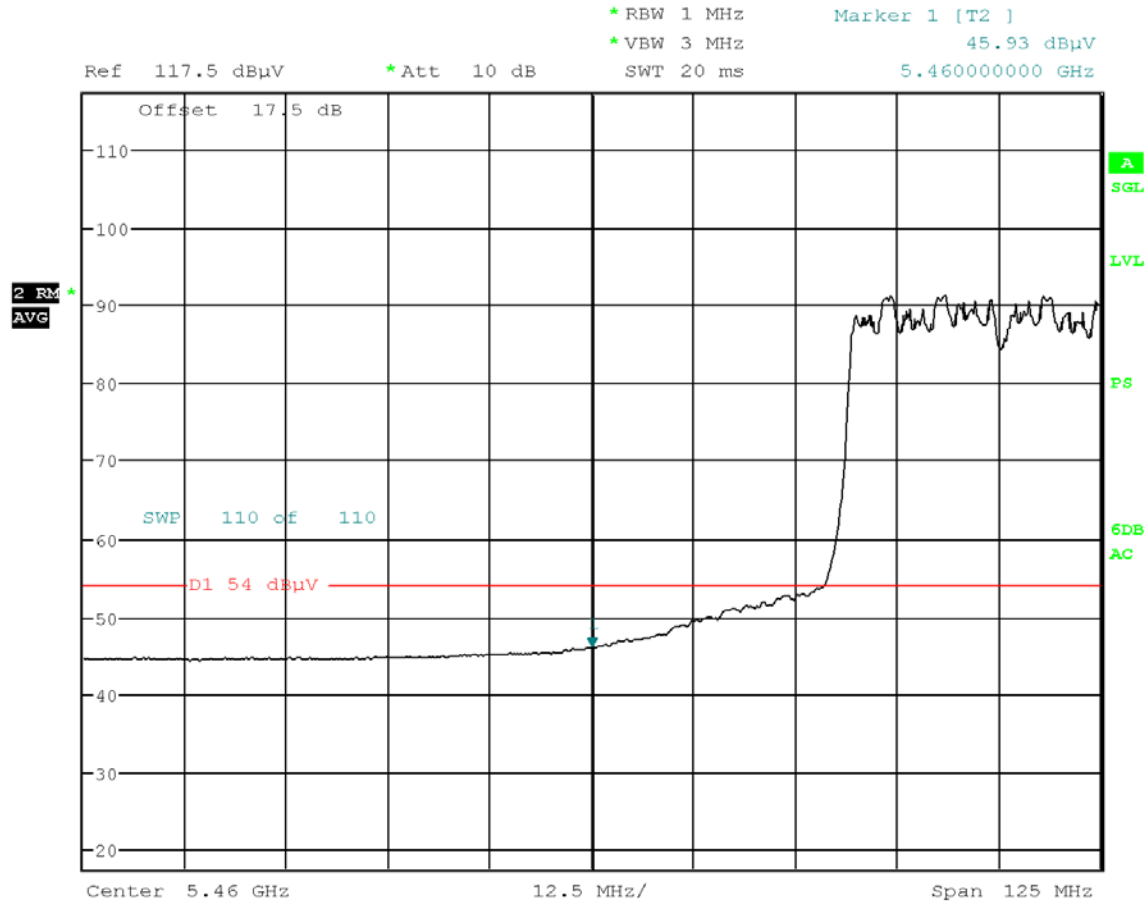
Plot 6-89. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 83 of 107

Radiated Band Edge Measurements (40MHz BW) (Cont'd)

§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (40MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5510MHz
 Channel: 102

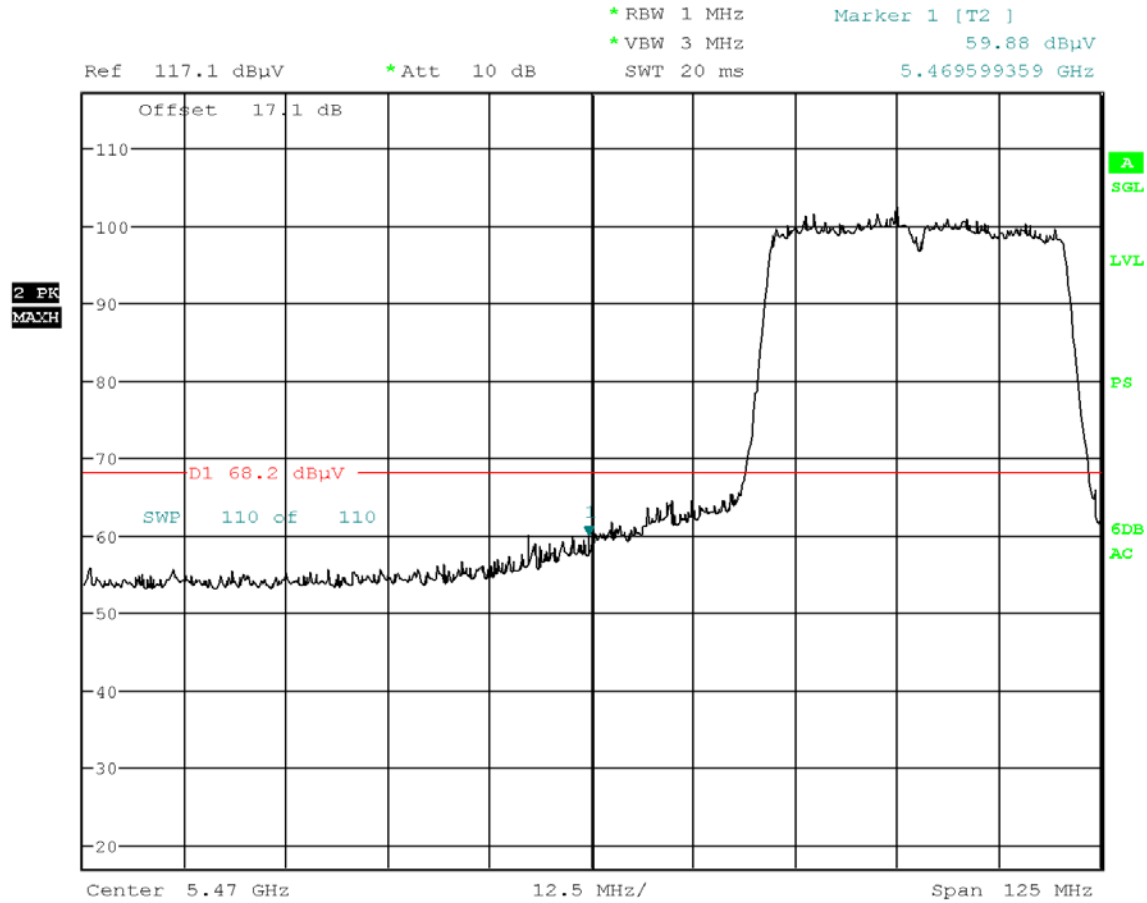


Date: 15.MAY.2013 17:42:08

Plot 6-90. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 84 of 107

Radiated Band Edge Measurements (40MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



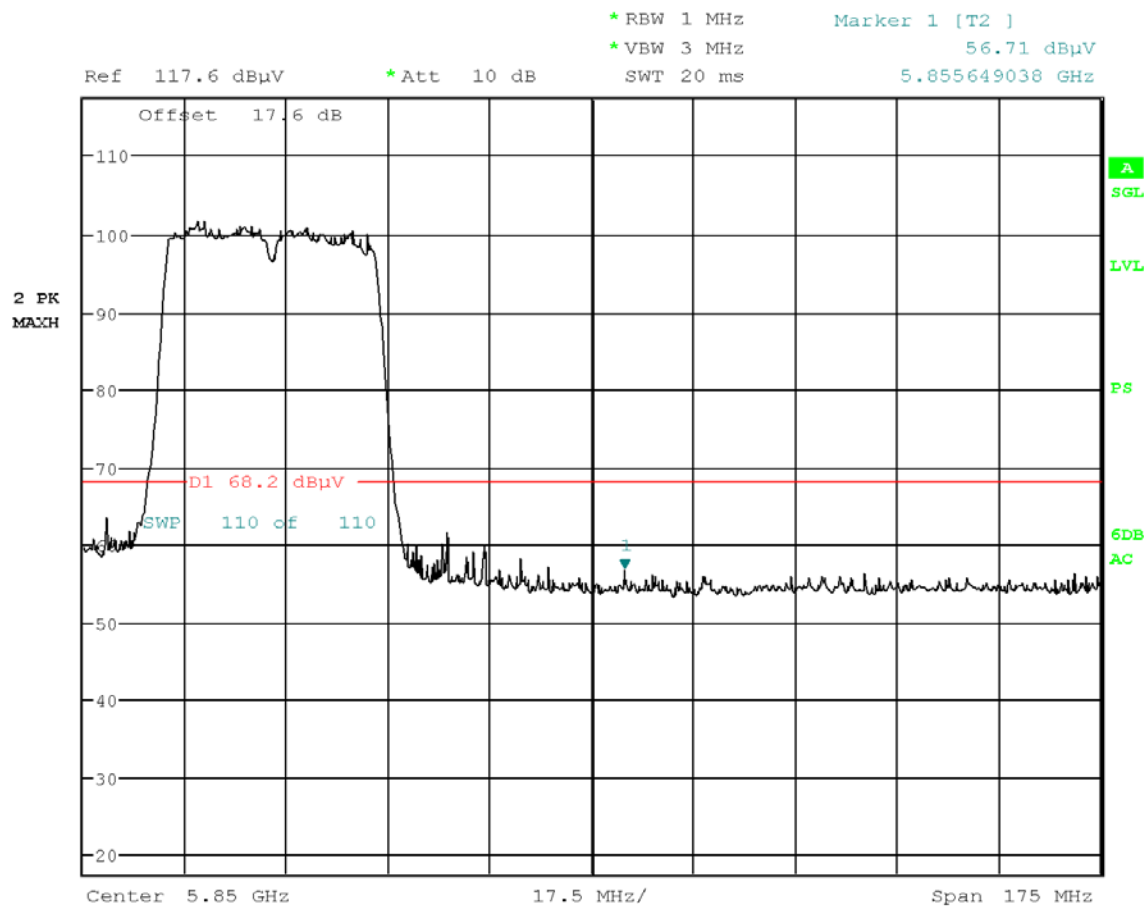
Date: 15.MAY.2013 17:31:15

Plot 6-91. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 85 of 107	

Radiated Band Edge Measurements (40MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11n (40MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5710MHz
 Channel: 142



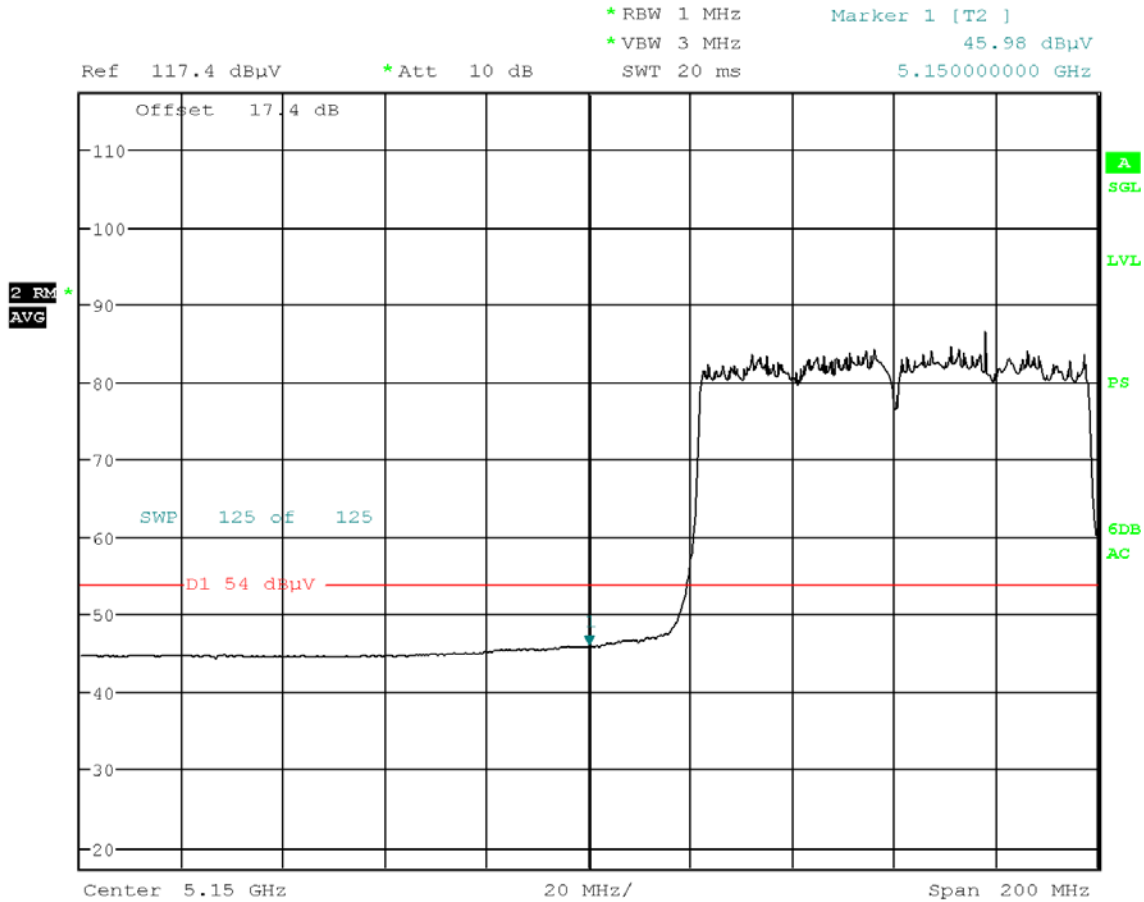
Date: 15.MAY.2013 17:53:26

Plot 6-92. Radiated Non-restricted Upper Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 86 of 107	

6.10 Radiated Band Edge Measurements (80MHz BW) §15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11ac (80MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5210MHz
 Channel: 42

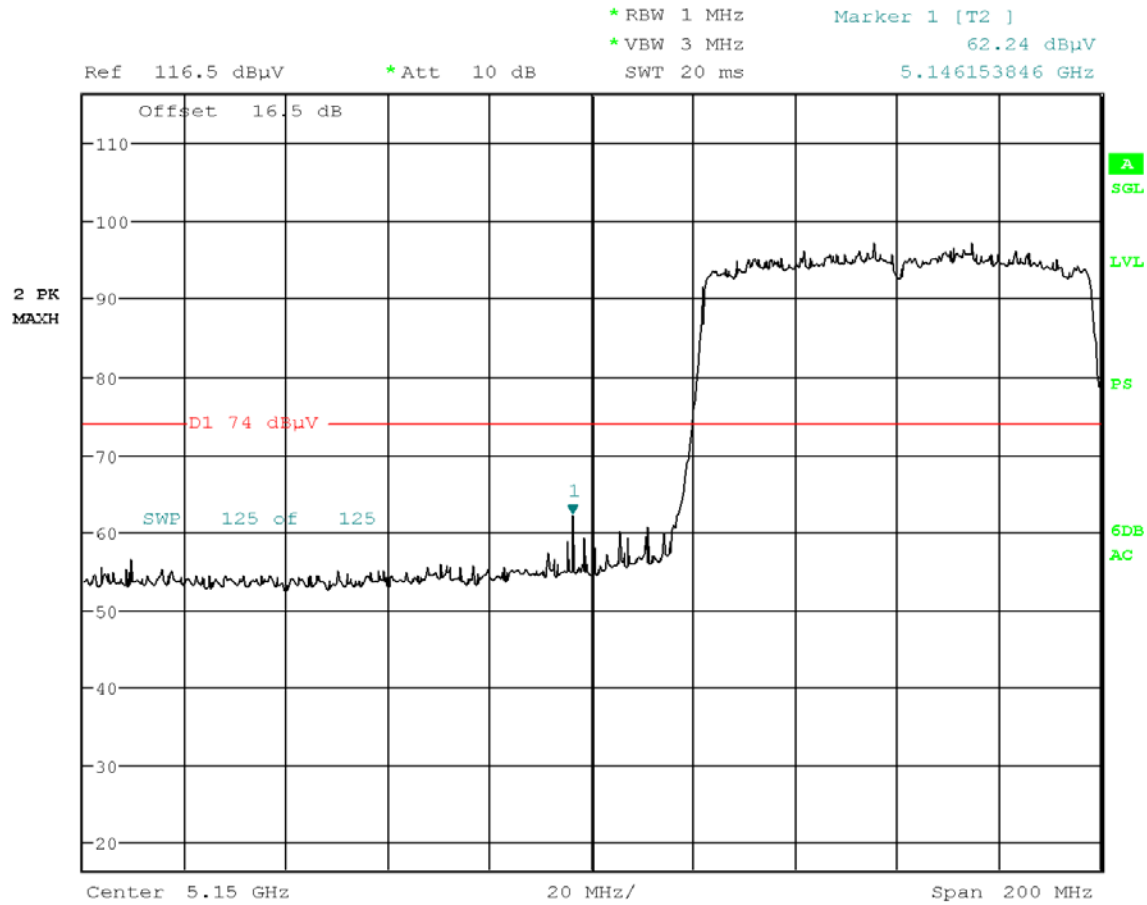


Date: 15.MAY.2013 17:58:32

Plot 6-93. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 87 of 107

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



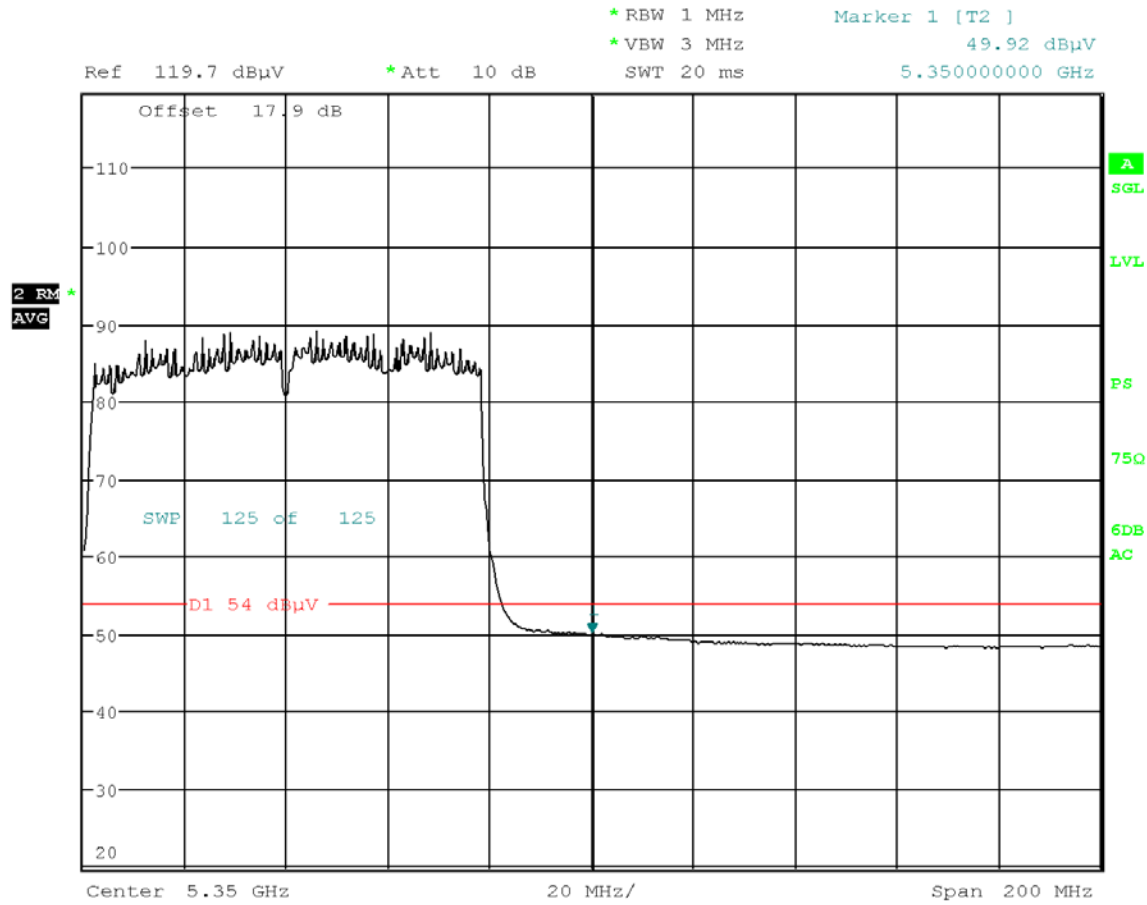
Date: 15.MAY.2013 17:57:36

Plot 6-94. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 88 of 107	

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11ac (80MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5290MHz
 Channel: 58

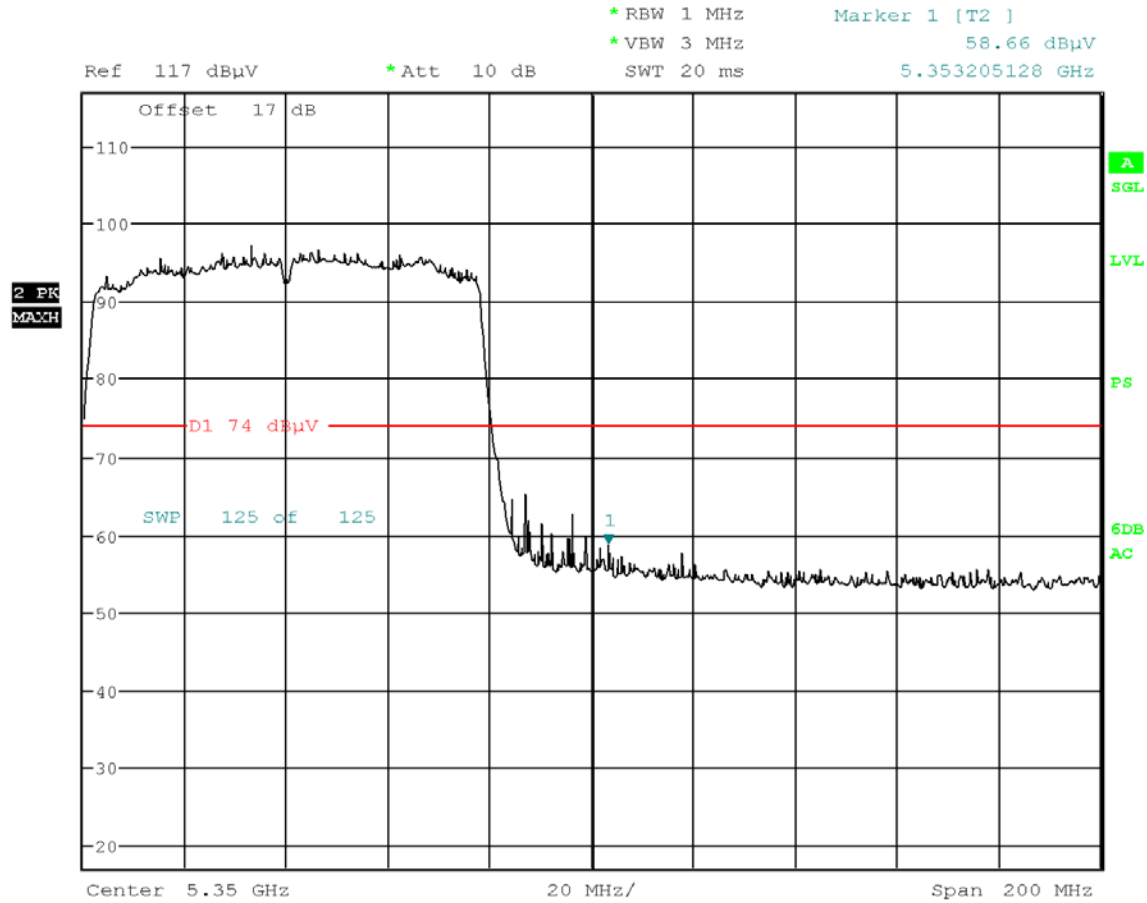


Date: 15.MAY.2013 18:04:18

Plot 6-95. Radiated Restricted Upper Band Edge Plot (Average – UNII Band 2)



FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 89 of 107

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



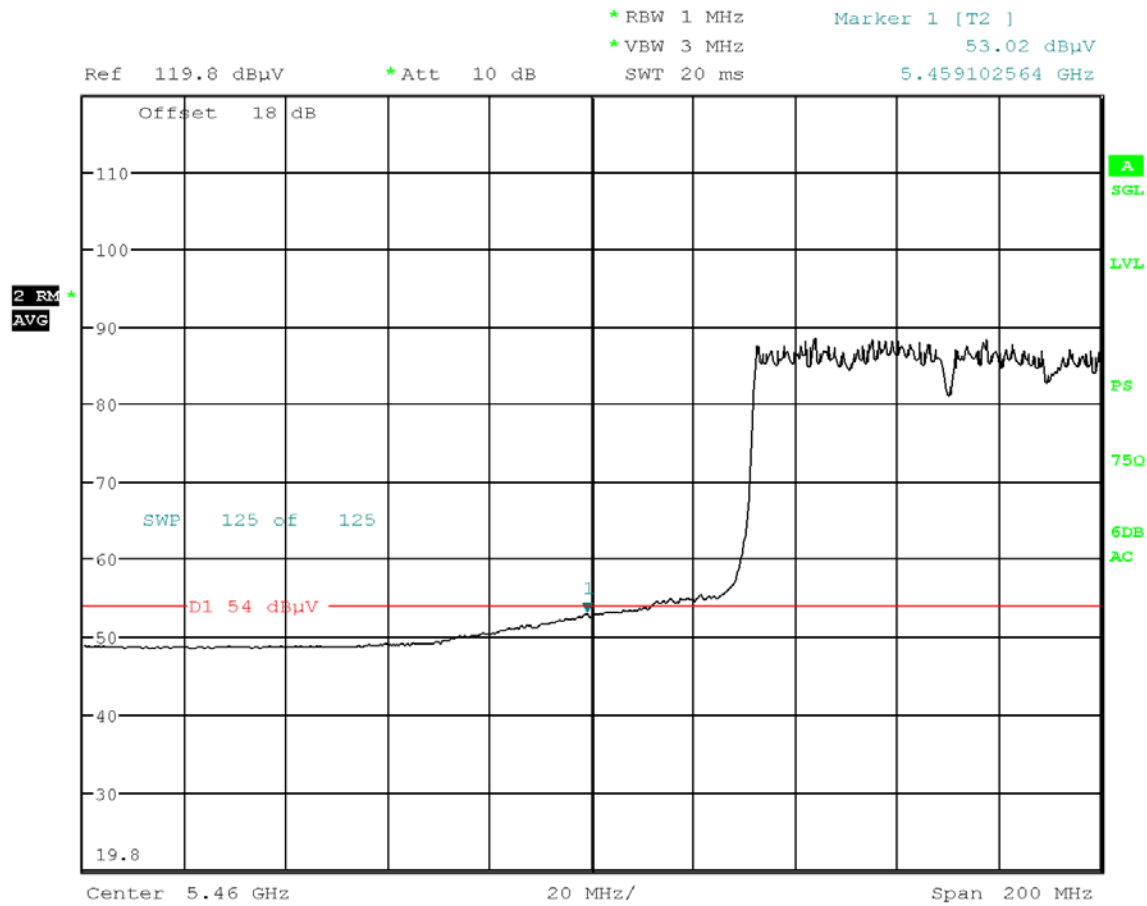
Date: 15.MAY.2013 18:02:36

Plot 6-96. Radiated Restricted Upper Band Edge Plot (Peak – UNII Band 2)

FCC ID: ZNFLS980		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 90 of 107	

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11ac (80MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5530MHz
 Channel: 106

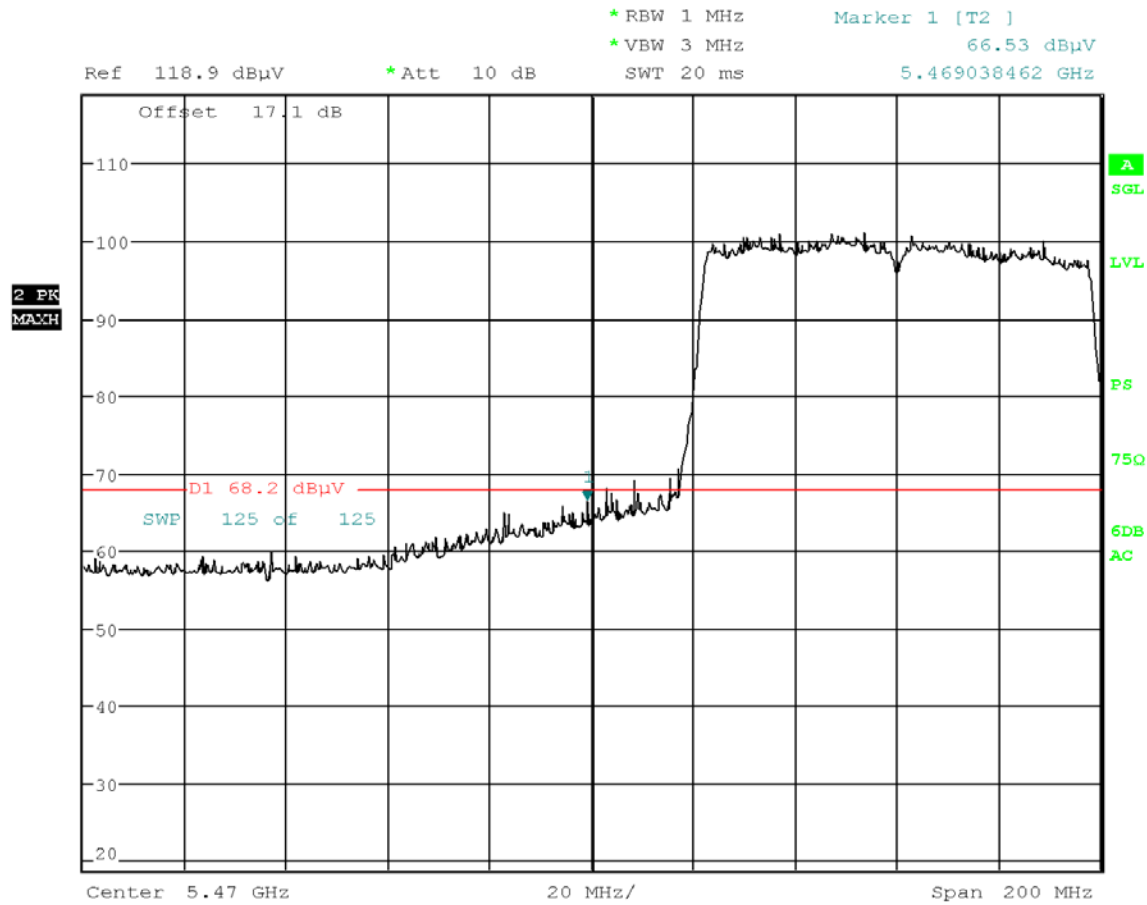


Date: 15.MAY.2013 18:08:55

Plot 6-97. Radiated Restricted Lower Band Edge Plot (Average – UNII Band 3)



FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 91 of 107

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]



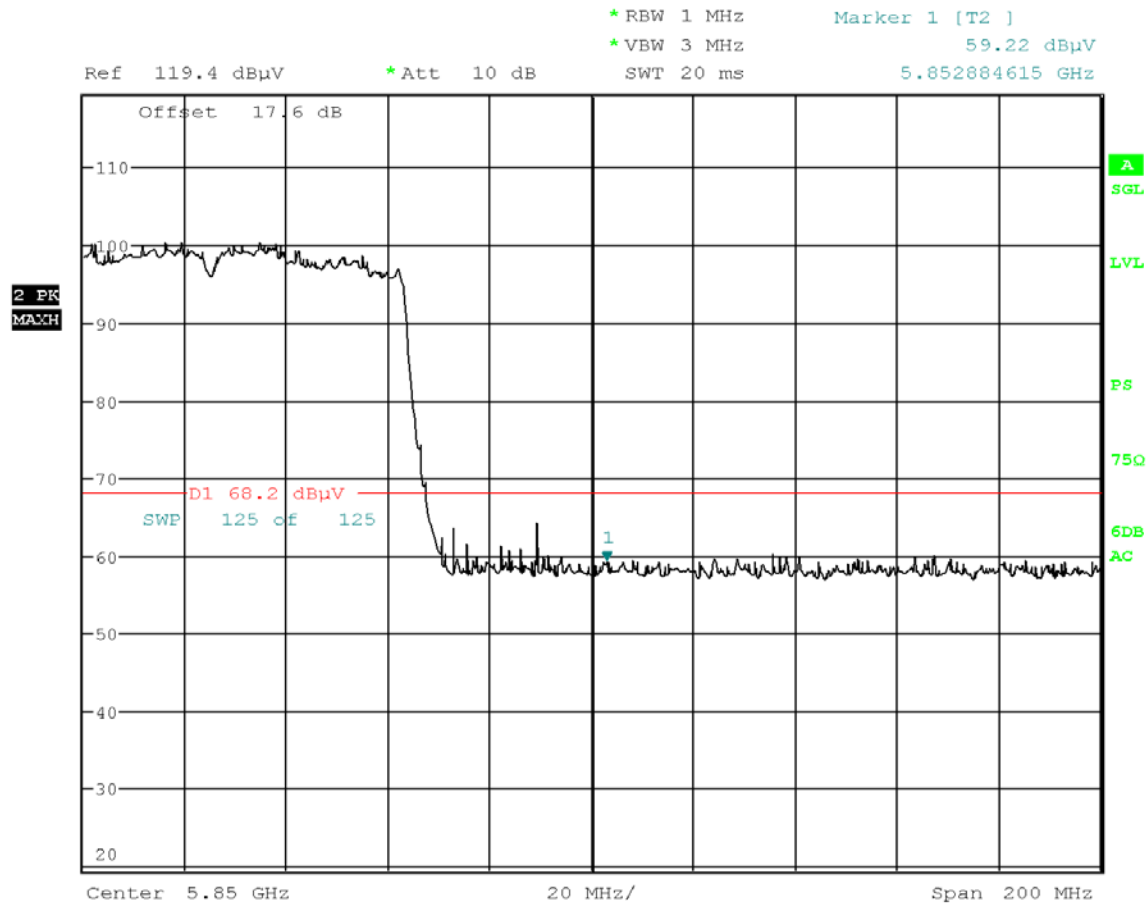
Date: 15.MAY.2013 18:07:49

Plot 6-98. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 92 of 107	

Radiated Band Edge Measurements (80MHz BW) (Cont'd)
§15.407(b)(1) and (2), §15.205 & §15.209; RSS-210 [A9.2]

Worst Case Mode: 802.11ac (80MHz)
 Worst Case Transfer Rate: MCS0
 Distance of Measurements: 3 Meters
 Operating Frequency: 5775MHz
 Channel: 155



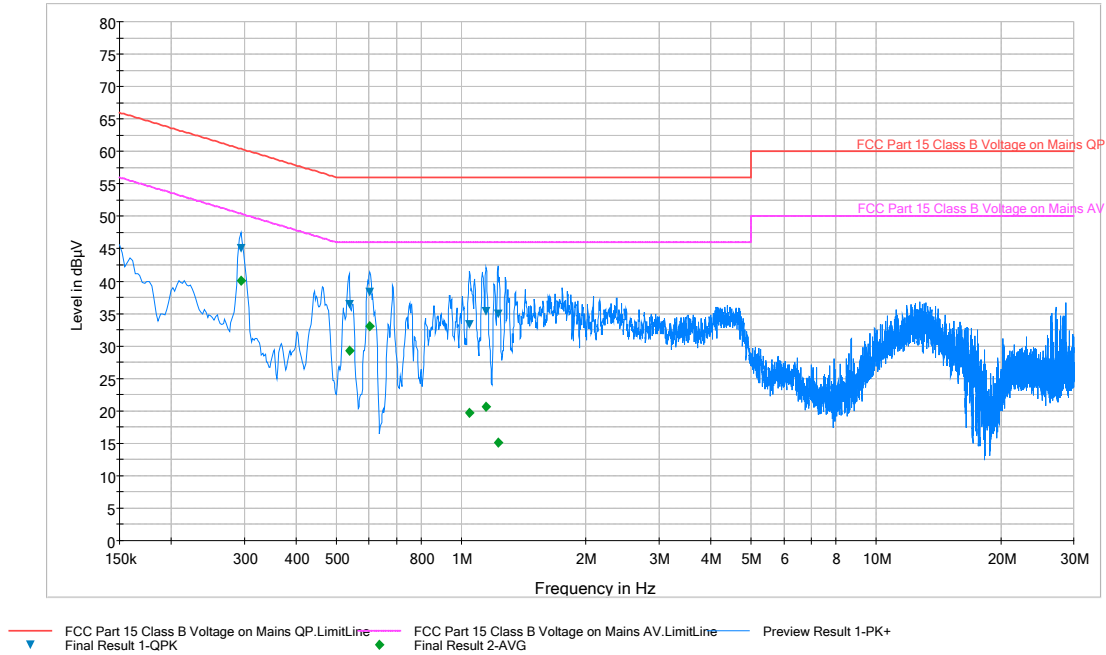
Date: 15.MAY.2013 18:12:32

Plot 6-99. Radiated Non-restricted Upper Band Edge Plot (Peak – UNII Band 3)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 93 of 107

6.11 Line-Conducted Test Data

§15.207; RSS-Gen [7.2.2]



Plot 6-100. Line Conducted Plot with 802.11a UNII Band 1 (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	L1	0.1	45.10	60.40	15.30	40.00	50.40	10.40
0.537	L1	0.1	36.40	56.00	19.60	29.30	46.00	16.70
0.602	L1	0.1	38.30	56.00	17.70	33.00	46.00	13.00
1.048	L1	0.2	33.30	56.00	22.70	19.70	46.00	26.30
1.149	L1	0.2	35.30	56.00	20.70	20.70	46.00	25.30
1.228	L1	0.2	35.00	56.00	21.00	15.20	46.00	30.80

Table 6-28. Line Conducted Data with 802.11a UNII Band 1 (L1)

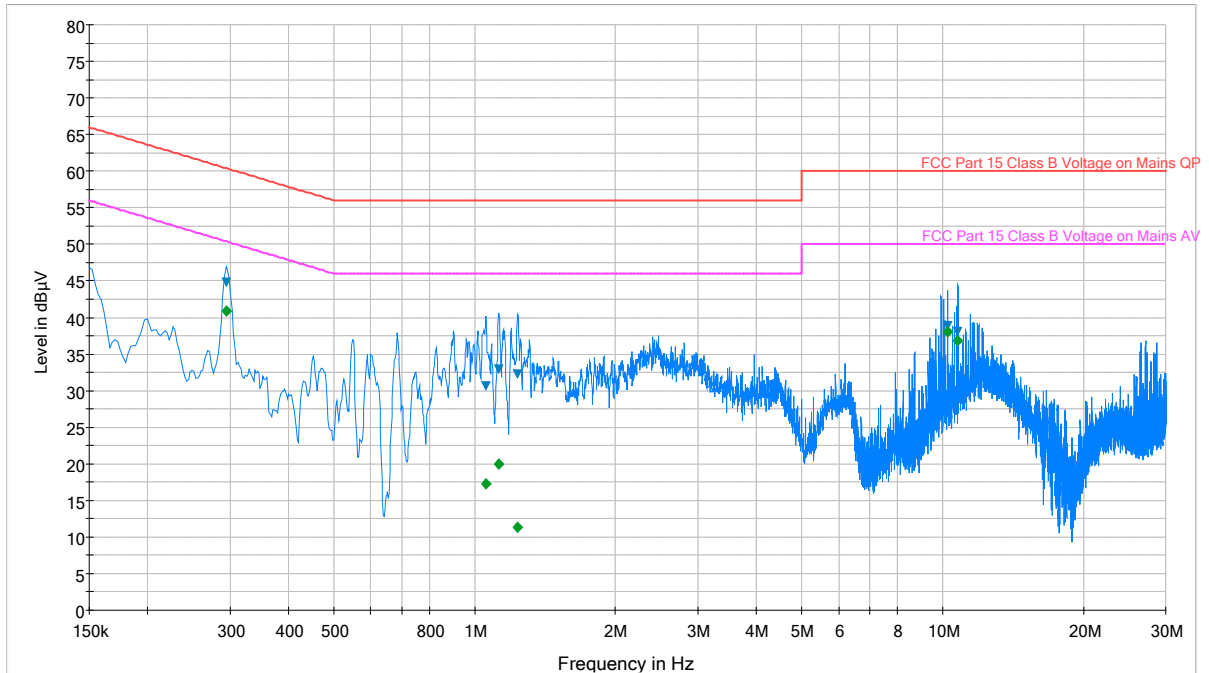
Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 94 of 107

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine
— FCC Part 15 Class B Voltage on Mains AV.LimitLine
— Preview Result 1-PK+
▼ Final Result 1-QPK
◆ Final Result 2-AVG

Plot 6-101. Line Conducted Plot with 802.11a UNII Band 1 (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	N	0.2	44.80	60.40	15.60	40.80	50.40	9.60
1.057	N	0.2	30.70	56.00	25.30	17.20	46.00	28.80
1.127	N	0.2	32.90	56.00	23.10	19.90	46.00	26.10
1.237	N	0.2	32.20	56.00	23.80	11.40	46.00	34.60
10.244	N	0.4	38.80	60.00	21.20	38.10	50.00	11.90
10.793	N	0.4	38.00	60.00	22.00	36.80	50.00	13.20



Table 6-29. Line Conducted Data with 802.11a UNII Band 1 (N)

Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 36. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

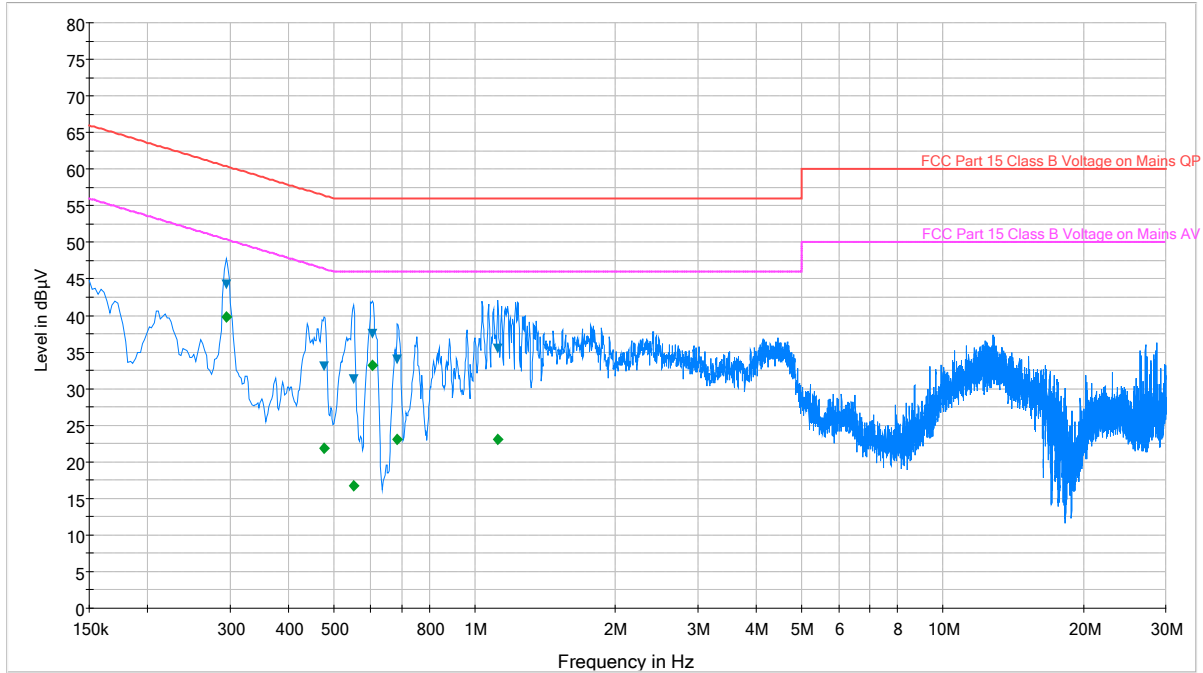
FCC ID: ZNFLS980		FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 95 of 107

8. Deviations to the Specifications: None.

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Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset	Page 96 of 107	

Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-102. Line Conducted Plot with 802.11a UNII Band 2 (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	L1	0.1	44.30	60.40	16.10	39.70	50.40	10.70
0.476	L1	0.1	33.10	56.40	23.30	21.90	46.40	24.50
0.551	L1	0.1	31.30	56.00	24.70	16.70	46.00	29.30
0.605	L1	0.1	37.50	56.00	18.50	33.20	46.00	12.80
0.683	L1	0.1	34.00	56.00	22.00	23.10	46.00	22.90
1.120	L1	0.2	35.50	56.00	20.50	23.00	46.00	23.00



Table 6-30. Line Conducted Data with 802.11a UNII Band 2 (L1)

Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 52. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

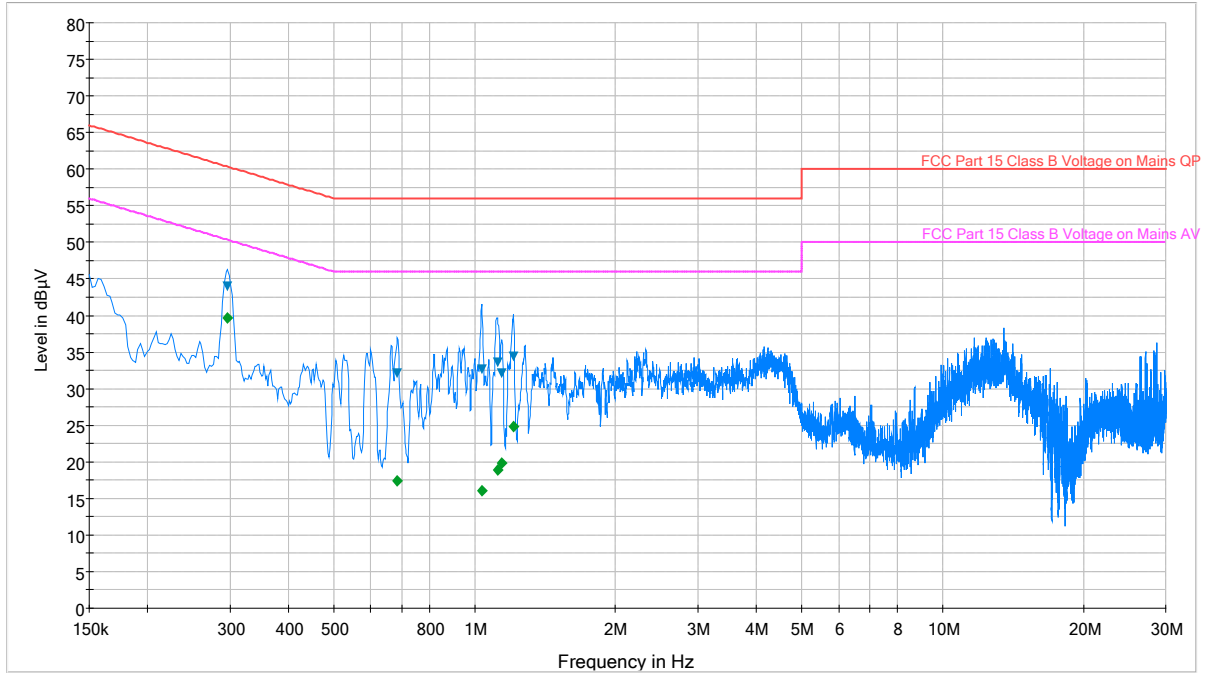
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 97 of 107

8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-103. Line Conducted Plot with 802.11a UNII Band 2 (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.296	N	0.2	44.00	60.30	16.30	39.60	50.30	10.70
0.683	N	0.1	32.10	56.00	23.90	17.40	46.00	28.60
1.034	N	0.2	32.70	56.00	23.30	16.10	46.00	29.90
1.120	N	0.2	33.60	56.00	22.40	18.90	46.00	27.10
1.145	N	0.2	32.10	56.00	23.90	19.80	46.00	26.20
1.210	N	0.2	34.40	56.00	21.60	24.80	46.00	21.20



Table 6-31. Line Conducted Data with 802.11a UNII Band 2 (N)

Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 52. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

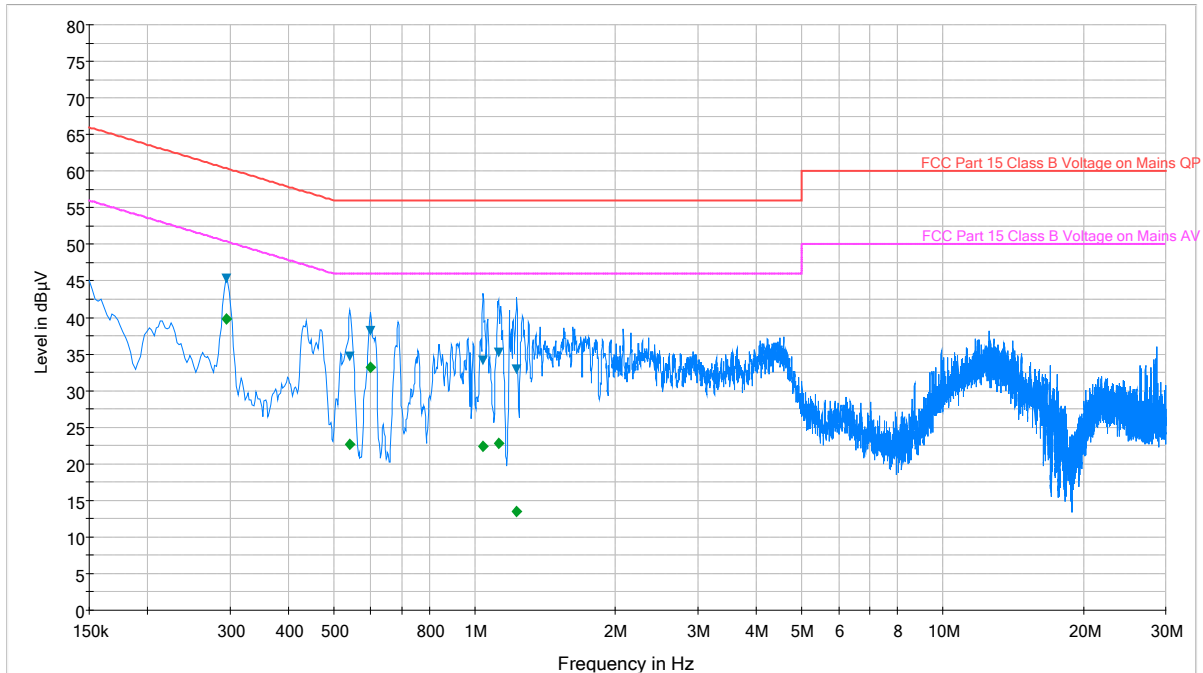
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
Test Report S/N: 0Y1305140846.ZNF	Test Dates: 5/14 - 5/23/2013	EUT Type: Portable Handset		Page 99 of 107

8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-104. Line Conducted Plot with 802.11a UNII Band 3 (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	L1	0.1	45.30	60.40	15.10	39.70	50.40	10.70
0.542	L1	0.1	34.70	56.00	21.30	22.70	46.00	23.30
0.600	L1	0.1	38.10	56.00	17.90	33.10	46.00	12.90
1.043	L1	0.2	34.10	56.00	21.90	22.40	46.00	23.60
1.124	L1	0.2	35.20	56.00	20.80	22.70	46.00	23.30
1.230	L1	0.2	33.00	56.00	23.00	13.60	46.00	32.40



Table 6-32. Line Conducted Plot with 802.11a UNII Band 3 (L1)

Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 100. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

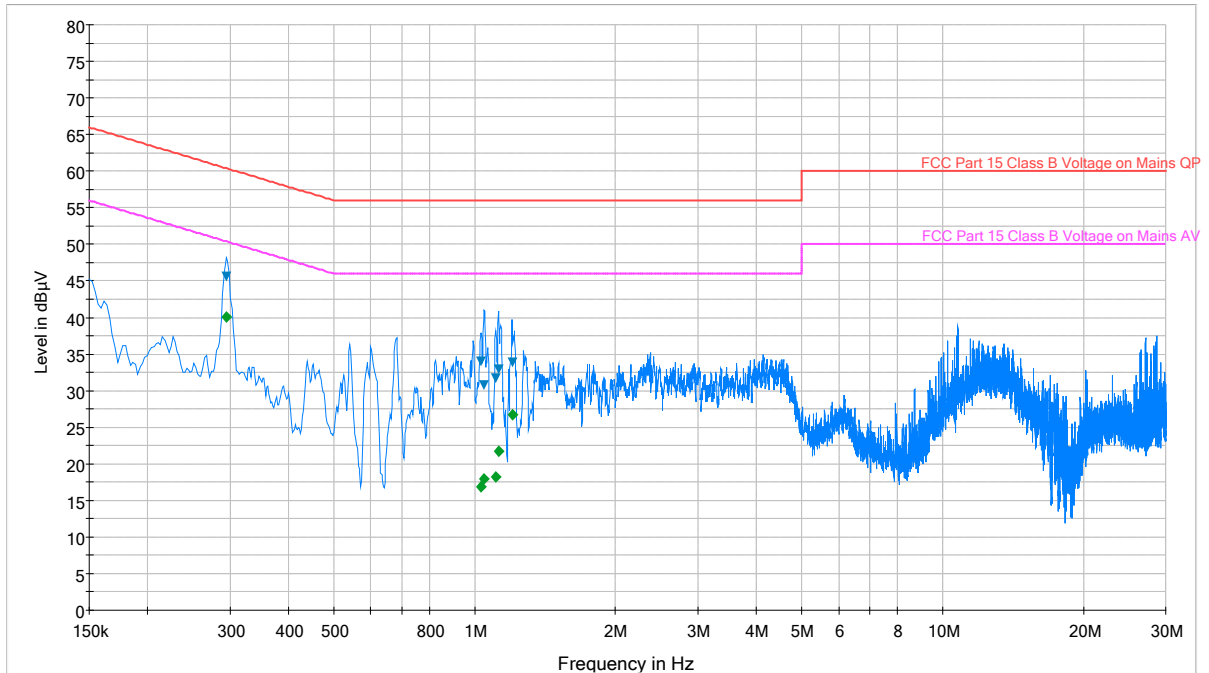
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine
— FCC Part 15 Class B Voltage on Mains AV.LimitLine
— Preview Result 1-PK+
▼ Final Result 1-QPK
◆ Final Result 2-AVG

Plot 6-105. Line Conducted Plot with 802.11a UNII Band 3 (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	N	0.2	45.60	60.40	14.80	40.10	50.40	10.30
1.032	N	0.2	33.90	56.00	22.10	16.80	46.00	29.20
1.048	N	0.2	30.70	56.00	25.30	17.90	46.00	28.10
1.109	N	0.2	31.70	56.00	24.30	18.20	46.00	27.80
1.124	N	0.2	33.00	56.00	23.00	21.70	46.00	24.30
1.203	N	0.2	33.80	56.00	22.20	26.70	46.00	19.30

Table 6-33. Line Conducted Data with 802.11a UNII Band 3 (N)

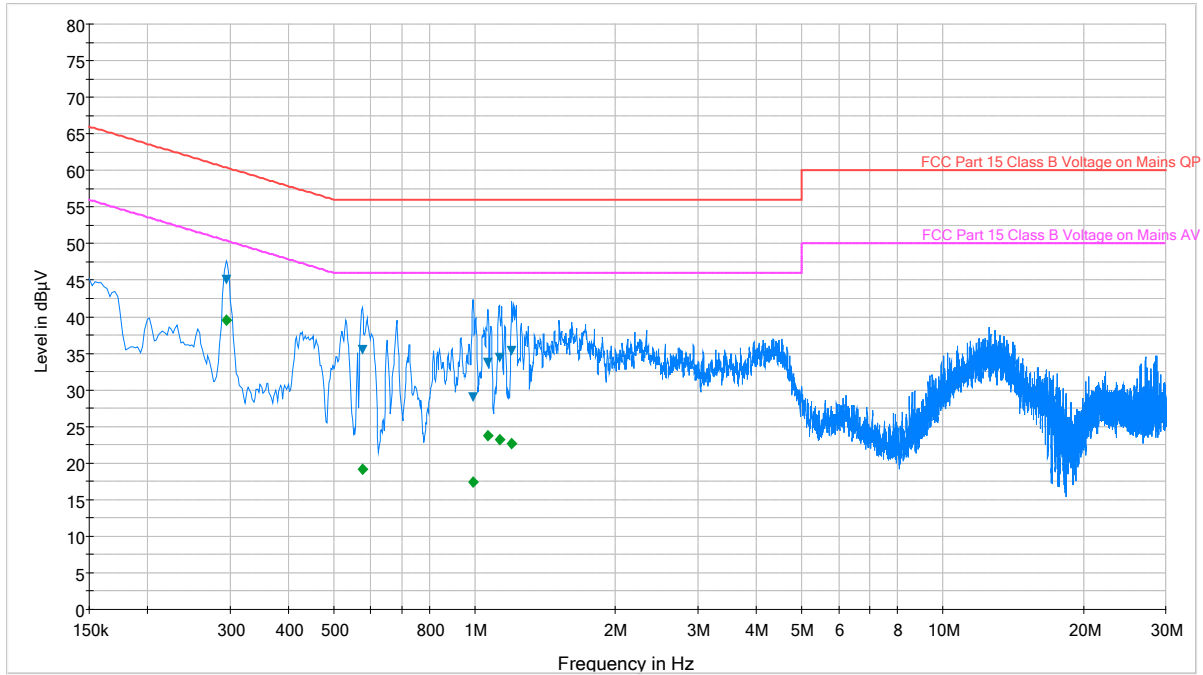
Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 100. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- L1 = Phase; N = Neutral
- Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
- Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

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8. Deviations to the Specifications: None.

Line-Conducted Test Data (Cont'd)
§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine
 — FCC Part 15 Class B Voltage on Mains AV.LimitLine
 — Preview Result 1-PK+
▼ Final Result 1-QPK
◆ Final Result 2-AVG

Plot 6-106. Line Conducted Plot with 802.11a UNII Band 4 (L1)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	L1	0.1	45.10	60.40	15.30	39.50	50.40	10.90
0.575	L1	0.1	35.40	56.00	20.60	19.20	46.00	26.80
0.992	L1	0.1	29.00	56.00	27.00	17.50	46.00	28.50
1.068	L1	0.2	33.70	56.00	22.30	23.70	46.00	22.30
1.129	L1	0.2	34.40	56.00	21.60	23.20	46.00	22.80
1.201	L1	0.2	35.30	56.00	20.70	22.60	46.00	23.40



Table 6-34. Line Conducted Data with 802.11a UNII Band 4 (L1)

Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 157. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
- Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.

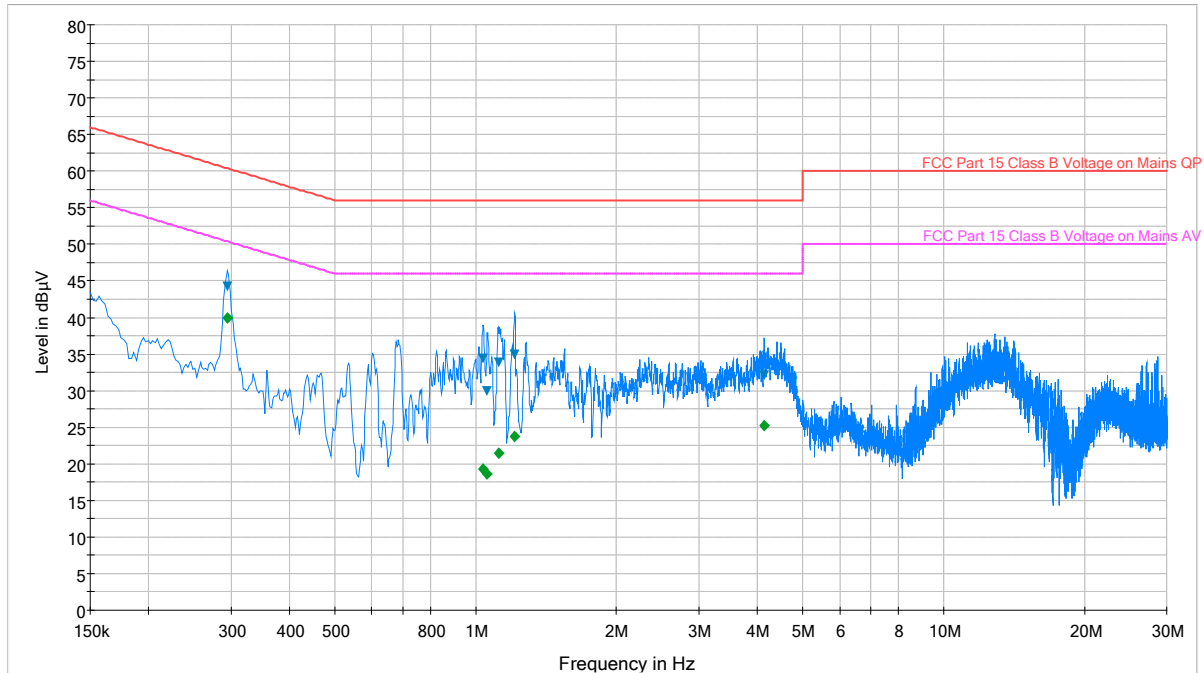
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)		Reviewed by: Quality Manager
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7. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



— FCC Part 15 Class B Voltage on Mains QP.LimitLine — FCC Part 15 Class B Voltage on Mains AV.LimitLine — Preview Result 1-PK+
▼ Final Result 1-QPK ◆ Final Result 2-AVG

Plot 6-107. Line Conducted Plot with 802.11a UNII Band 4 (N)

Frequency MHz	Line	Corr. dB	QuasiPeak dBµV	Limit dBµV	Margin dB	Average dBµV	Limit dBµV	Margin dB
0.294	N	0.2	44.20	60.40	16.20	39.90	50.40	10.50
1.039	N	0.2	34.40	56.00	21.60	19.20	46.00	26.80
1.059	N	0.2	29.90	56.00	26.10	18.60	46.00	27.40
1.122	N	0.2	33.90	56.00	22.10	21.40	46.00	24.60
1.212	N	0.2	35.00	56.00	21.00	23.70	46.00	22.30
4.137	N	0.2	32.10	56.00	23.90	25.20	46.00	20.80

Table 6-35. Line Conducted Data with 802.11a UNII Band 4 (N)



Notes:

- All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 157. The emissions found were not affected by the choice of channel used during testing.
- The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
- Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
- QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
- Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
- Traces shown in plot are made using a peak detector.
- Deviations to the Specifications: None.

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7.0 CONCLUSION

The data collected relate only the item(s) tested and show that the **LG Portable Handset FCC ID: ZNFLS980** is in compliance with Part 15E of the FCC Rules.

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