

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

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 72 of 107

6.8 Radiated Band Edge Measurements (20MHz BW)

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

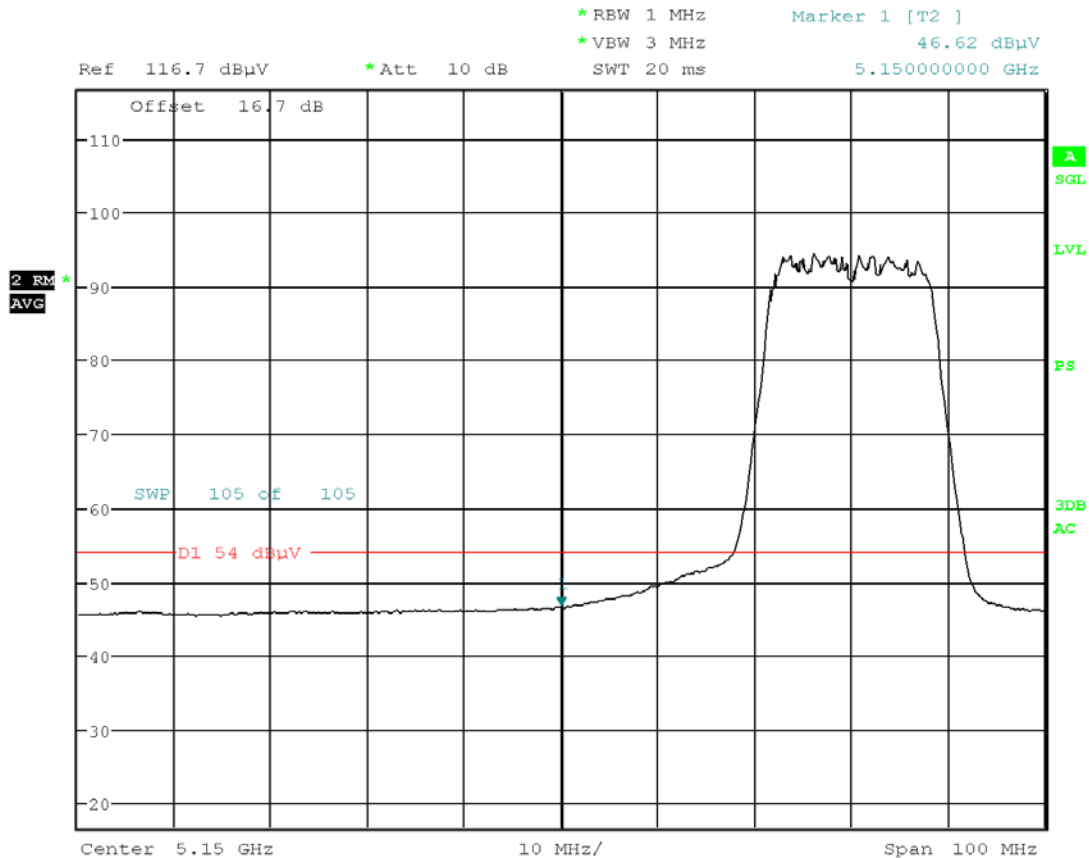
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5180MHz

Channel: 36



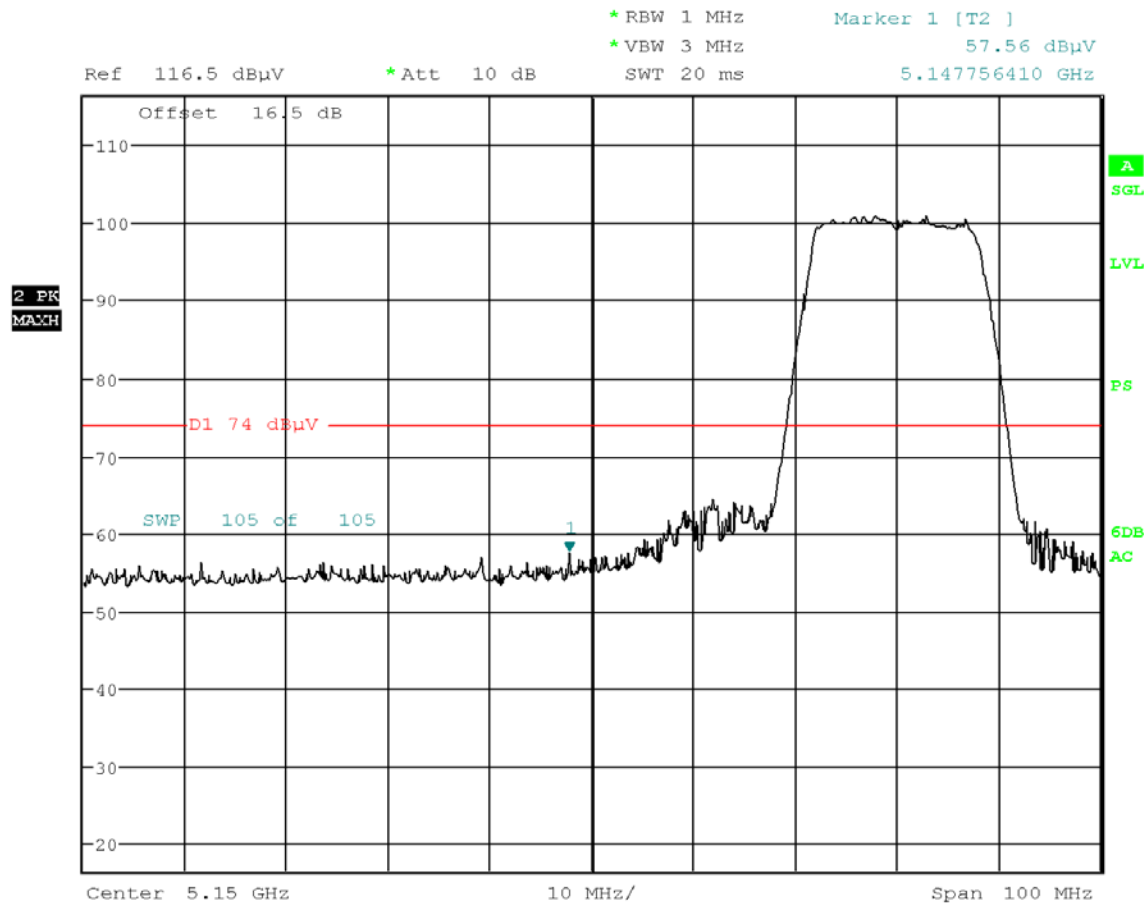
Date: 15.MAY.2013 15:52:33

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)	LG	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)	LG	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]

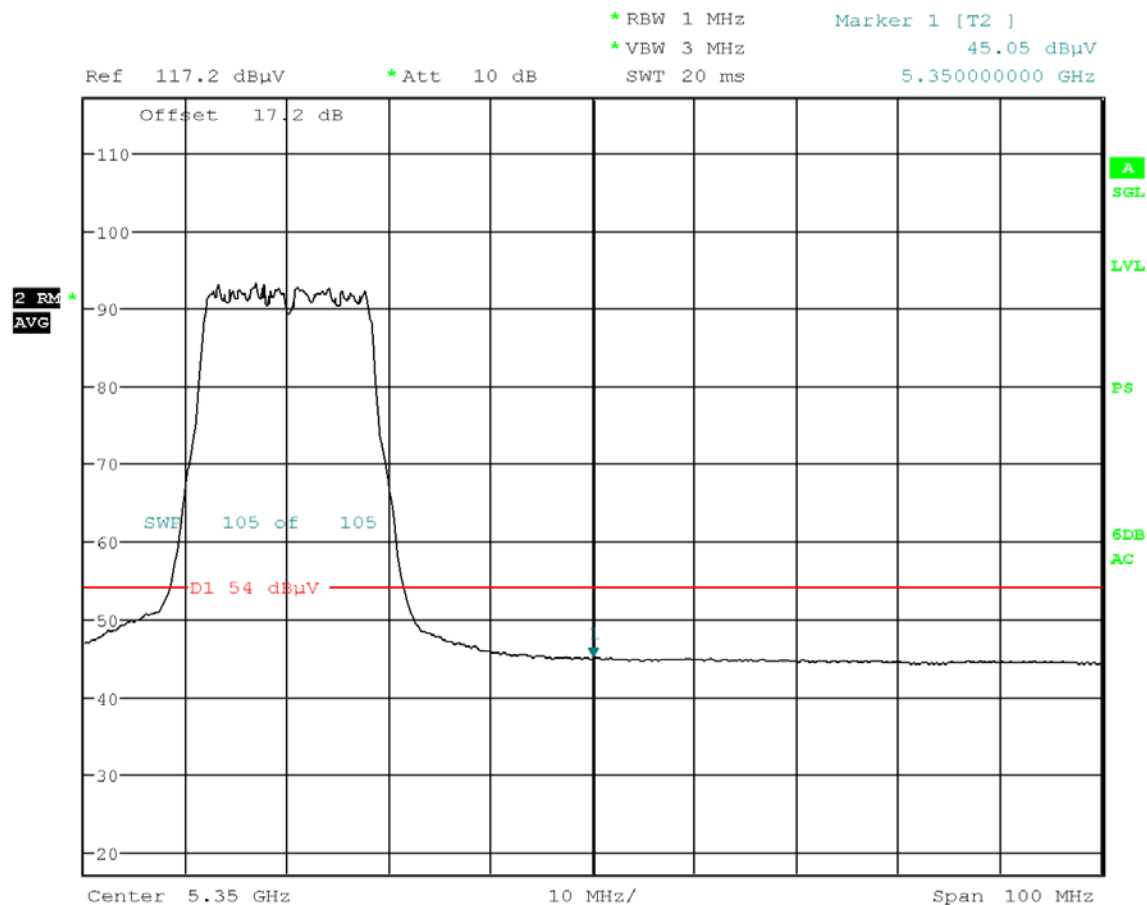
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5320MHz

Channel: 64



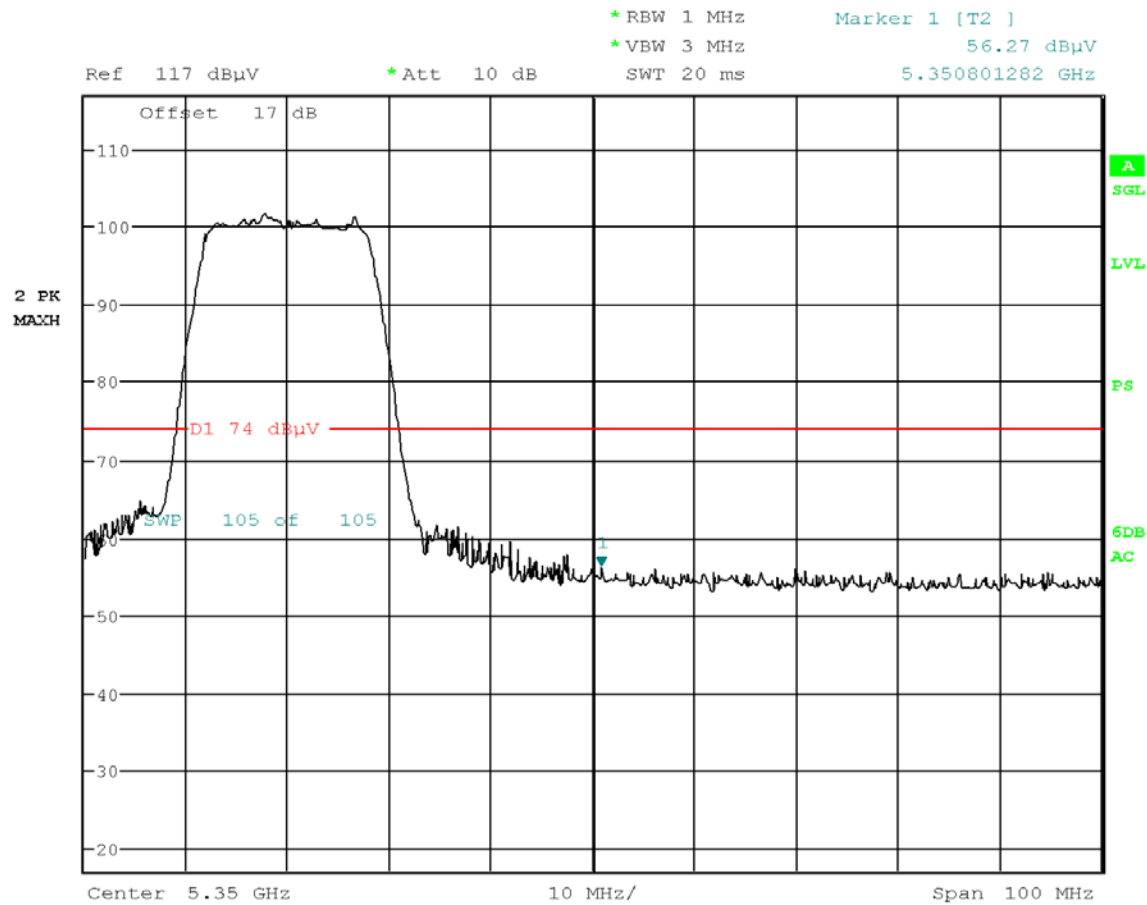
Date: 15.MAY.2013 16:07:53

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)	LG	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]

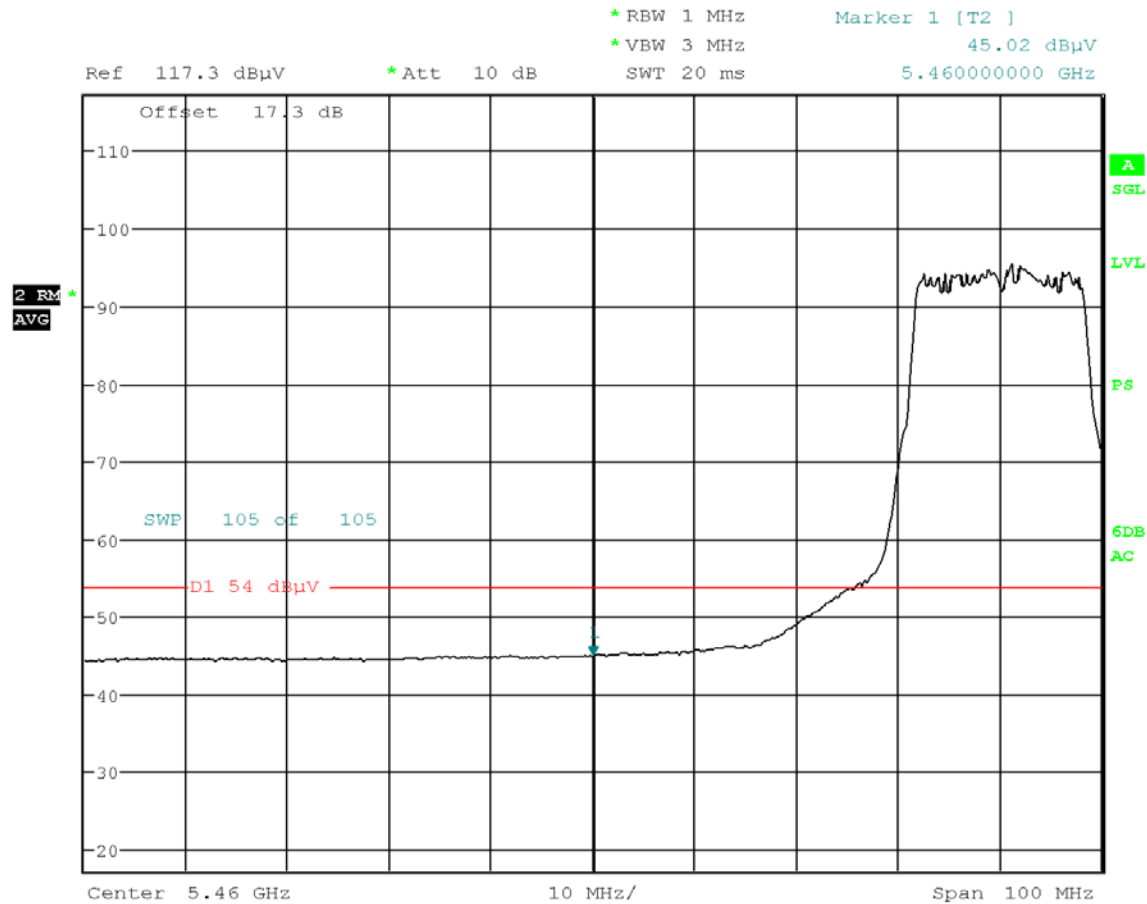
Worst Case Mode: 802.11n (20MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5500MHz

Channel: 100



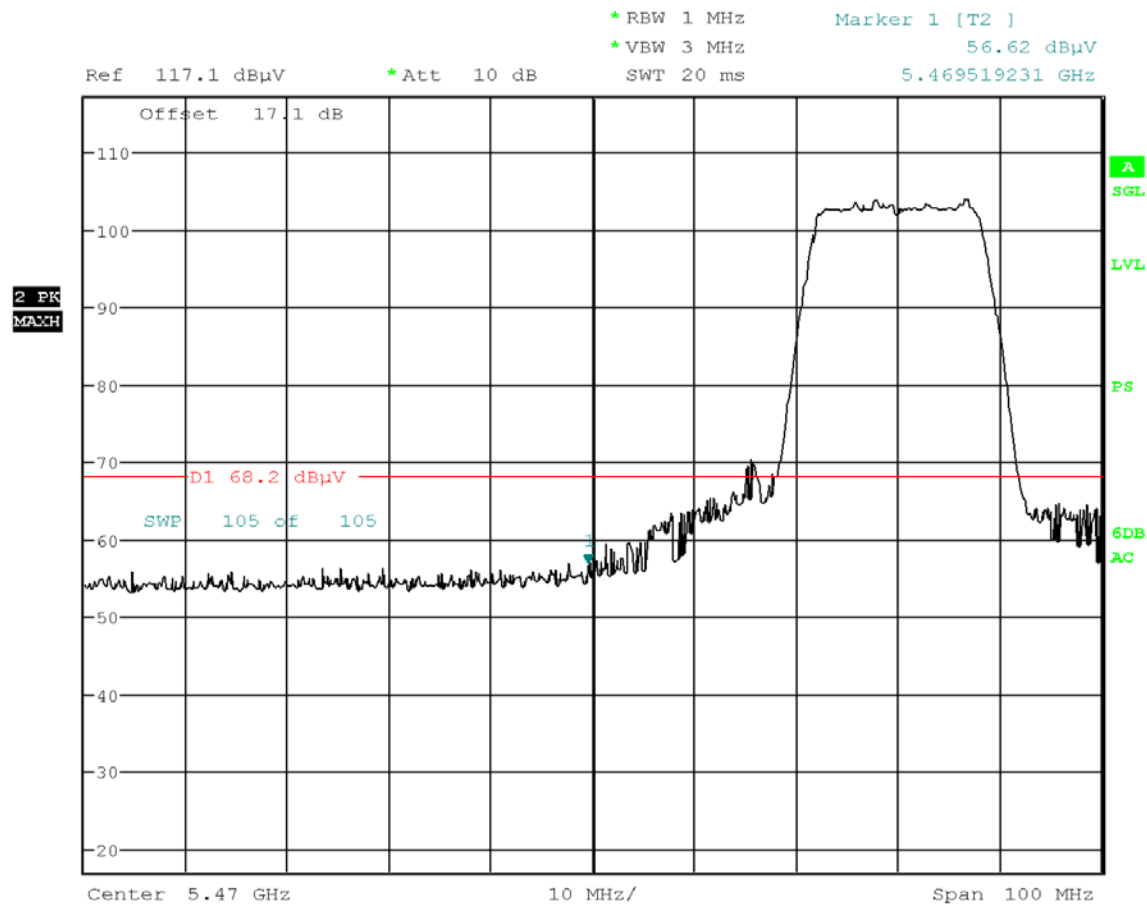
Date: 15.MAY.2013 16:28:11

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)		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]

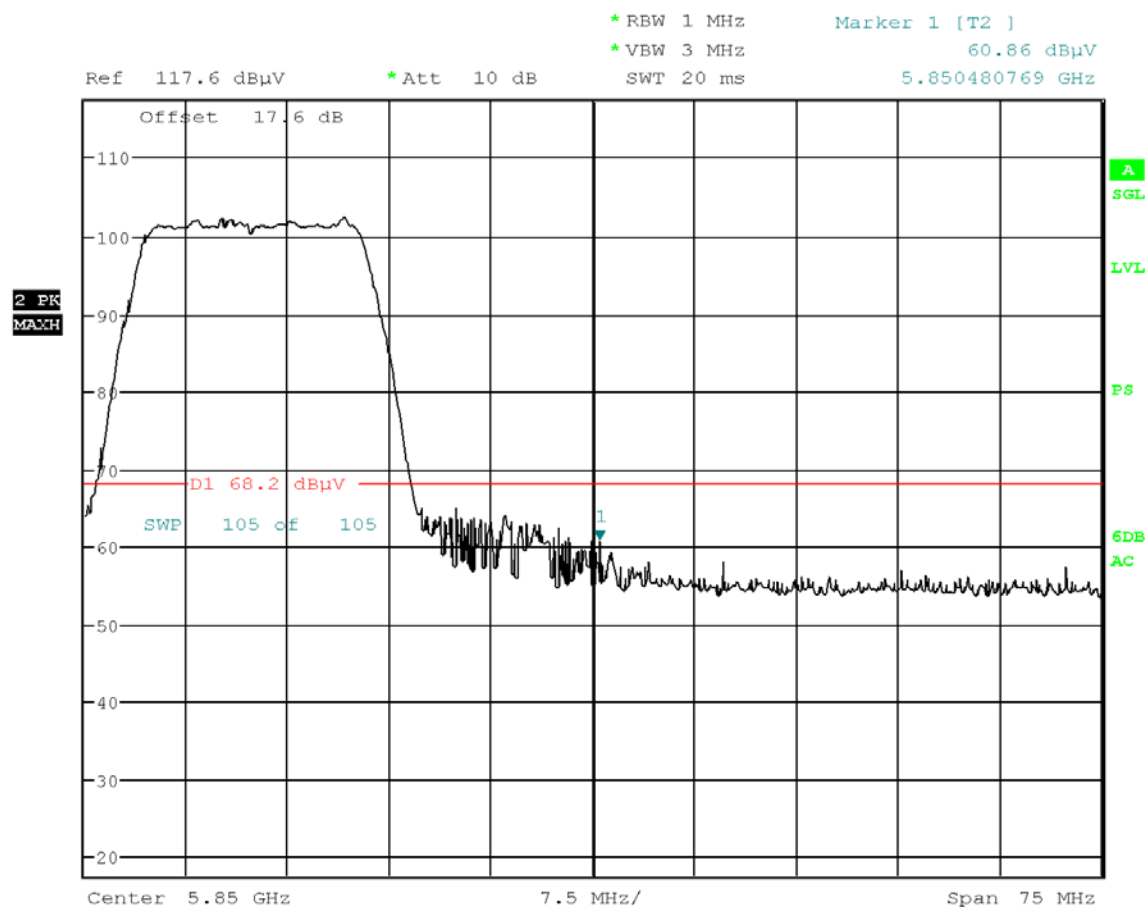
Worst Case Mode: 802.11n (20MHz)

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)	LG	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]

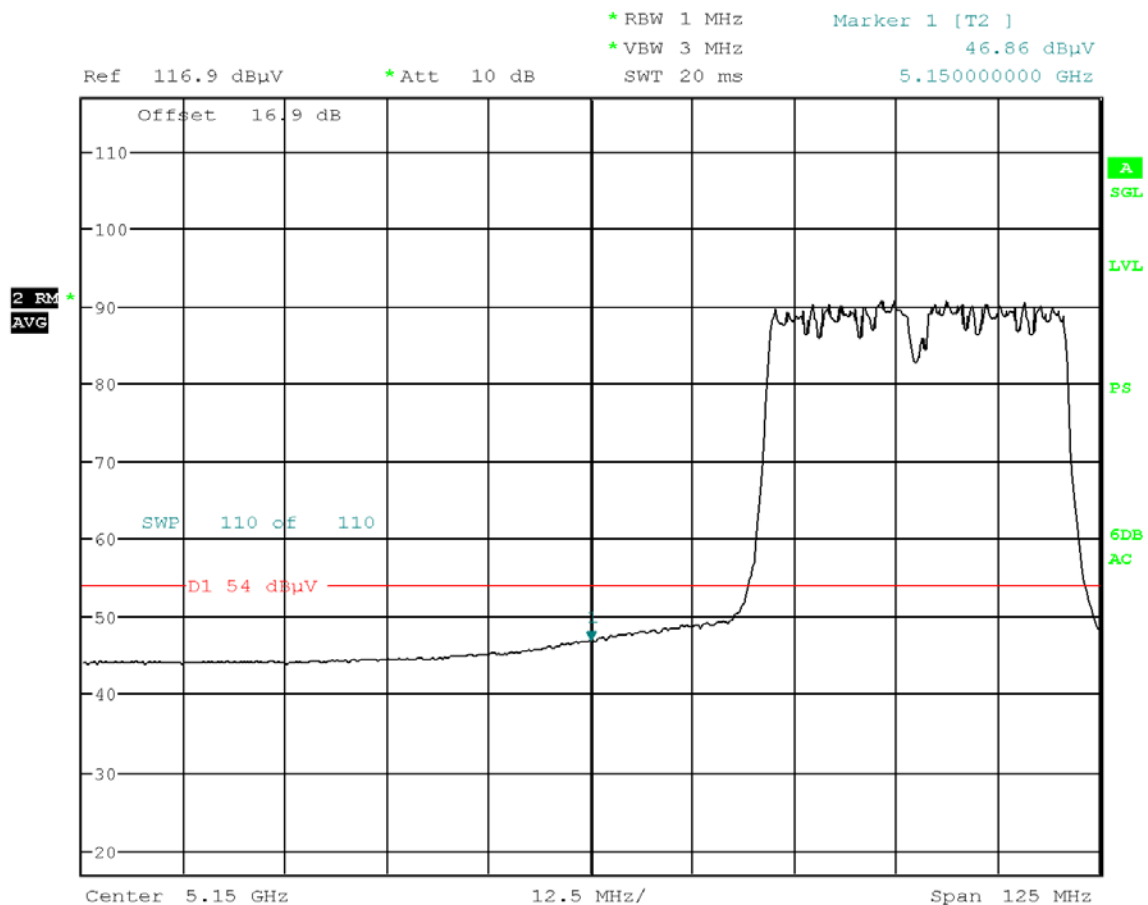
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5190MHz

Channel: 38



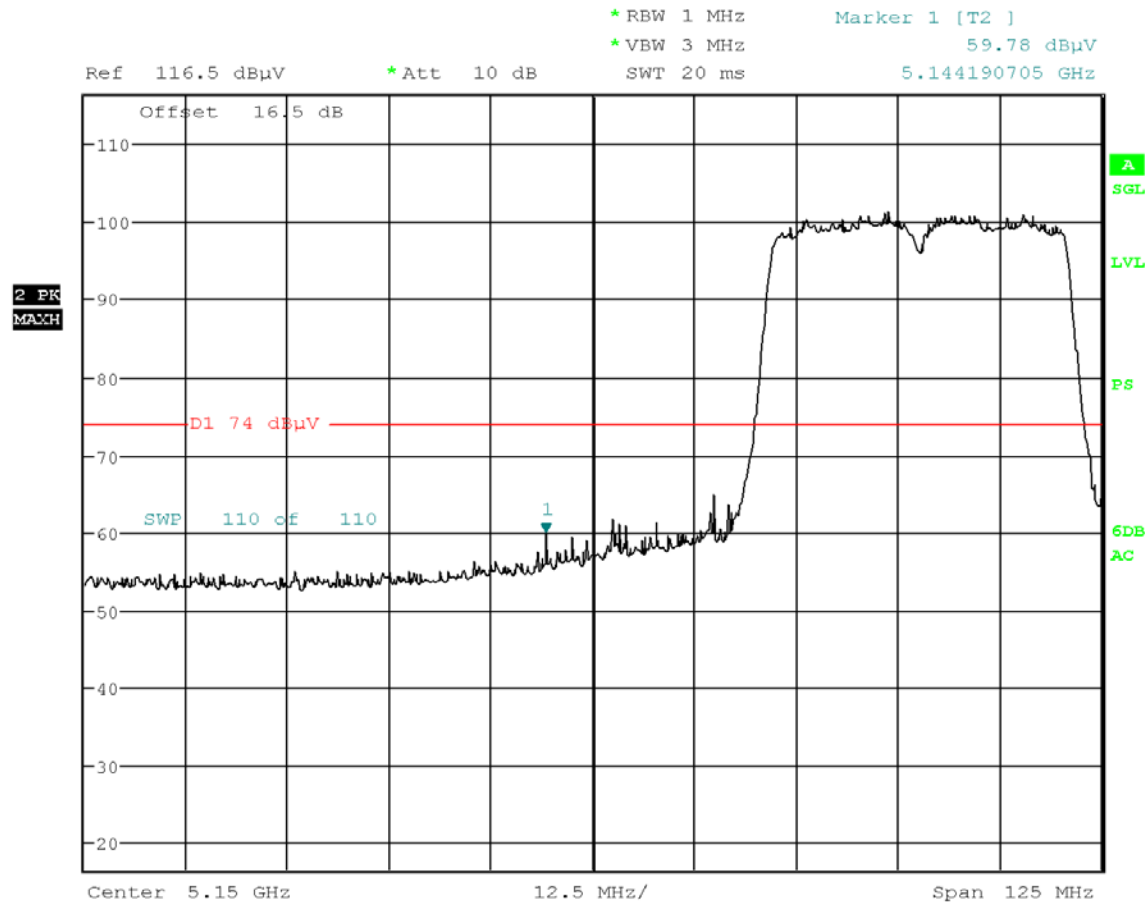
Date: 15.MAY.2013 17:24:23

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)	LG	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

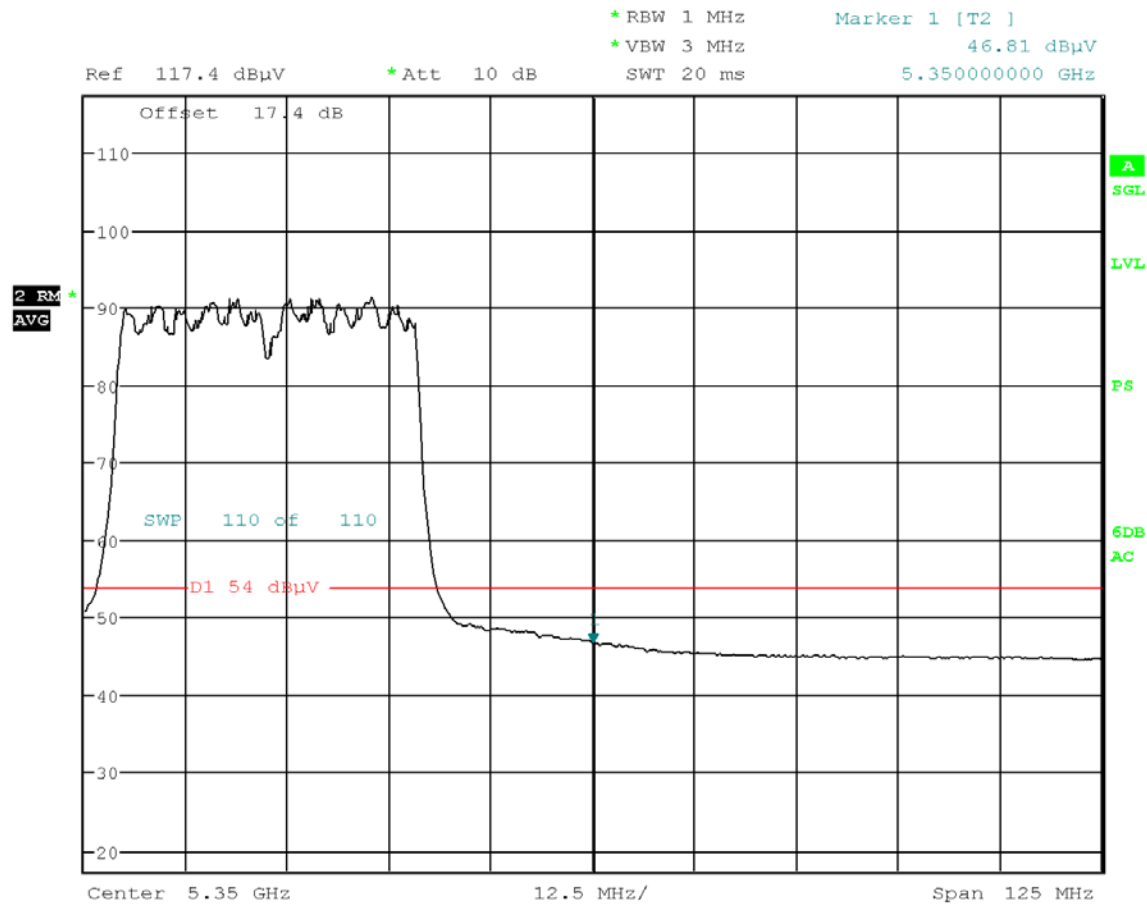
Plot 6-87. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	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



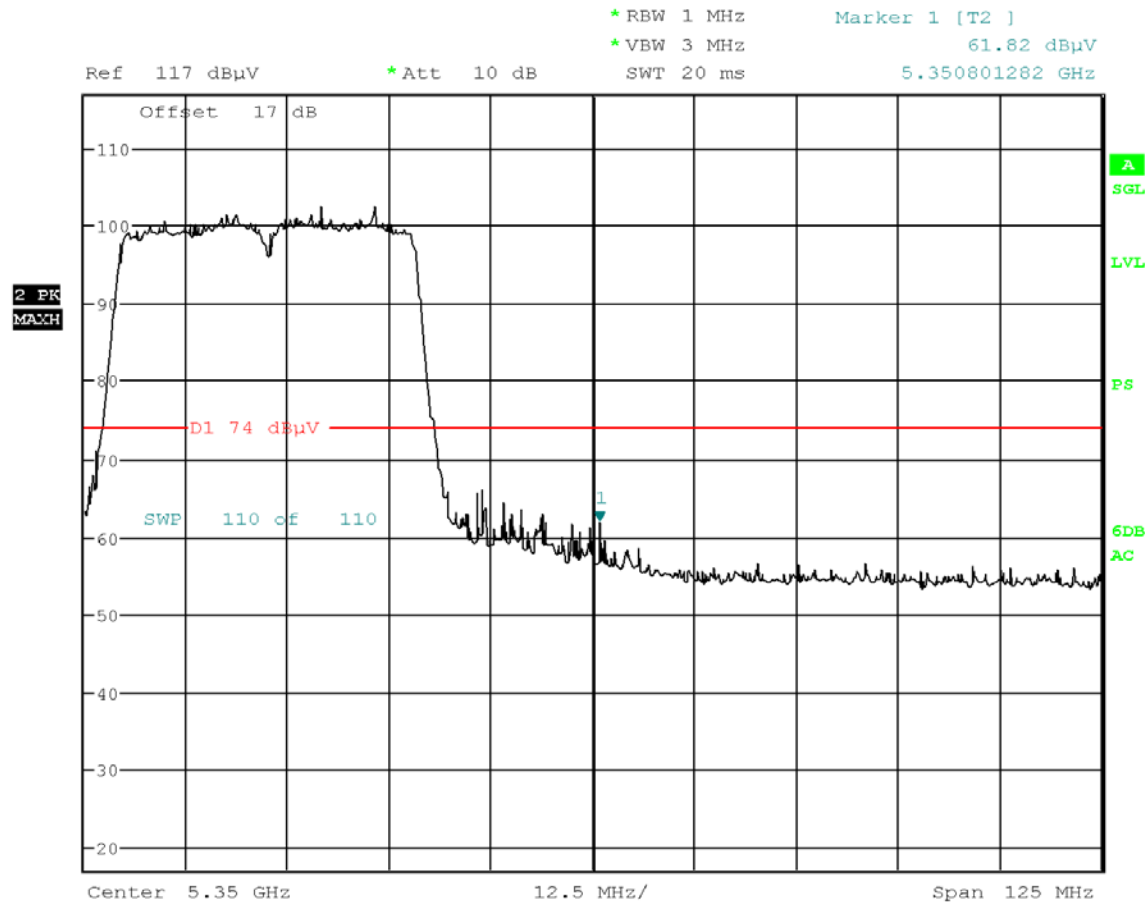
Date: 15.MAY.2013 17:05:29

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

FCC ID: ZNFLS980	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 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)	LG	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]

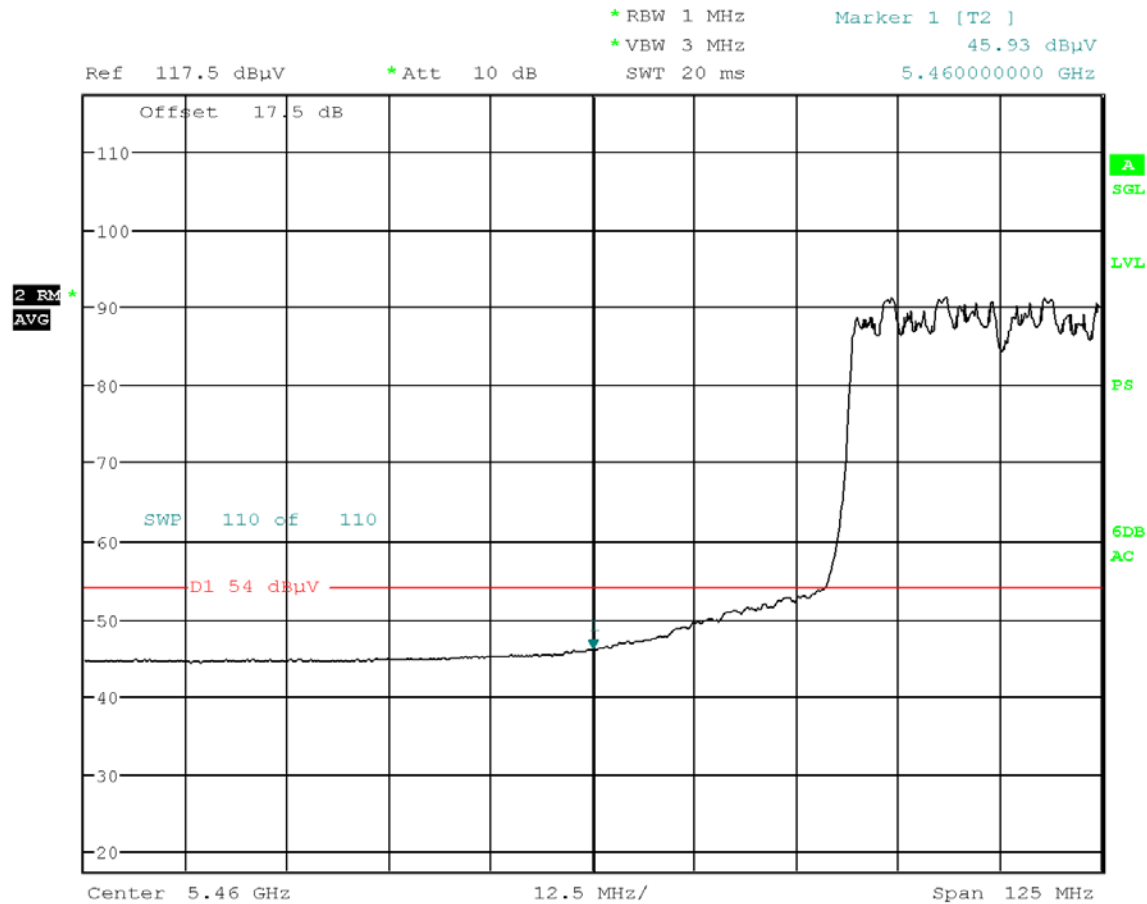
Worst Case Mode: 802.11n (40MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5510MHz

Channel: 102



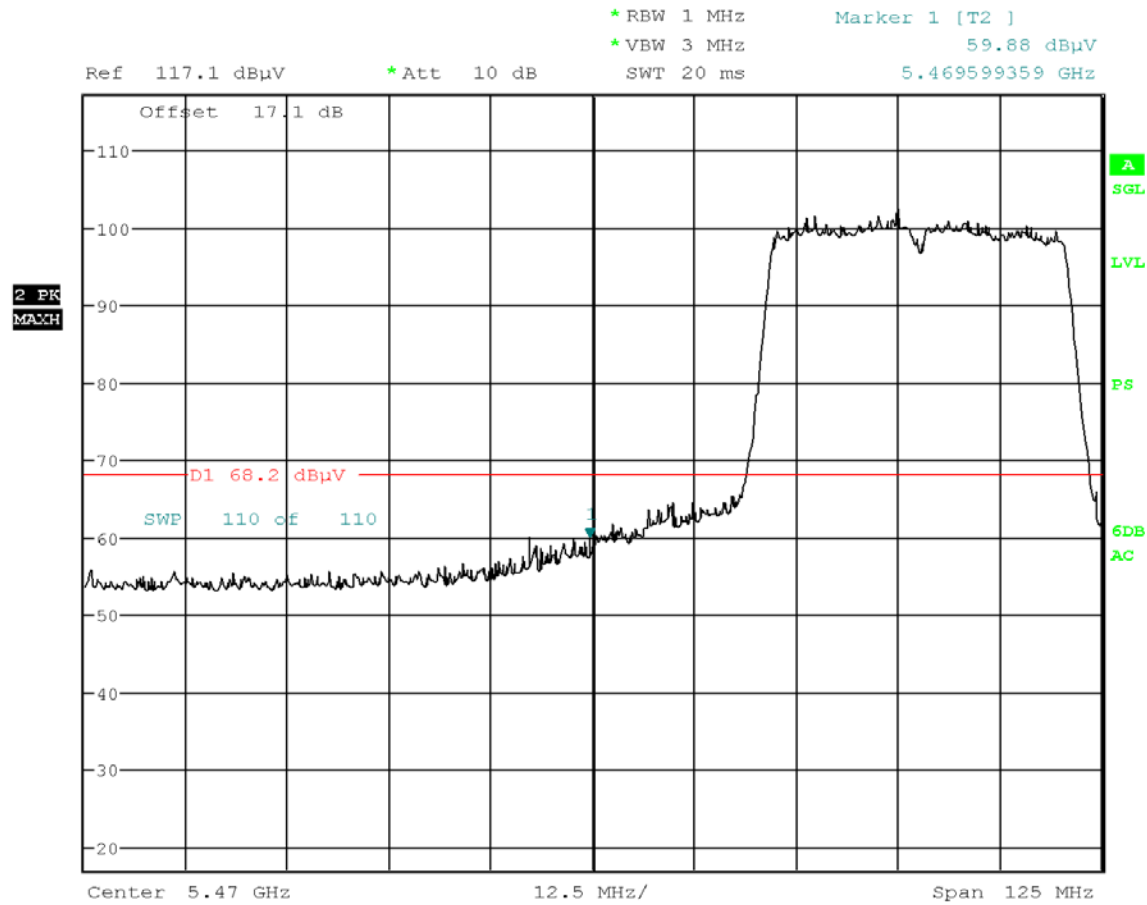
Date: 15.MAY.2013 17:42:08

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)	LG	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]

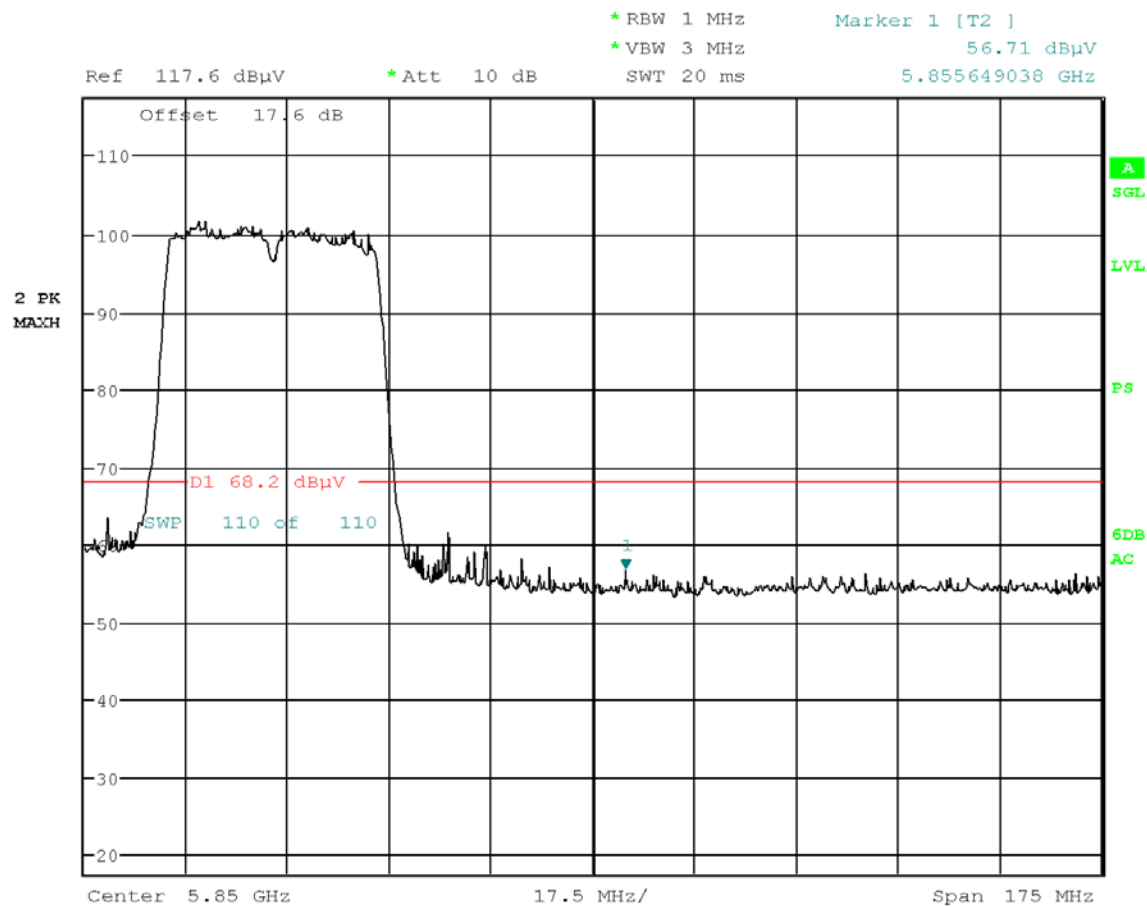
Worst Case Mode: 802.11n (40MHz)

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]

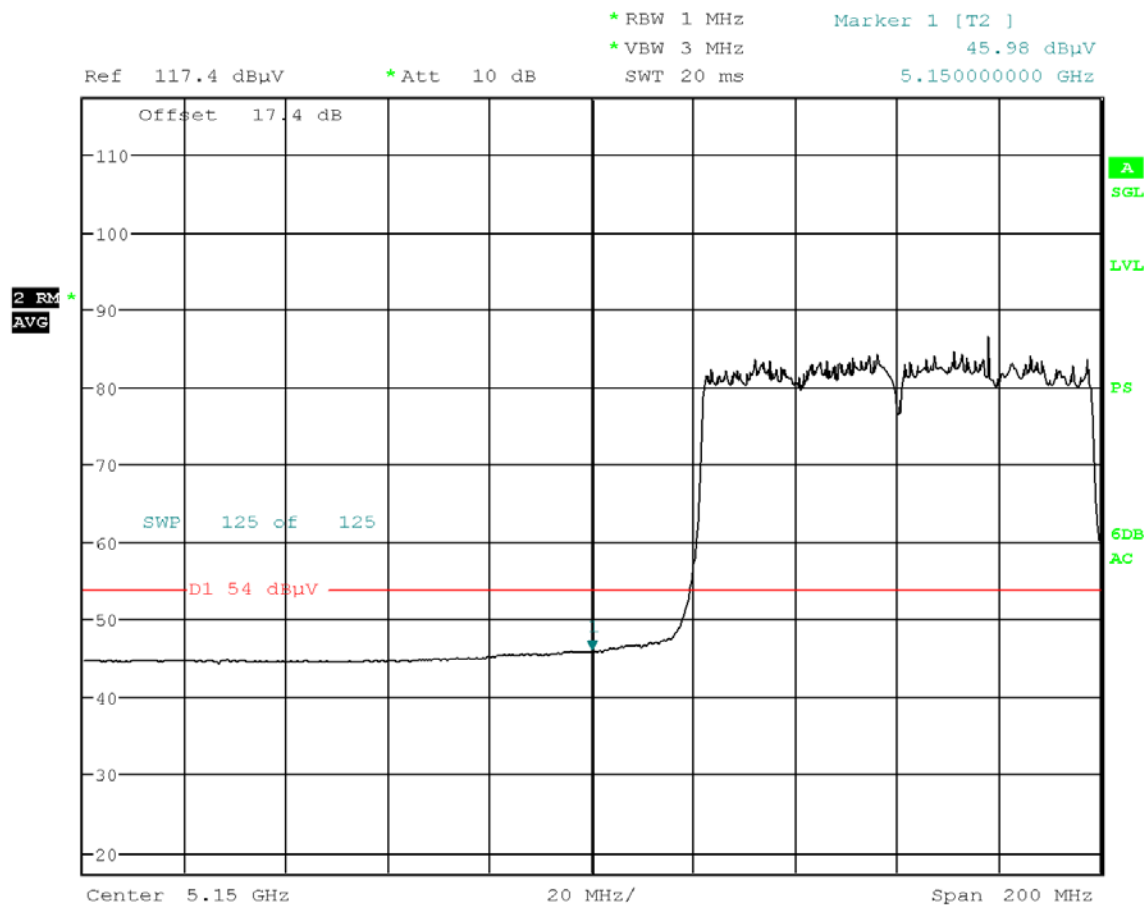
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5210MHz

Channel: 42



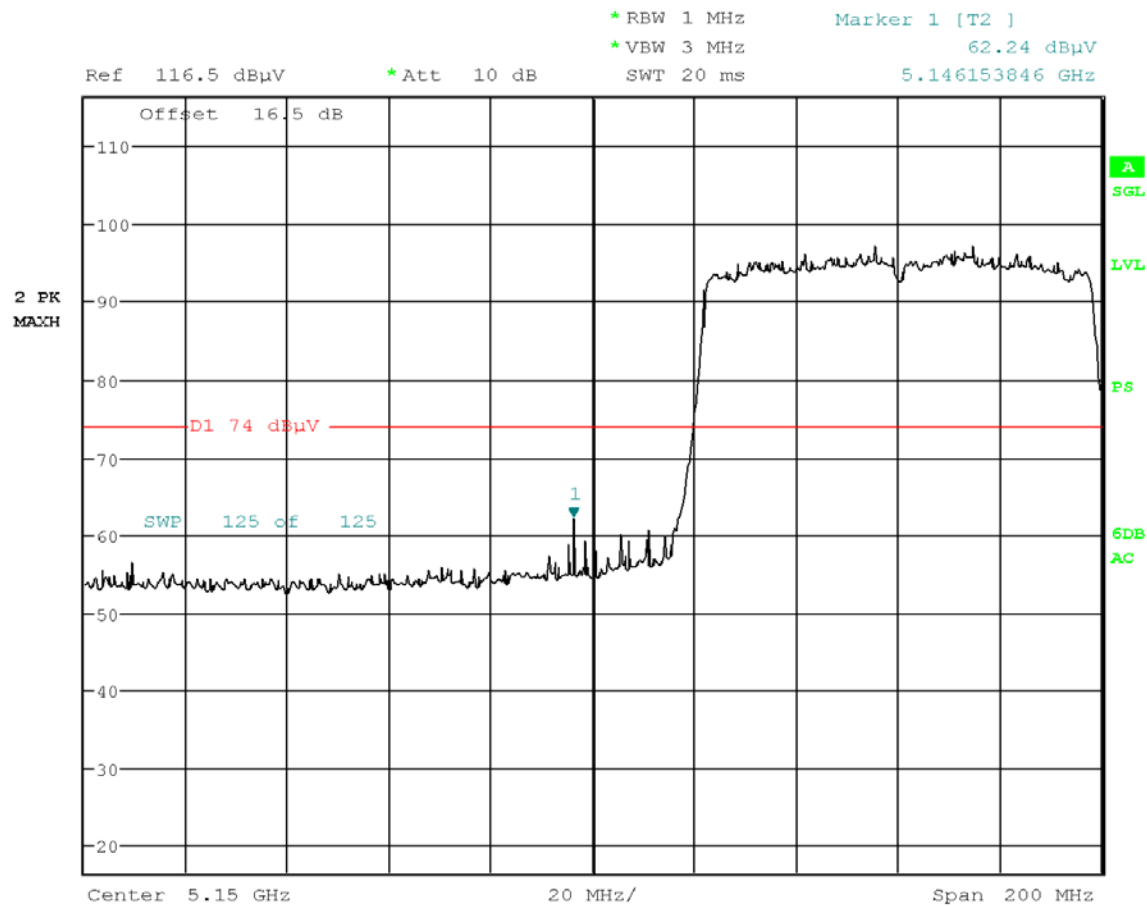
Date: 15.MAY.2013 17:58:32

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)	LG	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

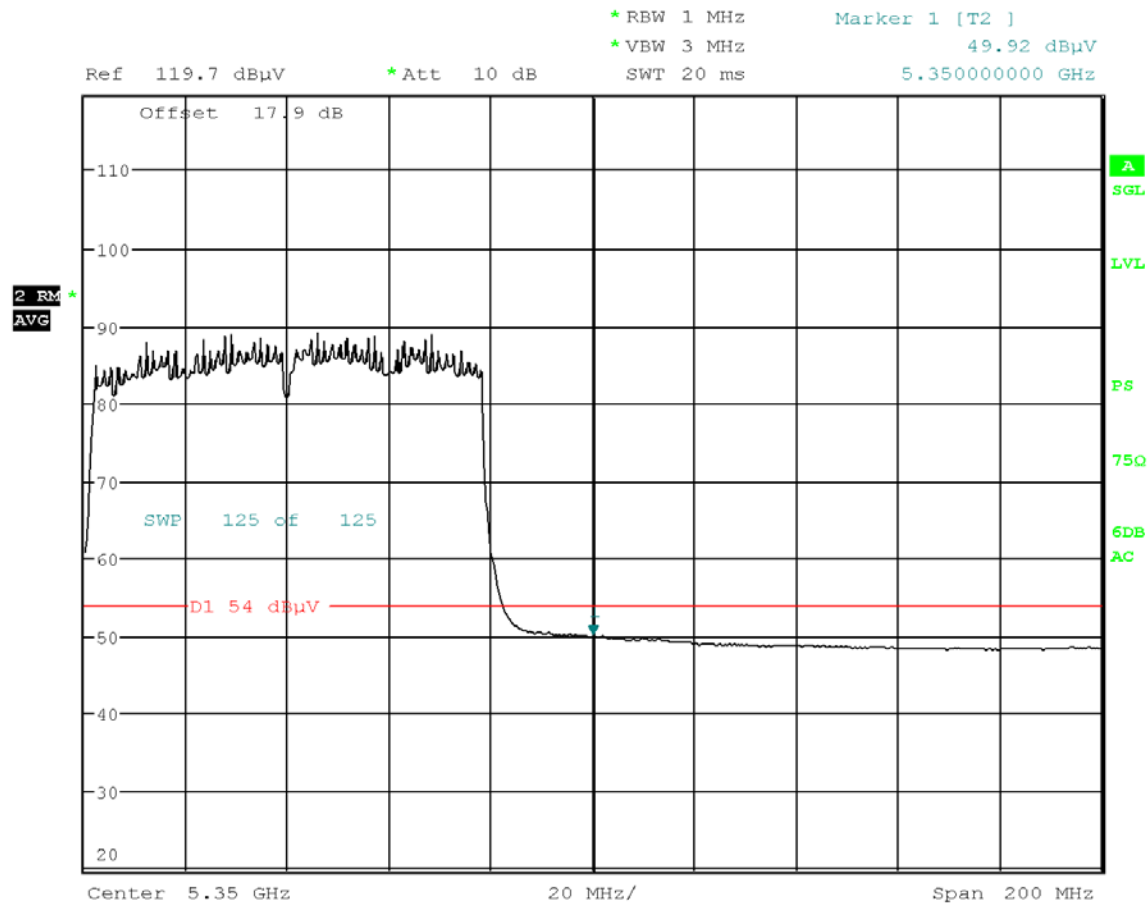
Plot 6-94. Radiated Restricted Lower Band Edge Plot (Peak – UNII Band 1)

FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	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



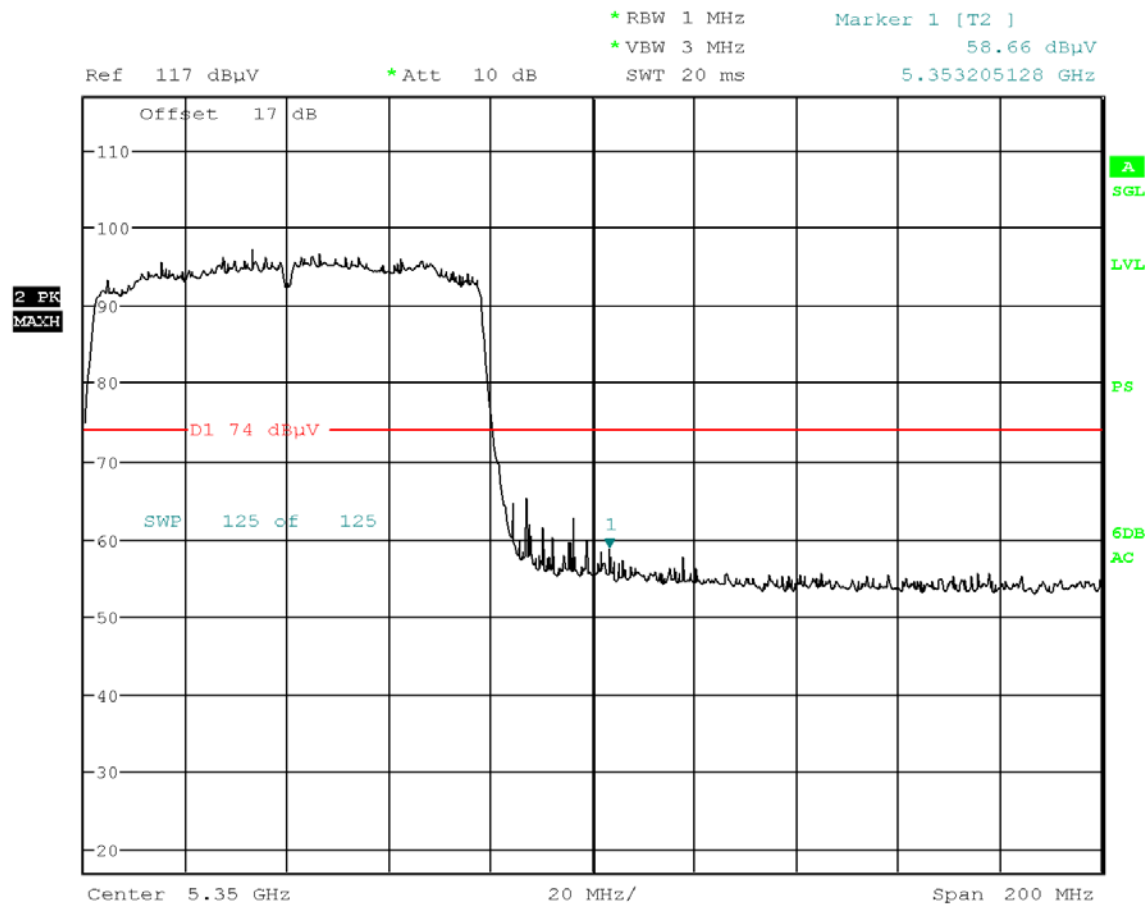
Date: 15.MAY.2013 18:04:18

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	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 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]

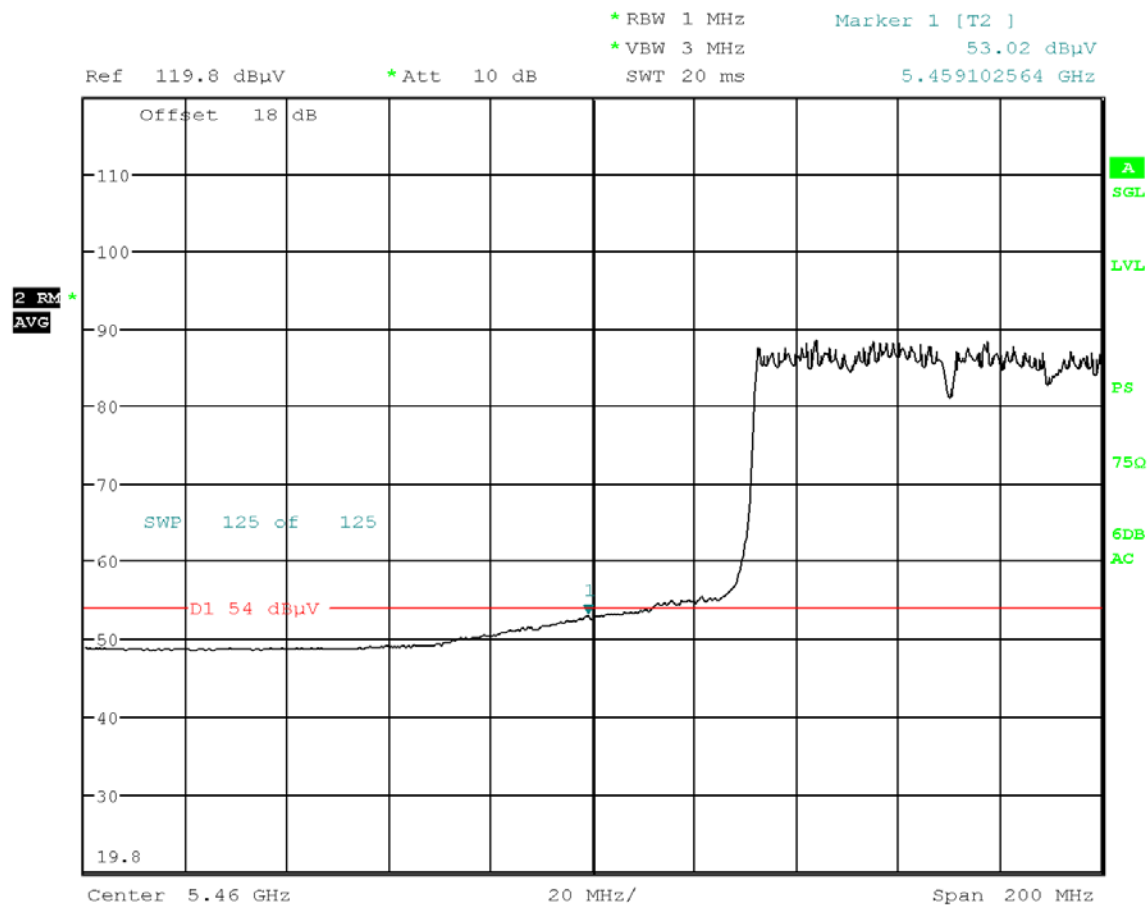
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5530MHz

Channel: 106



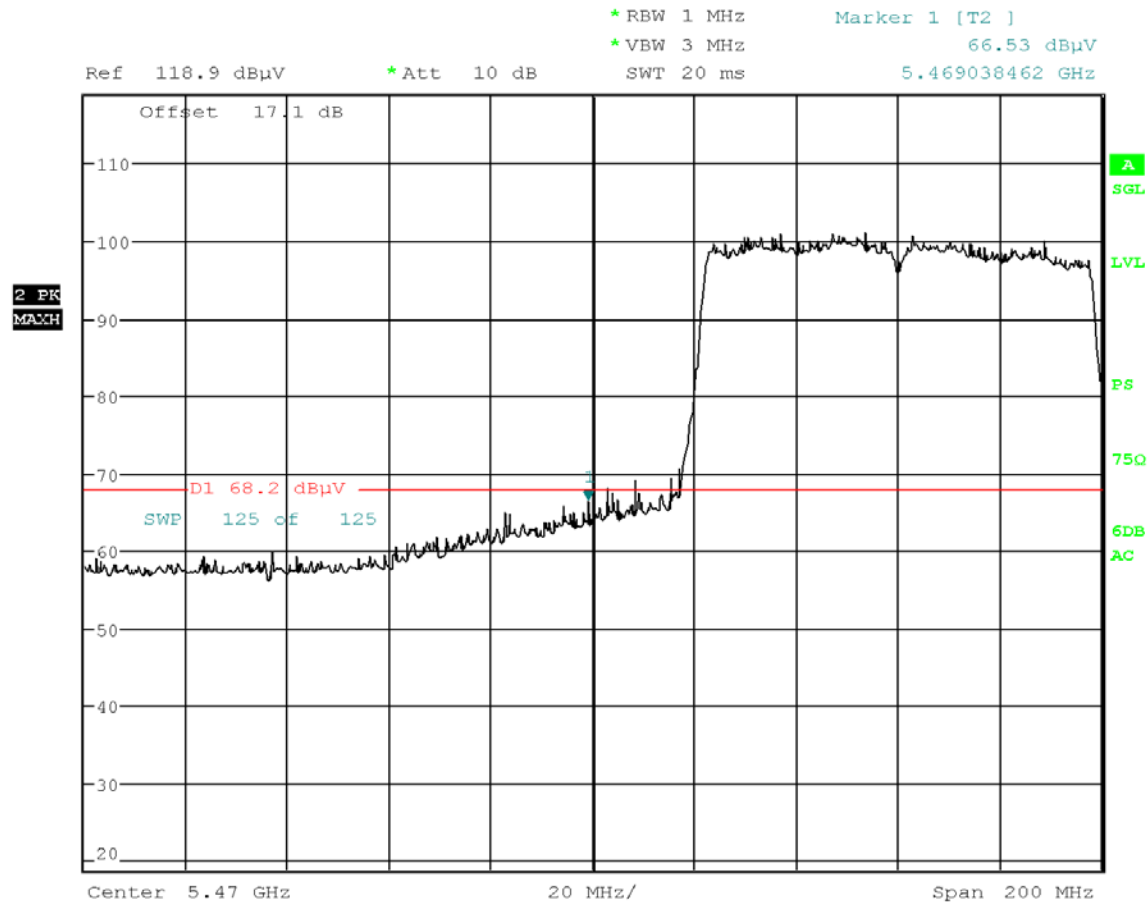
Date: 15.MAY.2013 18:08:55

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)	LG	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	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 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]

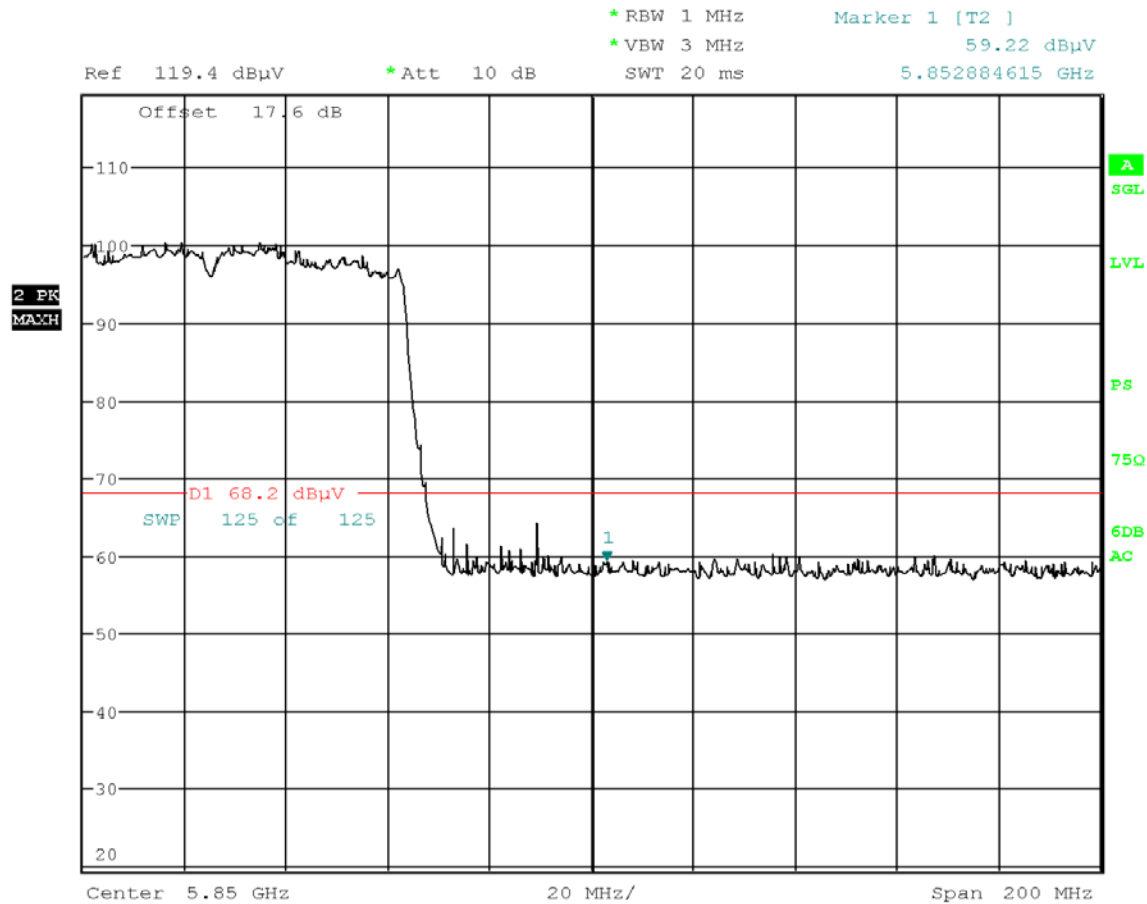
Worst Case Mode: 802.11ac (80MHz)

Worst Case Transfer Rate: MCS0

Distance of Measurements: 3 Meters

Operating Frequency: 5775MHz

Channel: 155



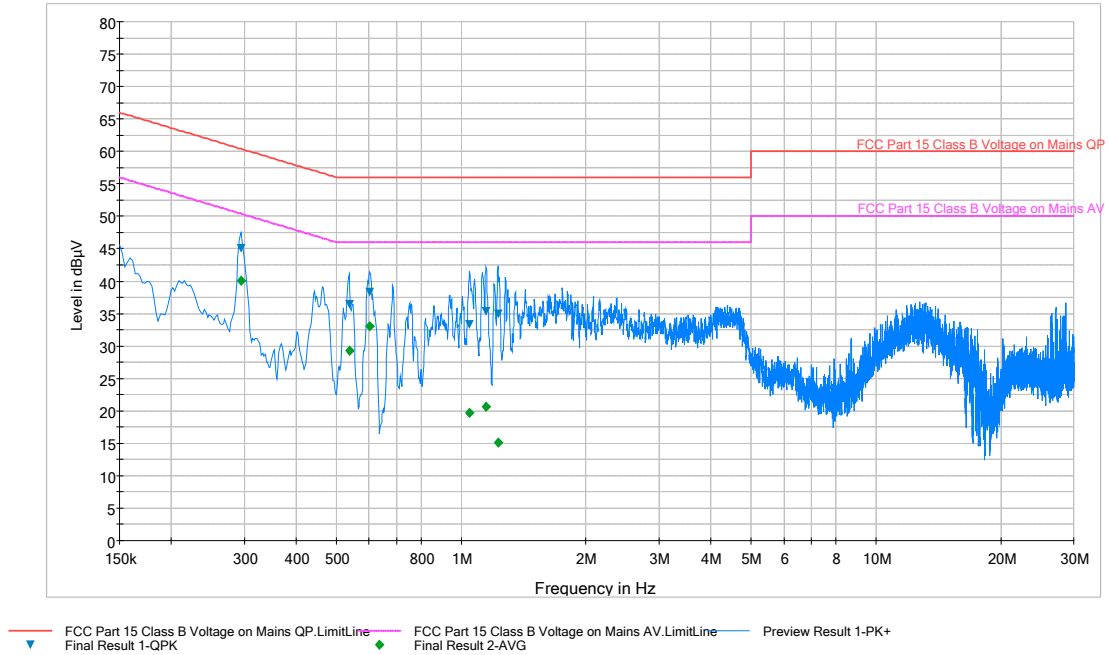
Date: 15.MAY.2013 18:12:32

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)	LG	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)

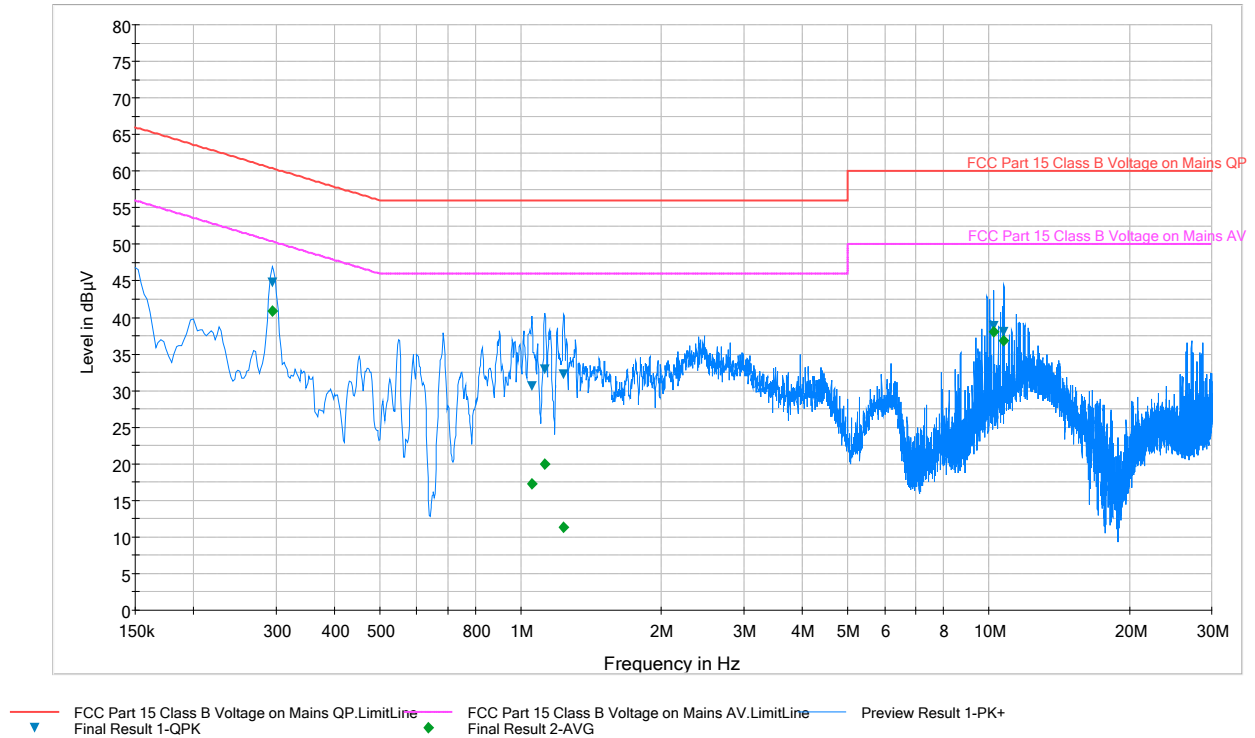
Notes:

- 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)	LG	Reviewed by: Quality Manager
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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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.

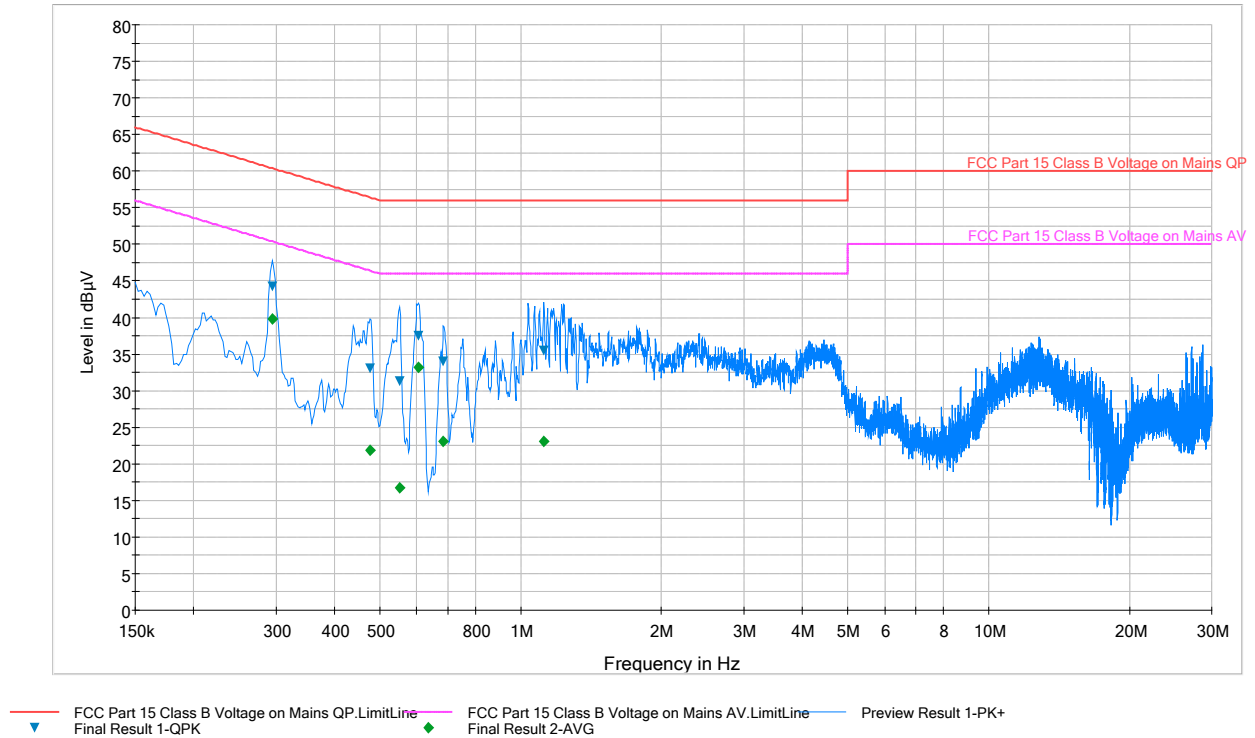
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8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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:

1. 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.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. L1 = Phase; N = Neutral
4. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Corr. (dB)
6. Margin (dB) = QP/AVLimit (dBµV) - QP/AV Level (dBµV)
7. Traces shown in plot are made using a peak detector.

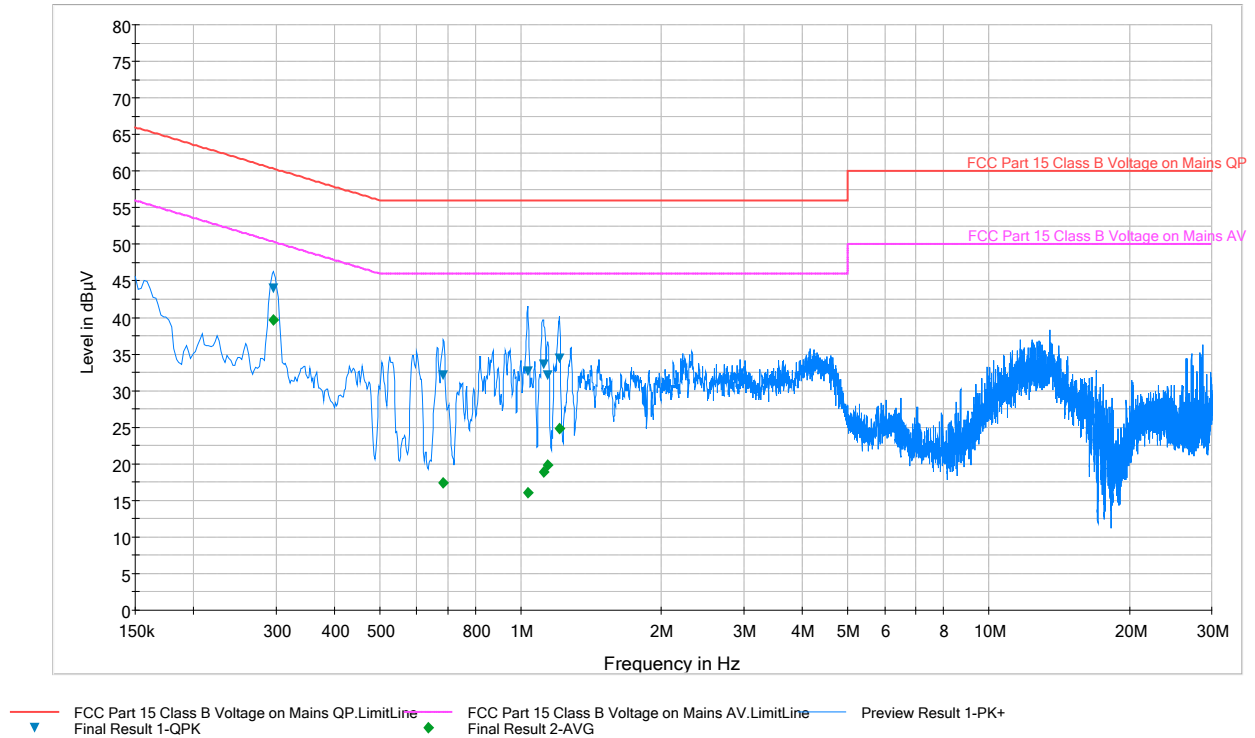
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
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8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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.

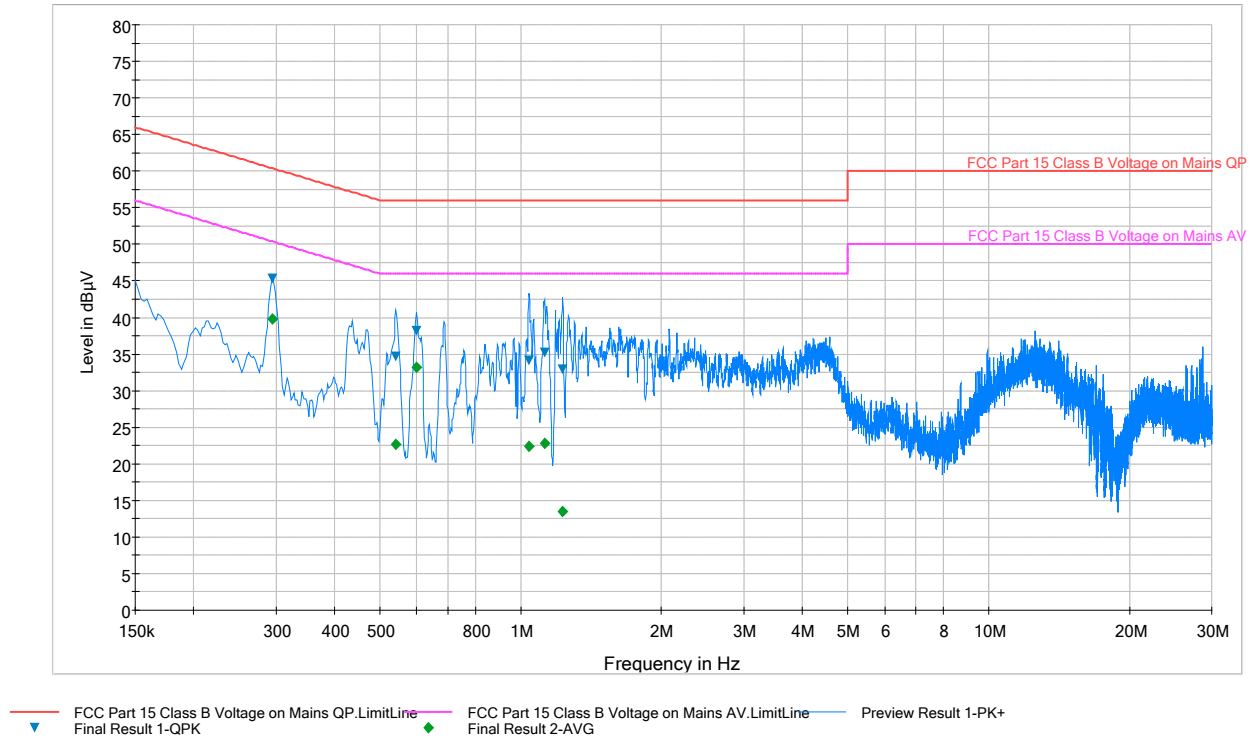
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
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8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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.

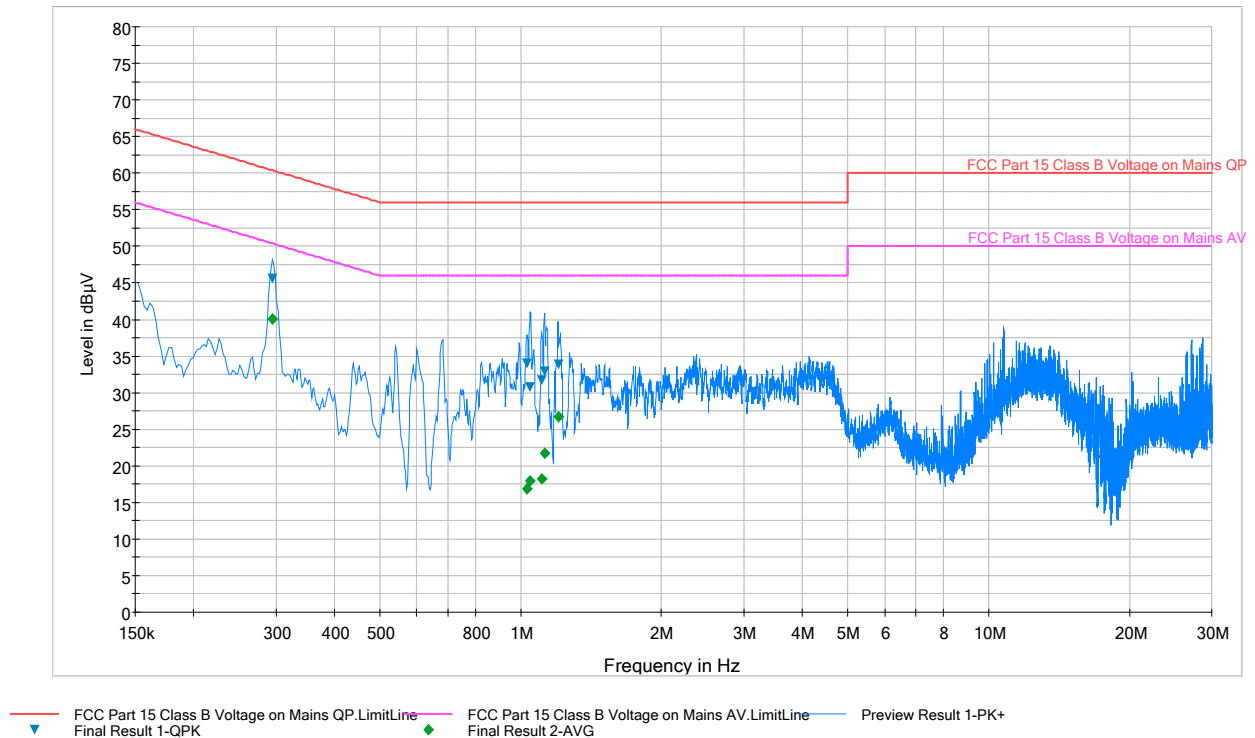
FCC ID: ZNFLS980	PCTEST ENGINEERING LABORATORY, INC.	FCC Pt. 15.407 802.11a/n/ac UNII MEASUREMENT REPORT (CERTIFICATION)	LG	Reviewed by: Quality Manager
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8. Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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:

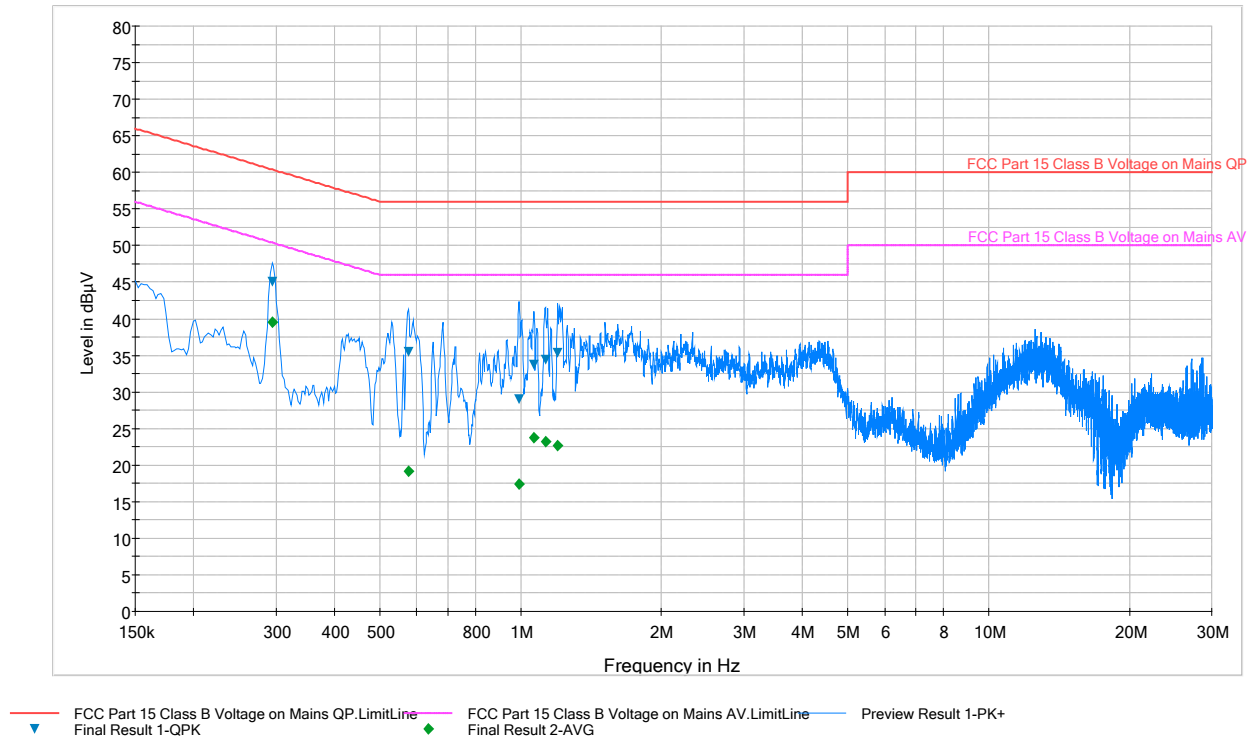
1. All modes of operation, data rates, and test channels were investigated and the worst-case emissions are reported in 802.11a mode using 6Mbps on Channel 100. The emissions found were not affected by the choice of channel used during testing.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. L1 = Phase; N = Neutral
4. Corr. (dB) = Cable loss (dB) + LISN insertion factor (dB)
5. QP/AV Level (dBμV) = QP/AV Analyzer/Receiver Level (dBμV) + Corr. (dB)
6. Margin (dB) = QP/AVLimit (dBμV) - QP/AV Level (dBμV)
7. 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]



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:

1. 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.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
6. Traces shown in plot are made using a peak detector.

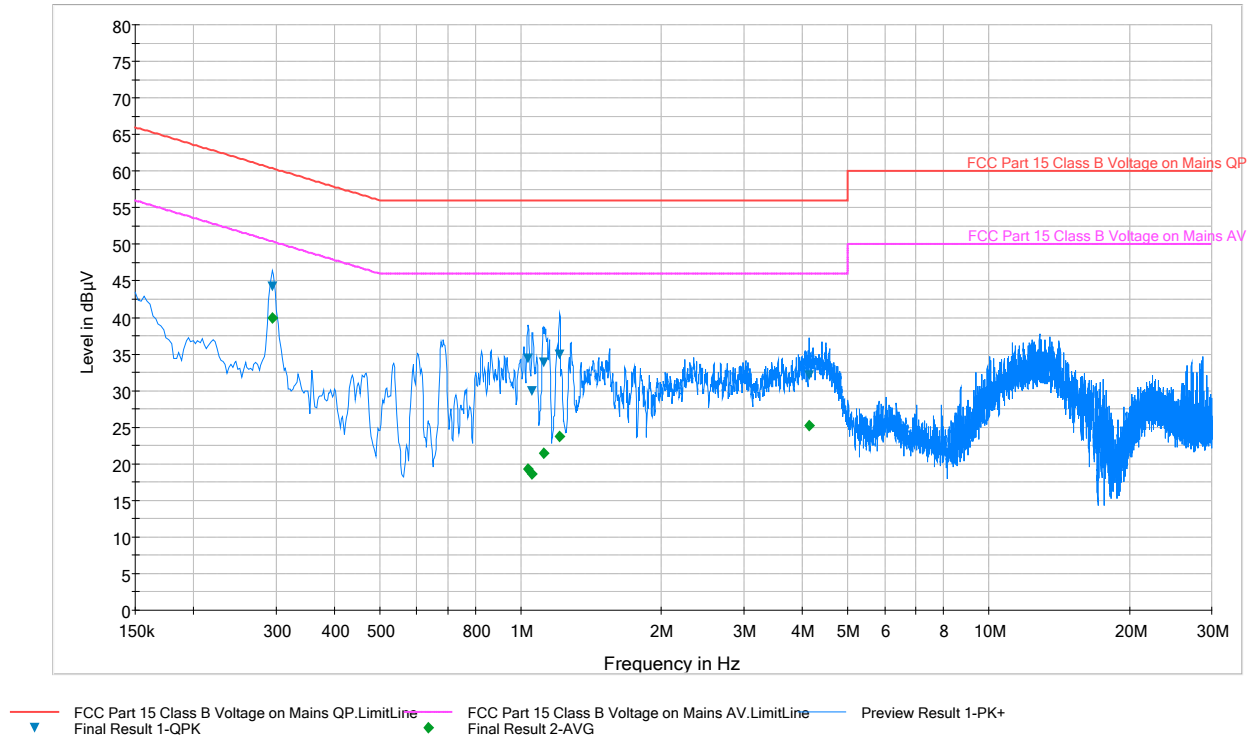
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7.Deviations to the Specifications: None.

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Line-Conducted Test Data (Cont'd)

§15.207; RSS-Gen [7.2.2]



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:

1. 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.
2. The limit for Class B device(s) from 150kHz to 30MHz are specified in Section 15.207 of the Title 47 CFR.
3. Factor (dB) = Cable loss (dB) + LISN insertion factor (dB)
4. QP/AV Level (dBµV) = QP/AV Analyzer/Receiver Level (dBµV) + Factor (dB)
5. Margin (dB) = QP/AV Limit (dBµV) – QP/AV Level (dBµV)
6. Traces shown in plot are made using a peak detector.
7. 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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