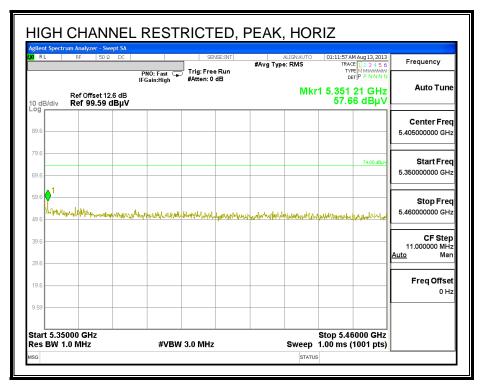
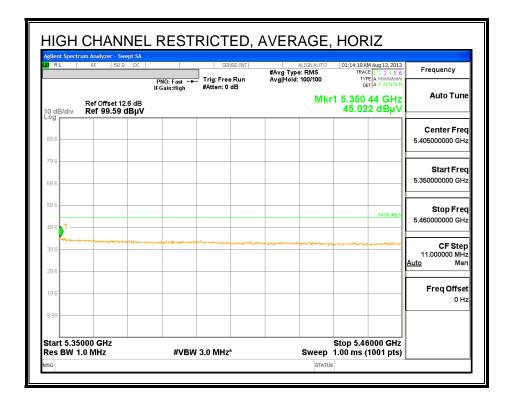
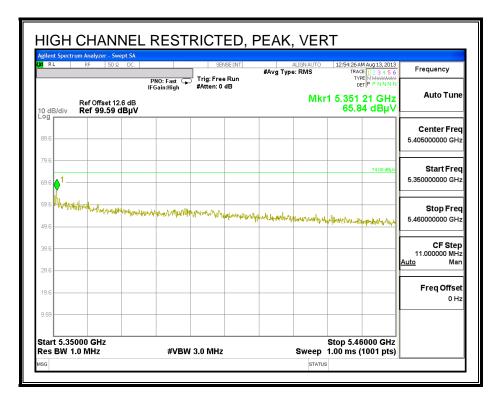
9.2.8. 802.11n HT20 2TX CDD MODE IN THE 5.3 GHz BAND

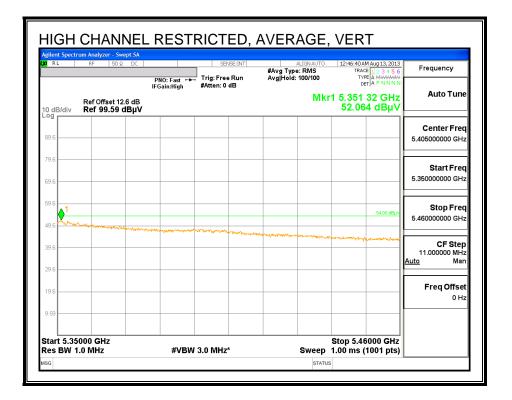
RESTRICTED BANDEDGE (HIGH CHANNEL)





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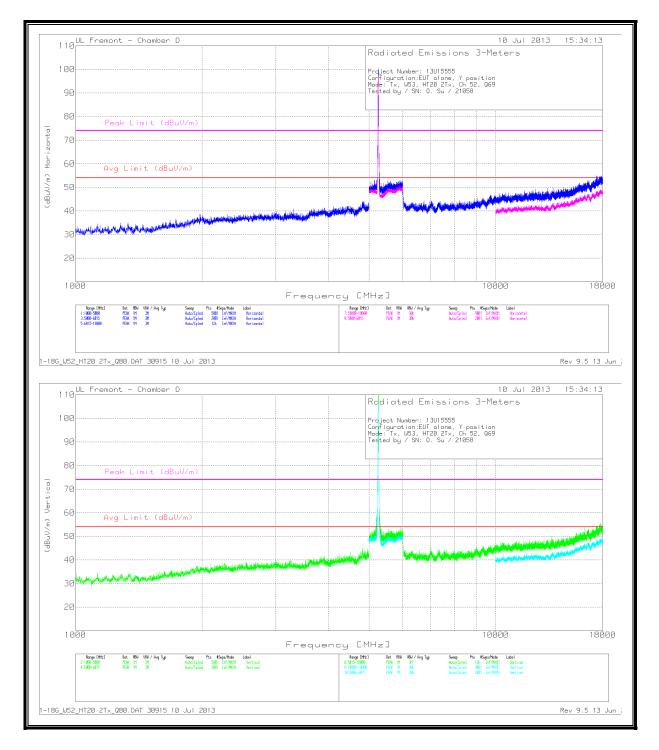




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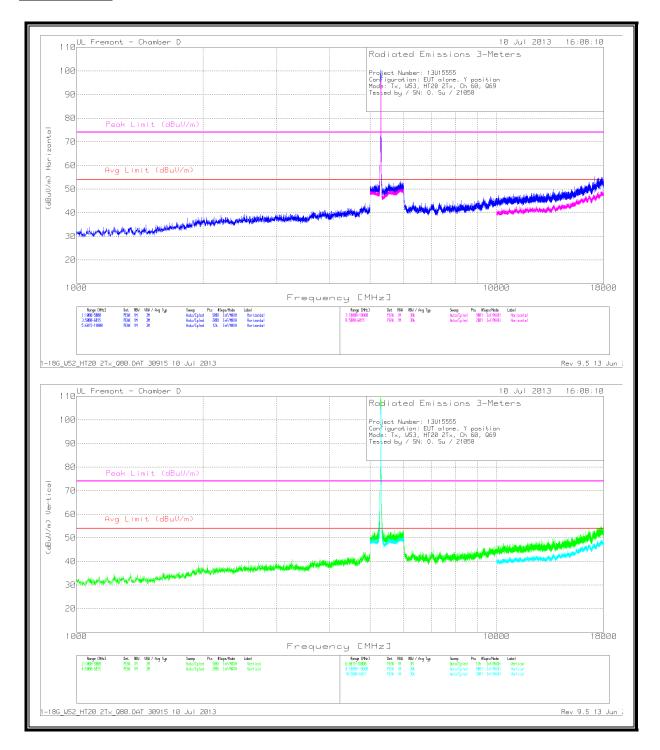
LOW CHANNEL



1-18G_W52_HT20 2Tx_Q80.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

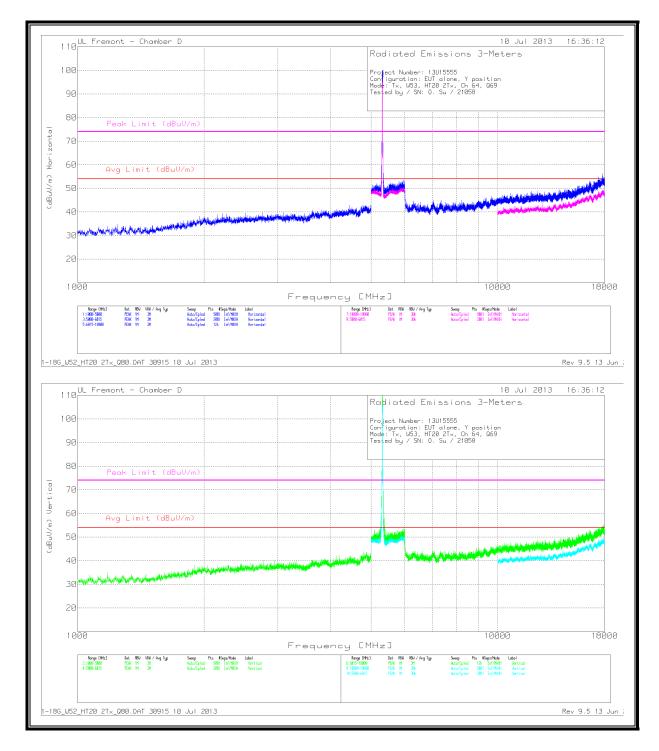
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MID CHANNEL



1-18G_W52_HT20 2Tx_Q80.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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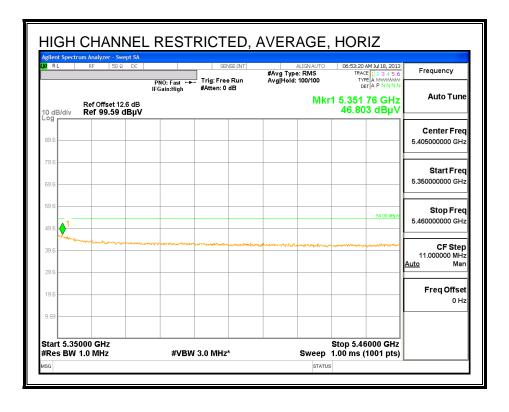
1-18G_W53_HT20 2Tx_Q69.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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9.2.9. 802.11n HT40 SISO MODE IN THE 5.3 GHz BAND

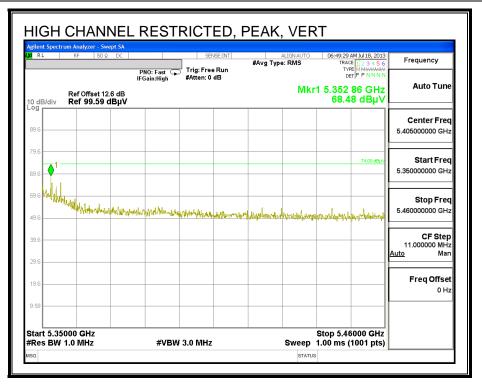
RESTRICTED BANDEDGE (HIGH CHANNEL)

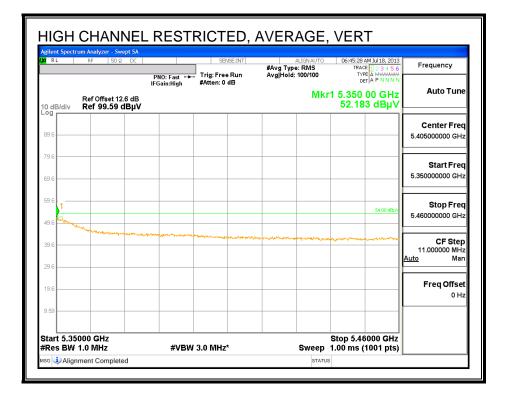
HIGH CHANNEL RESTRICTED, PEAK, HORIZ ilent Spectrum Analyzer - Swept S/ UTO 06:52:21 AM Jul 18, 2013 TRACE 1 2 3 4 5 6 TYPE MMWWWW DET P P N N N N Frequency #Avg Type: RMS PNO: Fast 🖵 IFGain:High Trig: Free Run #Atten: 0 dB Auto Tune Mkr1 5.351 43 GHz Ref Offset 12.6 dB Ref 99.59 dBµV 61.71 dBµV 10 dB/div **Center Freq** 5.405000000 GHz Start Freq 74.00 dB 5.350000000 GHz Stop Frea Hunderhander 5.46000000 GHz mapped and mark population all participations where the state of CF Step 11.000000 MHz Auto Mar Freq Offset 0 Hz Start 5.35000 GHz Stop 5.46000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.00 ms (1001 pts) STATUS



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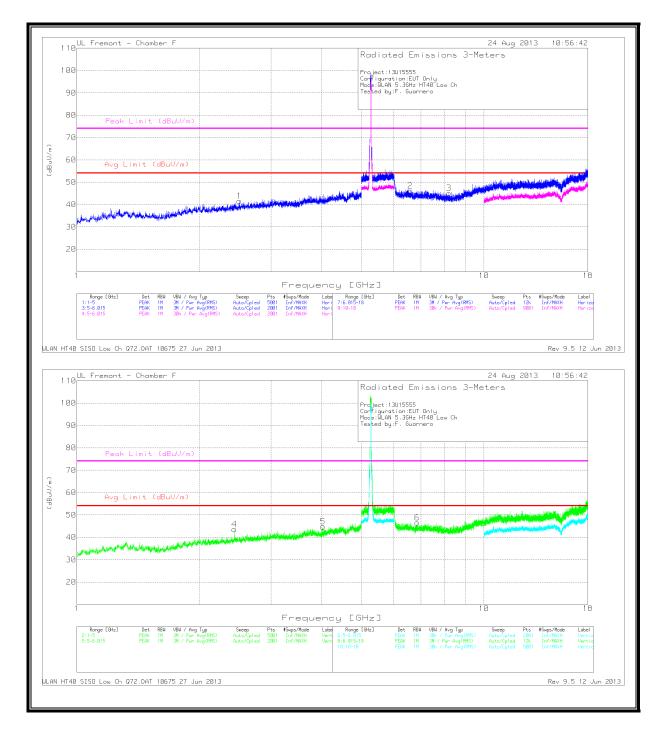




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REPORT NO: 15U21850-E29V2 FCC ID: BCGA1474 HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



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REPORT NO: 15U21850-E29V2 FCC ID: BCGA1474

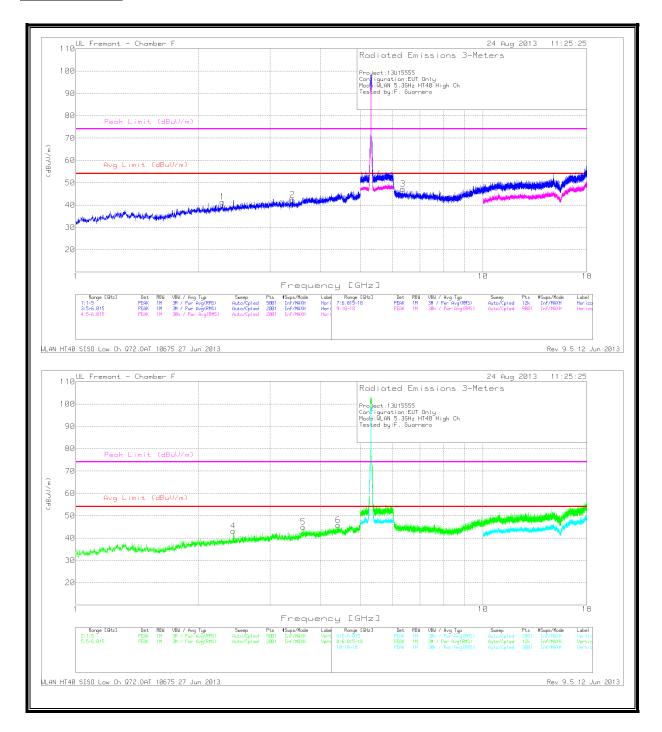
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.506	39.81	PK	32.5	-30.7	41.61	53.97	-12.36	74	-32.39	0-360	200	Н
2	6.593	36.76	PK	35.8	-26.4	46.16	53.97	-7.81	74	-27.84	0-360	100	Н
3	8.201	36.53	PK	36	-27.4	45.13	53.97	-8.84	74	-28.87	0-360	100	Н
4	2.439	42.28	PK	32.3	-31	43.58	53.97	-10.39	74	-30.42	0-360	100	V
5	4.022	39.69	PK	33.5	-28.4	44.79	53.97	-9.18	74	-29.21	0-360	199	V
6	6.859	37.69	PK	35.7	-26.8	46.59	53.97	-7.38	74	-27.41	0-360	100	V

PK - Peak detector

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HIGH CHANNEL



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Trace Markers

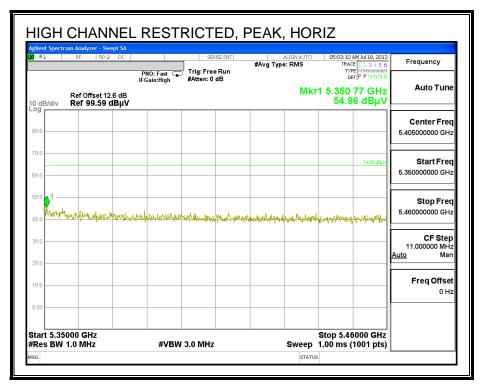
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.291	40.03	PK	32	-30.6	41.43	53.97	-12.54	74	-32.57	0-360	199	Н
2	3.406	38.97	PK	33	-29.6	42.37	53.97	-11.6	74	-31.63	0-360	98	Н
3	6.355	38.57	PK	35.6	-26.9	47.27	53.97	-6.7	74	-26.73	0-360	100	Н
4	2.437	42.06	PK	32.3	-31.1	43.26	53.97	-10.71	74	-30.74	0-360	201	V
5	3.62	40.85	PK	33.7	-29.6	44.95	53.97	-9.02	74	-29.05	0-360	101	V
6	4.41	40.14	PK	33.7	-28	45.84	53.97	-8.13	74	-28.16	0-360	101	V

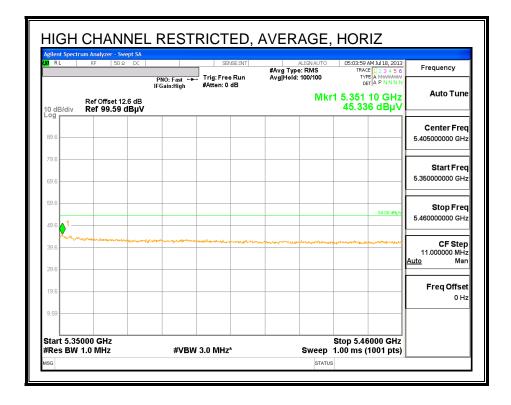
PK - Peak detector

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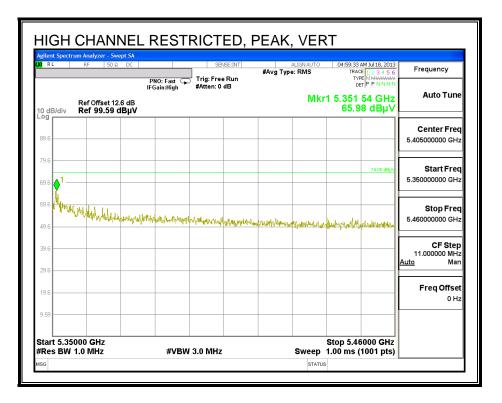
9.2.10. 802.11n HT40 2TX CDD MODE IN THE 5.3 GHz BAND

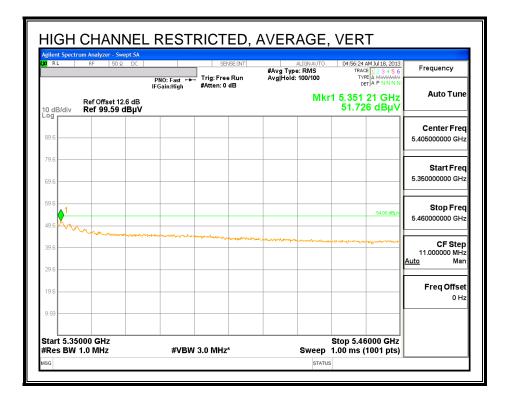
RESTRICTED BANDEDGE (HIGH CHANNEL)





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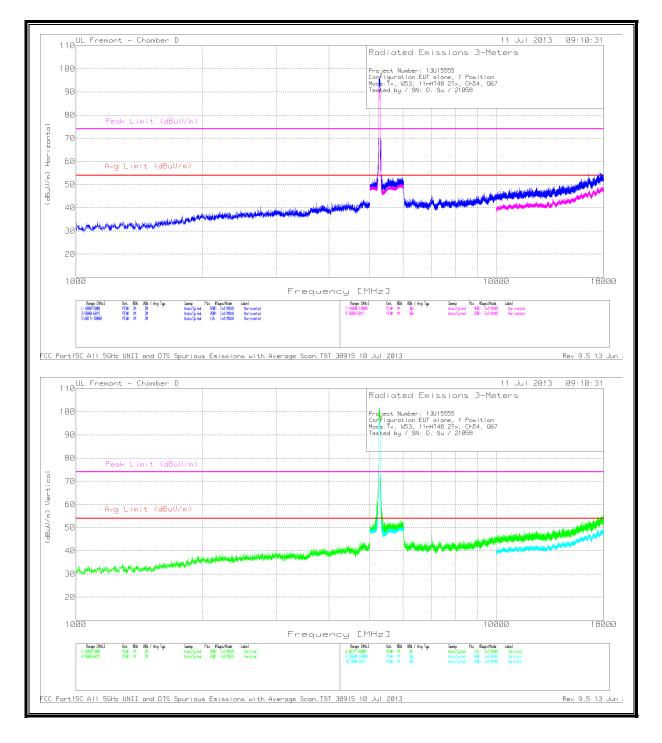




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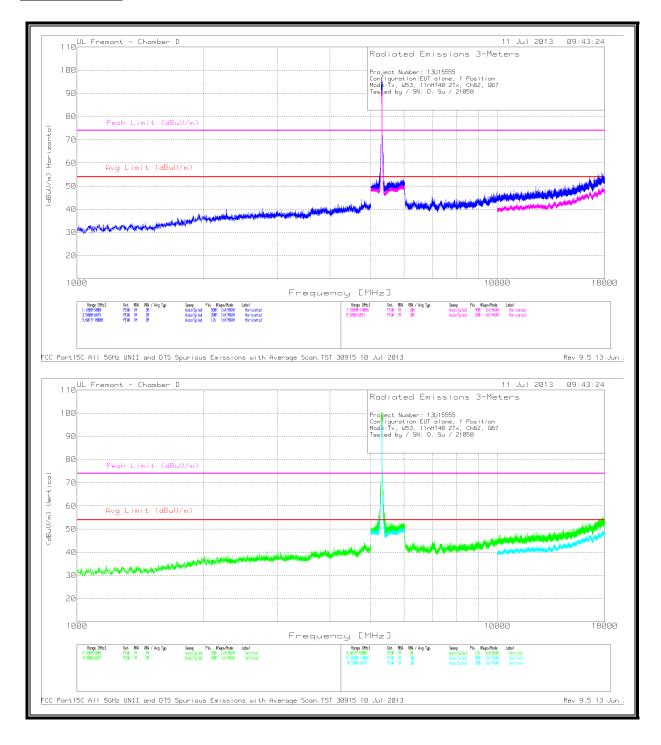
LOW CHANNEL



FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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HIGH CHANNEL



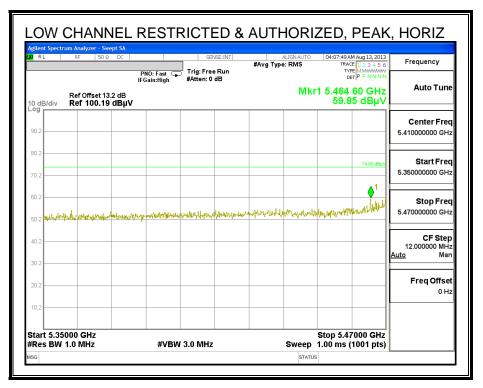
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 10 Jul 2013Rev 9.5 13 Jun 2013

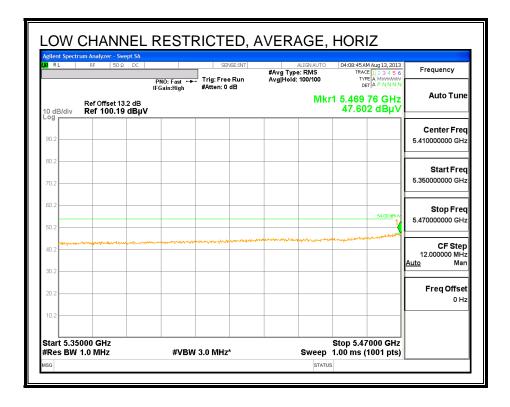
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9.2.11.

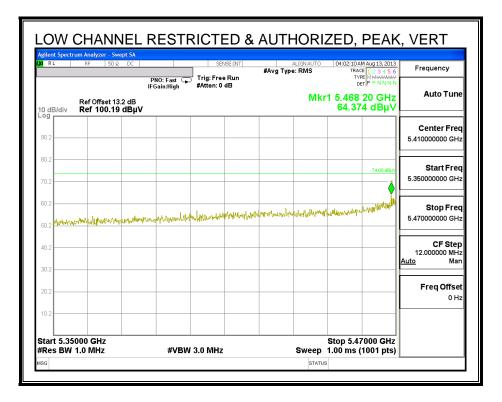
802.11a SISO MODE IN THE 5.6 GHz BAND

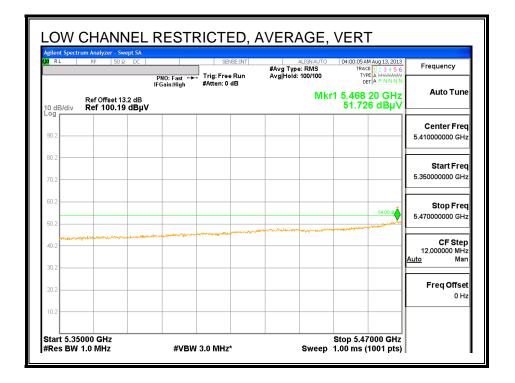
RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)



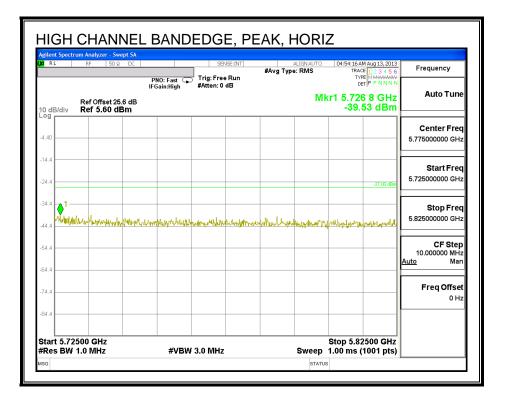


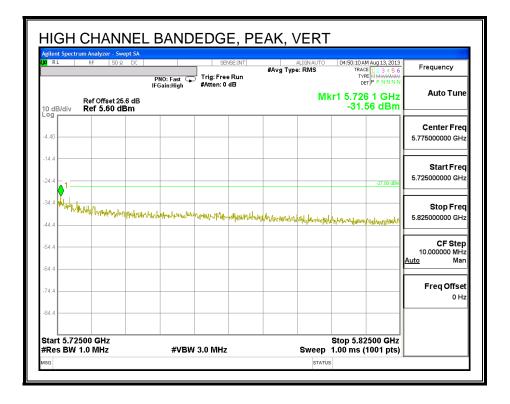
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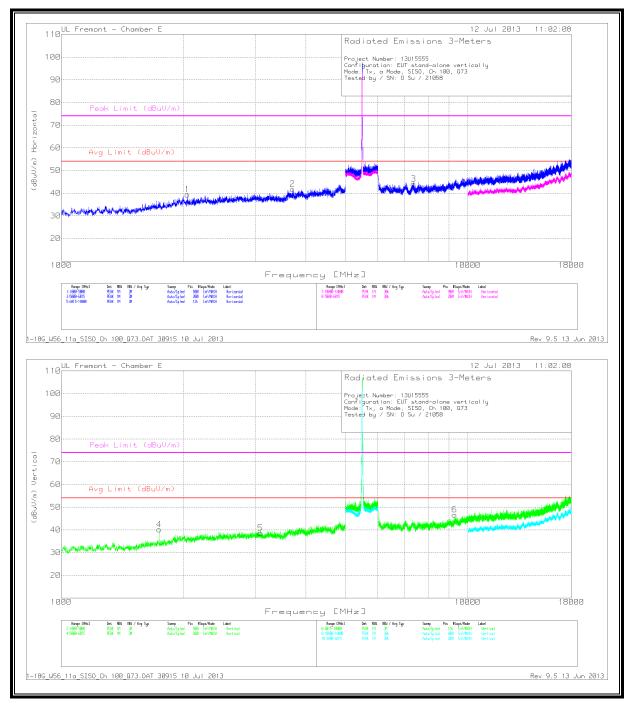
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LOW CHANNEL



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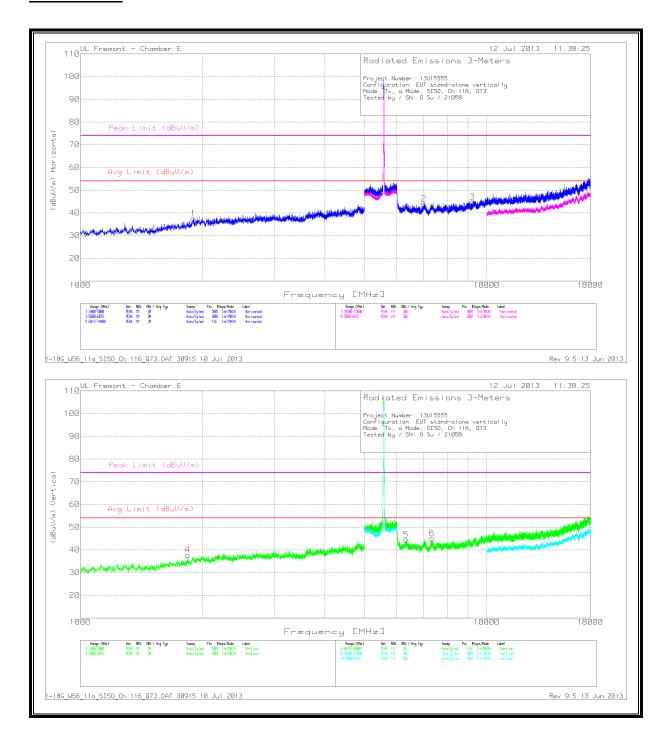
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.044	41.07	PK	32.2	-33.9	39.37	53.97	-14.6	74	-34.63	100	Н
2	3.706	40.45	PK	33.6	-32.3	41.75	53.97	-12.22	74	-32.25	200	Н
4	1.741	44.26	PK	30.4	-34.5	40.16	53.97	-13.81	74	-33.84	201	V
5	3.09	38.24	PK	33.3	-33	38.54	53.97	-15.43	74	-35.46	201	V
3	7.359	36.66	PK	36	-28.6	44.06	53.97	-9.91	74	-29.94	201	Н
6	9.285	35.77	PK	37.2	-26.3	46.67	53.97	-7.3	74	-27.33	100	V

PK - Peak detector

1-18G_W56_11a_SISO_Ch 100_Q73.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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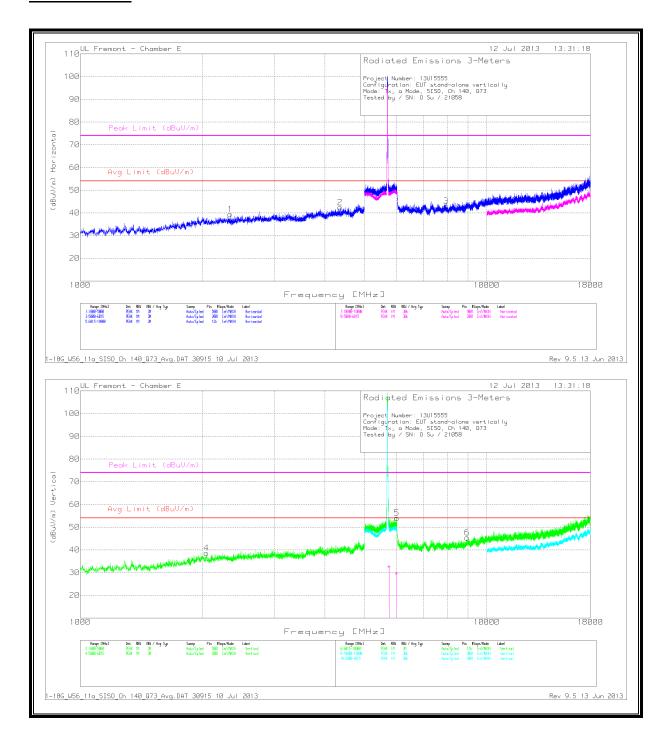
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	1.898	39.88	PK	31.4	-33.8	37.48	53.97	-16.49	74	-36.52	100	Н
2	7.001	36.94	PK	36	-29	43.94	53.97	-10.03	74	-30.06	100	Н
3	9.206	34.78	PK	37	-26.9	44.88	53.97	-9.09	74	-29.12	100	Н
4	1.838	41.23	PK	31.1	-34.5	37.83	53.97	-16.14	74	-36.17	201	V
5	6.339	37.9	PK	35.9	-29.3	44.5	53.97	-9.47	74	-29.5	201	V
6	7.333	37.52	PK	36	-28.5	45.02	53.97	-8.95	74	-28.98	201	V

PK - Peak detector

1-18G_W56_11a_SISO_Ch 116_Q73.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.337	40.9	PK	32.5	-34	39.4	53.97	-14.57	74	-34.6	100	Н
2	4.363	40.07	PK	34.1	-31.8	42.37	53.97	-11.6	74	-31.63	100	Н
3	7.946	35.06	PK	36.2	-28.3	42.96	53.97	-11.01	74	-31.04	100	Н
4	2.043	40.3	PK	32.2	-33.9	38.6	53.97	-15.37	74	-35.4	200	V
5	6.007	39.29	PK	35.8	-21.1	53.99			74	-20.01	100	V
	6.006	14.86	Av	35.8	-21.1	29.56	53.97	-24.41			154	V
6	8.95	35.82	PK	36.8	-27.2	45.42	53.97	-8.55	74	-28.58	100	V

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.757	18.87	Av	35.4	-21.7	32.57	53.97	-21.4	74	-41.43	289	382	V

PK - Peak detector

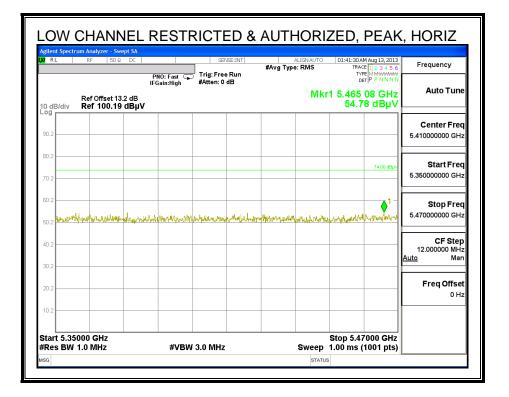
Av - average detection

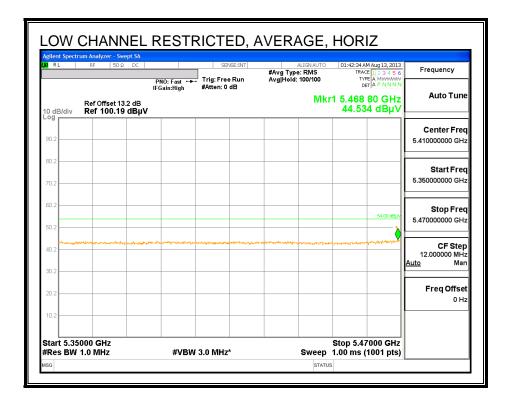
1-18G_W56_11a_SISO_Ch 140_Q73_Avg.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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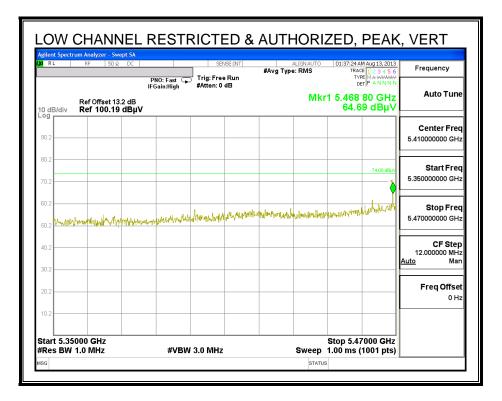
9.2.12. 802.11n HT20 2TX CDD MODE IN THE 5.6 GHz BAND

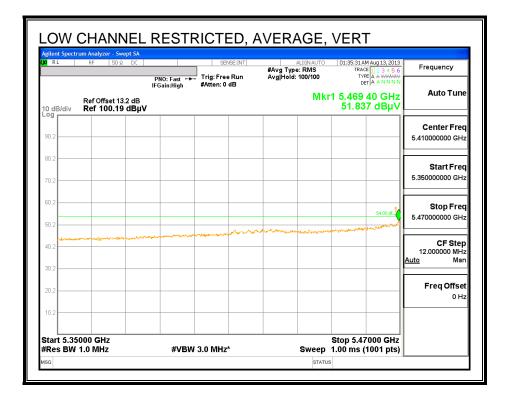
RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)



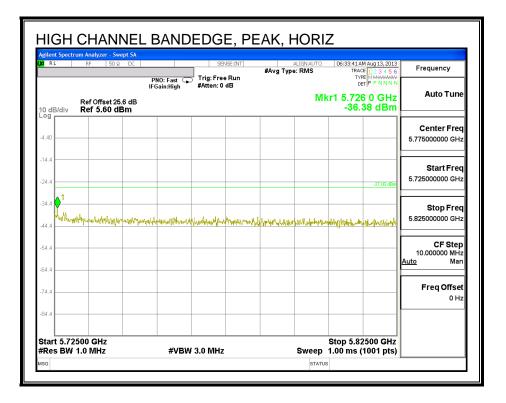


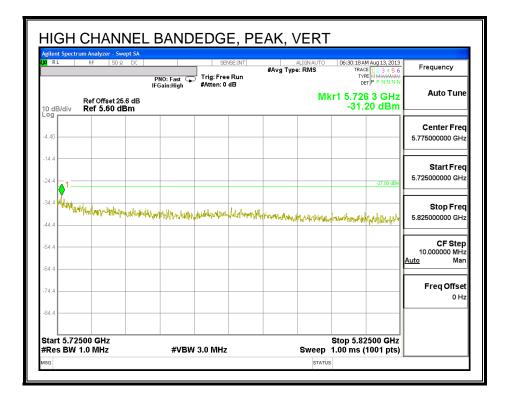
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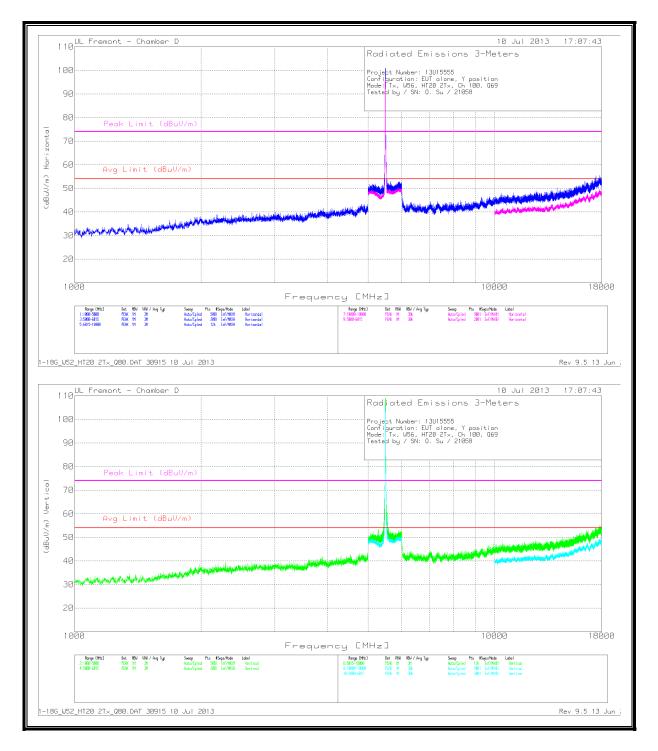




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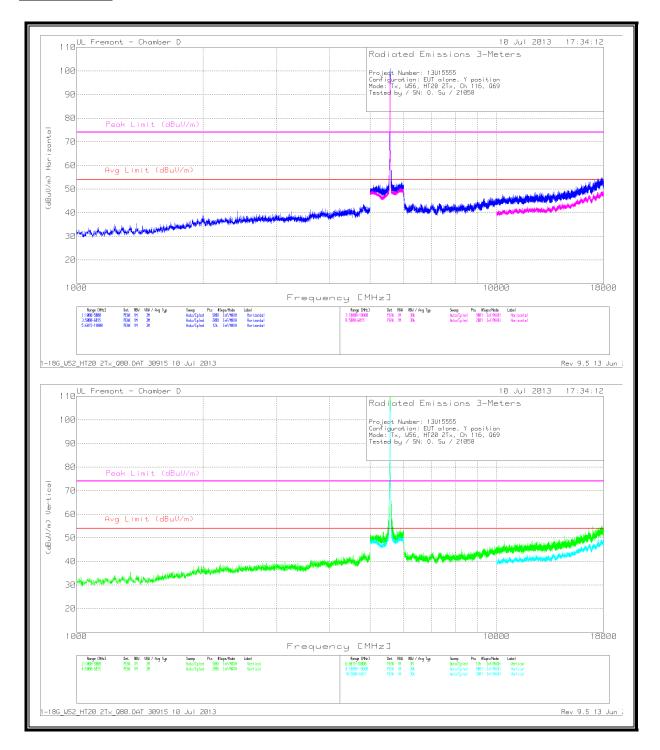
LOW CHANNEL



1-18G_W56_HT20 2Tx_Q69.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

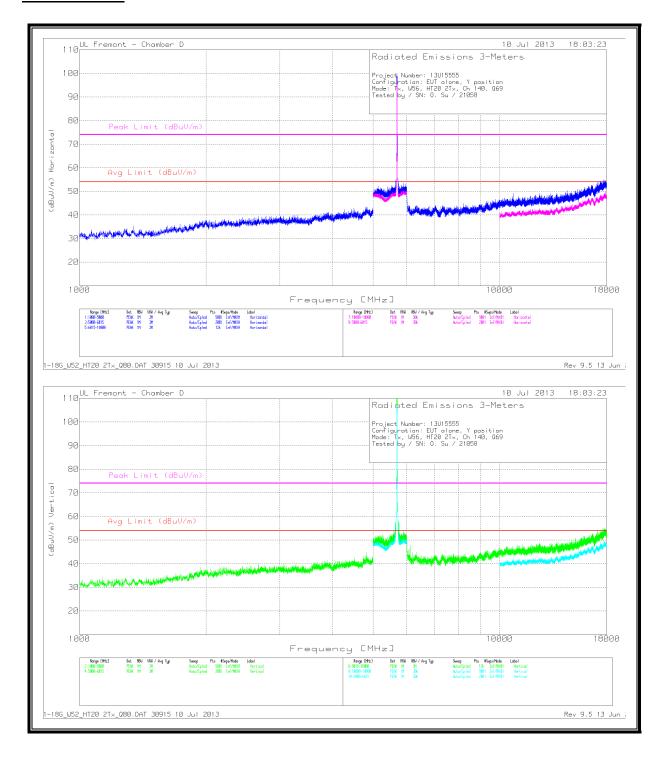
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MID CHANNEL



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1-18G_W56_HT20 2Tx_Q69.DAT 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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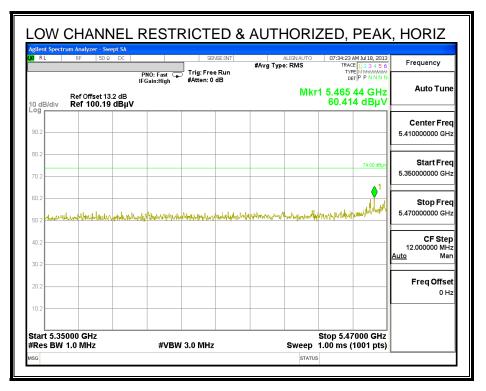
9.2.13. 802.11n HT20 2TX STBC MODE IN THE 5.6 GHz BAND

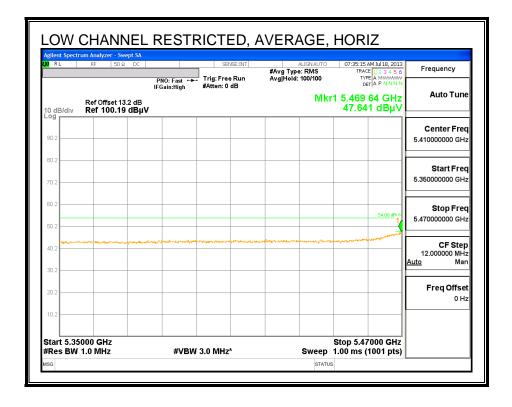
Covered by testing 11n HT20 CDD 2TX in the 5.6GHz band, total power across the two chains is higher than the power level the device will operate at.

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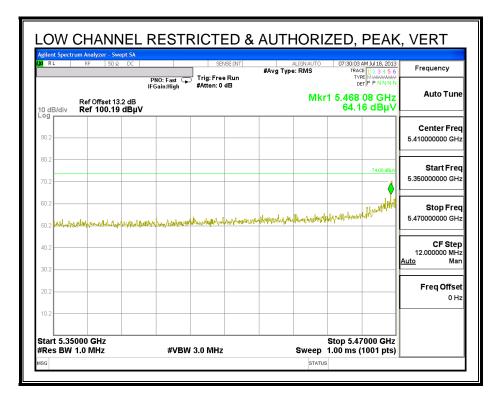
9.2.14. 802.11n HT40 SISO MODE IN THE 5.6 GHz BAND

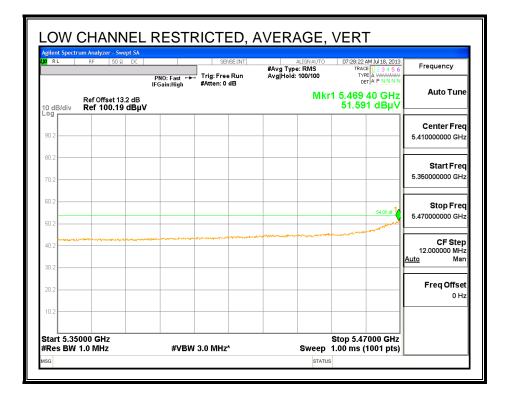
RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)



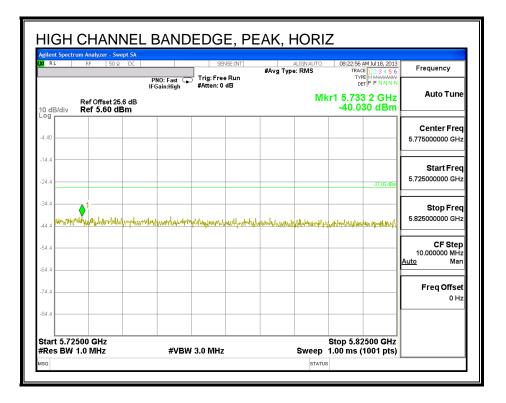


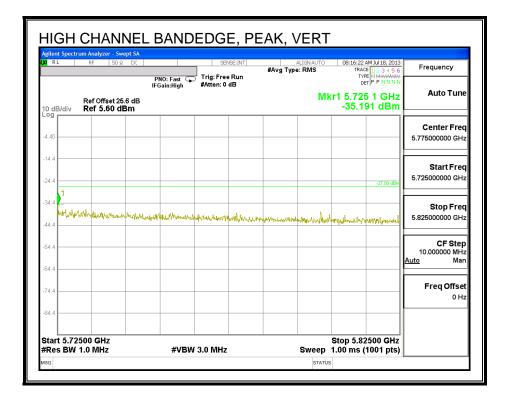
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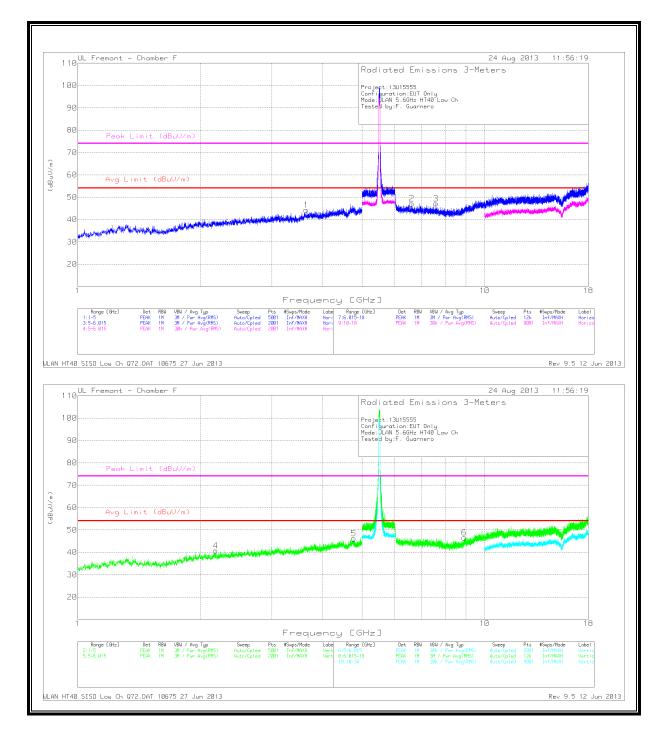




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LOW CHANNEL



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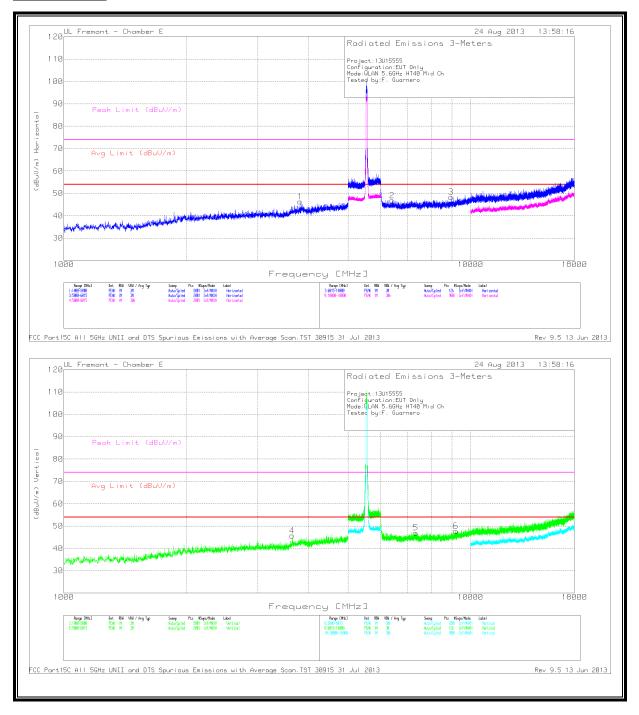
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.644	40.36	PK	33.6	-29.7	44.26	53.97	-9.71	74	-29.74	0-360	100	Н
2	6.621	37.24	PK	35.8	-25.9	47.14	53.97	-6.83	74	-26.86	0-360	100	Н
3	7.596	37.55	PK	35.9	-26.3	47.15	53.97	-6.82	74	-26.85	0-360	199	Н
4	2.183	39.94	PK	31.8	-31	40.74	53.97	-13.23	74	-33.26	0-360	100	V
5	4.768	39.79	PK	34.1	-27.7	46.19	53.97	-7.78	74	-27.81	0-360	200	V
6	8.911	35.78	PK	36.3	-25.5	46.58	53.97	-7.39	74	-27.42	0-360	100	V

PK - Peak detector

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MID CHANNEL



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Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 5GHz LPF	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.808	44.49	PK	33.7	-31.9	0	46.29	53.97	-7.68	74	-27.71	99	Н
2	6.416	40.37	PK	35.8	-29.4	0	46.77	53.97	-7.2	74	-27.23	199	Н
3	8.957	37.98	PK	36.8	-26.5	0	48.28	53.97	-5.69	74	-25.72	100	Н

PK - Peak detector

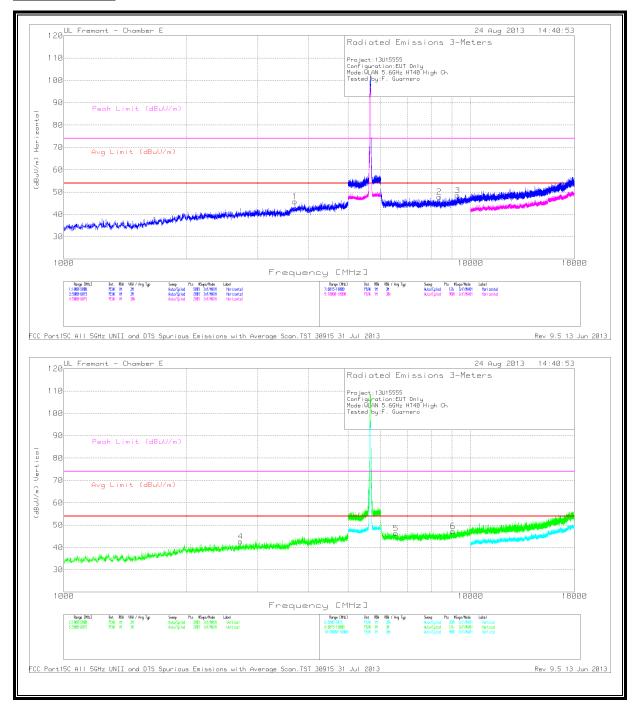
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	3.643	43.61	PK	33.4	-31.3	0	45.71	53.97	-8.26	74	-28.29	100	V
5	7.327	39.1	PK	36	-28.1	0	47	53.97	-6.97	74	-27	100	V
6	9.194	37.13	PK	37	-26.4	0	47.73	53.97	-6.24	74	-26.27	199	V

PK - Peak detector

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 31 Jul 2013Rev 9.5 13 Jun 2013

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HIGH CHANNEL



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Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 5GHz LPF	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.7	43.83	PK	33.6	-31.7	0	45.73	53.97	-8.24	74	-28.27	199	Н
2	8.378	39.09	PK	36.2	-27.5	0	47.79	53.97	-6.18	74	-26.21	100	Н
3	9.29	36.72	PK	37.2	-25.4	0	48.52	53.97	-5.45	74	-25.48	100	Н

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
5	6.556	38.74	PK	35.8	-28.2	0	46.34	53.97	-7.63	74	-27.66	199	V
4	2.719	42.05	PK	33.1	-32.5	0	42.65	53.97	-11.32	74	-31.35	200	V
6	9.052	36.91	PK	36.9	-26.6	0	47.21	53.97	-6.76	74	-26.79	199	V

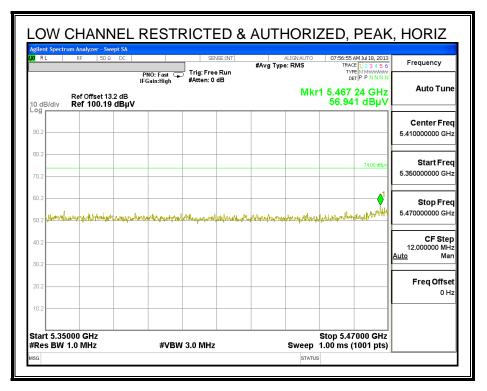
PK - Peak detector

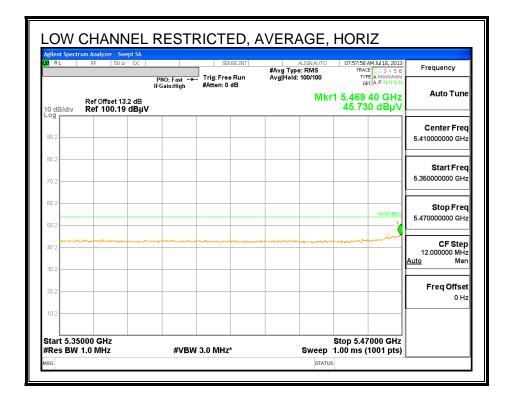
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 31 Jul 2013Rev 9.5 13 Jun 2013

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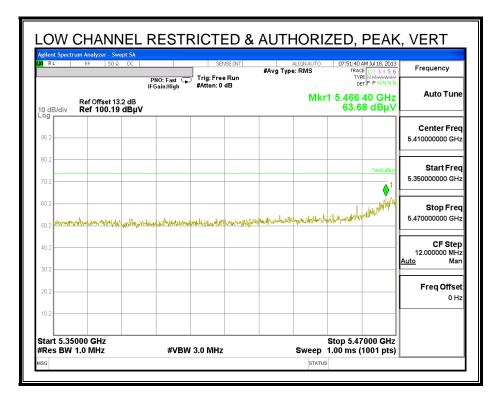
9.2.15. 802.11n HT40 2TX MODE IN THE 5.6 GHz BAND

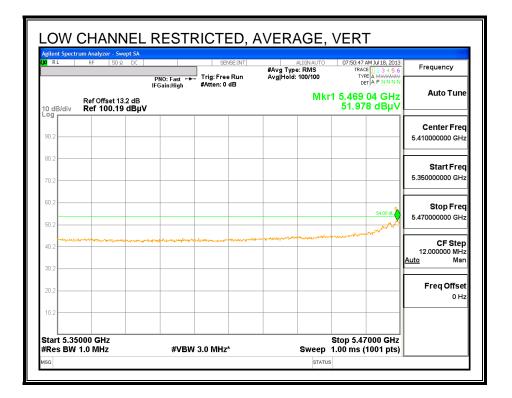
RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)



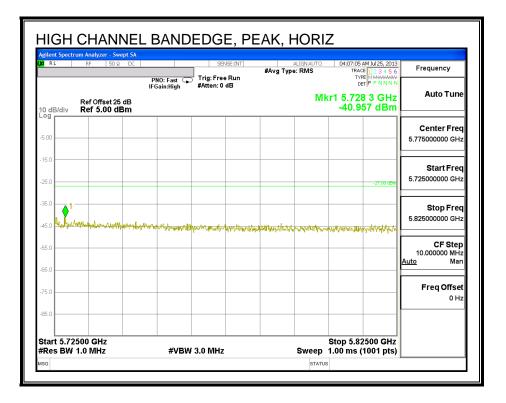


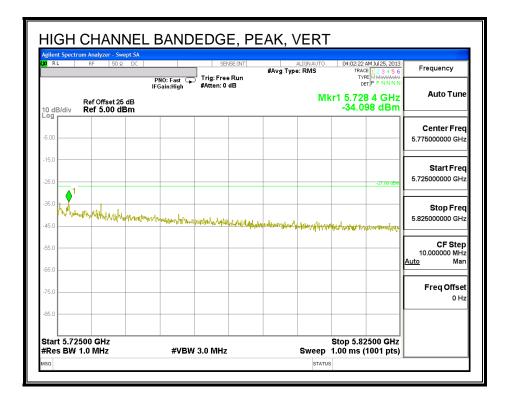
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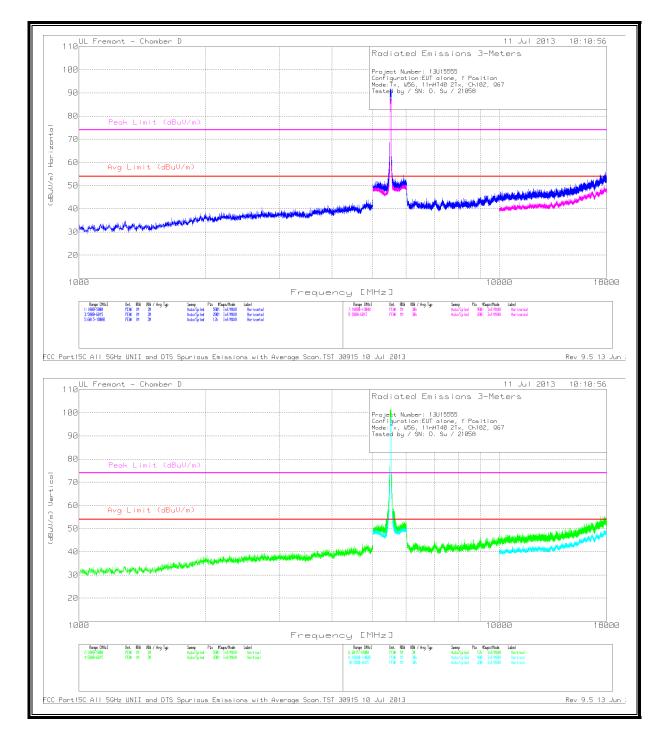
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LOW CHANNEL



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Trace Markers

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
5.905	39.86	PK	35.6	-20.9	54.56	-	-	74	-19.44	201	Н

PK - Peak detector

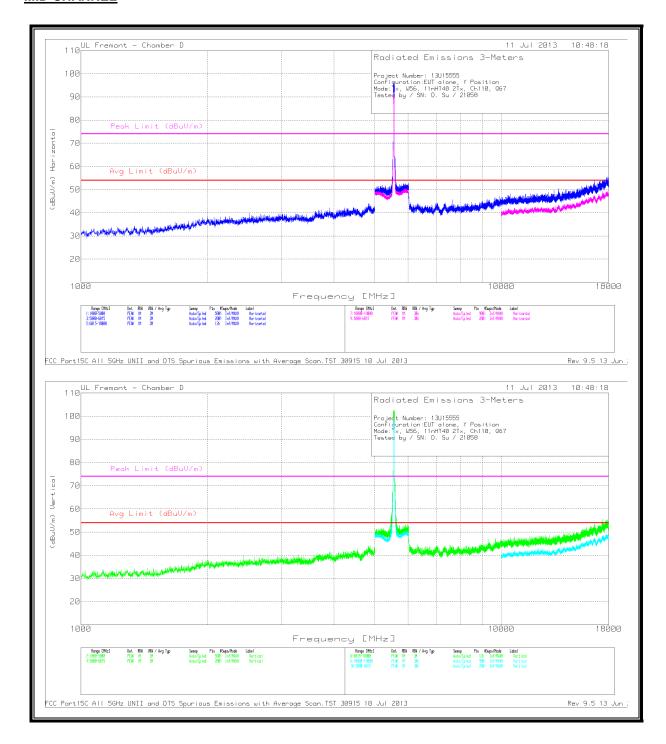
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.906	15.17	Av	35.6	-20.9	29.87	53.97	-24.1	74		285	145	Н

Av - average detection

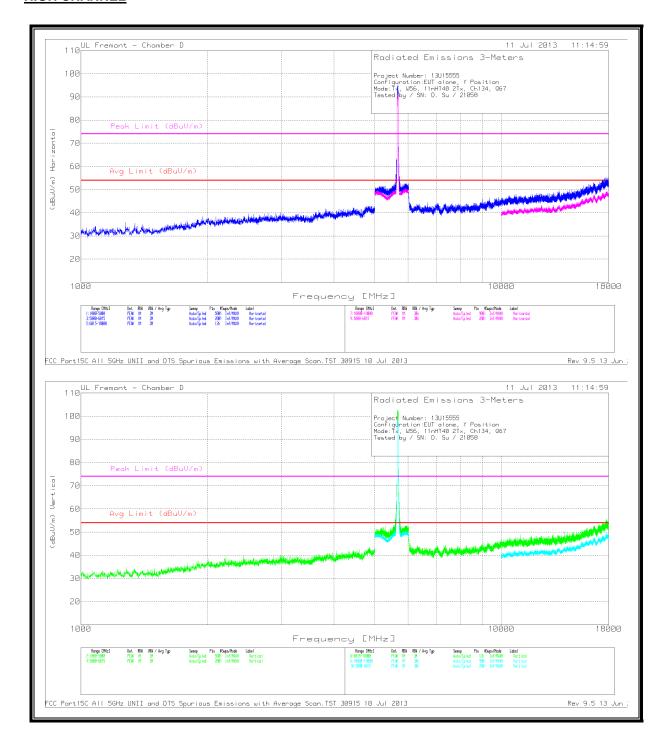
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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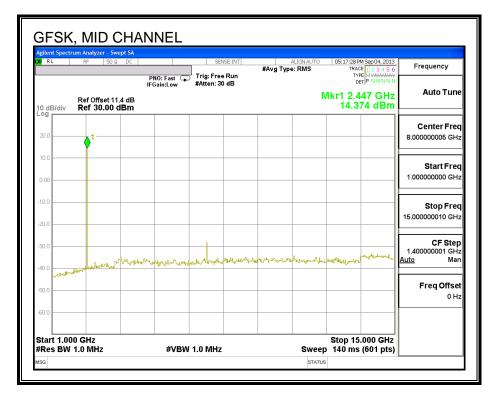
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 10 Jul 2013Rev 9.5 13 Jun 2013

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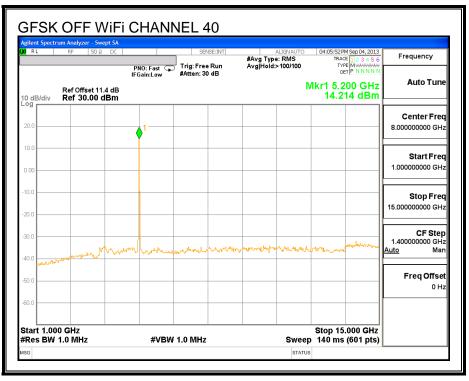
9.2.16. WORST-CASE 2.4GHZ & 5GHZ BAND CO-LOCATION

ANTENNA PORT:

BLUETOOTH ON



BLUETOOTH OFF WiFi ON



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UL VERIFICATION SERVICES INC. 47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888 This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc. .

R L	rum Analyzer - Swe RF 50 Ω	DC	SENSE:INT	ALIGNAUTO #Avg Type: RMS	04:03:32 PM Sep 04, 2013 TRACE 1 2 3 4 5 6	Frequency
	Ref Offset 11.	PNO: Fast IFGain:Low 4 dB	Trig: Free Run #Atten: 30 dB	Avg[Hold>100/100	TYPE MWWWWWW DET P NNNNN	Auto Tune
0 dB/div og	Ref 30.00 d	Bm			-29.602 dBm	
0.0	¹	3				Center Fre 8.000000000 GH
0.0		<mark>2</mark>	4			Start Fre 1.000000000 GH
0.0 0.0 0.0	warner warner waster	Marander benard		her		Stop Fre 15.000000000 GH
tart 1.00 Res BW	00 GHz 1.0 MHz	#VE	W 1.0 MHz	Swee	Stop 15.000 GHz p 140 ms (601 pts)	CF Ste 1.40000000 GH
KR MODE 1 1 N 2 N 3 N 4 N	RC SCL 1 f 1 f 1 f 1 f 1 f	× 2.447 GHz 4.873 GHz 5.200 GHz 7.323 GHz	14.396 dBm -30.749 dBm 14.960 dBm -29.602 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Ma FreqOffse
5 6 7 8						0 H
9 10 11 12						

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REPORT NO: 15U21850-E29V2 FCC ID: BCGA1474 RADIATED HARMONICS AND SPURIOUS EMISSIONS

RESULTS

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl /Pad	Corrected Reading (dBuVolts)	Peak Limit (dBuV/ m)	Margin (dB)	Class B Avg Limit (dBuV/m)	Margin (dB)	Polarity
4.882	52.921	PK	34.3	-27.3	45.921	74	-28.079	-	-	Н
7.325	55.157	PK	35.9	-26.4	45.657	74	-28.343	-	-	Н

PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl /Fltr/Pad	Corrected Reading (dBuVolts)	Peak Limit (dBuV/ m)	Margin (dB)	Class B Avg Limit (dBuV/m)	Margin (dB)	Polarity
4.883	45.533	AV	34.3	-27.3	38.533	-	-	54	-15.467	Н
7.325	46.811	AV	35.9	-26.4	37.311	-	-	54	-16.689	Н

AV – Average RMS detector

Measurements were taken using the worst case polarity.

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9.3. WORST-CASE ABOVE 18 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5 UL EMC	23 Aug 2013 10:49:53
	RF Emissions
5	Pro ject : 13015555
	Project:13U15555 Configuration:EUT Only Mode: WLAN 5.26Hz HT20 2TX Mid Ch
5	Tested by:F. Guarnero
5 Peak Limit (dBuV/	/m)
5	
5	
5 <mark>Avg Limit (dBuV/m</mark>	V
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	ware and a contract the second the the second and the s
5	
_	
5	
зааа	269
5000	Z60 Frequency [MHz]
Range (NHz) Det 1984 UBH / Arg Ty 1:18899-26998 IN 34	
In topo 20000 In an	makarqunek kancır inarizanları cərədə in ən induziyunda izdici i venistadi

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SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

D P	_UL_EMC	23 Aug 2013 11:03:08
95		RF Emissions
85	5	Project:13U15555 Configuration:EUT Only Mode:WLAN 5.2GHz HT20 2TX Mid Ch Tested by:F. Guarnero
75	5 Peak Limit (dBuV/m)	
65	5	
55	Avg Limit (dBuU/m)	
45	5	
35	5	
25	5 promotively and a program of the program of the second second second second second second second second second	and were to an internet of the construction of the state
15	5	
26	888	
	Ronge DHz) Det 189 UBJ / Ang Typ Sweep Pita Kompa/Hode 1:26998-46888 IN 39 Auto/Cpinel 1883 1/	Label Recycl (HHz) Det R80 (Flag) Sump Pils Esge/Flags Label Herizontal 2:20001-00000 15 31 NaturQuined 1683 1/ Vertical
н-	5 2GHz Q73.DAT 30915 2 Aug 2013	Rev 9.5 13 Ju

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SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

UL EMC	23 Aug 2013 11:50:44
	RF Emissions
5	Pro ject : 13U15555
	Project:13U15555 Configuration:EUT Only Mode:WLAN 5.36Hz HT20 2TX Mid Ch
5	Tested by:F. Guarnero
_ Peak Limit (dBuV/m)	
5	
5 Avg Limit (dBuU/m)	
5	
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5 manual all and a second and a s	hand and have been and the stand and the
5	
1 <u></u>	2600
	Frequency [MHz]
Range (MHz) Det #Skill UBW / Ang Tup Sweep Pts #Swee/Haz 1:16888-26688 IM 3M Auto/Cpi ed 1282 1/	ke Ladval Renge DM-L2 Det RBV IBV / Ang Typ Sweep Pta KSepu/Made Ladval Horizontal 2:18889-26989 IM 3H Autor/opied 1282 1/ Ventical

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VERTICAL)

5 UL EMC	23 Aug 2013 11:44:59
	RF Emissions
5	Project:13U15555 Configuration:EUT Only Mode:WLAN 5.3GHz HT20 2TX Mid Ch
5	Mode:⊌LAN 5.3GHz HT28 2TX Mid Ch Tested by:F. Guarnero
5 Peak Limit (dBuV/m)	
5	
5 Avg Limit (dBuV/m)	
5	
5	
	and the second
5 international and the second and t	herefore an indication of the provided and the contraction of the provident interaction of the termination of the theory of the termination of
5	
L 5000	400
	Frequency [MHz]
Rongs (NHz) Det 1981 / Ang Typ Sweep Pts 4 1:20888-48888 IN 3M Auto/Opted 1883	SnpoYfiche Ladvel Renge DMHz Det RBil KBV / Ang Typ Saveny Pia Kapp/Yoden Ladvel 1 // Horizontal 2:2008-60800 Hi 3Y Autor/Galet 1883 1/ Vertical
z 5 3GHz Q73.DAT 30915 2 Aug 2013	Rev 9.5 13 J

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SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5 UL EMC			23 Aug 2013 11:58	:52
			RF Emissions	
5			Pro lect : 13U15555	
			Project:13U15555 Configuration:EUT Only Mode:ULAN 5.66Hz HT20 2TX Mid Ch	
5			Tested by:F. Guarnero	
	t (dBuV/m)			
5				
.5				
5 Avg Limit	(dBuV/m)			
5				
15			and a contraction alternation with the second and and and and and and and and and a	NMA.
_ washington and the	municipalitic properties and the second s	where the property where the second second	and a state of a state of the	
:5				
5				
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8000		Frequency		2600
Range [NHz] Det 1:18889-26888	RBN UBN / Avg Tup Sweep Pts #Swps/Hade	Lobal R	naeDNHz] Det R8W (BW/AnaTup Sween Pts KSwas/Made Label	
1:18888-26888	IN 3M Auto/OpTed 1282 1/	Hanizontal 2:18	09-26888 IN 34 Auto/Opled 1282 1/ Ventical	

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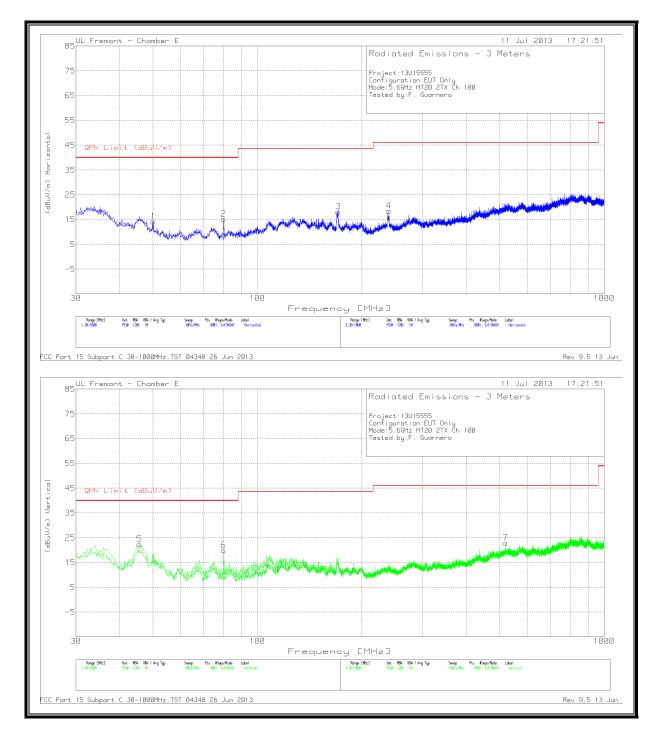
VERTICAL)

UL EMC		23 Aug 2013 12;	13:13
		RF Emissions	
15		 Project:13U15555 Configuration:EUT Only Mode:ULAN 5.66Hz HT20 2TX Mid Ch	
35			
75 Peak Limit (dBuV/m)			
.5			
5 Avg Limit (dBuV/m)			
5			
5			
5 - Antoine Malan science a characteristic terdenter at	wind will a construction of the company of a second stand of a second	estady performances and the performance of the here an product an application of the second statements and	Hohonsteinst
 Keria and a statistical to Activity Manufacture at a statistic 	ene Alfen des Andres en este en alter e	and the second	
5			
5000			400
	Frequen	cy [MHz]	-00
Range (MHz) Det 1984 LBM / Ang Typ 1:26888-49898 IN 34	Swepp Pts #Supps/Made Label Auto/Cpied 1083 1/ Harizontal	Renge DNH-2 Det 1991 USU / Ang Typ Samap Pta Kapan/Hode Label 2:2008-98080 IN 3H Ang Typ Auto/Opted 1083 i/ Venticol	
z 5 6GHz Q73.DAT 30915 2 Aug	2012	Rev 9.	- 13

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9.4. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



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Trace Markers

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Correcte d Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	50.1275	34.03	PK	7.9	-27.7	14.23	40	-25.77	400	Н
2	79.955	35.24	PK	7.7	-27.7	15.24	40	-24.76	400	Н
3	171.135	33.78	PK	11.7	-27.3	18.18	43.52	-25.34	98	Н
4	239.52	33.37	PK	11.5	-26.3	18.57	46.02	-27.45	98	Н
5	45.7625	39.87	PK	10	-27.5	22.37	40	-17.63	100	V
6	79.955	39.96	PK	7.7	-27.7	19.96	40	-20.04	100	V
7	519.1225	30.65	PK	18.1	-25.9	22.85	46.02	-23.17	100	V

PK - Peak detector

FCC Part 15 Subpart C 30-1000MHz.TST 04348 26 Jun 2013Rev 9.5 13 Jun 2013

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10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

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Line-L1 .15 - 30MHz

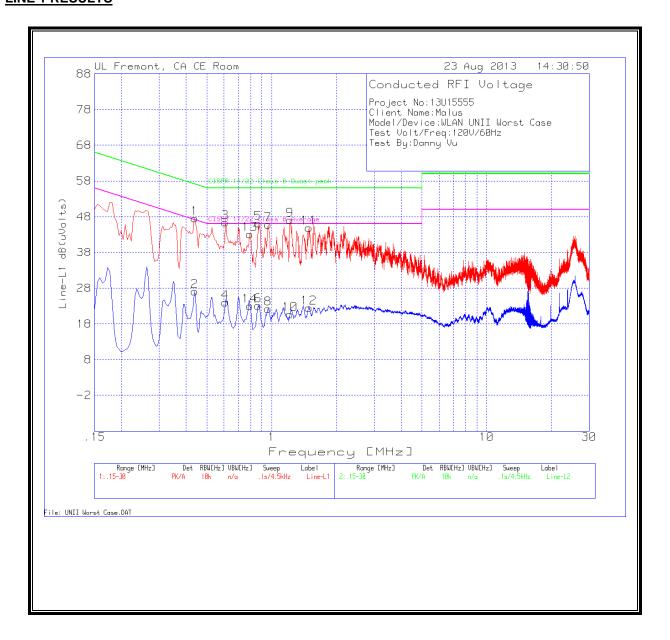
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin to Limit (dB)	CISPR 11/22 Class B Average	Margin to Limit (dB)
1	.438	47.5	PK	.1	0	47.6	57.1	-9.5	-	-
2	.438	27.06	Av	.1	0	27.16	-	-	47.1	-19.94
3	.609	46.28	PK	.1	0	46.38	56	-9.62	-	-
4	.609	23.97	Av	.1	0	24.07	-	-	46	-21.93
13	.7935	43.02	PK	.1	0	43.12	56	-12.88	-	-
14	.7935	22.9	Av	.1	0	23	-	-	46	-23
5	.8655	46.03	PK	.1	0	46.13	56	-9.87	-	-
6	.8655	23.03	Av	.1	0	23.13	-	-	46	-22.87
7	.9645	45.67	PK	.1	0	45.77	56	-10.23	-	-
8	.9645	22.15	Av	.1	0	22.25	-	-	46	-23.75
9	1.2165	46.86	PK	.1	.1	47.06	56	-8.94	-	-
10	1.2165	20.54	Av	.1	.1	20.74	-	-	46	-25.26
11	1.491	44.68	PK	.1	.1	44.88	56	-11.12	-	-
12	1.491	22.25	Av	.1	.1	22.45	-	-	46	-23.55

PK - Peak detector

Av - average detection

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Line-L2 .15 - 30MHz

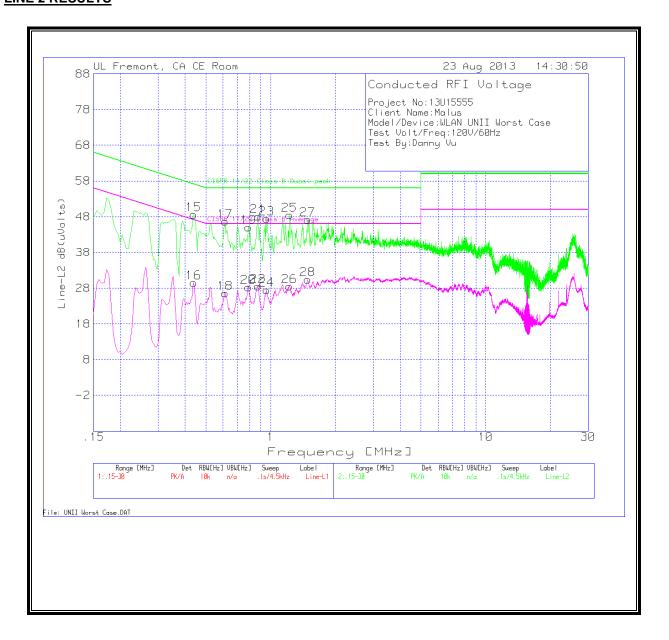
Trace Markers

Varker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin to Limit (dB)	CISPR 11/22 Class B Average	Margin to Limit (dB)
15	.438	48.5	PK	.1	0	48.6	57.1	-8.5	-	-
16	.438	29.49	Av	.1	0	29.59	-	-	47.1	-17.51
17	.6135	46.56	PK	.1	0	46.66	56	-9.34	-	-
18	.6135	26.46	Av	.1	0	26.56	-	-	46	-19.44
19	.789	44.87	PK	.1	0	44.97	56	-11.03	-	-
20	.789	28.11	Av	.1	0	28.21	-	-	46	-17.79
21	.8745	48	PK	.1	0	48.1	56	-7.9	-	-
22	.8745	28.46	Av	.1	0	28.56	-	-	46	-17.44
23	.96	47.4	PK	.1	0	47.5	56	-8.5	-	-
24	.96	27.45	Av	.1	0	27.55	-	-	46	-18.45
25	1.2255	48.3	PK	.1	.1	48.5	56	-7.5	-	-
26	1.2255	28.35	Av	.1	.1	28.55	-	-	46	-17.45
27	1.4865	46.96	PK	.1	.1	47.16	56	-8.84	-	-
28	1.4865	30.2	Av	.1	.1	30.4	-	-	46	-15.6

PK - Peak detector

Av - average detection

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11. DYNAMIC FREQUENCY SELECTION

11.1. OVERVIEW

11.1.1. LIMITS

FCC

§15.407 (h) and FCC 06-96 APPENDIX "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION".

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Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operatio		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode					
	Master	Client	Client			
		(without DFS)	(with DFS)			
DFS Detection Threshold	Yes	Not required	Yes			
Channel Closing Transmission Time	Yes	Yes	Yes			
Channel Move Time	Yes	Yes	Yes			

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value
	(see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assur Note 2: Throughout these test procedures an additional of the test transmission waveforms to account for variatio will ensure that the test signal is at or above the detectio response.	1 dB has been added to the amplitude ons in measurement equipment. This

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Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period

The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:

For the Short pulse radar Test Signals this instant is the end of the Burst.

For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated.

For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission.

The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Pulse Width Radar PRI Minimum Minimum Pulses Type (Microseconds) (Microseconds) Percentage of Trials Successful Detection 1428 60% 30 1 18 1 2 30 1-5 150-230 23-29 60% 3 6-10 200-500 60% 30 16-18 4 11-20 200-500 12-16 60% 30 80% 120 Aggregate (Radar Types 1-4)

Table 5 – Short Pulse Radar Test Waveforms

Table 6 – Long Pulse Radar Test Signal

Radar	Bursts	Pulses	Pulse	Chirp	PRI	Minimum	Minimum
Waveform		per	Width	Width	(µsec)	Percentage	Trials
		Burst	(µsec)	(MHz)		of Successful	
						Detection	
5	8-20	1-3	50-100	5-20	1000-	80%	30
					2000		

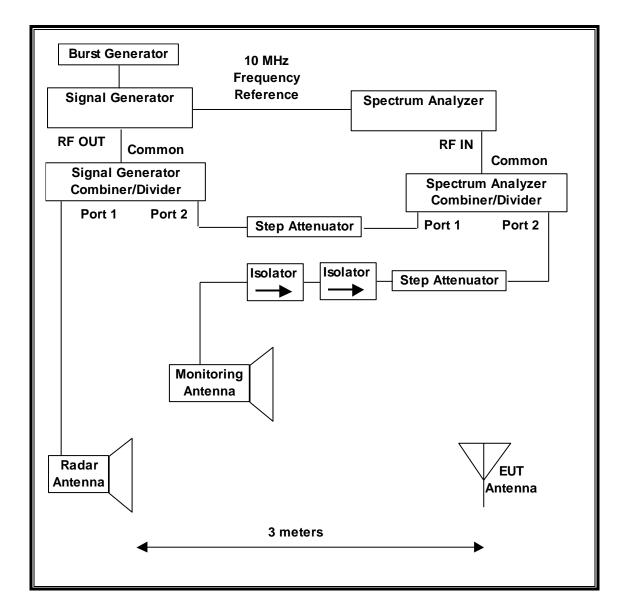
Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful	Minimum Trials
	(µ360)		(113)	пор		Detection	
6	1	333	300	9	.333	70%	30

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11.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



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SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at runtime.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

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ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

TEST AND MEASUREMENT EQUIPMENT

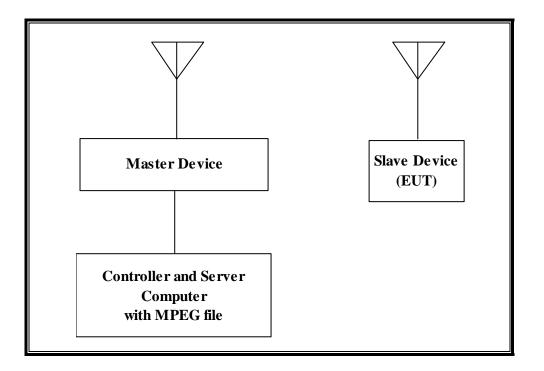
The following test and measurement equipment was utilized for the DFS tests documented in this report:

TEST EQUIPMENT LIST						
Description	Manufacturer Model		Asset Number	Cal Due		
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	09/18/13		
Vector Signal Generator, 20GHz	Agilent / HP	E8267C	C01066	11/20/13		

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11.1.3. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



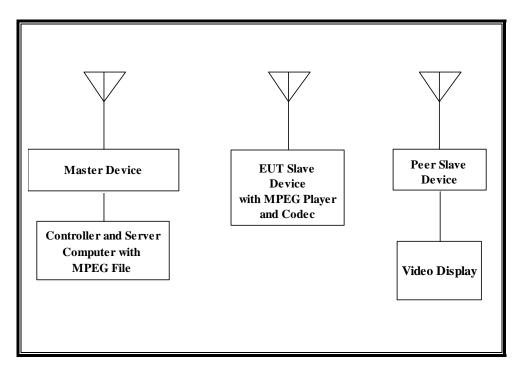
SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST						
Description	Manufacturer	Model	Serial Number	FCC ID		
Wireless Access Point (Master Device)	Cisco	AIR-AP1252AG-A-K9	FTX130390D9	LDK102061		
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH1049902N	DoC		
Notebook PC (Controller/Server)	Apple	MacBook Pro A1150	AOU257941	DoC		
AC Adapter (Controller/Server PC)	Delta Electronics	A1330	MV952157KAGKA	DoC		

11.1.4. SETUP OF EUT (CLIENT-TO-CLIENT COMMUNICATIONS MODE)

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST						
Description	Manufacturer	Model	Serial Number	FCC ID		
Wireless Access Point	Cisco	AIR-AP1252AG-A-	FTX130390D9	LDK102061		
(Master Device)		K9				
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH1049902N	DoC		
Notebook PC	Apple	MacBook Pro A1150	AOU257941	DoC		
(Controller/Server)						
AC Adapter (Controller/Server PC)	Delta Electronics	A1330	MV952157KAGKA	DoC		
Apple TV (Peer Slave	Apple	A1469	V07JV1Z7FF54	BCGA1469		
Video Display	Dell	U2410f	CN-0FJ525N- 72872-1B5-AGAL	DoC		

11.1.5. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 22.18 dBm EIRP in the 5250-5350 MHz band and 23.57 dBm EIRP in the 5470-5725 MHz band.

The only gain antenna assembly consists of 2 antennas with individual gains of 2.60 dBi, and 2.11 dBi in the 5250-5350 MHz band and 3.66 dBi and 3.99 dBi in the 5470-5725 MHz band.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is -64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides margin to the limit.

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic is generated by streaming the video file TestFile.mp2 "6 ½ Magic Hours" from the Master to the Slave in full motion video mode using the media Safari web browser.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11a/n architecture. Two nominal channel bandwidths are implemented: 20 MHz and 40 MHz.

The software installed in the EUT is 11B451.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices

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REPORT NO: 15U21850-E29V2 DATE: DEC FCC ID: BCGA1474 OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is -64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is -64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides margin to the limit.

The software installed in the access point is 12.4(25d)JA1.

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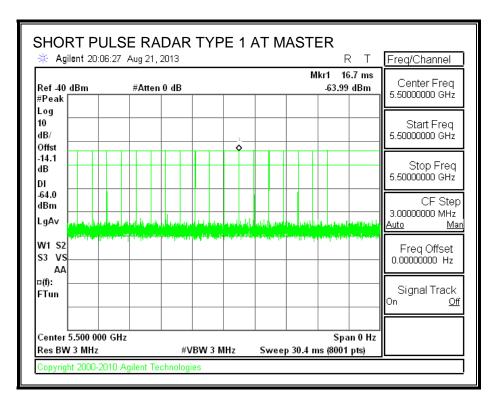
11.2. RESULTS FOR 20 MHz BANDWIDTH

11.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5500 MHz.

11.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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TRAFFIC

🔆 Agilent 18	8:01:30 /	Aug 21, 3	2013					F	хт	Freq/Channel
Ref -40 dBm #Peak □		#Atten	0 dB				MI	cr1 1. -77.51	26 ms dBm	Center Freq 5.50000000 GHz
Log 10 dB/ Offst										Start Freq 5.5000000 GHz
-14.1 dB 1 DI 0			.	1111111	r+ 68 +119	<u>) </u>	+++++++++++++++++++++++++++++++++++++++	<u> </u>		Stop Freq 5.5000000 GHz
dBm LgAv										CF Step 3.00000000 MHz <u>Auto Ma</u>
W1 S2 S3 FS AA										Freq Offset 0.00000000 Hz
¤(f): FTun										Signal Track On <u>Of</u>
Center 5.500 (Res BW 3 MH			#V	/ /BW 3 N	1Hz	Sw	eep 16		n 0 Hz î pts)	

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11.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

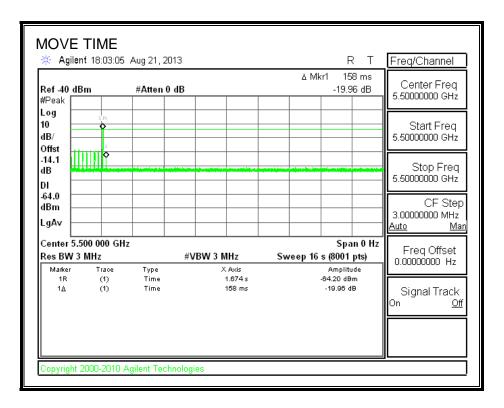
RESULTS

Agency	Channel Move Time	Limit
	(sec)	(sec)
FCC / IC	0.158	10

Agency	Aggregate Channel Closing Transmission Time	Limit
	(msec)	(msec)
FCC	0.0	60
IC	4.0	260

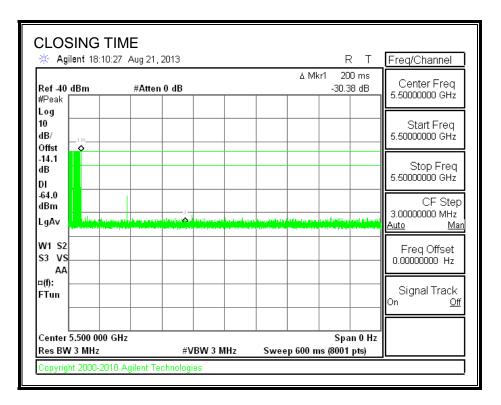
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MOVE TIME



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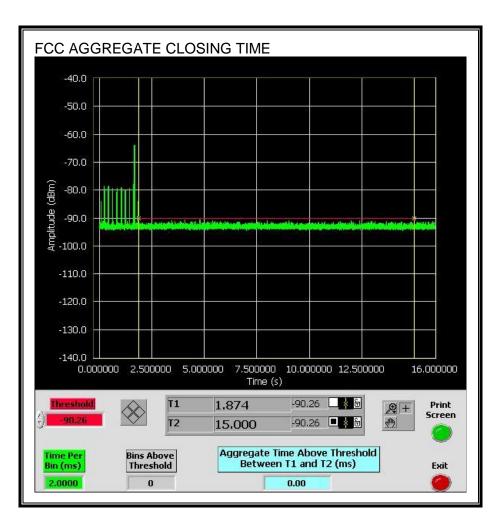
CHANNEL CLOSING TIME



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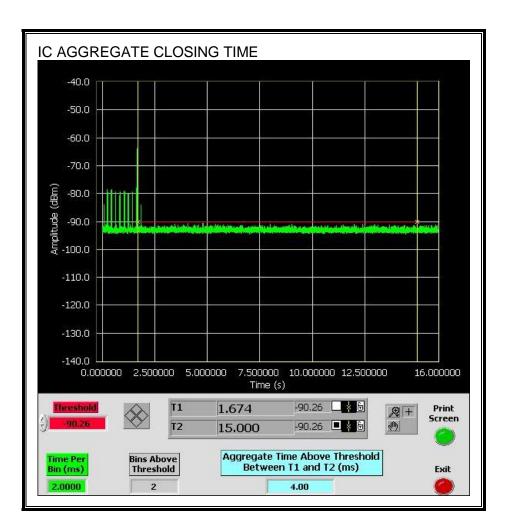
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmission was observed during the FCC aggregate monitoring period.



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Only intermittent transmissions are observed during the IC aggregate monitoring period.



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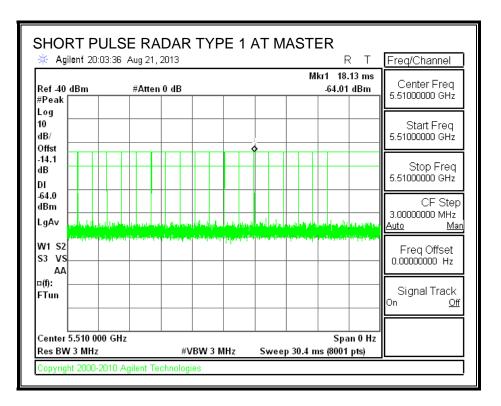
11.3. RESULTS FOR 40 MHz BANDWIDTH

11.3.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5510 MHz.

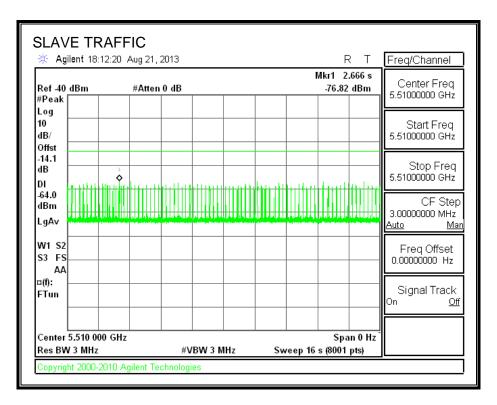
11.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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TRAFFIC



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11.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

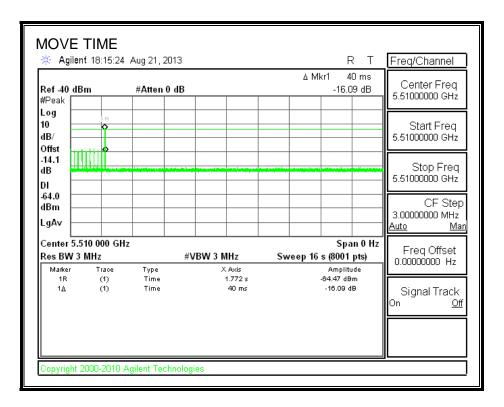
RESULTS

Agency	Channel Move Time	Limit
	(sec)	(sec)
FCC / IC	0.040	10

Agency	Aggregate Channel Closing Transmission Time	Limit
	(msec)	(msec)
FCC	0.0	60
IC	8.0	260

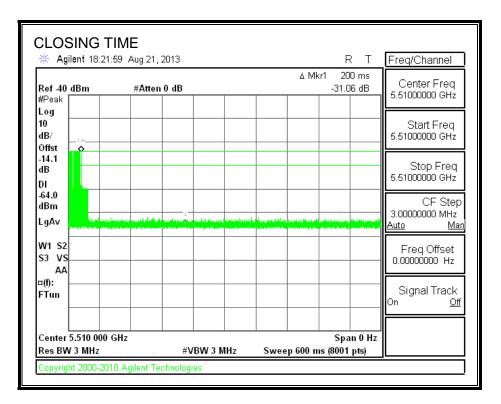
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MOVE TIME



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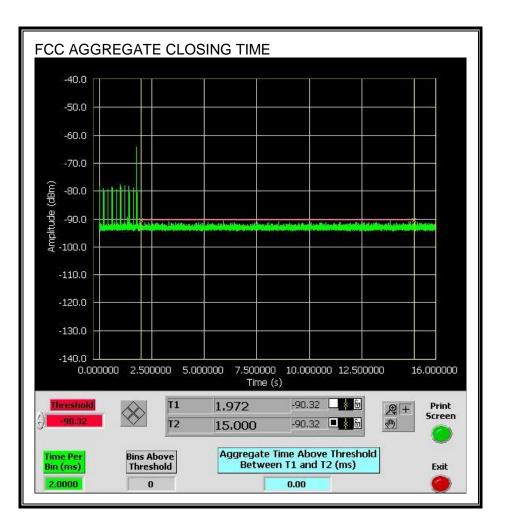
CHANNEL CLOSING TIME



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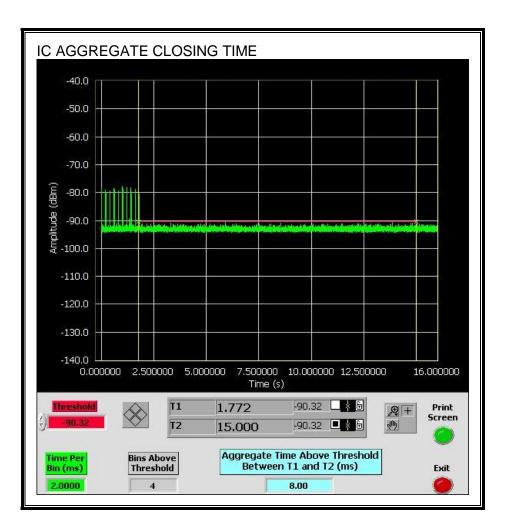
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmission is observed during the FCC aggregate monitoring period.



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Only intermittent transmissions are observed during the IC aggregate monitoring period.

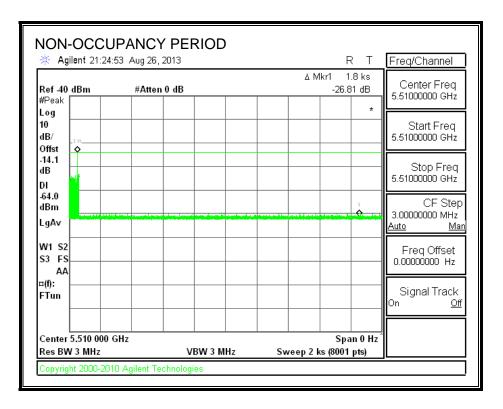


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11.3.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.



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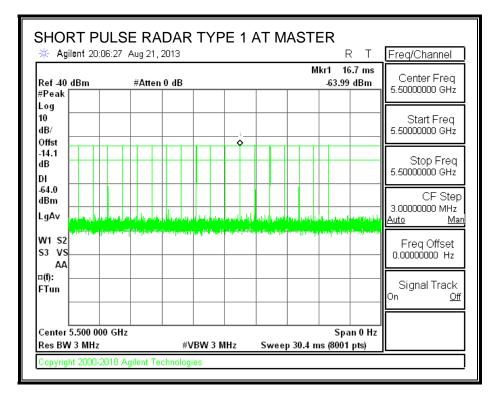
11.4. CLIENT-TO-CLIENT COMMUNICATIONS MODE RESULTS FOR 20 MHz BANDWIDTH

11.4.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5500 MHz.

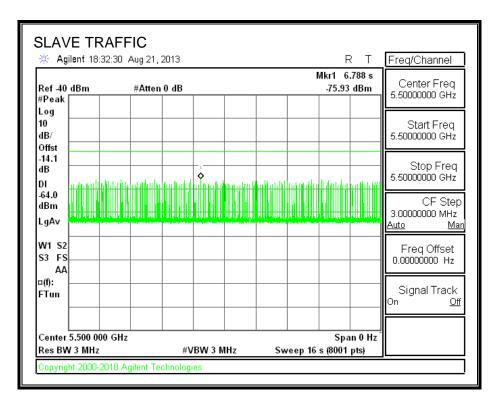
11.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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11.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

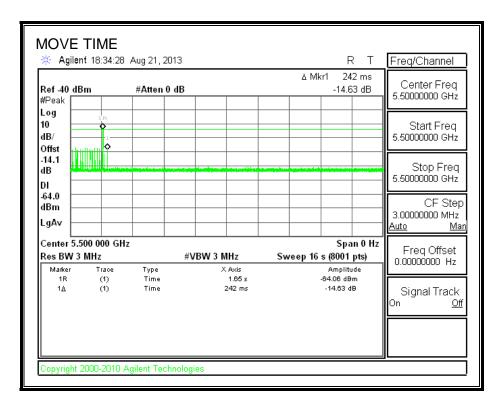
RESULTS

Agency	Channel Move Time	Limit
	(sec)	(sec)
FCC / IC	0.242	10

Agency	Aggregate Channel Closing Transmission Time	Limit
	(msec)	(msec)
FCC	6.0	60
IC	32.0	260

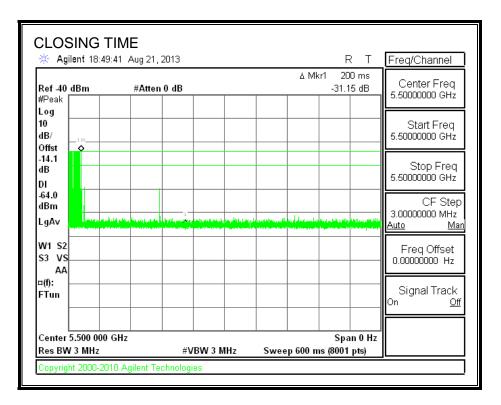
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MOVE TIME



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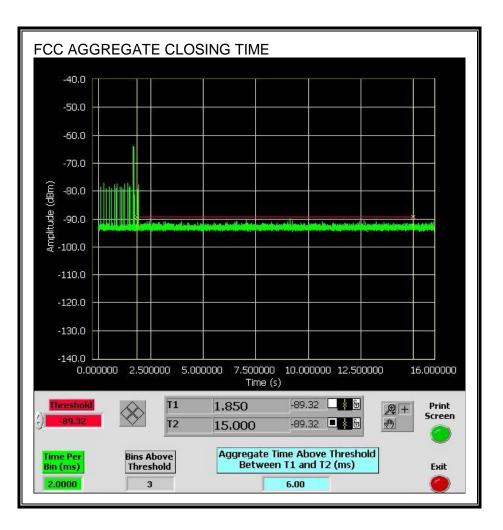
CHANNEL CLOSING TIME



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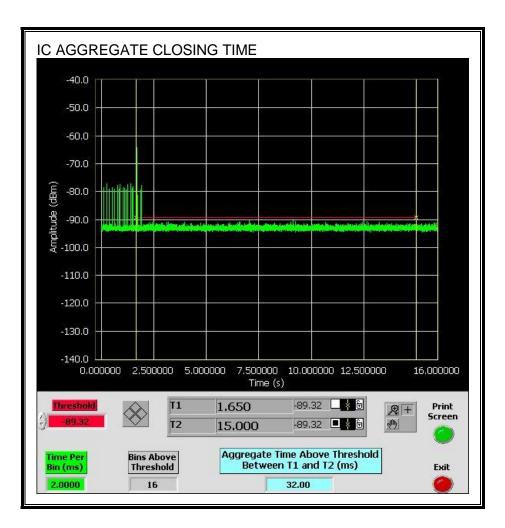
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the FCC aggregate monitoring period.



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Only intermittent transmissions are observed during the IC aggregate monitoring period.



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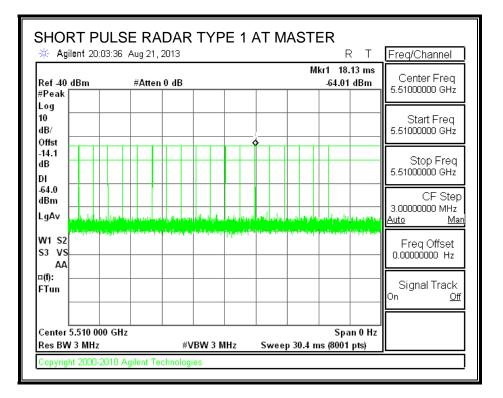
11.5. CLIENT-TO-CLIENT COMMUNICATIONS MODE RESULTS FOR 40 MHz BANDWIDTH

11.5.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5510 MHz.

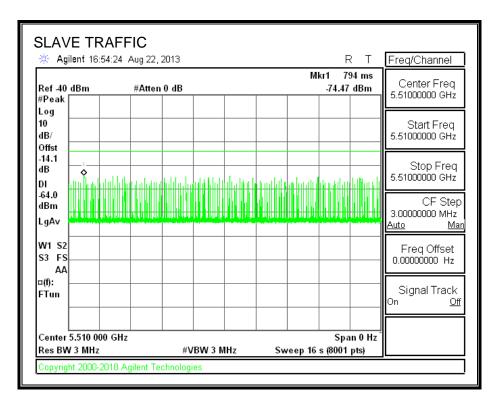
11.5.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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11.5.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.5.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time = (Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the FCC aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

The observation period over which the IC aggregate time is calculated begins at (Reference Marker) and ends no earlier than (Reference Marker + 10 sec).

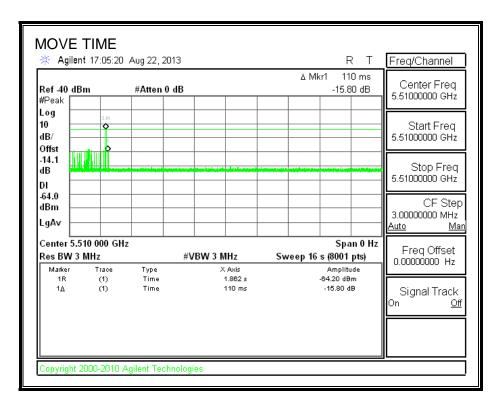
RESULTS

Agency	Channel Move Time	Limit
	(sec)	(sec)
FCC / IC	0.110	10

Agency	Aggregate Channel Closing Transmission Time	Limit
	(msec)	(msec)
FCC	0.0	60
IC	10.0	260

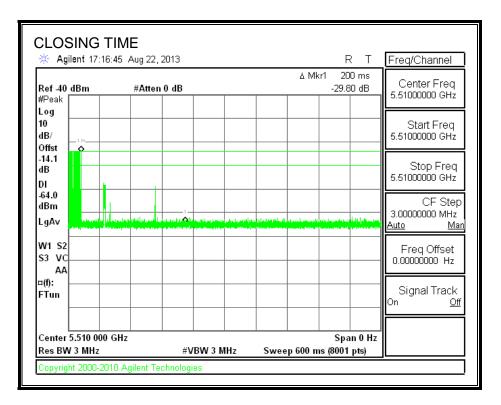
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MOVE TIME



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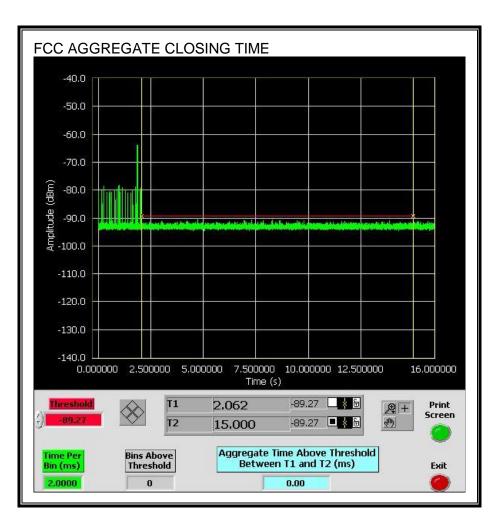
CHANNEL CLOSING TIME



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AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

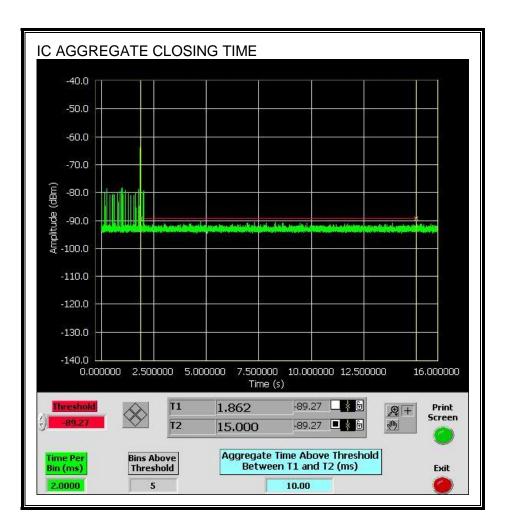
No transmissions are observed during the FCC aggregate monitoring period.



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Only intermittent transmissions are observed during the IC aggregate monitoring period.



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