

8.7. 802.11n HT20 STBC 2TX MODE, CHANNEL 144, 5.6 GHz BAND

8.7.1. 26 dB BANDWIDTH

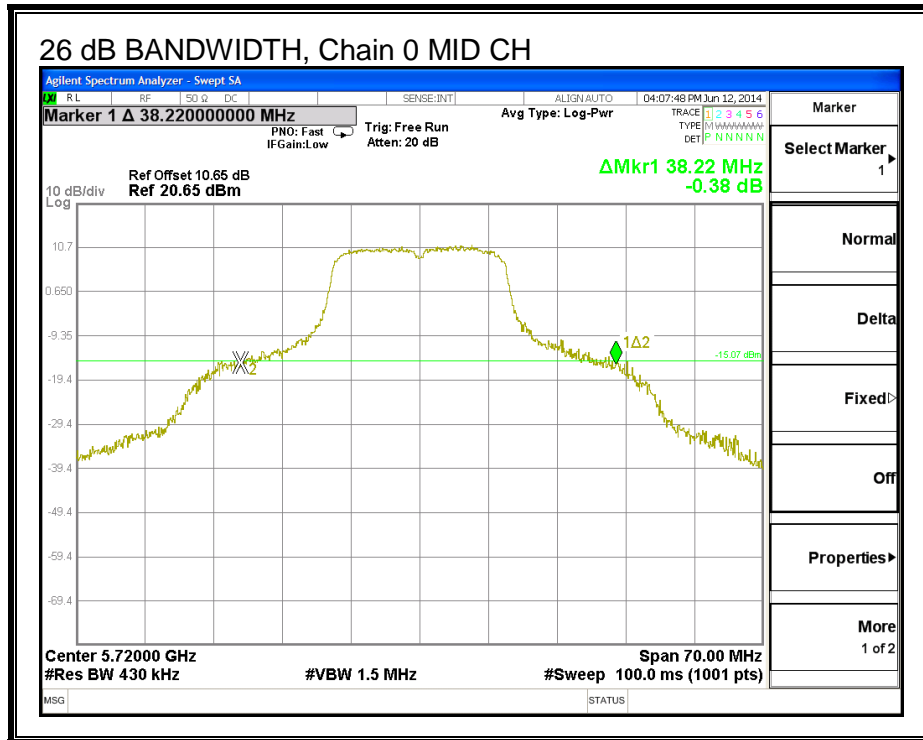
LIMITS

None; for reporting purposes only.

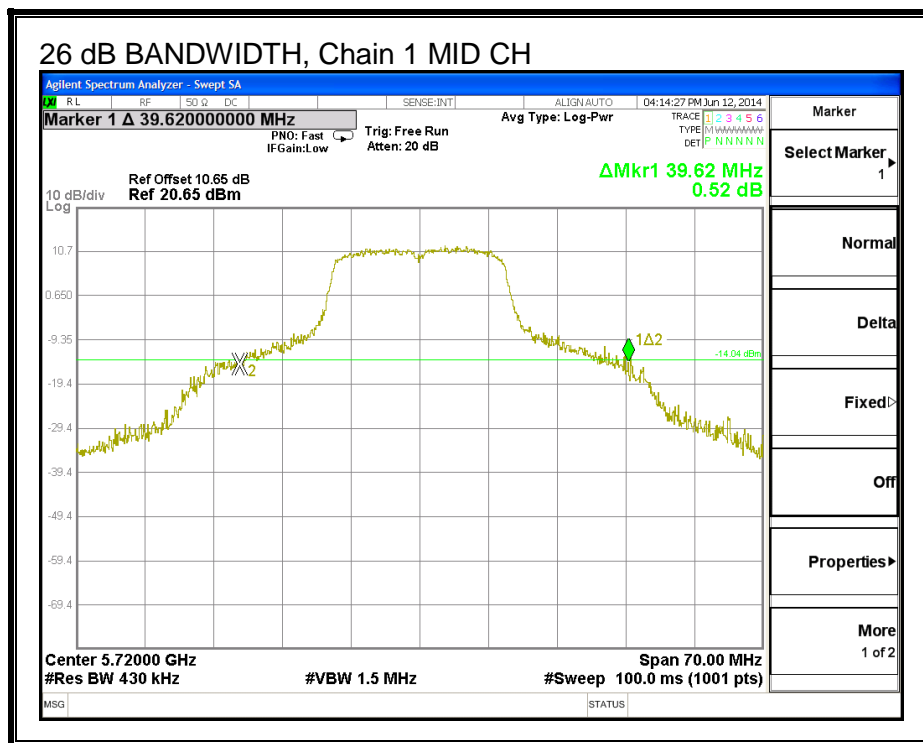
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
High	5720	38.22	39.62

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.7.2. 99% BANDWIDTH

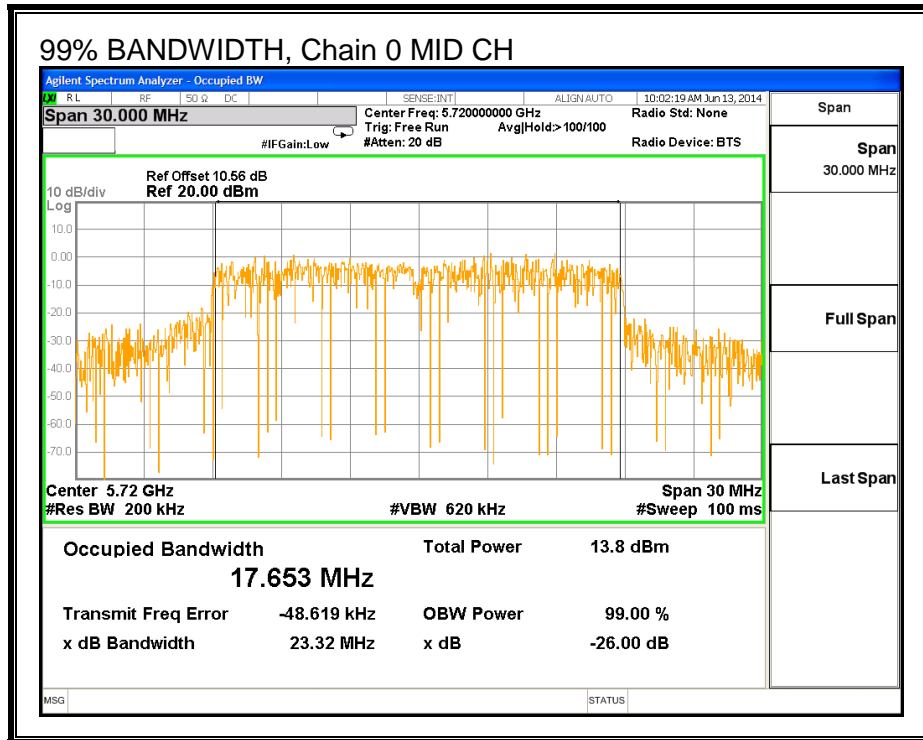
LIMITS

None; for reporting purposes only.

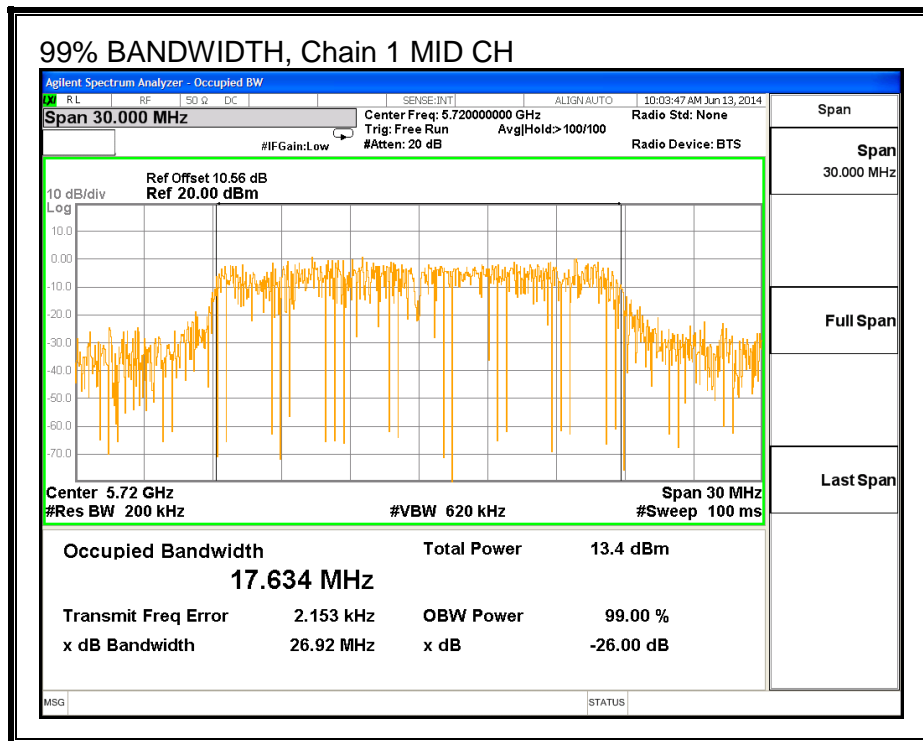
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
High	5720	17.6530	17.6340

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.7.3. OUTPUT POWER AND PSD

LIMITS

FCC §15.407

IC RSS-210 A9

Bands 5470–5600 MHz and 5650–5725 MHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz for IC and 26 dB emission bandwidth in MHz for FCC. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Bands 5725–5825 MHz

The maximum conducted output power shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever power is less. The power spectral density shall not exceed 17 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 4.0 W or $23 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz for IC and 26 dB emission bandwidth in MHz for FCC.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.30	4.30	4.30

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Mid	5720	24.110	13.8170	4.30

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Mid	5720	24.00	22.40	28.40	22.40	11.00	11.00	11.00

Duty Cycle CF (dB)	0.17	Included in Calculations of Corr'd Power & PPSD
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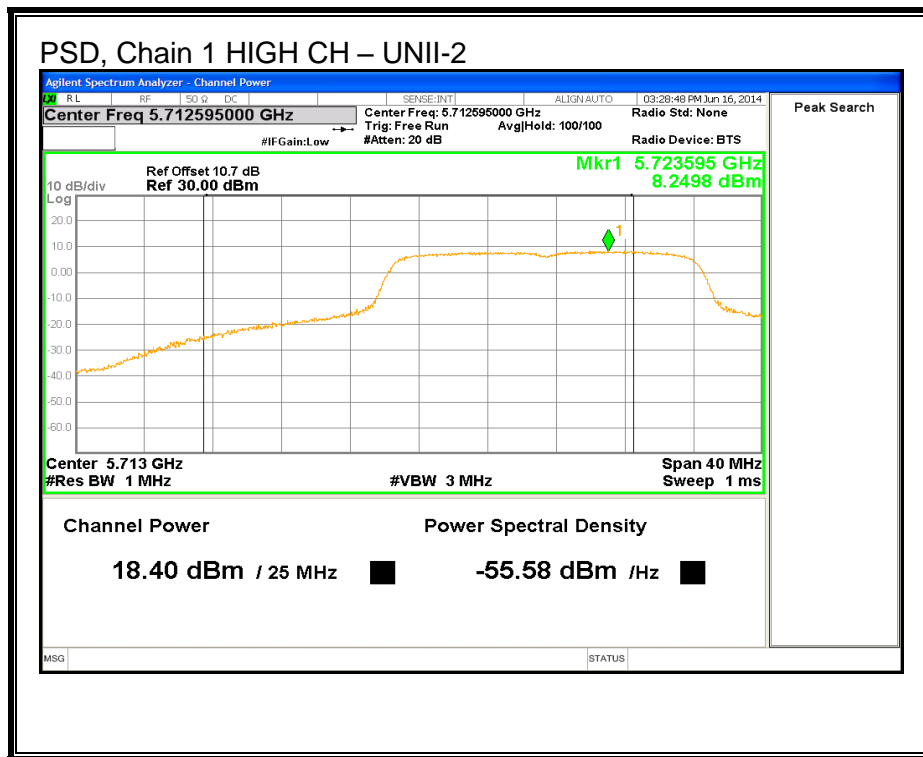
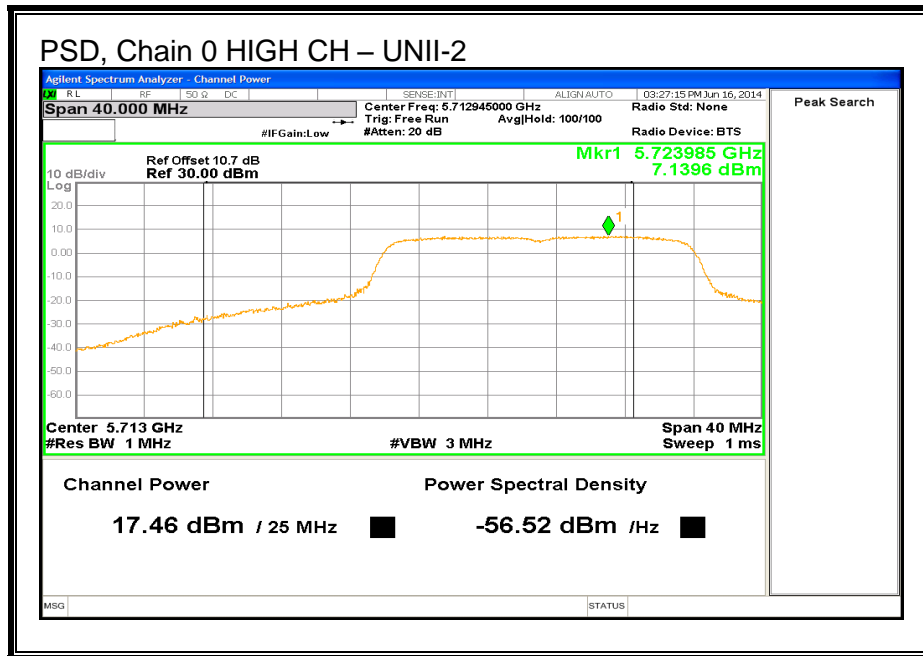
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	17.46	18.40	21.136	22.40	-1.268

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Mid	5720	7.140	8.250	10.91	11.00	-0.09

OUTPUT POWER AND PSD, UNII-2 PORTION



RESULTS

Limits (FCC), portion in 5.8GHz UNII-3 band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Mid	5720	14.11	3.8170	4.30

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Mid	5720	28.50	22.82	28.82	22.82	11.00	11.00	11.00

Duty Cycle CF (dB)	0.17	Included in Calculations of Corr'd Power & PPSD
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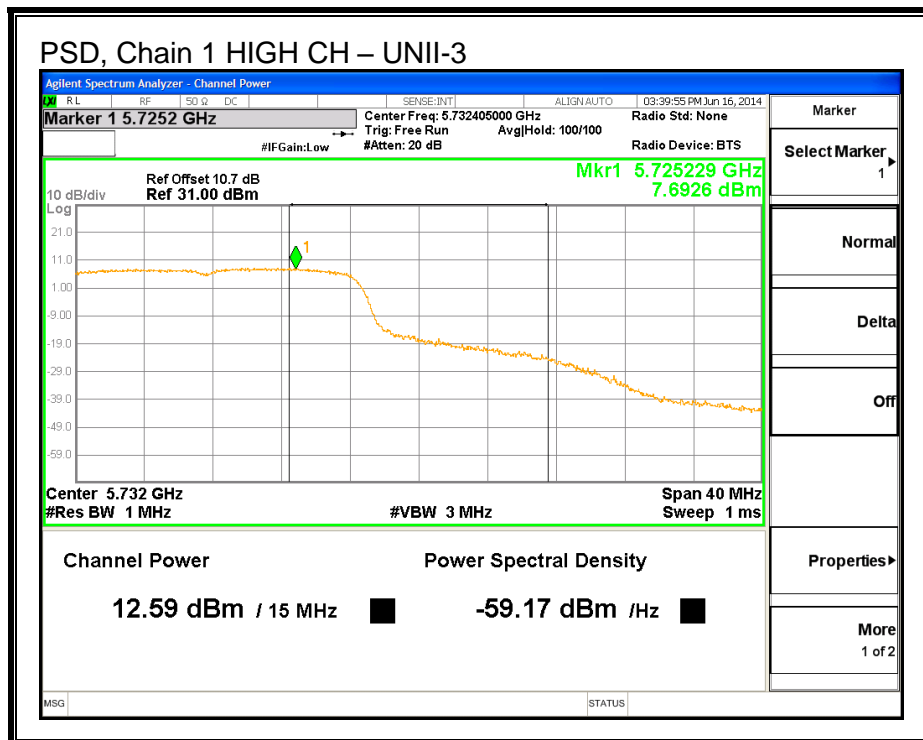
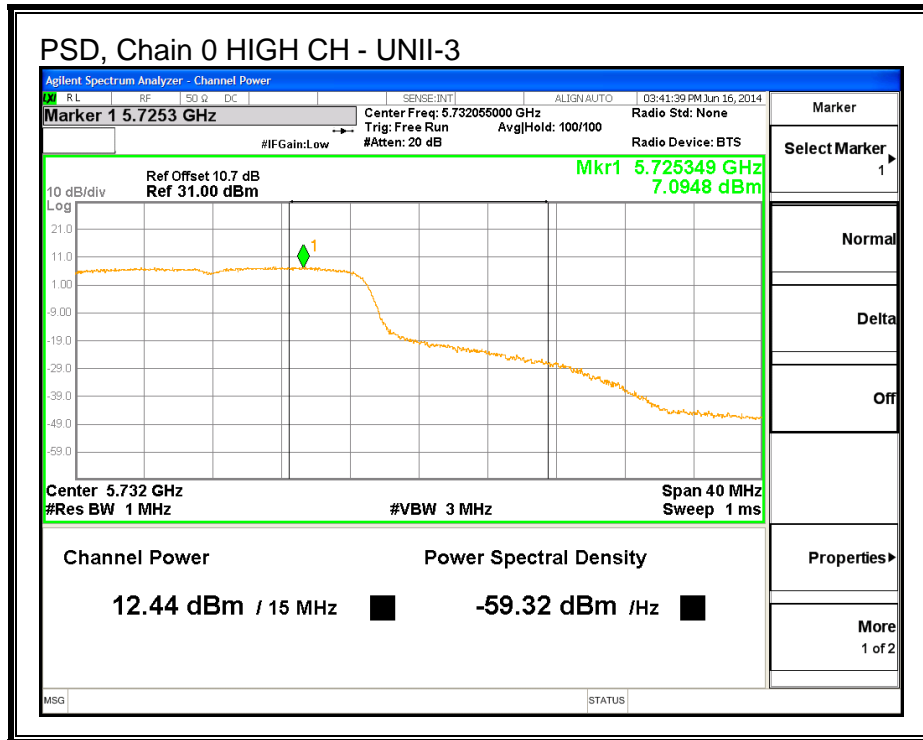
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	12.44	12.59	15.696	22.82	-7.121

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Mid	5720	7.095	7.693	10.58	11.00	-0.42

OUTPUT POWER AND PSD, UNII-3 PORTION



8.7.4. AVERAGE OUTPUT POWER (WHOLE FUNDAMENTAL)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

RESULTS

Frequency	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Output Power (dBm)	Output Power (mW)
5.6 GHz band, 2TX (Channels overlapping UNII-2 and UNII-3 bands)				
5720 (UNII-2 portion)	17.46	18.40	21.136	129.89
5720 (UNII-3 portion)	12.44	12.59	15.696	37.12
5720 (Whole signal)	18.65	19.41	22.267	168.55

8.7.5. EIRP IN THE UNII-2 BAND

LIMITS

None; for reporting purposes only.

RESULTS

Frequency	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Output Power (dBm)	Directional Antenna Gain (dBi)	EIRP (dBm)
5.6 GHz band, 2TX (Channels overlapping UNII-2 and UNII-3 bands)					
5720 (UNII portion)	17.46	18.40	21.106	4.3	25.406

8.8. 802.11n HT40 STBC 2TX MODE IN THE 5.6 GHz BAND

8.8.1. 26 dB BANDWIDTH

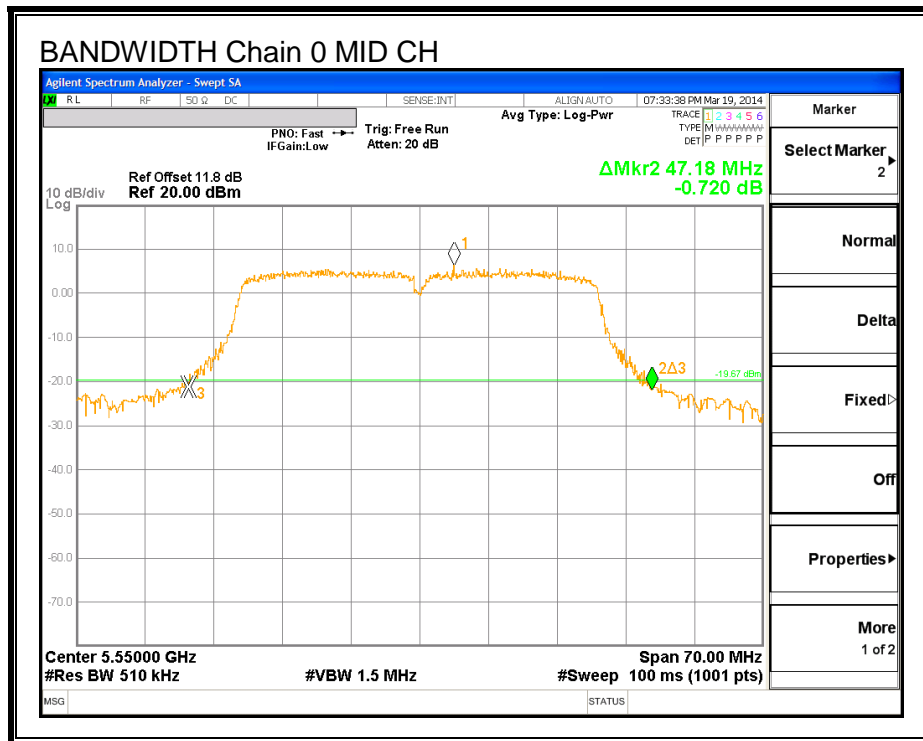
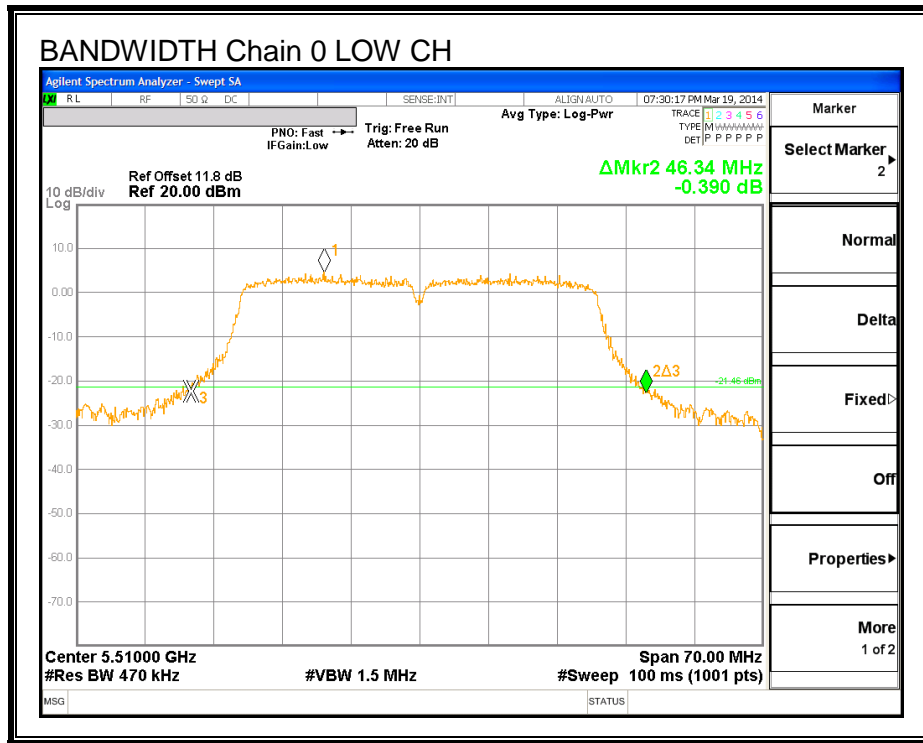
LIMITS

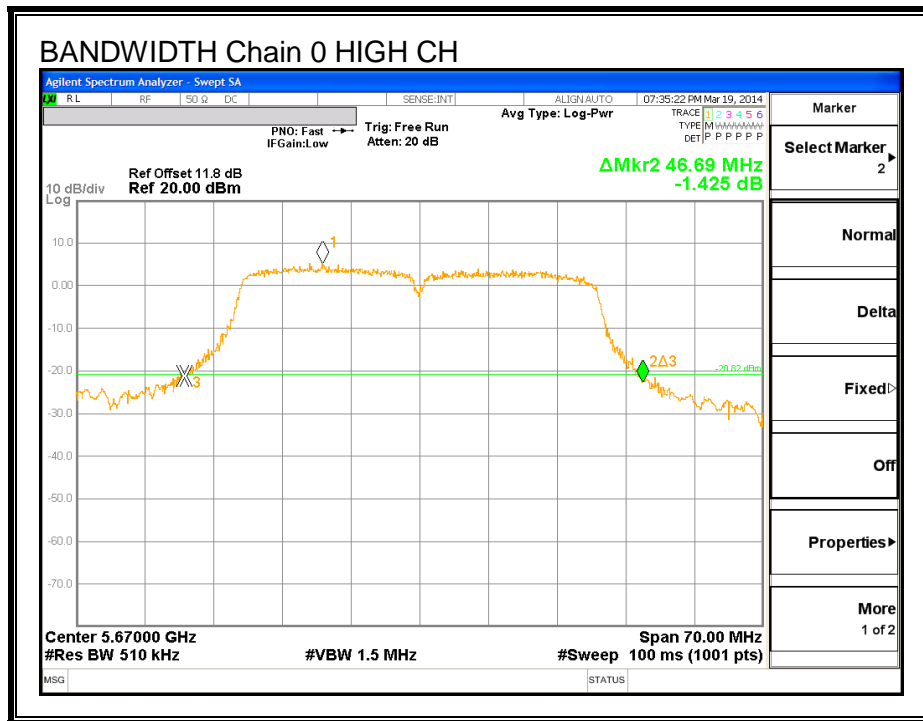
None; for reporting purposes only.

RESULTS

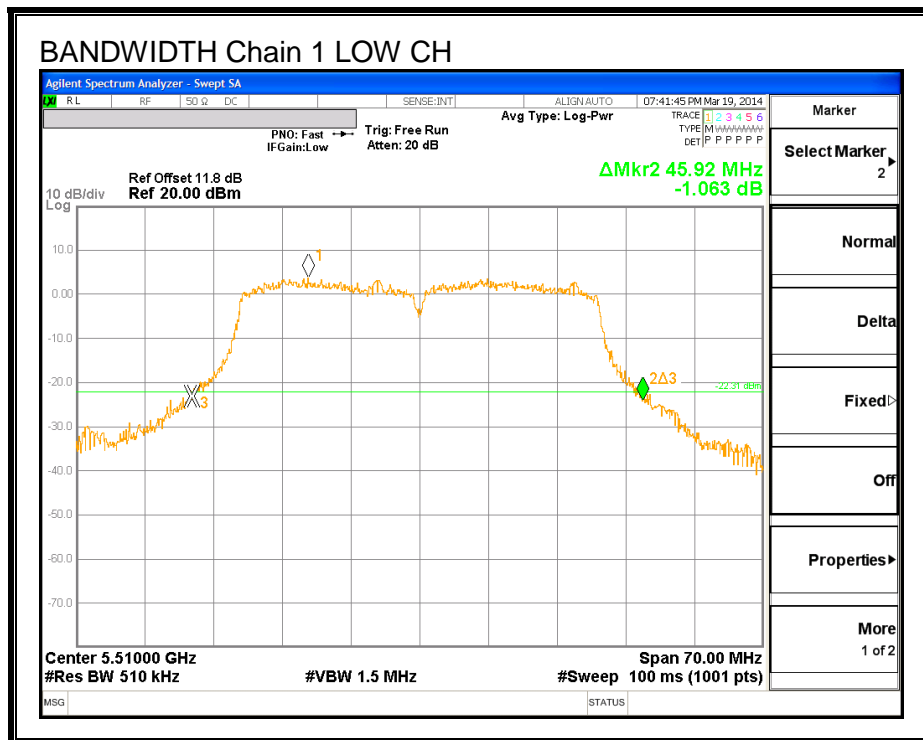
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5510	46.34	45.92
Mid	5550	47.18	45.85
High	5670	46.69	46.27

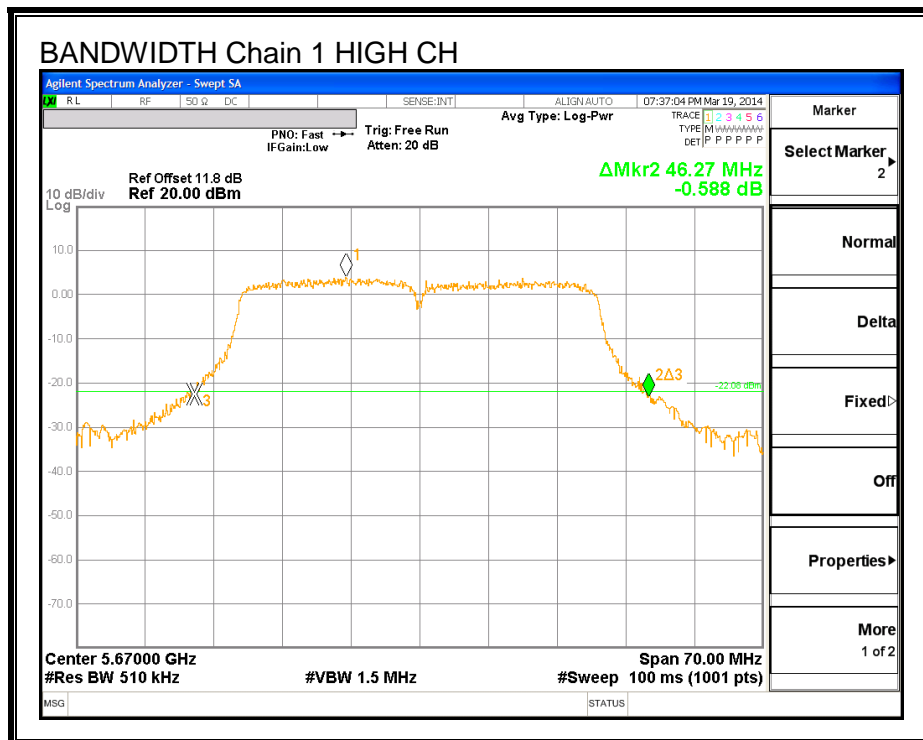
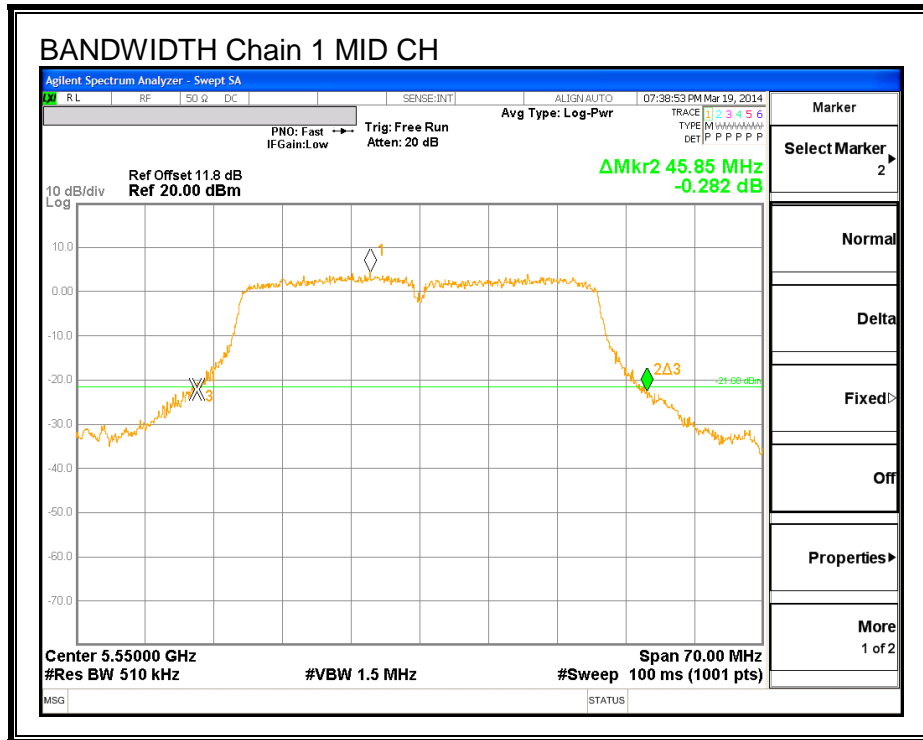
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





8.8.2. 99% BANDWIDTH

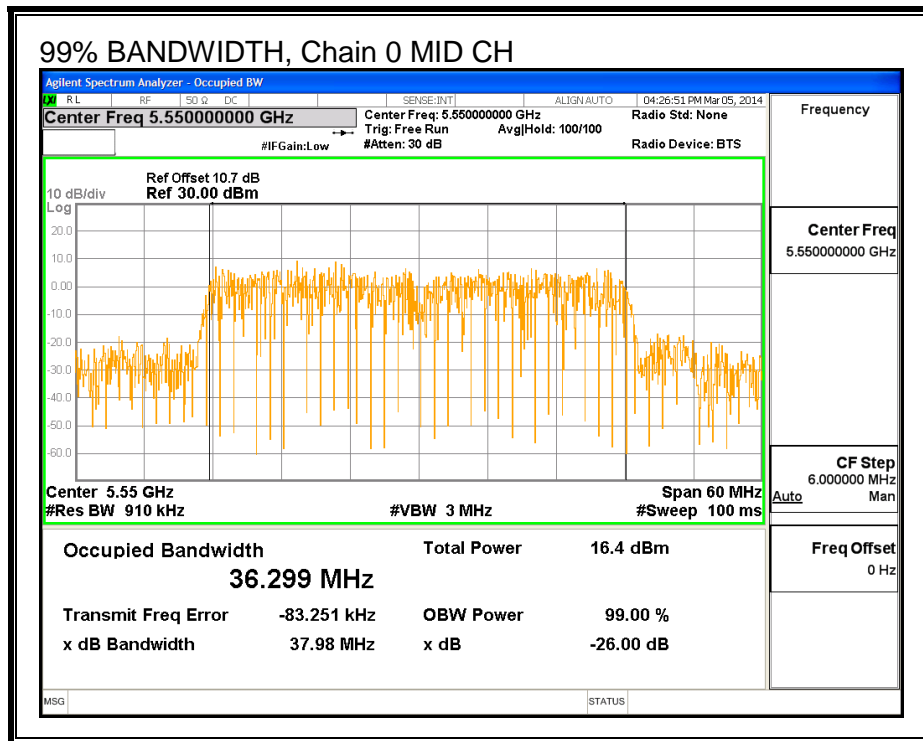
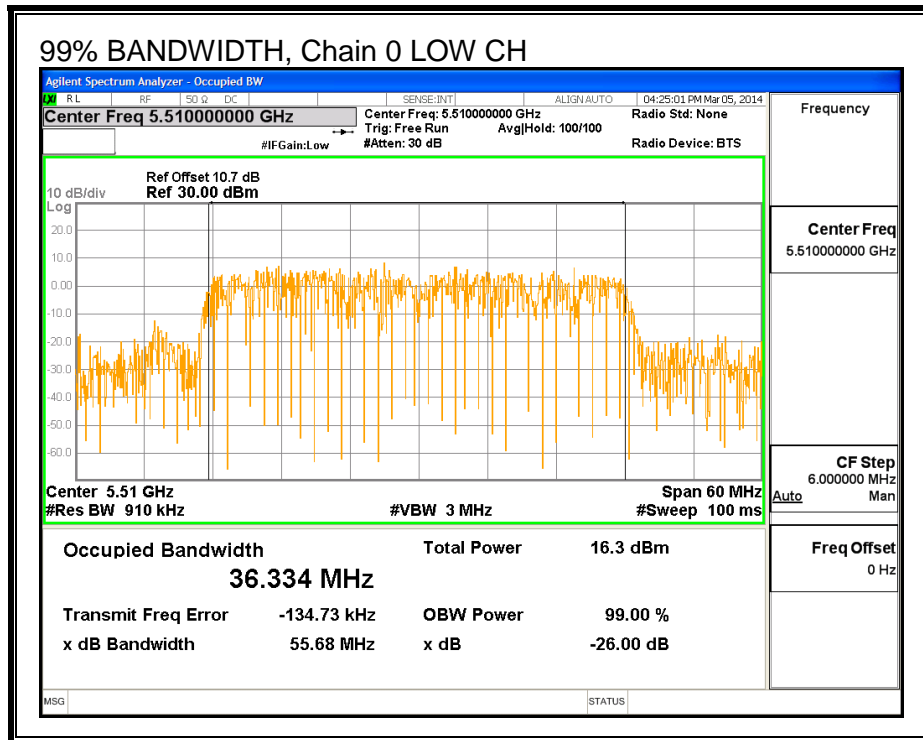
LIMITS

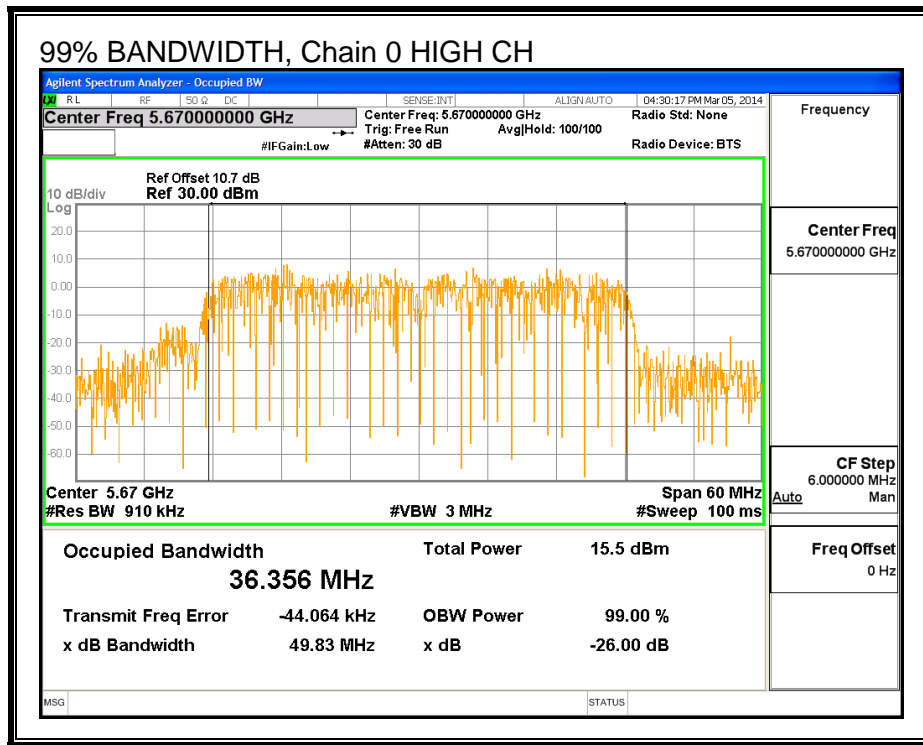
None; for reporting purposes only.

RESULTS

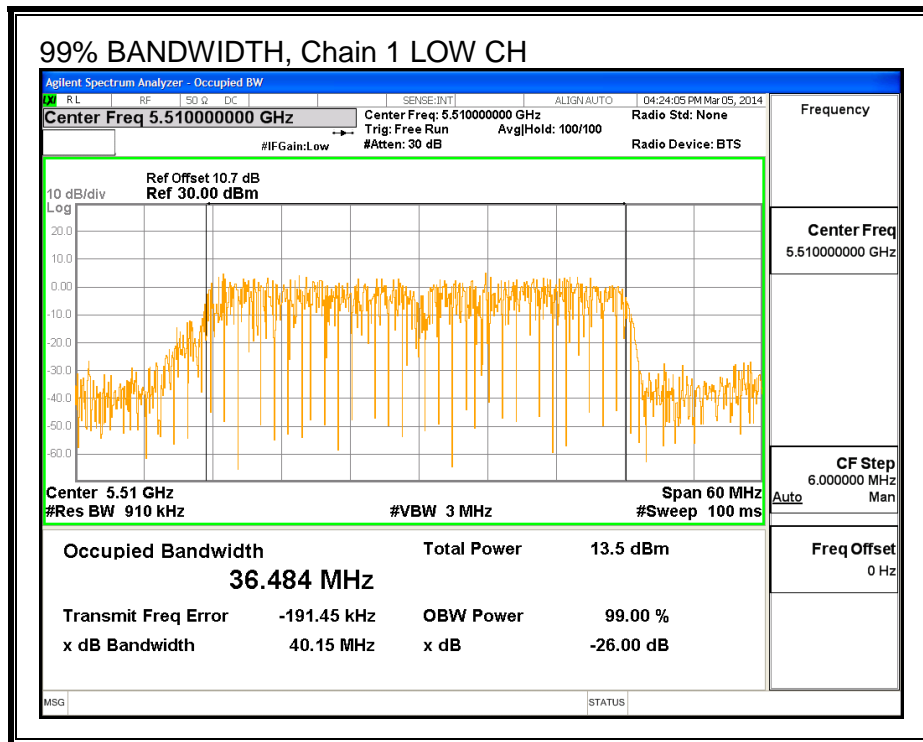
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.334	36.484
Mid	5550	36.299	36.677
High	5670	36.356	36.410

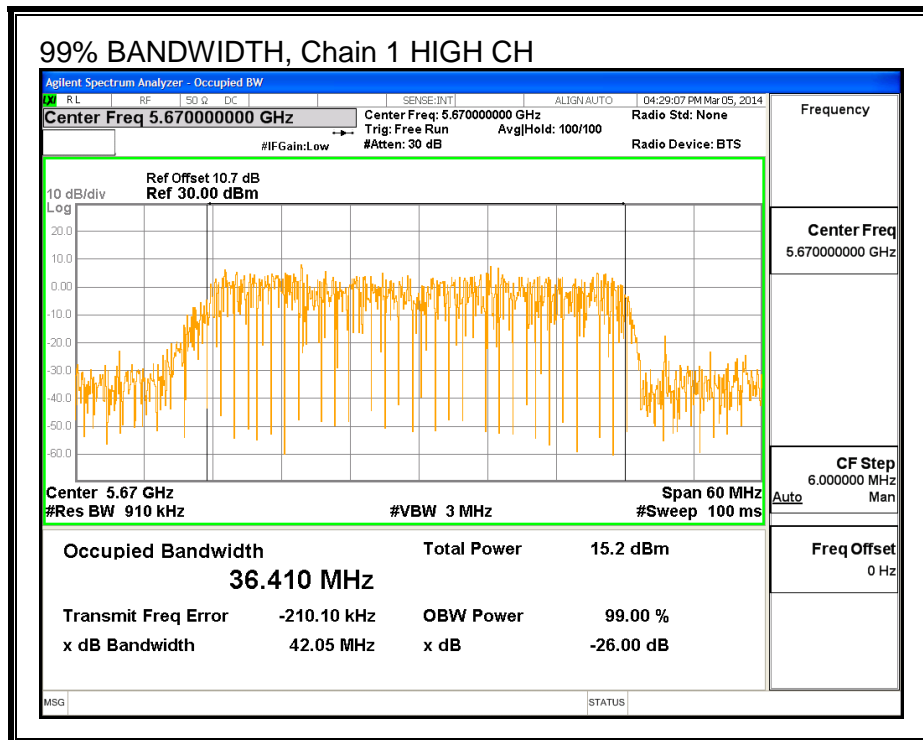
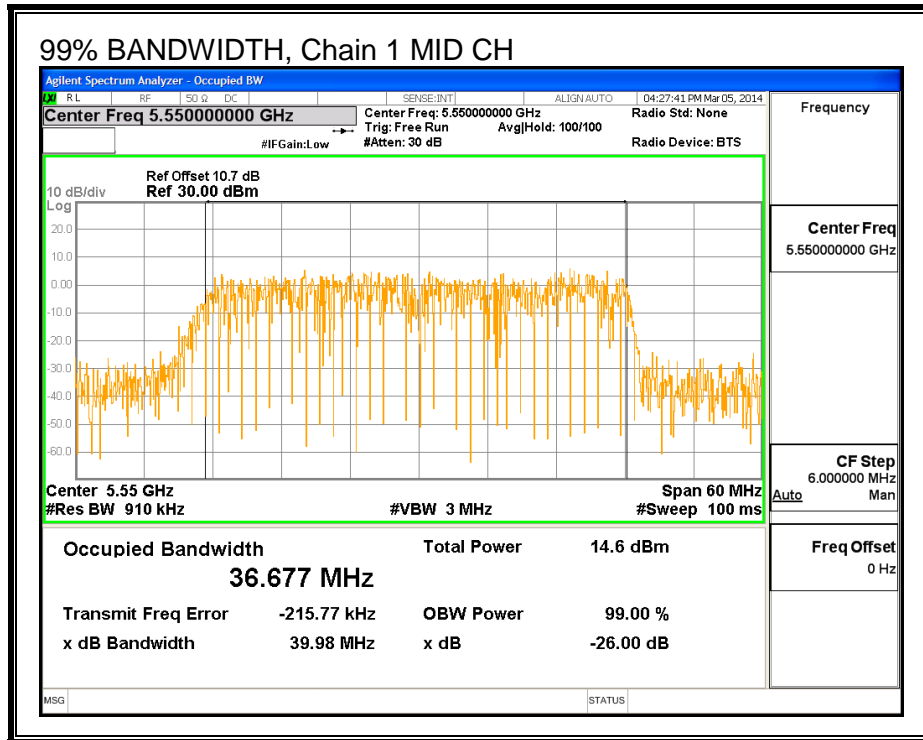
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





8.8.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	45.92	36.334	4.30
Mid	5550	45.85	36.299	4.30
High	5670	46.27	36.356	4.30

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.23	Included in Calculations of Corr'd Power & PPSD
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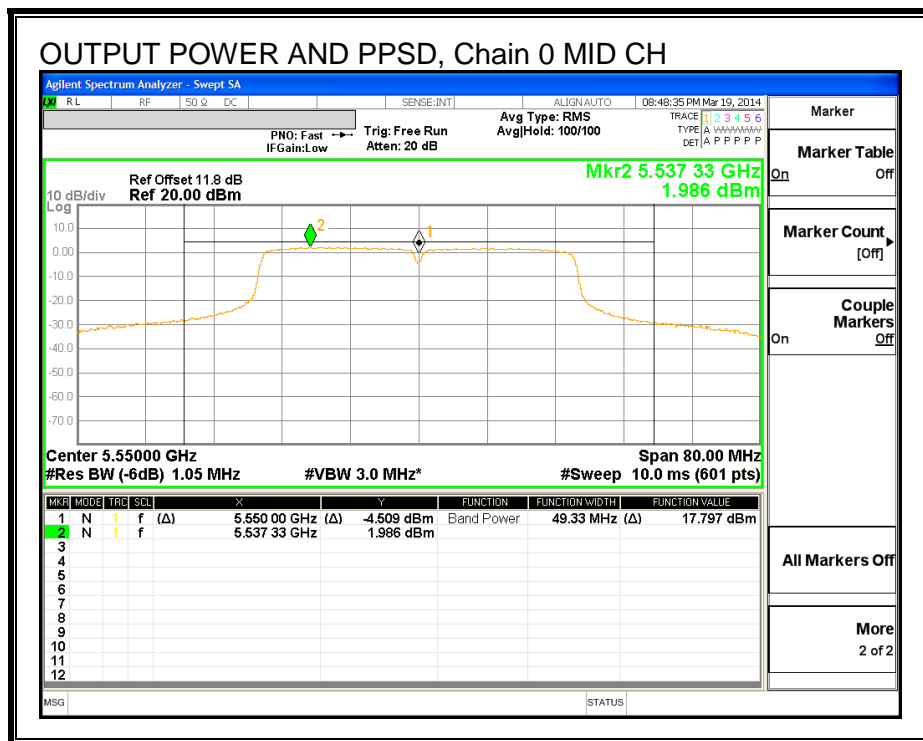
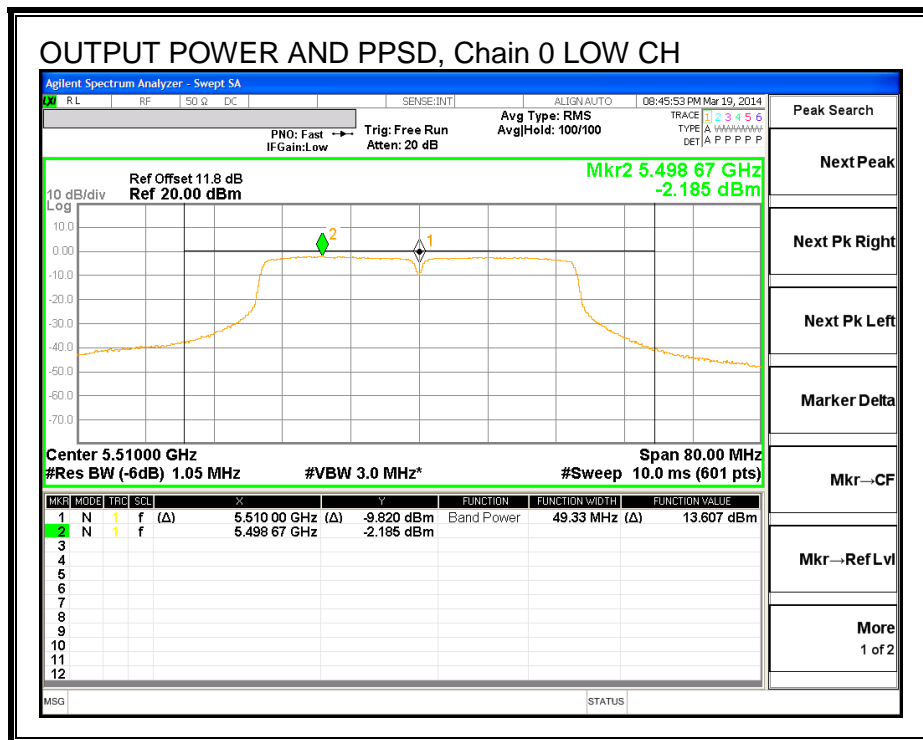
Output Power Results

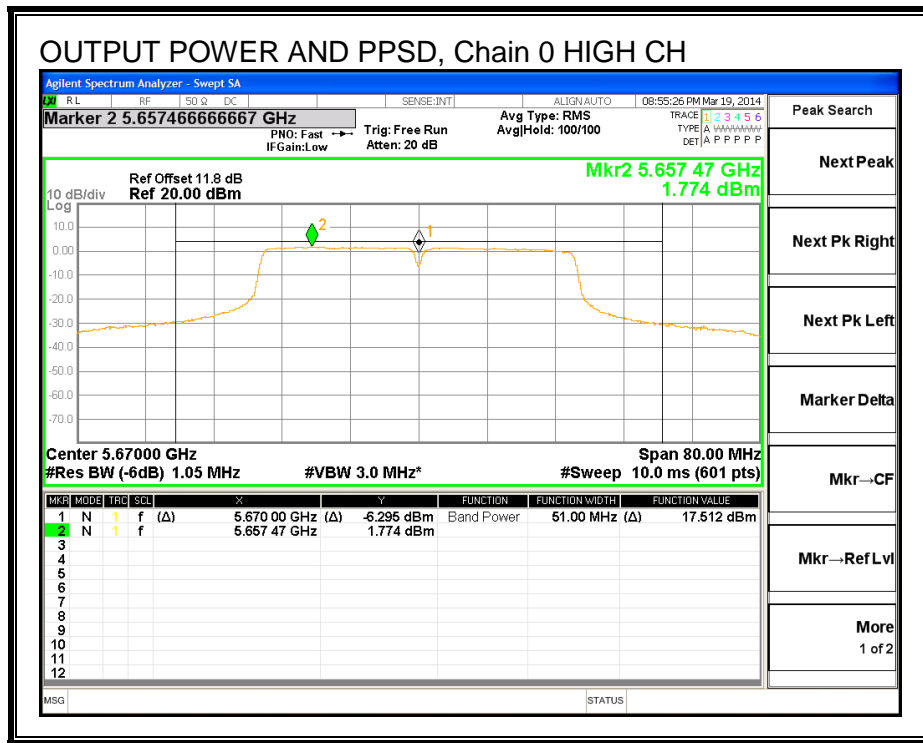
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	13.607	11.006	15.739	24.00	-8.261
Mid	5550	17.797	16.343	20.371	24.00	-3.629
High	5670	17.512	17.161	20.580	24.00	-3.420

PPSD Results

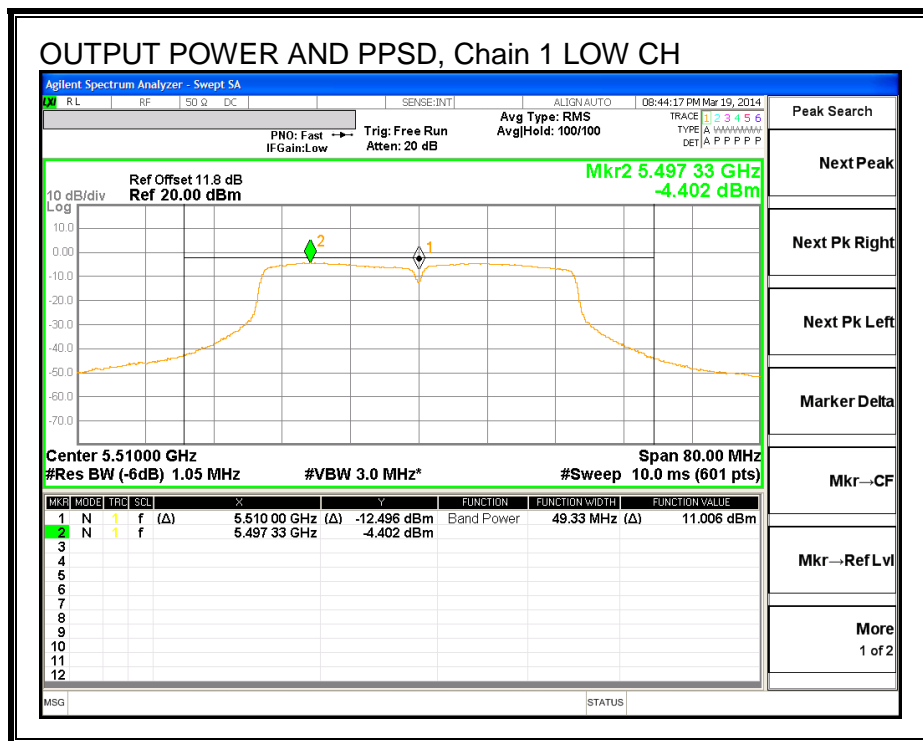
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-2.185	-4.402	0.09	11.00	-10.91
Mid	5550	1.986	0.846	4.69	11.00	-6.31
High	5670	1.774	1.576	4.92	11.00	-6.08

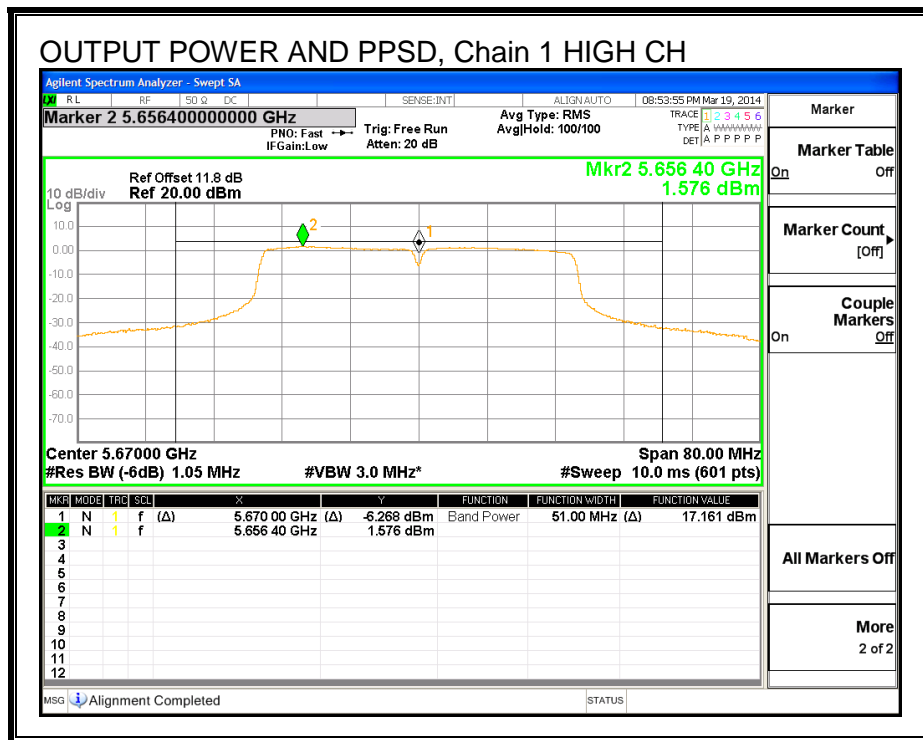
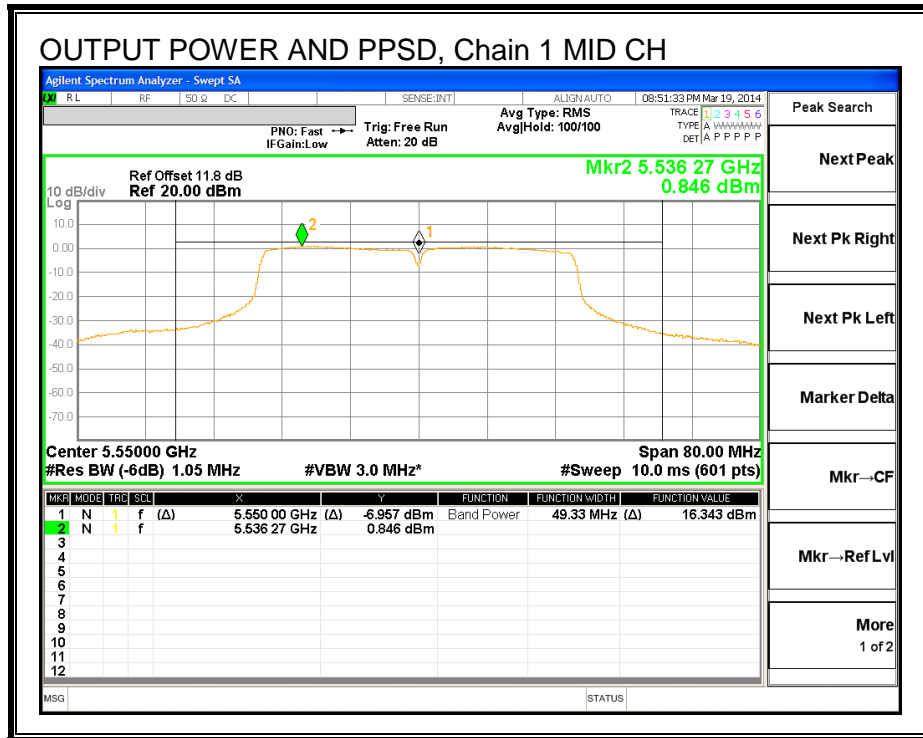
OUTPUT POWER AND PPSD, Chain 0





OUTPUT POWER AND PPSD, Chain 1





8.8.4. PEAK EXCURSION

LIMITS

FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

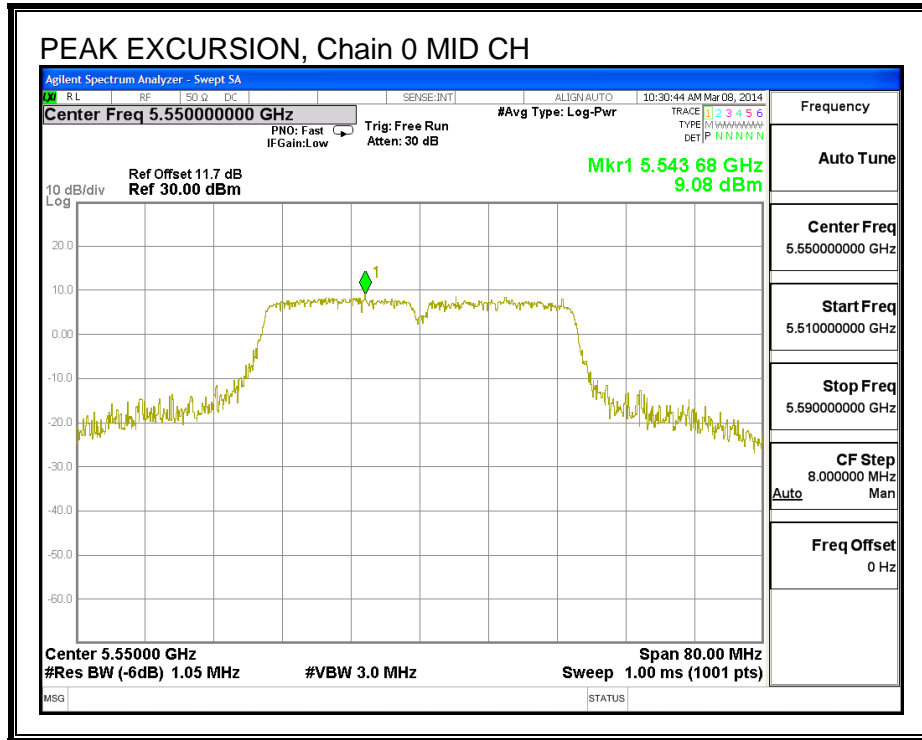
Chain 0

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5550	9.08	1.986	0.23	6.864	13	-6.136

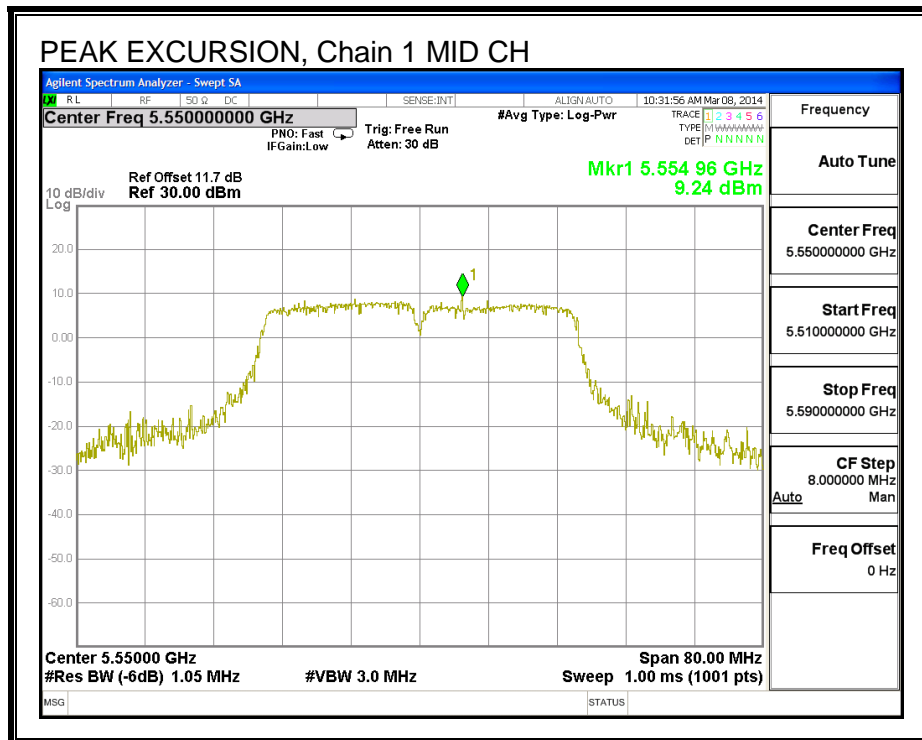
Chain 1

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5550	9.24	0.846	0.23	8.164	13	-4.836

PEAK EXCURSION, Chain 0



PEAK EXCURSION, Chain 1



8.8.5. CONDUCTED NOTCH BAND 5.6-5.65GHz EMISSIONS

LIMITS

Within 5600 – 5650 MHz band, -20 dBc relative to highest fundamental output power density per 100 kHz.

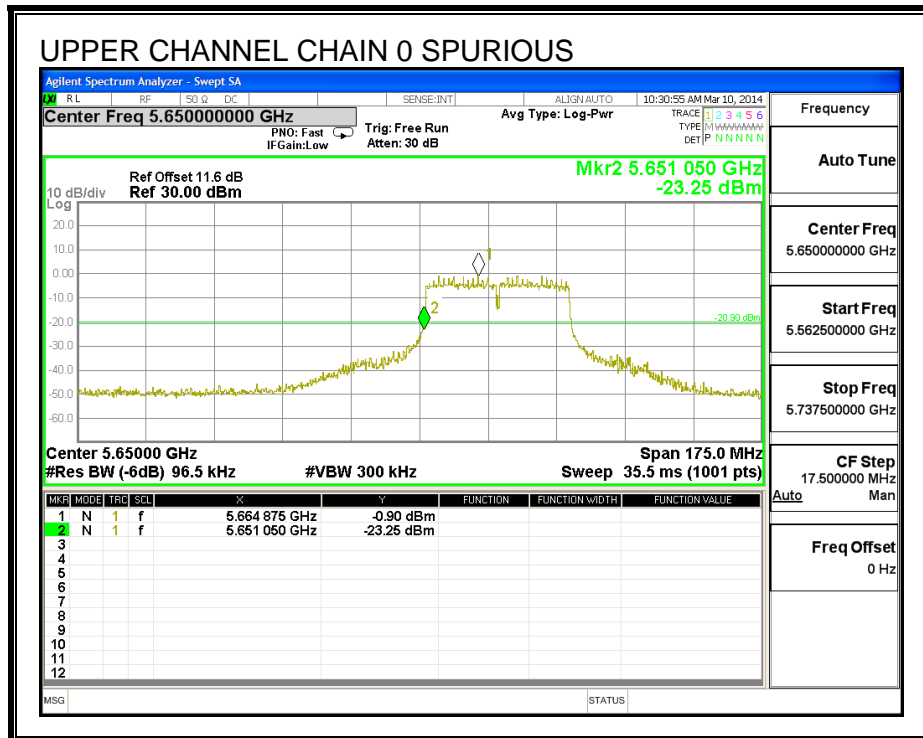
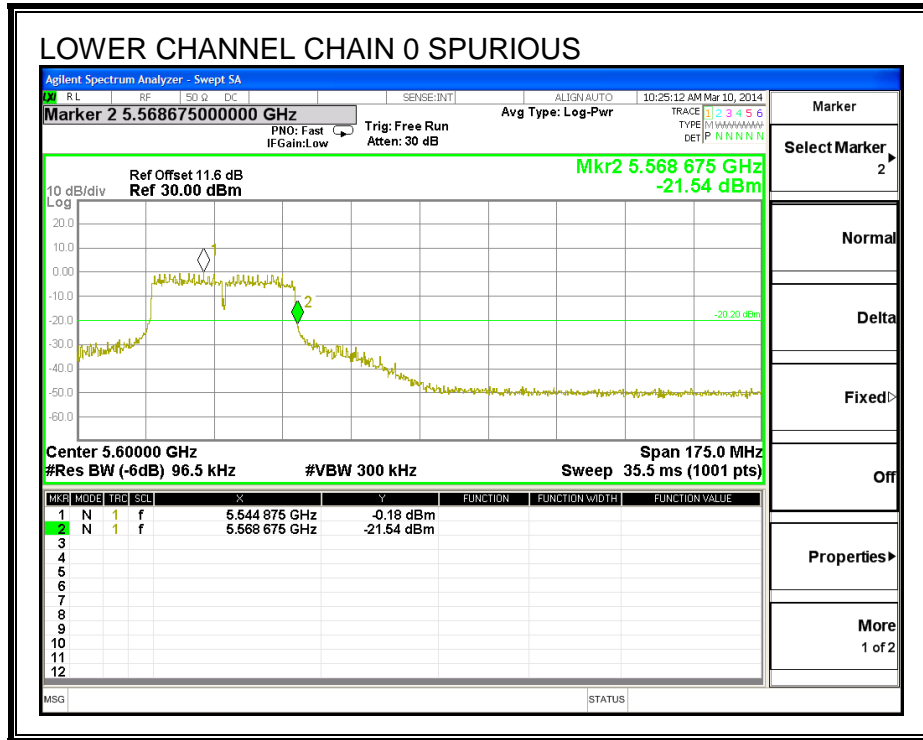
TEST PROCEDURE

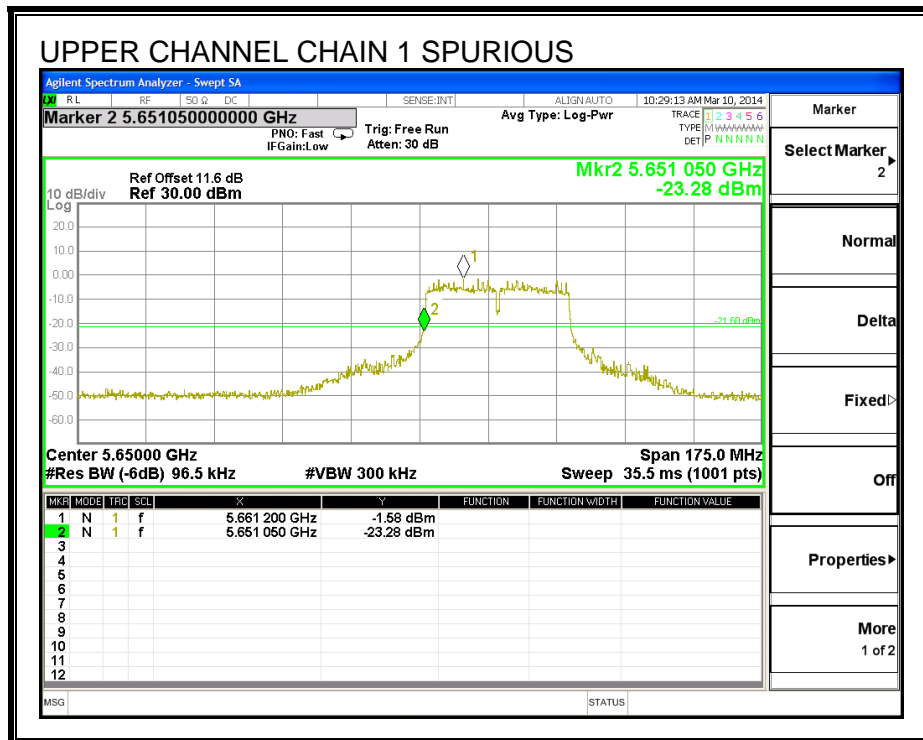
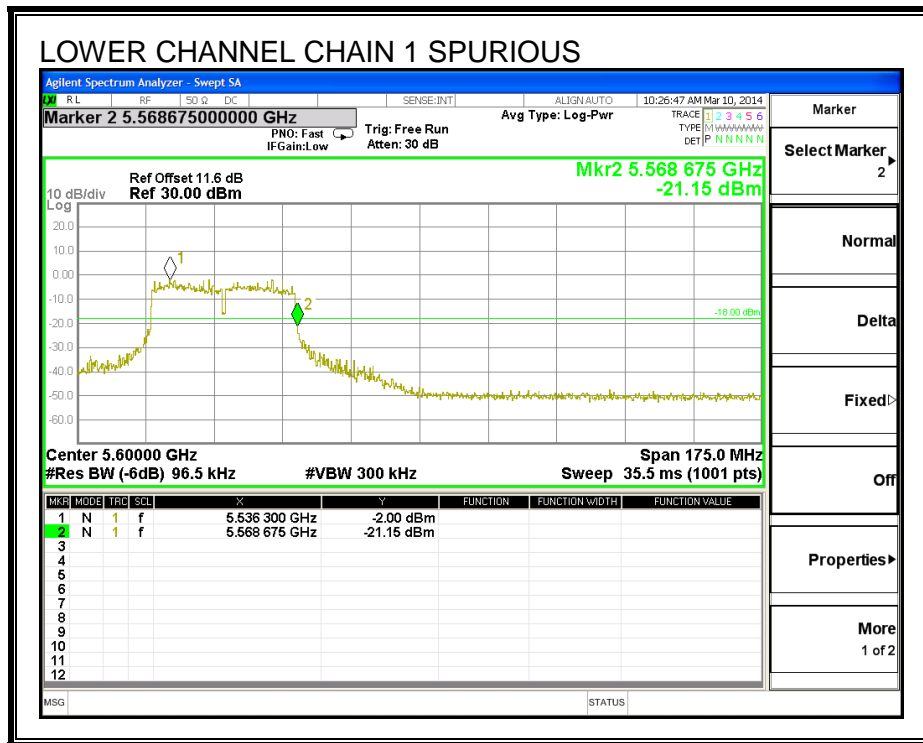
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

The authorized channel nearest to and less than 5600 MHz is measured.

The authorized channel nearest to and greater than 5650 MHz is measured.

SPURIOUS EMISSIONS IN WEATHER RADAR BAND 5600 - 5650 MHz





8.9. 802.11n HT40 STBC 2TX MODE, CHANNEL 142, 5.6 GHz BAND

8.9.1. 26 dB BANDWIDTH

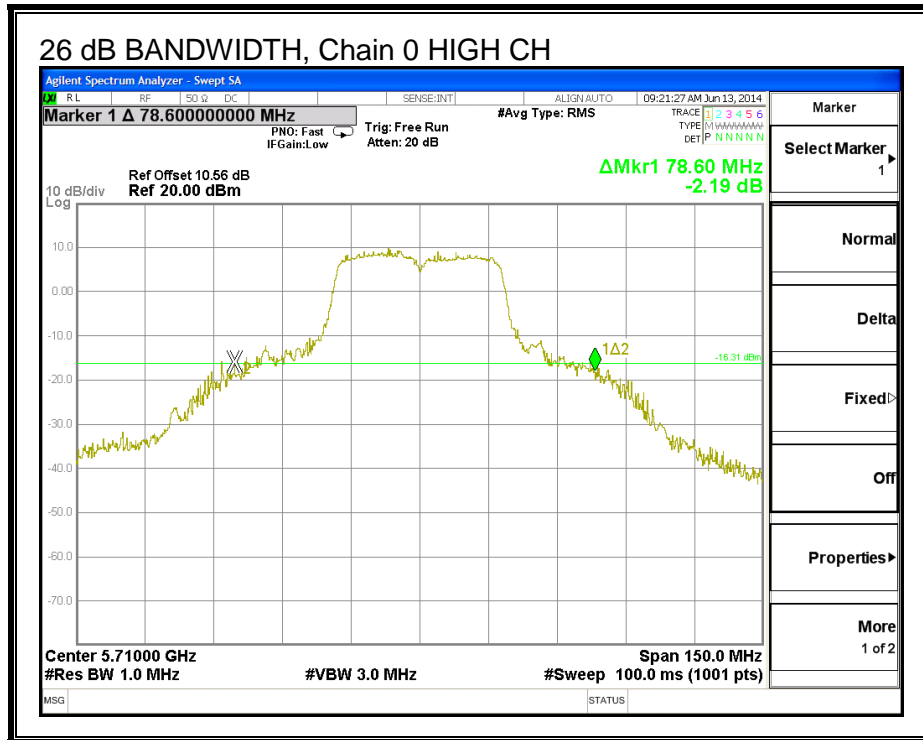
LIMITS

None; for reporting purposes only.

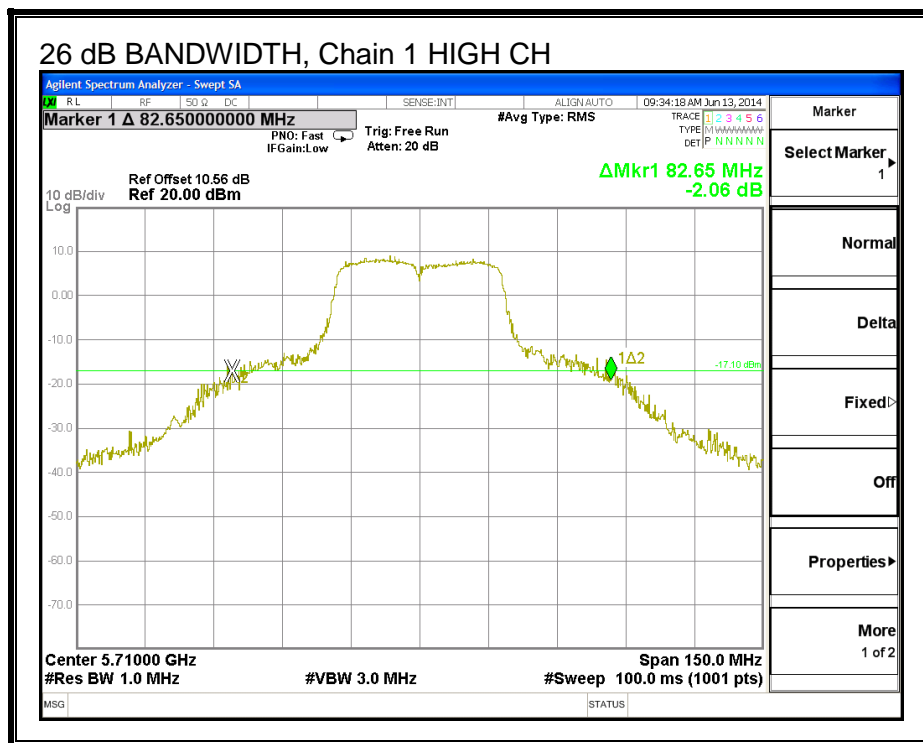
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
High	5710	78.60	82.65

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.9.2. 99% BANDWIDTH

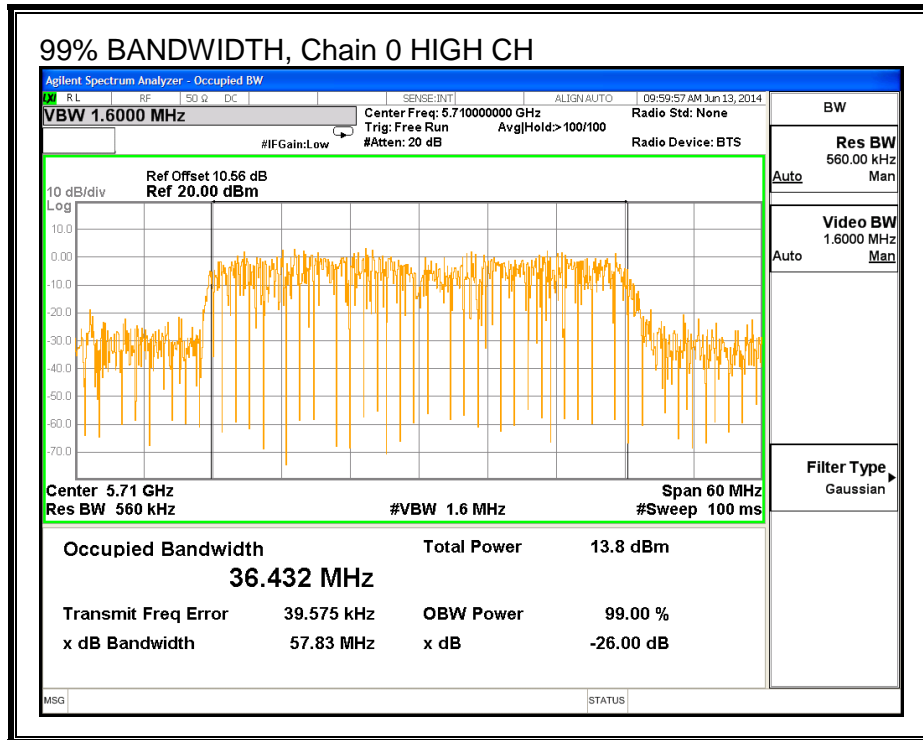
LIMITS

None; for reporting purposes only.

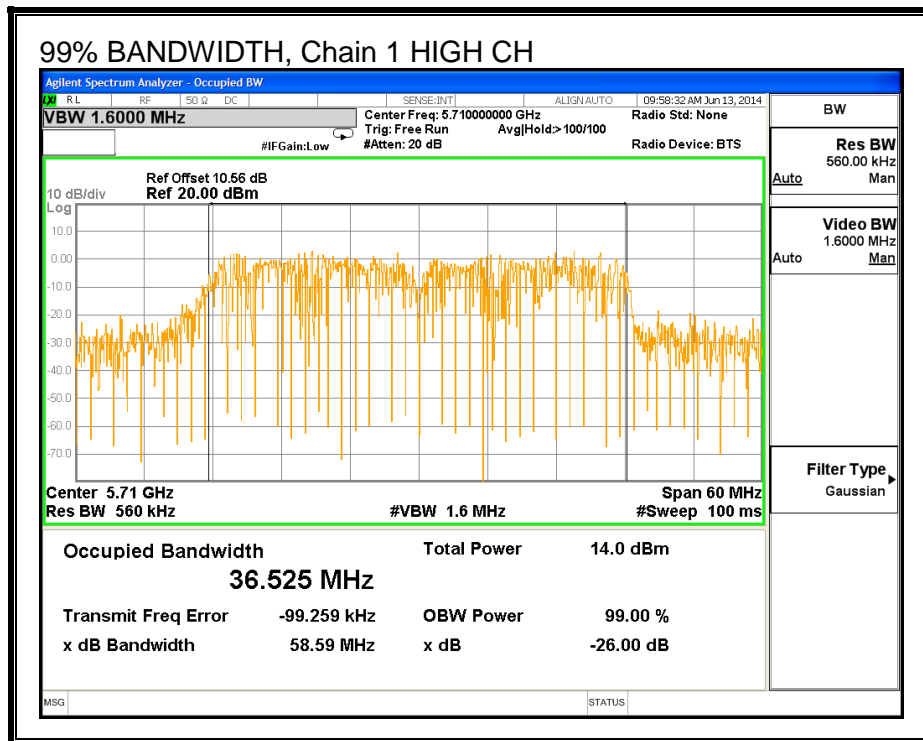
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
High	5710	36.4320	36.5250

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.9.3. OUTPUT POWER AND PSD

LIMITS

Bands 5470–5600 MHz and 5650–5725 MHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz for IC and 26 dB emission bandwidth in MHz for FCC. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Bands 5725–5825 MHz

The maximum conducted output power shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever power is less. The power spectral density shall not exceed 17 dBm in any 1.0 MHz band. The maximum e.i.r.p. shall not exceed 4.0 W or $23 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz for IC and 26 dB emission bandwidth in MHz for FCC.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.30	4.30	4.30

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5710	54.300	33.2160	4.30

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
High	5710	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.23	Included in Calculations of Corr'd Power & PPSD
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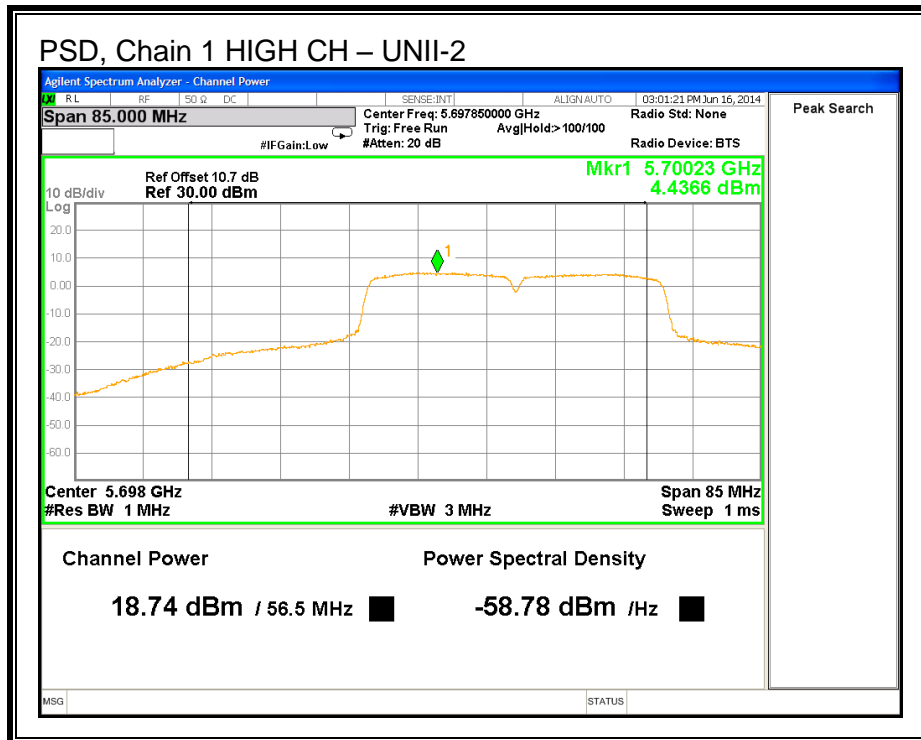
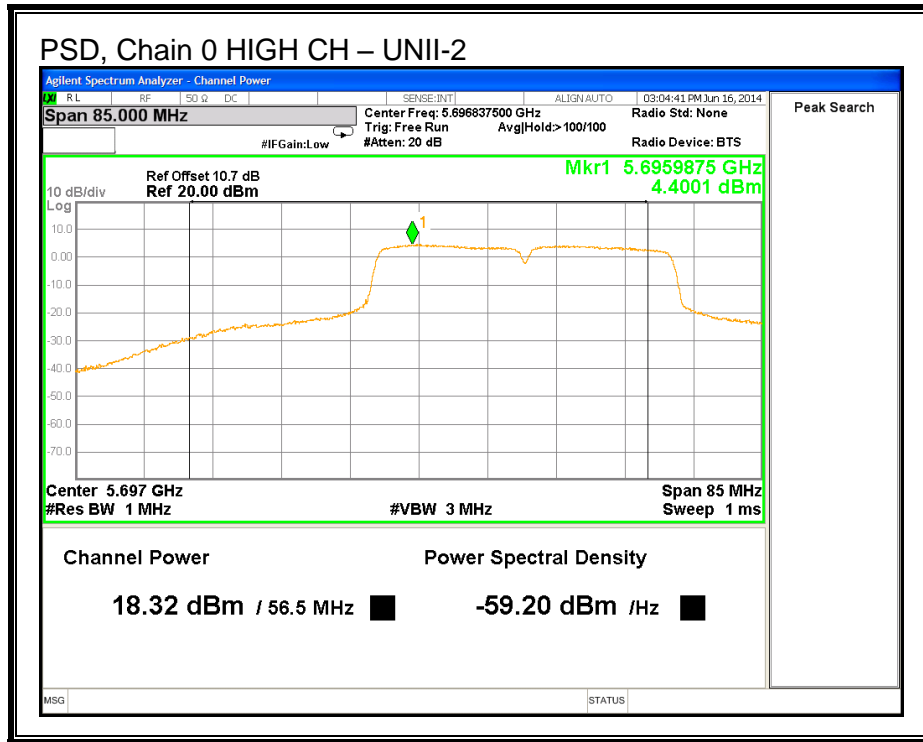
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5710	18.32	18.74	21.775	24.00	-2.225

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
High	5710	4.400	4.437	7.66	11.00	-3.34

OUTPUT POWER AND PSD, UNII-2 PORTION



RESULTS

Limits (FCC), portion in 5.8GHz UNII-3 band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5710	24.30	3.2160	4.30

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
High	5710	30.00	22.07	28.07	22.07	11.00	11.00	11.00

Duty Cycle CF (dB)	0.23	Included in Calculations of Corr'd Power & PPSD
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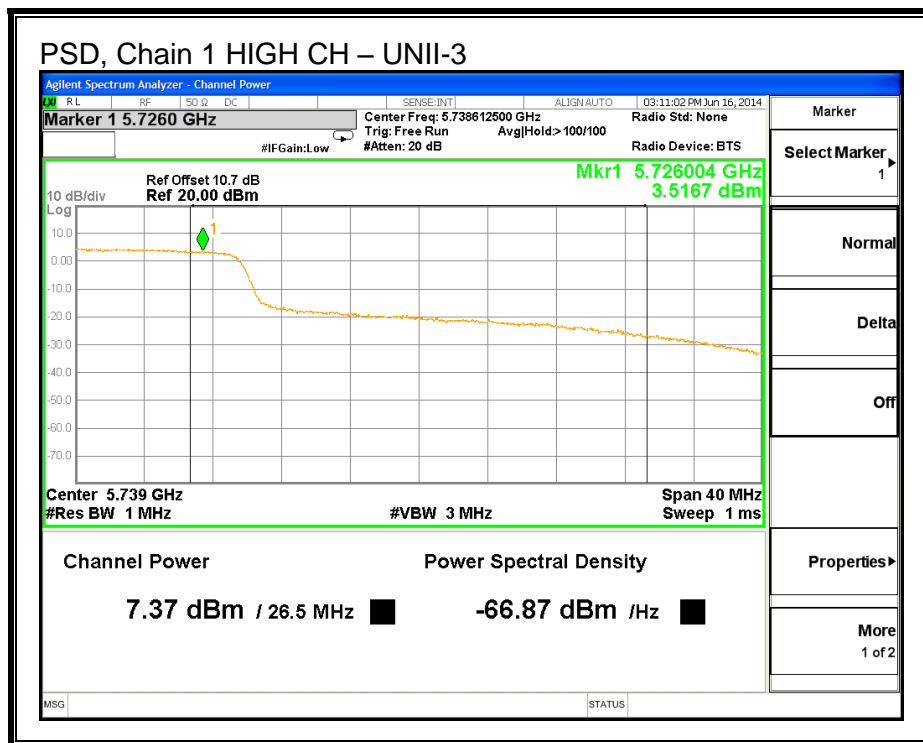
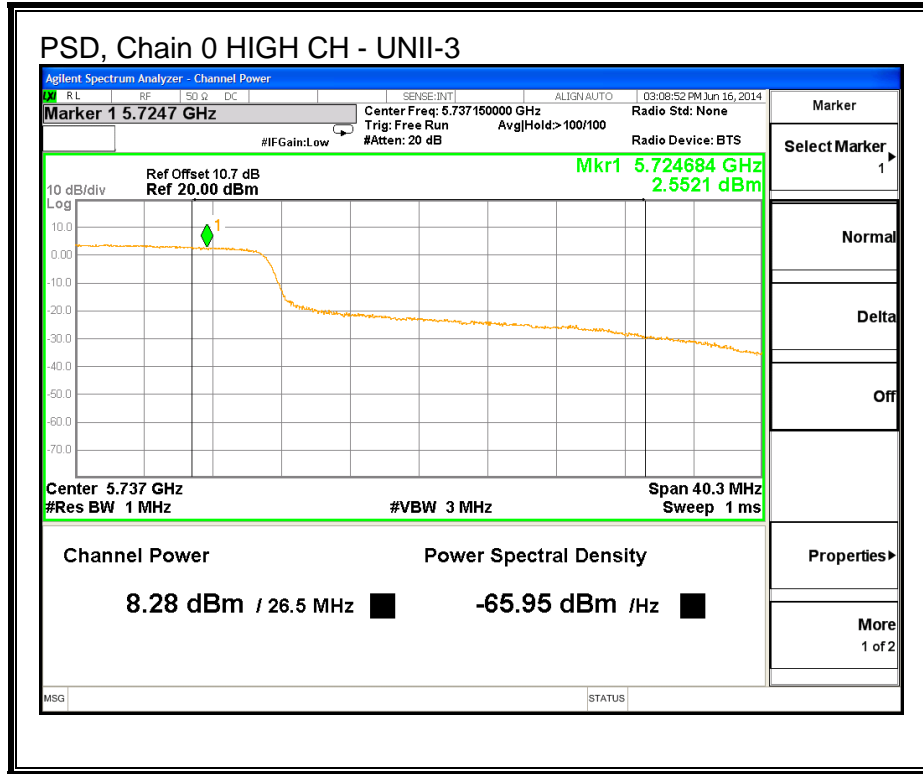
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5710	8.28	7.37	11.089	22.07	-10.984

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
High	5710	2.552	3.517	6.30	11.00	-4.70

OUTPUT POWER AND PSD, UNII-3 PORTION



8.9.4. AVERAGE OUTPUT POWER (WHOLE FUNDAMENTAL)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

RESULTS

Frequency	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Output Power (dBm)	Output Power (mW)
5.6 GHz band, 2TX (Channels overlapping UNII-2 and UNII-3 bands)				
5710 (UNII-2 portion)	18.32	18.74	21.775	150.50
5710 (UNII-3 portion)	8.28	7.37	11.089	12.85
5710 (Whole signal)	18.73	19.05	22.371	172.63

8.9.5. EIRP IN THE UNII-2 BAND

LIMITS

None; for reporting purposes only.

RESULTS

Frequency	Power, Chain 0 (dBm)	Power, Chain 1 (dBm)	Output Power (dBm)	Directional Antenna Gain (dBi)	EIRP (dBm)
5.6 GHz band, 2TX (Channels overlapping UNII-2 and UNII-3 bands)					
5720 (UNII portion)	18.32	18.74	21.685	4.3	25.985

9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 MHz for peak measurements and as applicable for average measurements.

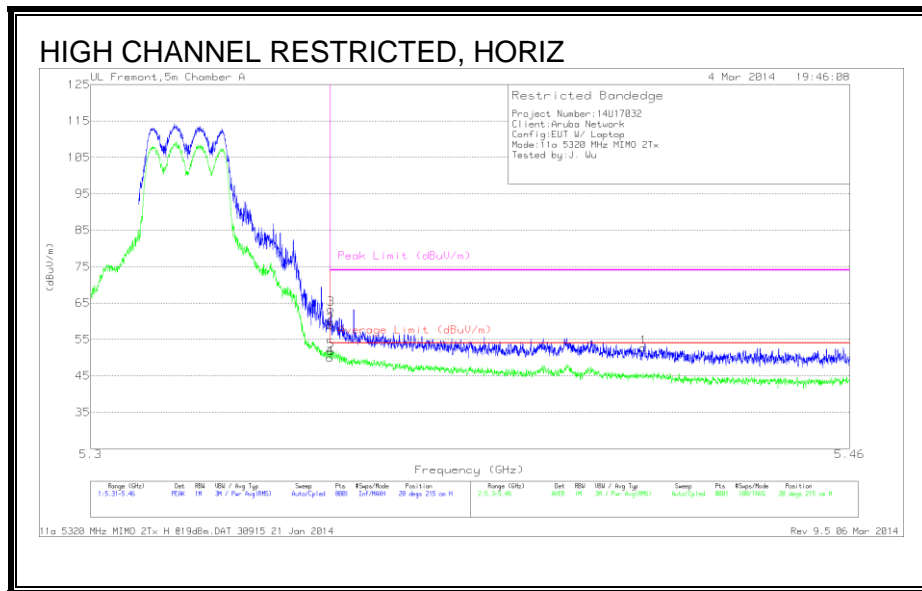
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. TX ABOVE 1 GHz 802.11a CDD 2TX MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)



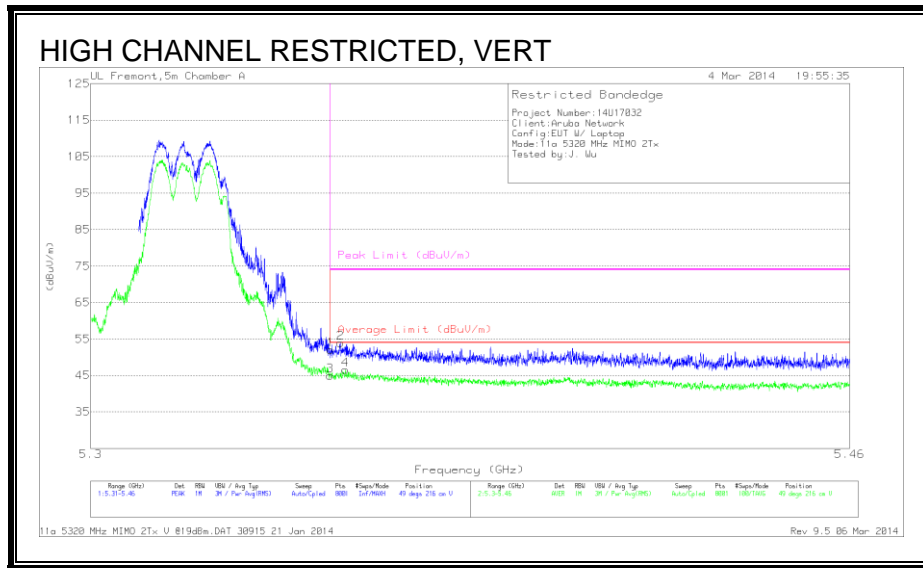
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.416	37.67	PK	34.7	-19.6	0	52.77	-	-	74	-21.23	20	215	H
2	* 5.35	43.97	PK	34.5	-19.6	0	58.87	-	-	74	-15.13	20	215	H
3	* 5.35	48.49	PK	34.5	-19.6	0	63.39	-	-	74	-10.61	20	215	H
4	* 5.35	34.9	RMS	34.5	-19.6	.1	49.9	54	-4.1	-	-	20	215	H
5	* 5.35	36.77	RMS	34.5	-19.6	.1	51.77	54	-2.23	-	-	20	215	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.17	PK	34.5	-19.6	0	52.07	-	-	74	-21.93	49	216	V
3	* 5.35	30.03	RMS	34.5	-19.6	0	44.93	54	-9.07	-	-	49	216	V
2	* 5.352	39.12	PK	34.5	-19.7	0	53.92	-	-	74	-20.08	49	216	V
4	* 5.353	31.72	RMS	34.5	-19.7	0	46.52	54	-7.48	-	-	49	216	V

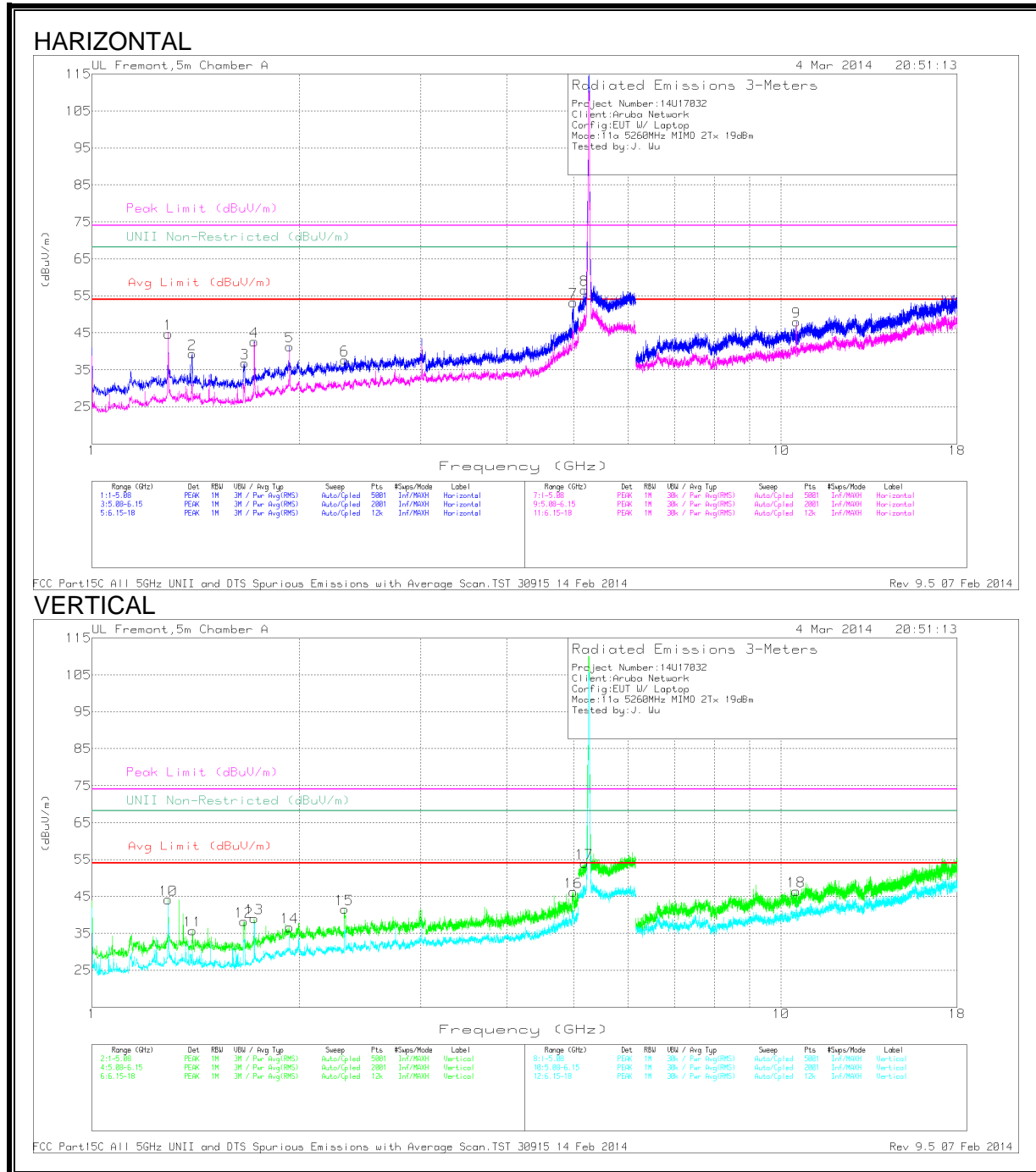
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F lzf/Psd (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.29	51.54	PK	30.1	-36.9	0	44.74	54	-9.26	74	-29.26	-	-	0-360	101	H
2	* 1.398	46.73	PK	29.1	-36.5	0	39.33	54	-14.67	74	-34.67	-	-	0-360	101	H
3	* 1.666	44.53	PK	28.7	-36.4	0	36.83	54	-17.17	74	-37.17	-	-	0-360	101	H
4	* 1.721	48.93	PK	29.3	-35.6	0	42.63	54	-11.37	74	-31.37	-	-	0-360	101	H
6	* 2.327	40.59	PK	31.9	-34.8	0	37.69	54	-16.31	74	-36.31	-	-	0-360	200	H
7	* 4.996	49.97	PK1	34	-28.6	0	55.37	-	-	74	-18.63	-	-	31	123	H
	* 4.988	37.32	AD1	34	-28.6	.1	42.82	54	-11.18	74	-31.18	-	-	31	123	H
10	* 1.29	50.95	PK	30.1	-36.9	0	44.15	54	-9.85	74	-29.85	-	-	0-360	201	V
11	* 1.4	43.17	PK	29.1	-36.5	0	35.77	54	-18.23	74	-38.23	-	-	0-360	101	V
12	* 1.662	45.91	PK	28.7	-36.4	0	38.21	54	-15.79	74	-35.79	-	-	0-360	201	V
13	* 1.72	45.4	PK	29.3	-35.6	0	39.1	54	-14.9	74	-34.9	-	-	0-360	201	V
15	* 2.325	44.47	PK	31.9	-34.8	0	41.57	54	-12.43	74	-32.43	-	-	0-360	201	V
16	* 4.996	40.83	PK	34	-28.6	0	46.23	54	-7.77	74	-27.77	-	-	0-360	101	V
5	1.935	44.53	PK	31.4	-34.6	0	41.33	-	-	-	-	68.2	-26.87	0-360	200	H
14	1.935	39.85	PK	31.4	-34.6	0	36.65	-	-	-	-	68.2	-31.55	0-360	201	V
17	5.182	40.35	PK	34.2	-20.6	0	53.95	-	-	-	-	68.2	-34.25	0-360	101	V
8	5.183	43.05	PK	34.2	-20.6	0	56.65	-	-	-	-	68.2	-11.55	0-360	200	H
18	10.519	31.9	PK	37.5	-23	0	46.4	-	-	-	-	68.2	-21.8	0-360	100	V
9	10.521	33.44	PK	37.5	-22.9	0	48.04	-	-	-	-	68.2	-20.16	0-360	200	H

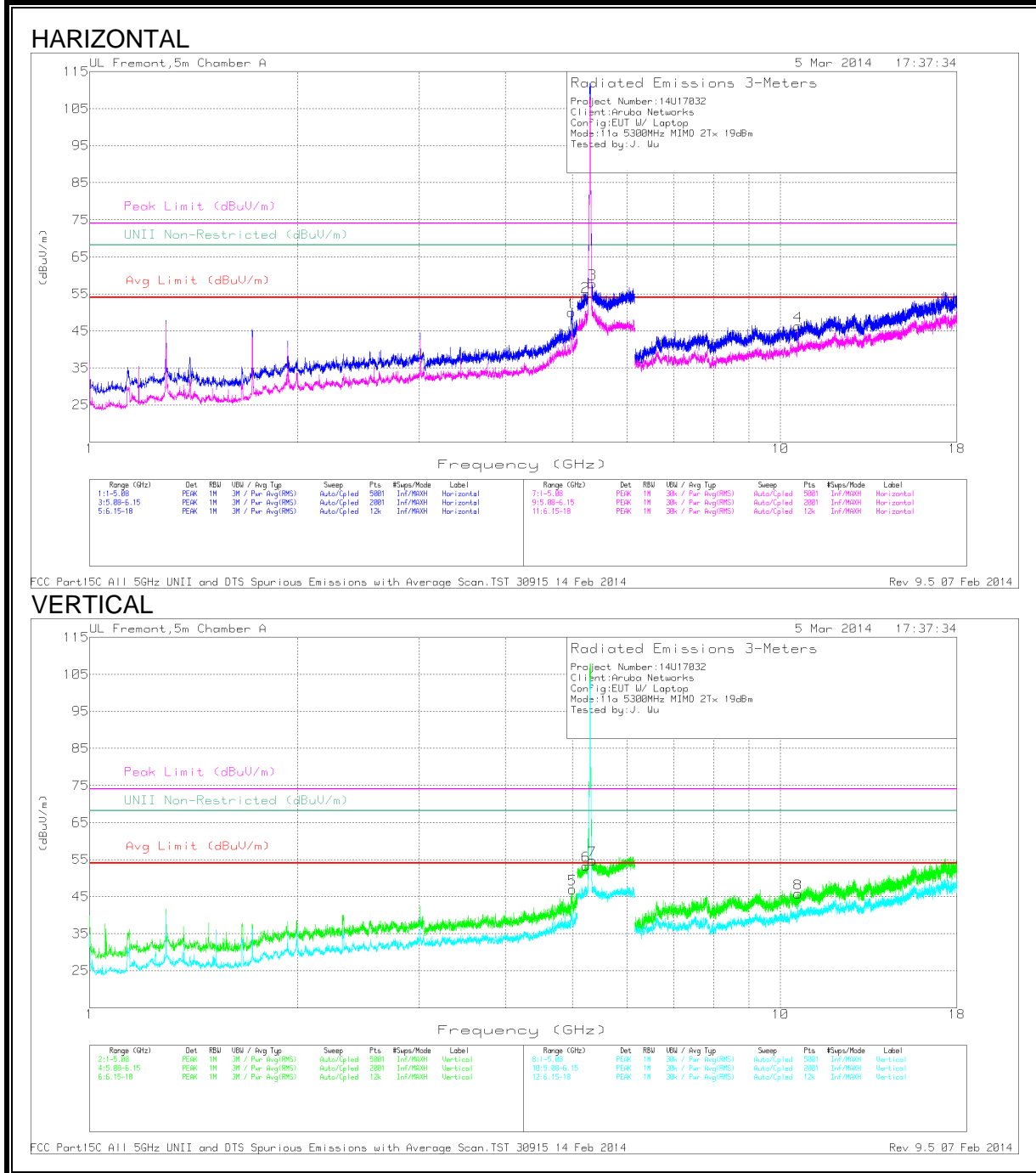
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

MIDDLE CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.995	48.24	PK1	34	-28.6	0	53.64	-	-	74	-20.36	-	-	36	122	H
	* 4.994	36.33	AD1	34	-28.6	.1	41.83	54	-12.17	-	-	-	-	36	122	H
5	* 5.395	42.18	PK1	34.7	-19.8	0	57.08	-	-	74	-16.92	-	-	30	297	V
	* 5.4	32.39	AD1	34.7	-19.8	.1	47.39	54	-6.61	-	-	-	-	30	297	V
3	* 5.393	43.77	PK1	34.7	-19.8	0	58.67	-	-	74	-15.33	-	-	32	121	H
	* 5.4	35.01	AD1	34.7	-19.8	.1	50.01	54	-3.99	-	-	-	-	32	121	H
7	* 5.415	40.61	PK1	34.7	-19.6	0	55.71	-	-	74	-18.29	-	-	202	328	V
	* 5.414	30.87	AD1	34.7	-19.6	.1	46.07	54	-7.93	-	-	-	-	202	328	V
6	5.196	42.67	PK	34.3	-20.5	0	56.47	-	-	-	-	68.2	-11.73	0-360	201	V
2	5.199	42.37	PK	34.3	-20.5	0	56.17	-	-	-	-	68.2	-12.03	0-360	200	H
4	10.561	34.51	PK	37.6	-22.8	0	49.31	-	-	-	-	68.2	-18.89	0-360	200	H
8	10.578	32.5	PK	37.7	-22.6	0	47.6	-	-	-	-	68.2	-20.6	0-360	101	V

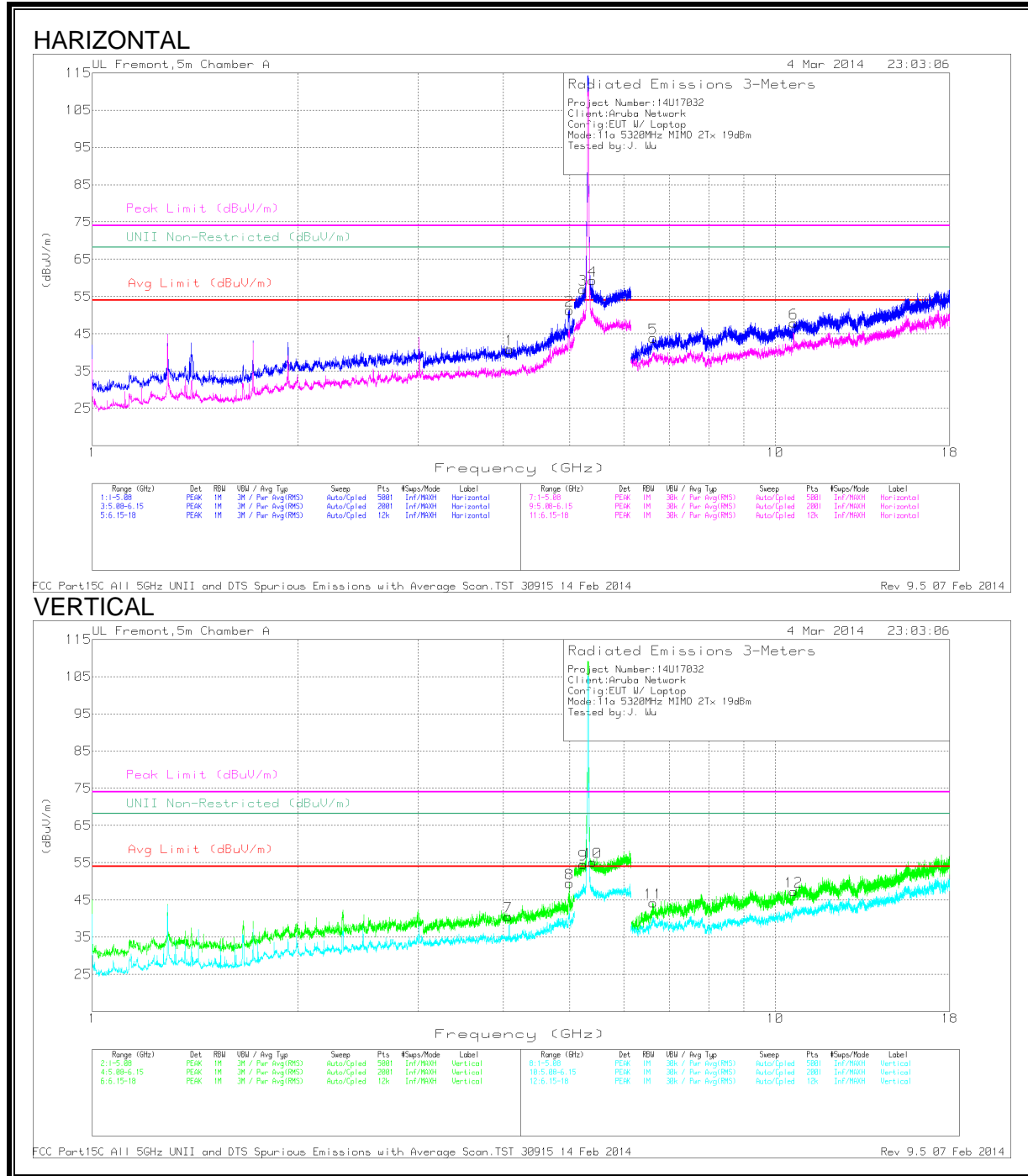
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.081	38.25	PK	33.5	-30.9	0	40.85	54	-13.15	74	-33.15	-	-	0-360	200	H
2	* 4.987	48.76	PK1	34	-28.6	0	54.16	-	-	74	-19.84	-	-	31	127	H
	* 4.989	36.57	AD1	34	-28.6	.1	42.07	54	-11.93	-	-	-	-	31	127	H
7	* 4.064	38.45	PK	33.4	-31.3	0	40.55	54	-13.45	74	-33.45	-	-	0-360	200	V
8	* 5	44.77	PK1	34	-28.6	0	50.17	-	-	74	-23.83	-	-	42	152	V
	* 4.991	32.67	AD1	34	-28.6	.1	38.17	54	-15.83	-	-	-	-	42	152	V
4	* 5.396	45.6	PK1	34.7	-19.8	0	60.5	-	-	74	-13.5	-	-	29	252	H
	* 5.4	35.16	AD1	34.7	-19.8	.1	50.16	54	-3.84	-	-	-	-	29	252	H
10	* 5.411	41	PK1	34.7	-19.6	0	56.1	-	-	74	-17.9	-	-	83	123	V
	* 5.413	31.02	AD1	34.7	-19.6	.1	46.22	54	-7.78	-	-	-	-	83	123	V
6	* 10.644	33.1	PK	37.8	-23	0	47.9	54	-6.1	74	-26.1	-	-	0-360	200	H
12	* 10.638	32.46	PK	37.8	-23	0	47.26	54	-6.74	74	-26.74	-	-	0-360	101	V
3	5.231	42.73	PK	34.3	-20.1	0	56.93	-	-	-	-	68.2	-11.27	0-360	200	H
9	5.237	40.84	PK	34.3	-20.6	0	54.54	-	-	-	-	68.2	-13.66	0-360	100	V
11	6.625	34.44	PK	35.6	-25.8	0	44.24	-	-	-	-	68.2	-23.96	0-360	200	V
5	6.628	34.05	PK	35.6	-25.8	0	43.85	-	-	-	-	68.2	-24.35	0-360	200	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

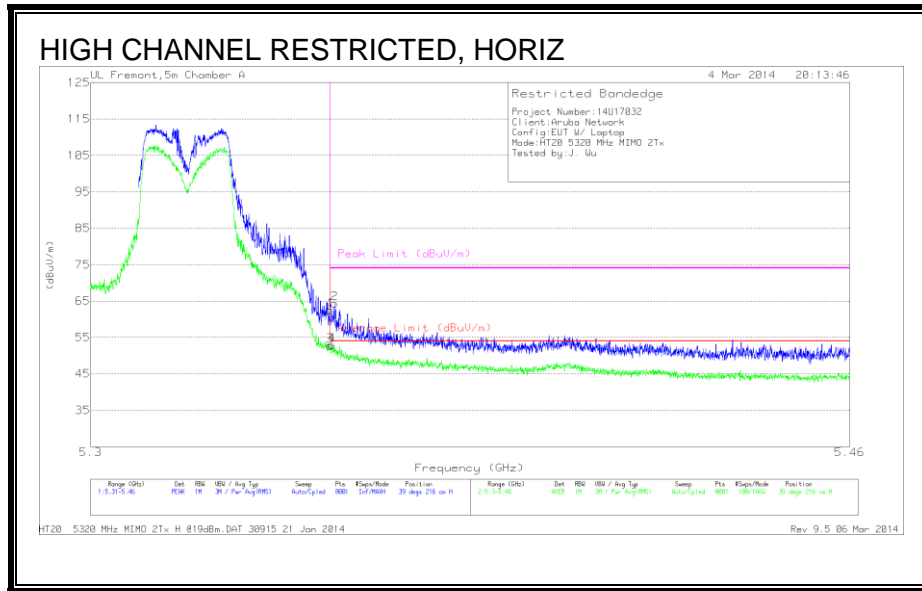
PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

9.2.2. TX ABOVE 1 GHz 802.11n HT20 STBC 2TX MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)



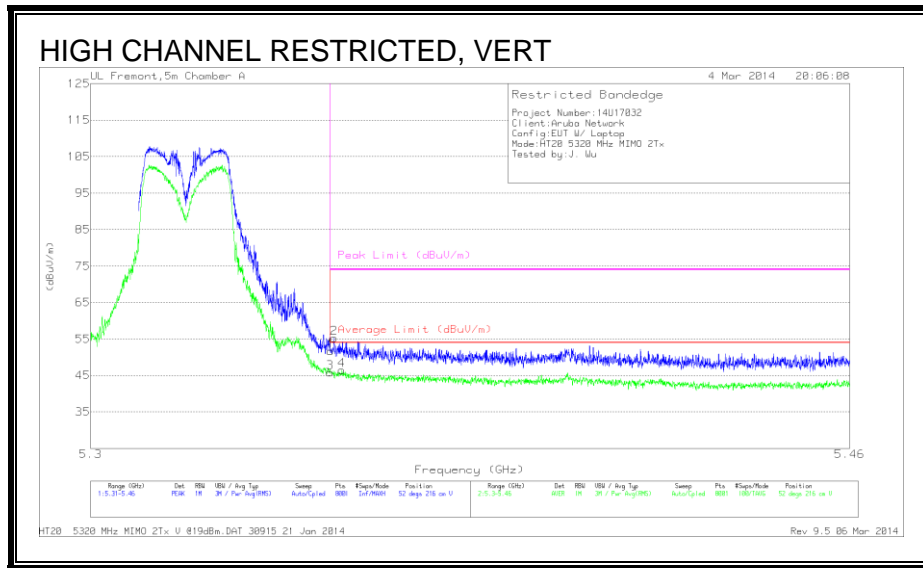
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	47.54	PK	34.5	-19.6	0	62.44	-	-	74	-11.56	39	216	H
3	* 5.35	37.61	RMS	34.5	-19.6	.2	52.71	54	-1.29	-	-	39	216	H
4	* 5.35	37.78	RMS	34.5	-19.6	.2	52.88	54	-1.12	-	-	39	216	H
2	* 5.351	49.44	PK	34.5	-19.6	0	64.34	-	-	74	-9.66	39	216	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.77	PK	34.5	-19.6	0	51.67	-	-	74	-22.33	52	216	V
3	* 5.35	30.73	RMS	34.5	-19.6	.2	45.83	54	-8.17	-	-	52	216	V
2	* 5.351	40.37	PK	34.5	-19.6	0	55.27	-	-	74	-18.73	52	216	V
4	* 5.352	31.39	RMS	34.5	-19.7	.2	46.39	54	-7.61	-	-	52	216	V

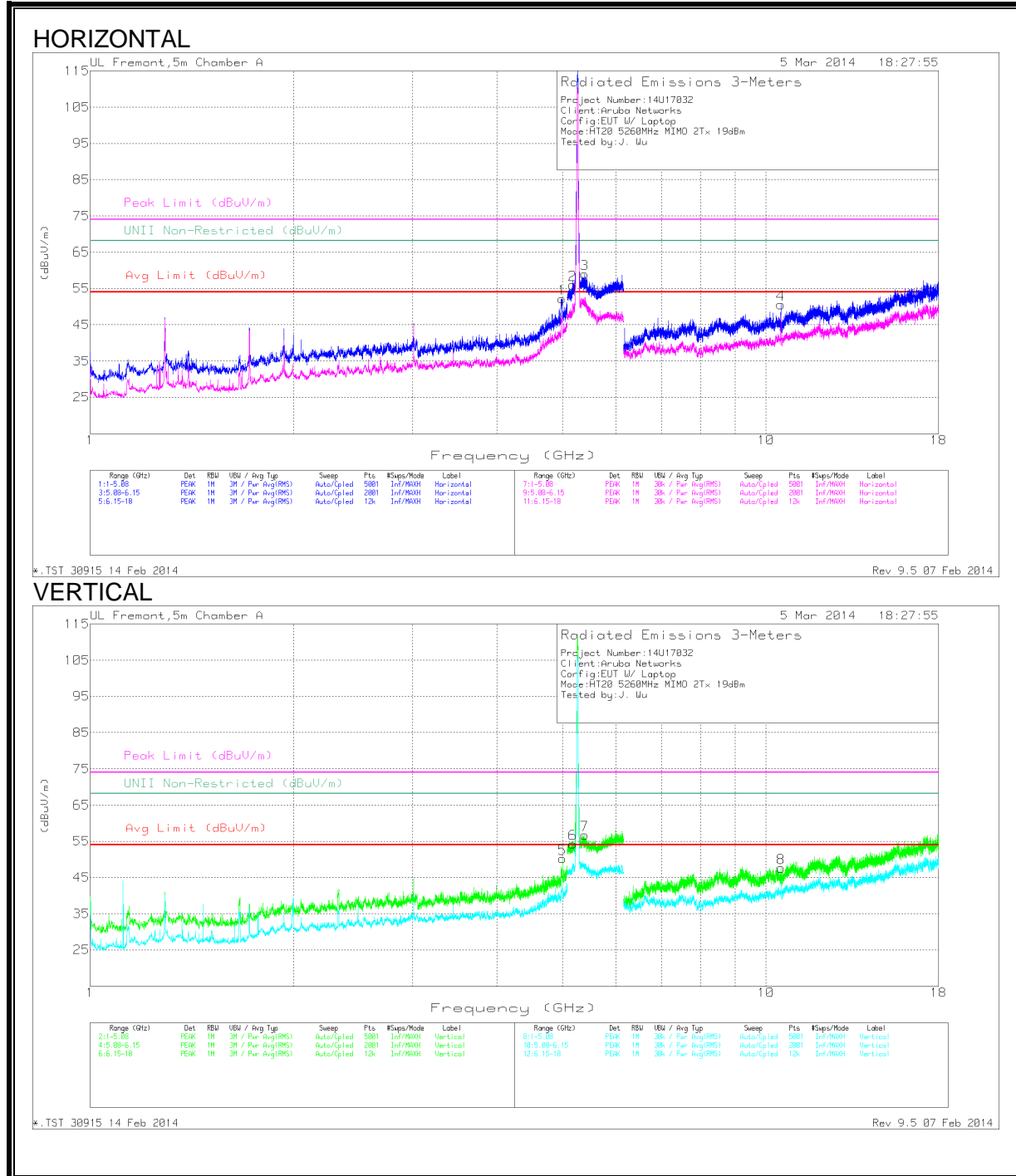
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.991	49.98	PK1	34	-28.6	0	55.38	-	-	74	-18.62	-	-	36	142	H
	* 4.984	37.86	AD1	34	-28.6	.2	43.46	54	-10.54	-	-	-	-	36	142	H
5	* 5	47.23	PK1	34	-28.6	0	52.63	-	-	74	-21.37	-	-	38	258	V
	* 4.989	34.95	AD1	34	-28.6	.2	40.55	54	-13.45	-	-	-	-	38	258	V
3	* 5.389	45.26	PK1	34.7	-19.9	0	60.06	-	-	74	-13.94	-	-	22	327	H
	* 5.381	34.5	AD1	34.6	-19.7	.2	49.6	54	-4.4	-	-	-	-	22	327	H
7	* 5.387	42.95	PK1	34.6	-19.9	0	57.65	-	-	74	-16.35	-	-	58	320	V
	* 5.392	32.5	AD1	34.7	-19.8	.2	47.6	54	-6.4	-	-	-	-	58	320	V
2	5.176	42.54	PK	34.2	-20.7	0	56.04	-	-	-	-	68.2	-12.16	0-360	200	H
6	5.177	40.69	PK	34.2	-20.6	0	54.29	-	-	-	-	68.2	-13.91	0-360	101	V
4	10.519	36.1	PK	37.5	-23	0	50.6	-	-	-	-	68.2	-17.6	0-360	200	H
8	10.52	33.14	PK	37.5	-23	0	47.64	-	-	-	-	68.2	-20.56	0-360	201	V

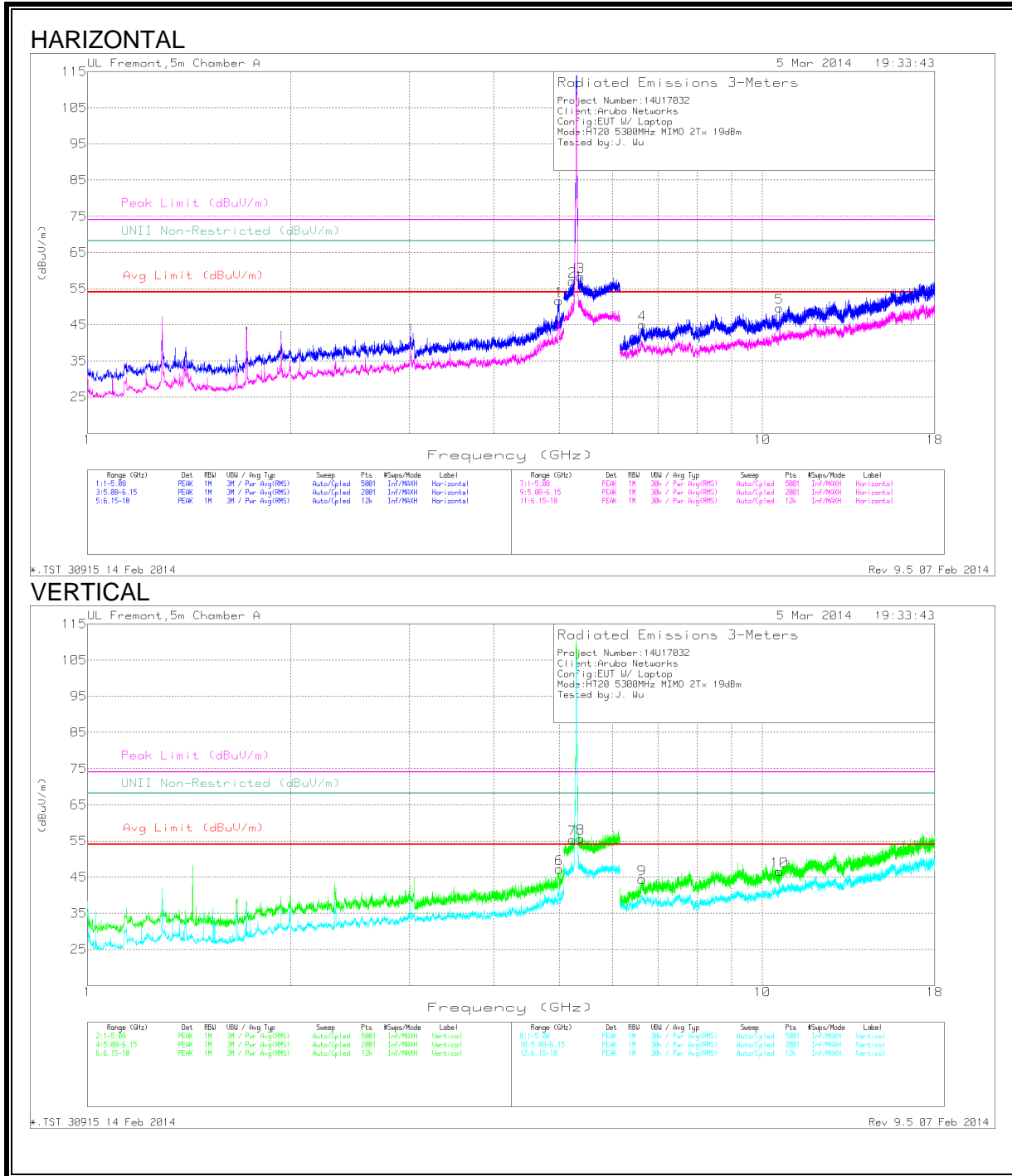
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

MIDDLE CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.978	46.56	PK1	34	-28.9	0	51.66	-	-	74	-22.34	-	-	57	287	H
	* 4.992	34.02	AD1	34	-28.6	.2	39.62	54	-14.38	-	-	-	-	57	287	H
6	* 5	44.22	PK1	34	-28.6	0	49.62	-	-	74	-24.38	-	-	50	211	V
	* 5	33.28	AD1	34	-28.6	.2	38.88	54	-15.12	-	-	-	-	50	211	V
3	* 5.382	45.34	PK1	34.6	-19.7	0	60.24	-	-	74	-13.76	-	-	11	300	H
	* 5.385	34.14	AD1	34.6	-19.8	.2	49.14	54	-4.86	-	-	-	-	11	300	H
8	* 5.387	43	PK1	34.6	-19.8	0	57.8	-	-	74	-16.2	-	-	66	249	V
	* 5.381	32.52	AD1	34.6	-19.7	.2	47.62	54	-6.38	-	-	-	-	66	249	V
10	* 10.6	36.35	PK1	37.7	-23.3	0	50.75	-	-	74	-23.25	-	-	223	143	V
	* 10.6	26.6	AD1	37.7	-23.3	.2	41.2	54	-12.8	-	-	-	-	223	143	V
5	* 10.6	39.23	PK1	37.7	-23.3	0	53.63	54	-.37	74	-20.37	-	-	162	311	H
	* 10.6	28.76	AD1	37.7	-23.3	.2	43.36	54	-10.64	74	-30.64	-	-	162	311	H
7	5.228	41.03	PK	34.3	-19.9	0	55.43	-	-	-	-	68.2	-12.77	0-360	101	V
2	5.229	42.59	PK	34.3	-19.9	0	56.99	-	-	-	-	68.2	-11.21	0-360	200	H
9	6.632	34.62	PK	35.6	-25.8	0	44.42	-	-	-	-	68.2	-23.78	0-360	201	V
4	6.64	35.7	PK	35.6	-26.3	0	45	-	-	-	-	68.2	-23.2	0-360	101	H

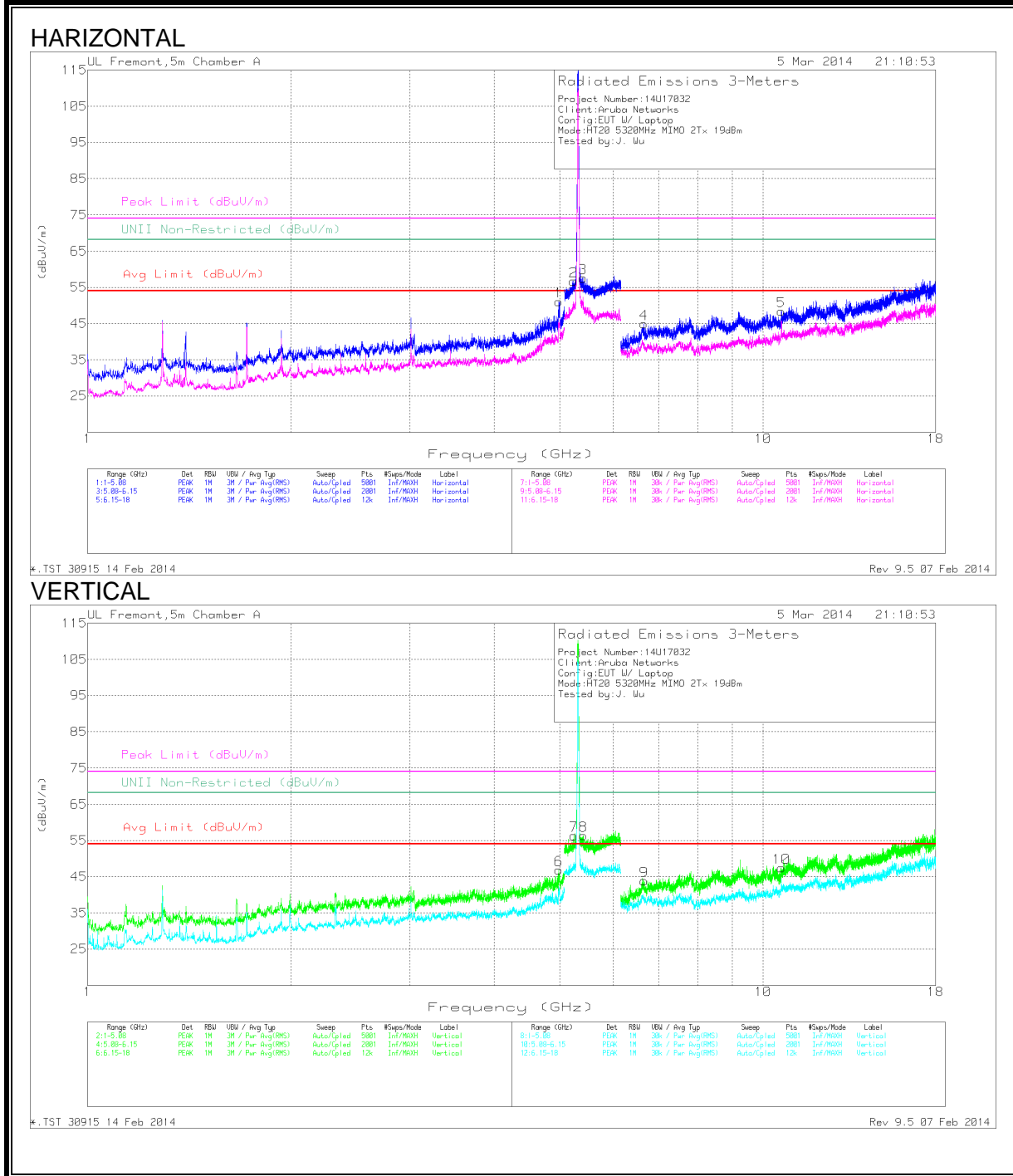
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/F lzf/Psd (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.984	46.09	PK1	34	-28.7	0	51.39	-	-	74	-22.61	-	-	18	109	H
	* 5	35.17	AD1	34	-28.6	.2	40.77	54	-13.23	-	-	-	-	18	109	H
6	* 4.983	41.56	PK	34	-28.7	0	46.86	54	-7.14	74	-27.14	-	-	0-360	101	V
3	* 5.393	44.33	PK1	34.7	-19.8	0	59.23	-	-	74	-14.77	-	-	32	212	H
	* 5.394	34.88	AD1	34.7	-19.8	.2	49.98	54	-4.02	-	-	-	-	32	212	H
8	* 5.397	41.77	PK1	34.7	-19.8	0	56.67	-	-	74	-17.33	-	-	27	112	V
	* 5.406	32.27	AD1	34.7	-19.7	.2	47.47	54	-6.53	-	-	-	-	27	112	V
5	* 10.641	39.09	PK1	37.8	-23	0	53.89	-	-	74	-20.11	-	-	197	189	H
	* 10.64	29.12	AD1	37.8	-23	.2	44.12	54	-9.88	-	-	-	-	197	189	H
10	* 10.641	32.66	PK	37.8	-23	0	47.46	54	-6.54	74	-26.54	-	-	0-360	200	V
2	5.241	43.2	PK	34.3	-20.8	0	56.7	-	-	-	-	68.2	-11.5	0-360	200	H
7	5.244	42.69	PK	34.3	-20.7	0	56.29	-	-	-	-	68.2	-11.91	0-360	101	V
4	6.66	35.83	PK	35.6	-26.5	0	44.93	-	-	-	-	68.2	-23.27	0-360	200	H
9	6.665	34.86	PK	35.6	-26.6	0	43.86	-	-	-	-	68.2	-24.34	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

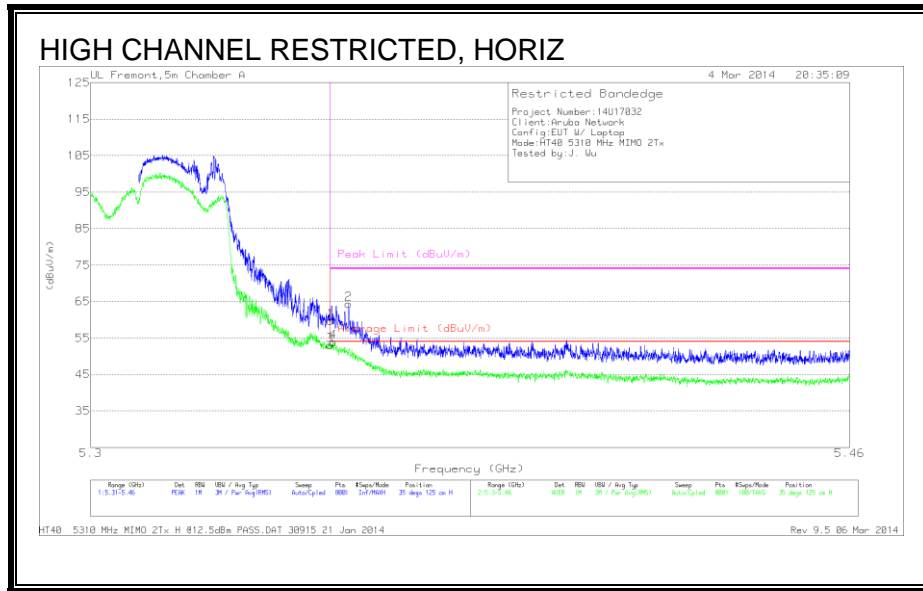
PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

9.2.3. TX ABOVE 1 GHz 802.11n HT40 STBC 2TX MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)



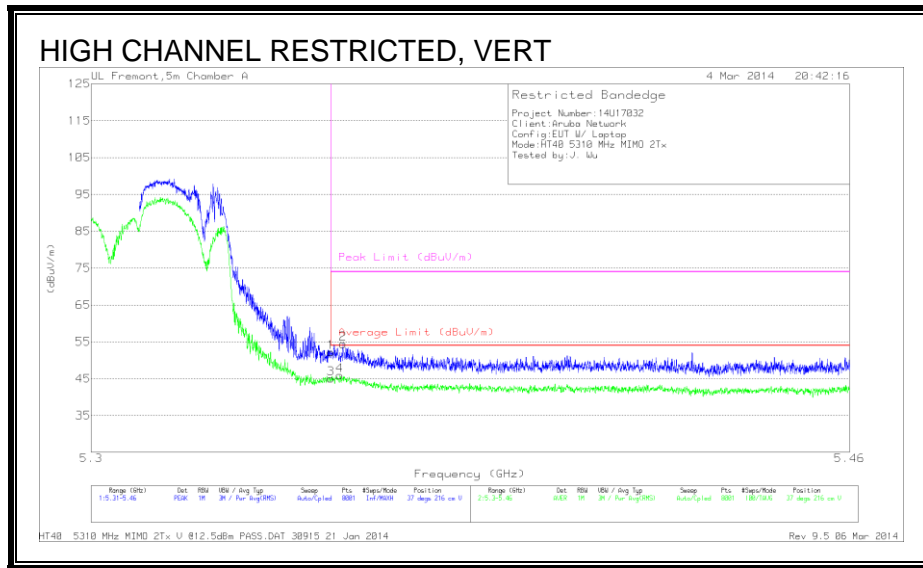
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.85	PK	34.5	-19.6	0	59.75	-	-	74	-14.25	35	125	H
3	* 5.35	37.88	RMS	34.5	-19.6	.2	52.98	54	-1.02	-	-	35	125	H
4	* 5.351	38.77	RMS	34.5	-19.6	.2	53.87	54	-.13	-	-	35	125	H
2	* 5.354	49.49	PK	34.5	-19.7	0	64.29	-	-	74	-9.71	35	125	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

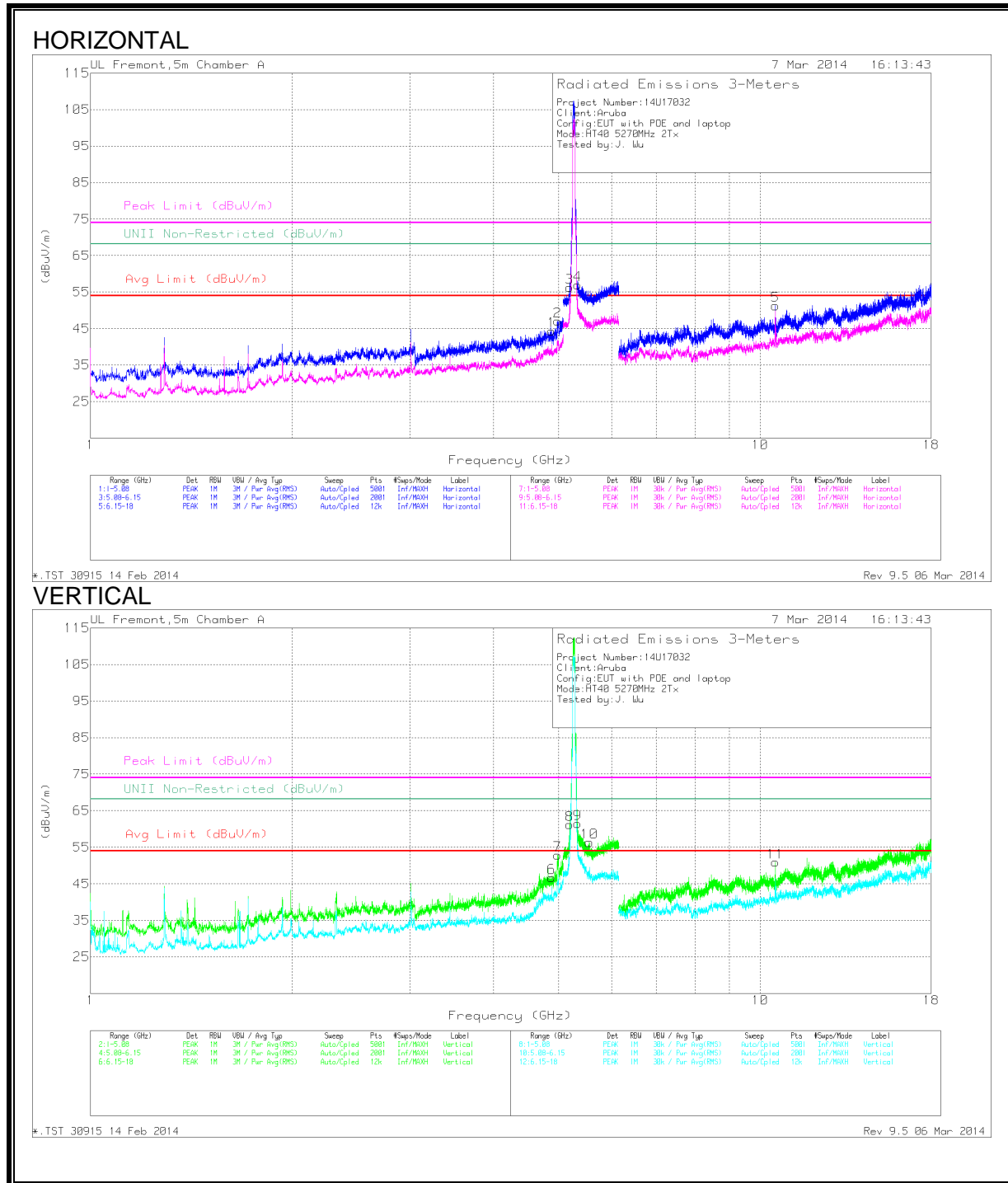
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.24	PK	34.5	-19.6	0	52.14	-	-	74	-21.86	37	216	V
3	* 5.35	29.98	RMS	34.5	-19.6	.2	45.08	54	-8.92	-	-	37	216	V
4	* 5.352	30.91	RMS	34.5	-19.7	.2	45.91	54	-8.09	-	-	37	216	V
2	* 5.353	39.66	PK	34.5	-19.7	0	54.46	-	-	74	-19.54	37	216	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS
LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.888	39.1	PK	34	-28.7	0	44.4	54	-9.6	74	-29.6	-	-	0-360	101	H
2	* 4.981	41.97	PK	33.9	-28.8	0	47.07	54	-6.93	74	-26.93	-	-	0-360	101	H
6	* 4.883	41.5	PK	34	-28.8	0	46.7	54	-7.3	74	-27.3	-	-	0-360	200	V
7	* 4.991	48.82	PK1	33.9	-28.6	0	54.12	-	-	74	-19.88	-	-	340	166	V
	* 4.986	37.2	AD1	33.9	-28.6	.2	42.7	54	-11.3	74	-31.3	-	-	340	166	V
3	5.196	42.65	PK	34.1	-20.5	0	56.25	-	-	-	-	68.2	-11.95	0-360	101	H
8	5.197	47.56	PK	34.1	-20.5	0	61.16	-	-	-	-	68.2	-7.04	0-360	201	V
4	5.336	42.68	PK	34.3	-20	0	56.98	-	-	-	-	68.2	-11.22	0-360	101	H
9	5.337	47.06	PK	34.3	-19.9	0	61.46	-	-	-	-	68.2	-6.74	0-360	201	V
10	5.559	41.54	PK	34.4	-19.6	0	56.34	-	-	-	-	68.2	-11.86	0-360	201	V
5	10.538	36.47	PK	37.6	-22.8	0	51.27	-	-	-	-	68.2	-16.93	0-360	100	H
11	10.539	36.21	PK	37.6	-22.9	0	50.91	-	-	-	-	68.2	-17.29	0-360	201	V

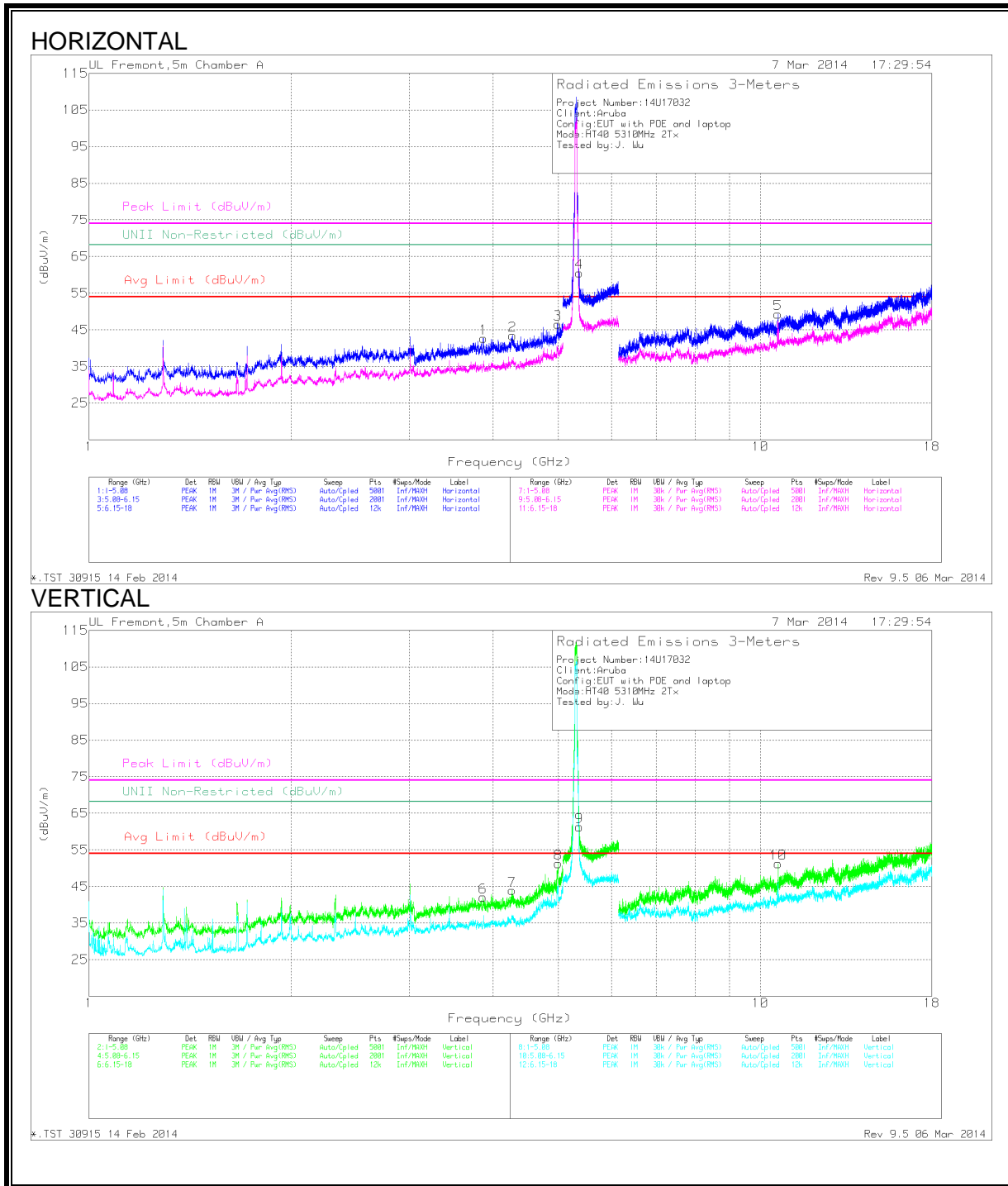
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T135 (dB/m)	Amp/Cbl/F lzf/Psd (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.88	39.1	PK	34	-28.7	0	44.4	54	-9.6	74	-29.6	-	-	0-360	101	H
2	* 4.981	41.97	PK	33.9	-28.8	0	47.07	54	-6.93	74	-26.93	-	-	0-360	101	H
6	* 4.883	41.5	PK	34	-28.8	0	46.7	54	-7.3	74	-27.3	-	-	0-360	200	V
7	* 4.991	48.82	PK1	33.9	-28.6	0	54.12	-	-	74	-19.88	-	-	340	166	V
	* 4.986	37.2	AD1	33.9	-28.6	.2	42.7	54	-11.3	74	-31.3	-	-	340	166	V
3	5.196	42.65	PK	34.1	-20.5	0	56.25	-	-	-	-	68.2	-11.95	0-360	101	H
8	5.197	47.56	PK	34.1	-20.5	0	61.16	-	-	-	-	68.2	-7.04	0-360	201	V
4	5.336	42.68	PK	34.3	-20	0	56.98	-	-	-	-	68.2	-11.22	0-360	101	H
9	5.337	47.06	PK	34.3	-19.9	0	61.46	-	-	-	-	68.2	-6.74	0-360	201	V
10	5.559	41.54	PK	34.4	-19.6	0	56.34	-	-	-	-	68.2	-11.86	0-360	201	V
5	10.538	36.47	PK	37.6	-22.8	0	51.27	-	-	-	-	68.2	-16.93	0-360	100	H
11	10.539	36.21	PK	37.6	-22.9	0	50.91	-	-	-	-	68.2	-17.29	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

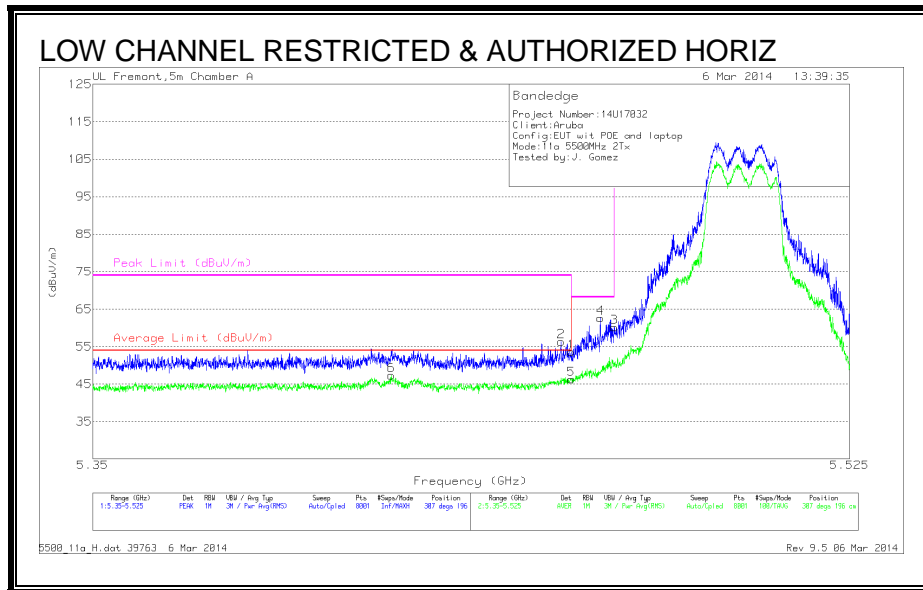
PK - Peak detector

PK1 - KDB 789033 Method: Peak

AD1 - KDB 789033 Method: AD Primary Power Average

9.2.4. TX ABOVE 1 GHz 802.11a CDD 2TX MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)



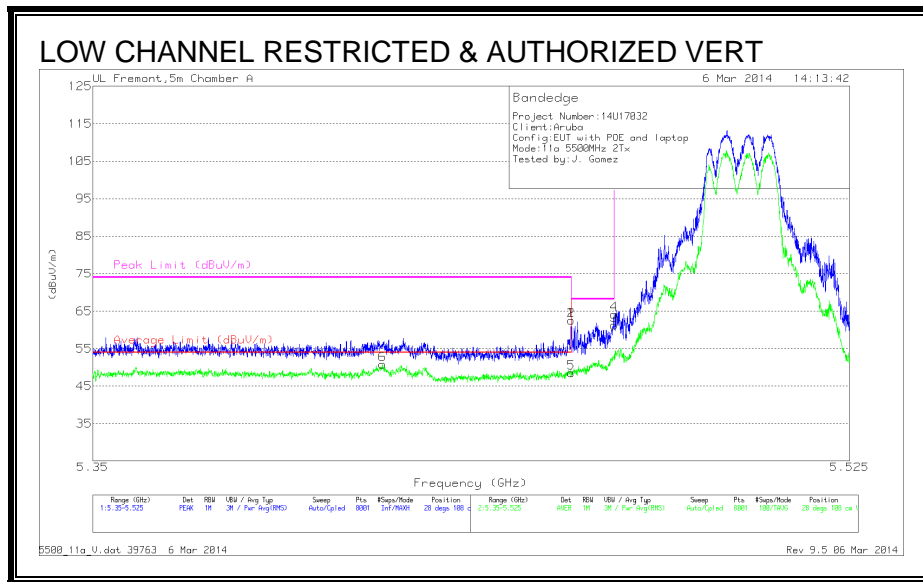
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.418	32.02	RMS	34.7	-19.5	.1	47.32	54	-6.68	-	-	307	196	H
2	* 5.458	41.41	PK	34.8	-19.9	0	56.31	-	-	74	-17.69	307	196	H
1	* 5.46	38.55	PK	34.8	-19.8	0	53.55	-	-	74	-20.45	307	196	H
5	* 5.46	31.16	RMS	34.8	-19.8	.1	46.26	54	-7.74	-	-	307	196	H
4	5.467	47.91	PK	34.8	-20.1	0	62.61	-	-	68.2	-5.59	307	196	H
3	5.47	45.67	PK	34.8	-20.3	0	60.17	-	-	68.2	-8.03	307	196	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



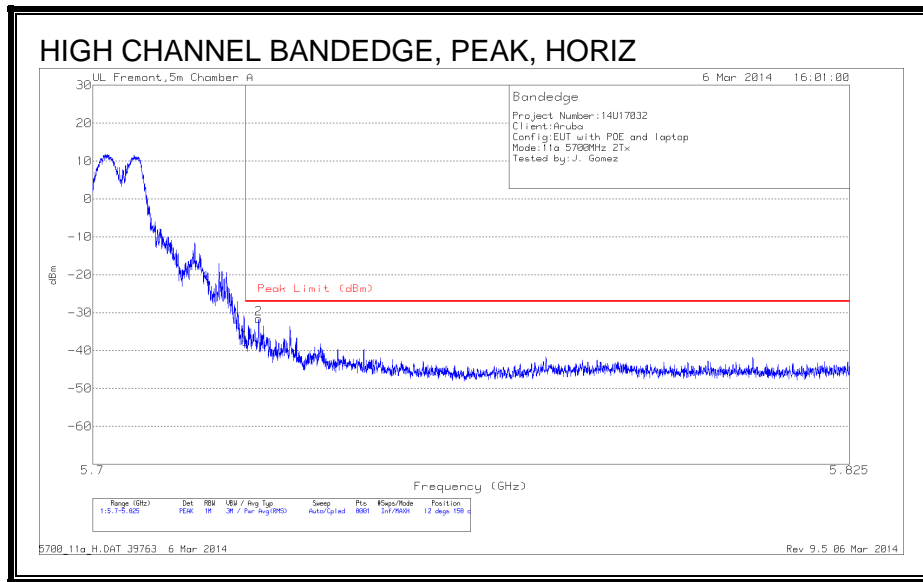
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cb/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.416	35.59	RMS	34.7	-19.6	.1	50.79	54	-3.21	-	-	28	108	V
1	* 5.46	47.5	PK	34.8	-19.8	0	62.5	-	-	74	-11.5	28	108	V
2	* 5.46	47.5	PK	34.8	-19.8	0	62.5	-	-	74	-11.5	28	108	V
5	* 5.46	33.45	RMS	34.8	-19.8	.1	48.55	54	-5.45	-	-	28	108	V
3	5.47	46.71	PK	34.8	-20.3	0	61.21	-	-	68.2	-6.99	28	108	V
4	5.47	49.64	PK	34.8	-20.3	0	64.14	-	-	68.2	-4.06	28	108	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

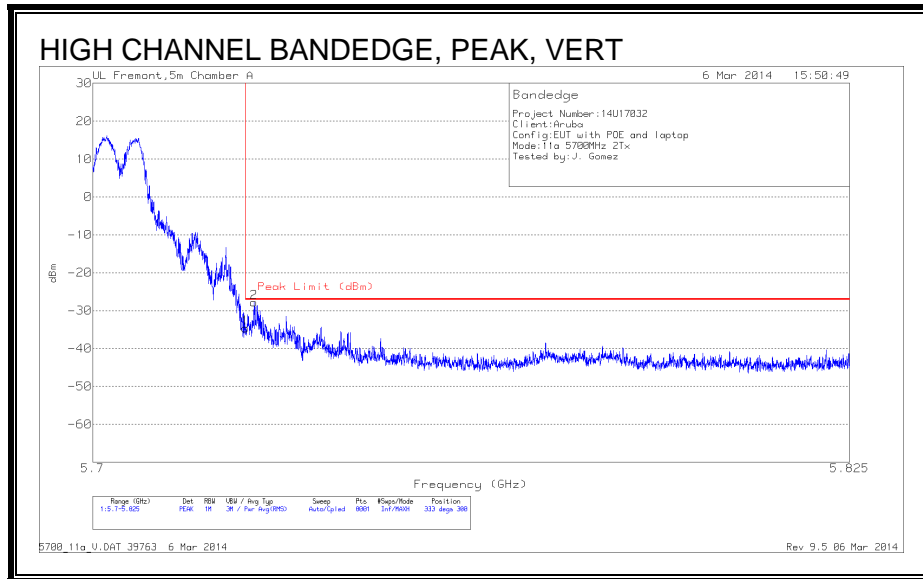


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading (dBm)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-64.69	PK	34.8	-19.6	11.8	-37.69	-27	-10.69	12	158	H
2	5.727	-58.52	PK	34.8	-19.7	11.8	-31.62	-27	-4.62	12	158	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector



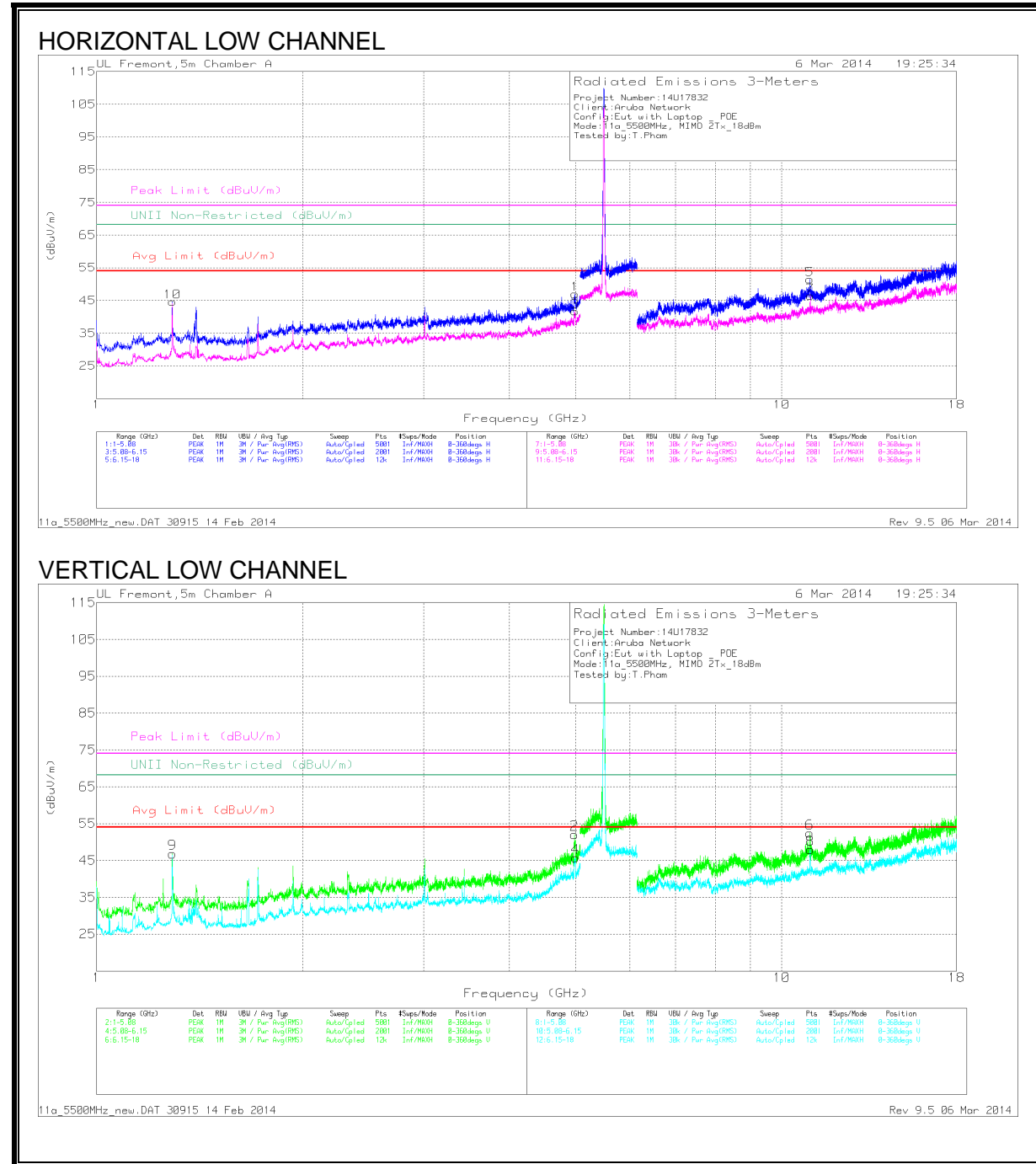
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading dBm	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-61.6	PK	34.8	-19.6	11.8	-34.6	-27	-7.6	333	300	V
2	5.726	-54.74	PK	34.8	-19.7	11.8	-27.84	-27	-.84	333	300	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.991	41.54	PK	34	-28.6	46.94	54	-7.06	74	-27.06	-	-	0-360	101	H
10	* 1.29	51.45	PK	30.1	-36.9	44.65	54	-9.35	74	-29.35	-	-	0-360	101	H
2	* 4.9991	42.17	PK1	33.5	-26.4	49.27	-	-	74	-24.73	-	-	48	146	V
	* 4.9906	31.46	AD1	33.5	-26.1	38.86	54	-15.14	-	-	-	-	48	146	V
9	* 1.29	53.6	PK	30.1	-36.9	46.8	54	-7.2	74	-27.2	-	-	0-360	101	V
5	* 10.985	37.07	PK1	37.5	-21.7	52.87	-	-	74	-21.13	-	-	261	126	H
	* 10.991	28.09	AD1	37.9	-21.9	44.09	54	-9.91	-	-	-	-	317	100	H
6	* 10.993	33.71	PK1	37.9	-22.2	49.41	-	-	74	-24.59	-	-	174	106	V
	* 10.994	24.76	AD1	37.9	-22.3	40.36	54	-13.64	-	-	-	-	174	106	V
3	* 4.993	36.34	PK	34	-28.6	41.74	54	-12.26	74	-32.26	-	-	0-360	101	H
4	* 4.996	40.41	PK	34	-28.6	45.81	54	-8.19	74	-28.19	-	-	0-360	201	V
7	* 11.003	31.16	PK	37.9	-22.6	46.46	54	-7.54	74	-27.54	-	-	0-360	100	H
8	* 10.999	32.63	PK	37.9	-22.6	47.93	54	-6.07	74	-26.07	-	-	0-360	101	V

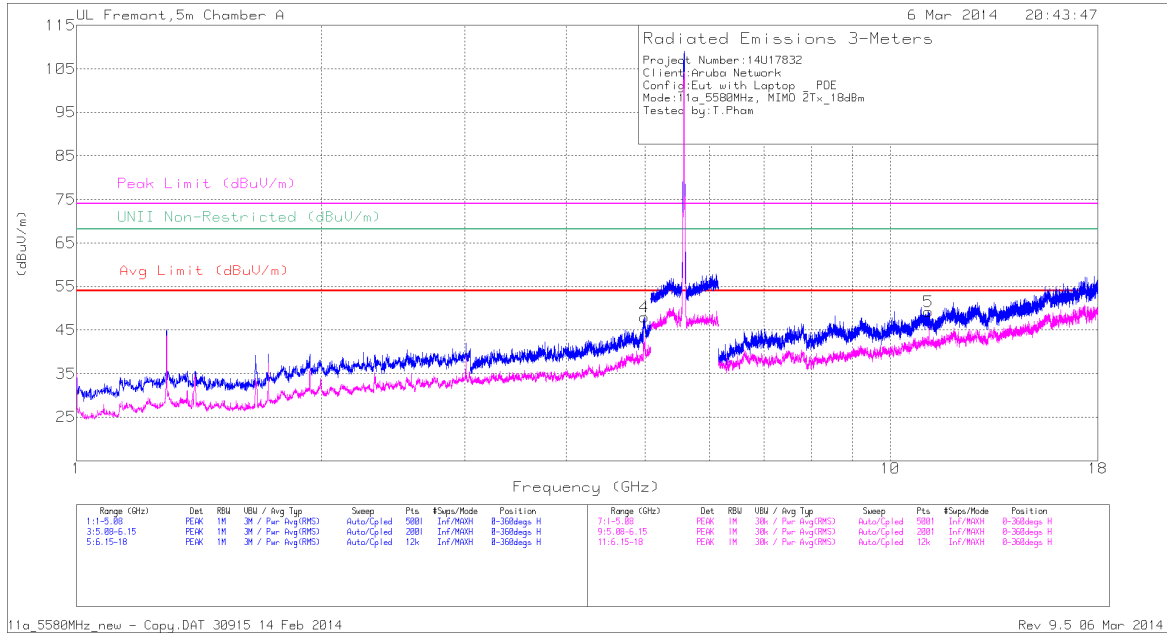
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

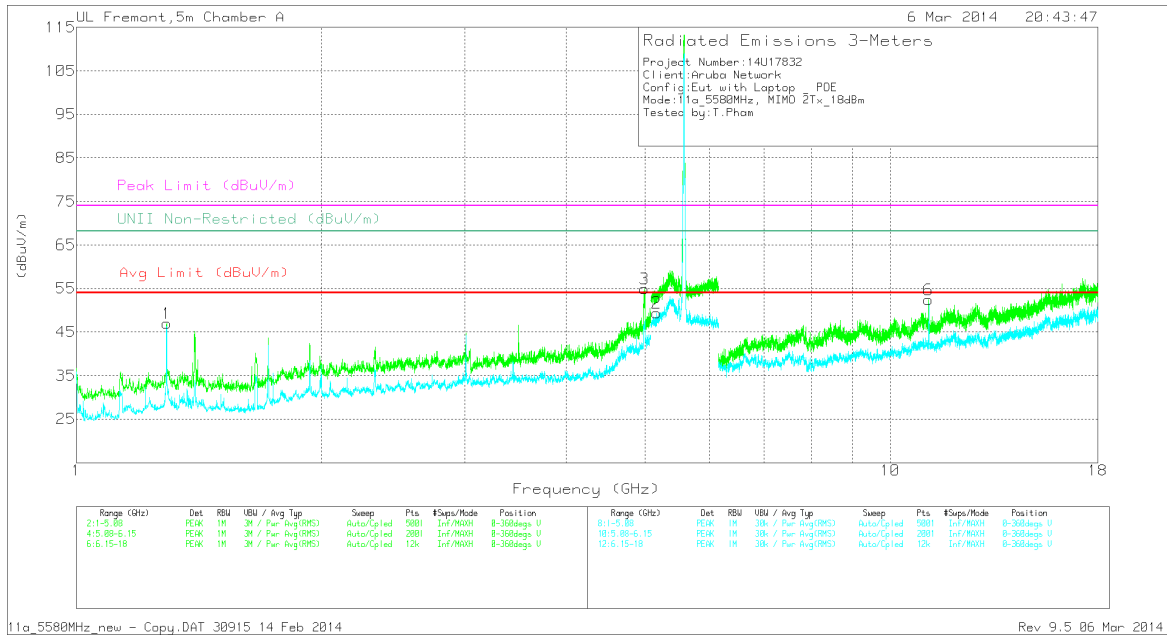
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HORIZONTAL MID CHANNEL



VERTICAL MID CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.99	42.53	PK	34	-28.6	47.93	54	-6.07	74	-26.07	-	-	0-360	200	H
1	* 1.29	53.75	PK	30.1	-36.9	46.95	54	-7.05	74	-27.05	-	-	0-360	101	V
3	* 4.992	47.45	PK1	34	-28.6	52.85	-	-	74	-21.15	-	-	24	277	V
	* 4.993	35.75	AD1	34	-28.6	41.15	54	-12.85	-	-	-	-	24	277	V
5	* 11.154	34.1	PK1	37.9	-22.5	49.5	-	-	74	-24.5	-	-	172	264	H
	* 11.153	24.39	AD1	37.9	-22.5	39.79	54	-14.21	-	-	-	-	172	264	H
6	* 11.158	37.26	PK1	37.9	-22.4	52.76	-	-	74	-21.24	-	-	177	298	V
	* 11.159	27.18	AD1	37.9	-22.4	42.68	54	-11.32	-	-	-	-	177	298	V
2	5.16	36.1	PK1	34.2	-20.5	49.8	-	-	74	-24.2	68.2	-18.76	0-360	100	V
	5.167	37.75	AD1	34	-28.6	43.15	54	-10.85	-	-	-	-	24	277	V

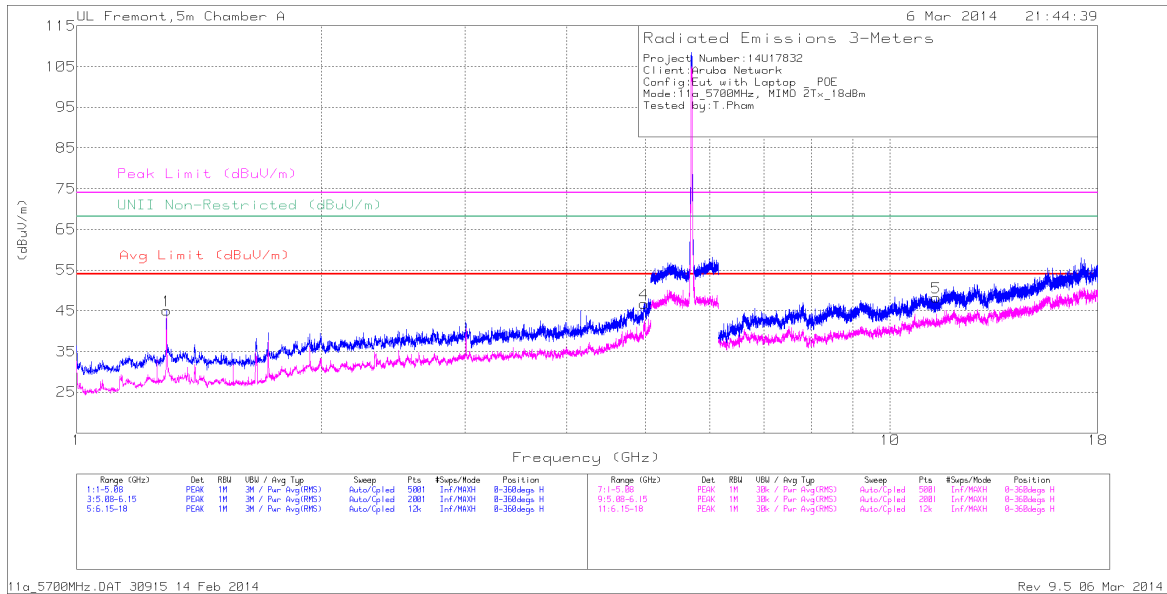
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

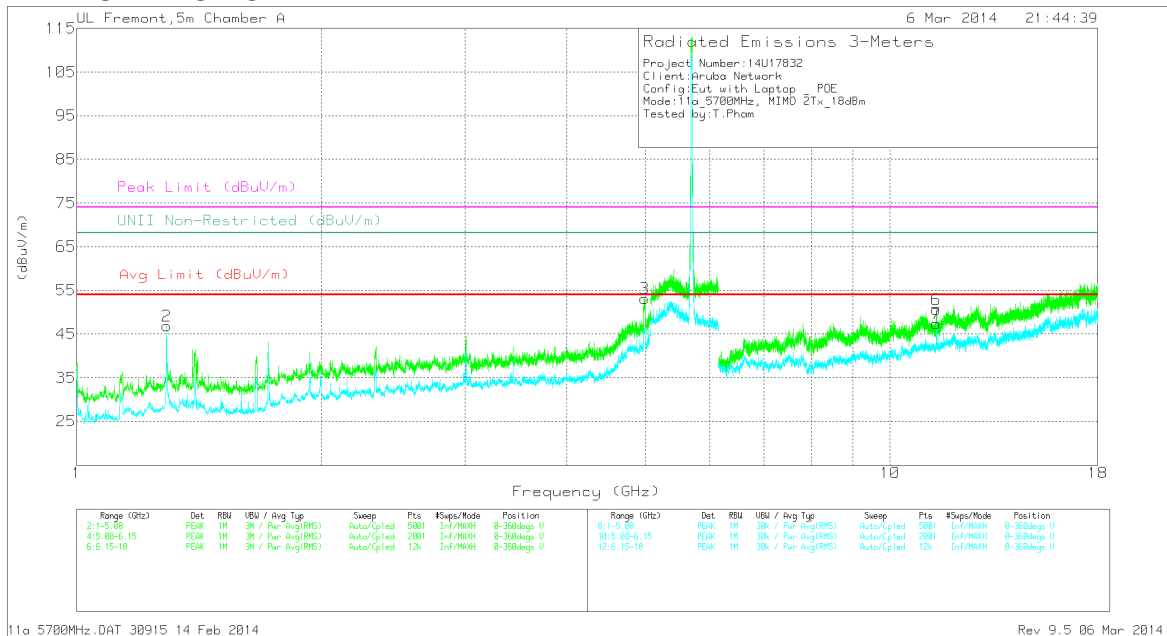
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HORIZONTAL HIGH CHANNEL



VERTICAL HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 4.991	41.4	PK	34	-28.6	46.8	54	-7.2	74	-27.2	-	-	0-360	200	H
1	* 1.29	53.66	PK	30.1	-36.9	46.86	54	-7.14	74	-27.14	-	-	0-360	100	V
2	* 4.988	47.1	PK1	34	-28.6	52.5	-	-	74	-21.5	-	-	25	187	V
	* 4.988	35.38	AD1	34	-28.6	40.78	54	-13.22	-	-	-	-	25	187	V
4	* 11.402	36.09	PK1	38.1	-23.3	50.89	-	-	74	-23.11	-	-	194	158	H
	* 11.402	25.97	AD1	38.1	-23.3	40.77	54	-13.23	-	-	-	-	194	158	H
5	* 11.401	34.19	PK1	38.1	-23.3	48.99	-	-	74	-25.01	-	-	159	162	V
	* 11.401	23.69	AD1	38.1	-23.3	38.49	54	-15.51	-	-	-	-	159	162	V
6	3.01	42.84	PK	33	-31.2	44.64	-	-	-	-	68.2	-23.56	0-360	201	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

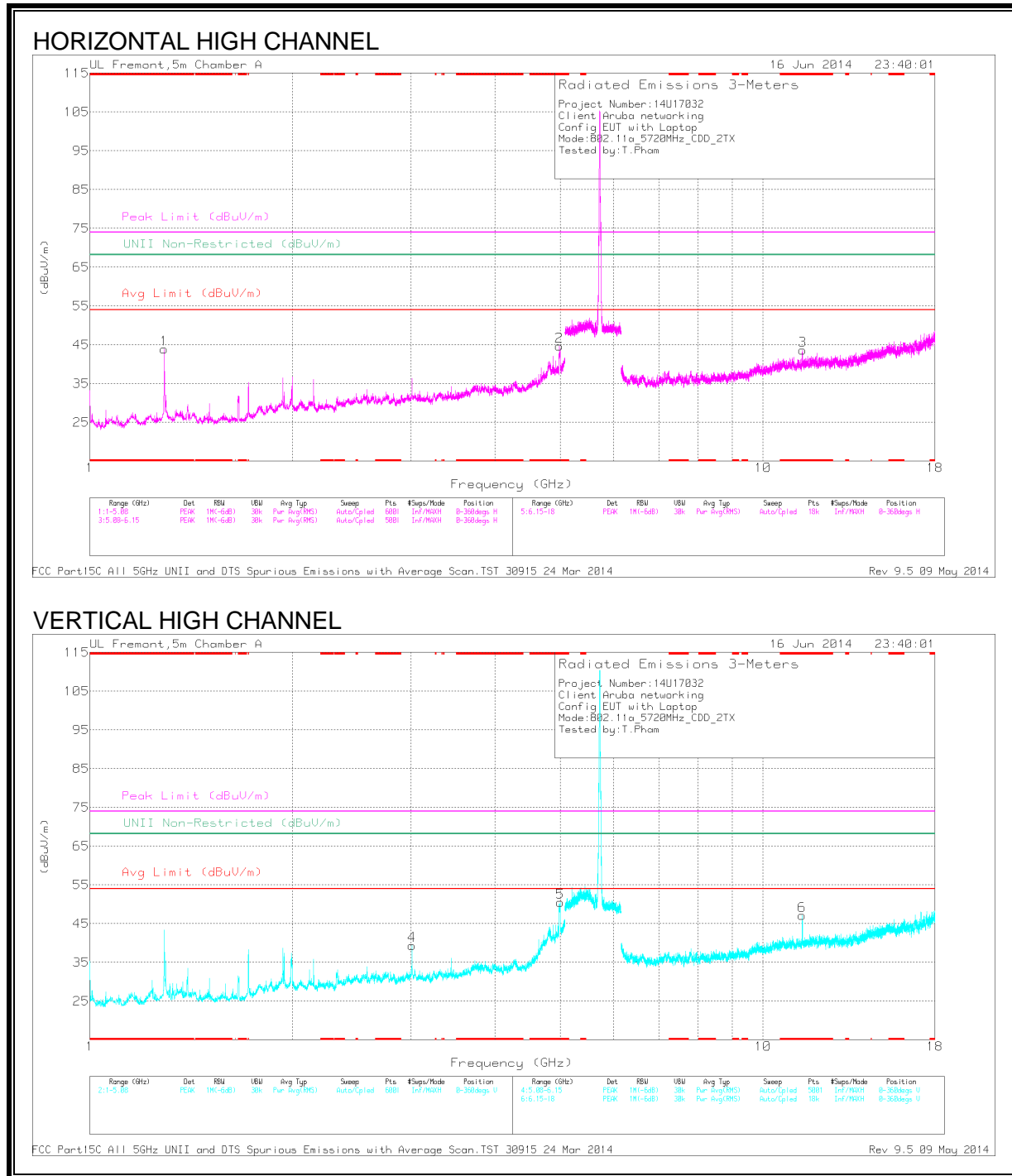
PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

9.2.5. TX ABOVE 1 GHz 802.11a CDD 2TX MODE CH 144 IN THE 5.6 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.29	54.09	PK1	30.1	-36.9	0	47.29	-	-	74	-26.71	-	-	264	184	H
	* 1.29	51.39	AD1	30.1	-36.9	-.1	44.69	54	-9.31	-	-	-	-	264	184	H
2	* 4.986	49.07	PK1	33.9	-28.6	0	54.37	-	-	74	-19.63	-	-	5	188	H
	* 4.986	34.87	AD1	33.9	-28.6	.1	40.27	54	-13.73	-	-	-	-	5	188	H
5	* 5	53.77	PK1	33.9	-28.6	0	59.07	-	-	74	-14.93	-	-	9	106	V
	* 5	38.94	AD1	33.9	-28.6	.1	44.34	54	-9.66	-	-	-	-	9	106	V
3	* 11.443	33.4	PK1	38.2	-23	0	48.6	-	-	74	-25.4	-	-	9	201	H
	* 11.443	22.87	AD1	38.2	-23	.1	38.17	54	-15.83	-	-	-	-	9	201	H
6	* 11.438	40.81	PK1	38.2	-23	0	56.01	-	-	74	-17.99	-	-	183	209	V
	* 11.438	29.12	AD1	38.2	-23	.1	44.42	54	-9.58	-	-	-	-	183	209	V
4	3.01	45.57	PK1	32.8	-31.2	0	47.17	-	-	-	-	68.2	-21.03	202	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

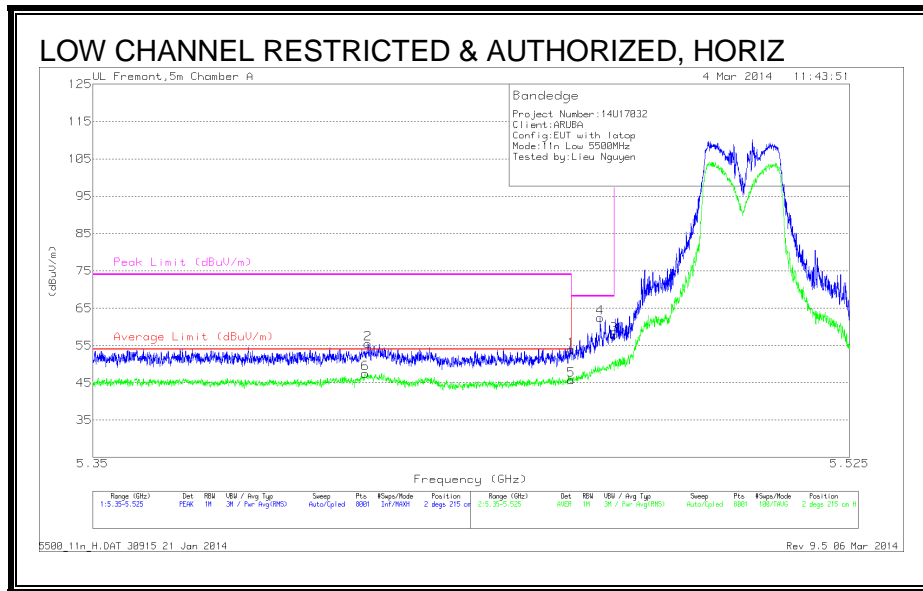
AD1 - KDB789033 Method: AD Primary Power Average

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 24 Mar 2014

Rev 9.5 09 May 2014

9.2.6. TX ABOVE 1 GHz 802.11n HT20 STBC 2TX MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEGE (LOW CHANNEL)



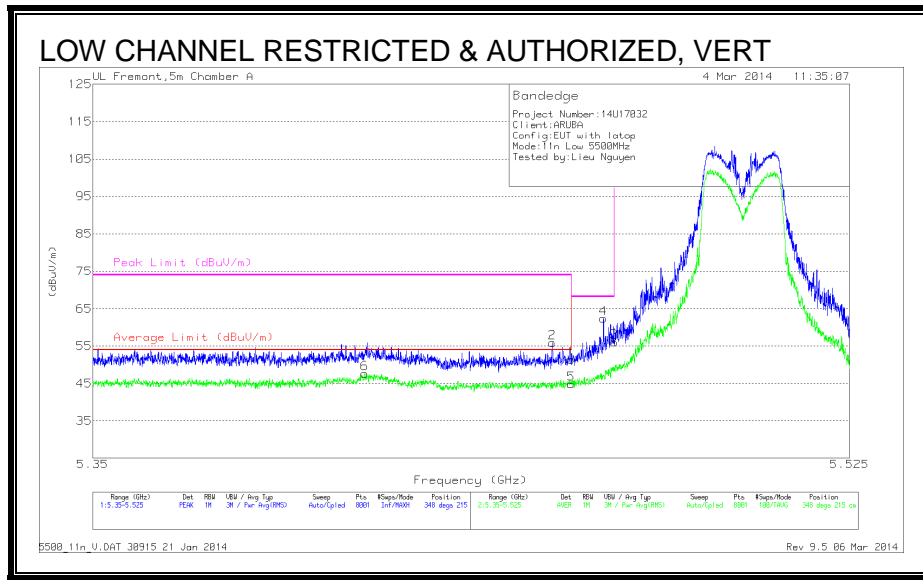
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.84	PK	34.8	-19.8	0	53.84	-	-	74	-20.16	2	215	H
2	* 5.413	40.35	PK	34.7	-19.6	0	55.45	-	-	74	-18.55	2	215	H
5	* 5.46	30.74	RMS	34.8	-19.8	0.2	45.76	54	-8.24	-	-	2	215	H
6	* 5.412	32.4	RMS	34.7	-19.6	0.2	47.7	54	-6.3	-	-	2	215	H
4	5.467	47.6	PK	34.8	-20	0	62.4	-	-	68.2	-5.8	2	215	H
3	5.47	43.35	PK	34.8	-20.3	0	57.85	-	-	68.2	-10.35	2	215	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

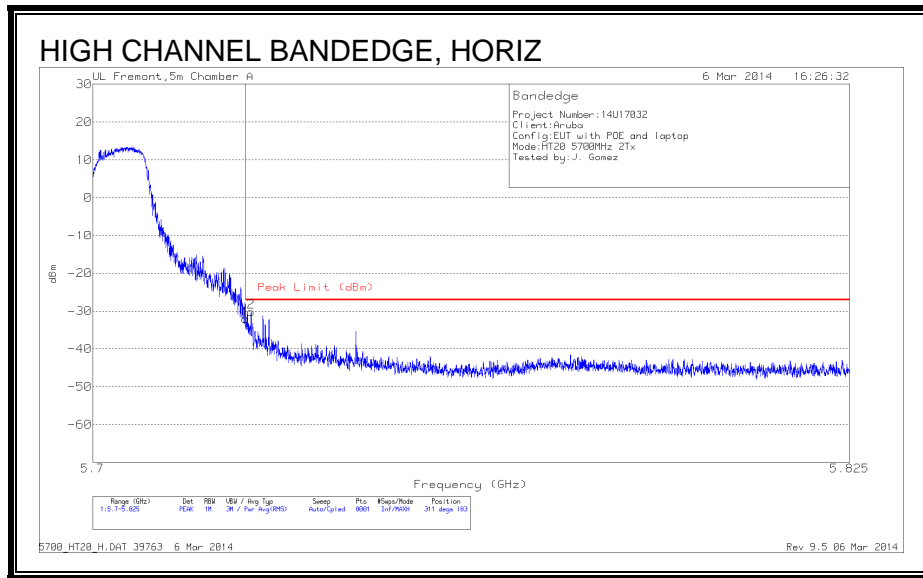
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT119 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 5.412	32.55	RMS	34.7	-19.6	0.2	47.67	54	-6.33	-	-	348	215	V
2	* 5.456	41.13	PK	34.8	-20	0	55.93	-	-	74	-18.07	348	215	V
1	* 5.46	36.45	PK	34.8	-19.8	0	51.45	-	-	74	-22.55	348	215	V
5	* 5.46	29.82	RMS	34.8	-19.8	0.2	44.84	54	-9.16	-	-	348	215	V
4	5.467	47.68	PK	34.8	-20.1	0	62.38	-	-	68.2	-5.82	348	215	V
3	5.47	41.55	PK	34.8	-20.3	0	56.05	-	-	68.2	-12.15	348	215	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

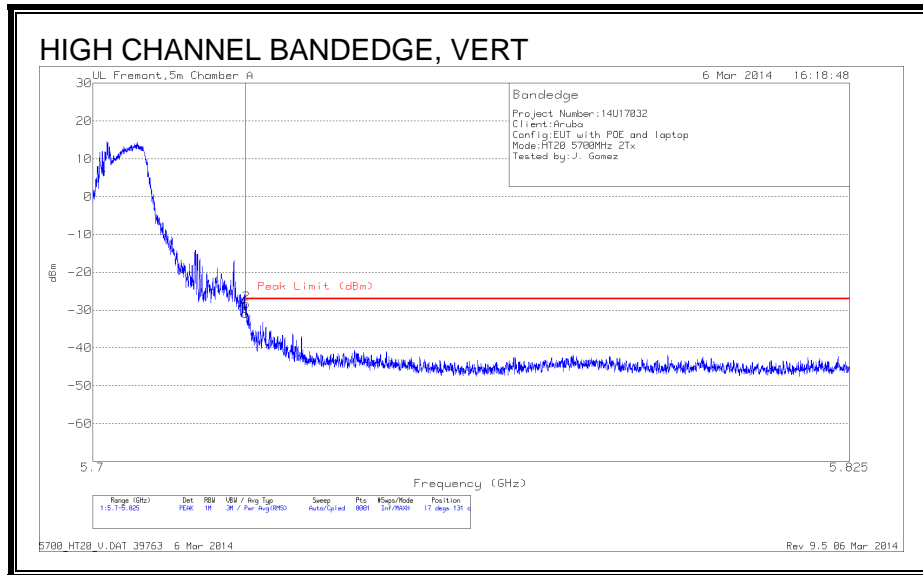
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading (dBm)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-59.08	PK	34.8	-19.6	11.8	-32.08	-27	-5.08	311	183	H
2	5.726	-57.1	PK	34.8	-19.7	11.8	-30.2	-27	-3.2	311	183	H

PK - Peak detector

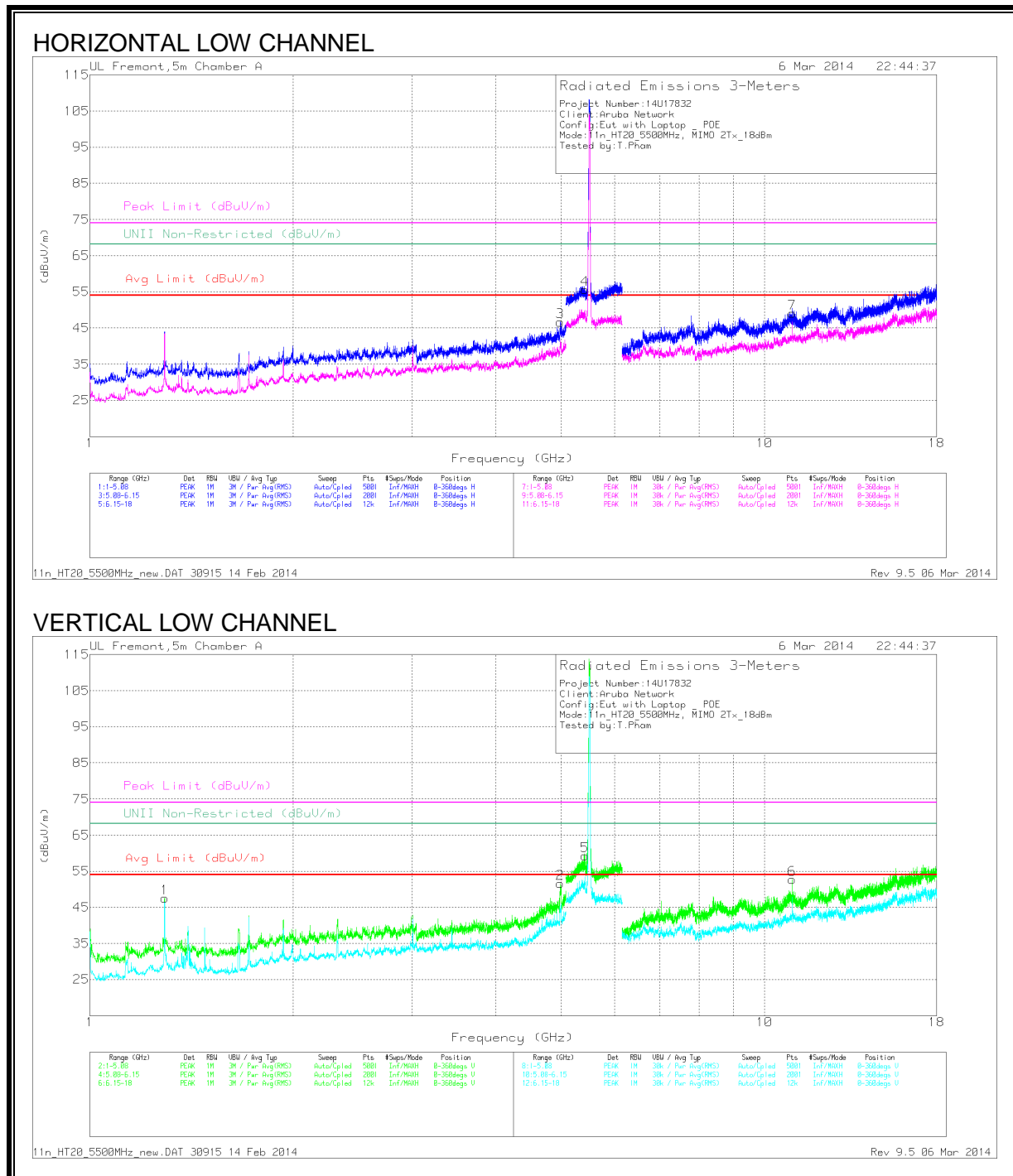


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cb/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading dBm	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-57.89	PK	34.8	-19.6	11.8	-30.89	-27	-3.89	17	131	V
2	5.725	-55.38	PK	34.8	-19.6	11.8	-28.38	-27	-1.38	17	131	V

PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 4.981	41.46	PK	34	-28.8	46.66	54	-7.34	74	-27.34	-	-	0-360	101	H
1	* 1.29	54.4	PK	30.1	-36.9	47.6	54	-6.4	74	-26.4	-	-	0-360	101	V
2	* 4.985	44.75	PK1	34	-28.6	50.15	-	-	74	-23.85	-	-	26	211	V
	* 4.986	33.11	AD1	34	-28.6	38.51	54	-15.49	-	-	-	-	26	211	V
4	* 5.4262	34.85	PK1	33.9	-18	50.75	-	-	74	-23.25	-	-	81	307	H
	* 5.4243	24.9	AD1	33.9	-18	40.8	54	-13.2	-	-	-	-	81	307	H
5	* 5.4133	42.34	PK1	33.9	-18.1	58.14	-	-	74	-25.86	-	-	72	336	V
	* 5.4154	25.76	AD1	33.9	-18	41.66	54	-12.34	-	-	-	-	72	336	V
7	* 10.994	35.88	PK1	37.9	-22.3	51.48	-	-	74	-22.52	-	-	184	364	H
	* 10.995	25.16	AD1	37.9	-22.4	40.66	54	-13.34	-	-	-	-	184	364	H
6	* 11.001	34.98	PK1	37.9	-22.6	50.28	-	-	74	-23.72	-	-	186	221	V
	* 11	25.42	AD1	37.9	-22.6	40.72	54	-13.28	-	-	-	-	186	221	V

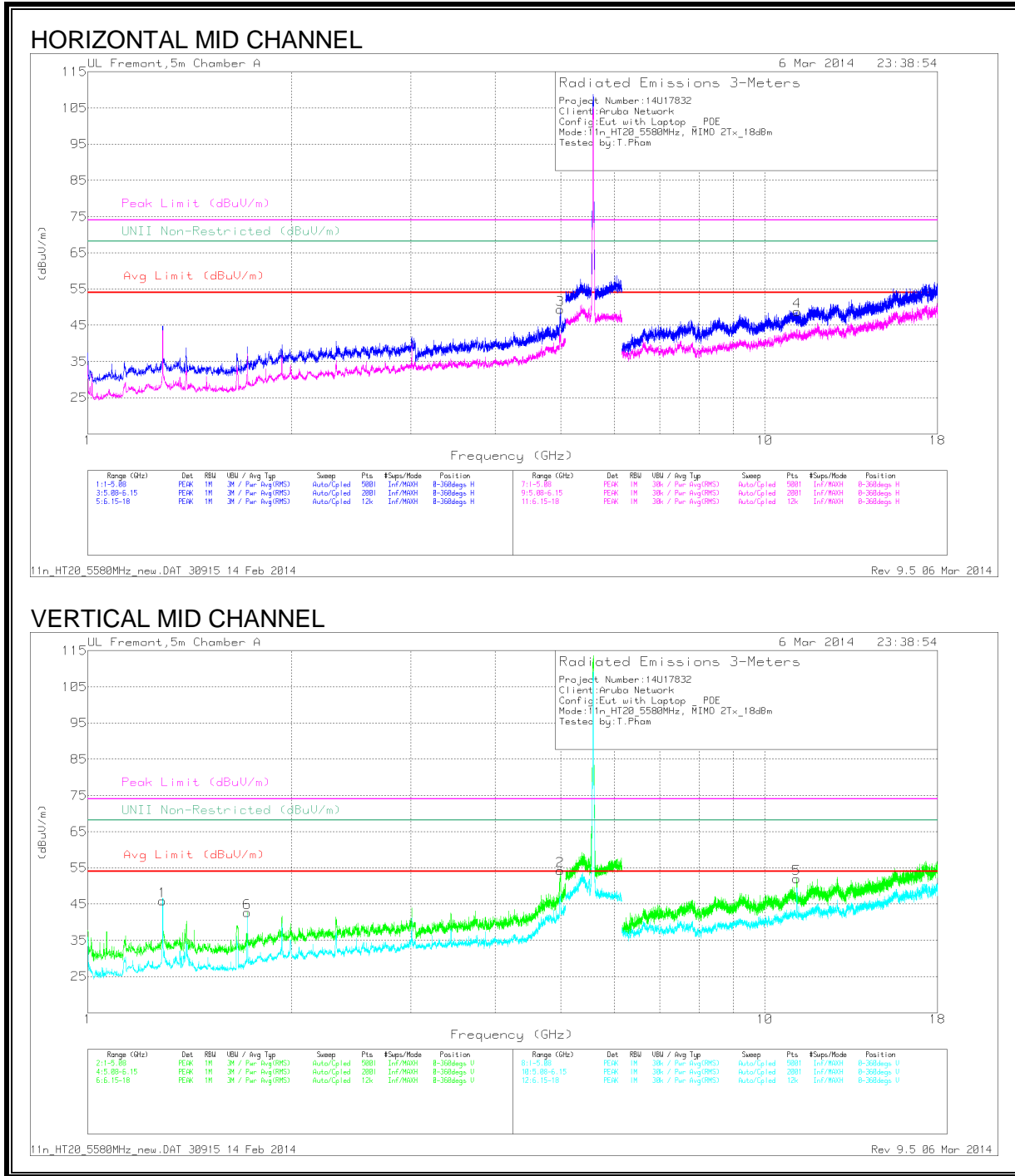
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL


 UL Fremont, 5m Chamber A 6 Mar 2014 23:38:54

Radiated Emissions 3-Meters
 Project Number: 14U17832
 Client: Aruba Network
 Config: Eut with Laptop PDE
 Mode: 11n_HT20_5580MHz, RIMD 2Tx_18dBm
 Tested by: T.Pham

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 4.9884	47.23	PK1	33.5	-26.4	54.33	-	-	74	-19.67	-	-	36	100	H
	* 4.9999	35.12	AD1	33.5	-26.5	42.12	54	-11.88	-	-	-	-	36	100	H
1	* 1.29	52.74	PK	30.1	-36.9	45.94	54	-8.06	74	-28.06	-	-	0-360	101	V
2	*4.99	50.25	PK1	34	-28.6	55.65	-	-	74	-18.35	-	-	2	203	V
	*4.91	37.85	AD1	34	-28.6	43.25	54	-10.75	-	-	-	-	2	203	V
6	* 1.72	49.01	PK	29.3	-35.6	42.71	54	-11.29	74	-31.29	-	-	0-360	200	V
4	* 11.158	34.71	PK1	37.9	-22.4	50.21	-	-	74	-23.79	-	-	184	176	H
	* 11.158	24.53	AD1	37.9	-22.4	40.03	54	-13.97	-	-	-	-	184	176	H
5	* 11.155	39.58	PK1	37.9	-22.5	54.98	-	-	74	-19.02	-	-	212	262	V
	* 11.155	28.59	AD1	37.9	-22.5	43.99	54	-10.01	-	-	-	-	212	262	V

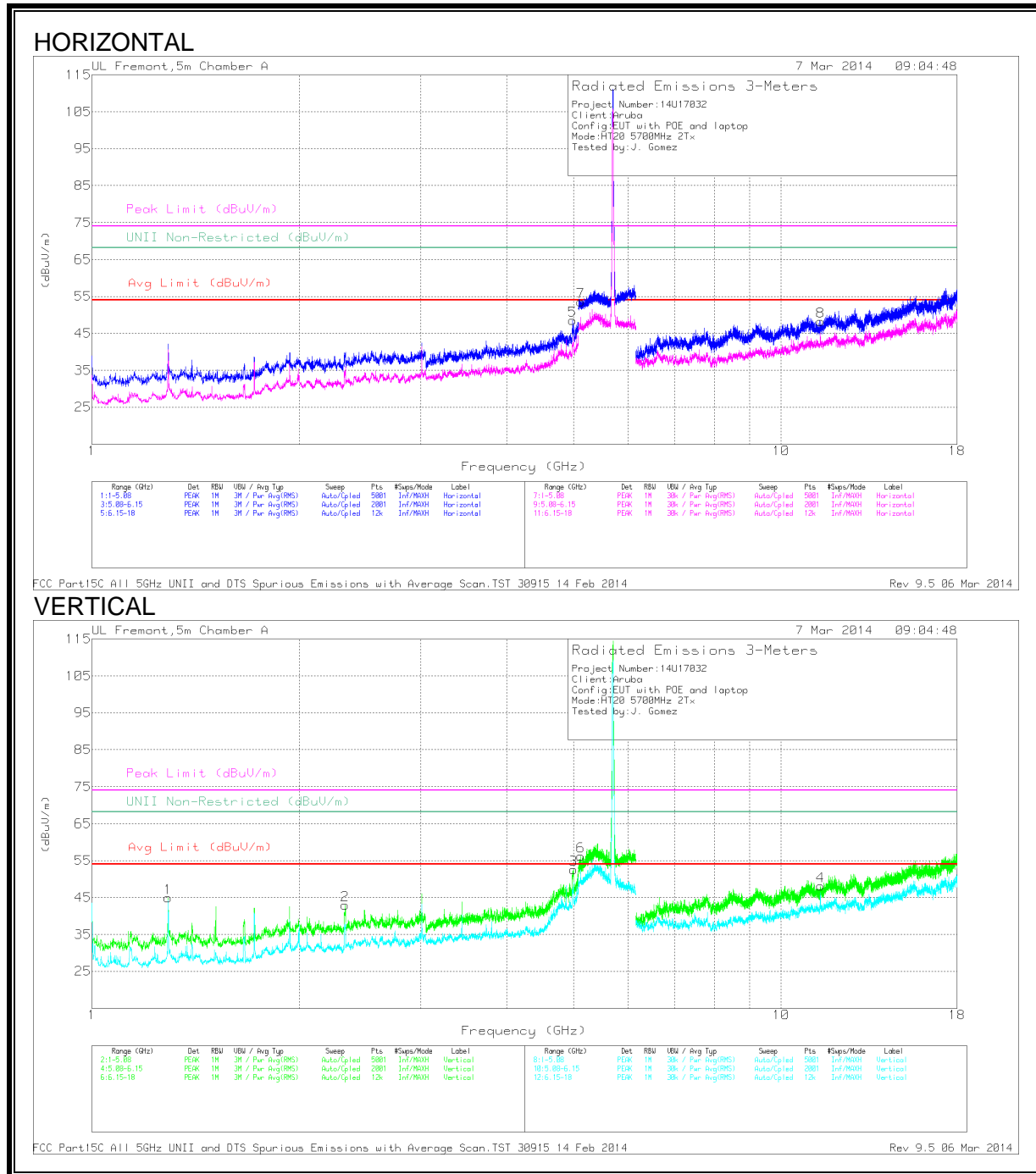
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/CI/ Filtz/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 5	45.1	PK1	33.9	-28.6	0	50.4	-	-	74	-23.6	-	-	22	123	H
	* 5	35.16	AD1	33.9	-28.6	.2	40.66	54	-13.34	-	-	-	-	22	123	H
1	* 1.29	51.71	PK	30.1	-36.9	0	44.91	54	-9.09	74	-29.09	-	-	0-360	100	V
2	* 2.33	46.02	PK	31.7	-34.7	0	43.02	54	-10.98	74	-30.98	-	-	0-360	201	V
3	* 5	49.5	PK1	33.9	-28.6	0	54.8	-	-	74	-19.2	-	-	8	153	V
	* 5	38.65	AD1	33.9	-28.6	.2	44.15	54	-9.85	-	-	-	-	8	153	V
7	* 5.12	42.63	PK1	33.9	-20.3	0	56.23	-	-	74	-17.77	-	-	70	311	H
	* 5.12	33.97	AD1	33.9	-20.3	.2	47.77	54	-6.23	-	-	-	-	70	311	H
6	* 5.117	44.04	PK1	33.9	-20.2	0	57.74	-	-	74	-16.26	-	-	1	125	V
	* 5.12	35.55	AD1	33.9	-20.3	.2	49.35	54	-4.65	-	-	-	-	1	125	V
8	* 11.413	35.61	PK1	38.1	-23.2	0	50.51	-	-	74	-23.49	-	-	258	103	H
	* 11.408	25.62	AD1	38.1	-23.3	.2	40.62	54	-13.38	-	-	-	-	258	103	H
4	* 11.409	34.19	PK1	38.1	-23.2	0	49.09	-	-	74	-24.91	-	-	183	387	V
	* 11.411	25	AD1	38.1	-23.2	.2	40.1	54	-13.9	-	-	-	-	183	387	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

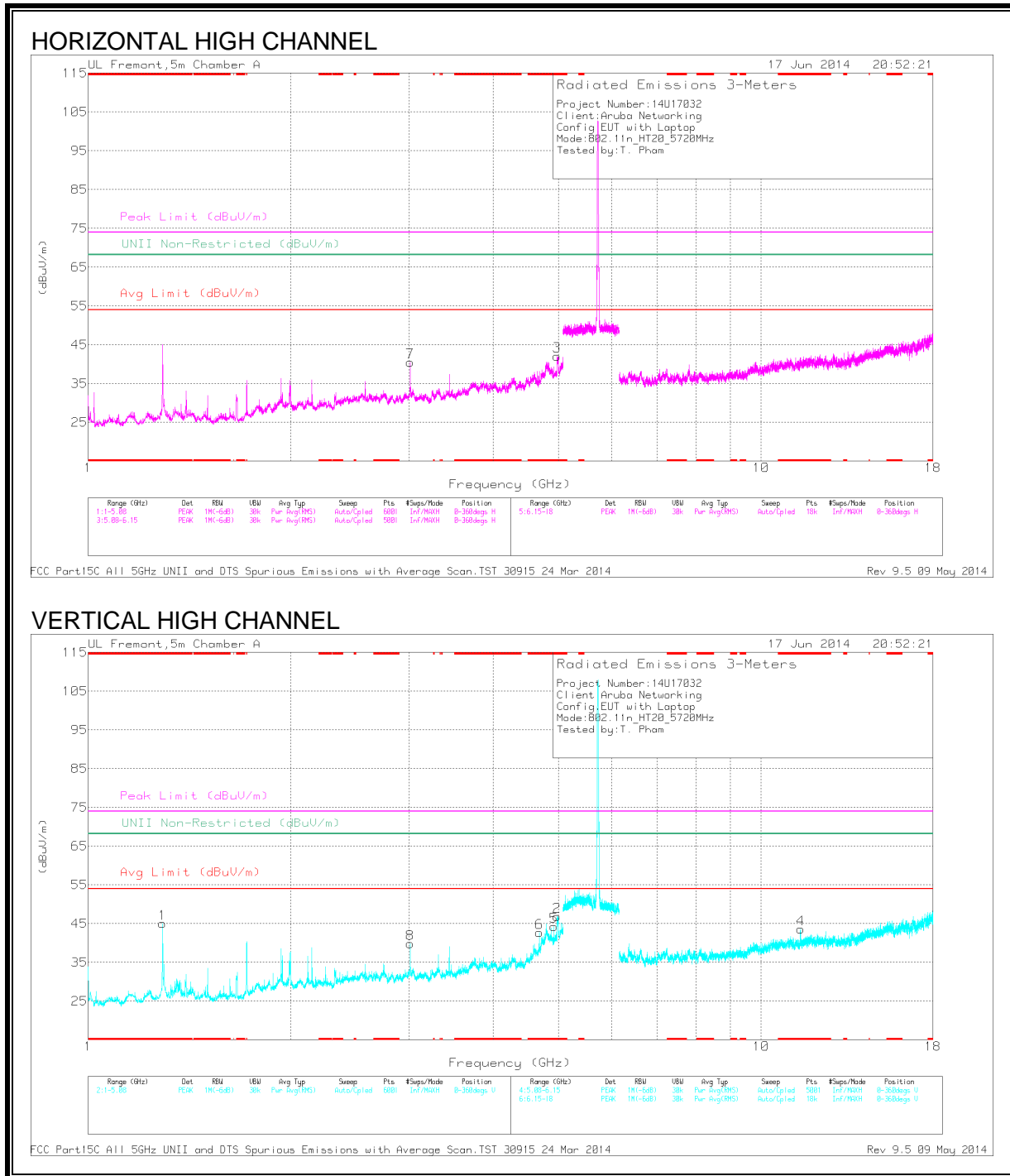
PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

9.2.7. TX ABOVE 1 GHz 802.11n HT20 STBC 2TX MODE CH 144 5.6 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.29	54.34	PK1	30.1	-36.9	0	47.54	-	-	74	-26.46	-	-	195	119	V
	* 1.29	51.82	AD1	30.1	-36.9	.2	45.22	54	-8.78	-	-	-	-	195	119	V
4	* 11.445	35.97	PK1	38.2	-23	0	51.17	-	-	74	-22.83	-	-	195	254	V
	* 11.449	24.37	AD1	38.2	-23	.2	39.77	54	-14.23	-	-	-	-	195	254	V
6	* 4.68	45.64	PK1	34	-29.6	0	50.04	-	-	74	-23.96	-	-	360	178	V
	* 4.68	36.1	AD1	34	-29.6	.2	40.7	54	-13.3	-	-	-	-	360	178	V
5	* 4.92	47.35	PK1	33.9	-29.2	0	52.05	-	-	74	-21.95	-	-	352	160	V
	* 4.92	37.66	AD1	33.9	-29.2	.2	42.56	54	-11.44	-	-	-	-	352	160	V
2	* 4.976	49.11	PK1	33.9	-29	0	54.01	-	-	74	-19.99	-	-	0	117	V
	* 4.977	35.28	AD1	33.9	-28.9	.2	40.48	54	-13.52	-	-	-	-	0	117	V
3	* 4.975	45.61	PK1	33.9	-29	0	50.51	-	-	74	-23.49	-	-	298	316	H
	* 4.978	32.23	AD1	33.9	-28.9	.2	37.43	54	-16.57	-	-	-	-	298	316	H
7	3.01	44.19	PK1	32.8	-31.2	0	45.79	-	-	-	-	68.2	-22.41	190	204	H
8	3.009	43.78	PK1	32.8	-31.2	0	45.38	-	-	-	-	68.2	-22.82	238	135	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

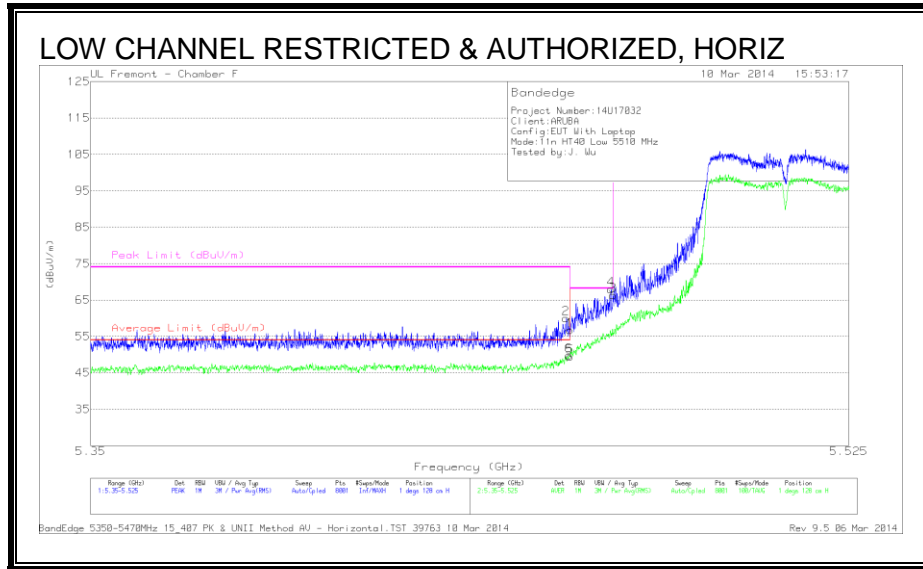
AD1 - KDB789033 Method: AD Primary Power Average

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 24 Mar 2014

Rev 9.5 09 May 2014

9.2.8. TX ABOVE 1 GHz 802.11n HT40 STBC 2TX MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEGE (LOW CHANNEL)



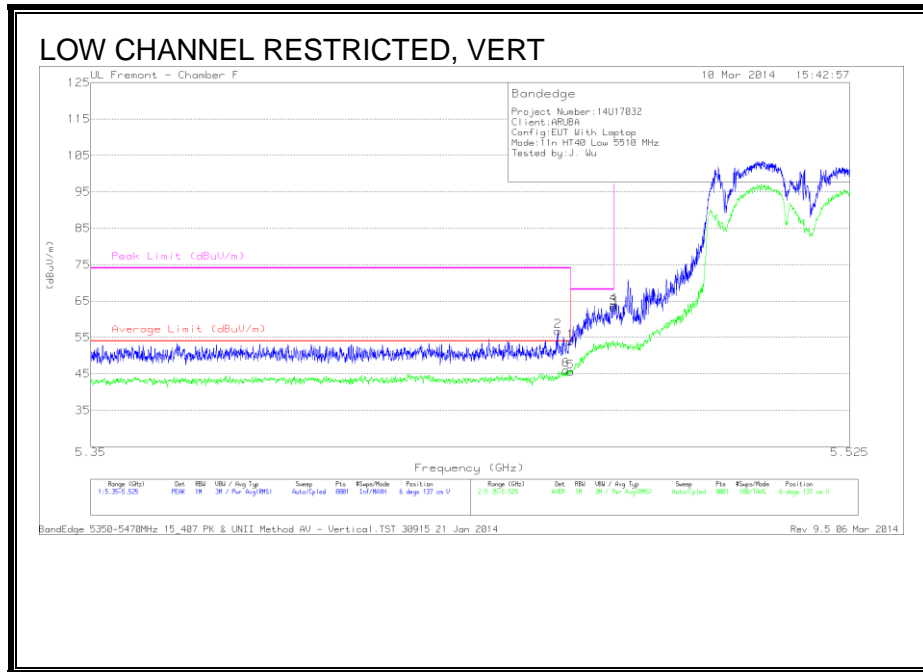
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT711 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	41.77	PK	34.8	-19.8	0	56.77	-	-	74	-17.23	1	128	H
2	* 5.459	45.03	PK	34.8	-19.9	0	59.93	-	-	74	-14.07	1	128	H
3	5.47	51.32	PK	34.8	-19.8	0	66.32	-	-	68.2	-1.88	1	128	H
4	5.47	52.98	PK	34.8	-19.8	0	67.98	-	-	68.2	-.22	1	128	H
5	* 5.46	34.25	RMS	34.8	-19.8	.2	49.45	54	-4.55	-	-	1	128	H
6	* 5.46	34.56	RMS	34.8	-19.8	.2	49.76	54	-4.24	-	-	1	128	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection



Trace Markers

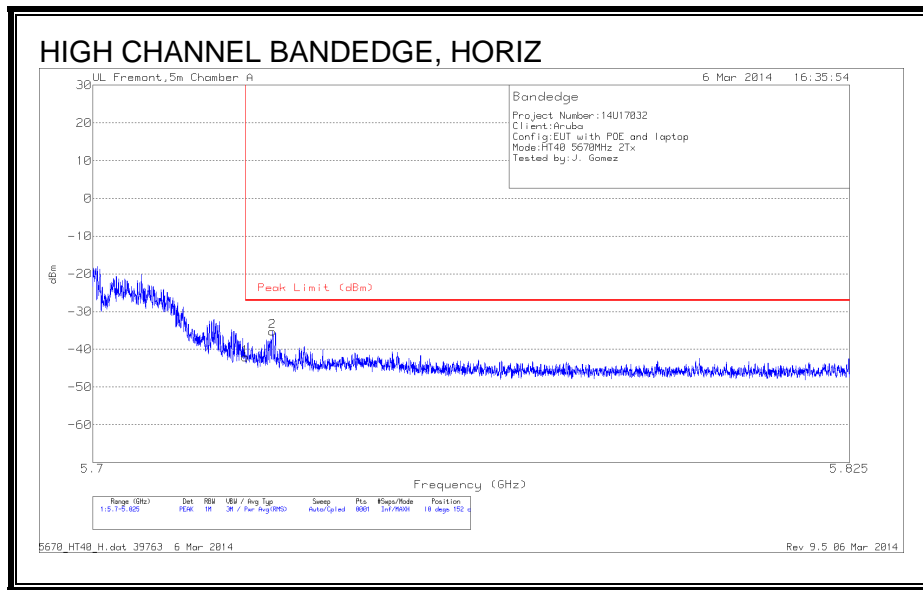
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fitter/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.91	PK	34.8	-19.8	0	53.91	-	-	74	-20.09	6	137	V
2	* 5.457	41.85	PK	34.8	-19.9	0	56.75	-	-	74	-17.25	6	137	V
3	5.47	48.2	PK	34.8	-19.8	0	63.2	-	-	68.2	-5	6	137	V
4	5.47	48.8	PK	34.8	-19.8	0	63.8	-	-	68.2	-4.4	6	137	V
5	* 5.46	30.36	RMS	34.8	-19.8	.2	45.56	54	-8.44	-	-	6	137	V
6	* 5.459	31	RMS	34.8	-19.9	.2	46.1	54	-7.9	-	-	6	137	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

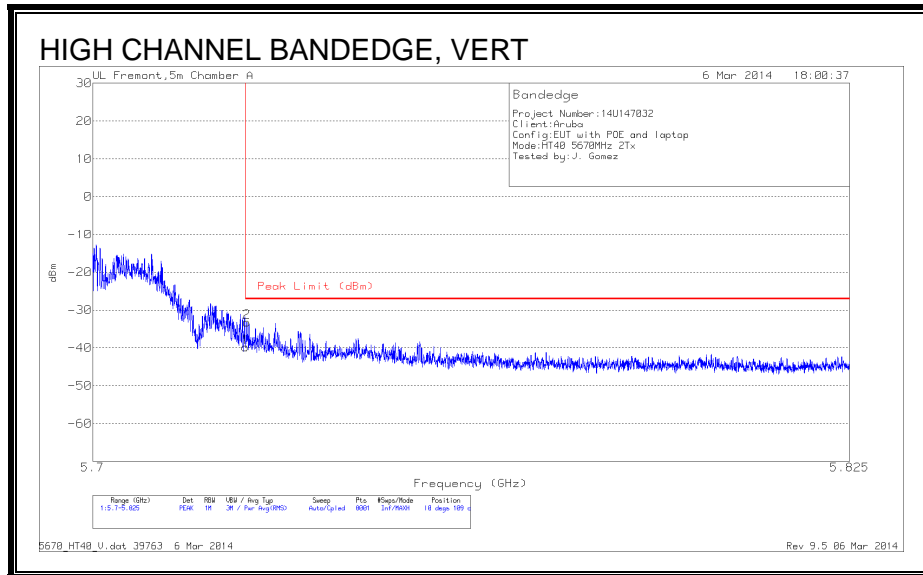
AUTHORIZED BANDEDGE (HIGH CHANNEL)



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	Conversion Factor (dB)	Corrected Reading (dBm)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-69.1	PK	34.8	-19.6	11.8	-42.1	-27	-15.1	18	152	H
2	5.729	-62.18	PK	34.8	-19.7	11.8	-35.28	-27	-8.28	18	152	H

PK - Peak detector



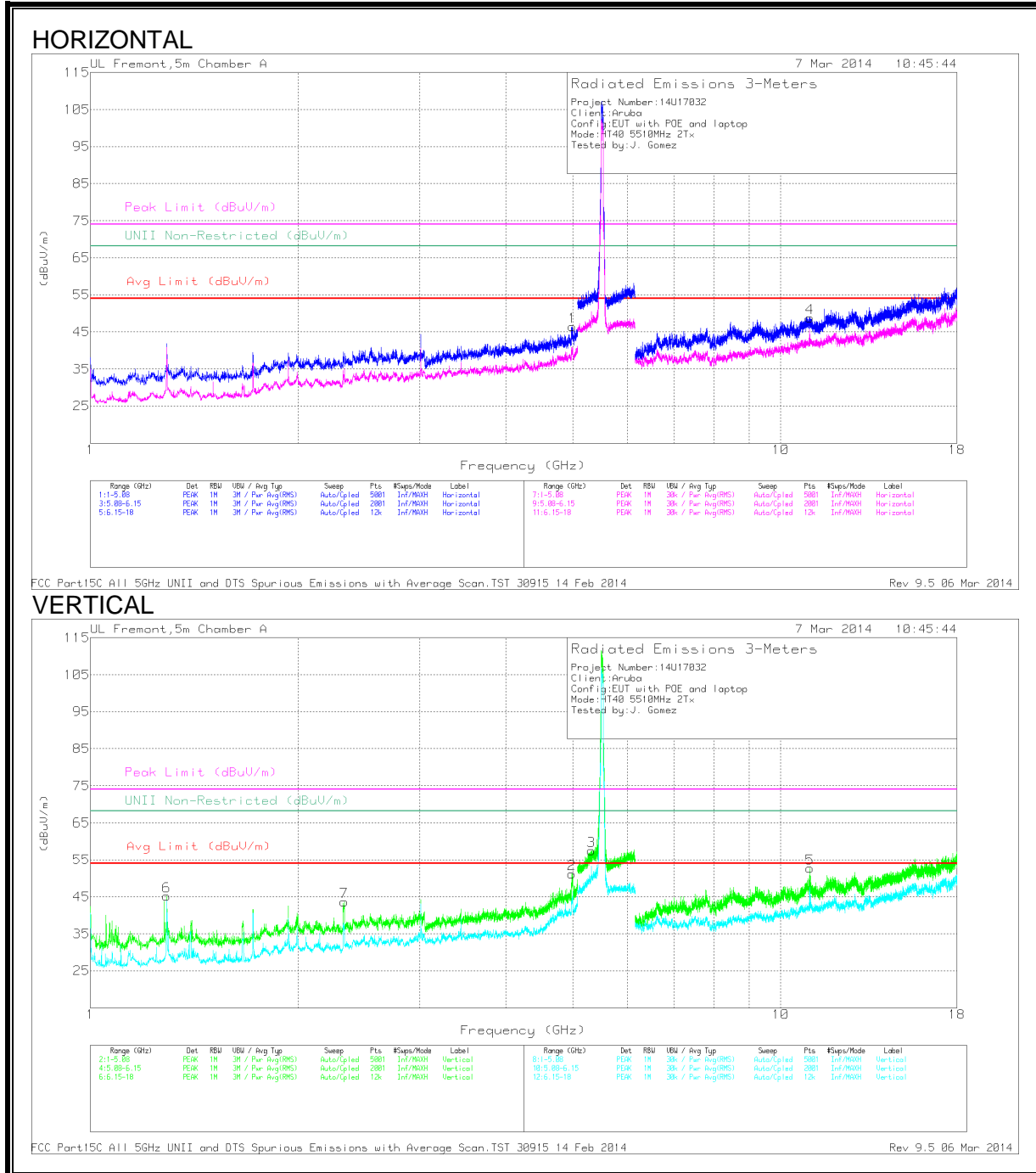
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cb/ Fitr/Pad (dB)	Conversion Factor (dB)	Corrected Reading dBm	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-66.77	PK	34.8	-19.6	11.8	-39.77	-27	-12.77	10	109	V
2	5.725	-60.19	PK	34.8	-19.6	11.8	-33.19	-27	-6.19	10	109	V

PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.987	41.12	PK	33.9	-28.6	0	46.42	54	-7.58	74	-27.58	-	-	0-360	200	H
2	* 4.977	46.51	PK1	33.9	-28.9	0	51.51	-	-	74	-22.49	-	-	28	101	V
	* 4.992	34.59	AD1	33.9	-28.6	.2	40.09	54	-13.91	-	-	-	-	28	101	V
6	* 1.29	52.01	PK	30.1	-36.9	0	45.21	54	-8.79	74	-28.79	-	-	0-360	100	V
7	* 2.332	46.54	PK	31.7	-34.6	0	43.64	54	-10.36	74	-30.36	-	-	0-360	201	V
4	* 11.021	35.27	PK1	37.7	-22.4	0	50.57	-	-	74	-23.43	-	-	251	301	H
	* 11.016	25.52	AD1	37.7	-22.3	.2	41.12	54	-12.88	-	-	-	-	251	301	H
5	* 11.016	39.41	PK1	37.7	-22.3	0	54.81	-	-	74	-19.19	-	-	199	103	V
	* 11.018	29.64	AD1	37.7	-22.2	.2	45.34	54	-8.66	-	-	-	-	199	103	V
3	5.321	43.11	PK	34.3	-19.9	0	57.51	-	-	-	-	68.2	-10.69	0-360	201	V

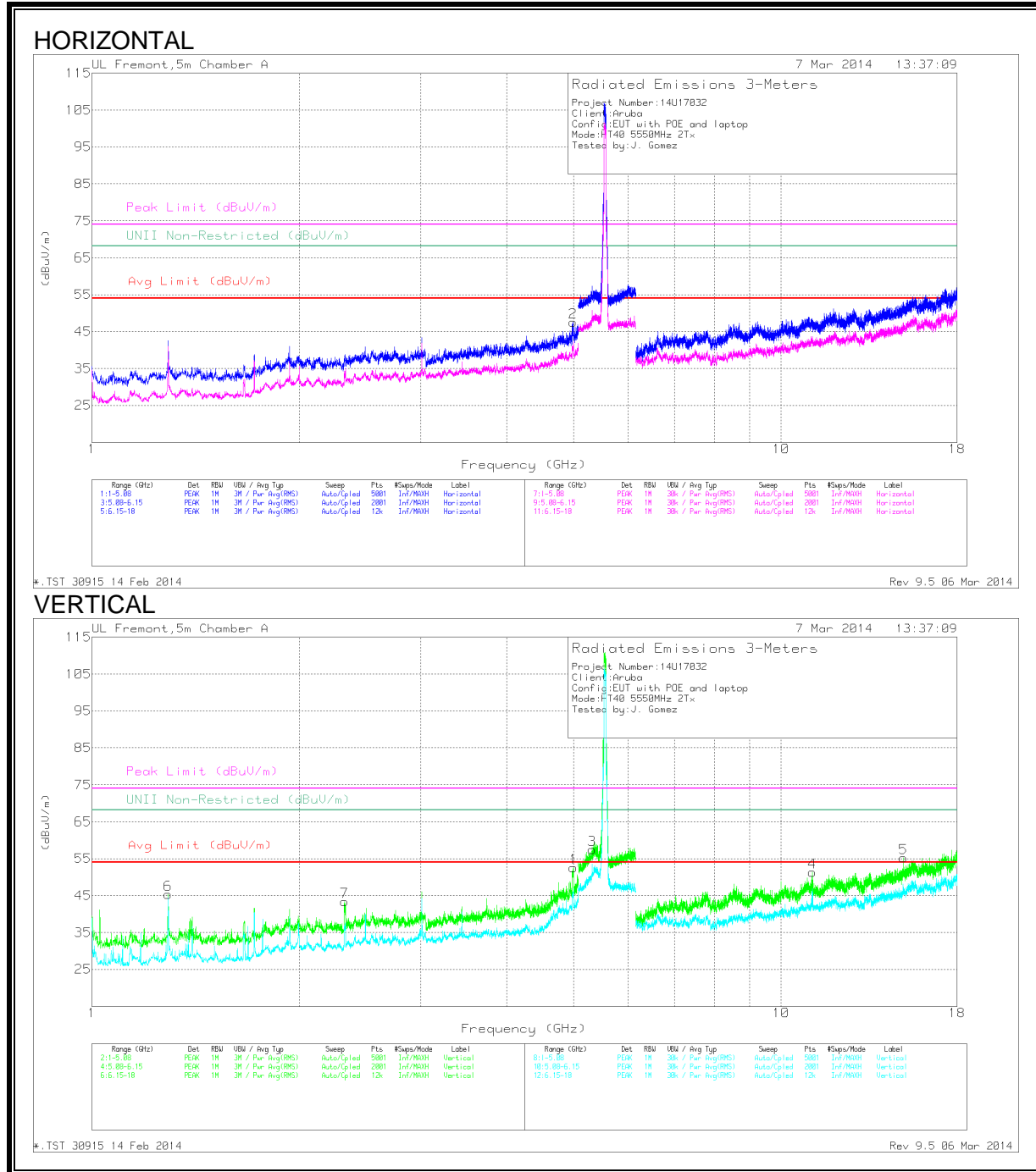
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL



VERTICAL

UL Fremont, 5m Chamber A
7 Mar 2014 13:37:09

Radiated Emissions 3-Meters
 Project Number: 14U17032
 Client: Aruba
 Config: EUT with PDE and laptop
 Mode: I140 5550MHz 2Tx
 Tested by: J. Gomez

Range (GHz)	Det	RBW	UBW / Avg Typ	Sweep	Pts	#Spts/Mode	Label	Range (GHz)	Det	RBW	UBW / Avg Typ	Sweep	Pts	#Spts/Mode	Label
2:1-5.85	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	5801	Inf/NOISE	Vertical	8:11-5.85	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	5801	Inf/NOISE	Vertical
4:5.85-6.15	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	2801	Inf/NOISE	Vertical	10:5.85-6.15	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	2801	Inf/NOISE	Vertical
6:6.15-18	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	12k	Inf/NOISE	Vertical	12:6.15-18	PEAK	1M	3M / Pur Avg(RMS)	Auto/Spd	12k	Inf/NOISE	Vertical

*.TST 30915 14 Feb 2014 Rev 9.5 06 Mar 2014

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T135 (dB/m)	Amp/Cb/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.988	42.31	PK	33.9	-28.6	0	47.61	54	-6.39	74	-26.39	-	-	0-360	100	H
1	* 4.986	49.76	PK1	33.9	-28.6	0	55.06	-	-	74	-18.94	-	-	5	207	V
	* 4.978	37.19	AD1	33.9	-28.9	.2	42.39	54	-11.61	-	-	-	-	5	207	V
6	* 1.29	52.11	PK	30.1	-36.9	0	45.31	54	-8.69	74	-28.69	-	-	0-360	100	V
7	* 2.324	46.43	PK	31.7	-34.8	0	43.33	54	-10.67	74	-30.67	-	-	0-360	200	V
4	* 11.096	36.66	PK1	37.7	-22.3	0	52.06	-	-	74	-21.94	-	-	216	224	V
	* 11.097	26.42	AD1	37.7	-22.3	.2	42.02	54	-11.98	-	-	-	-	216	224	V
3	5.321	43.12	PK	34.3	-19.9	0	57.52	-	-	-	-	68.2	-10.68	0-360	200	V
5	15.037	36.28	PK	40.2	-21.3	0	55.18	-	-	-	-	68.2	-13.02	0-360	200	V

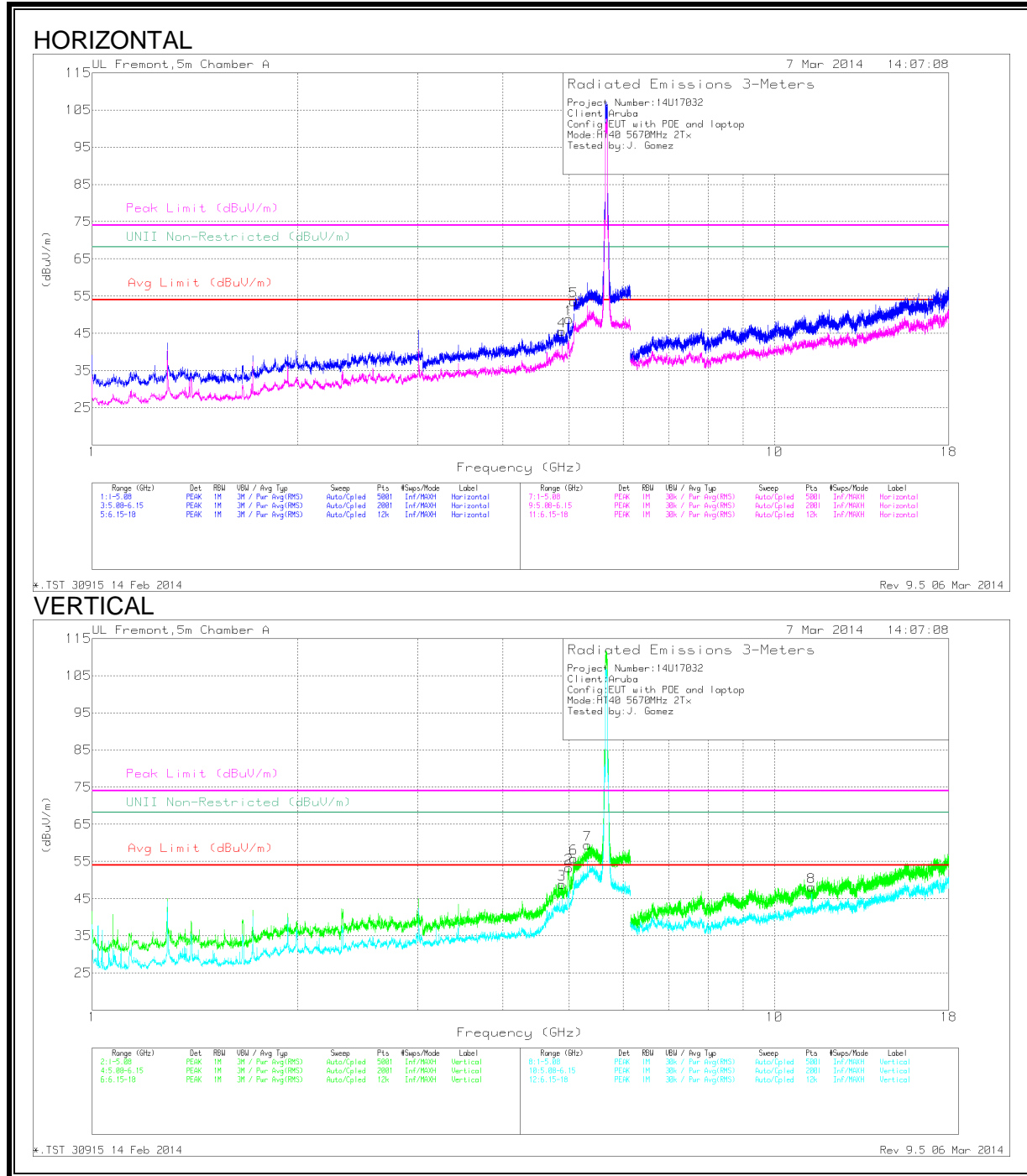
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F tr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.982	45.15	PK1	33.9	-28.7	0	50.35	-	-	74	-23.65	-	-	24	148	H
	* 5	34.48	AD1	33.9	-28.6	.2	39.98	54	-14.02	-	-	-	-	24	148	H
4	* 4.88	40.26	PK	34	-28.7	0	45.56	54	-8.44	74	-28.44	-	-	0-360	100	H
2	* 5	50.09	PK1	33.9	-28.6	0	55.39	-	-	74	-18.61	-	-	8	166	V
	* 4.988	37.44	AD1	33.9	-28.6	.2	42.94	54	-11.06	-	-	-	-	8	166	V
3	* 4.88	45.69	PK1	34	-28.7	0	50.99	-	-	74	-23.01	-	-	25	123	V
	* 4.88	37.1	AD1	34	-28.7	.2	42.6	54	-11.4	-	-	-	-	25	123	V
5	* 5.08	41.06	PK1	33.8	-20.4	0	54.46	-	-	74	-19.54	-	-	264	268	H
	* 5.081	31.37	AD1	33.8	-20.4	.2	44.97	54	-9.03	-	-	-	-	264	268	H
6	* 5.08	43.74	PK1	33.8	-20.4	0	57.14	-	-	74	-16.86	-	-	6	125	V
	* 5.08	33.1	AD1	33.8	-20.4	.2	46.7	54	-7.3	-	-	-	-	6	125	V
8	* 11.33	36.71	PK1	38	-22.5	0	52.21	-	-	74	-21.79	-	-	209	222	V
	* 11.333	26.54	AD1	38	-22.6	.2	42.14	54	-11.86	-	-	-	-	209	222	V
7	5.32	44.98	PK	34.3	-19.8	0	59.48	54	5.48	74	-14.52	68.2	-8.72	0-360	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

9.2.9. TX ABOVE 1 GHz 802.11n HT40 STBC 2TX MODE CH 142 5.6 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

