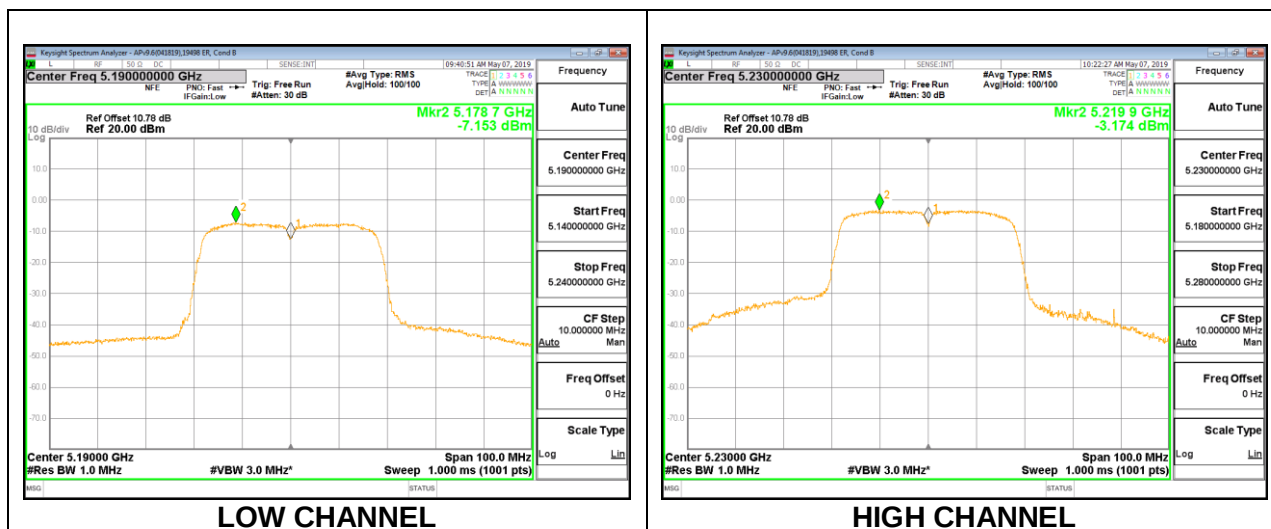




8.4.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

(FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.88	24.00	11.00

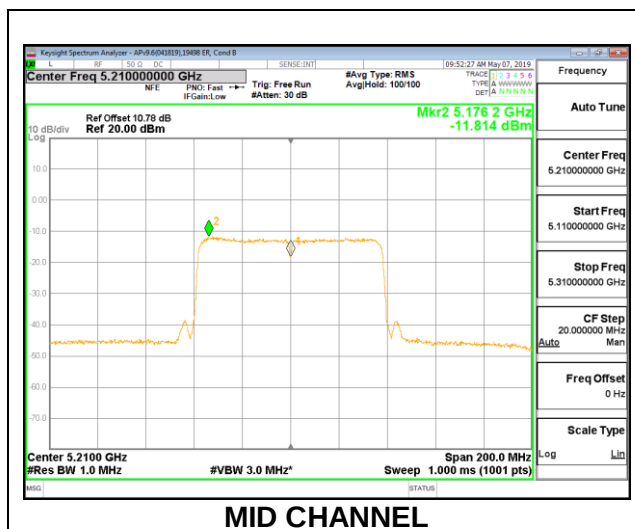
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	9.52	9.52	24.00	-14.48

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-11.814	-11.634	11.00	-22.63



8.4.5. 802.11a MODE IN THE 5.3 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.35	-2.88	24.00	11.00
Mid	5300	21.40	-2.88	24.00	11.00
High	5320	22.50	-2.88	24.00	11.00

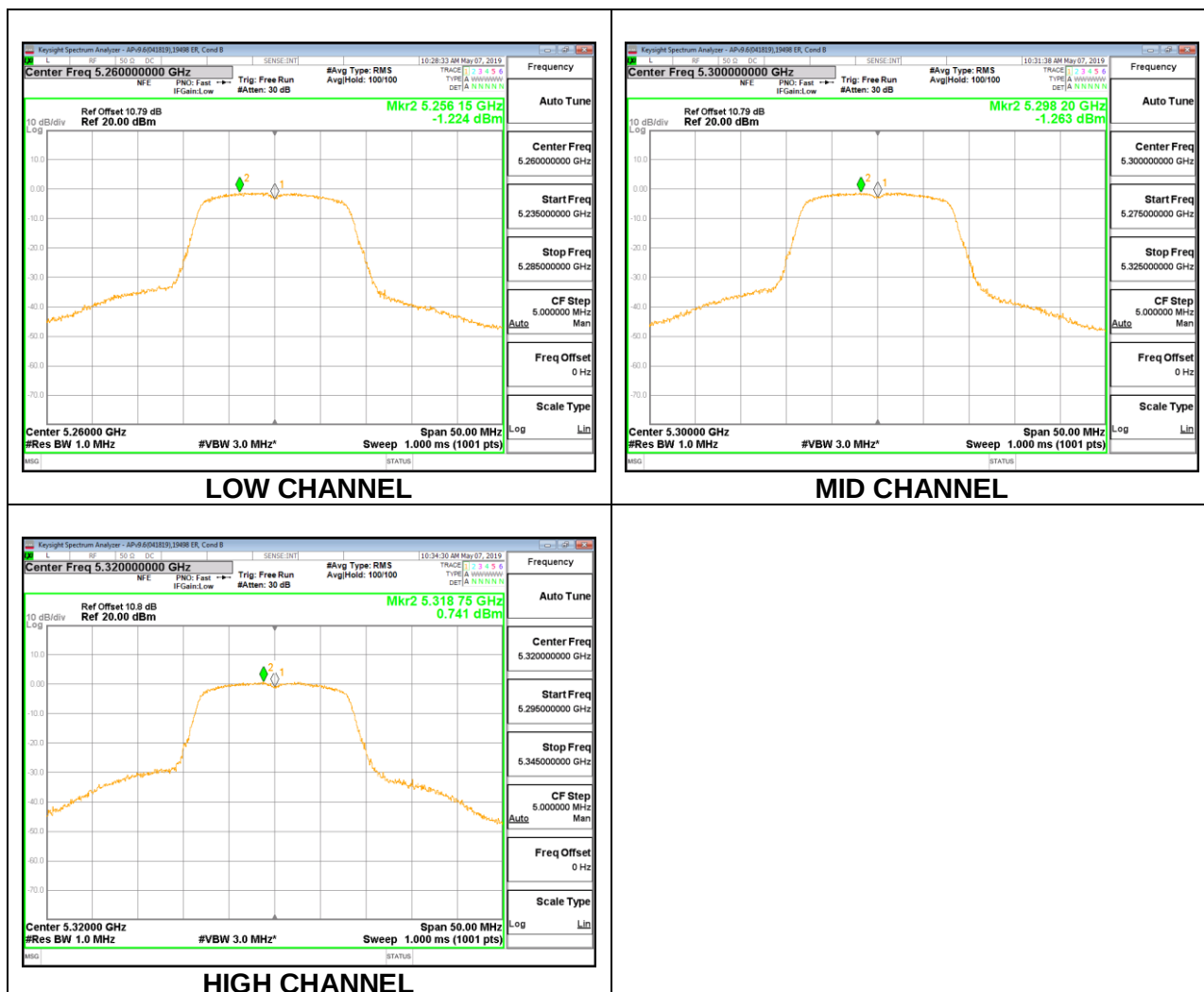
Duty Cycle CF (dB)	0.34	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	12.62	12.62	24.00	-11.38
Mid	5300	12.89	12.89	24.00	-11.11
High	5320	14.04	14.04	24.00	-9.96

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	-1.224	-0.884	11.00	-11.88
Mid	5300	-1.263	-0.923	11.00	-11.92
High	5320	0.741	1.081	11.00	-9.92



8.4.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	22.95	-2.88	24.00	11.00
Mid	5300	23.35	-2.88	24.00	11.00
High	5320	22.95	-2.88	24.00	11.00

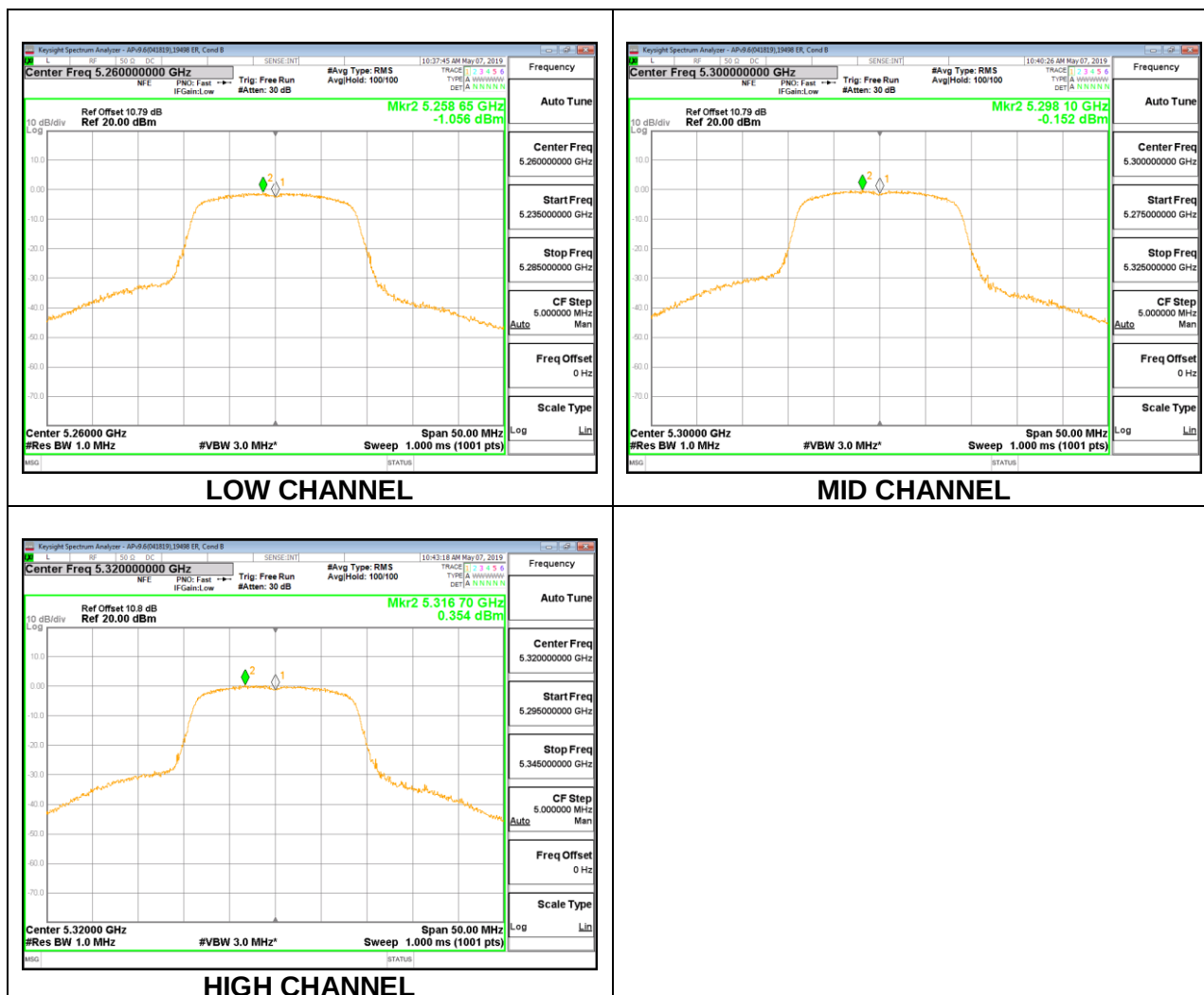
Duty Cycle CF (dB)	0.36	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	13.59	13.59	24.00	-10.41
Mid	5300	13.67	13.67	24.00	-10.33
High	5320	13.78	13.78	24.00	-10.22

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	-1.056	-0.696	11.00	-11.70
Mid	5300	-0.152	0.208	11.00	-10.79
High	5320	0.354	0.714	11.00	-10.29



8.4.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	44.30	-2.88	24.00	11.00
High	5310	44.30	-2.88	24.00	11.00

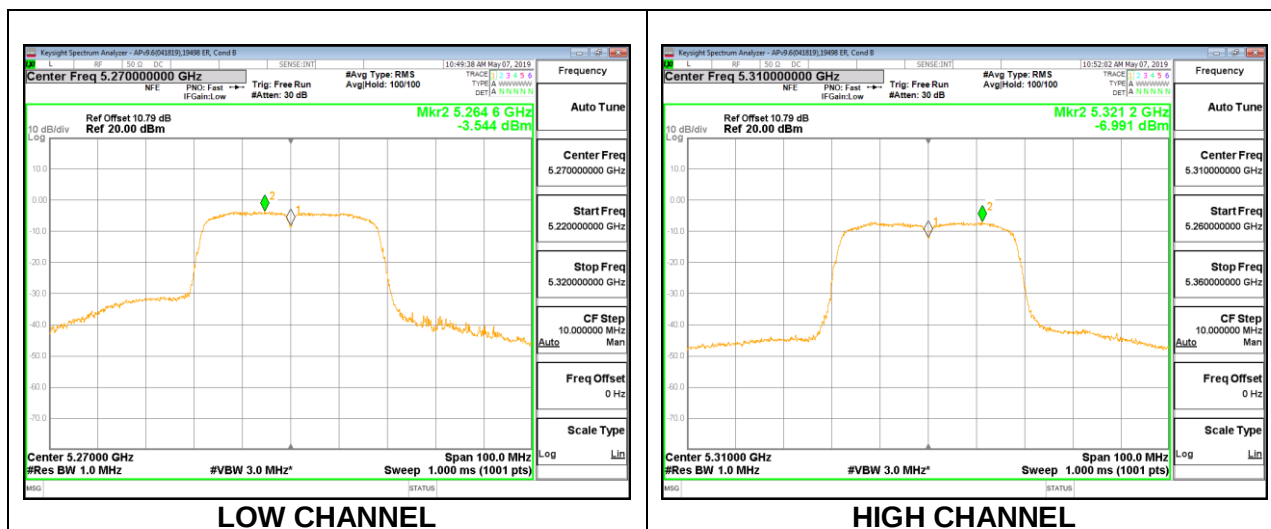
Duty Cycle CF (dB)	0.73	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	13.49	13.49	24.00	-10.51
High	5310	9.67	9.67	24.00	-14.33

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	-3.544	-2.814	11.00	-13.81
High	5310	-6.991	-6.261	11.00	-17.26



8.4.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	83.00	-2.88	24.00	11.00

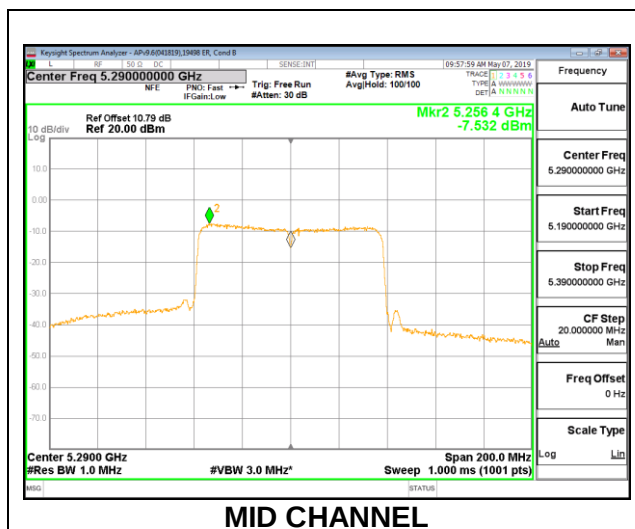
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	7.25	7.25	24.00	-16.75

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	-7.532	-7.352	11.00	-18.35



8.4.9. 802.11a MODE IN THE 5.6 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	22.80	-2.88	24.00	11.00
Mid	5580	23.15	-2.88	24.00	11.00
High	5700	23.35	-2.88	24.00	11.00
144	5720	22.90	-2.88	24.00	11.00

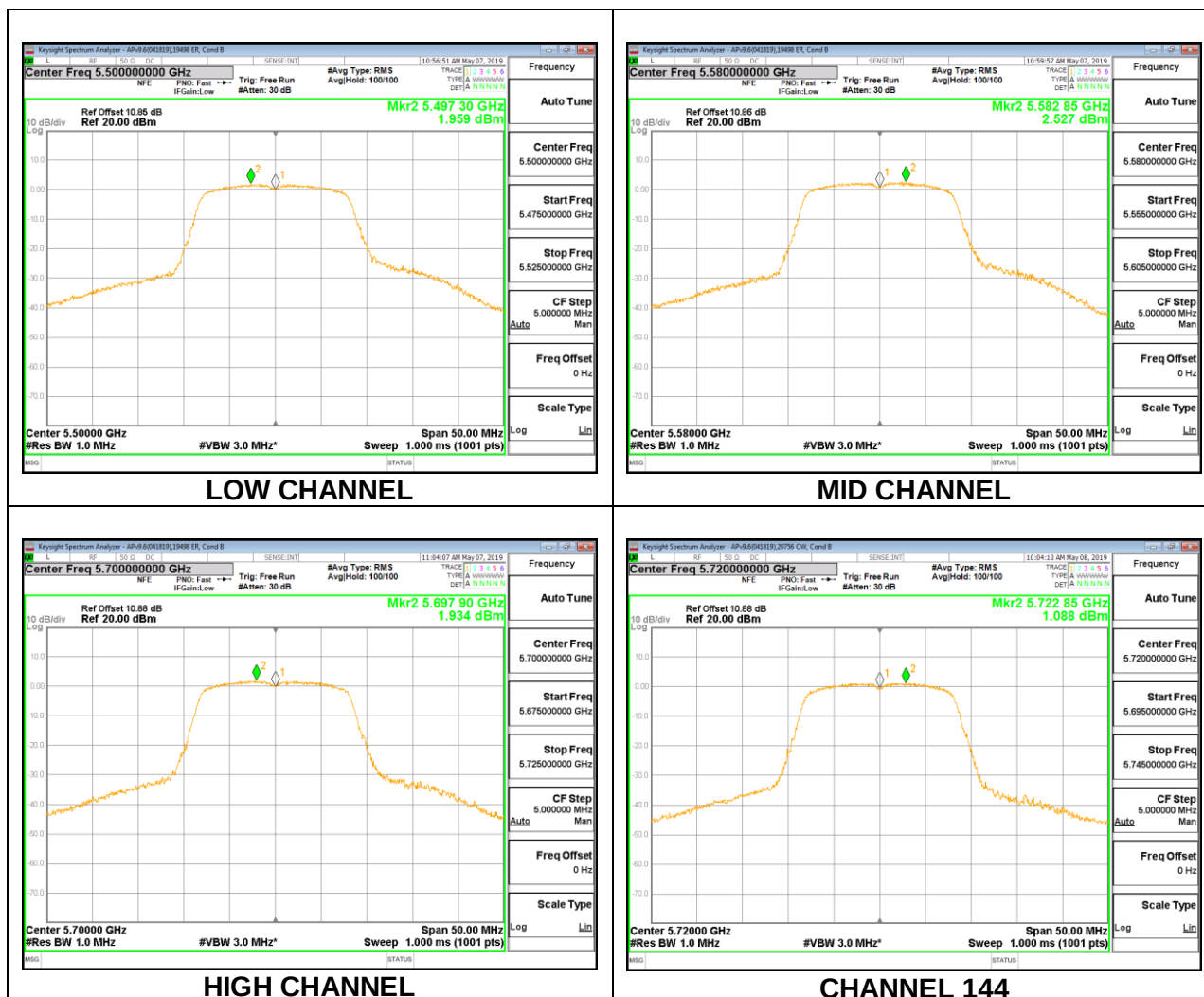
Duty Cycle CF (dB)	0.34	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.71	14.71	24.00	-9.29
Mid	5580	15.33	15.33	24.00	-8.67
High	5700	15.32	15.32	24.00	-8.68
144	5720	15.01	15.01	24.00	-8.99

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	1.959	2.299	11.00	-8.70
Mid	5580	2.527	2.867	11.00	-8.13
High	5700	1.934	2.274	11.00	-8.73
144	5720	1.088	1.428	11.00	-9.57



8.4.10. 802.11n HT20 MODE IN THE 5.6 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	25.25	-2.88	24.00	11.00
Mid	5580	24.65	-2.88	24.00	11.00
High	5700	23.15	-2.88	24.00	11.00
144	5720	23.20	-2.88	24.00	11.00

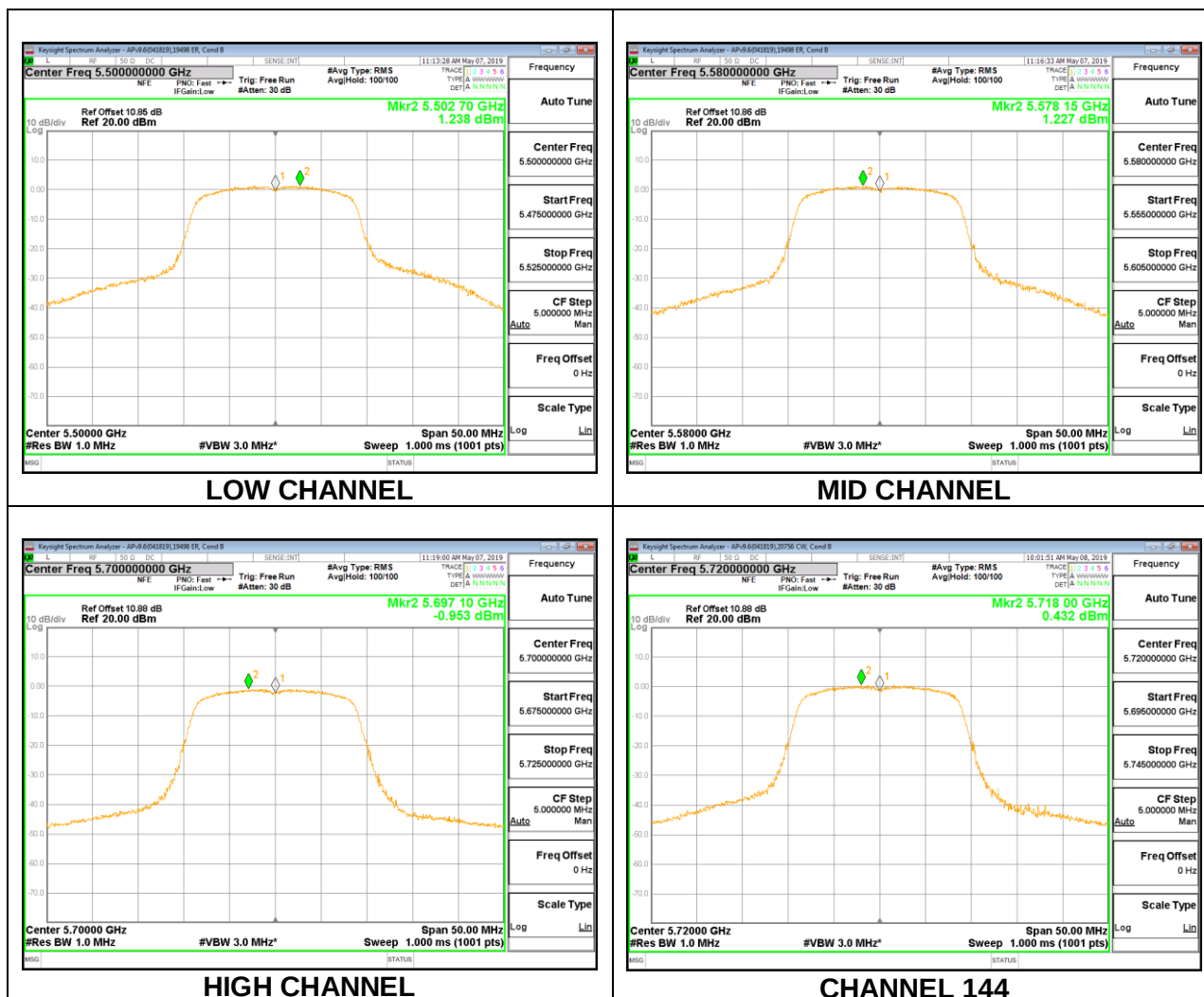
Duty Cycle CF (dB)	0.36	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.03	14.03	24.00	-9.97
Mid	5580	14.92	14.92	24.00	-9.08
High	5700	12.71	12.71	24.00	-11.29
144	5720	14.30	14.30	24.00	-9.70

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	1.238	1.598	11.00	-9.40
Mid	5580	1.227	1.587	11.00	-9.41
High	5700	-0.953	-0.593	11.00	-11.59
144	5720	0.432	0.792	11.00	-10.21



8.4.11. 802.11n HT40 MODE IN THE 5.6 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5510	44.90	-2.88	24.00	11.00
Mid	5550	45.00	-2.88	24.00	11.00
High	5670	44.10	-2.88	24.00	11.00
142	5710	44.70	-2.88	24.00	11.00

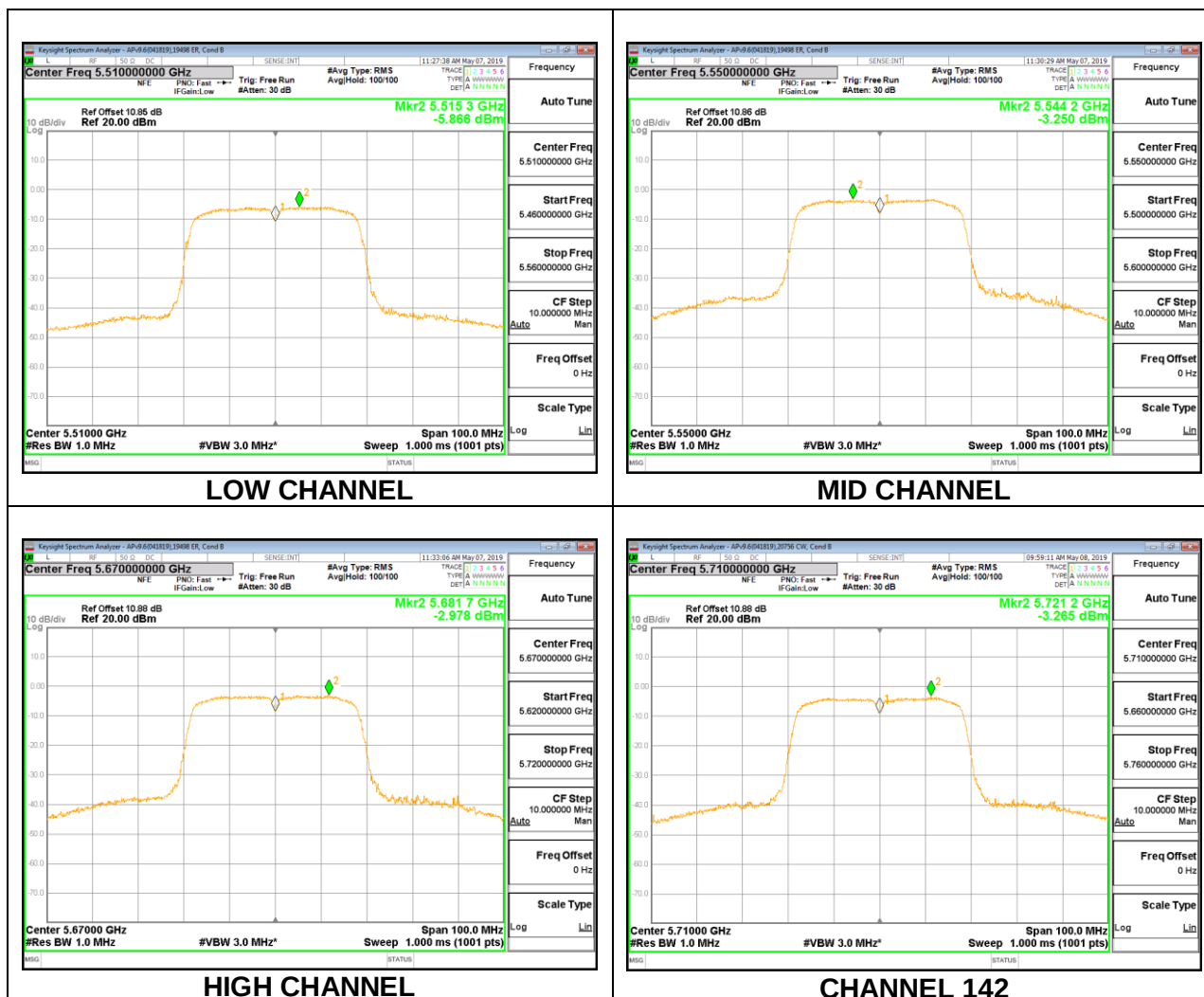
Duty Cycle CF (dB)	0.73	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	12.20	12.20	24.00	-11.80
Mid	5550	13.07	13.07	24.00	-10.93
High	5670	13.36	13.36	24.00	-10.64
142	5710	13.18	13.18	24.00	-10.82

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	-5.866	-5.136	11.00	-16.14
Mid	5550	-3.250	-2.520	11.00	-13.52
High	5670	-2.978	-2.248	11.00	-13.25
142	5710	-3.265	-2.535	11.00	-13.54



8.4.12. 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

(FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5530	85.20	-2.88	24.00	11.00
High	5610	84.80	-2.88	24.00	11.00
138	5690	83.20	-2.88	24.00	11.00

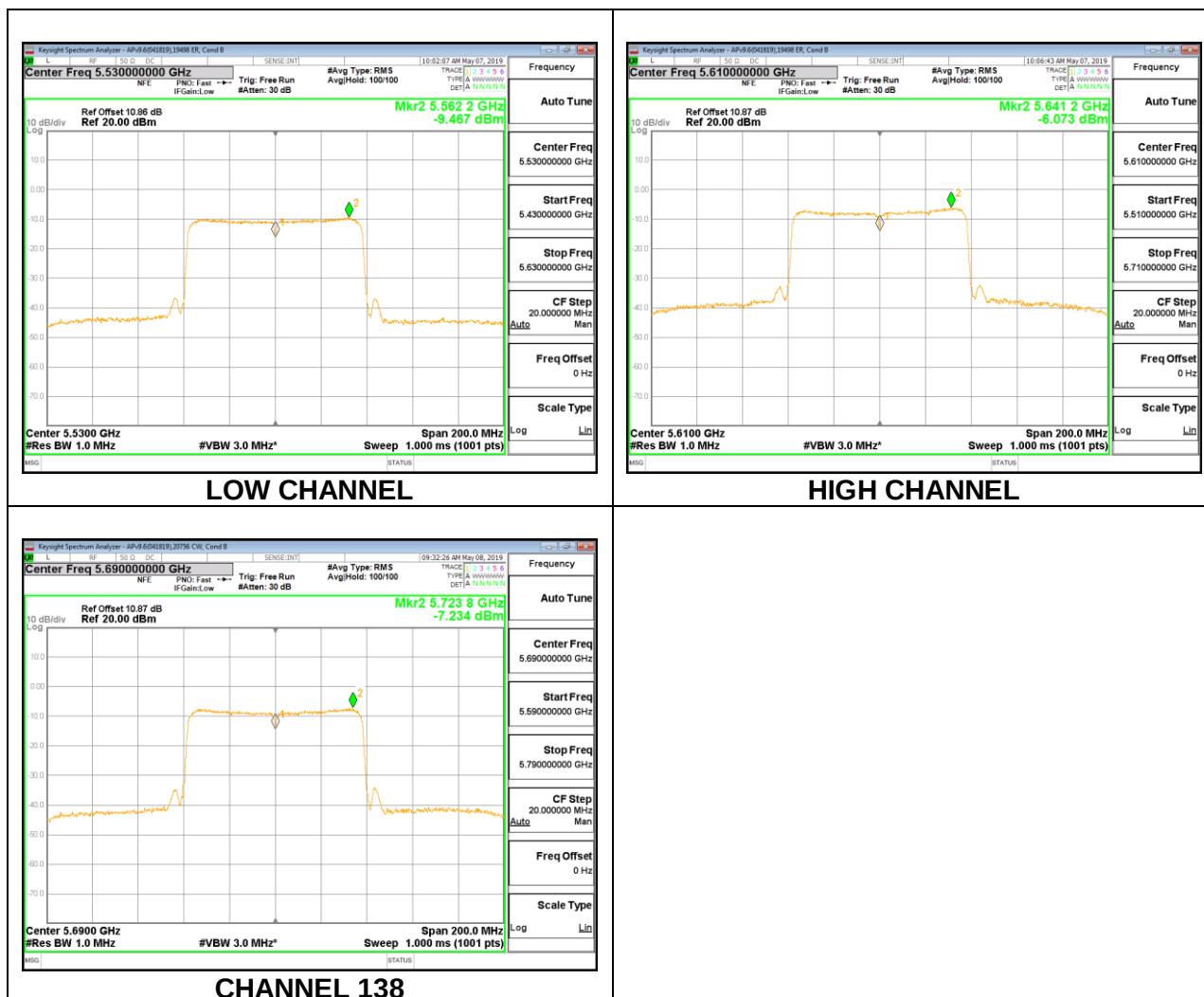
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	10.60	10.60	24.00	-13.40
High	5610	12.44	12.44	24.00	-11.56
138	5690	12.22	12.22	24.00	-11.78

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5530	-9.467	-9.287	11.00	-20.29
High	5610	-6.073	-5.893	11.00	-16.89
138	5690	-7.234	-7.054	11.00	-18.05



8.4.13. 802.11a MODE IN THE 5.8 GHz BAND

(FCC)

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 500KHz)
Low	5745	-2.88	30.00	30.00
Mid	5785	-2.88	30.00	30.00
High	5825	-2.88	30.00	30.00

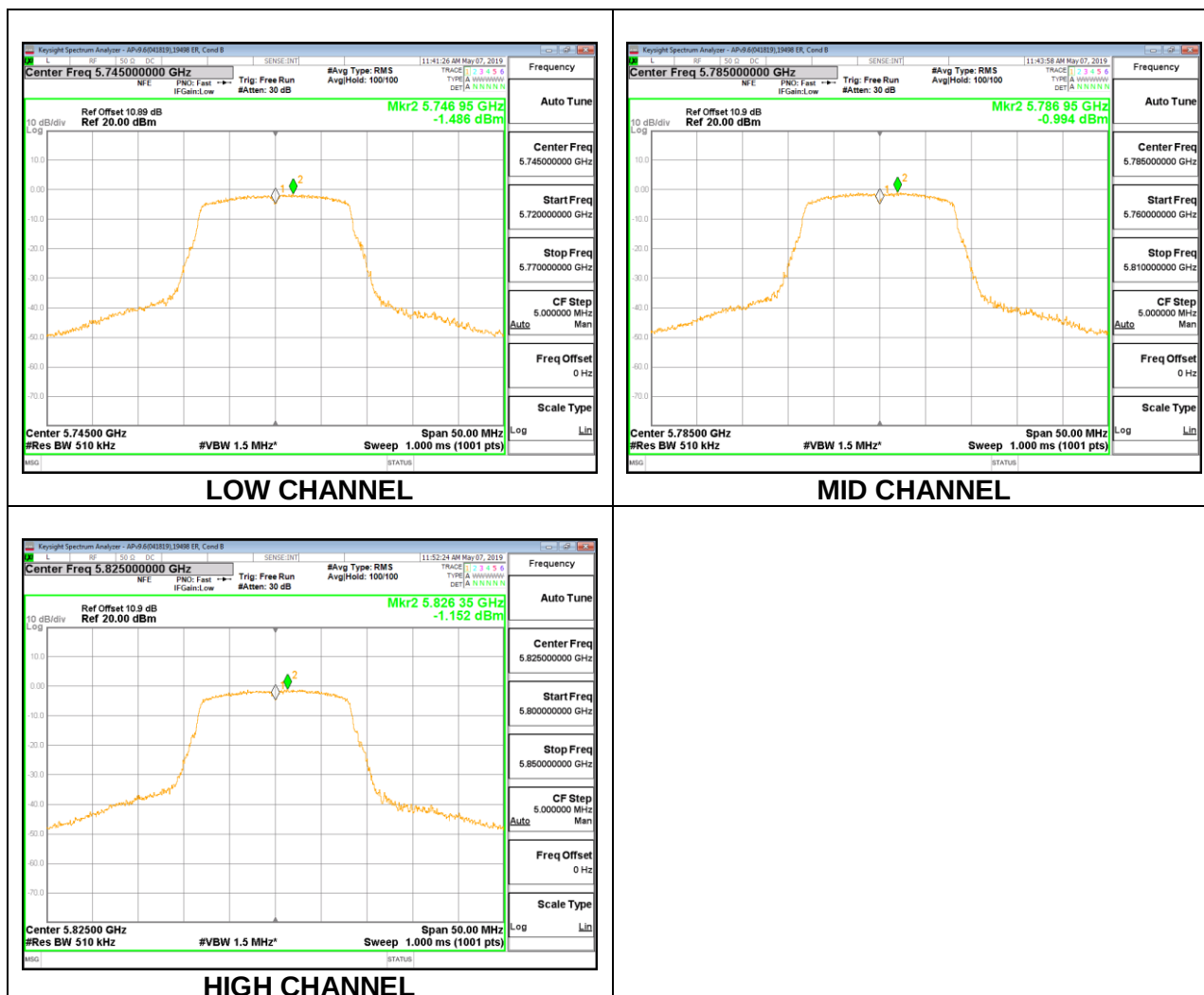
Duty Cycle CF (dB)	0.34	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	14.92	14.92	30.00	-15.08
Mid	5785	15.12	15.12	30.00	-14.88
High	5825	15.29	15.29	30.00	-14.71

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500KHz)	Total Corr'd PSD (dBm/ 500KHz)	PSD Limit (dBm/ 500KHz)	PSD Margin (dB)
Low	5745	-1.486	-1.146	30.00	-31.15
Mid	5785	-0.994	-0.654	30.00	-30.65
High	5825	-1.152	-0.812	30.00	-30.81



8.4.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

(FCC)

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 500KHz)
Low	5745	-2.88	30.00	30.00
Mid	5785	-2.88	30.00	30.00
High	5825	-2.88	30.00	30.00

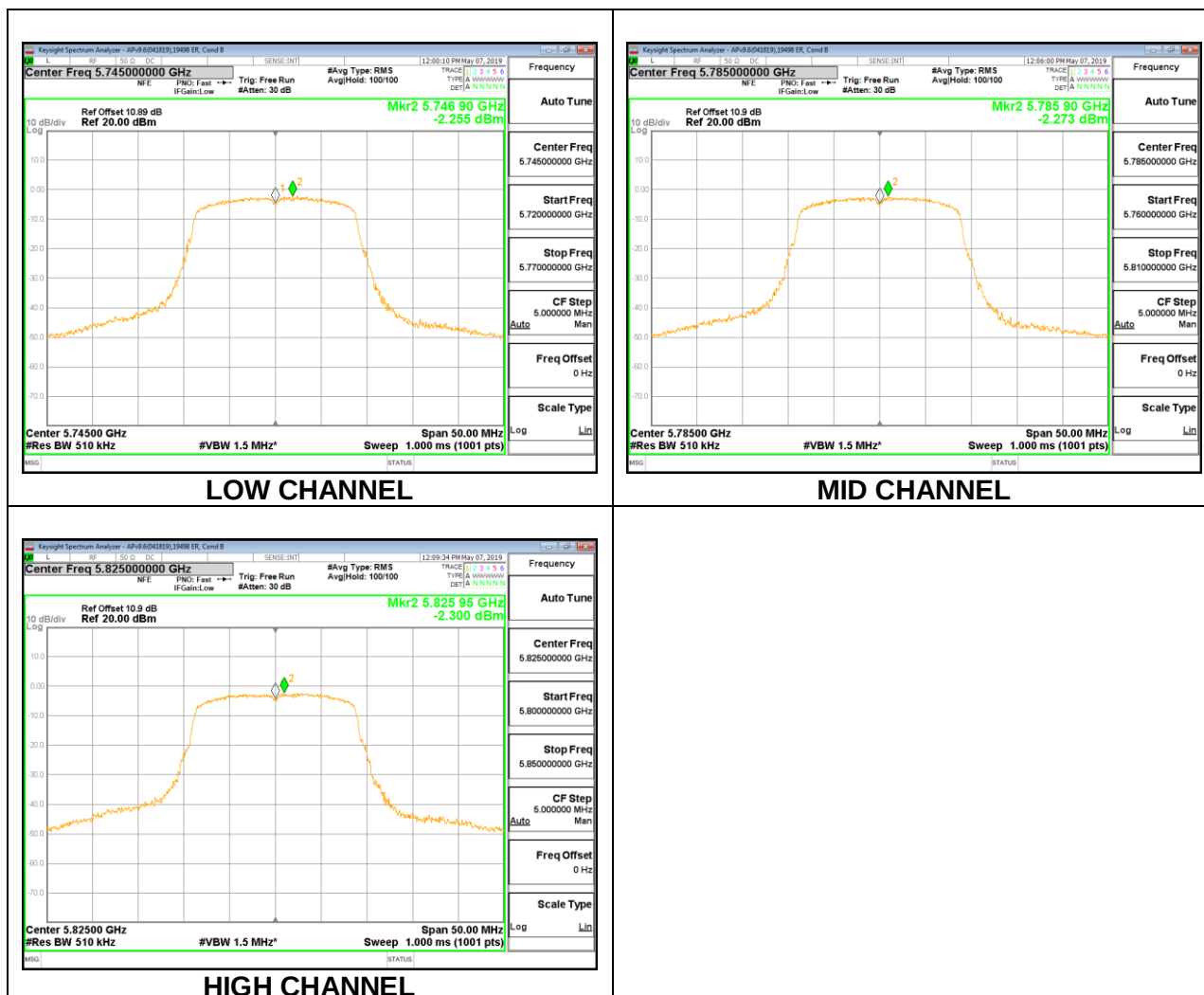
Duty Cycle CF (dB)	0.36	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	14.33	14.33	30.00	-15.67
Mid	5785	14.07	14.07	30.00	-15.93
High	5825	14.05	14.05	30.00	-15.95

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500KHz)	Total Corr'd PSD (dBm/ 500KHz)	PSD Limit (dBm/ 500KHz)	PSD Margin (dB)
Low	5745	-2.255	-1.895	30.00	-31.90
Mid	5785	-2.273	-1.913	30.00	-31.91
High	5825	-2.300	-1.940	30.00	-31.94



8.4.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

(FCC)

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 500KHz)
Low	5755	-2.88	30.00	30.00
High	5795	-2.88	30.00	30.00

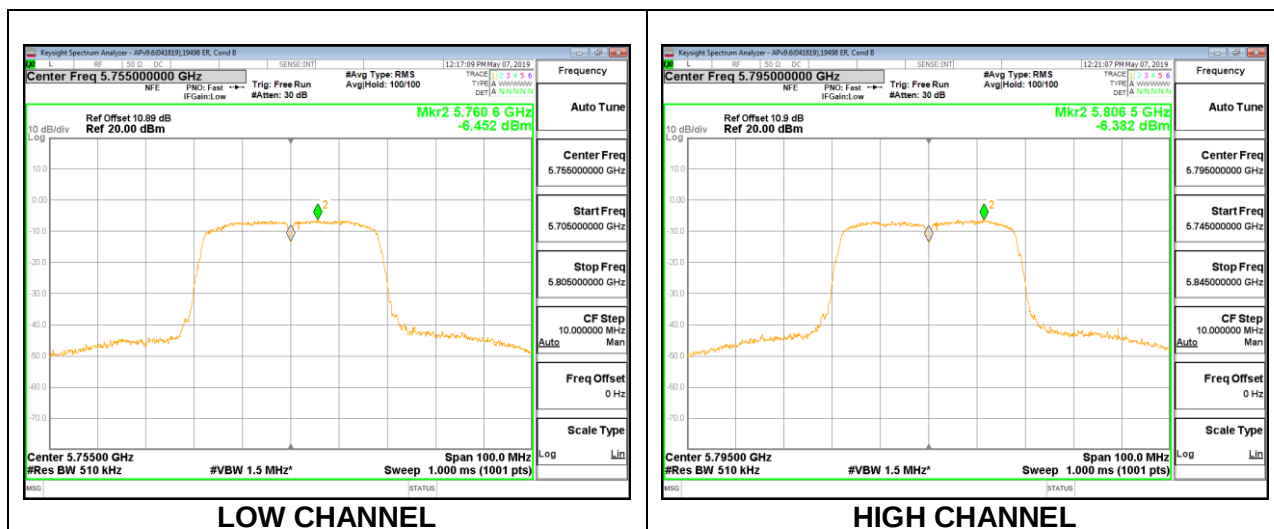
Duty Cycle CF (dB)	0.73	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	12.90	12.90	30.00	-17.10
High	5795	13.28	13.28	30.00	-16.72

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5755	-6.452	-5.722	30.00	-35.72
High	5795	-6.382	-5.652	30.00	-35.65



8.4.16. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

(FCC)

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 500KHz)
Mid	5775	-2.88	30.00	30.00

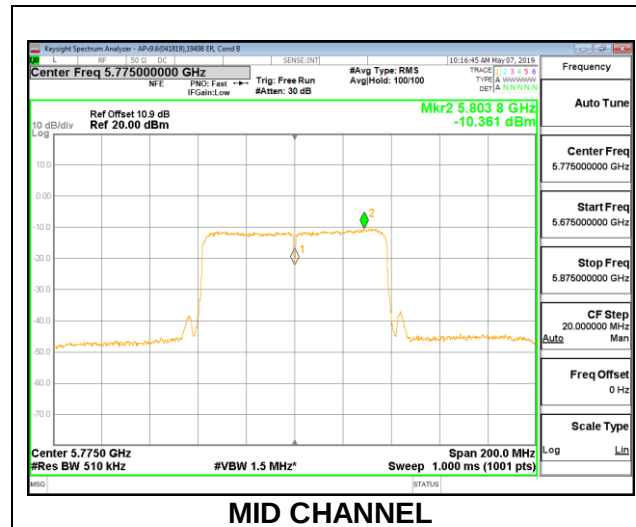
Duty Cycle CF (dB)	0.18	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	12.59	12.59	30.00	-17.41

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500KHz)	Total Corr'd PSD (dBm/ 500KHz)	PSD Limit (dBm/ 500KHz)	PSD Margin (dB)
Mid	5775	-10.361	-10.181	30.00	-40.18



9. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209 -Restricted bands

FCC §15.407(b)(1-3) -Un-Restricted bands

After January 01, 2019 for Outside of the Restricted Bands Emissions

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 for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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 pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 1GHz and 18GHz to 40 GHz is investigated with the transmitter set to transmit at the channel with highest output power as worst-case scenario. 1GHz to 18GHz was set to the lowest, middle, and highest channels in the 5 GHz bands.

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.

2D antenna use - For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

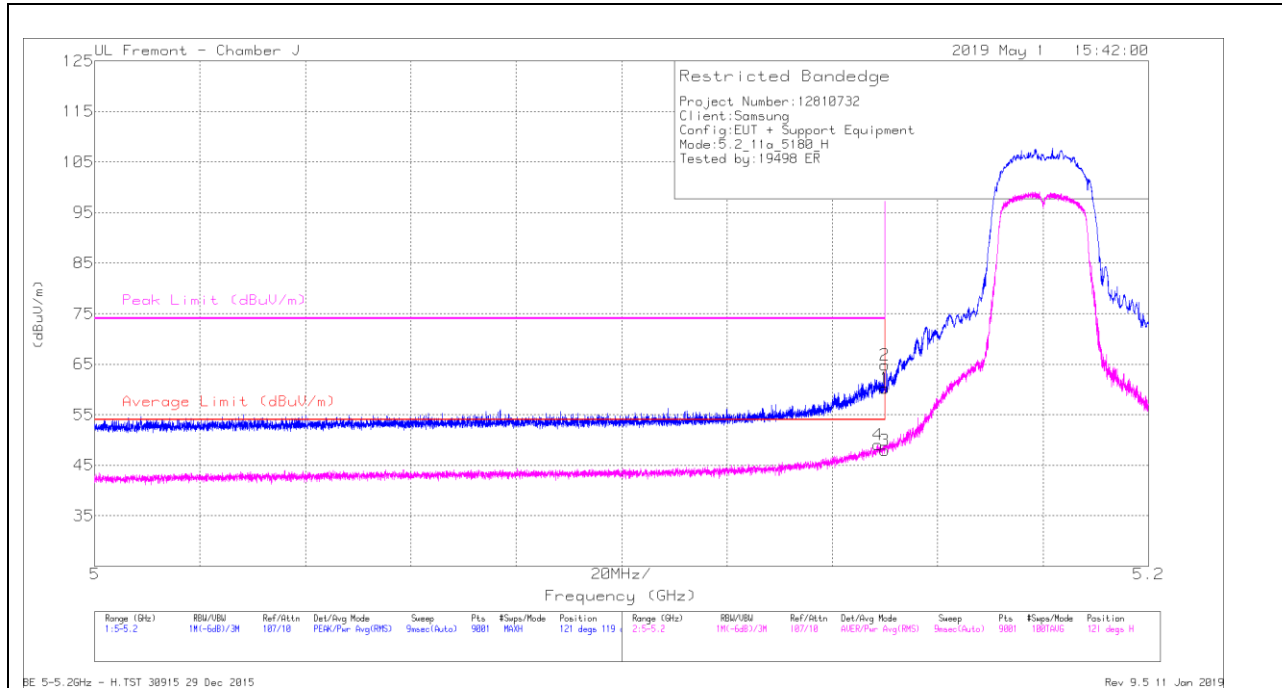
OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

9.1. TRANSMITTER ABOVE 1 GHz

9.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Trace Markers

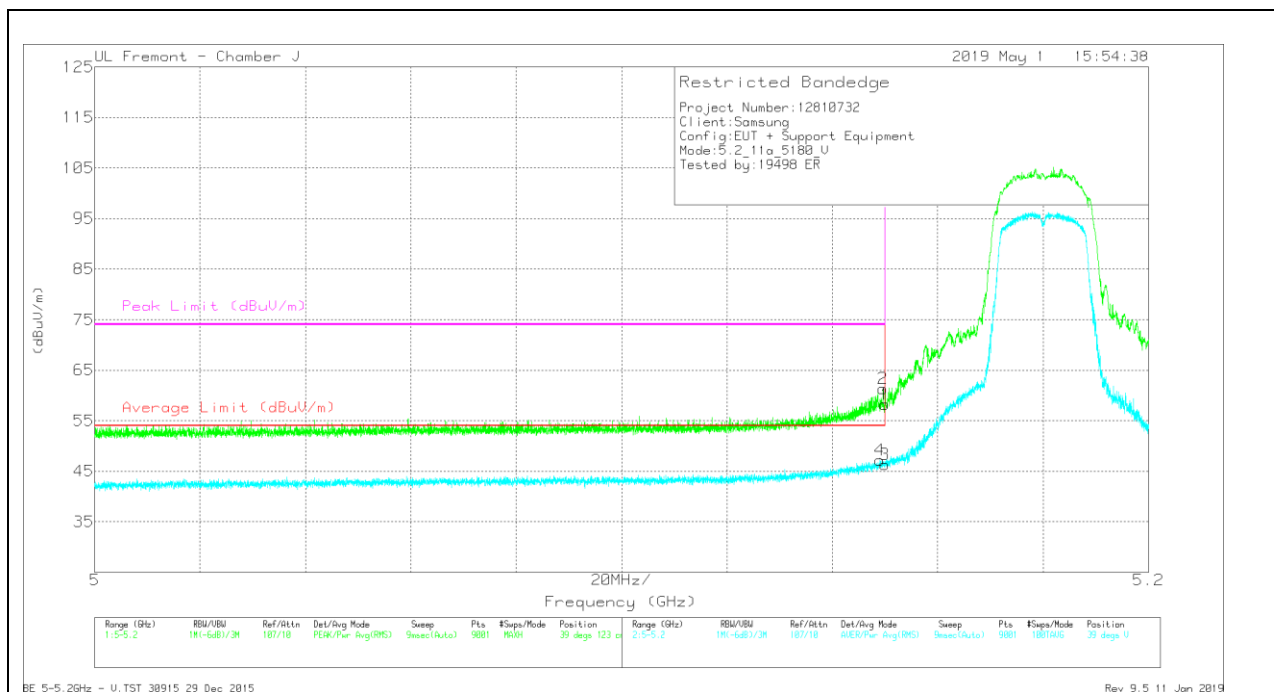
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cbl/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	46.16	Pk	35.7	-21.6	0	60.26	-	-	74	-13.74	121	119	H
2	* 5.15	50.7	Pk	35.7	-21.6	0	64.8	-	-	74	-9.2	121	119	H
3	* 5.15	33.53	RMS	35.7	-21.6	.34	47.97	54	-6.03	-	-	121	119	H
4	* 5.149	34.63	RMS	35.7	-21.6	.34	49.07	54	-4.93	-	-	121	119	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/CbI/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	*5.15	44.11	Pk	35.7	-21.6	0	58.21	-	-	74	-15.79	39	123	V
2	*5.15	47.23	Pk	35.7	-21.6	0	61.33	-	-	74	-12.67	39	123	V
3	*5.15	31.88	RMS	35.7	-21.6	.34	46.32	54	-7.68	-	-	39	123	V
4	*5.149	32.7	RMS	35.7	-21.6	.34	47.14	54	-6.86	-	-	39	123	V

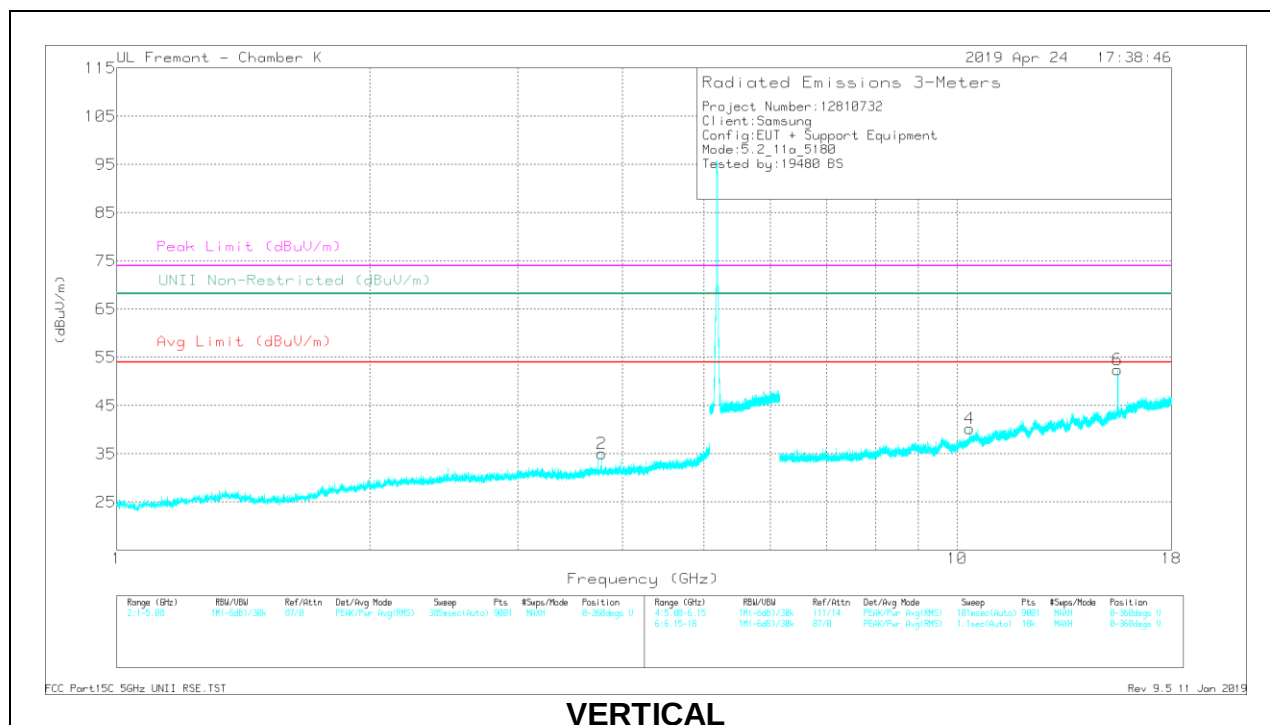
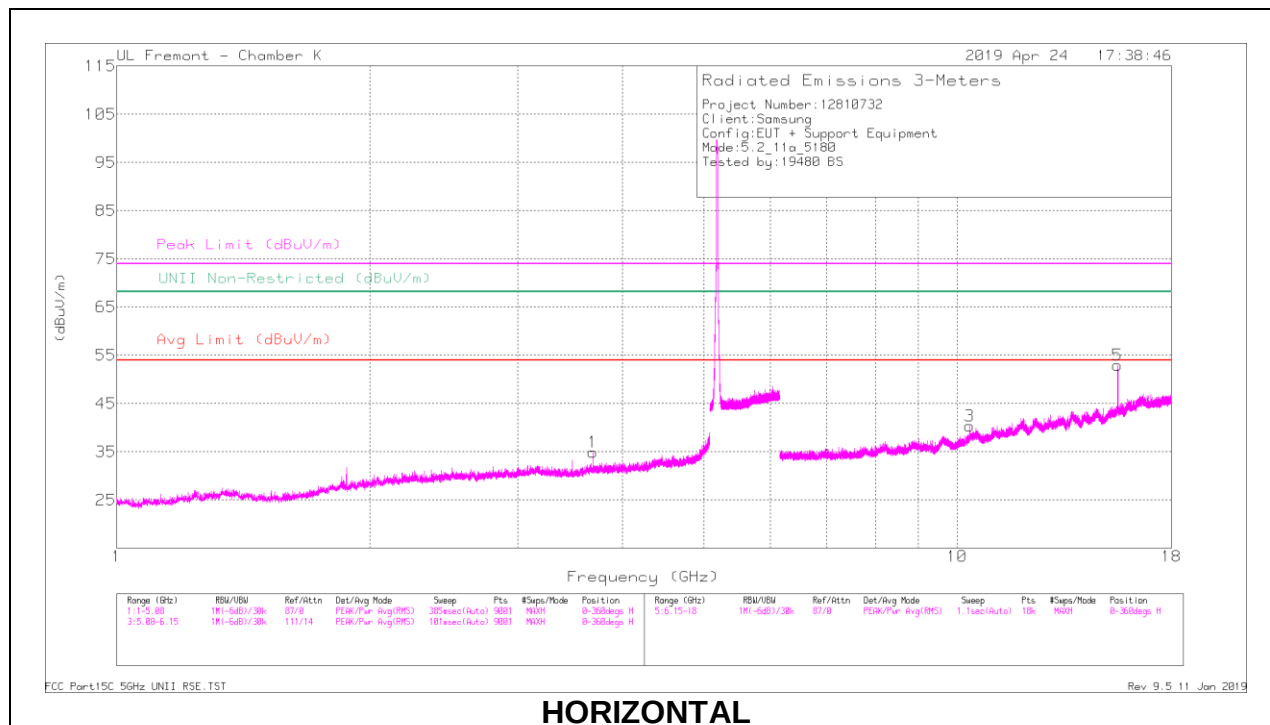
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

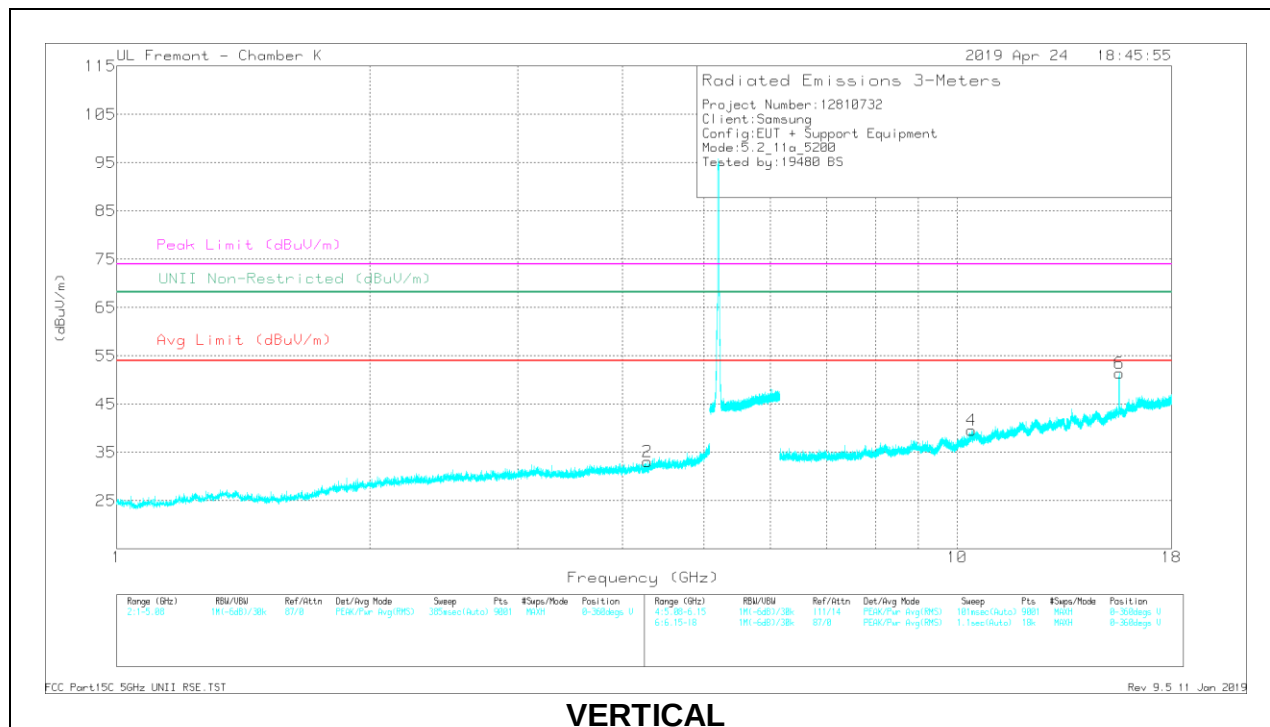
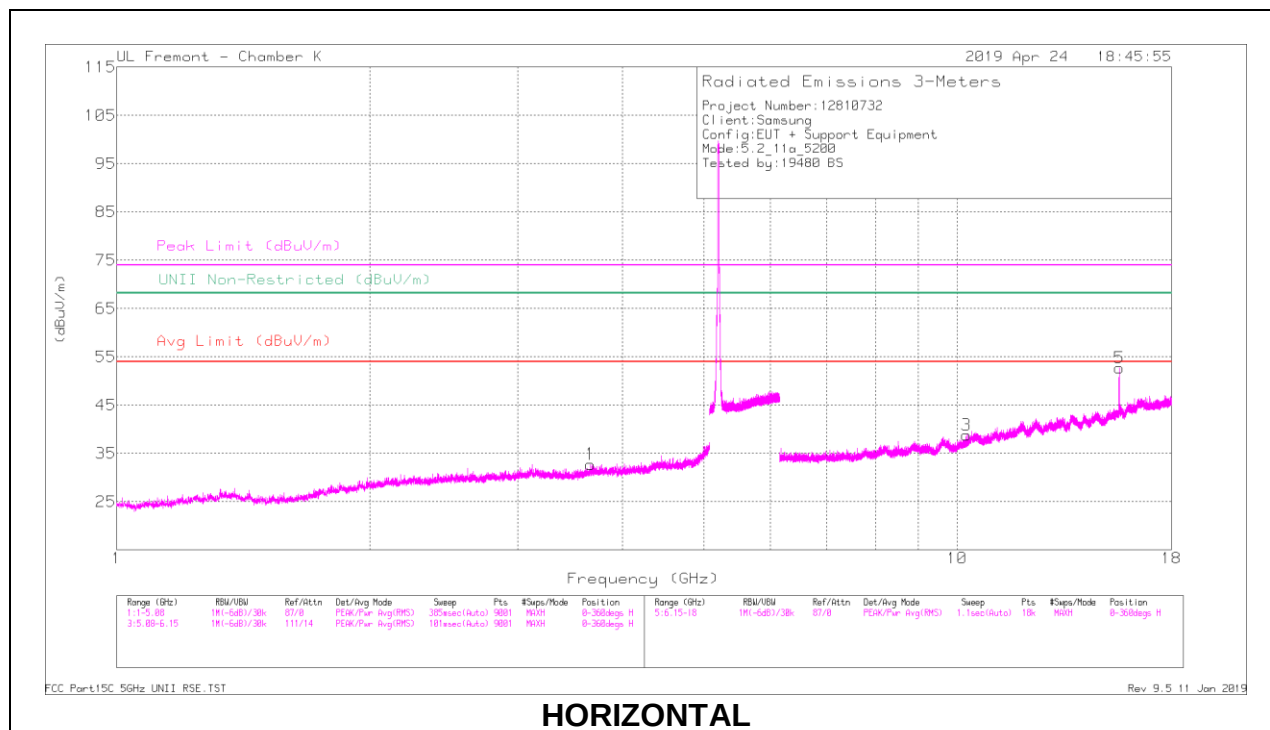
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.689	37.61	PK-U	33.1	-32	0	38.71	-	-	74	-35.29	-	-	156	332	H
	* 3.69	28.19	ADR	33.1	-32	.34	29.63	54	-24.37	-	-	-	-	156	332	H
2	* 3.773	38.13	PK-U	33.4	-31.9	0	39.63	-	-	74	-34.37	-	-	179	335	V
	* 3.777	28.42	ADR	33.4	-31.9	.34	30.26	54	-23.74	-	-	-	-	179	335	V
5	* 15.536	39.06	PK-U	40.7	-18.6	0	61.16	-	-	74	-12.84	-	-	217	102	H
	* 15.54	26.85	ADR	40.7	-18.6	.34	48.29	54	-4.71	-	-	-	-	217	102	H
3	10.36	34.2	PK-U	37.4	-23	0	48.6	-	-	-	-	68.2	-19.6	276	104	H
6	* 15.545	38.31	PK-U	40.7	-18.7	0	60.31	-	-	74	-13.69	-	-	185	195	V
	* 15.54	26.32	ADR	40.7	-18.6	.34	48.76	54	-5.24	-	-	-	-	185	195	V
4	10.36	33.54	PK-U	37.4	-23	0	47.94	-	-	-	-	68.2	-20.26	169	277	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL RESULTS



RADIATED EMISSIONS

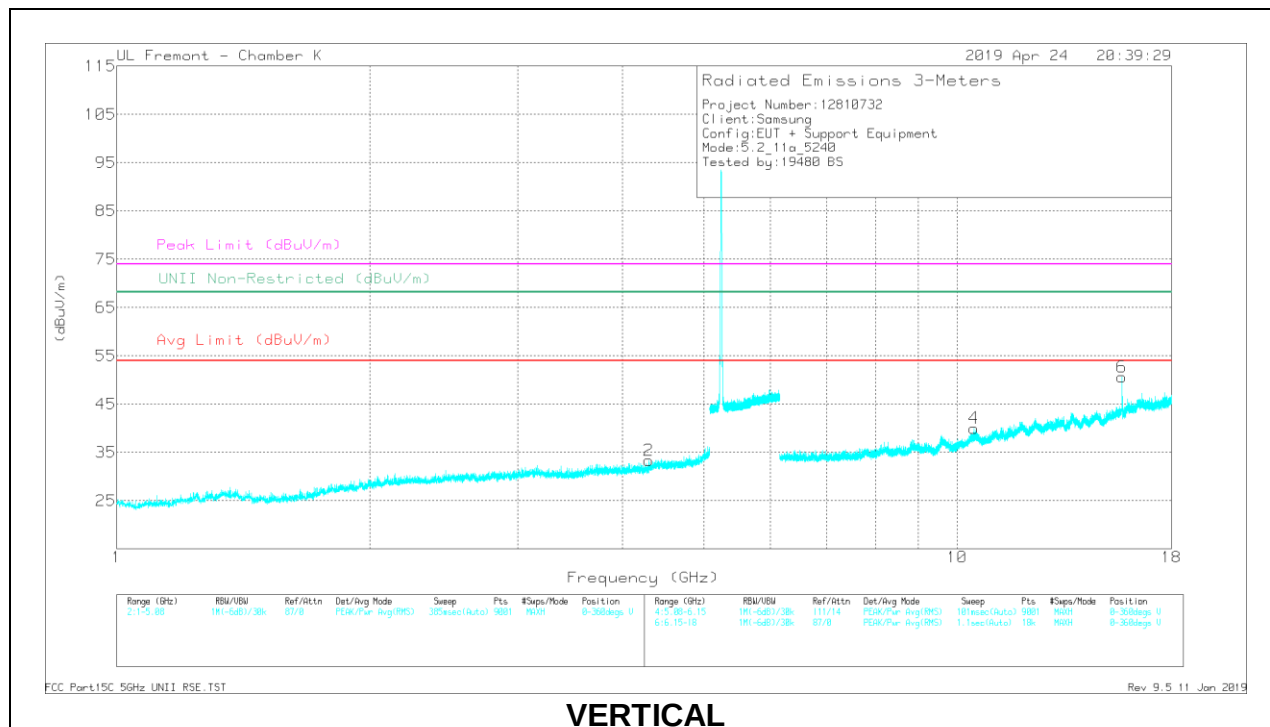
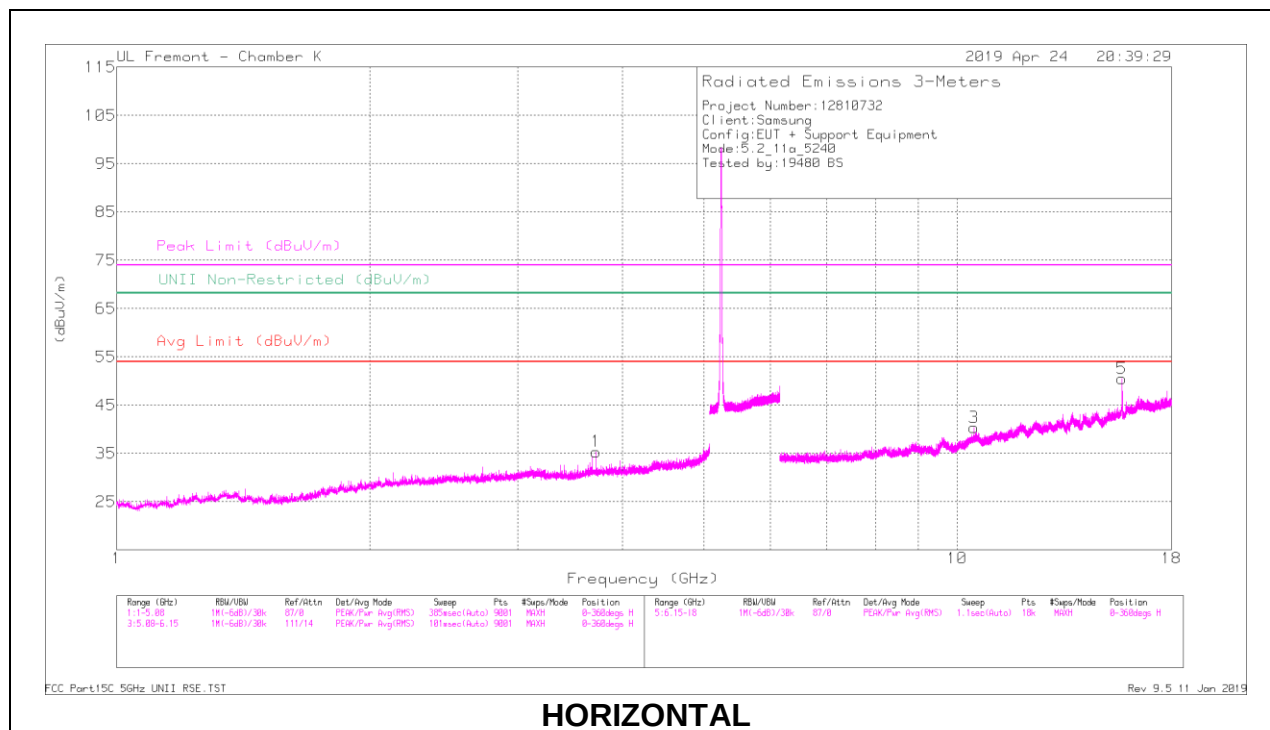
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.662	39.13	PK-U	33	-32.3	0	39.83	-	-	74	-34.17	-	-	193	133	H
	* 3.661	28.94	ADR	33	-32.3	.34	29.98	54	-24.02	-	-	-	-	193	133	H
2	* 4.286	36.26	PK-U	33.5	-31	0	38.76	-	-	74	-35.24	-	-	42	209	V
	* 4.287	27.23	ADR	33.5	-31	.34	30.07	54	-23.93	-	-	-	-	42	209	V
5	* 15.595	37.94	PK-U	40.7	-18.6	0	60.04	-	-	74	-13.96	-	-	227	109	H
	* 15.6	26.4	ADR	40.7	-18.6	.34	48.84	54	-5.16	-	-	-	-	227	109	H
3	10.266	31.42	PK-U	37.3	-23.5	0	45.22	-	-	-	-	68.2	-22.98	135	299	H
6	* 15.598	38.65	PK-U	40.7	-18.6	0	60.75	-	-	74	-13.25	-	-	187	200	V
	* 15.599	26.65	ADR	40.7	-18.6	.34	49.09	54	-4.91	-	-	-	-	187	200	V
4	10.4	33.72	PK-U	37.4	-22.8	0	48.32	-	-	-	-	68.2	-19.88	171	251	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/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	* 3.721	37.67	PK-U	33.2	-32	0	38.87	-	-	74	-35.13	-	-	351	363	H
	* 3.722	28.03	ADR	33.2	-32	.34	29.57	54	-24.43	-	-	-	-	351	363	H
2	* 4.299	37.99	PK-U	33.5	-31.1	0	40.39	-	-	74	-33.61	-	-	144	112	V
	* 4.297	27.35	ADR	33.5	-31.1	.34	30.09	54	-23.91	-	-	-	-	144	112	V
5	* 15.723	40.05	PK-U	40.8	-17.8	0	63.05	-	-	74	-10.95	-	-	174	212	H
	* 15.719	27.07	ADR	40.8	-17.8	.34	50.41	54	-3.59	-	-	-	-	174	212	H
3	10.48	32.54	PK-U	37.6	-22.9	0	47.24	-	-	-	-	68.2	-20.96	104	106	H
6	* 15.716	37.5	PK-U	40.8	-17.9	0	60.4	-	-	74	-13.6	-	-	187	204	V
	* 15.72	24.87	ADR	40.8	-17.8	.34	48.21	54	-5.79	-	-	-	-	187	204	V
4	10.48	34.08	PK-U	37.6	-22.9	0	48.78	-	-	-	-	68.2	-19.42	152	384	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

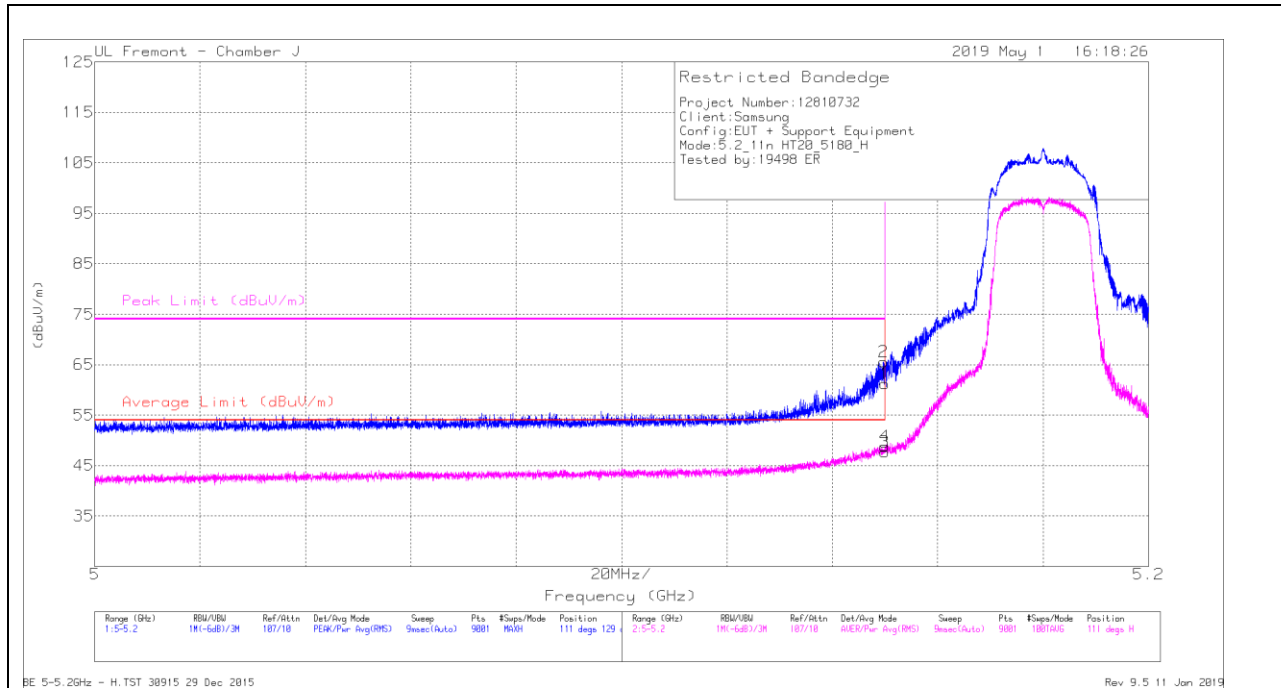
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Trace Markers

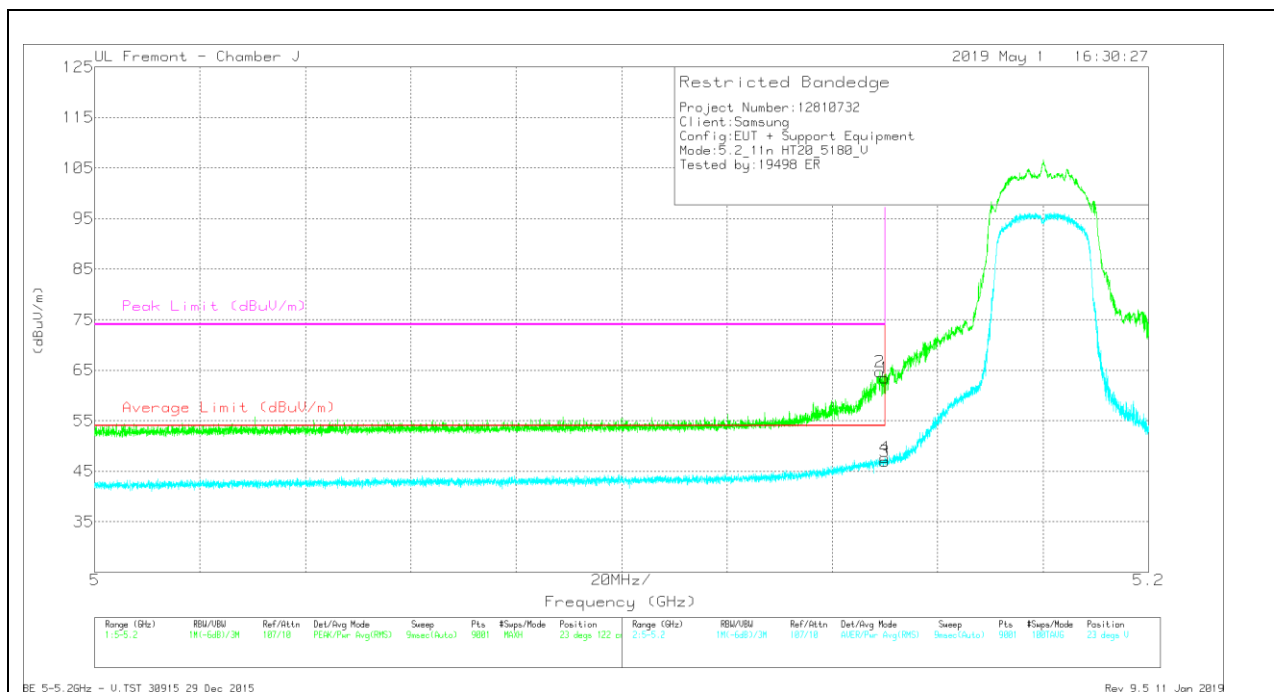
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/Cb/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*5.15	47.13	PK	35.7	-21.6	0	61.23	-	-	74	-12.77	111	129	H
2	*5.15	51.43	PK	35.7	-21.6	0	65.53	-	-	74	-8.47	111	129	H
3	*5.15	33.26	RMS	35.7	-21.6	.36	47.72	54	-6.28	-	-	111	129	H
4	*5.15	34.37	RMS	35.7	-21.6	.36	48.83	54	-5.17	-	-	111	129	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/CbI/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	*5.15	49.3	Pk	35.7	-21.6	0	63.4	-	-	74	-10.6	23	122	V
2	*5.149	50.61	Pk	35.7	-21.6	0	64.71	-	-	74	-9.29	23	122	V
3	*5.15	32.43	RMS	35.7	-21.6	.36	46.89	54	-7.11	-	-	23	122	V
4	*5.15	33.17	RMS	35.7	-21.6	.36	47.63	54	-6.37	-	-	23	122	V

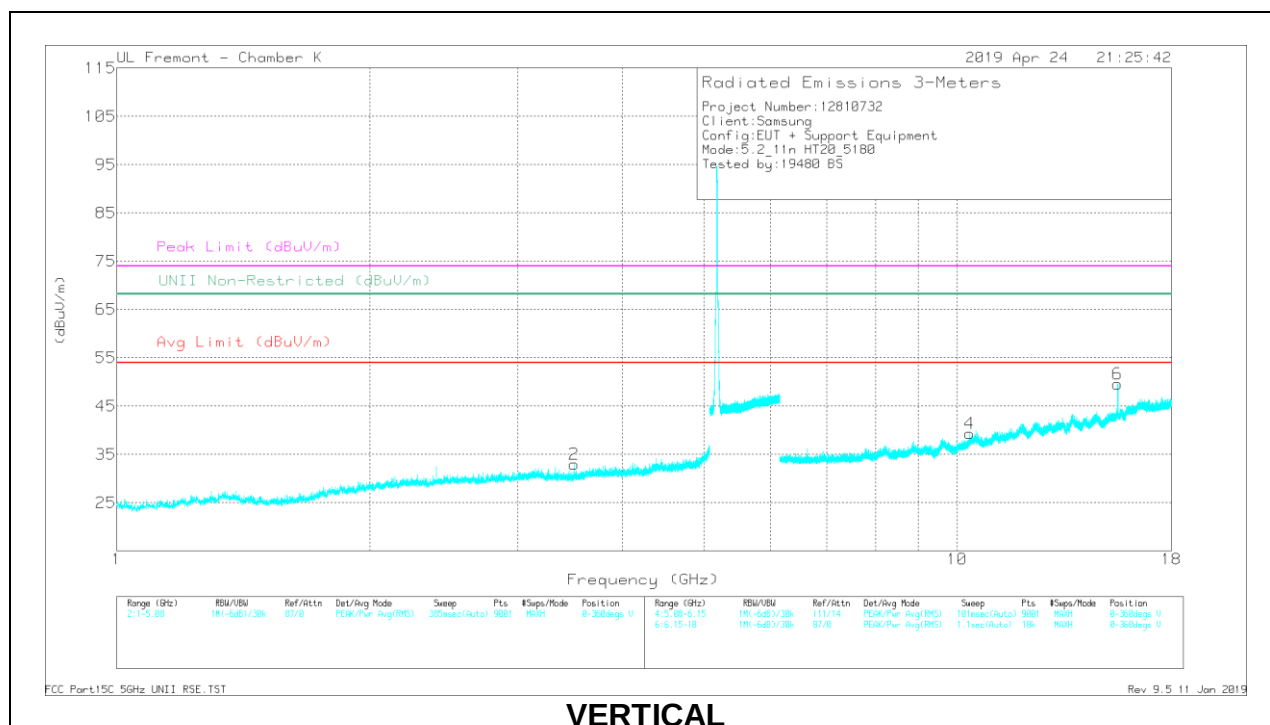
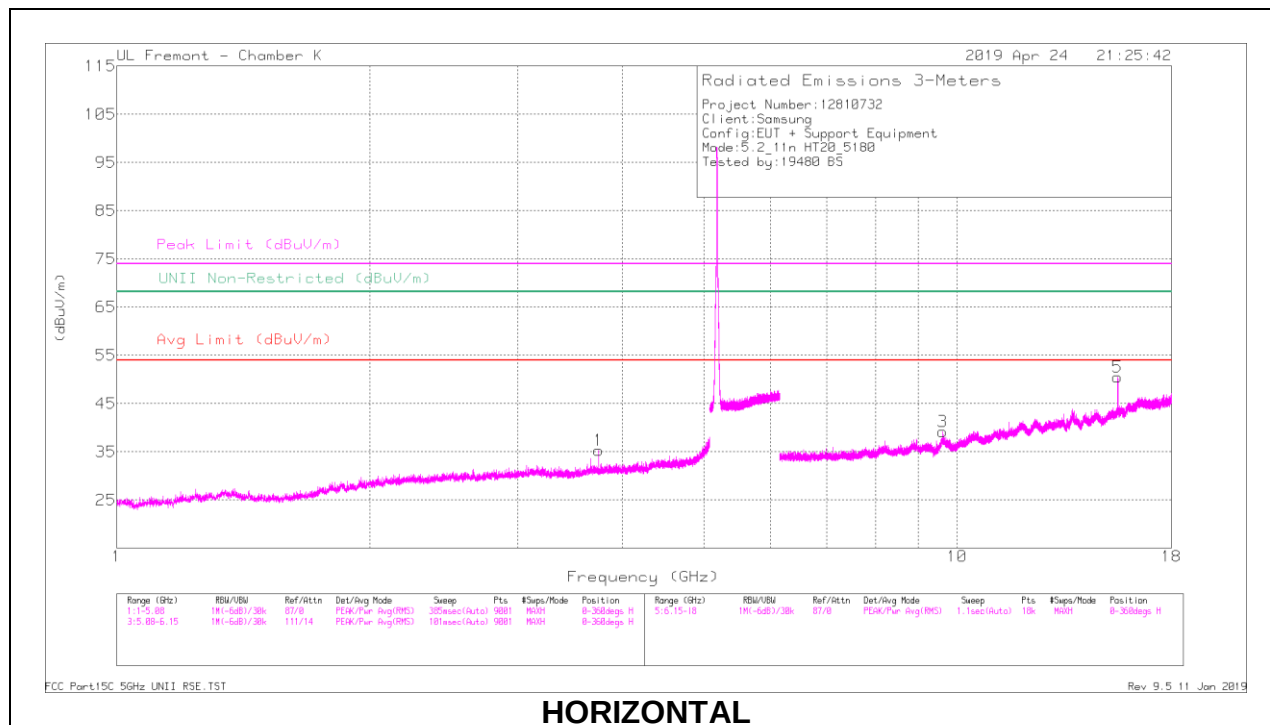
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

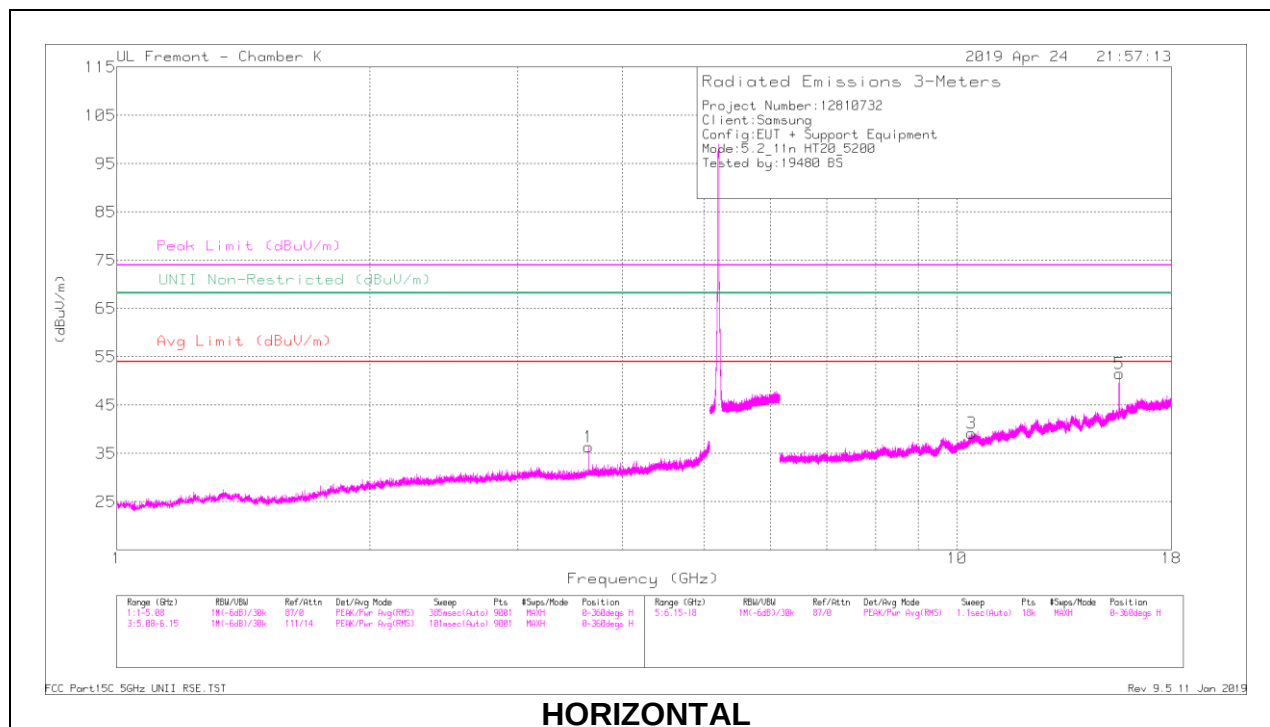
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.744	38.25	PK-U	33.3	-31.9	0	39.65	-	-	74	-34.35	-	-	149	350	H
	* 3.742	27.77	ADR	33.3	-31.9	.36	29.53	54	-24.47	-	-	-	-	149	350	H
2	* 3.503	38.95	PK-U	32.6	-32.8	0	38.75	-	-	74	-35.25	-	-	0	101	V
	* 3.504	28.61	ADR	32.7	-32.8	.36	28.87	54	-25.13	-	-	-	-	0	101	V
5	* 15.535	37.4	PK-U	40.7	-18.6	0	59.5	-	-	74	-14.5	-	-	213	101	H
	* 15.539	25.14	ADR	40.7	-18.6	.36	47.6	54	-6.4	-	-	-	-	213	101	H
3	9.611	32.77	PK-U	36.8	-23.3	0	46.27	-	-	-	-	68.2	-21.93	91	101	H
6	* 15.543	38.2	PK-U	40.7	-18.7	0	60.2	-	-	74	-13.8	-	-	185	191	V
	* 15.537	24.72	ADR	40.7	-18.6	.36	47.18	54	-6.82	-	-	-	-	185	191	V
4	10.36	31.89	PK-U	37.4	-23	0	46.29	-	-	-	-	68.2	-21.91	213	109	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

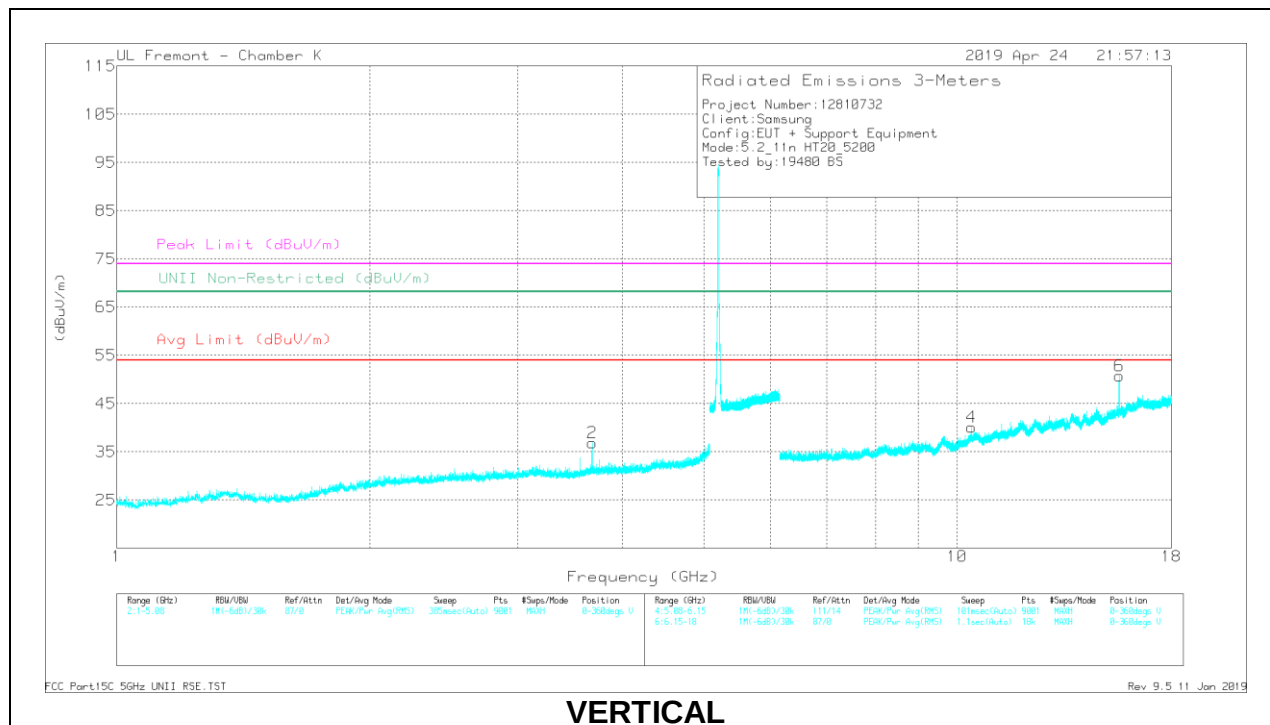
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL RESULTS



HORIZONTAL



VERTICAL

RADIATED EMISSIONS

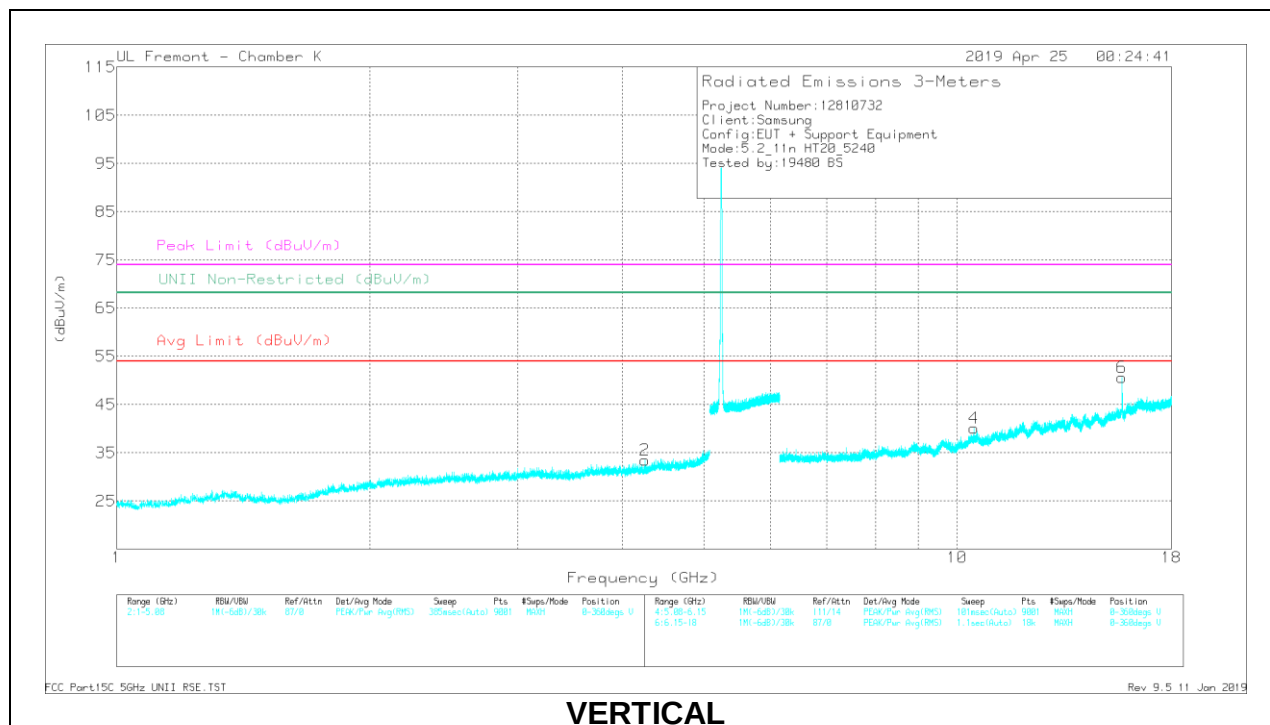
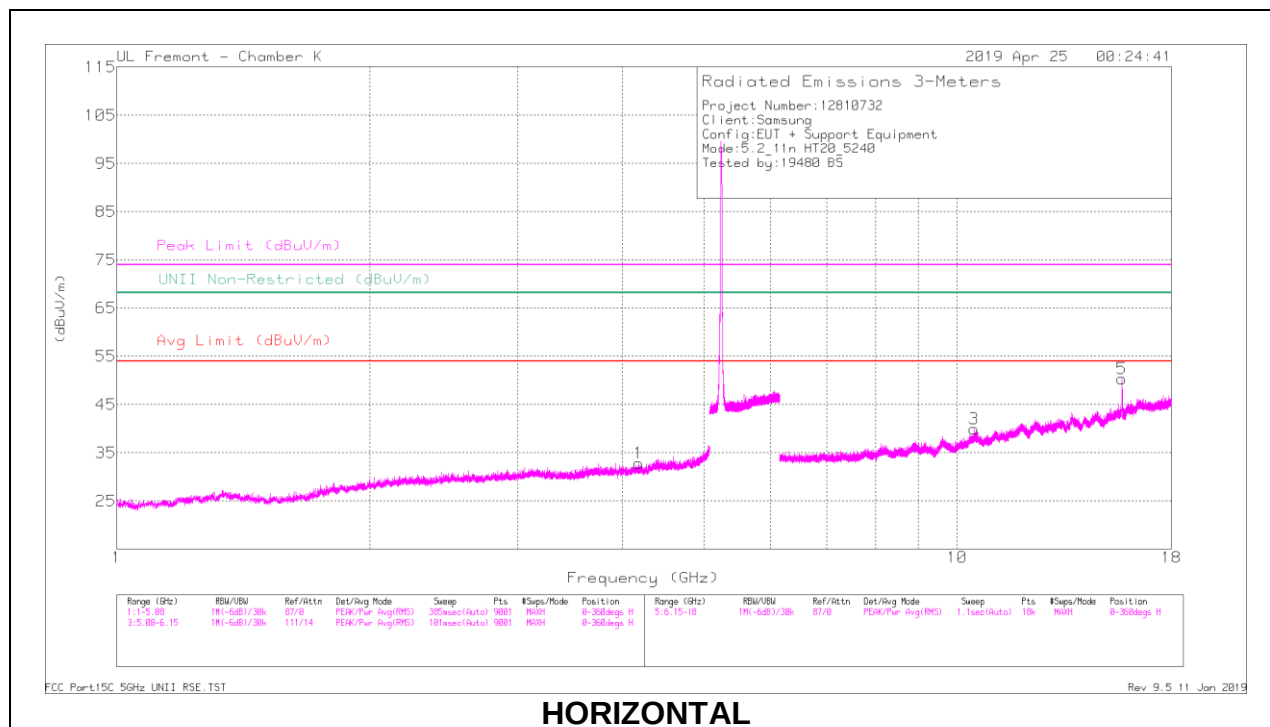
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.642	37.68	PK-U	32.9	-32.4	0	38.18	-	-	74	-35.82	-	-	360	281	H
	* 3.642	28.46	ADR	32.9	-32.4	.36	29.32	54	-24.68	-	-	-	-	360	281	H
2	* 3.68	37.78	PK-U	33.1	-32.2	0	38.68	-	-	74	-35.32	-	-	30	189	V
	* 3.68	28.34	ADR	33.1	-32.2	.36	29.6	54	-24.4	-	-	-	-	30	189	V
5	* 15.601	38.12	PK-U	40.7	-18.6	0	60.22	-	-	74	-13.78	-	-	188	234	H
	* 15.598	25.27	ADR	40.7	-18.6	.36	47.73	54	-6.27	-	-	-	-	188	234	H
3	10.41	31.23	PK-U	37.4	-22.8	0	45.83	-	-	-	-	68.2	-22.37	157	261	H
6	* 15.603	36.88	PK-U	40.7	-18.6	0	58.98	-	-	74	-15.02	-	-	183	199	V
	* 15.602	24.93	ADR	40.7	-18.6	.36	47.39	54	-6.61	-	-	-	-	183	199	V
4	10.402	33.19	PK-U	37.4	-22.8	0	47.79	-	-	-	-	68.2	-20.41	169	234	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/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	* 4.178	36.76	PK-U	33.4	-31.1	0	39.06	-	-	74	-34.94	-	-	346	231	H
	* 4.175	27.31	ADR	33.4	-31.1	.36	29.97	54	-24.03	-	-	-	-	346	231	H
2	* 4.258	35.83	PK-U	33.4	-30.8	0	38.43	-	-	74	-35.57	-	-	59	280	V
	* 4.258	27.26	ADR	33.4	-30.8	.36	30.22	54	-23.78	-	-	-	-	59	280	V
5	* 15.721	40.84	PK-U	40.8	-17.8	0	63.84	-	-	74	-10.16	-	-	177	218	H
	* 15.722	27.37	ADR	40.8	-17.8	.36	50.73	54	-3.27	-	-	-	-	177	218	H
3	10.48	32.88	PK-U	37.6	-22.9	0	47.58	-	-	-	-	68.2	-20.62	297	109	H
6	* 15.723	38.86	PK-U	40.8	-17.8	0	61.86	-	-	74	-12.14	-	-	186	203	V
	* 15.719	25.69	ADR	40.8	-17.8	.36	49.05	54	-4.95	-	-	-	-	186	203	V
4	10.48	32.63	PK-U	37.6	-22.9	0	47.33	-	-	-	-	68.2	-20.87	186	272	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

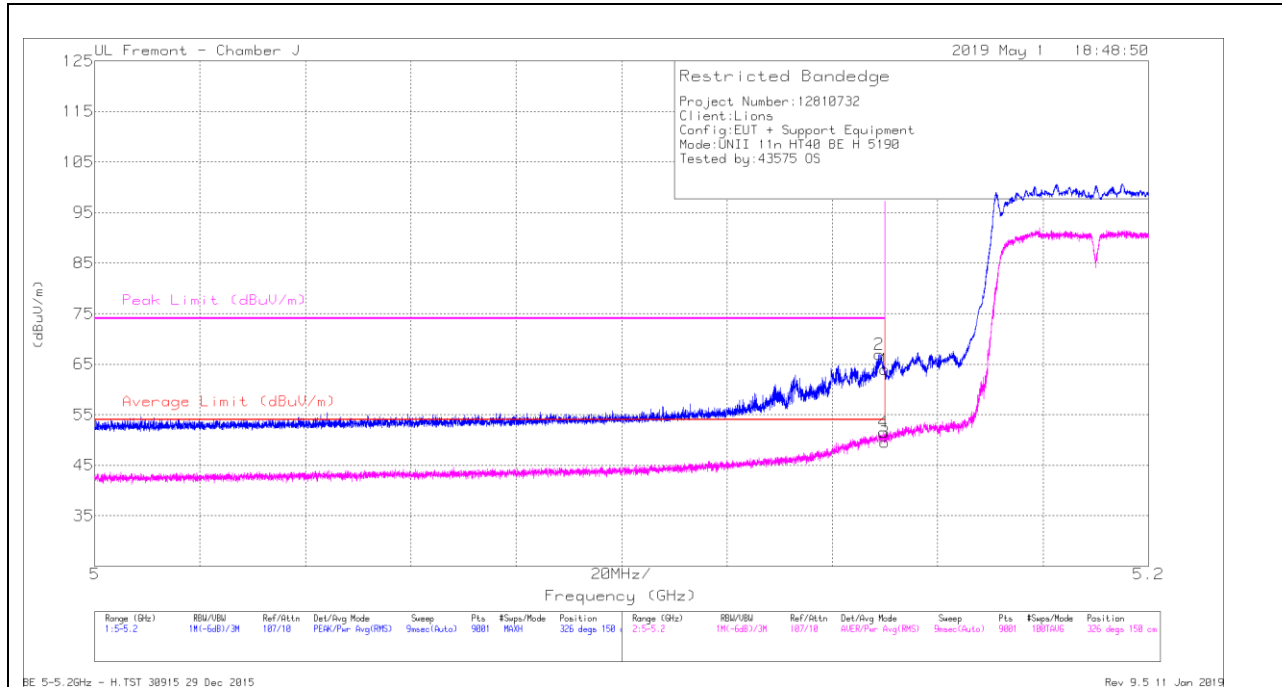
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

BANDEGE (LOW CHANNEL)

HORIZONTAL RESULT



Trace Markers

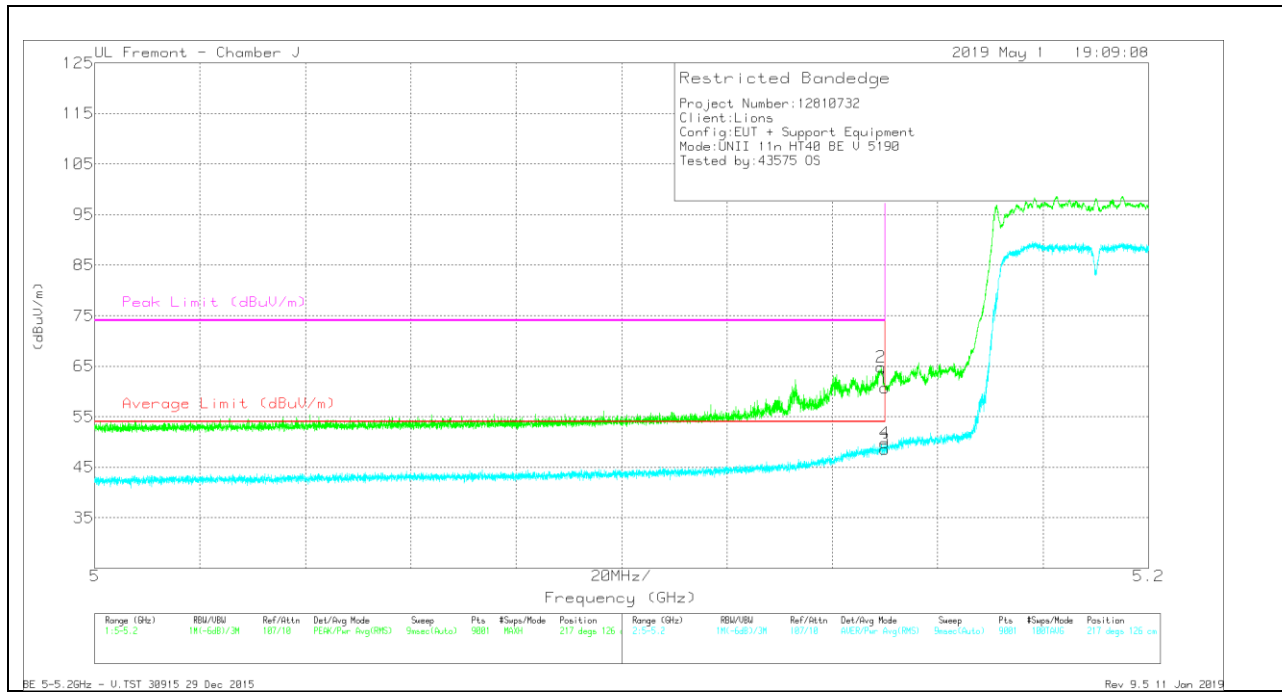
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/CbI/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*5.15	49.81	Pk	35.7	-21.6	0	63.91	-	-	74	-10.09	326	150	H
2	*5.149	52.83	Pk	35.7	-21.6	0	66.93	-	-	74	-7.07	326	150	H
3	*5.15	34.74	RMS	35.7	-21.6	.73	49.57	54	-4.43	-	-	326	150	H
4	*5.15	36.7	RMS	35.7	-21.6	.73	51.53	54	-2.47	-	-	326	150	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0189055 (dB/m)	Amp/CbI/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	*5.15	46.64	Pk	35.7	-21.6	0	60.74	-	-	74	-13.26	217	126	V
2	*5.149	50.7	Pk	35.7	-21.6	0	64.8	-	-	74	-9.2	217	126	V
3	*5.15	33.74	RMS	35.7	-21.6	.73	48.57	54	-5.43	-	-	217	126	V
4	*5.15	34.97	RMS	35.7	-21.6	.73	49.8	54	-4.2	-	-	217	126	V

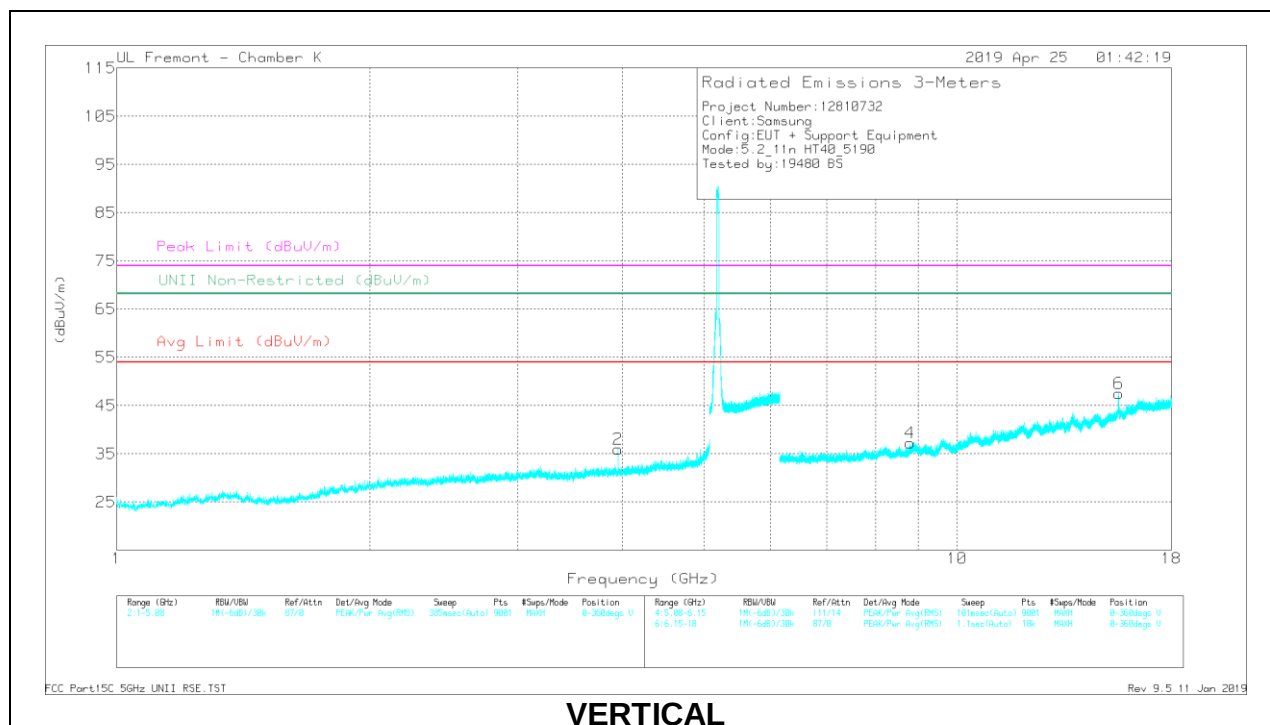
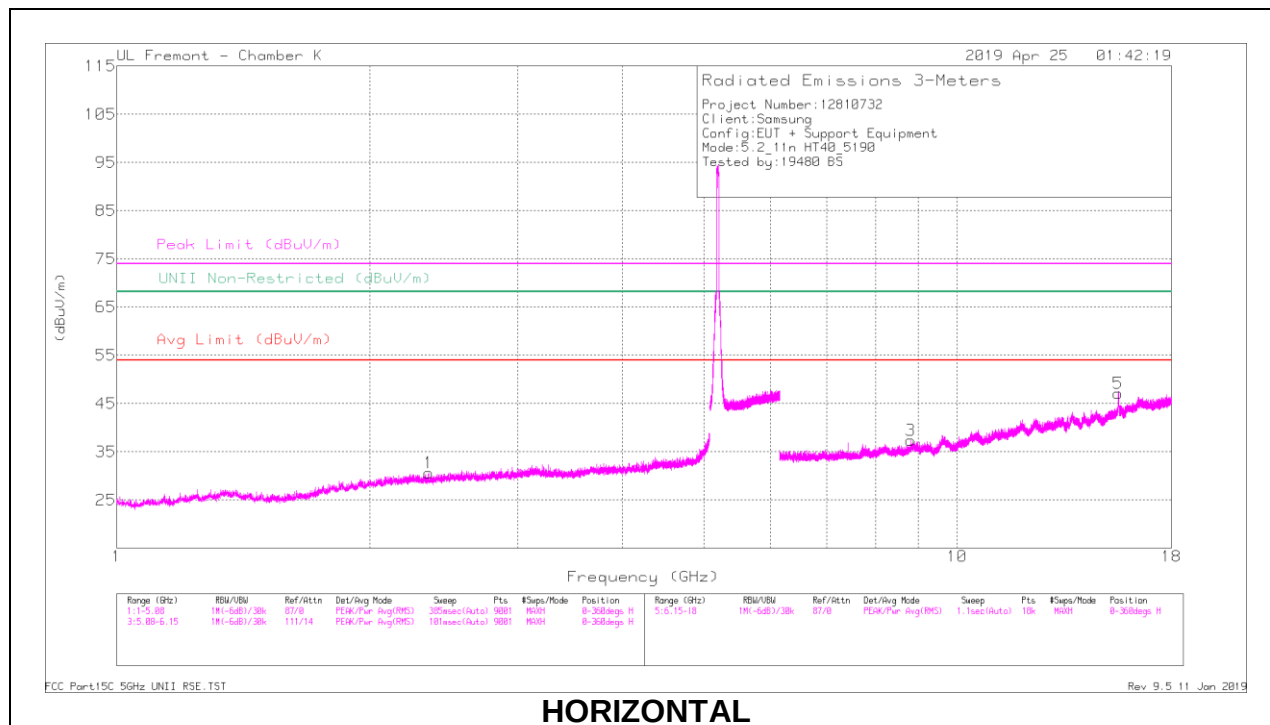
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL RESULTS



RADIATED EMISSIONS

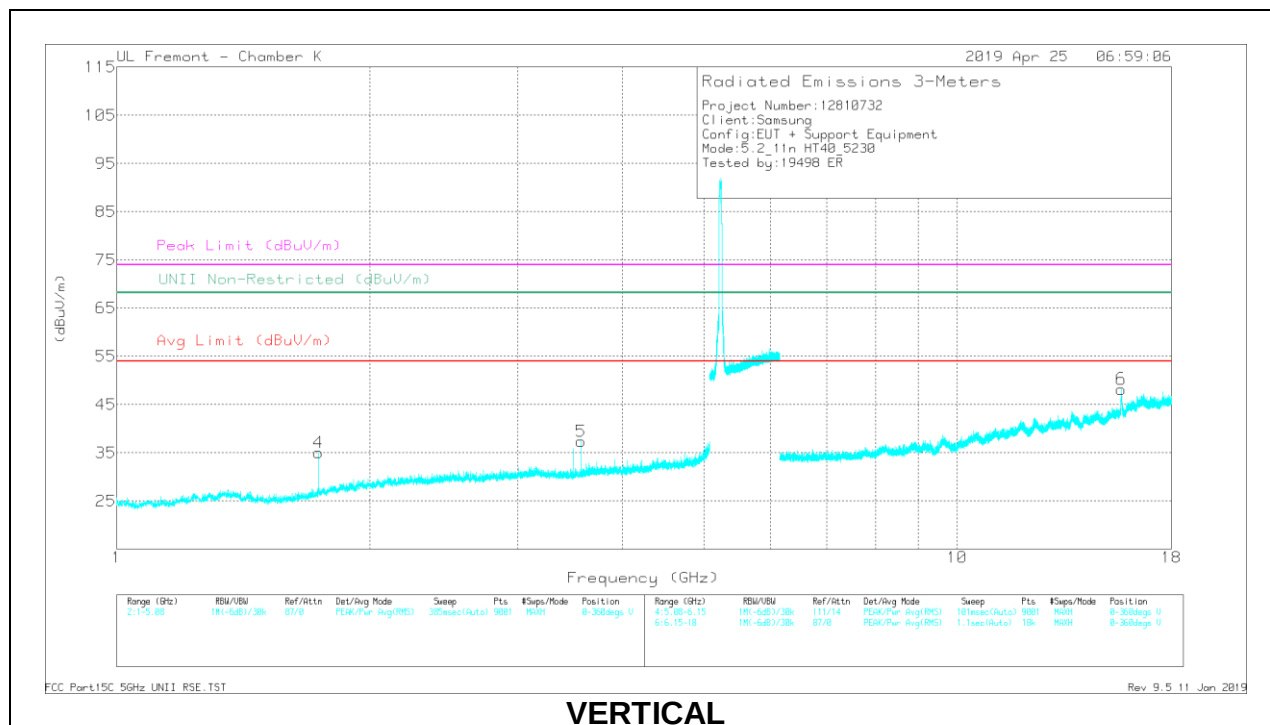
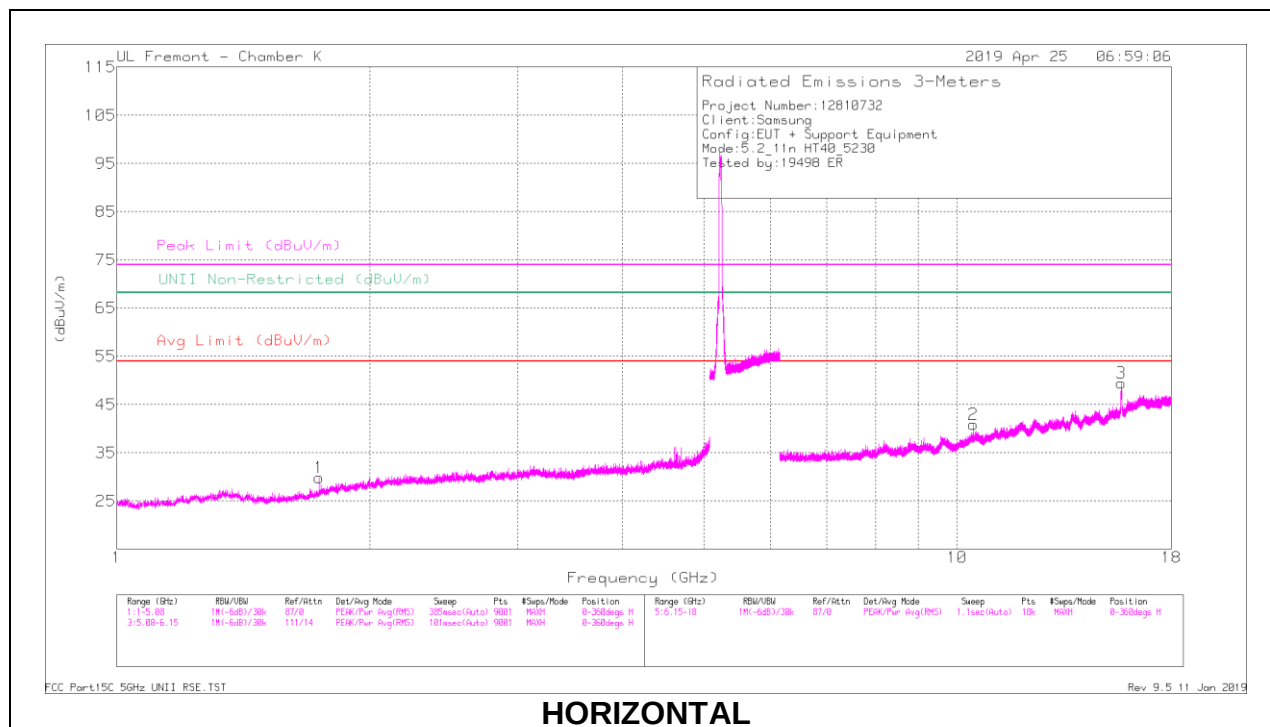
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.351	40.43	PK-U	31.7	-35.1	0	37.03	-	-	74	-36.97	-	-	273	236	H
	* 2.353	30.96	ADR	31.7	-35.1	.73	28.29	54	-25.71	-	-	-	-	273	236	H
2	* 3.948	37.46	PK-U	33.4	-31.4	0	39.46	-	-	74	-34.54	-	-	298	370	V
	* 3.95	28.14	ADR	33.4	-31.5	.73	30.77	54	-23.23	-	-	-	-	298	370	V
5	* 15.561	34.99	PK-U	40.7	-18.7	0	56.99	-	-	74	-17.01	-	-	172	289	H
	* 15.562	21.91	ADR	40.7	-18.7	.73	44.64	54	-9.36	-	-	-	-	172	289	H
3	8.812	32.18	PK-U	36	-24.2	0	43.98	-	-	-	-	68.2	-24.22	5	165	H
6	* 15.557	33.49	PK-U	40.7	-18.7	0	55.49	-	-	74	-18.51	-	-	187	185	V
	* 15.58	21.73	ADR	40.7	-18.6	.73	44.56	54	-9.44	-	-	-	-	187	185	V
4	8.795	32.38	PK-U	36	-24.3	0	44.08	-	-	-	-	68.2	-24.12	63	306	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/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	1.741	39.17	PK-U	29.4	-35.3	0	33.27	-	-	-	-	68.2	-34.93	163	158	H
5	* 3.57	38.47	PK-U	32.9	-32.4	0	38.97	-	-	74	-35.03	-	-	237	214	V
	* 3.572	28.62	ADR	33	-32.4	.73	29.95	54	-24.05	-	-	-	-	237	214	V
4	1.738	39.96	PK-U	29.4	-35.3	0	34.06	-	-	-	-	68.2	-34.14	38	248	V
3	* 15.683	35.06	PK-U	40.8	-18.2	0	57.66	-	-	74	-16.34	-	-	227	101	H
	* 15.684	25.08	ADR	40.8	-18.2	.73	48.41	54	-5.59	-	-	-	-	227	101	H
2	10.46	32.89	PK-U	37.5	-22.9	0	47.49	-	-	-	-	68.2	-20.71	298	119	H
6	* 15.677	32.96	PK-U	40.8	-18.2	0	55.56	-	-	74	-18.44	-	-	184	170	V
	* 15.678	22.34	ADR	40.8	-18.2	.73	45.67	54	-8.33	-	-	-	-	184	170	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

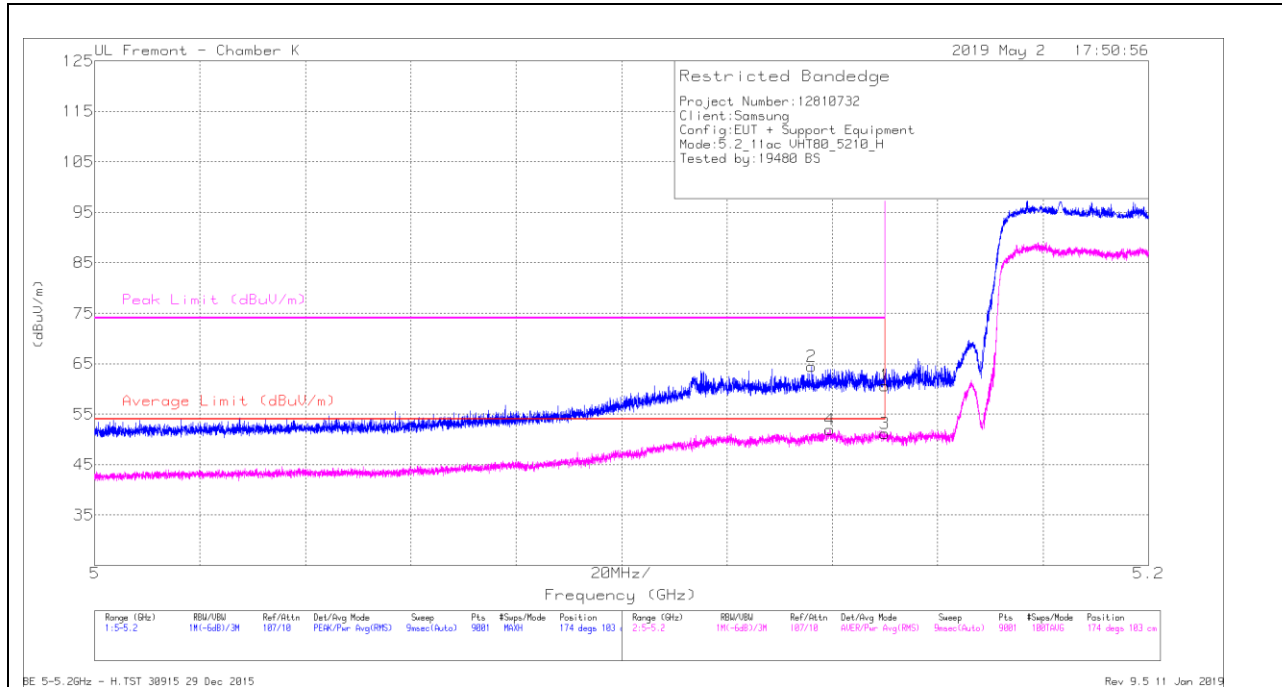
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.4. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

BANDEDGE (MID CHANNEL)

HORIZONTAL RESULT



Trace Markers

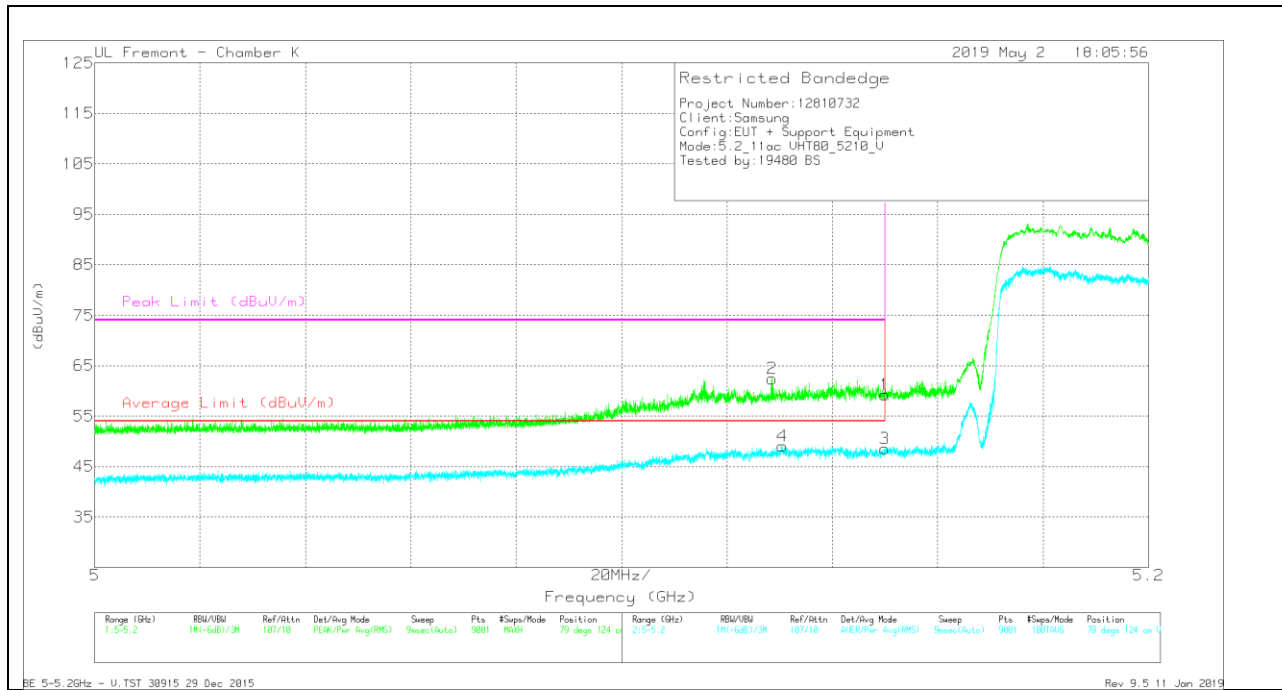
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/CbI/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*5.15	46.16	Pk	34.6	-20.1	0	60.66	-	-	74	-13.34	174	103	H
2	*5.136	50.07	Pk	34.6	-20.2	0	64.47	-	-	74	-9.53	174	103	H
3	*5.15	35.29	RMS	34.6	-20.1	.18	49.97	54	-4.03	-	-	174	103	H
4	*5.14	36.06	RMS	34.6	-20.2	.18	50.64	54	-3.36	-	-	174	103	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

VERTICAL RESULT



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/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	* 5.15	44.75	Pk	34.6	-20.1	0	59.25	-	-	74	-14.75	79	124	V
2	* 5.129	48	Pk	34.6	-20.2	0	62.4	-	-	74	-11.6	79	124	V
3	* 5.15	32.65	RMS	34.6	-20.1	.18	47.33	54	-6.67	-	-	79	124	V
4	* 5.131	33.27	RMS	34.6	-20.2	.18	47.85	54	-6.15	-	-	79	124	V

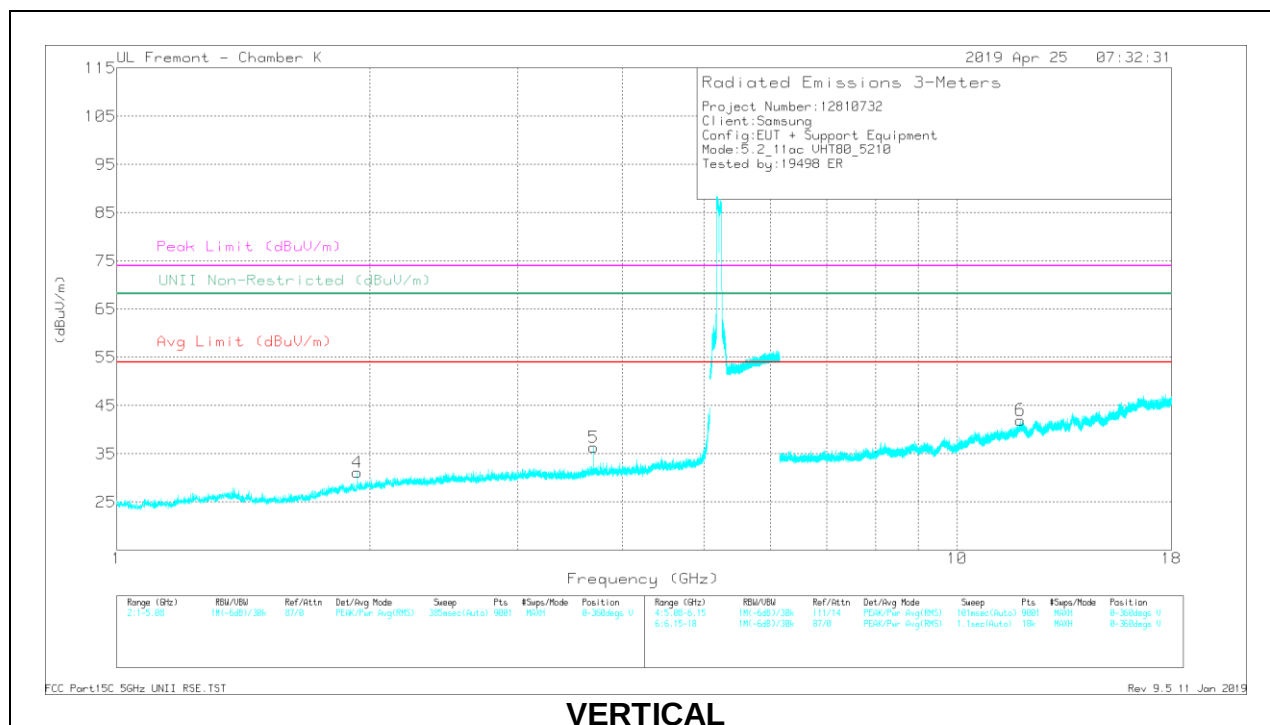
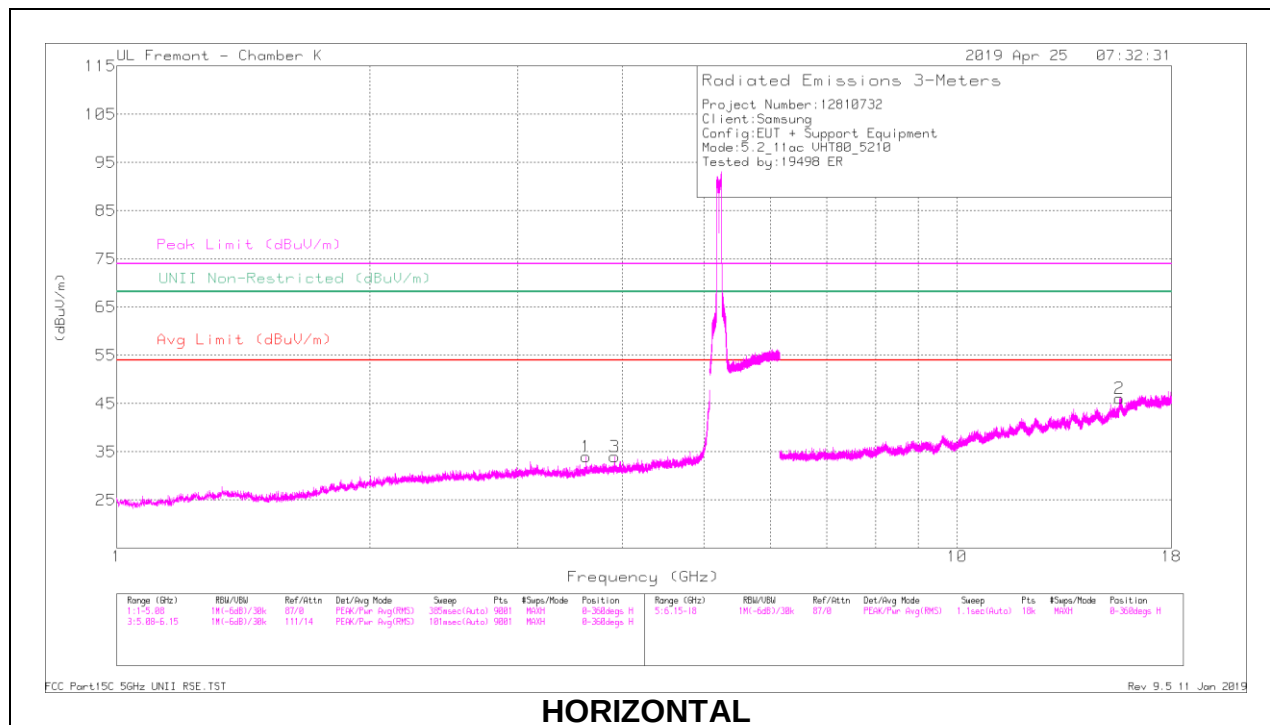
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

MID CHANNEL RESULTS



RADIATED EMISSIONS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Ampl/Cbl/Fitr/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	* 3.62	38.52	PK-U	33	-32.4	0	39.12	-	-	74	-34.88	-	-	263	187	H
	* 3.622	28.85	ADR	33	-32.4	.18	29.63	54	-24.37	-	-	-	-	263	187	H
3	* 3.913	37.62	PK-U	33.4	-31.5	0	39.52	-	-	74	-34.48	-	-	316	201	H
	* 3.913	27.57	ADR	33.4	-31.5	.18	29.65	54	-24.35	-	-	-	-	316	201	H
5	* 3.693	37.94	PK-U	33.1	-32.1	0	38.94	-	-	74	-35.06	-	-	324	201	V
	* 3.694	28.33	ADR	33.1	-32.1	.18	29.51	54	-24.49	-	-	-	-	324	201	V
4	1.934	41.73	PK-U	30.7	-35.2	0	37.23	-	-	-	-	68.2	-30.97	151	217	V
2	* 15.614	30.09	PK-U	40.7	-18.5	0	52.29	-	-	74	-21.71	-	-	173	137	H
	* 15.611	19.74	ADR	40.7	-18.5	.18	42.12	54	-11.88	-	-	-	-	173	137	H
6	* 11.9	29.62	PK-U	38.4	-20.4	0	47.82	-	-	74	-26.18	-	-	100	250	V
	* 11.898	20.23	ADR	38.4	-20.4	.18	38.41	54	-15.59	-	-	-	-	100	250	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average