

**E1922 ANTENNA**

**2TX Antenna 1 + Antenna 2 CDD MODE (FCC)**

<b>Test Engineer:</b>	23653 DC
<b>Test Date:</b>	1/16/2021

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	4.30	7.29	24.00	9.71
Mid	5200	4.30	7.29	24.00	9.71
High	5240	4.30	7.29	24.00	9.71

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
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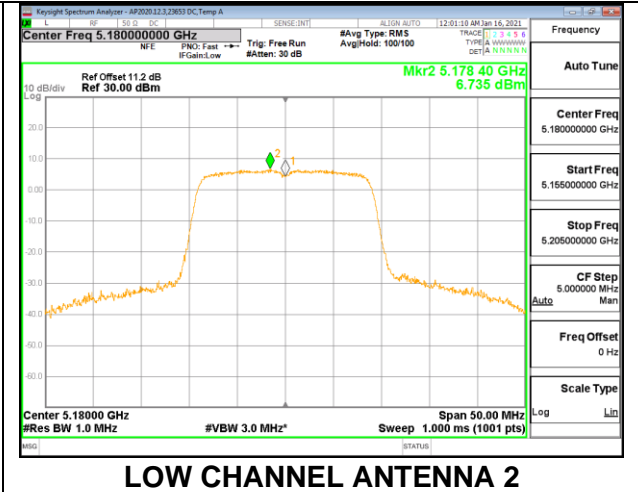
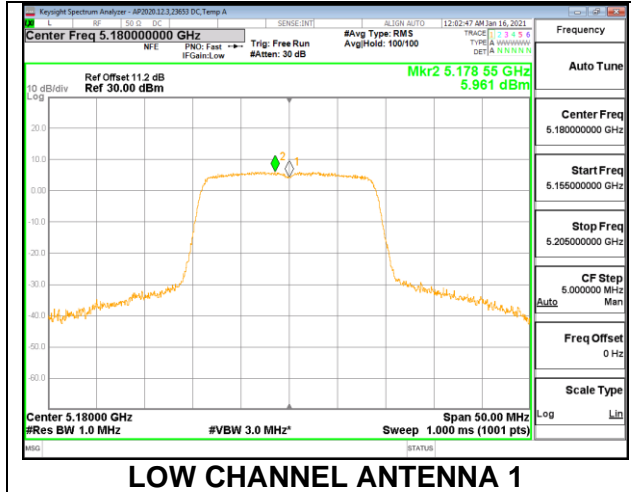
**Output Power Results**

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.43	16.91	19.69	24.00	-4.31
Mid	5200	17.11	17.67	20.41	24.00	-3.59
High	5240	17.37	18.14	20.78	24.00	-3.22

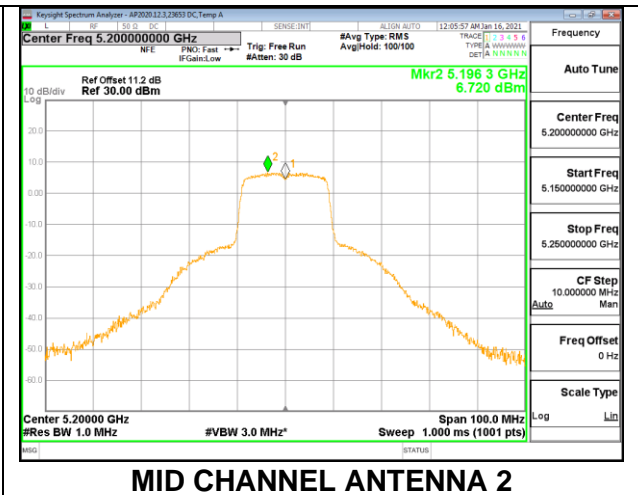
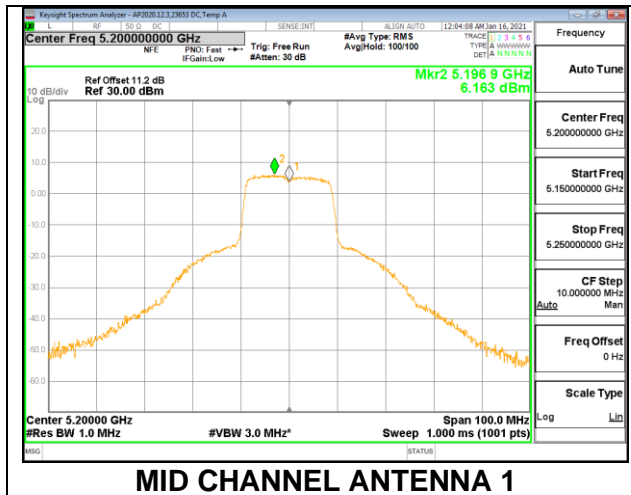
**PSD Results**

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Antenna 2 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	5.961	6.735	9.38	9.71	-0.33
Mid	5200	6.163	6.720	9.46	9.71	-0.25
High	5240	5.639	6.637	9.18	9.71	-0.53

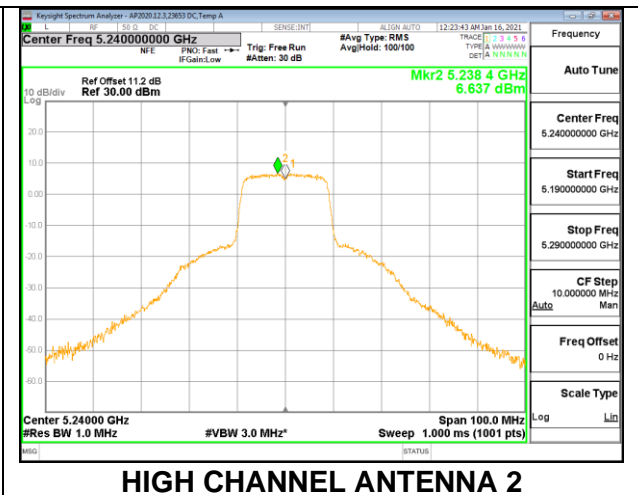
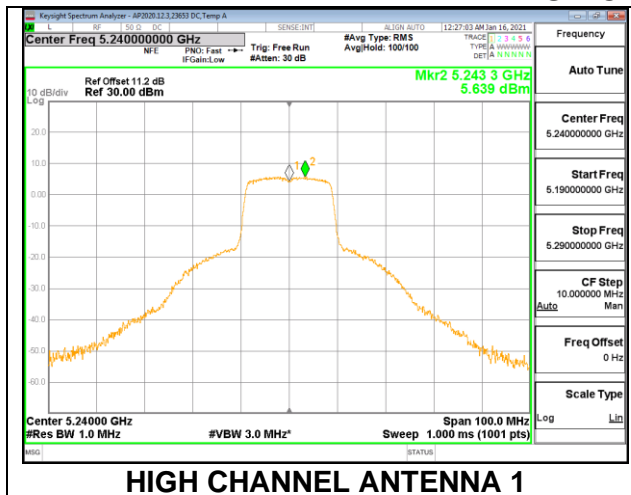
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL



**2TX Antenna 1 + Antenna 2 CDD MODE (ISED, PSD was tested by radiated method)**

<b>Test Engineer:</b>	19498 ER
<b>Test Date:</b>	12/21/2020

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 99% BW (MHz)
Low	5180	17.558
Mid	5200	18.343
High	5240	18.364

**Limits**

Channel	Frequency (MHz)	ISED EIRP Limit (dBm)	ISED eirp PSD Limit (dBm/ 1MHz)
Low	5180	22.44	10.00
Mid	5200	22.63	10.00
High	5240	22.64	10.00

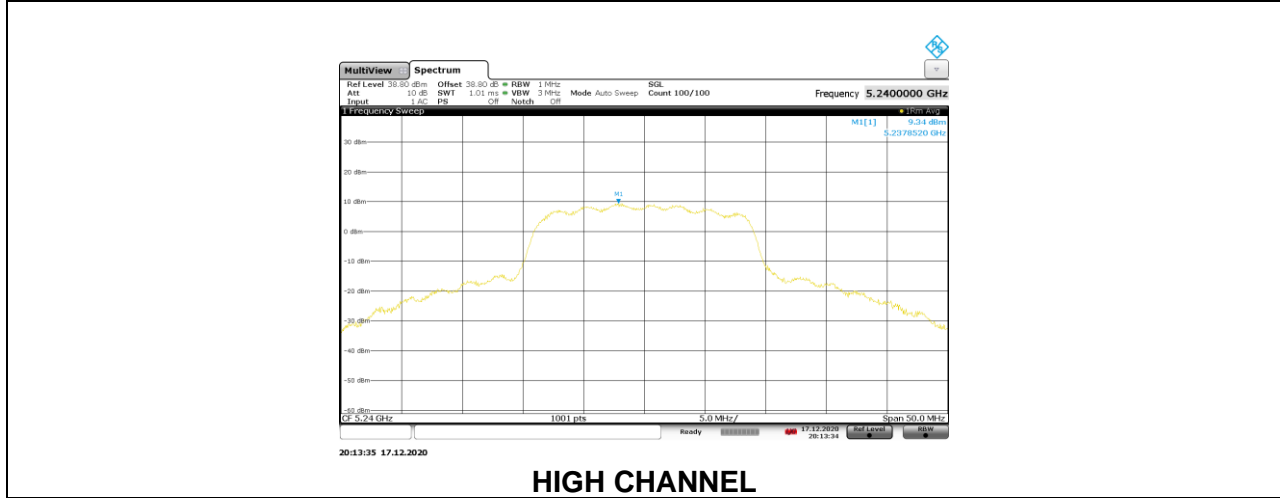
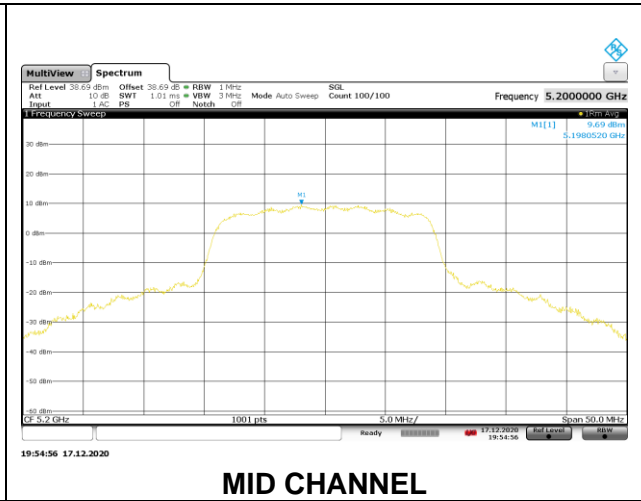
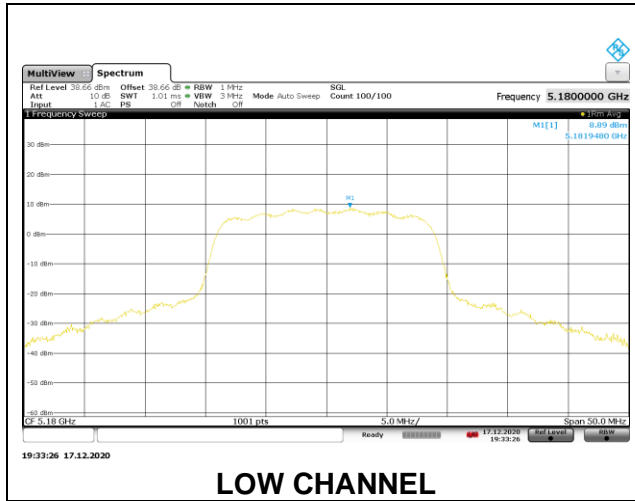
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
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**Output Power Results**

Channel	Frequency (MHz)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	19.00	22.44	-3.45
Mid	5200	19.81	22.63	-2.83
High	5240	18.87	22.64	-3.77

**PSD Results**

Channel	Frequency (MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.89	10.00	-1.11
Mid	5200	9.69	10.00	-0.31
High	5240	9.34	10.00	-0.66



### 9.5.3. 802.11a MODE IN THE 5.3 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

<b>Test Engineer:</b>	23653 DC
<b>Test Date:</b>	1/16/2021

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	28.90	16.64	4.11	7.10
Mid	5300	32.80	16.82	4.11	7.10
High	5320	29.50	16.90	4.11	7.10

#### 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	5260	24.00	23.21	29.21	23.21	9.90	11.00	9.90
Mid	5300	24.00	23.26	29.26	23.26	9.90	11.00	9.90
High	5320	24.00	23.28	29.28	23.28	9.90	11.00	9.90

<b>Duty Cycle CF (dB)</b>	0.61	<b>Included in Calculations of Corr'd PPSD</b>
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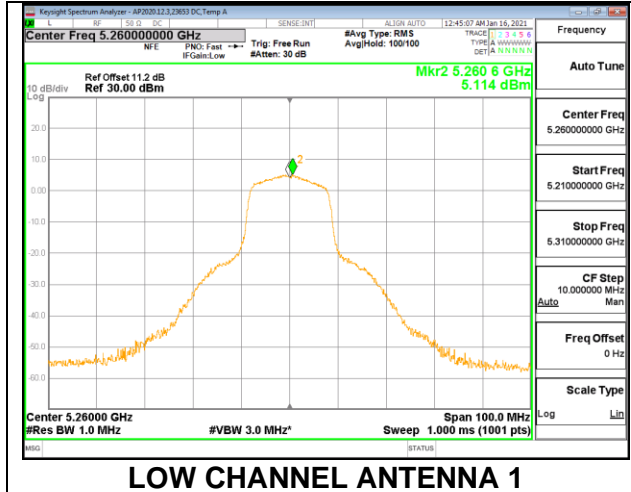
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.48	16.87	19.69	23.21	-3.52
Mid	5300	16.92	16.82	19.88	23.26	-3.38
High	5320	16.53	16.81	19.68	23.28	-3.60

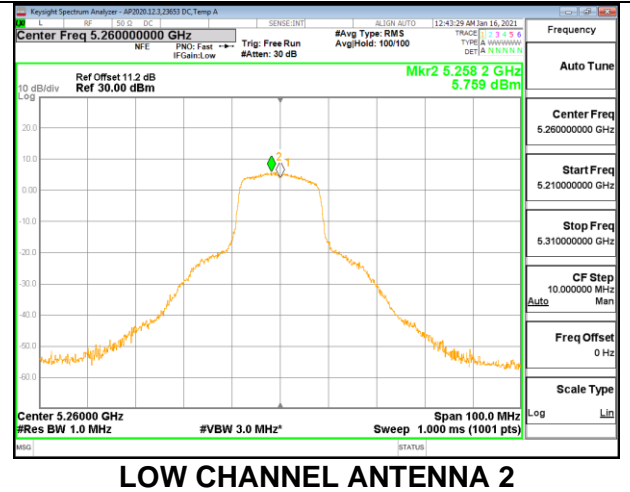
#### PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	5.114	5.759	9.07	9.90	-0.83
Mid	5300	5.559	6.059	9.44	9.90	-0.46
High	5320	5.754	5.924	9.46	9.90	-0.44

### LOW CHANNEL

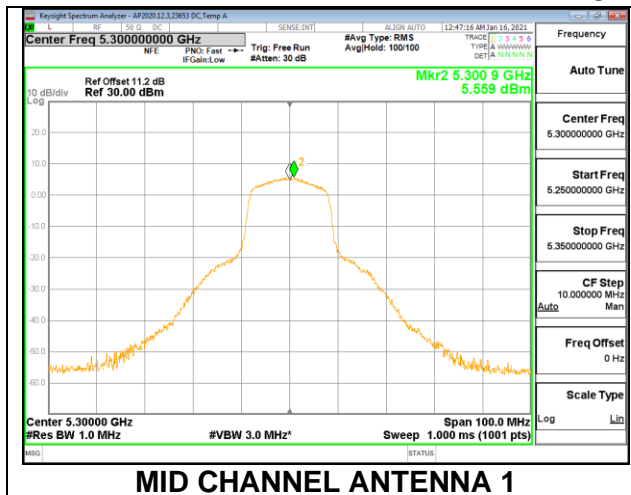


LOW CHANNEL ANTENNA 1

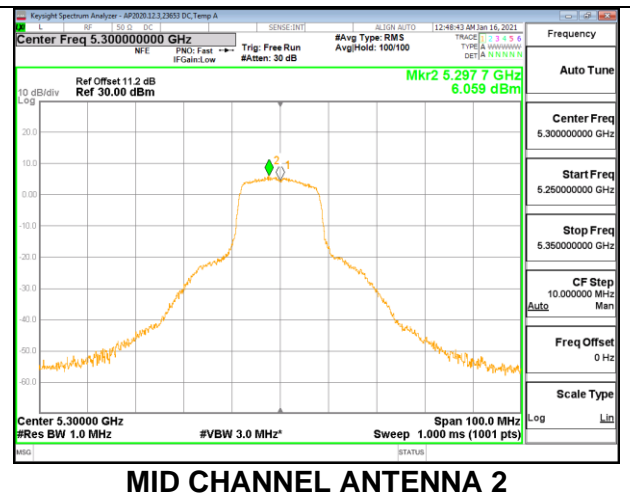


LOW CHANNEL ANTENNA 2

### MID CHANNEL

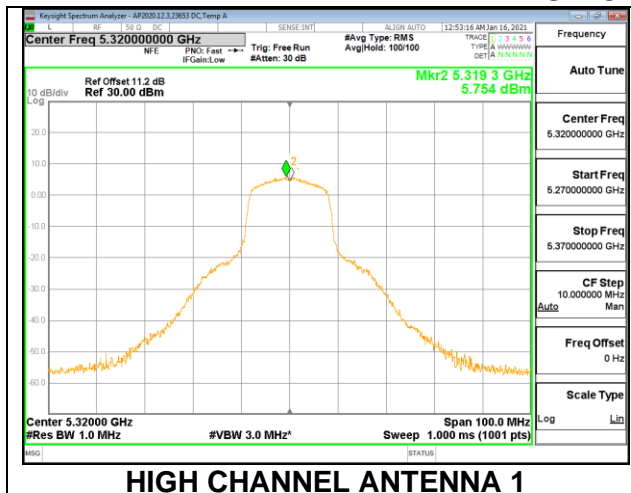


MID CHANNEL ANTENNA 1

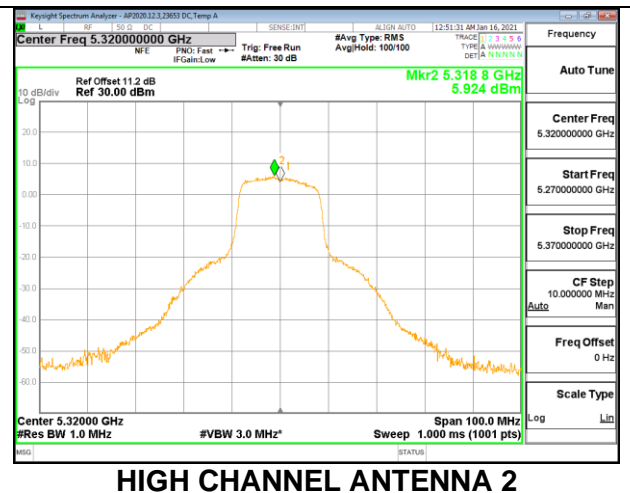


MID CHANNEL ANTENNA 2

### HIGH CHANNEL



HIGH CHANNEL ANTENNA 1



HIGH CHANNEL ANTENNA 2

### 9.5.4. 802.11n HT20 MODE IN THE 5.3 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

<b>Test Engineer:</b>	23653 DC
<b>Test Date:</b>	1/16/2021

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	33.75	17.917	4.11	7.10
Mid	5300	34.25	17.909	4.11	7.10
High	5320	32.10	17.793	4.11	7.10

#### 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	5260	24.00	23.53	29.53	23.53	9.90	11.00	9.90
Mid	5300	24.00	23.53	29.53	23.53	9.90	11.00	9.90
High	5320	24.00	23.50	29.50	23.50	9.90	11.00	9.90

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PPSD</b>
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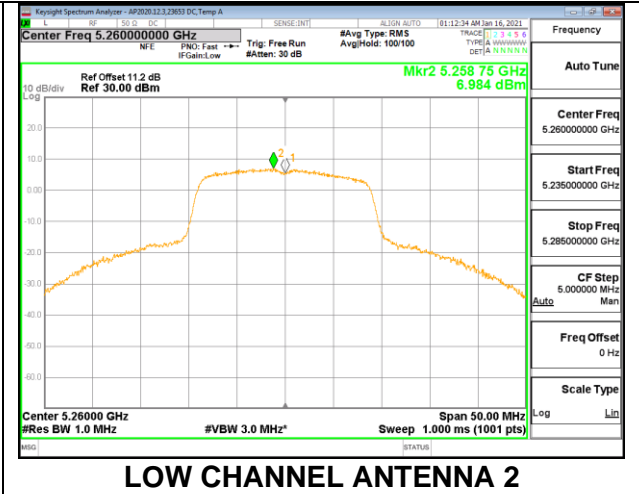
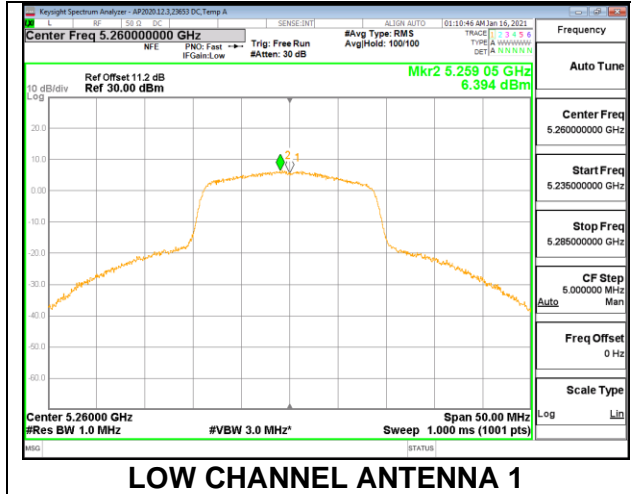
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.67	17.63	20.19	23.53	-3.35
Mid	5300	17.09	17.55	20.34	23.53	-3.19
High	5320	16.27	16.85	19.58	23.50	-3.92

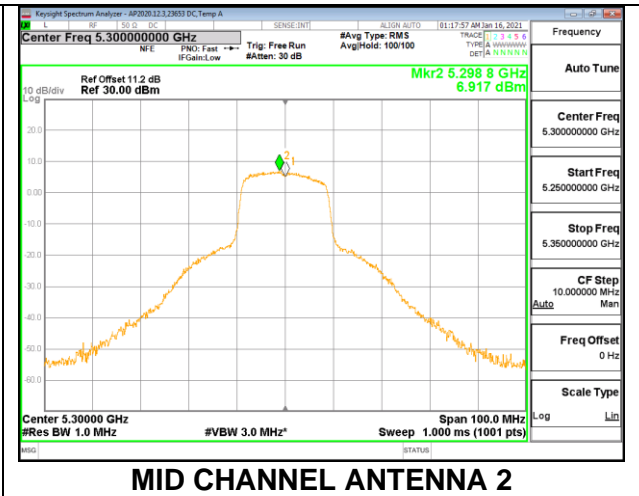
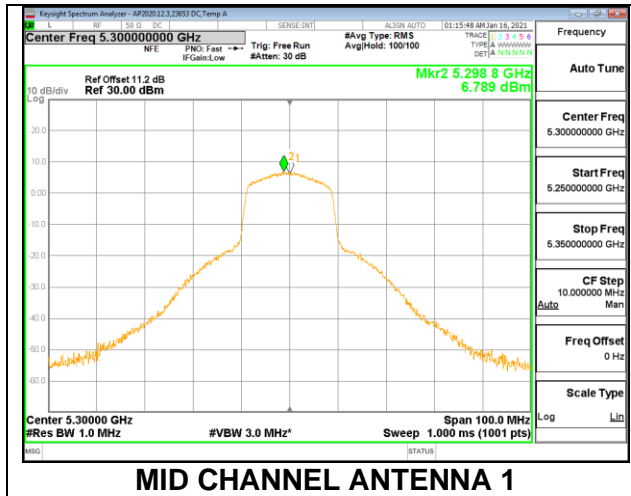
#### PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	6.394	6.984	9.71	9.90	-0.19
Mid	5300	6.789	6.917	9.86	9.90	-0.04
High	5320	6.720	6.940	9.84	9.90	-0.06

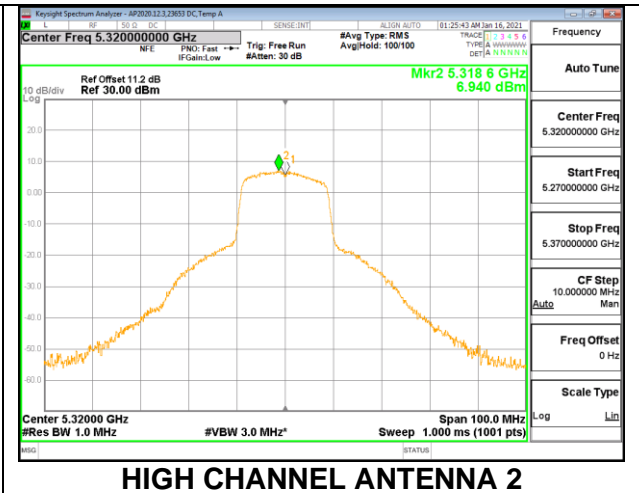
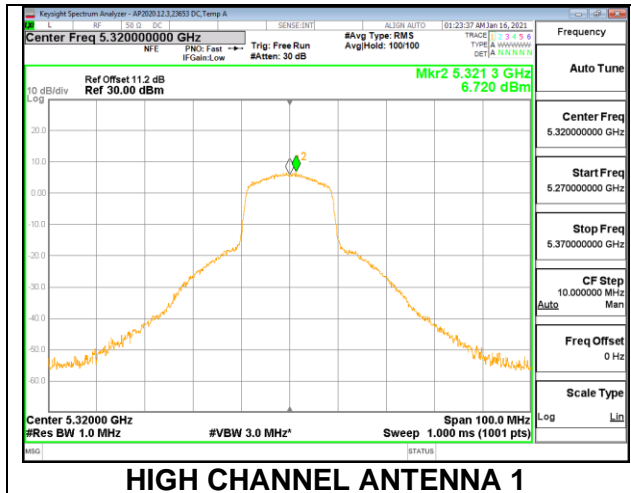
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL





### 9.5.5. 802.11a MODE IN THE 5.6 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

<b>Test Engineer:</b>	23653 DC
<b>Test Date:</b>	1/16/2021

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Direction Gain for PSD (dBi)
Low	5500	21.20	16.45	4.14	7.15
Mid	5580	20.80	16.43	4.14	7.15
High	5700	22.95	16.51	4.14	7.15

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)
Low	5500	24.00	23.16	29.16	23.16	9.85	11.00
Mid	5580	24.00	23.16	29.16	23.16	9.85	11.00
High	5700	24.00	23.18	29.18	23.18	9.85	11.00

<b>Duty Cycle CF (dB)</b>	0.61	<b>Included in Calculations of Corr'd PSD</b>
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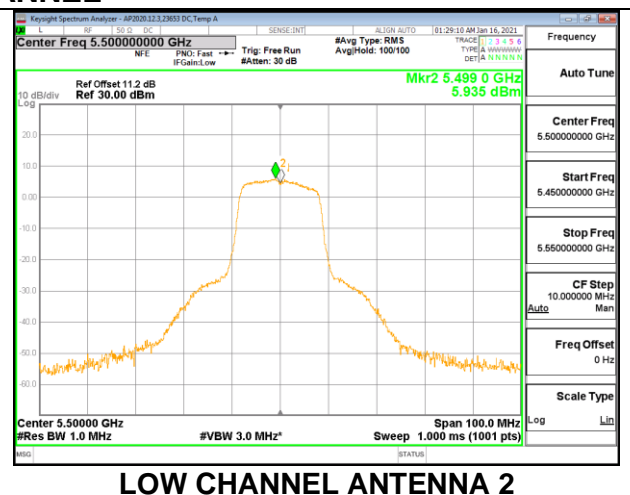
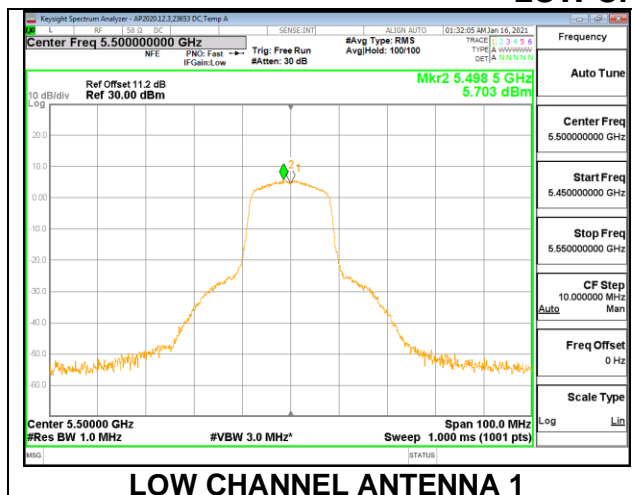
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	16.57	15.78	19.20	23.16	-3.96
Mid	5580	16.41	15.21	18.86	23.16	-4.30
High	5700	15.45	15.78	18.63	23.18	-4.55

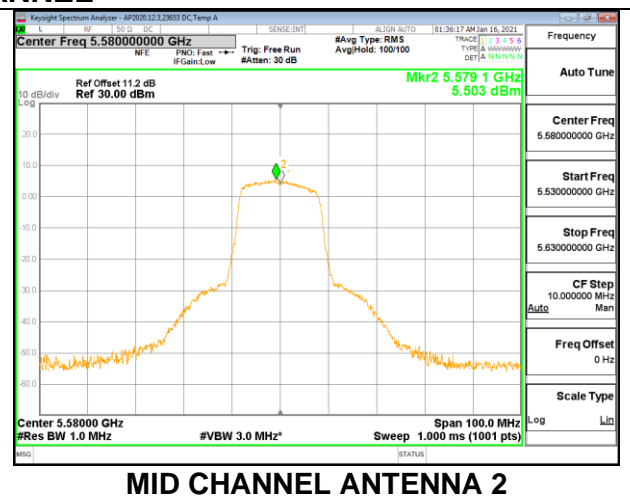
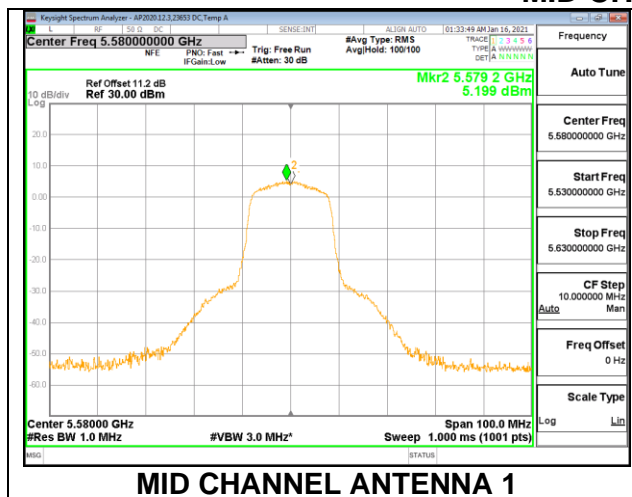
#### PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	5.703	5.935	9.441	9.85	-0.41
Mid	5580	5.199	5.503	8.974	9.85	-0.88
High	5700	5.724	6.137	9.556	9.85	-0.29

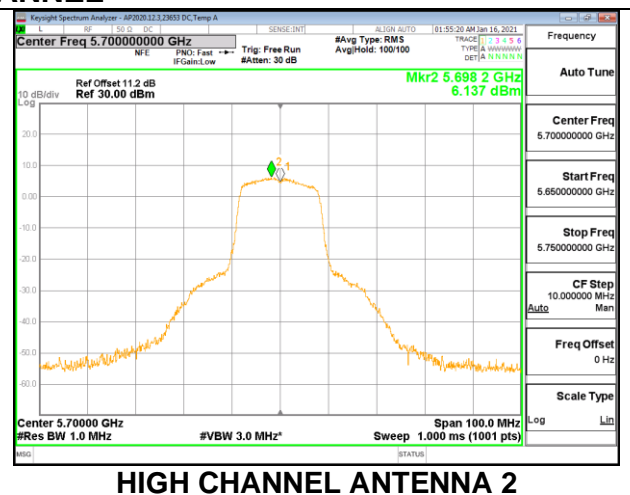
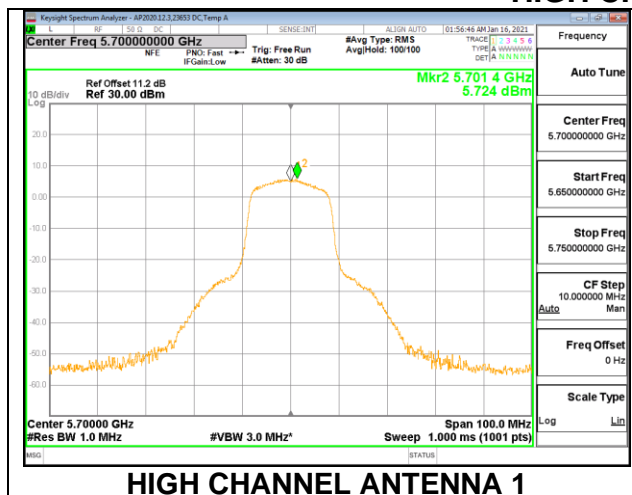
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL



### 9.5.6. 802.11n HT20 MODE IN THE 5.6 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

Test Engineer:	23653 DC
Test Date:	1/16/2021

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5500	21.25	17.60	4.14	7.15
Mid	5580	21.30	17.58	4.14	7.15
High	5700	21.70	17.61	4.14	7.15

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Low	5500	24.00	23.46	29.46	23.46	9.85	11.00	9.85
Mid	5580	24.00	23.45	29.45	23.45	9.85	11.00	9.85
High	5700	24.00	23.46	29.46	23.46	9.85	11.00	9.85

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PPSD
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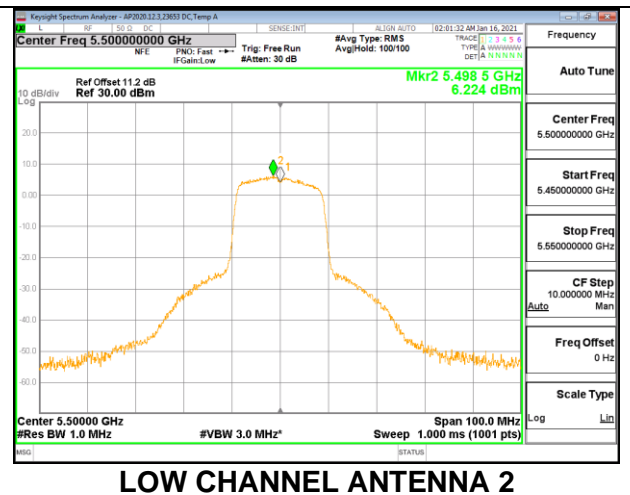
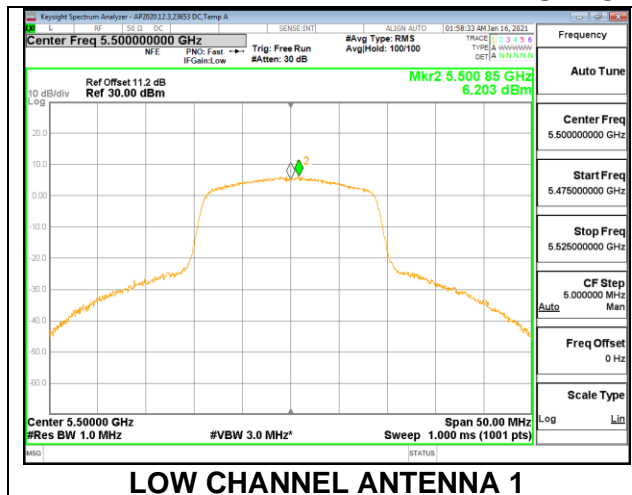
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.65	15.99	18.83	23.46	-4.62
Mid	5580	16.30	16.31	19.32	23.45	-4.14
High	5700	15.22	15.79	18.52	23.46	-4.93

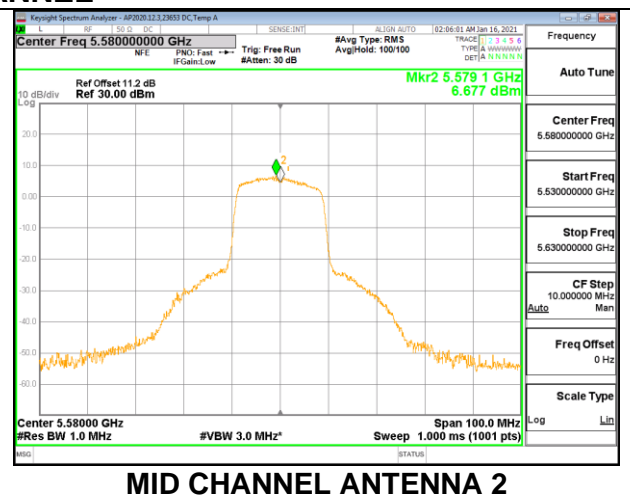
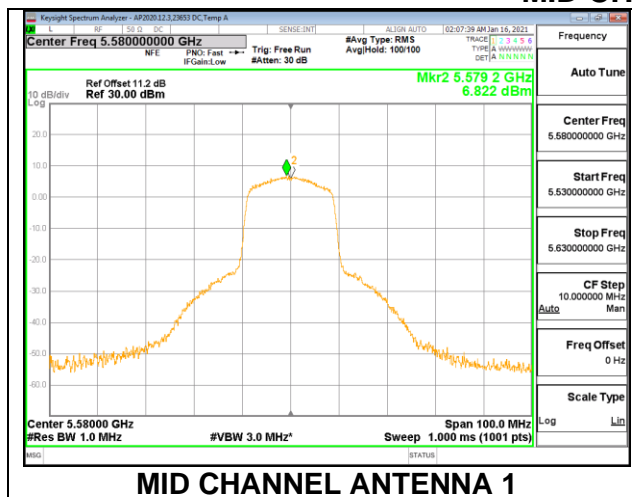
#### PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	6.203	6.224	9.224	9.85	-0.63
Mid	5580	6.822	6.677	9.760	9.85	-0.09
High	5700	5.930	5.945	8.948	9.85	-0.90

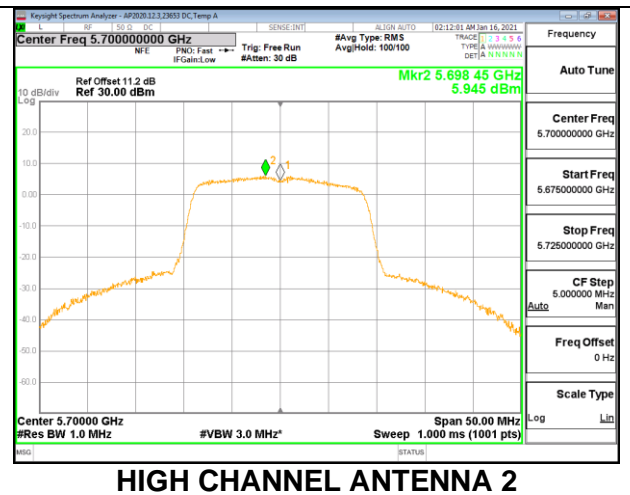
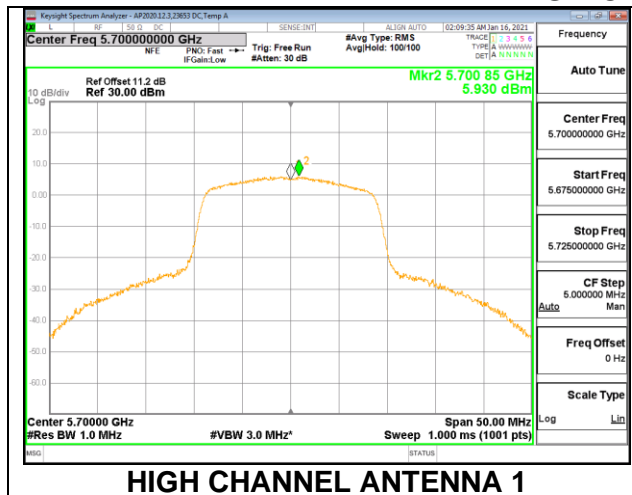
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL



### 9.5.7. 802.11a MODE IN THE 5.8 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

<b>Test Engineer:</b>	16069 OG
<b>Test Date:</b>	12/09/2020

#### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBm)	FCC/ISED Power Limit (dBm)	FCC/ISED PSD Limit (dBm/500KHz)
Low	5745	3.49	6.48	30.00	29.52
Mid	5785	3.49	6.48	30.00	29.52
High	5825	3.49	6.48	30.00	29.52

<b>Duty Cycle CF (dB)</b>	0.61	<b>Included in Calculations of Corr'd PSD</b>
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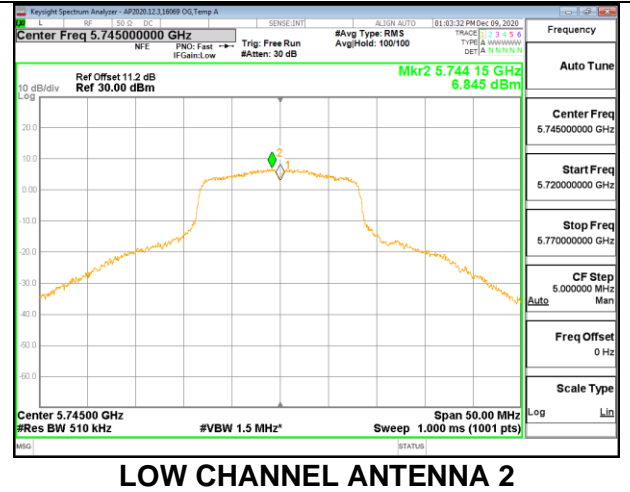
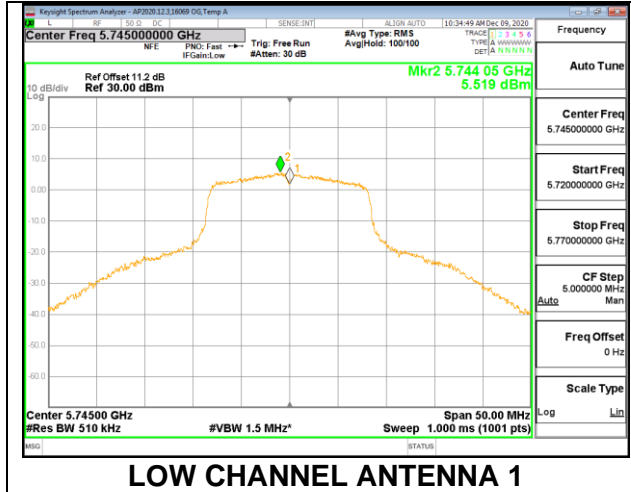
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	18.77	19.94	22.40	30.00	-7.60
Mid	5785	18.77	19.97	22.42	30.00	-7.58
High	5825	19.56	19.49	22.54	30.00	-7.46

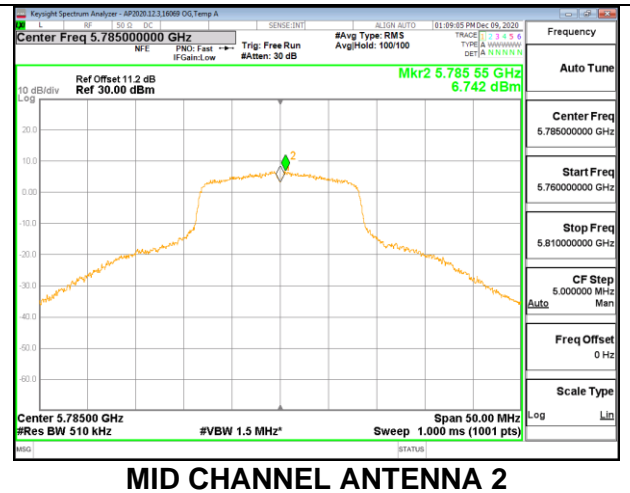
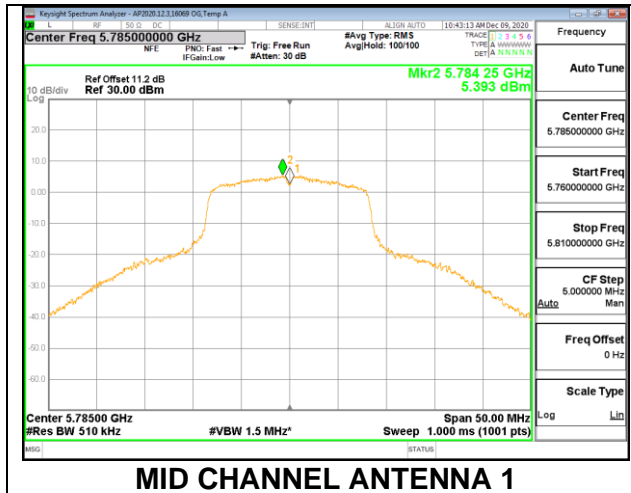
#### PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm/500KHz)	Antenna 2 Meas PSD (dBm/500KHz)	Total Corr'd PSD (dBm/500KHz)	PSD Limit (dBm/500KHz)	PSD Margin (dB)
Low	5745	5.519	6.845	9.853	29.52	-19.67
Mid	5785	5.393	6.742	9.740	29.52	-19.78
High	5825	6.649	5.741	9.839	29.52	-19.68

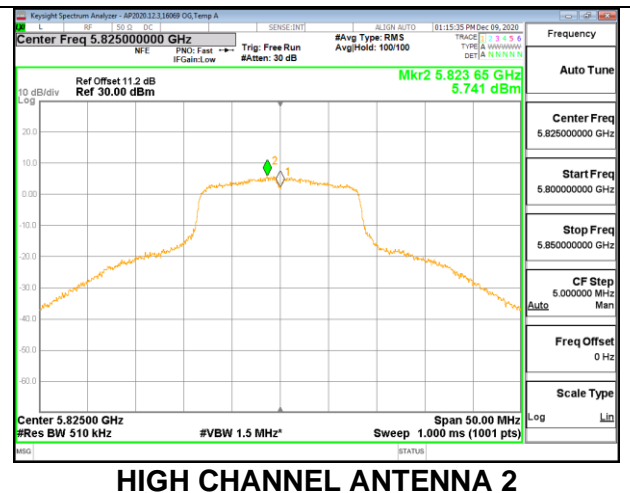
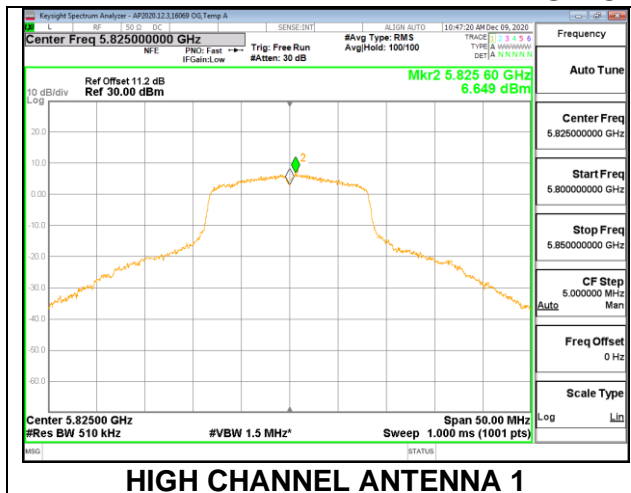
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL



### 9.5.8. 802.11n HT20 MODE IN THE 5.8 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE (FCC+IC)

<b>Test Engineer:</b>	16069 OG
<b>Test Date:</b>	12/09/2020

#### Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBm)	FCC/ISED Power Limit (dBm)	FCC/ISED PSD Limit (dBm/500KHz)
Low	5745	3.49	6.48	30.00	29.52
Mid	5785	3.49	6.48	30.00	29.52
High	5825	3.49	6.48	30.00	29.52

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
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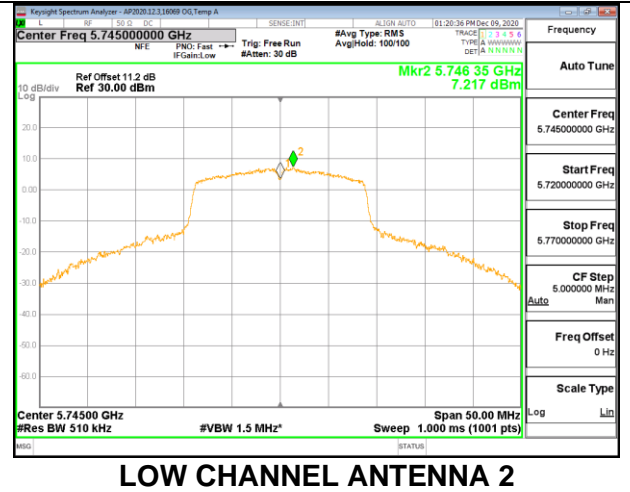
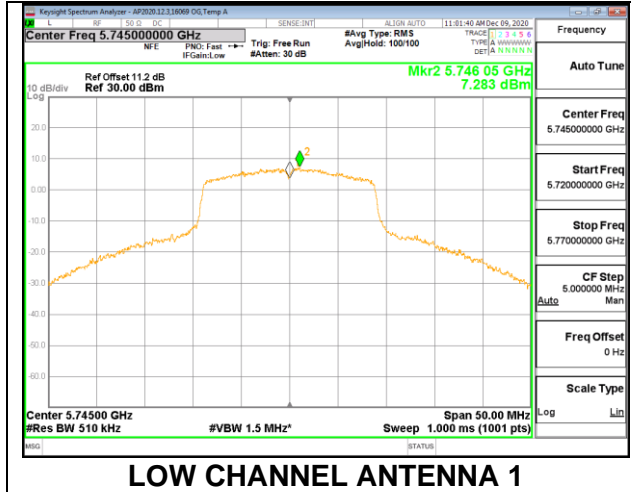
#### Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	20.52	21.96	24.31	30.00	-5.69
Mid	5785	20.84	21.82	24.37	30.00	-5.63
High	5825	21.43	21.51	24.48	30.00	-5.52

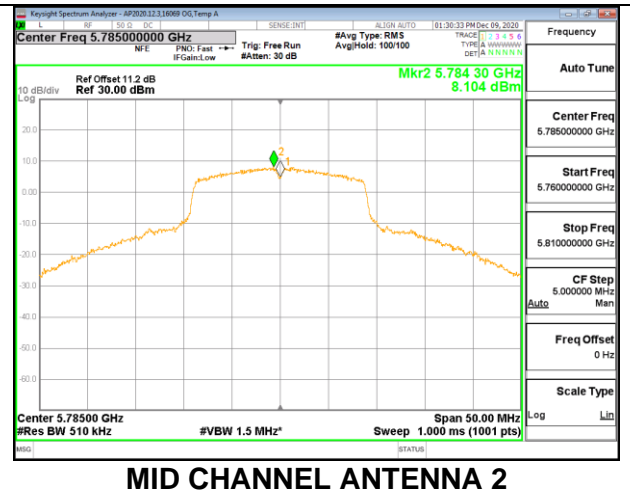
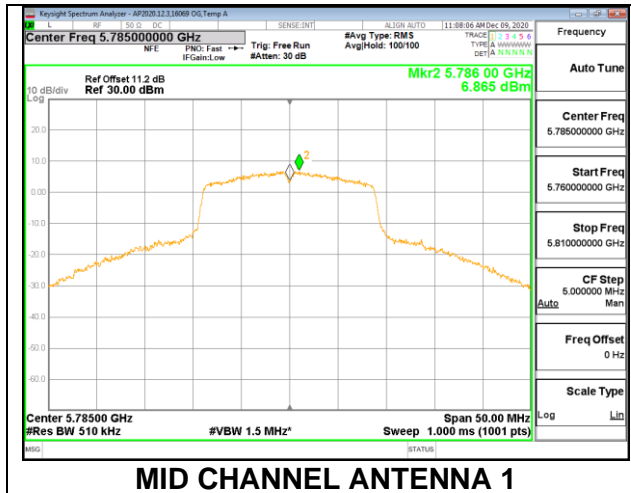
#### PSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PSD (dBm/500KHz)	Antenna 2 Meas PSD (dBm/500KHz)	Total Corr'd PSD (dBm/500KHz)	PSD Limit (dBm/500KHz)	PSD Margin (dB)
Low	5745	7.283	7.217	10.260	29.52	-19.26
Mid	5785	6.865	8.104	10.539	29.52	-18.98
High	5825	7.656	7.719	10.698	29.52	-18.82

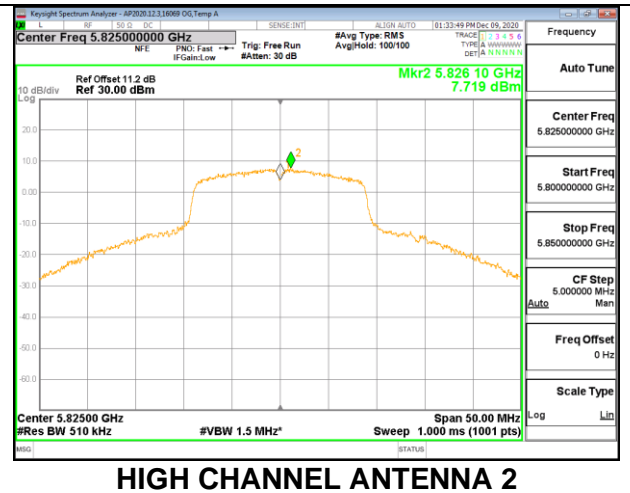
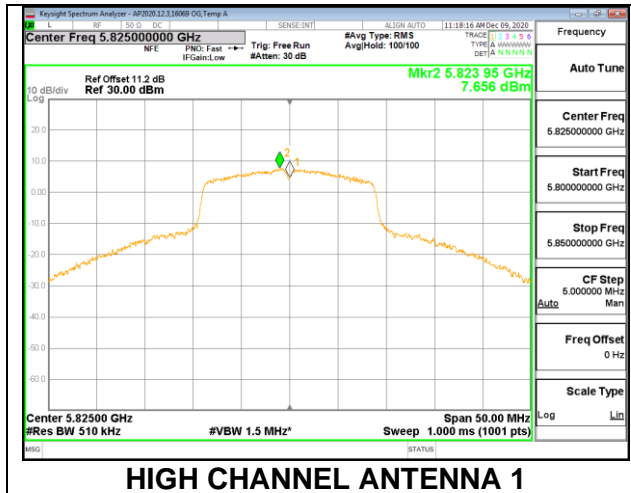
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL





## 10. RADIATED TEST RESULTS – E1915 ANTENNA

### 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

RSS 247 Issue 2 Sections

6.2.1.2 (for 5150-5250 MHz band)

6.2.2.2 (for 5250-5350 MHz band)

6.2.3.2 (for 5470-5600 MHz and 5650-5725 MHz bands)

6.2.4.2 (for 5725-5850 MHz band)

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 in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

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. Blue color trace on plots: Parallel orientation. Green color trace on plots: Perpendicular orientation.

#### **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.

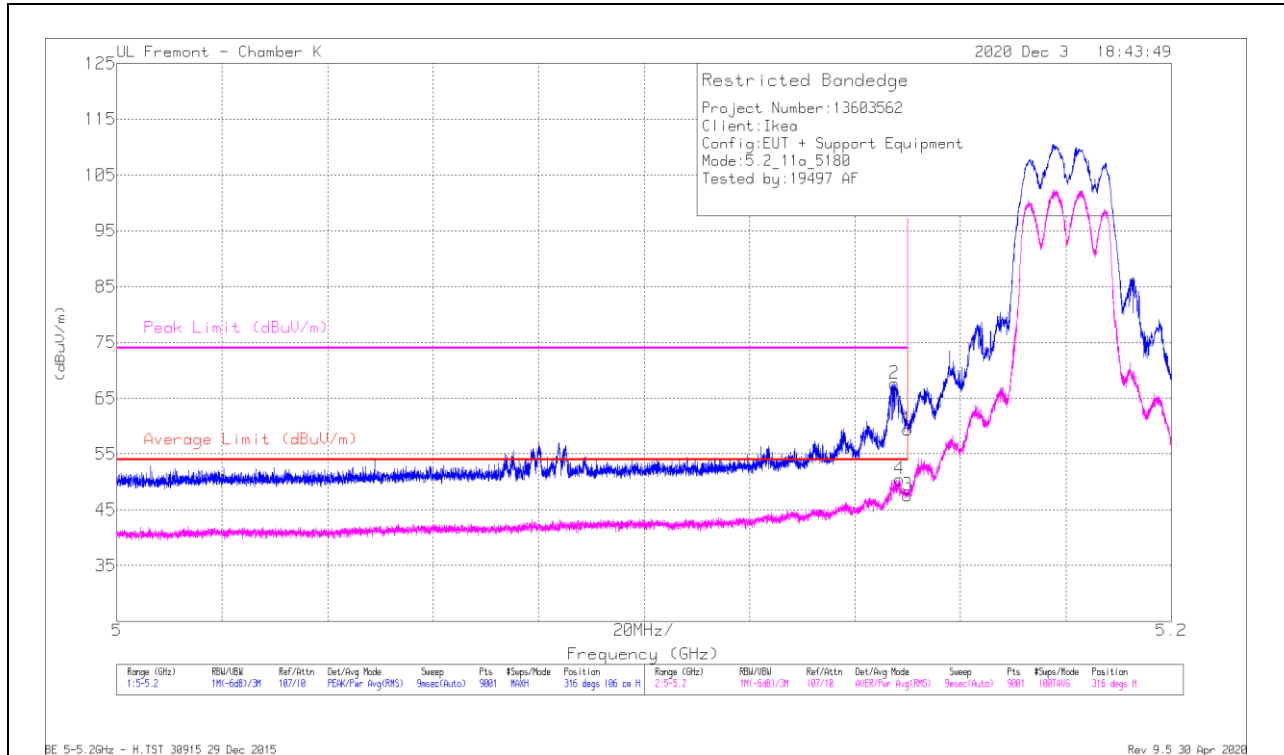
## 10.1. TRANSMITTER ABOVE 1 GHz

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

#### 2TX Antenna 1 + Antenna 2 CDD MODE

#### BANDEDGE (LOW CHANNEL)

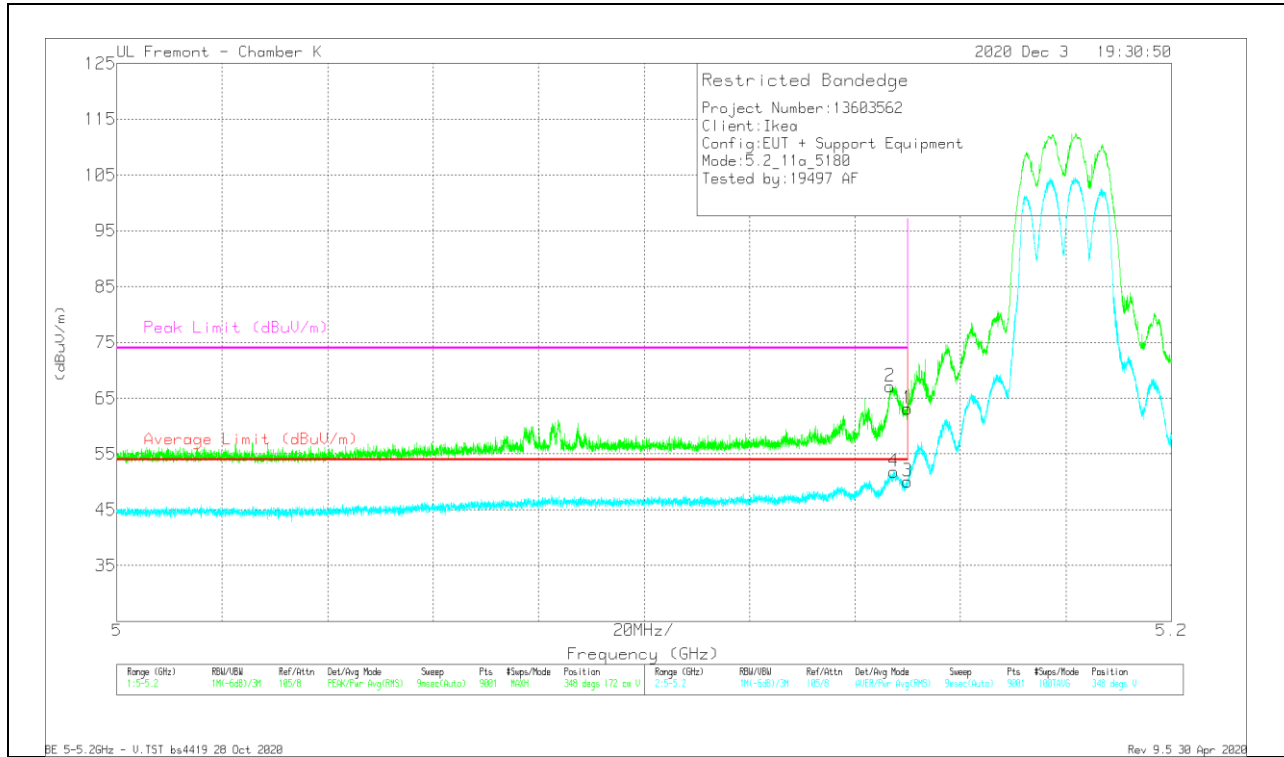
#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBu)	Det	AF T863 (dB/m)	Amp/Cb/Filtr/Par d (dB)	DC Corr (dB)	Corrected Reading (dBuVm)	Average Limit (dBuVm)	Margin (dB)	Peak Limit (dBuVm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	55.84	Pk	34.6	-31	0	59.44	-	-	74	-14.56	316	106	H
2	5.14751	64.16	Pk	34.5	-31	0	67.66	-	-	74	-6.34	316	106	H
3	5.15	43.35	RMS	34.6	-31	0.61	47.56	54	-6.44	-	-	316	106	H
4	5.14847	46.32	RMS	34.5	-31	0.61	50.43	54	-3.57	-	-	316	106	H

Pk - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT

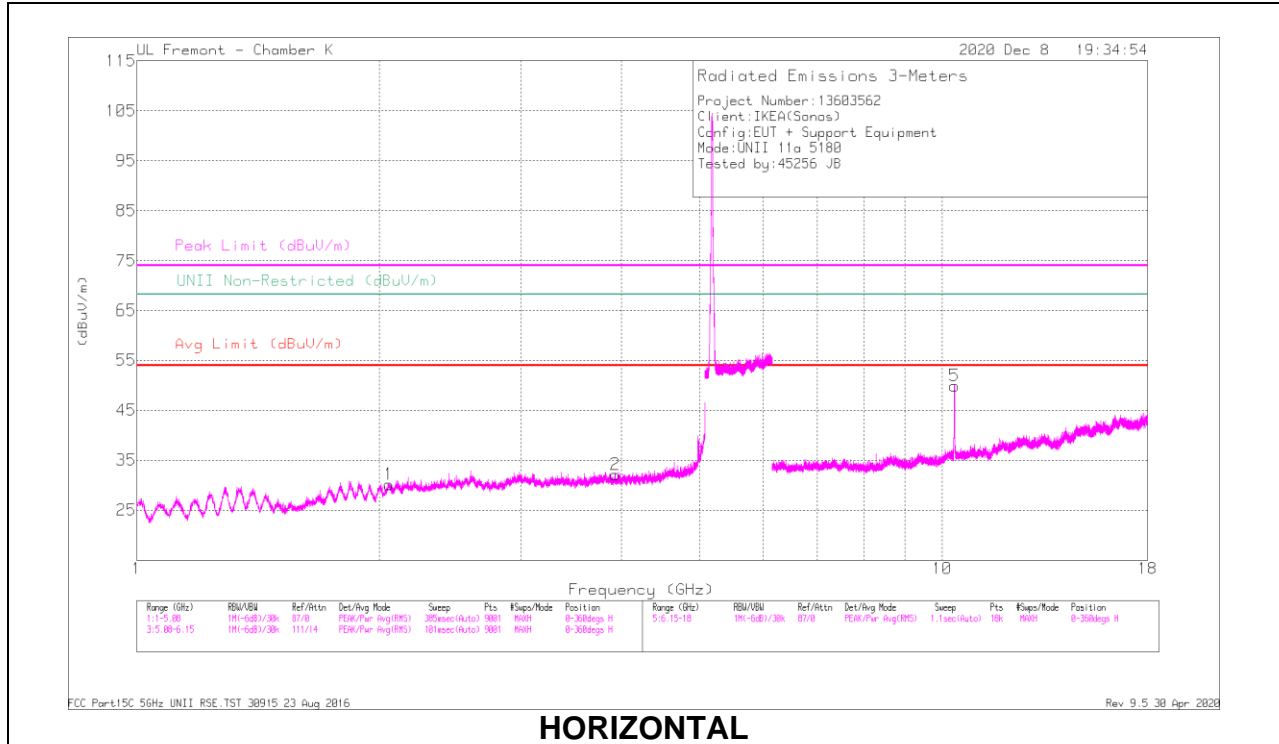


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cal/Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	36.17	Pk	34.6	-7.6	0	63.17	-	-	74	-10.83	348	172	V
2	5.14669	40.22	Pk	34.5	-7.6	0	67.12	-	-	74	-6.88	348	172	V
3	5.15	22.45	RMS	34.6	-7.6	0.61	50.06	54	-3.94	-	-	348	172	V
4	5.1474	24.27	RMS	34.5	-7.6	0.61	51.78	54	-2.22	-	-	348	172	V

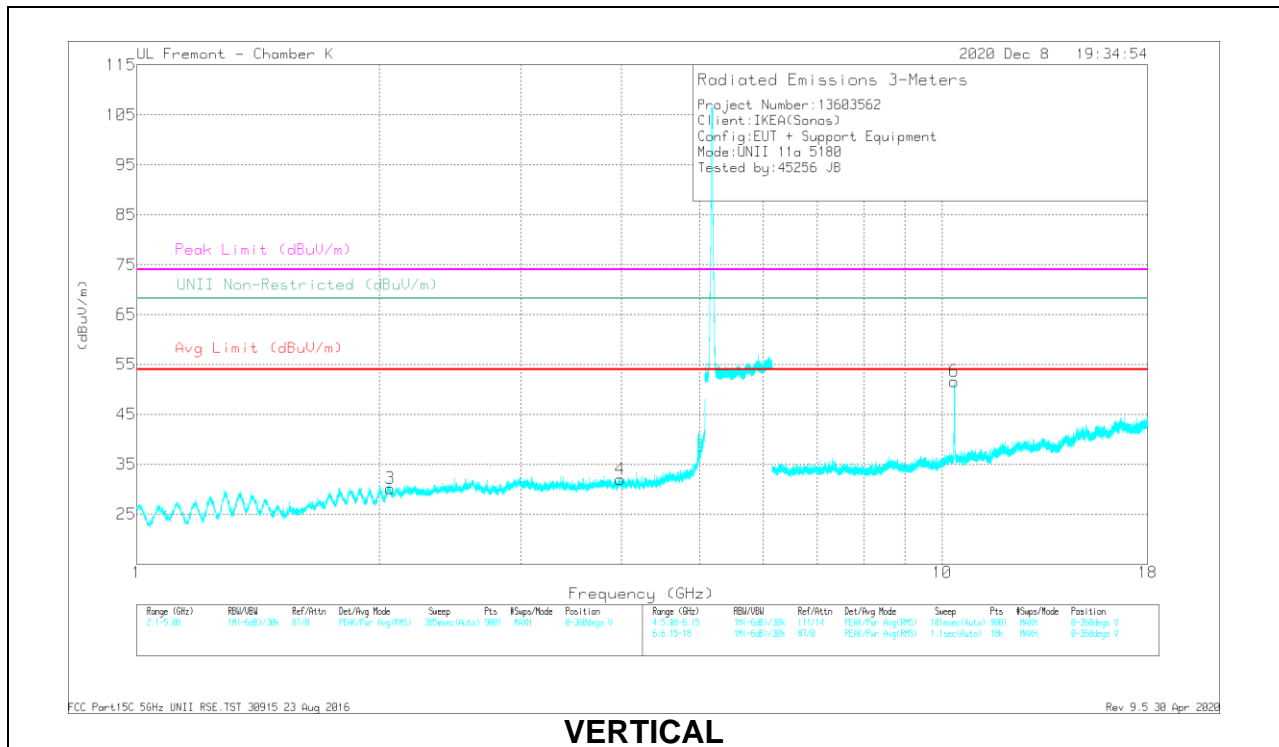
Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



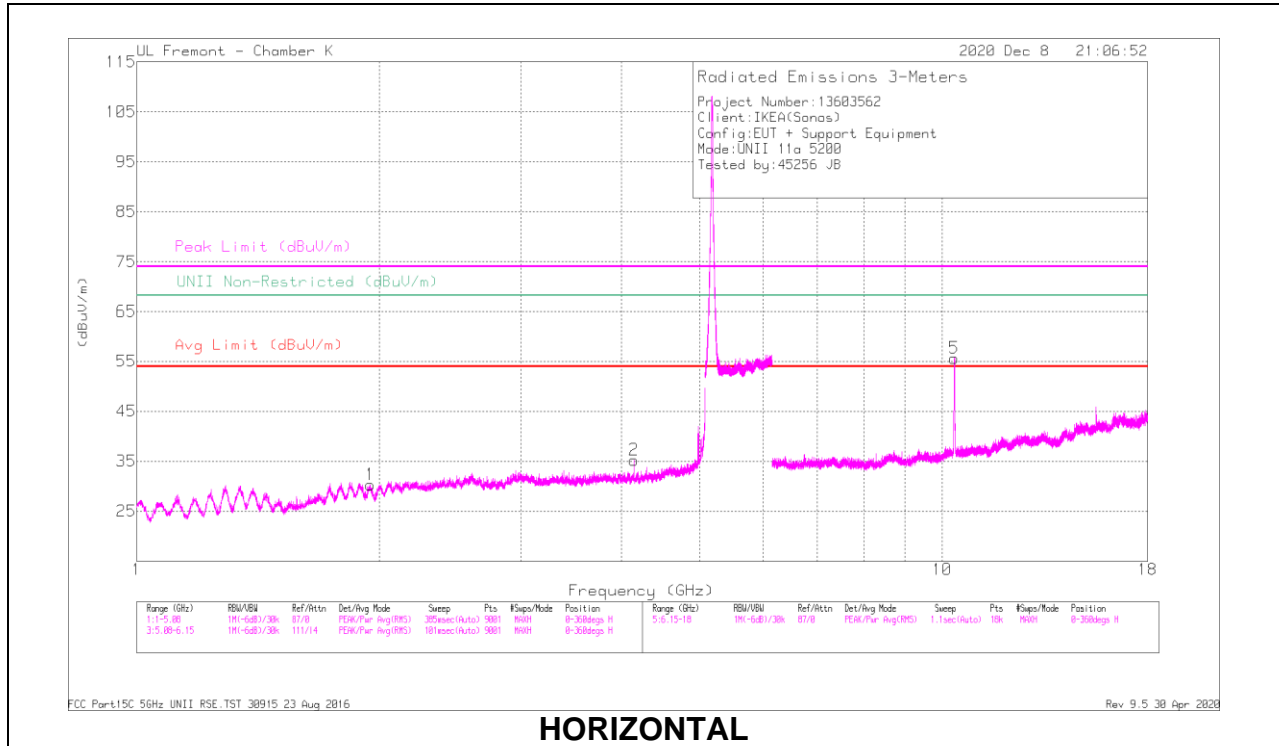
**VERTICAL**

### RADIATED EMISSIONS

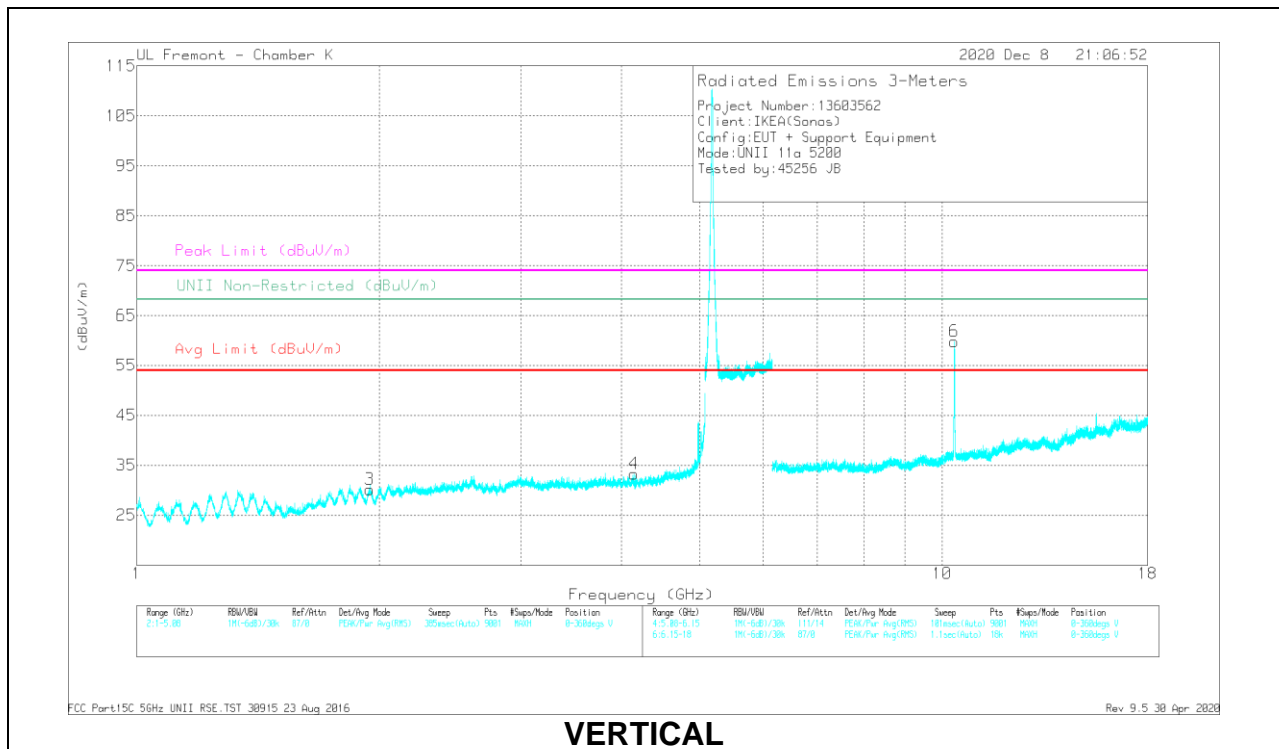
Frequency (MHz)	Mask Reading (dBm)	Dist	AF 100 (dBm)	AmpCoeffInPad (dB)	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBm/100kHz)	Margin (dB)	Peak Limit (dBm/100kHz)	PK Margin (dB)	UNEI Non-Restricted (dBm/100kHz)	PK Margin (dB)	Azimuth (Degs)	Height (m)	Polarity
* 3.9301	49.48	PK-U	33.6	-41.9	0	40.18	-	-	74	-33.82	-	-	51	105	H
* 3.92996	36.87	ADR	33.6	-41.9	0.61	29.18	54	-24.82	-	-	-	-	51	105	H
2.05855	53.09	PK-U	31.5	-45.9	0	38.69	-	-	-	-	68.2	-29.51	282	276	H
* 3.98424	48.15	PK-U	33.6	-41.8	0	39.95	-	-	74	-34.05	-	-	75	317	V
* 3.98422	36.87	ADR	33.6	-41.8	0.61	29.28	54	-24.72	-	-	-	-	75	317	V
2.06101	53.36	PK-U	31.5	-45.9	0	38.96	-	-	-	-	68.2	-29.24	288	284	V
10.36356	57.46	PK-U	37.6	-37.2	0	57.86	-	-	-	-	68.2	-10.34	185	96	H
10.36846	58.48	PK-U	37.6	-37.2	0	58.88	-	-	-	-	68.2	-9.32	232	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

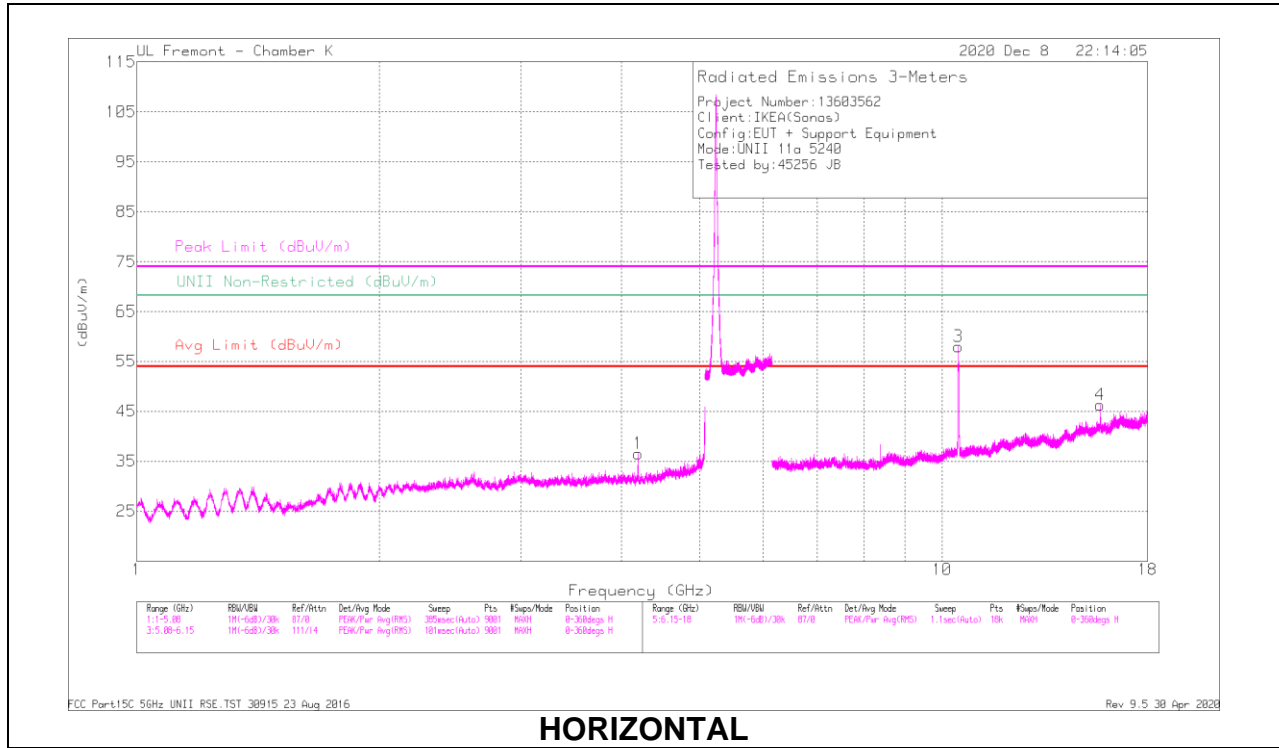
**RADIATED EMISSIONS**

Frequency (MHz)	Mean Reading (dBm)	Dist	AF 1003 (dBm)	AmpCoeff (dB)	DC Corr (dB)	Corrected Reading (dBm)	Avg Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	UNI Non-Restricted (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.14518	50.07	PK-U	33.6	-41.8	0	41.87	-	-	74	-32.13	-	-	360	115	H
* 4.14397	39.82	ADR	33.6	-41.8	0.61	32.23	54	-21.77	-	-	-	-	360	115	H
1.94842	53.43	PK-U	30.8	-45.5	0	38.73	-	-	-	-	68.2	-29.47	224	166	H
* 4.14389	49.22	PK-U	33.6	-41.8	0	41.02	-	-	74	-32.98	-	-	0	206	V
* 4.14395	39.06	ADR	33.6	-41.8	0.61	31.46	54	-22.54	-	-	-	-	0	206	V
1.94573	53.12	PK-U	30.8	-45.5	0	38.42	-	-	-	-	68.2	-29.78	10	366	V
10.36011	61.22	PK-U	37.6	-37.2	0	61.62	-	-	-	-	68.2	-6.56	203	202	H
10.36319	62.19	PK-U	37.6	-37.2	0	62.59	-	-	-	-	68.2	-5.61	237	102	V

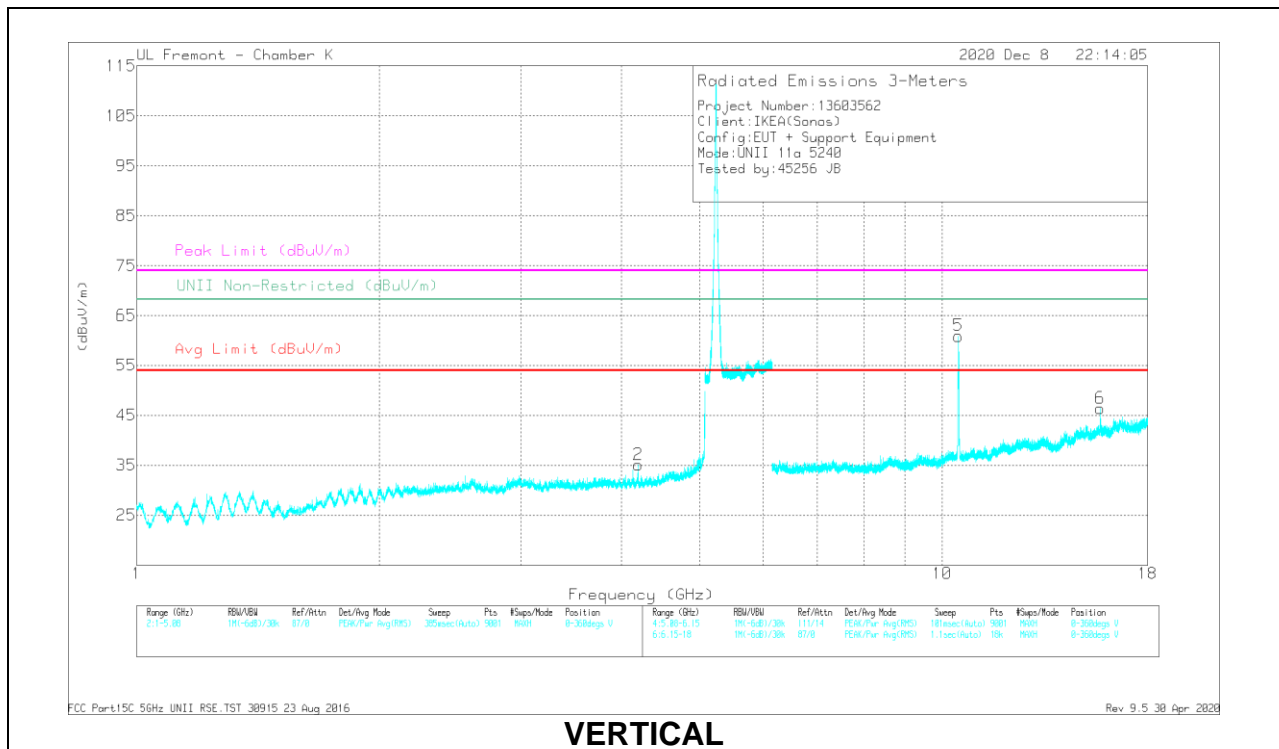
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average



### HIGH CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Frequency (MHz)	Meas Reading (dBµV)	Det	AF Tm3 (dBm)	Amp/Cat/Pwr/Fed (dB)	DC Corr (dB)	Corrected Reading (dBµV/m)	Avg Limit (dBµV/m)	Margin (dB)	Peak Limit (dBµV/m)	PK Margin (dB)	UNI Non-Restricted (dBµV/m)	PK Margin (dB)	Azimuth (Degs)	Height (m)	Polarity
* 4.19191	50.38	PK-U	33.6	-41.7	0	42.68	-	-	74	-31.12	-	-	344	109	H
* 4.19196	42.91	ADR	33.6	-41.7	0.61	35.42	54	-18.58	-	-	-	-	344	109	H
* 4.19212	50.76	PK-U	33.6	-41.7	0	42.66	-	-	74	-31.34	-	-	167	127	V
* 4.19196	42.15	ADR	33.6	-41.7	0.61	34.67	54	-19.33	-	-	-	-	167	127	V
10.48161	62.49	PK-U	37.8	-37.2	0	63.09	-	-	-	-	68.2	-5.11	136	217	H
* 15.71753	47.48	PK-U	40.9	-34.2	0	54.18	-	-	74	-19.82	-	-	129	97	H
* 15.71888	35.1	ADR	40.8	-34.2	0.61	42.31	54	-11.69	-	-	-	-	129	97	H
10.48166	66.04	PK-U	37.8	-37.2	0	66.64	-	-	-	-	68.2	-1.56	166	177	V
* 15.71745	48.3	PK-U	40.9	-34.2	0	55	-	-	74	-19	-	-	154	107	V
* 15.71835	36.56	ADR	40.9	-34.2	0.61	43.87	54	-10.13	-	-	-	-	134	107	V

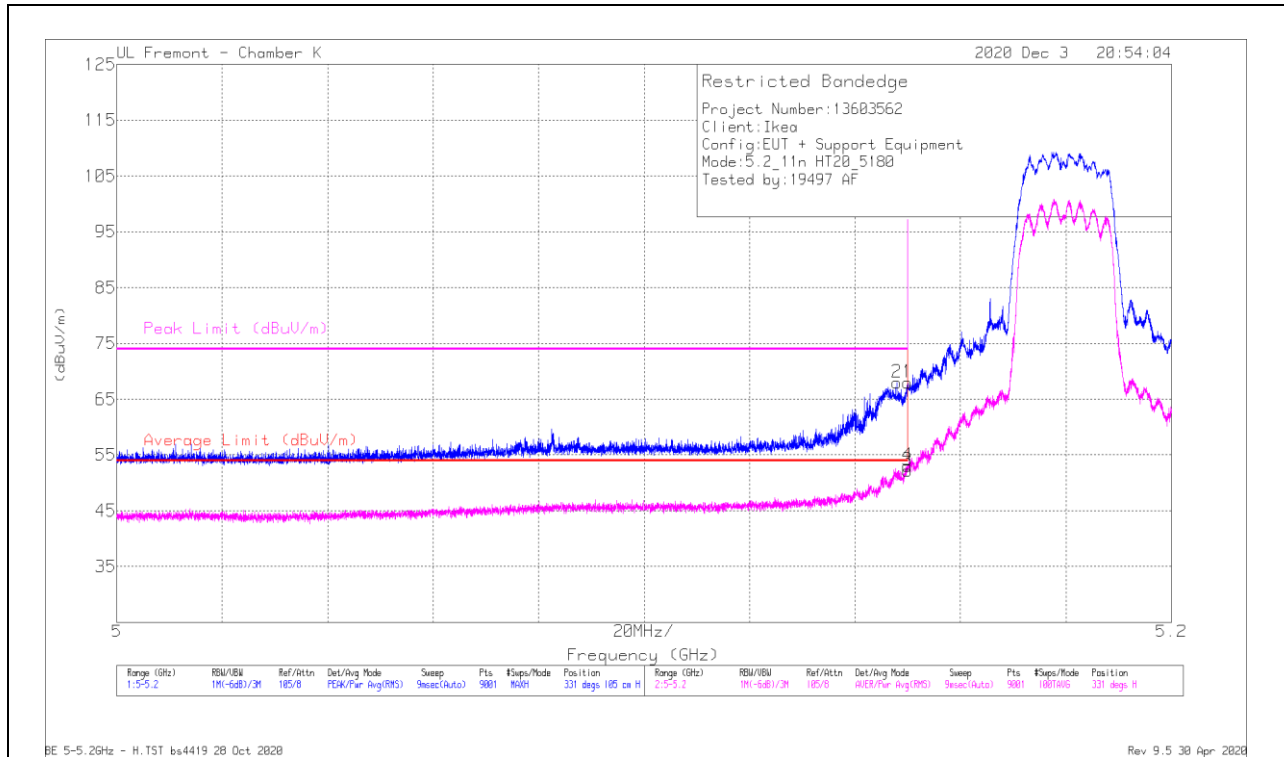
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
 PK-U - U-NII: Maximum Peak  
 ADR - U-NII AD primary method, RMS average

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

#### 2TX Antenna 1 + Antenna 2 CDD MODE

#### BANDEDGE (LOW CHANNEL)

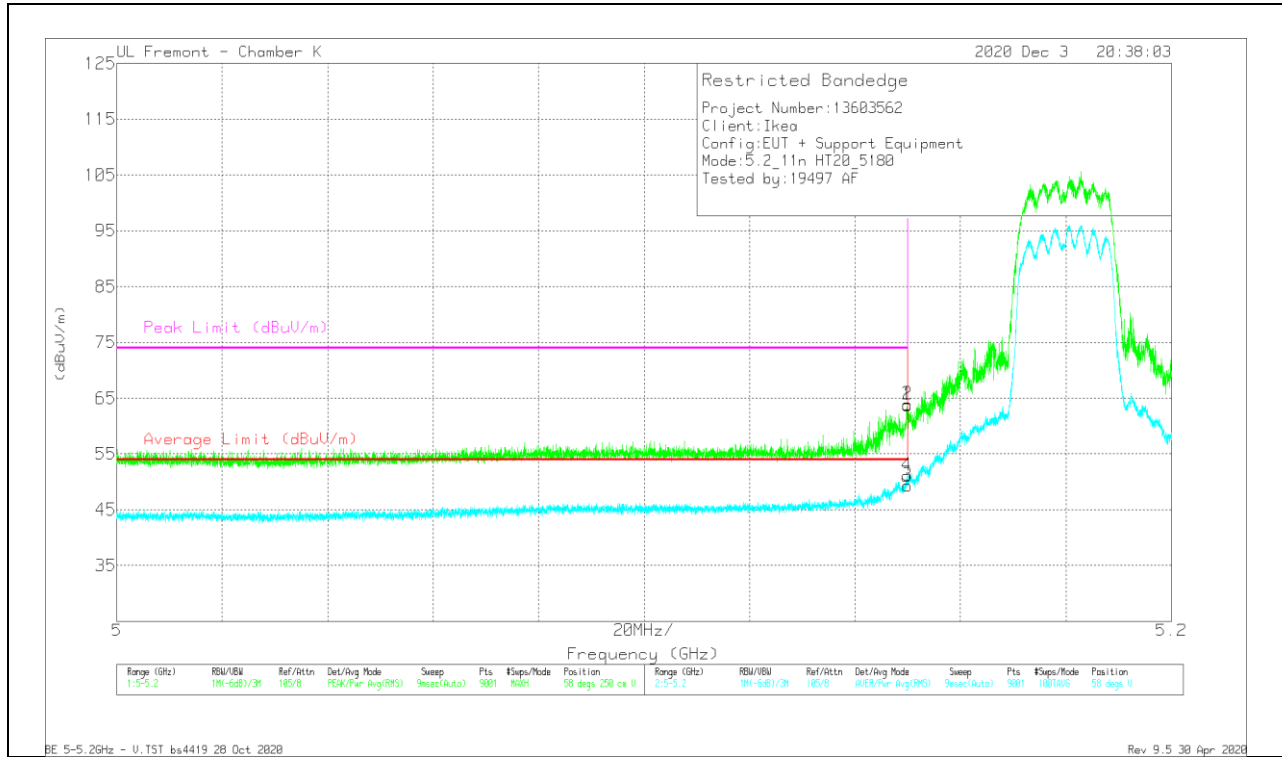
#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dBm)	Amp/CB/Filtr/Par d (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	41.02	Pk	34.6	-7.6	0	66.02	-	-	74	-5.98	331	105	H
2	5.14798	41.03	Pk	34.5	-7.6	0	67.93	-	-	74	-6.07	331	105	H
3	5.15	25.05	RMS	34.6	-7.6	0	52.05	54	-1.95	-	-	331	105	H
4	5.14993	25.92	RMS	34.6	-7.6	0	52.92	54	-1.08	-	-	331	105	H

Pk - Peak detector  
 RMS - RMS detection

### VERTICAL RESULT

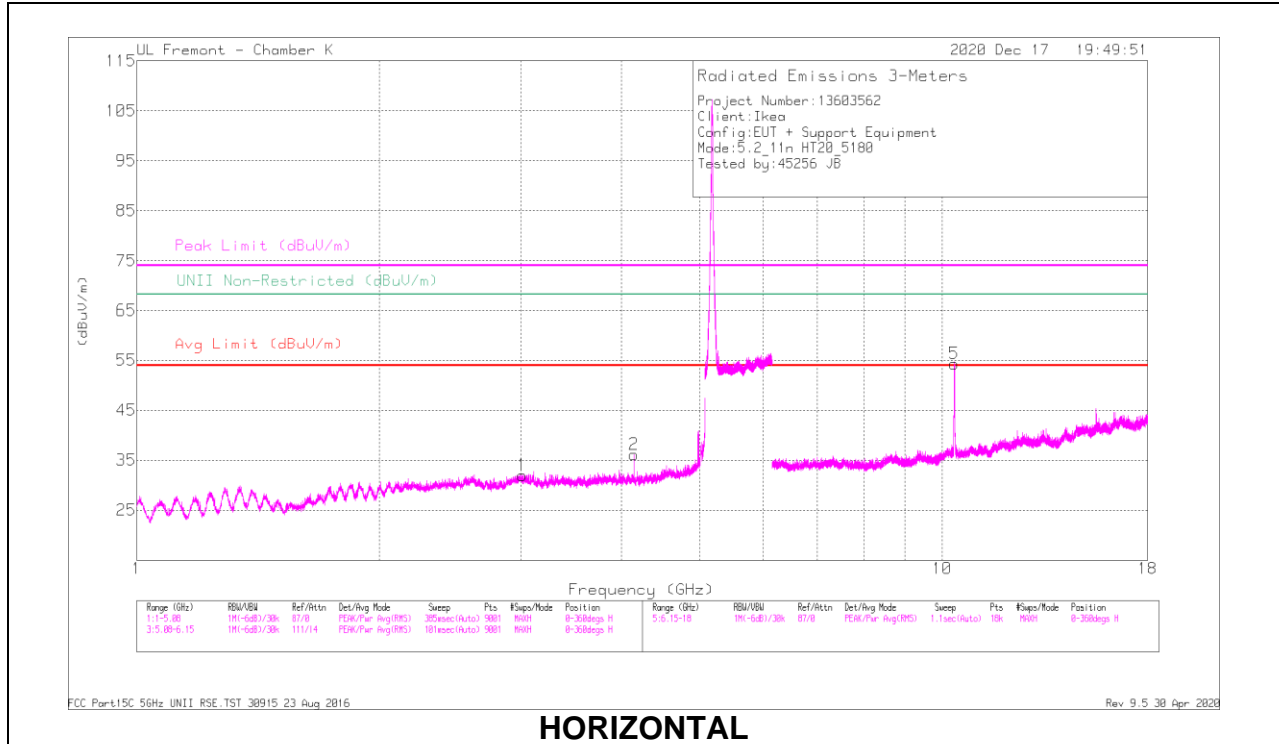


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dBm)	Amp/Ca/Filt/Par d (dB)	DC Corr (dB)	Corrected Reading (dBuVm)	Average Limit (dBuVm)	Margin (dB)	Peak Limit (dBuVm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	36.81	Pk	34.6	-7.6	0	63.81	-	-	74	-10.19	58	250	V
2	5.14998	36.93	Pk	34.6	-7.6	0	63.93	-	-	74	-10.07	58	250	V
3	5.15	22.22	RMS	34.6	-7.6	0	49.22	54	-4.78	-	-	58	250	V
4	5.14989	23.94	RMS	34.6	-7.6	0	50.94	54	-3.06	-	-	58	250	V

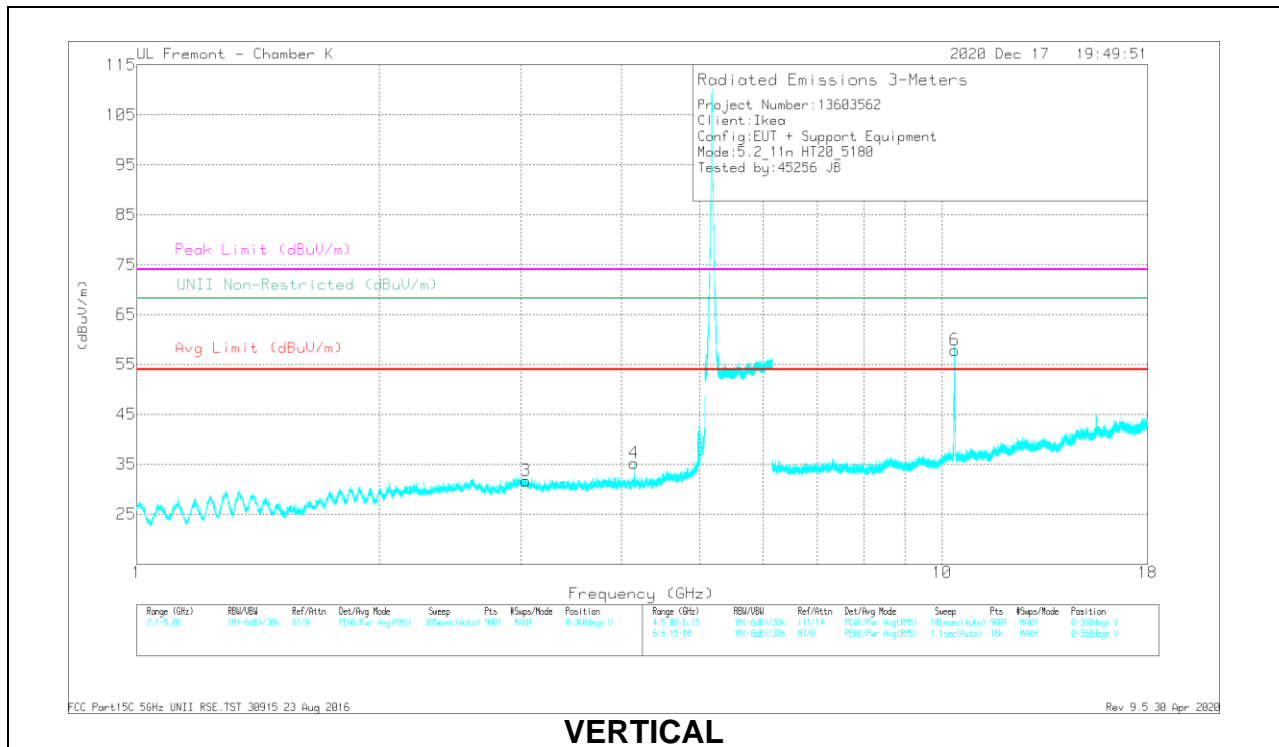
Pk - Peak detector  
 RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS

## LOW CHANNEL RESULTS



**HORIZONTAL**



**VERTICAL**

### RADIATED EMISSIONS

Frequency (MHz)	Mean Reading (dBµV)	Dist	AF 100 (dBm)	AmpCoeff (dB)	DC Corr (dB)	Corrected Reading (dBµV/m)	Avg Limit (dBµV/m)	Margin (dB)	Peak Limit (dBµV/m)	PK Margin (dB)	UNI Non-Restricted (dBµV/m)	PK Margin (dB)	Azimuth (Degs)	Height (m)	Polarity
3.01225	49.59	PK-U	32.9	-42.7	0	39.79	-	-	-	-	68.2	-28.41	47	347	H
* 4.14394	51.3	PK-U	33.6	-41.8	0	43.1	-	-	74	-30.9	-	-	233	103	H
* 4.14394	41.33	ADR	33.6	-41.8	0	33.13	54	-20.87	-	-	-	-	233	103	H
3.04393	48.96	PK-U	33	-42.4	0	39.56	-	-	-	-	68.2	-28.64	242	124	V
* 4.14513	49.34	PK-U	33.6	-41.8	0	40.14	-	-	74	-33.86	-	-	338	394	V
* 4.14187	37.11	ADR	33.6	-41.8	0	28.91	54	-25.09	-	-	-	-	338	394	V
10.35913	51.32	PK-U	37.6	-37.2	0	51.72	-	-	-	-	68.2	-16.48	92	187	H
10.36588	44.3	PK-U	37.6	-37.2	0	44.7	-	-	-	-	68.2	-23.5	172	106	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