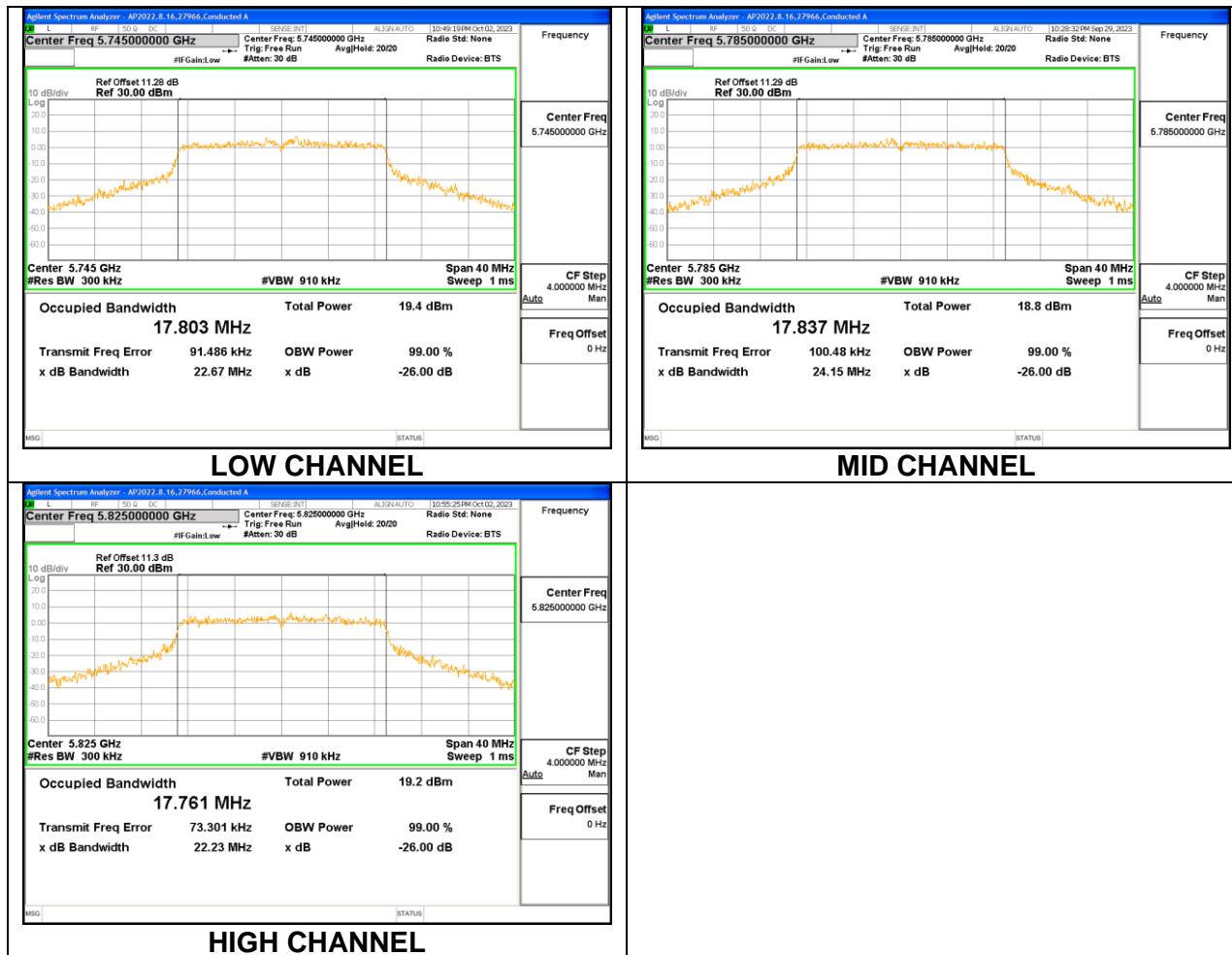


### 9.3.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

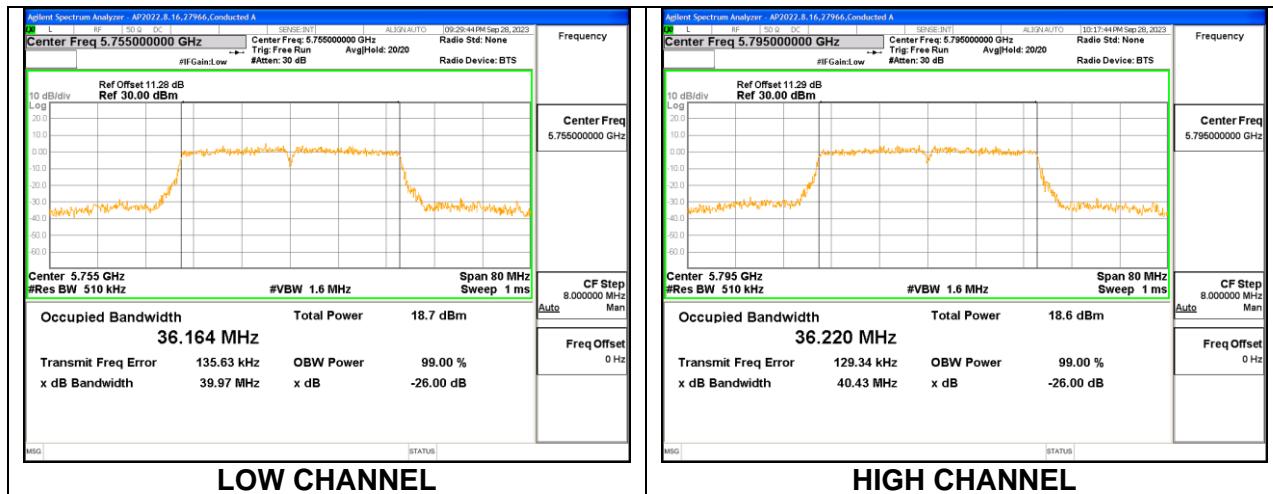
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.803
Mid	5785	17.837
High	5825	17.761



### 9.3.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

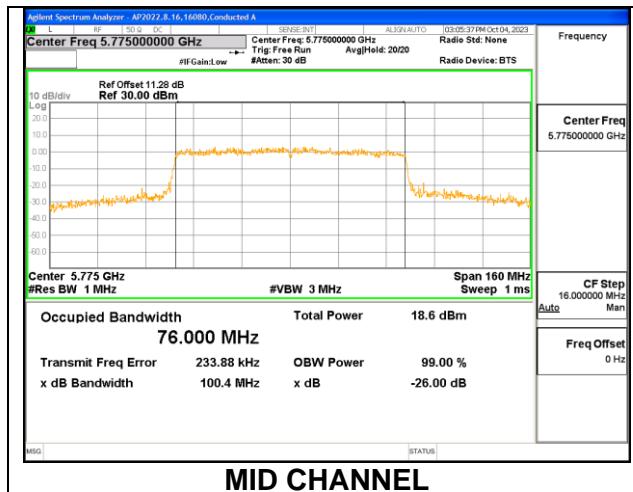
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.164
High	5795	36.220



### 9.3.16. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5775	76.000



## 9.4. 6 dB BANDWIDTH

### LIMITS

FCC §15.407 (e)

RSS-247 6.2.4.1

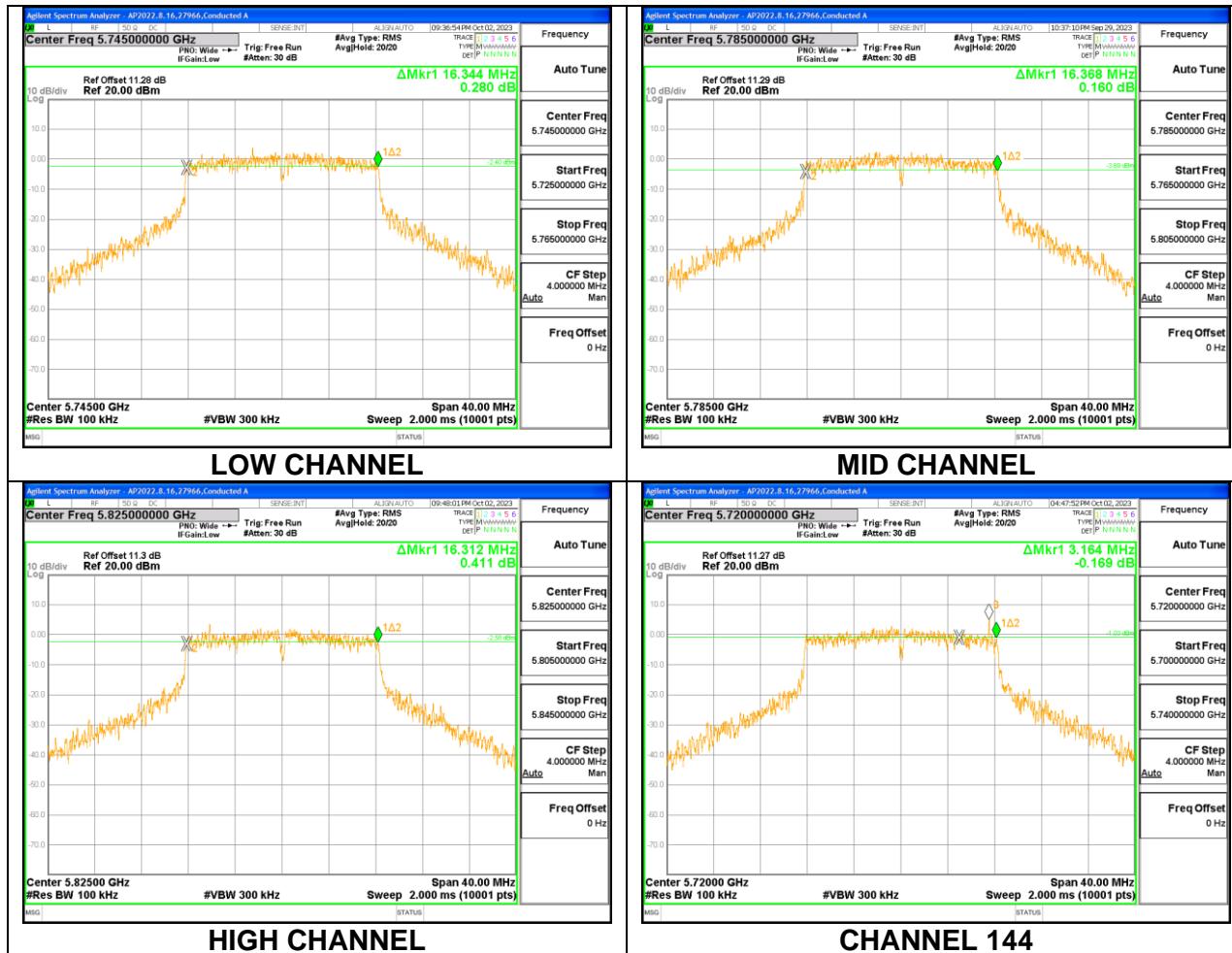
The minimum 6 dB bandwidth shall be at least 500 kHz.

### RESULTS

### 9.4.1. 802.11a MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

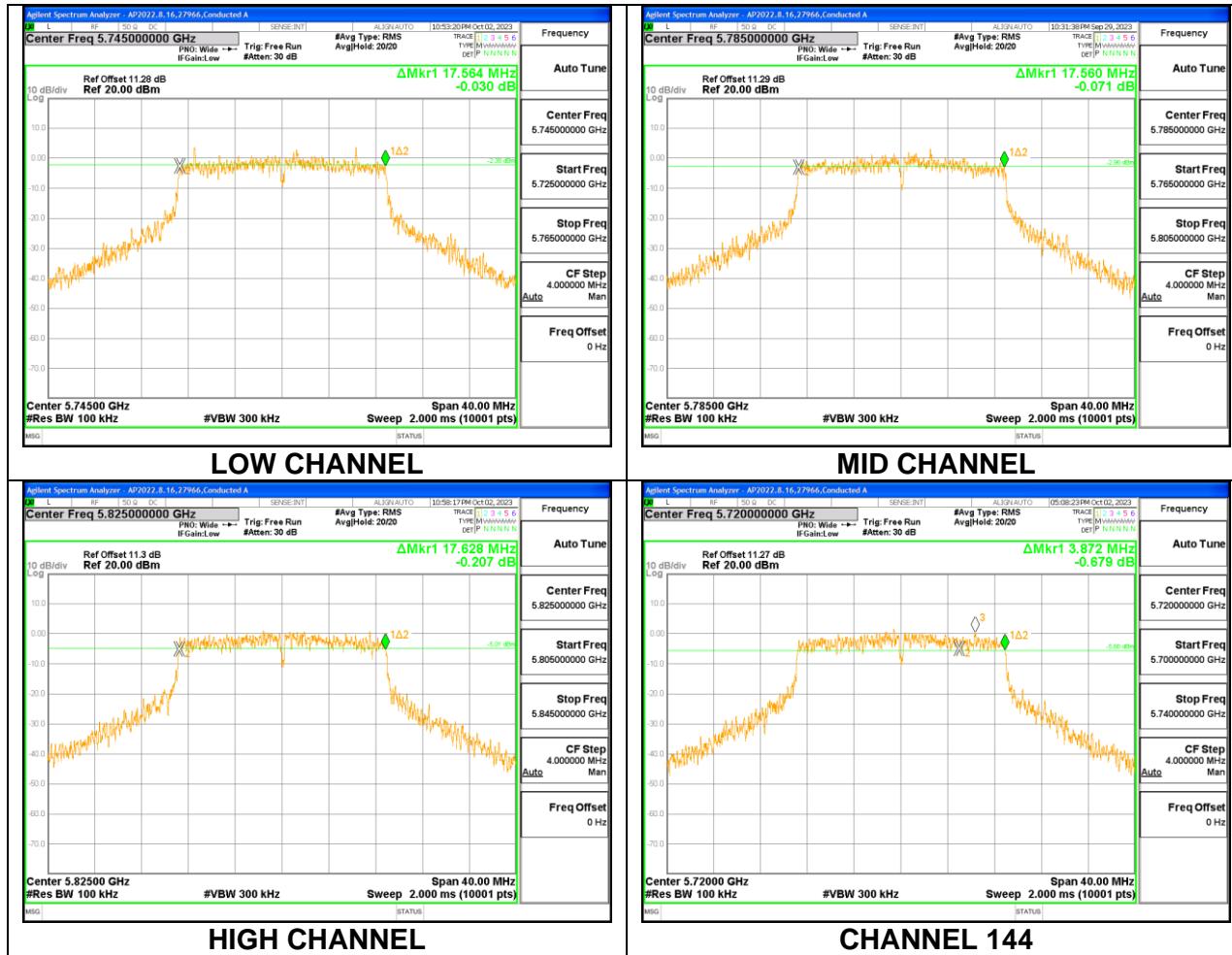
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.344	0.5
Mid	5785	16.368	0.5
High	5825	16.312	0.5
144	5720	3.164	0.5



## 9.4.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

### 1TX Antenna 1 MODE

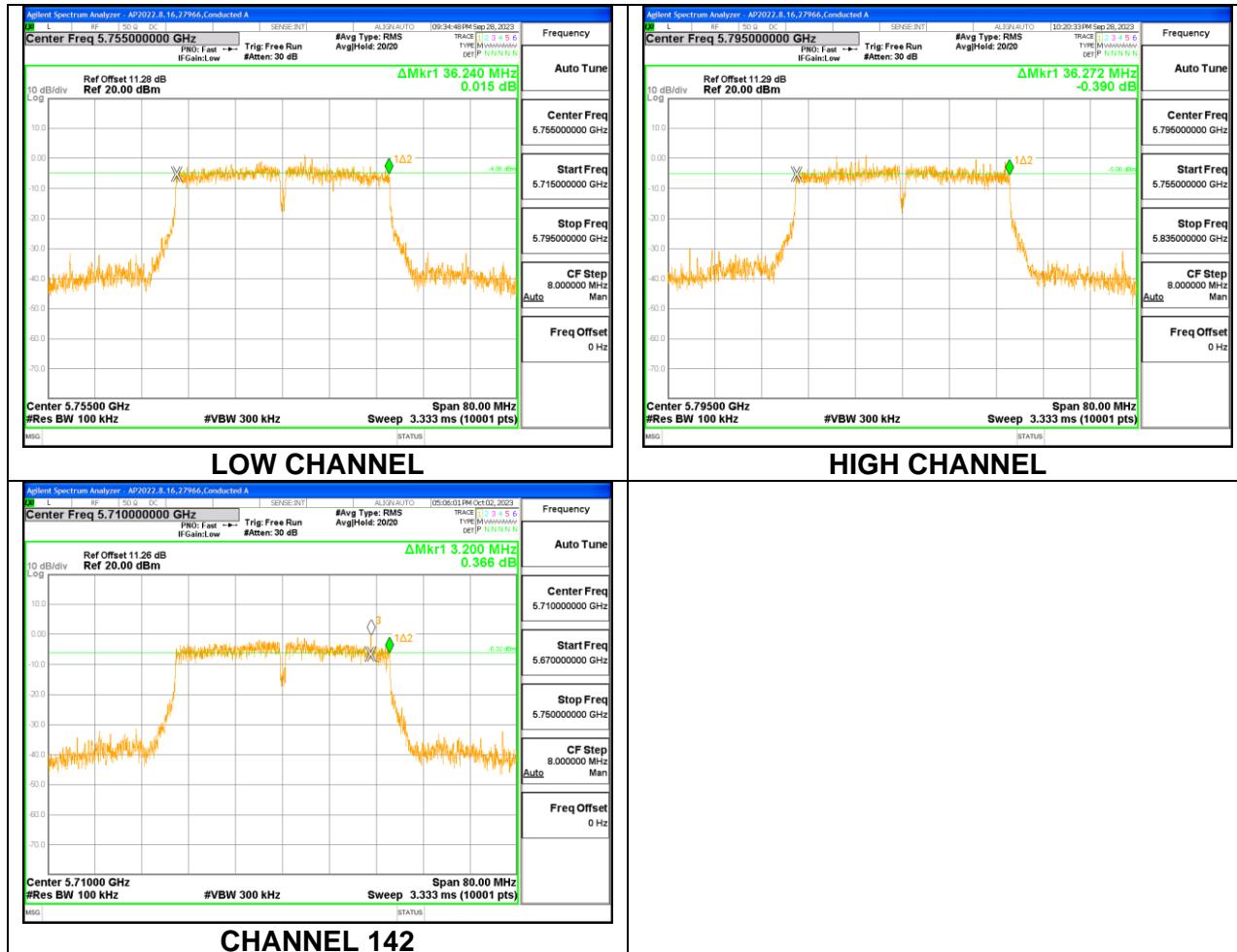
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.564	0.5
Mid	5785	17.560	0.5
High	5825	17.628	0.5
144	5720	3.872	0.5



### 9.4.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND

#### 1TX Antenna 1 MODE

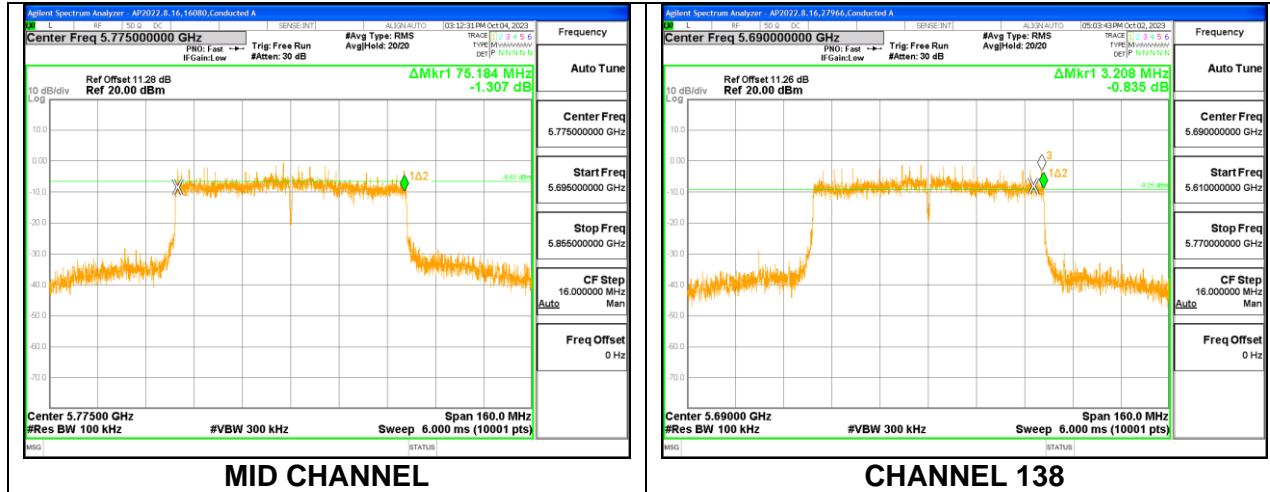
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.240	0.5
High	5795	36.272	0.5
142	5710	3.200	0.5



#### 9.4.4. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

##### 1TX Antenna 1 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.184	0.5
138	5690	3.208	0.5



## 9.5. OUTPUT POWER AND PSD

### LIMITS

#### FCC §15.407

##### **Band 5.15–5.25 GHz (pick the section that applies to your product)**

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### **Bands 5.25-5.35 GHz and 5.47-5.725 GHz**

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### **Band 5.725-5.85 GHz**

The maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

## RSS-247

### **Band 5.15-5.25 GHz**

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 megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

### **Band 5.25-5.35 GHz**

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10}B$ , dBm, whichever 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 is less. B is the 99% emission bandwidth in megahertz. 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 5.47-5.6 GHz and 5.65-5.725 GHz**

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10}B$ , dBm, whichever 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 is less. B is the 99% emission bandwidth in megahertz. 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.

### **Band 5.725-5.85 GHz**

The maximum conducted output power shall not exceed 1 W. The power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

## **TEST PROCEDURE**

The measurement method used for output power is KDB 789033 D02 v02r01, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02 v02r01, Section E.2.b (Method SA-1) was used.

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband average power sensor. Gated average output power was read directly from the power meter.

### **DIRECTIONAL ANTENNA GAIN**

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

<b>Band (MHz)</b>	<b>Antenna Peak Gain (dBi)</b>
5150-5250	0.71
5250-5300	1.07
5500-5700	1.07
5725-5850	1.21

### **RESULTS**

### 9.5.1. 802.11a MODE IN THE 5.2 GHz BAND

#### 1TX Antenna 1 MODE (FCC+IC) MOBILE

Test Engineer:	ZS 16080
Test Date:	2023-09-28

##### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	16.663	0.71
Mid	5200	16.571	0.71
High	5240	16.581	0.71

##### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED EIRP Limit (dBm)	Max ISED Power (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED eirp PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
Low	5180	24.00	22.22	21.51	21.51	11.00	10.00	9.29
Mid	5200	24.00	22.19	21.48	21.48	11.00	10.00	9.29
High	5240	24.00	22.20	21.49	21.49	11.00	10.00	9.29

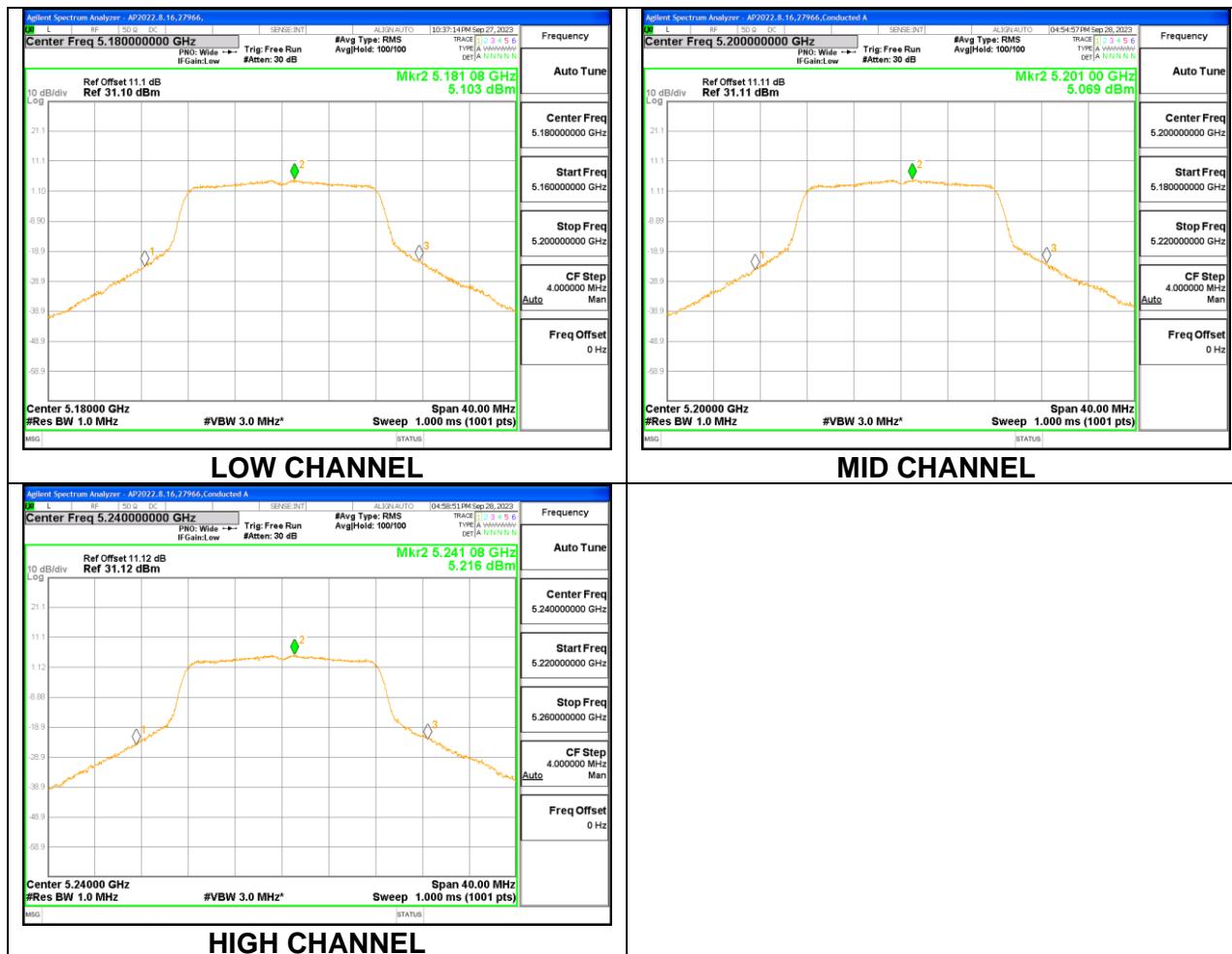
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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##### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.47	16.47	21.51	-5.04
Mid	5200	16.43	16.43	21.48	-5.05
High	5240	16.72	16.72	21.49	-4.77

##### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5180	5.103	5.10	9.29	-4.19
Mid	5200	5.069	5.07	9.29	-4.22
High	5240	5.216	5.22	9.29	-4.07



## 9.5.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

### 1TX Antenna 1 MODE (FCC+IC) MOBILE

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	17.773	0.71
Mid	5200	17.770	0.71
High	5240	17.805	0.71

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED EIRP Limit (dBm)	Max ISED Power (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED eirp PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Low	5180	24.00	22.50	21.79	21.79	11.00	10.00	9.29
Mid	5200	24.00	22.50	21.79	21.79	11.00	10.00	9.29
High	5240	24.00	22.51	21.80	21.80	11.00	10.00	9.29

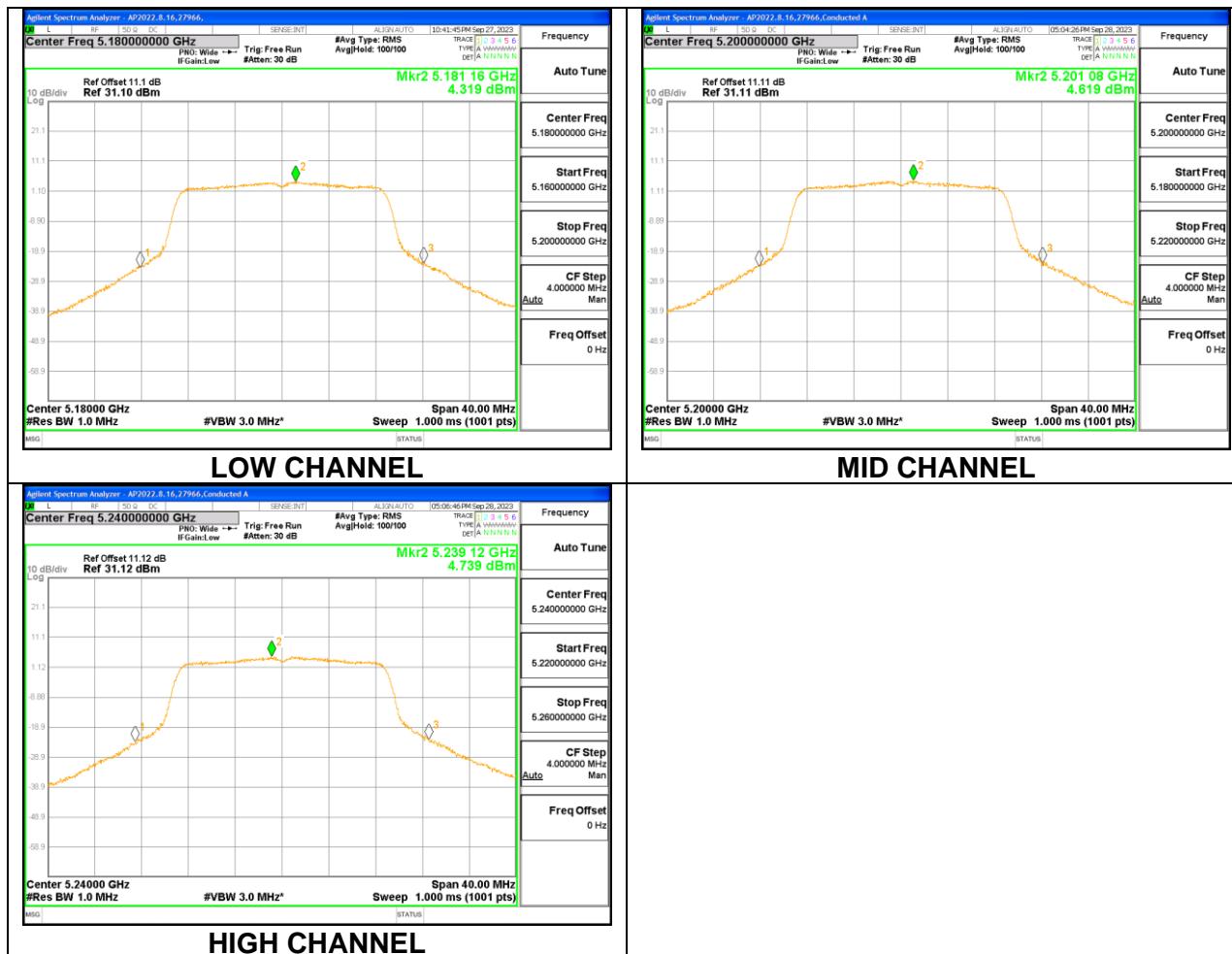
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.36	16.36	21.79	-5.43
Mid	5200	16.30	16.30	21.79	-5.49
High	5240	16.61	16.61	21.80	-5.19

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	4.319	4.32	9.29	-4.97
Mid	5200	4.619	4.62	9.29	-4.67
High	5240	4.739	4.74	9.29	-4.55



### 9.5.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

#### 1TX Antenna 1 MODE (FCC+IC) MOBILE

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5190	36.154	0.71
High	5230	36.175	0.71

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED EIRP Limit (dBm)	Max ISED Power (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED eirp PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Low	5190	24.00	23.00	22.29	22.29	11.00	10.00	9.29
High	5230	24.00	23.00	22.29	22.29	11.00	10.00	9.29

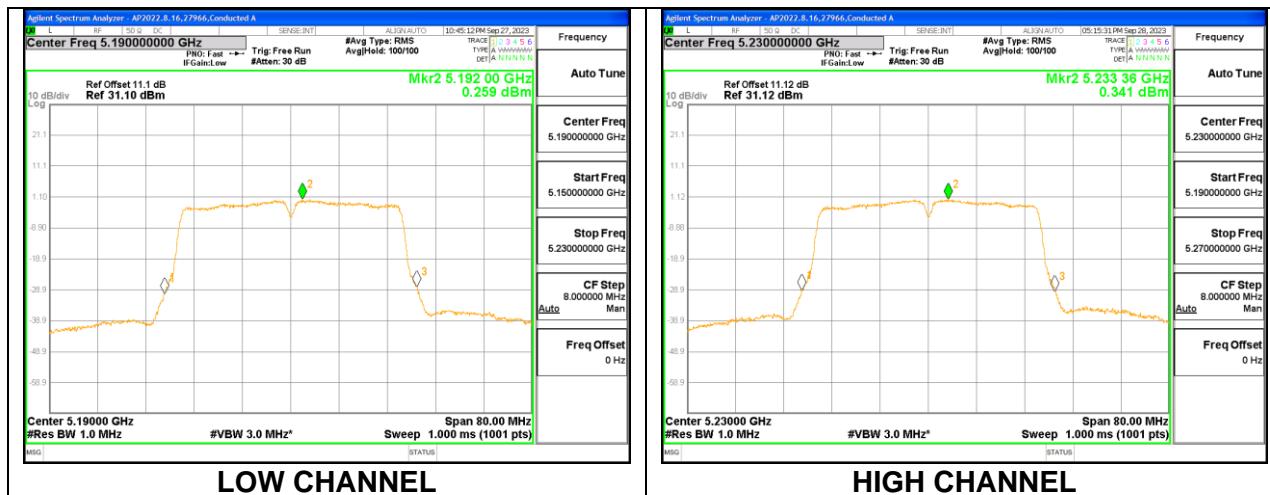
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.69	15.69	22.29	-6.60
High	5230	15.71	15.71	22.29	-6.58

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	0.259	0.42	9.29	-8.87
High	5230	0.341	0.50	9.29	-8.79



## 9.5.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

### 1TX Antenna 1 MODE (FCC+IC) MOBILE

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Mid	5210	75.747	0.71

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED EIRP Limit (dBm)	Max ISED Power (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED eirp PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Mid	5210	24.00	23.00	22.29	22.29	17.00	10.00	9.29

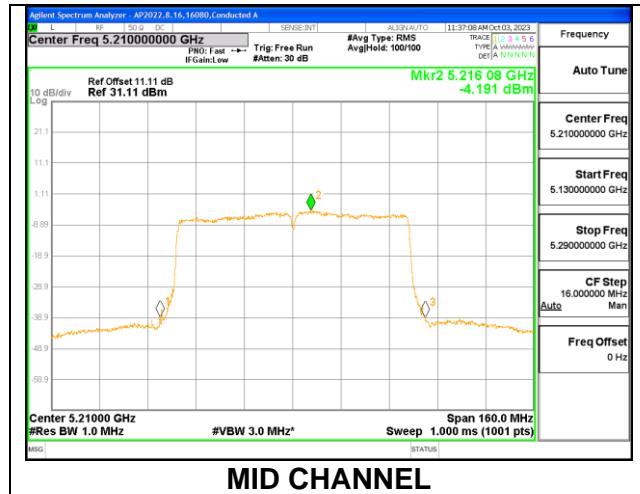
Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	13.66	13.66	22.29	-8.63

#### PPSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-4.191	-3.86	9.29	-13.15



MID CHANNEL

### 9.5.5. 802.11a MODE IN THE 5.3 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### 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	24.80	16.606	1.07	1.07
Mid	5300	24.84	16.635	1.07	1.07
High	5320	24.44	16.615	1.07	1.07

#### 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	23.20	29.20	23.20	11.00	11.00	11.00
Mid	5300	24.00	23.21	29.21	23.21	11.00	11.00	11.00
High	5320	24.00	23.21	29.21	23.21	11.00	11.00	11.00

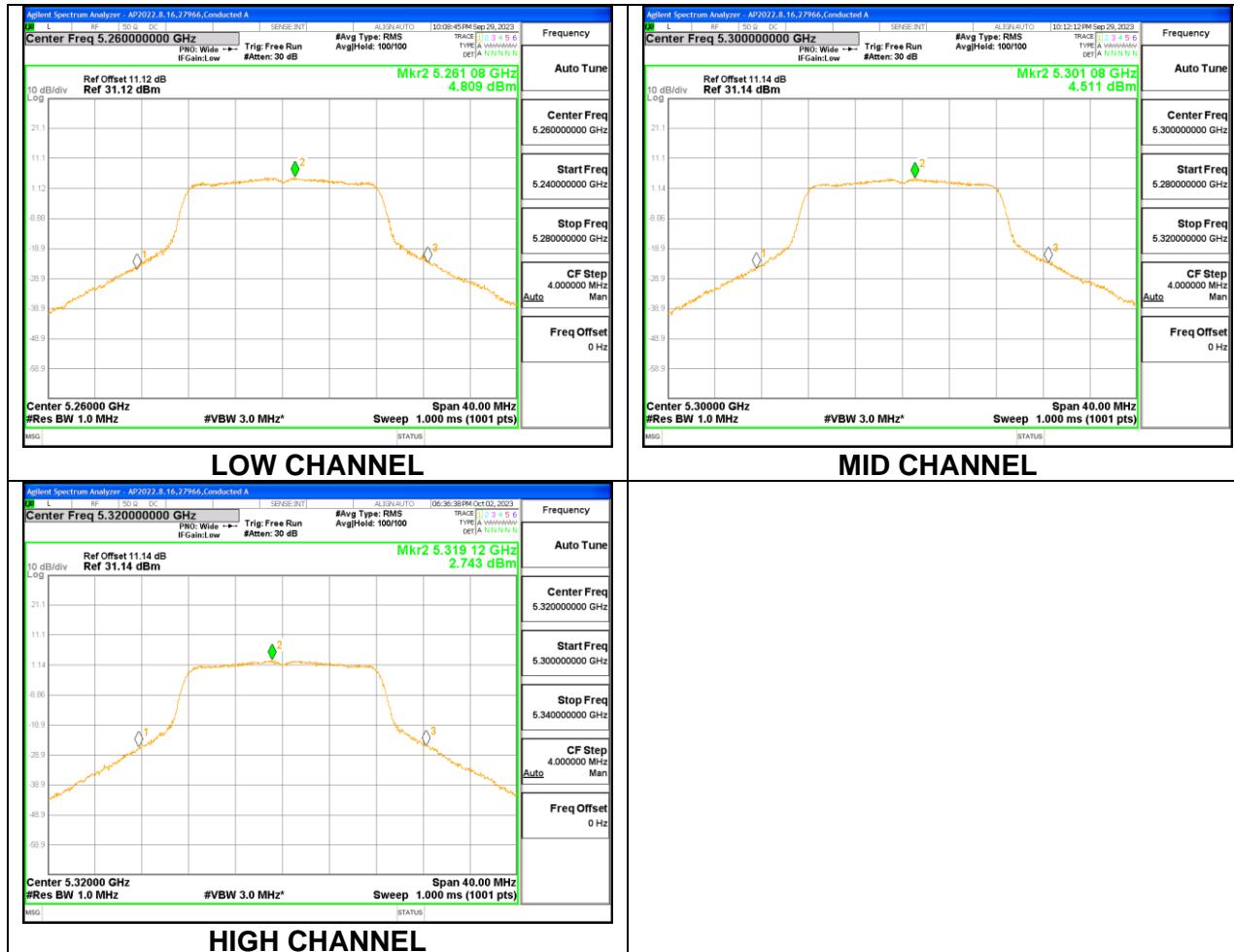
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PPSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.61	16.61	23.20	-6.59
Mid	5300	16.58	16.58	23.21	-6.63
High	5320	15.06	15.06	23.21	-8.15

#### PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	4.809	4.81	11.00	-6.19
Mid	5300	4.511	4.51	11.00	-6.49
High	5320	2.743	2.74	11.00	-8.26



## 9.5.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### 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	24.40	17.837	1.07	1.07
Mid	5300	24.28	17.886	1.07	1.07
High	5320	24.84	17.832	1.07	1.07

#### 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	23.51	29.51	23.51	11.00	11.00	11.00
Mid	5300	24.00	23.53	29.53	23.53	11.00	11.00	11.00
High	5320	24.00	23.51	29.51	23.51	11.00	11.00	11.00

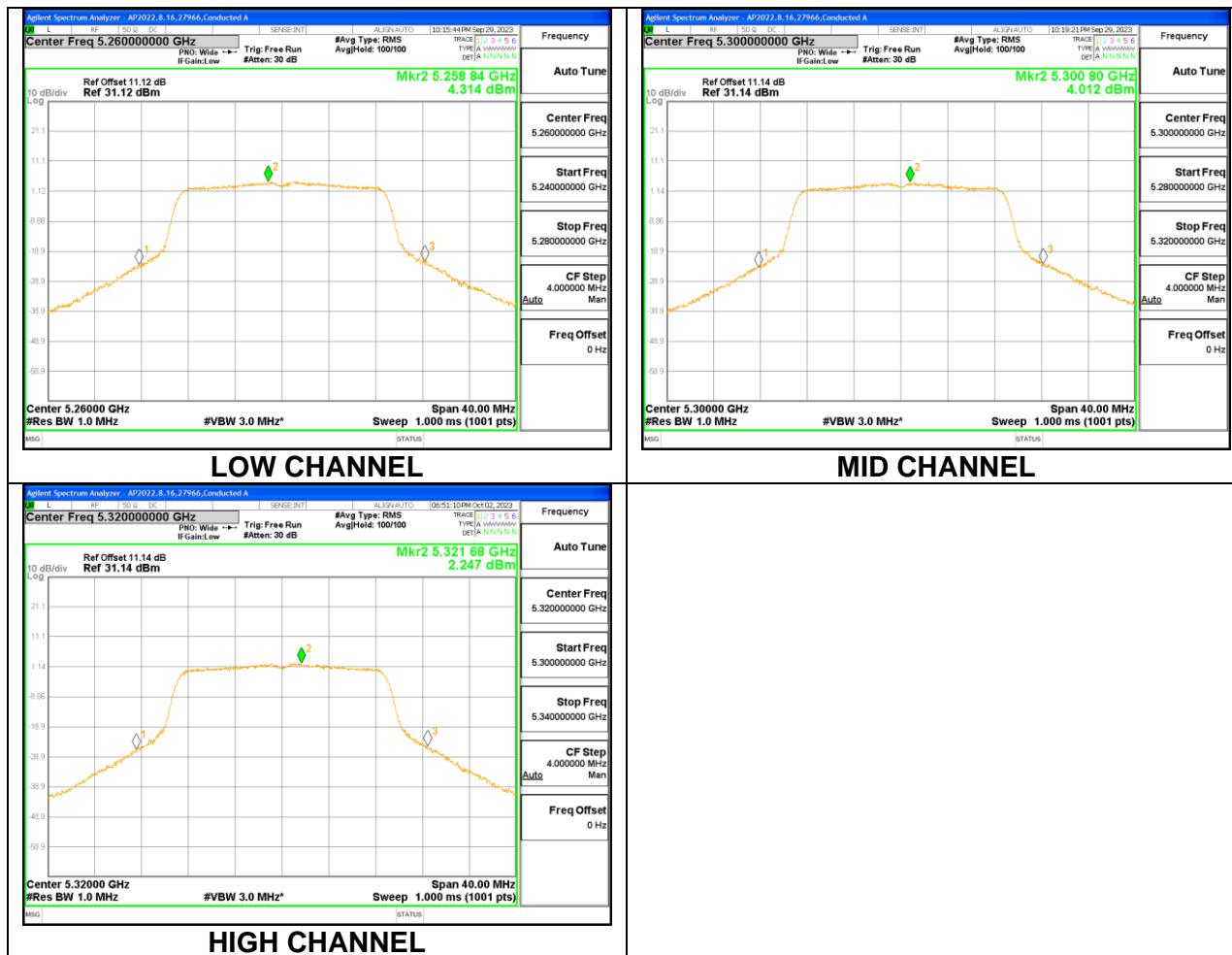
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PPSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.53	16.53	23.51	-6.98
Mid	5300	16.63	16.63	23.53	-6.90
High	5320	14.76	14.76	23.51	-8.75

#### PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	4.314	4.31	11.00	-6.69
Mid	5300	4.012	4.01	11.00	-6.99
High	5320	2.247	2.25	11.00	-8.75



### 9.5.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### 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	5270	42.08	36.194	1.07	1.07
High	5310	42.28	36.251	1.07	1.07

#### 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	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

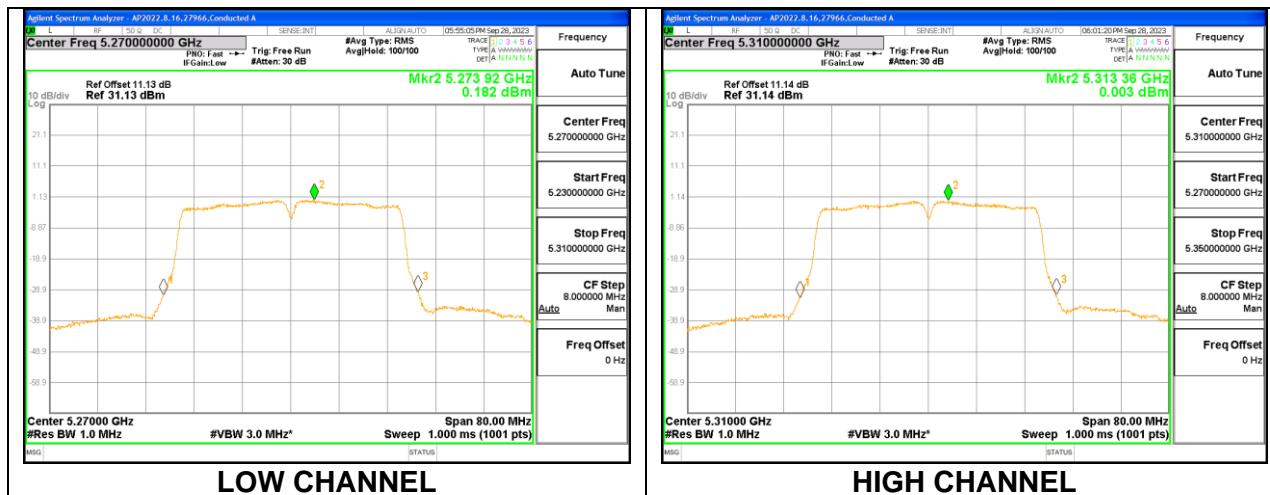
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd PPSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	15.64	15.64	24.00	-8.36
High	5310	15.60	15.60	24.00	-8.40

#### PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5270	0.182	0.34	11.00	-10.66
High	5310	0.003	0.16	11.00	-10.84



### 9.5.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### 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)
Mid	5290	96.48	75.637	1.07	1.07

#### 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	5290	24.00	24.00	30.00	24.00	11.00	11.00	11.00

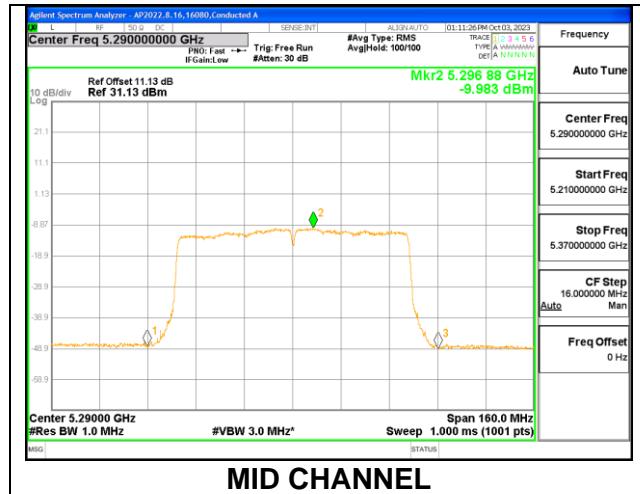
Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd PPSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	8.95	8.95	24.00	-15.05

#### PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Mid	5290	-9.983	-9.65	11.00	-20.65



MID CHANNEL

## 9.5.9. 802.11a MODE IN THE 5.6 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	24.84	16.6360	1.07
Mid	5580	24.92	16.6620	1.07
High	5700	24.88	16.6840	1.07
144	5720	24.88	16.6150	1.07

#### 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	23.21	29.21	23.21	11.00	11.00	11.00
Mid	5580	24.00	23.22	29.22	23.22	11.00	11.00	11.00
High	5700	24.00	23.22	29.22	23.22	11.00	11.00	11.00
144	5720	24.00	23.21	29.21	23.21	11.00	11.00	11.00

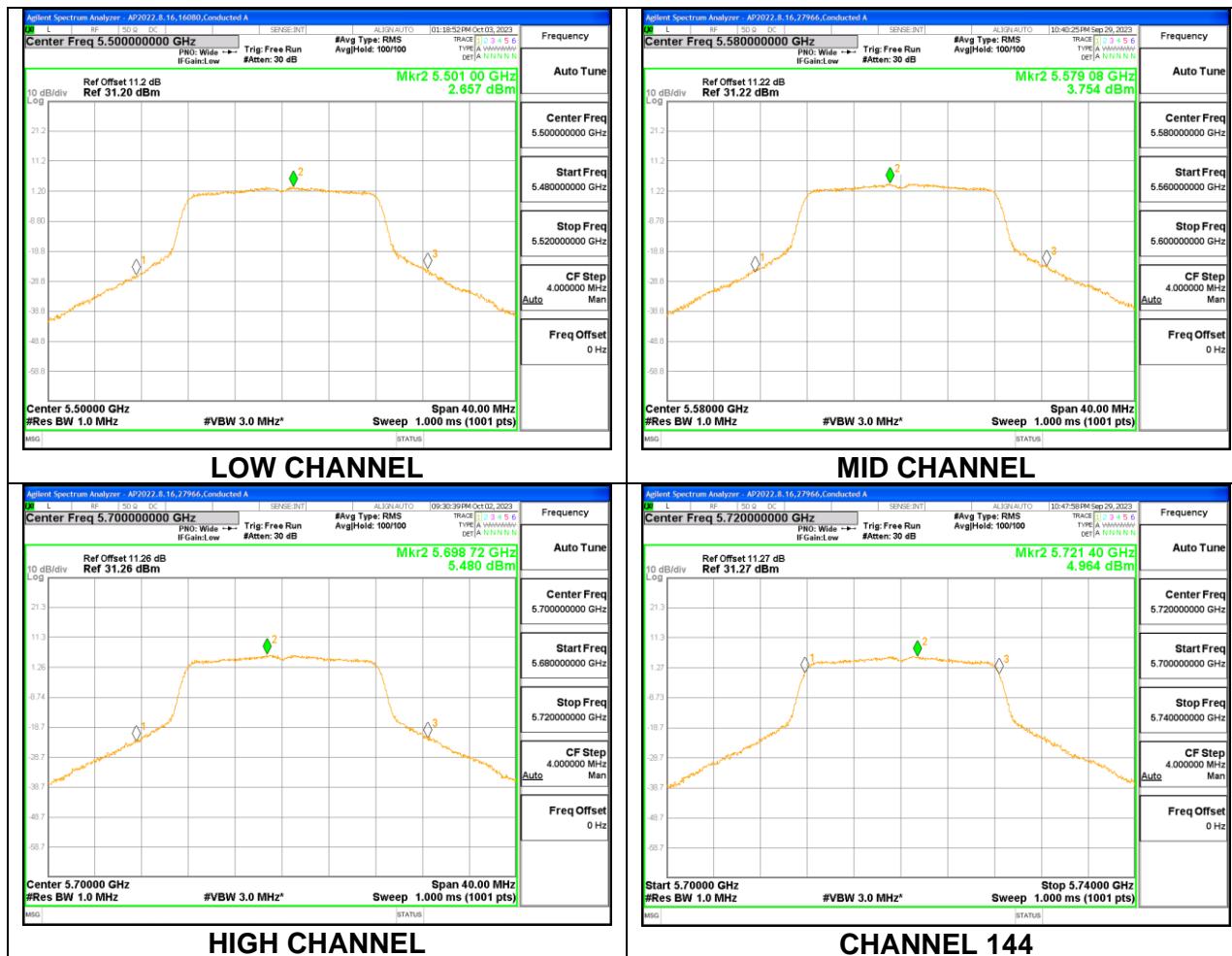
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.28	15.28	23.21	-7.93
Mid	5580	16.53	16.53	23.22	-6.69
High	5700	16.48	16.48	23.22	-6.74
144	5720	16.58	16.58	23.21	-6.63

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	2.657	3.754	11.00	-7.25
Mid	5580	3.754	5.480	11.00	-5.52
High	5700	5.480	5.480	11.00	-5.52
144	5720	4.964	4.964	11.00	-6.04



### 9.5.10. 802.11n HT20 MODE IN THE 5.6 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	25.20	17.765	1.07
Mid	5580	25.08	17.845	1.07
High	5700	24.88	17.815	1.07
144	5720	25.00	17.852	1.07

#### 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	23.50	29.50	23.50	11.00	11.00	11.00
Mid	5580	24.00	23.52	29.52	23.52	11.00	11.00	11.00
High	5700	24.00	23.51	29.51	23.51	11.00	11.00	11.00
144	5720	24.00	23.52	29.52	23.52	11.00	11.00	11.00

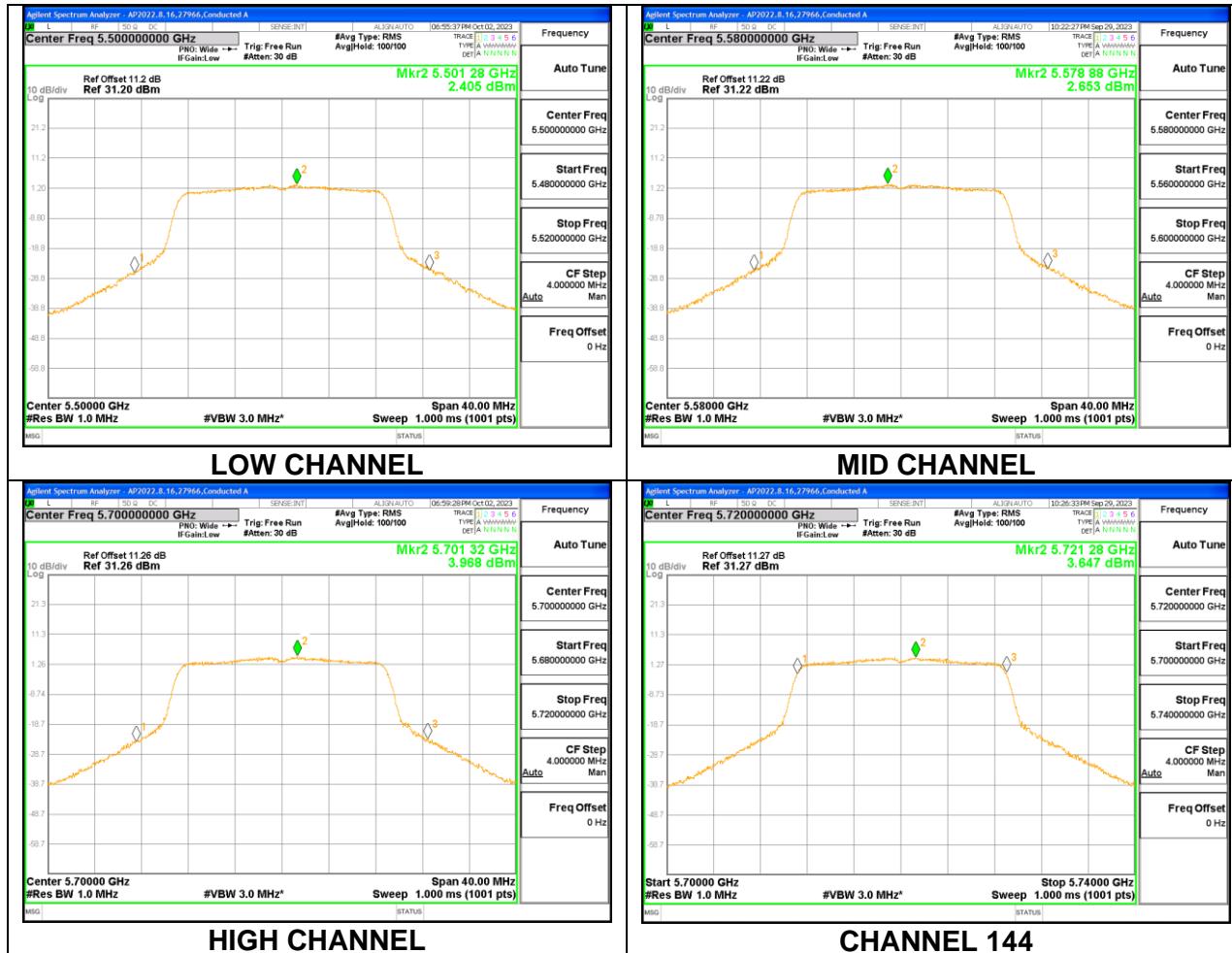
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.30	15.30	23.50	-8.20
Mid	5580	15.51	15.51	23.52	-8.01
High	5700	15.54	15.54	23.51	-7.97
144	5720	15.59	15.59	23.52	-7.93

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	2.405	2.405	11.00	-8.60
Mid	5580	2.653	2.653	11.00	-8.35
High	5700	3.968	3.968	11.00	-7.03
144	5720	3.467	3.467	11.00	-7.53



### 9.5.11. 802.11n HT40 MODE IN THE 5.6 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-28

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	42.00	36.218	1.07
Mid	5550	42.16	36.193	1.07
High	5670	42.40	36.194	1.07
142	5710	42.40	36.181	1.07

#### 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	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
142	5710	24.00	24.00	30.00	24.00	11.00	11.00	11.00

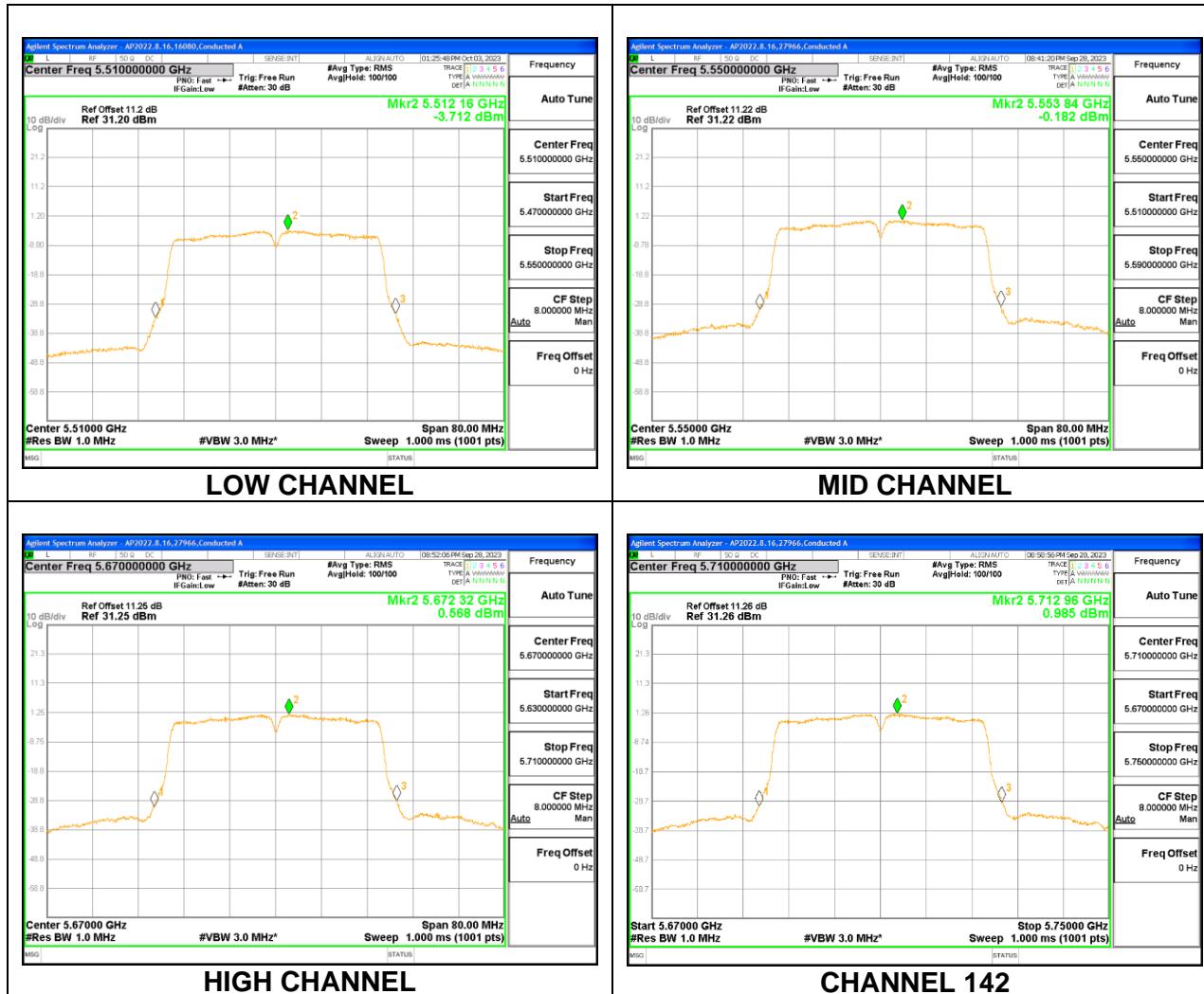
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	13.07	13.07	24.00	-10.93
Mid	5550	15.55	15.55	24.00	-8.45
High	5670	15.61	15.61	24.00	-8.39
142	5710	15.72	15.72	24.00	-8.28

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	-3.712	-3.55	11.00	-14.55
Mid	5550	-0.182	-0.02	11.00	-11.02
High	5670	0.568	0.73	11.00	-10.27
142	5710	0.985	1.15	11.00	-9.86



### 9.5.12. 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-29

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5530	97.28	75.864	1.07
High	5610	87.04	75.948	1.07
138	5690	92.80	75.937	1.07

#### 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	5530	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00
138	5690	24.00	24.00	30.00	24.00	11.00	11.00	11.00

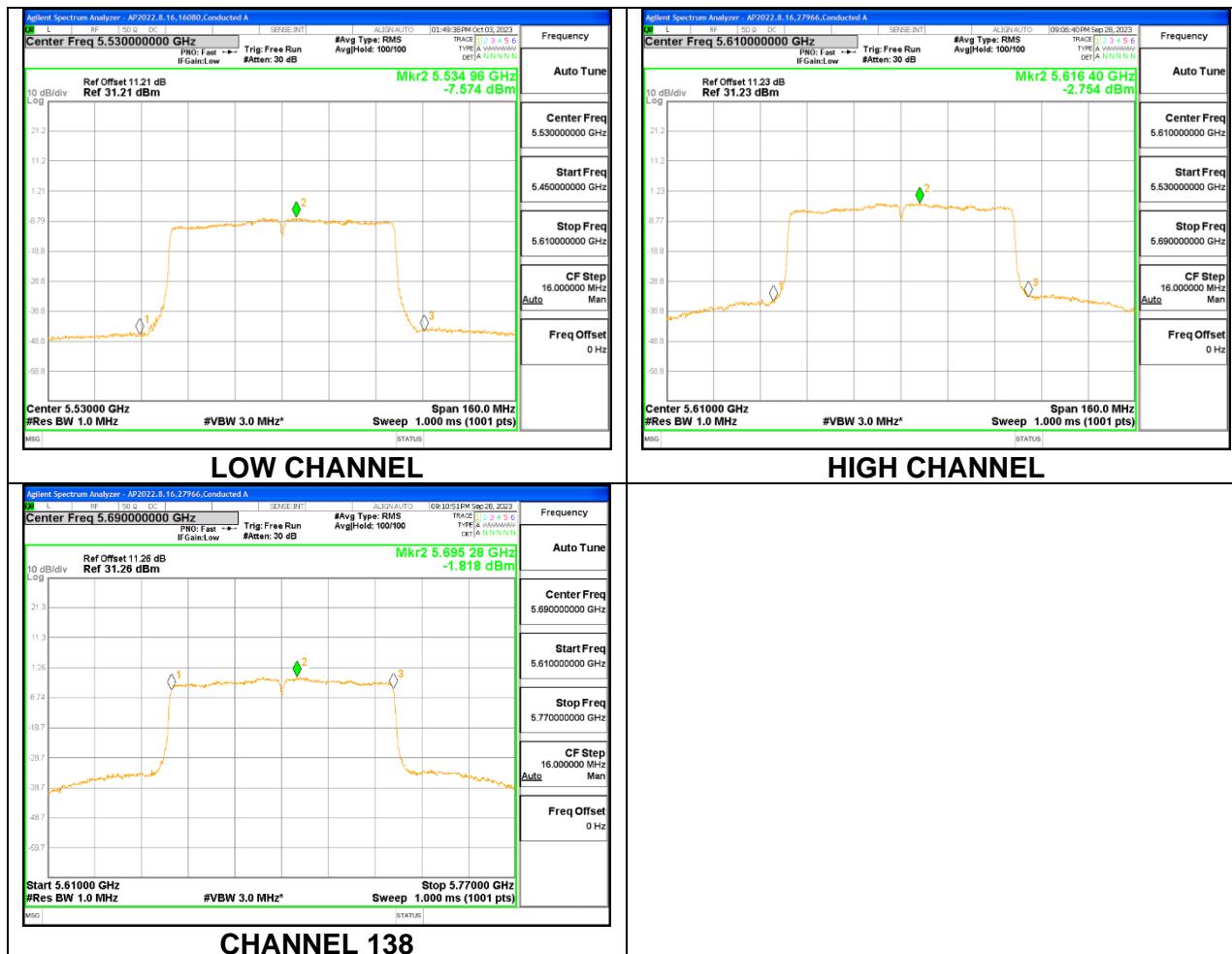
Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	11.14	11.14	24.00	-12.86
High	5610	15.48	15.48	24.00	-8.52
138	5690	15.61	15.61	24.00	-8.39

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5530	-7.574	-7.244	11.00	-18.24
High	5610	-2.754	-2.424	11.00	-13.42
138	5690	-1.818	-1.488	11.00	-12.49



### 9.5.13. 802.11a MODE IN THE 5.8 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-29

#### Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	FCC/ISED PSD Limit (dBm/ 500KHz)
Low	5745	1.21	30.00	30.00
Mid	5785	1.21	30.00	30.00
High	5825	1.21	30.00	30.00

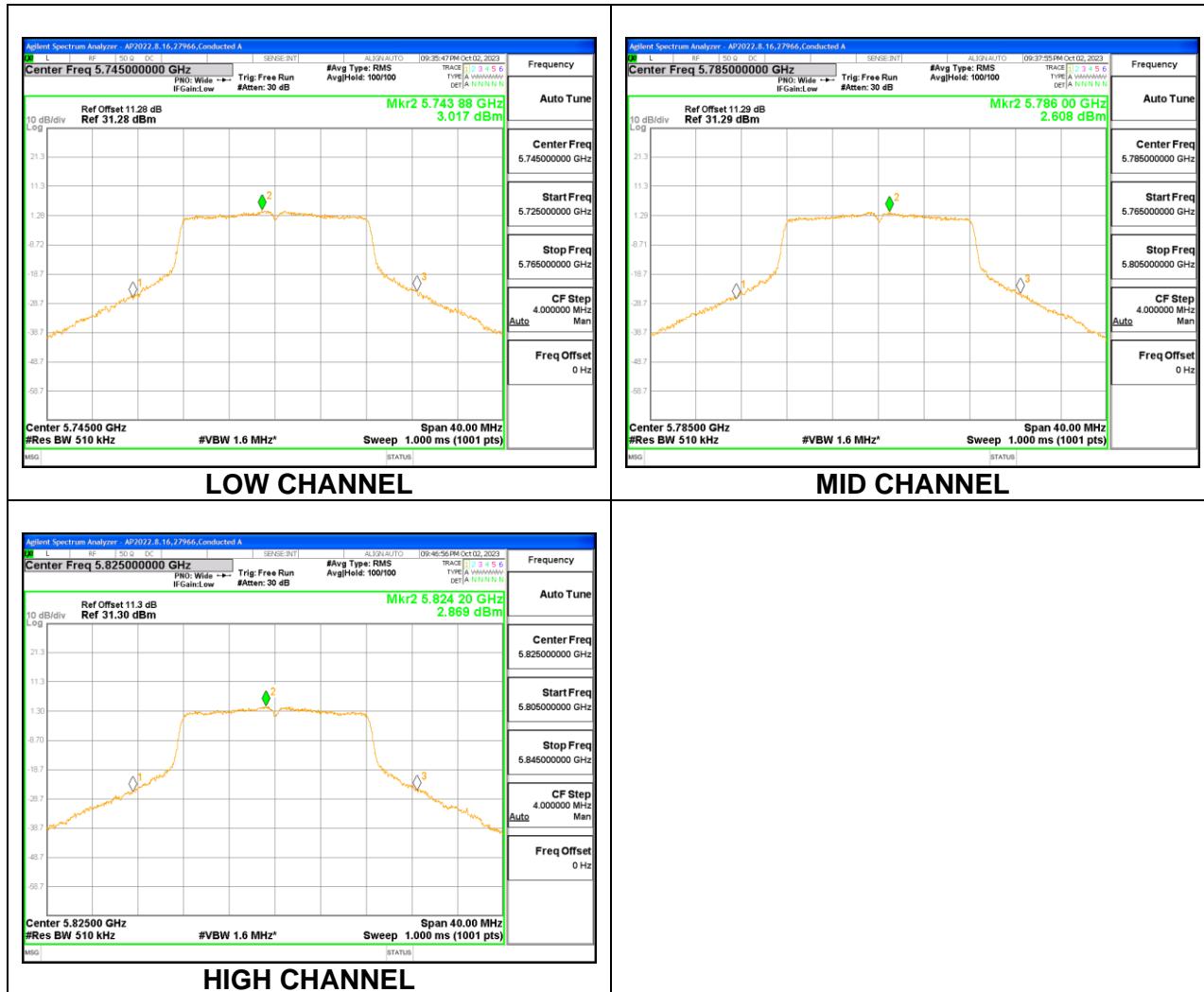
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.60	16.60	30.00	-13.40
Mid	5785	16.55	16.55	30.00	-13.45
High	5825	16.61	16.61	30.00	-13.39

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500kHz)	Total Corr'd PSD (dBm/ 500kHz)	PSD Limit (dBm/ 500kHz)	PSD Margin (dB)
Low	5745	3.017	3.017	30.00	-26.98
Mid	5785	2.608	2.608	30.00	-27.39
High	5825	2.869	2.869	30.00	-27.13



### 9.5.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-29

#### Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	FCC/ISED PSD Limit (dBm/ 500KHz)
Low	5745	1.21	30.00	30.00
Mid	5785	1.21	30.00	30.00
High	5825	1.21	30.00	30.00

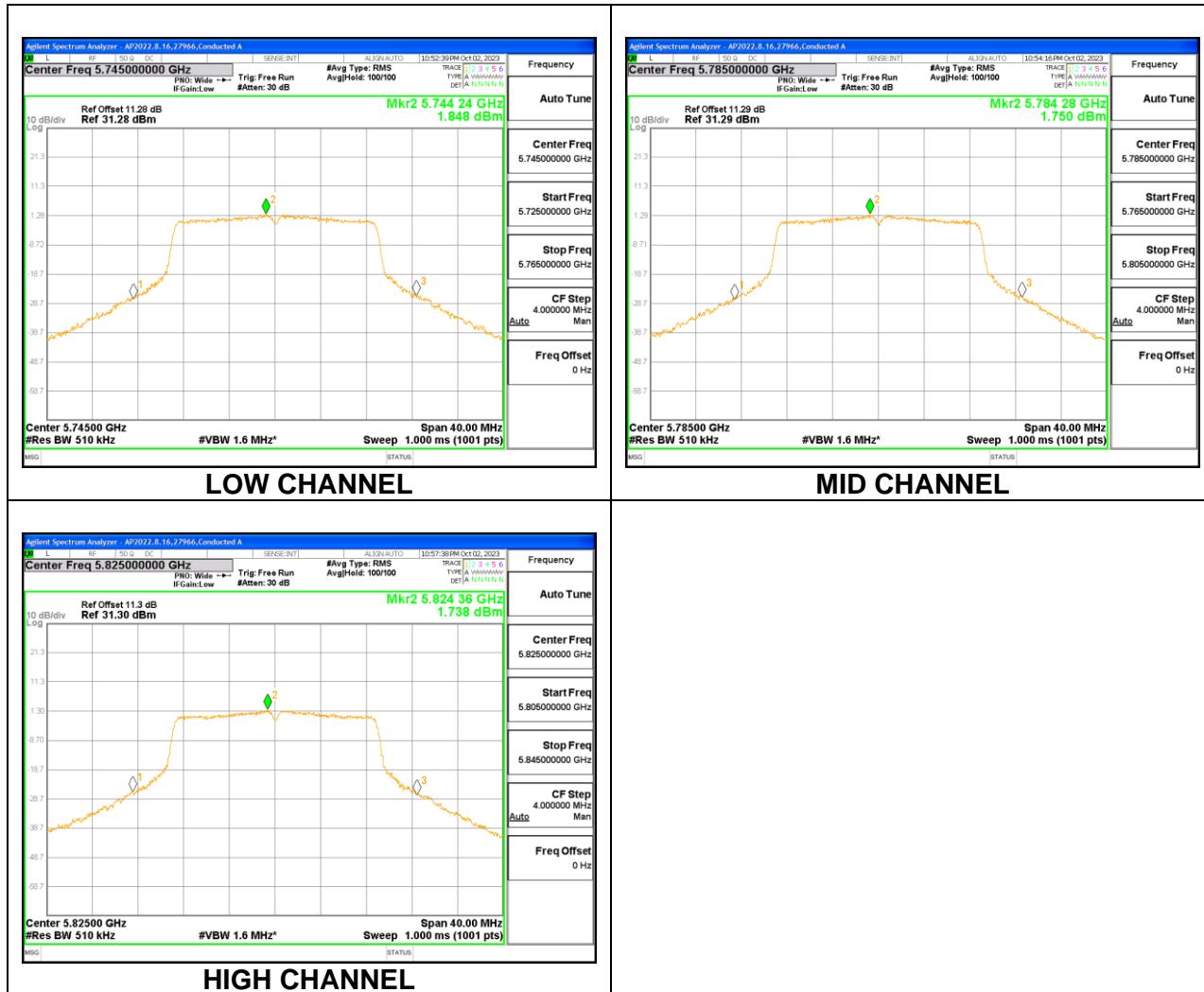
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	15.65	15.65	30.00	-14.35
Mid	5785	15.59	15.59	30.00	-14.41
High	5825	15.62	15.62	30.00	-14.38

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500kHz)	Total Corr'd PSD (dBm/ 500kHz)	PSD Limit (dBm/ 500kHz)	PSD Margin (dB)
Low	5745	1.848	1.848	30.00	-28.15
Mid	5785	1.750	1.750	30.00	-28.25
High	5825	1.738	1.738	30.00	-28.26



### 9.5.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-29

#### Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISE Power Limit (dBm)	FCC/ISED PSD Limit (dBm/ 500kHz)
Low	5755	1.21	30.00	30.00
High	5795	1.21	30.00	30.00

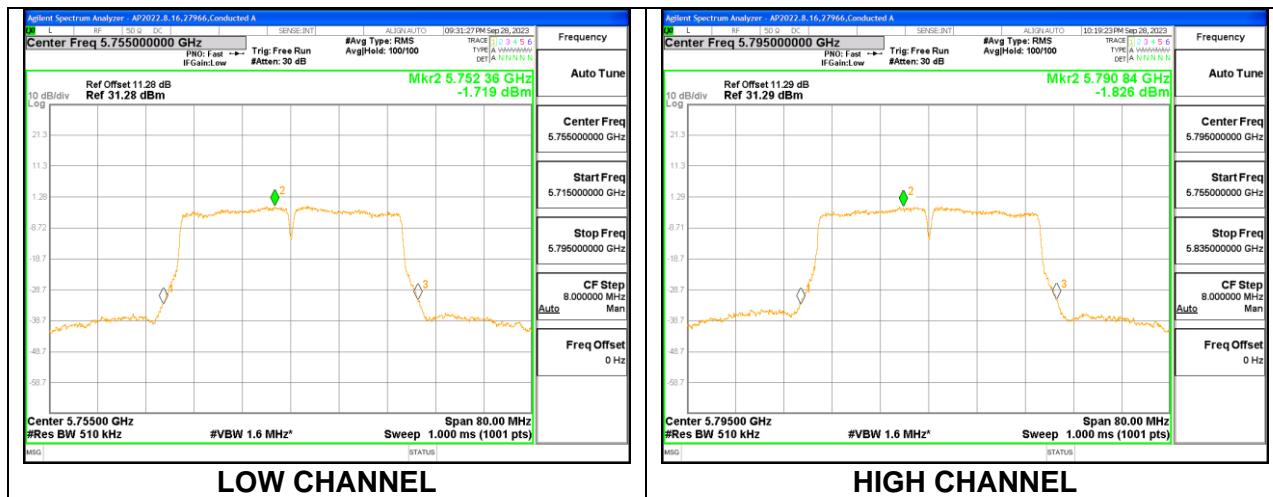
Duty Cycle CF (dB)	0.16	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	15.68	15.68	30.00	-14.32
High	5795	15.71	15.71	30.00	-14.29

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500kHz)	Total Corr'd PSD (dBm/ 500kHz)	PSD Limit (dBm/ 500kHz)	PSD Margin (dB)
Low	5755	-1.719	-1.559	30.00	-31.56
High	5795	-1.826	-1.666	30.00	-31.67



### 9.5.16. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

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

Test Engineer:	ZS 16080
Test Date:	2023-09-29

#### Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISE Power Limit (dBm)	FCC/ISED PSD Limit (dBm/ 500kHz)
Mid	5775	1.21	30.00	30.00

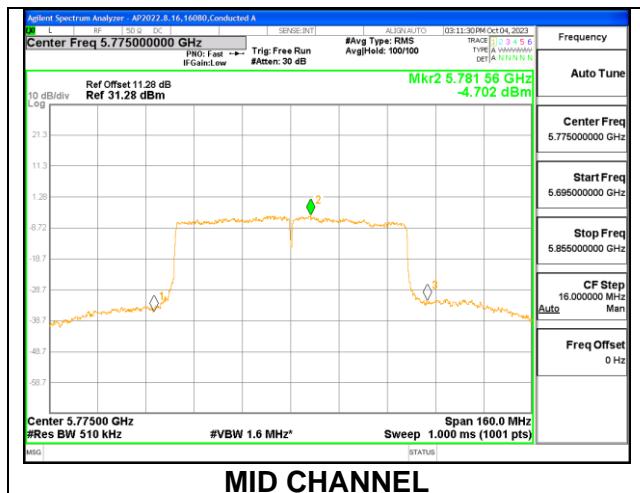
Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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#### Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5775	15.98	15.98	30.00	-14.02

#### PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 500kHz)	Total Corr'd PSD (dBm/ 500kHz)	PSD Limit (dBm/ 500kHz)	PSD Margin (dB)
Mid	5775	-4.702	-4.372	30.00	-34.37



MID CHANNEL

## 10. 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

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)

NCC LP0002 §2.7 and §2.8

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.

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.

Based 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.

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

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

NOTE: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table), using the free space impedance of 377 Ohms. For example the measurement at frequency X kHz resulted in a level of Y dB<sub>u</sub>V/m, which is equivalent to  $Y - 51.5 = Z$  dB<sub>u</sub>A/m, which has the same margin, W dB, to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

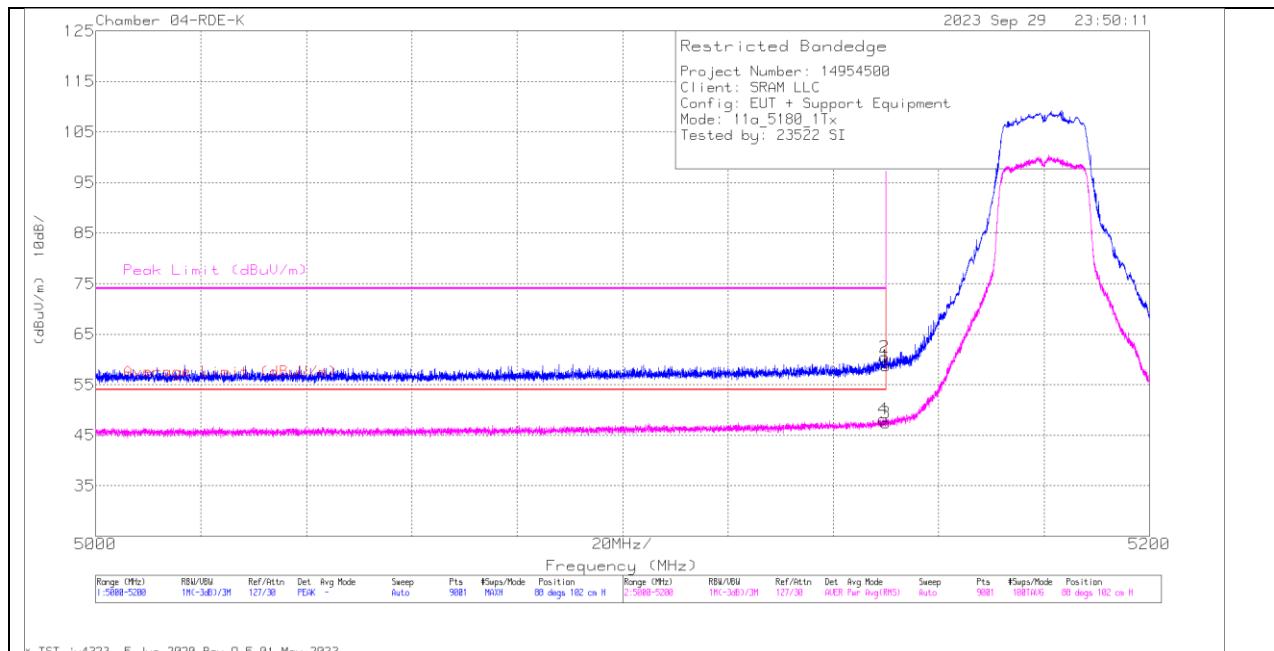
## 10.1. TRANSMITTER ABOVE 1 GHz

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

#### 1TX Antenna 1 MODE

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



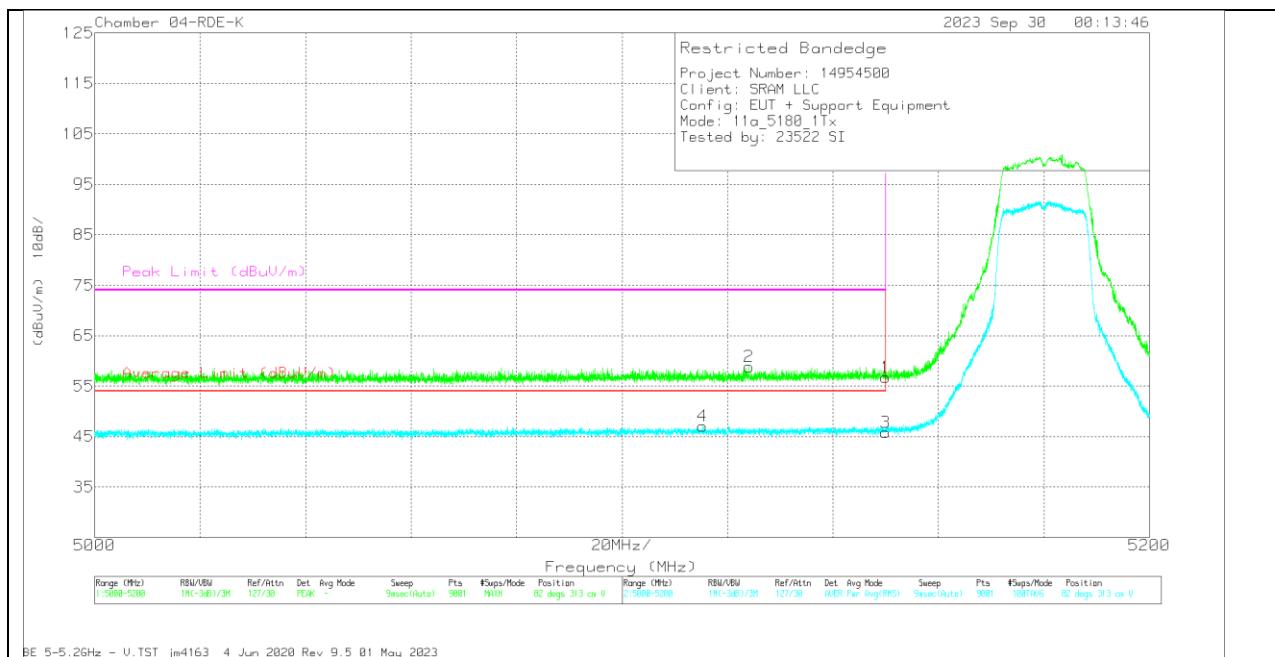
Marker	Frequency (MHz)	Meter Reading (dBm)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBm)	Average Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	54.69	Pk	34.1	-30.1	58.69	-	-	74	-15.31	88	102	H
2	* 5149.732	56.51	Pk	34.1	-30.1	60.51	-	-	74	-13.49	88	102	H
3	* 5150	43.38	RMS	34.1	-30.1	47.38	54	-6.62	-	-	88	102	H
4	* 5149.487	44.31	RMS	34.1	-30.2	48.21	54	-5.79	-	-	88	102	H

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	52.75	Pk	34.1	-30.1	56.75	-	-	74	-17.25	82	313	V
2	* 5124.065	55	Pk	34	-30.2	58.8	-	-	74	-15.2	82	313	V
3	* 5150	41.8	RMS	34.1	-30.1	45.8	54	-8.2	-	-	82	313	V
4	* 5115.266	43.3	RMS	34	-30.2	47.1	54	-6.9	-	-	82	313	V

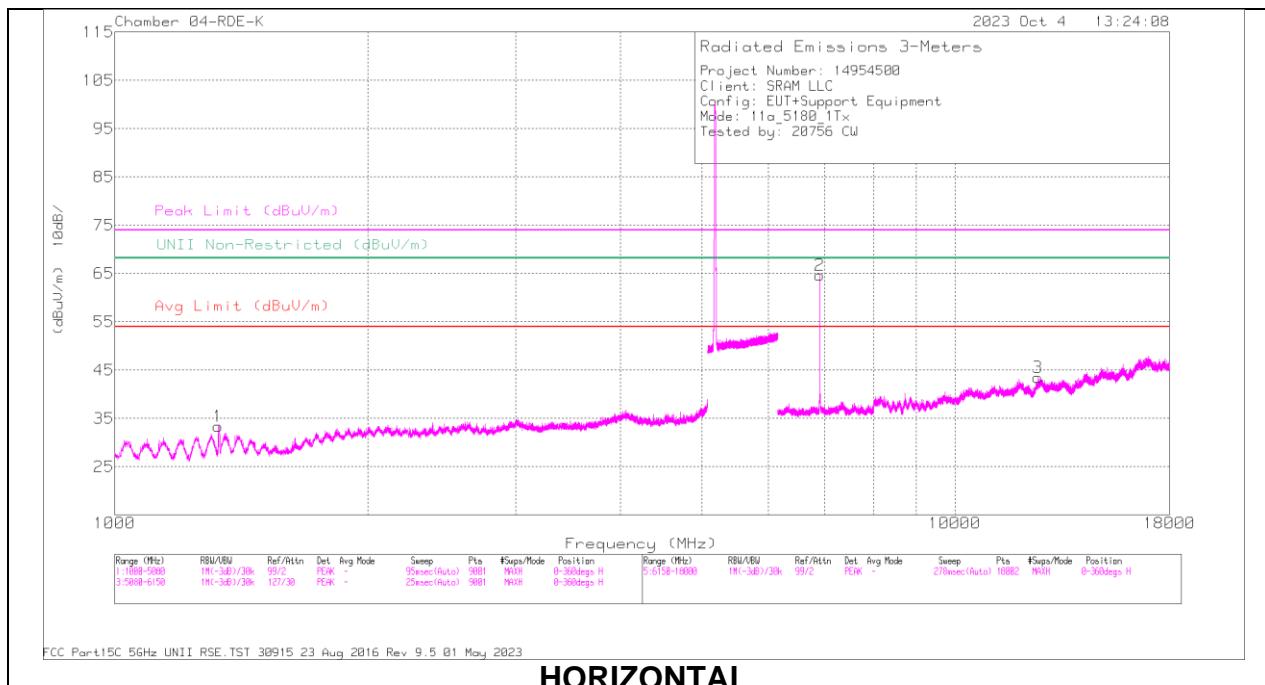
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK - Peak detector

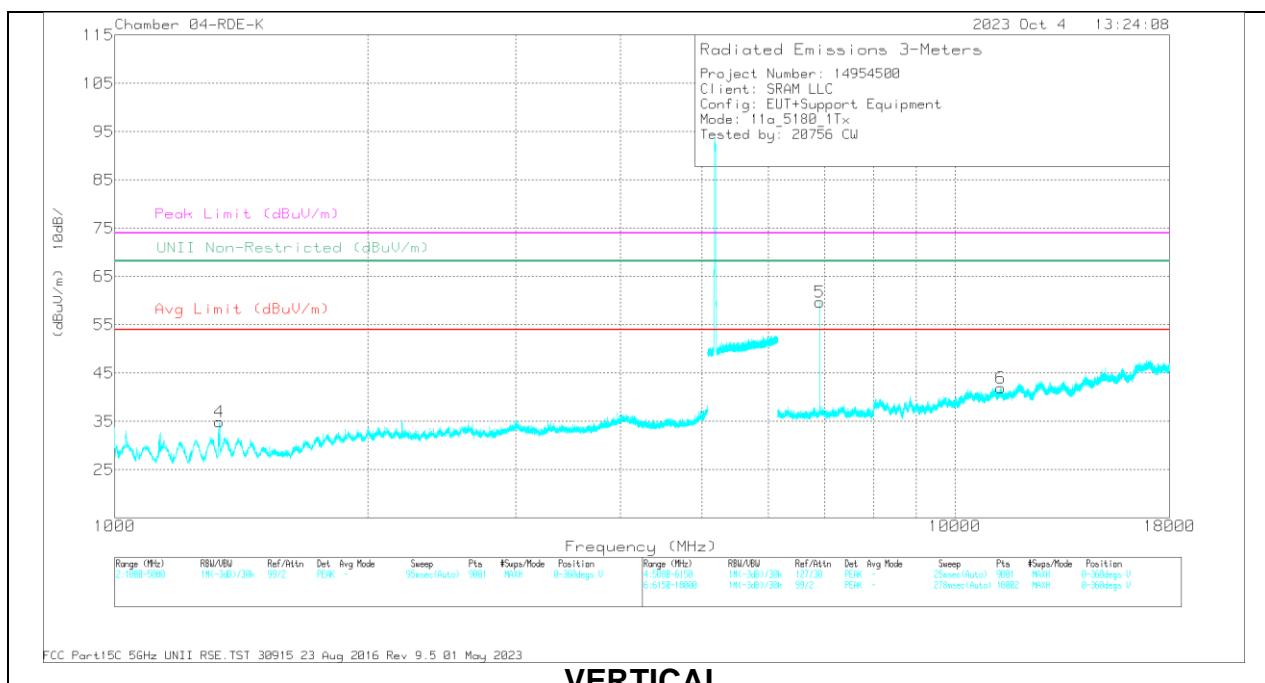
RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



### HORIZONTAL



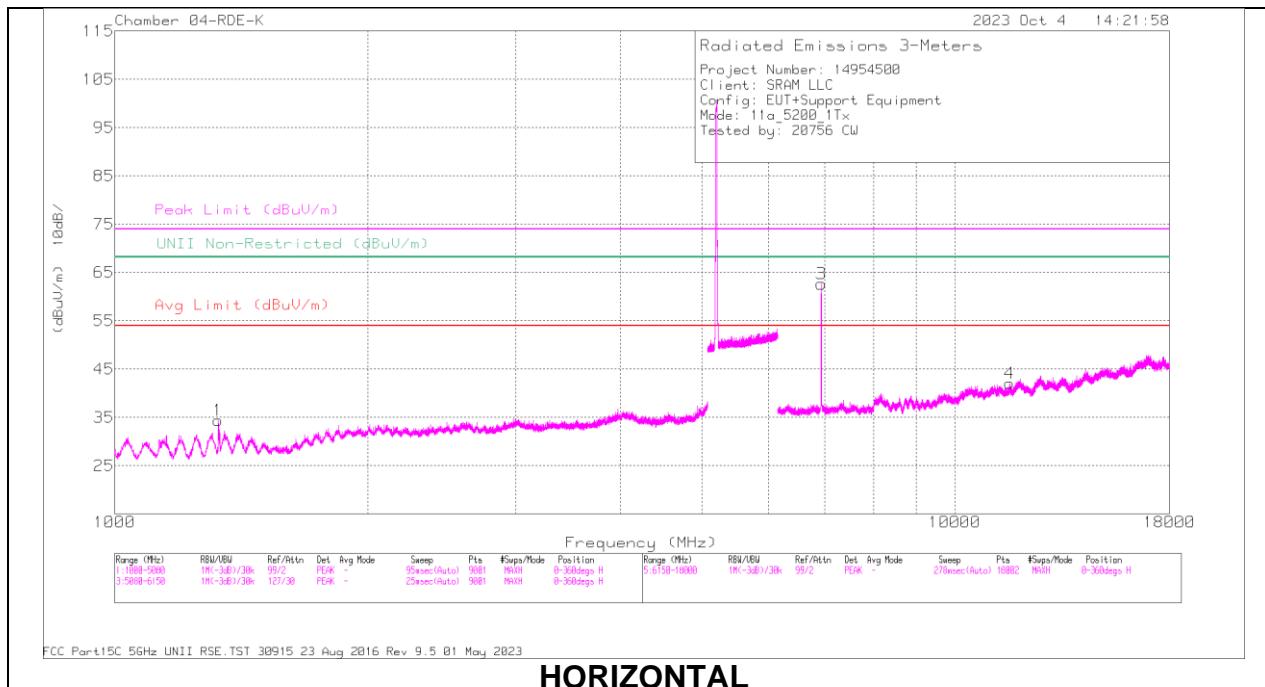
### VERTICAL

## RADIATED EMISSIONS

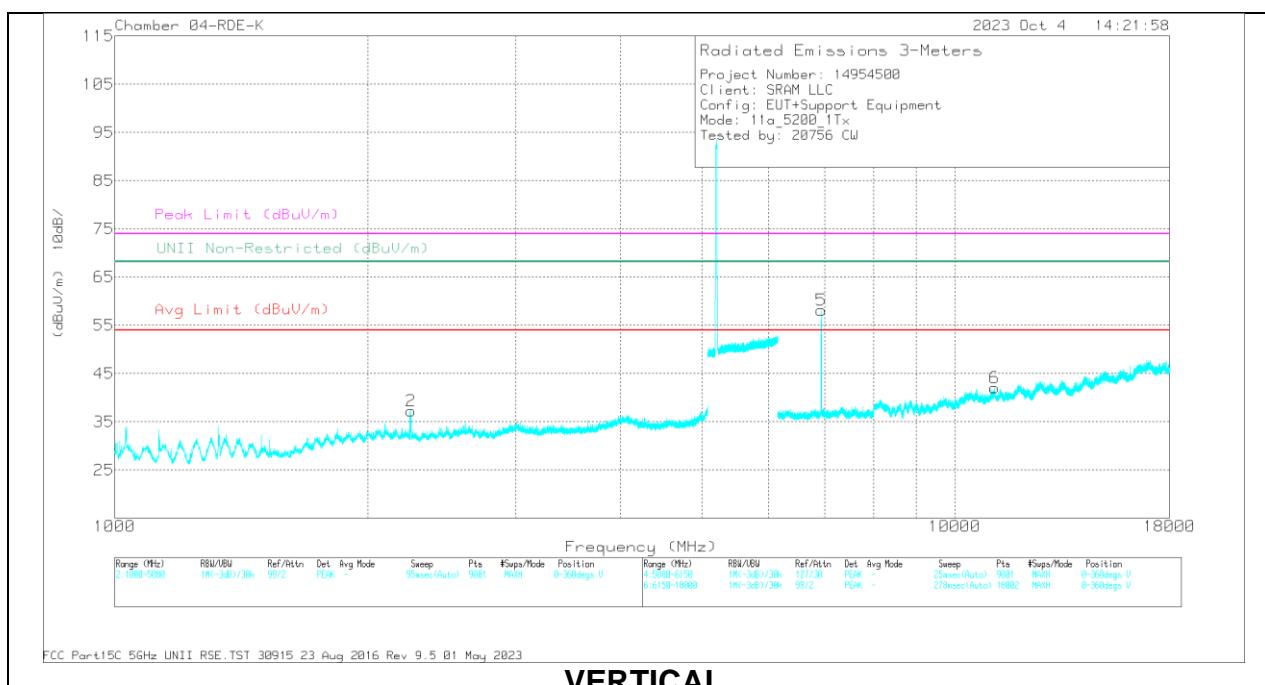
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1328.038	58.53	PK-U	29	-45.8	41.73	-	-	74	-32.27	-	-	98	186	H
	* 1329.687	44.02	ADR	29	-45.8	27.22	54	-26.78	-	-	-	-	98	186	H
4	* 1332.129	61.84	PK-U	29	-45.8	45.04	-	-	74	-28.96	-	-	214	220	V
	* 1331.274	46.22	ADR	29	-45.8	29.42	54	-24.58	-	-	-	-	214	220	V
2	6906.72	69.48	PK-U	35.7	-37.3	67.88	-	-	-	-	68.2	-32	171	104	H
	6906.609	65.47	ADR	35.7	-37.3	63.87	-	-	-	-	-	-	171	104	H
3	* 12544.733	46.97	PK-U	39.3	-33.7	52.57	-	-	74	-21.43	-	-	276	244	H
	* 12544.737	35.36	ADR	39.3	-33.7	40.96	54	-13.04	-	-	-	-	276	244	H
5	6906.679	64.58	PK-U	35.7	-37.3	62.98	-	-	-	-	68.2	-5.22	313	199	V
	6906.626	60.34	ADR	35.7	-37.3	58.74	-	-	-	-	-	-	313	199	V
6	* 11342.177	48.49	PK-U	37.8	-35.1	51.19	-	-	74	-22.81	-	-	184	389	V
	* 11342.238	36.86	ADR	37.8	-35.1	39.56	54	-14.44	-	-	-	-	184	389	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

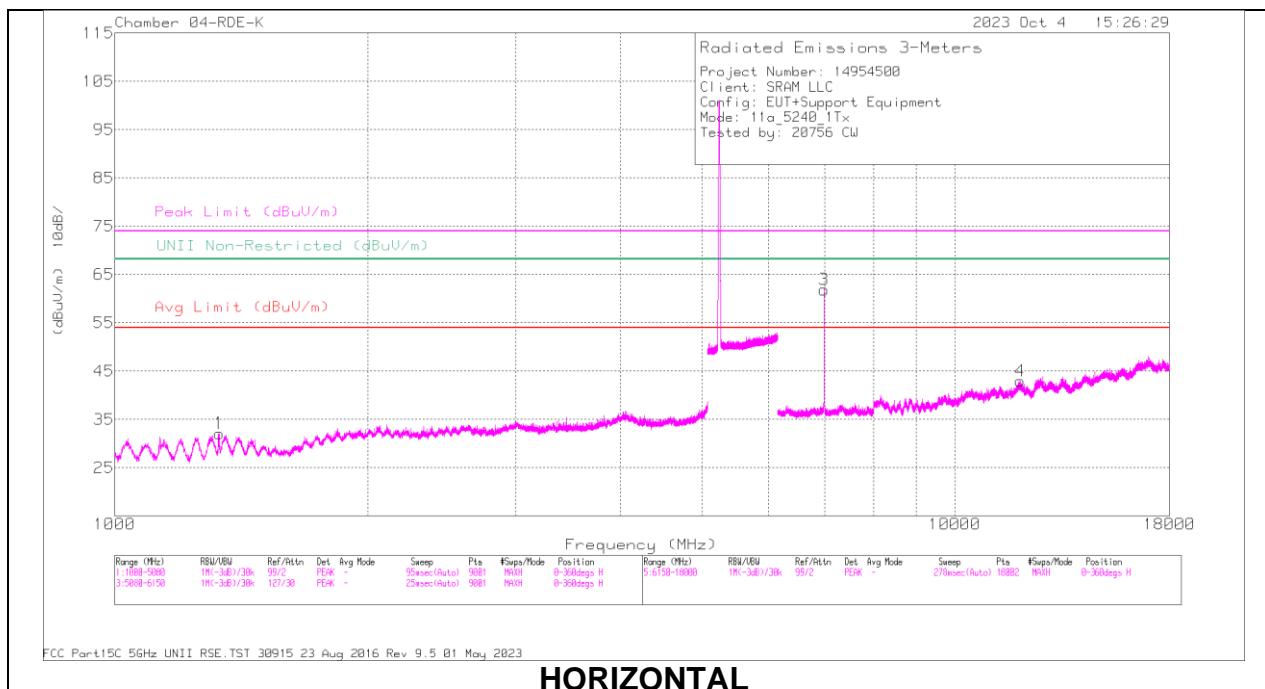
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1327.165	62.8	PK-U	29	-45.8	46	-	-	74	-28	-	-	260	120	H
	* 1328.079	46.25	ADR	29	-45.8	29.45	54	-24.55	-	-	-	-	260	120	H
2	* 2250.832	55.87	PK-U	31.4	-44.4	42.87	-	-	74	-31.13	-	-	150	337	V
	* 2252.311	43.92	ADR	31.4	-44.5	30.82	54	-23.18	-	-	-	-	150	337	V
3	6933.304	68.27	PK-U	35.7	-37.2	66.77	-	-	-	-	68.2	-1.43	172	108	H
	6933.279	64.27	ADR	35.7	-37.2	62.77	-	-	-	-	-	-	172	108	H
4	* 11622.017	47.6	PK-U	38.1	-34.6	51.1	-	-	74	-22.9	-	-	249	379	H
	* 11622.08	36.04	ADR	38.1	-34.6	39.54	54	-14.46	-	-	-	-	249	379	H
5	6933.317	66.05	PK-U	35.7	-37.2	64.55	-	-	-	-	68.2	-3.65	219	255	V
	6933.261	61.93	ADR	35.7	-37.2	60.43	-	-	-	-	-	-	219	255	V
6	* 11144.223	49.02	PK-U	38	-35.8	51.22	-	-	74	-22.78	-	-	134	392	V
	* 11144.554	37.75	ADR	38	-35.7	40.05	54	-13.95	-	-	-	-	134	392	V

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

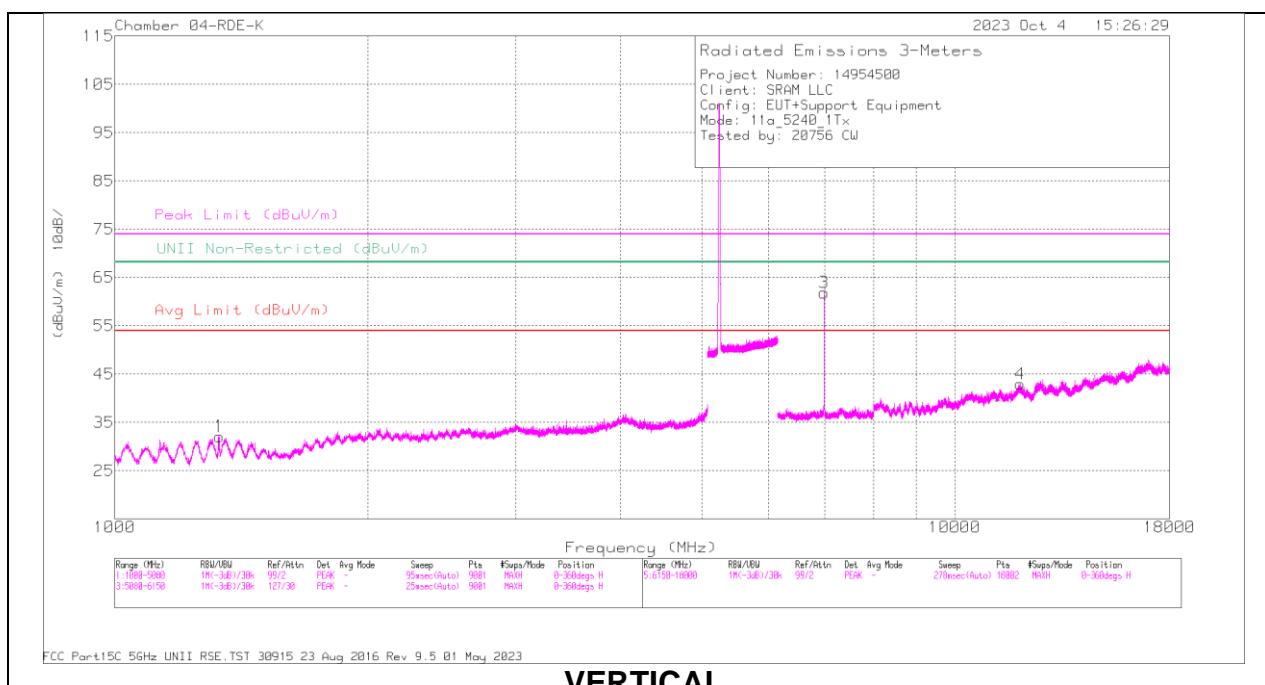
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## HIGH CHANNEL RESULTS



## HORIZONTAL



## VERTICAL

## RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	CbI/Amp (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	* 1333.363	62.23	PK-U	29	-45.8	45.43	-	-	74	-28.57	-	-	259	140	H
	* 1330.875	46.05	ADR	29	-45.8	29.25	54	-24.75	-	-	-	-	259	140	H
2	2156.788	61.22	PK-U	31.5	-44.7	48.02	-	-	-	-	68.2	-20.18	358	360	V
	2156.028	45	ADR	31.5	-44.7	31.8	-	-	-	-	-	-	358	360	V
3	6986.603	67.53	PK-U	35.7	-37.4	65.83	-	-	-	-	68.2	-2.37	173	142	H
	6986.59	63.6	ADR	35.7	-37.4	61.9	-	-	-	-	-	-	173	142	H
4	* 11962.989	47.26	PK-U	38.6	-34.1	51.76	-	-	74	-22.24	-	-	291	187	H
	* 11962.878	35.43	ADR	38.6	-34.1	39.93	54	-14.07	-	-	-	-	291	187	H
5	6986.722	63.3	PK-U	35.7	-37.4	61.6	-	-	-	-	68.2	-6.6	310	194	V
	6986.602	59.15	ADR	35.7	-37.4	57.45	-	-	-	-	-	-	310	194	V
6	* 11149.901	49.28	PK-U	38	-35.8	51.48	-	-	74	-22.52	-	-	262	205	V
	* 11149.854	37.18	ADR	38	-35.8	39.38	54	-14.62	-	-	-	-	262	205	V

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

PK-U - U-NII: Maximum Peak

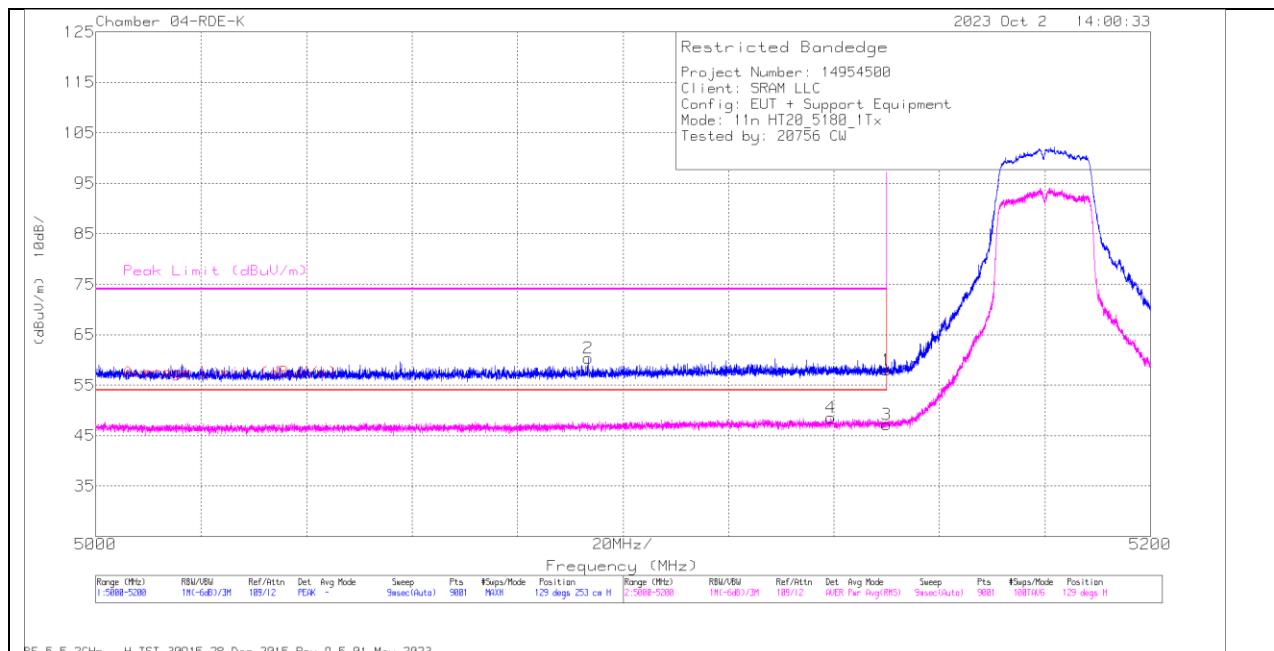
ADR - U-NII AD primary method, RMS average

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

### 1TX Antenna 1 MODE

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



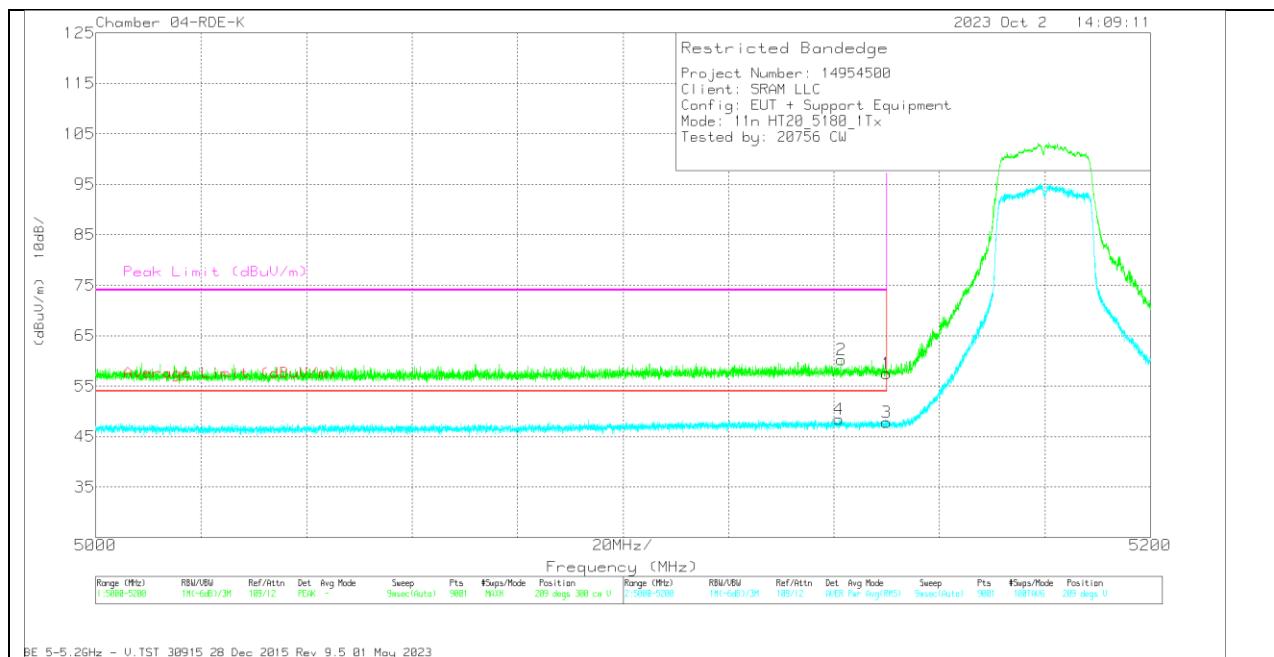
Marker	Frequency (MHz)	Meter Reading (dBmV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBmV/m)	Average Limit (dBmV/m)	Margin (dB)	Peak Limit (dBmV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	31.17	Pk	34.1	-7.3	57.97	-	-	74	-16.03	129	253	H
2	* 5093.355	33.75	Pk	33.9	-7.3	60.35	-	-	74	-13.65	129	253	H
3	* 5150	20.33	RMS	34.1	-7.3	47.13	54	-6.87	-	-	129	253	H
4	* 5139.421	21.66	RMS	34	-7.1	48.56	54	-5.44	-	-	129	253	H

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

PK - Peak detector

RMS - RMS detection

## VERTICAL RESULT

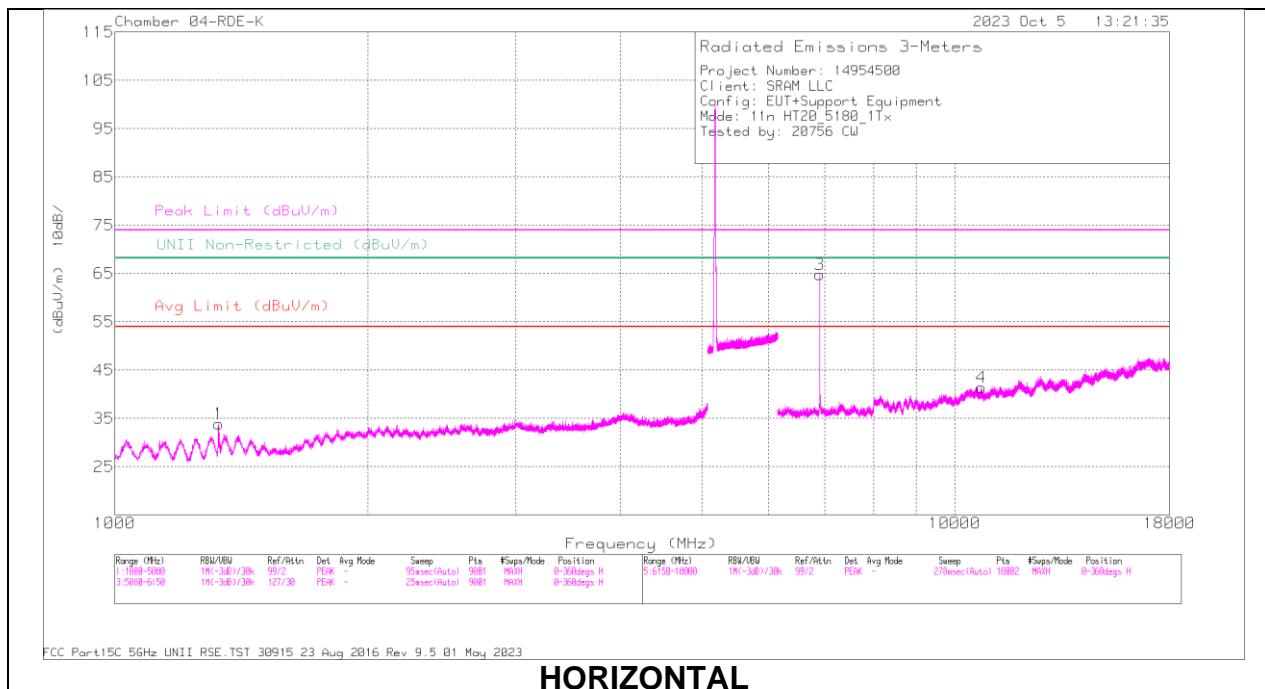


Marker	Frequency (MHz)	Meter Reading (dBm)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBm)	Average Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	30.68	Pk	34.1	-7.3	57.48	-	-	74	-16.52	209	300	V
2	* 5141.376	33.57	Pk	34	-7.3	60.27	-	-	74	-13.73	209	300	V
3	* 5150	21.06	RMS	34.1	-7.3	47.86	54	-6.14	-	-	209	300	V
4	* 5140.91	21.78	RMS	34	-7.3	48.48	54	-5.52	-	-	209	300	V

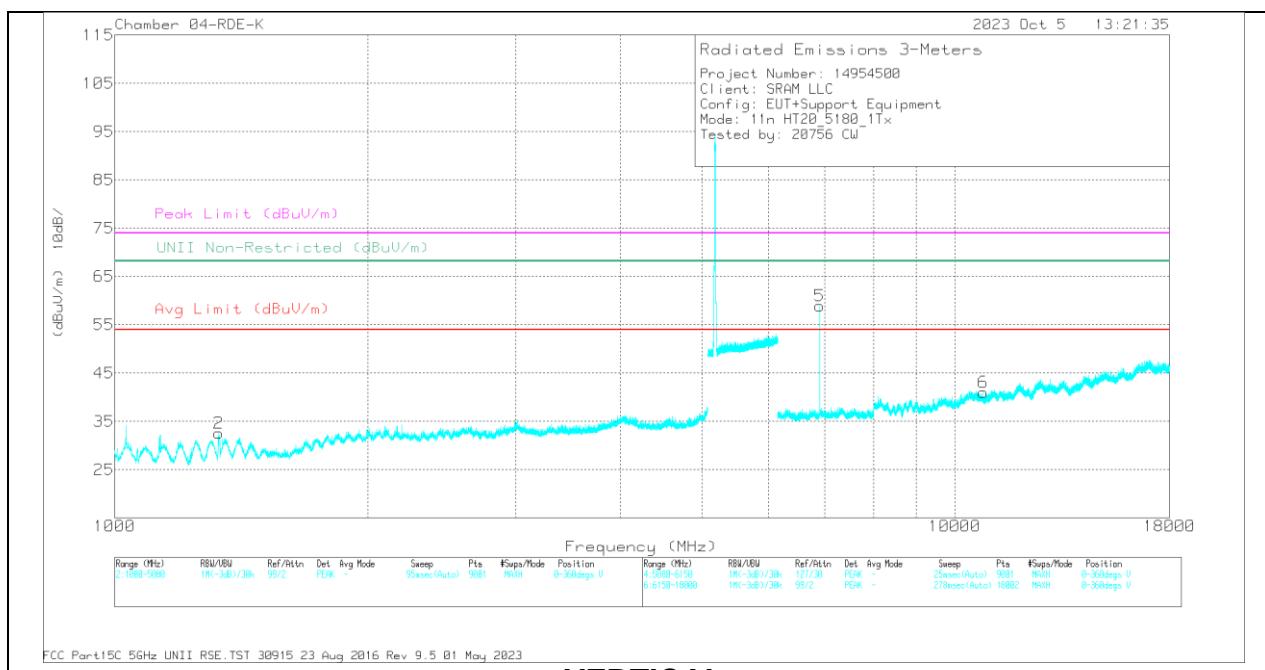
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
Pk - Peak detector  
RMS - RMS detection

## HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

## RADIATED EMISSIONS

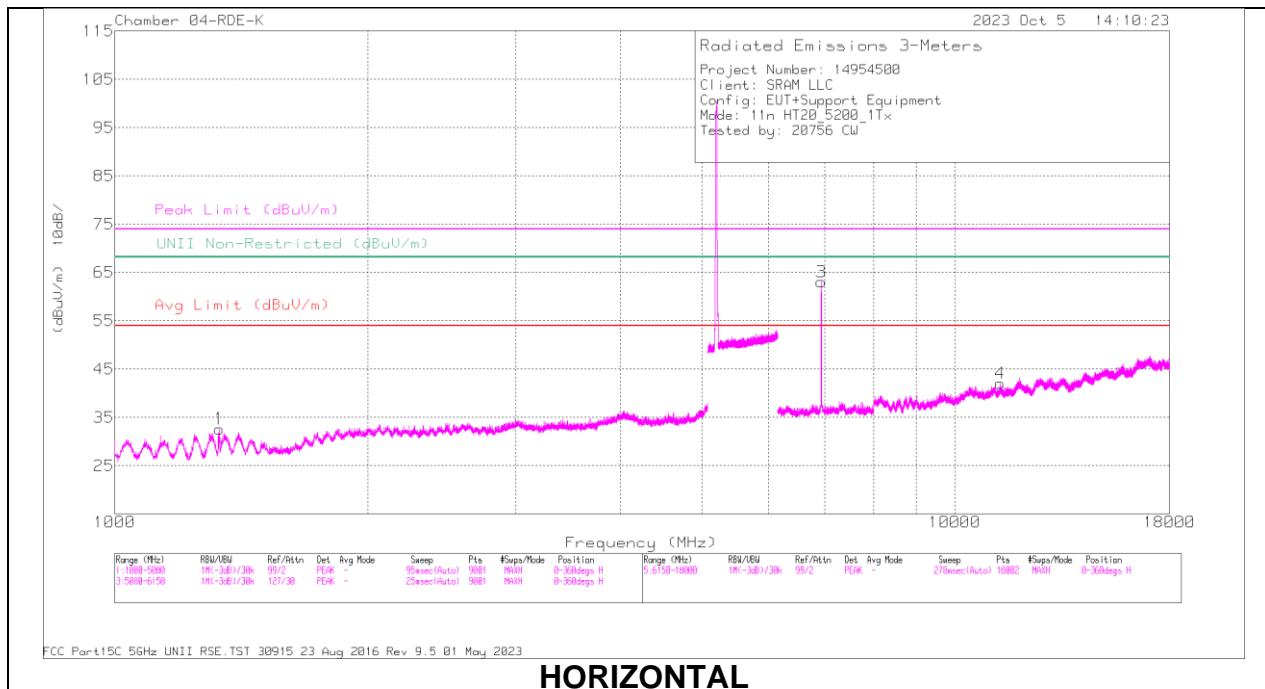
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1329.129	61.66	PK-U	29	-45.8	44.86	-	-	74	-29.14	-	-	253	156	H
	* 1329.153	45.52	ADR	29	-45.8	28.72	54	-25.28	-	-	-	-	253	156	H
2	* 1328.824	63.85	PK-U	29	-45.8	47.05	-	-	74	-26.95	-	-	203	110	V
	* 1327.944	47.41	ADR	29	-45.8	30.61	54	-23.39	-	-	-	-	203	110	V
3	6906.674	69.67	PK-U	35.7	-37.3	68.07	-	-	-	-	68.2	-13	170	105	H
	6906.545	65.94	ADR	35.7	-37.3	64.34	-	-	-	-	-	-	170	105	H
4	* 10742.828	48.67	PK-U	37.9	-36.3	50.27	-	-	74	-23.73	-	-	18	284	H
	* 10742.998	37.33	ADR	37.9	-36.3	38.93	54	-15.07	-	-	-	-	18	284	H
5	6906.75	64.27	PK-U	35.7	-37.3	62.67	-	-	-	-	68.2	-5.53	2	102	V
	6906.625	60.23	ADR	35.7	-37.3	58.63	-	-	-	-	-	-	2	102	V
6	* 10813.176	48.37	PK-U	38	-36.4	49.97	-	-	74	-24.03	-	-	247	130	V
	* 10813.365	36.58	ADR	38	-36.4	38.18	54	-15.82	-	-	-	-	247	130	V

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

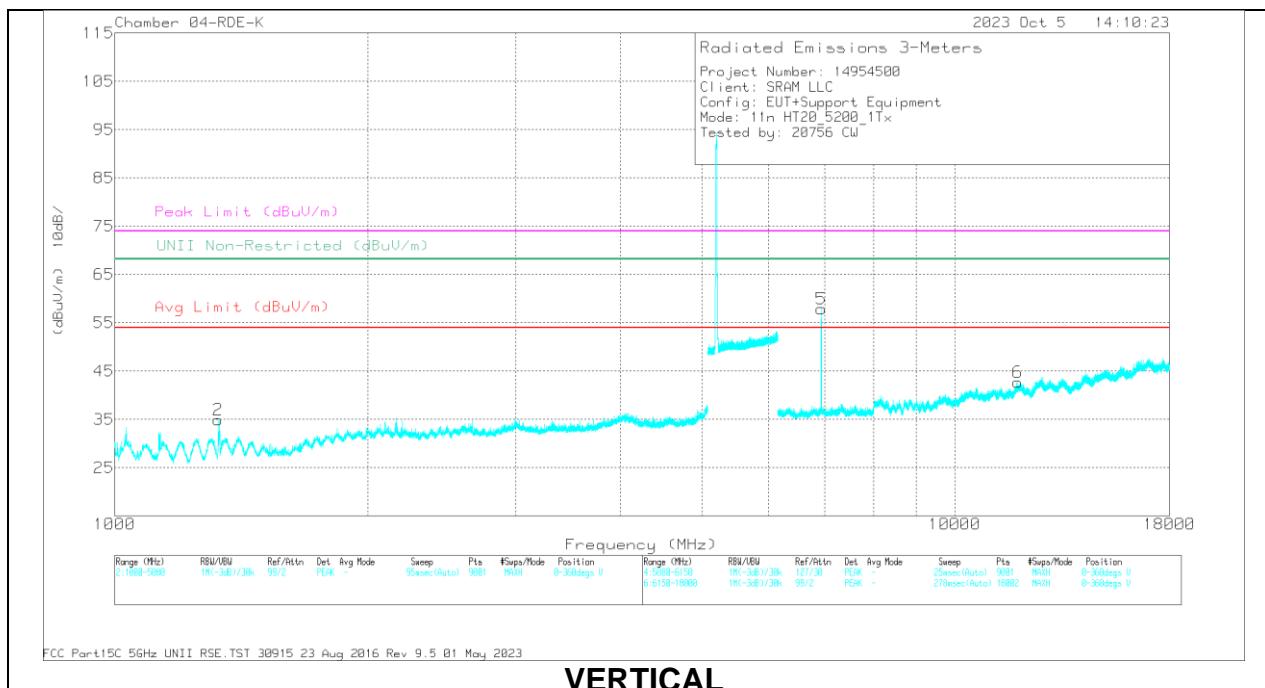
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## MID CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

## RADIATED EMISSIONS

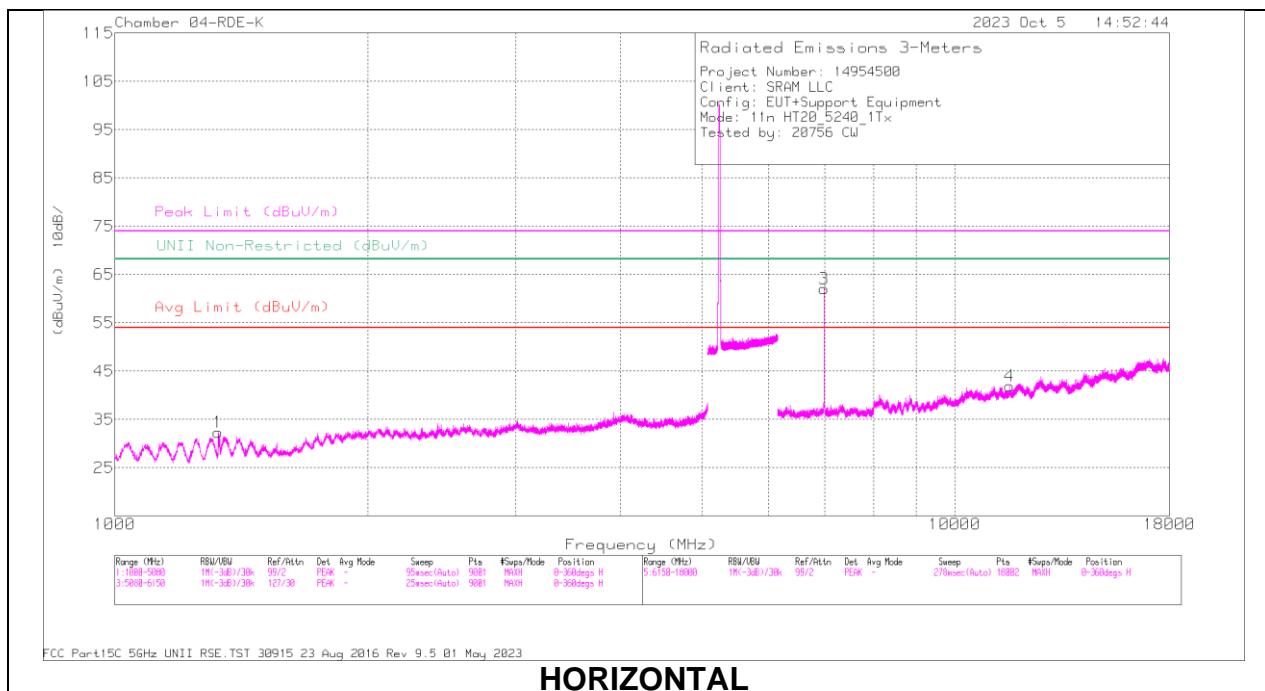
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1331.143	62.21	PK-U	29	-45.8	45.41	-	-	74	-28.59	-	-	251	102	H
	* 1331.074	46.16	ADR	29	-45.8	29.36	54	-24.64	-	-	-	-	251	102	H
2	* 1327.1	64.42	PK-U	29	-45.8	47.62	-	-	74	-26.38	-	-	207	135	V
	* 1327.384	47.83	ADR	29	-45.8	31.03	54	-22.97	-	-	-	-	207	135	V
3	6933.288	68.28	PK-U	35.7	-37.2	66.78	-	-	-	-	68.2	-1.42	171	136	H
	6933.232	64.46	ADR	35.7	-37.2	62.96	-	-	-	-	-	-	171	136	H
4	* 11311.032	48.91	PK-U	37.8	-35.4	51.31	-	-	74	-22.69	-	-	335	227	H
	* 11311.174	37.11	ADR	37.8	-35.4	39.51	54	-14.49	-	-	-	-	335	227	H
5	6933.493	65.03	PK-U	35.7	-37.2	63.53	-	-	-	-	68.2	-4.67	310	226	V
	6933.261	60.96	ADR	35.7	-37.2	59.46	-	-	-	-	-	-	310	226	V
6	* 11884.162	47.63	PK-U	38.4	-34.4	51.63	-	-	74	-22.37	-	-	359	111	V
	* 11884.227	35.67	ADR	38.4	-34.4	39.67	54	-14.33	-	-	-	-	359	111	V

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

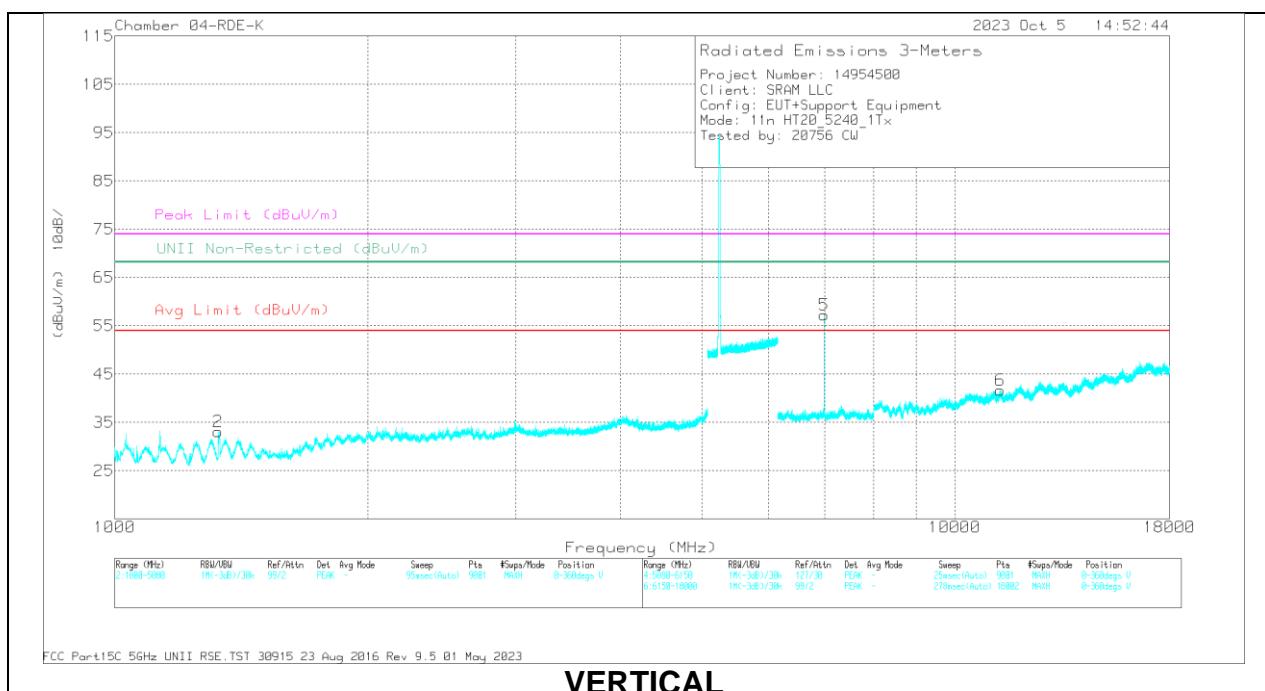
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## HIGH CHANNEL RESULTS



**HORIZONTAL**



## RADIATED EMISSIONS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	CbI/Amp (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	* 1327.782	63	PK-U	29	-45.8	46.2	-	-	74	-27.8	-	-	253	187	H
	* 1328.003	46.19	ADR	29	-45.8	29.39	54	-24.61	-	-	-	-	253	187	H
2	* 1327.865	63.97	PK-U	29	-45.8	47.17	-	-	74	-26.83	-	-	194	145	V
	* 1329.624	47.3	ADR	29	-45.8	30.5	54	-23.5	-	-	-	-	194	145	V
3	6986.742	67.64	PK-U	35.7	-37.4	65.94	-	-	-	-	68.2	-2.26	170	101	H
	6986.542	63.9	ADR	35.7	-37.4	62.2	-	-	-	-	-	-	170	101	H
4	* 11620.002	47.23	PK-U	38.1	-34.6	50.73	-	-	74	-23.27	-	-	341	223	H
	* 11619.889	35.88	ADR	38.1	-34.6	39.38	54	-14.62	-	-	-	-	341	223	H
5	6986.645	64.69	PK-U	35.7	-37.4	62.99	-	-	-	-	68.2	-5.21	311	220	V
	6986.616	60.59	ADR	35.7	-37.4	58.89	-	-	-	-	-	-	311	220	V
6	* 11317.256	48.71	PK-U	37.8	-35.3	51.21	-	-	74	-22.79	-	-	0	146	V
	* 11317.157	36.92	ADR	37.8	-35.3	39.42	54	-14.58	-	-	-	-	0	146	V

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

PK-U - U-NII: Maximum Peak

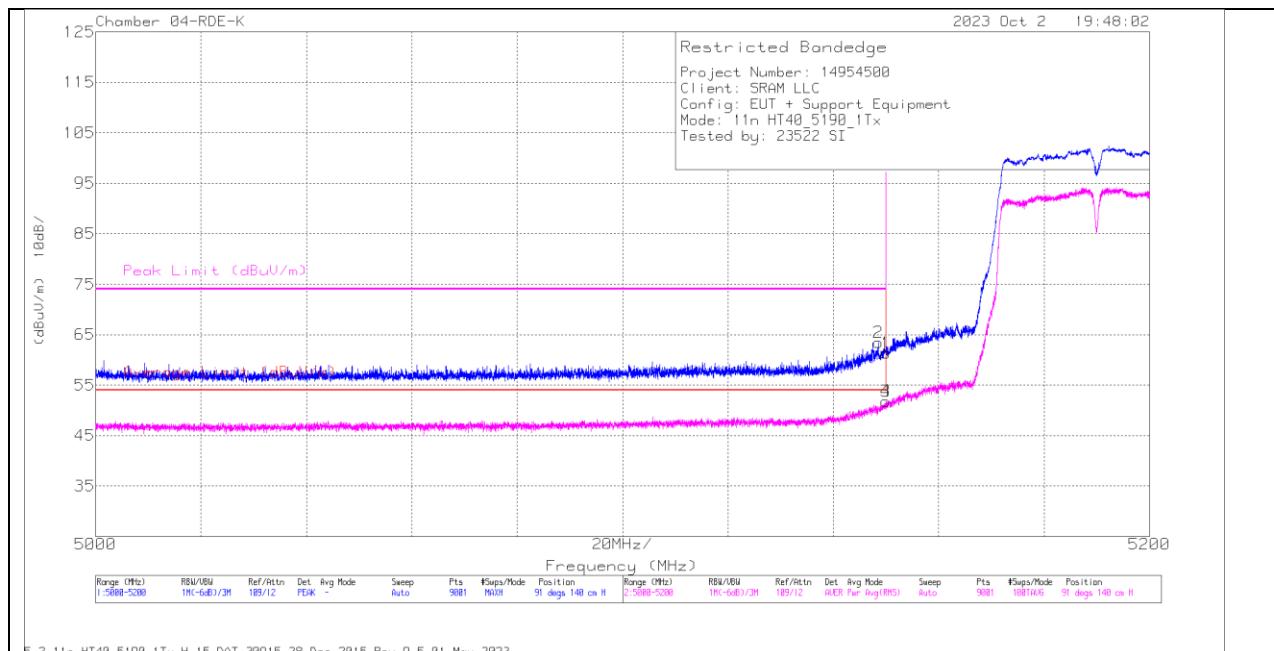
ADR - U-NII AD primary method, RMS average

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

#### 1TX Antenna 1 MODE

#### BANDEDGE (LOW CHANNEL)

#### HORIZONTAL RESULT



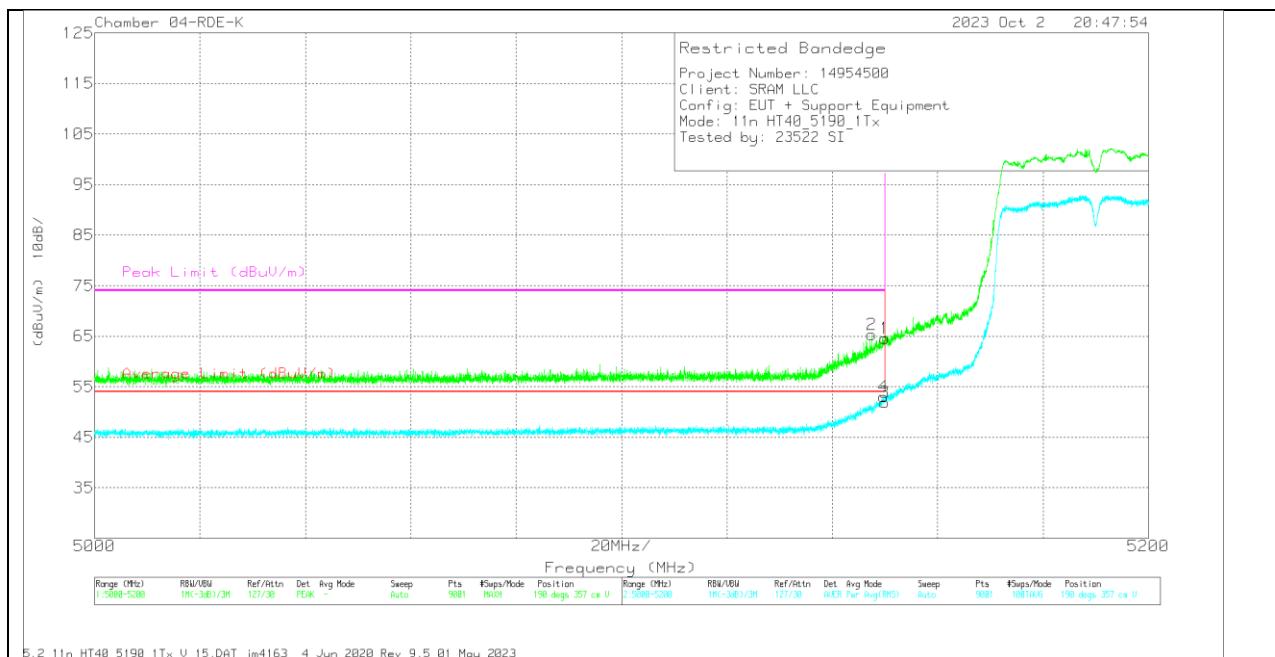
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	34.55	Pk	34.1	-7.3	0	61.35	-	-	74	-12.65	91	140	H
2	* 5148.554	36.8	Pk	34	-7.3	0	63.5	-	-	74	-10.5	91	140	H
3	* 5150	24.78	RMS	34.1	-7.3	.16	51.74	54	-2.26	-	-	91	140	H
4	* 5149.999	24.81	RMS	34.1	-7.3	.16	51.77	54	-2.22	-	-	91	140	H

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

Pk - Peak detector

RMS - RMS detection

## VERTICAL RESULT



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF 3m (dB/m)	Cbl/Amp (dB)	DCCF (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5150	60.54	Pk	34.1	-30.1	0	64.54	-	-	74	-9.46	190	357	V
2	* 5147.465	61.59	Pk	34	-30.3	0	65.29	-	-	74	-8.71	190	357	V
3	* 5150	47.64	RMS	34.1	-30.1	.16	51.8	54	-2.2	-	-	190	357	V
4	* 5149.732	48.77	RMS	34.1	-30.1	.16	52.93	54	-1.07	-	-	190	357	V

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

Pk - Peak detector

RMS - RMS detection