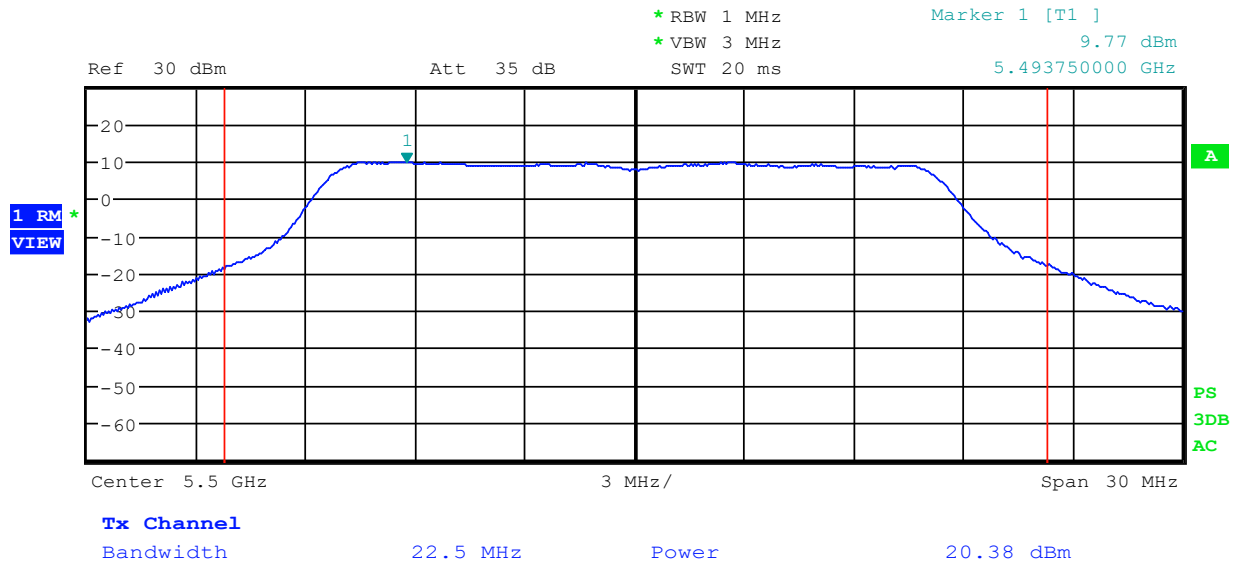




POWER SPECTRAL DENSITY UNII 2C – Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	9.77	10
Mid	5600	9.38	10
High	5700	9.86	10
Modulation: HT20			
Low	5500	9.59	10
Mid	5600	9.44	10
High	5700	9.56	10
Modulation: non HT40			
Low	5510	9.58	10
Mid	5590	9.59	10
High	5690	8.84	10
Modulation: HT40			
Low	5510	8.39	10
Mid	5590	9.10	10
High	5690	8.74	10
Modulation: HT80			
Low	5530	5.52	10
Mid	5610	6.80	10
High	5680	6.53	10

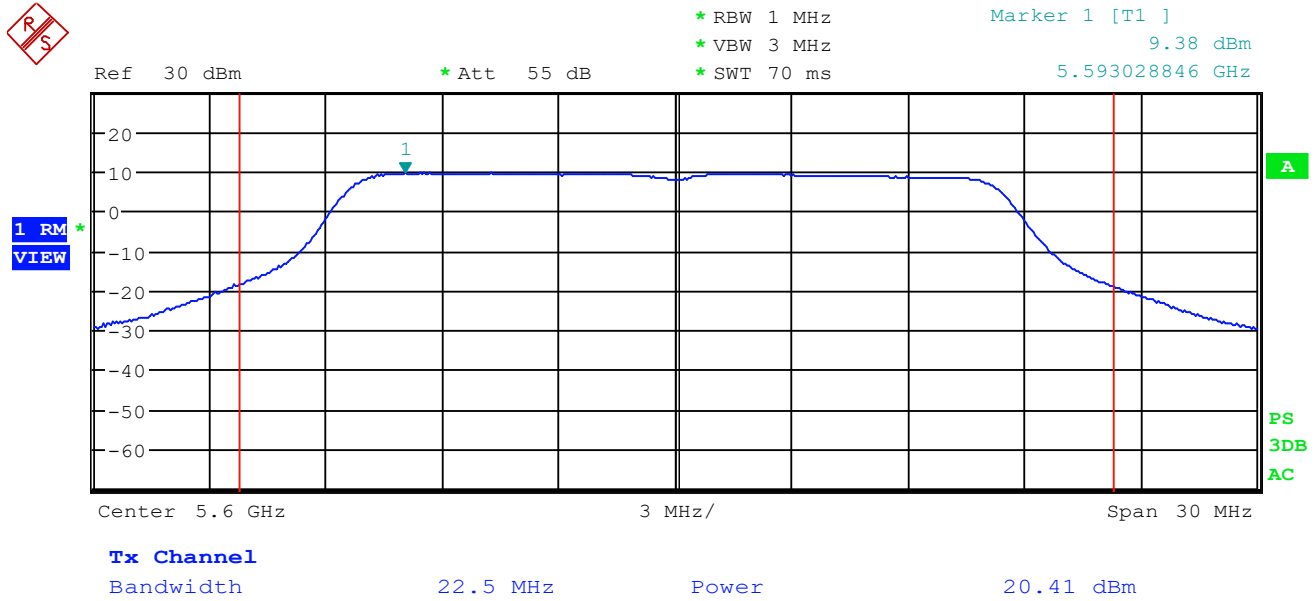


UNII 2C, Port 1: OFDM, Low Channel (Non-Beamforming)



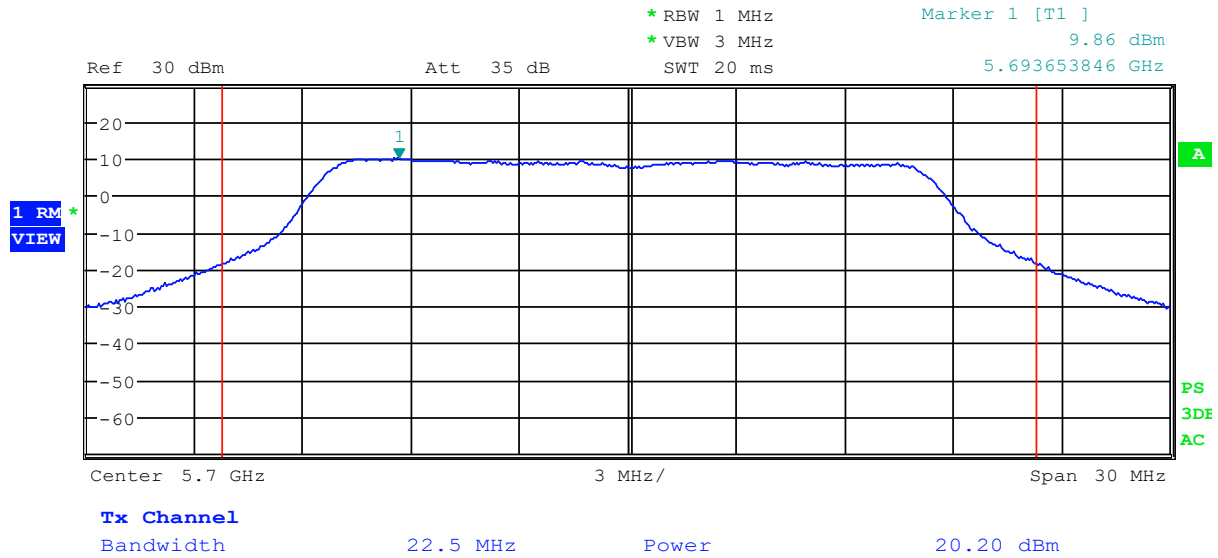


UNII 2C, Port 1: OFDM, Mid Channel (Non-Beamforming)



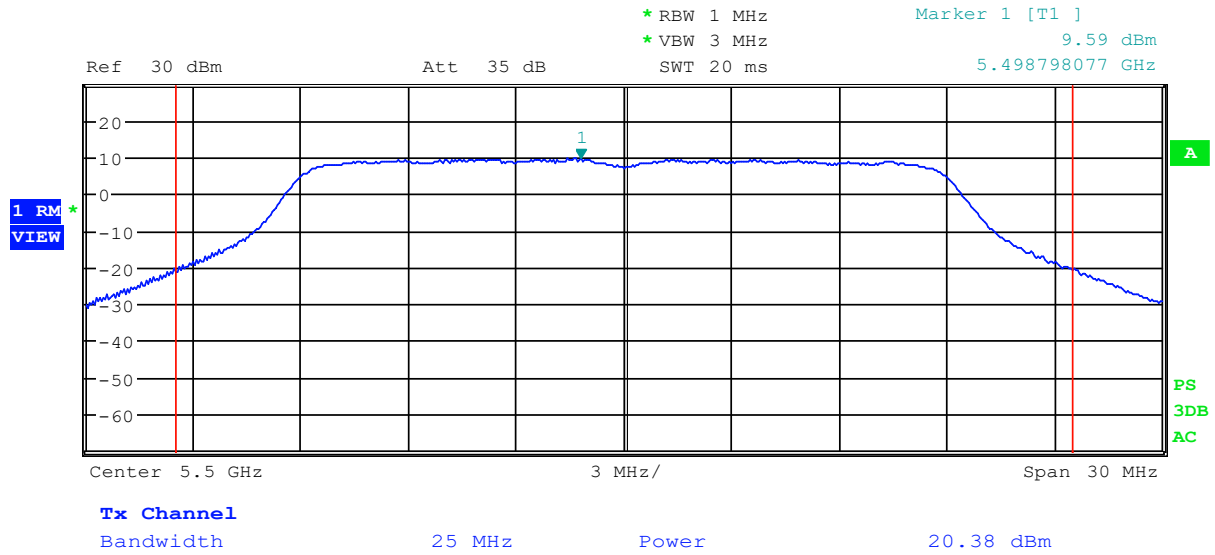


UNII 2C, Port 1: OFDM, High Channel (Non-beamforming)



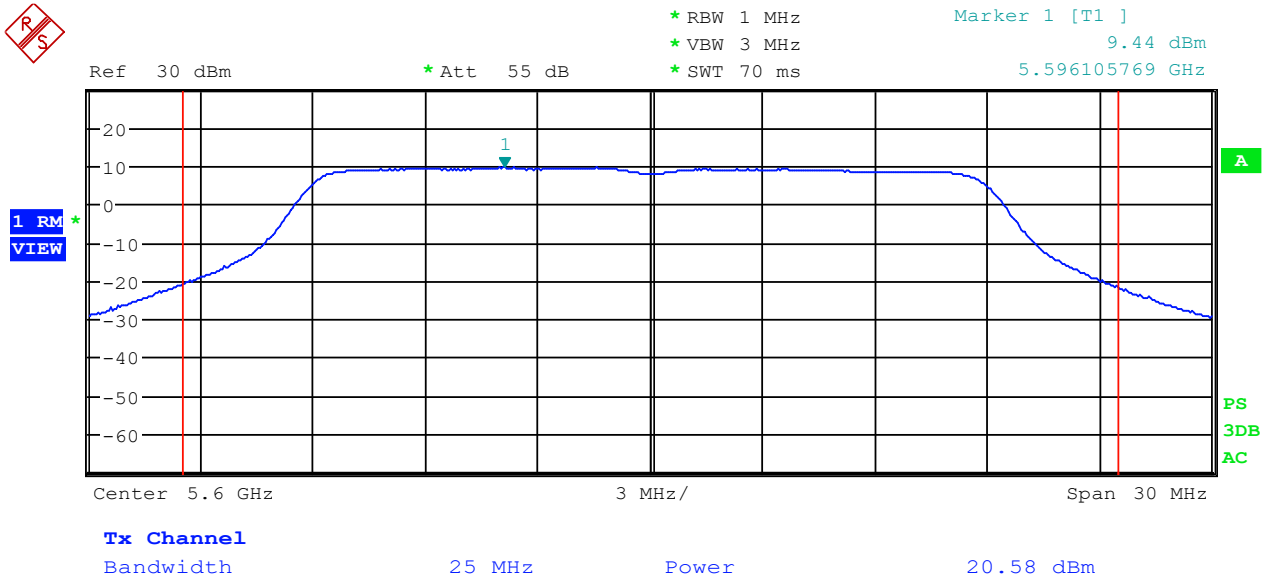


UNII 2C, Port 1: HT20, Low Channel (Non-beamforming)



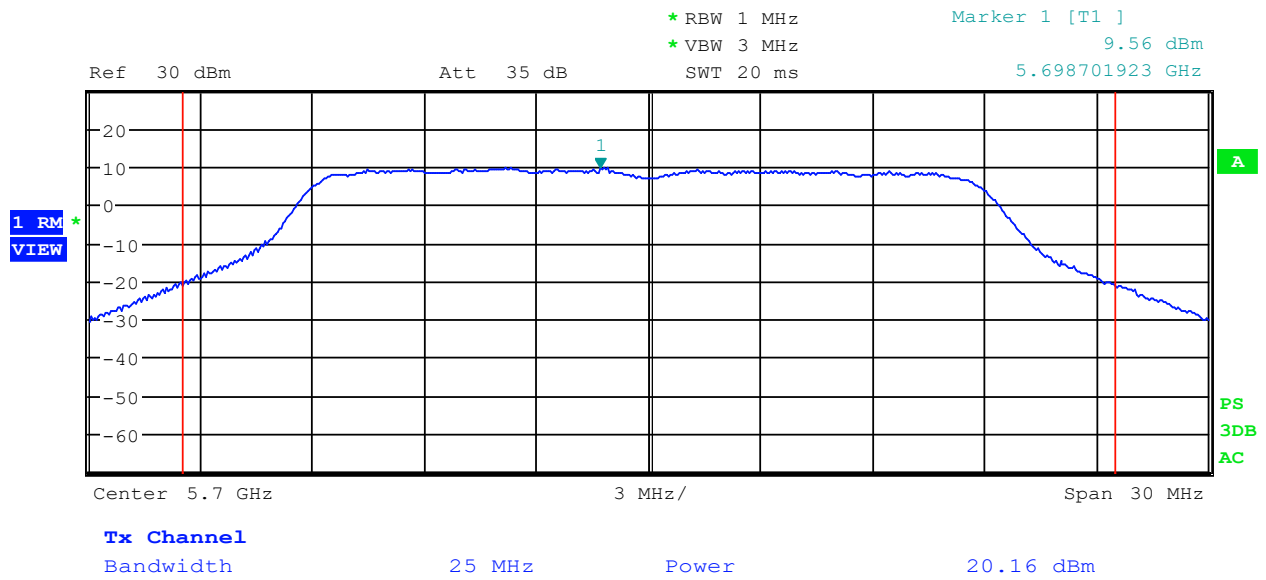


UNII 2C, Port 1: HT20, Mid Channel (Non-Beamforming)



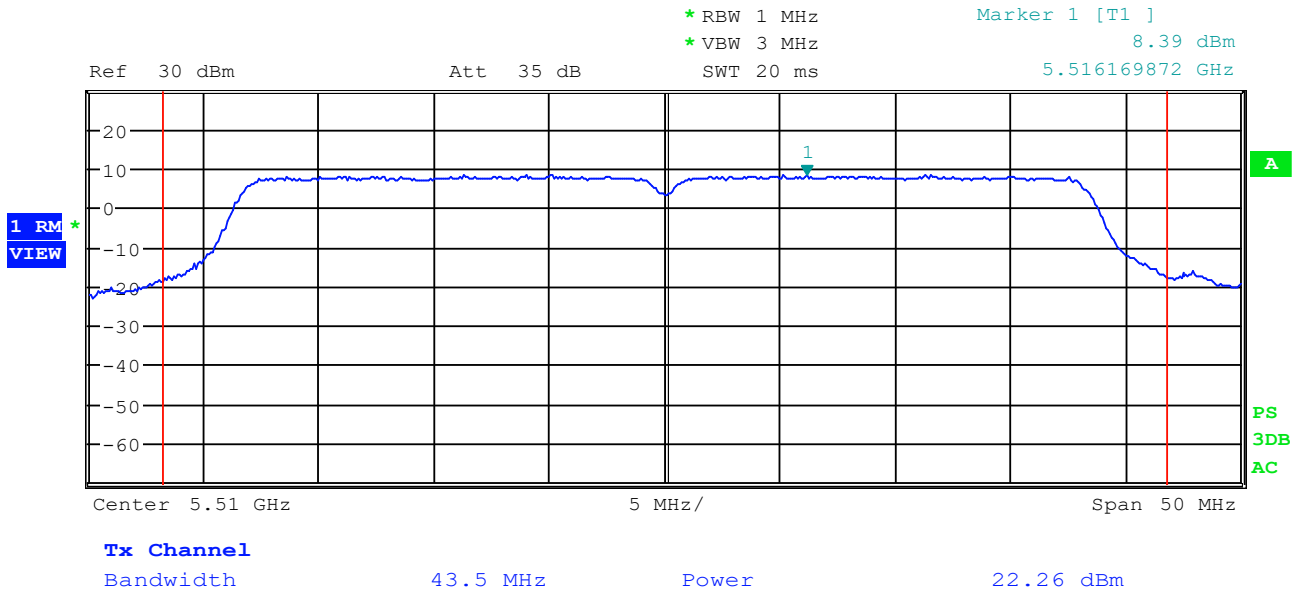


UNII 2C, Port 1: HT20, High Channel (Non-beamforming)



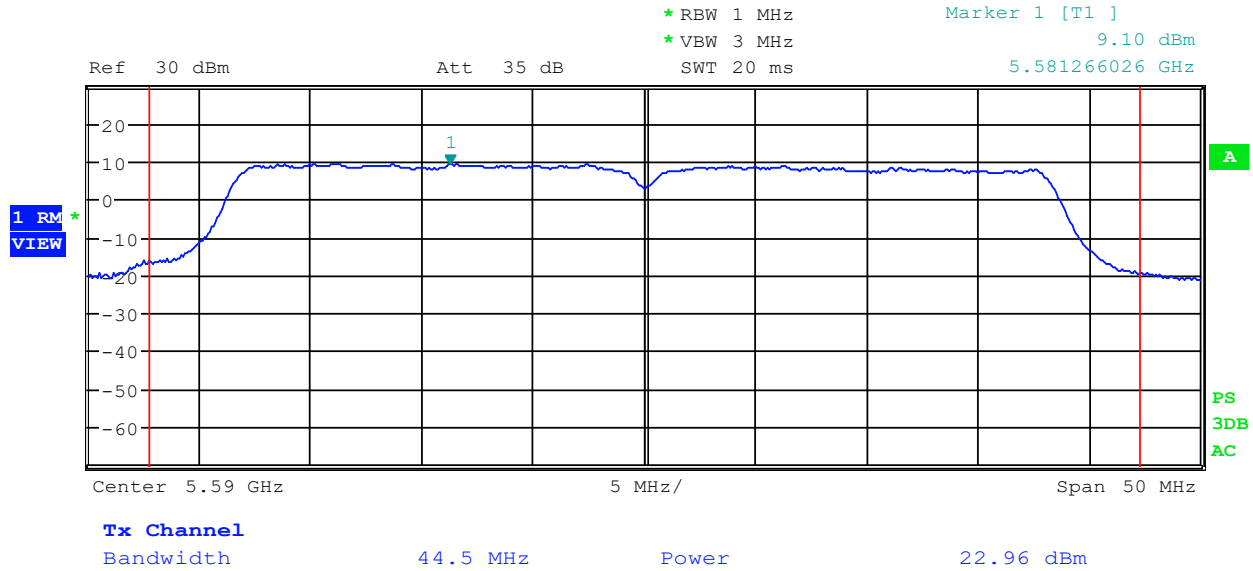


UNII 2C, Port 1: HT40, Low Channel (Non-beamforming)



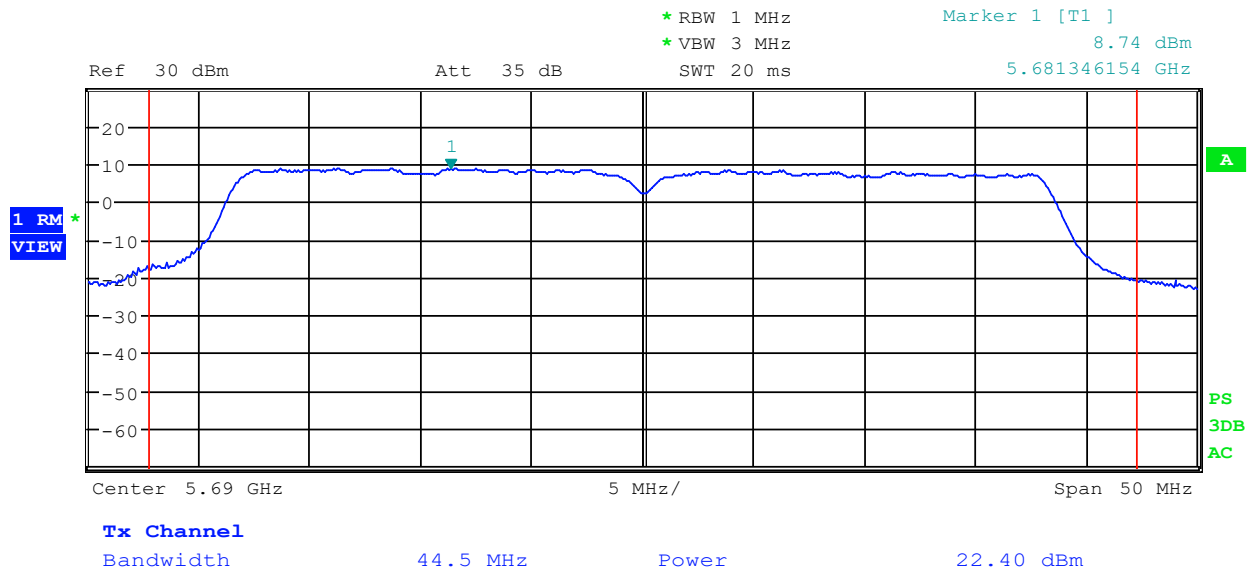


UNII 2C, Port 1: HT40, Mid Channel (Non-Beamforming)



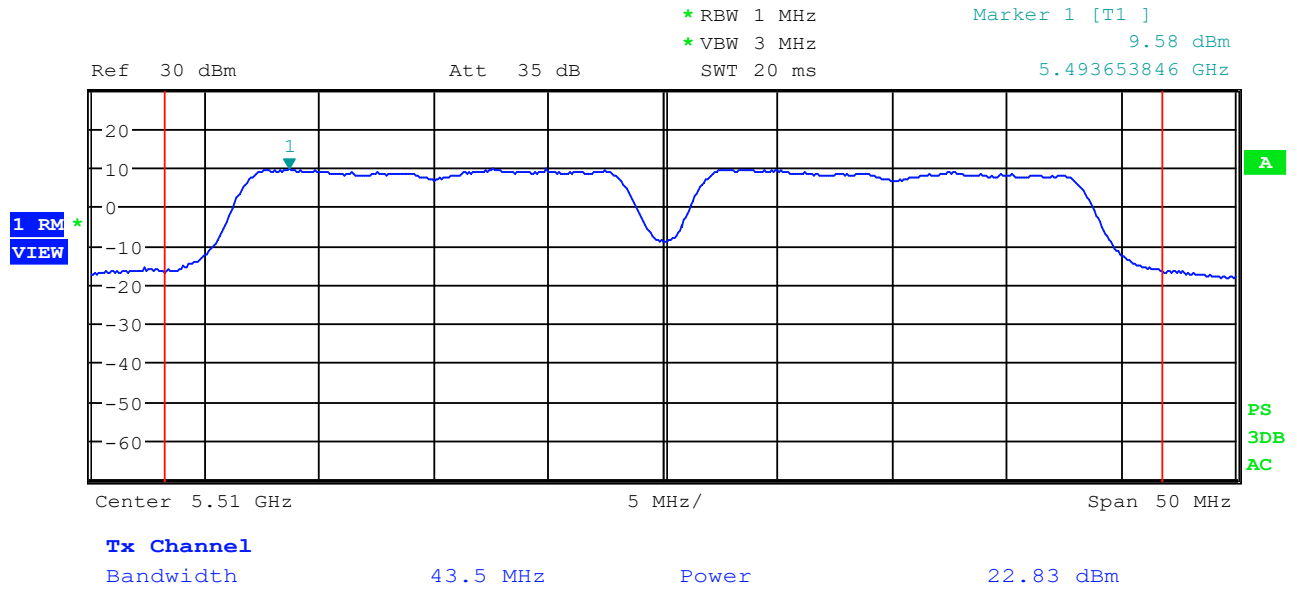


UNII 2C, Port 1: HT40, High Channel (Non-beamforming)



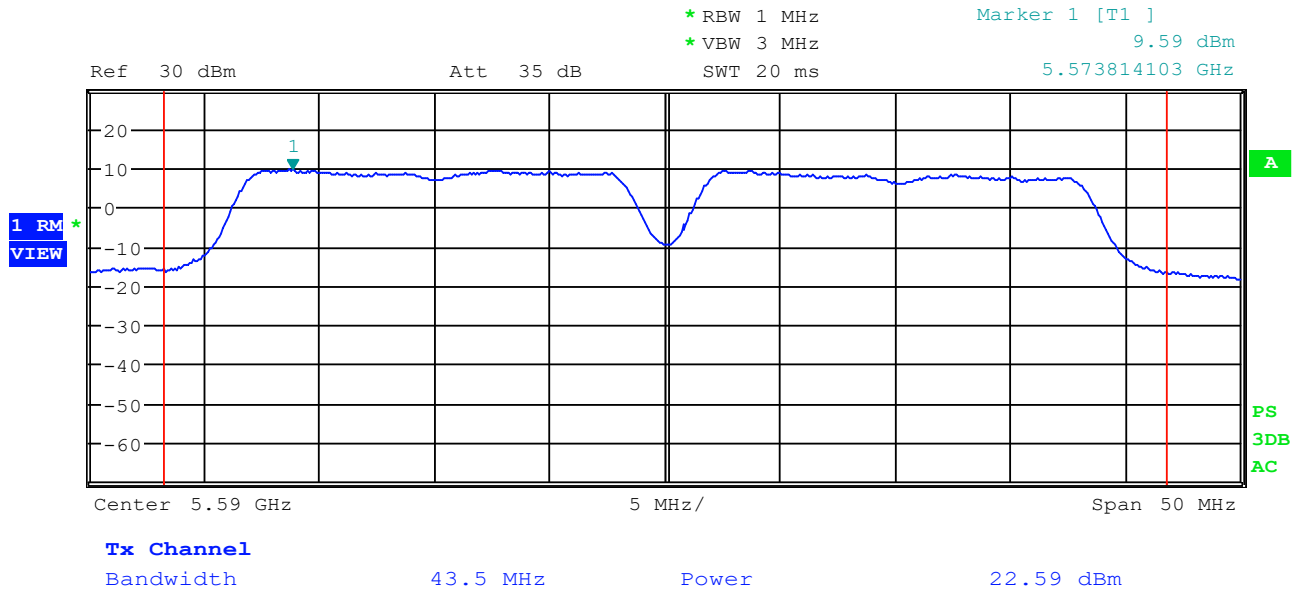


UNII 2C, Port 1: non HT40, Low Channel (Non-beamforming)



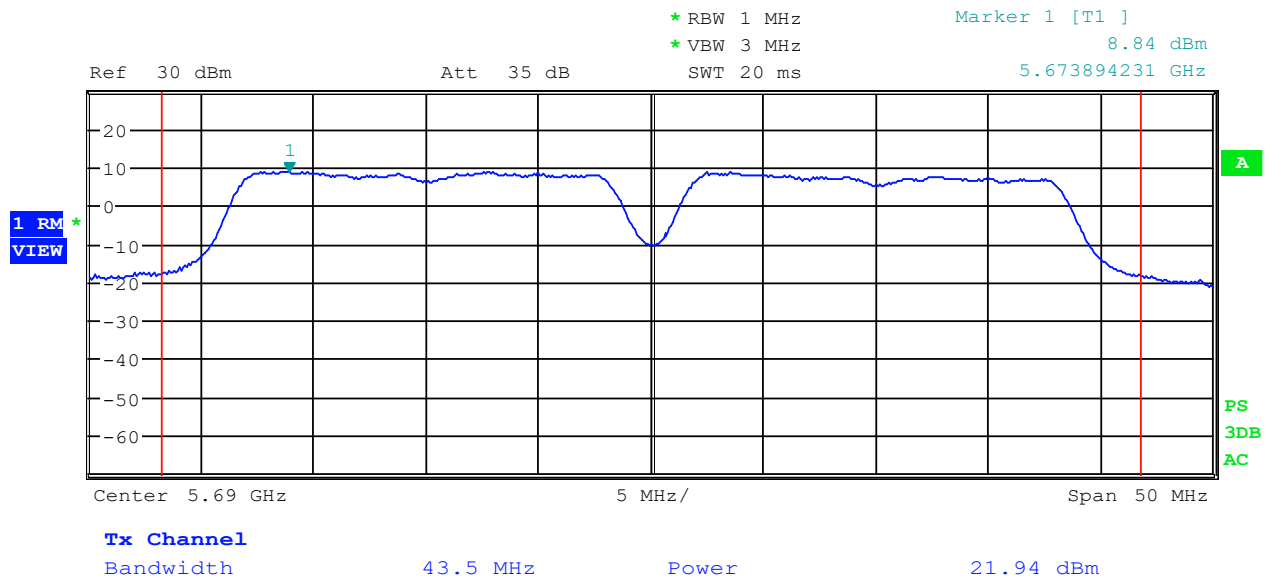


UNII 2C, Port 1: non HT40, Mid Channel (Non-Beamforming)



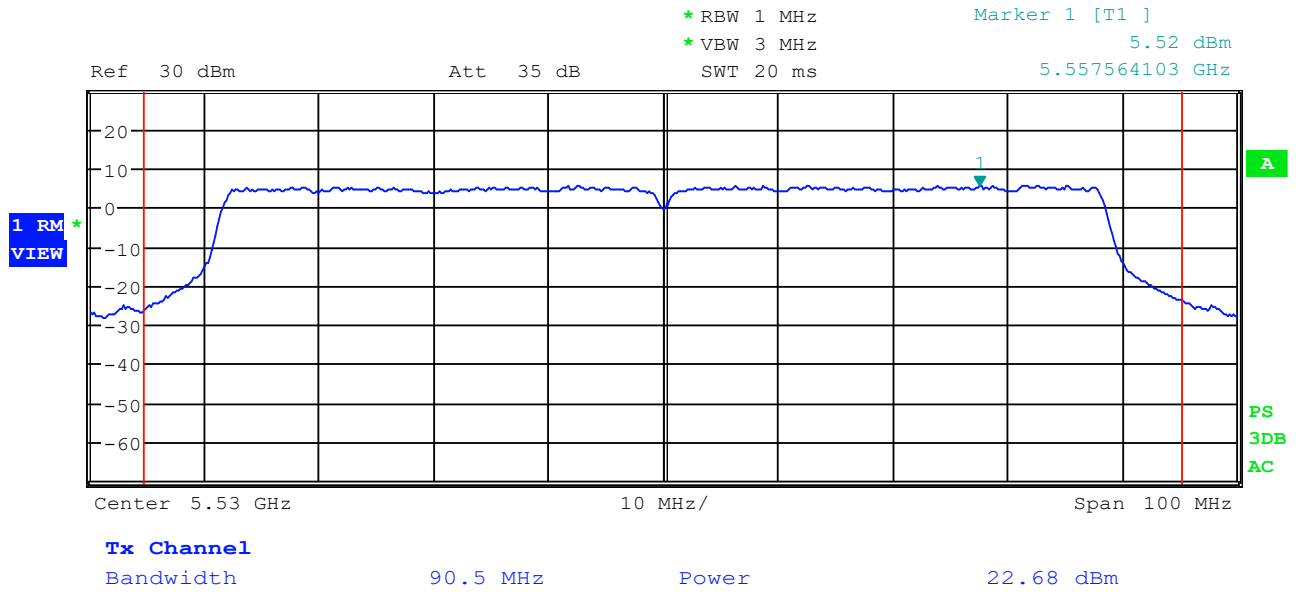


UNII 2C, Port 1: non HT40, High Channel (Non-beamforming)



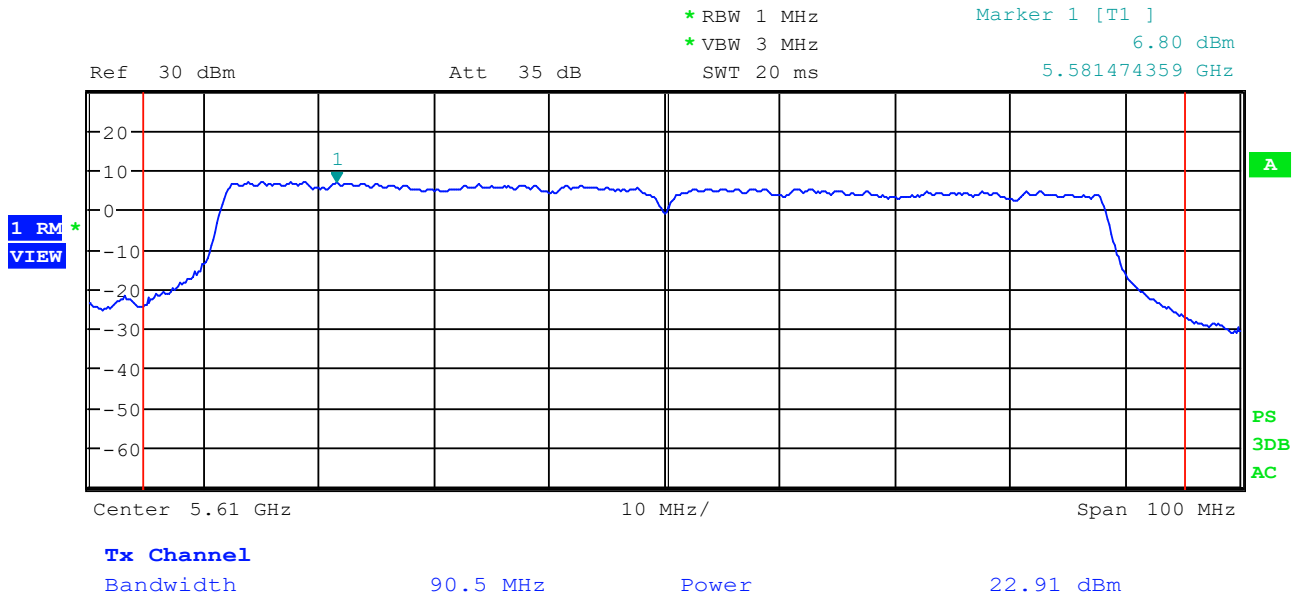


UNII 2C, Port 1: HT80, Low Channel (Non-beamforming)



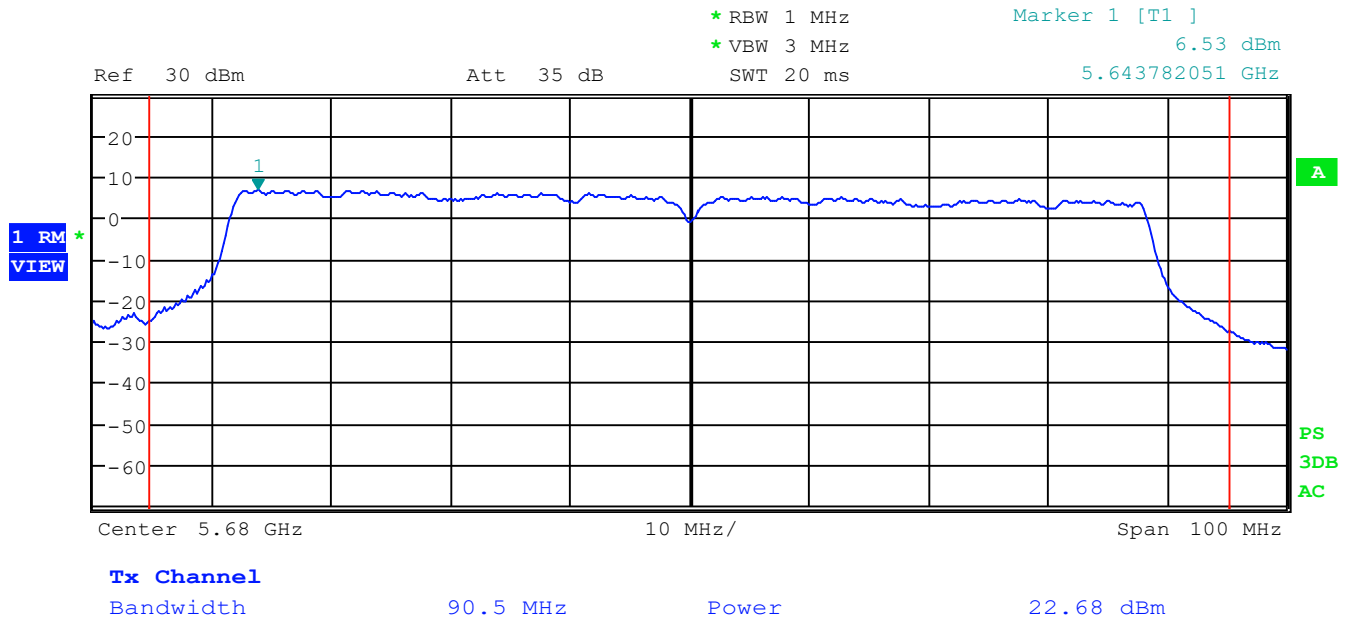


UNII 2C, Port 1: HT80, Mid Channel (Non-Beamforming)





UNII 2C, Port 1: HT80, High Channel (Non-beamforming)

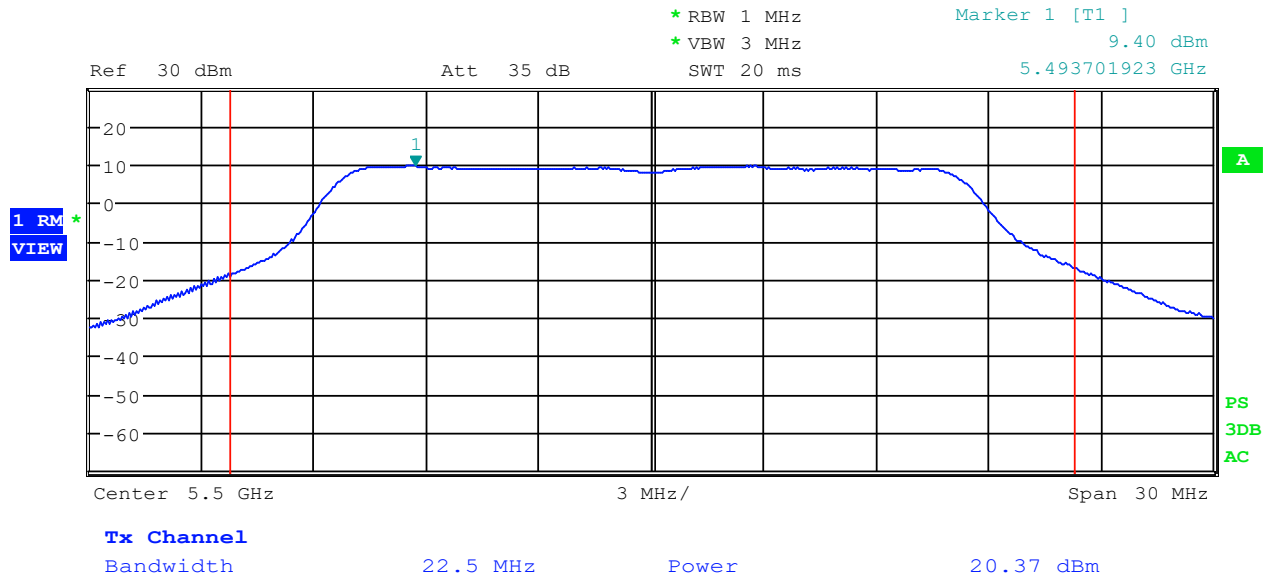




POWER SPECTRAL DENSITY UNII 2C – Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	9.40	10
Mid	5600	9.49	10
High	5700	9.78	10
Modulation: HT20			
Low	5500	9.10	10
Mid	5600	9.37	10
High	5700	9.51	10
Modulation: non HT40			
Low	5510	8.26	10
Mid	5590	8.63	10
High	5690	8.53	10
Modulation: HT40			
Low	5510	9.30	10
Mid	5590	9.40	10
High	5690	8.76	10
Modulation: HT80			
Low	5530	5.42	10
Mid	5610	5.53	10
High	5690	7.13	10

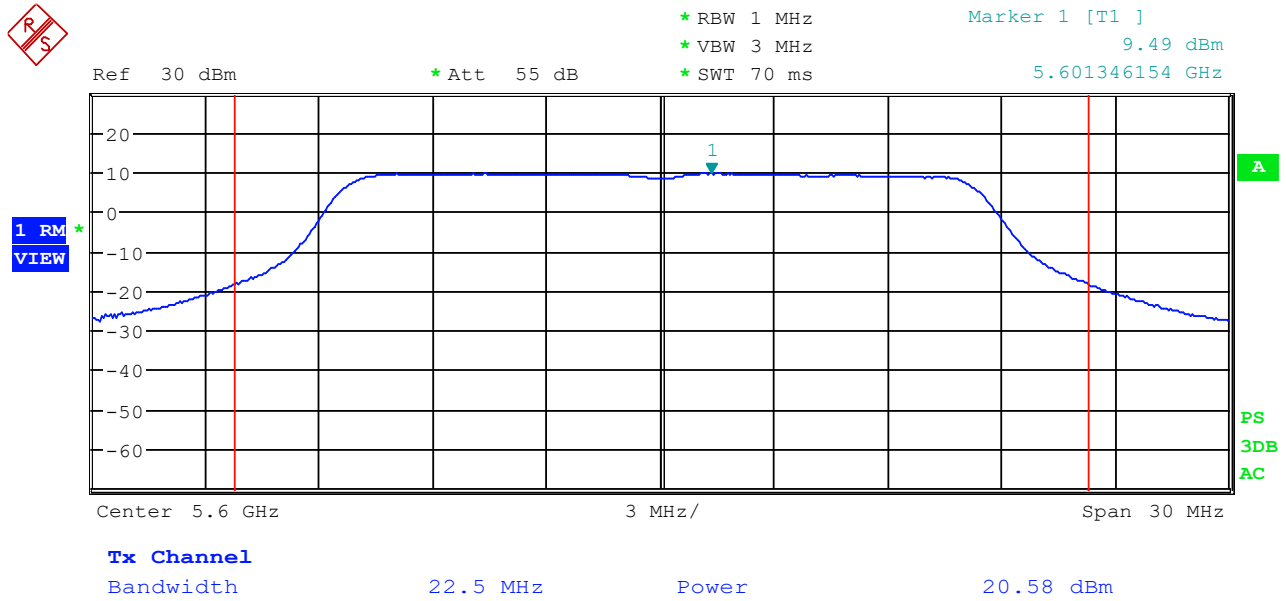


UNII 2C, Port 2: OFDM, Low Channel (Non-beamforming)



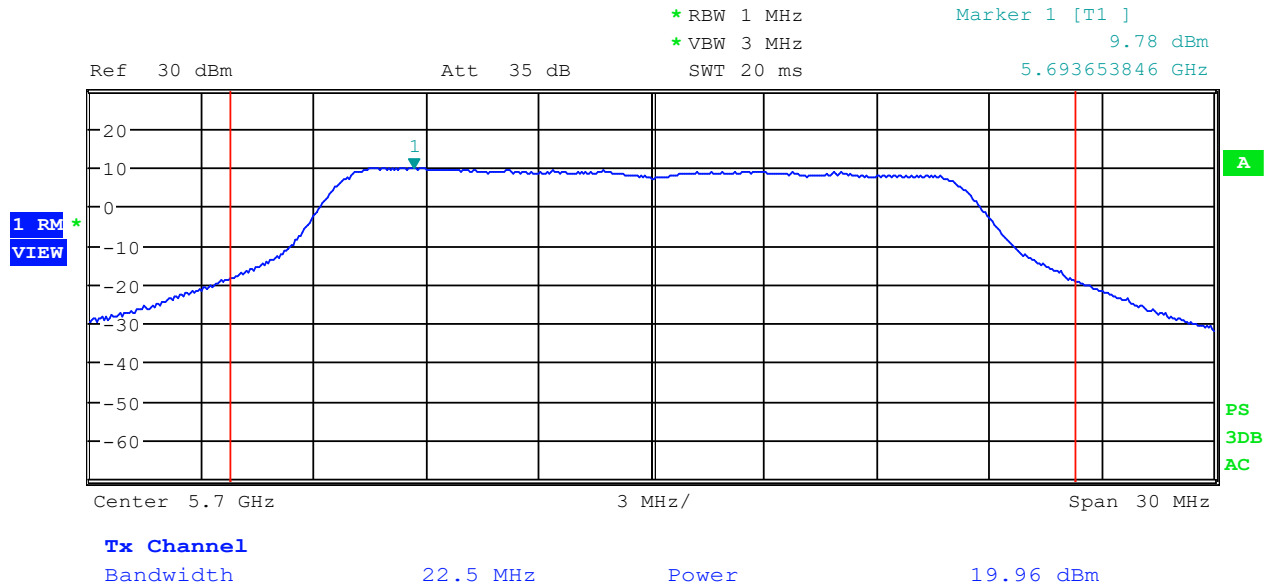


UNII 2C, Port 2: OFDM, Mid Channel (Non-Beamforming)





UNII 2C, Port 2: OFDM, High Channel (Non-beamforming)

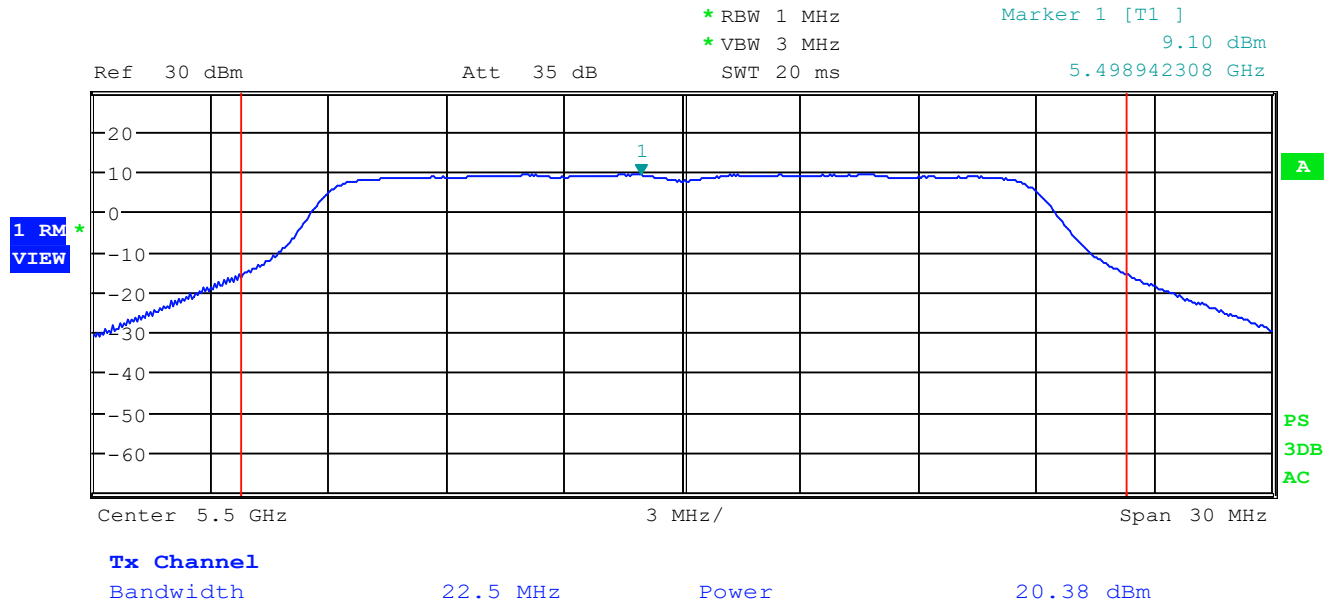




Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 2: HT20, Low Channel (Non-beamforming)

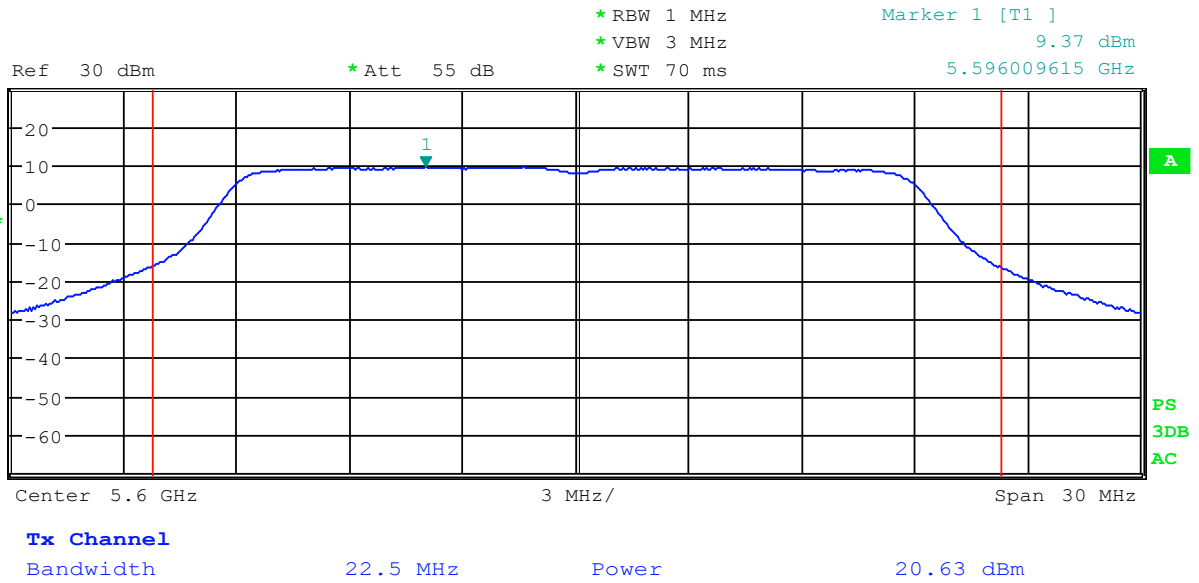




UNII 2C, Port 2: HT20, Mid Channel (Non-Beamforming)

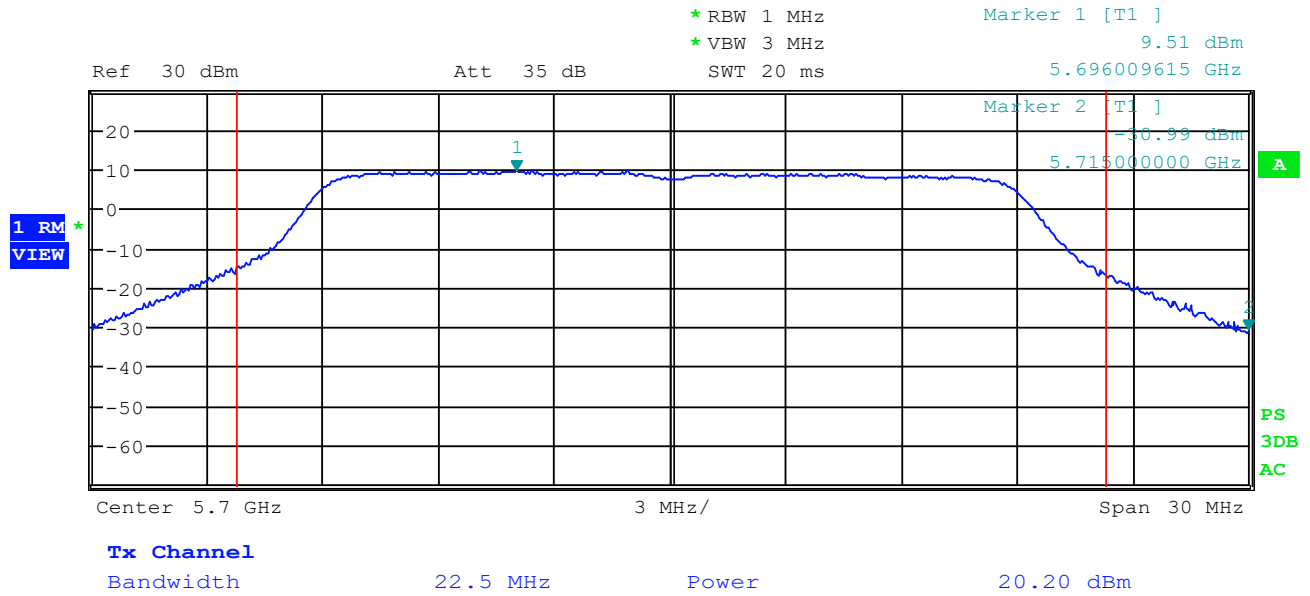


1 RM
VIEW



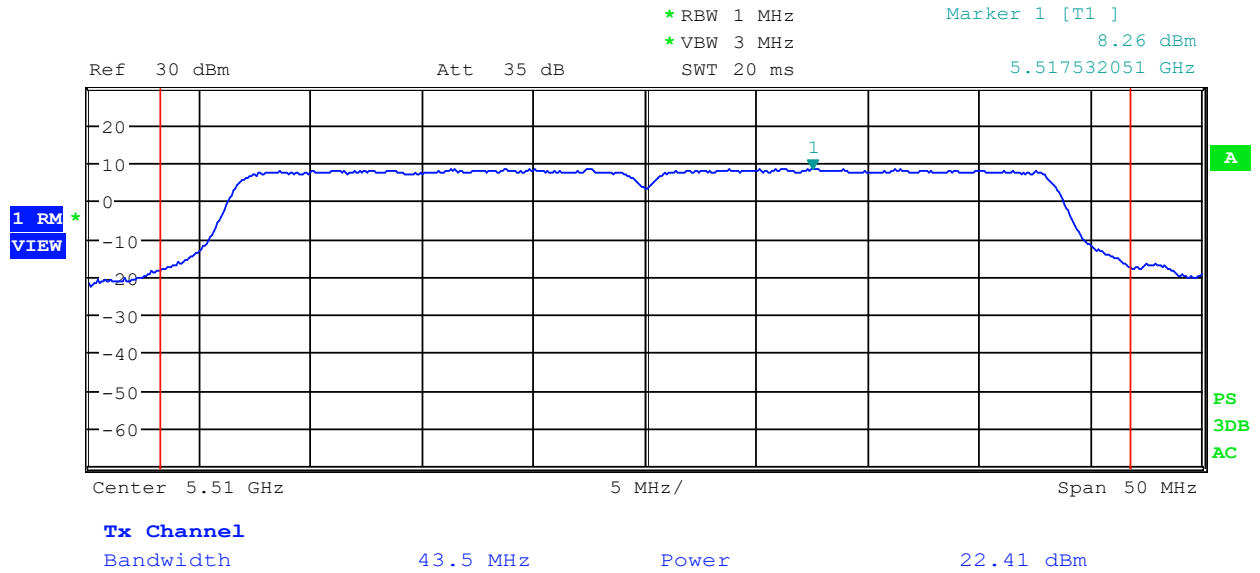


UNII 2C, Port 2: HT20, High Channel (Non-beamforming)



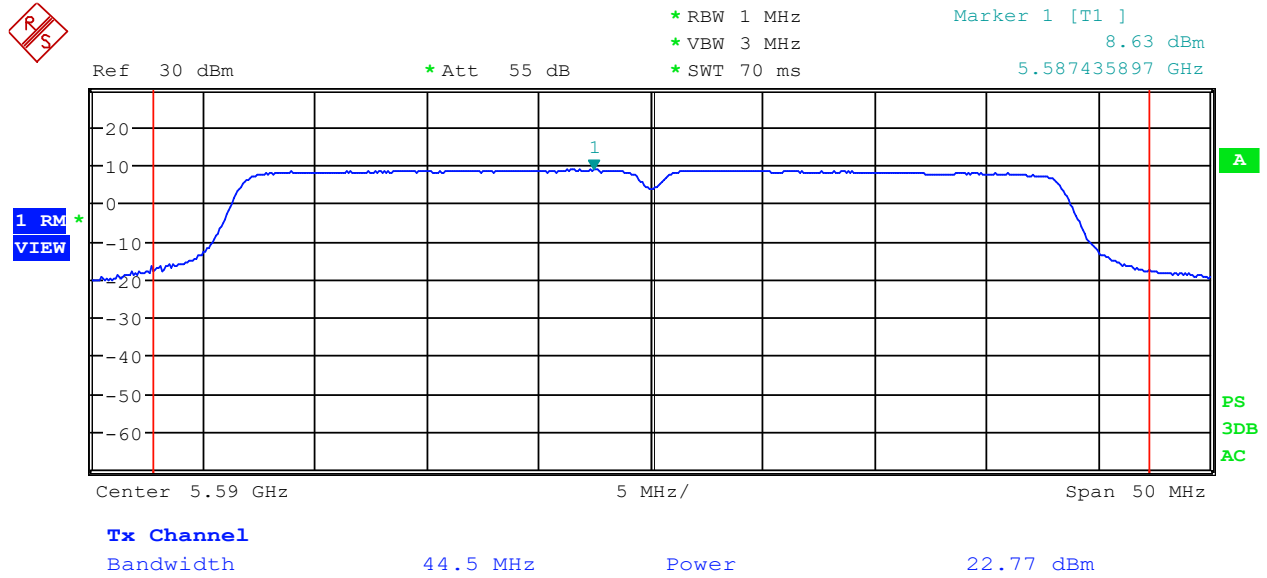


UNII 2C, Port 2: HT40, Low Channel (Non-beamforming)





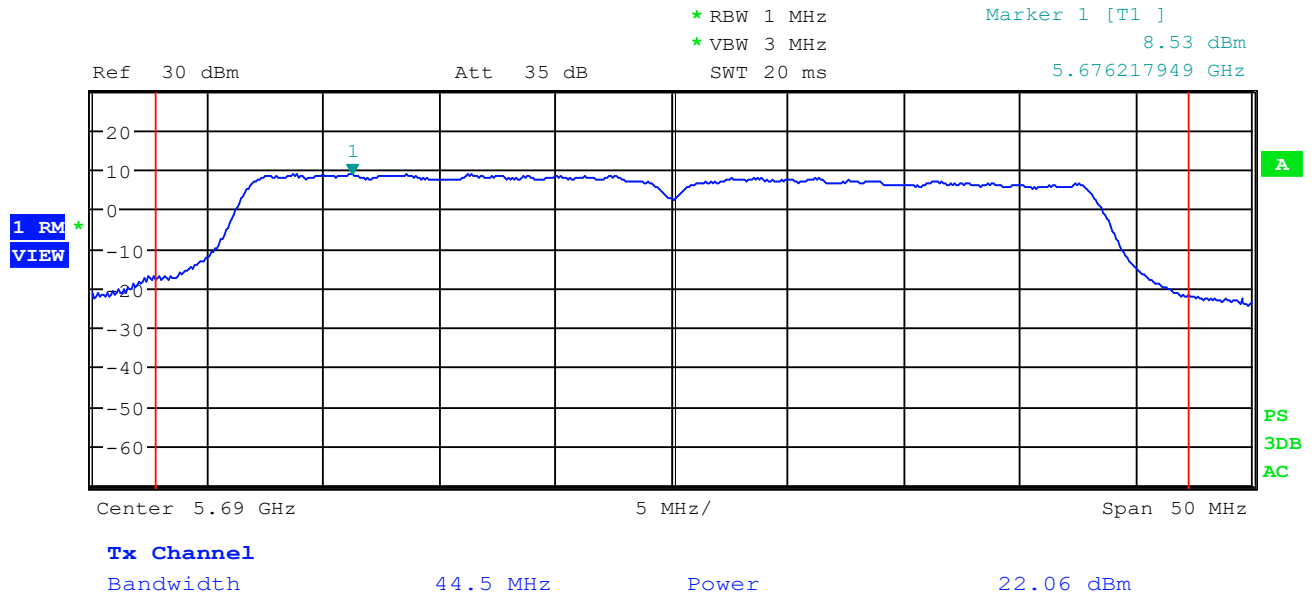
UNII 2C, Port 2: HT40, Mid Channel (Non-Beamforming)



Date: 9 SEP 2021 14:23:33

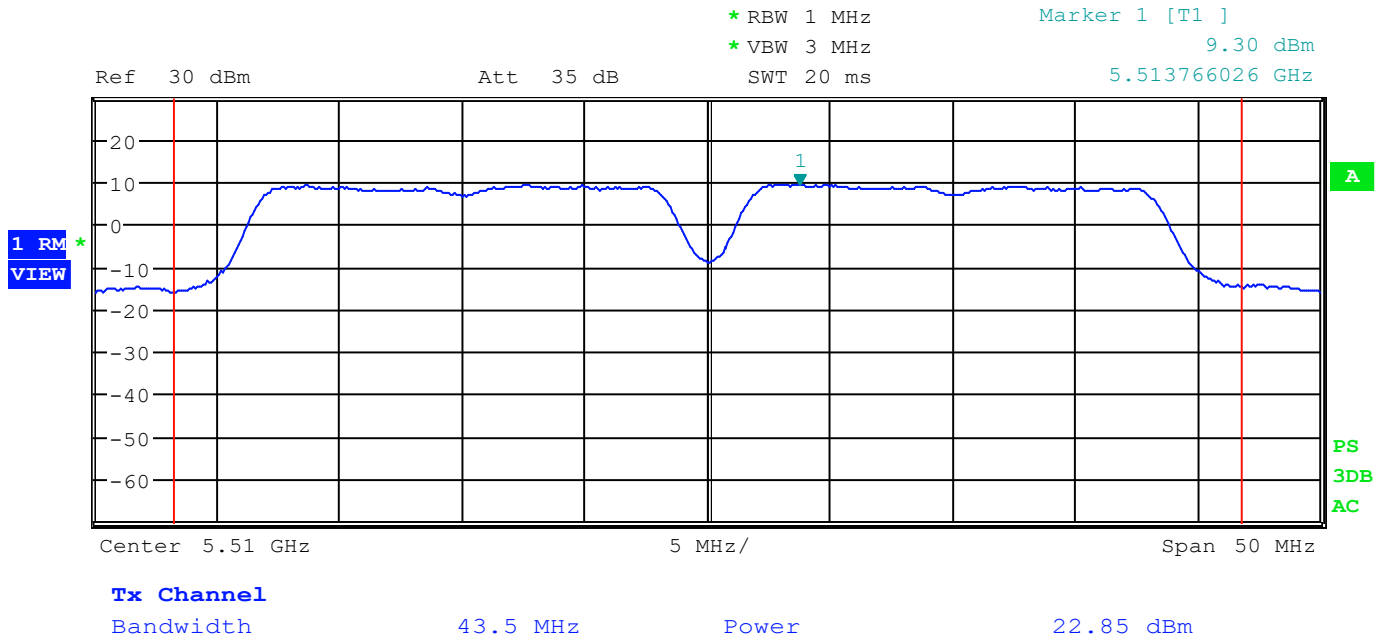


UNII 2C, Port 2: HT40, High Channel (Non-beamforming)



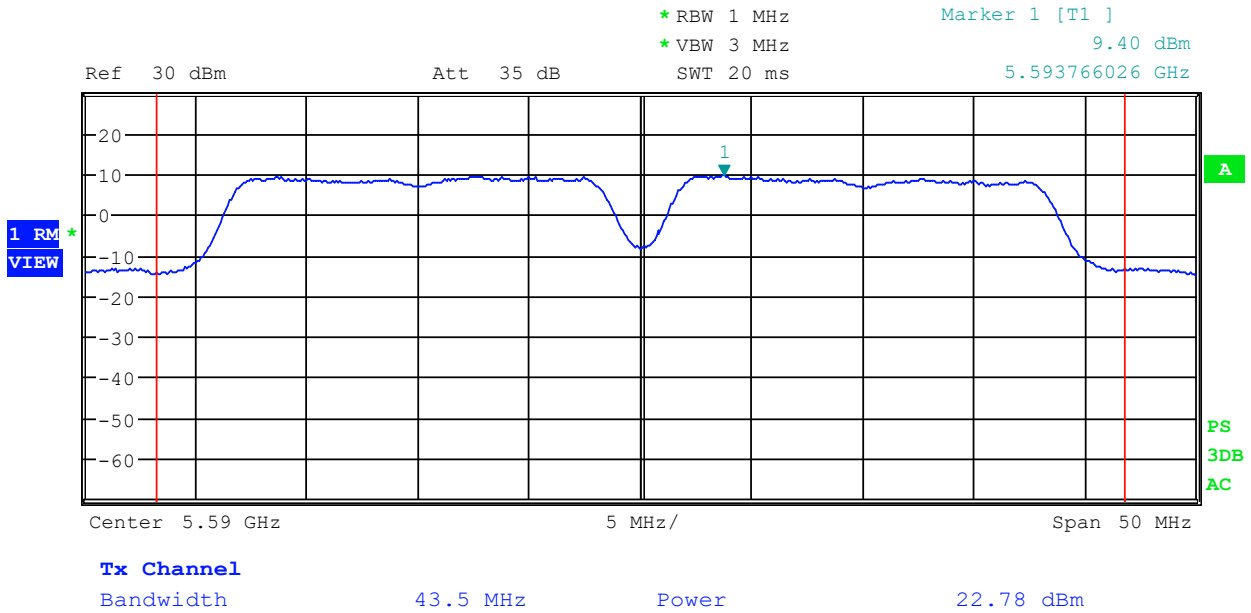


UNII 2C, Port 2: non HT40, Low Channel (Non-beamforming)



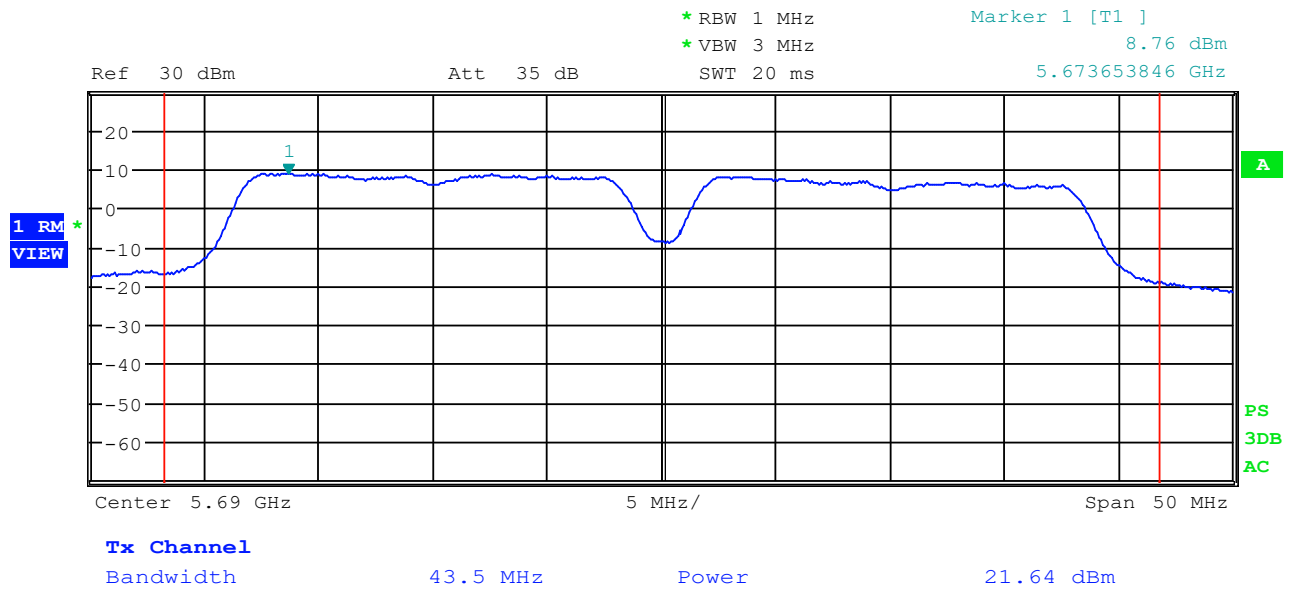


UNII 2C, Port 2: non HT40, Mid Channel (Non-Beamforming)



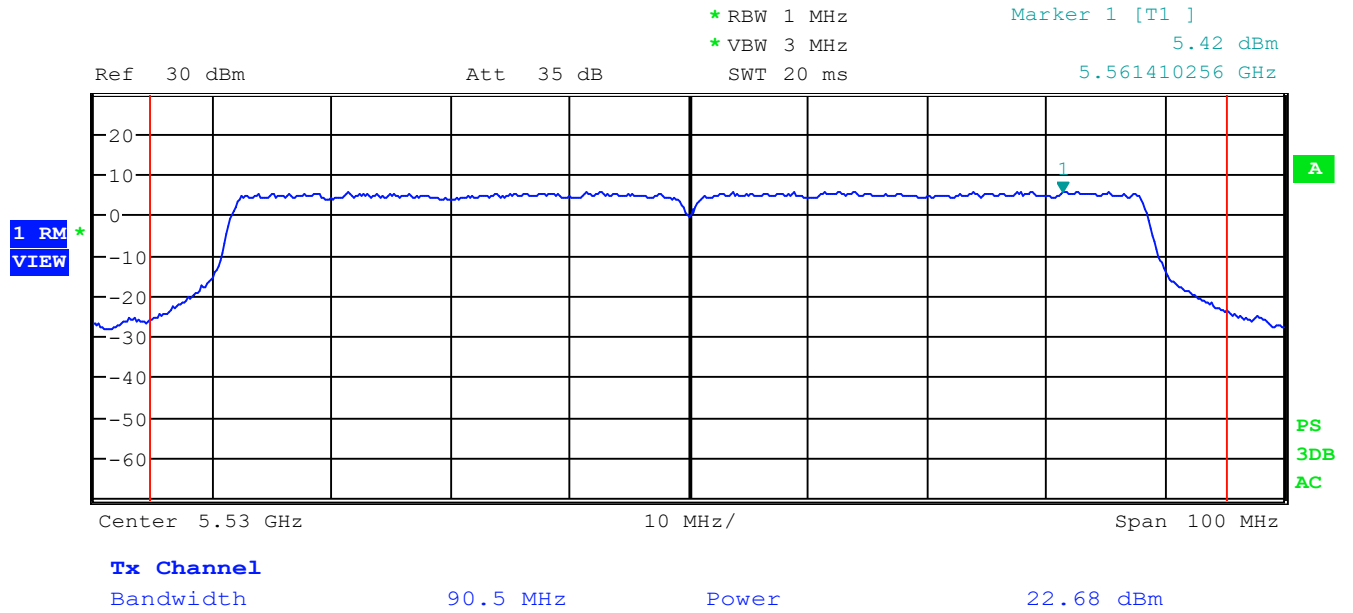


UNII 2C, Port 2: non HT40, High Channel (Non-beamforming)





UNII 2C, Port 2: HT80, Low Channel (Non-beamforming)

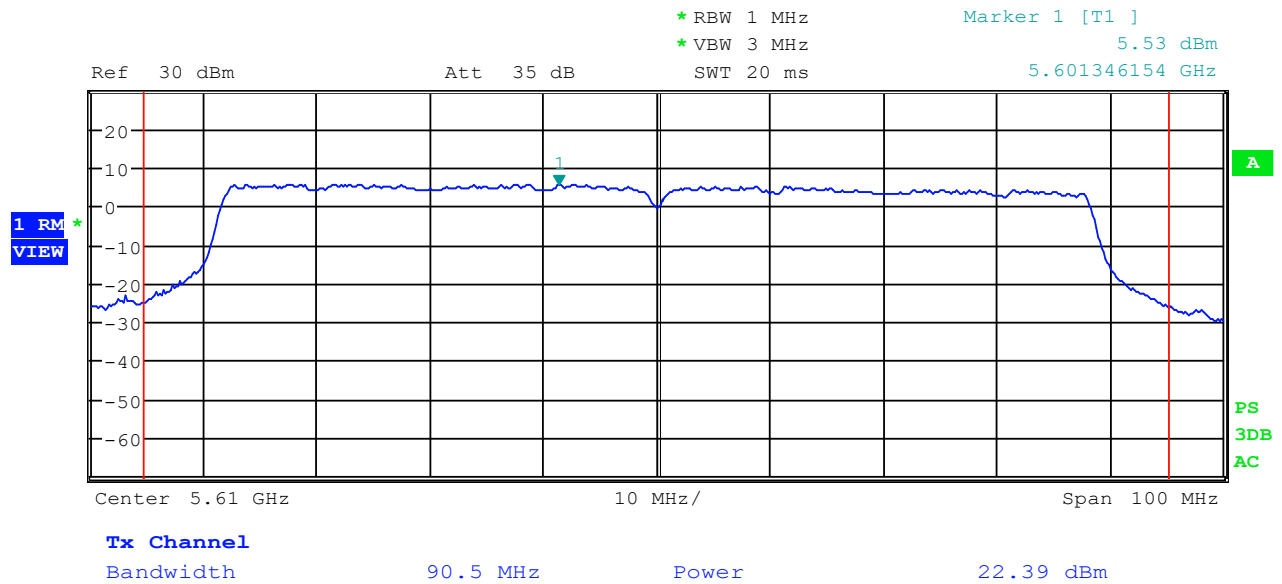




Order Number: F2P19924D

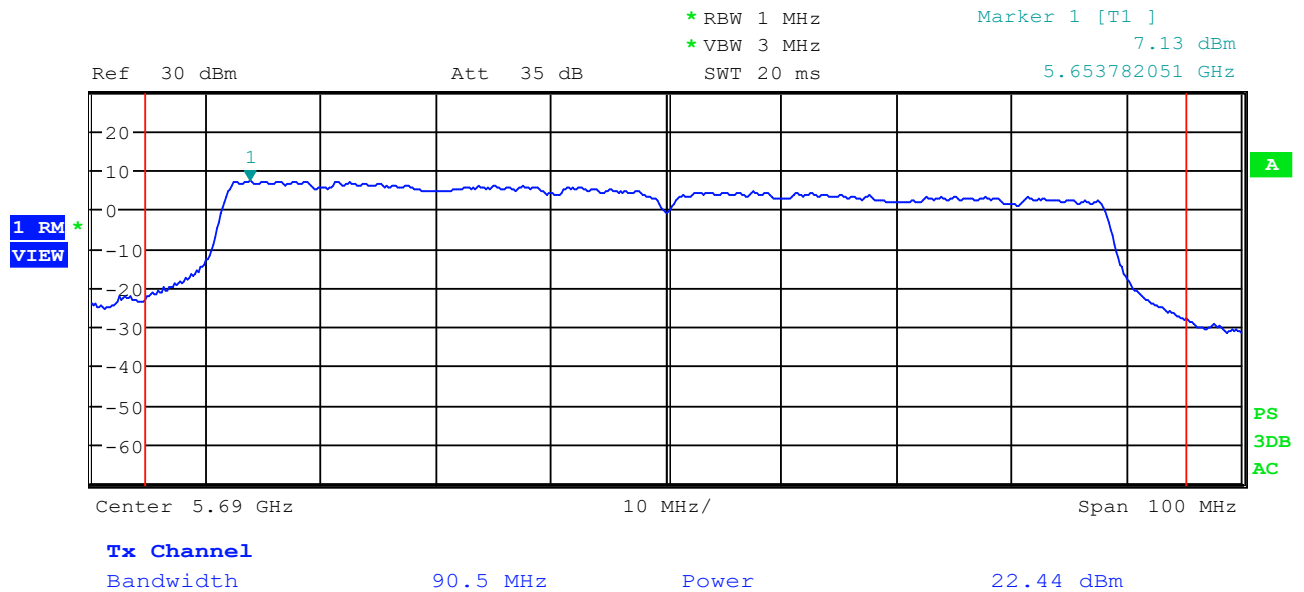
Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 2: HT80, Mid Channel (Non-Beamforming)





UNII 2C, Port 2: HT80, High Channel (Non-beamforming)

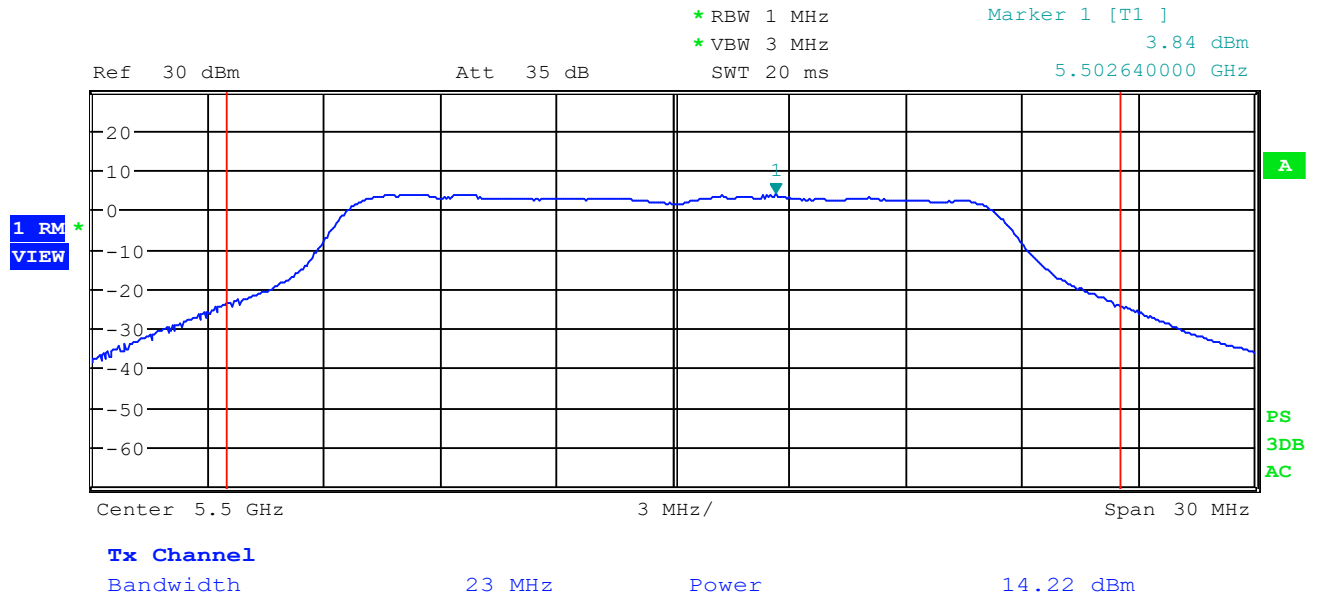




POWER SPECTRAL DENSITY UNII 2C – Port 1 (Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	3.84	10
Mid	5600	3.79	10
High	5700	3.69	10
Modulation: HT20			
Low	5500	3.61	10
Mid	5600	3.48	10
High	5700	3.89	10
Modulation: non HT40			
Low	5510	2.13	10
Mid	5590	2.90	10
High	5690	2.90	10
Modulation: HT40			
Low	5510	2.30	10
Mid	5590	2.70	10
High	5690	2.95	10
Modulation: HT80			
Low	5530	-1.26	10
Mid	5610	0.28	10
High	5690	-0.32	10

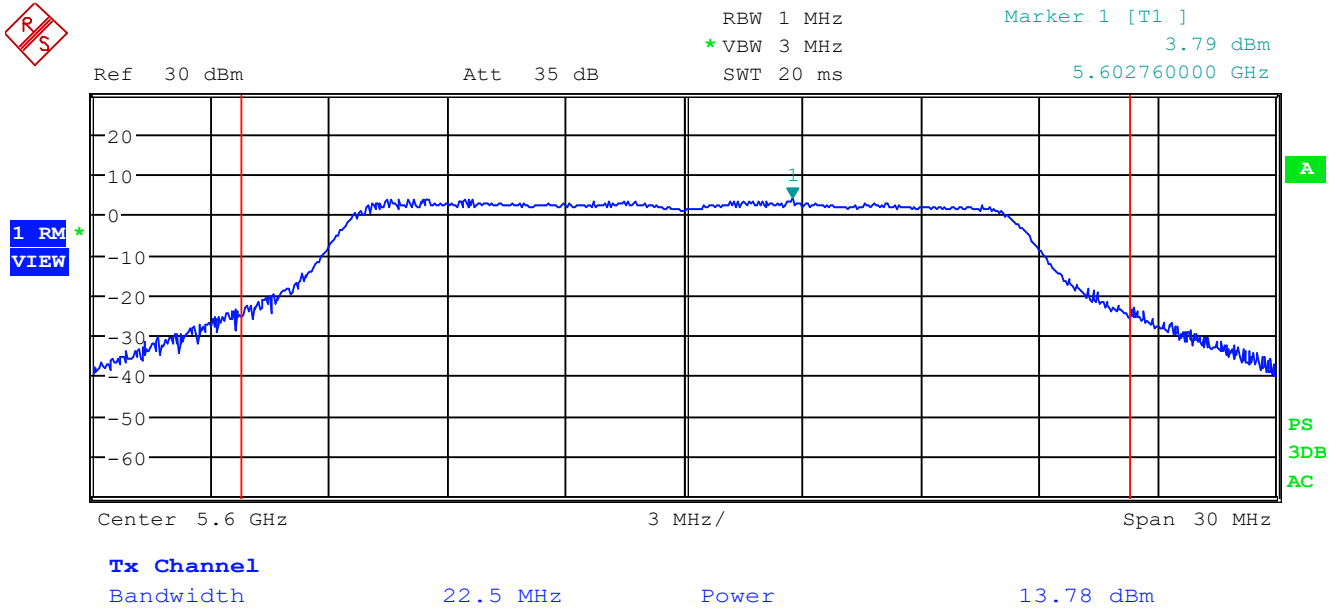


UNII 2C, Port 1: OFDM, Low Channel (Beamforming)



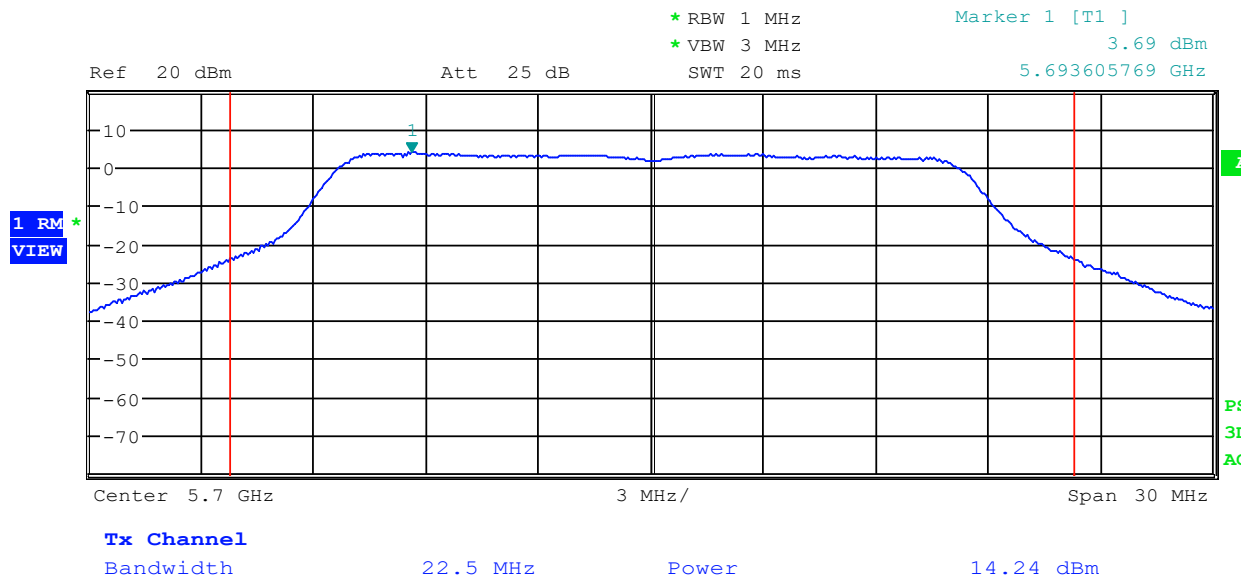


UNII 2C, Port 1: OFDM, Mid Channel (Beamforming)



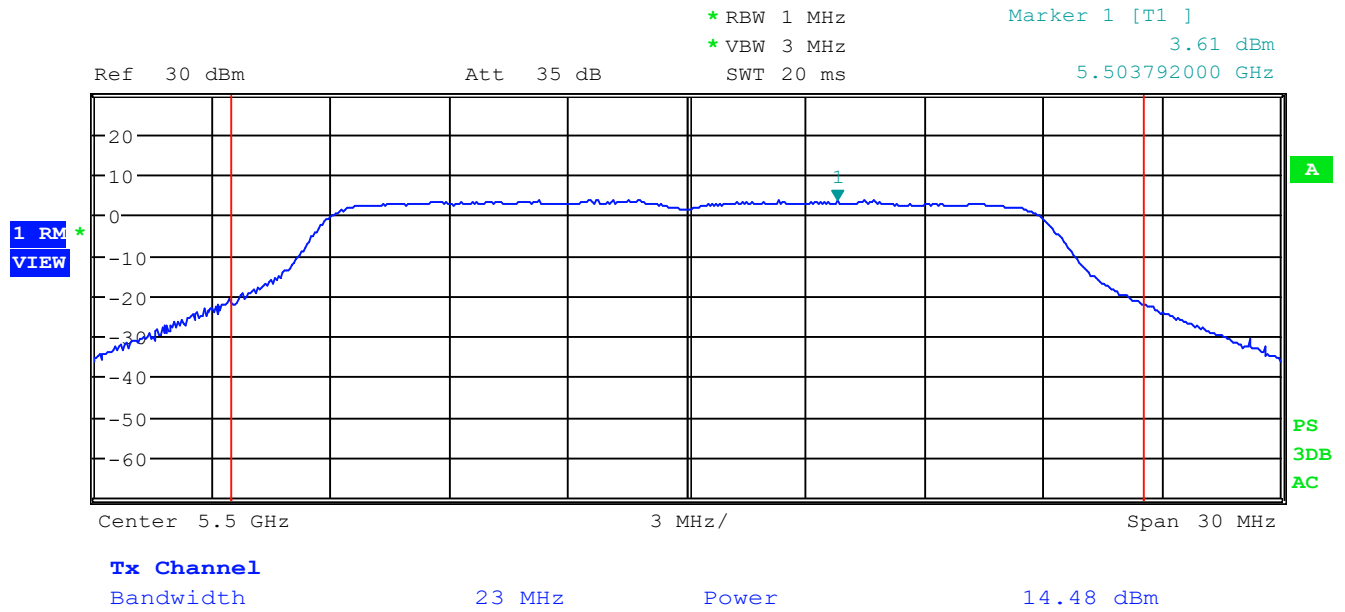


UNII 2C, Port 1: OFDM, High Channel (Beamforming)





UNII 2C, Port 1: HT20, Low Channel (Beamforming)

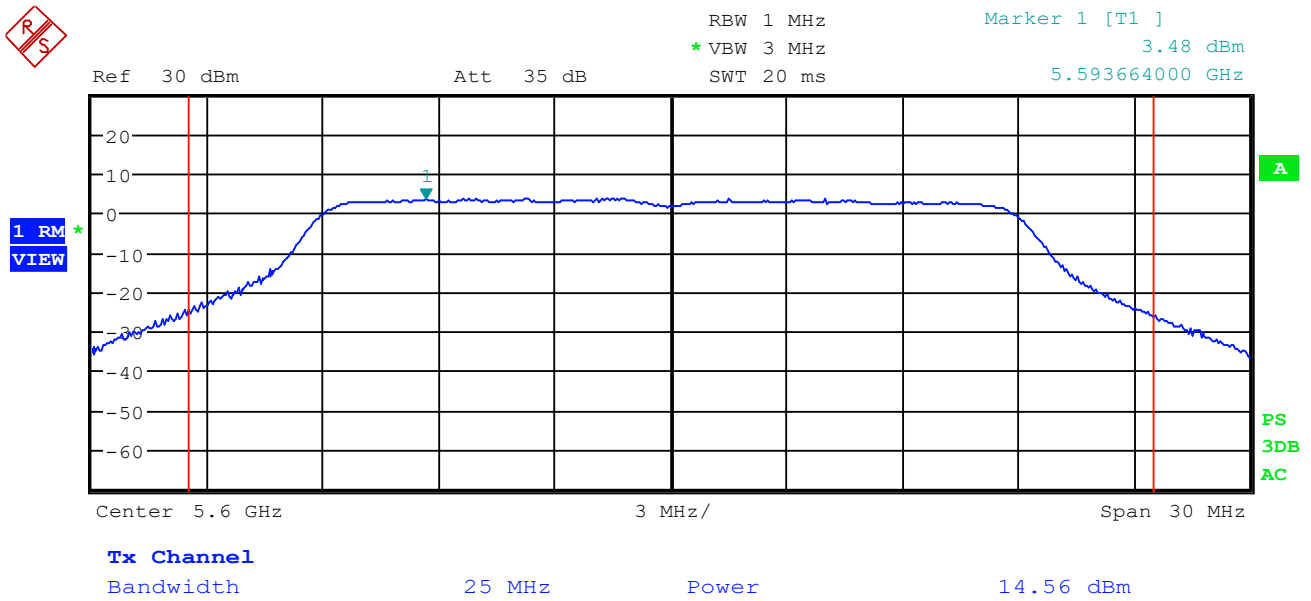




Order Number: F2P19924D

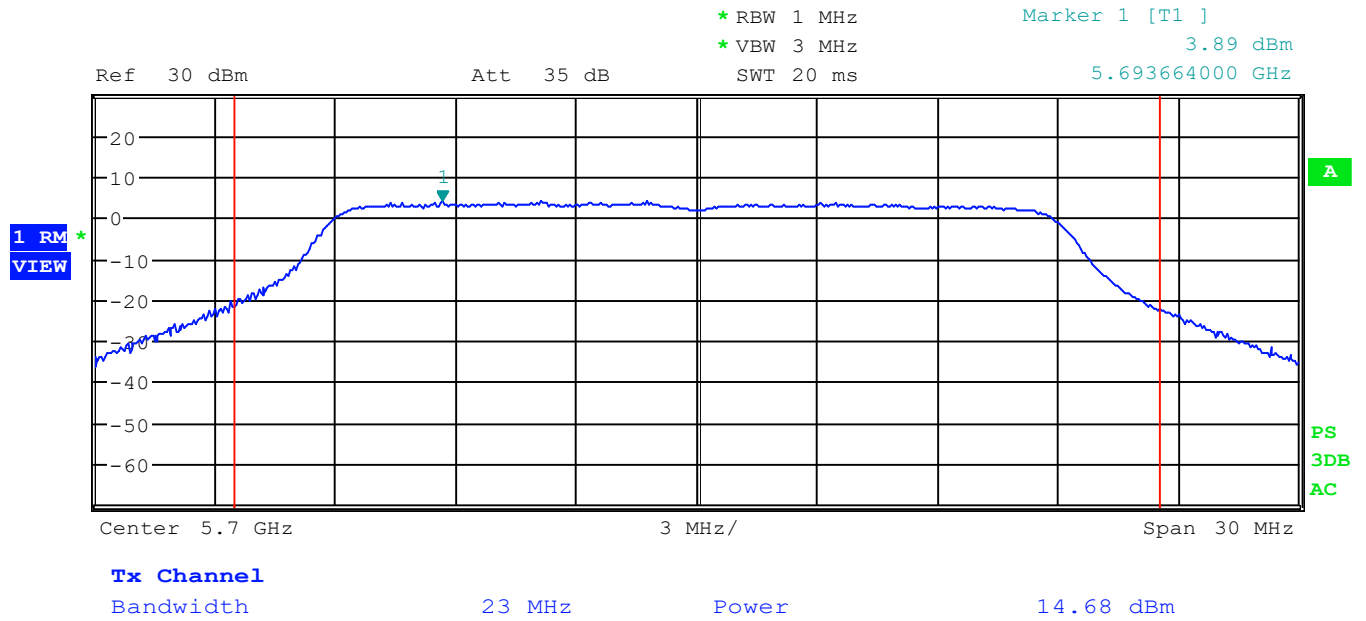
Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 1: HT20, Mid Channel (Beamforming)





UNII 2C, Port 1: HT20, High Channel (Beamforming)

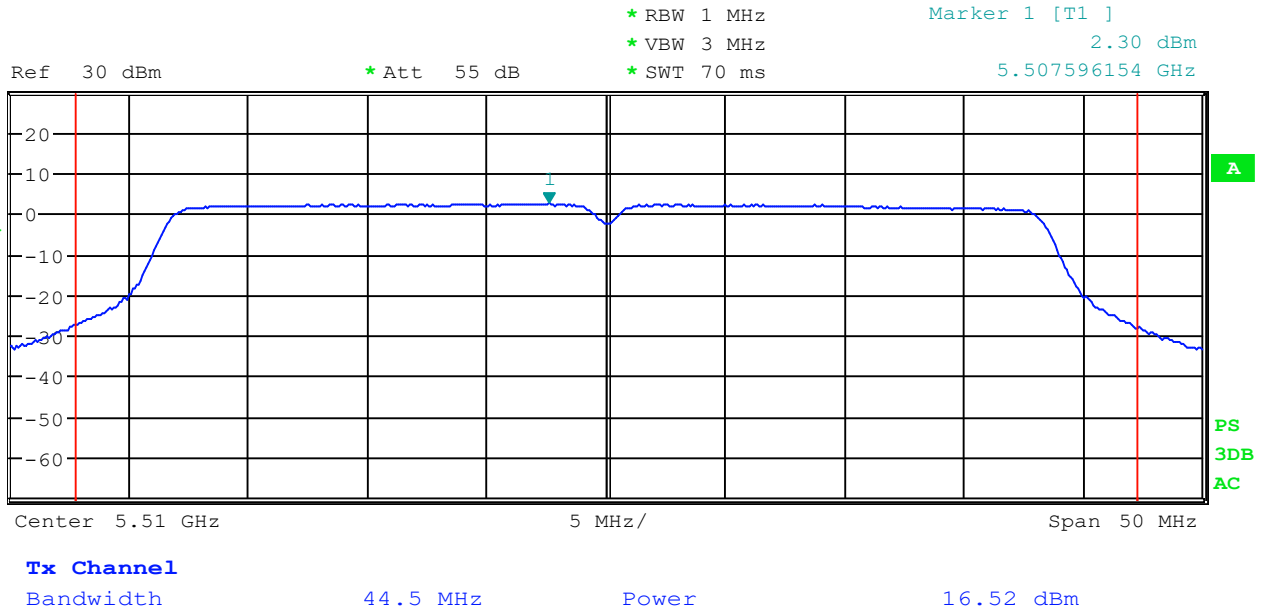




UNII 2C, Port 1: HT40, Low Channel (Beamforming)

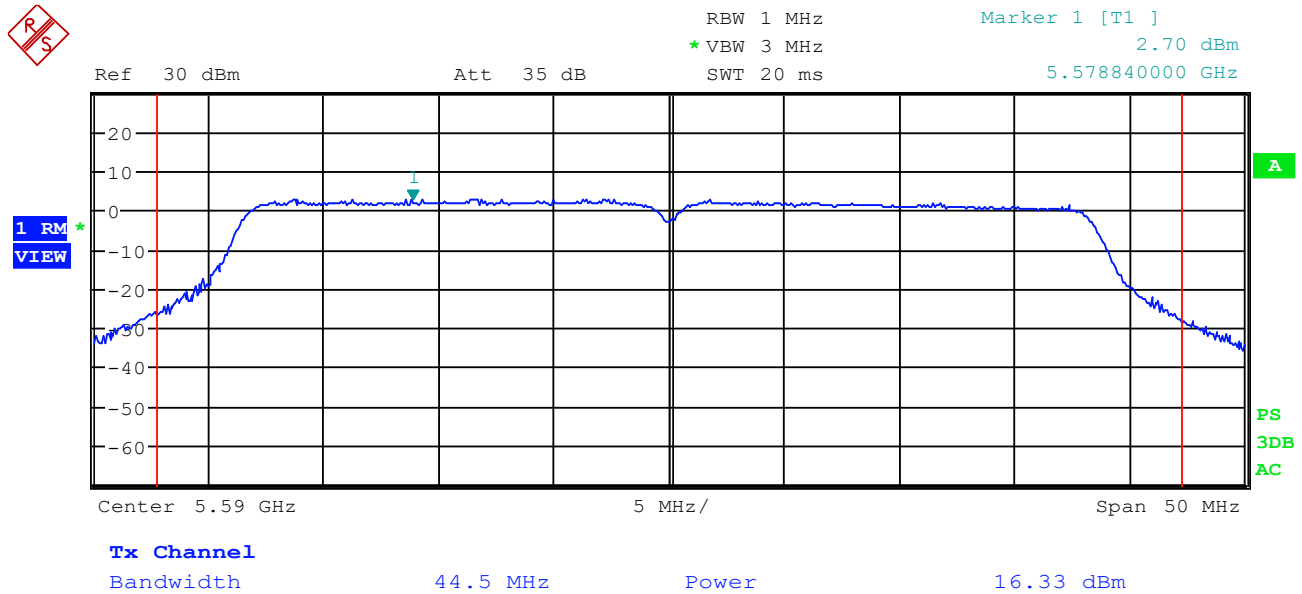


1 RM
VIEW



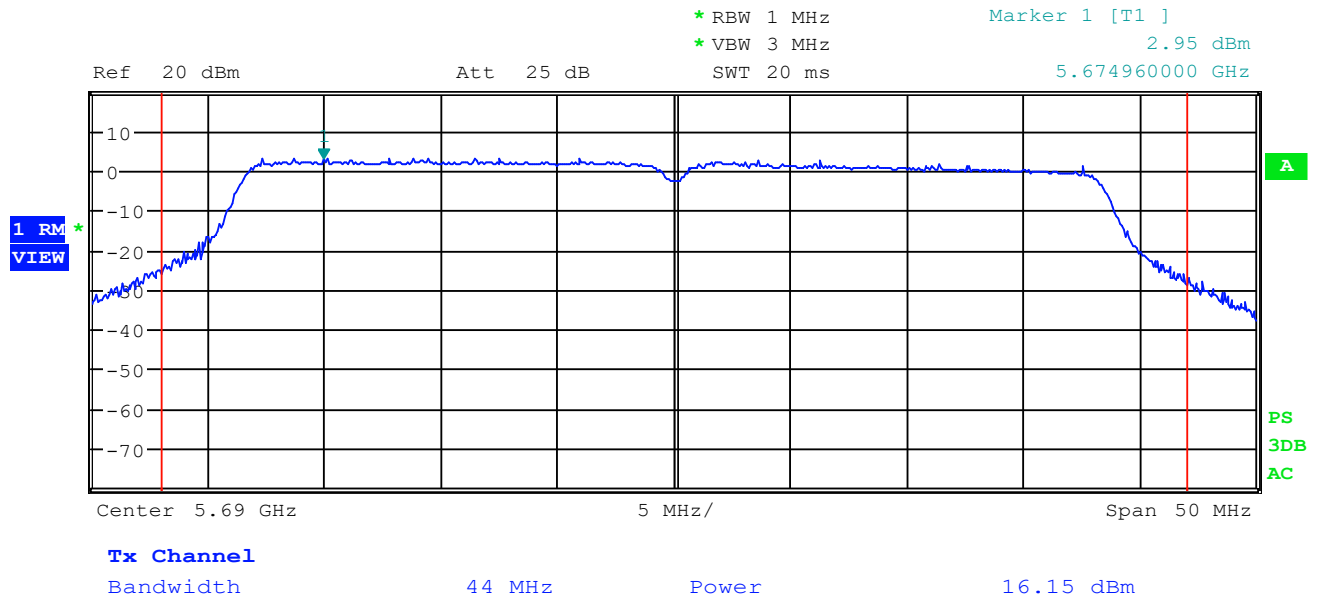


UNII 2C, Port 1: HT40, Mid Channel (Beamforming)



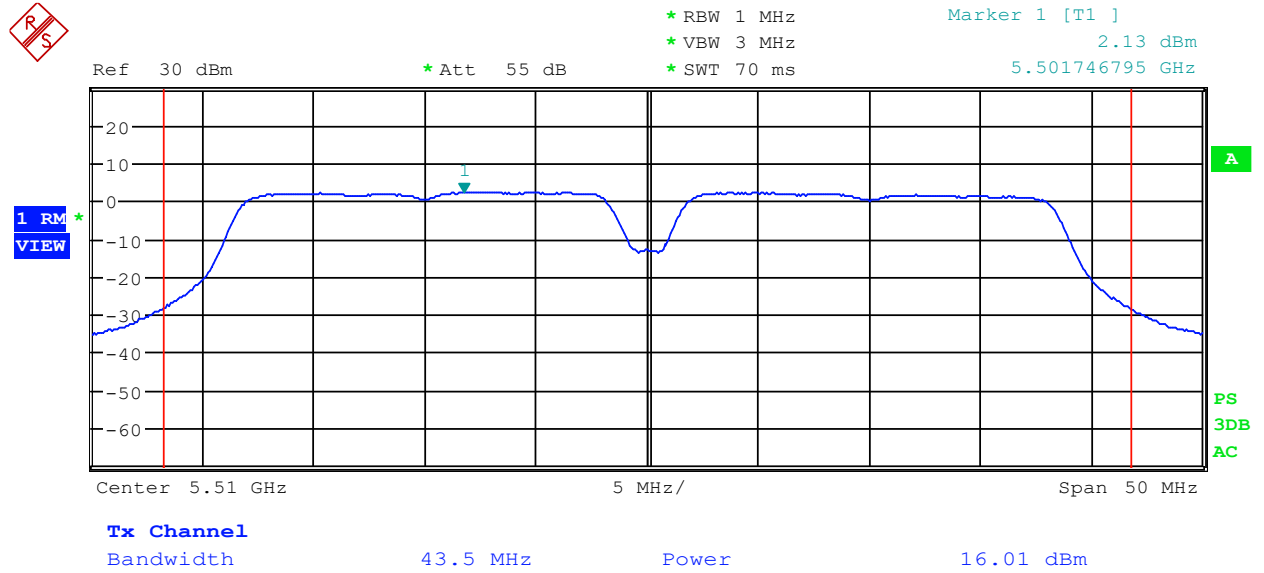


UNII 2C, Port 1: HT40, High Channel (Beamforming)



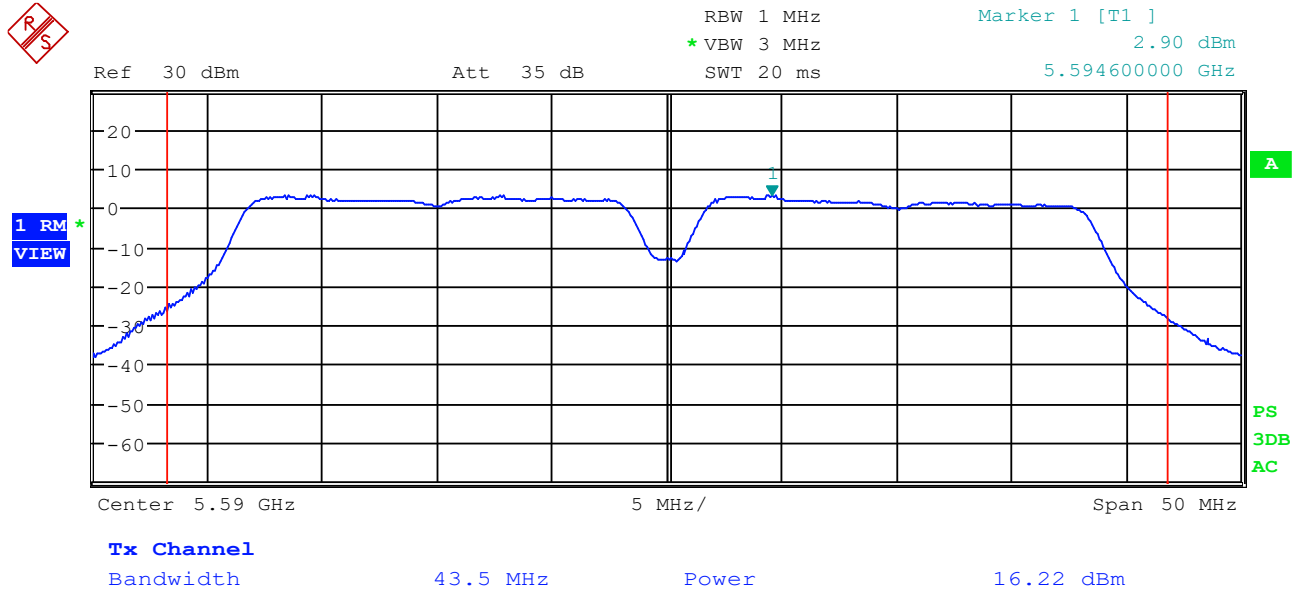


UNII 2C, Port 1: non HT40, Low Channel (Beamforming)



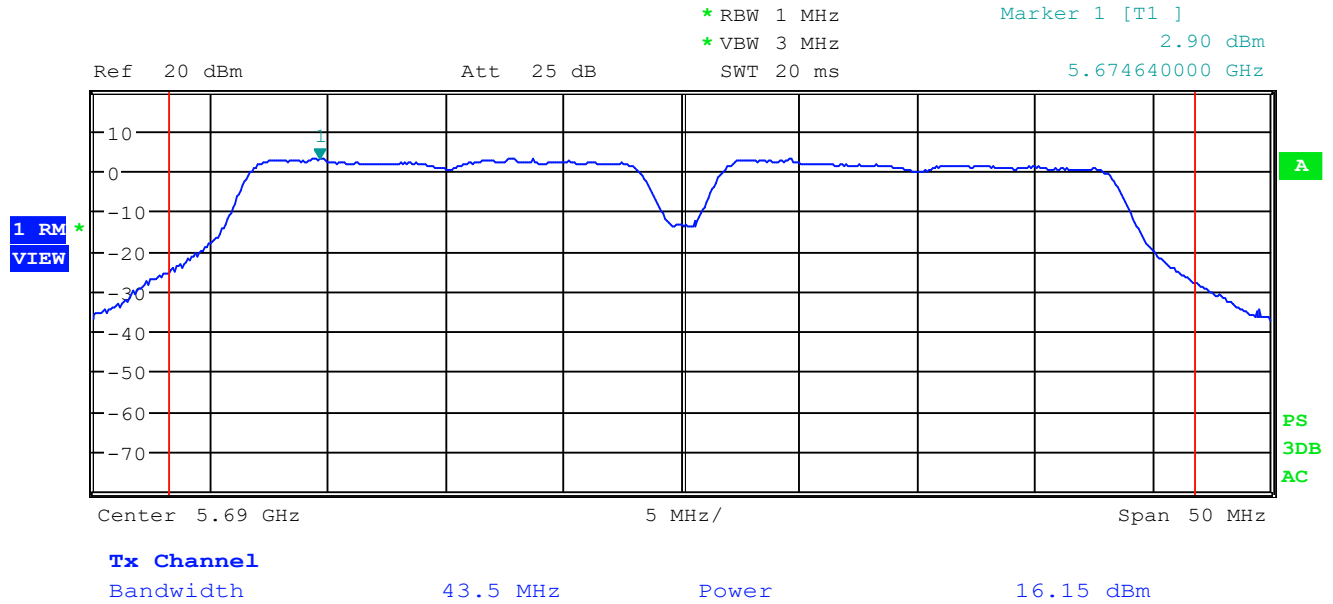


UNII 2C, Port 1: non HT40, Mid Channel (Beamforming)





UNII 2C, Port 1: non HT40, High Channel (Beamforming)





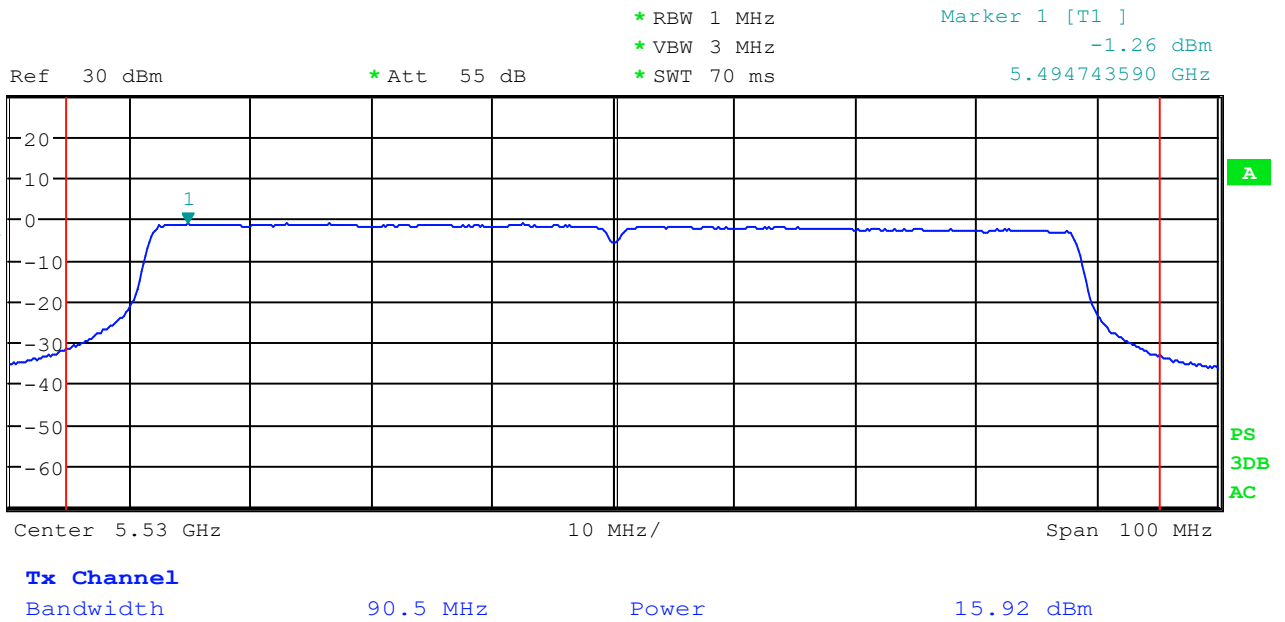
Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 1: HT80, Low Channel (Beamforming)

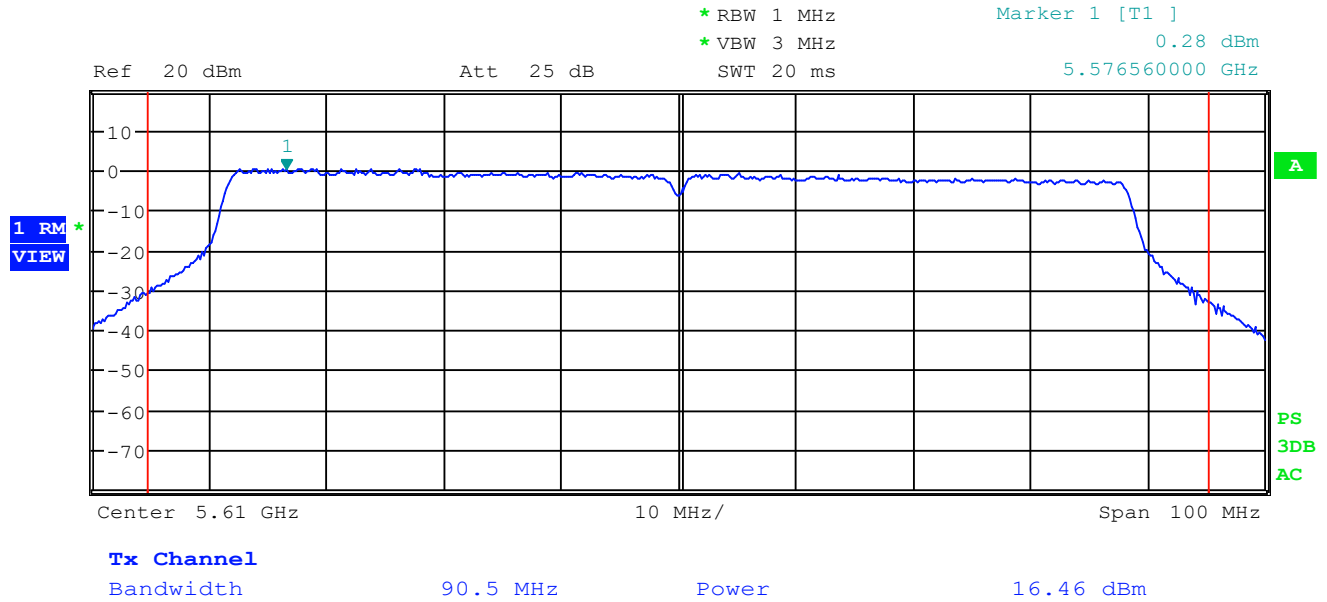


1 RM
VIEW



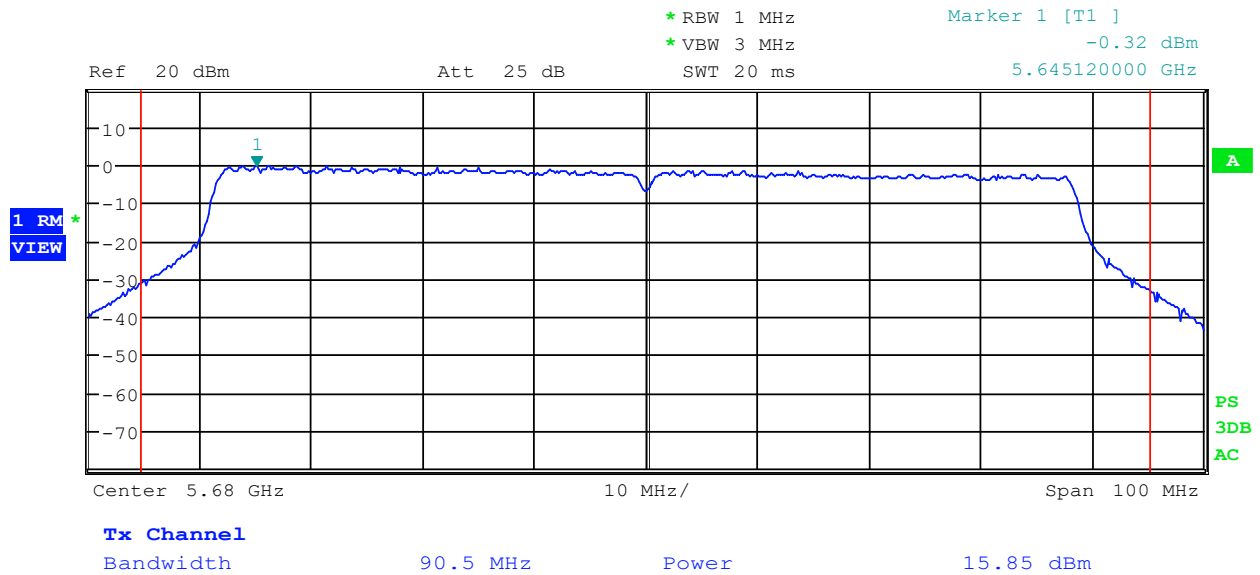


UNII 2C, Port 1: HT80, Mid Channel (Beamforming)





UNII 2C, Port 1: HT80, High Channel (Beamforming)

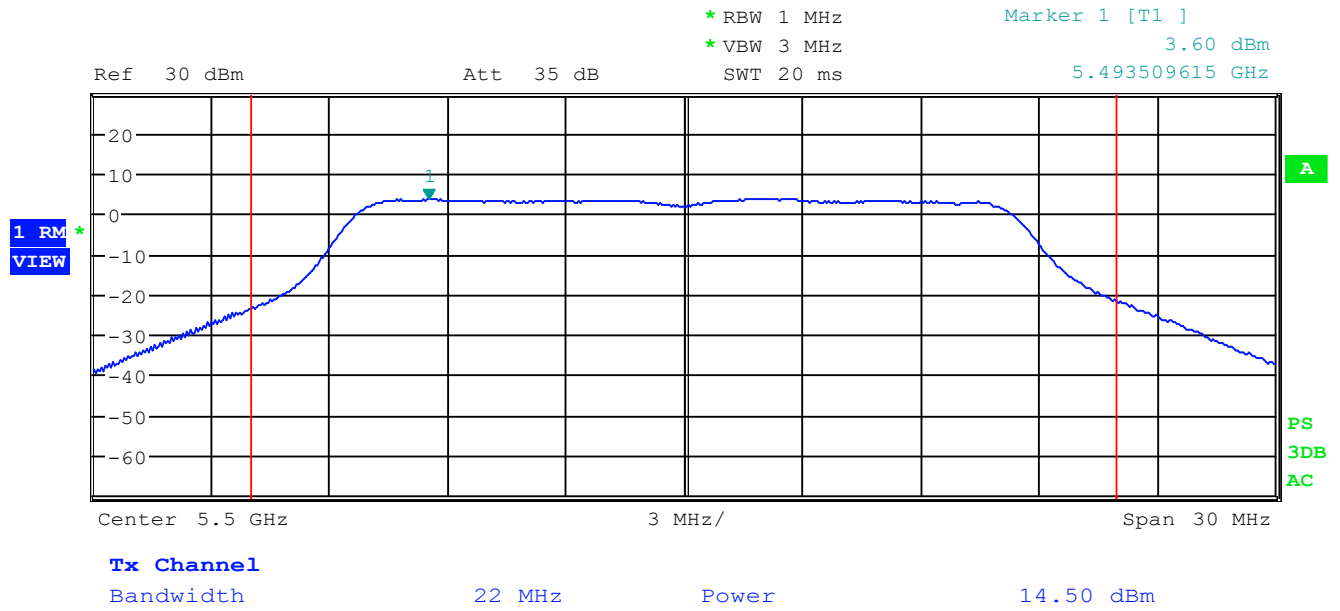




POWER SPECTRAL DENSITY UNII 2C – Port 2 (Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	3.60	10
Mid	5600	3.92	10
High	5700	3.82	10
Modulation: HT20			
Low	5500	3.60	10
Mid	5600	3.71	10
High	5700	3.94	10
Modulation: non HT40			
Low	5510	1.41	10
Mid	5590	3.02	10
High	5690	3.34	10
Modulation: HT40			
Low	5510	1.81	10
Mid	5590	2.45	10
High	5690	3.08	10
Modulation: HT80			
Low	5530	-1.47	10
Mid	5610	-0.06	10
High	5690	-0.01	10



UNII 2C, Port 2: OFDM, Low Channel (Beamforming)





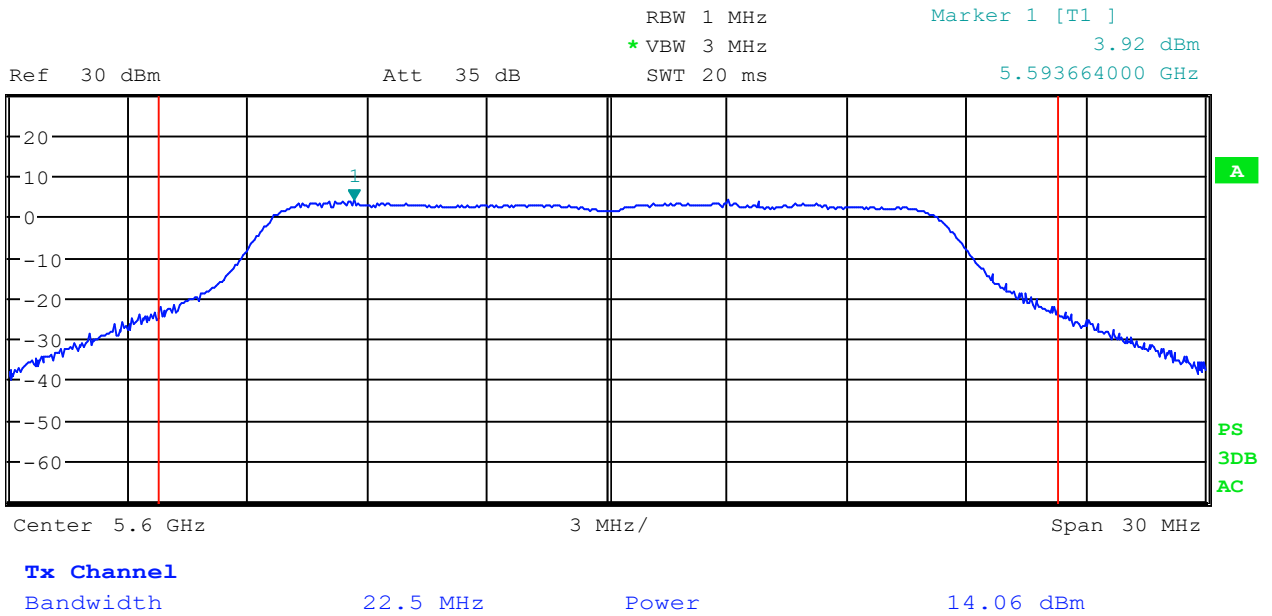
Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 2: OFDM, Mid Channel (Beamforming)

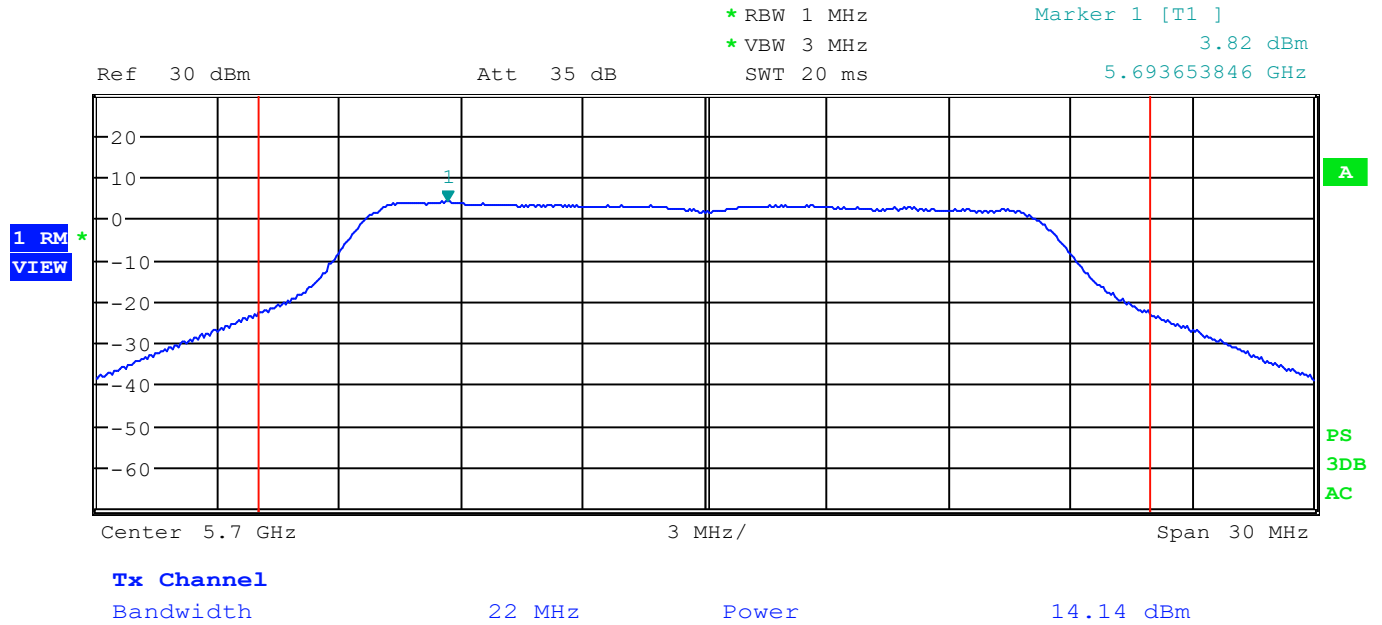


1 RM
VIEW



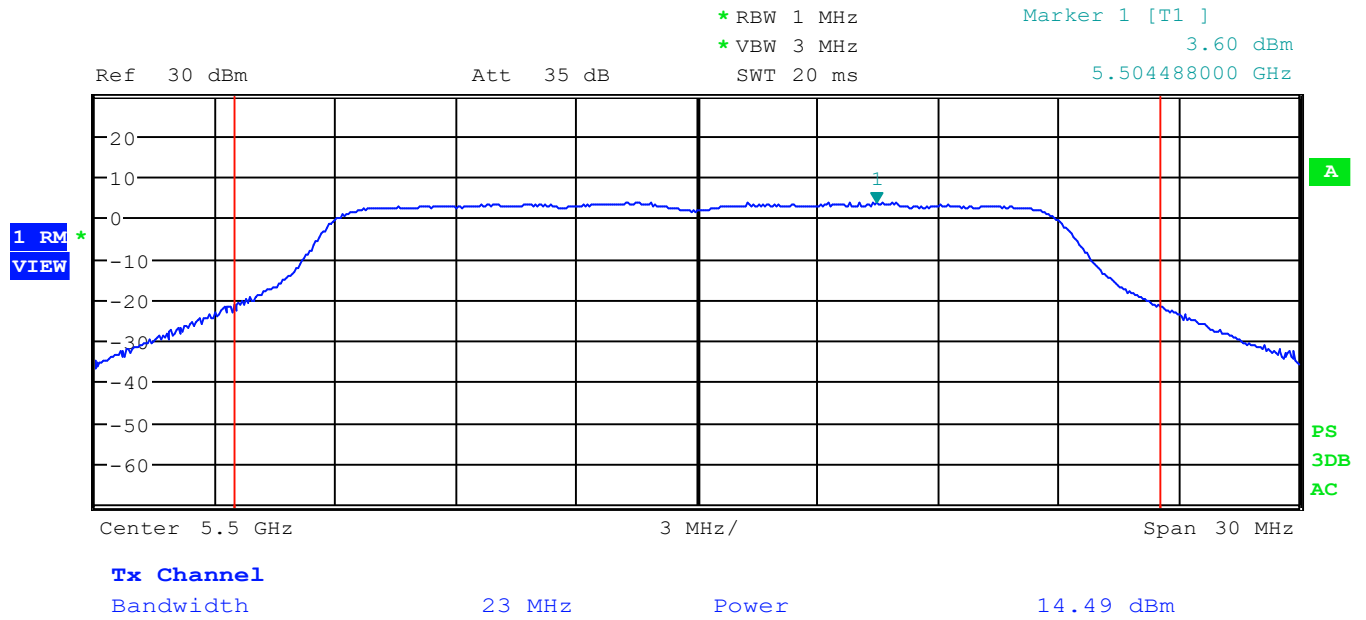


UNII 2C, Port 2: OFDM, High Channel (Beamforming)





UNII 2C, Port 2: HT20, Low Channel (Beamforming)

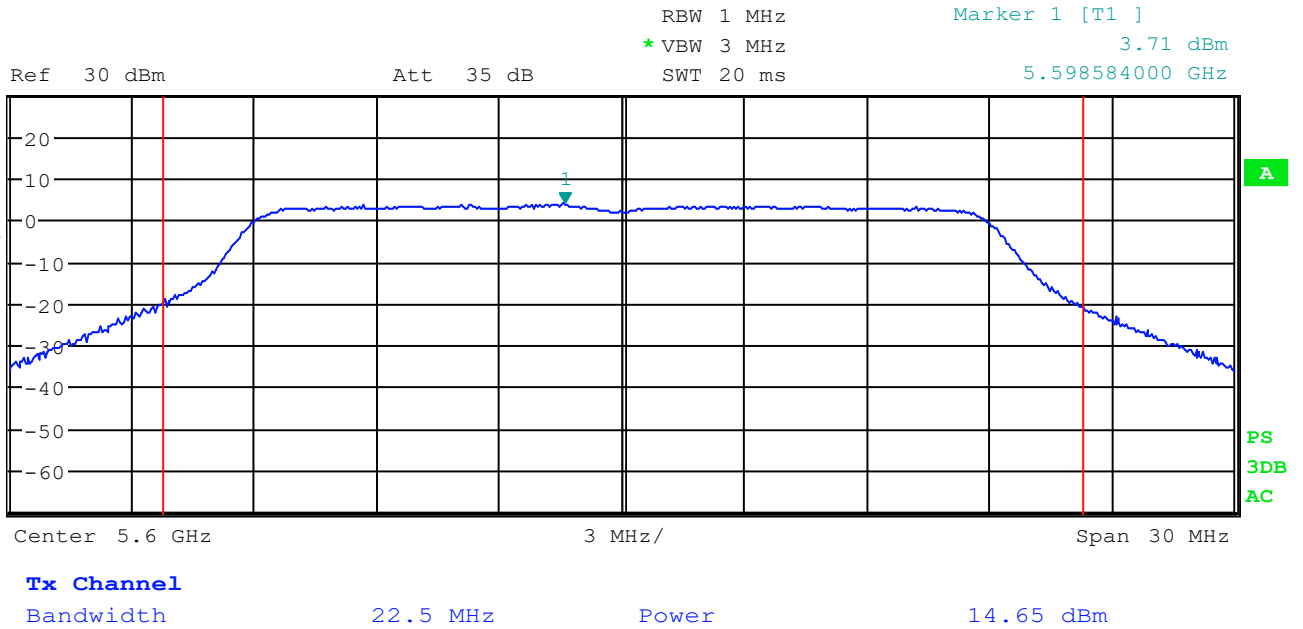




UNII 2C, Port 2: HT20, Mid Channel (Beamforming)

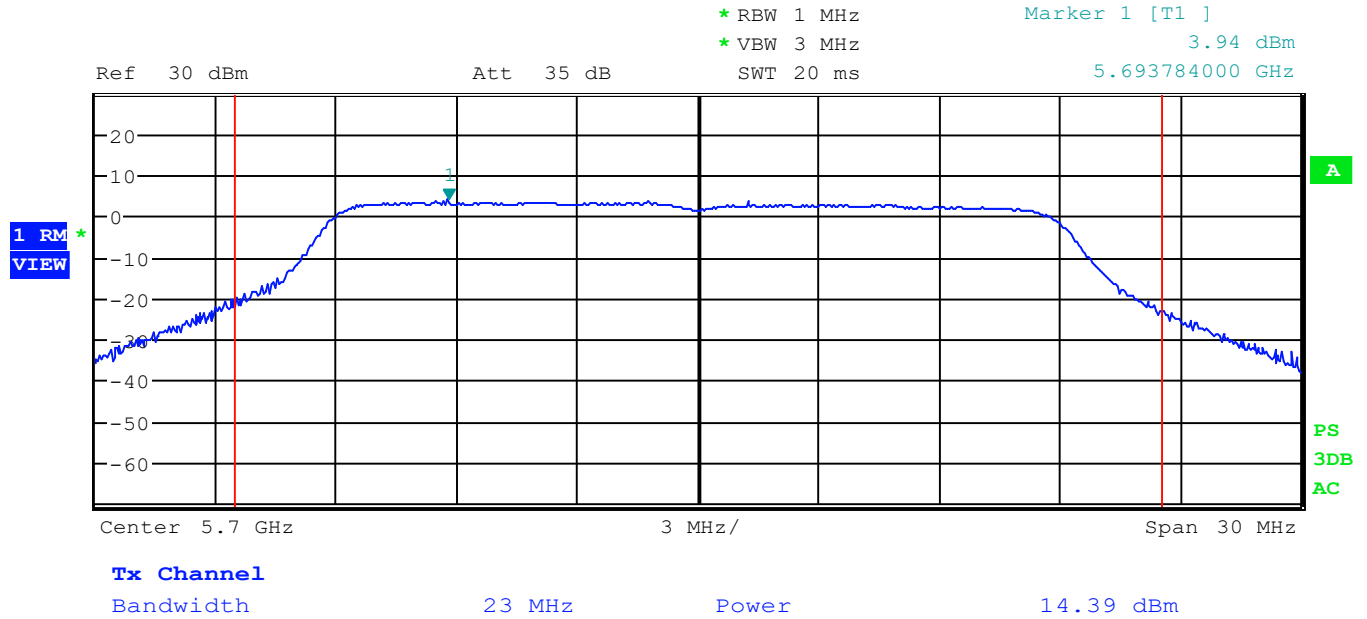


1 RM
VIEW



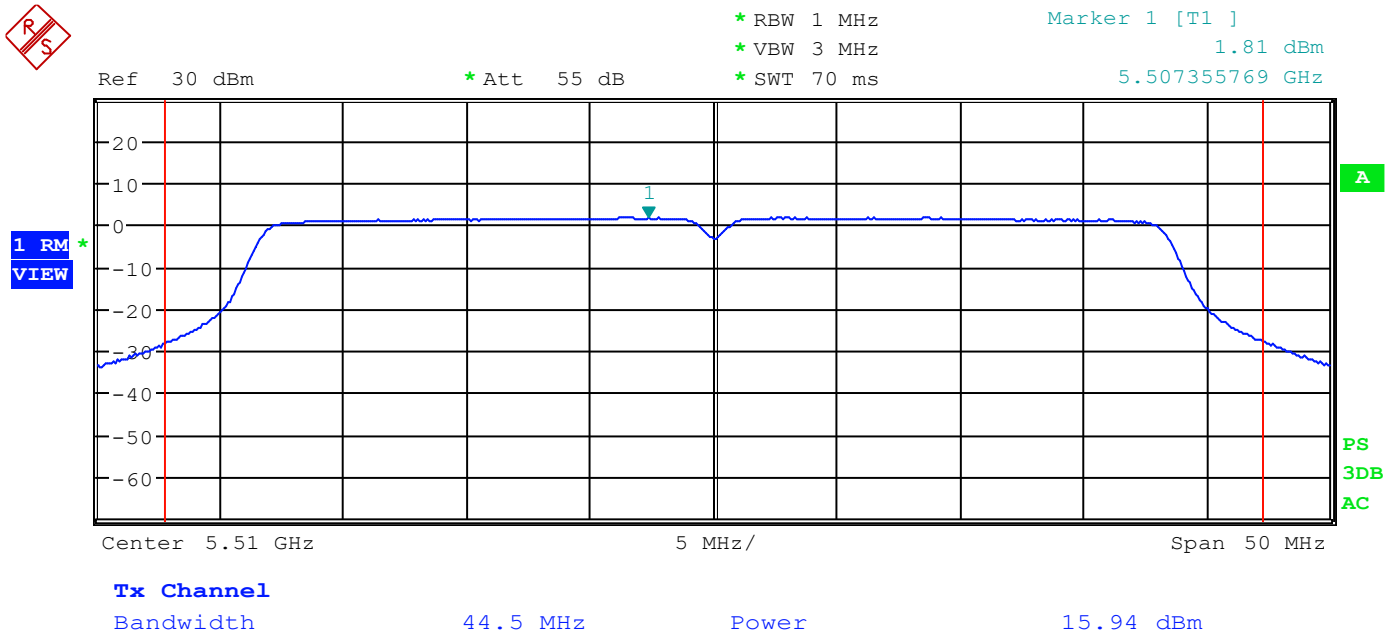


UNII 2C, Port 2: HT20, High Channel (Beamforming)



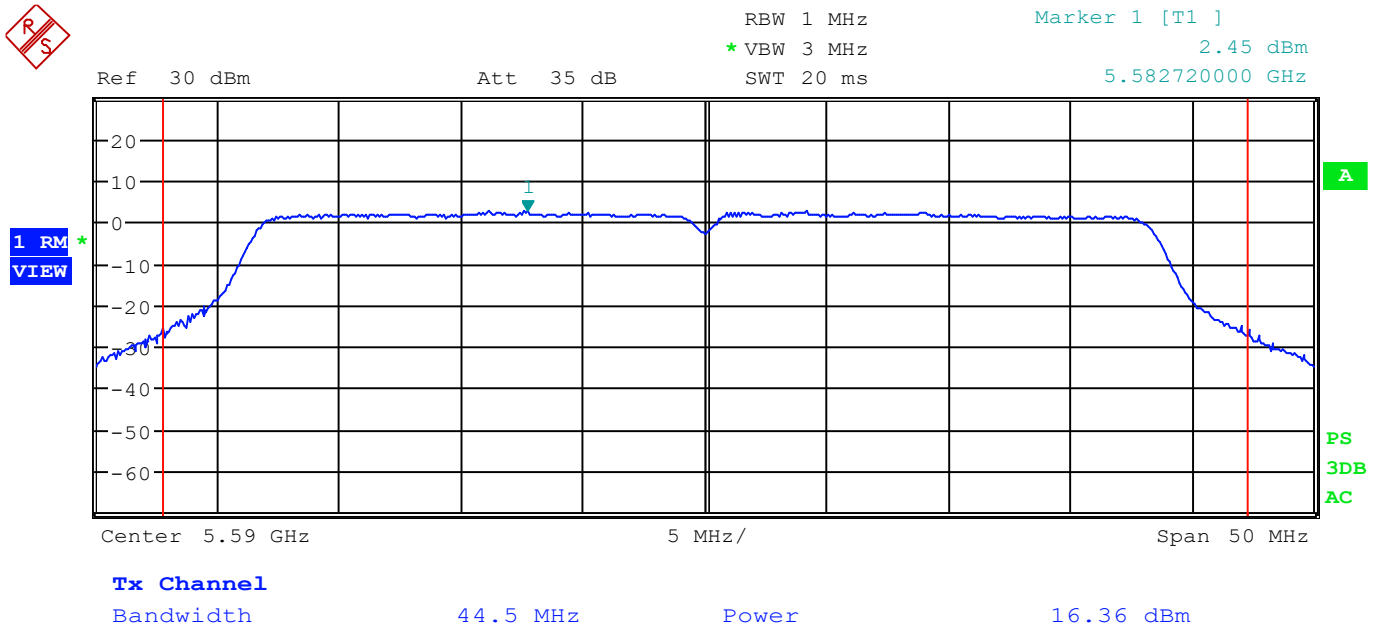


UNII 2C, Port 2: HT40, Low Channel (Beamforming)



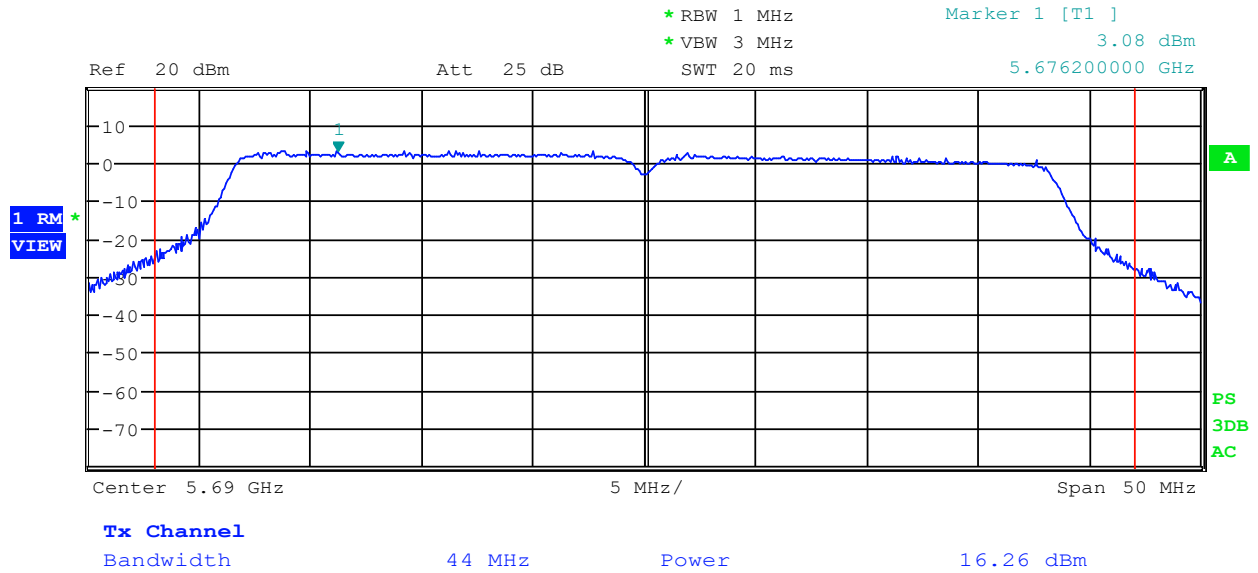


UNII 2C, Port 2: HT40, Mid Channel (Beamforming)



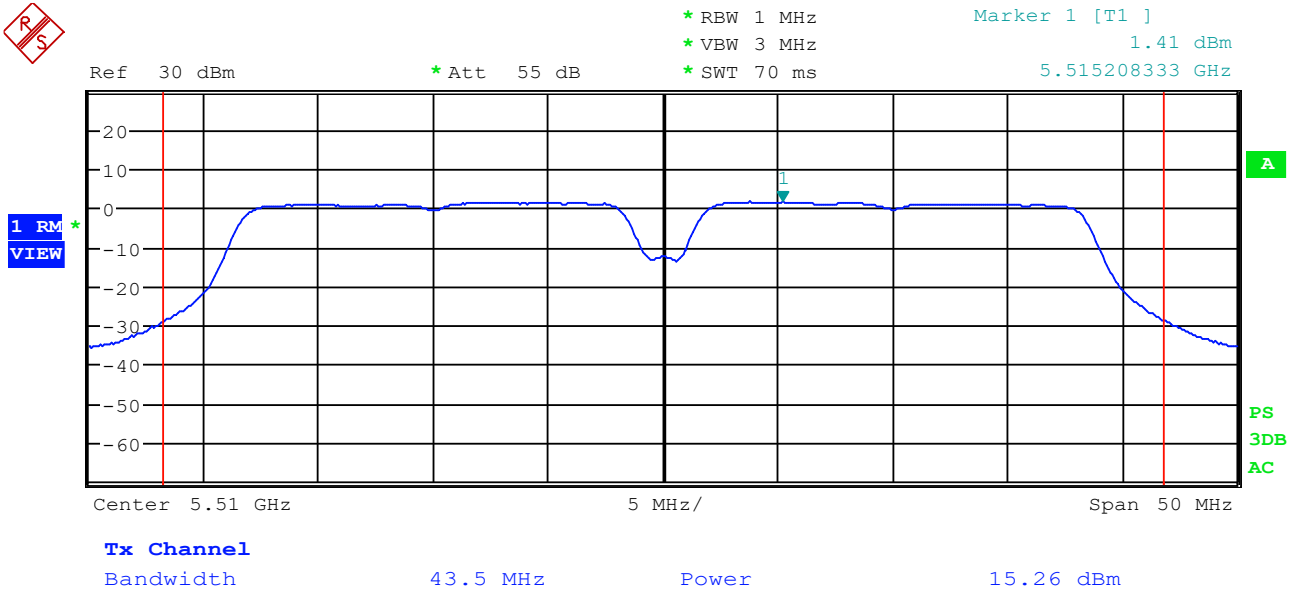


UNII 2C, Port 2: HT40, High Channel (Beamforming)





UNII 2C, Port 2: non HT40, Low Channel (Beamforming)





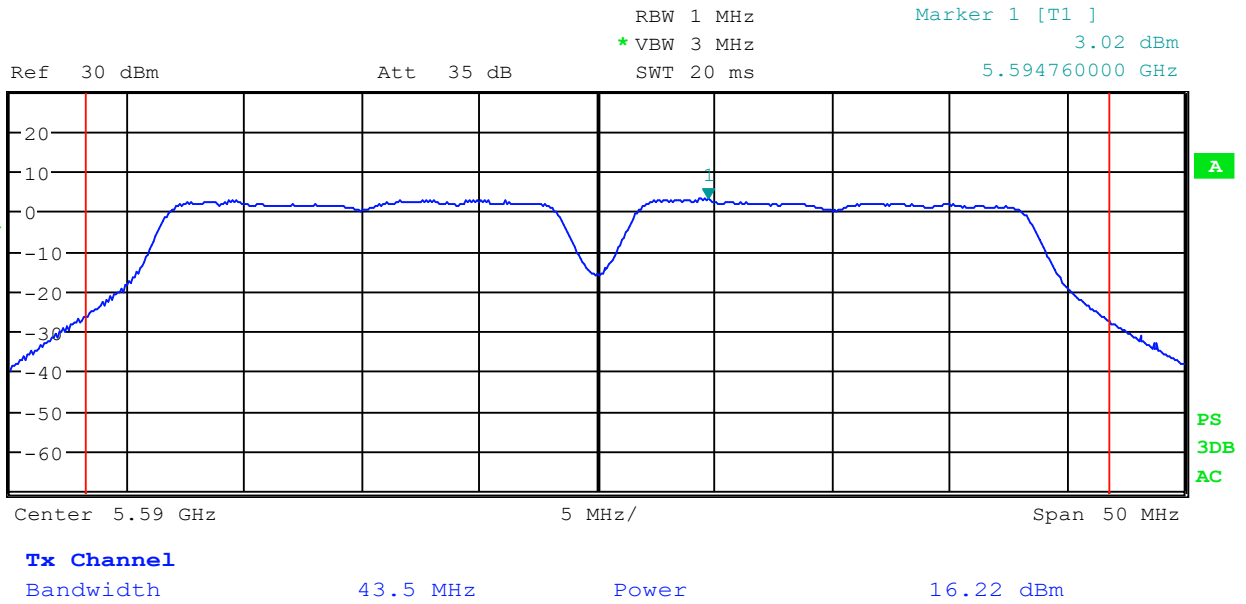
Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 2C, Port 2: non HT40, Mid Channel (Beamforming)

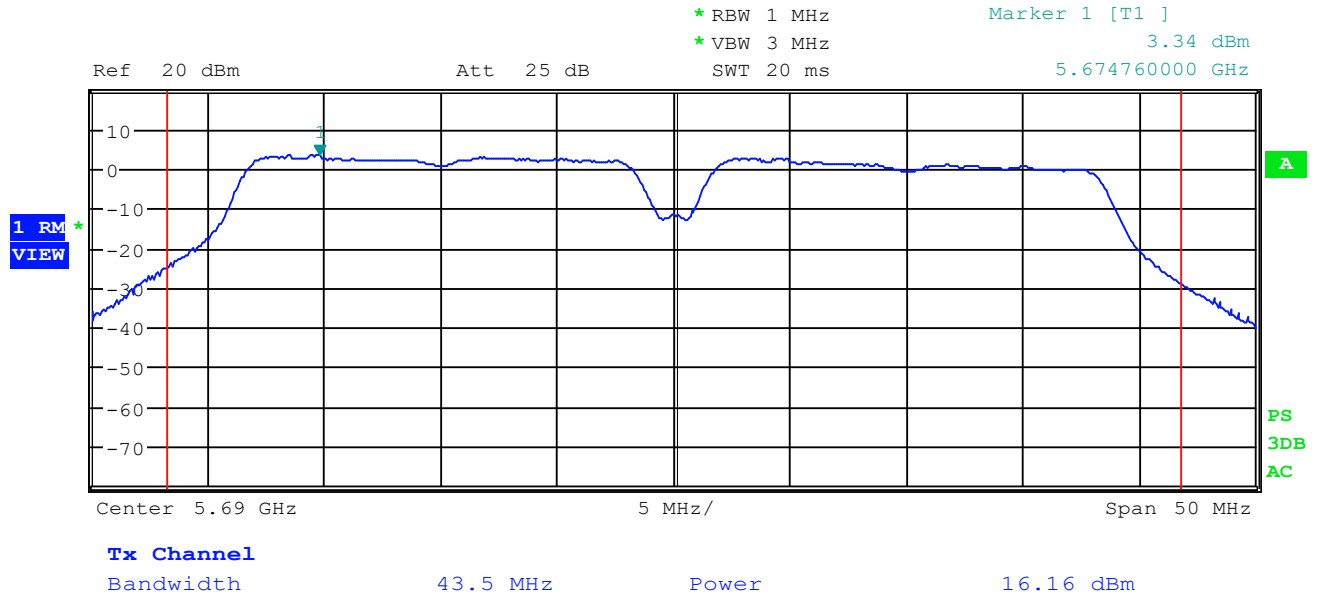


1 RM
VIEW



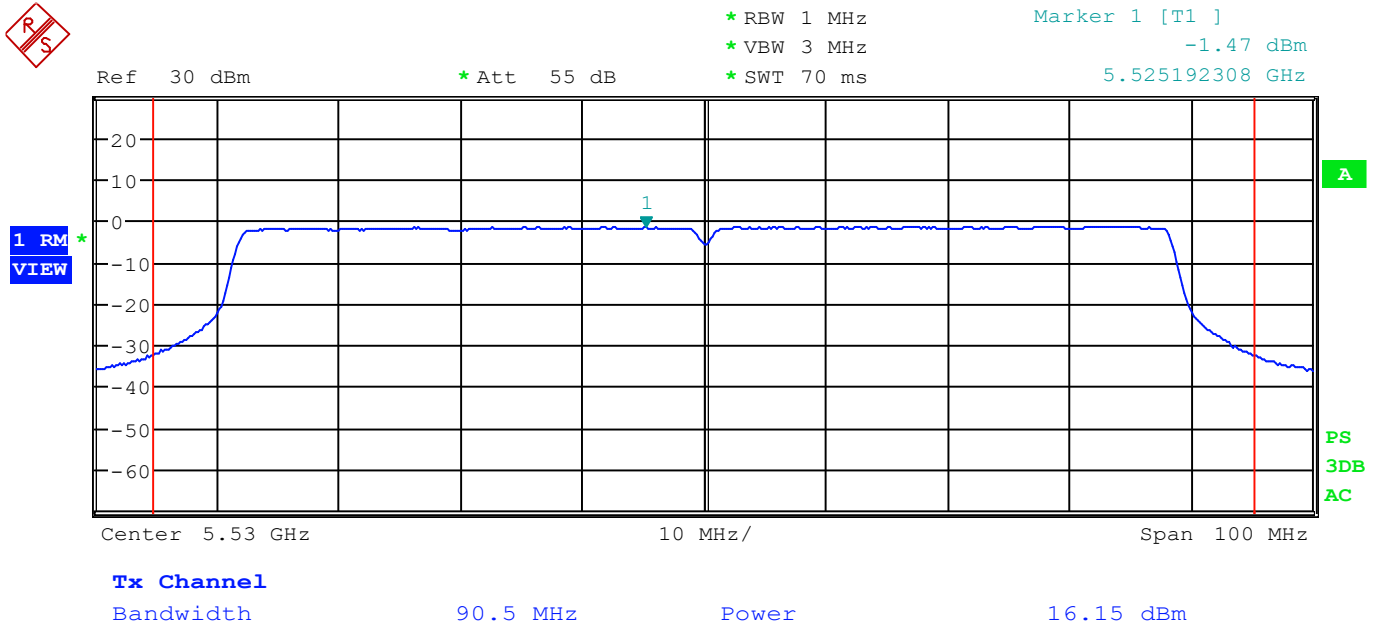


UNII 2C, Port 2: non HT40, High Channel (Beamforming)



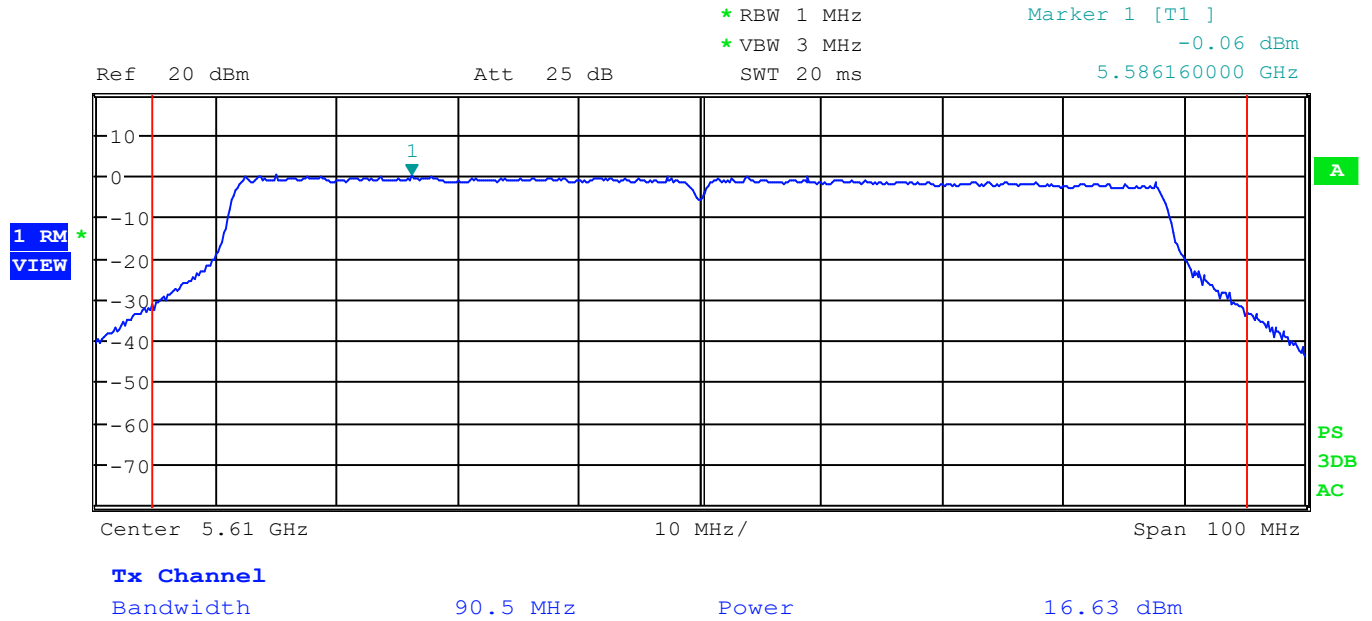


UNII 2C, Port 2: HT80, Low Channel (Beamforming)



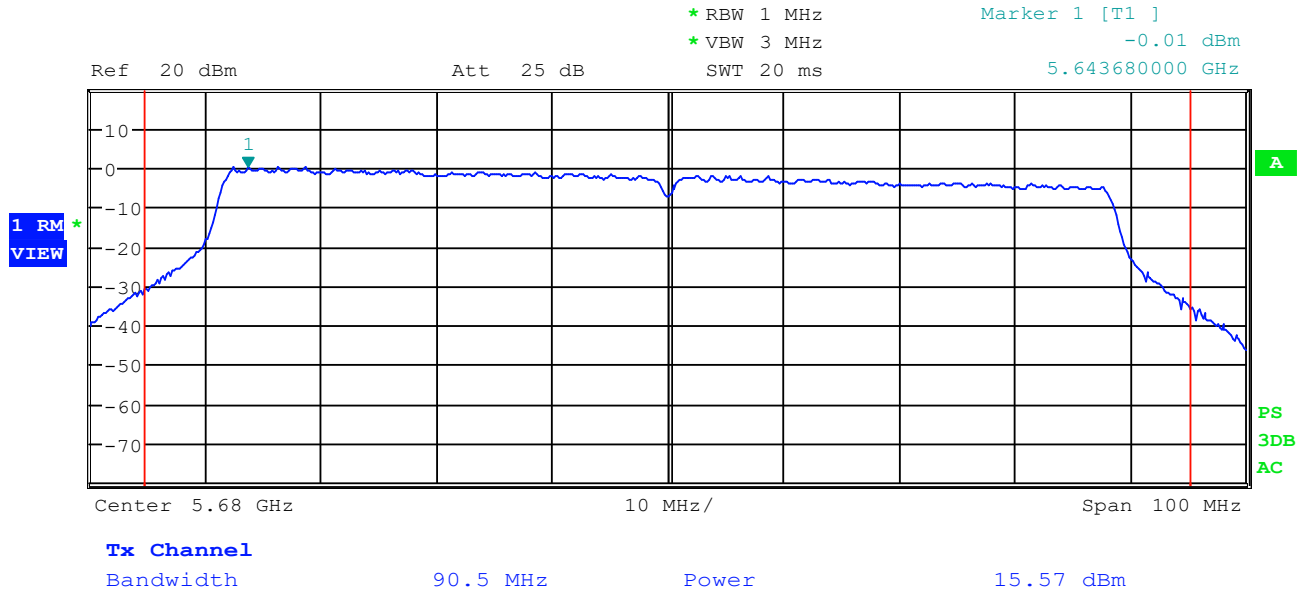


UNII 2C, Port 2: HT80, Mid Channel (Beamforming)





UNII 2C, Port 2: HT80, High Channel (Beamforming)





PSD UNII 2C SUMMING PORT 1 AND PORT 2 FOR BEAMFORMING MIMO							
Modulation: OFDM							
Frequency (MHz)	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	7
5500	3.60	3.84	2.29	2.42	4.71	6.73	
5600	3.92	3.79	2.47	2.39	4.86	6.87	
5700	3.82	3.69	2.41	2.34	4.75	6.77	
Modulation: HT20							
Frequency (MHz)	Measure and Sum (Summing port 1 and port 2)						7
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5500	3.60	3.61	2.29	2.29	4.58	6.61	
5600	3.71	3.48	2.35	2.23	4.58	6.61	
5700	3.94	3.89	2.48	2.45	4.93	6.93	
Modulation: non HT40							
Frequency (MHz)	Measure and Sum (Summing port 1 and port 2)						7
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5510	1.41	2.13	1.38	1.63	3.01	4.79	
5590	3.02	2.90	2.00	1.95	3.95	5.97	
5690	3.34	2.90	2.16	1.95	4.11	6.14	
Modulation: HT40							
Frequency (MHz)	Measure and Sum - (Summing port 1 and port 2)						7
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5510	1.81	2.30	1.52	1.70	3.22	5.08	
5590	2.45	2.70	1.76	1.86	3.62	5.59	
5690	3.08	2.95	2.03	1.97	4.00	6.02	
Modulation: HT80							
Frequency (MHz)	Measure and Sum (Summing port 1 and port 2)						7
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5530	-1.47	-1.26	0.71	0.75	1.46	1.64	
5610	-0.06	0.28	1.00	1.07	2.07	3.16	
5680	-0.01	-0.32	1.00	0.93	1.93	2.86	



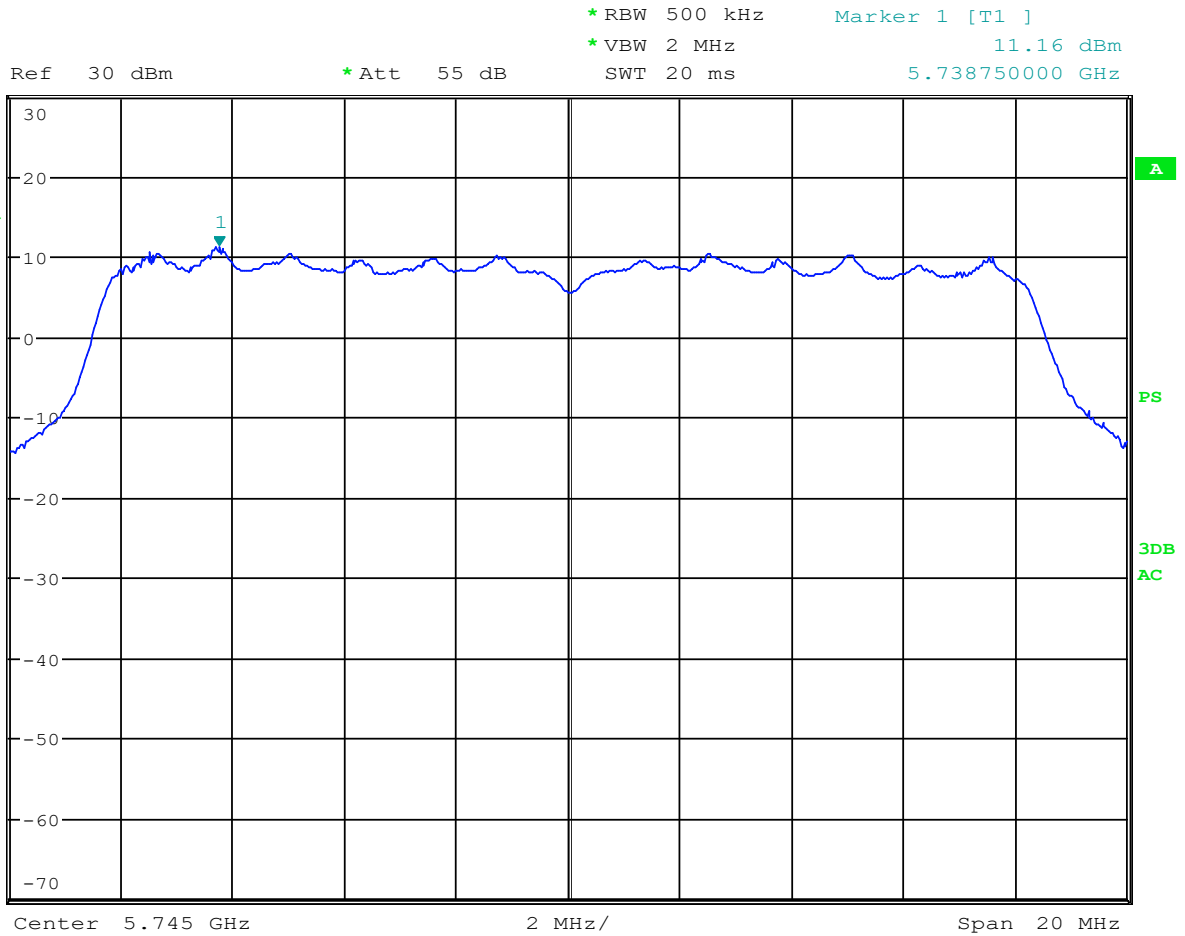
POWER SPECTRAL DENSITY UNII 3 – Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5745	11.16	29
Mid	5785	11.12	29
High	5825	11.14	29
Modulation: HT20			
Low	5745	10.76	29
Mid	5785	11.05	29
High	5825	10.95	29
Modulation: non HT40			
Low	5755	7.65	29
High	5795	7.94	29
Modulation: HT40			
Low	5755	7.73	29
High	5795	7.90	29
Modulation: HT80			
Mid	5775	5.38	29



UNII 3, Port 1: OFDM, Low Channel

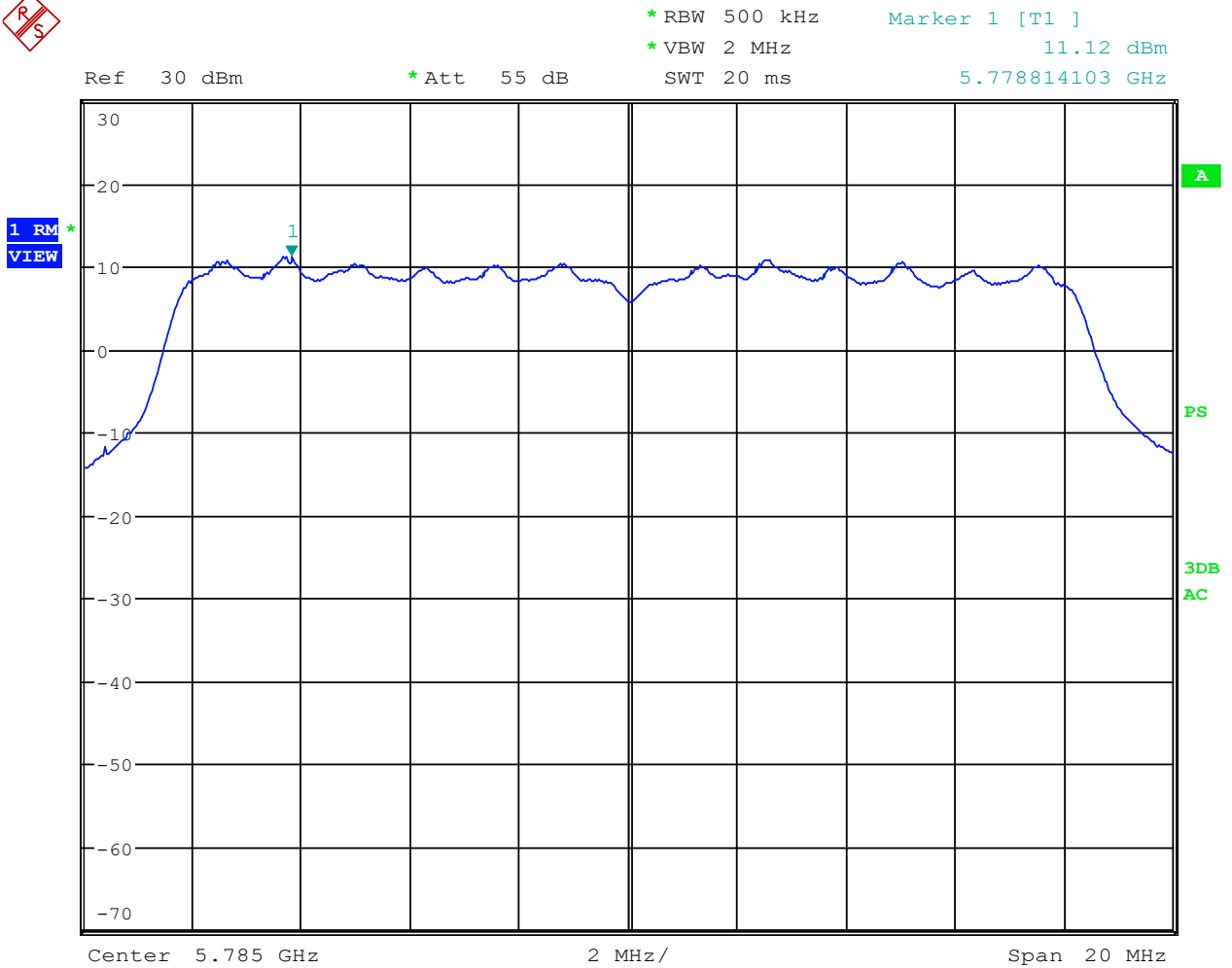


1 RM
VIEW



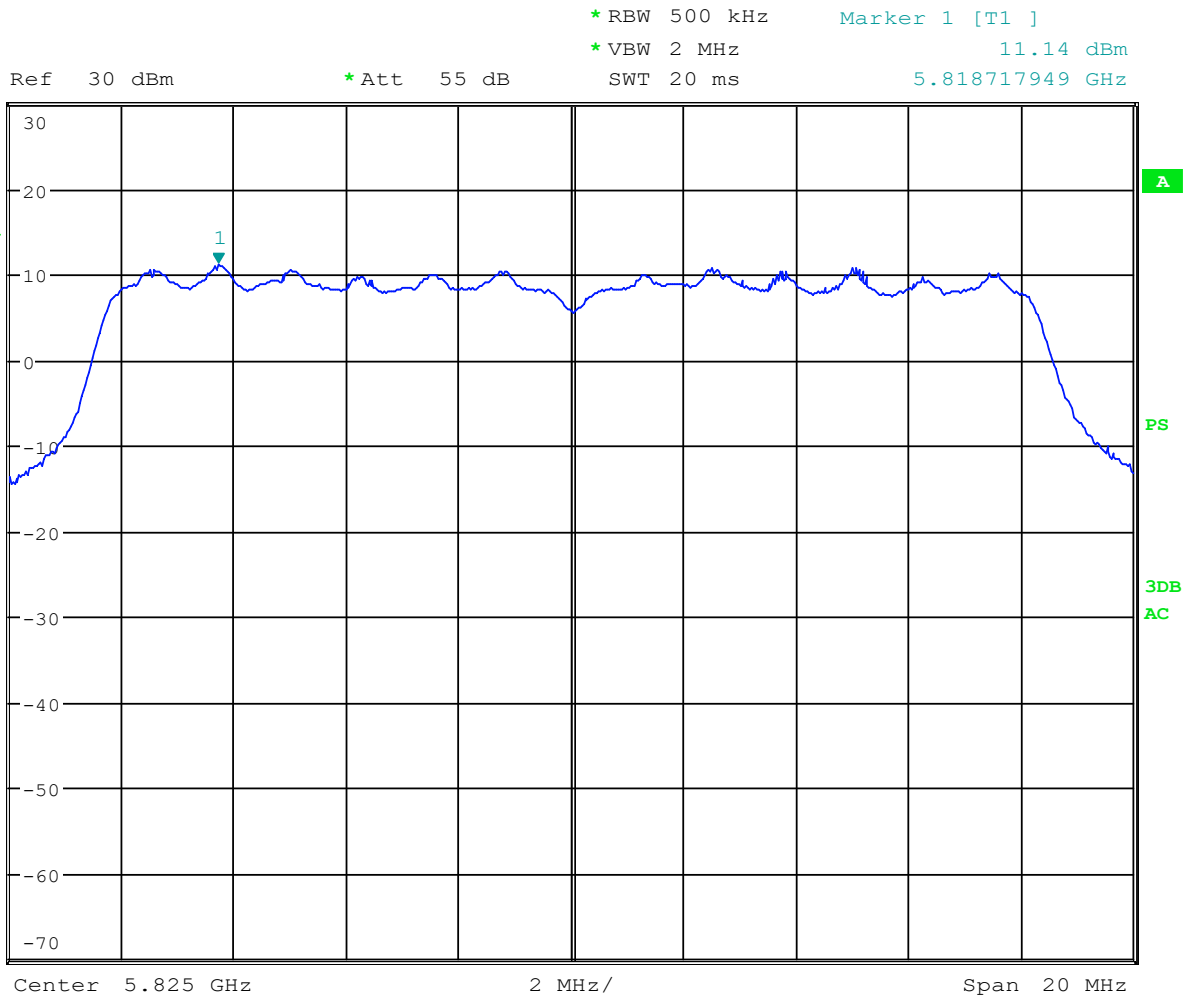


UNII 3, Port 1: OFDM, Mid Channel





UNII 3, Port 1: OFDM, High Channel

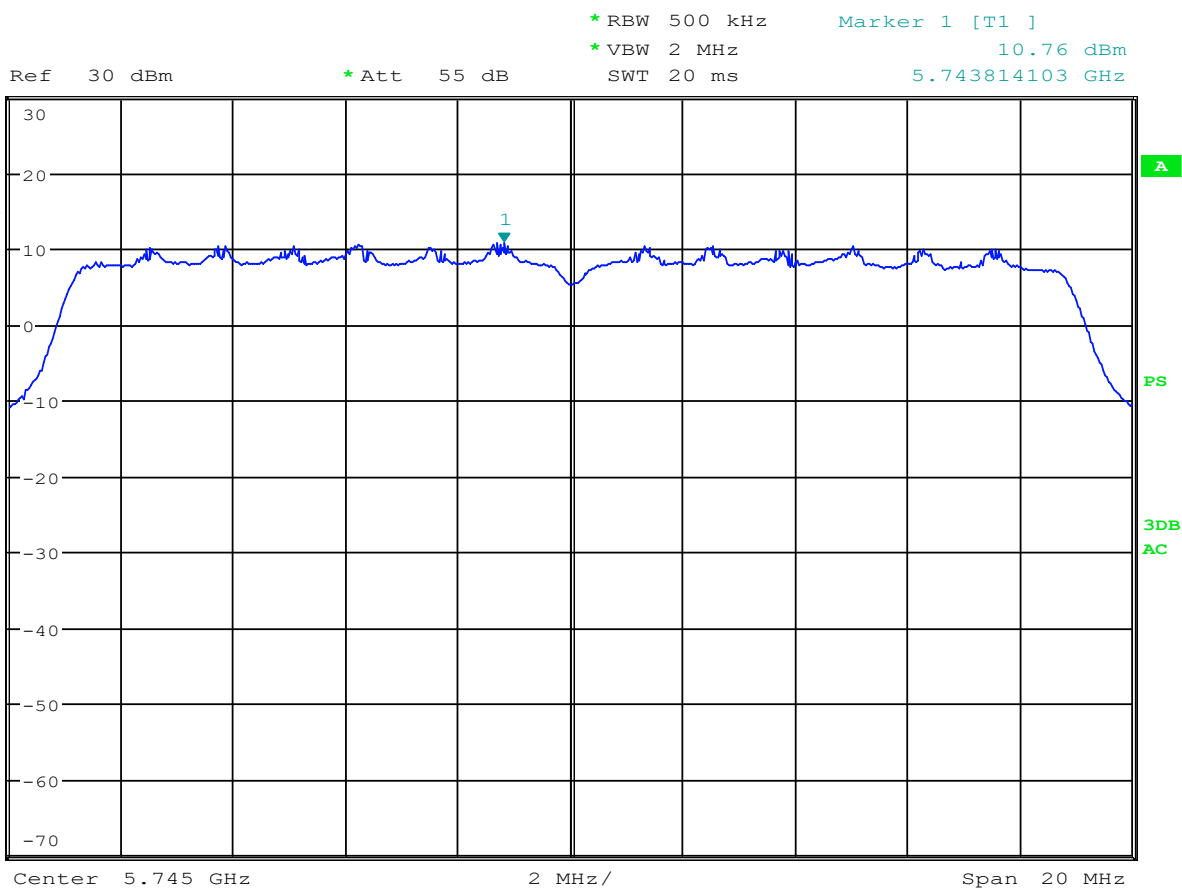




UNII 3, Port 1: HT20, Low Channel



1 RM
VIEW





Order Number: F2P19924D

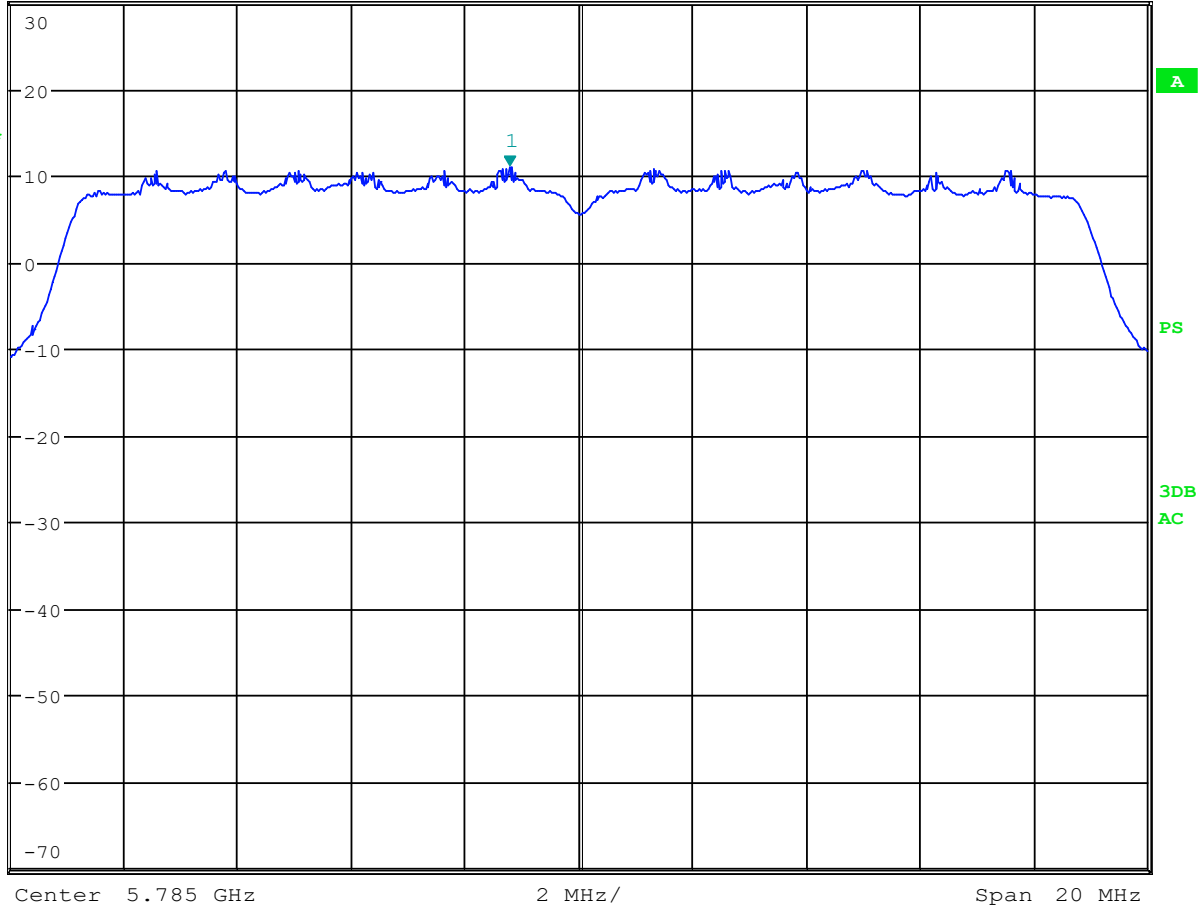
Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 1: HT20, Mid Channel



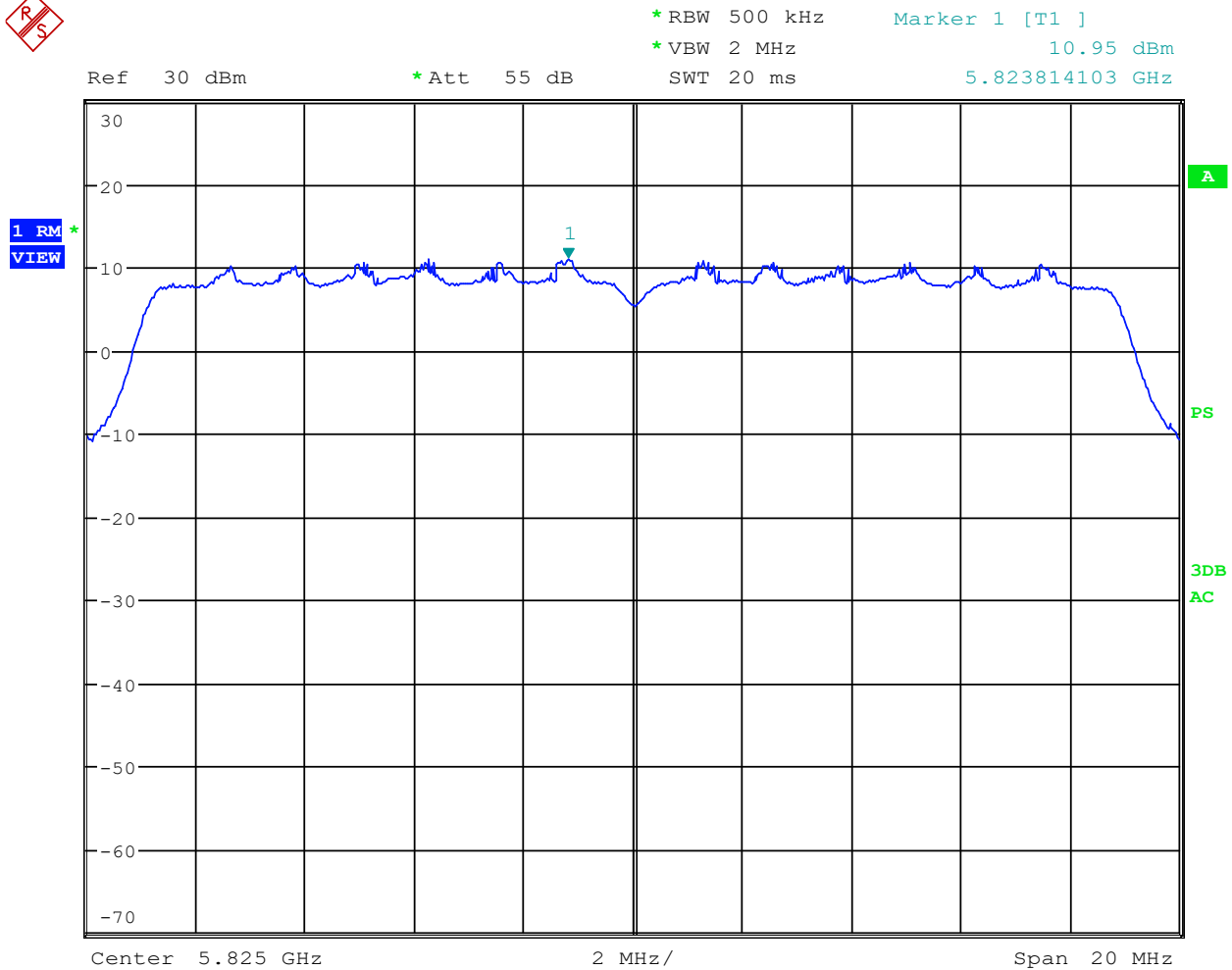
Ref 30 dBm * Att 55 dB SWT 20 ms * RBW 500 kHz Marker 1 [T1] 11.05 dBm
* VBW 2 MHz 5.783782051 GHz

1 RM
VIEW



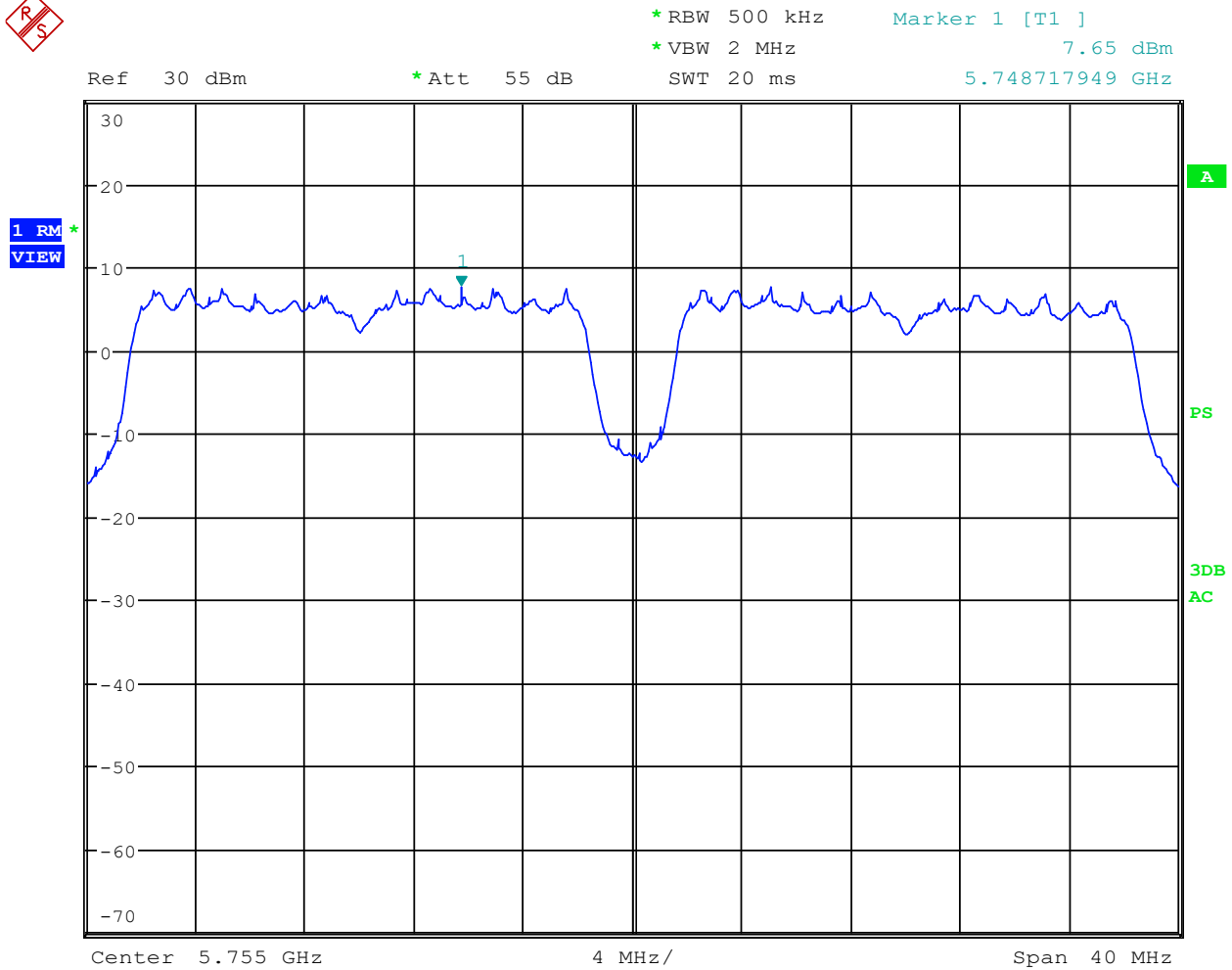


UNII 3, Port 1: HT20, High Channel





UNII 3, Port 1: non HT40, Low Channel



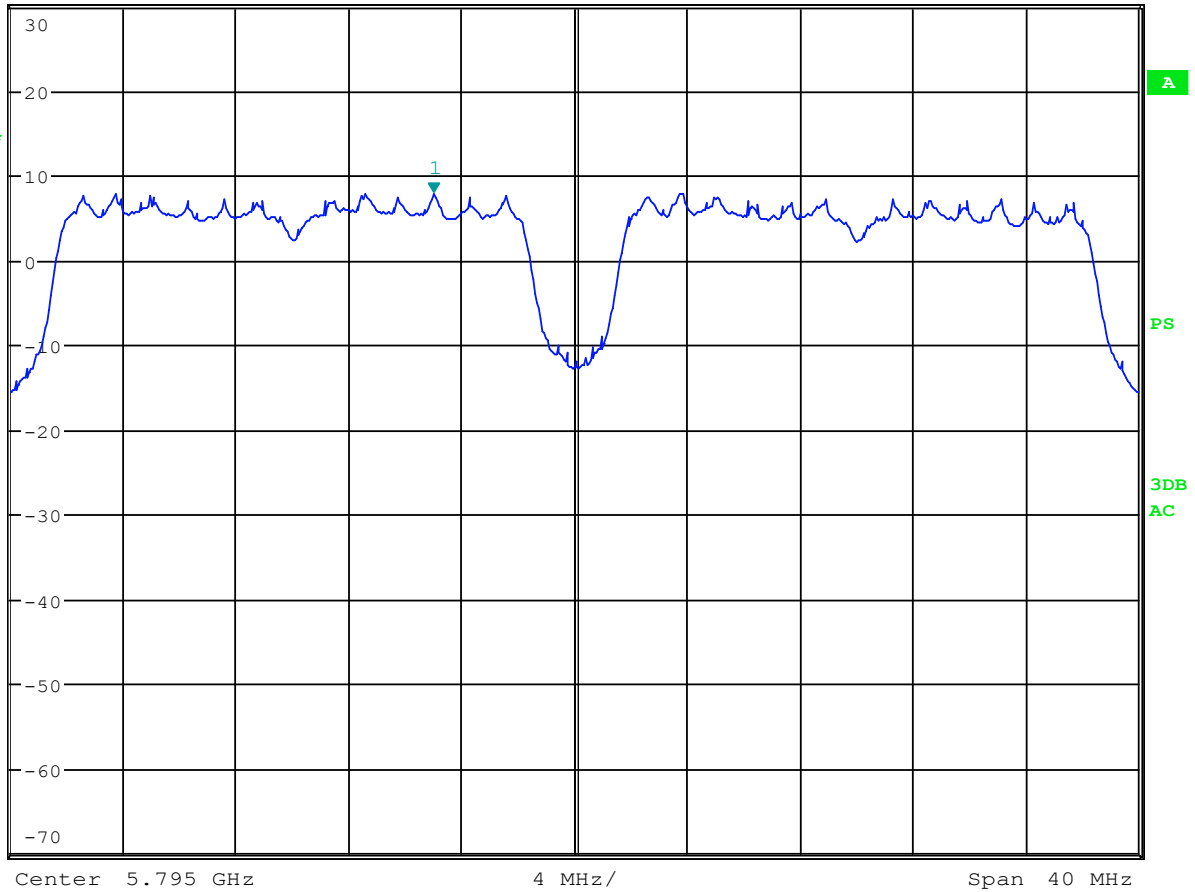


UNII 3, Port 1: non HT40, High Channel



Ref 30 dBm *Att 55 dB *RBW 500 kHz Marker 1 [T1]
*VBW 2 MHz 7.94 dBm
SWT 20 ms 5.790000000 GHz

1 RM
VIEW

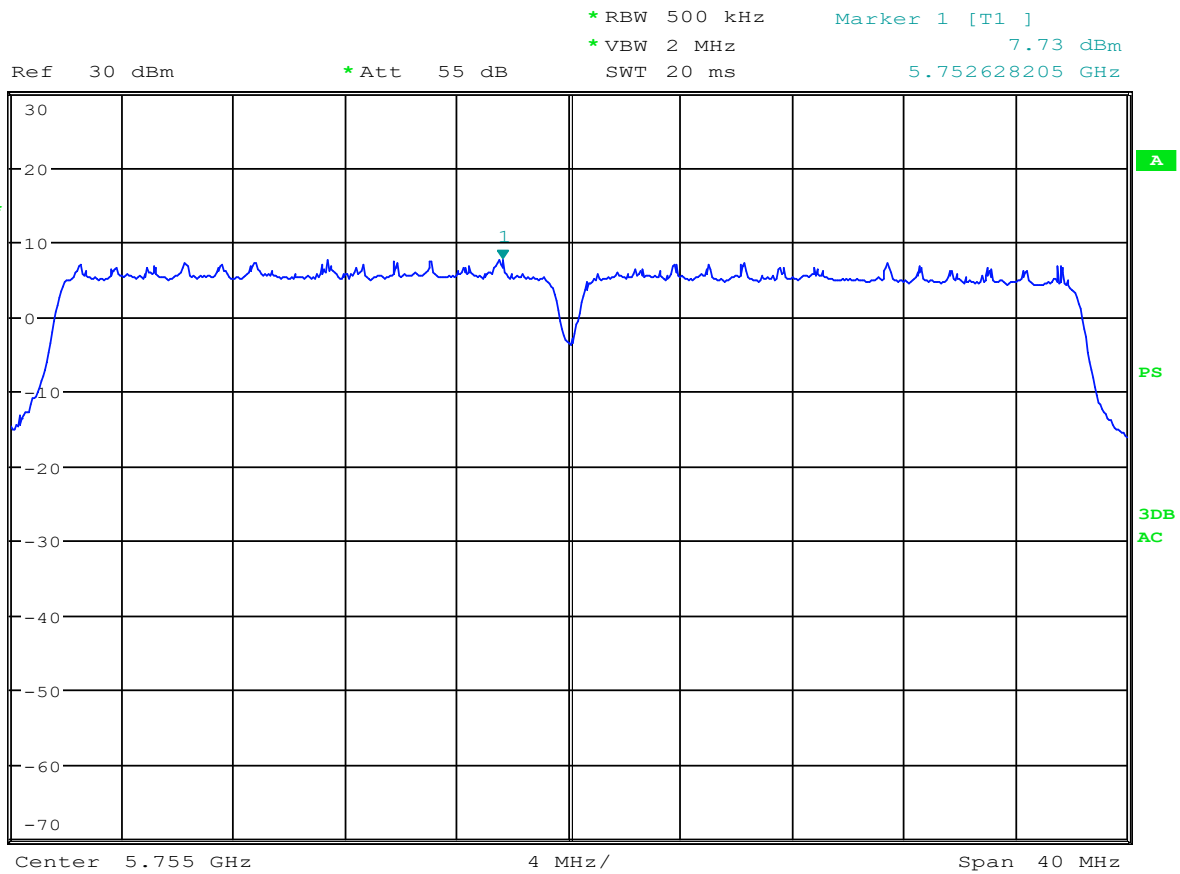




UNII 3, Port 1: HT40, Low Channel



1 RM
VIEW

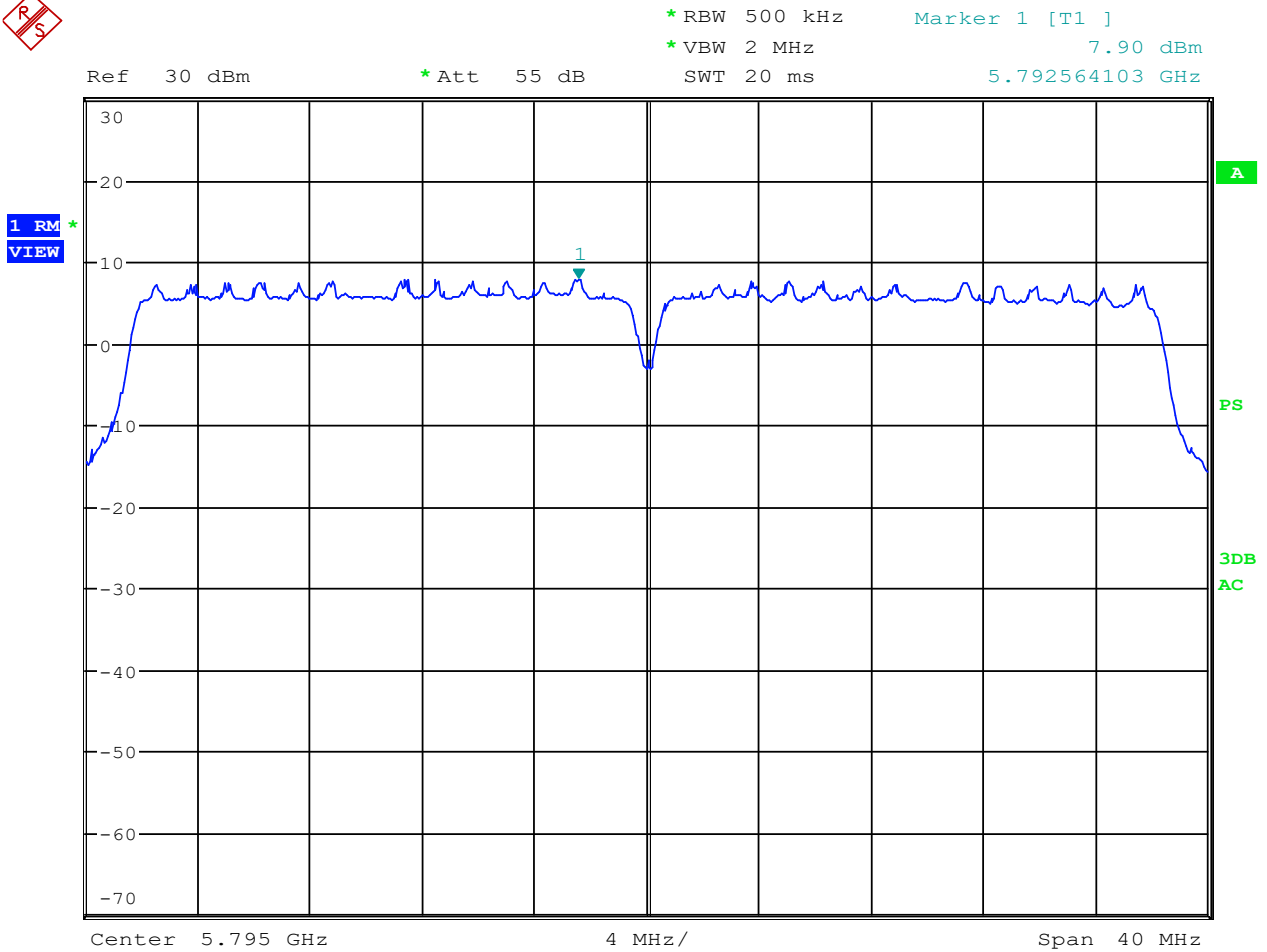




Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

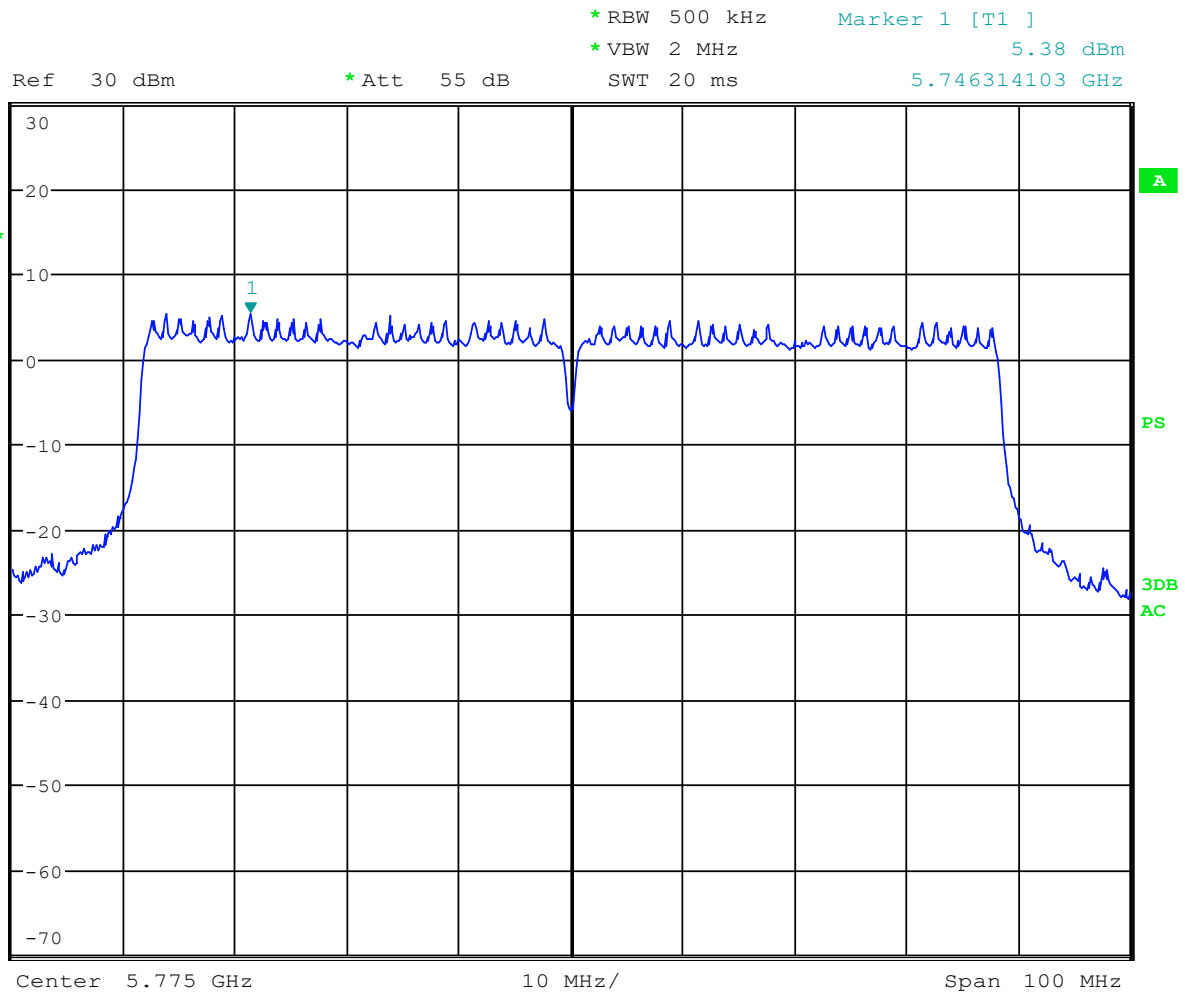
UNII 3, Port 1: HT40, High Channel



Date: 9.SEP.2021 18:02:44



UNII 3, Port 1: HT80





POWER SPECTRAL DENSITY UNII 3 – Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5745	10.98	29
Mid	5785	10.75	29
High	5825	11.06	29
Modulation: HT20			
Low	5745	10.62	29
Mid	5785	10.67	29
High	5825	11.03	29
Modulation: non HT40			
Low	5755	7.58	29
High	5795	8.03	29
Modulation: HT40			
Low	5755	7.51	29
High	5795	7.87	29
Modulation: HT80			
Mid	5775	5.50	29

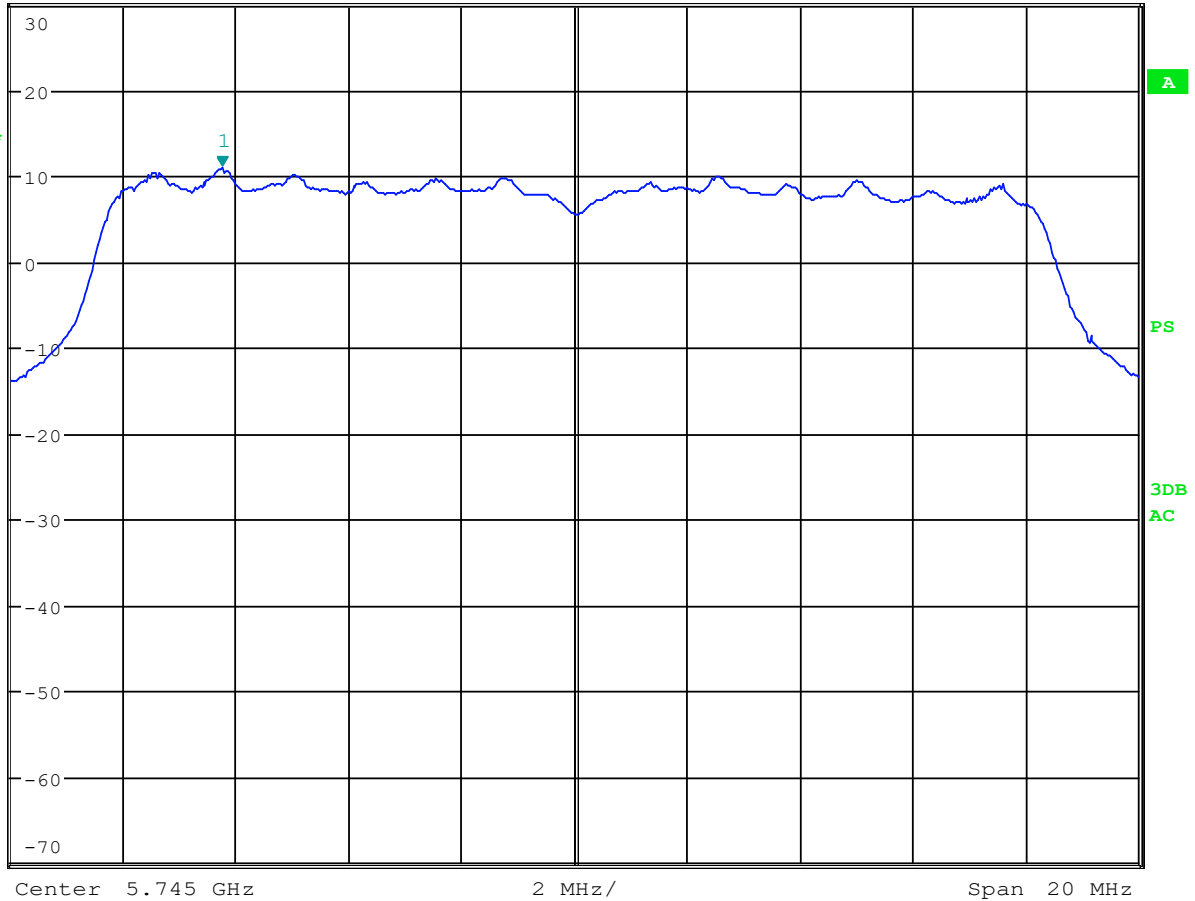


UNII 3, Port 2: OFDM, Low Channel



Ref 30 dBm * Att 55 dB * RBW 500 kHz Marker 1 [T1]
* VBW 2 MHz 10.98 dBm
SWT 20 ms 5.738750000 GHz

1 RM *
VIEW





Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: OFDM, Mid Channel



*RBW 500 kHz Marker 1 [T1]
*VBW 2 MHz 10.75 dBm
SWT 20 ms 5.778685897 GHz

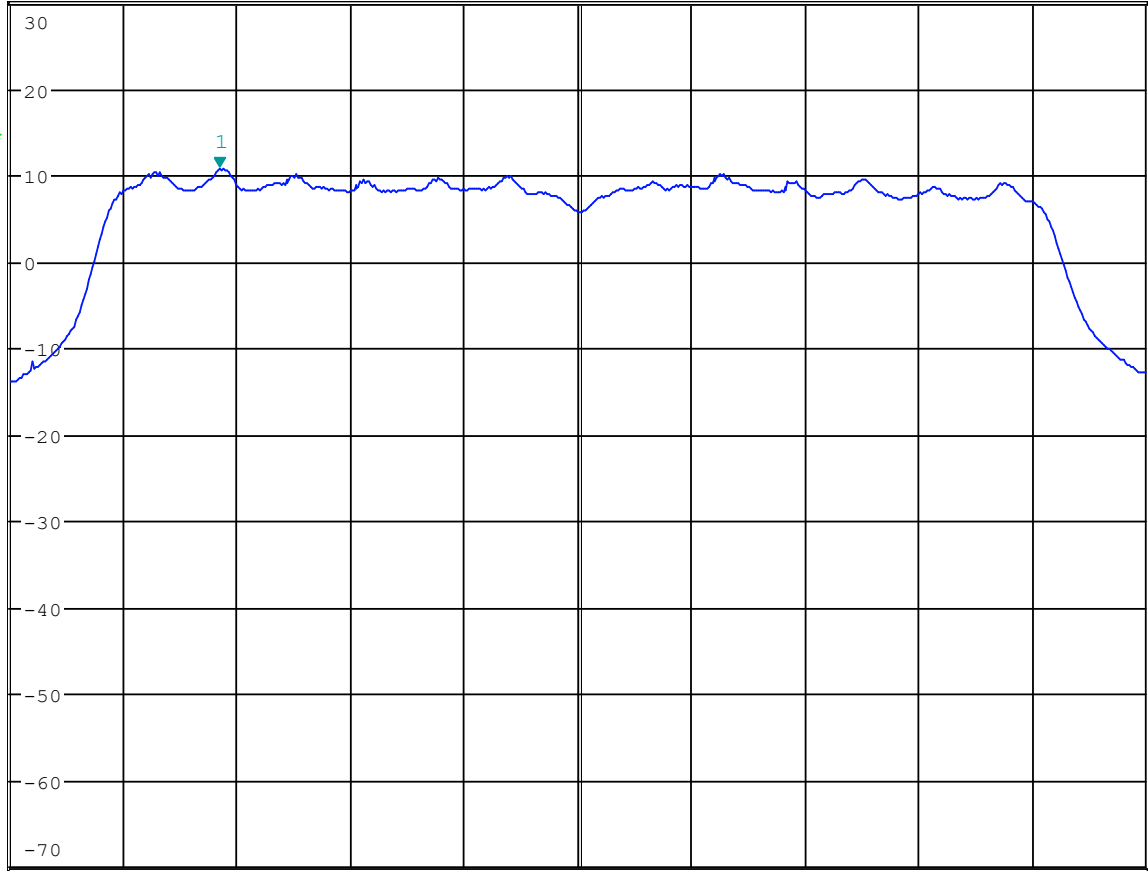
Ref 30 dBm

*Att 55 dB

SWT 20 ms

5.778685897 GHz

1 RM
VIEW



A

PS

3DB
AC

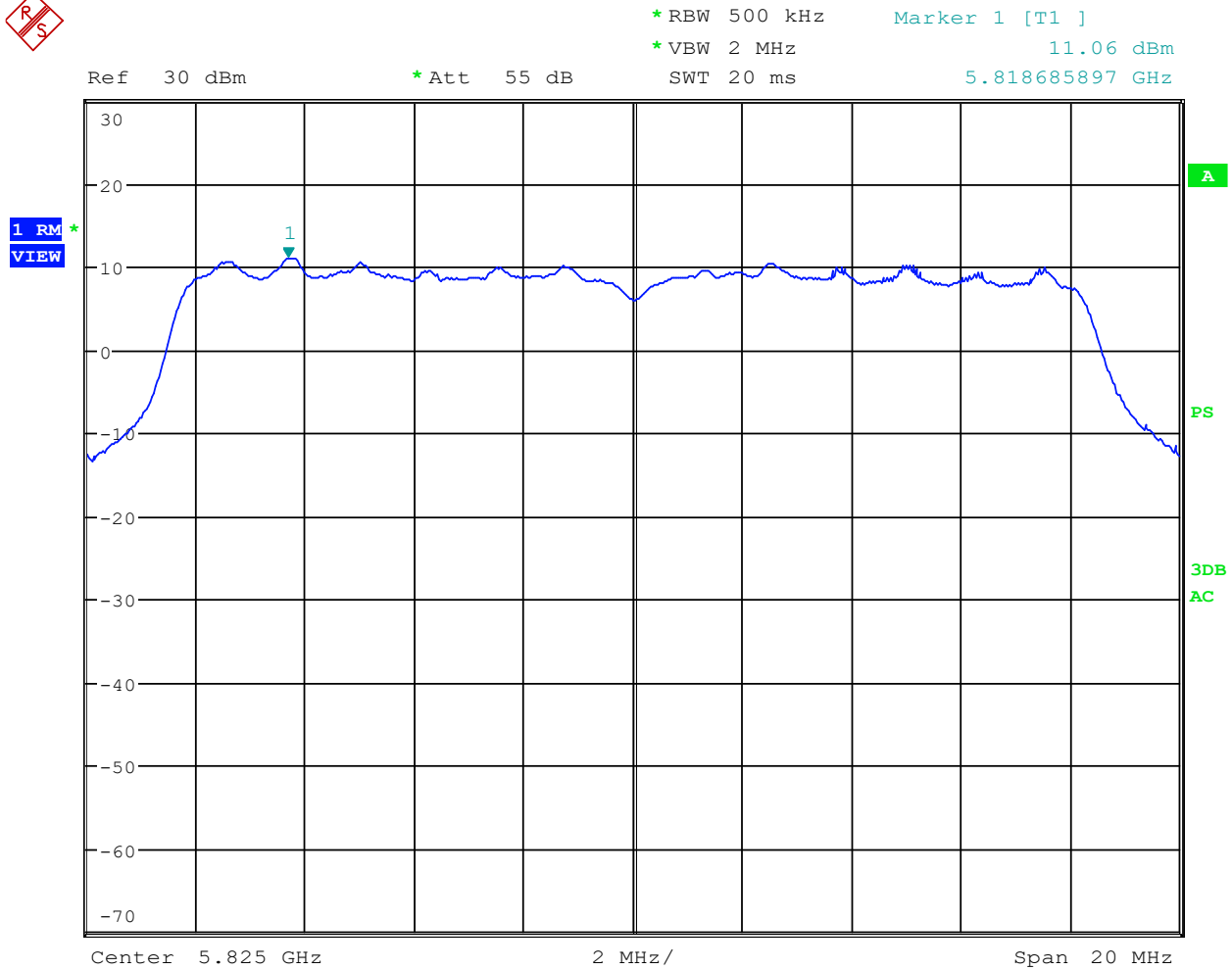
Center 5.785 GHz

2 MHz/

Span 20 MHz



UNII 3, Port 2: OFDM, High Channel





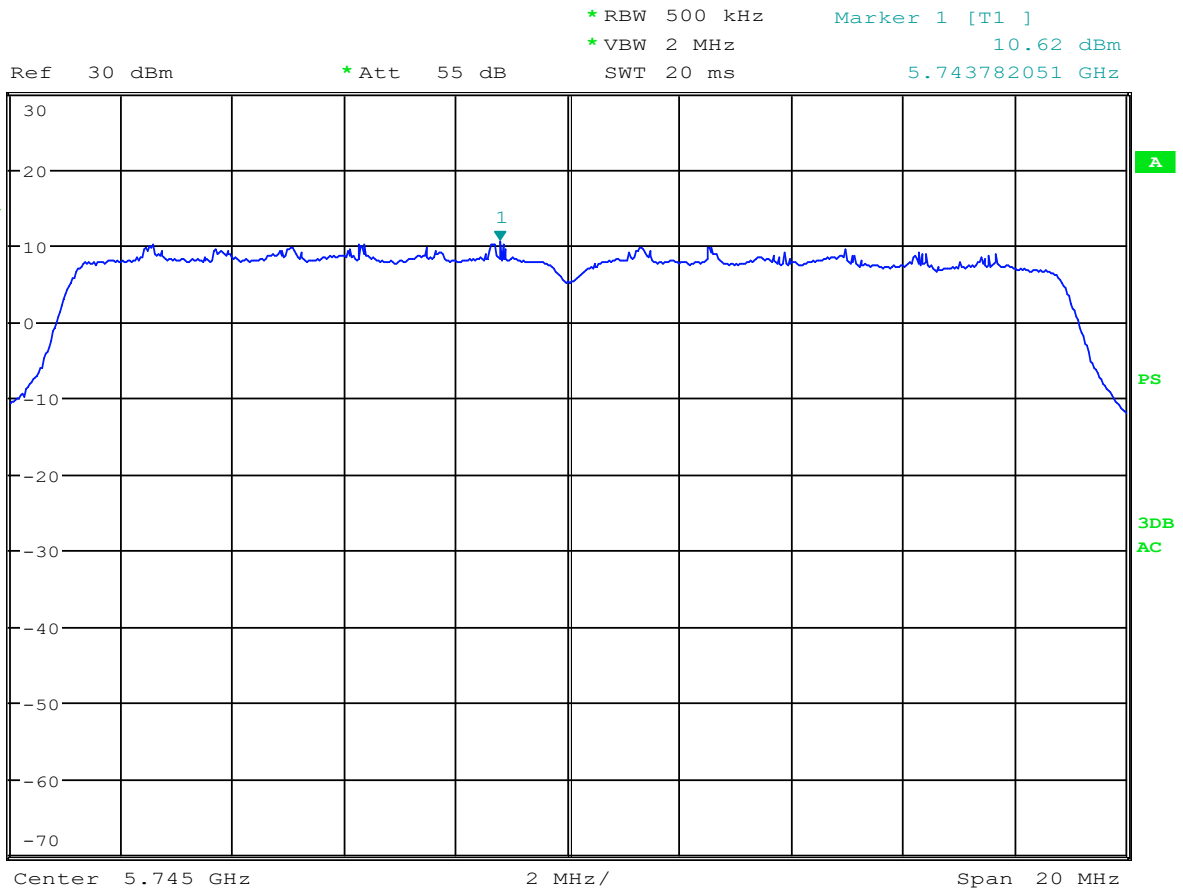
Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT20, Low Channel



1 RM
VIEW

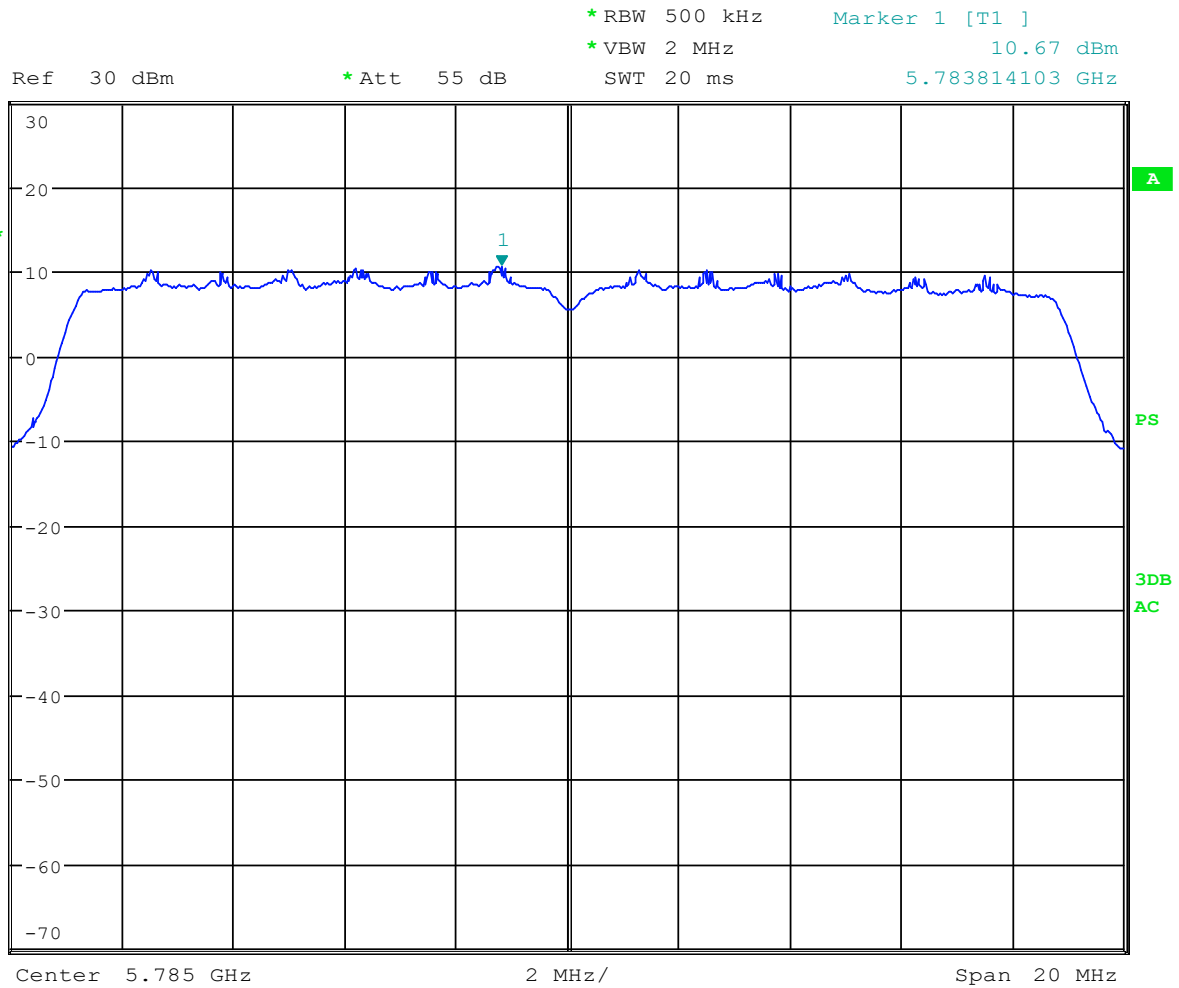




Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT20, Mid Channel





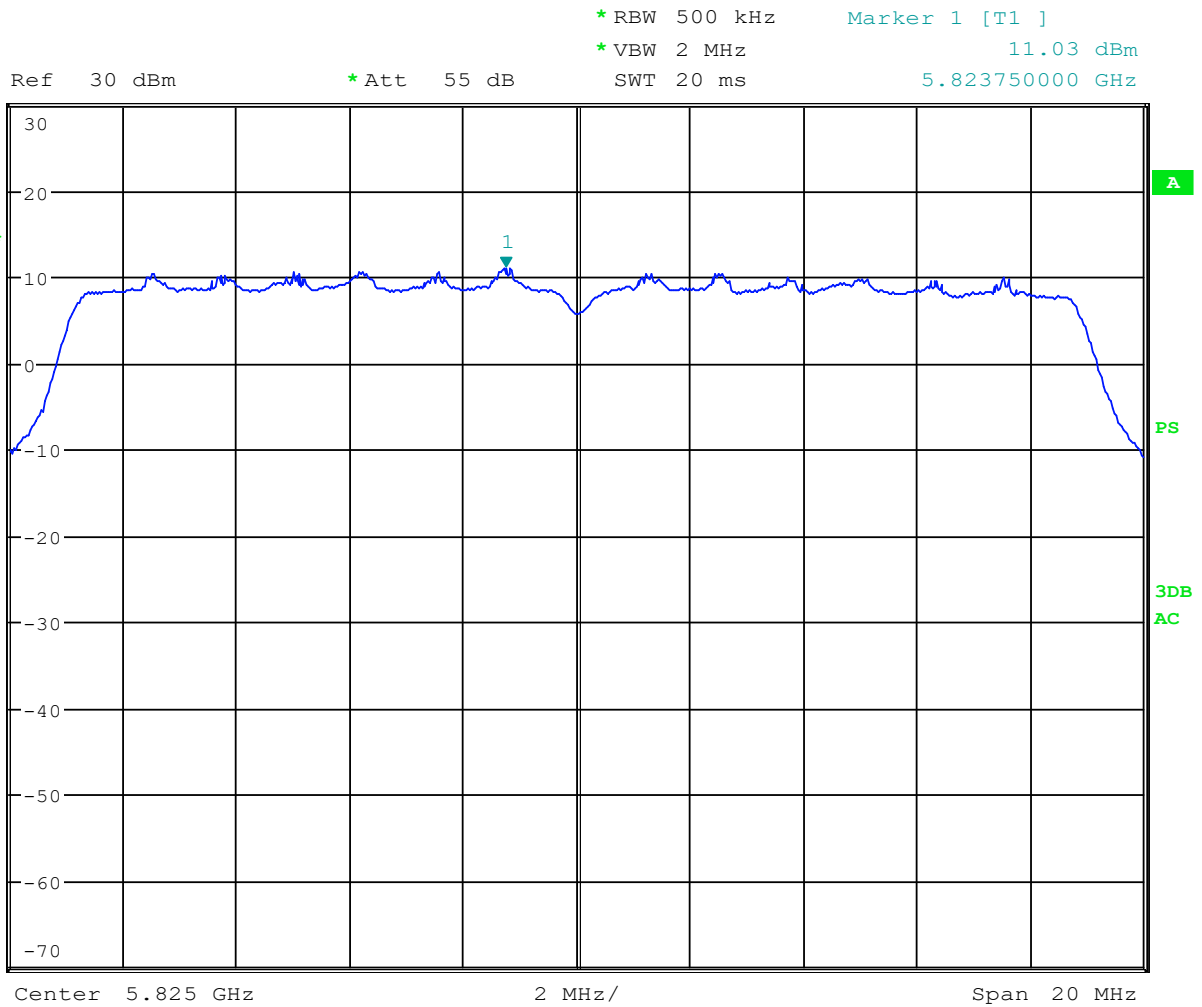
Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT20, High Channel



1 RM
VIEW



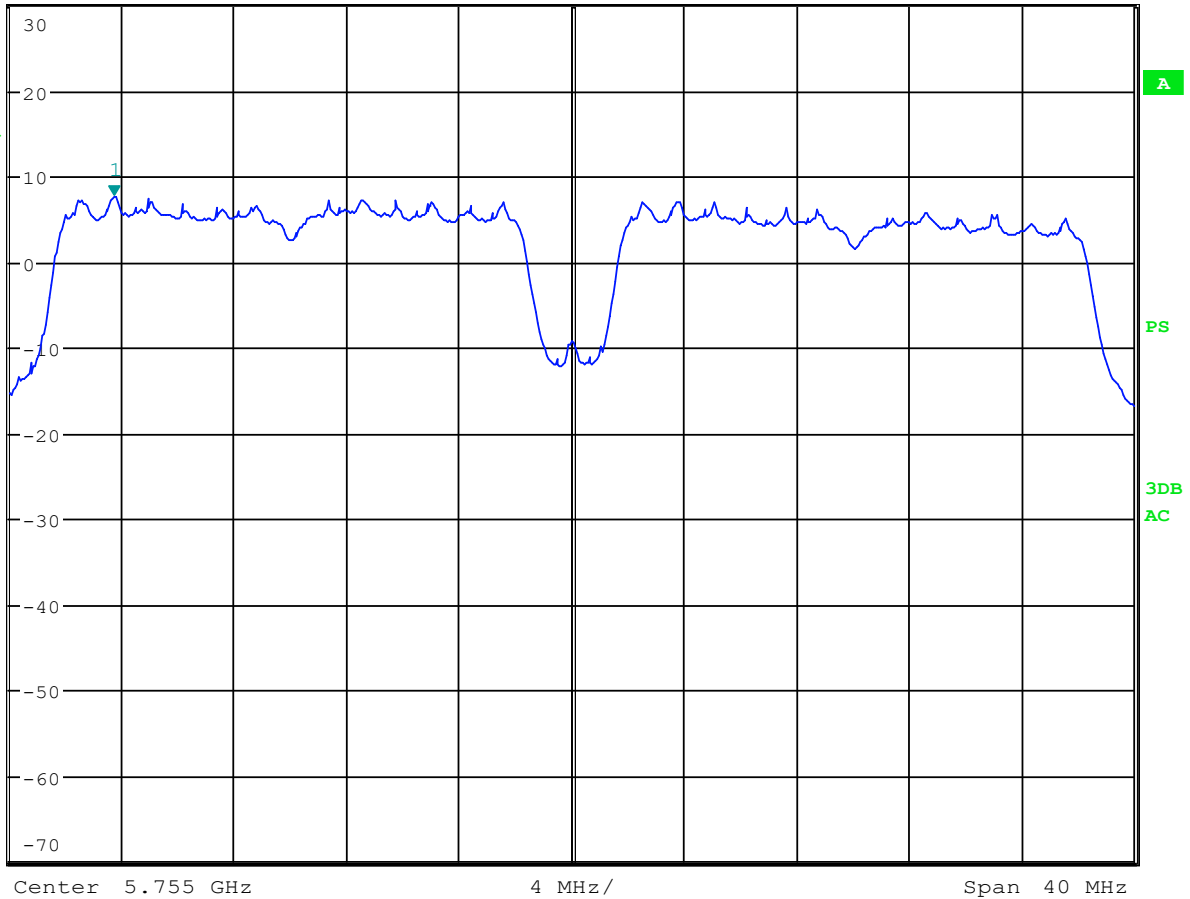


UNII 3, Port 2: non HT40, Low Channel



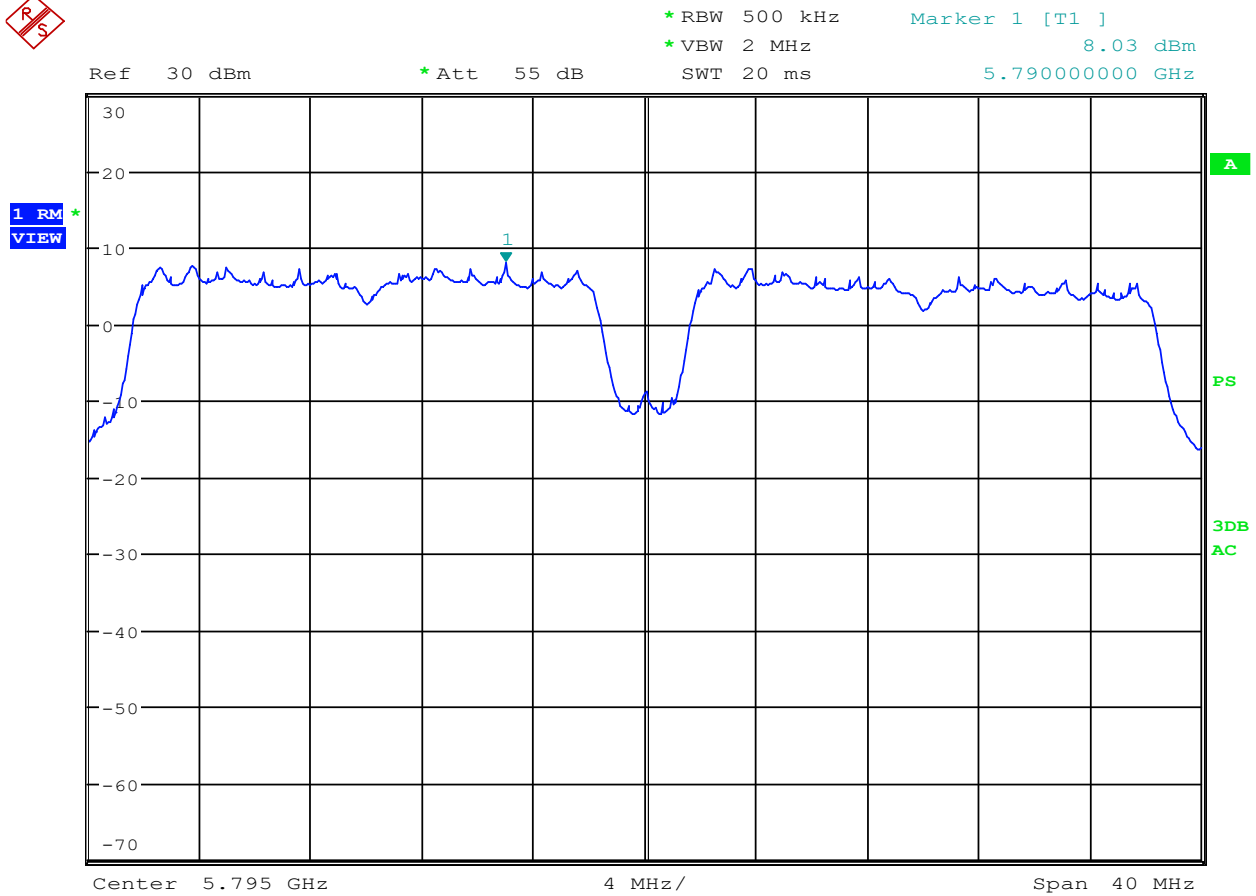
Ref 30 dBm * Att 55 dB * RBW 500 kHz Marker 1 [T1]
* VBW 2 MHz 7.58 dBm
SWT 20 ms 5.738717949 GHz

1 RM
VIEW





UNII 3, Port 2: non HT40, High Channel





Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT40, Low Channel

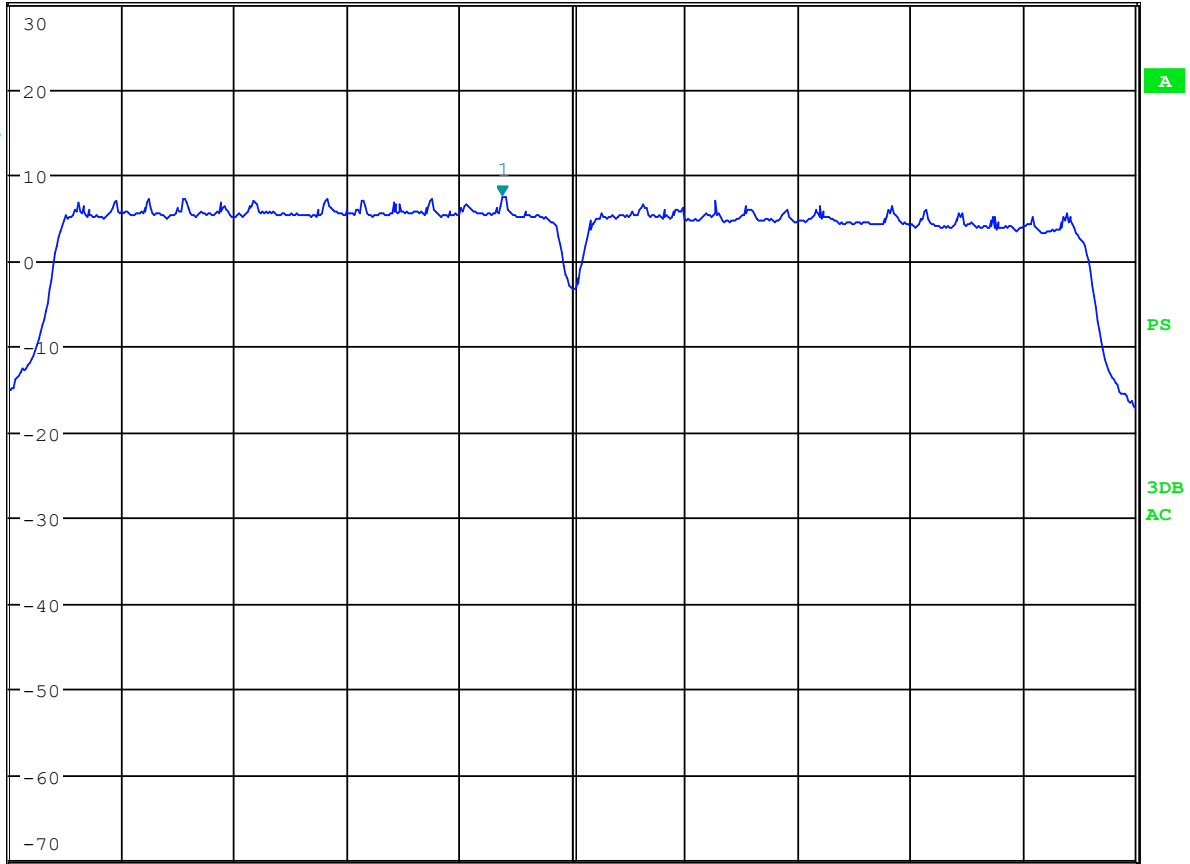


*RBW 500 kHz Marker 1 [T1]
*VBW 2 MHz 7.51 dBm
SWT 20 ms 5.752500000 GHz

Ref 30 dBm

*Att 55 dB

1 RM
VIEW



Center 5.755 GHz

4 MHz/

Span 40 MHz



Order Number: F2P19924D

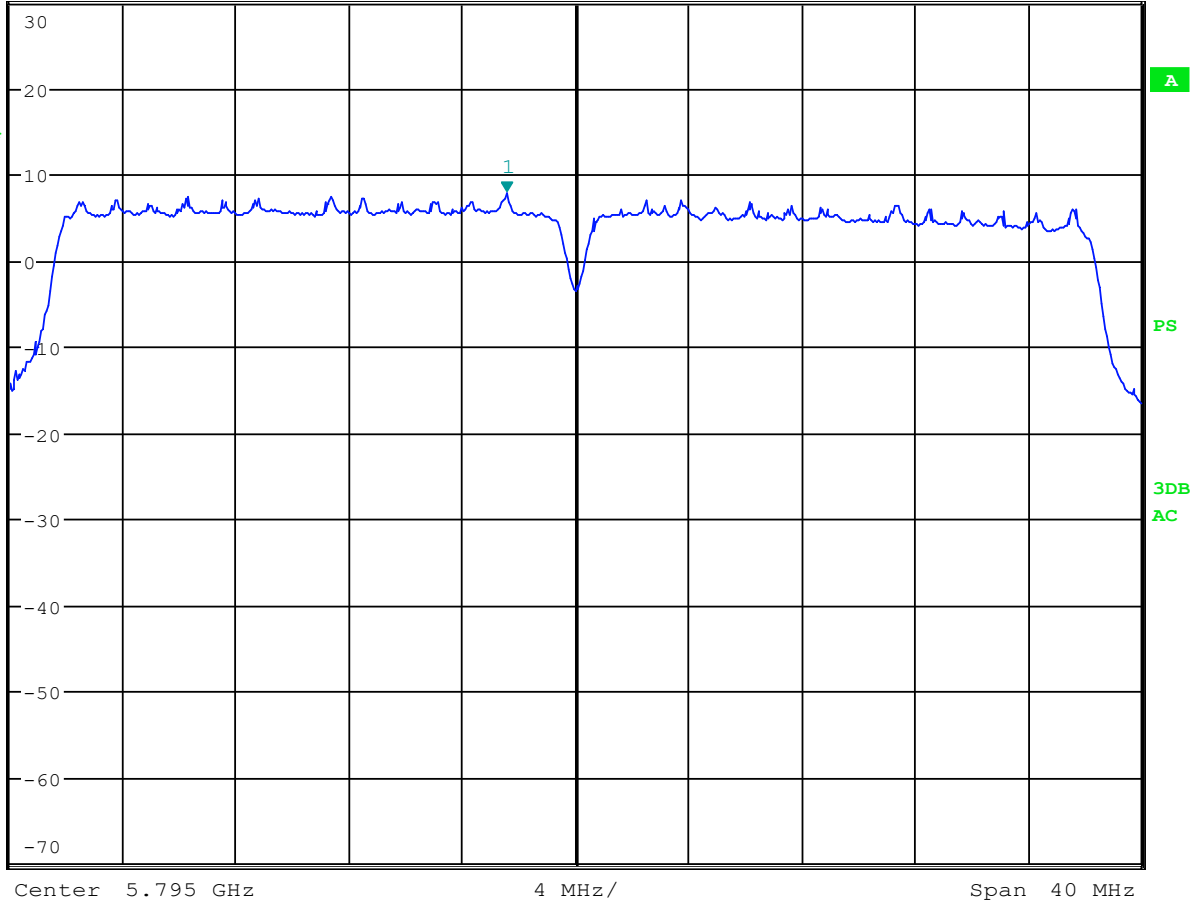
Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT40, High Channel



Ref 30 dBm * Att 55 dB RBW 500 kHz Marker 1 [T1]
* VBW 2 MHz 7.87 dBm
SWT 20 ms 5.792564103 GHz

1 RM
VIEW

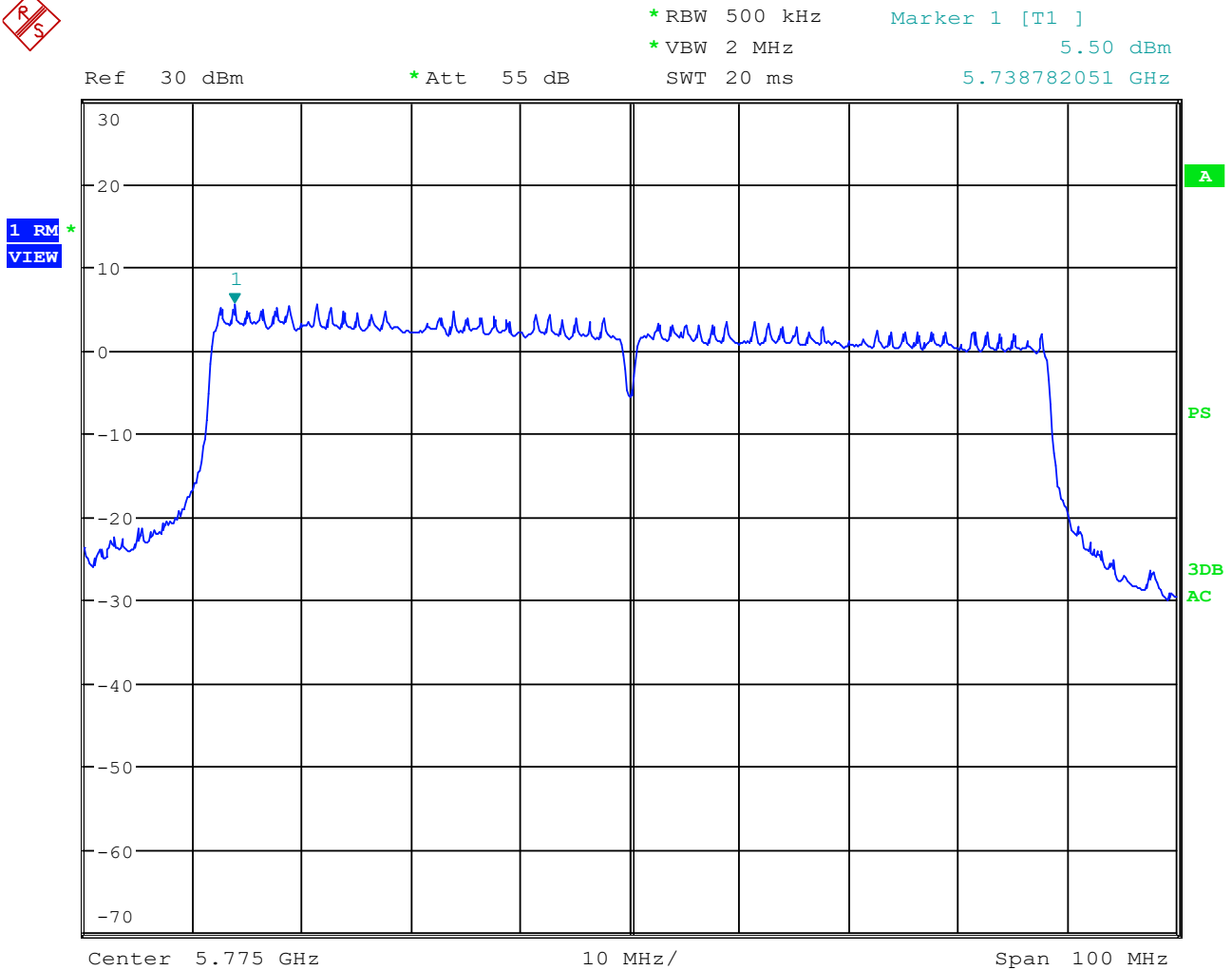




Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

UNII 3, Port 2: HT80





PSD UNII 3 SUMMING PORT 1 AND PORT 2 FOR BEAMFORMING - MIMO

Modulation: OFDM

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5745 (15)	10.98	11.16	12.53	13.06	25.59	14.08	26
5785 (21)	10.75	11.12	11.88	12.94	24.82	13.95	
5825 (15)	11.06	11.14	12.76	13.00	25.76	14.11	

Modulation: HT20

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5745 (15)	10.62	10.76	11.53	11.91	23.44	13.70	26
5785 (21)	10.67	11.05	11.67	12.73	24.40	13.87	
5825 (15)	11.03	10.95	12.67	12.44	25.11	14.00	

Modulation: non HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5755 (15)	7.58	7.65	5.73	5.82	11.55	10.63	26
5795 (15)	8.03	7.94	6.35	6.22	12.57	10.99	

Modulation: HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5755 (15)	7.51	7.73	5.63	5.30	10.93	10.39	26
5795 (15)	7.87	7.90	6.12	6.16	12.28	10.89	

Modulation: HT80

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						Limit (dBm)
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5775 (15)	5.50	5.38	3.55	3.45	7.00	8.45	26



9 RADIATED SPURIOUS EMISSION

The EUT antenna port was fitted with its integral/internal chip antenna. Radiated emissions were measured in a Semi-Anechoic Chamber. All emissions generated that fall in the restricted bands per FCC Part 15.205 were examined.

9.1 Requirements:

All emissions that fall in the restricted bands defined in FCC Part 15.205 shall not exceed the maximum field strength listed in FCC Part 15.209(a).

All other undesirable emission that do not fall under the provisions of Part 15.205, shall meet the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.*
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.*
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.*
- (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.*



9.2 Radiated Spurious Emission Test Data

Test Date(s):	2021-09-15	Test Engineer:	J. Chiller
Standards:	CFR 47 Part 15.407; Part 15.209 / KDB789033	Air Temperature:	21.4°C
		Relative Humidity:	51%

Notes: Plots are peak, max hold prescan data included only to determine what frequencies to investigate and measure. The EUT was initially placed in a semi-anechoic chamber, and rotated in all three orthogonal positions to maximize the emissions. The orthogonal position that showed the highest emissions was used. Characterization measurements were then performed to determine at which frequencies significant emissions occurred. These graphs are shown below.

The equipment was fully exercised with all cabling attached to the EUT and was positioned in a semi-anechoic chamber for maximum emissions. All antennas were mounted and all transmitters were on and transmitting at the same time to set worst-case Radiated Emissions and Beamforming due to MIMO configuration. While the equipment was energized, the receiving antenna was scanned from 1.0 meter to 4.0 meters in both vertical and horizontal polarities while the turntable was adjusted 360 degrees to determine the maximum field strength. The tables of measured results can be found below.

Some of the frequencies did not change with the EUT on or off. At those frequencies, the test distance was shortened to 1 meter and still no emissions from the EUT were visible or over the ambient or limit.

Limits are indicated as follows:

Solid Red = 15.407 Avg

Green = Restricted Band Avg

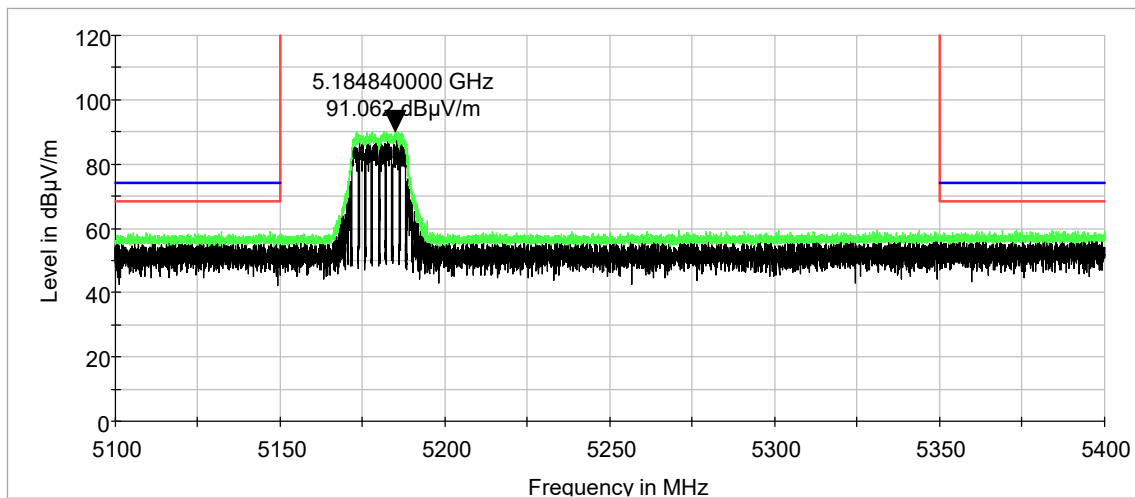
Blue = Restricted Band Peak

In the UNII-1 (5.15-5.25 GHz) band, UNII-2A (5.25-5.35 GHz) band, and lower end of the UNII-2C (5.47-5.725 GHz) band, there are restricted bands that applies from 4.5-5.15 GHz, and from 5.35-5.46 GHz. In these restricted bands, the limits are 54 dBμV/m Avg and 74 dBμV/m Peak.

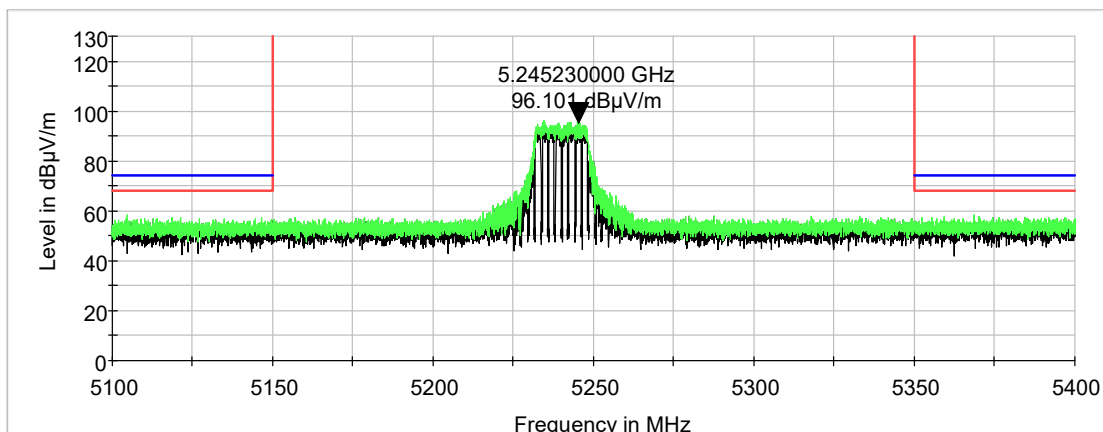


Scans and an evaluation were performed on all modulations and on the high, mid, and low channels in Beamforming and Non-Beamforming modes and the worse-case emissions are plotted below. Emissions to be found by the EUT were measured and listed in tables. The black lines are active scans while the green lines are the max peak scan of the unit during rotations. The plots are for reference only and the limit lines are not actual limit lines but merely a guide.

Lower Radiated Band Edge: UNII 1, OFDM



Upper Radiated Band Edge: UNII 1, OFDM

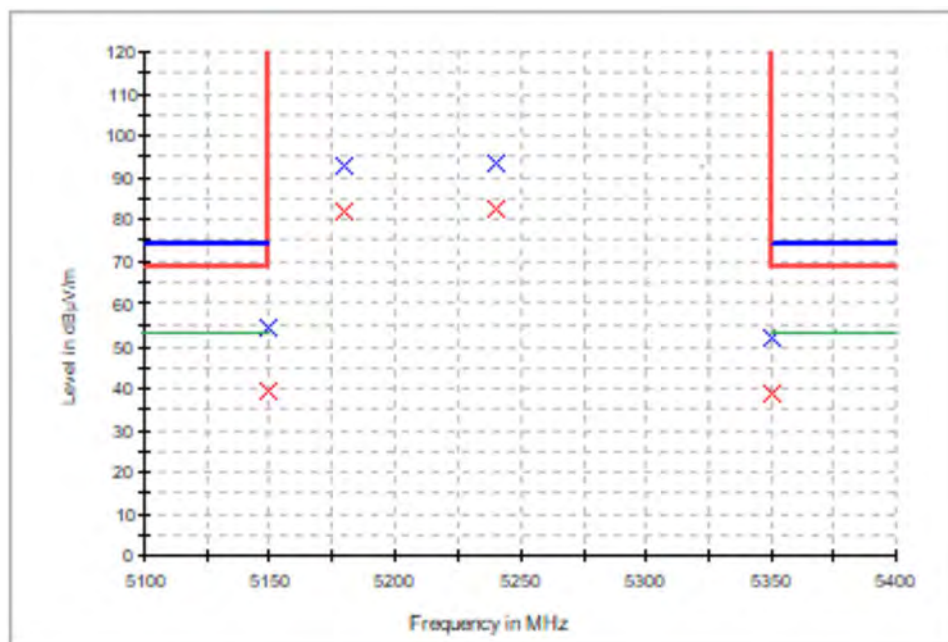




Radiated Band Edge: UNII 1, OFDM

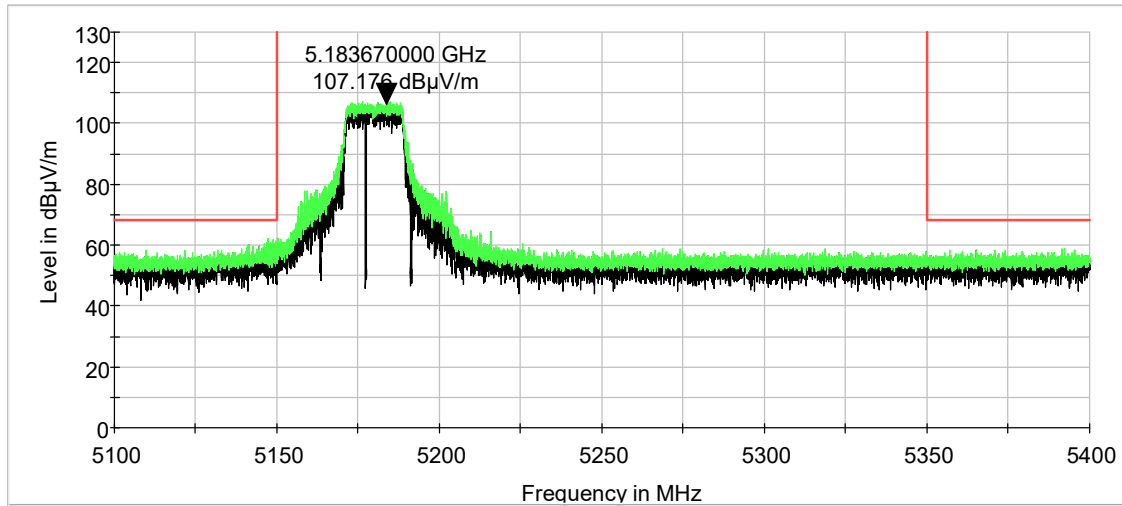
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5150.000000	54.3	39.3	1000.000	150.0	H	94.0	12.0	14.7	54.0
5180.000000	92.7	81.6	1000.000	150.0	H	94.0	12.0	-----	-----
5240.000000	93.2	82.4	1000.000	150.0	H	94.0	12.0	-----	-----
5350.000000	52.1	38.7	1000.000	150.0	H	94.0	12.4	15.3	54.0

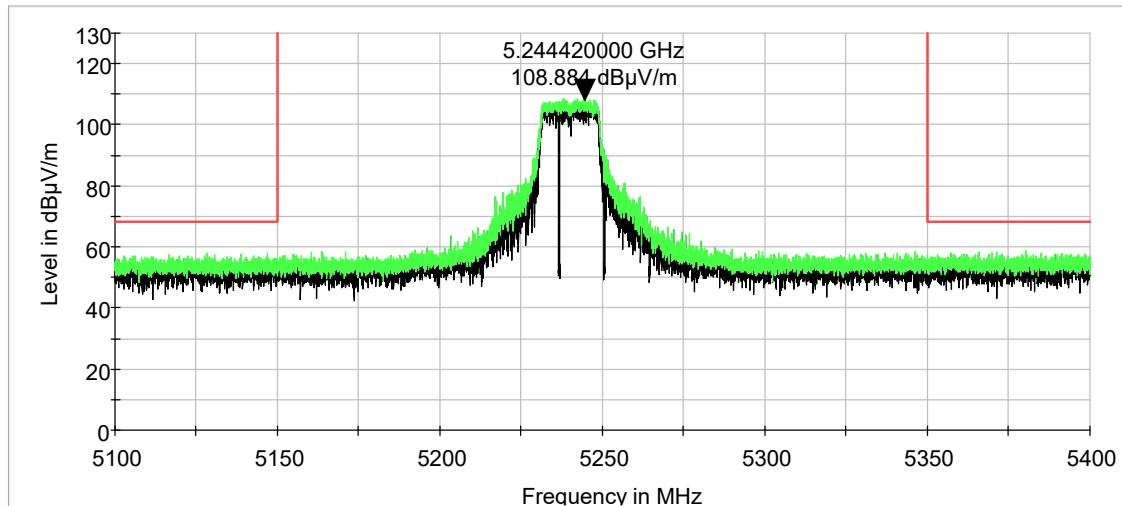




Lower Radiated Band Edge: UNII 1, HT20



Upper Radiated Band Edge: UNII 1, HT20

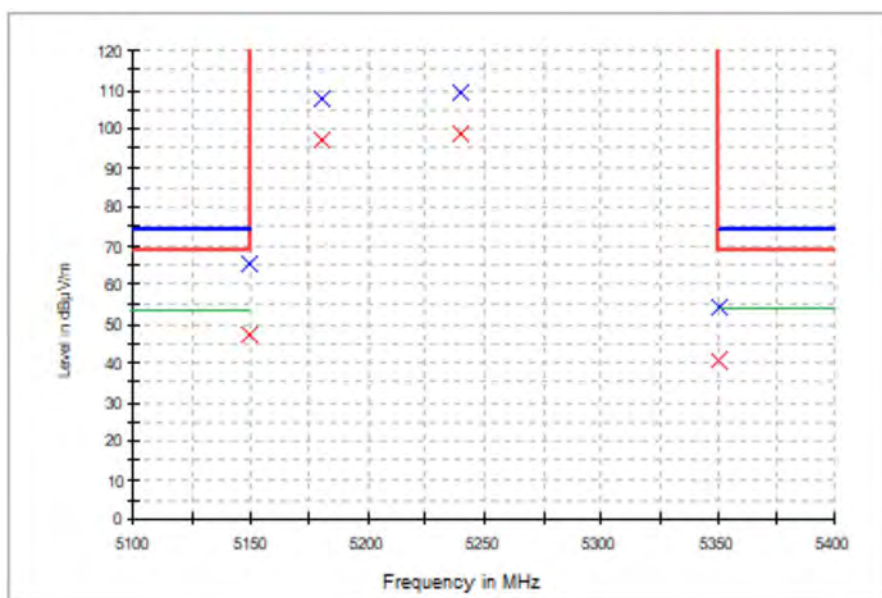




Radiated Band Edge: UNII 1, HT20

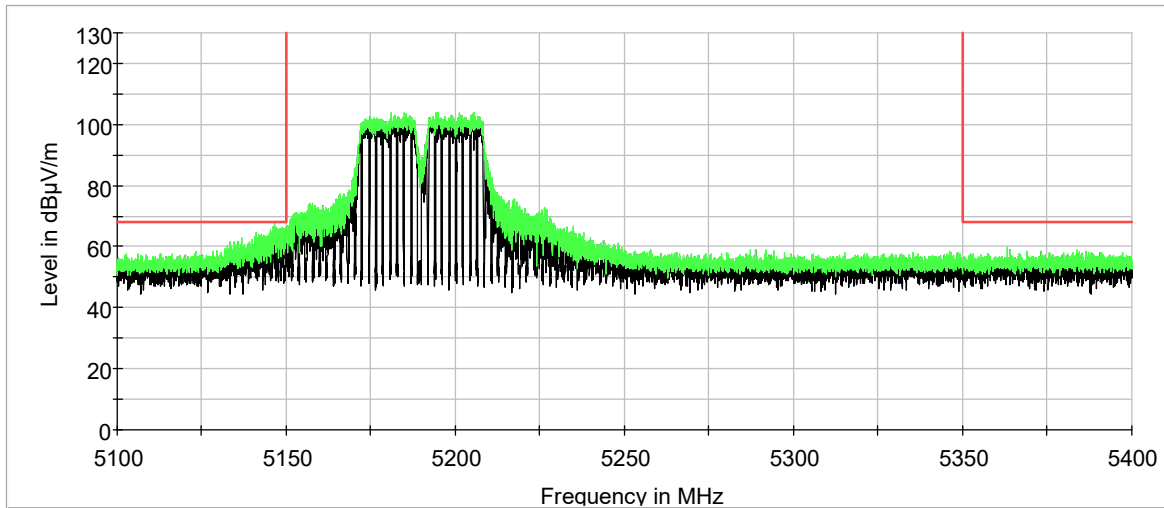
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5150.000000	65.4	47.5	1000.000	150.0	H	110.0	12.0	6.5	54.0
5180.000000	107.7	97.1	1000.000	150.0	H	104.0	12.0	-----	-----
5240.000000	109.0	98.5	1000.000	150.0	H	17.0	12.0	-----	-----
5350.000000	53.8	40.6	1000.000	150.0	H	124.0	12.4	13.4	54.0

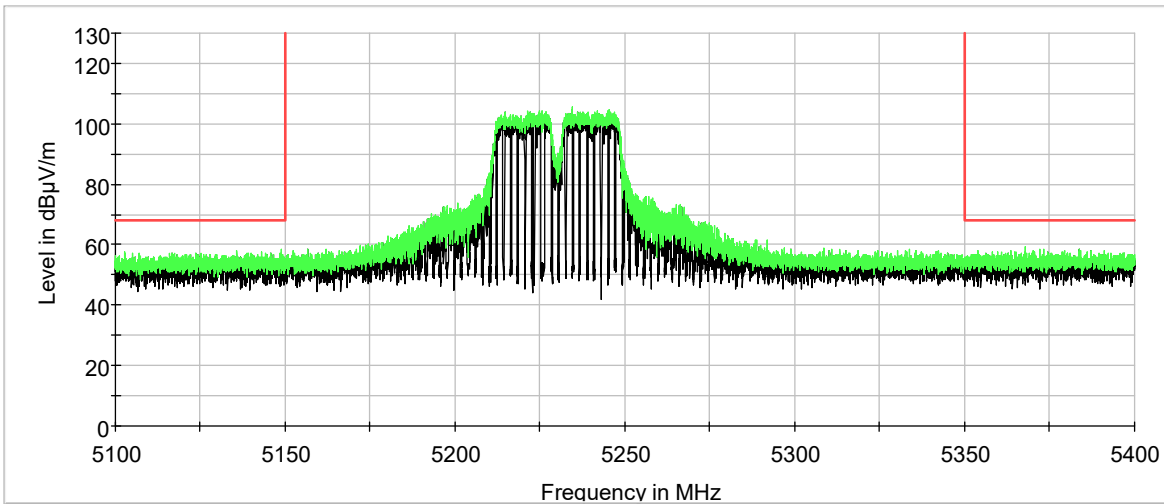




Lower Radiated Band Edge: UNII 1, non HT40



Upper Radiated Band Edge: UNII 1, non HT40

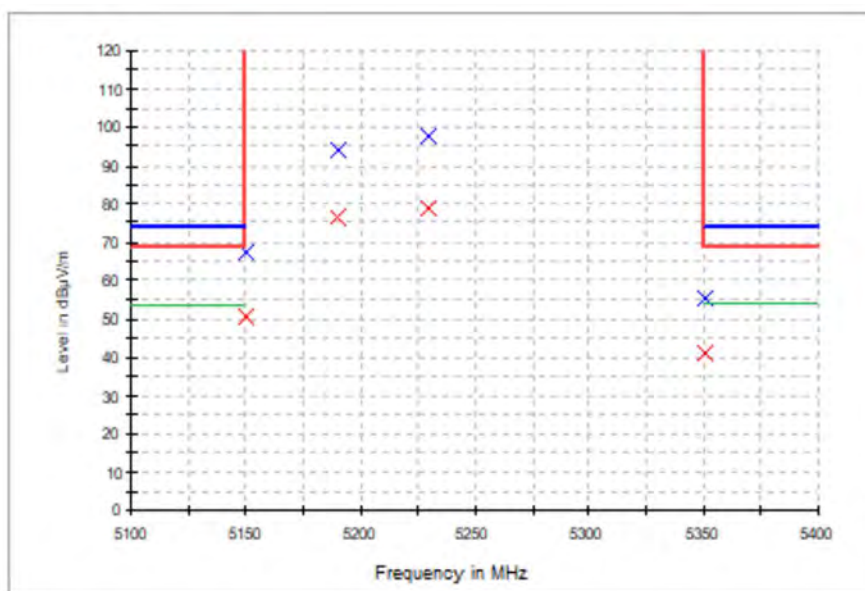




Radiated Band Edge: UNII 1, non HT40

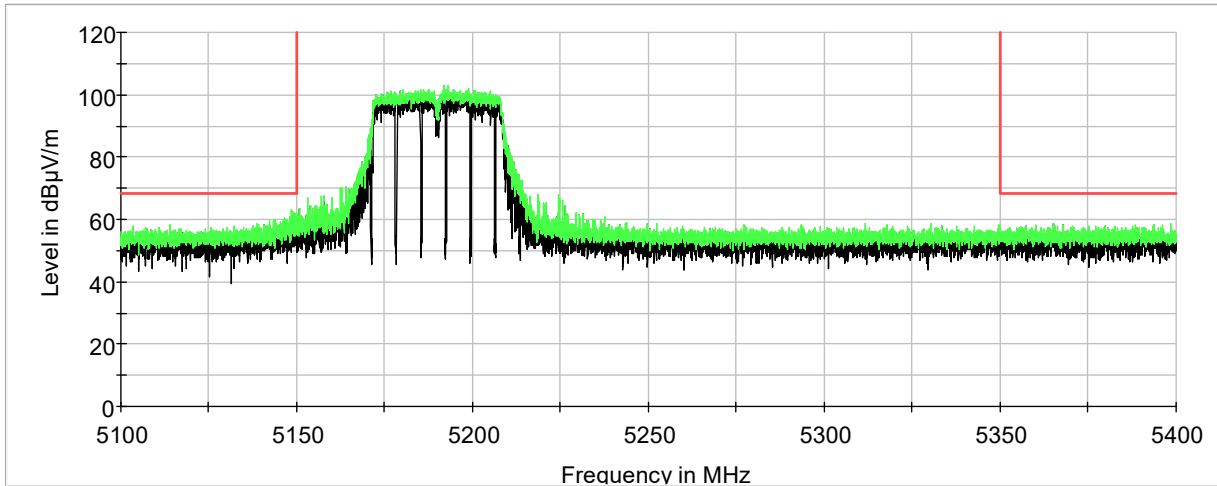
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5150.000000	67.2	50.4	1000.000	150.0	H	50.0	12.0	3.6	54.0
5190.000000	93.7	76.4	1000.000	150.0	H	48.0	12.0	-----	-----
5230.000000	97.3	79.0	1000.000	150.0	H	102.0	12.0	-----	-----
5350.000000	55.3	41.2	1000.000	150.0	H	102.0	12.4	12.8	54.0

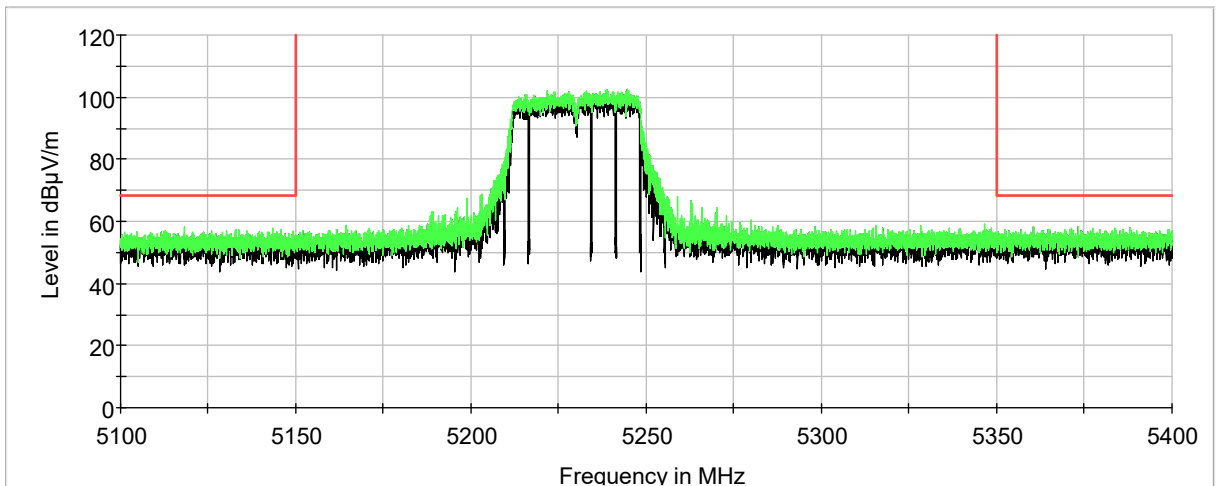




Lower Radiated Band Edge: UNII 1, HT40



Upper Radiated Band Edge: UNII 1, HT40

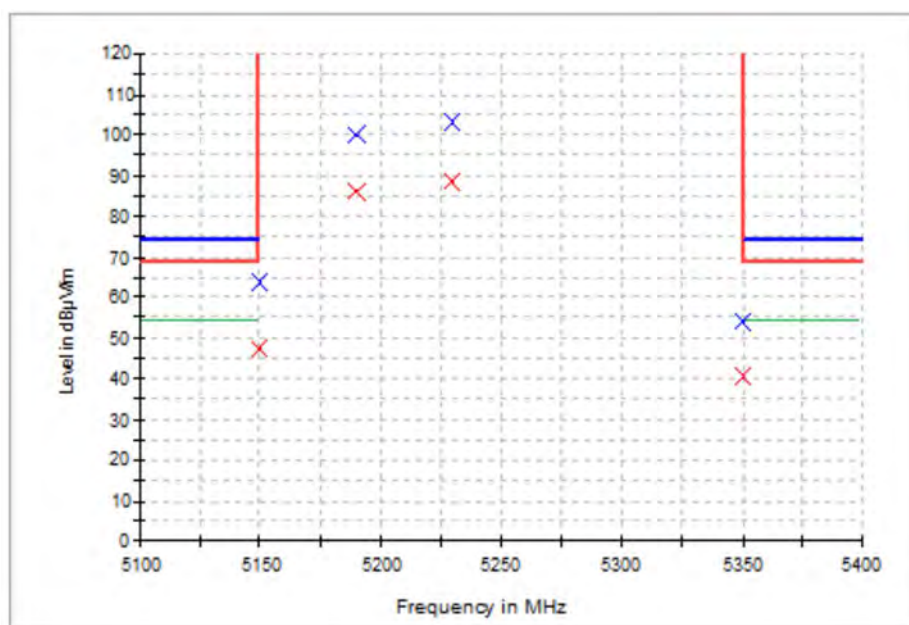




Radiated Band Edge: UNII 1, HT40

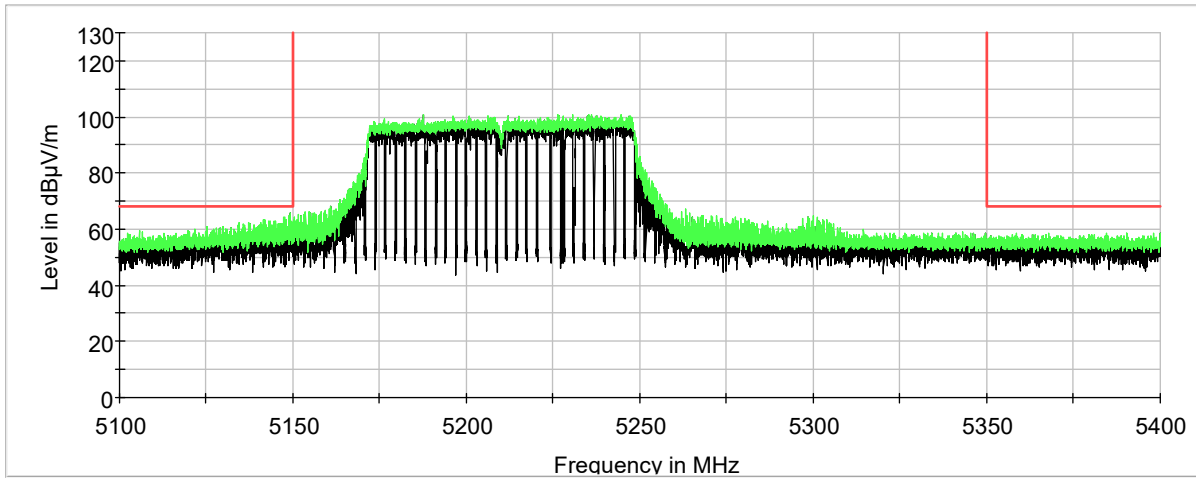
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5150.000000	63.7	47.0	1000.000	150.0	H	61.0	12.0	7.0	54.0
5190.000000	100.2	85.8	1000.000	150.0	H	62.0	12.0	-----	-----
5230.000000	103.0	88.6	1000.000	150.0	H	110.0	12.0	-----	-----
5350.000000	54.0	40.6	1000.000	150.0	H	120.0	12.4	13.4	54.0





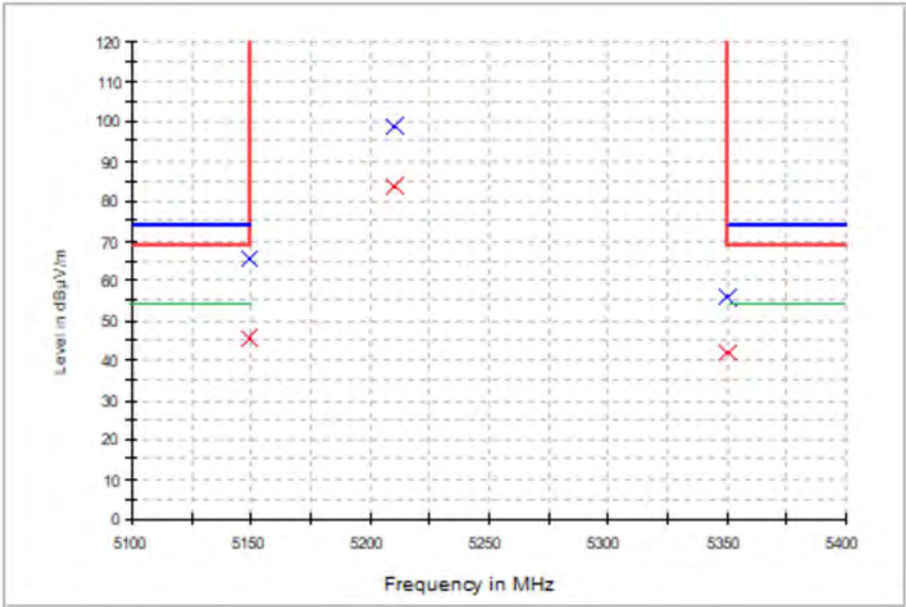
Radiated Band Edge: UNII 1, HT80 - Vertical





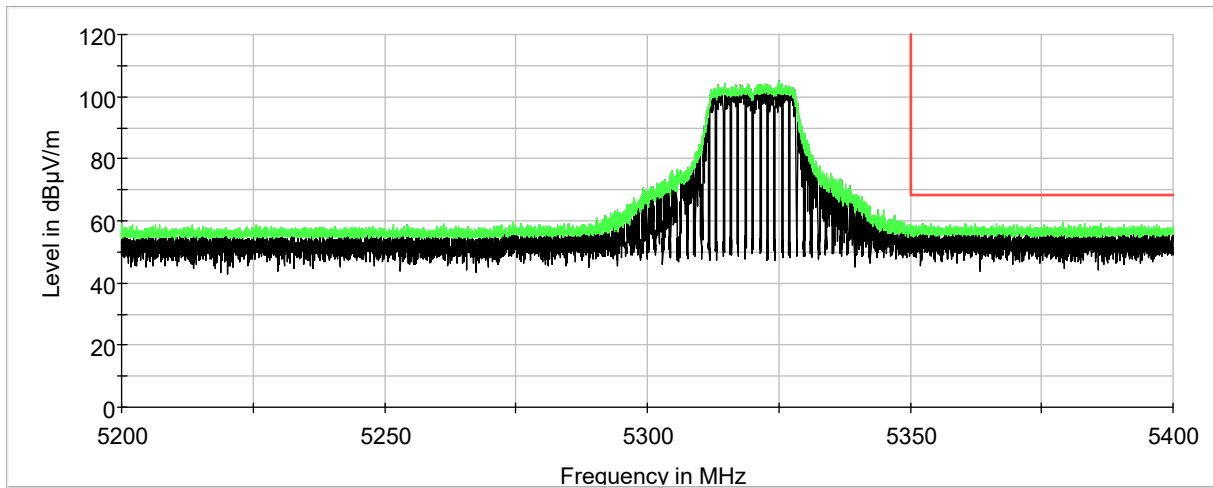
Radiated Band Edge: UNII 1, HT80
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5150.000000	65.3	45.6	1000.000	150.0	H	43.0	12.0	8.4	54.0
5210.000000	98.6	83.7	1000.000	150.0	H	43.0	12.0	-----	-----
5350.000000	56.0	42.0	1000.000	150.0	H	43.0	12.4	12.0	54.0





Radiated Band Edge: UNII 2A, OFDM - Vertical

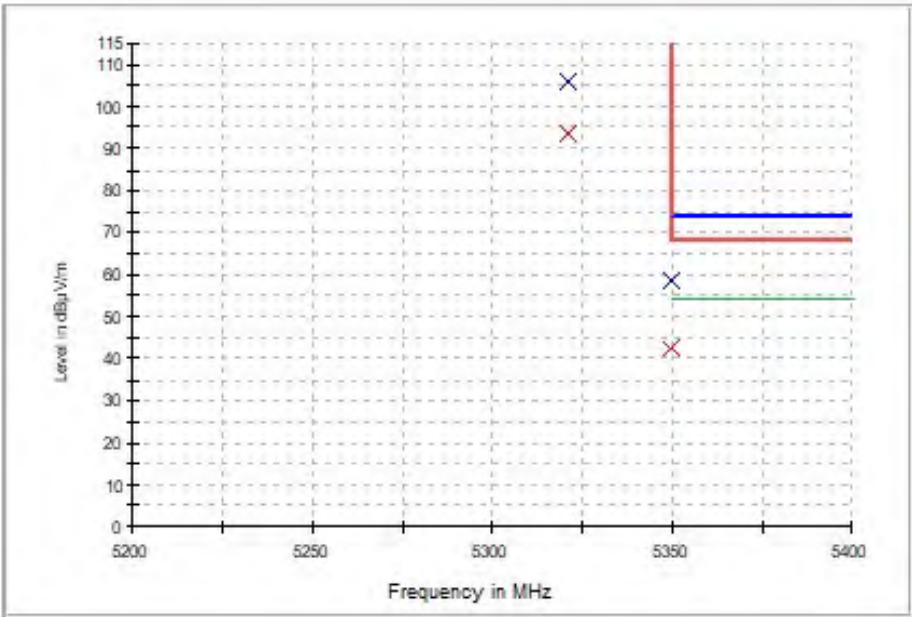




Radiated Band Edge: UNII 2A, OFDM

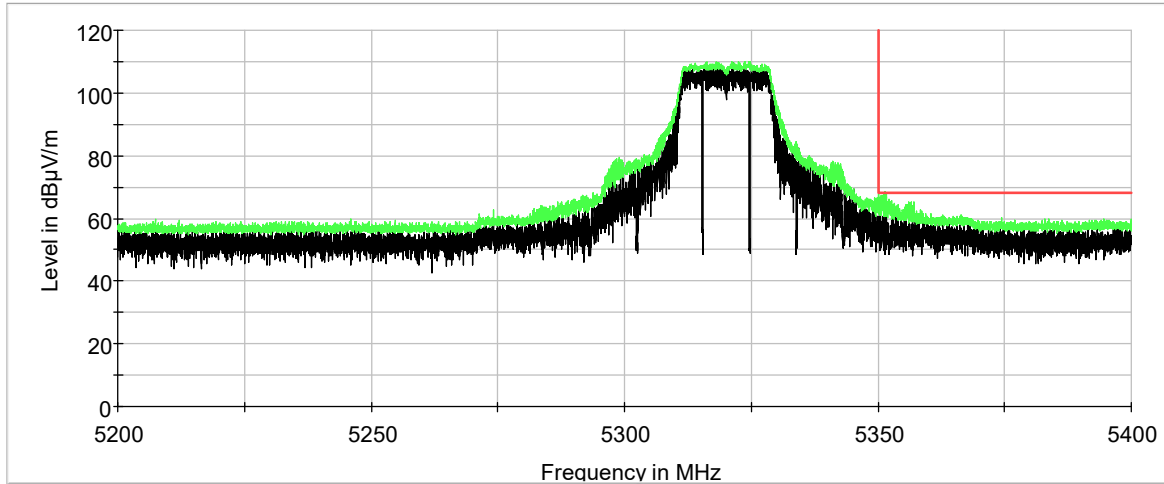
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
5321.000000	105.9	93.6	1000.000	100.0	H	129.0	12.3	-----	-----
5350.000000	58.5	42.4	1000.000	100.0	H	129.0	12.4	11.6	54.0

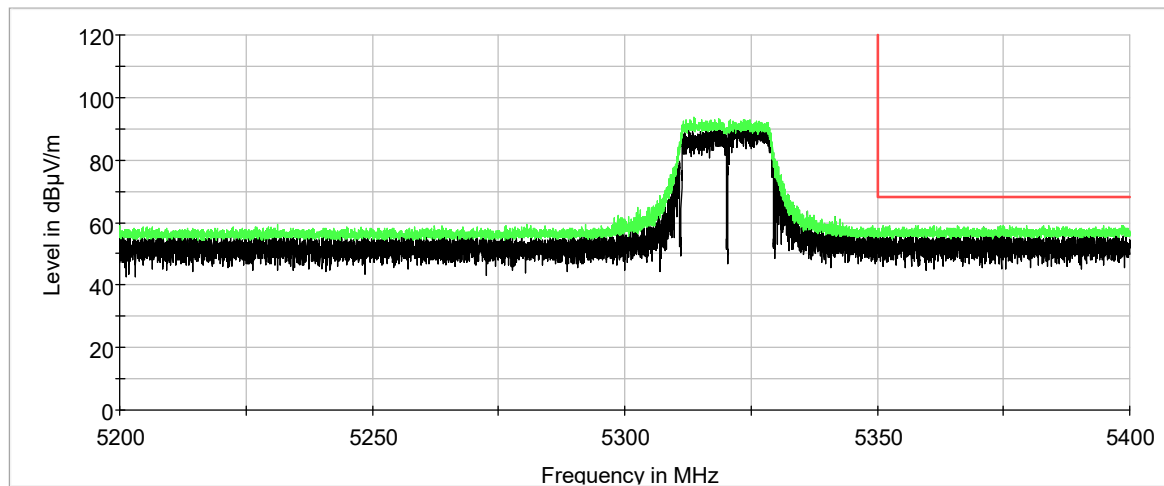




Radiated Band Edge: UNII 2A, HT20 - Vertical



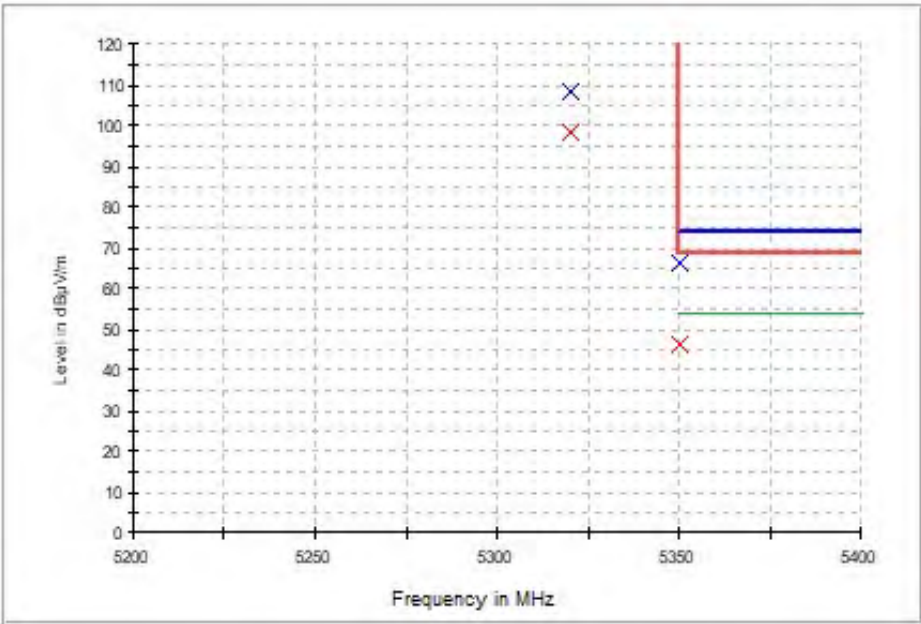
Radiated Band Edge: UNII 2A, HT20 - Horizontal





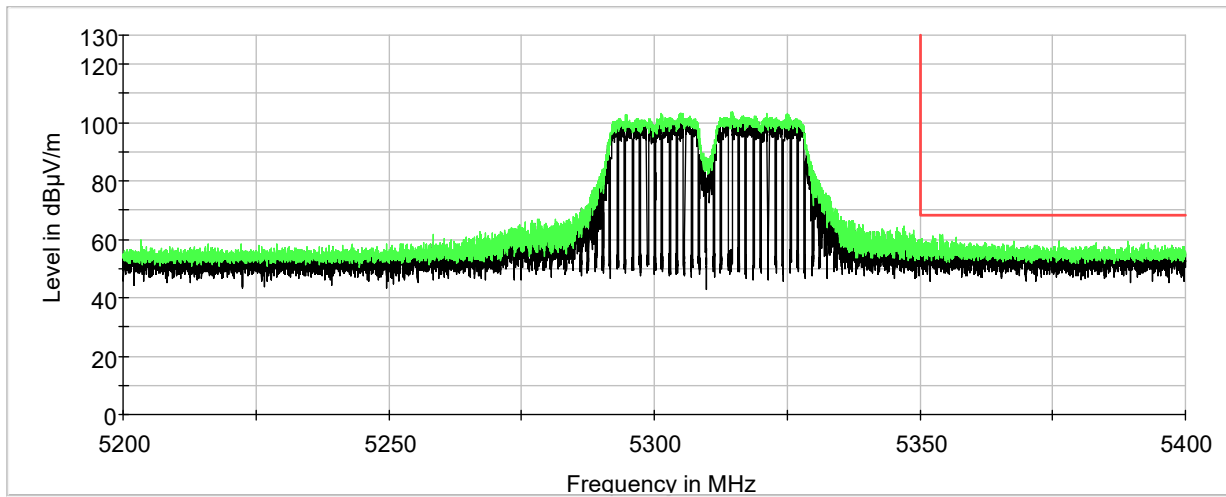
Radiated Band Edge: UNII 2A, HT20
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)		Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
5320.000000	108.6	98.2		1000.000	150.0	H	131.0	12.3	-----	-----
5350.000000	66.0	45.9		1000.000	150.0	H	131.0	12.4	8.1	54.0





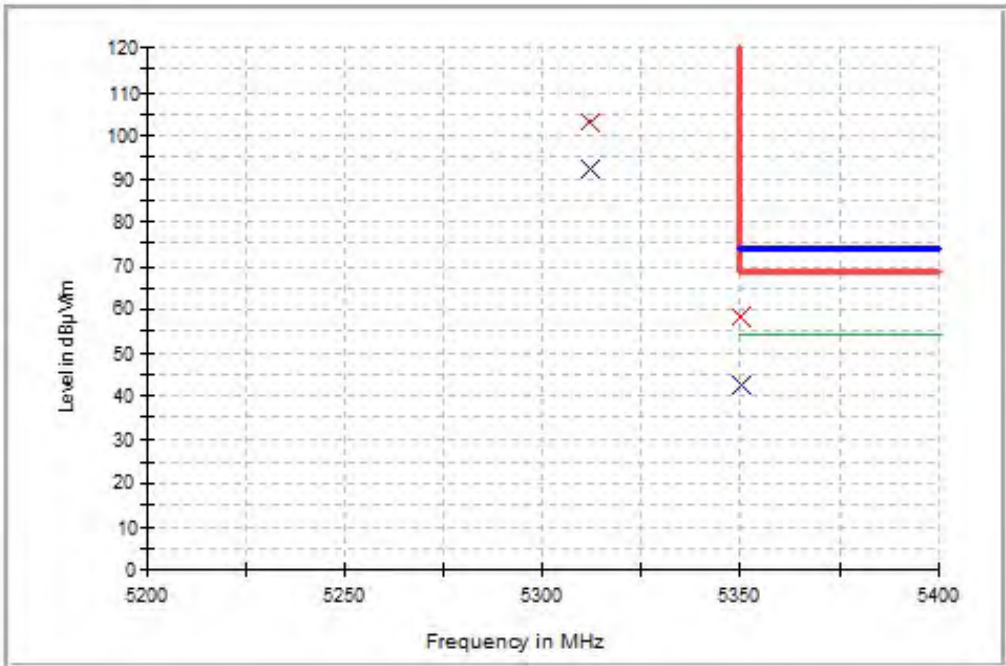
Radiated Band Edge: UNII 2A, non HT40 - Vertical





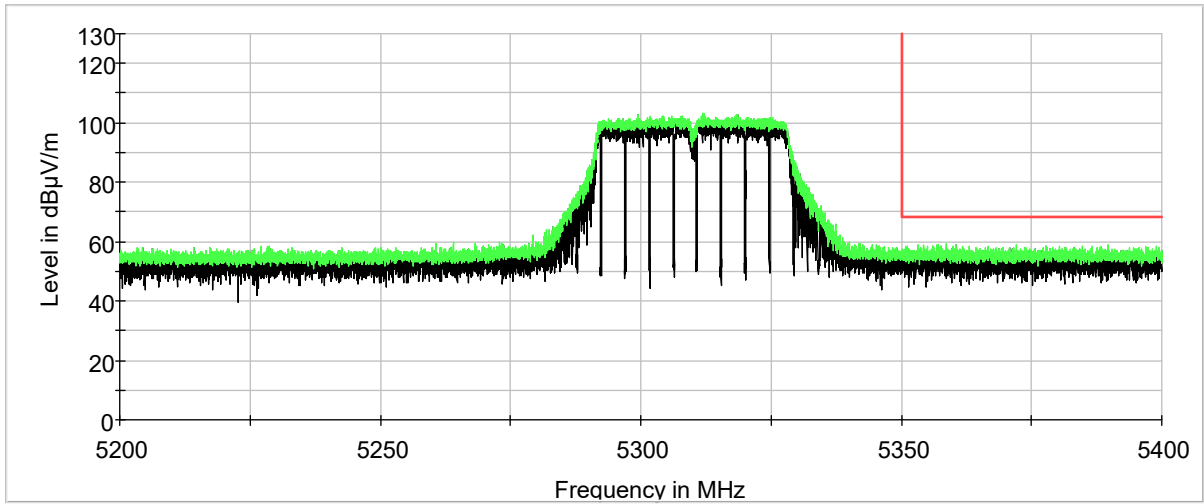
Radiated Band Edge: UNII 2A, non HT40
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
5312.000000	103.1	92.4	1000.000	150.0	H	128.0	12.2	----	----
5350.000000	58.0	42.7	1000.000	150.0	H	128.0	12.4	11.3	54.0





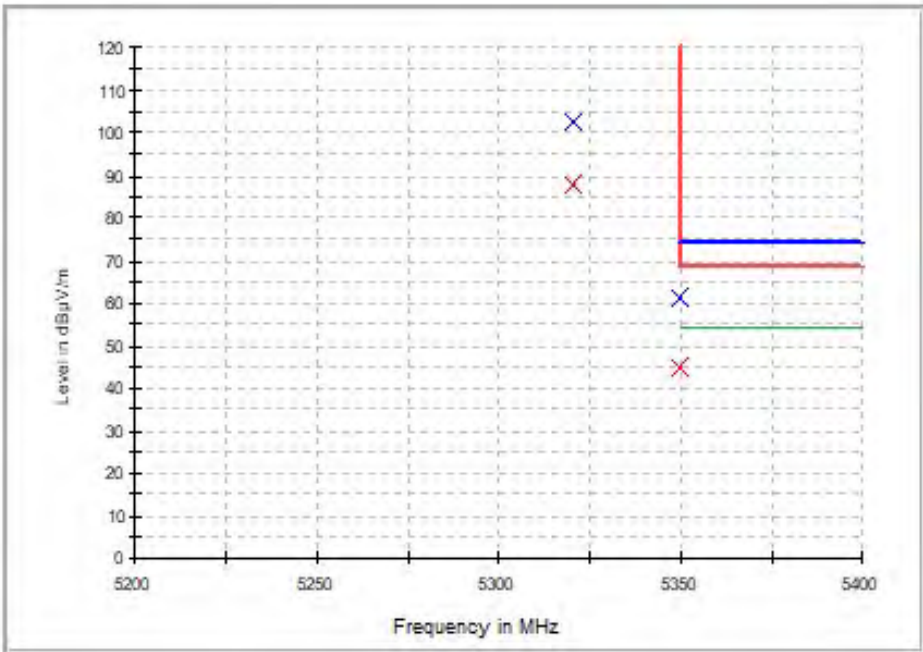
Radiated Band Edge: UNII 2A, HT40 - Vertical





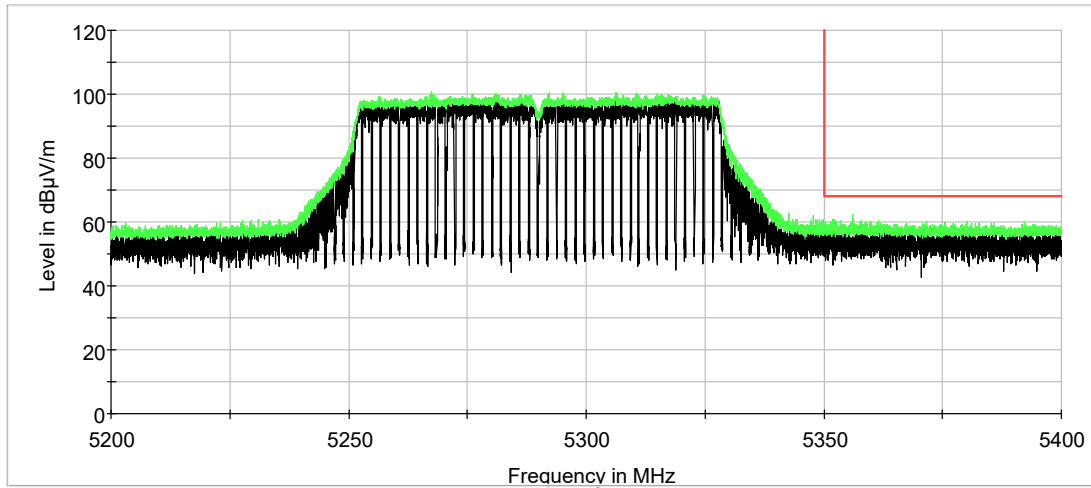
Radiated Band Edge: UNII 2A, HT40
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)
5320.000000	102.1	88.0	1000.000	150.0	H	128.0	12.3	-----	-----
5350.000000	61.0	45.1	1000.000	150.0	H	128.0	12.4	8.9	54.0





Radiated Band Edge: UNII 2A, HT80 - Vertical

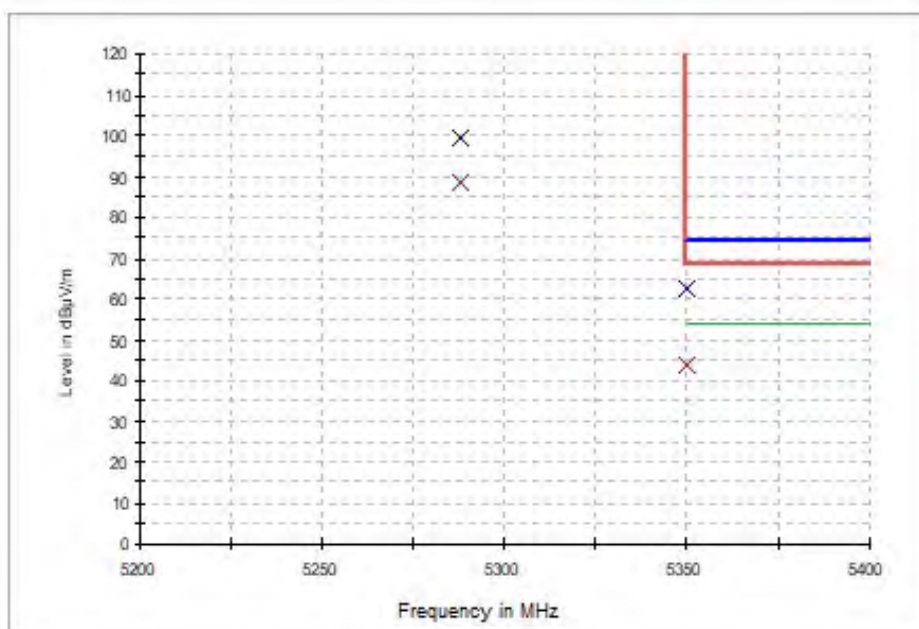




Radiated Band Edge: UNII 2A, HT80

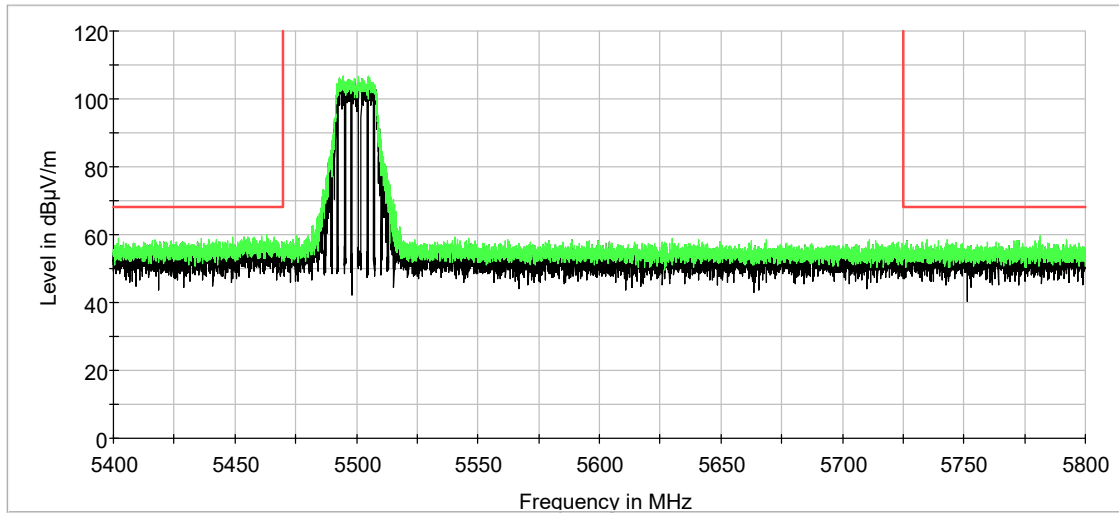
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
5290.000000	99.7	88.6	1000.000	150.0	H	128.0	12.1	-----	-----
5350.000000	62.5	43.7	1000.000	150.0	H	128.0	12.4	10.3	54.0

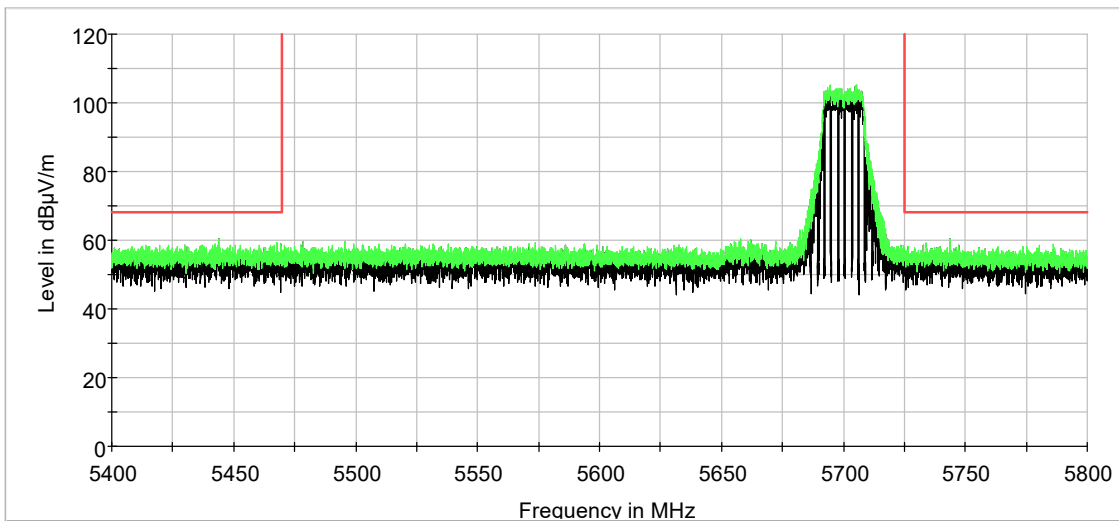




Lower Radiated Band Edge: UNII 2C, OFDM - Vertical



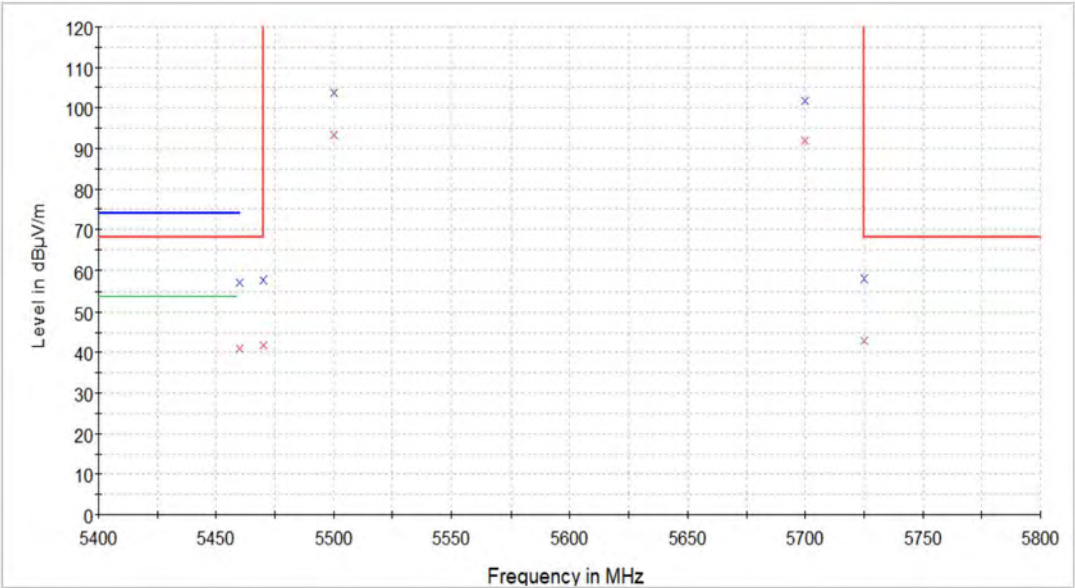
Upper Radiated Band Edge: UNII 2C, OFDM - Vertical





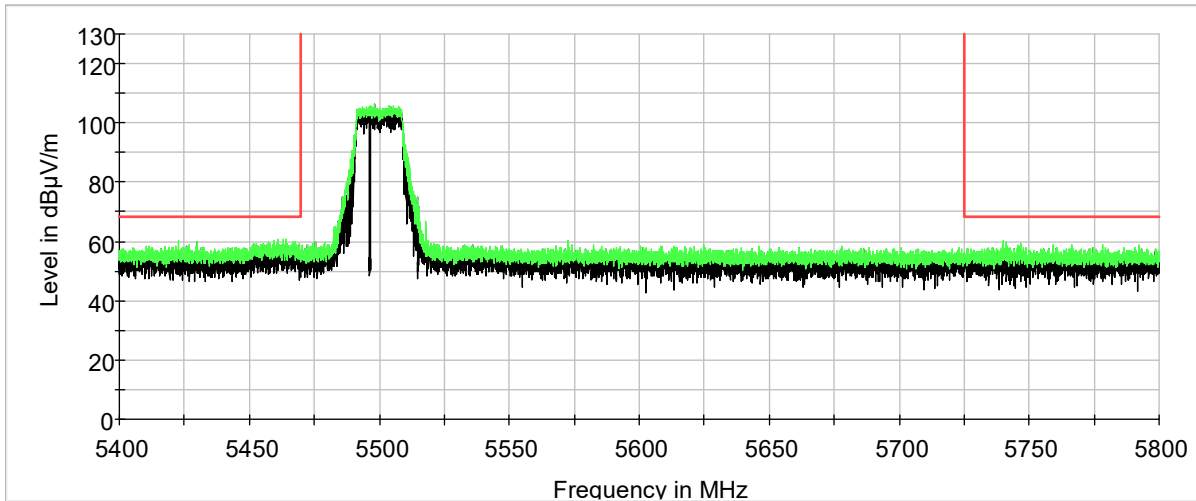
Radiated Band Edge: UNII 2C, OFDM
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	AVG (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Margin PK (dB)	Limit PK (dBµV/m)
5460.000	57.1	40.9	1000.000	150.0	H	155.0	12.7	13.1	54.0	16.9	74
5470.000	57.8	41.8	1000.000	150.0	H	155.0	12.7	12.2	54.0	16.2	74
5500.000	103.7	93.2	1000.000	150.0	H	155.0	12.7	-----	-----	-----	-----
5700.000	101.8	91.9	1000.000	150.0	H	157.0	12.5	-----	-----	-----	-----
5725.000	57.9	42.8	1000.000	150.0	H	157.0	12.5	-----	-----	10.3	68.2

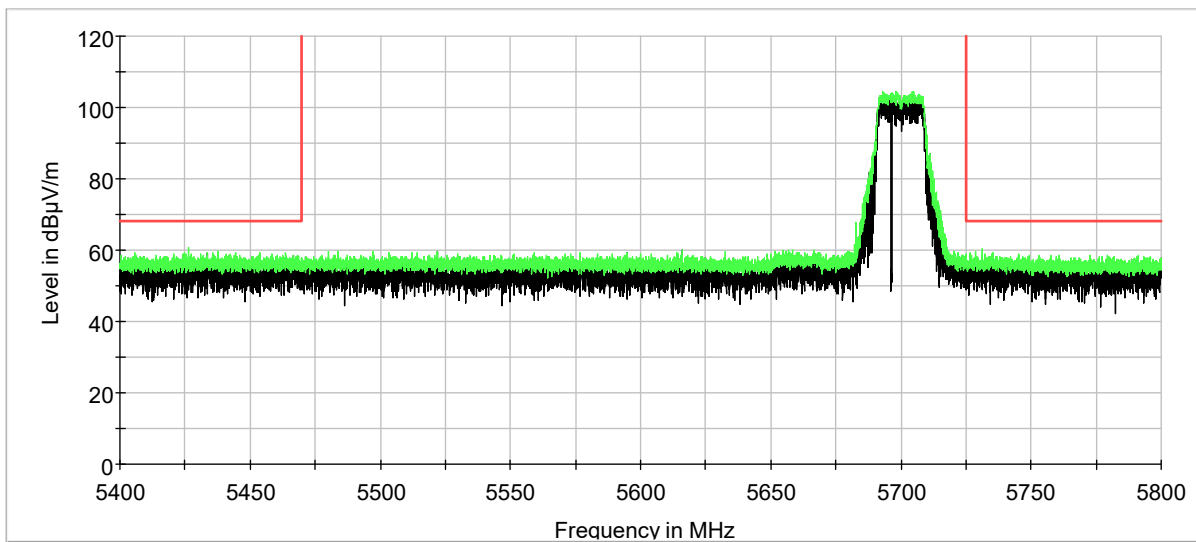




Lower Radiated Band Edge: UNII 2C, HT20



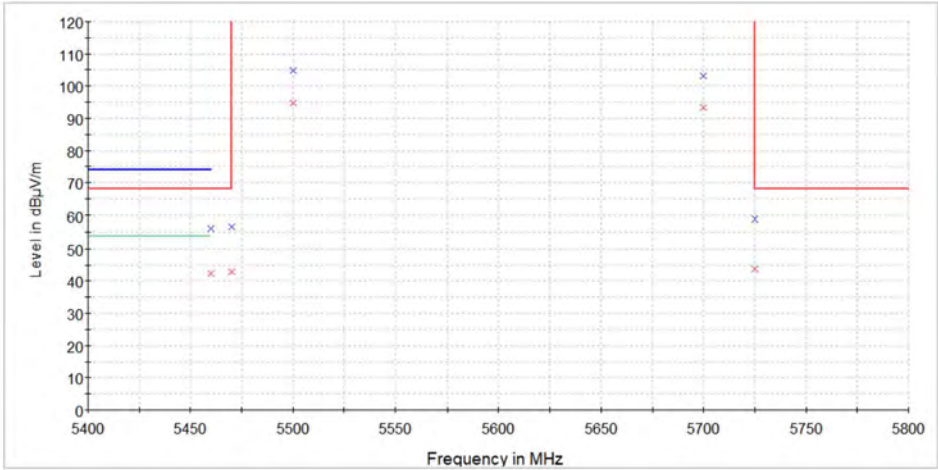
Upper Radiated Band Edge: UNII 2C, HT20





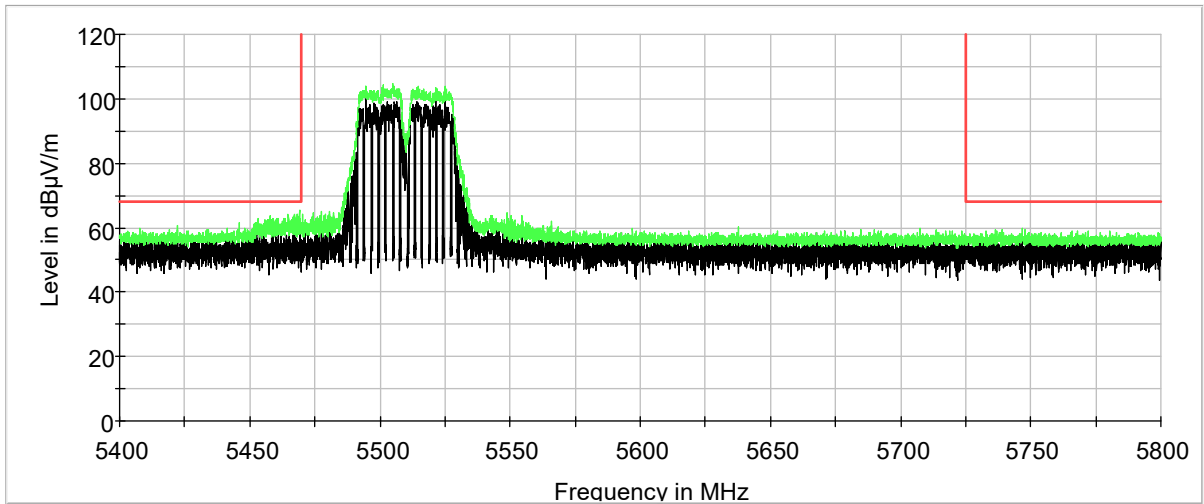
Radiated Band Edge: UNII 2C, HT20
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Margin PK (dB)	Limit PK (dBµV/
5460.00000	56.1	42.3	1000.000	150.0	H	157.0	12.7	11.7	54.0	17.9	74
5470.00000	56.7	43.0	1000.000	150.0	H	157.0	12.7	11.0	54.0	17.3	74
5500.00000	105.0	94.7	1000.000	150.0	H	157.0	12.7	-----	-----	-----	-----
5700.00000	103.3	93.3	1000.000	150.0	H	157.0	12.5	-----	-----	-----	-----
5725.00000	58.8	43.7	1000.000	150.0	H	157.0	12.5	-----	-----	9.4	68.2

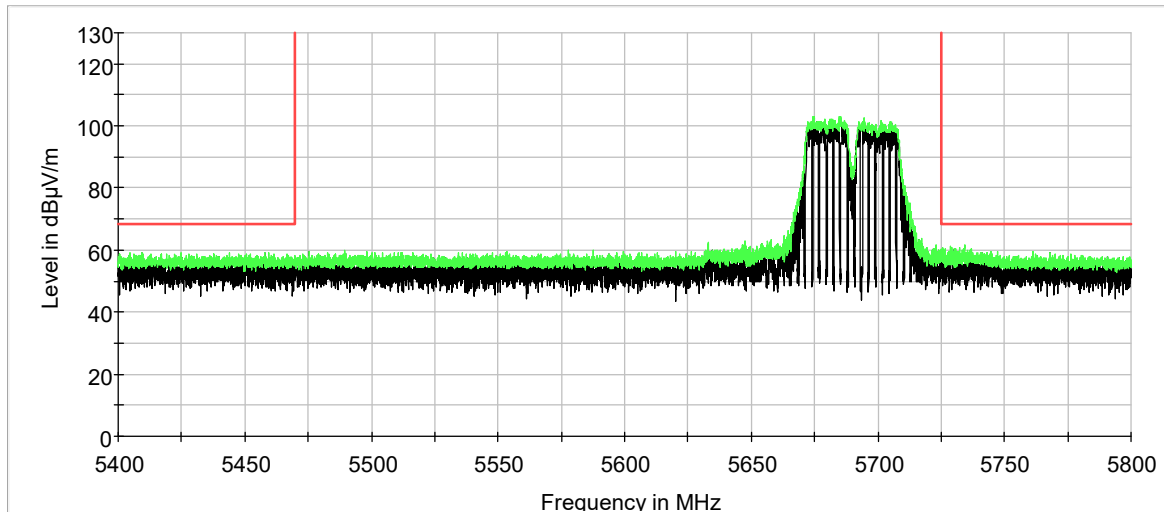




Lower Radiated Band Edge: UNII 2C, non HT40 - Vertical



Upper Radiated Band Edge: UNII 2C, non HT40 - Vertical

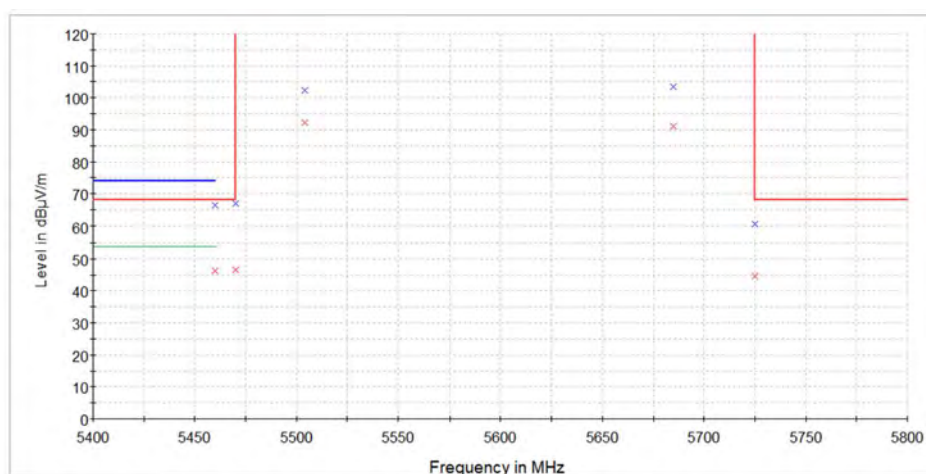




Radiated Band Edge: UNII 2C, non HT40

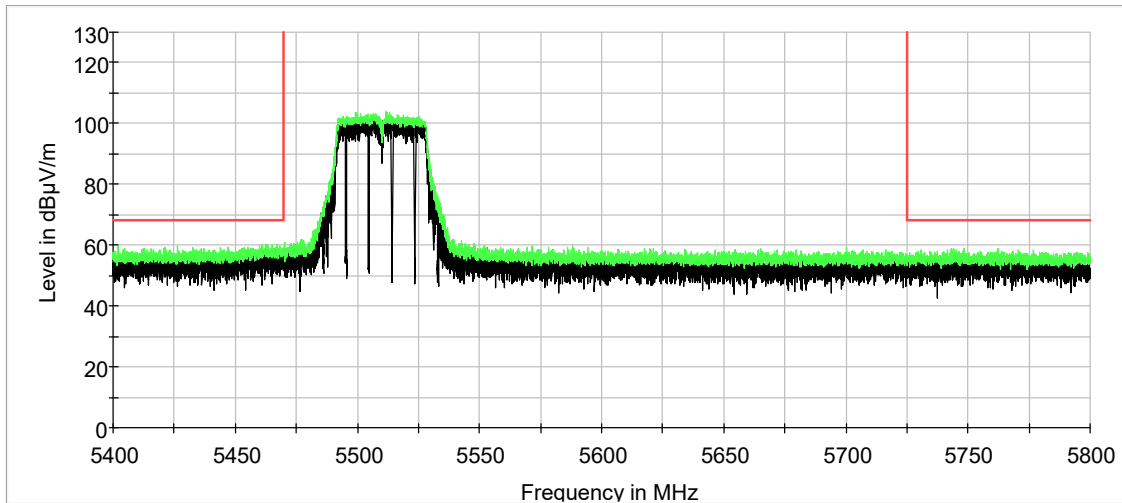
Measurements

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Margin PK (dB)	Limit PK (dBµV/m)
5460.000000	66.5	46.2	1000.000	150	H	158.0	12.7	7.8	54.0	7.5	74
5470.000000	66.9	46.6	1000.000	150.0	H	158.0	12.7	7.4	54.0	7.1	74
5504.000000	102.4	92.4	1000.000	150.0	H	158.0	12.7	-----	-----	-----	-----
5685.000000	103.5	91.2	1000.000	150.0	H	150.0	12.5	-----	-----	-----	-----
5725.000000	60.5	44.7	1000.000	150.0	H	150.0	12.5	-----	-----	7.7	68.2

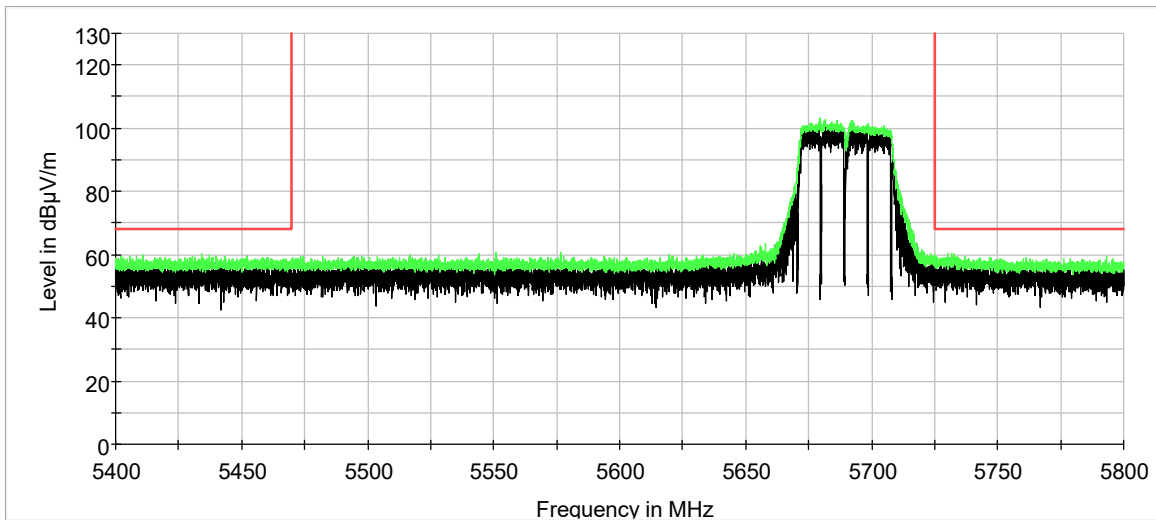




Lower Radiated Band Edge: UNII 2C, HT40 - Vertical



Upper Radiated Band Edge: UNII 2C, HT40 - Vertical

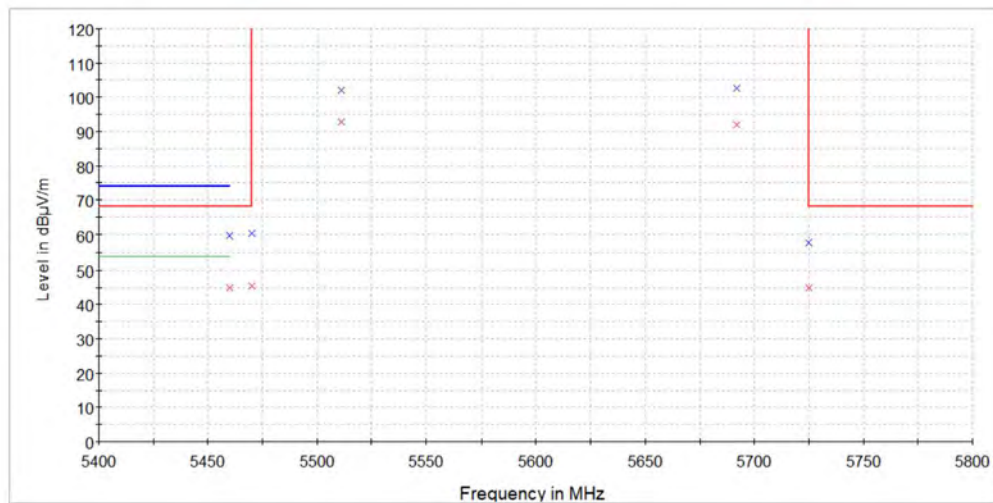




Radiated Band Edge: UNII 2C, HT40

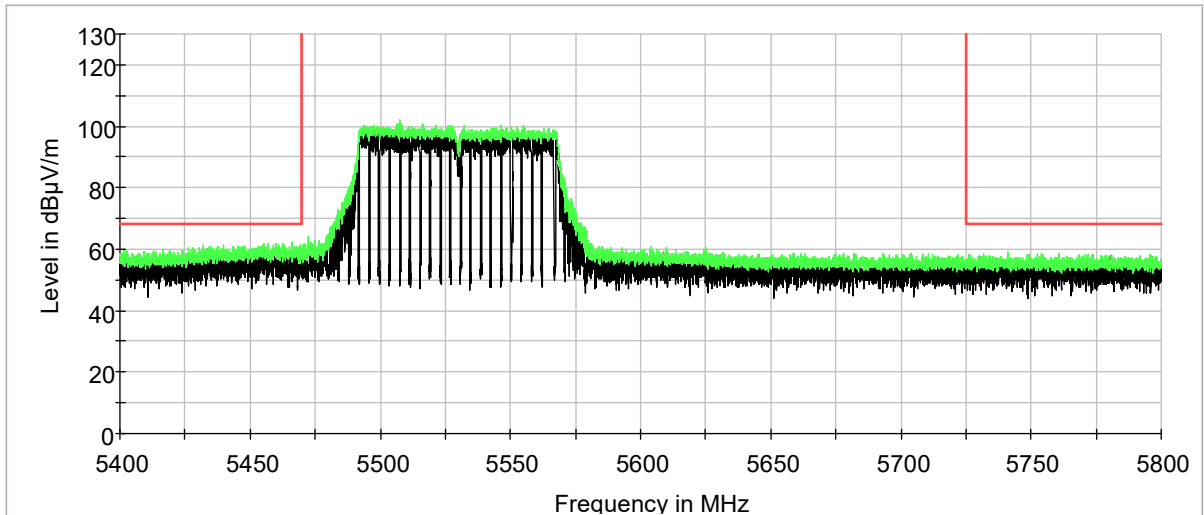
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)	Margin PK (dB)	Limit PK (dBμV/m)
5460.000000	59.7	45.0	1000.000	150.0	H	158.0	12.7	9.0	54.0	14.3	74
5470.000000	60.2	45.5	1000.000	150.0	H	158.0	12.7	8.5	54.0	13.8	74
5511.000000	102.2	92.9	1000.000	150.0	H	158.0	12.7	-----	-----	-----	-----
5692.000000	102.8	92.0	1000.000	150.0	H	158.0	12.5	-----	-----	-----	-----
5725.000000	57.9	44.7	1000.000	150.0	H	158.0	12.5	-----	-----	10.3	68.2

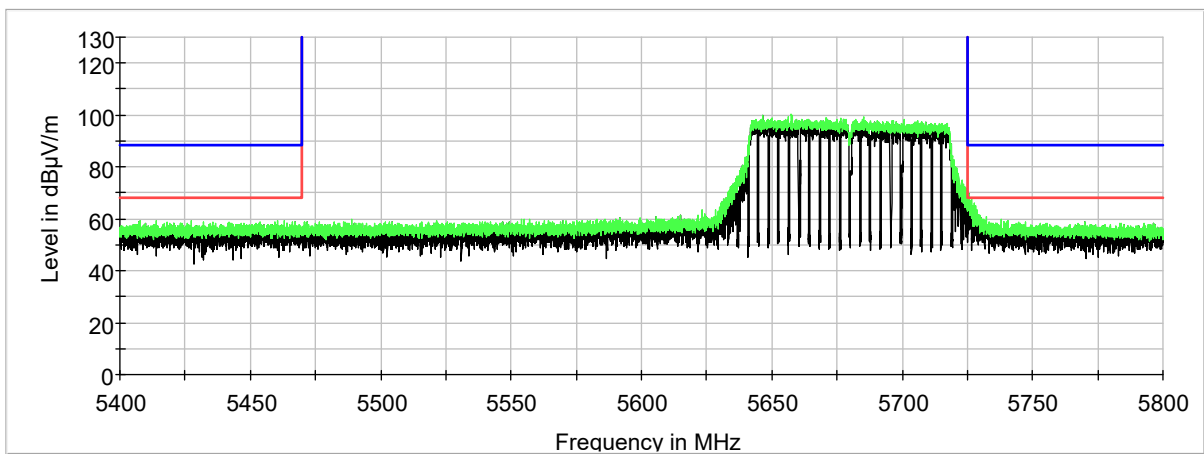




Lower Radiated Band Edge: UNII 2C, HT80 - Vertical



Upper Radiated Band Edge: UNII 2C, HT80 - Vertical

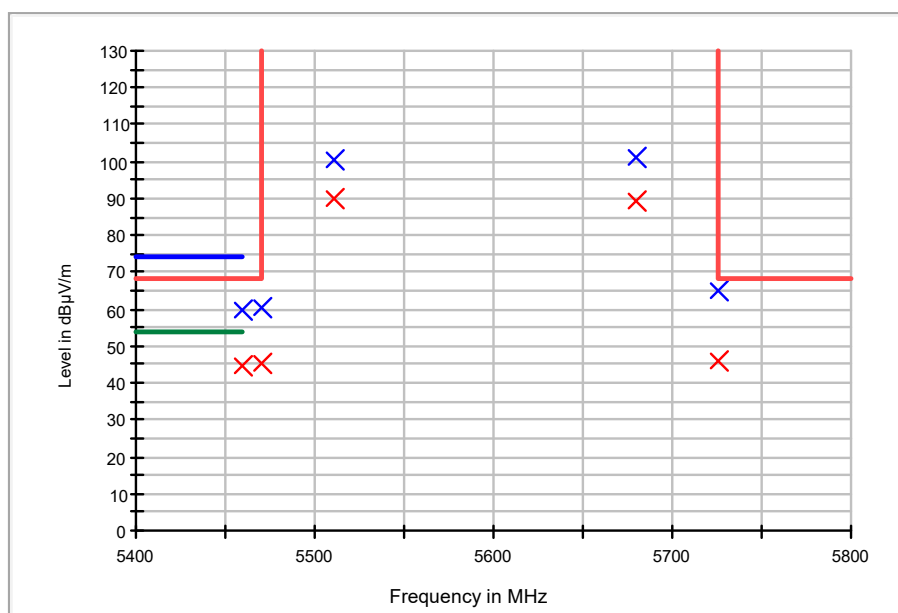




Radiated Band Edge: UNII 2C, HT80

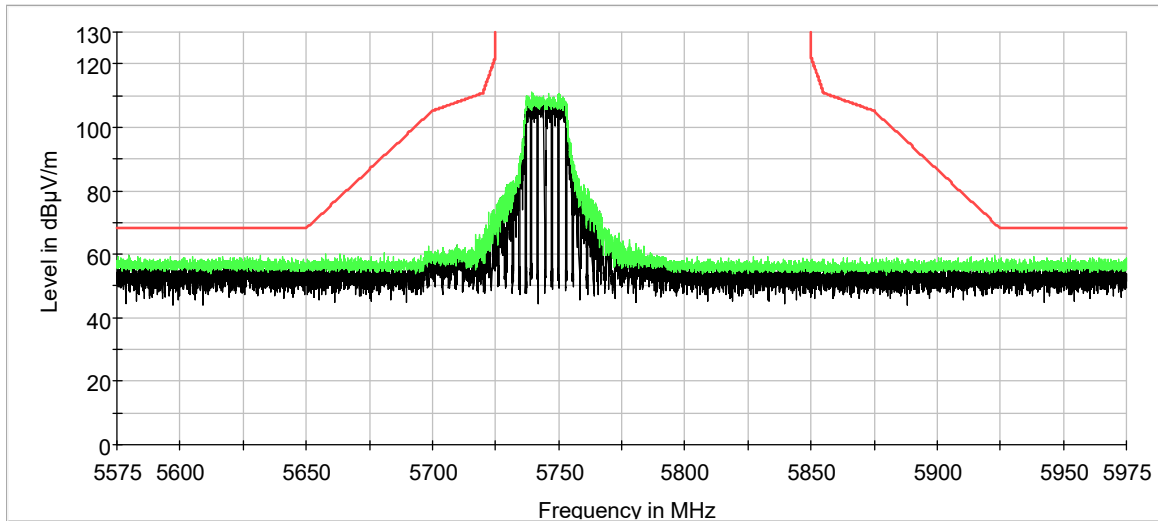
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBμV/m)	Margin MaxPk (dB)	Limit - MaxPk (dBμV/m)
5460.000000	59.8	44.7	1000.000	150.0	V	0.0	12.7	23.5	54.0	14.2	74.0
5470.000000	60.2	45.5	1000.000	150.0	V	0.0	12.7	-----	-----	8.0	68.2
5511.000000	100.6	90.1	1000.000	150.0	V	0.0	12.7	-----	-----	-----	-----
5680.000000	101.1	89.2	1000.000	150.0	V	0.0	12.5	-----	-----	-----	-----
5725.000000	64.8	45.9	1000.000	150.0	V	0.0	12.5	-----	-----	3.4	68.2

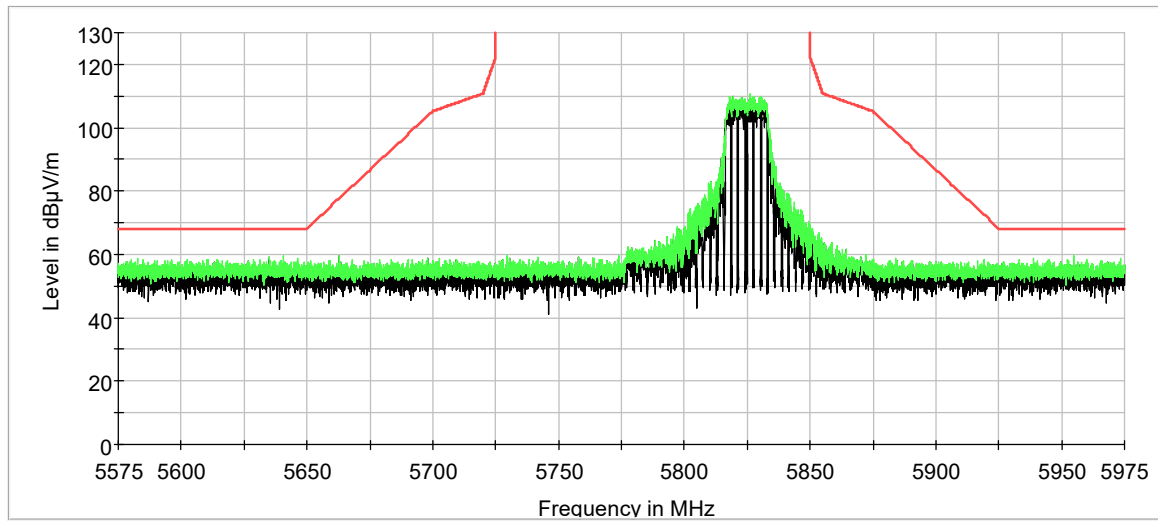




Lower Radiated Band Edge: UNII 3, OFDM - Vertical



Upper Radiated Band Edge: UNII 3, OFDM - Vertical

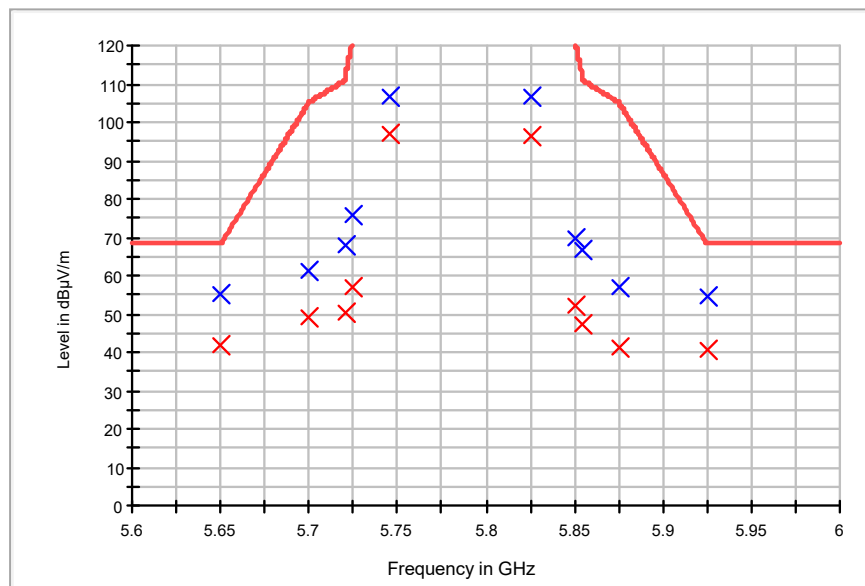




Radiated Band Edge: UNII 3, OFDM

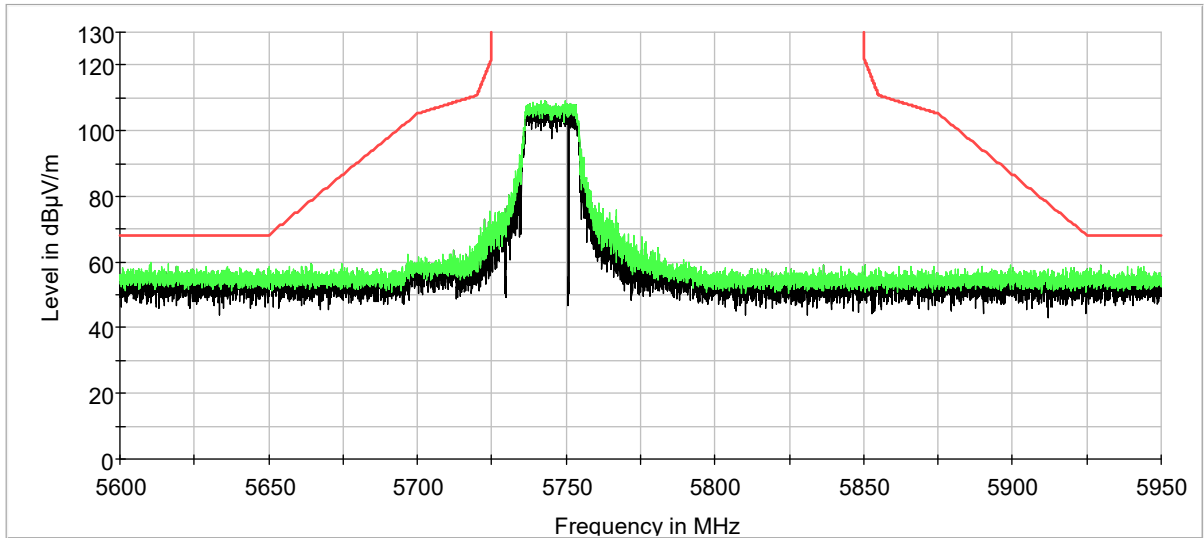
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin PK (dB)	Limit PK (dBμV/m)
5650.000000	55.3	41.6	1000.000	150.0	H	152.0	12.5	12.9	68.2
5700.000000	61.4	48.9	1000.000	150.0	H	152.0	12.5	43.8	105.2
5720.000000	67.8	50.1	1000.000	150.0	H	152.0	12.5	43.0	110.8
5725.000000	75.9	56.8	1000.000	150.0	H	152.0	12.5	46.3	122.2
5745.000000	107.0	96.9	1000.000	150.0	H	152.0	12.5	-----	-----
5825.000000	106.6	96.4	1000.000	150.0	H	152.0	12.5	-----	-----
5850.000000	70.0	51.9	1000.000	150.0	H	152.0	12.5	52.2	122.2
5855.000000	66.6	47.5	1000.000	150.0	H	152.0	12.5	44.2	110.8
5875.000000	56.8	41.2	1000.000	150.0	H	152.0	12.5	48.4	105.2
5925.000000	54.8	40.7	1000.000	150.0	H	152.0	12.7	13.4	68.2

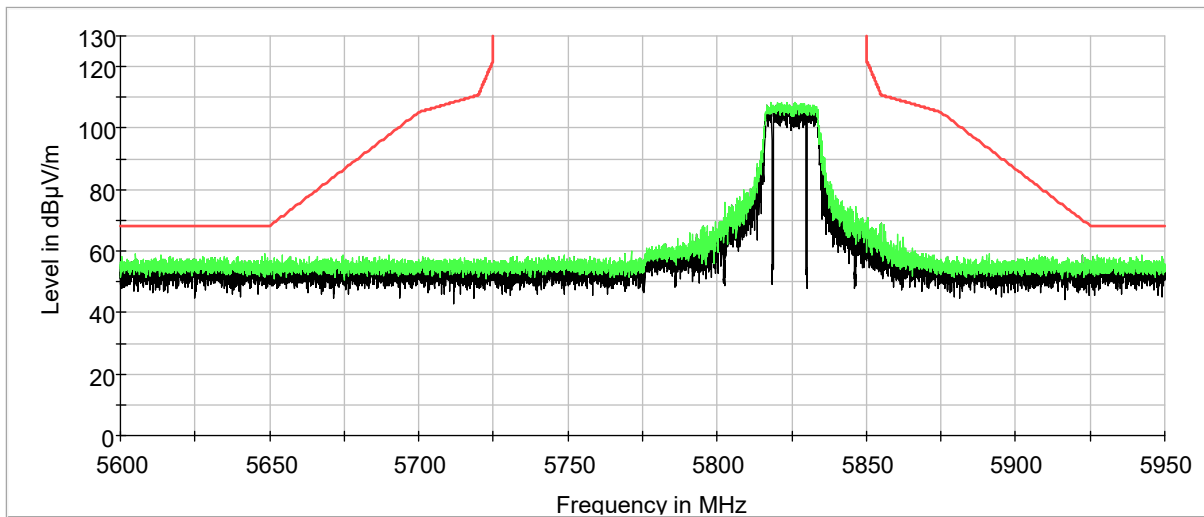




Lower Radiated Band Edge: UNII 3, HT20



Upper Radiated Band Edge: UNII 3, HT20

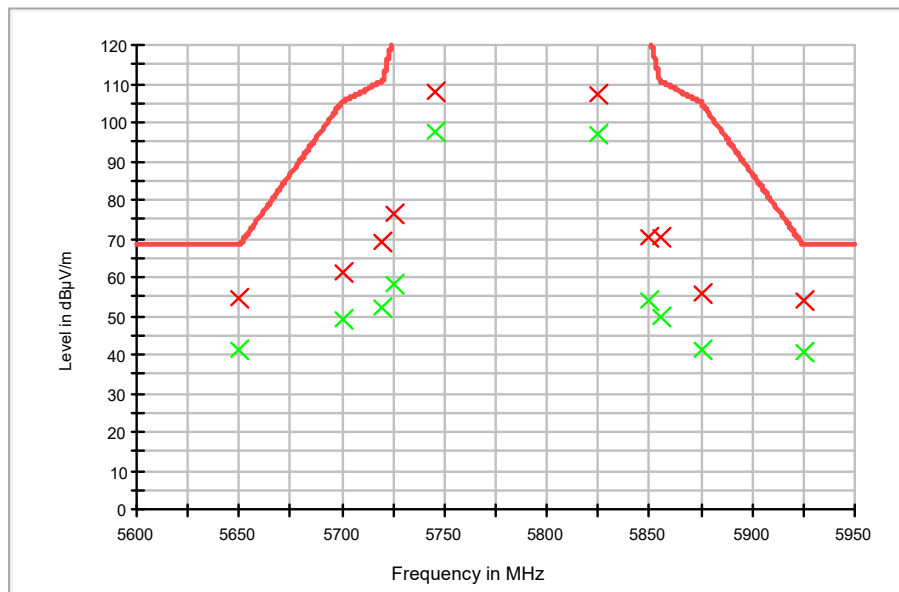




Radiated Band Edge: UNII 3, HT20

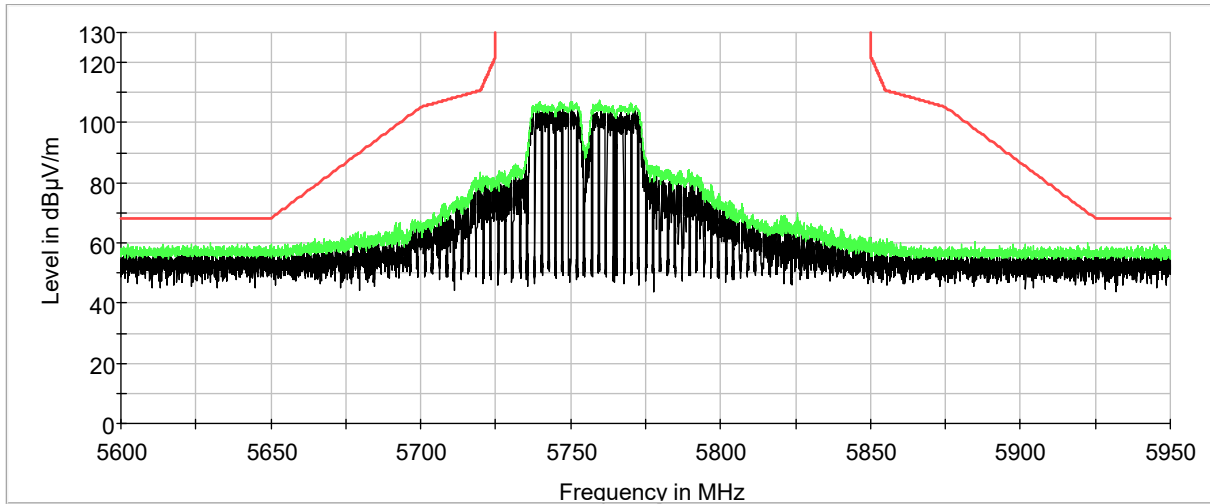
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin PK (dB)	Limit PK (dBμV/m)
5650.000000	54.5	41.5	1000.000	150.0	H	152.0	12.5	13.7	68.2
5700.000000	61.0	49.0	1000.000	150.0	H	152.0	12.5	44.2	105.2
5720.000000	68.9	52.0	1000.000	150.0	H	152.0	12.5	41.9	110.8
5725.000000	76.5	58.3	1000.000	150.0	H	152.0	12.5	45.7	122.2
5745.000000	107.6	97.5	1000.000	150.0	H	152.0	12.5	-----	-----
5825.000000	107.5	97.1	1000.000	150.0	H	152.0	12.5	-----	-----
5850.000000	70.4	54.0	1000.000	150.0	H	152.0	12.5	51.8	122.2
5855.000000	70.5	49.9	1000.000	150.0	H	152.0	12.5	40.3	110.8
5875.000000	55.8	41.2	1000.000	150.0	H	152.0	12.5	49.4	105.2
5925.000000	53.7	40.6	1000.000	150.0	H	152.0	12.7	14.5	68.2

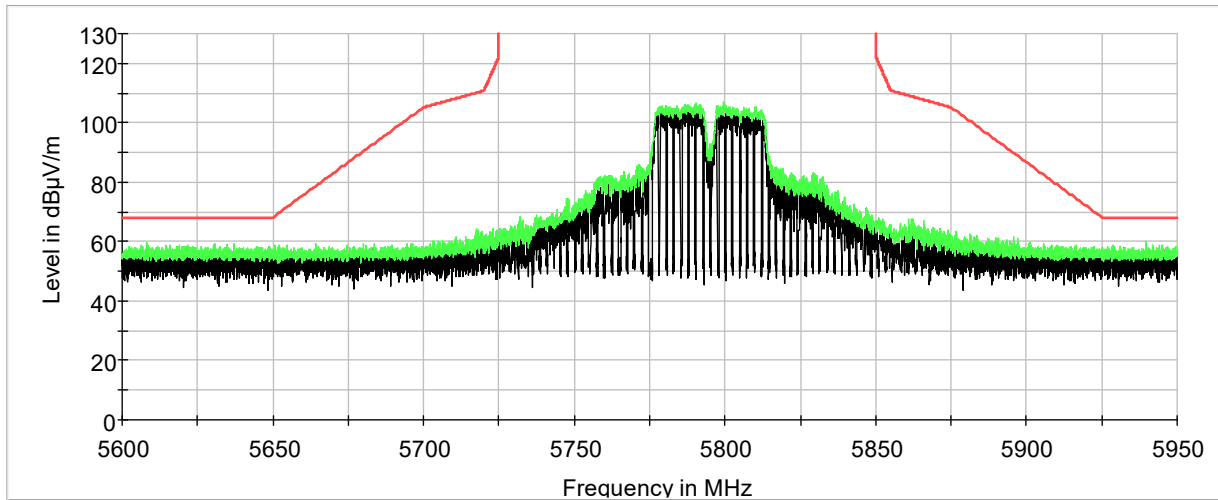




Lower Radiated Band Edge: UNII 3, non HT40 - Vertical



Upper Radiated Band Edge: UNII 3, non HT40 - Vertical

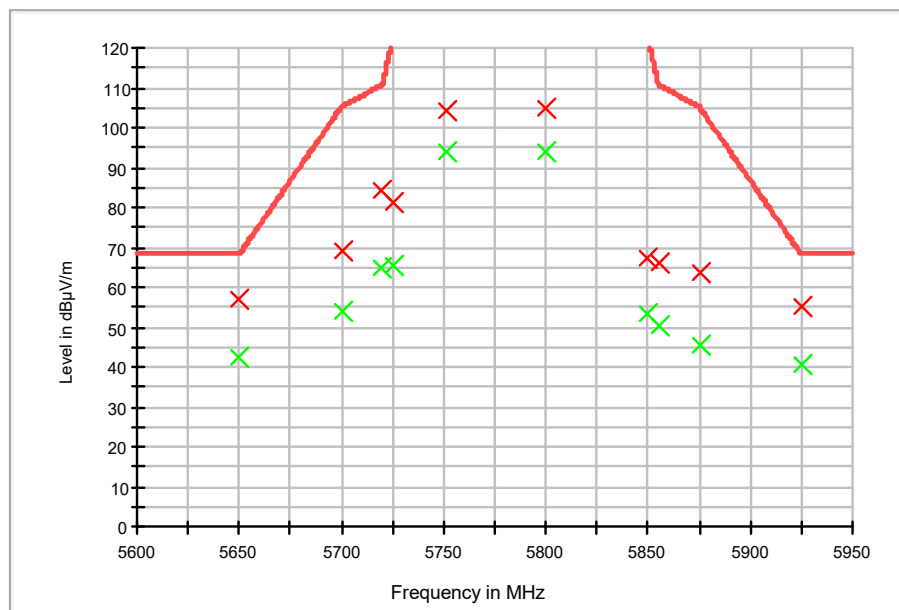




Radiated Band Edge: UNII 3, non HT40

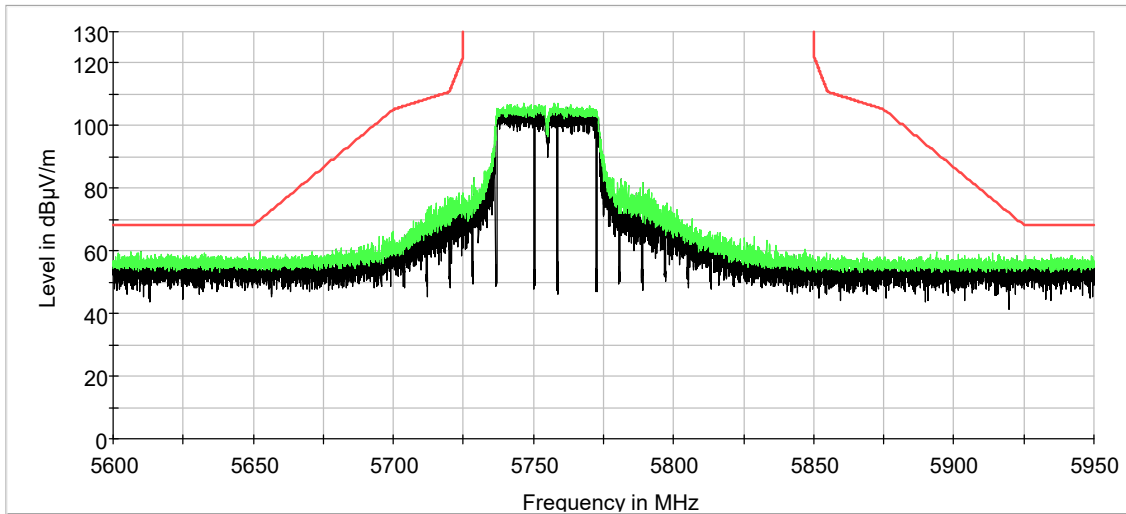
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin PK (dB)	Limit PK (dBμV/m)
5650.000000	57.0	42.1	1000.000	150.0	H	160.0	12.5	11.2	68.2
5700.000000	69.0	53.8	1000.000	150.0	H	160.0	12.5	36.2	105.2
5720.000000	84.0	64.9	1000.000	150.0	H	160.0	12.5	26.8	110.8
5725.000000	81.3	65.3	1000.000	150.0	H	160.0	12.5	40.9	122.2
5751.000000	104.3	94.1	1000.000	150.0	H	160.0	12.5	-----	-----
5800.000000	104.6	94.0	1000.000	150.0	H	168.0	12.5	-----	-----
5850.000000	67.6	53.4	1000.000	150.0	H	168.0	12.5	54.6	122.2
5855.000000	65.9	50.5	1000.000	150.0	H	168.0	12.5	44.9	110.8
5875.000000	63.4	45.7	1000.000	150.0	H	168.0	12.5	41.8	105.2
5925.000000	55.1	40.7	1000.000	150.0	H	168.0	12.7	13.1	68.2

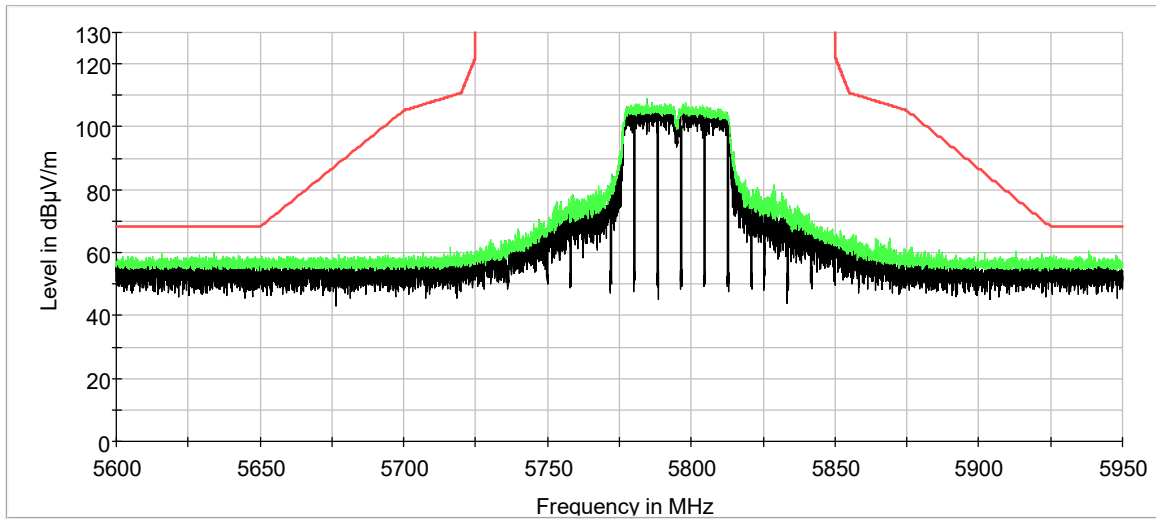




Lower Radiated Band Edge: UNII 3, HT40 - Vertical



Upper Radiated Band Edge: UNII 3, HT40 - Vertical

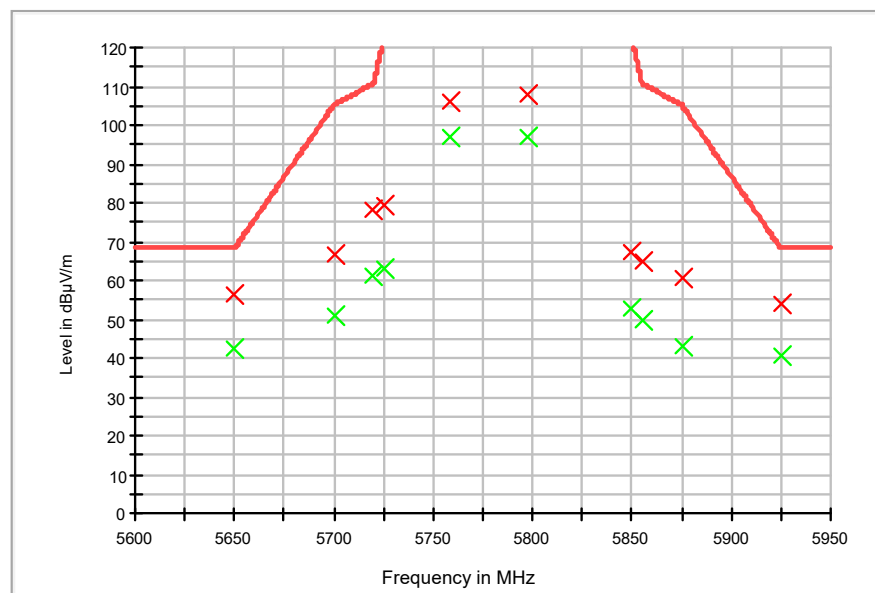




Radiated Band Edge: UNII 3, HT40

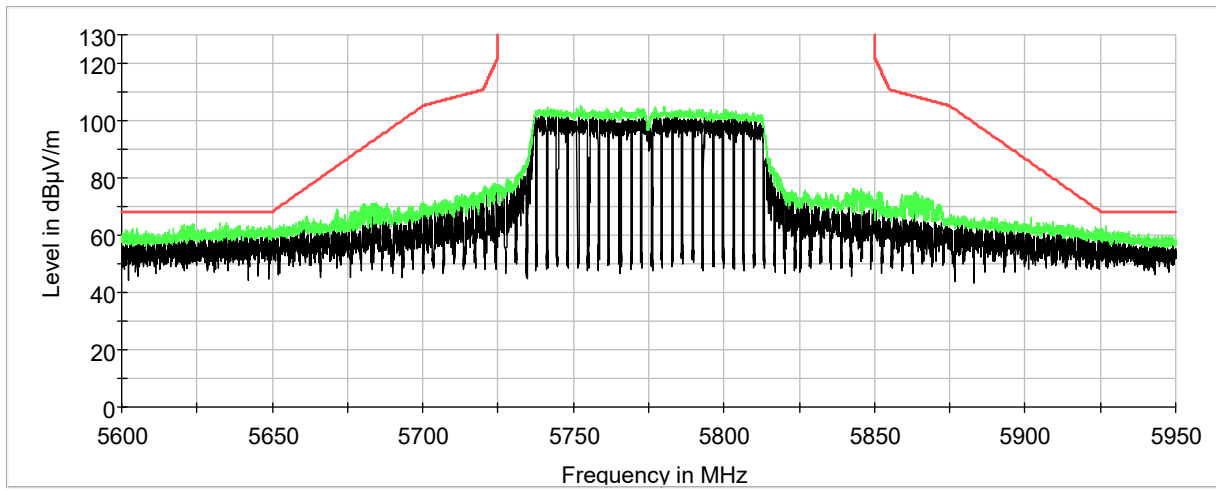
Measurements

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin PK (dB)	Limit PK (dBμV/m)
5650.000000	56.1	42.6	1000.000	150.0	H	152.0	12.5	12.1	68.2
5700.000000	66.9	51.1	1000.000	150.0	H	152.0	12.5	38.3	105.2
5720.000000	78.5	61.1	1000.000	150.0	H	152.0	12.5	32.3	110.8
5725.000000	79.3	63.1	1000.000	150.0	H	152.0	12.5	42.9	122.2
5759.000000	106.1	96.9	1000.000	150.0	H	152.0	12.5	-----	-----
5798.000000	107.8	97.2	1000.000	150.0	H	152.0	12.5	-----	-----
5850.000000	67.3	52.8	1000.000	150.0	H	152.0	12.5	54.9	122.2
5855.000000	65.1	49.9	1000.000	150.0	H	152.0	12.5	45.7	110.8
5875.000000	60.7	43.2	1000.000	150.0	H	152.0	12.5	44.5	105.2
5925.000000	54.2	40.7	1000.000	150.0	H	152.0	12.7	14.0	68.2





Radiated Band Edge: UNII 3, HT80 - Vertical

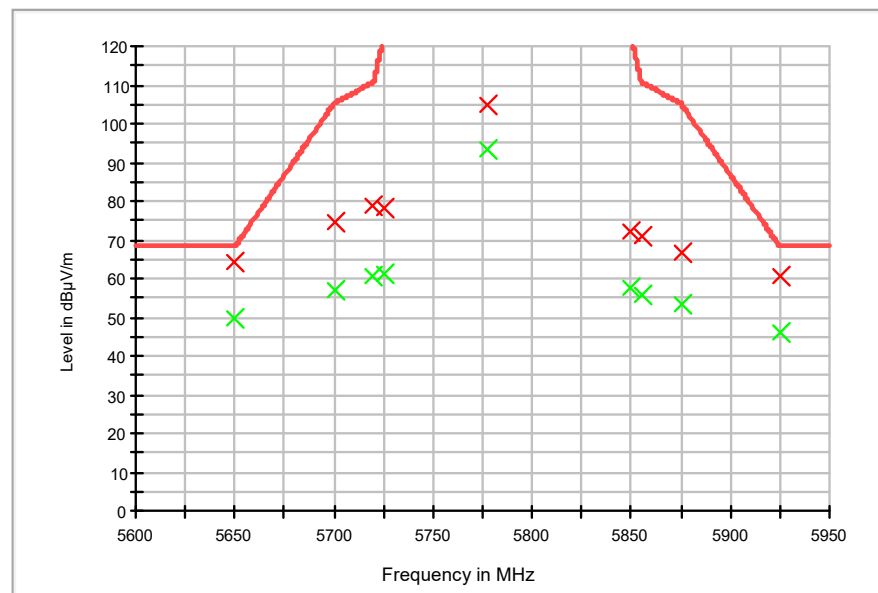




Radiated Band Edge: UNII 3, HT80

Measurements

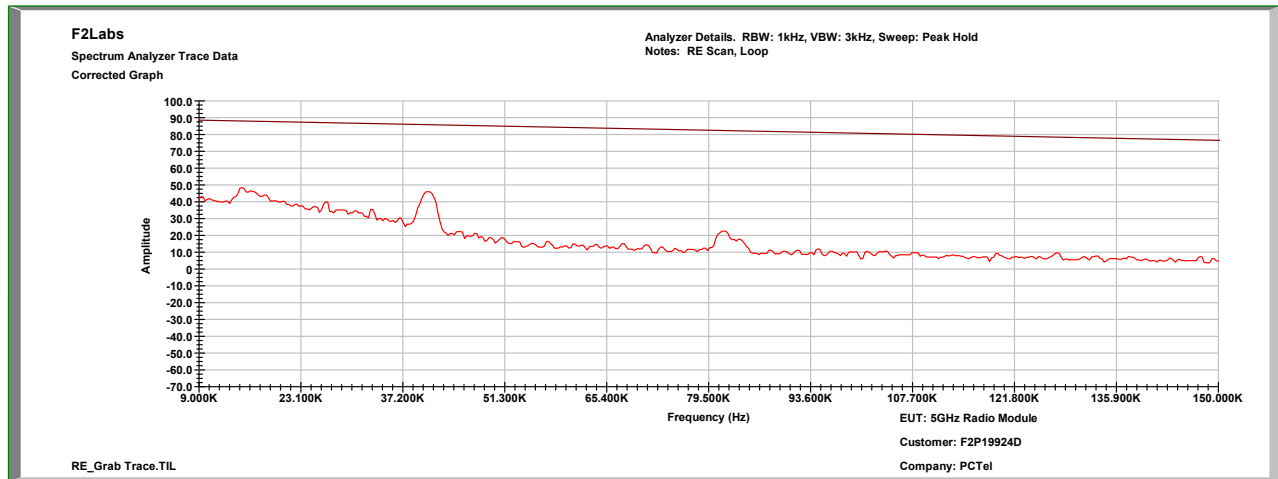
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin PK (dB)	Limit PK (dBμV/m)
5650.000000	64.0	49.6	1000.000	150.0	H	152.0	12.5	4.2	68.2
5700.000000	74.4	57.2	1000.000	150.0	H	152.0	12.5	30.8	105.2
5720.000000	78.9	60.4	1000.000	150.0	H	152.0	12.5	31.9	110.8
5725.000000	78.4	61.5	1000.000	150.0	H	152.0	12.5	43.8	122.2
5777.000000	104.9	93.4	1000.000	150.0	H	152.0	12.5	-----	-----
5850.000000	72.1	57.5	1000.000	150.0	H	152.0	12.5	50.1	122.2
5855.000000	71.0	55.8	1000.000	150.0	H	152.0	12.5	39.8	110.8
5875.000000	66.6	53.2	1000.000	150.0	H	152.0	12.5	38.6	105.2
5925.000000	60.8	45.8	1000.000	150.0	H	152.0	12.7	7.4	68.2



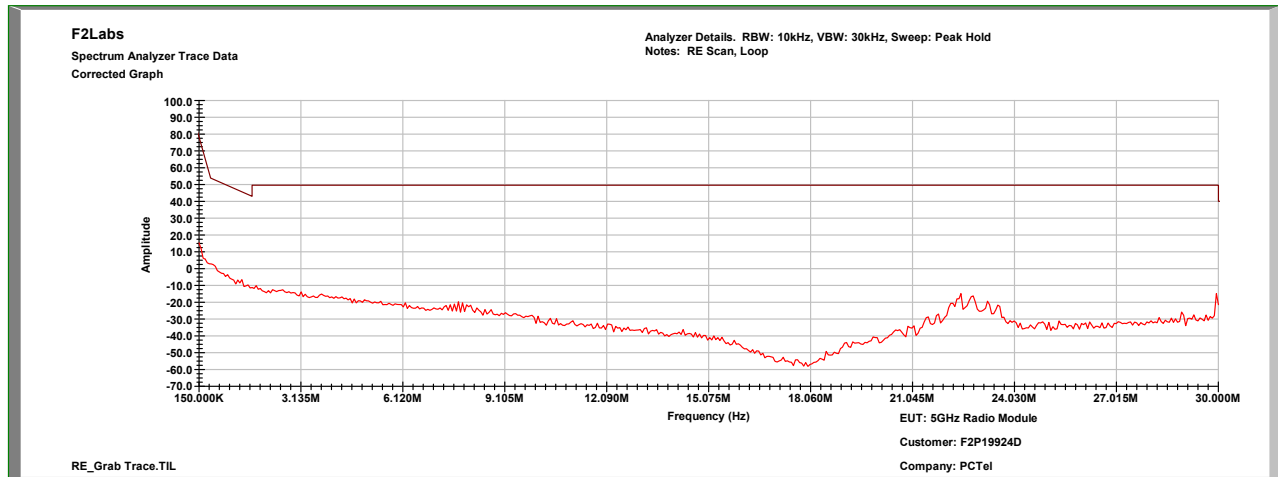


The following plots are worse case scans from all channels and all modulations from all antennas. The measurements in the tables are from all channels and modulations.

Radiated Spurious Emissions: 0.009 MHz to 0.15 MHz

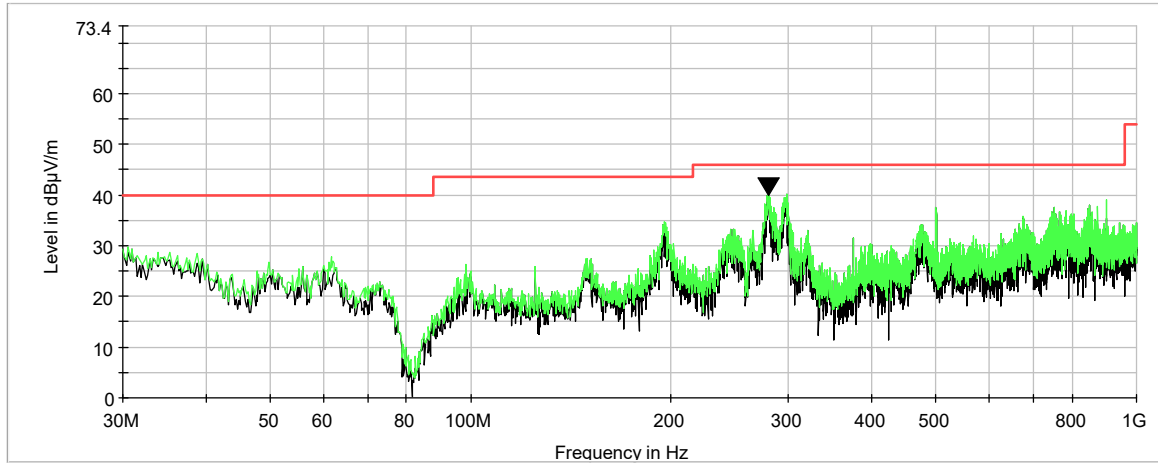


Radiated Spurious Emissions: 0.15 MHz to 30.0 MHz

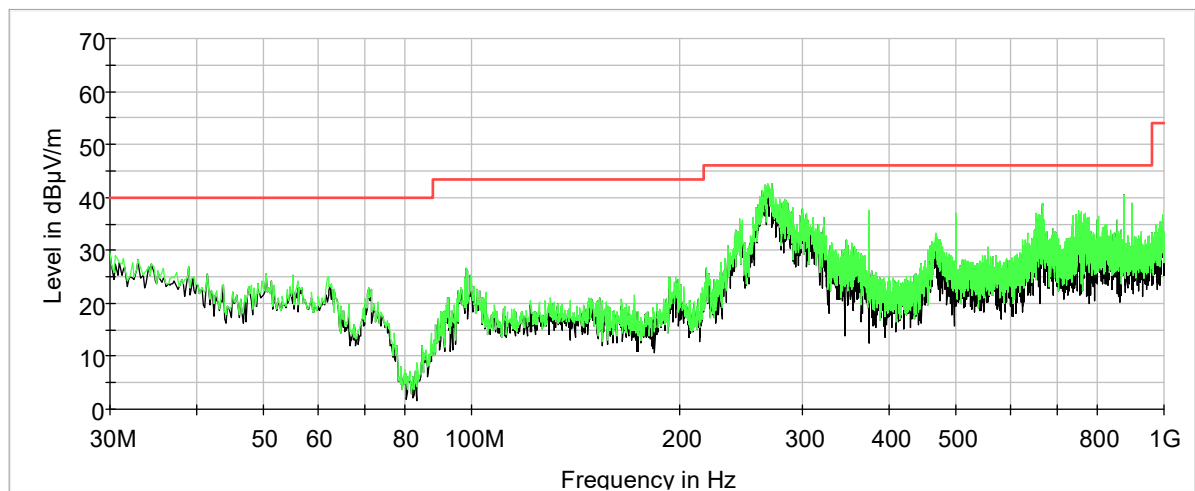




Radiated Spurious Emissions: 30 MHz to 1000 MHz, Vertical



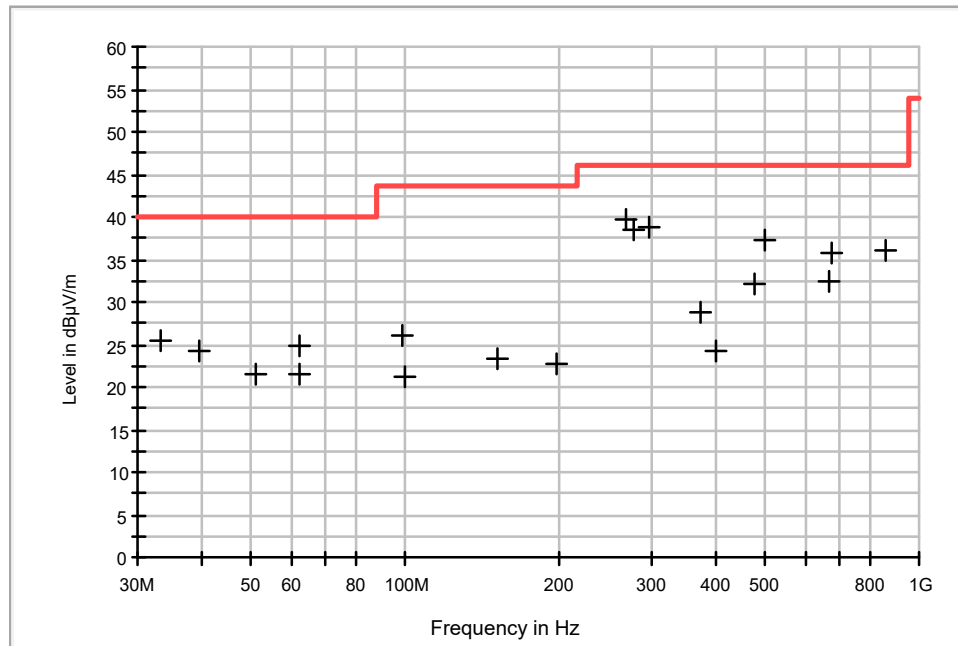
Radiated Spurious Emissions: 30 MHz to 1000 MHz, Horizontal





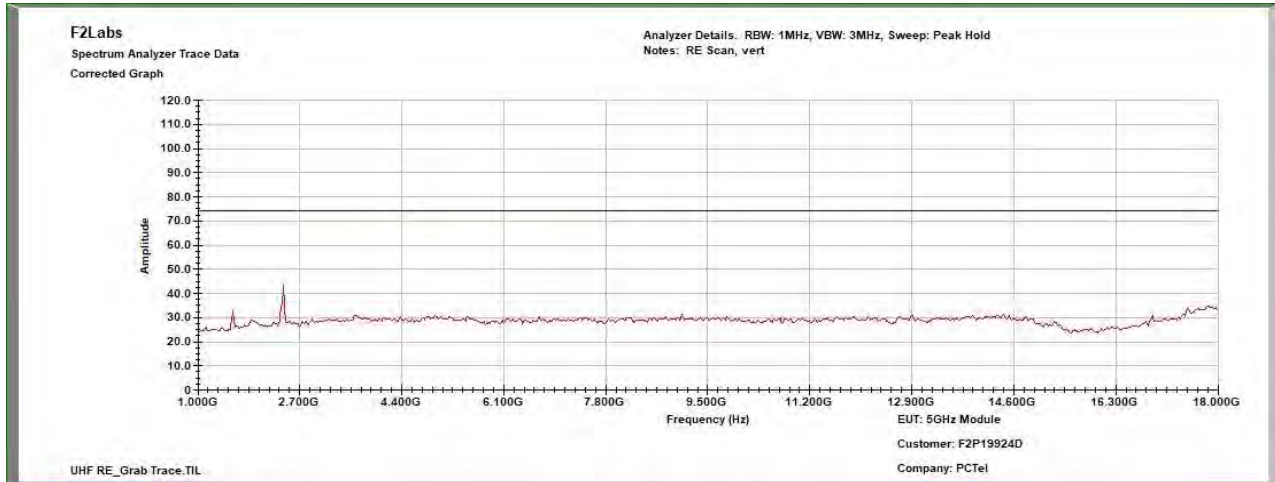
Measurements, 30 MHz to 1000 MHz

Frequency (MHz)	Antenna Polarization	Antenna Height (cm)	Azimuth (degrees)	Correction Factors (dB)	Emission (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
33.1	H	100	0	-3.5	25.4	40	-14.6
39.51	H	210	0	-8.3	24.4	40	-15.6
50.95	H	155	0	-14.4	21.4	40	-18.6
62.01	V	200	270	-14.9	21.6	40	-18.4
62.01	H	100	0	-14.9	24.7	40	-15.3
98.48	H	210	0	-12.5	25.9	43.5	-17.6
99.84	V	150	90	-12	21.2	43.5	-22.3
151.06	H	250	0	-9.4	23.4	43.5	-20.1
196.84	H	100	0	-9.1	22.7	43.5	-20.8
267.26	H	110	0	-8	39.8	46	-6.2
278.9	V	210	235	-7.7	38.4	46	-7.6
296.56	H	100	0	-7.5	38.9	46	-7.1
375.13	H	155	0	-5.3	28.7	46	-17.3
400.15	V	100	90	-4.6	24.1	46	-21.9
476.01	H	250	0	-2.3	32.1	46	-13.9
500.06	H	210	35	-2.1	37.4	46	-8.6
667.32	H	110	0	1.1	32.4	46	-13.6
677.38	V	100	270	1.2	35.7	46	-10.3
856.05	H	100	90	3.9	36.1	46	-9.9

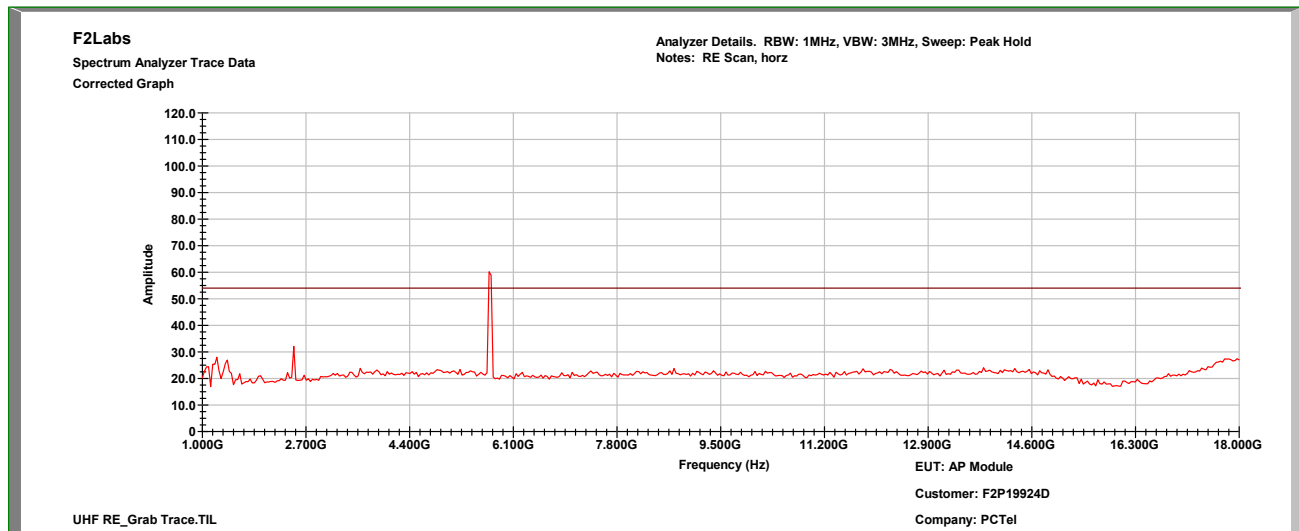




Radiated Spurious Emissions: 1 GHz to 18 GHz, Vertical

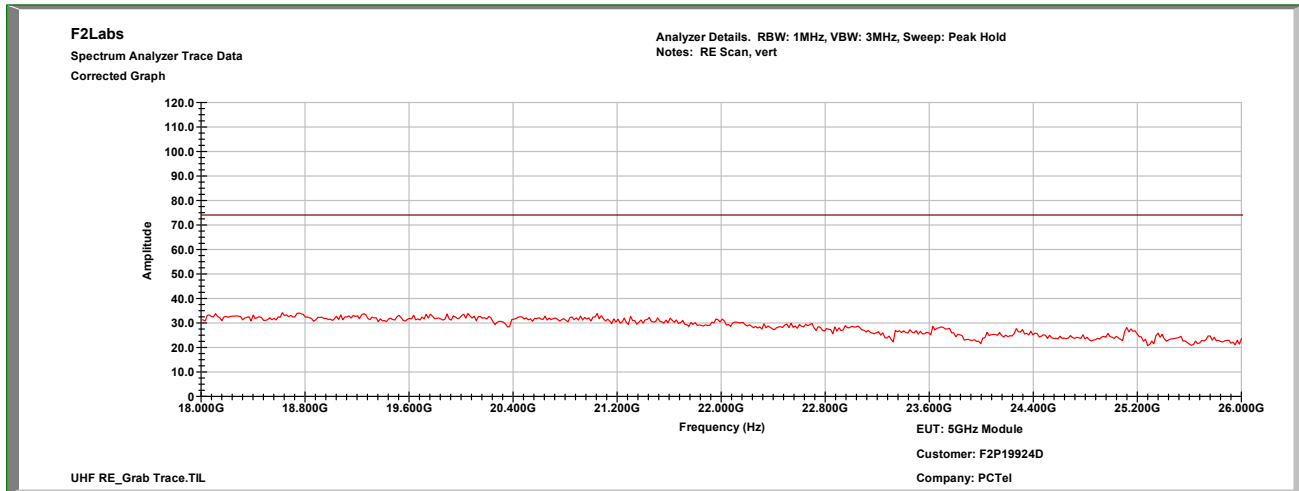


Radiated Spurious Emissions: 1 GHz to 18 GHz, Horizontal

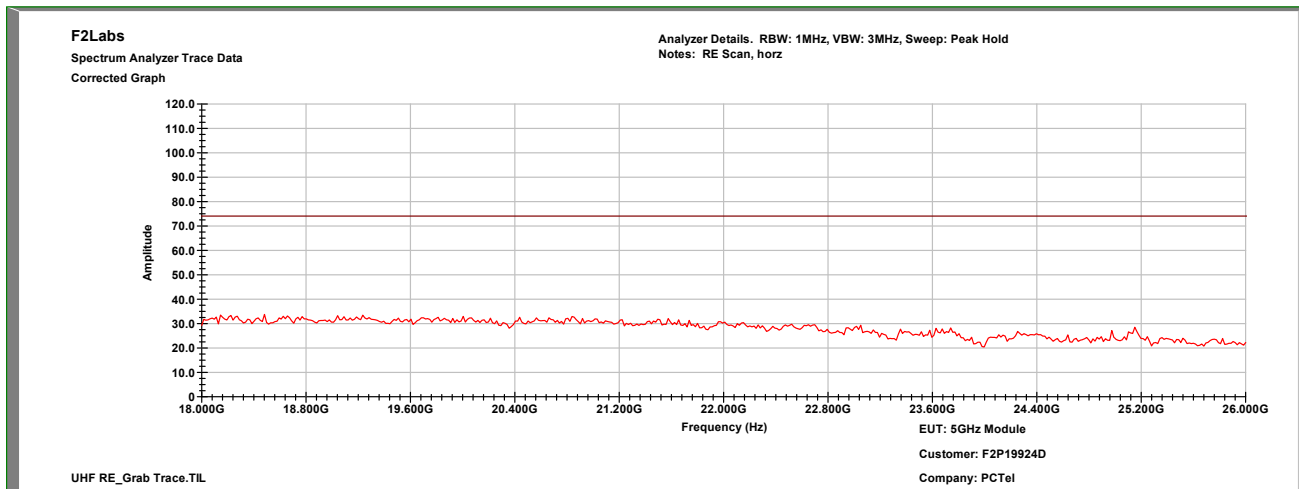




Radiated Spurious Emissions: 18 GHz to 26 GHz, Vertical

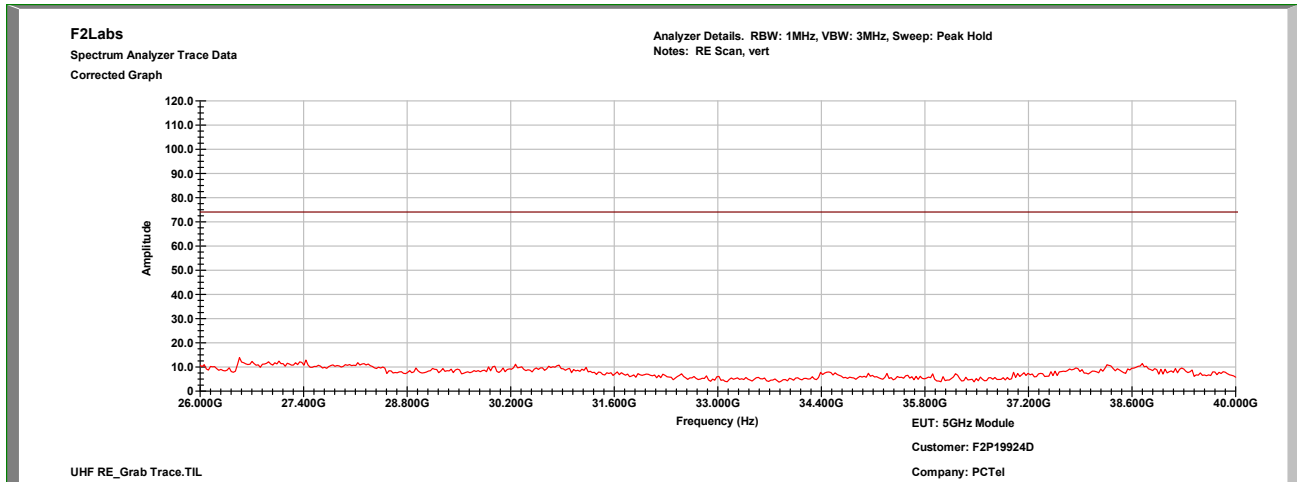


Radiated Spurious Emissions: 18 GHz to 26 GHz, Horizontal

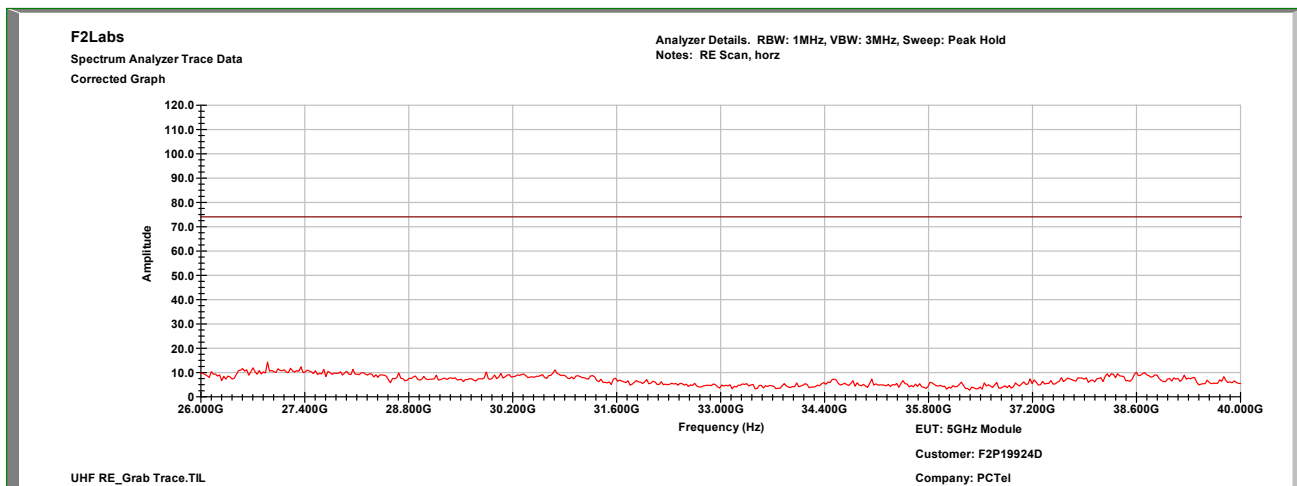




Radiated Spurious Emissions: 26 GHz to 40 GHz, Vertical



Radiated Spurious Emissions: 26 GHz to 40 GHz, Horizontal





10 CONDUCTED SPURIOUS EMISSIONS

The following tests were performed to demonstrate compliance.

RF Antenna Conducted Test

The EUT antenna ports were fitted with Type N connectors and directly connected to the input of the spectrum analyzer. Limit lines were adjusted to account for the 1dB over 6dBi gain of the antenna(s).

Test data presented is from Output Port 1, determined to be worst-case.

Summing and aggregation were not added to Conducted Spurious Emissions, as these were all more than 20dB below the limit and aggregation with antenna gain would only total 10dB to be added.

10.1 Requirements:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

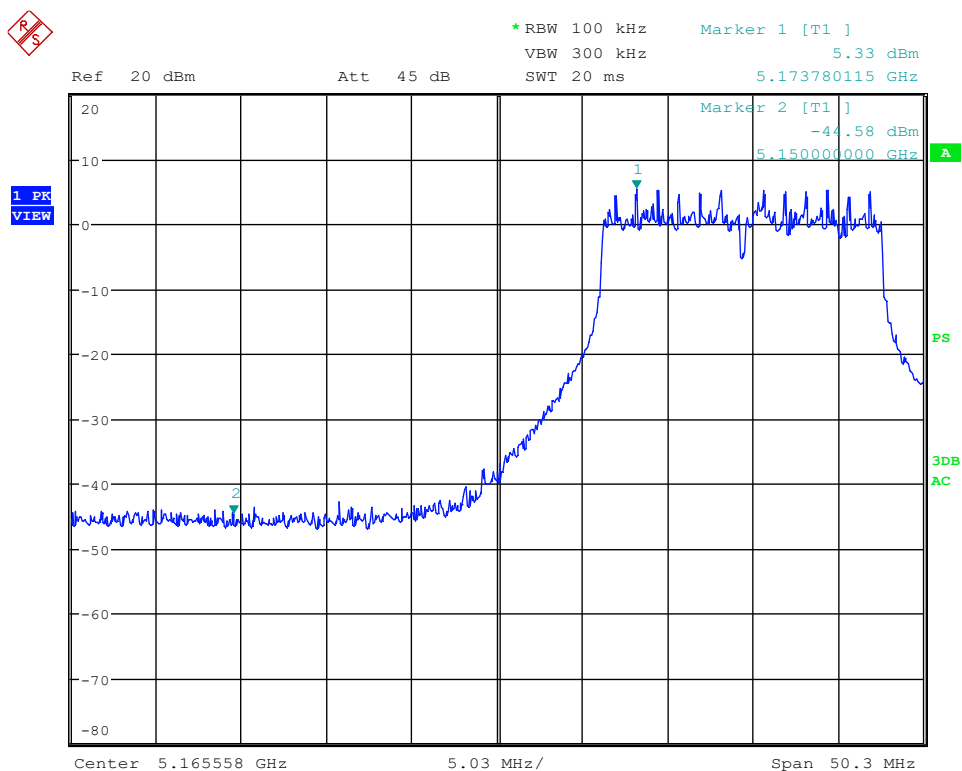
For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.



10.2 Conducted Spurious Emissions Test Data

Test Date(s):	2021-09-10 to 2021-09-14	Test Engineer:	J. Chiller
Standards:	CFR 47 Part 15.407(b)(1,4)	Air Temperature:	21.3°C
		Relative Humidity:	47%

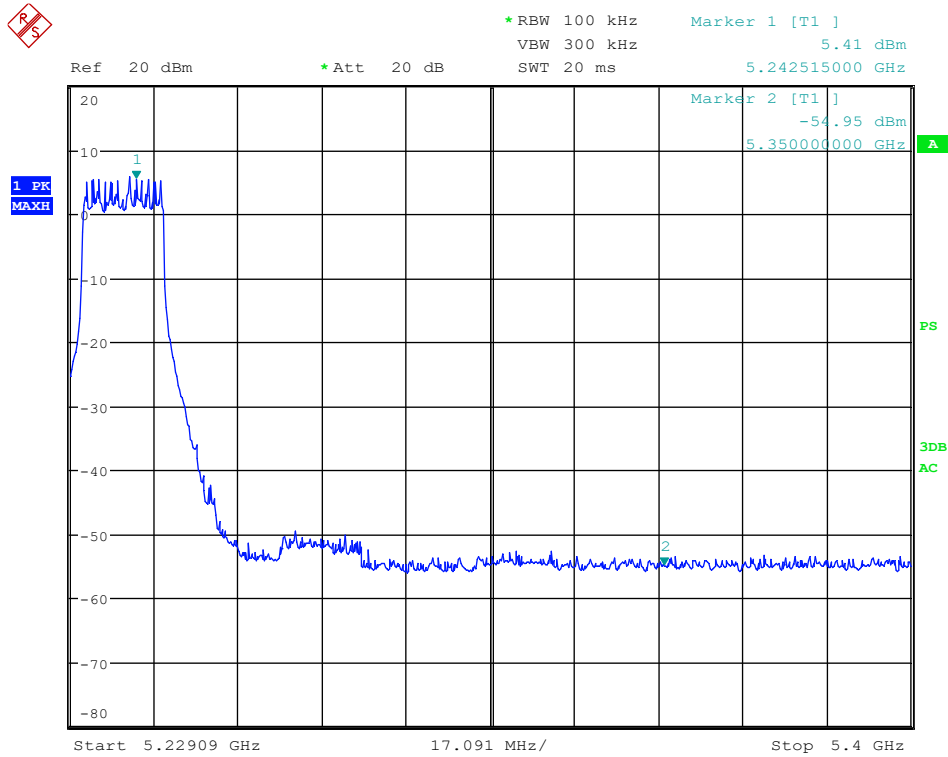
UNII 1, OFDM: Band Edge - Low



Date: 10.SEP.2021 16:03:57



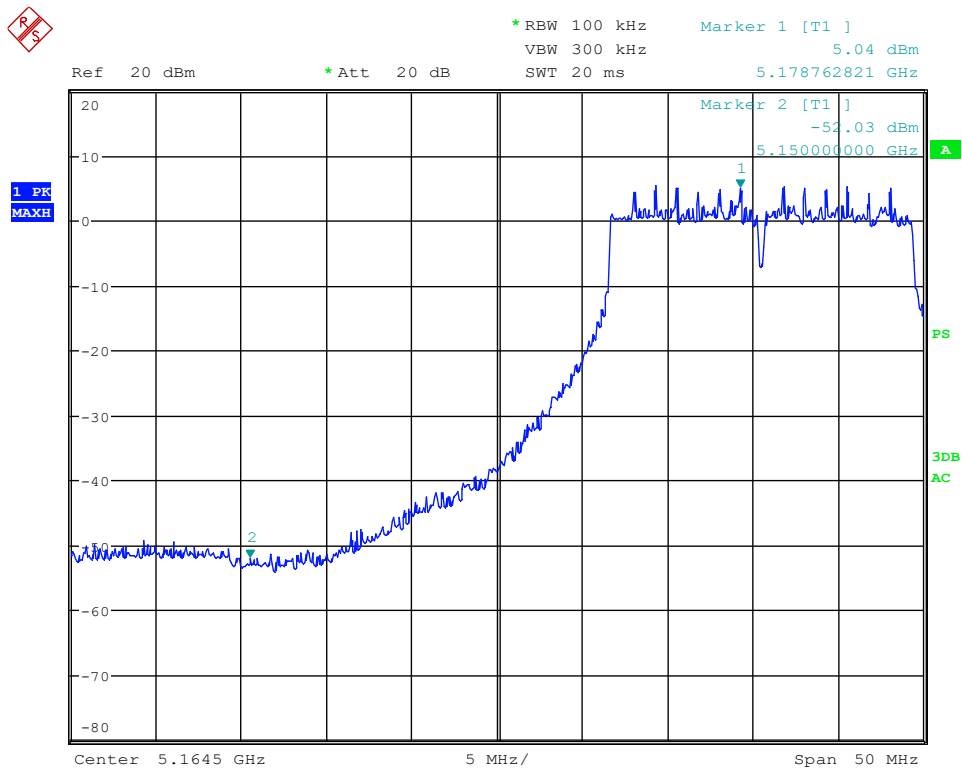
UNII 1, OFDM: Band Edge - High



Date: 10.SEP.2021 16:10:13



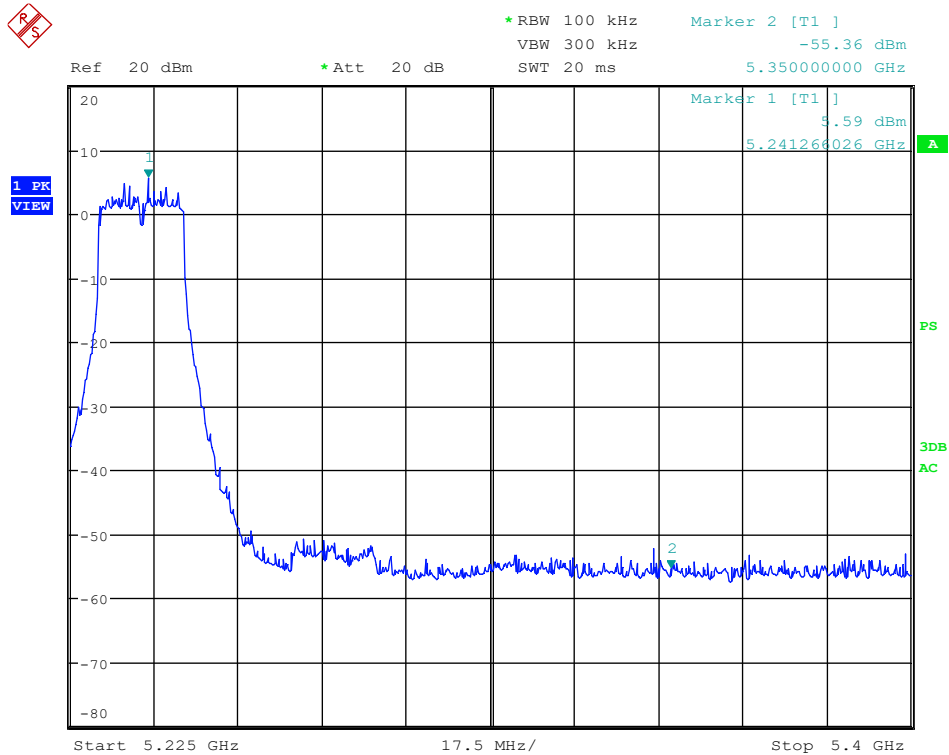
UNII 1, HT20: Band Edge - Low



Date: 10.SEP.2021 16:12:06



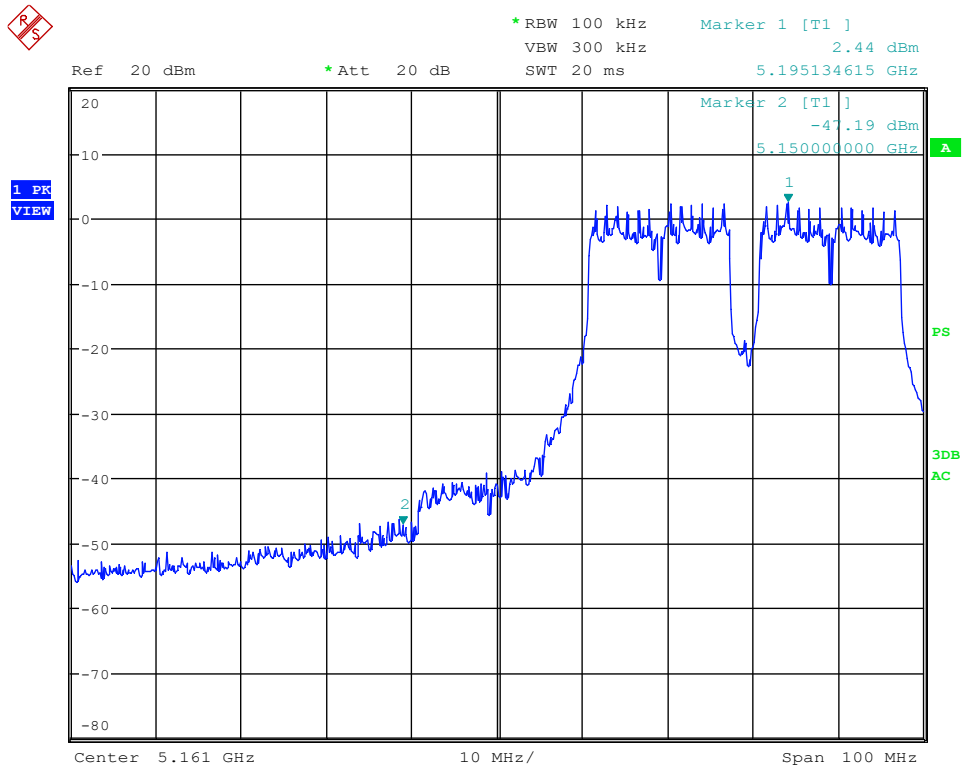
UNII 1, HT20: Band Edge - High



Date: 10.SEP.2021 16:13:35



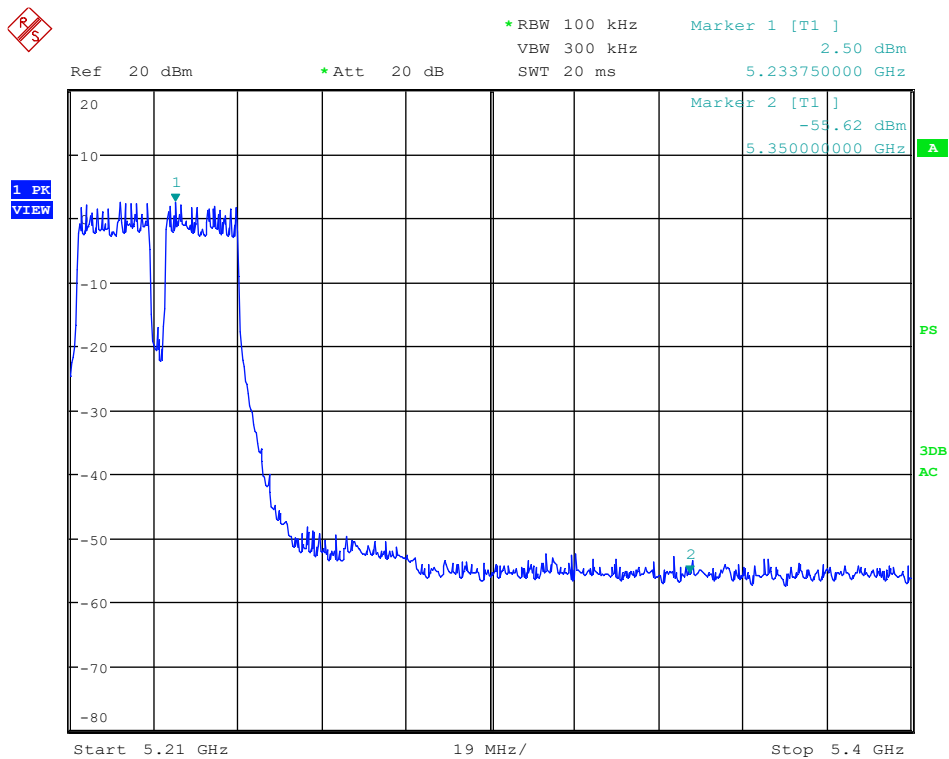
UNII 1, non HT40: Band Edge - Low



Date: 10.SEP.2021 16:16:48



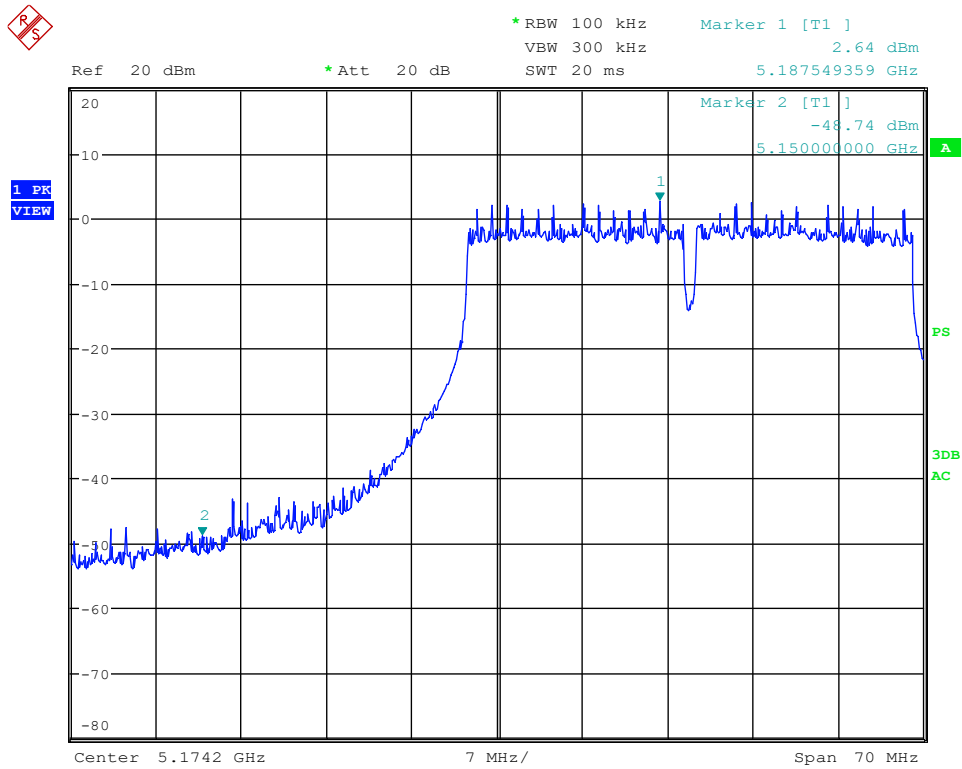
UNII 1, non HT40: Band Edge - High



Date: 10.SEP.2021 16:18:25



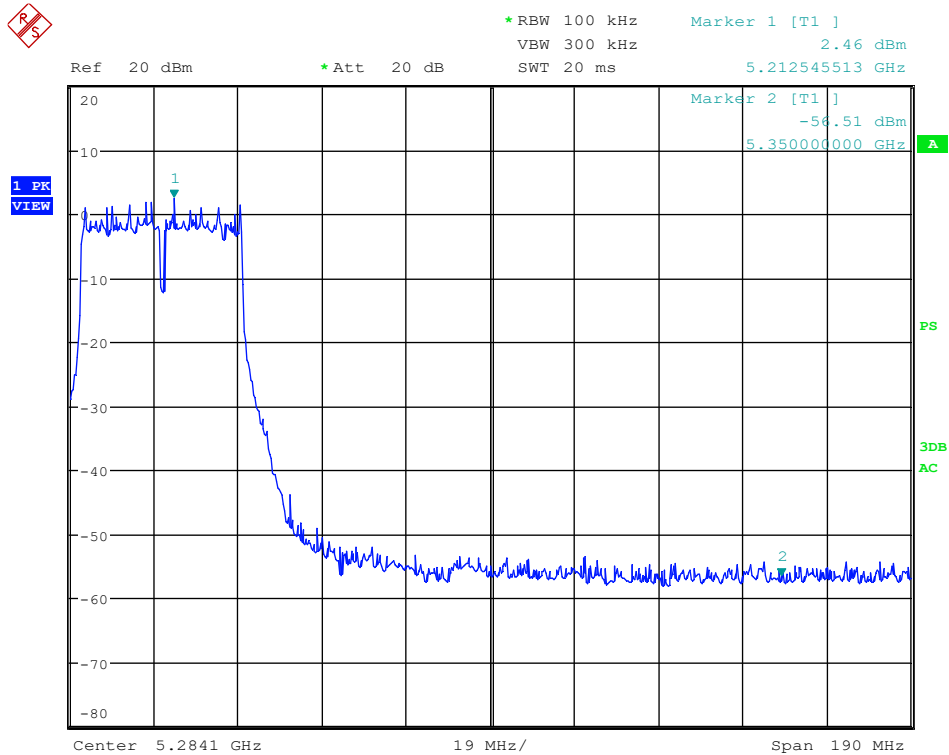
UNII 1, HT40: Band Edge - Low



Date: 10.SEP.2021 16:23:18



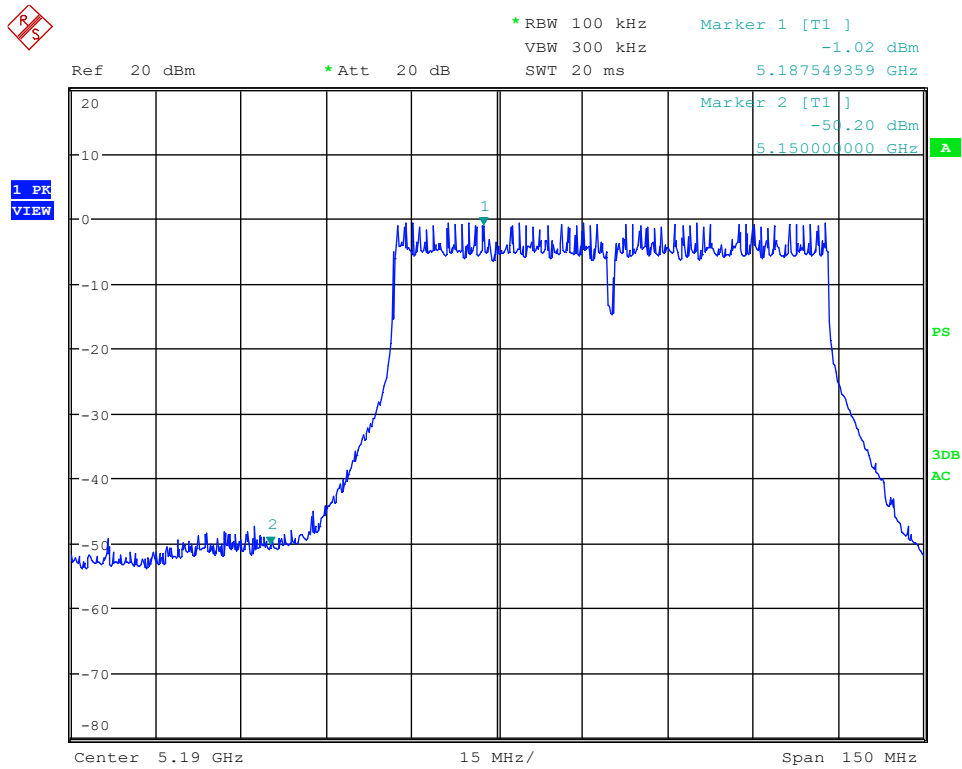
UNII 1, HT40: Band Edge - High



Date: 10.SEP.2021 16:20:50



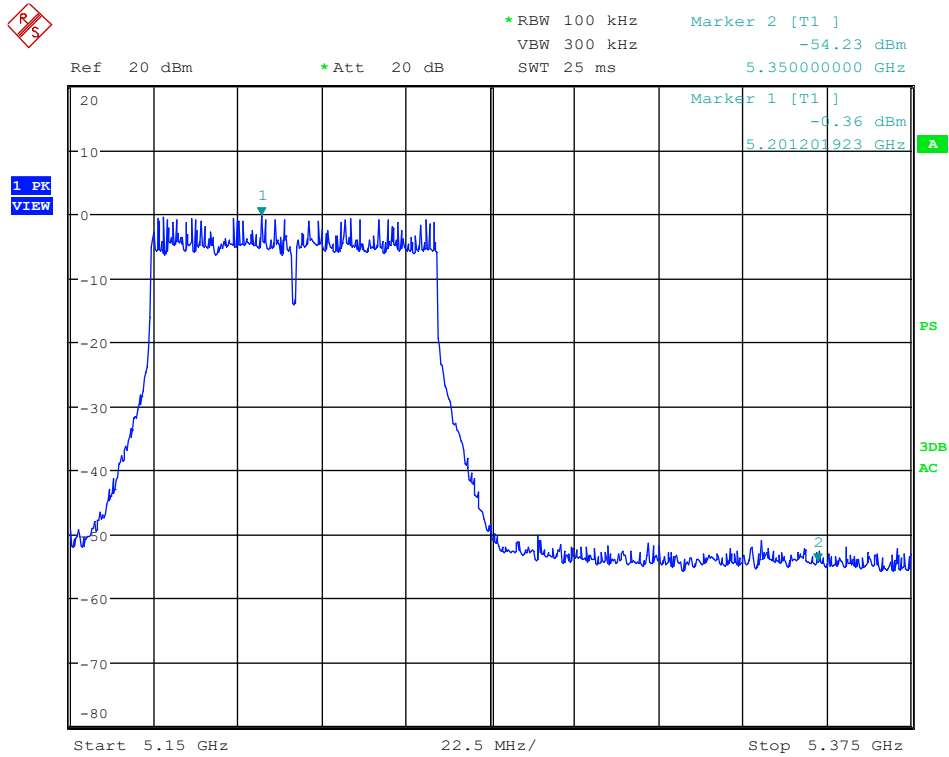
UNII 1, HT80: Band Edge - Low



Date: 10.SEP.2021 16:26:16



UNII 1, HT80: Band Edge - High



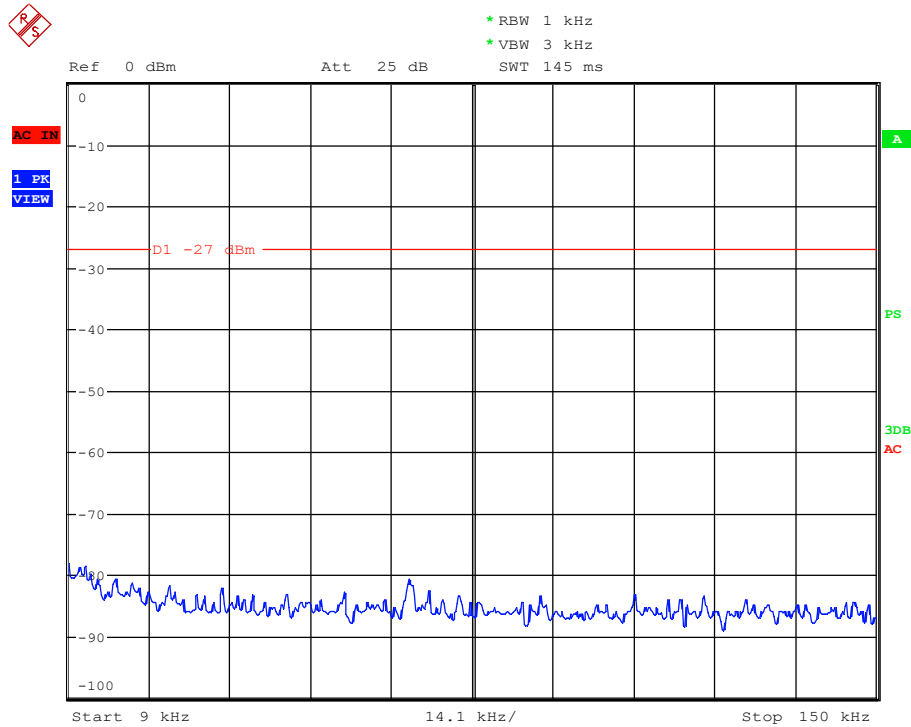
Date: 10.SEP.2021 16:28:04



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

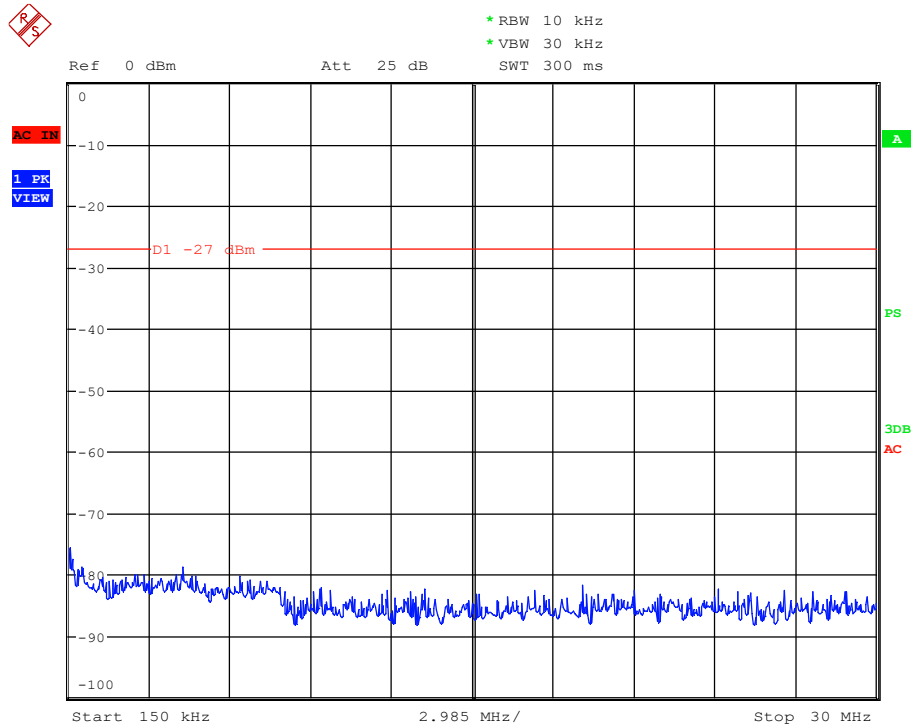
UNII 1: 0.009 MHz to 0.15 MHz



Date: 14.SEP.2021 14:40:39



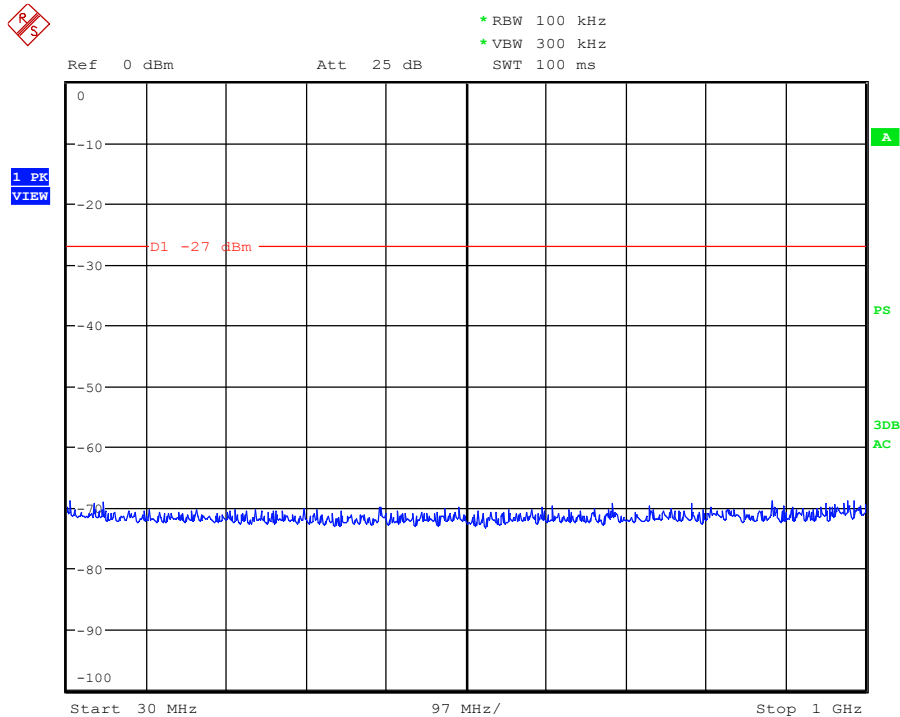
UNII 1: 0.15 MHz to 30 MHz



Date: 14.SEP.2021 14:41:49



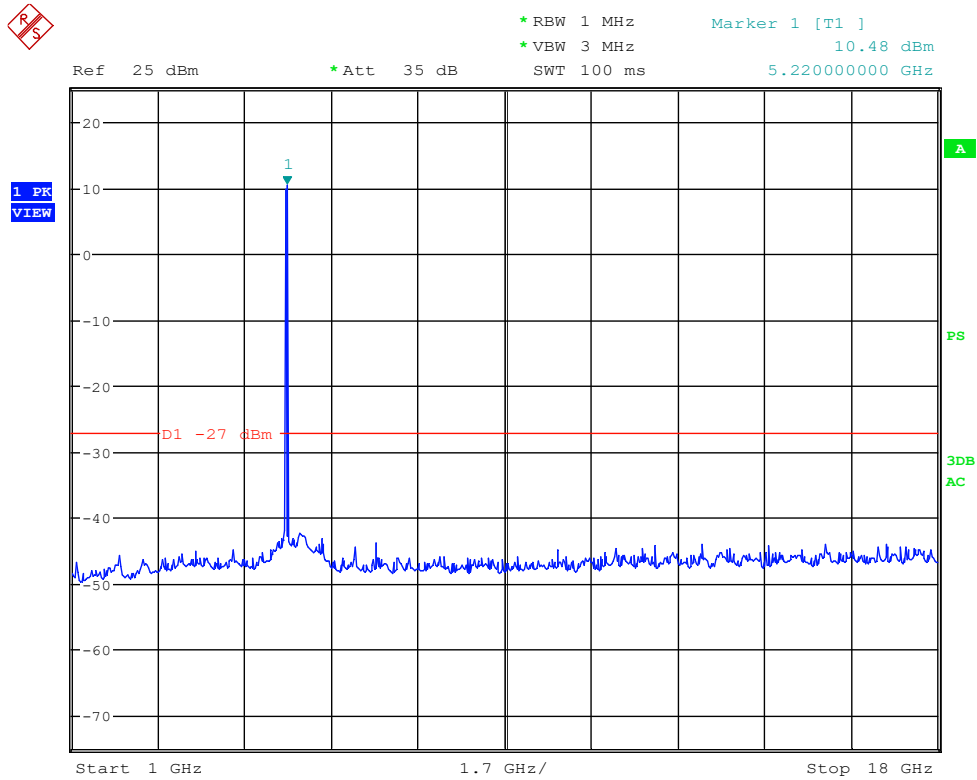
UNII 1: 30 MHz to 1000 MHz



Date: 14.SEP.2021 14:42:46



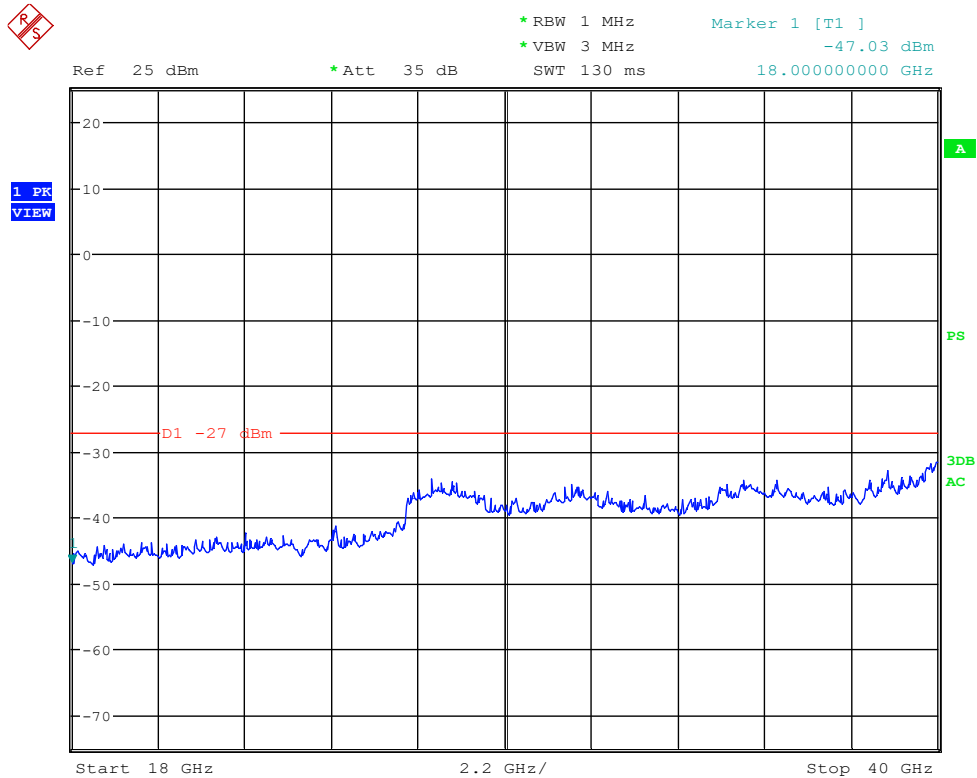
UNII 1: 1 GHz to 18 GHz



Date: 14.SEP.2021 16:16:13



UNII 1: 18 GHz to 40 GHz



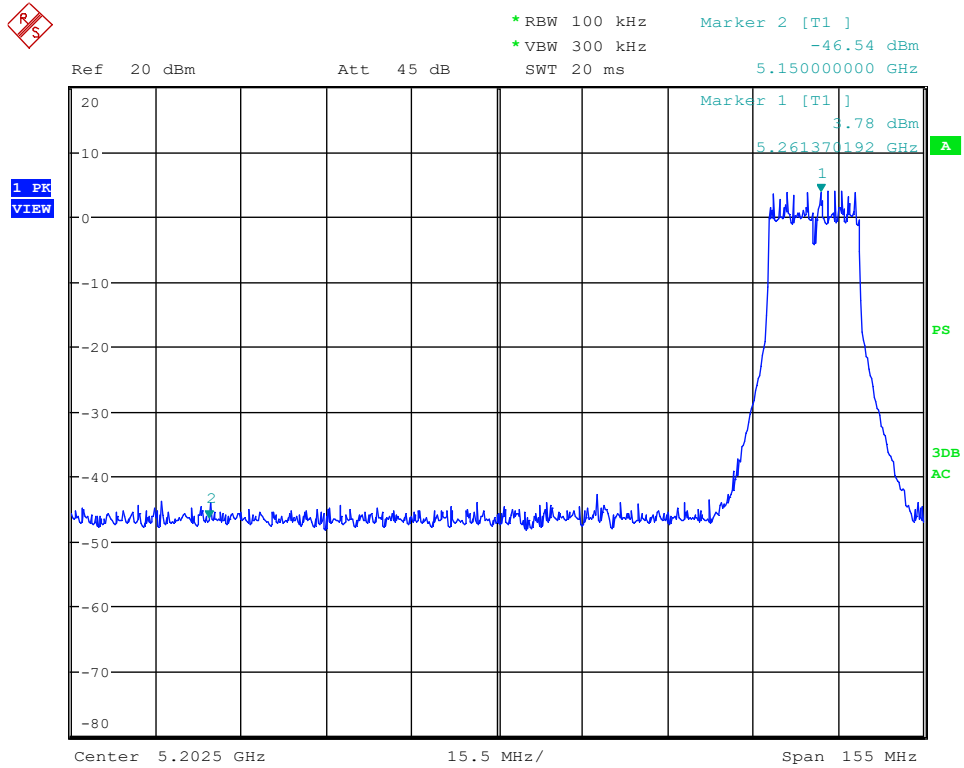
Date: 14.SEP.2021 16:20:10



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

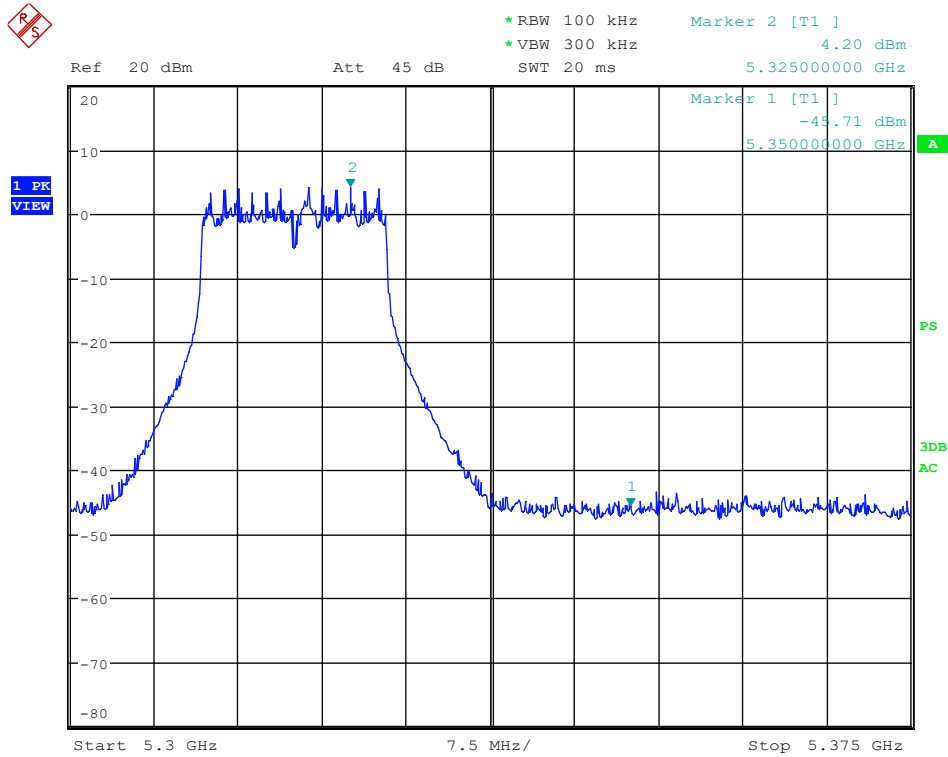
UNII 2A, OFDM Band Edge - Low



Date: 14.SEP.2021 12:26:36



UNII 2A, OFDM: Band Edge - High



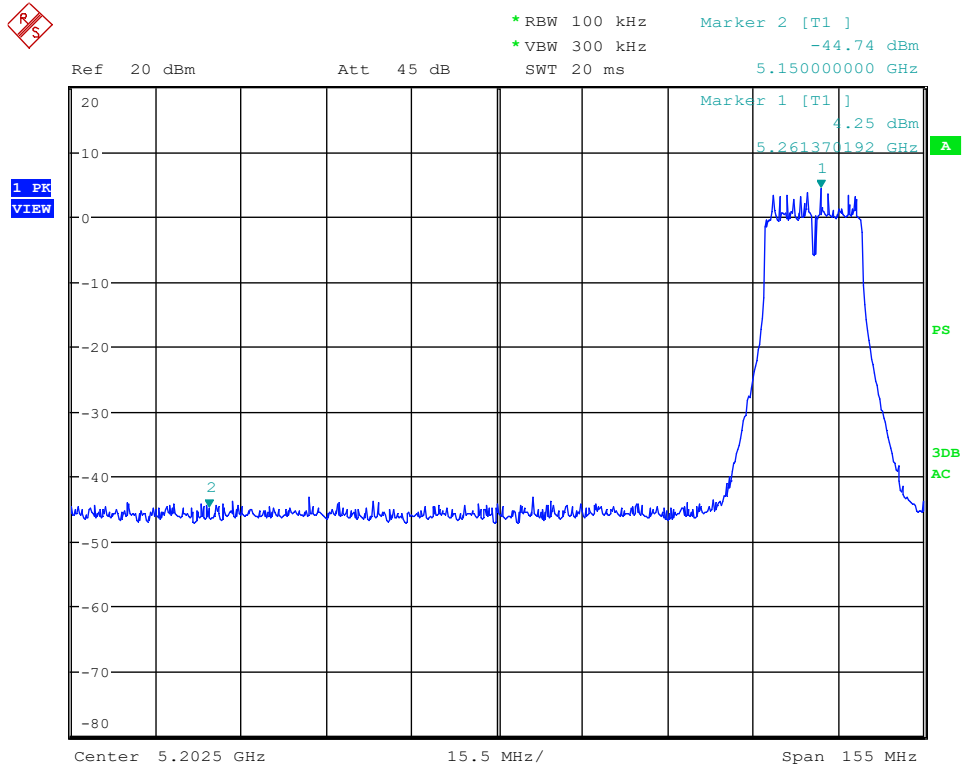
Date: 14.SEP.2021 12:58:53



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

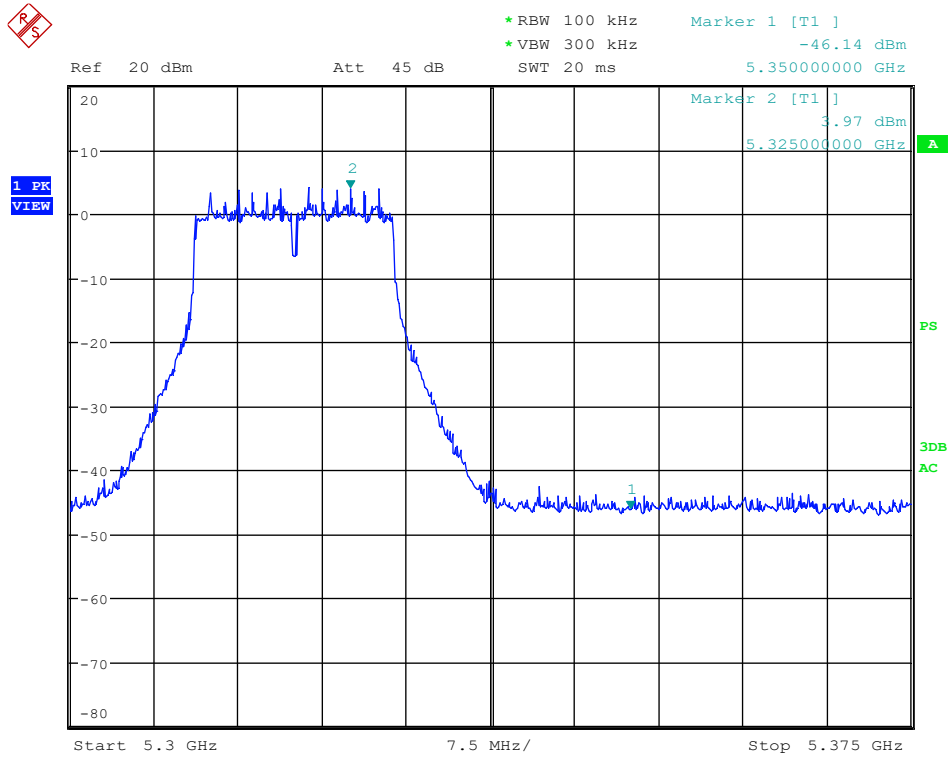
UNII 2A, HT20: Band Edge - Low



Date: 14.SEP.2021 12:25:20



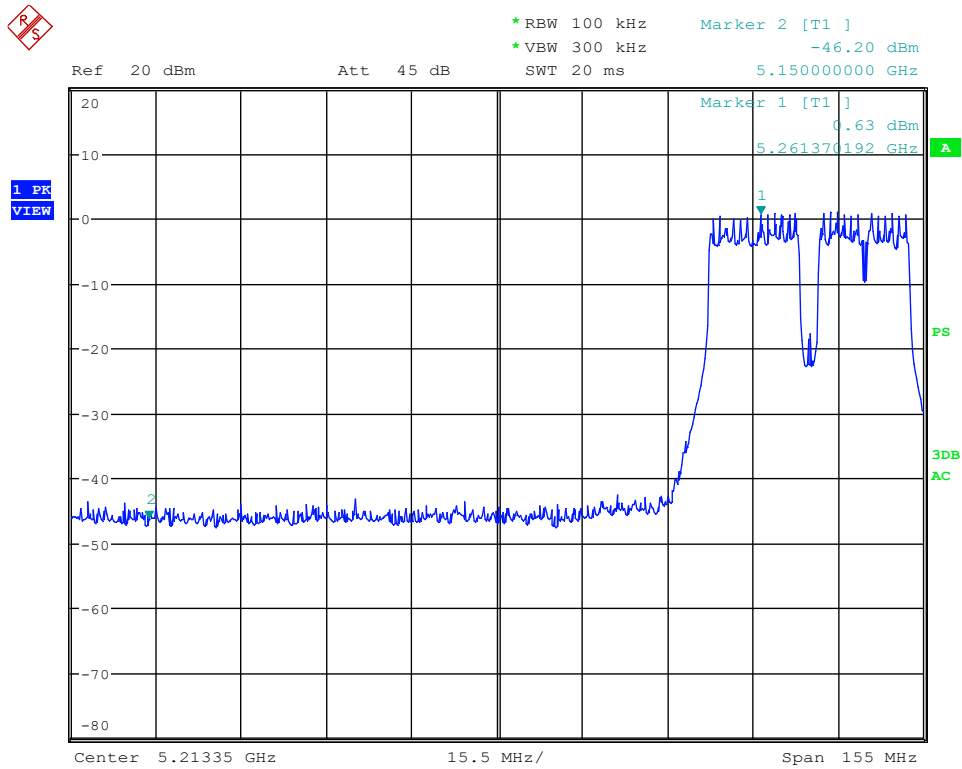
UNII 2A, HT20: Band Edge - High



Date: 14.SEP.2021 12:59:48



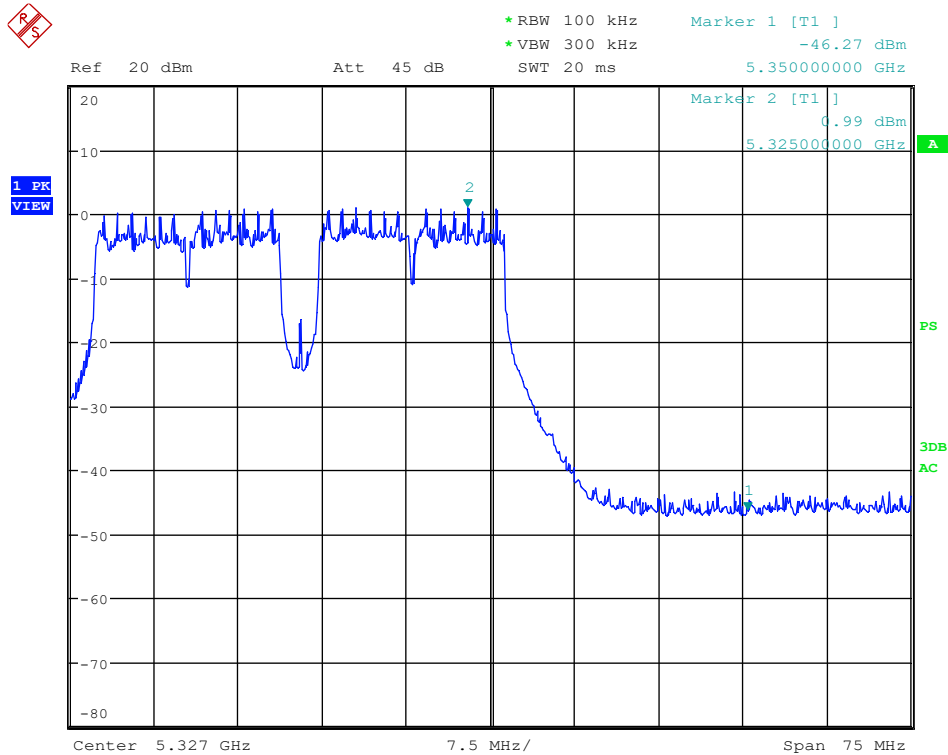
UNII 2A, non HT40: Band Edge - Low



Date: 14.SEP.2021 12:28:13



UNII 2A, non HT40: Band Edge - High



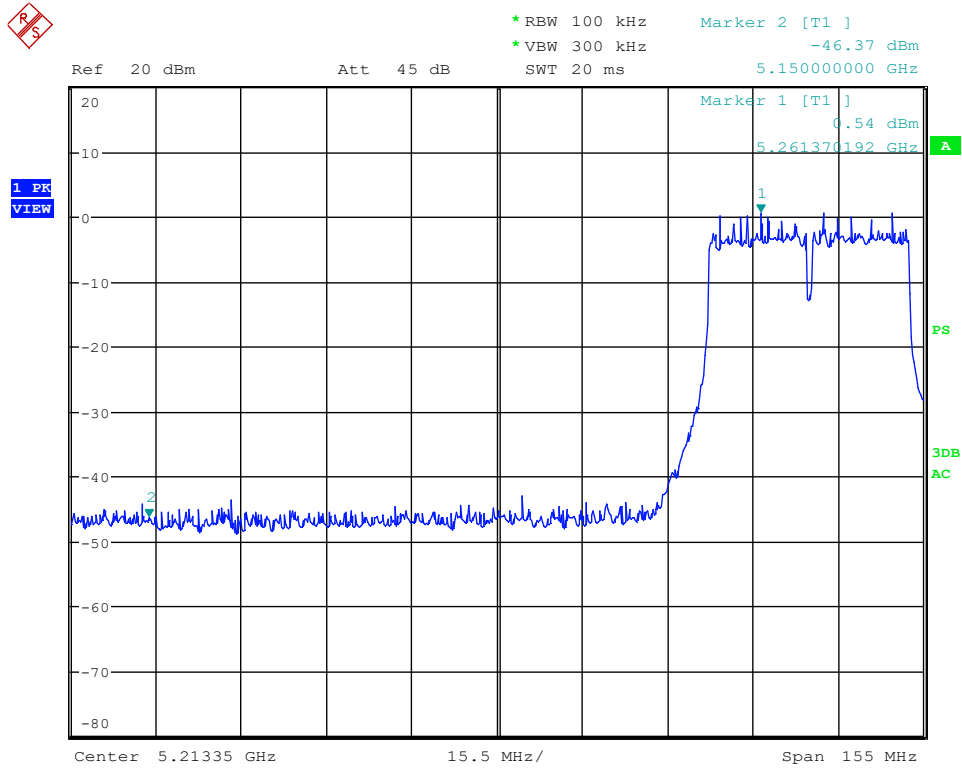
Date: 14.SEP.2021 13:01:54



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

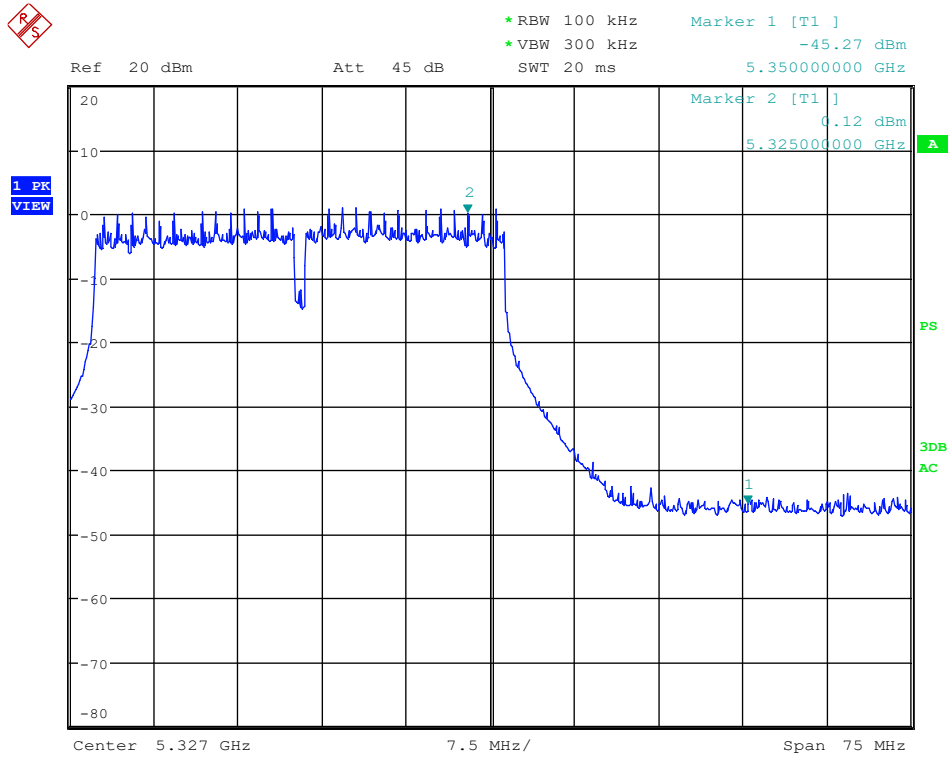
UNII 2A, HT40: Band Edge - Low



Date: 14.SEP.2021 12:28:49



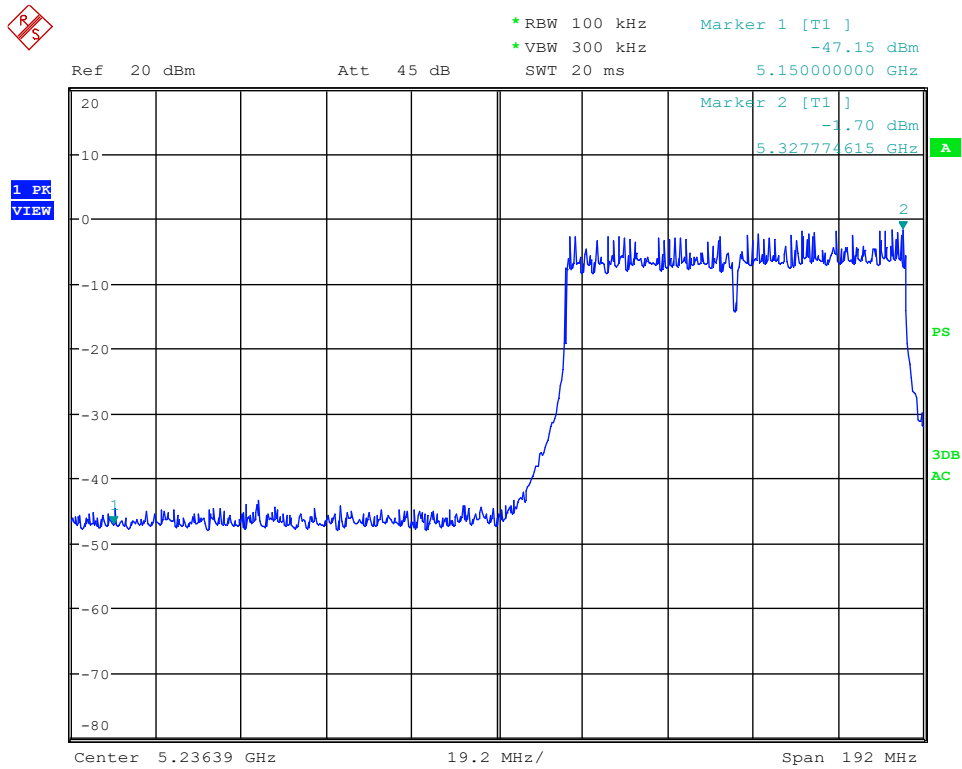
UNII 2A, HT40: Band Edge - High



Date: 14.SEP.2021 13:01:09



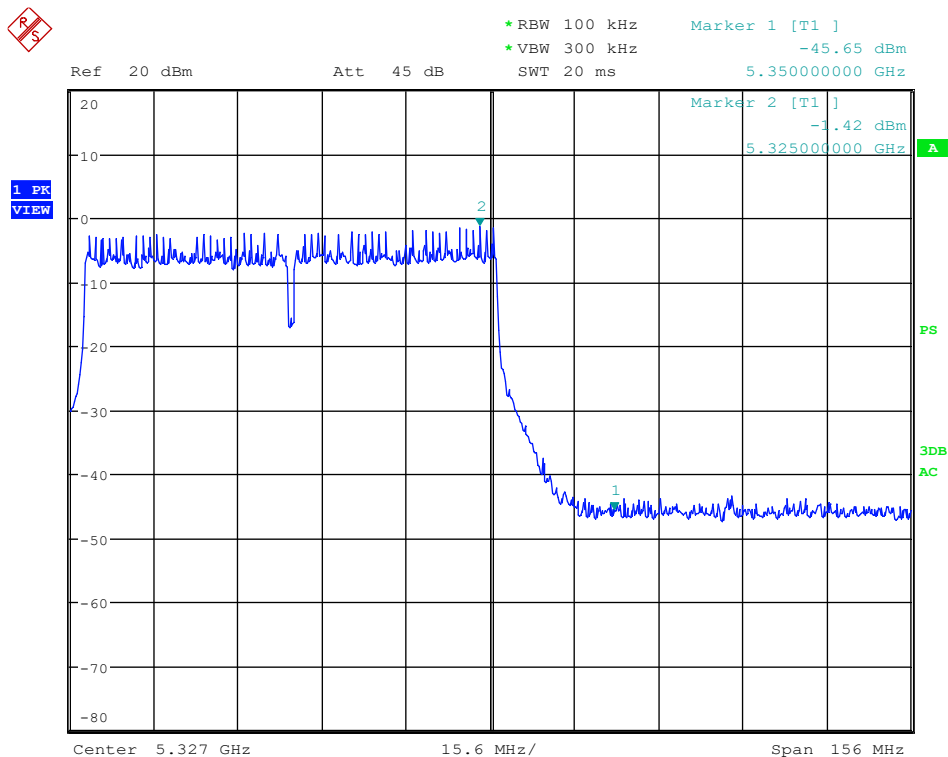
UNII 2A, HT80: Band Edge - Low



Date: 14.SEP.2021 12:31:07



UNII 2A, HT80: Band Edge - High



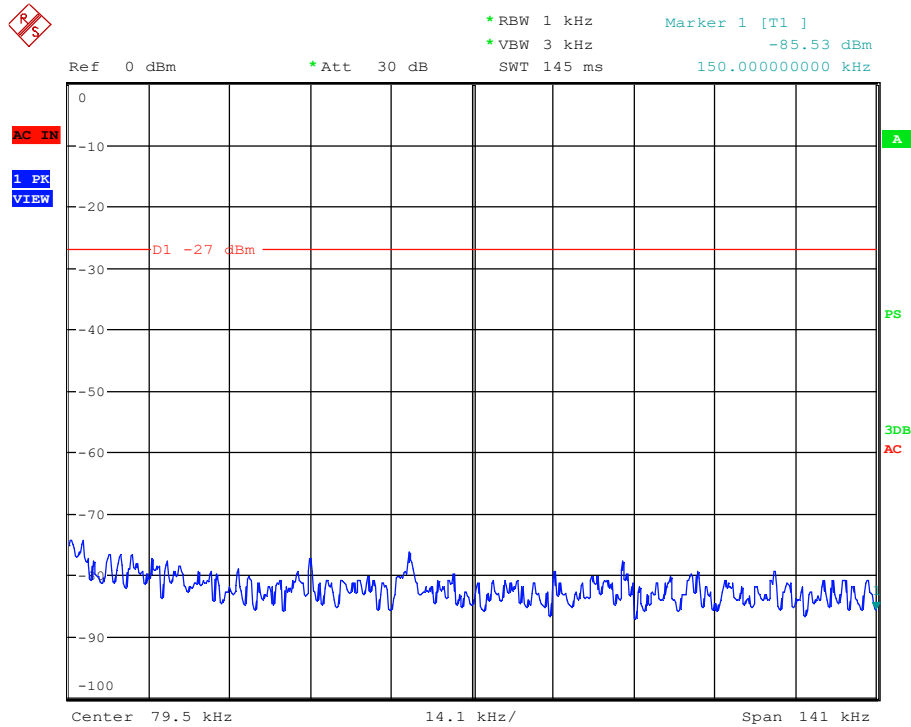
Date: 14.SEP.2021 13:03:45



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

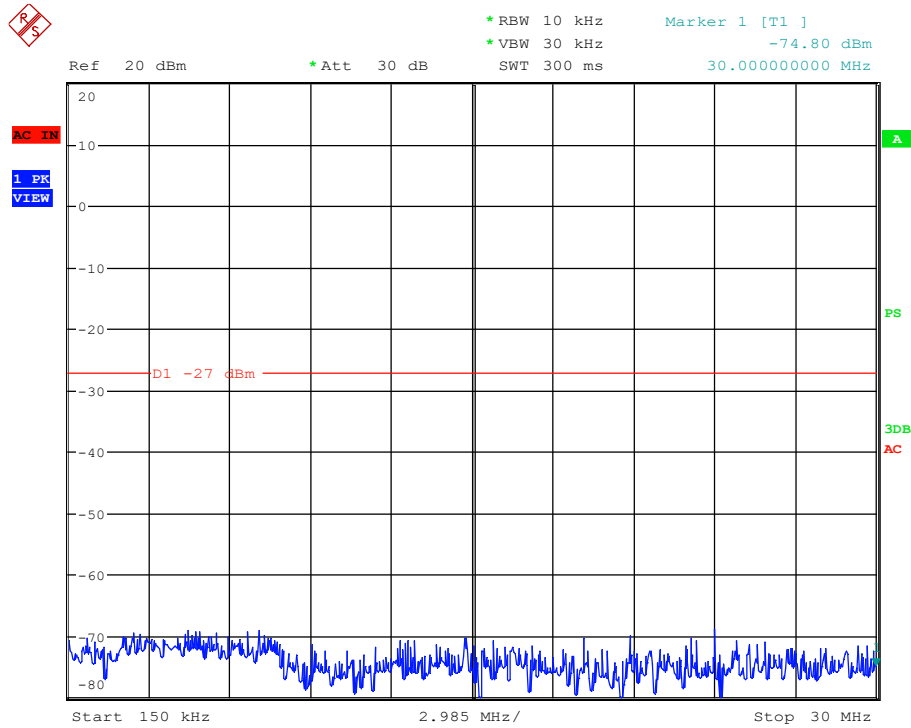
UNII 2A: 0.009 MHz to 0.15 MHz



Date: 14.SEP.2021 16:29:50



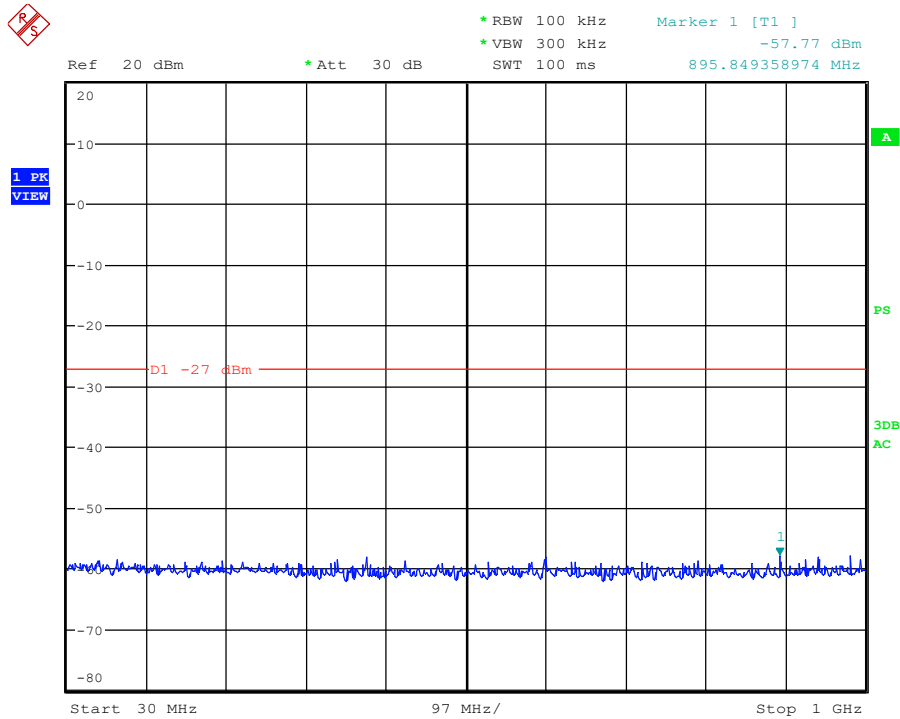
UNII 2A: 0.15 MHz to 30 MHz



Date: 14.SEP.2021 16:28:51



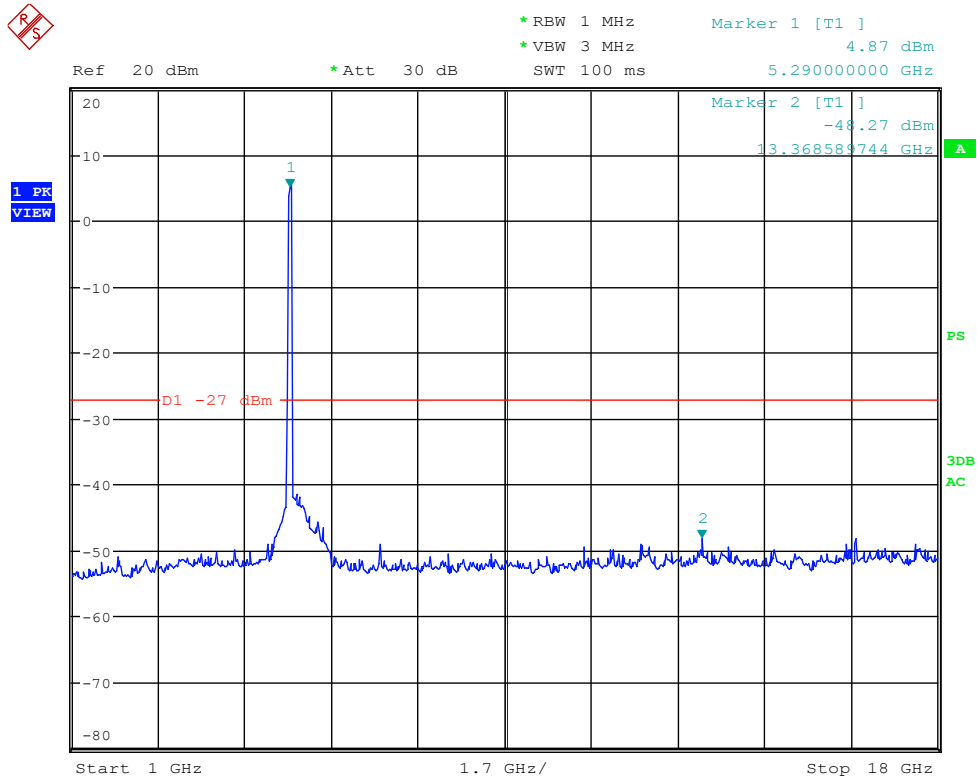
UNII 2A: 30 MHz to 1000 MHz



Date: 14.SEP.2021 16:27:37



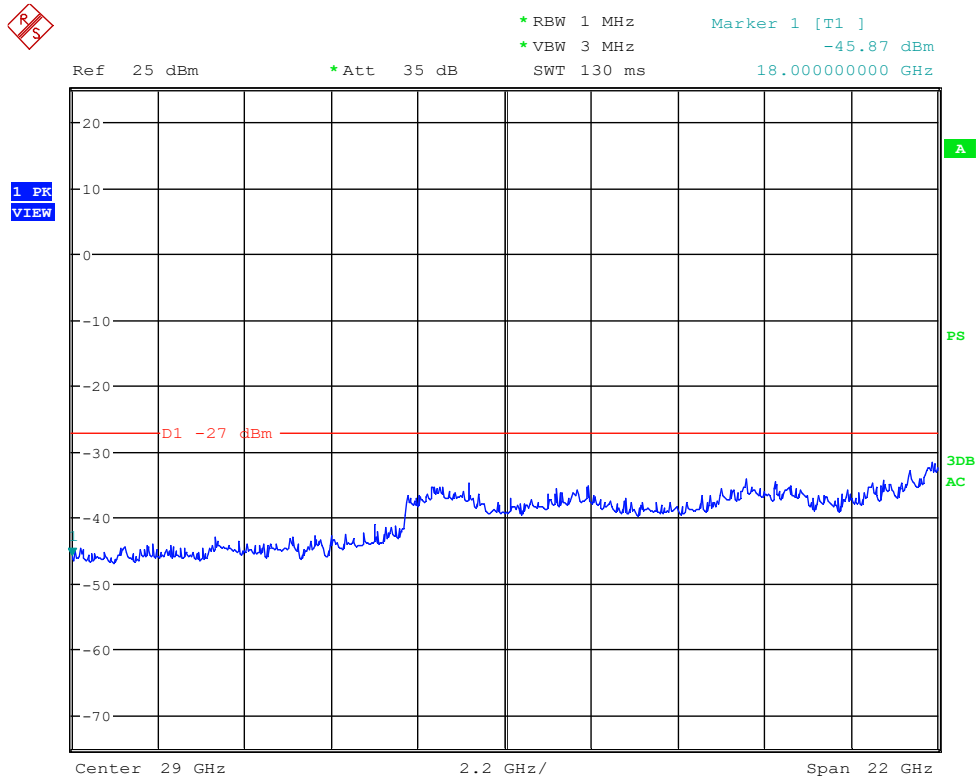
UNII 2A: 1 GHz to 18 GHz



Date: 14.SEP.2021 16:26:29



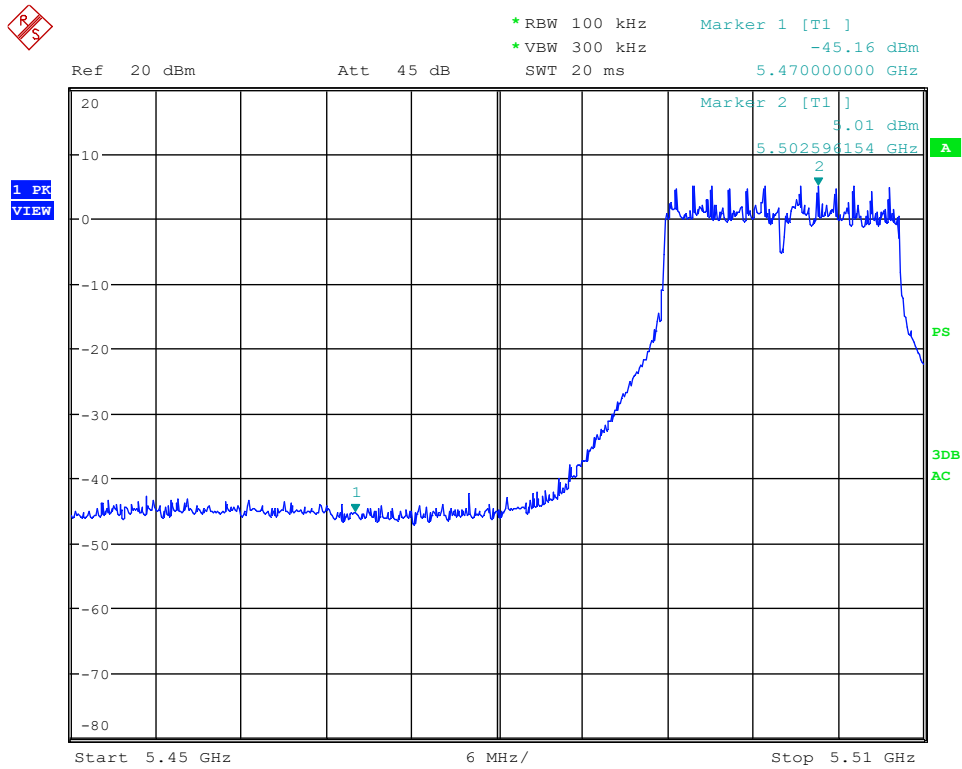
UNII 2A: 18 GHz to 40 GHz



Date: 14.SEP.2021 16:24:01



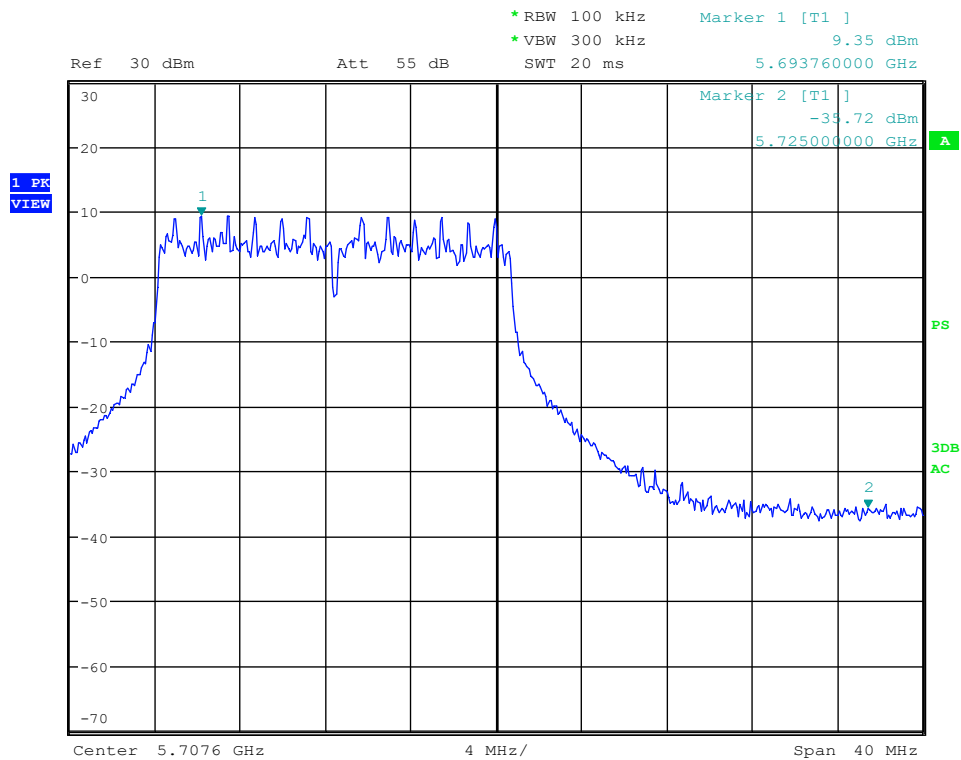
UNII 2C, OFDM: Band Edge - Low



Date: 14.SEP.2021 13:32:43



UNII 2C, OFDM: Band Edge - High



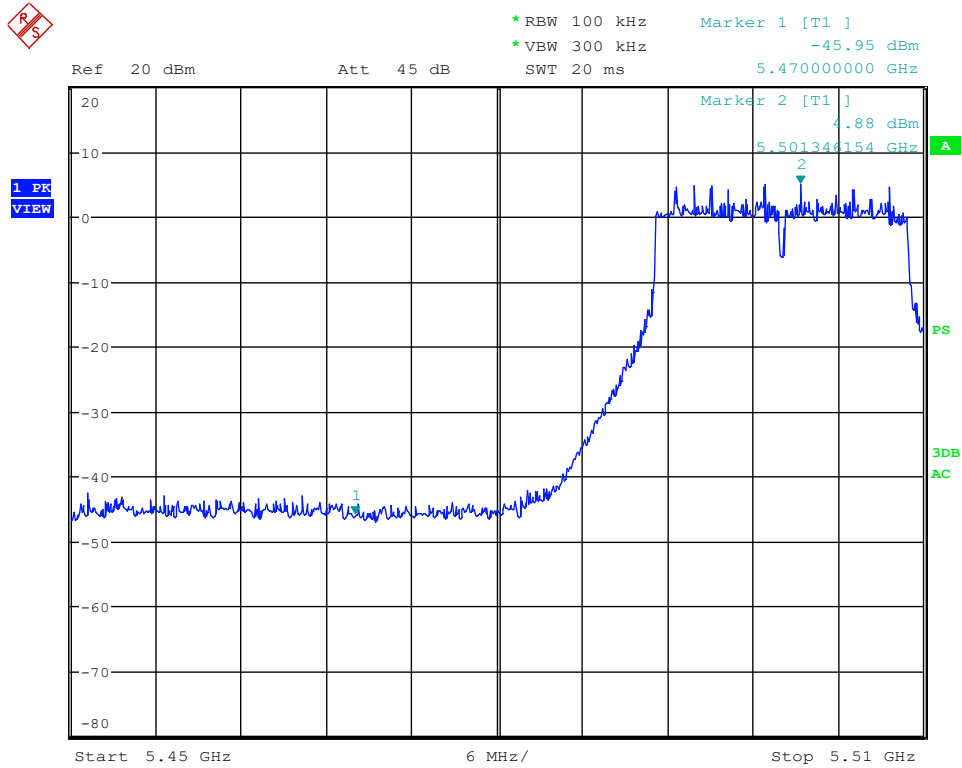
Date: 19.JAN.2022 12:54:34



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

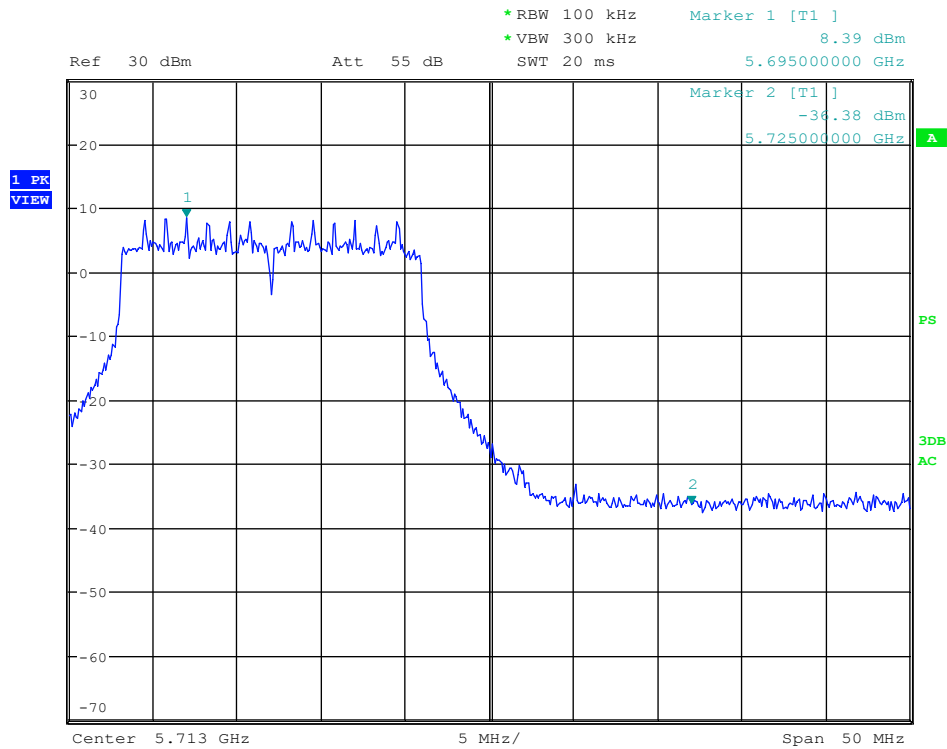
UNII 2C, HT20: Band Edge - Low



Date: 14.SEP.2021 13:33:34



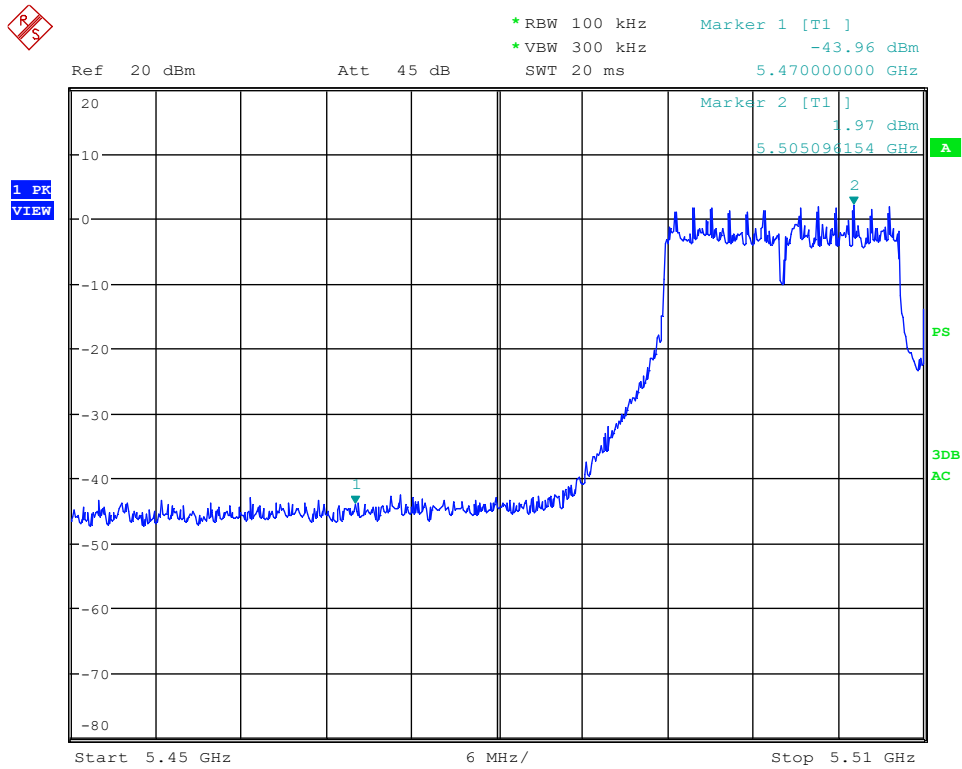
UNII 2C, HT20: Band Edge - High



Date: 19.JAN.2022 13:07:19



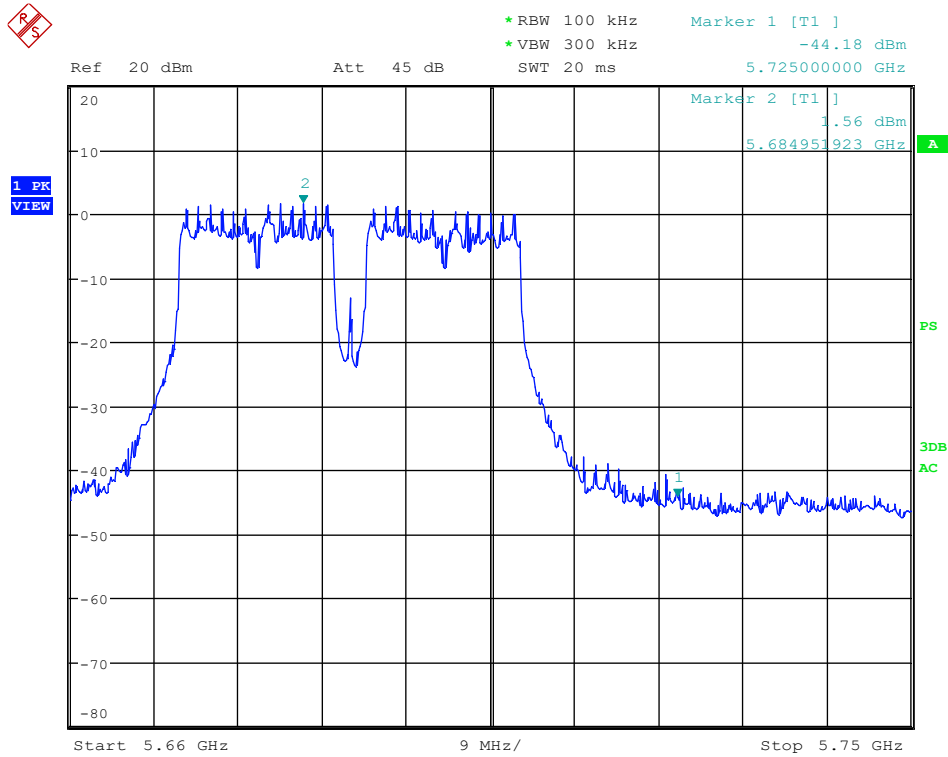
UNII 2C, non HT40: Band Edge - Low



Date: 14.SEP.2021 13:35:21



UNII 2C, non HT40: Band Edge - High



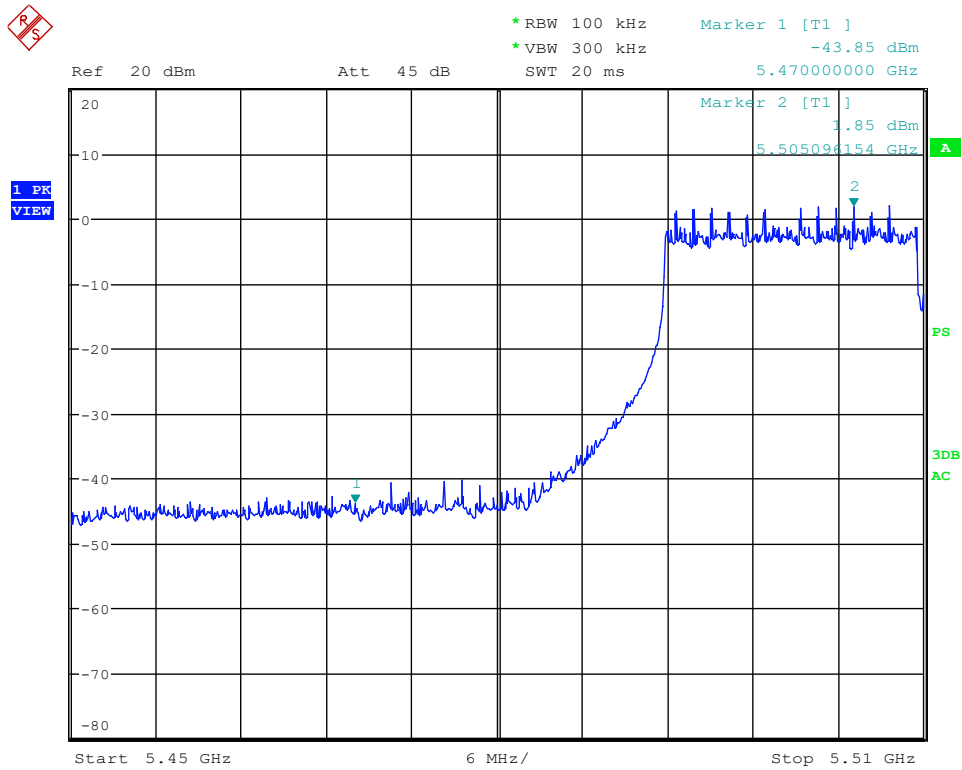
Date: 14.SEP.2021 13:50:18



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

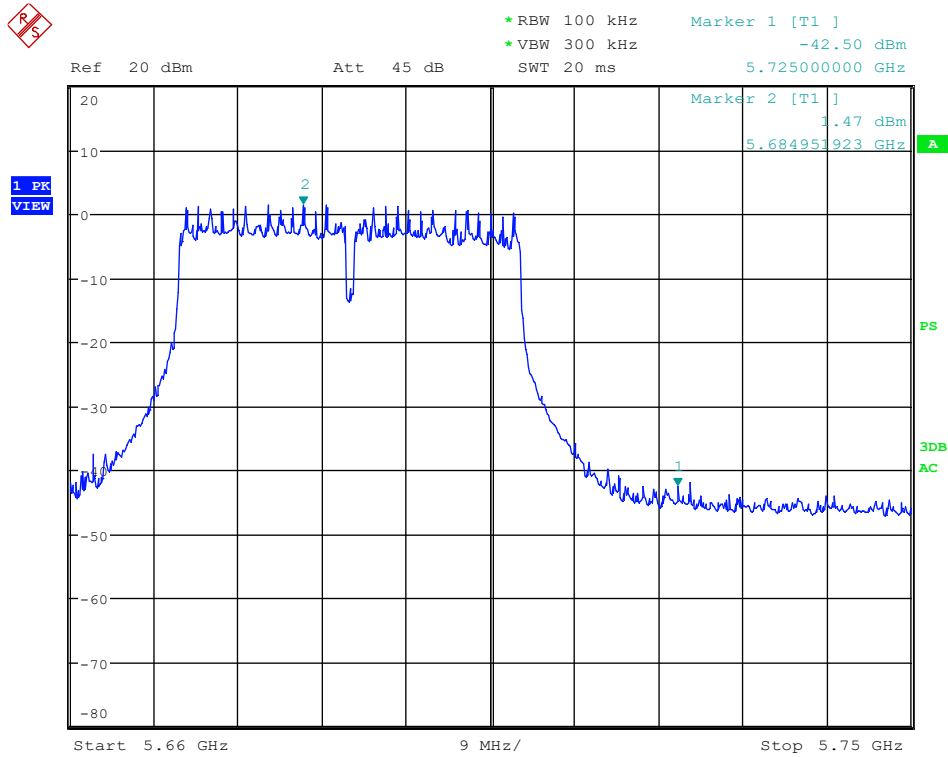
UNII 2C, HT40: Band Edge - Low



Date: 14.SEP.2021 13:35:59



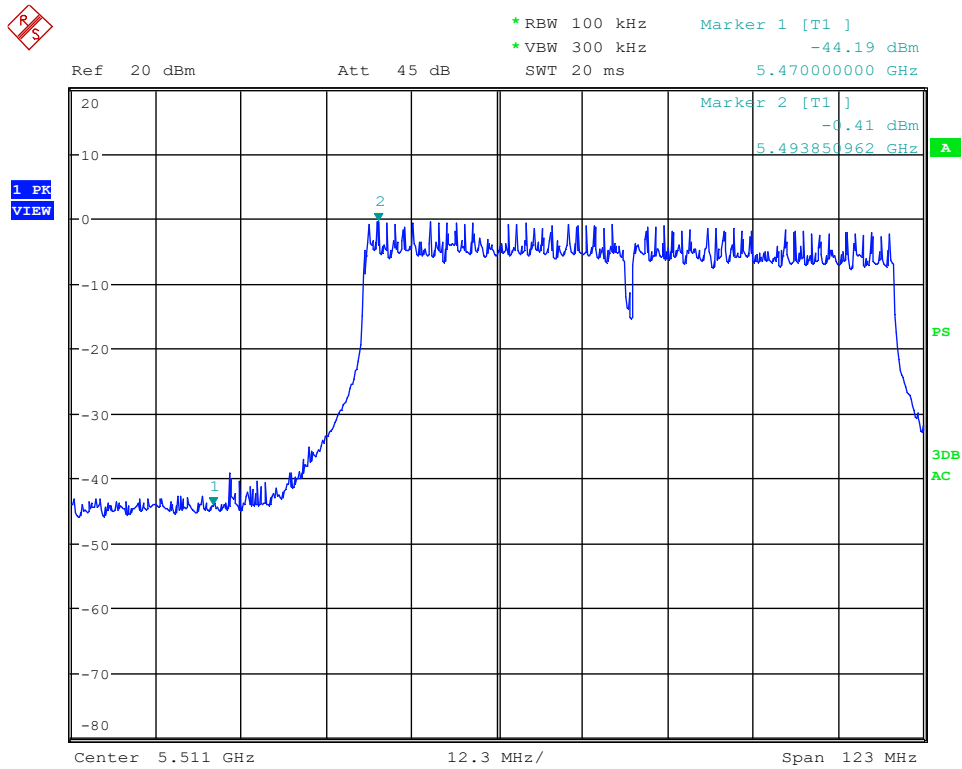
UNII 2C, HT40: Band Edge - High



Date: 14.SEP.2021 13:49:25



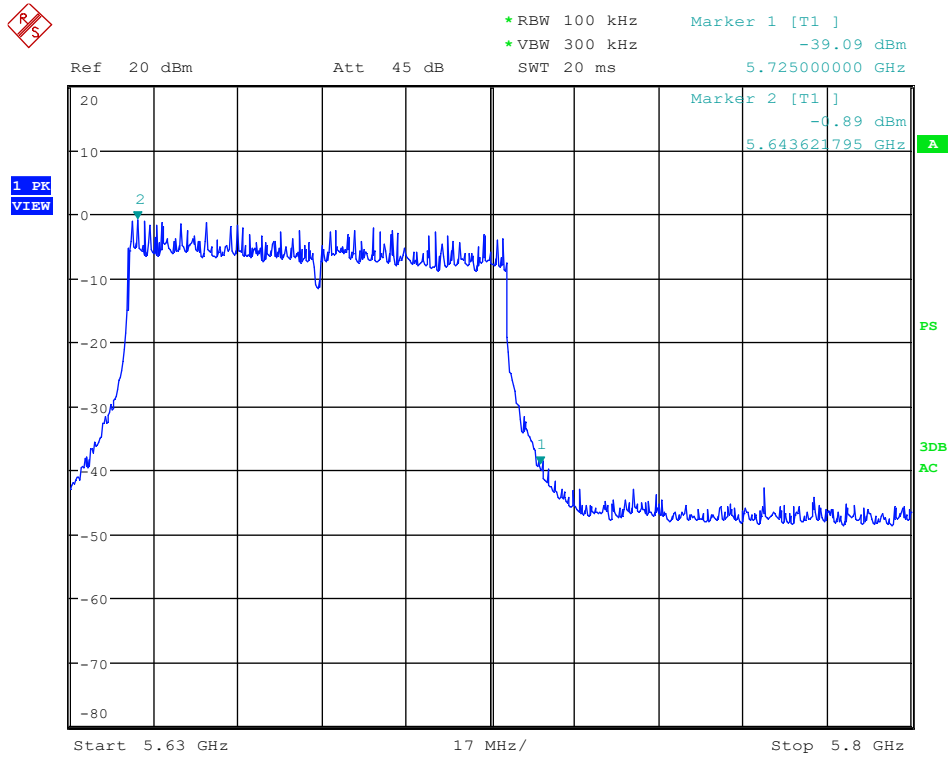
UNII 2C, HT80: Band Edge - Low



Date: 14.SEP.2021 13:38:03



UNII 2C, HT80: Band Edge - High



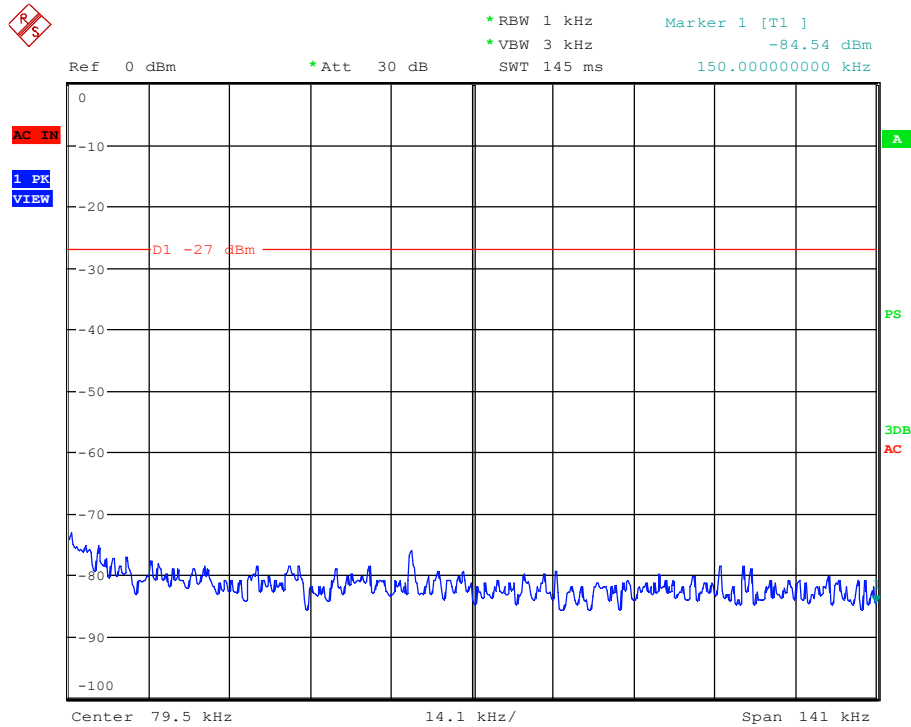
Date: 14.SEP.2021 13:47:27



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

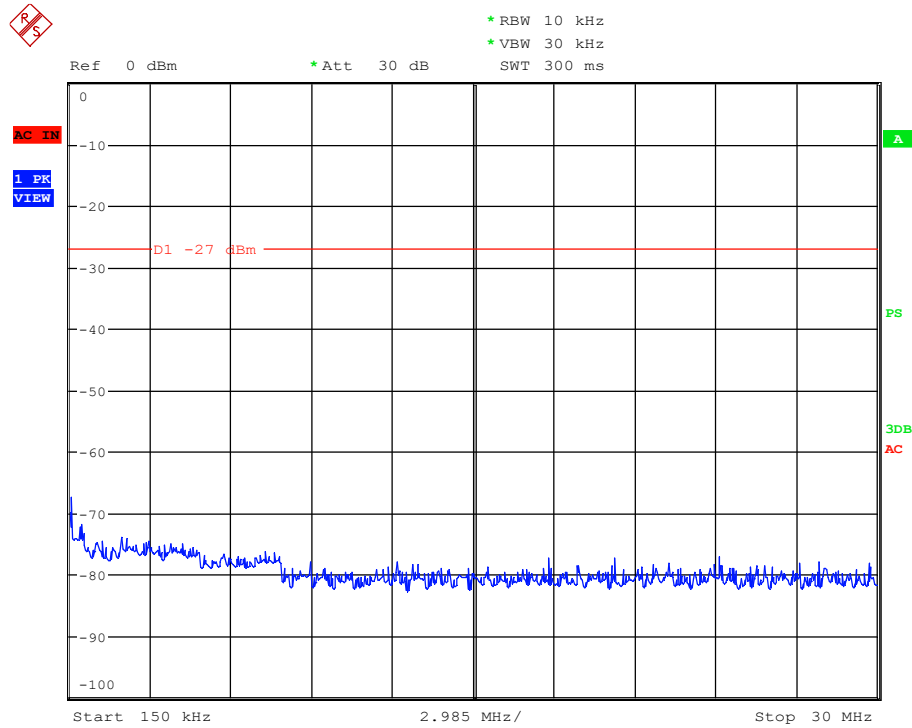
UNII 2C: 0.009 MHz to 0.15 MHz



Date: 14.SEP.2021 16:31:41

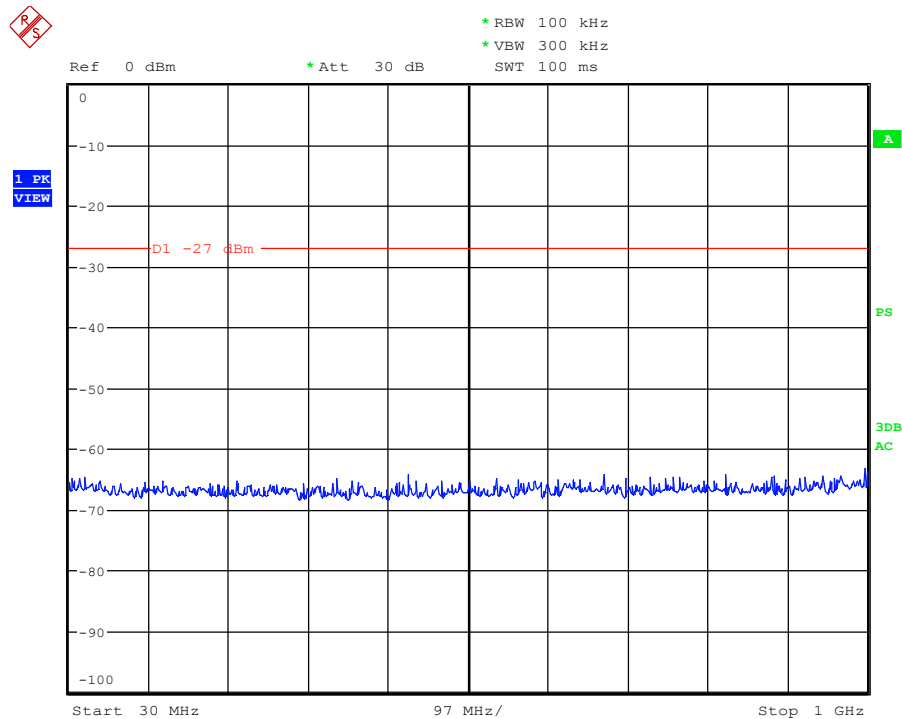


UNII 2C: 0.15 MHz to 30 MHz



Date: 14.SEP.2021 16:32:42

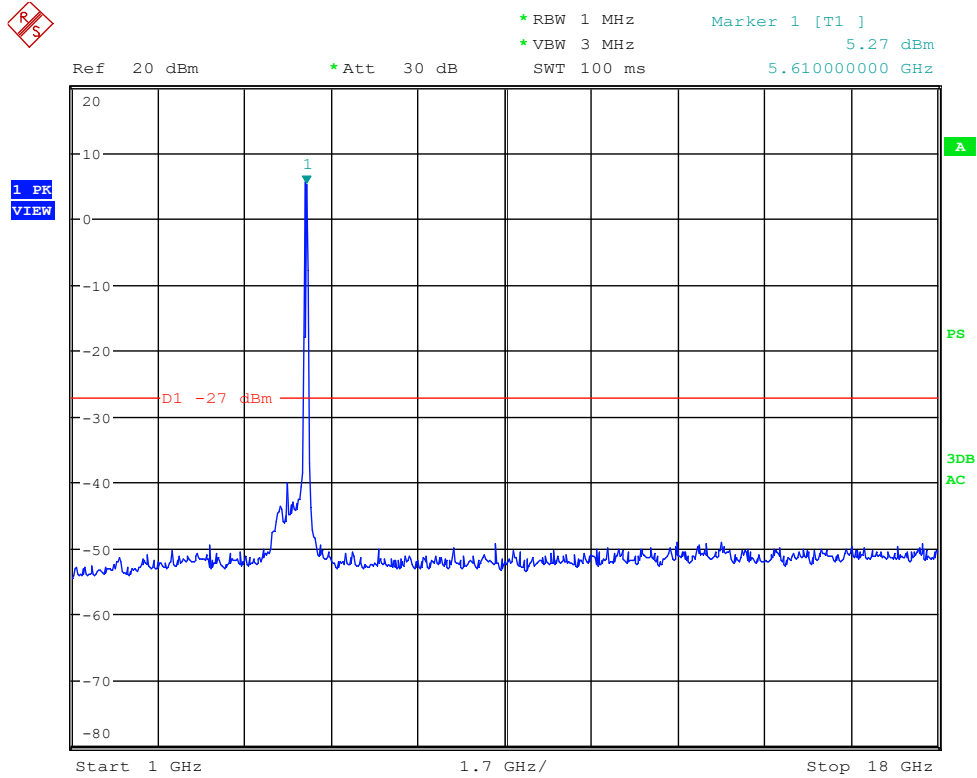
UNII 2C: 30 MHz to 1000 MHz



Date: 14.SEP.2021 16:33:33



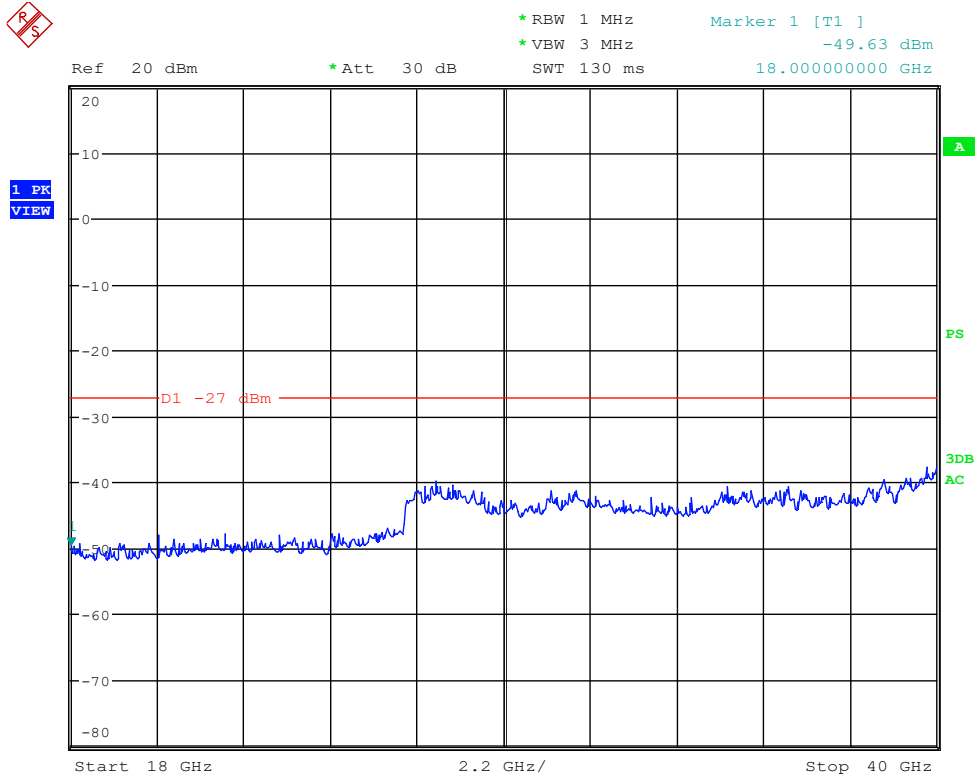
UNII 2C: 1 GHz to 18 GHz



Date: 14.SEP.2021 16:35:12



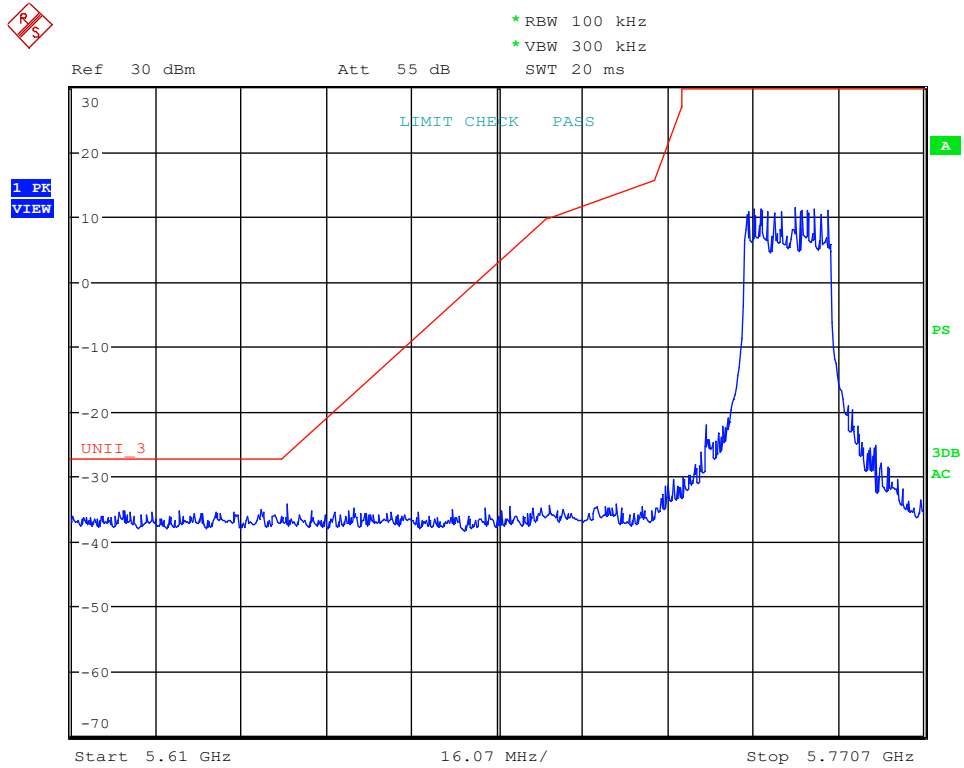
UNII 2C: 18 GHz to 40 GHz



Date: 14.SEP.2021 16:35:44



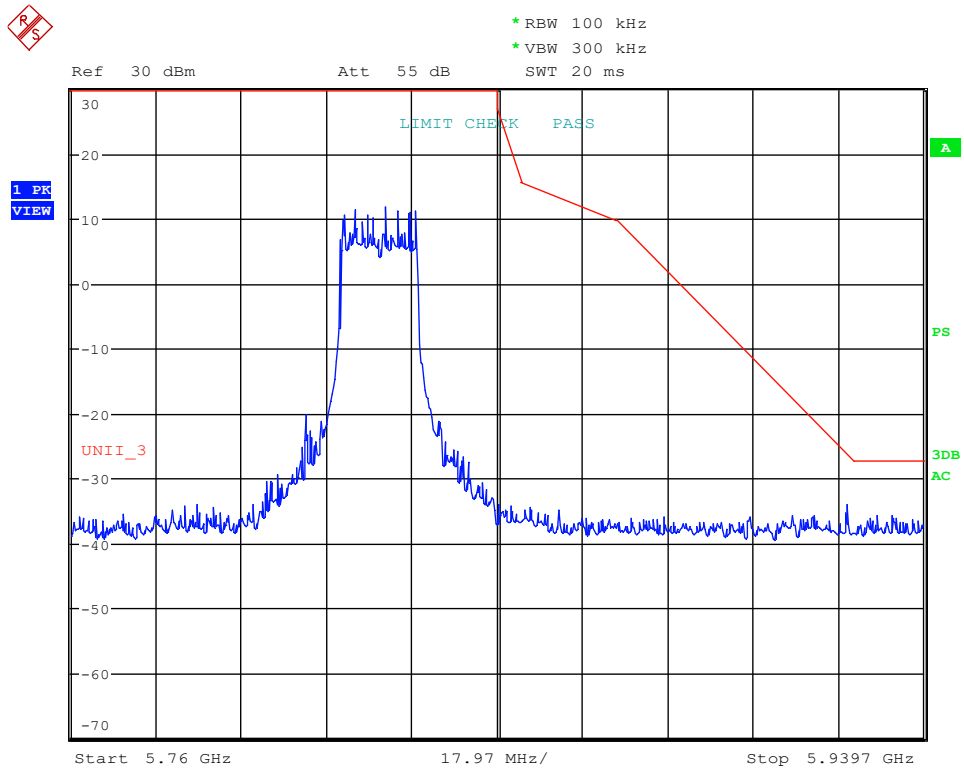
UNII 3, OFDM: Band Edge - Low



Date: 14.SEP.2021 14:14:58



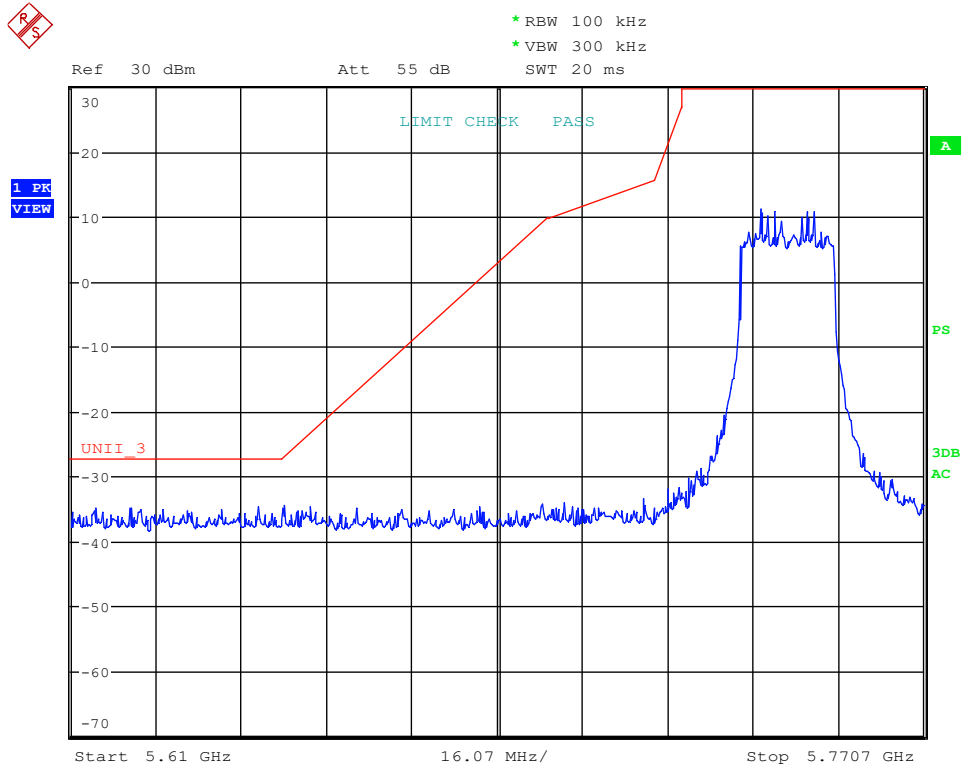
UNII 3, OFDM: Band Edge - High



Date: 14.SEP.2021 14:25:54



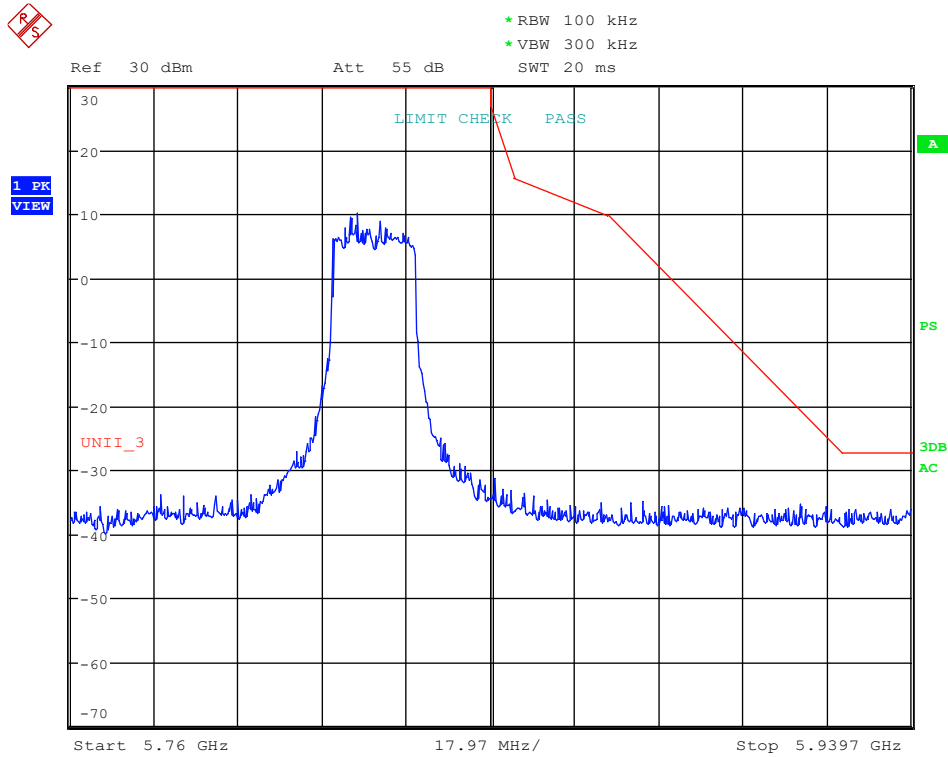
UNII 3, HT20: Band Edge - Low



Date: 14.SEP.2021 14:14:10



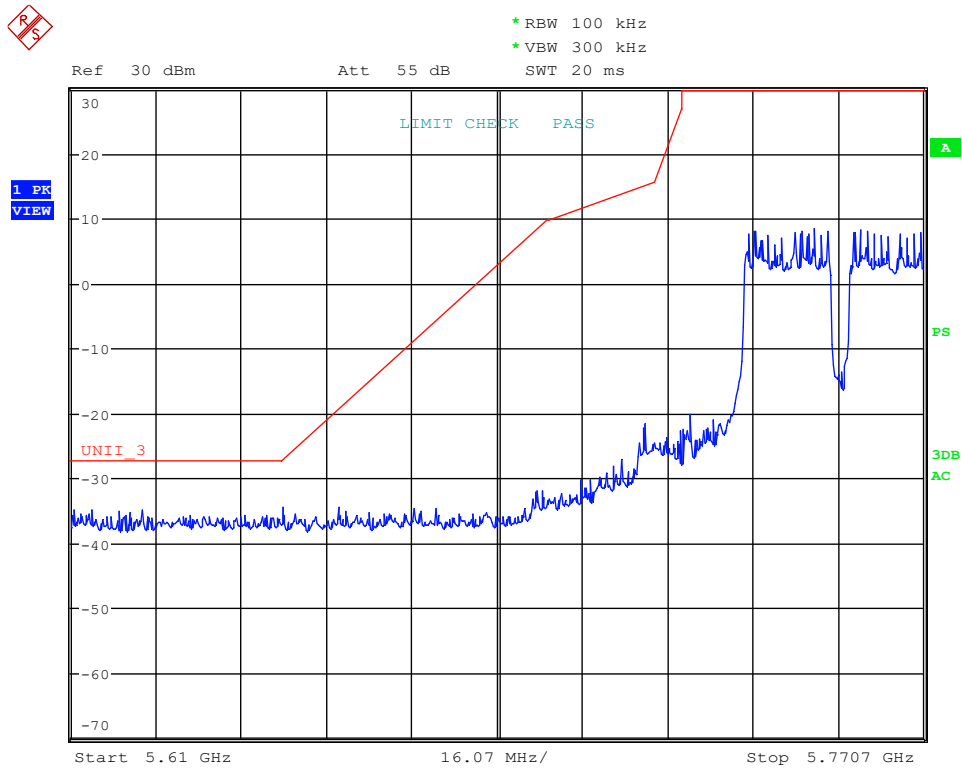
UNII 3, HT20: Band Edge - High



Date: 14.SEP.2021 14:25:18



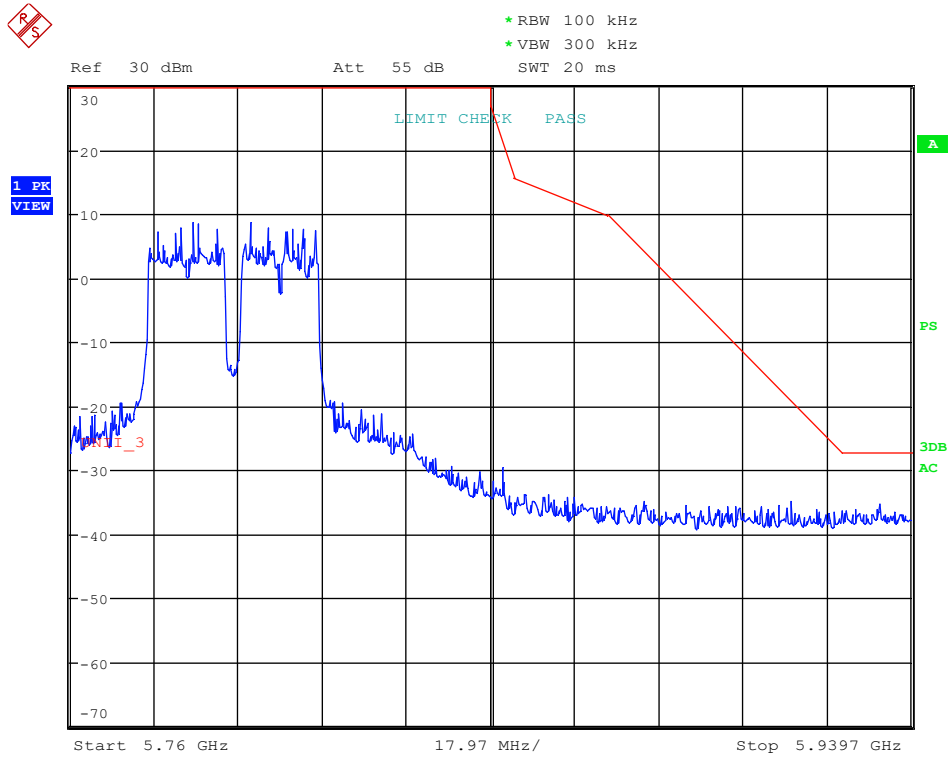
UNII 3, non HT40: Band Edge - Low



Date: 14.SEP.2021 14:16:16



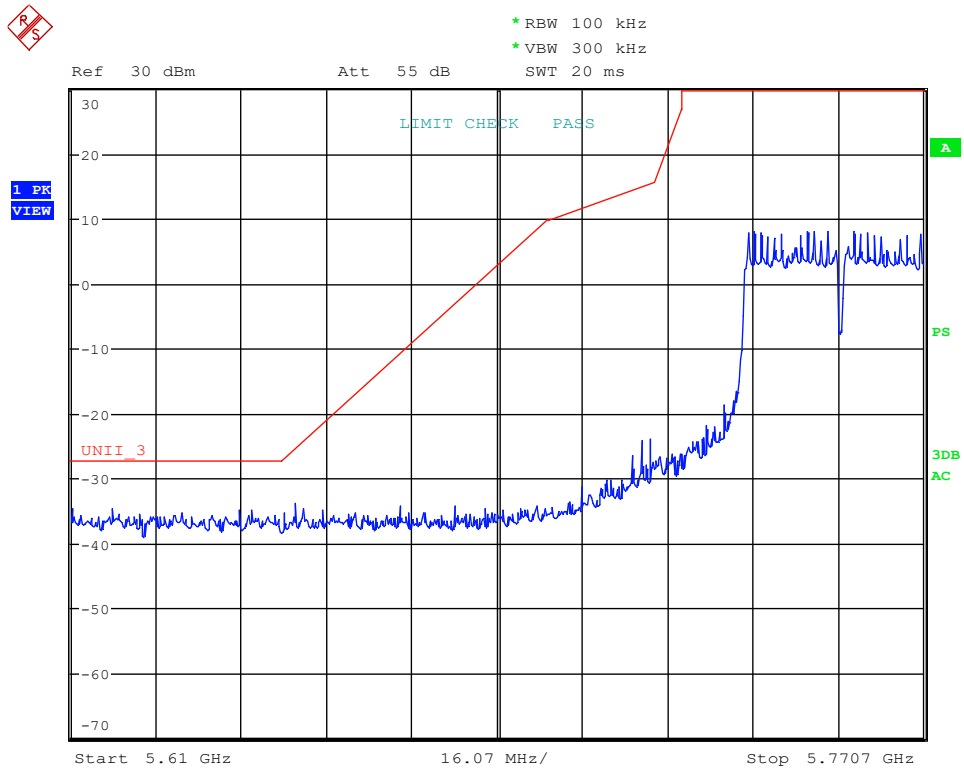
UNII 3, non HT40: Band Edge - High



Date: 14.SEP.2021 14:26:56



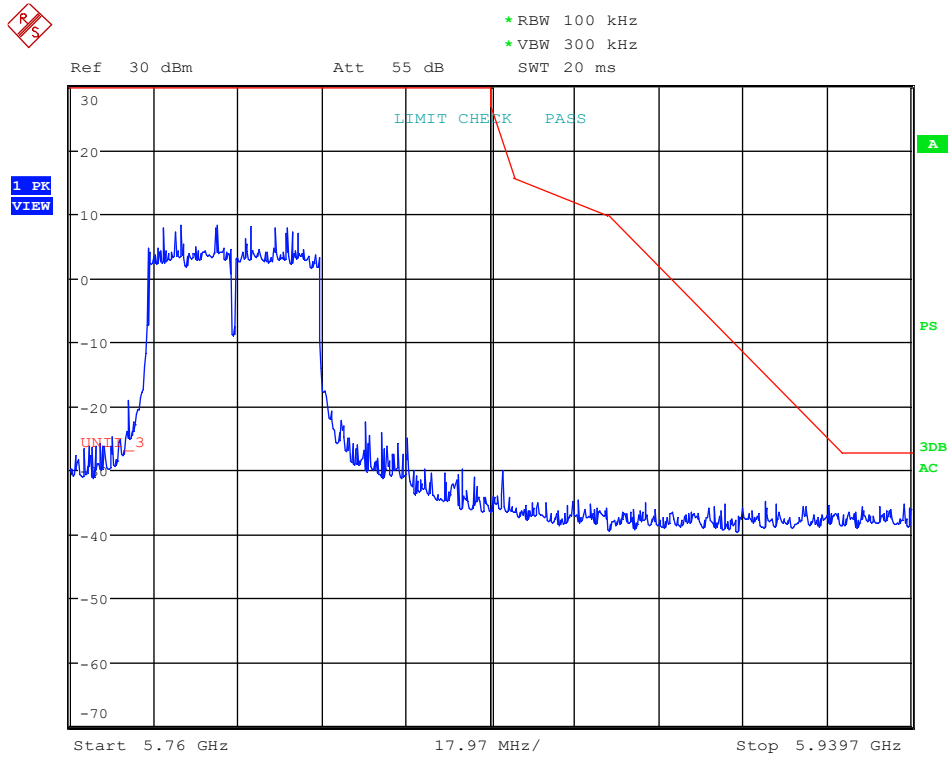
UNII 3, HT40: Band Edge - Low



Date: 14.SEP.2021 14:17:50



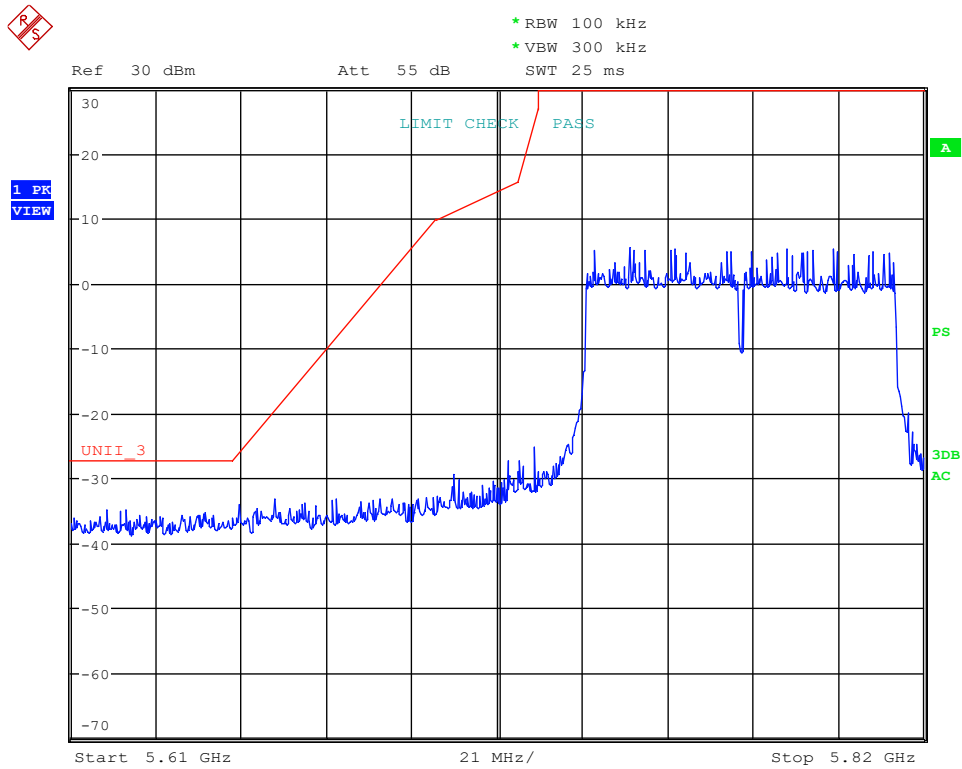
UNII 3, HT40: Band Edge - High



Date: 14.SEP.2021 14:27:38



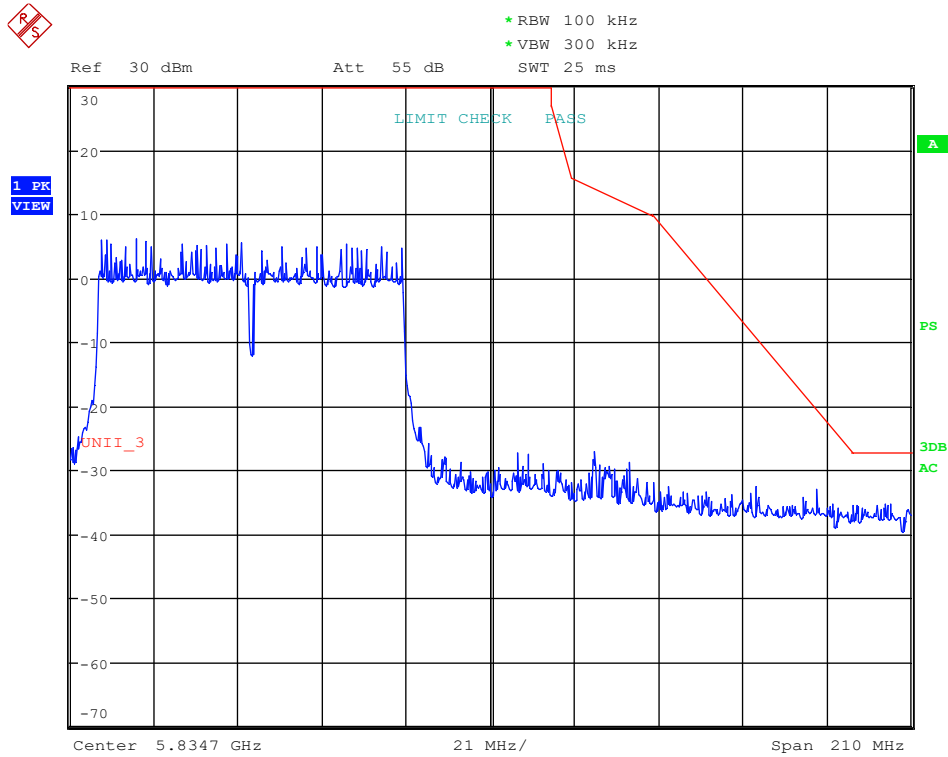
UNII 3, HT80: Band Edge - Low



Date: 14.SEP.2021 14:19:50



UNII 3, HT80: Band Edge - High



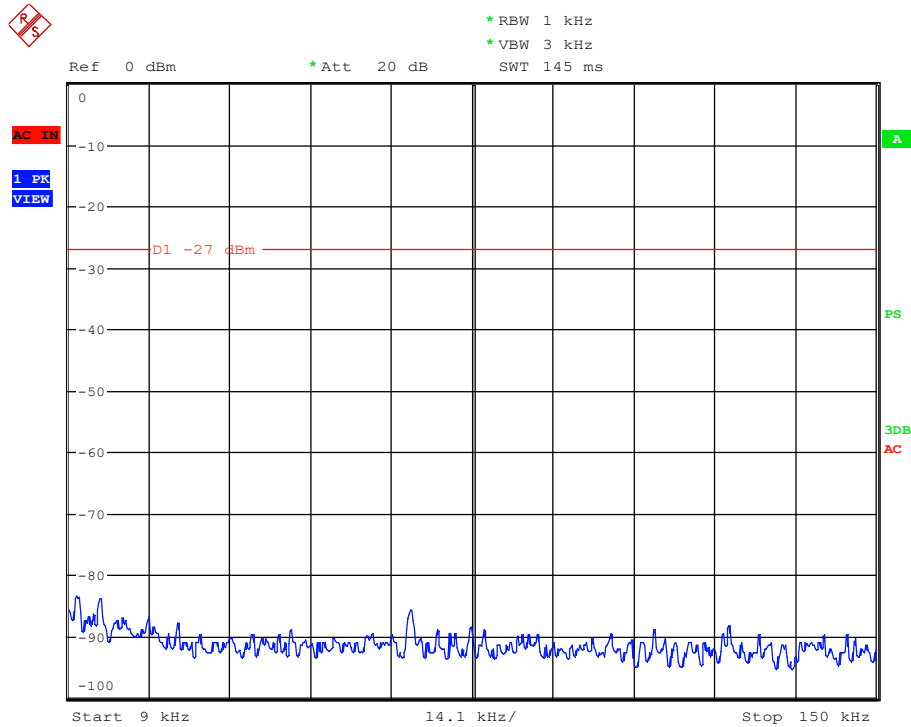
Date: 14.SEP.2021 14:20:52



Order Number: F2P19924D

Applicant: PCTEL, Inc
FCC ID: NYPRMWIFIAC2X2

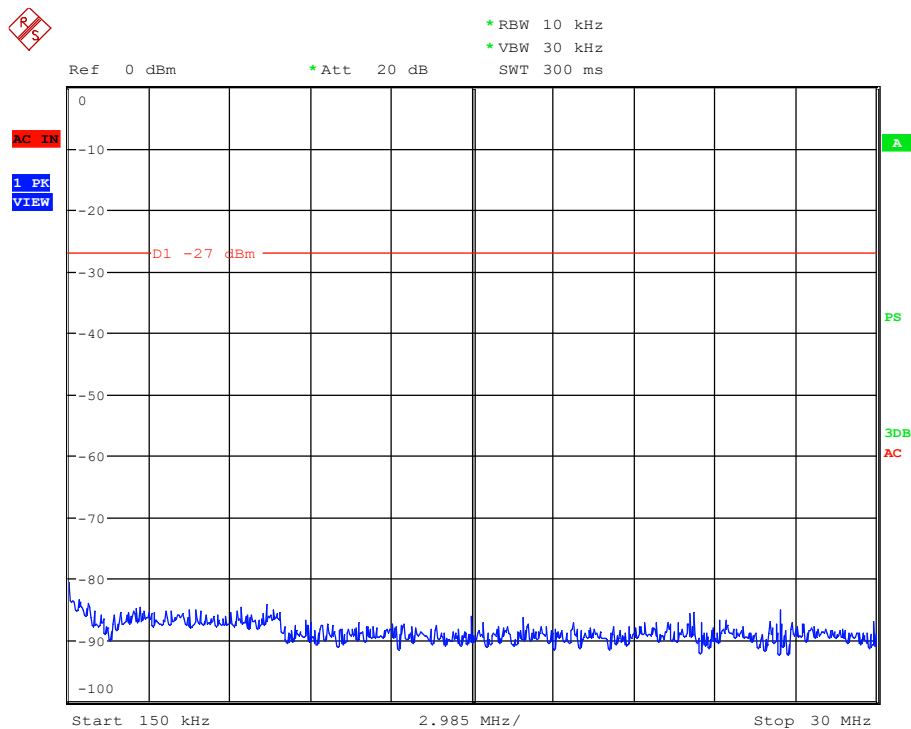
UNII 3: 0.009 MHz to 0.15 MHz



Date: 14.SEP.2021 16:43:54



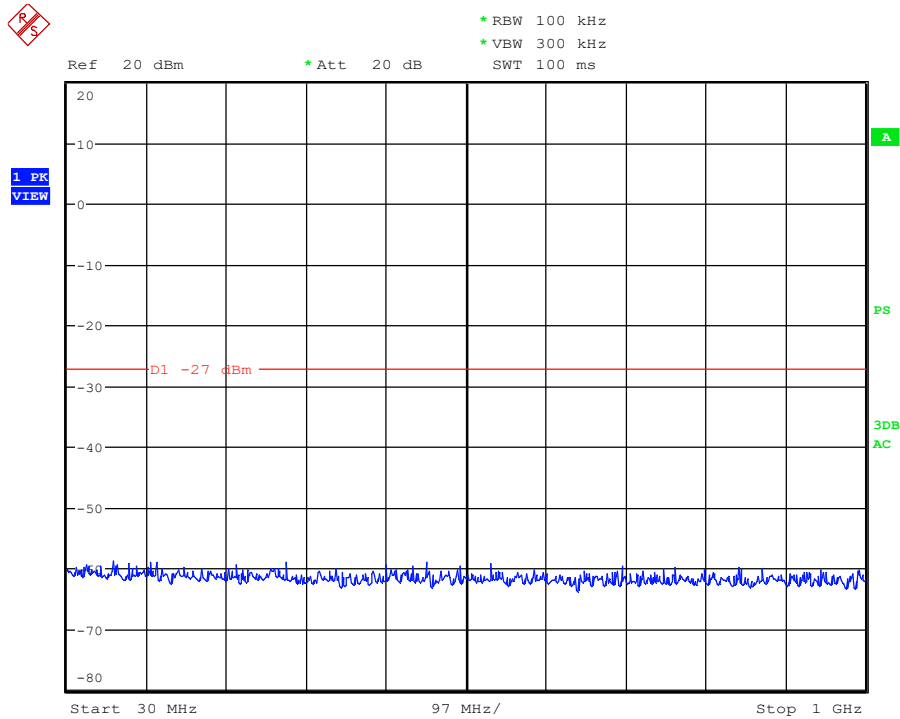
UNII 3: 0.15 MHz to 30 MHz



Date: 14.SEP.2021 16:43:07



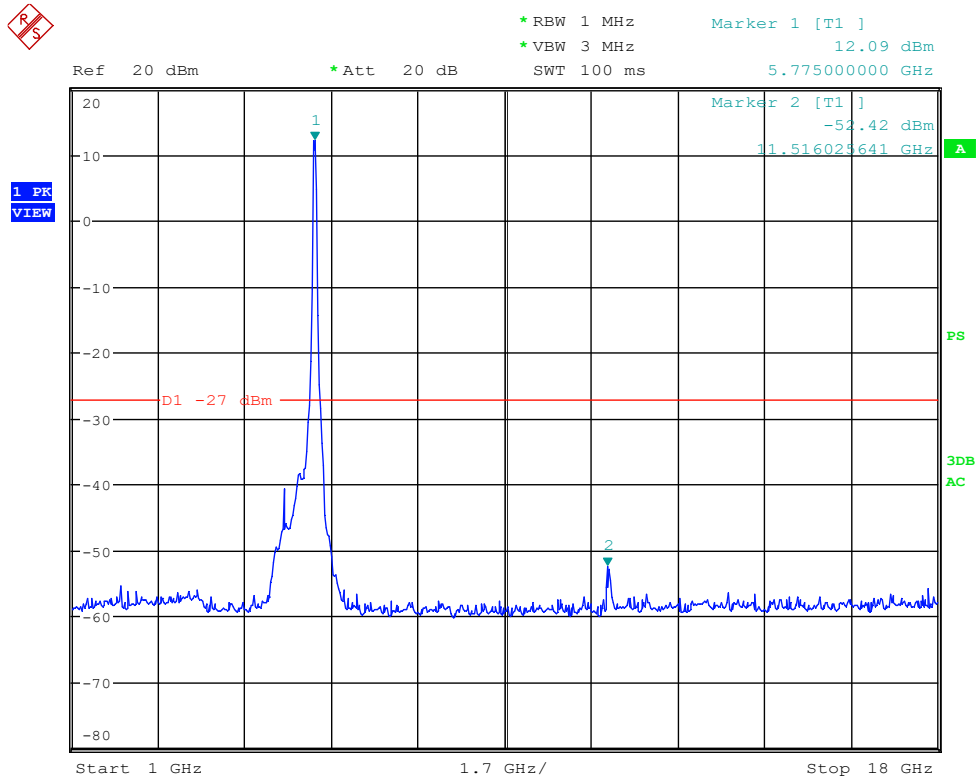
UNII 3: 30 MHz to 1000 MHz



Date: 14.SEP.2021 16:42:07



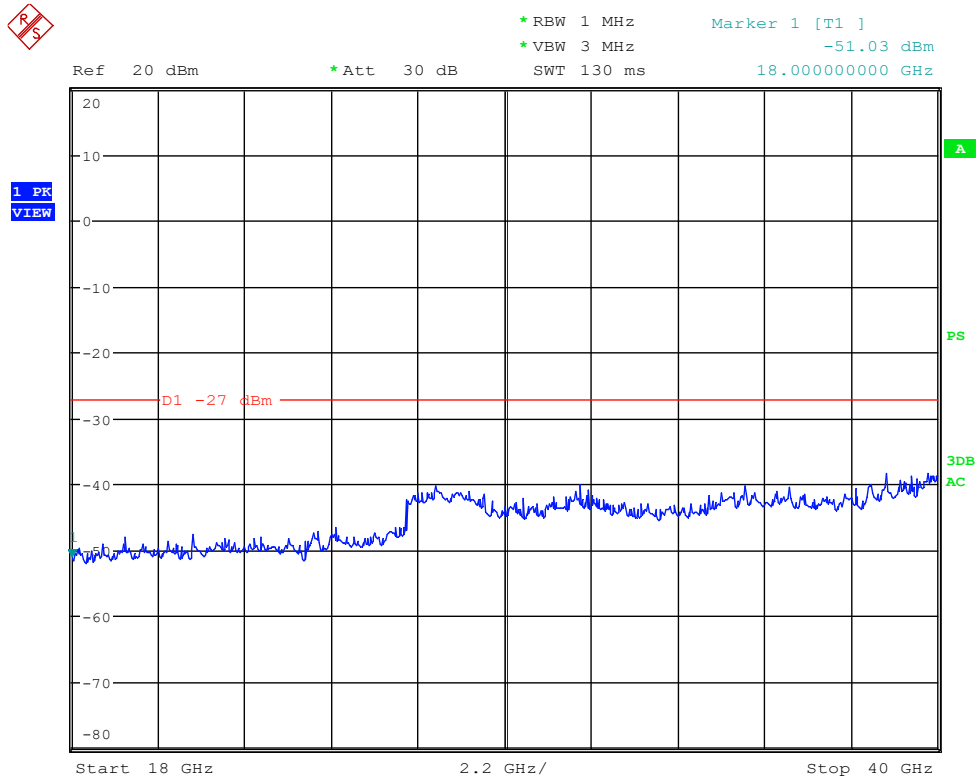
UNII 3: 1 GHz to 18 GHz



Date: 14.SEP.2021 16:40:58



UNII 3: 18 GHz to 40 GHz



Date: 14.SEP.2021 16:38:45



11 CONDUCTED EMISSIONS

11.1 Requirements

In accordance with FCC CFR 47 Part 15.207(a), "Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

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

*Decreases with the logarithm of the frequency.

11.2 Procedure

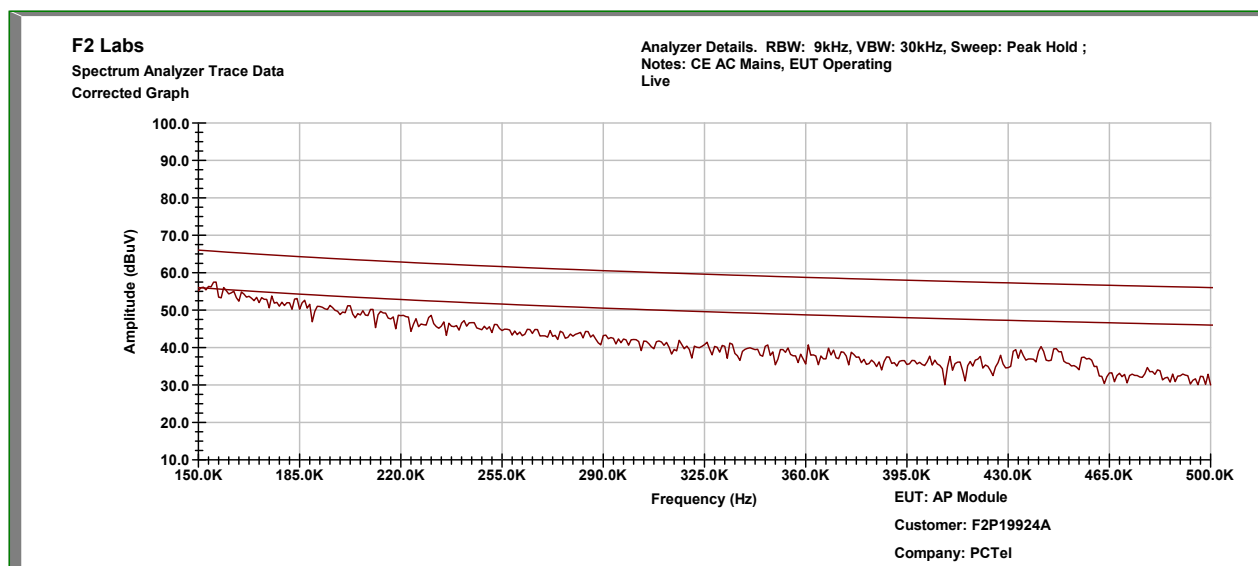
The EUT was placed on a 1.0 x 1.5 meter non-conductive table, 0.8 meter above a horizontal ground plane and 0.4 meter from a vertical ground plane. Power was provided to the EUT through a LISN bonded to a 3 x 2 meter ground plane. The LISN and peripherals were supplied power through a filtered AC power source. The output of the LISN was connected to the input of the receiver via a transient limiter, and emissions in the range 150 kHz to 30 MHz were measured. The measurements were recorded using the quasi-peak and average detectors as directed by the standard, and the resolution bandwidth during testing was 9 kHz. The raw measurements were corrected to allow for attenuation from the LISN, transient limiter and cables.



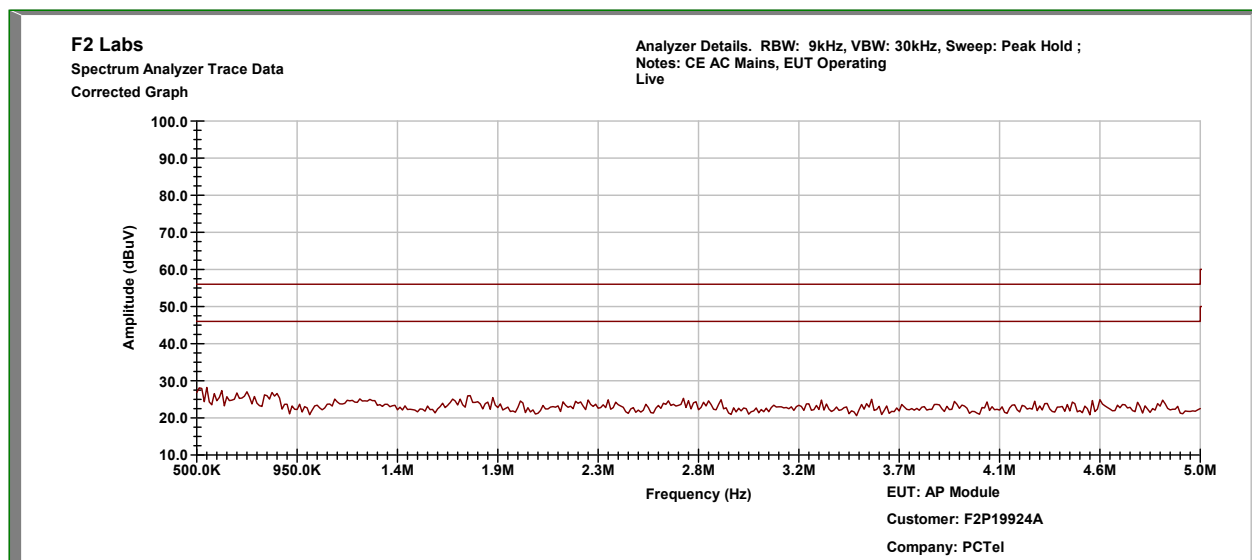
11.3 Conducted Emissions Test Data

Test Date(s):	2022-04-28	Test Engineer:	J. Chiller
Rule:	15.207	Air Temperature:	20.6° C
Test Results:	Complies	Relative Humidity:	36%

Conducted Test – Live: 0.15 MHz to 0.5 MHz

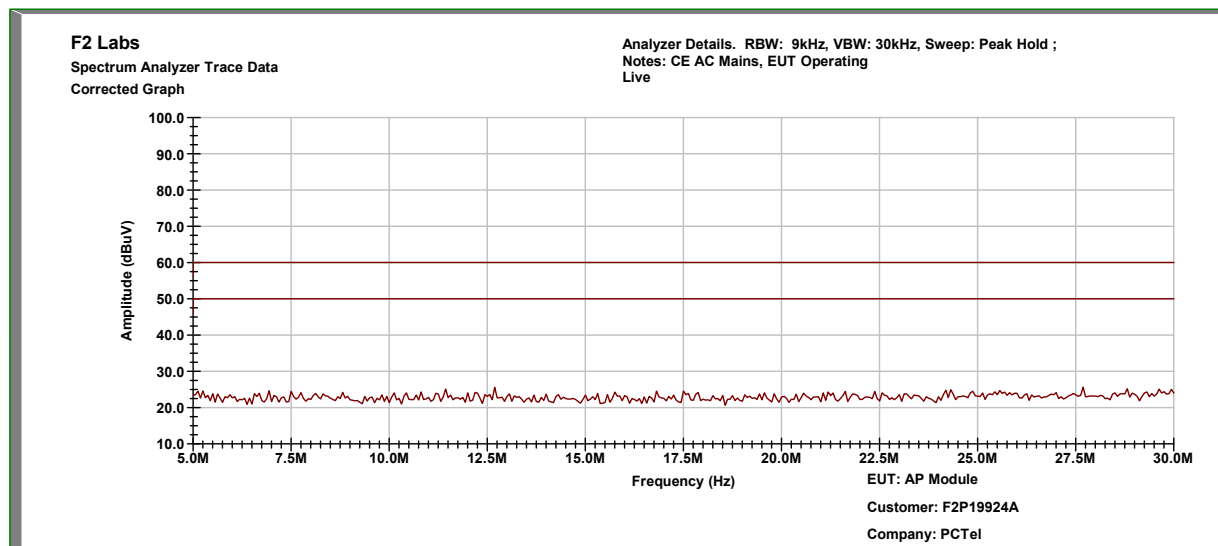


Conducted Test – Live: 0.5 MHz to 5.0 MHz





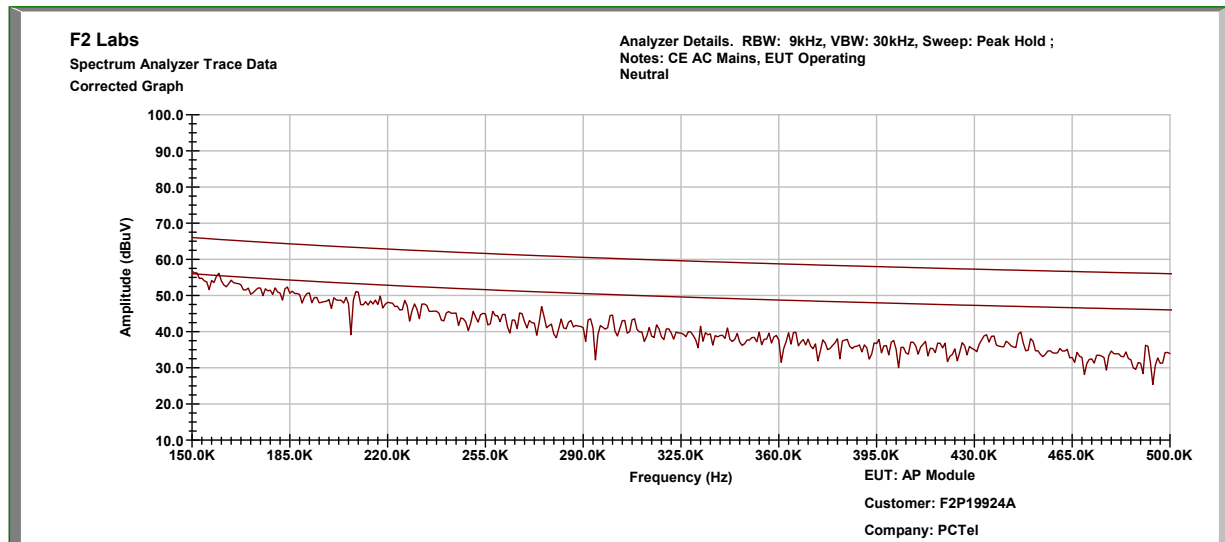
Conducted Test – Live: 5.0 MHz to 30.0 MHz



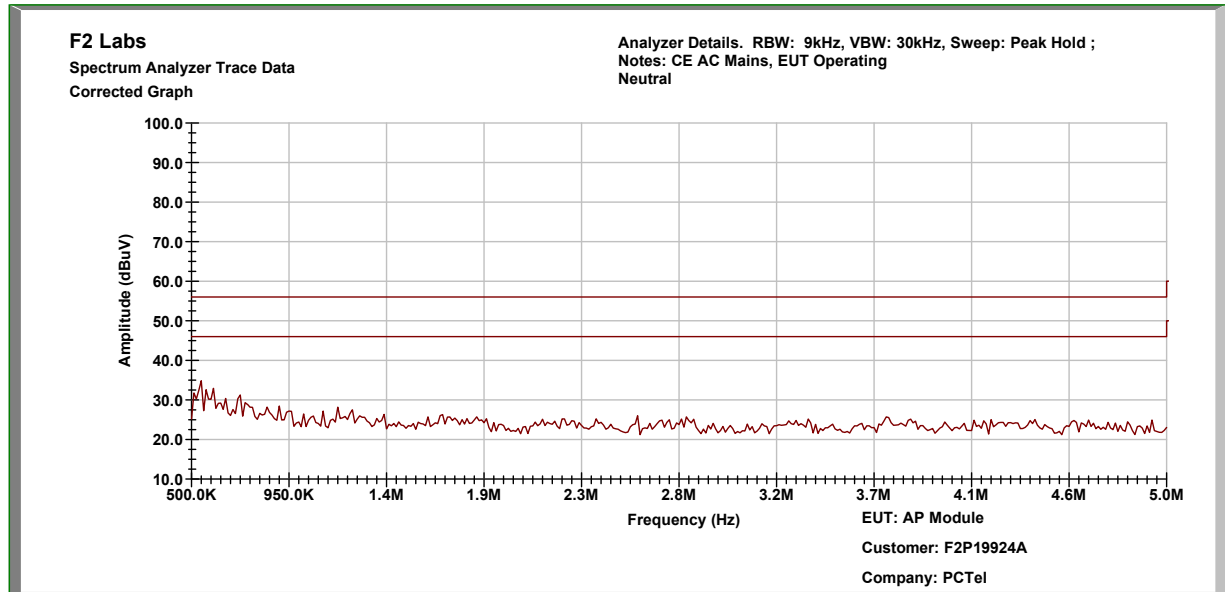
Top Discrete Measurements								
No.	Conductor	Frequency (MHz)	Detector	Level (dBμV)	Adjustment (dB)	Results (dBμV)	Limit (dBμV)	Margin (dB)
1	Line 1	0.156	Quasi-Peak	32.50	11.0	43.46	65.67	-22.2
		0.156	Average	13.96	11.0	24.92	55.67	-30.8
2	Line 1	0.162	Quasi-Peak	33.10	10.9	43.99	65.35	-21.4
		0.162	Average	11.53	10.9	22.42	55.35	-32.9
3	Line 1	0.175	Quasi-Peak	31.69	10.8	42.48	64.72	-22.2
		0.175	Average	11.56	10.8	22.35	54.72	-32.4



Conducted Test – Neutral: 0.15 MHz to 0.5 MHz

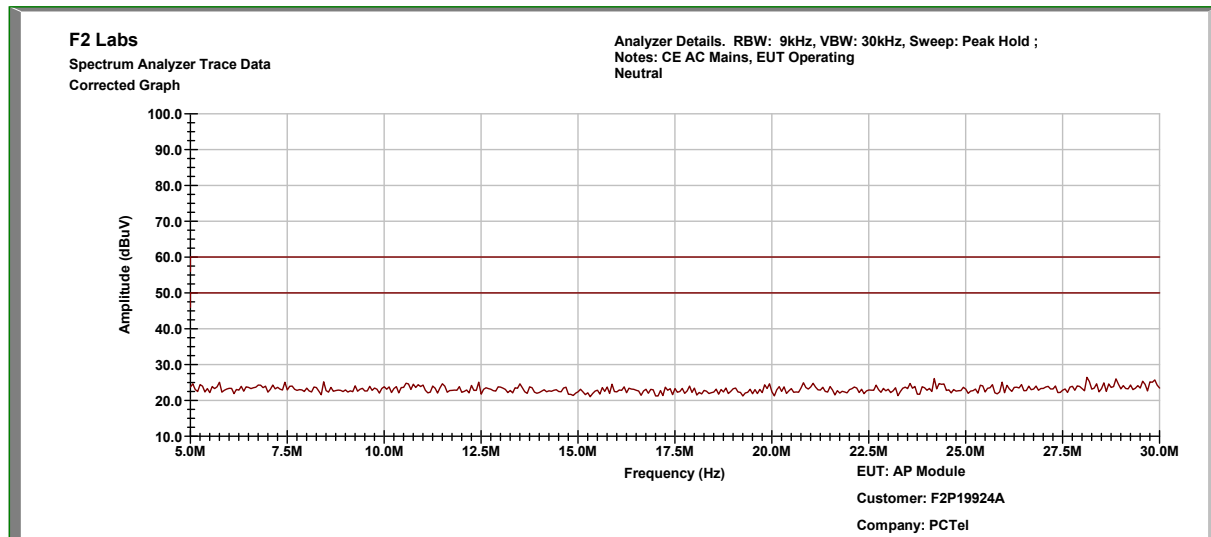


Conducted Test – Neutral: 0.5 MHz to 5.0 MHz





Conducted Test – Neutral: 5.0 MHz to 30.0 MHz

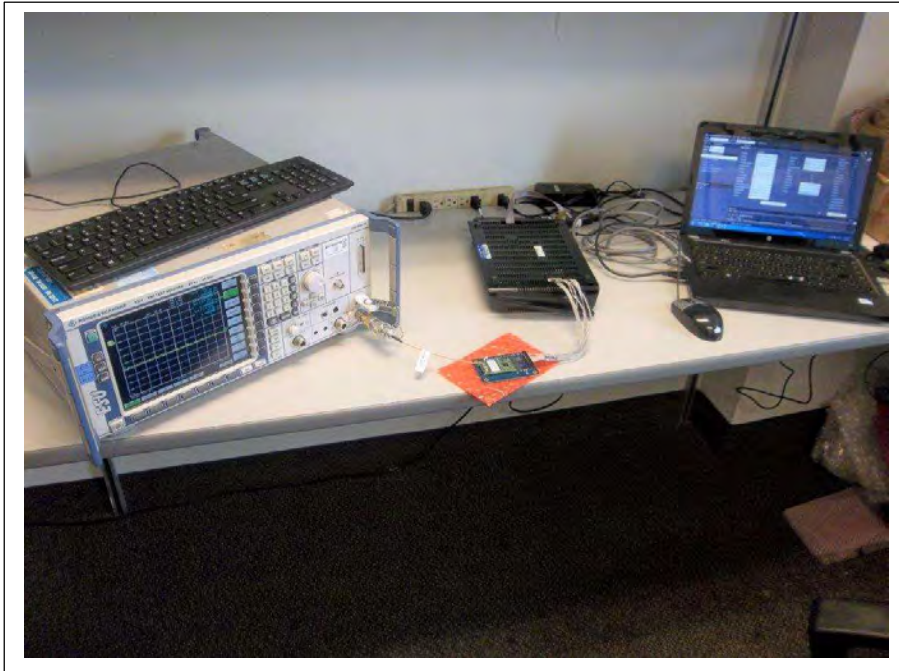


Top Discrete Measurements								
No.	Conductor	Frequency (MHz)	Detector	Level (dB μ V)	Adjustment (dB)	Results (dB μ V)	Limit (dB μ V)	Margin (dB)
1	Line 2	0.151	Quasi-Peak	38.43	11.8	50.19	65.91	-15.7
			Average	15.73	11.8	27.49	55.91	-28.4
2	Line 2	0.16	Quasi-Peak	35.37	11.7	47.03	65.46	-18.4
			Average	15.51	11.7	27.17	55.46	-28.3
3	Line 2	0.165	Quasi-Peak	36.31	11.6	47.93	65.21	-17.3
			Average	14.14	11.6	25.76	55.21	-29.4



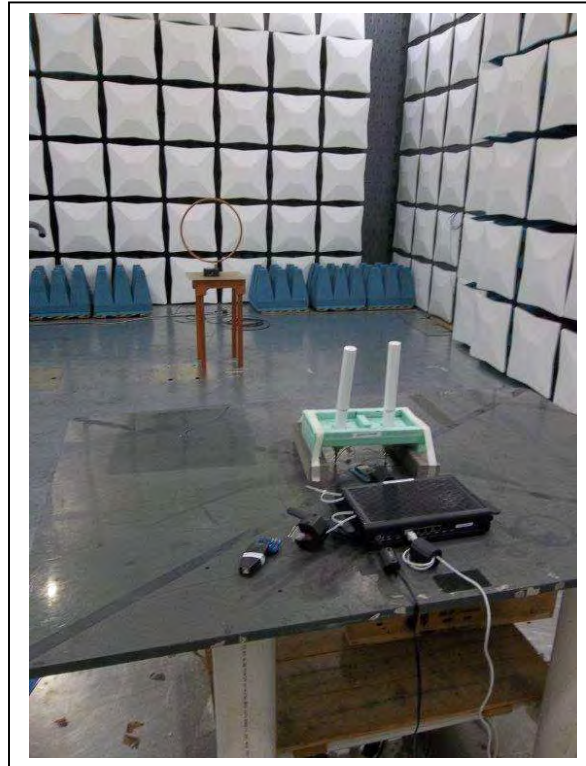
12 TEST SETUP PHOTOGRAPHS

General Conducted Test Setup



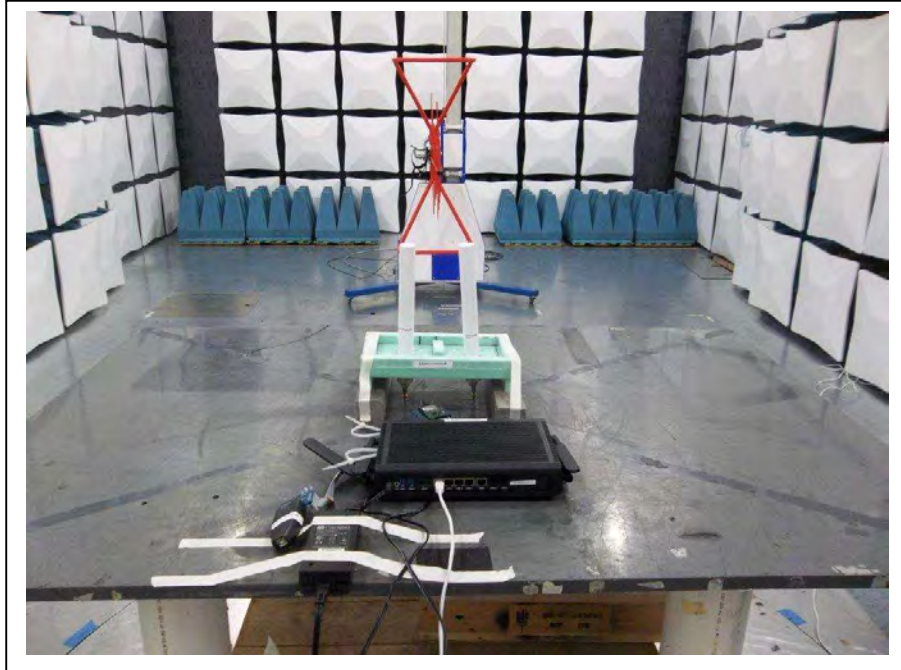


Radiated Spurious Emissions, Less Than 30 MHz



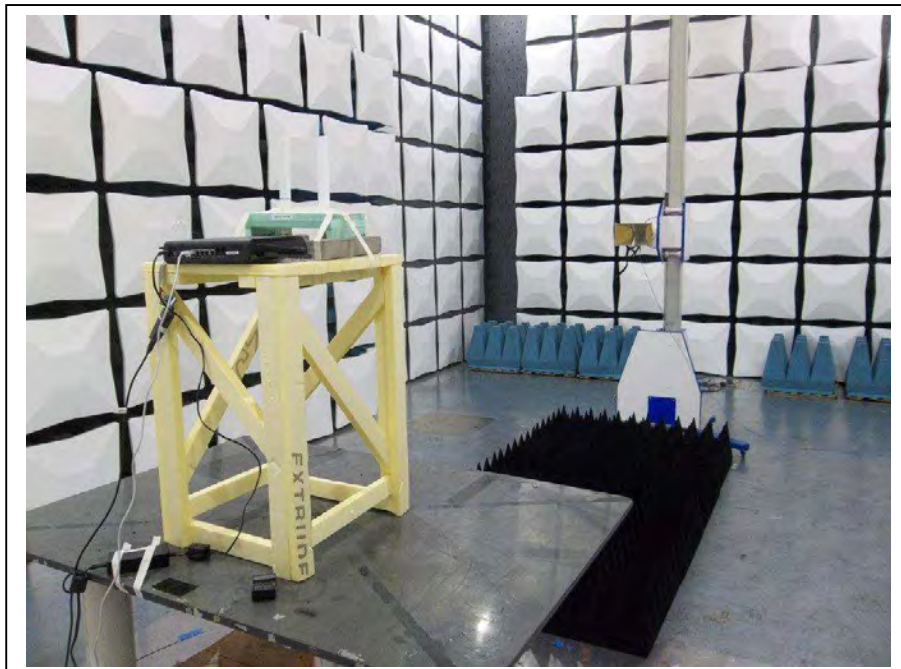
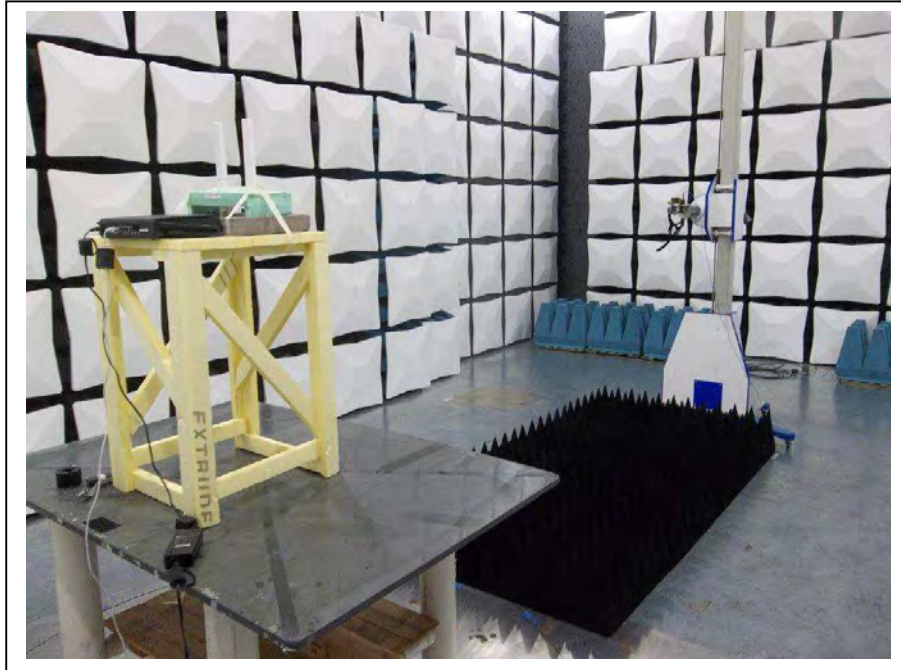


Radiated Spurious Emissions, 30 MHz to 1000 MHz





Radiated Spurious Emissions, Greater than 1 GHz





Conducted Emissions

