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CERTIFICATION TEST REPORT

Manufacturer: PCTEL, Inc
471 Brighton Drive
Bloomington, Illinois 60108-3102 USA

Applicant: Same as Above

Product Name: Remote Access Point

Product Description: Rugged 802.11ac Access Point

**Operating Voltage/Freq.
of EUT During Testing:** 120V/60 Hz; POE 48VDC

Model: AP-WIFI-1200-US

FCC ID: NYPWIFIAP1200

Testing Commenced: 2020-10-09

Testing Ended: 2021-05-05

Summary of Test Results: In Compliance

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Rule(s):

- FCC Part 15 Subpart E – Unlicensed National Information Infrastructure Devices, Section 15.407 General technical requirements
- FCC15.207 - Conducted Limits



Evaluation Conducted by:

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Report Reviewed by:

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to ANSI C63.10:2013 and recommended FCC procedure of measurement of DTS operating under Section 15.407 and in KDB789033 v02r01. A list of the measurement equipment can be found in Section 6.

1.3 Uncertainty Budget:

The uncertainty in EMC measurements arises from several factors which affect the results, some associated with environmental conditions in the measurement room, the test equipment being used, and the measurement techniques adopted.

The measurement uncertainty budgets detailed below are calculated from the test and calibration data and are expressed with a 95% confidence factor using a coverage factor of $k=2$. The Uncertainty for a laboratory are referred to as U_{lab} . For Radiated and Conducted Emissions, the Expanded Uncertainty is compared to the U_{cispr} values to determine if a specific margin is required to deem compliance.

U_{lab}

Measurement Range	Combined Uncertainty	Expanded Uncertainty
Radiated Emissions <1 GHz @ 3m	2.54	5.07dB
Radiated Emissions <1 GHz @ 10m	2.55	5.09dB
Radiated Emissions 1 GHz to 2.7 GHz	1.81	3.62dB
Radiated Emissions 2.7 GHz to 18 GHz	1.55	3.10dB
AC Power Line Conducted Emissions, 150kHz to 30 MHz	1.38	2.76dB
AC Power Line Conducted Emissions, 9kHz to 150kHz	1.66	3.32dB

U_{cispr}

Measurement Range	Expanded Uncertainty
Radiated Emissions <1 GHz @ 3m	5.2dB
Radiated Emissions <1 GHz @ 10m	5.2dB
Radiated Emissions 1 GHz to 2.7 GHz	Under Consideration
Radiated Emissions 2.7 GHz to 18 GHz	Under Consideration
AC Power Line Conducted Emissions, 150kHz to 30 MHz	3.6dB
AC Power Line Conducted Emissions, 9kHz to 150kHz	4.0dB

If U_{lab} is less than or equal to U_{cispr} , then:

- compliance is deemed to occur if no measured disturbance exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance exceeds the disturbance limit.

If U_{lab} is greater than U_{cispr} in table 1, then:

- compliance is deemed to occur if no measured disturbance, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance, increased by $(U_{lab} - U_{cispr})$, exceeds the disturbance limit.

Note: Only measurements listed in the tables above that relate to tests included in this Test Report are applicable.



1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P19923A-06E	First Issue	2021-05-05	K. Littell

**2 SUMMARY OF TEST RESULTS**

Note: Results below apply to both 5.1 GHz and 5.7 GHz.

Test Name	Standard(s)	Results
Radiated Spurious Emissions: 5.15-5.25 GHz	CFR 47 Part 15.205 / KDB789033	Complies
Occupied Bandwidth	CFR 47 Part 15.407(e) / Part 15.209 / KDB789033	Complies
Output Power	CFR 47 Part 15.407(a)(1)(iv) / Part 15.407(a)(3) / KDB789033	Complies
Power Spectral Density	CFR 47 Part 15.407(a)(1)(iv) / Part 15.407(a)(3) / KDB789033	Complies
Radiated Spurious Emissions: 5.725-5.85 GHz	CFR 47 Part 15.205 / KDB789033	Complies
Conducted Spurious Emissions	CFR 47 Part 15.407(b)(1,4)	Complies
Voltage Variations (Frequency Stability)	CFR 47 Part 15.31(e)	*
Conducted Emissions	CFR 47 Part 15.207(a)	Complies

**Not required in test report per KDB 789033 Sec II A 3.*

Modifications Made to the Equipment
None

**3 TABLES OF MEASURED RESULTS**

OCCUPIED BANDWIDTH UNII 1					
Channel	Frequency (MHz)	Power Setting	-26dB (MHz)	99% (MHz)	Limit
Modulation: OFDM					
Low	5180	15	23.841	16.92	>.500
Mid	5220	22	23.412	16.87	>.500
High	5240	22	23.842	16.92	>.500
Modulation: HT20					
Low	5180	15	25.123	17.13	>.500
Mid	5220	22	25.416	17.06	>.500
High	5240	18	25.887	17.02	>.500
Modulation: non HT40					
Low	5190	15	44.906	36.958	>.500
High	5230	18	42.831	36.761	>.500
Modulation: HT40					
Low	5190	15	44.199	36.835	>.500
High	5230	18	44.482	37.048	>.500
Modulation: HT80					
Mid	5210	18	86.524	75.894	>.500



OCCUPIED BANDWIDTH UNII 2A					
Channel	Frequency (MHz)	Power Setting	-26dB (MHz)	99% (MHz)	Limit
Modulation: OFDM					
Low	5260	20	24.015	16.88	>.500
High	5320	15	23.818	16.82	>.500
Modulation: HT20					
Low	5260	20	24.760	16.92	>.500
High	5320	15	25.697	16.83	>.500
Modulation: non HT40					
Low	5270	18	43.250	36.745	>.500
High	5310	15	42.990	36.914	>.500
Modulation: HT40					
Low	5270	22	44.678	37.022	>.500
High	5310	15	44.733	36.895	>.500
Modulation: HT80					
Mid	5290	16	87.578	76.295	>.500



OCCUPIED BANDWIDTH UNII 2C					
Channel	Frequency (MHz)	Power Setting	-26dB (MHz)	99% (MHz)	Limit
Modulation: OFDM					
Low	5500	15	24.161	17.06	>.500
Mid	5600	21	23.948	16.85	>.500
High	5700	14	24.074	16.875	>.500
Modulation: HT20					
Low	5500	15	25.905	17.06	>.500
Mid	5600	22	26.004	16.92	>.500
High	5700	15	25.679	16.875	>.500
Modulation: non HT40					
Low	5510	15	43.063	36.828	>.500
Mid	5590	21	43.242	36.994	>.500
High	5690	15	43.037	36.793	>.500
Modulation: HT40					
Low	5510	16	44.305	36.956	>.500
Mid	5590	22	44.685	37.163	>.500
High	5690	15	44.246	37.027	>.500
Modulation: HT80					
Low	5530	15	87.567	75.995	>.500
Mid	5610	21	87.615	76.183	>.500
High	5690	15	88.418	76.170	>.500



OCCUPIED BANDWIDTH UNII 3					
Channel	Frequency (MHz)	Power Setting	-6dB (MHz)	99% (MHz)	Limit
Modulation: OFDM					
Low	5745	15	16.35	16.92	>.500
Mid	5785	17	16.40	16.97	>.500
High	5825	15	16.42	16.92	>.500
Modulation: HT20					
Low	5745	15	17.72	16.92	>.500
Mid	5785	17	17.71	16.97	>.500
High	5825	15	17.655	16.92	>.500
Modulation: non HT40					
Low	5755	15	36.42	36.88	>.500
High	5795	15	36.46	36.83	>.500
Modulation: HT40					
Low	5755	15	36.25	37.00	>.500
High	5795	15	35.80	36.94	>.500
Modulation: HT80					
Mid	5775	15	75.53	76.19	>.500

**RF OUTPUT POWER UNII 1 Port 1 (Non-Beamforming Mode)****Modulation: OFDM**

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5180 (16)	30.7	14.87	794.0	29	306.9	24.87	4000	36
Mid	5220 (16)	30.5	14.84	794.0	29	304.8	24.84	4000	36
High	5240 (15)	28.4	14.53	794.0	29	283.8	24.53	4000	36

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5180 (15)	27.4	14.38	794.0	29	274.2	24.38	4000	36
Mid	5220 (15)	27.3	14.36	794.0	29	272.9	24.36	4000	36
High	5240 (15)	28.6	14.56	794.0	29	285.8	24.56	4000	36

Modulation: non HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5190 (16)	31.0	14.91	794.0	29	309.7	24.91	4000	36
High	5230 (16)	30.3	14.81	794.0	29	302.7	24.81	4000	36

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5190 (15)	29.0	14.62	794.0	29	289.7	24.62	4000	36
High	5230 (16)	31.3	14.96	794.0	29	313.3	24.96	4000	36

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5210 (15)	29.2	14.65	794.0	29	291.7	24.65	4000	36

**RF OUTPUT POWER UNII 1 Port 2 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5180 (15)	27.1	14.33	794.0	29	271.0	24.33	4000	36
Mid	5220 (15)	27.8	14.44	794.0	29	278.0	24.44	4000	36
High	5240 (15)	27.4	14.38	794.0	29	274.2	24.38	4000	36

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5180 (15)	27.3	14.36	794.0	29	272.9	24.36	4000	36
Mid	5220 (16)	28.5	14.55	794.0	29	285.1	24.55	4000	36
High	5240 (15)	27.6	14.41	794.0	29	276.1	24.41	4000	36

Modulation: non HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5190 (15)	25.6	14.08	794.0	29	255.9	24.08	4000	36
High	5230 (15)	25.7	14.10	794.0	29	257.0	24.10	4000	36

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5190 (15)	26.5	14.23	794.0	29	264.9	24.23	4000	36
High	5230 (15)	27.0	14.32	794.0	29	270.4	24.32	4000	36

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5210 (15)	27.2	14.35	794.0	29	272.3	24.35	4000	36

**RF OUTPUT POWER UNII 1 SUMMING PORT 1 AND PORT 2****Modulation: OFDM**

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P. (including 3dB aggregate gain)		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5180 (15)	30.7	27.1	57.8	17.62	794.0	29	578.1	27.62	4000	36
5220 (22)	30.5	27.8	53.8	17.30	794.0	29	537.0	27.30	4000	36
5240 (22)	28.4	27.4	55.8	17.47	794.0	29	558.5	27.47	4000	36

Modulation: HT20

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P. (including 3dB aggregate gain)		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5180 (15)	27.4	27.3	54.7	17.40	794.0	29	549.5	27.40	4000	36
5220 (22)	27.3	28.5	55.8	17.47	794.0	29	558.5	27.47	4000	36
5240 (18)	28.6	27.6	56.2	17.50	794.0	29	562.3	27.5	4000	36

Modulation: non HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P. (including 3dB aggregate gain)		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5190 (15)	31.0	25.6	56.6	17.53	794.0	29	566.2	27.53	4000	36
5230 (18)	30.3	25.7	56.0	17.48	794.0	29	559.8	27.48	4000	36

Modulation: HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P. (including 3dB aggregate gain)		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5190 (15)	29.0	26.5	55.5	17.44	794.0	29	554.6	27.44	4000	36
5230 (18)	31.3	27.0	58.3	17.70	794.0	29	588.8	27.70	4000	36

Modulation: HT80

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P. (including 3dB aggregate gain)		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5210 (18)	29.2	27.2	56.4	17.51	794.0	29	563.6	27.51	4000	36

**RF OUTPUT POWER UNII 2A Port 1 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5260 (20)	104.4	20.19	200	23	523.6	27.19	1000	30
High	5320 (15)	37.2	15.71	200	23	186.6	22.71	1000	30

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5260 (20)	109.1	20.38	200	23	547.0	27.38	1000	30
High	5320 (15)	38.1	15.82	200	23	191.4	22.82	1000	30

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5270 (18)	71.6	18.55	200	23	358.9	25.55	1000	30
High	5310 (15)	38.0	15.80	200	23	190.5	22.8	1000	30

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5270 (22)	190.5	22.80	200	23	955.0	29.80	1000	30
High	5310 (15)	38.4	15.84	200	23	192.3	22.84	1000	30

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5290 (16)	41.2	16.15	200	23	206.5	23.15	1000	30

**RF OUTPUT POWER UNII 2A Port 2 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5260 (20)	101.6	20.07	200	23	509.4	27.07	1000	30
High	5320 (15)	38.4	15.84	200	23	192.3	22.84	1000	30

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5260 (20)	95.3	19.79	200	23	477.5	26.79	1000	30
High	5320 (15)	39.4	15.95	200	23	197.3	22.95	1000	30

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5270 (18)	64.6	18.10	200	23	323.6	25.10	1000	30
High	5310 (15)	37.4	15.73	200	23	187.5	22.73	1000	30

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5270 (22)	167.5	22.24	200	23	839.5	29.24	1000	30
High	5310 (15)	38.6	15.87	200	23	193.6	22.87	1000	30

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5290 (15)	35.6	15.52	200	23	178.6	22.52	1000	30

**RF OUTPUT POWER UNII 2A SUMMING PORT 1 AND PORT 2****Modulation: OFDM**

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5260 (20)	34.8	35.0	69.8	18.4	200	20	691.83	28.4	1000	30
5320 (15)	37.2	38.4	75.6	18.8	200	20	758.58	28.8	1000	30

Modulation: HT20

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5260 (20)	34.8	34.8	69.6	18.4	200	20	691.83	28.4	1000	30
5320 (15)	38.1	39.4	77.5	18.9	200	20	776.25	28.9	1000	30

Modulation: non HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5270 (18)	34.7	34.8	69.5	18.4	200	20	691.83	28.4	1000	30
5310 (15)	38.0	37.4	75.4	18.8	200	20	758.58	28.8	1000	30

Modulation: HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5270 (22)	34.2	35.3	69.5	18.4	200	20	691.83	28.4	1000	30
5310 (15)	38.4	38.6	77.0	18.9	200	20	776.25	28.9	1000	30

Modulation: HT80

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5290 (16)	41.2	35.6	76.8	18.9	200	20	776.25	28.9	1000	30

**RF OUTPUT POWER UNII 2C Port 1 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5500 (15)	38.2	15.83	200	23	191.8	22.83	1000	30
Mid	5600 (21)	129.7	21.13	200	23	650.1	28.13	1000	30
High	5700 (14)	29.5	14.70	200	23	147.9	21.70	1000	30

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	DBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5500 (15)	39.0	15.91	200	23	195.4	22.91	1000	30
Mid	5600 (21)	129.4	21.12	200	23	648.6	28.12	1000	30
High	5700 (15)	32.2	15.08	200	23	161.4	22.08	1000	30

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5510 (15)	37.3	15.72	200	23	187.1	22.72	1000	30
Mid	5590 (21)	136.4	21.35	200	23	683.9	28.35	1000	30
High	5690 (15)	36.9	15.67	200	23	184.9	22.67	1000	30

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5510 (16)	40.2	16.04	200	23	201.4	23.04	1000	30
Mid	5590 (21)	155.2	21.91	200	23	778.0	28.91	1000	30
High	5690 (15)	33.9	15.30	200	23	169.8	22.30	1000	30

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5530 (15)	39.4	15.96	200	23	197.7	22.96	1000	30
Mid	5610 (21)	147.9	21.70	200	23	741.3	28.70	1000	30
High	5680 (15)	32.3	15.09	200	23	161.8	22.09	1000	30

**RF OUTPUT POWER UNII 2C Port 2 (Non-Beamforming Mode)****Modulation: OFDM**

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5500 (15)	37.3	15.71	200	23	186.6	22.71	1000	30
Mid	5600 (21)	131.8	21.20	200	23	660.7	28.2	1000	30
High	5700 (15)	32.9	15.17	200	23	164.8	22.17	1000	30

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5500 (16)	40.6	16.09	200	23	203.7	23.09	1000	30
Mid	5600 (21)	143.2	21.56	200	23	717.8	28.56	1000	30
High	5700 (15)	32.9	15.18	200	23	165.2	22.18	1000	30

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5510 (15)	36.7	15.65	200	23	184.1	22.65	1000	30
Mid	5590 (21)	128.2	21.08	200	23	642.7	28.08	1000	30
High	5690 (15)	37.8	15.77	200	23	189.2	22.77	1000	30

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5510 (15)	38.4	15.84	200	23	192.3	22.84	1000	30
Mid	5590 (22)	169.1	22.28	200	23	847.3	29.28	1000	30
High	5690 (15)	34.2	15.33	200	23	171.0	22.33	1000	30

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5530 (15)	38.7	15.88	200	23	194.1	22.88	1000	30
Mid	5610 (21)	156.0	21.93	200	23	781.6	28.93	1000	30
High	5690 (15)	35.4	15.49	200	23	177.4	22.49	1000	30

**RF OUTPUT POWER UNII 2C SUMMING PORT 1 AND PORT 2****Modulation: OFDM**

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5500 (15)	38.2	37.3	75.5	18.80	200	20	758.58	28.80	1000	30
5600 (21)	32.7	33.8	66.5	18.23	200	20	665.27	28.23	1000	30
5700 (14)	29.5	32.9	62.4	18.00	200	20	630.96	28.00	1000	30

Modulation: HT20

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5500 (15)	39.0	40.6	79.6	19.01	200	20	796.16	29.01	1000	30
5600 (21)	32.7	34.2	66.9	18.25	200	20	668.34	28.25	1000	30
5700 (15)	32.2	32.9	65.1	18.14	200	20	651.63	28.14	1000	30

Modulation: non HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5510 (15)	37.3	36.7	74.0	18.69	200	20	739.61	28.69	1000	30
5590 (21)	33.8	34.3	68.1	18.33	200	20	680.77	28.33	1000	30
5690 (15)	36.9	37.8	74.7	18.73	200	20	746.45	28.73	1000	30

Modulation: HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5510 (16)	40.2	38.4	78.6	18.95	200	20	794.33	29.00	1000	30
5590 (21)	33.7	34.4	68.1	18.33	200	20	680.77	28.33	1000	30
5690 (15)	33.9	34.2	68.1	18.33	200	20	680.77	28.33	1000	30

Modulation: HT80

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5530 (15)	39.4	38.7	78.1	18.92	200	20	779.83	28.92	1000	30
5610 (21)	33.3	34.0	67.3	18.28	200	20	672.98	28.28	1000	30
5680 (15)	32.3	35.4	67.7	18.30	200	20	676.08	28.30	1000	30

**RF OUTPUT POWER UNII 3 Port 1 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5745 (15)	35.23	15.47	794.0	29	176.6	22.47	4000	36
Mid	5785 (21)	60.11	17.79	794.0	29	301.3	24.79	4000	36
High	5825 (15)	35.4	15.49	794.0	29	177.4	22.49	4000	36

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5745 (15)	36.2	15.58	794.0	29	181.2	22.58	4000	36
Mid	5785 (21)	60.67	17.83	794.0	29	304.1	24.83	4000	36
High	5825 (15)	33.9	15.30	794.0	29	169.8	22.30	4000	36

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5755 (15)	35.3	15.48	794.0	29	177.0	22.48	4000	36
High	5795 (15)	35.4	15.50	794.0	29	177.8	22.5	4000	36

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5755 (15)	36.5	15.62	794.0	29	182.8	22.62	4000	36
High	5795 (15)	34.3	15.35	794.0	29	171.8	22.35	4000	36

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5775 (15)	36.8	15.66	794.0	29	184.5	22.66	4000	36

**RF OUTPUT POWER UNII 3 Port 2 (Non-Beamforming Mode)**

Modulation: OFDM

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5745 (15)	35.2	15.48	794.0	29	177.0	22.48	4000	36
Mid	5785 (21)	64.57	18.10	794.0	29	323.6	25.10	4000	36
High	5825 (15)	32.4	15.11	794.0	29	162.6	22.11	4000	36

Modulation: HT20

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5745 (15)	37.7	15.76	794.0	29	188.8	22.76	4000	36
Mid	5785 (21)	65.61	18.17	794.0	29	328.9	25.17	4000	36
High	5825 (15)	32.7	15.15	794.0	29	164.1	22.15	4000	36

Modulation: NON HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5755 (15)	35.5	15.50	794.0	29	177.8	22.5	4000	36
High	5795 (15)	34.5	15.38	794.0	29	173.0	22.38	4000	36

Modulation: HT40

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Low	5755 (15)	37.8	15.78	794.0	29	189.7	22.78	4000	36
High	5795 (15)	37.0	15.68	794.0	29	185.4	22.68	4000	36

Modulation: HT80

Channel	Frequency (MHz) / Power Setting	Measured Power		Limit		E.I.R.P.		Limit	
		mW	dBm	mW	dBm	mW	dBm	E.I.R.P (mW)	E.I.R.P (dBm)
Mid	5775 (15)	37.5	15.74	794.0	29	187.9	22.74	4000	36

**RF OUTPUT POWER UNII 3 SUMMING PORT 1 AND PORT 2****Modulation: OFDM**

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5745 (15)	35.23	35.2	70.43	18.5	794.0	29	707.94	28.5	4000	36
5785 (21)	60.11	64.57	124.68	20.95	794.0	29	1244.51	30.95	4000	36
5825 (15)	35.4	32.4	67.8	18.3	794.0	29	676.08	28.3	4000	36

Modulation: HT20

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5745 (15)	36.2	37.7	73.9	18.69	794.0	29	739.61	28.69	4000	36
5785 (21)	60.67	65.61	126.28	21.01	794.0	29	1261.83	31.01	4000	36
5825 (15)	33.9	32.7	66.6	18.23	794.0	29	665.27	28.23	4000	36

Modulation: non HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5755 (15)	35.3	35.5	70.8	18.5	794.0	29	707.95	28.50	4000	36
5795 (15)	35.4	34.5	69.9	18.44	794.0	29	698.23	28.44	4000	36

Modulation: HT40

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5755 (15)	36.5	37.8	74.3	18.71	794.0	29	743.02	28.71	4000	36
5795 (15)	34.3	37.0	71.3	18.53	794.0	29	712.85	28.53	4000	36

Modulation: HT80

Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)				Limit		E.I.R.P.		Limit	
	Port 1 mW	Port 2 mW	Summed mW	Summed dBm	mW	dBm	mW	dBm	mW	dBm
5775 (15)	36.8	37.5	74.3	18.71	794.0	29	743.02	28.71	4000	36



POWER SPECTRAL DENSITY UNII 1- Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5180	5.48	16
Mid	5220	12.10	16
High	5240	12.29	16
Modulation: HT20			
Low	5180	8.20	16
Mid	5220	11.93	16
High	5240	8.77	16
Modulation: non HT40			
Low	5190	3.10	16
High	5230	5.75	16
Modulation: HT40			
Low	5190	2.41	16
High	5230	5.64	16
Modulation: HT80			
Mid	5210	-0.43	16



POWER SPECTRAL DENSITY UNII 1- Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5180	5.67	16
Mid	5220	11.42	16
High	5240	11.84	16
Modulation: HT20			
Low	5180	5.11	16
Mid	5220	11.64	16
High	5240	11.53	16
Modulation: non HT40			
Low	5190	2.52	16
High	5230	8.61	16
Modulation: HT40			
Low	5190	2.26	16
High	5230	9.20	16
Modulation: HT80			
Mid	5210	-0.41	16

NOTE : 3dB as worse case aggregate gain, the total PSD is calculated by summing the measured PSD in linear power from both output ports. The max antenna gain for this device is 7dBi, and so the total directional gain is 10dB, therefore the maximum PSD limit is reduced by 4 dB when in beamforming mode.

**PSD UNII 1 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	13
5180 (15)	5.67	5.48	3.68	3.51	7.19	8.56	
5220 (15)	6.12	5.41	4.09	3.48	7.57	8.79	
5240 (15)	5.89	5.52	3.88	3.56	7.44	8.72	
Modulation: HT20							
Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						13
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5180 (15)	5.11	8.20	3.24	6.06	9.30	9.68	
5220 (15)	6.08	5.62	4.06	3.65	7.71	8.87	
5240 (15)	5.92	5.48	3.91	3.53	7.44	8.72	
Modulation: non HT40							
Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						13
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5190 (15)	2.52	3.10	1.79	2.04	3.83	5.83	
5230 (15)	8.61	5.75	7.26	3.75	11.01	10.41	
Modulation: HT40							
Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						13
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5190 (15)	2.26	2.41	1.68	1.74	3.42	5.34	
5230 (15)	9.20	5.64	8.31	3.66	11.97	10.78	
Modulation: HT80							
Frequency (MHz) / Power Setting	Measure and Sum (Summing port 1 and port 2)						13
	Port 2 dBm	Port 1 dBm	Port 2 mW	Port 1 mW	Summed mW	Summed dBm	
5210 (15)	-0.41	-0.43	.91	.90	1.81	2.57	



POWER SPECTRAL DENSITY UNII 2A – Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5260	3.91	10
High	5320	3.69	10
Modulation: HT20			
Low	5260	3.85	10
High	5320	3.72	10
Modulation: non HT40			
Low	5270	6.08	10
High	5310	3.65	10
Modulation: HT40			
Low	5270	5.73	10
High	5320	3.02	10
Modulation: HT80			
Mid	5290	-0.16	10



POWER SPECTRAL DENSITY UNII 2A – Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5260	4.72	10
High	5320	4.71	10
Modulation: HT20			
Low	5260	4.75	10
High	5320	4.72	10
Modulation: non HT40			
Low	5270	6.28	10
High	5310	3.58	10
Modulation: HT40			
Low	5270	5.58	10
High	5310	3.08	10
Modulation: HT80			
Mid	5290	0.09	10



PSD UNII 2A 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	7
5260 (20)	3.24	3.23	2.11	2.10	4.21	6.24	
5320 (15)	3.50	3.45	2.24	2.21	4.45	6.48	
Modulation: HT20							
Frequency (MHz) / Power Setting	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	
5260 (20)	3.32	3.43	2.15	2.20	4.35	6.38	
5320 (15)	3.38	3.46	2.18	2.22	4.40	6.43	
Modulation: non HT40							
Frequency (MHz) / Power Setting	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	
5270 (18)	3.38	3.26	2.18	2.12	4.30	6.33	
5310 (15)	3.58	3.65	2.88	2.32	4.6	6.62	
Modulation: HT40							
Frequency (MHz) / Power Setting	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	
5270 (18)	3.36	3.20	2.16	2.09	4.25	6.28	
5310 (15)	3.08	3.02	2.03	2.00	4.03	6.05	
Modulation: HT80							
Frequency (MHz) / Power Setting	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	
5290 (18)	0.09	-0.16	1.02	.96	1.98	2.96	



POWER SPECTRAL DENSITY UNII 2C – Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	6.30	10
Mid	5600	4.24	10
High	5700	4.85	10
Modulation: HT20			
Low	5500	6.16	10
Mid	5600	4.20	10
High	5700	4.54	10
Modulation: non HT40			
Low	5510	3.65	10
Mid	5590	4.59	10
High	5690	3.21	10
Modulation: HT40			
Low	5510	3.00	10
Mid	5590	4.53	10
High	5690	2.57	10
Modulation: HT80			
Low	5530	0.08	10
Mid	5610	3.68	10
High	5690	-0.75	10



POWER SPECTRAL DENSITY UNII 2C – Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5500	6.21	10
Mid	5600	4.52	10
High	5700	5.81	10
Modulation: HT20			
Low	5500	5.69	10
Mid	5600	4.56	10
High	5700	5.58	10
Modulation: non HT40			
Low	5510	3.60	10
Mid	5590	4.46	10
High	5690	3.11	10
Modulation: HT40			
Low	5510	3.44	10
Mid	5590	4.45	10
High	5690	3.00	10
Modulation: HT80			
Low	5530	0.12	10
Mid	5610	4.57	10
High	5690	0.32	10

**PSD UNII 2C 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	7
5500 (15)	3.25	3.30	2.11	2.14	4.25	6.28	
5600 (21)	3.42	3.03	2.20	2.01	4.21	6.24	
5700 (14)	3.54	3.39	2.26	2.18	4.44	6.47	
Modulation: HT20							
Frequency (MHz) / Power Setting	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 (15)	3.17	3.17	2.07	2.07	4.14	6.17	
5600 (21)	3.49	3.05	2.23	2.02	4.25	6.28	
5700 (14)	3.35	3.23	2.16	2.10	4.26	6.29	
Modulation: non HT40							
Frequency (MHz) / Power Setting	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 (15)	3.60	3.65	2.29	2.32	4.61	6.64	
5590 (21)	3.19	3.23	2.08	2.10	4.18	6.21	
5690 (15)	3.11	3.21	2.04	2.09	4.13	6.15	
Modulation: HT40							
Frequency (MHz) / Power Setting	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 (15)	3.44	3.00	2.20	1.99	4.19	6.22	
5590 (21)	3.11	3.38	2.05	2.18	4.23	6.26	
5690 (15)	3.00	2.57	1.99	1.81	3.8	5.79	
Modulation: HT80							
Frequency (MHz) / Power Setting	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 (15)	0.12	0.08	1.03	1.01	2.04	3.09	
5610 (21)	4.57	3.68	2.86	2.33	3.89	5.89	
5680 (15)	0.32	-0.75	1.07	.84	1.91	2.81	



POWER SPECTRAL DENSITY UNII 3 – Port 1 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5745	4.50	29
Mid	5785	11.21	29
High	5825	4.41	29
Modulation: HT20			
Low	5745	4.54	29
Mid	5785	11.10	29
High	5825	4.15	29
Modulation: non HT40			
Low	5755	1.89	29
High	5795	1.95	29
Modulation: HT40			
Low	5755	1.82	29
High	5795	1.72	29
Modulation: HT80			
Mid	5775	-1.12	29



SPECTRAL DENSITY UNII 3 – Port 2 (Non-Beamforming Mode)			
Channel	Frequency (MHz)	Measured Power (dbm)	Limit (dbm)
Modulation: OFDM			
Low	5745	5.08	29
Mid	5785	11.83	29
High	5825	4.67	29
Modulation: HT20			
Low	5745	5.25	29
Mid	5785	11.85	29
High	5825	4.28	29
Modulation: non HT40			
Low	5755	2.30	29
High	5795	2.21	29
Modulation: HT40			
Low	5755	2.15	29
High	5795	1.86	29
Modulation: HT80			
Mid	5775	-0.41	29

**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)	5.08	4.50	3.22	2.81	6.03	7.80	26
5785 (21)	11.83	11.21	15.24	13.21	28.36	14.52	
5825 (15)	4.67	4.41	2.93	2.76	5.69	7.55	

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)	5.25	4.54	3.35	2.84	6.19	7.91	26
5785 (21)	11.85	11.10	15.31	12.88	28.19	14.5	
5825 (15)	4.28	4.15	2.67	2.6	5.27	7.21	

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)	2.30	1.89	1.69	1.54	3.23	5.09	26
5795 (15)	2.21	1.95	1.66	1.56	3.09	4.90	

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)	2.15	1.82	1.64	1.52	3.16	4.99	26
5795 (15)	1.86	1.72	1.53	1.48	3.01	4.78	

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)	-0.41	-1.12	.90	.77	1.67	2.22	26



4 ENGINEERING STATEMENT

This report has been prepared on behalf of PCTEL, Inc to provide documentation for the testing described herein. This equipment has been tested and found to comply with Part 15.407 of the FCC Rules using ANSI C63.10 and KDB789033 standards. The test results found in this test report relate only to the items tested.

**5 EUT INFORMATION AND DATA****5.1 Equipment Under Test:**Product: **Rugged 802.11ac Access Point**

Model: AP-WIFI-1200-US

Serial No.: Proto 2

Software Version: Linux ver. 4.4.60, GCC ver.5.2.0

FCC ID: **NYPWIFIAP1200****5.2 Trade Name:****PCTEL, Inc****5.3 Power Supply:**

PoE Supply: PhiHong POE29U-1AT(PL)

5.4 Applicable Rules:

CFR 47, Part 15.407, subpart E

5.5 Equipment Category:

Radio Transmitter-UNII

5.6 Antenna:

External, Detachable 7dBi Dipole

5.7 Accessories:

Device	Manufacturer	Model Number	Serial Number
PoE Supply	PhiHong	POE29U-1AT(PL)	None Specified
TI Uart Interface	PCTel, Inc	None Specified	None Specified
Antenna	PCTel, Inc	BOA24006NM	None Specified
Laptop	Dell	Latitude E6430s	3ZQ24X1
Accessory Software/Version:		Procomm Plus v4.8, TI Smart Studio 7 v2.12.0	

5.8 Testing Algorithm:

The EUT was set up in a test mode to continuously transmit at low, mid and high frequencies within the various UNII bands. Where there were only four channels in any band segment, the low and high channels were used.

The EUT was powered by a client-supplied POE adaptor.

**6 LIST OF MEASUREMENT INSTRUMENTATION**

Equipment Type	Asset Number	Manufacturer	Model	Serial Number	Calibration Due Date
Shielded Chamber 2014	CL166-E	AlbatrossProjects	B83117-DF435-T261	US140023	2021-01-03
Temp/Hum. Recorder	CL261	Extech	445814	04	2021-02-12
Spectrum Analyzer	CL138	Agilent Technologies	E4407B	US41192779	2021-09-16
Receiver	CL151	Rohde & Schwarz	ESU40	100319	2021-10-06
Antenna, JB3 Combination	CL175	Sunol Sciences	JB3	A030315	2021-11-05
Horn Antenna	CL098	Emco	3115	9809-5580	2021-01-31
Horn Antenna	CL114	AH Systems, Inc.	SAS-572	237	2021-02-04
Pre-Amplifier	CL189	Com-Power	PAM-840A	461303	2021-07-31
Pre-Amplifier	CL153	Agilent	83006-69007	MY39500791	2020-12-31
Pre-Amplifier	CL250	Com-Power	PAM-118A	18040011	2021-06-21
Amplifier w/Monopole & 18" Loop	CL163-Loop	A.H. Systems, Inc.	EHA-52B	100	2021-10-15
Horn Antenna	CL188	Comm Power	AH - 640	091065	2021-07-23
Low Loss Cable Set	--	Pasternack	PE3C0666-252 / PE3C066-50CM	None Spec.	2023-10-12
Software:	Tile Version 3.4.B.3.		Software Verified: 2020-10-13 to 2020-11-17		
Software:	EMC 32, Version 8.53.0		Software Verified: 2020-10-13 to 2020-11-17		
Temp/Hum. Recorder	CL263	Extech	445814	06	2021-02-12
Transient Limiter	CL102	Hewlett Packard	11947A	3107A03325	2021-02-17
Software:	Tile Version 3.4.B.3.		Software Verified: 2020-10-09		
Spectrum Analyzer	CL147	Agilent	E7402A	MY45101241	2021-01-06
LISN	CL181	Com-Power	LI-125A	191226	2020-10-31
LISN	CL182	Com-Power	LI-125A	191225	2020-10-31



7 OCCUPIED BANDWIDTH

7.1 Requirements:

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the -26dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage.

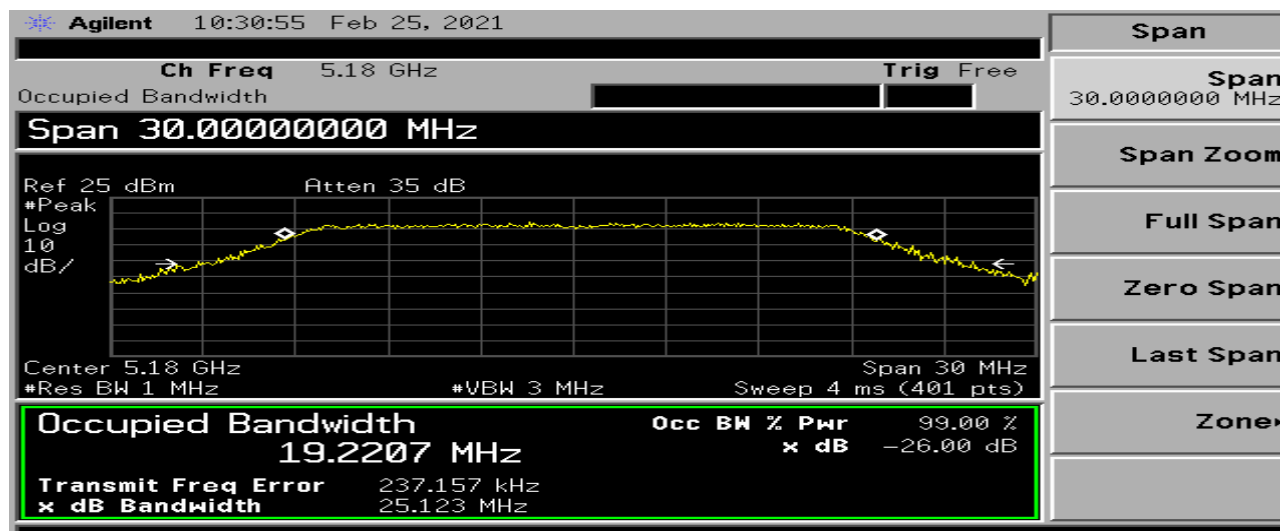
Bandwidth measurements were made at the low, mid and high frequencies. The bandwidth was measured using the analyzer's marker function.



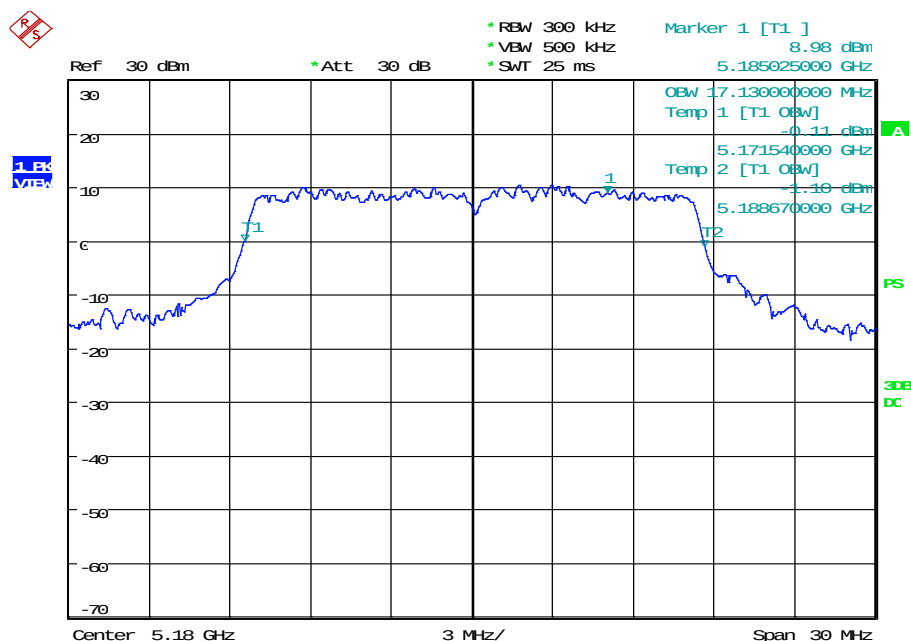
7.2 Occupied Bandwidth Test Data

Test Date(s):	2021-02-26	Test Engineer(s):	J. Chiller
Standards:	CFR 47 Part 15.215(c)	Air Temperature:	21.8°C
		Relative Humidity:	36%

UNII 1, HT20: -26dB, Low Channel

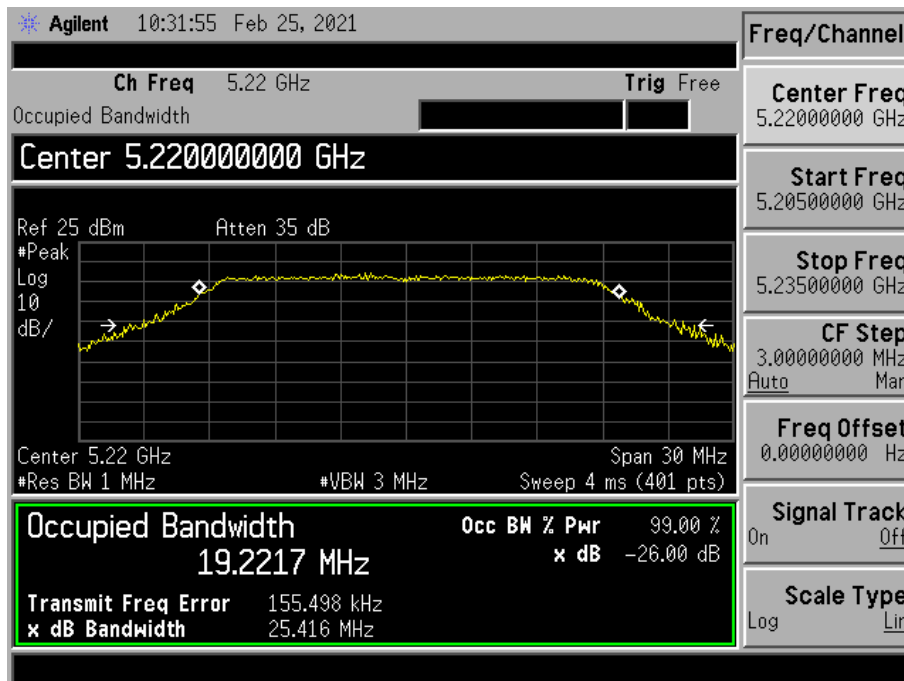


UNII 1, HT20: 99%, Low Channel

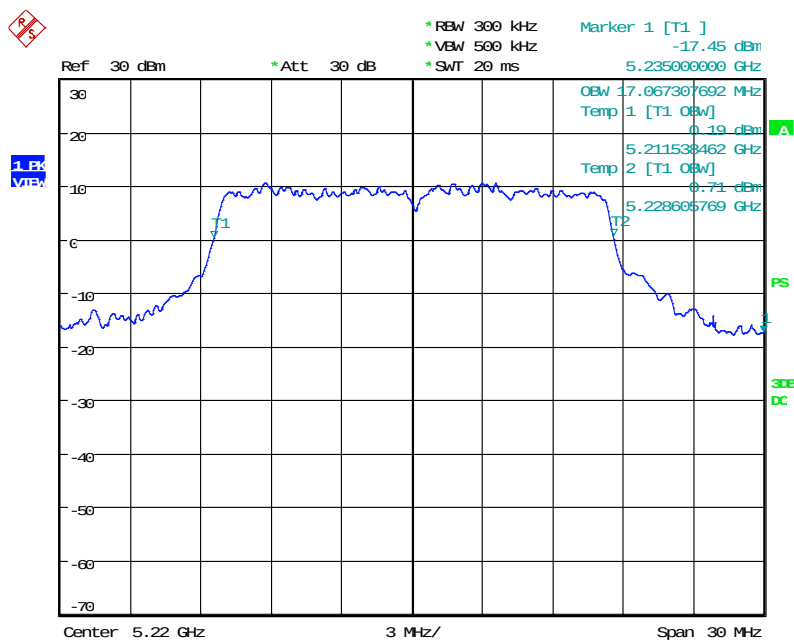




UNII 1, HT20: -26dB, Mid Channel



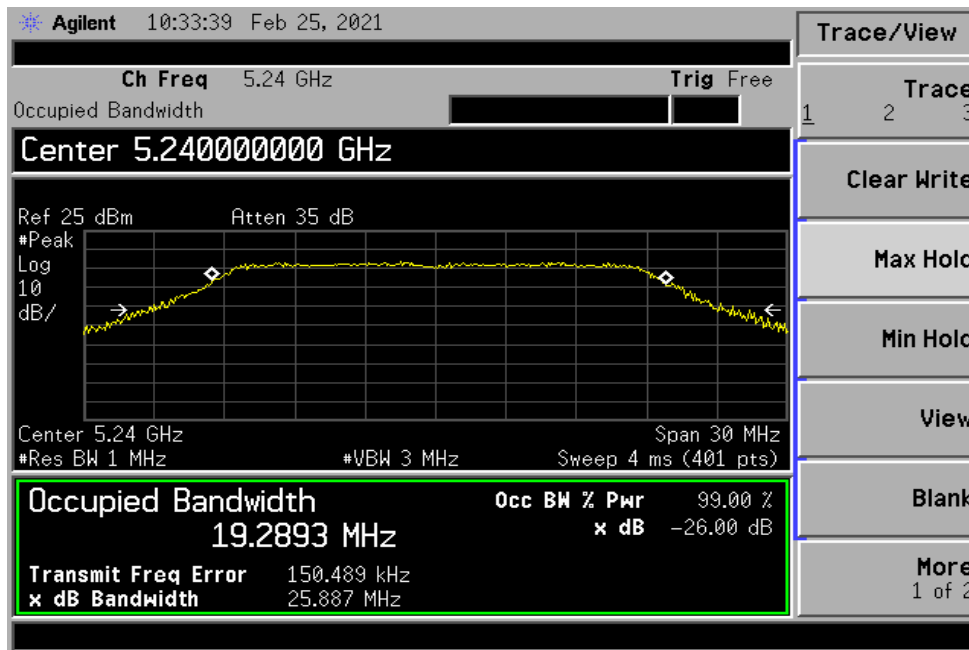
UNII 1, HT20: 99%, Mid Channel



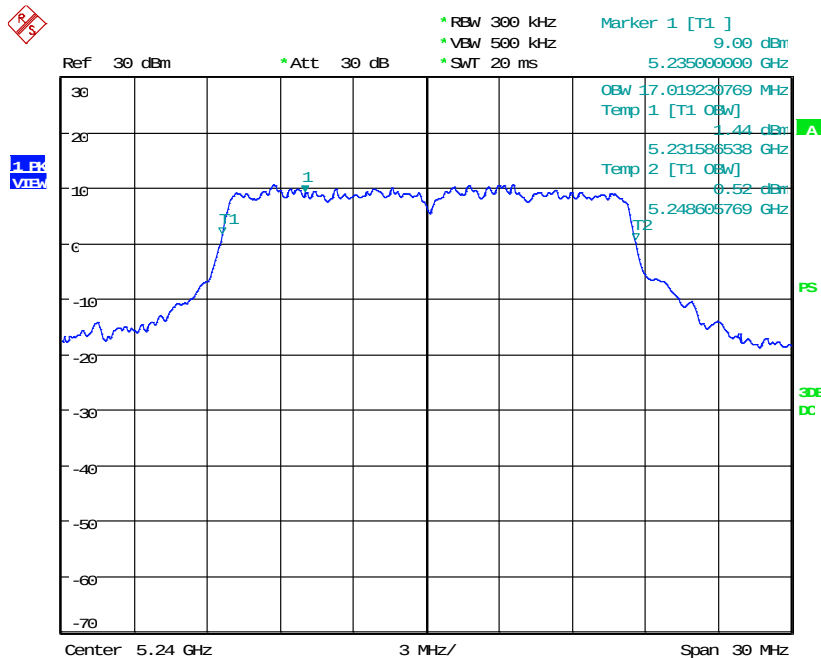
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UNII 1, HT20: -26dB, High Channel



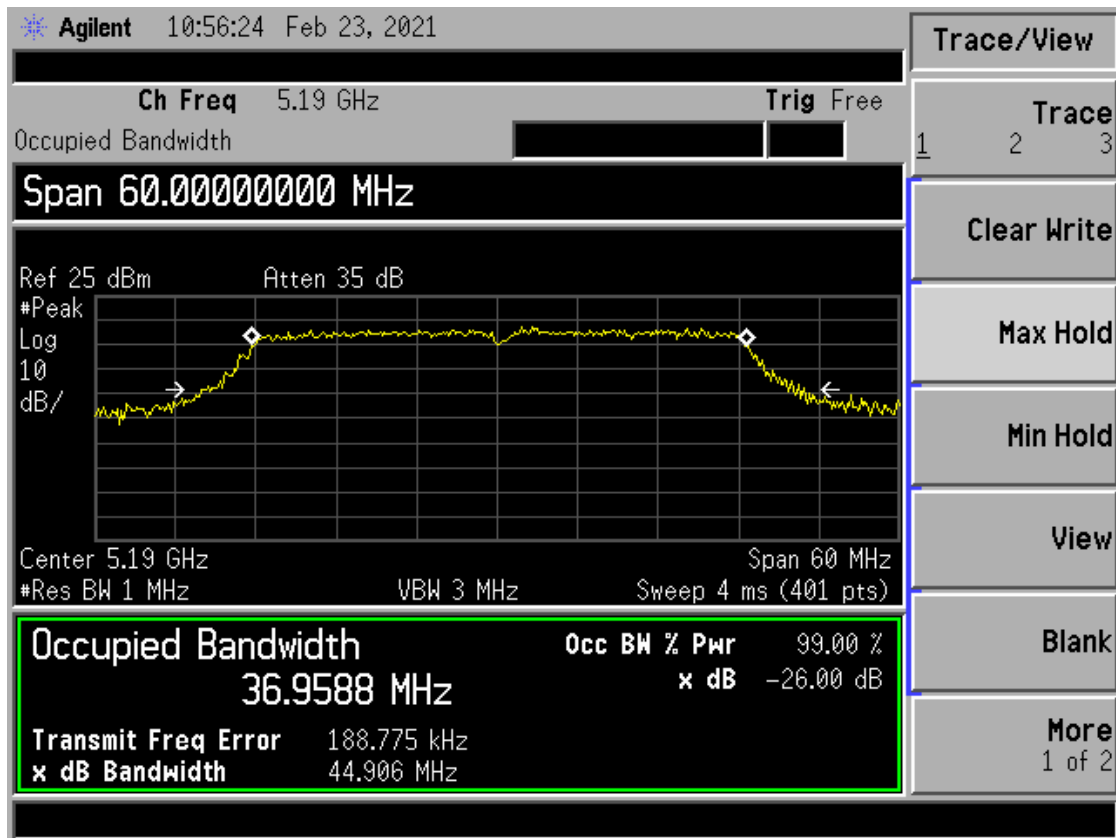
UNII 1, HT20: 99%, High Channel



Date: 28.APR.2021 12:28:45

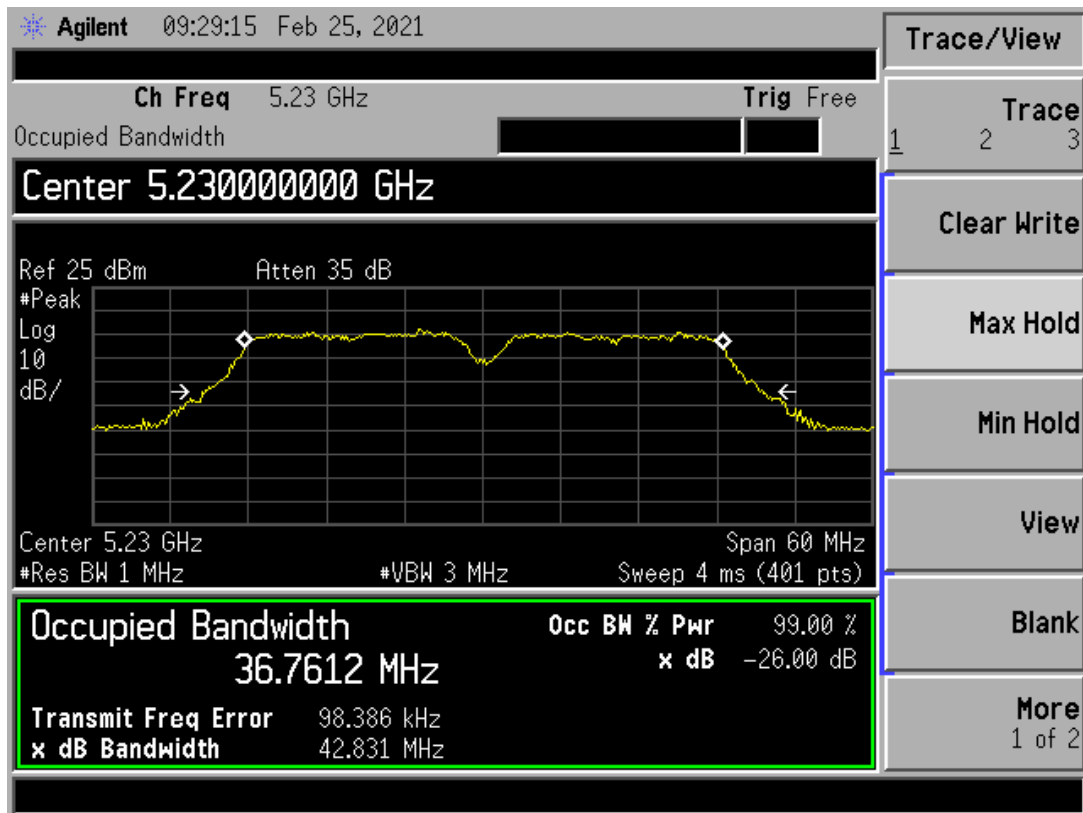


UNII 1, non HT40: 99% / -26dB, Low Channel



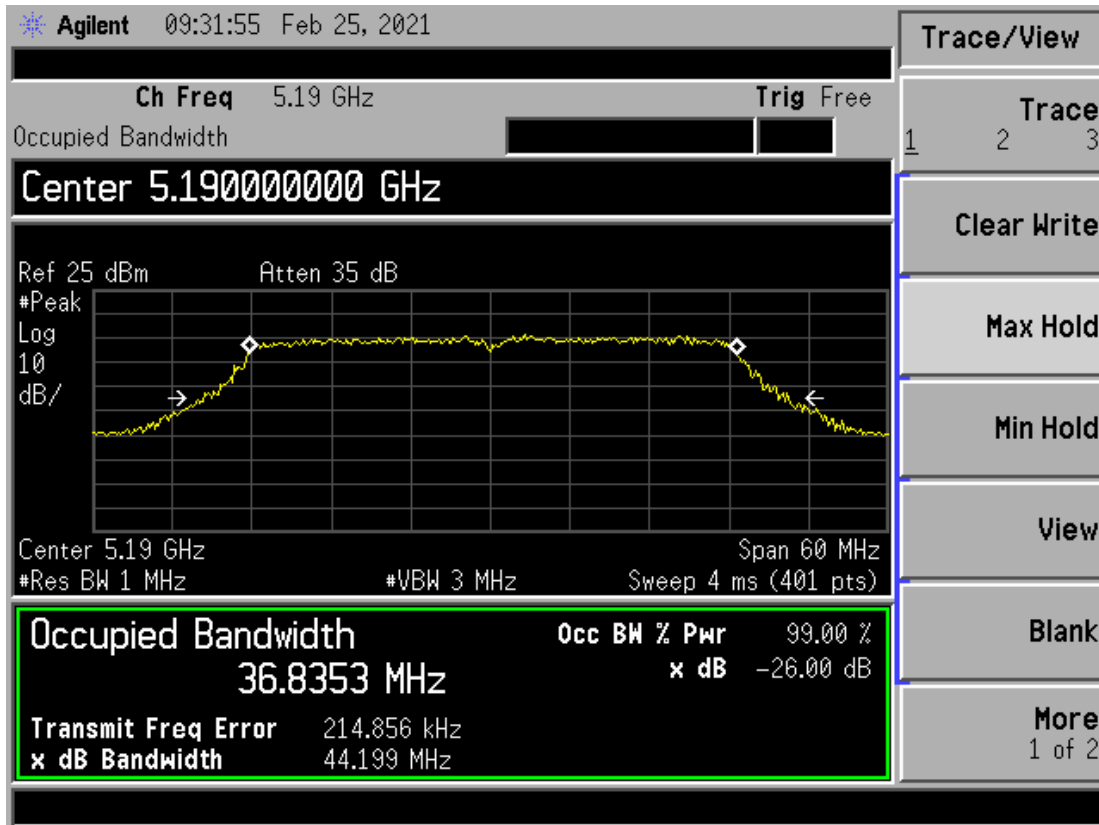


UNII 1, non HT40: 99% / -26dB, High Channel



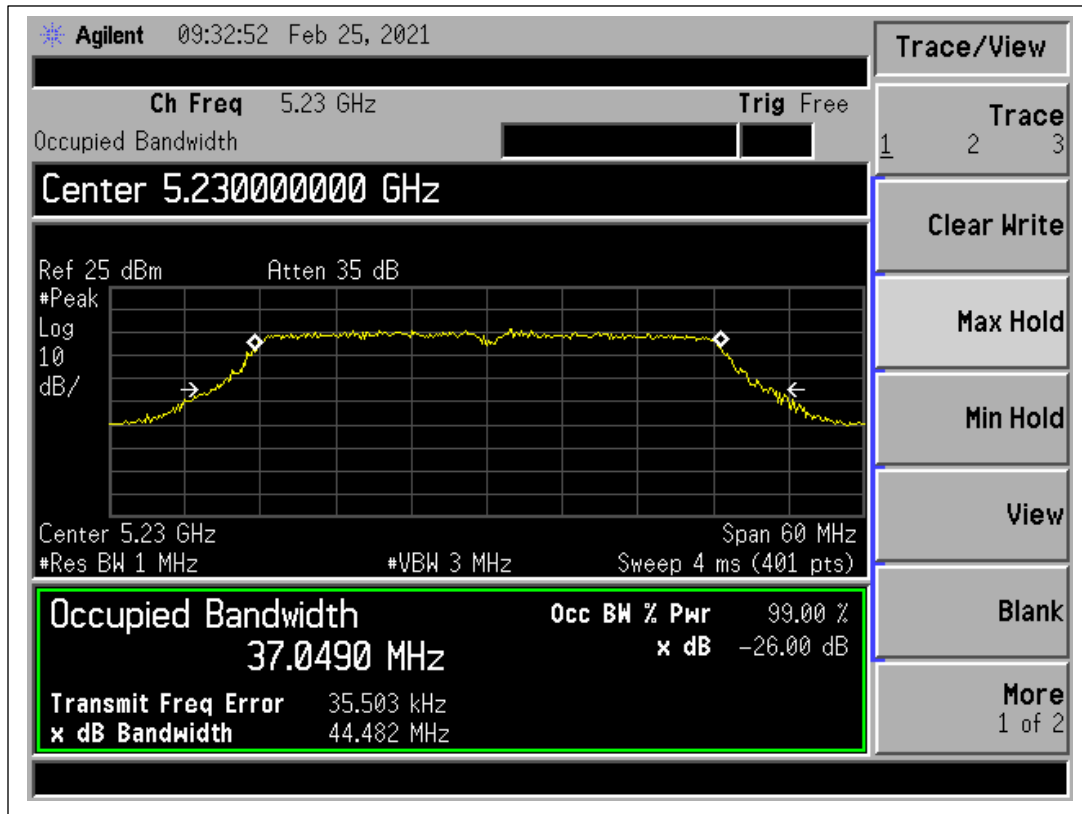


UNII 1, HT40: 99% / -26dB, Low Channel



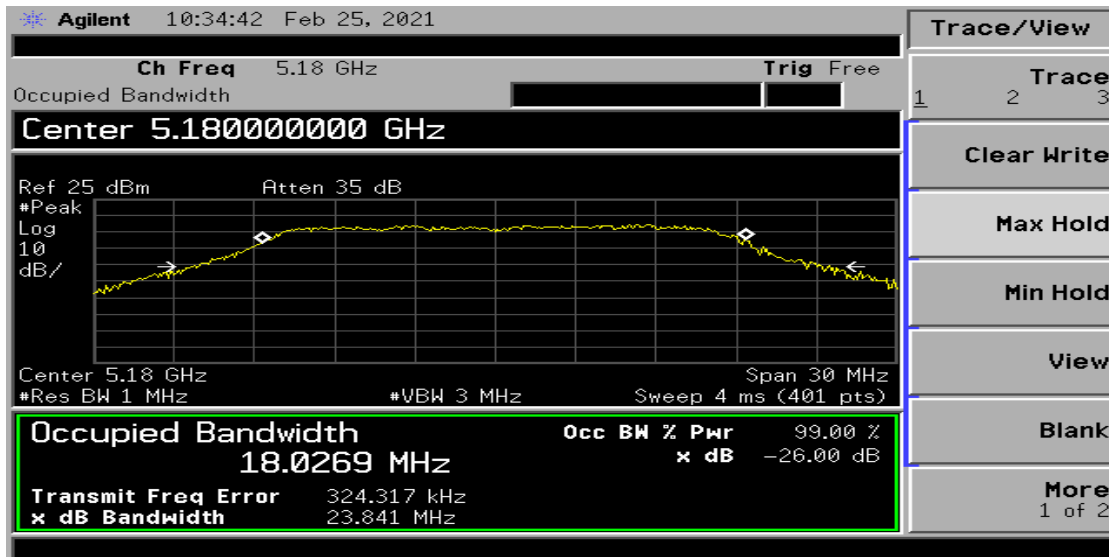


UNII 1, HT40: 99% / -26dB, High Channel

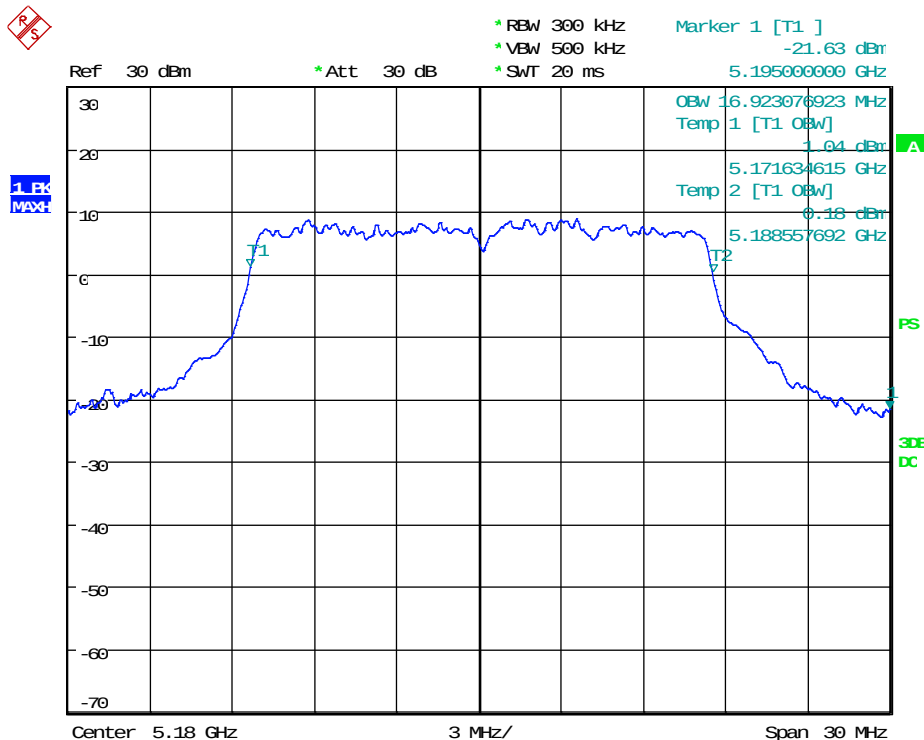




UNII 1, OFDM: -26dB, Low Channel



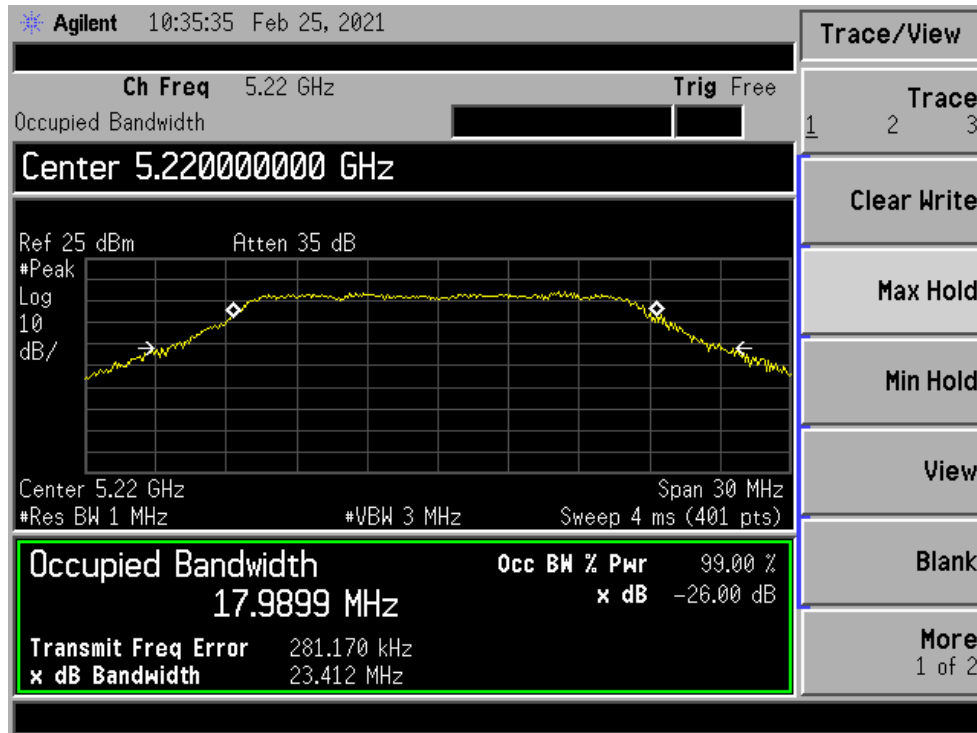
UNII 1, OFDM: 99%, Low Channel



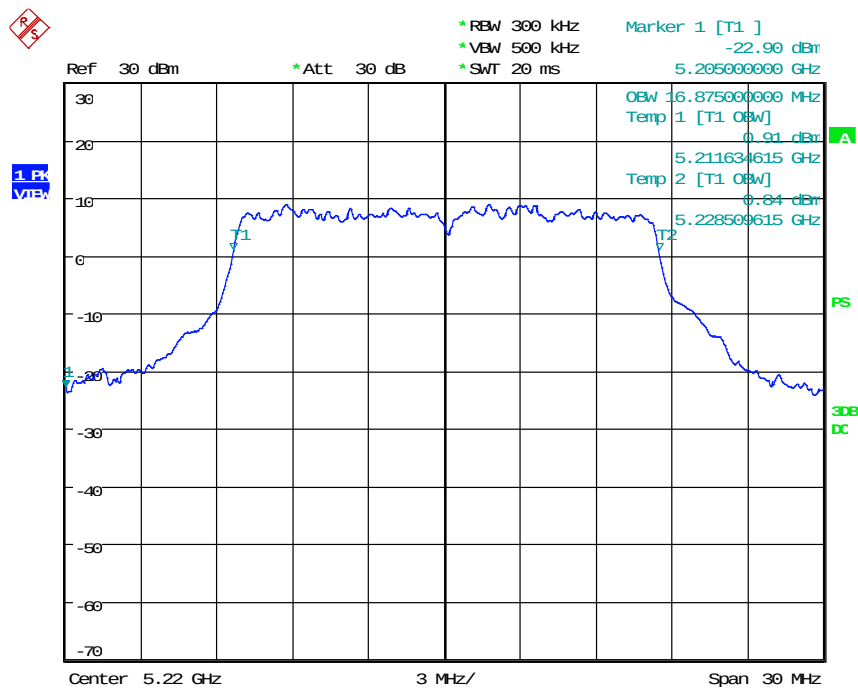
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UNII 1, OFDM: -26dB, Mid Channel



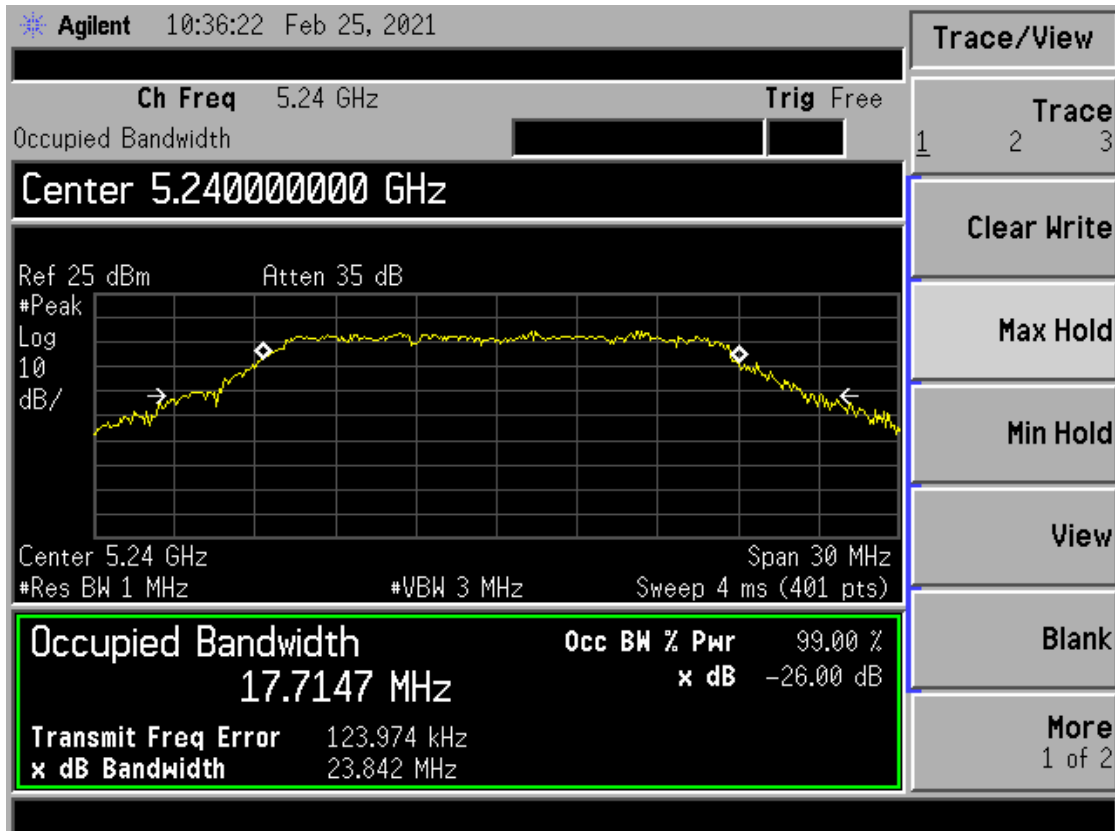
UNII 1, OFDM: 99%, Mid Channel



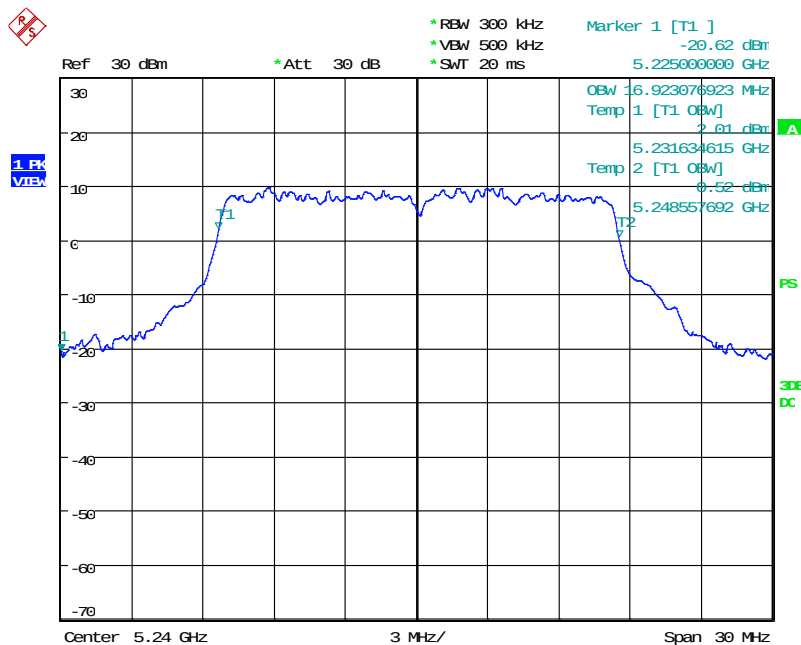
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UNI 1, OFDM: -26dB, High Channel



UNI 1, OFDM: 99% High Channel



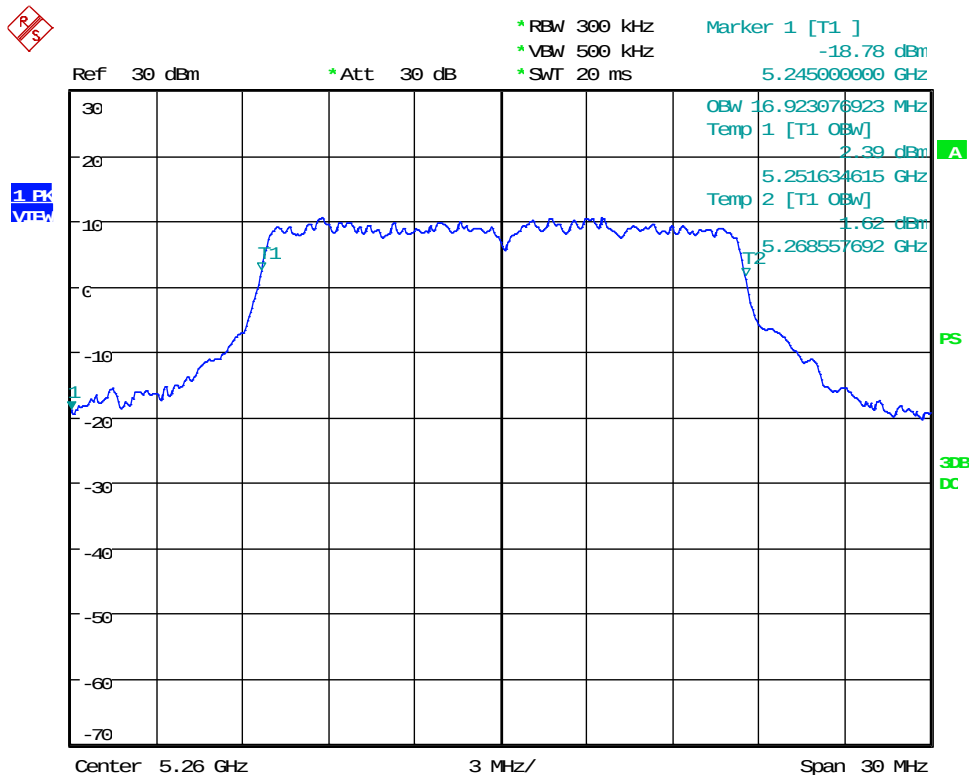
Date: 28.APR.2021 12:59:11



UNII 2A, HT20: -26dB, Low Channel



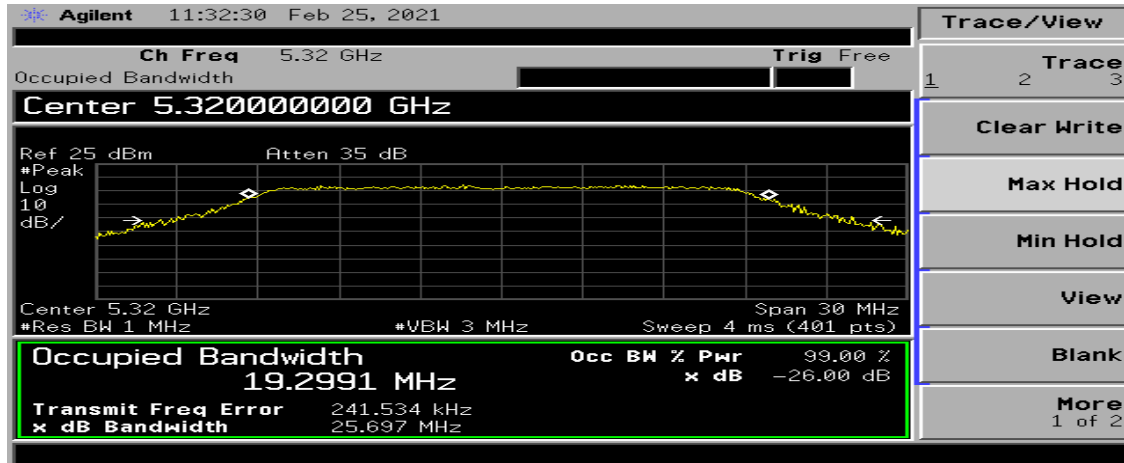
UNII 2A, HT20: 99%, Low Channel



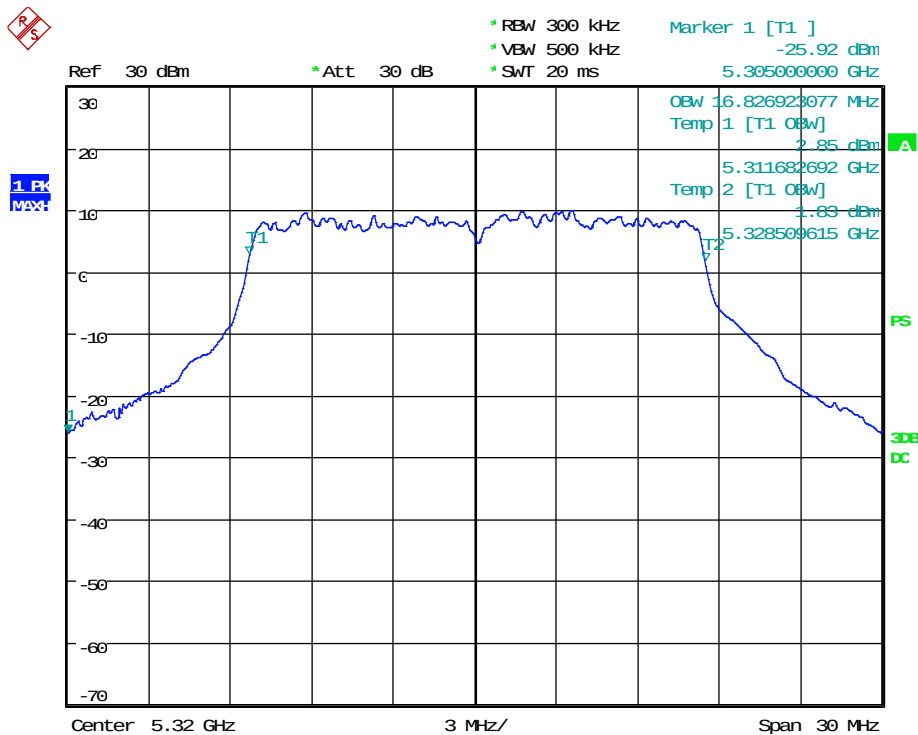
Date: 28.APR.2021 13:02:39



UNII 2A, HT20: -26dB, High Channel



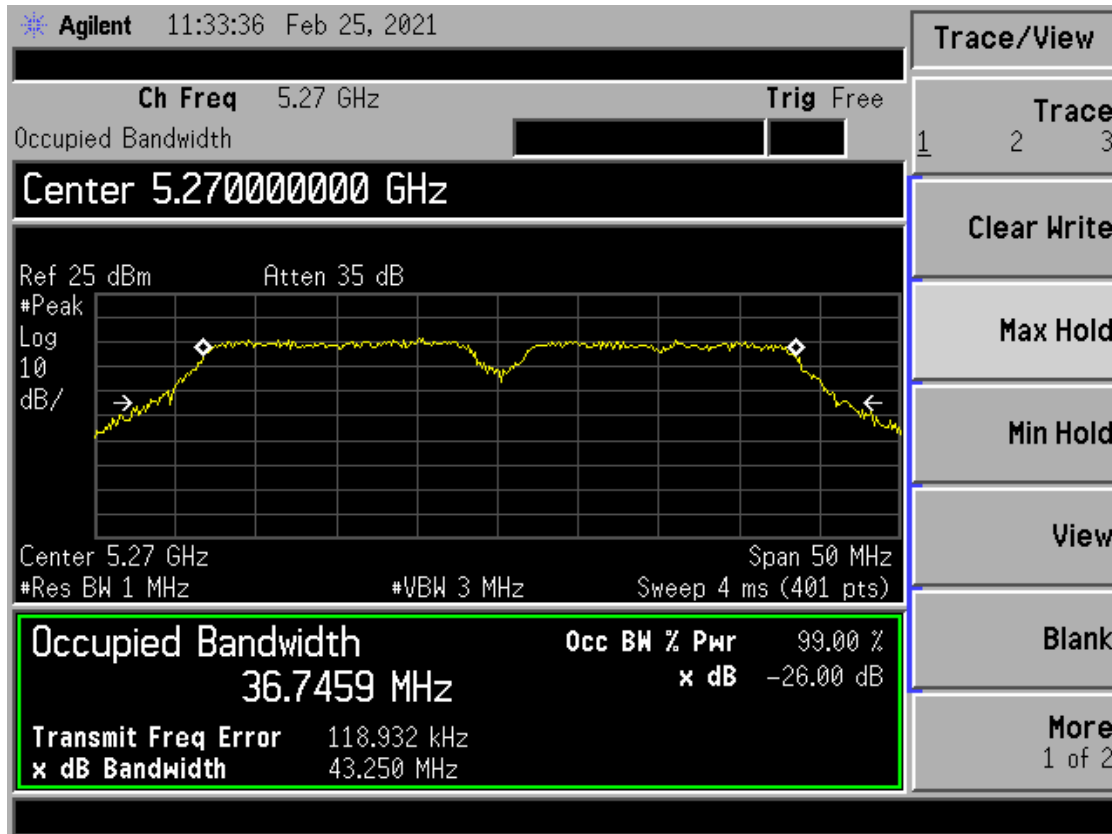
UNII 2A, HT20: 99%, High Channel



Date: 28.APR.2021 13:43:53

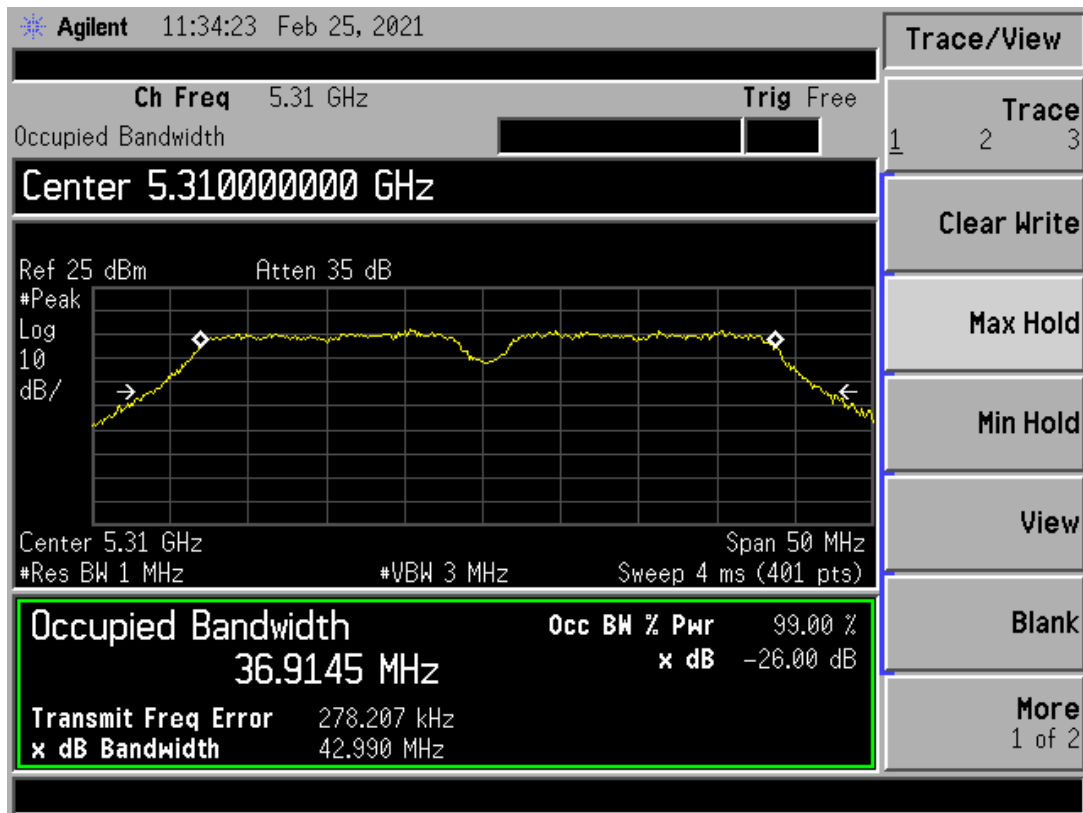


UNII 2A, non HT40: 99% / -26dB, Low Channel



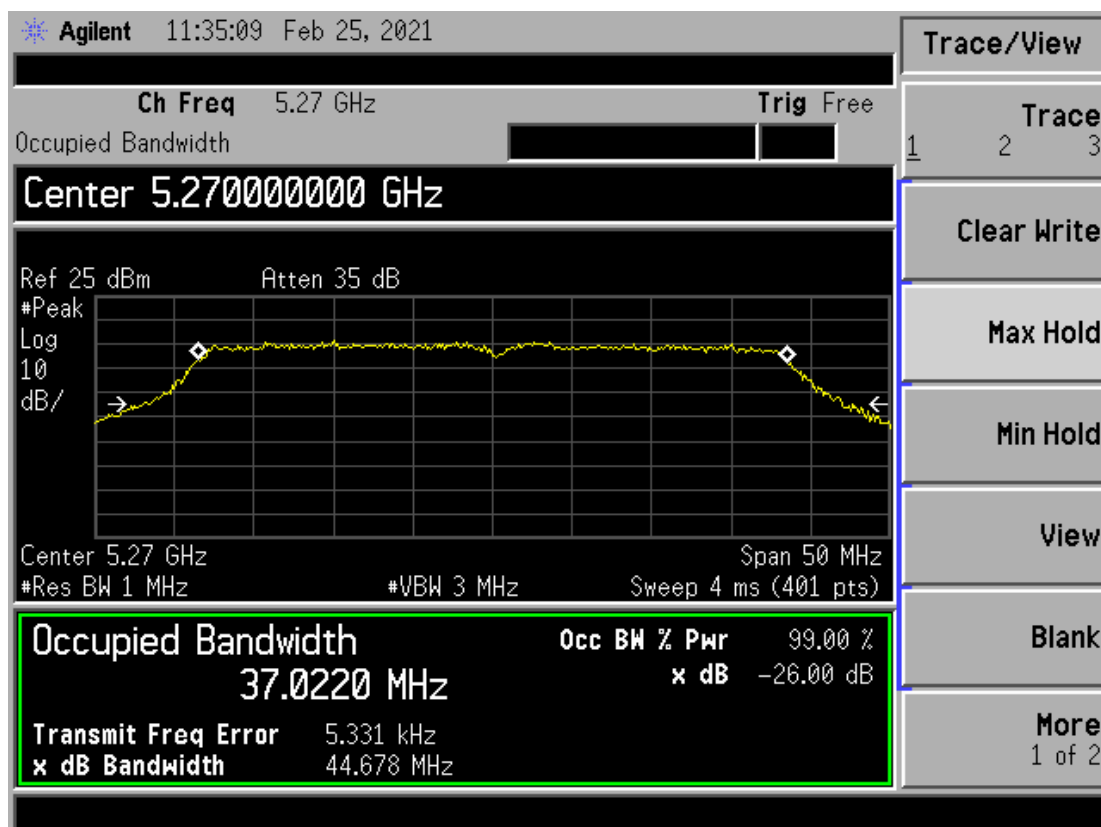


UNII 2A, non HT40: 99% / -26dB, High Channel



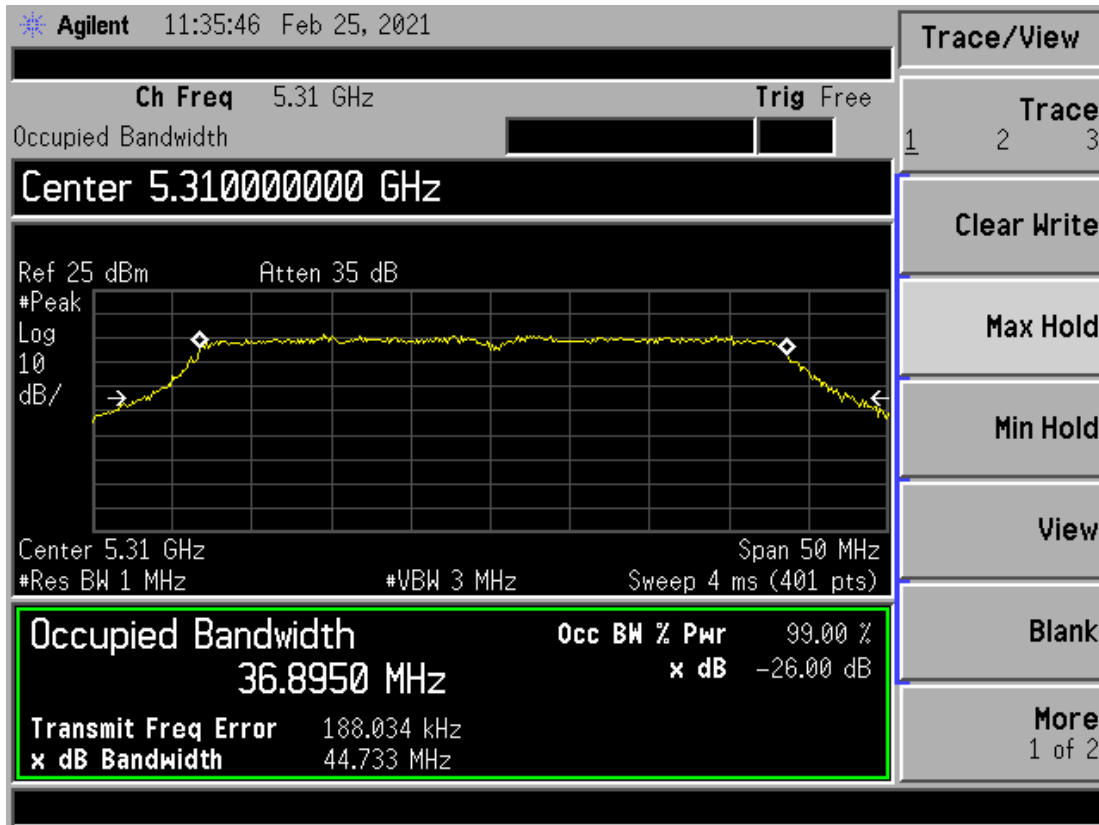


UNII 2A, HT40: 99% / -26dB, Low Channel



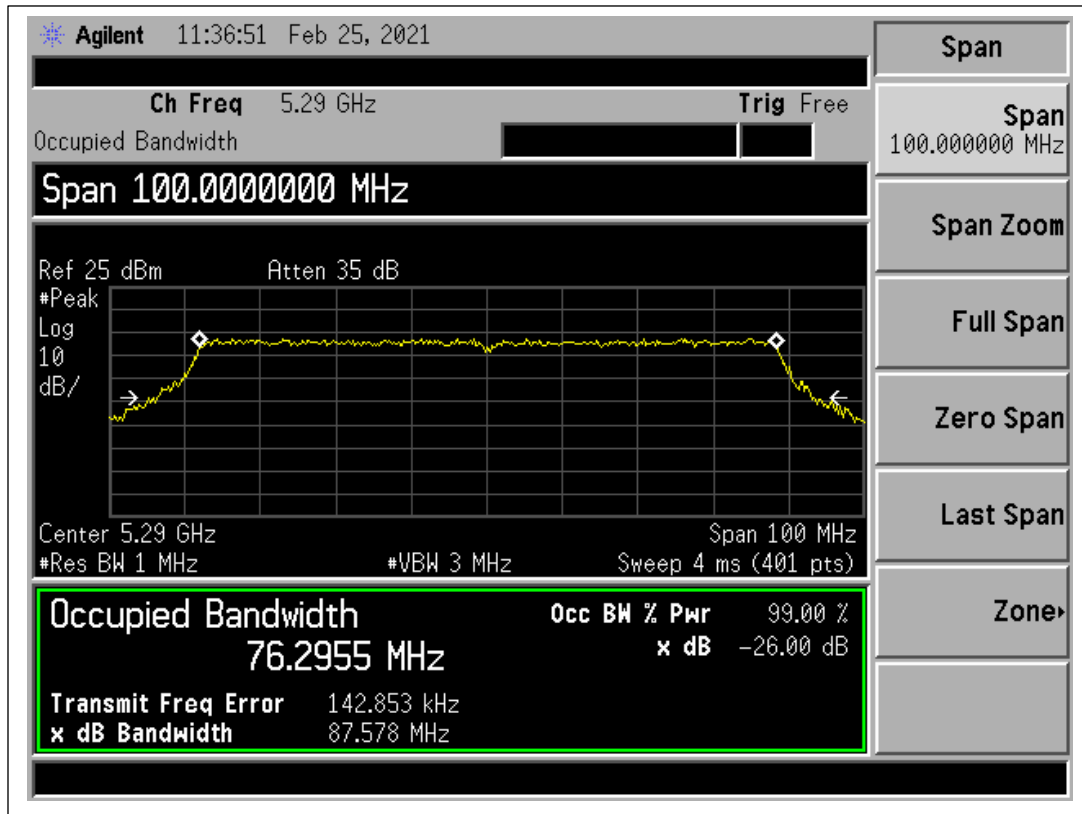


UNII 2A, HT40: 99% / -26dB, High Channel



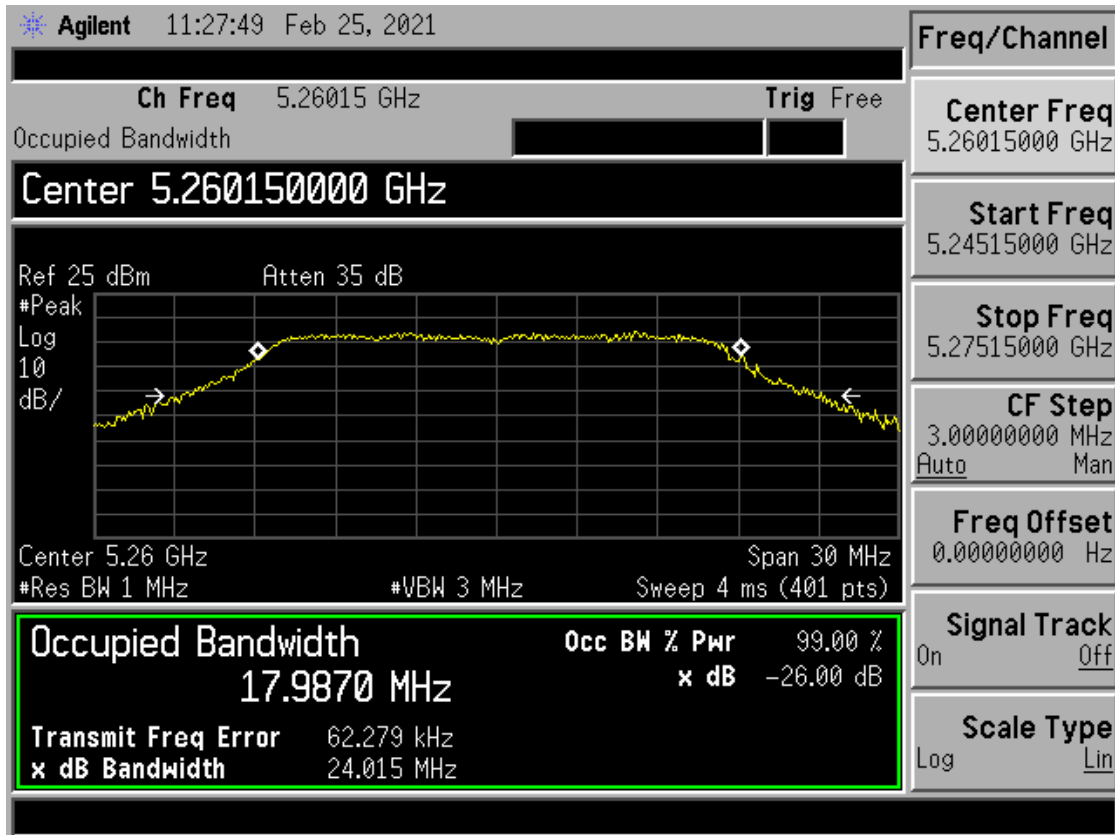


UNII 2A, HT80: 99% / -26dB

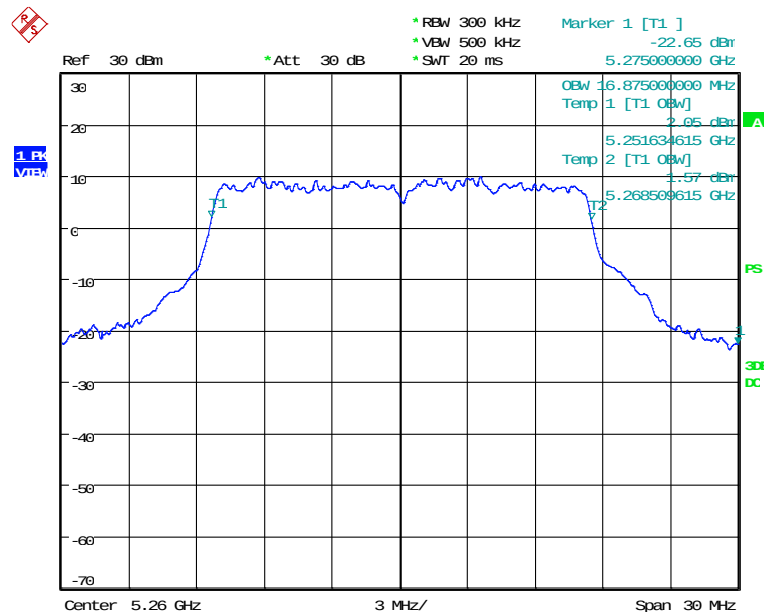




UNII 2A, OFDM: -26dB, Low Channel



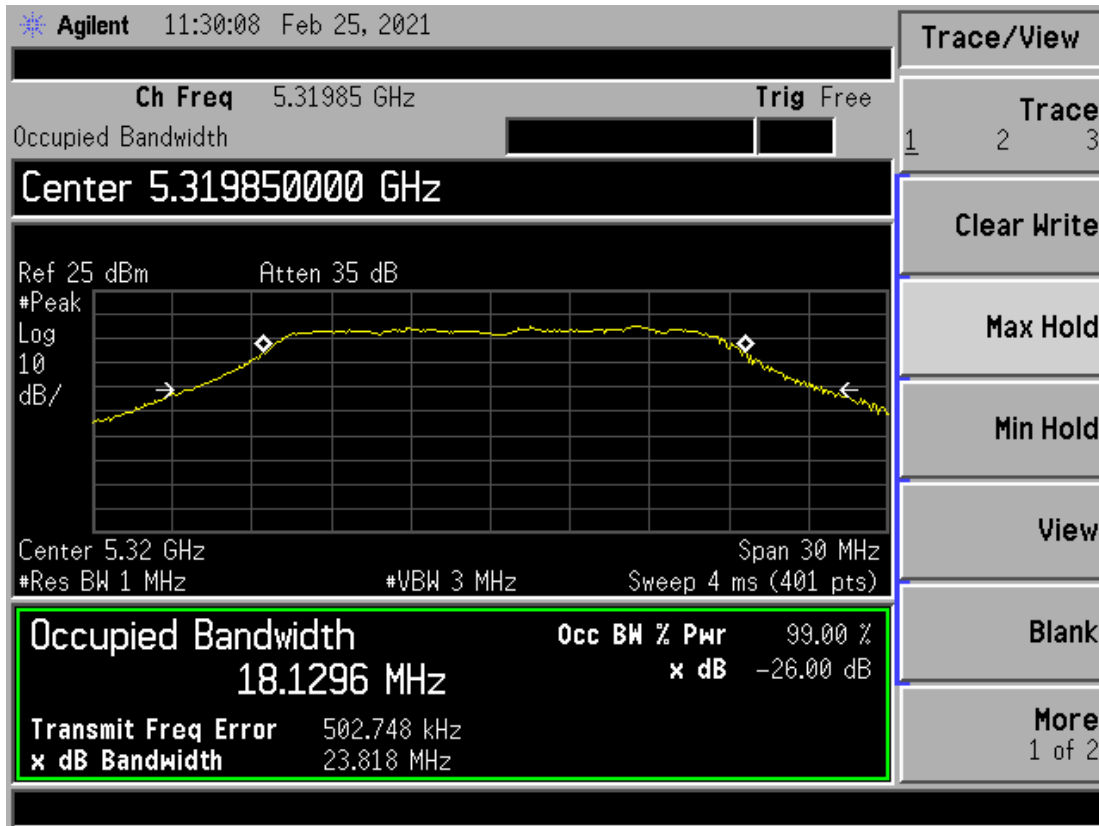
UNII 2A, OFDM: 99%, Low Channel



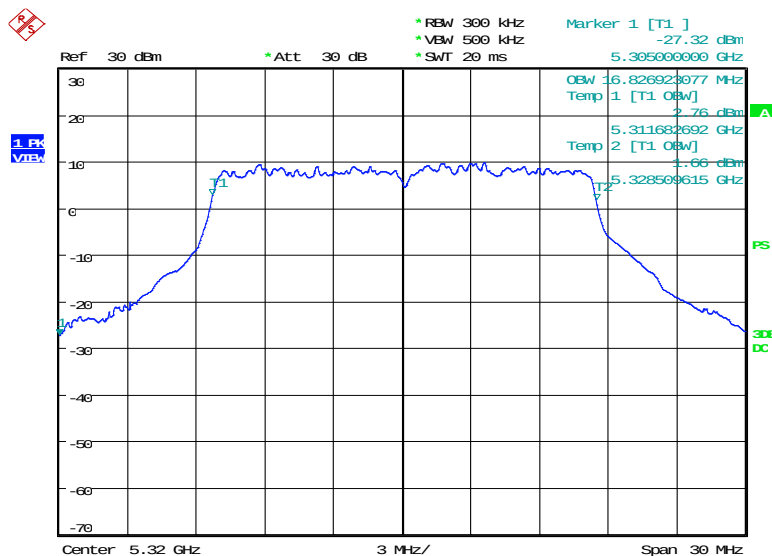
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UNII 2A, OFDM: -26dB, High Channel



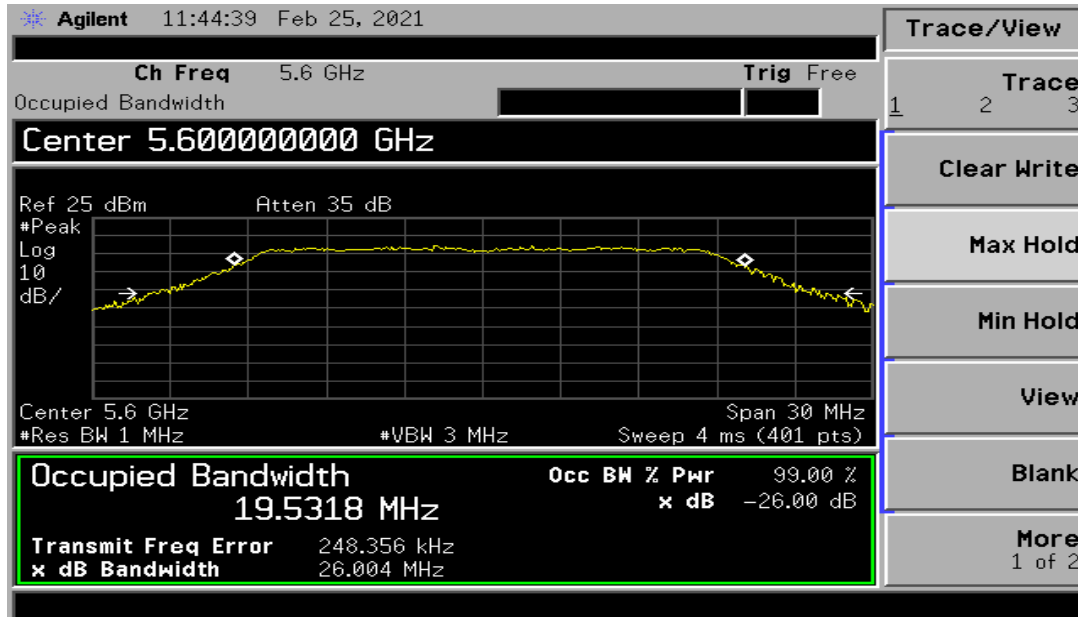
UNII 2A, OFDM: -26dB, High Channel



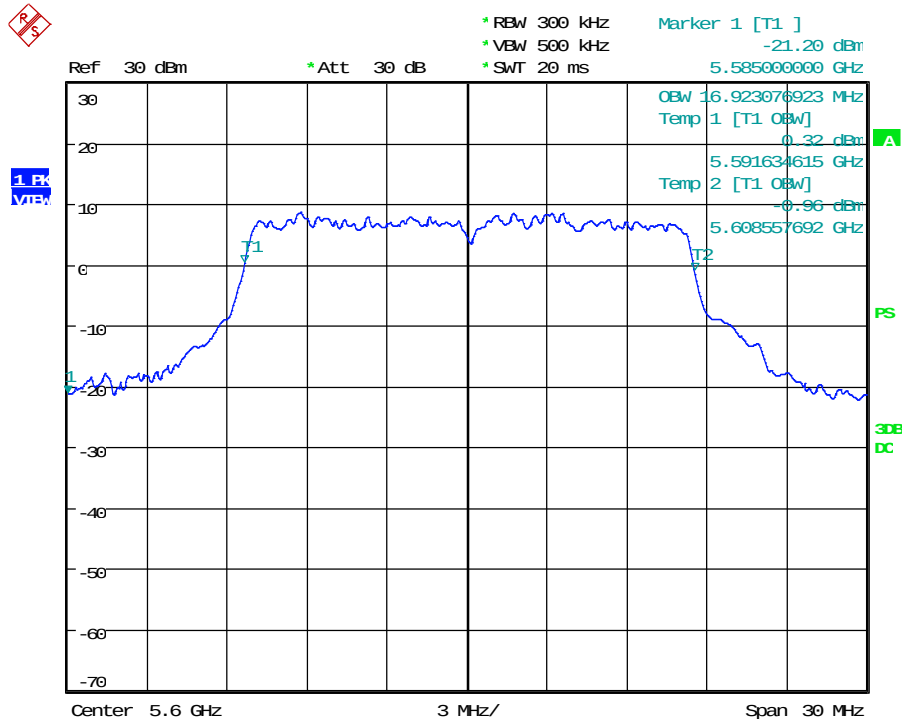
Date: 28.APR.2021 13:51:08



UNII 2C, HT20: -26dB, Mid Channel



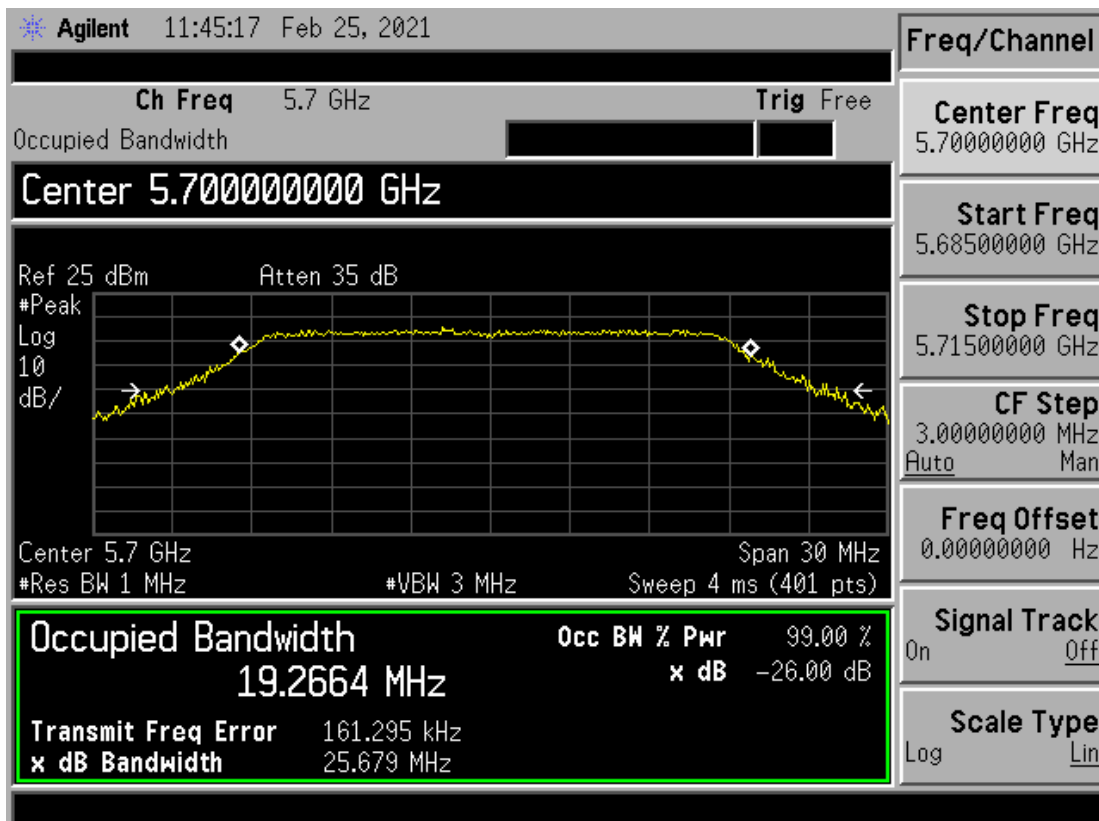
UNII 2C, HT20: 99% Mid Channel



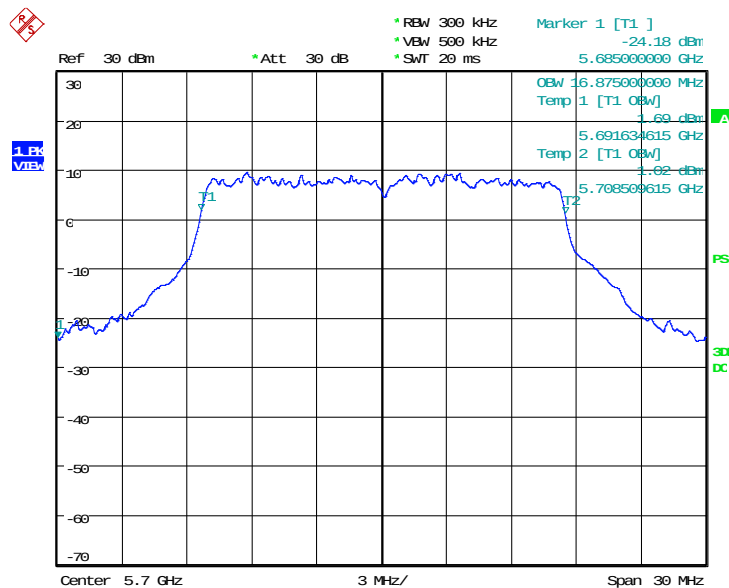
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UNII 2C, HT20: -26dB, High Channel



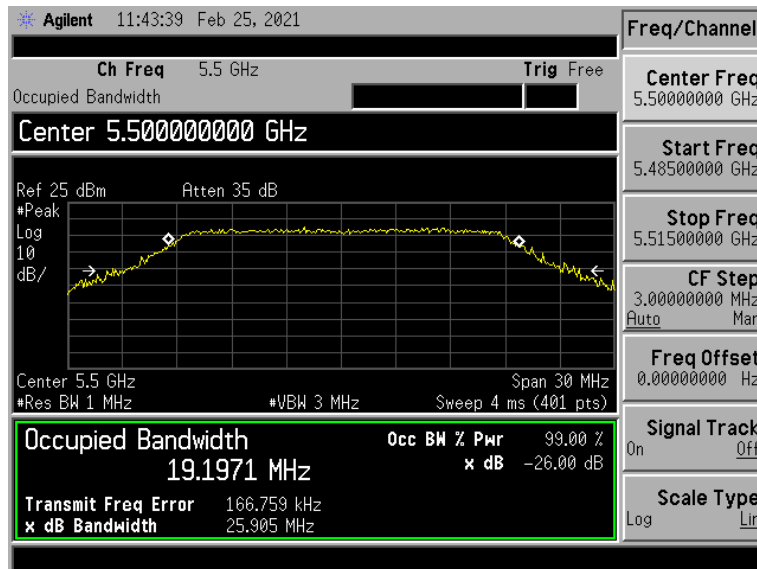
UNII 2C, HT20: 99% High Channel



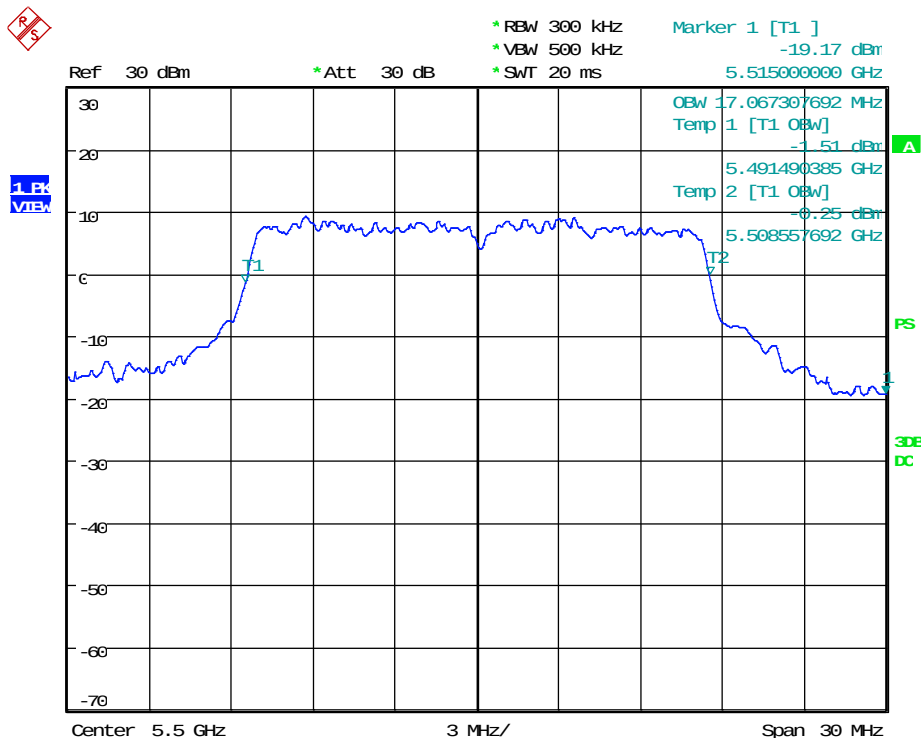
Date: 28.APR.2021 14:03:22



UNII 2C, HT20: -26dB, Low Channel



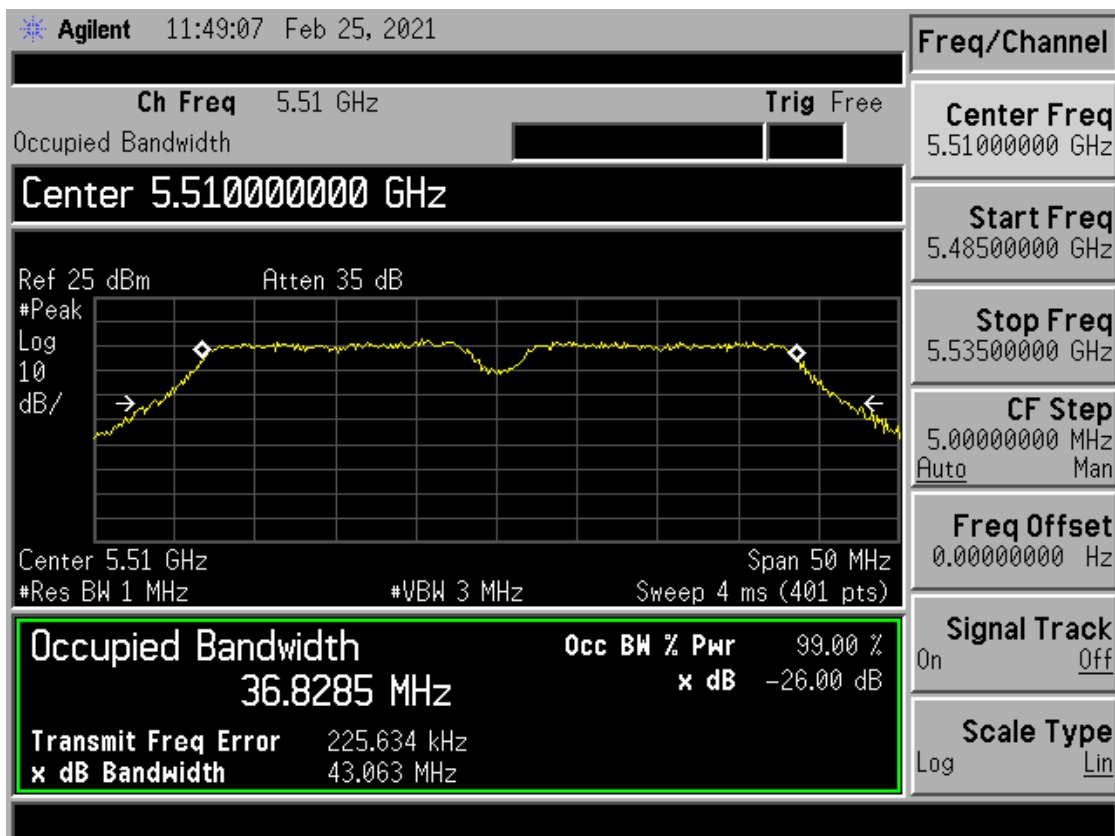
UNII 2C, HT20: 99%, Low Channel



Date: 28.APR.2021 14:24:54

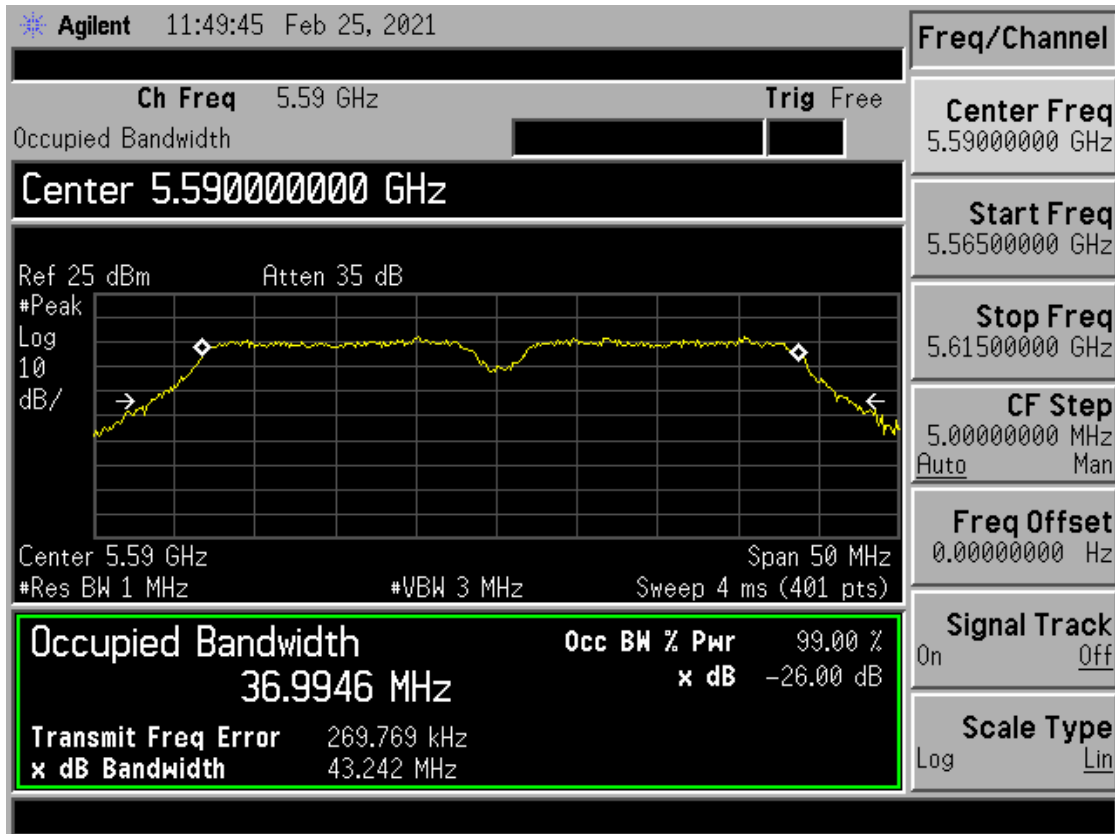


UNII 2C, non HT40: 99% / -26dB, Low Channel



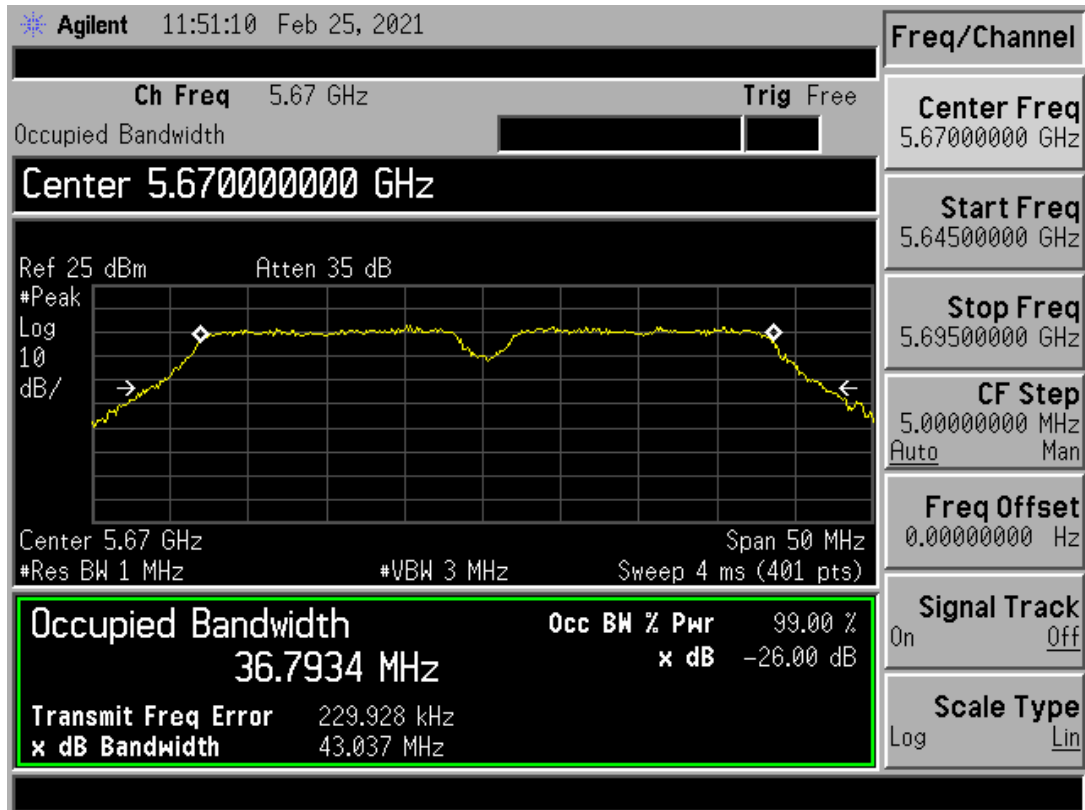


UNII 2C, non HT40: 99% / -26dB, Mid Channel



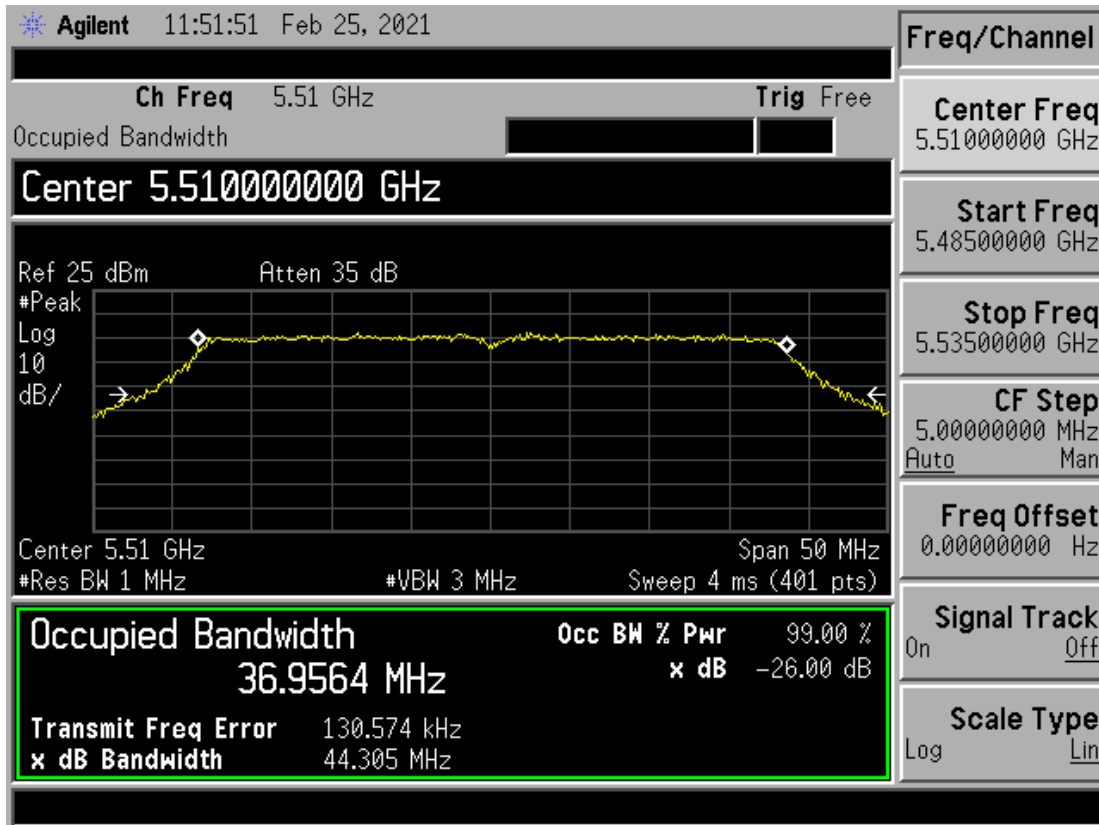


UNII 2C, non HT40: 99% / -26dB, High Channel



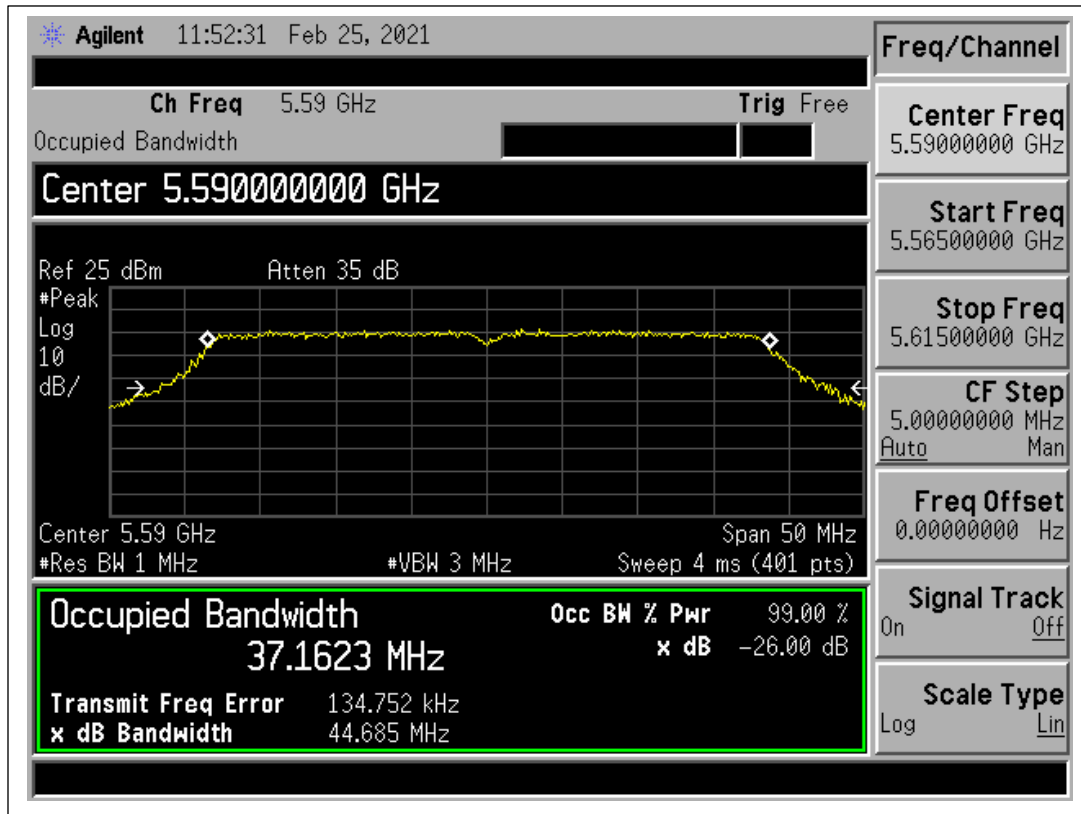


UNII 2C, HT40: 99% / -26dB, Low Channel



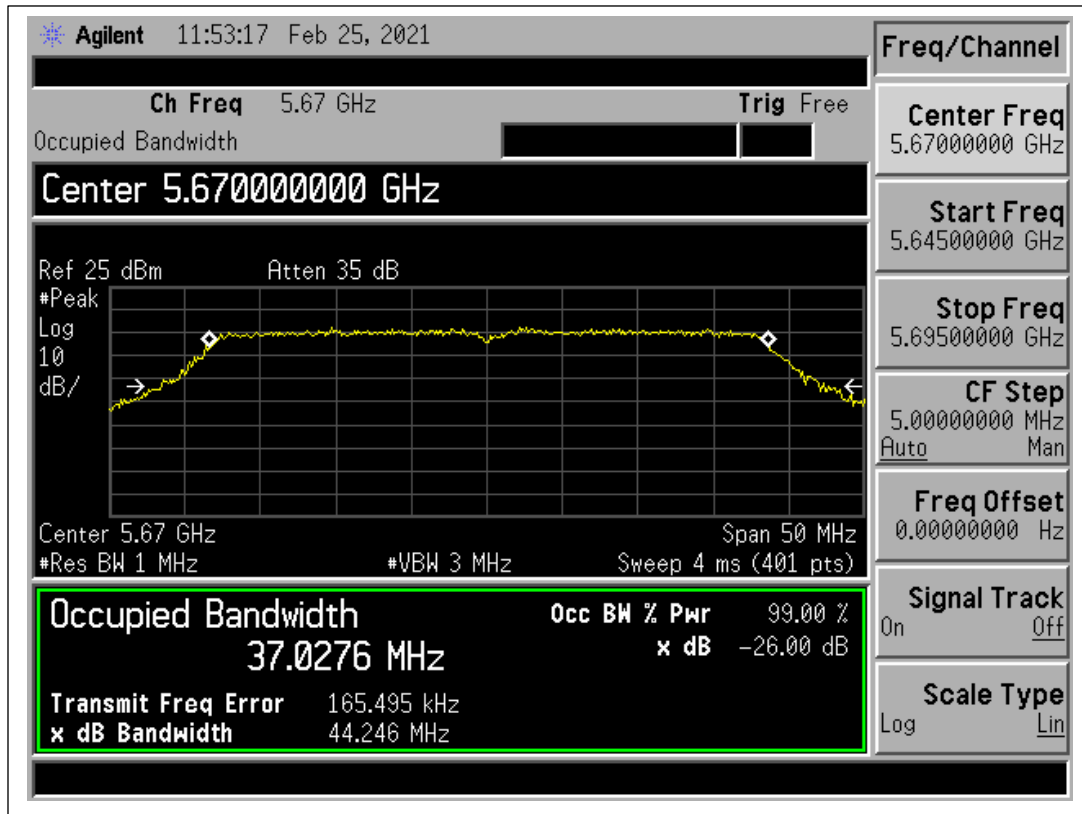


UNII 2C, HT40: 99% / -26dB, Mid Channel



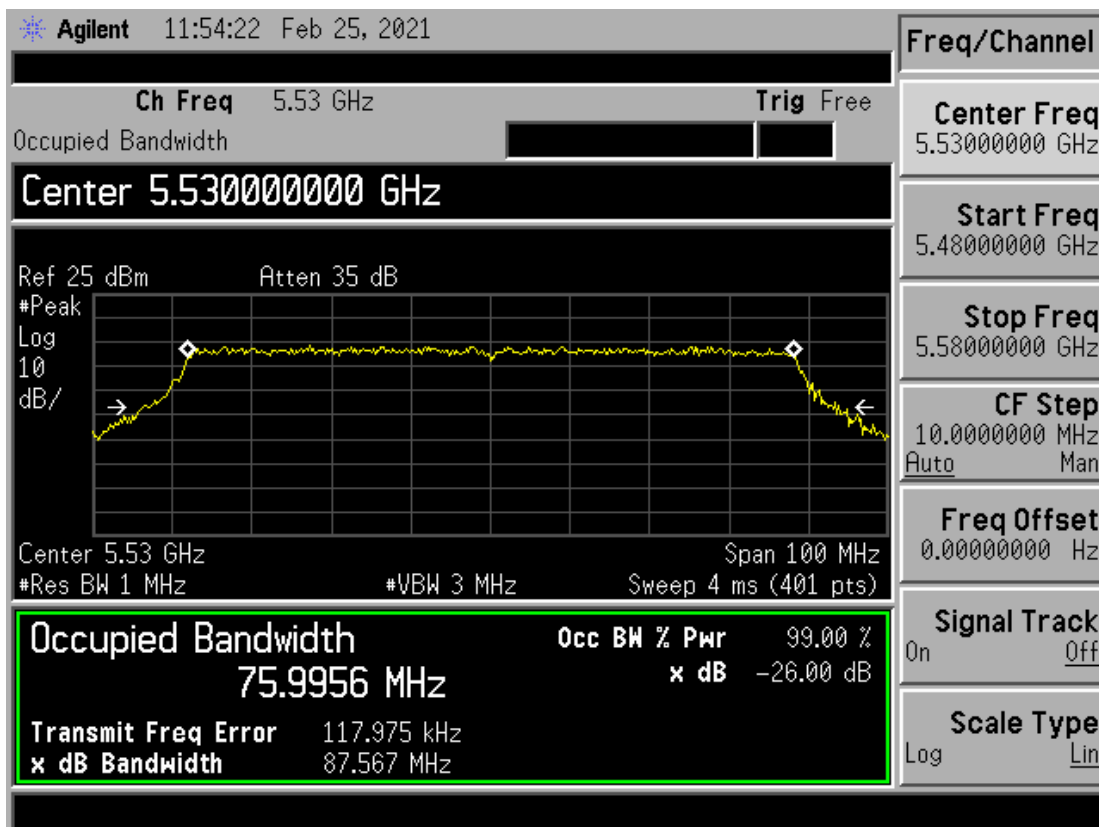


UNII 2C, HT40: 99% / -26dB, High Channel



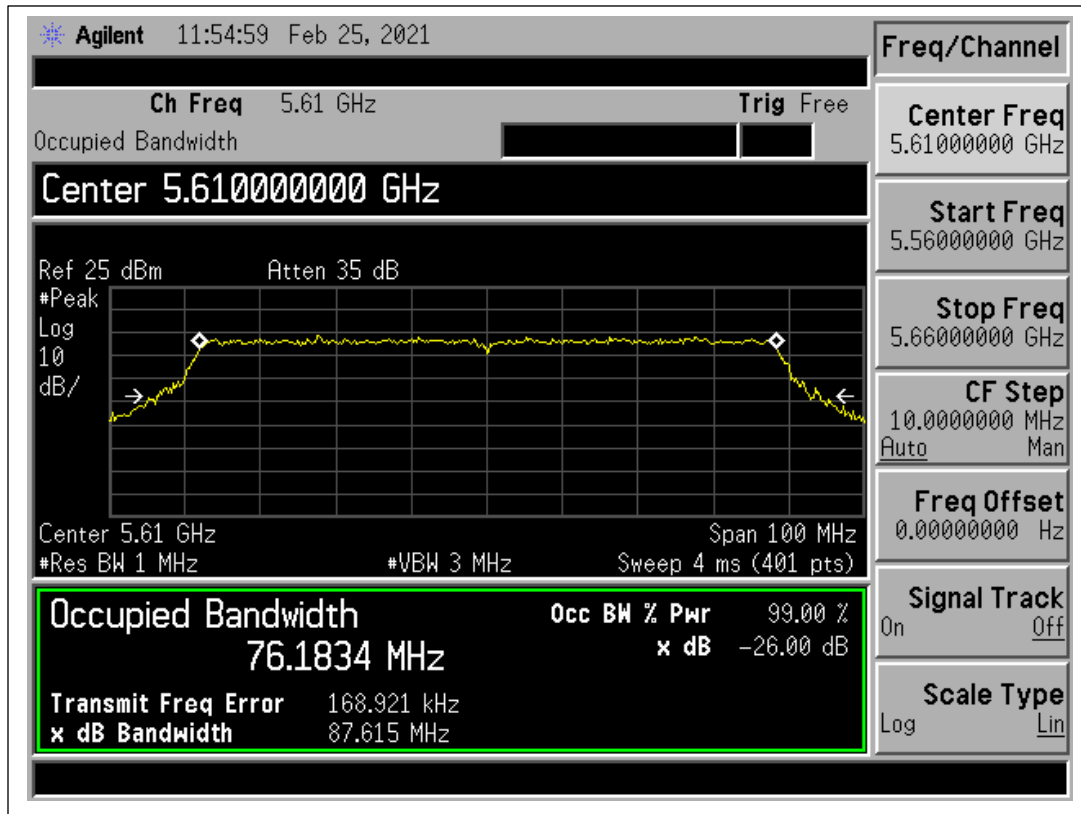


UNII 2C, HT80: 99% / -26dB, Low Channel



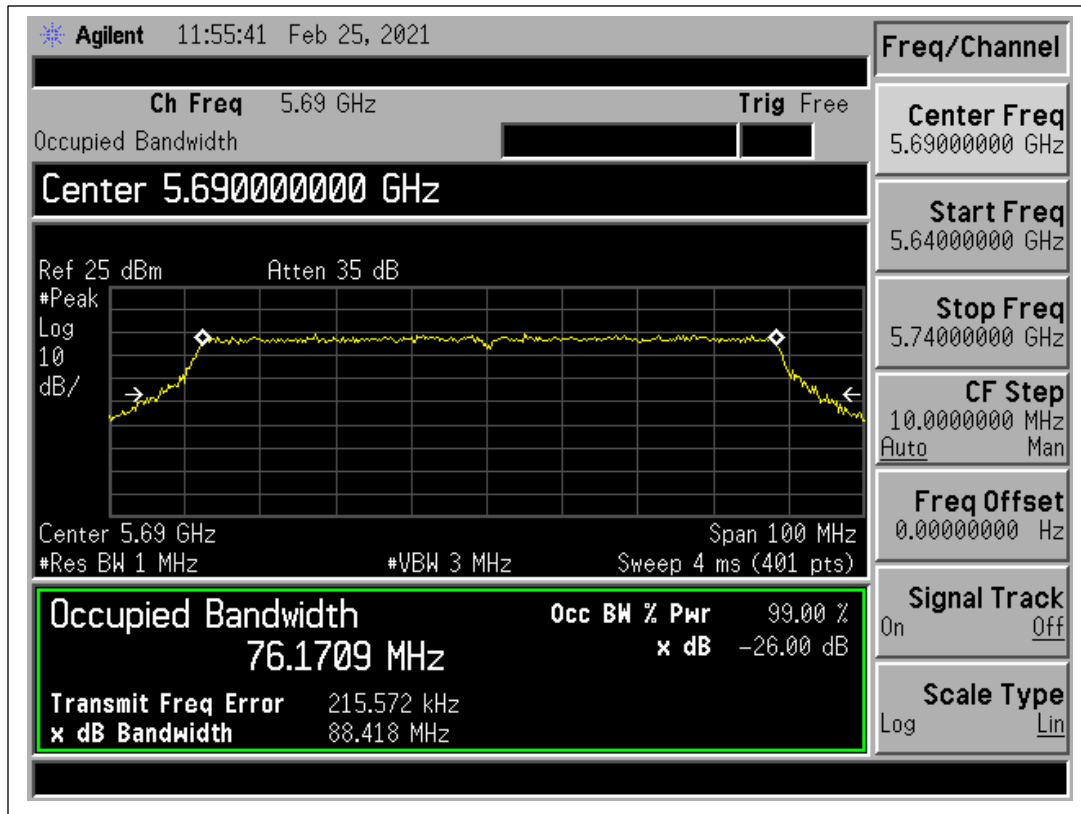


UNII 2C, HT80: 99% / -26dB, Mid Channel



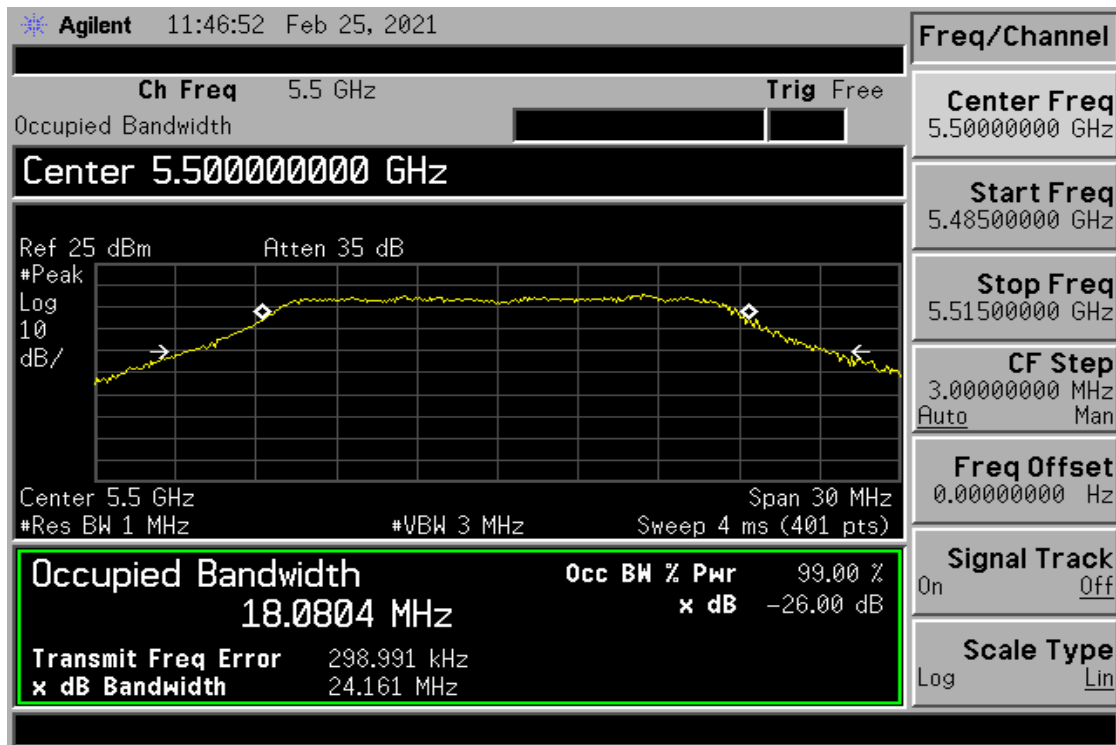


UNII 2C, HT80: 99% / -26dB, High Channel

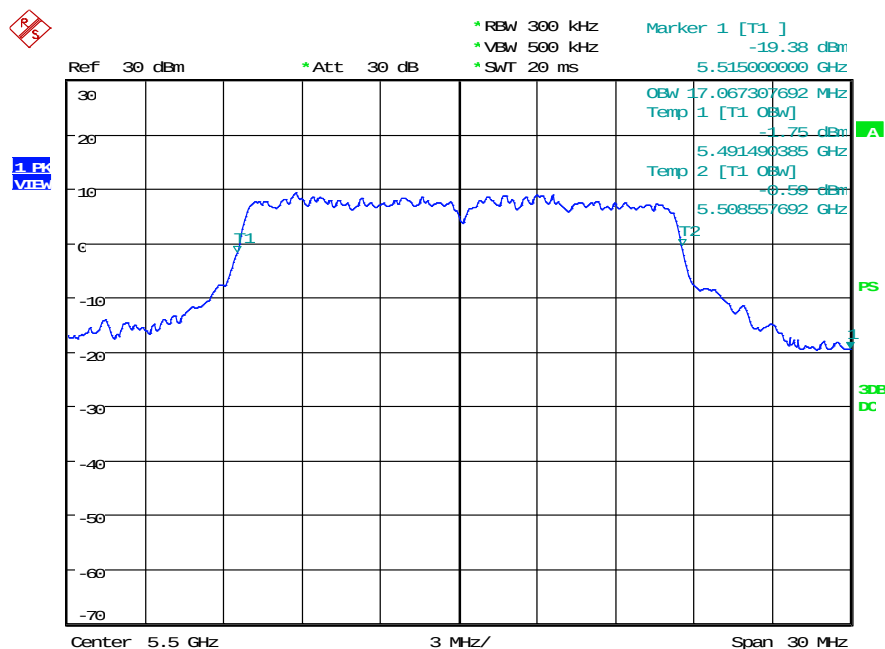




UNII 2C, OFDM: -26dB, Low Channel



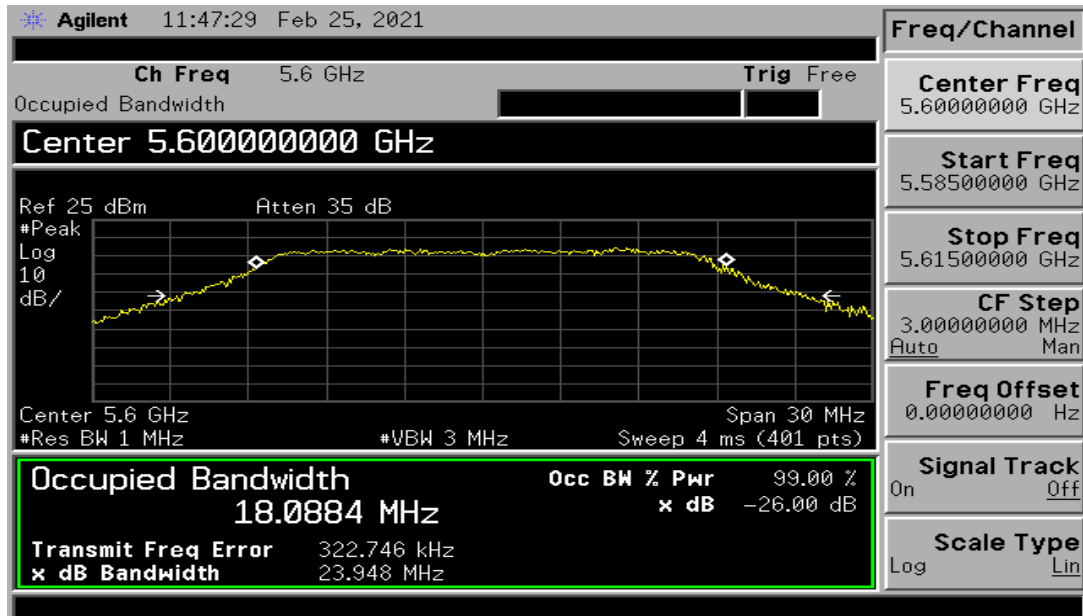
UNII 2C, OFDM: 99%, Low Channel



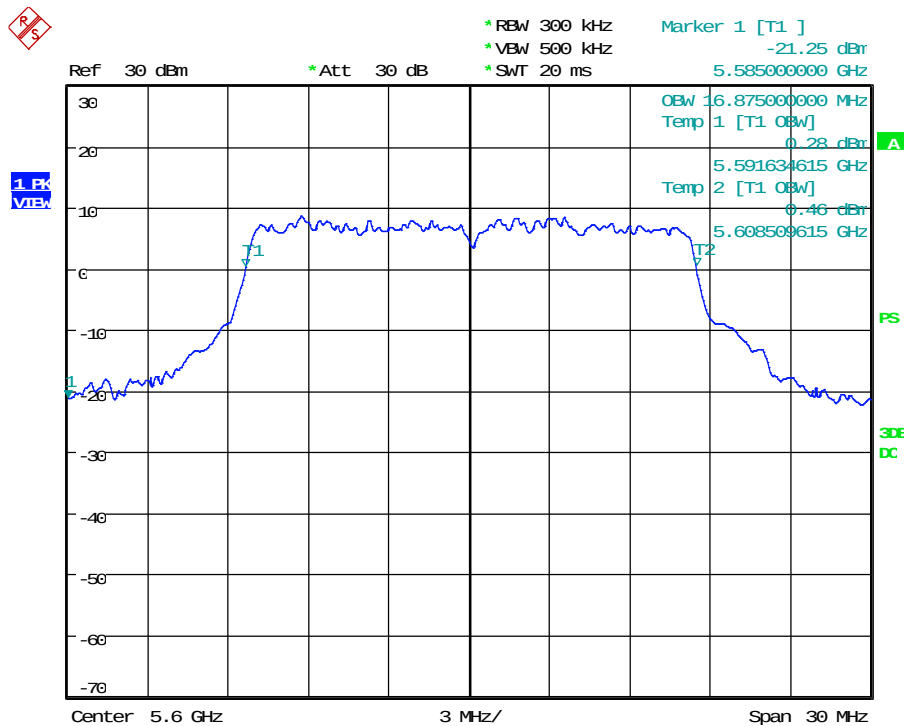
Date: 28.APR.2021 14:06:08



UNII 2C, OFDM: -26dB, Mid Channel



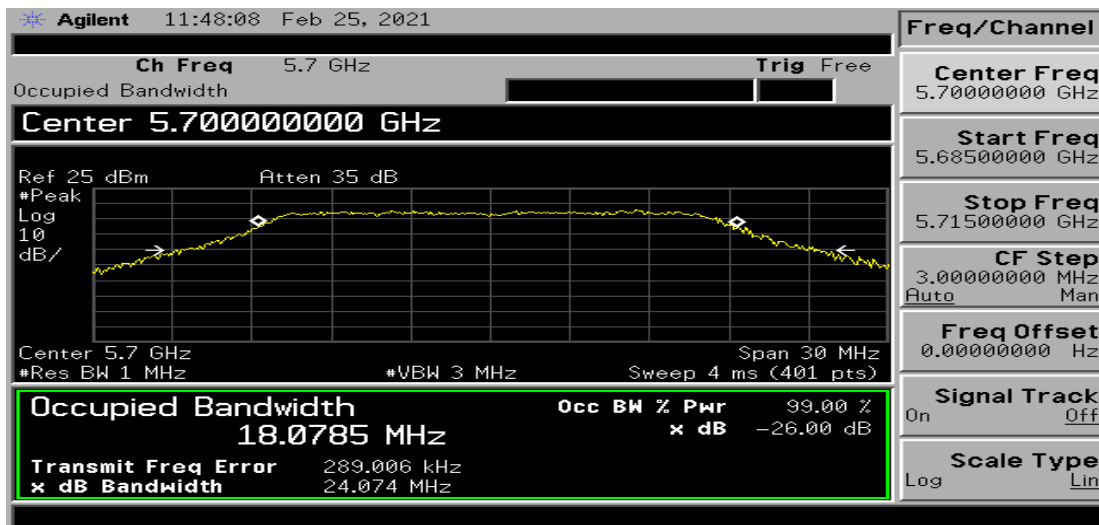
UNII 2C, OFDM: 99% Mid Channel



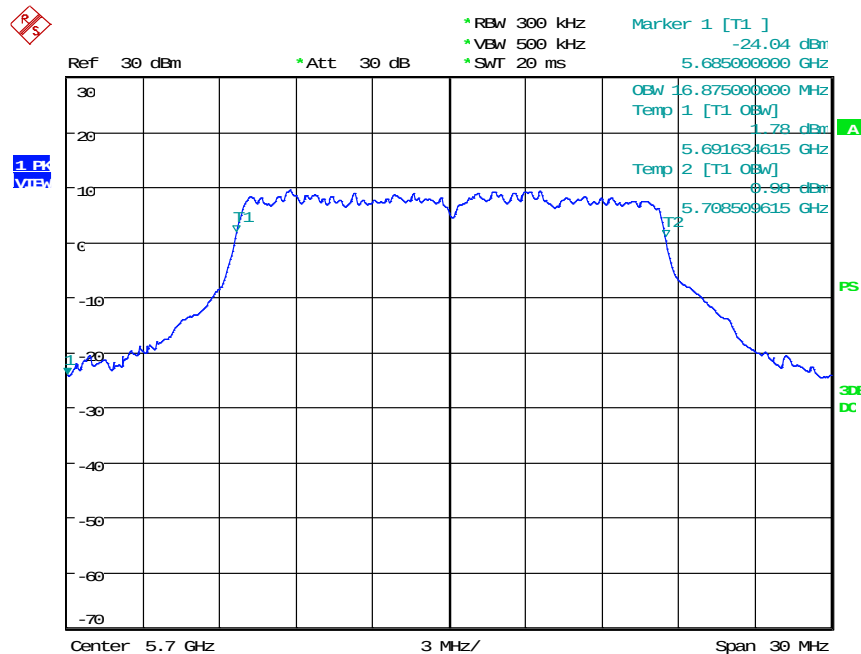
Date: 28.APR.2021 14:07:50



UNII 2C, OFDM: -26dB, High Channel



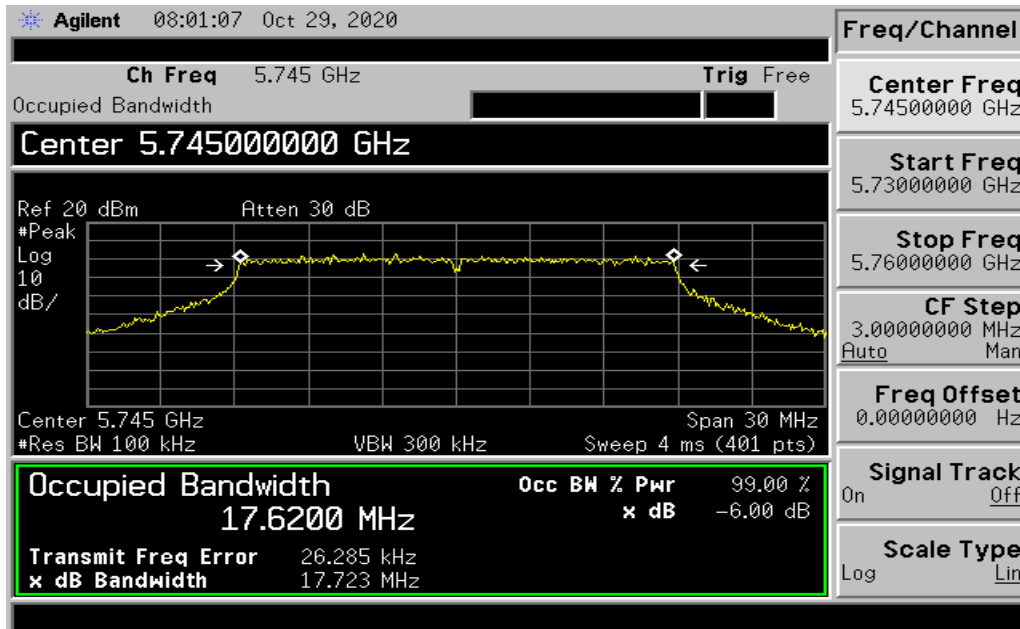
UNII 2C, OFDM: 99% High Channel



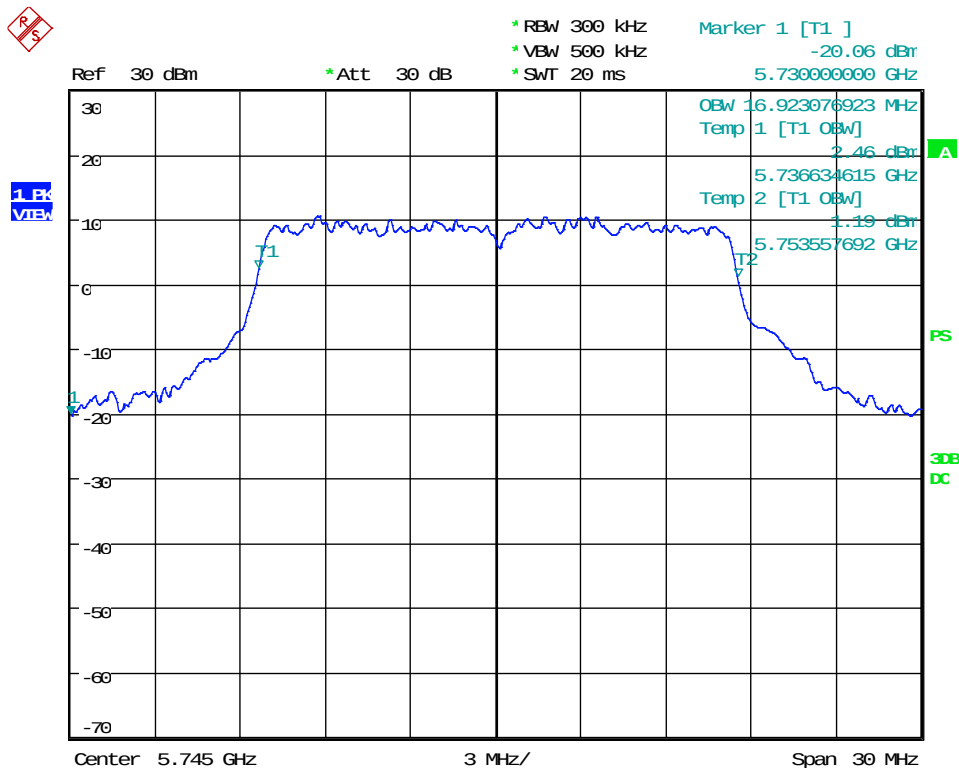
Date: 28.APR.2021 14:09:42



UNII 3, HT20: -6dB, Low Channel

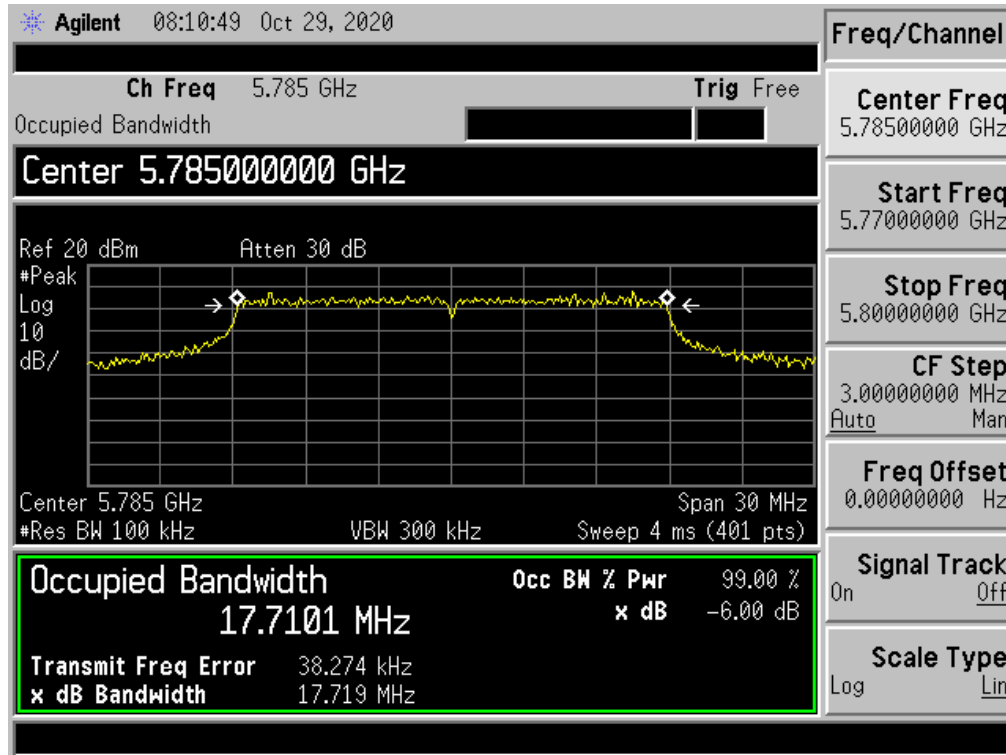


UNII 3, HT20: 99%, Low Channel

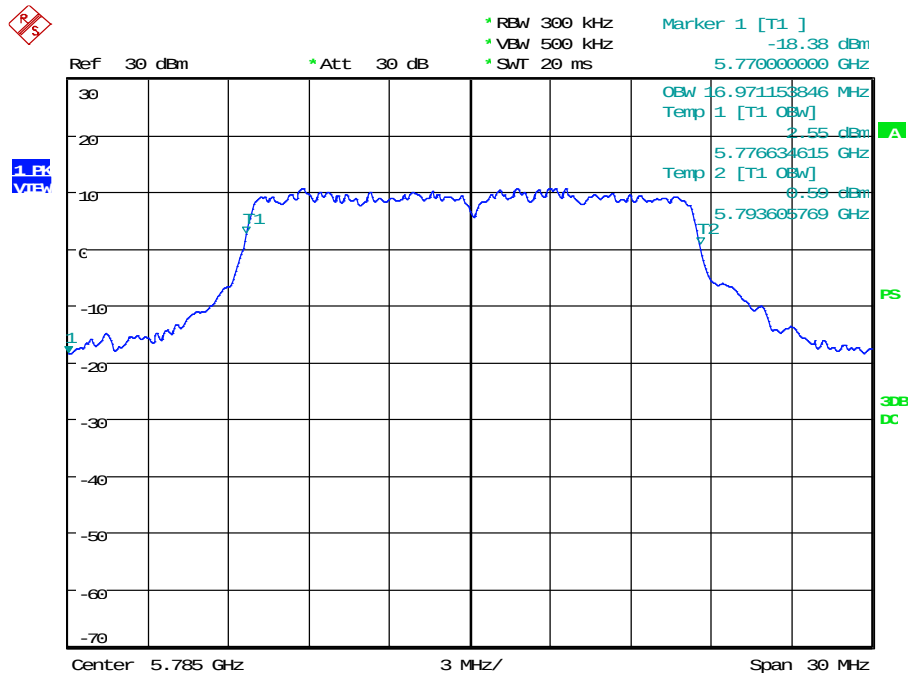




UNII 3, HT20: -6dB, Mid Channel



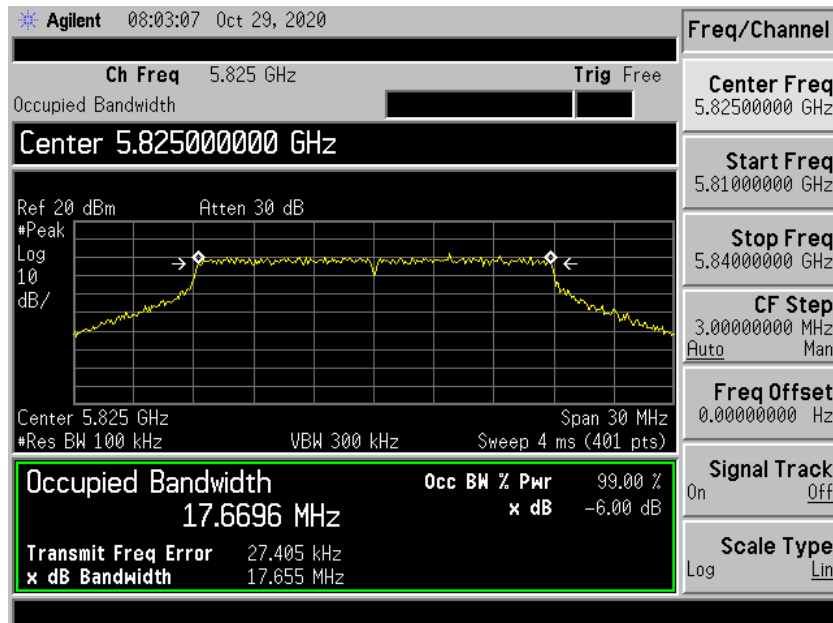
UNII 3, HT20: 99%, Mid Channel



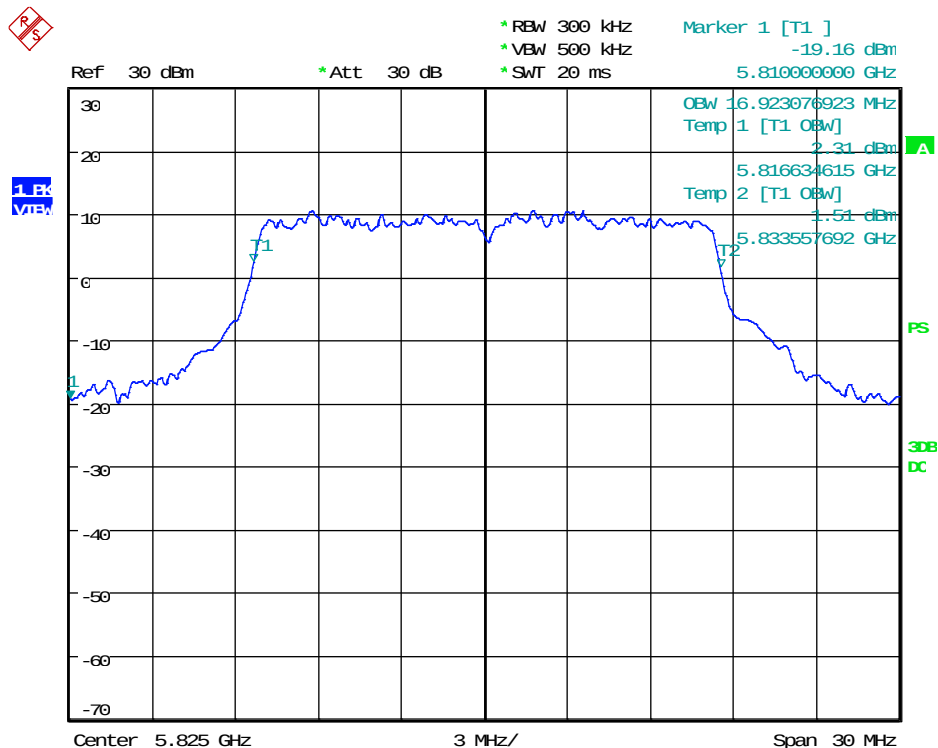
Date: 28.APR.2021 15:15:47



UNII 3, HT20: -6dB, High Channel

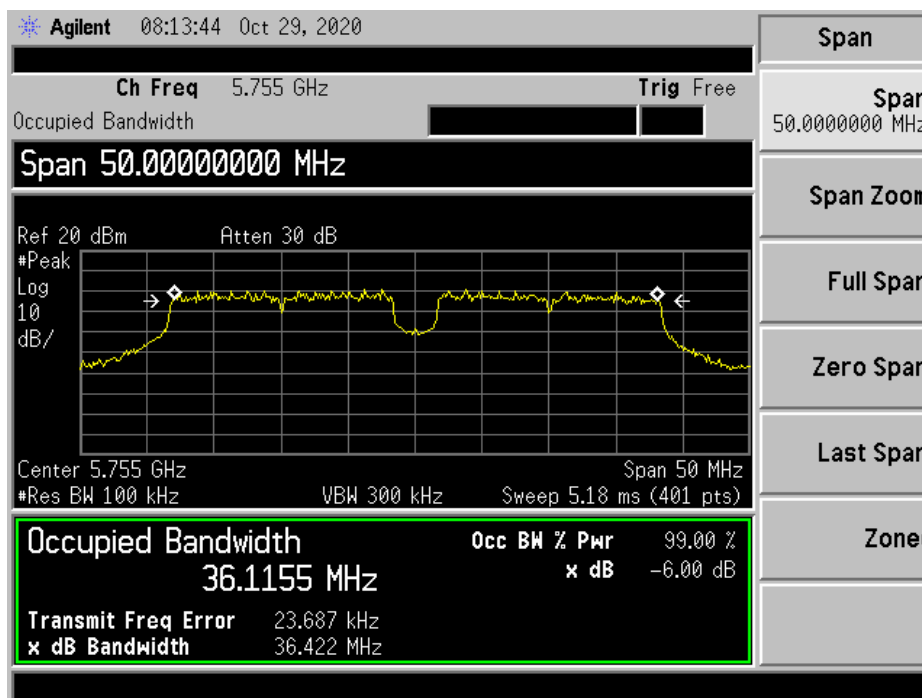


UNII 3, HT20: 99%, High Channel

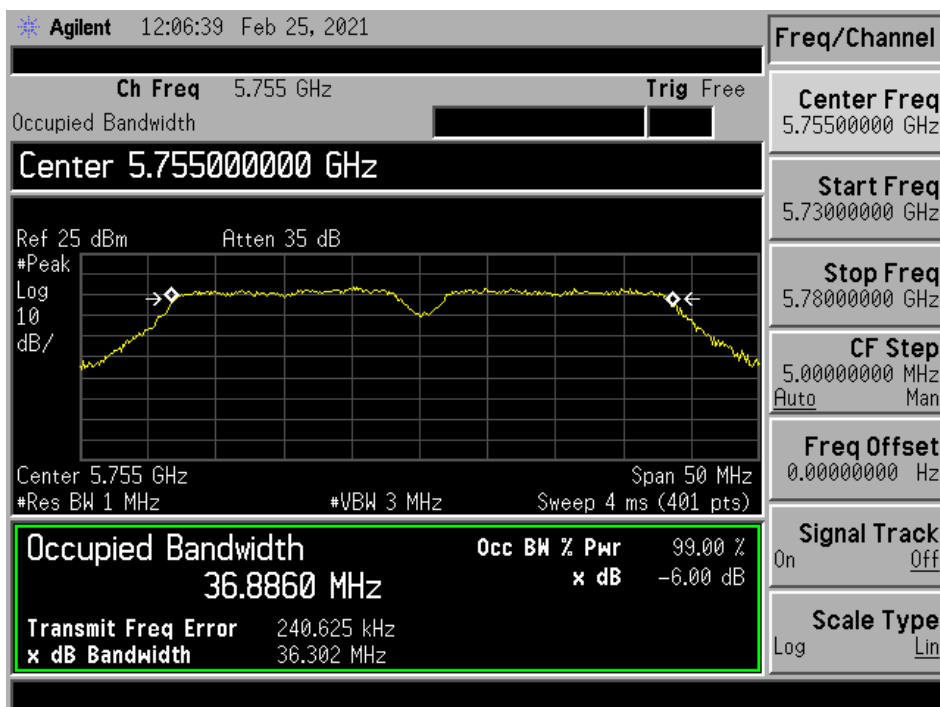




UNII 3, non HT40: -6dB, Low Channel



UNII 3, non HT40: 99%, Low Channel

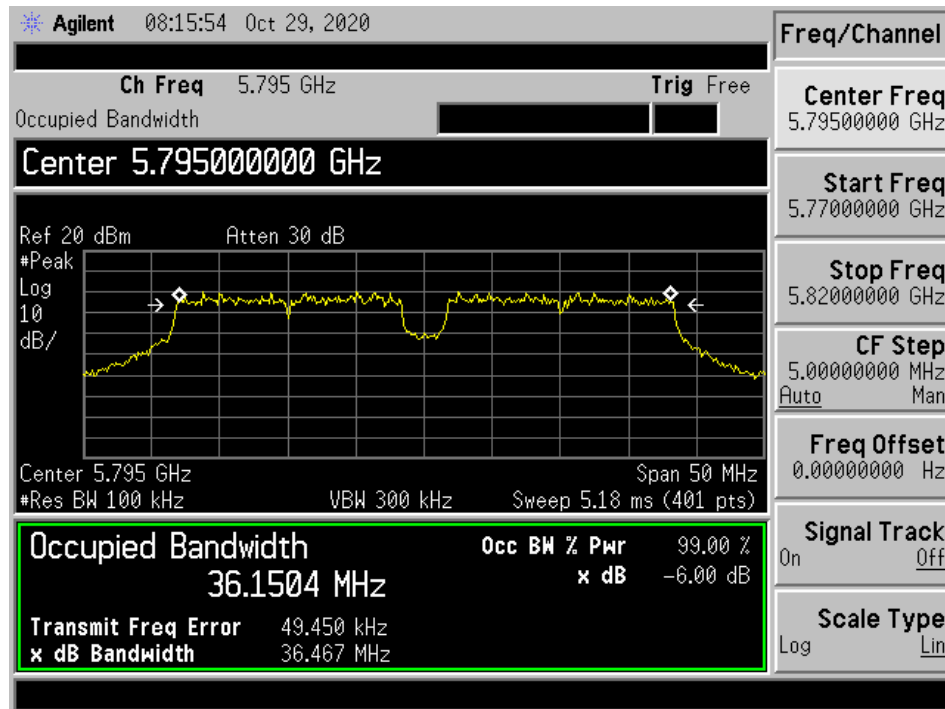




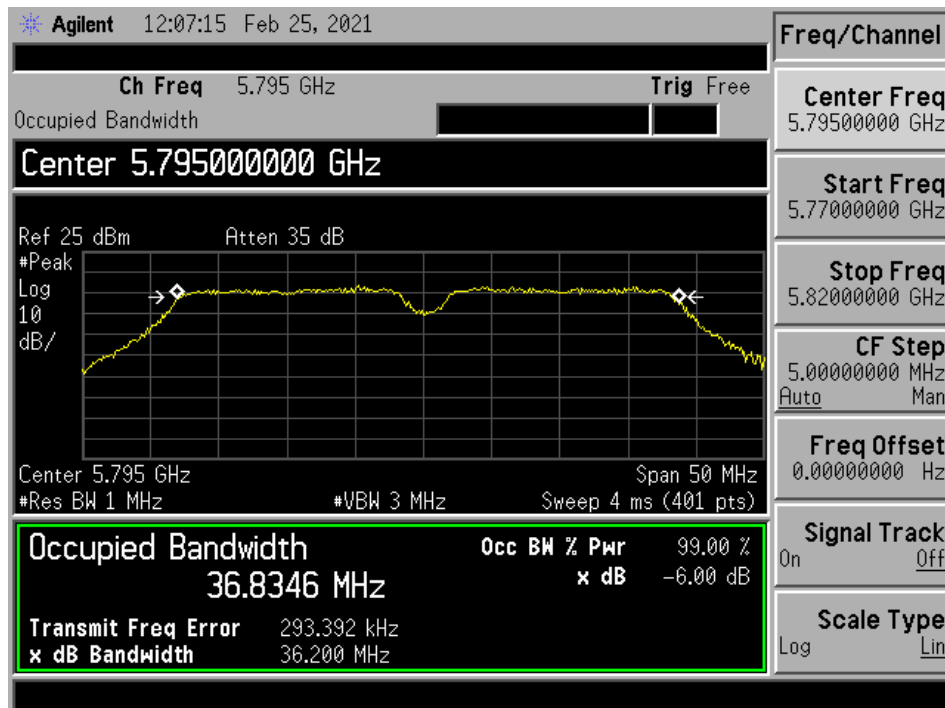
Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 3, non HT40: -6dB, High Channel



UNII 3, non HT40: 99% High Channel

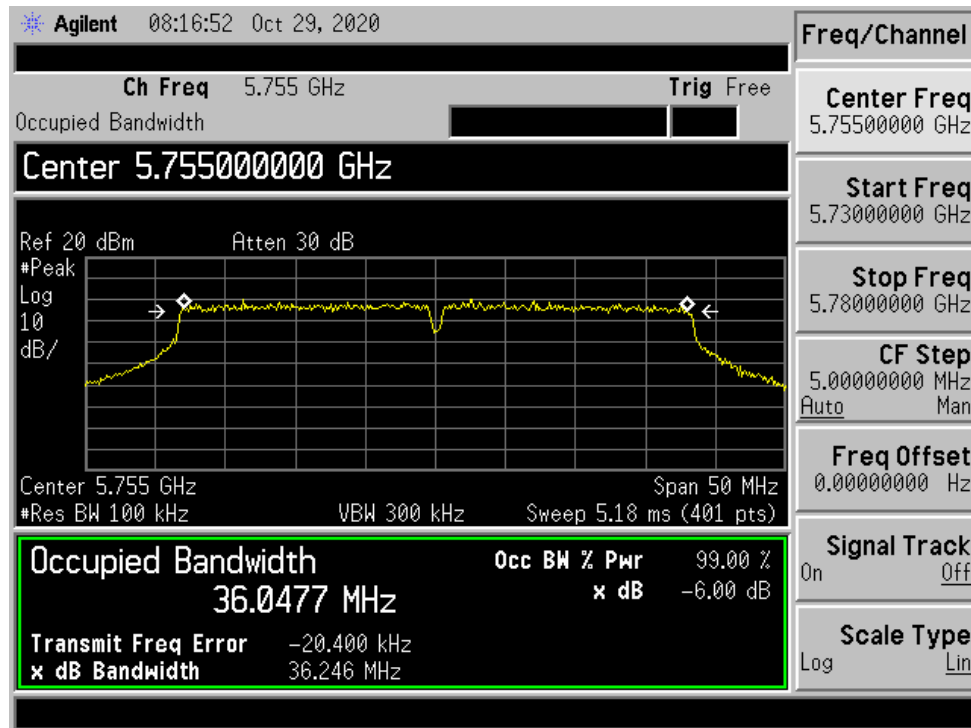




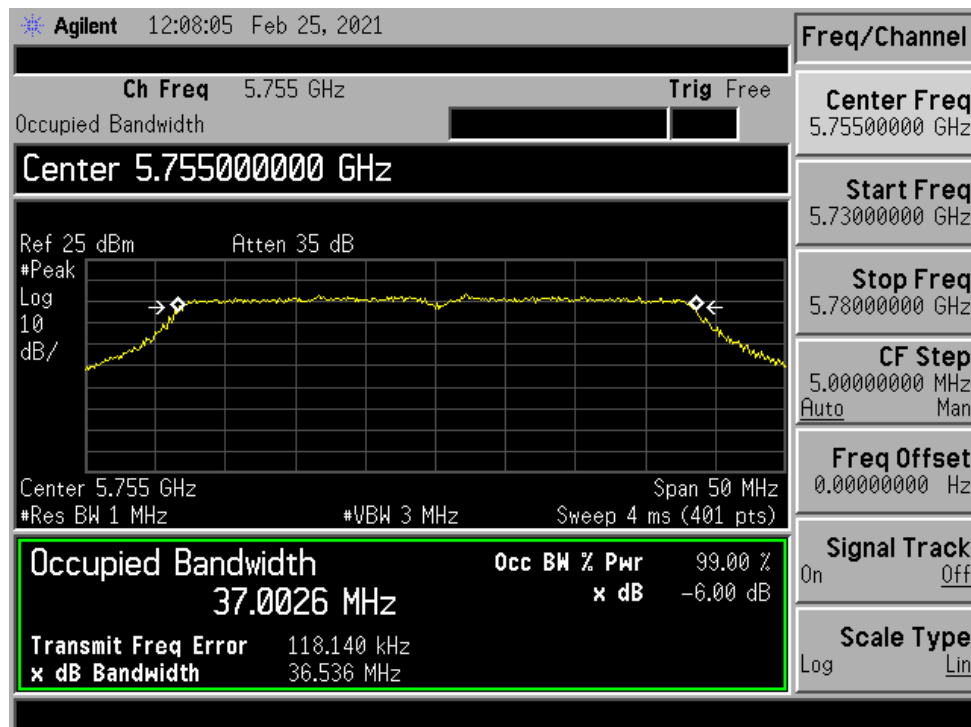
Order Number: F2P19923A

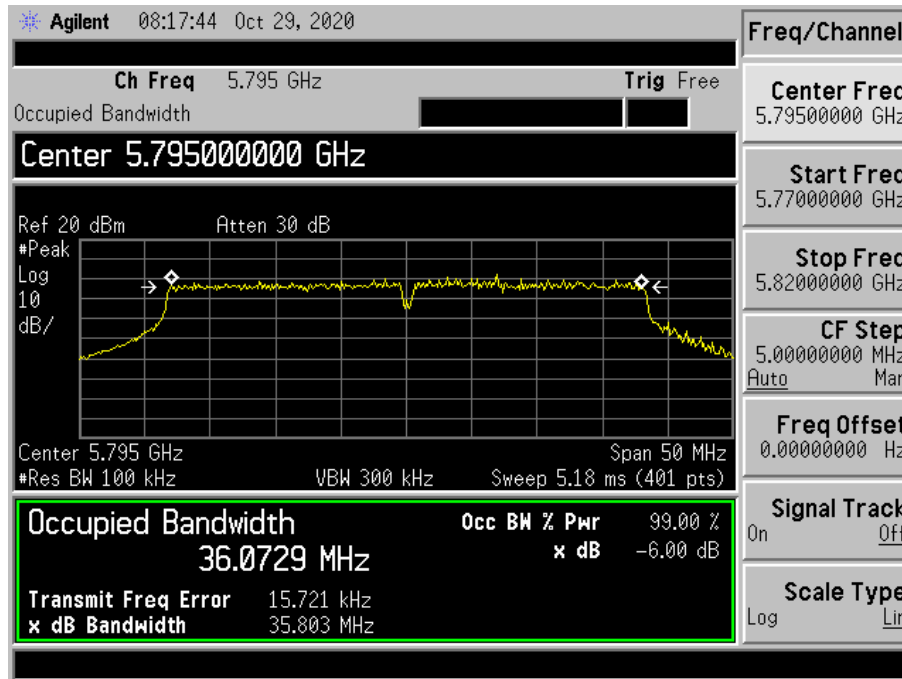
Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 3, HT40: -6dB, Low Channel

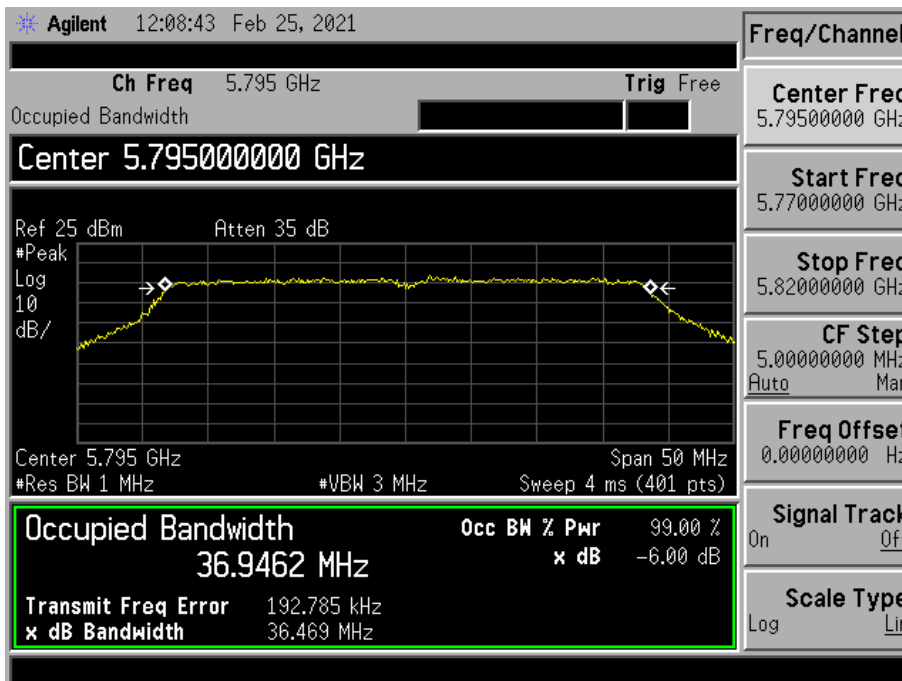


UNII 3, HT40: 99%, Low Channel



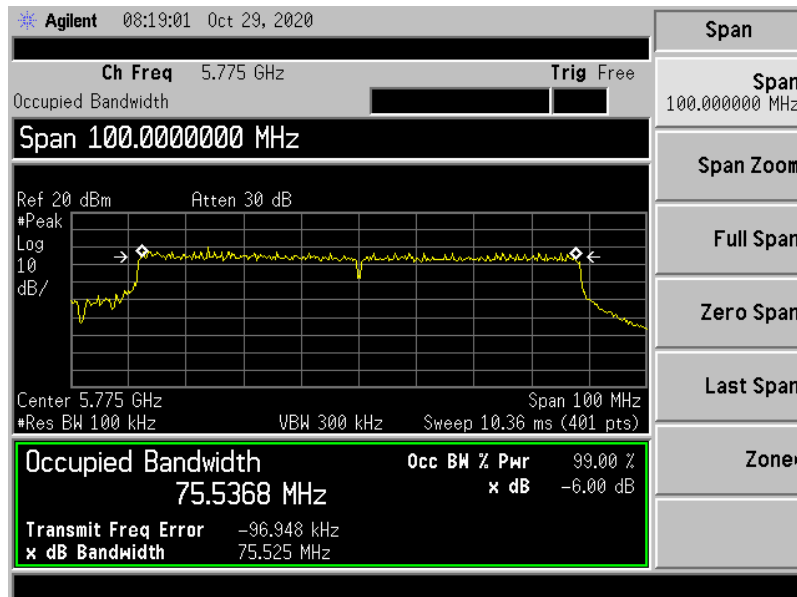


UNII 3, HT40: 99%, High Channel

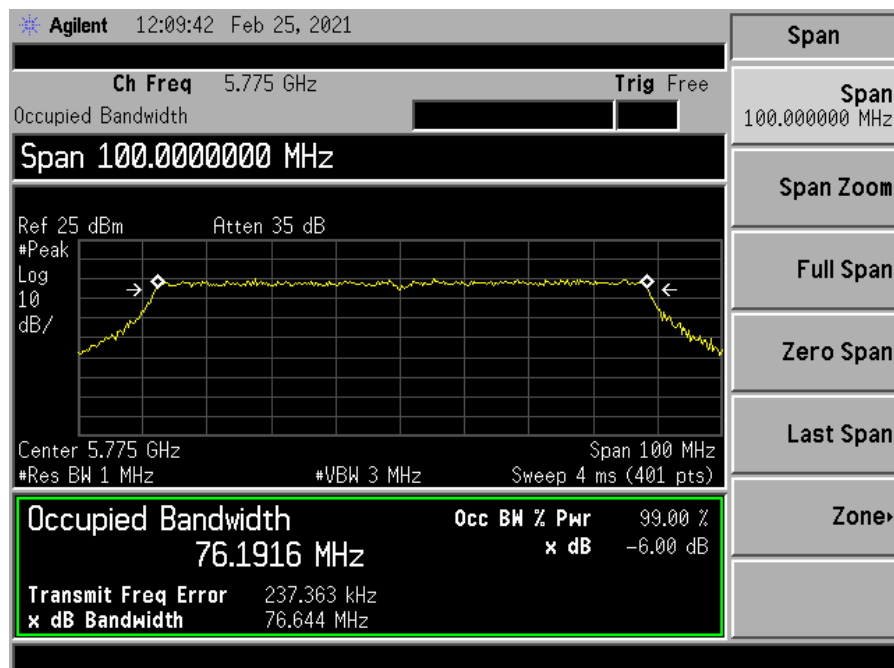




UNII 3, HT80: -6dB

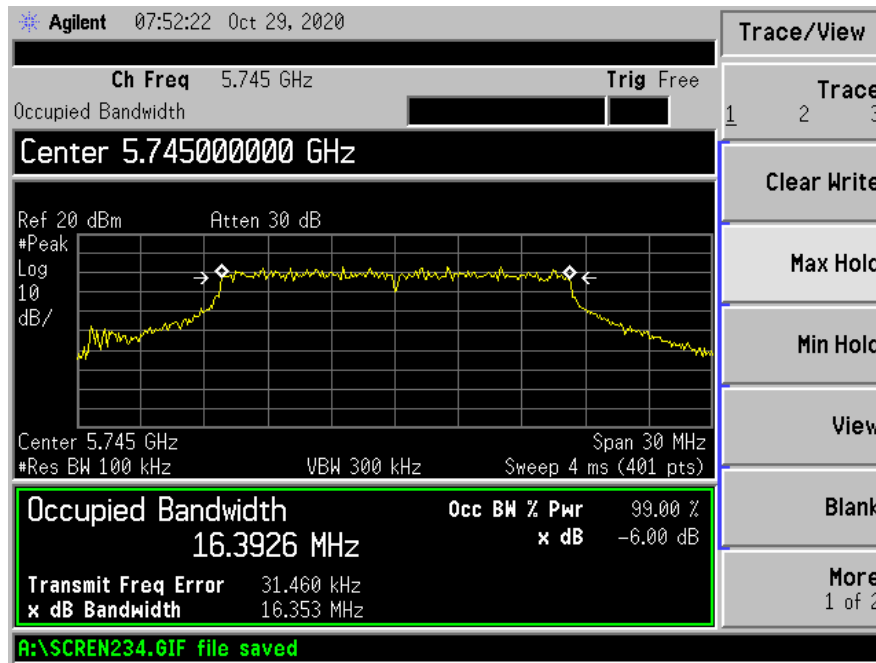


UNII 3, HT80: 99%

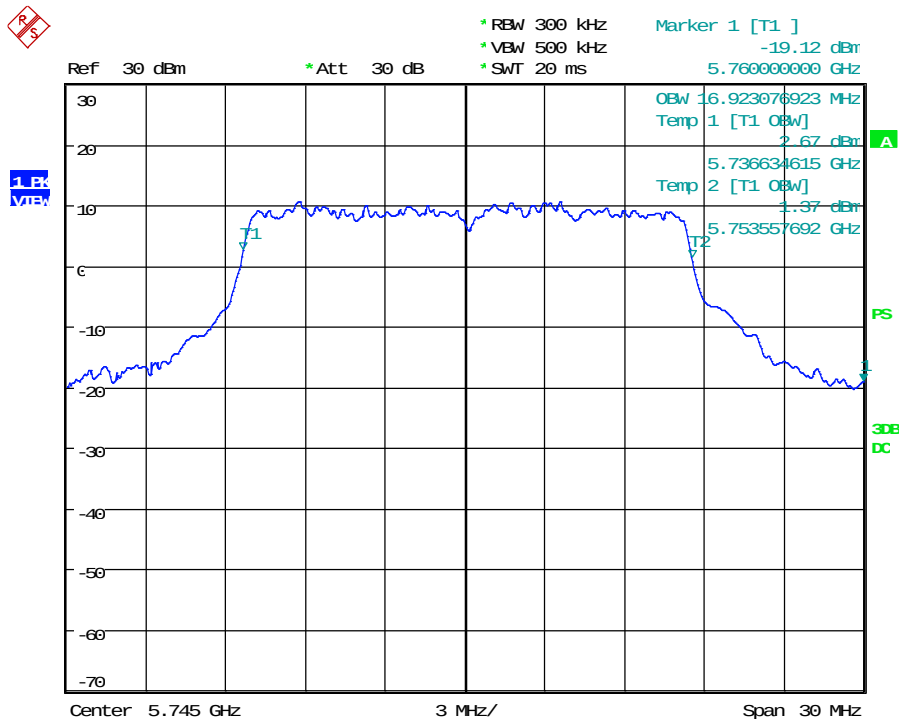




UNII 3, OFDM: -6dB, Low Channel



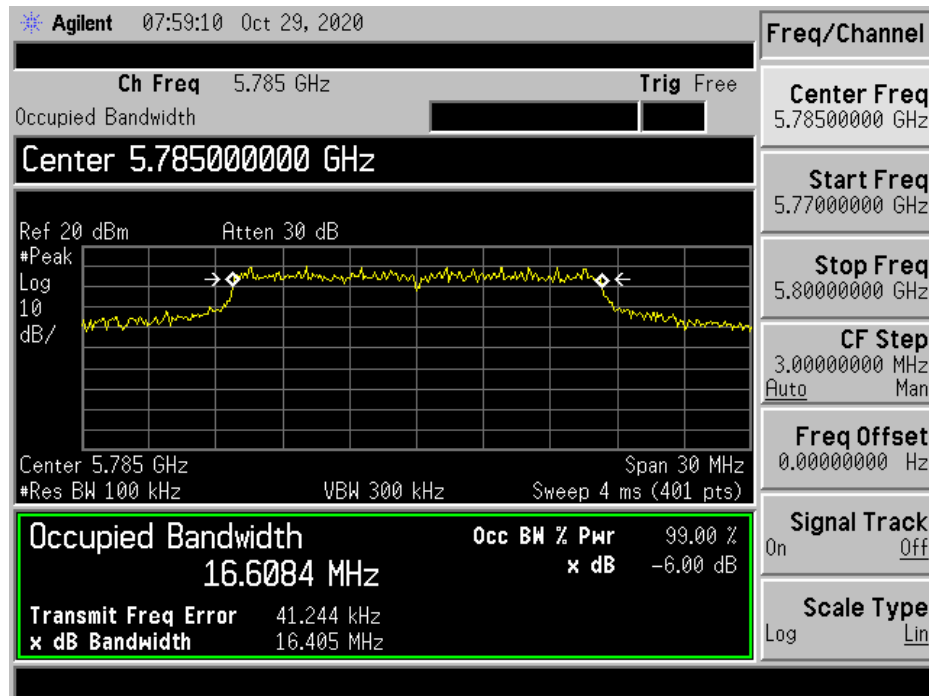
UNII 3, OFDM: 99%, Low Channel



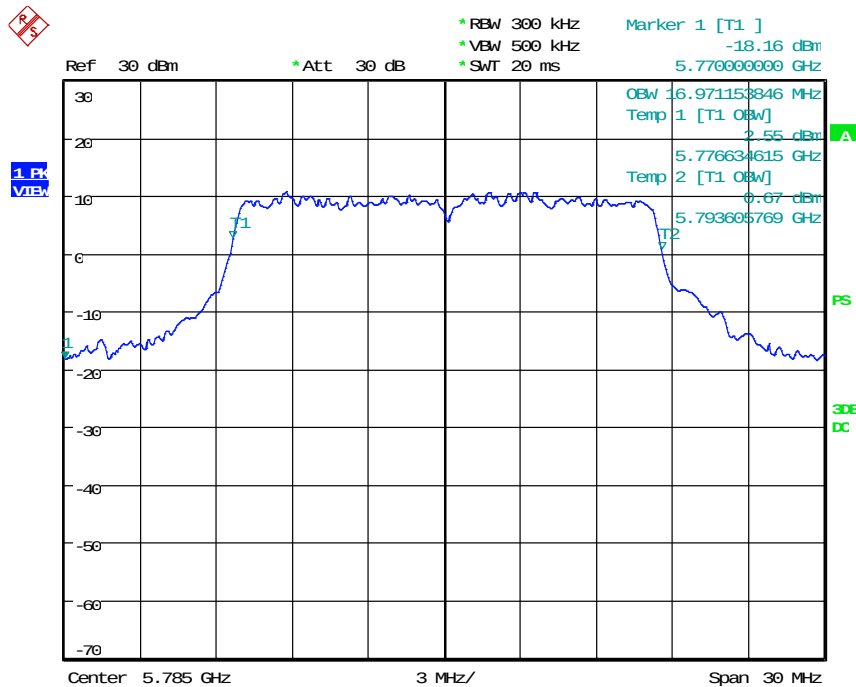
Date: 28.APR.2021 15:19:51



UNII 3, OFDM: -6dB, Mid Channel

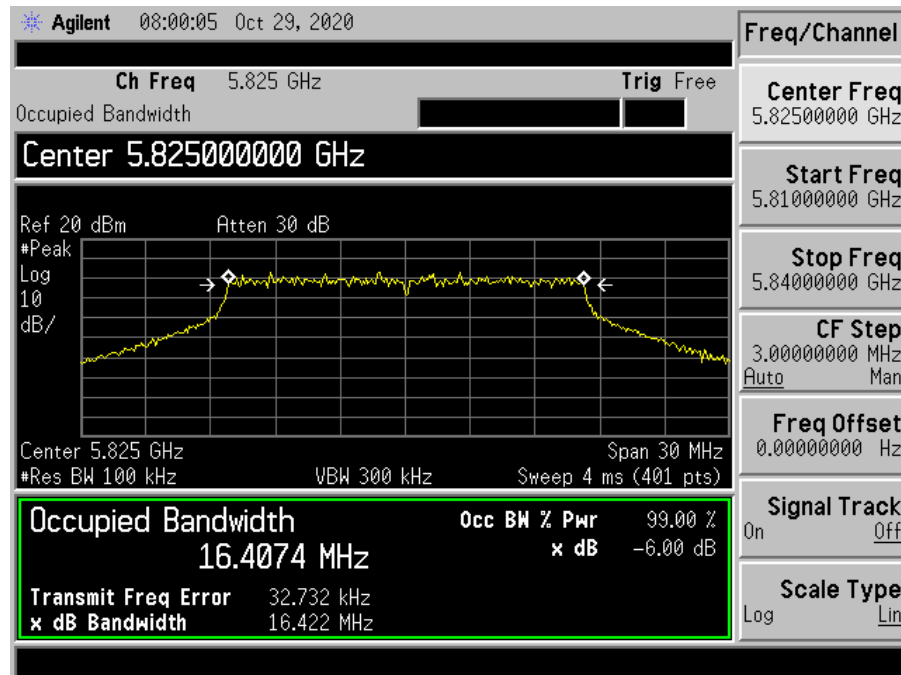


UNII 3, OFDM: 99%, Mid Channel

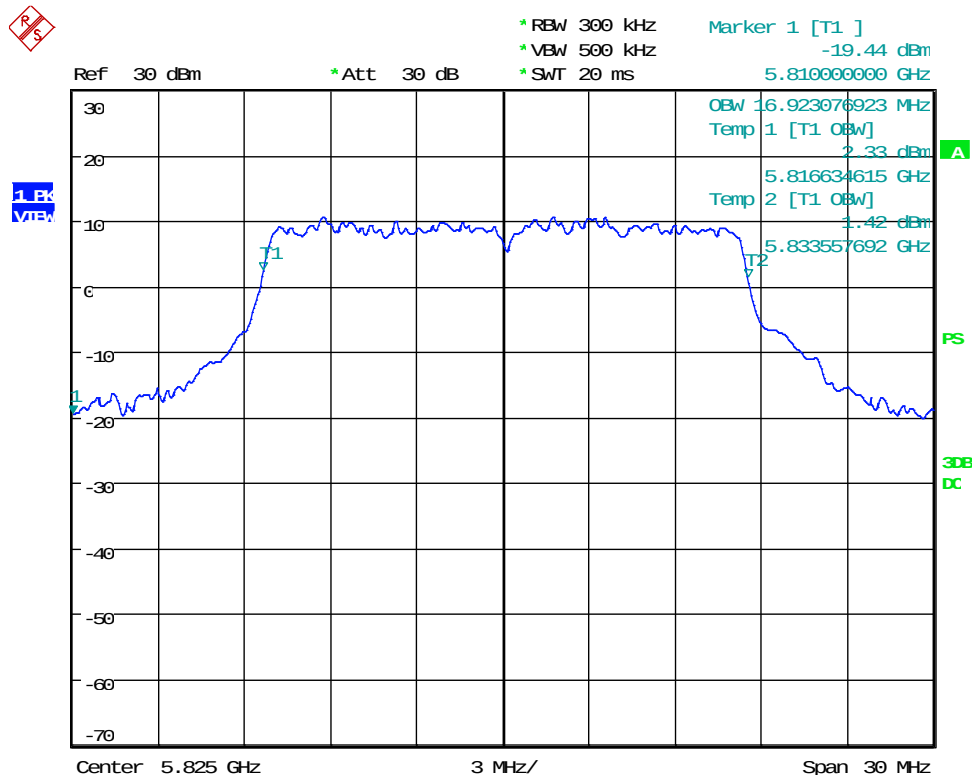


Date: 28.APR.2021 15:21:25

UNII 3, OFDM: -6dB, High Channel



UNII 3, OFDM: 99%, High Channel





8 OUTPUT POWER

The EUT antenna ports were fitted with Type N connectors and directly connected to the input of the receiver.

Requirements:

For 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 (24 dBm) provided the maximum antenna gain does not exceed 6 dBi. 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, 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.

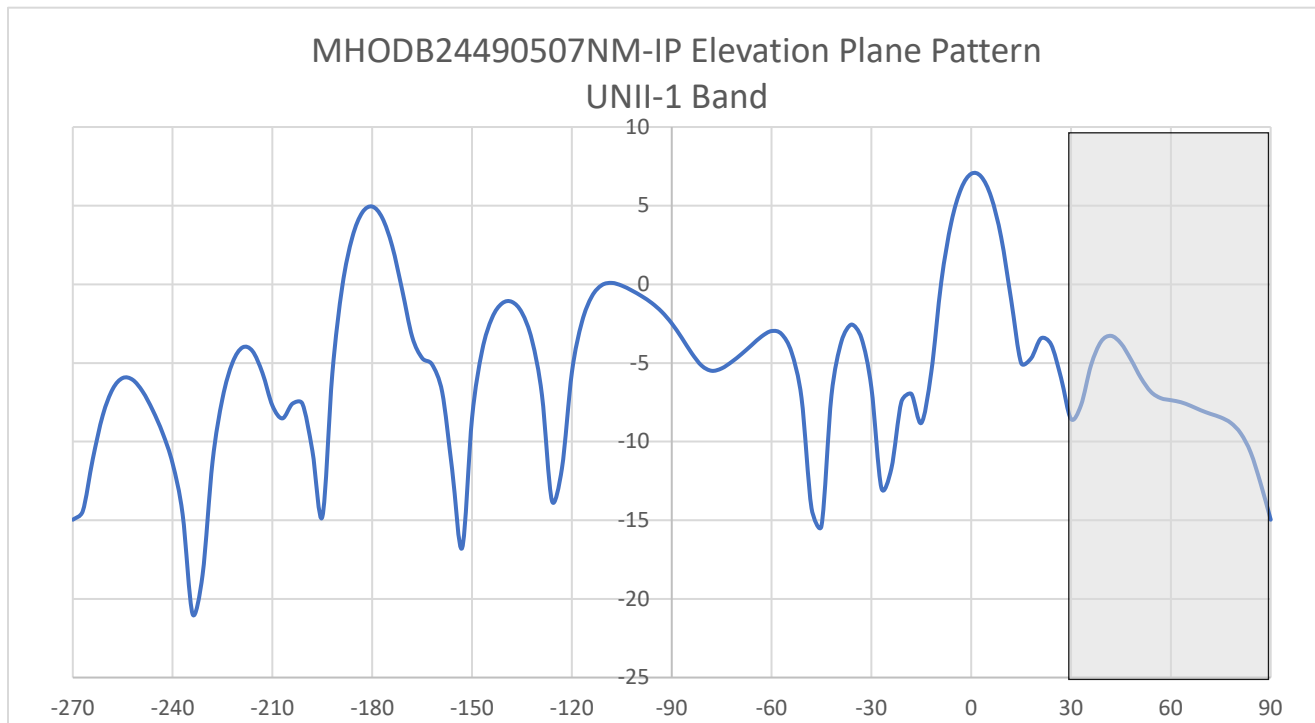
For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30 dBm). If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**ABOVE 30 DEGREES AS MEASURED FROM THE HORIZON****§15.407(a)(1)(i)**

The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm). The elevation angle was where 0° was horizontal and 90° was straight-up.

Per KDB 789033 D02, the indicated radiation pattern between 30° and 90° is in the highlighted area of the graph. The peak gain was -3.28 dBi.

As seen in the table of measurement results on page 14 of this report, the maximum e.i.r.p. at any elevation above 30 degrees is below 125 mW (21 dBm).

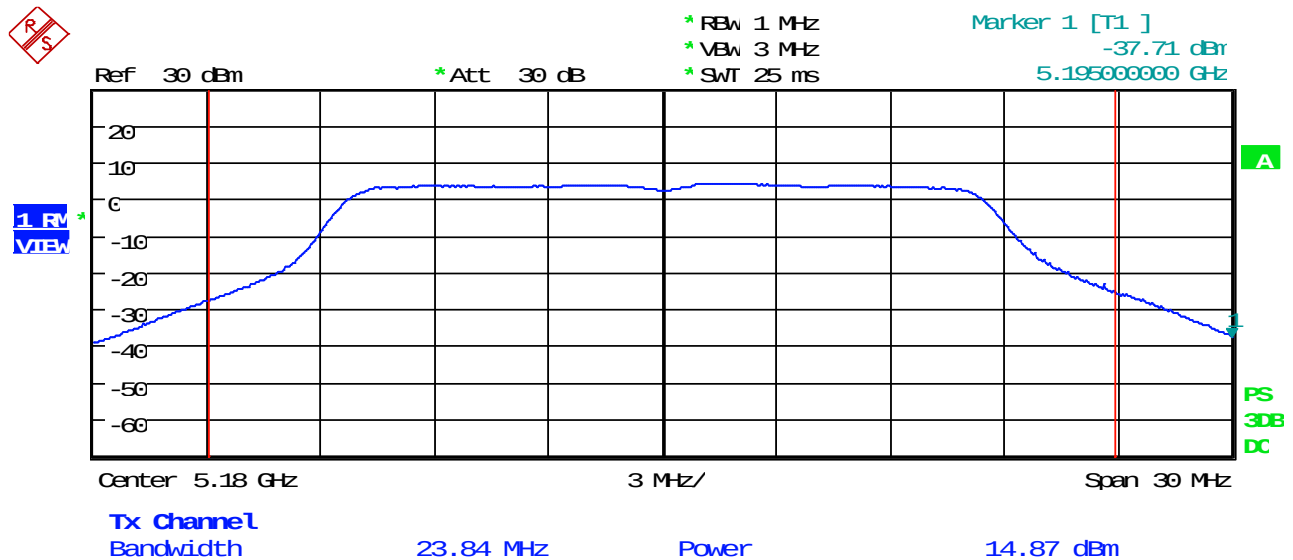




8.2 Output Power Test Data

Test Date(s):	2020-10-29 to 2021-04-30	Test Engineer:	J. Chiller
Standards:	CFR 47 Part 15.407(a)(1,2,3); KDB789033	Air Temperature:	23.7°C
		Relative Humidity:	42%

UNII 1, Port 1: OFDM, Low Channel

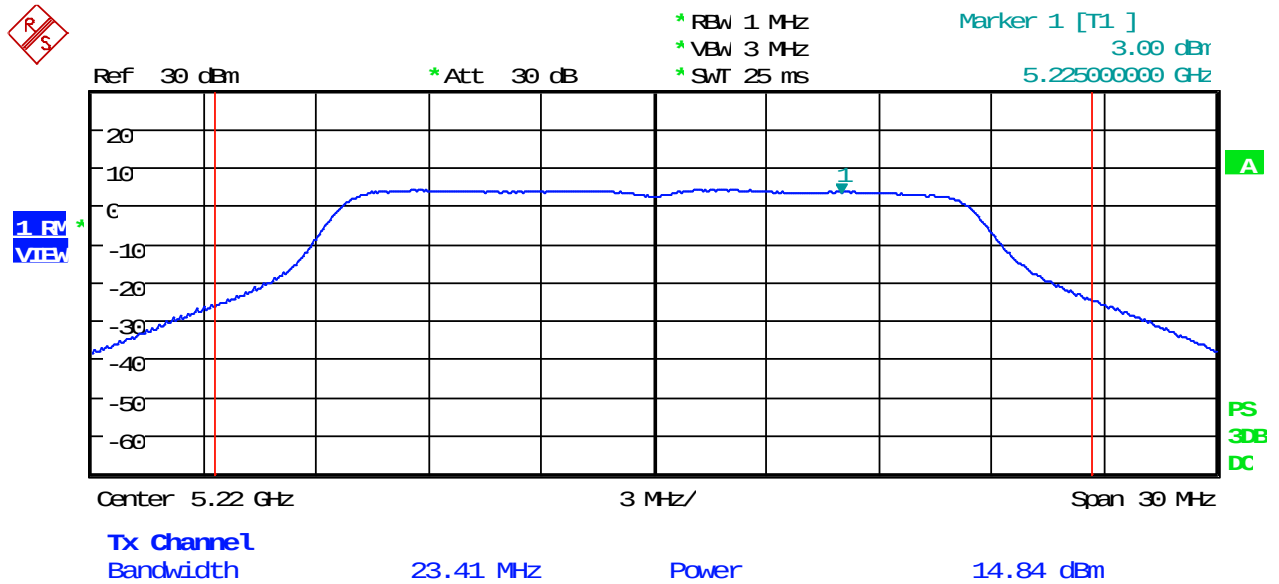




Order Number: F2P19923A

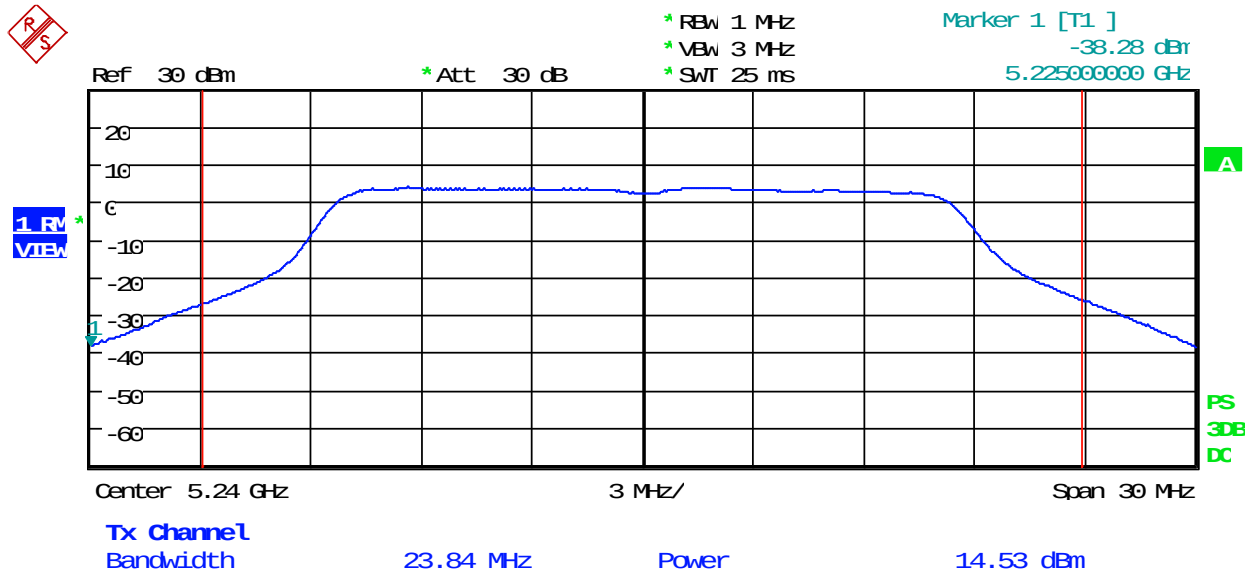
Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 1: OFDM, Mid Channel





UNII 1, Port 1: OFDM, High Channel



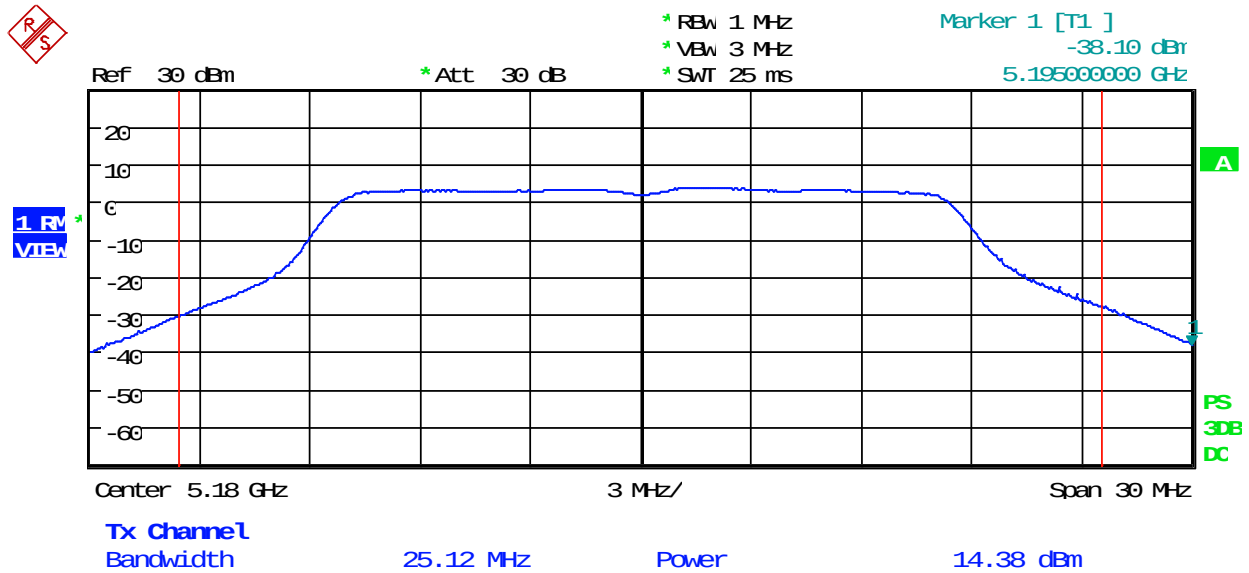
Date: 30.APR.2021 15:21:43



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 1: HT20, Low Channel



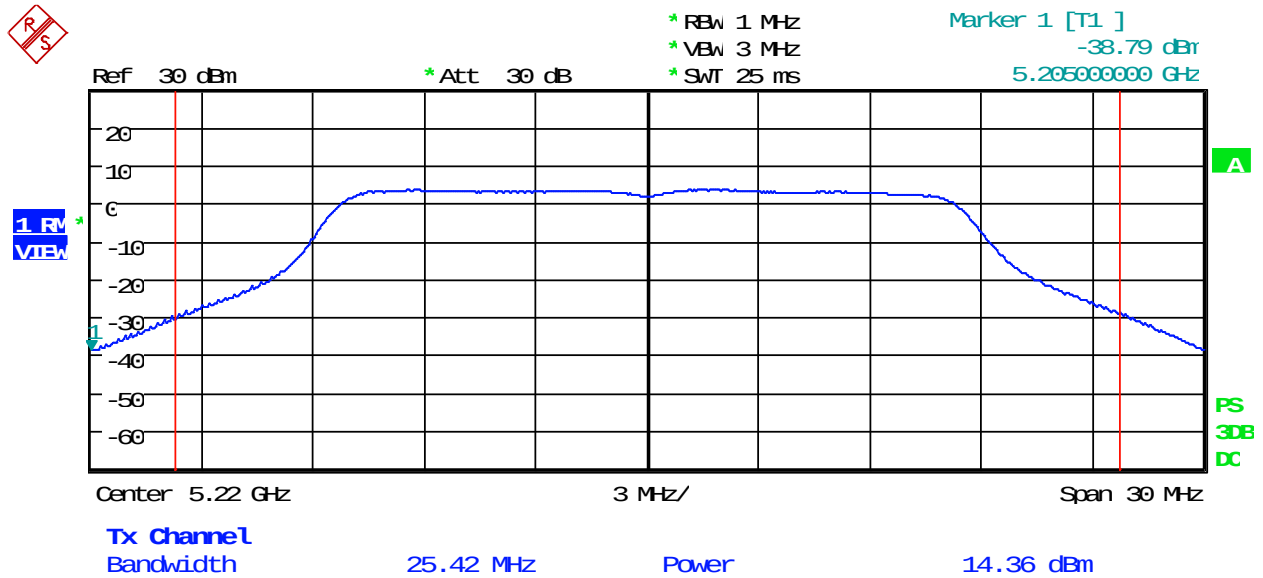
Date: 30.APR.2021 15:25:57



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

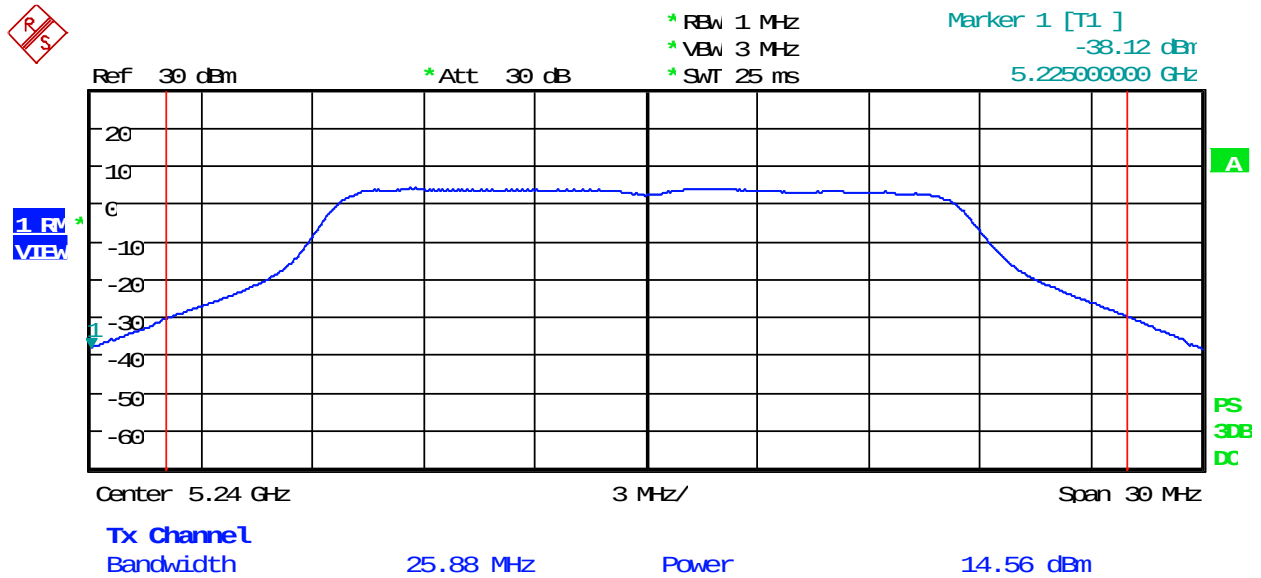
UNII 1, Port 1: HT20, Mid Channel



Date: 30.APR.2021 15:29:52



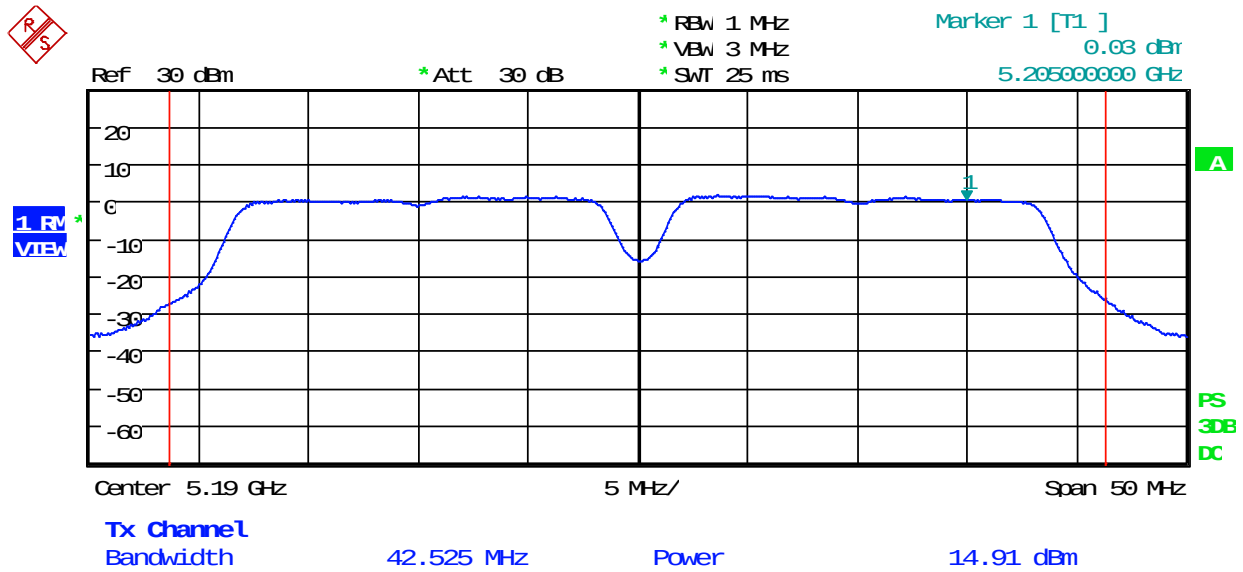
UNII 1, Port 1: HT20, High Channel



Date: 30.APR.2021 15:32:23



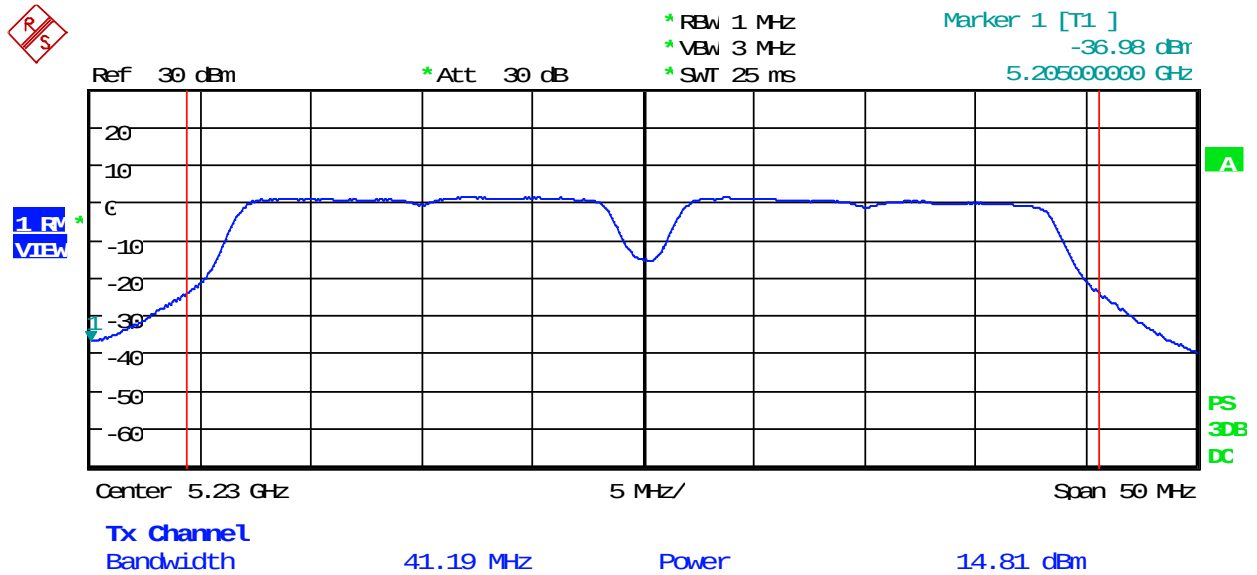
UNII 1, Port 1: non HT40, Low Channel



Date: 30.APR.2021 15:34:28



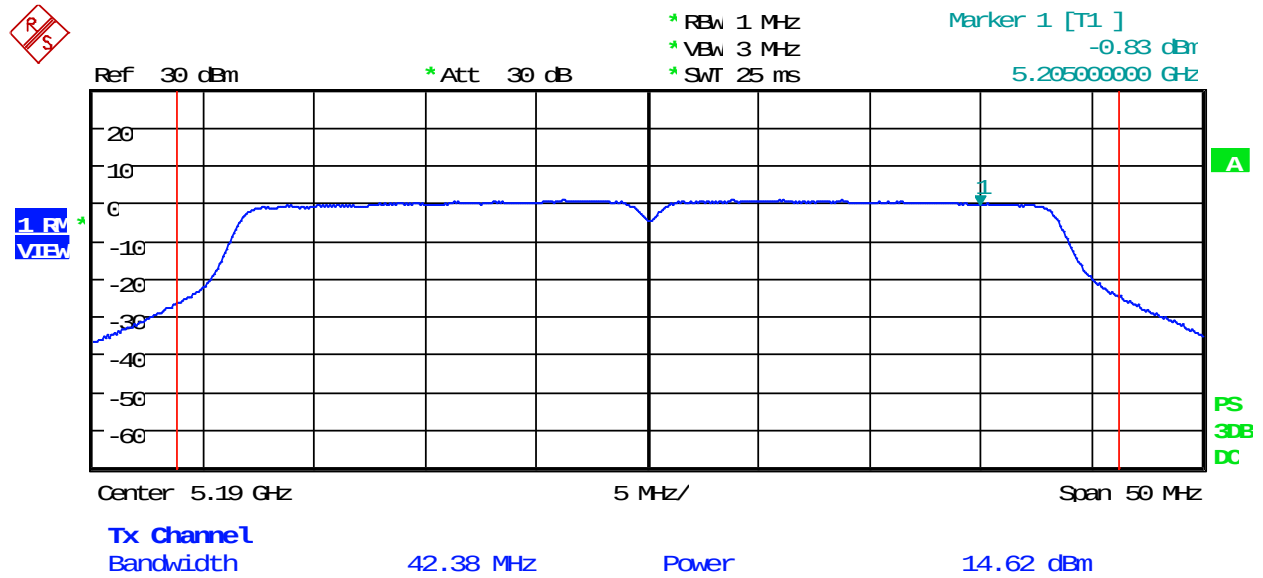
UNII 1, Port 1: non HT40, High Channel



Date: 30.APR.2021 15:35:30



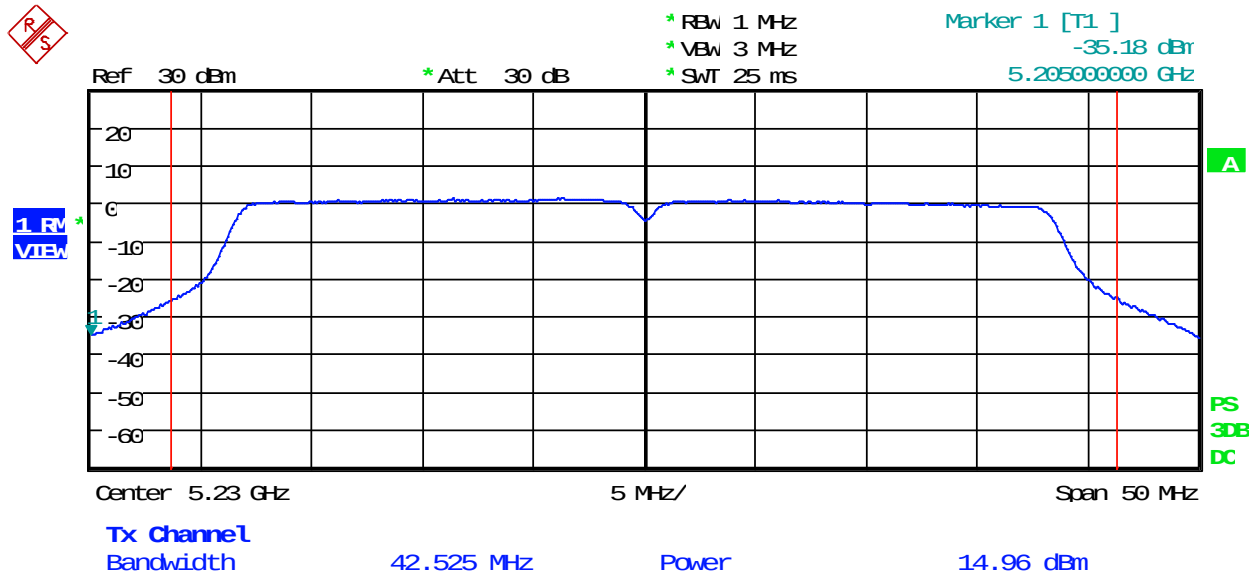
UNII 1, Port 1: HT40, Low Channel



Date: 30.APR.2021 15:42:09



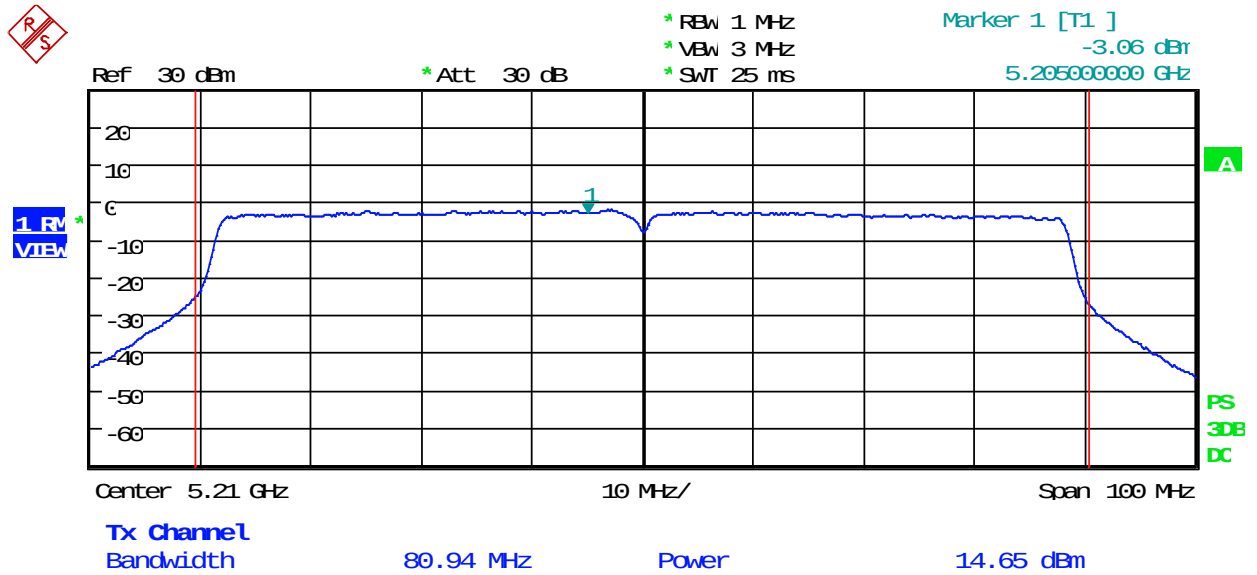
UNII 1, Port 1: HT40, High Channel



Date: 30.APR.2021 15:38:19



UNII 1, Port 1: HT80



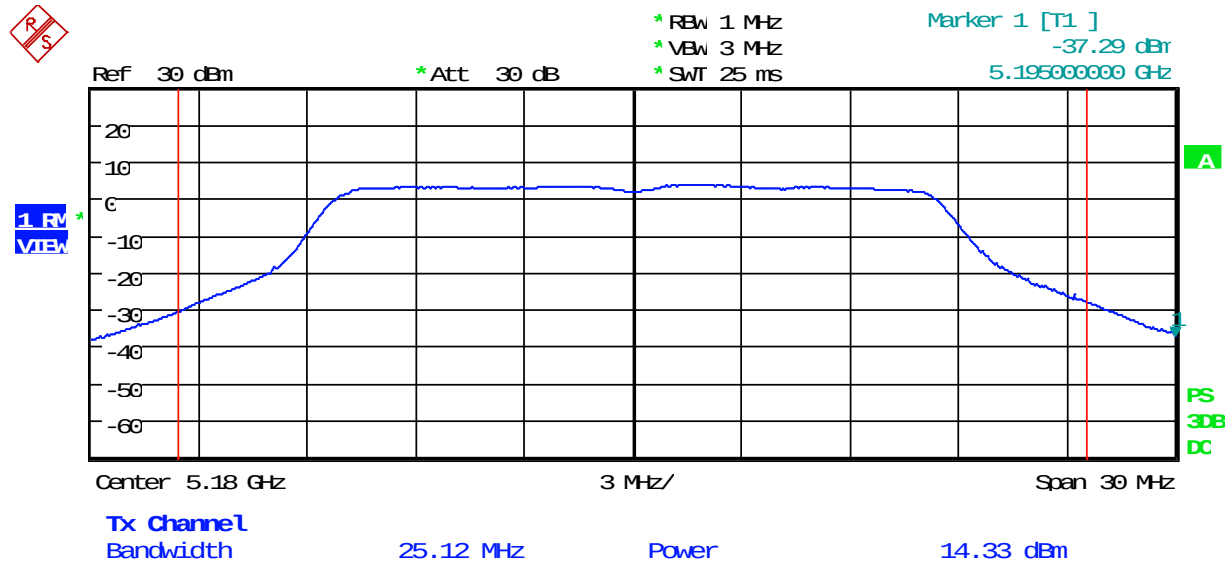
Date: 30.APR.2021 13:15:16



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 2: OFDM, Low Channel



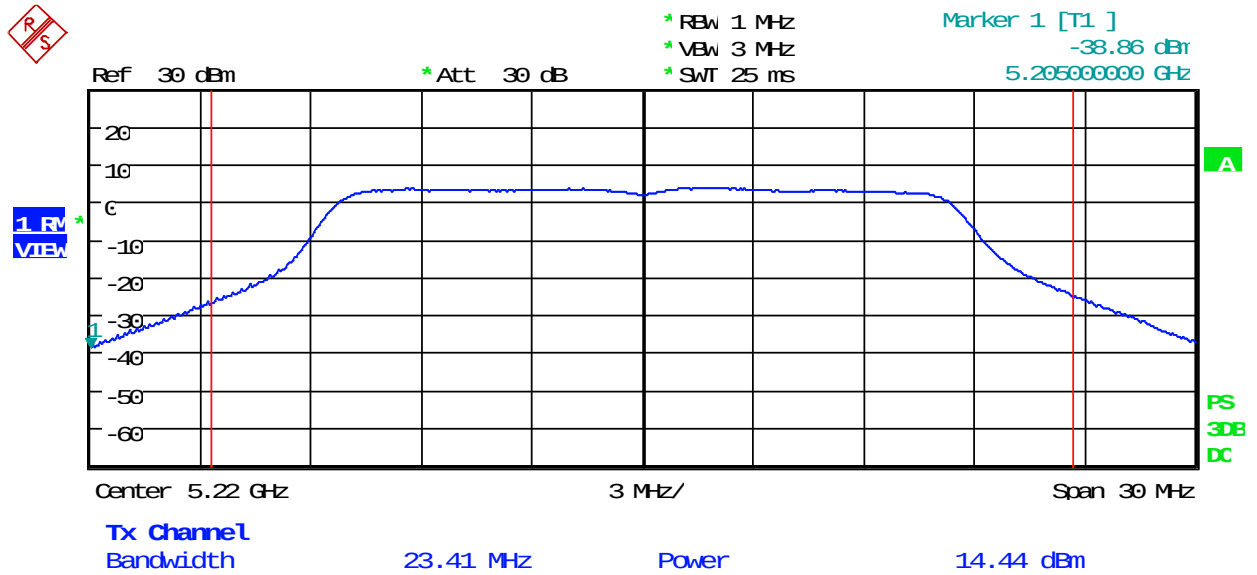
Date: 30.APR.2021 15:15:38



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

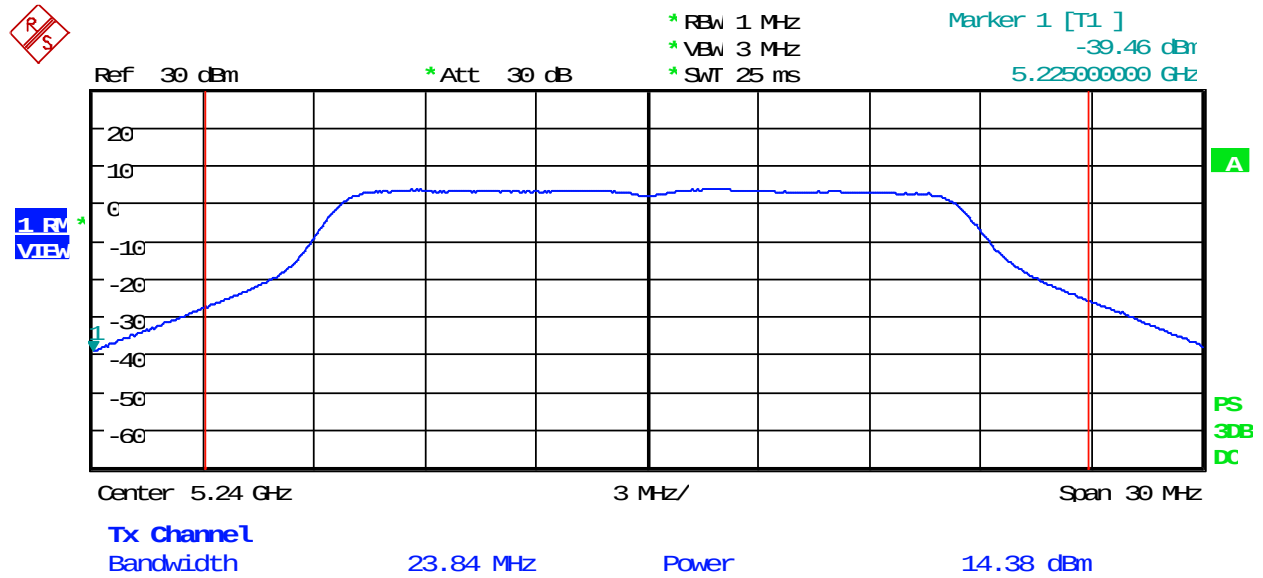
UNII 1, Port 2: OFDM, Mid Channel



Date: 30.APR.2021 15:16:49



UNII 1, Port 2: OFDM, High Channel



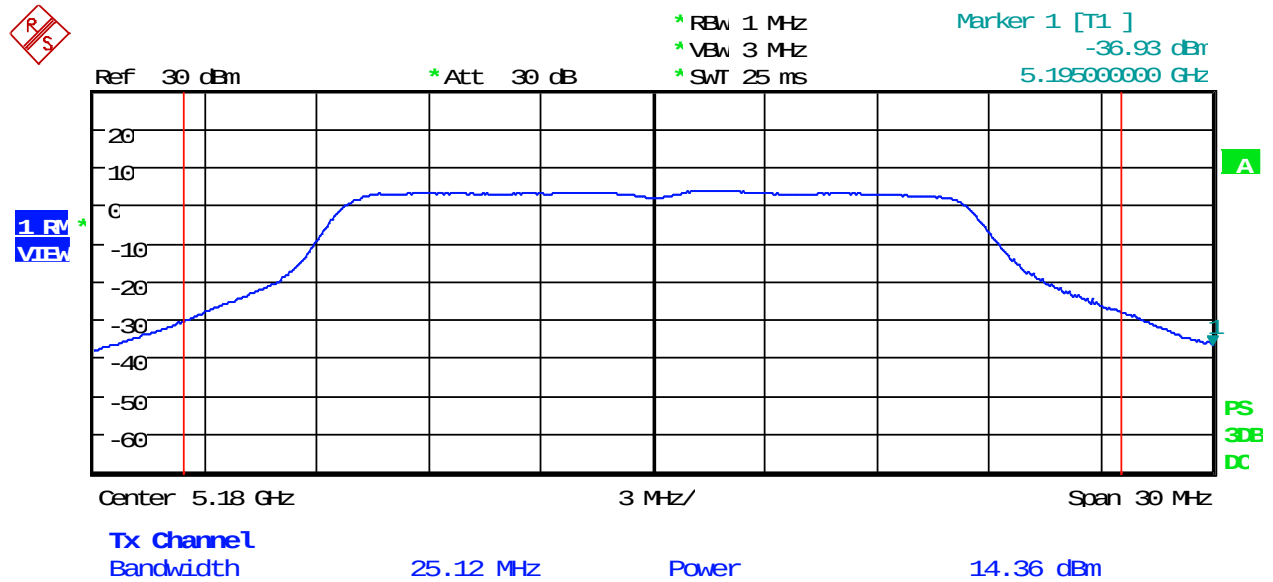
Date: 30.APR.2021 15:18:26



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 2: HT20, Low Channel



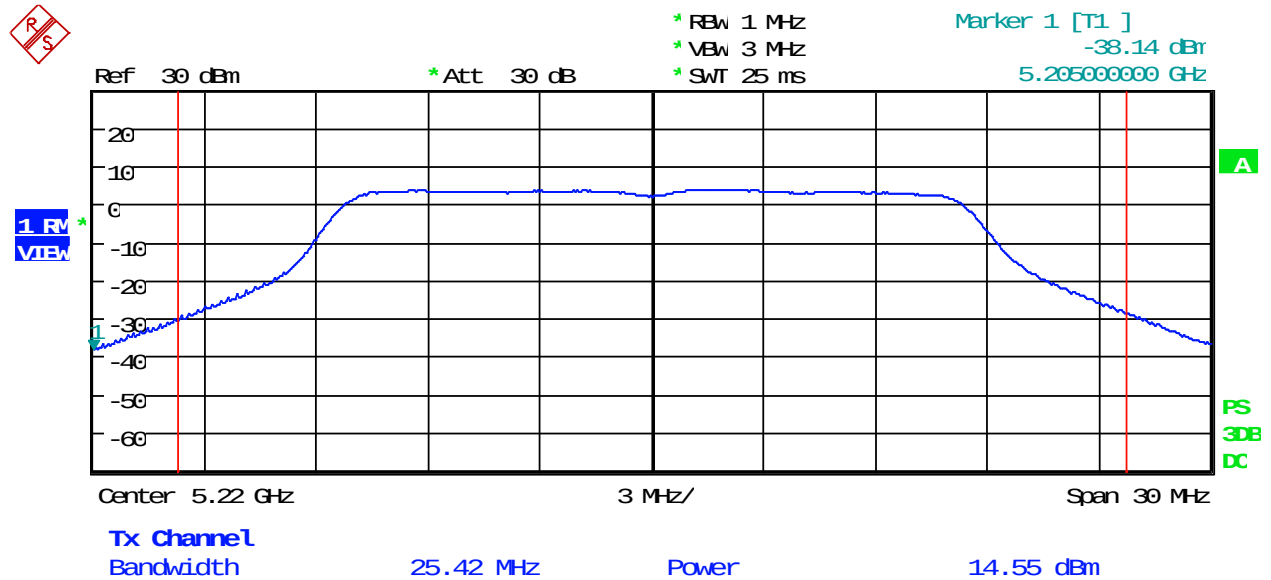
Date: 30.APR.2021 15:09:33



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 2: HT20, Mid Channel



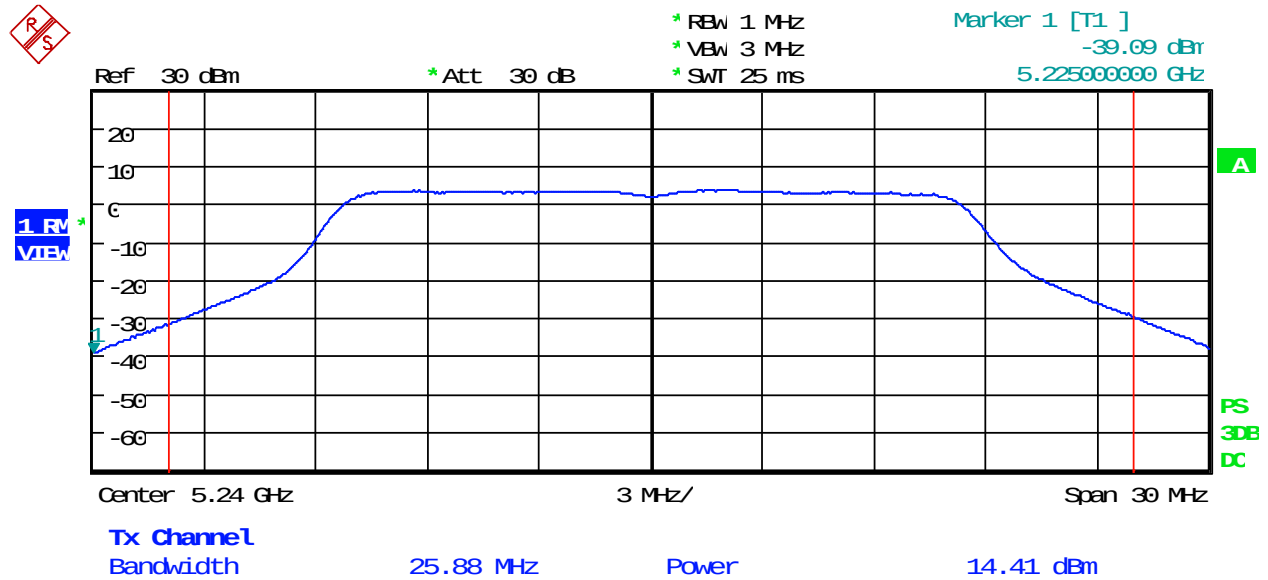
Date: 30.APR.2021 15:12:29



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

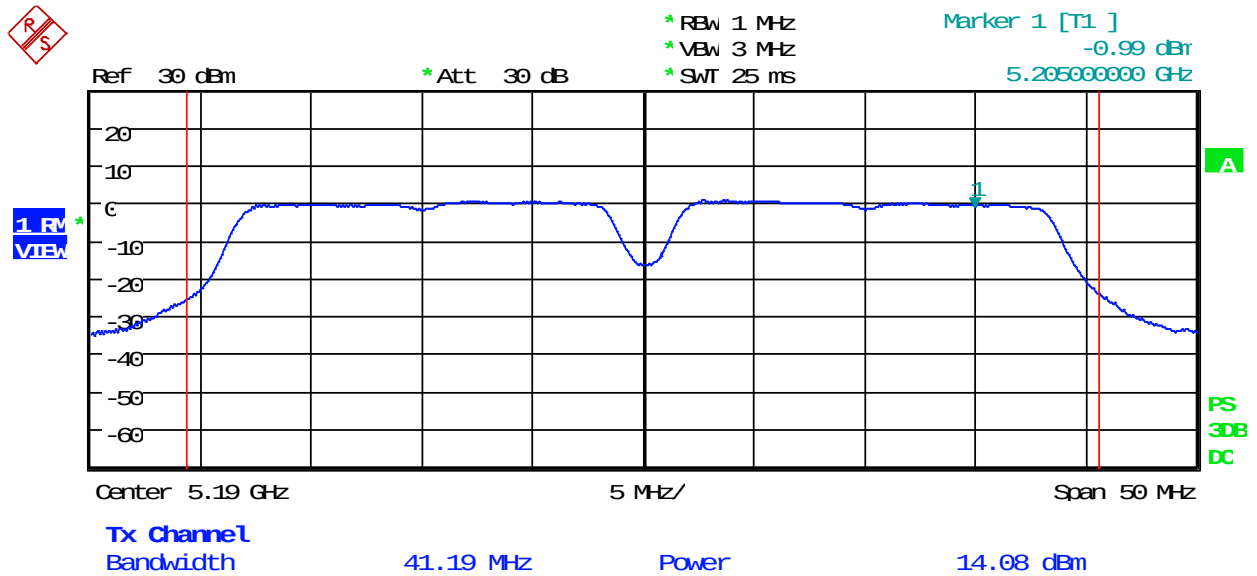
UNII 1, Port 2: HT20, High Channel



Date: 30.APR.2021 15:13:53



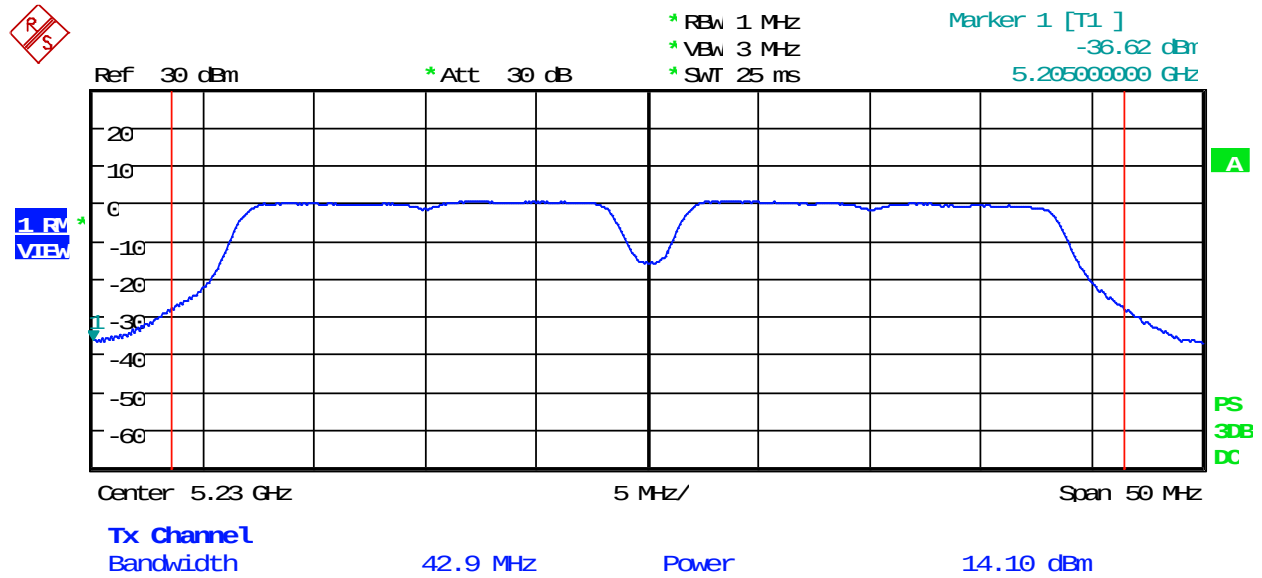
UNII 1, Port 2: non HT40, Low Channel



Date: 30.APR.2021 15:06:54



UNII 1, Port 2: non HT40, High Channel



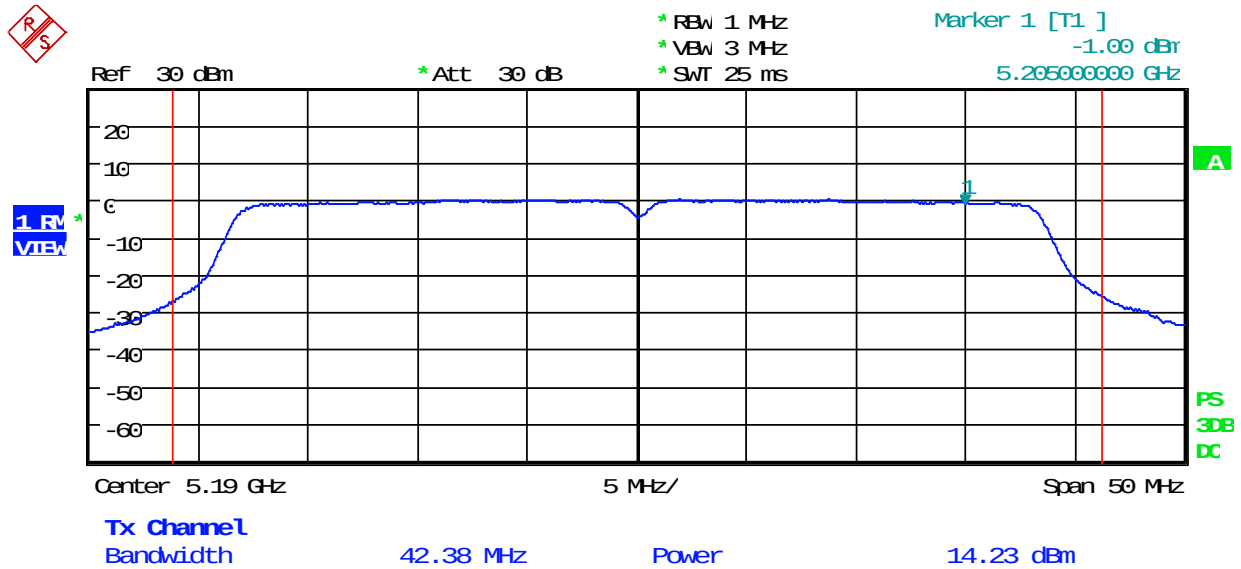
Date: 30.APR.2021 15:00:14



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 1, Port 2: HT40, Low Channel



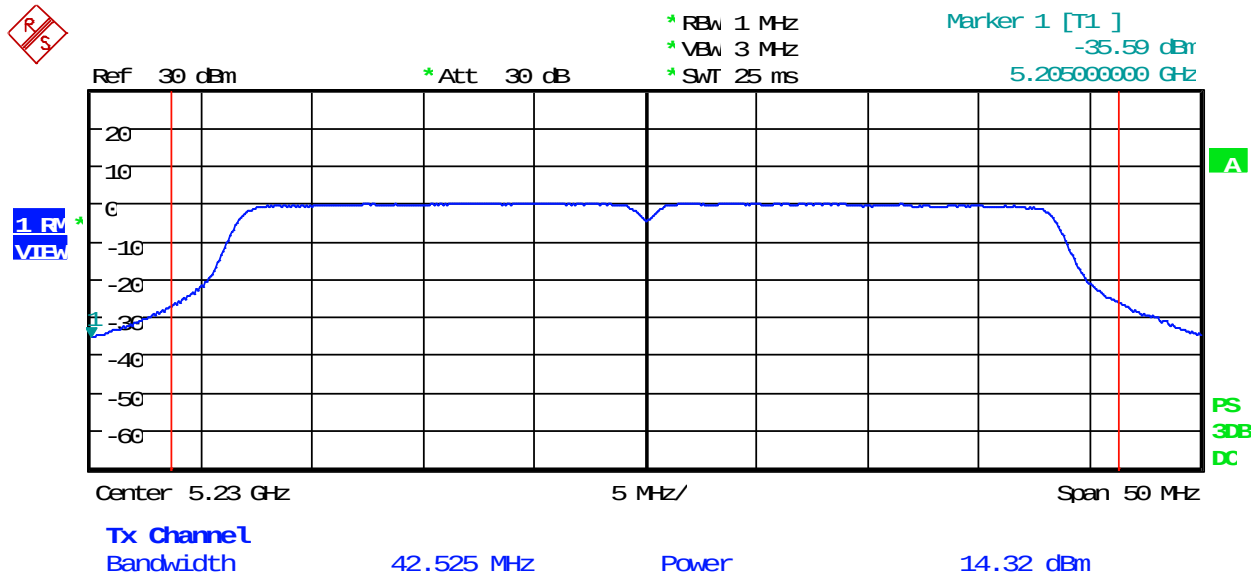
Date: 30.APR.2021 13:25:36



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

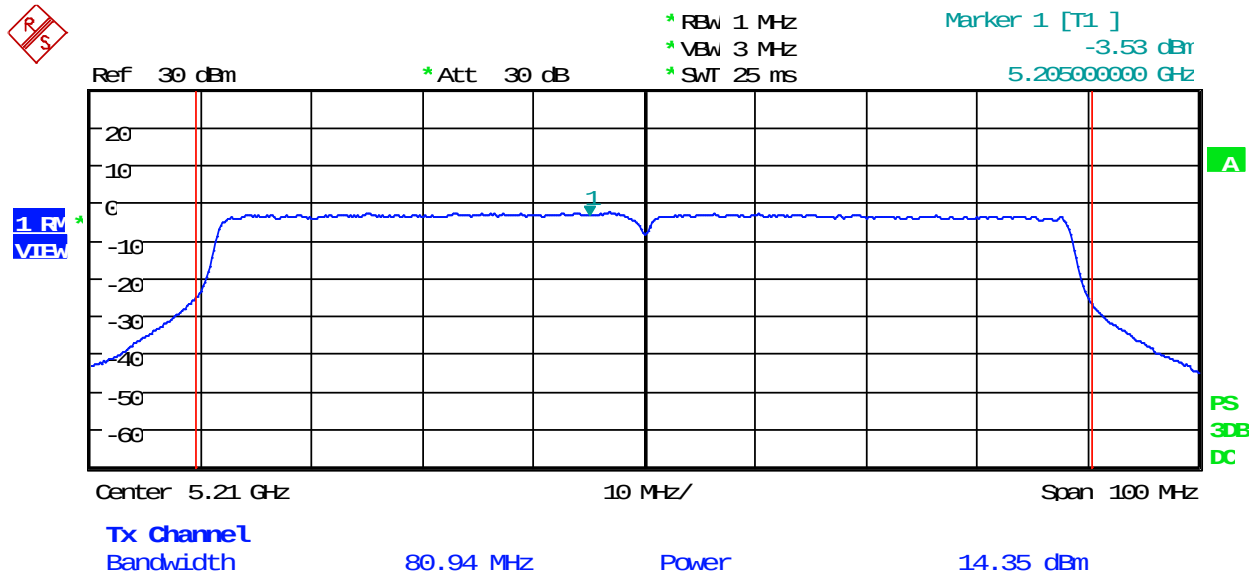
UNII 1, Port 2: HT40, High Channel



Date: 30.APR.2021 13:23:30



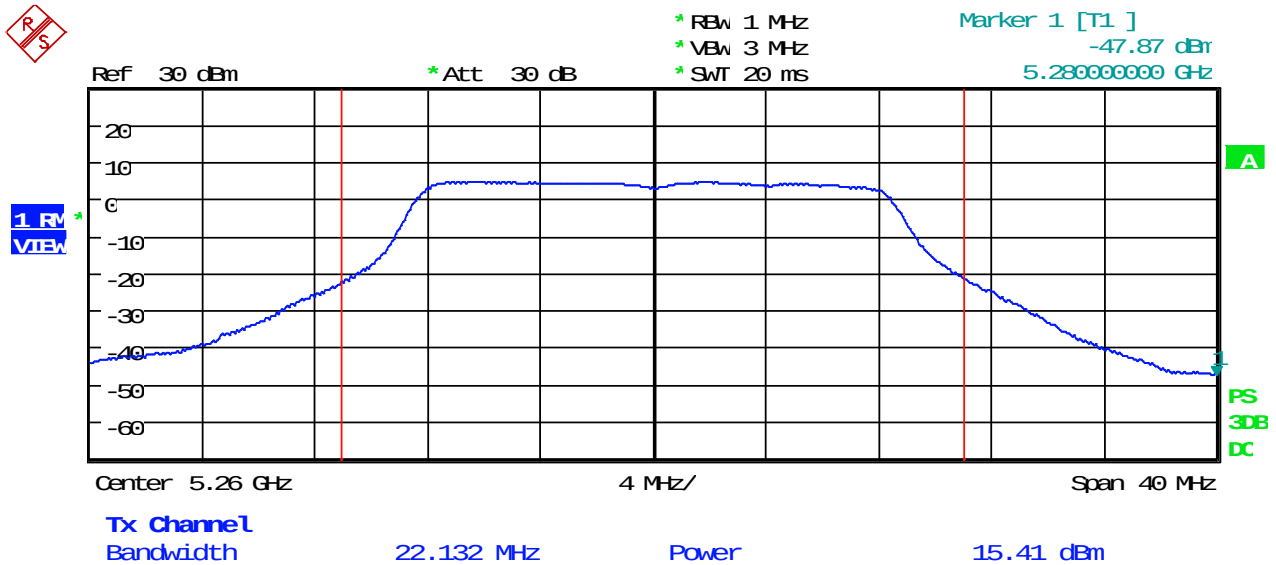
UNII 1, Port 2: HT80



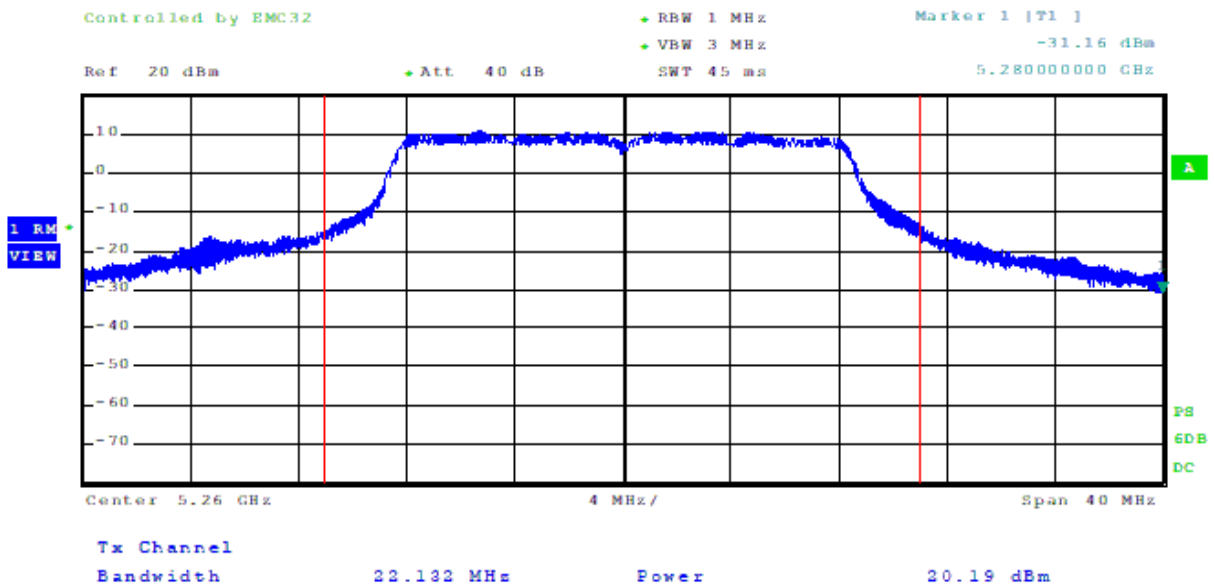
Date: 30.APR.2021 13:07:15



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



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

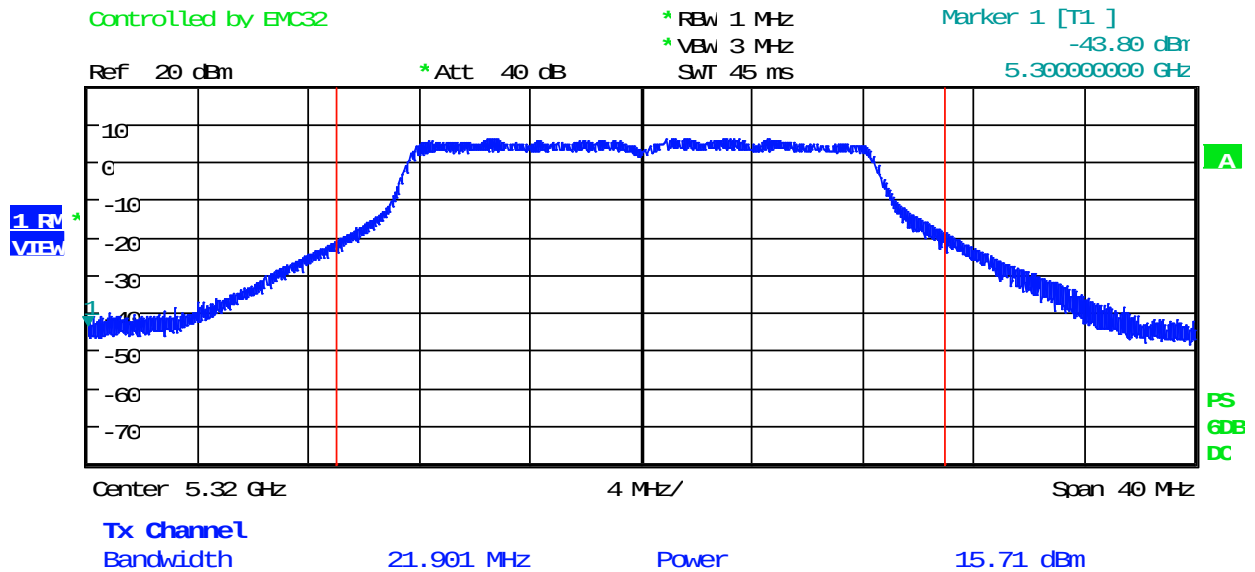




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

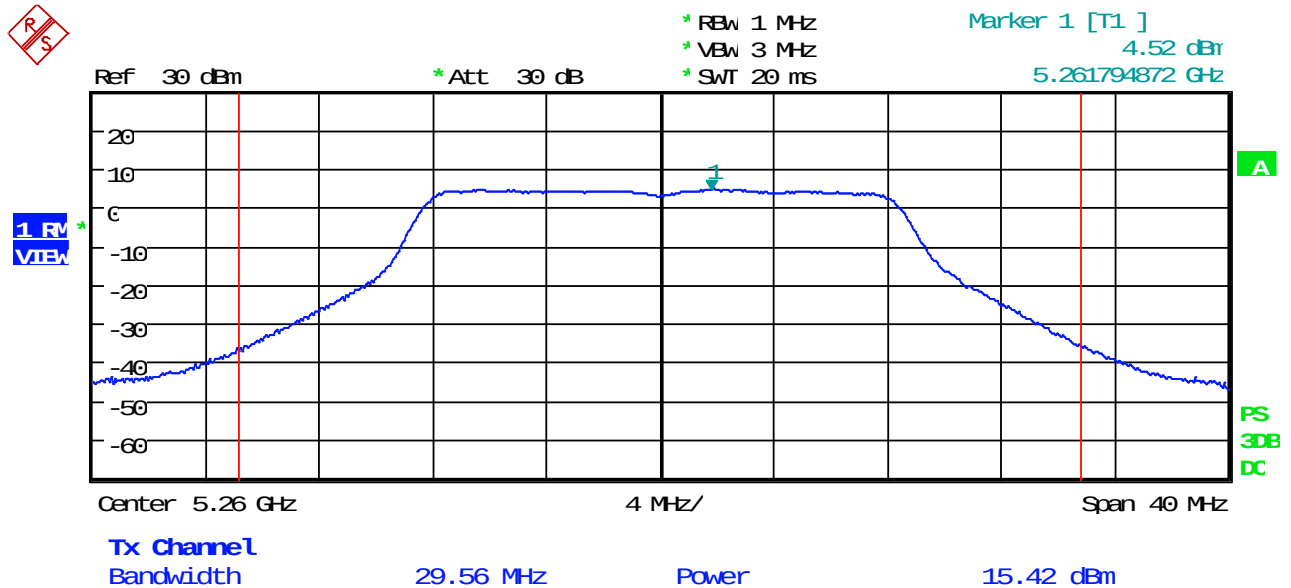
UNII 2A, Port 1: OFDM, High Channel (Beamforming and non-beamforming)



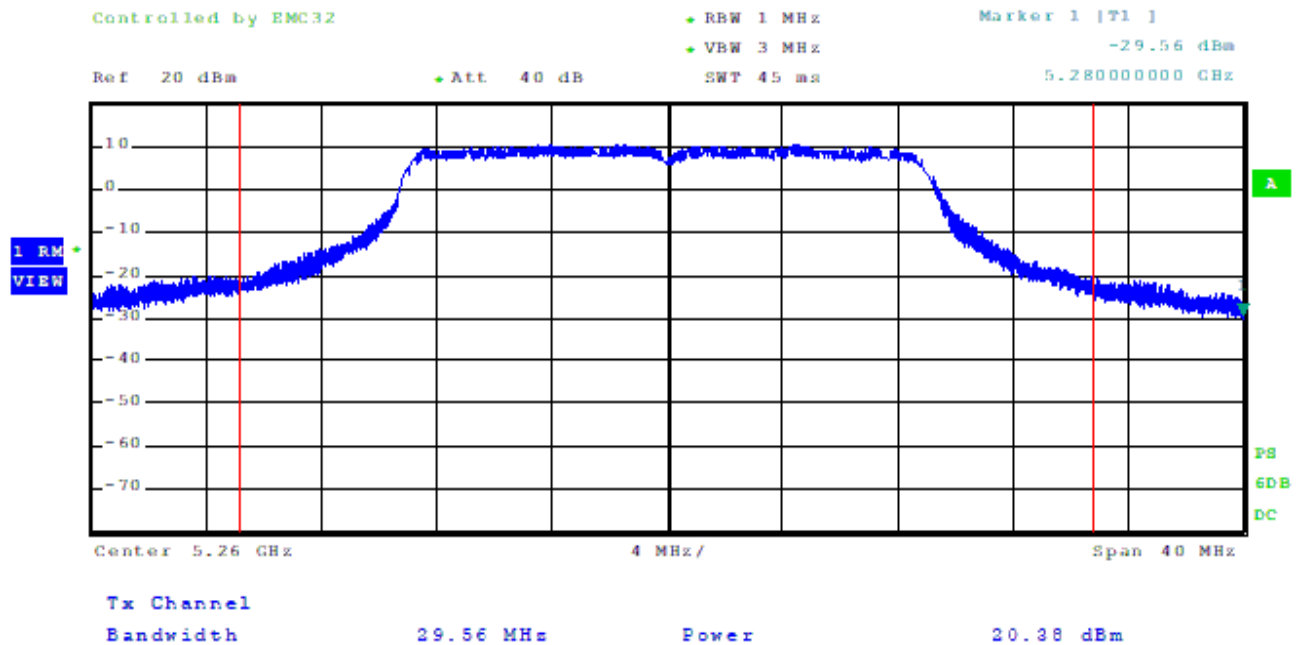
Date: 30.OCT.2020 08:59:42



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

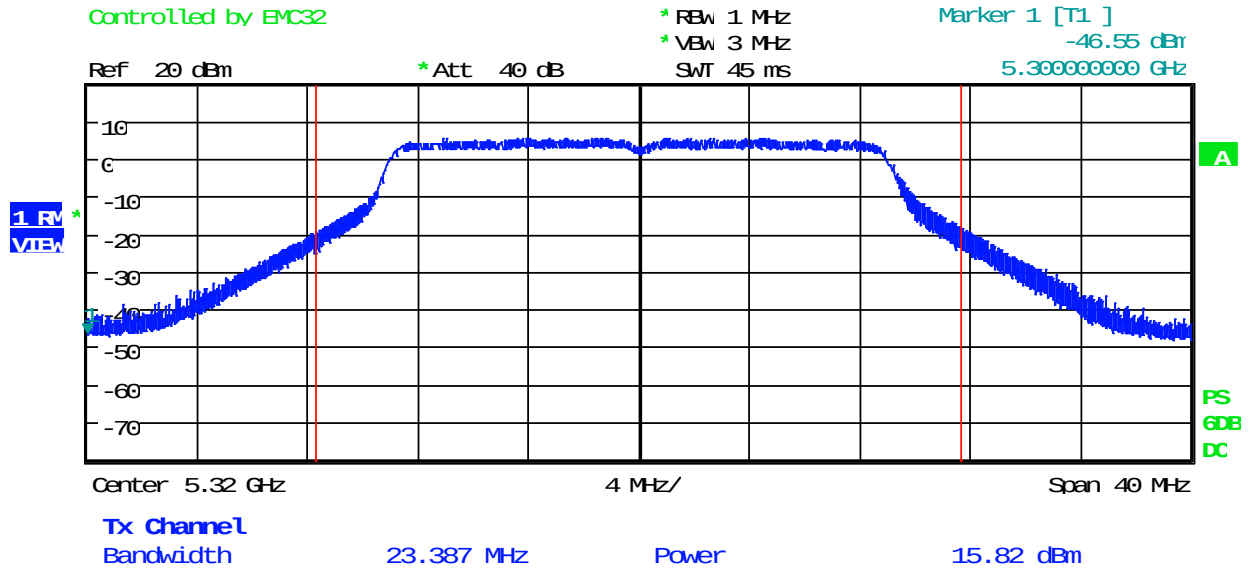


UNII 2A, Port 1: HT20, Low Channel (Non-Beamforming)





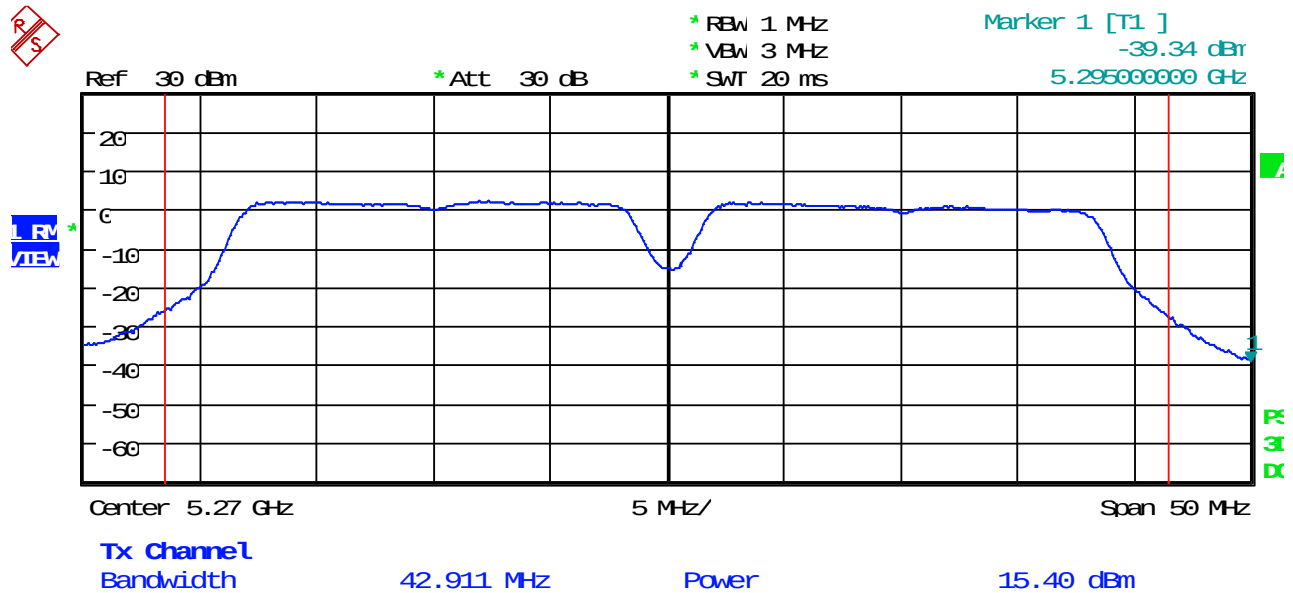
UNII 2A, Port 1: HT20, High Channel (Beamforming and non-beamforming)



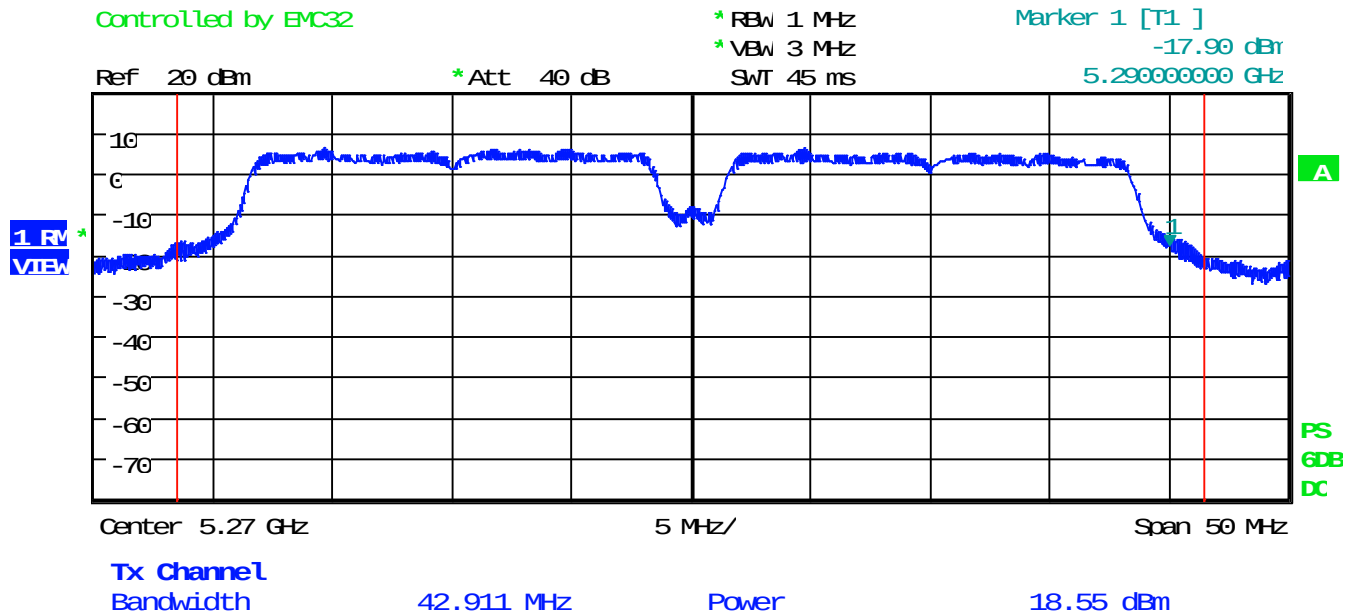
Date: 30.OCT.2020 09:03:59



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

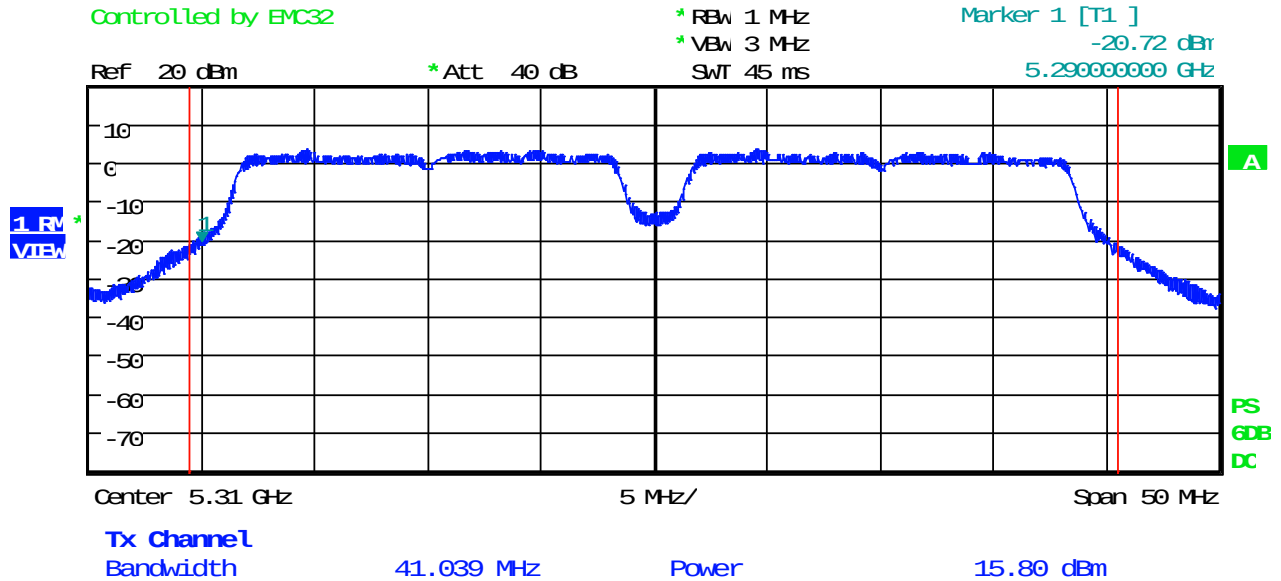


UNII 2A, Port 1: non HT40, Low Channel (Non-Beamforming)



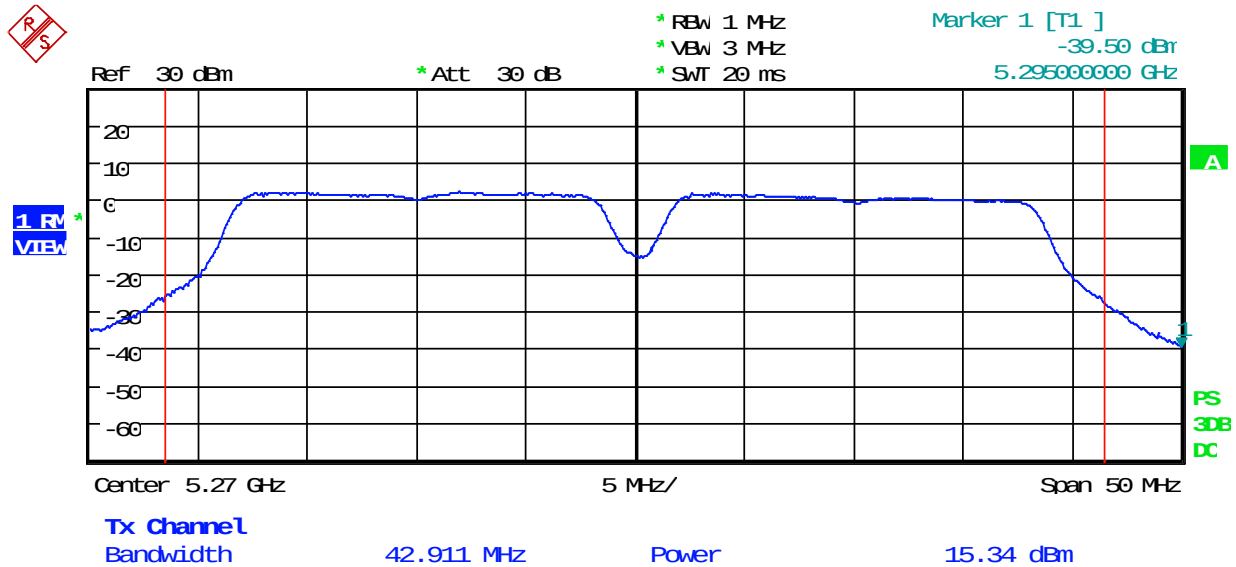


UNII 2A, Port 1: non HT40, High Channel (Beamforming and Non-beamforming)

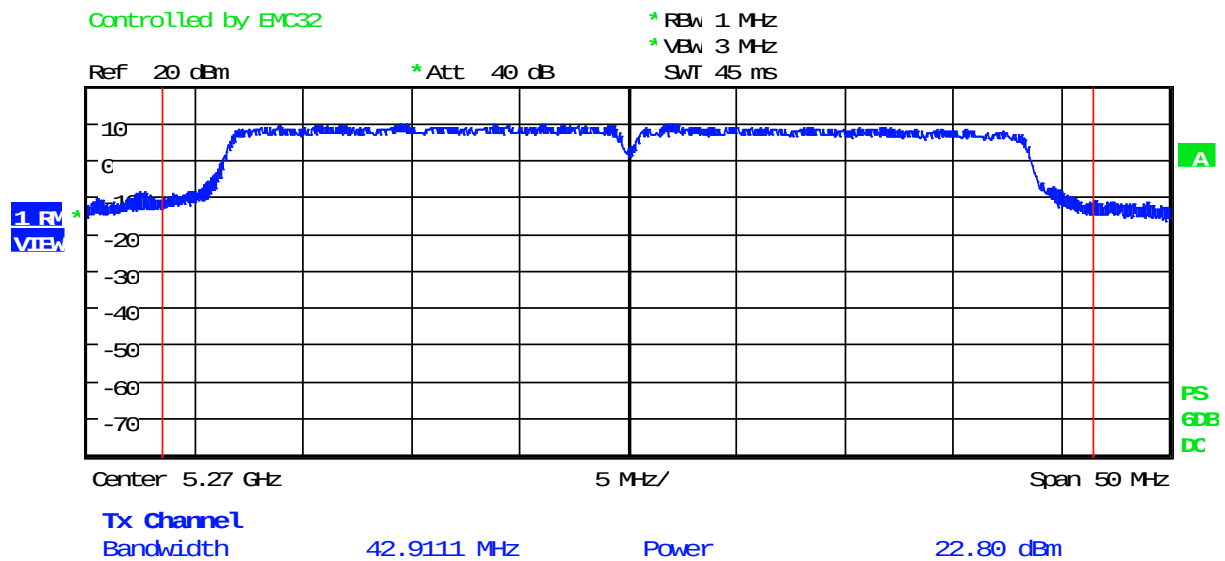




UNII 2A, Port 1: HT40, Low Channel (Beamforming)



UNII 2A, Port 1: HT40, Low Channel (Non-Beamforming)

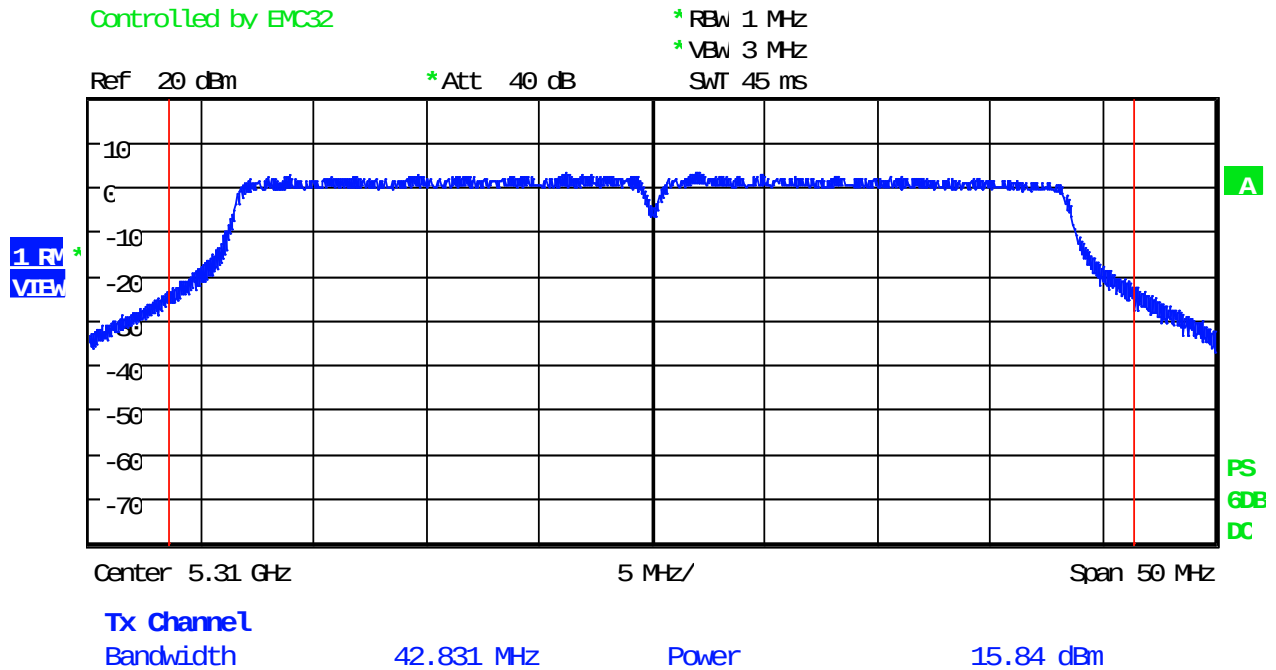




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FCC ID: NYPWIFIAP1200

UNII 2A, Port 1: HT40, High Channel (Beamforming and Non-beamforming)

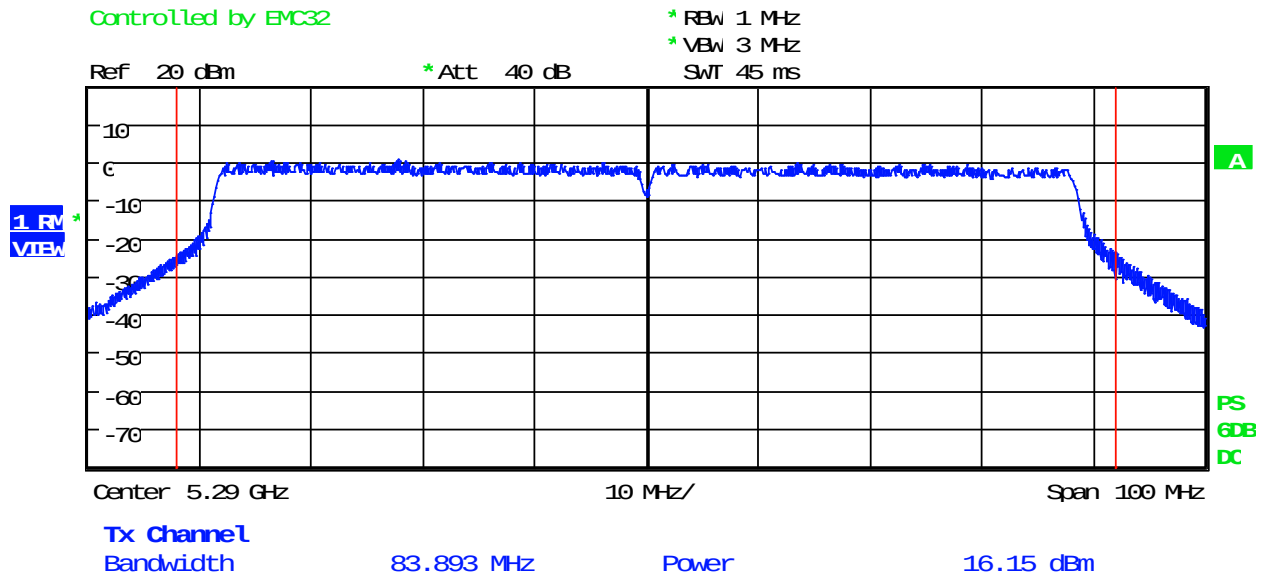




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

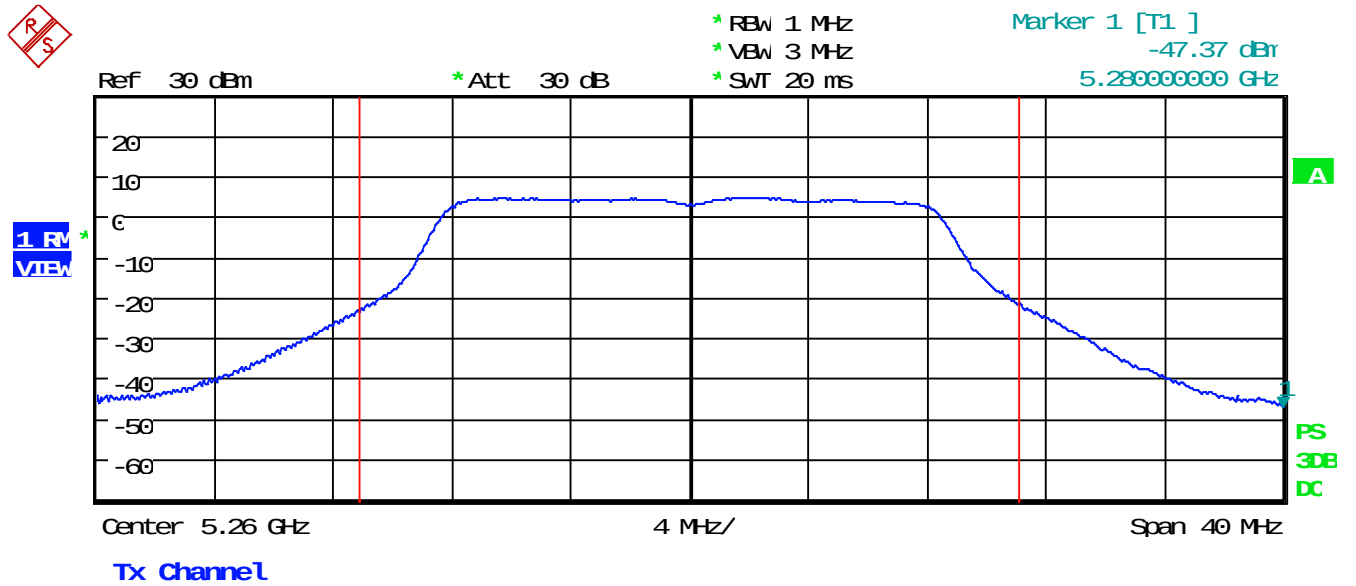
UNII 2A, Port 1: HT80 (Beamforming and Non-beamforming)



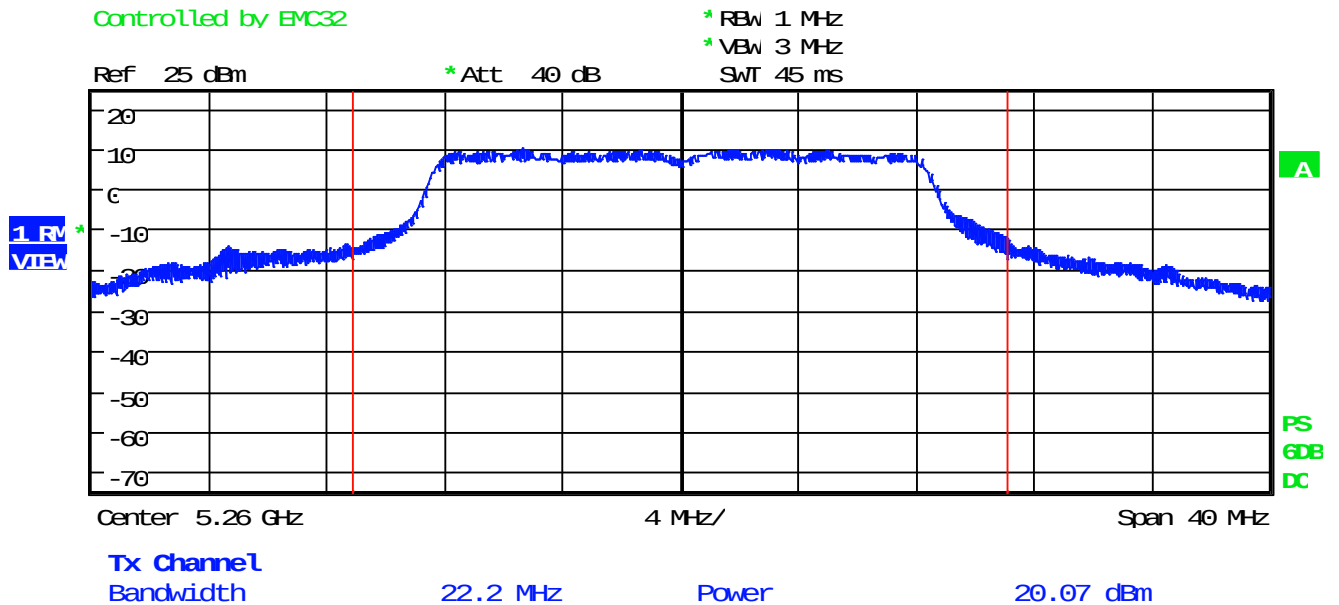
Date: 30.OCT.2020 09:17:11



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

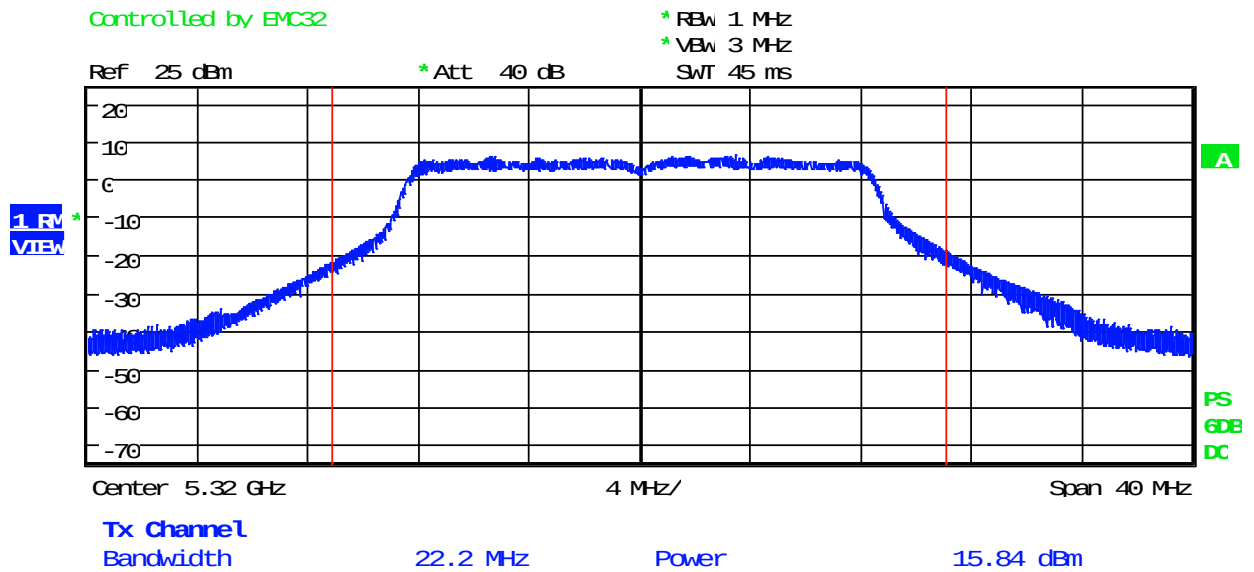


UNII 2A, Port 2: OFDM, Low Channel (Non-beamforming)





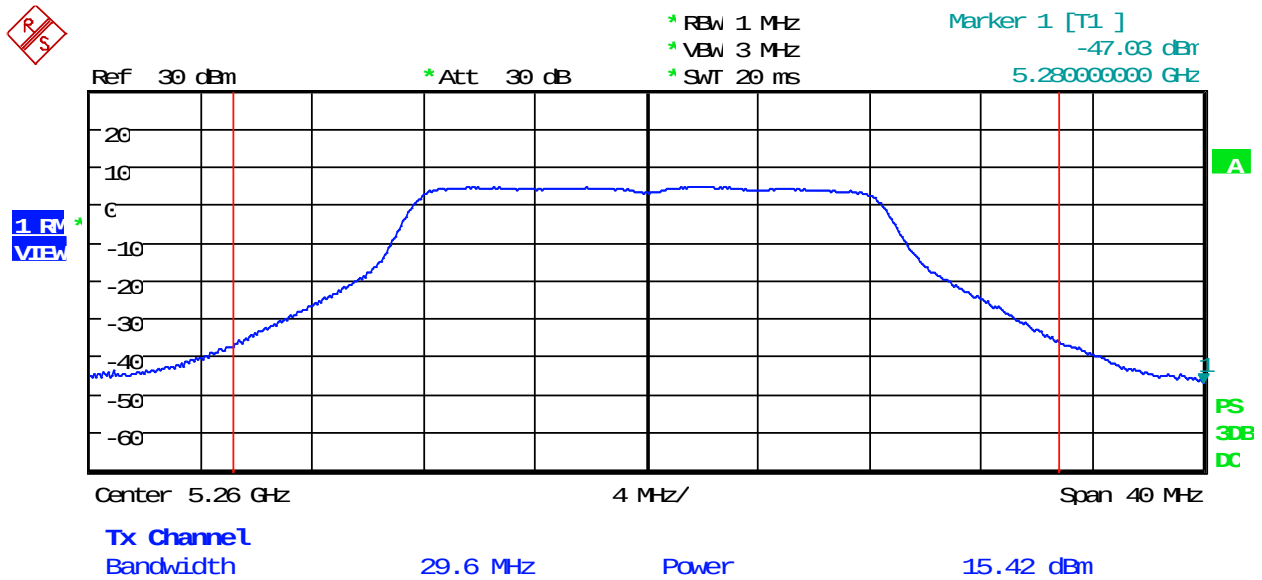
UNII 2A, Port 2: OFDM, High Channel (Beamforming and Non-beamforming)



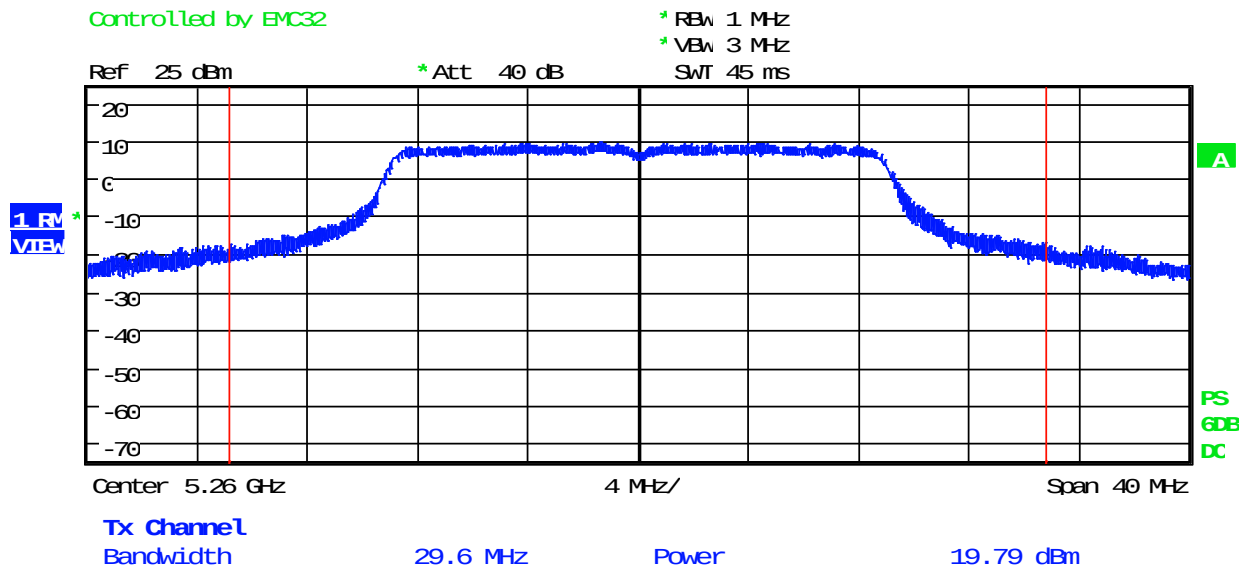
Date: 2.NOV.2020 10:45:13



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



UNII 2A, Port 2: HT20, Low Channel (Non-Beamforming)

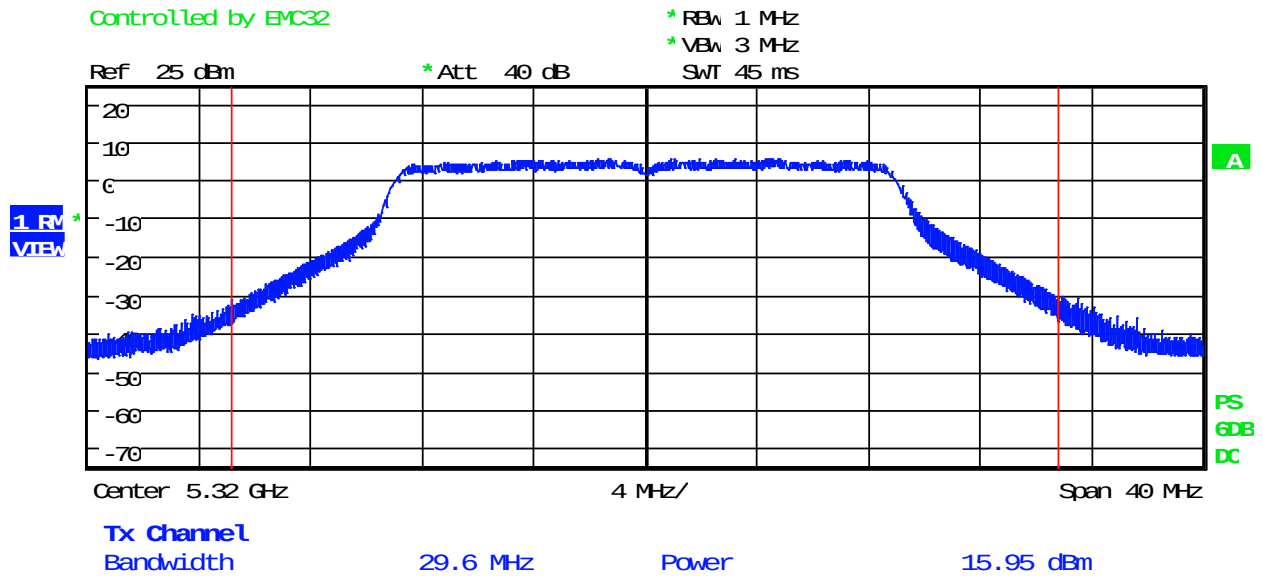




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

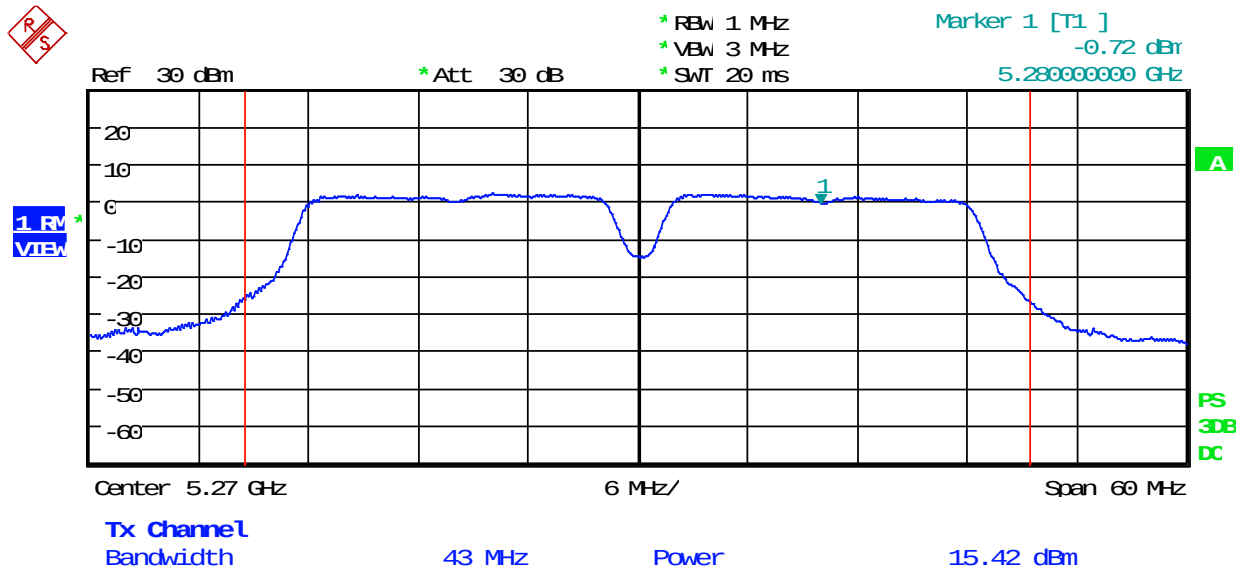
UNII 2A, Port 2: HT20, High Channel (Beamforming and Non-beamforming)



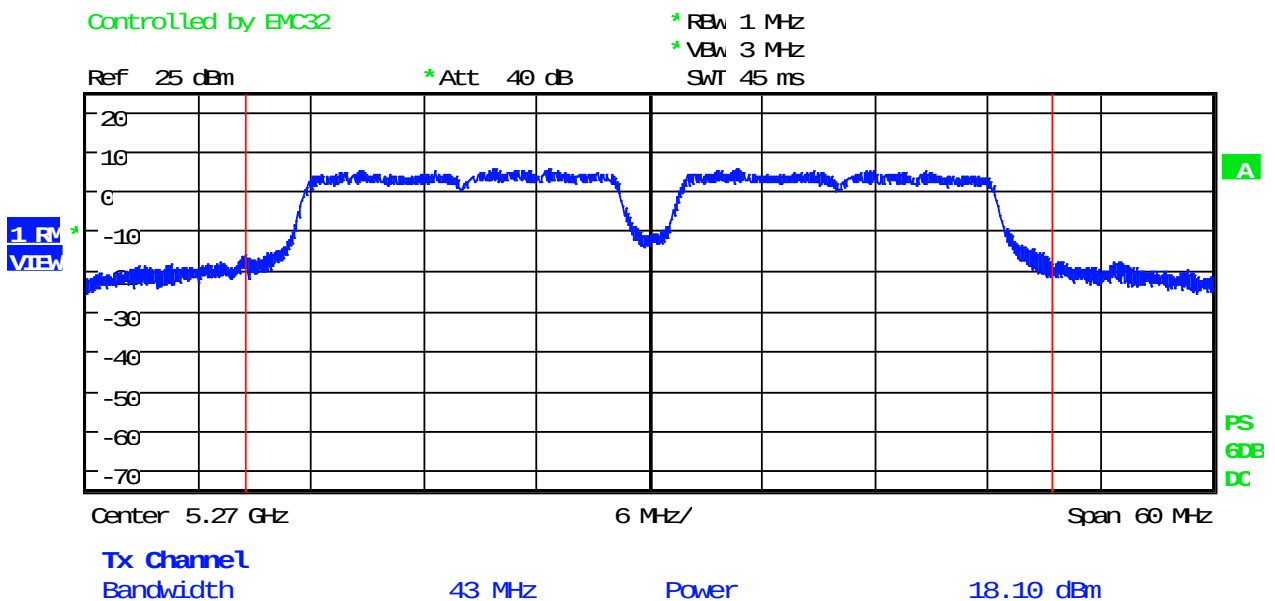
Date: 2.NOV.2020 10:48:28



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

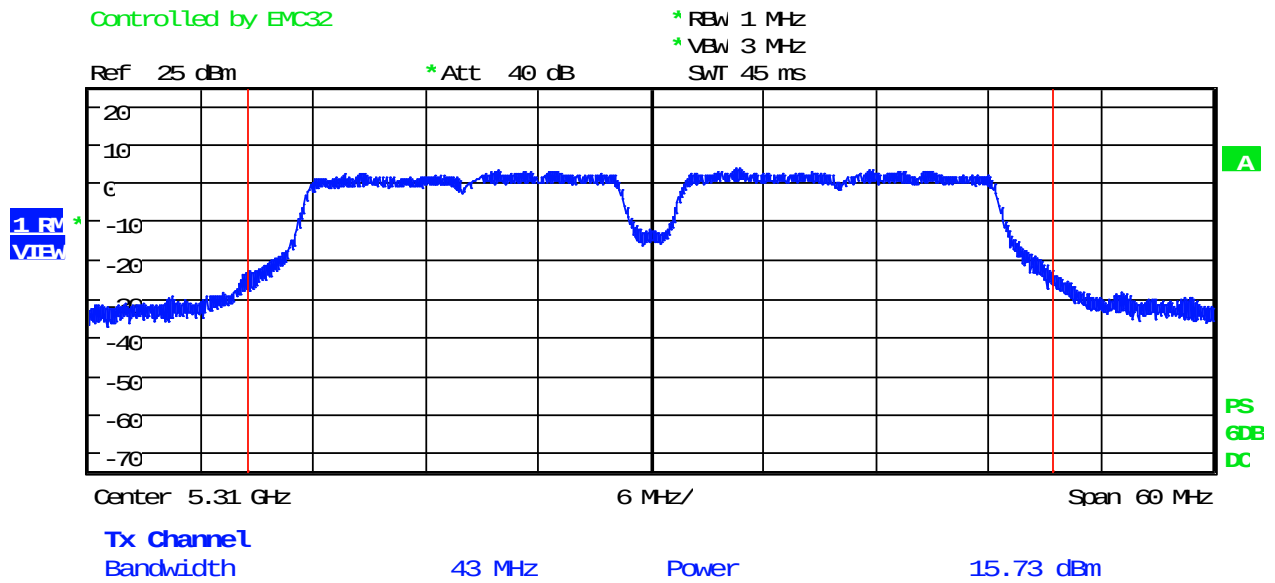


UNII 2A, Port 2: non HT40, Low Channel (Non-Beamforming)





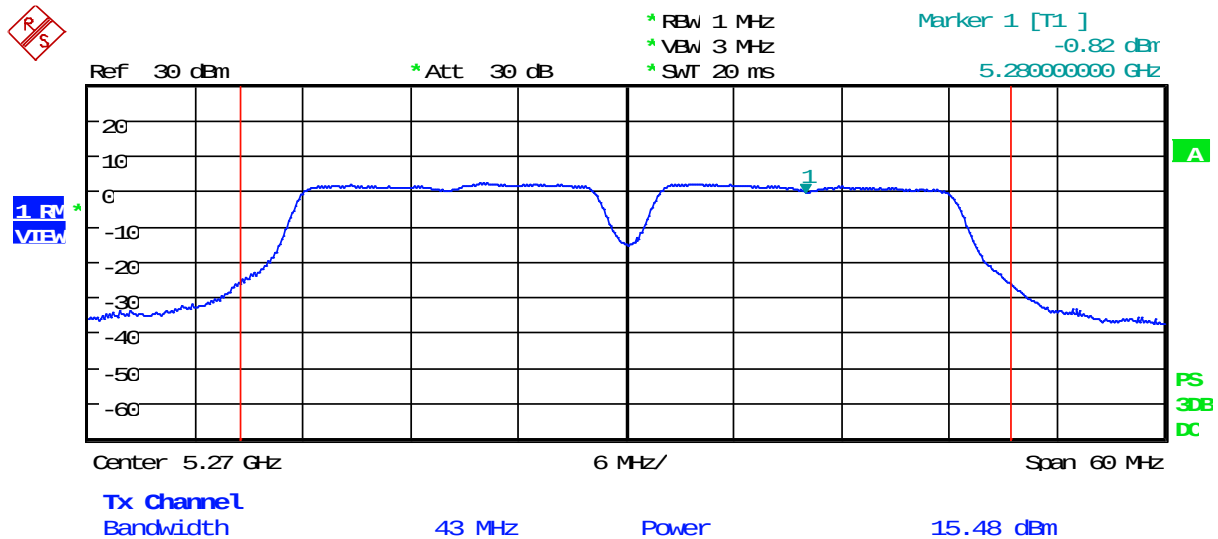
UNII 2A, Port 2: non HT40, High Channel (Beamforming and Non-beamforming)



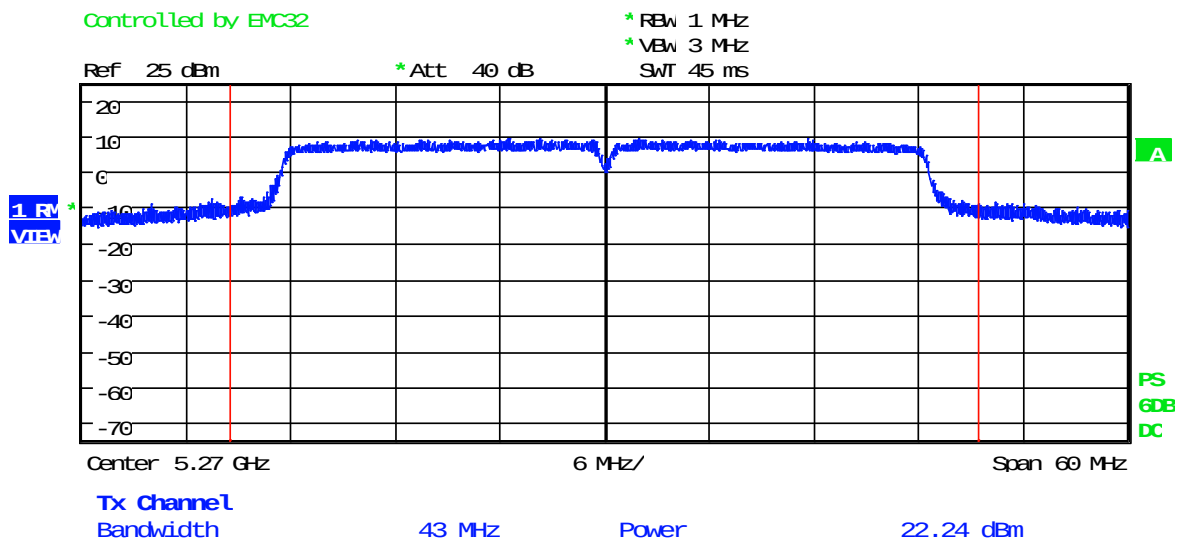
Date: 2.NOV.2020 10:51:27



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



UNII 2A, Port 2: HT40, Low Channel (Non-Beamforming)

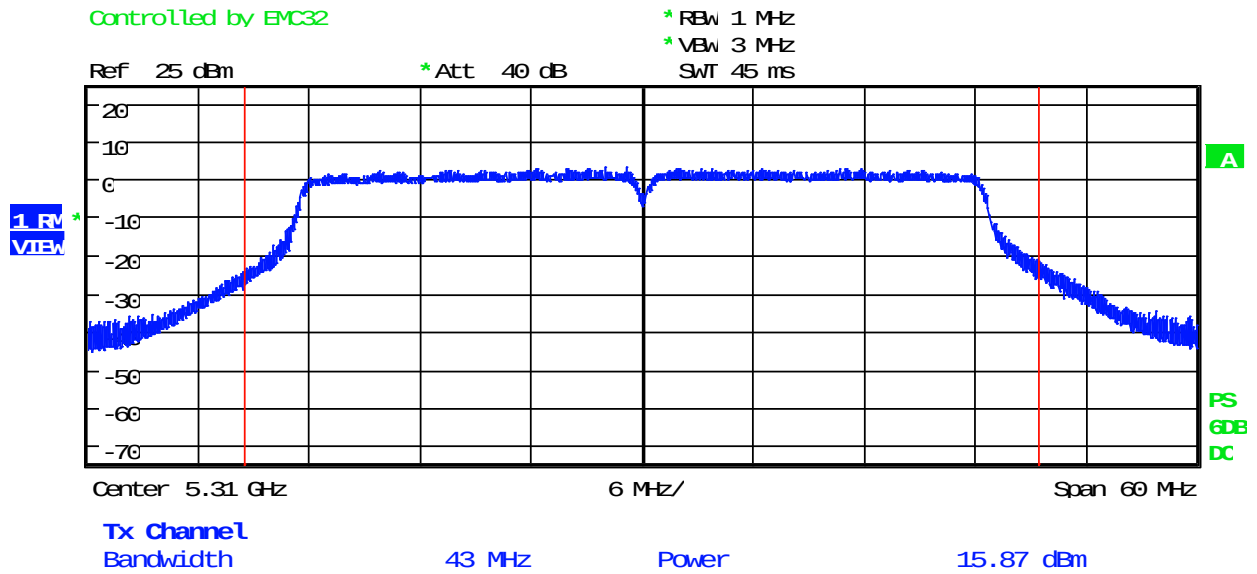




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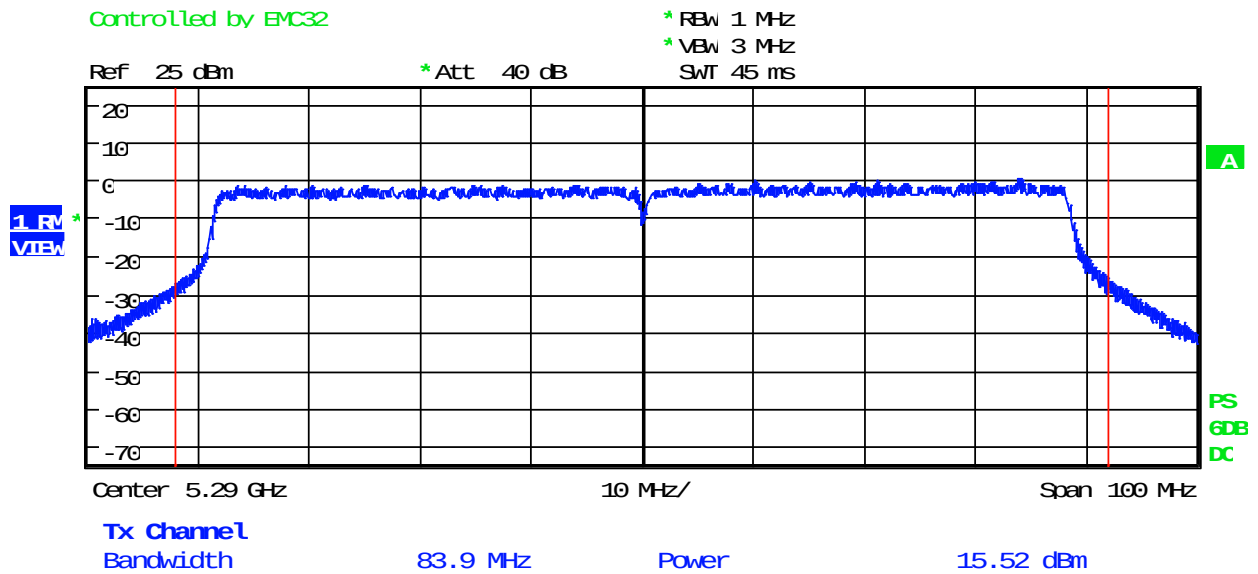
UNII 2A, Port 2: HT40, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 10:57:57



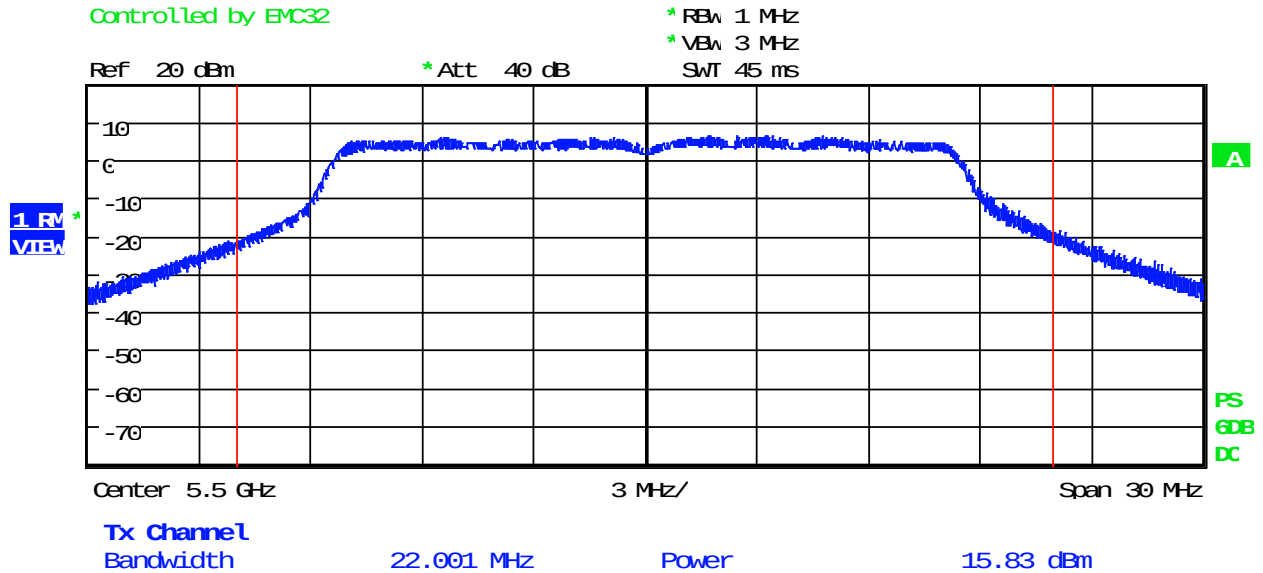
UNII 2A, Port 2: HT80 (Beamforming and Non-beamforming)



Date: 2.NOV.2020 11:00:26

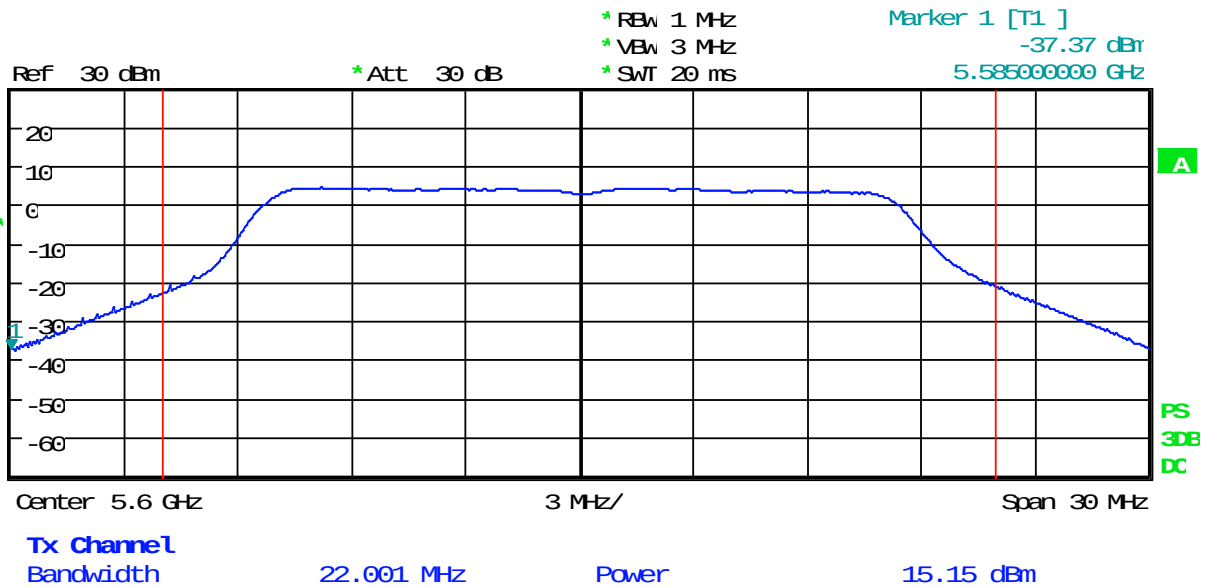


UNII 2C, Port 1: OFDM, Low Channel (Beamforming and Non-Beamforming)



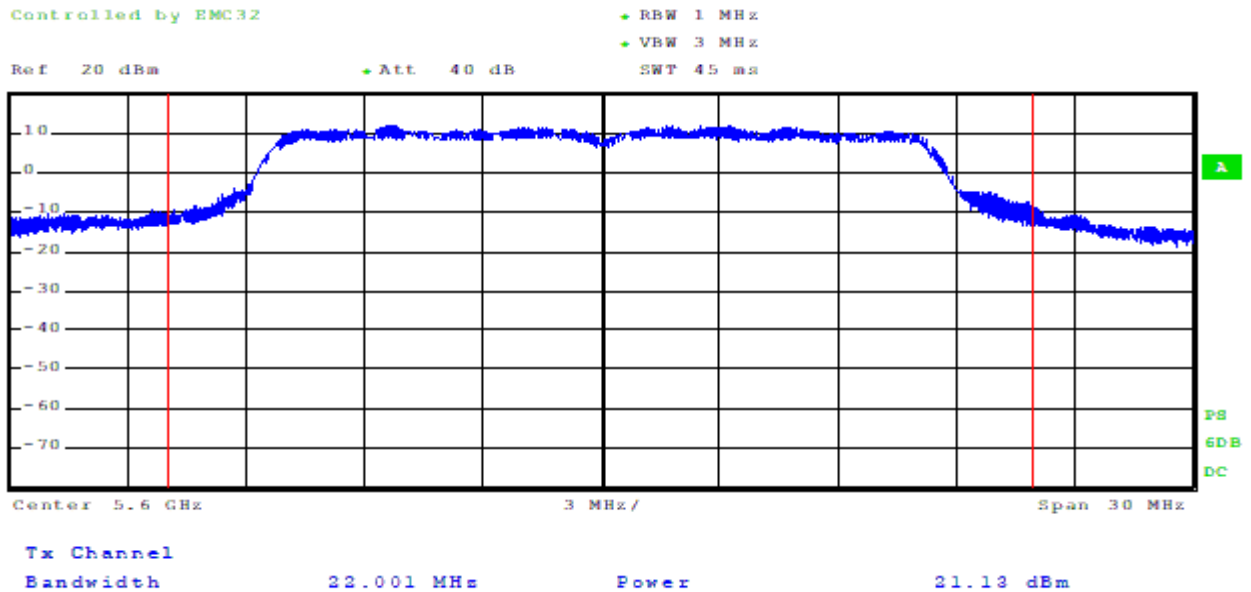


UNII 2C, Port 1: OFDM, Mid Channel (Beamforming)

1 RM
VIEW

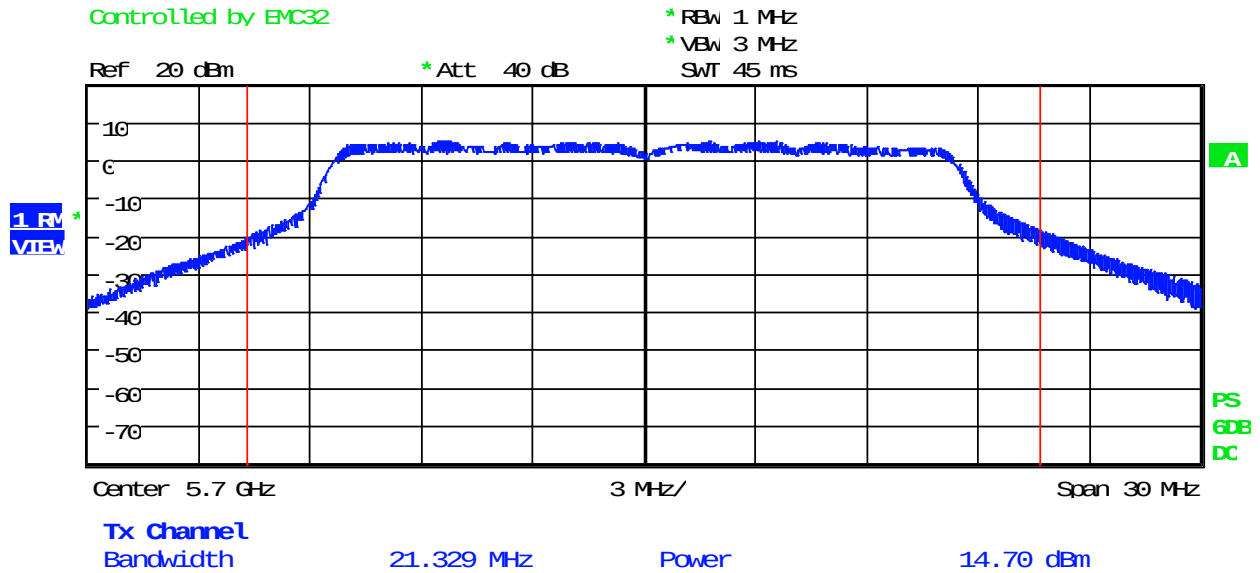
UNII 2C, Port 1: OFDM, Mid Channel (Non-Beamforming)

Controlled by EMC32

1 RM
VIEW



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



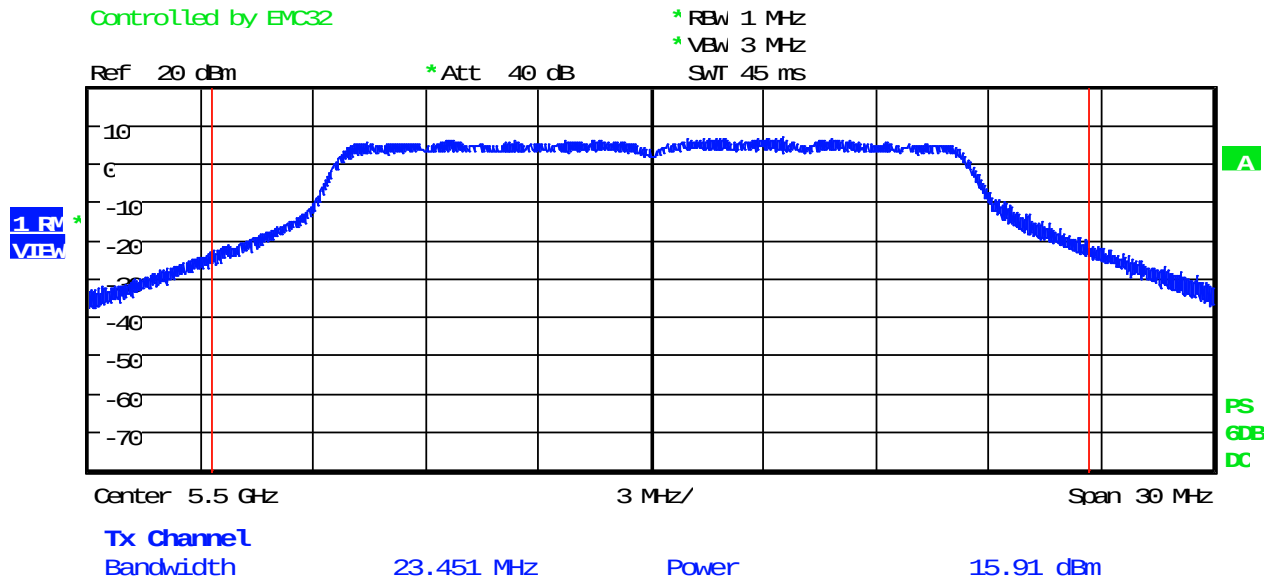
Date: 30.OCT.2020 09:39:21



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

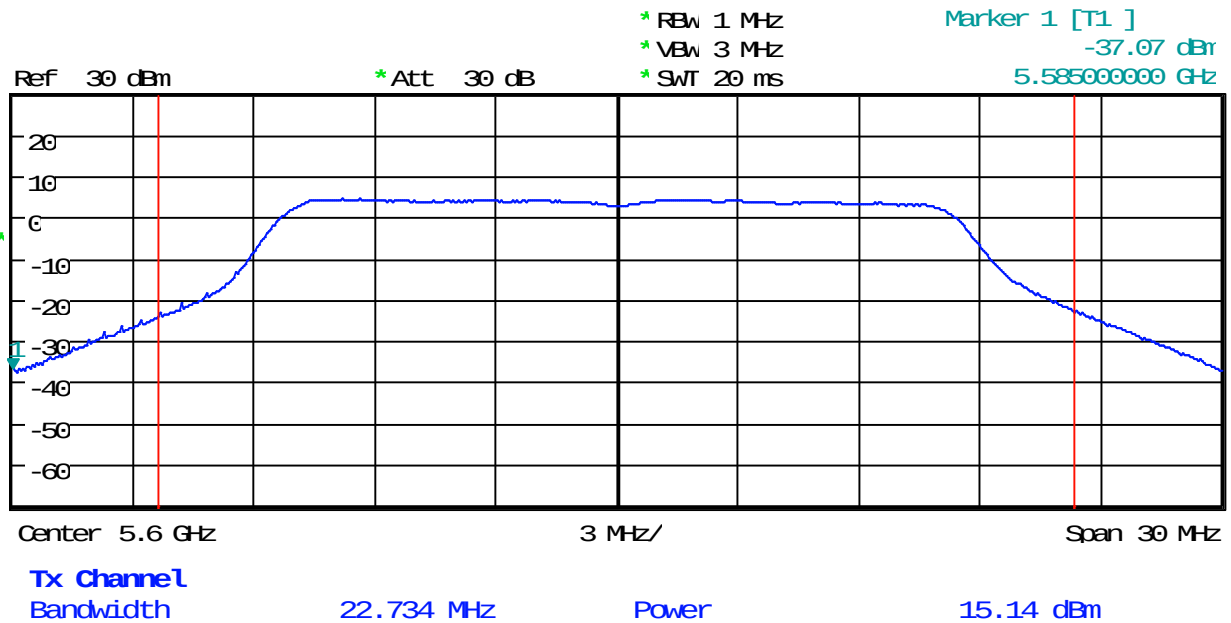
UNII 2C, Port 1: HT20, Low Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 09:41:22



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

1 RM
VIEW

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

Controlled by EMC32

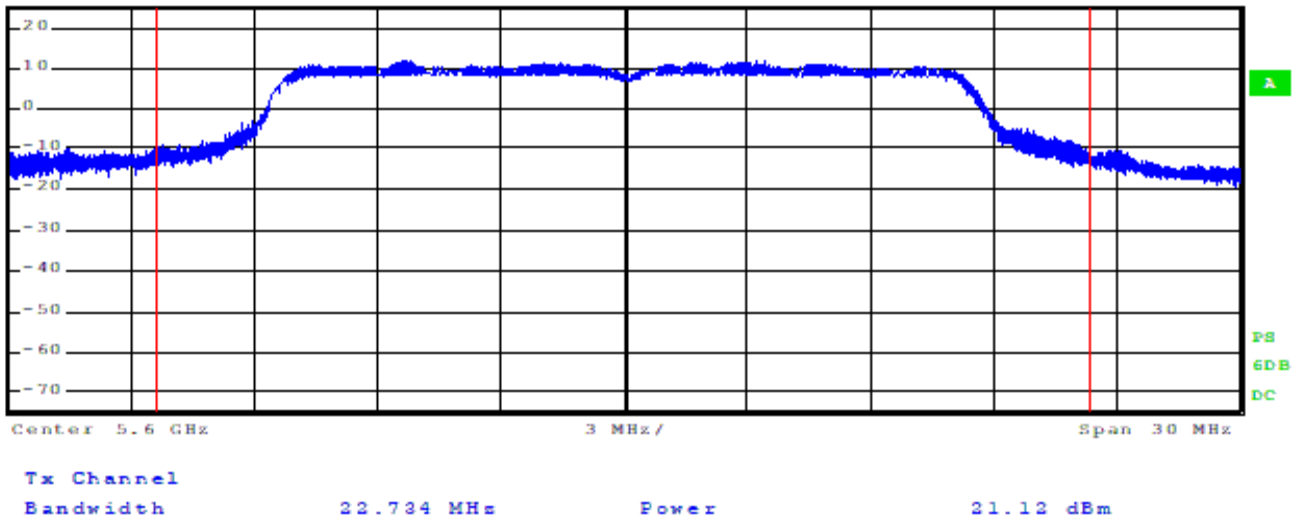
Ref 25 dBm

* Att 40 dB

* RBW 1 MHz

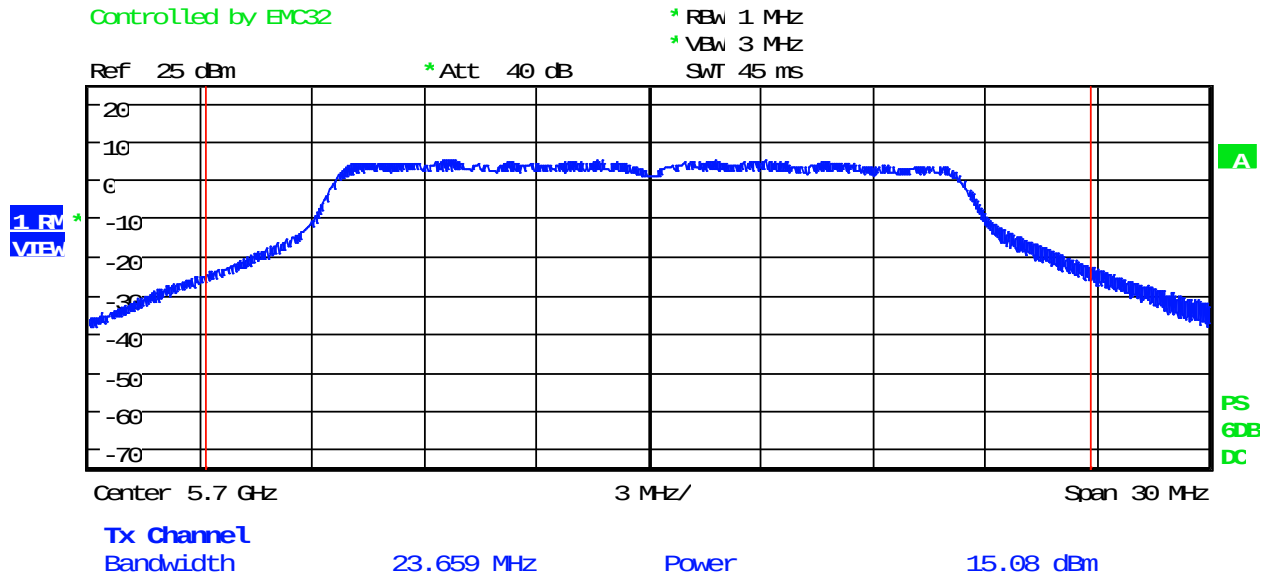
* VBW 3 MHz

* SWT 45 ms

1 RM
VIEW



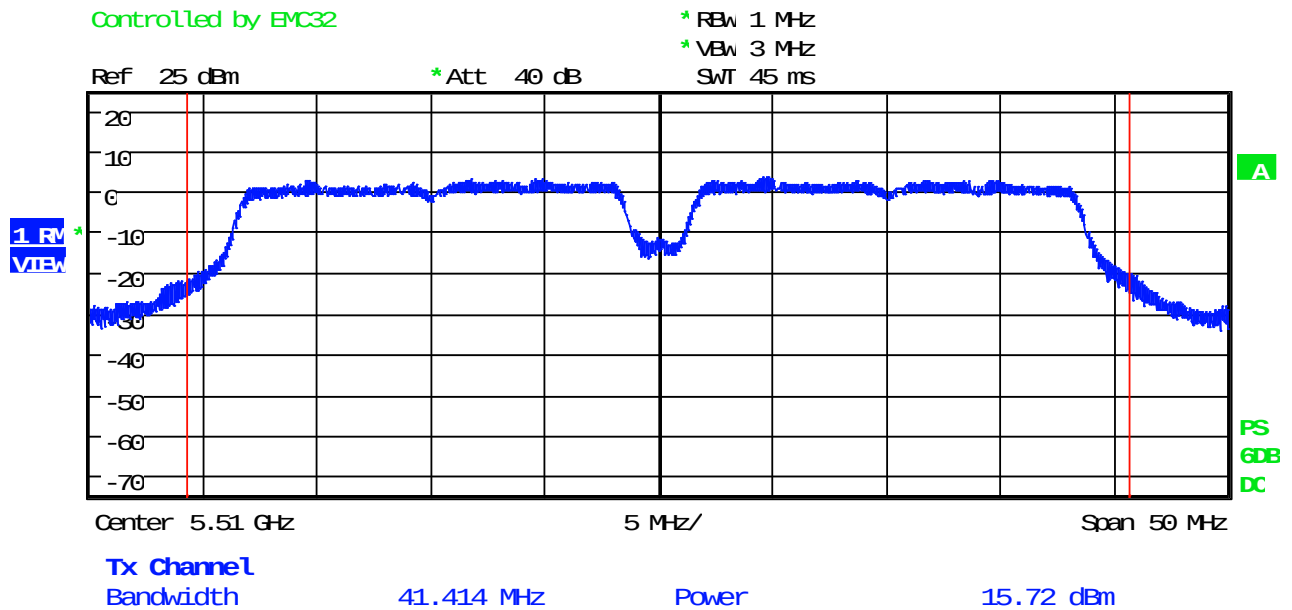
UNII 2C, Port 1: HT20, High Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 09:44:25

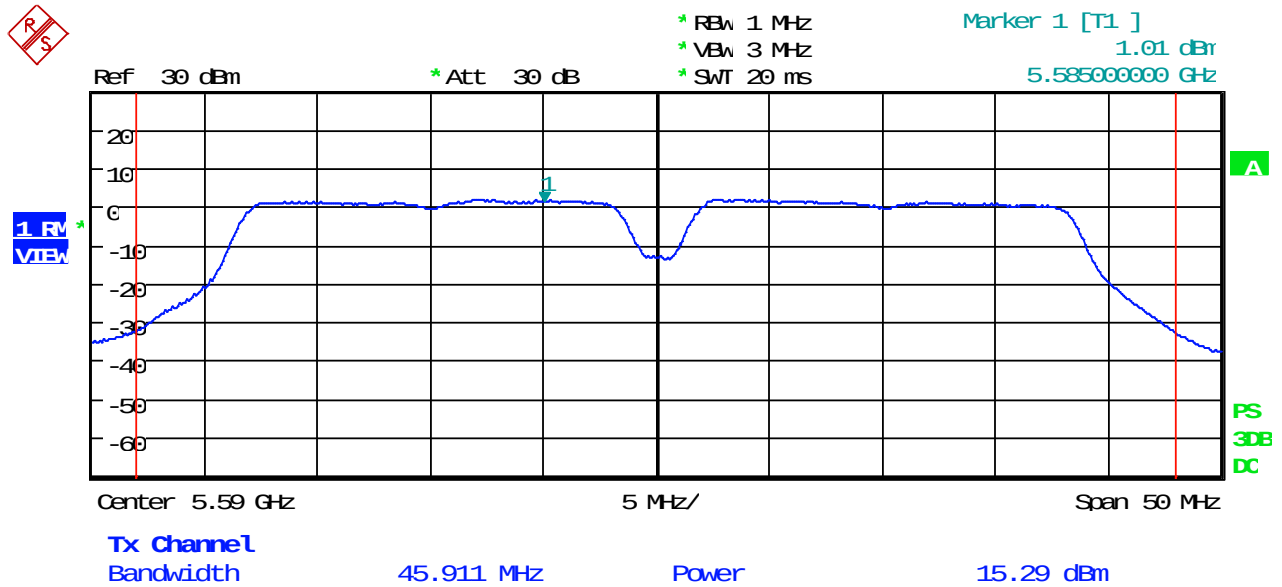


UNII 2C, Port 1: non HT40, Low Channel (Beamforming and Non-beamforming)



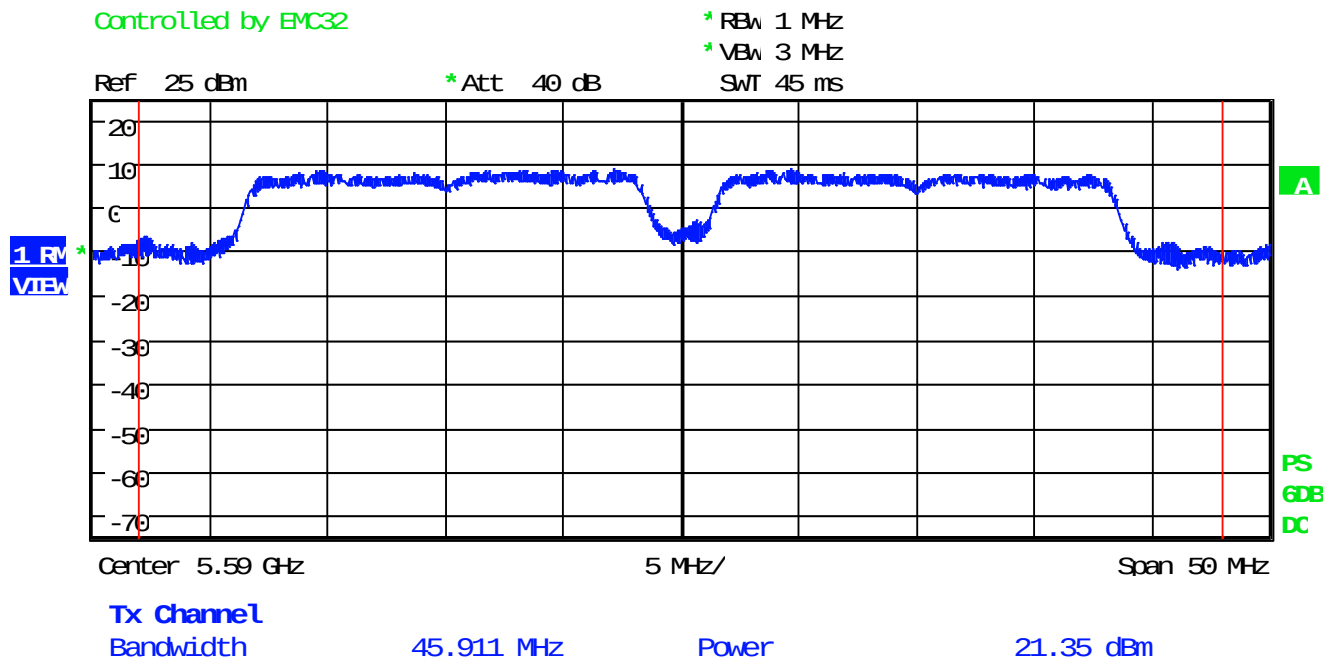


UNII 2C, Port 1: non HT40, Mid Channel (Beamforming)



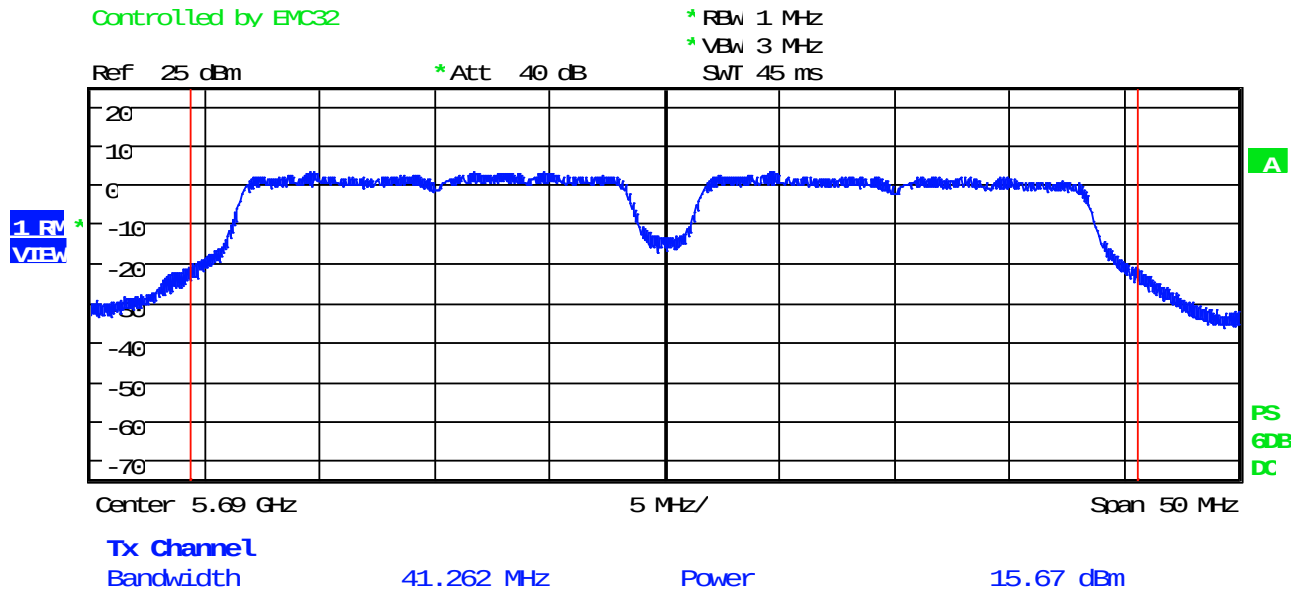
UNII 2C, Port 1: non HT40, Mid Channel (Non-Beamforming)

Controlled by EMC32





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

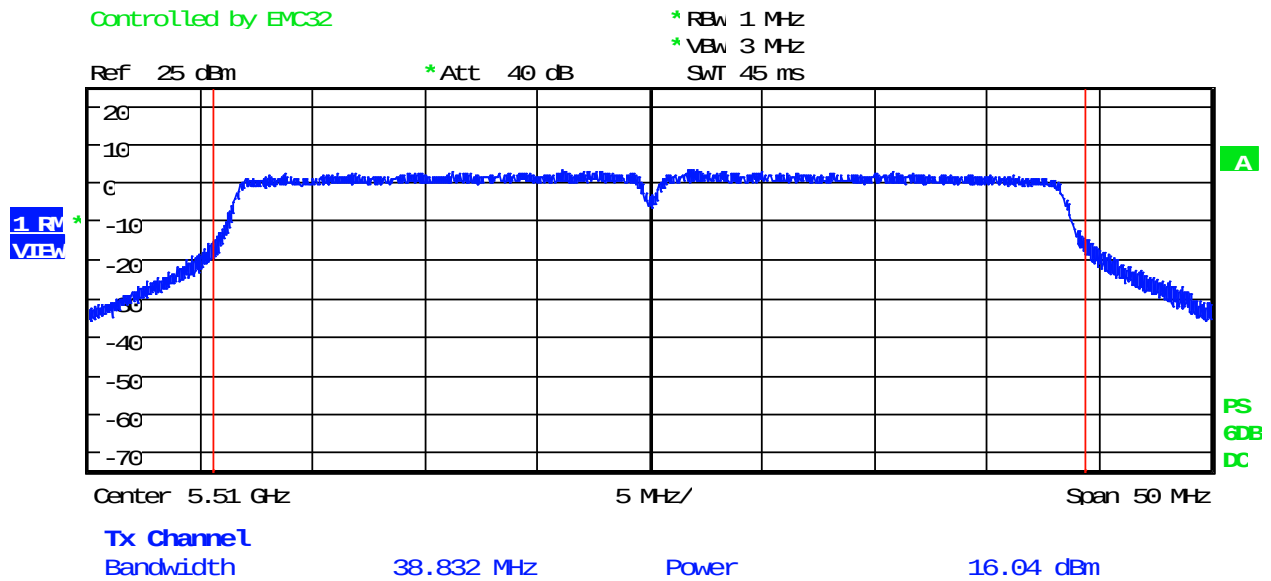




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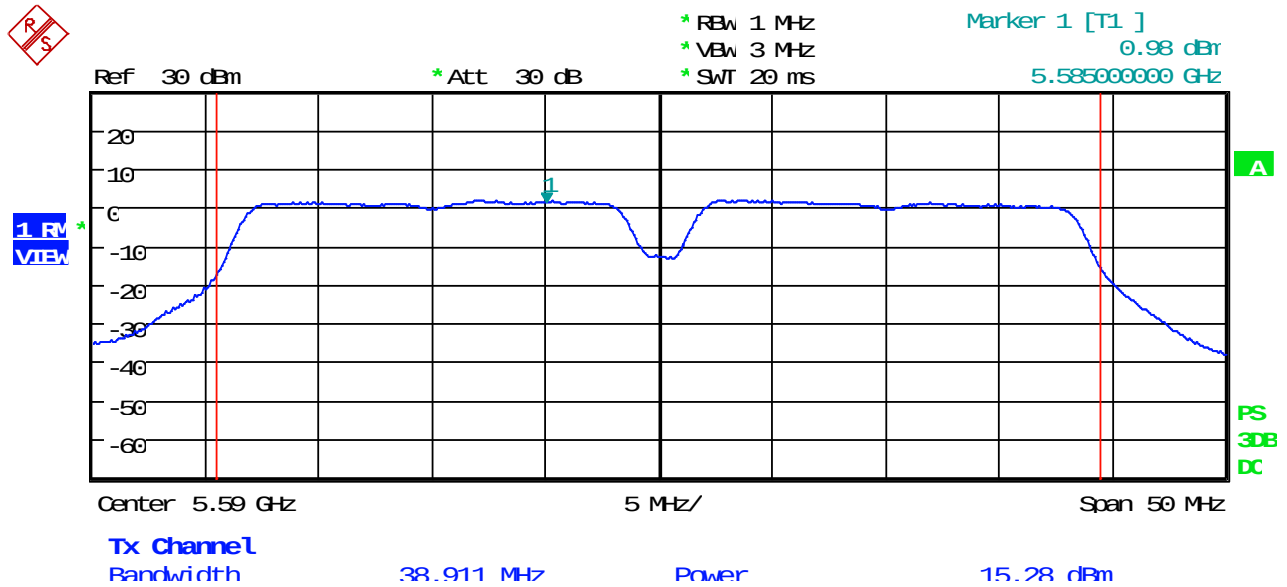
UNII 2C, Port 1: HT40, Low Channel (Beamforming and Non-beamforming)



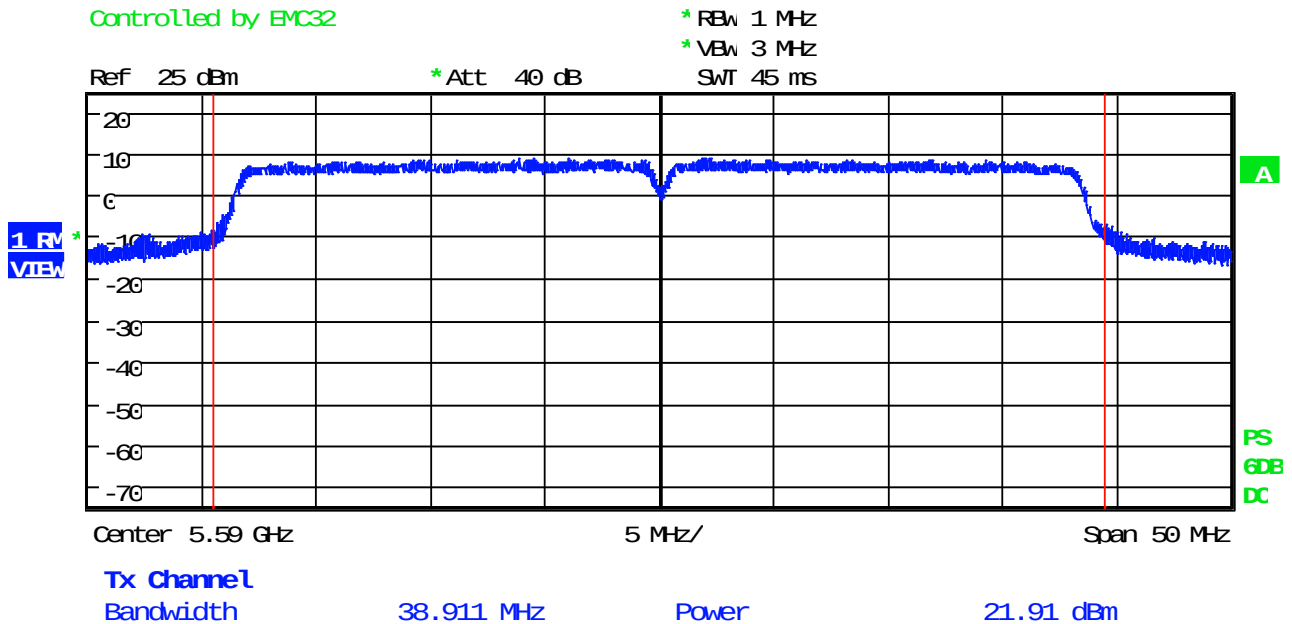
Date: 30.OCT.2020 09:55:36



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



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

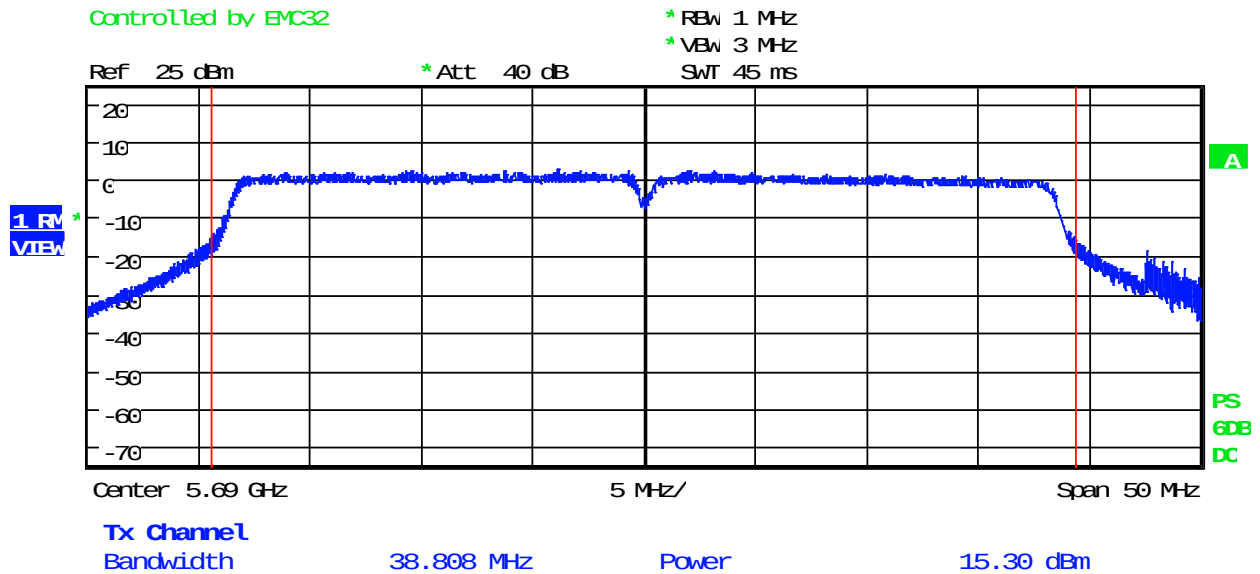




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

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



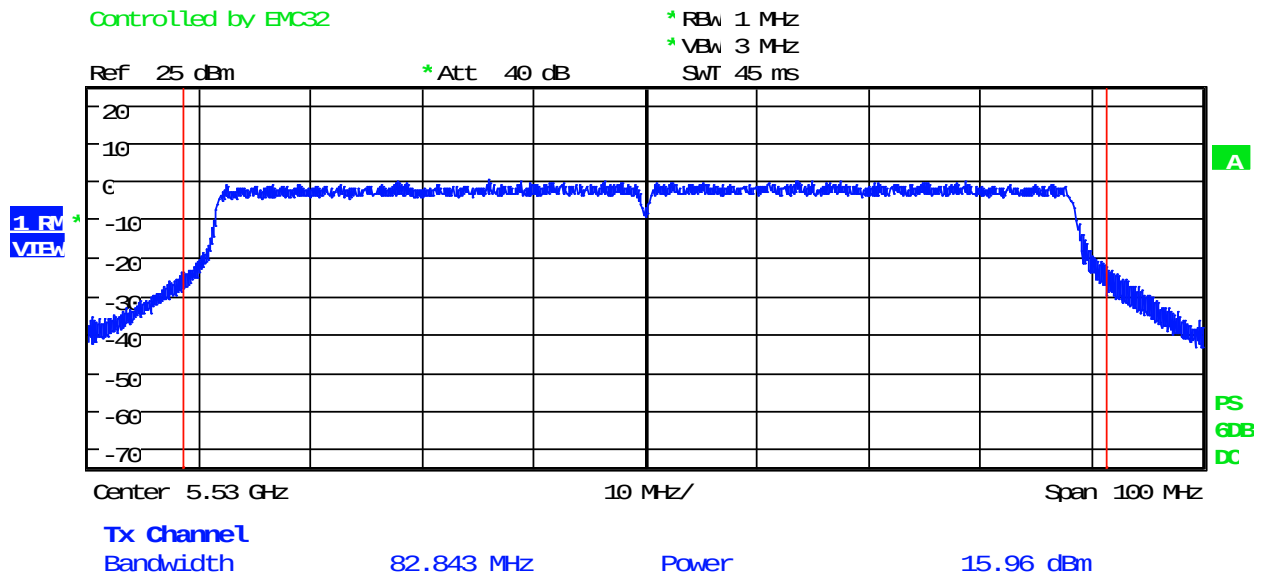
Date: 30.OCT.2020 09:57:48



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

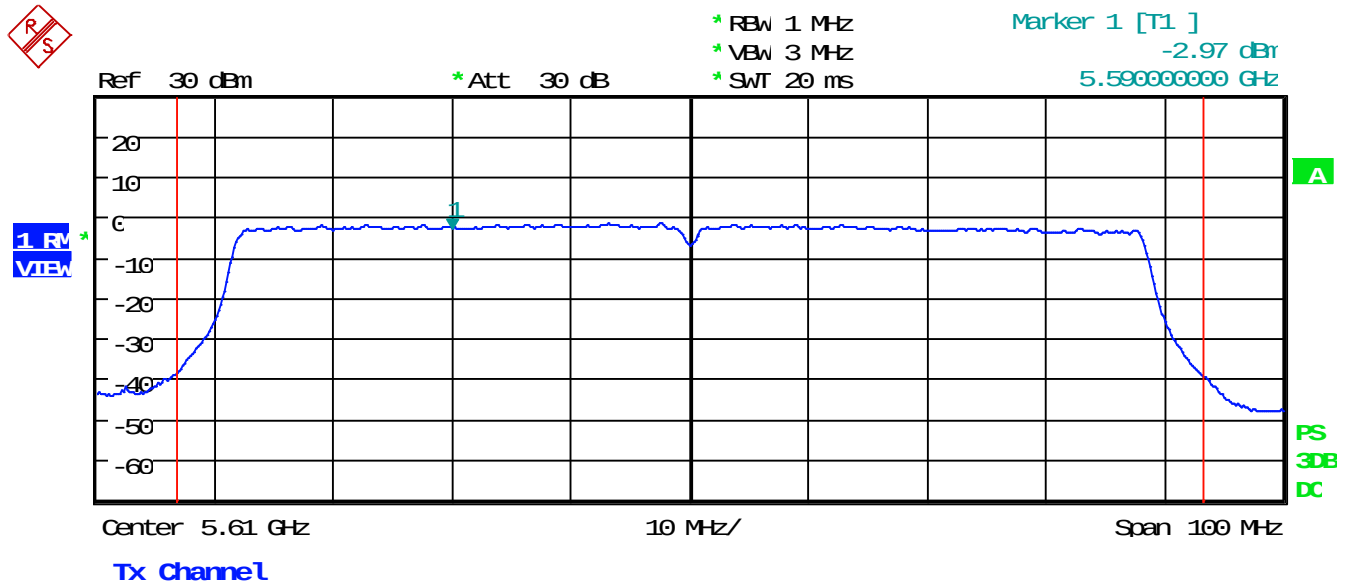
UNII 2C, Port 1: HT80, Low Channel (Beamforming and Non-beamforming)



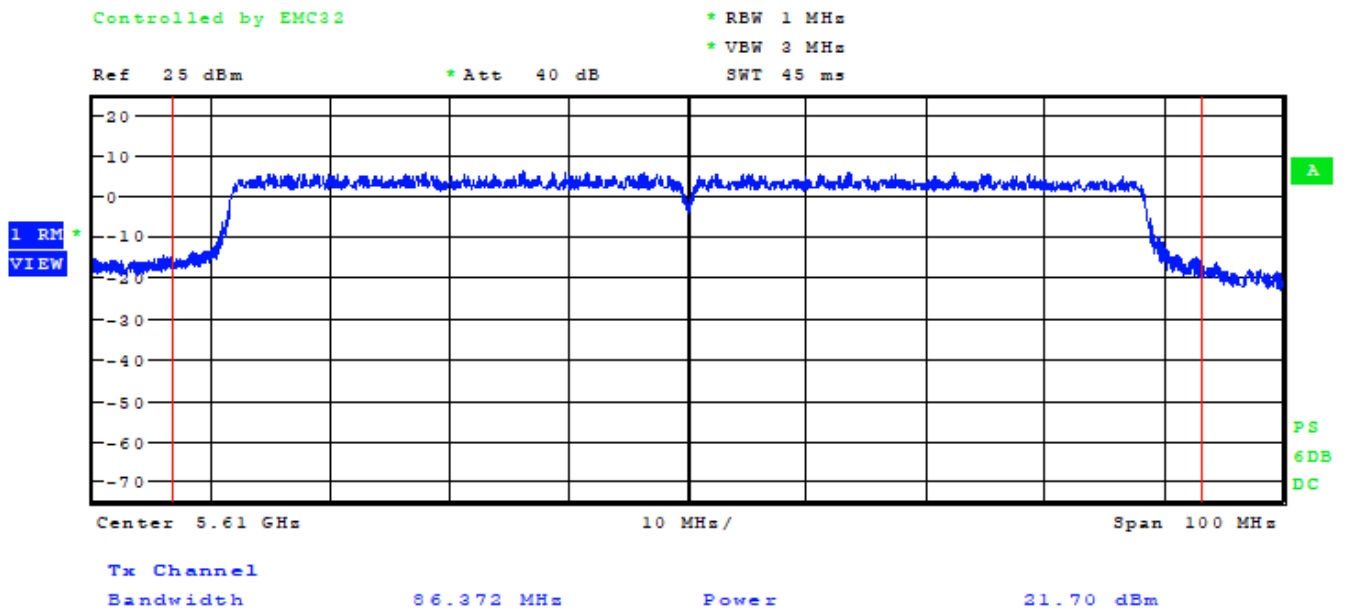
Date: 30.OCT.2020 10:02:03



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



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

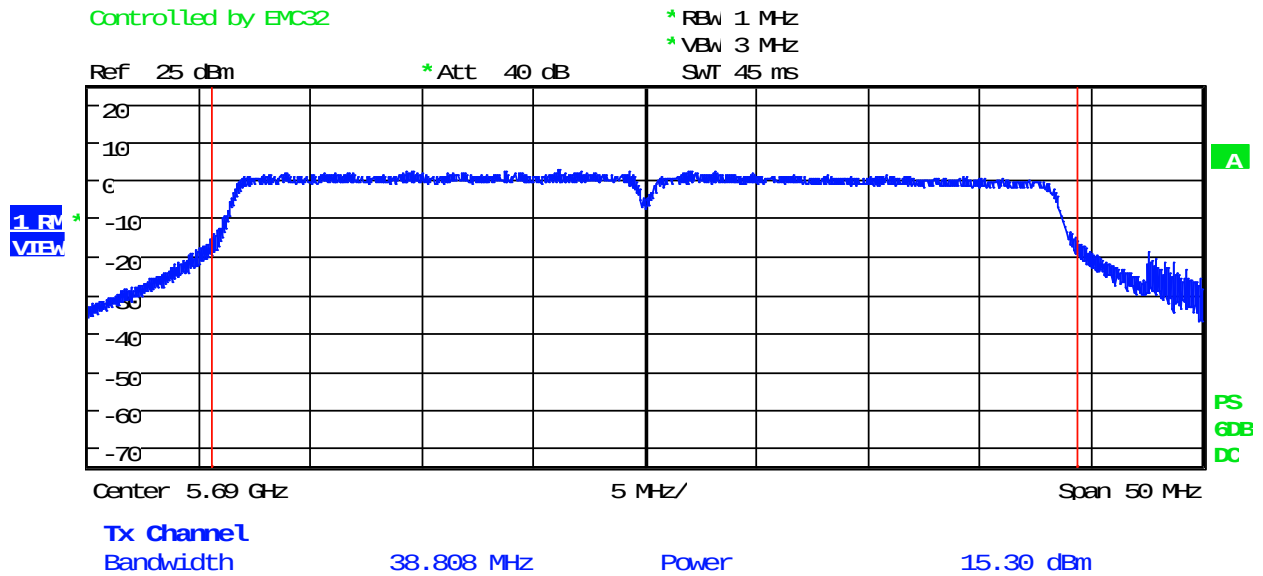




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

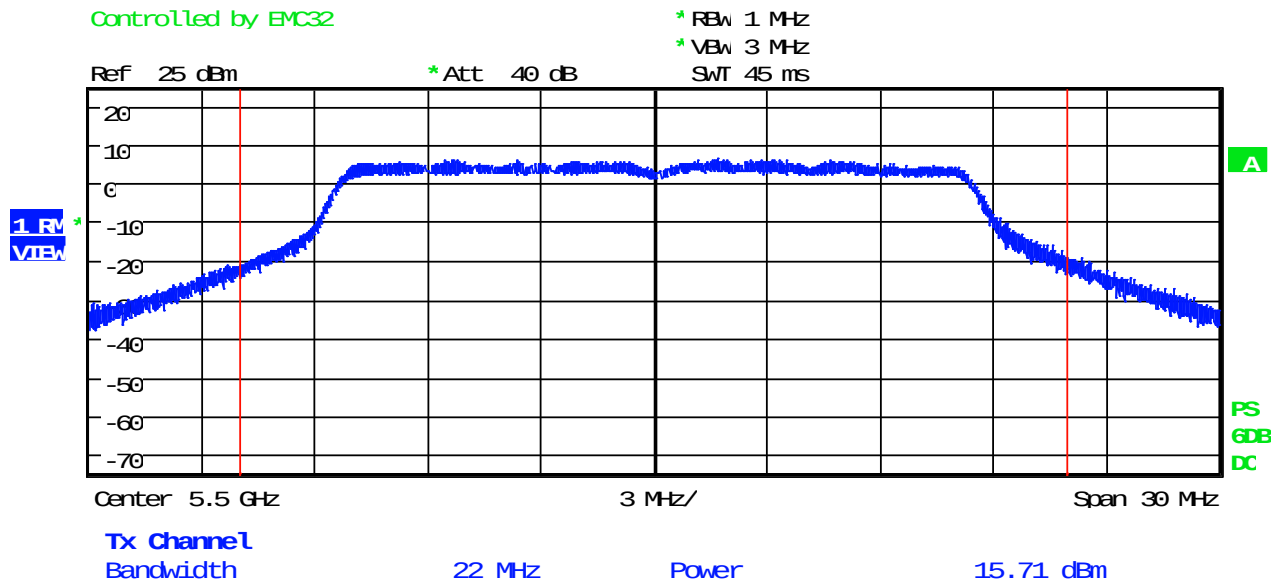
UNII 2C, Port 1: HT80, High Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 09:57:48



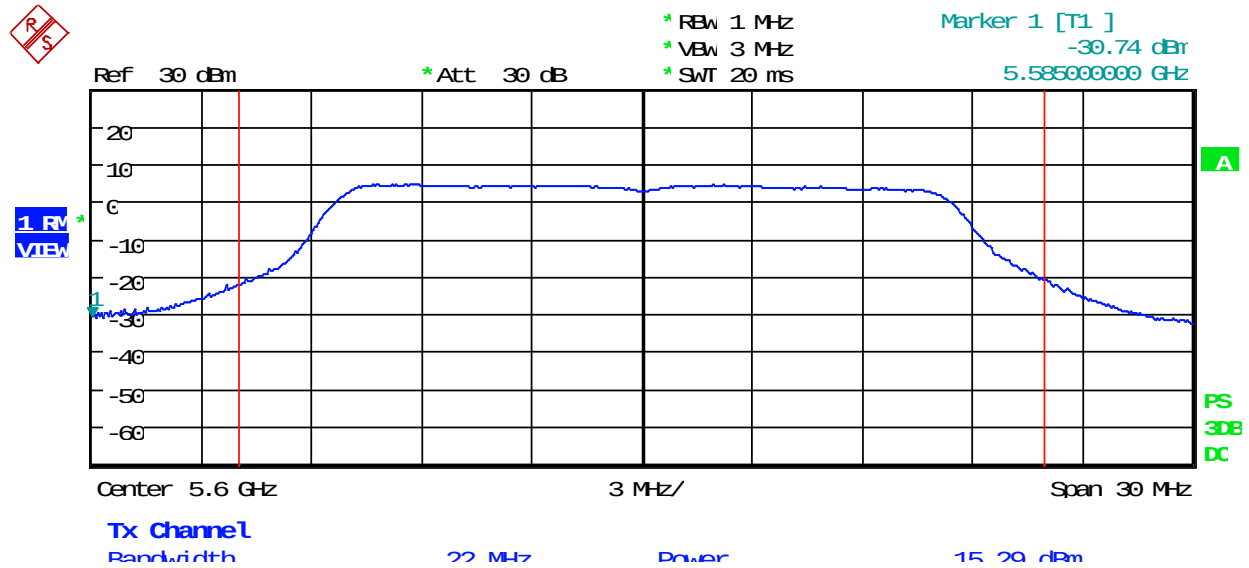
UNII 2C, Port 2: OFDM, Low Channel (Beamforming and Non-beamforming)



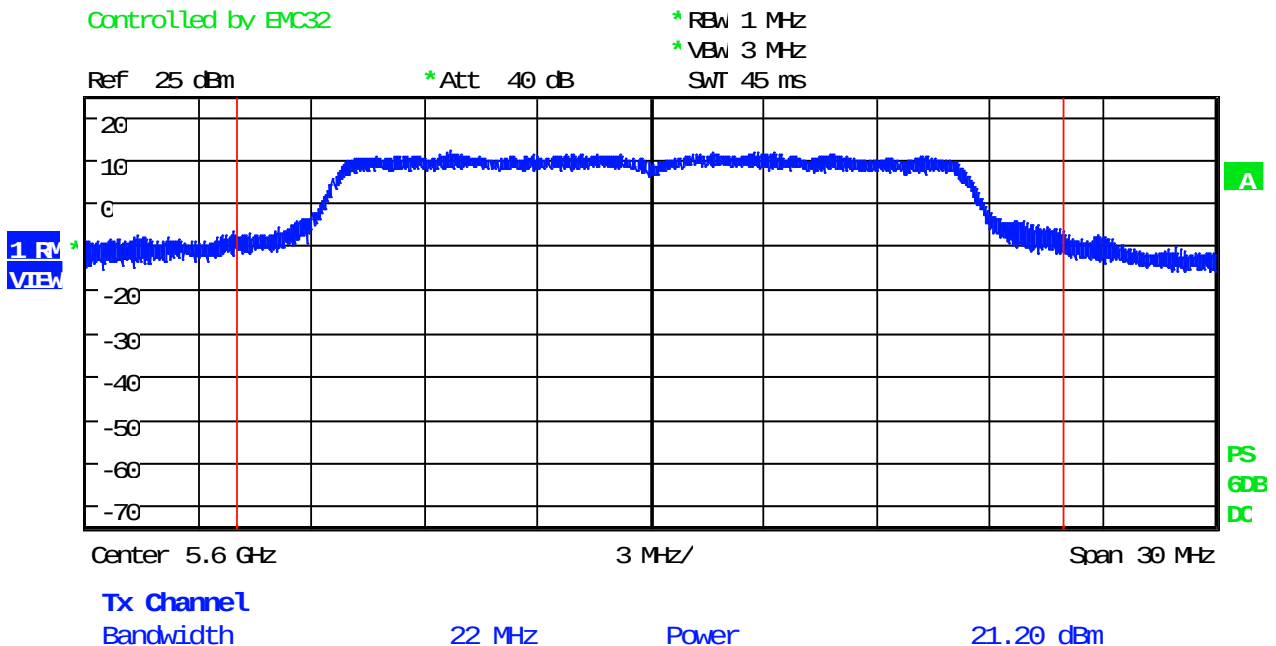
Date: 2.NOV.2020 11:29:32



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

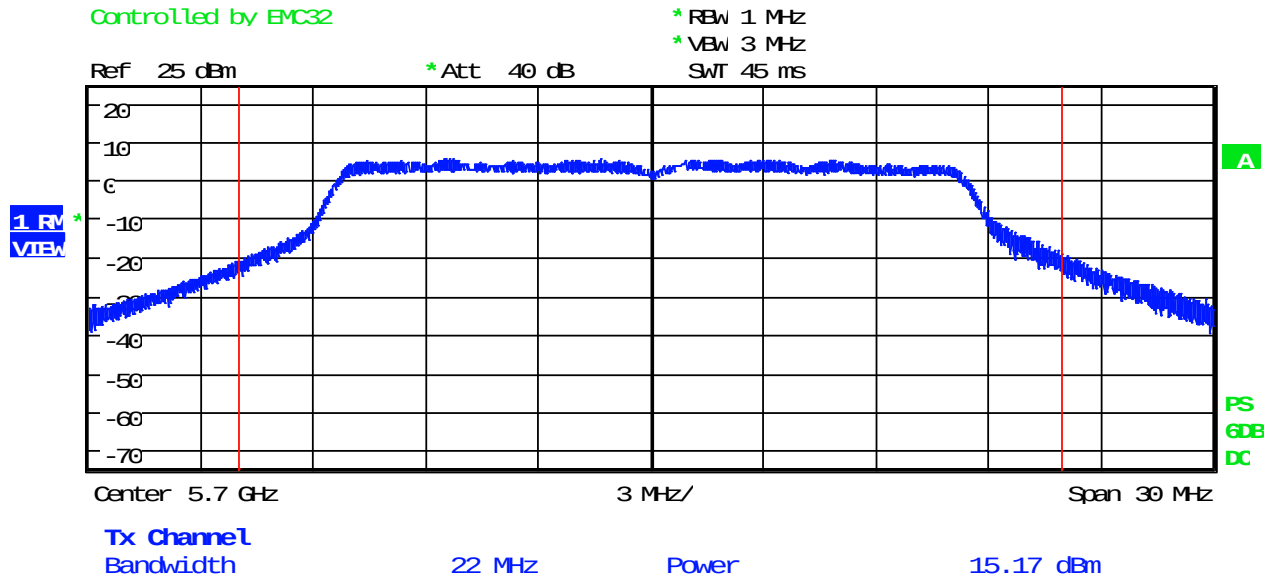


UNII 2C, Port 2: OFDM, Mid Channel (Non-Beamforming)





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



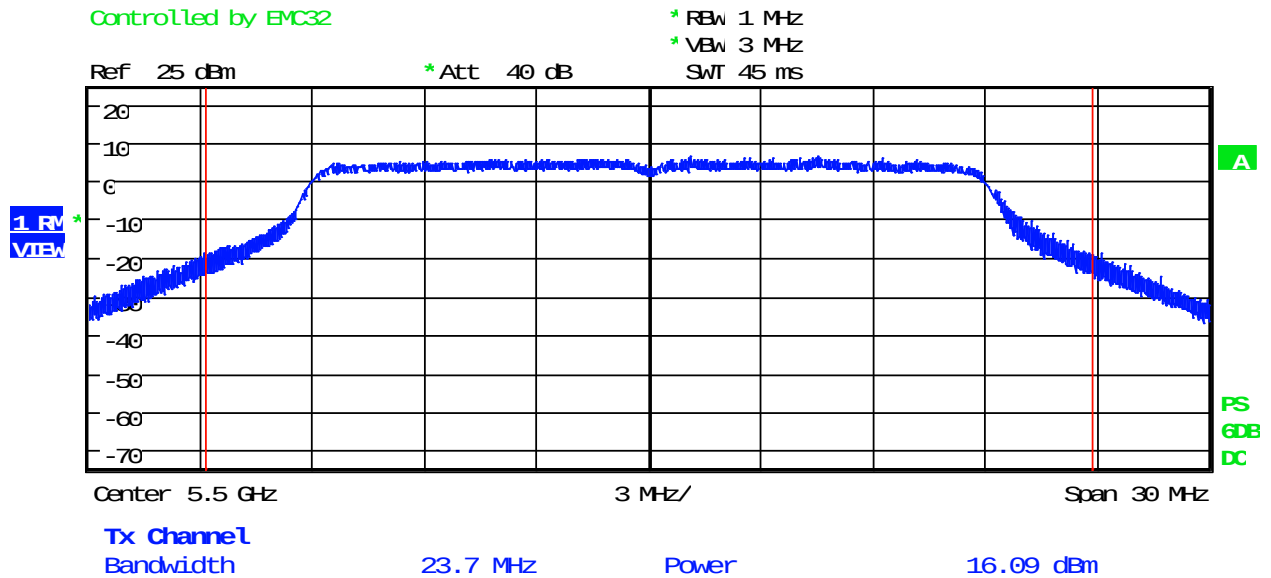
Date: 2.NOV.2020 11:31:23



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

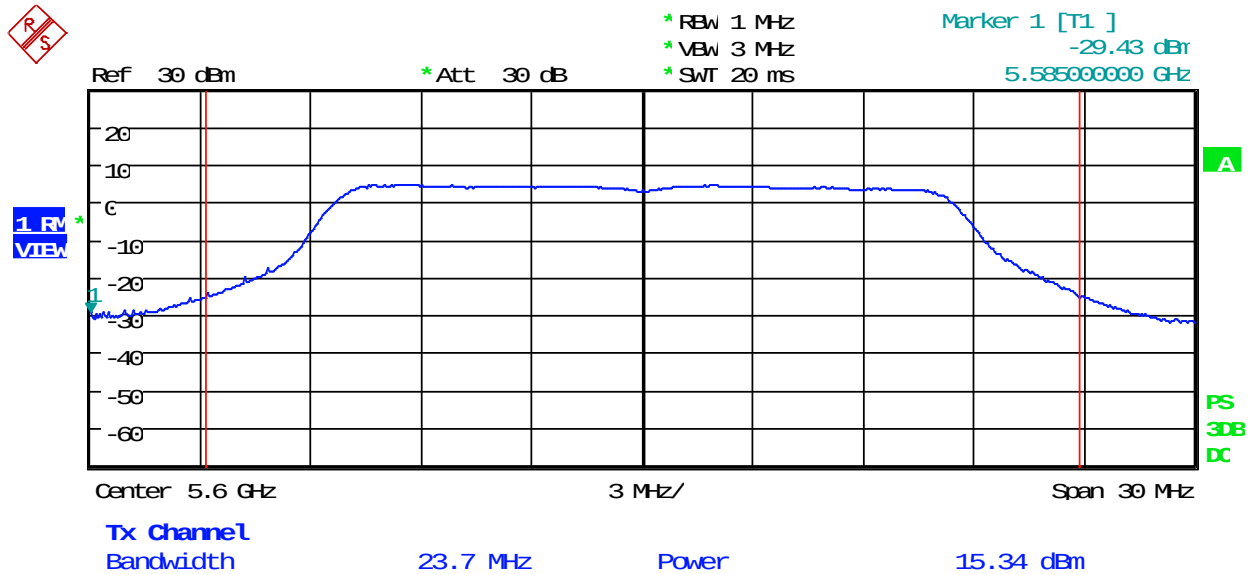
UNII 2C, Port 2: HT20, Low Channel (Beamforming and Non-beamforming)



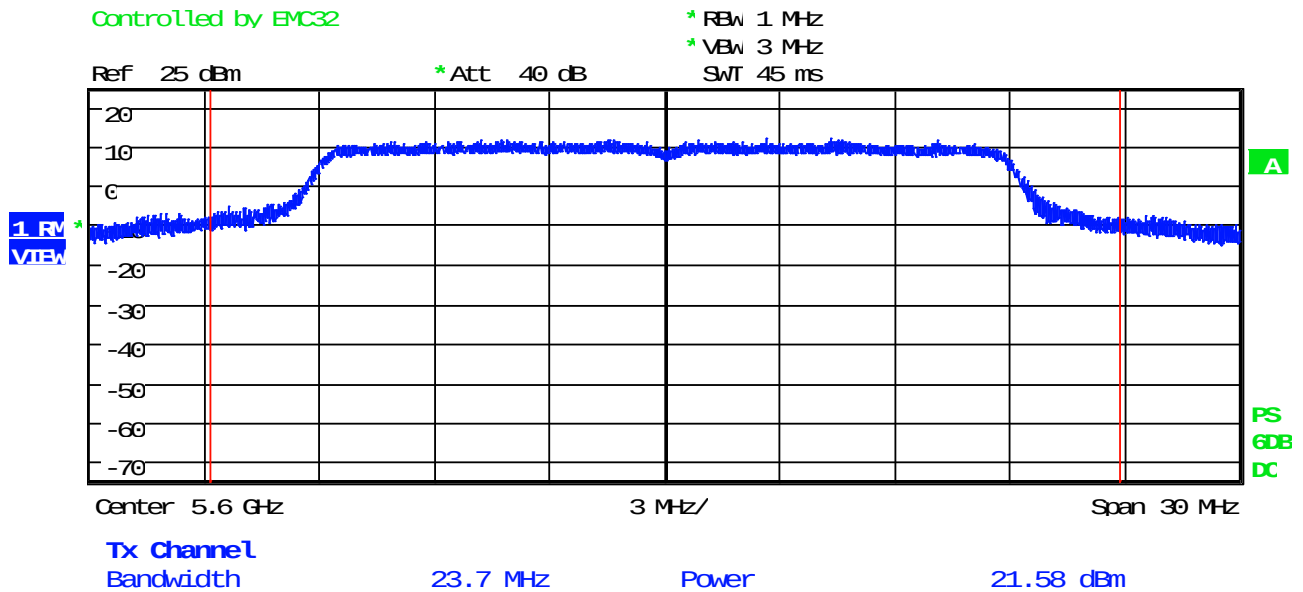
Date: 2.NOV.2020 11:33:04



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

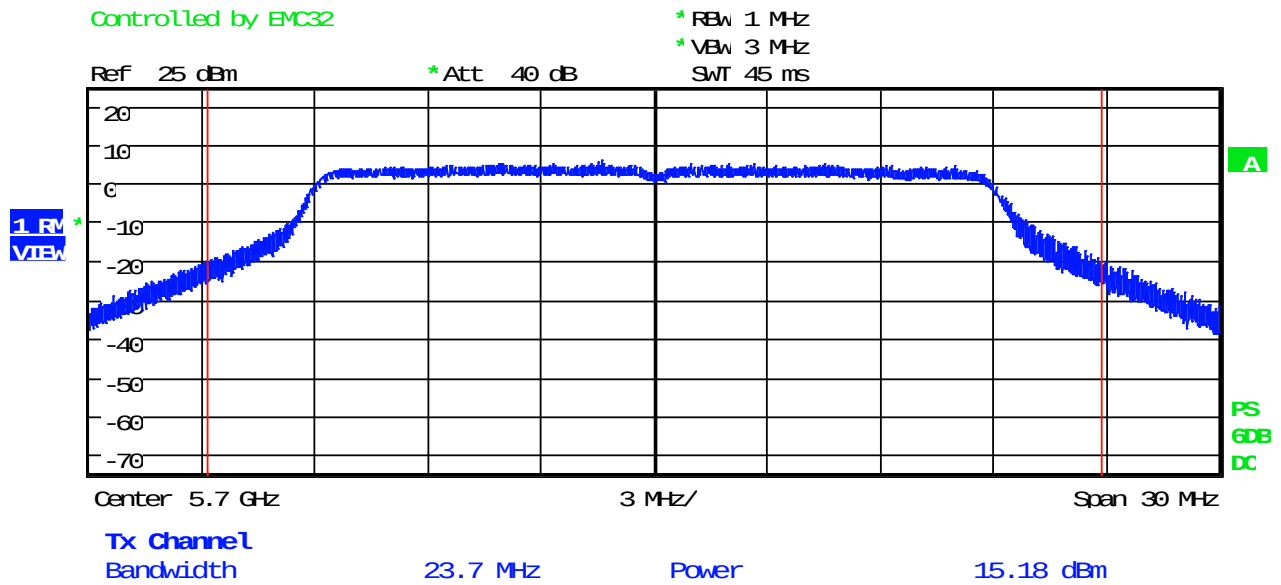


UNII 2C, Port 2: HT20, Mid Channel (Non-Beamforming)





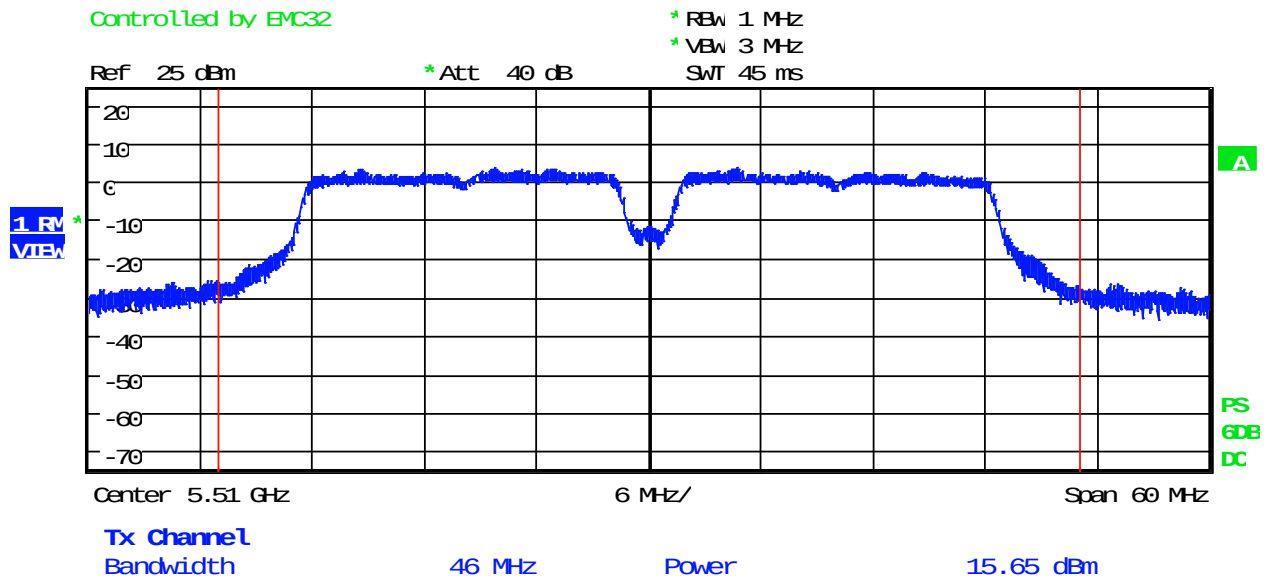
UNII 2C, Port 2: HT20, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 11:34:46



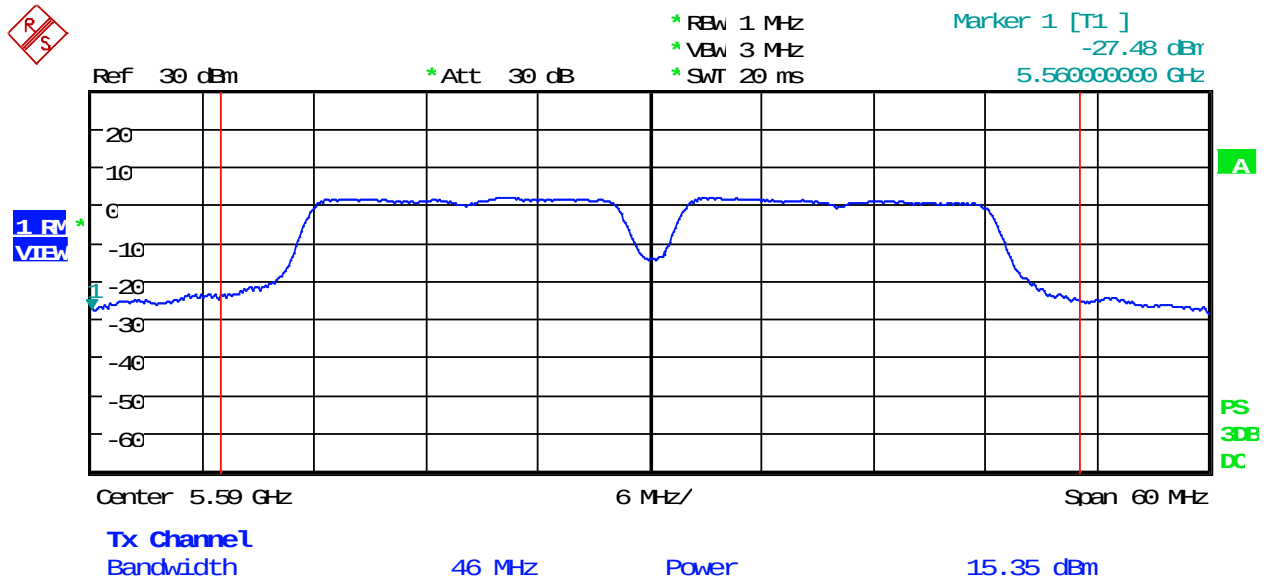
UNII 2C, Port 2: non HT40, Low Channel (Beamforming and Non-beamforming)



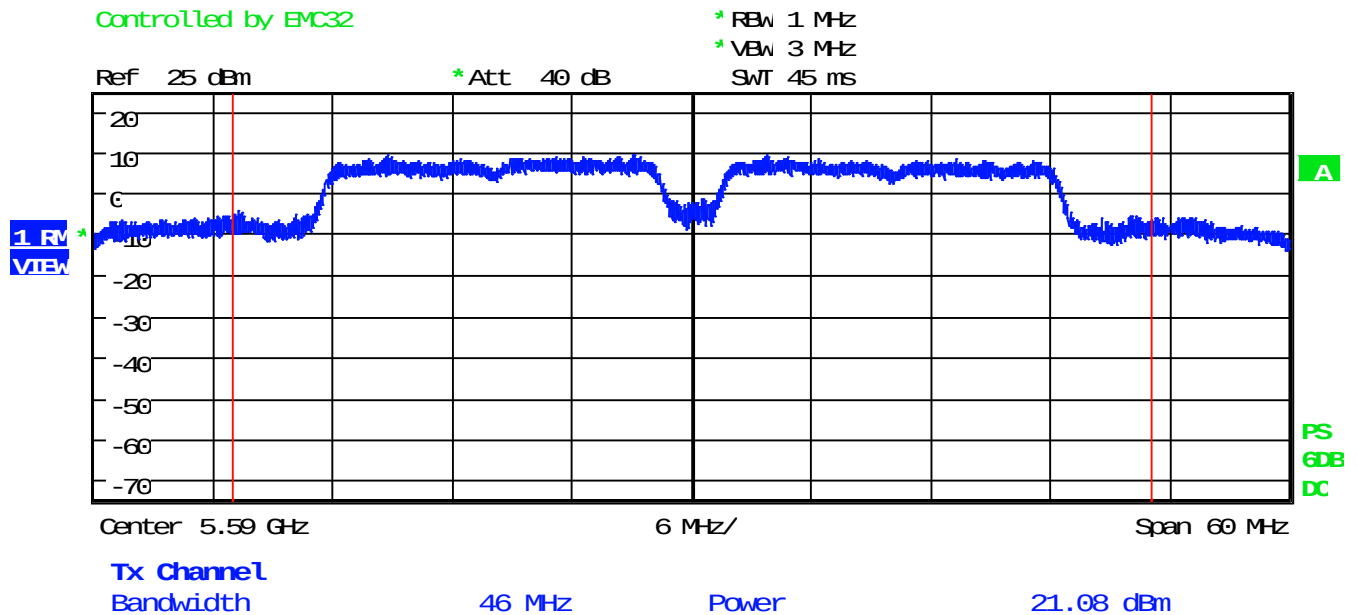
Date: 2.NOV.2020 11:37:03



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



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

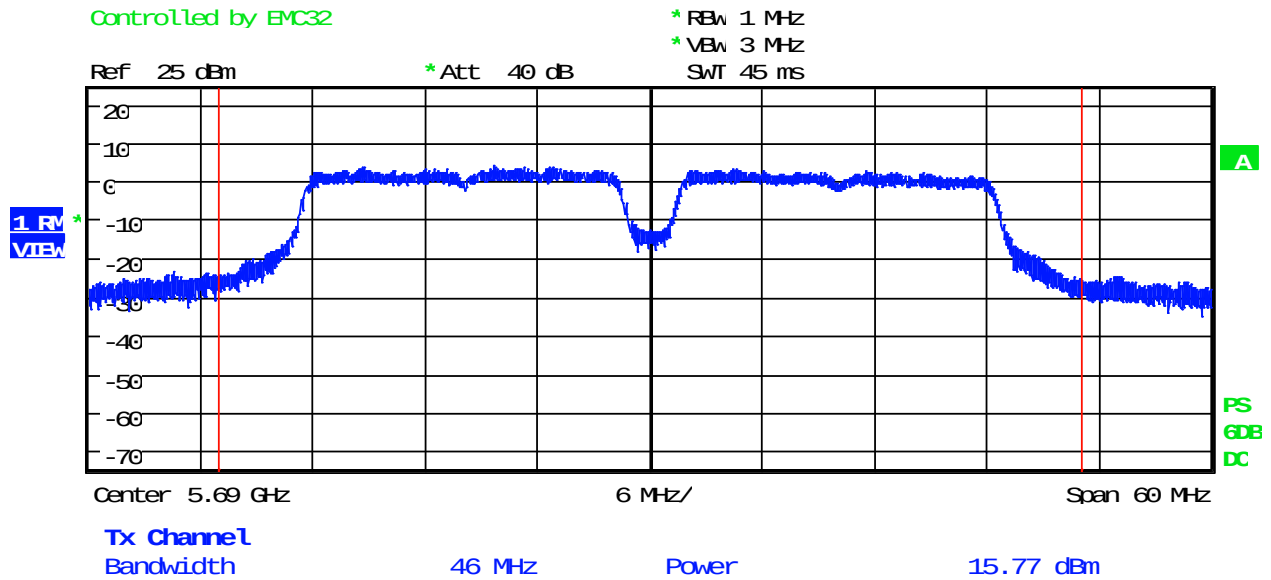




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

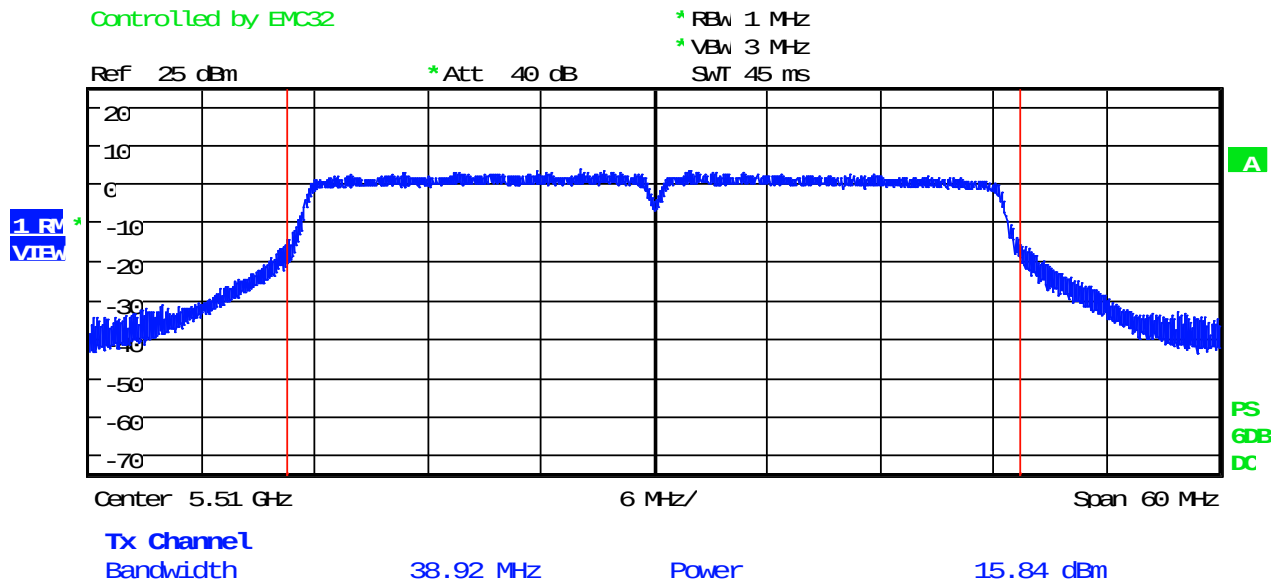
UNII 2C, Port 2: non HT40, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 11:39:11



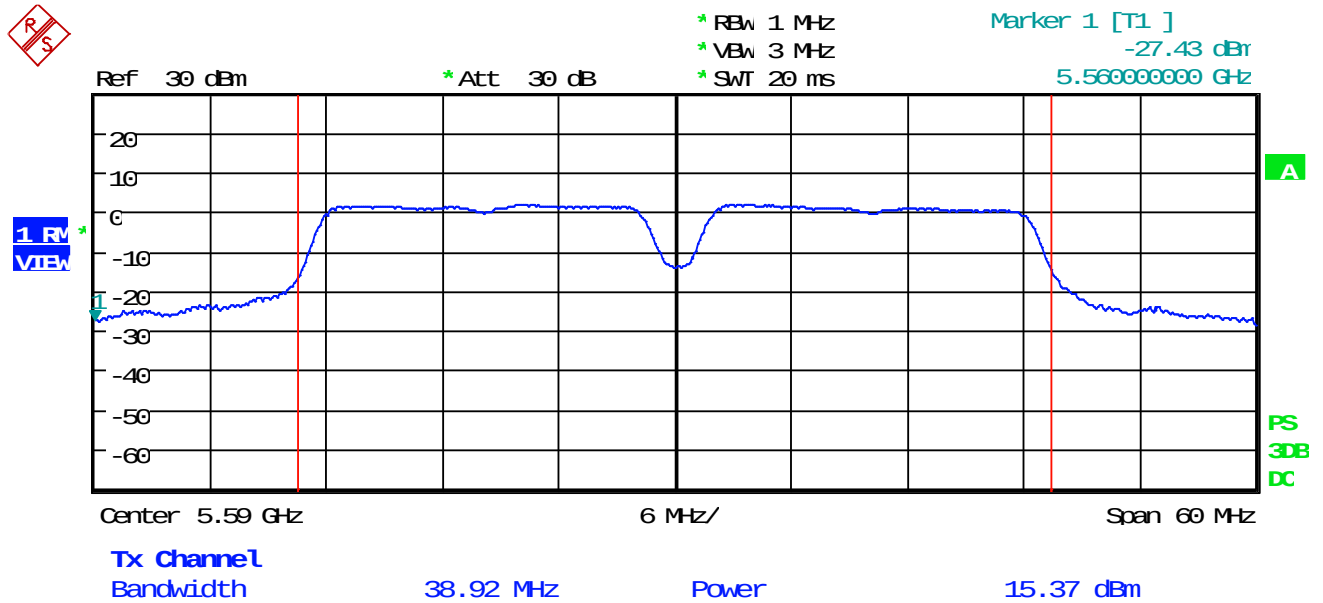
UNII 2C, Port 2: HT40, Low Channel (Beamforming and Non-beamforming)



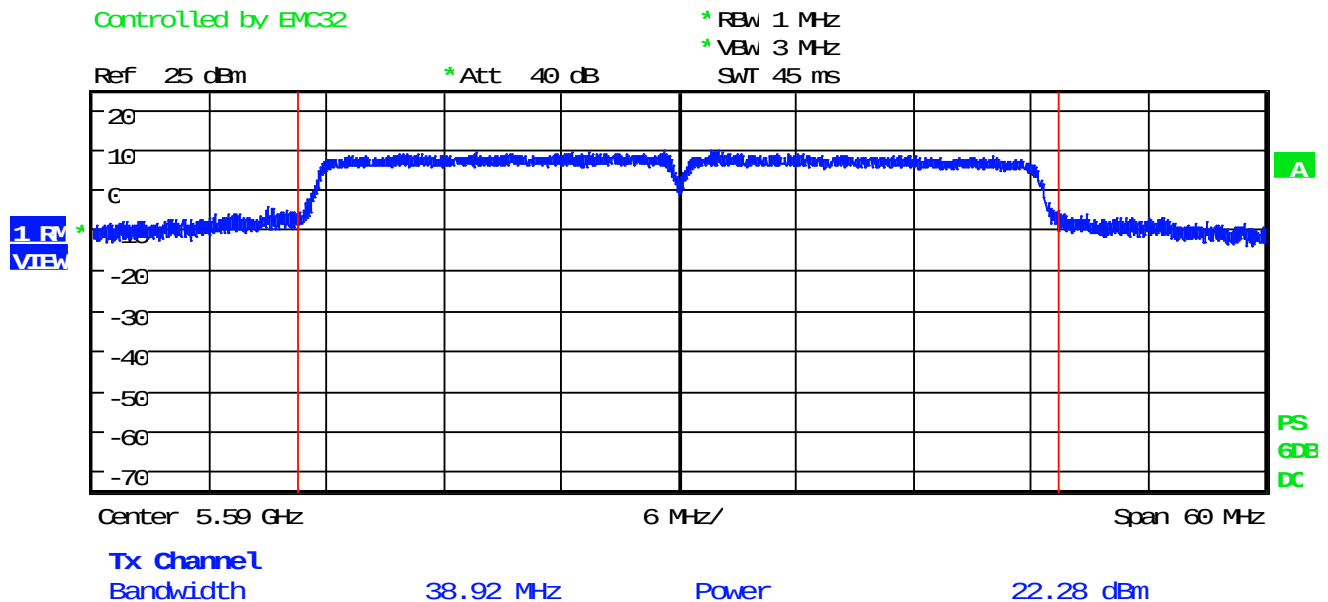
Date: 2.NOV.2020 11:42:16



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



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

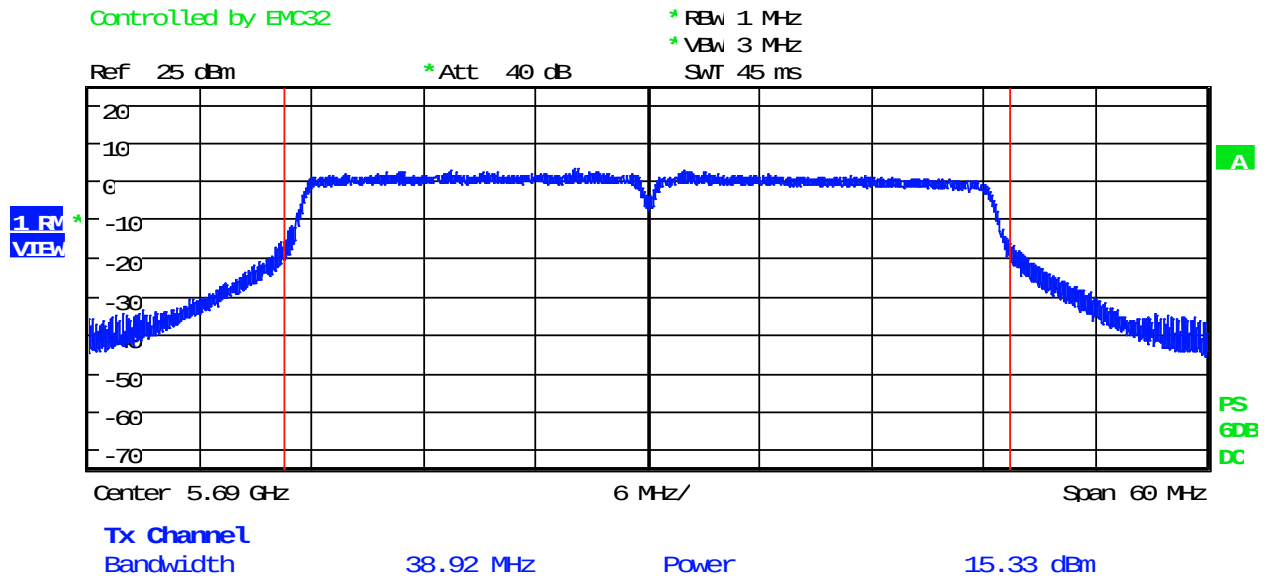




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

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



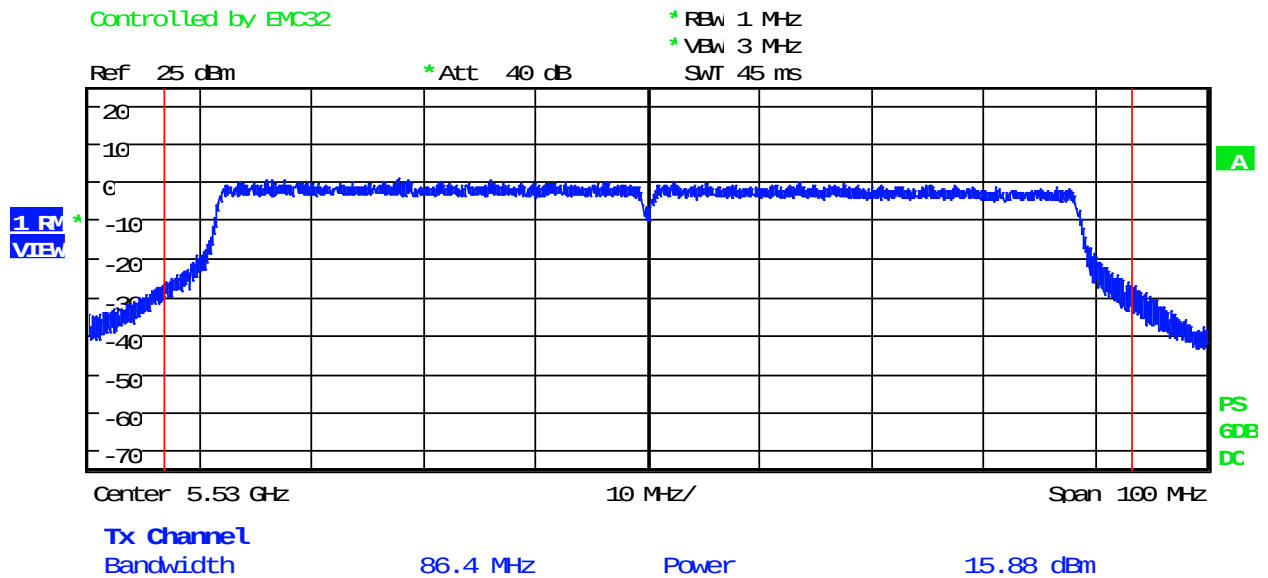
Date: 2.NOV.2020 11:44:59



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

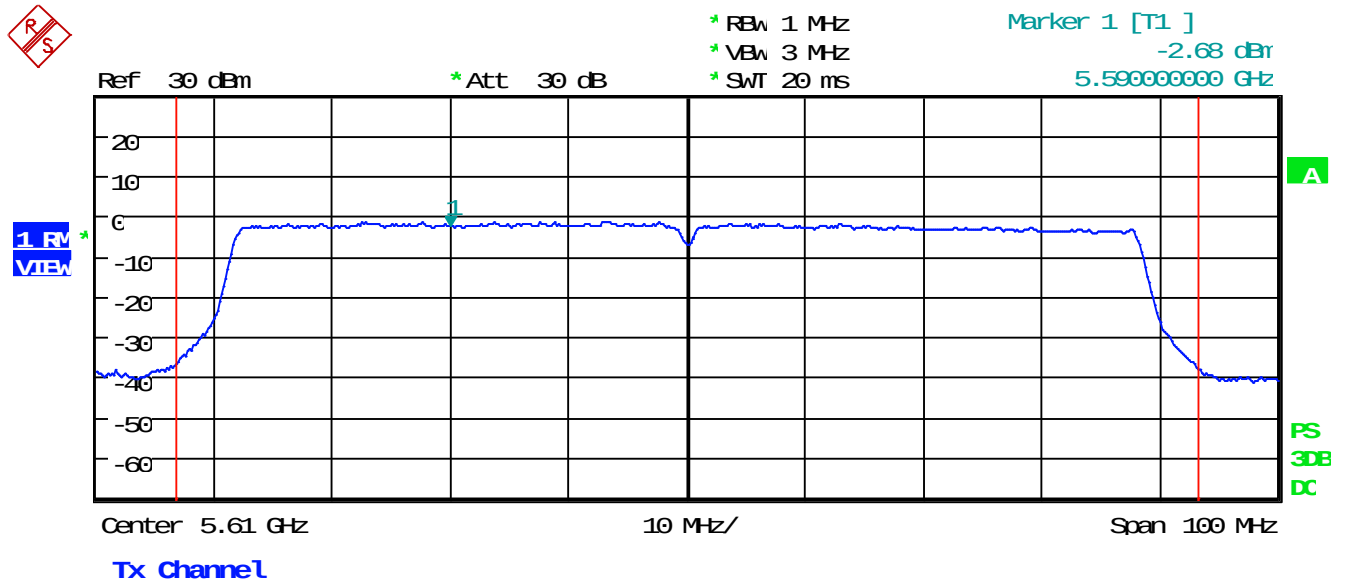
UNII 2C, Port 2: HT80, Low Channel (Beamforming and Non-beamforming)



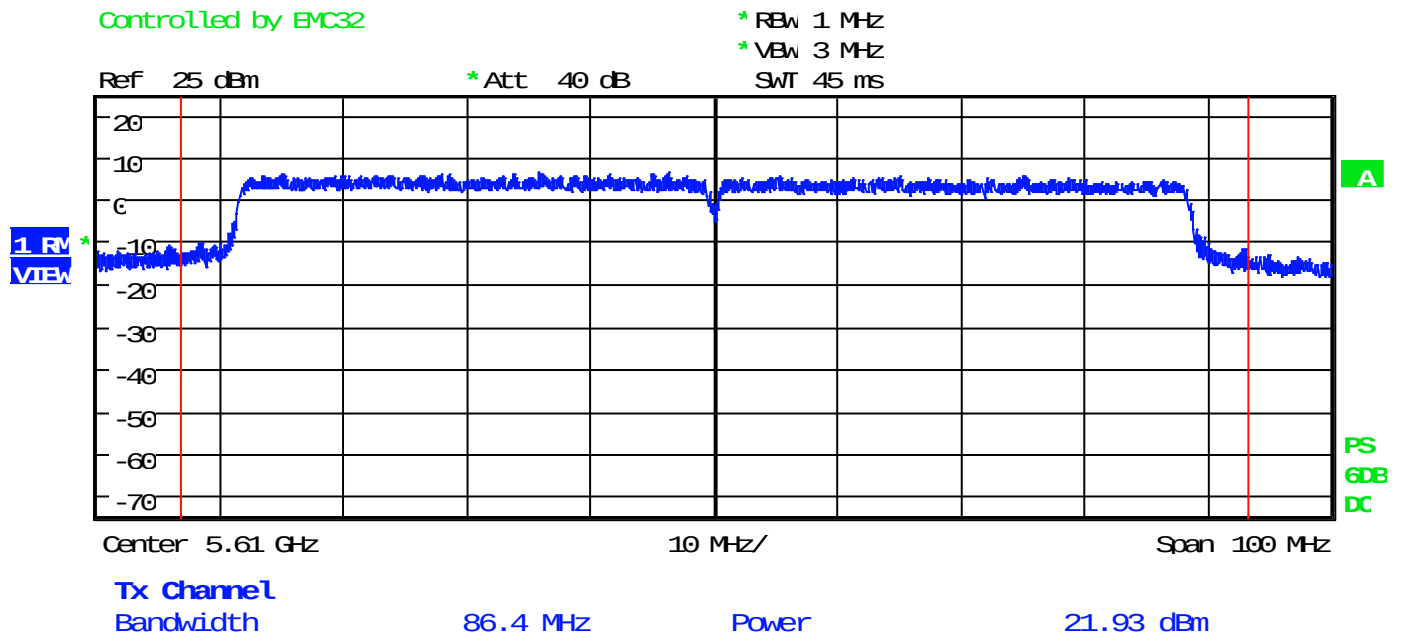
Date: 2.NOV.2020 11:47:17



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



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

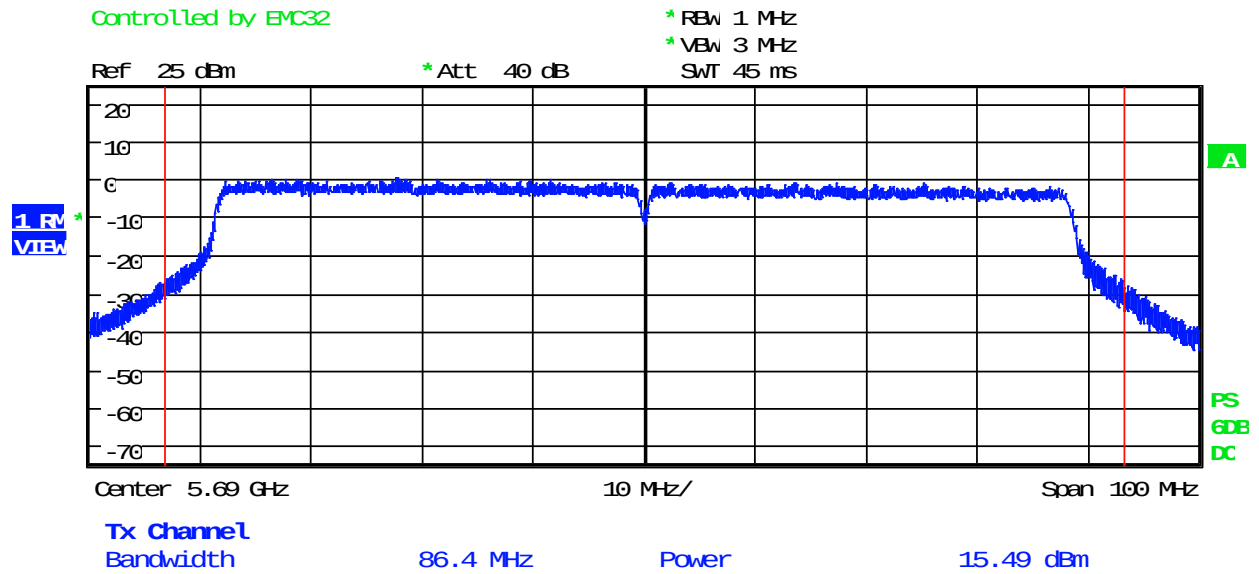




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

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



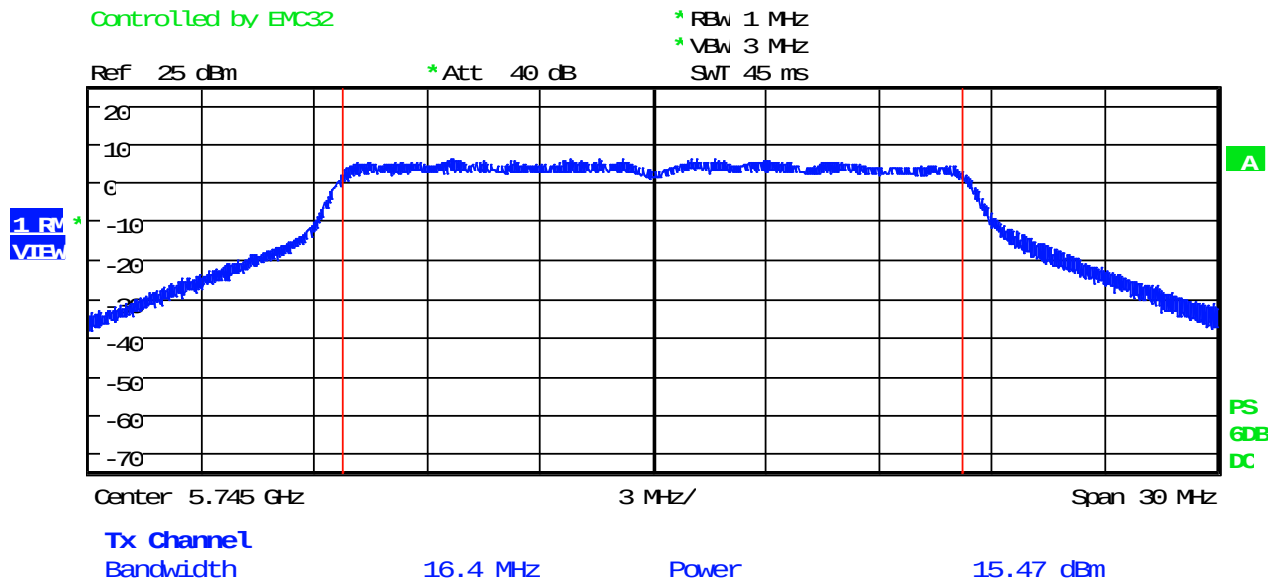
Date: 2.NOV.2020 11:49:31



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

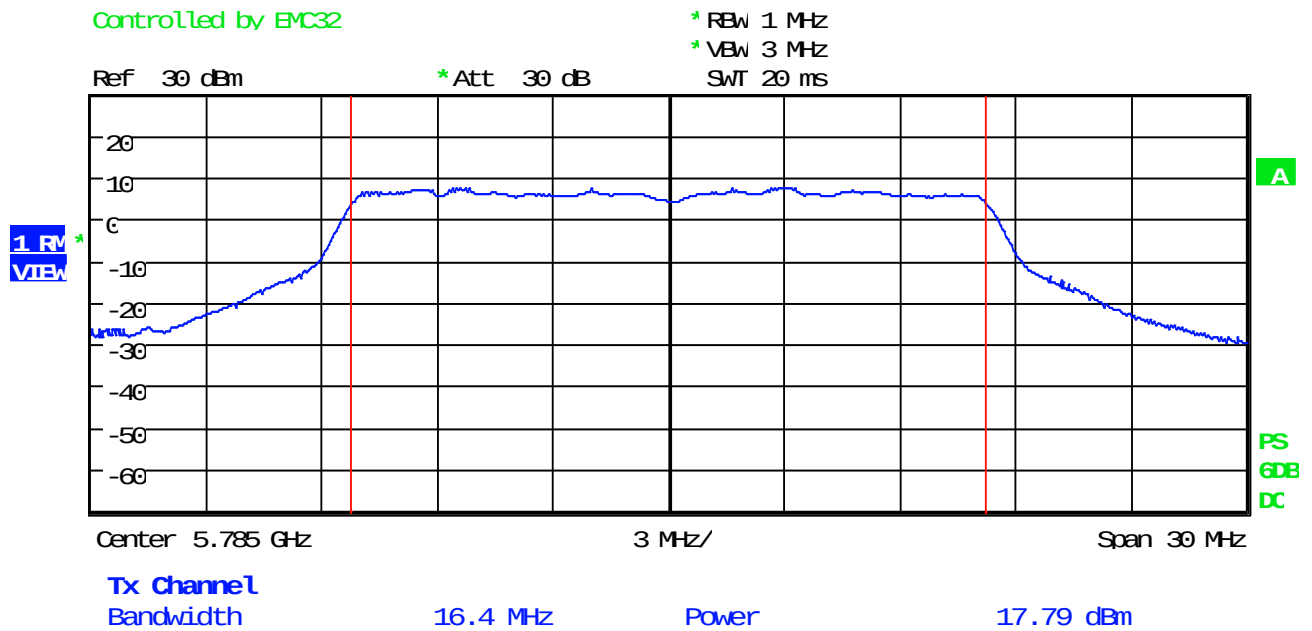
UNII 3, Port 1: OFDM, Low Channel (Beamforming and Non-beamforming)



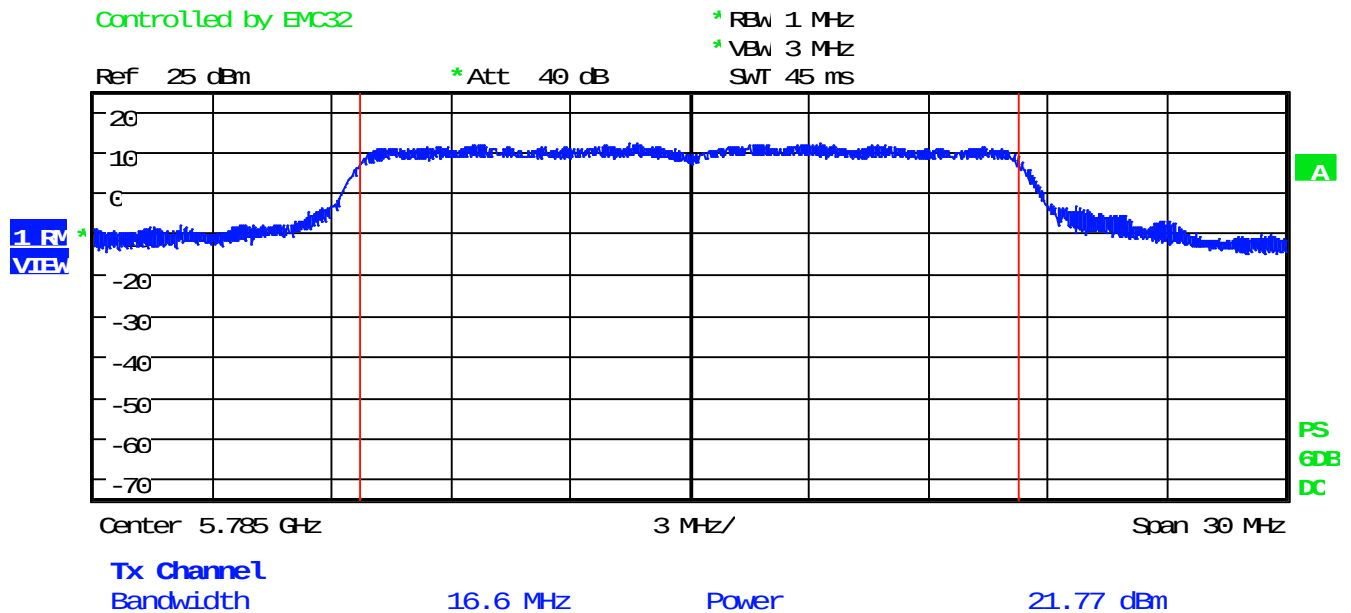
Date: 30.OCT.2020 10:17:09



UNII 3, Port 1: OFDM, Mid Channel (Beamforming)



UNII 3, Port 1: OFDM, Mid Channel (Non-Beamforming)

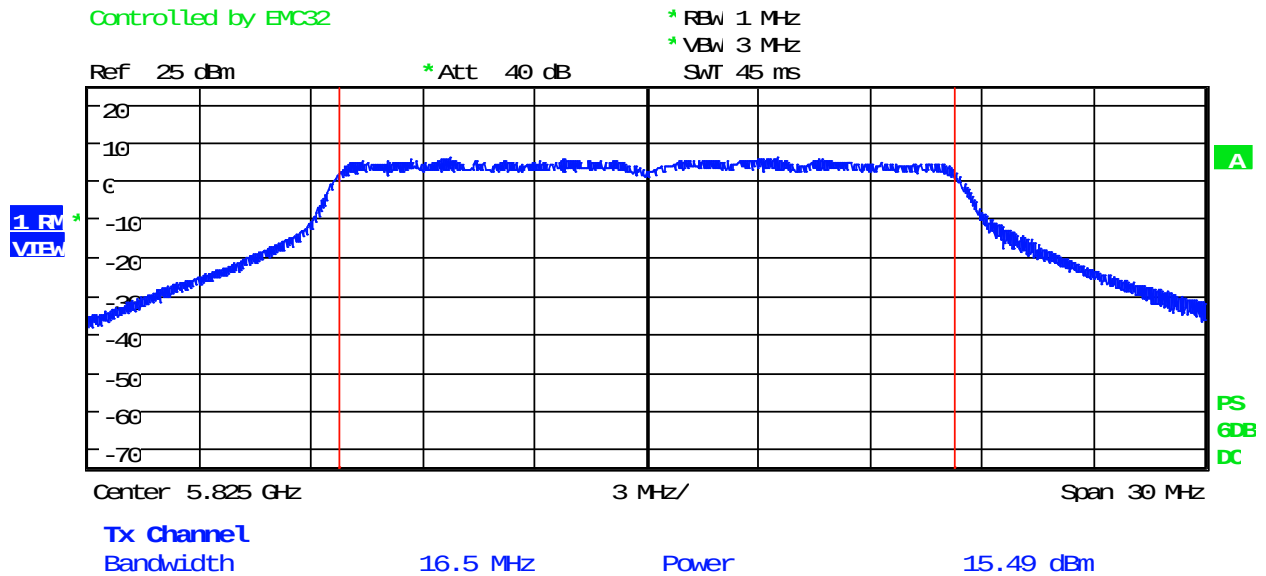




Order Number: F2P19923A

Applicant: PCTEL, Inc
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UNII 3, Port 1: OFDM, High Channel (Beamforming and Non-beamforming)



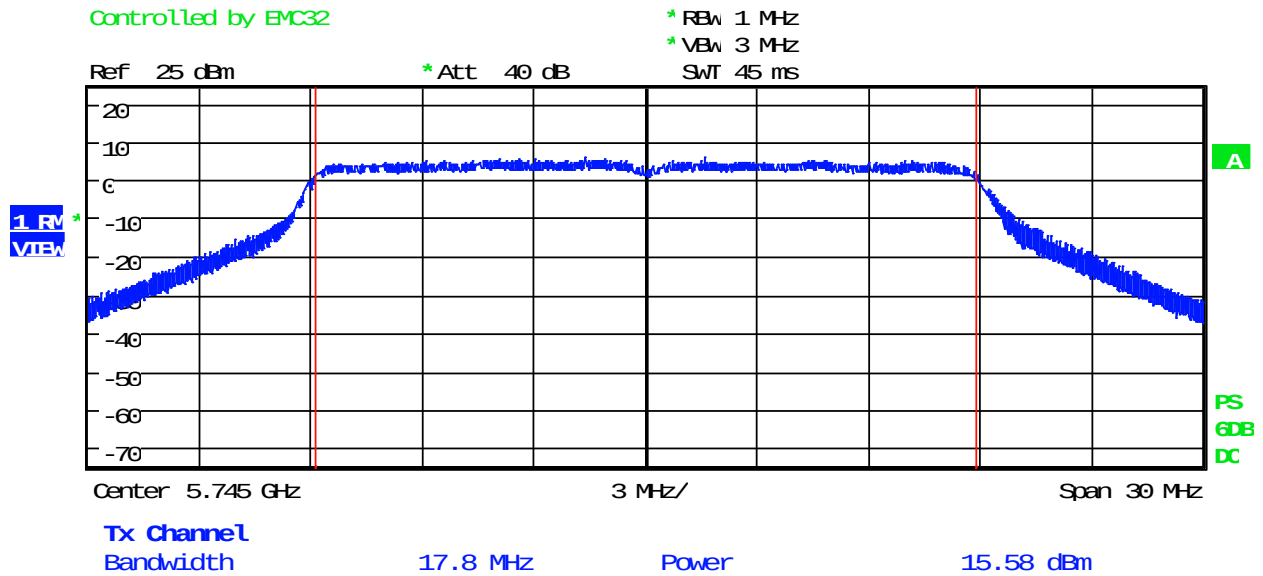
Date: 30.OCT.2020 10:20:30



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

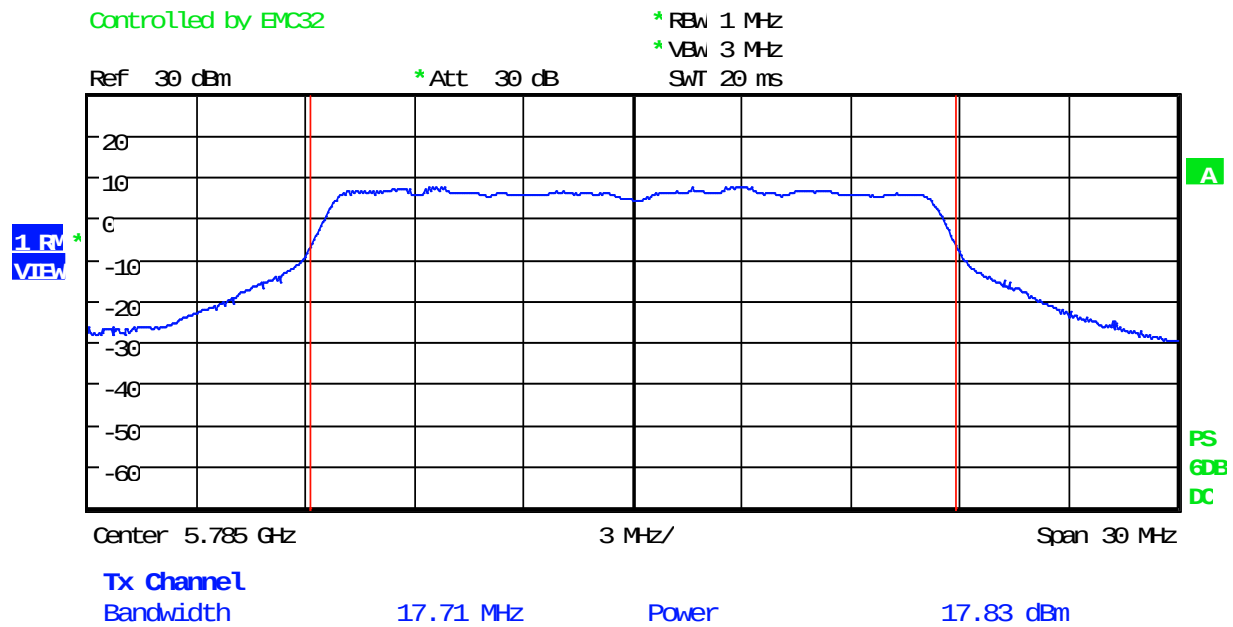
UNII 3, Port 1: HT20, Low Channel (Beamforming and Non-beamforming)



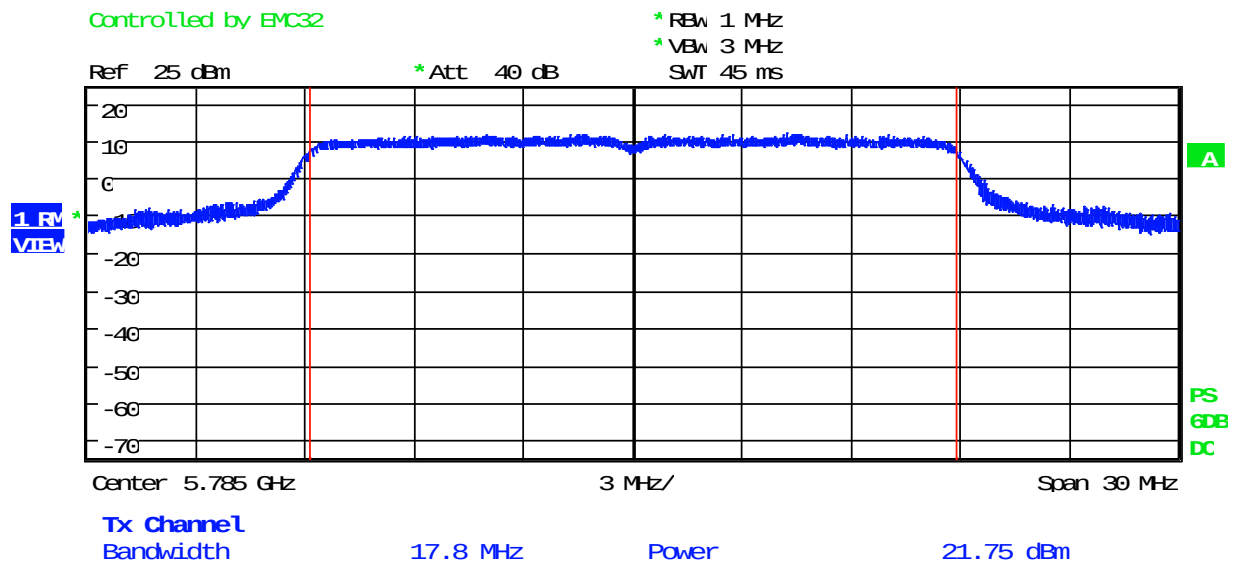
Date: 30.OCT.2020 10:22:55



UNII 3, Port 1: HT20, Mid Channel (Beamforming)



UNII 3, Port 1: HT20, Mid Channel (Non-beamforming)

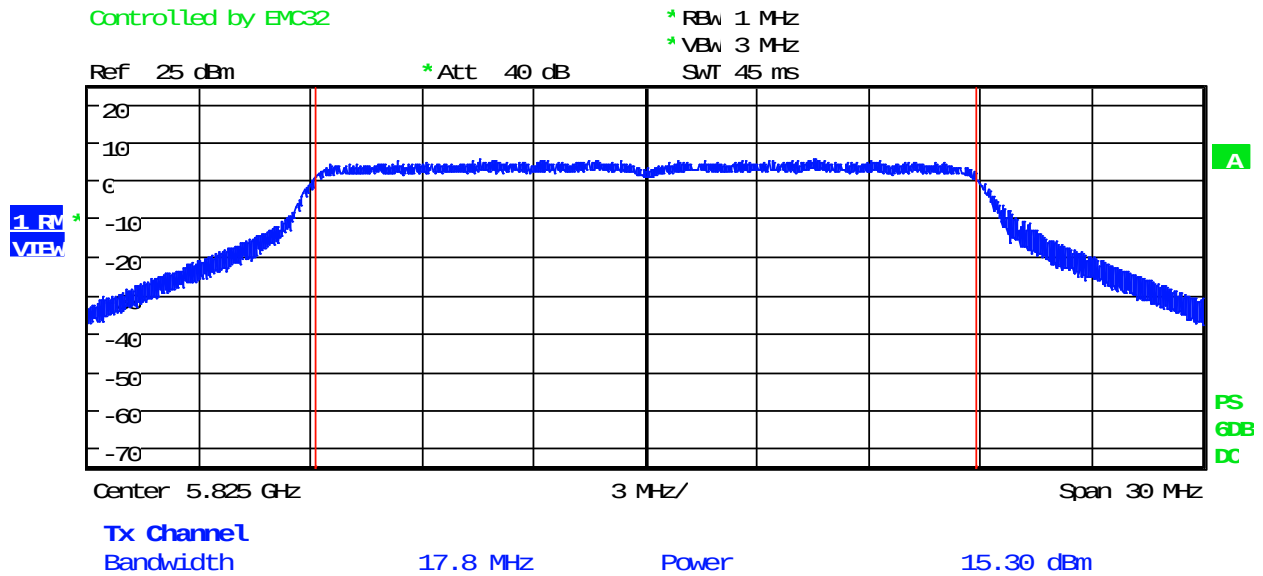




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

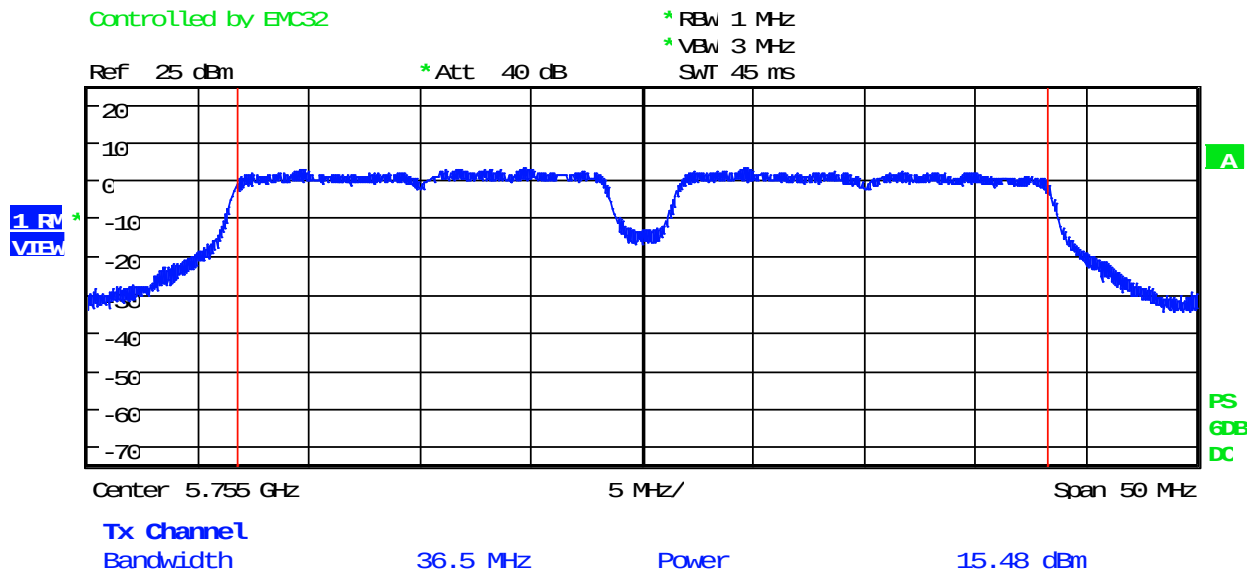
UNII 3, Port 1: HT20, High Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 10:24:31



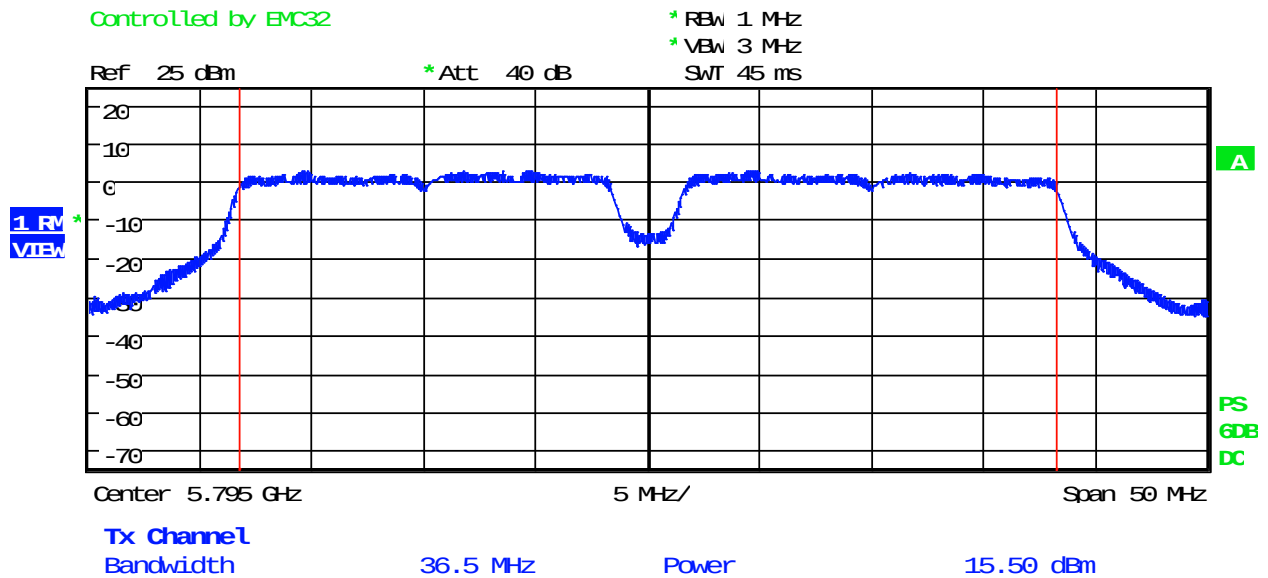
UNII 3, Port 1: non HT40, Low Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 10:27:24



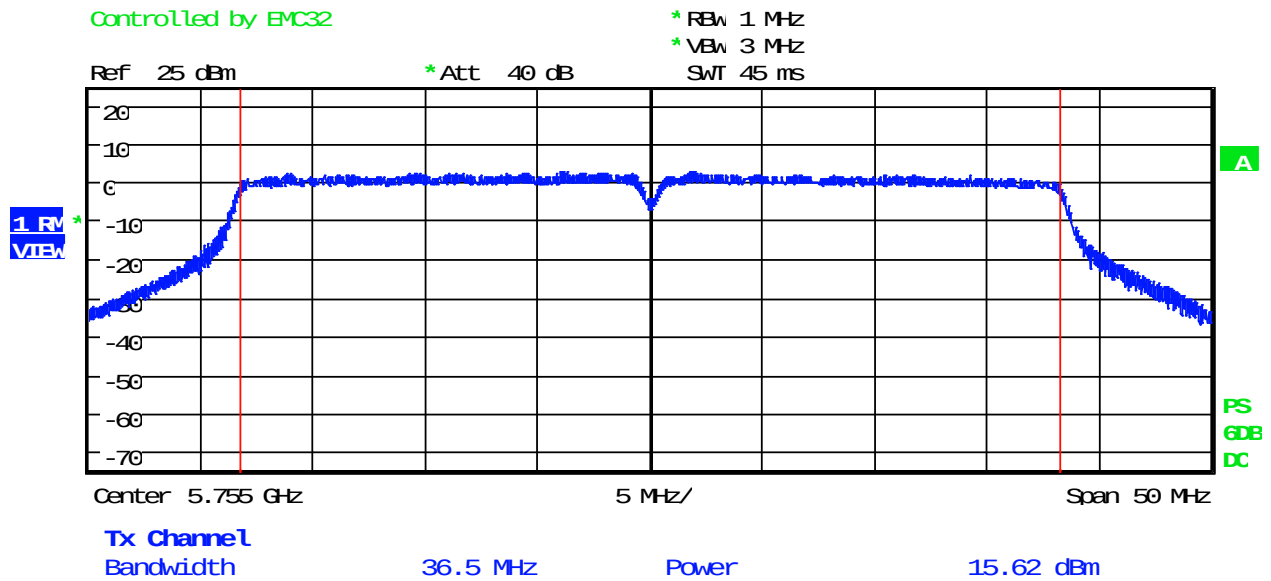
UNII 3, Port 1: non HT40, High Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 10:28:16



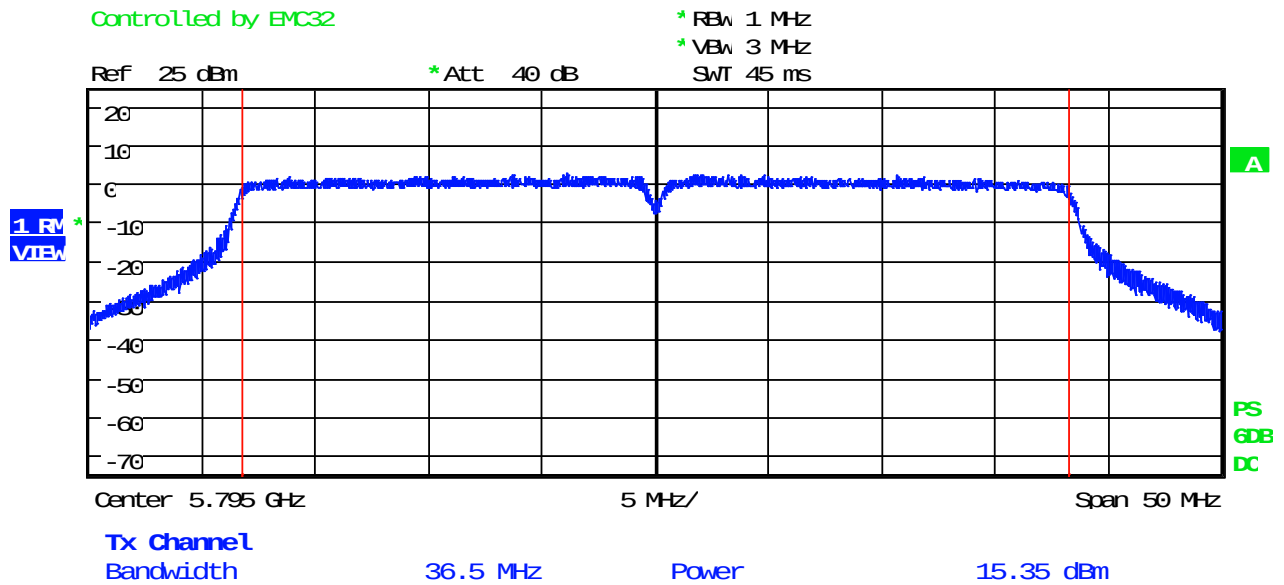
UNII 3, Port 1: HT40, Low Channel (Beamforming and Non-beamforming)



Date: 30.OCT.2020 10:29:43



UNII 3, Port 1: HT40, High Channel (Beamforming and Non-beamforming)



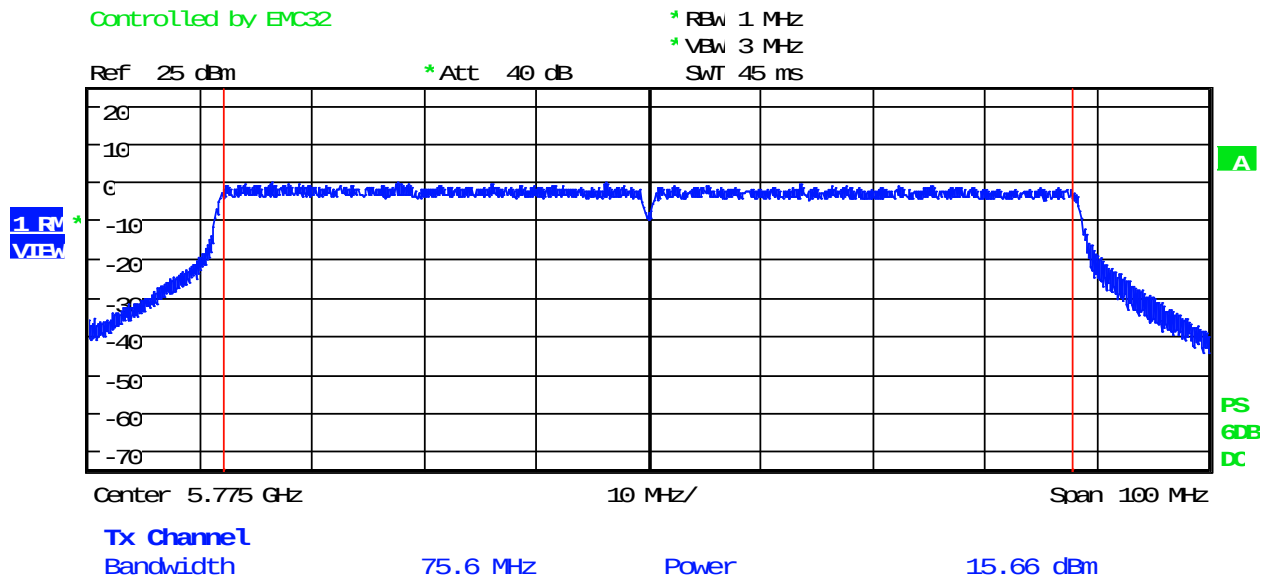
Date: 30.OCT.2020 10:30:28



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

UNII 3, Port 1: HT80 (Beamforming and Non-beamforming)



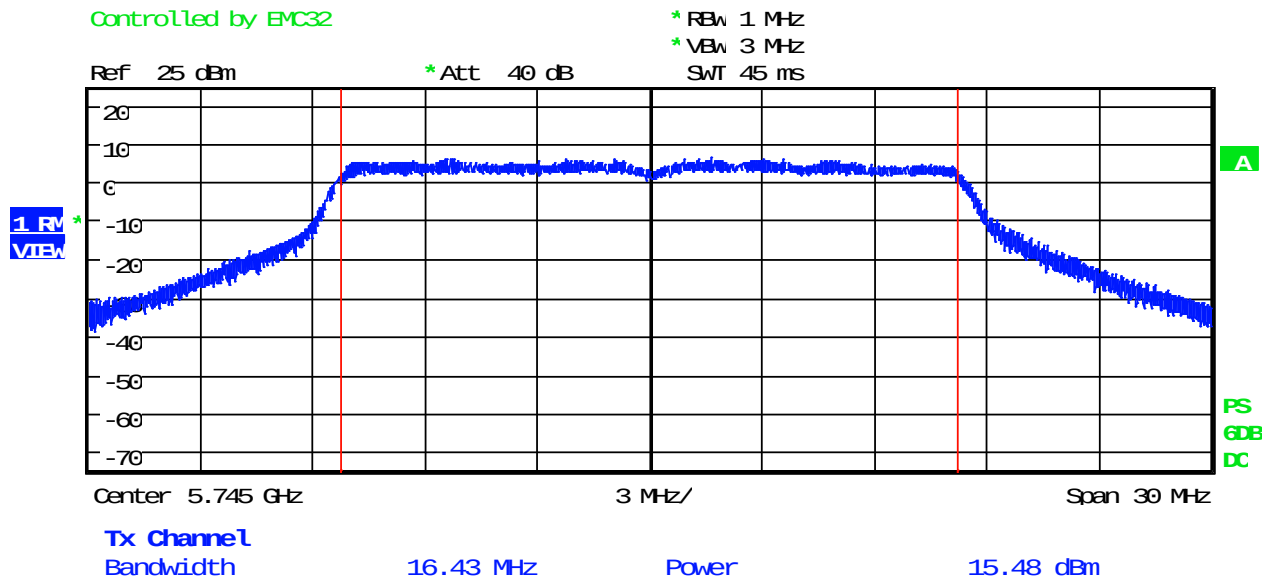
Date: 30.OCT.2020 10:32:32



Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

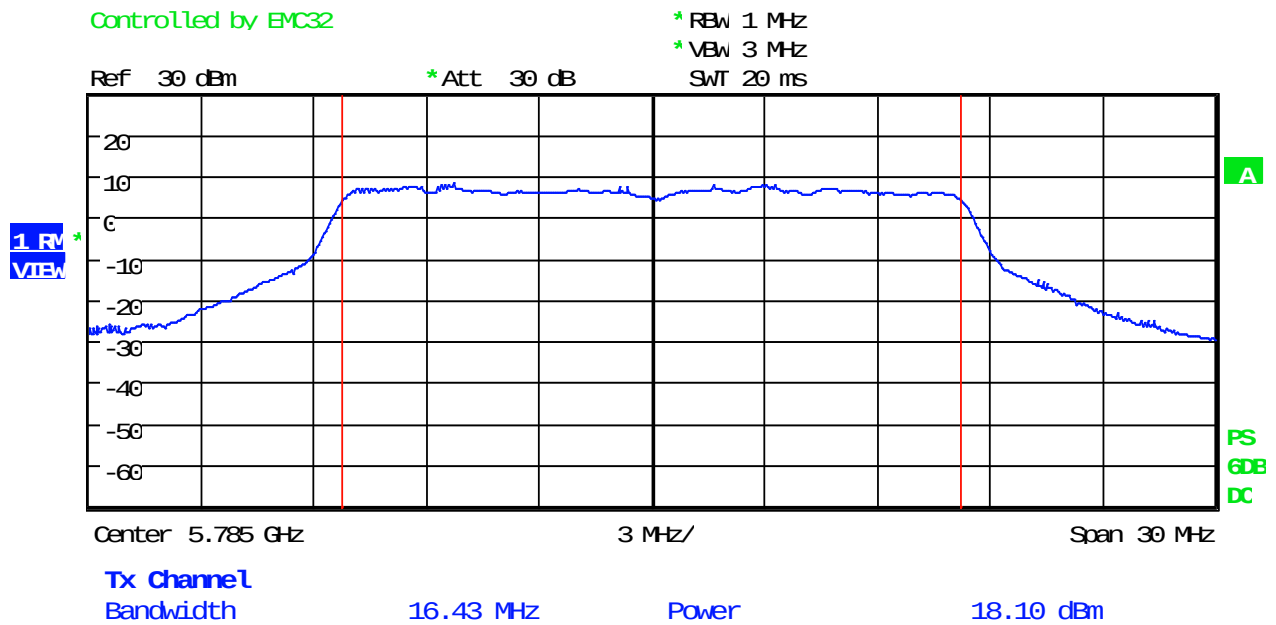
UNII 3, Port 2: OFDM, Low Channel (Beamforming and Non-beamforming)



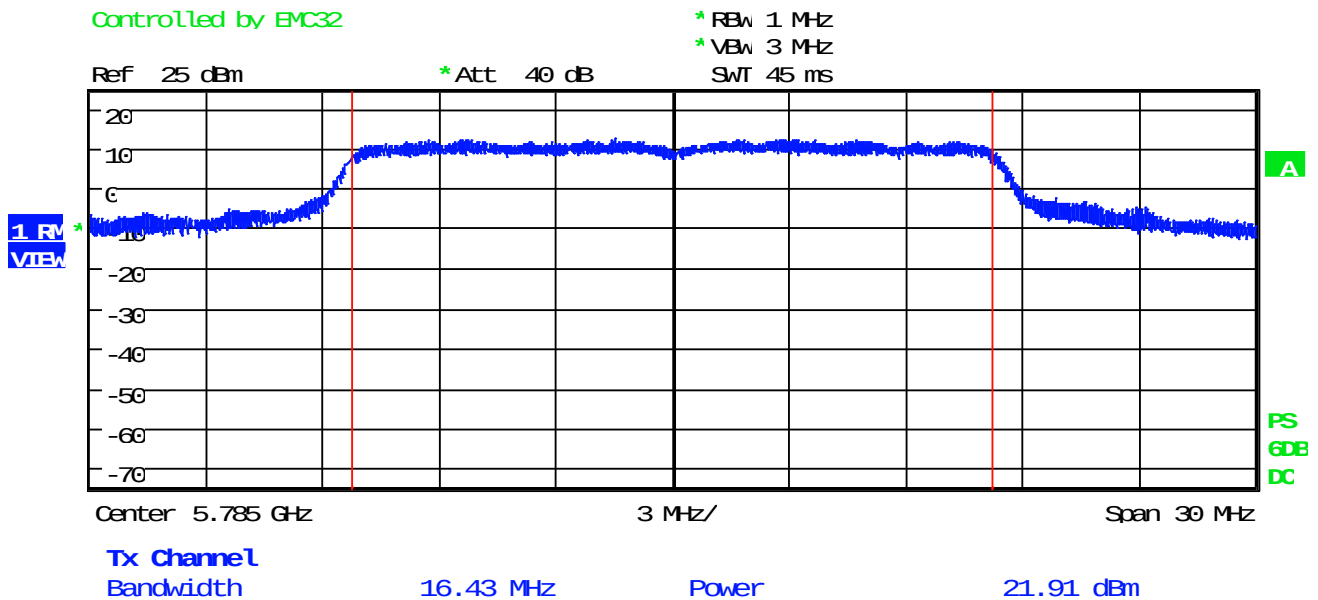
Date: 2.NOV.2020 11:57:41



UNII 3, Port 2: OFDM, Mid Channel (Beamforming)

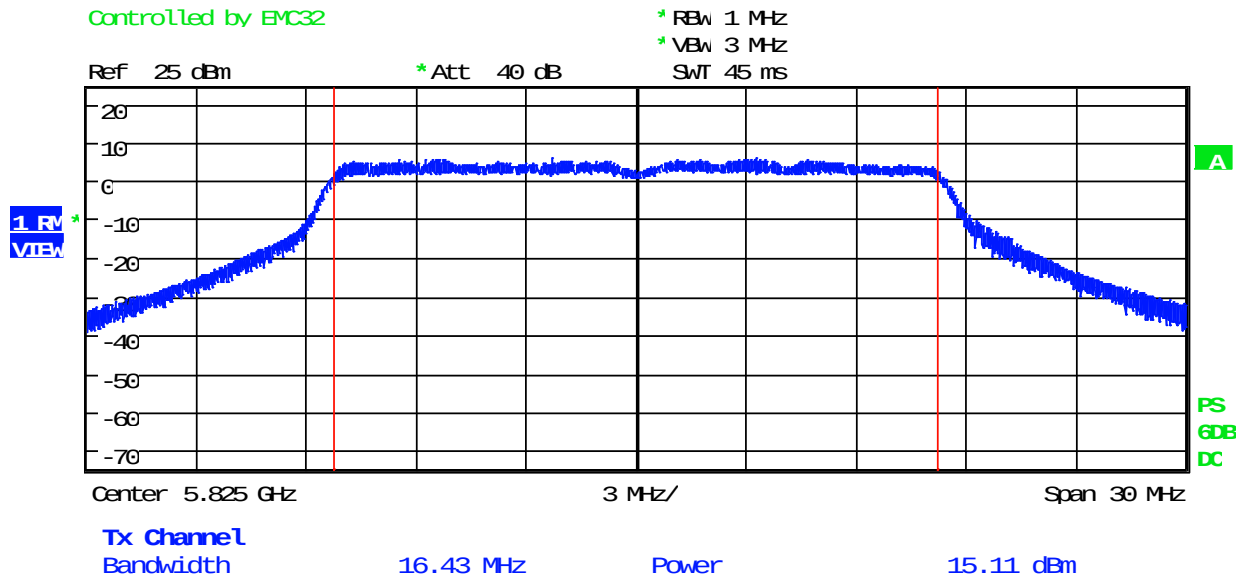


UNII 3, Port 2: OFDM, Mid Channel (Non-Beamforming)





UNII 3, Port 2: OFDM, High Channel (Beamforming and Non-beamforming)

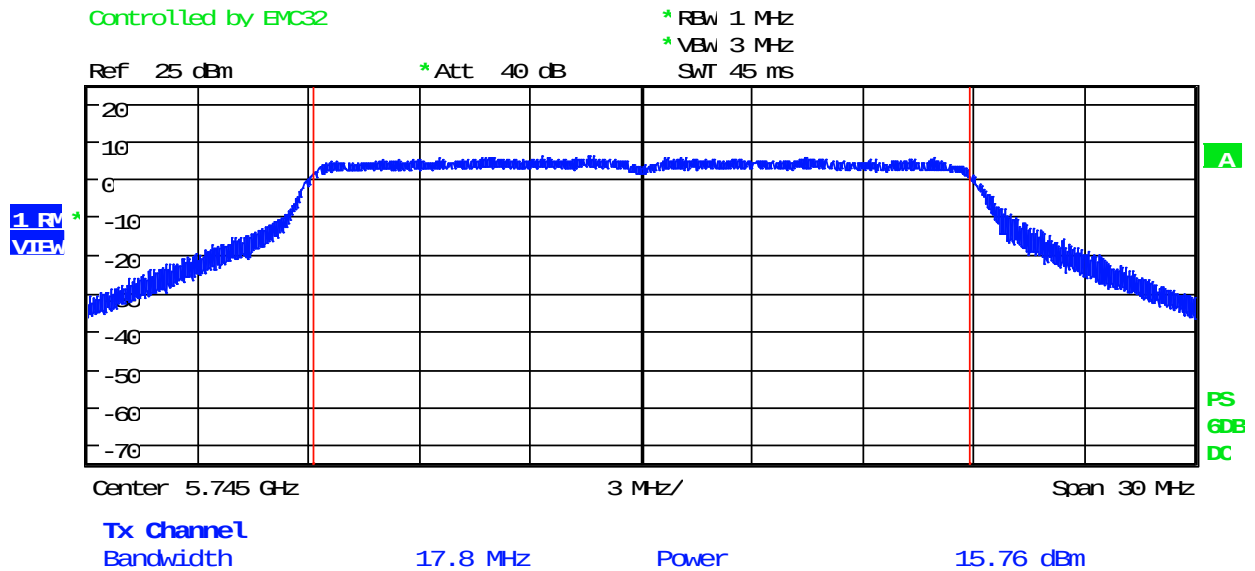




Order Number: F2P19923A

Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

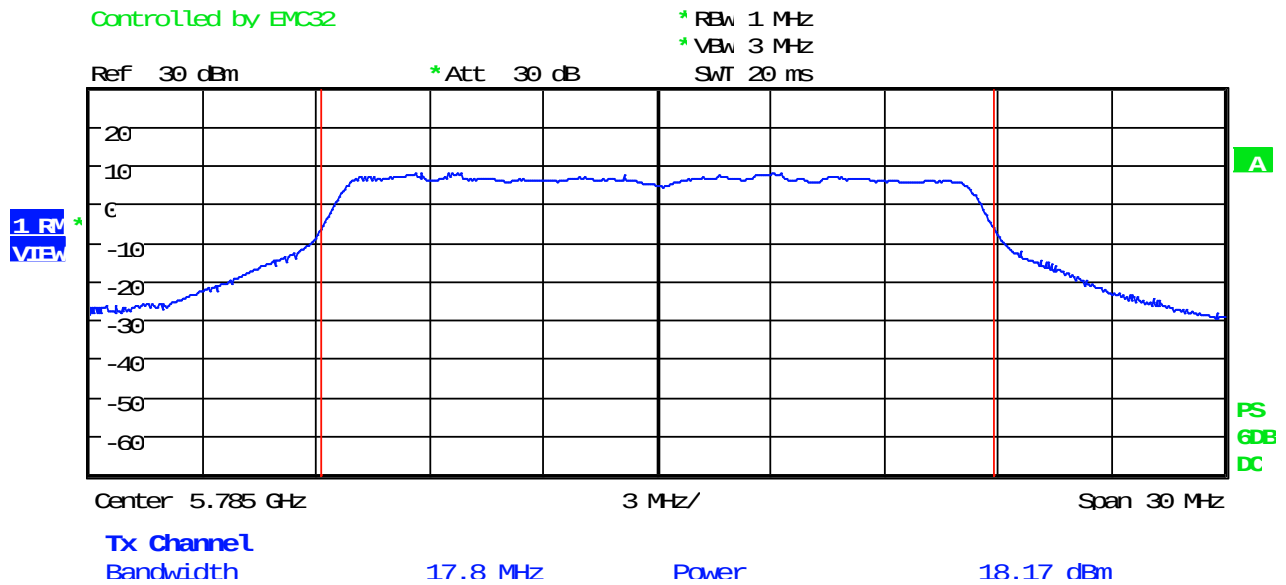
UNII 3, Port 2: HT20, Low Channel (Beamforming and Non-beamforming)



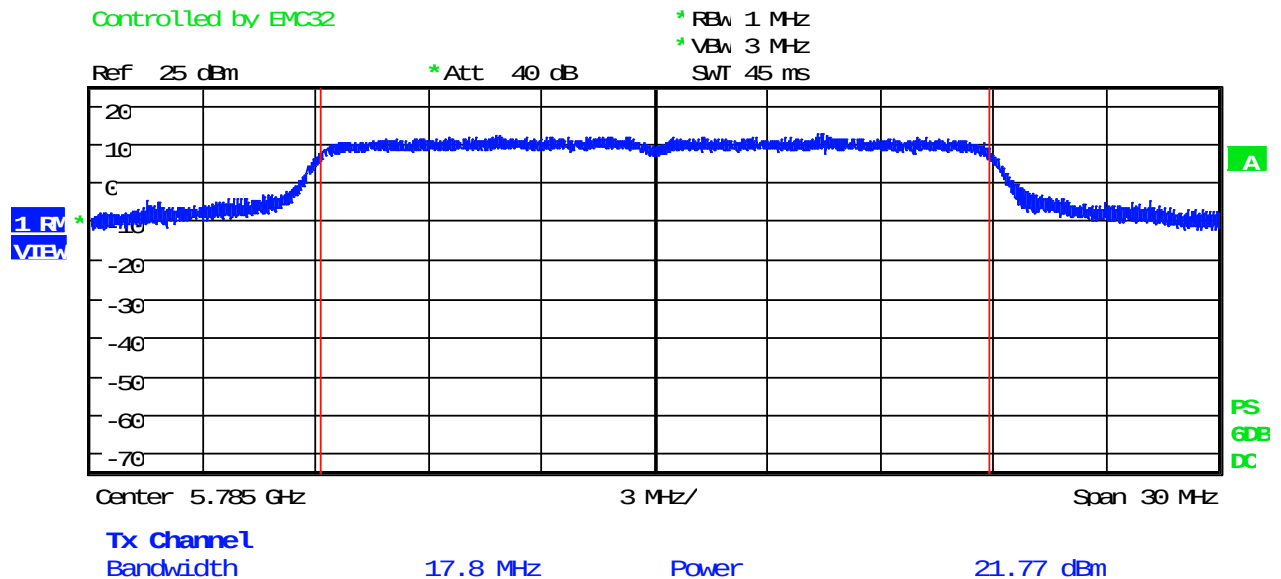
Date: 2.NOV.2020 12:02:15



UNII 3, Port 2: HT20, Mid Channel (Beamforming)



UNII 3, Port 2: HT20, Mid Channel (Non-beamforming)

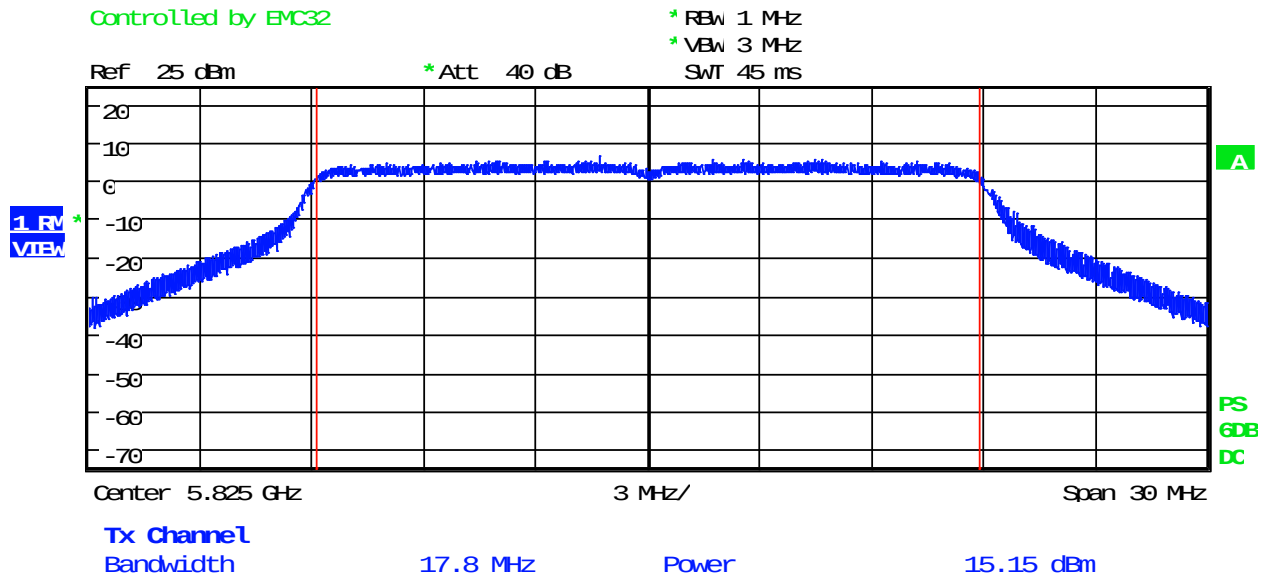




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Applicant: PCTEL, Inc
FCC ID: NYPWIFIAP1200

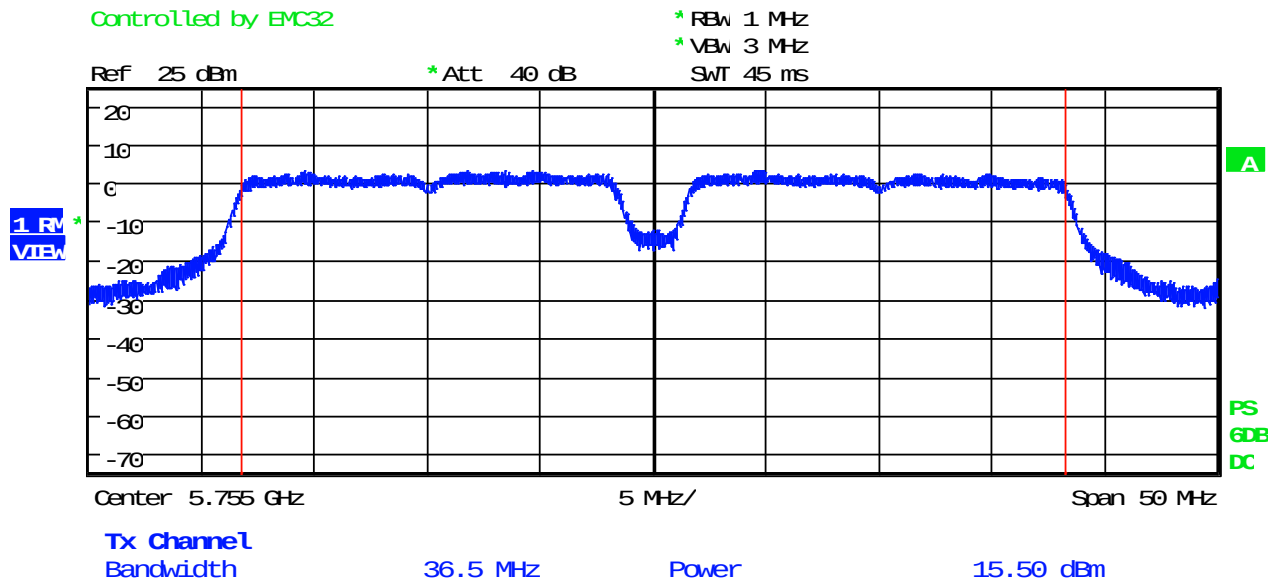
UNII 3, Port 2: HT20, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:03:43



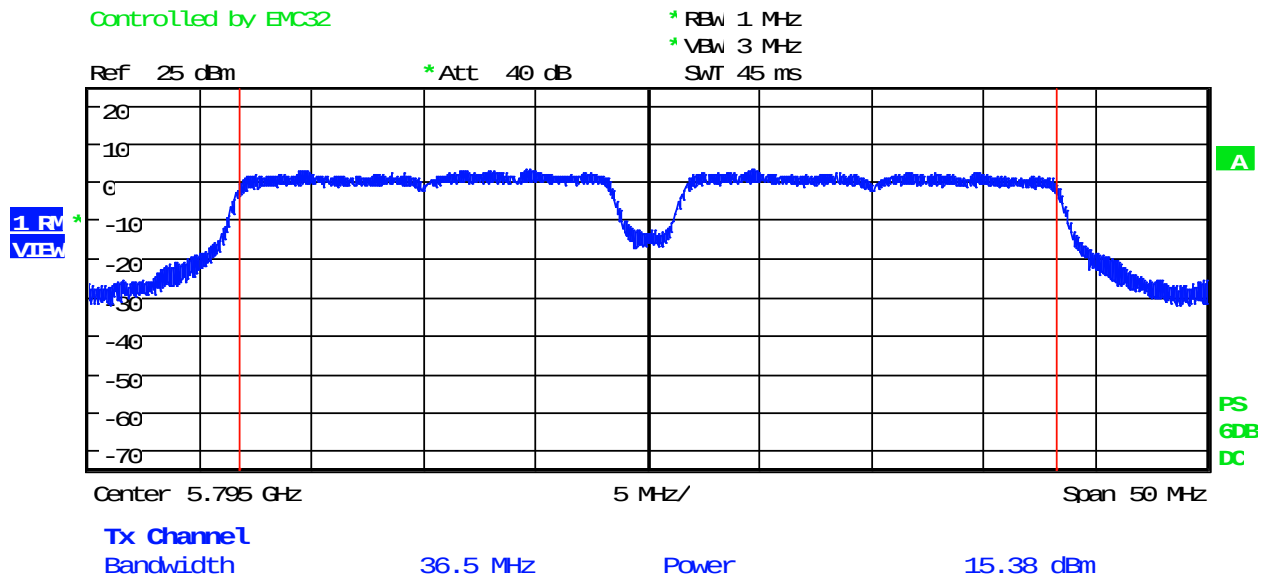
UNII 3, Port 2: non HT40, Low Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:13:21



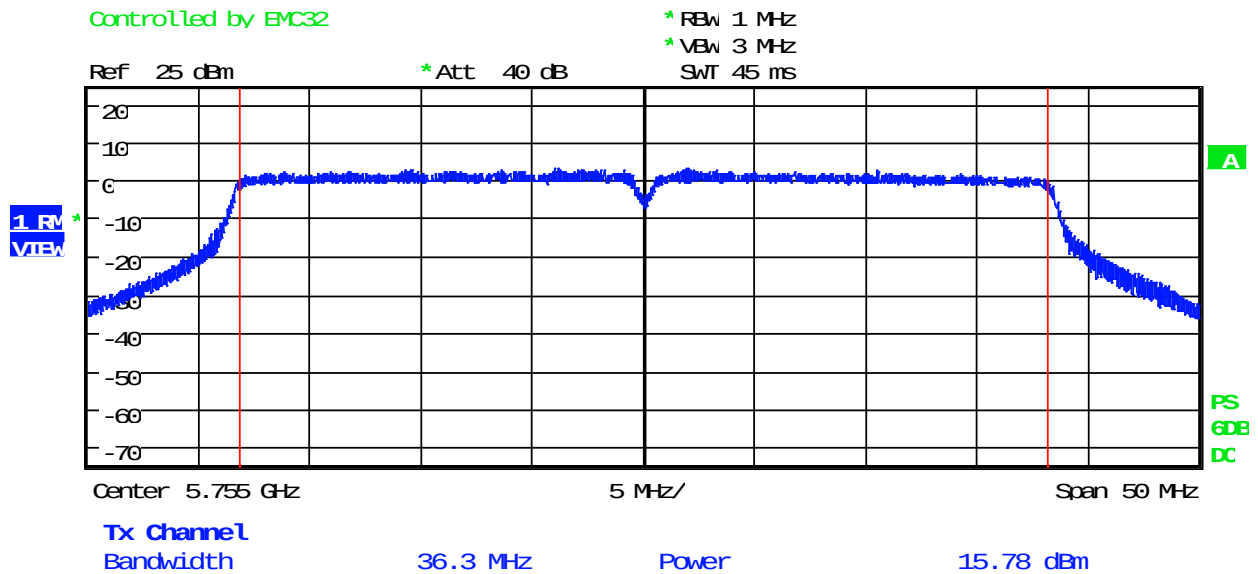
UNII 3, Port 2: non HT40, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:14:05



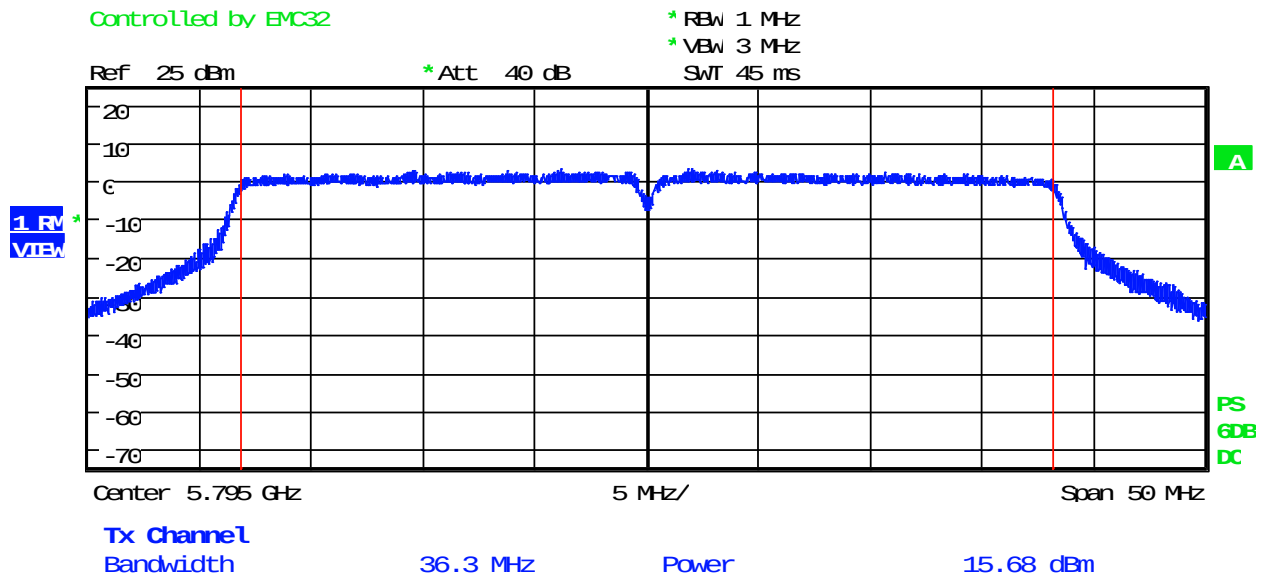
UNII 3, Port 2: HT40, Low Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:15:54



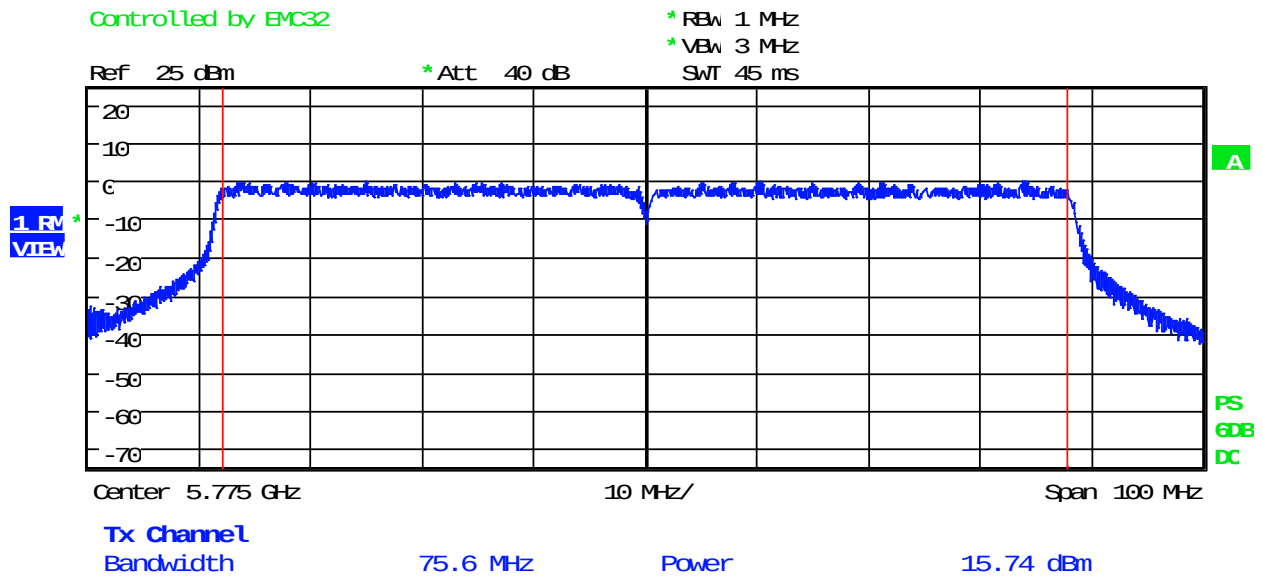
UNII 3, Port 2: HT40, High Channel (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:16:36



UNII 3, Port 2: HT80 (Beamforming and Non-beamforming)



Date: 2.NOV.2020 12:18:39