8.3. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

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

RESULTS

Note: No 6dB emission bandwidth located after 5725MHz.

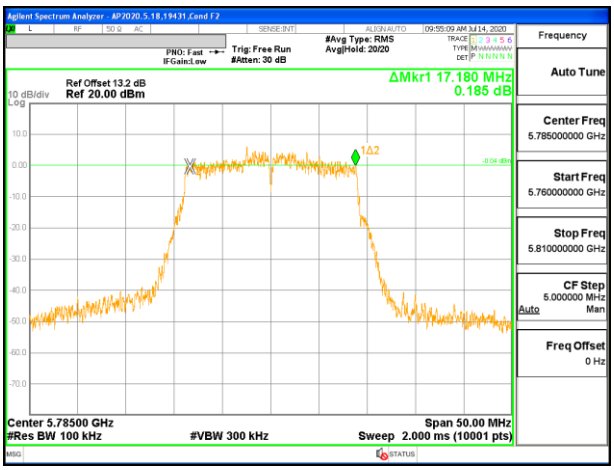
11ax HE20 Mode RU index 0, 4
11ax HE40 Mode RU index 0, 8
11ax HE80 Mode RU index 0, 18

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.1. 802.11n HT20 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE

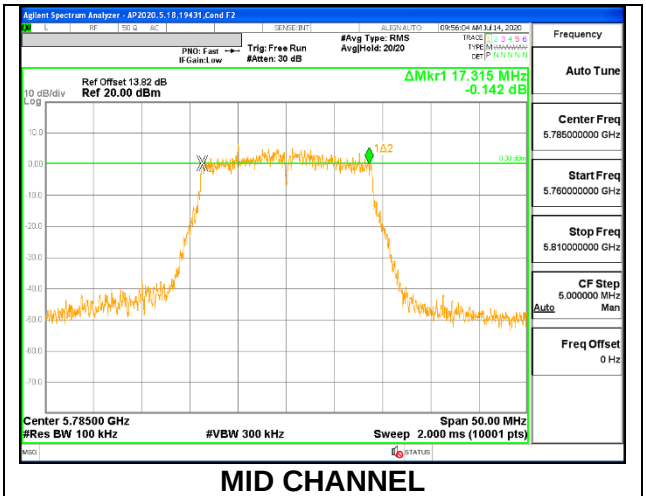
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.595	0.5
Mid	5785	17.180	0.5
High	5825	17.055	0.5
144	5720	3.965	0.5



MID CHANNEL

1TX Antenna 5 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.670	0.5
Mid	5785	17.315	0.5
High	5825	17.600	0.5
144	5720	3.860	0.5

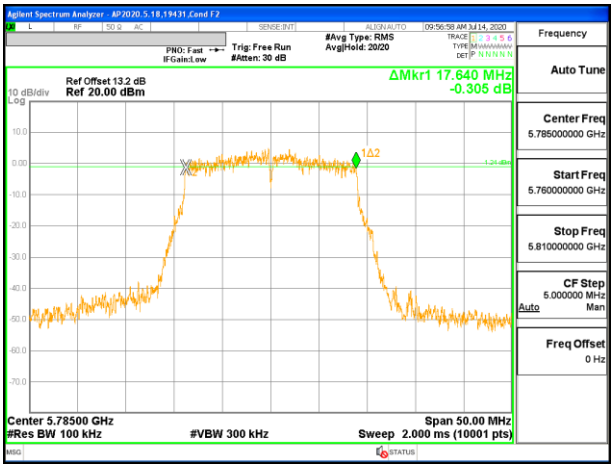


MID CHANNEL

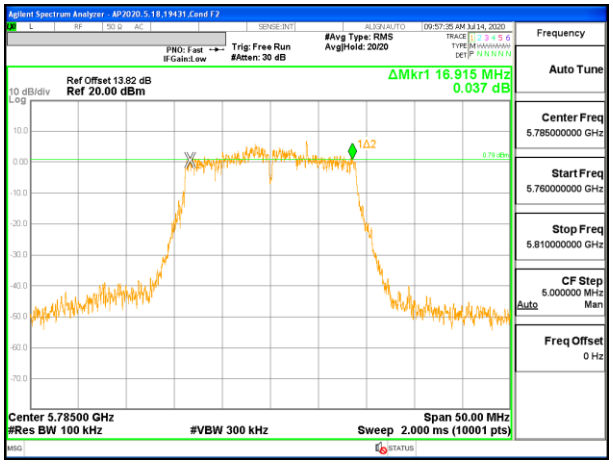
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	17.610	17.470	0.5
Mid	5785	17.640	16.915	0.5
High	5825	17.590	17.550	0.5
144	5720	3.965	3.925	0.5



MID CHANNEL [ANT 6]



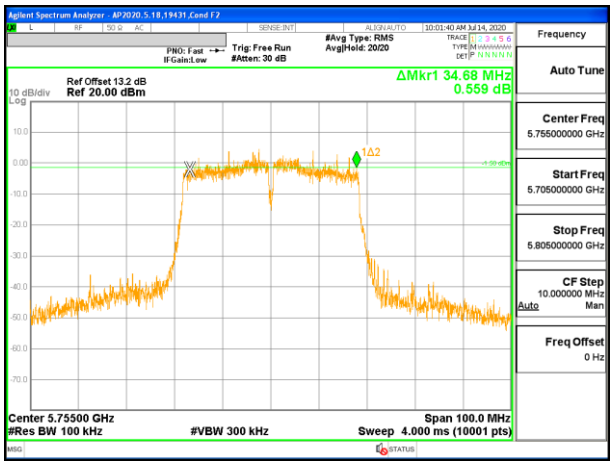
MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.2. 802.11n HT40 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE

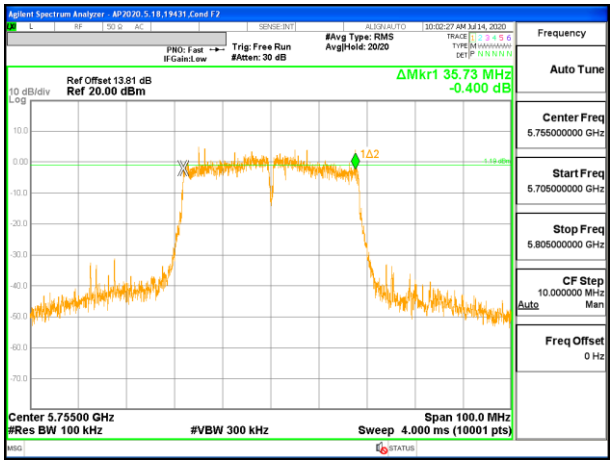
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	34.680	0.5
High	5795	35.110	0.5
142	5710	3.300	0.5



LOW CHANNEL

1TX Antenna 5 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.730	0.5
High	5795	35.050	0.5
142	5710	3.240	0.5

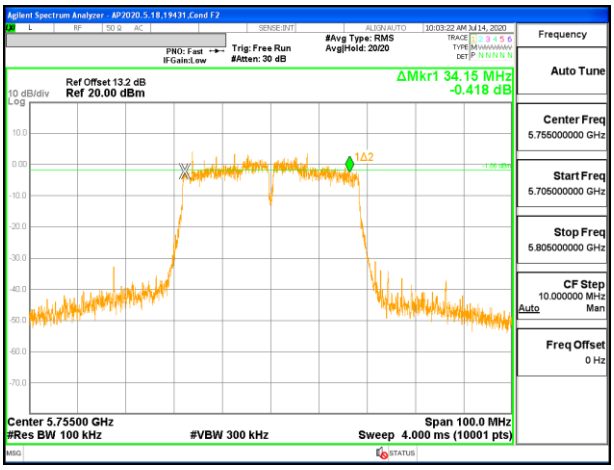


LOW CHANNEL

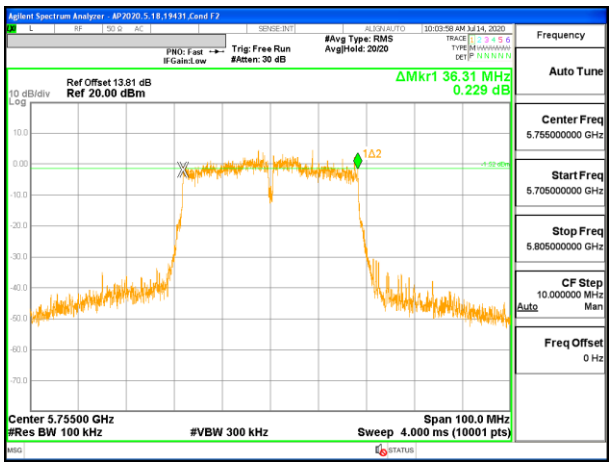
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	34.150	36.310	0.5
High	5795	35.450	36.340	0.5
142	5710	2.640	3.300	0.5



LOW CHANNEL [ANT 6]



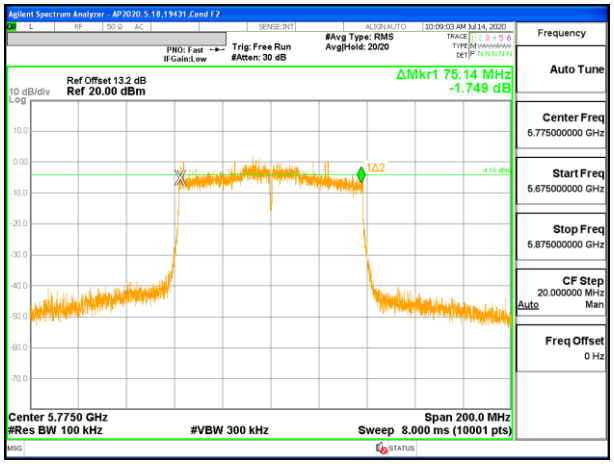
LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.3. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE

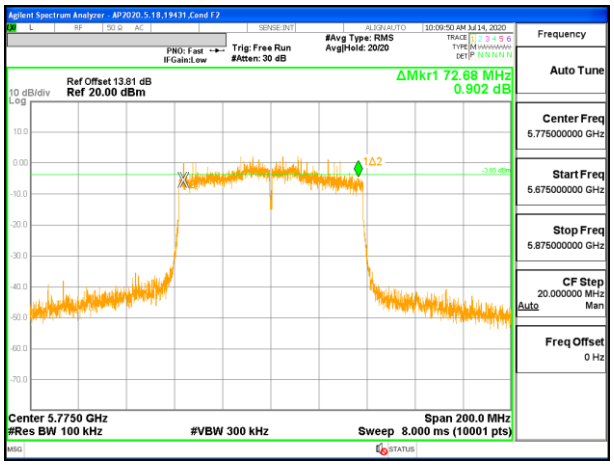
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.140	0.5
138	5690	3.340	0.5



MID CHANNEL

1TX Antenna 5 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	72.680	0.5
138	5690	2.660	0.5

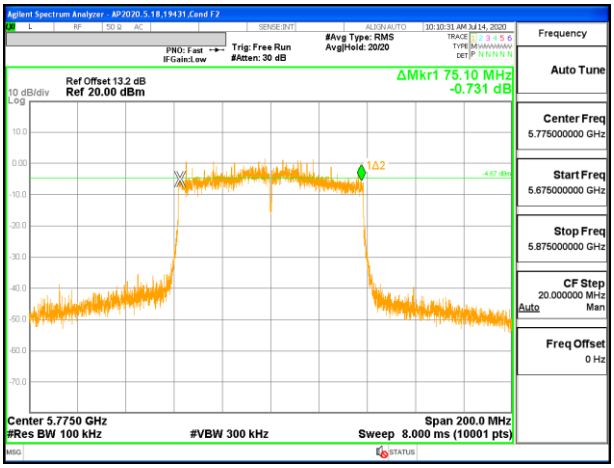


MID CHANNEL

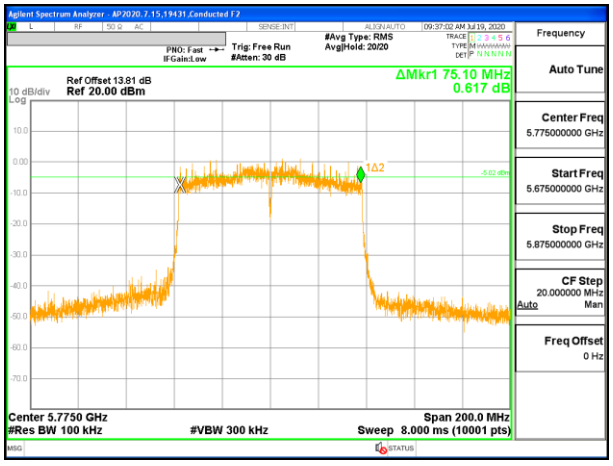
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	75.100	75.100	0.5
138	5690	3.360	3.220	0.5



MID CHANNEL [ANT 6]



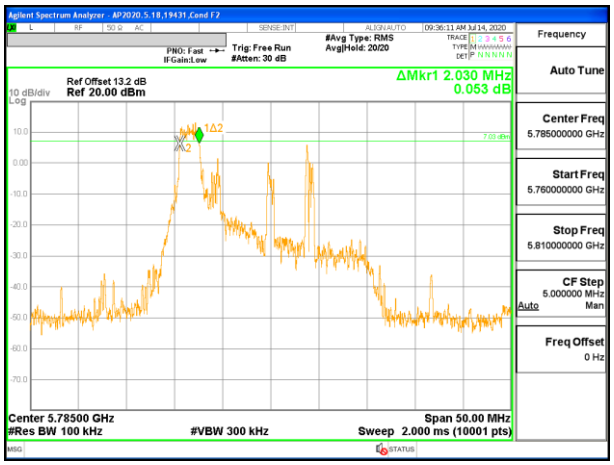
MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.4. 802.11ax HE20 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE: 26 Tones, RU Index 0

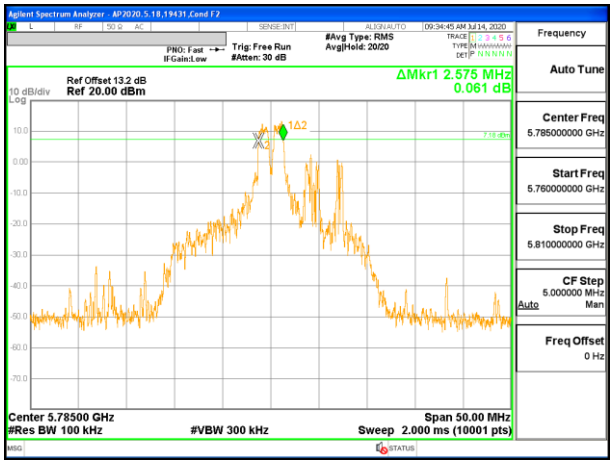
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	1.995	0.5
Mid	5785	2.030	0.5
High	5825	2.085	0.5



MID CHANNEL

1TX Antenna 6 MODE: 26 Tones, RU Index 4

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	2.605	0.5
Mid	5785	2.575	0.5
High	5825	2.570	0.5

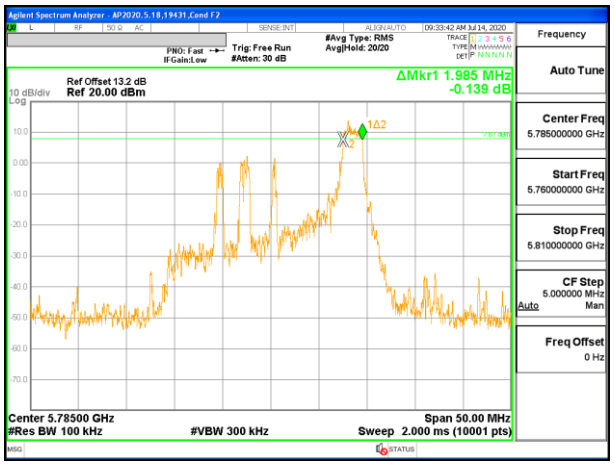


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE: 26 Tones, RU Index 8

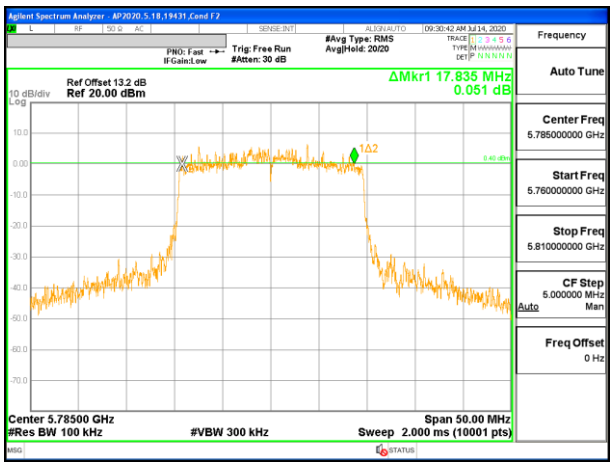
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	2.020	0.5
Mid	5785	1.985	0.5
High	5825	2.030	0.5
144	5720	2.110	0.5



MID CHANNEL

1TX Antenna 6 MODE: 242 Tones, RU Index 61

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	18.950	0.5
Mid	5785	17.835	0.5
High	5825	18.585	0.5
144	5720	4.545	0.5

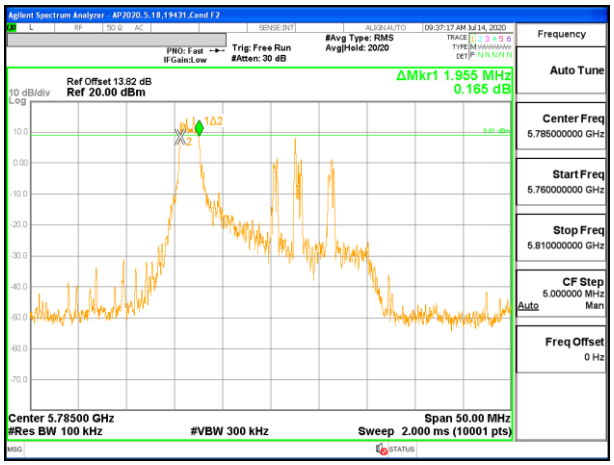


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 0

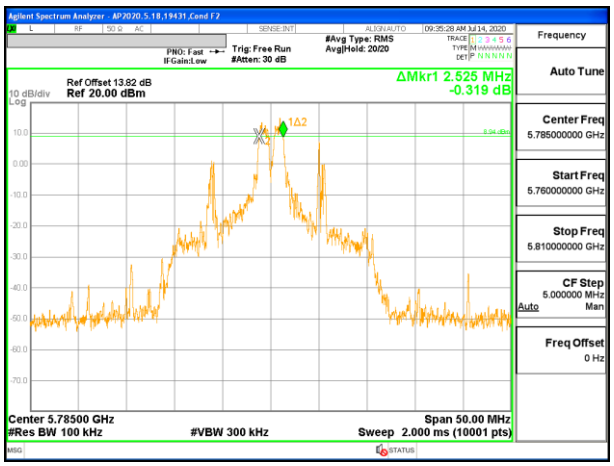
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	2.075	0.5
Mid	5785	1.955	0.5
High	5825	2.095	0.5



MID CHANNEL

1TX Antenna 5 MODE: 26 Tones, RU Index 4

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	2.575	0.5
Mid	5785	2.525	0.5
High	5825	2.580	0.5

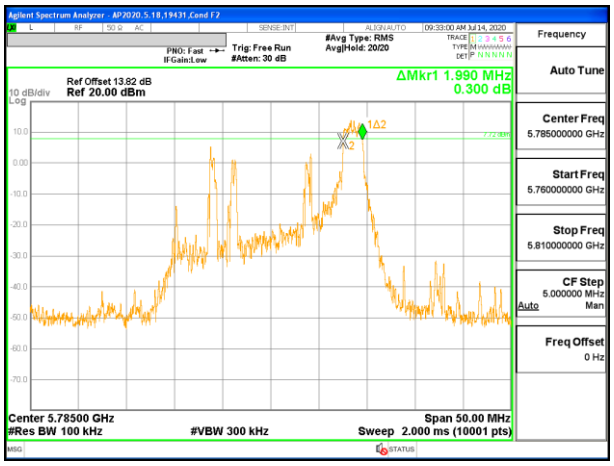


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 8

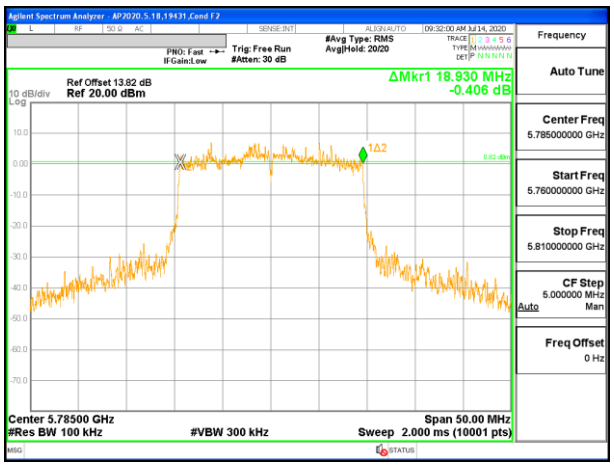
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	2.065	0.5
Mid	5785	1.990	0.5
High	5825	1.965	0.5
144	5720	2.020	0.5



MID CHANNEL

1TX Antenna 5 MODE: 242 Tones, RU Index 61

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.800	0.5
Mid	5785	18.930	0.5
High	5825	18.200	0.5
144	5720	4.640	0.5

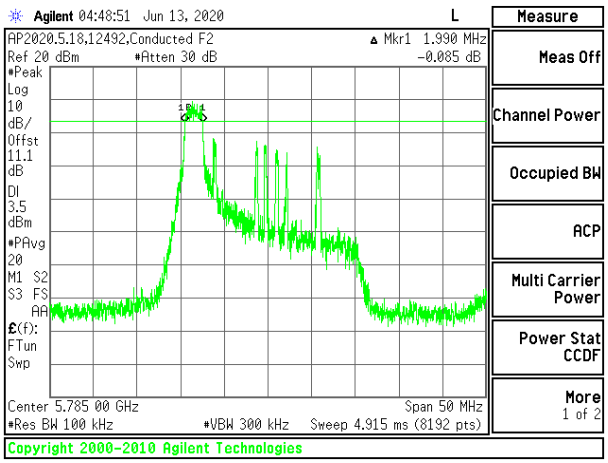


MID CHANNEL

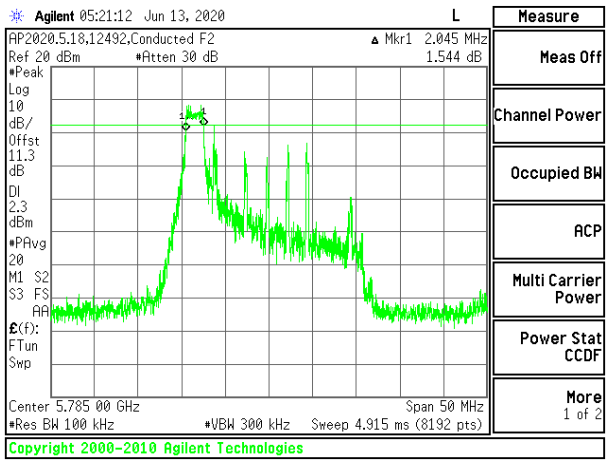
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB BW Ant 5 (MHz)	6 dB BW Ant 6 (MHz)	Minimum Limit (MHz)
Low	5745	2.088	2.027	0.5
Mid	5785	2.045	1.990	0.5
High	5825	2.008	1.972	0.5



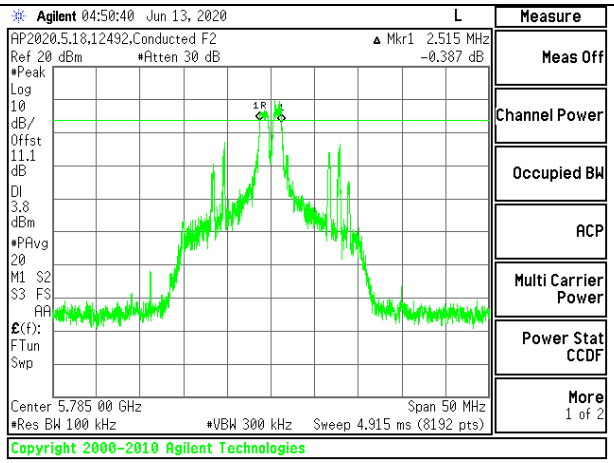
MID CHANNEL [ANT 6]



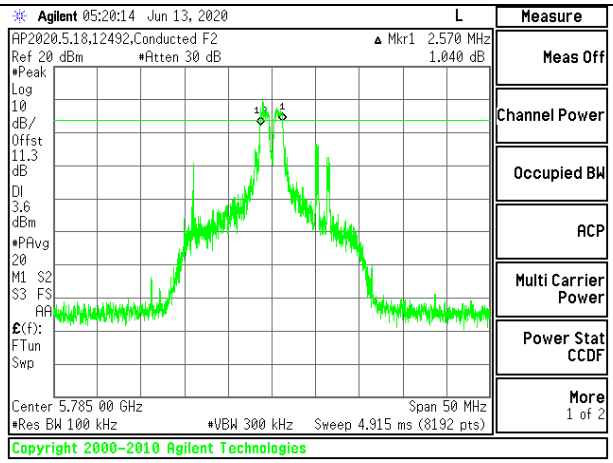
MID CHANNEL [ANT 5]

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 4

Channel	Frequency (MHz)	6 dB BW Ant 5 (MHz)	6 dB BW Ant 6 (MHz)	Minimum Limit (MHz)
Low	5745	2.570	2.661	0.5
Mid	5785	2.570	2.515	0.5
High	5825	2.631	2.600	0.5



MID CHANNEL [ANT 6]

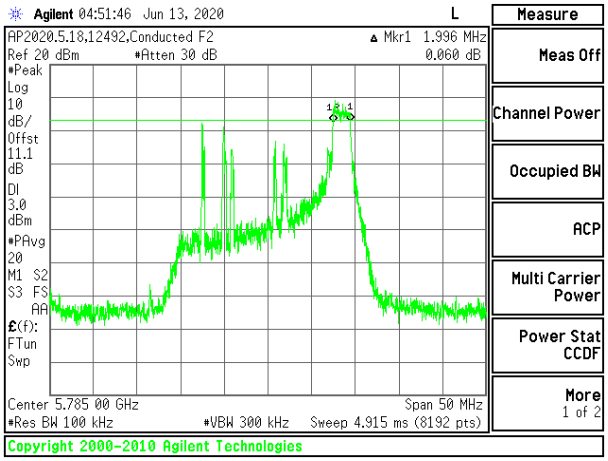


MID CHANNEL [ANT 5]

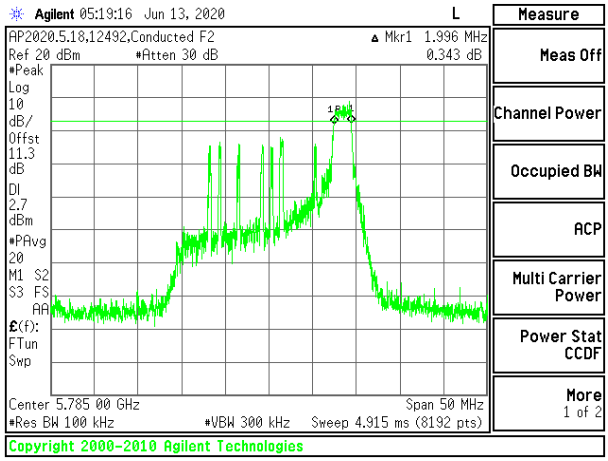
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Low	5745	2.027	1.990	0.5
Mid	5785	1.996	1.996	0.5
High	5825	2.033	2.118	0.5
144	5720	1.996	1.984	0.5



MID CHANNEL [ANT 6]

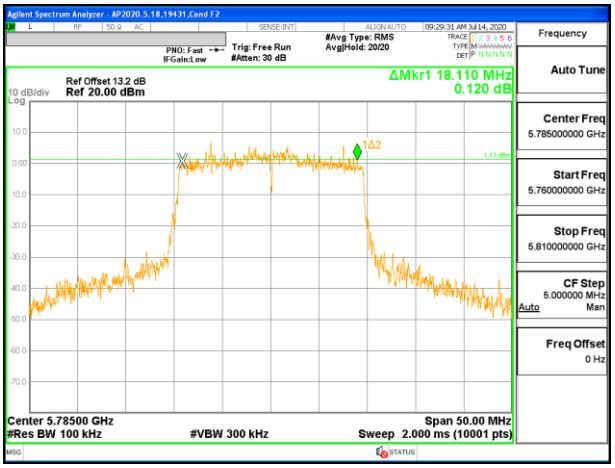


MID CHANNEL [ANT 5]

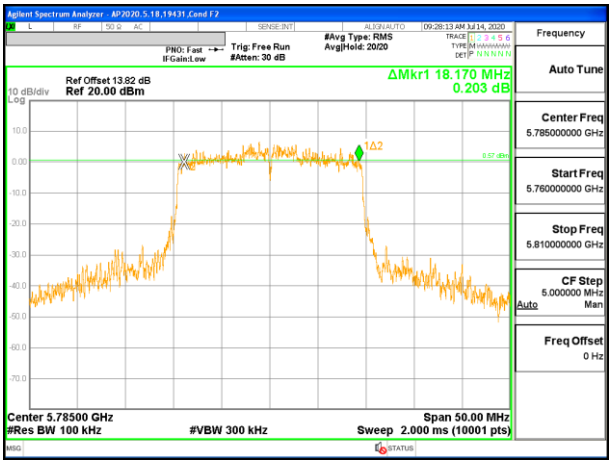
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE: 242 Tones, RU Index 61

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	18.580	17.880	0.5
Mid	5785	18.110	18.170	0.5
High	5825	18.645	18.360	0.5
144	5720	4.615	4.600	0.5



MID CHANNEL [ANT 6]



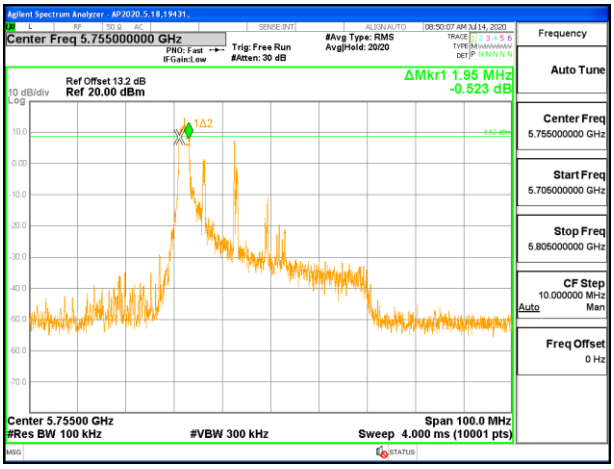
MID CHANNEL [ANT 5]

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.5. 802.11ax HE40 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE: 26 Tones, RU Index 0

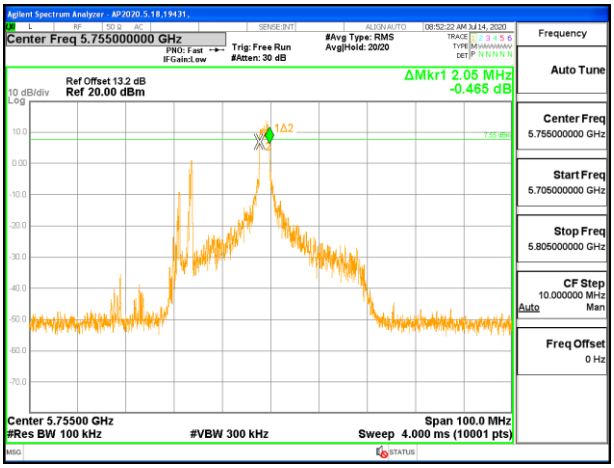
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	1.950	0.5
High	5795	2.010	0.5



LOW CHANNEL

1TX Antenna 6 MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.050	0.5
High	5795	2.030	0.5

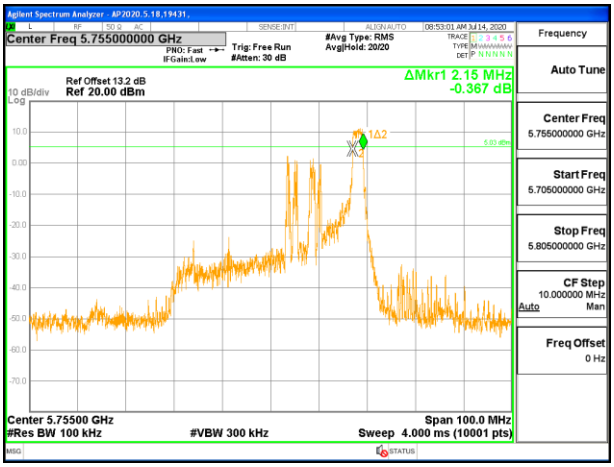


LOW CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE: 26 Tones, RU Index 17

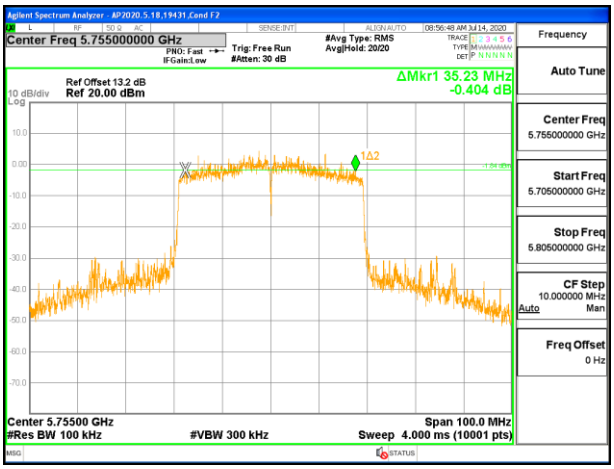
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.150	0.5
High	5795	2.000	0.5
142	5710	2.030	0.5



LOW CHANNEL

1TX Antenna 6 MODE: 424 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.230	0.5
High	5795	35.930	0.5
142	5710	4.100	0.5

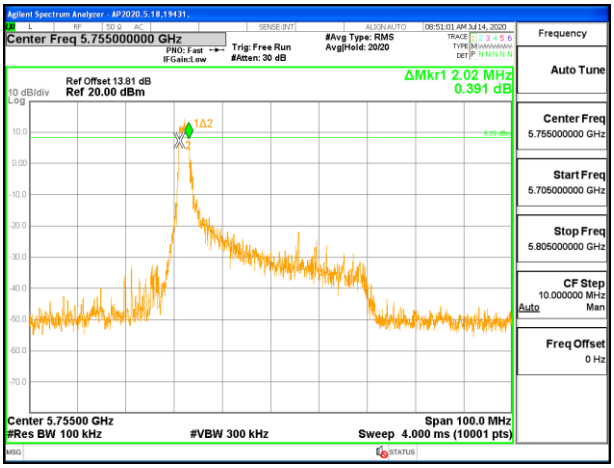


LOW CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 0

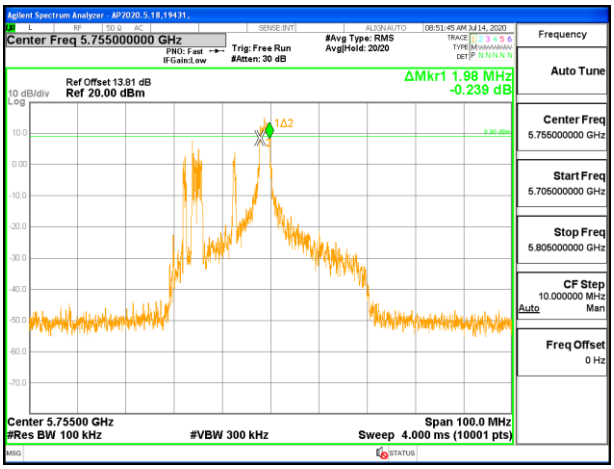
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.020	0.5
High	5795	2.060	0.5



LOW CHANNEL

1TX Antenna 5 MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	1.980	0.5
High	5795	2.000	0.5

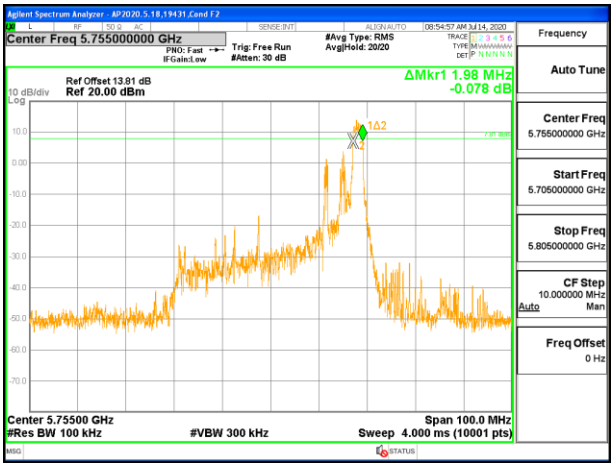


LOW CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 17

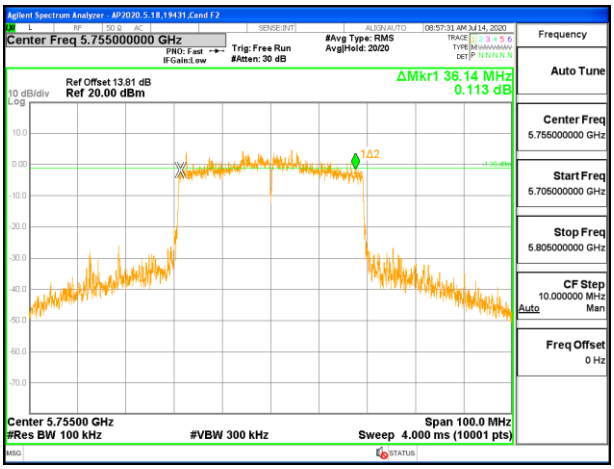
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	1.980	0.5
High	5795	2.010	0.5
142	5710	2.070	0.5



LOW CHANNEL

1TX Antenna 5 MODE: 424 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	36.140	0.5
High	5795	37.260	0.5
142	5710	4.110	0.5

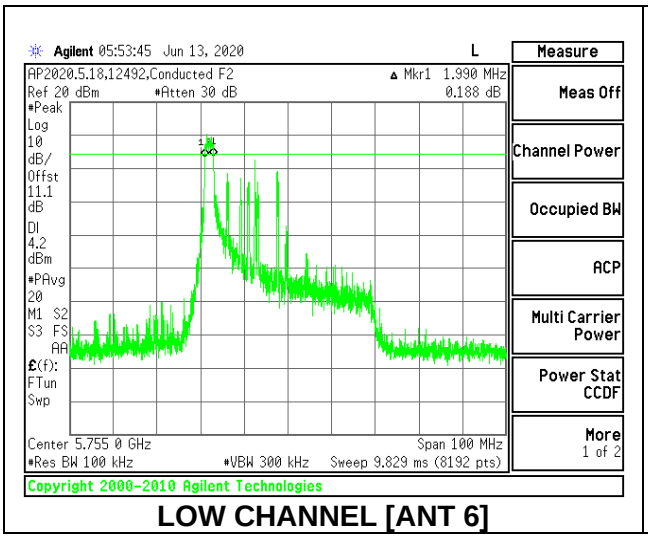


LOW CHANNEL

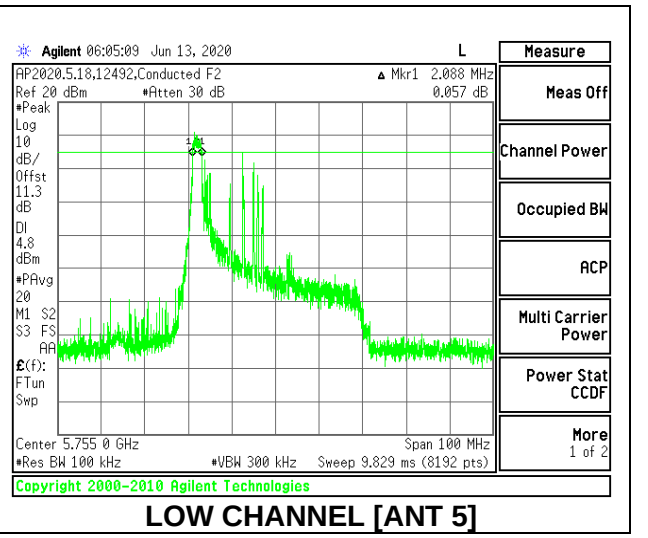
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Low	5755	1.990	2.088	0.5
High	5795	1.917	2.100	0.5



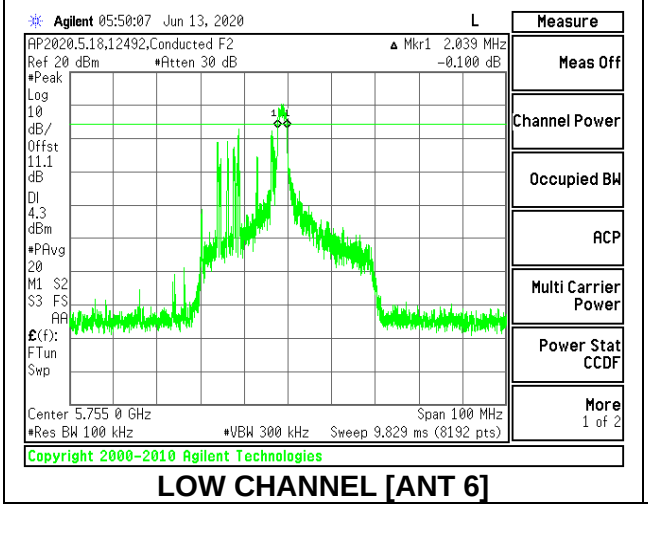
LOW CHANNEL [ANT 6]



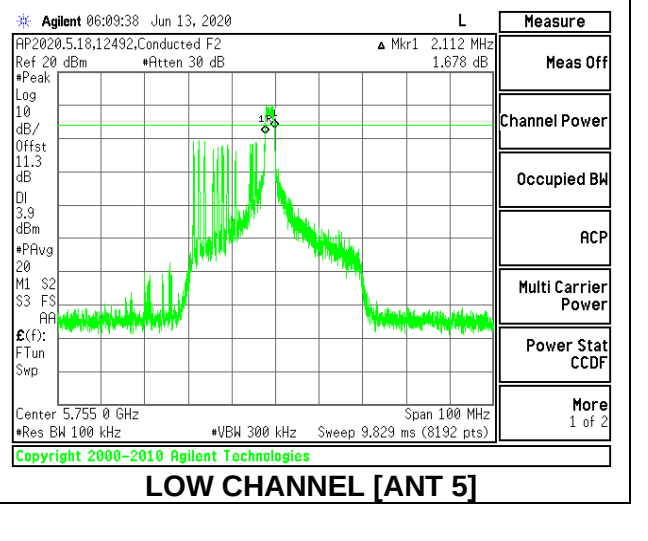
LOW CHANNEL [ANT 5]

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Low	5755	2.039	2.112	0.5
High	5795	2.136	2.051	0.5



LOW CHANNEL [ANT 6]

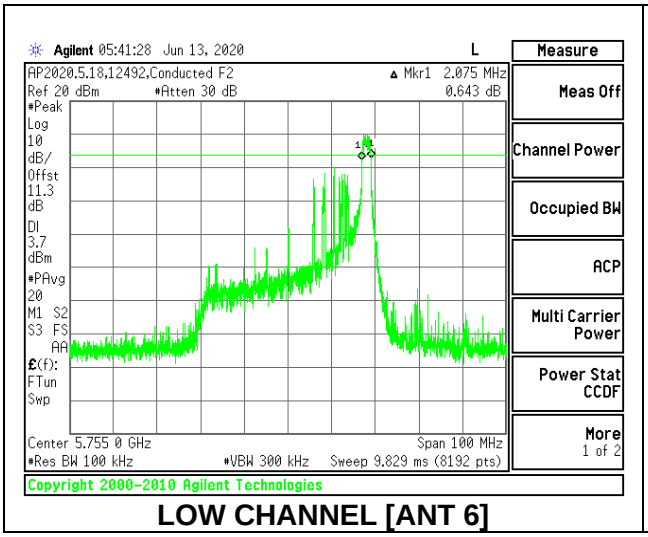


LOW CHANNEL [ANT 5]

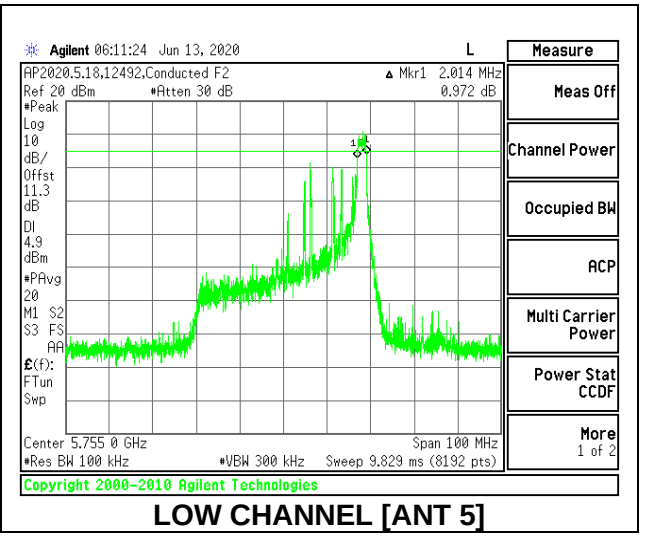
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 17

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Low	5755	2.075	2.014	0.5
High	5795	2.051	2.063	0.5
142	5710	2.014	2.039	0.5



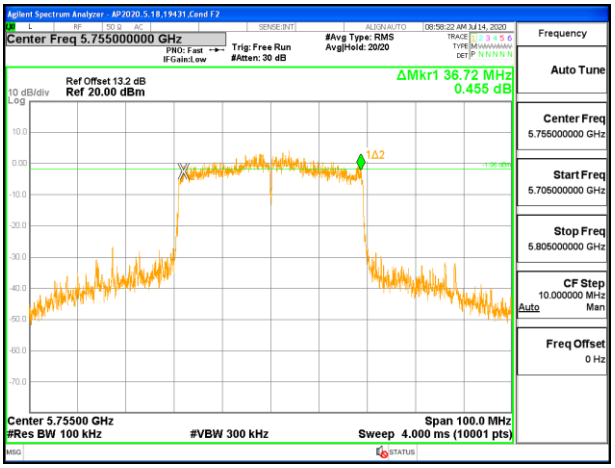
LOW CHANNEL [ANT 6]



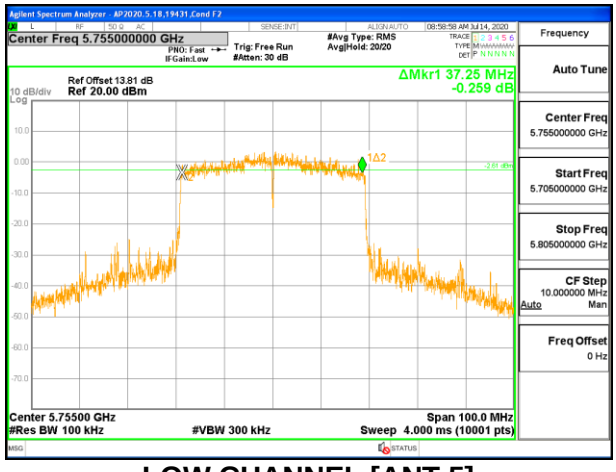
LOW CHANNEL [ANT 5]

2TX Antenna 6 + Antenna 5 CDD MODE: 424 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	36.720	37.250	0.5
High	5795	36.820	37.580	0.5
142	5710	4.080	4.090	0.5



LOW CHANNEL [ANT 6]



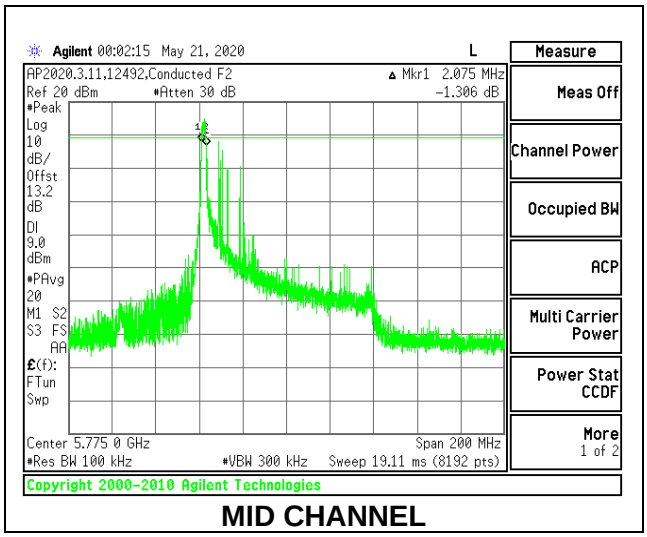
LOW CHANNEL [ANT 5]

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.3.6. 802.11ax HE80 MODE IN THE 5.8 GHz BAND

1TX Antenna 6 MODE: 26 Tones, RU Index 0

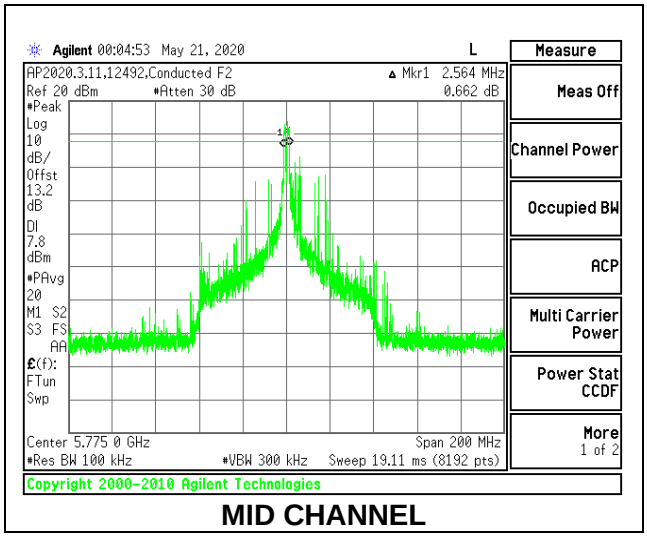
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.075	0.5



MID CHANNEL

1TX Antenna 6 MODE: 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.564	0.5

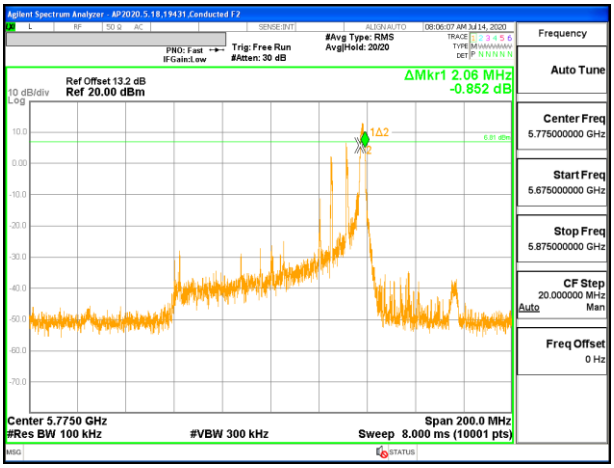


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE: 26 Tones, RU Index 36

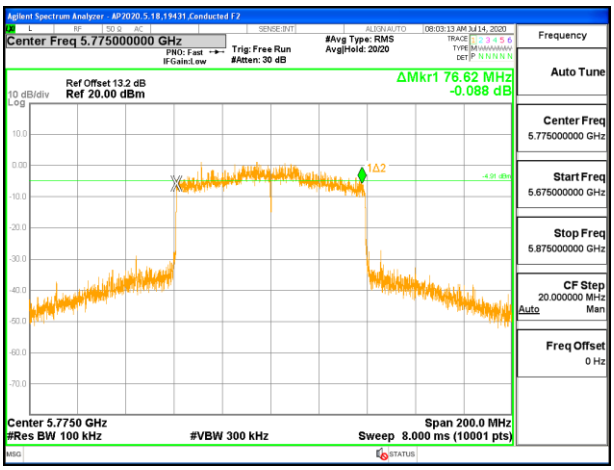
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.060	0.5
Mid	5690	2.020	0.5



MID CHANNEL

1TX Antenna 6 MODE: 26 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	76.620	0.5
Mid	5690	4.000	0.5

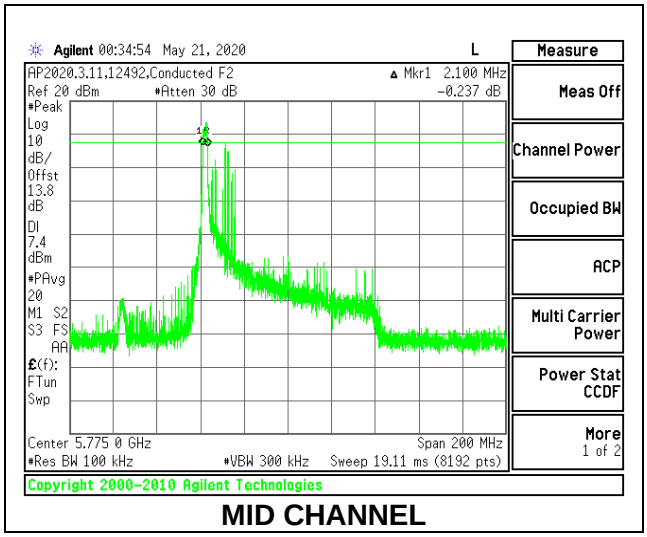


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 0

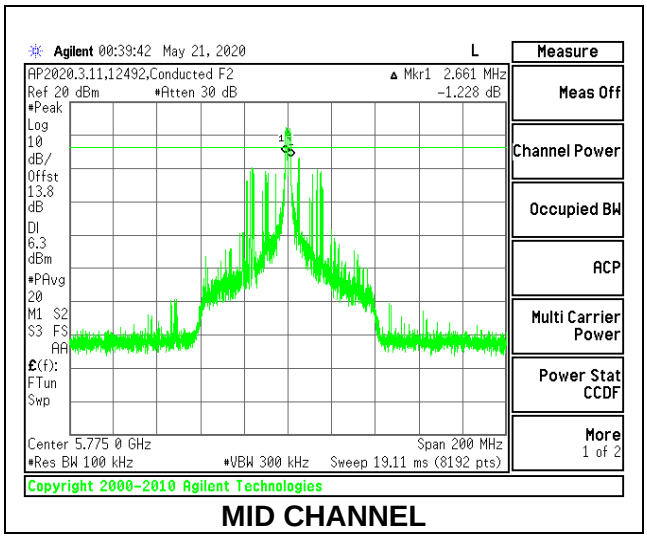
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.100	0.5



MID CHANNEL

1TX Antenna 5 MODE: 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.661	0.5

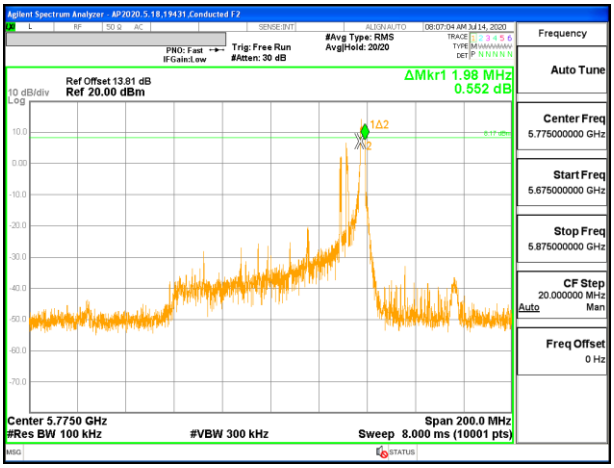


MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE: 26 Tones, RU Index 36

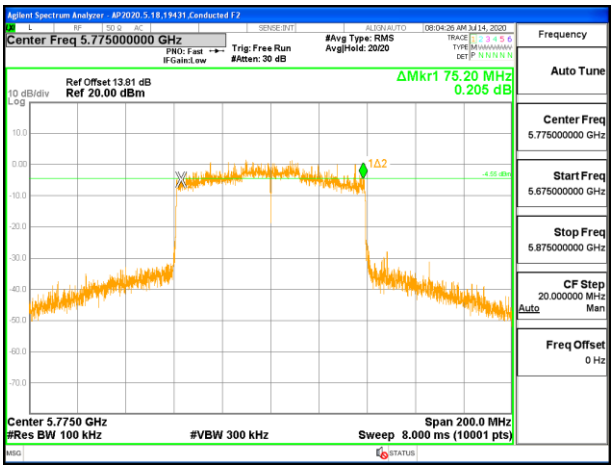
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	1.980	0.5
138	5690	2.100	0.5



MID CHANNEL

1TX Antenna 5 MODE: 996 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.200	0.5
138	5690	4.040	0.5

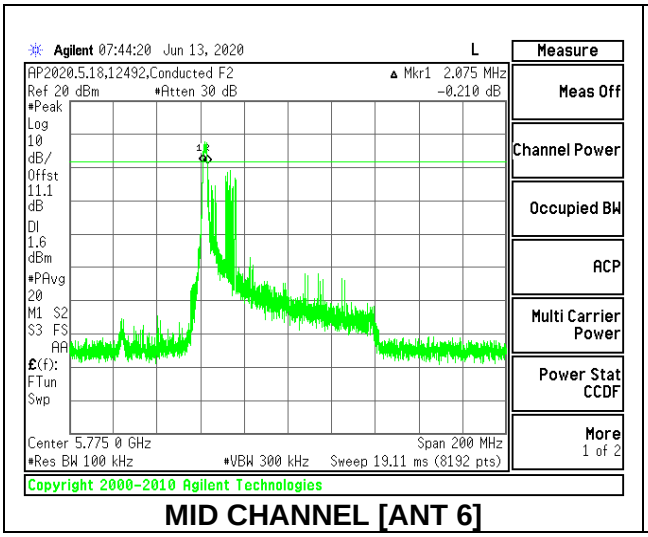


MID CHANNEL

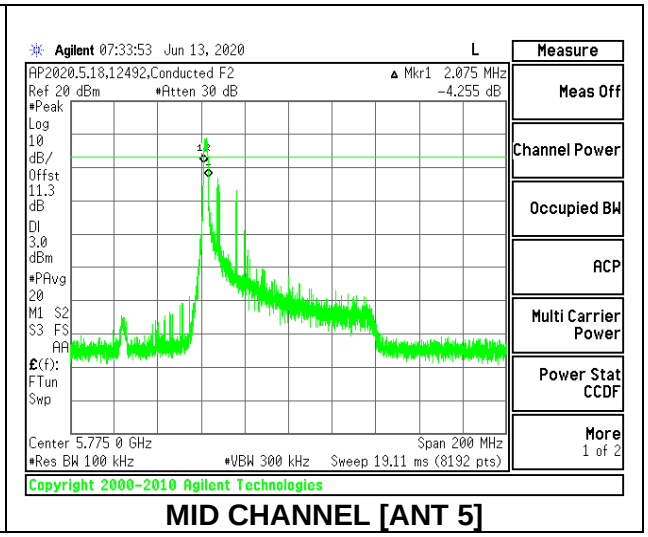
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Mid	5775	2.075	2.075	0.5



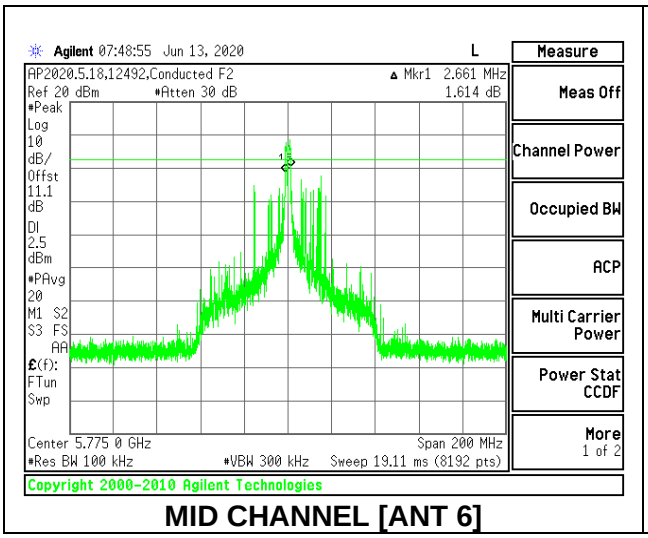
MID CHANNEL [ANT 6]



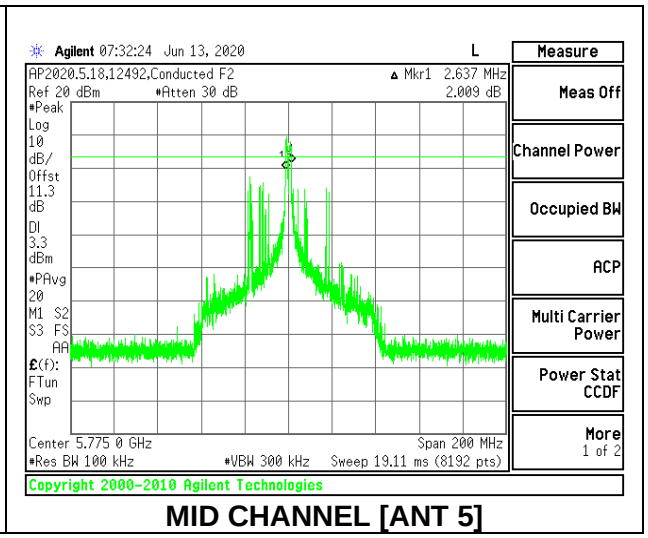
MID CHANNEL [ANT 5]

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Mid	5775	2.661	2.637	0.5



MID CHANNEL [ANT 6]

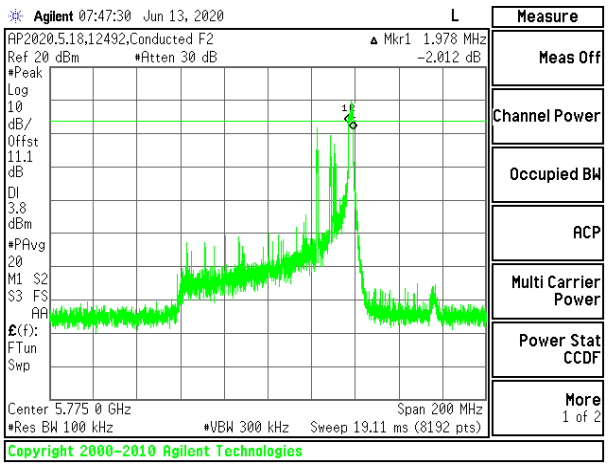


MID CHANNEL [ANT 5]

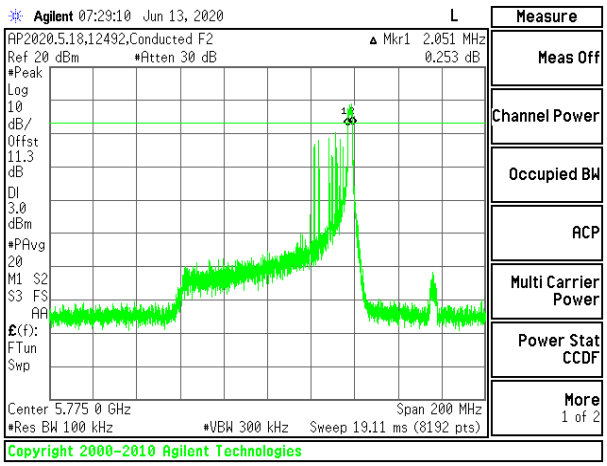
UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE – 26 Tones, RU Index 36

Channel	Frequency (MHz)	6 dB BW Ant 6 (MHz)	6 dB BW Ant 5 (MHz)	Minimum Limit (MHz)
Mid	5775	1.978	2.051	0.5
138	5690	2.075	2.149	0.5



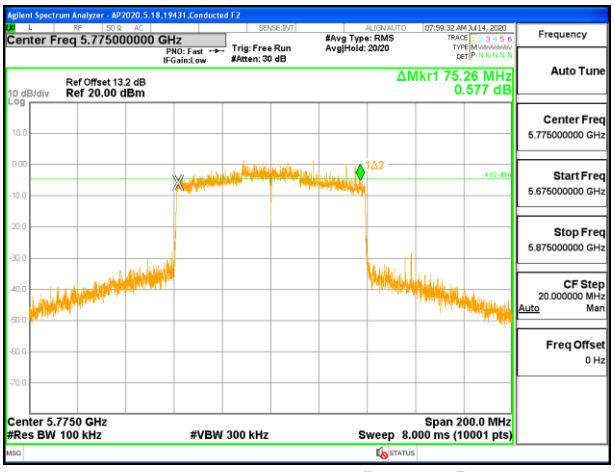
MID CHANNEL [ANT 6]



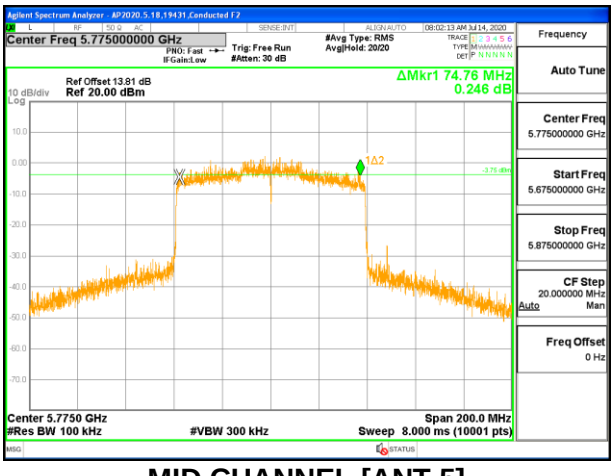
MID CHANNEL [ANT 5]

TX Antenna 6 + Antenna 5 OFDMA MODE: 996 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	75.260	74.760	0.5
138	5690	3.980	4.020	0.5



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407

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

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

Bands 5.25-5.35 GHz and 5.47-5.725 GHz
The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Band 5.725-5.85 GHz

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

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02 v02r01, Section E.3.b (Method PM-G).

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F.
For all straddle channels, full bandwidth power is reported in the 5.6GHz section. The combined 5.6GHz and 5.8GHz power already passed the worst case 5.6GHz 24dBm limit, therefore there is no need to provide the 5.8GHz power.

11n HT20 and 11ax HE20 straddle channel 26dB bandwidth= (26dB BW/2)+5
11n HT20 and 11ax HE20 straddle channel 99% bandwidth= (99% BW/2)+5

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

DIRECTIONAL ANTENNA GAIN

For 1 TX:
There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:

Tx chains are uncorrelated for power and correlated for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:

Band (GHz)	Ant 6 Gain (dBi)	Ant 5 Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	-2.4	-2.8	-2.60	0.41
5.3	-1.8	-2.9	-2.32	0.68
5.6	-0.3	-3.6	-1.64	1.22
5.8	-1.0	-3.3	-2.00	0.94

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/1/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.40	24.00	11.00
Mid	5200	-2.40	24.00	11.00
High	5240	-2.40	24.00	11.00

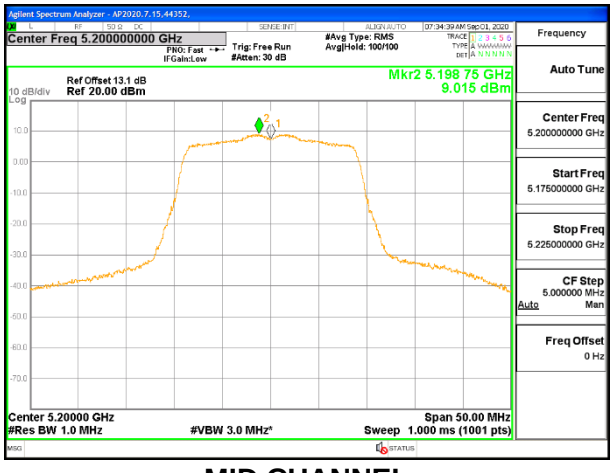
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.98	18.98	24.00	-5.02
Mid	5200	19.71	19.71	24.00	-4.29
High	5240	19.69	19.69	24.00	-4.31

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.197	8.197	11.00	-2.803
Mid	5200	9.015	9.015	11.00	-1.985
High	5240	8.959	8.959	11.00	-2.041



MID CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.80	24.00	11.00
Mid	5200	-2.80	24.00	11.00
High	5240	-2.80	24.00	11.00

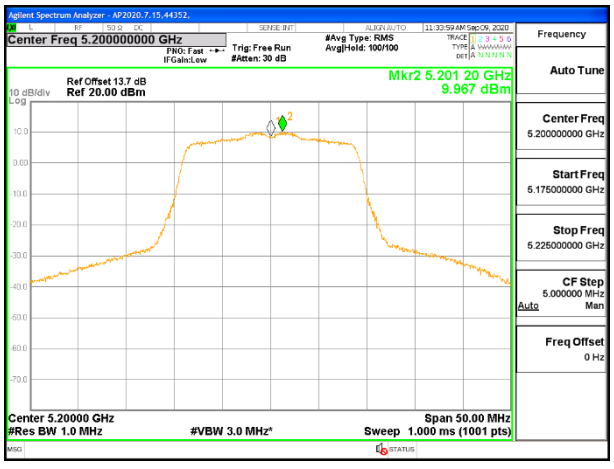
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.83	18.83	24.00	-5.17
Mid	5200	20.77	20.77	24.00	-3.23
High	5240	20.74	20.74	24.00	-3.26

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.215	8.215	11.00	-2.785
Mid	5200	9.967	9.967	11.00	-1.033
High	5240	10.093	10.093	11.00	-0.907



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.60	0.41	24.00	11.00
Mid	5200	-2.60	0.41	24.00	11.00
High	5240	-2.60	0.41	24.00	11.00

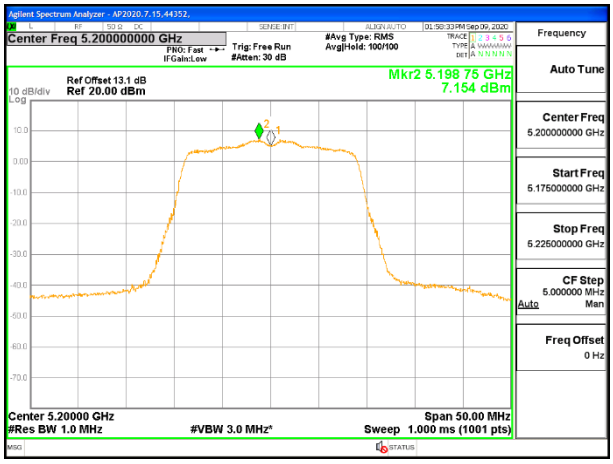
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

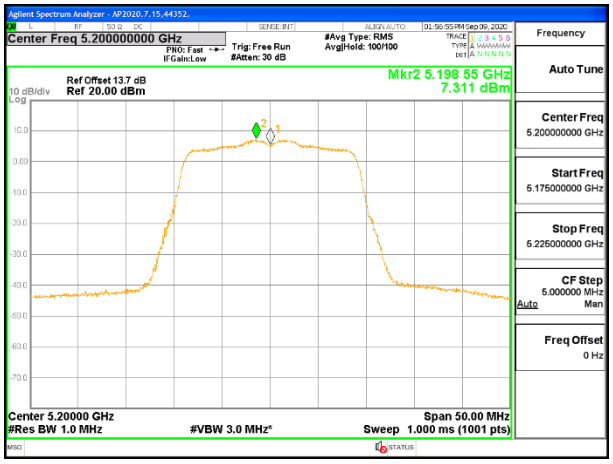
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.83	17.83	20.84	24.00	-3.16
Mid	5200	17.91	17.98	20.96	24.00	-3.04
High	5240	17.88	17.76	20.83	24.00	-3.17

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.803	6.969	9.897	11.00	-1.103
Mid	5200	7.154	7.311	10.244	11.00	-0.756
High	5240	6.935	6.936	9.946	11.00	-1.054



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.2. 802.11n HT40 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.40	24.00	11.00
High	5230	-2.40	24.00	11.00

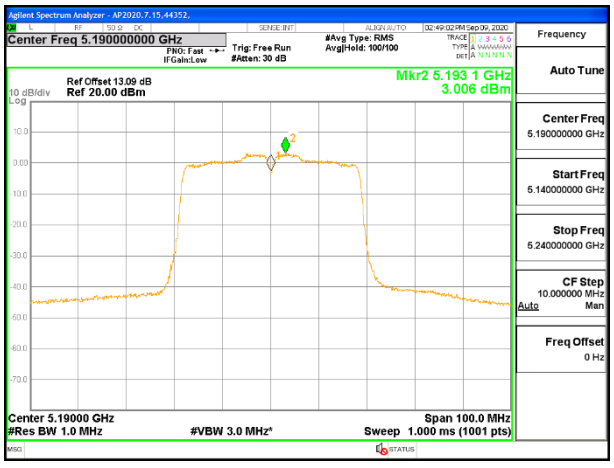
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	16.24	16.24	24.00	-7.76
High	5230	19.72	19.72	24.00	-4.28

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	3.006	3.096	11.00	-7.904
High	5230	6.068	6.158	11.00	-4.842



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.80	24.00	11.00
High	5230	-2.80	24.00	11.00

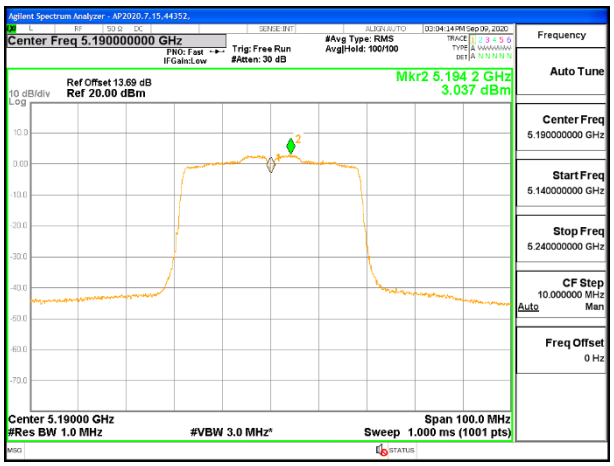
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	16.39	16.39	24.00	-7.61
High	5230	20.73	20.73	24.00	-3.27

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	3.037	3.127	11.00	-7.873
High	5230	7.274	7.364	11.00	-3.636



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.60	0.41	24.00	11.00
High	5230	-2.60	0.41	24.00	11.00

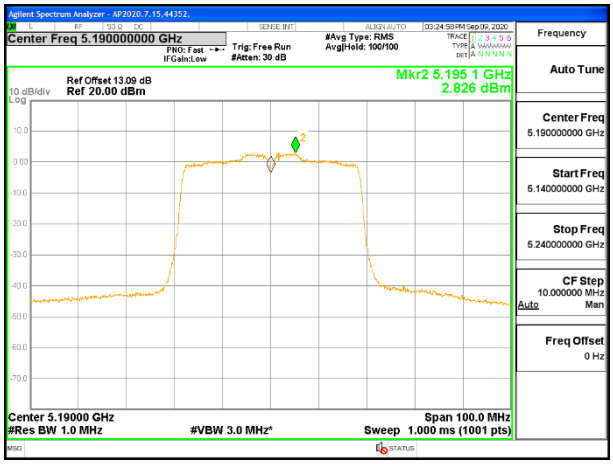
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

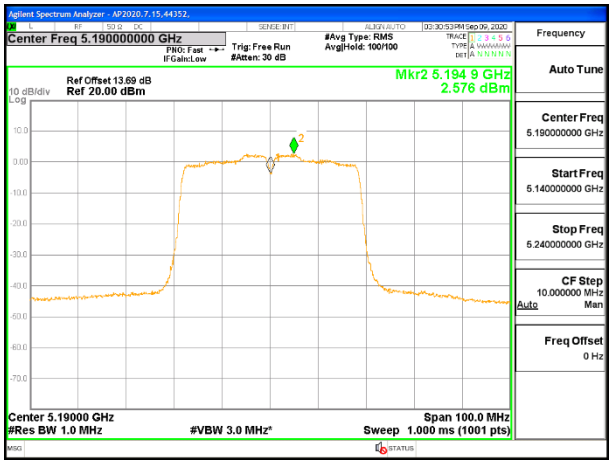
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.94	15.86	18.91	24.00	-5.09
High	5230	19.73	19.92	22.84	24.00	-1.16

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	2.826	2.576	5.803	11.00	-5.197
High	5230	6.415	6.151	9.385	11.00	-1.615



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.3. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.40	24.00	11.00

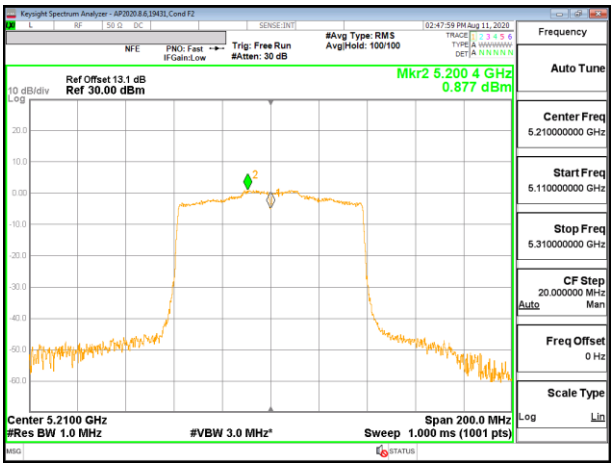
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.89	15.89	24.00	-8.11

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	0.877	1.067	11.00	-9.933



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE

Test Engineer:	39472
Test Date:	9/9/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.80	24.00	11.00

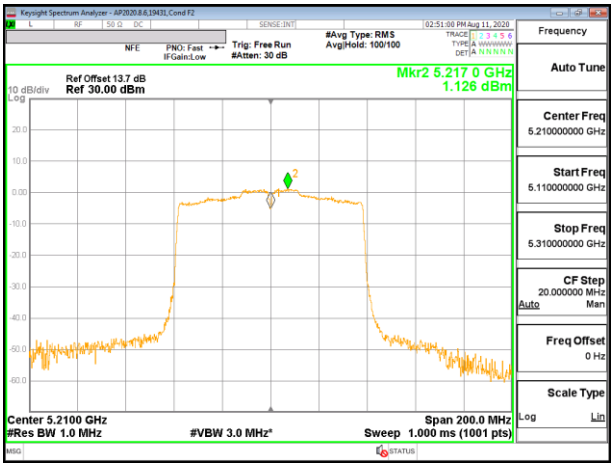
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.77	15.77	24.00	-8.23

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	1.126	1.316	11.00	-9.684



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE (FCC) MOBILE

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-2.60	0.41	24.00	11.00

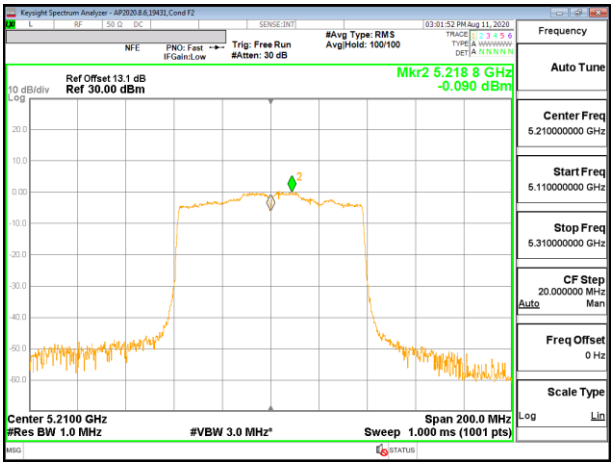
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

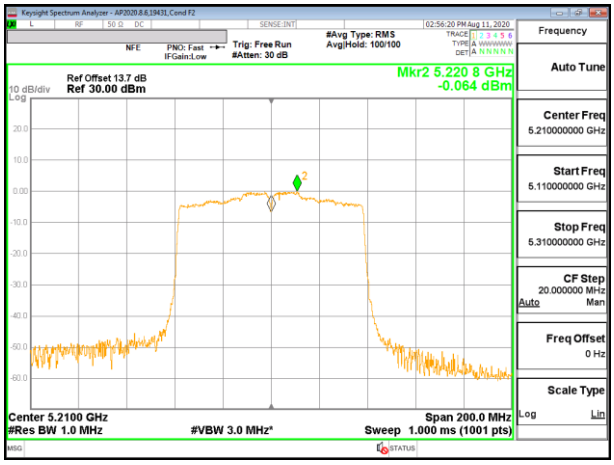
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.10	15.18	18.15	24.00	-5.85

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-0.090	-0.064	3.123	11.00	-7.877



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.4. 802.11ax HE20 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.40	24.00	11.00
Mid	5200	-2.40	24.00	11.00
High	5240	-2.40	24.00	11.00

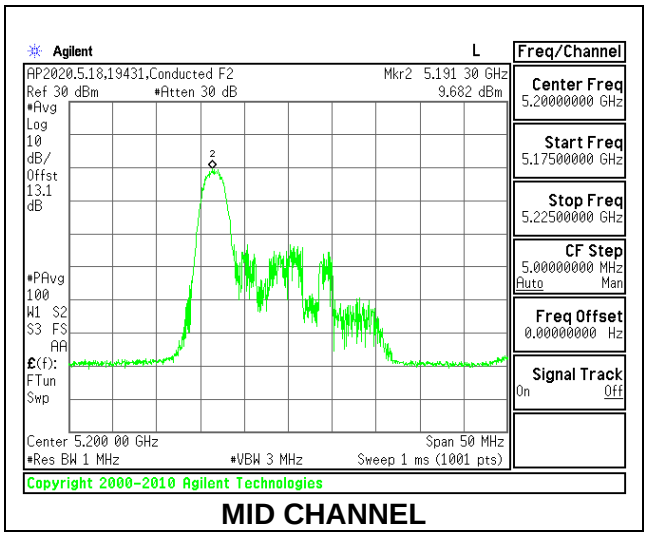
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.74	11.74	24.00	-12.26
Mid	5200	11.89	11.89	24.00	-12.11
High	5240	11.69	11.69	24.00	-12.31

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.532	9.532	11.00	-1.468
Mid	5200	9.682	9.682	11.00	-1.318
High	5240	9.600	9.600	11.00	-1.400



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.40	24.00	11.00
Mid	5200	-2.40	24.00	11.00
High	5240	-2.40	24.00	11.00

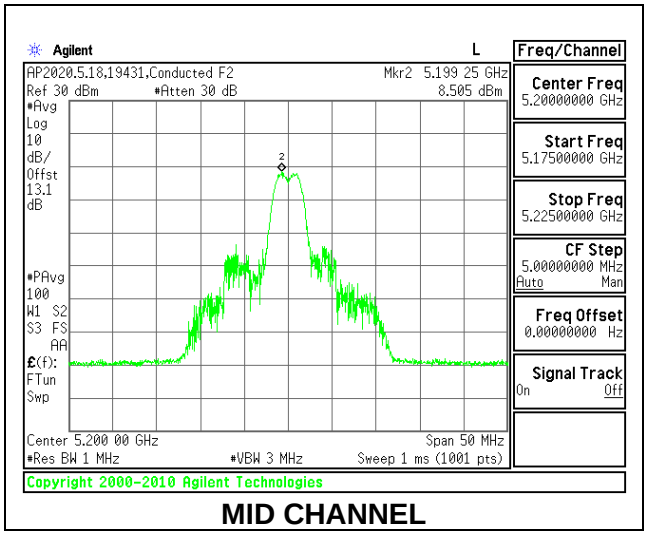
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.80	11.80	24.00	-12.20
Mid	5200	11.91	11.91	24.00	-12.09
High	5240	11.74	11.74	24.00	-12.26

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.515	8.515	11.00	-2.485
Mid	5200	8.505	8.505	11.00	-2.495
High	5240	8.481	8.481	11.00	-2.519



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.40	24.00	11.00
Mid	5200	-2.40	24.00	11.00
High	5240	-2.40	24.00	11.00

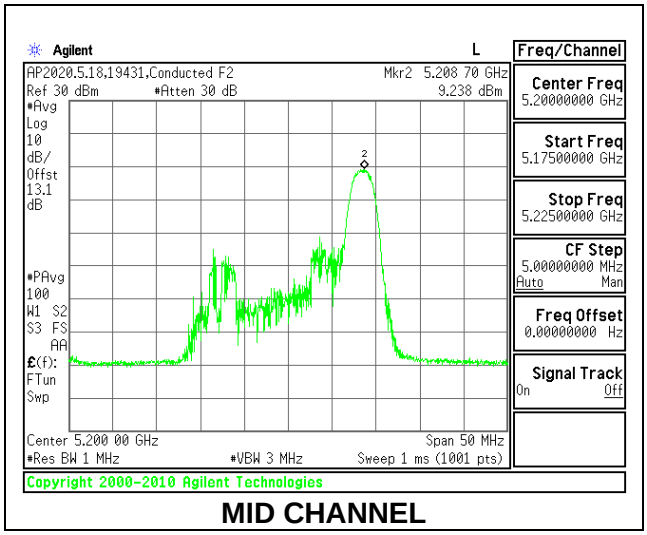
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.82	11.82	24.00	-12.18
Mid	5200	11.96	11.96	24.00	-12.04
High	5240	11.78	11.78	24.00	-12.22

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.299	9.299	11.00	-1.701
Mid	5200	9.238	9.238	11.00	-1.762
High	5240	9.421	9.421	11.00	-1.579



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.40	24.00	11.00
Mid	5200	-2.40	24.00	11.00
High	5240	-2.40	24.00	11.00

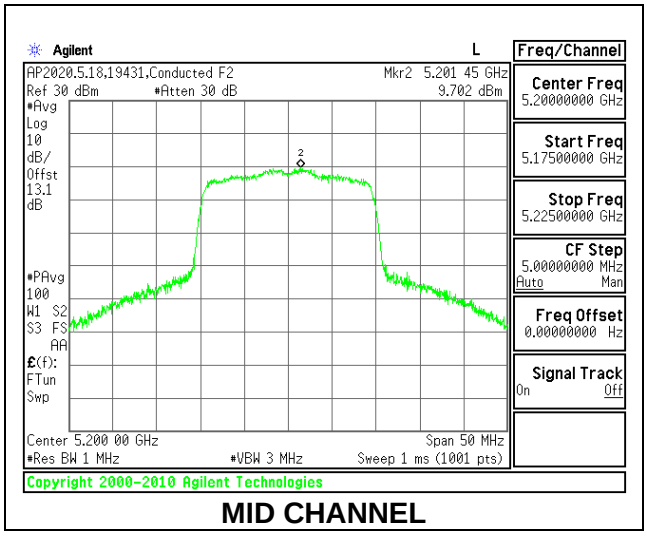
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.80	17.80	24.00	-6.20
Mid	5200	19.72	19.72	24.00	-4.28
High	5240	19.69	19.69	24.00	-4.31

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.723	7.723	11.00	-3.277
Mid	5200	9.702	9.702	11.00	-1.298
High	5240	9.737	9.737	11.00	-1.263



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.80	24.00	11.00
Mid	5200	-2.80	24.00	11.00
High	5240	-2.80	24.00	11.00

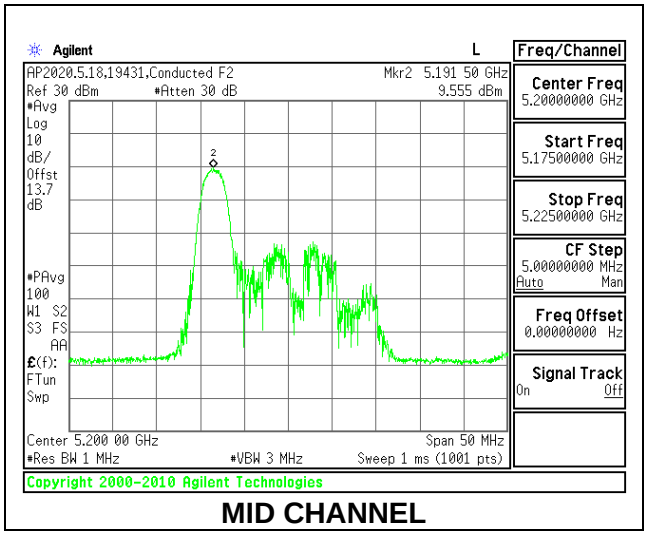
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.69	11.69	24.00	-12.31
Mid	5200	11.84	11.84	24.00	-12.16
High	5240	11.79	11.79	24.00	-12.21

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.404	9.404	11.00	-1.596
Mid	5200	9.555	9.555	11.00	-1.445
High	5240	9.436	9.436	11.00	-1.564



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.80	24.00	11.00
Mid	5200	-2.80	24.00	11.00
High	5240	-2.80	24.00	11.00

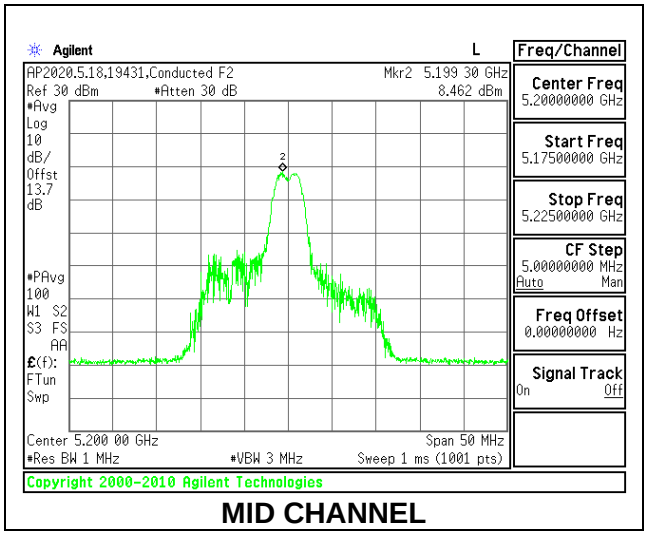
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.79	11.79	24.00	-12.21
Mid	5200	11.86	11.86	24.00	-12.14
High	5240	11.80	11.80	24.00	-12.20

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.498	8.498	11.00	-2.502
Mid	5200	8.462	8.462	11.00	-2.538
High	5240	8.576	8.576	11.00	-2.424



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.80	24.00	11.00
Mid	5200	-2.80	24.00	11.00
High	5240	-2.80	24.00	11.00

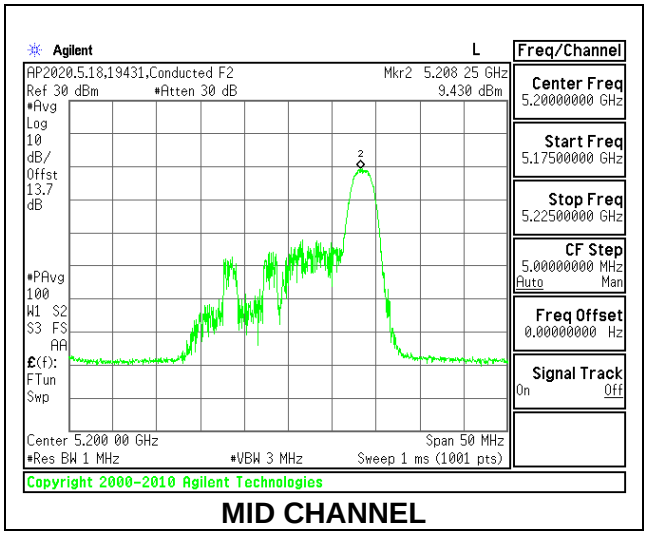
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.71	11.71	24.00	-12.29
Mid	5200	11.82	11.82	24.00	-12.18
High	5240	11.79	11.79	24.00	-12.21

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.563	9.563	11.00	-1.437
Mid	5200	9.430	9.430	11.00	-1.570
High	5240	9.357	9.357	11.00	-1.643



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.80	24.00	11.00
Mid	5200	-2.80	24.00	11.00
High	5240	-2.80	24.00	11.00

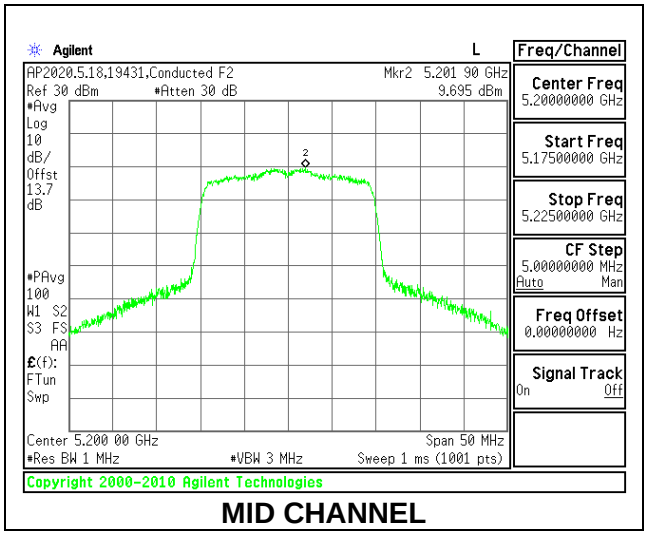
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.90	17.90	24.00	-6.10
Mid	5200	20.89	20.89	24.00	-3.11
High	5240	20.73	20.73	24.00	-3.27

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.544	7.544	11.00	-3.456
Mid	5200	9.695	9.695	11.00	-1.305
High	5240	9.690	9.690	11.00	-1.310



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.60	0.41	24.00	11.00
Mid	5200	-2.60	0.41	24.00	11.00
High	5240	-2.60	0.41	24.00	11.00

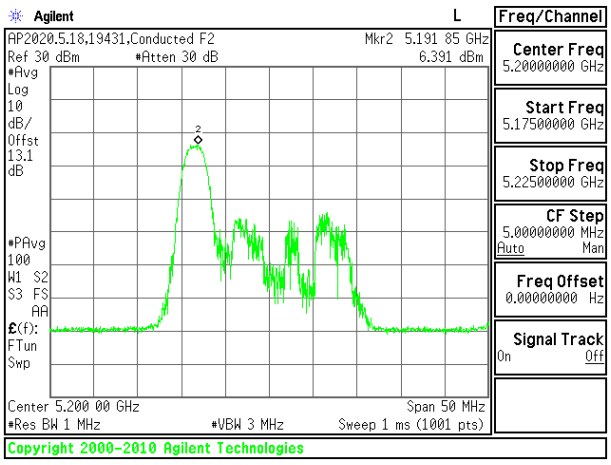
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

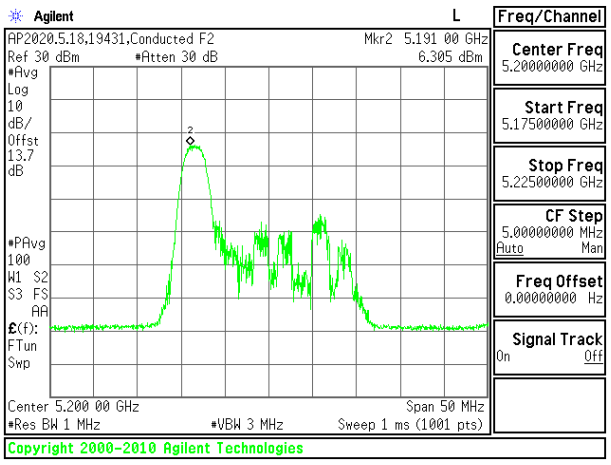
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.77	8.89	11.84	24.00	-12.16
Mid	5200	8.89	8.91	11.91	24.00	-12.09
High	5240	8.69	8.72	11.72	24.00	-12.28

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.360	6.392	9.386	11.00	-1.614
Mid	5200	6.391	6.305	9.359	11.00	-1.641
High	5240	6.450	6.473	9.472	11.00	-1.528



MID CHANNEL ANT 6



MID CHANNEL ANT 5

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.60	0.41	24.00	11.00
Mid	5200	-2.60	0.41	24.00	11.00
High	5240	-2.60	0.41	24.00	11.00

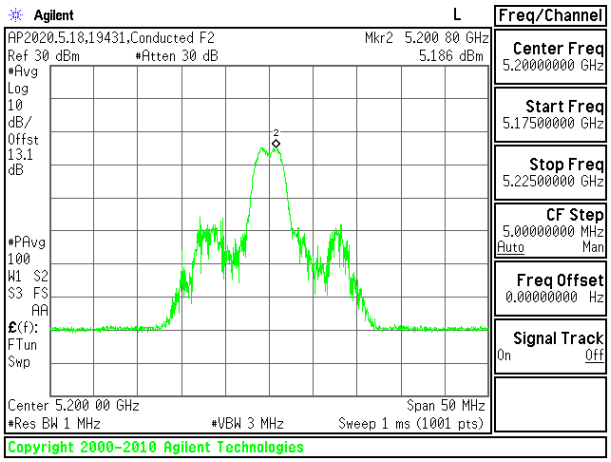
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

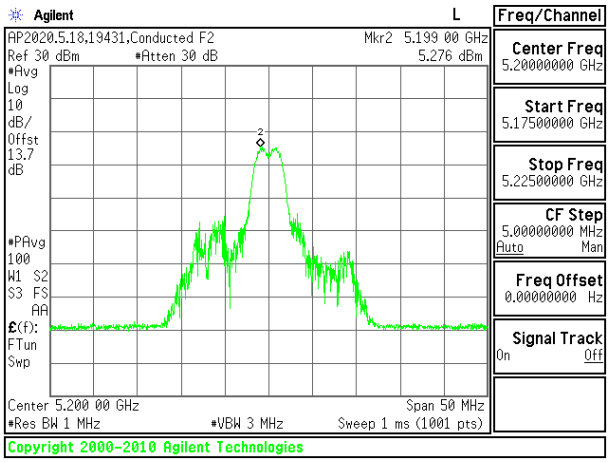
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.90	8.88	11.90	24.00	-12.10
Mid	5200	8.94	8.90	11.93	24.00	-12.07
High	5240	8.76	8.80	11.79	24.00	-12.21

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	5.073	5.418	8.259	11.00	-2.741
Mid	5200	5.186	5.276	8.242	11.00	-2.758
High	5240	5.311	5.320	8.326	11.00	-2.674



MID CHANNEL ANT 6



MID CHANNEL ANT 5

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.60	0.41	24.00	11.00
Mid	5200	-2.60	0.41	24.00	11.00
High	5240	-2.60	0.41	24.00	11.00

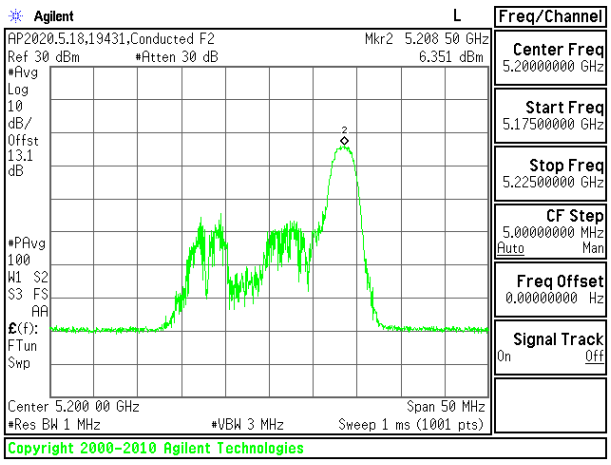
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

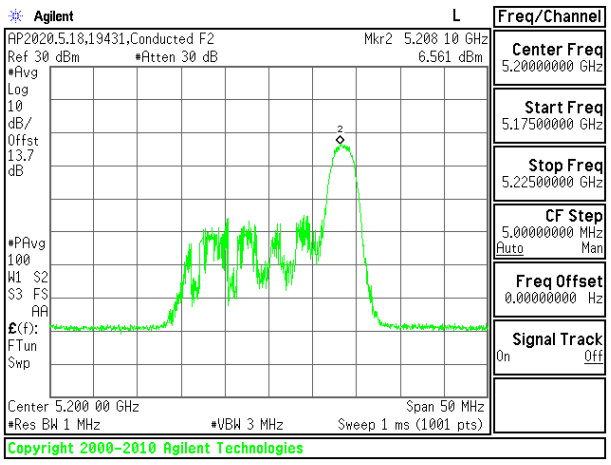
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.76	8.80	11.79	24.00	-12.21
Mid	5200	8.91	8.95	11.94	24.00	-12.06
High	5240	8.82	8.88	11.86	24.00	-12.14

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.538	6.563	9.561	11.00	-1.439
Mid	5200	6.351	6.561	9.468	11.00	-1.532
High	5240	6.480	6.567	9.534	11.00	-1.466



MID CHANNEL ANT 6



MID CHANNEL ANT 5

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	39472
Test Date:	09/09/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.60	0.41	24.00	11.00
Mid	5200	-2.60	0.41	24.00	11.00
High	5240	-2.60	0.41	24.00	11.00

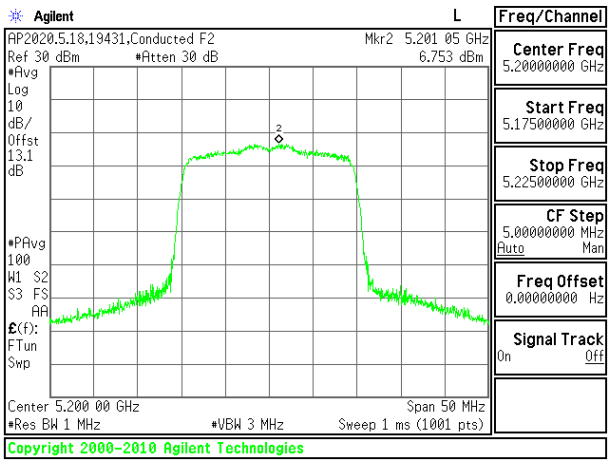
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

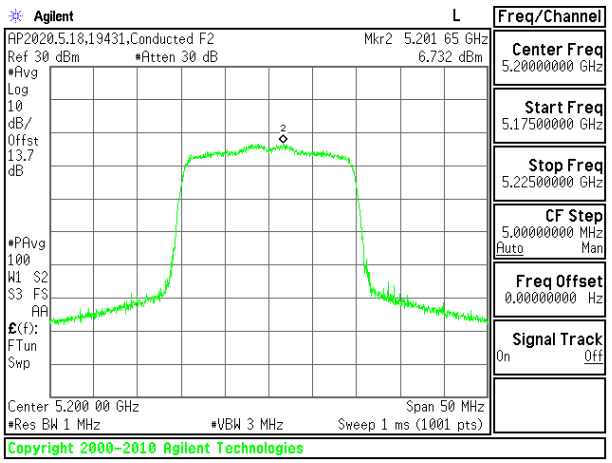
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.89	16.92	19.92	24.00	-4.08
Mid	5200	17.92	17.90	20.92	24.00	-3.08
High	5240	17.85	17.88	20.88	24.00	-3.12

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.792	6.648	9.731	11.00	-1.269
Mid	5200	6.753	6.732	9.753	11.00	-1.247
High	5240	6.745	6.672	9.719	11.00	-1.281



MID CHANNEL ANT 6



MID CHANNEL ANT 5

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.5. 802.11ax HE40 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.40	24.00	11.00
High	5230	-2.40	24.00	11.00

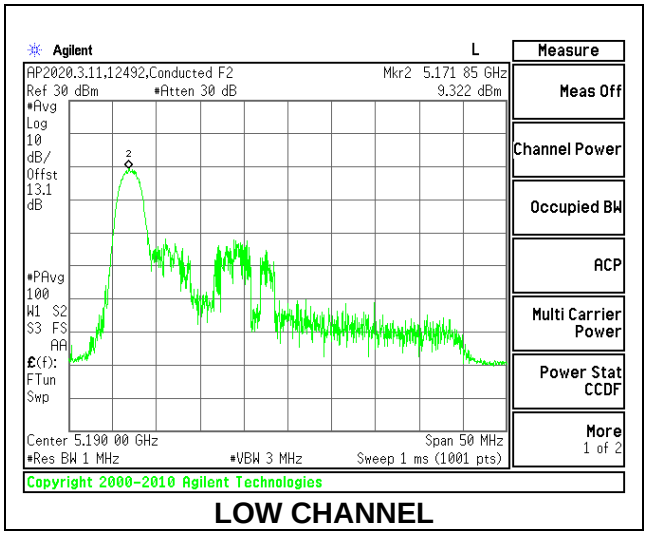
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.73	11.73	24.00	-12.27
High	5230	11.98	11.98	24.00	-12.02

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.322	9.322	11.00	-1.678
High	5230	9.171	9.171	11.00	-1.829



LOW CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.40	24.00	11.00
High	5230	-2.40	24.00	11.00

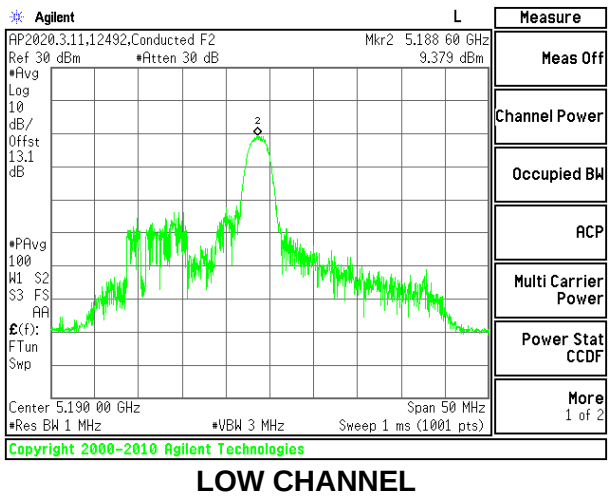
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.88	11.88	24.00	-12.12
High	5230	11.81	11.81	24.00	-12.19

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.379	9.379	11.00	-1.621
High	5230	9.382	9.382	11.00	-1.618



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.40	24.00	11.00
High	5230	-2.40	24.00	11.00

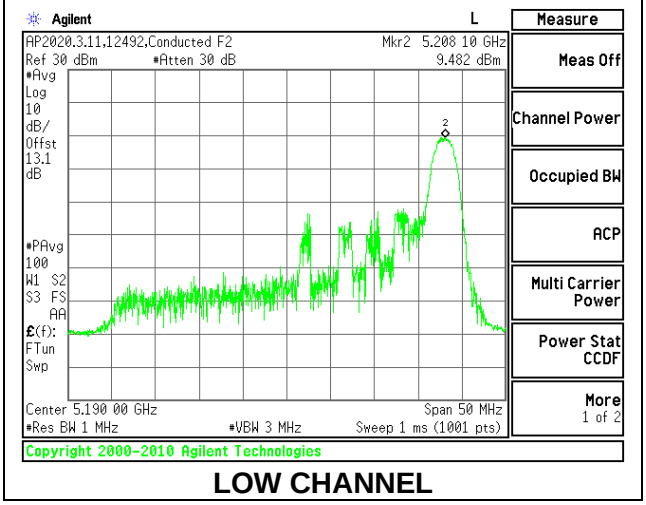
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.89	11.89	24.00	-12.11
High	5230	11.96	11.96	24.00	-12.04

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.482	9.482	11.00	-1.518
High	5230	9.226	9.226	11.00	-1.774



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.40	24.00	11.00
High	5230	-2.40	24.00	11.00

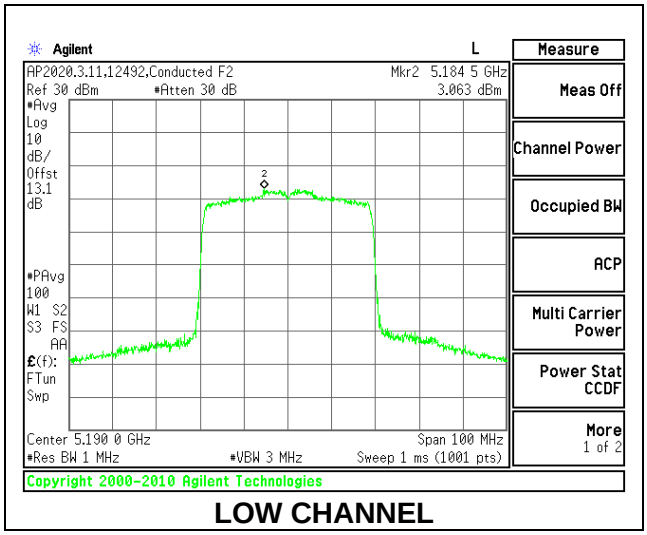
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.80	15.80	24.00	-8.20
High	5230	19.73	19.73	24.00	-4.27

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	3.063	3.063	11.00	-7.937
High	5230	7.666	7.666	11.00	-3.334



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.80	24.00	11.00
High	5230	-2.80	24.00	11.00

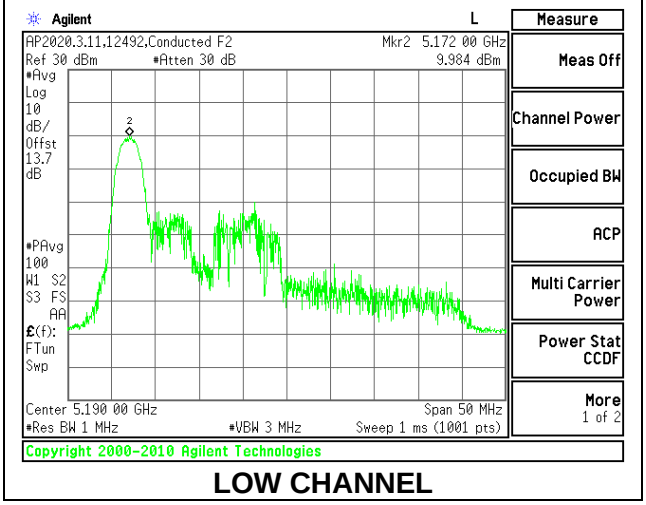
Duty Cycle CF (dB)		**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.79	11.79	24.00	-12.21
High	5230	11.92	11.92	24.00	-12.08

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.984	9.984	11.00	-1.016
High	5230	9.947	9.947	11.00	-1.053



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.80	24.00	11.00
High	5230	-2.80	24.00	11.00

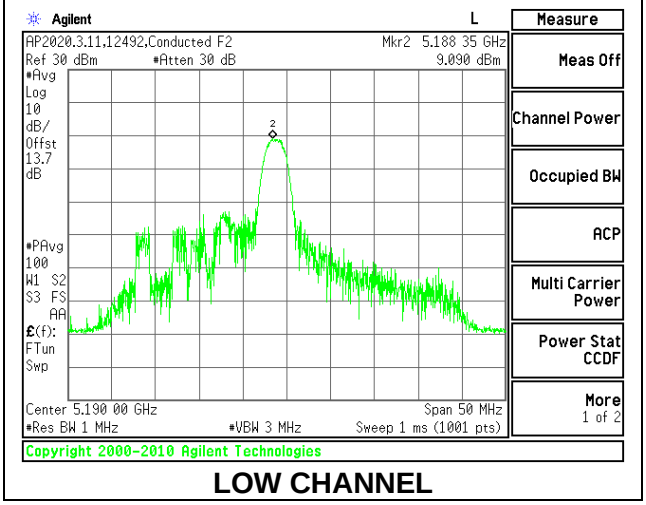
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.90	11.90	24.00	-12.10
High	5230	11.95	11.95	24.00	-12.05

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.090	9.090	11.00	-1.910
High	5230	9.265	9.265	11.00	-1.735



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.80	24.00	11.00
High	5230	-2.80	24.00	11.00

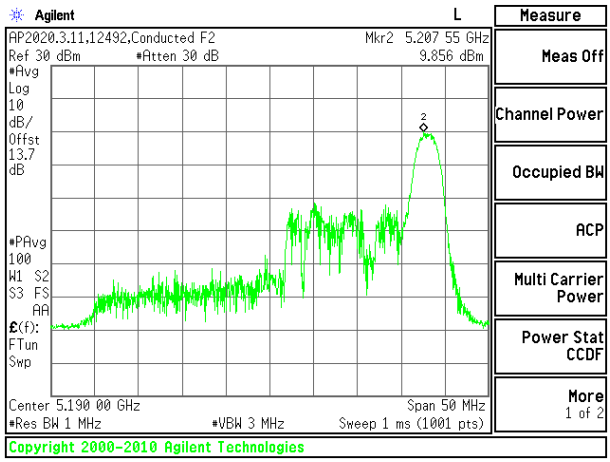
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.89	11.89	24.00	-12.11
High	5230	11.96	11.96	24.00	-12.04

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.856	9.856	11.00	-1.144
High	5230	9.701	9.701	11.00	-1.299



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.80	24.00	11.00
High	5230	-2.80	24.00	11.00

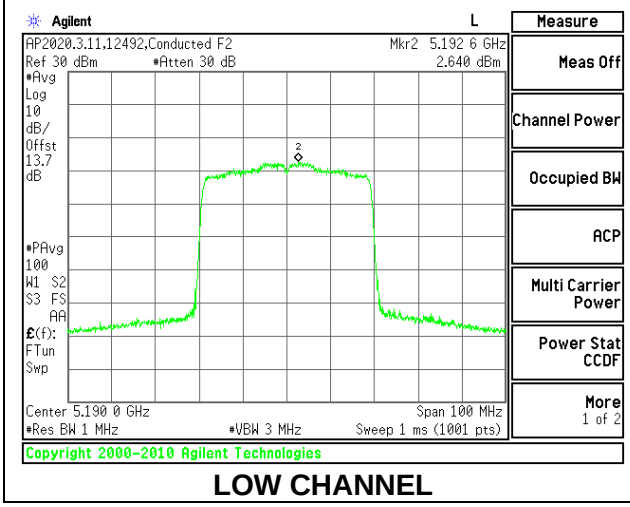
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.89	15.89	24.00	-8.11
High	5230	20.88	20.88	24.00	-3.12

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	2.640	2.640	11.00	-8.360
High	5230	7.728	7.728	11.00	-3.272



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.60	0.41	24.00	11.00
High	5230	-2.60	0.41	24.00	11.00

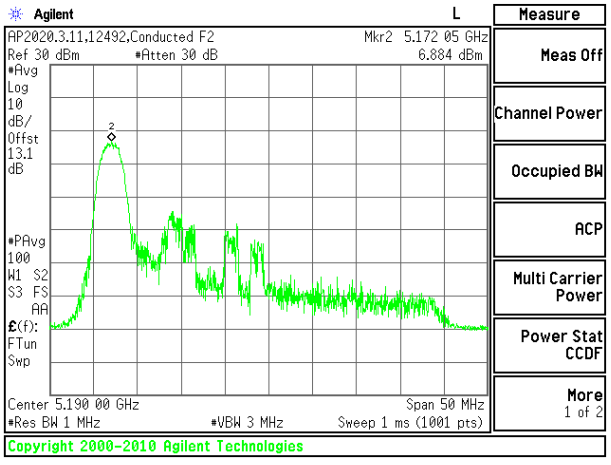
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

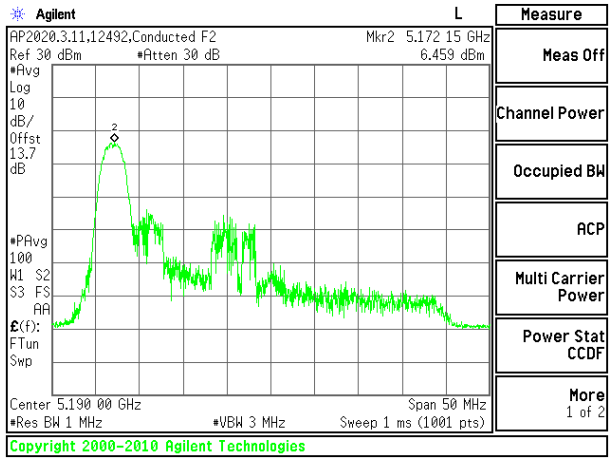
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.78	8.80	11.80	24.00	-12.20
High	5230	8.88	8.92	11.91	24.00	-12.09

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	6.884	6.459	9.687	11.00	-1.313
High	5230	6.898	6.501	9.714	11.00	-1.286



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.60	0.41	24.00	11.00
High	5230	-2.60	0.41	24.00	11.00

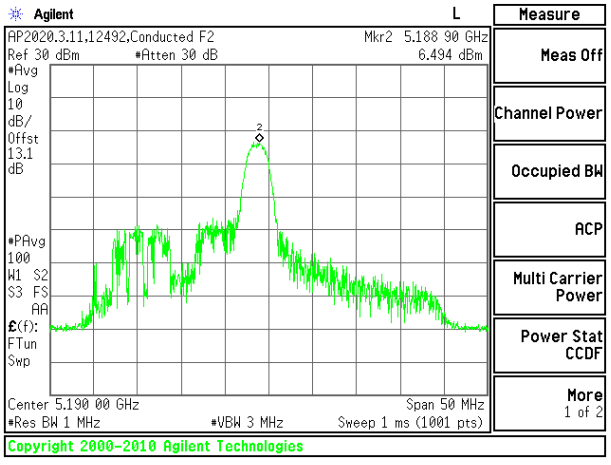
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

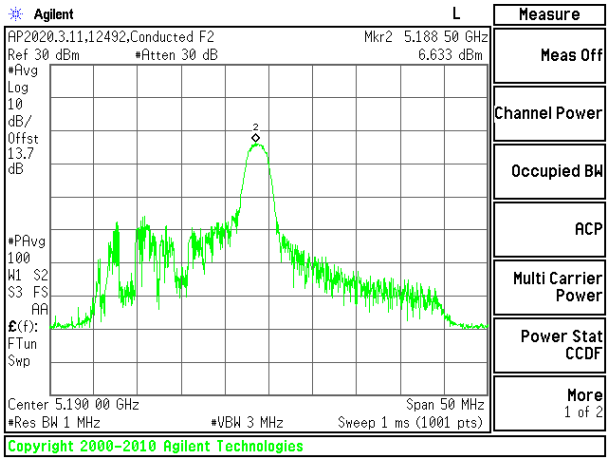
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.79	8.82	11.82	24.00	-12.18
High	5230	8.69	8.84	11.78	24.00	-12.22

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	6.494	6.633	9.574	11.00	-1.426
High	5230	6.354	6.420	9.397	11.00	-1.603



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.60	0.41	24.00	11.00
High	5230	-2.60	0.41	24.00	11.00

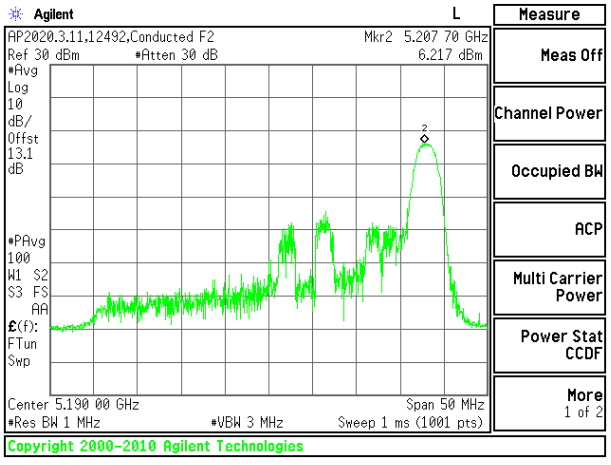
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

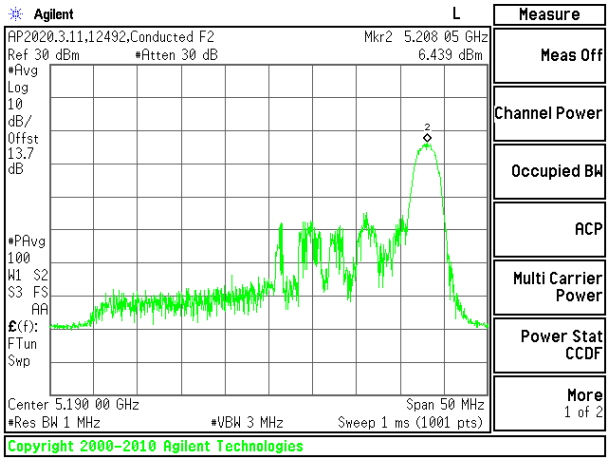
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.67	8.80	11.75	24.00	-12.25
High	5230	8.90	8.79	11.86	24.00	-12.14

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	6.217	6.439	9.340	11.00	-1.660
High	5230	6.159	6.202	9.191	11.00	-1.809



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.60	0.41	24.00	11.00
High	5230	-2.60	0.41	24.00	11.00

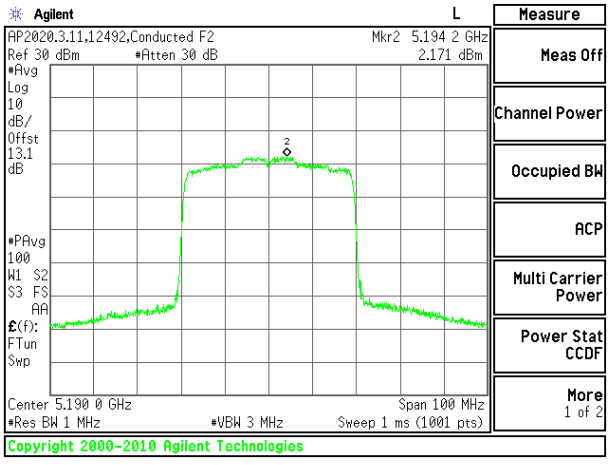
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

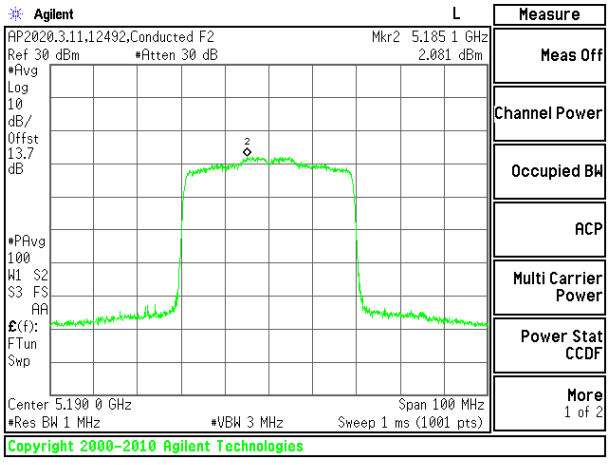
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.29	15.31	18.31	24.00	-5.69
High	5230	19.71	19.83	22.78	24.00	-1.22

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	2.171	2.081	5.137	11.00	-5.863
High	5230	6.663	6.898	9.792	11.00	-1.208



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.6. 802.11ax HE80 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.40	24.00	11.00

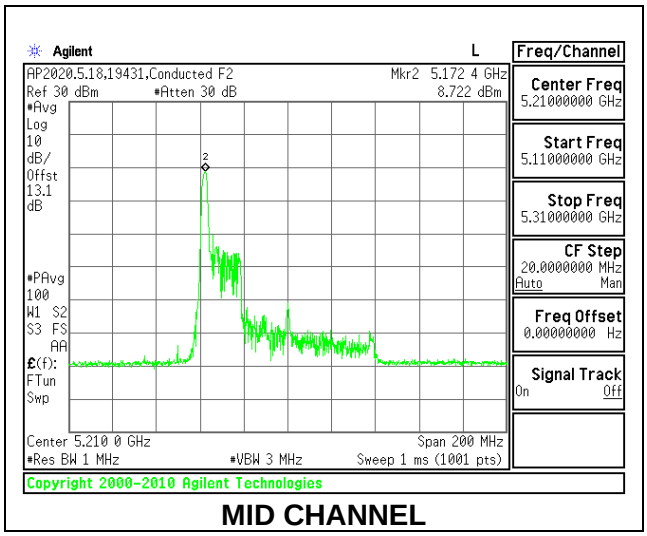
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.87	11.87	24.00	-12.13

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.722	8.722	11.00	-2.278



MID CHANNEL

This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.40	24.00	11.00

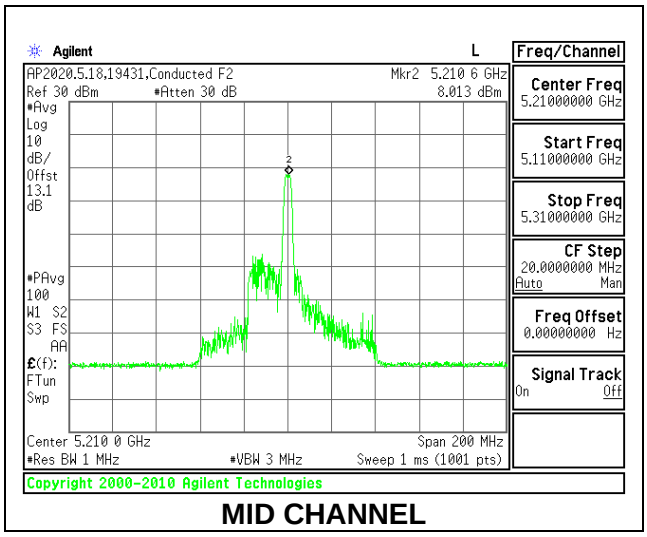
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.82	11.82	24.00	-12.18

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.013	8.013	11.00	-2.987



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.40	24.00	11.00

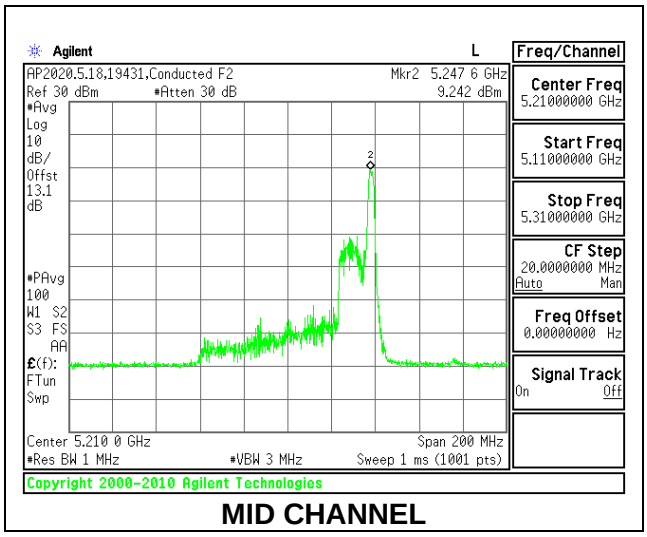
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.77	11.77	24.00	-12.23

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	9.242	9.242	11.00	-1.758



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 6 MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.40	24.00	11.00

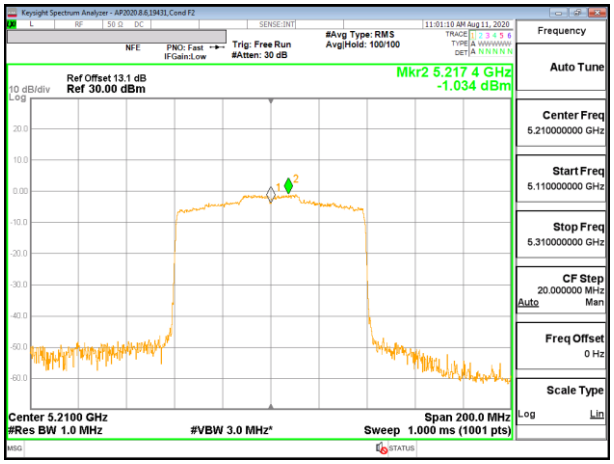
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.83	15.83	24.00	-8.17

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-1.034	-1.034	11.00	-12.034



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.80	24.00	11.00

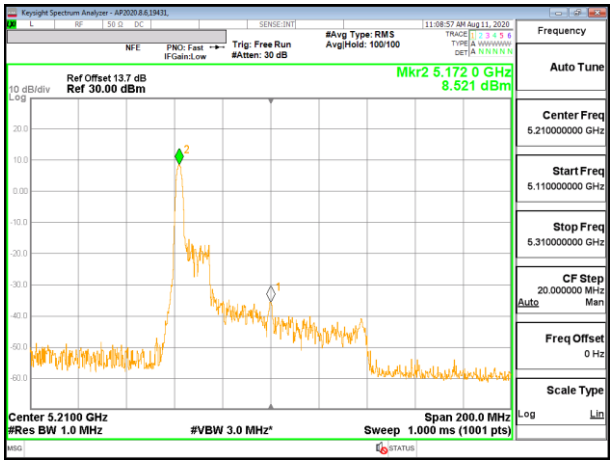
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.69	11.69	24.00	-12.31

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.521	8.521	11.00	-2.479



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.80	24.00	11.00

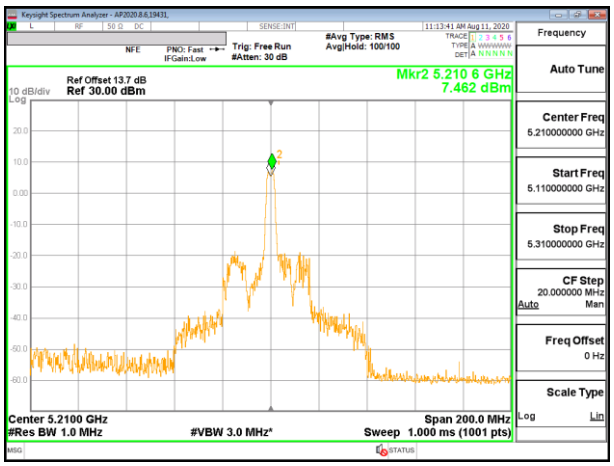
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.76	11.76	24.00	-12.24

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	7.462	7.462	11.00	-3.538



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.80	24.00	11.00

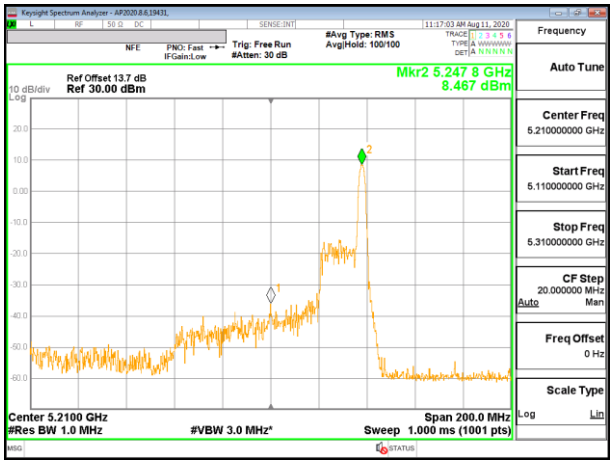
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.79	11.79	24.00	-12.21

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.467	8.467	11.00	-2.533



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.80	24.00	11.00

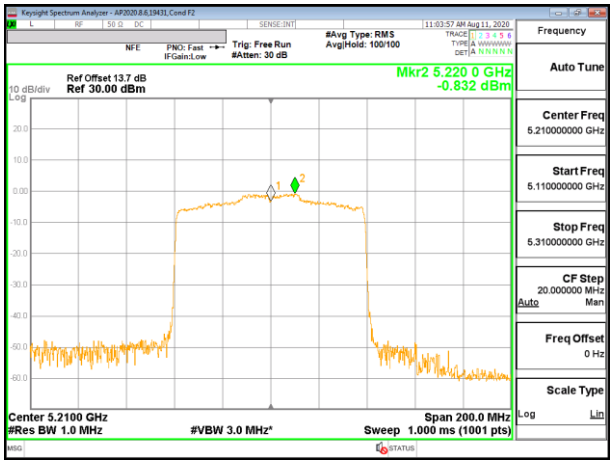
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.83	15.83	24.00	-8.17

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-0.832	-0.832	11.00	-11.832



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-2.60	0.41	24.00	11.00

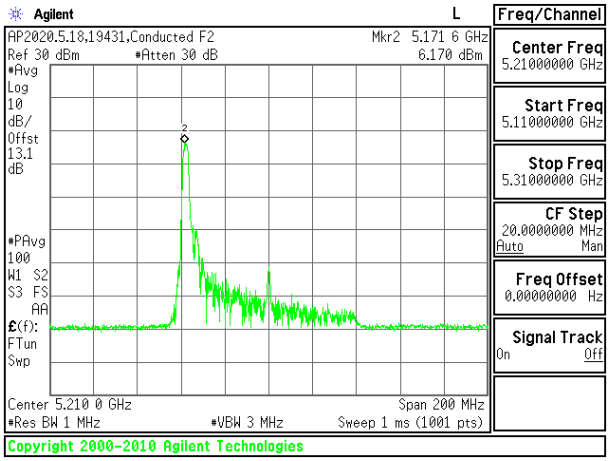
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

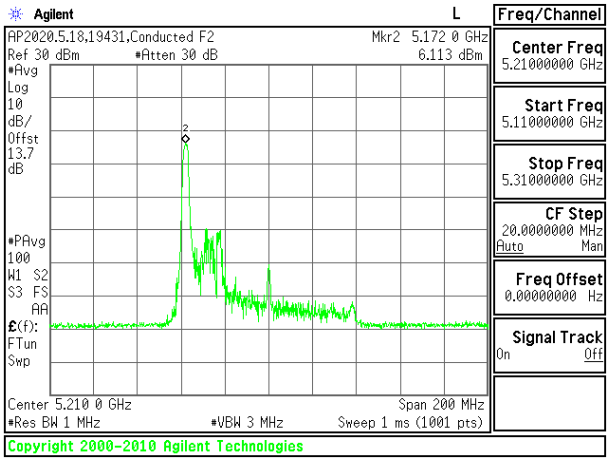
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.88	8.69	11.80	24.00	-12.20

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	6.170	6.113	9.152	11.00	-1.848



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-2.60	0.41	24.00	11.00

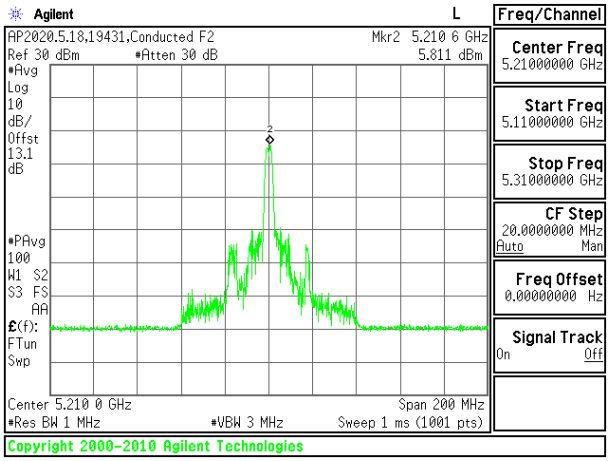
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

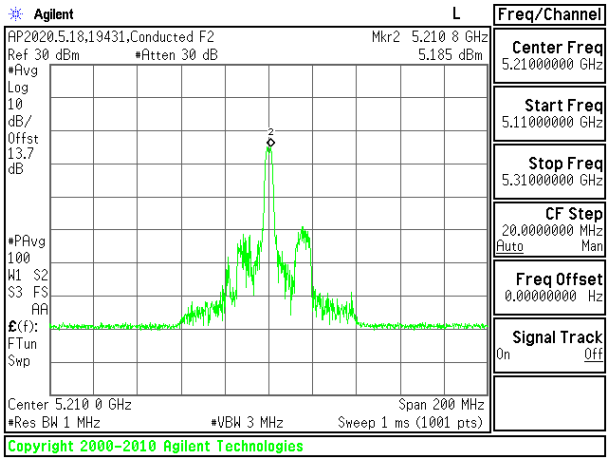
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.59	8.68	11.65	24.00	-12.35

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	5.811	5.185	8.520	11.00	-2.480



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-2.60	0.41	24.00	11.00

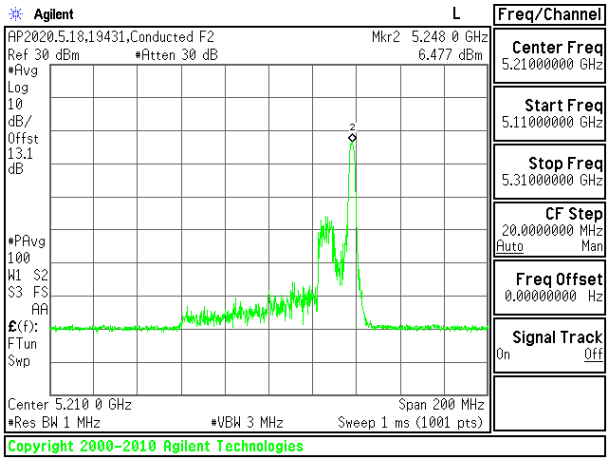
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

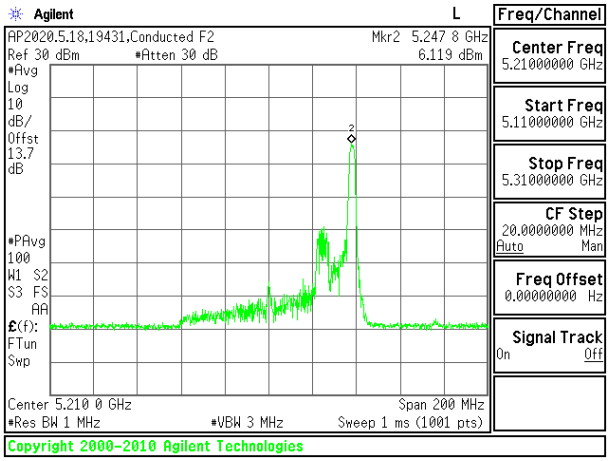
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.66	8.79	11.74	24.00	-12.26

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	6.477	6.119	9.312	11.00	-1.688



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 OFDMA MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	44352
Test Date:	09/10/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-2.60	0.41	24.00	11.00

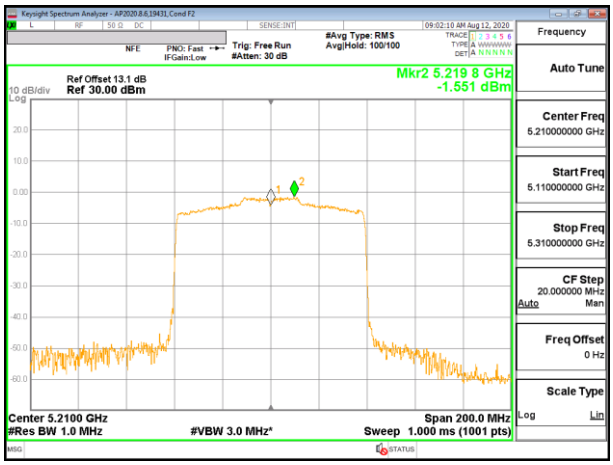
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

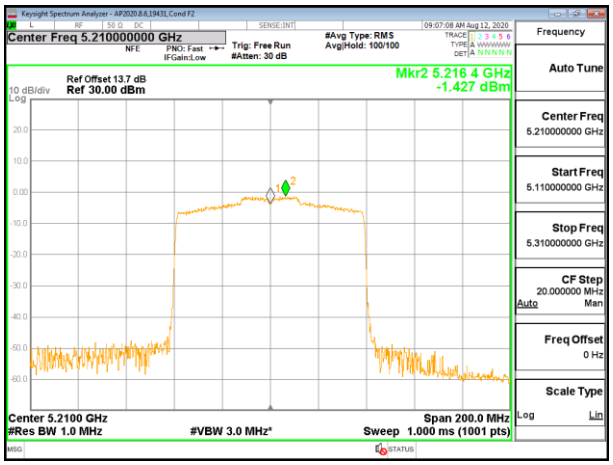
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	14.86	14.90	17.89	24.00	-6.11

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-1.551	-1.427	1.522	11.00	-9.478



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.7. 802.11n HT20 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.50	-1.80	24.00	11.00
Mid	5300	21.70	-1.80	24.00	11.00
High	5320	21.70	-1.80	24.00	11.00

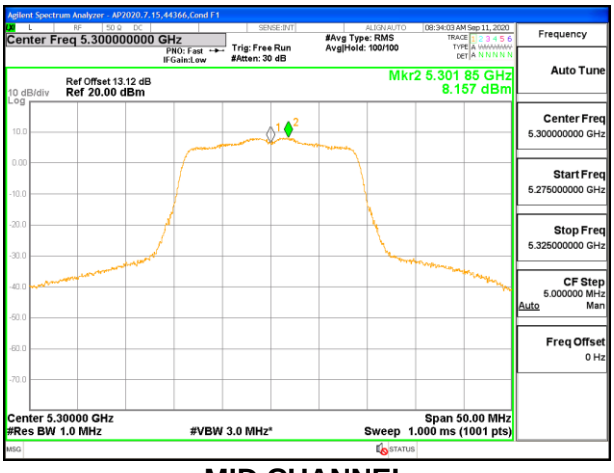
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.84	18.84	24.00	-5.16
Mid	5300	18.87	18.87	24.00	-5.13
High	5320	18.75	18.75	24.00	-5.25

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.146	8.146	11.00	-2.854
Mid	5300	8.157	8.157	11.00	-2.843
High	5320	8.065	8.065	11.00	-2.935



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.80	-2.90	24.00	11.00
Mid	5300	21.45	-2.90	24.00	11.00
High	5320	21.65	-2.90	24.00	11.00

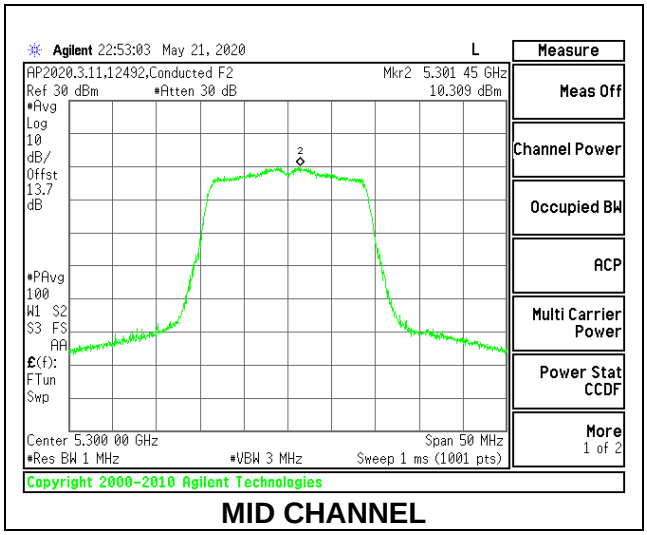
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	20.89	20.89	24.00	-3.11
Mid	5300	20.92	20.92	24.00	-3.08
High	5320	18.79	18.79	24.00	-5.21

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	9.863	9.863	11.00	-1.137
Mid	5300	10.309	10.309	11.00	-0.691
High	5320	8.928	8.928	11.00	-2.072



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.20	-2.32	0.68	24.00	11.00
Mid	5300	21.20	-2.32	0.68	24.00	11.00
High	5320	21.30	-2.32	0.68	24.00	11.00

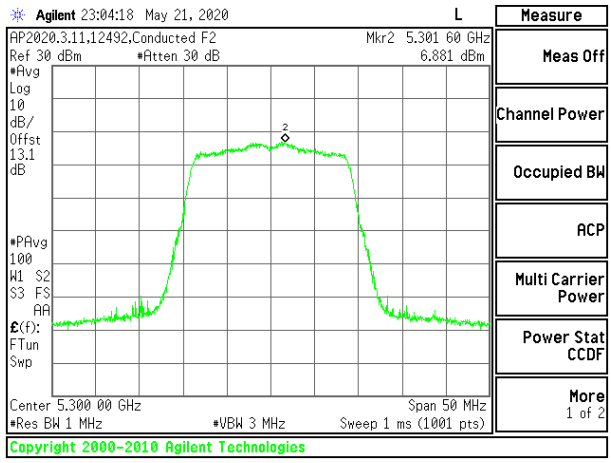
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

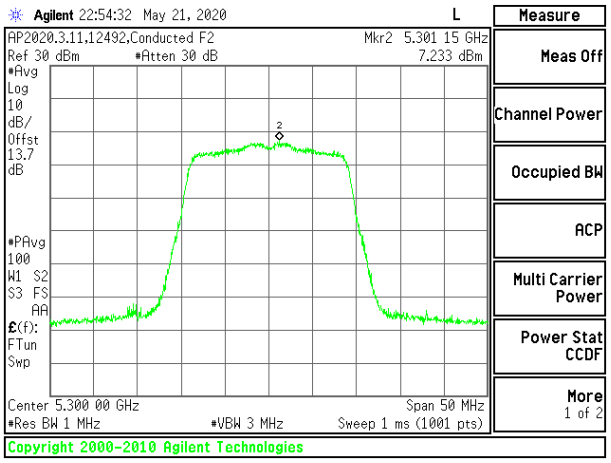
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	17.76	17.71	20.75	24.00	-3.25
Mid	5300	17.87	17.98	20.94	24.00	-3.06
High	5320	17.82	17.88	20.86	24.00	-3.14

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	6.506	6.379	9.453	11.00	-1.547
Mid	5300	6.881	7.233	10.071	11.00	-0.929
High	5320	6.771	6.718	9.755	11.00	-1.245



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

d

8.4.8. 802.11n HT40 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	42.20	-1.80	24.00	11.00
High	5310	42.00	-1.80	24.00	11.00

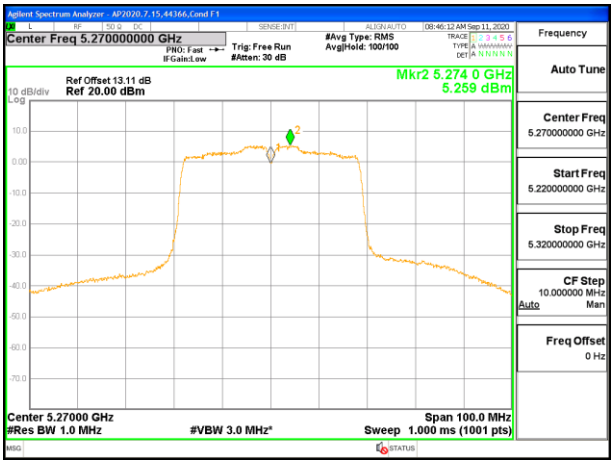
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	18.88	18.88	24.00	-5.12
High	5310	17.35	17.35	24.00	-6.65

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	5.259	5.259	11.00	-5.741
High	5310	4.431	4.431	11.00	-6.569



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

1TX Antenna 5 MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	42.50	-2.90	24.00	11.00
High	5310	42.40	-2.90	24.00	11.00

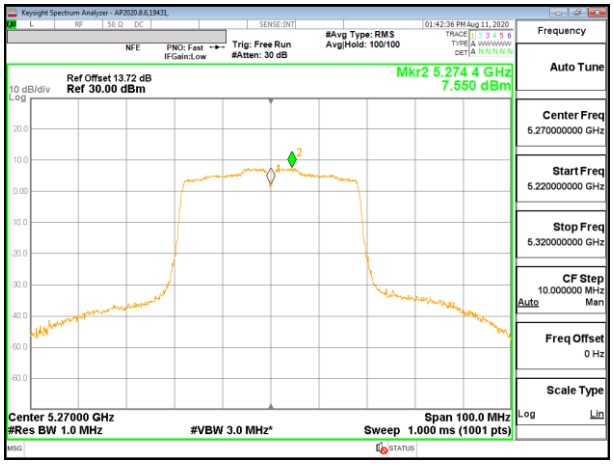
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	20.67	20.67	24.00	-3.33
High	5310	17.39	17.39	24.00	-6.61

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	7.550	7.640	11.00	-3.360
High	5310	4.309	4.309	11.00	-6.691



LOW CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

2TX Antenna 6 + Antenna 5 CDD MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	40.70	-2.32	0.68	24.00	11.00
High	5310	40.80	-2.32	0.68	24.00	11.00

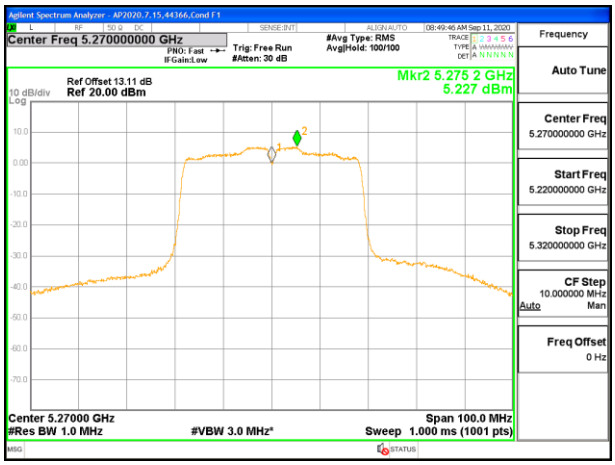
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

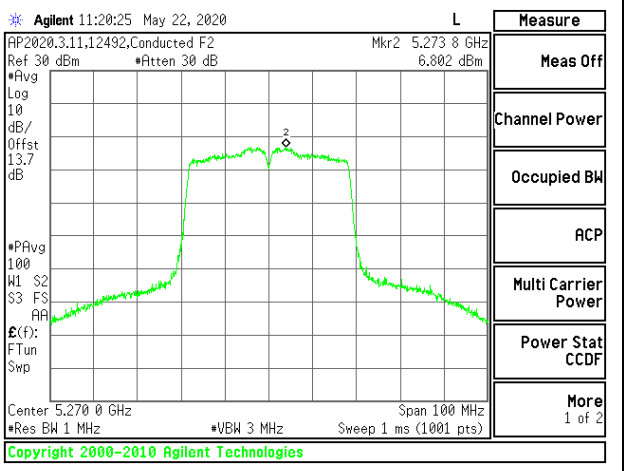
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	18.88	19.82	22.39	24.00	-1.61
High	5310	16.24	16.19	19.23	24.00	-4.77

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	5.227	6.802	9.186	11.00	-1.814
High	5310	3.923	3.807	6.966	11.00	-4.034



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.

8.4.9. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Test Engineer:	44352
Test Date:	9/1/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	83.00	-1.80	24.00	11.00

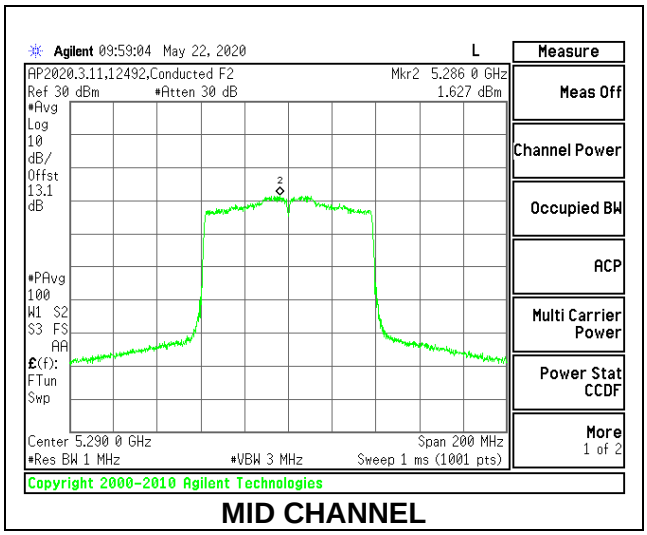
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	16.40	16.40	24.00	-7.60

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	1.627	1.817	11.00	-9.183



MID CHANNEL

UL VERIFICATION SERVICES INC.
47173 Benicia Street, Fremont, CA 94538; USA TEL:(510) 319-4000 FAX:(510) 661-0888
This report shall not be reproduced except in full, without the written approval of UL Verification Services Inc.