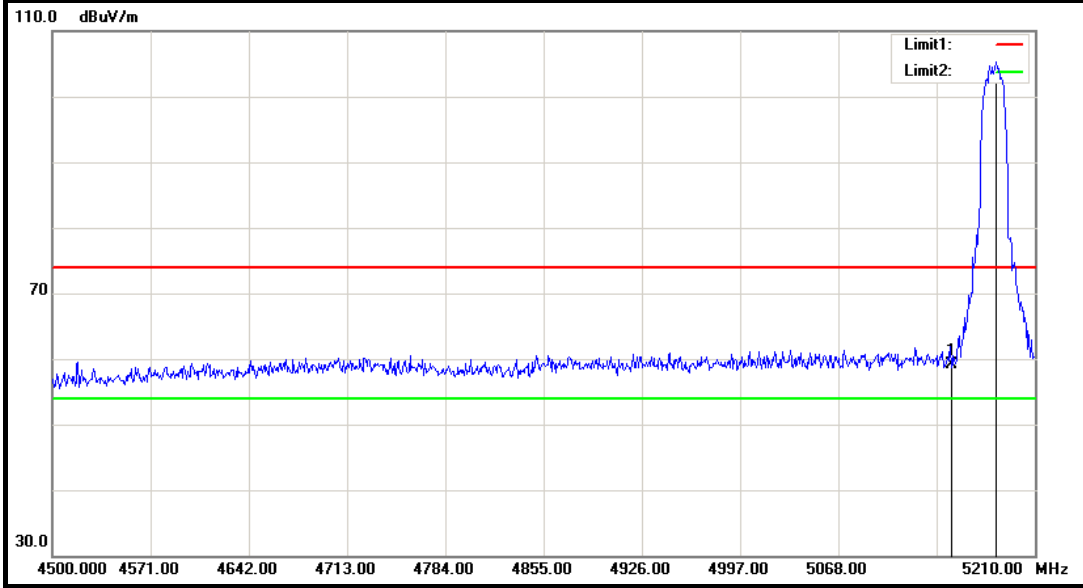
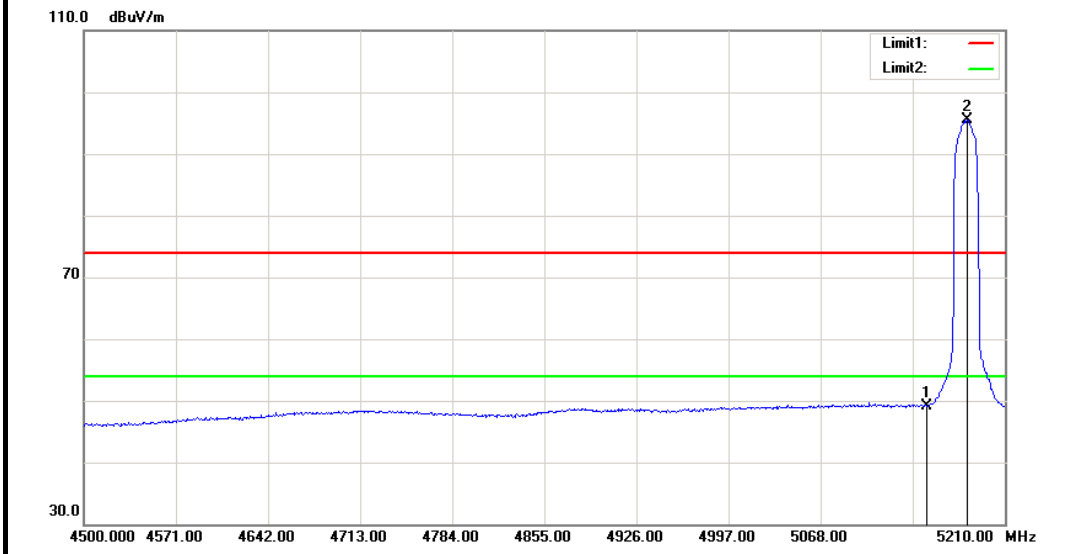
Detector mode: Peak **Polarity: Horizontal**



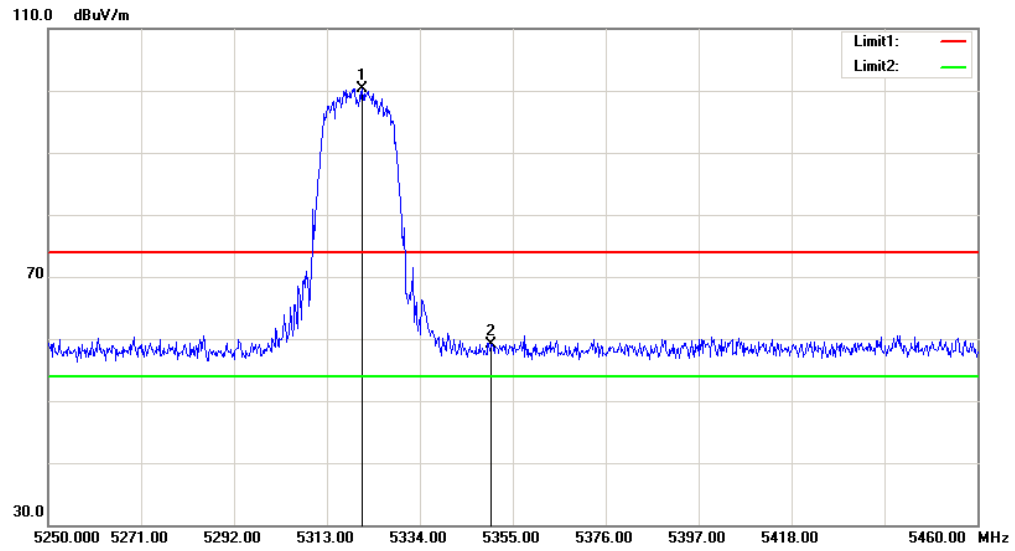
Detector mode: Average **Polarity: Horizontal**



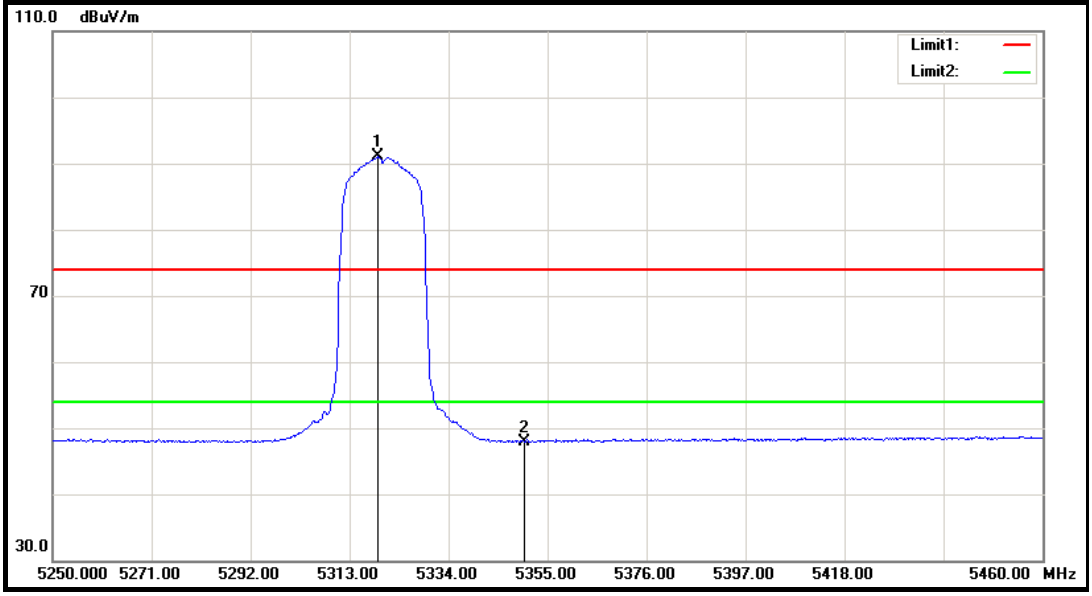
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	53.90	5.25	59.15	74.00	-14.85	Peak	Horizontal
2	5182.310	99.92	5.30	105.22	---	---	Peak	Horizontal
1	5150.000	43.88	5.25	49.13	54.00	-4.87	Average	Horizontal
2	5180.890	90.25	5.30	95.55	---	---	Average	Horizontal

IEEE 802.11a mode / 5320MHz

Detector mode: Peak **Polarity: Vertical**

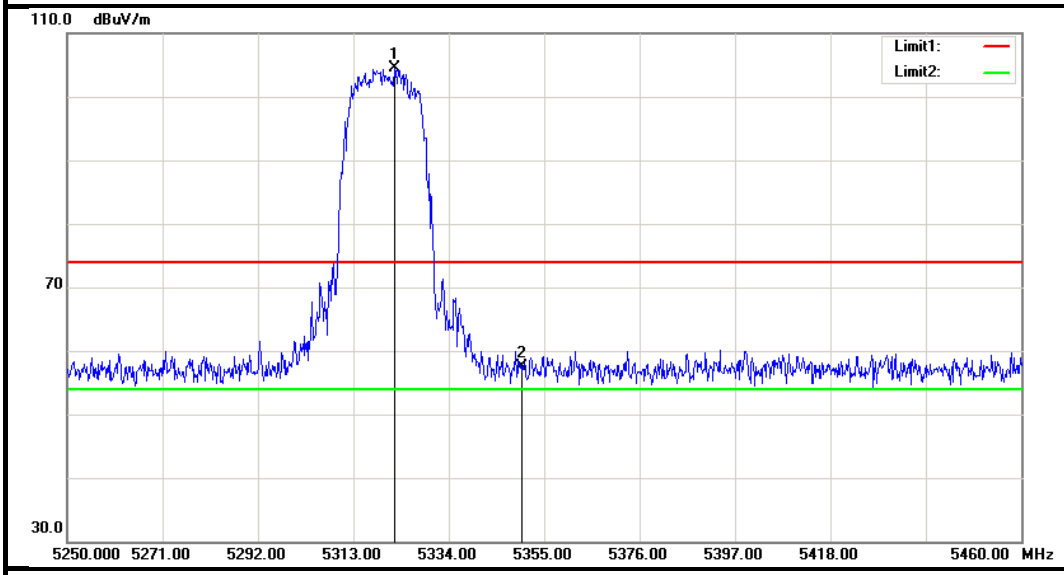


Detector mode: Average **Polarity: Vertical**

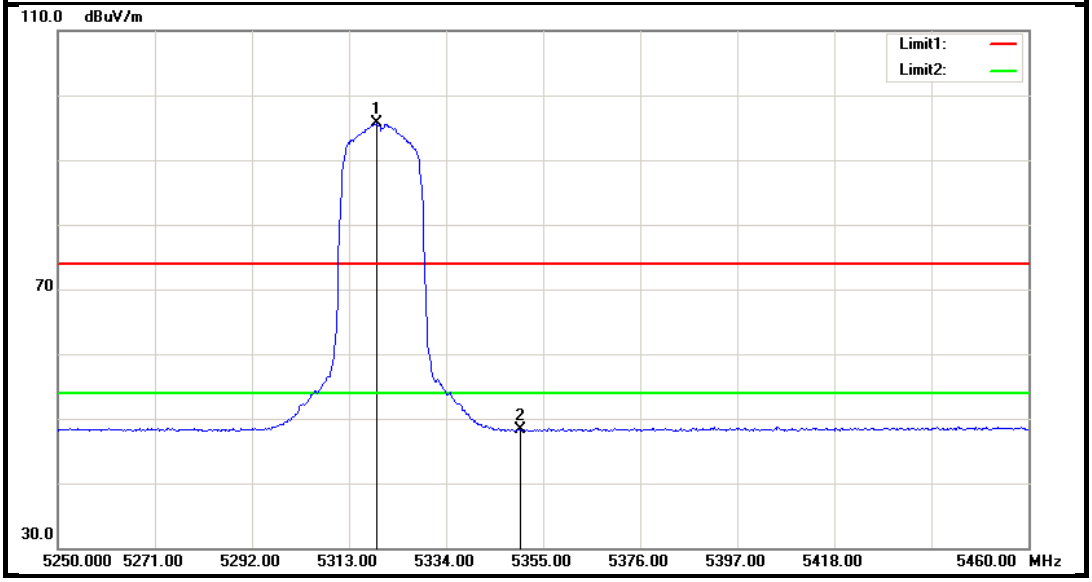


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5320.980	94.81	5.55	100.36	---	---	Peak	Vertical
2	5350.000	53.48	5.60	59.08	74.00	-14.92	Peak	Vertical
1	5318.880	85.46	5.55	91.01	---	---	Average	Vertical
2	5350.000	42.35	5.60	47.95	54.00	-6.05	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



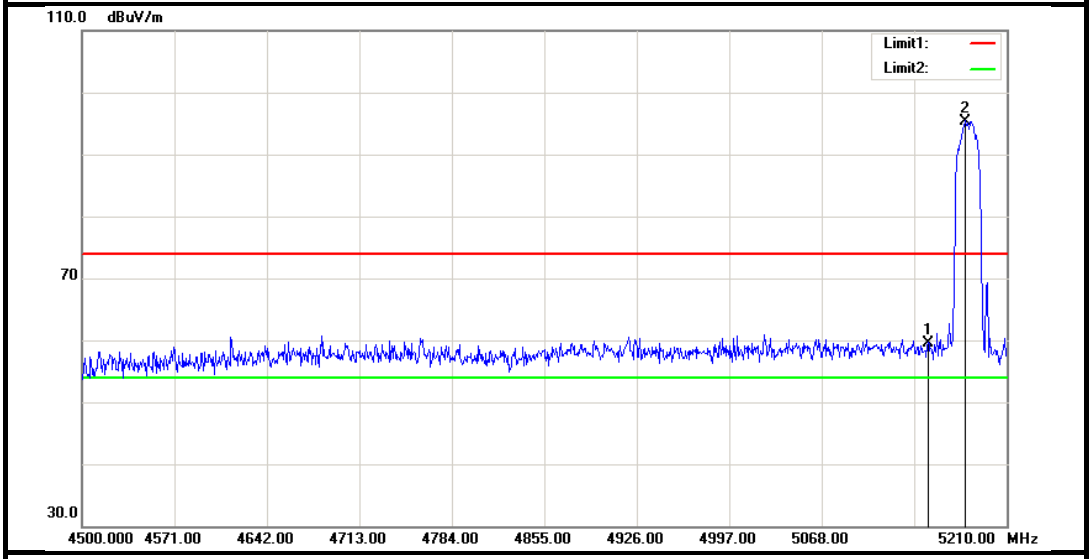
Detector mode: Average **Polarity: Horizontal**



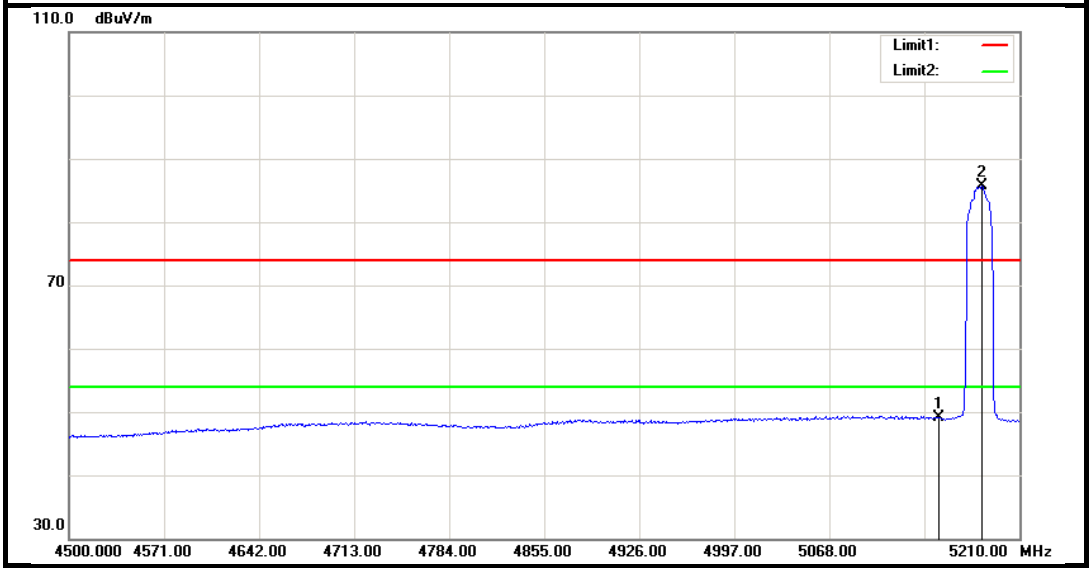
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5322.030	98.96	5.55	104.51	---	---	Peak	Horizontal
2	5350.000	51.92	5.60	57.52	74.00	-16.48	Peak	Horizontal
1	5318.880	90.09	5.55	95.64	---	---	Average	Horizontal
2	5350.000	42.63	5.60	48.23	54.00	-5.77	Average	Horizontal

IEEE 802.11n HT 20 MHz mode / 5180 MHz

Detector mode: Peak **Polarity: Vertical**

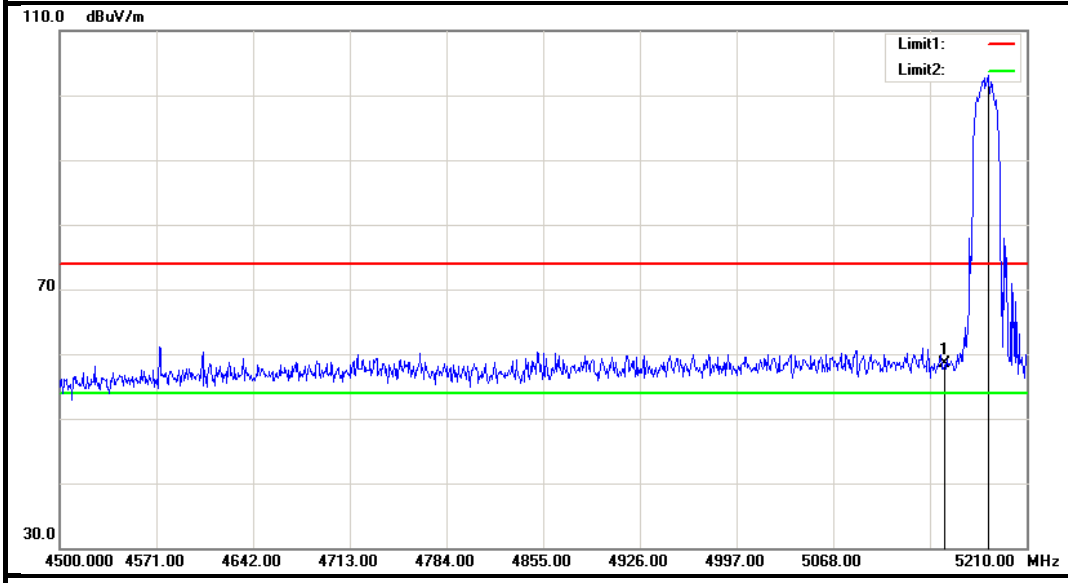


Detector mode: Average **Polarity: Vertical**

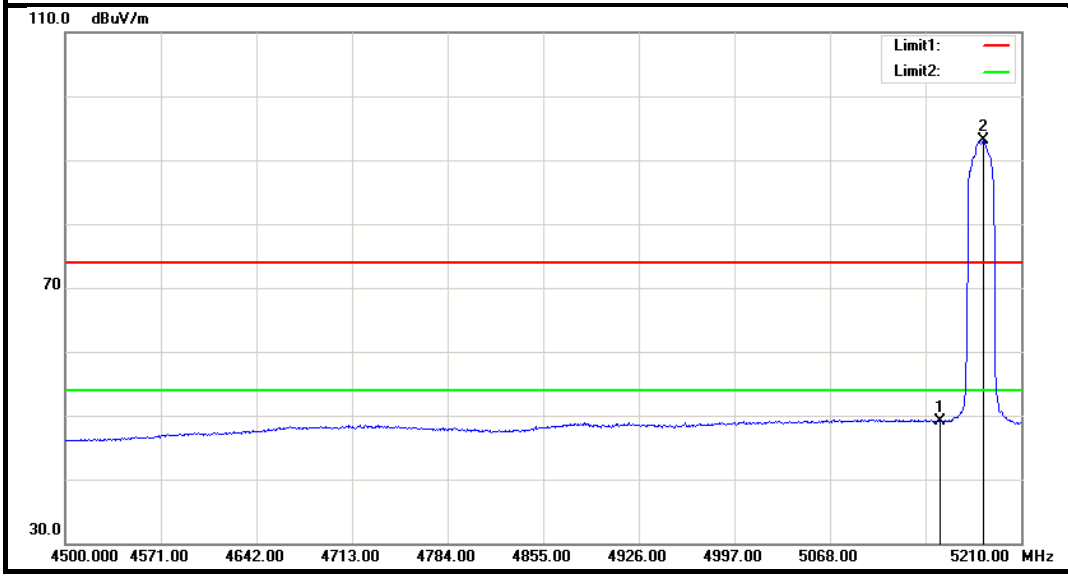


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	54.29	5.25	59.54	74.00	-14.46	Peak	Vertical
2	5178.050	90.10	5.30	95.40	---	---	Peak	Vertical
1	5150.000	43.92	5.25	49.17	54.00	-4.83	Average	Vertical
2	5181.600	80.47	5.30	85.77	---	---	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



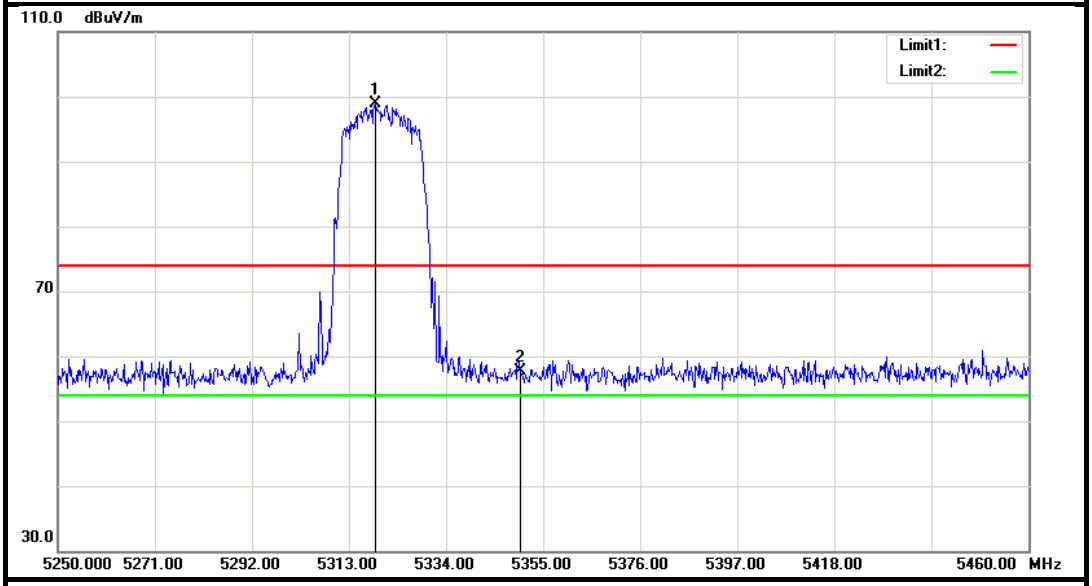
Detector mode: Average **Polarity: Horizontal**



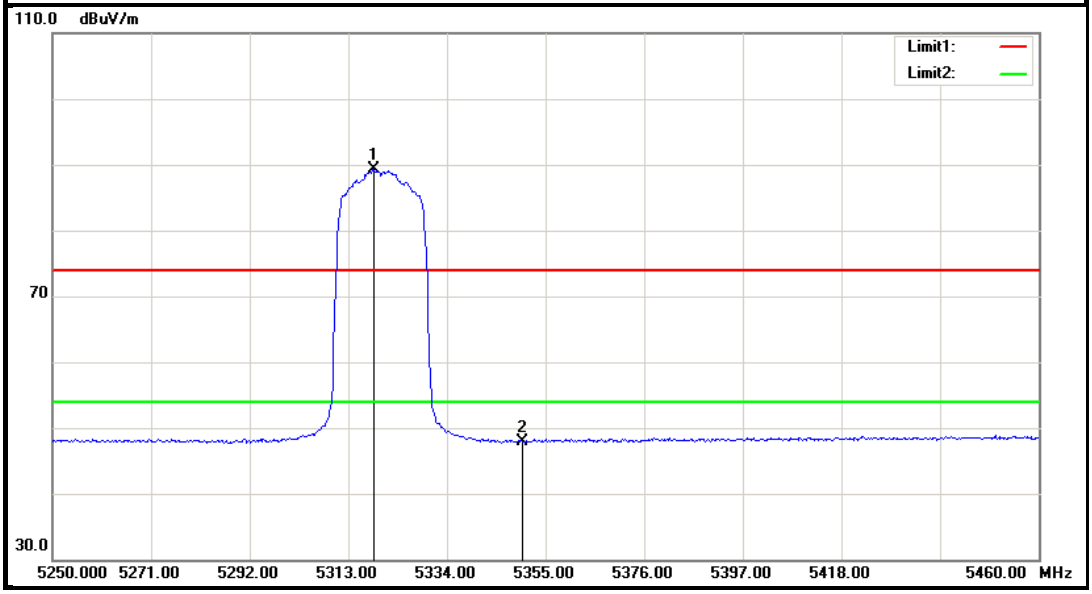
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	53.31	5.25	58.56	74.00	-15.44	Peak	Horizontal
2	5181.600	97.84	5.30	103.14	---	---	Peak	Horizontal
1	5150.000	43.85	5.25	49.10	54.00	-4.90	Average	Horizontal
2	5181.600	87.81	5.30	93.11	---	---	Average	Horizontal

IEEE 802.11n HT 20 MHz mode / 5320 MHz

Detector mode: Peak **Polarity: Vertical**

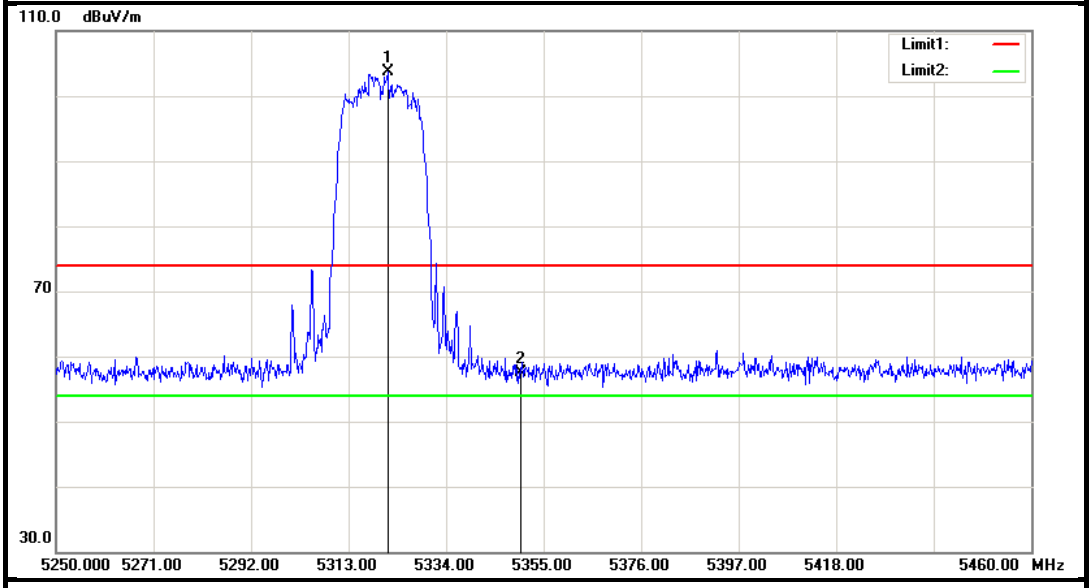


Detector mode: Average **Polarity: Vertical**

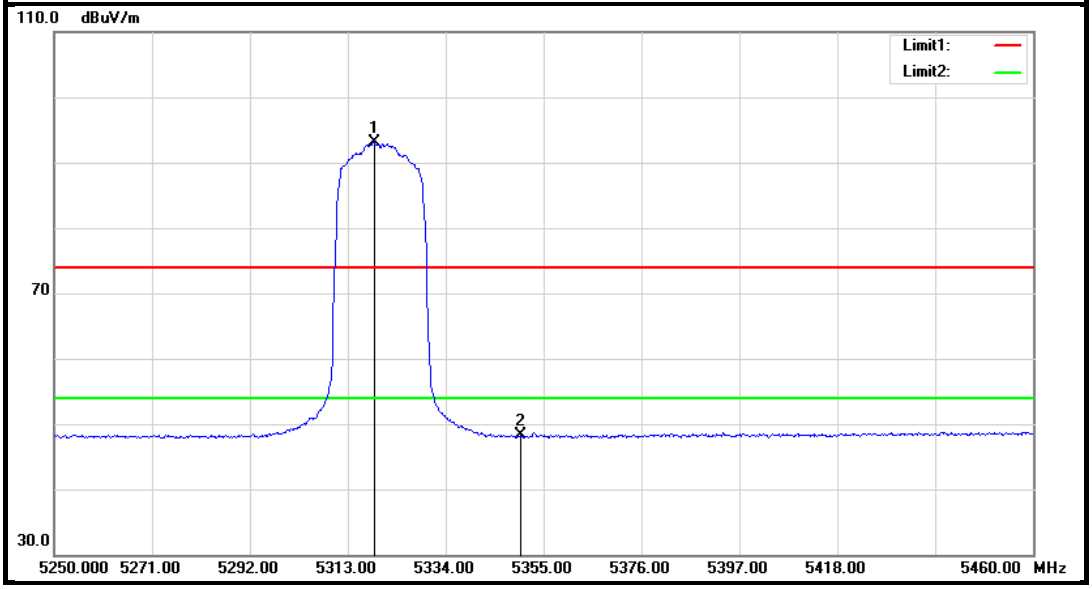


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5318.670	93.41	5.55	98.96	---	---	Peak	Vertical
2	5350.000	52.06	5.60	57.66	74.00	-16.34	Peak	Vertical
1	5318.460	83.72	5.55	89.27	---	---	Average	Vertical
2	5350.000	42.28	5.60	47.88	54.00	-6.12	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



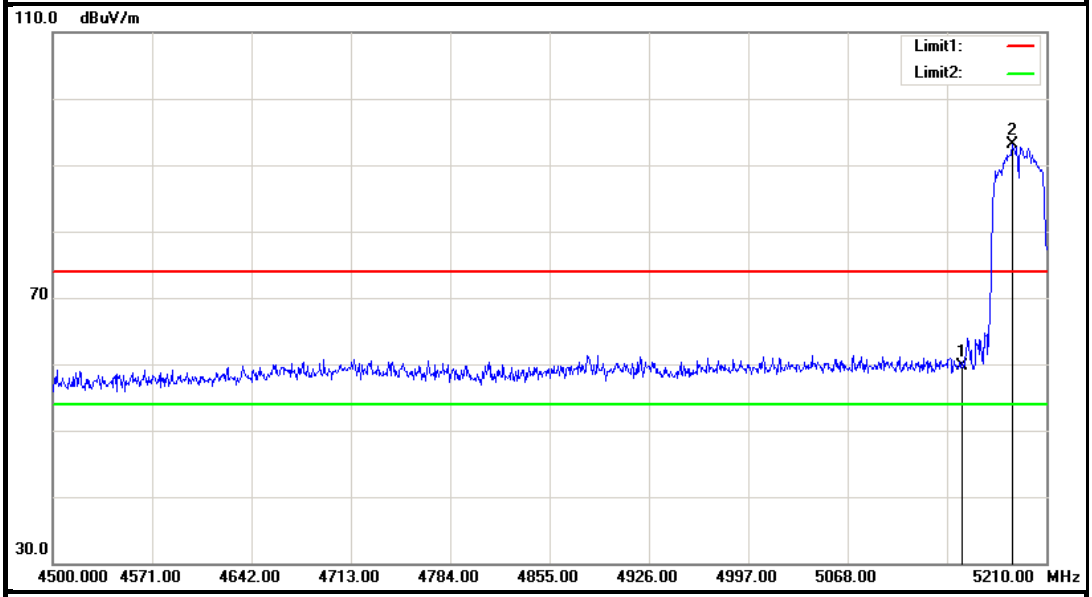
Detector mode: Average **Polarity: Horizontal**



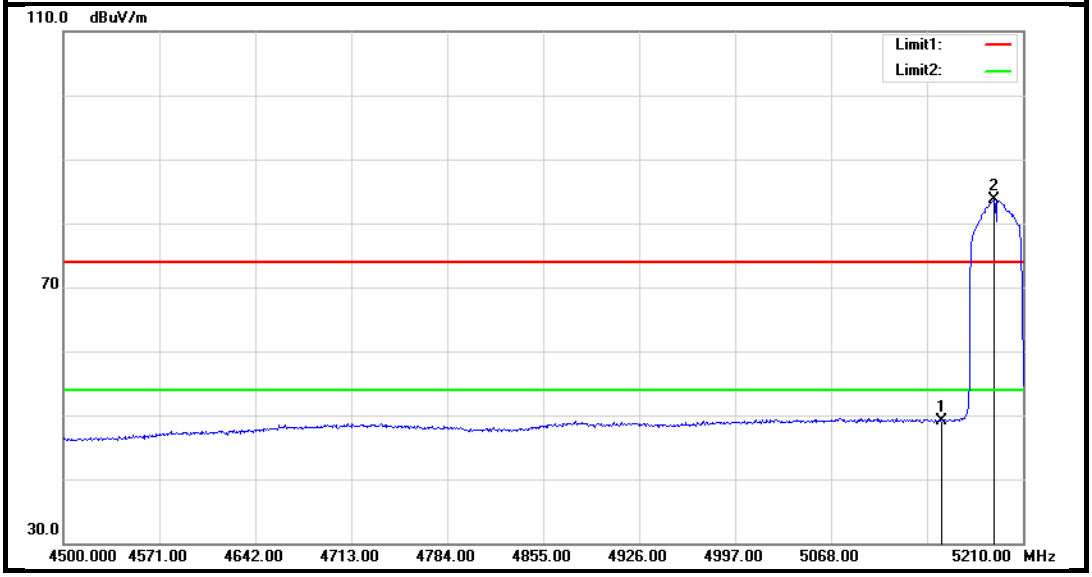
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5321.400	98.07	5.55	103.62	---	---	Peak	Horizontal
2	5350.000	51.88	5.60	57.48	74.00	-16.52	Peak	Horizontal
1	5318.670	87.62	5.55	93.17	---	---	Average	Horizontal
2	5350.000	42.61	5.60	48.21	54.00	-5.79	Average	Horizontal

IEEE 802.11n HT 40 MHz mode / 5190 MHz

Detector mode: Peak **Polarity: Vertical**

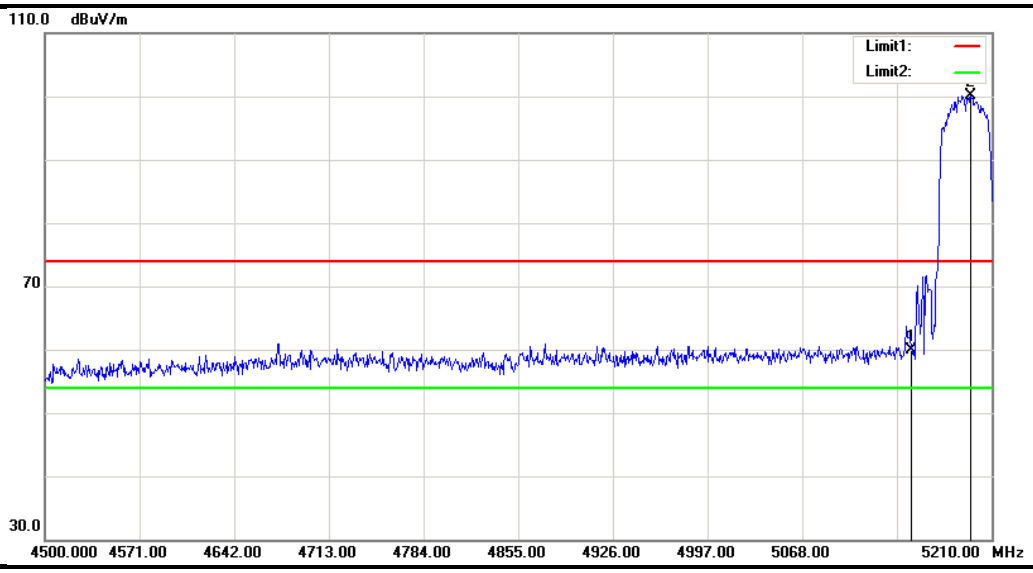


Detector mode: Average **Polarity: Vertical**

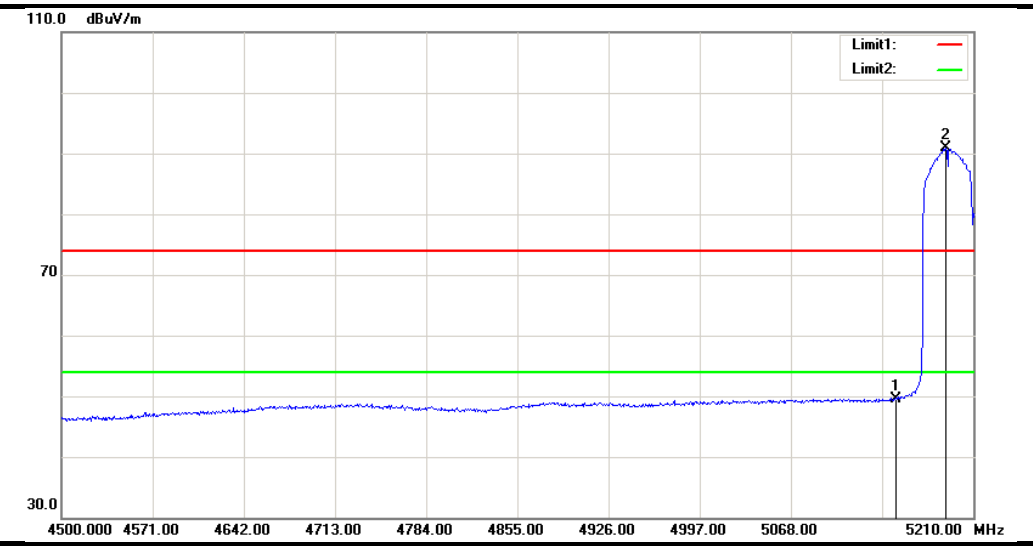


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	54.43	5.25	59.68	74.00	-14.32	Peak	Vertical
2	5185.860	87.70	5.31	93.01	---	---	Peak	Vertical
1	5150.000	43.93	5.25	49.18	54.00	-4.82	Average	Vertical
2	5188.700	78.43	5.32	83.75	---	---	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



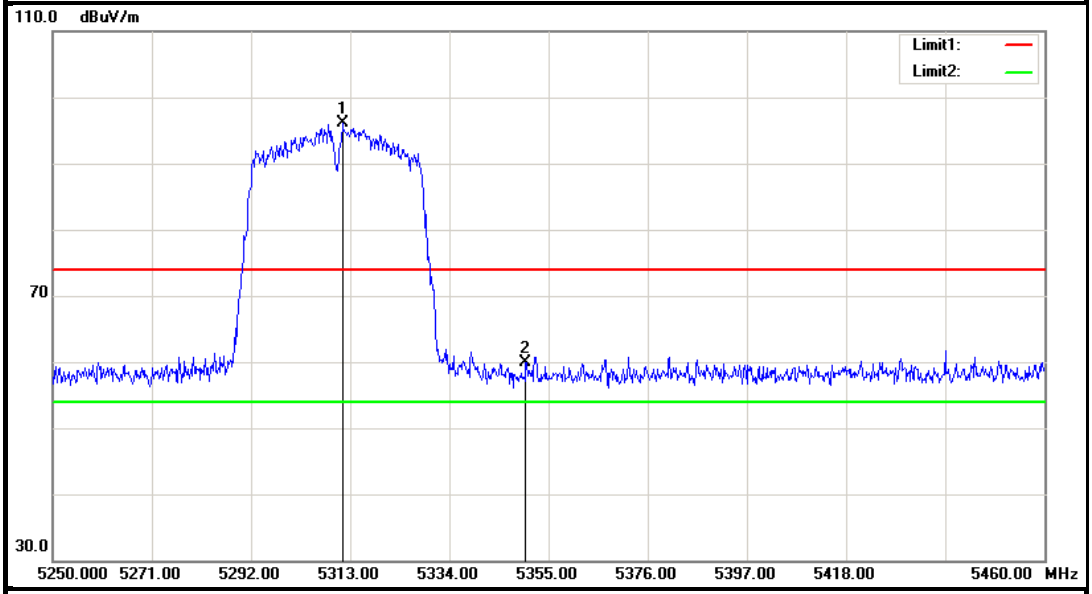
Detector mode: Average **Polarity: Horizontal**



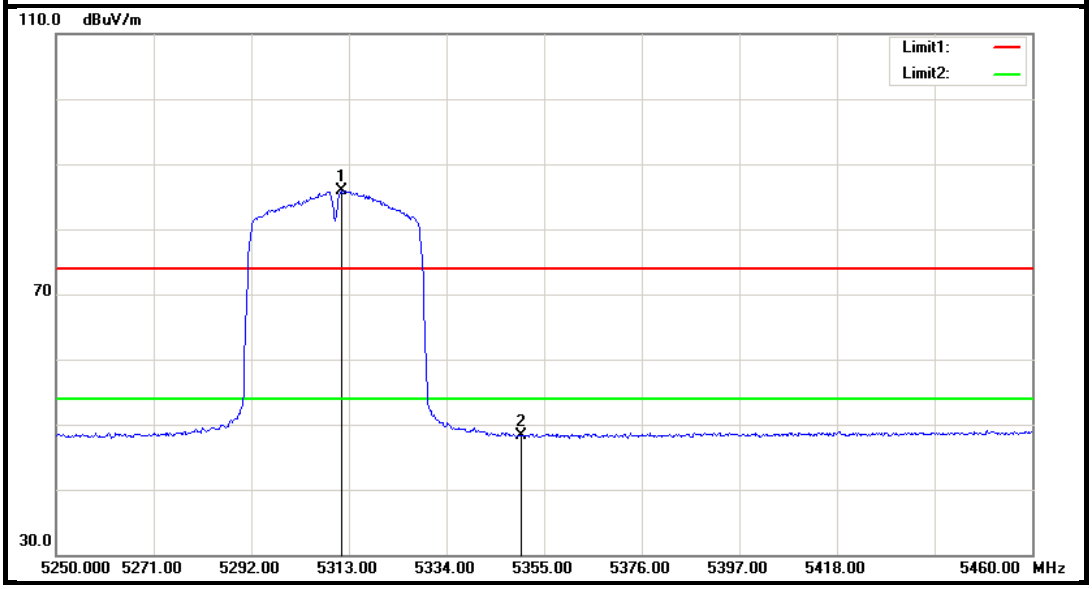
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	54.62	5.25	59.87	74.00	-14.13	Peak	Horizontal
2	5194.380	94.70	5.33	100.03	---	---	Peak	Horizontal
1	5150.000	44.17	5.25	49.42	54.00	-4.58	Average	Horizontal
2	5188.700	85.54	5.32	90.86	---	---	Average	Horizontal

IEEE 802.11n HT 40 MHz mode / 5310 MHz

Detector mode: Peak **Polarity: Vertical**

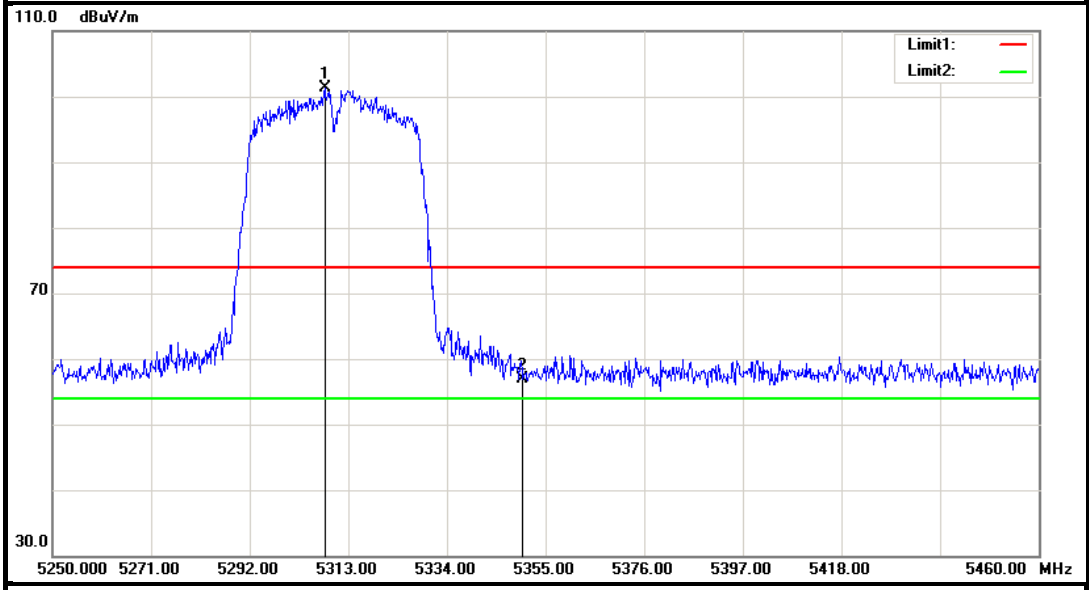


Detector mode: Average **Polarity: Vertical**

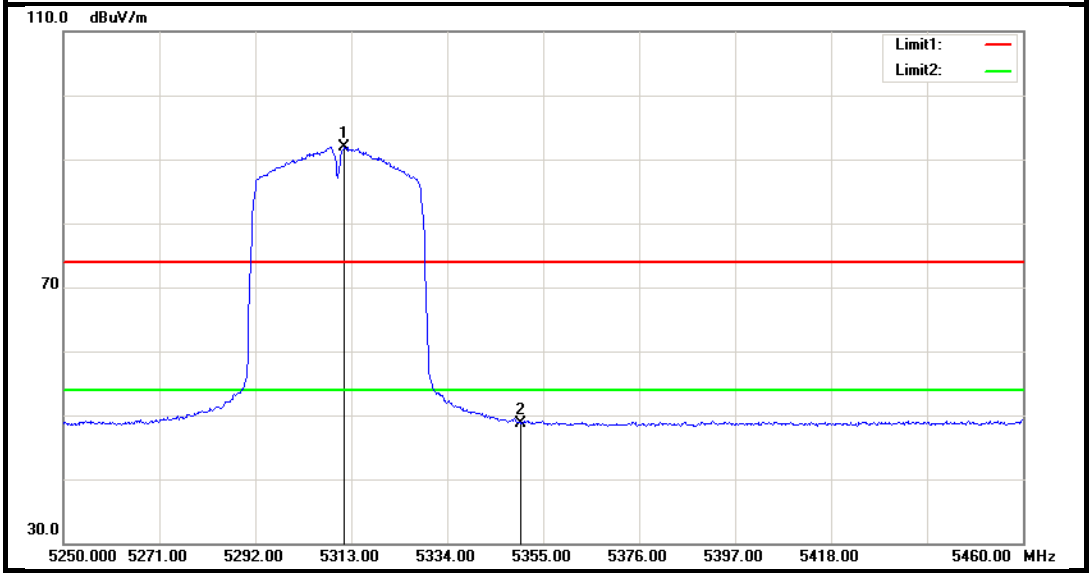


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5311.320	90.64	5.53	96.17	---	---	Peak	Vertical
2	5350.000	54.33	5.60	59.93	74.00	-14.07	Peak	Vertical
1	5311.320	80.44	5.53	85.97	---	---	Average	Vertical
2	5350.000	42.63	5.60	48.23	54.00	-5.77	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



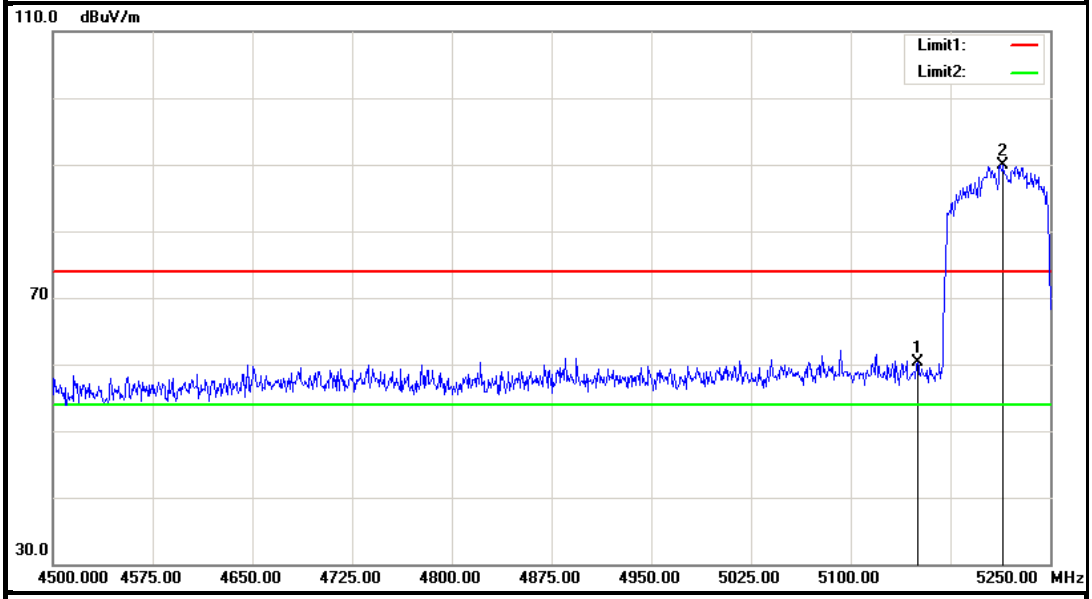
Detector mode: Average **Polarity: Horizontal**



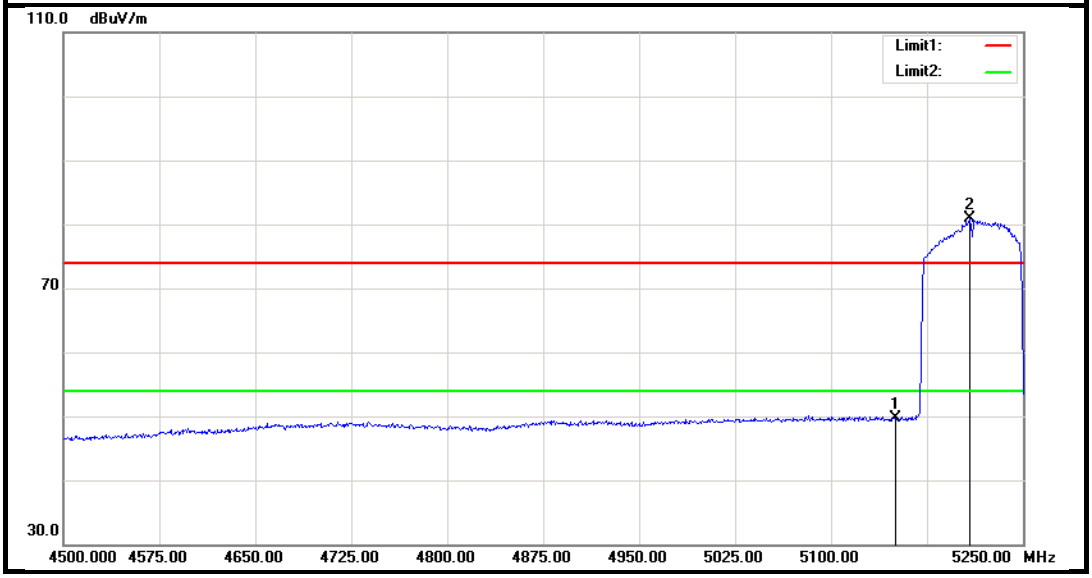
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5307.960	95.80	5.53	101.33	---	---	Peak	Horizontal
2	5350.000	51.27	5.60	56.87	74.00	-17.13	Peak	Horizontal
1	5311.530	86.47	5.53	92.00	---	---	Average	Horizontal
2	5350.000	43.18	5.60	48.78	54.00	-5.22	Average	Horizontal

IEEE 802.11ac 80 mode / 5210 MHz

Detector mode: Peak **Polarity: Vertical**

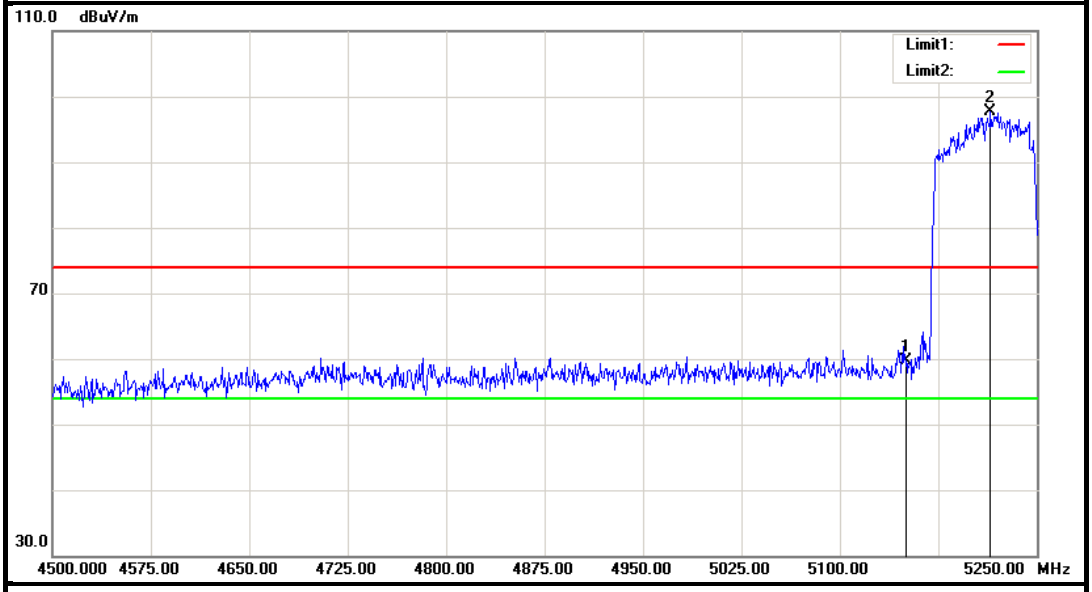


Detector mode: Average **Polarity: Vertical**

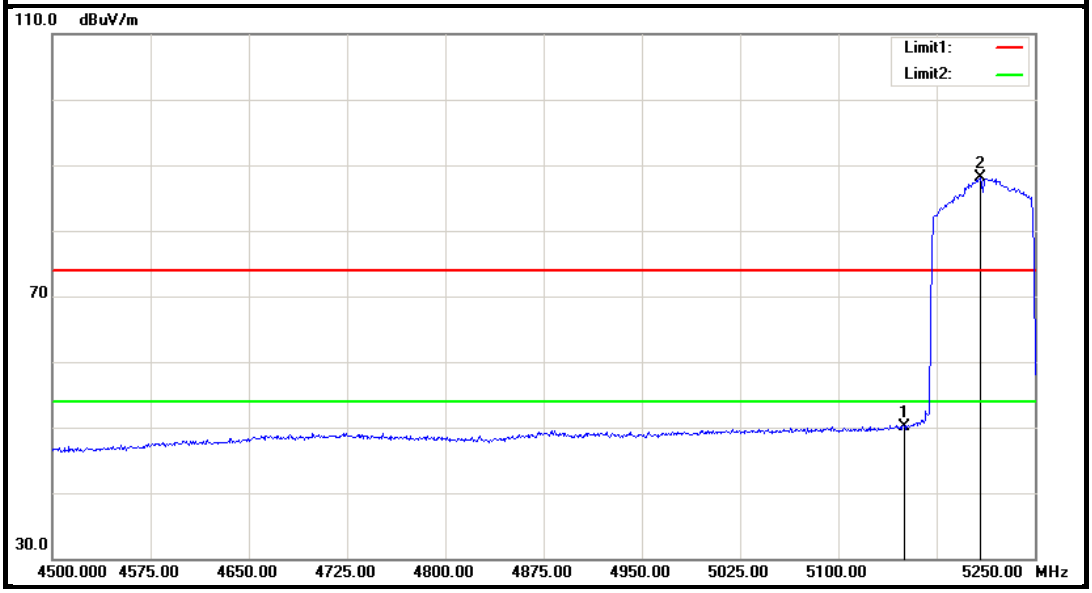


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	55.07	5.25	60.32	74.00	-13.68	Peak	Vertical
2	5214.750	84.61	5.36	89.97	---	---	Peak	Vertical
1	5150.000	44.54	5.25	49.79	54.00	-4.21	Average	Vertical
2	5208.000	75.60	5.35	80.95	---	---	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



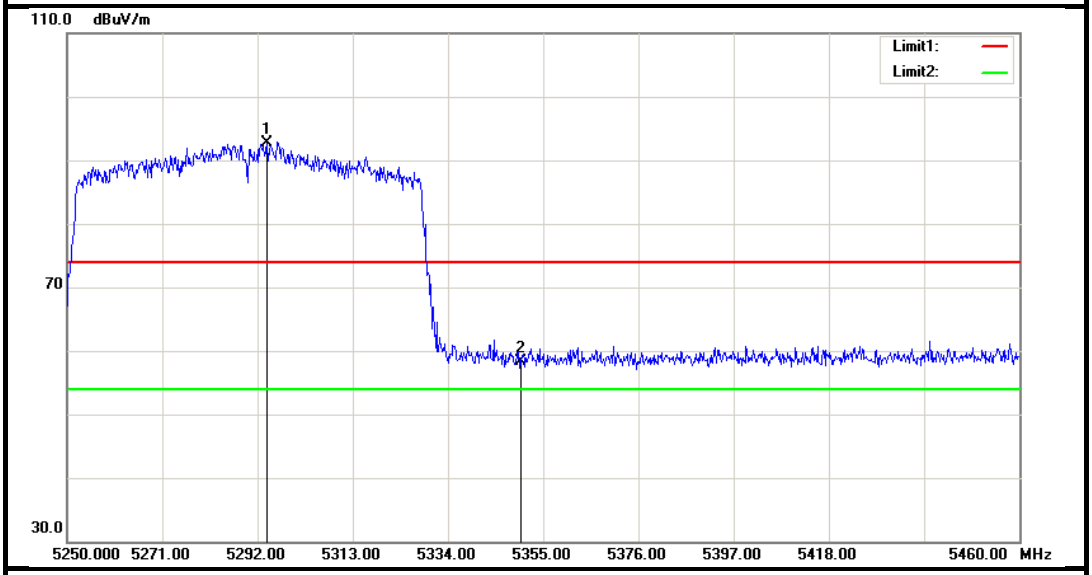
Detector mode: Average **Polarity: Horizontal**



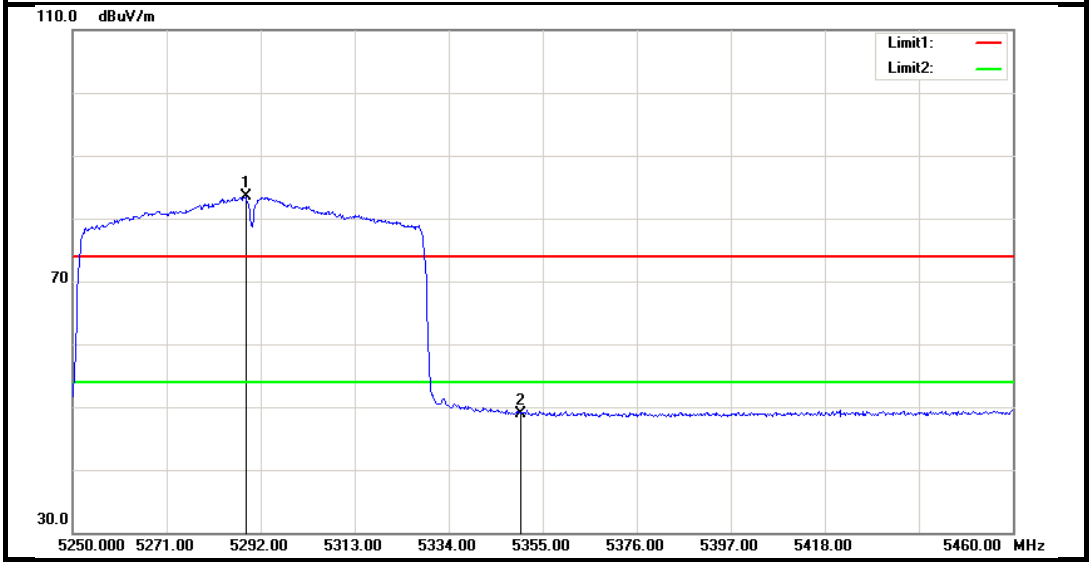
No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5150.000	54.55	5.25	59.80	74.00	-14.20	Peak	Horizontal
2	5214.750	92.31	5.36	97.67	---	---	Peak	Horizontal
1	5150.000	44.80	5.25	50.05	54.00	-3.95	Average	Horizontal
2	5208.750	82.79	5.35	88.14	---	---	Average	Horizontal

IEEE 802.11ac 80 mode / 5290 MHz

Detector mode: Peak **Polarity: Vertical**

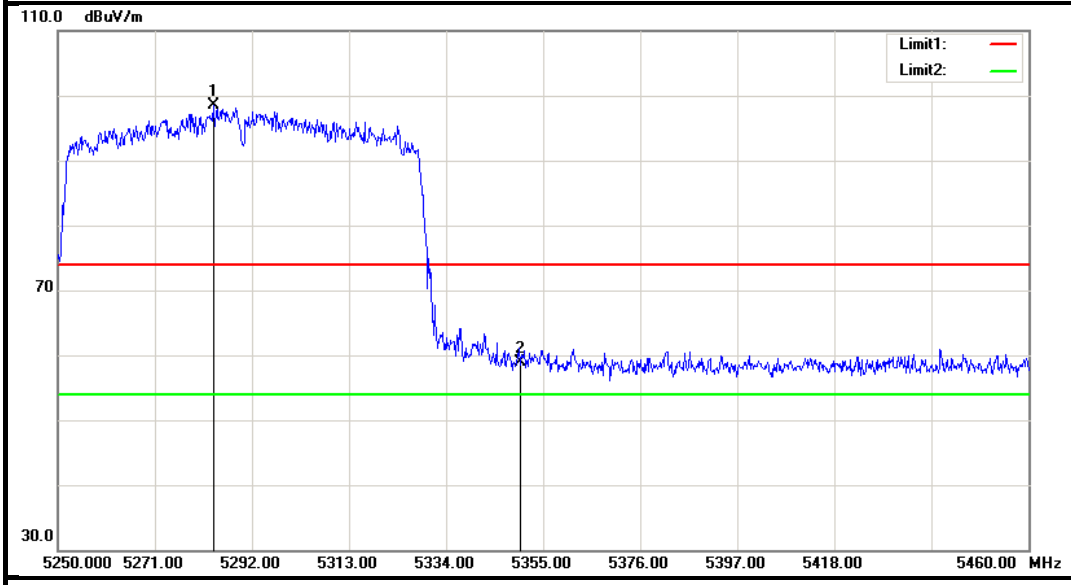


Detector mode: Average **Polarity: Vertical**

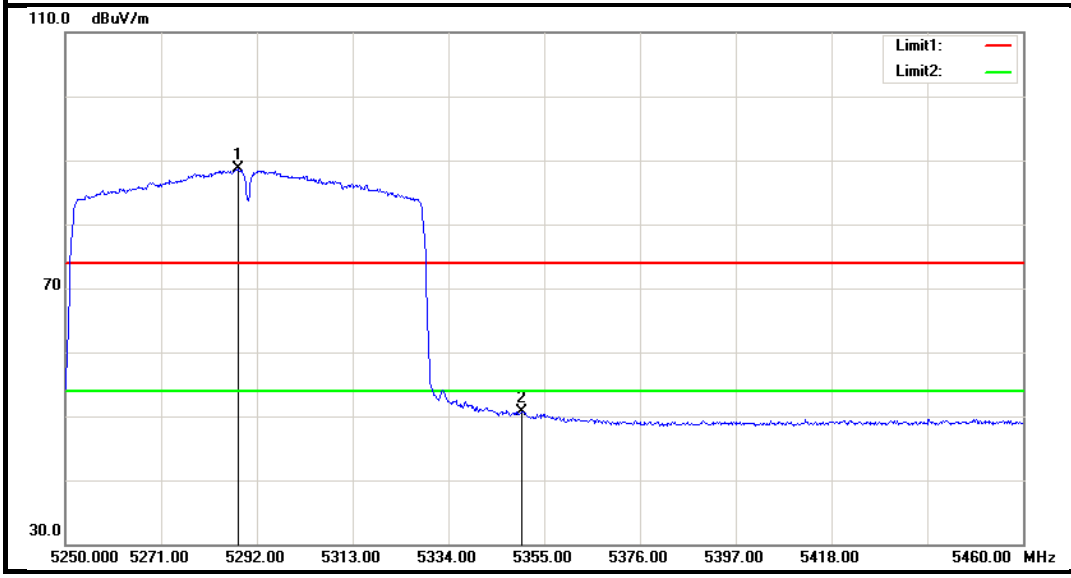


No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5294.100	87.16	5.50	92.66	---	---	Peak	Vertical
2	5350.000	52.74	5.60	58.34	74.00	-15.66	Peak	Vertical
1	5288.640	77.95	5.49	83.44	---	---	Average	Vertical
2	5350.000	43.34	5.60	48.94	54.00	-5.06	Average	Vertical

Detector mode: Peak **Polarity: Horizontal**



Detector mode: Average **Polarity: Horizontal**



No.	Frequency (MHz)	Reading (dB)	Factor (dB/m)	Result (dB/m)	Limit (dB/m)	Margin (dB)	Remark	Antenna Polar
1	5283.600	92.99	5.48	98.47	---	---	Peak	Horizontal
2	5350.000	53.21	5.60	58.81	74.00	-15.19	Peak	Horizontal
1	5288.010	83.19	5.49	88.68	---	---	Average	Horizontal
2	5350.000	45.09	5.60	50.69	54.00	-3.31	Average	Horizontal

6.6 PEAK POWER SPECTAL DENSITY

6.6.1 LIMIT

According to §15.407(a) & FCC R&O FCC 14-30

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 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 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(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.

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

(3) For the 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. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

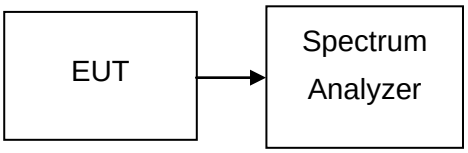
Note to paragraph (a)(3): The Commission strongly recommends that parties employing U-NII devices to provide critical communications services should determine if there are any nearby Government radar systems that could affect their operation.

6.6.2MEASUREMENT EQUIPMENT USED

Name of Equipment	Manufacturer	Model	Serial Number	Last Calibration	Due Calibration
Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019

Remark: *Each piece of equipment is scheduled for calibration once a year.*

6.6.3 TEST CONFIGURATION



6.6.4 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
   Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. For devices operating in the bands 5.15-5.25 GHz,Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span > 26dB bandwidth, Sweep=1ms
3. For devices operating in the bands 5.725-5.85 GHz,Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span > 26dB bandwidth, Sweep=1ms
4. Record the max. reading.
5. Repeat the above procedure until the measurements for all frequencies are completed

6.6.5 TEST RESULTS

Test Data

Test mode: IEEE 802.11a mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5180	3.988	11	-7.012	PASS
Mid	5200	3.953		-7.047	PASS
High	5240	3.867		-7.133	PASS

Test mode: IEEE 802.11a mode / 5260~ 5320MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5260	4.037	11	-6.963	PASS
Mid	5300	3.931		-7.069	PASS
High	5320	4.298		-6.702	PASS

Test mode: IEEE 802.11a mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5500	-1.461	11	-12.461	PASS
Mid	5580	-1.920		-12.920	PASS
High	5700	-1.941		-12.941	PASS

Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5745	0.664	30	-29.336	PASS
Mid	5785	0.841		-29.159	PASS
High	5825	0.714		-29.286	PASS

Remark:

Directional Gain= G_{ant} + 10log (N_{ant}) dBi

G_{ant}: Gain of Individual Antennas (Same for Each Antenna)

The RBW factor = 10log10(500/470)=0.269 dB into test plots.

Test mode: IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5180	1.556	11	-9.444	PASS
Mid	5200	1.582		-9.418	PASS
High	5240	1.579		-9.421	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5260~ 5320MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5260	0.746	11	-10.254	PASS
Mid	5300	1.476		-9.524	PASS
High	5320	1.726		-9.274	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5500	-1.692	11	-12.692	PASS
Mid	5580	-2.297		-13.297	PASS
High	5700	-1.990		-12.990	PASS

Test mode: IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5745	-1.236	30	-31.236	PASS
Mid	5785	-1.491		-31.491	PASS
High	5825	-1.691		-31.691	PASS

Remark:

The RBW factor = 10log10(500/470)=0.269 dB into test plots.

Test mode: IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5190	-0.777	11	-11.777	PASS
High	5230	-1.207		-12.207	PASS

Test mode: IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5270	-1.616	11	-12.616	PASS
High	5310	-0.904		-11.904	PASS

Test mode: IEEE 802.11n HT 40 MHz mode / 5510 ~ 5670MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5510	-4.620	11	-15.620	PASS
Mid	5550	-4.646		-15.646	PASS
High	5670	-5.369		-16.369	PASS

Test mode: IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
Low	5755	-3.957	30	-33.957	PASS
High	5795	-4.354		-34.354	PASS

Remark:

The RBW factor = 10log10(500/470)=0.269 dB into test plots.

Test mode: IEEE 802.11ac 80 mode / 5210MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
	5210	-3.210	11	-14.210	PASS

Test mode: IEEE 802.11ac 80 mode / 5290MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
	5290	-3.123	11	-14.123	PASS

Test mode: IEEE 802.11ac 80 mode / 5530MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
	5530	-8.268	11	-19.268	PASS

Test mode: IEEE 802.11ac 80 mode / 5775MHz

Channel	Frequency (MHz)	PPSD (dBm)	Limit (dBm)	Margin	Result
	5775	-6.805	30	-36.805	PASS

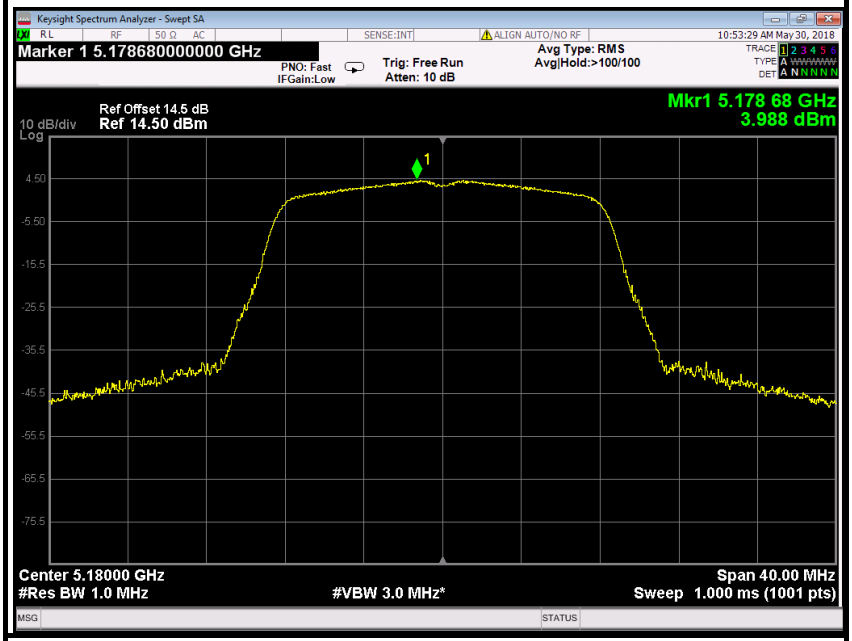
Remark:

The RBW factor = 10log10(500/470)=0.269 dB into test plots.

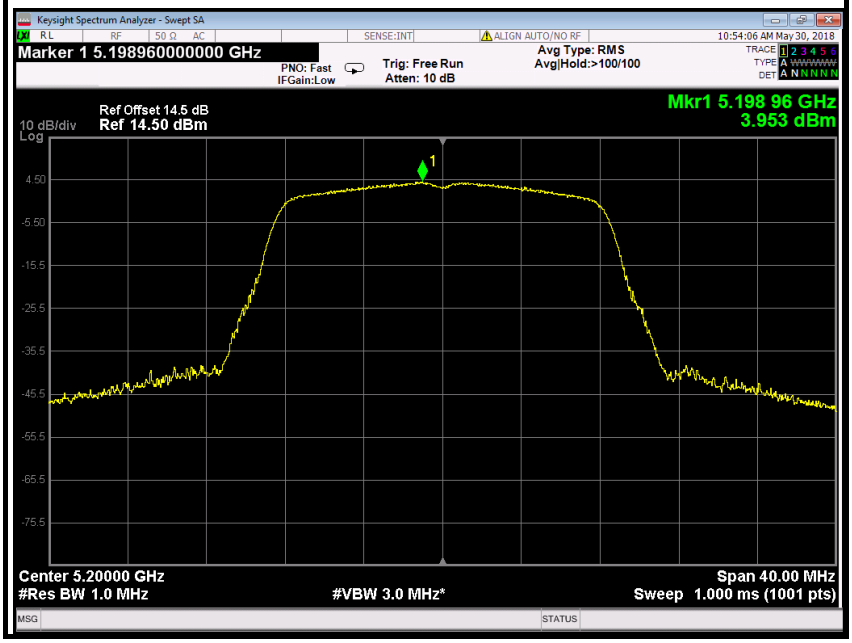
Test Plot

IEEE 802.11a mode / 5180 ~ 5240MHz

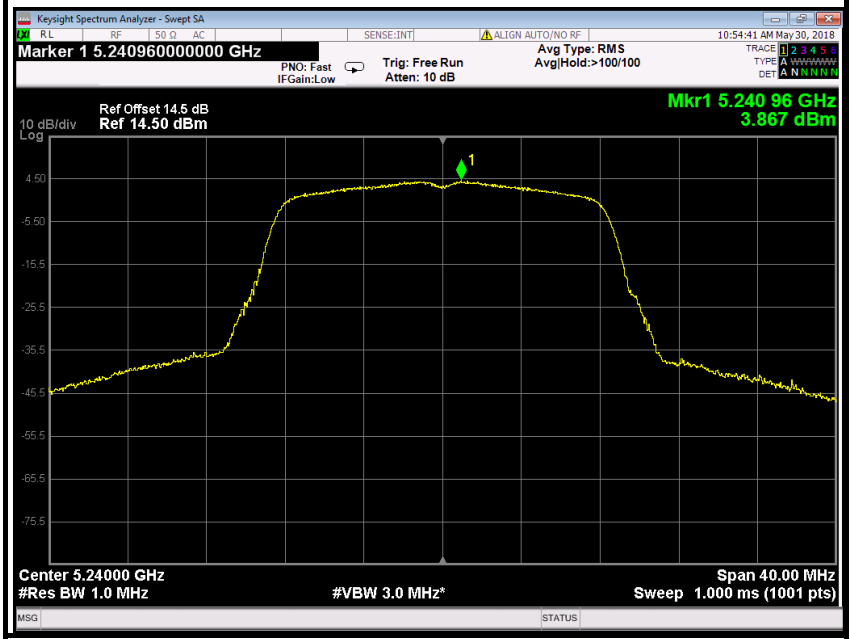
PPSD (CH Low)



PPSD (CH Mid)

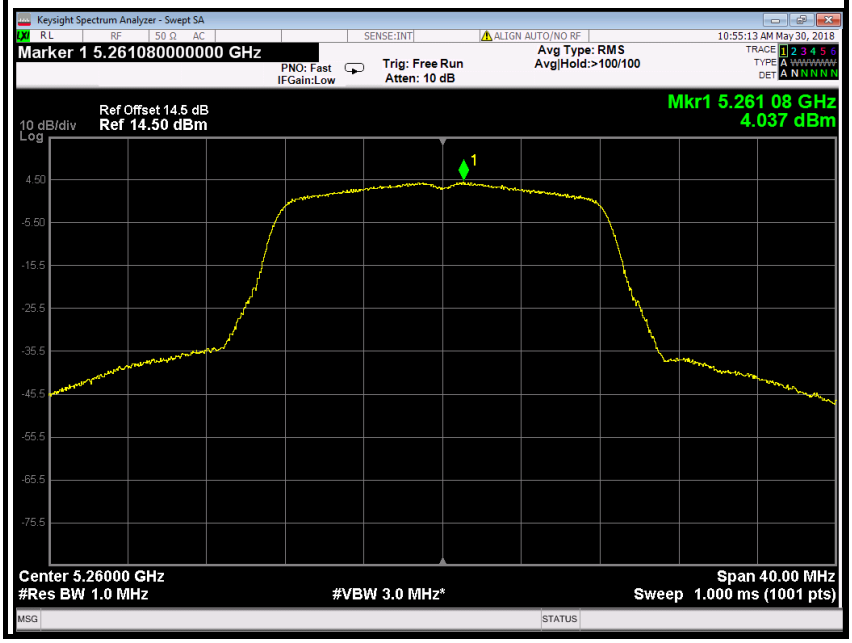


PPSD (CH High)

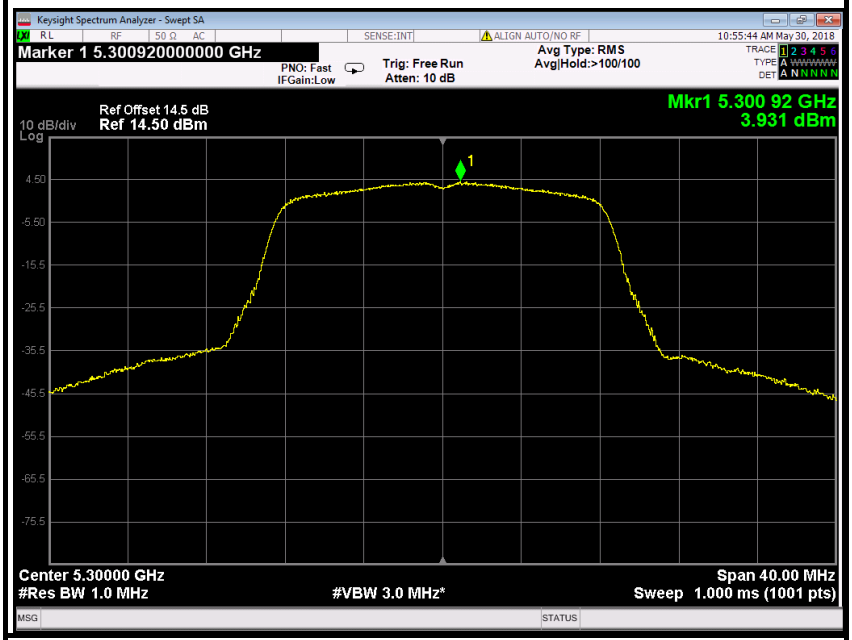


IEEE 802.11a mode / 5260~ 5320MHz

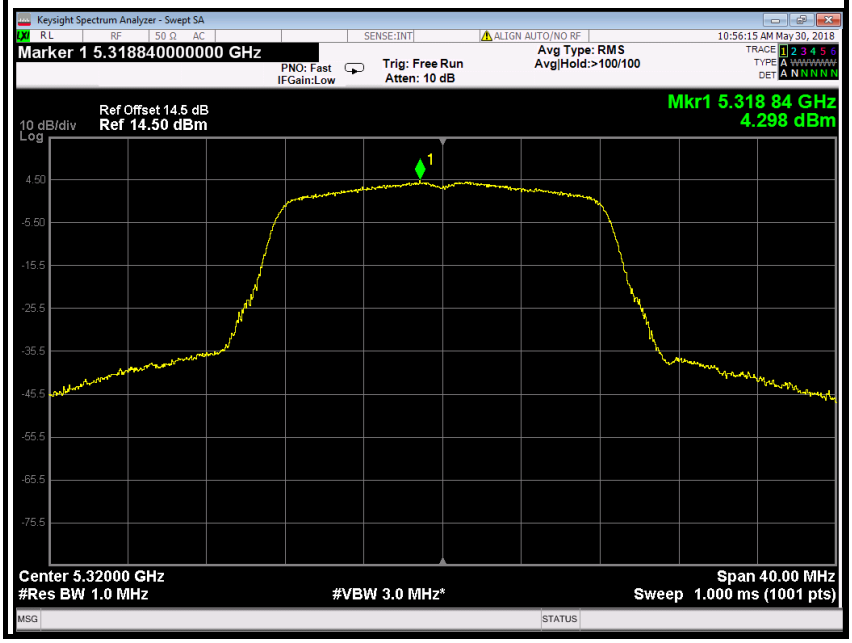
PPSD (CH Low)



PPSD (CH Mid)

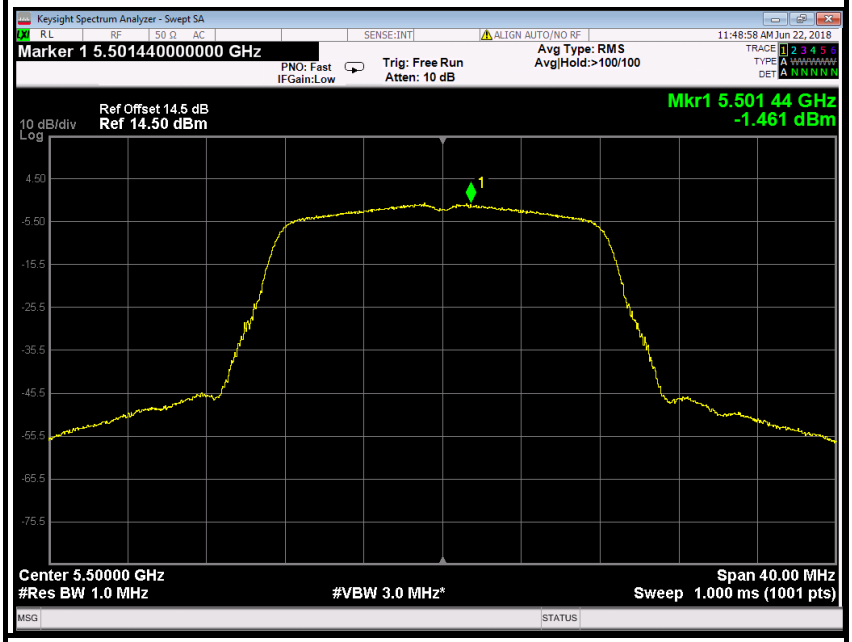


PPSD (CH High)

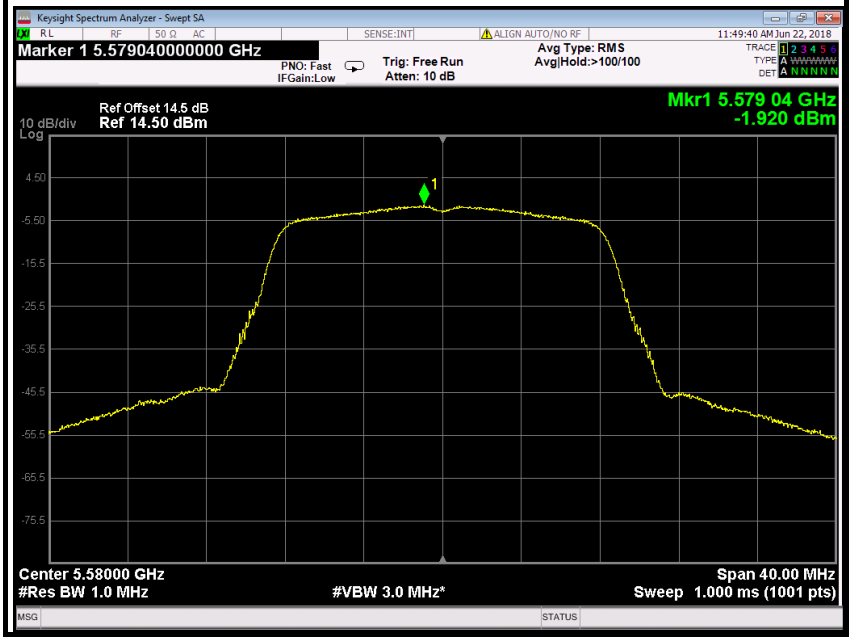


IEEE 802.11a mode / 5500 ~ 5700MHz

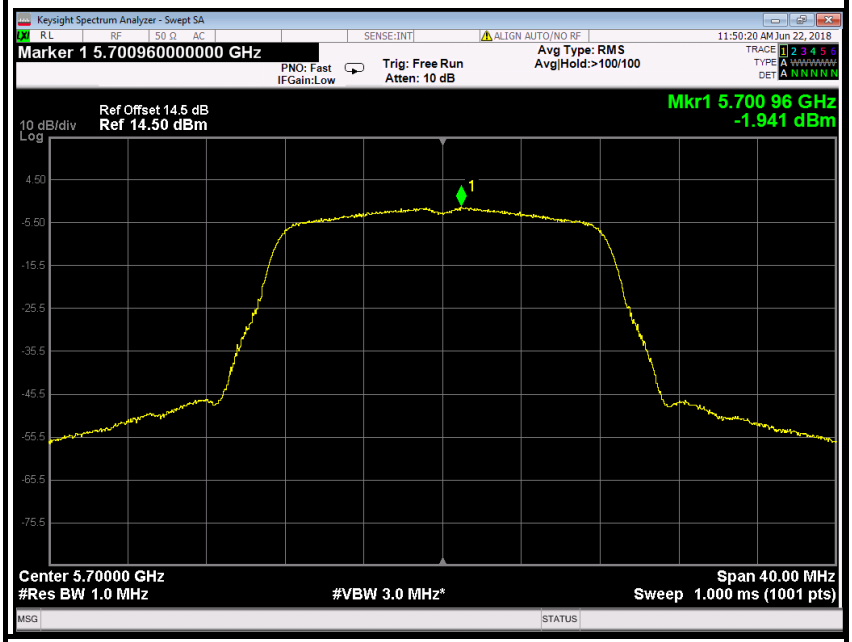
PPSD (CH Low)



PPSD (CH Mid)

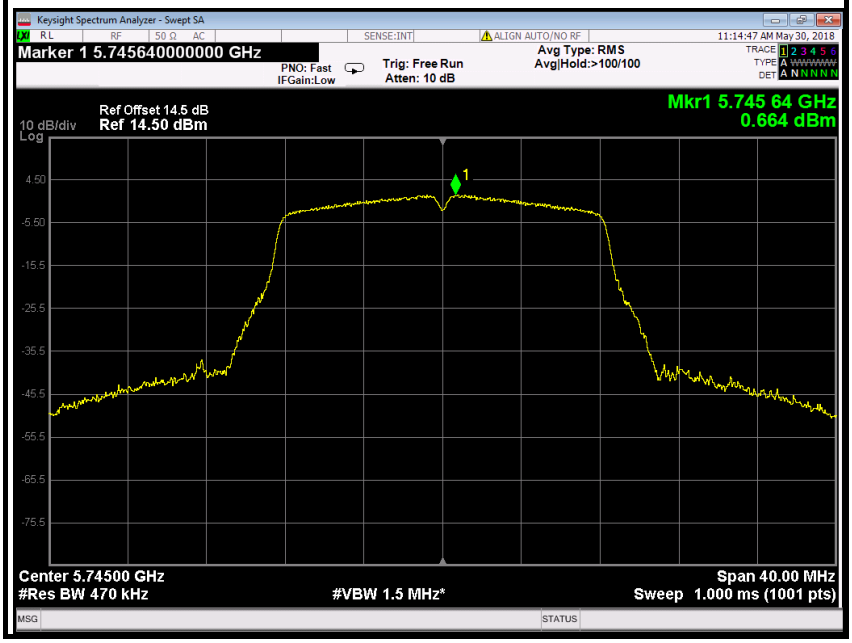


PPSD (CH High)

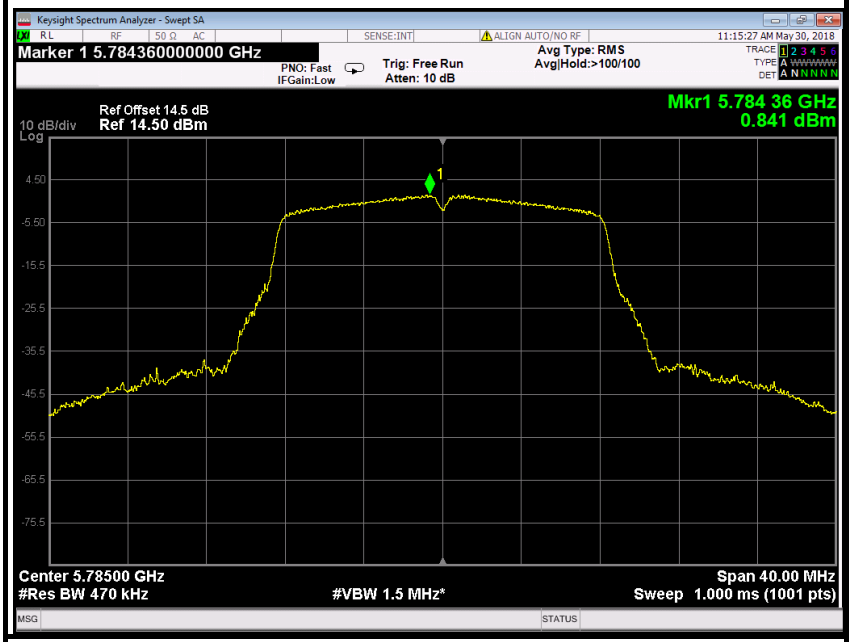


IEEE 802.11a mode / 5745 ~ 5825MHz

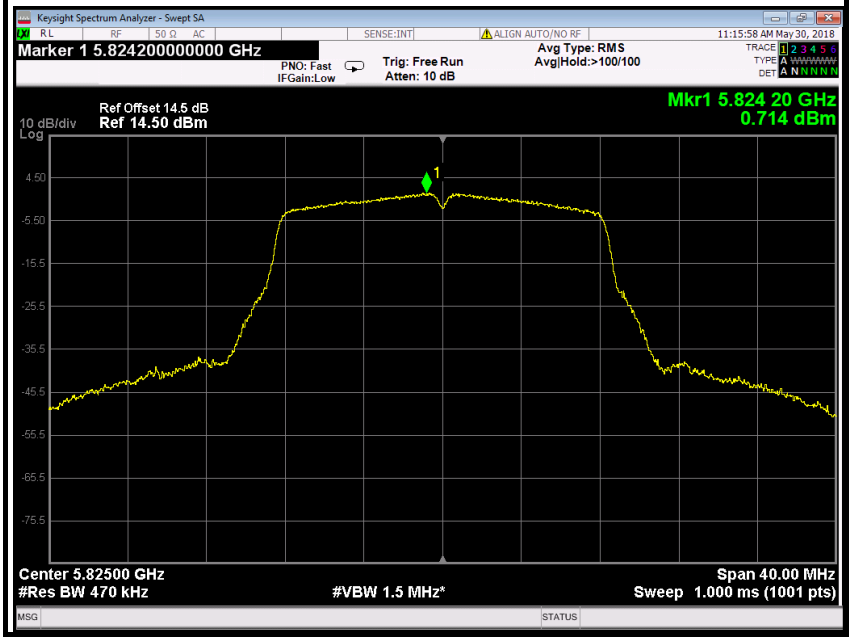
PPSD (CH Low)



PPSD (CH Mid)

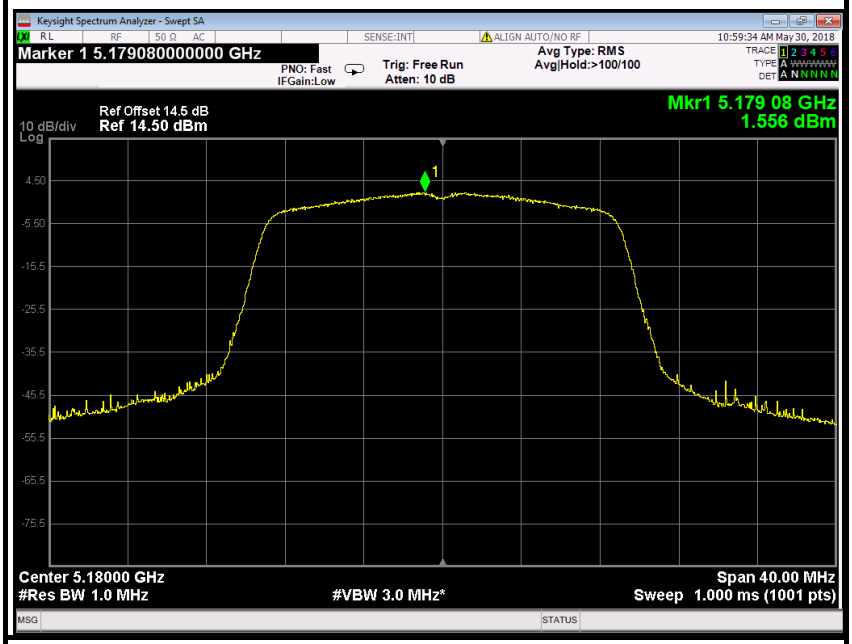


PPSD (CH High)

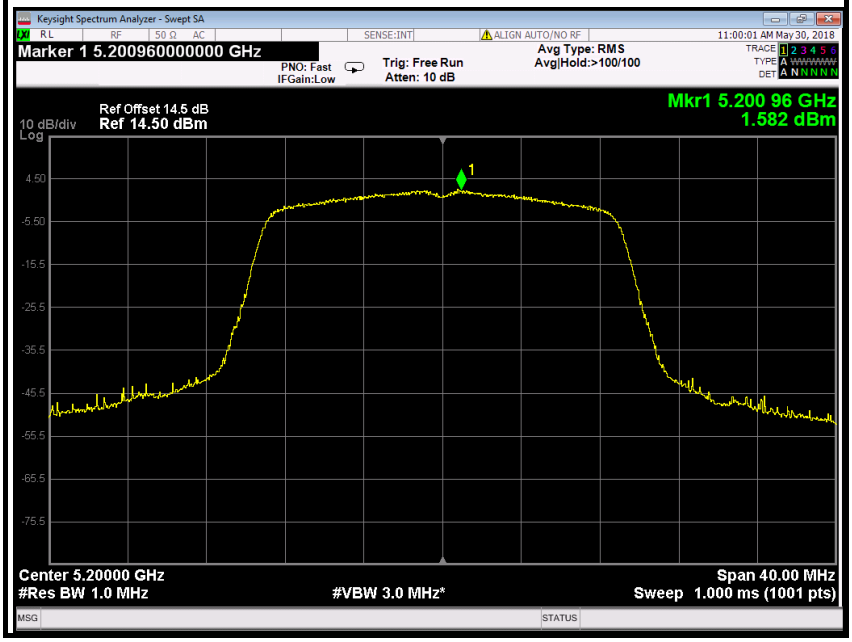


IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz

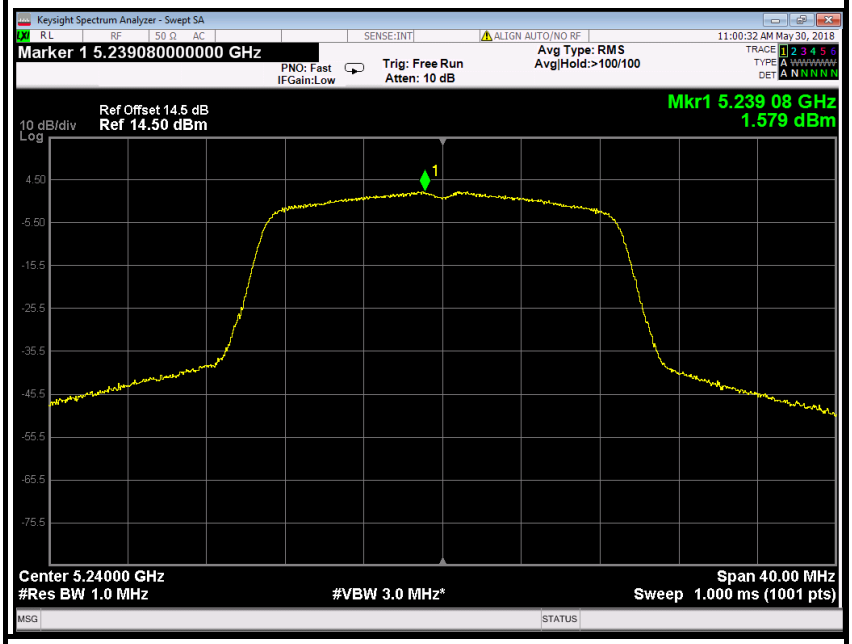
PPSD (CH Low)



PPSD (CH Mid)

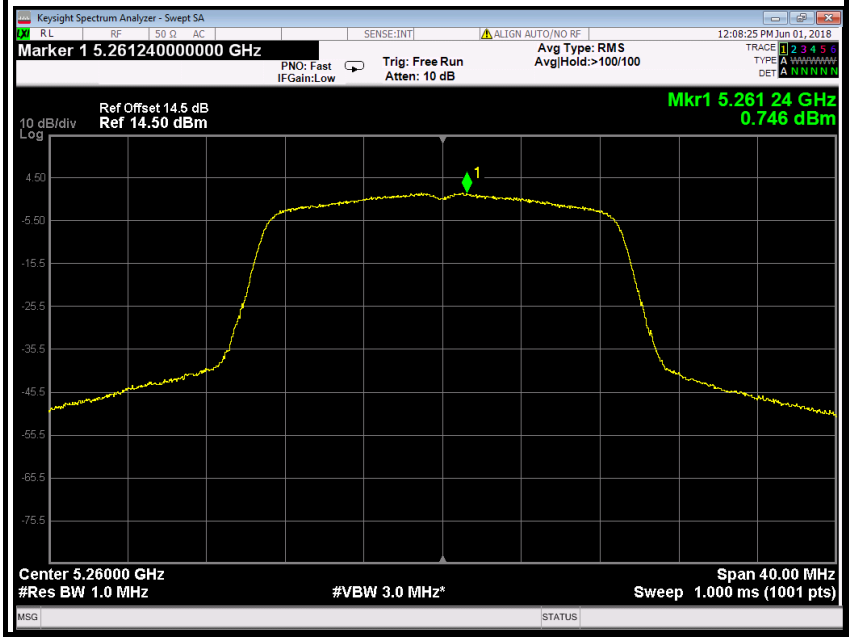


PPSD (CH High)

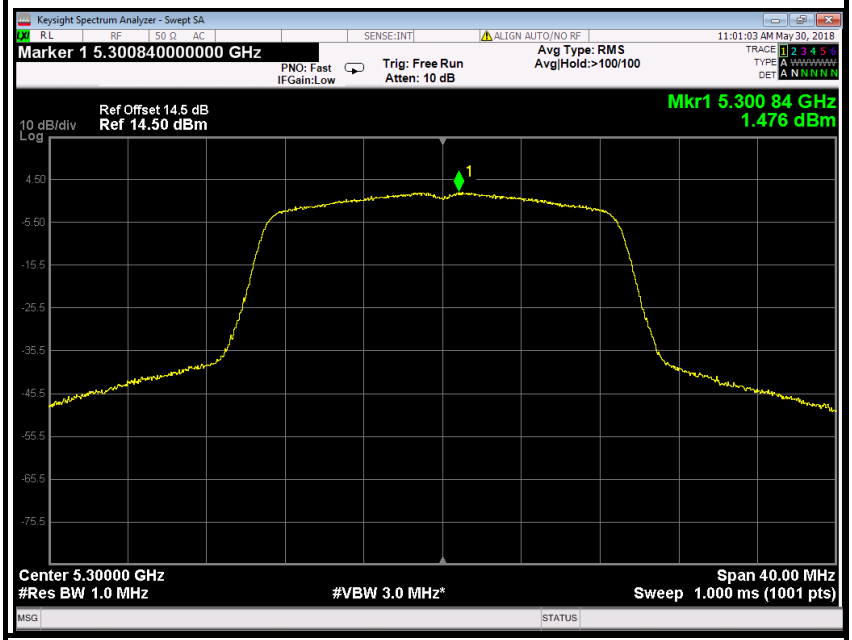


IEEE 802.11n HT 20 MHz mode / 5260~ 5320MHz

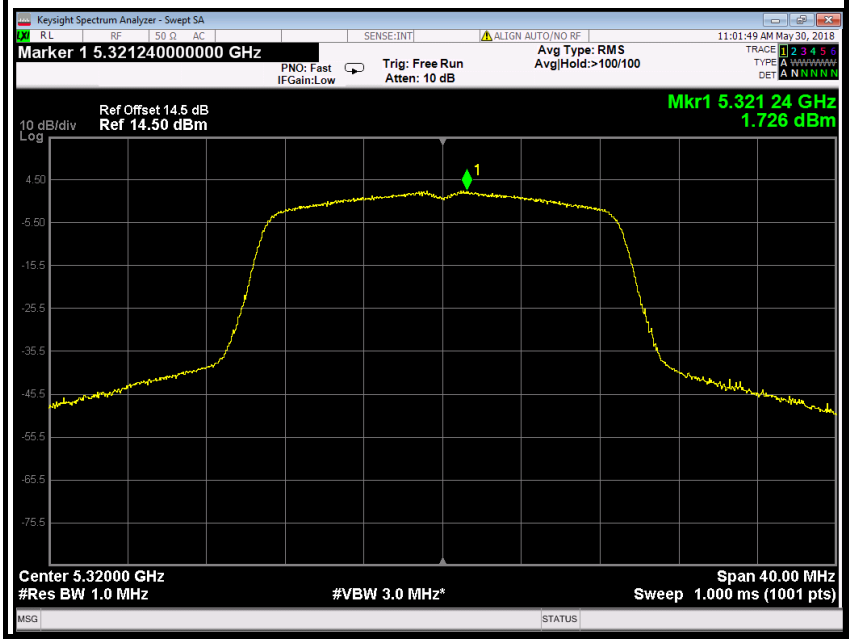
PPSD (CH Low)



PPSD (CH Mid)

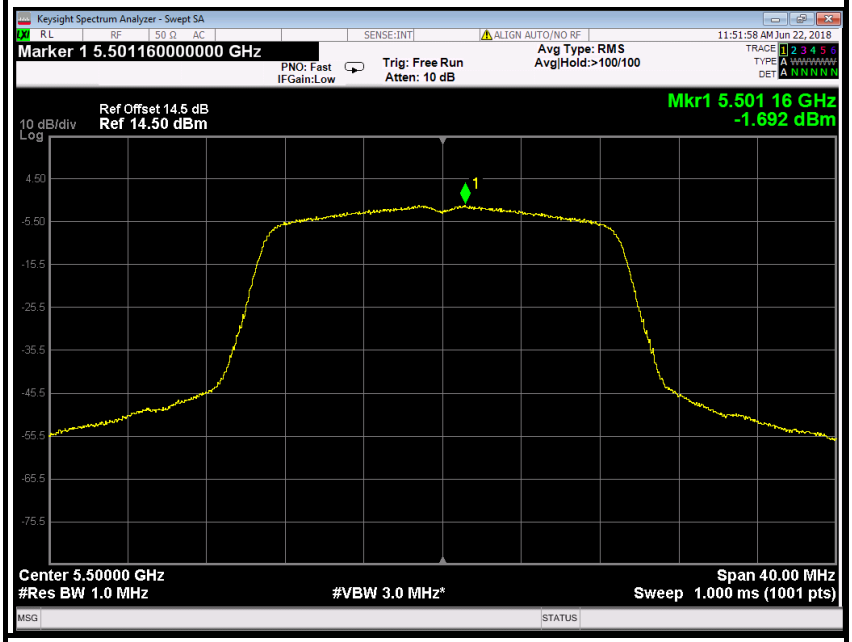


PPSD (CH High)

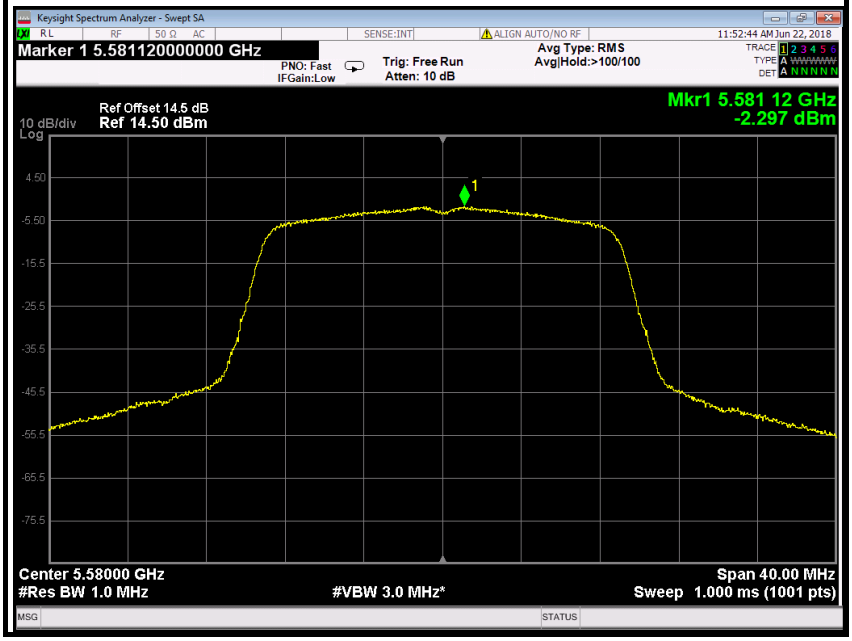


IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz

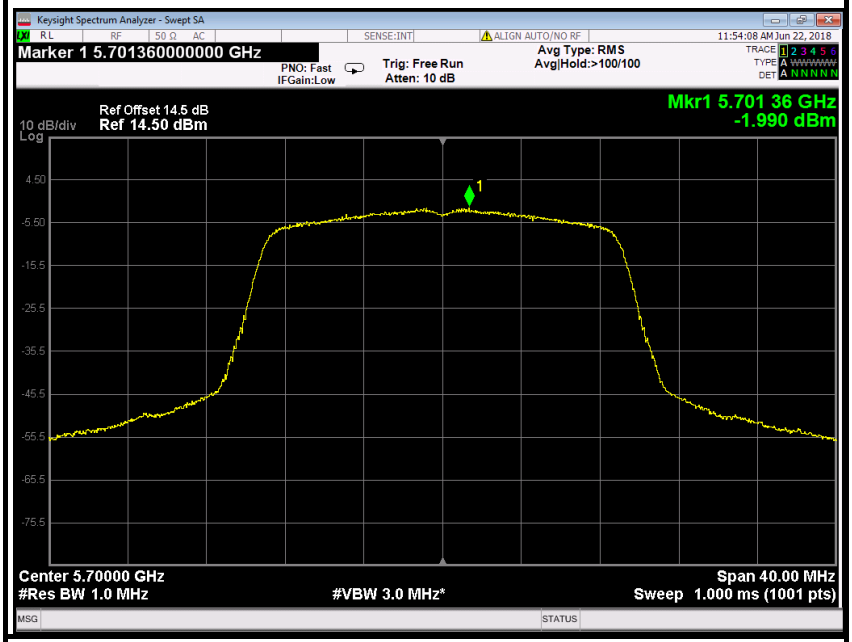
PPSD (CH Low)



PPSD (CH Mid)

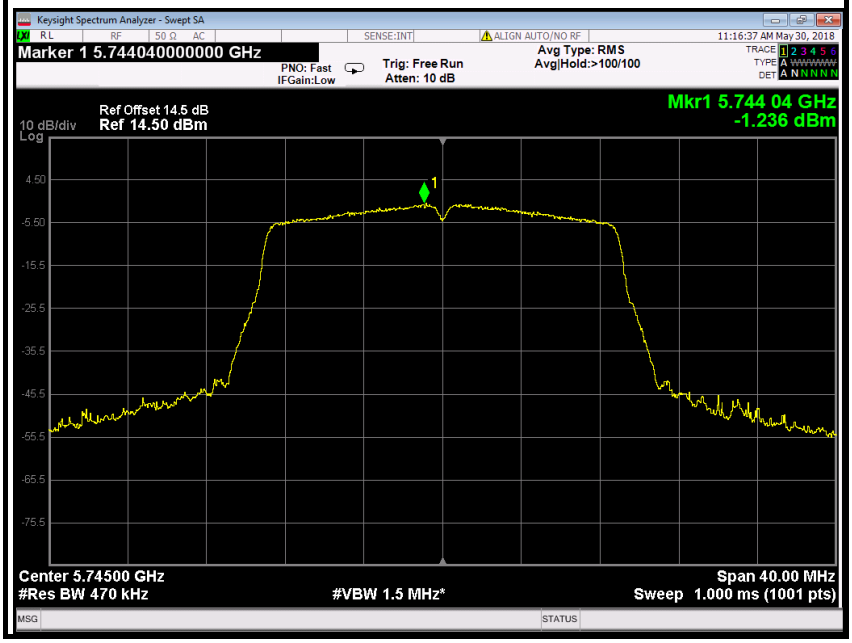


PPSD (CH High)

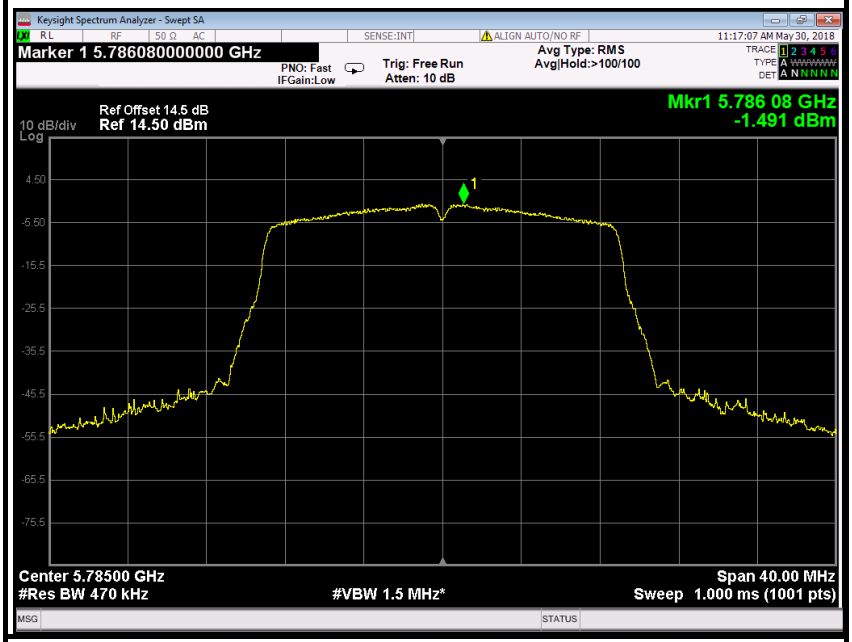


IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz

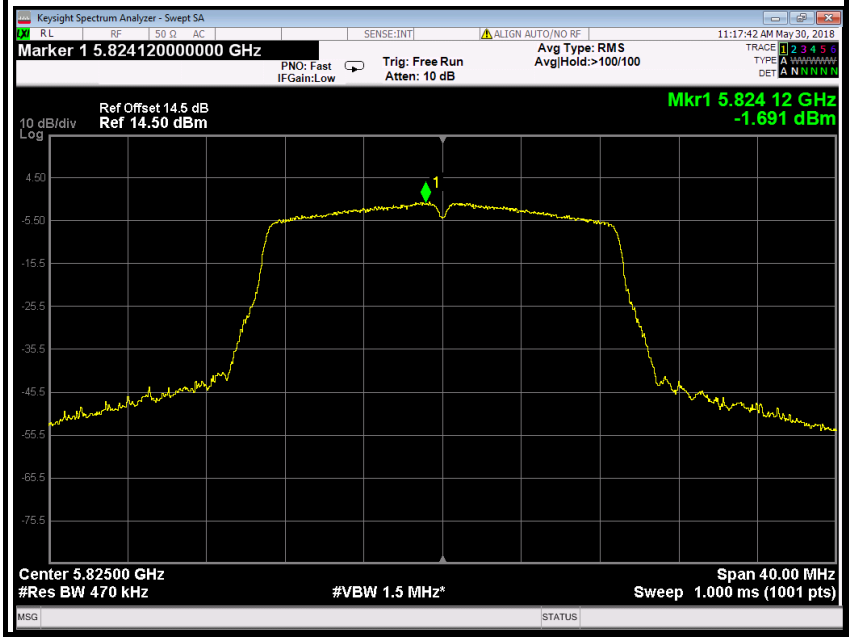
PPSD (CH Low)



PPSD (CH Mid)

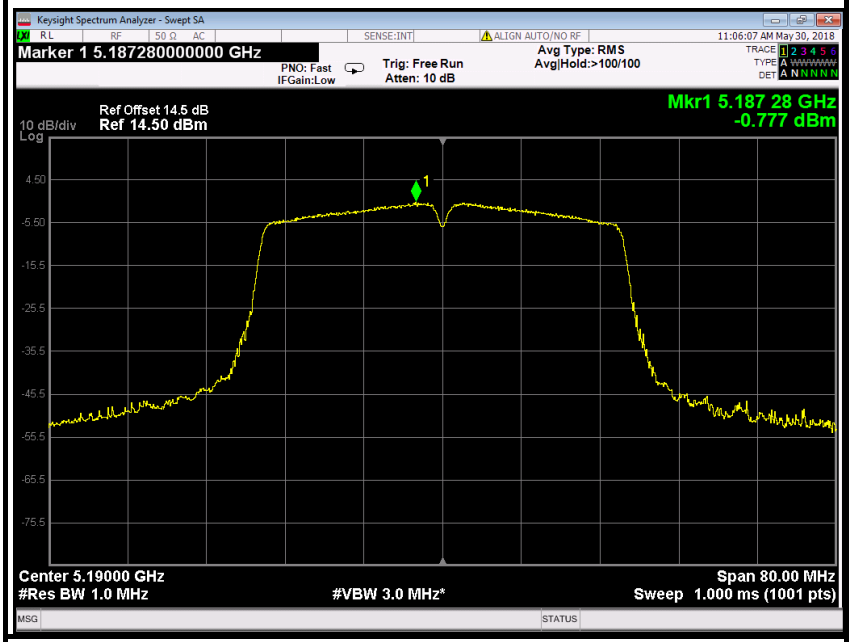


PPSD (CH High)

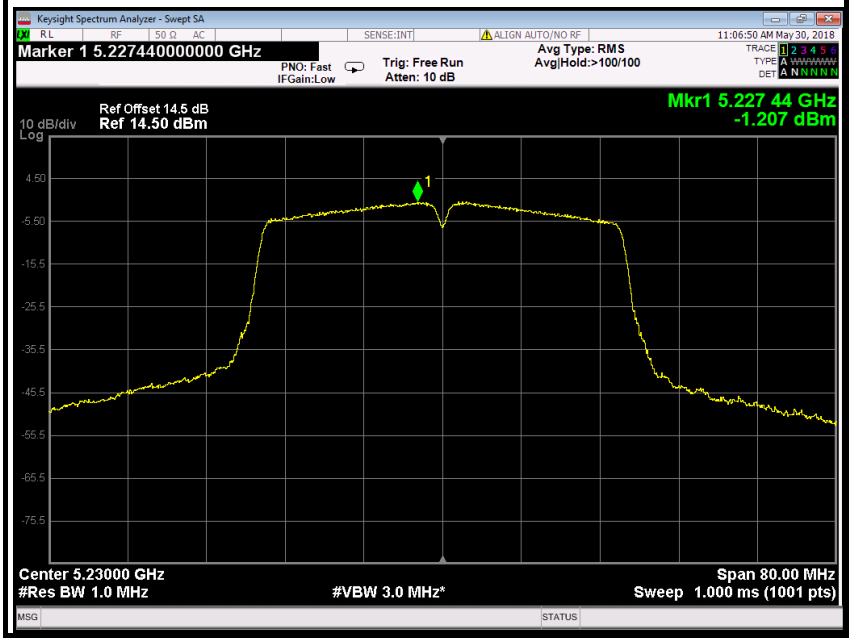


IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz

PPSD (CH Low)

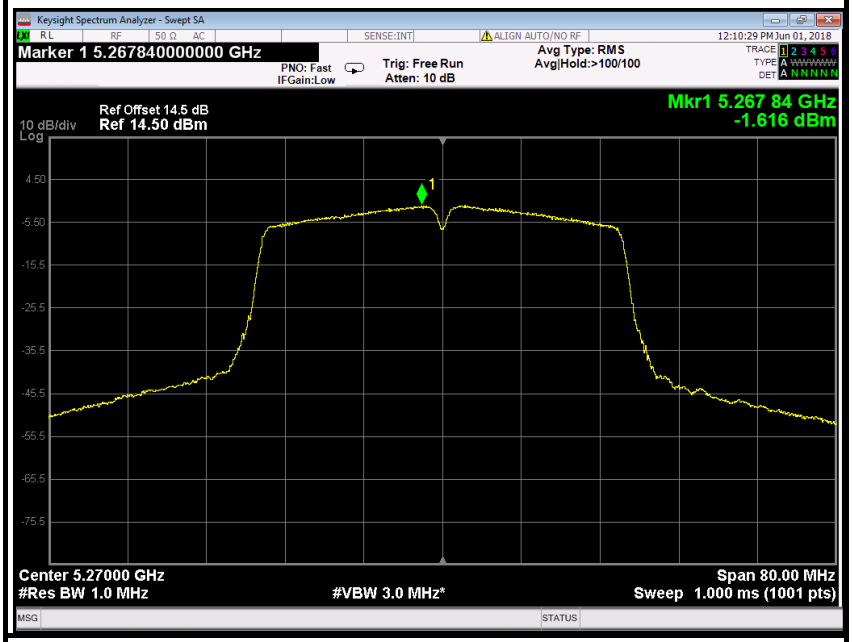


PPSD (CH High)

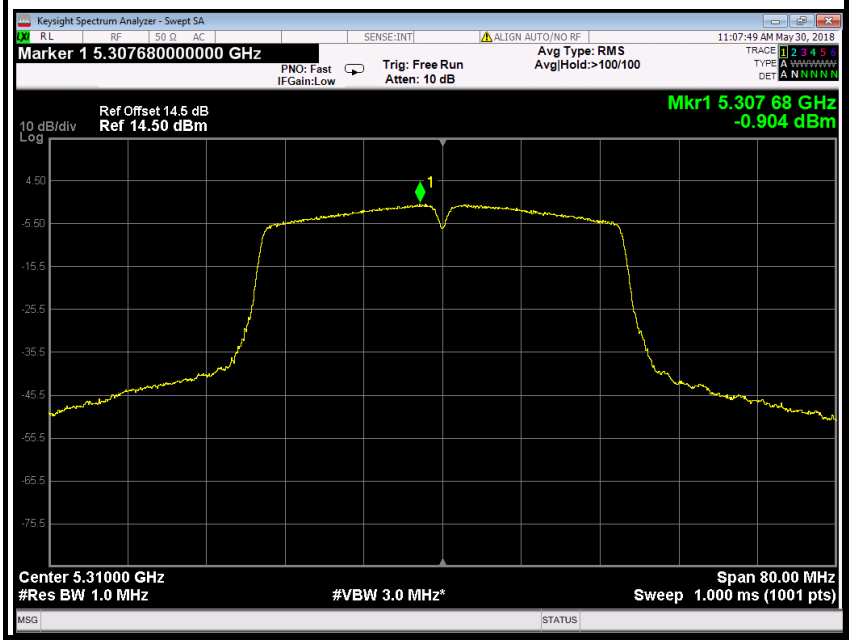


IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz

PPSD (CH Low)

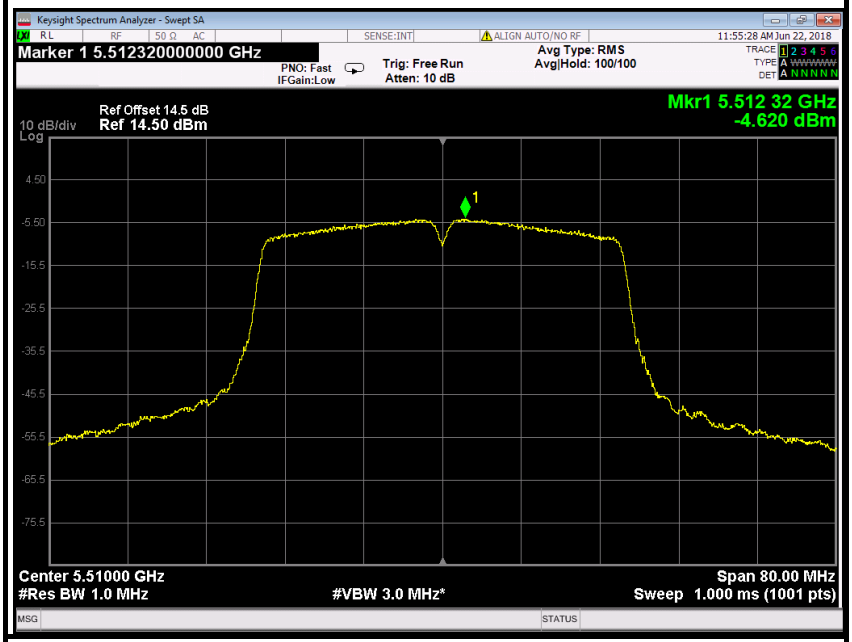


PPSD (CH High)

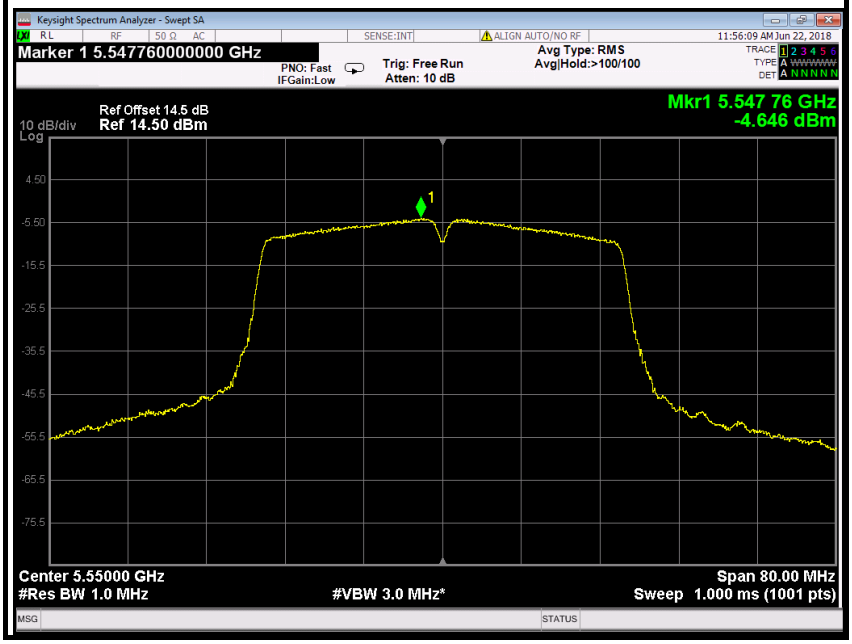


IEEE 802.11n HT 40 MHz mode / 5510~ 5670MHz

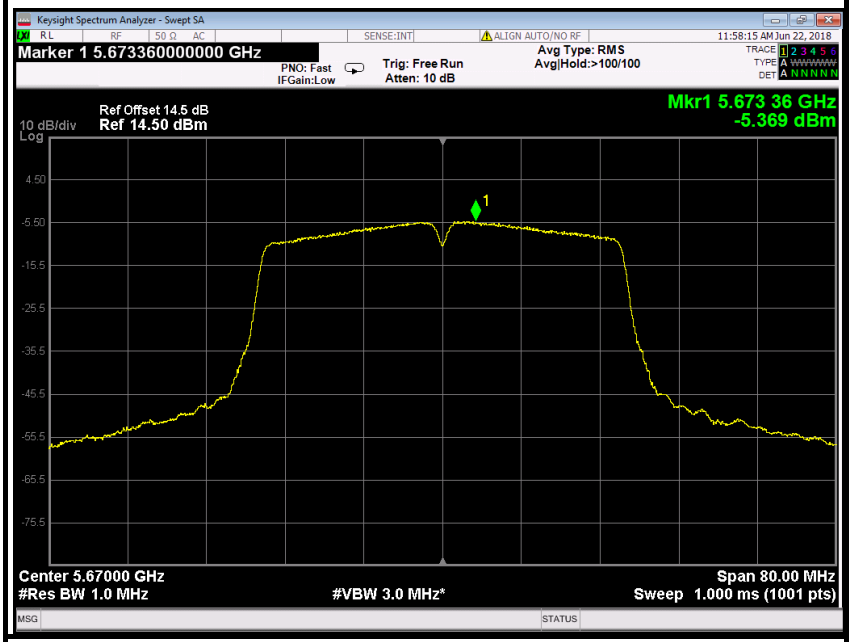
PPSD (CH Low)



PPSD (CH Mid)

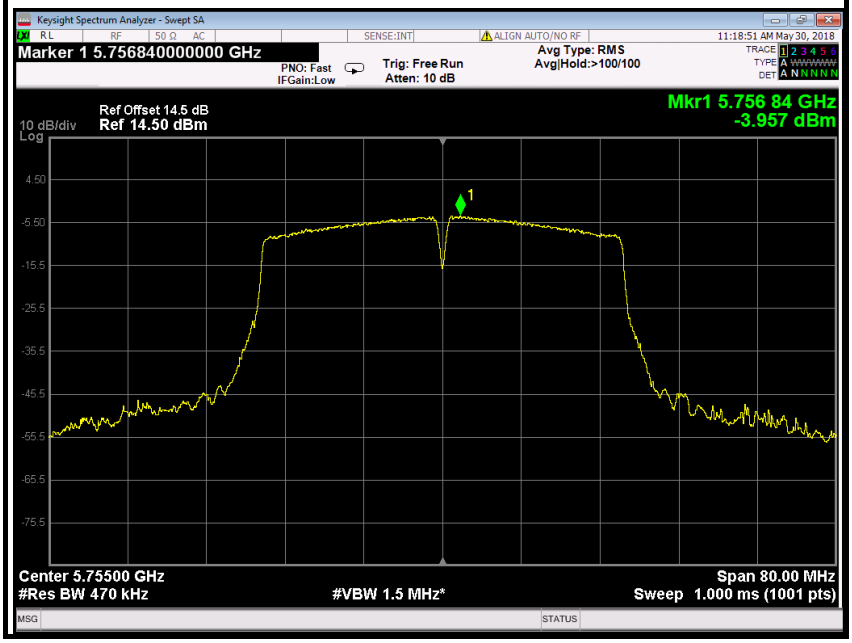


PPSD (CH High)

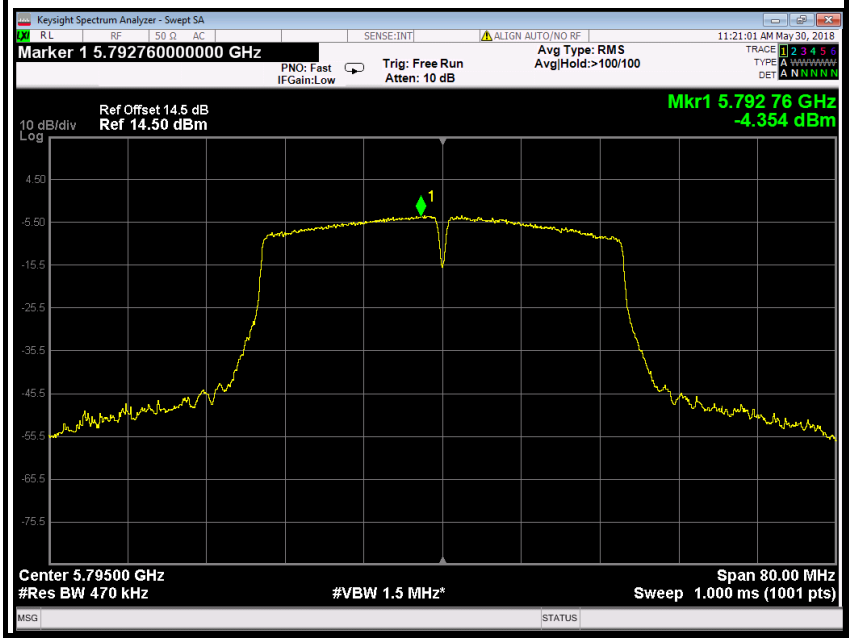


IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz

PPSD (CH Low)

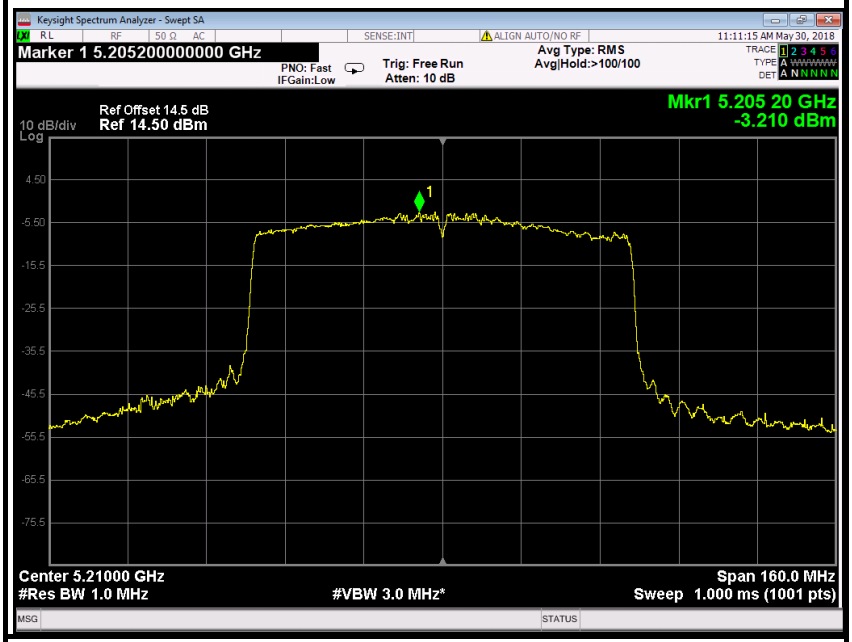


PPSD (CH High)



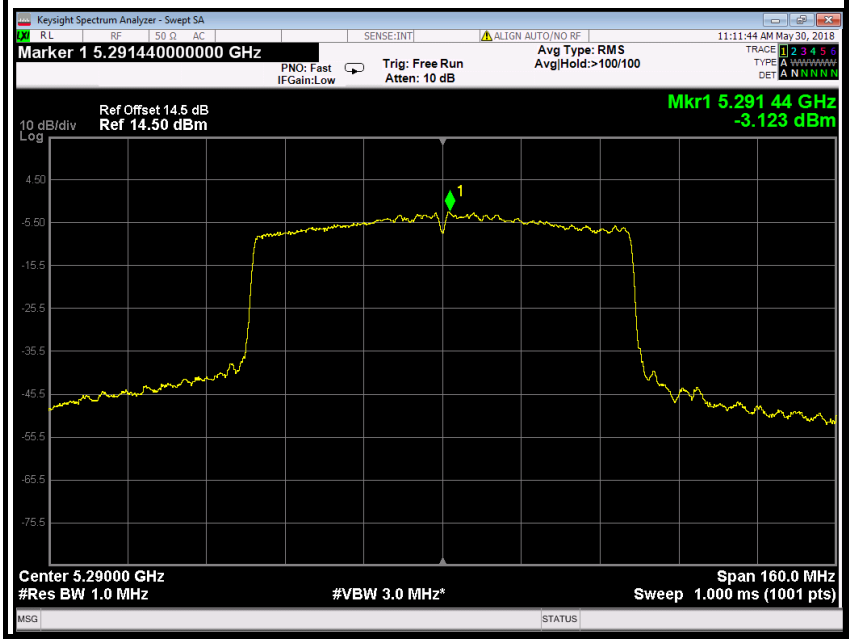
IEEE 802.11ac 80 mode / 5210MHz

PPSD



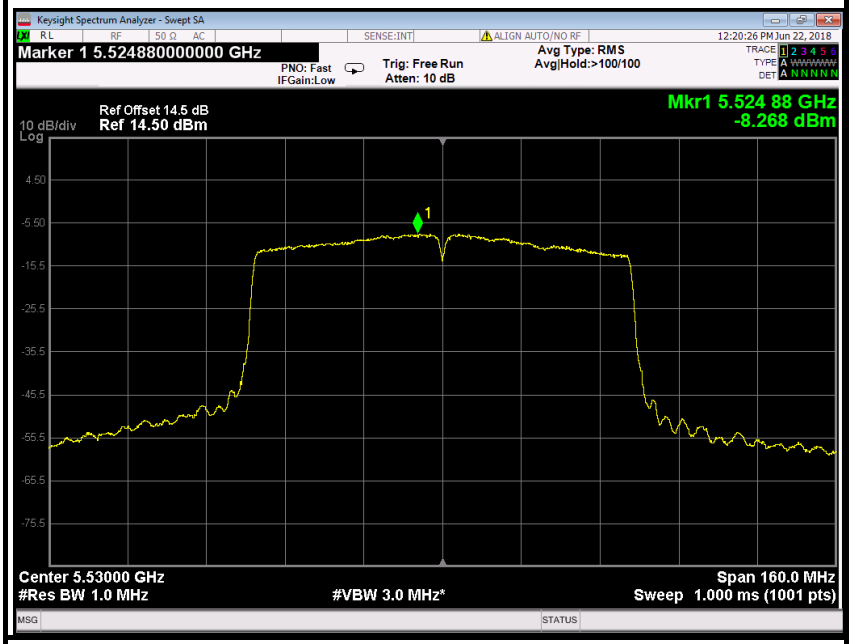
IEEE 802.11ac 80 mode / 5290MHz

PPSD



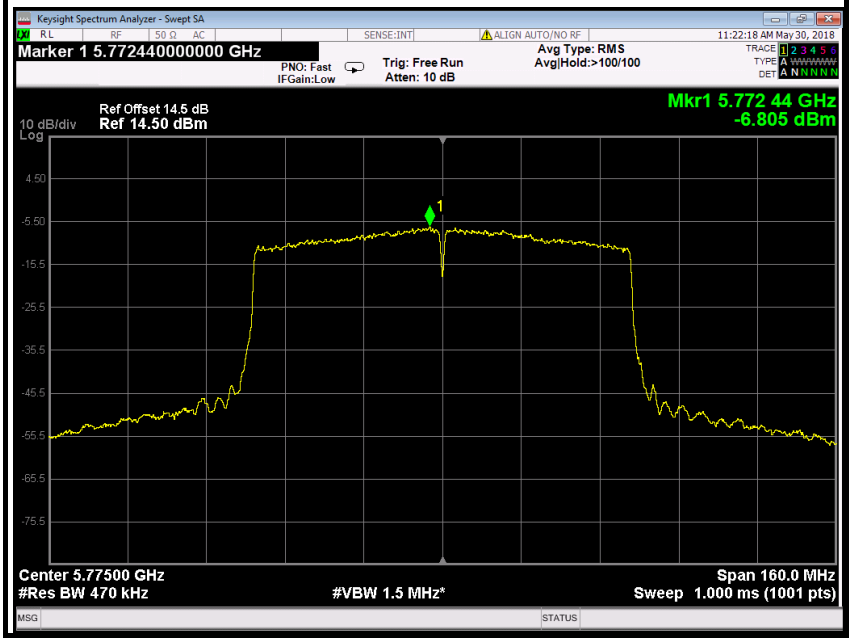
IEEE 802.11ac 80 mode / 5530MHz

PPSD



IEEE 802.11ac 80 mode / 5775MHz

PPSD



6.7 RADIATED UNDESIABLE EMISSION

6.7.1 LIMIT

1. According to §15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30-88	100*	3
88-216	150*	3
216-960	200*	3
Above 960	500	3

Remark: *Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.*

2. In the emission table above, the tighter limit applies at the band edges.

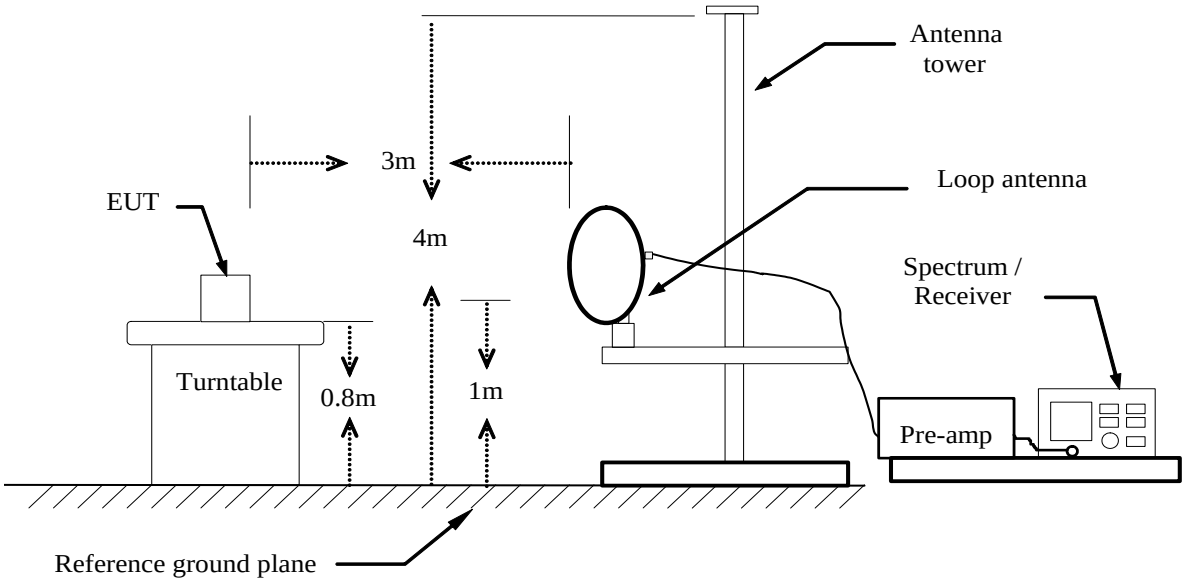
Frequency (MHz)	Field Strength (μV/m at 3-meter)	Field Strength (dBμV/m at 3-meter)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

6.7.2 TEST INSTRUMENTS

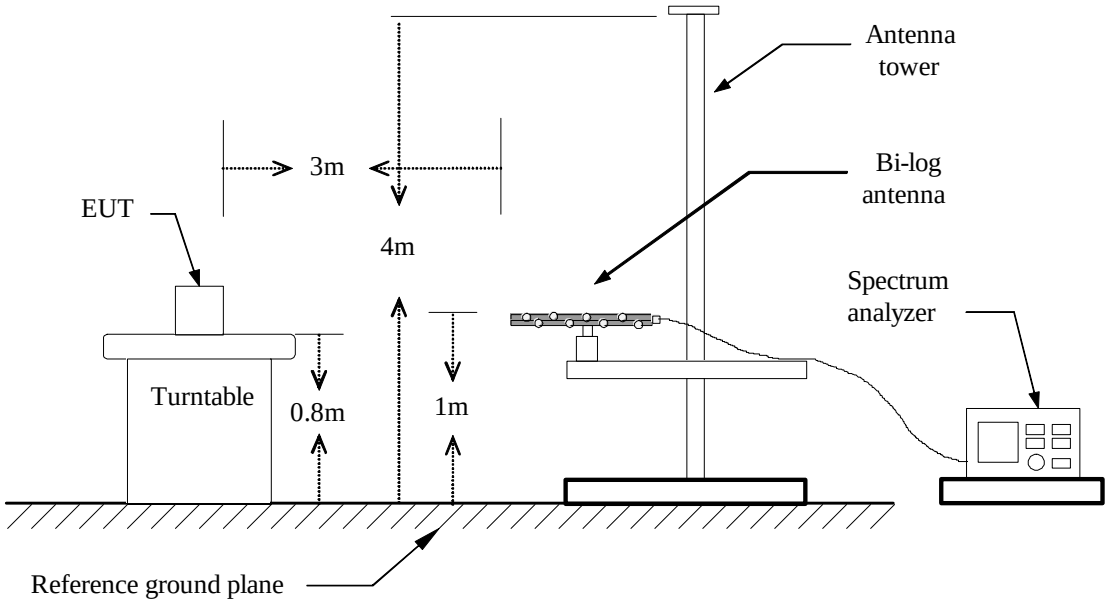
Radiated Emission Test Site 966（2）					
Name of Equipment	**Manufacturer**	**Model Number**	**Serial Number**	**Last Calibration**	**Due Calibration**
PSA Series Spectrum Analyzer	Agilent	N9010A	MY52221469	01/27/2018	01/26/2019
EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100783	02/21/2018	02/20/2019
Amplifier	EMEC	EM330	060661	03/18/2018	03/17/2019
High Noise Amplifier	Agilent	8449B	3008A01838	02/21/2018	02/20/2019
Loop Antenna	COM-POWER	AL-130	121044	09/25/2017	09/24/2018
Bilog Antenna	SCHAFFNER	CBL6143	5082	02/21/2018	02/20/2019
Horn Antenna	SCHWARZBECK	BBHA9120	D286	02/27/2018	02/27/2019
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170-497	02/27/2018	02/27/2019
Turn Table	N/A	N/A	N/A	N.C.R	N.C.R
Antenna Tower	SUNOL	TLT2	N/A	N.C.R	N.C.R
Controller	Sunol Sciences	SC104V	022310-1	N.C.R	N.C.R
Controller	CT	N/A	N/A	N.C.R	N.C.R
Temp. / Humidity Meter	Anymetre	JR913	N/A	01/29/2018	01/28/2019
Test S/W	FARAD	LZ-RF / CCS-SZ-3A2			

6.7.3 TEST CONFIGURATION

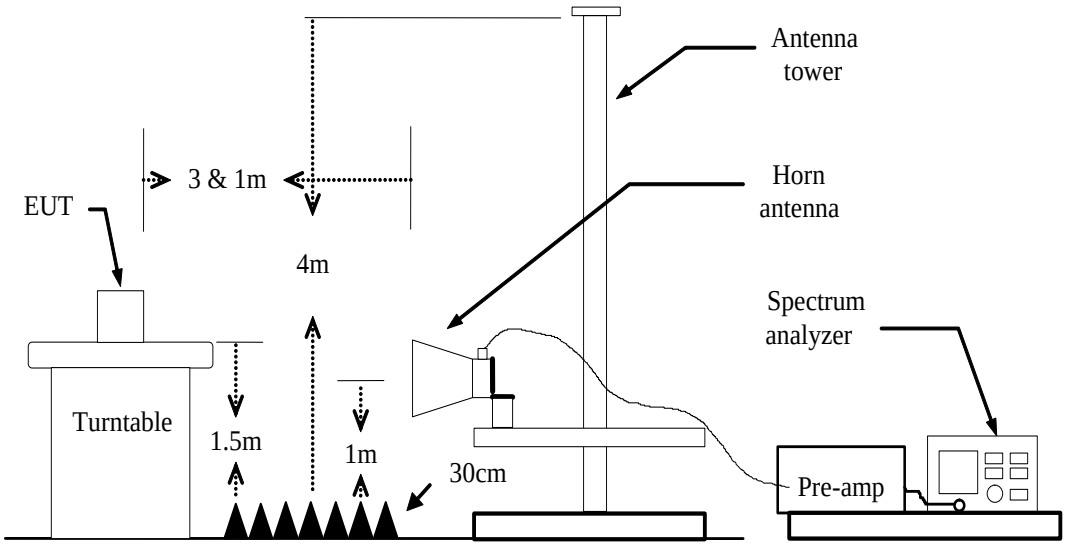
Below 30MHz



Below 1 GHz



Above 1 GHz



For the actual test configuration, please refer to the related item – Photographs of the TEST CONFIGURATION.

6.7.4 MEASURING SETTING

The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/T for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 1/T for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB 100kHz for QP

6.7.5TEST PROCEDURE

1) Sequence of testing 9 kHz to 30 MHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions.

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna height is 0.8 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height scan range is 1 meter to 2.5 meter.

--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz
Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 1 meter.

--- The EUT was set into operation.

Pre measurement:

--- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

--- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

6.7.6 DATA SAPLE

Below 1GHz

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXX.XXXX	36.37	-12.20	24.17	40.00	-15.83	V	QP

Frequency (MHz) = Emission frequency in MHz
Reading (dBuV) = Uncorrected Analyzer / Receiver reading
Correct Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)
Limit (dBuV/m) = Limit stated in standard
Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)
Q.P. = Quasi-peak Reading

Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
XXXX.XXXX	62.09	-11.42	50.67	74.00	-23.33	V	Peak
XXXX.XXXX	49.78	-11.42	38.36	54.00	-15.64	V	AVG

Frequency (MHz) = Emission frequency in MHz
Reading (dBuV) = Uncorrected Analyzer / Receiver reading
Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)
Limit (dBuV/m) = Limit stated in standard
Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)
Peak = Peak Reading
AVG = Average Reading

Calculation Formula

Margin (dB) = Result (dBuV/m) – Limits (dBuV/m)
Result (dBuV/m) = Reading (dBuV) + Correction Factor

6.7.7 TEST RESULTS

Below 1 GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

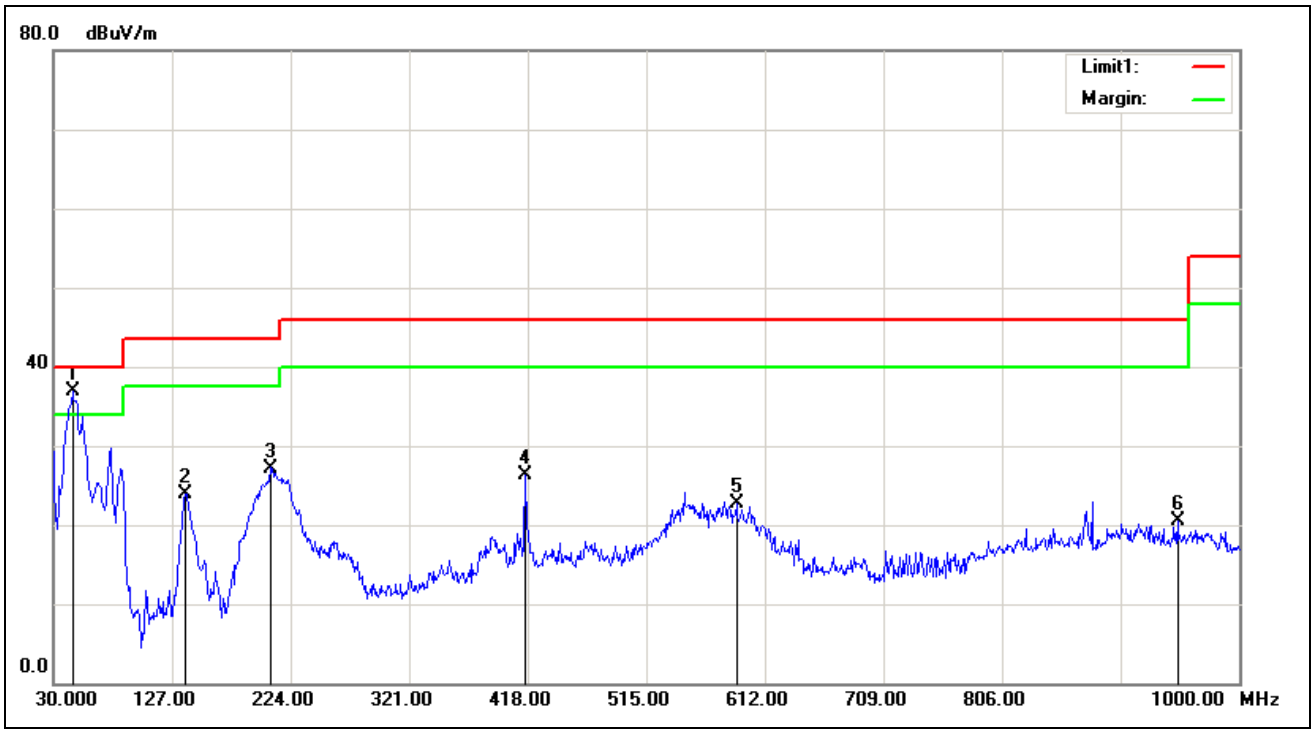
Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
45.5200	56.07	-19.12	36.95	40.00	-3.05	V	QP
137.6700	45.03	-21.13	23.90	43.50	-19.60	V	QP
207.5100	49.01	-21.81	27.20	43.50	-16.30	V	QP
416.0600	41.85	-15.49	26.36	46.00	-19.64	V	QP
588.7200	35.71	-13.05	22.66	46.00	-23.34	V	QP
949.5600	29.92	-9.32	20.60	46.00	-25.40	V	QP
115.3600	45.18	-21.46	23.72	43.50	-19.78	H	QP
191.0200	47.83	-22.85	24.98	43.50	-18.52	H	QP
212.3600	48.69	-21.24	27.45	43.50	-16.05	H	QP
387.9300	30.67	-16.44	14.23	46.00	-31.77	H	QP
559.6200	30.07	-13.25	16.82	46.00	-29.18	H	QP
705.1200	29.91	-11.92	17.99	46.00	-28.01	H	QP

Pre-scan all mode and recorded the worst case results in this report (802.11a (Low Mid)).

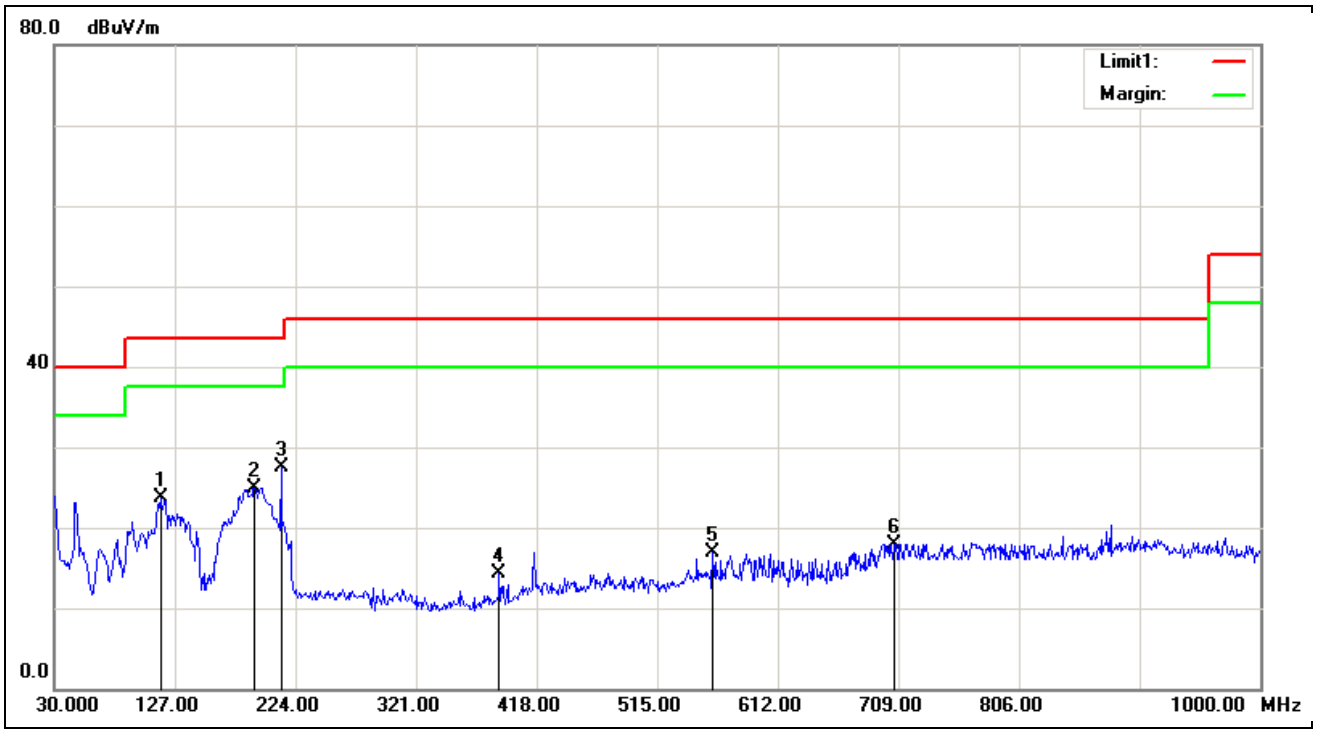
Remark:

1. *No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz)*
2. *Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak detector mode.*
3. *Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Quasi-peak limit (dBuV/m).*

Vertical



Horizontal



Above 1 GHz

1GHz~6GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
1720.000	51.84	-6.44	45.40	74.00	-28.60	V	peak
1910.000	54.73	-5.57	49.16	74.00	-24.84	V	peak
2410.000	51.03	-2.75	48.28	74.00	-25.72	V	peak
2460.000	50.55	-2.48	48.07	74.00	-25.93	V	peak
2595.000	47.30	-2.09	45.21	74.00	-28.79	V	peak
2925.000	44.99	-1.49	43.50	74.00	-30.50	V	peak
1780.000	47.13	-6.31	40.82	74.00	-33.18	H	Peak
1925.000	47.03	-5.48	41.55	74.00	-32.45	H	Peak
2410.000	48.00	-2.75	45.25	74.00	-28.75	H	Peak
3170.000	50.80	-1.07	49.73	74.00	-24.27	H	peak
4355.000	42.46	2.84	45.30	74.00	-28.70	H	peak
4760.000	45.24	4.20	49.44	74.00	-24.56	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Above 6GHz

Test Mode: TX / IEEE 802.11a / 5180MHz /(CH Low) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6456.000	31.89	6.82	38.71	74.00	-35.29	V	peak
6972.000	31.33	7.65	38.98	74.00	-35.02	V	peak
7476.000	31.71	8.63	40.34	74.00	-33.66	V	peak
7704.000	31.68	9.07	40.75	74.00	-33.25	V	peak
8472.000	30.96	9.39	40.35	74.00	-33.65	V	peak
9924.000	30.75	11.76	42.51	74.00	-31.49	V	peak
6948.000	31.80	7.62	39.42	74.00	-34.58	H	Peak
7332.000	32.46	8.35	40.81	74.00	-33.19	H	Peak
7932.000	31.68	9.52	41.20	74.00	-32.80	H	Peak
8436.000	31.05	9.41	40.46	74.00	-33.54	H	peak
9336.000	31.00	10.07	41.07	74.00	-32.93	H	peak
9672.000	30.15	11.04	41.19	74.00	-32.81	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5200MHz /(CH Mid) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6516.000	31.87	6.92	38.79	74.00	-35.21	V	peak
7056.000	30.81	7.81	38.62	74.00	-35.38	V	peak
7488.000	31.27	8.65	39.92	74.00	-34.08	V	peak
7884.000	30.95	9.42	40.37	74.00	-33.63	V	peak
8616.000	31.22	9.31	40.53	74.00	-33.47	V	peak
9324.000	30.37	10.03	40.40	74.00	-33.60	V	peak
6864.000	31.22	7.48	38.70	74.00	-35.30	H	Peak
7284.000	32.30	8.25	40.55	74.00	-33.45	H	Peak
7920.000	31.05	9.49	40.54	74.00	-33.46	H	Peak
8412.000	31.13	9.42	40.55	74.00	-33.45	H	peak
9288.000	30.73	9.93	40.66	74.00	-33.34	H	peak
9684.000	29.59	11.07	40.66	74.00	-33.34	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5240MHz /(CH High) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6564.000	31.61	6.99	38.60	74.00	-35.40	V	peak
7032.000	32.20	7.76	39.96	74.00	-34.04	V	peak
7440.000	31.78	8.56	40.34	74.00	-33.66	V	peak
7860.000	31.16	9.38	40.54	74.00	-33.46	V	peak
8160.000	31.44	9.56	41.00	74.00	-33.00	V	peak
9012.000	31.30	9.13	40.43	74.00	-33.57	V	peak
7320.000	32.21	8.32	40.53	74.00	-33.47	H	Peak
7788.000	31.72	9.24	40.96	74.00	-33.04	H	Peak
8376.000	30.27	9.44	39.71	74.00	-34.29	H	Peak
9804.000	30.25	11.42	41.67	74.00	-32.33	H	peak
11148.000	29.52	15.01	44.53	74.00	-29.47	H	peak
11448.000	29.38	14.88	44.26	74.00	-29.74	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5260MHz /(CH Low) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6780.000	33.02	7.34	40.36	74.00	-33.64	V	peak
7212.000	31.58	8.11	39.69	74.00	-34.31	V	peak
7644.000	31.79	8.96	40.75	74.00	-33.25	V	peak
8676.000	31.01	9.28	40.29	74.00	-33.71	V	peak
9660.000	30.38	11.00	41.38	74.00	-32.62	V	peak
10092.000	30.61	12.27	42.88	74.00	-31.12	V	peak
6588.000	32.12	7.03	39.15	74.00	-34.85	H	Peak
7092.000	31.59	7.88	39.47	74.00	-34.53	H	Peak
7764.000	31.46	9.19	40.65	74.00	-33.35	H	Peak
8112.000	31.70	9.59	41.29	74.00	-32.71	H	peak
9924.000	30.60	11.76	42.36	74.00	-31.64	H	peak
10872.000	30.08	14.68	44.76	74.00	-29.24	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5300MHz /(CH Mid) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6576.000	31.69	7.01	38.70	74.00	-35.30	V	peak
7164.000	31.99	8.02	40.01	74.00	-33.99	V	peak
7728.000	31.86	9.12	40.98	74.00	-33.02	V	peak
8004.000	31.86	9.65	41.51	74.00	-32.49	V	peak
9792.000	31.11	11.38	42.49	74.00	-31.51	V	peak
10476.000	29.94	13.46	43.40	74.00	-30.60	V	peak
7188.000	31.74	8.07	39.81	74.00	-34.19	H	Peak
7680.000	31.80	9.03	40.83	74.00	-33.17	H	Peak
8088.000	32.06	9.60	41.66	74.00	-32.34	H	Peak
9396.000	30.74	10.24	40.98	74.00	-33.02	H	peak
10836.000	30.40	14.57	44.97	74.00	-29.03	H	peak
11844.000	30.24	14.71	44.95	74.00	-29.05	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5320MHz /(CH High) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6840.000	32.21	7.44	39.65	74.00	-34.35	V	peak
7392.000	31.68	8.46	40.14	74.00	-33.86	V	peak
7956.000	32.06	9.56	41.62	74.00	-32.38	V	peak
8640.000	31.69	9.30	40.99	74.00	-33.01	V	peak
8976.000	31.96	9.11	41.07	74.00	-32.93	V	peak
10044.000	30.70	12.12	42.82	74.00	-31.18	V	peak
6168.000	31.20	6.35	37.55	74.00	-36.45	H	Peak
6504.000	30.70	6.90	37.60	74.00	-36.40	H	Peak
7068.000	30.80	7.83	38.63	74.00	-35.37	H	Peak
7836.000	30.45	9.33	39.78	74.00	-34.22	H	peak
8472.000	30.46	9.39	39.85	74.00	-34.15	H	peak
10596.000	28.93	13.83	42.76	74.00	-31.24	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5500MHz /(CH Low) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
6456.000	31.52	6.82	38.34	74.00	-35.66	V	peak
7308.000	30.97	8.30	39.27	74.00	-34.73	V	peak
8088.000	32.33	9.60	41.93	74.00	-32.07	V	peak
9144.000	29.04	9.51	38.55	74.00	-35.45	V	peak
10020.000	29.77	12.04	41.81	74.00	-32.19	V	peak
10920.000	28.96	14.83	43.79	74.00	-30.21	V	peak
6732.000	31.73	7.27	39.00	74.00	-35.00	H	Peak
7272.000	31.70	8.23	39.93	74.00	-34.07	H	Peak
7788.000	30.07	9.24	39.31	74.00	-34.69	H	Peak
8292.000	29.92	9.49	39.41	74.00	-34.59	H	peak
9384.000	29.95	10.21	40.16	74.00	-33.84	H	peak
10380.000	29.08	13.16	42.24	74.00	-31.76	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*

Test Mode: TX / IEEE 802.11a / 5580MHz /(CH Mid) **Tested by:** Saber Huang

Ambient temperature: 24°C **Relative humidity:** 52% RH **Date:** May 25, 2018

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Pole (V/H)	Remark
7908.000	29.77	9.47	39.24	74.00	-34.76	V	peak
8508.000	29.70	9.37	39.07	74.00	-34.93	V	peak
9096.000	30.60	9.38	39.98	74.00	-34.02	V	peak
9468.000	29.44	10.45	39.89	74.00	-34.11	V	peak
10008.000	28.96	12.00	40.96	74.00	-33.04	V	peak
10812.000	29.22	14.50	43.72	74.00	-30.28	V	peak
6348.000	34.47	6.64	41.11	74.00	-32.89	H	Peak
6504.000	31.31	6.90	38.21	74.00	-35.79	H	Peak
6984.000	32.34	7.67	40.01	74.00	-33.99	H	peak
7764.000	30.04	9.19	39.23	74.00	-34.77	H	peak
8424.000	31.28	9.42	40.70	74.00	-33.30	H	peak
9828.000	30.09	11.48	41.57	74.00	-32.43	H	peak

Remark:

1. *Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.*
2. *Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.*
3. *Average test would be performed if the peak result were greater than the average limit.*
4. *Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.*
5. *Measurements above show only up to 6 maximum emissions noted, or would be lesser, with " N/A " remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.*
6. *Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).*