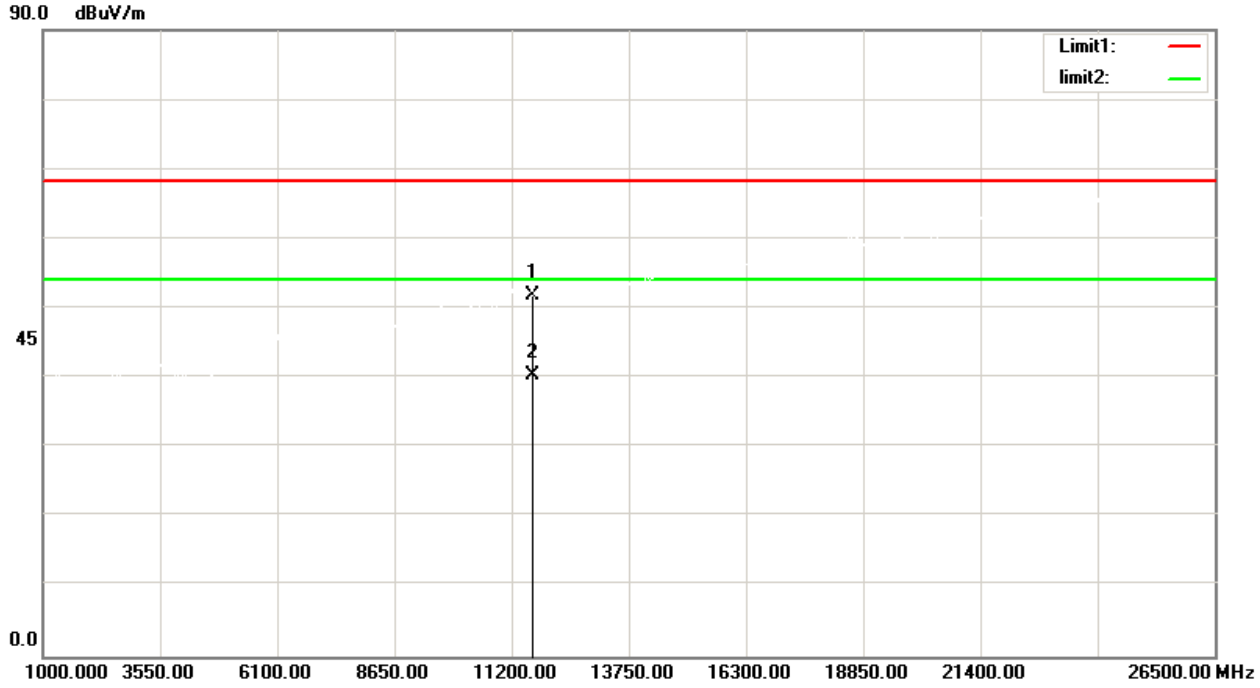
Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz

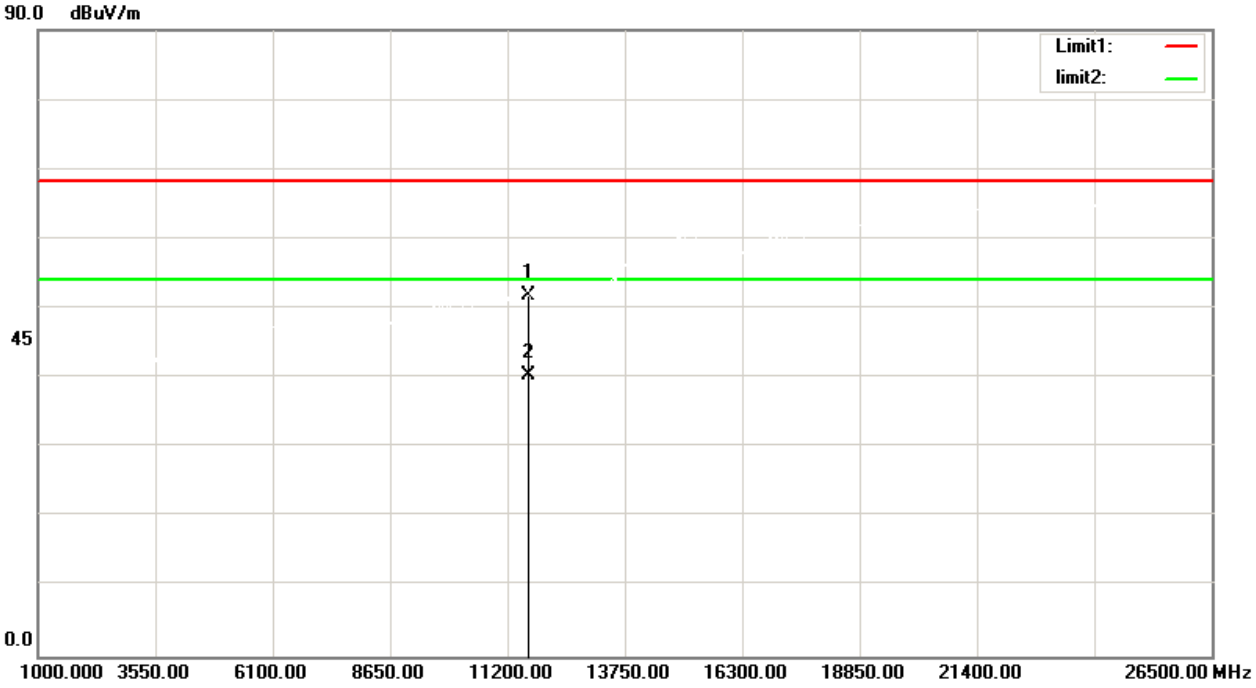
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.84	7.97	51.81	68.30	-16.49	peak
2	11650.000	32.40	7.97	40.37	54.00	-13.63	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT20) Mode 5825 MHz

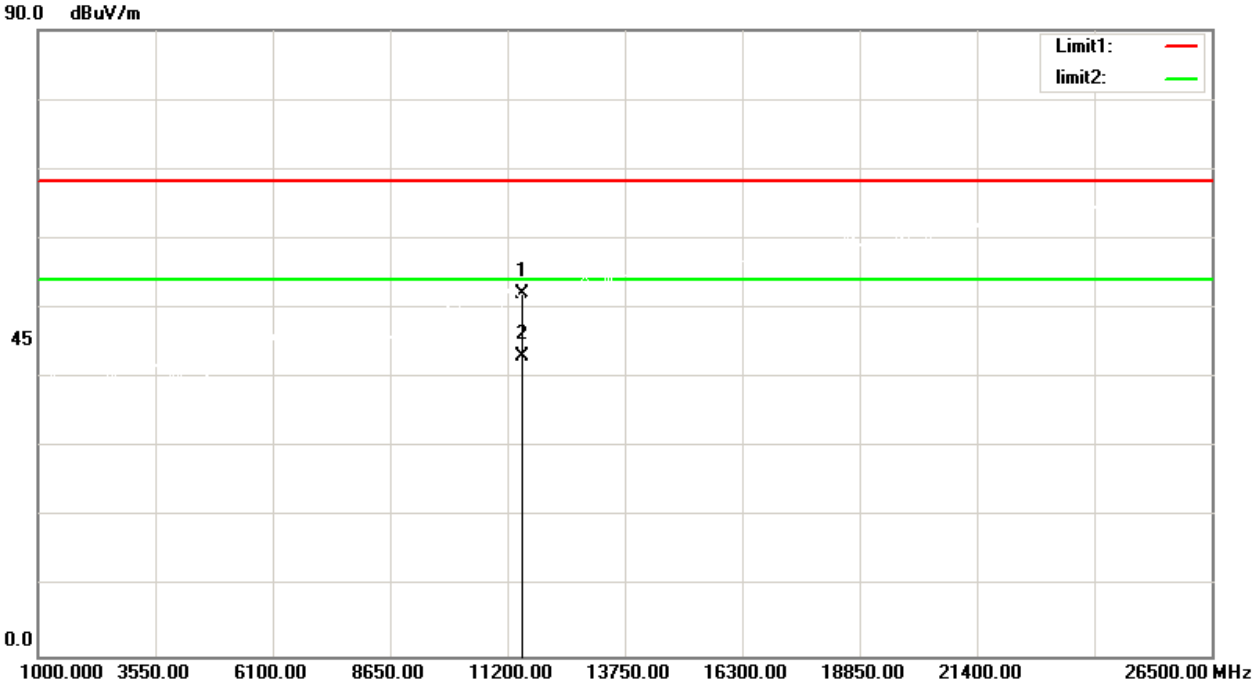
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.89	7.97	51.86	68.30	-16.44	peak
2	11650.000	32.31	7.97	40.28	54.00	-13.72	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz

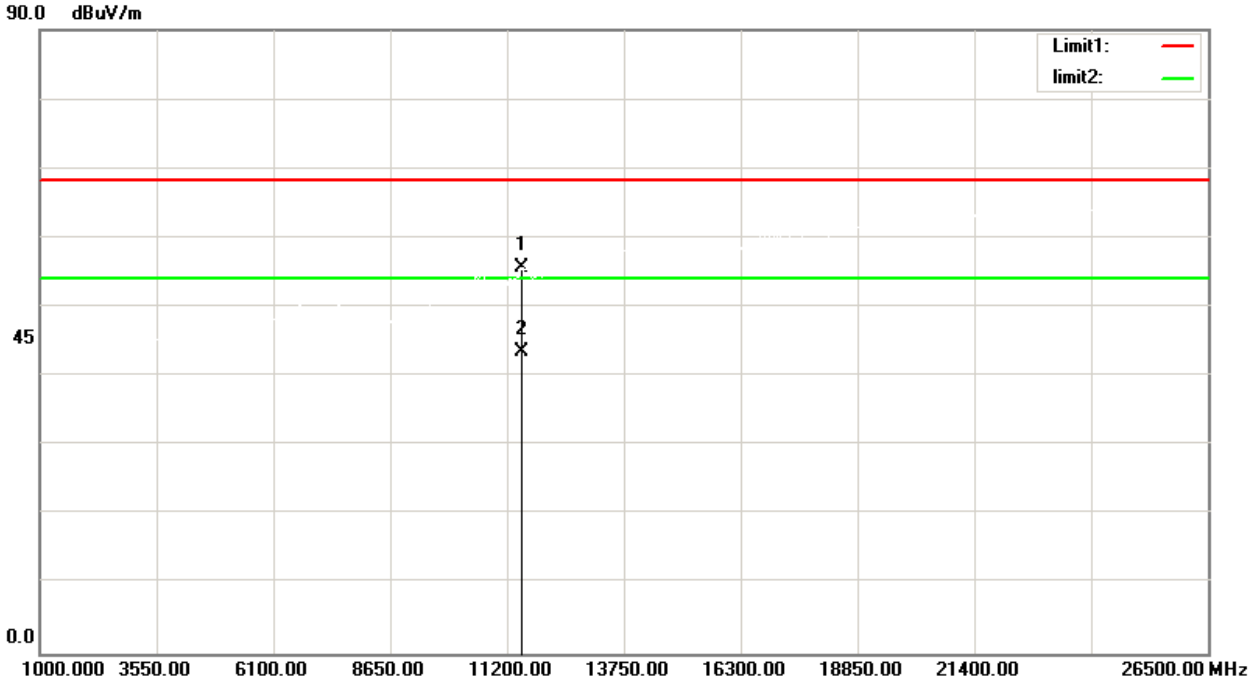
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	44.00	8.04	52.04	68.30	-16.26	peak
2	11510.000	35.11	8.04	43.15	54.00	-10.85	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5755 MHz

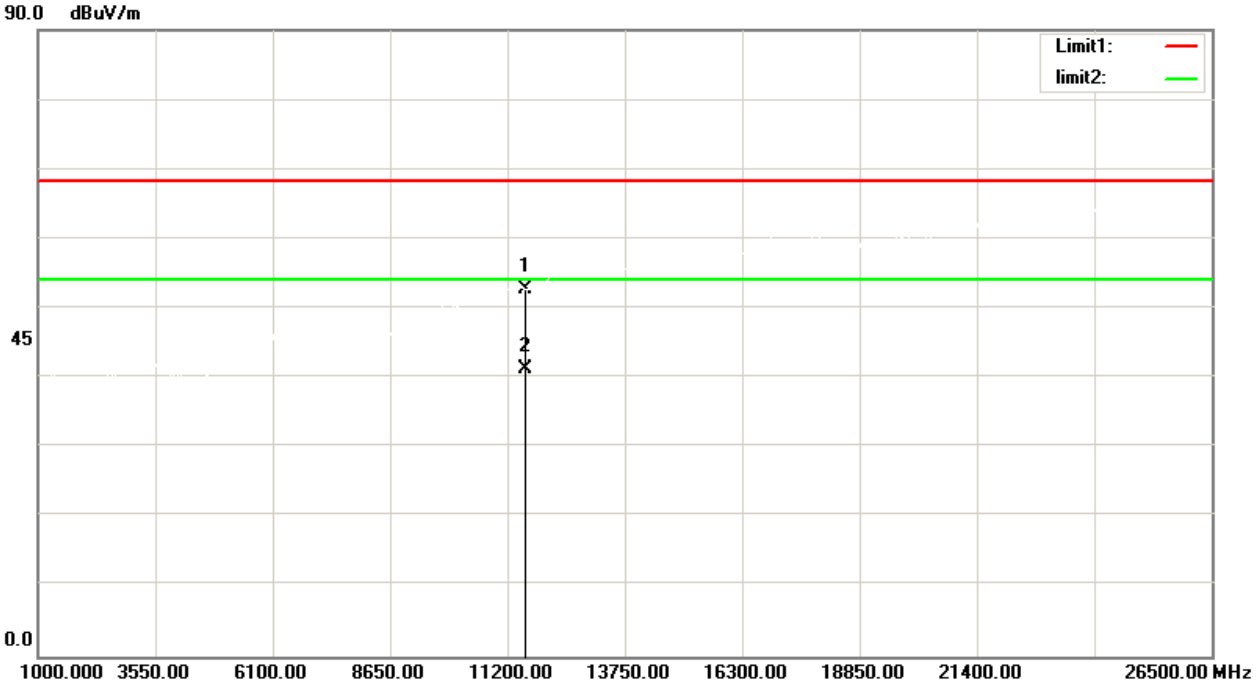
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	47.63	8.04	55.67	68.30	-12.63	peak
2	11510.000	35.58	8.04	43.62	54.00	-10.38	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz

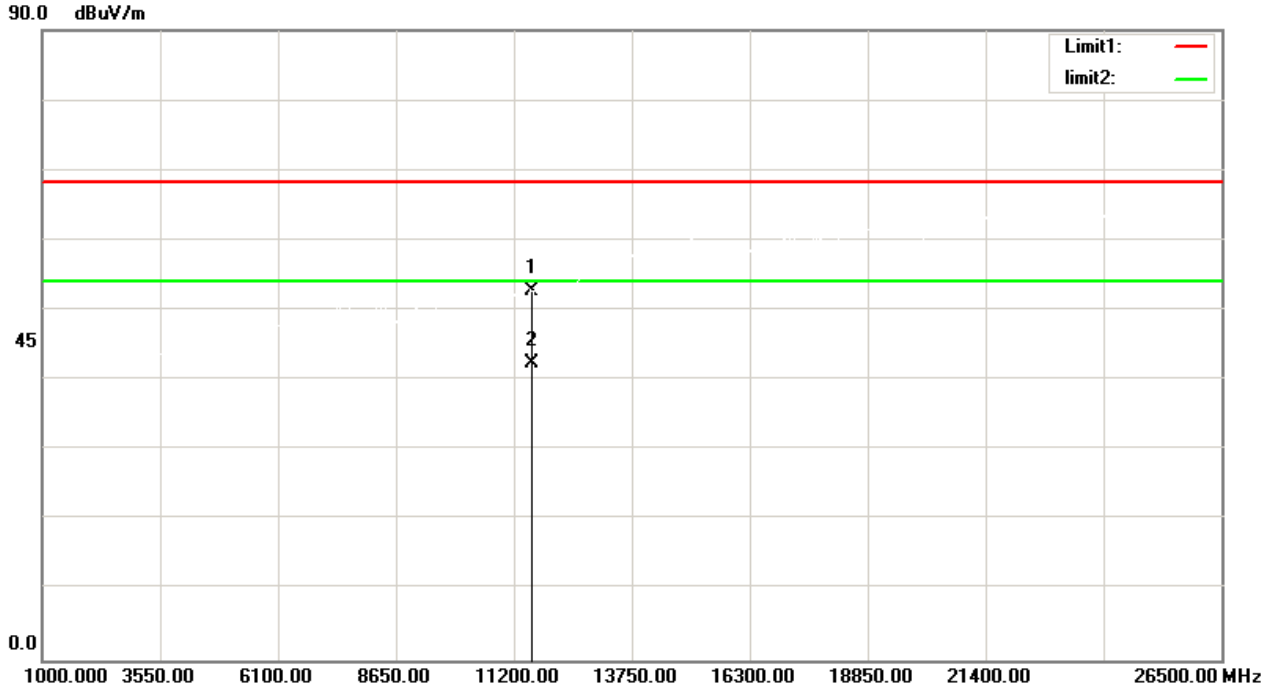
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	44.84	8.01	52.85	68.30	-15.45	peak
2	11590.000	33.33	8.01	41.34	54.00	-12.66	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX N (HT40) Mode 5795 MHz

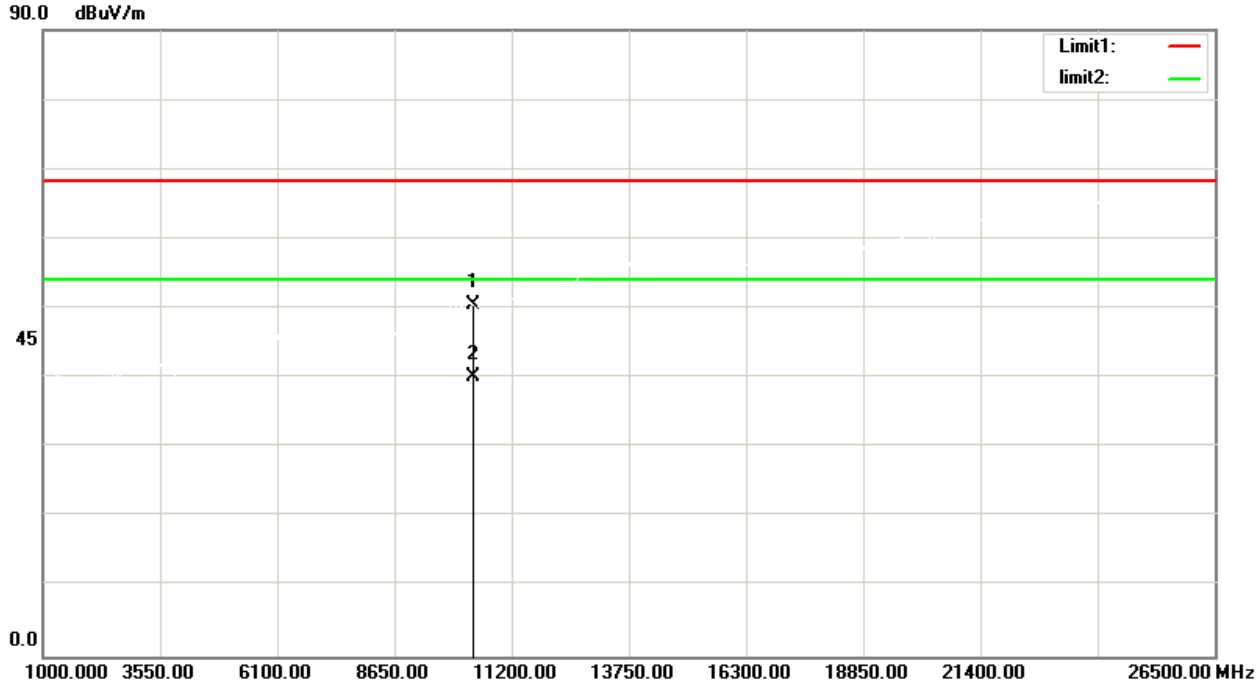
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.110	44.79	8.01	52.80	68.30	-15.50	peak
2	11590.110	34.34	8.01	42.35	54.00	-11.65	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

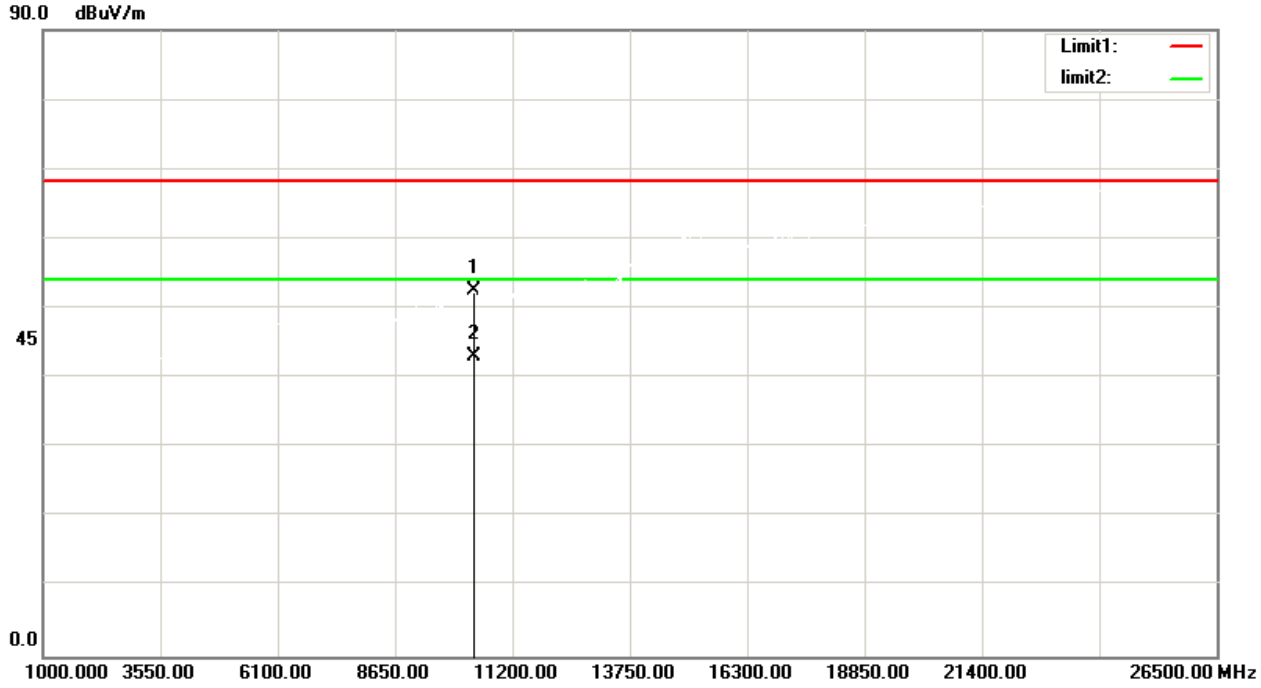
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	44.24	6.22	50.46	68.30	-17.84	peak
2	10360.000	33.94	6.22	40.16	54.00	-13.84	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5180 MHz

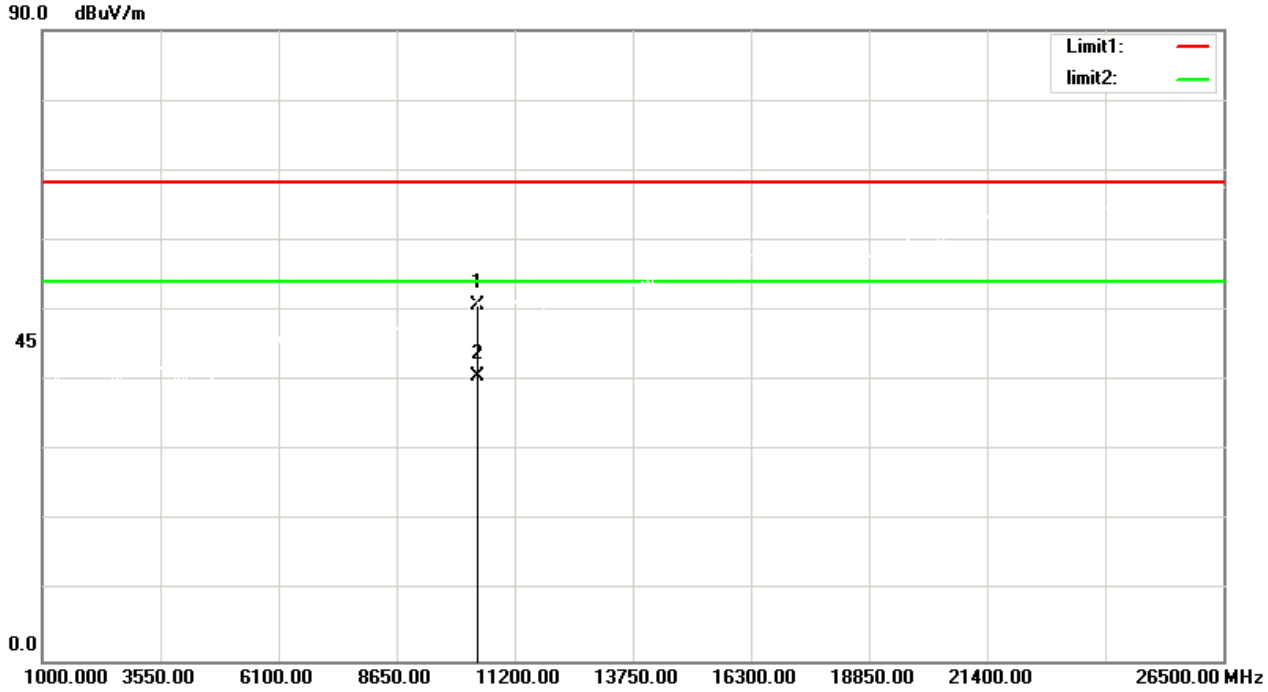
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	46.25	6.22	52.47	68.30	-15.83	peak
2	10360.000	36.84	6.22	43.06	54.00	-10.94	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

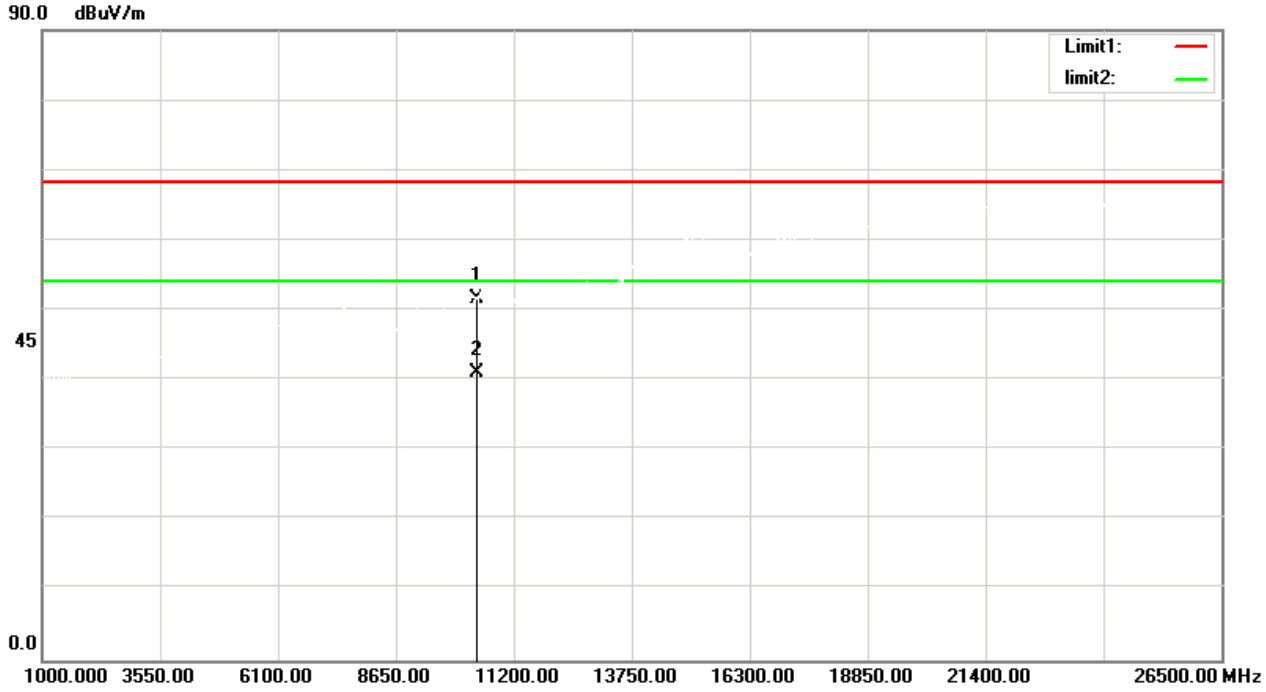
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	44.47	6.35	50.82	68.30	-17.48	peak
2	10400.000	34.27	6.35	40.62	54.00	-13.38	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5200 MHz

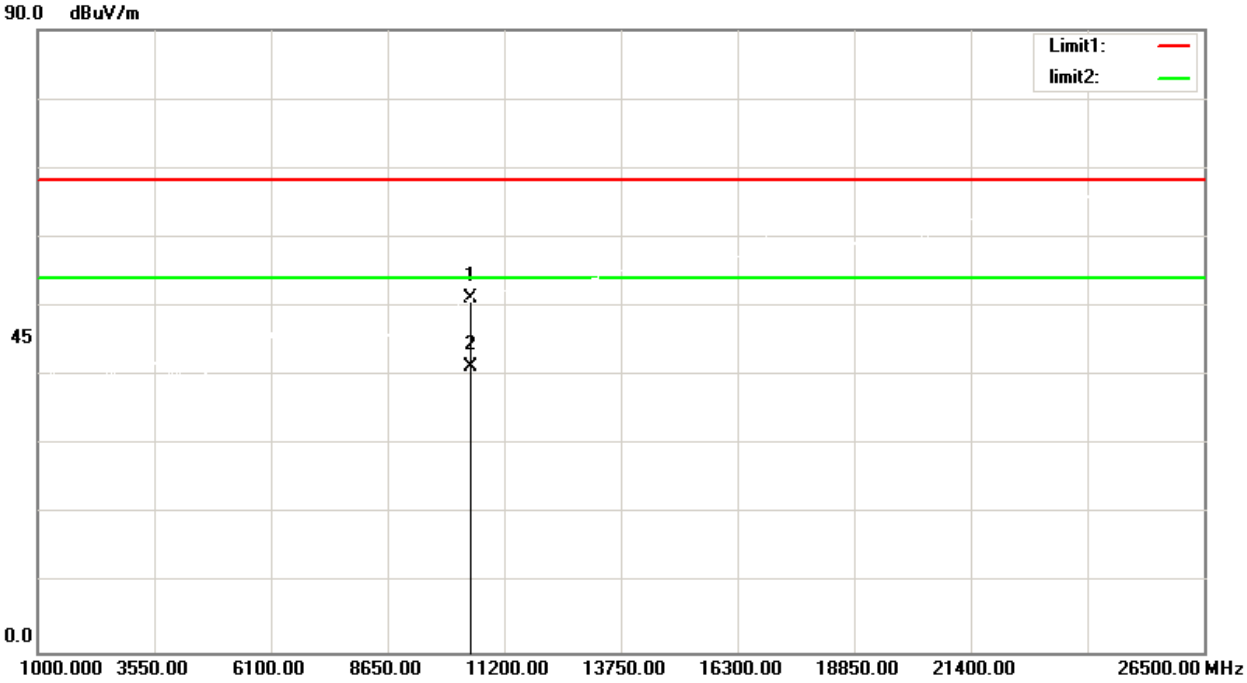
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	45.33	6.35	51.68	68.30	-16.62	peak
2	10400.000	34.79	6.35	41.14	54.00	-12.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

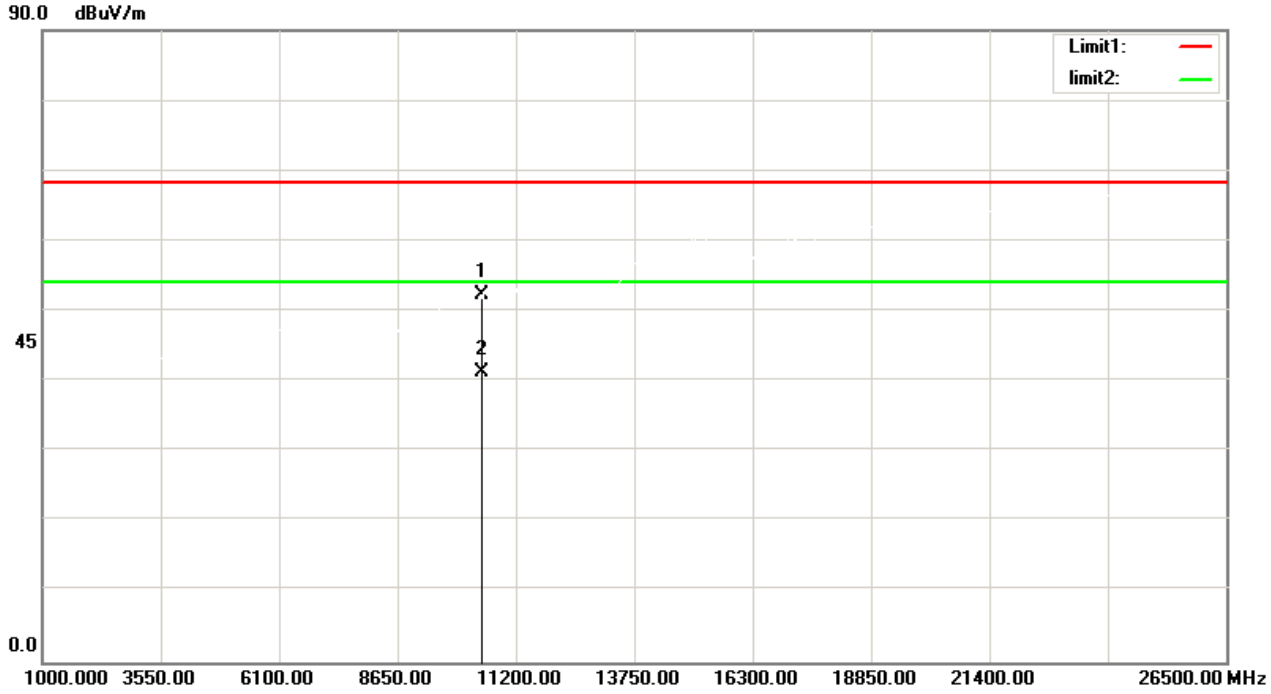
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	44.58	6.61	51.19	68.30	-17.11	peak
2	10480.000	34.70	6.61	41.31	54.00	-12.69	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT20) Mode 5240 MHz

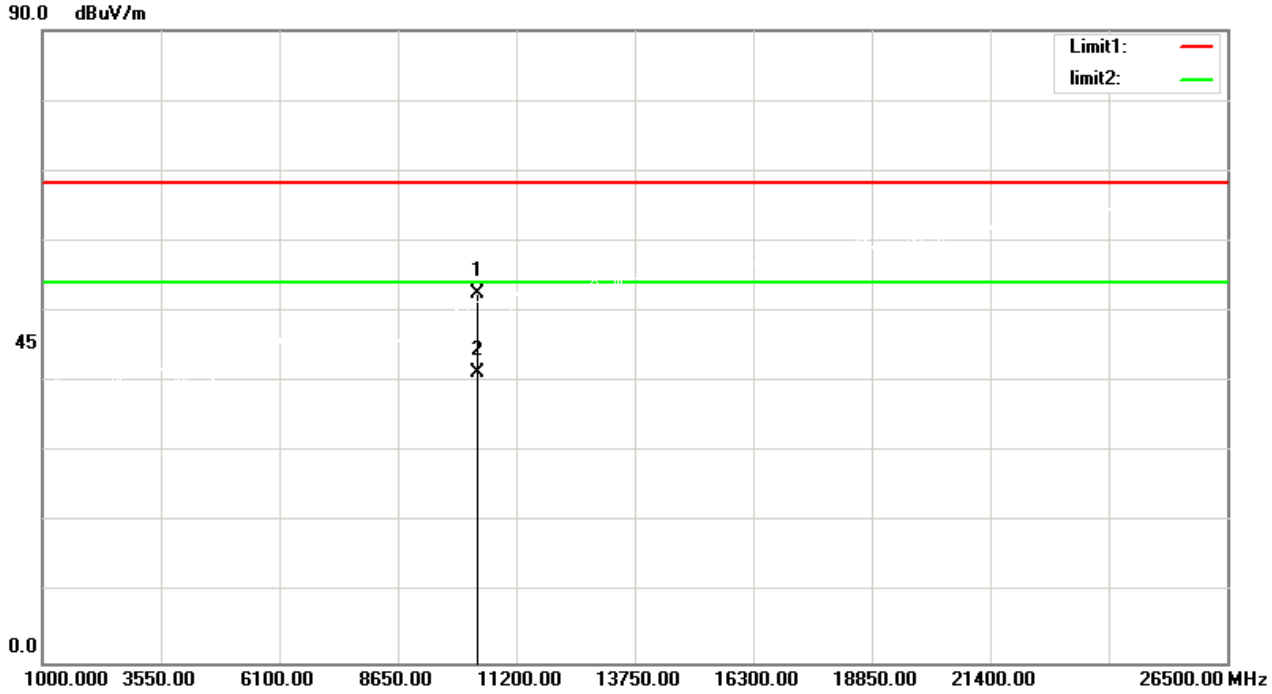
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	45.77	6.61	52.38	68.30	-15.92	peak
2	10480.000	34.76	6.61	41.37	54.00	-12.63	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

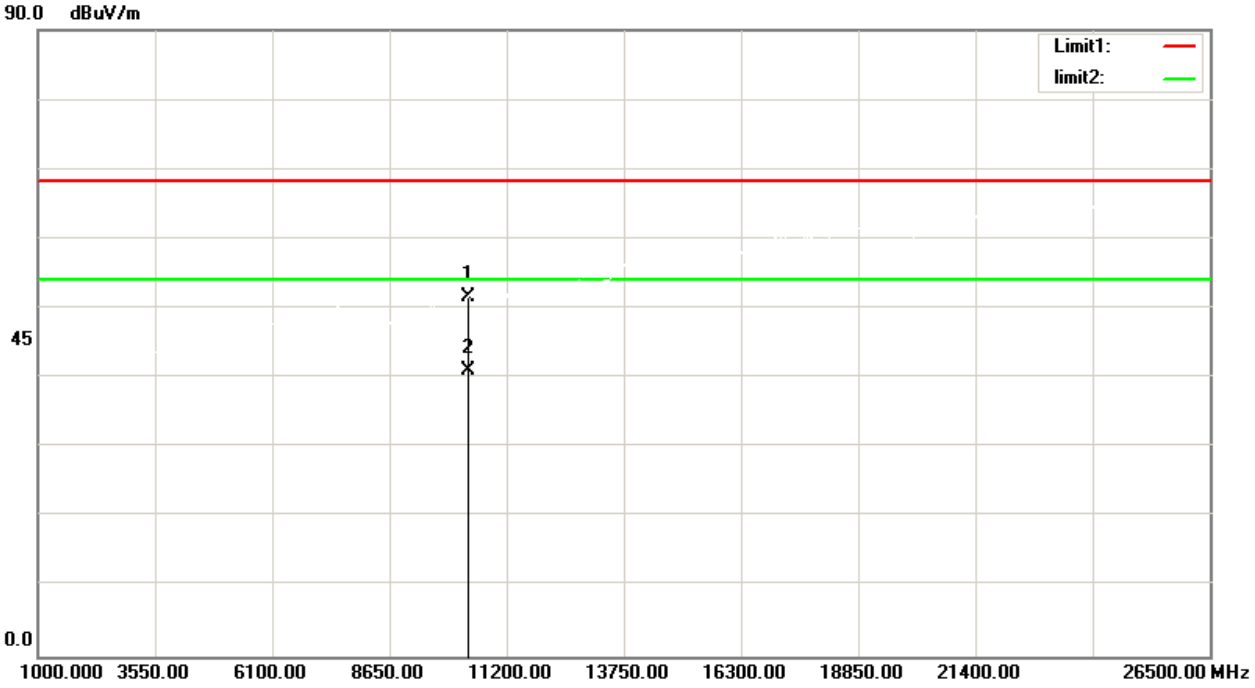
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	46.33	6.28	52.61	68.30	-15.69	peak
2	10380.000	35.10	6.28	41.38	54.00	-12.62	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5190 MHz

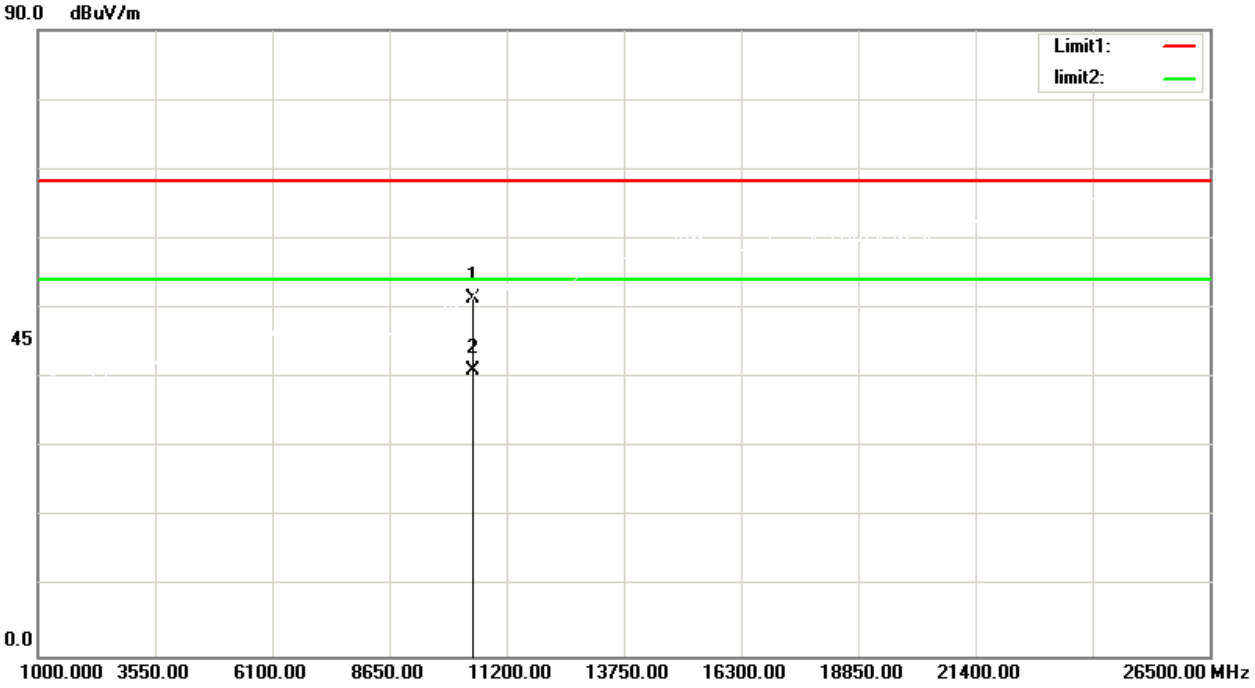
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	45.40	6.28	51.68	68.30	-16.62	peak
2	10380.000	34.86	6.28	41.14	54.00	-12.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

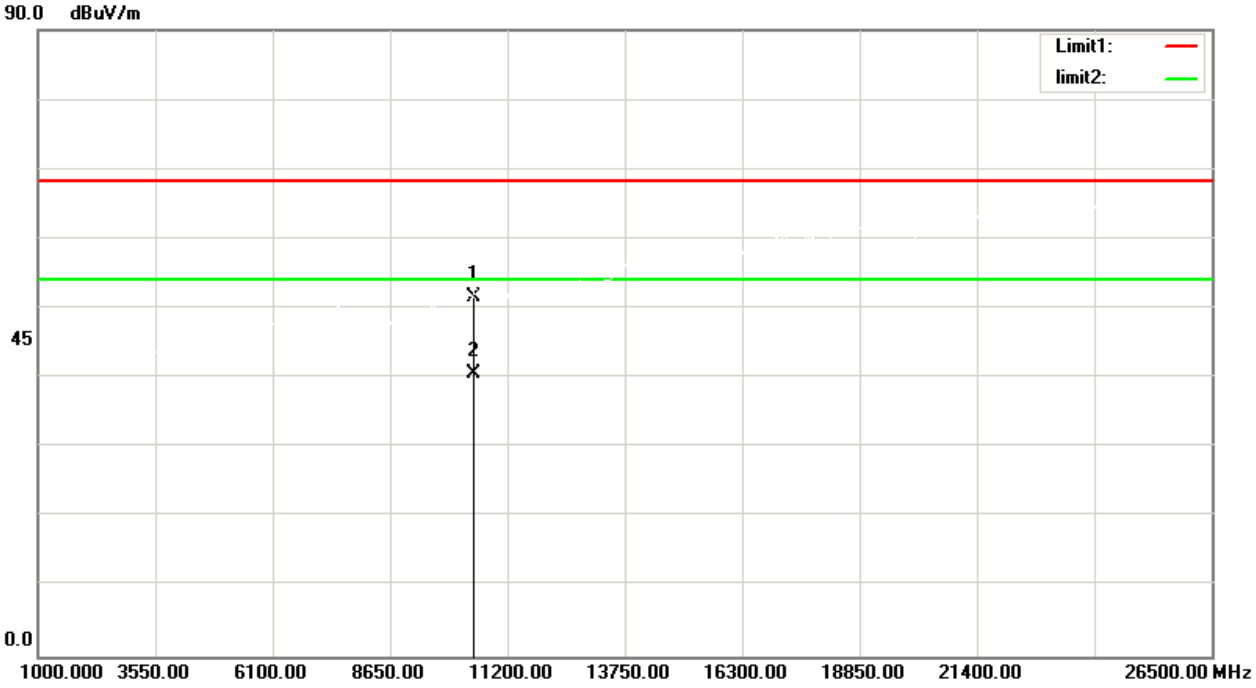
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	44.77	6.55	51.32	68.30	-16.98	peak
2	10460.000	34.59	6.55	41.14	54.00	-12.86	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT40) Mode 5230 MHz

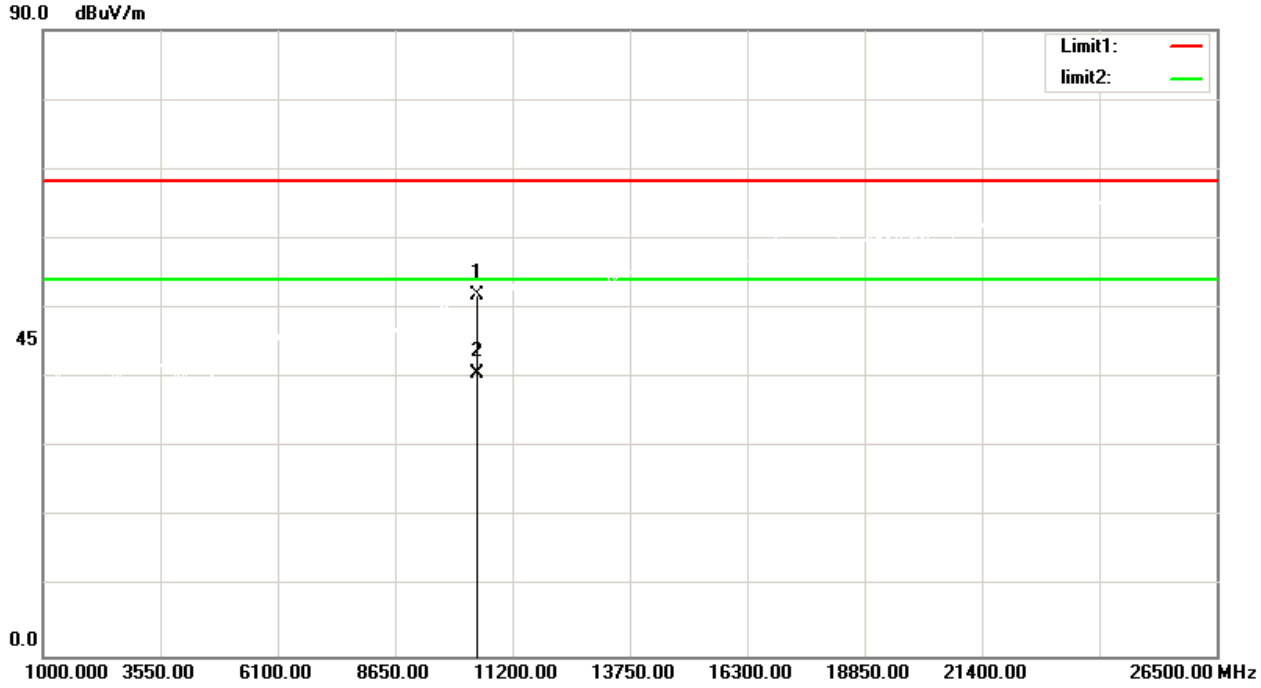
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	45.13	6.55	51.68	68.30	-16.62	peak
2	10460.000	34.16	6.55	40.71	54.00	-13.29	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

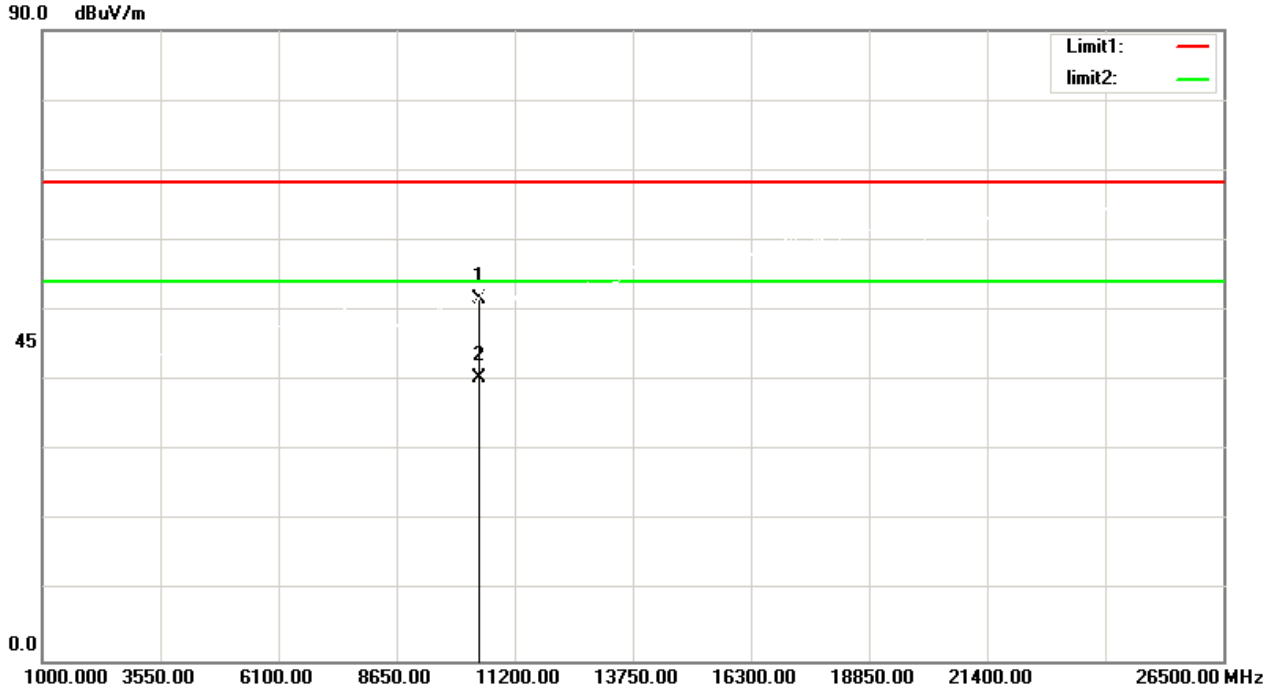
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10425.000	45.39	6.43	51.82	68.30	-16.48	peak
2	10425.000	34.25	6.43	40.68	54.00	-13.32	AVG

Orthogonal Axis	X
Test Mode	UNII-1_TX AC (VHT80) Mode 5210 MHz

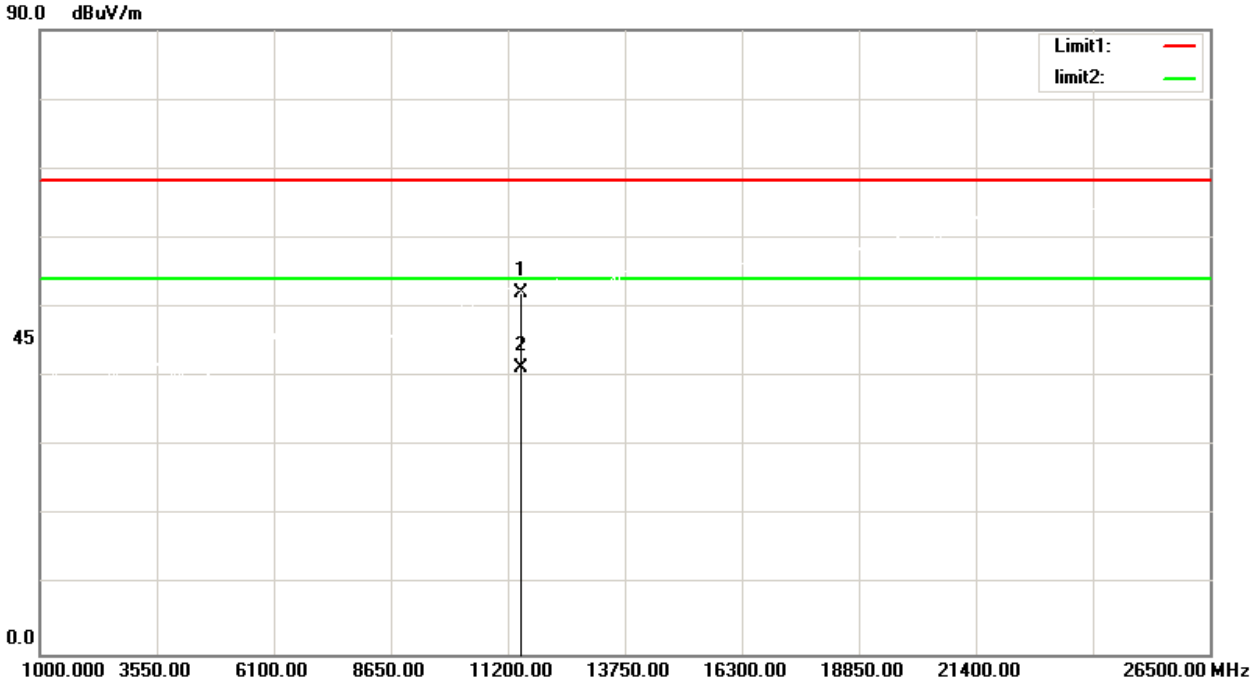
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10425.000	45.25	6.43	51.68	68.30	-16.62	peak
2	10425.000	33.95	6.43	40.38	54.00	-13.62	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

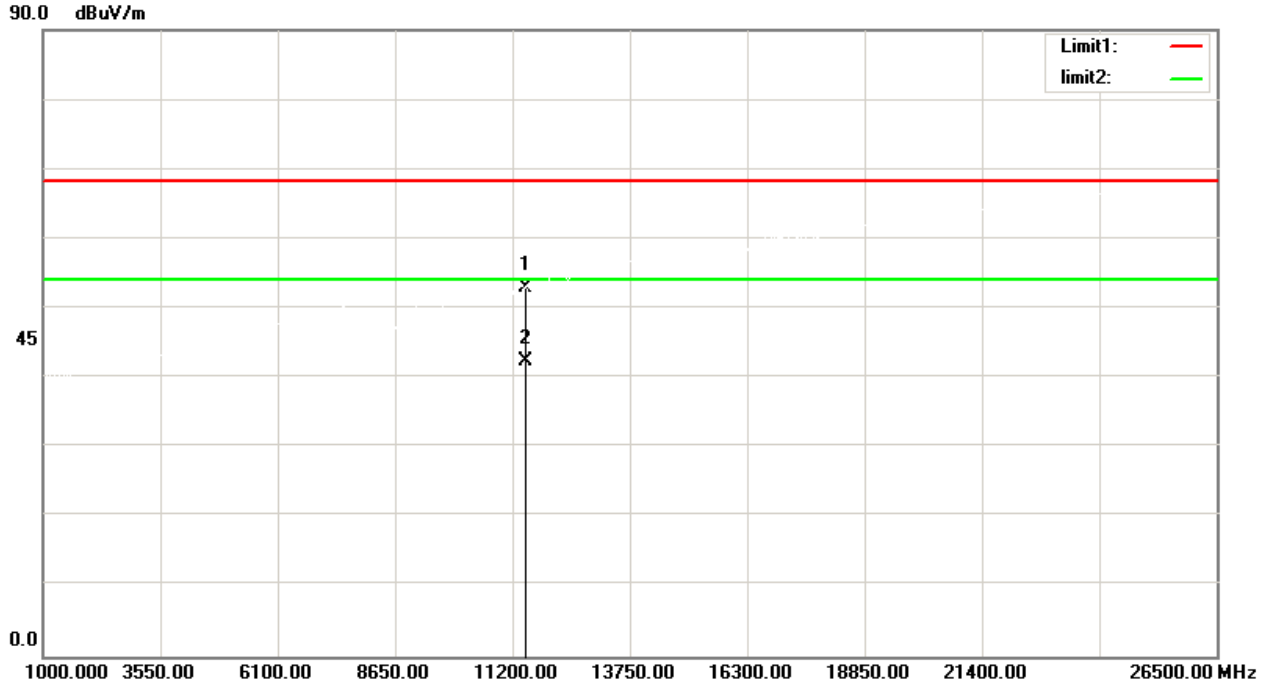
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.200	43.98	8.06	52.04	68.30	-16.26	peak
2	11490.200	33.21	8.06	41.27	54.00	-12.73	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5745 MHz

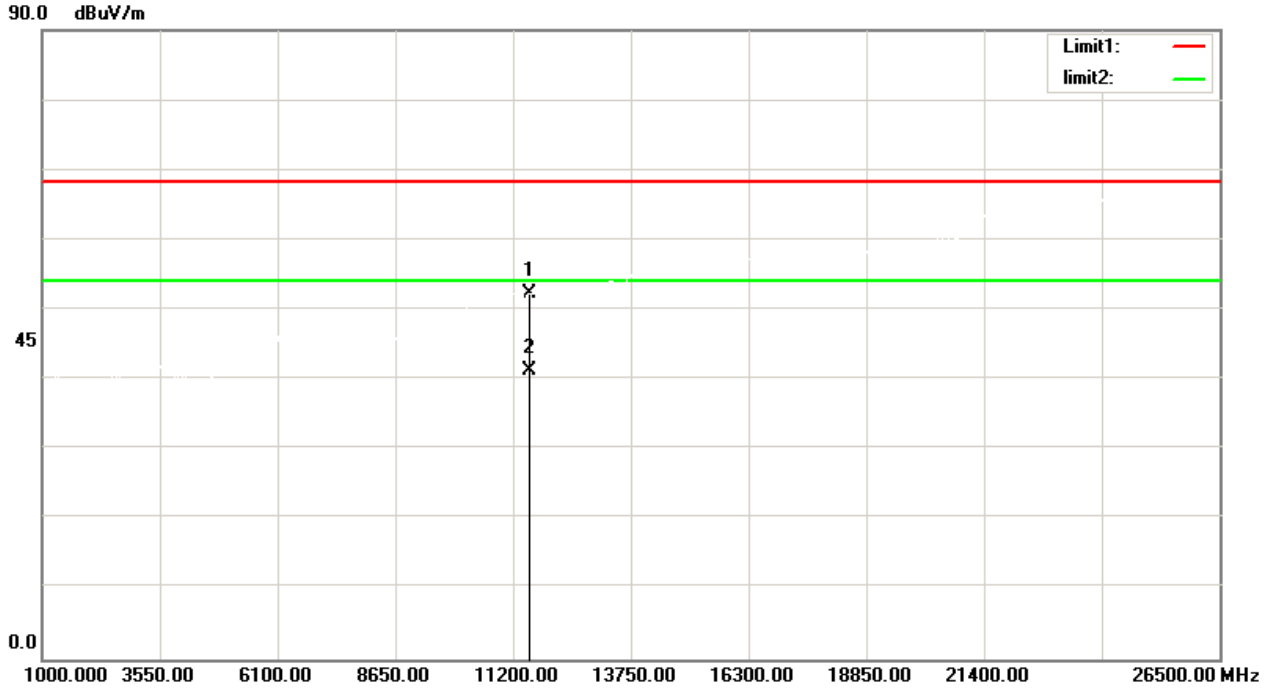
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	44.84	8.06	52.90	68.30	-15.40	peak
2	11490.000	34.32	8.06	42.38	54.00	-11.62	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

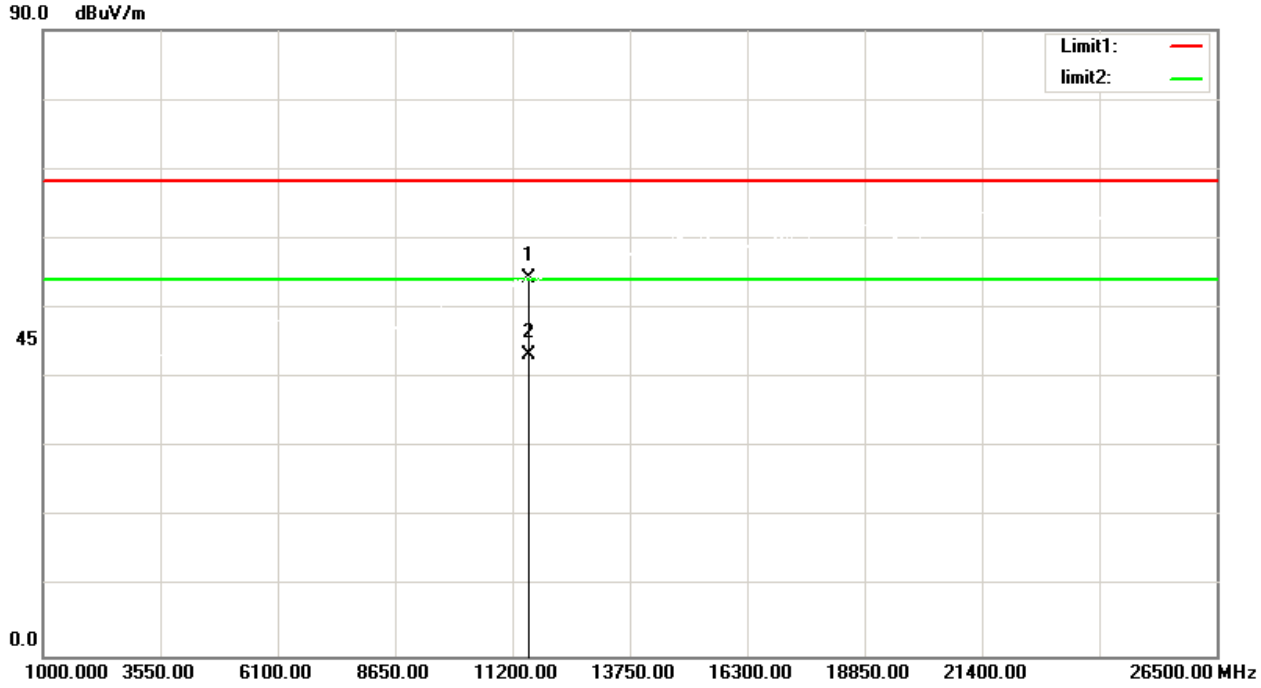
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	44.36	8.00	52.36	68.30	-15.94	peak
2	11570.000	33.37	8.00	41.37	54.00	-12.63	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5785 MHz

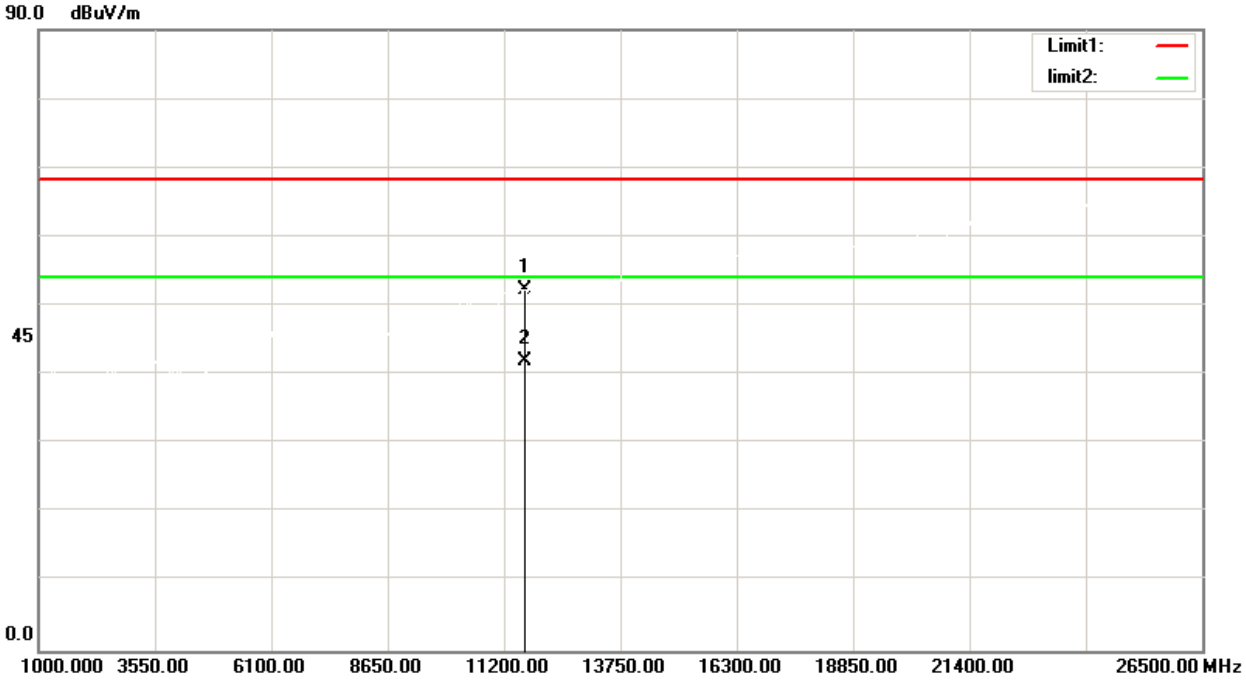
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.116	46.36	8.00	54.36	68.30	-13.94	peak
2	11570.116	35.26	8.00	43.26	54.00	-10.74	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

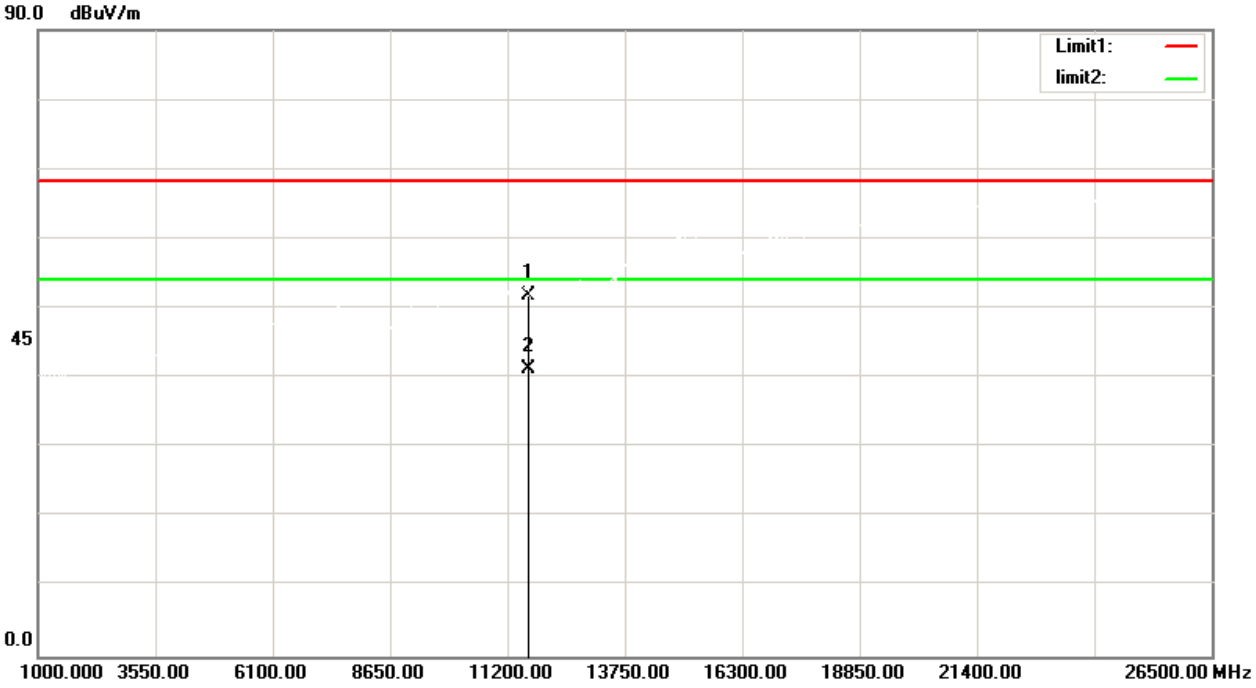
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	44.34	7.97	52.31	68.30	-15.99	peak
2	11650.000	34.09	7.97	42.06	54.00	-11.94	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT20) Mode 5825 MHz

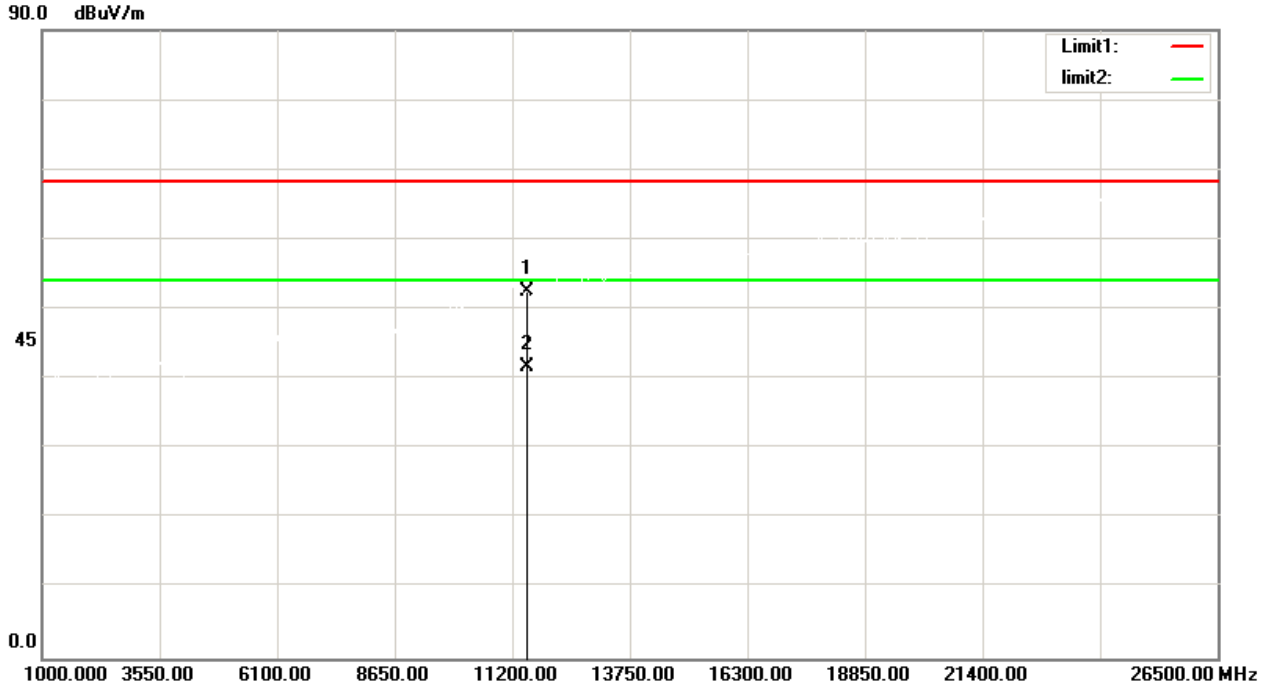
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	43.89	7.97	51.86	68.30	-16.44	peak
2	11650.000	33.40	7.97	41.37	54.00	-12.63	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

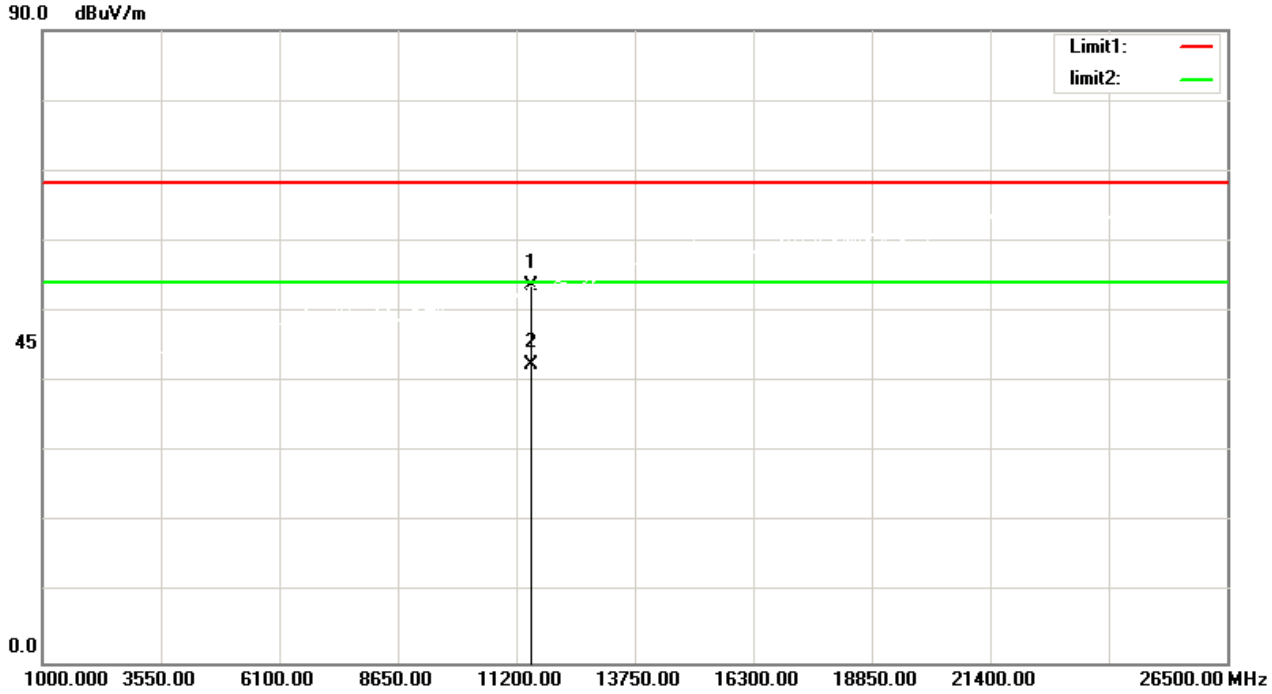
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	44.50	8.04	52.54	68.30	-15.76	peak
2	11510.000	33.65	8.04	41.69	54.00	-12.31	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5755 MHz

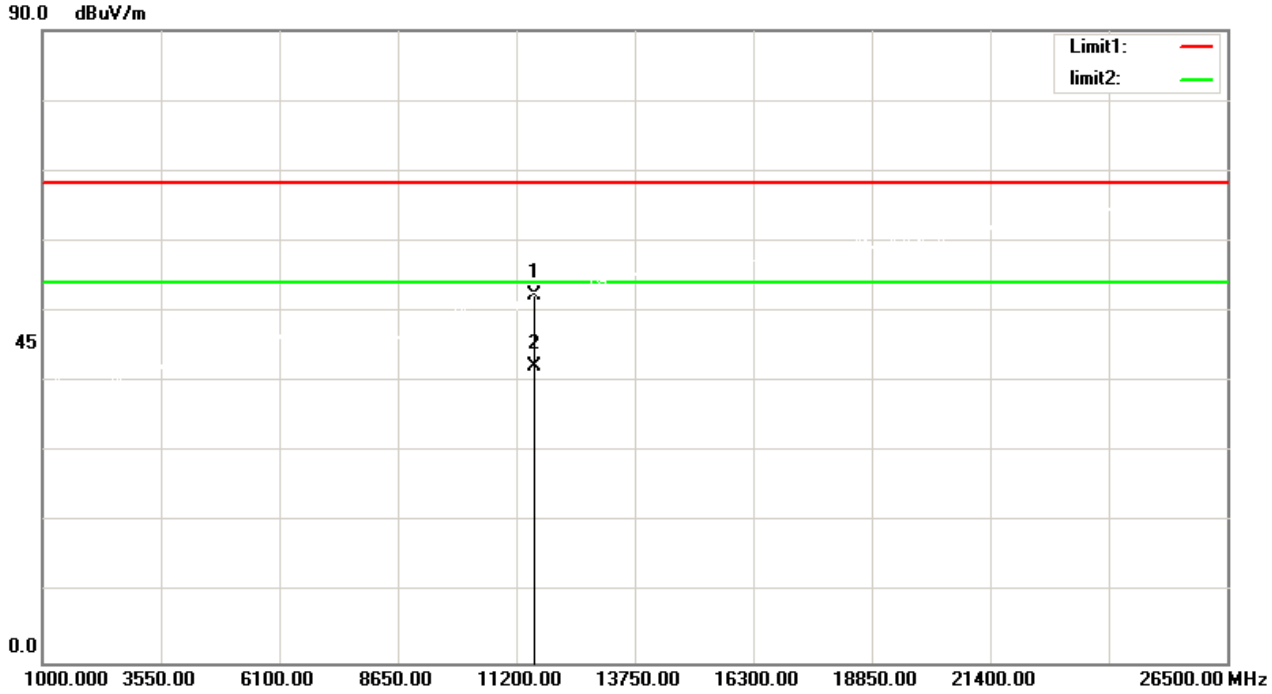
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	45.63	8.04	53.67	68.30	-14.63	peak
2	11510.000	34.31	8.04	42.35	54.00	-11.65	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

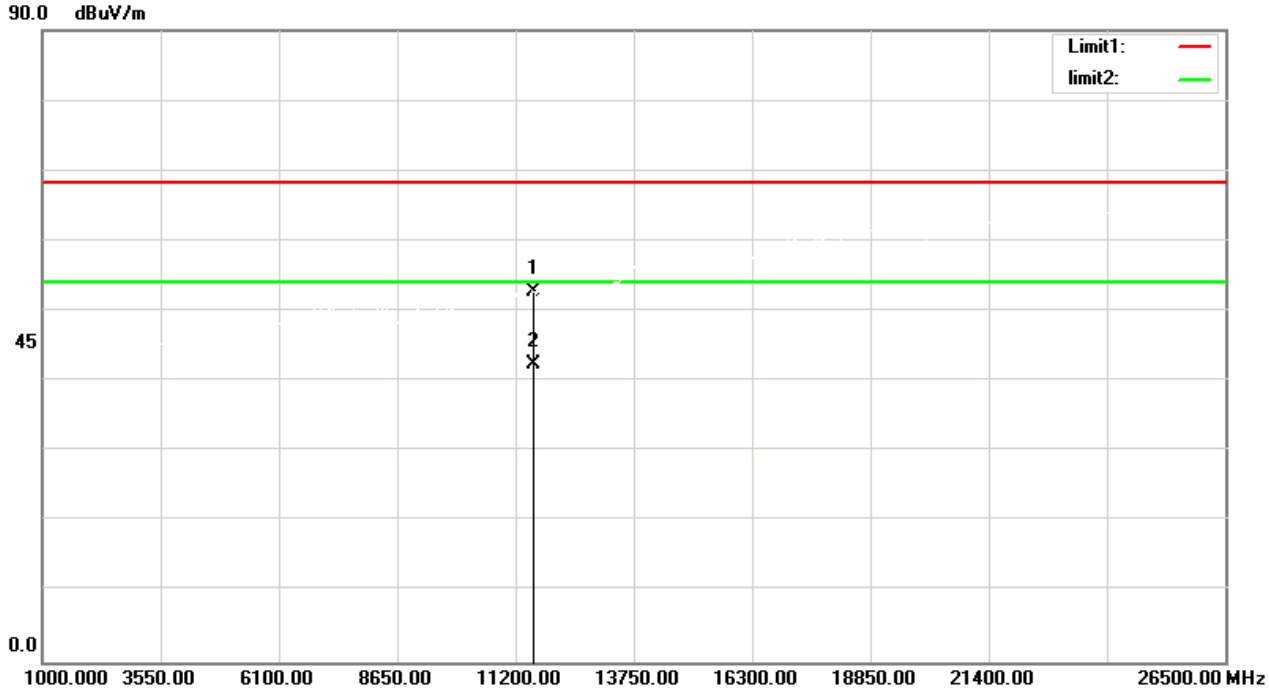
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	44.34	8.01	52.35	68.30	-15.95	peak
2	11590.000	34.11	8.01	42.12	54.00	-11.88	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT40) Mode 5795 MHz

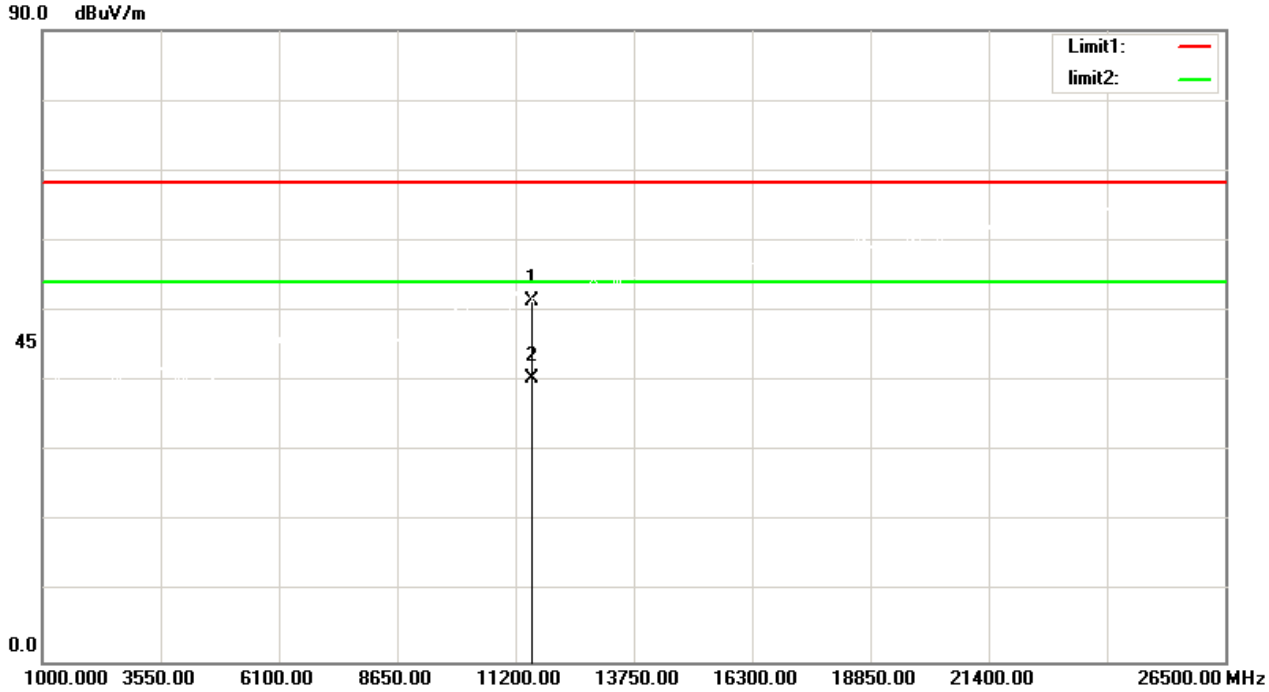
Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	44.79	8.01	52.80	68.30	-15.50	peak
2	11590.000	34.36	8.01	42.37	54.00	-11.63	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

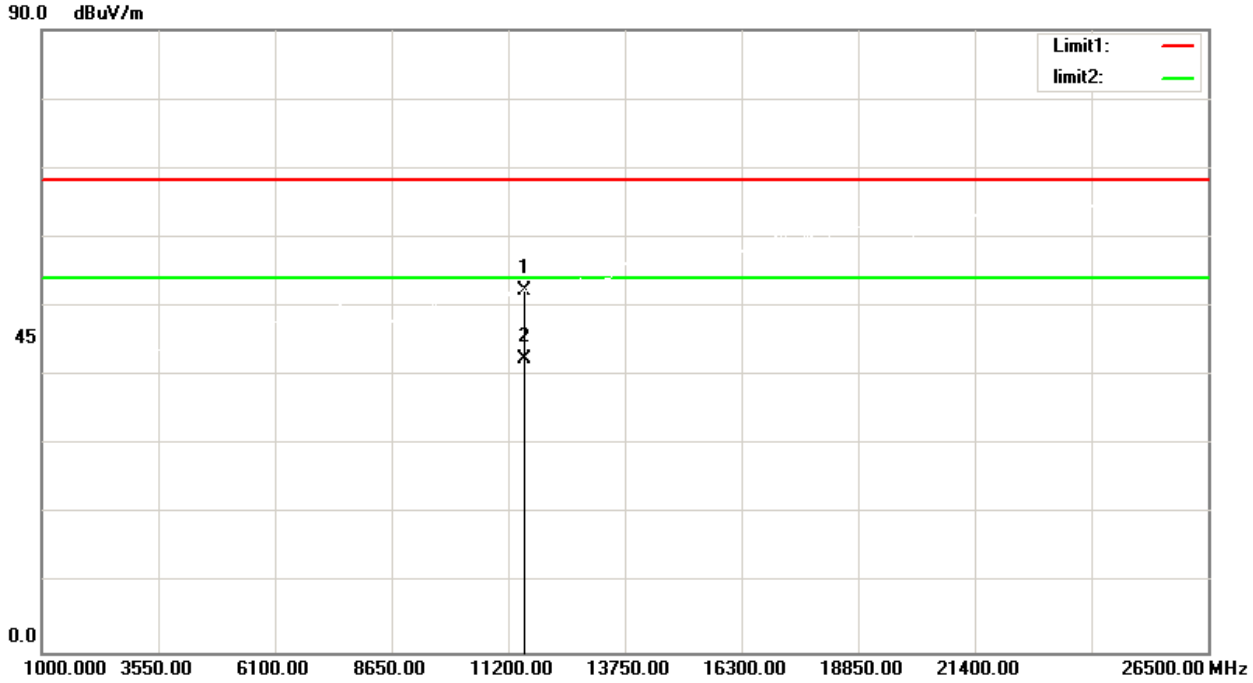
Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11555.000	43.34	8.02	51.36	68.30	-16.94	peak
2	11555.000	32.34	8.02	40.36	54.00	-13.64	AVG

Orthogonal Axis	X
Test Mode	UNII-3_TX AC (VHT80) Mode 5775 MHz

Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	44.34	8.02	52.36	68.30	-15.94	peak
2	11550.000	34.30	8.02	42.32	54.00	-11.68	AVG

6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15, Subpart E (15.407) RSS-Gen and RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a) 15.407(e) RSS-247 6.2.1.1 RSS-247 6.2.4.1	26 dB Bandwidth	-	5150-5250
	6dB Bandwidth	Minimum 500 kHz	5725-5850

6.2 TEST PROCEDURE AND SETTING

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below

b. Spectrum Setting:
For UNII-1:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26dB Bandwidth
RBW	300 kHz (Bandwidth 20 MHz) 1 MHz (Bandwidth 40 MHz and 80 MHz)
VBW	1 MHz (Bandwidth 20 MHz) 3 MHz (Bandwidth 40 MHz and 80 MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

For UNII-3:

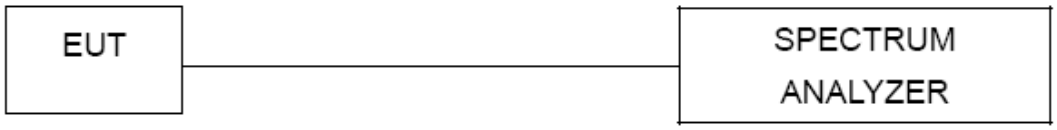
Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26dB / 6dB below carrier.

6.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

6.4 TEST SETUP



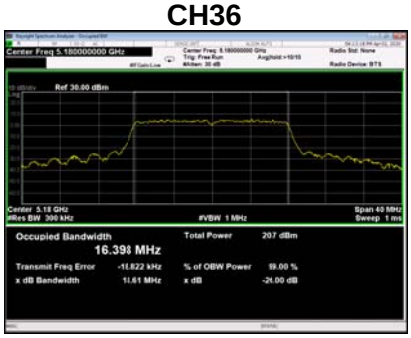
6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

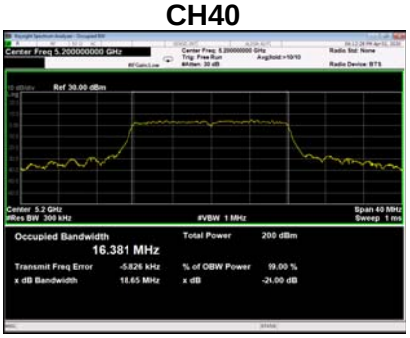
6.6 TEST RESULTS

UNII-1_TX A Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	18.61	16.398
40	5200	18.65	16.381
48	5240	21.99	16.448

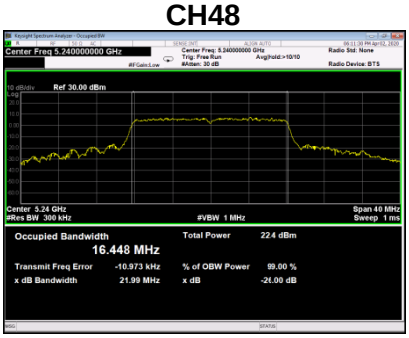
CH36



CH40

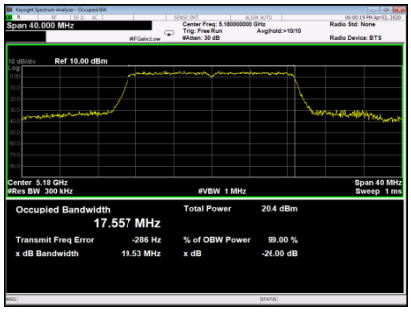


CH48

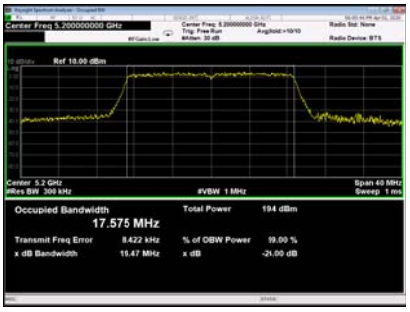


UNII-1_TX N (HT20) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	19.53	17.557
40	5200	19.47	17.575
48	5240	19.59	17.528

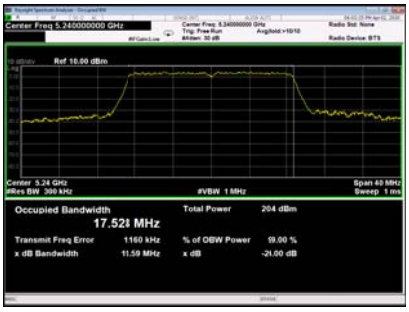
CH36



CH40

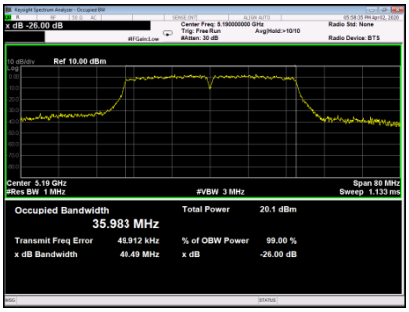


CH48

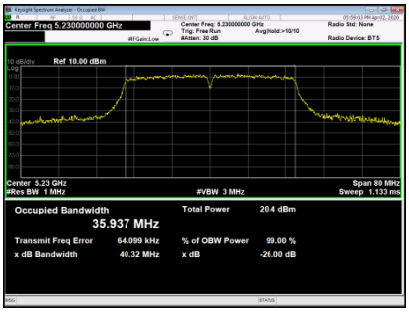


UNII-1_TX N (HT40) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	40.49	35.983
46	5230	40.32	35.937

CH38



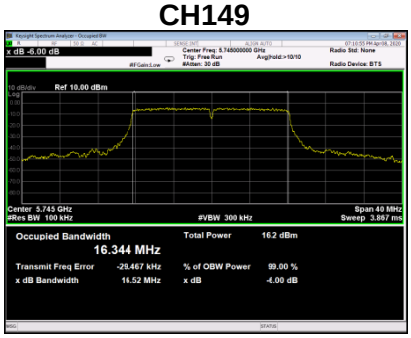
CH46



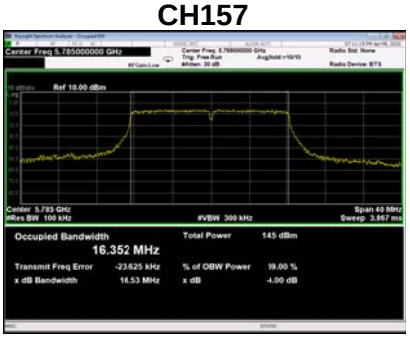
UNII-3_TX A Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	16.52	16.463	500	PASS
157	5785	16.53	16.394	500	PASS
165	5825	16.52	16.409	500	PASS

6 dB Bandwidth

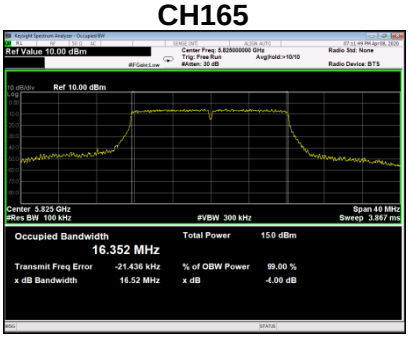
CH149



CH157



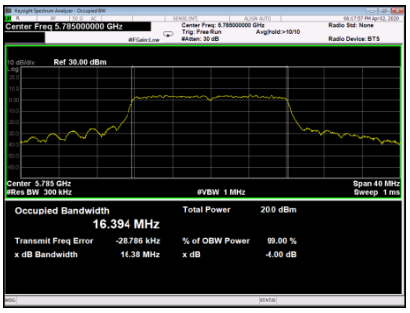
CH165



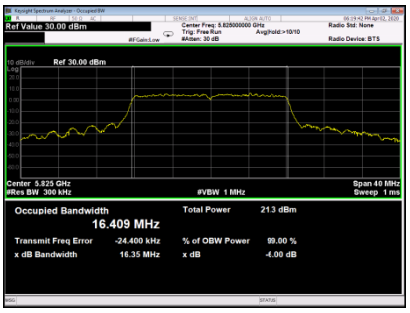
99% Emission Bandwidth

CH149

CH157



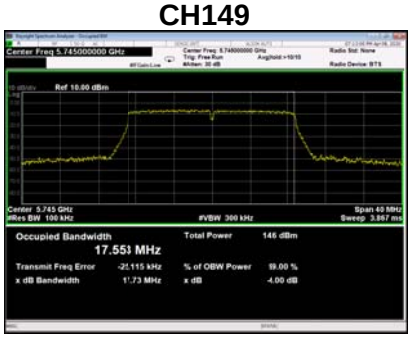
CH165



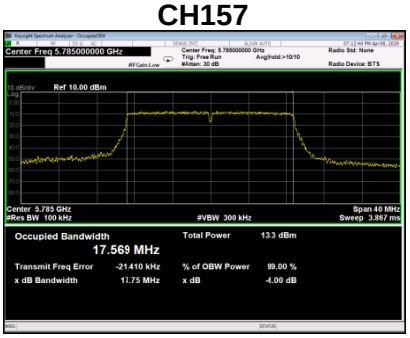
UNII-3_TX N (HT20) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	17.73	17.594	500	PASS
157	5785	17.75	17.552	500	PASS
165	5825	17.72	17.539	500	PASS

6 dB Bandwidth

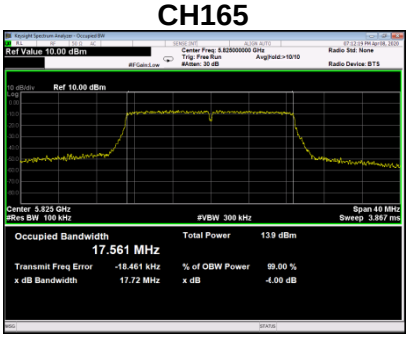
CH149



CH157

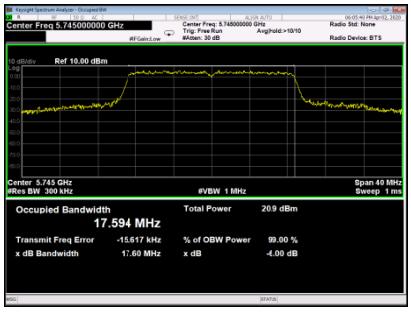


CH165

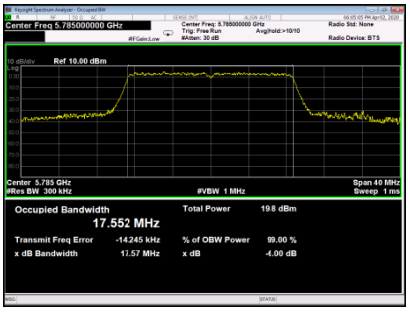


99% Emission Bandwidth

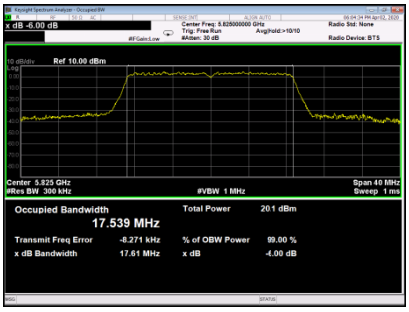
CH149



CH157



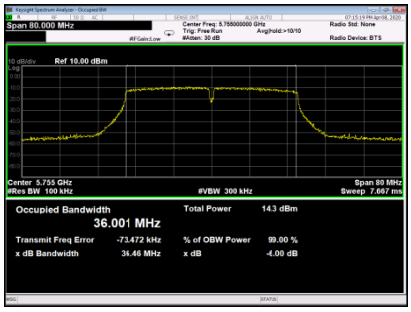
CH165



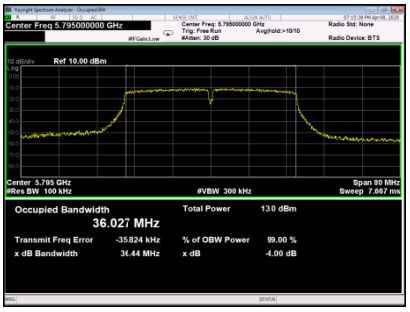
UNII-3_TX N (HT40) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
151	5755	36.46	36.033	500	PASS
159	5795	36.44	35.988	500	PASS

6 dB Bandwidth

CH151

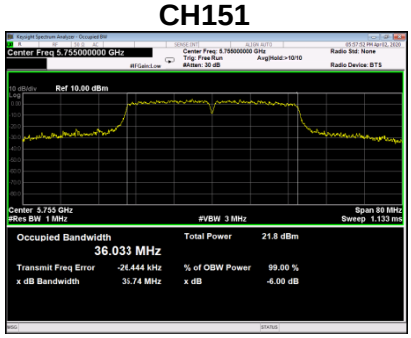


CH159

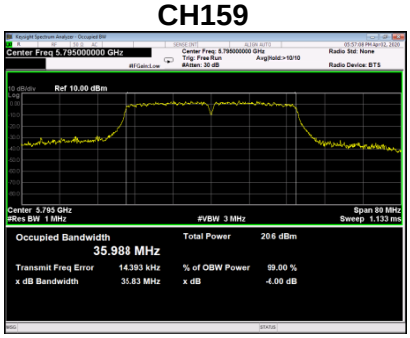


99% Emission Bandwidth

CH151

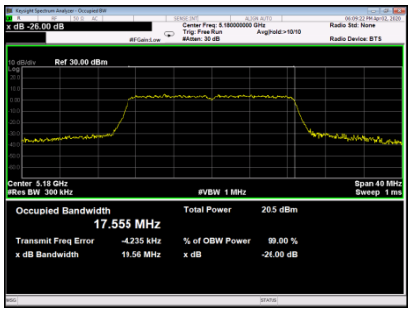


CH159

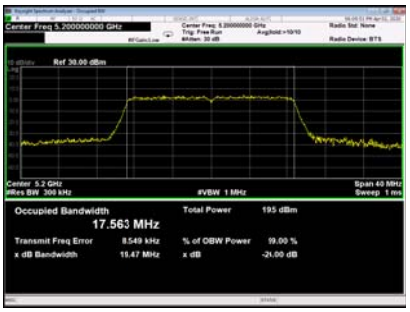


UNII-1_TX AC (VHT20) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	19.56	17.555
40	5200	19.47	17.563
48	5240	19.51	17.560

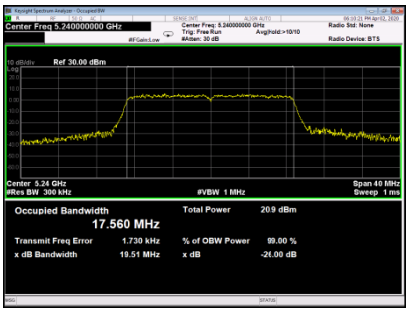
CH36



CH40

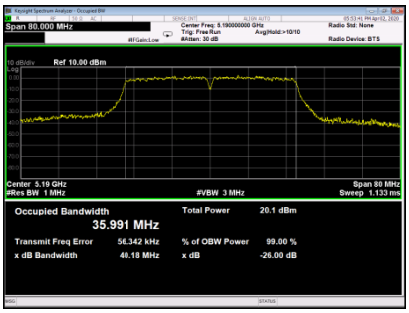


CH48

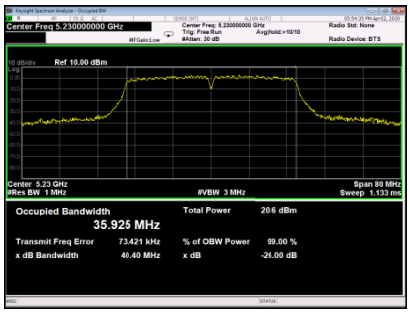


UNII-1_TX AC (VHT40) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	40.18	35.991
46	5230	40.40	-35.925

CH38

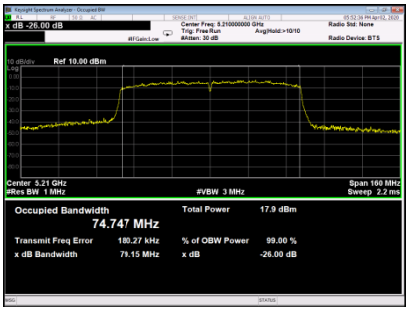


CH46



UNII-1_TX AC (VHT80) Mode			
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
42	5210	79.15	74.747

CH42



UNII-3_TX AC (VHT20) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	17.70	17.757	500	PASS
157	5785	17.72	17.549	500	PASS
165	5825	17.70	17.557	500	PASS

6 dB Bandwidth

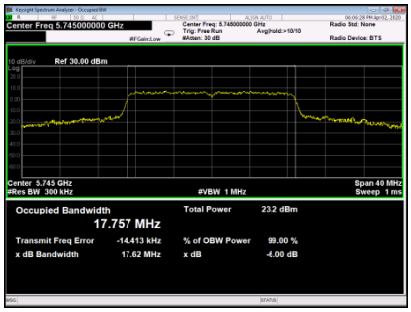
CH149

CH157

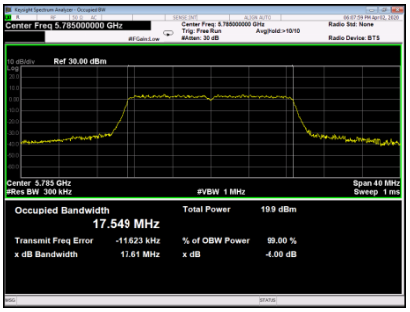
CH165

99% Emission Bandwidth

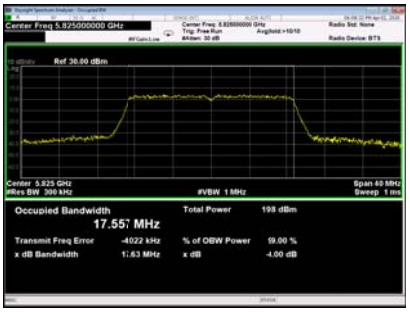
CH149



CH157



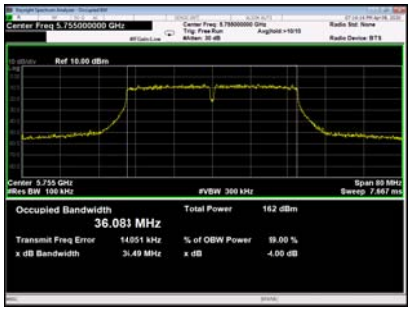
CH165



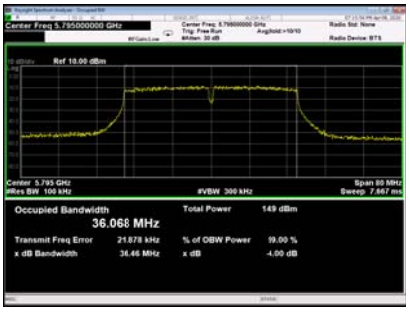
UNII-3_TX AC (VHT40) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
151	5755	36.49	35.977	500	PASS
159	5795	36.46	35.991	500	PASS

6 dB Bandwidth

CH151

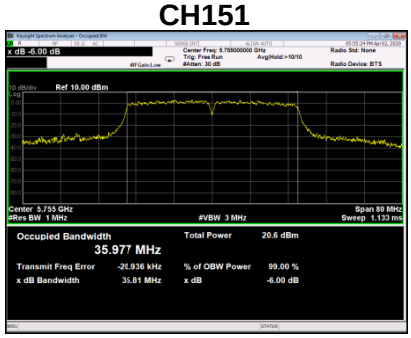


CH159

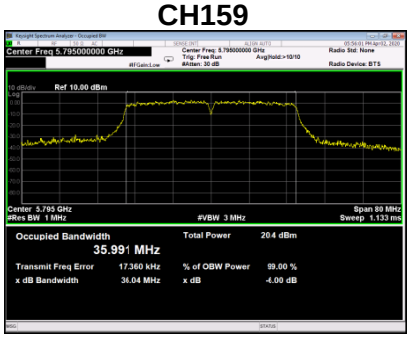


99% Emission Bandwidth

CH151

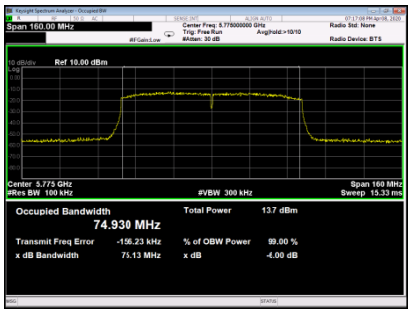


CH159

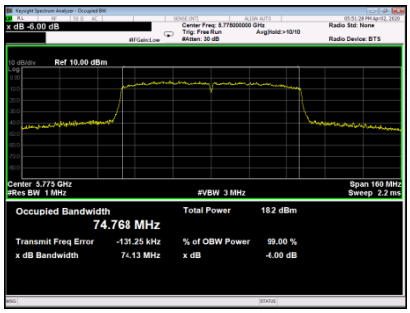


UNII-3_TX AC (VHT80) Mode					
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
155	5775	75.13	74.768	500	PASS

6 dB Bandwidth
CH155



99% Emission Bandwidth
CH155



7. MAXIMUM OUTPUT POWER TEST

7.1 LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.1	EIRP Output Power	not exceed 200 mW or 10 + 10 logB, dBm, whichever power is less	5150-5250
15.407(a)	Maximum Output Power	AP device:1 Watt (30dBm) Client device: 250mW (24dBm)	5150-5250
15.407(a) RSS-247 6.2.4.1	Maximum Output Power	1 Watt (30dBm)	5725-5850

Note:

a. For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW 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.

b. B is the 99% emission bandwidth in megahertz.

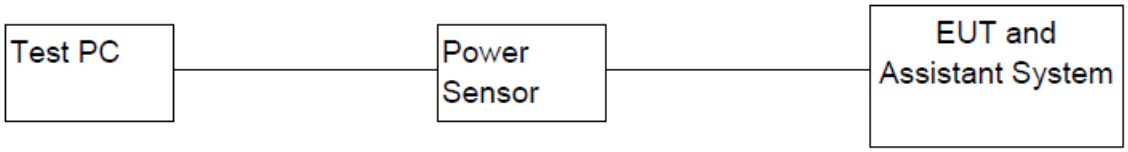
7.2 TEST PROCEDURE AND SETTING

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
b. Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

7.3 MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Sensor	KEYSIGHT	U2021XA	MY55240009	05/27/2020
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Micable	C10-01-01-1	100309	N/A
4	Test Software	KEYSIGHT	Power Panel	V3.11	N/A

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

UNII-1_TX A Mode_Ant 1 For FCC							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.85	0.00	14.85	24.00	0.25	PASS
40	5200	15.21	0.00	15.21	24.00	0.25	PASS
48	5240	16.26	0.00	16.26	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 2 For FCC							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	15.04	0.00	15.04	24.00	0.25	PASS
40	5200	14.65	0.00	14.65	24.00	0.25	PASS
48	5240	15.32	0.00	15.32	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 1 For IC							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	17.85	0.00	17.85	23.00	0.2	PASS
40	5200	18.21	0.00	18.21	23.00	0.2	PASS
48	5240	19.26	0.00	19.26	23.00	0.2	PASS

UNII-1_TX A Mode_Ant 2 For IC							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.04	0.00	18.04	23.00	0.2	PASS
40	5200	17.65	0.00	17.65	23.00	0.2	PASS
48	5240	18.32	0.00	18.32	23.00	0.2	PASS

UNII-1_TX N (HT20) Mode _Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	15.52	0.00	15.52	24.00	0.25	PASS
40	5200	14.90	0.00	14.90	24.00	0.25	PASS
48	5240	14.75	0.00	14.75	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.98	0.00	14.98	24.00	0.25	PASS
40	5200	15.39	0.00	15.39	24.00	0.25	PASS
48	5240	15.63	0.00	15.63	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.27	24.00	0.25	PASS
40	5200	18.16	24.00	0.25	PASS
48	5240	18.22	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	21.27	23.00	0.2	PASS
40	5200	21.16	23.00	0.2	PASS
48	5240	21.22	23.00	0.2	PASS

UNII-1_TX N (HT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	14.97	0.00	14.97	24.00	0.25	PASS
46	5230	15.90	0.00	15.90	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	14.73	0.00	14.73	24.00	0.25	PASS
46	5230	15.63	0.00	15.63	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	17.86	24.00	0.25	PASS
46	5230	18.78	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	20.86	23.00	0.2	PASS
46	5230	21.78	23.00	0.2	PASS

UNII-3_TX A Mode_Ant1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.99	0.00	14.99	30.00	1.00	PASS
157	5785	14.43	0.00	14.43	30.00	1.00	PASS
165	5825	15.43	0.00	15.43	30.00	1.00	PASS

UNII-3_TX A Mode_Ant2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.89	0.00	14.89	30.00	1.00	PASS
157	5785	15.29	0.00	15.29	30.00	1.00	PASS
165	5825	15.11	0.00	15.11	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Ant1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.10	0.00	15.10	30.00	1.00	PASS
157	5785	15.03	0.00	15.03	30.00	1.00	PASS
165	5825	14.95	0.00	14.95	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode _Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.19	0.00	15.19	30.00	1.00	PASS
157	5785	15.33	0.00	15.33	30.00	1.00	PASS
165	5825	15.15	0.00	15.15	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	18.16	30.00	1.00	PASS
157	5785	18.19	30.00	1.00	PASS
165	5825	18.06	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	15.27	0.00	15.27	30.00	1.00	PASS
159	5795	15.43	0.00	15.43	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	14.86	0.00	14.86	30.00	1.00	PASS
159	5795	15.43	0.00	15.43	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	18.08	30.00	1.00	PASS
159	5795	18.44	30.00	1.00	PASS

UNII-1_TX AC (VHT20) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	15.51	0.00	15.51	24.00	0.25	PASS
40	5200	14.96	0.00	14.96	24.00	0.25	PASS
48	5240	15.73	0.00	15.73	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	15.14	0.00	15.14	24.00	0.25	PASS
40	5200	15.23	0.00	15.23	24.00	0.25	PASS
48	5240	15.61	0.00	15.61	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.34	24.00	0.25	PASS
40	5200	18.11	24.00	0.25	PASS
48	5240	18.68	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	21.34	23.00	0.2	PASS
40	5200	21.11	23.00	0.2	PASS
48	5240	21.68	23.00	0.2	PASS

UNII-1_TX AC (VHT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	15.35	0.00	15.35	24.00	0.25	PASS
46	5230	15.23	0.00	15.23	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	14.85	0.00	14.85	24.00	0.25	PASS
46	5230	15.08	0.00	15.08	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	18.12	24.00	0.25	PASS
46	5230	18.17	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm))	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	21.12	23.00	0.2	PASS
46	5230	21.17	23.00	0.2	PASS

UNII-1_TX AC (VHT80) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	13.32	0.00	13.32	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	13.02	0.00	13.02	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	16.18	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	19.18	23.00	0.2	PASS

UNII-3_TX AC (VHT20) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.72	0.00	15.72	30.00	1.00	PASS
157	5785	14.96	0.00	14.96	30.00	1.00	PASS
165	5825	15.08	0.00	15.08	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.13	0.00	15.13	30.00	1.00	PASS
157	5785	15.19	0.00	15.19	30.00	1.00	PASS
165	5825	15.76	0.00	15.76	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	18.45	30.00	1.00	PASS
157	5785	18.09	30.00	1.00	PASS
165	5825	18.44	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	15.38	0.00	15.38	30.00	1.00	PASS
159	5795	15.53	0.00	15.53	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	14.89	0.00	14.89	30.00	1.00	PASS
159	5795	15.31	0.00	15.31	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	18.15	30.00	1.00	PASS
159	5795	18.43	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	13.36	0.00	13.36	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	13.35	0.00	13.35	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Total					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	16.37	30.00	1.00	PASS

8. POWER SPECTRAL DENSITY TEST

8.1 LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.2	EIRP Power Spectral Density	10dBm/MHz	5150-5250
15.407(a)	Power Spectral Density	AP device:17dBm/MHz Client device:11dBm/MHz	5150-5250
15.407(a) RSS-247 6.2.4.2	Power Spectral Density	30dBm/500kHz	5725-5850

8.2 TEST PROCEDURE ANS SETTING

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

Note:

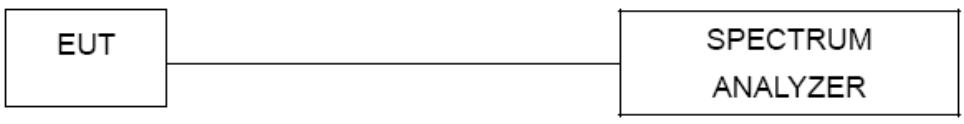
1.For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.

2.The value measured with RBW=1MHz is to be added with 10log(500kHz/1MHz) which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

8.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

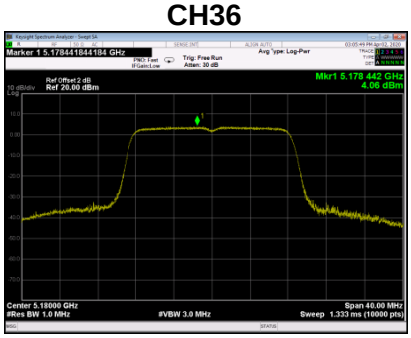
The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

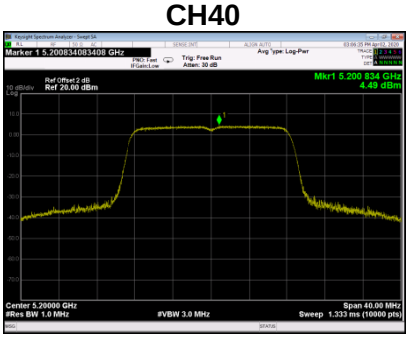
UNII-1_TX A Mode_Ant 1 For FCC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	4.06	0.00	4.06	11.00	PASS
40	5200	4.49	0.00	4.49	11.00	PASS
48	5240	5.82	0.00	5.82	11.00	PASS

UNII-1_TX A Mode_Ant 1 For IC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	7.06	0.00	7.06	10.00	PASS
40	5200	7.49	0.00	7.49	10.00	PASS
48	5240	8.82	0.00	8.82	10.00	PASS

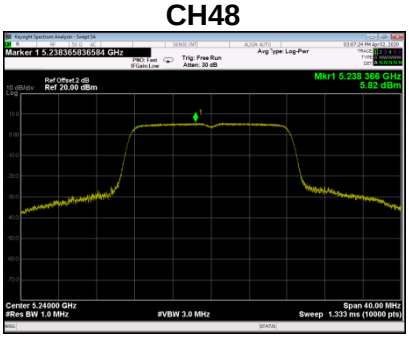
CH36



CH40



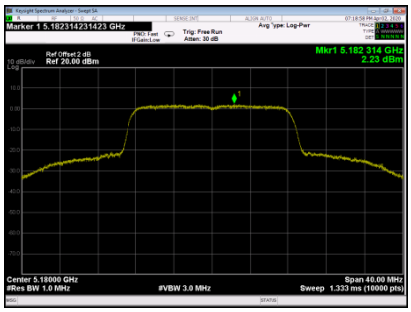
CH48



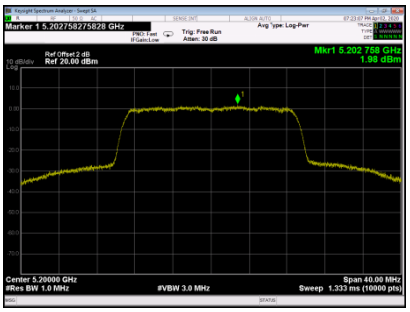
UNII-1_TX A Mode_Ant2 For FCC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.23	0.00	2.23	11.00	PASS
40	5200	1.98	0.00	1.98	11.00	PASS
48	5240	2.60	0.00	2.60	11.00	PASS

UNII-1_TX A Mode_Ant2 For IC						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	5.23	0.00	5.23	10.00	PASS
40	5200	4.98	0.00	4.98	10.00	PASS
48	5240	5.60	0.00	5.60	10.00	PASS

CH36



CH40



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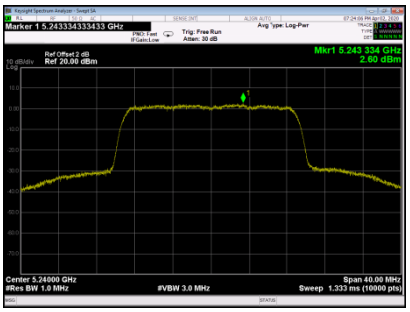
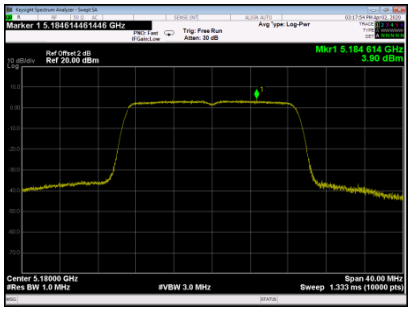


UNII-1_TX N (HT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	3.90	0.00	3.90	11.00	PASS
40	5200	2.87	0.00	2.87	11.00	PASS
48	5240	2.93	0.00	2.93	11.00	PASS

CH36



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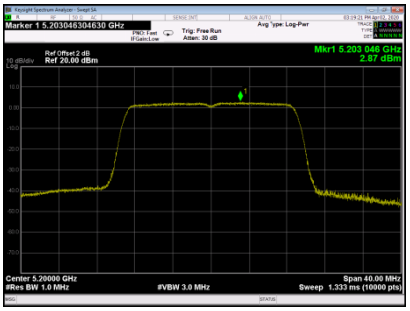
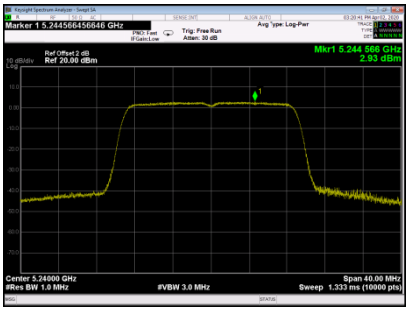
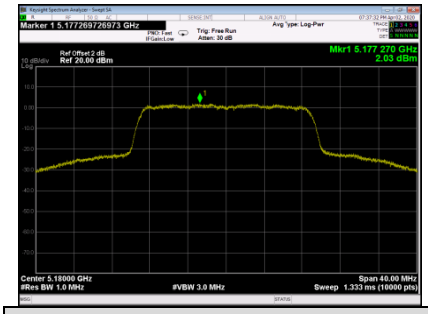


CH48



UNII-1_TX N (HT20) Mode_Ant 2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.03	0.00	2.03	11.00	PASS
40	5200	2.49	0.00	2.49	11.00	PASS
48	5240	3.60	0.00	3.60	11.00	PASS

CH36



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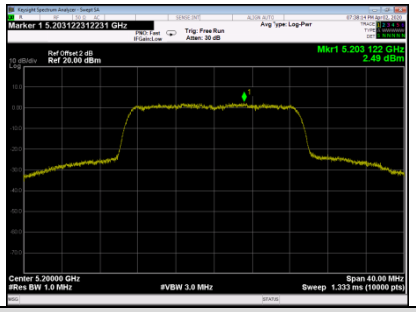
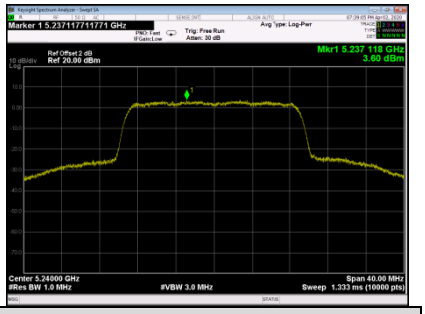


CH48

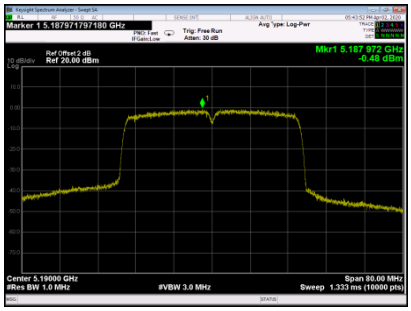


UNII-1_TX N (HT20) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.08	11.00	PASS
40	5200	5.69	11.00	PASS
48	5240	6.29	11.00	PASS

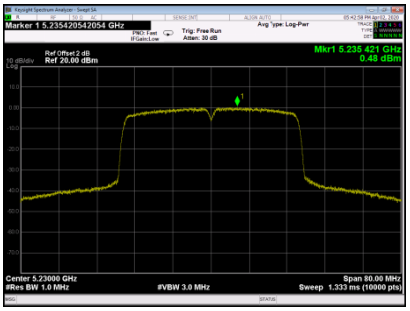
UNII-1_TX N (HT20) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	9.08	10.00	PASS
40	5200	8.69	10.00	PASS
48	5240	9.29	10.00	PASS

UNII-1_TX N (HT40) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-0.48	0.00	-0.48	11.00	PASS
46	5230	0.48	0.00	0.48	11.00	PASS

CH38

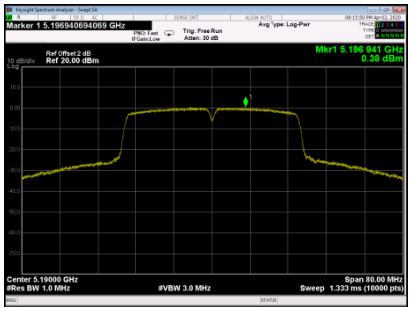


CH46

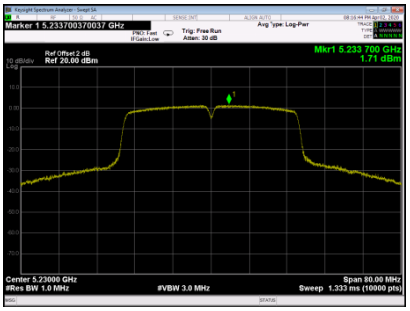


UNII-1_TX N (HT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	0.38	0.00	0.38	11.00	PASS
46	5230	1.71	0.00	1.71	11.00	PASS

CH38



CH46

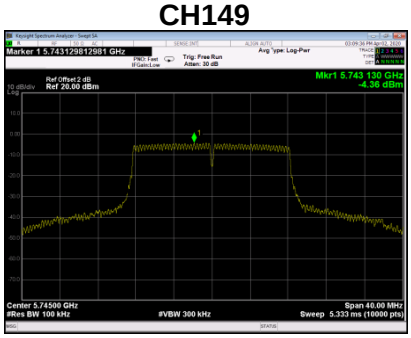


UNII-1_TX N (HT40) Mode _Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	2.98	11.00	PASS
46	5230	4.15	11.00	PASS

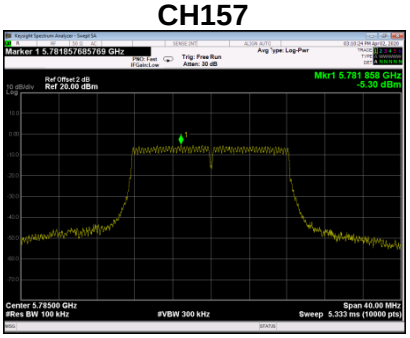
UNII-1_TX N (HT40) Mode _Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	5.98	10.00	PASS
46	5230	7.15	10.00	PASS

UNII-3_TX A Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-4.36	0.00	-4.36	30.00	PASS
157	5785	-5.30	0.00	-5.30	30.00	PASS
165	5825	-4.87	0.00	-4.87	30.00	PASS

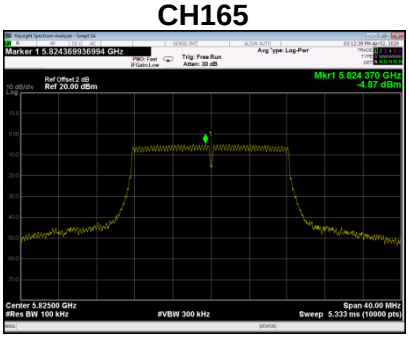
CH149



CH157

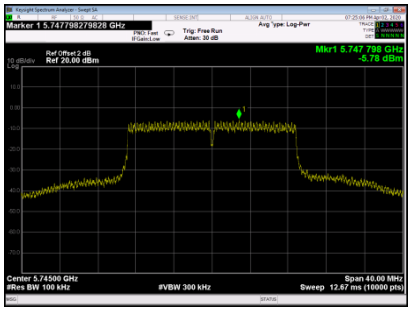


CH165

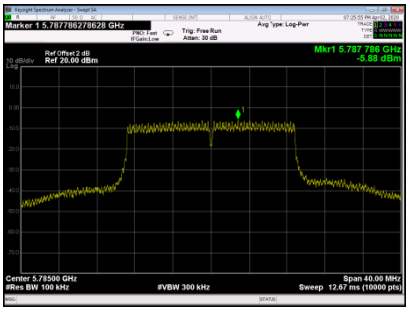


UNII-3_TX A Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-5.78	0.00	-5.78	30.00	PASS
157	5785	-5.88	0.00	-5.88	30.00	PASS
165	5825	-5.75	0.00	-5.75	30.00	PASS

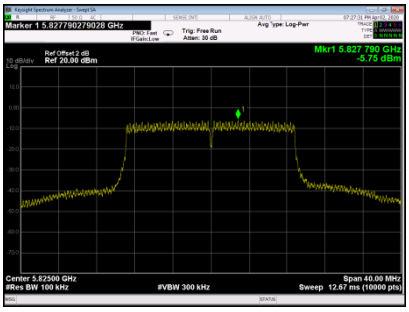
CH149



CH157

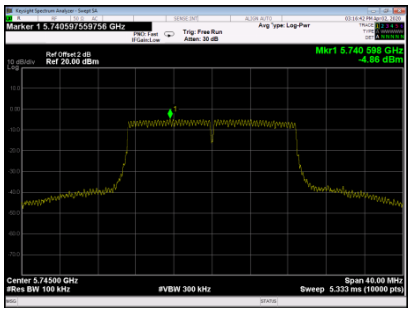


CH165

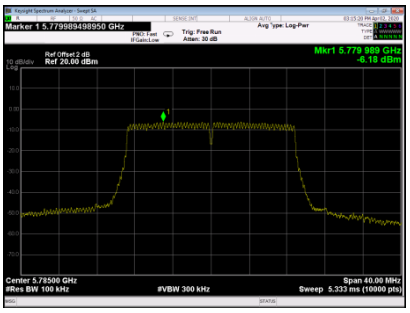


UNII-3_TX N (HT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-4.86	0.00	-4.86	30.00	PASS
157	5785	-6.18	0.00	-6.18	30.00	PASS
165	5825	-6.15	0.00	-6.15	30.00	PASS

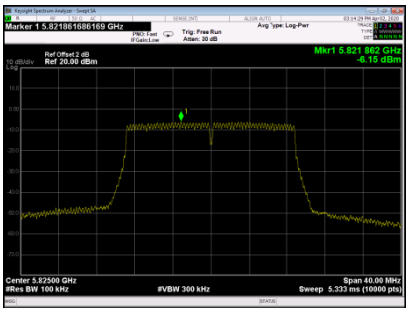
CH149



CH157

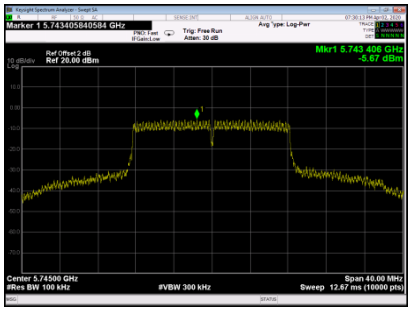


CH165

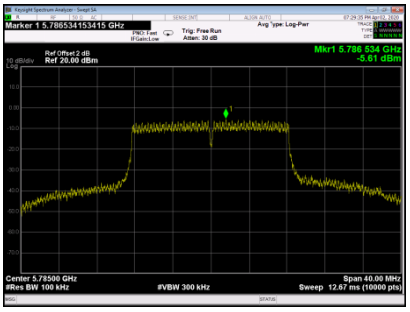


UNII-3_TX N (HT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-5.67	0.00	-5.67	30.00	PASS
157	5785	-5.61	0.00	-5.61	30.00	PASS
165	5825	-5.58	0.00	-5.58	30.00	PASS

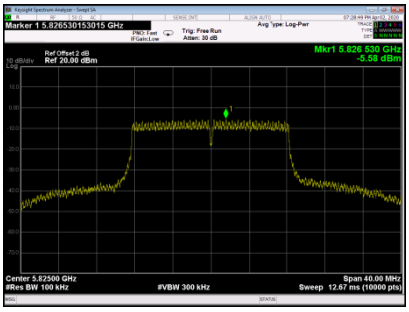
CH149



CH157



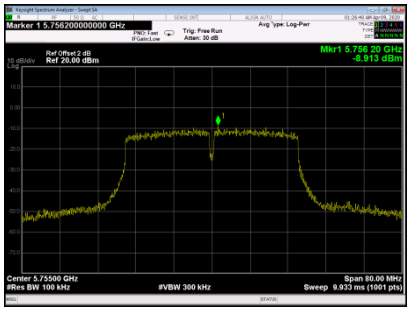
CH165



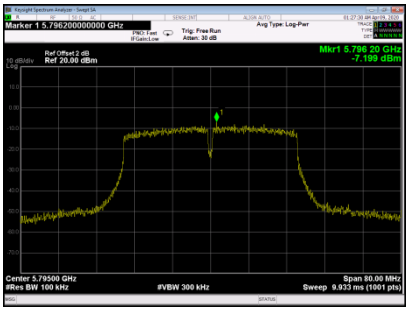
UNII-3_TX N (HT20) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-2.24	30.00	PASS
157	5785	-2.88	30.00	PASS
165	5825	-2.85	30.00	PASS

UNII-3_TX N (HT40) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-8.913	0.00	-8.913	30.00	PASS
159	5795	-7.199	0.00	-7.199	30.00	PASS

CH151

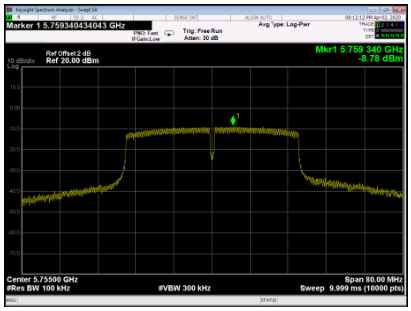


CH159

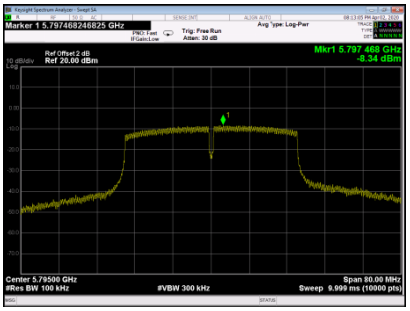


UNII-3_TX N (HT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-8.78	0.00	-8.78	30.00	PASS
159	5795	-8.34	0.00	-8.34	30.00	PASS

CH151



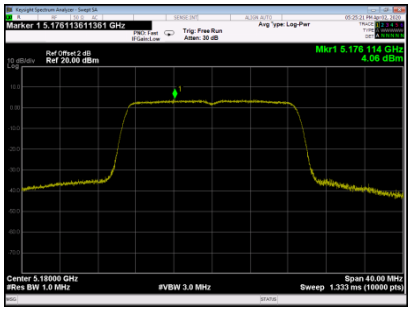
CH159



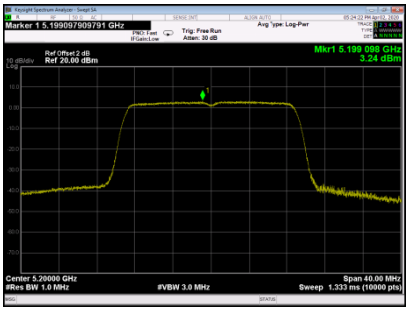
UNII-3_TX N (HT40) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-5.84	30.00	PASS
159	5795	-4.72	30.00	PASS

UNII-1_TX AC (VHT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	4.06	0.00	4.06	11.00	PASS
40	5200	3.24	0.00	3.24	11.00	PASS
48	5240	2.03	0.00	4.88	11.00	PASS

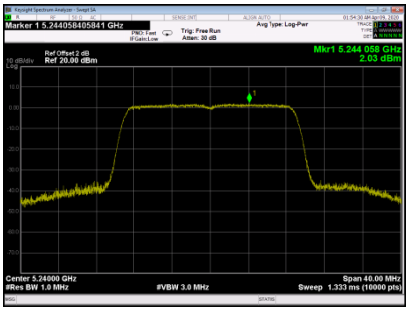
CH36



CH40

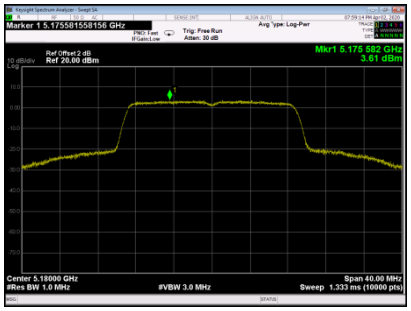


CH48

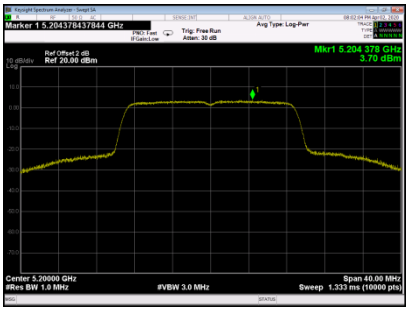


UNII-1_TX AC (VHT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	3.61	0.00	3.61	11.00	PASS
40	5200	3.70	0.00	3.70	11.00	PASS
48	5240	3.20	0.00	4.75	11.00	PASS

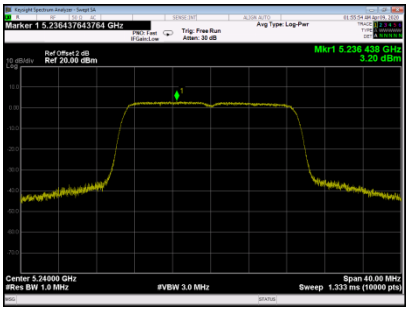
CH36



CH40



CH48

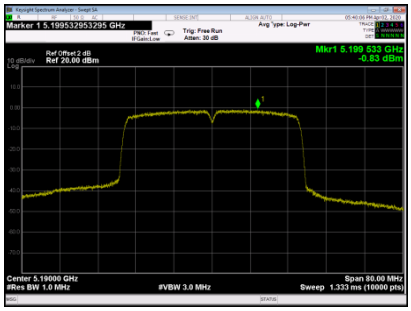


UNII-1_TX AC (VHT20) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.85	11.00	PASS
40	5200	6.49	11.00	PASS
48	5240	5.66	11.00	PASS

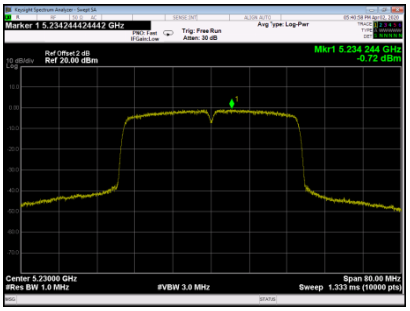
UNII-1_TX AC (VHT20) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	9.85	10.00	PASS
40	5200	9.49	10.00	PASS
48	5240	8.66	10.00	PASS

UNII-1_TX AC (VHT40) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-0.83	0.00	-0.83	11.00	PASS
46	5230	-0.72	0.00	-0.72	11.00	PASS

CH38

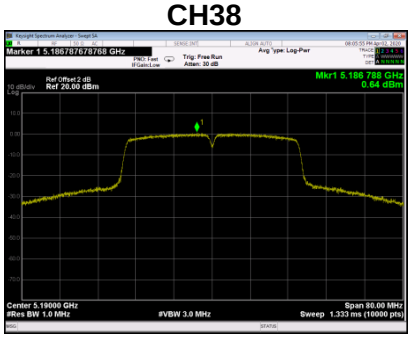


CH46

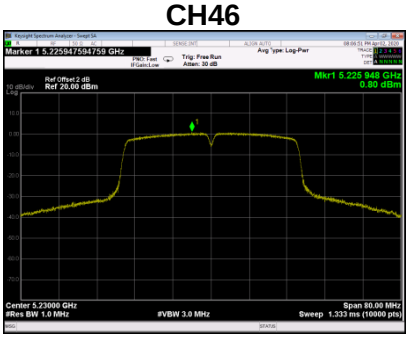


UNII-1_TX AC (VHT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	0.64	0.00	0.64	11.00	PASS
46	5230	0.80	0.00	0.80	11.00	PASS

CH38



CH46

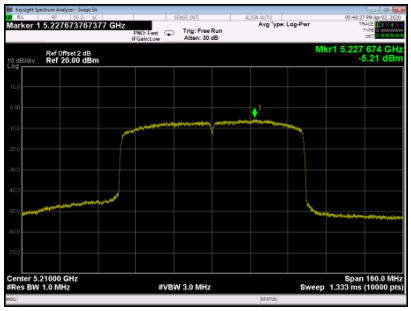


UNII-1_TX AC (VHT40) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	2.98	11.00	PASS
46	5230	3.12	11.00	PASS

UNII-1_TX AC (VHT40) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density(dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	5.98	10.00	PASS
46	5230	6.12	10.00	PASS

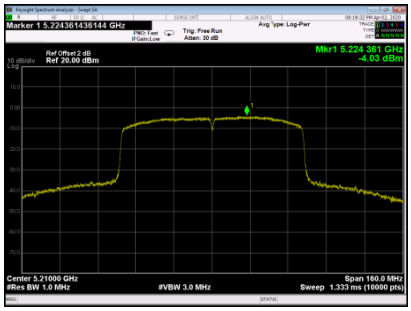
UNII-1_TX AC (VHT80) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-5.21	0.00	-5.21	11.00	PASS

CH42



UNII-1_TX AC (VHT80) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-4.03	0.00	-4.03	11.00	PASS

CH42

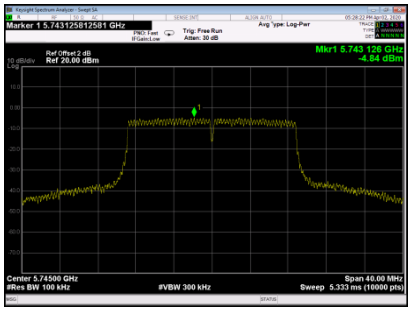


UNII-1_TX AC (VHT80) Mode_Total For FCC				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-1.57	11.00	PASS

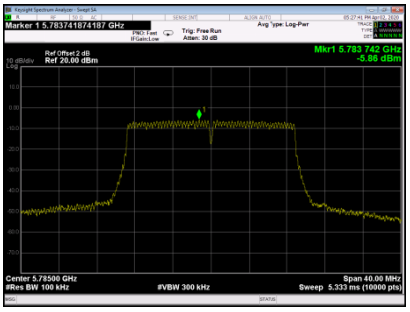
UNII-1_TX AC (VHT80) Mode_Total For IC				
Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	1.43	10.00	PASS

UNII-3_TX AC (VHT20) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-4.84	0.00	-4.84	30.00	PASS
157	5785	-5.86	0.00	-5.86	30.00	PASS
165	5825	-6.21	0.00	-6.21	30.00	PASS

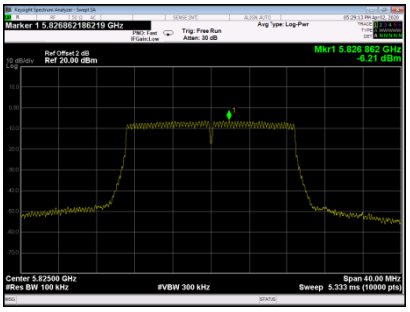
CH149



CH157

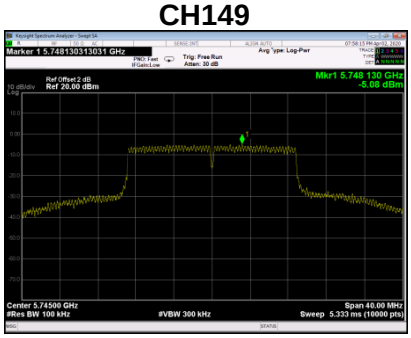


CH165

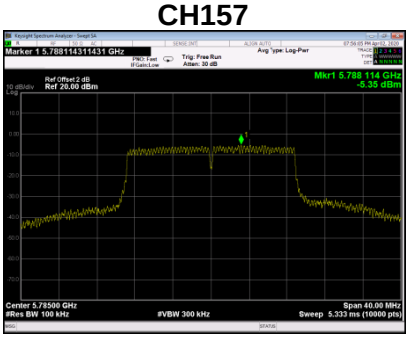


UNII-3_TX AC (VHT20) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-5.08	0.00	-5.08	30.00	PASS
157	5785	-5.35	0.00	-5.35	30.00	PASS
165	5825	-4.29	0.00	-4.29	30.00	PASS

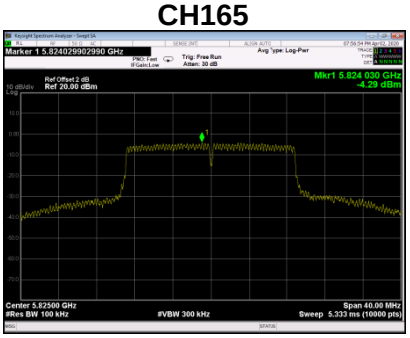
CH149



CH157



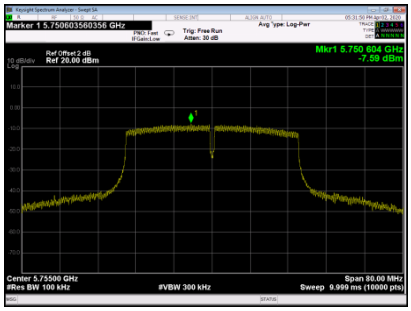
CH165



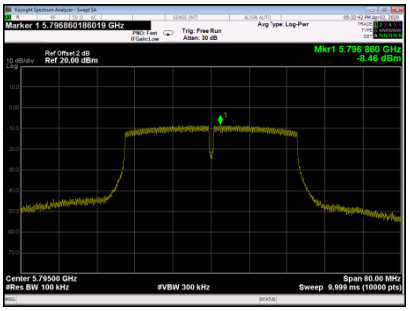
UNII-3_TX AC (VHT20) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-1.95	30.00	PASS
157	5785	-2.59	30.00	PASS
165	5825	-2.13	30.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-7.59	0.00	-7.59	30.00	PASS
159	5795	-8.46	0.00	-8.46	30.00	PASS

CH151

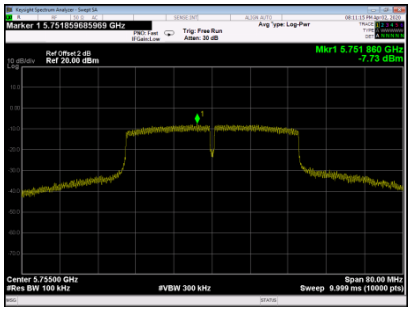


CH159

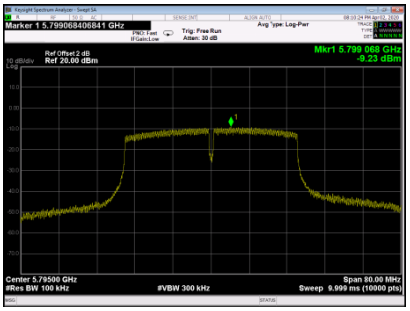


UNII-3_TX AC (VHT40) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-7.73	0.00	-7.73	30.00	PASS
159	5795	-9.23	0.00	-9.23	30.00	PASS

CH151



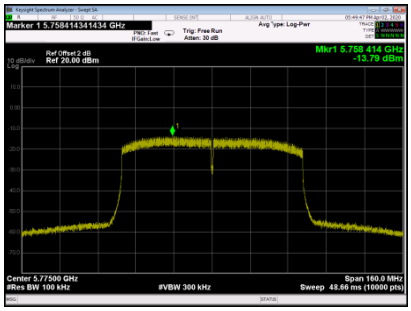
CH159



UNII-3_TX AC (VHT40) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-4.65	30.00	PASS
159	5795	-5.82	30.00	PASS

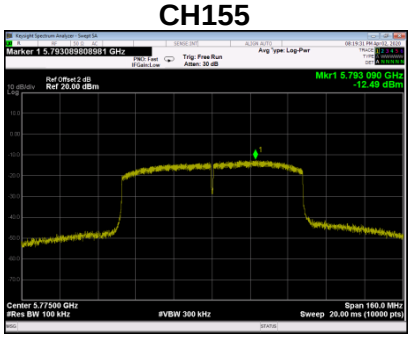
UNII-3_TX AC (VHT80) Mode_Ant 1						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-13.79	0.00	-13.79	30.00	PASS

CH155



UNII-3_TX AC (VHT80) Mode_Ant2						
Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-12.49	0.00	-12.49	30.00	PASS

CH155



UNII-3_TX AC (VHT80) Mode_Total				
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-10.08	30.00	PASS

9. FREQUENCY STABILITY MEASUREMENT

9.1 LIMIT

FCC Part15, Subpart E (15.407)&RSS-GEN			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g) RSS-GEN 6.11	Frequency Stability	Specified in the user's manual	5150-5250
			5725-5850

9.2 TEST PROCEDURE AND SETTING

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

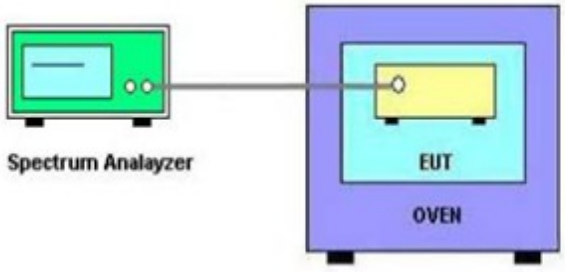
b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10kHz
Sweep Time	Auto

9.3 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2020/05/27
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A
4	Temperature conditioning	Guan Jian.HTH1000	-20-130℃	GJ1000-10D001	N/A
5	DC Power Supply	G.KE	IPR-10010D	010931954	N/A

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 TEST RESULTS

	Temperature vs. Frequency Stability	
Voltage	Temperature	Measurement Frequency (MHz)
3.3V	(℃)	5180
	-20	5180.012
	25	5180.011
	50	5180.009
2.5V	25	5180.007
Max. Deviation (MHz)		0.012
Max. Deviation (ppm)		2.32

	Temperature vs. Frequency Stability	
Voltage	Temperature	Measurement Frequency (MHz)
3.3V	(℃)	5745
	-20	5745.016
	25	5745.012
	50	5745.014
2.5V	25	5745.011
Max. Deviation (MHz)		0.016
Max. Deviation (ppm)		2.79

Note: 2.5V is the end point voltage, and products below 2.5V will cease working.

END OF TEST REPORT