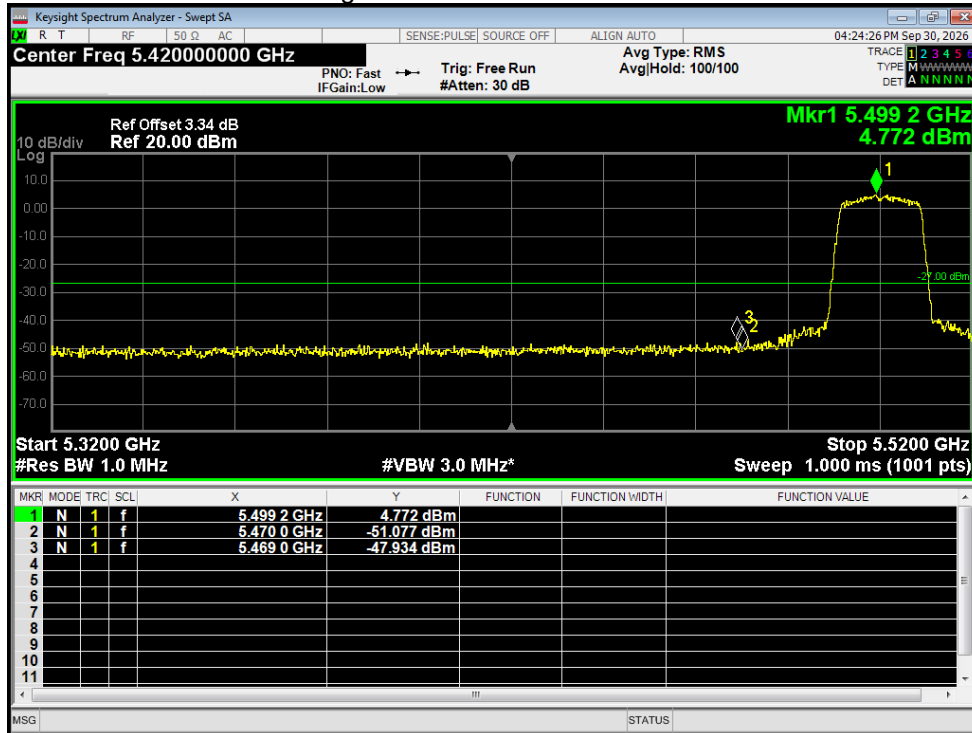
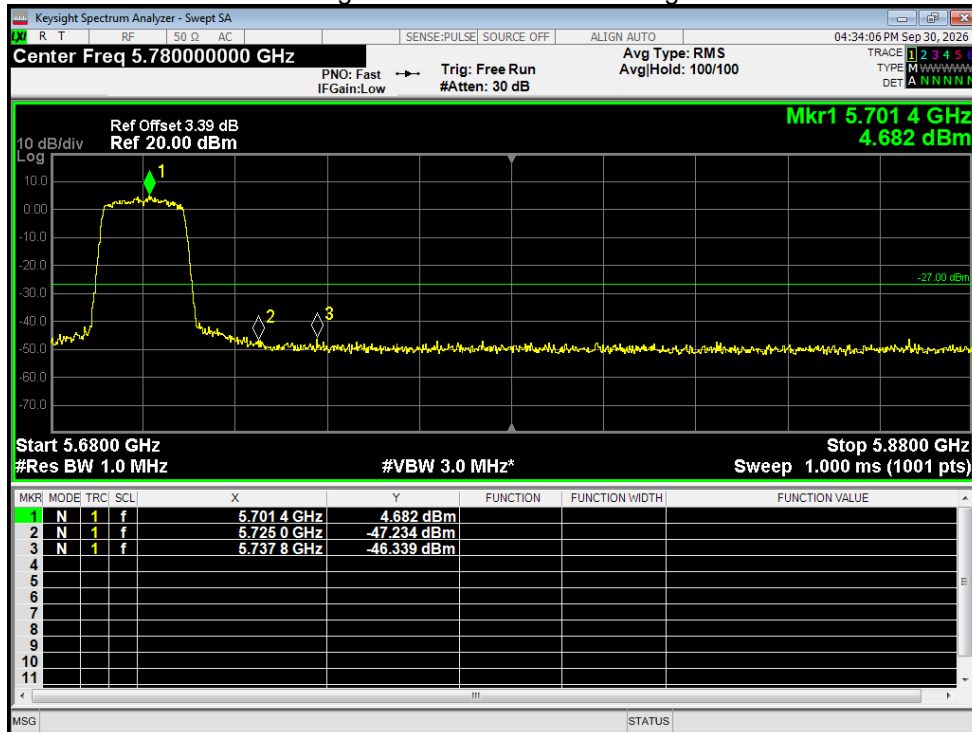


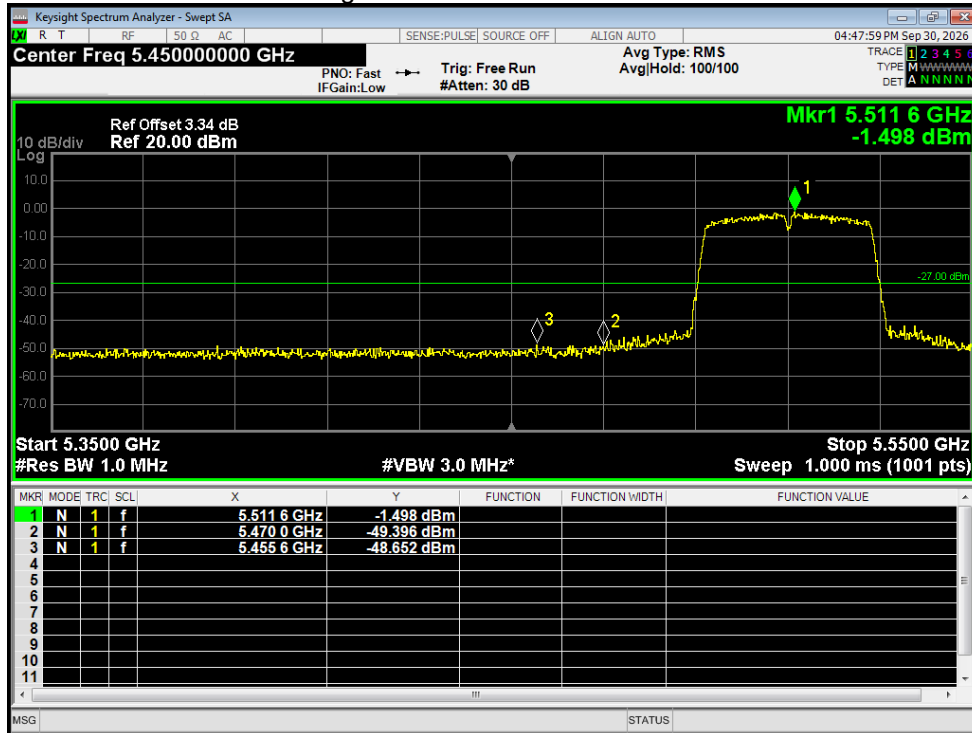
Band Edge NVNT ac20 5500MHz Low Ant1



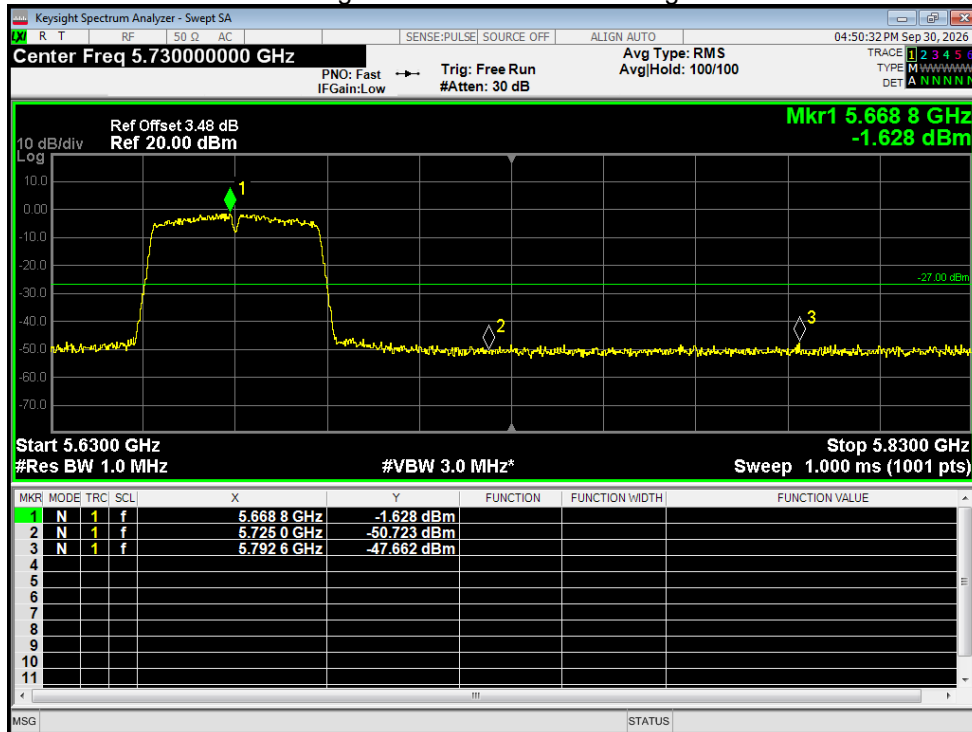
Band Edge NVNT ac20 5700MHz High Ant1



Band Edge NVNT ac40 5510MHz Low Ant1

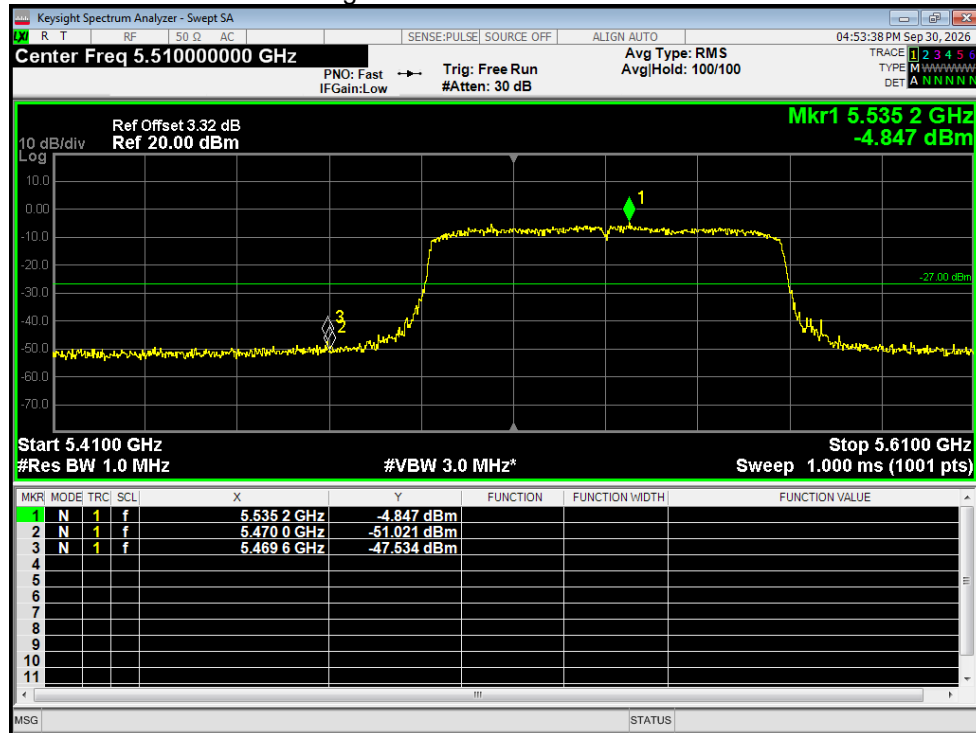


Band Edge NVNT ac40 5670MHz High Ant1





Band Edge NVNT ac80 5530MHz Low Ant1





ANT1

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Verdict
NVNT	a	5745	Ant1	-42.55	Pass
NVNT	a	5825	Ant1	-42.81	Pass
NVNT	n20	5745	Ant1	-42.27	Pass
NVNT	n20	5825	Ant1	-43.91	Pass
NVNT	n40	5755	Ant1	-42.39	Pass
NVNT	n40	5795	Ant1	-44.01	Pass
NVNT	ac20	5745	Ant1	-43.4	Pass
NVNT	ac20	5825	Ant1	-43.26	Pass
NVNT	ac40	5755	Ant1	-42.22	Pass
NVNT	ac40	5795	Ant1	-44.42	Pass
NVNT	ac80	5775	Ant1	-41.01	Pass

ANT2

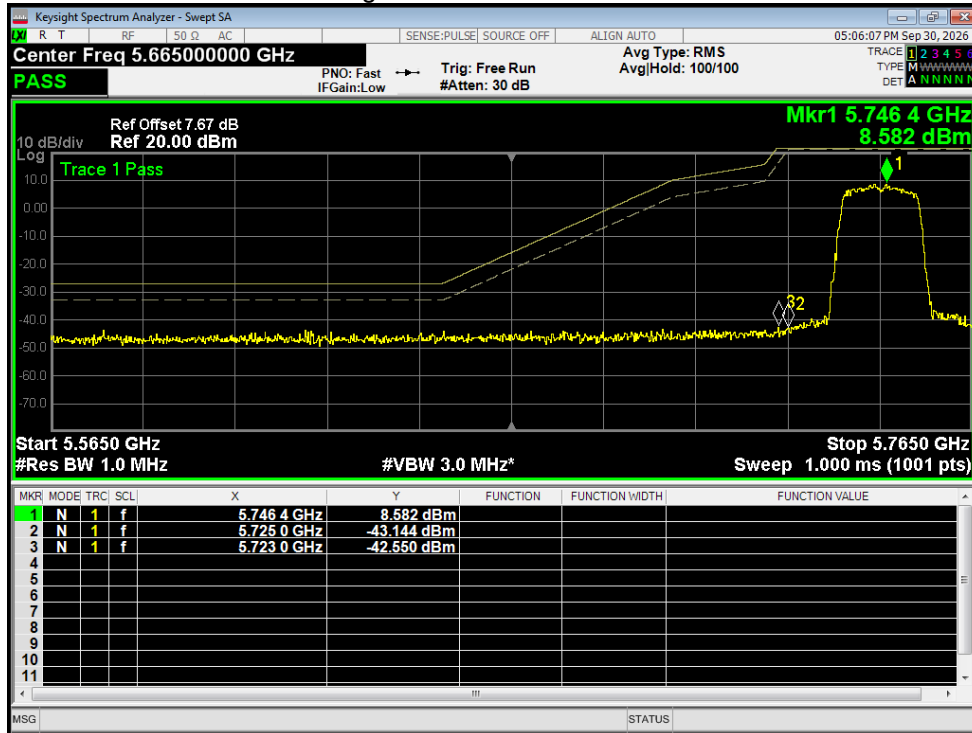
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Verdict
NVNT	a	5745	Ant1	-42.42	Pass
NVNT	a	5825	Ant1	-42.1	Pass
NVNT	n20	5745	Ant1	-41.84	Pass
NVNT	n20	5825	Ant1	-42.92	Pass
NVNT	n40	5755	Ant1	-41.68	Pass
NVNT	n40	5795	Ant1	-42.95	Pass
NVNT	ac20	5745	Ant1	-41.3	Pass
NVNT	ac20	5825	Ant1	-42.79	Pass
NVNT	ac40	5755	Ant1	-42.07	Pass
NVNT	ac40	5795	Ant1	-43.17	Pass
NVNT	ac80	5775	Ant1	-40.44	Pass

Note: The limit values are detailed in the test diagram

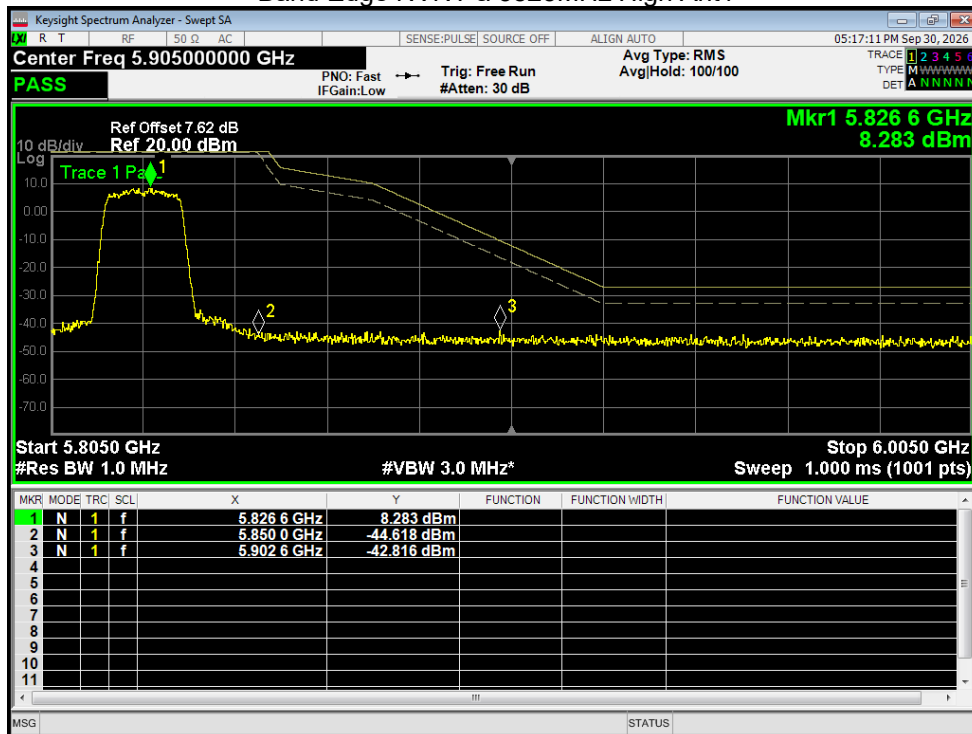


ANT1

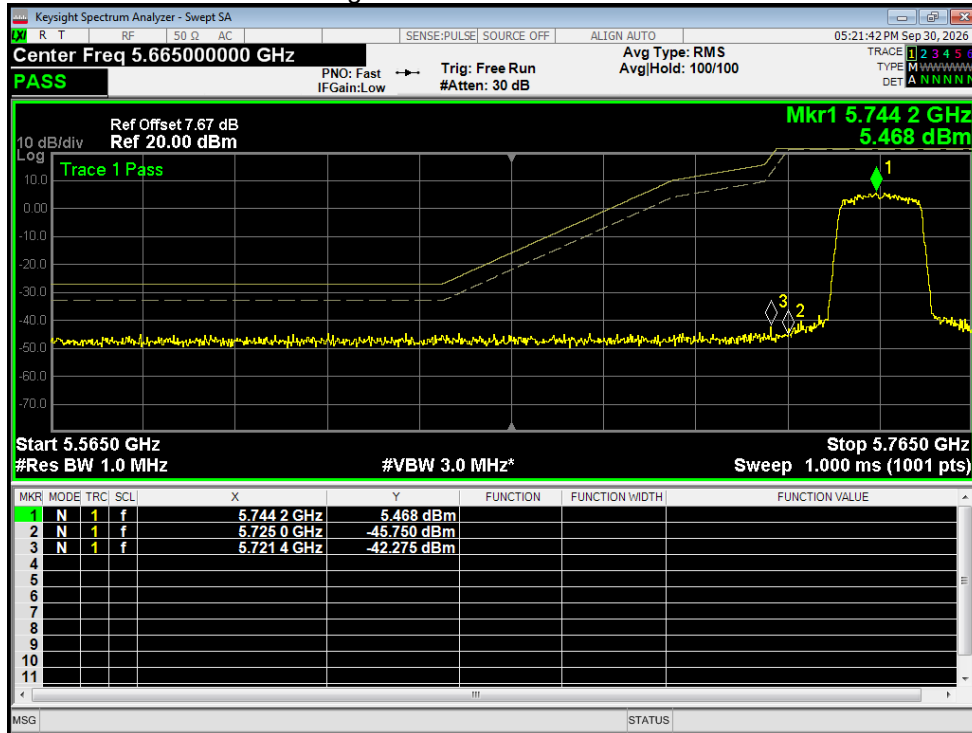
Band Edge NVNT a 5745MHz Low Ant1



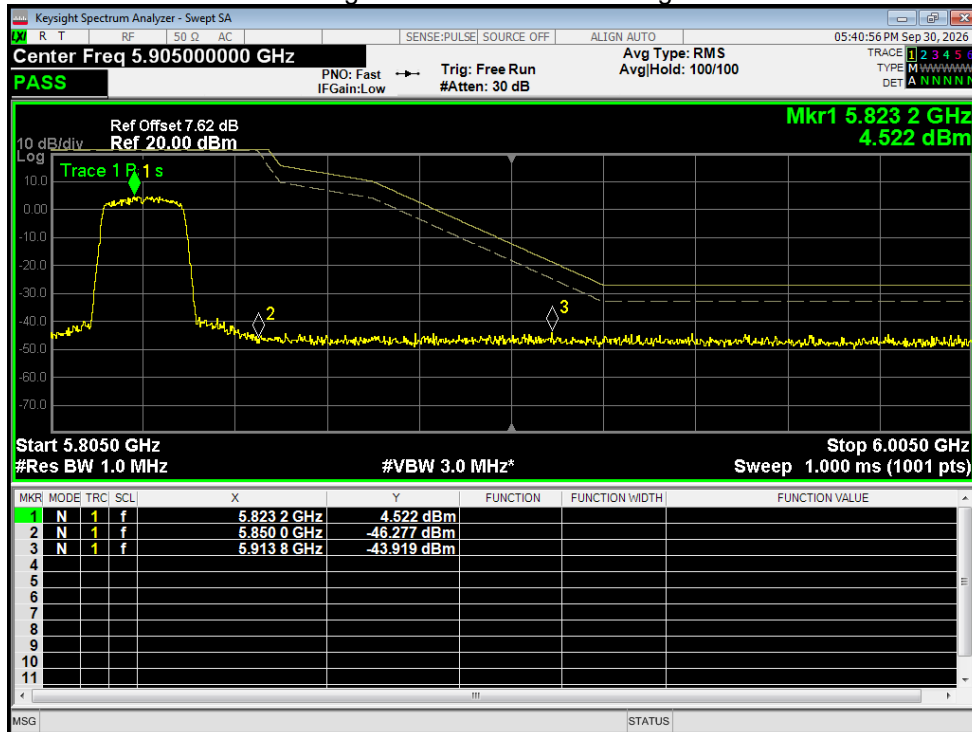
Band Edge NVNT a 5825MHz High Ant1



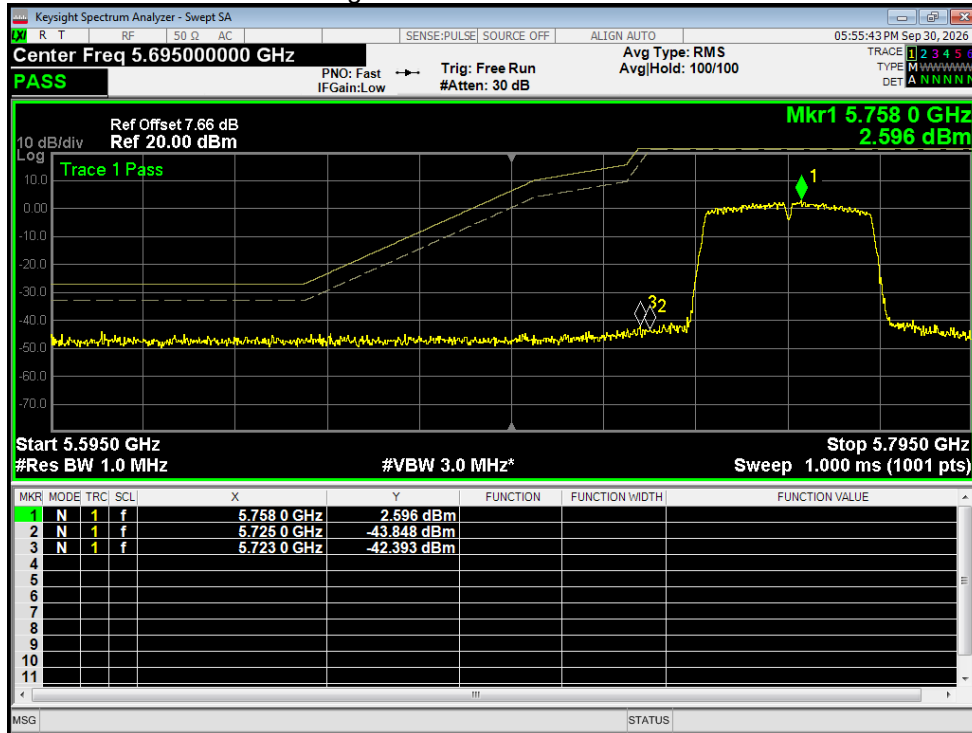
Band Edge NVNT n20 5745MHz Low Ant1



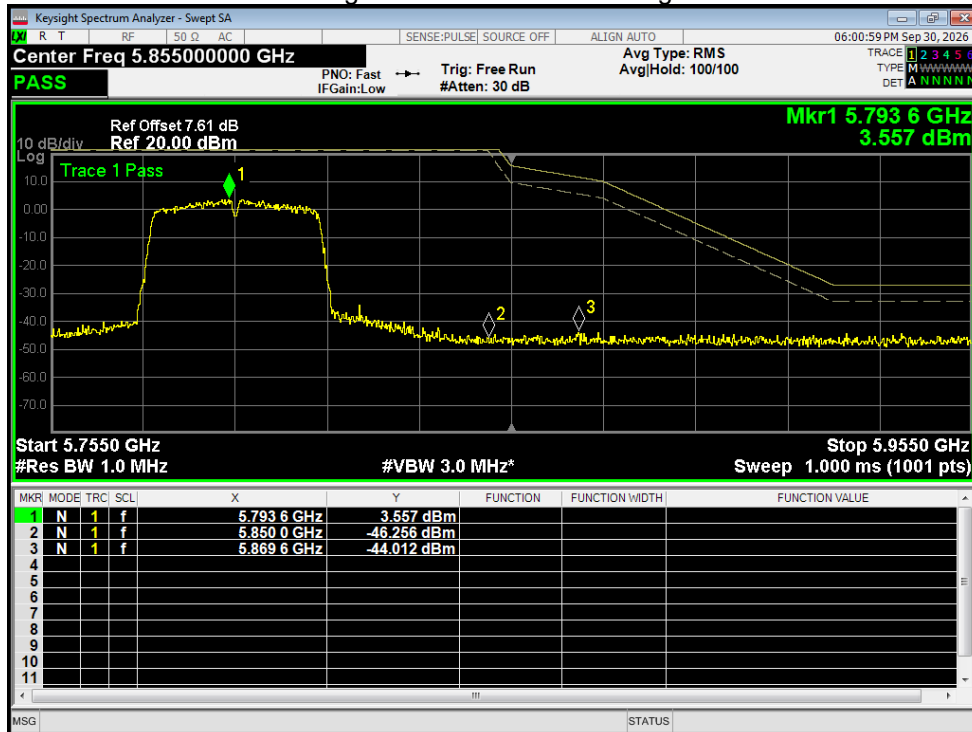
Band Edge NVNT n20 5825MHz High Ant1



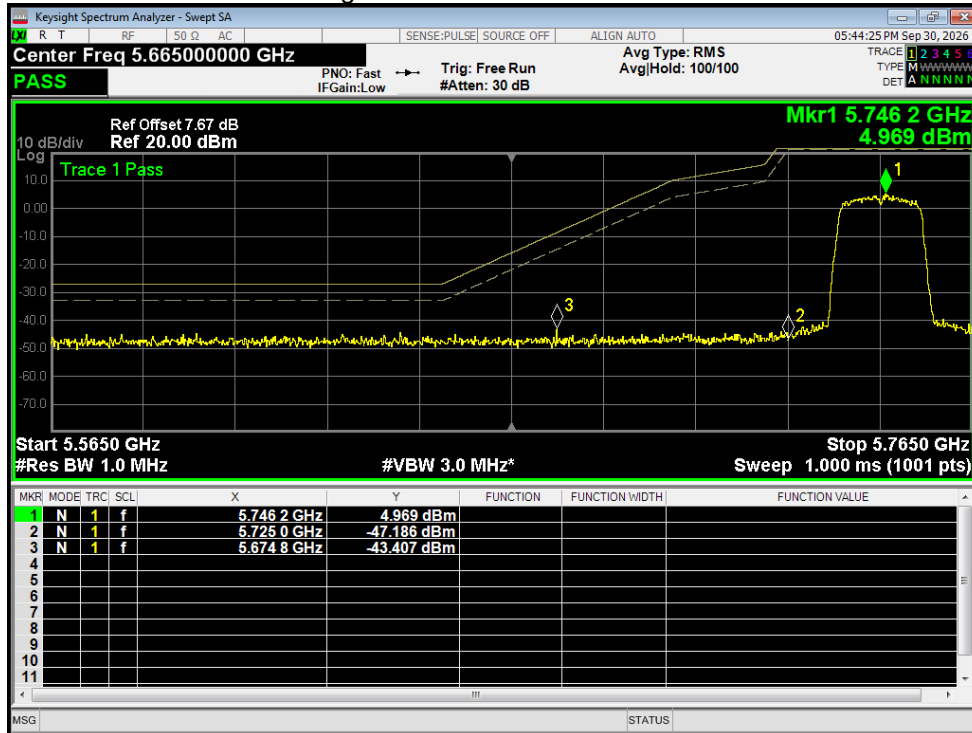
Band Edge NVNT n40 5755MHz Low Ant1



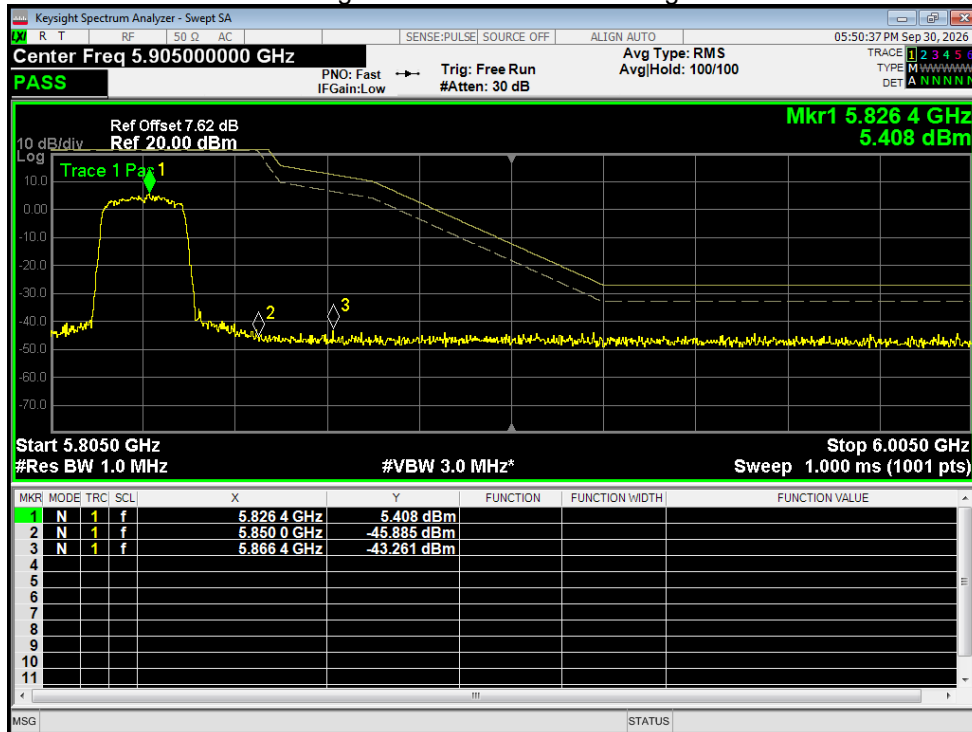
Band Edge NVNT n40 5795MHz High Ant1



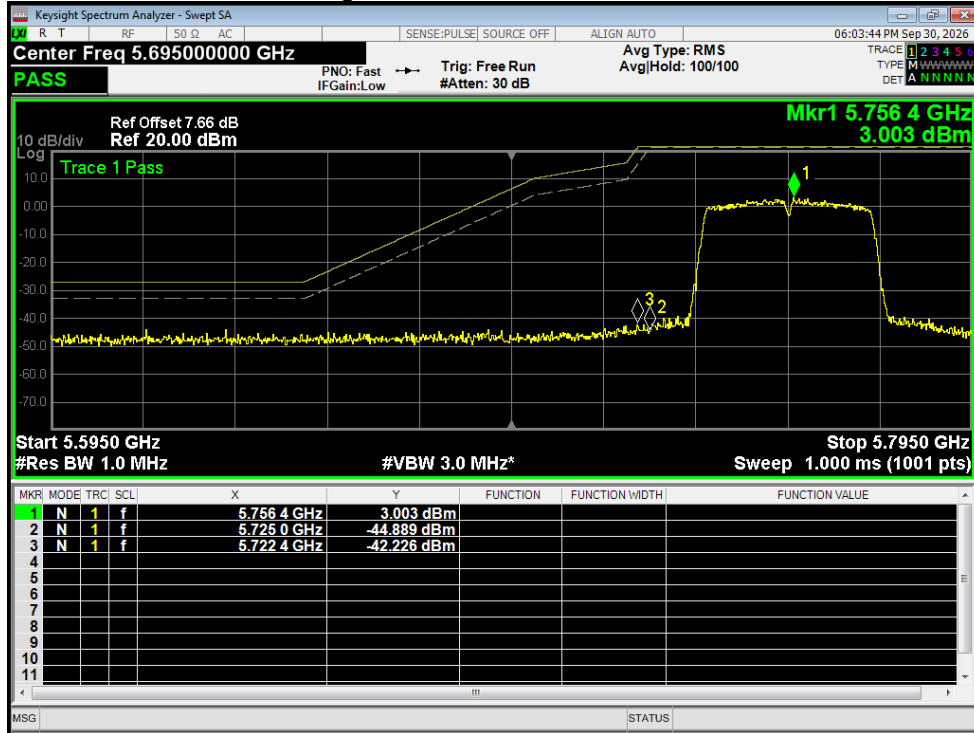
Band Edge NVNT ac20 5745MHz Low Ant1



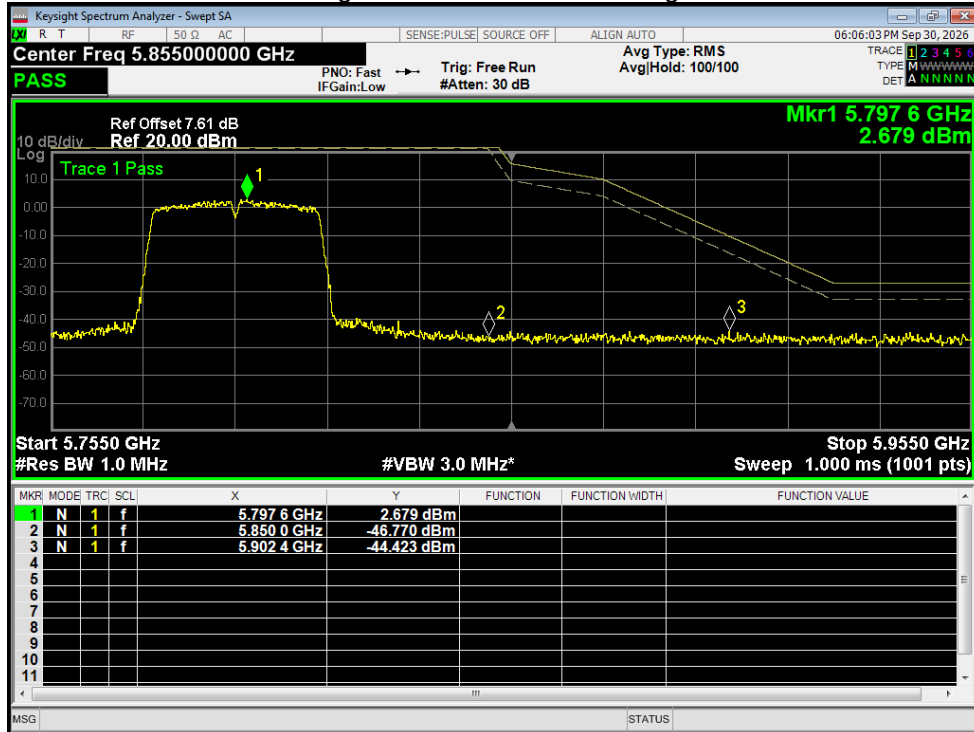
Band Edge NVNT ac20 5825MHz High Ant1



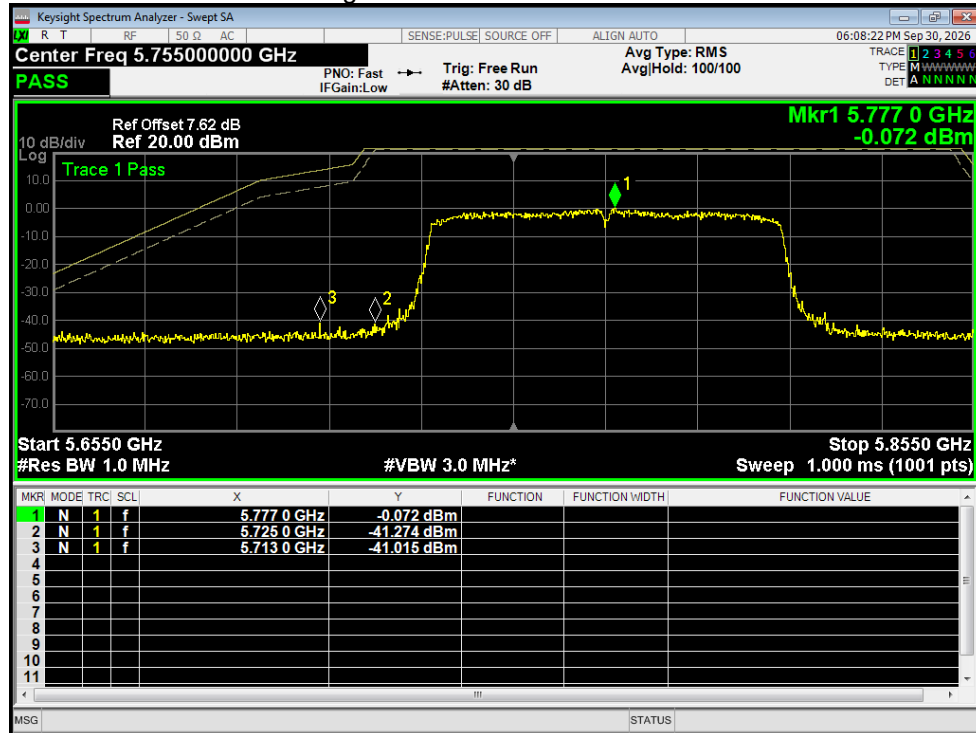
Band Edge NVNT ac40 5755MHz Low Ant1



Band Edge NVNT ac40 5795MHz High Ant1



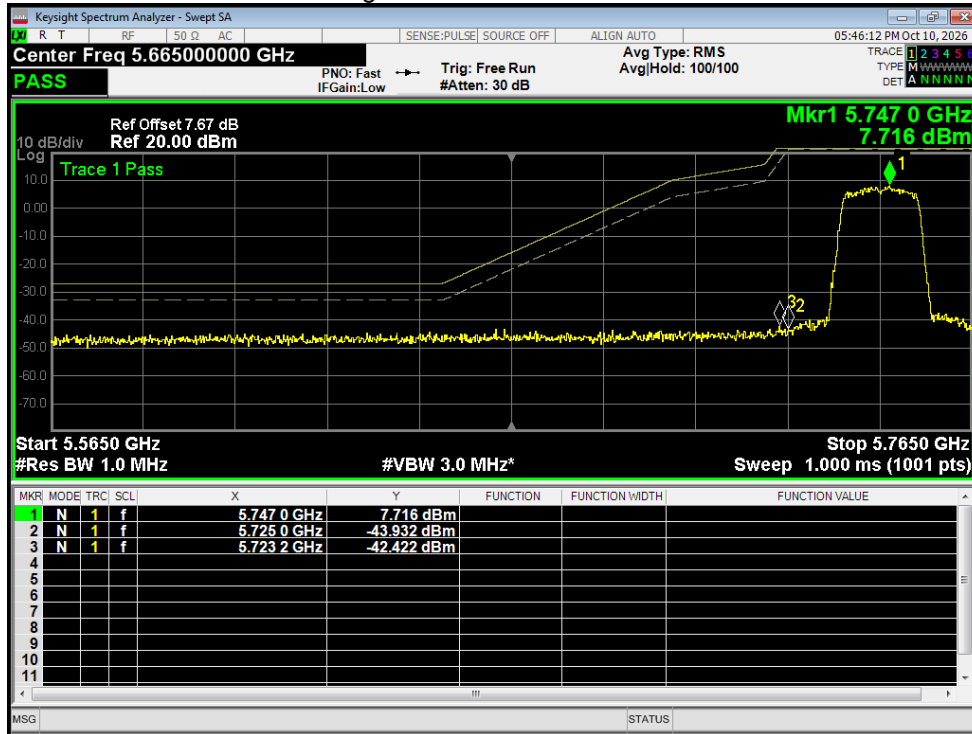
Band Edge NVNT ac80 5775MHz Low Ant1



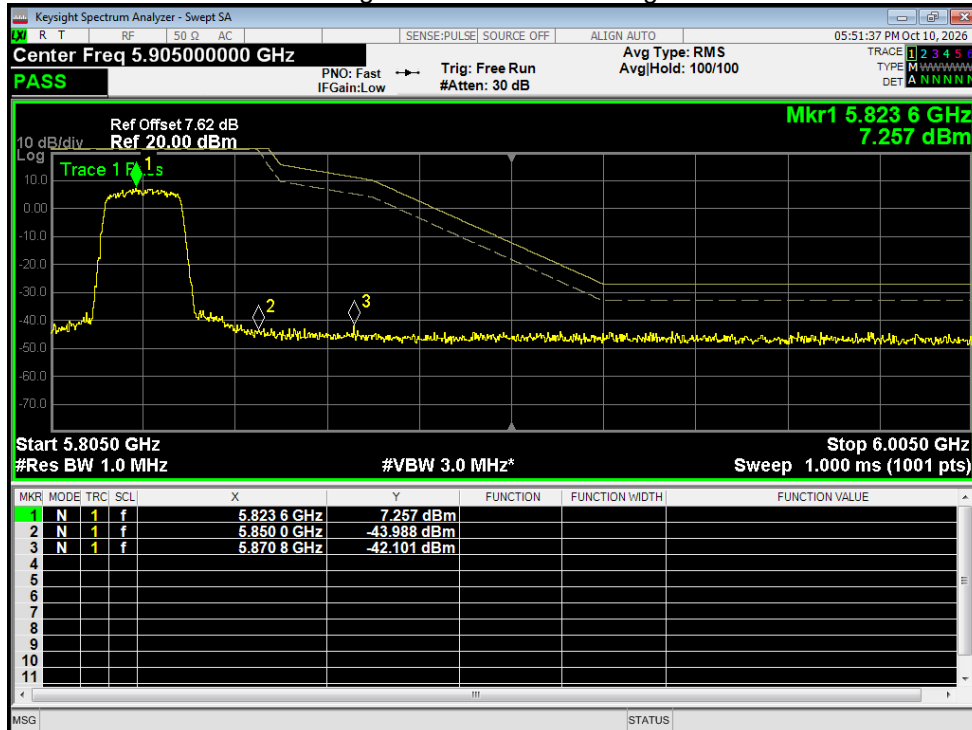


ANT2

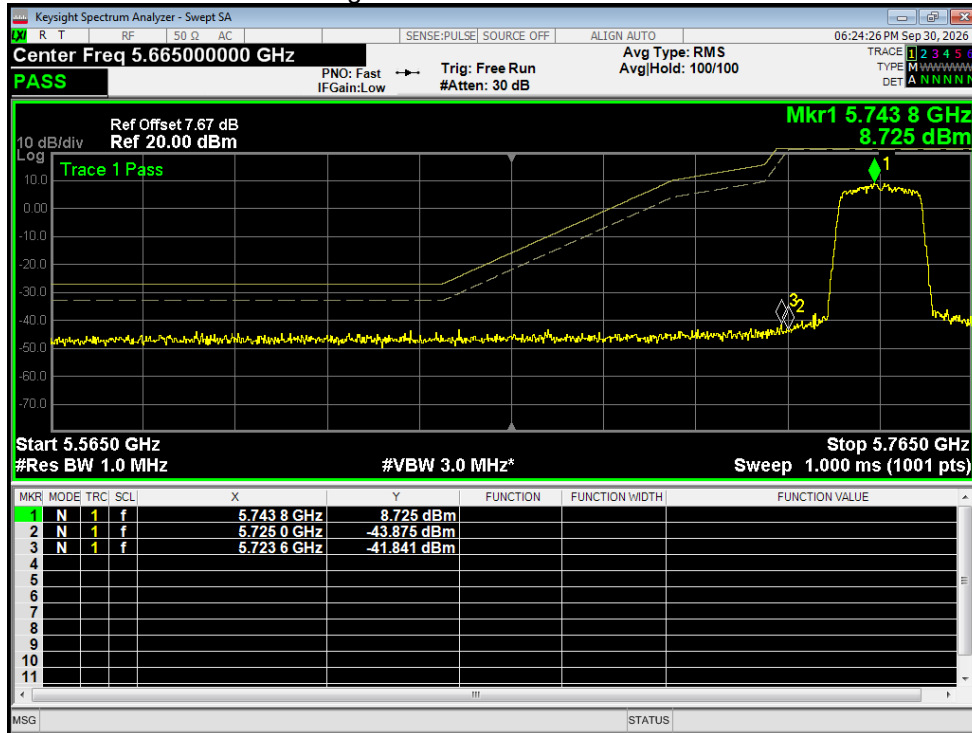
Band Edge NVNT a 5745MHz Low Ant1



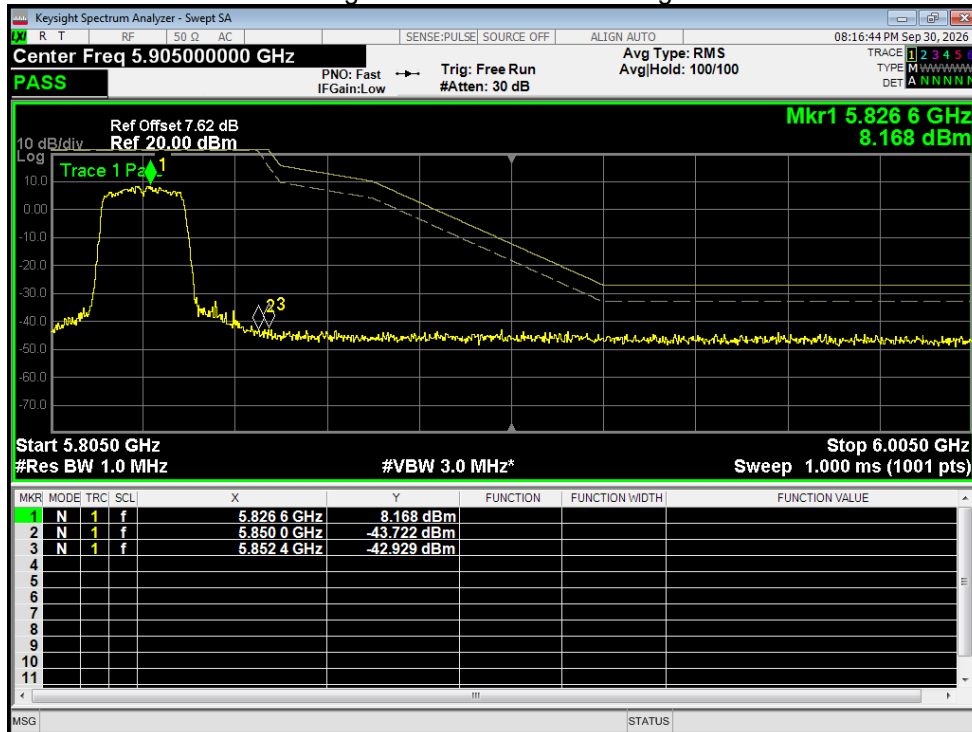
Band Edge NVNT a 5825MHz High Ant1



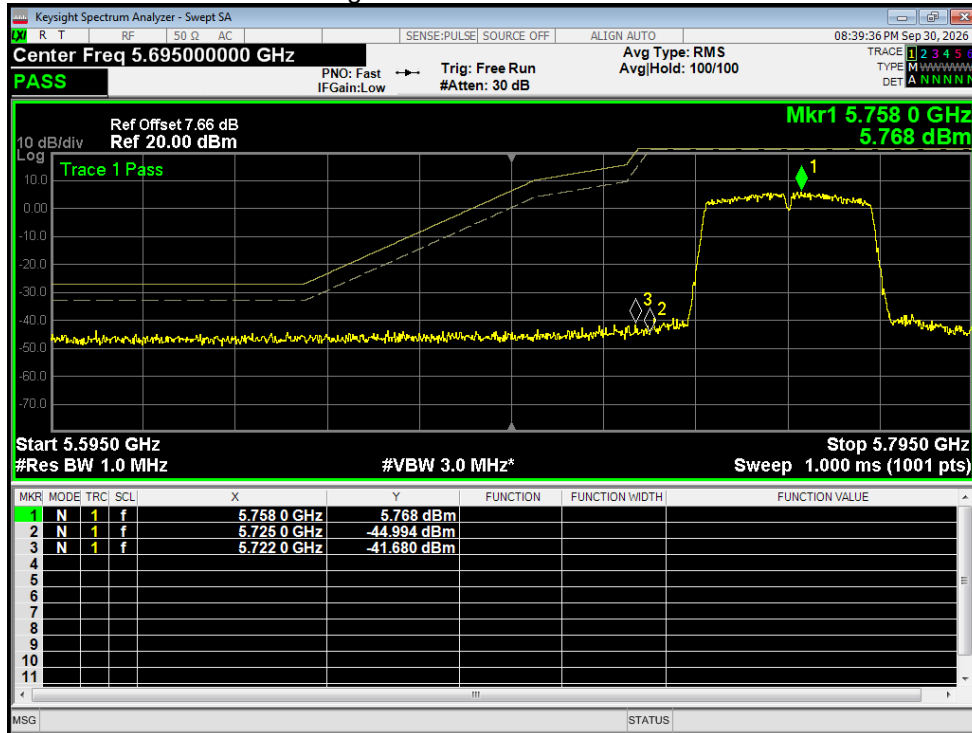
Band Edge NVNT n20 5745MHz Low Ant1



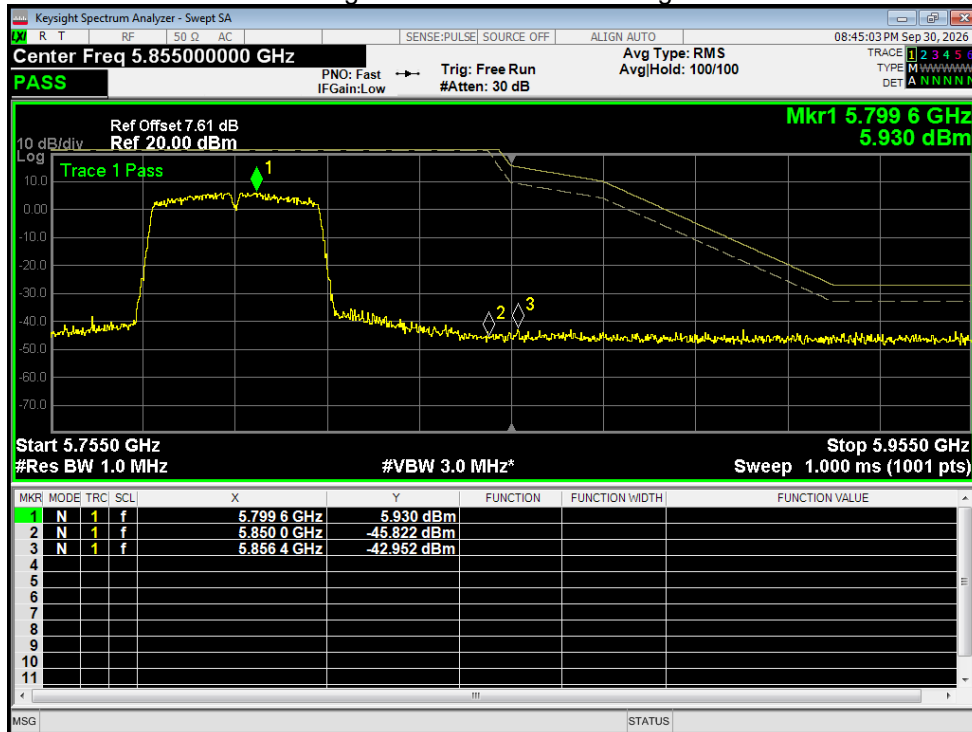
Band Edge NVNT n20 5825MHz High Ant1



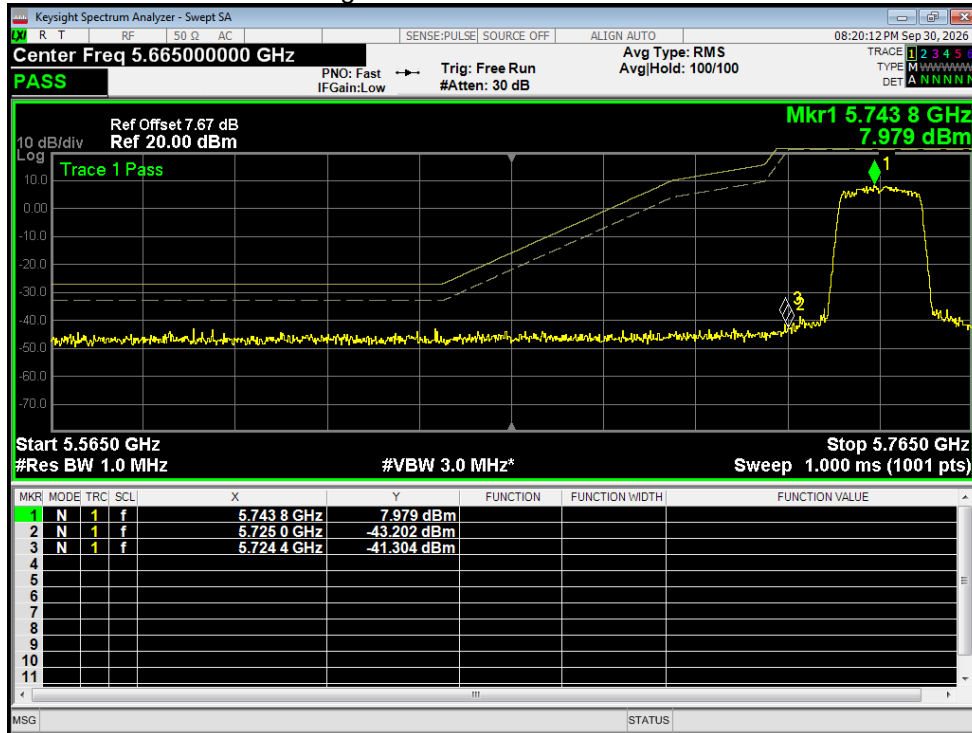
Band Edge NVNT n40 5755MHz Low Ant1



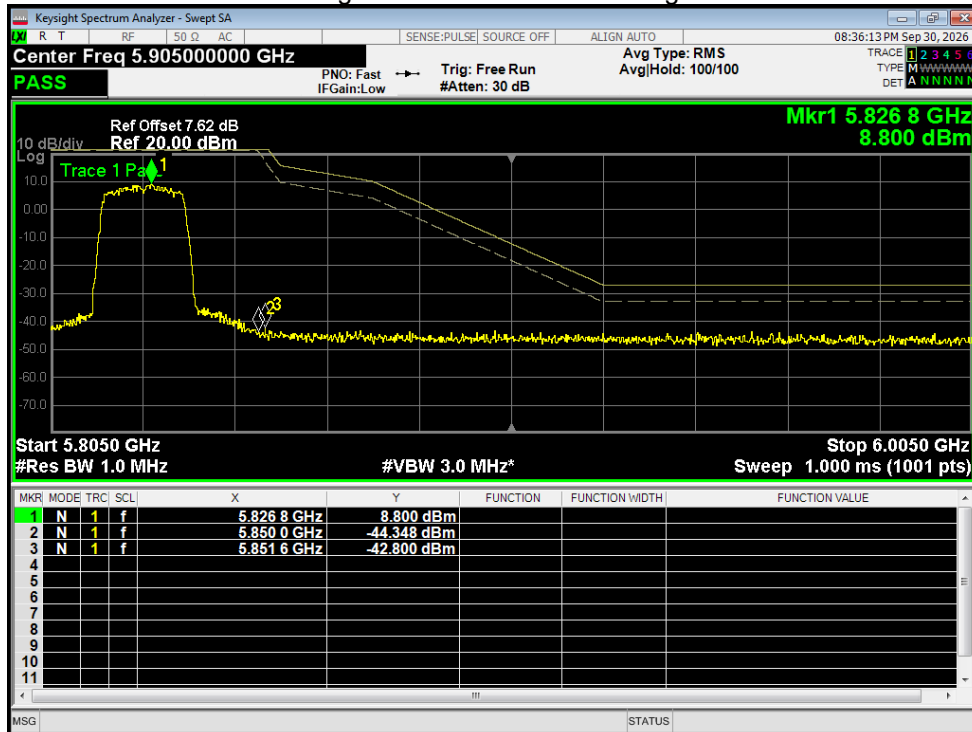
Band Edge NVNT n40 5795MHz High Ant1



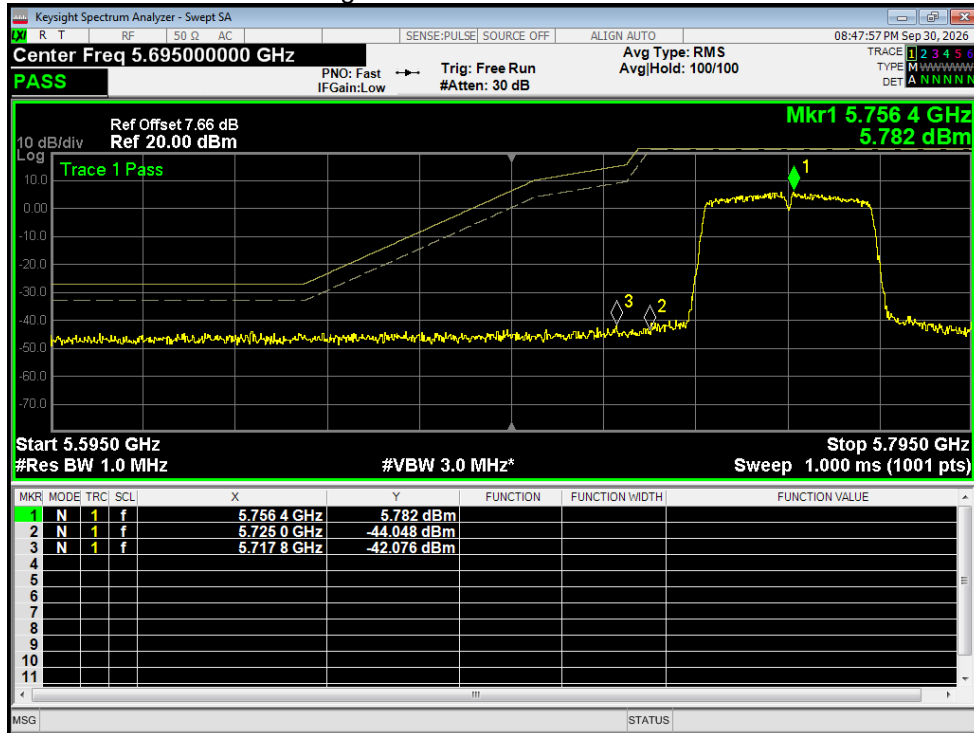
Band Edge NVNT ac20 5745MHz Low Ant1



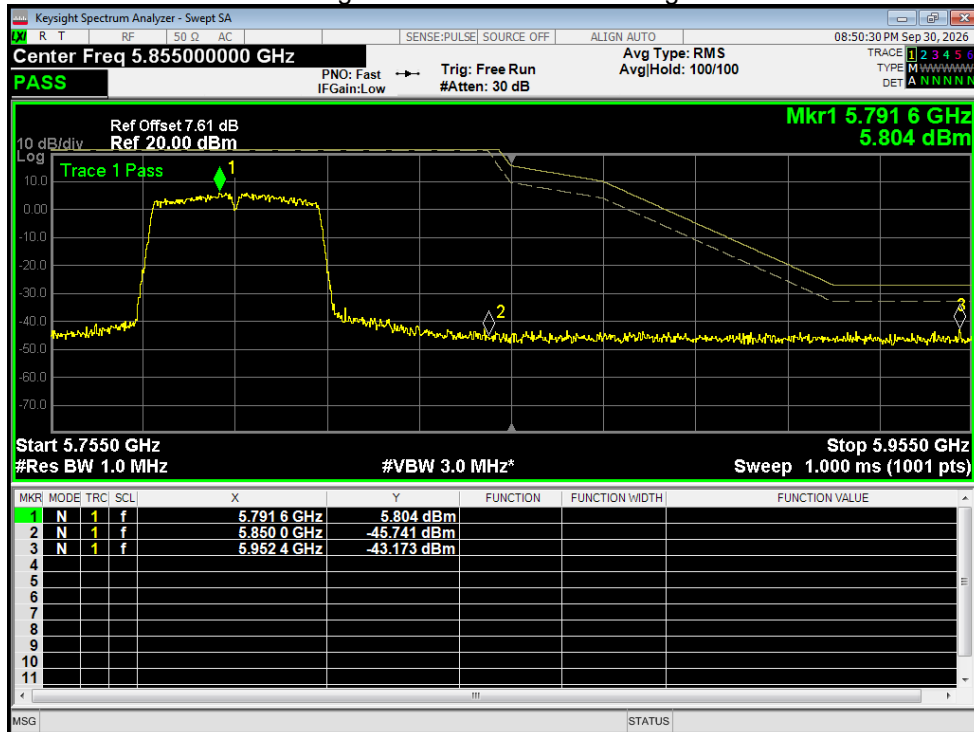
Band Edge NVNT ac20 5825MHz High Ant1



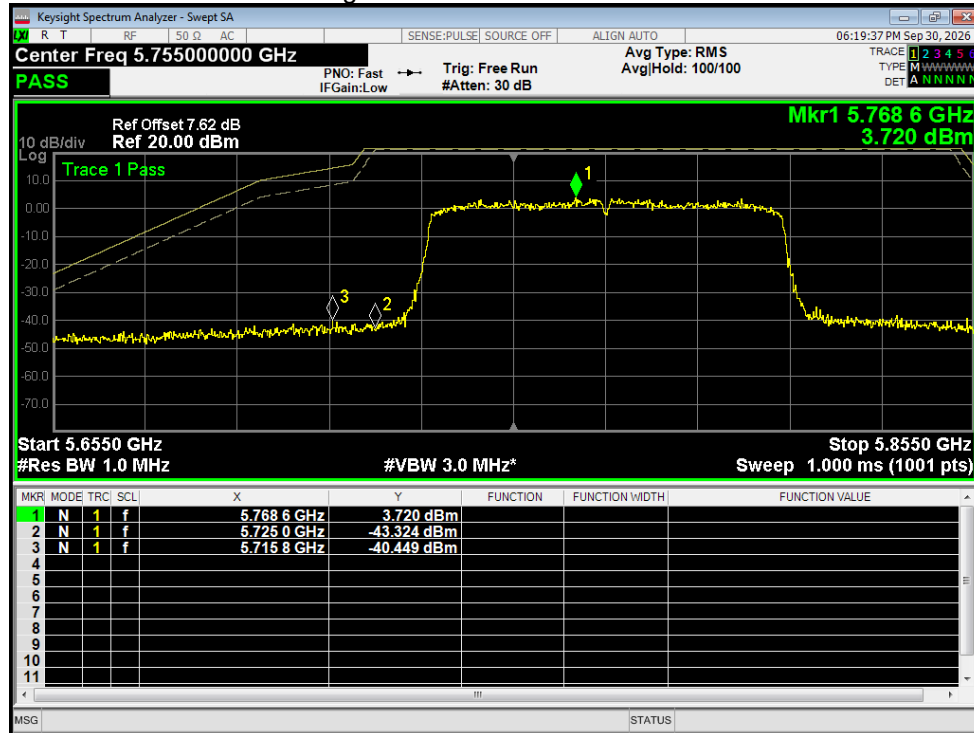
Band Edge NVNT ac40 5755MHz Low Ant1



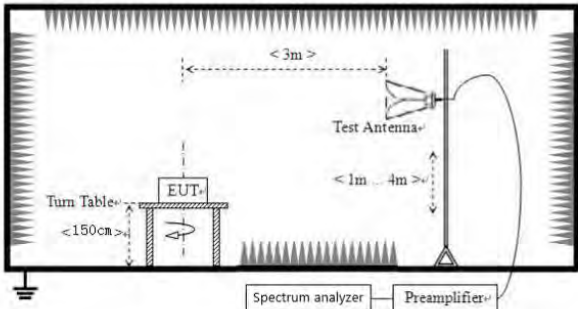
Band Edge NVNT ac40 5795MHz High Ant1

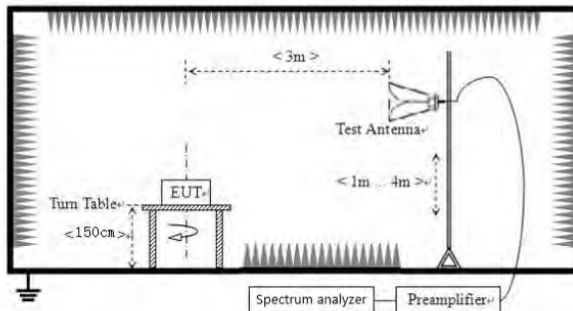


Band Edge NVNT ac80 5775MHz Low Ant1



Radiated Emission Method

Test Requirement:	47CFR Part 15.209 and 15.205				
Test Method:	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 § 6.10				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		AV	1MHz	3MHz	Average Value
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.0		Quasi-peak Value
	88MHz-216MHz		43.5		Quasi-peak Value
	216MHz-960MHz		46.0		Quasi-peak Value
	960MHz-1GHz		54.0		Quasi-peak Value
	Above 1GHz		54.0		Average Value
			68.2		Peak Value
	Undesirable emission limits:				
	(1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.				
	(2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.				
	(3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.				
	All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.				
Test setup:	Above 1GHz				
					



Test Procedure:	a. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. 7. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.	
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test environment:	Temp.: 26°C	Humid.: 54%RH
Test voltage:	DC 12V	
Test results:	Pass	

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

3. Two antennas are tested, only the worst case's (Main Antenna) data was showed.

4. The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

5. According to KDB 789033 D02v02r01 section G) 1) d), for measurements above 1000 MHz @3m distance, the limit of field strength is computed as follows:

$$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$$

For example, if EIRP = -27dBm

$$E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 10 + 95.2 = 105.2\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 15.6 + 95.2 = 110.8\text{dBuV/m}.$$

$$E[\text{dBuV/m}] = 27 + 95.2 = 122.2\text{dBuV/m}$$

**Measurement data:****5.180~5.240 GHz**

All models and modes have been tested, and the report only displays the worst mode 802.11a ANT1 and ANT1+ANT2 working simultaneously 802.11ac20 /ac40/ac80 data.

IEEE 802.11a							
Operation Frequency:5180MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	55.03	-5.94	49.09	74.00	-24.91	Horizontal	PK
5150	57.20	-5.94	51.26	74.00	-22.74	Vertical	PK
5150	40.67	-5.94	34.73	54.00	-19.27	Horizontal	AV
5150	41.51	-5.94	35.57	54.00	-18.43	Vertical	AV

IEEE 802.11a							
Operation Frequency:5240MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	48.91	-5.70	43.21	74.00	-30.79	Horizontal	PK
5350	50.77	-5.70	45.07	74.00	-28.93	Vertical	PK
5350	38.30	-5.70	32.60	54.00	-21.40	Horizontal	AV
5350	39.61	-5.70	33.91	54.00	-20.09	Vertical	AV

IEEE 802.11ac20							
Operation Frequency:5180MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	57.41	-5.94	51.47	74.00	-22.53	Horizontal	PK
5150	58.64	-5.94	52.70	74.00	-21.30	Vertical	PK
5150	47.16	-5.94	41.22	54.00	-12.78	Horizontal	AV
5150	43.94	-5.94	38.00	54.00	-16.00	Vertical	AV

IEEE 802.11ac20							
Operation Frequency:5240MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	50.96	-5.70	45.26	74.00	-28.74	Horizontal	PK
5350	51.89	-5.70	46.19	74.00	-27.81	Vertical	PK
5350	40.29	-5.70	34.59	54.00	-19.41	Horizontal	AV
5350	41.71	-5.70	36.01	54.00	-17.99	Vertical	AV

IEEE 802.11ac40							
Operation Frequency:5190MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	65.80	-5.94	59.86	74.00	-14.14	Horizontal	PK
5150	70.51	-5.94	64.57	74.00	-9.43	Vertical	PK
5150	48.80	-5.94	42.86	54.00	-11.14	Horizontal	AV
5150	50.76	-5.94	44.82	54.00	-9.18	Vertical	AV



IEEE 802.11ac40 Operation Frequency:5230MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	48.66	-5.70	42.96	74.00	-31.04	Horizontal	PK
5350	49.17	-5.70	43.47	74.00	-30.53	Vertical	PK
5350	38.01	-5.70	32.31	54.00	-21.69	Horizontal	AV
5350	38.25	-5.70	32.55	54.00	-21.45	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5210MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	65.74	-5.94	59.80	74.00	-14.20	Horizontal	PK
5150	65.93	-5.94	59.99	74.00	-14.01	Vertical	PK
5150	44.67	-5.94	38.73	54.00	-15.27	Horizontal	AV
5150	44.91	-5.94	38.97	54.00	-15.03	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5210MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	48.47	-5.70	42.77	74.00	-31.23	Horizontal	PK
5350	50.32	-5.70	44.62	74.00	-29.38	Vertical	PK
5350	38.15	-5.70	32.45	54.00	-21.55	Horizontal	AV
5350	38.80	-5.70	33.10	54.00	-20.90	Vertical	AV

**5.260~5.320 GHz**

All models and modes have been tested, and the report only displays the worst mode 802.11a ANT1 and ANT1+ANT2 working simultaneously 802.11ac20 /ac40/ac80 data.

IEEE 802.11a Operation Frequency:5260MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	49.02	-5.94	43.08	74.00	-30.92	Horizontal	PK
5150	49.91	-5.94	43.97	74.00	-30.03	Vertical	PK
5150	38.64	-5.94	32.70	54.00	-21.30	Horizontal	AV
5150	38.74	-5.94	32.80	54.00	-21.20	Vertical	AV

IEEE 802.11a Operation Frequency:5320MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	50.29	-5.70	44.59	74.00	-29.41	Horizontal	PK
5350	49.07	-5.70	43.37	74.00	-30.63	Vertical	PK
5350	39.49	-5.70	33.79	54.00	-20.21	Horizontal	AV
5350	38.98	-5.70	33.28	54.00	-20.72	Vertical	AV

IEEE 802.11ac20 Operation Frequency:5260MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	51.60	-5.94	45.66	74.00	-28.34	Horizontal	PK
5150	51.80	-5.94	45.86	74.00	-28.14	Vertical	PK
5150	40.65	-5.94	34.71	54.00	-19.29	Horizontal	AV
5150	41.94	-5.94	36.00	54.00	-18.00	Vertical	AV

IEEE 802.11ac20 Operation Frequency:5320MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	64.32	-5.70	58.62	74.00	-15.38	Horizontal	PK
5350	52.78	-5.70	47.08	74.00	-26.92	Vertical	PK
5350	51.31	-5.70	45.61	54.00	-8.39	Horizontal	AV
5350	40.22	-5.70	34.52	54.00	-19.48	Vertical	AV

IEEE 802.11ac40 Operation Frequency:5270MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	50.07	-5.94	44.13	74.00	-29.87	Horizontal	PK
5150	49.00	-5.94	43.06	74.00	-30.94	Vertical	PK
5150	38.58	-5.94	32.64	54.00	-21.36	Horizontal	AV
5150	38.72	-5.94	32.78	54.00	-21.22	Vertical	AV



IEEE 802.11ac40 Operation Frequency:5310MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	58.11	-5.70	52.41	74.00	-21.59	Horizontal	PK
5350	53.65	-5.70	47.95	74.00	-26.05	Vertical	PK
5350	41.91	-5.70	36.21	54.00	-17.79	Horizontal	AV
5350	39.73	-5.70	34.03	54.00	-19.97	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5290MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5150	50.51	-5.94	44.57	74.00	-29.43	Horizontal	PK
5150	49.21	-5.94	43.27	74.00	-30.73	Vertical	PK
5150	39.32	-5.94	33.38	54.00	-20.62	Horizontal	AV
5150	39.32	-5.94	33.38	54.00	-20.62	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5290MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5350	60.71	-5.70	55.01	74.00	-18.99	Horizontal	PK
5350	51.49	-5.70	45.79	74.00	-28.21	Vertical	PK
5350	49.09	-5.70	43.39	54.00	-10.61	Horizontal	AV
5350	40.70	-5.70	35.00	54.00	-19.00	Vertical	AV

**5.500~5.700 GHz**

All models and modes have been tested, and the report only displays the worst mode 802.11a ANT1 and ANT1+ANT2 working simultaneously 802.11ac20 /ac40/ac80 data.

IEEE 802.11a							
Operation Frequency:5500MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5460	56.28	-5.57	50.71	68.20	-17.49	Horizontal	PK
5460	49.01	-5.57	43.44	68.20	-24.76	Vertical	PK
5460	39.72	-5.57	34.15	54.00	-19.85	Horizontal	AV
5460	38.91	-5.57	33.34	54.00	-20.66	Vertical	AV

IEEE 802.11a							
Operation Frequency:5700MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5725	60.86	-4.61	56.25	68.20	-11.95	Horizontal	PK
5725	60.45	-4.61	55.84	68.20	-12.36	Vertical	PK
5725	44.49	-4.61	39.88	54.00	-14.12	Horizontal	AV
5725	44.27	-4.61	39.66	54.00	-14.34	Vertical	AV

IEEE 802.11ac20							
Operation Frequency:5500MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5460	53.17	-5.57	47.60	68.20	-20.60	Horizontal	PK
5460	49.96	-5.57	44.39	68.20	-23.81	Vertical	PK
5460	41.32	-5.57	35.75	54.00	-18.25	Horizontal	AV
5460	39.20	-5.57	33.63	54.00	-20.37	Vertical	AV

IEEE 802.11ac20							
Operation Frequency:5700MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5725	66.03	-4.61	61.42	68.20	-6.78	Horizontal	PK
5725	62.34	-4.61	57.73	68.20	-10.47	Vertical	PK
5725	46.20	-4.61	41.59	54.00	-12.41	Horizontal	AV
5725	43.76	-4.61	39.15	54.00	-14.85	Vertical	AV

IEEE 802.11ac40							
Operation Frequency:5510MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5460	58.30	-5.57	52.73	68.20	-15.47	Horizontal	PK
5460	60.51	-5.57	54.94	68.20	-13.26	Vertical	PK
5460	41.55	-5.57	35.98	54.00	-18.02	Horizontal	AV
5460	41.70	-5.57	36.13	54.00	-17.87	Vertical	AV



IEEE 802.11ac40 Operation Frequency:5670MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5725	53.95	-4.61	49.34	68.20	-18.86	Horizontal	PK
5725	50.74	-4.61	46.13	68.20	-22.07	Vertical	PK
5725	39.78	-4.61	35.17	54.00	-18.83	Horizontal	AV
5725	39.22	-4.61	34.61	54.00	-19.39	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5530MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5460	70.59	-5.57	65.02	68.20	-3.18	Horizontal	PK
5460	57.24	-5.57	51.67	68.20	-16.53	Vertical	PK
5460	43.84	-5.57	38.27	54.00	-15.73	Horizontal	AV
5460	40.55	-5.57	34.98	54.00	-19.02	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5530MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5725	49.70	-4.61	45.09	68.20	-23.11	Horizontal	PK
5725	49.64	-4.61	45.03	68.20	-23.17	Vertical	PK
5725	39.41	-4.61	34.80	54.00	-19.20	Horizontal	AV
5725	39.33	-4.61	34.72	54.00	-19.28	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5610MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5460	69.29	-5.57	63.72	68.20	-4.48	Horizontal	PK
5460	58.42	-5.57	52.85	68.20	-15.35	Vertical	PK
5460	42.86	-5.57	37.29	54.00	-16.71	Horizontal	AV
5460	41.22	-5.57	35.65	54.00	-18.35	Vertical	AV

IEEE 802.11ac80 Operation Frequency:5610MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5725	50.58	-4.61	45.97	68.20	-22.23	Horizontal	PK
5725	48.78	-4.61	44.17	68.20	-24.03	Vertical	PK
5725	40.08	-4.61	35.47	54.00	-18.53	Horizontal	AV
5725	40.03	-4.61	35.42	54.00	-18.58	Vertical	AV

**5.745~5.825 GHz:**

All models and modes have been tested, and the report only displays the worst mode 802.11a ANT1 and ANT1+ANT2 working simultaneously 802.11ac20 /ac40/ac80 data.

IEEE 802.11a Operation Frequency:5745MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5650	49.79	-4.91	44.88	68.20	-23.32	Horizontal	PK
5650	38.23	-4.91	33.32	54.00	-20.68	Horizontal	AV
5700	54.26	-4.70	49.56	105.20	-55.64	Horizontal	PK
5700	39.76	-4.70	35.06	54.00	-18.94	Horizontal	AV
5720	65.07	-4.62	60.45	110.80	-50.35	Horizontal	PK
5720	48.17	-4.62	43.55	54.00	-10.45	Horizontal	AV
5725	69.99	-4.61	65.38	122.20	-56.82	Horizontal	PK
5725	54.35	-4.61	49.74	54.00	-4.26	Horizontal	AV
5650	49.76	-4.91	44.85	68.20	-23.35	Vertical	PK
5650	38.32	-4.91	33.41	54.00	-20.59	Vertical	AV
5700	53.96	-4.70	49.26	105.20	-55.94	Vertical	PK
5700	40.35	-4.70	35.65	54.00	-18.35	Vertical	AV
5720	64.81	-4.62	60.19	110.80	-50.61	Vertical	PK
5720	46.52	-4.62	41.90	54.00	-12.10	Vertical	AV
5725	71.94	-4.61	67.33	122.20	-54.87	Vertical	PK
5725	52.63	-4.61	48.02	54.00	-5.98	Vertical	AV

IEEE 802.11a Operation Frequency:5825MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5850	50.02	-4.09	45.93	122.20	-76.27	Vertical	PK
5850	38.62	-4.09	34.53	54.00	-19.47	Vertical	AV
5855	50.15	-4.07	46.08	110.80	-64.72	Vertical	PK
5855	38.54	-4.07	34.47	54.00	-19.53	Vertical	AV
5875	49.59	-3.99	45.60	105.20	-59.60	Vertical	PK
5875	38.19	-3.99	34.20	54.00	-19.80	Vertical	AV
5925	50.79	-3.78	47.01	68.20	-21.19	Vertical	PK
5925	39.21	-3.78	35.43	54.00	-18.57	Vertical	AV
5850	48.64	-4.09	44.55	122.20	-77.65	Horizontal	PK
5850	38.00	-4.09	33.91	54.00	-20.09	Horizontal	AV
5855	50.07	-4.07	46.00	110.80	-64.80	Horizontal	PK
5855	38.07	-4.07	34.00	54.00	-20.00	Horizontal	AV
5875	48.30	-3.99	44.31	105.20	-60.89	Horizontal	PK
5875	37.63	-3.99	33.64	54.00	-20.36	Horizontal	AV
5925	48.74	-3.78	44.96	68.20	-23.24	Horizontal	PK
5925	38.19	-3.78	34.41	54.00	-19.59	Horizontal	AV



IEEE 802.11ac20 Operation Frequency:5745MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5650	49.46	-4.91	44.55	68.20	-23.65	Horizontal	PK
5650	38.11	-4.91	33.20	54.00	-20.80	Horizontal	AV
5700	49.52	-4.70	44.82	105.20	-60.38	Horizontal	PK
5700	38.54	-4.70	33.84	54.00	-20.16	Horizontal	AV
5720	50.75	-4.62	46.13	110.80	-64.67	Horizontal	PK
5720	38.77	-4.62	34.15	54.00	-19.85	Horizontal	AV
5725	50.80	-4.61	46.19	122.20	-76.01	Horizontal	PK
5725	41.13	-4.61	36.52	54.00	-17.48	Horizontal	AV
5650	48.78	-4.91	43.87	68.20	-24.33	Vertical	PK
5650	38.40	-4.91	33.49	54.00	-20.51	Vertical	AV
5700	49.98	-4.70	45.28	105.20	-59.92	Vertical	PK
5700	39.34	-4.70	34.64	54.00	-19.36	Vertical	AV
5720	51.71	-4.62	47.09	110.80	-63.71	Vertical	PK
5720	40.86	-4.62	36.24	54.00	-17.76	Vertical	AV
5725	62.14	-4.61	57.53	122.20	-64.67	Vertical	PK
5725	44.13	-4.61	39.52	54.00	-14.48	Vertical	AV

IEEE 802.11ac20 Operation Frequency:5825MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5850	58.59	-4.09	54.50	122.20	-67.70	Vertical	PK
5850	41.38	-4.09	37.29	54.00	-16.71	Vertical	AV
5855	54.38	-4.07	50.31	110.80	-60.49	Vertical	PK
5855	39.70	-4.07	35.63	54.00	-18.37	Vertical	AV
5875	48.85	-3.99	44.86	105.20	-60.34	Vertical	PK
5875	37.70	-3.99	33.71	54.00	-20.29	Vertical	AV
5925	49.58	-3.78	45.80	68.20	-22.40	Vertical	PK
5925	38.94	-3.78	35.16	54.00	-18.84	Vertical	AV
5850	62.25	-4.09	58.16	122.20	-64.04	Horizontal	PK
5850	43.27	-4.09	39.18	54.00	-14.82	Horizontal	AV
5855	58.39	-4.07	54.32	110.80	-56.48	Horizontal	PK
5855	41.40	-4.07	37.33	54.00	-16.67	Horizontal	AV
5875	49.36	-3.99	45.37	105.20	-59.83	Horizontal	PK
5875	38.19	-3.99	34.20	54.00	-19.80	Horizontal	AV
5925	49.16	-3.78	45.38	68.20	-22.82	Horizontal	PK
5925	38.50	-3.78	34.72	54.00	-19.28	Horizontal	AV



IEEE 802.11ac40 Operation Frequency:5755MHz							
Frequency (MHz)	Read Level (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	Polarization	Detect or Type
5650	50.75	-4.91	45.84	68.20	-22.36	Horizontal	PK
5650	39.02	-4.91	34.11	54.00	-19.89	Horizontal	AV
5700	57.91	-4.70	53.21	105.20	-51.99	Horizontal	PK
5700	40.55	-4.70	35.85	54.00	-18.15	Horizontal	AV
5720	70.91	-4.62	66.29	110.80	-44.51	Horizontal	PK
5720	50.65	-4.62	46.03	54.00	-7.97	Horizontal	AV
5725	71.76	-4.61	67.15	122.20	-55.05	Horizontal	PK
5725	50.95	-4.61	46.34	54.00	-7.66	Horizontal	AV
5650	49.38	-4.91	44.47	68.20	-23.73	Vertical	PK
5650	38.46	-4.91	33.55	54.00	-20.45	Vertical	AV
5700	54.74	-4.70	50.04	105.20	-55.16	Vertical	PK
5700	39.17	-4.70	34.47	54.00	-19.53	Vertical	AV
5720	64.67	-4.62	60.05	110.80	-50.75	Vertical	PK
5720	47.00	-4.62	42.38	54.00	-11.62	Vertical	AV
5725	63.60	-4.61	58.99	122.20	-63.21	Vertical	PK
5725	47.90	-4.61	43.29	54.00	-10.71	Vertical	AV

IEEE 802.11ac40 Operation Frequency:5795MHz							
Frequency (MHz)	Read Level (dBUV)	Factor (dB/m)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	Polarization	Detect or Type
5850	71.53	-4.09	67.44	122.20	-54.76	Vertical	PK
5850	45.36	-4.09	41.27	54.00	-12.73	Vertical	AV
5855	69.94	-4.07	65.87	110.80	-44.93	Vertical	PK
5855	44.17	-4.07	40.10	54.00	-13.90	Vertical	AV
5875	65.34	-3.99	61.35	105.20	-43.85	Vertical	PK
5875	41.49	-3.99	37.50	54.00	-16.50	Vertical	AV
5925	54.70	-3.78	50.92	68.20	-17.28	Vertical	PK
5925	39.62	-3.78	35.84	54.00	-18.16	Vertical	AV
5850	73.88	-4.09	69.79	122.20	-52.41	Horizontal	PK
5850	46.35	-4.09	42.26	54.00	-11.74	Horizontal	AV
5855	70.08	-4.07	66.01	110.80	-44.79	Horizontal	PK
5855	44.40	-4.07	40.33	54.00	-13.67	Horizontal	AV
5875	62.54	-3.99	58.55	105.20	-46.65	Horizontal	PK
5875	40.66	-3.99	36.67	54.00	-17.33	Horizontal	AV
5925	52.45	-3.78	48.67	68.20	-19.53	Horizontal	PK
5925	38.87	-3.78	35.09	54.00	-18.91	Horizontal	AV



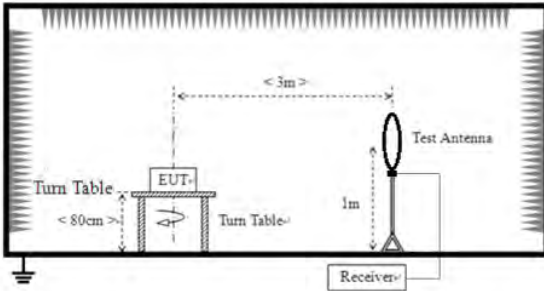
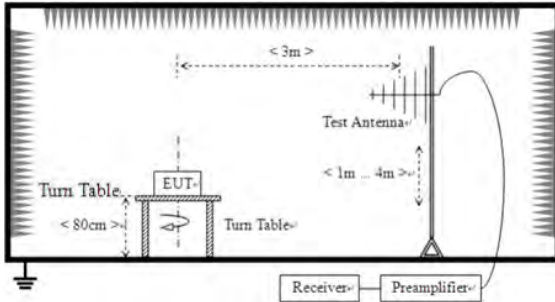
IEEE 802.11ac80 Operation Frequency:5775MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5650	59.90	-4.91	54.99	68.20	-13.21	Horizontal	PK
5650	42.26	-4.91	37.35	54.00	-16.65	Horizontal	AV
5700	67.72	-4.70	63.02	105.20	-42.18	Horizontal	PK
5700	44.89	-4.70	40.19	54.00	-13.81	Horizontal	AV
5720	69.11	-4.62	64.49	110.80	-46.31	Horizontal	PK
5720	45.58	-4.62	40.96	54.00	-13.04	Horizontal	AV
5725	72.77	-4.61	68.16	122.20	-54.04	Horizontal	PK
5725	49.07	-4.61	44.46	54.00	-9.54	Horizontal	AV
5650	60.32	-4.91	55.41	68.20	-12.79	Vertical	PK
5650	41.97	-4.91	37.06	54.00	-16.94	Vertical	AV
5700	69.64	-4.70	64.94	105.20	-40.26	Vertical	PK
5700	51.72	-4.70	47.02	54.00	-6.98	Vertical	AV
5720	75.57	-4.62	70.95	110.80	-39.85	Vertical	PK
5720	54.57	-4.62	49.95	54.00	-4.05	Vertical	AV
5725	76.79	-4.61	72.18	122.20	-50.02	Vertical	PK
5725	52.60	-4.61	47.99	54.00	-6.01	Vertical	AV

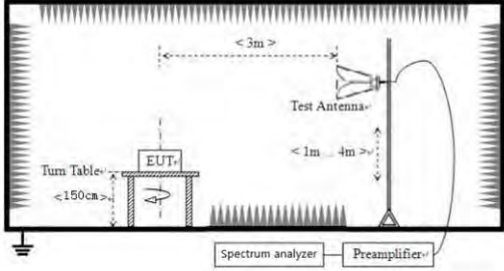
IEEE 802.11ac80 Operation Frequency:5775MHz							
Frequency (MHz)	Read Level (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Detect or Type
5850	70.48	-4.09	66.39	122.20	-55.81	Vertical	PK
5850	47.11	-4.09	43.02	54.00	-10.98	Vertical	AV
5855	69.61	-4.07	65.54	110.80	-45.26	Vertical	PK
5855	46.66	-4.07	42.59	54.00	-11.41	Vertical	AV
5875	61.35	-3.99	57.36	105.20	-47.84	Vertical	PK
5875	40.15	-3.99	36.16	54.00	-17.84	Vertical	AV
5925	51.38	-3.78	47.60	68.20	-20.60	Vertical	PK
5925	39.76	-3.78	35.98	54.00	-18.02	Vertical	AV
5850	66.78	-4.09	62.69	122.20	-59.51	Horizontal	PK
5850	44.78	-4.09	40.69	54.00	-13.31	Horizontal	AV
5855	65.80	-4.07	61.73	110.80	-49.07	Horizontal	PK
5855	42.96	-4.07	38.89	54.00	-15.11	Horizontal	AV
5875	55.58	-3.99	51.59	105.20	-53.61	Horizontal	PK
5875	39.25	-3.99	35.26	54.00	-18.74	Horizontal	AV
5925	49.84	-3.78	46.06	68.20	-22.14	Horizontal	PK
5925	39.82	-3.78	36.04	54.00	-17.96	Horizontal	AV

Remark:

Factor =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

4.7 Spurious Emission

Test Requirement:	47CFR Part 15.209, Part 15E Section 15.407(b)(4)				
Test Method:	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024§6.4&6.5&6.6				
Test Frequency Range:	9kHz to 40GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Value
	9kHz-150KHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	120KHz	360KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		AV	1MHz	3MHz	Average Value
Limit:	Frequency		Limit (uV/m)	Value	Measurement Distance
	0.009MHz-0.490MHz		2400/F(KHz)	QP	300m
	0.490MHz-1.705MHz		24000/F(KHz)	QP	300m
	1.705MHz-30MHz		30	QP	30m
	30MHz-88MHz		100	QP	3m
	88MHz-216MHz		150	QP	
	216MHz-960MHz		200	QP	
	960MHz-1GHz		500	QP	
	Frequency		Limit (dBm/MHz)	Remark	
	Above 1GHz		-27.0	Peak Value	
Test setup:	For radiated emissions from 9kHz to 30MHz				
					
	For radiated emissions from 30MHz to1GHz				
					
	For radiated emissions above 1GHz				

	
Test Procedure:	1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. The radiation measurements are performed in X, Y, Z axis positioning. And found the X axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Remarks:

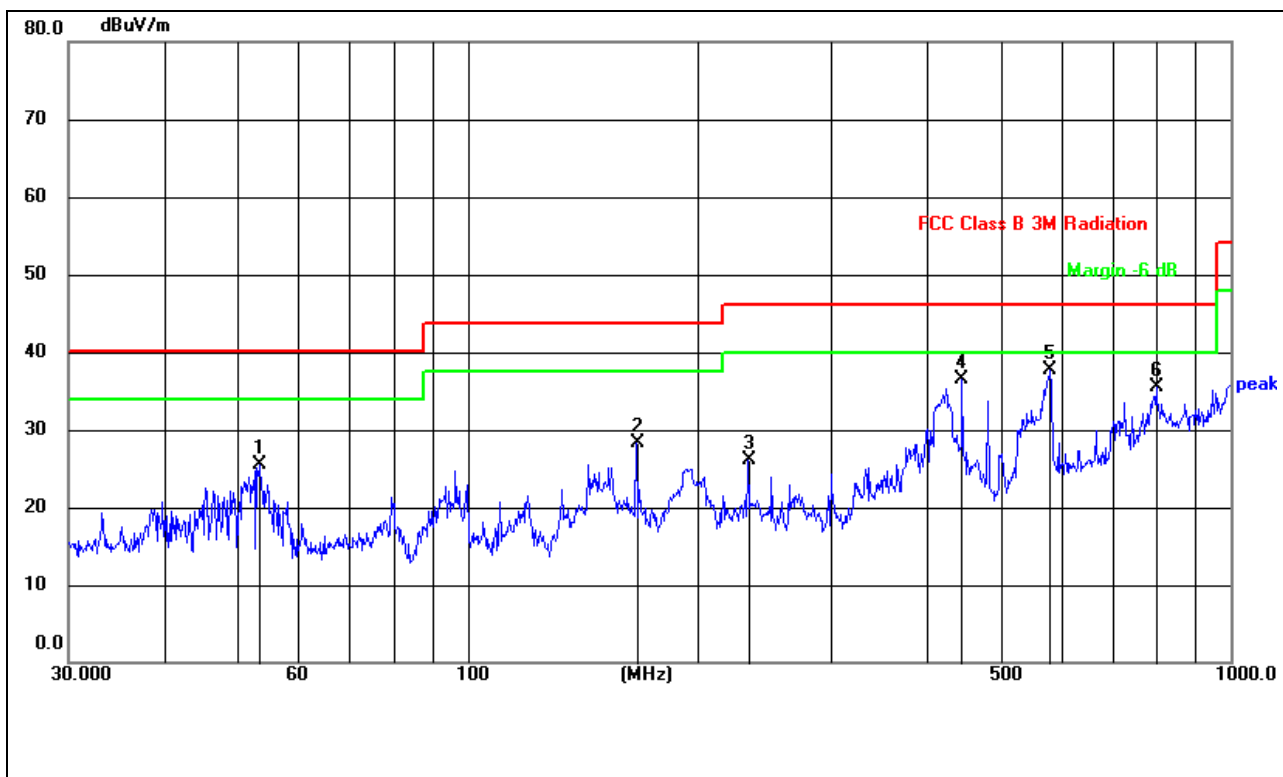
1. The report only shows the worst mode.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

Measurement Data:

Below 1GHz

All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20(5180) data.

Test polarization:	Vertical	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH

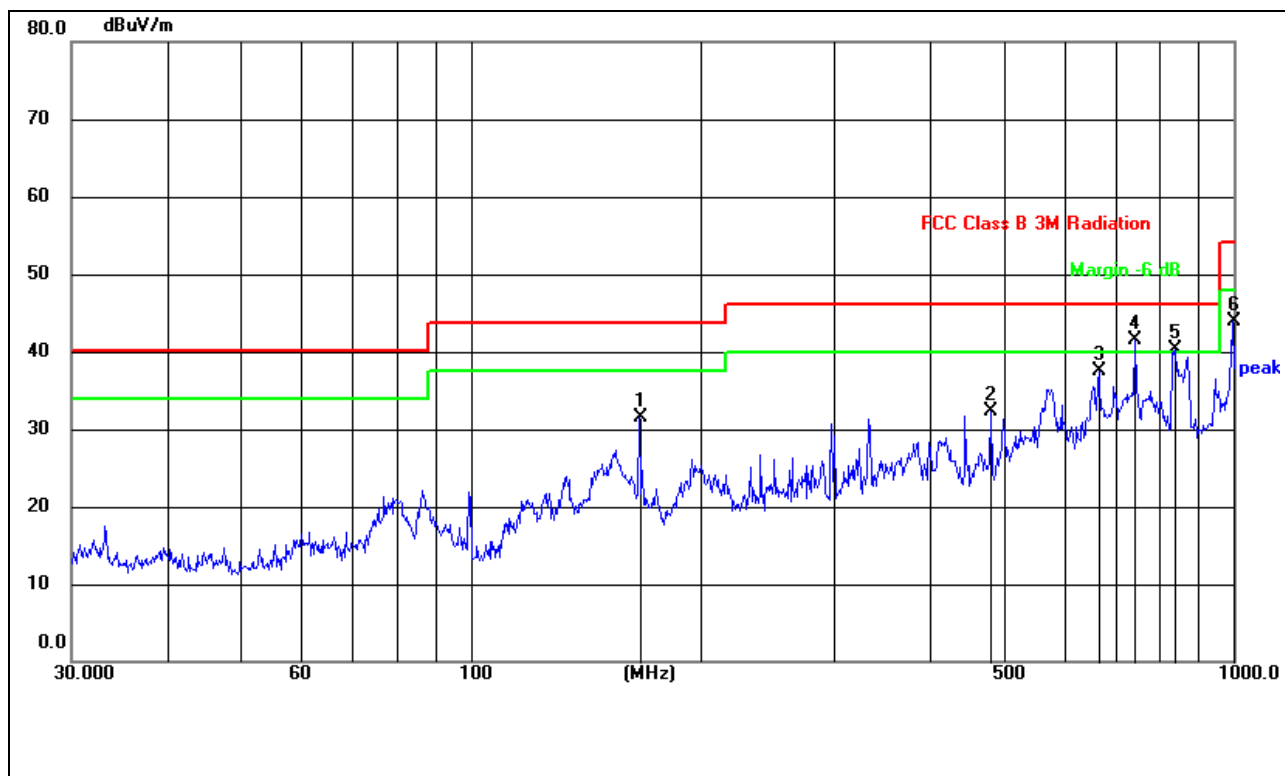


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	53.3179	47.88	-22.32	25.56	40.00	-14.44	QP
2	166.6514	49.54	-21.22	28.32	43.50	-15.18	QP
3	233.3487	49.30	-23.26	26.04	46.00	-19.96	QP
4	444.8514	52.20	-15.77	36.43	46.00	-9.57	QP
5	580.7026	49.68	-11.92	37.76	46.00	-8.24	QP
6	798.9797	41.81	-6.35	35.46	46.00	-10.54	QP

Factor= Antenna Factor + Cable Loss – Preamplifier Factor

Level = Reading + Factor, Margin=level-Limit

Test polarization:	Horizontal	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	166.6514	52.70	-21.22	31.48	43.50	-12.02	QP
2	480.5276	47.36	-15.09	32.27	46.00	-13.73	QP
3	665.8035	47.52	-9.94	37.58	46.00	-8.42	QP
4	742.2587	49.69	-8.10	41.59	46.00	-4.41	QP
5	839.1818	46.30	-6.09	40.21	46.00	-5.79	QP
6	996.4996	46.94	-3.09	43.85	54.00	-10.15	QP

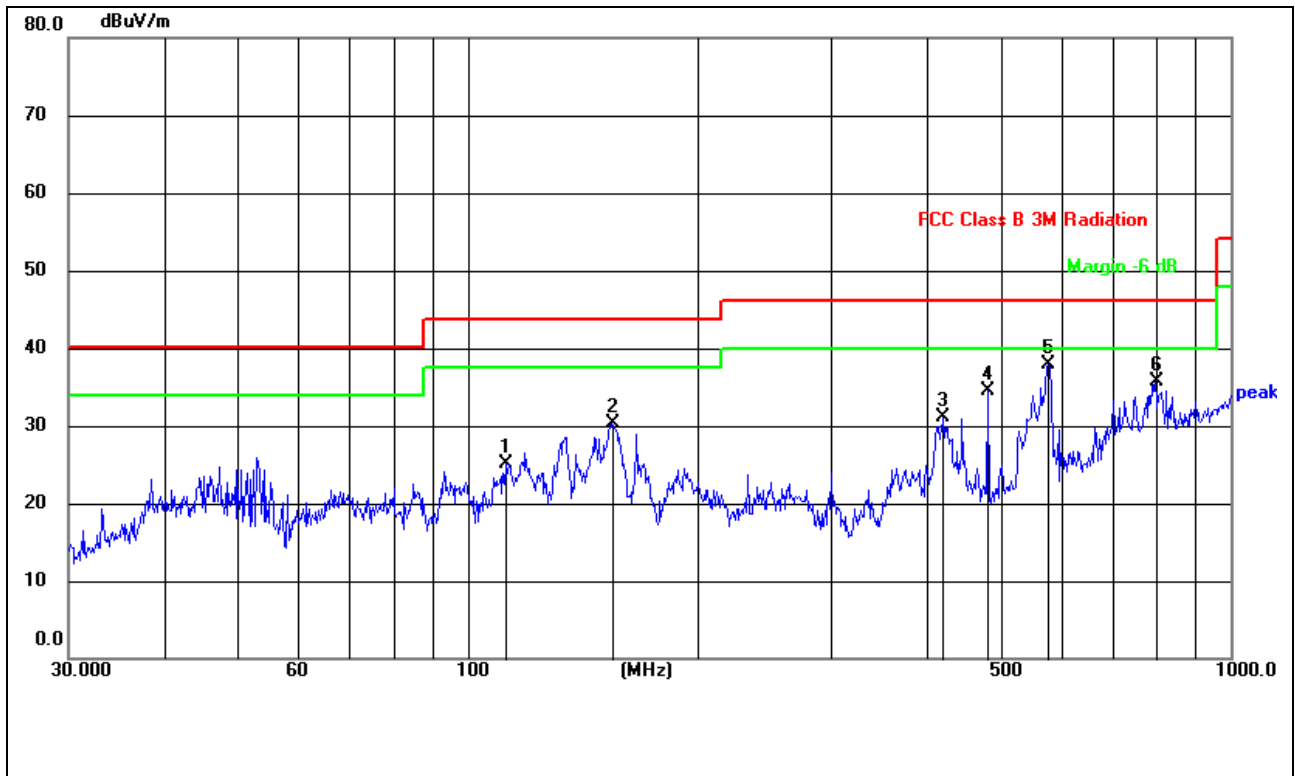
Remarks:

Level = Receiver Reading + Factor

Factor = Antenna Factor + Cable Factor – Preamplifier Factor

All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20(5320) data.

Test polarization:	Vertical	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH

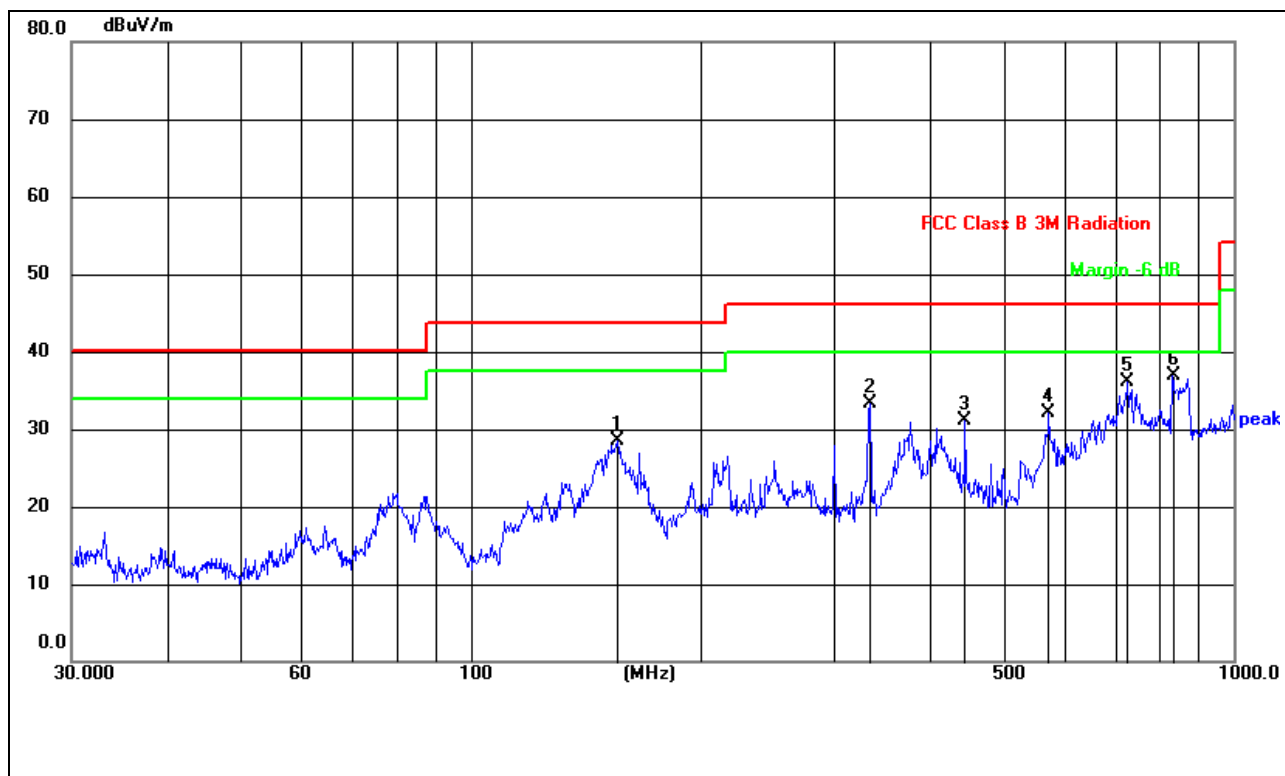


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	112.1305	49.34	-24.18	25.16	43.50	-18.34	QP
2	154.2786	51.15	-20.91	30.24	43.50	-13.26	QP
3	420.5803	47.72	-16.68	31.04	46.00	-14.96	QP
4	480.5276	49.68	-15.09	34.59	46.00	-11.41	QP
5	576.6443	49.98	-12.01	37.97	46.00	-8.03	QP
6	796.1830	42.08	-6.45	35.63	46.00	-10.37	QP

Factor= Antenna Factor + Cable Loss – Preamplifier Factor

Level = Reading + Factor, Margin=level-Limit

Test polarization:	Horizontal	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	155.9101	49.39	-20.92	28.47	43.50	-15.03	QP
2	333.6867	52.92	-19.69	33.23	46.00	-12.77	QP
3	444.8514	46.84	-15.77	31.07	46.00	-14.93	QP
4	572.6144	44.22	-12.09	32.13	46.00	-13.87	QP
5	726.8052	44.51	-8.41	36.10	46.00	-9.90	QP
6	830.4002	43.11	-6.14	36.97	46.00	-9.03	QP

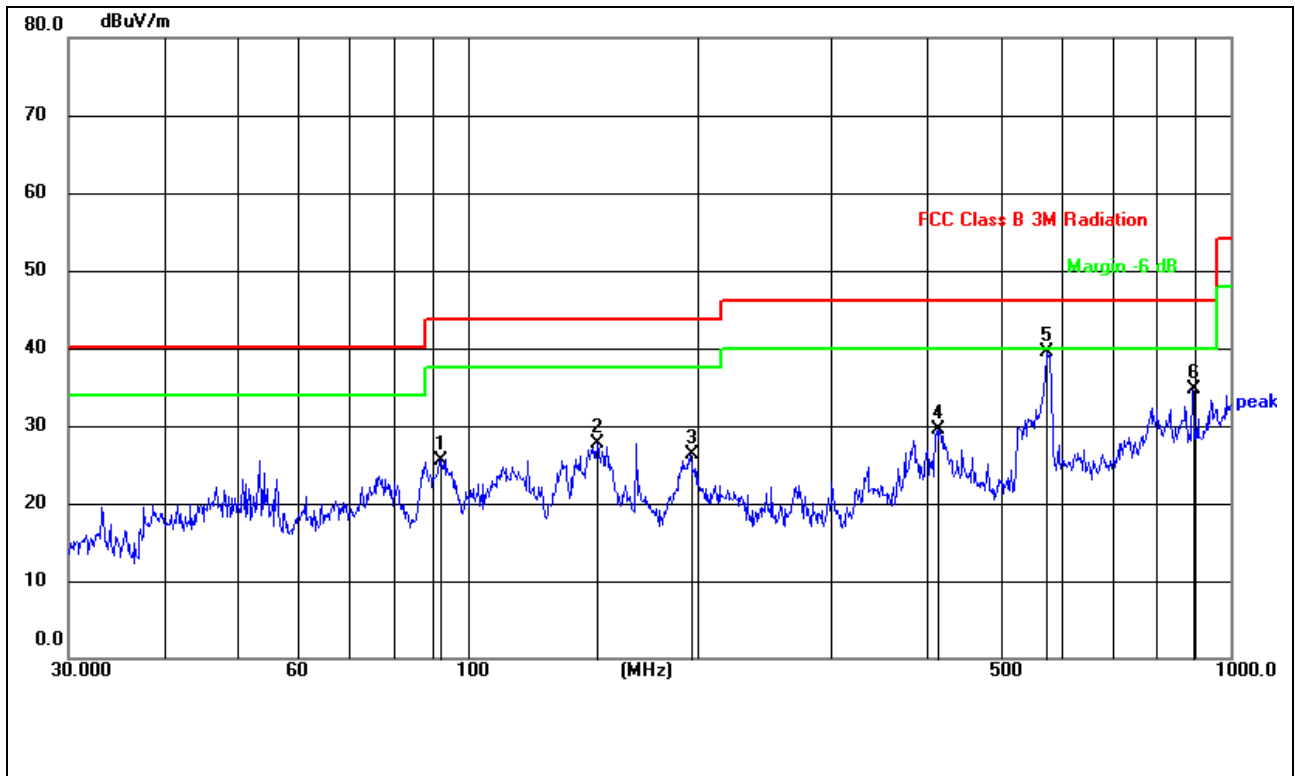
Remarks:

Level = Receiver Reading + Factor

Factor = Antenna Factor + Cable Factor - Preamplifier Factor

All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20(5700) data.

Test polarization:	Vertical	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH

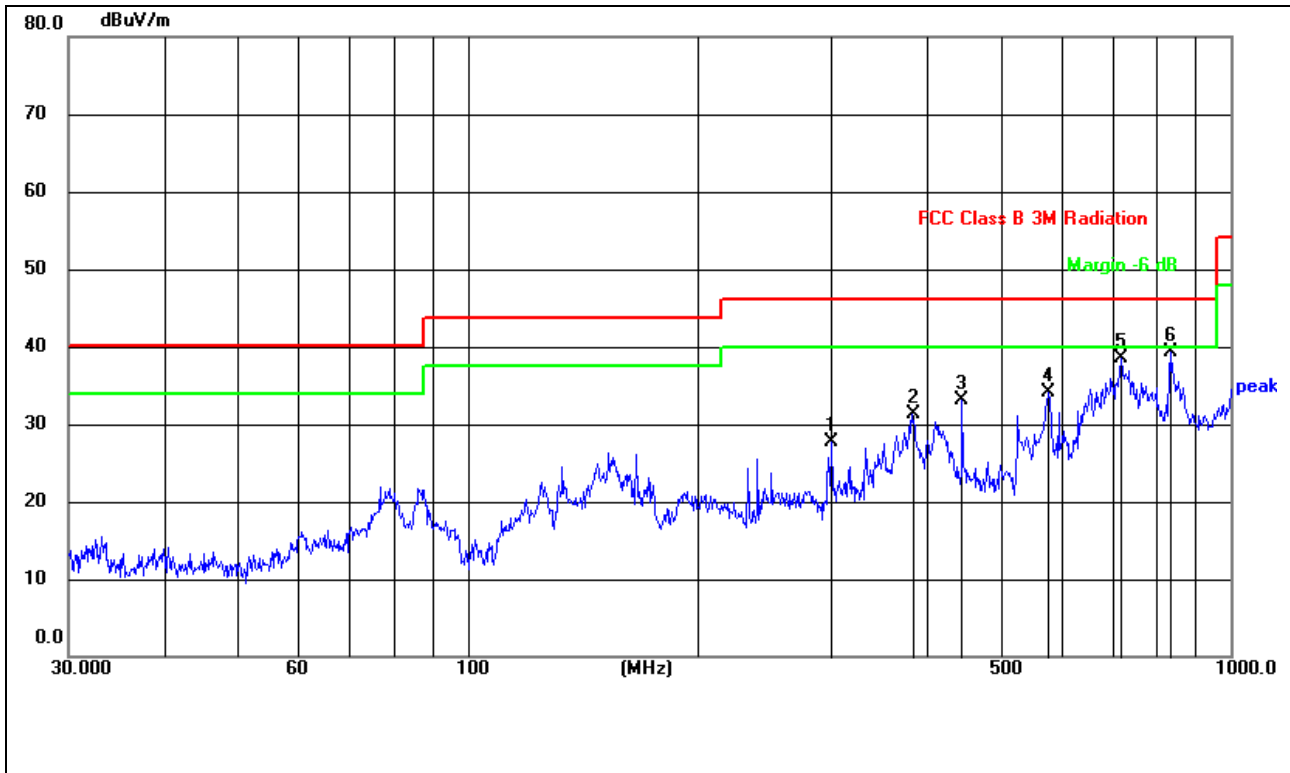


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	92.4624	51.11	-25.64	25.47	43.50	-18.03	QP
2	147.9214	48.84	-21.10	27.74	43.50	-15.76	QP
3	195.8220	50.00	-23.71	26.29	43.50	-17.21	QP
4	414.7223	46.38	-16.95	29.43	46.00	-16.57	QP
5	574.6258	51.48	-12.06	39.42	46.00	-6.58	QP
6	890.7278	40.03	-5.31	34.72	46.00	-11.28	QP

Factor= Antenna Factor + Cable Loss – Preamplifier Factor

Level = Reading + Factor, Margin=level-Limit

Test polarization:	Horizontal	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	300.3672	48.32	-20.60	27.72	46.00	-18.28	QP
2	382.5879	49.64	-18.25	31.39	46.00	-14.61	QP
3	444.8514	48.97	-15.77	33.20	46.00	-12.80	QP
4	576.6443	46.02	-12.01	34.01	46.00	-11.99	QP
5	719.1995	47.00	-8.56	38.44	46.00	-7.56	QP
6	833.3171	45.43	-6.13	39.30	46.00	-6.70	QP

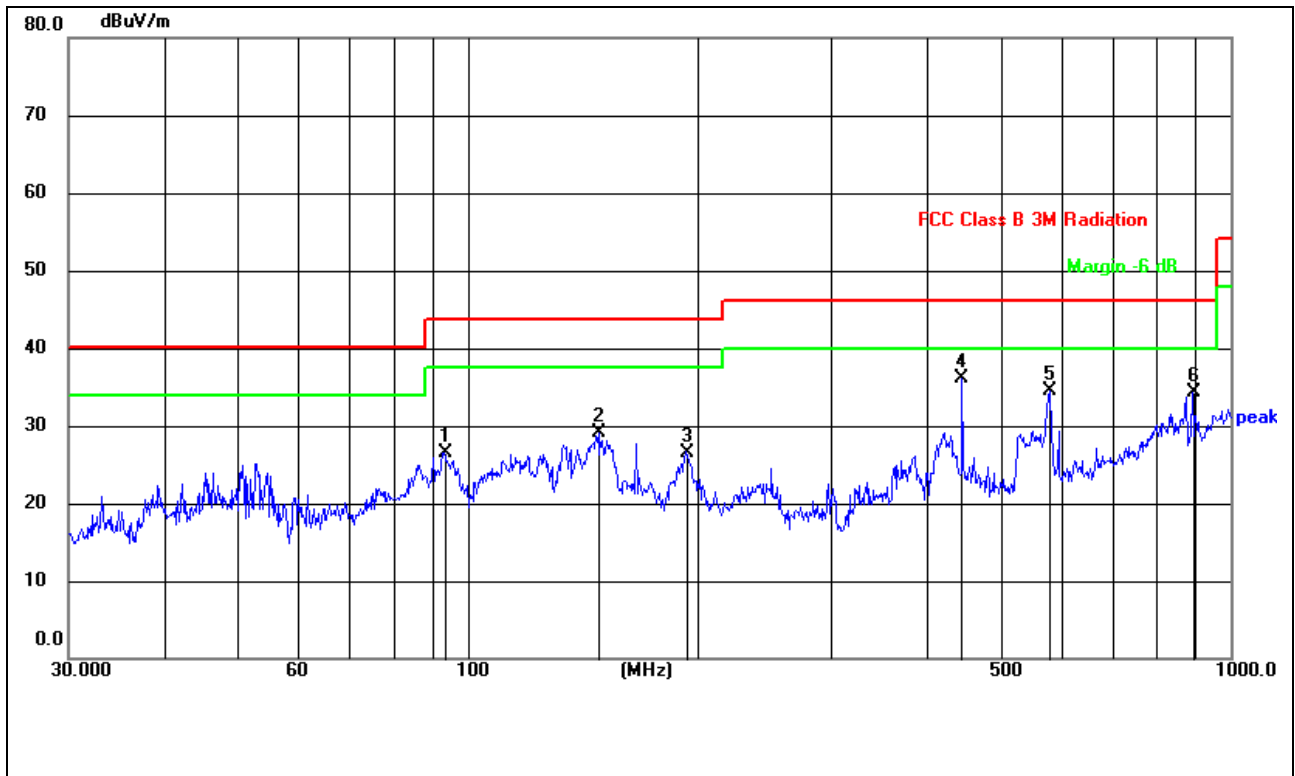
Remarks:

Level = Receiver Reading + Factor

Factor = Antenna Factor + Cable Factor - Preamplifier Factor

All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20(5745) data.

Test polarization:	Vertical	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH

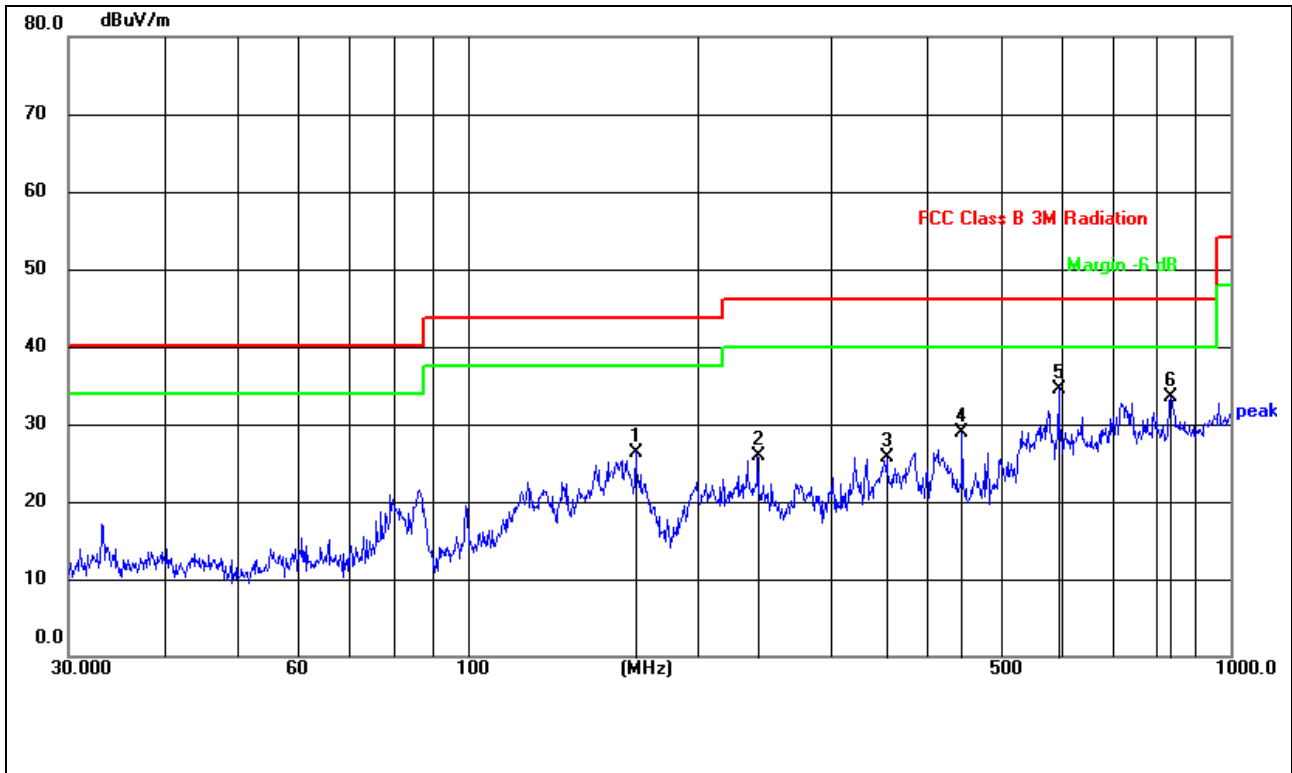


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	93.1132	52.16	-25.63	26.53	43.50	-16.97	QP
2	148.4410	50.10	-21.03	29.07	43.50	-14.43	QP
3	193.0945	50.24	-23.64	26.60	43.50	-16.90	QP
4	444.8514	51.79	-15.77	36.02	46.00	-9.98	QP
5	578.6699	46.55	-11.97	34.58	46.00	-11.42	QP
6	890.7278	39.70	-5.31	34.39	46.00	-11.61	QP

Factor= Antenna Factor + Cable Loss – Preamplifier Factor

Level = Reading + Factor, Margin=level-Limit

Test polarization:	Horizontal	Test voltage:	DC 12V
Temp.:	24.0°C	Humid.:	59%RH



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	166.0680	47.59	-21.19	26.40	43.50	-17.10	QP
2	239.9874	48.75	-22.89	25.86	46.00	-20.14	QP
3	354.1831	45.27	-19.58	25.69	46.00	-20.31	QP
4	444.8514	44.63	-15.77	28.86	46.00	-17.14	QP
5	595.1329	46.12	-11.61	34.51	46.00	-11.49	QP
6	836.2443	39.55	-6.11	33.44	46.00	-12.56	QP

Remarks:

Level = Receiver Reading + Factor

Factor = Antenna Factor + Cable Factor - Preamplifier Factor

**1-40GHz:**

All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20 data.

Temperature:	26°C	Relative Humidity:	54%RH
Pressure:	101.2kPa	Test Voltage :	DC 12V
Test Mode :	5.2G TX- 802.11ac20		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Low Channel:5180MHz							
V	10360.00	46.60	2.26	48.86	68.20	-19.34	PK
V	10360.00	30.04	2.26	32.30	54.00	-21.70	AV
V	15540.00	46.57	7.14	53.71	74.00	-20.29	PK
V	15540.00	30.43	7.14	37.57	54.00	-16.43	AV
V	20720.00	58.42	-5.56	52.86	68.20	-15.34	PK
V	20720.00	47.94	-5.56	42.38	54.00	-11.62	AV
V	25900.00	56.89	-2.60	54.29	68.20	-13.91	PK
V	25900.00	46.31	-2.60	43.71	54.00	-10.29	AV
V	31080.00	55.53	1.66	57.19	68.20	-11.01	PK
V	31080.00	43.59	1.66	45.25	54.00	-8.75	AV
V	36260.00	54.41	5.13	59.54	68.20	-8.66	PK
V	36260.00	43.64	5.13	48.77	54.00	-5.23	AV
H	10360.00	46.67	2.26	48.93	68.20	-19.27	PK
H	10360.00	30.87	2.26	33.13	54.00	-20.87	AV
H	15540.00	45.20	7.14	52.34	74.00	-21.66	PK
H	15540.00	32.37	7.14	39.51	54.00	-14.49	AV
H	20720.00	57.26	-5.56	51.70	68.20	-16.50	PK
H	20720.00	47.29	-5.56	41.73	54.00	-12.27	AV
H	25900.00	55.88	-2.60	53.28	68.20	-14.92	PK
H	25900.00	45.52	-2.60	42.92	54.00	-11.08	AV
H	31080.00	53.48	1.66	55.14	68.20	-13.06	PK
H	31080.00	43.12	1.66	44.78	54.00	-9.22	AV
H	36260.00	53.96	5.13	59.09	68.20	-9.11	PK
H	36260.00	43.07	5.13	48.20	54.00	-5.80	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Middle Channel:5200Hz							
V	10400.00	45.97	2.33	48.30	68.20	-19.90	PK
V	10400.00	31.75	2.33	34.08	54.00	-19.92	AV
V	15600.00	44.82	7.03	51.85	74.00	-22.15	PK
V	15600.00	31.19	7.03	38.22	54.00	-15.78	AV
V	20800.00	57.22	-5.47	51.75	68.20	-16.45	PK
V	20800.00	47.23	-5.47	41.76	54.00	-12.24	AV
V	26000.00	56.43	-2.59	53.84	68.20	-14.36	PK
V	26000.00	45.75	-2.59	43.16	54.00	-10.84	AV
V	31200.00	53.08	1.56	54.64	68.20	-13.56	PK
V	31200.00	43.31	1.56	44.87	54.00	-9.13	AV
V	36400.00	54.52	4.87	59.39	68.20	-8.81	PK
V	36400.00	43.31	4.87	48.18	54.00	-5.82	AV
H	10400.00	46.33	2.33	48.66	68.20	-19.54	PK
H	10400.00	30.15	2.33	32.48	54.00	-21.52	AV
H	15600.00	45.13	7.03	52.16	74.00	-21.84	PK
H	15600.00	33.39	7.03	40.42	54.00	-13.58	AV
H	20800.00	56.27	-5.47	50.80	68.20	-17.40	PK
H	20800.00	46.28	-5.47	40.81	54.00	-13.19	AV
H	26000.00	55.22	-2.59	52.63	68.20	-15.57	PK
H	26000.00	45.25	-2.59	42.66	54.00	-11.34	AV
H	31200.00	52.33	1.56	53.89	68.20	-14.31	PK
H	31200.00	42.88	1.56	44.44	54.00	-9.56	AV
H	36400.00	53.39	4.87	58.26	68.20	-9.94	PK
H	36400.00	42.73	4.87	47.60	54.00	-6.40	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
High Channel:5240MHz							
V	10480.00	44.36	2.49	46.85	68.20	-21.35	PK
V	10480.00	30.47	2.49	32.96	54.00	-21.04	AV
V	15720.00	42.65	6.81	49.46	74.00	-24.54	PK
V	15720.00	33.85	6.81	40.66	54.00	-13.34	AV
V	20960.00	56.26	-5.29	50.97	68.20	-17.23	PK
V	20960.00	46.06	-5.29	40.77	54.00	-13.23	AV
V	26200.00	54.48	-2.47	52.01	68.20	-16.19	PK
V	26200.00	45.06	-2.47	42.59	54.00	-11.41	AV
V	31440.00	52.23	1.28	53.51	68.20	-14.69	PK
V	31440.00	41.83	1.28	43.11	54.00	-10.89	AV
V	36680.00	52.17	4.55	56.72	68.20	-11.48	PK
V	36680.00	41.49	4.55	46.04	54.00	-7.96	AV
H	10480.00	45.34	2.49	47.83	68.20	-20.37	PK
H	10480.00	32.92	2.49	35.41	54.00	-18.59	AV
H	15720.00	44.83	6.81	51.64	74.00	-22.36	PK
H	15720.00	32.19	6.81	39.00	54.00	-15.00	AV
H	20960.00	56.34	-5.29	51.05	68.20	-17.15	PK
H	20960.00	46.03	-5.29	40.74	54.00	-13.26	AV
H	26200.00	55.03	-2.47	52.56	68.20	-15.64	PK
H	26200.00	45.13	-2.47	42.66	54.00	-11.34	AV
H	31440.00	50.95	1.28	52.23	68.20	-15.97	PK
H	31440.00	40.47	1.28	41.75	54.00	-12.25	AV
H	36680.00	50.51	4.55	55.06	68.20	-13.14	PK
H	36680.00	40.00	4.55	44.55	54.00	-9.45	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20 data.

Temperature:	26°C	Relative Humidity:	54%RH
Pressure:	101.2kPa	Test Voltage :	DC 12V
Test Mode :	5.3G TX- 802.11ac20		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Low Channel:5260MHz							
V	10520.00	46.55	2.57	49.12	68.20	-19.08	PK
V	10520.00	32.80	2.57	35.37	54.00	-18.63	AV
V	15780.00	43.10	6.71	49.81	74.00	-24.19	PK
V	15780.00	32.12	6.71	38.83	54.00	-15.17	AV
V	21040.00	54.80	-5.24	49.56	74.00	-24.44	PK
V	21040.00	46.04	-5.24	40.80	54.00	-13.20	AV
V	26300.00	54.27	-2.37	51.90	68.20	-16.30	PK
V	26300.00	45.03	-2.37	42.66	54.00	-11.34	AV
V	31560.00	53.25	1.19	54.44	74.00	-19.56	PK
V	31560.00	41.74	1.19	42.93	54.00	-11.07	AV
V	36820.00	52.55	4.44	56.99	68.20	-11.21	PK
V	36820.00	42.38	4.44	46.82	54.00	-7.18	AV
H	10520.00	45.62	2.57	48.19	68.20	-20.01	PK
H	10520.00	32.87	2.57	35.44	54.00	-18.56	AV
H	15780.00	53.21	6.71	59.92	74.00	-14.08	PK
H	15780.00	35.12	6.71	41.83	54.00	-12.17	AV
H	21040.00	56.22	-5.24	50.98	74.00	-23.02	PK
H	21040.00	46.03	-5.24	40.79	54.00	-13.21	AV
H	26300.00	54.32	-2.37	51.95	68.20	-16.25	PK
H	26300.00	44.42	-2.37	42.05	54.00	-11.95	AV
H	31560.00	52.77	1.19	53.96	74.00	-20.04	PK
H	31560.00	42.48	1.19	43.67	54.00	-10.33	AV
H	36820.00	53.66	4.44	58.10	68.20	-10.10	PK
H	36820.00	42.37	4.44	46.81	54.00	-7.19	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Middle Channel:5280Hz							
V	10560.00	44.96	2.65	47.61	68.20	-20.59	PK
V	10560.00	31.01	2.65	33.66	54.00	-20.34	AV
V	15840.00	47.76	6.59	54.35	74.00	-19.65	PK
V	15840.00	31.54	6.59	38.13	54.00	-15.87	AV
V	21120.00	56.56	-5.22	51.34	74.00	-22.66	PK
V	21120.00	46.25	-5.22	41.03	54.00	-12.97	AV
V	26400.00	55.37	-2.23	53.14	68.20	-15.06	PK
V	26400.00	44.12	-2.23	41.89	54.00	-12.11	AV
V	31680.00	53.17	1.14	54.31	74.00	-19.69	PK
V	31680.00	41.49	1.14	42.63	54.00	-11.37	AV
V	36960.00	46.26	4.28	50.54	68.20	-17.66	PK
V	36960.00	53.63	4.28	57.91	54.00	3.91	AV
H	10560.00	45.51	2.65	48.16	68.20	-20.04	PK
H	10560.00	33.01	2.65	35.66	54.00	-18.34	AV
H	15840.00	54.73	6.59	61.32	74.00	-12.68	PK
H	15840.00	33.59	6.59	40.18	54.00	-13.82	AV
H	21120.00	55.32	-5.22	50.10	74.00	-23.90	PK
H	21120.00	46.30	-5.22	41.08	54.00	-12.92	AV
H	26400.00	53.94	-2.23	51.71	68.20	-16.49	PK
H	26400.00	43.84	-2.23	41.61	54.00	-12.39	AV
H	31680.00	51.80	1.14	52.94	74.00	-21.06	PK
H	31680.00	42.42	1.14	43.56	54.00	-10.44	AV
H	36960.00	51.52	4.28	55.80	68.20	-12.40	PK
H	36960.00	42.31	4.28	46.59	54.00	-7.41	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
High Channel:5320MHz							
V	10640.00	46.56	2.80	49.36	74.00	-24.64	PK
V	10640.00	31.30	2.80	34.10	54.00	-19.90	AV
V	15960.00	49.11	6.37	55.48	74.00	-18.52	PK
V	15960.00	35.35	6.37	41.72	54.00	-12.28	AV
V	21280.00	57.38	-5.16	52.22	74.00	-21.78	PK
V	21280.00	46.76	-5.16	41.60	54.00	-12.40	AV
V	26600.00	54.09	-1.99	52.10	68.20	-16.10	PK
V	26600.00	44.40	-1.99	42.41	54.00	-11.59	AV
V	31920.00	52.95	0.82	53.77	68.20	-14.43	PK
V	31920.00	43.06	0.82	43.88	54.00	-10.12	AV
V	37240.00	54.28	4.22	58.50	68.20	-9.70	PK
V	37240.00	42.24	4.22	46.46	54.00	-7.54	AV
H	10640.00	42.24	2.80	45.04	74.00	-28.96	PK
H	10640.00	32.31	2.80	35.11	54.00	-18.89	AV
H	15960.00	48.80	6.37	55.17	74.00	-18.83	PK
H	15960.00	35.32	6.37	41.69	54.00	-12.31	AV
H	21280.00	57.27	-5.16	52.11	74.00	-21.89	PK
H	21280.00	46.71	-5.16	41.55	54.00	-12.45	AV
H	26600.00	56.18	-1.99	54.19	68.20	-14.01	PK
H	26600.00	44.55	-1.99	42.56	54.00	-11.44	AV
H	31920.00	52.20	0.82	53.02	68.20	-15.18	PK
H	31920.00	43.04	0.82	43.86	54.00	-10.14	AV
H	37240.00	53.72	4.22	57.94	68.20	-10.26	PK
H	37240.00	41.56	4.22	45.78	54.00	-8.22	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20 data.

Temperature:	26°C	Relative Humidity:	54%RH
Pressure:	101.2kPa	Test Voltage :	DC 12V
Test Mode :	5.6G TX- 802.11ac20		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Low Channel:5500MHz							
V	11000.00	44.74	3.51	48.25	74.00	-25.75	PK
V	11000.00	32.51	3.51	36.02	54.00	-17.98	AV
V	16500.00	45.93	7.21	53.14	68.20	-15.06	PK
V	16500.00	32.86	7.21	40.07	54.00	-13.93	AV
V	22000.00	57.83	-4.67	53.16	68.20	-15.04	PK
V	22000.00	46.37	-4.67	41.70	54.00	-12.30	AV
V	27500.00	53.26	-1.74	51.52	68.20	-16.68	PK
V	27500.00	43.82	-1.74	42.08	54.00	-11.92	AV
V	33000.00	55.04	1.51	56.55	68.20	-11.65	PK
V	33000.00	43.01	1.51	44.52	54.00	-9.48	AV
V	38500.00	51.45	4.90	56.35	68.20	-11.85	PK
V	38500.00	41.86	4.90	46.76	54.00	-7.24	AV
H	11000.00	46.25	3.51	49.76	74.00	-24.24	PK
H	11000.00	32.28	3.51	35.79	54.00	-18.21	AV
H	16500.00	46.65	7.21	53.86	68.20	-14.34	PK
H	16500.00	32.21	7.21	39.42	54.00	-14.58	AV
H	22000.00	57.59	-4.67	52.92	68.20	-15.28	PK
H	22000.00	46.59	-4.67	41.92	54.00	-12.08	AV
H	27500.00	54.95	-1.74	53.21	68.20	-14.99	PK
H	27500.00	43.75	-1.74	42.01	54.00	-11.99	AV
H	33000.00	53.97	1.51	55.48	68.20	-12.72	PK
H	33000.00	43.08	1.51	44.59	54.00	-9.41	AV
H	38500.00	52.11	4.90	57.01	68.20	-11.19	PK
H	38500.00	41.81	4.90	46.71	54.00	-7.29	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Middle Channel:5560Hz							
V	11120.00	41.88	3.59	45.47	74.00	-28.53	PK
V	11120.00	30.32	3.59	33.91	54.00	-20.09	AV
V	16680.00	45.60	7.53	53.13	68.20	-15.07	PK
V	16680.00	32.66	7.53	40.19	54.00	-13.81	AV
V	22240.00	56.94	-4.87	52.07	74.00	-21.93	PK
V	22240.00	45.11	-4.87	40.24	54.00	-13.76	AV
V	27800.00	53.07	-1.73	51.34	68.20	-16.86	PK
V	27800.00	43.46	-1.73	41.73	54.00	-12.27	AV
V	33360.00	54.39	1.24	55.63	68.20	-12.57	PK
V	33360.00	42.58	1.24	43.82	54.00	-10.18	AV
V	38920.00	50.82	5.53	56.35	68.20	-11.85	PK
V	38920.00	41.26	5.53	46.79	54.00	-7.21	AV
H	11120.00	41.62	3.59	45.21	74.00	-28.79	PK
H	11120.00	30.88	3.59	34.47	54.00	-19.53	AV
H	16680.00	45.27	7.53	52.80	68.20	-15.40	PK
H	16680.00	33.49	7.53	41.02	54.00	-12.98	AV
H	22240.00	57.22	-4.87	52.35	74.00	-21.65	PK
H	22240.00	45.31	-4.87	40.44	54.00	-13.56	AV
H	27800.00	54.38	-1.73	52.65	68.20	-15.55	PK
H	27800.00	44.21	-1.73	42.48	54.00	-11.52	AV
H	33360.00	54.92	1.24	56.16	68.20	-12.04	PK
H	33360.00	44.47	1.24	45.71	54.00	-8.29	AV
H	38920.00	51.43	5.53	56.96	68.20	-11.24	PK
H	38920.00	41.62	5.53	47.15	54.00	-6.85	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
High Channel:5700MHz							
V	11400.00	43.10	3.75	46.85	74.00	-27.15	PK
V	11400.00	32.19	3.75	35.94	54.00	-18.06	AV
V	17100.00	47.48	8.11	55.59	68.20	-12.61	PK
V	17100.00	36.08	8.11	44.19	54.00	-9.81	AV
V	22800.00	56.63	-4.68	51.95	74.00	-22.05	PK
V	22800.00	45.42	-4.68	40.74	54.00	-13.26	AV
V	28500.00	54.39	-1.68	52.71	68.20	-15.49	PK
V	28500.00	42.22	-1.68	40.54	54.00	-13.46	AV
V	34200.00	51.45	1.48	52.93	68.20	-15.27	PK
V	34200.00	41.79	1.48	43.27	54.00	-10.73	AV
V	39900.00	48.82	5.40	54.22	68.20	-13.98	PK
V	39900.00	38.67	5.40	44.07	54.00	-9.93	AV
H	11400.00	46.18	3.75	49.93	74.00	-24.07	PK
H	11400.00	31.00	3.75	34.75	54.00	-19.25	AV
H	17100.00	49.64	8.11	57.75	68.20	-10.45	PK
H	17100.00	35.14	8.11	43.25	54.00	-10.75	AV
H	22800.00	56.31	-4.68	51.63	74.00	-22.37	PK
H	22800.00	46.26	-4.68	41.58	54.00	-12.42	AV
H	28500.00	53.81	-1.68	52.13	68.20	-16.07	PK
H	28500.00	43.29	-1.68	41.61	54.00	-12.39	AV
H	34200.00	52.92	1.48	54.40	68.20	-13.80	PK
H	34200.00	42.81	1.48	44.29	54.00	-9.71	AV
H	39900.00	51.43	5.40	56.83	68.20	-11.37	PK
H	39900.00	40.42	5.40	45.82	54.00	-8.18	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



All models and modes have been tested, and the report only displays the worst mode ANT1+ANT2 working simultaneously 802.11ac20 data.

Temperature:	26°C	Relative Humidity:	54%RH
Pressure:	101.2kPa	Test Voltage :	DC 12V
Test Mode :	5.8G TX- 802.11ac 20		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Low Channel:5745MHz							
V	11490.00	44.14	3.81	47.95	74.00	-26.05	PK
V	11490.00	31.95	3.81	35.76	54.00	-18.24	AV
V	17235.00	52.15	8.11	60.26	68.20	-7.94	PK
V	17235.00	37.51	8.11	45.62	54.00	-8.38	AV
V	22980.00	54.83	-4.69	50.14	74.00	-23.86	PK
V	22980.00	44.83	-4.69	40.14	54.00	-13.86	AV
V	28725.00	52.37	-1.67	50.70	68.20	-17.50	PK
V	28725.00	42.49	-1.67	40.82	54.00	-13.18	AV
V	34470.00	54.08	2.41	56.49	68.20	-11.71	PK
V	34470.00	43.21	2.41	45.62	54.00	-8.38	AV
H	11490.00	42.36	3.81	46.17	74.00	-27.83	PK
H	11490.00	31.41	3.81	35.22	54.00	-18.78	AV
H	17235.00	56.89	8.11	65.00	68.20	-3.20	PK
H	17235.00	37.13	8.11	45.24	54.00	-8.76	AV
H	22980.00	54.09	-4.69	49.40	74.00	-24.60	PK
H	22980.00	44.77	-4.69	40.08	54.00	-13.92	AV
H	28725.00	55.77	-1.67	54.10	68.20	-14.10	PK
H	28725.00	42.88	-1.67	41.21	54.00	-12.79	AV
H	34470.00	53.05	2.41	55.46	68.20	-12.74	PK
H	34470.00	43.11	2.41	45.52	54.00	-8.48	AV

Remark:

- Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
- If peak below the average limit, the average emission was no test.
- The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
Middle Channel:5785MHz							
V	11570.00	41.63	3.86	45.49	74.00	-28.51	PK
V	11570.00	29.96	3.86	33.82	54.00	-20.18	AV
V	17355.00	54.78	8.10	62.88	68.20	-5.32	PK
V	17355.00	35.36	8.10	43.46	54.00	-10.54	AV
V	23140.00	56.51	-4.58	51.93	74.00	-22.07	PK
V	23140.00	44.63	-4.58	40.05	54.00	-13.95	AV
V	28925.00	51.73	-1.59	50.14	68.20	-18.06	PK
V	28925.00	41.68	-1.59	40.09	54.00	-13.91	AV
V	34710.00	54.28	3.21	57.49	68.20	-10.71	PK
V	34710.00	42.19	3.21	45.40	54.00	-8.60	AV
H	11570.00	42.06	3.86	45.92	74.00	-28.08	PK
H	11570.00	29.13	3.86	32.99	54.00	-21.01	AV
H	17355.00	51.56	8.10	59.66	68.20	-8.54	PK
H	17355.00	38.87	8.10	46.97	54.00	-7.03	AV
H	23140.00	53.97	-4.58	49.39	74.00	-24.61	PK
H	23140.00	44.46	-4.58	39.88	54.00	-14.12	AV
H	28925.00	51.93	-1.59	50.34	68.20	-17.86	PK
H	28925.00	41.93	-1.59	40.34	54.00	-13.66	AV
H	34710.00	51.69	3.21	54.90	68.20	-13.30	PK
H	34710.00	41.10	3.21	44.31	54.00	-9.69	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detect or Type
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
High Channel:5825MHz							
V	11650.00	46.04	3.90	49.94	74.00	-24.06	PK
V	11650.00	31.98	3.90	35.88	54.00	-18.12	AV
V	17475.00	53.02	8.10	61.12	68.20	-7.08	PK
V	17475.00	40.20	8.10	48.30	54.00	-5.70	AV
V	23300.00	57.09	-4.48	52.61	68.20	-15.59	PK
V	23300.00	45.89	-4.48	41.41	54.00	-12.59	AV
V	29125.00	51.86	-1.38	50.48	68.20	-17.72	PK
V	29125.00	42.11	-1.38	40.73	54.00	-13.27	AV
V	34950.00	53.32	3.87	57.19	68.20	-11.01	PK
V	34950.00	42.46	3.87	46.33	54.00	-7.67	AV
H	11650.00	43.97	3.90	47.87	74.00	-26.13	PK
H	11650.00	29.01	3.90	32.91	54.00	-21.09	AV
H	17475.00	51.67	8.10	59.77	68.20	-8.43	PK
H	17475.00	40.44	8.10	48.54	54.00	-5.46	AV
H	23300.00	55.00	-4.48	50.52	68.20	-17.68	PK
H	23300.00	45.58	-4.48	41.10	54.00	-12.90	AV
H	29125.00	51.13	-1.38	49.75	68.20	-18.45	PK
H	29125.00	40.97	-1.38	39.59	54.00	-14.41	AV
H	34950.00	50.98	3.87	54.85	68.20	-13.35	PK
H	34950.00	42.25	3.87	46.12	54.00	-7.88	AV

Remark:

1. Emission Level = Meter Reading + Factor,
Factor=Antenna Factor + Cable Loss – Pre-amplifier
Margin= Emission Level – Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

5 Dynamic Frequency Selection (DFS)

5.1 DFS Parameters

Table D.1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table D.2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

Table D.3: DFS Detection Thresholds

Maximum Transmit Power	Value (See Notes 1,2, and 3)
EIRP $\geq$ 200 mW	-64 dBm
EIRP < 200 mW and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 mW that do not meet the power spectral density requirement	-64 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.	
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.	
Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.	

Table D.4: DFS requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds (See Note 1)
Channel Closing Transmission Time	200 ms + an aggregate of 60ms over remaining 10 second period (See Notes 1 and 2)
U-NII Detection Bandwidth	Minimum 100% of the UNII 99% transmission power bandwidth (See Note 3)
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step, the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.	

Table D.5: Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A Test B	$\text{Roundup} \left(\frac{\frac{1}{360}}{\frac{19 \cdot 10^4}{\text{PRI}_{\text{min}}}} \right)$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Table D.6: Long Pulse Radar Test Waveform

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30
Long Pulse Radar Test Signal Wave form 12 second transmission							
							

Table D.7: Frequency Hopping Radar Test Waveform

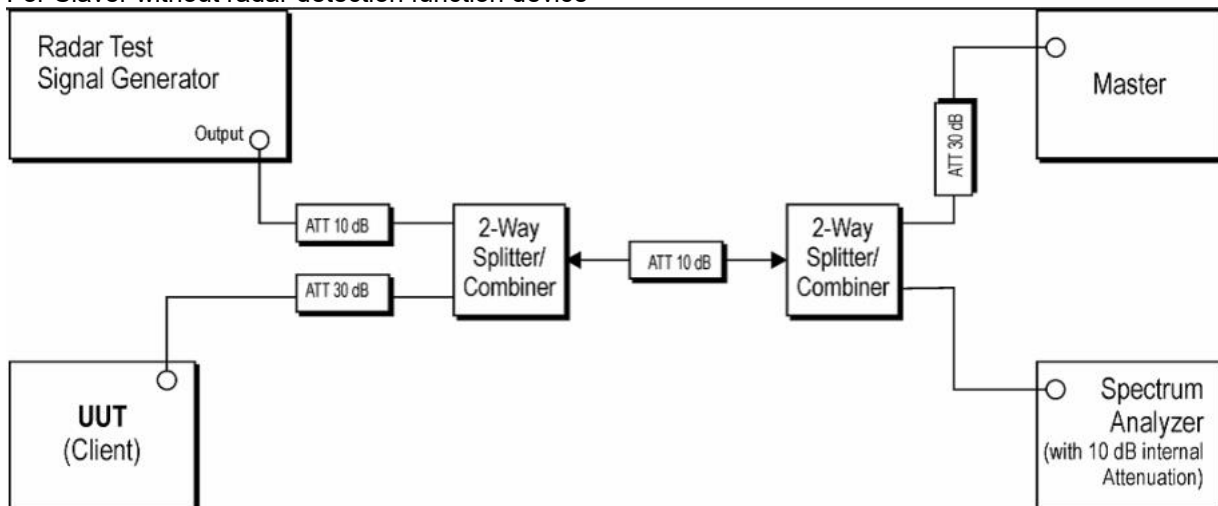
Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	0	0.333	300	70%	30

5.2 DFS Technical Requirements

Requirement	DFS Operational mode		
	☐ Master	☒ Slave without Radar Detection	☐ Slave with Radar Detection
Channel Availability Check	√	Not Required	Not Required
UNII Detection Bandwidth	√	Not Required	√
Statistical Performance Check	√	Not Required	√
Channel Move Time	√	√	√
Channel Closing Transmission Time	√	√	√
Non-Occupancy Period	√	Not Required	√

5.3 Test Setup Block

For Slaver without radar detection function device



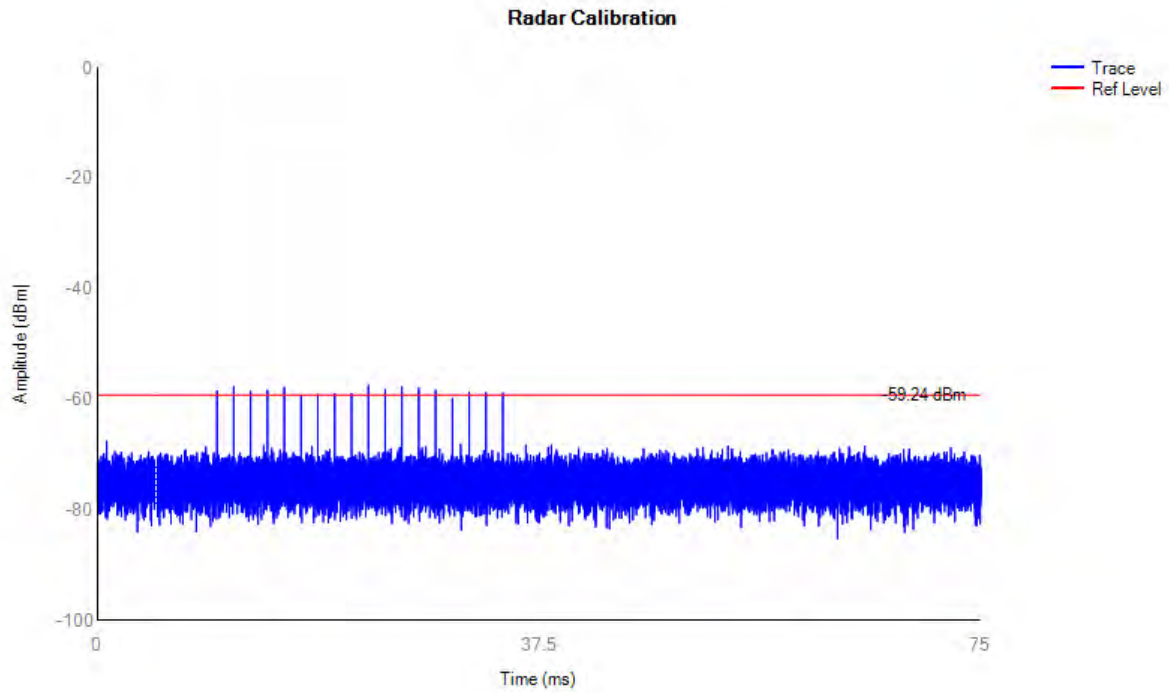
5.4 EUT Configuration for DFS Test

Test Items	Channel Frequency
Channel Move Time	5290MHz, 5320MHz, 5500MHz, 5610MHz
Channel Closing Transmission Time	5290MHz, 5320MHz, 5500MHz, 5610MHz

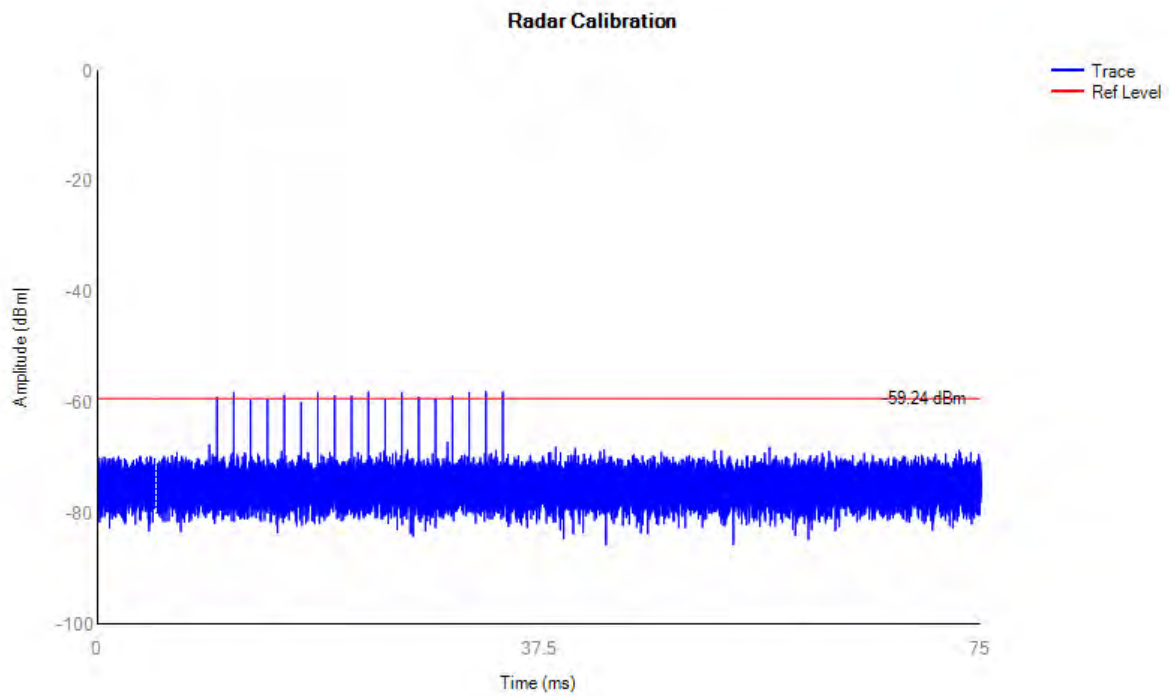
5.5 Verification of Radar Type and Level

5.3G

5290MHz DFS_FCC_T0



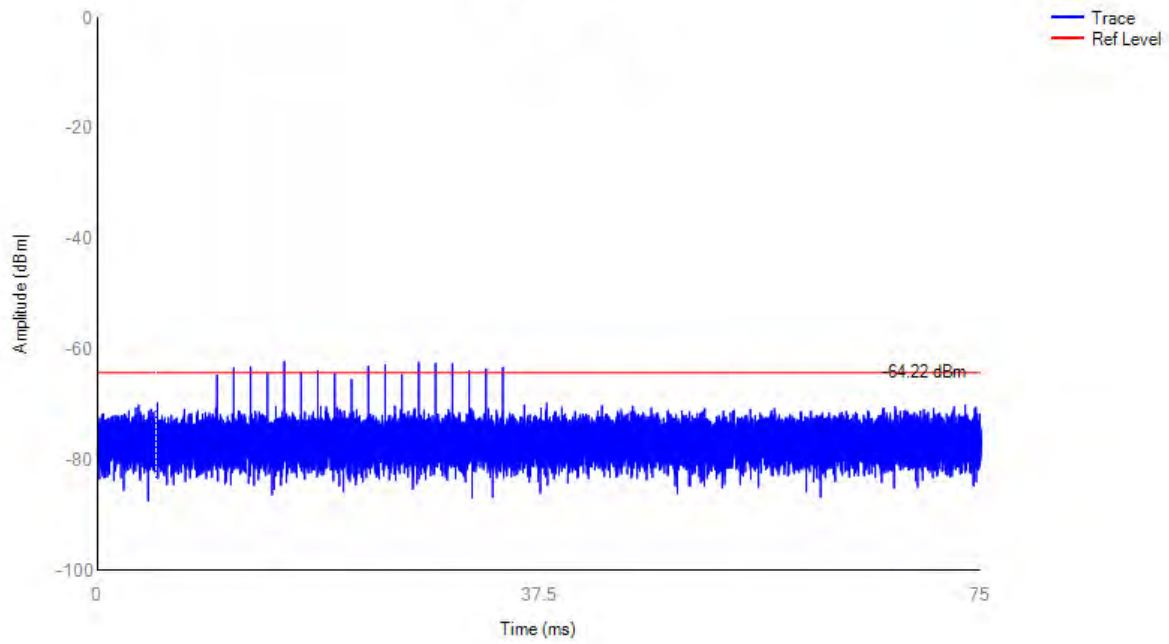
5320MHz DFS_FCC_T0



5.6G

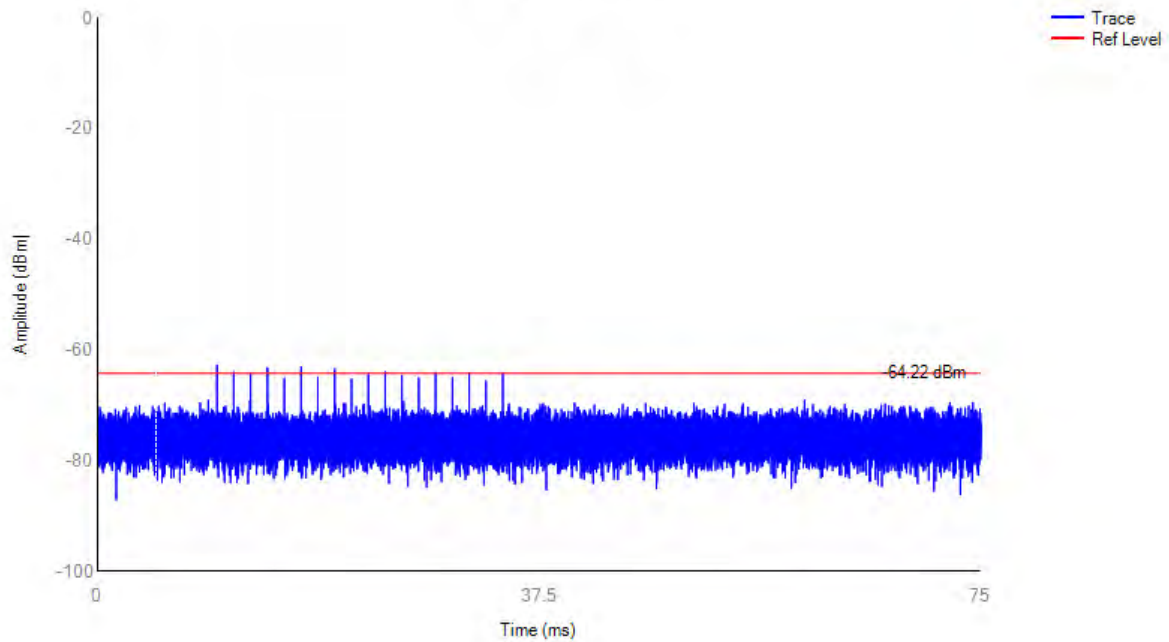
5500MHz DFS_FCC_T0

Radar Calibration



5500MHz DFS_FCC_T0

Radar Calibration



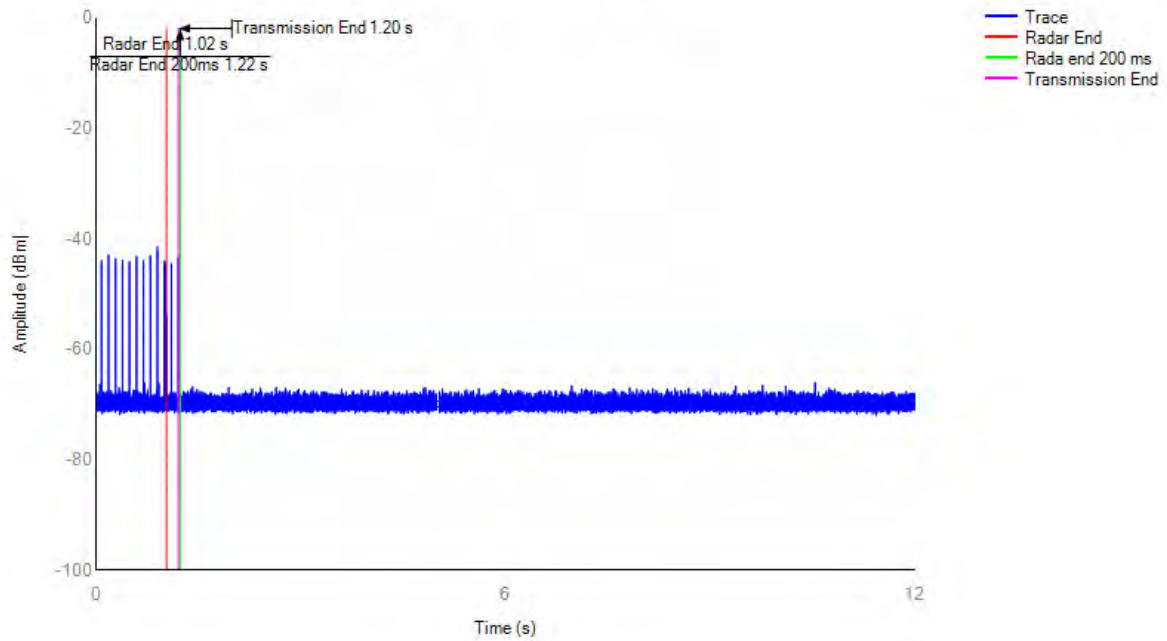


Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
5290	0.1745	10	0.0024	0.26	0	0.06	Pass
5290	0.0973	10	0.0008	0.26	0	0.06	Pass
5320	0.0913	10	0.0008	0.26	0	0.06	Pass
5320	0.0857	10	0.0012	0.26	0	0.06	Pass
5500	0.1621	10	0.0016	0.26	0	0.06	Pass
5500	0.1205	10	0.0016	0.26	0	0.06	Pass
5610	0.0901	10	0.0008	0.26	0	0.06	Pass
5610	0.1461	10	0.0024	0.26	0	0.06	Pass

5.3G

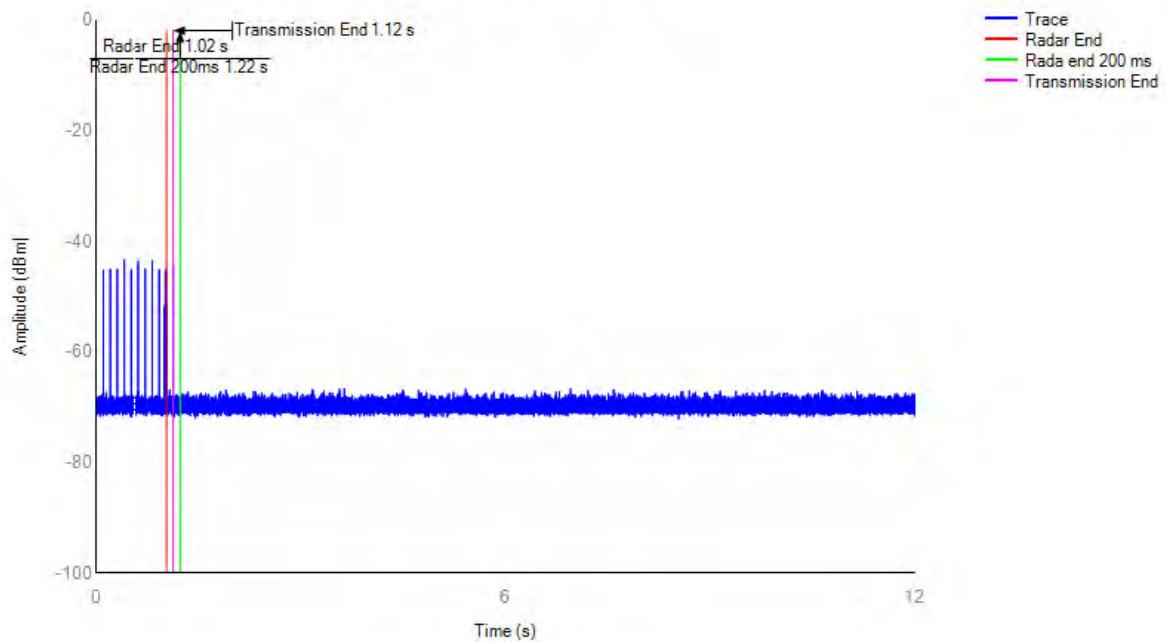
5290MHz Shutdown

Channel Shutdown



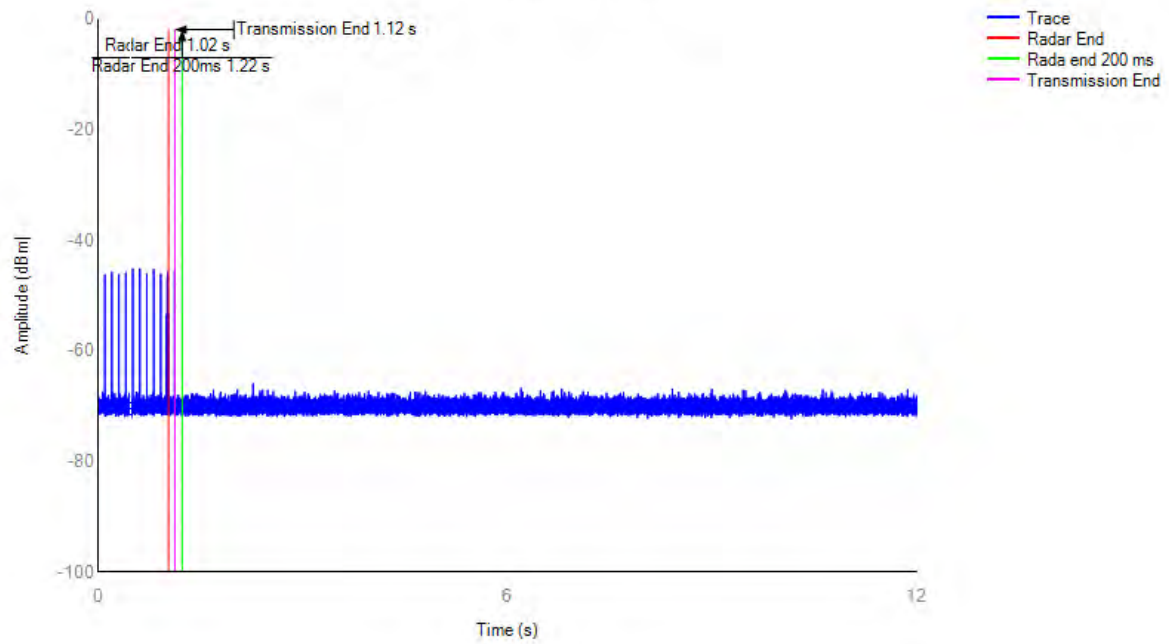
5290MHz Shutdown

Channel Shutdown



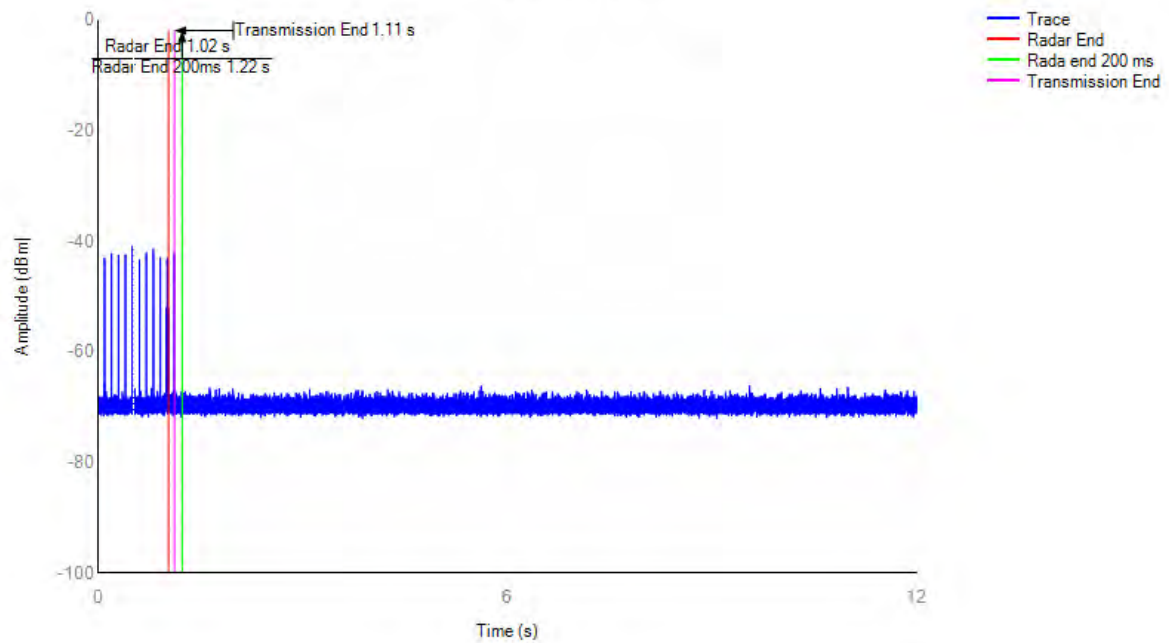
5320MHz Shutdown

Channel Shutdown



5320MHz Shutdown

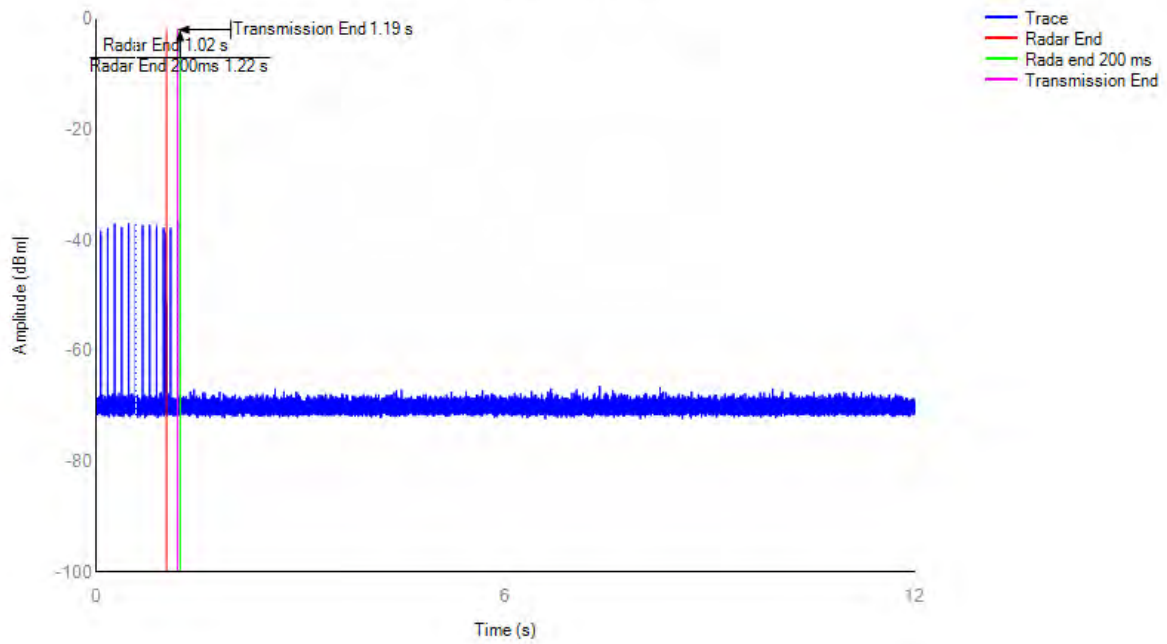
Channel Shutdown



5.6G

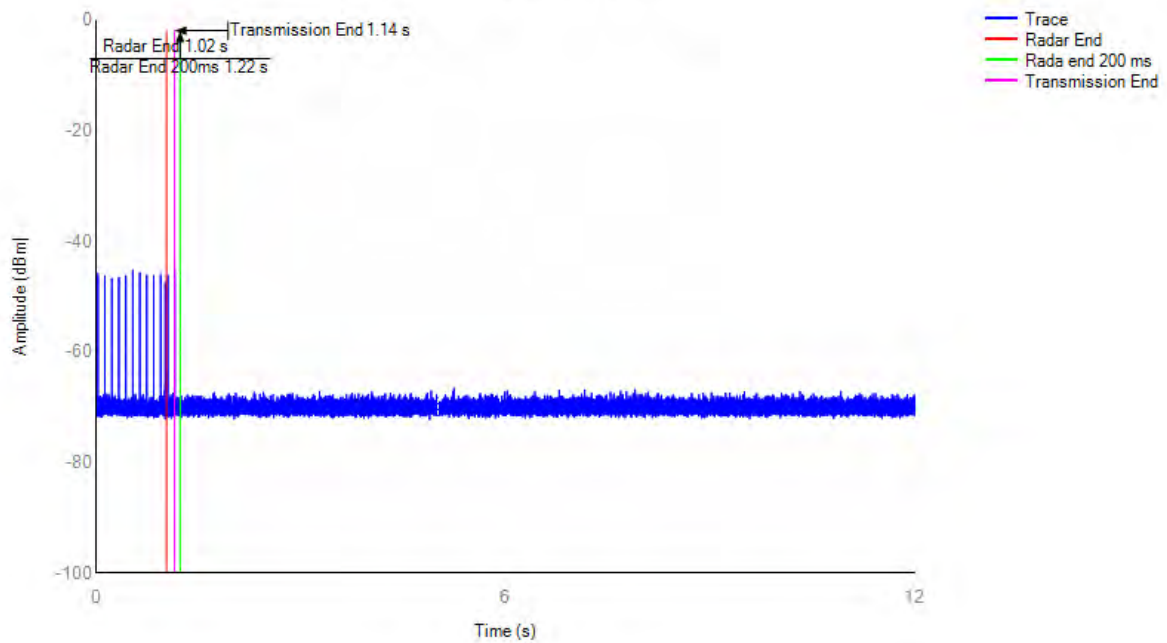
5500MHz Shutdown

Channel Shutdown



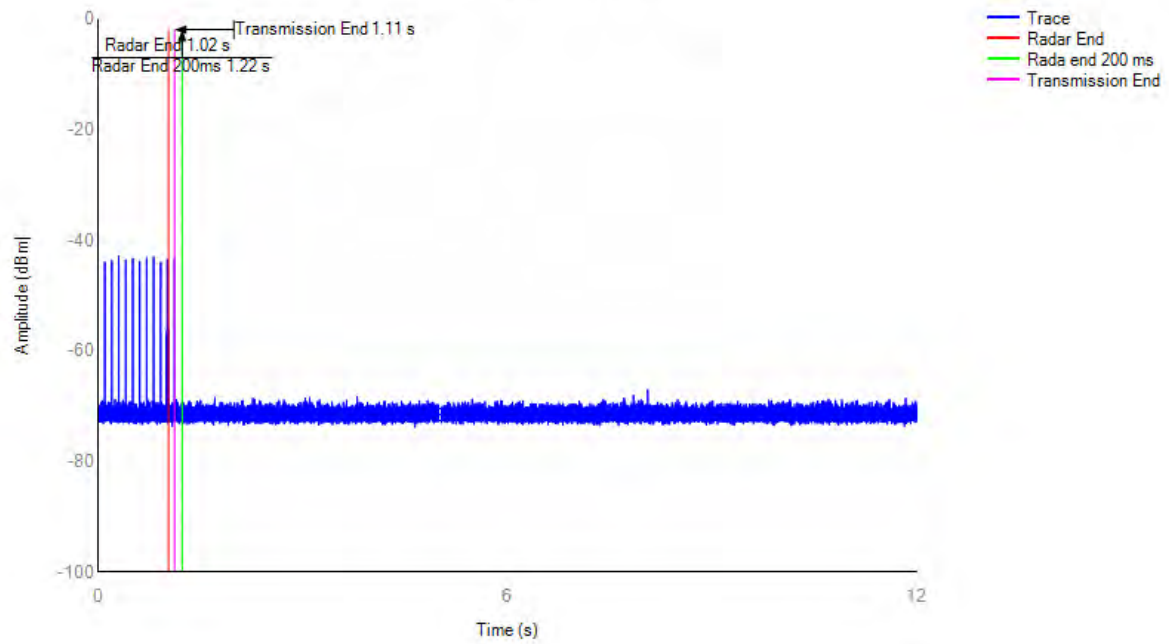
5500MHz Shutdown

Channel Shutdown



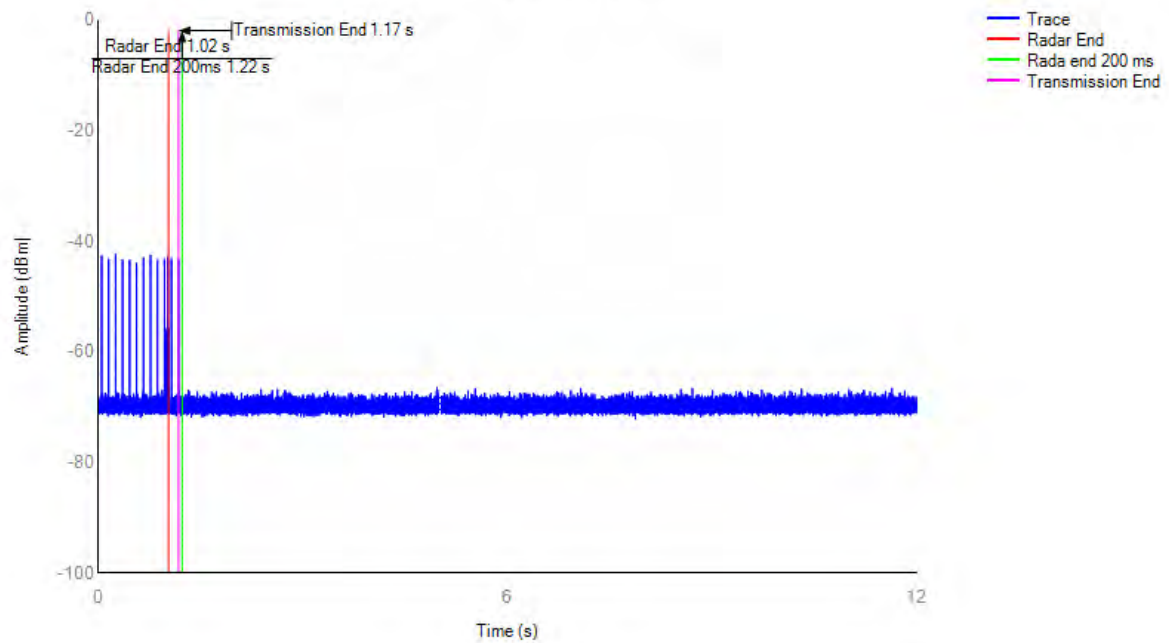
5610MHz Shutdown

Channel Shutdown



5610MHz Shutdown

Channel Shutdown





6 Test Setup Photo

Reference to the file No.: ET-26084429SP for details.

7 EUT Constructional Details

Reference to the file No.: ET-26084429EP and ET-26084429IP for details

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