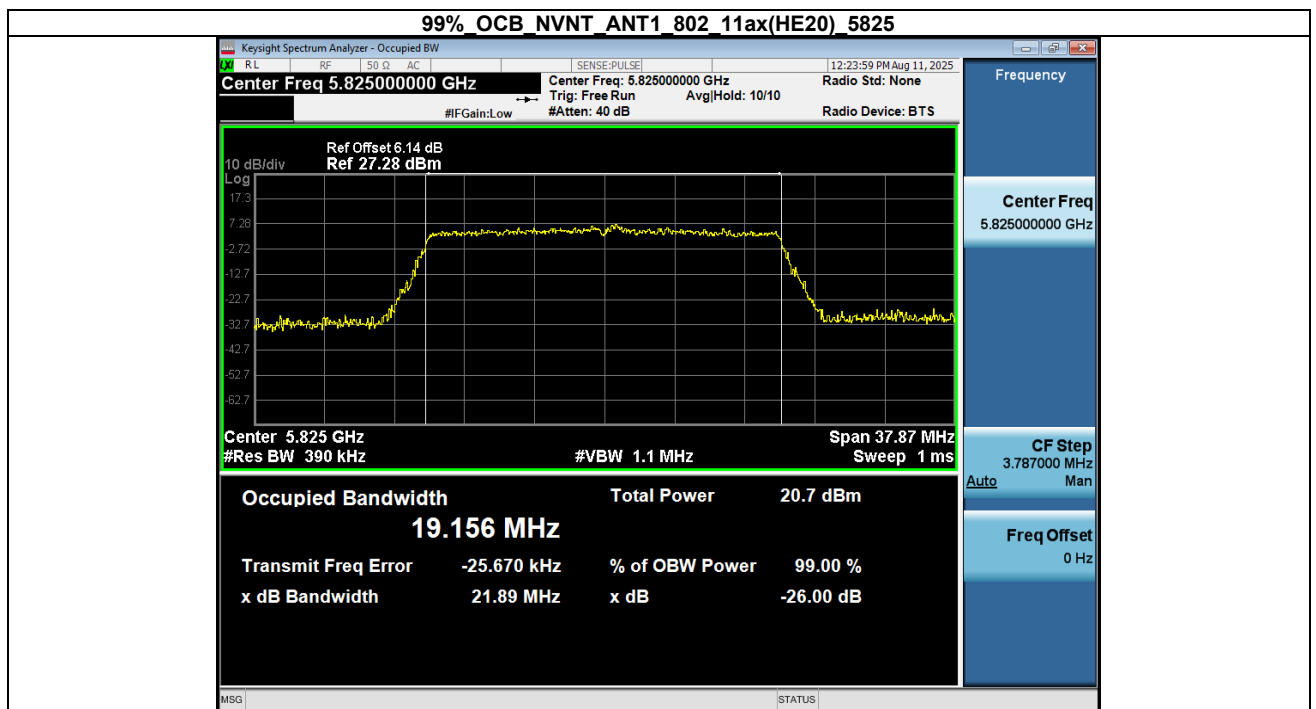
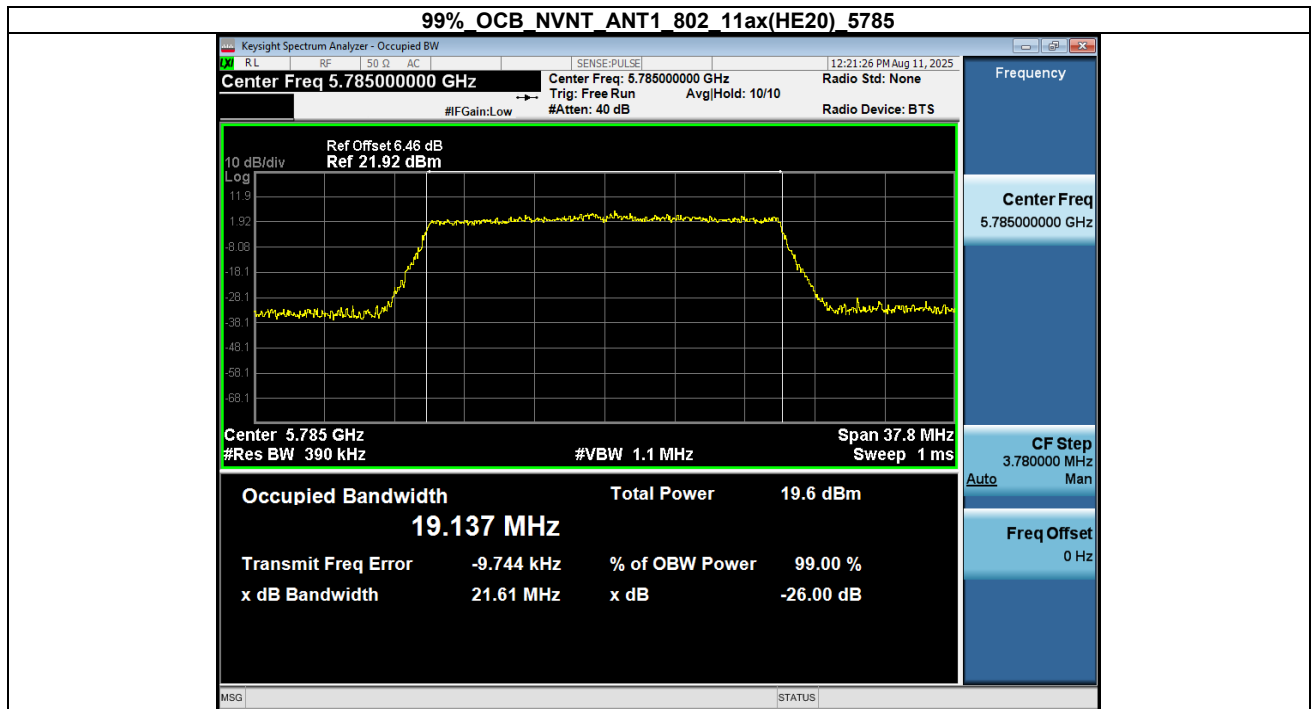
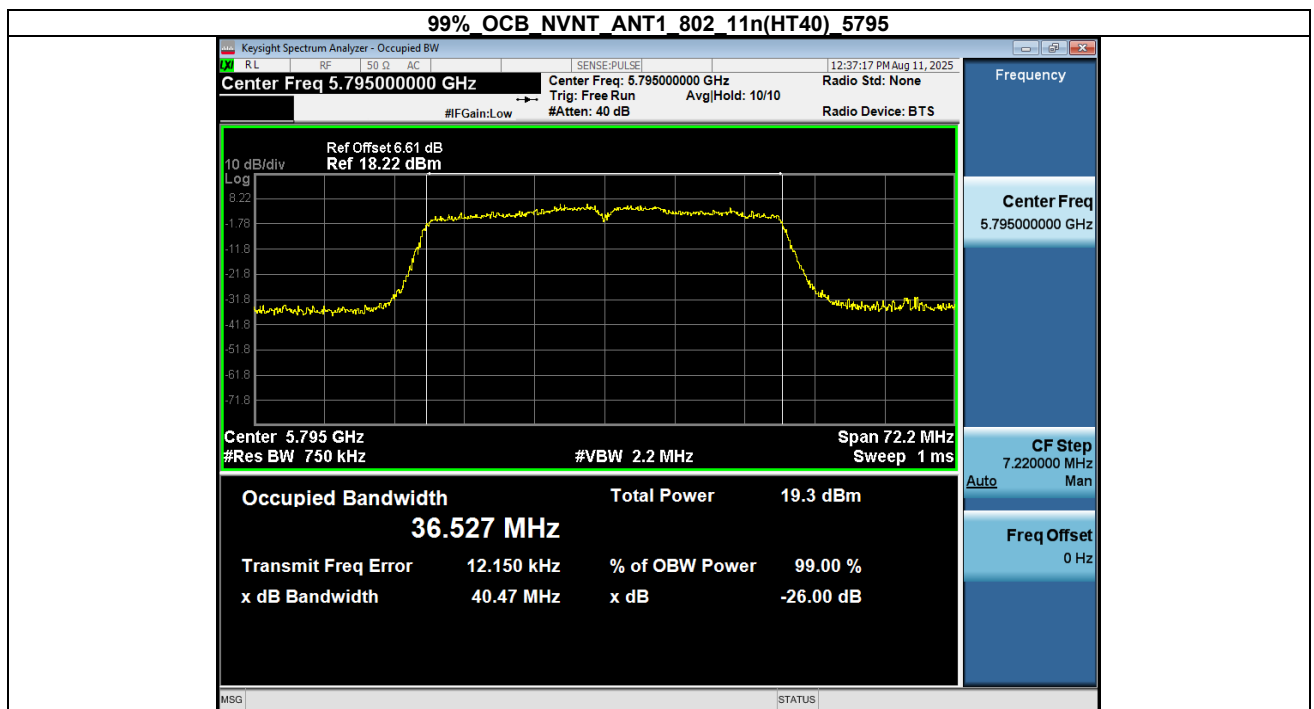
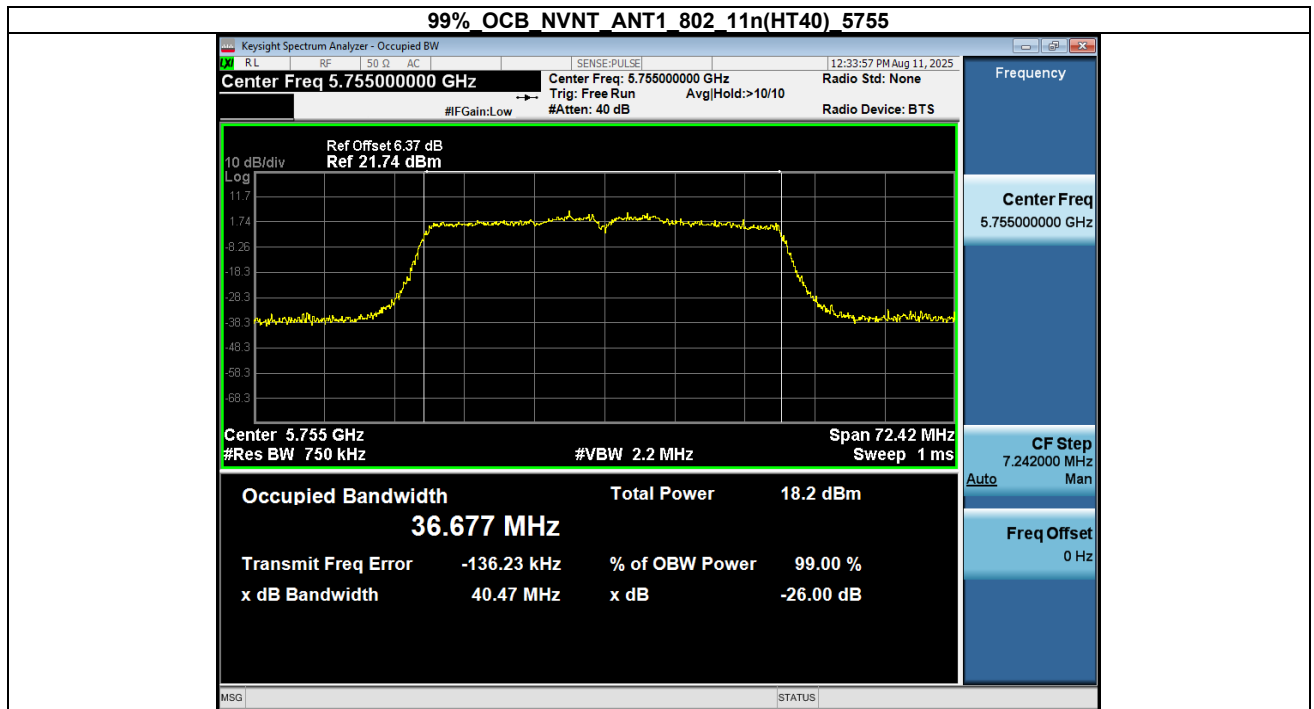
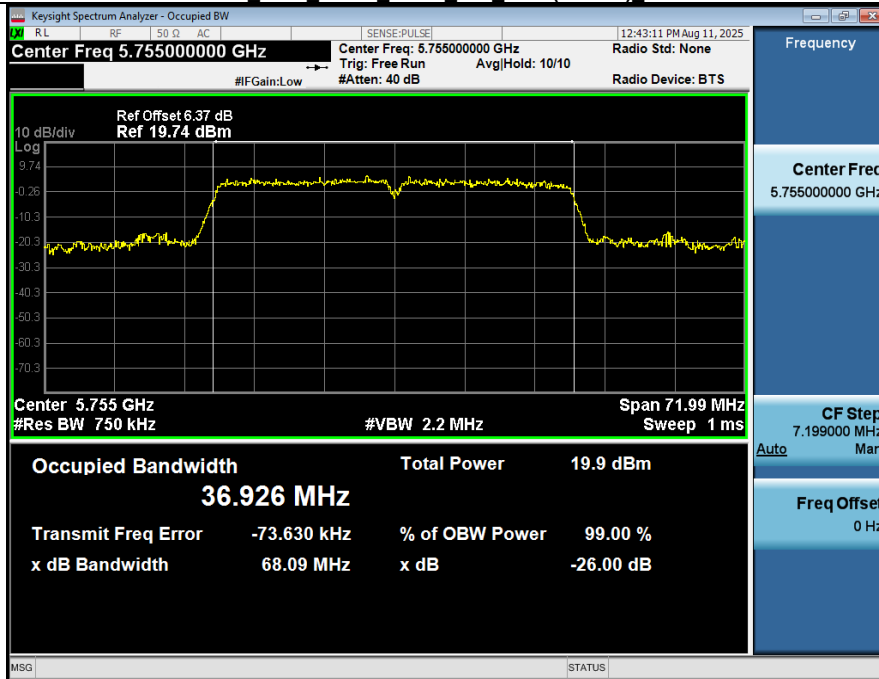


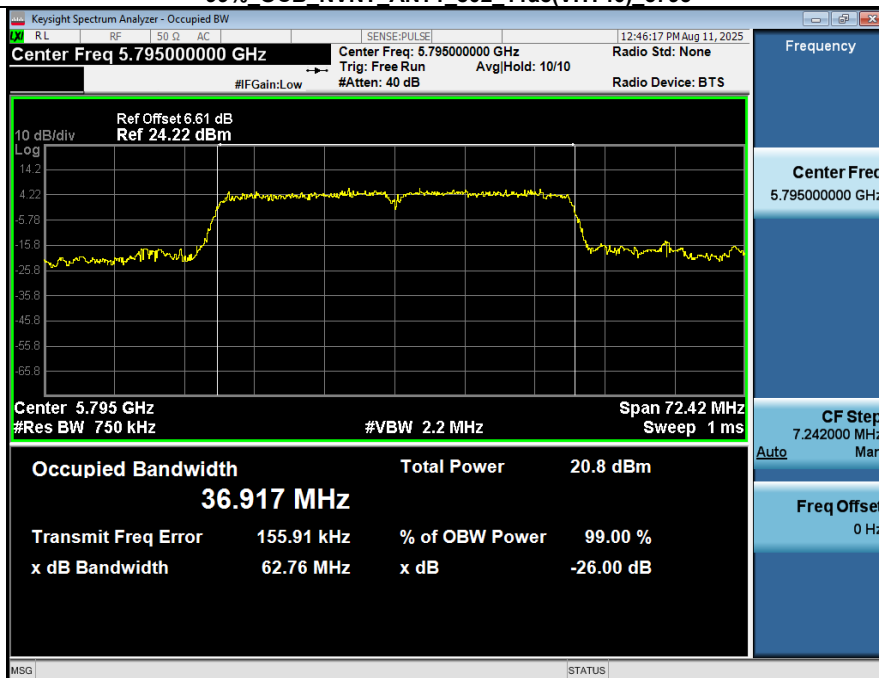




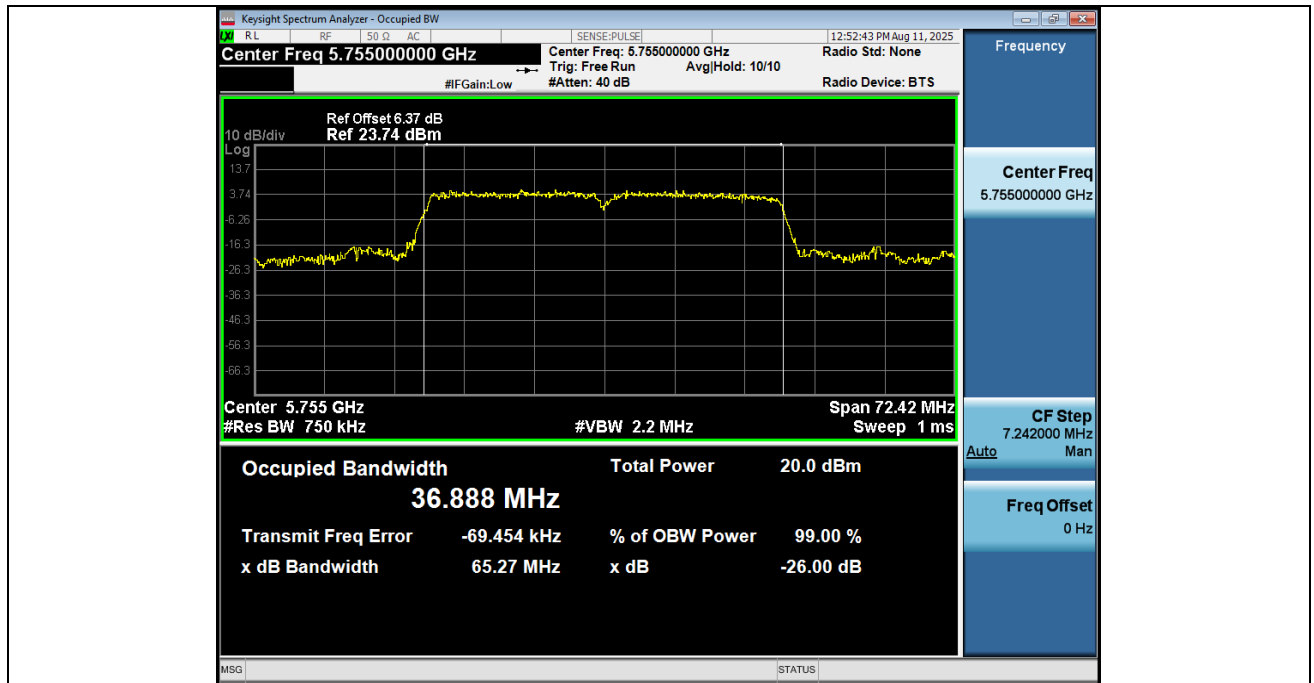
99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5755



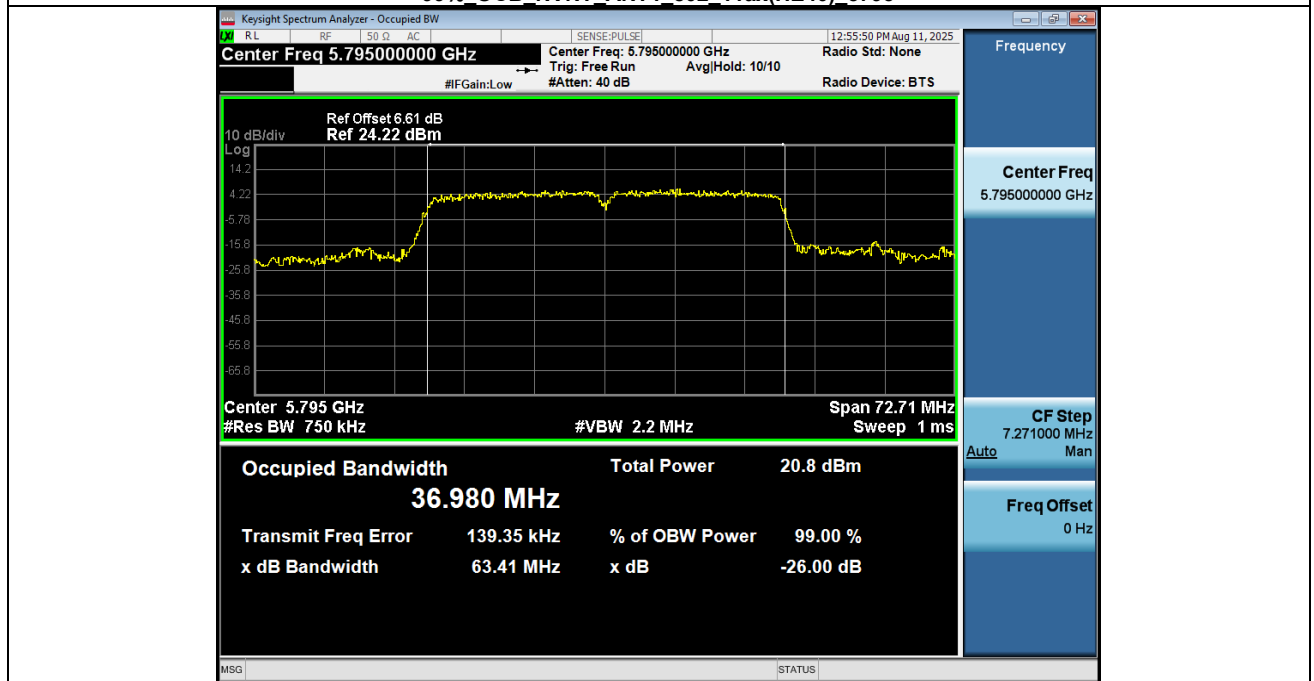
99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5795

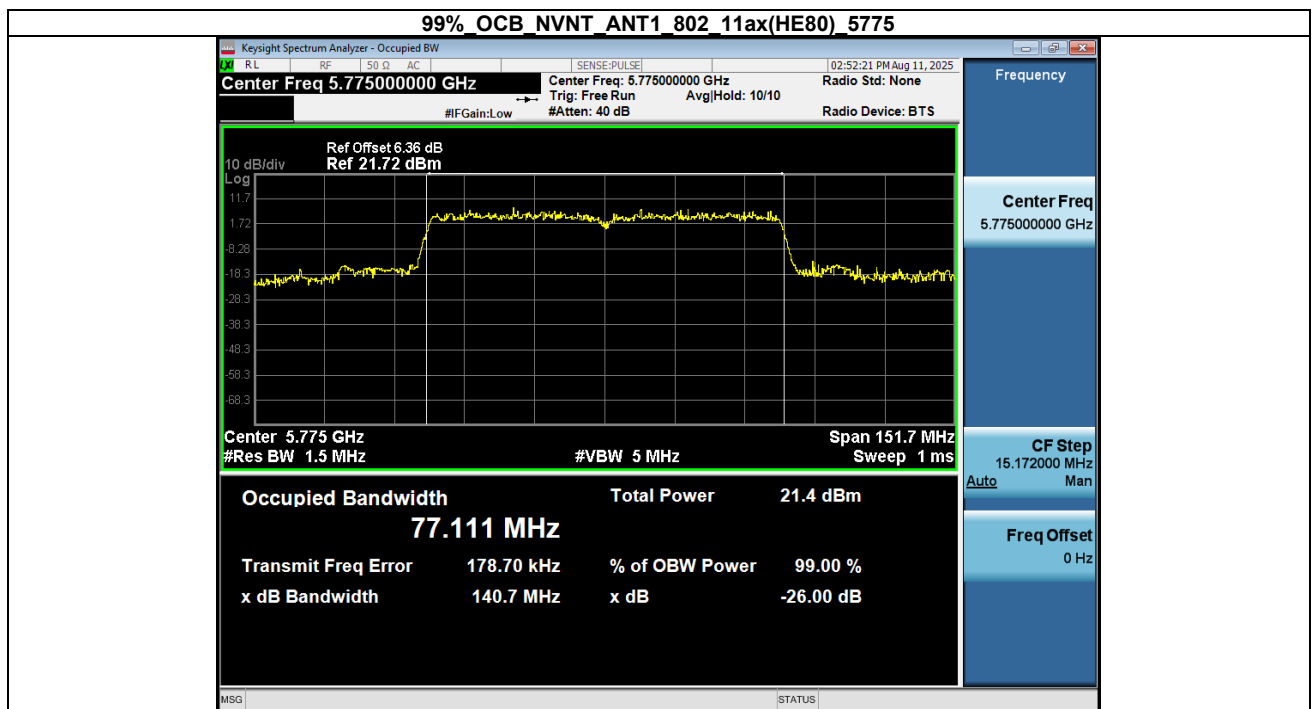
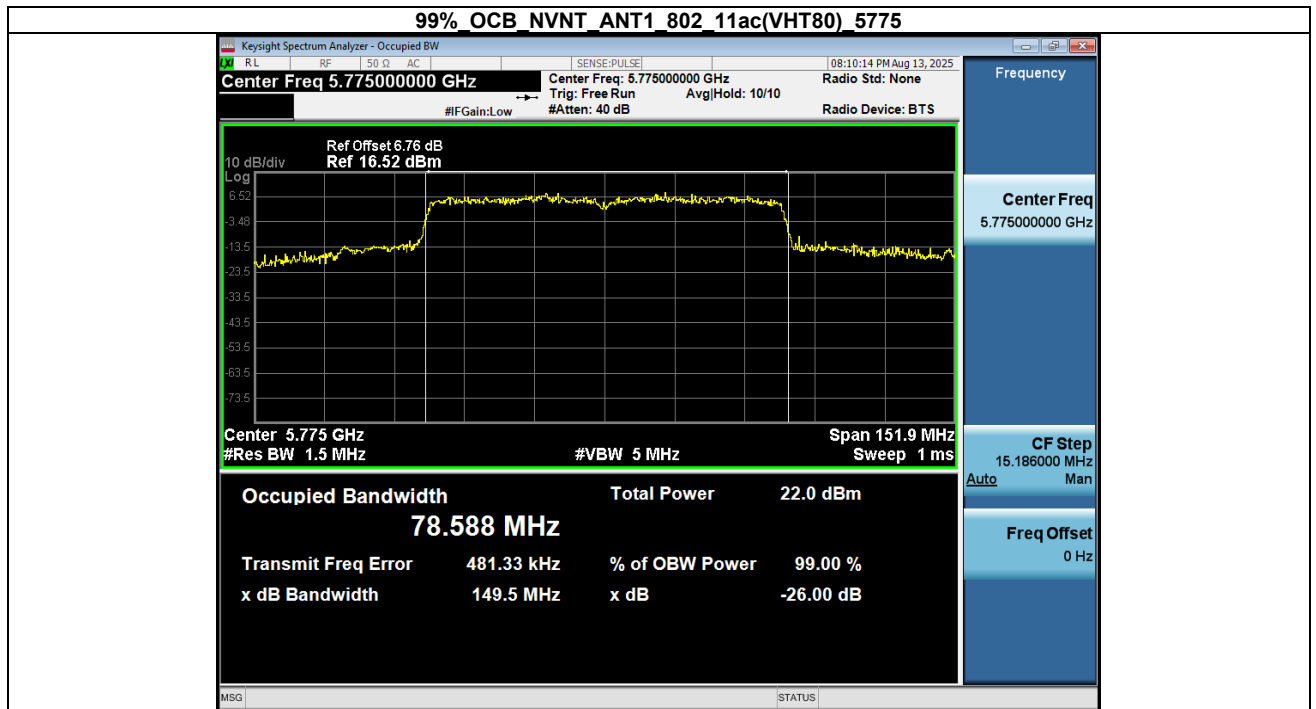


99%_OCB_NVNT_ANT1_802_11ax(HE40)_5755



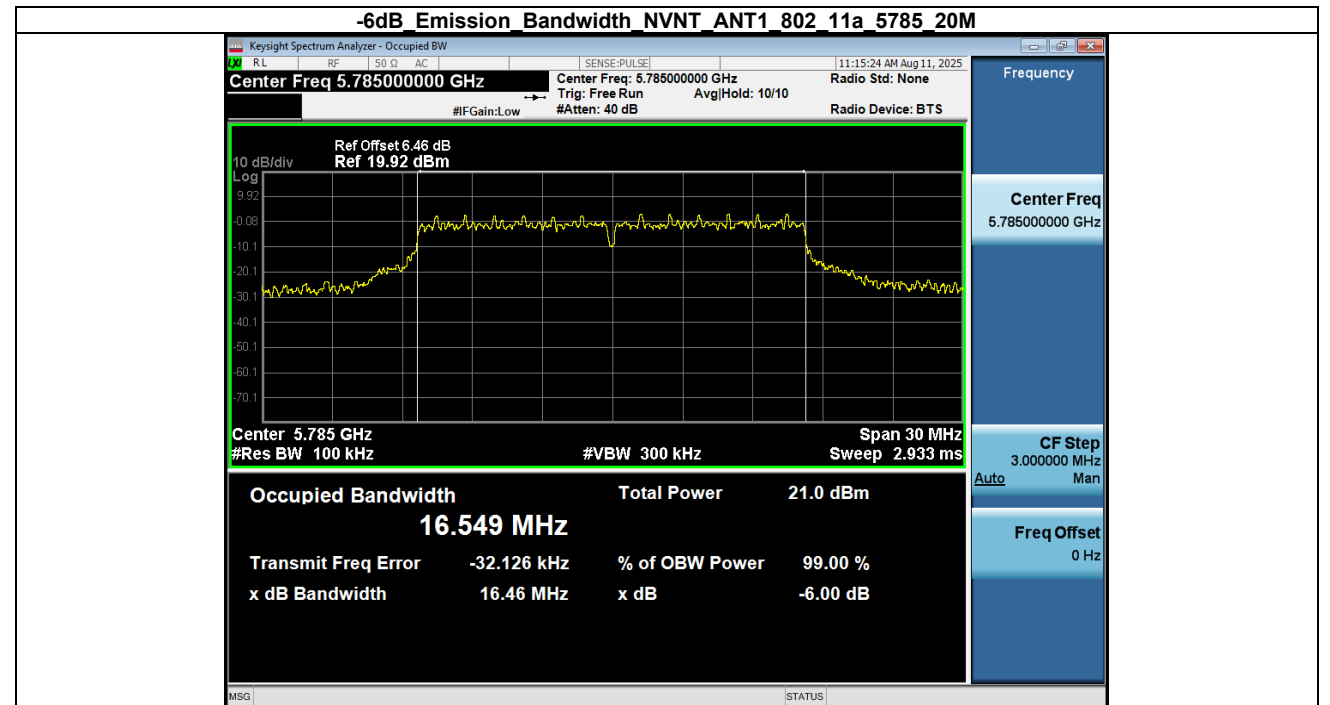
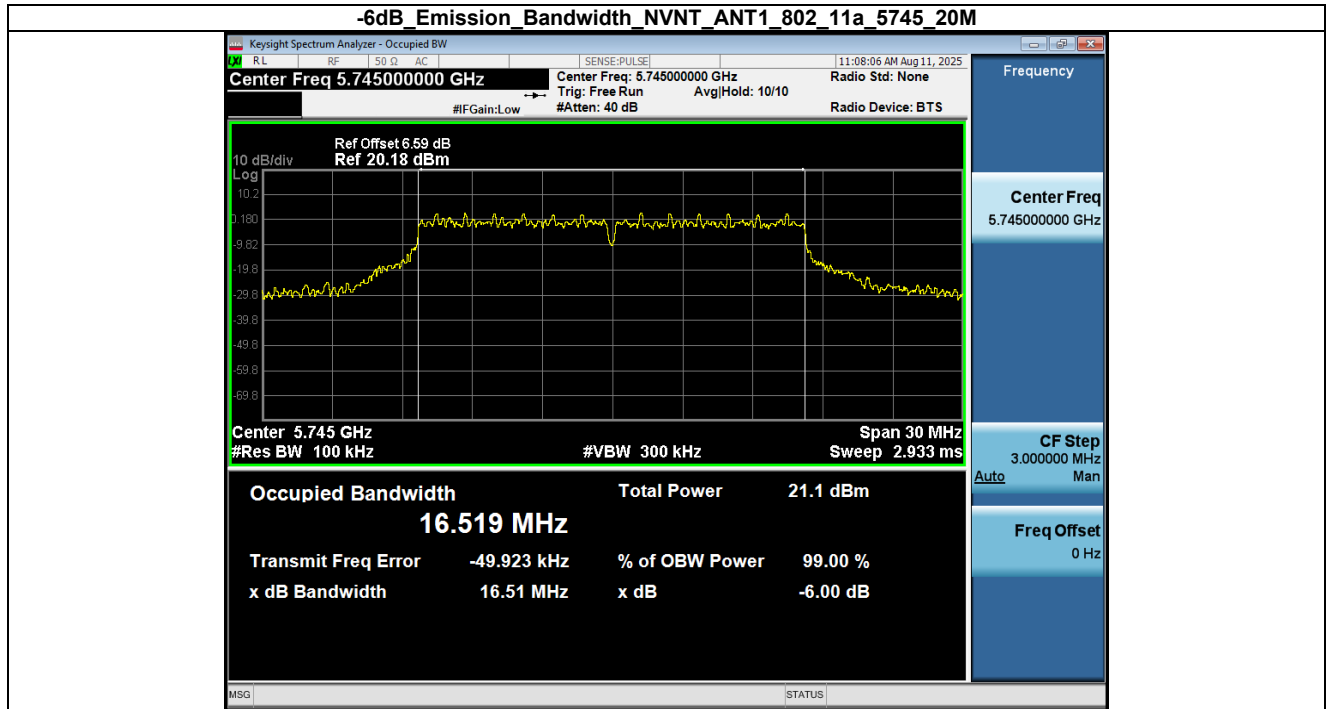
99% OCB NVNT ANT1 802 11ax(HE40) 5795



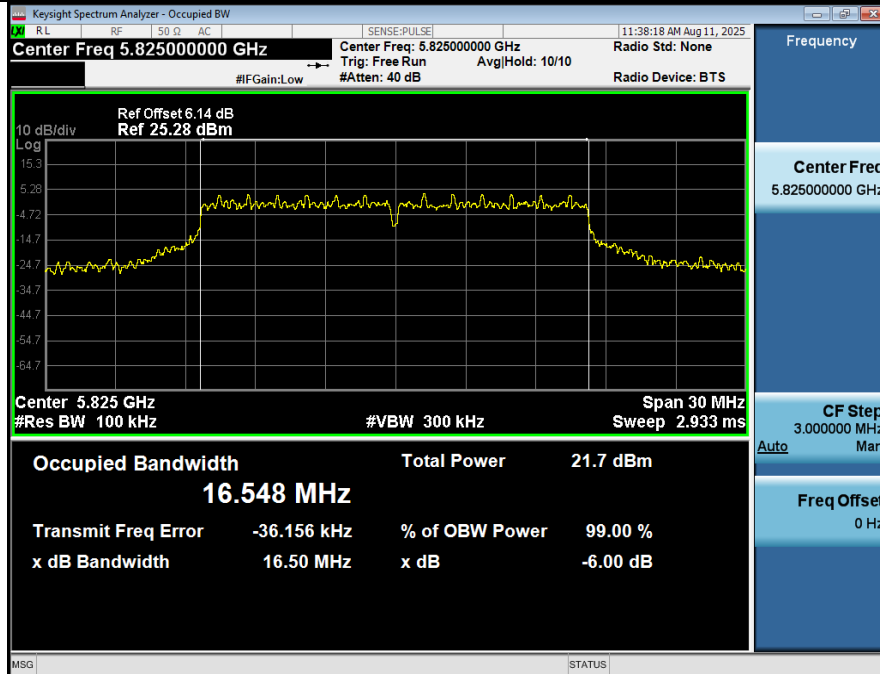


1.3 Test Datas U-NII-3 (6dB Bandwidth)

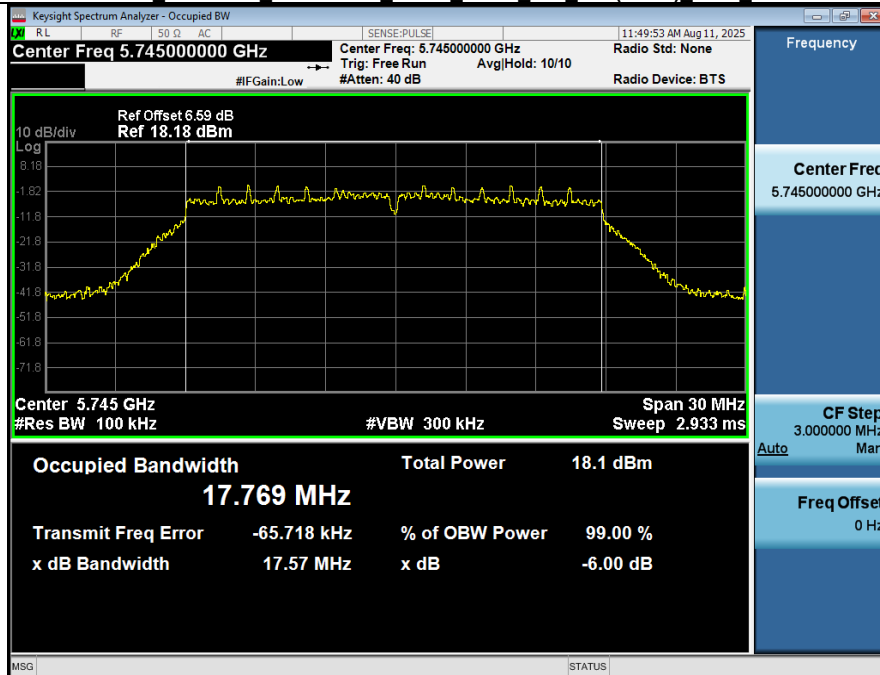
Condition	Antenna	Mode	Frequency(MHz)	-6dB Emission Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	802.11a	5745.00	16.510	0.500	Pass
NVNT	ANT1	802.11a	5785.00	16.461	0.500	Pass
NVNT	ANT1	802.11a	5825.00	16.497	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	17.566	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	16.114	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	17.526	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	17.735	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	17.693	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	17.705	0.500	Pass
NVNT	ANT1	802.11ax(HE20)	5745.00	18.810	0.500	Pass
NVNT	ANT1	802.11ax(HE20)	5785.00	18.610	0.500	Pass
NVNT	ANT1	802.11ax(HE20)	5825.00	18.773	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	35.796	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	35.215	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	36.344	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	36.301	0.500	Pass
NVNT	ANT1	802.11ax(HE40)	5755.00	36.436	0.500	Pass
NVNT	ANT1	802.11ax(HE40)	5795.00	36.094	0.500	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	75.873	0.500	Pass
NVNT	ANT1	802.11ax(HE80)	5775.00	75.549	0.500	Pass



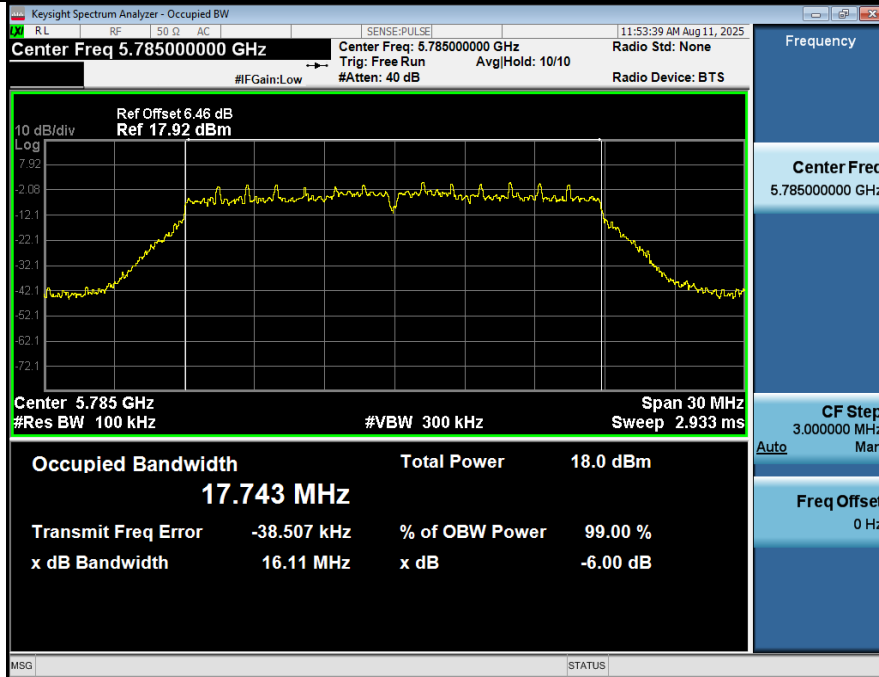
-6dB Emission Bandwidth NVNT ANT1 802_11a 5825 20M



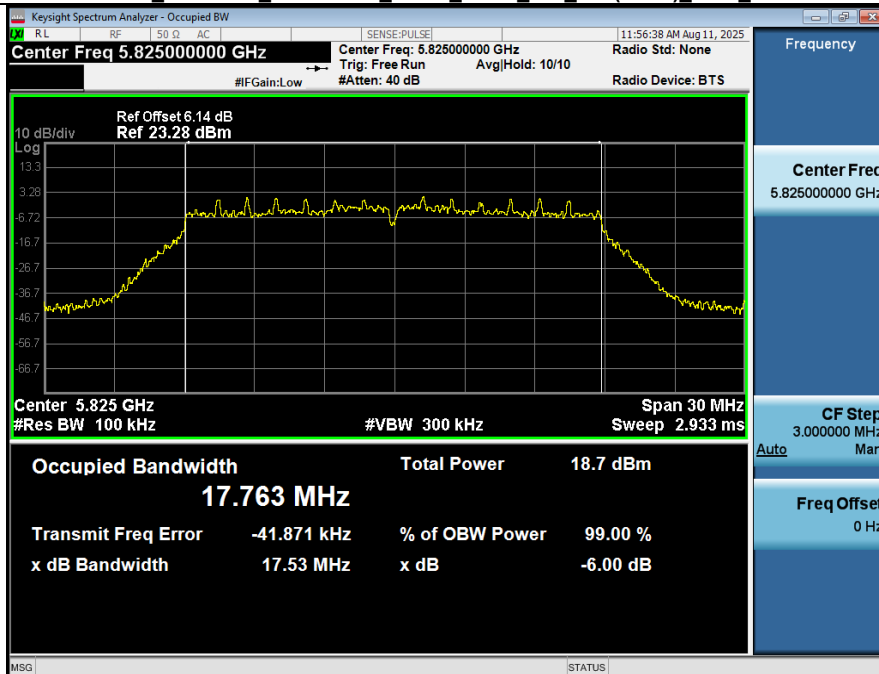
-6dB Emission Bandwidth NVNT ANT1 802_11n(HT20) 5745 20M



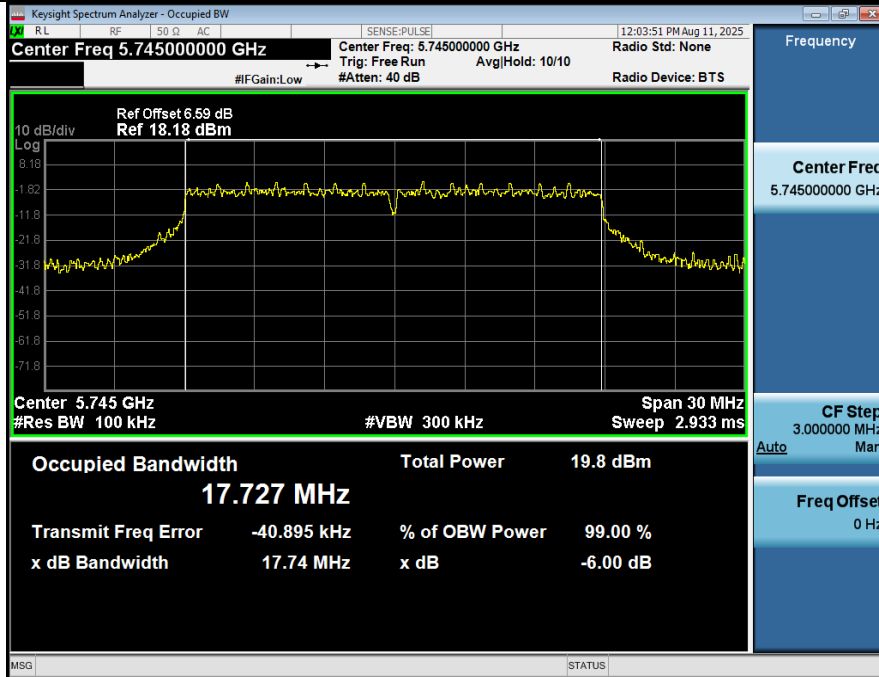
-6dB Emission Bandwidth NVNT_ANT1_802_11n(HT20)_5785_20M



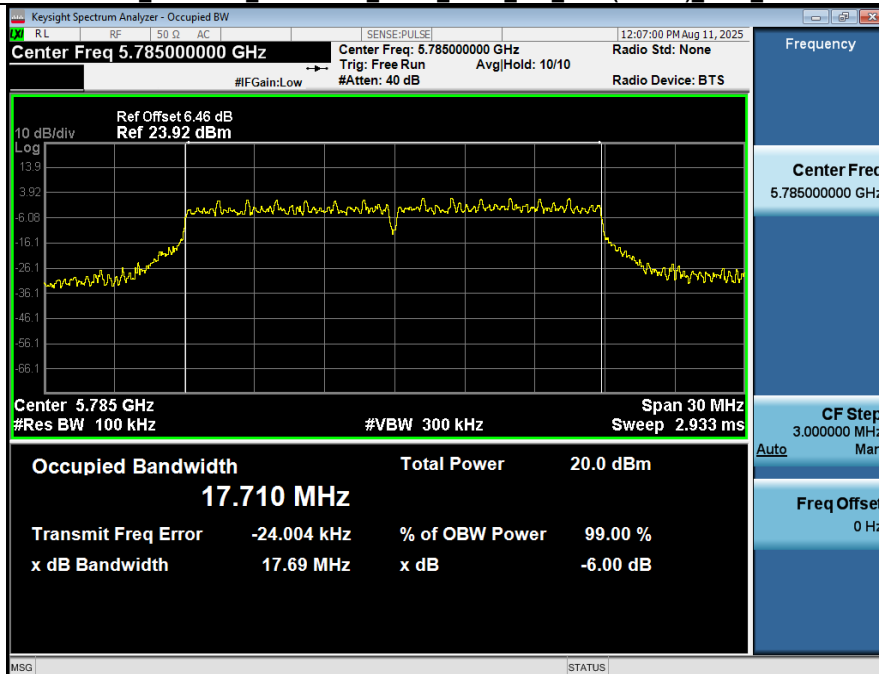
-6dB Emission Bandwidth NVNT_ANT1_802_11n(HT20)_5825_20M



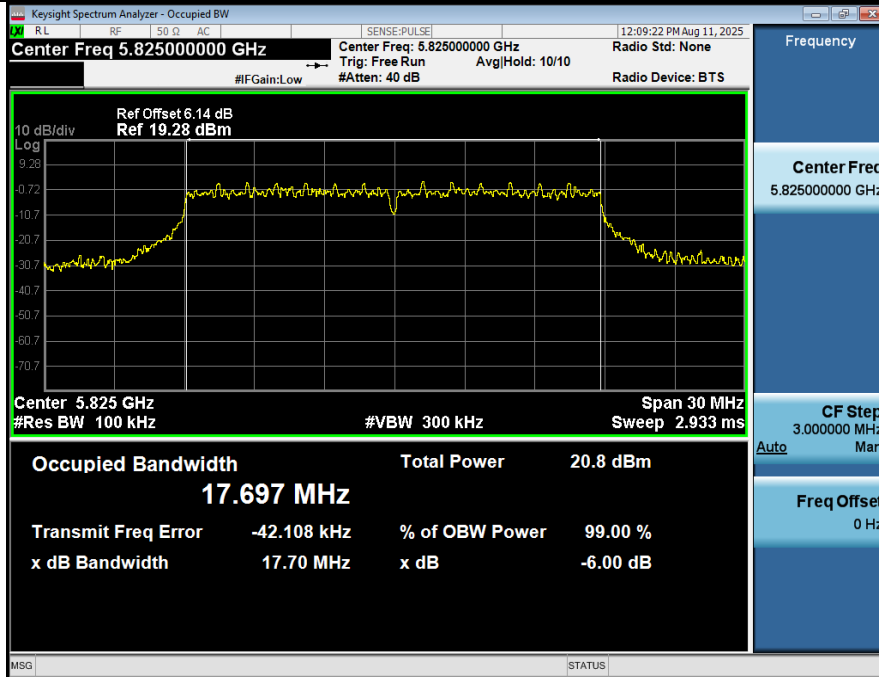
-6dB Emission Bandwidth NVNT_ANT1_802_11ac(VHT20)_5745_20M



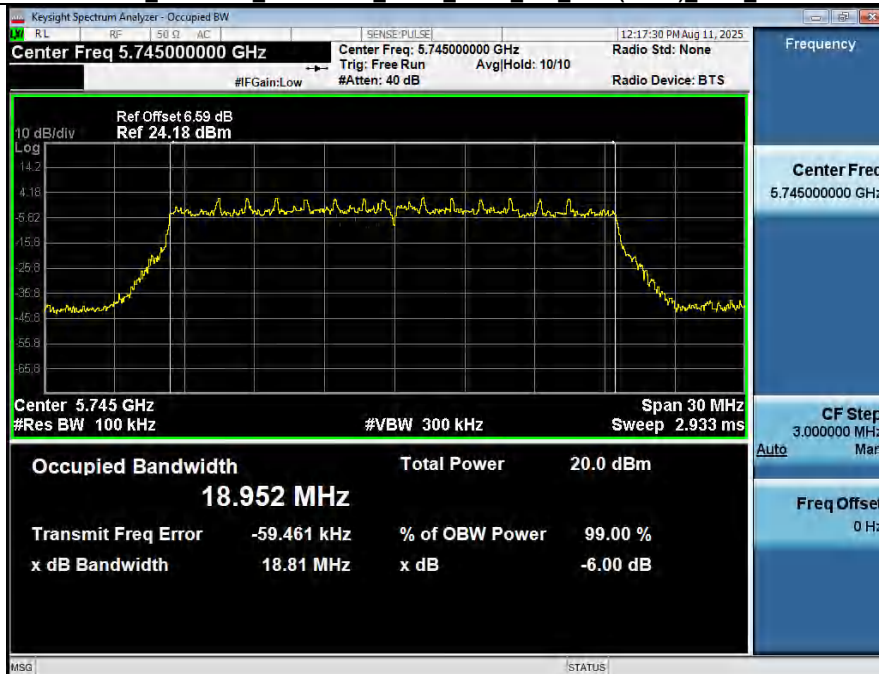
-6dB Emission Bandwidth NVNT_ANT1_802_11ac(VHT20)_5785_20M



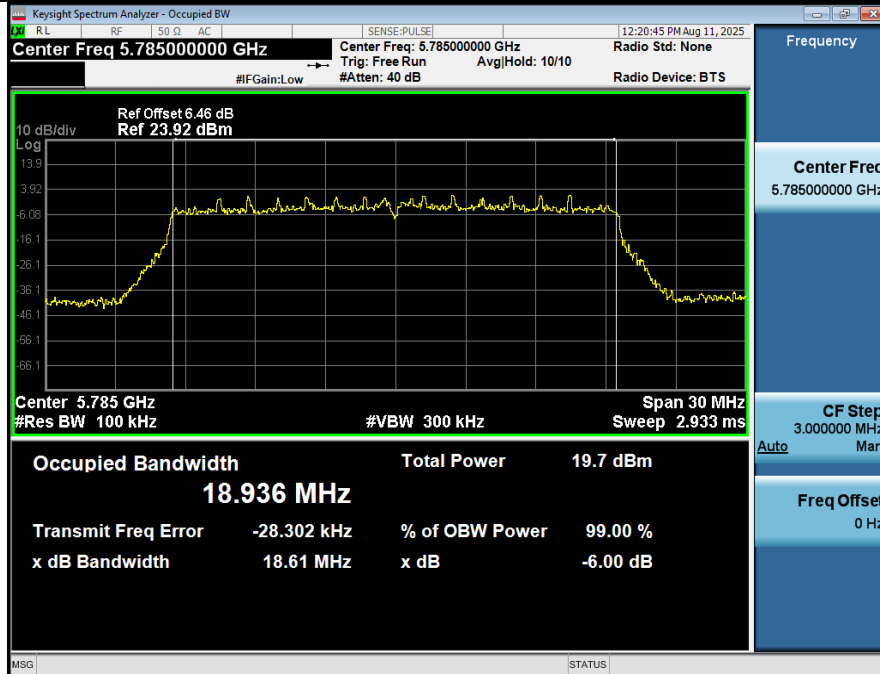
-6dB Emission Bandwidth NVNT_ANT1_802_11ac(VHT20)_5825_20M



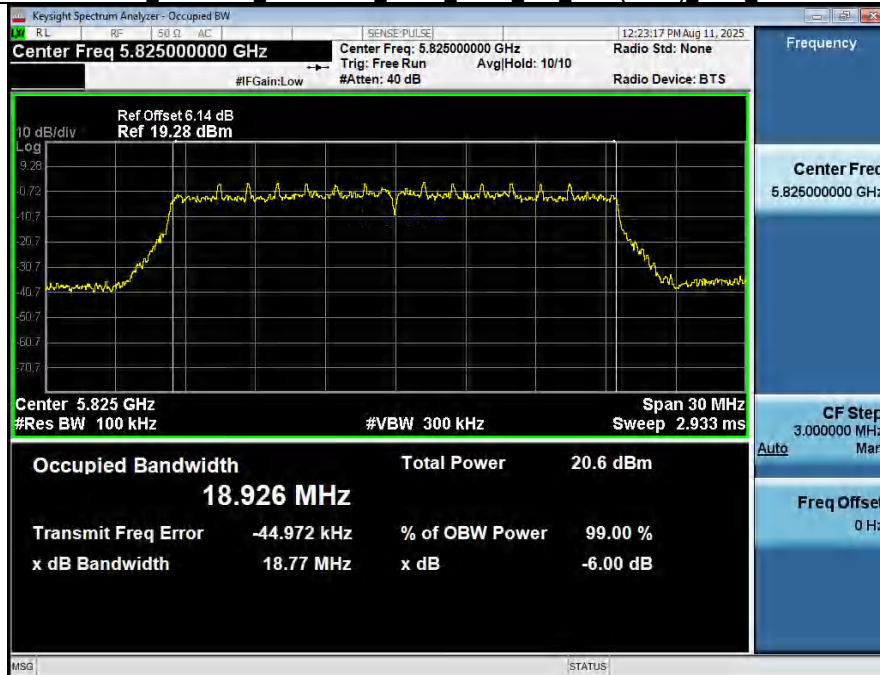
-6dB Emission Bandwidth NVNT_ANT1_802_11ax(HE20)_5745_20M



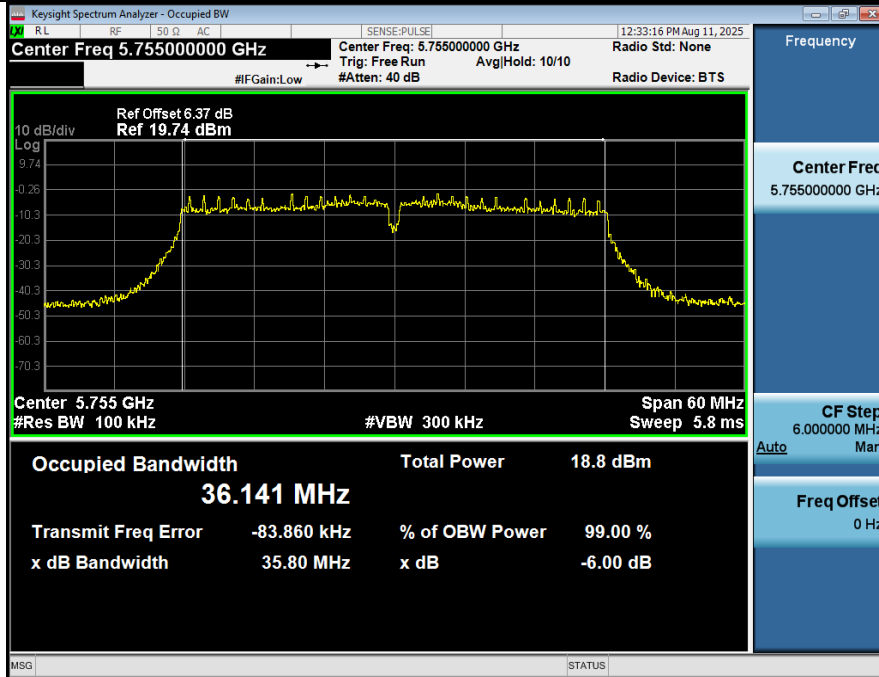
-6dB Emission Bandwidth NVNT ANT1 802 11ax(HE20) 5785 20M



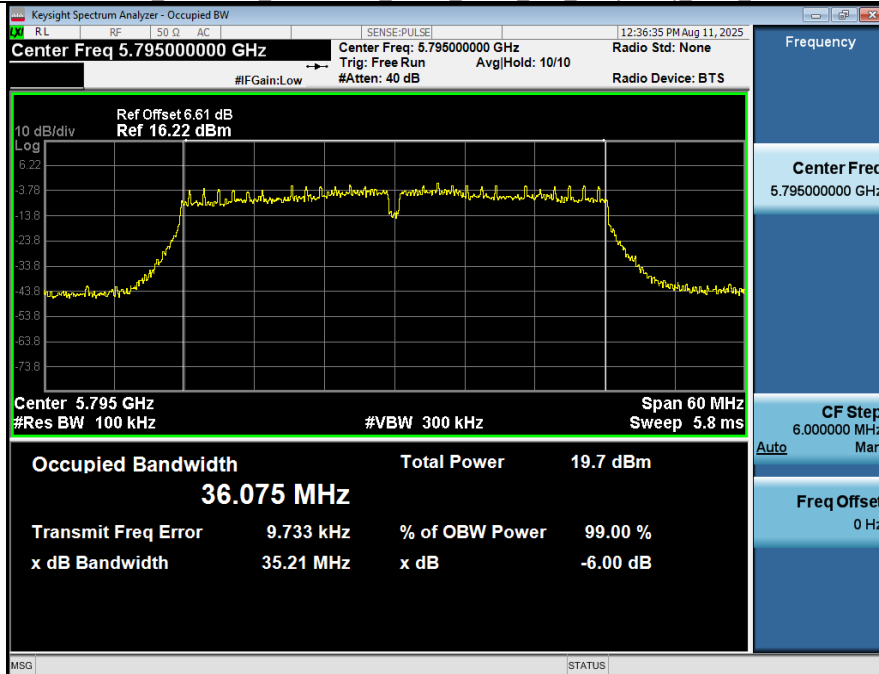
-6dB Emission Bandwidth NVNT ANT1 802 11ax(HE20) 5825 20M

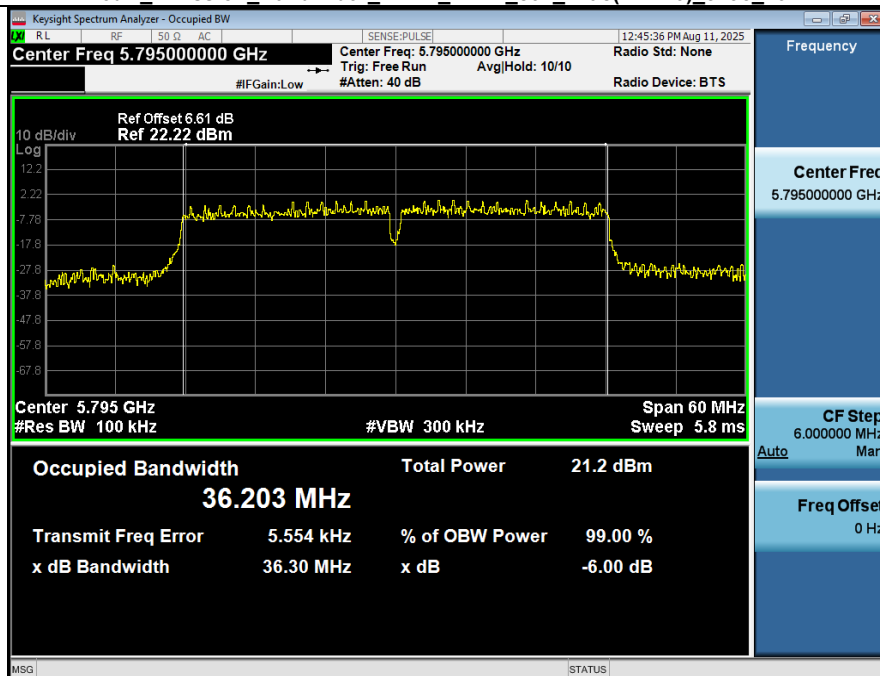
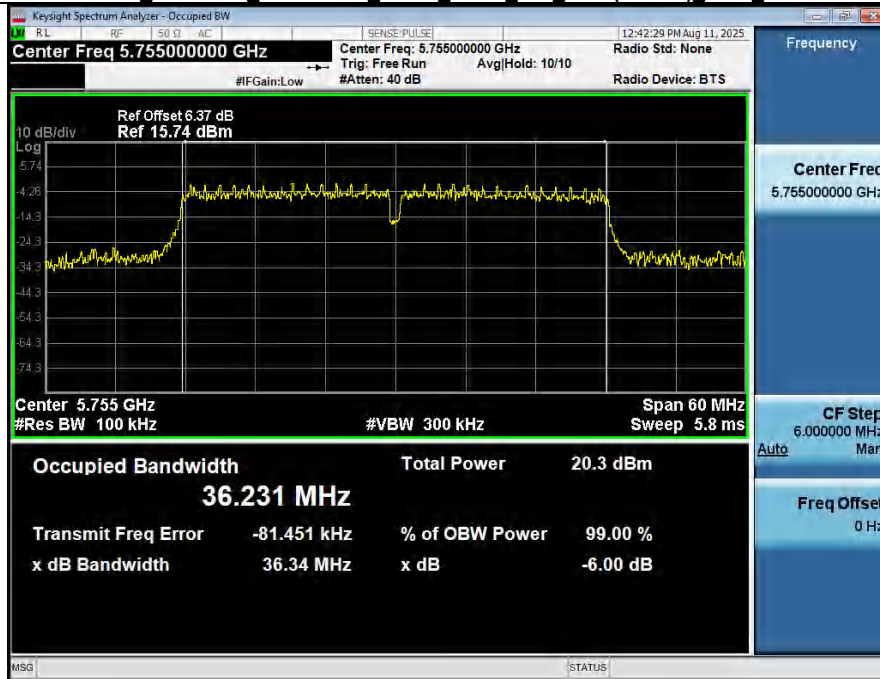


-6dB Emission Bandwidth NVNT_ANT1_802_11n(HT40)_5755_40M

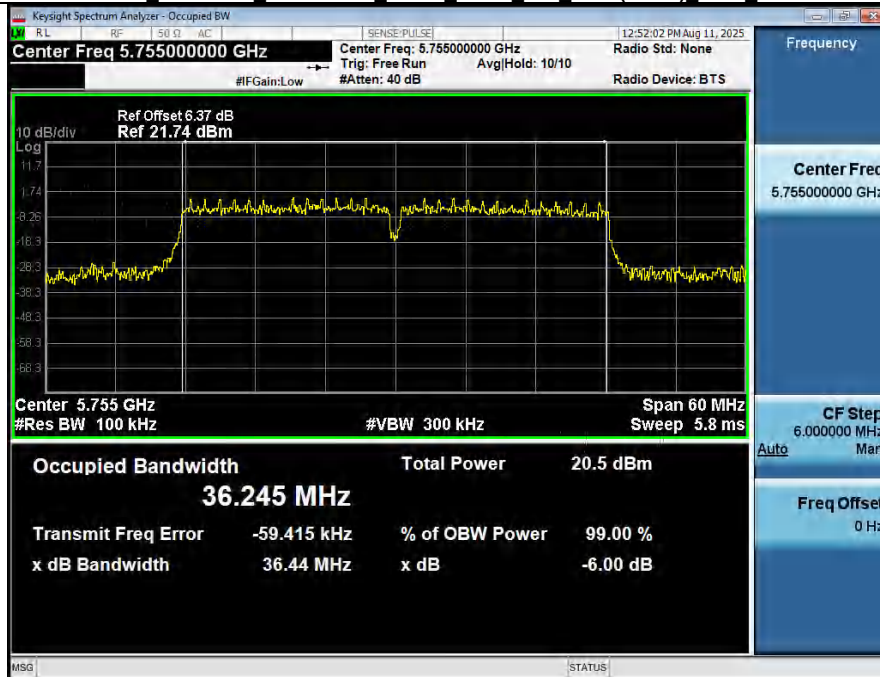


-6dB Emission Bandwidth NVNT_ANT1_802_11n(HT40)_5795_40M

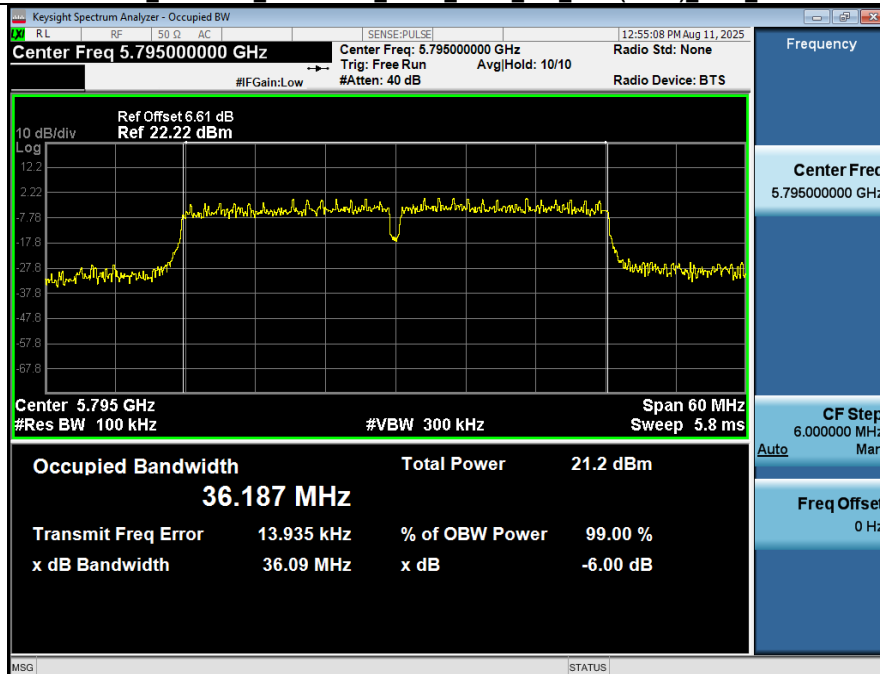




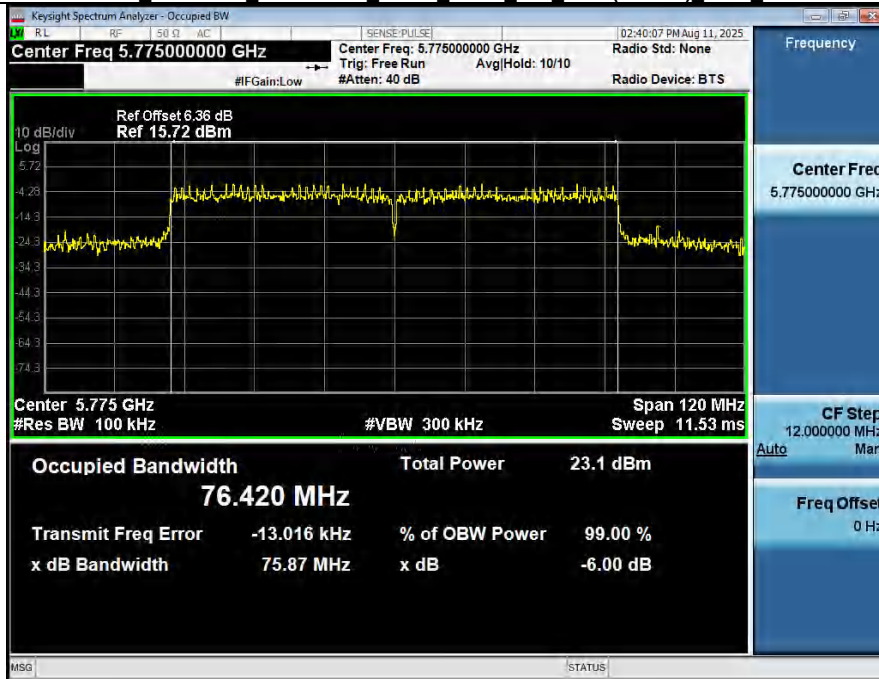
-6dB Emission Bandwidth NVNT ANT1_802_11ax(HE40)_5755_40M



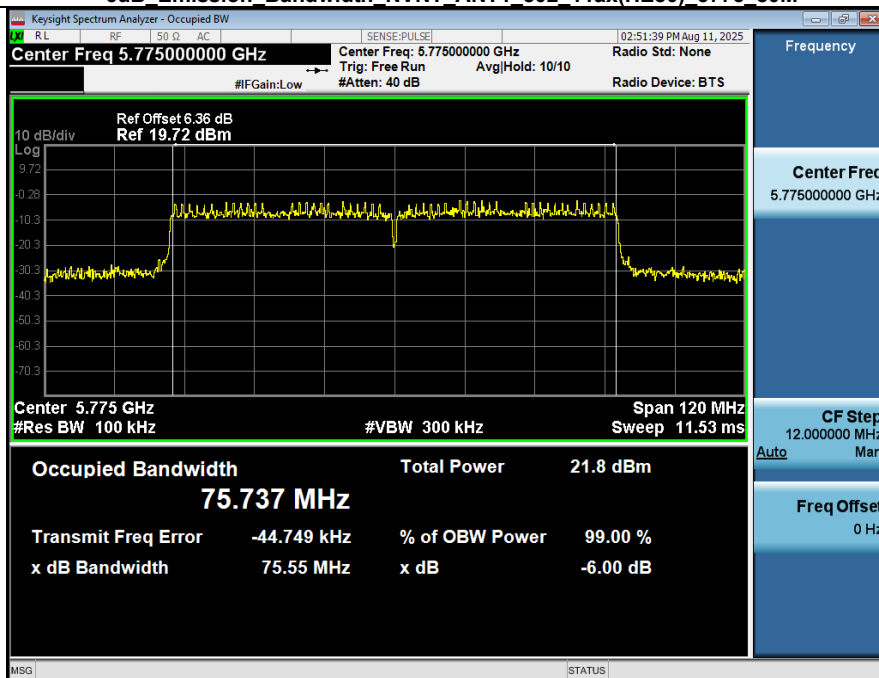
-6dB Emission Bandwidth NVNT ANT1_802_11ax(HE40)_5795_40M



-6dB Emission Bandwidth NVNT ANT1 802 11ac(VHT80) 5775 80M



-6dB Emission Bandwidth NVNT ANT1 802 11ax(HE80) 5775 80M



2. Maximum output power

2.1 Test Data (U-NII-1)

Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Antenna Gain	EIRP (dBm)	FCC Conducted limit(dBm)	ISED EIRP limit(dBm)	Result
ANT1	802.11a	5180.00	11.98	4.50	16.48	24	22.19	Pass
ANT2	802.11a	5180.00	11.21	3.05	14.26	24	22.25	Pass
ANT1	802.11a	5200.00	12.12	4.50	16.62	24	22.20	Pass
ANT2	802.11a	5200.00	11.27	3.05	14.32	24	22.28	Pass
ANT1	802.11a	5240.00	12.21	4.50	16.71	24	22.19	Pass
ANT2	802.11a	5240.00	11.36	3.05	14.41	24	22.31	Pass
ANT1	802.11n(HT20)	5180.00	10.82	4.50	15.32	24	22.48	Pass
ANT2	802.11n(HT20)	5180.00	10.13	3.05	13.18	24	22.47	Pass
ANT1	802.11n(HT20)	5200.00	10.99	4.50	15.49	24	22.48	Pass
ANT2	802.11n(HT20)	5200.00	10.46	3.05	13.51	24	22.48	Pass
ANT1	802.11n(HT20)	5240.00	11.23	4.50	15.73	24	22.48	Pass
ANT2	802.11n(HT20)	5240.00	10.82	3.05	13.87	24	22.48	Pass
ANT1	802.11ac(VHT20)	5180.00	11.08	4.50	15.58	24	22.50	Pass
ANT2	802.11ac(VHT20)	5180.00	10.58	3.05	13.63	24	22.50	Pass
ANT1	802.11ac(VHT20)	5200.00	10.88	4.50	15.38	24	22.49	Pass
ANT2	802.11ac(VHT20)	5200.00	11.06	3.05	14.11	24	22.49	Pass
ANT1	802.11ac(VHT20)	5240.00	10.59	4.50	15.09	24	22.49	Pass
ANT2	802.11ac(VHT20)	5240.00	9.83	3.05	12.88	24	22.49	Pass
ANT1	802.11ax(HE20)	5180.00	11.34	4.50	15.84	24	22.79	Pass
ANT2	802.11ax(HE20)	5180.00	10.17	3.05	13.22	24	22.79	Pass
ANT1	802.11ax(HE20)	5200.00	11.27	4.50	15.77	24	22.79	Pass
ANT2	802.11ax(HE20)	5200.00	10.82	3.05	13.87	24	22.79	Pass
ANT1	802.11ax(HE20)	5240.00	10.63	4.50	15.13	24	22.79	Pass
ANT2	802.11ax(HE20)	5240.00	10.13	3.05	13.18	24	22.80	Pass
ANT1	802.11n(HT40)	5190.00	10.78	4.50	15.28	24	23.00	Pass
ANT2	802.11n(HT40)	5190.00	9.86	3.05	12.91	24	23.00	Pass
ANT1	802.11n(HT40)	5230.00	11.27	4.50	15.77	24	23.00	Pass
ANT2	802.11n(HT40)	5230.00	10.71	3.05	13.76	24	23.00	Pass
ANT1	802.11ac(VHT40)	5190.00	10.71	4.50	15.21	24	23.00	Pass
ANT2	802.11ac(VHT40)	5190.00	10.79	3.05	13.84	24	23.00	Pass
ANT1	802.11ac(VHT40)	5230.00	11.27	4.50	15.77	24	23.00	Pass
ANT2	802.11ac(VHT40)	5230.00	10.10	3.05	13.15	24	23.00	Pass
ANT1	802.11ax(HE40)	5190.00	11.03	4.50	15.53	24	23.00	Pass
ANT2	802.11ax(HE40)	5190.00	9.80	3.05	12.85	24	23.00	Pass
ANT1	802.11ax(HE40)	5230.00	11.01	4.50	15.51	24	23.00	Pass
ANT2	802.11ax(HE40)	5230.00	11.01	3.05	14.06	24	23.00	Pass
ANT1	802.11ac(VHT80)	5210.00	10.19	4.50	14.69	24	23.00	Pass
ANT2	802.11ac(VHT80)	5210.00	10.51	3.05	13.56	24	23.00	Pass
ANT1	802.11ax(HE80)	5210.00	10.55	4.50	15.05	24	23.00	Pass
ANT2	802.11ax(HE80)	5210.00	10.42	3.05	13.47	24	23.00	Pass

Appendix B
CN25M6MM 001



Prüfbericht - Produkte
Test Report - Products

Page 46 of 224

Antenna	Mode	Frequency (MHz)	Conducted Power(dBm)	Antenna Gain	EIRP (dBm)	FCC Conducted limit(dBm)	ISED EIRP limit(dBm)	Result
MIMO_TX	802.11a	5180.00	14.62	4.50	19.12	23.98	22.19	Pass
MIMO_TX	802.11a	5200.00	14.78	4.50	19.28	23.98	22.19	Pass
MIMO_TX	802.11a	5240.00	14.82	4.50	19.32	23.98	22.19	Pass
MIMO_TX	802.11n(HT20)	5180.00	13.50	4.50	18.00	23.98	22.47	Pass
MIMO_TX	802.11n(HT20)	5200.00	13.74	4.50	18.24	23.98	22.47	Pass
MIMO_TX	802.11n(HT20)	5240.00	14.04	4.50	18.54	23.98	22.47	Pass
MIMO_TX	802.11ac(VHT20)	5180.00	13.85	4.50	18.35	23.98	22.48	Pass
MIMO_TX	802.11ac(VHT20)	5200.00	13.98	4.50	18.48	23.98	22.48	Pass
MIMO_TX	802.11ac(VHT20)	5240.00	13.24	4.50	17.74	23.98	22.48	Pass
MIMO_TX	802.11ax(HE20)	5180.00	13.81	4.50	18.31	23.98	22.79	Pass
MIMO_TX	802.11ax(HE20)	5200.00	14.06	4.50	18.56	23.98	22.79	Pass
MIMO_TX	802.11ax(HE20)	5240.00	13.40	4.50	17.90	23.98	22.79	Pass
MIMO_TX	802.11n(HT40)	5190.00	13.35	4.50	17.85	23.98	23.00	Pass
MIMO_TX	802.11n(HT40)	5230.00	14.01	4.50	18.51	23.98	23.00	Pass
MIMO_TX	802.11ac(VHT40)	5190.00	13.76	4.50	18.26	23.98	23.00	Pass
MIMO_TX	802.11ac(VHT40)	5230.00	13.74	4.50	18.24	23.98	23.00	Pass
MIMO_TX	802.11ax(HE40)	5190.00	13.47	4.50	17.97	23.98	23.00	Pass
MIMO_TX	802.11ax(HE40)	5230.00	14.02	4.50	18.52	23.98	23.00	Pass
MIMO_TX	802.11ac(VHT80)	5210.00	13.36	4.50	17.86	23.98	23.00	Pass
MIMO_TX	802.11ax(HE80)	5210.00	13.50	4.50	18.00	23.98	23.00	Pass

Note:

- 1) The cable loss and duty cycle factor are taken into account in results, $e.i.r.p. = P_{(Peak\ power)} + G$
- 2) As for Cyclic Delay Diversity (CDD), the directional gain is based on KDB662911D01 F(ii) under Unequal antenna gains: Directional gain is calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain.

Appendix B
CN25M6MM 001



Prüfbericht - Produkte
Test Report - Products

Page 47 of 224

2.2 Test Data (U-NII-3)

Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	14.16	30	Pass
NVNT	ANT2	802.11a	5745.00	13.79	30	Pass
NVNT	ANT1	802.11a	5785.00	13.66	30	Pass
NVNT	ANT2	802.11a	5785.00	13.44	30	Pass
NVNT	ANT1	802.11a	5825.00	13.56	30	Pass
NVNT	ANT2	802.11a	5825.00	13.59	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	11.80	30	Pass
NVNT	ANT2	802.11n(HT20)	5745.00	10.16	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	11.95	30	Pass
NVNT	ANT2	802.11n(HT20)	5785.00	10.06	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	11.21	30	Pass
NVNT	ANT2	802.11n(HT20)	5825.00	9.65	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	10.75	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5745.00	10.42	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	11.18	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5785.00	10.66	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	11.14	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5825.00	11.17	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	10.90	30	Pass
NVNT	ANT2	802.11n(HT40)	5755.00	9.48	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	10.92	30	Pass
NVNT	ANT2	802.11n(HT40)	5795.00	9.70	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	11.66	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5755.00	10.65	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	10.94	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5795.00	10.07	30	Pass
NVNT	ANT1	802.11ax(HE40)	5755.00	11.62	30	Pass
NVNT	ANT2	802.11ax(HE40)	5755.00	10.88	30	Pass
NVNT	ANT1	802.11ax(HE40)	5795.00	10.87	30	Pass
NVNT	ANT2	802.11ax(HE40)	5795.00	10.52	30	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	10.41	30	Pass
NVNT	ANT2	802.11ac(VHT80)	5775.00	11.57	30	Pass
NVNT	ANT1	802.11ax(HE80)	5775.00	10.77	30	Pass
NVNT	ANT2	802.11ax(HE80)	5775.00	10.54	30	Pass
NVNT	ANT1	802.11ax(HE20)	5745.00	10.31	30	Pass
NVNT	ANT2	802.11ax(HE20)	5745.00	11.81	30	Pass
NVNT	ANT1	802.11ax(HE20)	5785.00	10.72	30	Pass
NVNT	ANT2	802.11ax(HE20)	5785.00	9.55	30	Pass
NVNT	ANT1	802.11ax(HE20)	5825.00	11.21	30	Pass
NVNT	ANT2	802.11ax(HE20)	5825.00	9.06	30	Pass

Appendix B
CN25M6MM 001



Prüfbericht - Produkte
Test Report - Products

Page 48 of 224

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11a	5745.00	16.99	30	Pass
NVNT	MIMO_TX	802.11a	5785.00	16.56	30	Pass
NVNT	MIMO_TX	802.11a	5825.00	16.59	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5745.00	14.07	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5785.00	14.12	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5825.00	13.51	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5745.00	13.60	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5785.00	13.94	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5825.00	14.16	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5745.00	14.13	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5785.00	13.19	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5825.00	13.28	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5755.00	13.26	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5795.00	13.36	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5755.00	14.19	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5795.00	13.53	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	5755.00	14.27	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	5795.00	13.71	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5775.00	14.04	30	Pass
NVNT	MIMO_TX	802.11ax(HE80)	5775.00	13.67	30	Pass

Note:

- 1) The cable loss and duty cycle factor are taken into account in results, e.i.r.p.=P_(Peak power)+ G
- 3) As for Cyclic Delay Diversity (CDD), the directional gain is based on KDB662911D01 F(ii) under Unequal antenna gains: Directional gain is calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain.

Appendix B
CN25M6MM 001



Prüfbericht - Produkte
Test Report - Products

Page 49 of 224

2.3 Duty Cycle

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
NVNT	ANT1	802.11a	5180.00	92.54	0.34
NVNT	ANT2	802.11a	5180.00	92.54	0.34
NVNT	ANT1	802.11a	5200.00	92.54	0.34
NVNT	ANT2	802.11a	5200.00	92.54	0.34
NVNT	ANT1	802.11a	5240.00	93.23	0.30
NVNT	ANT2	802.11a	5240.00	92.54	0.34
NVNT	ANT1	802.11n(HT20)	5180.00	90.48	0.43
NVNT	ANT2	802.11n(HT20)	5180.00	85.71	0.67
NVNT	ANT1	802.11n(HT20)	5200.00	90.48	0.43
NVNT	ANT2	802.11n(HT20)	5200.00	90.00	0.46
NVNT	ANT1	802.11n(HT20)	5240.00	85.71	0.67
NVNT	ANT2	802.11n(HT20)	5240.00	90.48	0.43
NVNT	ANT1	802.11ac(VHT20)	5180.00	61.54	2.11
NVNT	ANT2	802.11ac(VHT20)	5180.00	64.29	1.92
NVNT	ANT1	802.11ac(VHT20)	5200.00	61.54	2.11
NVNT	ANT2	802.11ac(VHT20)	5200.00	69.23	1.60
NVNT	ANT1	802.11ac(VHT20)	5240.00	61.54	2.11
NVNT	ANT2	802.11ac(VHT20)	5240.00	61.54	2.11
NVNT	ANT1	802.11ax(HE20)	5180.00	75.00	1.25
NVNT	ANT2	802.11ax(HE20)	5180.00	75.00	1.25
NVNT	ANT1	802.11ax(HE20)	5200.00	75.00	1.25
NVNT	ANT2	802.11ax(HE20)	5200.00	75.00	1.25
NVNT	ANT1	802.11ax(HE20)	5240.00	75.00	1.25
NVNT	ANT2	802.11ax(HE20)	5240.00	75.00	1.25
NVNT	ANT1	802.11n(HT40)	5190.00	72.22	1.41
NVNT	ANT2	802.11n(HT40)	5190.00	72.22	1.41
NVNT	ANT1	802.11n(HT40)	5230.00	72.22	1.41
NVNT	ANT2	802.11n(HT40)	5230.00	73.68	1.33
NVNT	ANT1	802.11ac(VHT40)	5190.00	50.00	3.01
NVNT	ANT2	802.11ac(VHT40)	5190.00	50.00	3.01
NVNT	ANT1	802.11ac(VHT40)	5230.00	50.00	3.01
NVNT	ANT2	802.11ac(VHT40)	5230.00	50.00	3.01
NVNT	ANT1	802.11ax(HE40)	5190.00	50.00	3.01
NVNT	ANT2	802.11ax(HE40)	5190.00	50.00	3.01
NVNT	ANT1	802.11ax(HE40)	5230.00	50.00	3.01
NVNT	ANT2	802.11ax(HE40)	5230.00	50.00	3.01
NVNT	ANT1	802.11ac(VHT80)	5210.00	37.50	4.26
NVNT	ANT2	802.11ac(VHT80)	5210.00	37.50	4.26
NVNT	ANT1	802.11ax(HE80)	5210.00	37.50	4.26
NVNT	ANT2	802.11ax(HE80)	5210.00	44.44	3.52

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
NVNT	ANT1	802.11a	5745.00	92.59	0.33
NVNT	ANT2	802.11a	5745.00	92.59	0.33
NVNT	ANT1	802.11a	5785.00	92.59	0.33
NVNT	ANT2	802.11a	5785.00	92.59	0.33
NVNT	ANT1	802.11a	5825.00	92.59	0.33
NVNT	ANT2	802.11a	5825.00	92.59	0.33
NVNT	ANT1	802.11n(HT20)	5745.00	87.80	0.56
NVNT	ANT2	802.11n(HT20)	5745.00	88.10	0.55
NVNT	ANT1	802.11n(HT20)	5785.00	76.19	1.18
NVNT	ANT2	802.11n(HT20)	5785.00	76.19	1.18
NVNT	ANT1	802.11n(HT20)	5825.00	91.78	0.37
NVNT	ANT2	802.11n(HT20)	5825.00	91.89	0.37
NVNT	ANT1	802.11ac(VHT20)	5745.00	66.67	1.76
NVNT	ANT2	802.11ac(VHT20)	5745.00	66.67	1.76
NVNT	ANT1	802.11ac(VHT20)	5785.00	66.67	1.76
NVNT	ANT2	802.11ac(VHT20)	5785.00	66.67	1.76
NVNT	ANT1	802.11ac(VHT20)	5825.00	66.67	1.76
NVNT	ANT2	802.11ac(VHT20)	5825.00	66.67	1.76
NVNT	ANT1	802.11n(HT40)	5755.00	54.55	2.63
NVNT	ANT2	802.11n(HT40)	5755.00	54.55	2.63
NVNT	ANT1	802.11n(HT40)	5795.00	54.55	2.63
NVNT	ANT2	802.11n(HT40)	5795.00	54.55	2.63
NVNT	ANT1	802.11ac(VHT40)	5755.00	50.00	3.01

Appendix B
CN25M6MM 001



Prüfbericht - Produkte
Test Report - Products

Page 50 of 224

NVNT	ANT2	802.11ac(VHT40)	5755.00	54.55	2.63
NVNT	ANT1	802.11ac(VHT40)	5795.00	54.55	2.63
NVNT	ANT2	802.11ac(VHT40)	5795.00	54.55	2.63
NVNT	ANT1	802.11ax(HE40)	5755.00	50.00	3.01
NVNT	ANT2	802.11ax(HE40)	5755.00	50.00	3.01
NVNT	ANT1	802.11ax(HE40)	5795.00	50.00	3.01
NVNT	ANT2	802.11ax(HE40)	5795.00	54.55	2.63
NVNT	ANT1	802.11ac(VHT80)	5775.00	41.18	3.85
NVNT	ANT2	802.11ac(VHT80)	5775.00	44.44	3.52
NVNT	ANT1	802.11ax(HE80)	5775.00	44.44	3.52
NVNT	ANT2	802.11ax(HE80)	5775.00	44.44	3.52
NVNT	ANT1	802.11ax(HE20)	5745.00	58.33	2.34
NVNT	ANT2	802.11ax(HE20)	5745.00	58.33	2.34
NVNT	ANT1	802.11ax(HE20)	5785.00	58.33	2.34
NVNT	ANT2	802.11ax(HE20)	5785.00	58.33	2.34
NVNT	ANT1	802.11ax(HE20)	5825.00	61.54	2.11
NVNT	ANT2	802.11ax(HE20)	5825.00	61.54	2.11

3. Power Spectral Density

3.1 Test Datas Bands U-NII-1

Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	EIRP Result [dBm/MHz]	Conducted Power Limit[dBm/MHz]	EIRP Result Limit [dBm/MHz]	Verdict
ANT1	802.11a	5180.00	0.56	5.06	≤11.00	≤10.00	PASS
ANT2	802.11a	5180.00	-1.69	1.36	≤11.00	≤10.00	PASS
ANT1	802.11a	5200.00	1.13	5.63	≤11.00	≤10.00	PASS
ANT2	802.11a	5200.00	-1.90	1.15	≤11.00	≤10.00	PASS
ANT1	802.11a	5240.00	0.82	5.32	≤11.00	≤10.00	PASS
ANT2	802.11a	5240.00	-1.73	2.32	≤11.00	≤10.00	PASS
ANT1	802.11n(HT20)	5180.00	-1.86	2.64	≤11.00	≤10.00	PASS
ANT2	802.11n(HT20)	5180.00	-0.52	2.53	≤11.00	≤10.00	PASS
ANT1	802.11n(HT20)	5200.00	0.33	4.83	≤11.00	≤10.00	PASS
ANT2	802.11n(HT20)	5200.00	-0.42	2.63	≤11.00	≤10.00	PASS
ANT1	802.11n(HT20)	5240.00	-0.93	3.57	≤11.00	≤10.00	PASS
ANT2	802.11n(HT20)	5240.00	-0.10	2.95	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT20)	5180.00	0.05	4.55	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT20)	5180.00	0.50	3.55	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT20)	5200.00	-0.91	3.59	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT20)	5200.00	0.98	4.03	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT20)	5240.00	-0.96	3.54	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT20)	5240.00	0.90	3.95	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE20)	5180.00	-1.24	3.26	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE20)	5180.00	-0.74	2.31	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE20)	5200.00	-0.04	4.46	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE20)	5200.00	-0.07	2.98	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE20)	5240.00	-0.73	3.77	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE20)	5240.00	0.61	3.66	≤11.00	≤10.00	PASS
ANT1	802.11n(HT40)	5190.00	-1.99	2.51	≤11.00	≤10.00	PASS
ANT2	802.11n(HT40)	5190.00	-3.07	-0.02	≤11.00	≤10.00	PASS
ANT1	802.11n(HT40)	5230.00	0.34	4.84	≤11.00	≤10.00	PASS
ANT2	802.11n(HT40)	5230.00	-1.61	1.44	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT40)	5190.00	-0.60	3.9	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT40)	5190.00	-1.65	1.4	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT40)	5230.00	-0.23	4.27	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT40)	5230.00	-1.28	1.77	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE40)	5190.00	-1.24	3.26	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE40)	5190.00	-2.04	1.01	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE40)	5230.00	-1.44	3.06	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE40)	5230.00	1.11	4.16	≤11.00	≤10.00	PASS
ANT1	802.11ac(VHT80)	5210.00	-6.63	-2.13	≤11.00	≤10.00	PASS
ANT2	802.11ac(VHT80)	5210.00	-4.68	-1.63	≤11.00	≤10.00	PASS
ANT1	802.11ax(HE80)	5210.00	-5.75	-1.25	≤11.00	≤10.00	PASS
ANT2	802.11ax(HE80)	5210.00	-4.51	-1.46	≤11.00	≤10.00	PASS

Antenna	Modulation	Frequency (MHz)	PSD(dBm/MHz)	EIRP Result [dBm/MHz]	Conducted Power Limit[dBm/MHz]	EIRP Result Limit [dBm/MHz]	Verdict
MIMO TX	802.11a	5180.00	2.59	9.40	≤10.19	≤10.00	PASS
MIMO TX	802.11a	5200.00	2.89	9.70	≤10.19	≤10.00	PASS
MIMO TX	802.11a	5240.00	2.74	9.55	≤10.19	≤10.00	PASS
MIMO TX	802.11n(HT20)	5180.00	1.26	8.07	≤10.19	≤10.00	PASS
MIMO TX	802.11n(HT20)	5200.00	2.29	9.1	≤10.19	≤10.00	PASS
MIMO TX	802.11n(HT20)	5240.00	2.13	8.94	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT20)	5180.00	1.69	8.5	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT20)	5200.00	2.63	9.44	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT20)	5240.00	3.01	9.82	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE20)	5180.00	0.66	7.47	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE20)	5200.00	1.68	8.49	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE20)	5240.00	2.18	8.99	≤10.19	≤10.00	PASS
MIMO TX	802.11n(HT40)	5190.00	-0.55	6.26	≤10.19	≤10.00	PASS
MIMO TX	802.11n(HT40)	5230.00	1.11	7.92	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT40)	5190.00	1.04	7.85	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT40)	5230.00	0.55	7.36	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE40)	5190.00	1.28	8.09	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE40)	5230.00	2.27	9.08	≤10.19	≤10.00	PASS
MIMO TX	802.11ac(VHT80)	5210.00	-3.21	3.6	≤10.19	≤10.00	PASS
MIMO TX	802.11ax(HE80)	5210.00	-2.57	4.24	≤10.19	≤10.00	PASS

- 1) The cable loss and duty cycle factor are taken into account in results, e.i.r.p.=P_(Peak power)+ G
- 2) As for MIMO mode, the directional gain is based on KDB662911D01 F(2)(d) under Unequal antenna gains:

If transmit signals are *correlated*, then

Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

- 3) There is a reduction in conducted power limits when the directional gain gets higher than 6dBi.

3.2 Test Datas Bands U-NII-3

Condition	Antenna	Modulation	Frequency (MHz)	PSD_SA (dBm/RBW)	limit(dBm/500kHz)	Result
NVNT	ANT1	802.11a	5745.00	0.75	30	Pass
NVNT	ANT2	802.11a	5745.00	-2.14	30	Pass
NVNT	ANT1	802.11a	5785.00	0.21	30	Pass
NVNT	ANT2	802.11a	5785.00	-1.48	30	Pass
NVNT	ANT1	802.11a	5825.00	-1.07	30	Pass
NVNT	ANT2	802.11a	5825.00	-1.76	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	-1.44	30	Pass
NVNT	ANT2	802.11n(HT20)	5745.00	-0.32	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	-0.09	30	Pass
NVNT	ANT2	802.11n(HT20)	5785.00	1.69	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	0.73	30	Pass
NVNT	ANT2	802.11n(HT20)	5825.00	0.82	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	-1.61	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5745.00	-3.33	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	0.34	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5785.00	0.69	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	-0.17	30	Pass
NVNT	ANT2	802.11ac(VHT20)	5825.00	2.60	30	Pass
NVNT	ANT1	802.11ax(HE20)	5745.00	-2.63	30	Pass
NVNT	ANT2	802.11ax(HE20)	5745.00	-2.41	30	Pass
NVNT	ANT1	802.11ax(HE20)	5785.00	0.66	30	Pass
NVNT	ANT2	802.11ax(HE20)	5785.00	0.58	30	Pass
NVNT	ANT1	802.11ax(HE20)	5825.00	0.20	30	Pass
NVNT	ANT2	802.11ax(HE20)	5825.00	-0.94	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	-0.84	30	Pass
NVNT	ANT2	802.11n(HT40)	5755.00	-0.58	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	-1.49	30	Pass
NVNT	ANT2	802.11n(HT40)	5795.00	-0.73	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	1.52	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5755.00	-0.73	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	-0.41	30	Pass
NVNT	ANT2	802.11ac(VHT40)	5795.00	-0.66	30	Pass
NVNT	ANT1	802.11ax(HE40)	5755.00	-3.85	30	Pass
NVNT	ANT2	802.11ax(HE40)	5755.00	-4.11	30	Pass
NVNT	ANT1	802.11ax(HE40)	5795.00	-2.00	30	Pass
NVNT	ANT2	802.11ax(HE40)	5795.00	-3.11	30	Pass
NVNT	ANT1	802.11ac(VHT80)	5775.00	-5.21	30	Pass
NVNT	ANT2	802.11ac(VHT80)	5775.00	-5.65	30	Pass
NVNT	ANT1	802.11ax(HE80)	5775.00	-5.09	30	Pass
NVNT	ANT2	802.11ax(HE80)	5775.00	-5.06	30	Pass

Condition	Antenna	Mode	Frequency (MHz)	MIMO PSD(dBm/500kHz)	Limit(dBm/500kHz)	Result
NVNT	MIMO_TX	802.11a	5745.00	2.55	30	Pass
NVNT	MIMO_TX	802.11a	5785.00	2.46	30	Pass
NVNT	MIMO_TX	802.11a	5825.00	3.12	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5745.00	1.83	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5785.00	3.09	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	5825.00	3.12	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5745.00	-0.18	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5785.00	1.66	30	Pass
NVNT	MIMO_TX	802.11ac(VHT20)	5825.00	4.24	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5745.00	0.26	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5785.00	2.62	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	5825.00	2.47	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5755.00	1.53	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	5795.00	1.59	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5755.00	2.49	30	Pass
NVNT	MIMO_TX	802.11ac(VHT40)	5795.00	1.14	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	5755.00	-1.56	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	5795.00	0.14	30	Pass
NVNT	MIMO_TX	802.11ac(VHT80)	5775.00	-3.89	30	Pass
NVNT	MIMO_TX	802.11ax(HE80)	5775.00	-3.15	30	Pass

- 1) The cable loss and duty cycle factor are taken into account in results, e.i.r.p.=P_(Peak power)+ G
- 2) As for MIMO mode, the directional gain is based on KDB662911D01 F(2)(d) under Unequal antenna gains:
If transmit signals are *correlated*, then
Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{\text{ANT}}]$ dBi [Note the “20”s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
- 3) There is a reduction in conducted power limits when the directional gain gets higher than 6dBi.

3.3 Test Plots

Only the worst cases (20MHz bandwidth) listed



Power Spectral Density NVNT ANT1 802 11a 5200



Power Spectral Density NVNT ANT2 802 11a 5200

