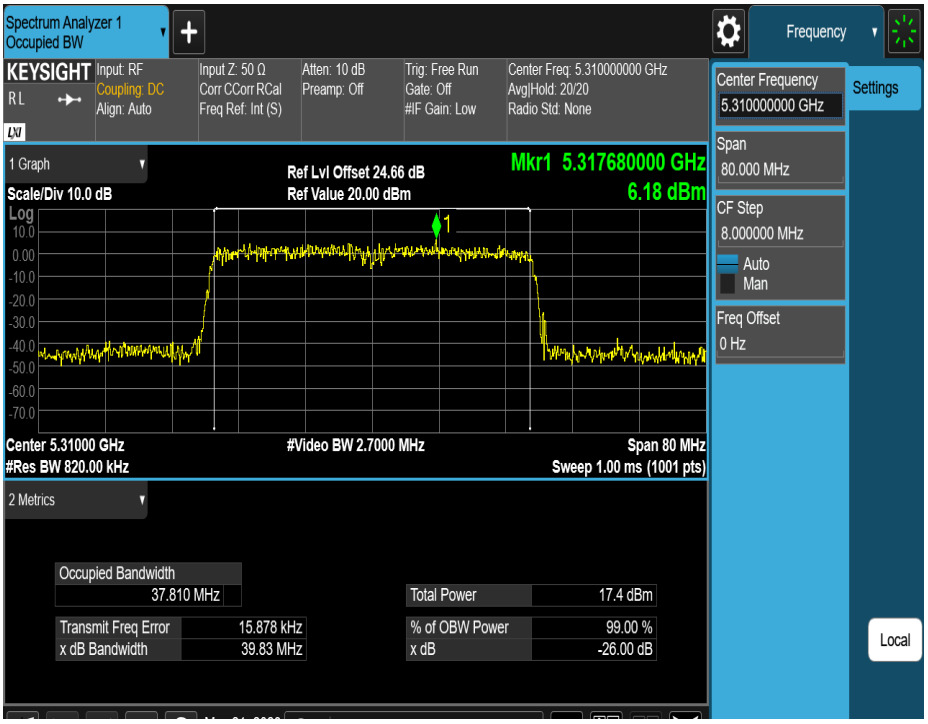
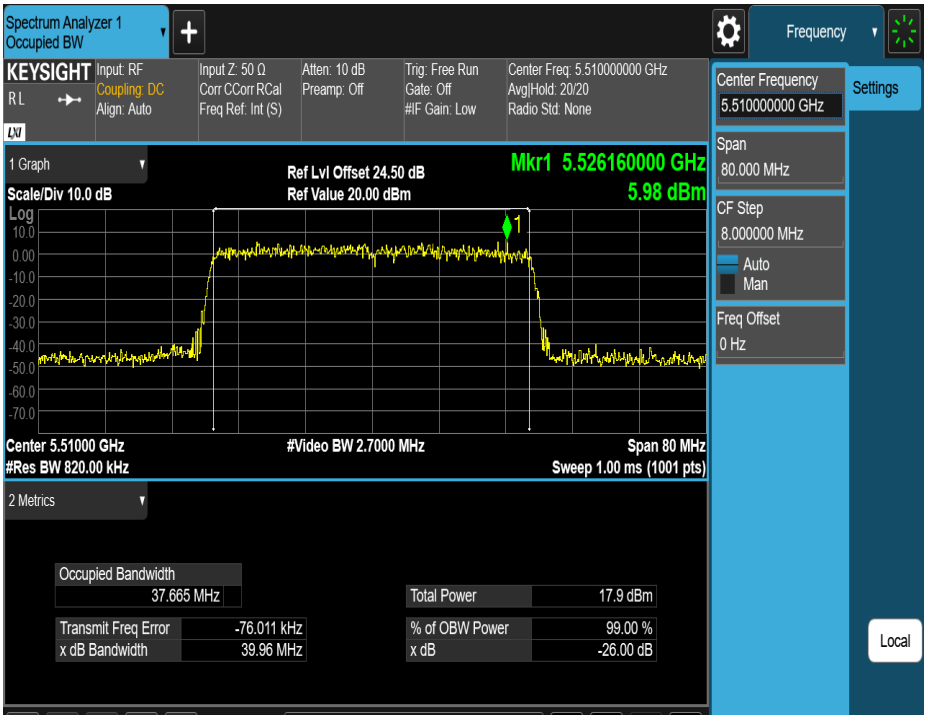
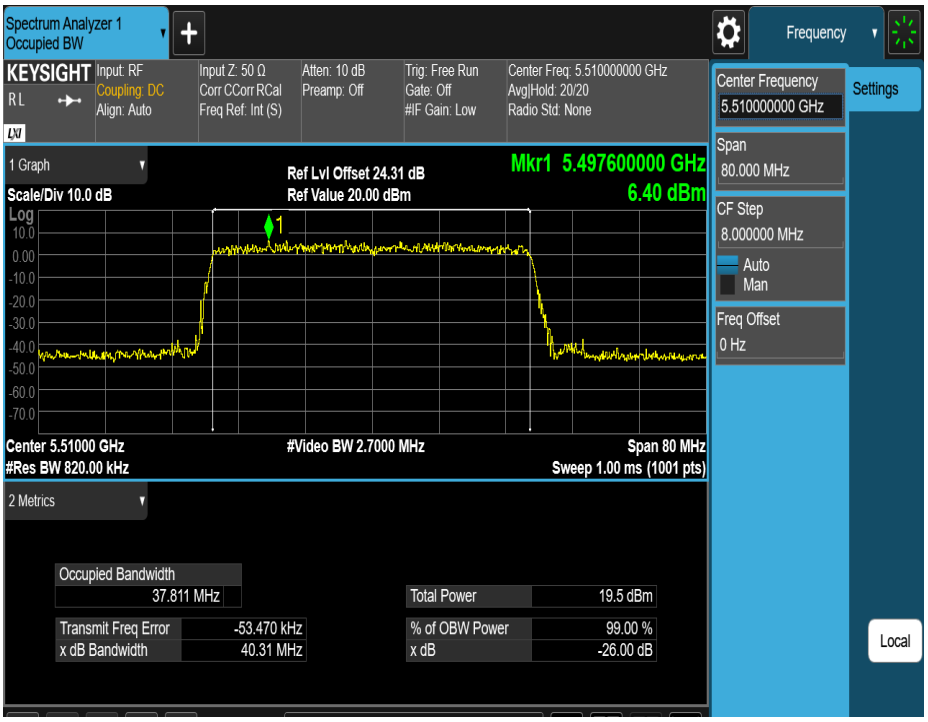
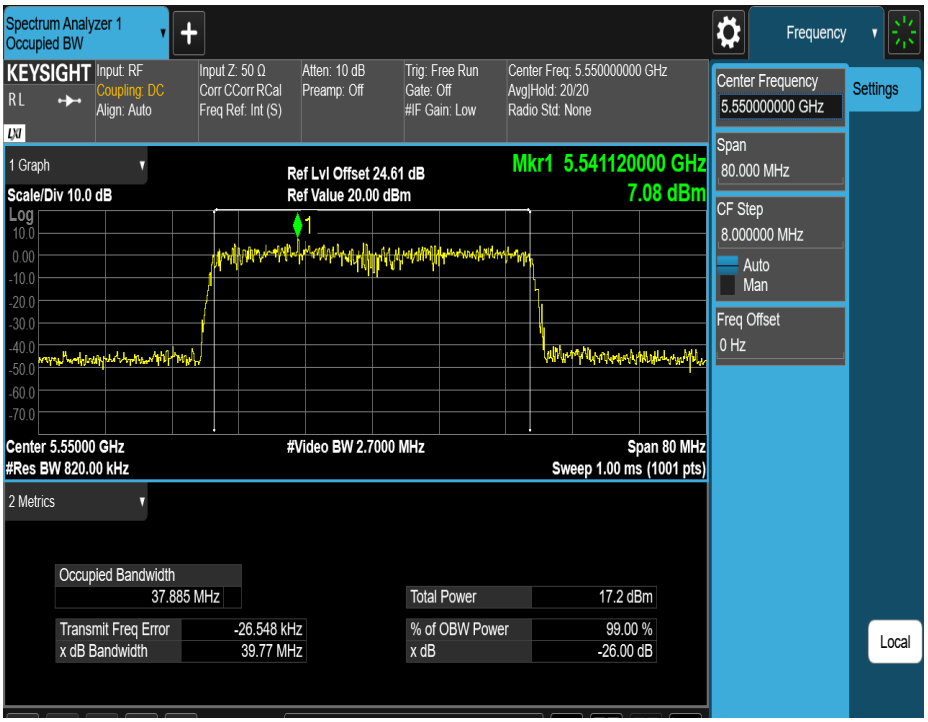
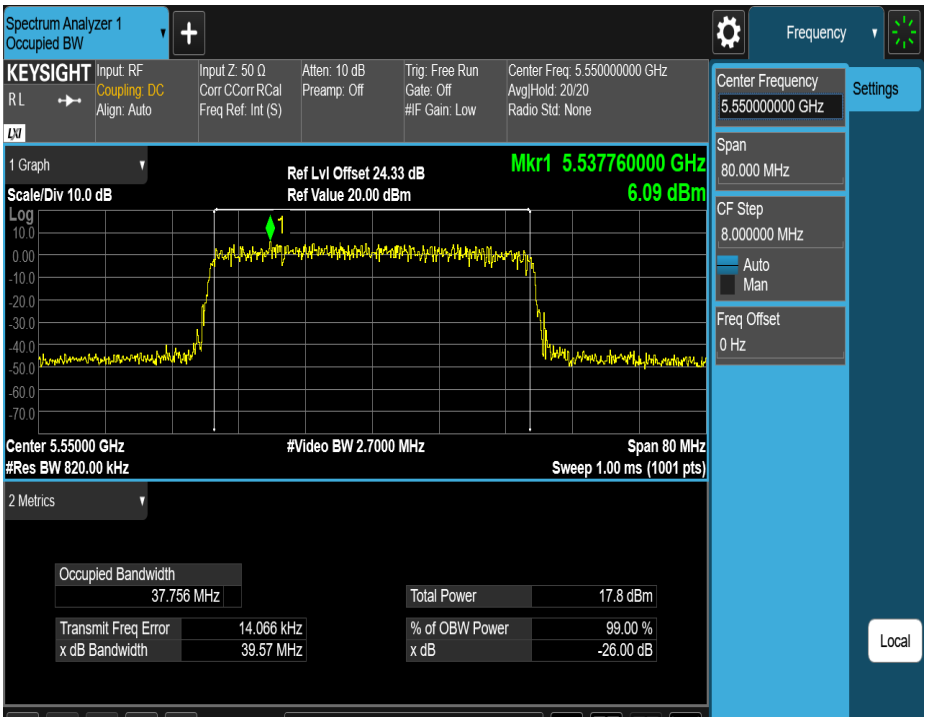
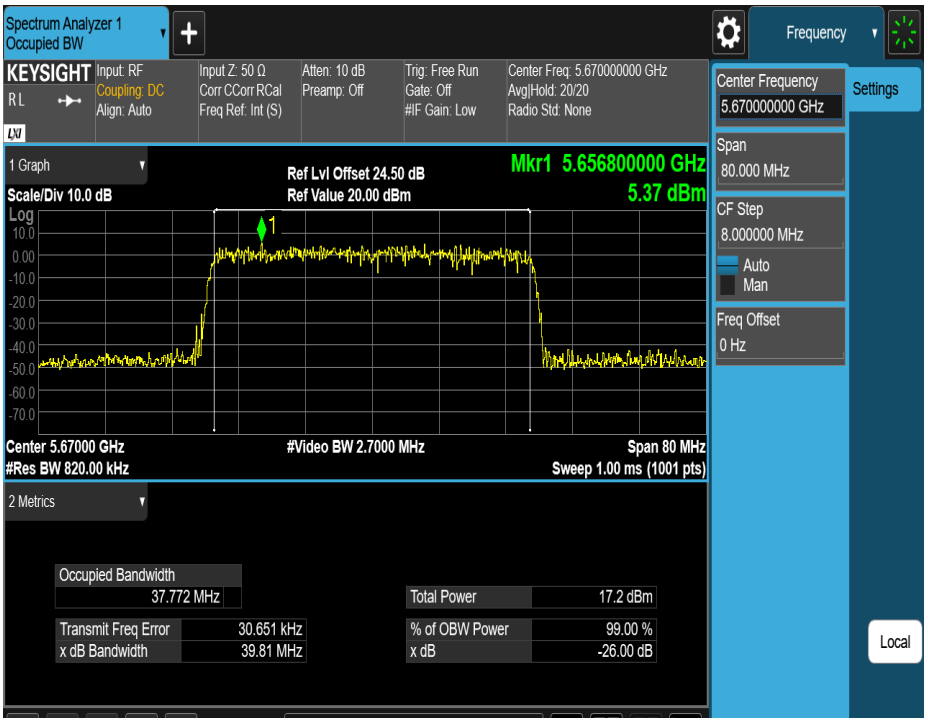
11AX40MIMO_Ant2_5310


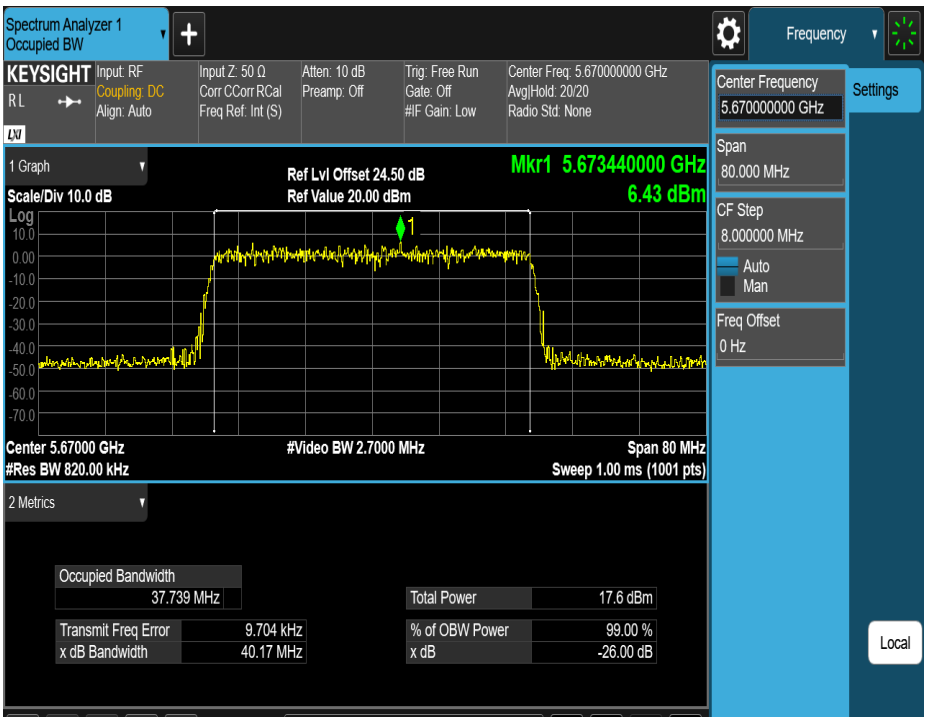
11AX40MIMO_Ant1_5510


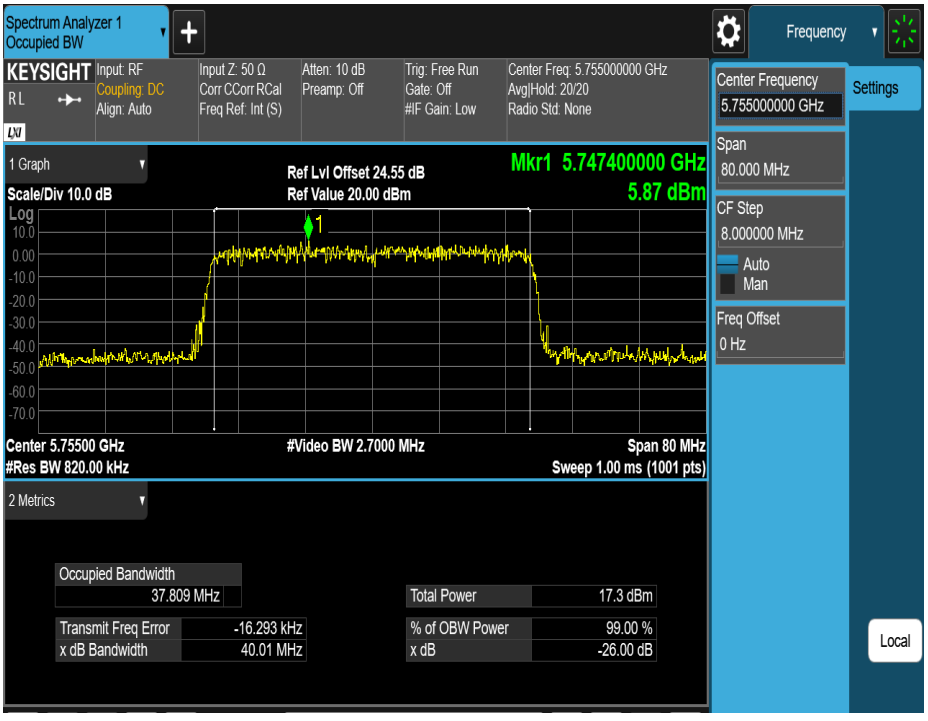
11AX40MIMO_Ant2_5510


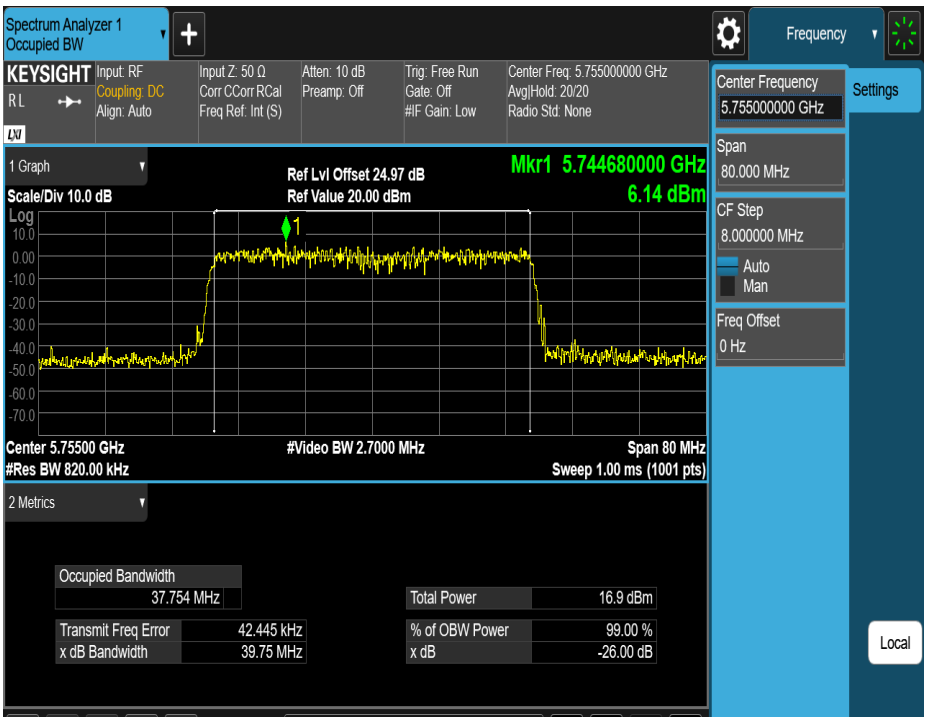
11AX40MIMO_Ant1_5550


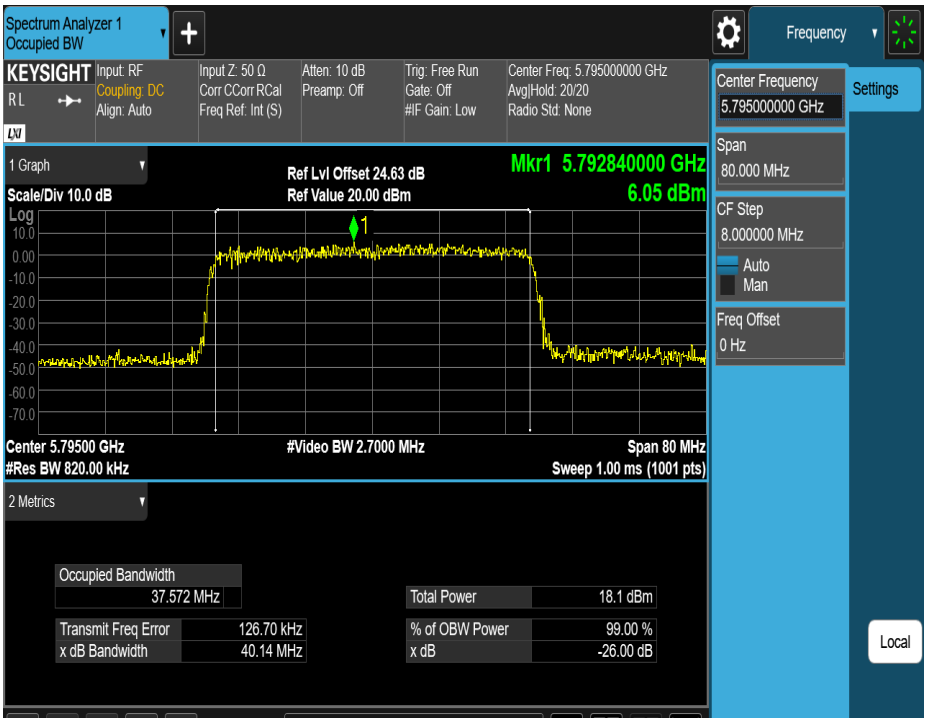
11AX40MIMO_Ant2_5550


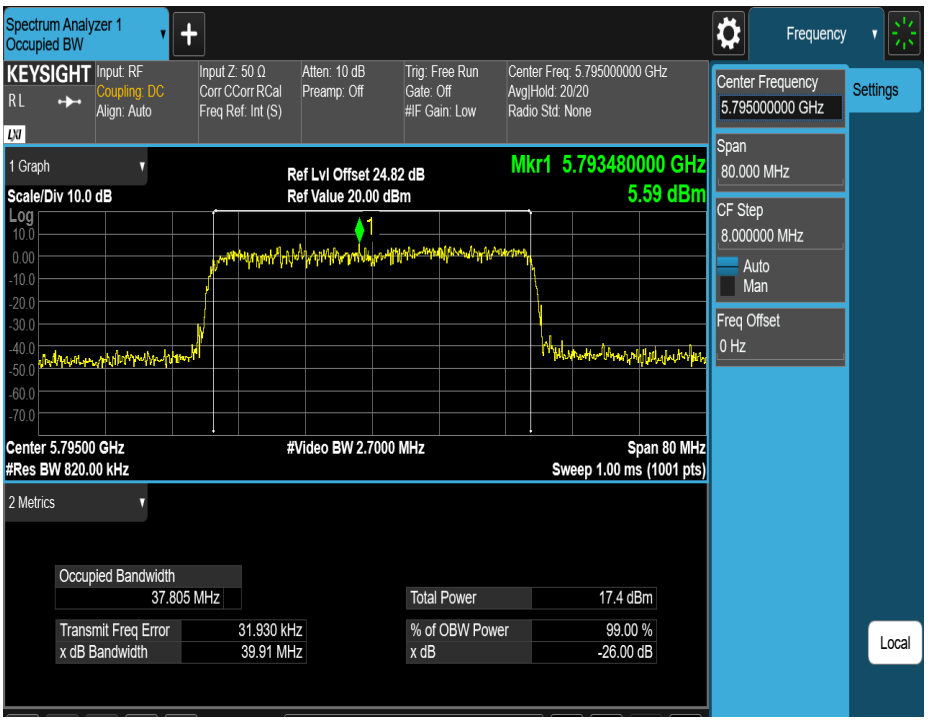
11AX40MIMO_Ant1_5670


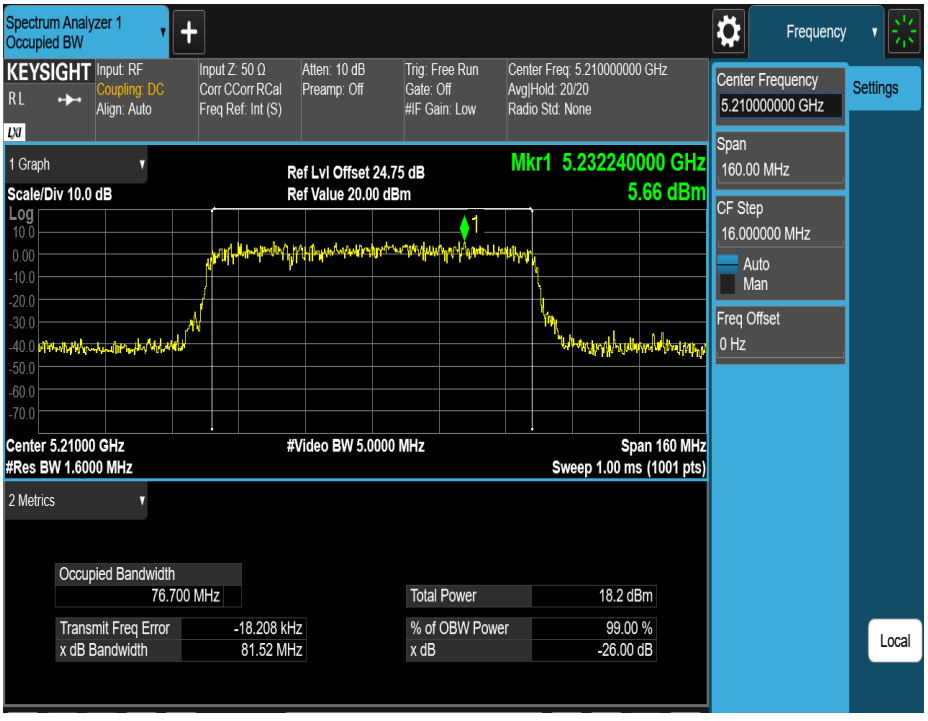
11AX40MIMO_Ant2_5670


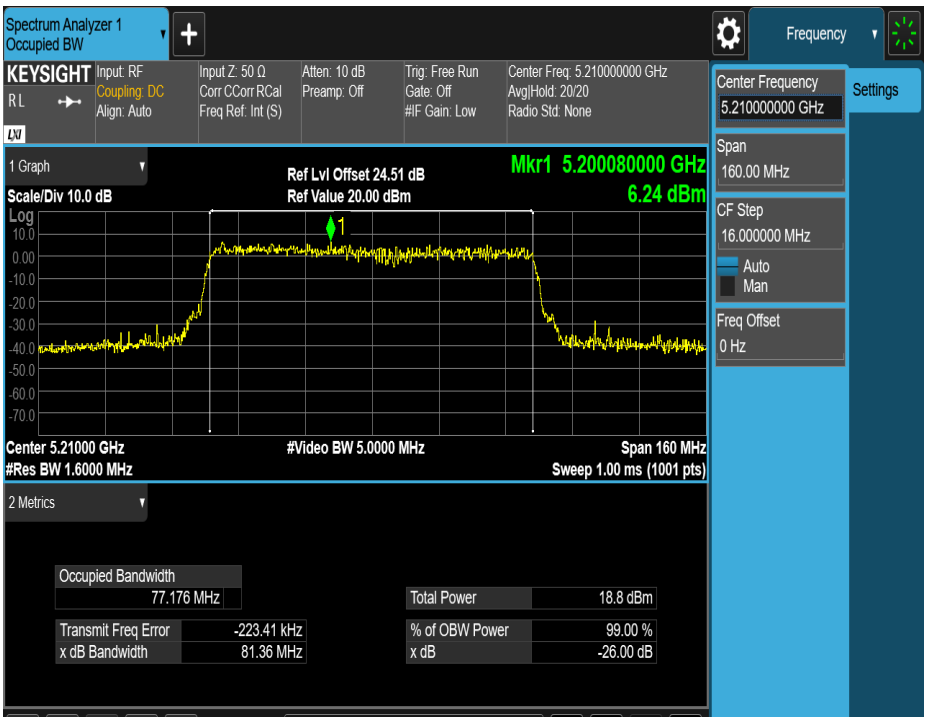
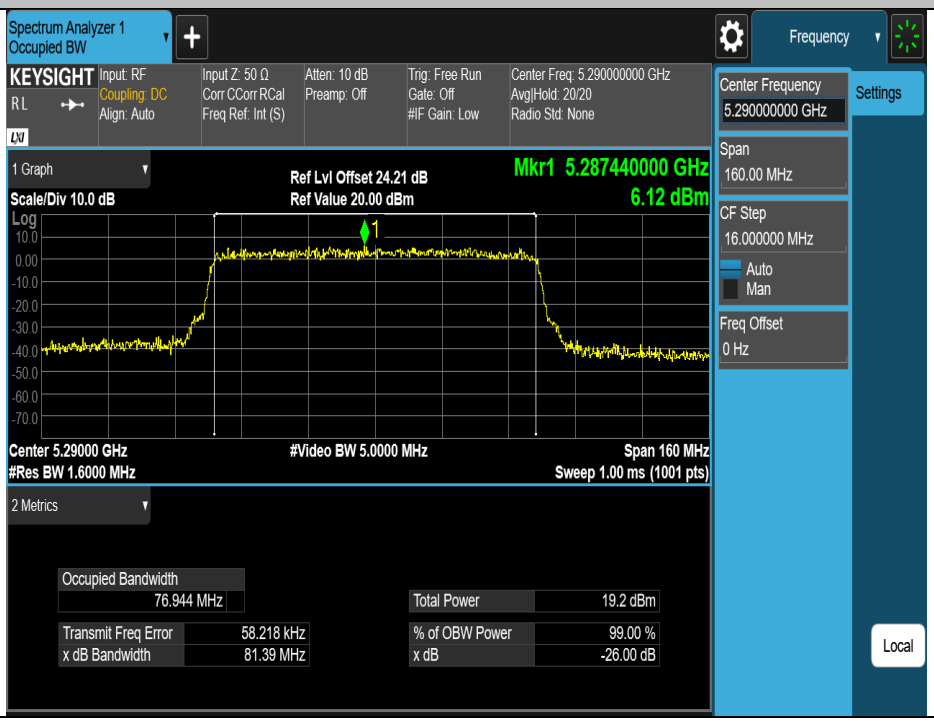
11AX40MIMO_Ant1_5755


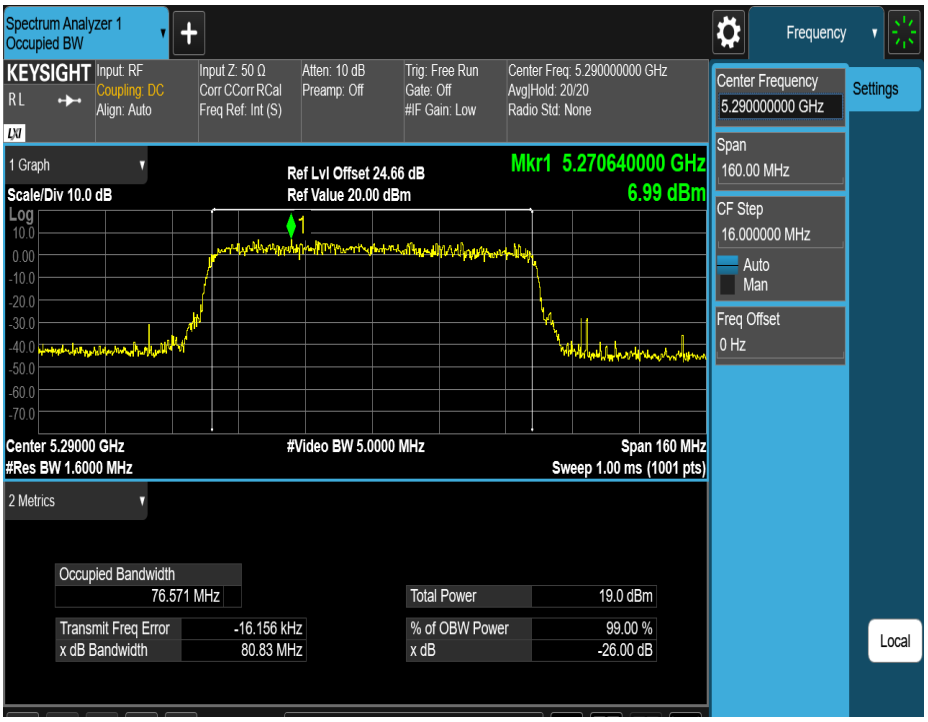
11AX40MIMO_Ant2_5755


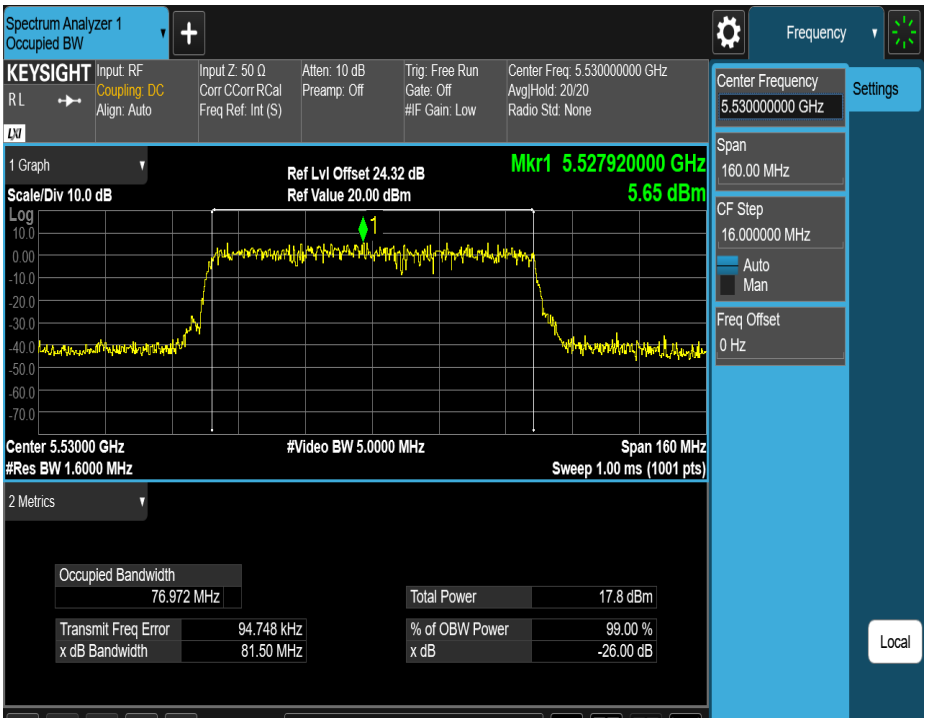
11AX40MIMO_Ant1_5795


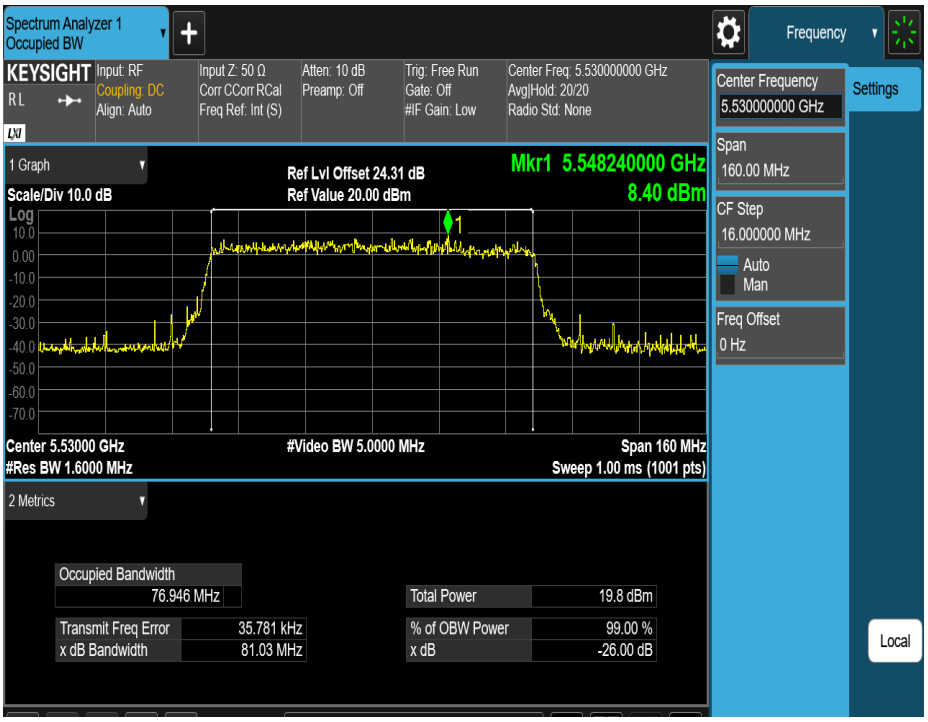
11AX40MIMO_Ant2_5795


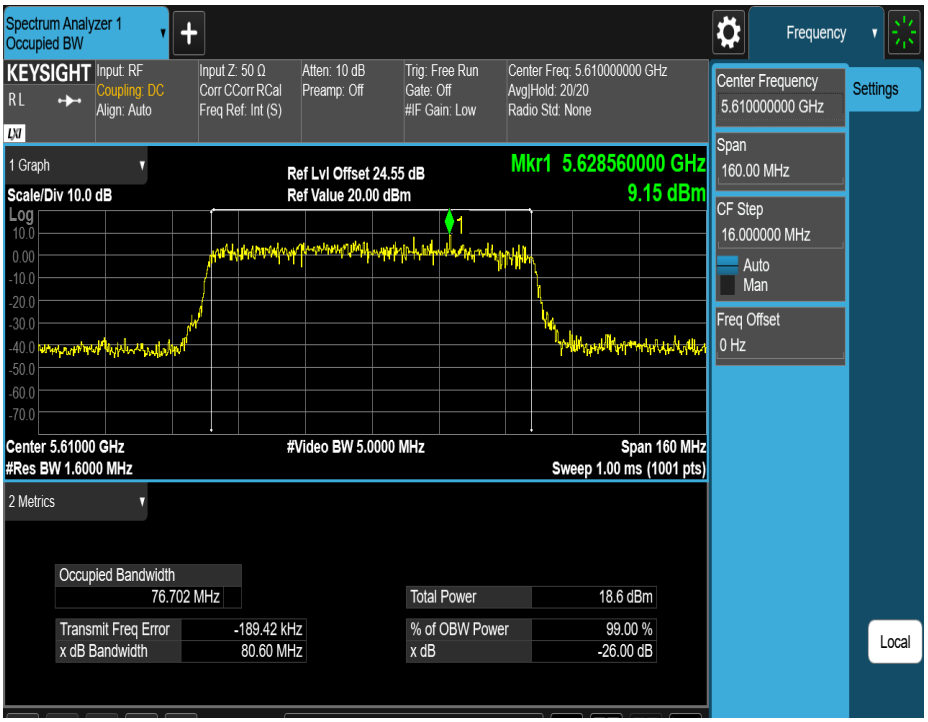
11AX80MIMO_Ant1_5210


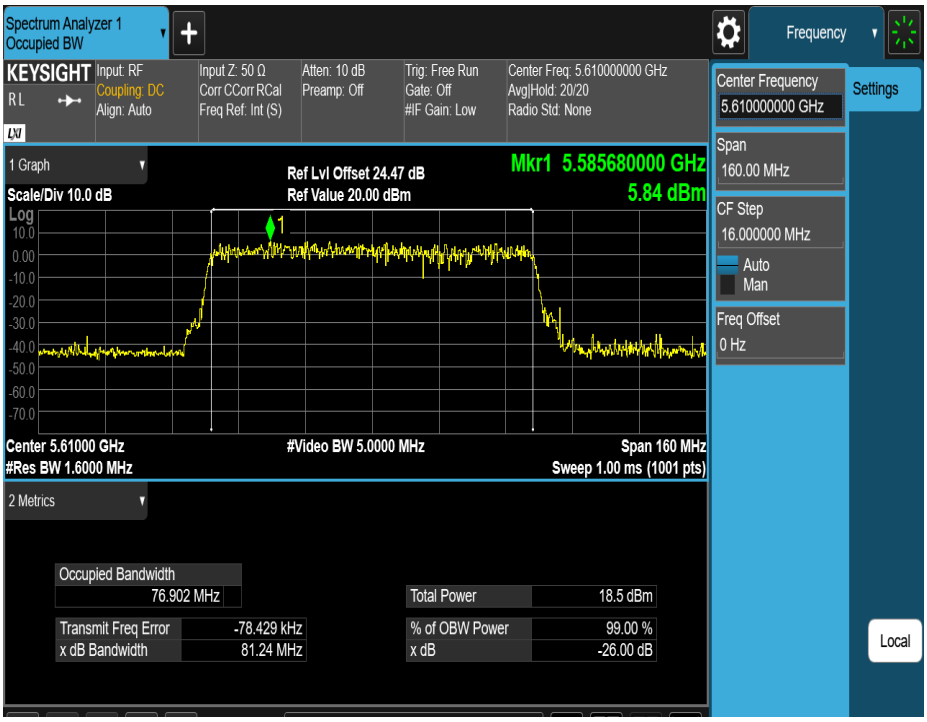
11AX80MIMO_Ant2_5210

11AX80MIMO_Ant1_5290


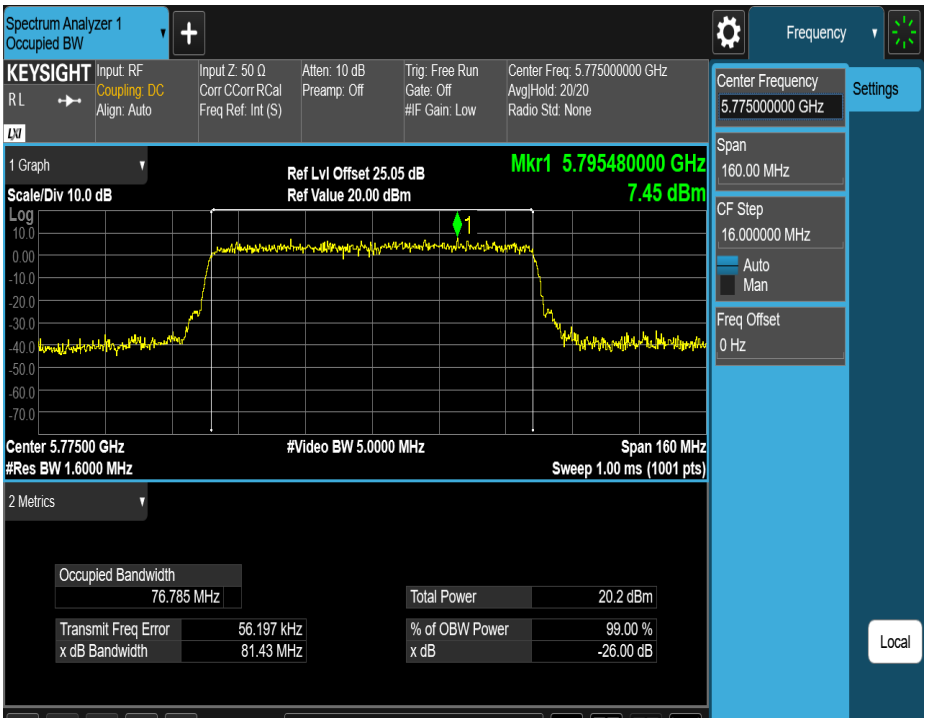
11AX80MIMO_Ant2_5290


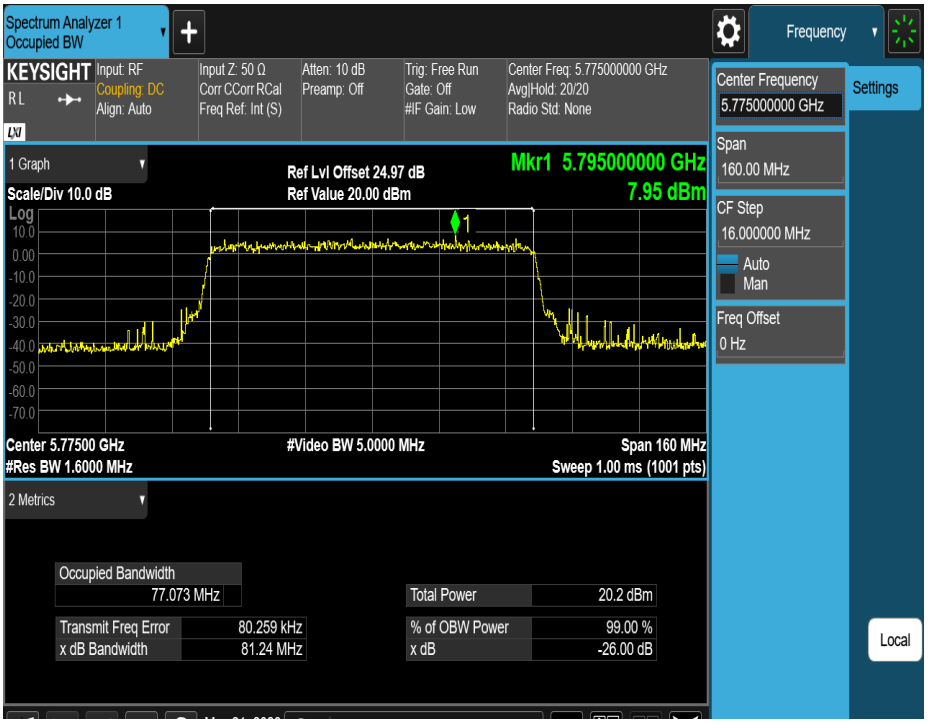
11AX80MIMO_Ant1_5530


11AX80MIMO_Ant2_5530


11AX80MIMO_Ant1_5610


11AX80MIMO_Ant2_5610


11AX80MIMO_Ant1_5775


11AX80MIMO_Ant2_5775


3.4 Conducted Output Power

3.4.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Conducted Output Power	Master device: 1 Watt (30 dBm) Client device: 250 mW (23.98 dBm)	5150-5250
		250 mW (23.98 dBm)	5250-5350
		250 mW (23.98 dBm)	5470-5725
		1 Watt (30dBm)	5725-5850

Note:

a. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

3.4.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

a) The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.

b) Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

3.4.3 Test Setup

3.4.4 Table of Parameters of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

NO Beamforming

Test Mode	Power Level Setting defined by Manufacturer							
	ALL ANT							
	Band	Value	Band	Value	Band	Value	Band	Value
11A	U-NII-1	17	U-NII-2A	17	U-NII-2C	17	U-NII-3	17
11N20MIMO	U-NII-1	14	U-NII-2A	14	U-NII-2C	14	U-NII-3	14
11N40MIMO	U-NII-1	13	U-NII-2A	13	U-NII-2C	13	U-NII-3	13
11AC20MIMO	U-NII-1	14	U-NII-2A	14	U-NII-2C	14	U-NII-3	14
11AC40MIMO	U-NII-1	13	U-NII-2A	13	U-NII-2C	13	U-NII-3	13
11AC80MIMO	U-NII-1	13	U-NII-2A	13	U-NII-2C	13	U-NII-3	13
11AX20MIMO	U-NII-1	14	U-NII-2A	14	U-NII-2C	14	U-NII-3	14
11AX40MIMO	U-NII-1	13	U-NII-2A	13	U-NII-2C	13	U-NII-3	13
11AX80MIMO	U-NII-1	13	U-NII-2A	13	U-NII-2C	13	U-NII-3	13

Beamforming

Test Mode	Power Level Setting defined by Manufacturer							
	ALL ANT							
	Band	Value	Band	Value	Band	Value	Band	Value
11N20MIMO	U-NII-1	11	U-NII-2A	11	U-NII-2C	11	U-NII-3	11
11N40MIMO	U-NII-1	10	U-NII-2A	10	U-NII-2C	10	U-NII-3	10
11AC20MIMO	U-NII-1	11	U-NII-2A	11	U-NII-2C	11	U-NII-3	11
11AC40MIMO	U-NII-1	10	U-NII-2A	10	U-NII-2C	10	U-NII-3	10
11AC80MIMO	U-NII-1	9	U-NII-2A	9	U-NII-2C	9	U-NII-3	9
11AX20MIMO	U-NII-1	11	U-NII-2A	11	U-NII-2C	11	U-NII-3	11
11AX40MIMO	U-NII-1	10	U-NII-2A	10	U-NII-2C	10	U-NII-3	10
11AX80MIMO	U-NII-1	9	U-NII-2A	9	U-NII-2C	9	U-NII-3	9

3.4.5 The Result

No beamforming

Test Mode	Antenna	Frequency[MHz]	Conducted Average power [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	17.48	≤30	PASS
11A	Ant2	5180	17.31	≤30	PASS
11A	Ant1	5200	17.59	≤30	PASS
11A	Ant2	5200	17.18	≤30	PASS
11A	Ant1	5240	17.88	≤30	PASS
11A	Ant2	5240	17.57	≤30	PASS
11A	Ant1	5260	17.86	≤23.98	PASS
11A	Ant2	5260	17.64	≤23.98	PASS
11A	Ant1	5280	**17.89**	≤23.98	PASS
11A	Ant2	5280	17.70	≤23.98	PASS
11A	Ant1	5320	17.40	≤23.98	PASS
11A	Ant2	5320	17.34	≤23.98	PASS
11A	Ant1	5500	17.28	≤23.98	PASS
11A	Ant2	5500	17.21	≤23.98	PASS
11A	Ant1	5580	17.74	≤23.98	PASS
11A	Ant2	5580	17.37	≤23.98	PASS
11A	Ant1	5700	17.24	≤23.98	PASS
11A	Ant2	5700	17.12	≤23.98	PASS
11A	Ant1	5745	17.49	≤30	PASS
11A	Ant2	5745	17.36	≤30	PASS
11A	Ant1	5785	17.50	≤30	PASS
11A	Ant2	5785	17.42	≤30	PASS
11A	Ant1	5825	17.64	≤30	PASS
11A	Ant2	5825	17.56	≤30	PASS
11N20MIMO	Ant1	5180	14.63	≤27.76	PASS
11N20MIMO	Ant2	5180	14.18	≤27.76	PASS
11N20MIMO	total	5180	17.42	≤27.76	PASS
11N20MIMO	Ant1	5200	14.64	≤27.76	PASS
11N20MIMO	Ant2	5200	14.02	≤27.76	PASS
11N20MIMO	total	5200	17.35	≤27.76	PASS
11N20MIMO	Ant1	5240	14.51	≤27.76	PASS
11N20MIMO	Ant2	5240	14.05	≤27.76	PASS
11N20MIMO	total	5240	17.30	≤27.76	PASS
11N20MIMO	Ant1	5260	14.68	≤21.74	PASS
11N20MIMO	Ant2	5260	14.04	≤21.74	PASS
11N20MIMO	total	5260	17.38	≤21.74	PASS
11N20MIMO	Ant1	5280	14.62	≤21.74	PASS

11N20MIMO	Ant2	5280	14.23	≤21.74	PASS
11N20MIMO	total	5280	17.44	≤21.74	PASS
11N20MIMO	Ant1	5320	14.44	≤21.74	PASS
11N20MIMO	Ant2	5320	14.01	≤21.74	PASS
11N20MIMO	total	5320	17.24	≤21.74	PASS
11N20MIMO	Ant1	5500	14.44	≤21.74	PASS
11N20MIMO	Ant2	5500	14.19	≤21.74	PASS
11N20MIMO	total	5500	17.33	≤21.74	PASS
11N20MIMO	Ant1	5580	14.61	≤21.74	PASS
11N20MIMO	Ant2	5580	14.06	≤21.74	PASS
11N20MIMO	total	5580	17.35	≤21.74	PASS
11N20MIMO	Ant1	5700	14.44	≤21.74	PASS
11N20MIMO	Ant2	5700	14.21	≤21.74	PASS
11N20MIMO	total	5700	17.34	≤21.74	PASS
11N20MIMO	Ant1	5745	14.57	≤27.76	PASS
11N20MIMO	Ant2	5745	14.29	≤27.76	PASS
11N20MIMO	total	5745	17.44	≤27.76	PASS
11N20MIMO	Ant1	5785	14.45	≤27.76	PASS
11N20MIMO	Ant2	5785	14.14	≤27.76	PASS
11N20MIMO	total	5785	17.31	≤27.76	PASS
11N20MIMO	Ant1	5825	14.53	≤27.76	PASS
11N20MIMO	Ant2	5825	14.15	≤27.76	PASS
11N20MIMO	total	5825	17.36	≤27.76	PASS
11N40MIMO	Ant1	5190	13.94	≤27.76	PASS
11N40MIMO	Ant2	5190	13.45	≤27.76	PASS
11N40MIMO	total	5190	16.71	≤27.76	PASS
11N40MIMO	Ant1	5230	13.71	≤27.76	PASS
11N40MIMO	Ant2	5230	13.45	≤27.76	PASS
11N40MIMO	total	5230	16.59	≤27.76	PASS
11N40MIMO	Ant1	5270	13.91	≤21.74	PASS
11N40MIMO	Ant2	5270	13.51	≤21.74	PASS
11N40MIMO	total	5270	16.73	≤21.74	PASS
11N40MIMO	Ant1	5310	13.81	≤21.74	PASS
11N40MIMO	Ant2	5310	13.42	≤21.74	PASS
11N40MIMO	total	5310	16.63	≤21.74	PASS
11N40MIMO	Ant1	5510	13.62	≤21.74	PASS
11N40MIMO	Ant2	5510	13.32	≤21.74	PASS
11N40MIMO	total	5510	16.48	≤21.74	PASS
11N40MIMO	Ant1	5550	13.82	≤21.74	PASS
11N40MIMO	Ant2	5550	13.44	≤21.74	PASS
11N40MIMO	total	5550	16.65	≤21.74	PASS

11N40MIMO	Ant1	5670	13.78	≤21.74	PASS
11N40MIMO	Ant2	5670	13.43	≤21.74	PASS
11N40MIMO	total	5670	16.62	≤21.74	PASS
11N40MIMO	Ant1	5755	13.66	≤27.76	PASS
11N40MIMO	Ant2	5755	13.34	≤27.76	PASS
11N40MIMO	total	5755	16.51	≤27.76	PASS
11N40MIMO	Ant1	5795	13.98	≤27.76	PASS
11N40MIMO	Ant2	5795	13.52	≤27.76	PASS
11N40MIMO	total	5795	16.77	≤27.76	PASS
11AC20MIMO	Ant1	5180	14.25	≤27.76	PASS
11AC20MIMO	Ant2	5180	14.00	≤27.76	PASS
11AC20MIMO	total	5180	17.14	≤27.76	PASS
11AC20MIMO	Ant1	5200	14.43	≤27.76	PASS
11AC20MIMO	Ant2	5200	14.04	≤27.76	PASS
11AC20MIMO	total	5200	17.25	≤27.76	PASS
11AC20MIMO	Ant1	5240	14.40	≤27.76	PASS
11AC20MIMO	Ant2	5240	13.82	≤27.76	PASS
11AC20MIMO	total	5240	17.13	≤27.76	PASS
11AC20MIMO	Ant1	5260	14.25	≤21.74	PASS
11AC20MIMO	Ant2	5260	13.88	≤21.74	PASS
11AC20MIMO	total	5260	17.08	≤21.74	PASS
11AC20MIMO	Ant1	5280	14.56	≤21.74	PASS
11AC20MIMO	Ant2	5280	14.18	≤21.74	PASS
11AC20MIMO	total	5280	17.39	≤21.74	PASS
11AC20MIMO	Ant1	5320	14.26	≤21.74	PASS
11AC20MIMO	Ant2	5320	13.89	≤21.74	PASS
11AC20MIMO	total	5320	17.09	≤21.74	PASS
11AC20MIMO	Ant1	5500	14.27	≤21.74	PASS
11AC20MIMO	Ant2	5500	13.94	≤21.74	PASS
11AC20MIMO	total	5500	17.12	≤21.74	PASS
11AC20MIMO	Ant1	5580	14.45	≤21.74	PASS
11AC20MIMO	Ant2	5580	14.08	≤21.74	PASS
11AC20MIMO	total	5580	17.28	≤21.74	PASS
11AC20MIMO	Ant1	5700	14.21	≤21.74	PASS
11AC20MIMO	Ant2	5700	13.84	≤21.74	PASS
11AC20MIMO	total	5700	17.04	≤21.74	PASS
11AC20MIMO	Ant1	5745	14.42	≤27.76	PASS
11AC20MIMO	Ant2	5745	13.94	≤27.76	PASS
11AC20MIMO	total	5745	17.20	≤27.76	PASS
11AC20MIMO	Ant1	5785	14.24	≤27.76	PASS
11AC20MIMO	Ant2	5785	13.82	≤27.76	PASS

11AC20MIMO	total	5785	17.04	≤27.76	PASS
11AC20MIMO	Ant1	5825	14.33	≤27.76	PASS
11AC20MIMO	Ant2	5825	13.76	≤27.76	PASS
11AC20MIMO	total	5825	17.06	≤27.76	PASS
11AC40MIMO	Ant1	5190	13.39	≤27.76	PASS
11AC40MIMO	Ant2	5190	13.00	≤27.76	PASS
11AC40MIMO	total	5190	16.21	≤27.76	PASS
11AC40MIMO	Ant1	5230	13.53	≤27.76	PASS
11AC40MIMO	Ant2	5230	13.03	≤27.76	PASS
11AC40MIMO	total	5230	16.29	≤27.76	PASS
11AC40MIMO	Ant1	5270	13.60	≤21.74	PASS
11AC40MIMO	Ant2	5270	13.09	≤21.74	PASS
11AC40MIMO	total	5270	16.36	≤21.74	PASS
11AC40MIMO	Ant1	5310	13.48	≤21.74	PASS
11AC40MIMO	Ant2	5310	13.05	≤21.74	PASS
11AC40MIMO	total	5310	16.28	≤21.74	PASS
11AC40MIMO	Ant1	5510	13.64	≤21.74	PASS
11AC40MIMO	Ant2	5510	13.09	≤21.74	PASS
11AC40MIMO	total	5510	16.39	≤21.74	PASS
11AC40MIMO	Ant1	5550	13.62	≤21.74	PASS
11AC40MIMO	Ant2	5550	13.15	≤21.74	PASS
11AC40MIMO	total	5550	16.40	≤21.74	PASS
11AC40MIMO	Ant1	5670	13.70	≤21.74	PASS
11AC40MIMO	Ant2	5670	13.18	≤21.74	PASS
11AC40MIMO	total	5670	16.46	≤21.74	PASS
11AC40MIMO	Ant1	5755	13.69	≤27.76	PASS
11AC40MIMO	Ant2	5755	13.15	≤27.76	PASS
11AC40MIMO	total	5755	16.44	≤27.76	PASS
11AC40MIMO	Ant1	5795	13.58	≤27.76	PASS
11AC40MIMO	Ant2	5795	13.26	≤27.76	PASS
11AC40MIMO	total	5795	16.43	≤27.76	PASS
11AC80MIMO	Ant1	5210	12.81	≤27.76	PASS
11AC80MIMO	Ant2	5210	12.52	≤27.76	PASS
11AC80MIMO	total	5210	15.68	≤27.76	PASS
11AC80MIMO	Ant1	5290	12.73	≤21.74	PASS
11AC80MIMO	Ant2	5290	12.42	≤21.74	PASS
11AC80MIMO	total	5290	15.59	≤21.74	PASS
11AC80MIMO	Ant1	5530	12.61	≤21.74	PASS
11AC80MIMO	Ant2	5530	12.29	≤21.74	PASS
11AC80MIMO	total	5530	15.46	≤21.74	PASS
11AC80MIMO	Ant1	5610	12.75	≤21.74	PASS

11AC80MIMO	Ant2	5610	12.35	≤21.74	PASS
11AC80MIMO	total	5610	15.57	≤21.74	PASS
11AC80MIMO	Ant1	5775	12.76	≤27.76	PASS
11AC80MIMO	Ant2	5775	12.32	≤27.76	PASS
11AC80MIMO	total	5775	15.55	≤27.76	PASS
11AX20MIMO	Ant1	5180	14.35	≤27.76	PASS
11AX20MIMO	Ant2	5180	13.81	≤27.76	PASS
11AX20MIMO	total	5180	17.10	≤27.76	PASS
11AX20MIMO	Ant1	5200	14.14	≤27.76	PASS
11AX20MIMO	Ant2	5200	13.86	≤27.76	PASS
11AX20MIMO	total	5200	17.01	≤27.76	PASS
11AX20MIMO	Ant1	5240	14.25	≤27.76	PASS
11AX20MIMO	Ant2	5240	13.98	≤27.76	PASS
11AX20MIMO	total	5240	17.13	≤27.76	PASS
11AX20MIMO	Ant1	5260	14.41	≤21.74	PASS
11AX20MIMO	Ant2	5260	13.93	≤21.74	PASS
11AX20MIMO	total	5260	17.19	≤21.74	PASS
11AX20MIMO	Ant1	5280	14.48	≤21.74	PASS
11AX20MIMO	Ant2	5280	13.96	≤21.74	PASS
11AX20MIMO	total	5280	17.24	≤21.74	PASS
11AX20MIMO	Ant1	5320	14.25	≤21.74	PASS
11AX20MIMO	Ant2	5320	13.81	≤21.74	PASS
11AX20MIMO	total	5320	17.04	≤21.74	PASS
11AX20MIMO	Ant1	5500	14.40	≤21.74	PASS
11AX20MIMO	Ant2	5500	13.81	≤21.74	PASS
11AX20MIMO	total	5500	17.12	≤21.74	PASS
11AX20MIMO	Ant1	5580	14.19	≤21.74	PASS
11AX20MIMO	Ant2	5580	13.74	≤21.74	PASS
11AX20MIMO	total	5580	16.99	≤21.74	PASS
11AX20MIMO	Ant1	5700	14.12	≤21.74	PASS
11AX20MIMO	Ant2	5700	13.80	≤21.74	PASS
11AX20MIMO	total	5700	16.97	≤21.74	PASS
11AX20MIMO	Ant1	5745	14.30	≤27.76	PASS
11AX20MIMO	Ant2	5745	14.01	≤27.76	PASS
11AX20MIMO	total	5745	17.16	≤27.76	PASS
11AX20MIMO	Ant1	5785	14.24	≤27.76	PASS
11AX20MIMO	Ant2	5785	13.96	≤27.76	PASS
11AX20MIMO	total	5785	17.11	≤27.76	PASS
11AX20MIMO	Ant1	5825	14.12	≤27.76	PASS
11AX20MIMO	Ant2	5825	13.69	≤27.76	PASS
11AX20MIMO	total	5825	16.92	≤27.76	PASS

11AX40MIMO	Ant1	5190	13.25	≤27.76	PASS
11AX40MIMO	Ant2	5190	12.90	≤27.76	PASS
11AX40MIMO	total	5190	16.09	≤27.76	PASS
11AX40MIMO	Ant1	5230	13.54	≤27.76	PASS
11AX40MIMO	Ant2	5230	13.09	≤27.76	PASS
11AX40MIMO	total	5230	16.33	≤27.76	PASS
11AX40MIMO	Ant1	5270	13.45	≤21.74	PASS
11AX40MIMO	Ant2	5270	12.92	≤21.74	PASS
11AX40MIMO	total	5270	16.20	≤21.74	PASS
11AX40MIMO	Ant1	5310	13.37	≤21.74	PASS
11AX40MIMO	Ant2	5310	12.98	≤21.74	PASS
11AX40MIMO	total	5310	16.19	≤21.74	PASS
11AX40MIMO	Ant1	5510	13.23	≤21.74	PASS
11AX40MIMO	Ant2	5510	12.84	≤21.74	PASS
11AX40MIMO	total	5510	16.05	≤21.74	PASS
11AX40MIMO	Ant1	5550	13.38	≤21.74	PASS
11AX40MIMO	Ant2	5550	12.94	≤21.74	PASS
11AX40MIMO	total	5550	16.17	≤21.74	PASS
11AX40MIMO	Ant1	5670	13.15	≤21.74	PASS
11AX40MIMO	Ant2	5670	12.76	≤21.74	PASS
11AX40MIMO	total	5670	15.97	≤21.74	PASS
11AX40MIMO	Ant1	5755	13.23	≤27.76	PASS
11AX40MIMO	Ant2	5755	12.84	≤27.76	PASS
11AX40MIMO	total	5755	16.05	≤27.76	PASS
11AX40MIMO	Ant1	5795	13.33	≤27.76	PASS
11AX40MIMO	Ant2	5795	12.88	≤27.76	PASS
11AX40MIMO	total	5795	16.12	≤27.76	PASS
11AX80MIMO	Ant1	5210	12.34	≤27.76	PASS
11AX80MIMO	Ant2	5210	11.89	≤27.76	PASS
11AX80MIMO	total	5210	15.13	≤21.74	PASS
11AX80MIMO	Ant1	5290	12.32	≤21.74	PASS
11AX80MIMO	Ant2	5290	12.02	≤21.74	PASS
11AX80MIMO	total	5290	15.18	≤21.74	PASS
11AX80MIMO	Ant1	5530	12.30	≤21.74	PASS
11AX80MIMO	Ant2	5530	11.84	≤21.74	PASS
11AX80MIMO	total	5530	15.09	≤21.74	PASS
11AX80MIMO	Ant1	5610	12.12	≤21.74	PASS
11AX80MIMO	Ant2	5610	11.93	≤21.74	PASS
11AX80MIMO	total	5610	15.04	≤21.74	PASS
11AX80MIMO	Ant1	5775	12.26	≤27.76	PASS
11AX80MIMO	Ant2	5775	11.88	≤27.76	PASS

11AX80MIMO	total	5775	15.08	≤27.76	PASS

Note: The duty cycle factor has included in power value.

For EUT1/ EUT2/EUT3/EUT4/EUT5/EUT6/EUT7

Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Power Limit (dBm)
U-NII-1	5.20	5.26	8.24	27.76
U-NII-2A	5.20	5.26	8.24	21.74
U-NII-2C	5.20	5.26	8.24	21.74
U-NII-3	5.20	5.26	8.24	27.76
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{5.20/20} + 10^{5.26/20})^2/N_{ANT}$] dBi=8.24 dBi				

For EUT8/EUT9

Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Power Limit (dBm)
U-NII-1	4.88	6.66	8.83	27.17
U-NII-2A	4.88	6.66	8.83	21.15
U-NII-2C	4.88	6.66	8.83	21.15
U-NII-3	4.88	6.66	8.83	27.17
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{4.88/20} + 10^{6.66/20})^2/N_{ANT}$] dBi=8.83 dBi				

Beamforming

11N20MIMO	Ant1	5180	11.40	≤24.76	PASS
11N20MIMO	Ant2	5180	11.02	≤24.76	PASS
11N20MIMO	total	5180	14.22	≤24.76	PASS
11N20MIMO	Ant1	5200	11.29	≤24.76	PASS
11N20MIMO	Ant2	5200	10.95	≤24.76	PASS
11N20MIMO	total	5200	14.13	≤24.76	PASS
11N20MIMO	Ant1	5240	11.20	≤24.76	PASS
11N20MIMO	Ant2	5240	10.95	≤24.76	PASS
11N20MIMO	total	5240	14.09	≤24.76	PASS
11N20MIMO	Ant1	5260	11.39	≤18.74	PASS
11N20MIMO	Ant2	5260	10.93	≤18.74	PASS
11N20MIMO	total	5260	14.18	≤18.74	PASS
11N20MIMO	Ant1	5280	11.39	≤18.74	PASS
11N20MIMO	Ant2	5280	10.89	≤18.74	PASS
11N20MIMO	total	5280	14.16	≤18.74	PASS
11N20MIMO	Ant1	5320	11.18	≤18.74	PASS
11N20MIMO	Ant2	5320	10.91	≤18.74	PASS
11N20MIMO	total	5320	14.06	≤18.74	PASS
11N20MIMO	Ant1	5500	11.42	≤18.74	PASS
11N20MIMO	Ant2	5500	10.87	≤18.74	PASS
11N20MIMO	total	5500	14.16	≤18.74	PASS
11N20MIMO	Ant1	5580	11.34	≤18.74	PASS
11N20MIMO	Ant2	5580	11.02	≤18.74	PASS
11N20MIMO	total	5580	14.19	≤18.74	PASS
11N20MIMO	Ant1	5700	11.32	≤18.74	PASS
11N20MIMO	Ant2	5700	10.99	≤18.74	PASS
11N20MIMO	total	5700	14.17	≤18.74	PASS
11N20MIMO	Ant1	5745	11.35	≤24.76	PASS
11N20MIMO	Ant2	5745	11.06	≤24.76	PASS
11N20MIMO	total	5745	14.21	≤24.76	PASS
11N20MIMO	Ant1	5785	11.23	≤24.76	PASS
11N20MIMO	Ant2	5785	10.88	≤24.76	PASS
11N20MIMO	total	5785	14.06	≤24.76	PASS
11N20MIMO	Ant1	5825	11.20	≤24.76	PASS
11N20MIMO	Ant2	5825	10.85	≤24.76	PASS
11N20MIMO	total	5825	14.04	≤24.76	PASS
11N40MIMO	Ant1	5190	10.97	≤24.76	PASS
11N40MIMO	Ant2	5190	10.51	≤24.76	PASS
11N40MIMO	total	5190	13.76	≤24.76	PASS

11N40MIMO	Ant1	5230	10.88	≤24.76	PASS
11N40MIMO	Ant2	5230	10.38	≤24.76	PASS
11N40MIMO	total	5230	13.65	≤24.76	PASS
11N40MIMO	Ant1	5270	10.80	≤18.74	PASS
11N40MIMO	Ant2	5270	10.32	≤18.74	PASS
11N40MIMO	total	5270	13.58	≤18.74	PASS
11N40MIMO	Ant1	5310	10.74	≤18.74	PASS
11N40MIMO	Ant2	5310	10.34	≤18.74	PASS
11N40MIMO	total	5310	13.55	≤18.74	PASS
11N40MIMO	Ant1	5510	10.84	≤18.74	PASS
11N40MIMO	Ant2	5510	10.38	≤18.74	PASS
11N40MIMO	total	5510	13.63	≤18.74	PASS
11N40MIMO	Ant1	5550	10.67	≤18.74	PASS
11N40MIMO	Ant2	5550	10.45	≤18.74	PASS
11N40MIMO	total	5550	13.57	≤18.74	PASS
11N40MIMO	Ant1	5670	10.89	≤18.74	PASS
11N40MIMO	Ant2	5670	10.41	≤18.74	PASS
11N40MIMO	total	5670	13.66	≤18.74	PASS
11N40MIMO	Ant1	5755	10.82	≤24.76	PASS
11N40MIMO	Ant2	5755	10.23	≤24.76	PASS
11N40MIMO	total	5755	13.55	≤24.76	PASS
11N40MIMO	Ant1	5795	10.97	≤24.76	PASS
11N40MIMO	Ant2	5795	10.48	≤24.76	PASS
11N40MIMO	total	5795	13.74	≤24.76	PASS
11AC20MIMO	Ant1	5180	11.16	≤24.76	PASS
11AC20MIMO	Ant2	5180	10.81	≤24.76	PASS
11AC20MIMO	total	5180	14.00	≤24.76	PASS
11AC20MIMO	Ant1	5200	11.51	≤24.76	PASS
11AC20MIMO	Ant2	5200	10.94	≤24.76	PASS
11AC20MIMO	total	5200	14.24	≤24.76	PASS
11AC20MIMO	Ant1	5240	11.34	≤24.76	PASS
11AC20MIMO	Ant2	5240	10.86	≤24.76	PASS
11AC20MIMO	total	5240	14.12	≤24.76	PASS
11AC20MIMO	Ant1	5260	11.30	≤18.74	PASS
11AC20MIMO	Ant2	5260	11.04	≤18.74	PASS
11AC20MIMO	total	5260	14.18	≤18.74	PASS
11AC20MIMO	Ant1	5280	11.09	≤18.74	PASS
11AC20MIMO	Ant2	5280	10.86	≤18.74	PASS
11AC20MIMO	total	5280	13.99	≤18.74	PASS
11AC20MIMO	Ant1	5320	11.38	≤18.74	PASS
11AC20MIMO	Ant2	5320	10.84	≤18.74	PASS

11AC20MIMO	total	5320	14.13	≤18.74	PASS
11AC20MIMO	Ant1	5500	11.26	≤18.74	PASS
11AC20MIMO	Ant2	5500	10.86	≤18.74	PASS
11AC20MIMO	total	5500	14.07	≤18.74	PASS
11AC20MIMO	Ant1	5580	11.28	≤18.74	PASS
11AC20MIMO	Ant2	5580	10.76	≤18.74	PASS
11AC20MIMO	total	5580	14.04	≤18.74	PASS
11AC20MIMO	Ant1	5700	11.43	≤18.74	PASS
11AC20MIMO	Ant2	5700	10.89	≤18.74	PASS
11AC20MIMO	total	5700	14.18	≤18.74	PASS
11AC20MIMO	Ant1	5745	11.29	≤24.76	PASS
11AC20MIMO	Ant2	5745	10.83	≤24.76	PASS
11AC20MIMO	total	5745	14.08	≤24.76	PASS
11AC20MIMO	Ant1	5785	11.30	≤24.76	PASS
11AC20MIMO	Ant2	5785	10.94	≤24.76	PASS
11AC20MIMO	total	5785	14.14	≤24.76	PASS
11AC20MIMO	Ant1	5825	11.12	≤24.76	PASS
11AC20MIMO	Ant2	5825	10.92	≤24.76	PASS
11AC20MIMO	total	5825	14.03	≤24.76	PASS
11AC40MIMO	Ant1	5190	10.64	≤24.76	PASS
11AC40MIMO	Ant2	5190	10.17	≤24.76	PASS
11AC40MIMO	total	5190	13.42	≤24.76	PASS
11AC40MIMO	Ant1	5230	10.60	≤24.76	PASS
11AC40MIMO	Ant2	5230	10.22	≤24.76	PASS
11AC40MIMO	total	5230	13.43	≤24.76	PASS
11AC40MIMO	Ant1	5270	10.88	≤18.74	PASS
11AC40MIMO	Ant2	5270	10.50	≤18.74	PASS
11AC40MIMO	total	5270	13.71	≤18.74	PASS
11AC40MIMO	Ant1	5310	10.63	≤18.74	PASS
11AC40MIMO	Ant2	5310	10.15	≤18.74	PASS
11AC40MIMO	total	5310	13.41	≤18.74	PASS
11AC40MIMO	Ant1	5510	10.85	≤18.74	PASS
11AC40MIMO	Ant2	5510	10.39	≤18.74	PASS
11AC40MIMO	total	5510	13.63	≤18.74	PASS
11AC40MIMO	Ant1	5550	10.80	≤18.74	PASS
11AC40MIMO	Ant2	5550	10.30	≤18.74	PASS
11AC40MIMO	total	5550	13.57	≤18.74	PASS
11AC40MIMO	Ant1	5670	10.65	≤18.74	PASS
11AC40MIMO	Ant2	5670	10.09	≤18.74	PASS
11AC40MIMO	total	5670	13.39	≤18.74	PASS
11AC40MIMO	Ant1	5755	10.59	≤24.76	PASS

11AC40MIMO	Ant2	5755	10.22	≤24.76	PASS
11AC40MIMO	total	5755	13.42	≤24.76	PASS
11AC40MIMO	Ant1	5795	10.70	≤24.76	PASS
11AC40MIMO	Ant2	5795	10.22	≤24.76	PASS
11AC40MIMO	total	5795	13.48	≤24.76	PASS
11AC80MIMO	Ant1	5210	10.05	≤24.76	PASS
11AC80MIMO	Ant2	5210	9.59	≤24.76	PASS
11AC80MIMO	total	5210	12.84	≤24.76	PASS
11AC80MIMO	Ant1	5290	9.79	≤18.74	PASS
11AC80MIMO	Ant2	5290	9.36	≤18.74	PASS
11AC80MIMO	total	5290	12.59	≤18.74	PASS
11AC80MIMO	Ant1	5530	9.85	≤18.74	PASS
11AC80MIMO	Ant2	5530	9.30	≤18.74	PASS
11AC80MIMO	total	5530	12.60	≤18.74	PASS
11AC80MIMO	Ant1	5610	9.88	≤18.74	PASS
11AC80MIMO	Ant2	5610	9.50	≤18.74	PASS
11AC80MIMO	total	5610	12.70	≤18.74	PASS
11AC80MIMO	Ant1	5775	9.84	≤24.76	PASS
11AC80MIMO	Ant2	5775	9.50	≤24.76	PASS
11AC80MIMO	total	5775	12.68	≤24.76	PASS
11AX20MIMO	Ant1	5180	11.66	≤24.76	PASS
11AX20MIMO	Ant2	5180	11.02	≤24.76	PASS
11AX20MIMO	total	5180	14.36	≤24.76	PASS
11AX20MIMO	Ant1	5200	11.50	≤24.76	PASS
11AX20MIMO	Ant2	5200	10.97	≤24.76	PASS
11AX20MIMO	total	5200	14.25	≤24.76	PASS
11AX20MIMO	Ant1	5240	11.42	≤24.76	PASS
11AX20MIMO	Ant2	5240	11.20	≤24.76	PASS
11AX20MIMO	total	5240	14.33	≤24.76	PASS
11AX20MIMO	Ant1	5260	11.39	≤18.74	PASS
11AX20MIMO	Ant2	5260	11.03	≤18.74	PASS
11AX20MIMO	total	5260	14.22	≤18.74	PASS
11AX20MIMO	Ant1	5280	11.45	≤18.74	PASS
11AX20MIMO	Ant2	5280	11.09	≤18.74	PASS
11AX20MIMO	total	5280	14.29	≤18.74	PASS
11AX20MIMO	Ant1	5320	11.50	≤18.74	PASS
11AX20MIMO	Ant2	5320	11.06	≤18.74	PASS
11AX20MIMO	total	5320	14.30	≤18.74	PASS
11AX20MIMO	Ant1	5500	11.50	≤18.74	PASS
11AX20MIMO	Ant2	5500	10.99	≤18.74	PASS
11AX20MIMO	total	5500	14.26	≤18.74	PASS

11AX20MIMO	Ant1	5580	11.51	≤18.74	PASS
11AX20MIMO	Ant2	5580	11.12	≤18.74	PASS
11AX20MIMO	total	5580	14.33	≤18.74	PASS
11AX20MIMO	Ant1	5700	11.65	≤18.74	PASS
11AX20MIMO	Ant2	5700	11.05	≤18.74	PASS
11AX20MIMO	total	5700	14.37	≤18.74	PASS
11AX20MIMO	Ant1	5745	11.55	≤24.76	PASS
11AX20MIMO	Ant2	5745	11.15	≤24.76	PASS
11AX20MIMO	total	5745	14.36	≤24.76	PASS
11AX20MIMO	Ant1	5785	11.32	≤24.76	PASS
11AX20MIMO	Ant2	5785	10.89	≤24.76	PASS
11AX20MIMO	total	5785	14.12	≤24.76	PASS
11AX20MIMO	Ant1	5825	11.37	≤24.76	PASS
11AX20MIMO	Ant2	5825	11.14	≤24.76	PASS
11AX20MIMO	total	5825	14.26	≤24.76	PASS
11AX40MIMO	Ant1	5190	10.90	≤24.76	PASS
11AX40MIMO	Ant2	5190	10.47	≤24.76	PASS
11AX40MIMO	total	5190	13.70	≤24.76	PASS
11AX40MIMO	Ant1	5230	10.51	≤24.76	PASS
11AX40MIMO	Ant2	5230	10.20	≤24.76	PASS
11AX40MIMO	total	5230	13.37	≤24.76	PASS
11AX40MIMO	Ant1	5270	10.67	≤18.74	PASS
11AX40MIMO	Ant2	5270	10.07	≤18.74	PASS
11AX40MIMO	total	5270	13.39	≤18.74	PASS
11AX40MIMO	Ant1	5310	10.48	≤18.74	PASS
11AX40MIMO	Ant2	5310	10.26	≤18.74	PASS
11AX40MIMO	total	5310	13.38	≤18.74	PASS
11AX40MIMO	Ant1	5510	10.74	≤18.74	PASS
11AX40MIMO	Ant2	5510	10.40	≤18.74	PASS
11AX40MIMO	total	5510	13.58	≤18.74	PASS
11AX40MIMO	Ant1	5550	10.53	≤18.74	PASS
11AX40MIMO	Ant2	5550	10.16	≤18.74	PASS
11AX40MIMO	total	5550	13.36	≤18.74	PASS
11AX40MIMO	Ant1	5670	10.61	≤18.74	PASS
11AX40MIMO	Ant2	5670	10.25	≤18.74	PASS
11AX40MIMO	total	5670	13.44	≤18.74	PASS
11AX40MIMO	Ant1	5755	10.83	≤24.76	PASS
11AX40MIMO	Ant2	5755	10.42	≤24.76	PASS
11AX40MIMO	total	5755	13.64	≤24.76	PASS
11AX40MIMO	Ant1	5795	10.75	≤24.76	PASS
11AX40MIMO	Ant2	5795	10.24	≤24.76	PASS

11AX40MIMO	total	5795	13.51	≤24.76	PASS
11AX80MIMO	Ant1	5210	9.79	≤24.76	PASS
11AX80MIMO	Ant2	5210	9.40	≤24.76	PASS
11AX80MIMO	total	5210	12.61	≤18.74	PASS
11AX80MIMO	Ant1	5290	9.53	≤18.74	PASS
11AX80MIMO	Ant2	5290	9.17	≤18.74	PASS
11AX80MIMO	total	5290	12.36	≤18.74	PASS
11AX80MIMO	Ant1	5530	9.81	≤18.74	PASS
11AX80MIMO	Ant2	5530	9.47	≤18.74	PASS
11AX80MIMO	total	5530	12.65	≤18.74	PASS
11AX80MIMO	Ant1	5610	9.78	≤18.74	PASS
11AX80MIMO	Ant2	5610	9.35	≤18.74	PASS
11AX80MIMO	total	5610	12.58	≤18.74	PASS
11AX80MIMO	Ant1	5775	9.72	≤24.76	PASS
11AX80MIMO	Ant2	5775	9.34	≤24.76	PASS
11AX80MIMO	total	5775	12.55	≤24.76	PASS

Note: The duty cycle factor has included in power value.

For EUT1/EUT2/EUT3/EUT4/EUT5

Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Beamforming gain(dB)	Correlated chains directional gain (dBi)	Power Limit (dBm)
U-NII-1	5.20	5.26	3	11.24	24.76
U-NII-2A	5.20	5.26	3	11.24	18.74
U-NII-2C	5.20	5.26	3	11.24	18.74
U-NII-3	5.20	5.26	3	11.24	24.76
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{5.20/20} + 10^{5.26/20})^2/N_{ANT}$] dBi=8.24					
Correlated chains directional gain= Directional gain+ Beamforming gain=8.24+3=11.24 dBi					

For EUT6/EUT7

Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Beamforming gain(dB)	Correlated chains directional gain (dBi)	Power Limit (dBm)
U-NII-1	4.88	6.66	3	11.83	24.17
U-NII-2A	4.88	6.66	3	11.83	18.15
U-NII-2C	4.88	6.66	3	11.83	18.15
U-NII-3	4.88	6.66	3	11.83	24.17
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{4.88/20} + 10^{6.66/20})^2/N_{ANT}$] dBi=8.83					
Correlated chains directional gain= Directional gain+ Beamforming gain=8.83+3=11.83 dBi					

3.5 Power Spectral Density

3.5.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	Master device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250
		11 dBm/MHz	5250-5350
		11 dBm/MHz	5470-5725
		30 dBm/500 kHz	5725-5850

3.5.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

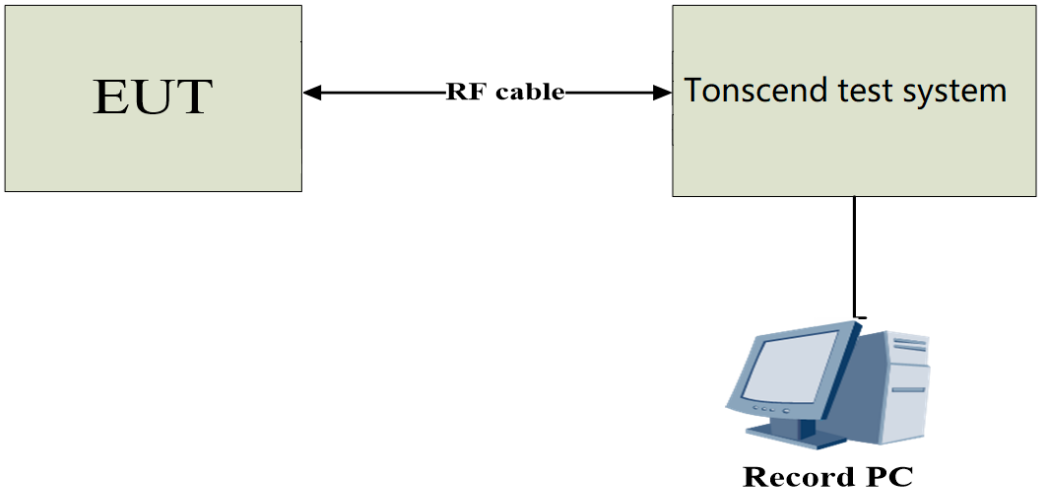
a) The EUT was directly connected to the tonscend test system and antenna output port as show in the block diagram below. Spectrum analyser settings as following:

Centre Frequency	The centre frequency of the channel under test
RBW	= 1 MHz (Band1/2/3) = 500kHz (Band4)
VBW	≥3 x RBW
Frequency span	2 x Nominal Channel Bandwidth
Detector Mode	RMS
Trace Mode	Max Hold
Sweep Time	Auto Couple

b) Wait for the trace to stabilize. Use the peak marker function to determine the maximum amplitude level within the RBW.

c) The value defined in step b shall be compared to the limits and be recorded .

3.5.3 Test Setup



3.5.4 The Result

Test Mode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	4.28	≤17.00	PASS
	Ant2	5180	5.59	≤16.34	PASS
	Ant1	5200	6.74	≤17.00	PASS
	Ant2	5200	4.69	≤16.34	PASS
	Ant1	5240	5.21	≤17.00	PASS
	Ant2	5240	6.31	≤16.34	PASS
	Ant1	5260	5.42	≤11.00	PASS
	Ant2	5260	5.72	≤10.34	PASS
	Ant1	5280	5.02	≤11.00	PASS
	Ant2	5280	4.68	≤10.34	PASS
	Ant1	5320	5.13	≤11.00	PASS
	Ant2	5320	5.91	≤10.34	PASS
	Ant1	5500	5.9	≤11.00	PASS
	Ant2	5500	5.08	≤10.34	PASS
	Ant1	5580	6.03	≤11.00	PASS
	Ant2	5580	5.68	≤10.34	PASS
	Ant1	5700	5.88	≤11.00	PASS
	Ant2	5700	6.38	≤10.34	PASS
	Ant1	5745	2.3	≤30.00	PASS
	Ant2	5745	2.94	≤29.34	PASS
	Ant1	5785	3.32	≤30.00	PASS
	Ant2	5785	2.48	≤29.34	PASS
	Ant1	5825	3.03	≤30.00	PASS
	Ant2	5825	3.06	≤29.34	PASS
11N20MIMO	Ant1	5180	2.89	≤14.17	PASS
	Ant2	5180	2.28	≤14.17	PASS
	total	5180	5.61	≤14.17	PASS
	Ant1	5200	2.25	≤14.17	PASS
	Ant2	5200	3.07	≤14.17	PASS
	total	5200	5.69	≤14.17	PASS
	Ant1	5240	2.34	≤14.17	PASS
	Ant2	5240	2.59	≤14.17	PASS
	total	5240	5.48	≤14.17	PASS
	Ant1	5260	1.97	≤8.17	PASS
	Ant2	5260	1.84	≤8.17	PASS
	total	5260	4.92	≤8.17	PASS
	Ant1	5280	2.54	≤8.17	PASS
	Ant2	5280	1.9	≤8.17	PASS
	total	5280	5.24	≤8.17	PASS

	Ant1	5320	1.93	≤8.17	PASS
	Ant2	5320	2.84	≤8.17	PASS
	total	5320	5.42	≤8.17	PASS
	Ant1	5500	3.3	≤8.17	PASS
	Ant2	5500	3.22	≤8.17	PASS
	total	5500	6.27	≤8.17	PASS
	Ant1	5580	3.53	≤8.17	PASS
	Ant2	5580	3.48	≤8.17	PASS
	total	5580	6.52	≤8.17	PASS
	Ant1	5700	4.1	≤8.17	PASS
	Ant2	5700	2.15	≤8.17	PASS
	total	5700	6.24	≤8.17	PASS
	Ant1	5745	0.03	≤27.17	PASS
	Ant2	5745	0.76	≤27.17	PASS
	total	5745	3.42	≤27.17	PASS
	Ant1	5785	0.97	≤27.17	PASS
	Ant2	5785	-0.11	≤27.17	PASS
	total	5785	3.47	≤27.17	PASS
	Ant1	5825	0.44	≤27.17	PASS
	Ant2	5825	0.44	≤27.17	PASS
	total	5825	3.45	≤27.17	PASS
11N40MIMO	Ant1	5190	-7.43	≤14.17	PASS
	Ant2	5190	-0.08	≤14.17	PASS
	total	5190	0.65	≤14.17	PASS
	Ant1	5230	-0.05	≤14.17	PASS
	Ant2	5230	-2.31	≤14.17	PASS
	total	5230	1.98	≤14.17	PASS
	Ant1	5270	0.05	≤8.17	PASS
	Ant2	5270	0.16	≤8.17	PASS
	total	5270	3.12	≤8.17	PASS
	Ant1	5310	-0.6	≤8.17	PASS
	Ant2	5310	0.42	≤8.17	PASS
	total	5310	2.95	≤8.17	PASS
	Ant1	5510	0.01	≤8.17	PASS
	Ant2	5510	0.37	≤8.17	PASS
	total	5510	3.20	≤8.17	PASS
	Ant1	5550	0.88	≤8.17	PASS
	Ant2	5550	0.06	≤8.17	PASS
	total	5550	3.50	≤8.17	PASS
	Ant1	5670	-0.09	≤8.17	PASS
	Ant2	5670	-0.03	≤8.17	PASS

	total	5670	2.95	≤8.17	PASS
	Ant1	5755	-2.47	≤27.17	PASS
	Ant2	5755	-1.45	≤27.17	PASS
	total	5755	1.08	≤27.17	PASS
	Ant1	5795	-2.07	≤27.17	PASS
	Ant2	5795	-2.37	≤27.17	PASS
	total	5795	0.79	≤27.17	PASS
11AC20MIMO	Ant1	5180	2.96	≤14.17	PASS
	Ant2	5180	3.13	≤14.17	PASS
	total	5180	6.06	≤14.17	PASS
	Ant1	5200	3.25	≤14.17	PASS
	Ant2	5200	2.93	≤14.17	PASS
	total	5200	6.10	≤14.17	PASS
	Ant1	5240	4.46	≤14.17	PASS
	Ant2	5240	1.02	≤14.17	PASS
	total	5240	6.08	≤14.17	PASS
	Ant1	5260	2.75	≤8.17	PASS
	Ant2	5260	3.43	≤8.17	PASS
	total	5260	6.11	≤8.17	PASS
	Ant1	5280	3.05	≤8.17	PASS
	Ant2	5280	2.01	≤8.17	PASS
	total	5280	5.57	≤8.17	PASS
	Ant1	5320	3.1	≤8.17	PASS
	Ant2	5320	3.02	≤8.17	PASS
	total	5320	6.07	≤8.17	PASS
	Ant1	5500	3.29	≤8.17	PASS
	Ant2	5500	2.84	≤8.17	PASS
	total	5500	6.08	≤8.17	PASS
	Ant1	5580	2.63	≤8.17	PASS
	Ant2	5580	4.02	≤8.17	PASS
	total	5580	6.39	≤8.17	PASS
	Ant1	5700	4.57	≤8.17	PASS
	Ant2	5700	3.2	≤8.17	PASS
	total	5700	6.95	≤8.17	PASS
	Ant1	5745	0.58	≤27.17	PASS
	Ant2	5745	0.8	≤27.17	PASS
	total	5745	3.70	≤27.17	PASS
	Ant1	5785	1.22	≤27.17	PASS
	Ant2	5785	0.32	≤27.17	PASS
	total	5785	3.80	≤27.17	PASS
	Ant1	5825	0.96	≤27.17	PASS

	Ant2	5825	0.47	≤27.17	PASS
	total	5825	3.73	≤27.17	PASS
11AC40MIMO	Ant1	5190	-6.65	≤14.17	PASS
	Ant2	5190	-5.82	≤14.17	PASS
	total	5190	-3.20	≤14.17	PASS
	Ant1	5230	0.85	≤14.17	PASS
	Ant2	5230	-0.08	≤14.17	PASS
	total	5230	3.42	≤14.17	PASS
	Ant1	5270	0.86	≤8.17	PASS
	Ant2	5270	1.42	≤8.17	PASS
	total	5270	4.16	≤8.17	PASS
	Ant1	5310	-0.2	≤8.17	PASS
	Ant2	5310	0.76	≤8.17	PASS
	total	5310	3.32	≤8.17	PASS
	Ant1	5510	1.59	≤8.17	PASS
	Ant2	5510	1.62	≤8.17	PASS
	total	5510	4.62	≤8.17	PASS
	Ant1	5550	1	≤8.17	PASS
	Ant2	5550	0.24	≤8.17	PASS
	total	5550	3.65	≤8.17	PASS
	Ant1	5670	-0.14	≤8.17	PASS
	Ant2	5670	-0.47	≤8.17	PASS
	total	5670	2.71	≤8.17	PASS
	Ant1	5755	-2.58	≤27.17	PASS
	Ant2	5755	-4.21	≤27.17	PASS
	total	5755	-0.31	≤27.17	PASS
	Ant1	5795	-2.5	≤27.17	PASS
	Ant2	5795	-1.43	≤27.17	PASS
	total	5795	1.08	≤27.17	PASS
11AC80MIMO	Ant1	5210	-0.76	≤14.17	PASS
	Ant2	5210	-1.11	≤14.17	PASS
	total	5210	2.08	≤14.17	PASS
	Ant1	5290	-2.23	≤8.17	PASS
	Ant2	5290	0.31	≤8.17	PASS
	total	5290	2.23	≤8.17	PASS
	Ant1	5530	-2.75	≤8.17	PASS
	Ant2	5530	-3.78	≤8.17	PASS
	total	5530	-0.22	≤8.17	PASS
	Ant1	5610	-2.92	≤8.17	PASS
	Ant2	5610	-2.79	≤8.17	PASS
	total	5610	0.16	≤8.17	PASS

	Ant1	5775	-4.45	≤27.17	PASS
	Ant2	5775	-2.18	≤27.17	PASS
	total	5775	-0.16	≤27.17	PASS
11AX20MIMO	Ant1	5180	4.28	≤14.17	PASS
	Ant2	5180	4.4	≤14.17	PASS
	total	5180	7.35	≤14.17	PASS
	Ant1	5200	4.43	≤14.17	PASS
	Ant2	5200	4.78	≤14.17	PASS
	total	5200	7.62	≤14.17	PASS
	Ant1	5240	2.63	≤14.17	PASS
	Ant2	5240	4.34	≤14.17	PASS
	total	5240	6.58	≤14.17	PASS
	Ant1	5260	4.46	≤8.17	PASS
	Ant2	5260	3.64	≤8.17	PASS
	total	5260	7.08	≤8.17	PASS
	Ant1	5280	3.06	≤8.17	PASS
	Ant2	5280	3.57	≤8.17	PASS
	total	5280	6.33	≤8.17	PASS
	Ant1	5320	2.78	≤8.17	PASS
	Ant2	5320	3.02	≤8.17	PASS
	total	5320	5.91	≤8.17	PASS
	Ant1	5500	2.24	≤8.17	PASS
	Ant2	5500	1.23	≤8.17	PASS
	total	5500	4.77	≤8.17	PASS
	Ant1	5580	2.42	≤8.17	PASS
	Ant2	5580	2.35	≤8.17	PASS
	total	5580	5.40	≤8.17	PASS
	Ant1	5700	2.71	≤8.17	PASS
	Ant2	5700	3.19	≤8.17	PASS
	total	5700	5.97	≤8.17	PASS
	Ant1	5745	0.71	≤27.17	PASS
	Ant2	5745	1.4	≤27.17	PASS
	total	5745	4.08	≤27.17	PASS
	Ant1	5785	1.48	≤27.17	PASS
	Ant2	5785	1.26	≤27.17	PASS
	total	5785	4.38	≤27.17	PASS
	Ant1	5825	0.59	≤27.17	PASS
	Ant2	5825	0.76	≤27.17	PASS
	total	5825	3.69	≤27.17	PASS
11AX40MIMO	Ant1	5190	3.7	≤14.17	PASS
	Ant2	5190	4.47	≤14.17	PASS

	total	5190	7.85	≤14.17	PASS
	Ant1	5230	0.97	≤14.17	PASS
	Ant2	5230	2.21	≤14.17	PASS
	total	5230	4.64	≤14.17	PASS
	Ant1	5270	0.13	≤8.17	PASS
	Ant2	5270	0.74	≤8.17	PASS
	total	5270	2.93	≤8.17	PASS
	Ant1	5310	0.04	≤8.17	PASS
	Ant2	5310	0.57	≤8.17	PASS
	total	5310	3.32	≤8.17	PASS
	Ant1	5510	1.14	≤8.17	PASS
	Ant2	5510	0.63	≤8.17	PASS
	total	5510	3.90	≤8.17	PASS
	Ant1	5550	3.19	≤8.17	PASS
	Ant2	5550	2.16	≤8.17	PASS
	total	5550	5.72	≤8.17	PASS
	Ant1	5670	-0.6	≤8.17	PASS
	Ant2	5670	0.09	≤8.17	PASS
	total	5670	2.77	≤8.17	PASS
	Ant1	5755	-1.94	≤27.17	PASS
	Ant2	5755	-2.87	≤27.17	PASS
	total	5755	0.63	≤27.17	PASS
	Ant1	5795	-2.26	≤27.17	PASS
	Ant2	5795	-1.94	≤27.17	PASS
	total	5795	0.91	≤27.17	PASS
11AX80MIMO	Ant1	5210	-0.85	≤14.17	PASS
	Ant2	5210	-11.26	≤14.17	PASS
	total	5210	-0.47	≤14.17	PASS
	Ant1	5290	-2.34	≤8.17	PASS
	Ant2	5290	-2.32	≤8.17	PASS
	total	5290	0.68	≤8.17	PASS
	Ant1	5530	-1.8	≤8.17	PASS
	Ant2	5530	0.37	≤8.17	PASS
	total	5530	2.43	≤8.17	PASS
	Ant1	5610	-1.44	≤8.17	PASS
	Ant2	5610	-2.61	≤8.17	PASS
	total	5610	1.02	≤8.17	PASS
	Ant1	5775	-3.85	≤27.17	PASS
	Ant2	5775	-4.84	≤27.17	PASS
	total	5775	-1.31	≤27.17	PASS

Note：

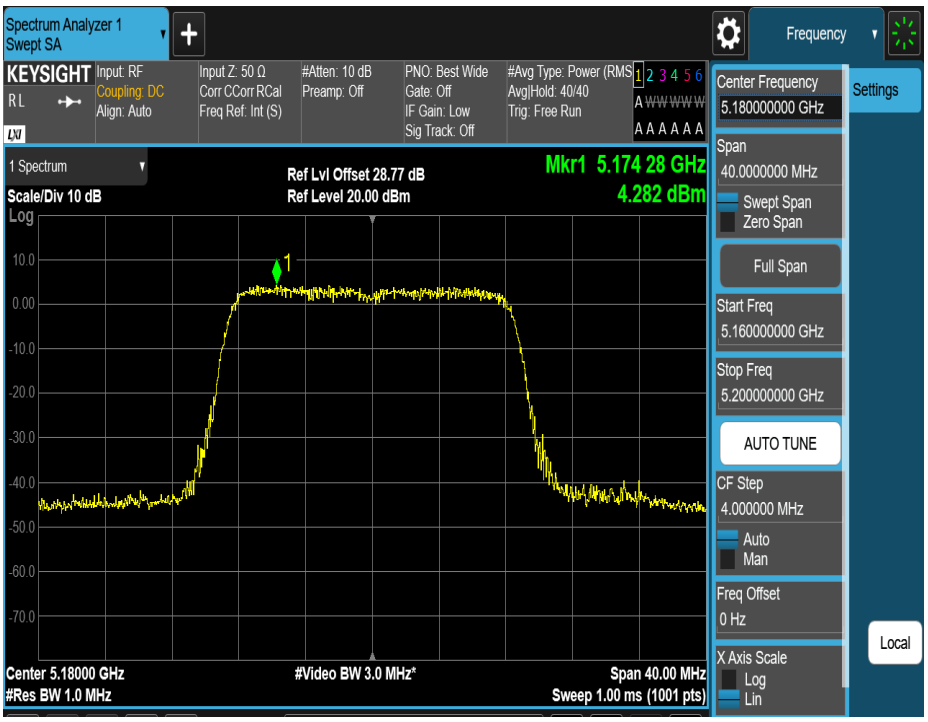
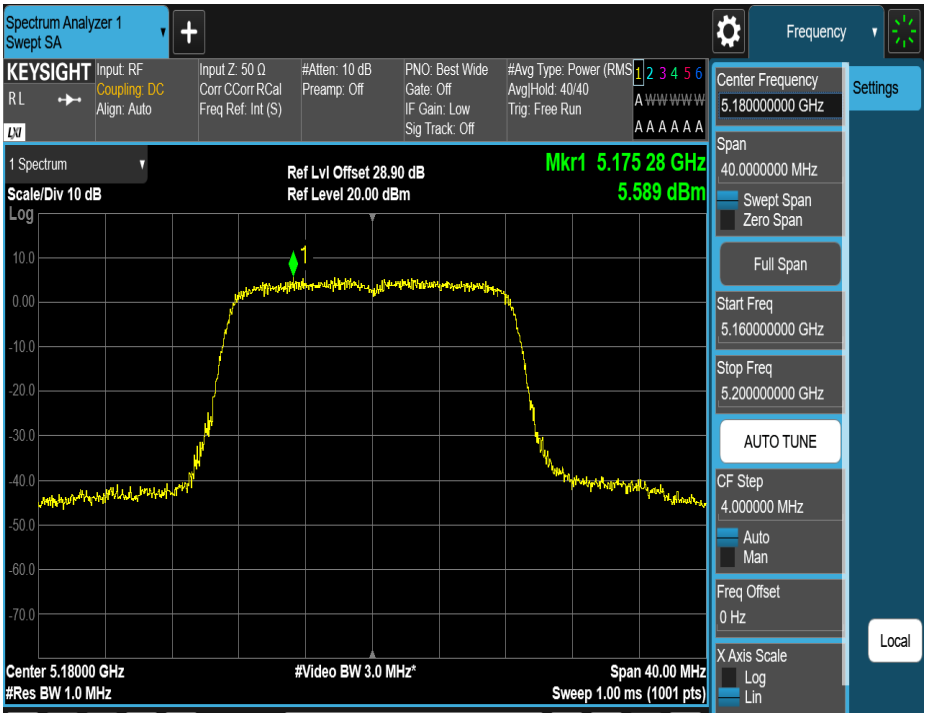
1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 300kHz and VBW at 1500kHz if the spectrum analyzer does not have 500 kHz RBW. Then, add 10 log (500 kHz/300 kHz) to the measured result, i.e. 2.22 dB.
3. During the test of U-NII 3 PSD, the measurement result with RBW=300kHz has been added 2.22 dB by compensating offset, offset=cable loss+duty factor+10log(500kHz/300kHz).
4. Beamforming conducted power less than no beamforming conducted power, so only no beamforming conducted power spectral density was recored.

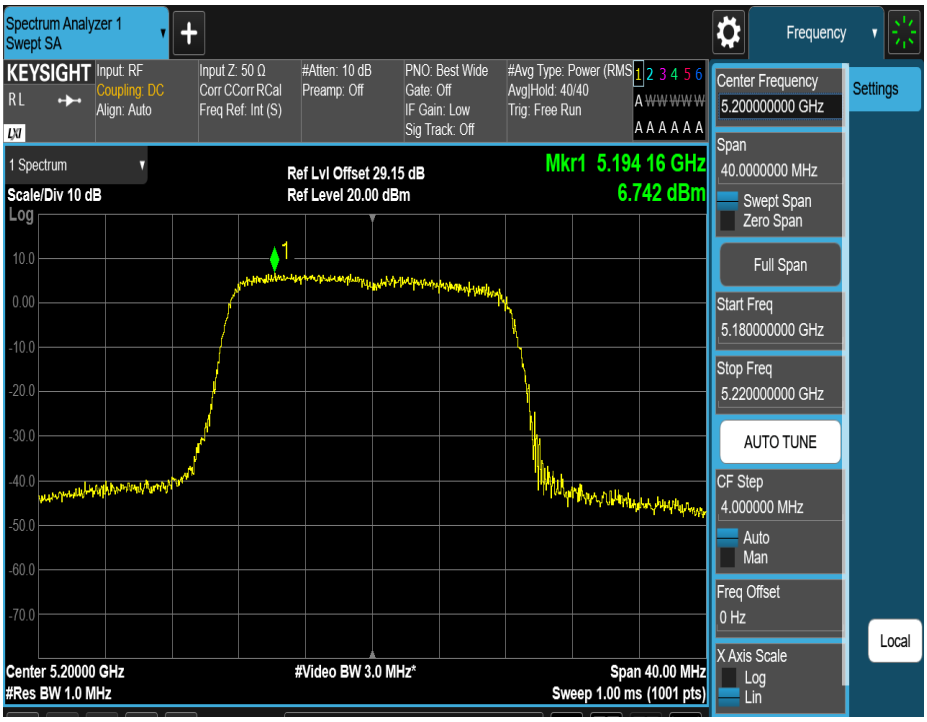
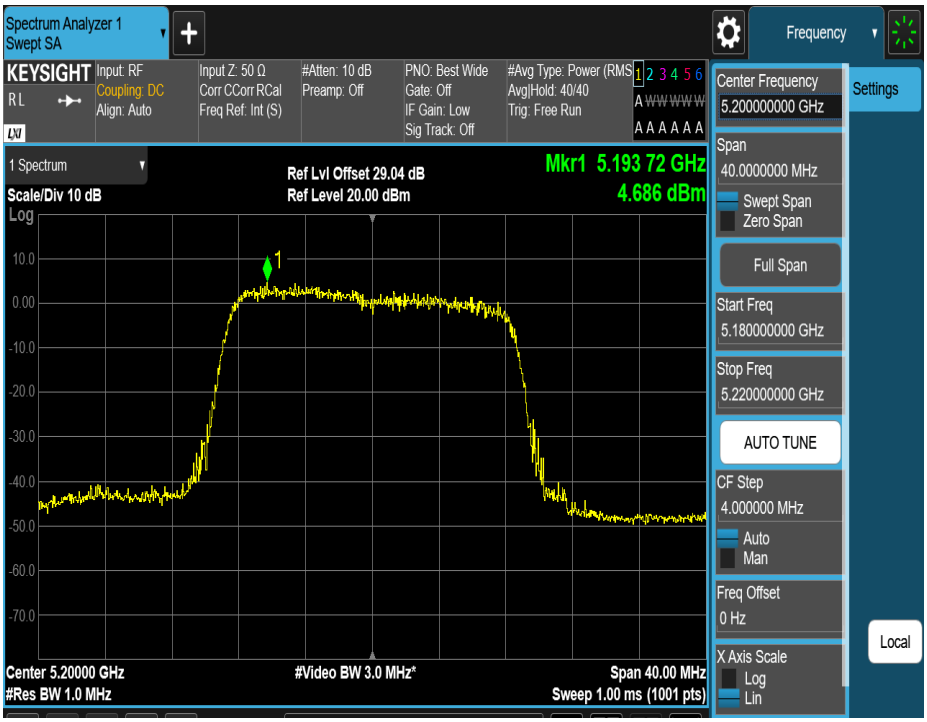
For EUT1/EUT2/EUT3/EUT4/EUT5/EUT6/EUT7

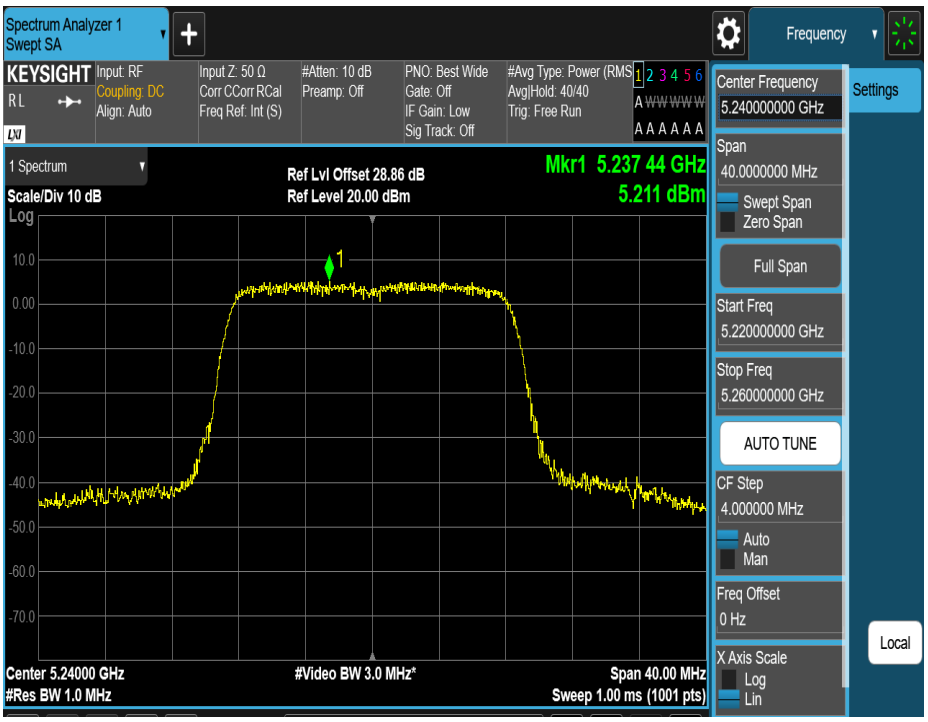
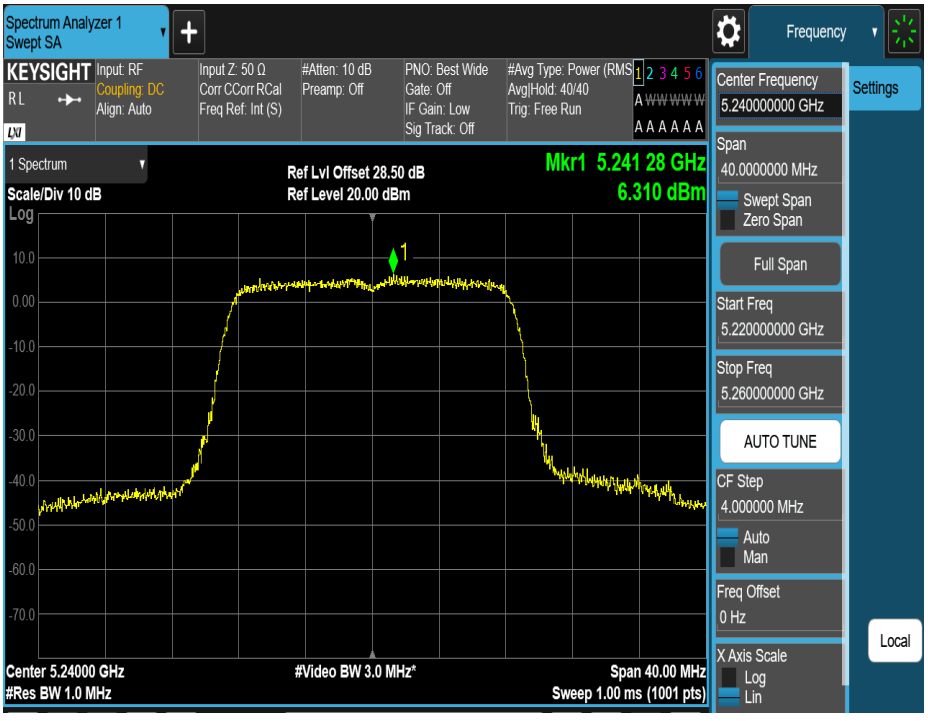
Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Power Spectral Density Limit (dBm)
U-NII-1	5.20	5.26	8.24	14.76
U-NII-2A	5.20	5.26	8.24	8.76
U-NII-2C	5.20	5.26	8.24	8.76
U-NII-3	5.20	5.26	8.24	27.76
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{5.20/20} + 10^{5.26/20})^2/N_{ANT}$] dBi=8.24				

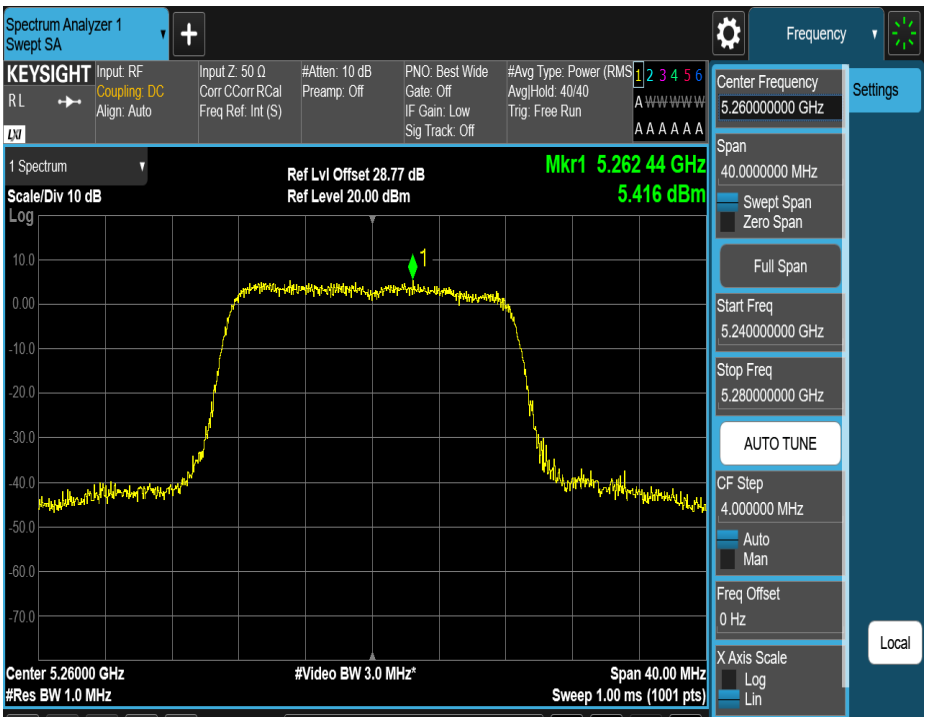
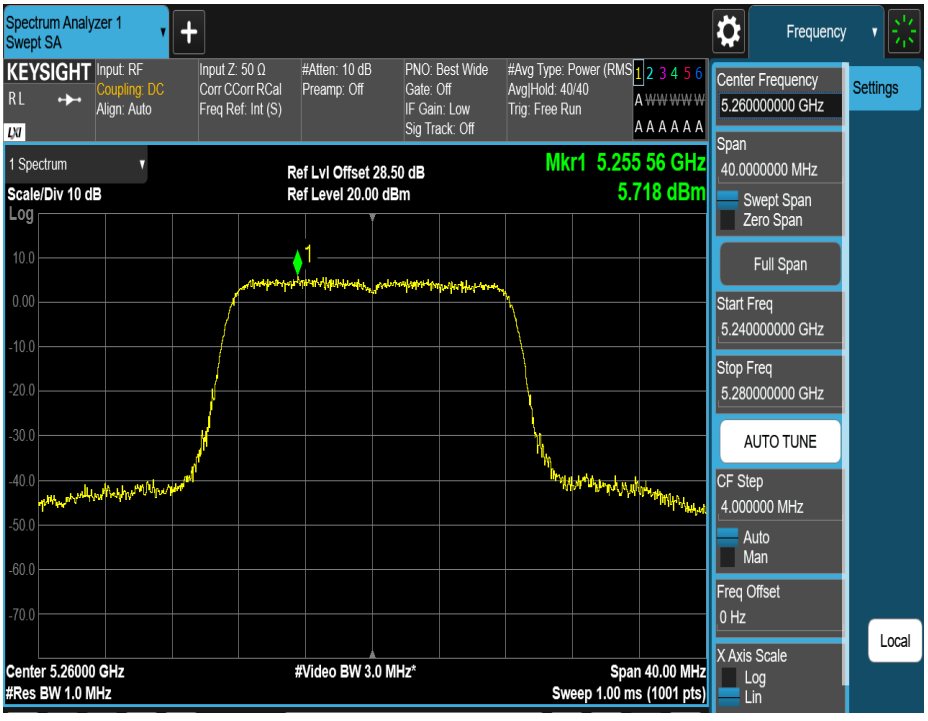
For EUT8/EUT9

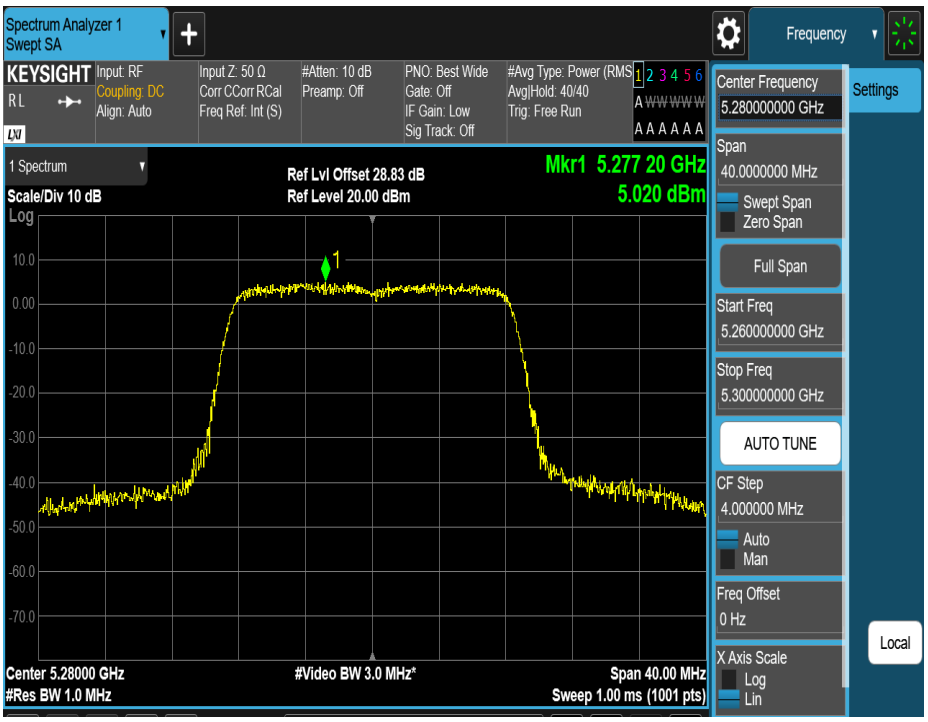
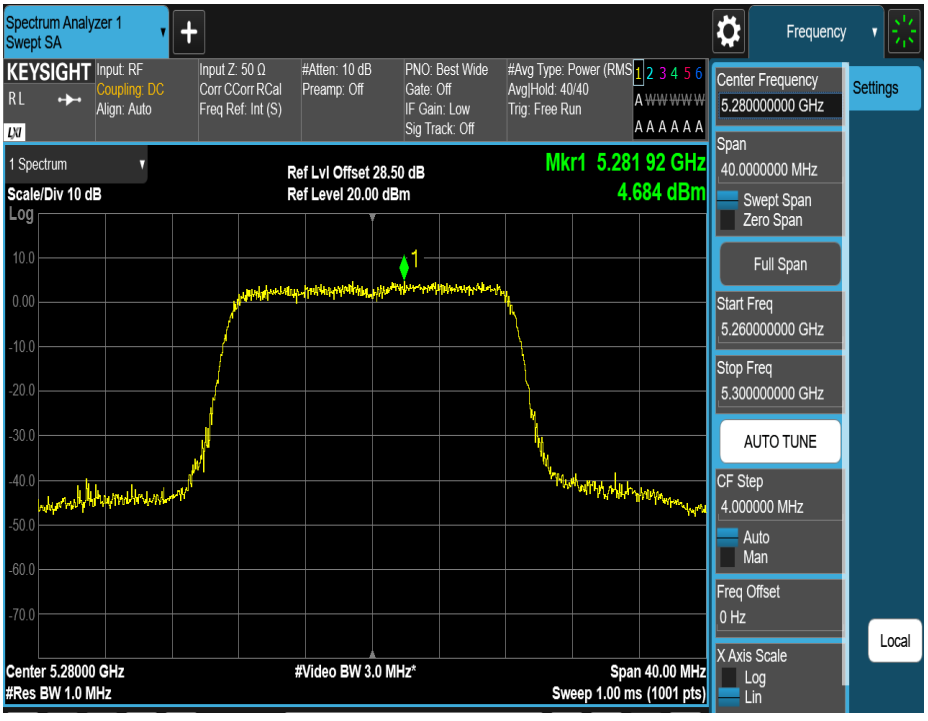
Frequency Band	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	Correlated chains directional gain (dBi)	Power Spectral Density Limit (dBm)
U-NII-1	4.88	6.66	8.83	14.17
U-NII-2A	4.88	6.66	8.83	8.17
U-NII-2C	4.88	6.66	8.83	8.17
U-NII-3	4.88	6.66	8.83	27.17
Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, …, G_N dBi If transmit signals are correlated, then Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}$] 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.] Directional gain = 10log[$(10^{4.88/20} + 10^{6.66/20})^2/N_{ANT}$] dBi=8.83				

11A_Ant1_5180

11A_Ant2_5180


11A_Ant1_5200

11A_Ant2_5200


11A_Ant1_5240

11A_Ant2_5240


11A_Ant1_5260

11A_Ant2_5260


11A_Ant1_5280

11A_Ant2_5280


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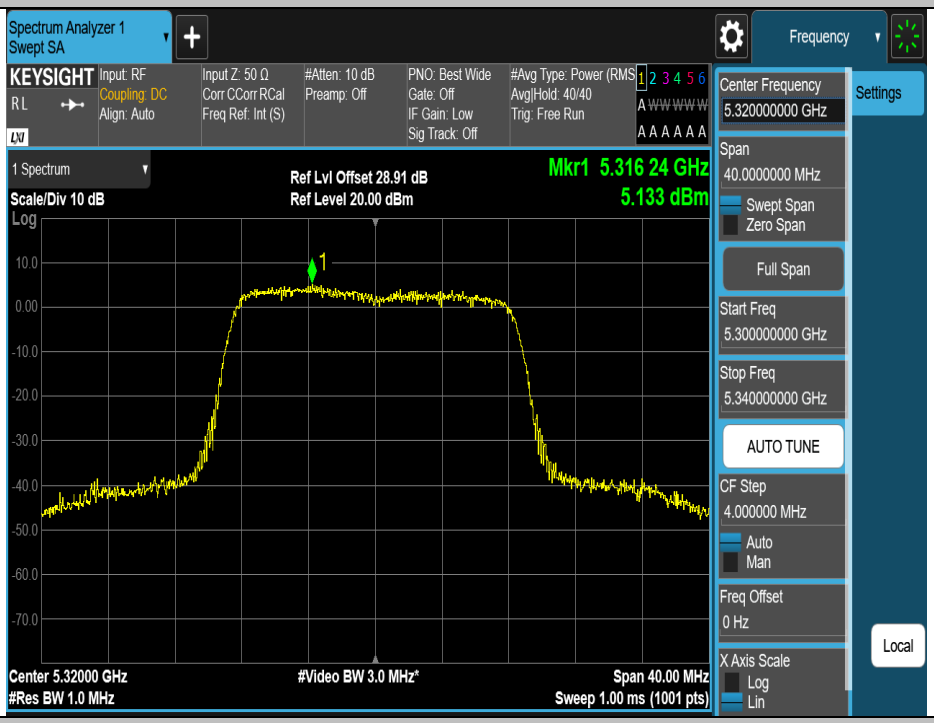
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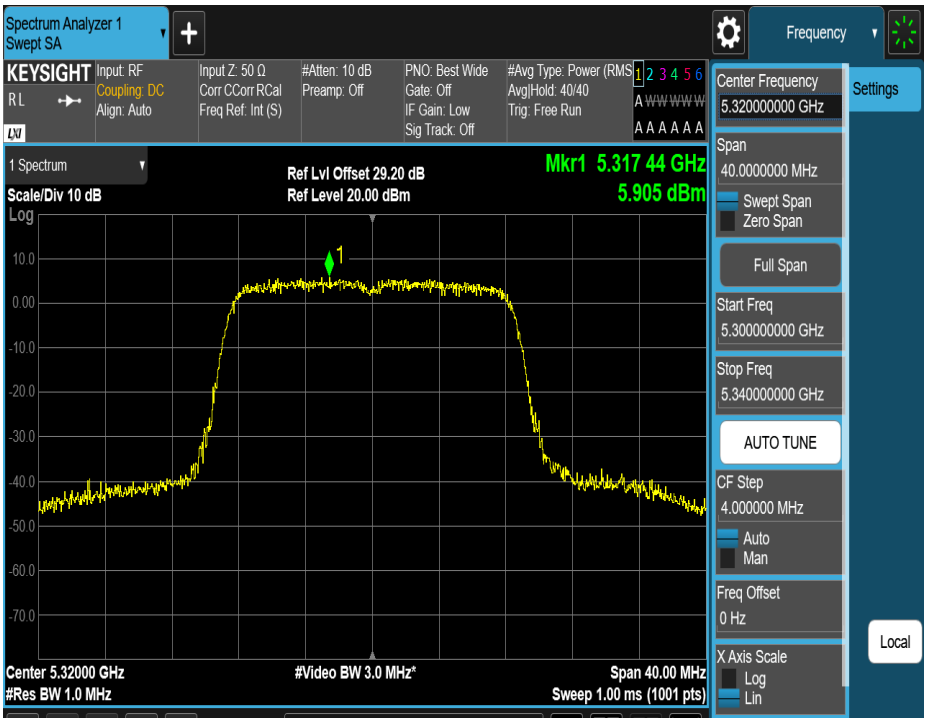

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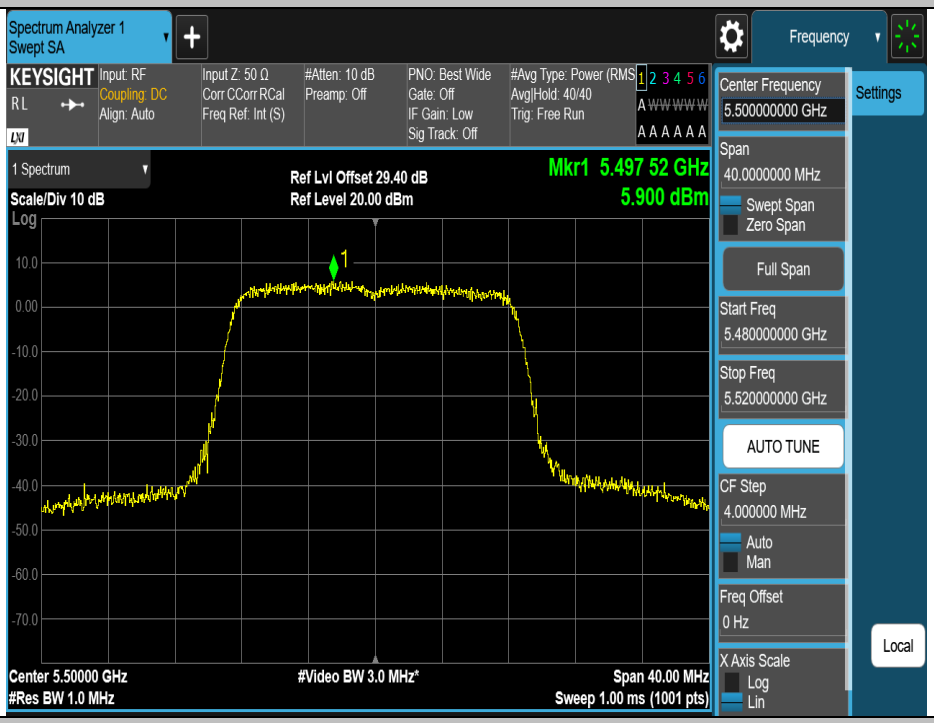
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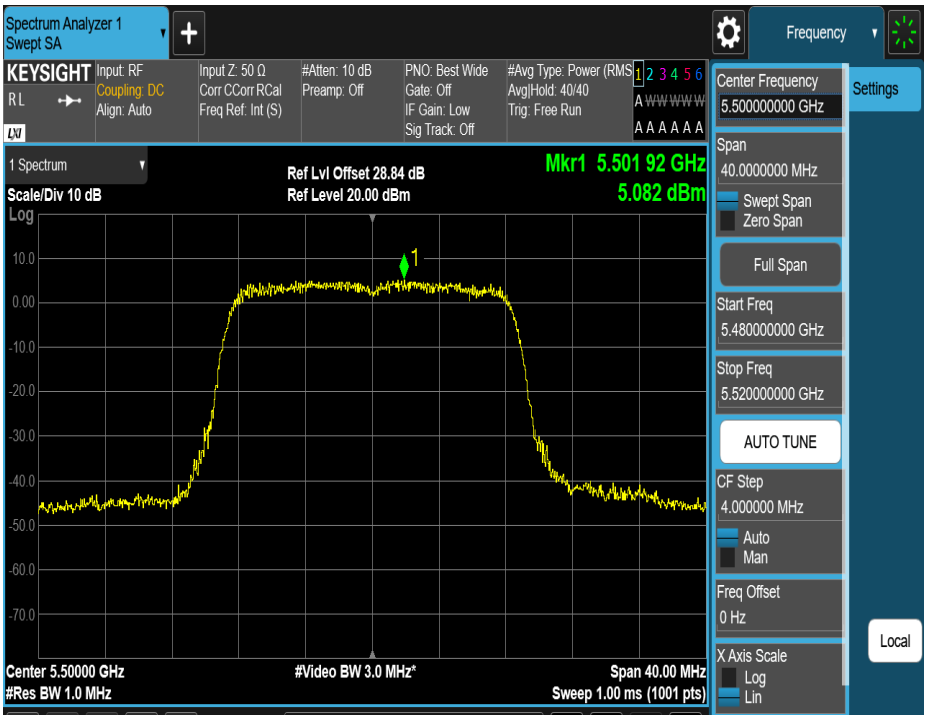

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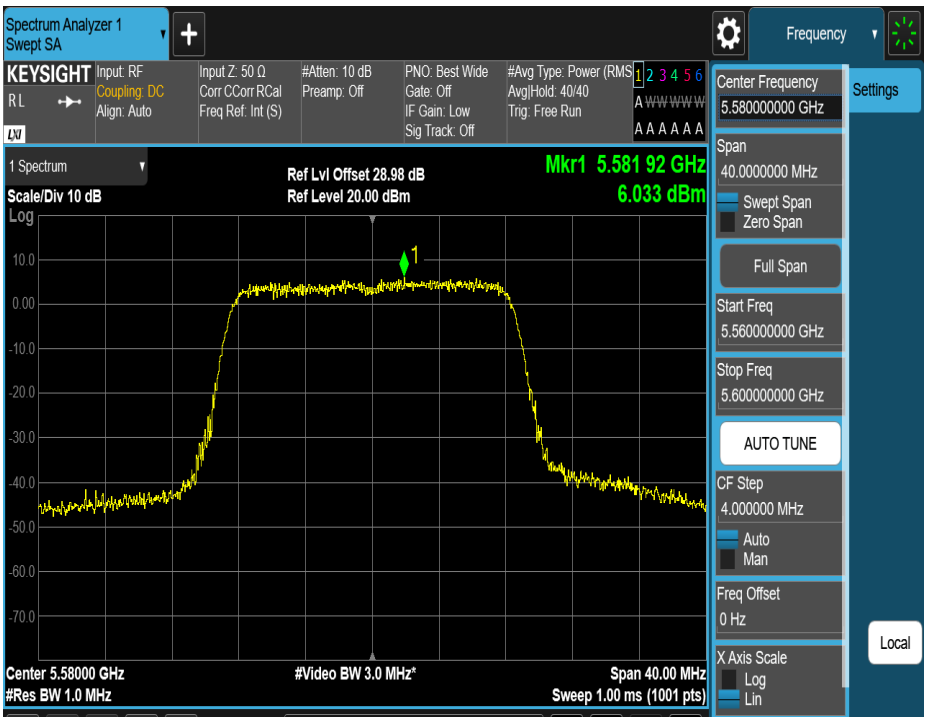
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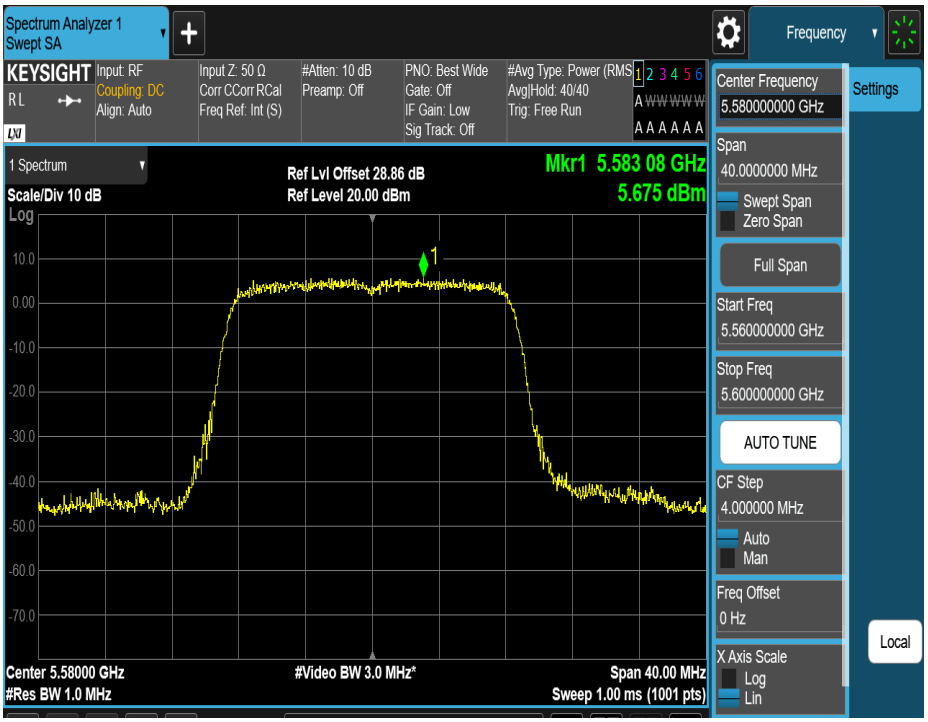

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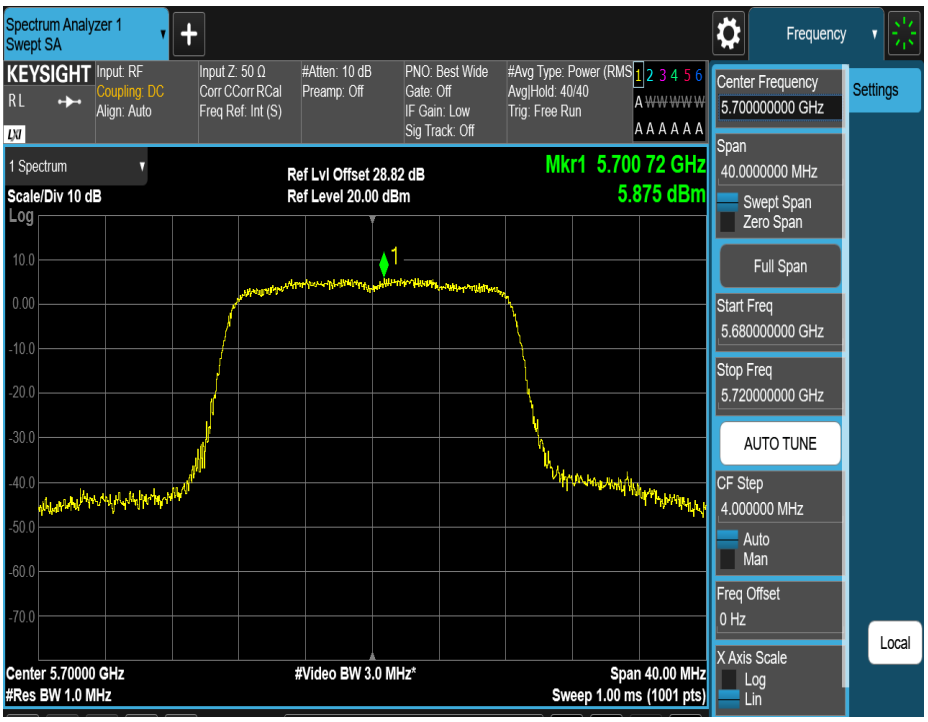
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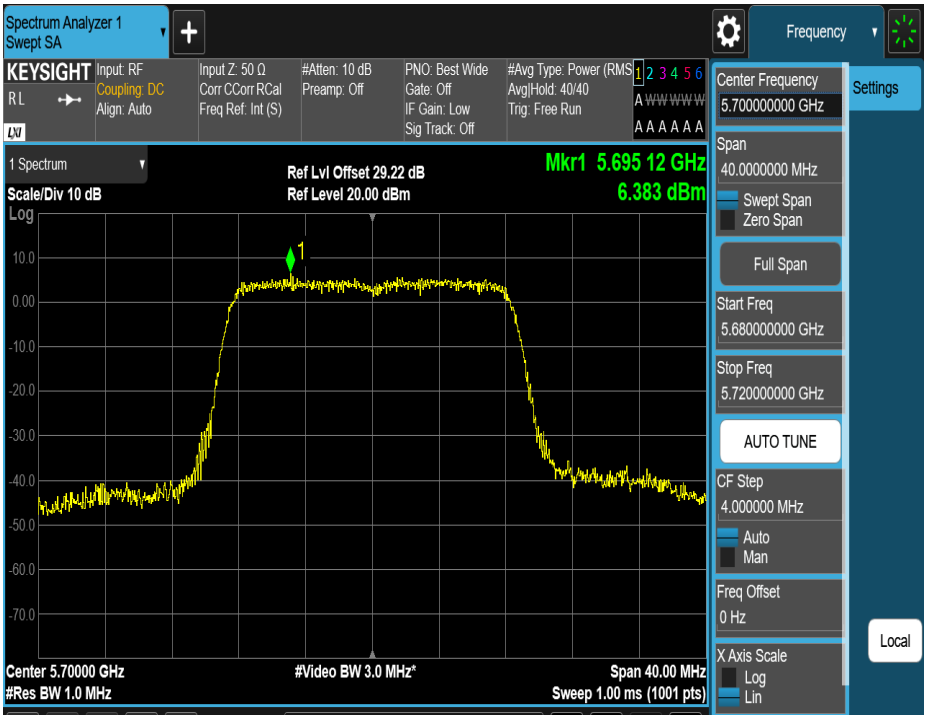

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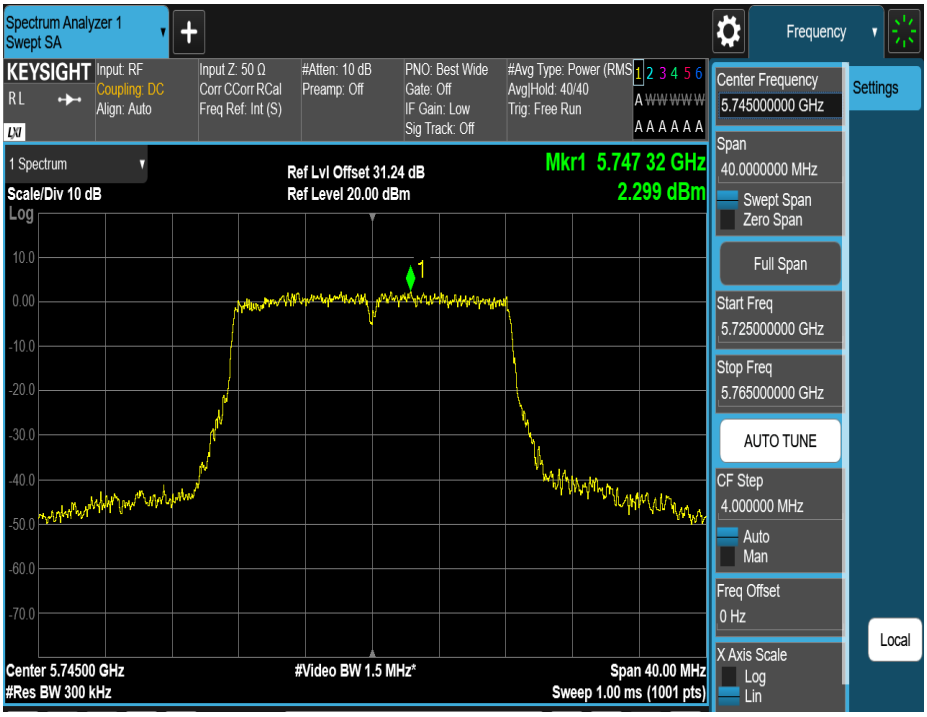
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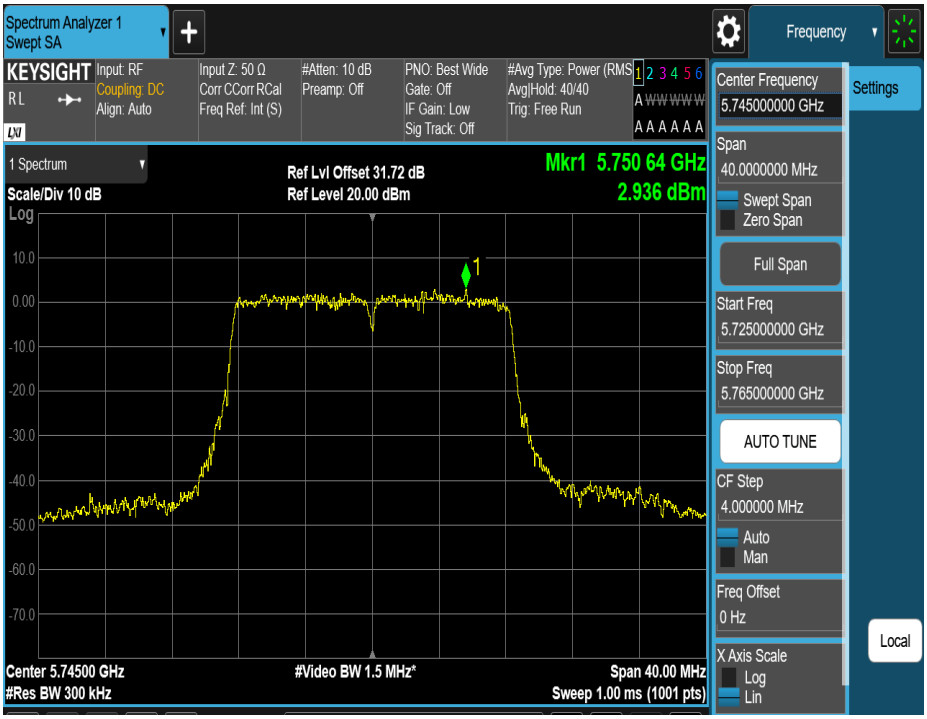

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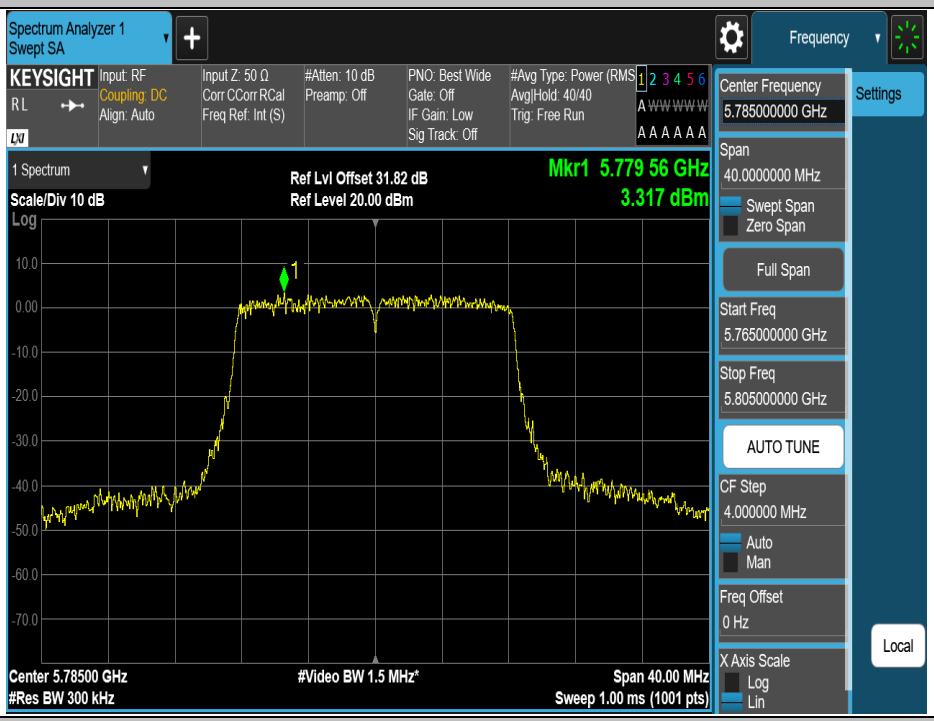

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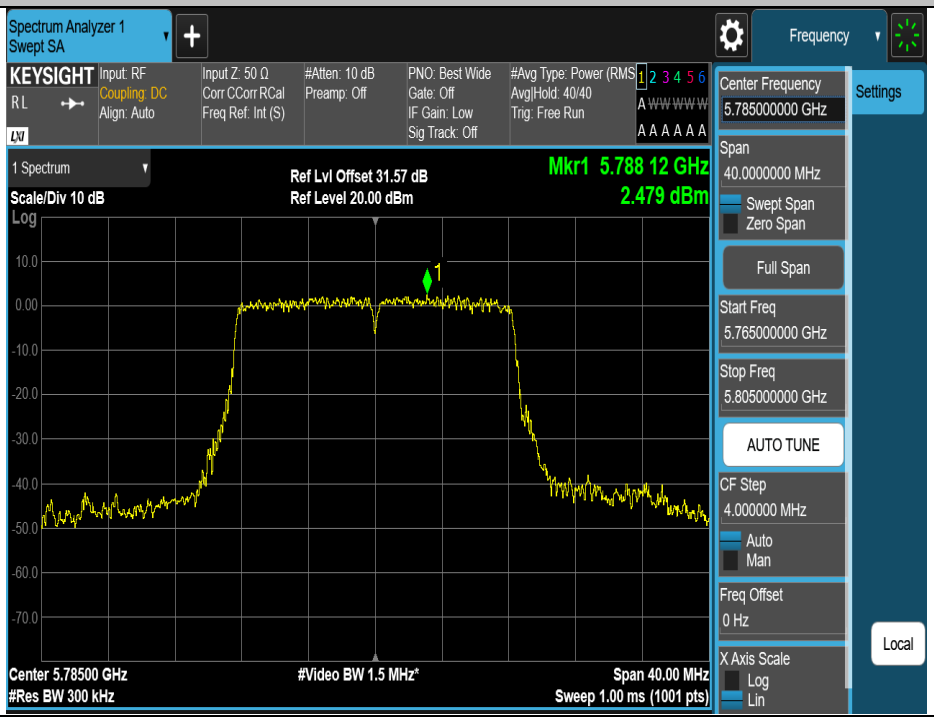

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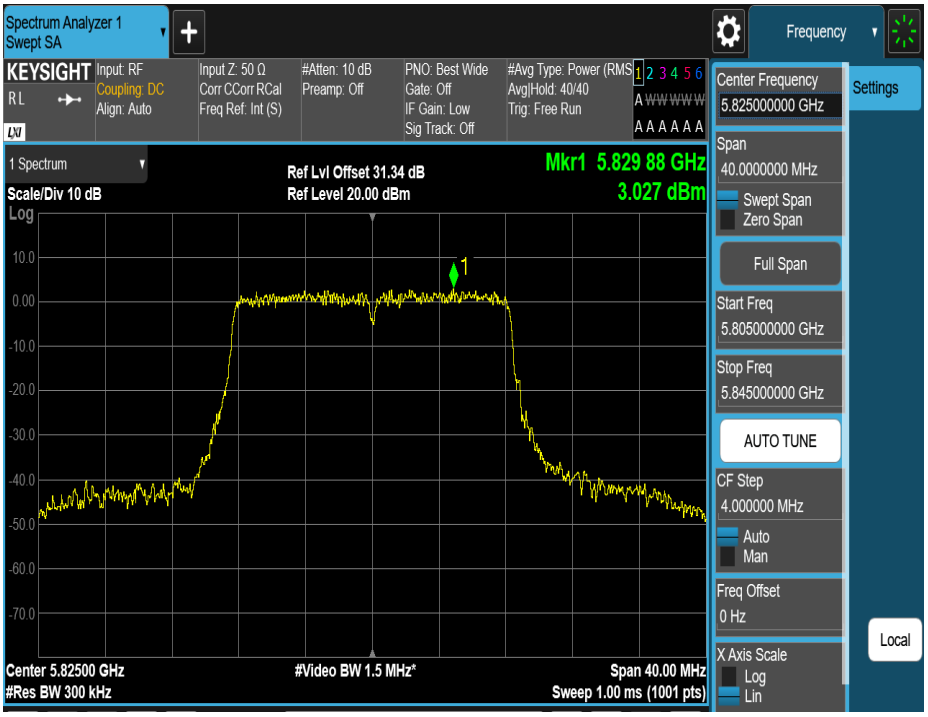
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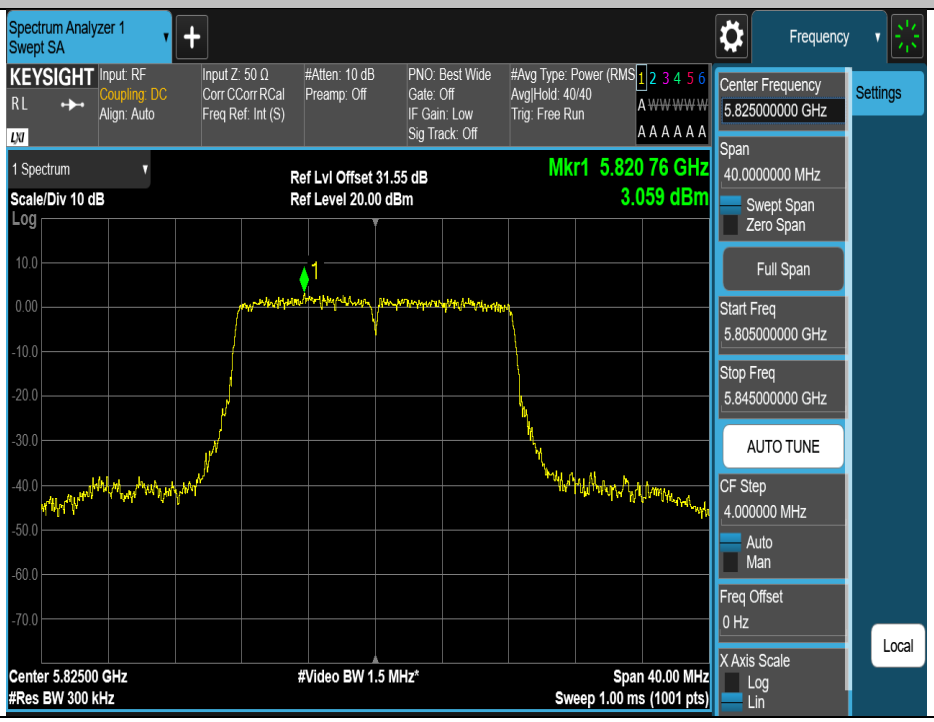

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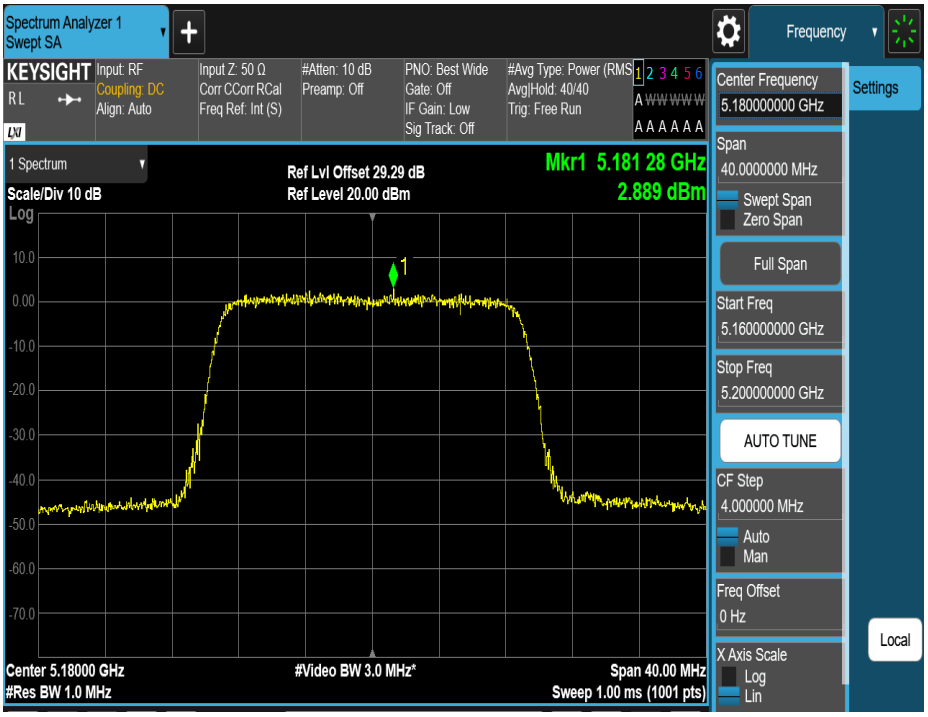
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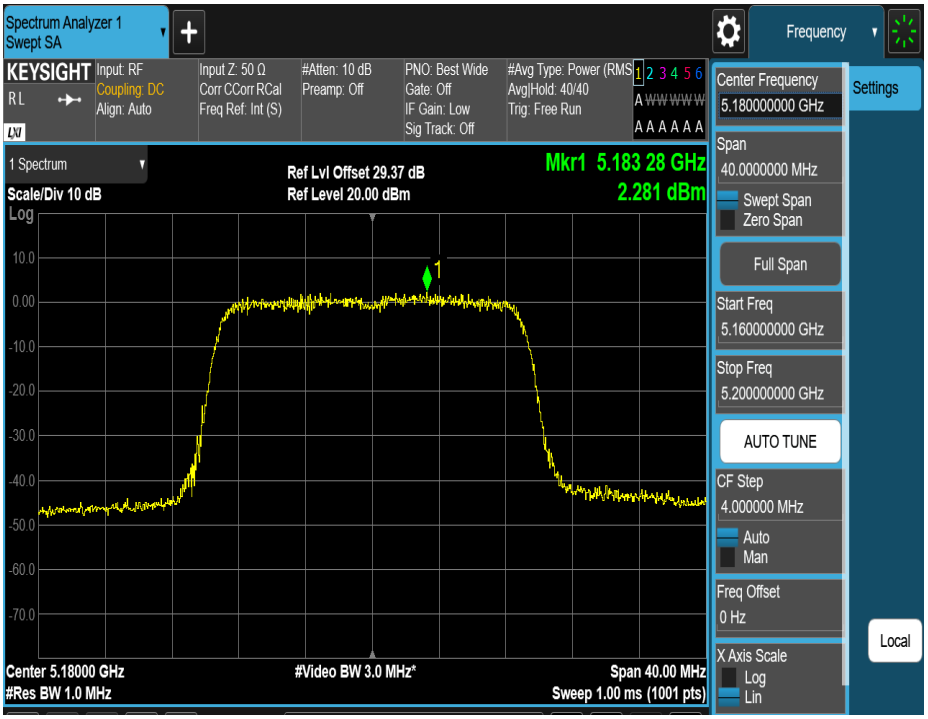

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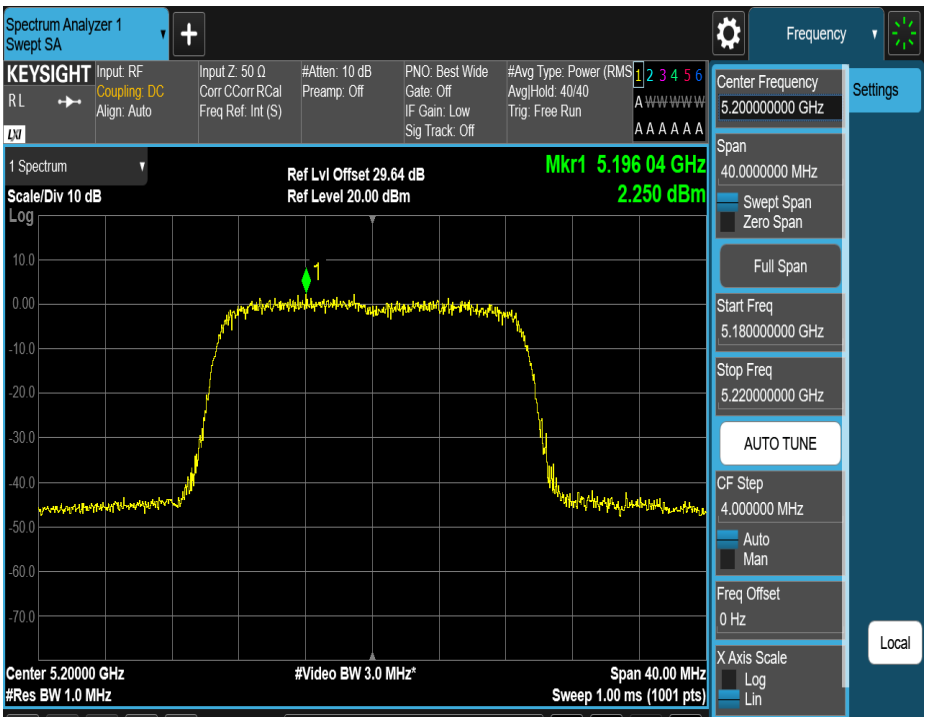
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