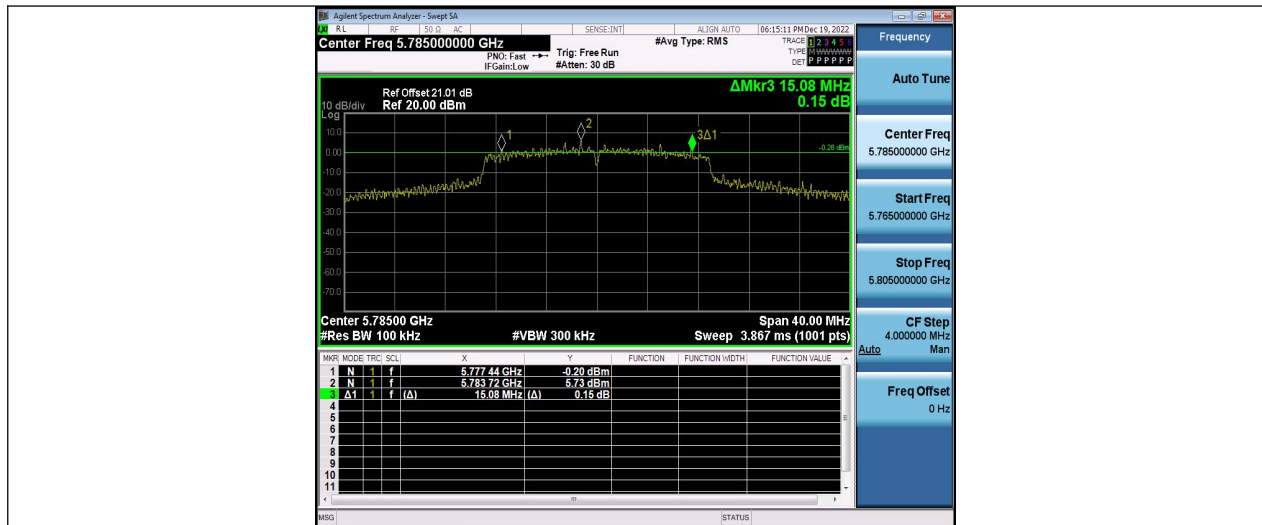
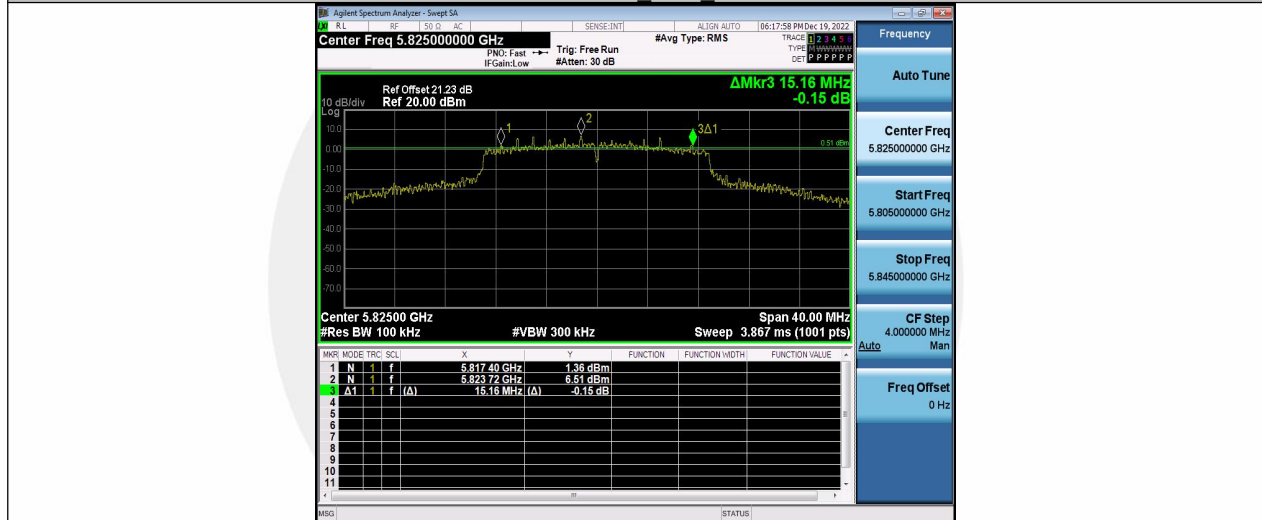
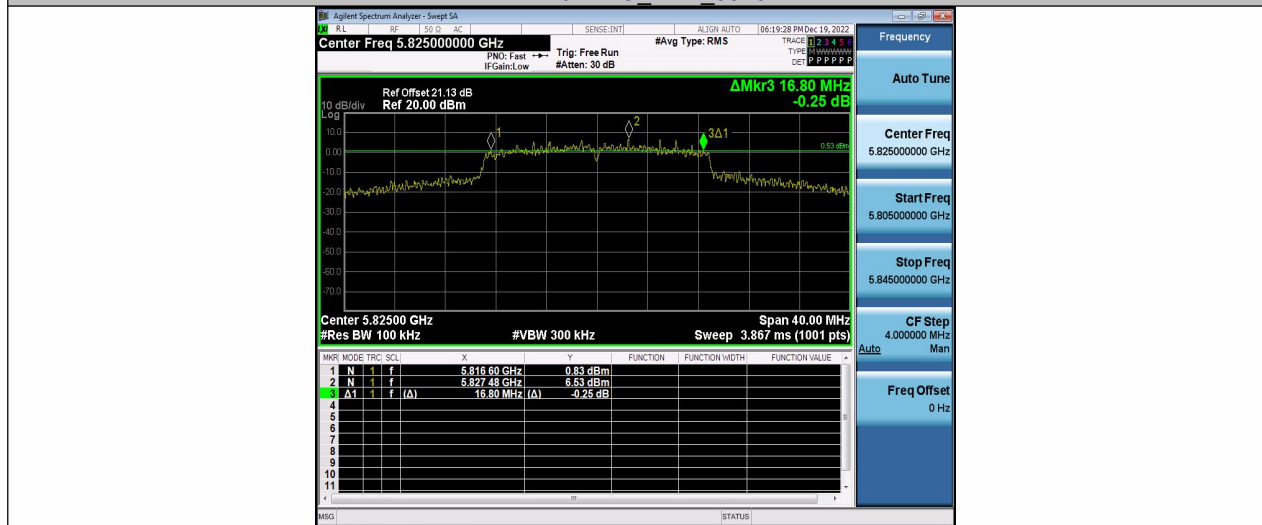




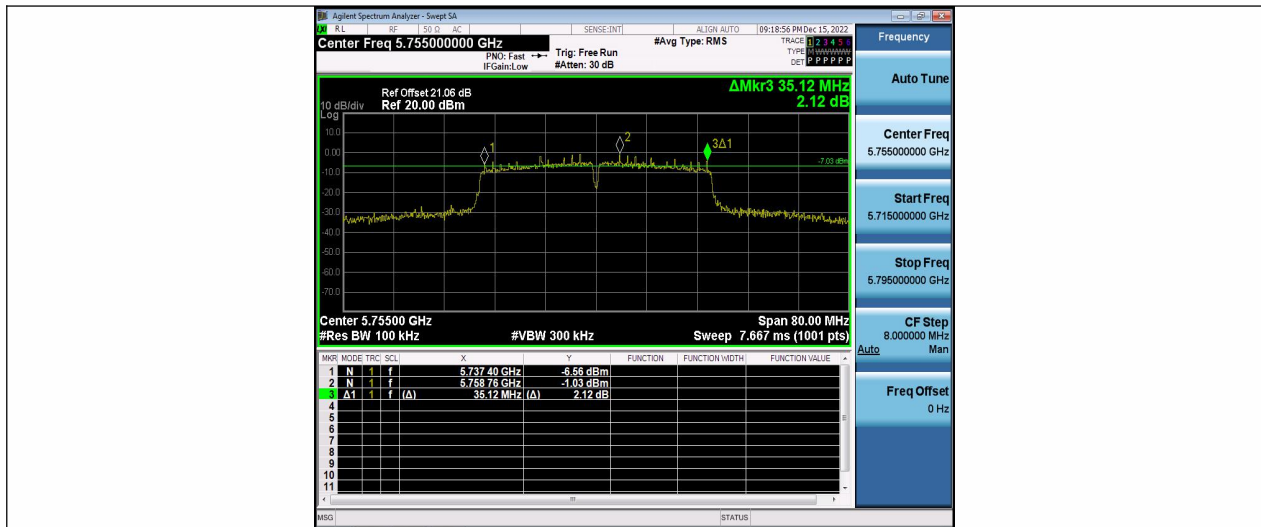
11N20MIMO_Ant1_5825



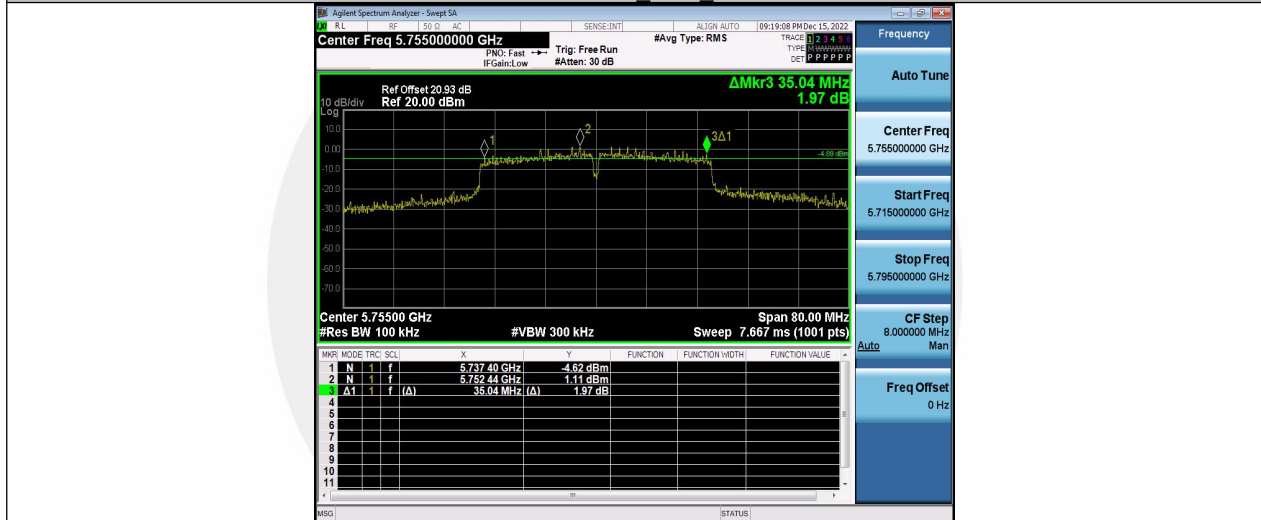
11N20MIMO_Ant2_5825



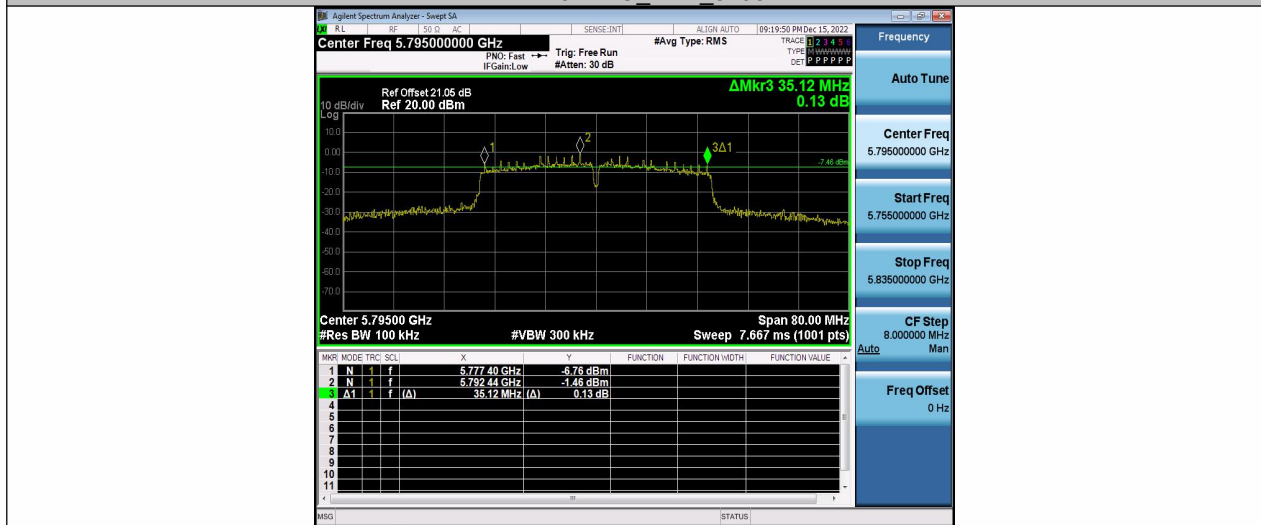
11N40MIMO_Ant1_5755



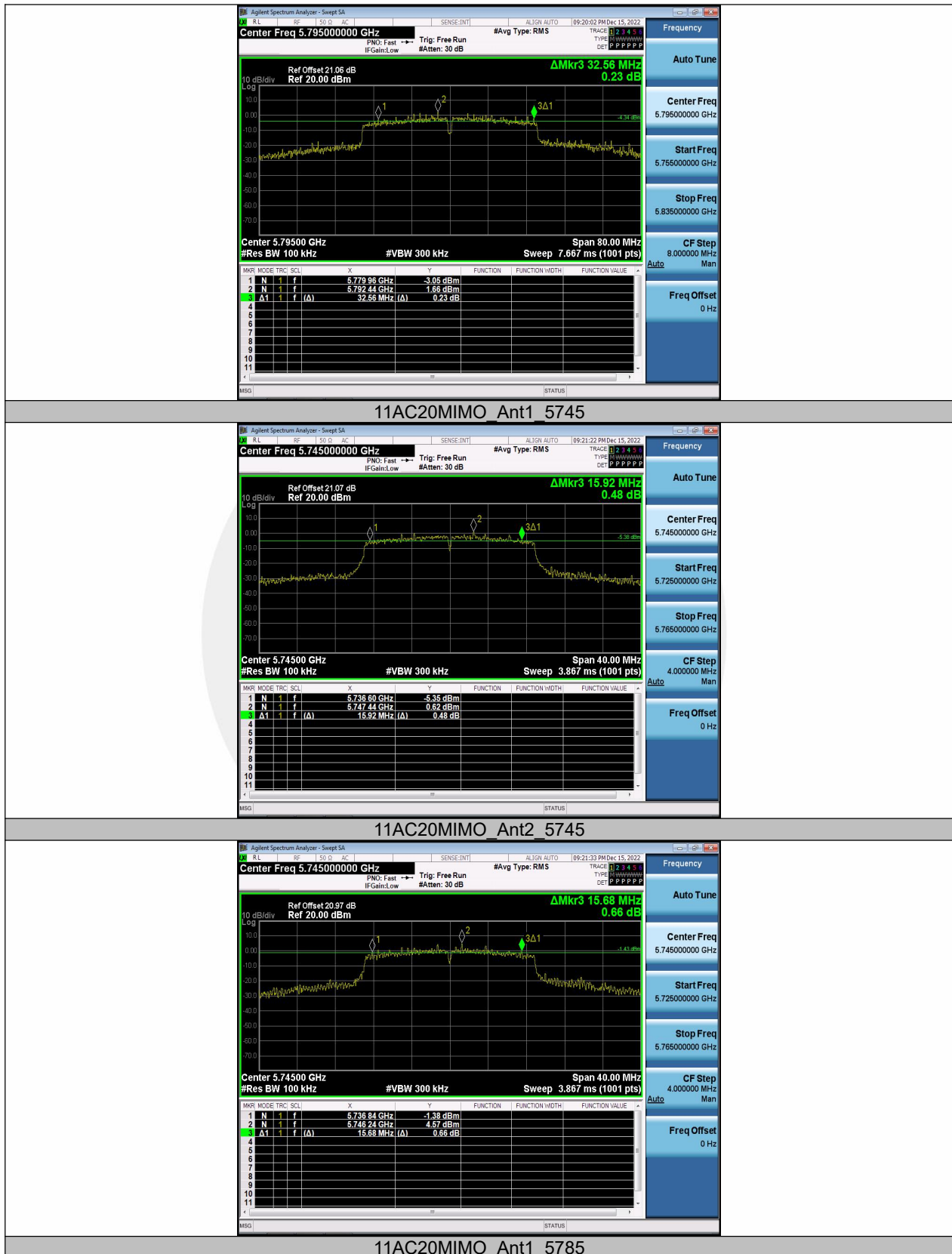
11N40MIMO Ant2 5755



11N40MIMO Ant1 5795



11N40MIMO Ant2 5795

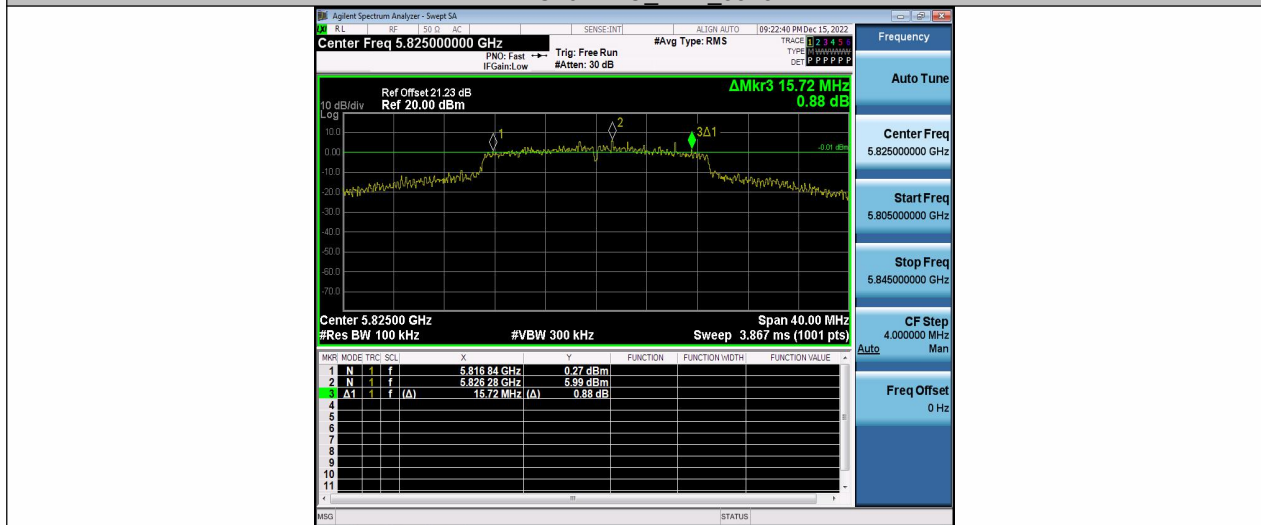




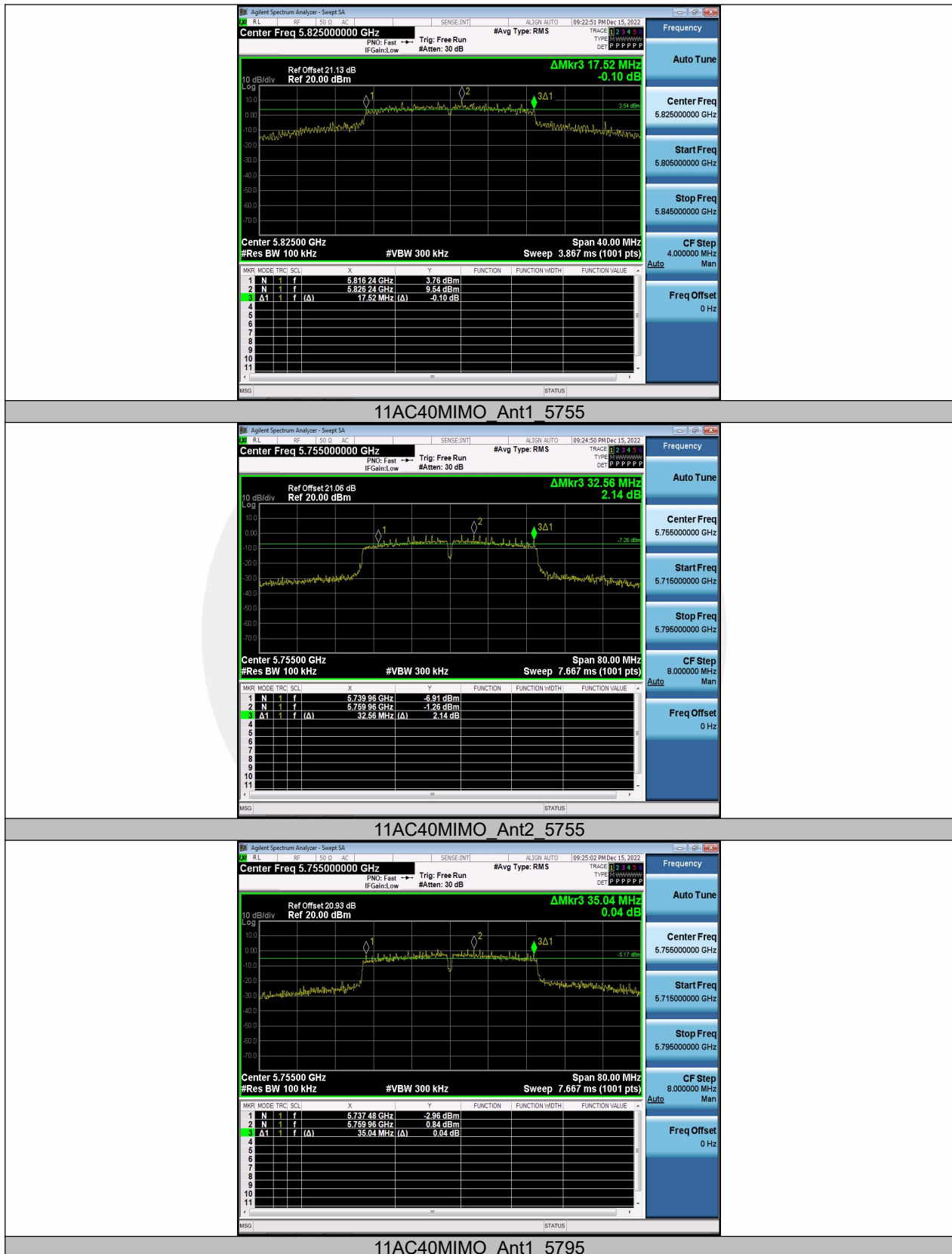
11AC20MIMO_Ant2_5785



11AC20MIMO_Ant2_5785



11AC20MIMO_Ant2_5825





11AC40MIMO_Ant2_5795



11AC80MIMO_Ant1_5775



11AC80MIMO_Ant2_5775



8.2 MAXIMUM CONDUCTED OUTPUT POWER

8.2.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I
According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C
According to FCC Part 15.407(a)(3) for UNII Band III
According to 789033 D02 Section II(E)

8.2.2 Conformance Limit

■ For the band 5.15-5.25 GHz,

(a) (1) (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

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

(a) (1) (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

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

■ For the band 5.725-5.85 GHz

(a) (3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2.3 Test Configuration

Test according to clause 6.1 radio frequency test setup 1.

8.2.4 Test Procedure

The maximum average conducted output power can be measured using Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

- The Transmitter output (antenna port) was connected to the power meter.
- Turn on the EUT and power meter and then record the power value.
- Repeat above procedures on all channels needed to be tested.

8.2.5 Test Results

Software Power Setting:	
11A	B1: 15 B2: 20 B3: 1A B4: 1E
11N20	B1: 0F B2: 0E B3: 1C B4: 1E
11N40	B1: 14 B2: 22 B3: 22 B4: 24
11AC20	B1: 0F B2: 1C B3: 1E B4: 1D
11AC40	B1: 15 B2: 22 B3: 22 B4: 24
11AC80	B1: 14 B2: 22 B3: 24 B4: 24

Test Mode	Antenna	Frequency [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	12.75	27.54	5.87	18.62	---	PASS
	Ant2	5180	13.82	27.54	5.00	18.82	---	PASS
	Ant1	5200	13.09	27.54	5.87	18.96	---	PASS
	Ant2	5200	14.10	27.54	5.00	19.10	---	PASS
	Ant1	5240	13.05	27.54	5.87	18.92	---	PASS
	Ant2	5240	13.87	27.54	5.00	18.87	---	PASS
	Ant1	5260	18.94	21.52	5.87	24.81	27.54	PASS
			14.01	21.47	5.87	19.88	27.54	PASS
	Ant2	5260	19.83	21.52	5	24.83	27.54	PASS
			13.99	21.52	5	18.99	27.54	PASS
	Ant1	5280	19.12	21.52	5.87	24.99	27.54	PASS
			13.95	21.52	5.87	19.82	27.54	PASS
	Ant2	5280	19.1	21.52	5	24.1	27.54	PASS
			13.26	21.48	5	18.26	27.54	PASS
	Ant1	5320	16.31	21.52	5.87	22.18	27.54	PASS
			13.1	21.44	5.87	18.97	27.54	PASS
	Ant2	5320	17	21.52	5	22	27.54	PASS
			12.78	21.52	5	17.78	27.54	PASS
	Ant1	5500	15.27	21.52	5.87	21.14	27.54	PASS
			11.95	21.51	5.87	17.82	27.54	PASS
	Ant2	5500	14.42	21.52	5	19.42	27.54	PASS
			10.46	21.47	5	15.46	27.54	PASS
	Ant1	5580	16.79	21.52	5.87	22.66	27.54	PASS
			13.16	21.47	5.87	19.03	27.54	PASS
	Ant2	5580	16.46	21.52	5	21.46	27.54	PASS
			12.62	21.44	5	17.62	27.54	PASS
	Ant1	5700	15.49	21.52	5.87	21.36	27.54	PASS
			11.91	21.52	5.87	17.78	27.54	PASS
	Ant2	5700	15.58	21.52	5	20.58	27.54	PASS
			10.04	21.47	5	15.04	27.54	PASS
	Ant1	5745	15.71	27.54	5.87	21.58	---	PASS
	Ant2	5745	16.14	27.54	5.00	21.14	---	PASS
	Ant1	5785	15.30	27.54	5.87	21.17	---	PASS
	Ant2	5785	15.67	27.54	5.00	20.67	---	PASS
	Ant1	5825	16.82	27.54	5.87	22.69	---	PASS
	Ant2	5825	16.80	27.54	5.00	21.80	---	PASS
11N20MI MO	Ant1	5180	9.92	27.54	5.87	15.79	---	PASS
	Ant2	5180	11.11	27.54	5.00	16.11	---	PASS
	total	5180	13.57	27.54	---	18.96	---	PASS
	Ant1	5200	10.20	27.54	5.87	16.07	---	PASS
	Ant2	5200	11.30	27.54	5.00	16.30	---	PASS
	total	5200	13.80	27.54	---	19.20	---	PASS
	Ant1	5240	9.80	27.54	5.87	15.67	---	PASS
	Ant2	5240	11.22	27.54	5.00	16.22	---	PASS
	total	5240	13.58	27.54	---	18.96	---	PASS
	Ant1	5260	16.64	21.52	5.87	22.51	27.54	PASS
			12.99	21.52	5.87	18.86	27.54	PASS
	Ant2	5260	18.08	21.52	5	23.08	27.54	PASS
			13.93	21.52	5	18.93	27.54	PASS
	total	5260	20.43	21.52	---	25.81	27.54	PASS

	Ant1	5280	16.5	21.52	---	21.91	27.54	PASS
			16.79	21.52	5.87	22.66	27.54	PASS
			12.88	21.52	5.87	18.75	27.54	PASS
	Ant2	5280	17.82	21.52	5	22.82	27.54	PASS
			13.45	21.51	5	18.45	27.54	PASS
	total	5280	20.35	21.52	---	25.75	27.54	PASS
			16.18	21.52	---	21.61	27.54	PASS
	Ant1	5320	16.41	21.52	5.87	22.28	27.54	PASS
			13.14	21.52	5.87	19.01	27.54	PASS
	Ant2	5320	17.04	21.52	5	22.04	27.54	PASS
			12.9	21.52	5	17.9	27.54	PASS
	total	5320	19.75	21.52	---	25.17	27.54	PASS
			16.03	21.52	---	21.5	27.54	PASS
	Ant1	5500	15.25	21.52	5.87	21.12	27.54	PASS
			11.87	21.52	5.87	17.74	27.54	PASS
	Ant2	5500	14.78	21.52	5	19.78	27.54	PASS
			10.76	21.52	5	15.76	27.54	PASS
	total	5500	18.03	21.52	---	23.51	27.54	PASS
			14.36	21.52	---	19.87	27.54	PASS
	Ant1	5580	16.82	21.52	5.87	22.69	27.54	PASS
			13.37	21.52	5.87	19.24	27.54	PASS
	Ant2	5580	16.87	21.52	5	21.87	27.54	PASS
			12.77	21.52	5	17.77	27.54	PASS
	total	5580	19.86	21.52	---	25.31	27.54	PASS
			16.09	21.52	---	21.58	27.54	PASS
	Ant1	5700	16.86	21.52	5.87	22.73	27.54	PASS
			12.02	21.52	5.87	17.89	27.54	PASS
	Ant2	5700	17.37	21.52	5	22.37	27.54	PASS
			10.42	21.52	5	15.42	27.54	PASS
	total	5700	20.13	21.52	---	25.56	27.54	PASS
			14.3	21.52	---	19.84	27.54	PASS
	Ant1	5745	15.58	27.54	5.87	21.45	---	PASS
	Ant2	5745	16.09	27.54	5.00	21.09	---	PASS
	total	5745	18.85	27.54	---	24.28	---	PASS
	Ant1	5785	15.01	27.54	5.87	20.88	---	PASS
	Ant2	5785	15.74	27.54	5.00	20.74	---	PASS
	total	5785	18.40	27.54	---	23.82	---	PASS
	Ant1	5825	16.86	27.54	5.87	22.73	---	PASS
	Ant2	5825	16.85	27.54	5.00	21.85	---	PASS
	total	5825	19.87	27.54	---	25.32	---	PASS
11N40MI MO	Ant1	5190	13.23	27.54	5.87	19.10	---	PASS
	Ant2	5190	14.53	27.54	5.00	19.53	---	PASS
	total	5190	16.94	27.54	---	22.33	---	PASS
	Ant1	5230	13.06	27.54	5.87	18.93	---	PASS
	Ant2	5230	14.77	27.54	5.00	19.77	---	PASS
	total	5230	17.01	27.54	---	22.38	---	PASS
	Ant1	5270	16.38	21.52	5.87	22.25	27.54	PASS
			13.1	21.52	5.87	18.97	27.54	PASS
	Ant2	5270	17.17	21.52	5	22.17	27.54	PASS
			13.84	21.52	5	18.84	27.54	PASS
	total	5270	19.8	21.52	---	25.22	27.54	PASS
			16.5	21.52	---	21.92	27.54	PASS
	Ant1	5310	16.65	21.52	5.87	22.52	27.54	PASS
			13.54	21.52	5.87	19.41	27.54	PASS
	Ant2	5310	17.14	21.52	5	22.14	27.54	PASS

	total	5310	13.28	21.52	5	18.28	27.54	PASS
			19.91	21.52	---	25.34	27.54	PASS
			16.42	21.52	---	21.89	27.54	PASS
Ant1	5510		15.47	21.52	5.87	21.34	27.54	PASS
			12.19	21.52	5.87	18.06	27.54	PASS
Ant2	5510		14.88	21.52	5	19.88	27.54	PASS
			11.13	21.52	5	16.13	27.54	PASS
total	5510		18.2	21.52	---	23.68	27.54	PASS
			14.7	21.52	---	20.21	27.54	PASS
Ant1	5550		16.38	21.52	5.87	22.25	27.54	PASS
			13.01	21.52	5.87	18.88	27.54	PASS
Ant2	5550		16.17	21.52	5	21.17	27.54	PASS
			12.5	21.52	5	17.5	27.54	PASS
total	5550		19.29	21.52	---	24.75	27.54	PASS
			15.77	21.52	---	21.25	27.54	PASS
Ant1	5670		16.37	21.52	5.87	22.24	27.54	PASS
			12.94	21.52	5.87	18.81	27.54	PASS
Ant2	5670		16.57	21.52	5	21.57	27.54	PASS
			11.26	21.52	5	16.26	27.54	PASS
total	5670		19.48	21.52	---	24.93	27.54	PASS
			15.19	21.52	---	20.73	27.54	PASS
Ant1	5755		15.59	27.54	5.87	21.46	---	PASS
Ant2	5755		15.88	27.54	5.00	20.88	---	PASS
total	5755		18.75	27.54	---	24.19	---	PASS
Ant1	5795		15.60	27.54	5.87	21.47	---	PASS
Ant2	5795		16.21	27.54	5.00	21.21	---	PASS
total	5795		18.93	27.54	---	24.35	---	PASS
11AC20M IMO	Ant1	5180	9.90	27.54	5.87	15.77	---	PASS
	Ant2	5180	11.13	27.54	5.00	16.13	---	PASS
	total	5180	13.57	27.54	---	18.96	---	PASS
	Ant1	5200	10.13	27.54	5.87	16.00	---	PASS
	Ant2	5200	11.33	27.54	5.00	16.33	---	PASS
	total	5200	13.78	27.54	---	19.18	---	PASS
	Ant1	5240	10.23	27.54	5.87	16.10	---	PASS
	Ant2	5240	11.69	27.54	5.00	16.69	---	PASS
	total	5240	14.03	27.54	---	19.42	---	PASS
	Ant1	5260	16.59	21.52	5.87	22.46	27.54	PASS
			13.08	21.52	5.87	18.95	27.54	PASS
	Ant2	5260	18.05	21.52	5	23.05	27.54	PASS
			13.86	21.52	5	18.86	27.54	PASS
	total	5260	20.39	21.52	---	25.78	27.54	PASS
			16.5	21.52	---	21.92	27.54	PASS
	Ant1	5280	16.71	21.52	5.87	22.58	27.54	PASS
			12.99	21.52	5.87	18.86	27.54	PASS
	Ant2	5280	17.74	21.52	5	22.74	27.54	PASS
			13.61	21.52	5	18.61	27.54	PASS
	total	5280	20.27	21.52	---	25.67	27.54	PASS
			16.32	21.52	---	21.75	27.54	PASS
	Ant1	5320	16.4	21.52	5.87	22.27	27.54	PASS
			13.13	21.52	5.87	19	27.54	PASS
	Ant2	5320	17.25	21.52	5	22.25	27.54	PASS
			12.84	21.52	5	17.84	27.54	PASS
	total	5320	19.86	21.52	---	25.27	27.54	PASS
			16	21.52	---	21.47	27.54	PASS
	Ant1	5500	15.4	21.52	5.87	21.27	27.54	PASS

	Ant2	5500	11.76	21.52	5.87	17.63	27.54	PASS
			14.72	21.52	5	19.72	27.54	PASS
			10.33	21.52	5	15.33	27.54	PASS
	total	5500	18.08	21.52	---	23.57	27.54	PASS
			14.11	21.52	---	19.64	27.54	PASS
	Ant1	5580	16.74	21.52	5.87	22.61	27.54	PASS
			13.12	21.52	5.87	18.99	27.54	PASS
	Ant2	5580	16.94	21.52	5	21.94	27.54	PASS
			12.64	21.52	5	17.64	27.54	PASS
	total	5580	19.85	21.52	---	25.3	27.54	PASS
			15.9	21.52	---	21.38	27.54	PASS
	Ant1	5700	15.4	21.52	5.87	21.27	27.54	PASS
			11.87	21.52	5.87	17.74	27.54	PASS
	Ant2	5700	15.96	21.52	5	20.96	27.54	PASS
			10.08	21.52	5	15.08	27.54	PASS
	total	5700	18.7	21.52	---	24.13	27.54	PASS
			14.08	21.52	---	19.62	27.54	PASS
	Ant1	5745	15.53	27.54	5.87	21.40	---	PASS
	Ant2	5745	16.11	27.54	5.00	21.11	---	PASS
	total	5745	18.84	27.54	---	24.27	---	PASS
	Ant1	5785	15.15	27.54	5.87	21.02	---	PASS
	Ant2	5785	15.72	27.54	5.00	20.72	---	PASS
	total	5785	18.45	27.54	---	23.88	---	PASS
	Ant1	5825	16.78	27.54	5.87	22.65	---	PASS
	Ant2	5825	16.82	27.54	5.00	21.82	---	PASS
	total	5825	19.81	27.54	---	25.27	---	PASS
11AC40M IMO	Ant1	5190	13.25	27.54	5.87	19.12	---	PASS
	Ant2	5190	14.51	27.54	5.00	19.51	---	PASS
	total	5190	16.94	27.54	---	22.33	---	PASS
	Ant1	5230	13.08	27.54	5.87	18.95	---	PASS
	Ant2	5230	14.67	27.54	5.00	19.67	---	PASS
	total	5230	16.96	27.54	---	22.34	---	PASS
	Ant1	5270	16.4	21.52	5.87	22.27	27.54	PASS
			13.1	21.52	5.87	18.97	27.54	PASS
	Ant2	5270	16.99	21.52	5	21.99	27.54	PASS
			13.64	21.52	5	18.64	27.54	PASS
	total	5270	19.72	21.52	---	25.14	27.54	PASS
			16.39	21.52	---	21.82	27.54	PASS
	Ant1	5310	16.57	21.52	5.87	22.44	27.54	PASS
			13.55	21.52	5.87	19.42	27.54	PASS
	Ant2	5310	17.07	21.52	5	22.07	27.54	PASS
			13.25	21.52	5	18.25	27.54	PASS
	total	5310	19.84	21.52	---	25.27	27.54	PASS
			16.41	21.52	---	21.88	27.54	PASS
	Ant1	5510	15.39	21.52	5.87	21.26	27.54	PASS
			12.11	21.52	5.87	17.98	27.54	PASS
	Ant2	5510	14.78	21.52	5	19.78	27.54	PASS
			10.89	21.52	5	15.89	27.54	PASS
	total	5510	18.11	21.52	---	23.59	27.54	PASS
			14.55	21.52	---	20.07	27.54	PASS
	Ant1	5550	16.28	21.52	5.87	22.15	27.54	PASS
			12.99	21.52	5.87	18.86	27.54	PASS
	Ant2	5550	16.13	21.52	5	21.13	27.54	PASS
			12.42	21.52	5	17.42	27.54	PASS
	total	5550	19.22	21.52	---	24.68	27.54	PASS

	Ant1	5670	15.72	21.52	---	21.21	27.54	PASS
			16.41	21.52	5.87	22.28	27.54	PASS
			13.01	21.52	5.87	18.88	27.54	PASS
	Ant2	5670	16.66	21.52	5	21.66	27.54	PASS
			11.13	21.52	5	16.13	27.54	PASS
	total	5670	19.55	21.52	---	24.99	27.54	PASS
			15.18	21.52	---	20.73	27.54	PASS
	Ant1	5755	15.64	27.54	5.87	21.51	---	PASS
	Ant2	5755	15.77	27.54	5.00	20.77	---	PASS
	total	5755	18.72	27.54	---	24.17	---	PASS
	Ant1	5795	15.50	27.54	5.87	21.37	---	PASS
	Ant2	5795	16.12	27.54	5.00	21.12	---	PASS
	total	5795	18.83	27.54	---	24.26	---	PASS
11AC80M IMO	Ant1	5210	12.45	27.54	5.87	18.32	---	PASS
	Ant2	5210	14.21	27.54	5.00	19.21	---	PASS
	total	5210	16.43	27.54	---	21.80	---	PASS
	Ant1	5290	16.64	21.52	5.87	22.51	27.54	PASS
			12.87	21.52	5.87	18.74	27.54	PASS
	Ant2	5290	17.11	21.52	5	22.11	27.54	PASS
			12.58	21.52	5	17.58	27.54	PASS
	total	5290	19.89	21.52	---	25.32	27.54	PASS
			15.74	21.52	---	21.21	27.54	PASS
	Ant1	5530	15.79	21.52	5.87	21.66	27.54	PASS
			12.38	21.52	5.87	18.25	27.54	PASS
	Ant2	5530	15.56	21.52	5	20.56	27.54	PASS
			11.55	21.52	5	16.55	27.54	PASS
	total	5530	18.69	21.52	---	24.16	27.54	PASS
			15	21.52	---	20.49	27.54	PASS
	Ant1	5610	17.01	21.52	5.87	22.88	27.54	PASS
			13.63	21.52	5.87	19.5	27.54	PASS
	Ant2	5610	17.73	21.52	5	22.73	27.54	PASS
			13.34	21.52	5	18.34	27.54	PASS
	total	5610	20.4	21.52	---	25.82	27.54	PASS
			16.5	21.52	---	21.97	27.54	PASS
	Ant1	5775	15.35	27.54	5.87	21.22	---	PASS
	Ant2	5775	15.79	27.54	5.00	20.79	---	PASS
	total	5775	18.59	27.54	---	24.02	---	PASS







