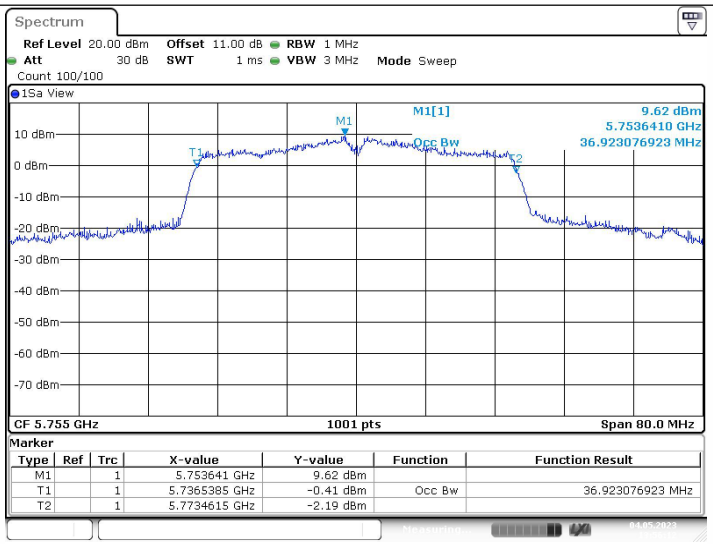
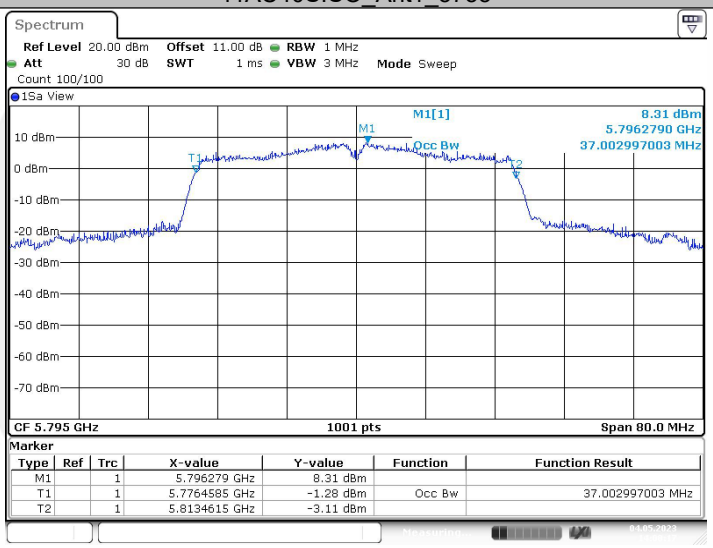


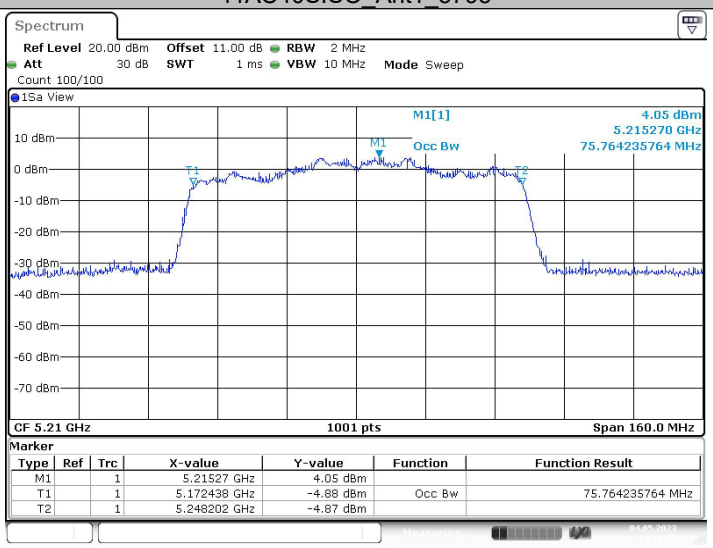
Date: 4.MAY.2023 13:56:12

11AC40SISO_Ant1_5755



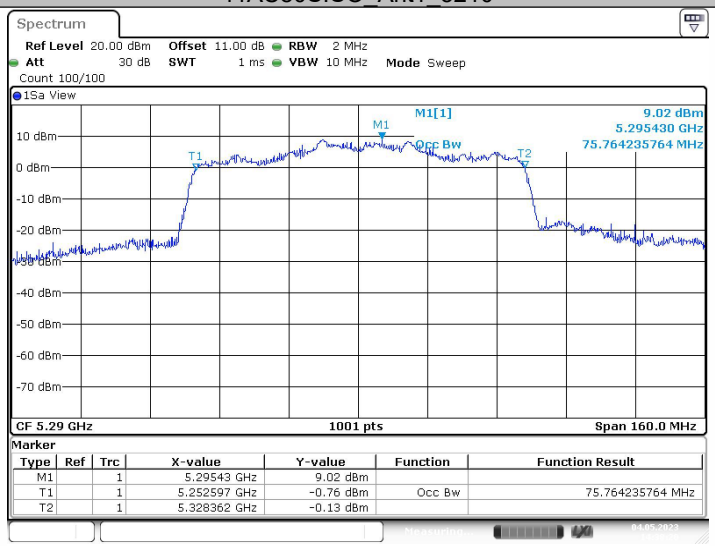
Date: 4.MAY.2023 14:00:17

11AC40SISO_Ant1_5795



Date: 4.MAY.2023 14:11:32

11AC80SISO_Ant1_5210



Date: 4.MAY.2023 14:38:20

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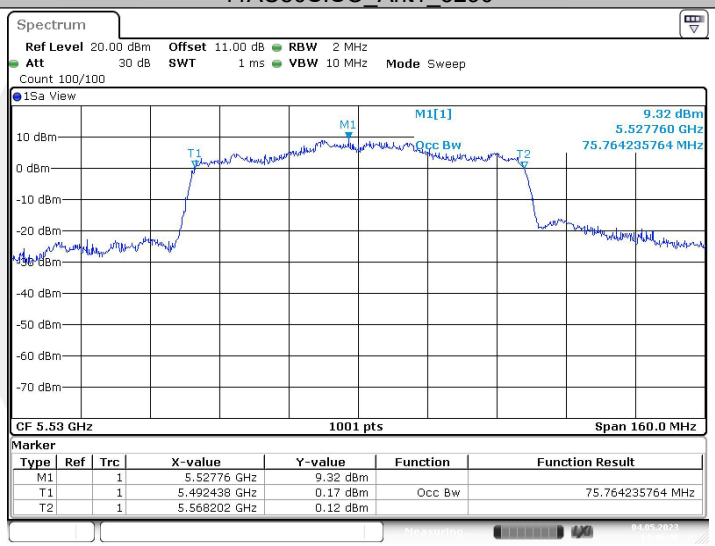

Date: 4.MAY.2023 14:46:48

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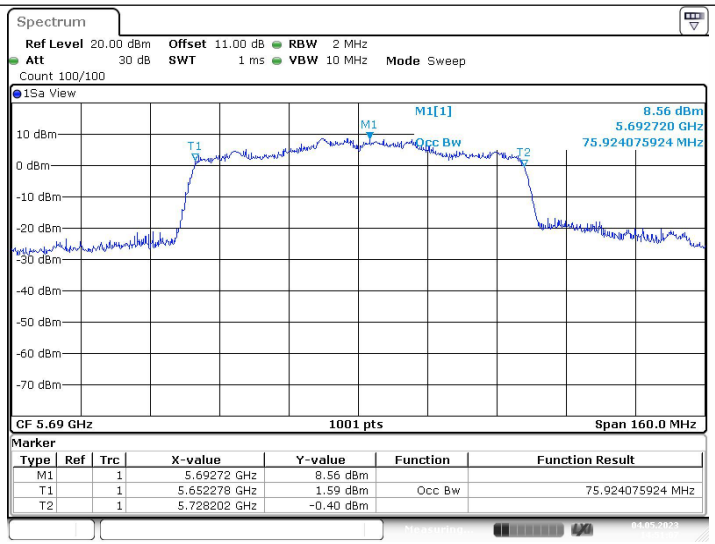

Date: 4.MAY.2023 14:51:08

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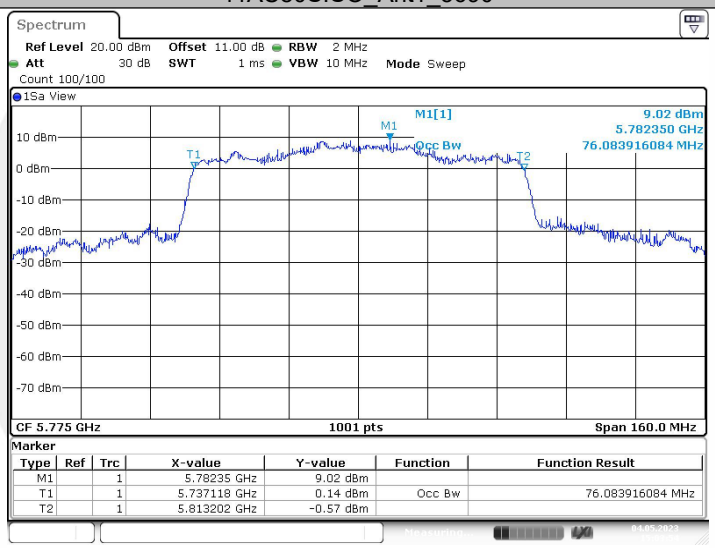
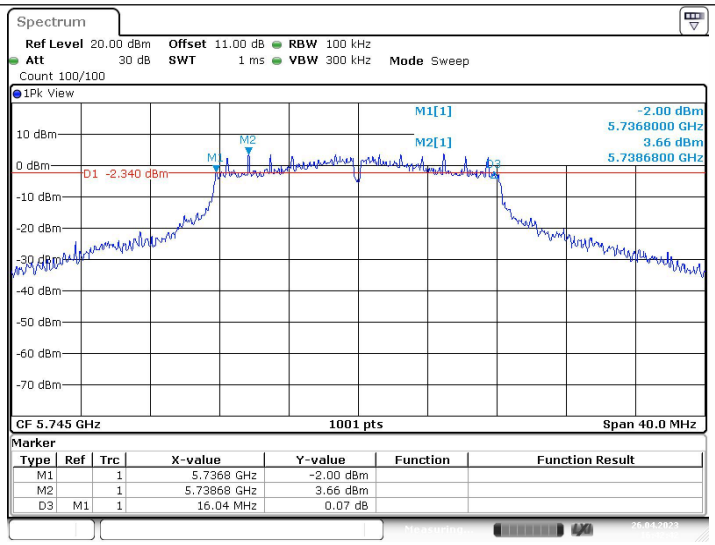


Date: 4.MAY.2023 15:03:55

11AC80SISO_Ant1_5775

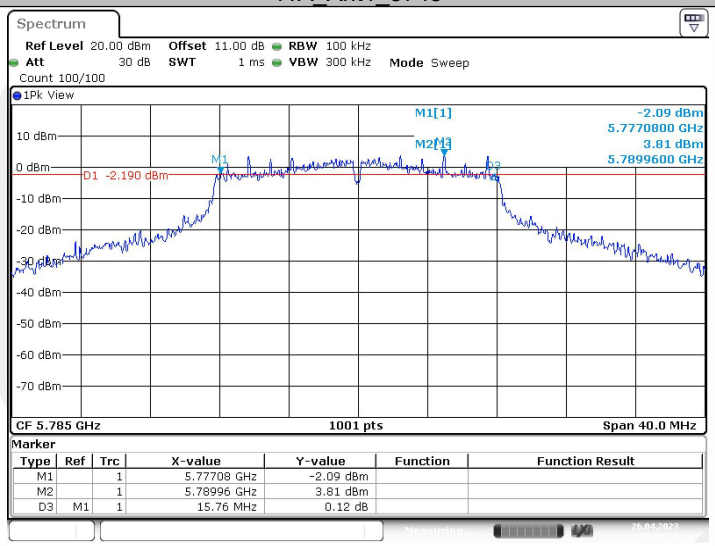
Min emission bandwidth(6db)

TestMode	Antenna	Freq(MHz)	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.04	5736.80	5752.84	0.5	PASS
		5785	15.76	5777.08	5792.84	0.5	PASS
		5825	16.04	5816.80	5832.84	0.5	PASS
11N20SISO	Ant1	5745	15.92	5736.80	5752.72	0.5	PASS
		5785	15.68	5777.16	5792.84	0.5	PASS
		5825	16.32	5816.40	5832.72	0.5	PASS
11N40SISO	Ant1	5755	35.60	5737.32	5772.92	0.5	PASS
		5795	35.76	5777.16	5812.92	0.5	PASS
11AC20SISO	Ant1	5745	17.28	5736.48	5753.76	0.5	PASS
		5785	17.48	5776.24	5793.72	0.5	PASS
		5825	17.60	5816.12	5833.72	0.5	PASS
11AC40SISO	Ant1	5755	36.40	5736.76	5773.16	0.5	PASS
		5795	36.00	5776.76	5812.76	0.5	PASS
11AC80SISO	Ant1	5690	75.20	5652.40	5727.60	0.5	PASS
		5775	75.20	5737.40	5812.60	0.5	PASS



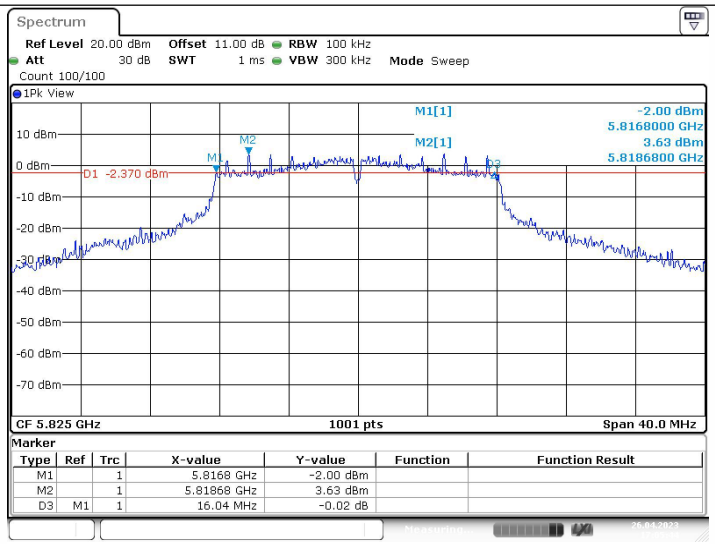
Date: 26.APR.2023 16:42:42

11A_Ant1_5745



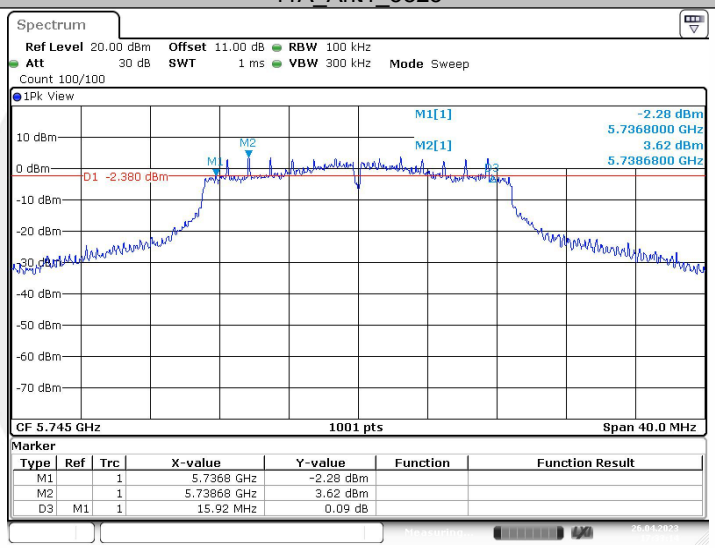
Date: 26.APR.2023 17:02:38

11A_Ant1_5785



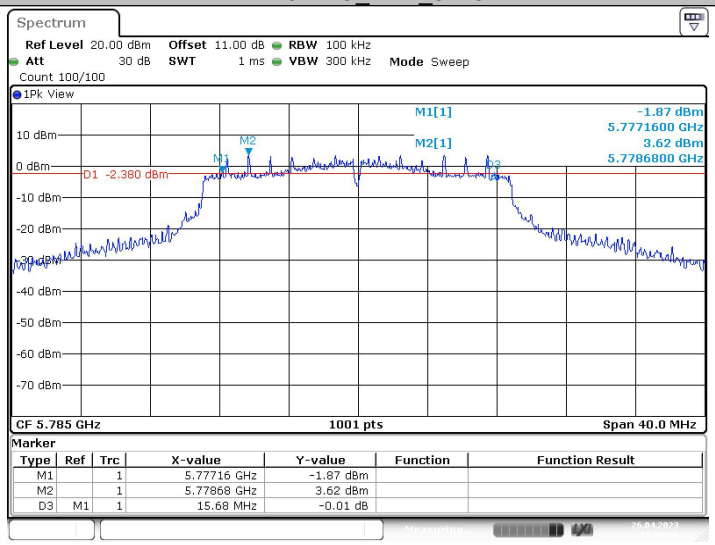
Date: 26.APR.2023 17:05:44

11A_Ant1_5825



Date: 26.APR.2023 17:33:14

11N20SISO_Ant1_5745



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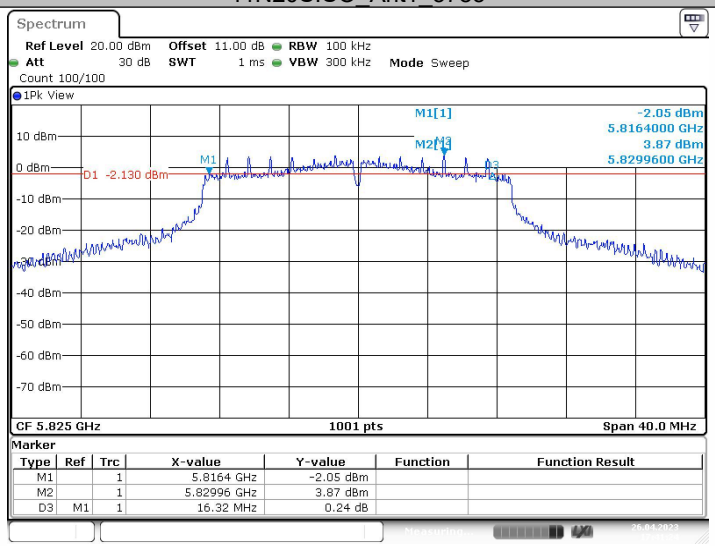
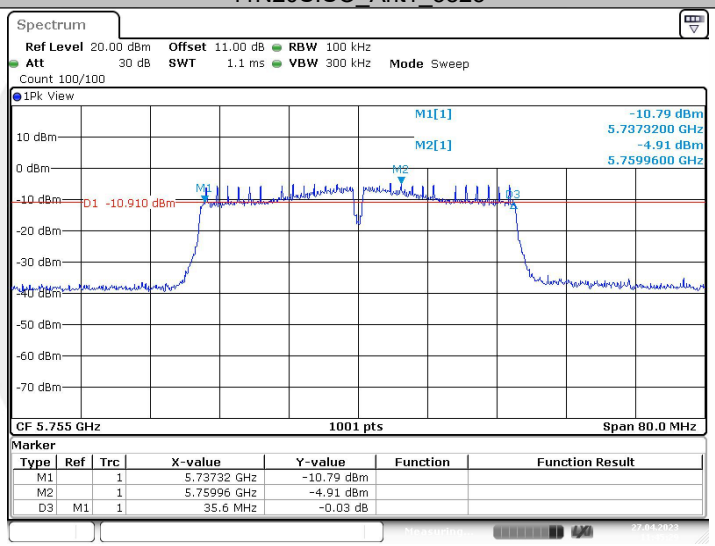


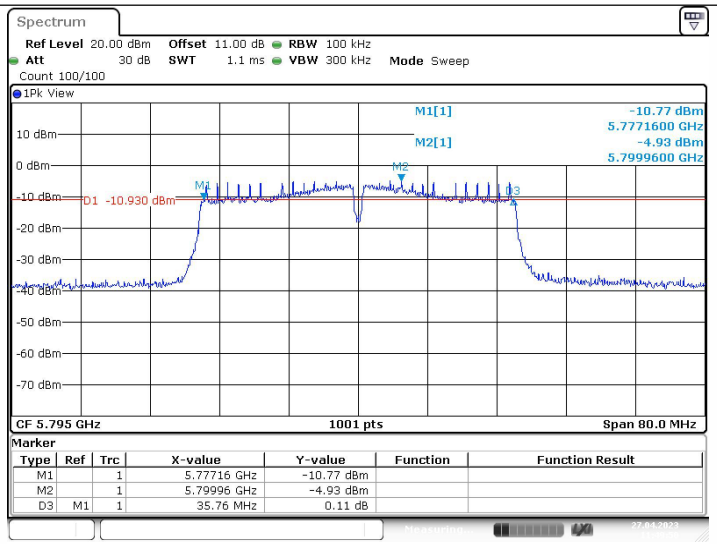
Date: 26.APR.2023 17:41:24

11N20SISO_Ant1_5825



Date: 27.APR.2023 11:45:30

11N40SISO_Ant1_5755



Date: 27.APR.2023 11:49:50

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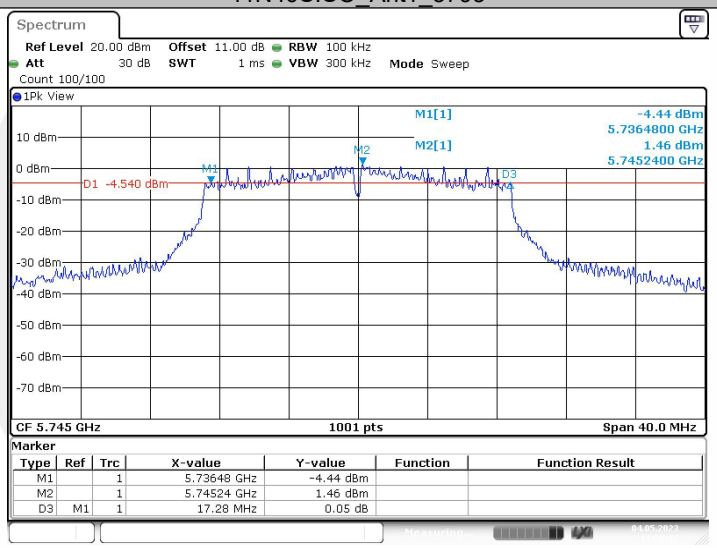
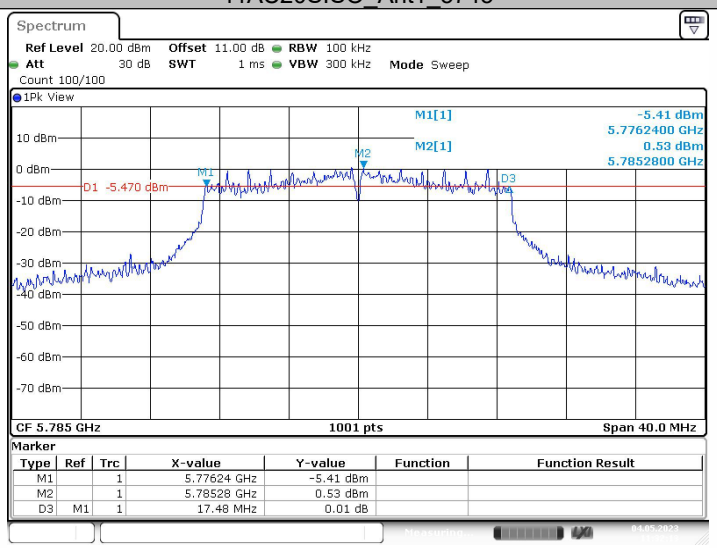


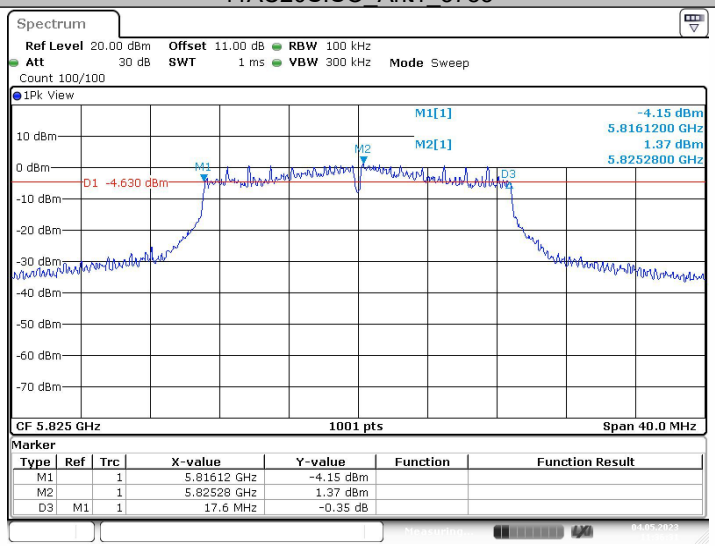
Date: 4.MAY.2023 11:28:32

11AC20SISO_Ant1_5745



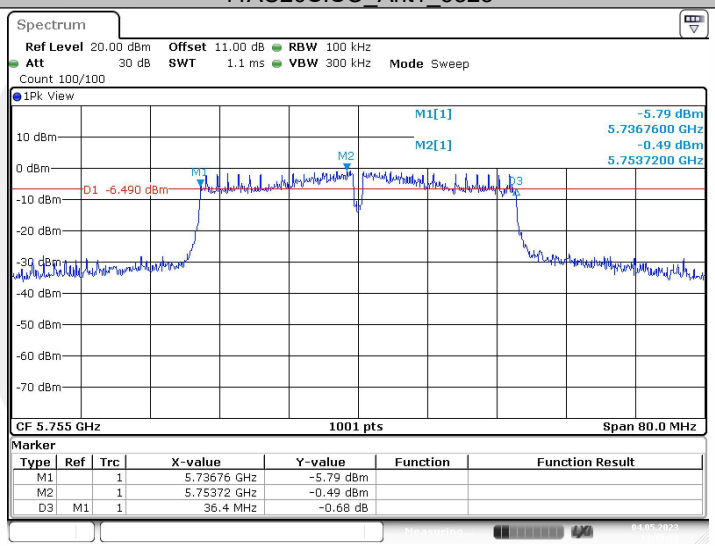
Date: 4.MAY.2023 11:32:13

11AC20SISO_Ant1_5785



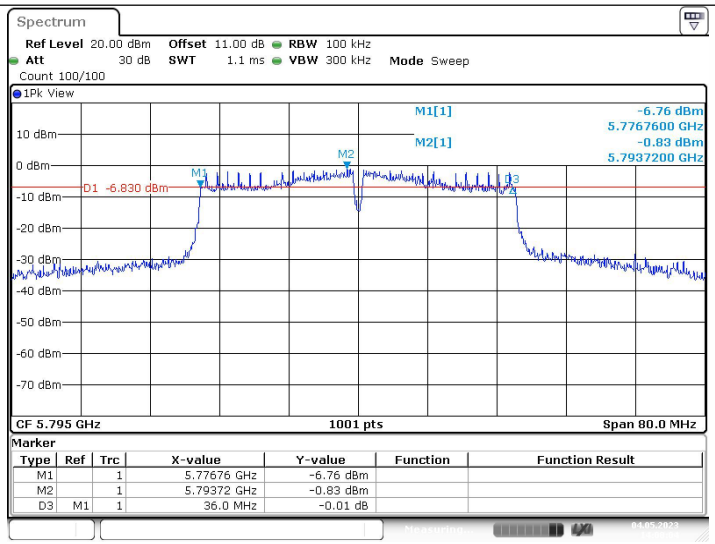
Date: 4.MAY.2023 11:36:32

11AC20SISO_Ant1_5825



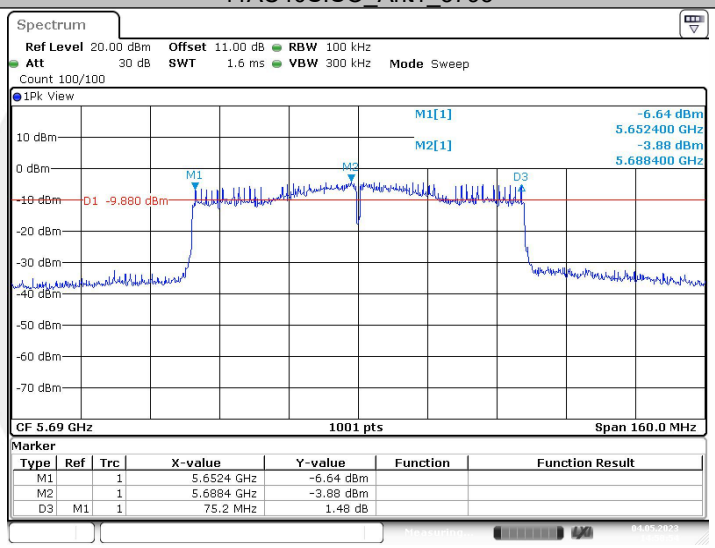
Date: 4.MAY.2023 13:55:59

11AC40SISO_Ant1_5755



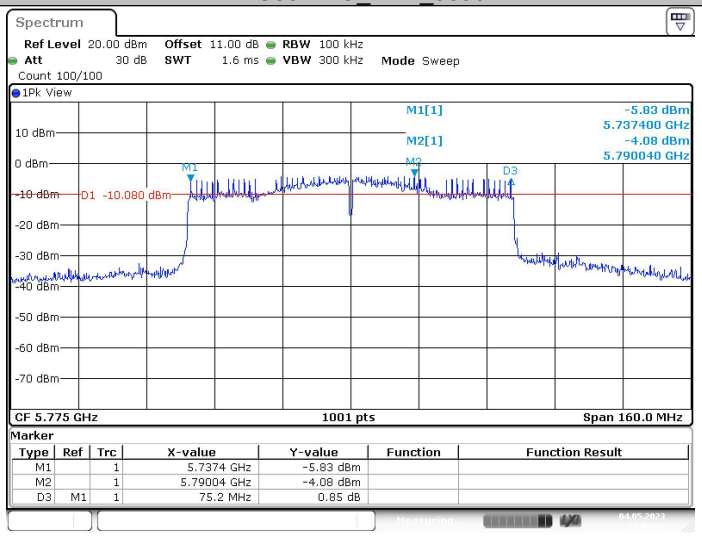
Date: 4.MAY.2023 14:00:04

11AC40SISO_Ant1_5795



Date: 4.MAY.2023 14:50:54

11AC80SISO_Ant1_5690



Date: 4.MAY.2023 15:03:42

11AC80SISO_Ant1_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 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

8.2.4 Test Procedure

Method 1 For Normal Bandwidth 20MHz, 40MHz

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

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

Method 2 For Normal Bandwidth 80MHz

Measurement of maximum conducted output power using a spectrum analyzer (Method SA-1 from KDB 789033)

a. Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
b. Set RBW = 1 MHz.
c. Set VBW ≥ 3 MHz.
d. Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
e. Sweep time = auto.
f. Detector = power averaging (rms)
g. Trace average at least 100 traces in power averaging (rms) mode.
h. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

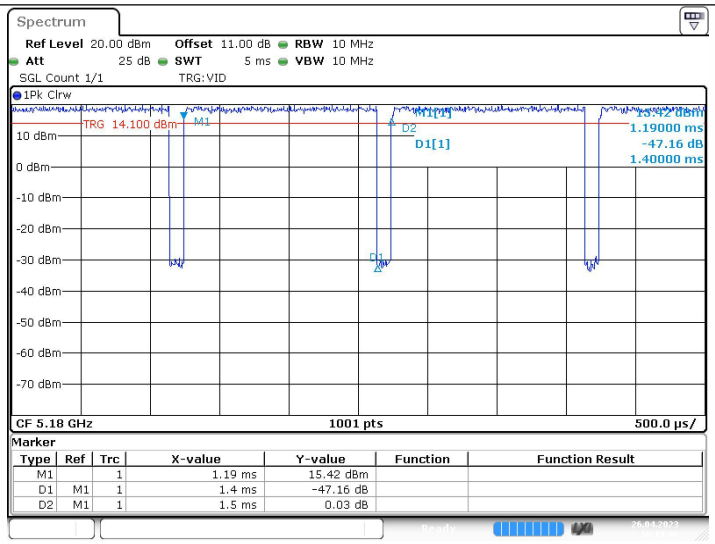
8.2.5 Test Results

Test Mode	Antenna	Frequency[MHz]	ChannelPowert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.91	93.33	0.30	14.21	≤23.98	PASS
11A	Ant1	5200	13.78	93.33	0.30	14.08	≤23.98	PASS
11A	Ant1	5220	14.01	93.33	0.30	14.31	≤23.98	PASS
11A	Ant1	5240	14.02	92.67	0.33	14.35	≤23.98	PASS
11A	Ant1	5260	14.08	93.33	0.30	14.38	≤23.98	PASS
11A	Ant1	5280	14.73	93.33	0.30	15.03	≤23.98	PASS
11A	Ant1	5300	14.37	93.33	0.30	14.67	≤23.98	PASS
11A	Ant1	5320	14.36	93.33	0.30	14.66	≤23.98	PASS
11A	Ant1	5500	14.62	93.33	0.30	14.92	≤23.98	PASS
11A	Ant1	5580	14.34	93.29	0.30	14.64	≤23.98	PASS
11A	Ant1	5700	13.21	92.67	0.33	13.54	≤23.98	PASS
11A	Ant1	5745	13.98	93.29	0.30	14.28	≤30.00	PASS
11A	Ant1	5785	13.73	92.67	0.33	14.06	≤30.00	PASS
11A	Ant1	5825	13.65	93.29	0.30	13.95	≤30.00	PASS
11AC20SISO	Ant1	5180	10.09	73.68	1.33	11.42	≤23.98	PASS
11AC20SISO	Ant1	5200	11.07	73.68	1.33	12.40	≤23.98	PASS
11AC20SISO	Ant1	5220	11.92	78.95	1.03	12.95	≤23.98	PASS
11AC20SISO	Ant1	5240	10.58	78.95	1.03	11.61	≤23.98	PASS
11AC20SISO	Ant1	5260	10.58	78.95	1.03	11.61	≤23.98	PASS
11AC20SISO	Ant1	5280	11.28	73.68	1.33	12.61	≤23.98	PASS
11AC20SISO	Ant1	5300	12.40	78.95	1.03	13.43	≤23.98	PASS
11AC20SISO	Ant1	5320	10.97	73.68	1.33	12.30	≤23.98	PASS
11AC20SISO	Ant1	5500	10.15	73.68	1.33	11.48	≤23.98	PASS
11AC20SISO	Ant1	5580	10.43	78.95	1.03	11.46	≤23.98	PASS
11AC20SISO	Ant1	5700	10.18	73.68	1.33	11.51	≤23.98	PASS
11AC20SISO	Ant1	5745	11.15	73.68	1.33	12.48	≤30.00	PASS
11AC20SISO	Ant1	5785	9.94	78.95	1.03	10.97	≤30.00	PASS
11AC20SISO	Ant1	5825	10.88	73.68	1.33	12.21	≤30.00	PASS
11AC40SISO	Ant1	5190	9.67	61.54	2.11	11.78	≤23.98	PASS
11AC40SISO	Ant1	5230	9.88	61.54	2.11	11.99	≤23.98	PASS
11AC40SISO	Ant1	5270	10.04	69.23	1.60	11.64	≤23.98	PASS
11AC40SISO	Ant1	5310	10.38	61.54	2.11	12.49	≤23.98	PASS
11AC40SISO	Ant1	5510	10.50	61.54	2.11	12.61	≤23.98	PASS
11AC40SISO	Ant1	5670	10.07	61.54	2.11	12.18	≤23.98	PASS
11AC40SISO	Ant1	5755	10.88	69.23	1.60	12.48	≤30.00	PASS
11AC40SISO	Ant1	5795	10.42	61.54	2.11	12.53	≤30.00	PASS
11AC80SISO	Ant1	5210	9.50	54.55	2.63	12.13	≤23.98	PASS
11AC80SISO	Ant1	5290	10.02	54.55	2.63	12.65	≤23.98	PASS
11AC80SISO	Ant1	5530	10.15	54.55	2.63	12.78	≤23.98	PASS
11AC80SISO	Ant1	5690_UNII-2C	9.71	54.55	2.63	12.34	≤23.98	PASS
11AC80SISO	Ant1	5775	10.16	54.55	2.63	12.79	≤30.00	PASS
11N20SISO	Ant1	5180	12.80	92.91	0.32	13.12	≤23.98	PASS
11N20SISO	Ant1	5200	12.75	92.91	0.32	13.07	≤23.98	PASS
11N20SISO	Ant1	5220	13.66	92.91	0.32	13.98	≤23.98	PASS
11N20SISO	Ant1	5240	13.18	92.20	0.35	13.53	≤23.98	PASS
11N20SISO	Ant1	5260	13.26	92.91	0.32	13.58	≤23.98	PASS
11N20SISO	Ant1	5280	13.52	92.91	0.32	13.84	≤23.98	PASS
11N20SISO	Ant1	5300	14.08	92.91	0.32	14.40	≤23.98	PASS
11N20SISO	Ant1	5320	13.68	92.91	0.32	14.00	≤23.98	PASS
11N20SISO	Ant1	5500	13.65	92.91	0.32	13.97	≤23.98	PASS
11N20SISO	Ant1	5580	13.34	92.91	0.32	13.66	≤23.98	PASS
11N20SISO	Ant1	5700	12.92	92.91	0.32	13.24	≤23.98	PASS
11N20SISO	Ant1	5745	13.74	92.91	0.32	14.06	≤30.00	PASS
11N20SISO	Ant1	5785	13.57	92.91	0.32	13.89	≤30.00	PASS
11N20SISO	Ant1	5825	13.45	100.00	0.00	13.45	≤30.00	PASS
11N40SISO	Ant1	5190	11.68	94.20	0.26	11.94	≤23.98	PASS
11N40SISO	Ant1	5230	11.79	92.75	0.33	12.12	≤23.98	PASS
11N40SISO	Ant1	5270	12.00	92.75	0.33	12.33	≤23.98	PASS
11N40SISO	Ant1	5310	12.32	92.75	0.33	12.65	≤23.98	PASS

11N40SISO	Ant1	5510	12.45	94.20	0.26	12.71	≤23.98	PASS
11N40SISO	Ant1	5550	12.31	94.20	0.26	12.57	≤23.98	PASS
11N40SISO	Ant1	5670	11.96	94.20	0.26	12.22	≤23.98	PASS
11N40SISO	Ant1	5755	12.69	92.75	0.33	13.02	≤30.00	PASS
11N40SISO	Ant1	5795	12.62	94.20	0.26	12.88	≤30.00	PASS

TestMode	Antenna	Freq(MHz)	TransmissionDuration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5180	1.40	1.50	93.33
		5200	1.40	1.50	93.33
		5220	1.40	1.50	93.33
		5240	1.39	1.50	92.67
		5260	1.40	1.50	93.33
		5280	1.40	1.50	93.33
		5300	1.40	1.50	93.33
		5320	1.40	1.50	93.33
		5500	1.40	1.50	93.33
		5580	1.39	1.49	93.29
		5700	1.39	1.50	92.67
		5745	1.39	1.49	93.29
		5785	1.39	1.50	92.67
		5825	1.39	1.49	93.29
11N20SISO	Ant1	5180	1.31	1.41	92.91
		5200	1.31	1.41	92.91
		5220	1.31	1.41	92.91
		5240	1.30	1.41	92.20
		5260	1.31	1.41	92.91
		5280	1.31	1.41	92.91
		5300	1.31	1.41	92.91
		5320	1.31	1.41	92.91
		5500	1.31	1.41	92.91
		5580	1.31	1.41	92.91
		5700	1.31	1.41	92.91
		5745	1.31	1.41	92.91
		5785	1.31	1.41	92.91
		5825	30.00	30.00	100.00
11N40SISO	Ant1	5190	0.65	0.69	94.20
		5230	0.64	0.69	92.75
		5270	0.64	0.69	92.75
		5310	0.64	0.69	92.75
		5510	0.65	0.69	94.20
		5550	0.65	0.69	94.20
		5670	0.65	0.69	94.20
		5755	0.64	0.69	92.75
		5795	0.65	0.69	94.20
11AC20SISO	Ant1	5180	0.14	0.19	73.68
		5200	0.14	0.19	73.68
		5220	0.15	0.19	78.95
		5240	0.15	0.19	78.95
		5260	0.15	0.19	78.95
		5280	0.14	0.19	73.68
		5300	0.15	0.19	78.95
		5320	0.14	0.19	73.68
		5500	0.14	0.19	73.68
		5580	0.15	0.19	78.95
		5700	0.14	0.19	73.68
		5745	0.14	0.19	73.68
		5785	0.15	0.19	78.95
		5825	0.14	0.19	73.68
11AC40SISO	Ant1	5190	0.08	0.13	61.54
		5230	0.08	0.13	61.54
		5270	0.09	0.13	69.23
		5310	0.08	0.13	61.54
		5510	0.08	0.13	61.54
		5670	0.08	0.13	61.54
		5755	0.09	0.13	69.23
		5795	0.08	0.13	61.54

11AC80SISO	Ant1	5210	0.06	0.11	54.55
		5290	0.06	0.11	54.55
		5530	0.06	0.11	54.55
		5690	0.06	0.11	54.55
		5775	0.06	0.11	54.55



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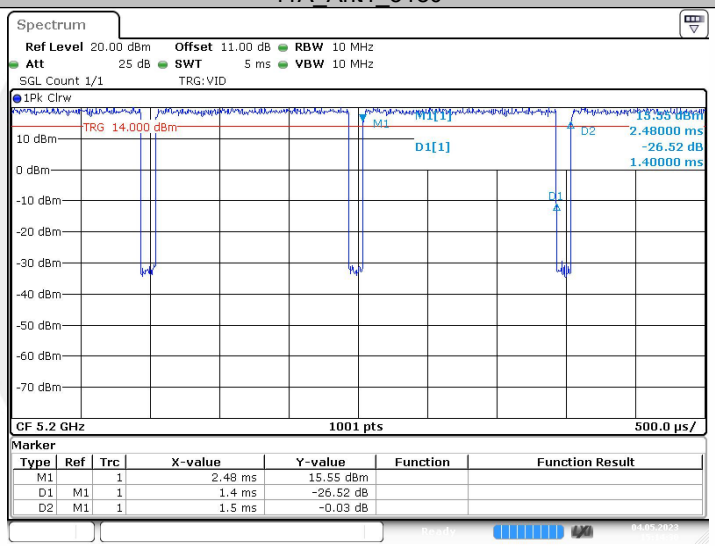

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