

Appendix B

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Smart Art Frame

Trade Mark: Canvia

Test Model: CanviaWOD

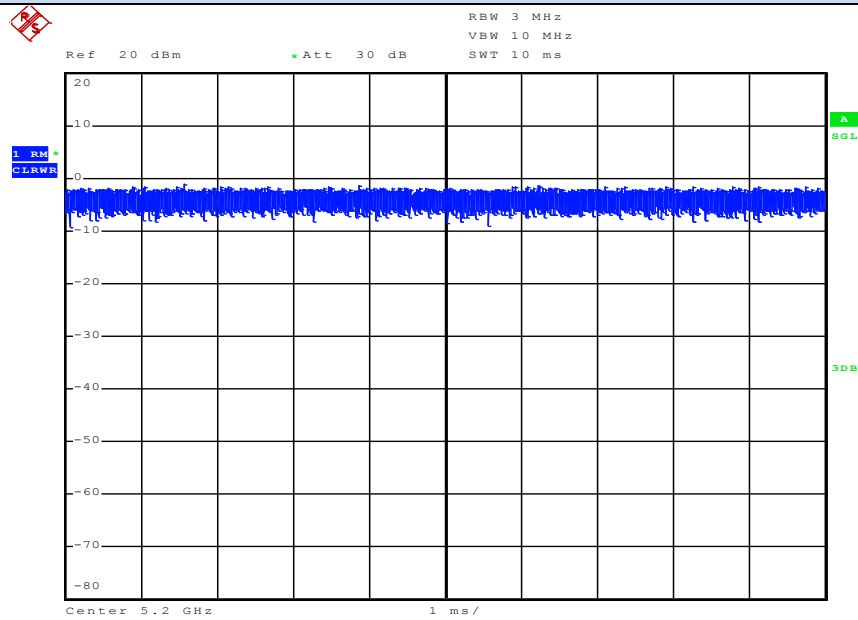
Environmental Conditions

Temperature:	25 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Lihuan
Supervised by:	Wang.Chuang

B.1 Duty Cycle

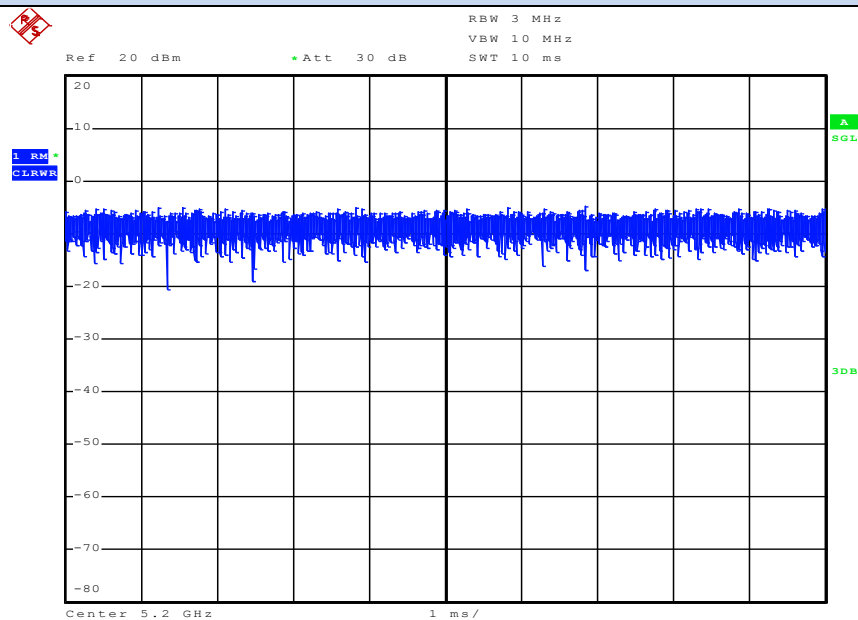
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5200	100	0.00	0.01
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01
11AC20 SISO	5200	100	0.00	0.01
11AC40 SISO	5190	100	0.00	0.01
11AC80 SISO	5210	100	0.00	0.01

On Time and Duty Cycle



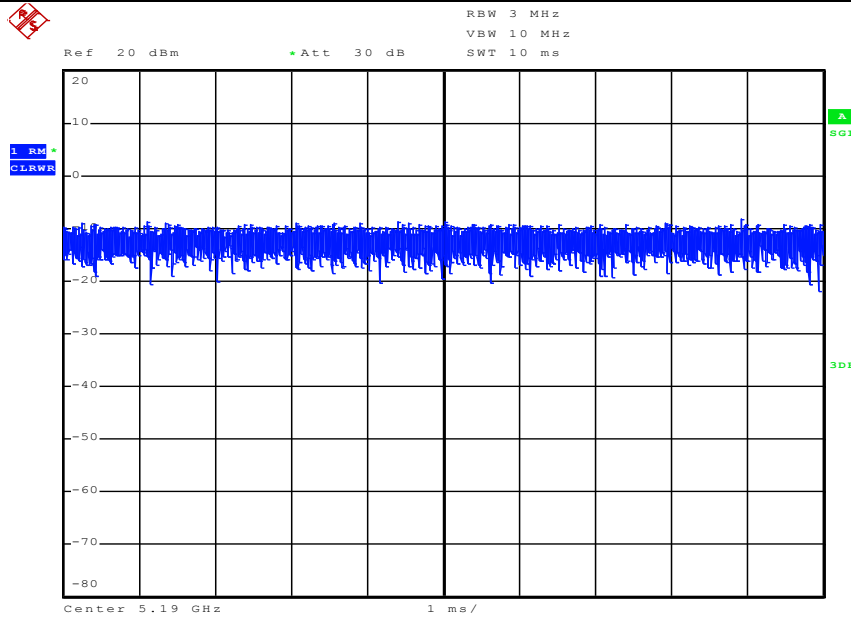
Date: 7.AUG.2019 17:13:12

IEEE 802.11a



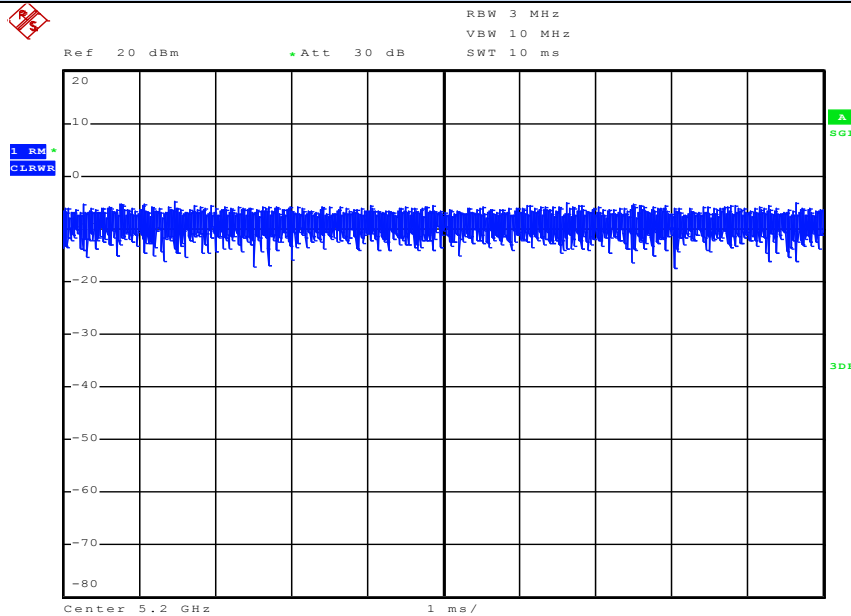
Date: 7.AUG.2019 17:18:44

IEEE 802.11n HT20



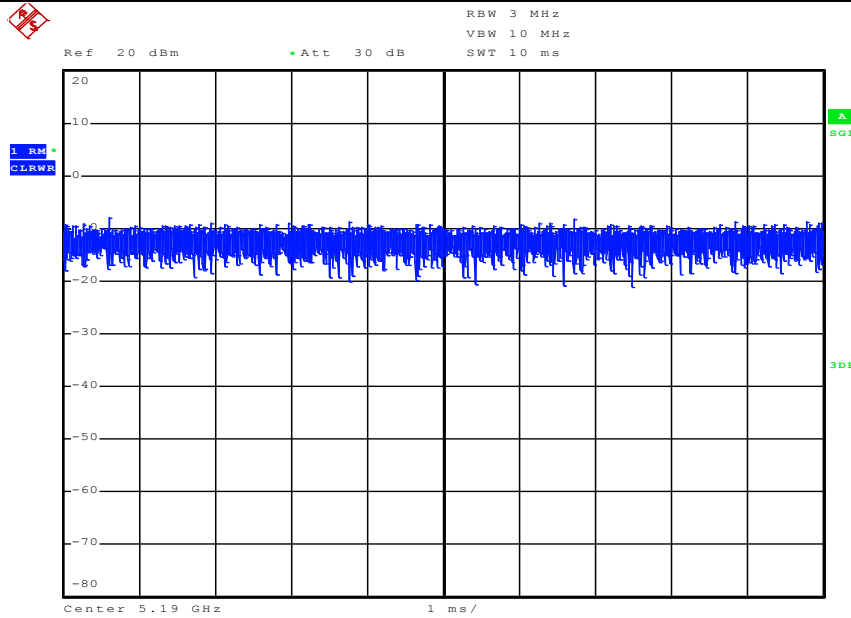
Date: 7.AUG.2019 17:20:31

IEEE 802.11n HT40



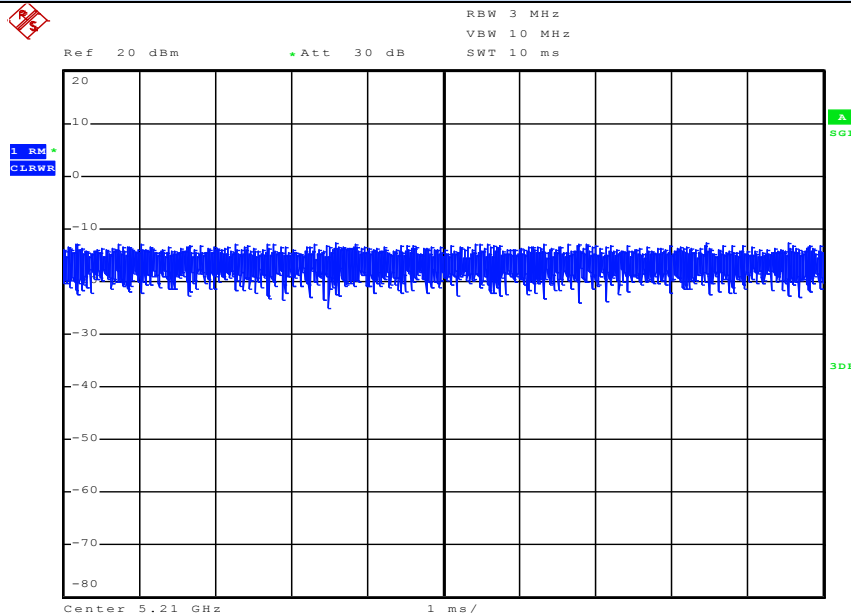
Date: 7.AUG.2019 17:22:10

IEEE 802.11AC20



Date: 7.AUG.2019 17:23:50

IEEE 802.11 AC40



Date: 7.AUG.2019 17:25:32

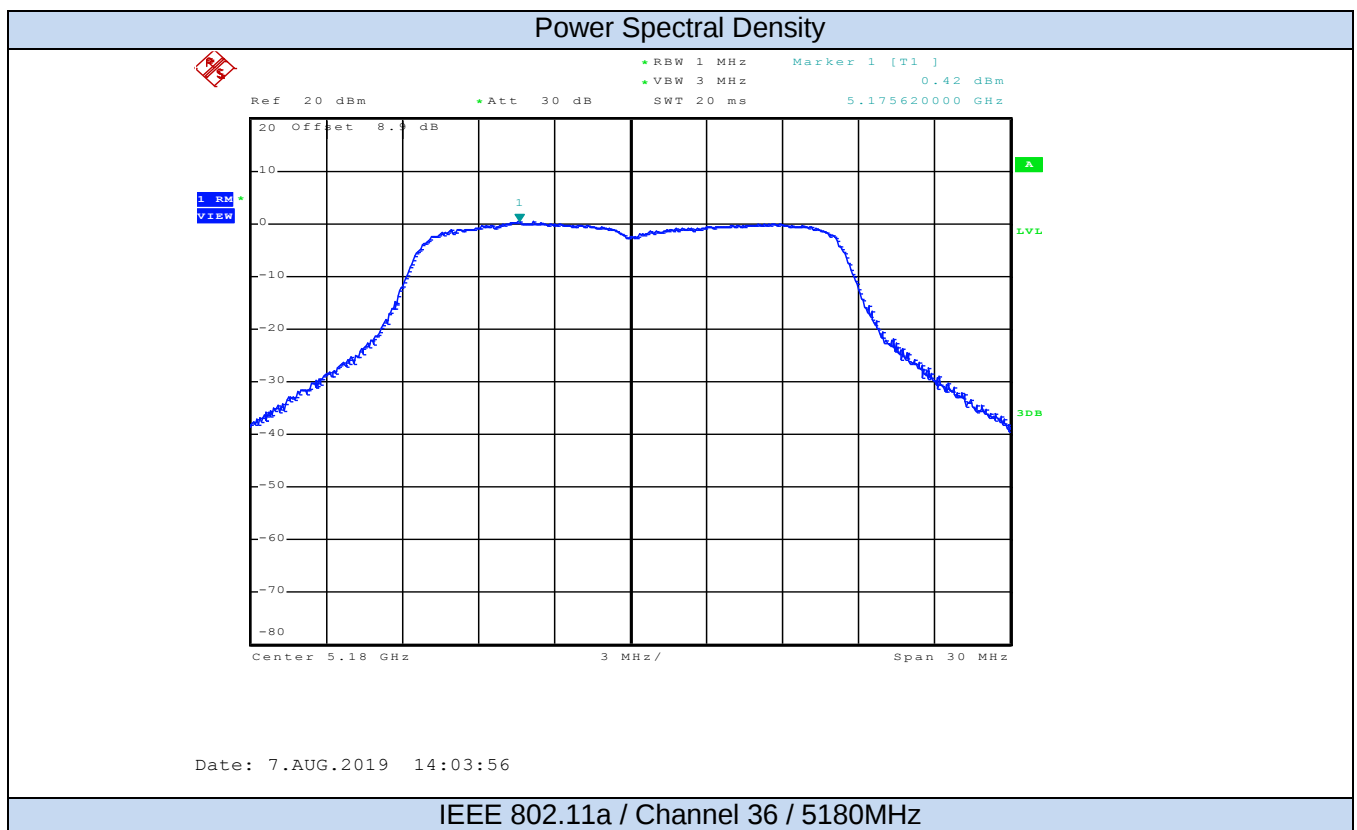
IEEE 802.11AC80

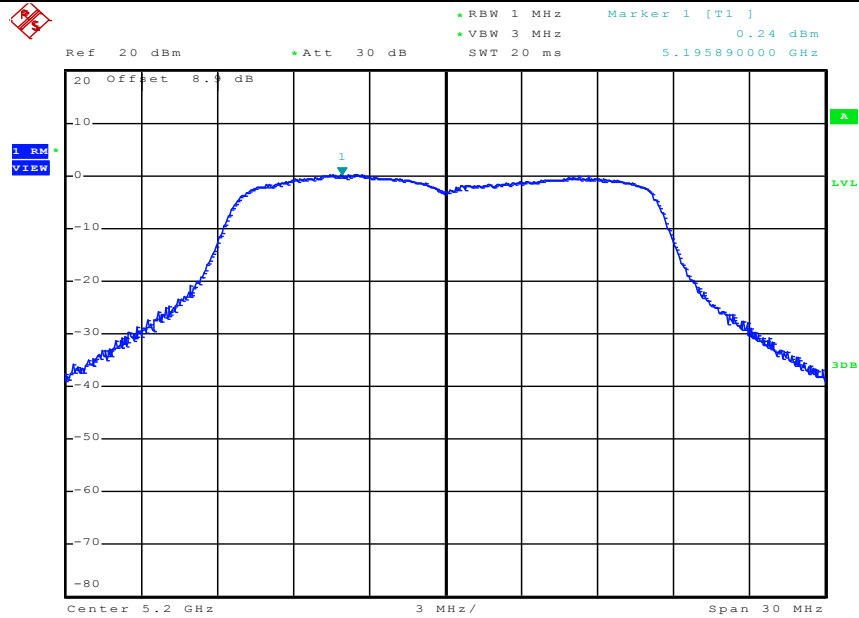
B.2 Maximum Conduct Output Power

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor(dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	10.92	0	10.92	24	Pass
	40	5200	10.38	0	10.38		Pass
	48	5240	9.77	0	9.77		Pass
11N20 SISO	36	5180	10.32	0	10.32	24	Pass
	40	5200	9.91	0	9.91		Pass
	48	5240	9.7	0	9.7		Pass
11N40 SISO	38	5190	10	0	10	24	Pass
	46	5230	9.38	0	9.38		Pass
11AC20 SISO	36	5180	10.28	0	10.28	24	Pass
	40	5200	10.01	0	10.01		Pass
	48	5240	9.69	0	9.69		Pass
11AC40 SISO	38	5190	9.72	0	9.72	24	Pass
	46	5230	9.21	0	9.21		Pass
11AC80 SISO	42	5210	10.03	0	10.03	24	Pass

B.3 Power Spectral Density

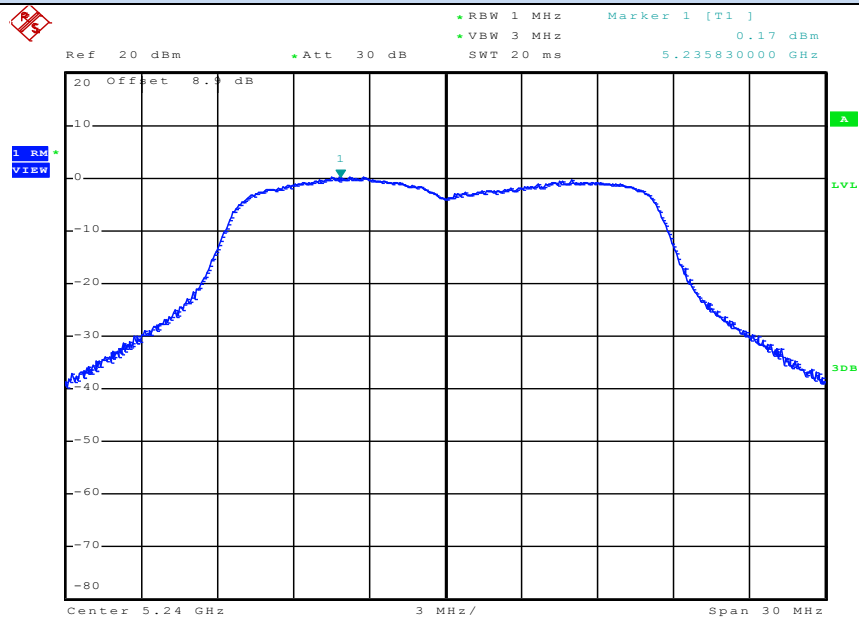
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor (dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	0.42	0	0.51	11	Pass
	40	5200	0.24	0	0.32		Pass
	48	5240	0.17	0	0.25		Pass
11N20 SISO	36	5180	-0.21	0	-0.12	11	Pass
	40	5200	0.02	0	0.11		Pass
	48	5240	-0.01	0	0.08		Pass
11N40 SISO	38	5190	-3.14	0	-2.96	11	Pass
	46	5230	-3.22	0	-3.04		Pass
11AC20 SISO	36	5180	-0.21	0	-0.12	11	Pass
	40	5200	0.04	0	0.13		Pass
	48	5240	0.05	0	0.14		Pass
11AC40 SISO	38	5190	-3.38	0	-3.20	11	Pass
	46	5230	-3.24	0	-3.06		Pass
11AC80 SISO	42	5210	-6.40	0	-6.03	11	Pass





Date: 7.AUG.2019 14:06:58

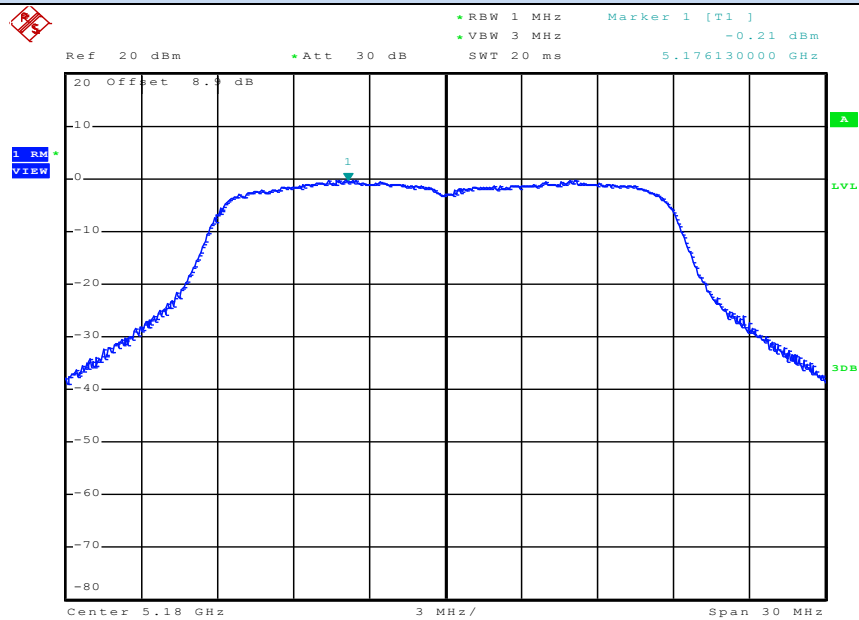
IEEE 802.11na / Channel 40 / 5200MHz



Date: 7.AUG.2019 14:08:40

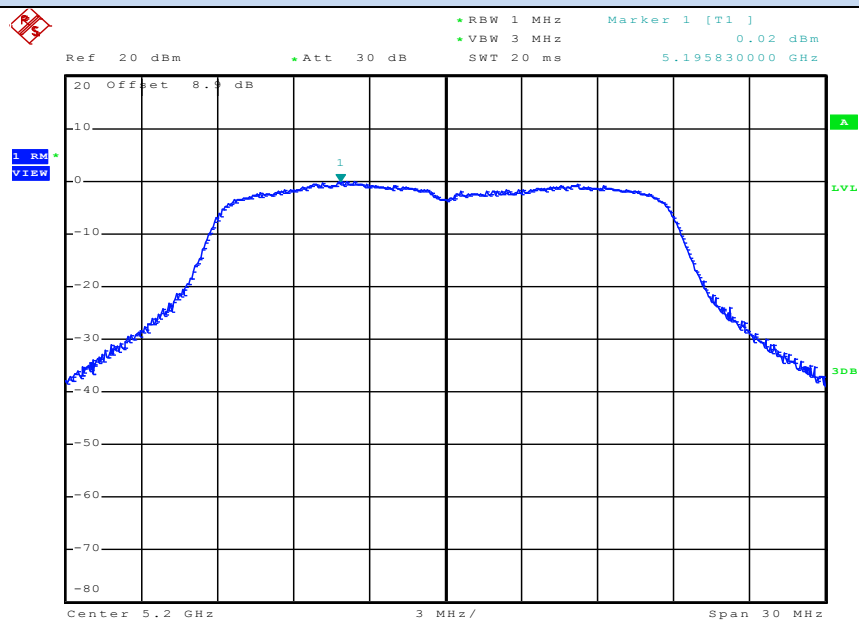
IEEE 802.11na / Channel 48 / 5240MHz

Power Spectral Density



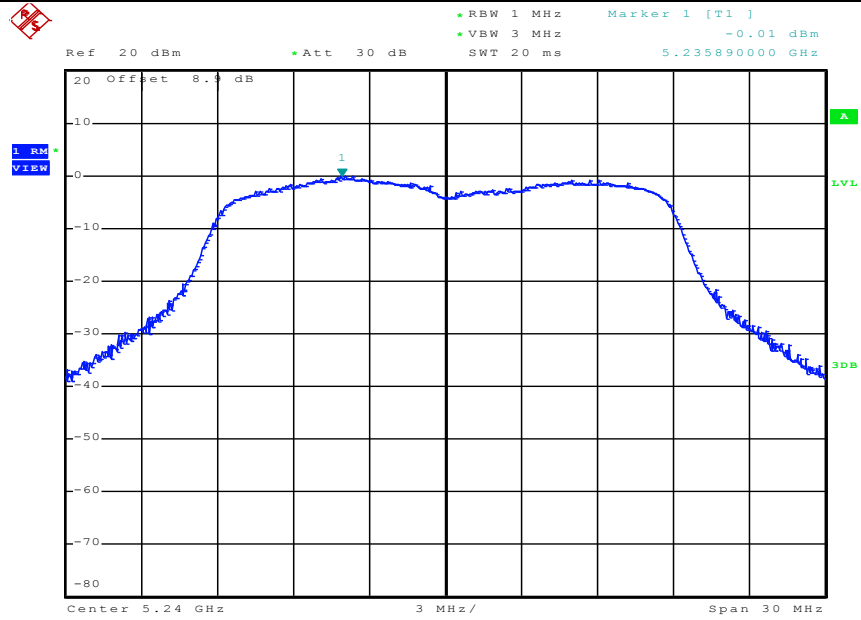
Date: 7.AUG.2019 14:23:55

IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 7.AUG.2019 14:28:27

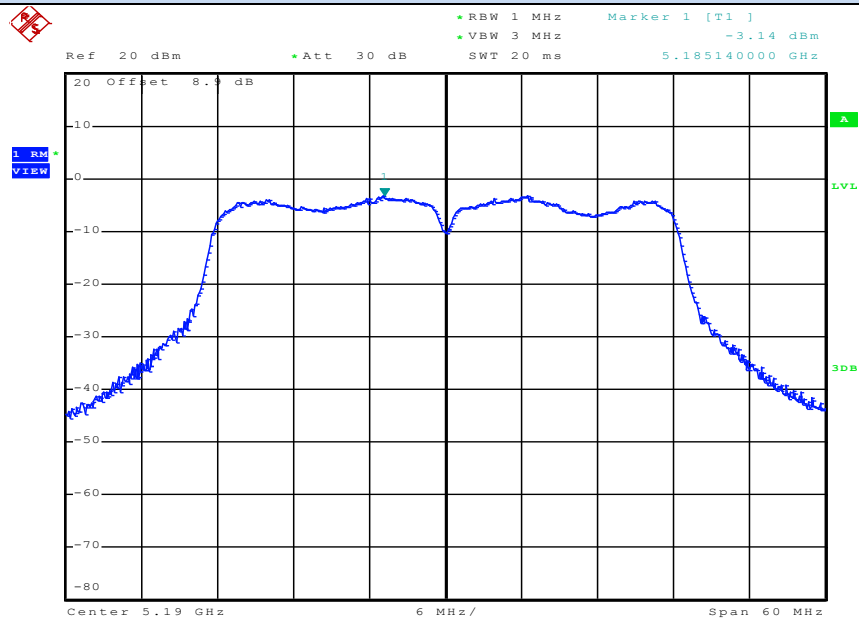
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 7.AUG.2019 14:30:02

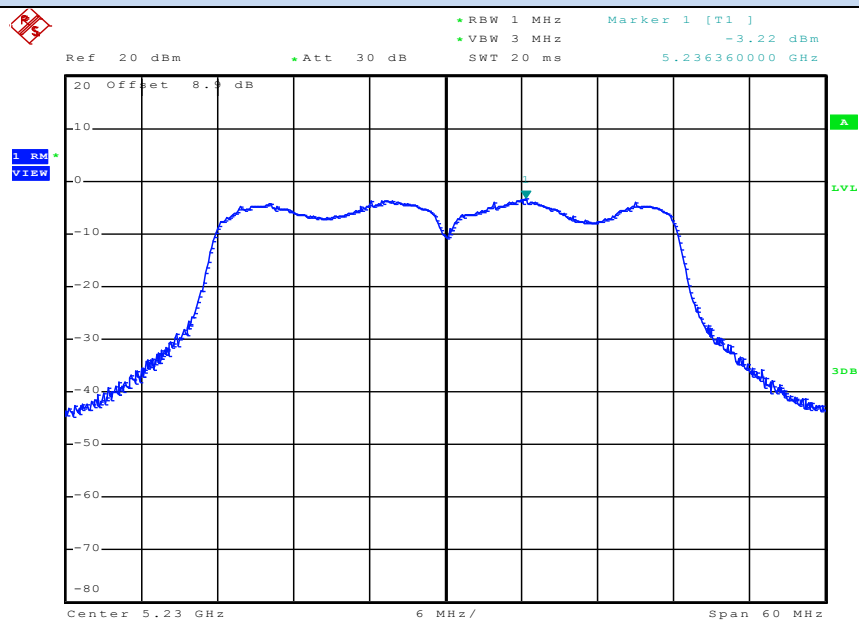
IEEE 802.11n20 / Channel 48 / 5240MHz

Power Spectral Density



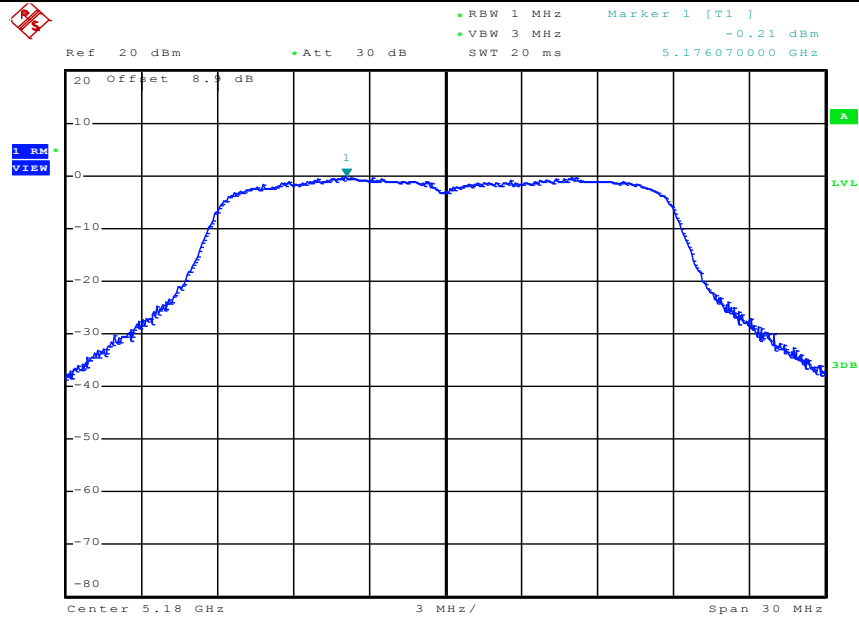
Date: 7.AUG.2019 14:44:08

IEEE 802.11n40 / Channel 38 / 5190MHz



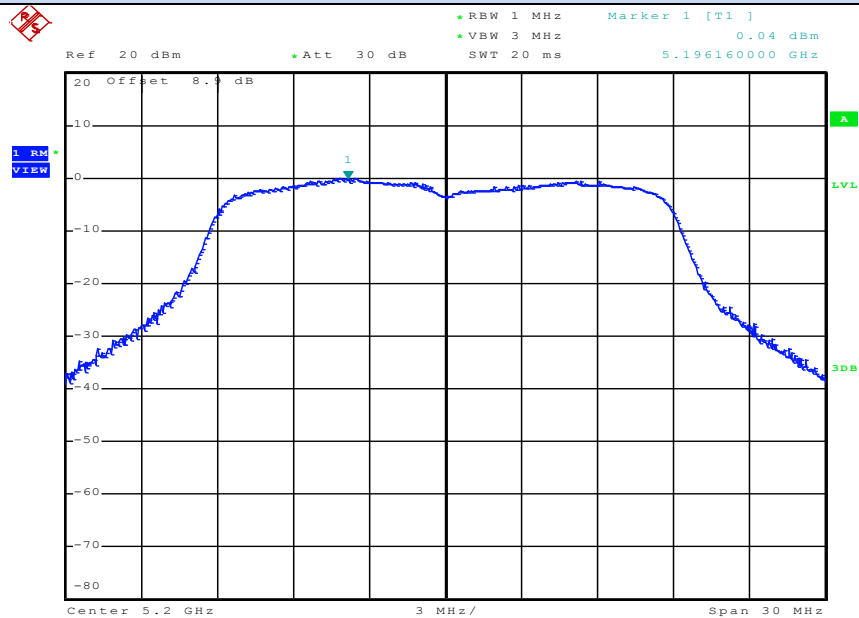
Date: 7.AUG.2019 14:49:26

IEEE 802.11n40 / Channel 46 / 5230MHz



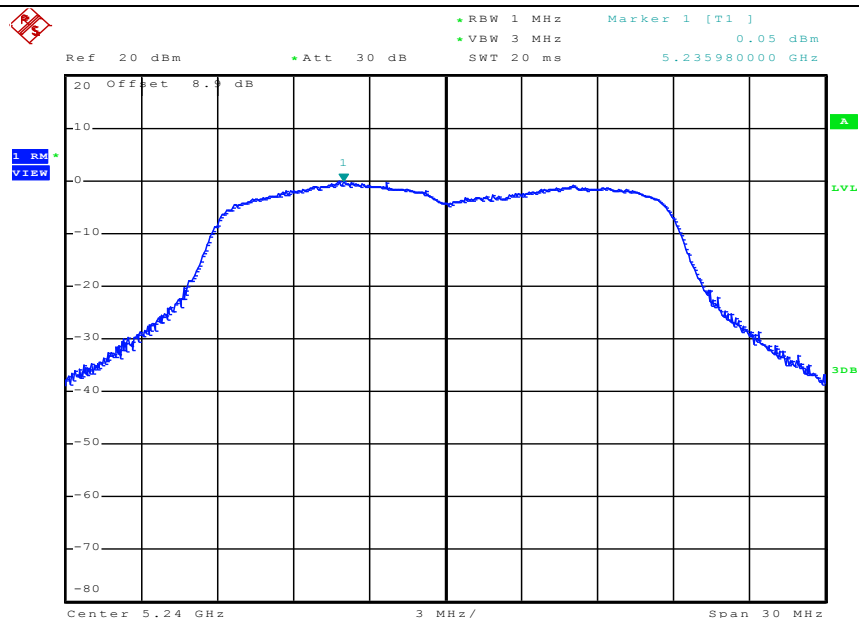
Date: 7.AUG.2019 16:49:28

IEEE 802.11ac20 / Channel 36 / 5180MHz



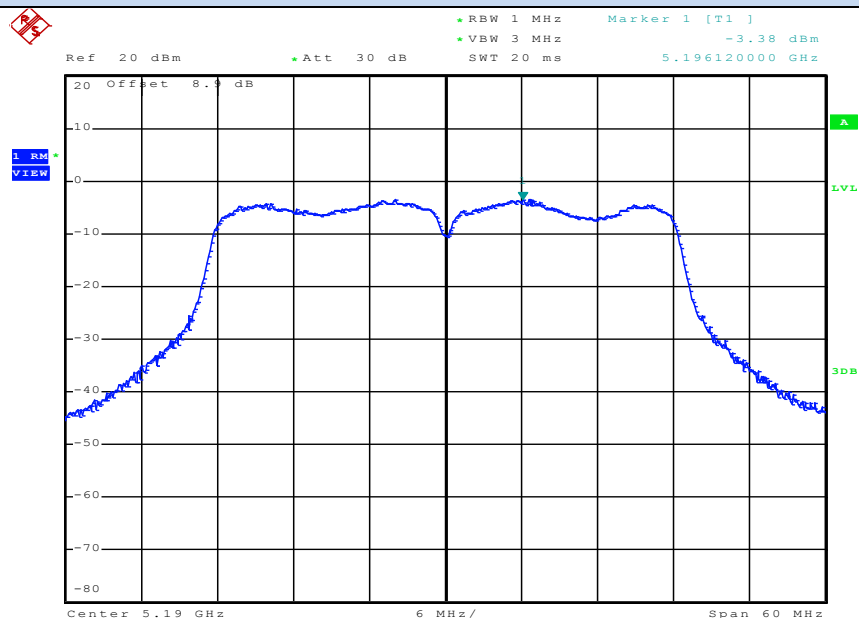
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IEEE 802.11ac20 / Channel 40 / 5200MHz



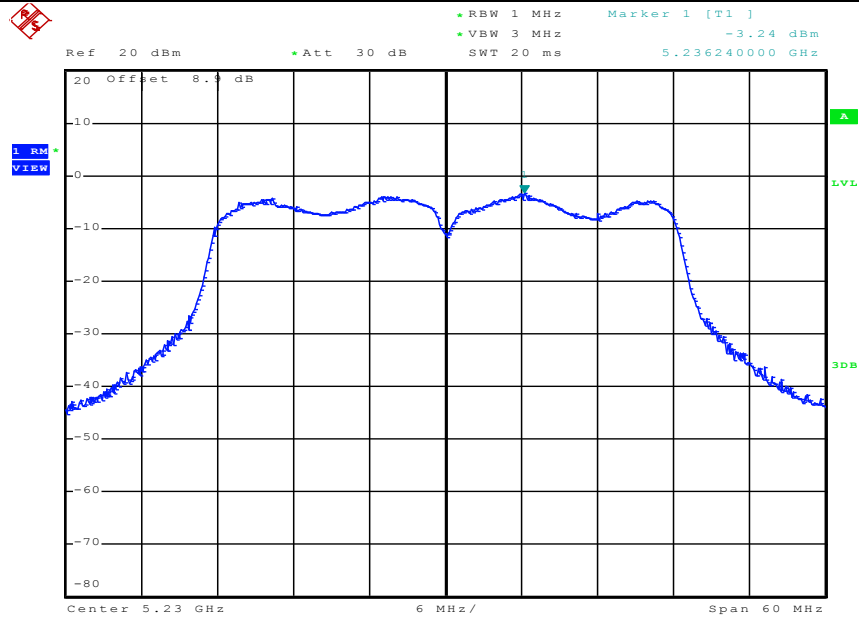
Date: 7.AUG.2019 16:56:31

IEEE 802.11ac20 / Channel 48 / 5240MHz



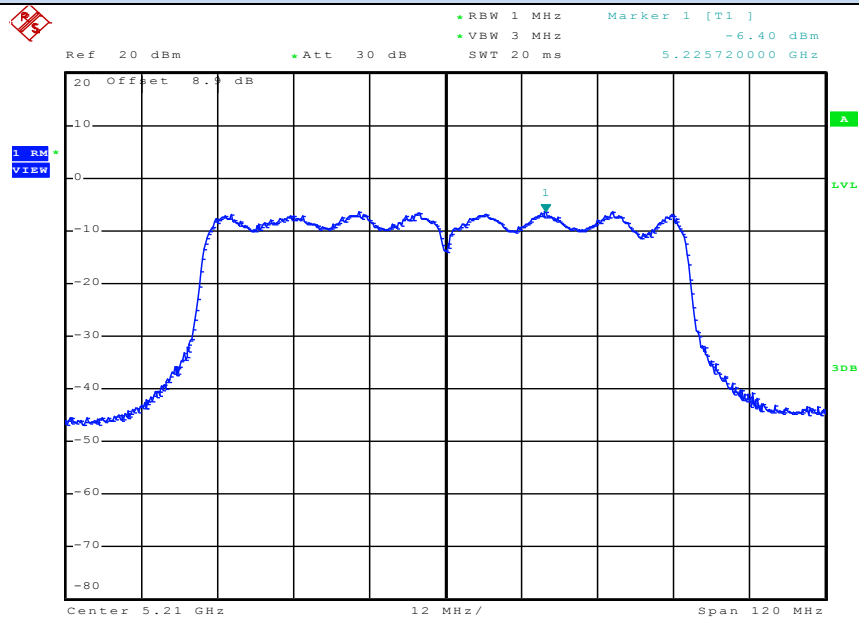
Date: 7.AUG.2019 17:31:27

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 7.AUG.2019 17:34:57

IEEE 802.11ac40 / Channel 46 / 5230MHz

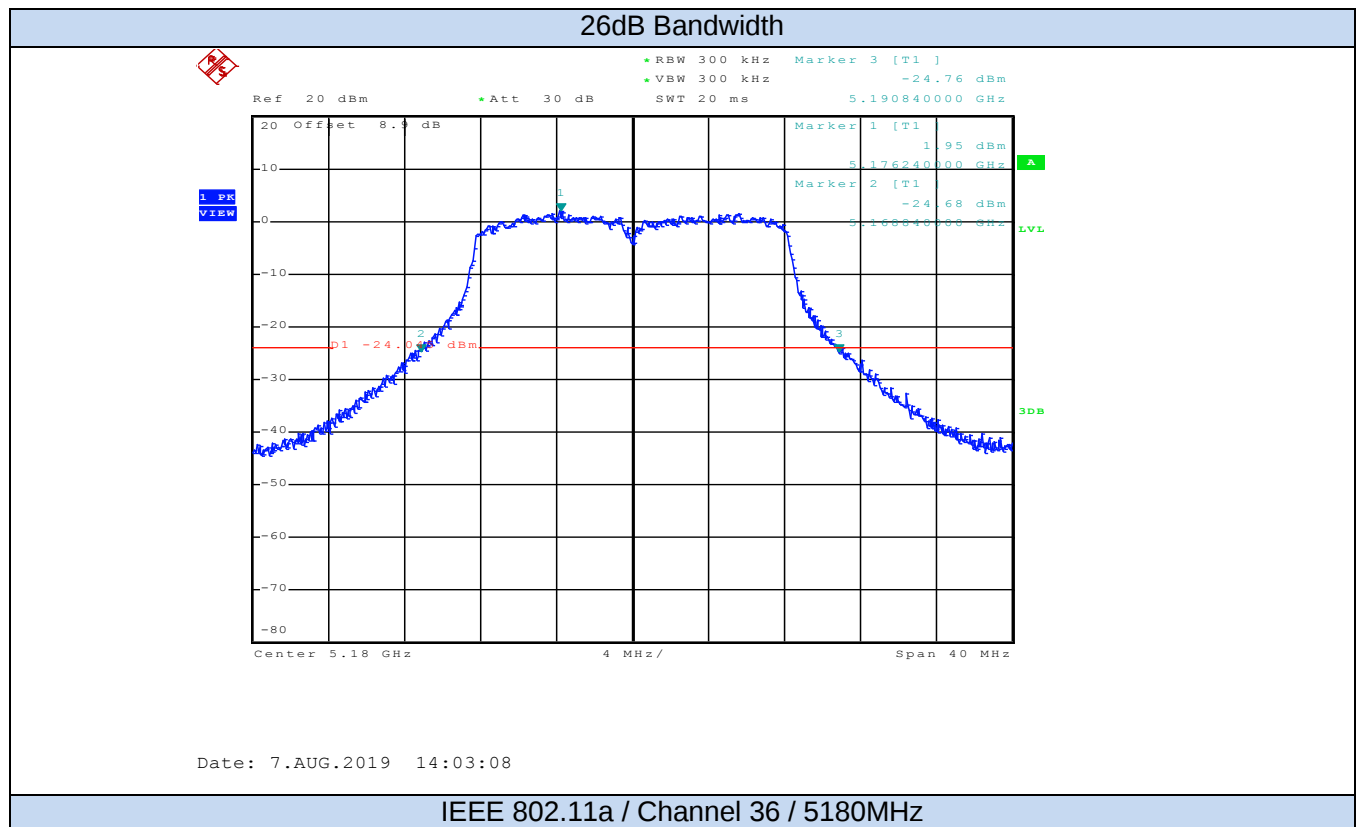


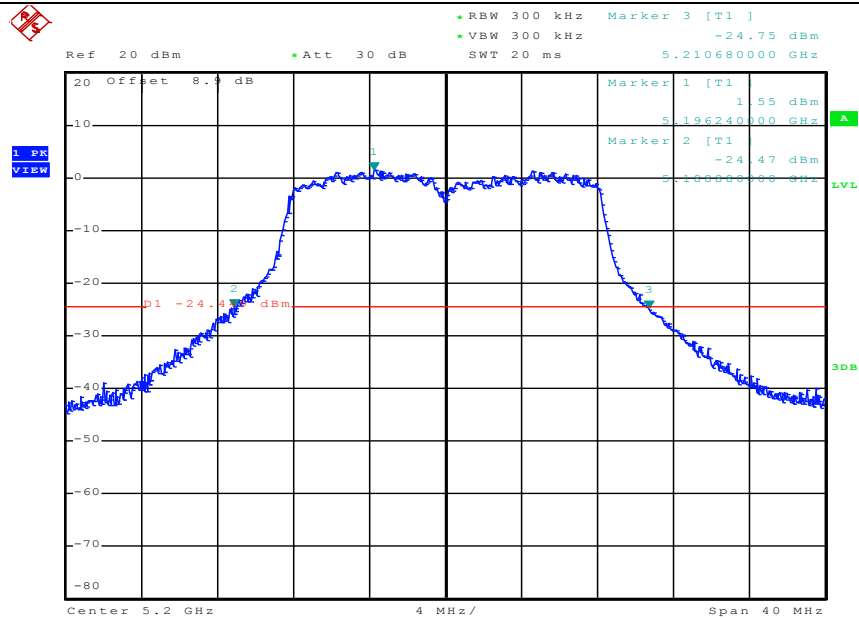
Date: 7.AUG.2019 17:49:43

IEEE 802.11ac80 / Channel 42 / 5210MHz

B.4 Emission Bandwidth

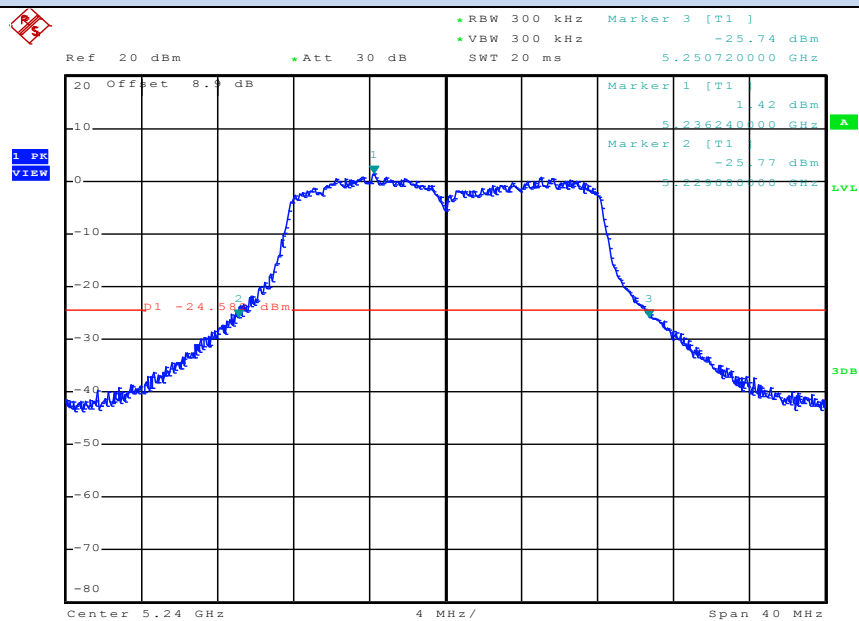
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	22.000	16.605	No Limit	Pass
	40	5200	21.800	16.605		Pass
	48	5240	21.640	16.590		Pass
11N20 SISO	36	5180	23.080	17.740	No Limit	Pass
	40	5200	22.760	17.740		Pass
	48	5240	22.920	17.710		Pass
11N40 SISO	38	5190	44.080	36.140	No Limit	Pass
	46	5230	43.920	36.120		Pass
11AC20 SISO	36	5180	23.360	17.750	No Limi	Pass
	40	5200	22.760	17.730		Pass
	48	5240	23.400	17.720		Pass
11AC40 SISO	38	5190	44.240	36.160	No Limi	Pass
	46	5230	44.560	36.160		Pass
11AC80 SISO	42	5210	86.240	75.320	No Limi	Pass





Date: 7.AUG.2019 14:06:10

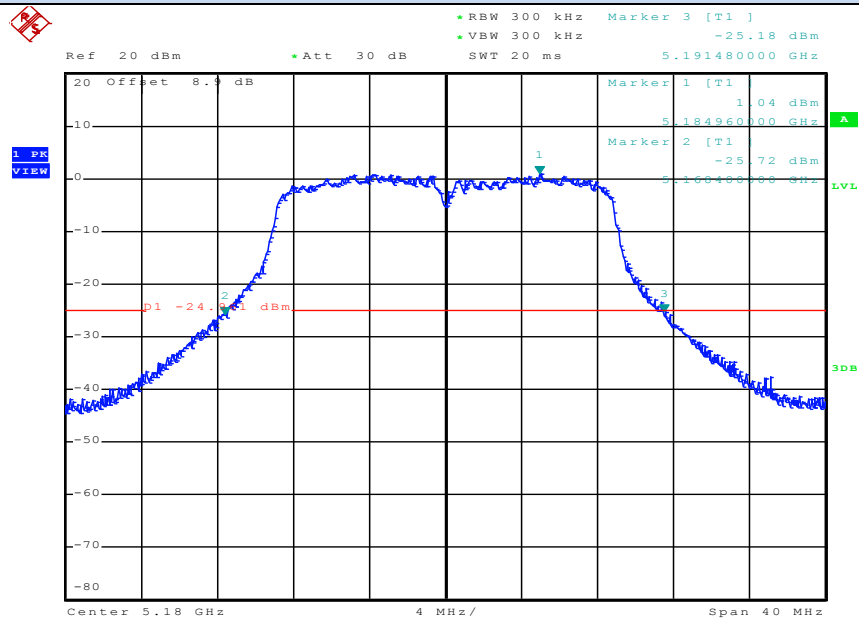
IEEE 802.11a / Channel 40 / 5200MHz



Date: 7.AUG.2019 14:07:52

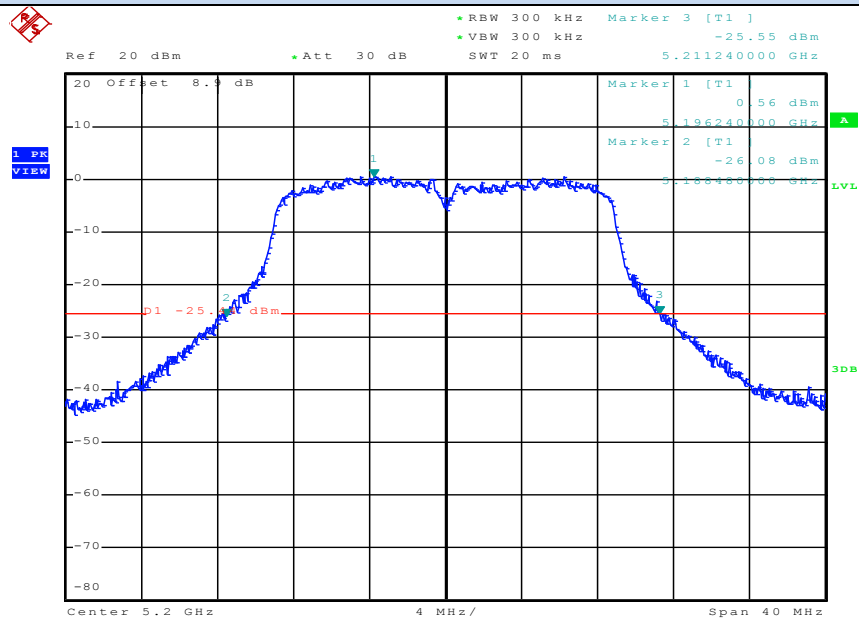
IEEE 802.11a / Channel 48 / 5240MHz

26dB Bandwidth



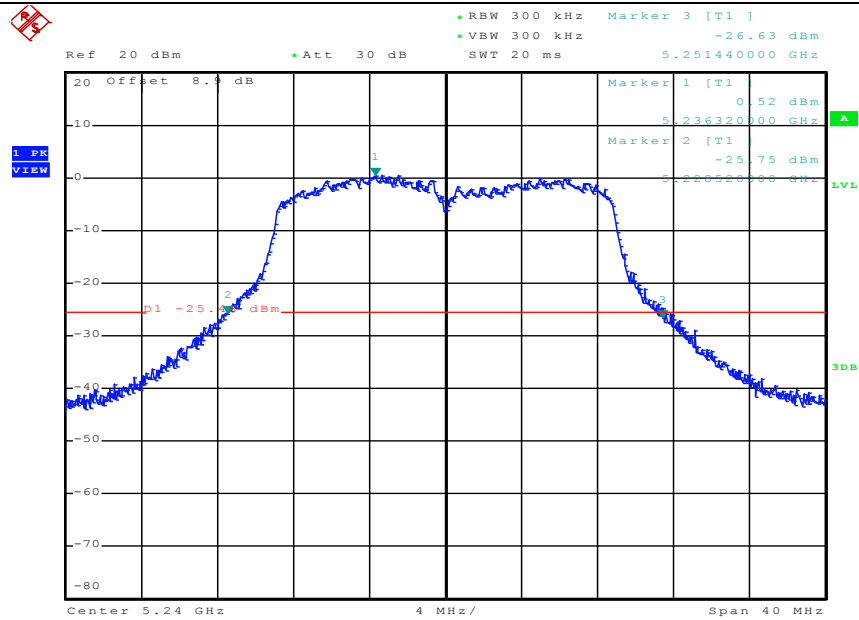
Date: 7.AUG.2019 14:23:07

IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 7.AUG.2019 14:27:38

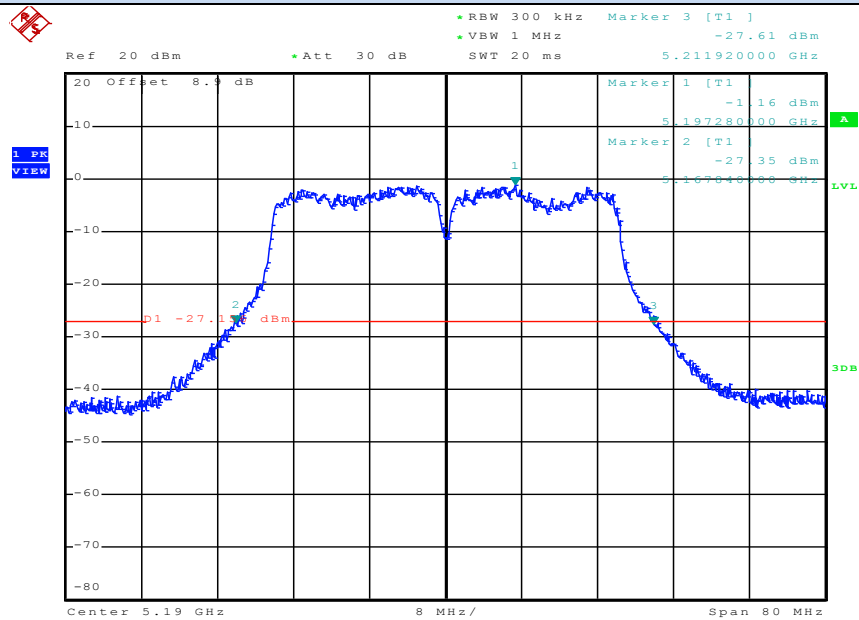
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 7.AUG.2019 14:29:14

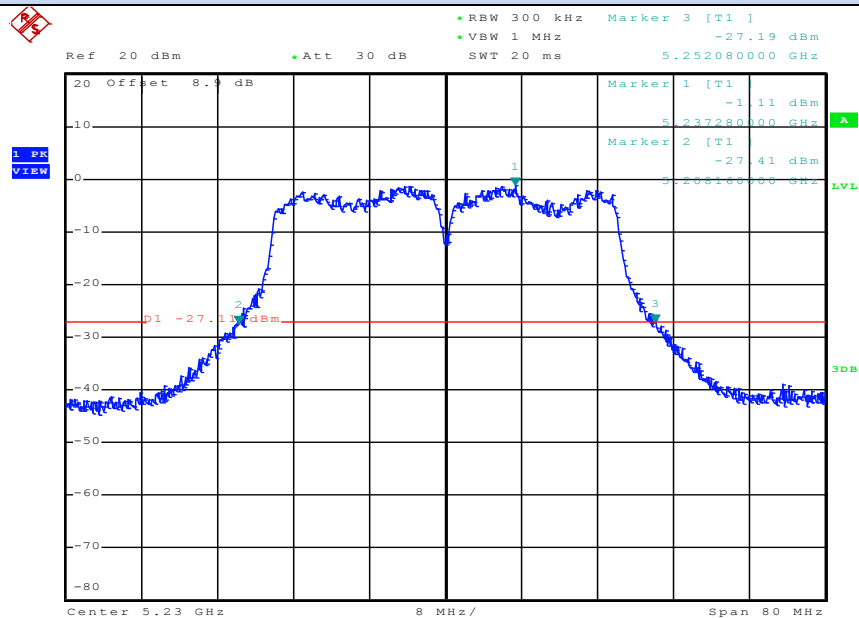
IEEE 802.11n20 / Channel 48 / 5240MHz

26dB Bandwidth



Date: 7.AUG.2019 14:43:20

IEEE 802.11n40 / Channel 38 / 5190MHz



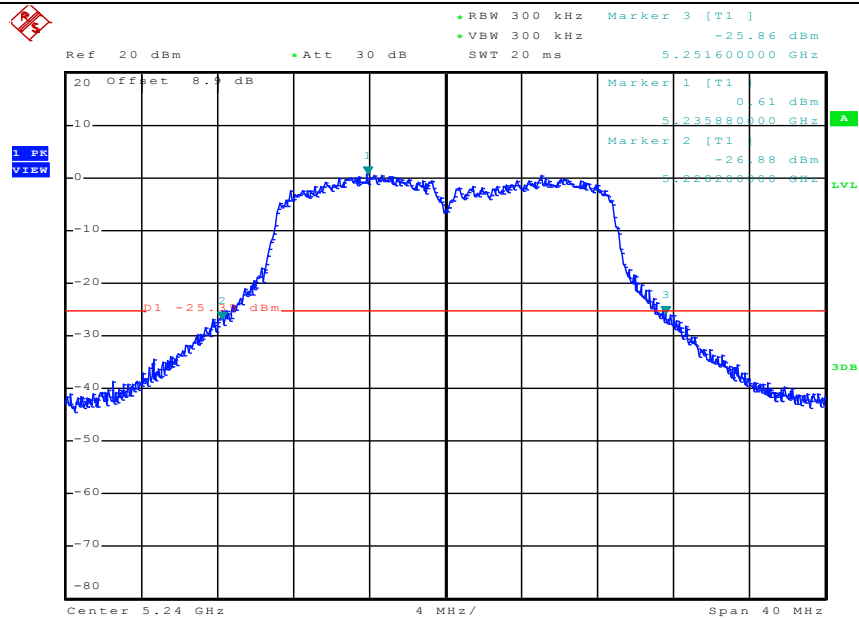
Date: 7.AUG.2019 14:48:38

IEEE 802.11n40 / Channel 46 / 5230MHz



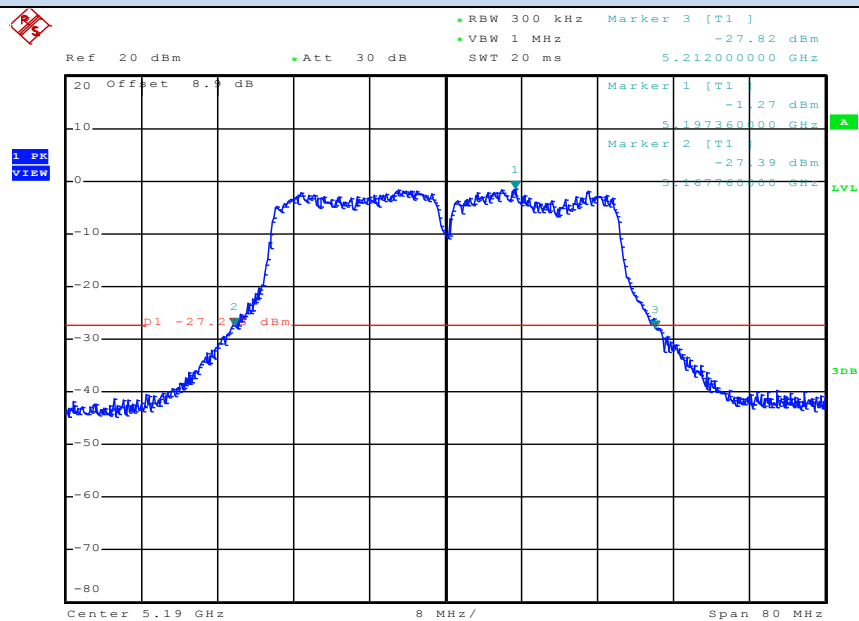
Date: 7.AUG.2019 16:52:10

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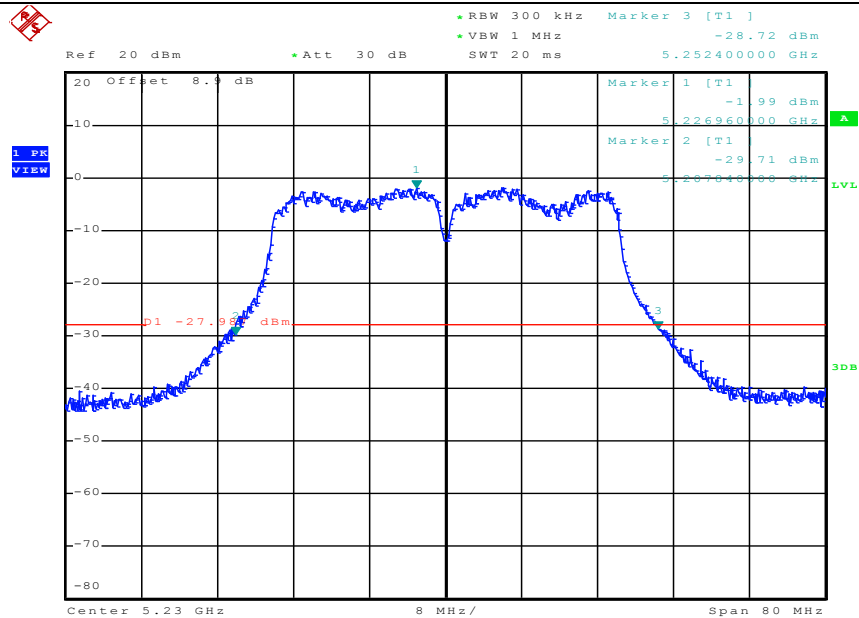
Date: 7.AUG.2019 16:55:44

IEEE 802.11ac20 / Channel 48 / 5240MHz



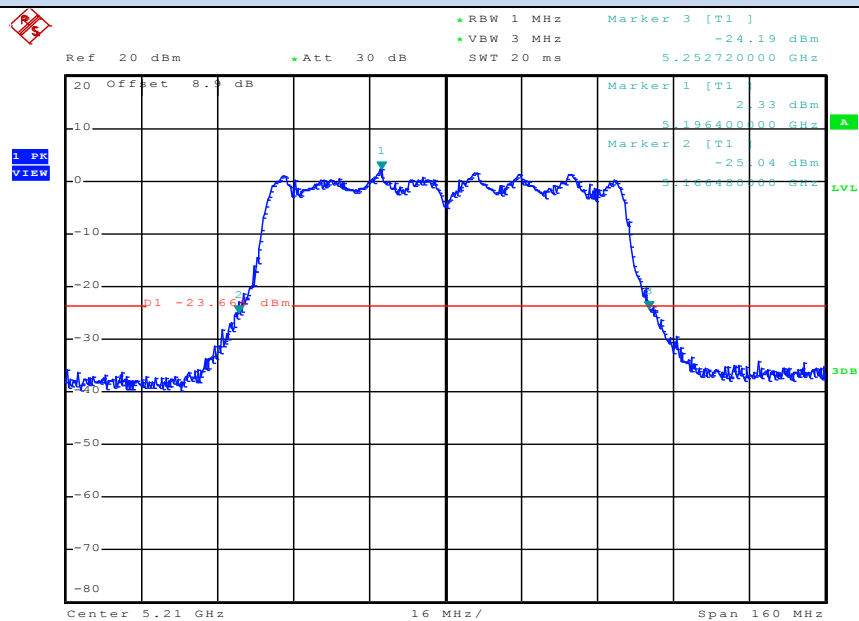
Date: 7.AUG.2019 17:30:39

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 7.AUG.2019 17:34:09

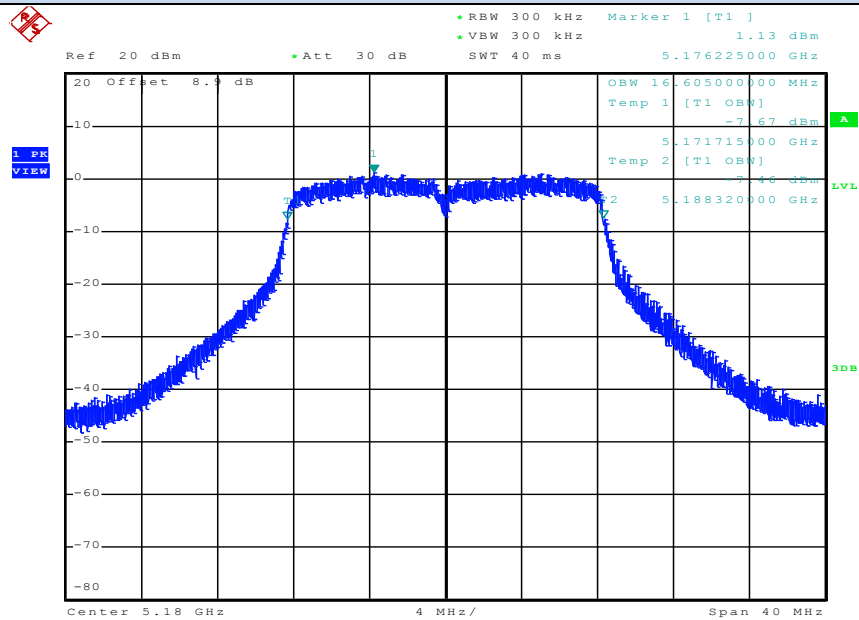
IEEE 802.11ac40 / Channel 46 / 5230MHz



Date: 7.AUG.2019 17:48:55

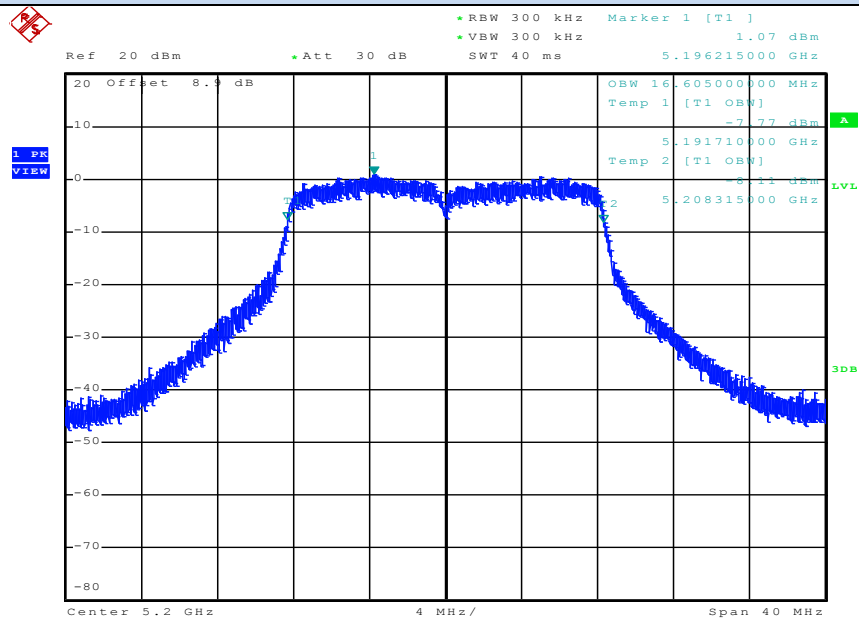
IEEE 802.11ac80 / Channel 42 / 5210MHz

99% Occupied Bandwidth



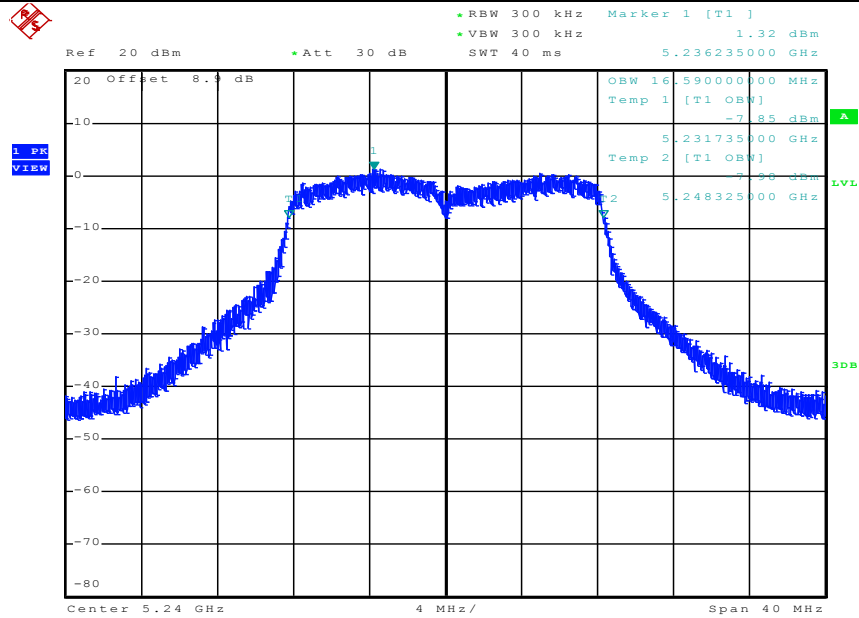
Date: 7.AUG.2019 18:00:03

IEEE 802.11a / Channel 36 / 5180MHz



Date: 7.AUG.2019 18:00:34

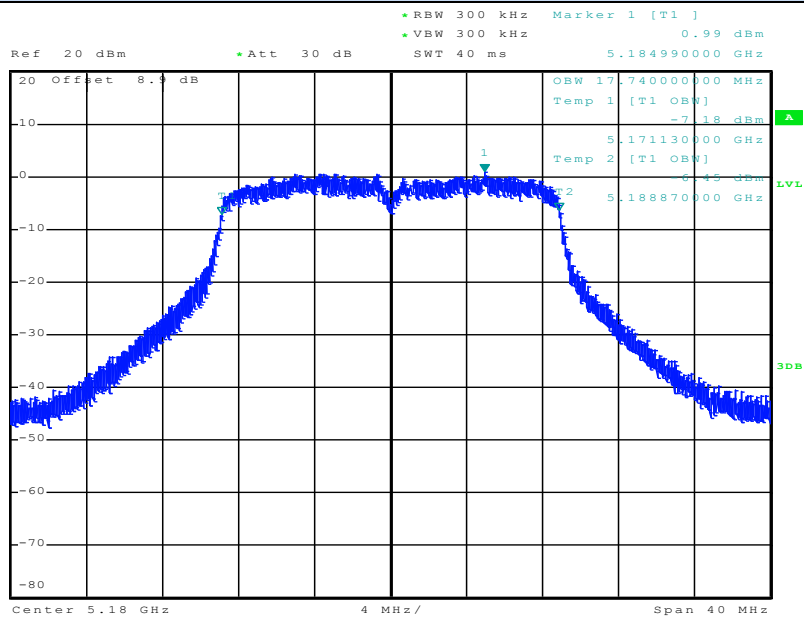
IEEE 802.11a / Channel 40 / 5200MHz



Date: 7.AUG.2019 18:01:13

IEEE 802.11a / Channel 48 / 5240MHz

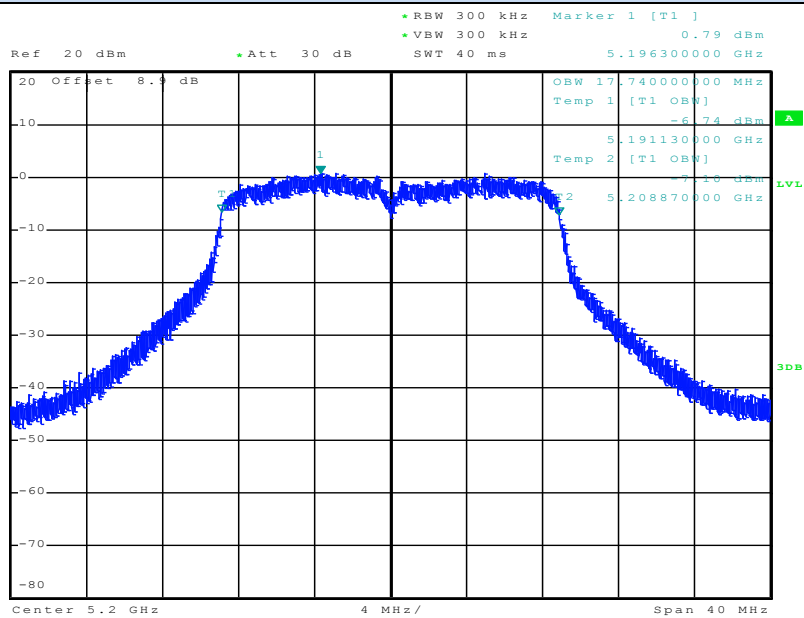
1 PK
VIEW



Date: 7.AUG.2019 18:07:07

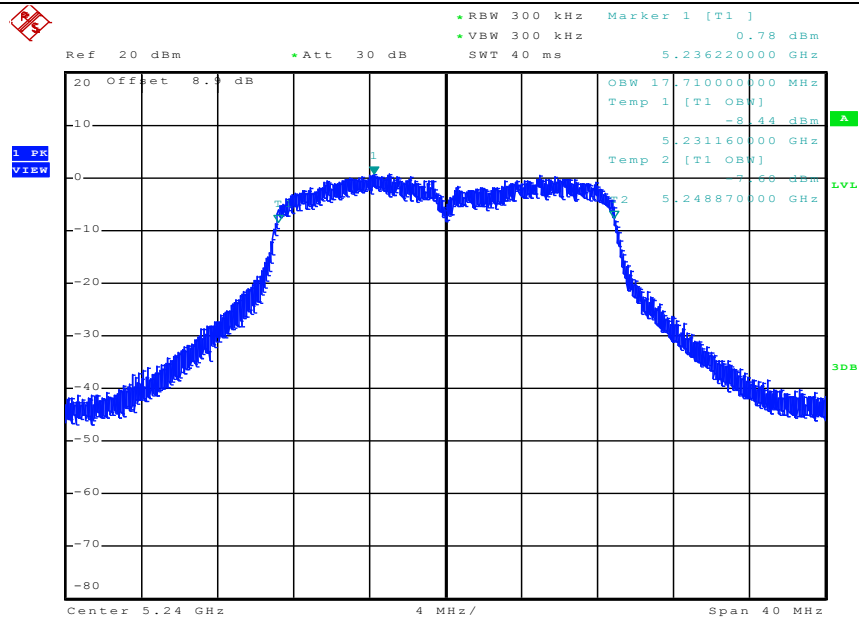
IEEE 802.11n20 / Channel 36 / 5180MHz

1 PK
VIEW



Date: 7.AUG.2019 18:07:40

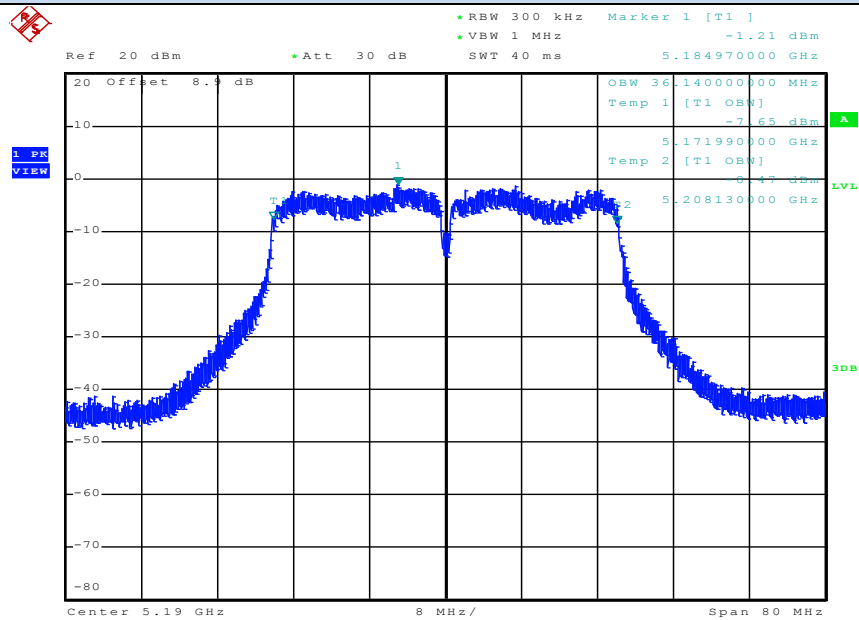
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 7.AUG.2019 18:08:21

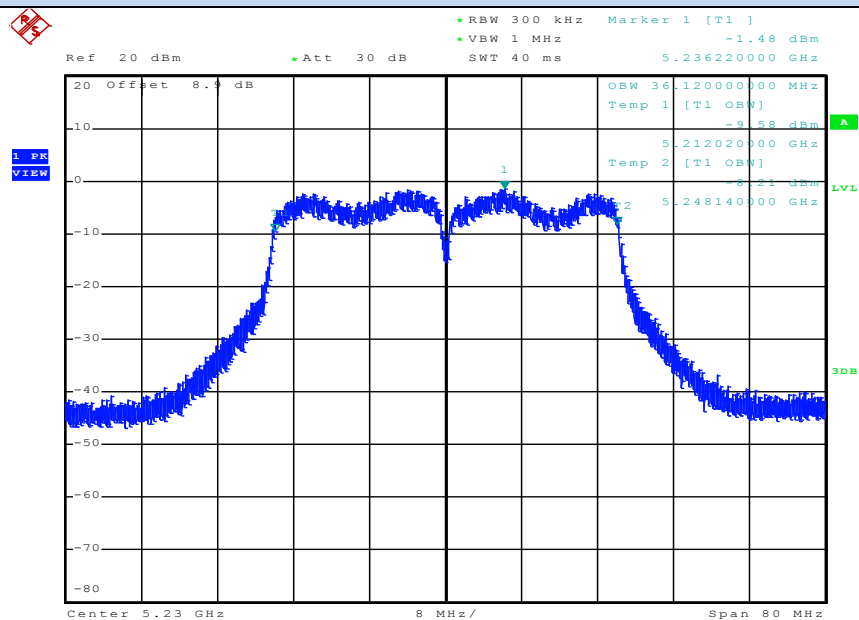
IEEE 802.11n20 / Channel 48 / 5240MHz

99% Occupied Bandwidth



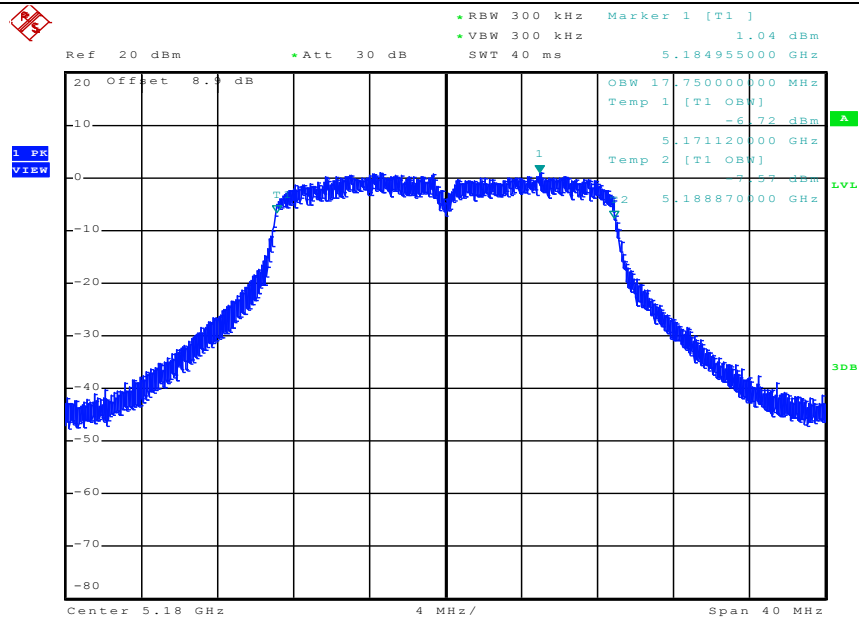
Date: 7.AUG.2019 18:14:30

IEEE 802.11n40 / Channel 38 / 5190MHz



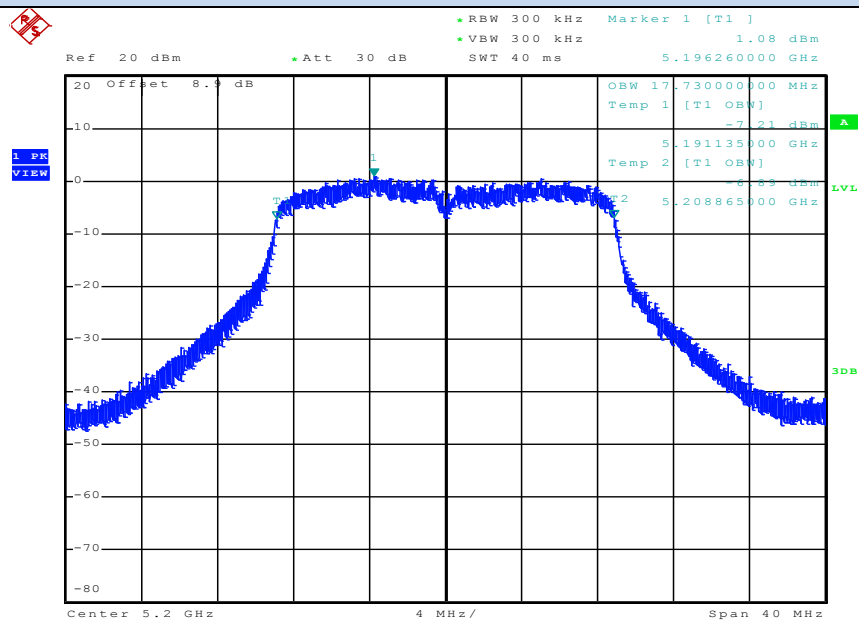
Date: 7.AUG.2019 18:15:46

IEEE 802.11n40 / Channel 46 / 5230MHz



Date: 7.AUG.2019 18:18:45

IEEE 802.11ac20 / Channel 36 / 5180MHz



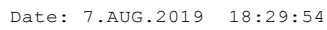
Date: 7.AUG.2019 18:20:07

IEEE 802.11ac20 / Channel 40 / 5200MHz

[illegible]

Date: 7.AUG.2019 18:29:08

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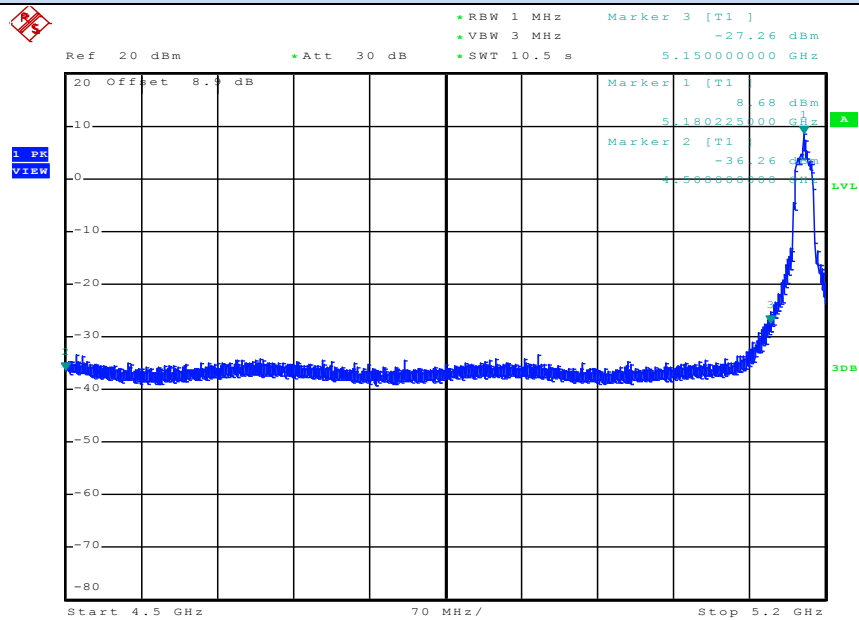
Date: 7.AUG.2019 18:31:39

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B.5 Undesirable Emissions Measurement

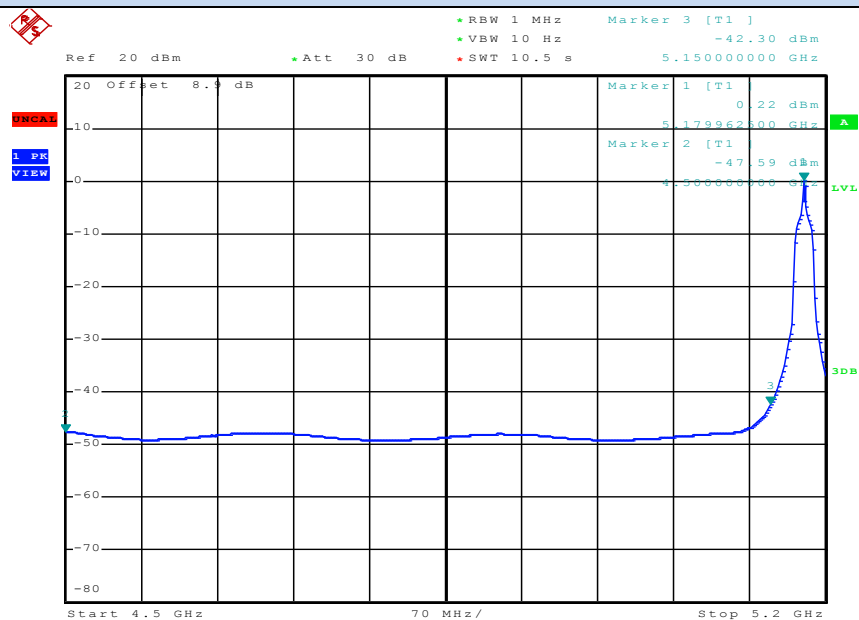
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11A	36	4500.0	-35.81	3.00	0	59.42	Peak	74.00	Pass
		4500.0	-47.51	3.00	0	47.72	Average	54.00	Pass
		5150.0	-36.31	3.00	0	58.92	Peak	74.00	Pass
		5150.0	-48.18	3.00	0	47.05	Average	54.00	Pass
	48	5350.0	-36.34	3.00	0	58.89	Peak	74.00	Pass
		5350.0	-48.82	3.00	0	46.41	Average	54.00	Pass
		5460.0	-135.10	3.00	0	-39.87	Peak	74.00	Pass
		5460.0	-47.78	3.00	0	47.45	Average	54.00	Pass
11N2 O SISO	36	4500.0	-36.59	3.00	0	58.64	Peak	74.00	Pass
		4500.0	-47.78	3.00	0	47.45	Average	54.00	Pass
		5150.0	-36.99	3.00	0	58.24	Peak	74.00	Pass
		5150.0	-48.35	3.00	0	46.88	Average	54.00	Pass
	48	5350.0	-38.53	3.00	0	56.70	Peak	74.00	Pass
		5350.0	-49.02	3.00	0	46.21	Average	54.00	Pass
		5460.0	-36.44	3.00	0	58.79	Peak	74.00	Pass
		5460.0	-47.95	3.00	0	47.28	Average	54.00	Pass
11N4 O SISO	38	4500.0	-36.56	3.00	0	58.67	Peak	74.00	Pass
		4500.0	-47.82	3.00	0	47.41	Average	54.00	Pass
		5150.0	-37.35	3.00	0	57.88	Peak	74.00	Pass
		5150.0	-48.48	3.00	0	46.75	Average	54.00	Pass
	46	5350.0	-36.79	3.00	0	58.44	Peak	74.00	Pass
		5350.0	-49.04	3.00	0	46.19	Average	54.00	Pass
		5460.0	-36.99	3.00	0	58.24	Peak	74.00	Pass
		5460.0	-48.00	3.00	0	47.23	Average	54.00	Pass
11A C20 SIS O	36	4500.0	-35.62	3.00	0	59.61	Peak	74.00	Pass
		4500.0	-47.88	3.00	0	47.35	Average	54.00	Pass
		5150.0	-36.78	3.00	0	58.45	Peak	74.00	Pass
		5150.0	-48.51	3.00	0	46.72	Average	54.00	Pass
	48	4500.0	-35.62	3.00	0	59.61	Peak	74.00	Pass
		4500.0	-47.88	3.00	0	47.35	Average	54.00	Pass
		5150.0	-36.78	3.00	0	58.45	Peak	74.00	Pass
		5150.0	-48.51	3.00	0	46.72	Average	54.00	Pass
11A C40 SIS O	38	4500.0	-36.27	3.00	0	58.96	Peak	74.00	Pass
		4500.0	-47.92	3.00	0	47.31	Average	54.00	Pass
		5150.0	-37.61	3.00	0	57.62	Peak	74.00	Pass
		5150.0	-48.52	3.00	0	46.71	Average	54.00	Pass
	46	5350.0	-36.94	3.00	0	58.29	Peak	74.00	Pass
		5350.0	-49.10	3.00	0	46.13	Average	54.00	Pass
		5460.0	-36.88	3.00	0	58.35	Peak	74.00	Pass
		5460.0	-48.01	3.00	0	47.22	Average	54.00	Pass
11A C80 SIS O	42	4500.0	-37.59	3.00	0	57.64	Peak	74.00	Pass
		5150.0	-49.14	3.00	0	46.09	Average	54.00	Pass
		4500.0	-36.41	3.00	0	58.82	Peak	74.00	Pass
		5150.0	-48.04	3.00	0	47.19	Average	54.00	Pass
		5350.0	-37.59	3.00	0	57.64	Peak	74.00	Pass
		5460.0	-49.14	3.00	0	46.09	Average	54.00	Pass
		5350.0	-36.41	3.00	0	58.82	Peak	74.00	Pass
		5460.0	-48.04	3.00	0	47.19	Average	54.00	Pass

Undesirable Emissions Measurement



Date: 7.AUG.2019 17:12:10

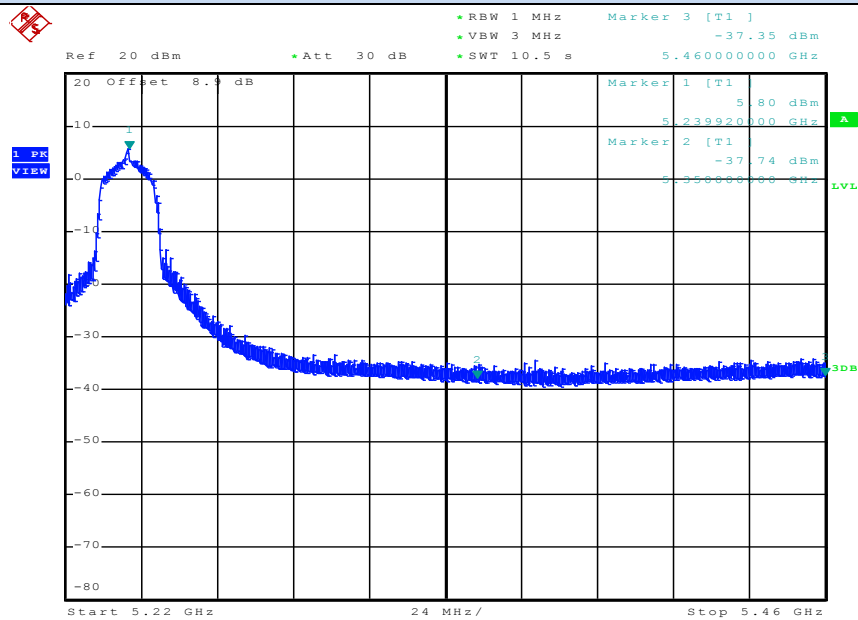
IEEE 802.11a / Channel 36 / 5180MHz / Peak



Date: 7.AUG.2019 17:12:42

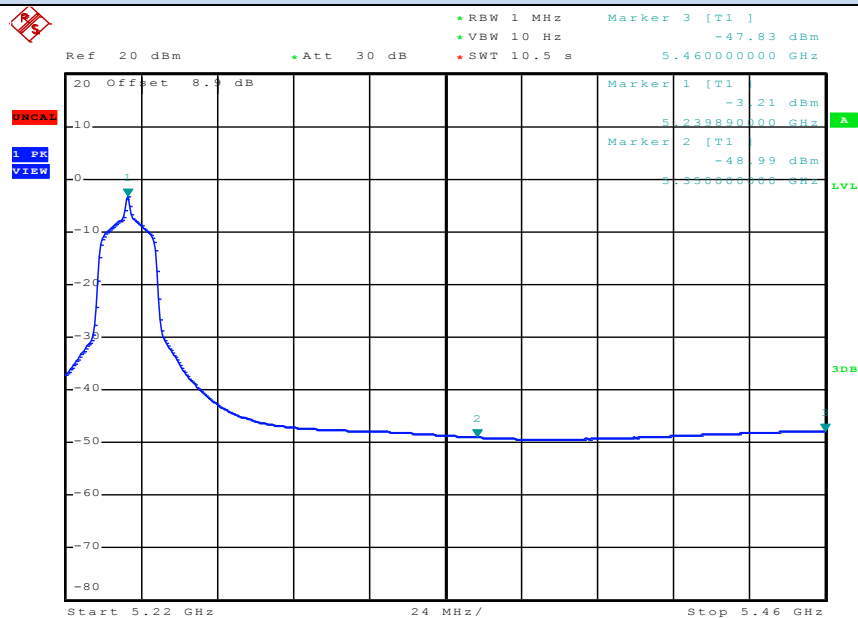
IEEE 802.11a / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement



Date: 7.AUG.2019 17:14:02

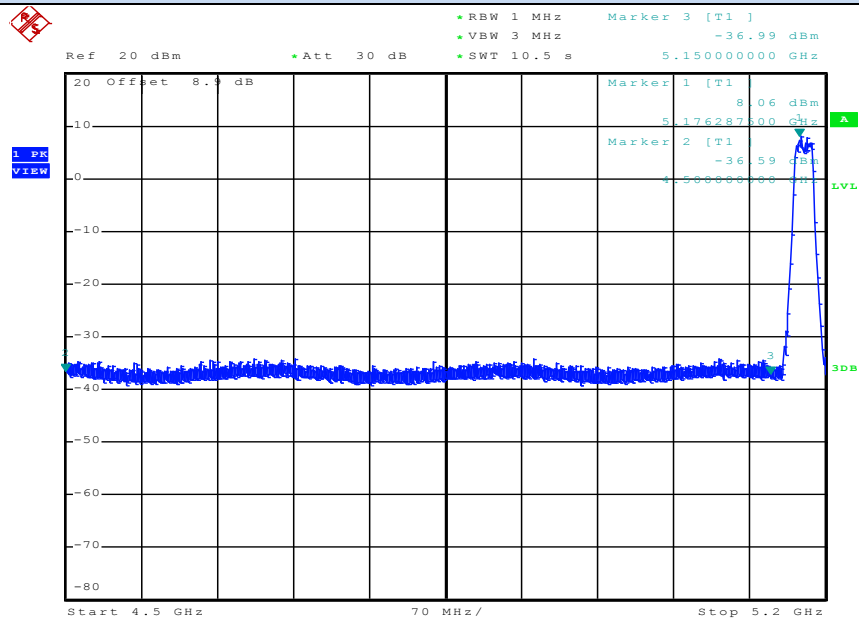
IEEE 802.11a / Channel 48 / 5240MHz / Peak



Date: 7.AUG.2019 17:14:31

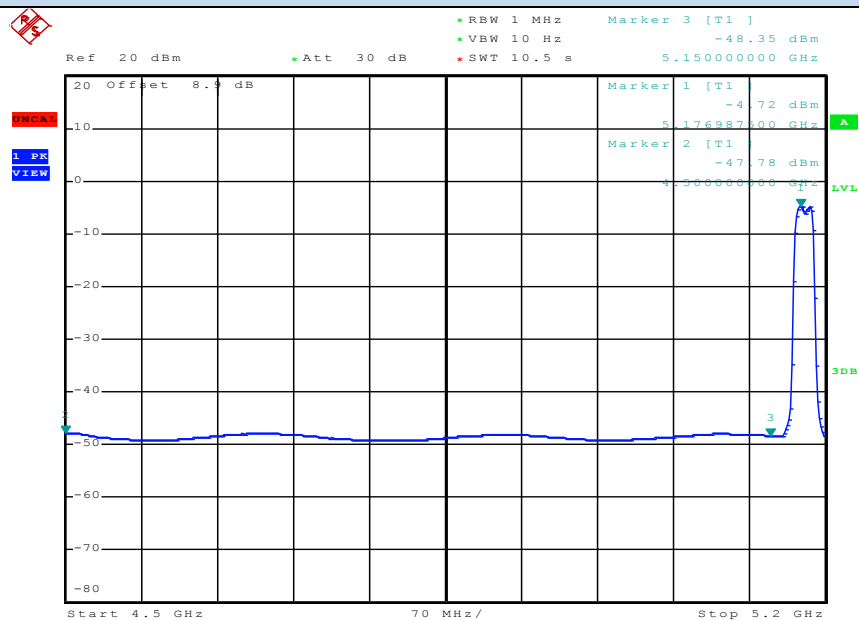
IEEE 802.11a / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement



Date: 7.AUG.2019 14:26:20

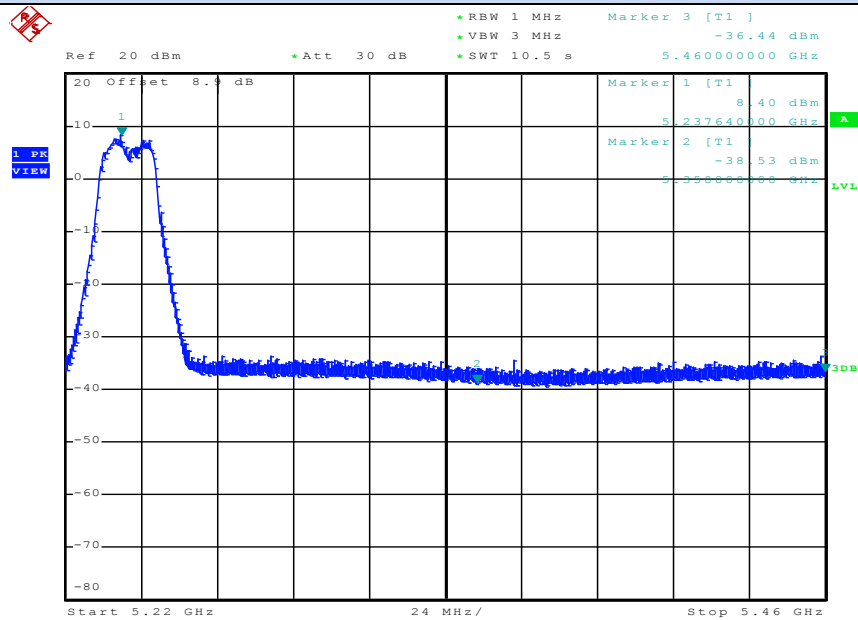
IEEE 802.11n20 / Channel 36 / 5180MHz / Peak



Date: 7.AUG.2019 14:26:53

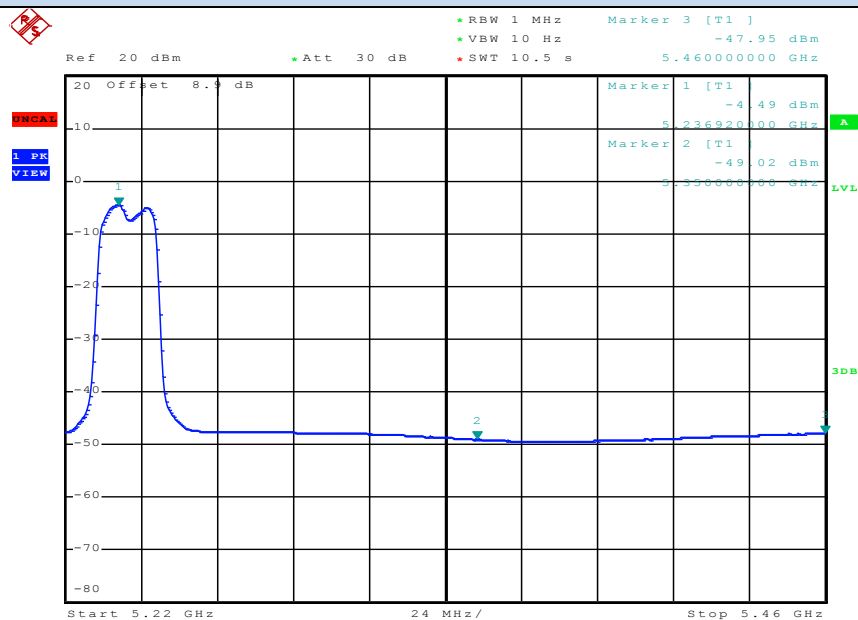
IEEE 802.11n20 / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement



Date: 7.AUG.2019 14:30:47

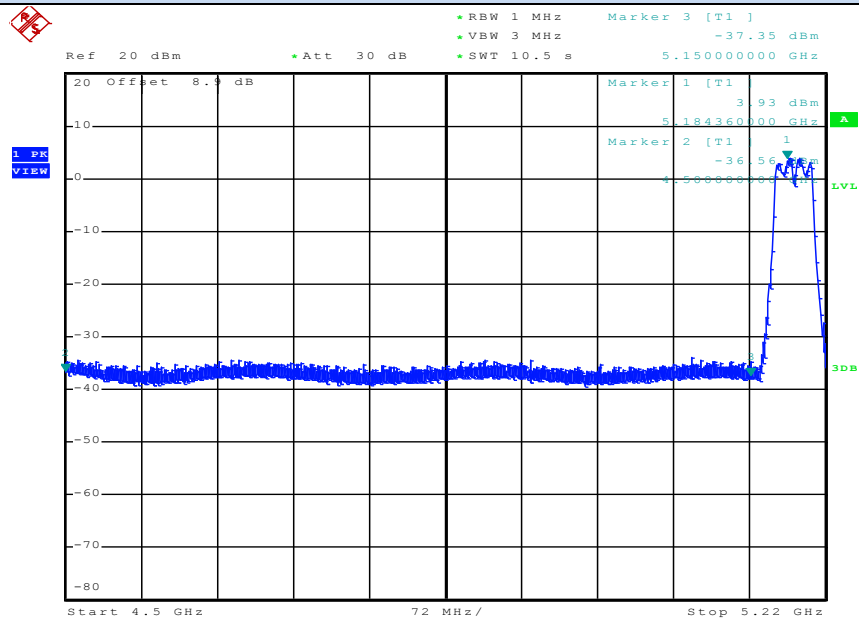
IEEE 802.11n20 / Channel 48 / 5240MHz / Peak



Date: 7.AUG.2019 14:31:15

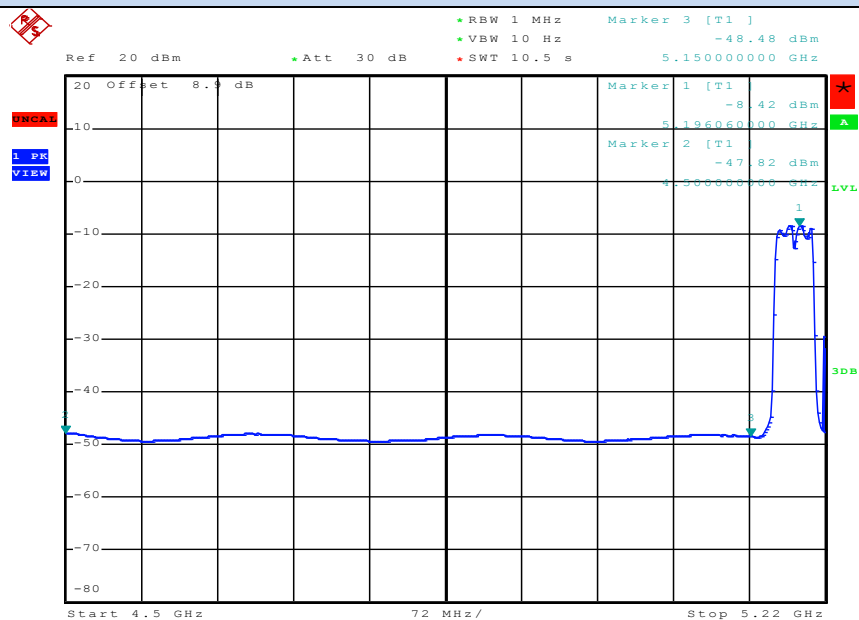
IEEE 802.11n20 / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement



Date: 7.AUG.2019 14:46:33

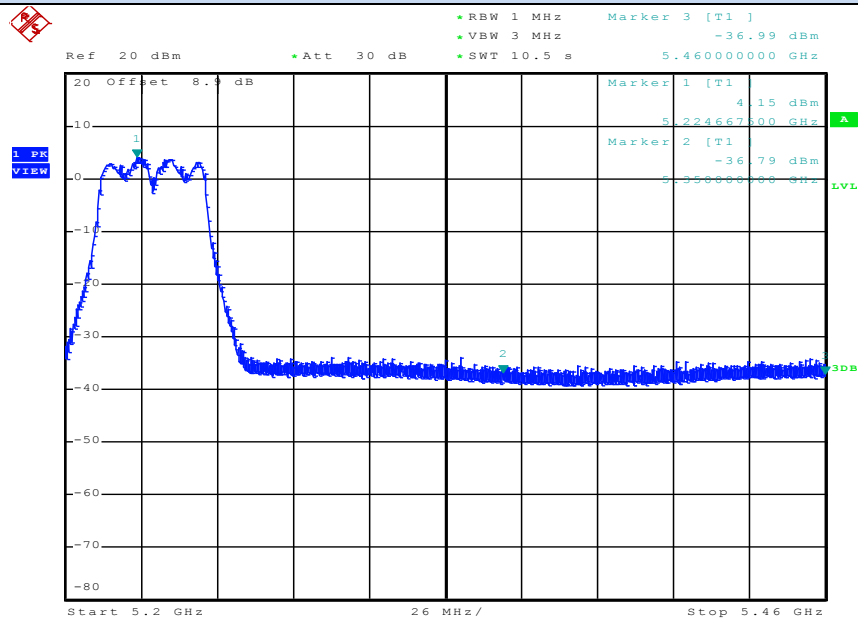
IEEE 802.11n40 / Channel 38 / 5190MHz / Peak



Date: 7.AUG.2019 14:47:05

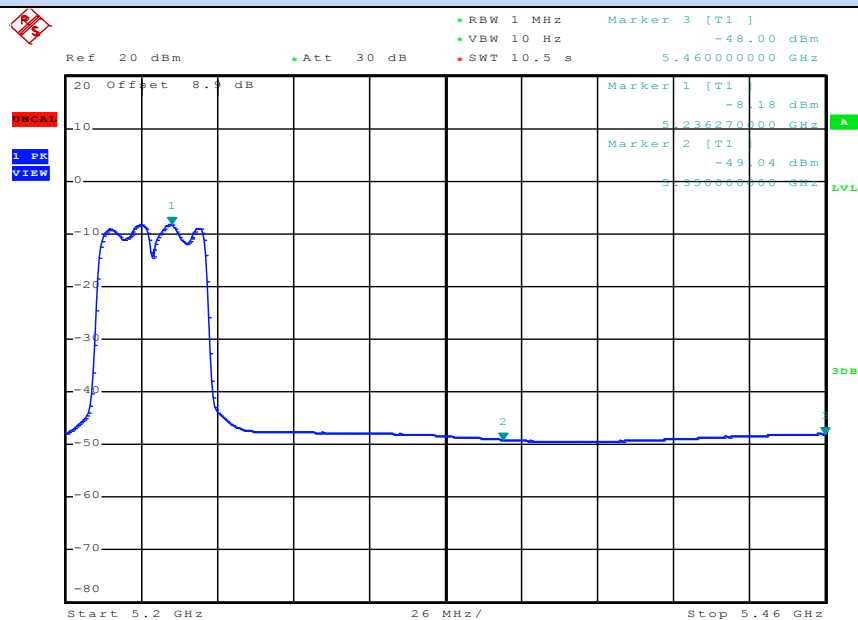
IEEE 802.11n40 / Channel 38 / 5190MHz / Average

Undesirable Emissions Measurement



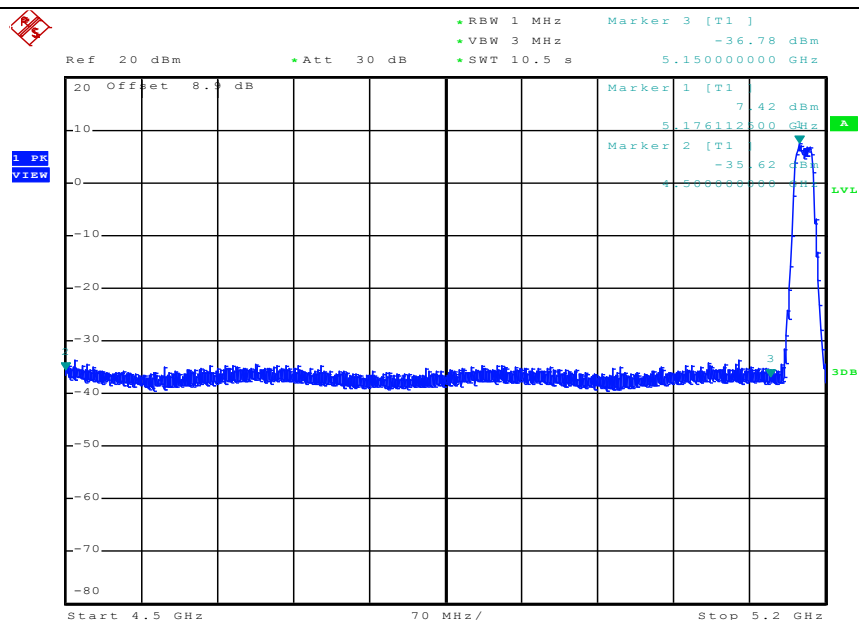
Date: 7.AUG.2019 14:50:11

IEEE 802.11n40 / Channel 48 / 5230MHz / Peak



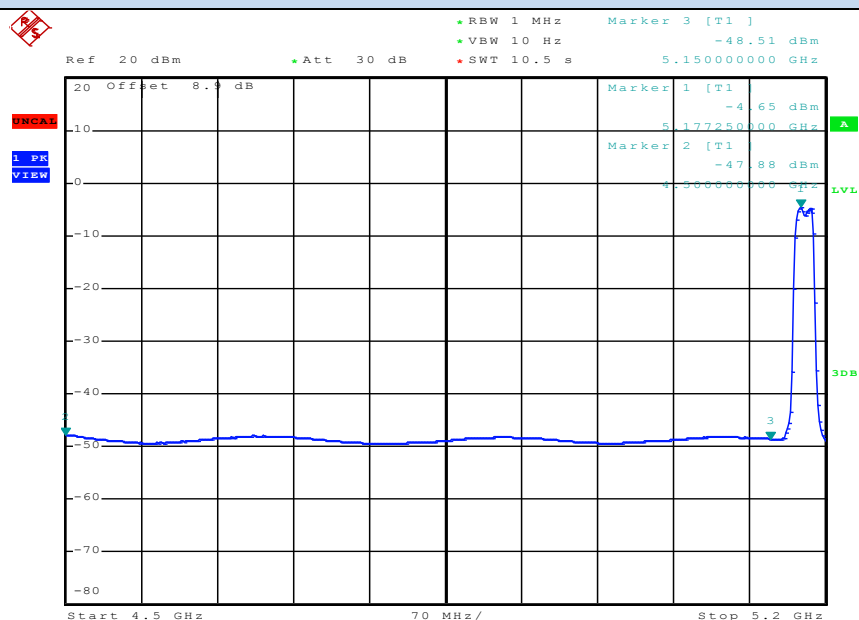
Date: 7.AUG.2019 14:50:39

IEEE 802.11n40 / Channel 48 / 5230MHz / Average



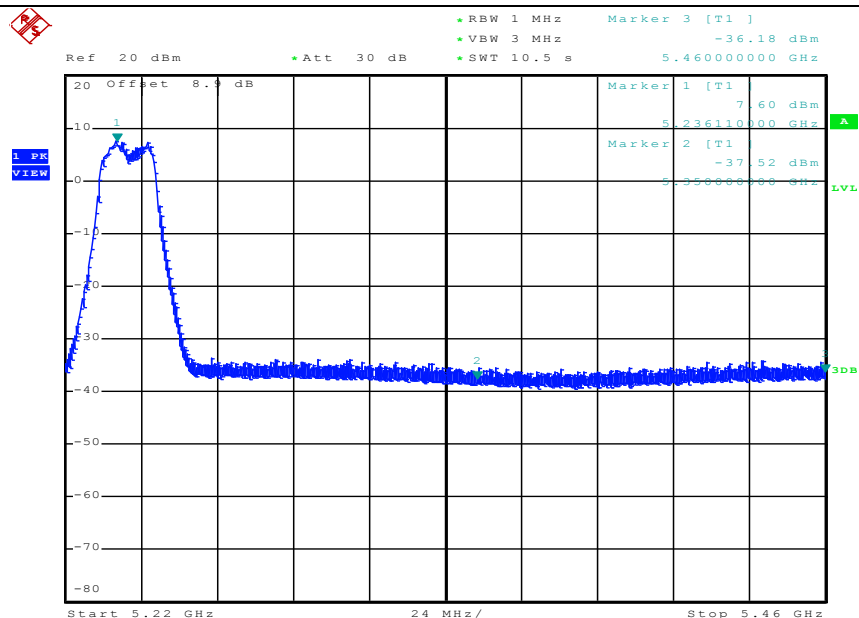
Date: 7.AUG.2019 16:50:17

IEEE 802.11ac20 / Channel 36 / 5180MHz / Peak



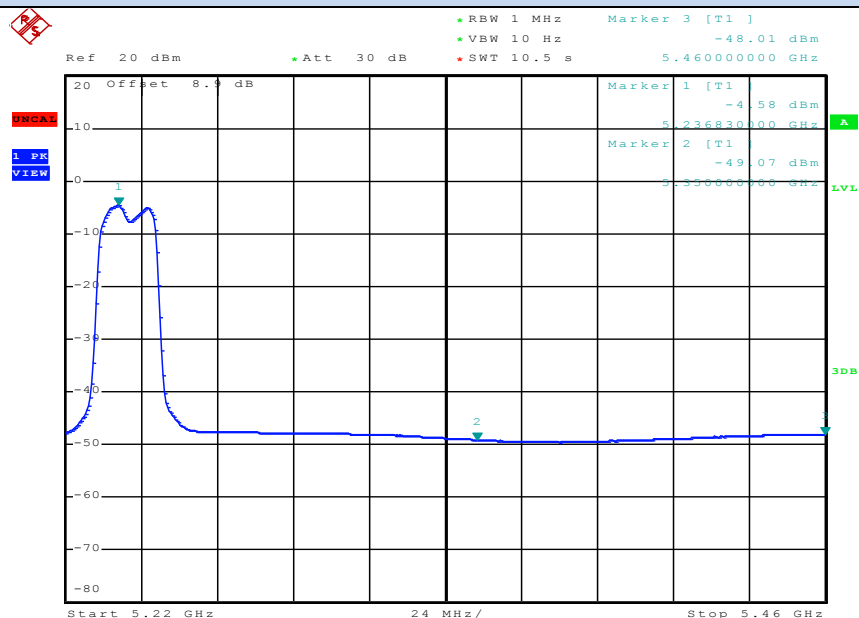
Date: 7.AUG.2019 16:50:49

IEEE 802.11ac20 / Channel 36 / 5180MHz / Average



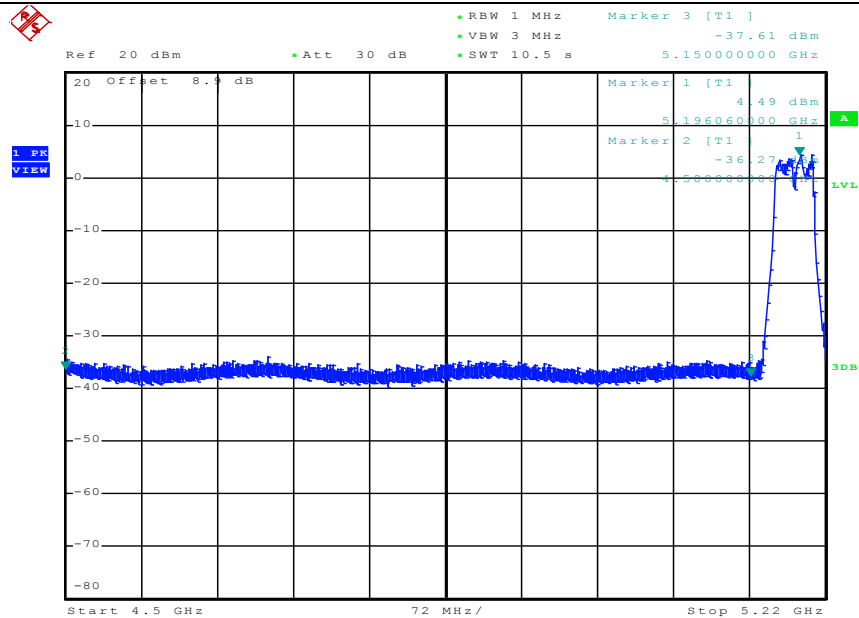
Date: 7.AUG.2019 16:57:17

IEEE 802.11ac20 / Channel 48 / 5240MHz / Peak



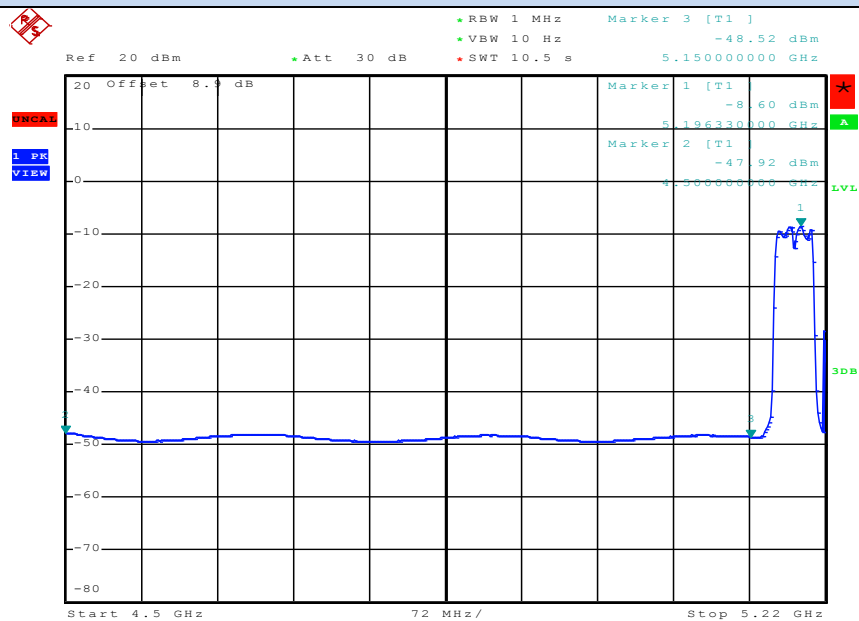
Date: 7.AUG.2019 16:57:45

IEEE 802.11ac20 / Channel 48 / 5240MHz / Average



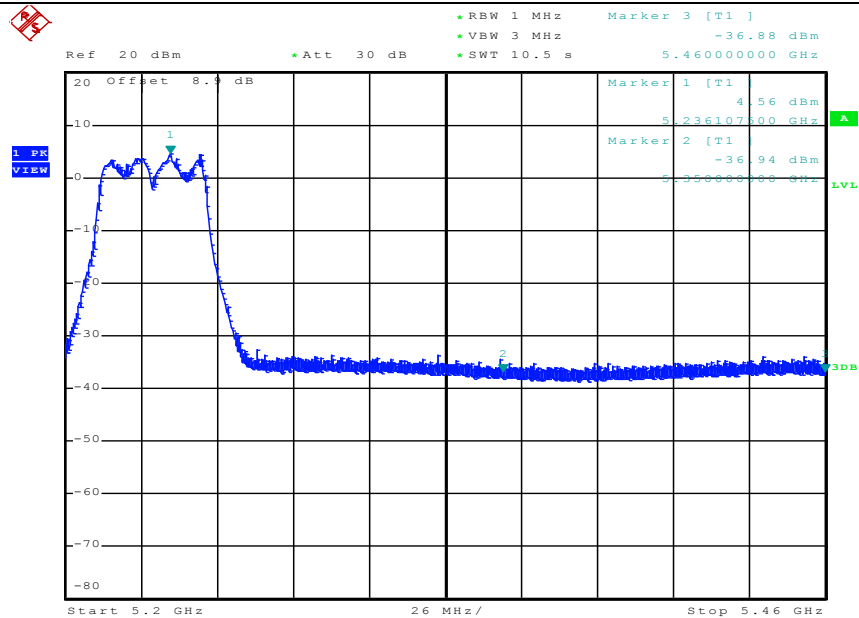
Date: 7.AUG.2019 17:32:12

IEEE 802.11ac40 / Channel 38 / 5190MHz / Peak



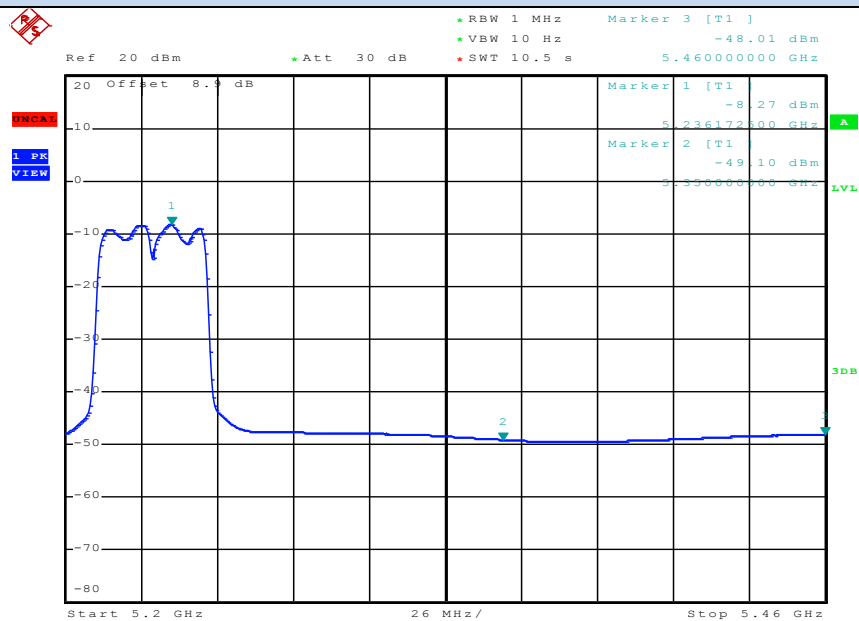
Date: 7.AUG.2019 17:32:44

IEEE 802.11ac40 / Channel 38 / 5190MHz / Average



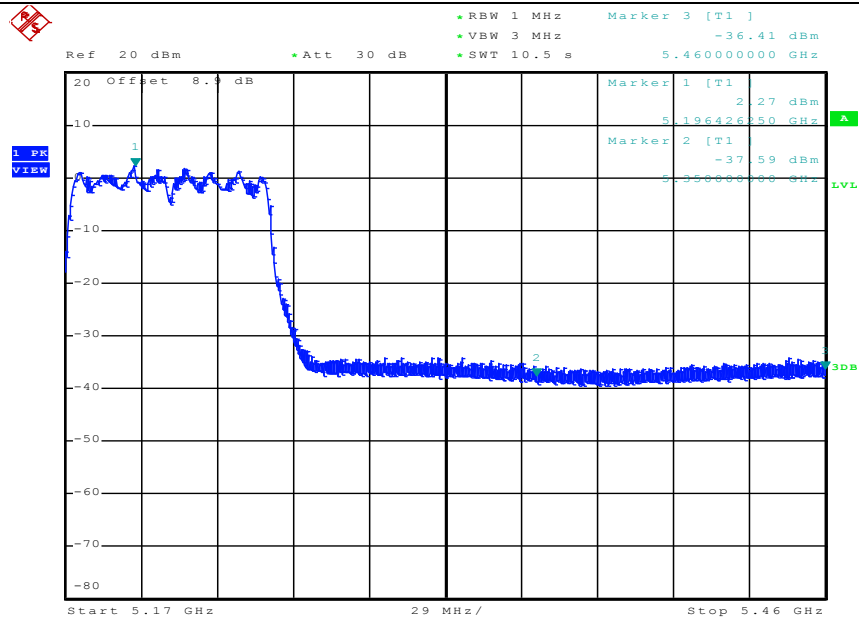
Date: 7.AUG.2019 17:36:03

IEEE 802.11ac40 / Channel 48 / 5230MHz / Peak



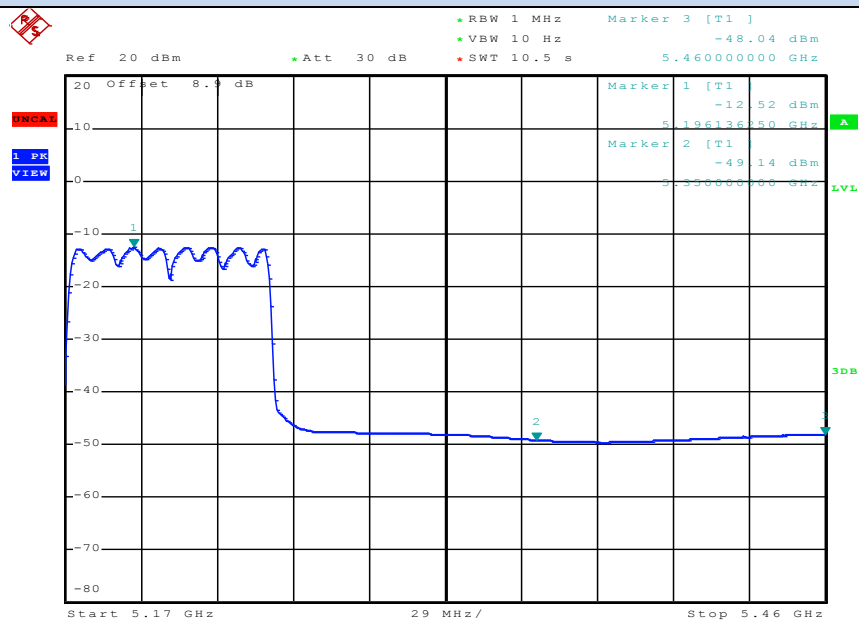
Date: 7.AUG.2019 17:37:39

IEEE 802.11ac40 / Channel 48 / 5230MHz / Average



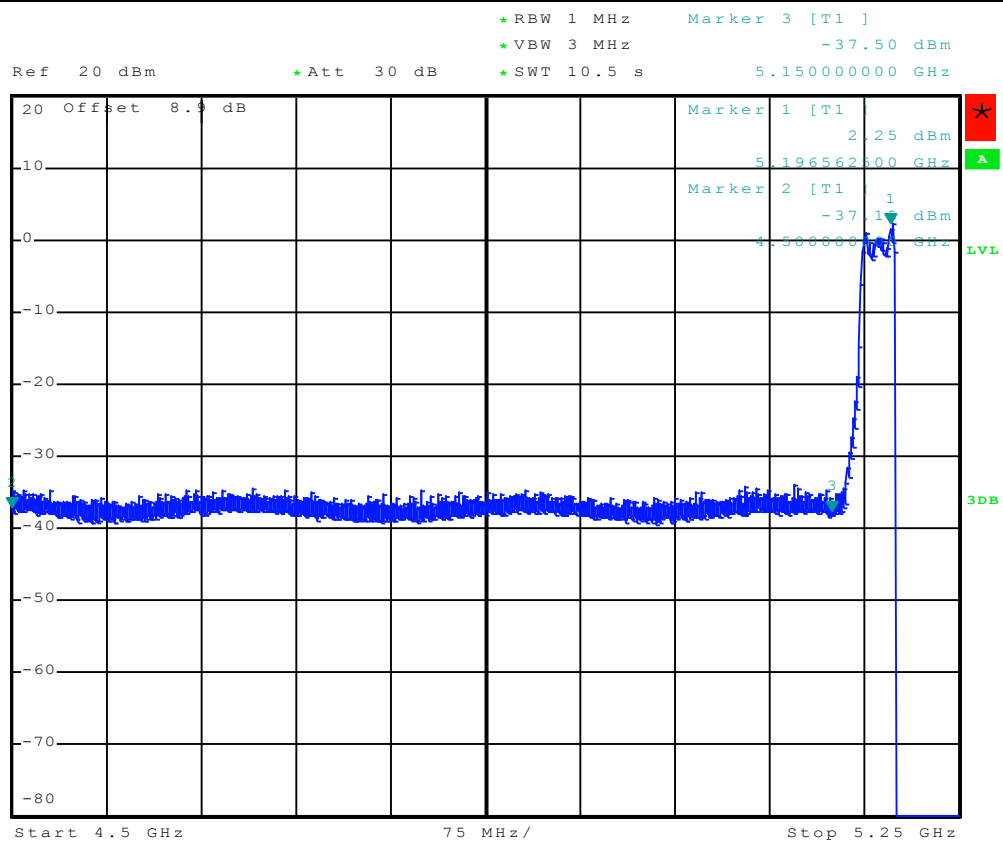
Date: 7.AUG.2019 17:51:34

IEEE 802.11ac80 / Channel 42 / 5210MHz / Peak



Date: 7.AUG.2019 17:52:25

IEEE 802.11ac80 / Channel 42 / 5210MHz / Average

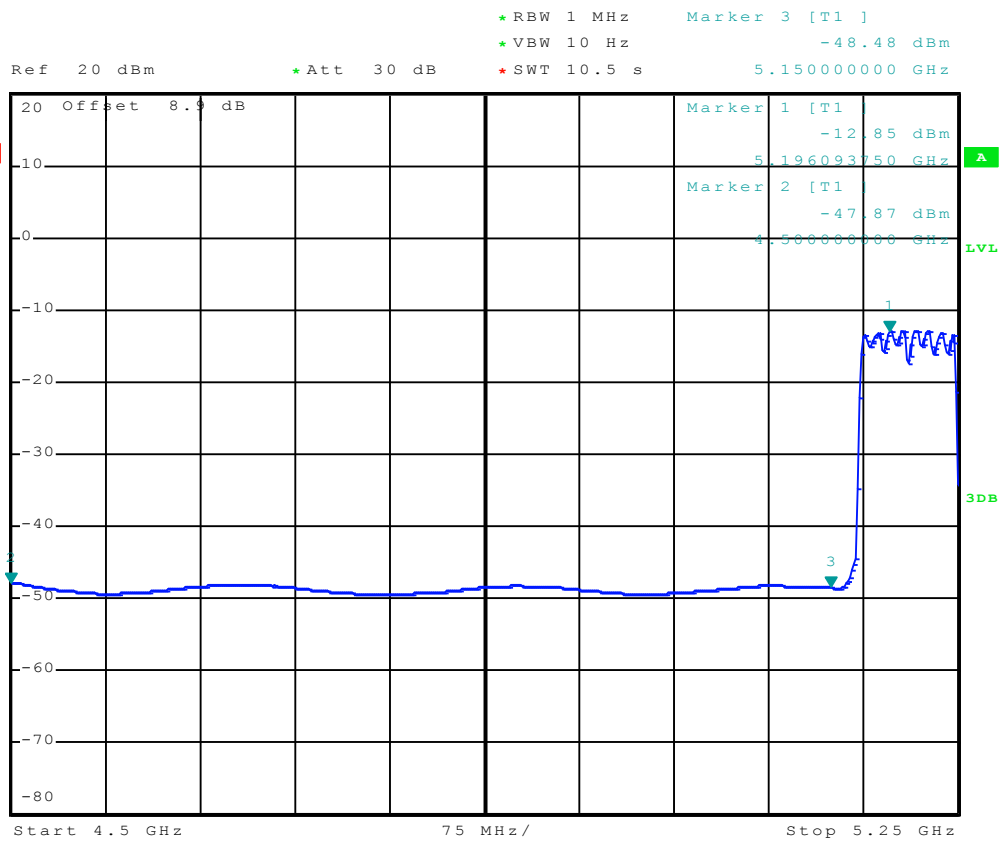
1 PK
VIEW

Date: 7.AUG.2019 17:50:27

IEEE 802.11ac80 / Channel 42/ 5210MHz / Peak



UNCAT

1 PR
VIEW

Date: 7.AUG.2019 17:51:03

IEEE 802.11ac80 / Channel 42 / 5210MHz / Average