

Appendix D

RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Legends Ultimate Home Arcade

Trade Mark: N/A

Test Model: HA8800

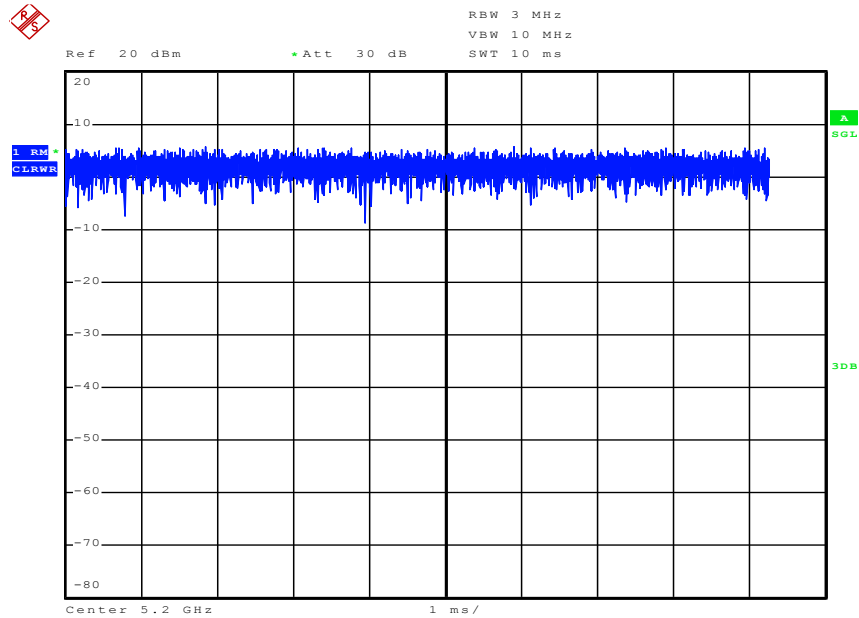
Environmental Conditions

Temperature:	24.5 ° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	JK ZHOU
Supervised by:	Wang Chuang

D.1 Duty Cycle

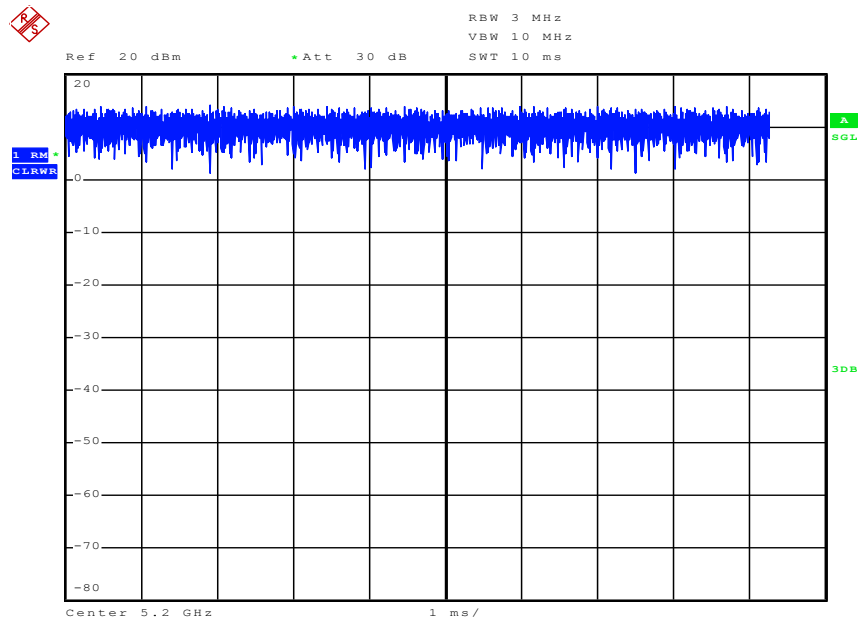
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5200	100	0.00	0.01
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01
11AC20 SISO	5200	100	0.00	0.01
11AC40 SISO	5190	100	0.00	0.01
11AC80 SISO	5210	100	0.00	0.01

On Time and Duty Cycle



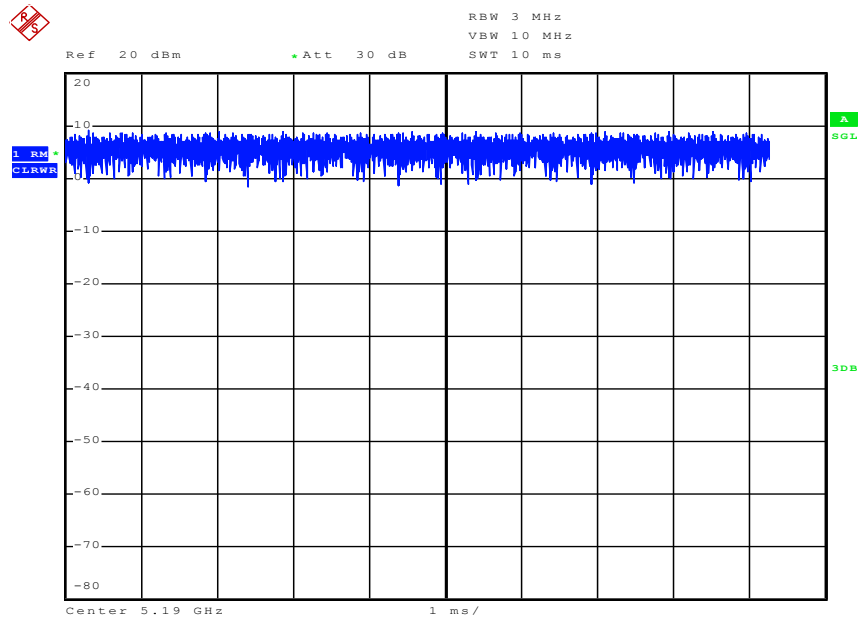
Date: 15.AUG.2019 17:28:28

IEEE 802.11a



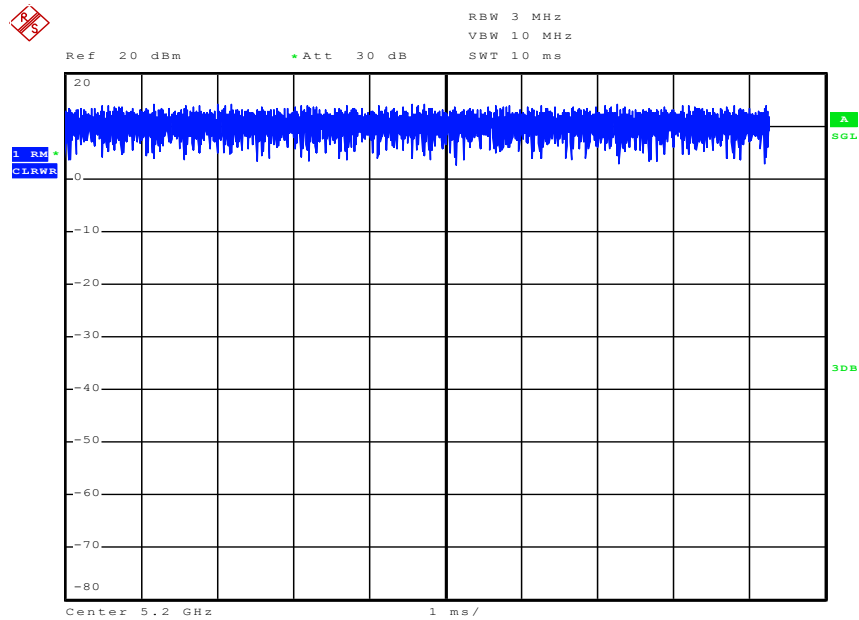
Date: 15.AUG.2019 17:41:02

IEEE 802.11n HT20



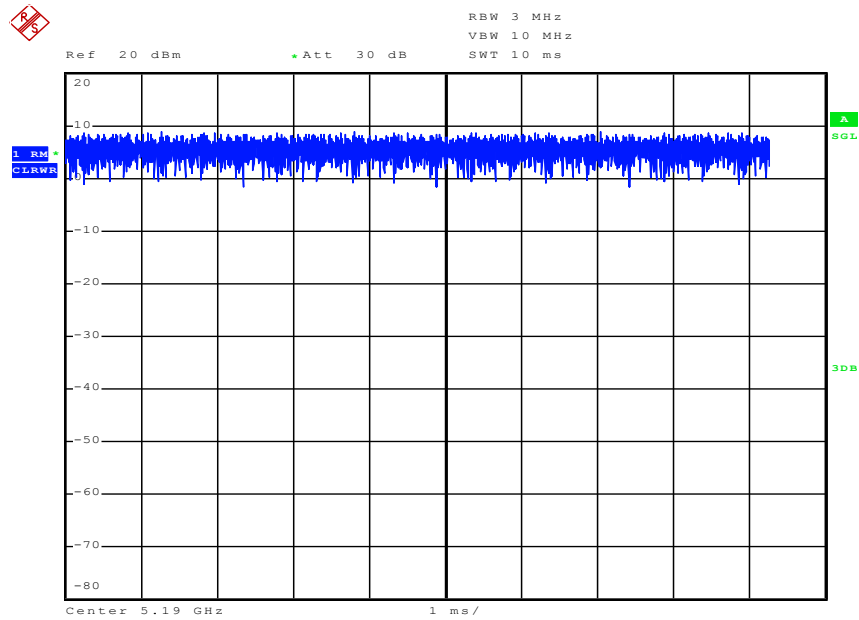
Date: 15 AUG 2019 17:43:02

IEEE 802.11n HT40



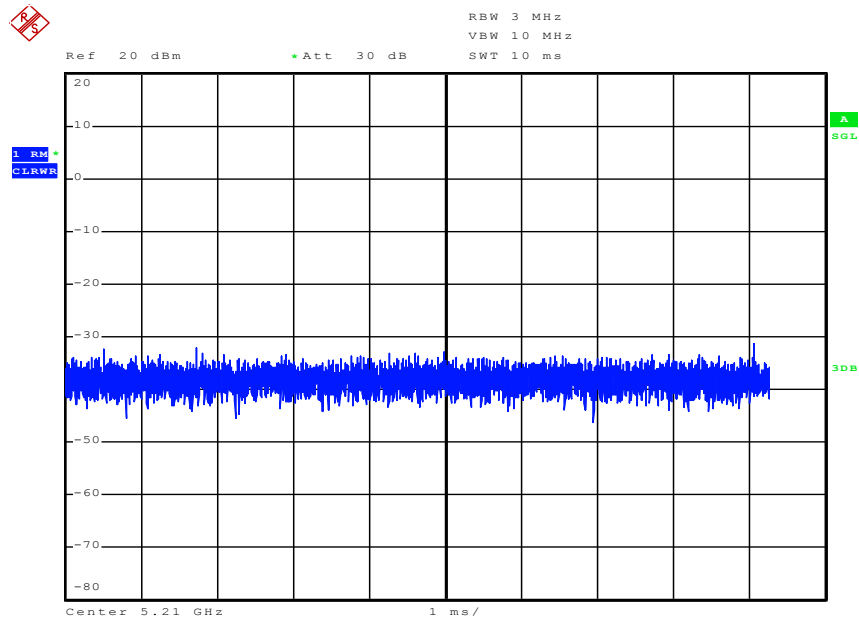
Date: 15 AUG 2019 17:44:49

IEEE 802.11AC20



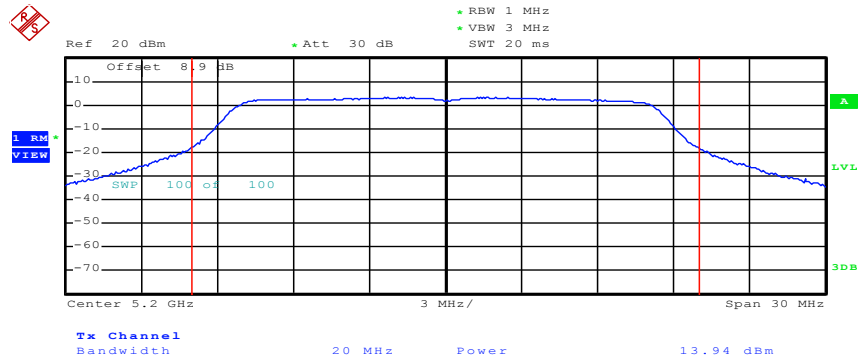
Date: 15 AUG 2019 17:46:27

IEEE 802.11 AC40



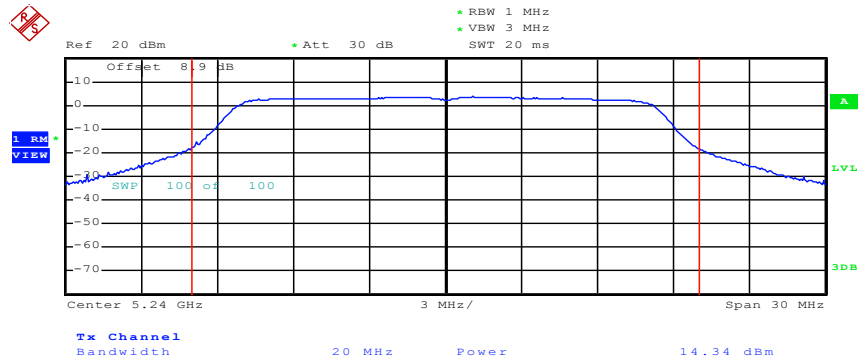
Date: 15 AUG 2019 17:50:14

IEEE 802.11AC80



Date: 7 AUG 2019 17:56:18

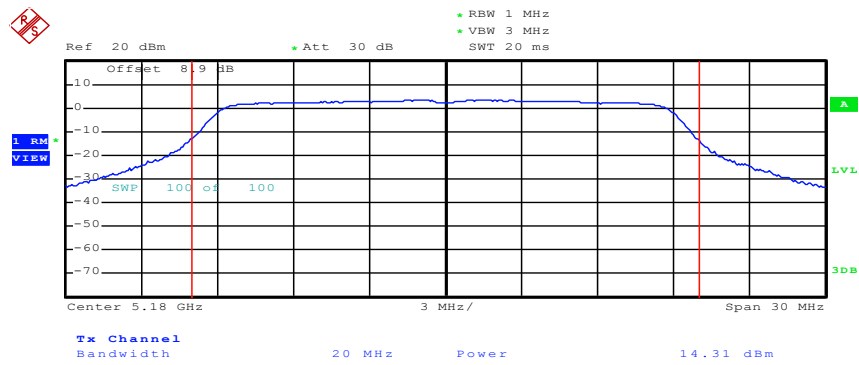
IEEE 802.11a / Channel 40 / 5200MHz



Date: 7 AUG 2019 17:57:22

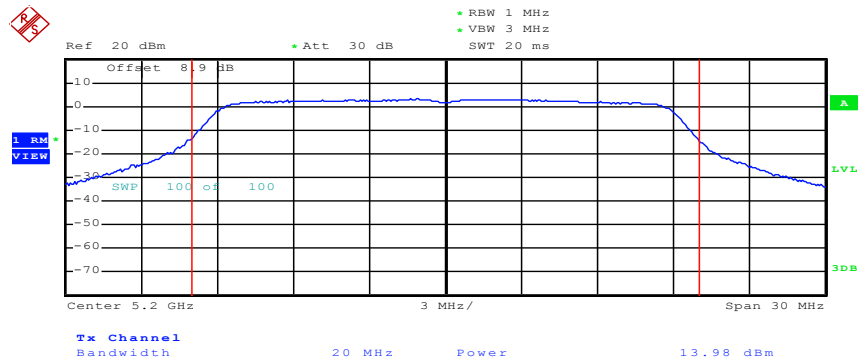
IEEE 802.11a / Channel 48 / 5240MHz

Maximum Conducted Output Power



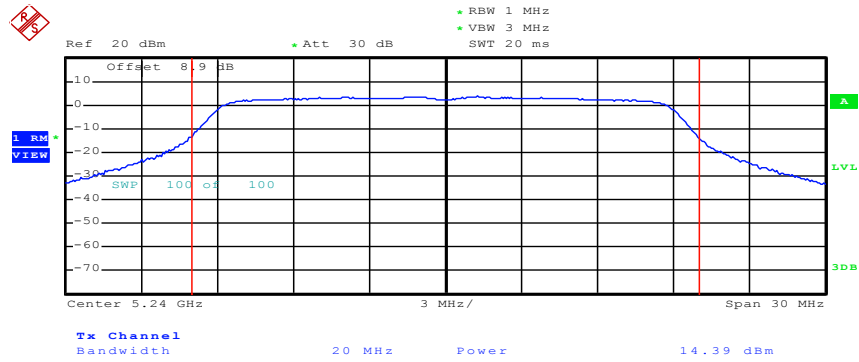
Date: 7 AUG 2019 18:02:48

IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 7 AUG 2019 18:03:51

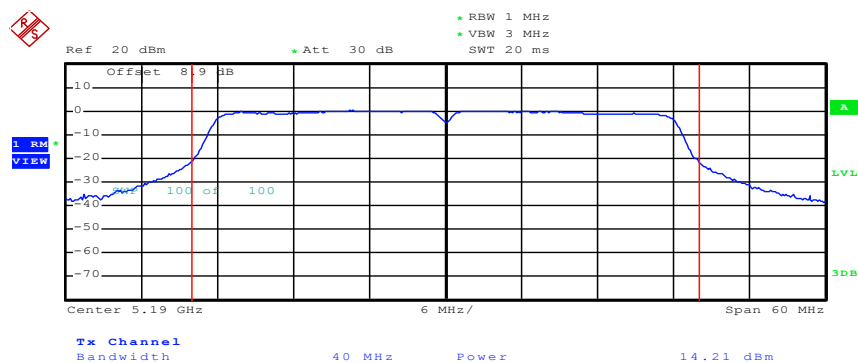
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 7 AUG 2019 18:04:52

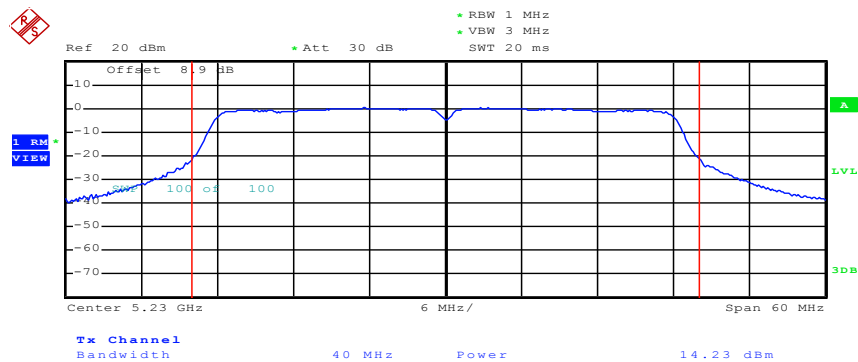
IEEE 802.11n20 / Channel 48 / 5240MHz

Maximum Conducted Output Power



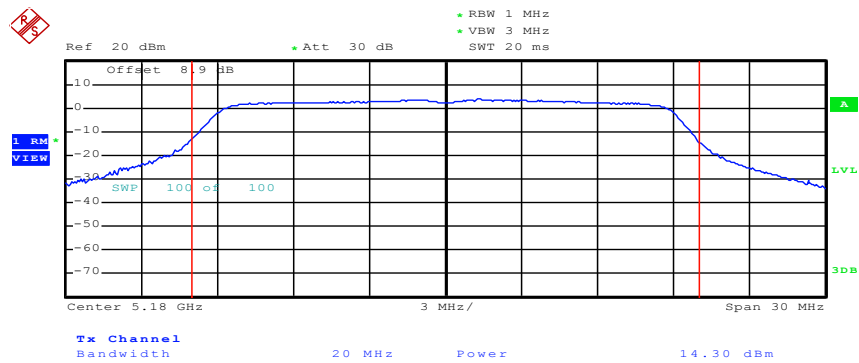
Date: 7 AUG 2019 18:09:42

IEEE 802.11n40 / Channel 38 / 5190MHz



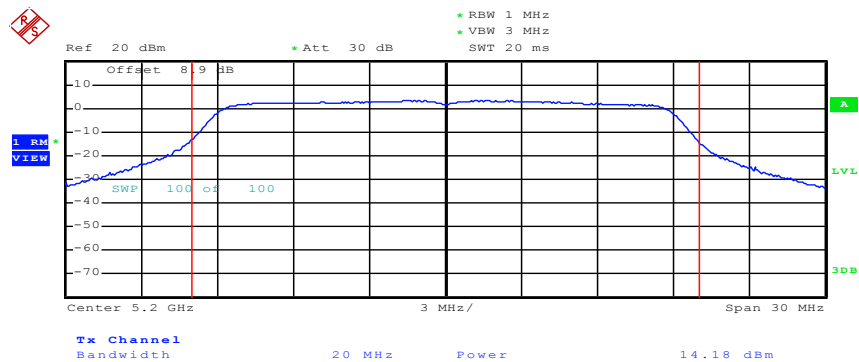
Date: 7 AUG 2019 18:10:40

IEEE 802.11n40 / Channel 46 / 5230MHz



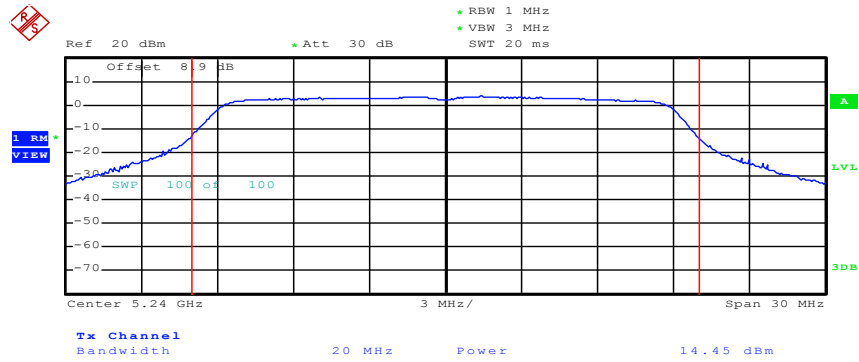
Date: 7 AUG 2019 18:14:04

IEEE 802.11ac20 / Channel 36 / 5180MHz



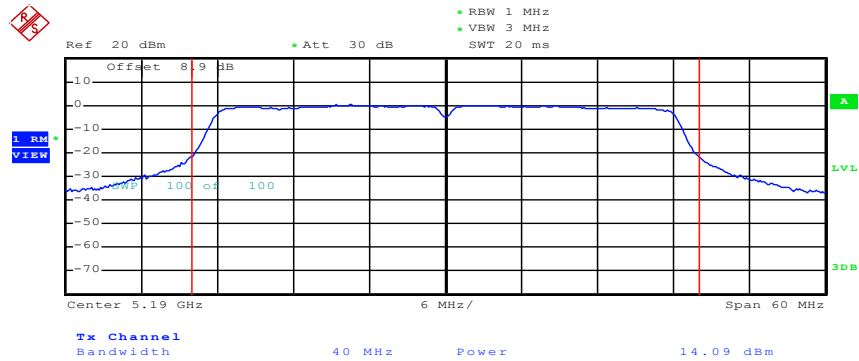
Date: 7 AUG 2019 18:14:59

IEEE 802.11ac20 / Channel 40 / 5200MHz



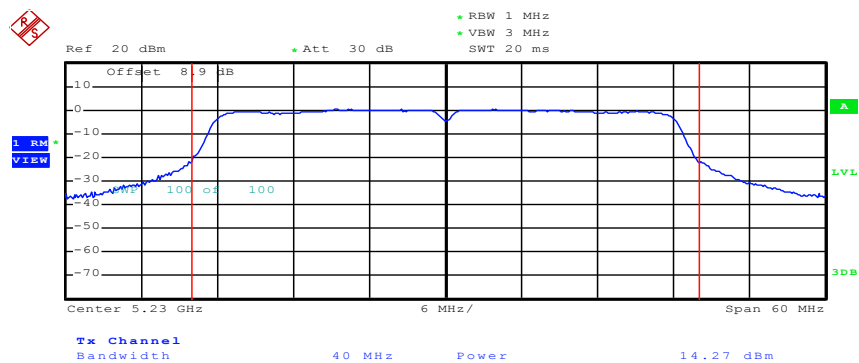
Date: 7 AUG 2019 18:15:56

IEEE 802.11ac20 / Channel 48 / 5240MHz



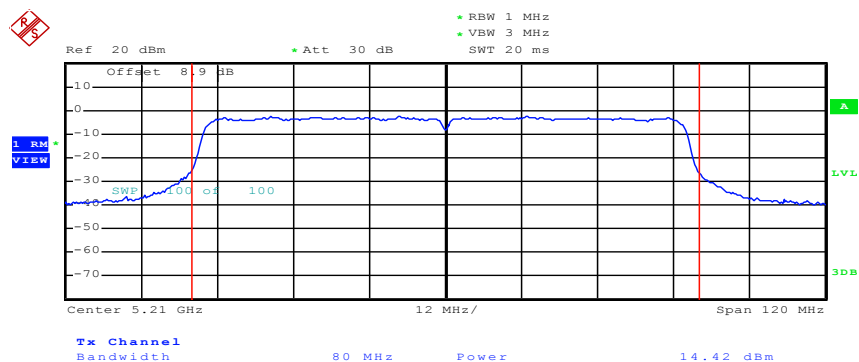
Date: 7 AUG 2019 18:20:06

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 7 AUG 2019 18:21:06

IEEE 802.11ac40 / Channel 46 / 5230MHz

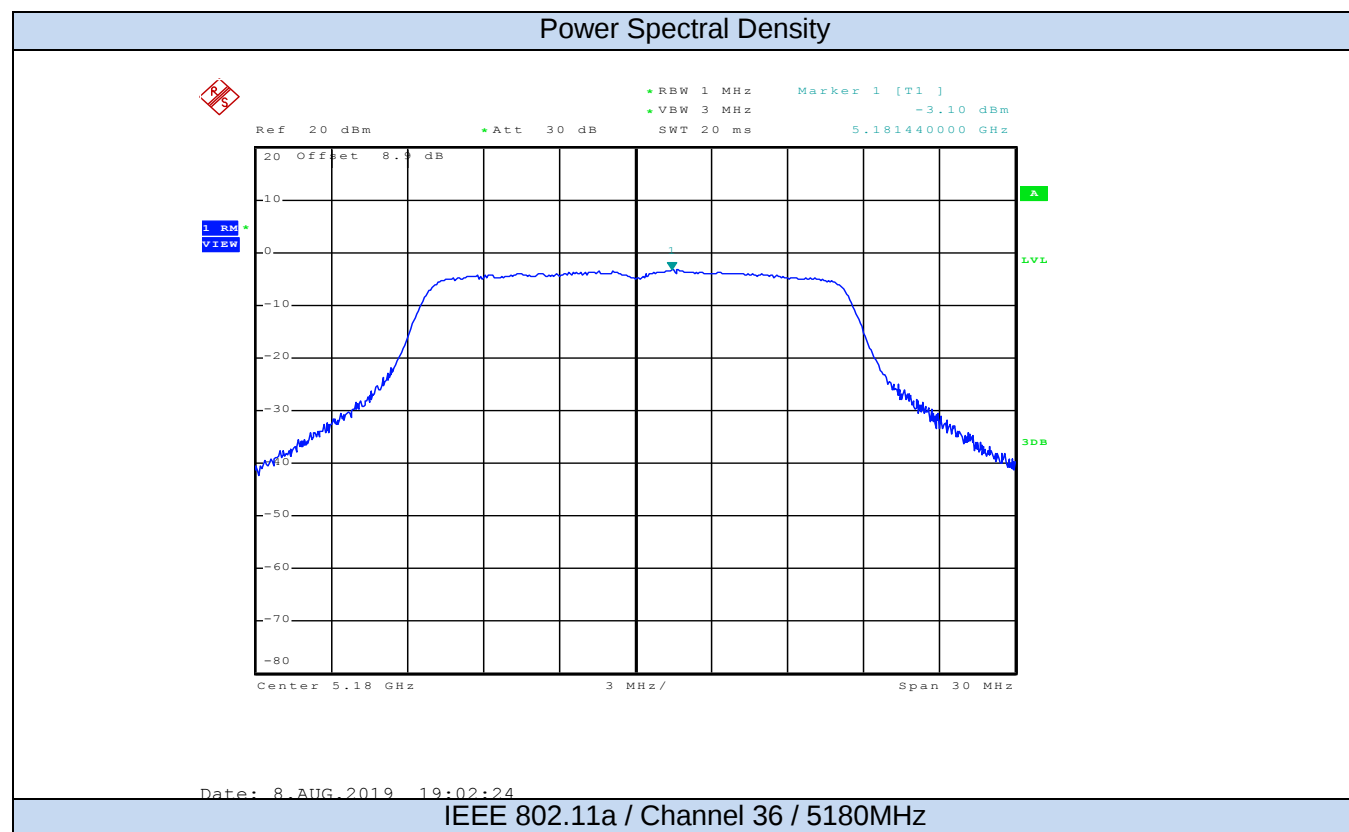


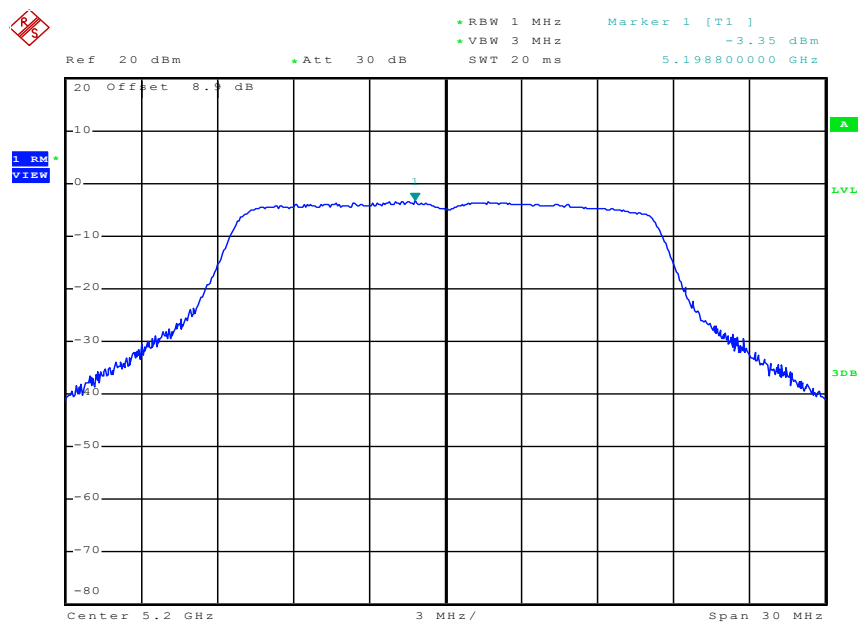
Date: 7 AUG 2019 18:24:37

IEEE 802.11ac80 / Channel 42 / 5210MHz

D.3 Power Spectral Density

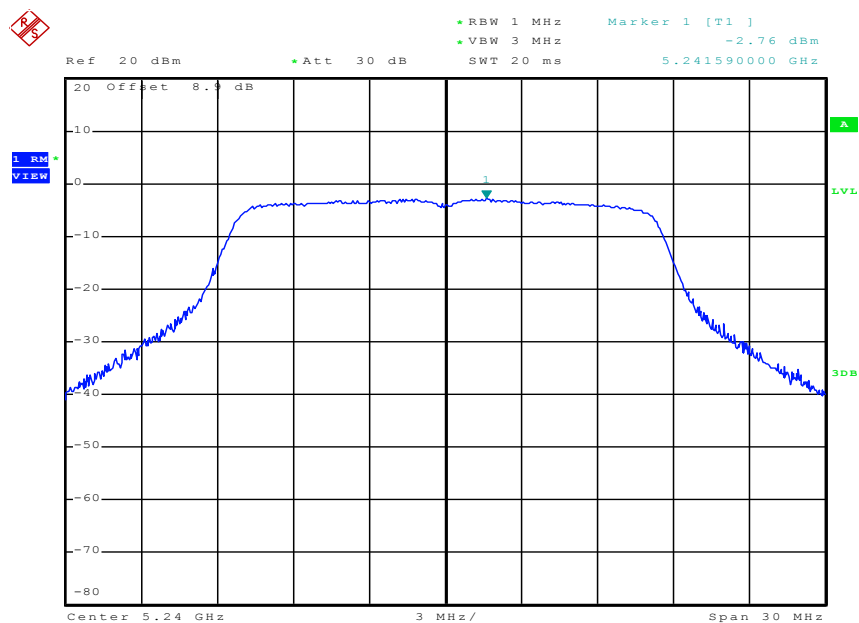
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	-3.10	0	-3.10	11	Pass
	40	5200	-3.35	0	-3.35		Pass
	48	5240	-2.76	0	-2.76		Pass
11N2 0 SISO	36	5180	-3.11	0	-3.11	11	Pass
	40	5200	-3.47	0	-3.47		Pass
	48	5240	-2.90	0	-2.90		Pass
11N4 0 SISO	38	5190	-6.66	0	-6.66	11	Pass
	46	5230	-6.54	0	-6.54		Pass
11AC 20 SISO	36	5180	-3.02	0	-3.02	11	Pass
	40	5200	-3.07	0	-3.07		Pass
	48	5240	-2.52	0	-2.52		Pass
11AC 40 SISO	38	5190	-6.75	0	-6.75	11	Pass
	46	5230	-6.33	0	-6.33		Pass
11AC 80 SISO	42	5210	-9.27	0	-9.27	11	Pass





Date: 8 AUG 2019 19:05:43

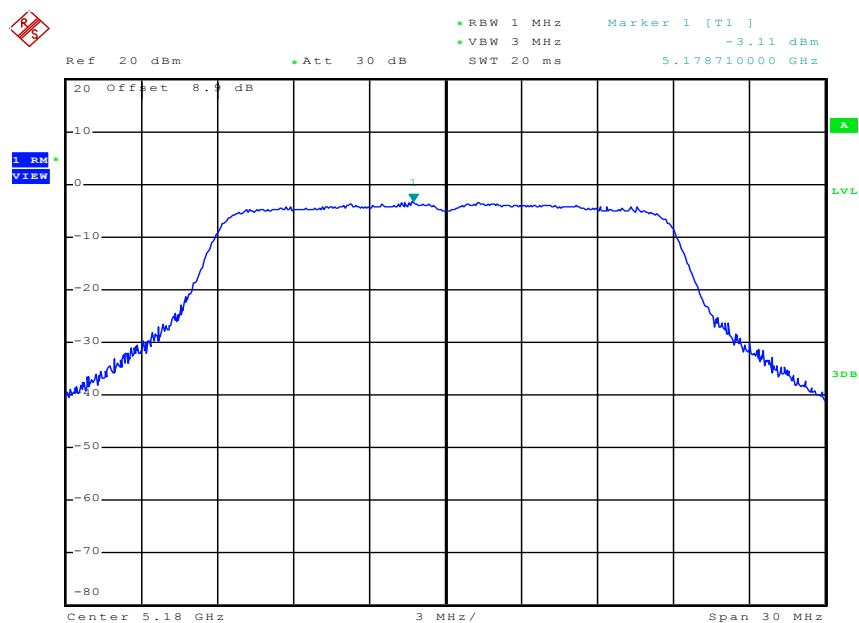
IEEE 802.11na / Channel 40 / 5200MHz



Date: 8 AUG 2019 19:07:38

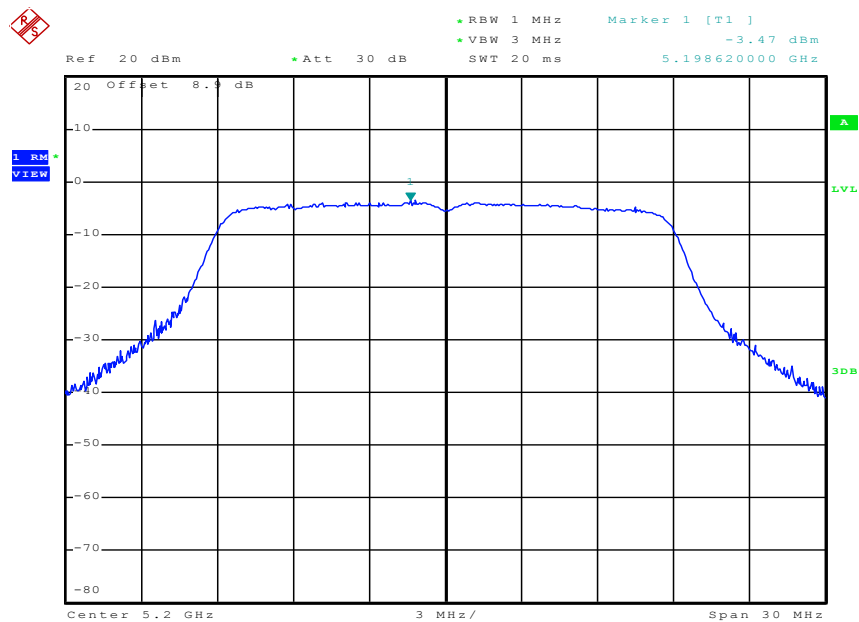
IEEE 802.11na / Channel 48 / 5240MHz

Power Spectral Density



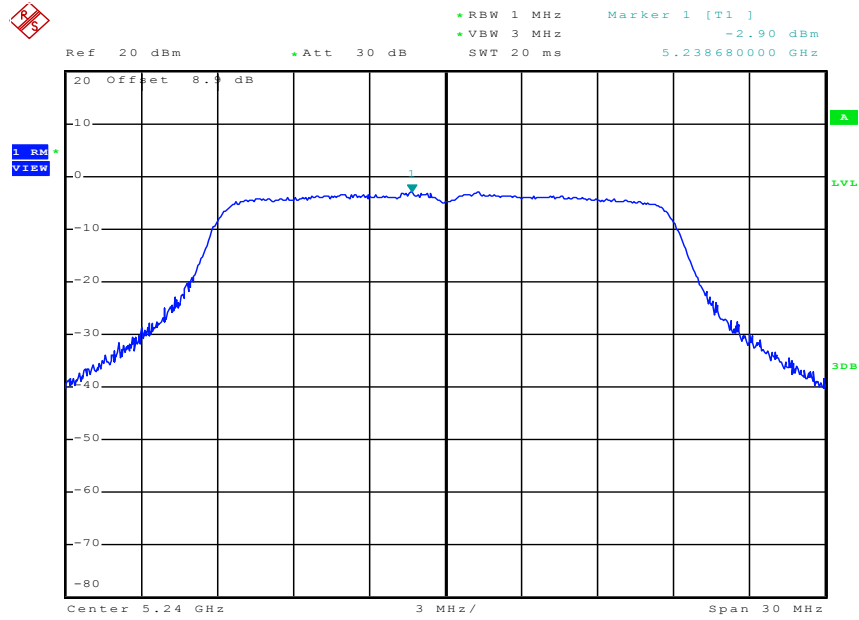
Date: 8 AUG 2019 19:20:54

IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 8 AUG 2019 19:23:59

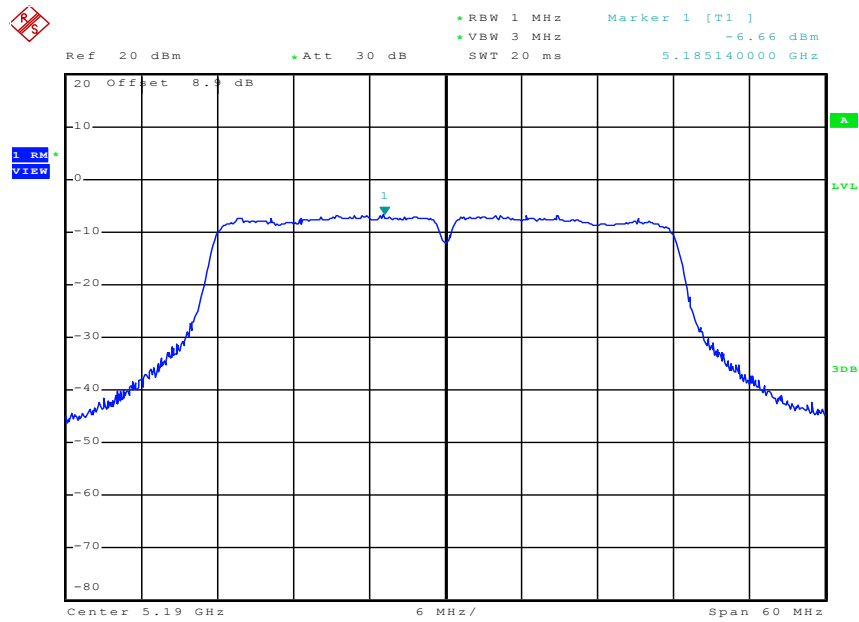
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 8 AUG 2019 19:25:56

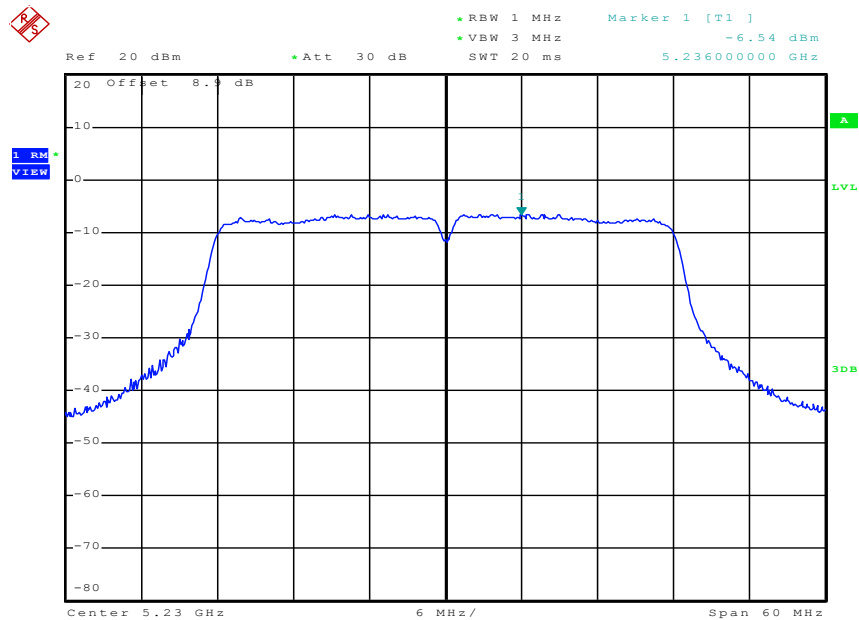
IEEE 802.11n20 / Channel 48 / 5240MHz

Power Spectral Density



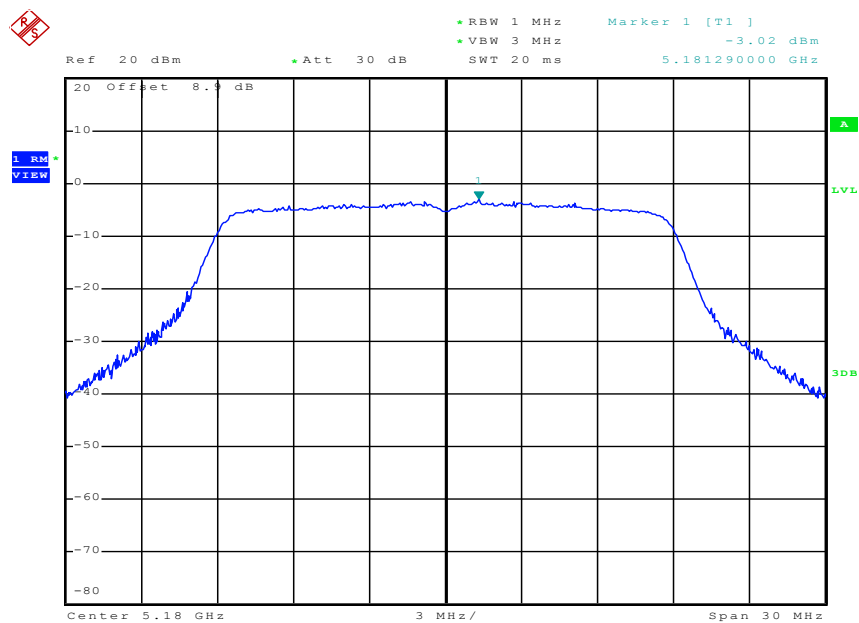
Date: 8 AUG 2019 19:38:41

IEEE 802.11n40 / Channel 38 / 5190MHz



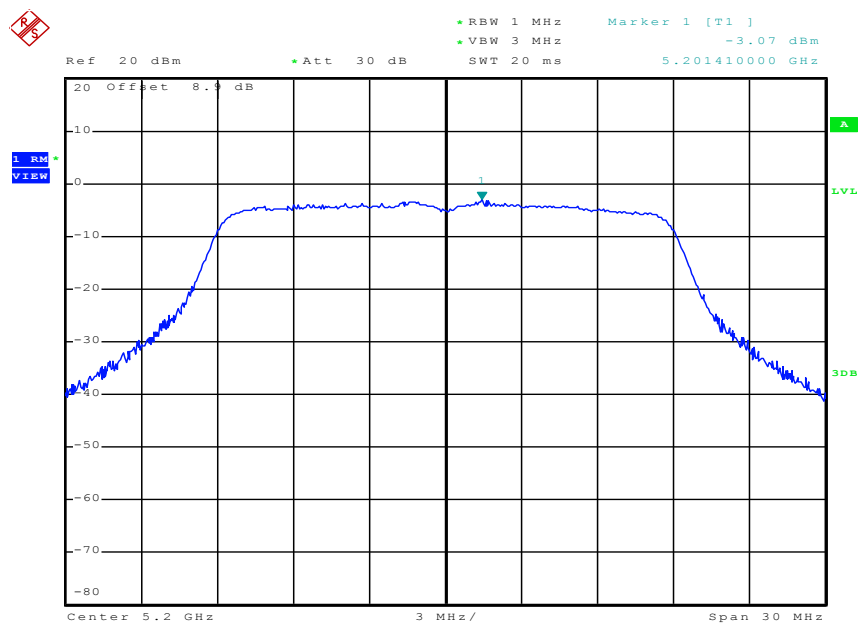
Date: 8 AUG 2019 19:41:46

IEEE 802.11n40 / Channel 46 / 5230MHz



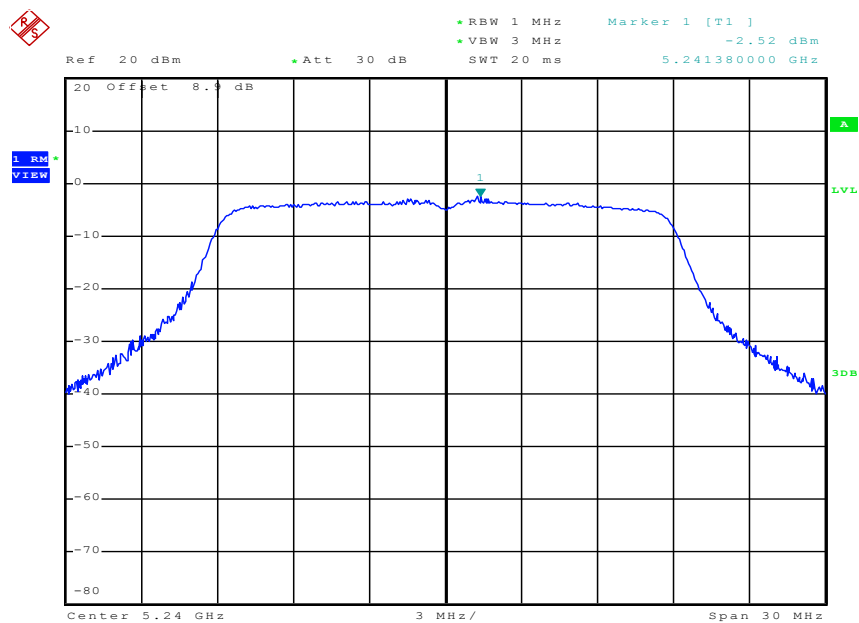
Date: 8 AUG 2019 19:52:27

IEEE 802.11ac20 / Channel 36 / 5180MHz



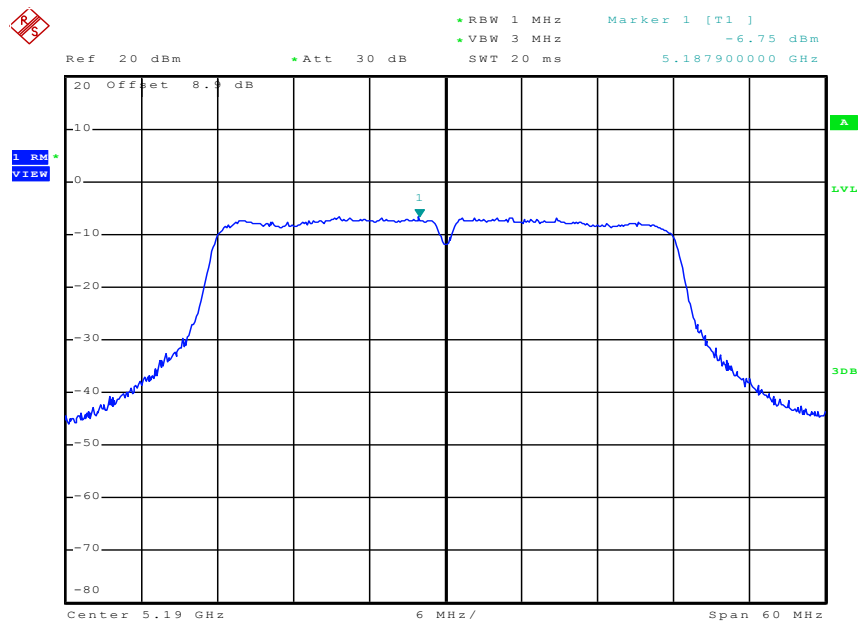
Date: 8 AUG 2019 19:55:17

IEEE 802.11ac20 / Channel 40 / 5200MHz



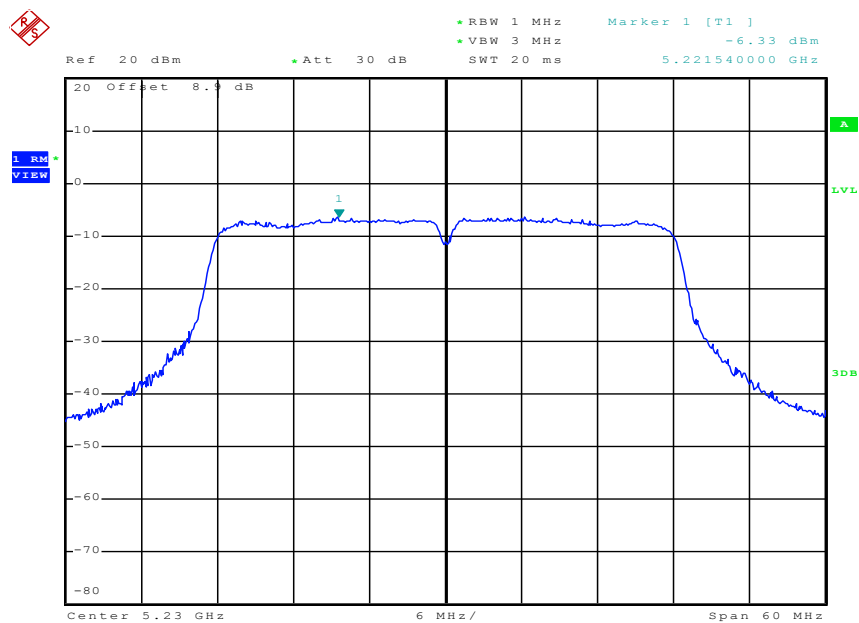
Date: 8 AUG 2019 19:56:59

IEEE 802.11ac20 / Channel 48 / 5240MHz



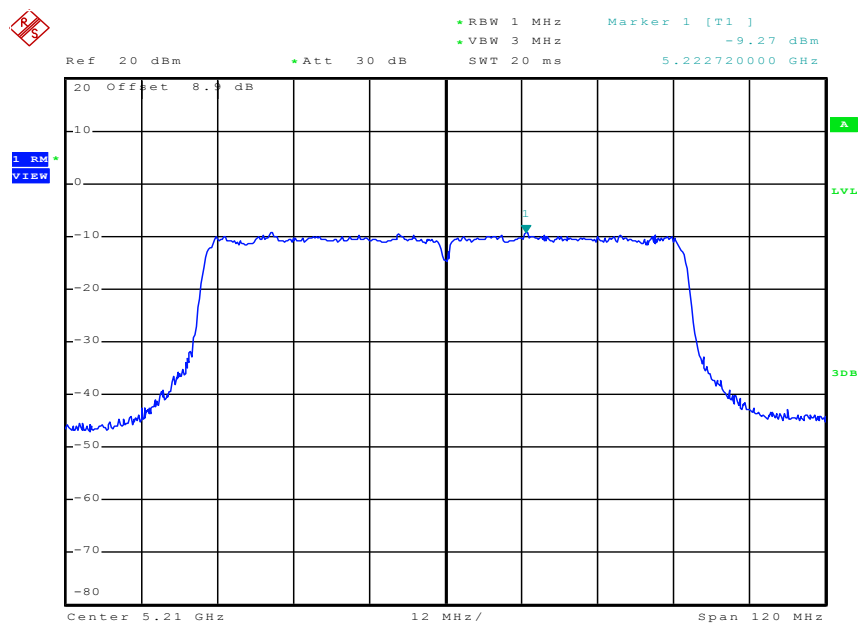
Date: 8 AUG 2019 20:20:34

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 8 AUG 2019 21:05:45

IEEE 802.11ac40 / Channel 46 / 5230MHz



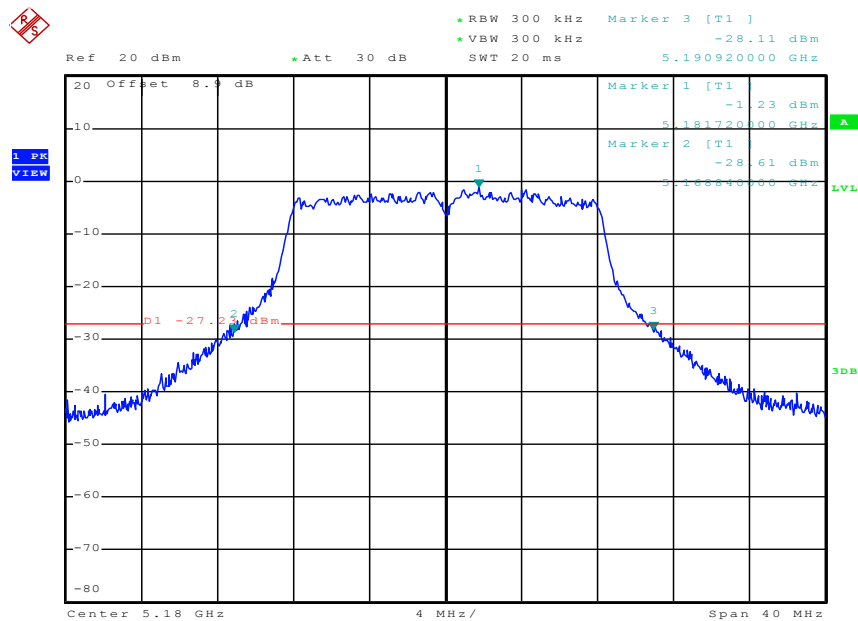
Date: 8 AUG 2019 21:15:51

IEEE 802.11ac80 / Channel 42 / 5210MHz

D.4 Emission Bandwidth

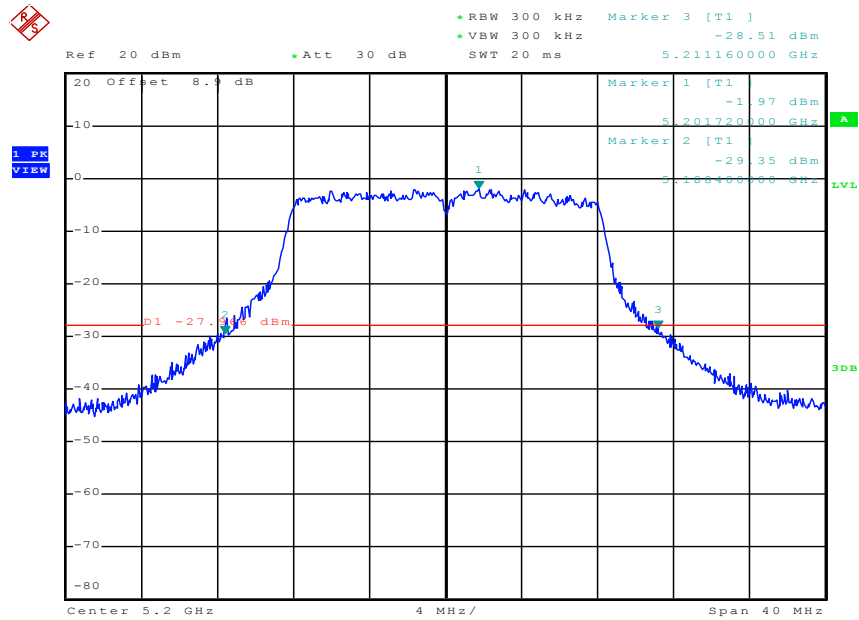
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	22.080	No Limit	Pass
	40	5200	22.760		Pass
	48	5240	40.000		Pass
11N20 SISO	36	5180	23.240	No Limit	Pass
	40	5200	23.640		Pass
	48	5240	23.160		Pass
11N40 SISO	38	5190	44.080	No Limit	Pass
	46	5230	44.960		Pass
11AC20 SISO	36	5180	23.200	No Limi	Pass
	40	5200	23.360		Pass
	48	5240	23.560		Pass
11AC40 SISO	38	5190	44.960	No Limi	Pass
	46	5230	44.640		Pass
11AC80 SISO	42	5210	90.400	No Limi	Pass

26dB Bandwidth



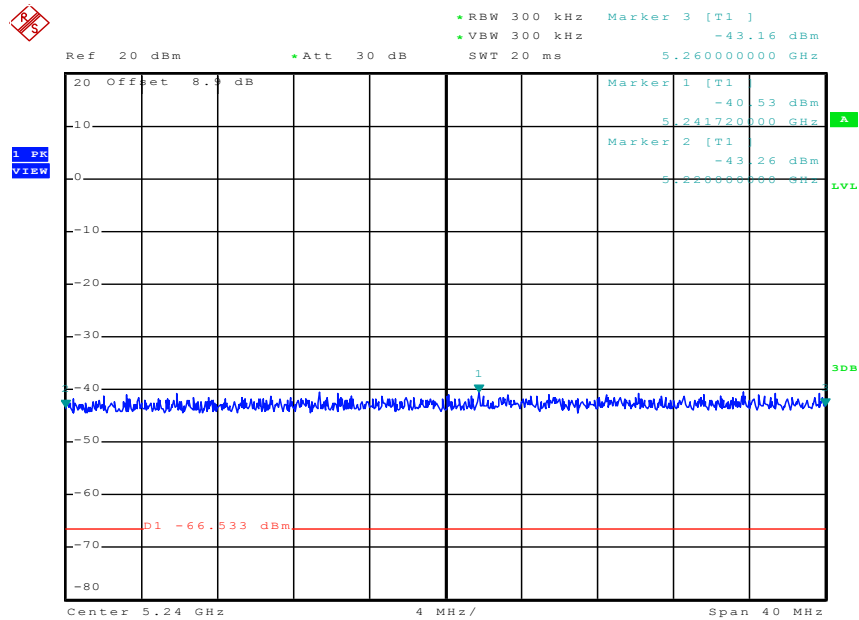
Date: 8 AUG 2019 19:01:36

IEEE 802.11a / Channel 36 / 5180MHz



Date: 8 AUG 2019 19:04:55

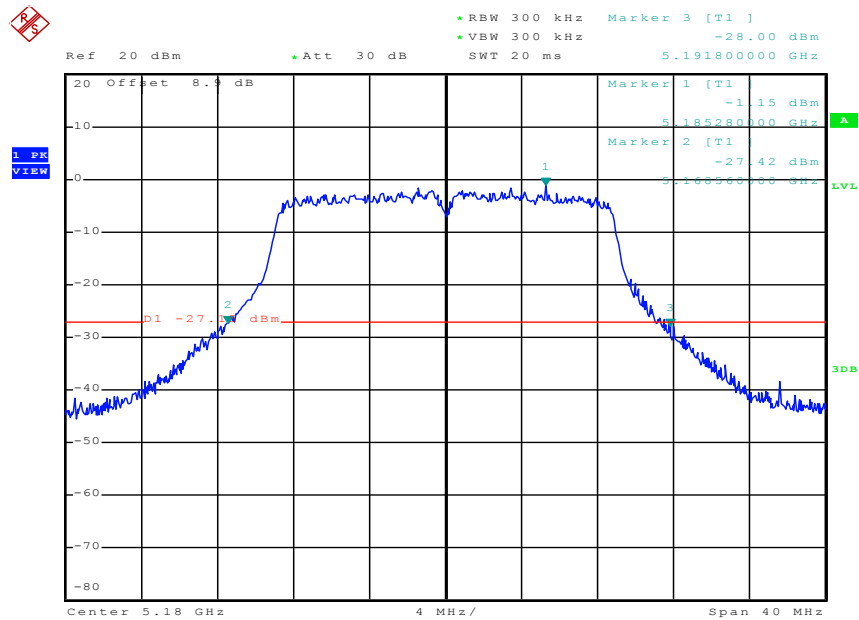
IEEE 802.11a / Channel 40 / 5200MHz



Date: 8 AUG 2019 21:59:06

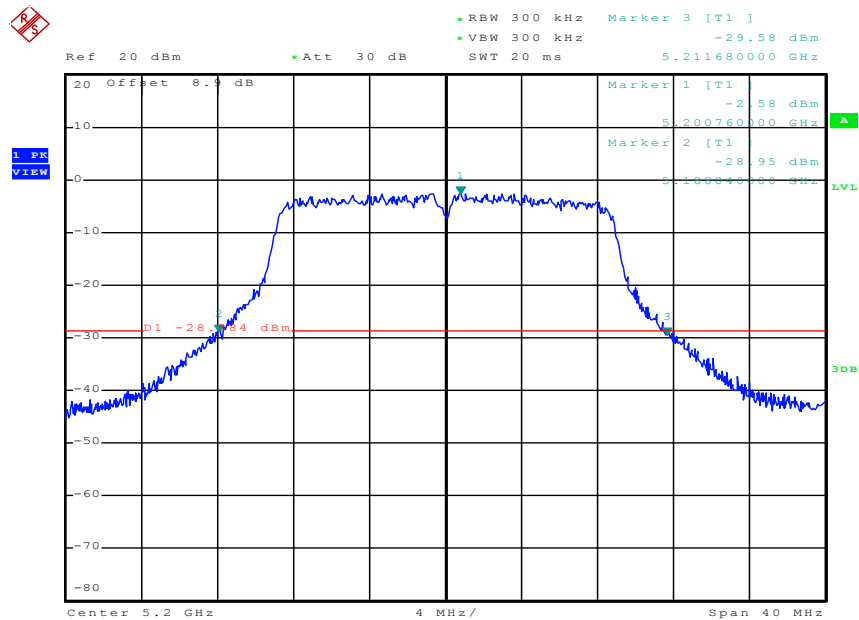
IEEE 802.11a / Channel 48 / 5240MHz

26dB Bandwidth



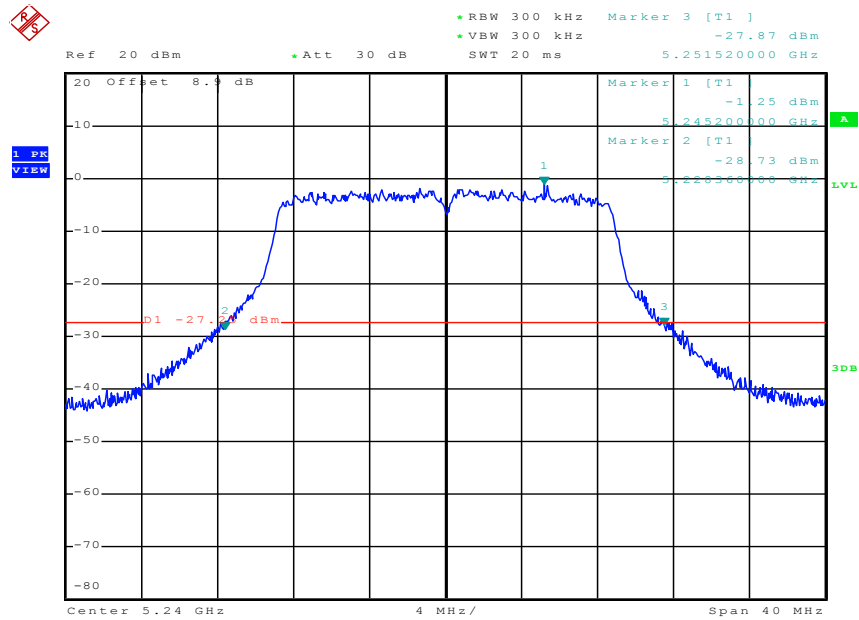
Date: 8 AUG 2019 19:20:06

IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 8 AUG 2019 19:23:12

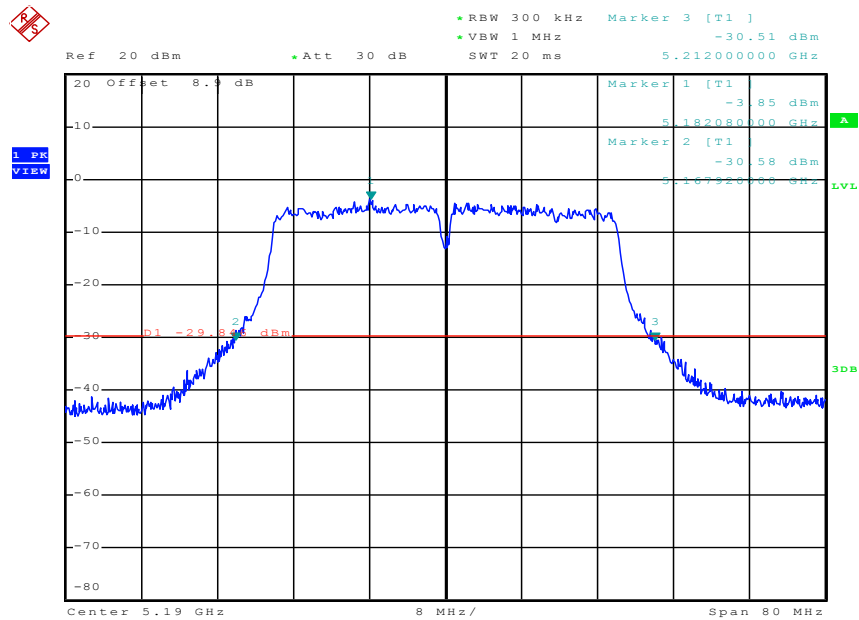
IEEE 802.11n20 / Channel 40 / 5200MHz



Date: 8 AUG 2019 19:25:09

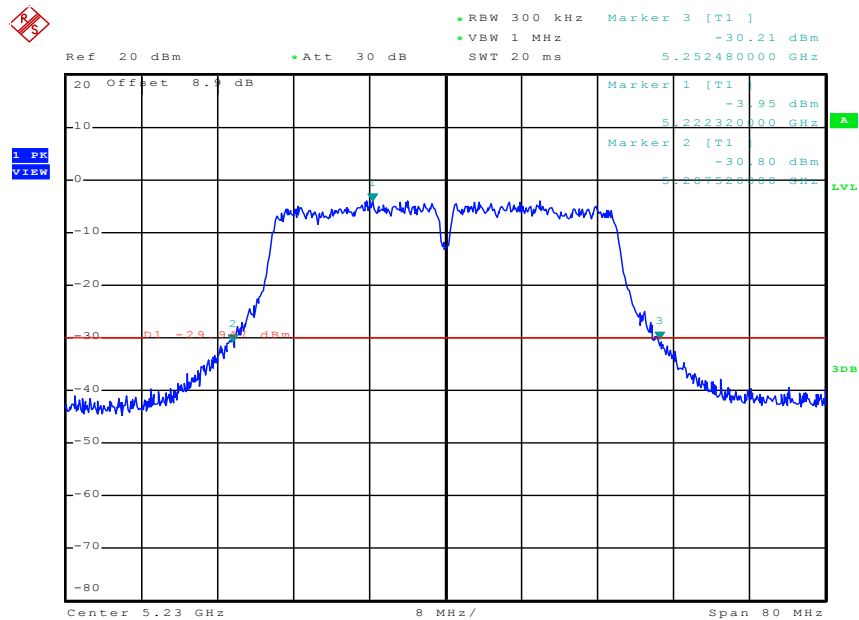
IEEE 802.11n20 / Channel 48 / 5240MHz

26dB Bandwidth



Date: 8 AUG 2019 19:37:53

IEEE 802.11n40 / Channel 38 / 5190MHz



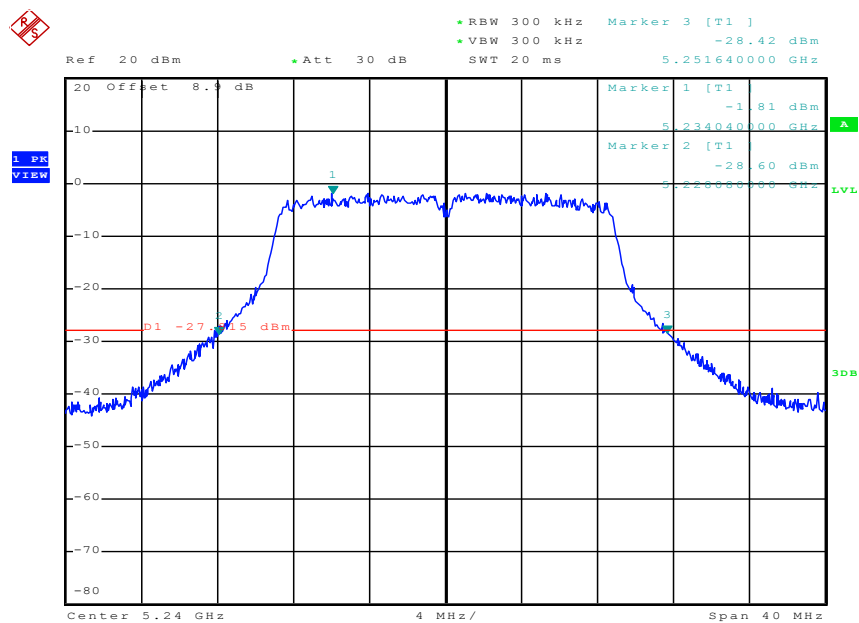
Date: 8 AUG 2019 19:40:58

IEEE 802.11n40 / Channel 46 / 5230MHz



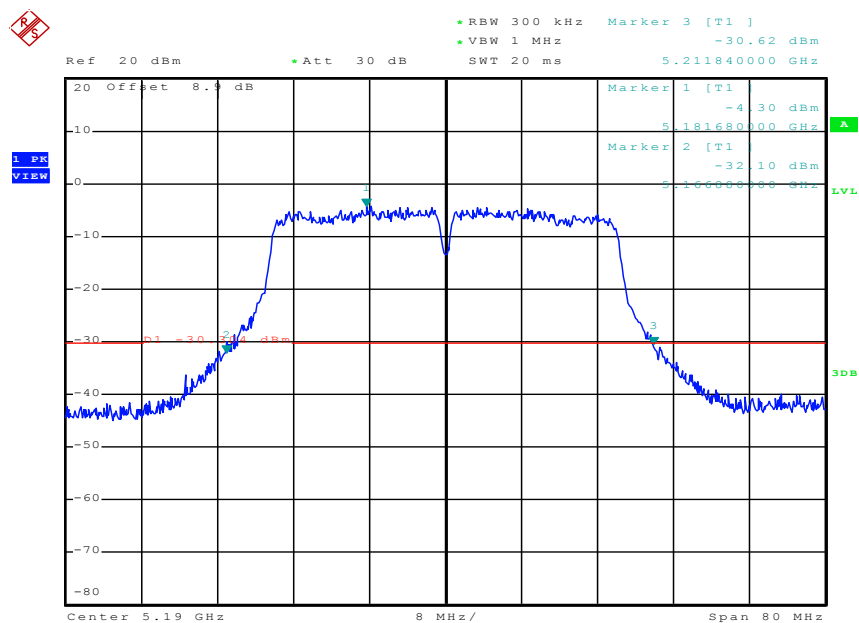
Date: 8.AUG.2019 19:54:29

Page 26 of 40



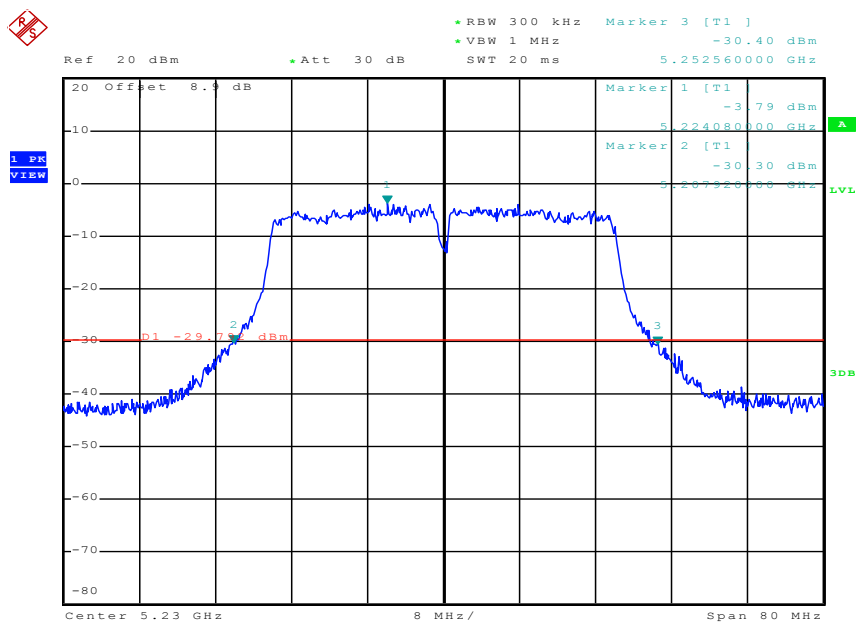
Date: 8 AUG 2019 19:56:12

IEEE 802.11ac20 / Channel 48 / 5240MHz



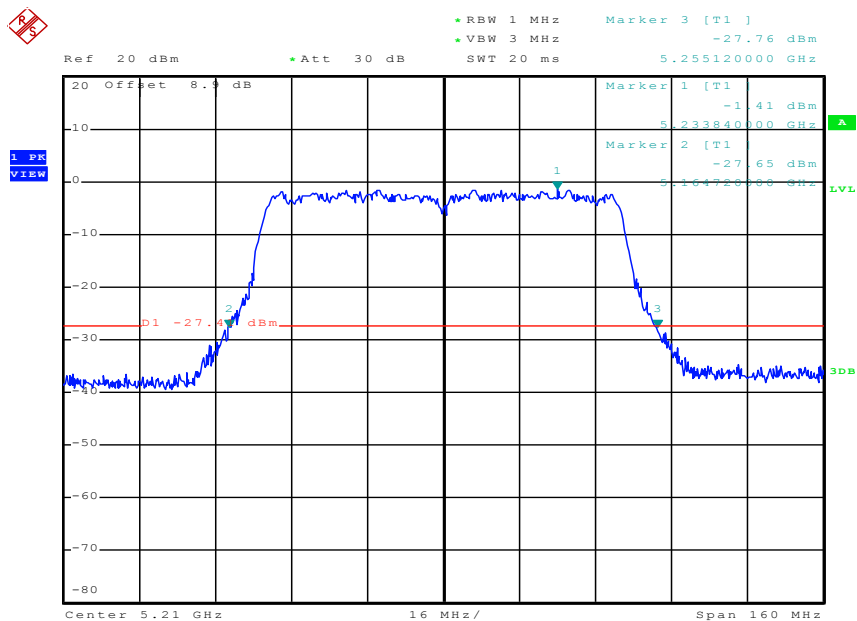
Date: 8 AUG 2019 20:19:47

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 8 AUG 2019 21:04:57

IEEE 802.11ac40 / Channel 46 / 5230MHz



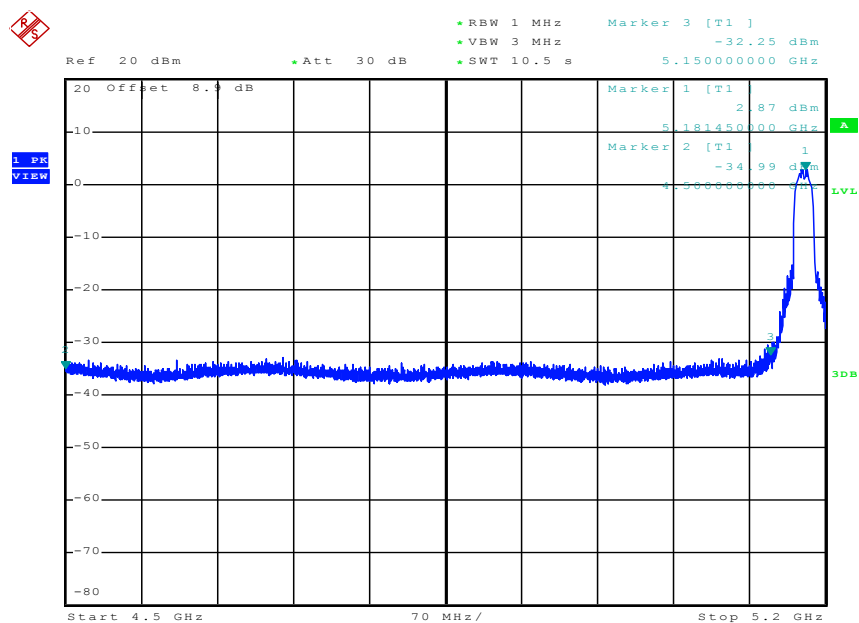
Date: 8 AUG 2019 21:15:04

IEEE 802.11ac80 / Channel 42 / 5210MHz

D.5 Undesirable Emissions Measurement

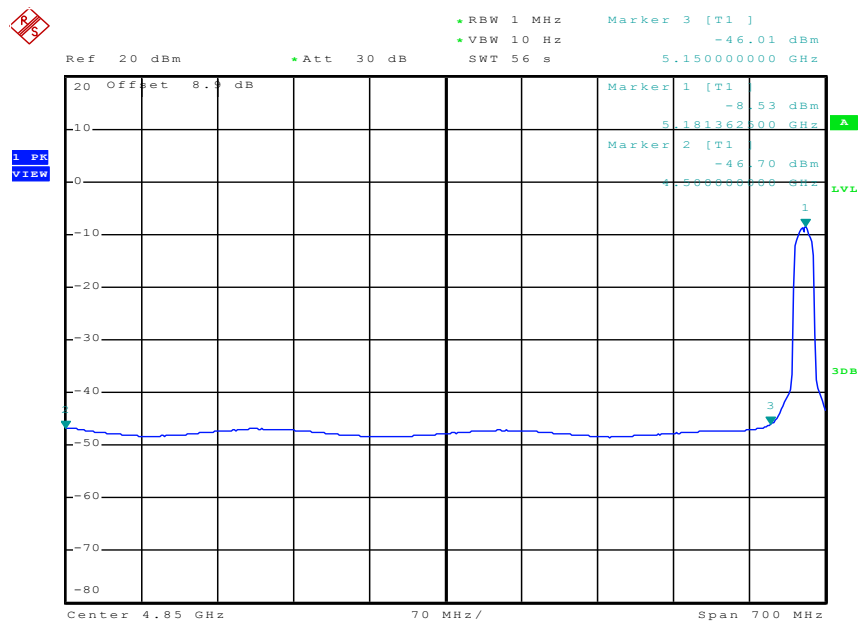
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11A	36	4500.0	-34.99	2.00	0	60.24	Peak	68.20	Pass
		4500.0	-46.70	2.00	0	48.53	Average	54.00	Pass
		5150.0	-32.25	2.00	0	62.98	Peak	68.20	Pass
		5150.0	-46.01	2.00	0	49.22	Average	54.00	Pass
	48	5350.0	-36.61	2.00	0	58.62	Peak	68.20	Pass
		5350.0	-48.18	2.00	0	47.05	Average	54.00	Pass
		5460.0	-36.55	2.00	0	58.68	Peak	68.20	Pass
		5460.0	-46.99	2.00	0	48.24	Average	54.00	Pass
11N2 O SISO	36	4500.0	-34.78	2.00	0	60.45	Peak	68.20	Pass
		4500.0	-46.71	2.00	0	48.52	Average	54.00	Pass
		5150.0	-34.94	2.00	0	60.29	Peak	68.20	Pass
		5150.0	-47.52	2.00	0	47.71	Average	54.00	Pass
	48	5350.0	-36.29	2.00	0	58.94	Peak	68.20	Pass
		5350.0	-48.18	2.00	0	47.05	Average	54.00	Pass
		5460.0	-35.70	2.00	0	59.53	Peak	68.20	Pass
		5460.0	-47.02	2.00	0	48.21	Average	54.00	Pass
11N4 O SISO	38	4500.0	-34.59	2.00	0	60.64	Peak	68.20	Pass
		4500.0	-46.74	2.00	0	48.49	Average	54.00	Pass
		5150.0	-34.03	2.00	0	61.20	Peak	68.20	Pass
		5150.0	-47.25	2.00	0	47.98	Average	54.00	Pass
	46	5350.0	-36.52	2.00	0	58.71	Peak	68.20	Pass
		5350.0	-48.23	2.00	0	47.00	Average	54.00	Pass
		5460.0	-33.94	2.00	0	61.29	Peak	68.20	Pass
		5460.0	-47.03	2.00	0	48.20	Average	54.00	Pass
11A C20 SIS O	36	4500.0	-35.58	2.00	0	59.65	Peak	68.20	Pass
		4500.0	-46.76	2.00	0	48.47	Average	54.00	Pass
		5150.0	-37.61	2.00	0	57.62	Peak	68.20	Pass
		5150.0	-47.52	2.00	0	47.71	Average	54.00	Pass
	48	4500.0	-35.58	2.00	0	59.65	Peak	68.20	Pass
		4500.0	-46.76	2.00	0	48.47	Average	54.00	Pass
		5150.0	-37.61	2.00	0	57.62	Peak	68.20	Pass
		5150.0	-47.52	2.00	0	47.71	Average	54.00	Pass
11A C40 SIS O	38	4500.0	-35.27	2.00	0	59.96	Peak	68.20	Pass
		4500.0	-46.75	2.00	0	48.48	Average	54.00	Pass
		5150.0	-35.66	2.00	0	59.57	Peak	68.20	Pass
		5150.0	-47.27	2.00	0	47.96	Average	54.00	Pass
	46	5350.0	-36.45	2.00	0	58.78	Peak	68.20	Pass
		5350.0	-48.14	2.00	0	47.09	Average	54.00	Pass
		5460.0	-34.96	2.00	0	60.27	Peak	68.20	Pass
		5460.0	-46.98	2.00	0	48.25	Average	54.00	Pass
11A C80 SIS O	42	4500.0	-36.14	2.00	0	59.09	Peak	68.20	Pass
		5150.0	-48.16	2.00	0	47.07	Average	54.00	Pass
		4500.0	-35.78	2.00	0	59.45	Peak	68.20	Pass
		5150.0	-46.99	2.00	0	48.24	Average	54.00	Pass
		5350.0	-36.14	2.00	0	59.09	Peak	68.20	Pass
		5460.0	-48.16	2.00	0	47.07	Average	54.00	Pass
		5350.0	-35.78	2.00	0	59.45	Peak	68.20	Pass
		5460.0	-46.99	2.00	0	48.24	Average	54.00	Pass

Undesirable Emissions Measurement



Date: 26 SEP 2019 16:22:58

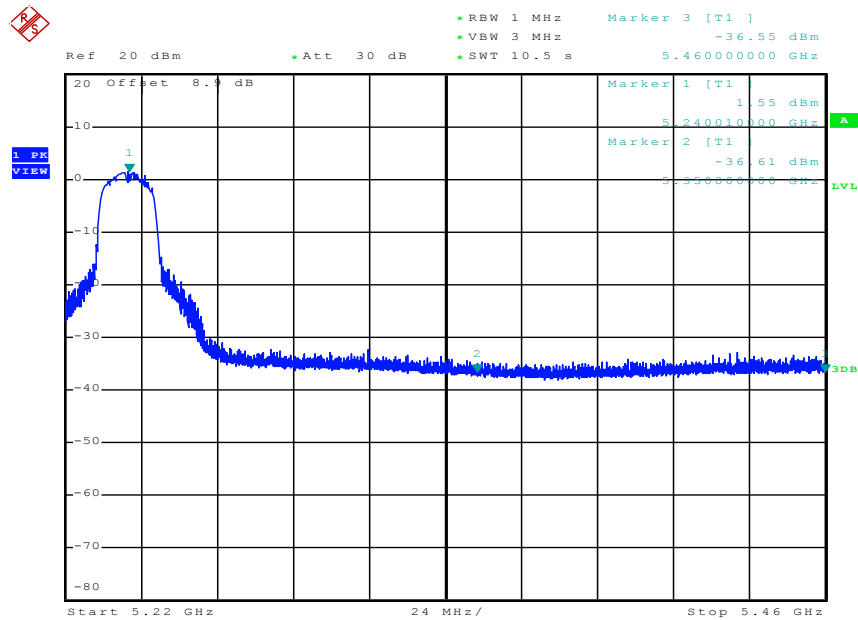
IEEE 802.11a / Channel 36 / 5180MHz / Peak



Date: 26 SEP 2019 16:24:42

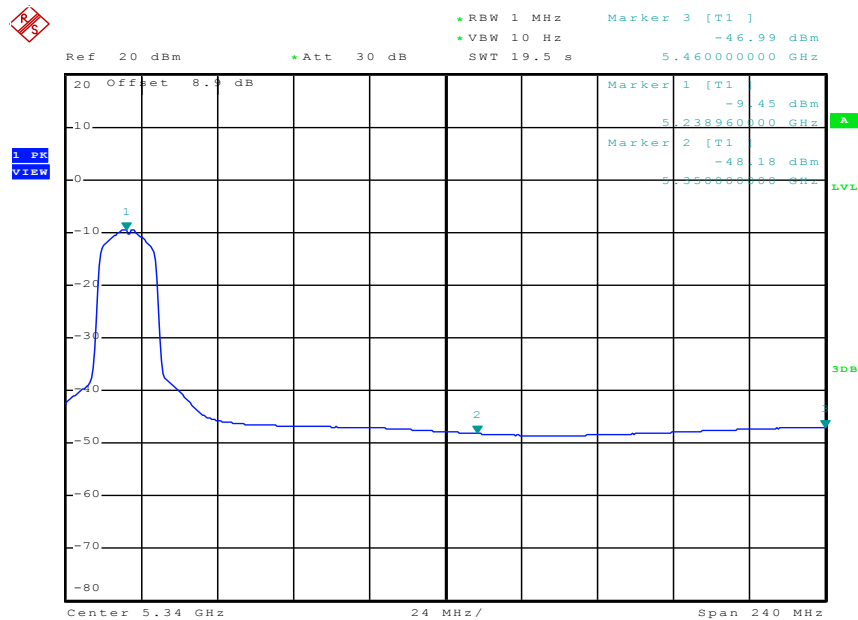
IEEE 802.11a / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement



Date: 26 SEP 2019 16:25:40

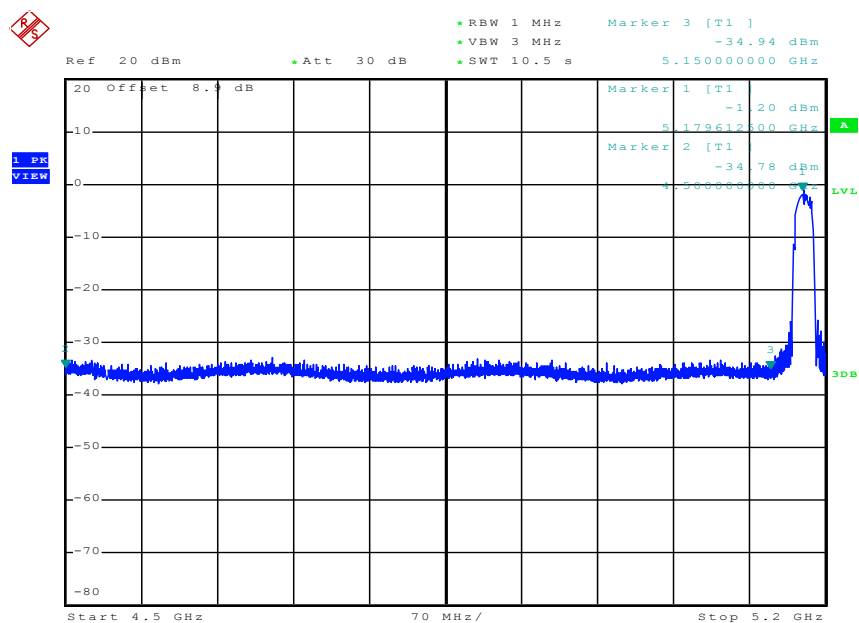
IEEE 802.11a / Channel 48 / 5240MHz / Peak



Date: 26 SEP 2019 16:27:20

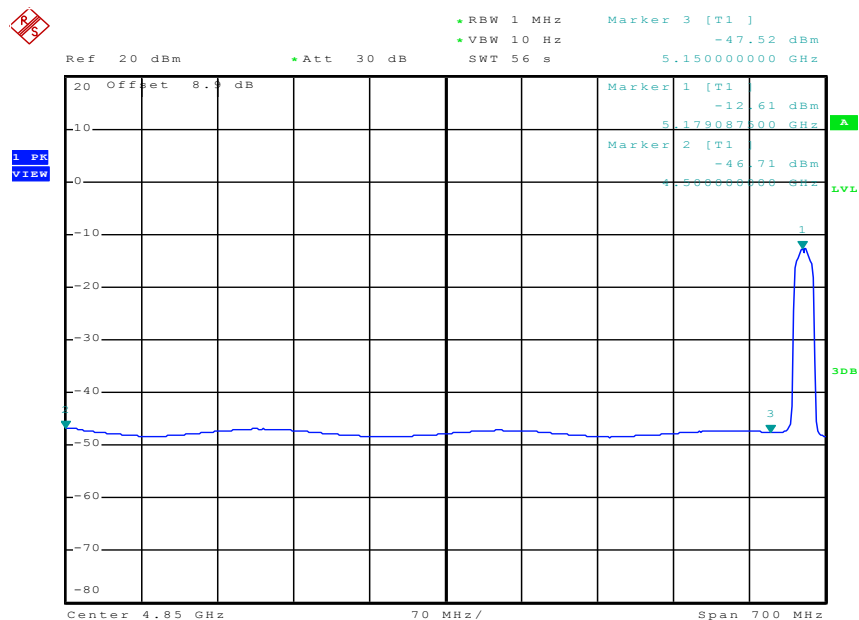
IEEE 802.11a / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement



Date: 26 SEP 2019 16:39:56

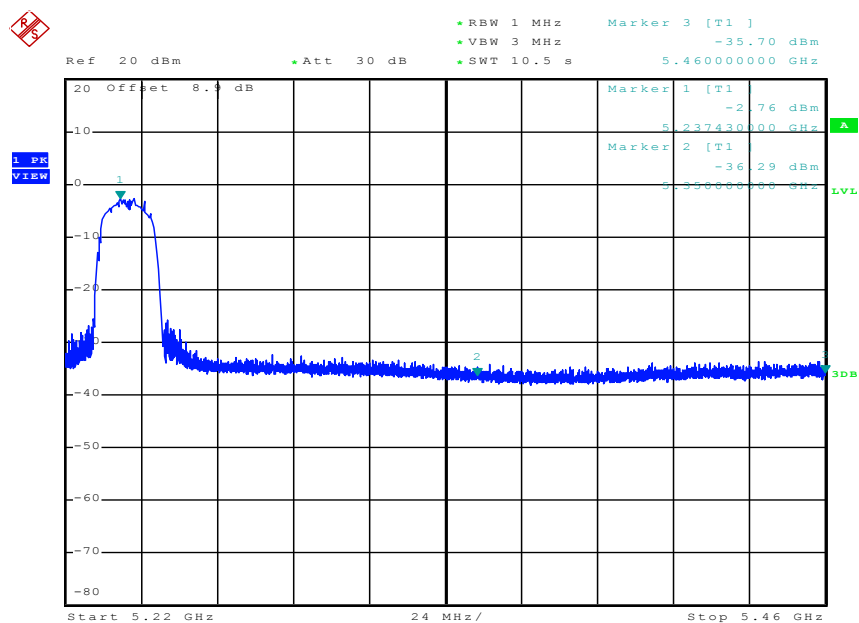
IEEE 802.11n20 / Channel 36 / 5180MHz / Peak



Date: 26 SEP 2019 16:41:33

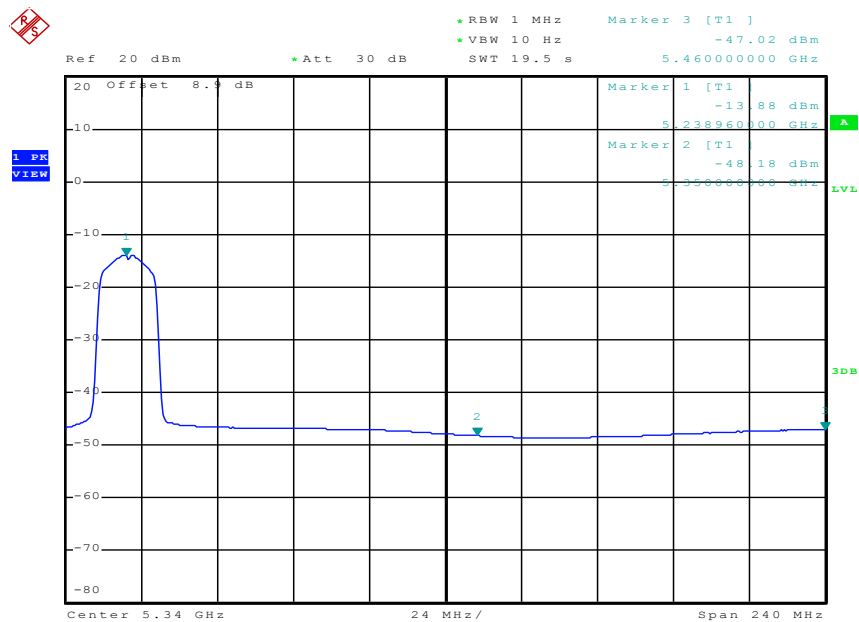
IEEE 802.11n20 / Channel 36 / 5180MHz / Average

Undesirable Emissions Measurement



Date: 26 SEP 2019 16:42:41

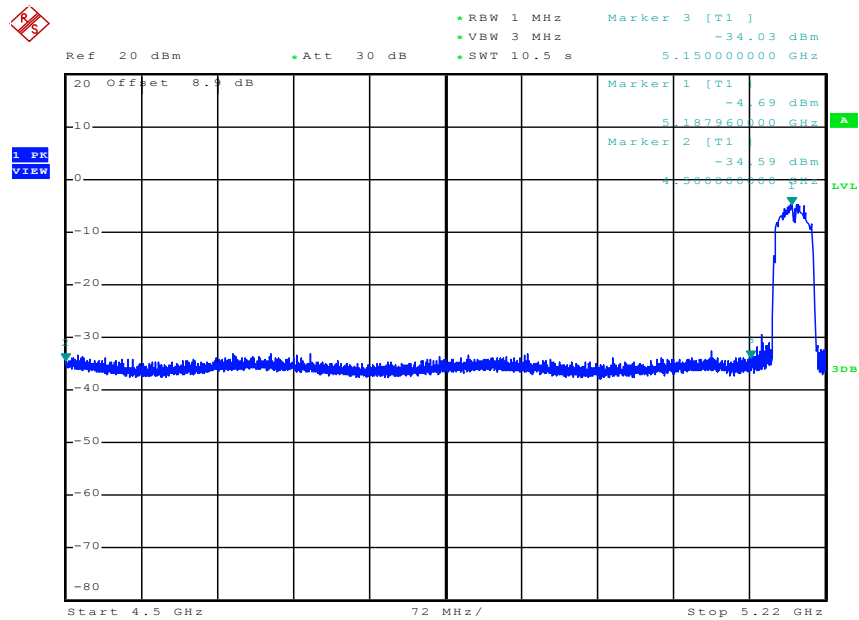
IEEE 802.11n20 / Channel 48 / 5240MHz / Peak



Date: 26 SEP 2019 16:43:50

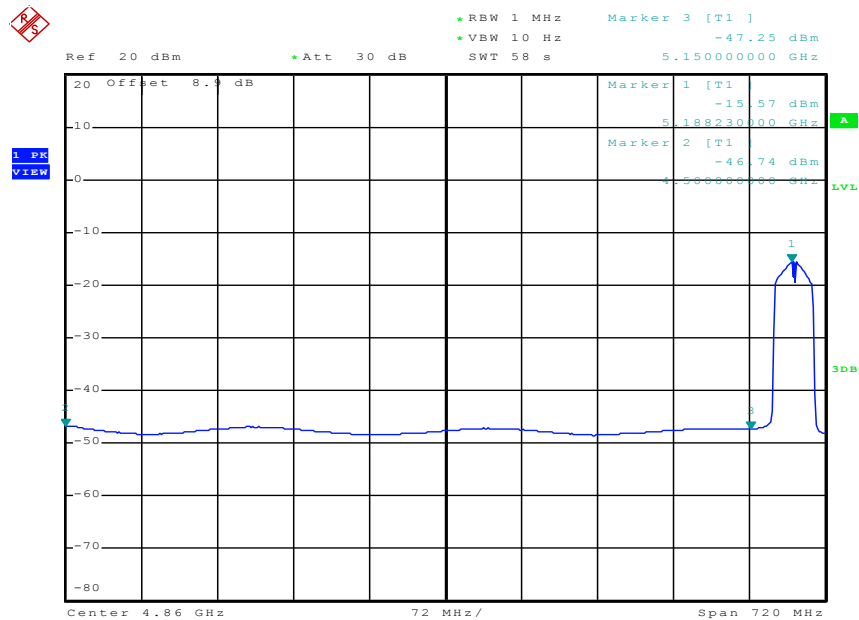
IEEE 802.11n20 / Channel 48 / 5240MHz / Average

Undesirable Emissions Measurement



Date: 26 SEP 2019 16:50:07

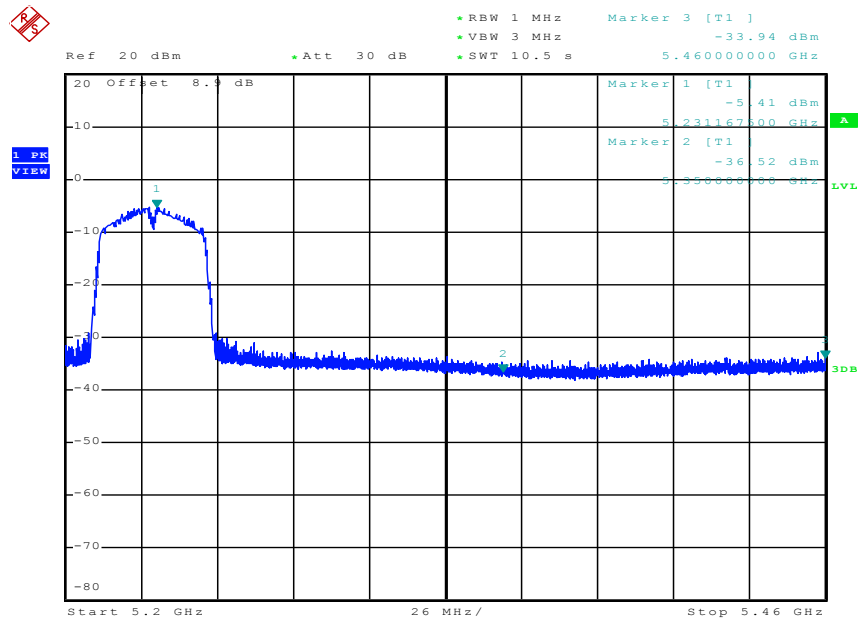
IEEE 802.11n40 / Channel 38 / 5190MHz / Peak



Date: 26 SEP 2019 16:51:45

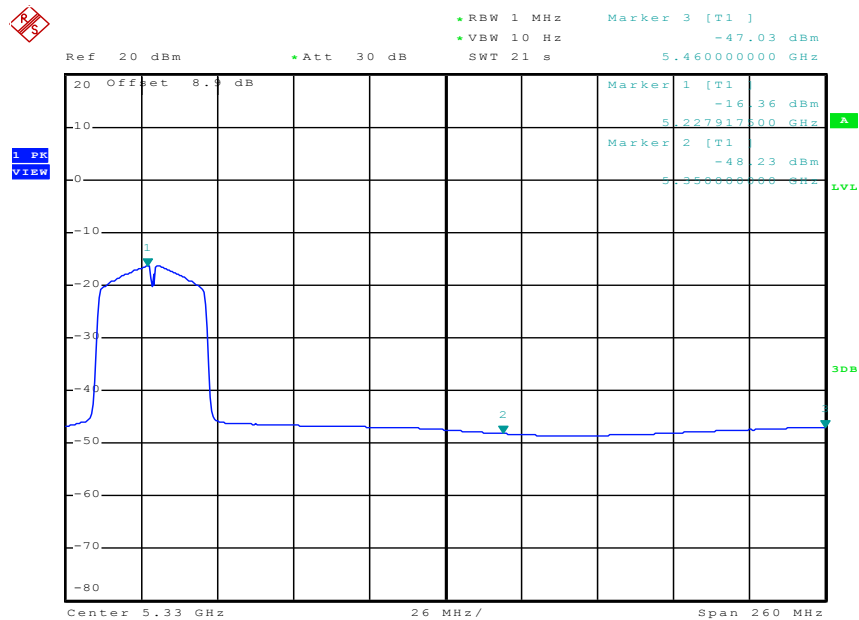
IEEE 802.11n40 / Channel 38 / 5190MHz / Average

Undesirable Emissions Measurement



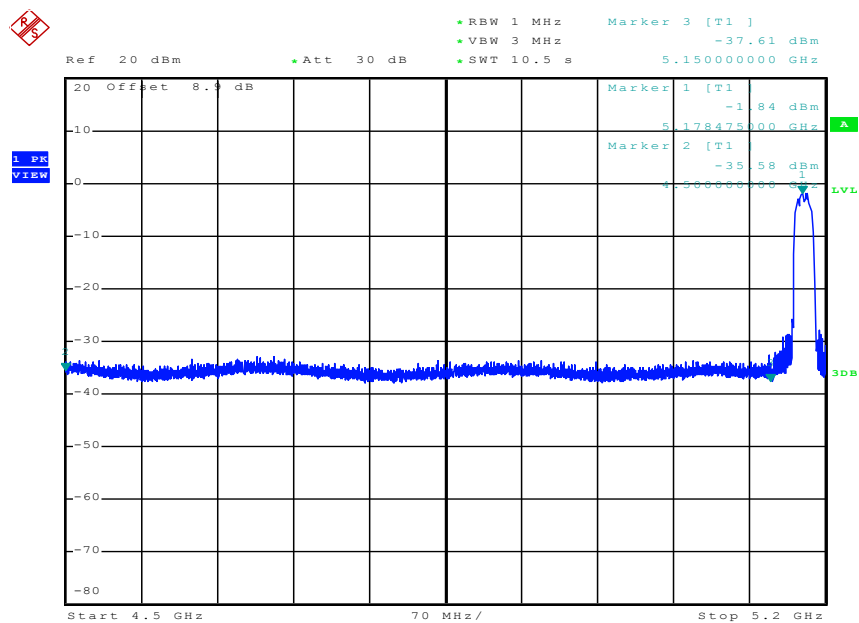
Date: 26 SEP 2019 16:52:46

IEEE 802.11n40 / Channel 46 / 5230MHz / Peak



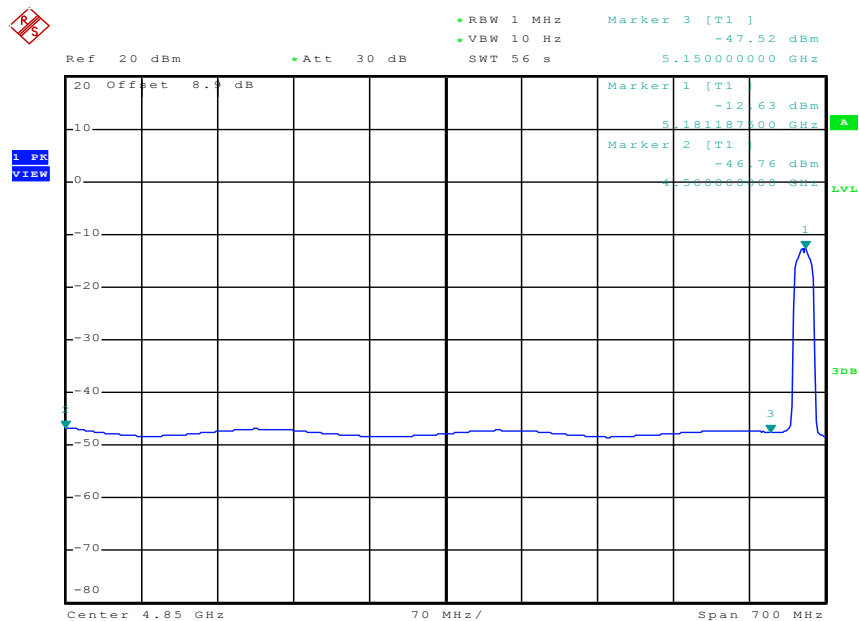
Date: 26 SEP 2019 16:53:54

IEEE 802.11n40 / Channel 46 / 5230MHz / Average



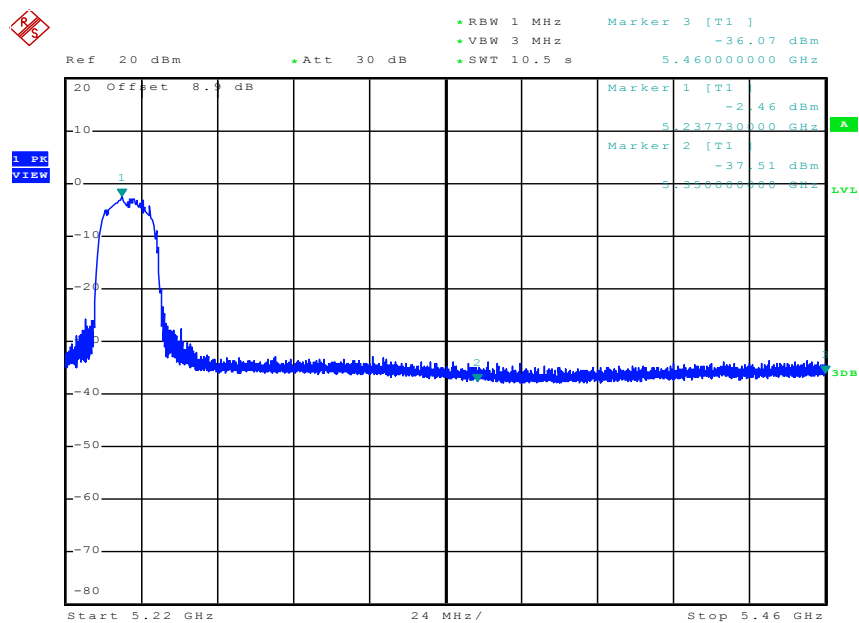
Date: 26 SEP 2019 16:59:36

IEEE 802.11ac20 / Channel 36 / 5180MHz / Peak



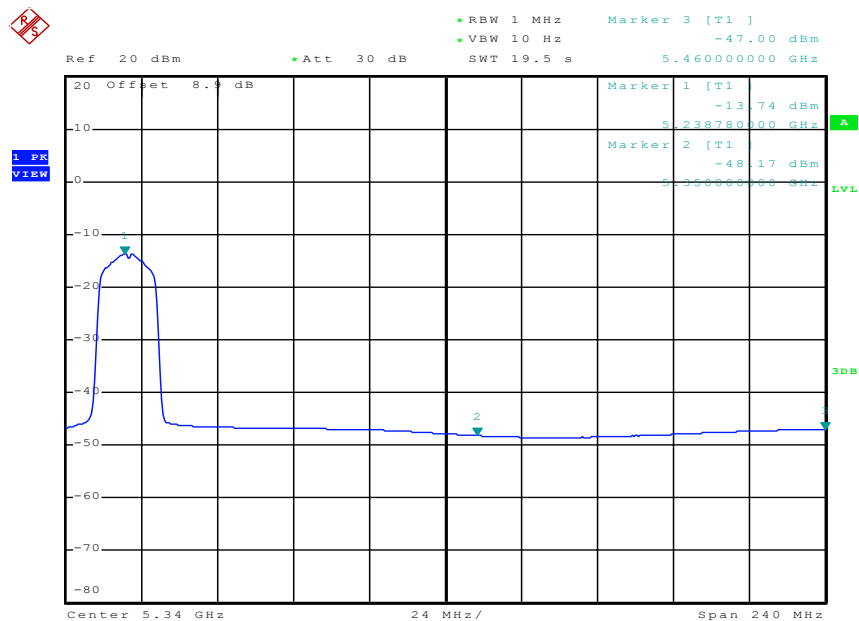
Date: 26 SEP 2019 17:01:13

IEEE 802.11ac20 / Channel 36 / 5180MHz / Average



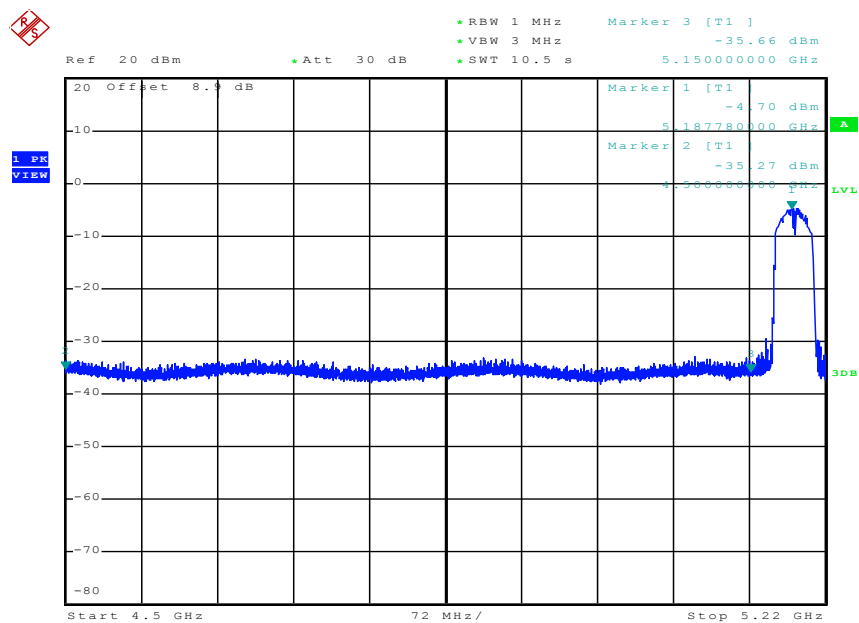
Date: 26 SEP 2019 17:03:59

IEEE 802.11ac20 / Channel 48 / 5240MHz / Peak



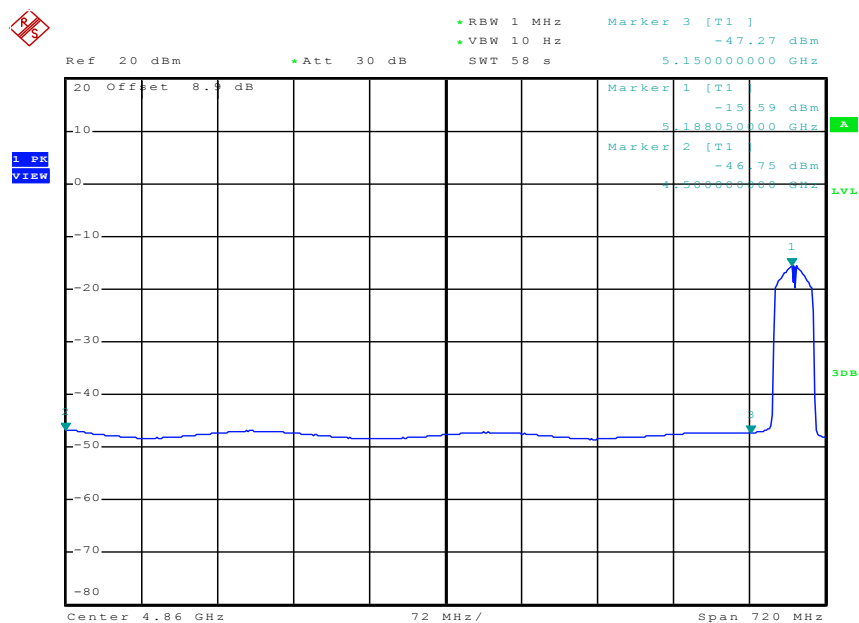
Date: 26 SEP 2019 17:06:35

IEEE 802.11ac20 / Channel 48 / 5240MHz / Average



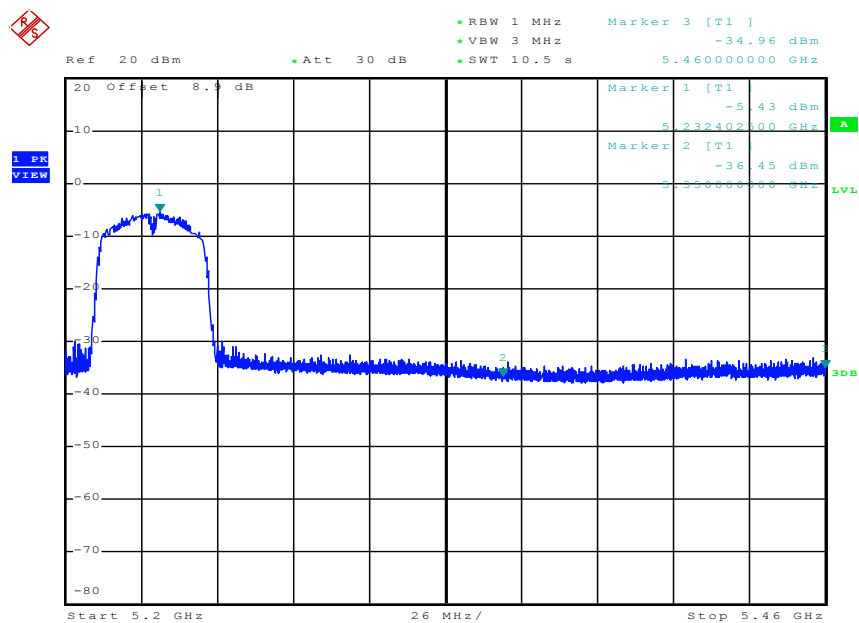
Date: 26 SEP 2019 17:12:09

IEEE 802.11ac40 / Channel 38/ 5190MHz / Peak



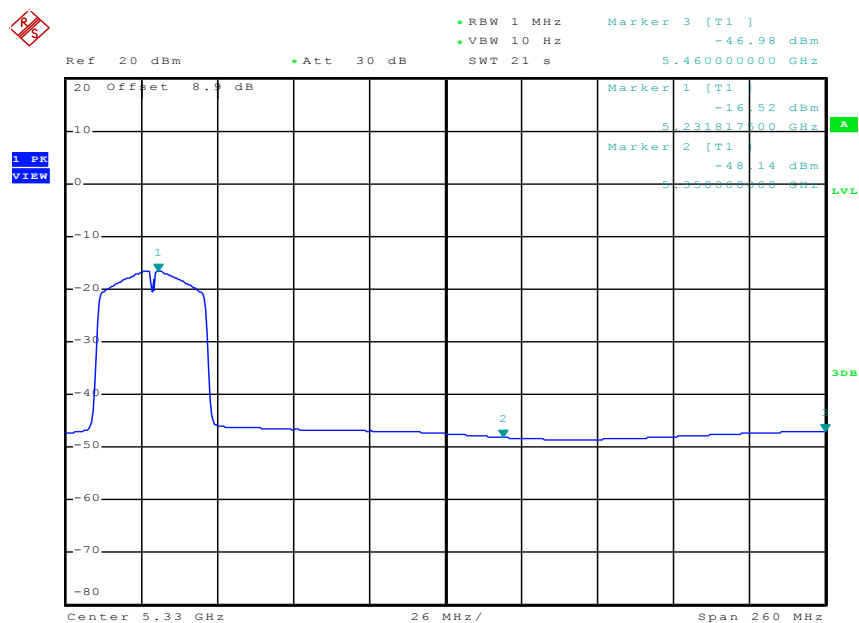
Date: 26 SEP 2019 17:13:50

IEEE 802.11ac40 / Channel 38 / 5190MHz / Average



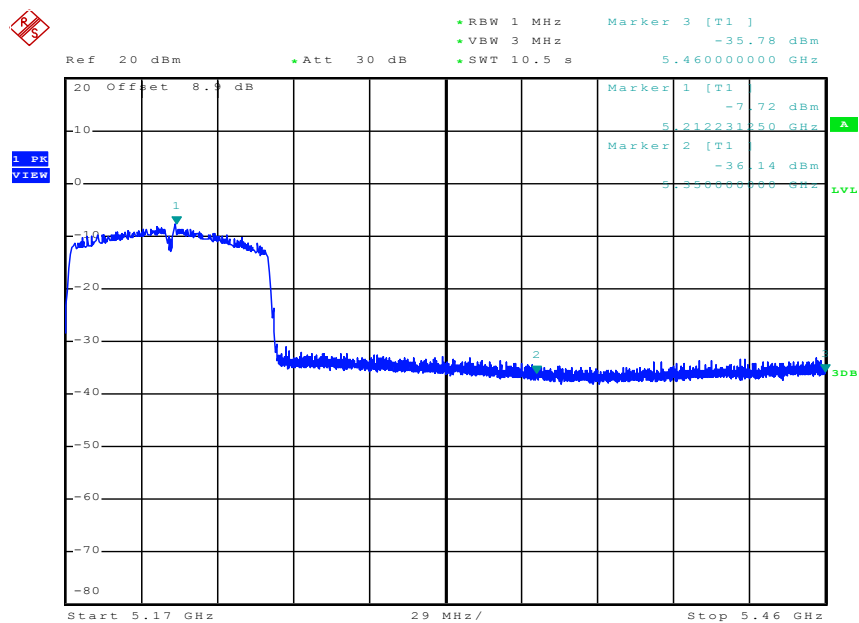
Date: 26 SEP 2019 18:40:27

IEEE 802.11ac40 / Channel 46 / 5230MHz / Peak



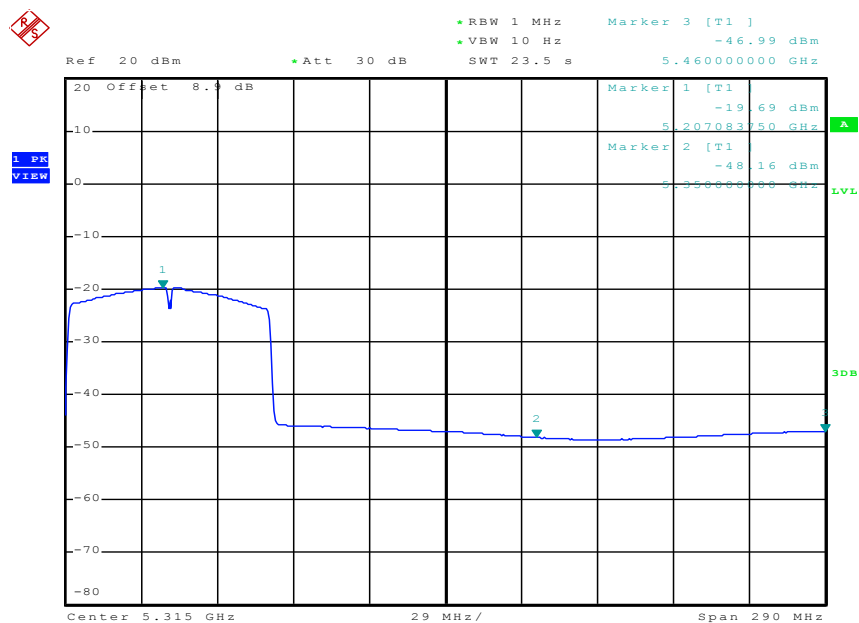
Date: 26 SEP 2019 18:41:26

IEEE 802.11ac40 / Channel 46 / 5230MHz / Average



Date: 26 SEP 2019 18:46:38

IEEE 802.11ac80 / Channel 42 / 5210MHz / Peak



Date: 26 SEP 2019 18:47:37

IEEE 802.11ac80 / Channel 42 / 5210MHz / Average