

## Appendix D

### RF Test Data for 5.2G WLAN (Conducted Measurement)

Product Name: Rugged Tablet

Test Model: LT800

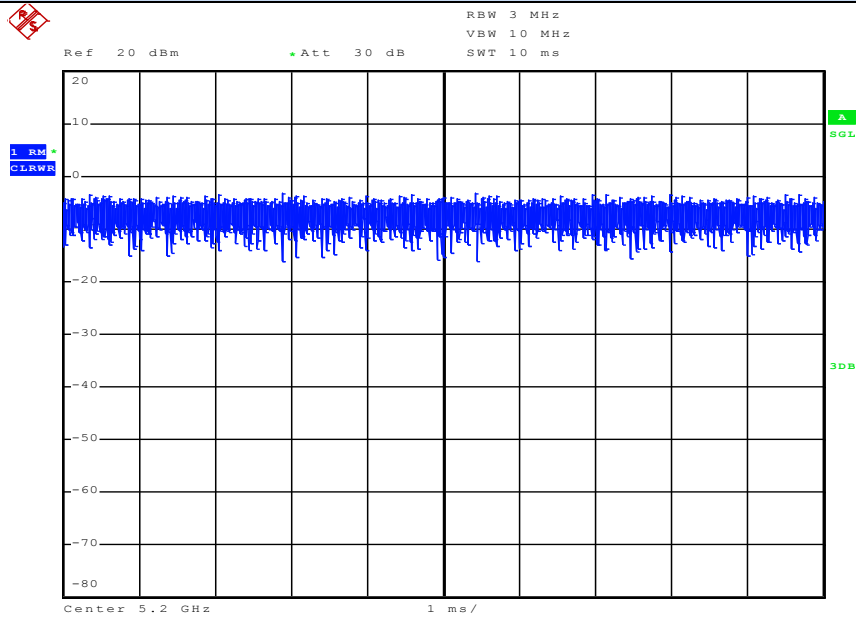
#### Environmental Conditions

Temperature:	25.2 ° C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Wang Chuang

#### D.1 Duty Cycle

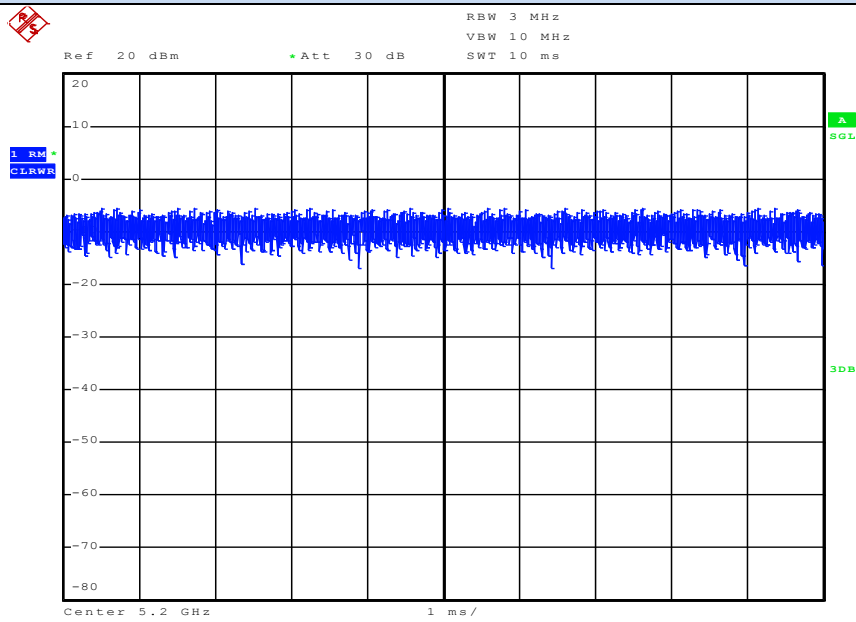
Test Mode	Test Frequency (MHz)	Duty Cycle (%)	10log(1/x) Factor (dB)	1/B Minimum VBW(KHz)
11A	5200	100	0.00	0.01
11N20 SISO	5200	100	0.00	0.01
11N40 SISO	5190	100	0.00	0.01
11AC20 SISO	5200	100	0.00	0.01
11AC40 SISO	5190	100	0.00	0.01
11AC80 SISO	5210	100	0.00	0.01

### On Time and Duty Cycle



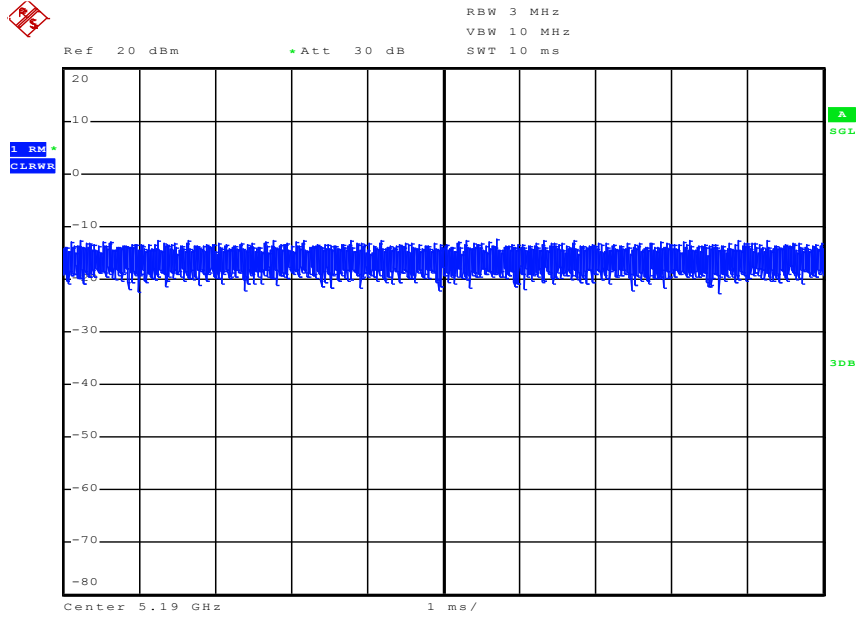
Date: 21.AUG.2019 18:55:09

### IEEE 802.11a



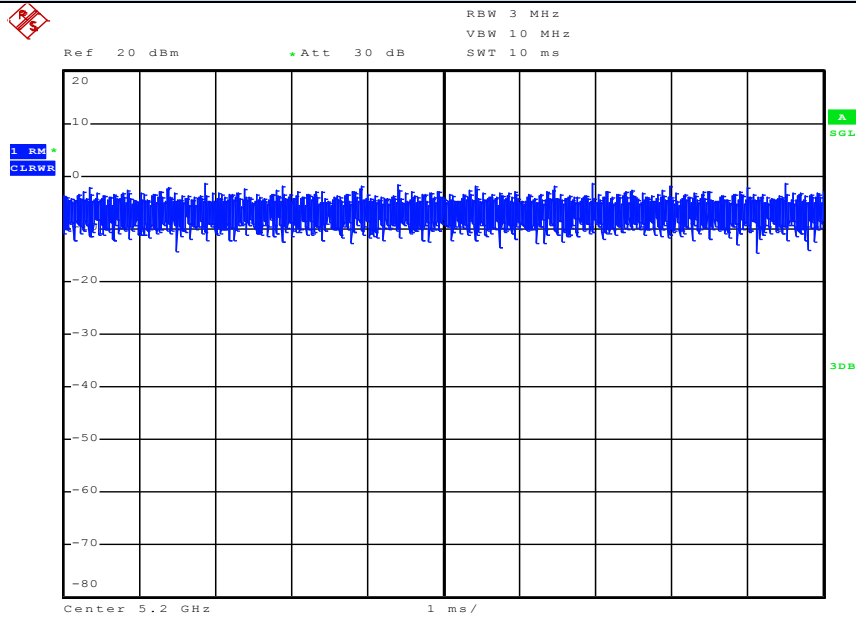
Date: 21.AUG.2019 19:15:23

### IEEE 802.11n HT20



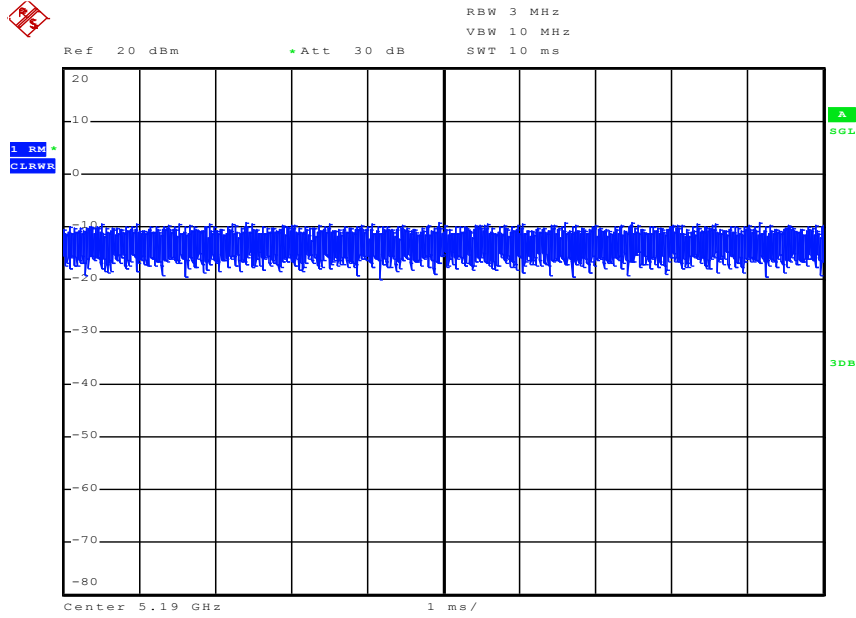
Date: 21.AUG.2019 19:31:09

IEEE 802.11n HT40



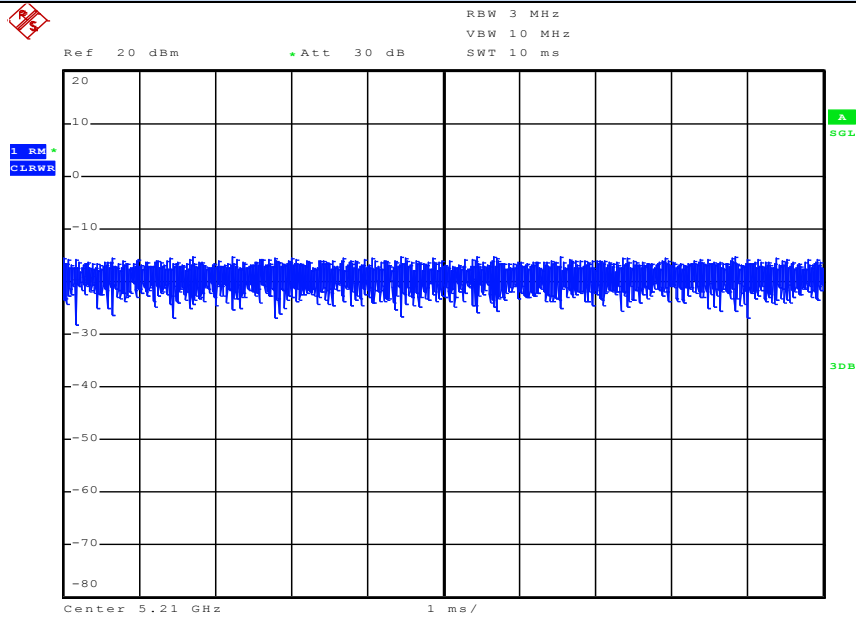
Date: 21.AUG.2019 20:07:42

IEEE 802.11AC20



Date: 21.AUG.2019 20:34:01

IEEE 802.11 AC40



Date: 21.AUG.2019 21:15:56

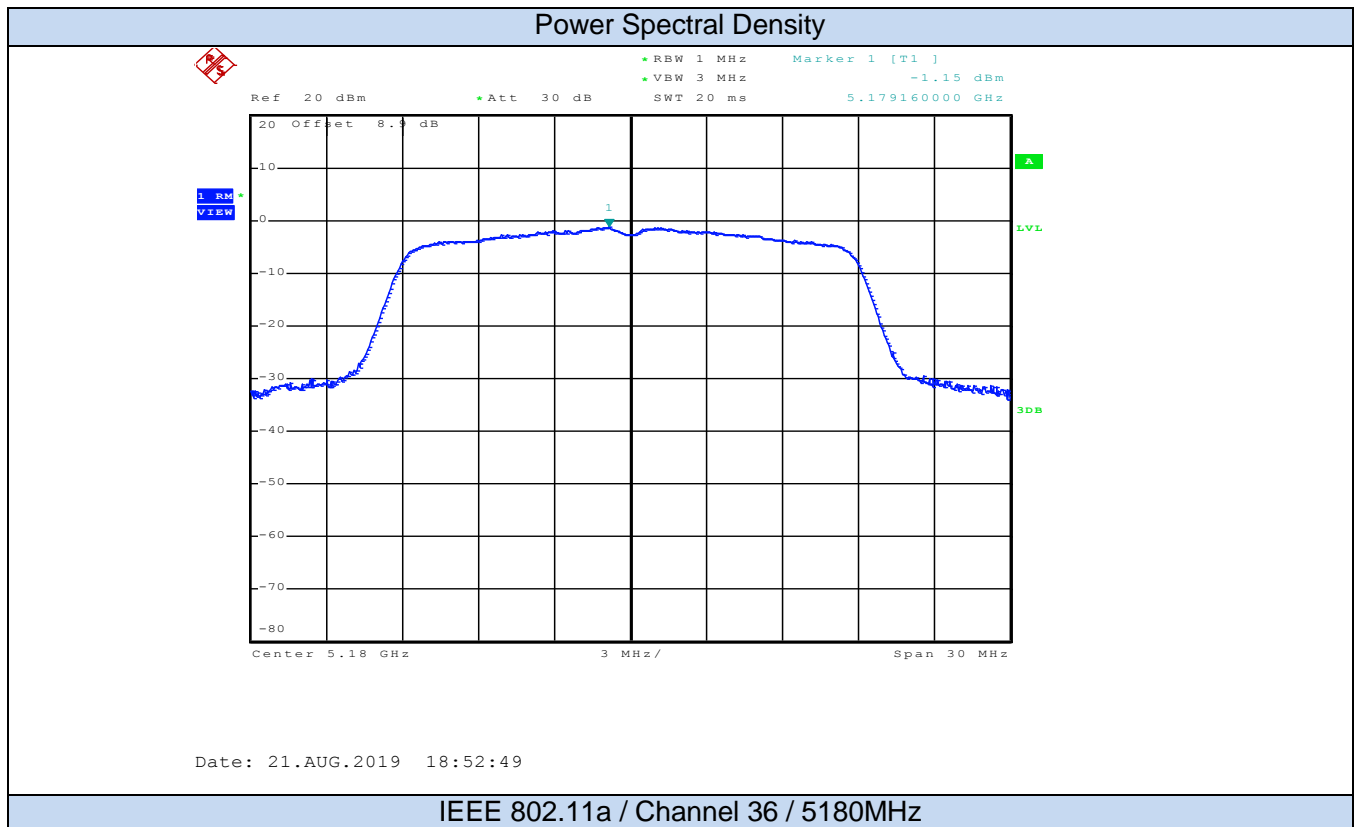
IEEE 802.11AC80

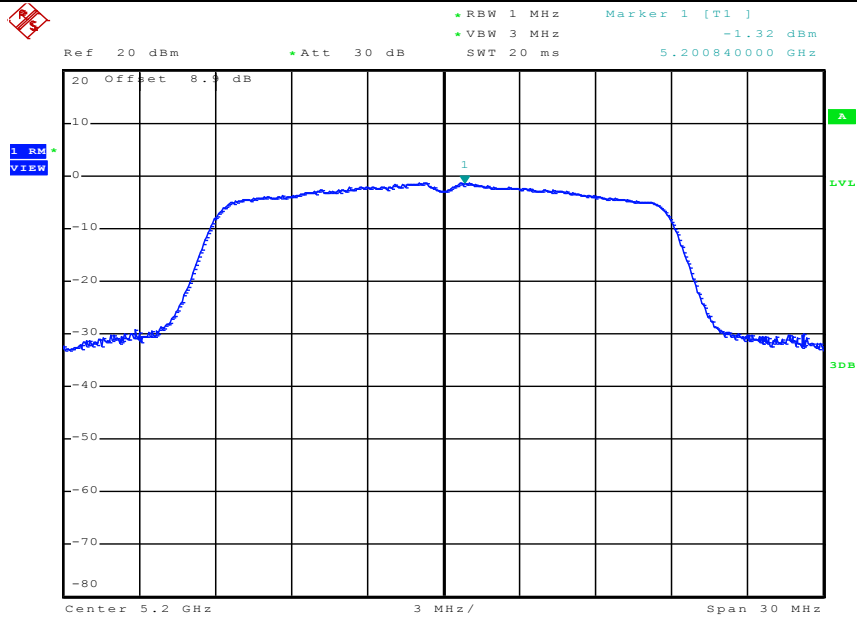
**D.2 Maximum Conduct Output Power**

Test Mode	Channel	Frequency (MHz)	AVG Conducted Power (dBm)	Duty Cycle Factor( dB)	Report Conducted Power(dBm)	Limit (dBm)	Verdict
11A	36	5180	8.78	0	8.78	24	Pass
	40	5200	8.60	0	8.60		Pass
	48	5240	8.78	0	8.78		Pass
11N20 SISO	36	5180	6.55	0	6.55	24	Pass
	40	5200	6.75	0	6.75		Pass
	48	5240	6.71	0	6.71		Pass
11N40 SISO	38	5190	9.50	0	9.50	24	Pass
	46	5230	9.66	0	9.66		Pass
11AC20 SISO	36	5180	9.48	0	9.48	24	Pass
	40	5200	9.61	0	9.61		Pass
	48	5240	9.83	0	9.83		Pass
11AC40 SISO	38	5190	9.77	0	9.77	24	Pass
	46	5230	9.82	0	9.82		Pass
11AC80 SISO	42	5210	8.82	0	8.82	24	Pass

### D.3 Power Spectral Density

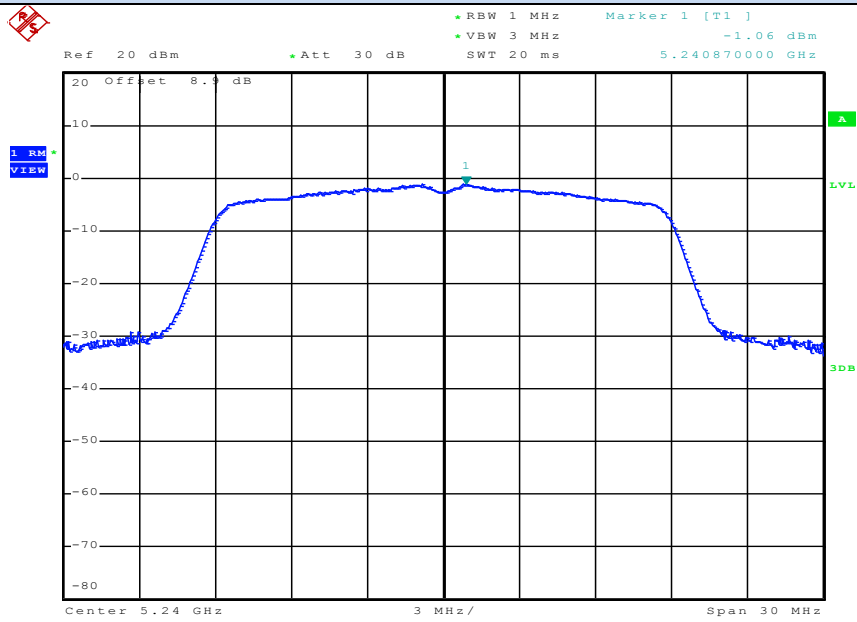
Test Mode	Channel	Frequency (MHz)	Power Density (dBm/MHz)	Duty Cycle Factor(dB)	Report Power Density (dBm/MHz)	Limit (dBm/MHz)	Verdict
11A	36	5180	-1.15	0	-1.15	11	Pass
	40	5200	-1.32	0	-1.32		Pass
	48	5240	-1.06	0	-1.06		Pass
11N2 0 SISO	36	5180	-3.97	0	-3.97	11	Pass
	40	5200	-2.76	0	-2.76		Pass
	48	5240	-2.54	0	-2.54		Pass
11N4 0 SISO	38	5190	-3.69	0	-3.69	11	Pass
	46	5230	-3.24	0	-3.24		Pass
11AC 20 SISO	36	5180	-1.99	0	-1.99	11	Pass
	40	5200	0.17	0	0.17		Pass
	48	5240	0.50	0	0.50		Pass
11AC 40 SISO	38	5190	-5.08	0	-5.08	11	Pass
	46	5230	-2.79	0	-2.79		Pass
11AC 80 SISO	42	5210	-7.02	0	-7.02	11	Pass





Date: 21.AUG.2019 18:56:12

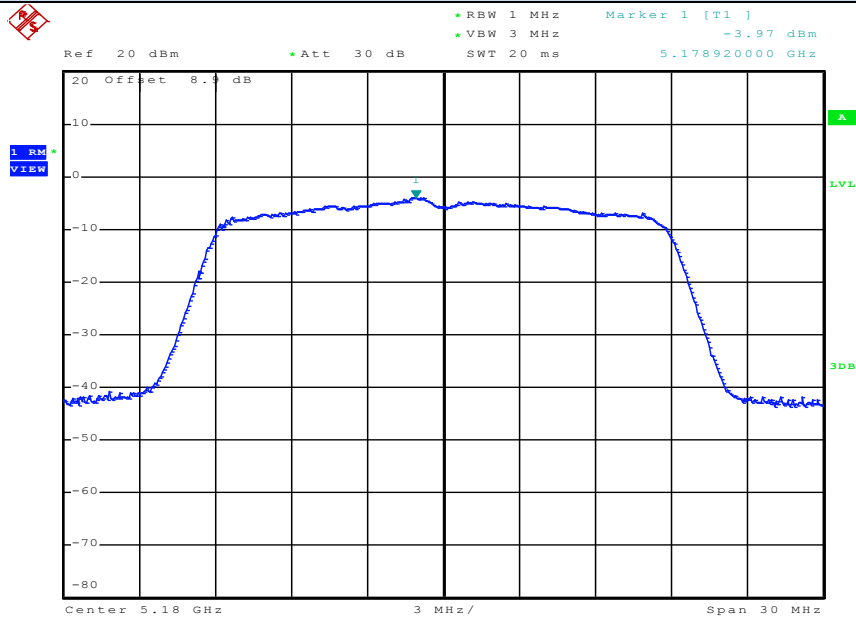
IEEE 802.11a / Channel 40 / 5200MHz



Date: 21.AUG.2019 18:57:46

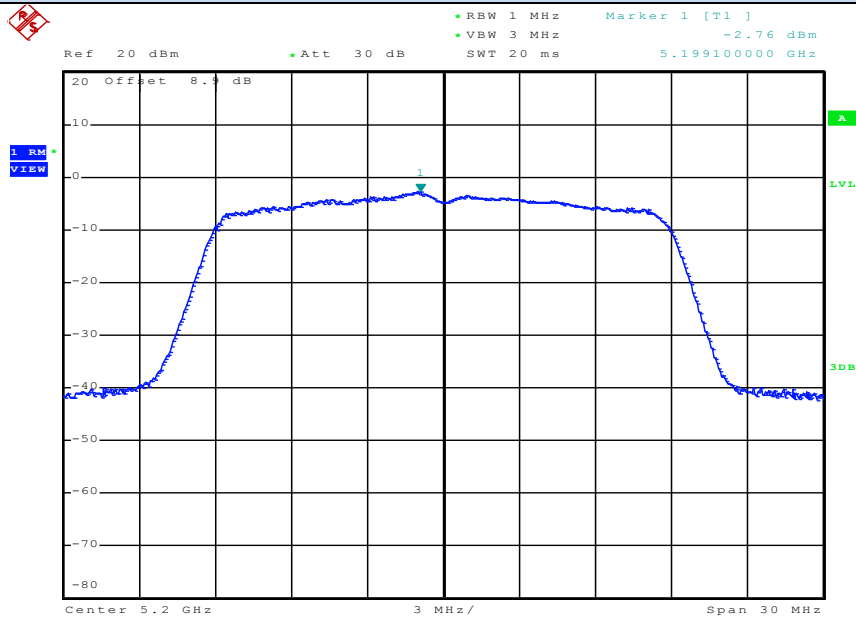
IEEE 802.11a / Channel 48 / 5240MHz

Power Spectral Density



Date: 21.AUG.2019 19:10:41

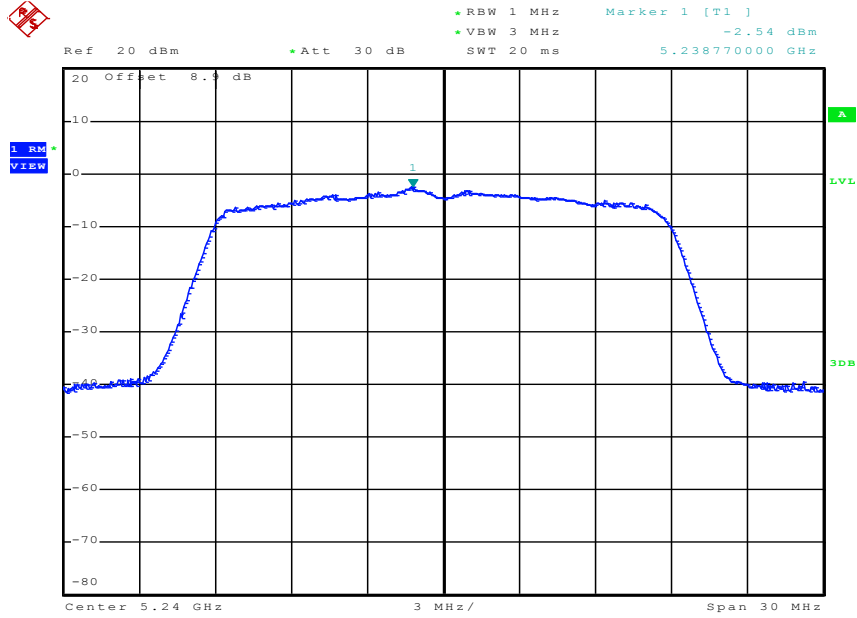
IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 21.AUG.2019 19:16:26

IEEE 802.11n20 / Channel 40 / 5200MHz

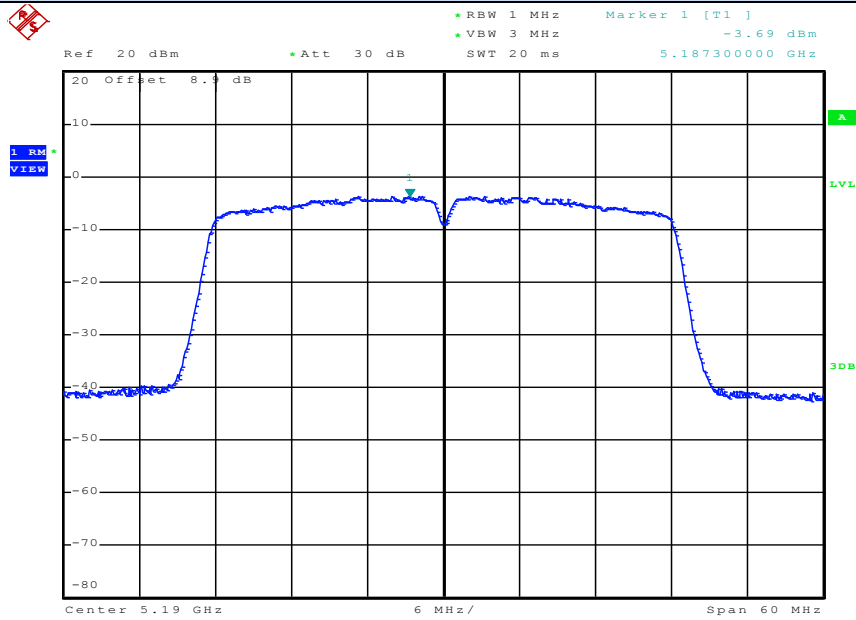




Date: 21.AUG.2019 19:19:32

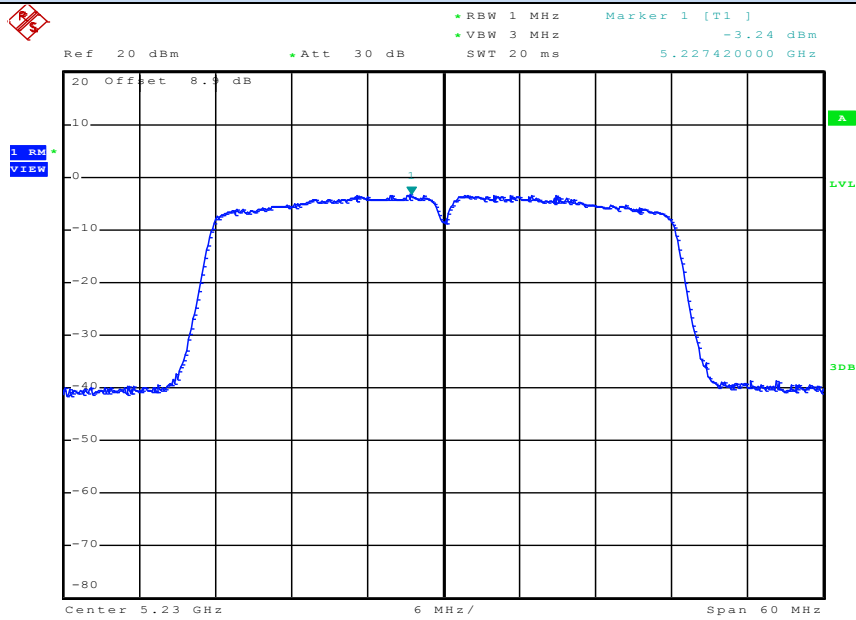
IEEE 802.11n20 / Channel 48 / 5240MHz

Power Spectral Density



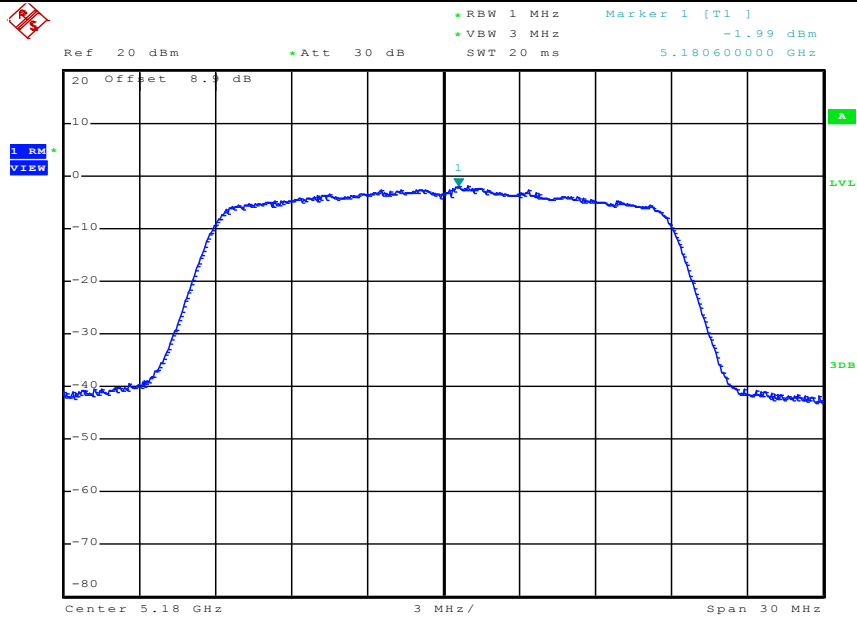
Date: 21.AUG.2019 19:39:13

IEEE 802.11n40 / Channel 38 / 5190MHz



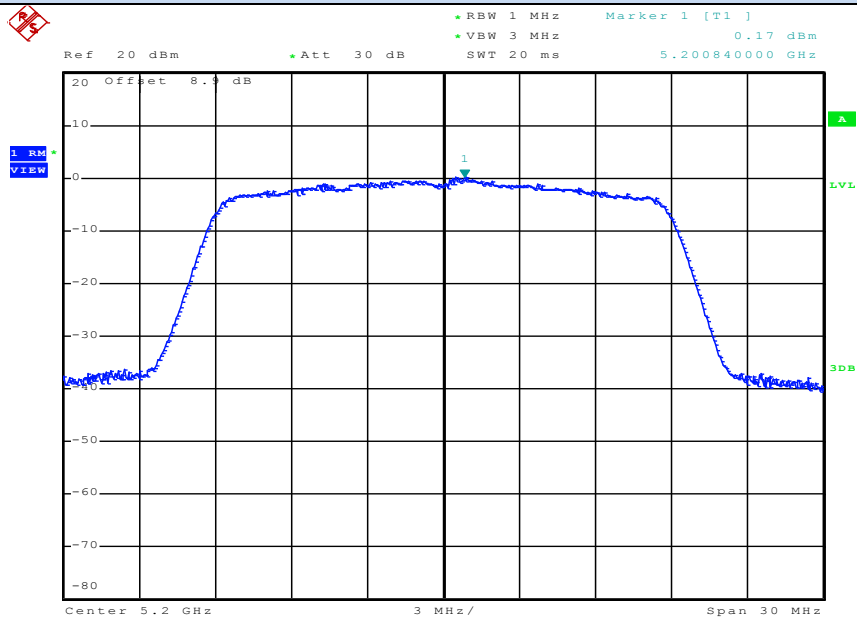
Date: 21.AUG.2019 19:44:18

IEEE 802.11n40 / Channel 46 / 5230MHz



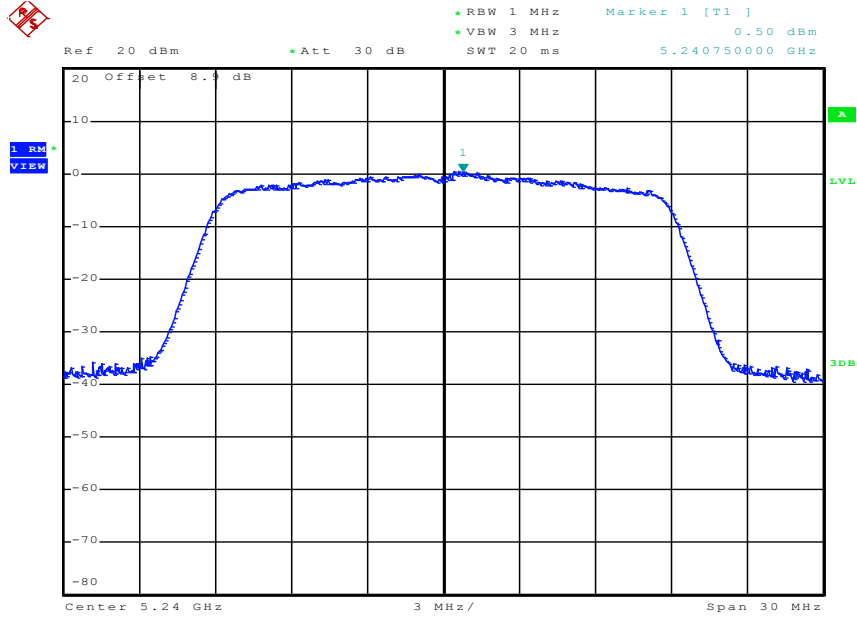
Date: 21.AUG.2019 20:02:37

IEEE 802.11ac20 / Channel 36 / 5180MHz



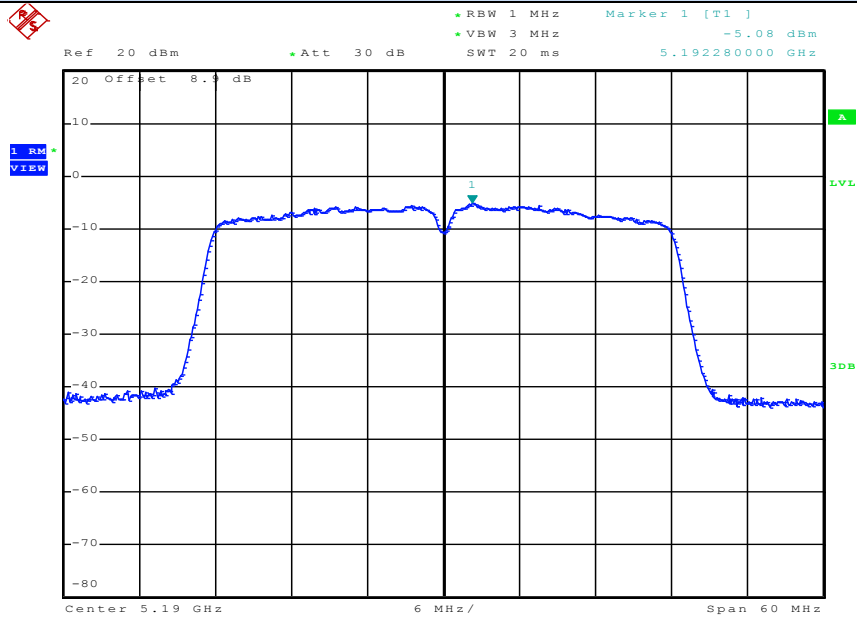
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IEEE 802.11ac20 / Channel 40 / 5200MHz



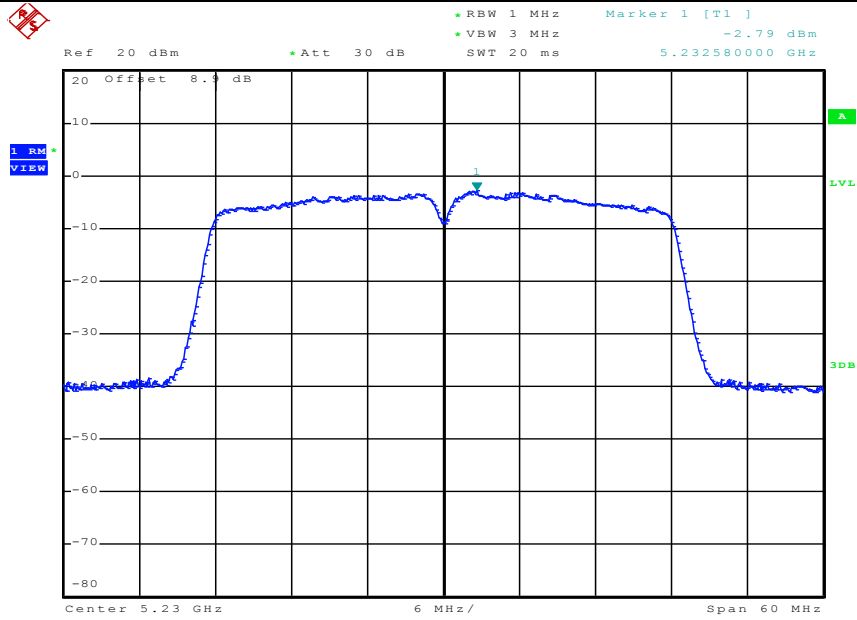
Date: 21.AUG.2019 20:10:09

IEEE 802.11ac20 / Channel 48 / 5240MHz



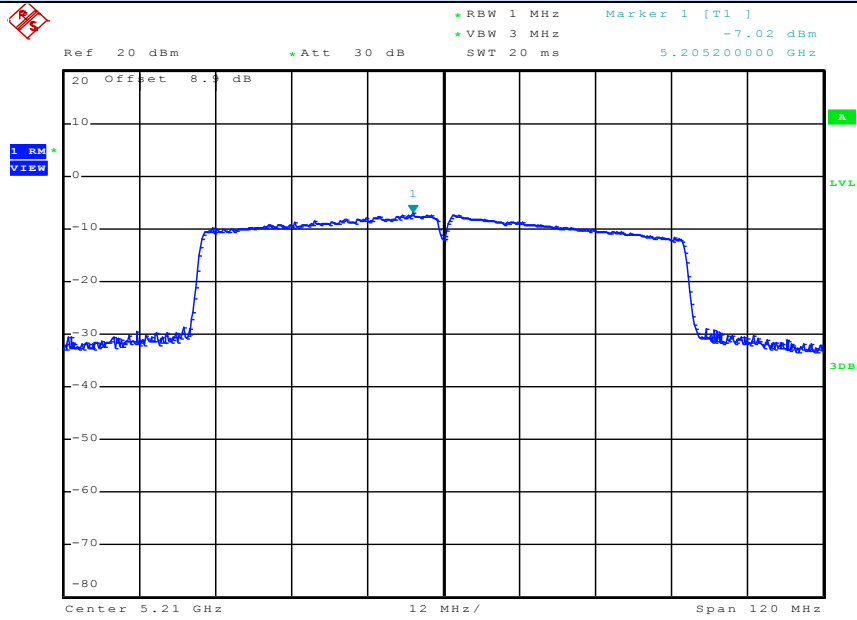
Date: 21.AUG.2019 20:37:38

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 21.AUG.2019 20:40:55

IEEE 802.11ac40 / Channel 46 / 5230MHz

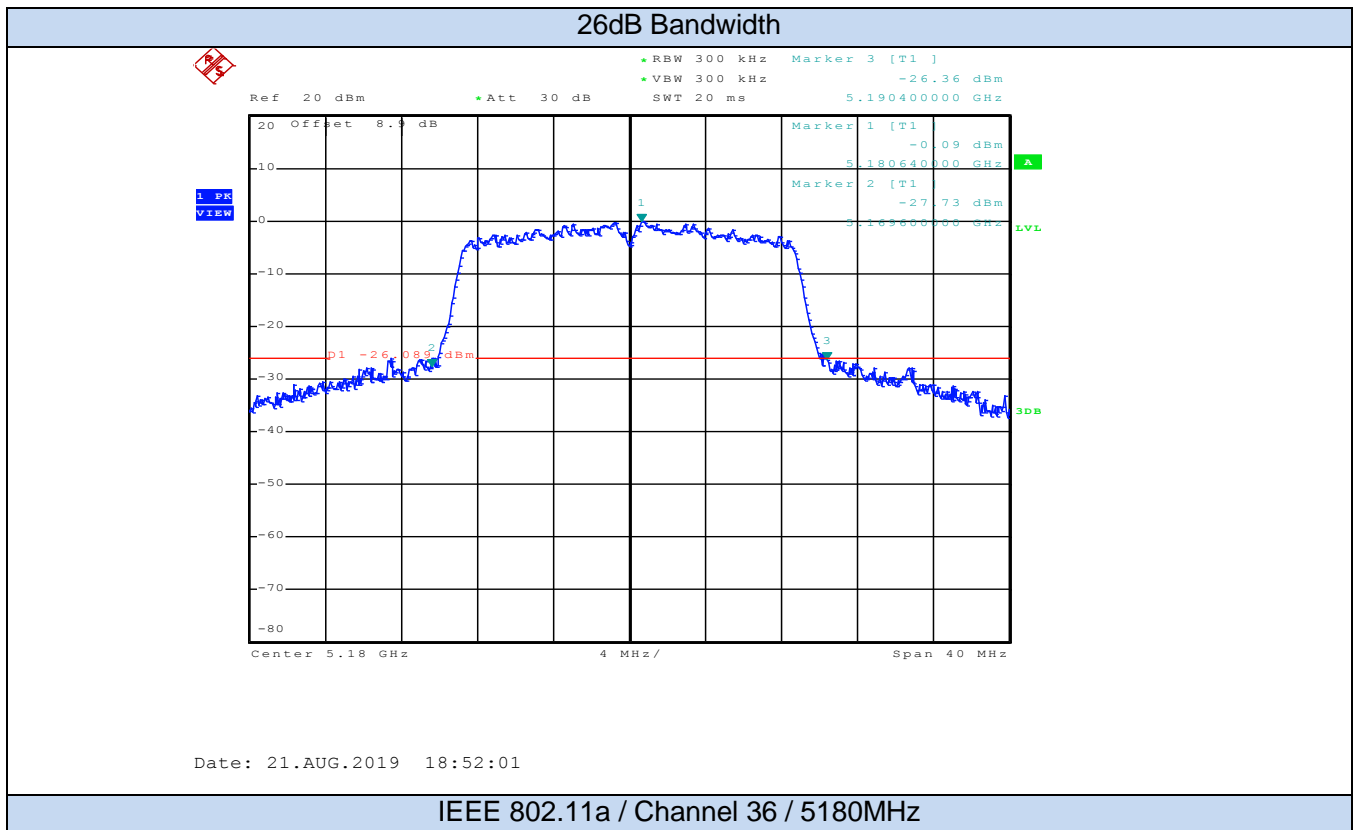


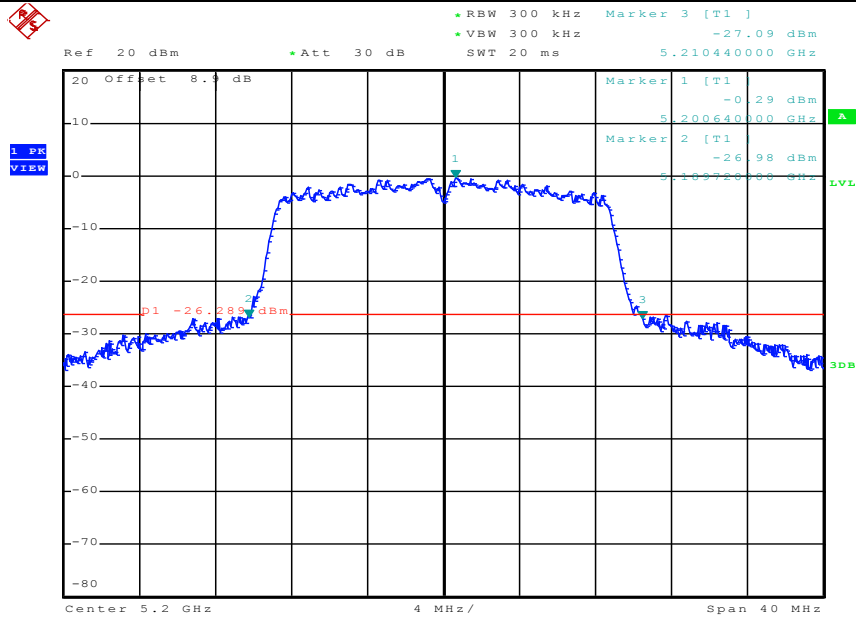
Date: 21.AUG.2019 21:17:26

IEEE 802.11ac80 / Channel 42 / 5210MHz

### D.4 Emission Bandwidth

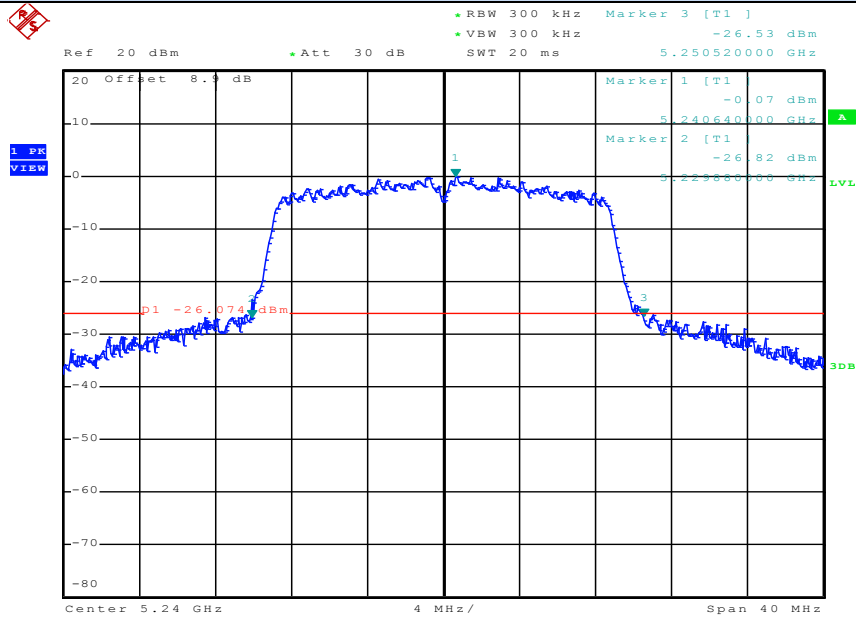
Test Mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
11A	36	5180	20.800	No Limit	Pass
	40	5200	20.720		Pass
	48	5240	20.640		Pass
11N20 SISO	36	5180	19.880	No Limit	Pass
	40	5200	19.760		Pass
	48	5240	19.800		Pass
11N40 SISO	38	5190	39.760	No Limit	Pass
	46	5230	39.360		Pass
11AC20 SISO	36	5180	19.680	No Limit	Pass
	40	5200	19.760		Pass
	48	5240	19.680		Pass
11AC40 SISO	38	5190	39.120	No Limit	Pass
	46	5230	39.120		Pass
11AC80 SISO	42	5210	78.000	No Limit	Pass





Date: 21.AUG.2019 18:55:25

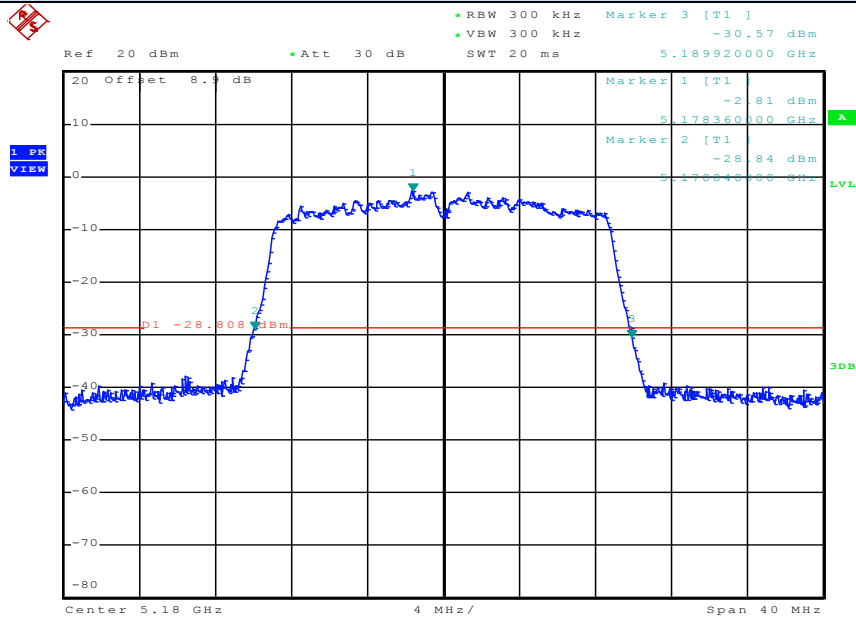
IEEE 802.11a / Channel 40 / 5200MHz



Date: 21.AUG.2019 18:56:59

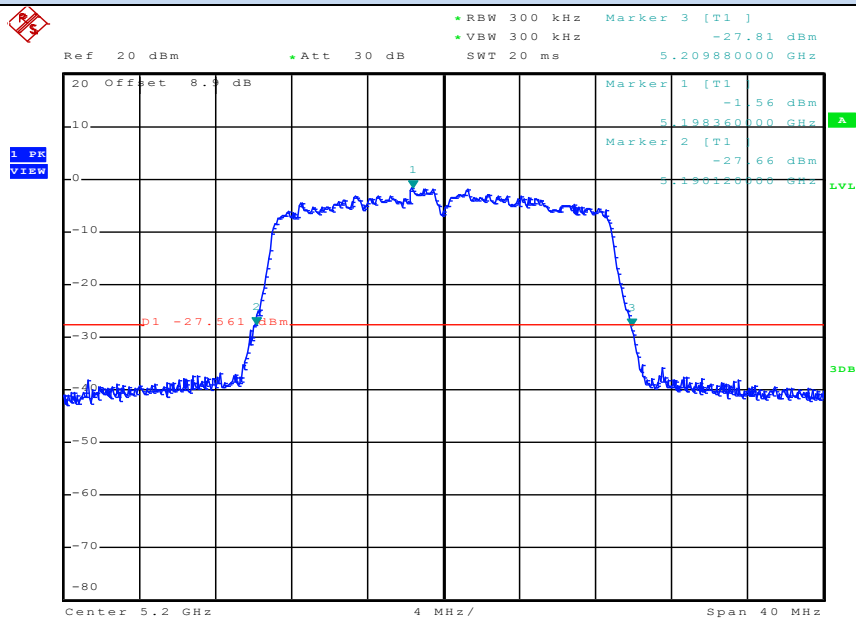
IEEE 802.11a / Channel 48 / 5240MHz

### 26dB Bandwidth



Date: 21.AUG.2019 19:09:54

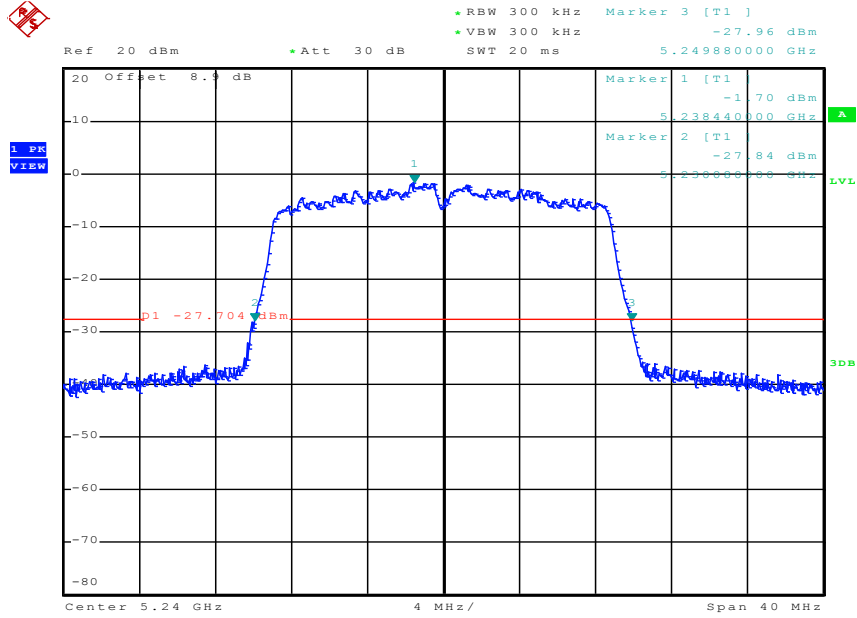
### IEEE 802.11n20 / Channel 36 / 5180MHz



Date: 21.AUG.2019 19:15:38

### IEEE 802.11n20 / Channel 40 / 5200MHz

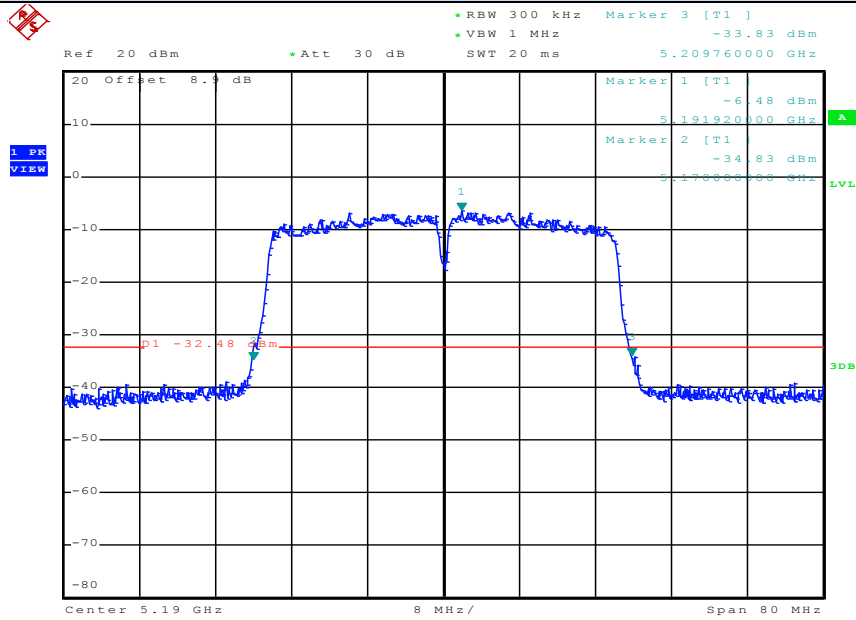




Date: 21.AUG.2019 19:18:44

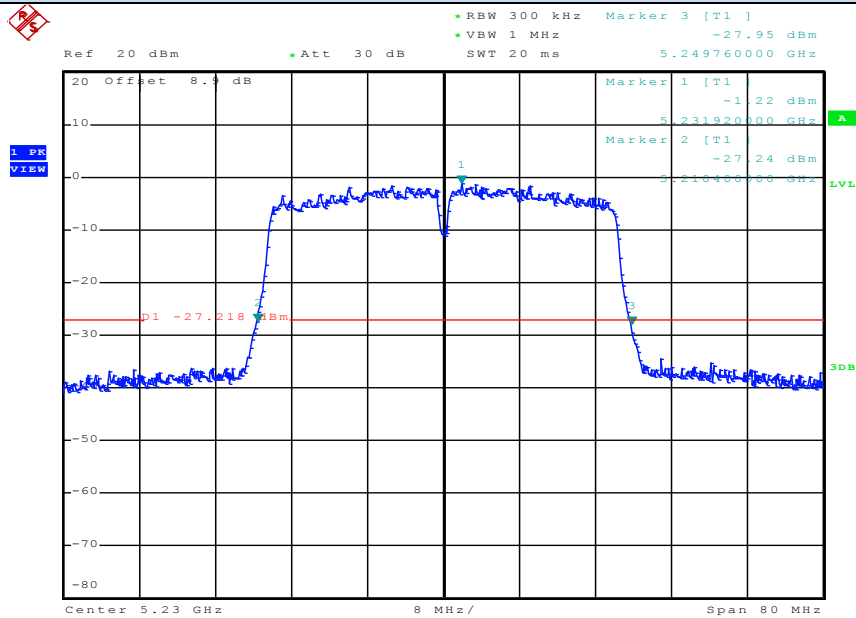
IEEE 802.11n20 / Channel 48 / 5240MHz

### 26dB Bandwidth



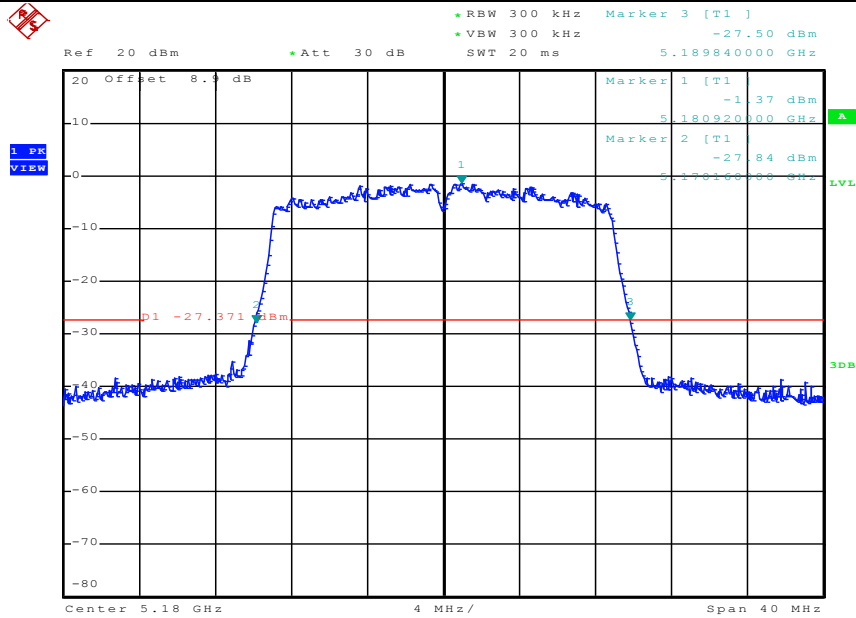
Date: 21.AUG.2019 19:31:24

### IEEE 802.11n40 / Channel 38 / 5190MHz



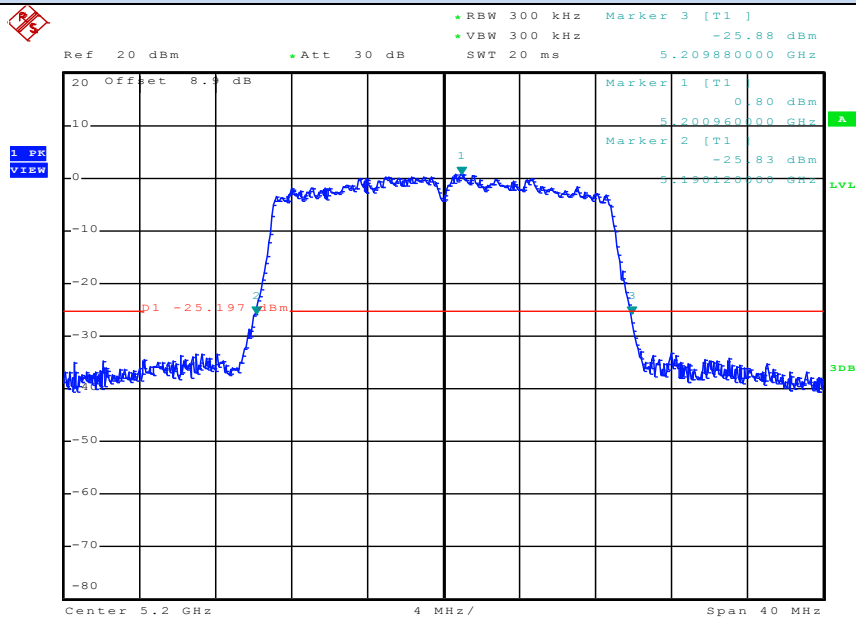
Date: 21.AUG.2019 19:43:30

### IEEE 802.11n40 / Channel 46 / 5230MHz



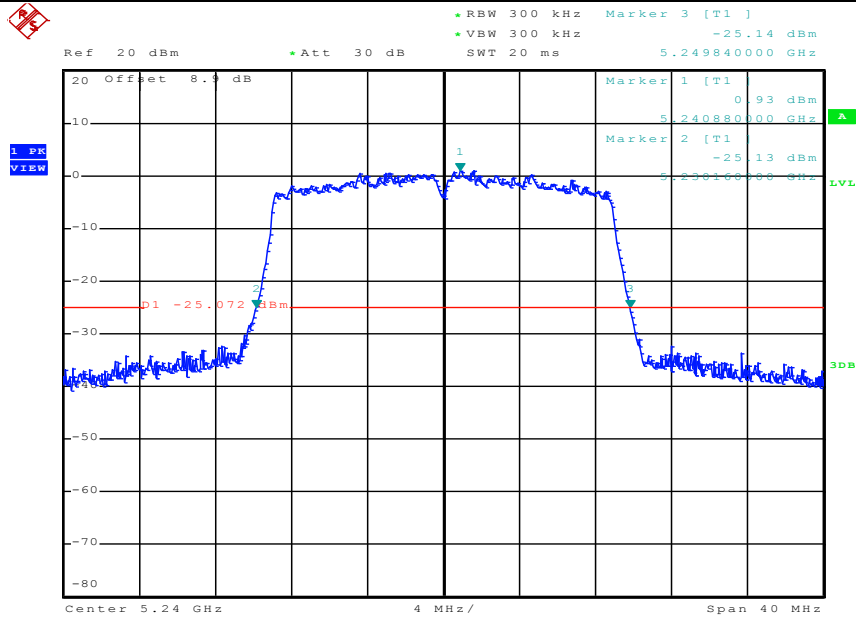
Date: 21.AUG.2019 20:01:50

IEEE 802.11ac20 / Channel 36 / 5180MHz



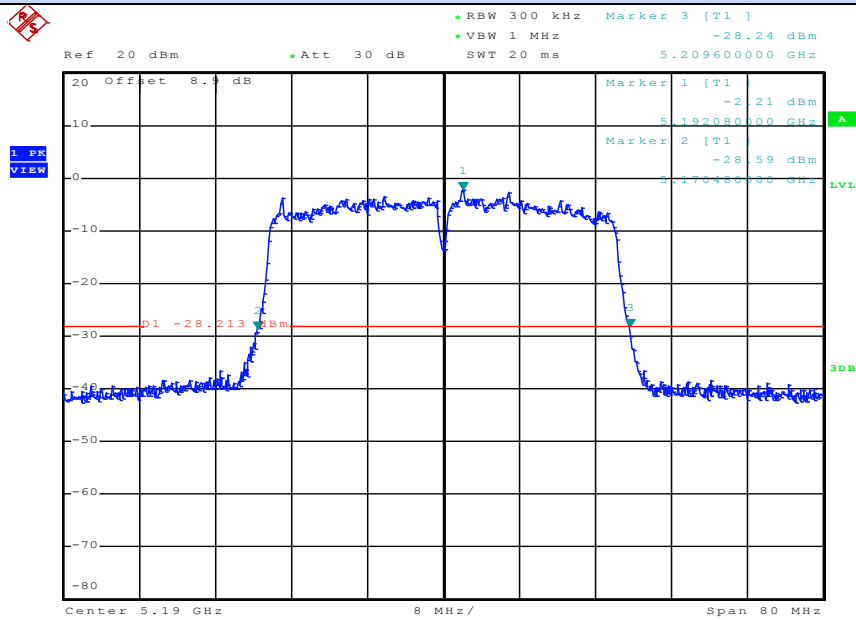
Date: 21.AUG.2019 20:07:57

IEEE 802.11ac20 / Channel 40 / 5200MHz



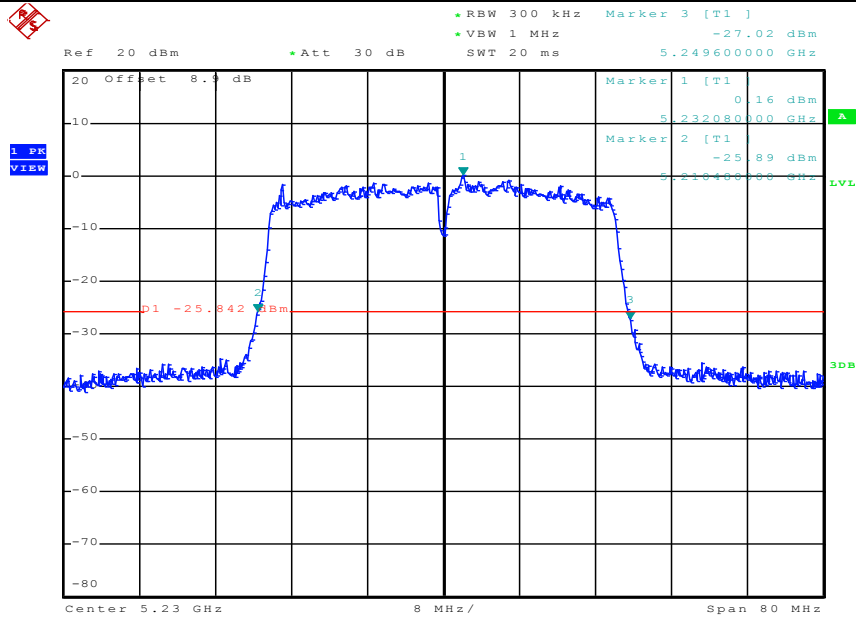
Date: 21.AUG.2019 20:09:21

IEEE 802.11ac20 / Channel 48 / 5240MHz



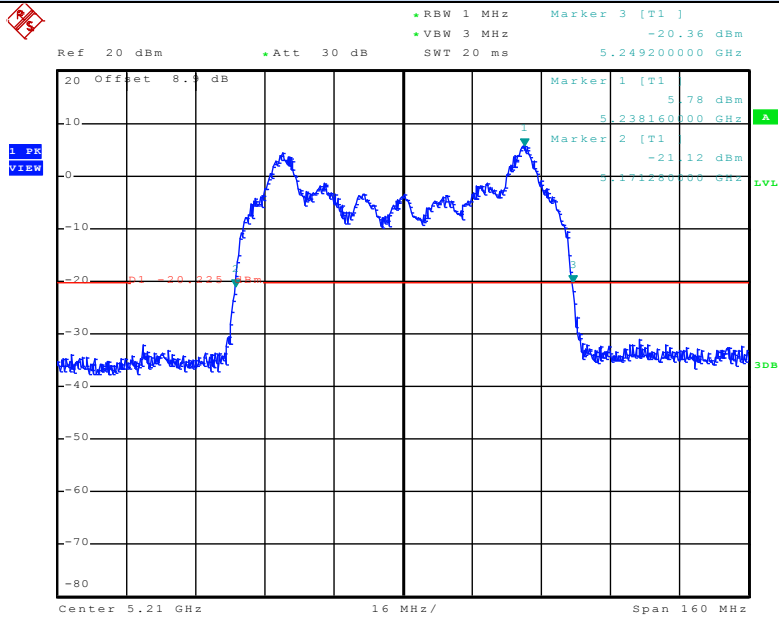
Date: 21.AUG.2019 20:34:16

IEEE 802.11ac40 / Channel 38 / 5190MHz



Date: 21.AUG.2019 20:40:07

IEEE 802.11ac40 / Channel 46 / 5230MHz



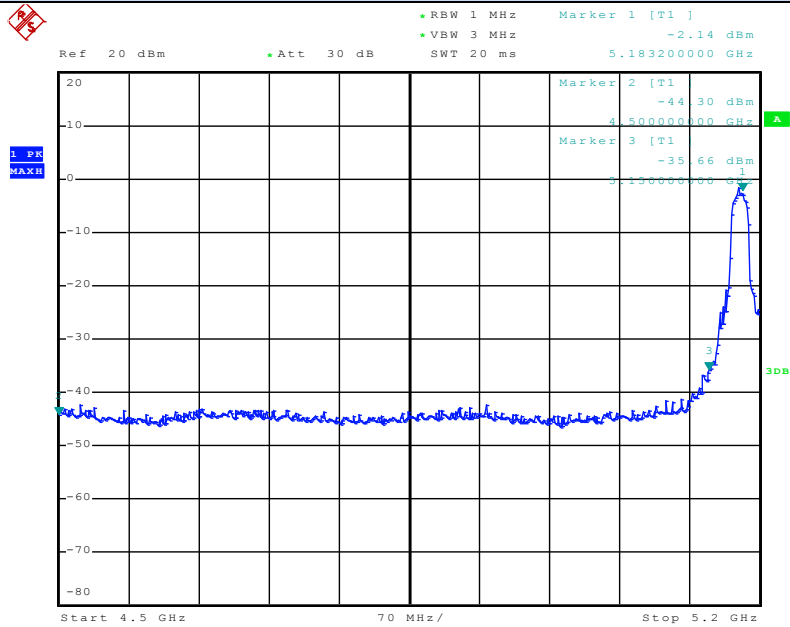
Date: 21.AUG.2019 19:29:58

IEEE 802.11ac80 / Channel 42 / 5210MHz

**D.5 Undesirable Emissions Measurement**

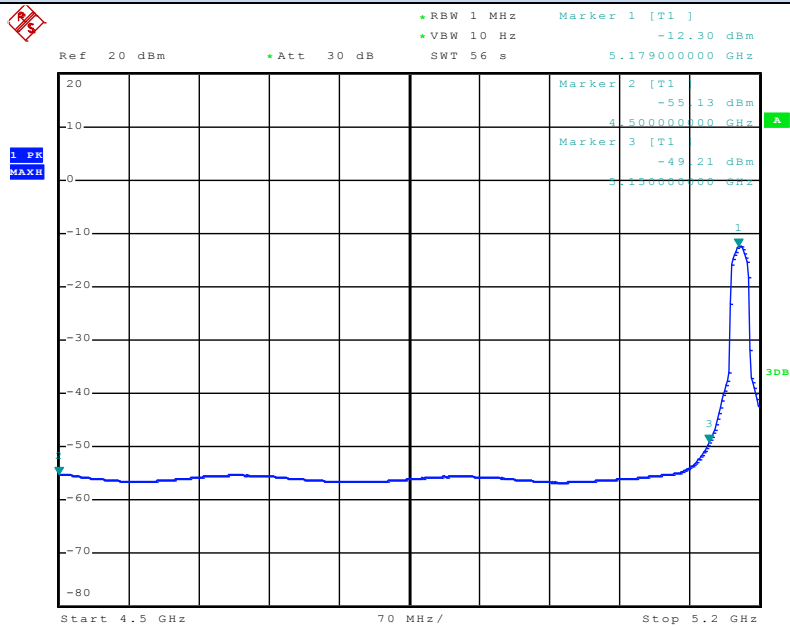
Test Mode	Channel	Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	Ground Reflection Factor (dB)	Covert Radiated E Level At 3m (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
11A	36	4500.0	-44.30	2.00	0	52.96	Peak	68.20	Pass
		4500.0	-55.13	2.00	0	42.13	Average	54.00	Pass
		5150.0	-35.66	2.00	0	61.60	Peak	68.20	Pass
		5150.0	-49.21	2.00	0	48.05	Average	54.00	Pass
	48	5350.0	-45.17	2.00	0	52.09	Peak	68.20	Pass
		5350.0	-56.45	2.00	0	40.81	Average	54.00	Pass
		5460.0	-42.71	2.00	0	54.55	Peak	68.20	Pass
		5460.0	-55.34	2.00	0	41.92	Average	54.00	Pass
11N2 0 SISO	36	4500.0	-42.84	2.00	0	54.42	Peak	68.20	Pass
		4500.0	-55.13	2.00	0	42.13	Average	54.00	Pass
		5150.0	-34.16	2.00	0	63.10	Peak	68.20	Pass
		5150.0	-49.12	2.00	0	48.14	Average	54.00	Pass
	48	5350.0	-45.67	2.00	0	51.59	Peak	68.20	Pass
		5350.0	-56.47	2.00	0	40.79	Average	54.00	Pass
		5460.0	-45.05	2.00	0	52.21	Peak	68.20	Pass
		5460.0	-55.36	2.00	0	41.90	Average	54.00	Pass
11N4 0 SISO	38	4500.0	-42.79	2.00	0	54.47	Peak	68.20	Pass
		4500.0	-55.13	2.00	0	42.13	Average	54.00	Pass
		5150.0	-32.08	2.00	0	65.18	Peak	68.20	Pass
		5150.0	-45.65	2.00	0	51.61	Average	54.00	Pass
	46	5350.0	-44.85	2.00	0	52.41	Peak	68.20	Pass
		5350.0	-56.39	2.00	0	40.87	Average	54.00	Pass
		5460.0	-44.07	2.00	0	53.19	Peak	68.20	Pass
		5460.0	-55.34	2.00	0	41.92	Average	54.00	Pass
11A C20 SIS O	36	4500.0	-44.34	2.00	0	52.92	Peak	68.20	Pass
		4500.0	-55.15	2.00	0	42.11	Average	54.00	Pass
		5150.0	-34.96	2.00	0	62.30	Peak	68.20	Pass
		5150.0	-49.14	2.00	0	48.12	Average	54.00	Pass
	48	4500.0	-44.50	2.00	0	52.76	Peak	68.20	Pass
		4500.0	-56.45	2.00	0	40.81	Average	54.00	Pass
		5150.0	-42.99	2.00	0	54.27	Peak	68.20	Pass
		5150.0	-55.35	2.00	0	41.91	Average	54.00	Pass
11A C40 SIS O	38	4500.0	-45.16	2.00	0	52.10	Peak	68.20	Pass
		4500.0	-55.15	2.00	0	42.11	Average	54.00	Pass
		5150.0	-33.13	2.00	0	64.13	Peak	68.20	Pass
		5150.0	-45.66	2.00	0	51.60	Average	54.00	Pass
	46	5350.0	-43.95	2.00	0	53.31	Peak	68.20	Pass
		5350.0	-55.35	2.00	0	41.91	Average	54.00	Pass
		5460.0	-42.67	2.00	0	54.59	Peak	68.20	Pass
		5460.0	-56.38	2.00	0	40.88	Average	54.00	Pass
11A C80 SIS O	42	4500.0	-42.68	2.00	0	54.58	Peak	68.20	Pass
		4500.0	-55.10	2.00	0	42.16	Average	54.00	Pass
		5150.0	-39.75	2.00	0	57.51	Peak	68.20	Pass
		5150.0	-55.29	2.00	0	41.97	Average	54.00	Pass
		5350.0	-45.08	2.00	0	52.18	Peak	68.20	Pass
		5350.0	-56.37	2.00	0	40.89	Average	54.00	Pass
		5460.0	-44.56	2.00	0	52.70	Peak	68.20	Pass
		5460.0	-55.25	2.00	0	42.01	Average	54.00	Pass

### Undesirable Emissions Measurement



Date: 21.AUG.2019 16:14:20

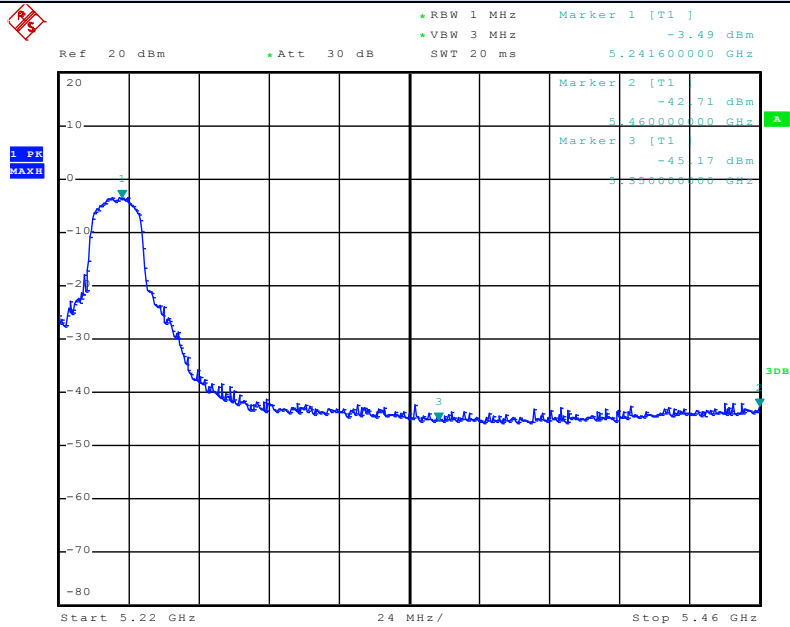
### IEEE 802.11a / Channel 36 / 5180MHz / Peak



Date: 21.AUG.2019 16:13:37

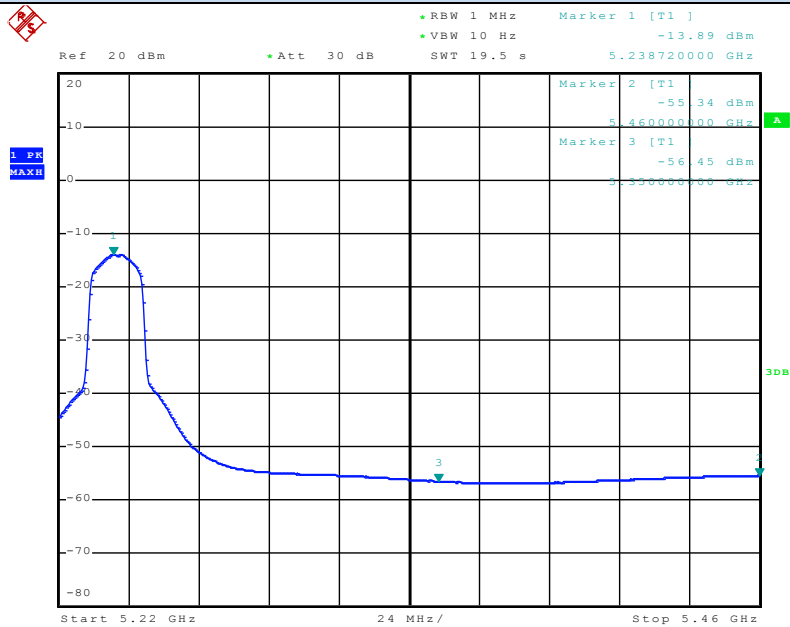
### IEEE 802.11a / Channel 36 / 5180MHz / Average

### Undesirable Emissions Measurement



Date: 21.AUG.2019 16:24:20

### IEEE 802.11a / Channel 48 / 5240MHz / Peak

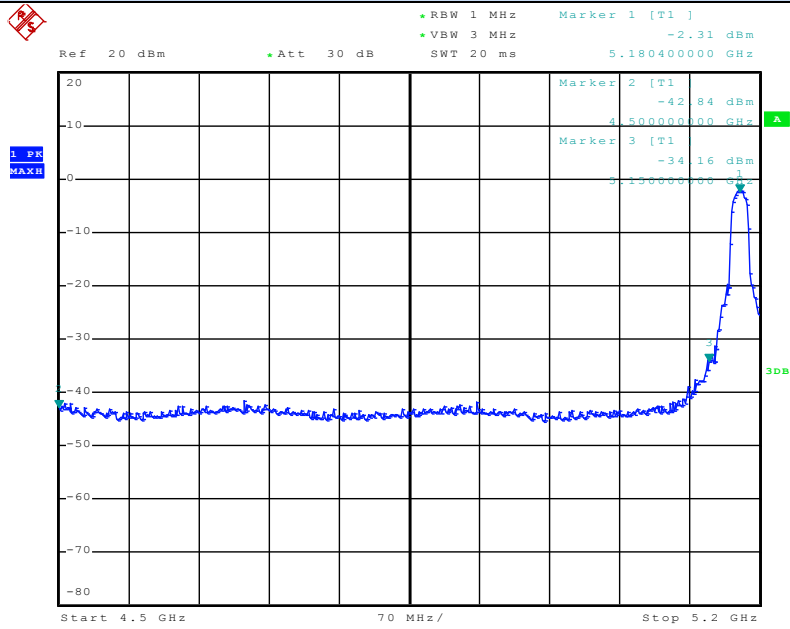


Date: 21.AUG.2019 16:25:21

### IEEE 802.11a / Channel 48 / 5240MHz / Average

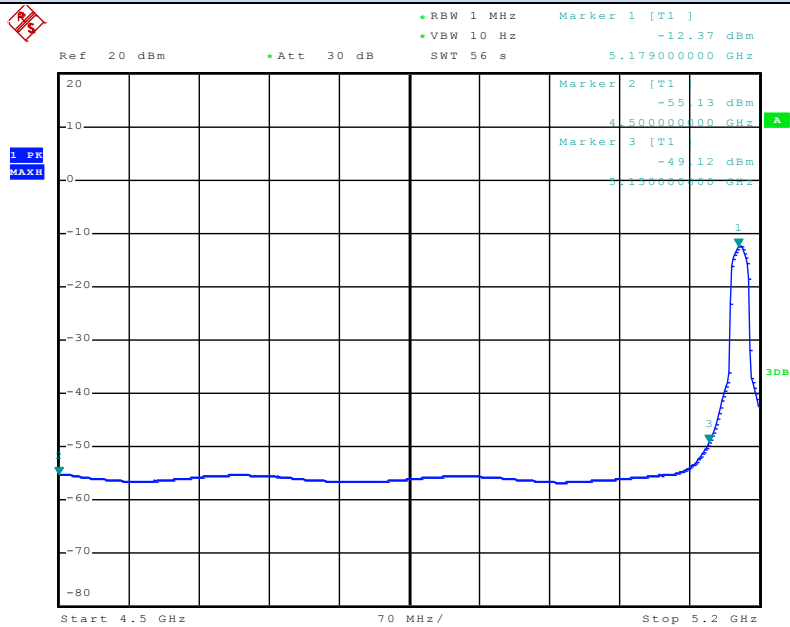


### Undesirable Emissions Measurement



Date: 21.AUG.2019 16:19:10

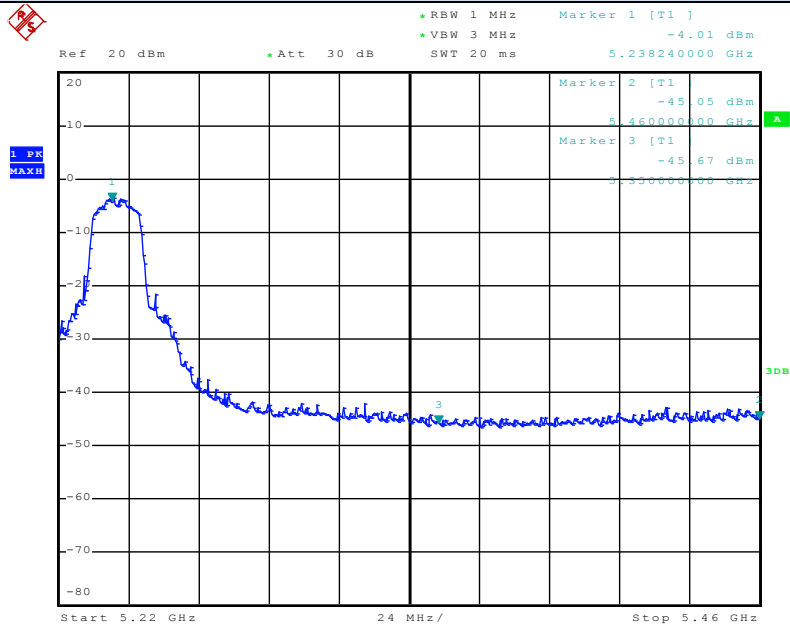
### IEEE 802.11n20 / Channel 36 / 5180MHz / Peak



Date: 21.AUG.2019 16:21:29

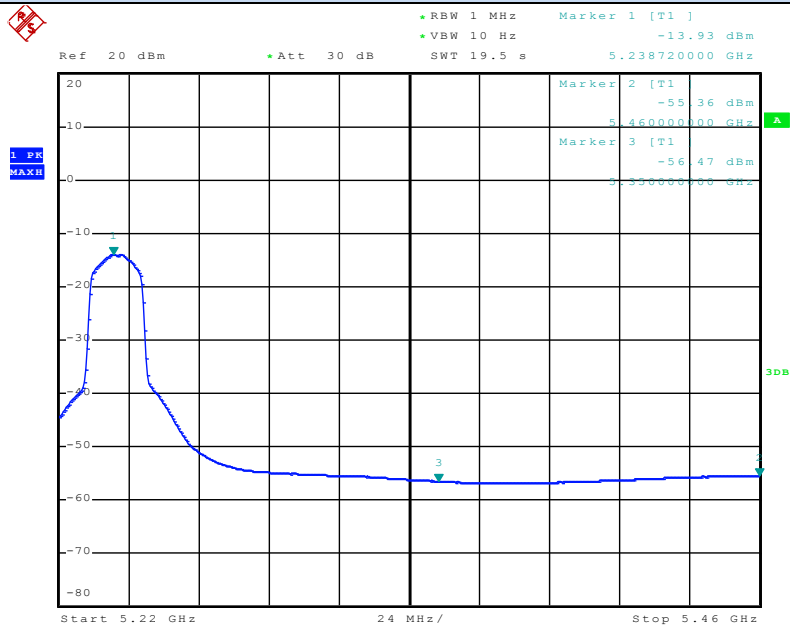
### IEEE 802.11n20 / Channel 36 / 5180MHz / Average

### Undesirable Emissions Measurement



Date: 21.AUG.2019 16:25:54

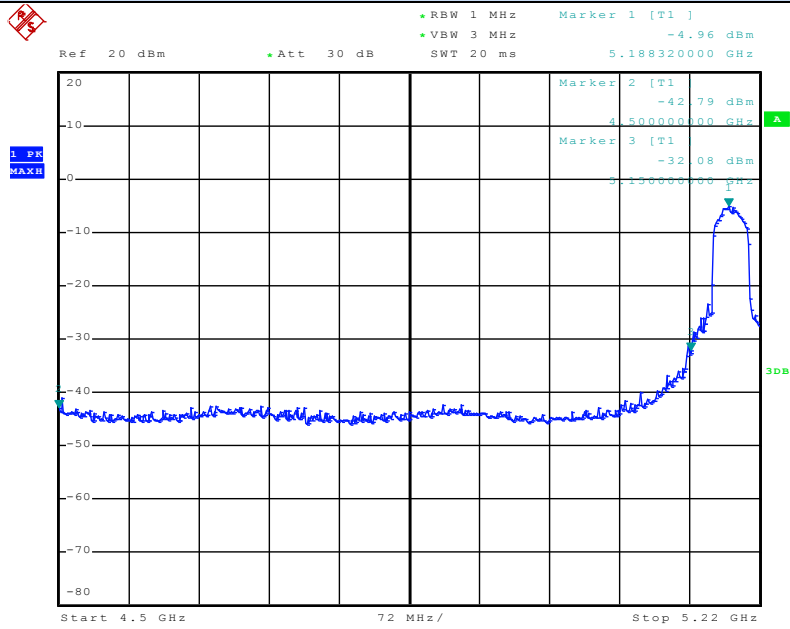
### IEEE 802.11n20 / Channel 48 / 5240MHz / Peak



Date: 21.AUG.2019 16:27:41

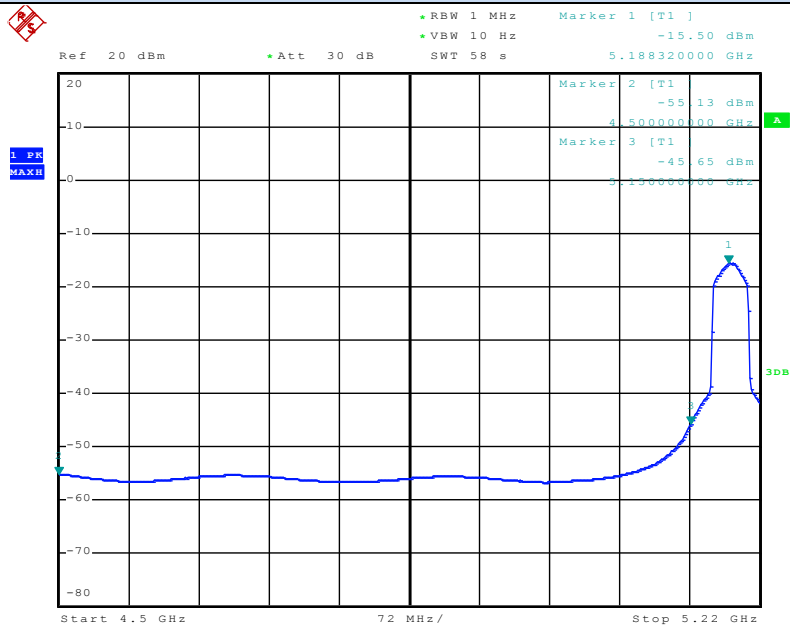
### IEEE 802.11n20 / Channel 48 / 5240MHz / Average

### Undesirable Emissions Measurement



Date: 21.AUG.2019 16:07:12

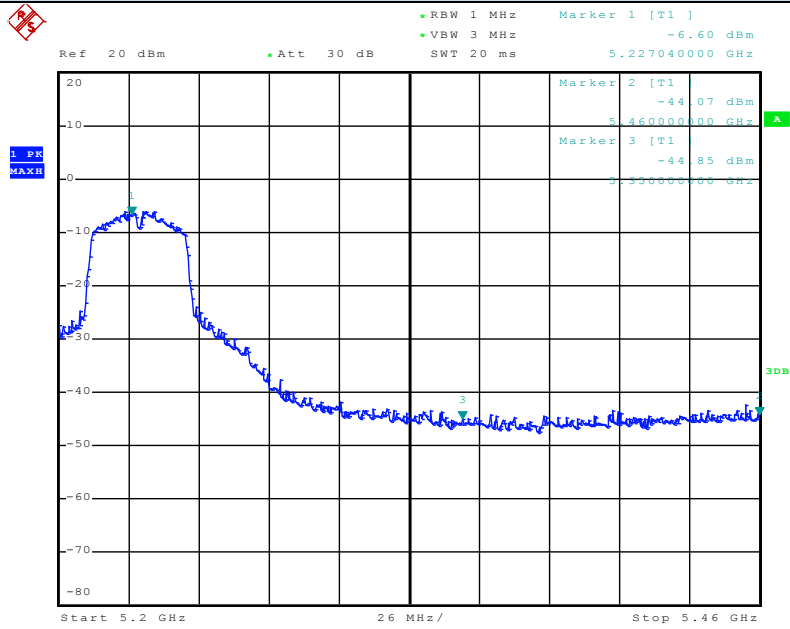
### IEEE 802.11n40 / Channel 38 / 5190MHz / Peak



Date: 21.AUG.2019 16:11:12

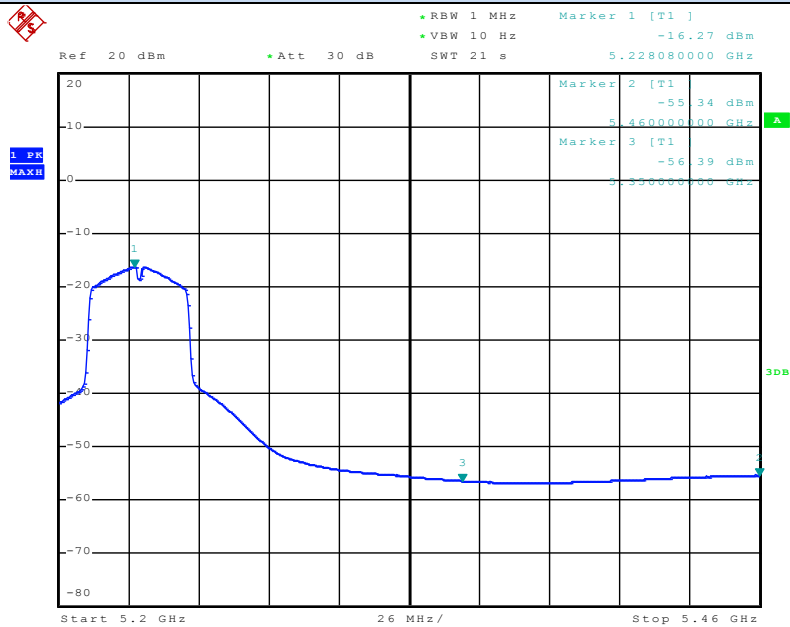
### IEEE 802.11n40 / Channel 38 / 5190MHz / Average

### Undesirable Emissions Measurement



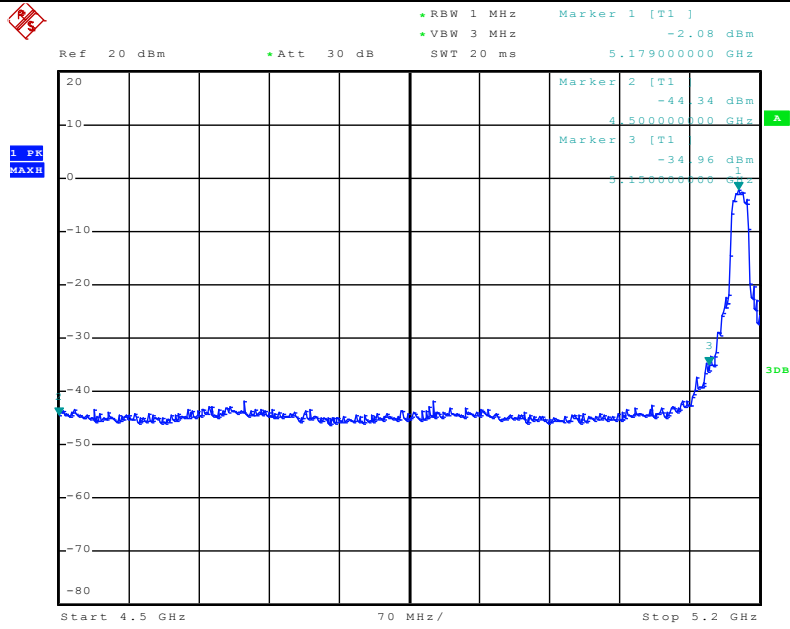
Date: 21.AUG.2019 16:32:25

### IEEE 802.11n40 / Channel 46 / 5230MHz / Peak



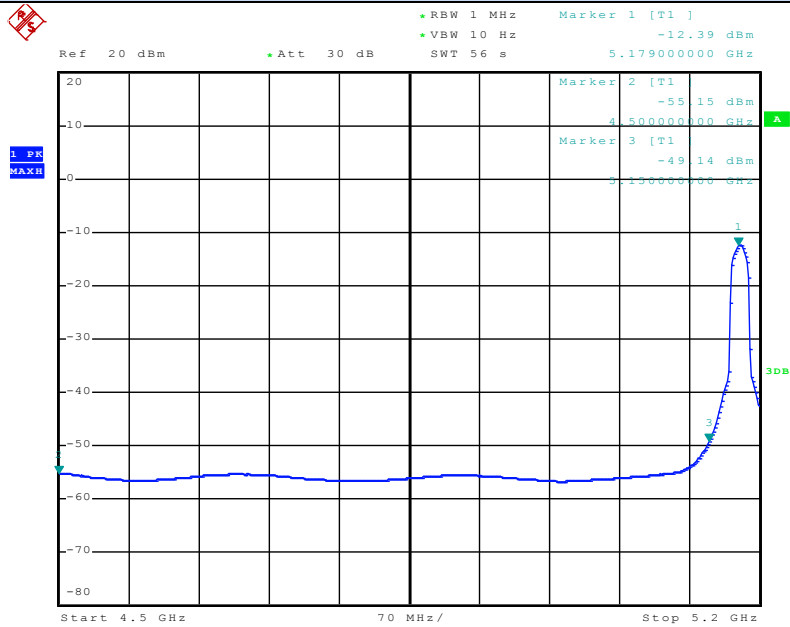
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### IEEE 802.11n40 / Channel 46 / 5230MHz / Average



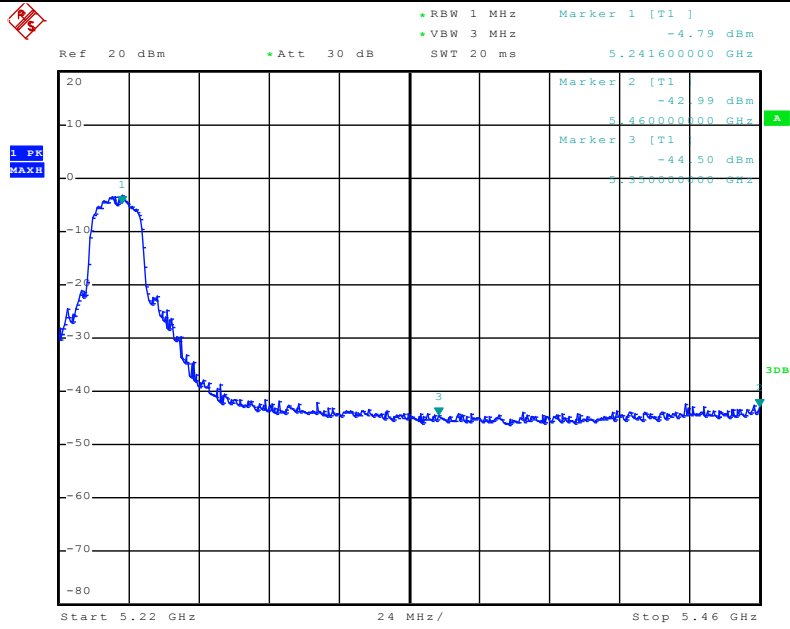
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IEEE 802.11ac20 / Channel 36 / 5180MHz / Peak



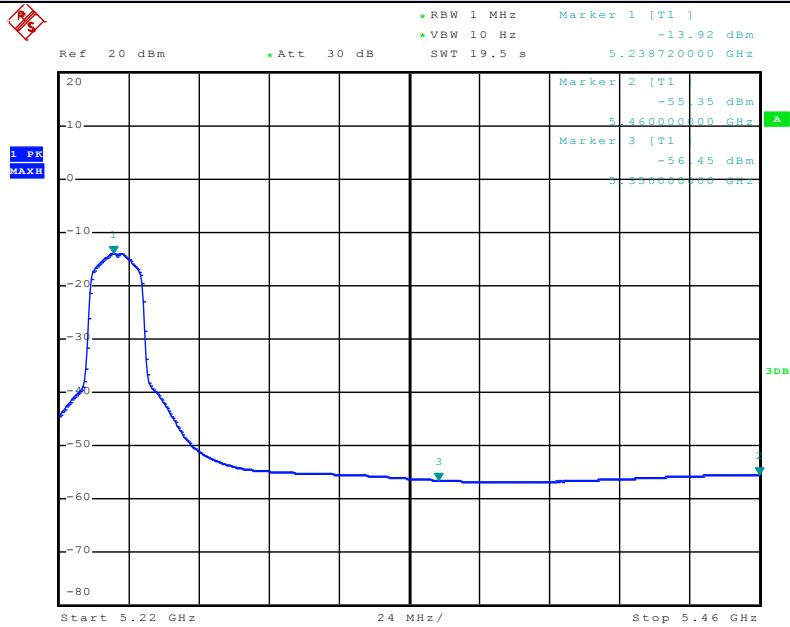
Date: 21.AUG.2019 16:17:51

IEEE 802.11ac20 / Channel 36 / 5180MHz / Average



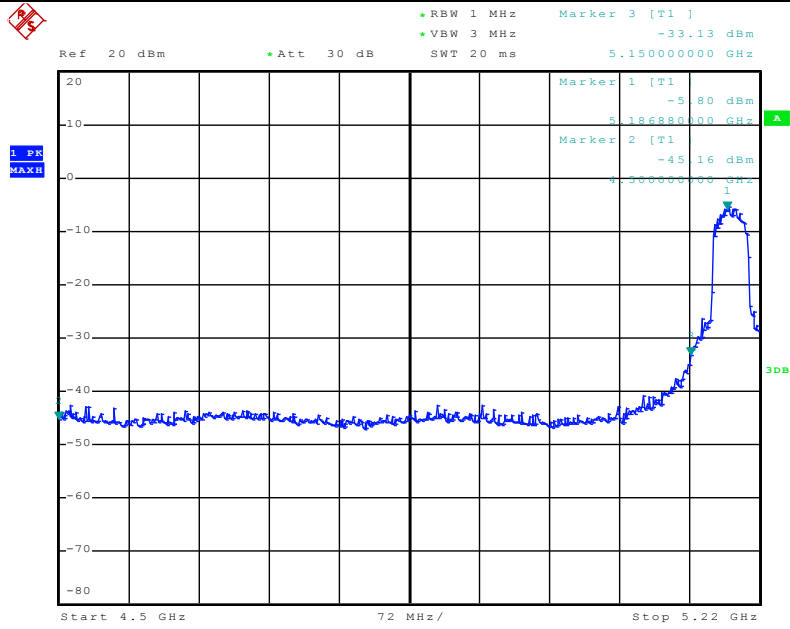
Date: 21.AUG.2019 16:28:27

IEEE 802.11ac20 / Channel 48 / 5240MHz / Peak



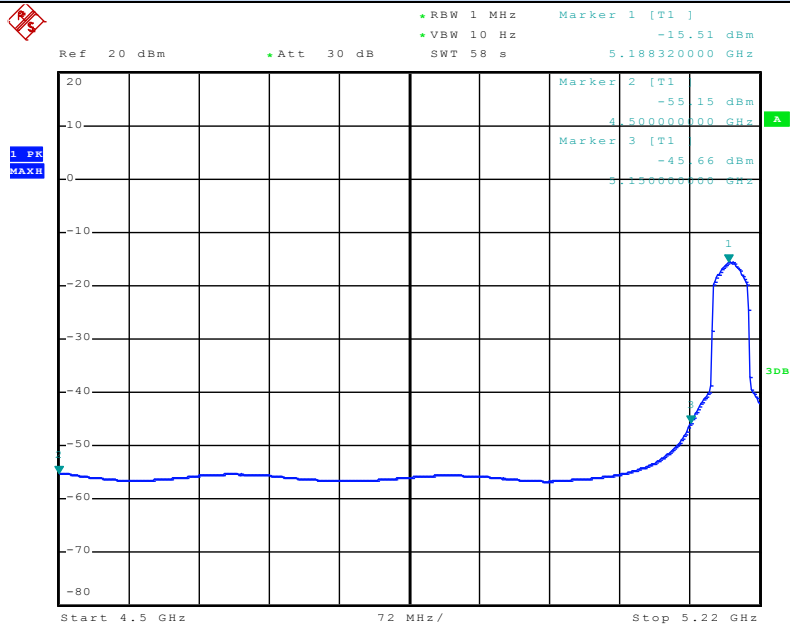
Date: 21.AUG.2019 16:29:09

IEEE 802.11ac20 / Channel 48 / 5240MHz / Average



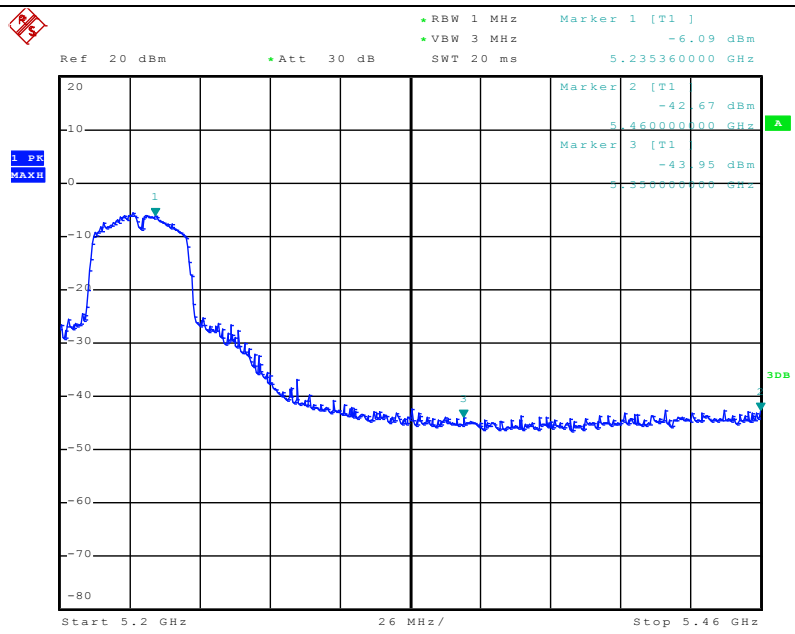
Date: 21.AUG.2019 15:56:33

IEEE 802.11ac40 / Channel 38 / 5190MHz / Peak



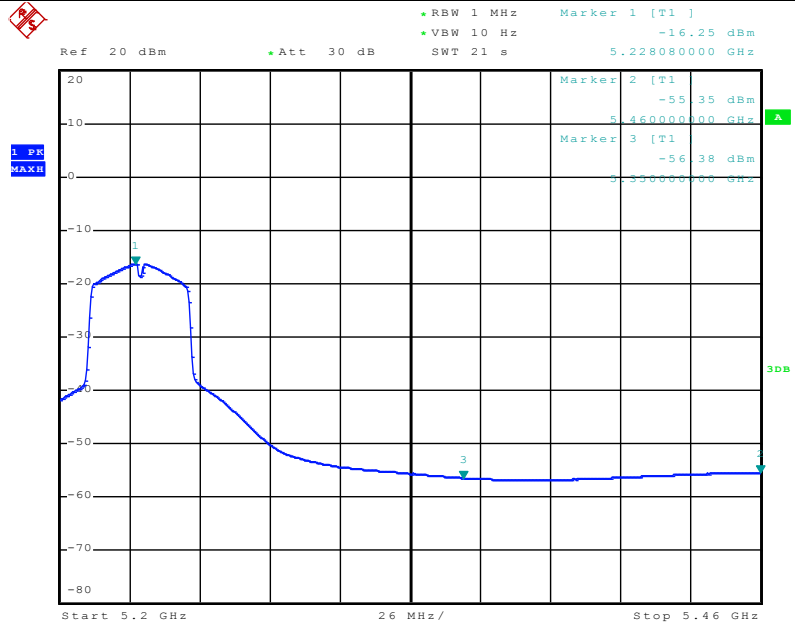
Date: 21.AUG.2019 16:06:36

IEEE 802.11ac40 / Channel 38 / 5190MHz / Average



Date: 21.AUG.2019 16:32:49

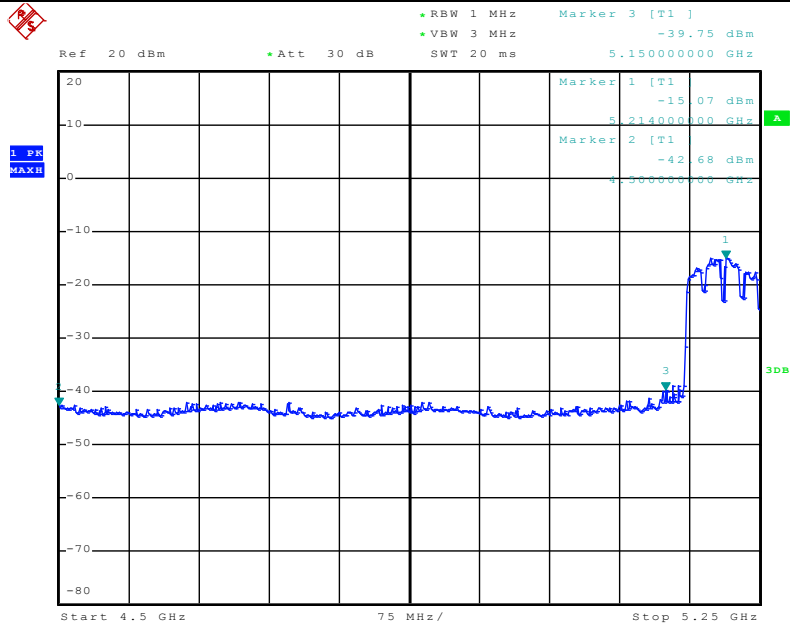
IEEE 802.11ac40 / Channel 46 / 5230MHz / Peak



Date: 21.AUG.2019 16:33:41

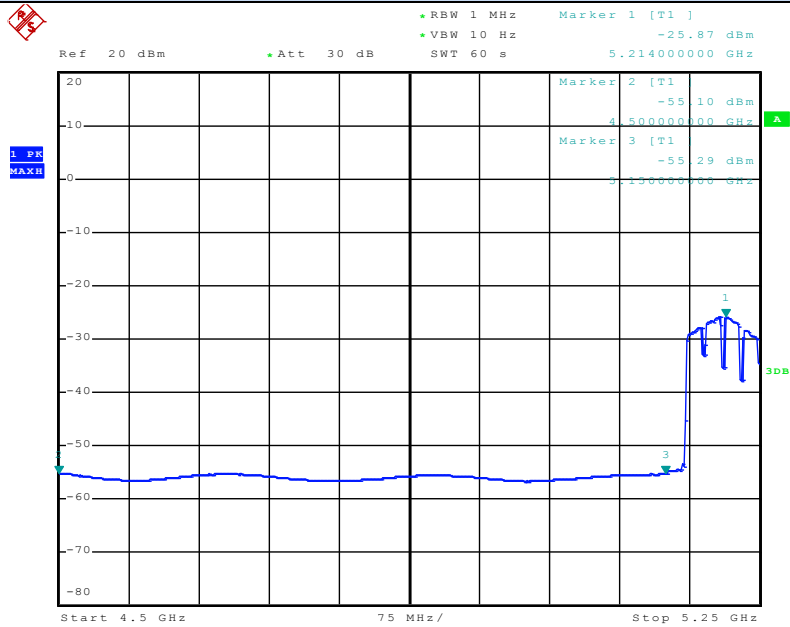
IEEE 802.11ac40 / Channel 46 / 5230MHz / Average





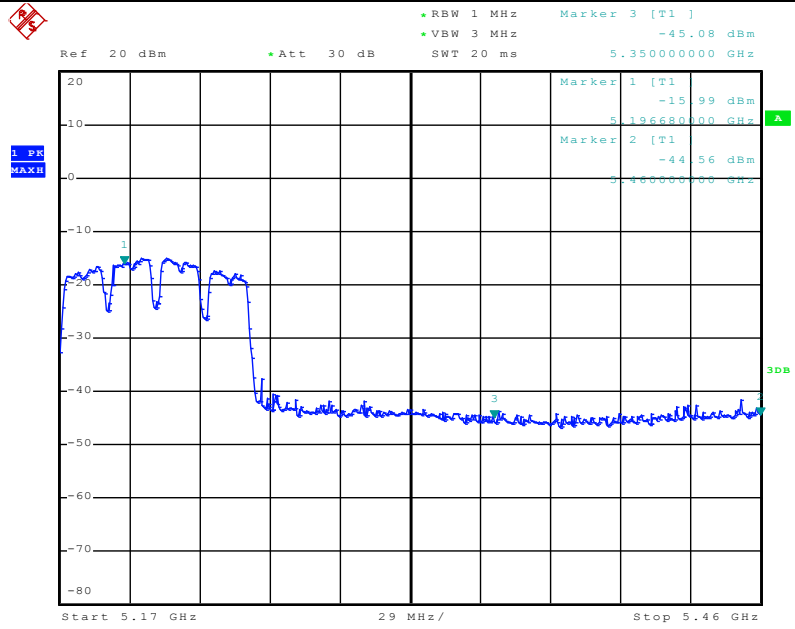
Date: 21.AUG.2019 15:04:51

IEEE 802.11ac80 / Channel 42 / 5210MHz / Peak



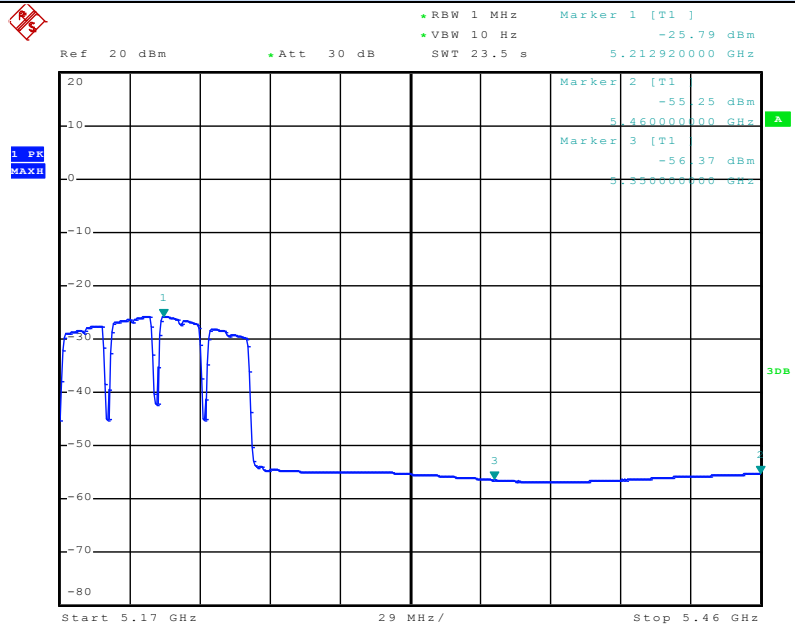
Date: 21.AUG.2019 15:06:39

IEEE 802.11ac80 / Channel 42 / 5210MHz / Average



Date: 21.AUG.2019 15:00:18

IEEE 802.11ac80 / Channel 42 / 5210MHz / Peak



Date: 21.AUG.2019 15:01:52

IEEE 802.11ac80 / Channel 42 / 5210MHz / Average