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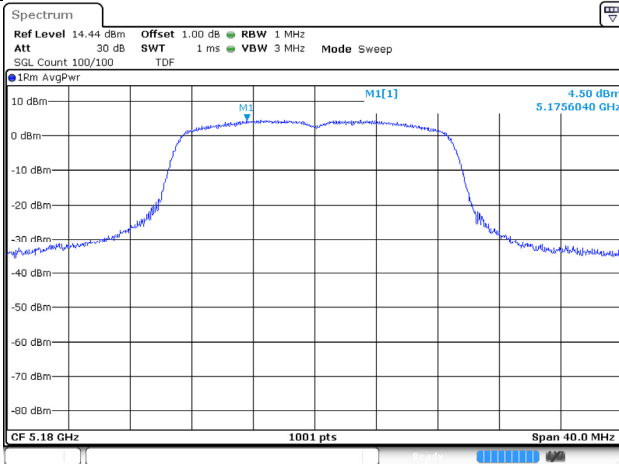
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

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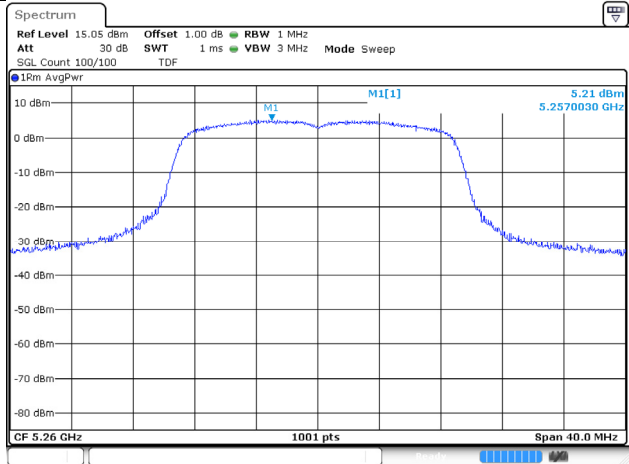
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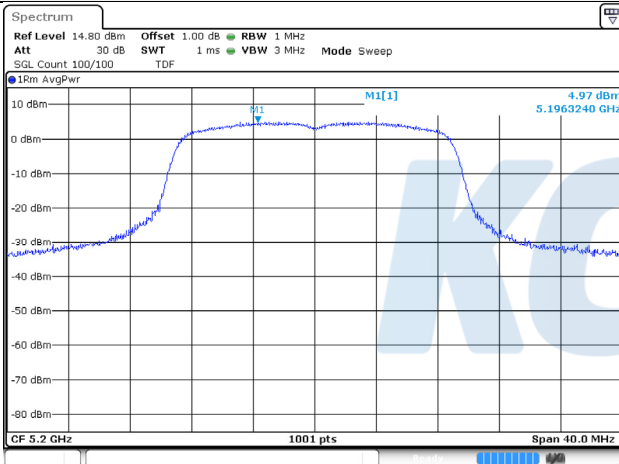
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UNII-2A / 802.11ac VHT20 / Low ch.



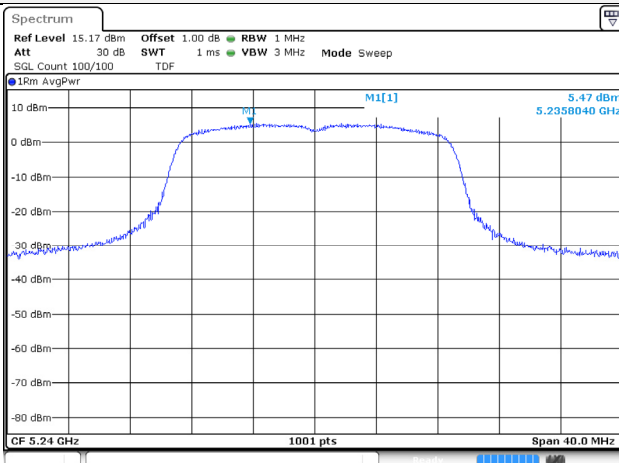
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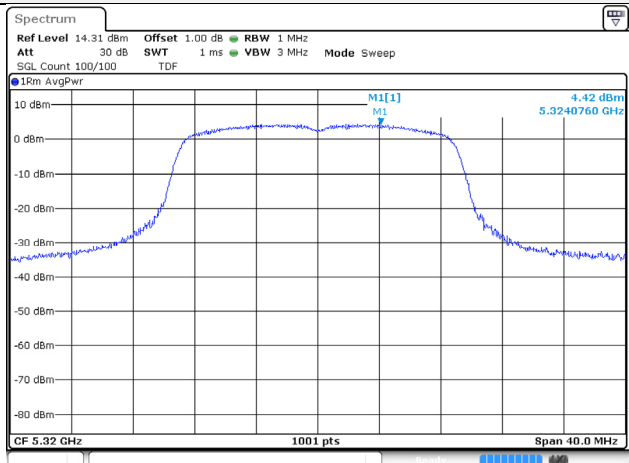
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UNII-1 / 802.11ac VHT20 / High ch.



UNII-2A / 802.11ac VHT20 / High ch.



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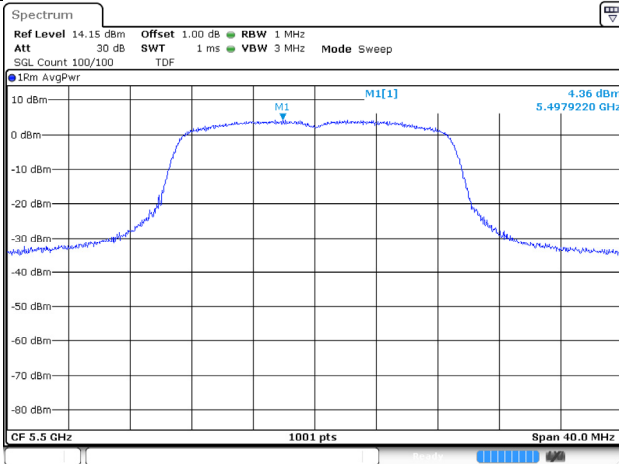
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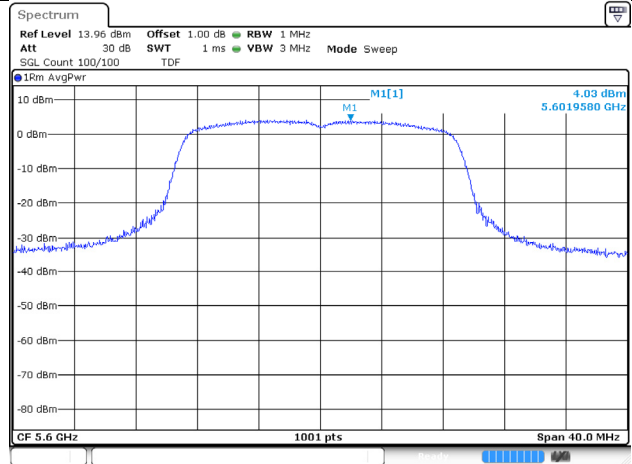
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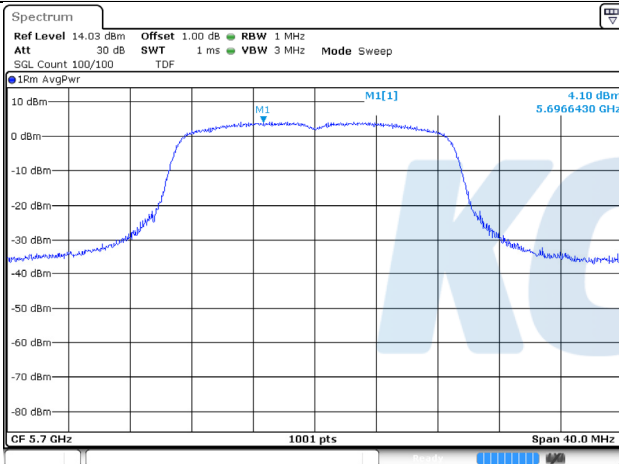
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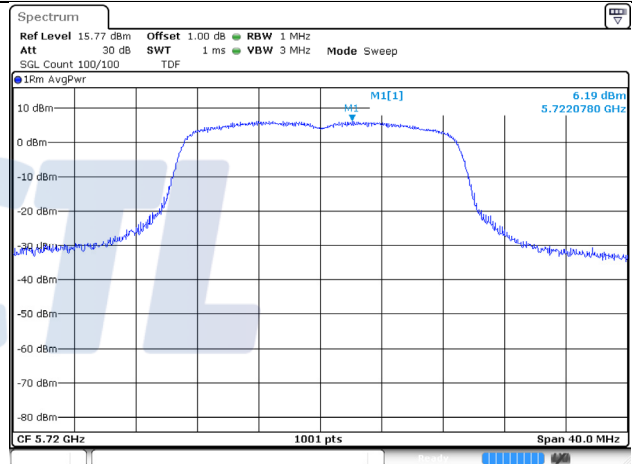
UNII-2C / 802.11ac VHT20 / Mid ch.



UNII-2C / 802.11ac VHT20 / High ch.



UNII-2C 802.11ac VHT20 / Straddle ch.



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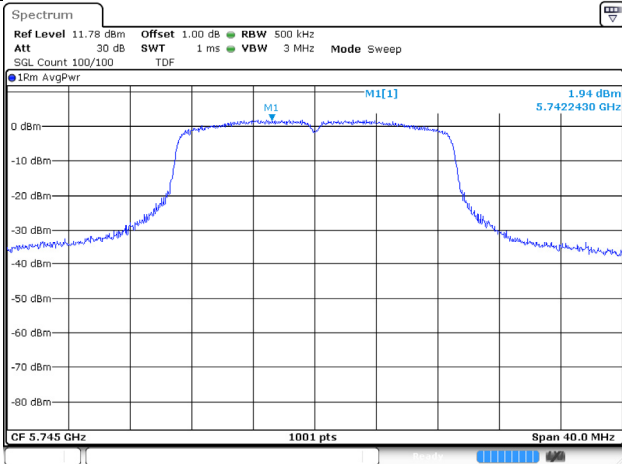
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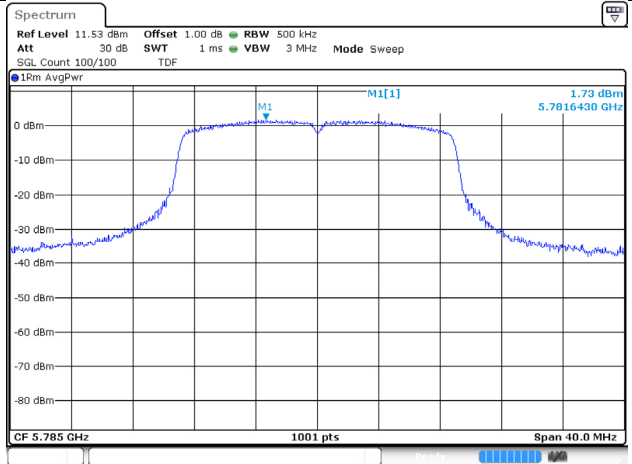
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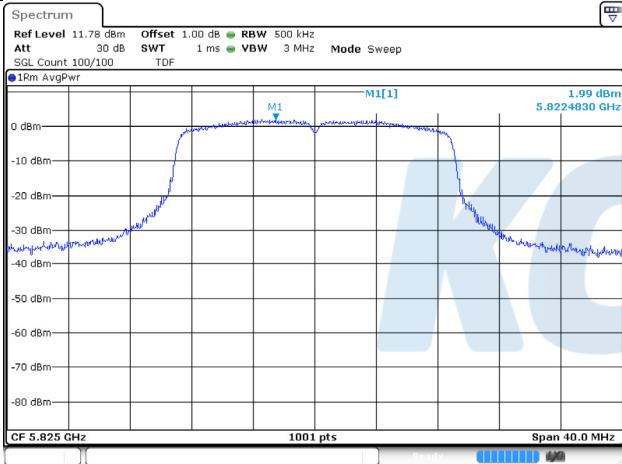
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UNII-3 / 802.11ac VHT20 / Mid ch.



UNII-3 802.11ac VHT20 / High ch.



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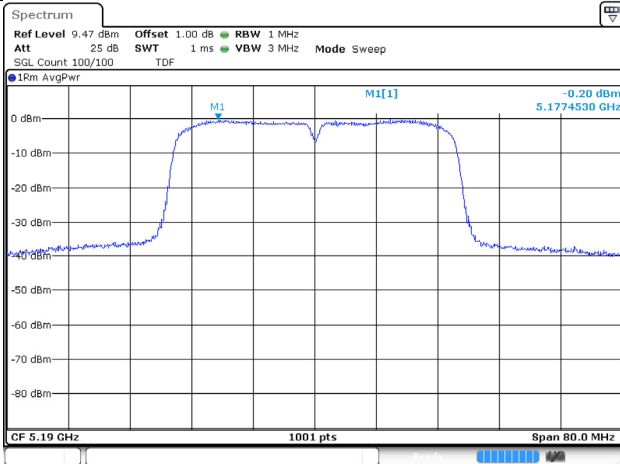
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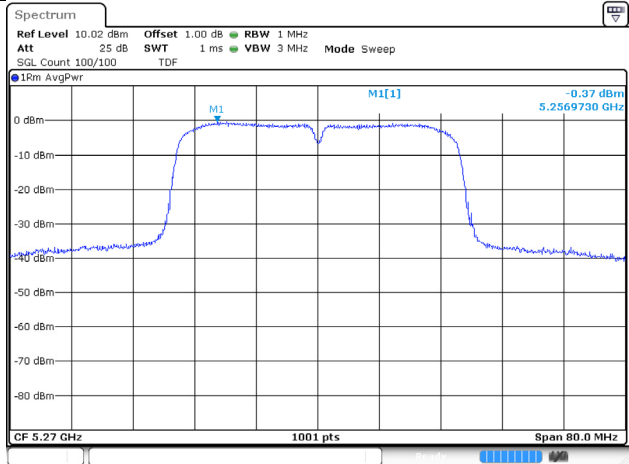
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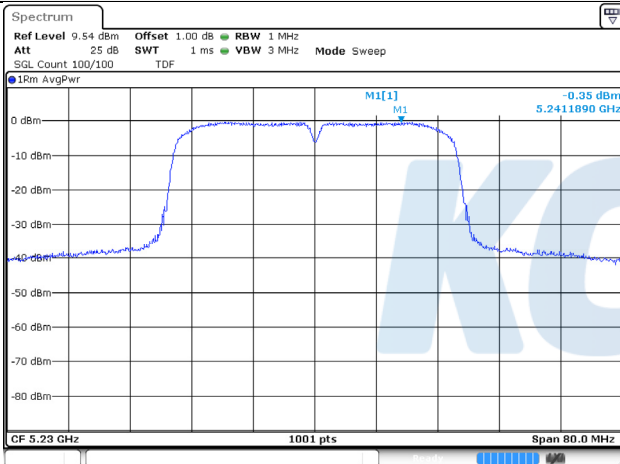
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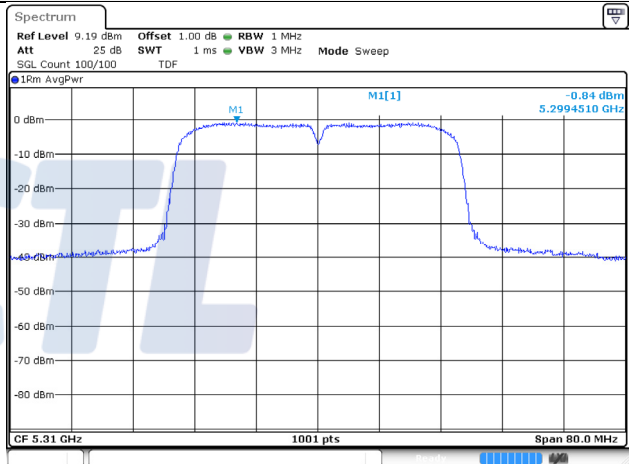
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UNII-1 / 802.11ac VHT40 / High ch.



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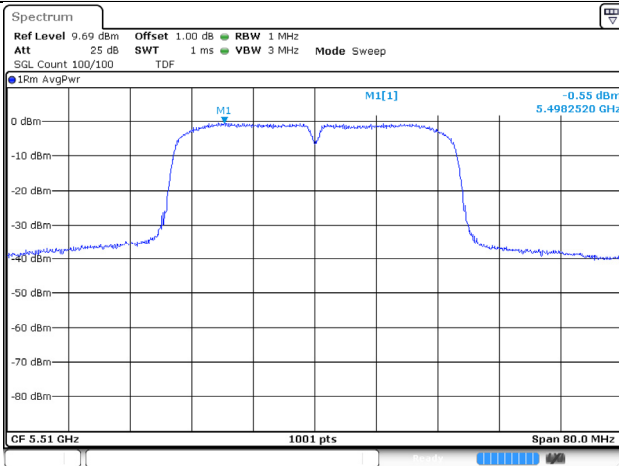
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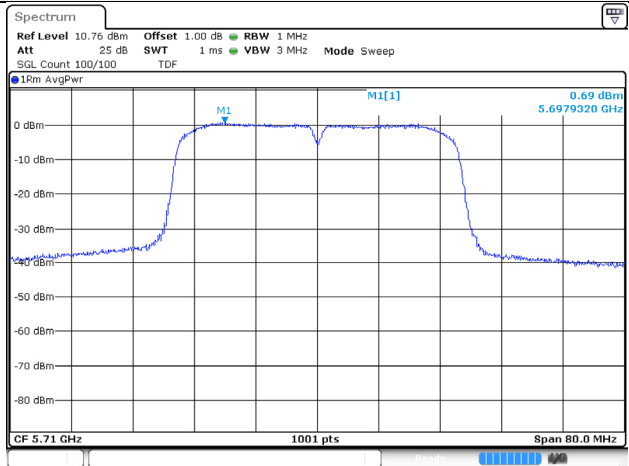
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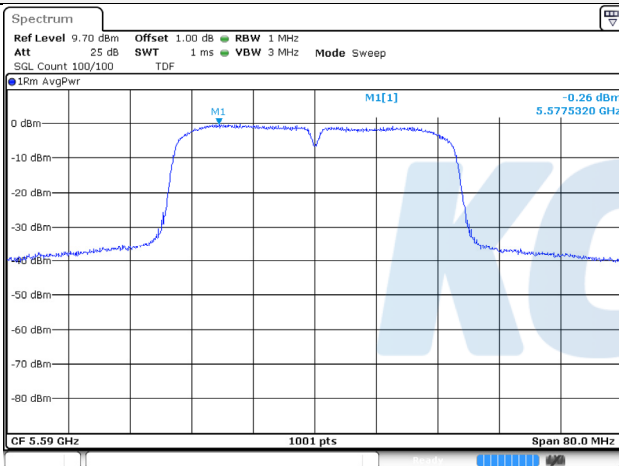
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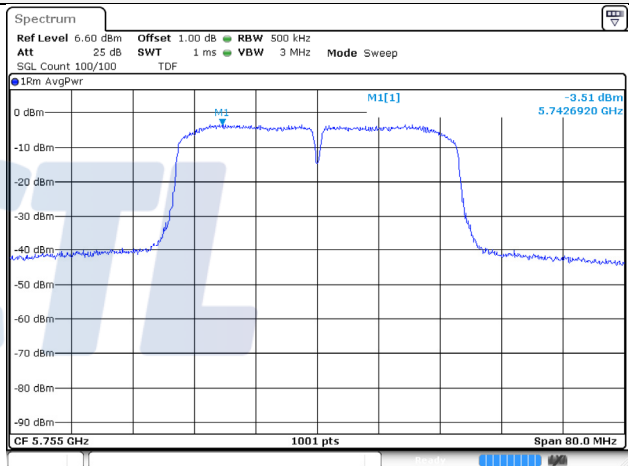
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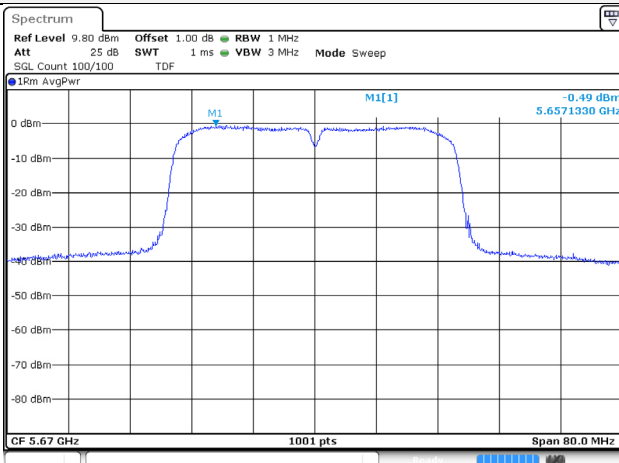
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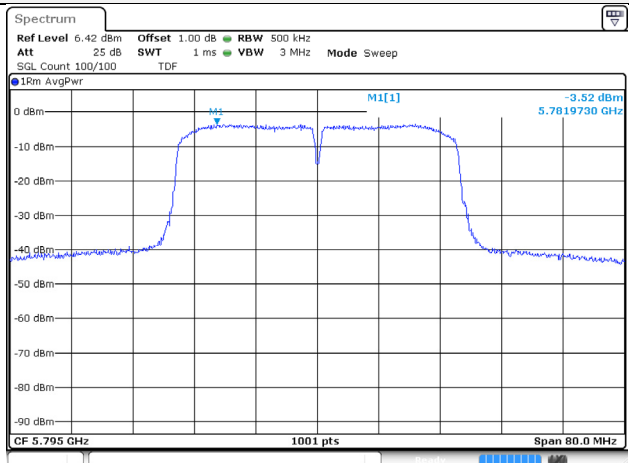
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UNII-2C / 802.11ac VHT40 / High ch.



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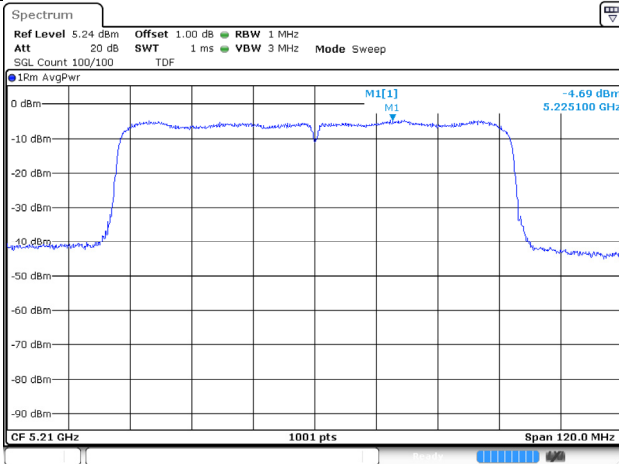
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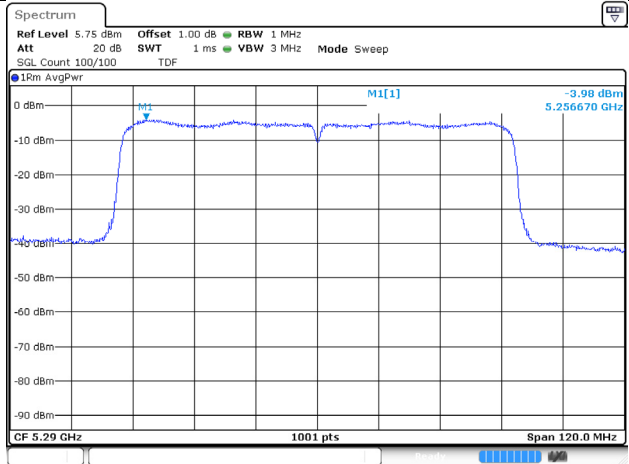
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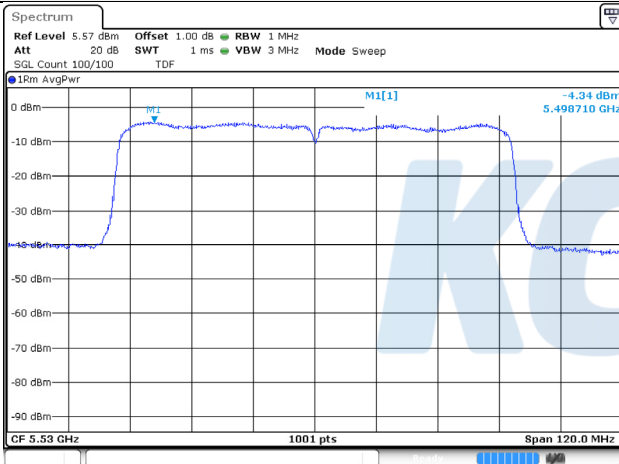
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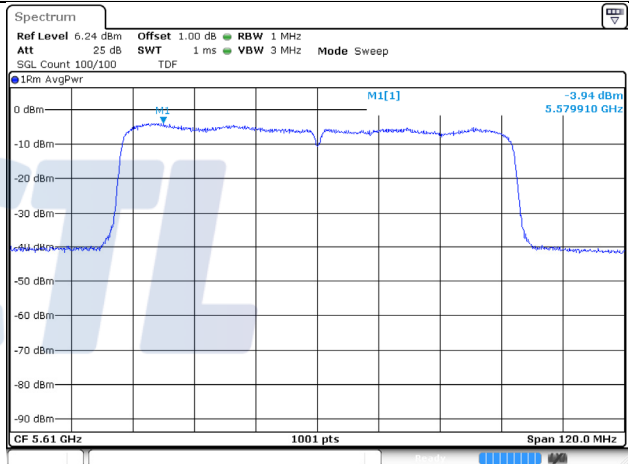
UNII-2A / 802.11ac VHT80 / Low ch.



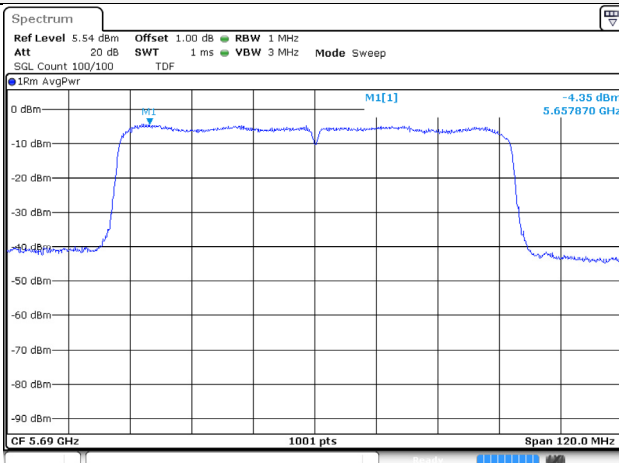
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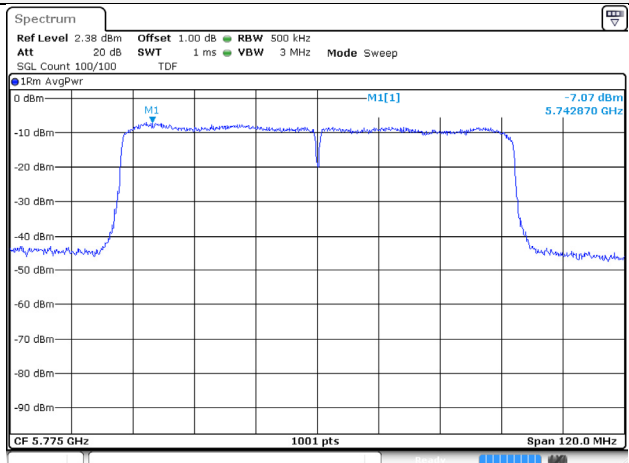
UNII-2C / 802.11ac VHT80 / High ch.



UNII-2C / 802.11ac VHT80 / Straddle ch.



UNII-3 / 802.11ac VHT80 / Low ch.

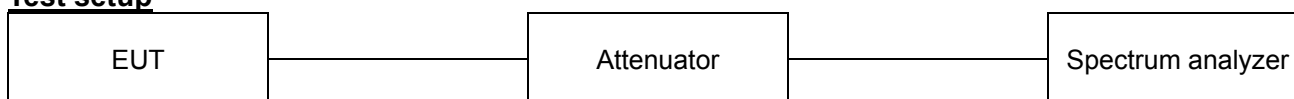


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7.3. 26 dB Bandwidth & 99% Bandwidth

Test setup



Limit

N/A

Test procedure

ANSI C63.10-2013 Section 12.4

KDB 789033 D02 v02r01 - Section C.1 (26dBbandwidth)

KDB 789033 D02 v02r01 - Section D (99% bandwidth)

Test settings

1. 26 dB Bandwidth

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. 99% Occupied Bandwidth

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1% to 5% of the OBW
- Set VBW $\geq 3 \times$ RBW
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument (if available).
- If the instrument does not have a 99% power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

Notes:

- ¹⁾ means Band-crossing channels.

Test results

26 dB bandwidth

Test mode	Band	Frequency(MHz)	Measured Bandwidth (MHz)
802.11a	UNII-1	5 180	20.73
		5 200	20.73
		5 240	23.18
	UNII-2A	5 260	21.23
		5 280	20.88
		5 320	20.78
	UNII-2C	5 500	21.08
		5 600	21.43
		5 700	22.48
		5 720 ¹⁾	16.11
802.11n HT20	UNII-1	5 180	21.93
		5 200	22.53
		5 240	22.38
	UNII-2A	5 260	22.33
		5 280	22.18
		5 320	22.53
	UNII-2C	5 500	21.93
		5 600	21.93
		5 700	21.78
		5 720 ¹⁾	16.31
802.11n HT40	UNII-1	5 190	52.05
		5 230	41.06
	UNII-2A	5 270	63.44
		5 310	52.05
	UNII-2C	5 510	52.05
		5 590	63.04
		5 670	63.24
		5 710 ¹⁾	35.69

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Test mode	Band	Frequency(MHz)	Measured Bandwidth (MHz)
802.11ac VHT20	UNII-1	5 180	21.43
		5 200	22.48
		5 240	22.58
	UNII-2A	5 260	22.43
		5 280	21.43
		5 320	22.38
	UNII-2C	5 500	21.43
		5 600	21.48
		5 700	21.58
		5 720 ¹⁾	16.31
802.11ac VHT40	UNII-1	5 190	41.16
		5 230	41.26
	UNII-2A	5 270	41.16
		5 310	41.06
	UNII-2C	5 510	41.16
		5 590	41.26
		5 670	41.06
		5 710 ¹⁾	35.39
802.11ac VHT80	UNII-1	5 210	81.28
	UNII-2A	5 290	81.28
	UNII-2C	5 530	81.04
		5 610	81.04
		5 690 ¹⁾	75.79

99% bandwidth

Test mode	Band	Frequency(MHz)	Measured Bandwidth (MHz)
802.11a	UNII-1	5 240	16.48
	UNII-2A	5 260	16.53
802.11n HT20	UNII-1	5 240	17.68
	UNII-2A	5 260	17.68
802.11n HT40	UNII-1	5 230	37.26
	UNII-2A	5 270	37.16
802.11ac VHT20	UNII-1	5 240	17.63
	UNII-2A	5 260	17.63
802.11ac VHT40	UNII-1	5 230	36.26
	UNII-2A	5 270	36.36
802.11ac VHT80	UNII-1	5 210	75.40
	UNII-2A	5 290	75.52



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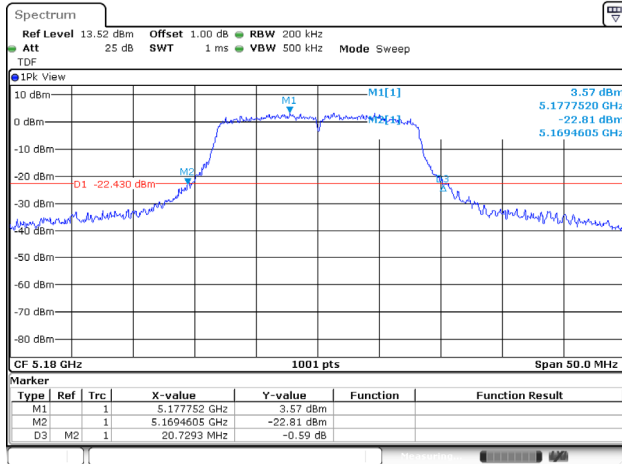
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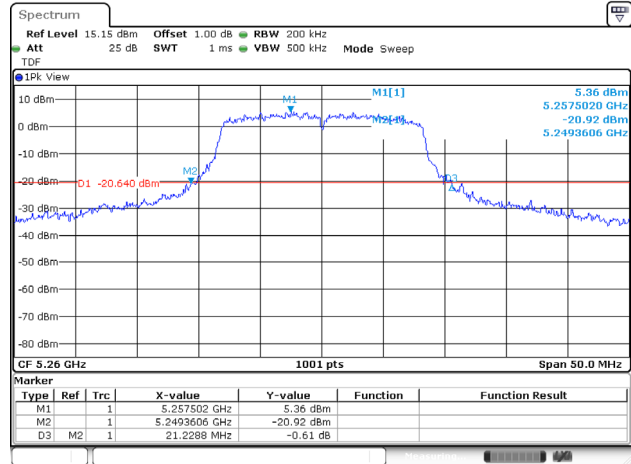


26 dB bandwidth

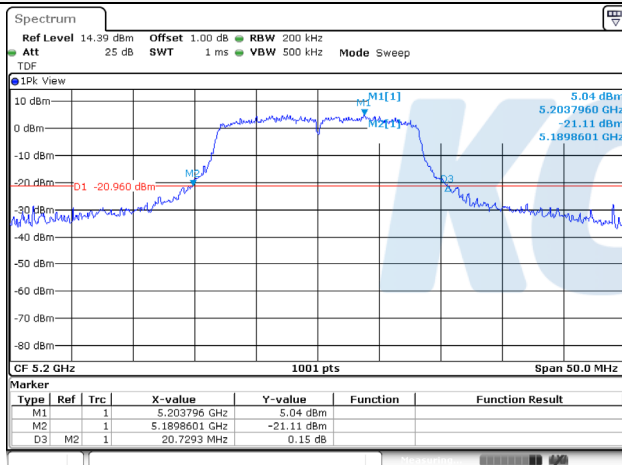
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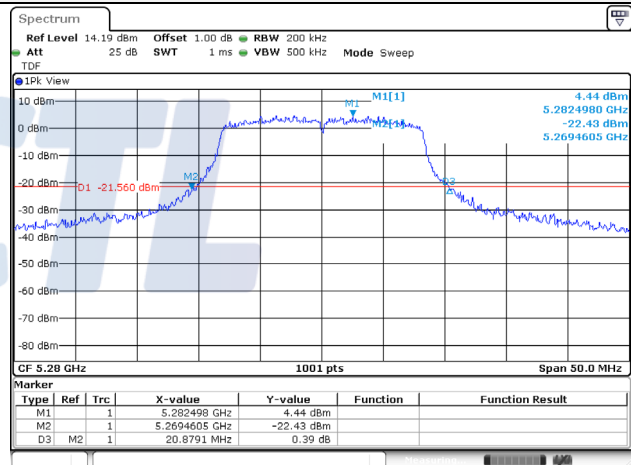
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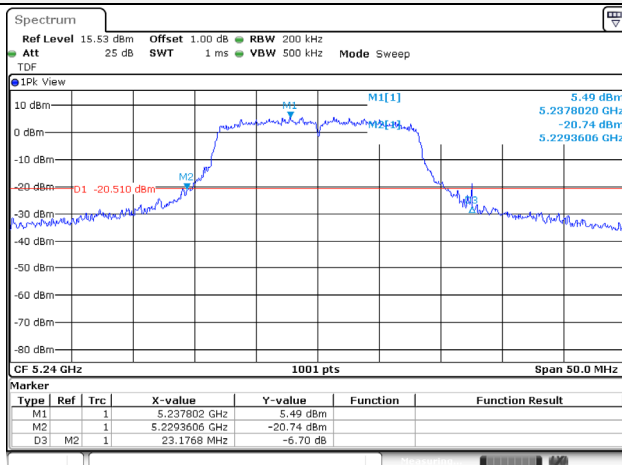
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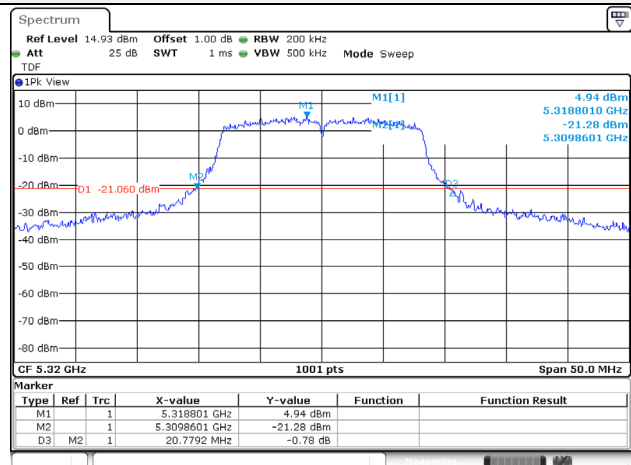
UNII-2A / 802.11a / Mid ch.



UNII-1 / 802.11a / High ch.



UNII-2A / 802.11a / High ch.



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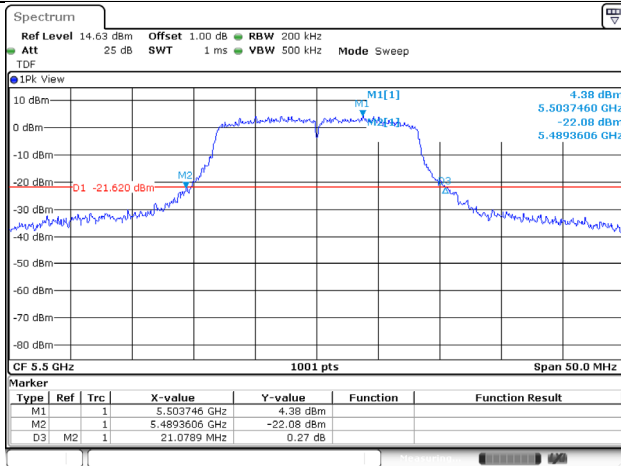
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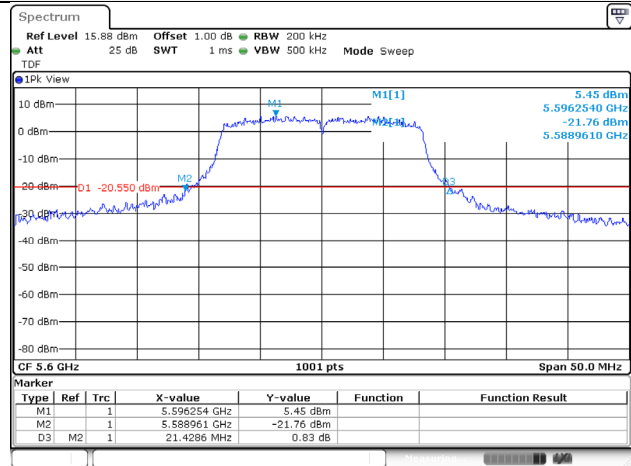
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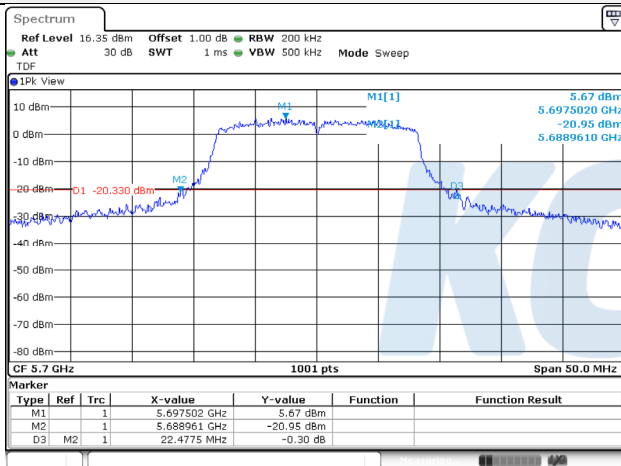
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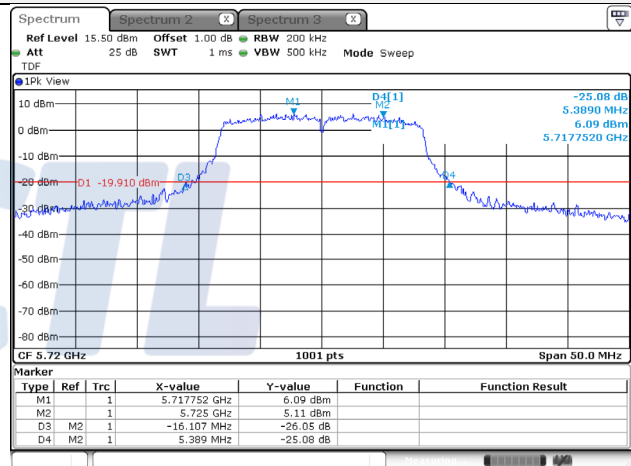
UNII-2C / 802.11a / Mid ch.



UNII-2C / 802.11a / High ch.



UNII-2C / 802.11a / Straddle ch.



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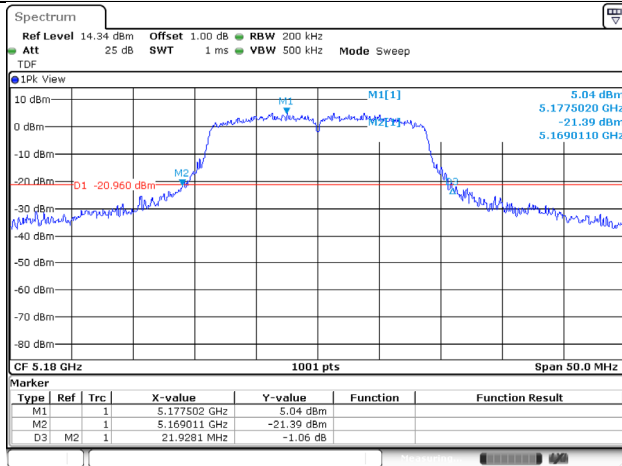
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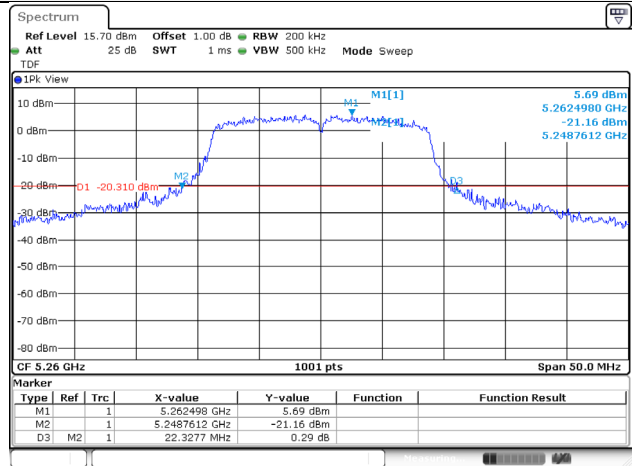
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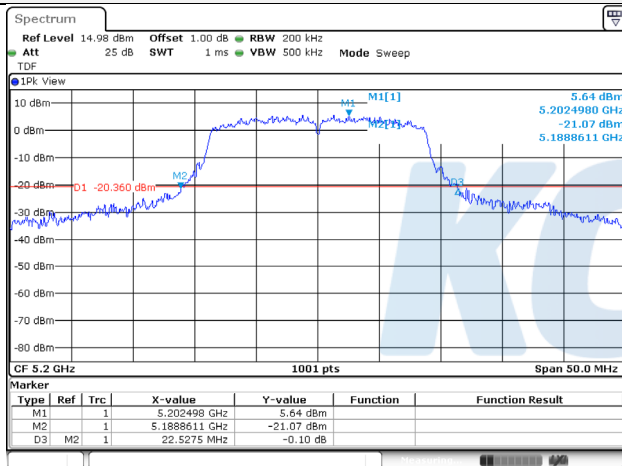
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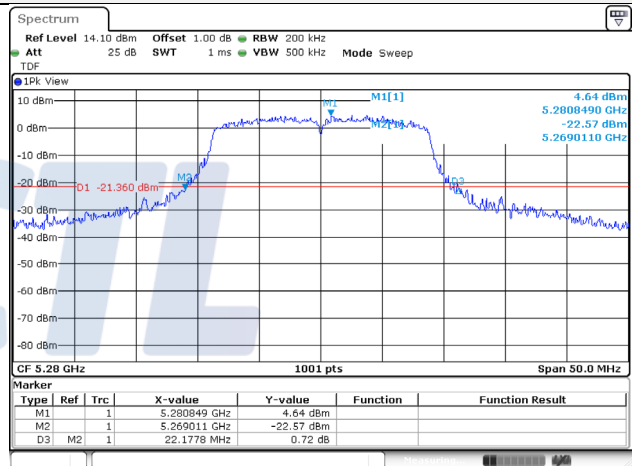
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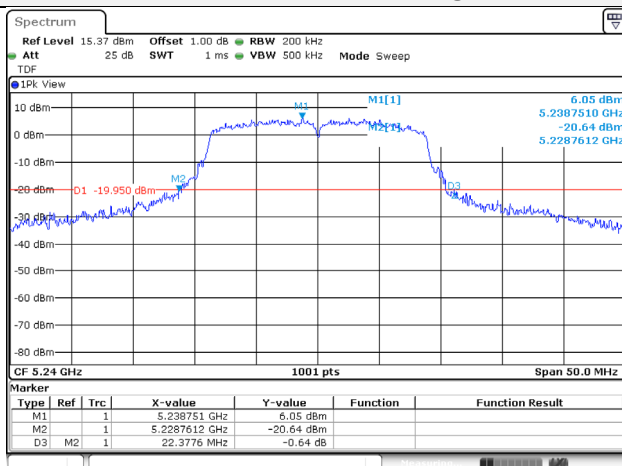
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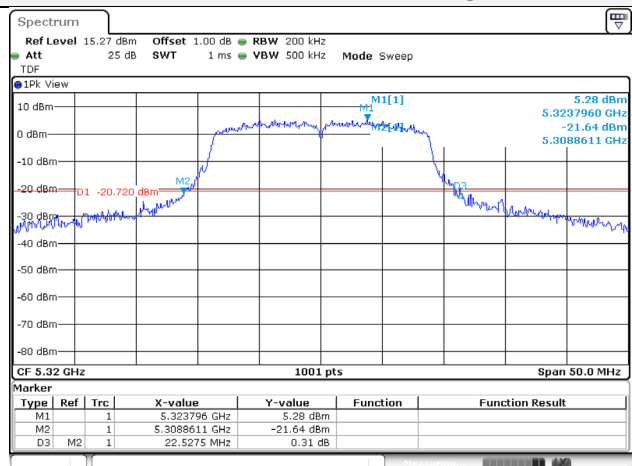
UNII-2A / 802.11n HT20 / Mid ch.



UNII-1 / 802.11n HT20 / High ch.



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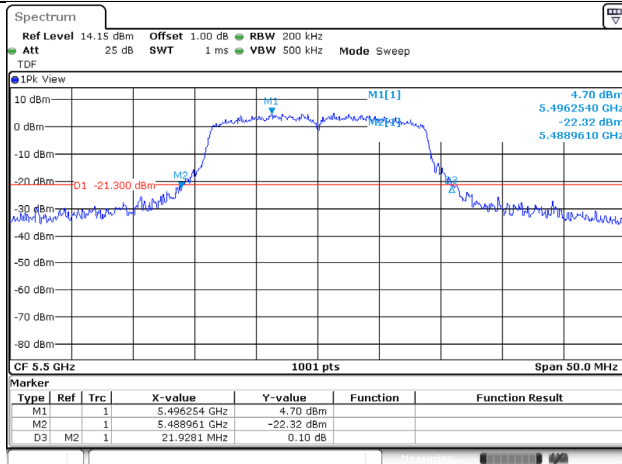
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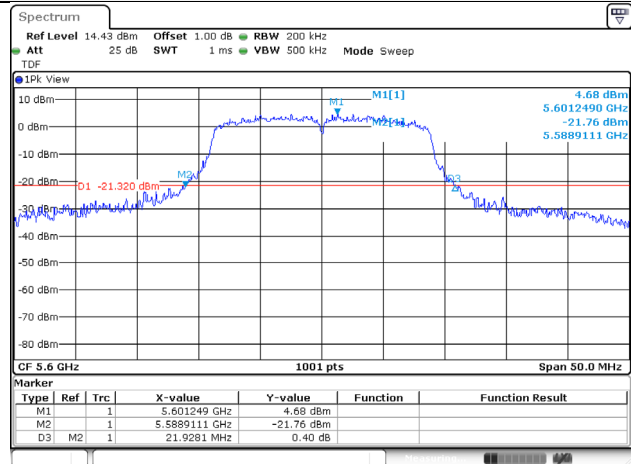
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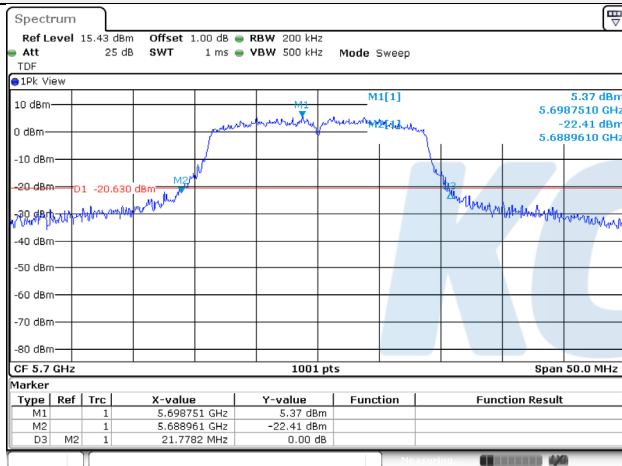
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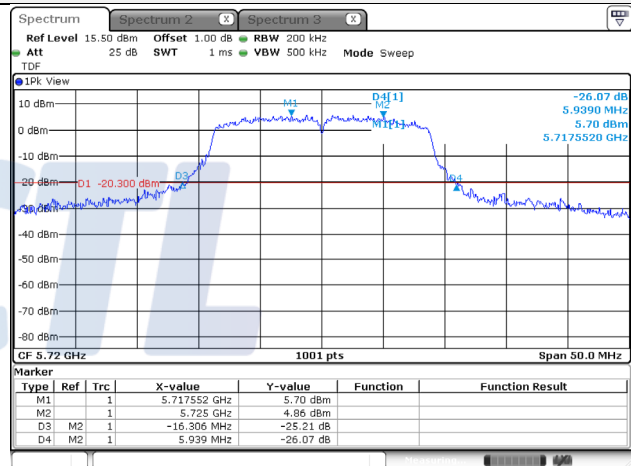
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UNII-2C / 802.11n HT20 / High ch.



UNII-2C / 802.11n HT20 / Straddle ch.



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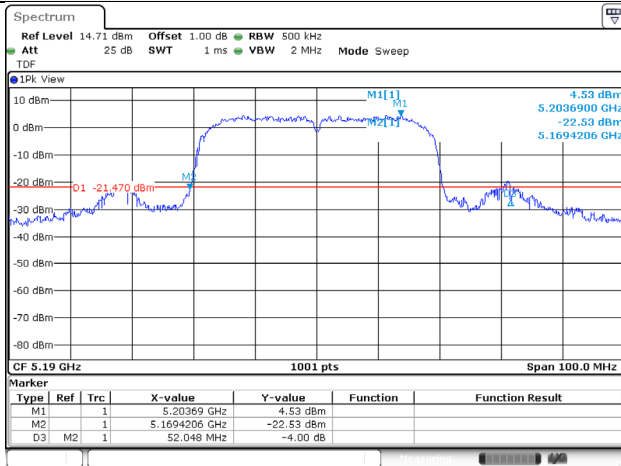
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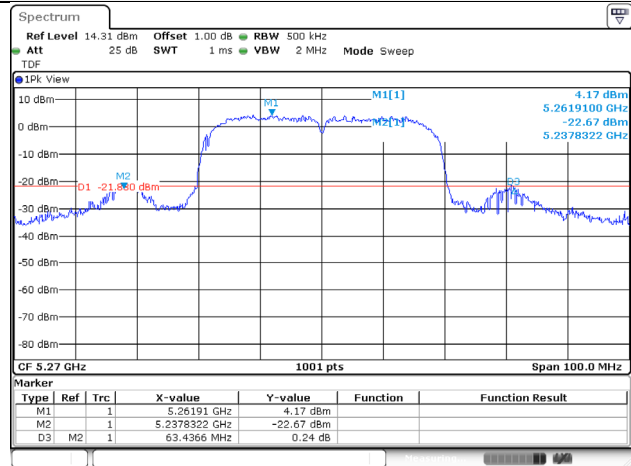
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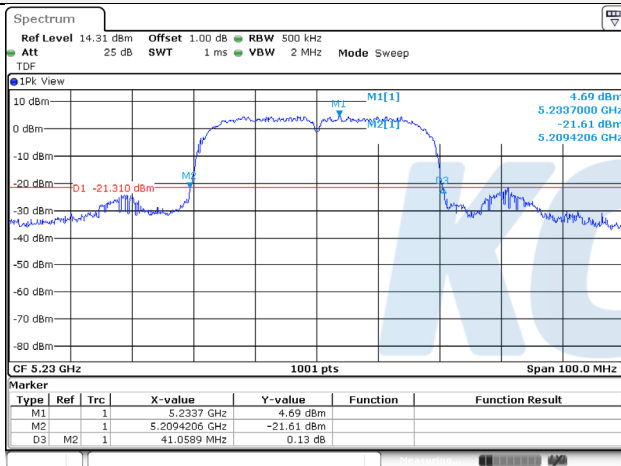
UNII-1 / 802.11n HT40 / Low ch.



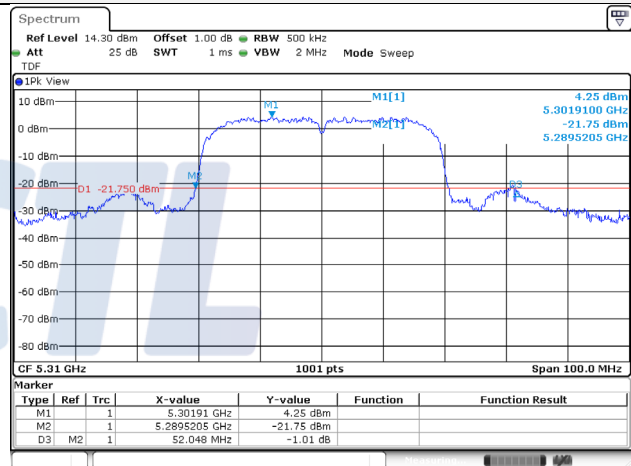
UNII-2A / 802.11n HT40 / Low ch.



UNII-1 / 802.11n HT40 / High ch.



UNII-2A / 802.11n HT40 / High ch.



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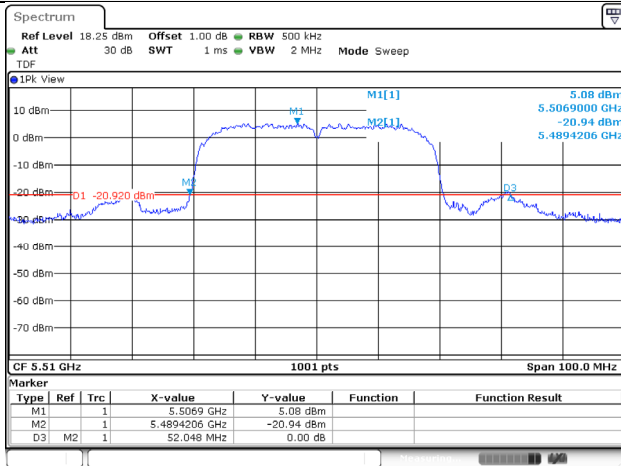
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR20-SRF0016-A

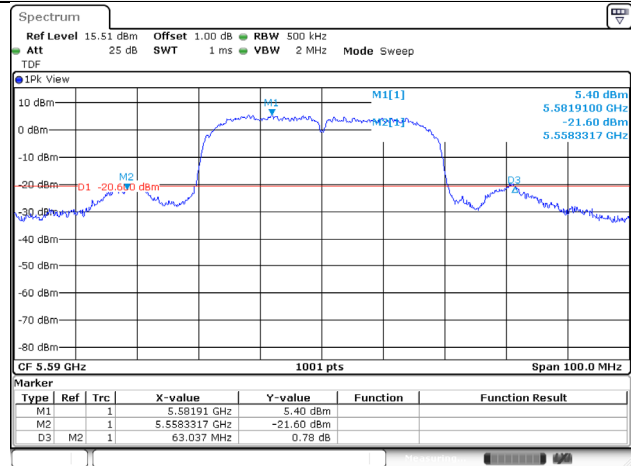
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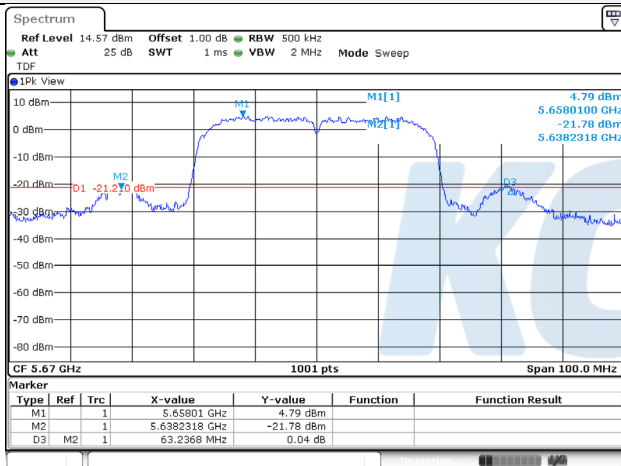
UNII-2C / 802.11n HT40 / Low ch.



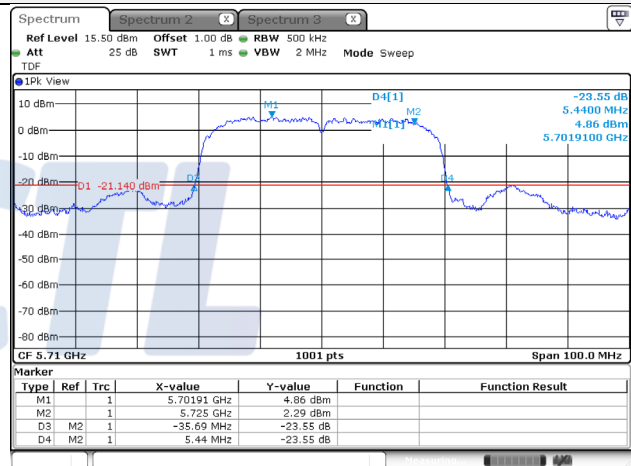
UNII-2C / 802.11n HT40 / Mid ch.



UNII-2C / 802.11n HT40 / High ch.



UNII-2C / 802.11n HT40 / Straddle ch.



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