

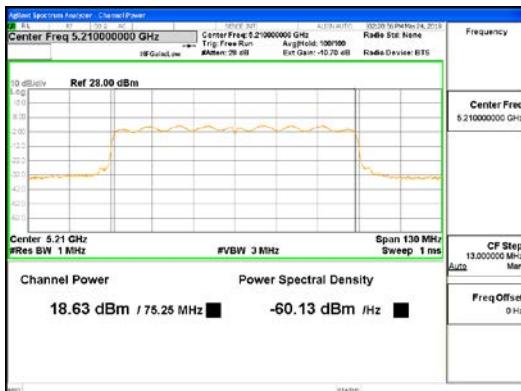


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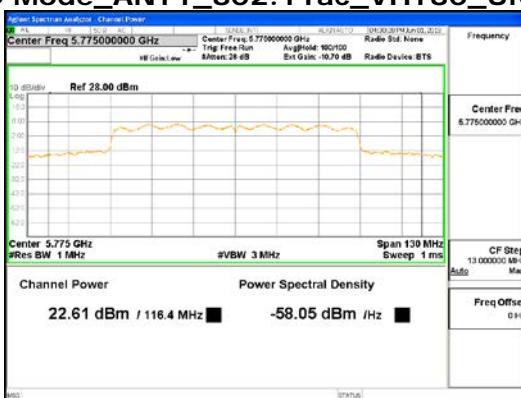
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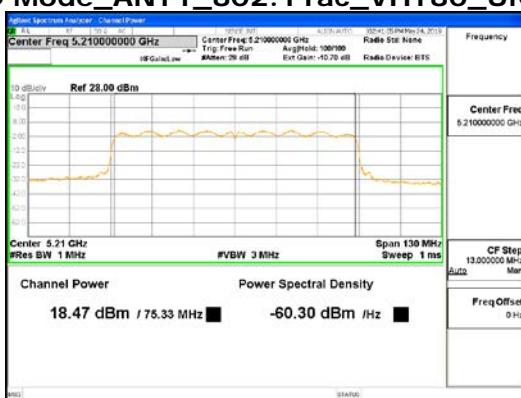
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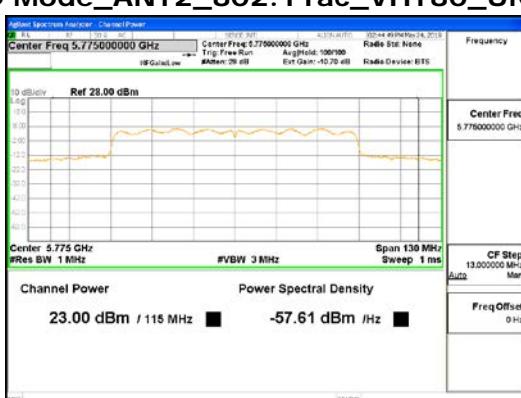
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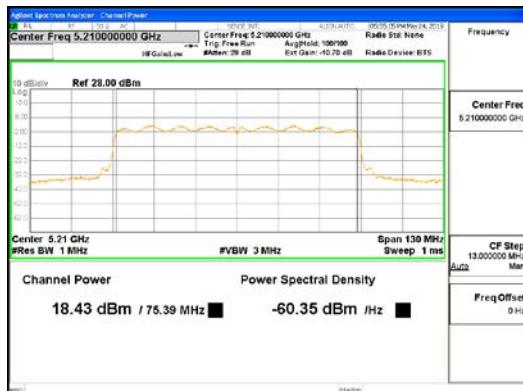
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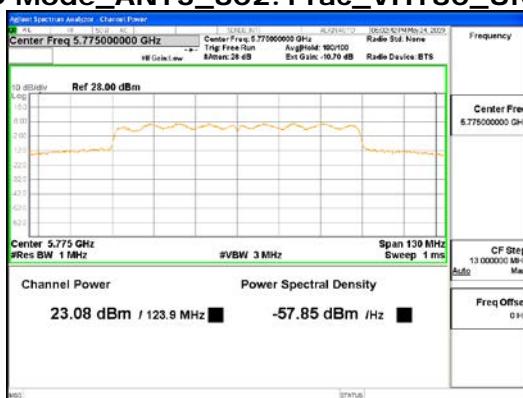
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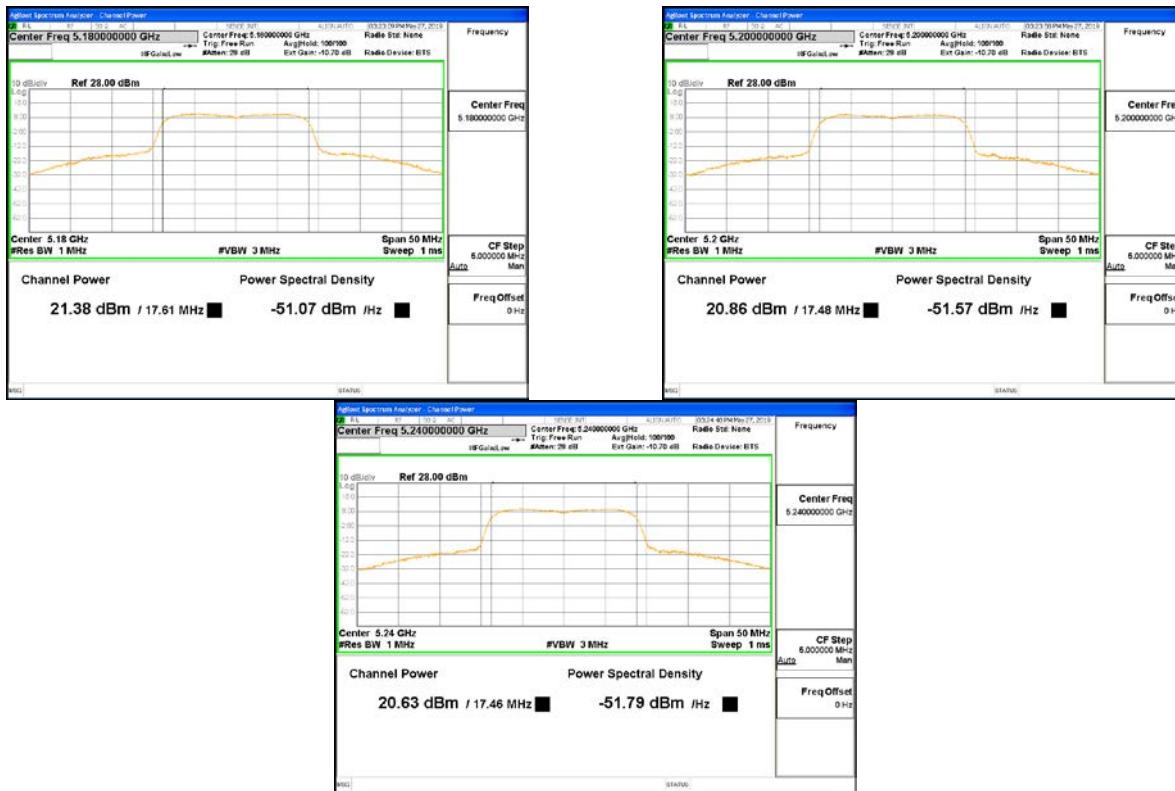
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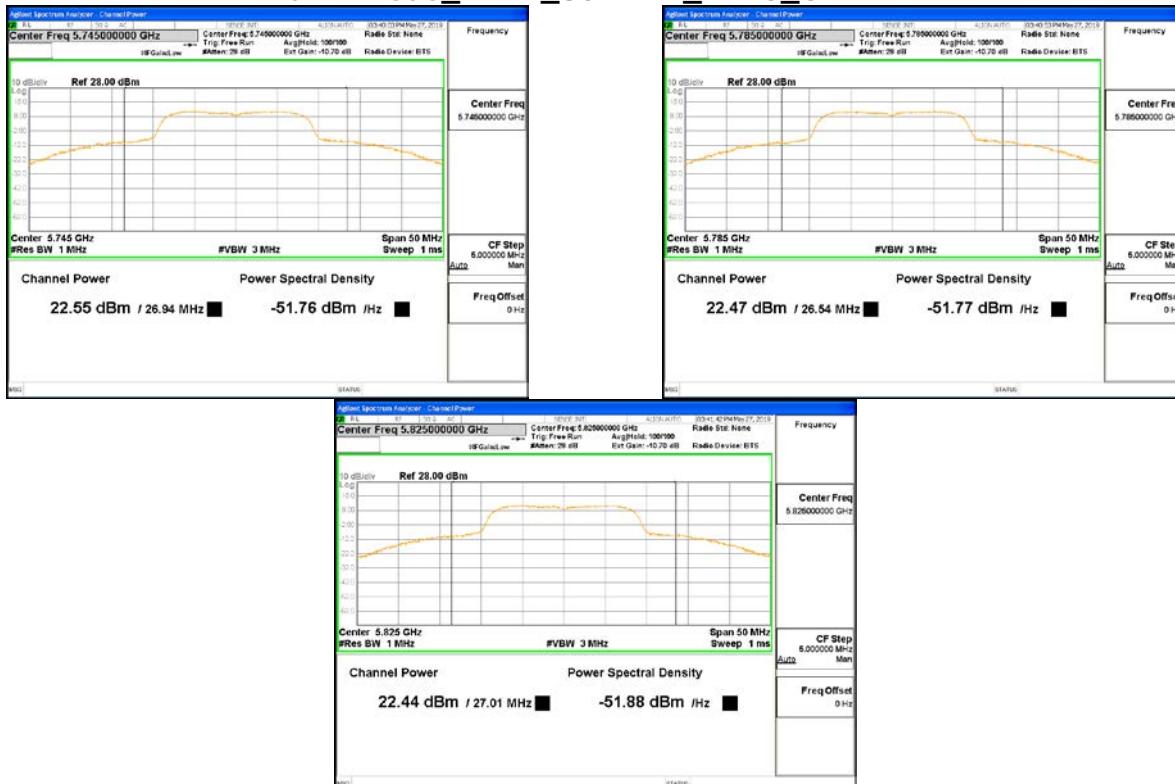
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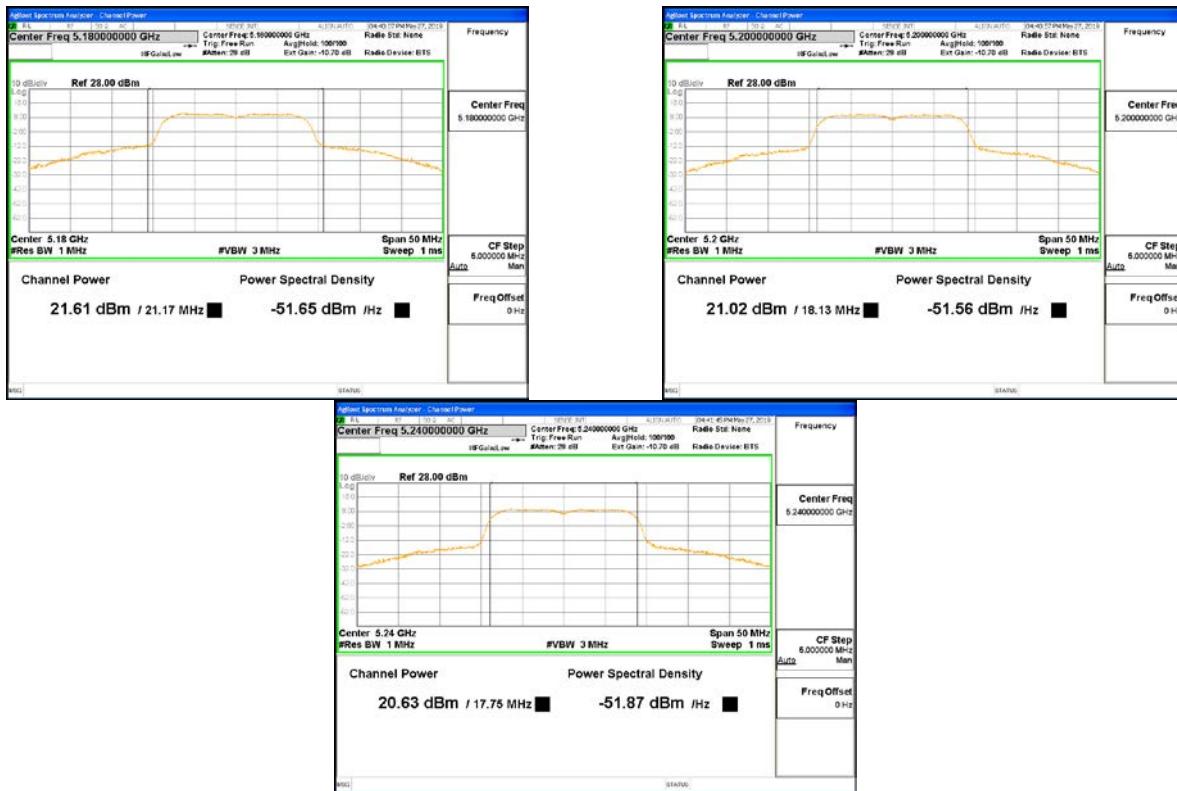
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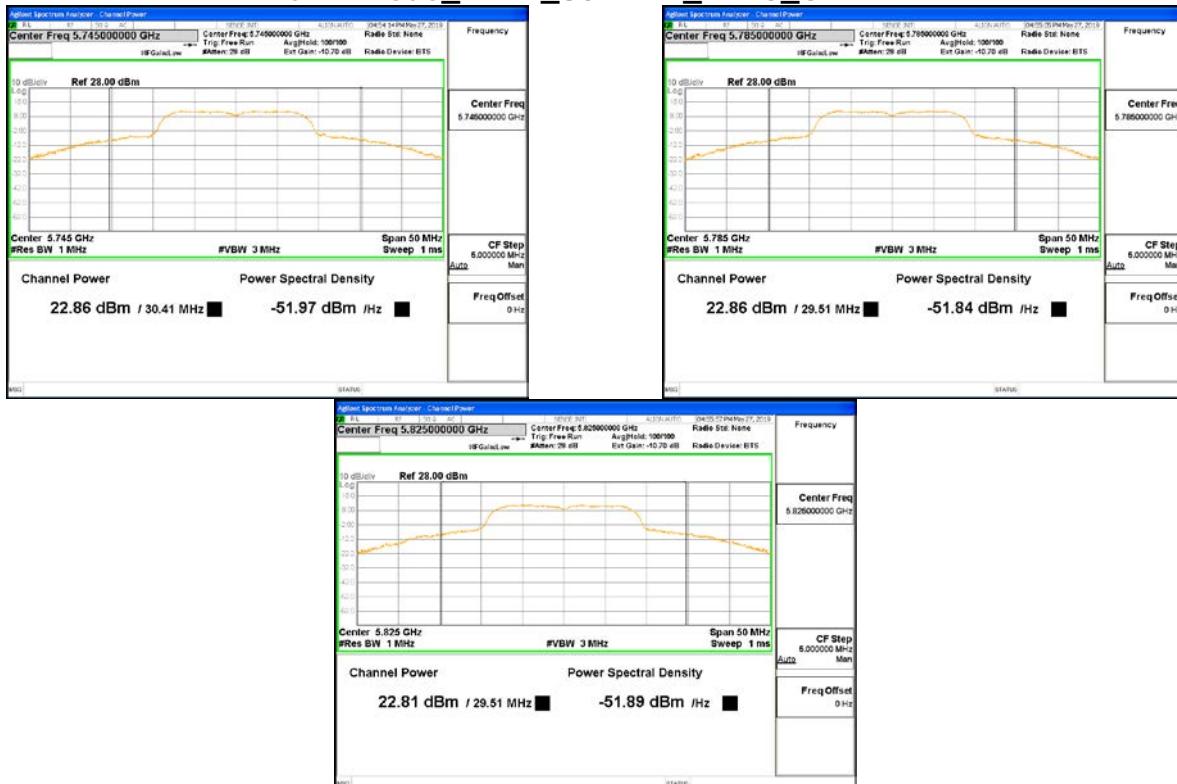
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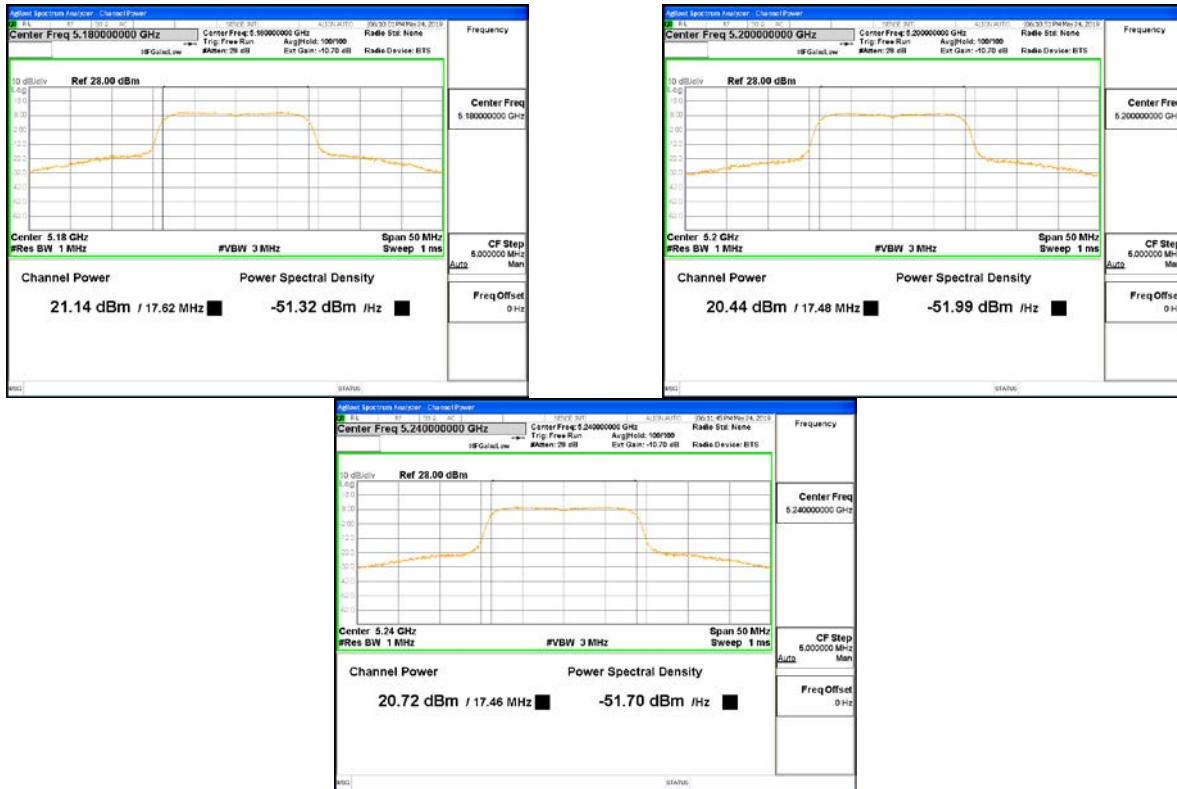
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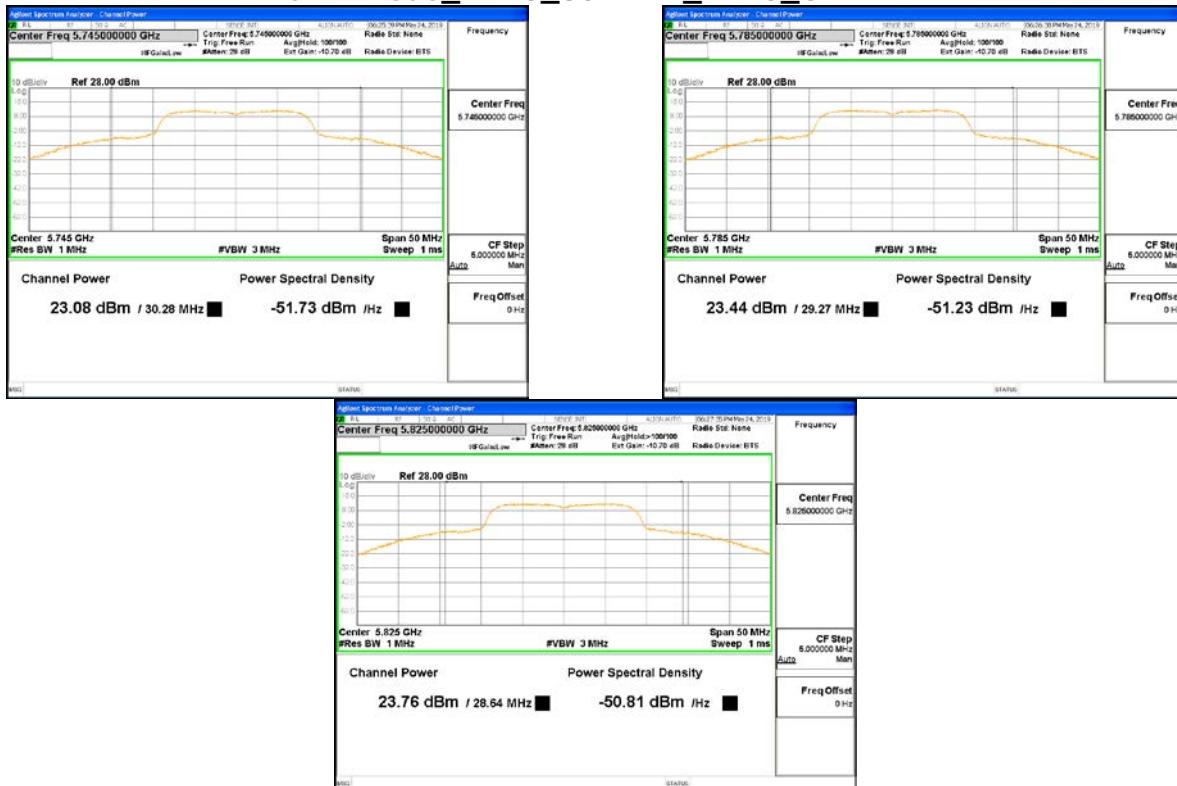
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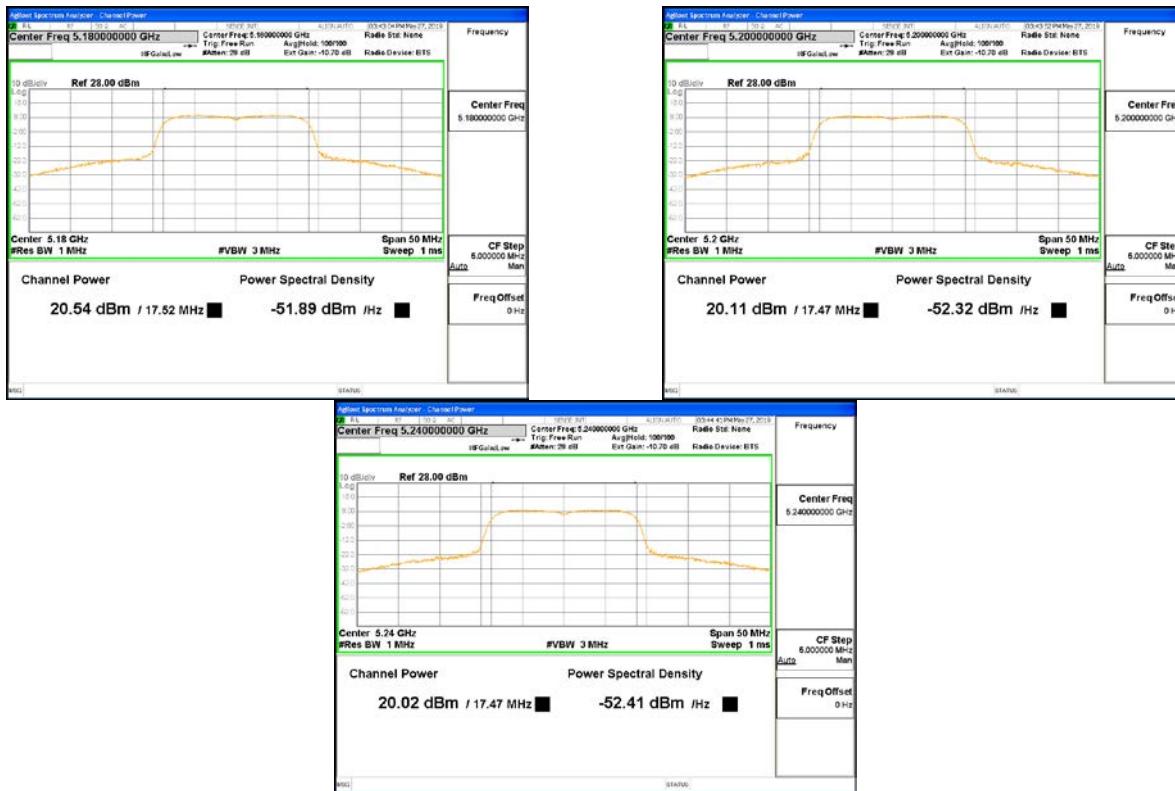
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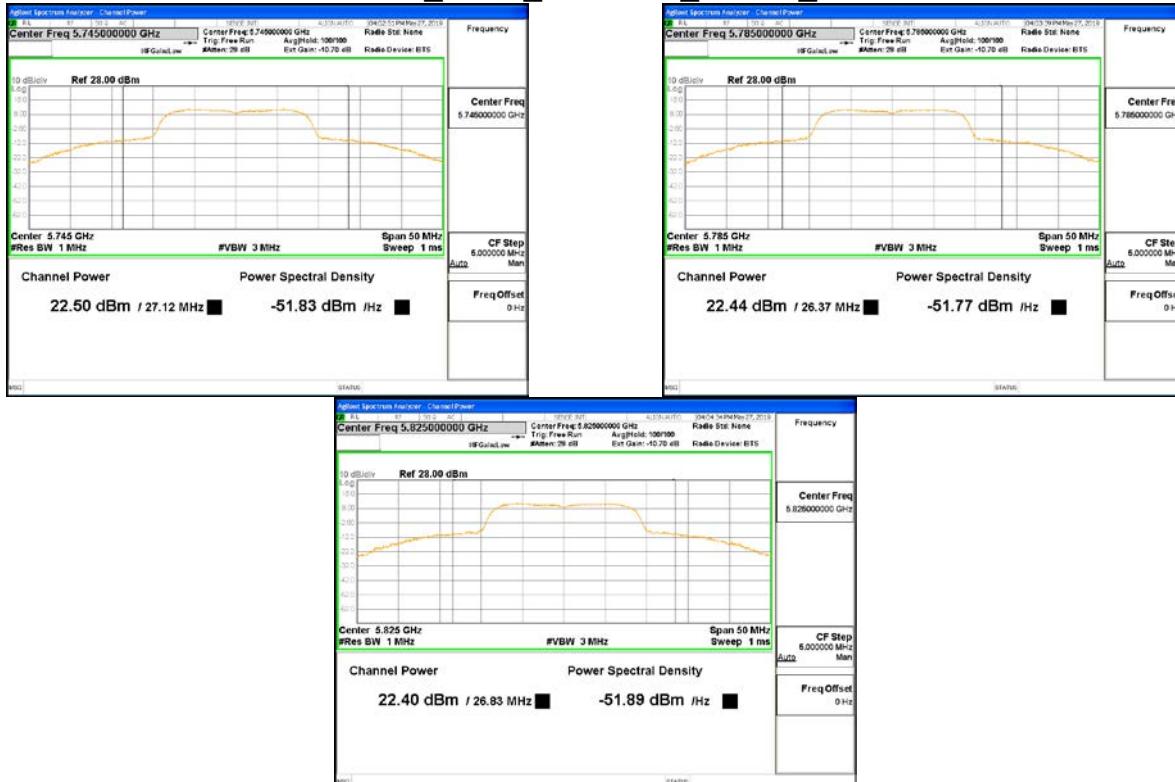
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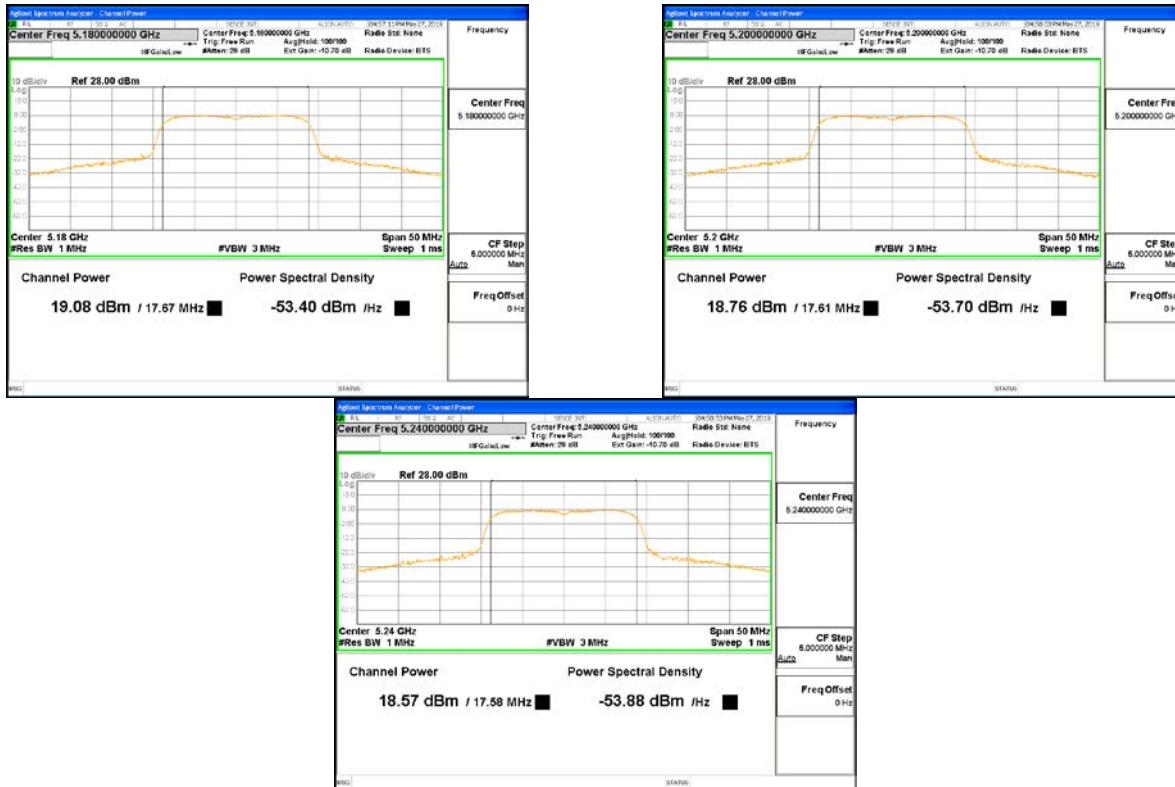
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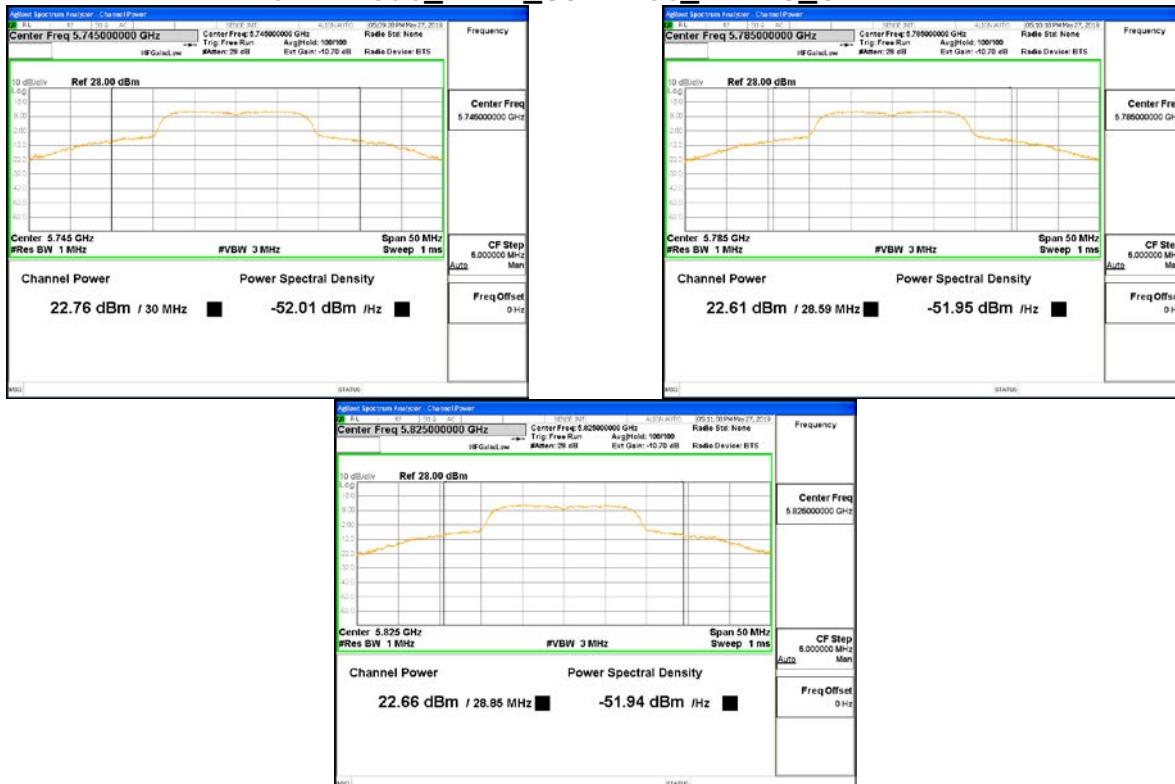
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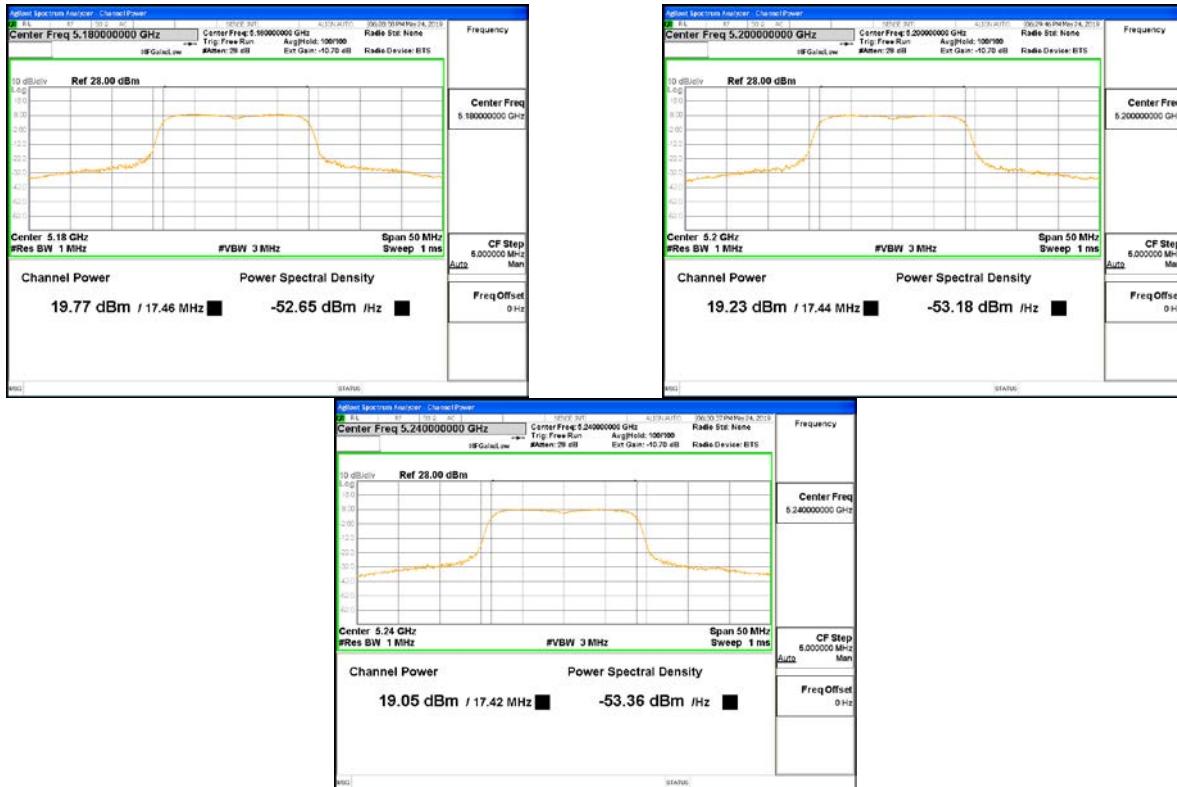
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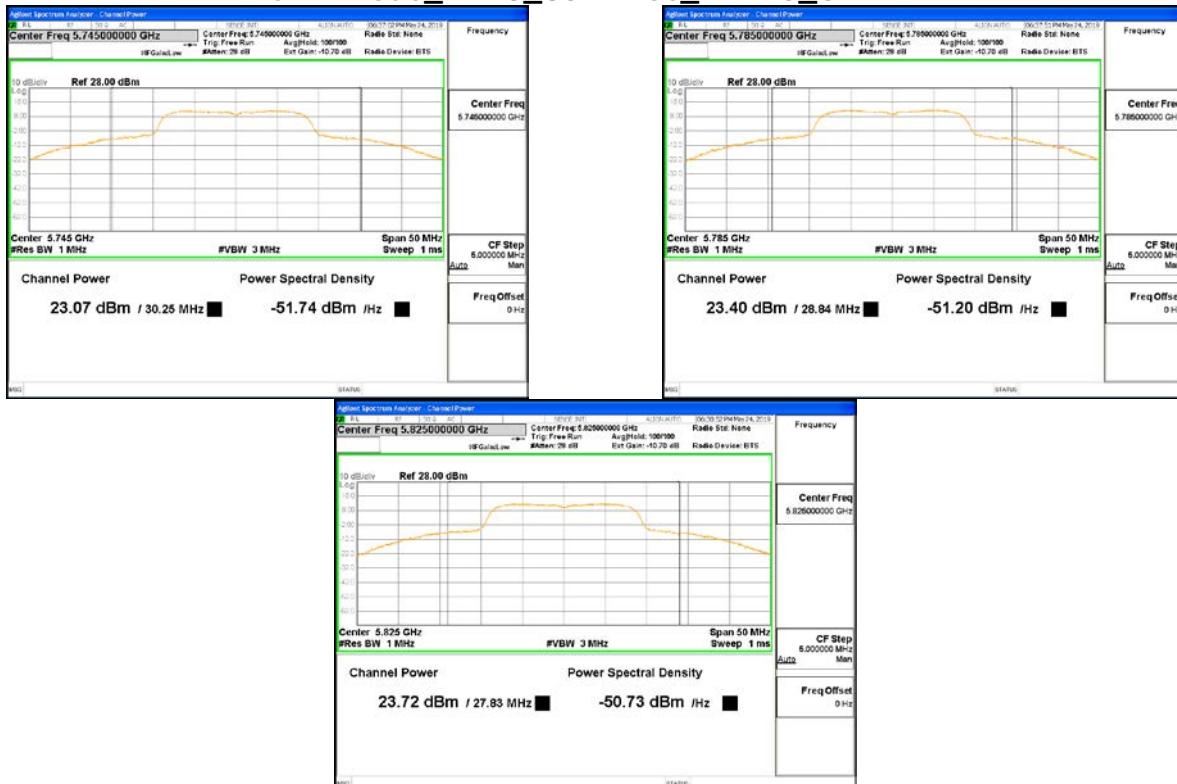
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**SDM Mode\_ANT3\_802.11ac\_VHT20\_UNII-1**



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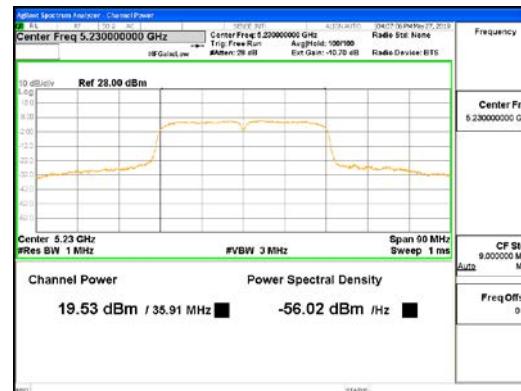
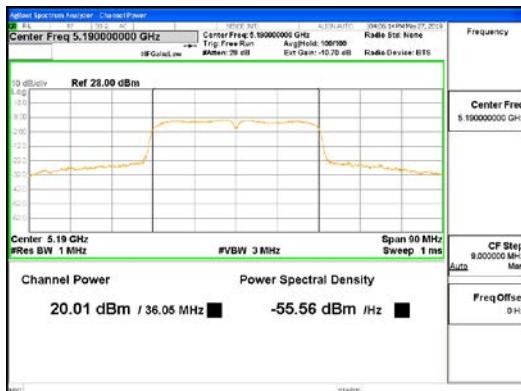


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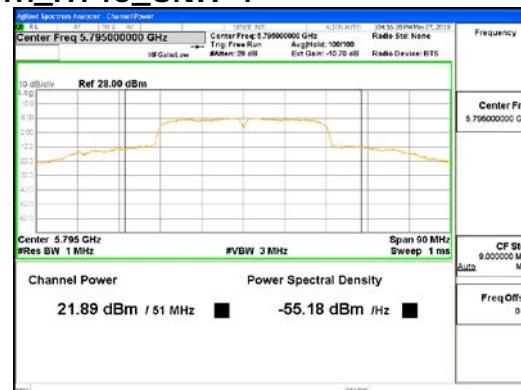
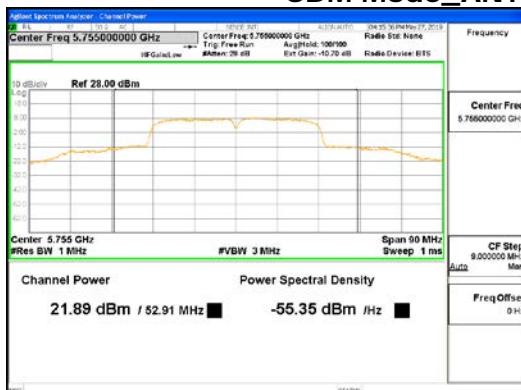
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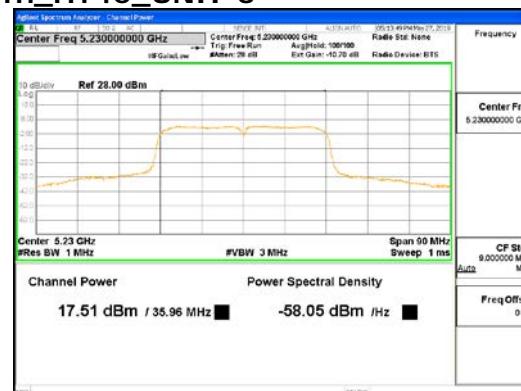
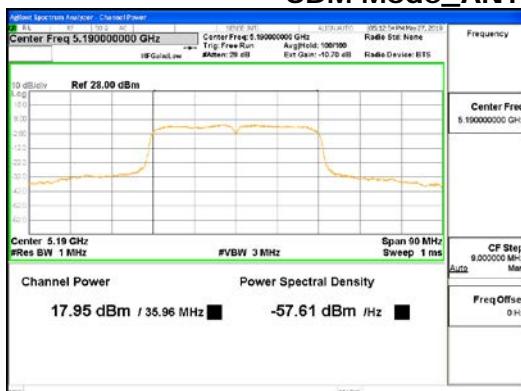
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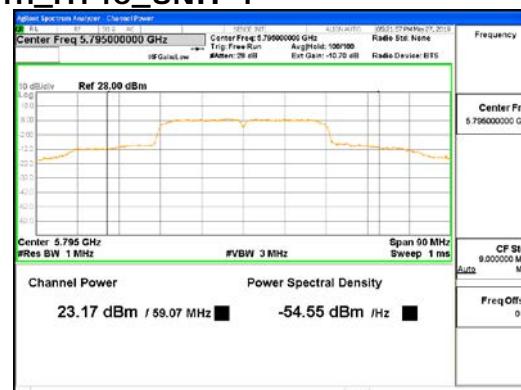
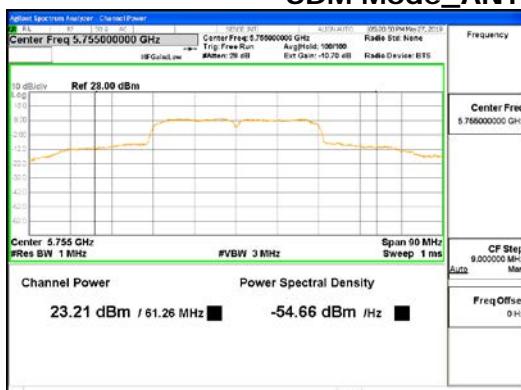
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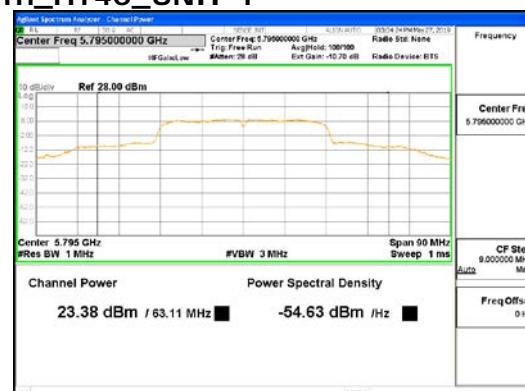
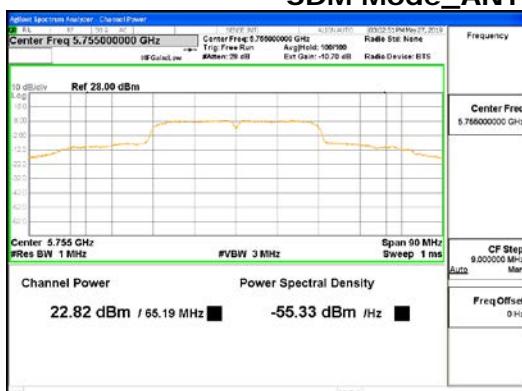
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**SDM Mode\_ANT3\_802.11n\_HT40\_UNII-1**



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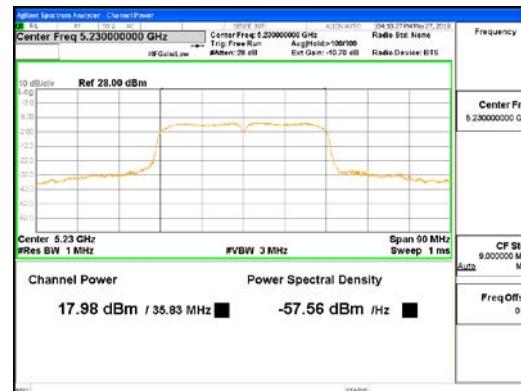
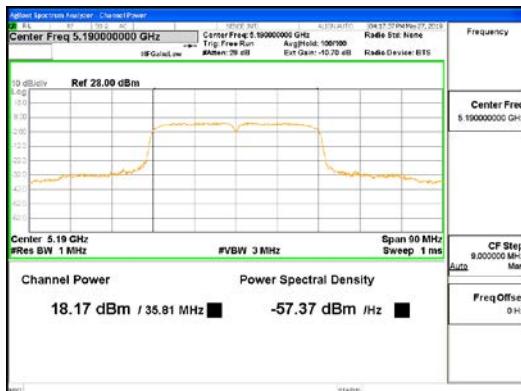


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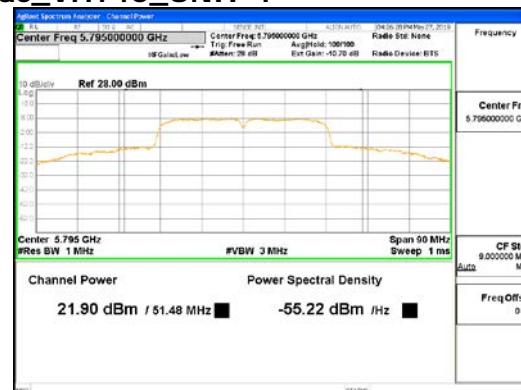
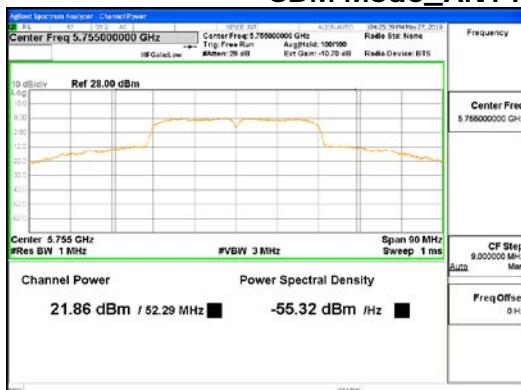
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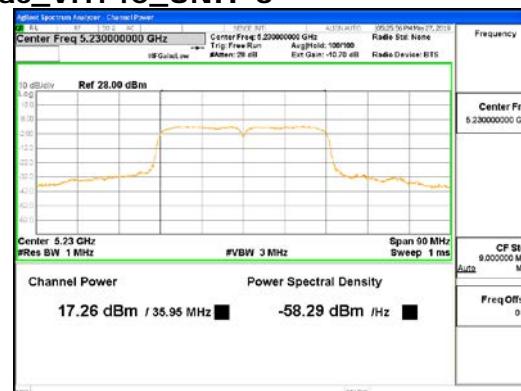
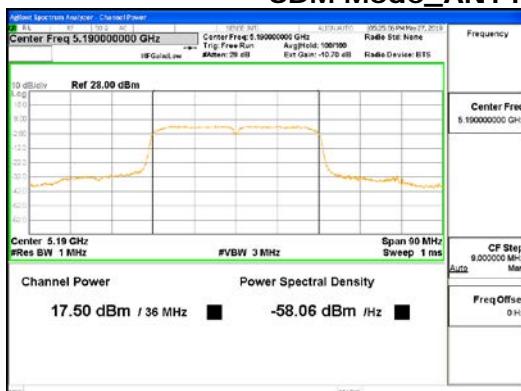
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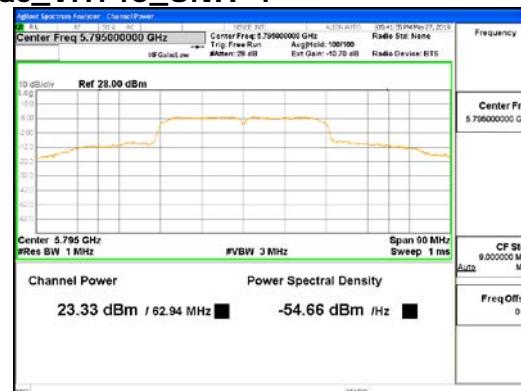
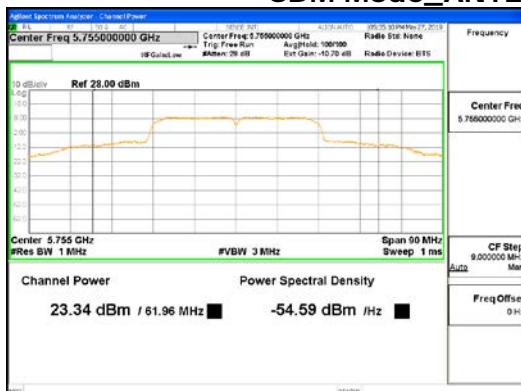
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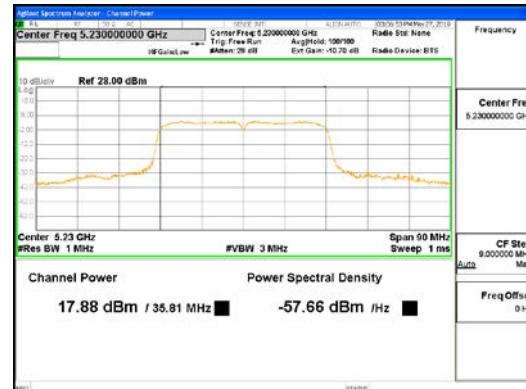
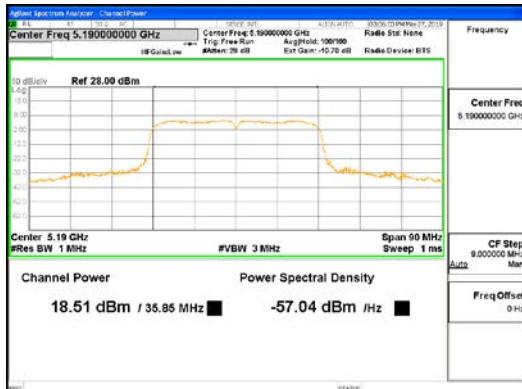
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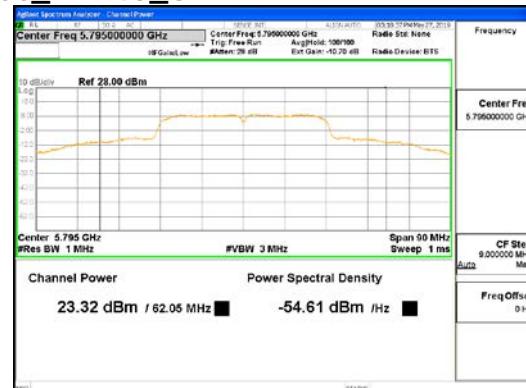
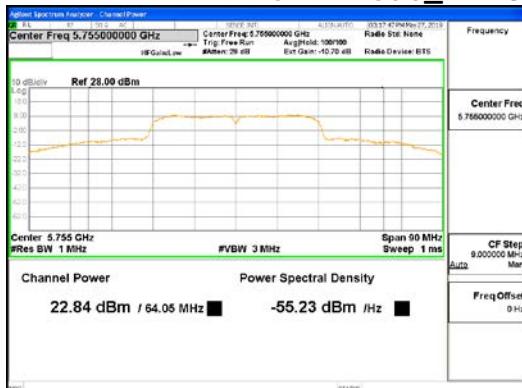
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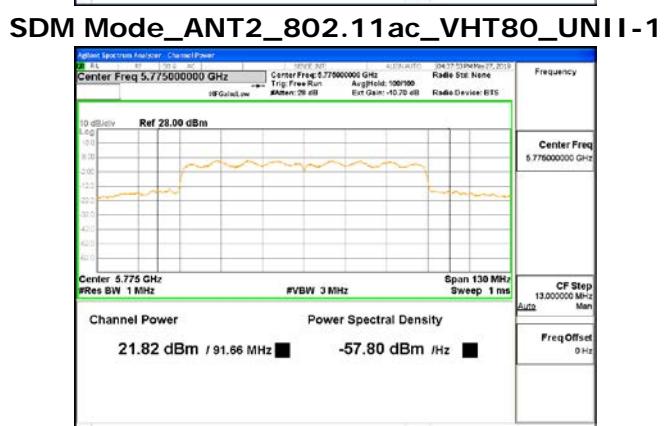
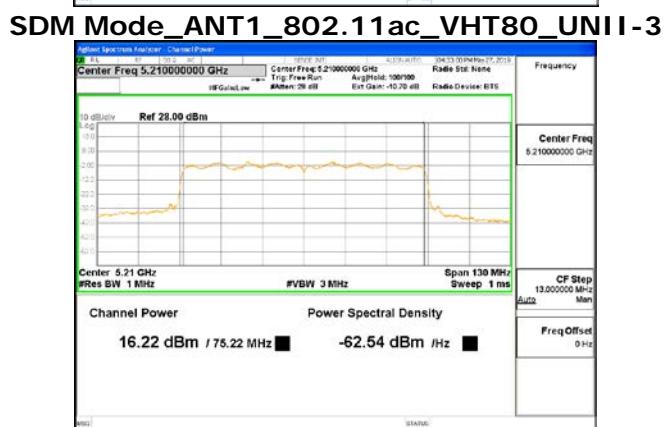
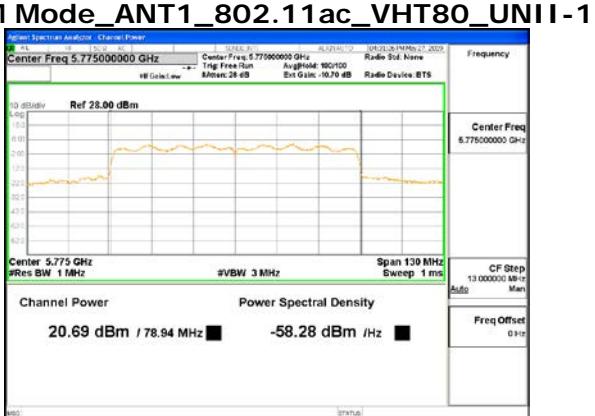
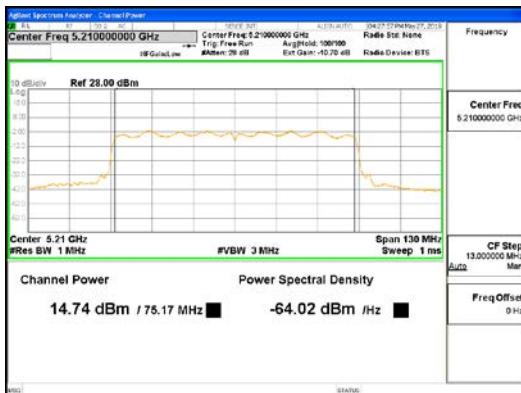


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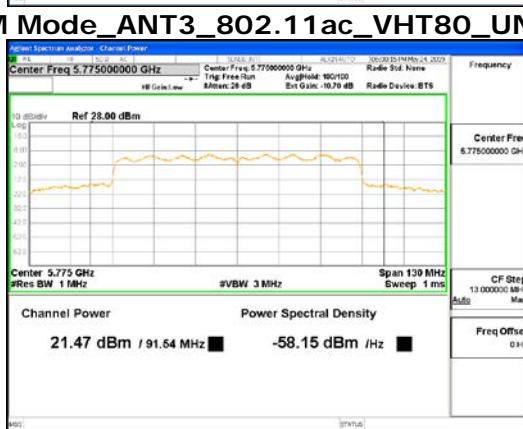
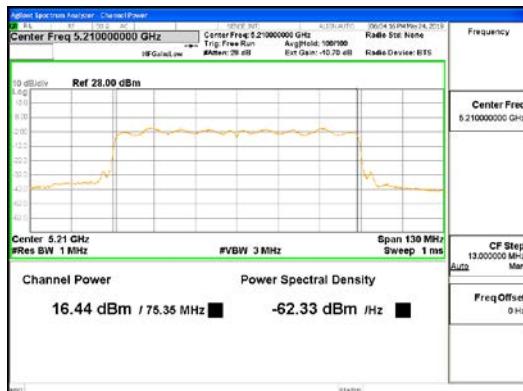




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## 4.4 Power Spectral Density

### Test Procedures

KDB 789033 – Section F (Method SA-2, Maximum Power Spectral Density)  
KDB 662911 D01, D02 (Multiple Transmitter Output)

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

#### Test Settings :

Center frequency = the highest, middle and the lowest channels

- |                                      |                                     |
|--------------------------------------|-------------------------------------|
| a) RBW = 1 MHz, 500 KHz (UNII 3)     | b) VBW = 3 MHz, 1.5 MHz (UNII 3)    |
| c) Sweep time = auto                 | d) Detector = power averaging (rms) |
| e) Trace mode = Average at least 100 |                                     |
| f) Duty cycle factor = $10\log(1/x)$ |                                     |

<b>Test mode</b>		<b>Duty Cycle Factor (dB)</b>
CDD Mode	802.11a	0.12
	802.11n_HT20	0.15
	802.11n_HT40	0.28
	802.11ac_VHT20	0.17
	802.11ac_VHT40	0.33
	802.11ac_VHT80	0.50
SDM Mode	802.11n_HT20	0.29
	802.11n_HT40	0.65
	802.11ac_VHT20	0.41
	802.11ac_VHT40	0.60
	802.11ac_VHT80	1.02



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## Limit

Operating Mode	Band	Mode	ANT Configuration	ANT Gain (dBi)	Limit (dBm)
SISO	UNII 1	802.11a/n/ac	ANT1, ANT2, ANT3	2.00	17.00
	UNII 3				30.00
MIMO (2Tx)	UNII 1	802.11a/n/ac	ANT1 + ANT2	5.01	17.00
	UNII 3				30.00
MIMO (3Tx)	UNII 1	802.11a/n/ac	ANT1 + ANT2 + ANT3	6.77	16.23
	UNII 3				29.23

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## Test Data

### CDD Mode\_ANT1

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11a	5 180	10.36	0.12	10.48	17.00	6.52
	5 200	10.51	0.12	10.63	17.00	6.37
	5 240	10.15	0.12	10.27	17.00	6.73
	5 745	9.61	0.12	9.73	30.00	20.27
	5 785	9.58	0.12	9.7	30.00	20.30
	5 825	9.6	0.12	9.72	30.00	20.28
802.11n _HT20	5 180	10.87	0.15	11.02	17.00	5.98
	5 200	10.54	0.15	10.69	17.00	6.31
	5 240	10.25	0.15	10.40	17.00	6.60
	5 745	9.75	0.15	9.90	30.00	20.10
	5 785	9.72	0.15	9.87	30.00	20.13
	5 825	9.86	0.15	10.01	30.00	19.99
802.11ac _VHT20	5 180	10.43	0.17	10.60	17.00	6.40
	5 200	10.08	0.17	10.25	17.00	6.75
	5 240	10.21	0.17	10.38	17.00	6.62
	5 745	9.91	0.17	10.08	30.00	19.92
	5 785	9.81	0.17	9.98	30.00	20.02
	5 825	9.84	0.17	10.01	30.00	19.99
802.11n _HT40	5 190	6.58	0.28	6.86	17.00	10.14
	5 230	6.23	0.28	6.51	17.00	10.49
	5 755	6.23	0.28	6.51	30.00	23.49
	5 795	6.32	0.28	6.6	30.00	23.40
802.11ac _VHT40	5 190	6.71	0.33	7.04	17.00	9.96
	5 230	6.49	0.33	6.82	17.00	10.18
	5 755	6.38	0.33	6.71	30.00	23.29
	5 795	6.31	0.33	6.64	30.00	23.36
802.11ac _VHT80	5 210	2.43	0.50	2.93	17.00	14.07
	5 775	4.13	0.50	4.63	30.00	25.37
Measurement uncertainty		$\pm 1.5$ dB				

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### CDD Mode\_ANT2

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11a	5 180	10.18	0.12	10.30	17.00	6.70
	5 200	9.95	0.12	10.07	17.00	6.93
	5 240	9.79	0.12	9.91	17.00	7.09
	5 745	10.29	0.12	10.41	30.00	19.59
	5 785	9.96	0.12	10.08	30.00	19.92
	5 825	10.23	0.12	10.35	30.00	19.65
802.11n _HT20	5 180	10.09	0.15	10.24	17.00	6.76
	5 200	9.85	0.15	10.00	17.00	7.00
	5 240	9.49	0.15	9.64	17.00	7.36
	5 745	9.61	0.15	9.76	30.00	20.24
	5 785	9.49	0.15	9.64	30.00	20.36
	5 825	9.42	0.15	9.57	30.00	20.43
802.11ac _VHT20	5 180	9.70	0.17	9.87	17.00	7.13
	5 200	9.37	0.17	9.54	17.00	7.46
	5 240	9.34	0.17	9.51	17.00	7.49
	5 745	9.54	0.17	9.71	30.00	20.29
	5 785	9.37	0.17	9.54	30.00	20.46
	5 825	9.44	0.17	9.61	30.00	20.39
802.11n _HT40	5 190	6.46	0.28	6.74	17.00	10.26
	5 230	6.33	0.28	6.61	17.00	10.39
	5 755	6.74	0.28	7.02	30.00	22.98
	5 795	6.91	0.28	7.19	30.00	22.81
802.11ac _VHT40	5 190	6.52	0.33	6.85	17.00	10.15
	5 230	6.33	0.33	6.66	17.00	10.34
	5 755	6.92	0.33	7.25	30.00	22.75
	5 795	6.91	0.33	7.24	30.00	22.76
802.11ac _VHT80	5 210	2.20	0.50	2.70	17.00	14.30
	5 775	4.23	0.50	4.73	30.00	25.27
Measurement uncertainty		$\pm 1.5$ dB				

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**CDD Mode\_ANT3**

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11a	5 180	10.99	0.12	11.11	17.00	5.89
	5 200	10.34	0.12	10.46	17.00	6.54
	5 240	10.10	0.12	10.22	17.00	6.78
	5 745	9.03	0.12	9.15	30.00	20.85
	5 785	9.63	0.12	9.75	30.00	20.25
	5 825	10.01	0.12	10.13	30.00	19.87
802.11n _HT20	5 180	9.91	0.15	10.06	17.00	6.94
	5 200	9.68	0.15	9.83	17.00	7.17
	5 240	9.46	0.15	9.61	17.00	7.39
	5 745	8.83	0.15	8.98	30.00	21.02
	5 785	9.35	0.15	9.50	30.00	20.50
	5 825	9.63	0.15	9.78	30.00	20.22
802.11ac _VHT20	5 180	9.98	0.17	10.15	17.00	6.85
	5 200	9.93	0.17	10.10	17.00	6.90
	5 240	9.49	0.17	9.66	17.00	7.34
	5 745	8.85	0.17	9.02	30.00	20.98
	5 785	9.80	0.17	9.97	30.00	20.03
	5 825	10.16	0.17	10.33	30.00	19.67
802.11n _HT40	5 190	7.49	0.28	7.77	17.00	9.23
	5 230	7.15	0.28	7.43	17.00	9.57
	5 755	6.17	0.28	6.45	30.00	23.55
	5 795	6.65	0.28	6.93	30.00	23.07
802.11ac _VHT40	5 190	8.11	0.33	8.44	17.00	8.56
	5 230	7.49	0.33	7.82	17.00	9.18
	5 755	6.29	0.33	6.62	30.00	23.38
	5 795	6.87	0.33	7.20	30.00	22.80
802.11ac _VHT80	5 210	2.24	0.50	2.74	17.00	14.26
	5 775	4.26	0.50	4.76	30.00	25.24
Measurement uncertainty		$\pm 1.5$ dB				

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**CDD Mode\_ANT1 + ANT2**

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11a	5 180	13.28	0.12	13.40	17.00	3.60
	5 200	13.25	0.12	13.37	17.00	3.63
	5 240	12.98	0.12	13.10	17.00	3.90
	5 745	12.97	0.12	13.09	30.00	16.91
	5 785	12.78	0.12	12.90	30.00	17.10
	5 825	12.94	0.12	13.06	30.00	16.94
802.11n _HT20	5 180	13.51	0.15	13.66	17.00	3.34
	5 200	13.22	0.15	13.37	17.00	3.63
	5 240	12.90	0.15	13.05	17.00	3.95
	5 745	12.69	0.15	12.84	30.00	17.16
	5 785	12.62	0.15	12.77	30.00	17.23
	5 825	12.66	0.15	12.81	30.00	17.19
802.11ac _VHT20	5 180	13.09	0.17	13.26	17.00	3.74
	5 200	12.75	0.17	12.92	17.00	4.08
	5 240	12.81	0.17	12.98	17.00	4.02
	5 745	12.74	0.17	12.91	30.00	17.09
	5 785	12.61	0.17	12.78	30.00	17.22
	5 825	12.65	0.17	12.82	30.00	17.18
802.11n _HT40	5 190	9.53	0.28	9.81	17.00	7.19
	5 230	9.29	0.28	9.57	17.00	7.43
	5 755	9.50	0.28	9.78	30.00	20.22
	5 795	9.64	0.28	9.92	30.00	20.08
802.11ac _VHT40	5 190	9.63	0.33	9.96	17.00	7.04
	5 230	9.42	0.33	9.75	17.00	7.25
	5 755	9.67	0.33	10.00	30.00	20.00
	5 795	9.63	0.33	9.96	30.00	20.04
802.11ac _VHT80	5 210	5.33	0.50	5.83	17.00	11.17
	5 775	7.19	0.50	7.69	30.00	22.31
Measurement uncertainty		$\pm 1.5$ dB				

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**CDD Mode\_ANT1 + ANT2 + ANT3**

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11a	5 180	15.30	0.12	15.42	16.23	0.81
	5 200	15.04	0.12	15.16	16.23	1.07
	5 240	14.79	0.12	14.91	16.23	1.32
	5 745	14.45	0.12	14.57	29.23	14.66
	5 785	14.50	0.12	14.62	29.23	14.61
	5 825	14.73	0.12	14.85	29.23	14.38
802.11n _HT20	5 180	15.08	0.15	15.23	16.23	1.00
	5 200	14.81	0.15	14.96	16.23	1.27
	5 240	14.52	0.15	14.67	16.23	1.56
	5 745	14.19	0.15	14.34	29.23	14.89
	5 785	14.29	0.15	14.44	29.23	14.79
	5 825	14.41	0.15	14.56	29.23	14.67
802.11ac _VHT20	5 180	14.82	0.17	14.99	16.23	1.24
	5 200	14.58	0.17	14.75	16.23	1.48
	5 240	14.47	0.17	14.64	16.23	1.59
	5 745	14.23	0.17	14.40	29.23	14.83
	5 785	14.44	0.17	14.61	29.23	14.62
	5 825	14.59	0.17	14.76	29.23	14.47
802.11n _HT40	5 190	11.64	0.28	11.92	16.23	4.31
	5 230	11.36	0.28	11.64	16.23	4.59
	5 755	11.16	0.28	11.44	29.23	17.79
	5 795	11.40	0.28	11.68	29.23	17.55
802.11ac _VHT40	5 190	11.94	0.33	12.27	16.23	3.96
	5 230	11.57	0.33	11.90	16.23	4.33
	5 755	11.31	0.33	11.64	29.23	17.59
	5 795	11.48	0.33	11.81	29.23	17.42
802.11ac _VHT80	5 210	7.06	0.50	7.56	16.23	8.67
	5 775	8.98	0.50	9.48	29.23	19.75
Measurement uncertainty		$\pm 1.5$ dB				

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**SDM Mode\_ANT1**

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11n _HT20	5 180	10.37	0.29	10.66	17.00	6.34
	5 200	10.01	0.29	10.30	17.00	6.70
	5 240	9.73	0.29	10.02	17.00	6.98
	5 745	8.93	0.29	9.22	30.00	20.78
	5 785	8.77	0.29	9.06	30.00	20.94
	5 825	8.91	0.29	9.20	30.00	20.80
802.11ac _VHT20	5 180	9.57	0.41	9.98	17.00	7.02
	5 200	9.34	0.41	9.75	17.00	7.25
	5 240	9.18	0.41	9.59	17.00	7.41
	5 745	9.12	0.41	9.53	30.00	20.47
	5 785	8.85	0.41	9.26	30.00	20.74
	5 825	8.54	0.41	8.95	30.00	21.05
802.11n _HT40	5 190	6.33	0.65	6.98	17.00	10.02
	5 230	5.65	0.65	6.3	17.00	10.70
	5 755	5.31	0.65	5.96	30.00	24.04
	5 795	5.47	0.65	6.12	30.00	23.88
802.11ac _VHT40	5 190	4.30	0.60	4.9	17.00	12.10
	5 230	4.35	0.60	4.95	17.00	12.05
	5 755	5.15	0.60	5.75	30.00	24.25
	5 795	5.25	0.60	5.85	30.00	24.15
802.11ac _VHT80	5 210	-0.97	1.02	0.05	17.00	16.95
	5 775	2.28	1.02	3.3	30.00	26.70
Measurement uncertainty		$\pm 1.5$ dB				

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### SDM Mode\_ANT2

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11n _HT20	5 180	10.62	0.29	10.91	17.00	6.09
	5 200	10.30	0.29	10.59	17.00	6.41
	5 240	9.80	0.29	10.09	17.00	6.91
	5 745	9.76	0.29	10.05	30.00	19.95
	5 785	9.17	0.29	9.46	30.00	20.54
	5 825	9.29	0.29	9.58	30.00	20.42
802.11ac _VHT20	5 180	8.24	0.41	8.65	17.00	8.35
	5 200	7.89	0.41	8.30	17.00	8.70
	5 240	7.96	0.41	8.37	17.00	8.63
	5 745	9.11	0.41	9.52	30.00	20.48
	5 785	8.85	0.41	9.26	30.00	20.74
	5 825	9.01	0.41	9.42	30.00	20.58
802.11n _HT40	5 190	4.05	0.65	4.70	17.00	12.30
	5 230	3.52	0.65	4.17	17.00	12.83
	5 755	6.46	0.65	7.11	30.00	22.89
	5 795	6.49	0.65	7.14	30.00	22.86
802.11ac _VHT40	5 190	3.40	0.60	4.00	17.00	13.00
	5 230	3.32	0.60	3.92	17.00	13.08
	5 755	6.55	0.60	7.15	30.00	22.85
	5 795	6.46	0.60	7.06	30.00	22.94
802.11ac _VHT80	5 210	0.45	1.02	1.47	17.00	15.53
	5 775	3.54	1.02	4.56	30.00	25.44
Measurement uncertainty		$\pm 1.5$ dB				

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### SDM Mode\_ANT3

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11n _HT20	5 180	10.25	0.29	10.54	17.00	6.46
	5 200	9.76	0.29	10.05	17.00	6.95
	5 240	10.10	0.29	10.39	17.00	6.61
	5 745	9.65	0.29	9.94	30.00	20.06
	5 785	9.72	0.29	10.01	30.00	19.99
	5 825	10.11	0.29	10.40	30.00	19.60
802.11ac _VHT20	5 180	8.97	0.41	9.38	17.00	7.62
	5 200	8.47	0.41	8.88	17.00	8.12
	5 240	8.18	0.41	8.59	17.00	8.41
	5 745	9.53	0.41	9.94	30.00	20.06
	5 785	9.75	0.41	10.16	30.00	19.84
	5 825	9.80	0.41	10.21	30.00	19.79
802.11n _HT40	5 190	5.54	0.65	6.19	17.00	10.81
	5 230	4.88	0.65	5.53	17.00	11.47
	5 755	6.18	0.65	6.83	30.00	23.17
	5 795	6.97	0.65	7.62	30.00	22.38
802.11ac _VHT40	5 190	4.45	0.60	5.05	17.00	11.95
	5 230	4.08	0.60	4.68	17.00	12.32
	5 755	5.92	0.60	6.52	30.00	23.48
	5 795	7.11	0.60	7.71	30.00	22.29
802.11ac _VHT80	5 210	0.04	1.02	1.06	17.00	15.94
	5 775	3.13	1.02	4.15	30.00	25.85
Measurement uncertainty		$\pm 1.5$ dB				

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### SDM Mode\_ANT1 + ANT2

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11n _HT20	5 180	13.51	0.29	13.80	17.00	3.20
	5 200	13.17	0.29	13.46	17.00	3.54
	5 240	12.78	0.29	13.07	17.00	3.93
	5 745	12.38	0.29	12.67	30.00	17.33
	5 785	11.98	0.29	12.27	30.00	17.73
	5 825	12.11	0.29	12.40	30.00	17.60
802.11ac _VHT20	5 180	11.97	0.41	12.38	17.00	4.62
	5 200	11.69	0.41	12.10	17.00	4.90
	5 240	11.62	0.41	12.03	17.00	4.97
	5 745	12.13	0.41	12.54	30.00	17.46
	5 785	11.86	0.41	12.27	30.00	17.73
	5 825	11.79	0.41	12.20	30.00	17.80
802.11n _HT40	5 190	8.35	0.65	9.00	17.00	8.00
	5 230	7.72	0.65	8.37	17.00	8.63
	5 755	8.93	0.65	9.58	30.00	20.42
	5 795	9.02	0.65	9.67	30.00	20.33
802.11ac _VHT40	5 190	6.88	0.60	7.48	17.00	9.52
	5 230	6.88	0.60	7.48	17.00	9.52
	5 755	8.92	0.60	9.52	30.00	20.48
	5 795	8.91	0.60	9.51	30.00	20.49
802.11ac _VHT80	5 210	2.81	1.02	3.83	17.00	13.17
	5 775	5.97	1.02	6.99	30.00	23.01
Measurement uncertainty		$\pm 1.5$ dB				

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**SDM Mode\_ANT1 + ANT2 + ANT3**

Test Mode	Frequency (MHz)	Measured Power Density (dBm)	Duty cycle Factor (dB)	Result Output Power (dBm)	Limit (dBm)	Margin (dB)
802.11n _HT20	5 180	15.19	0.29	15.48	16.23	0.75
	5 200	14.80	0.29	15.09	16.23	1.14
	5 240	14.65	0.29	14.94	16.23	1.29
	5 745	14.23	0.29	14.52	29.23	14.71
	5 785	14.01	0.29	14.30	29.23	14.93
	5 825	14.24	0.29	14.53	29.23	14.70
802.11ac _VHT20	5 180	13.73	0.41	14.14	16.23	2.09
	5 200	13.38	0.41	13.79	16.23	2.44
	5 240	13.24	0.41	13.65	16.23	2.58
	5 745	14.03	0.41	14.44	29.23	14.79
	5 785	13.94	0.41	14.35	29.23	14.88
	5 825	13.92	0.41	14.33	29.23	14.90
802.11n _HT40	5 190	10.18	0.65	10.83	16.23	5.40
	5 230	9.54	0.65	10.19	16.23	6.04
	5 755	10.78	0.65	11.43	29.23	17.80
	5 795	11.13	0.65	11.78	29.23	17.45
802.11ac _VHT40	5 190	8.85	0.60	9.45	16.23	6.78
	5 230	8.71	0.60	9.31	16.23	6.92
	5 755	10.68	0.60	11.28	29.23	17.95
	5 795	11.11	0.60	11.71	29.23	17.52
802.11ac _VHT80	5 210	4.65	1.02	5.67	16.23	10.56
	5 775	7.79	1.02	8.81	29.23	20.42
Measurement uncertainty		$\pm 1.5$ dB				

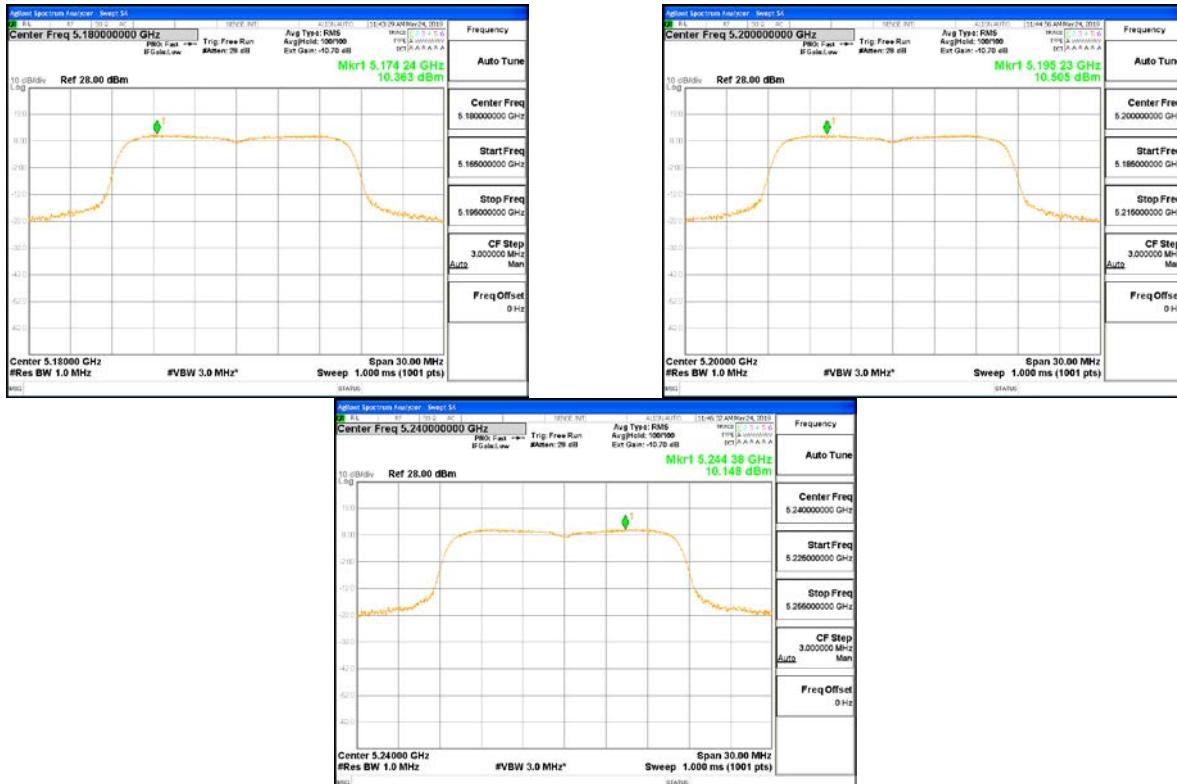
See next pages for actual measured spectrum plots.



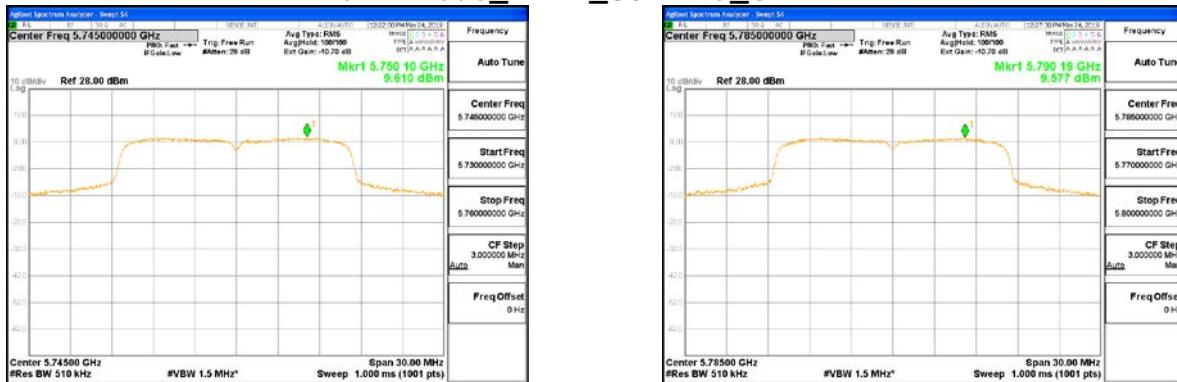
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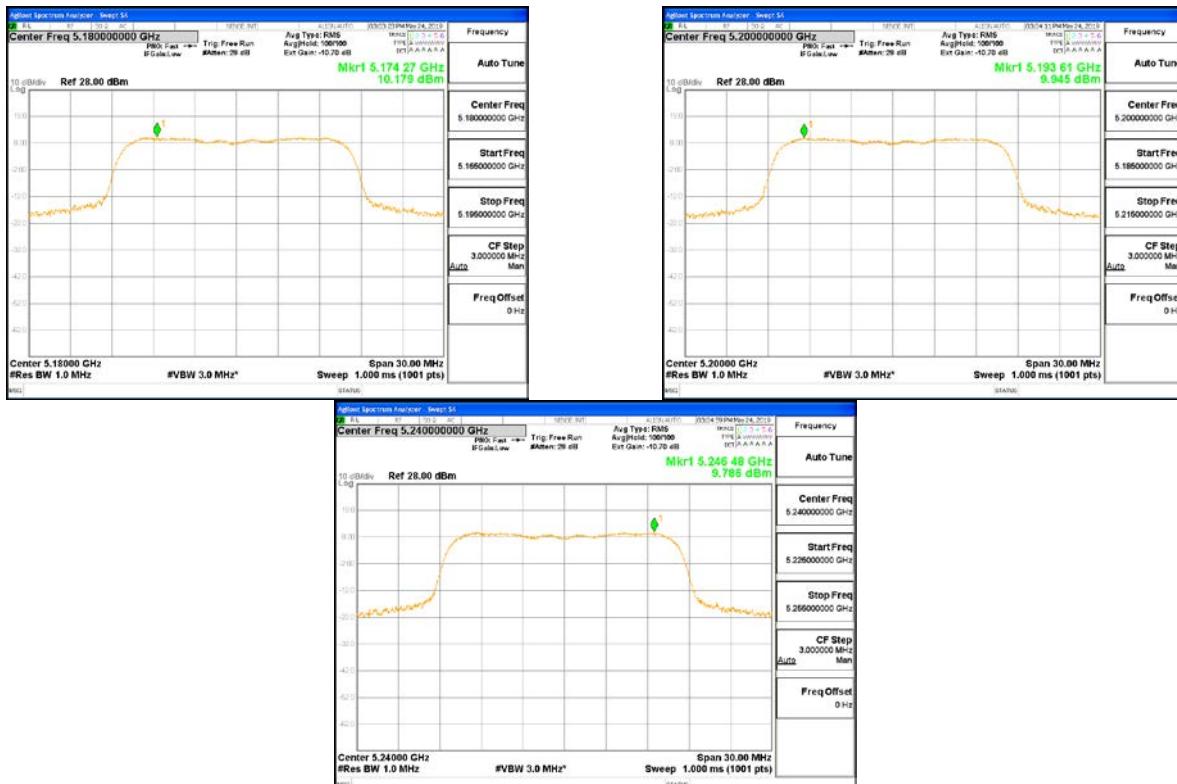
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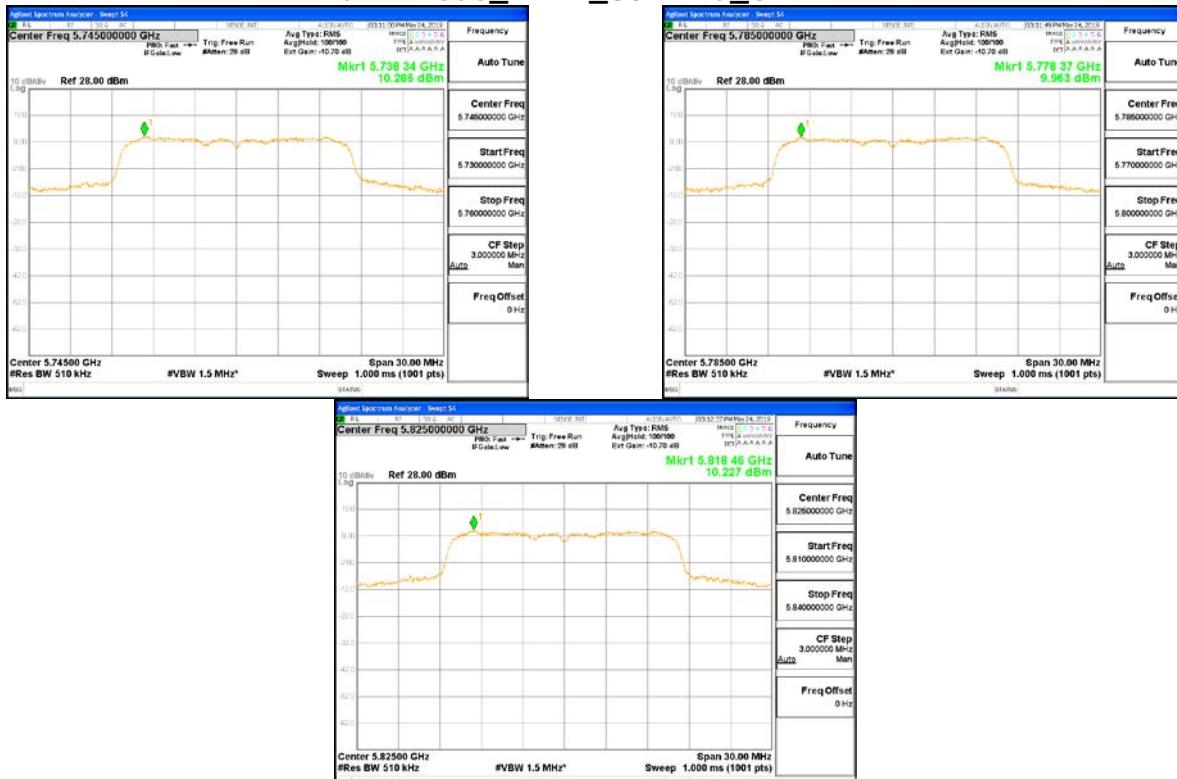
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### CDD Mode\_ANT1\_802.11a\_UNII-3



CDD Mode\_ANT2\_802.11a\_UNII-1



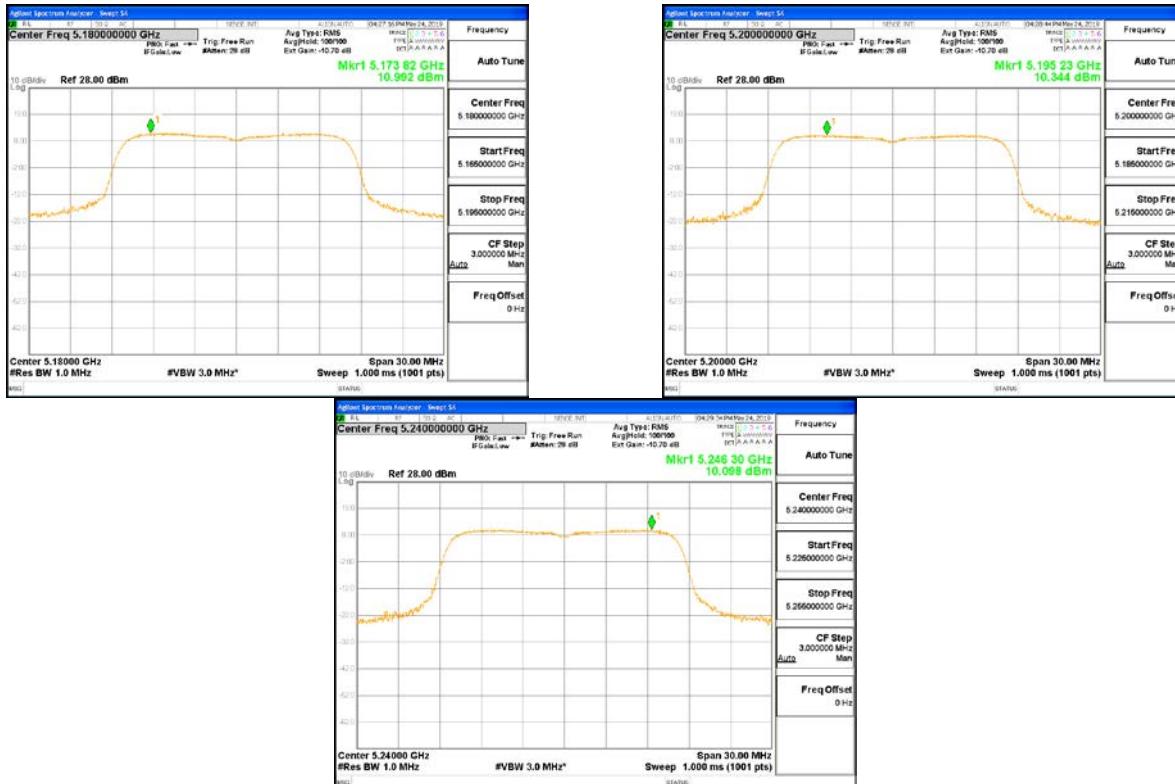
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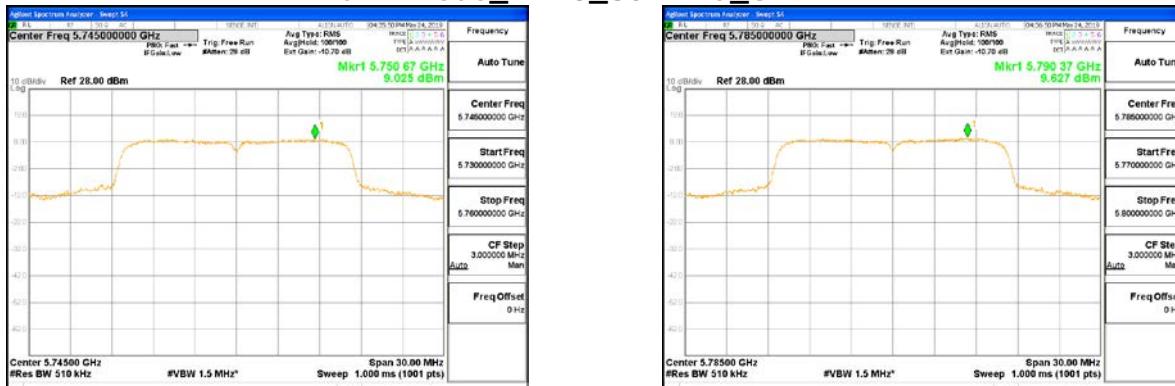
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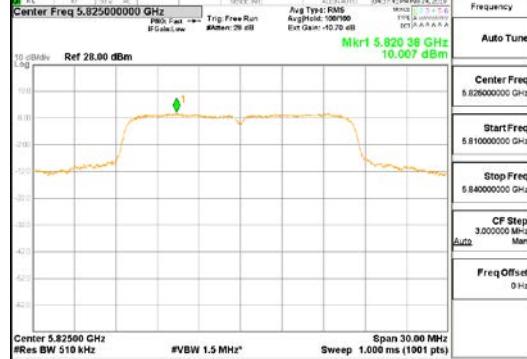
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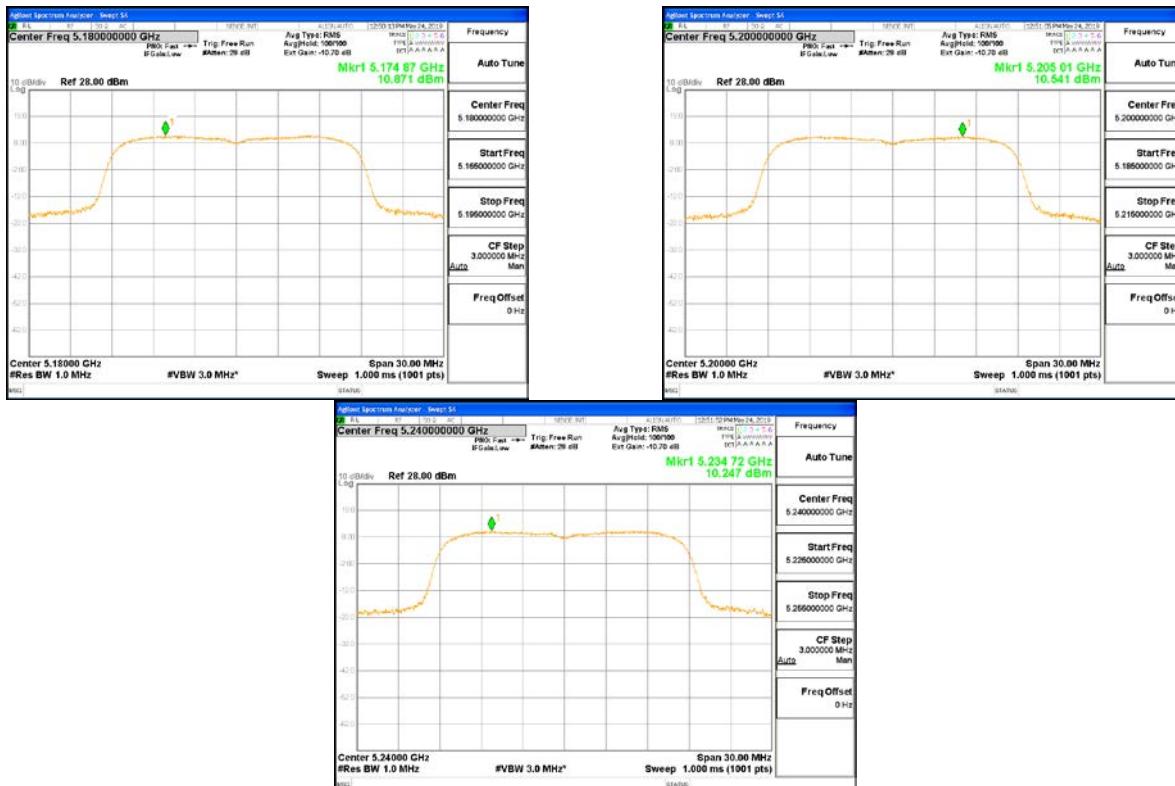


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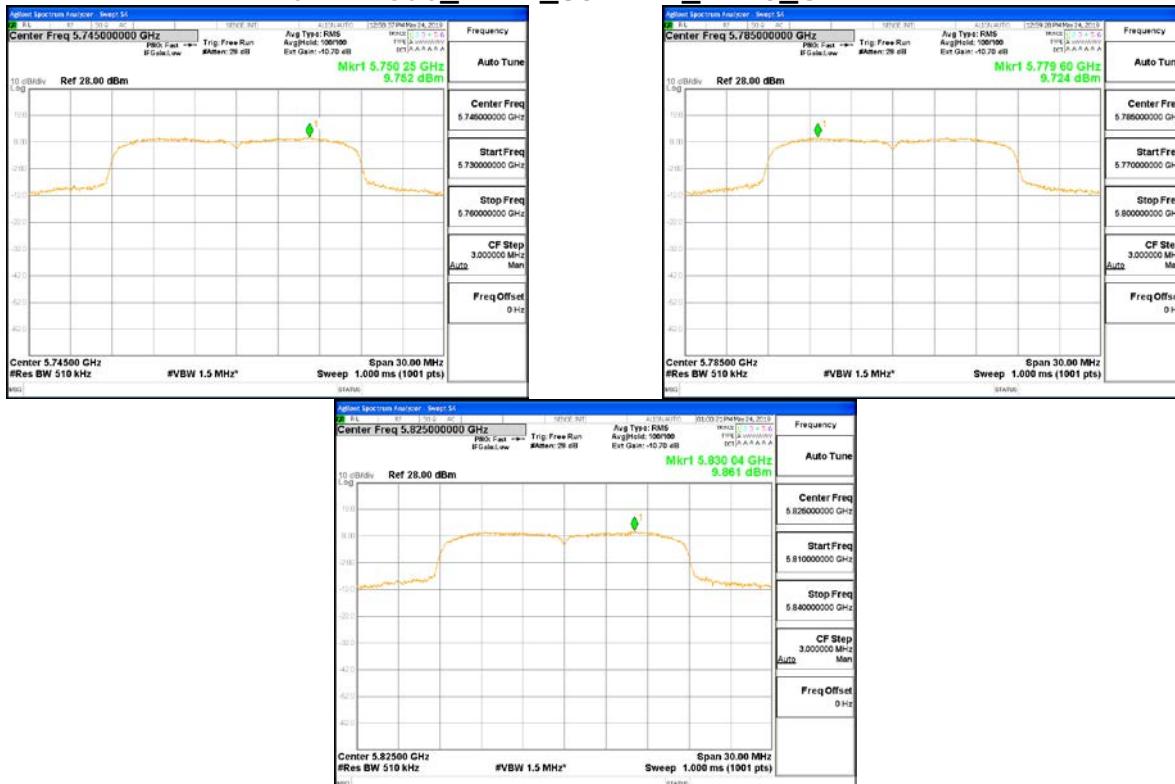


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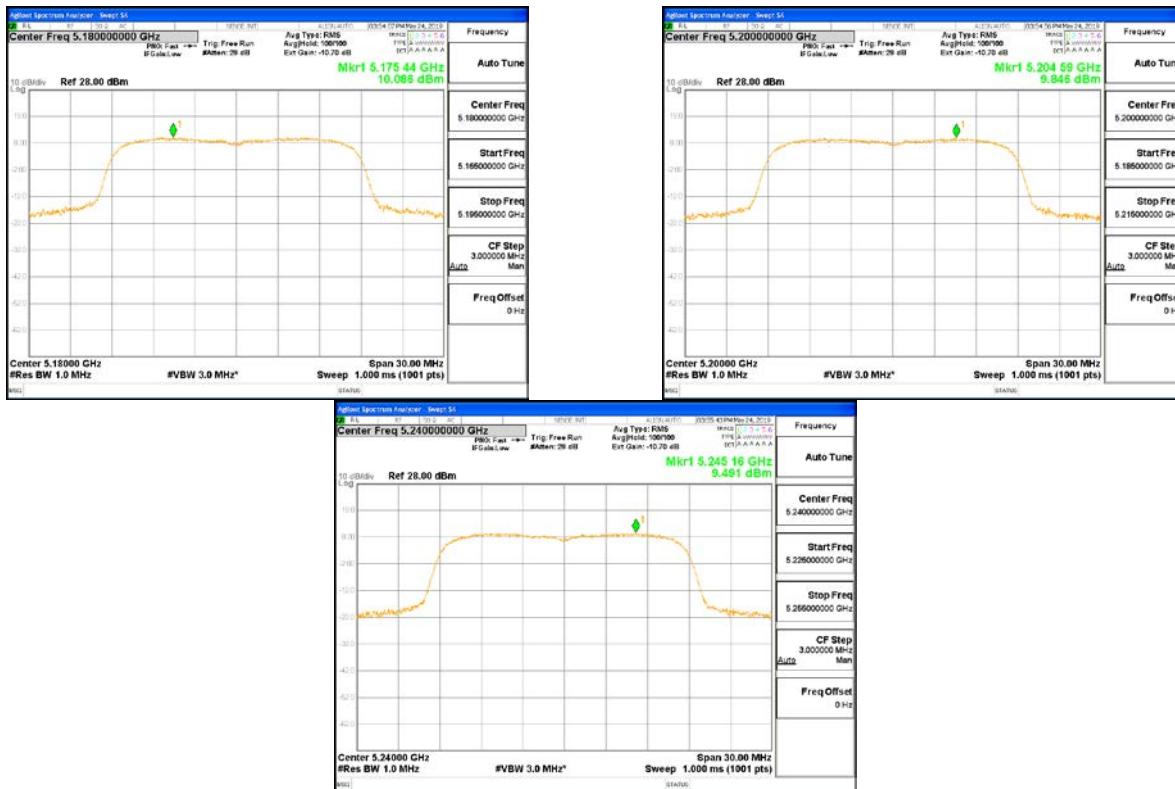
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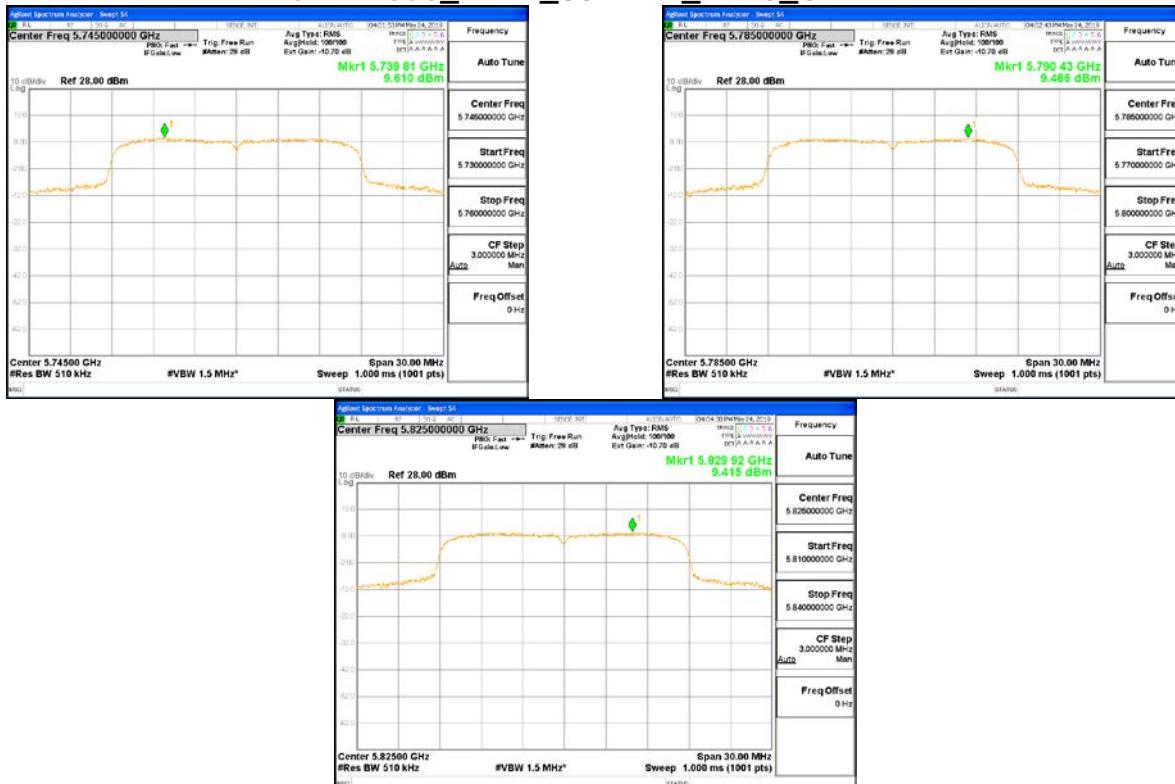
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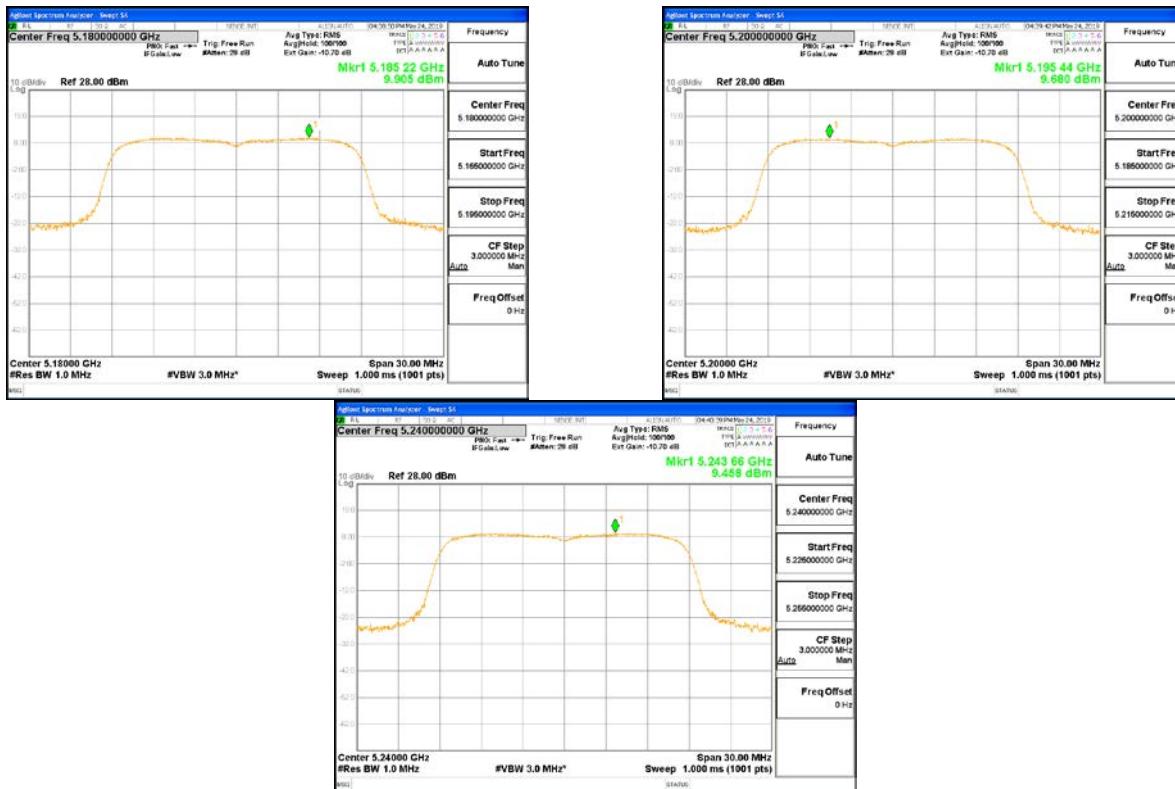
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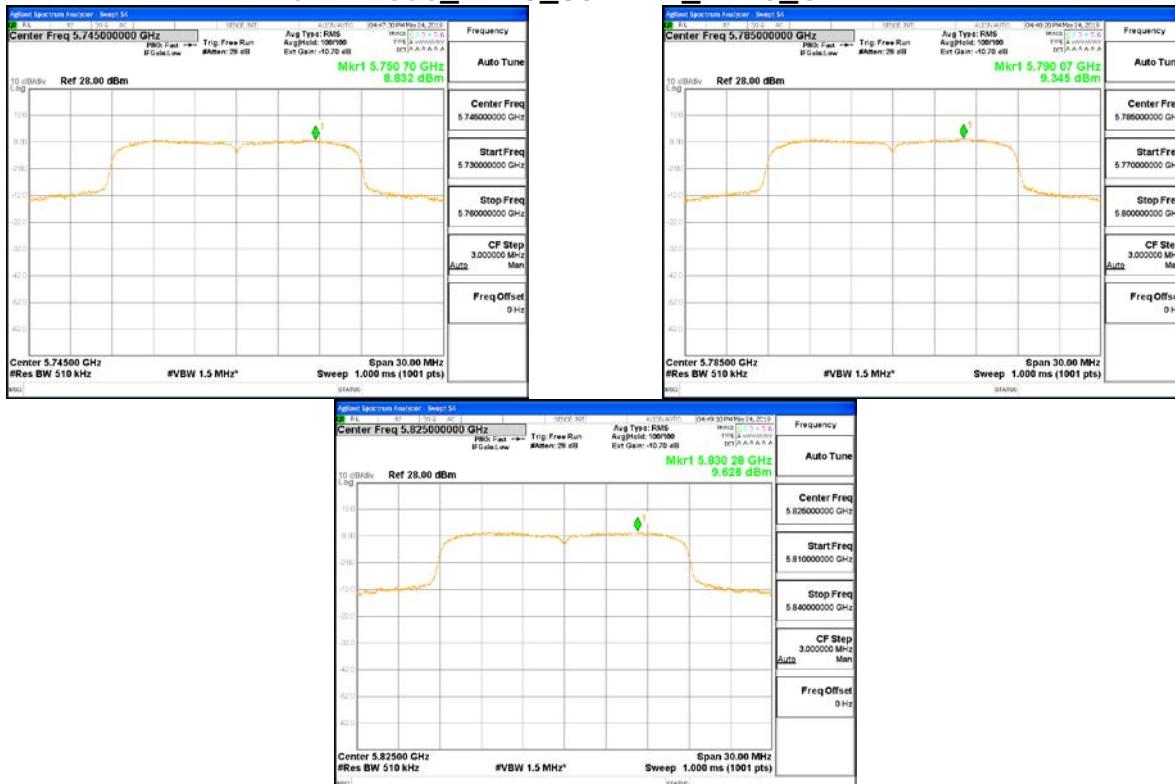
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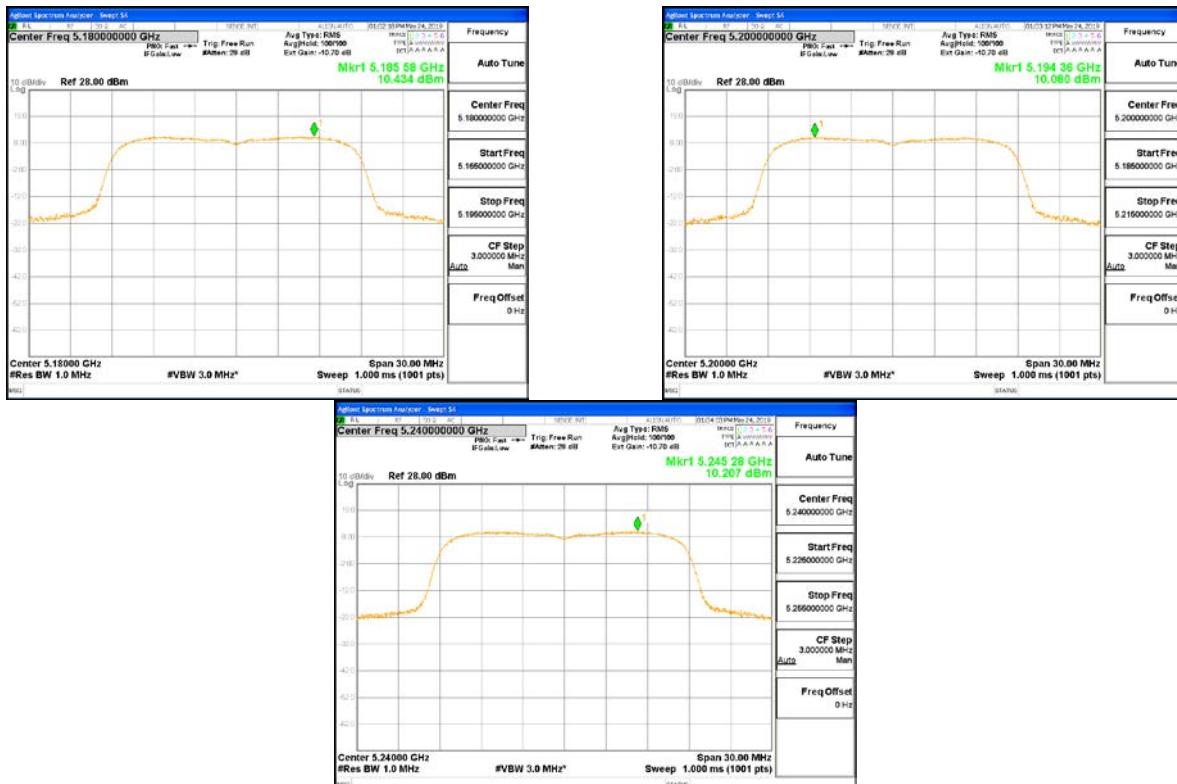
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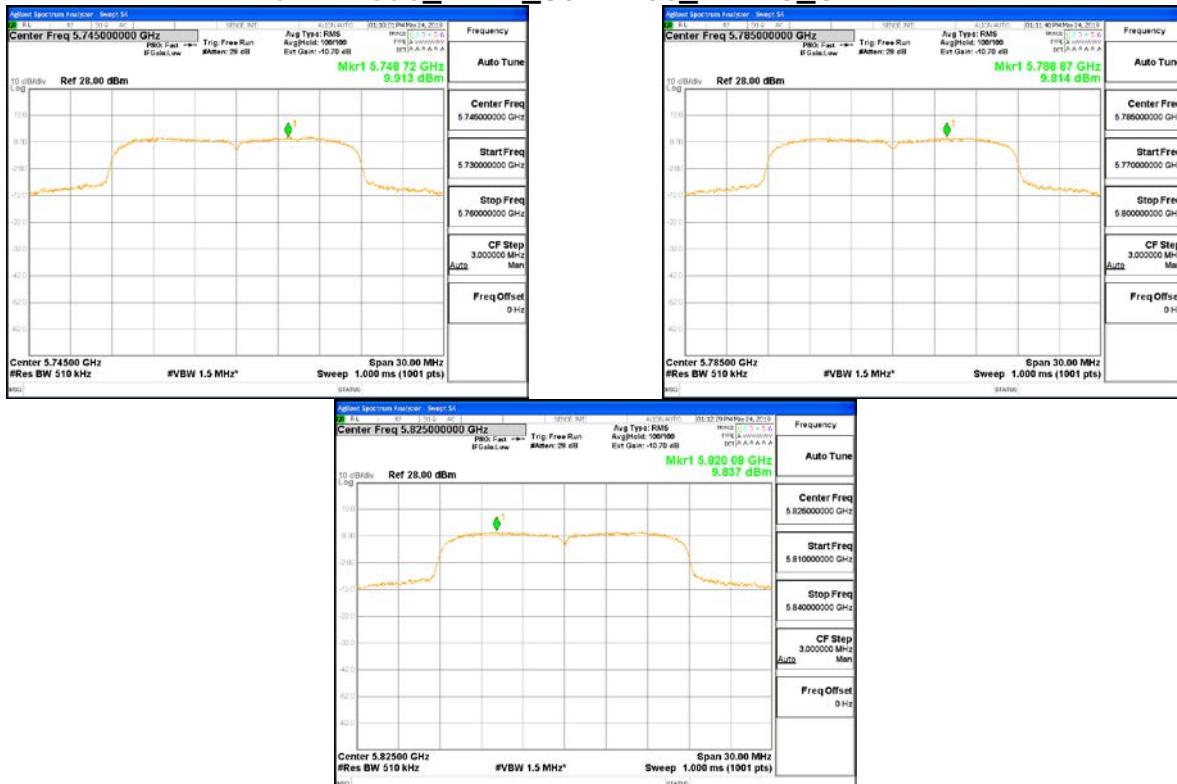
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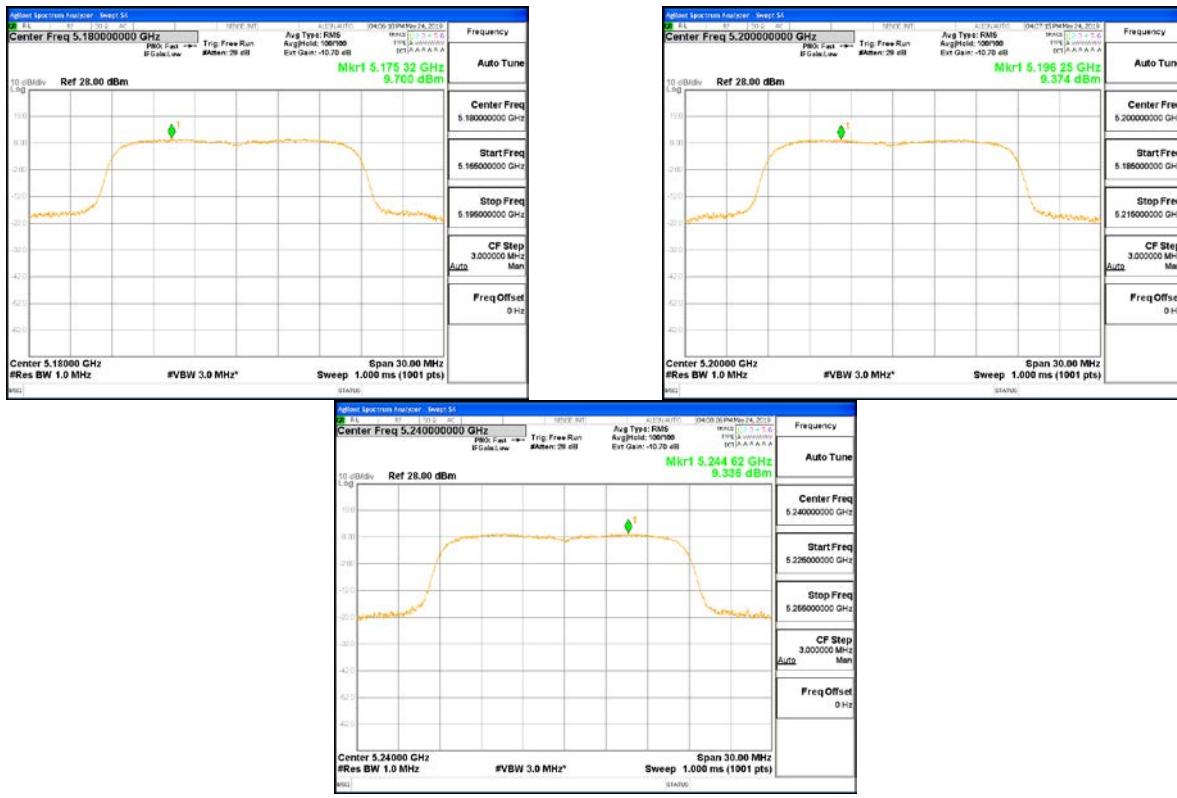
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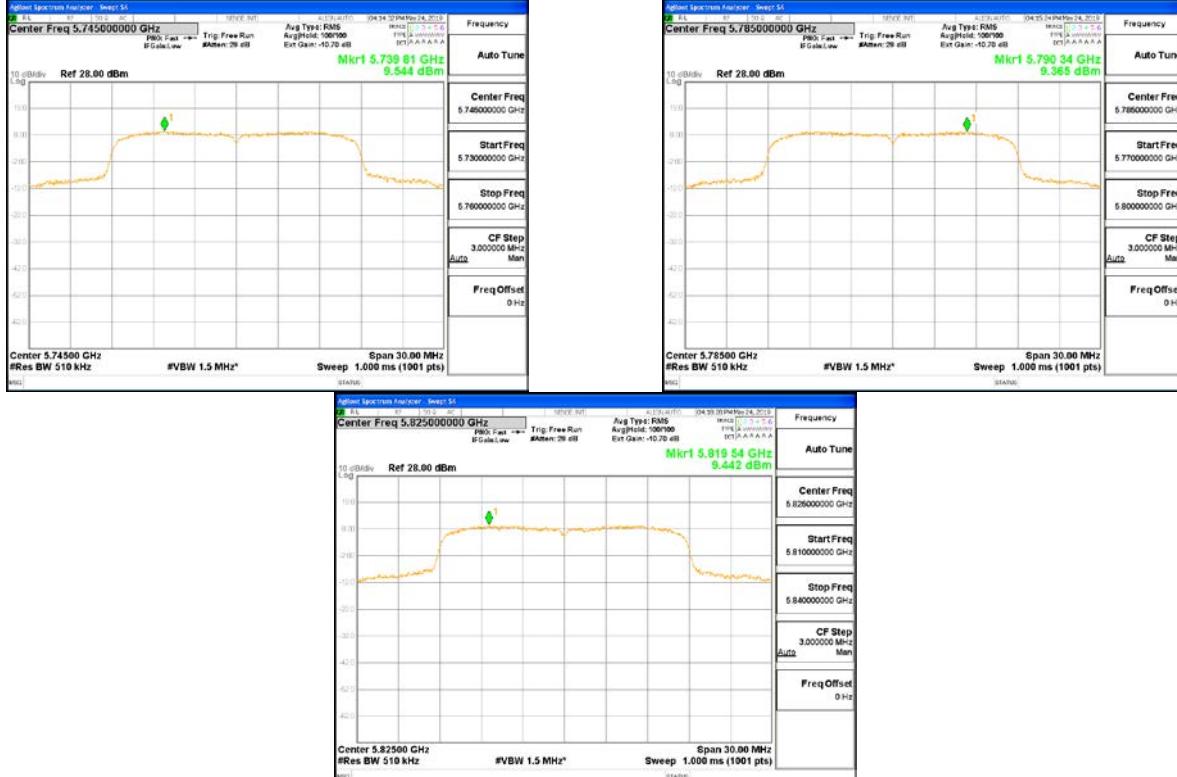
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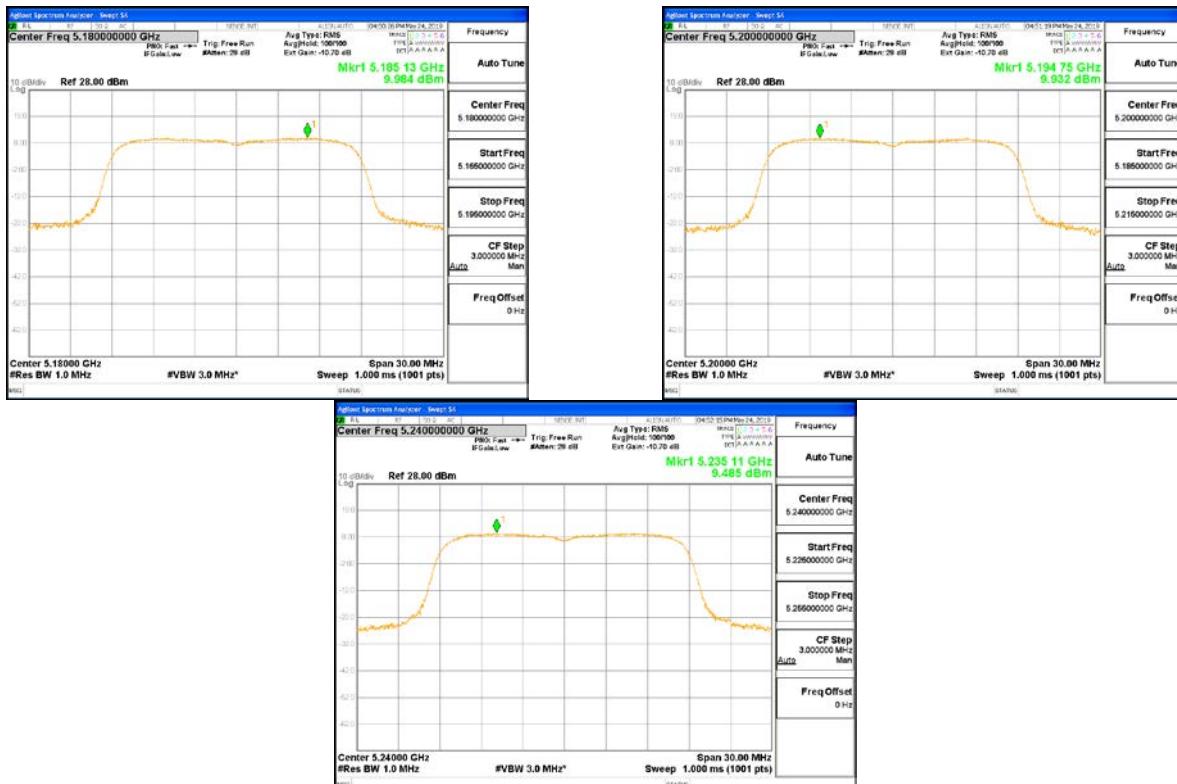
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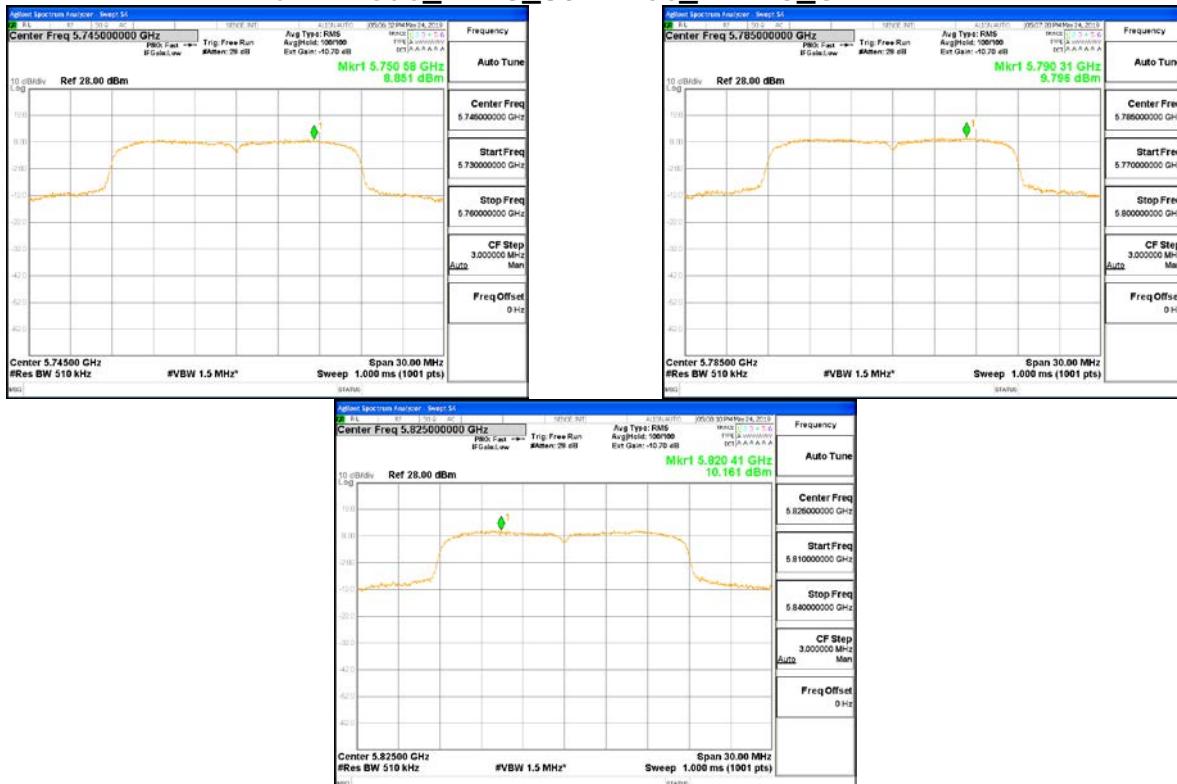
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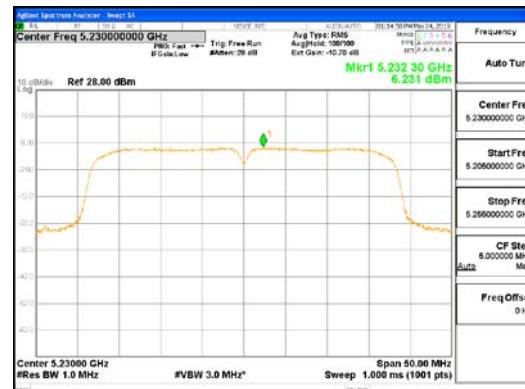


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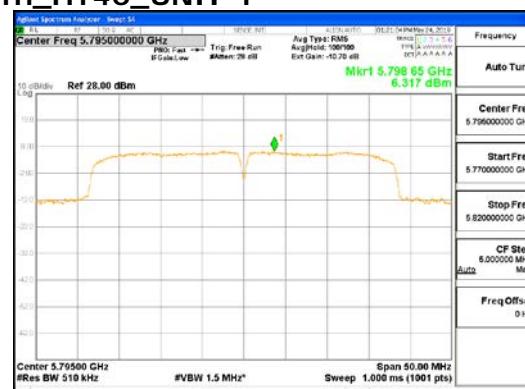
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**CDD Mode\_ANT1\_802.11n\_HT40\_UNII-1**



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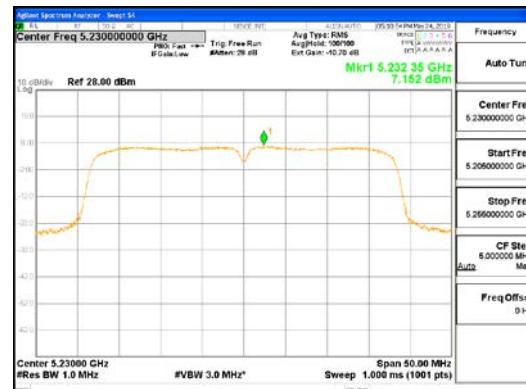


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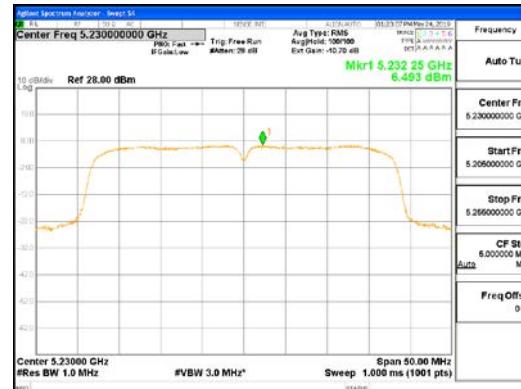
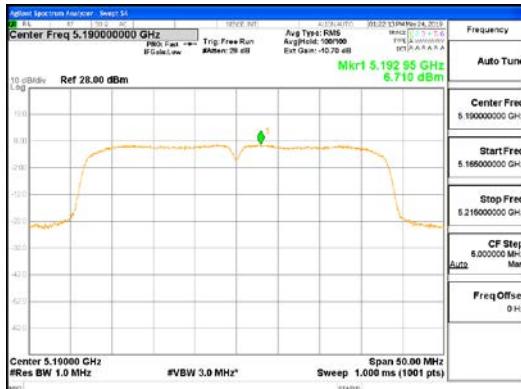


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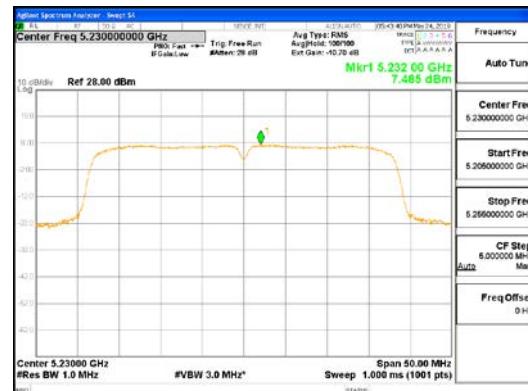
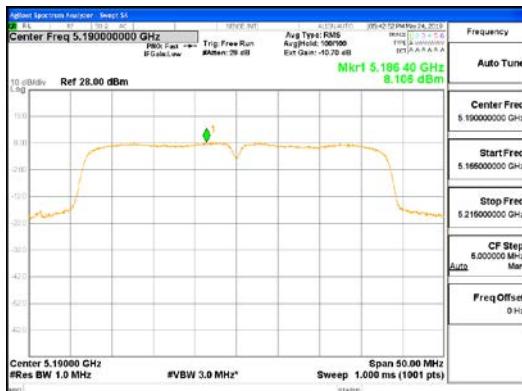
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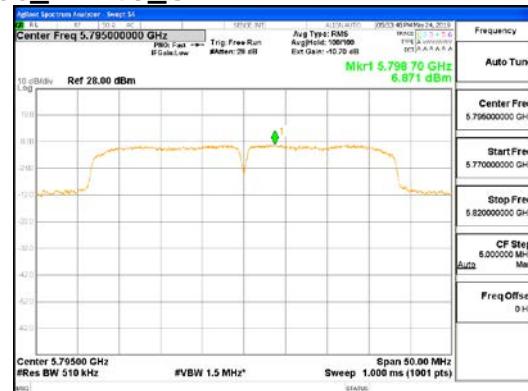
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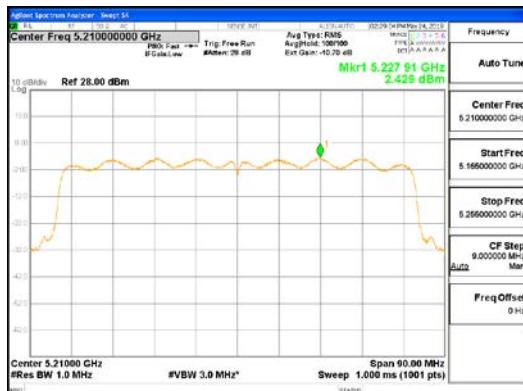
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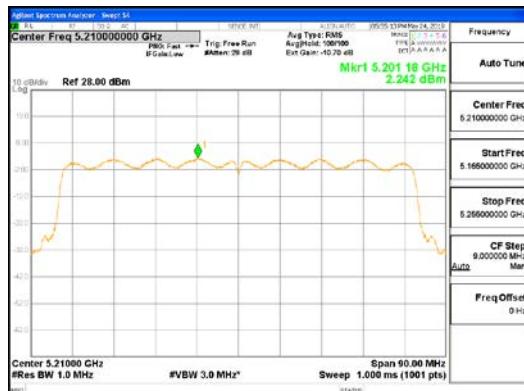
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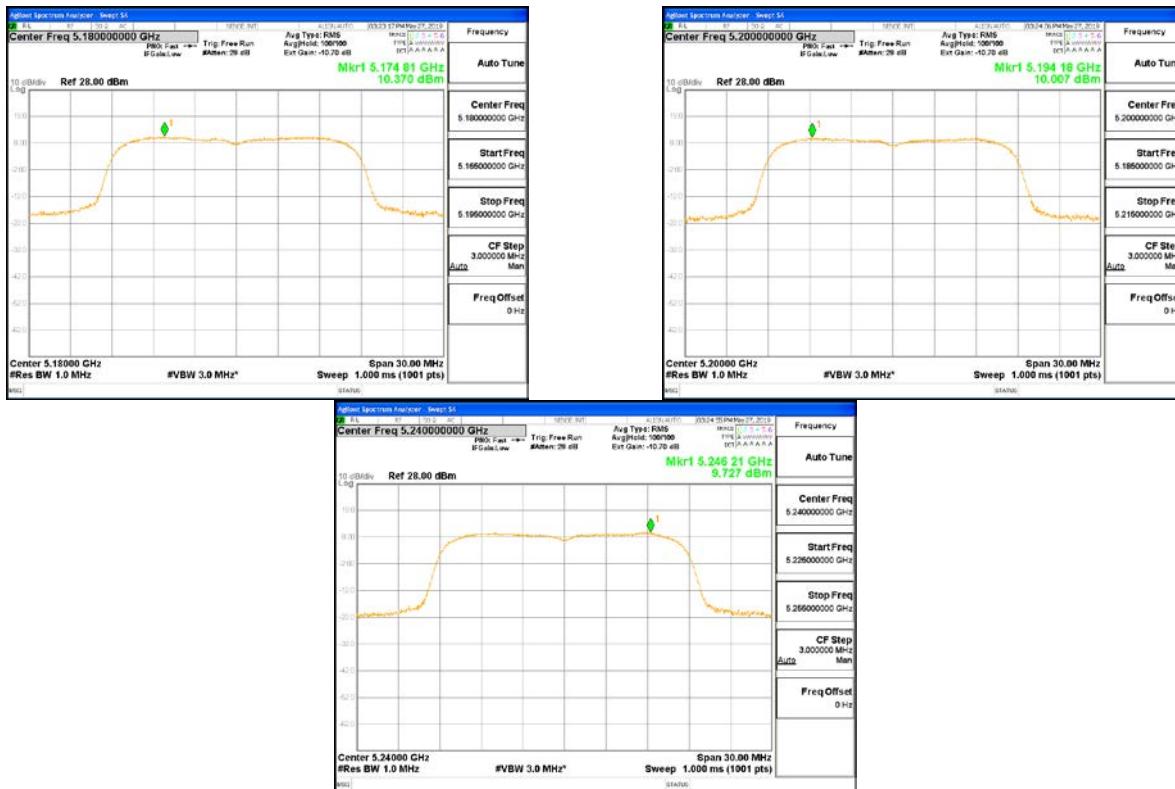
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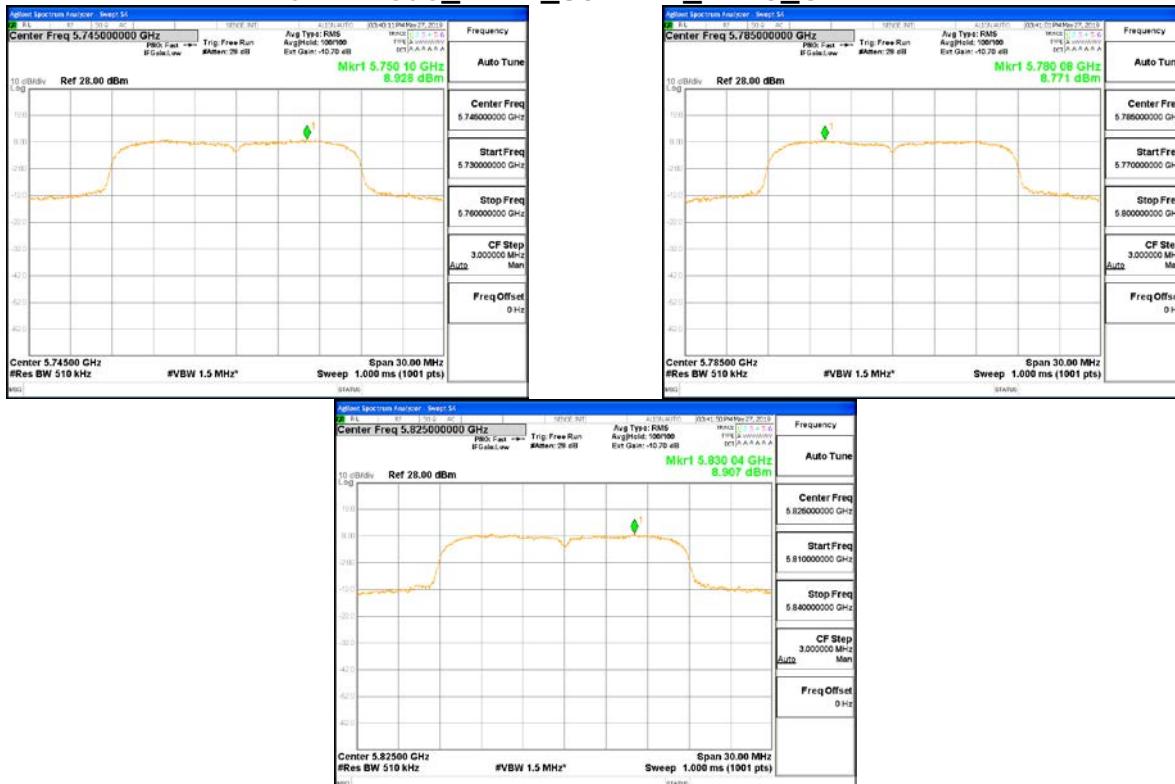
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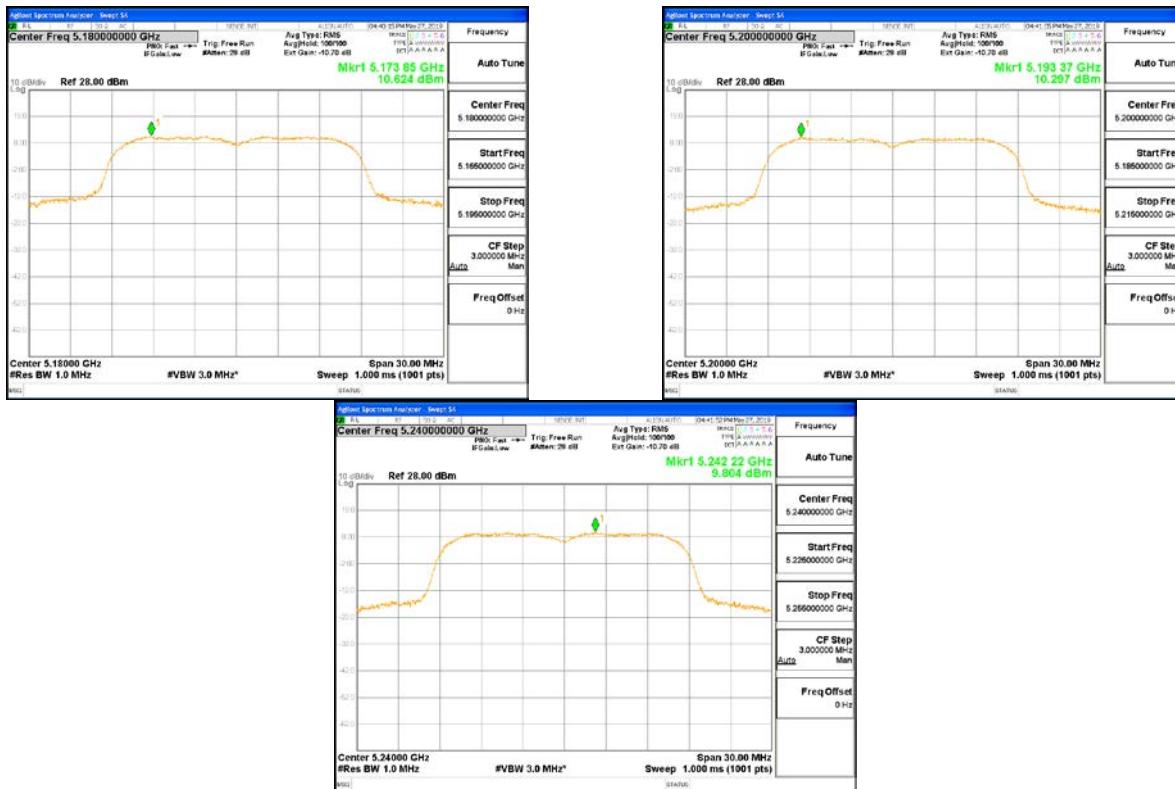
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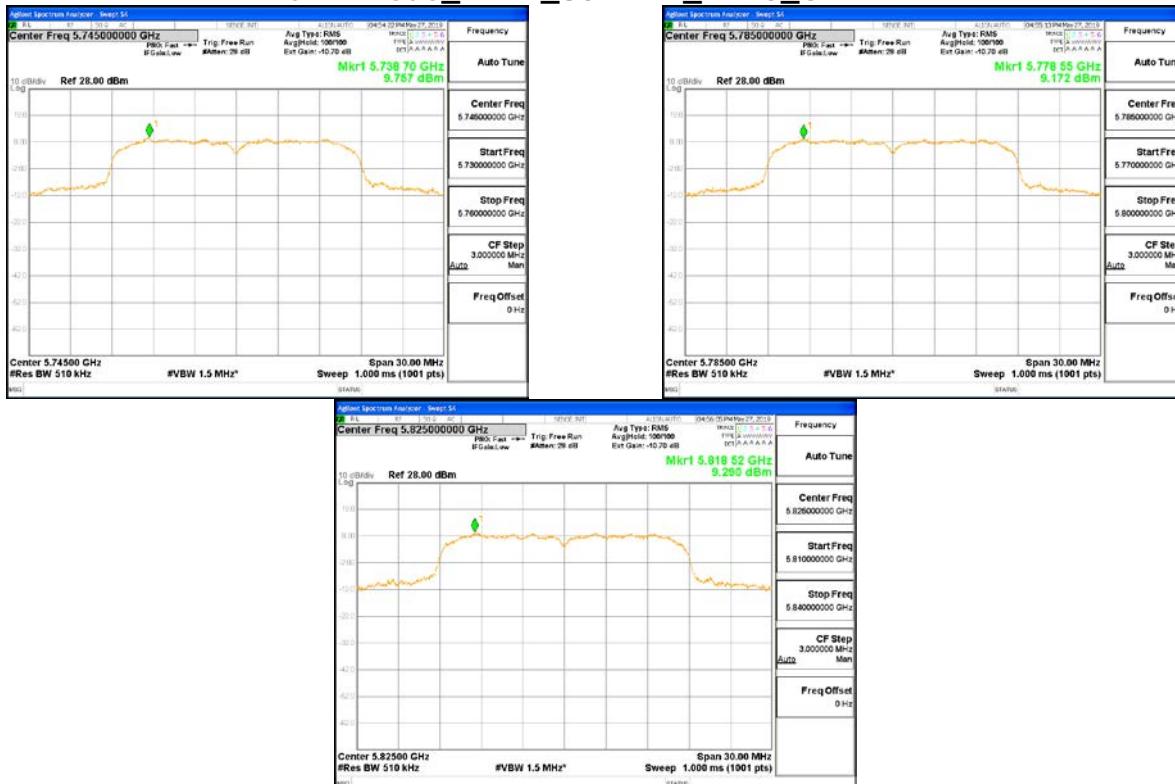
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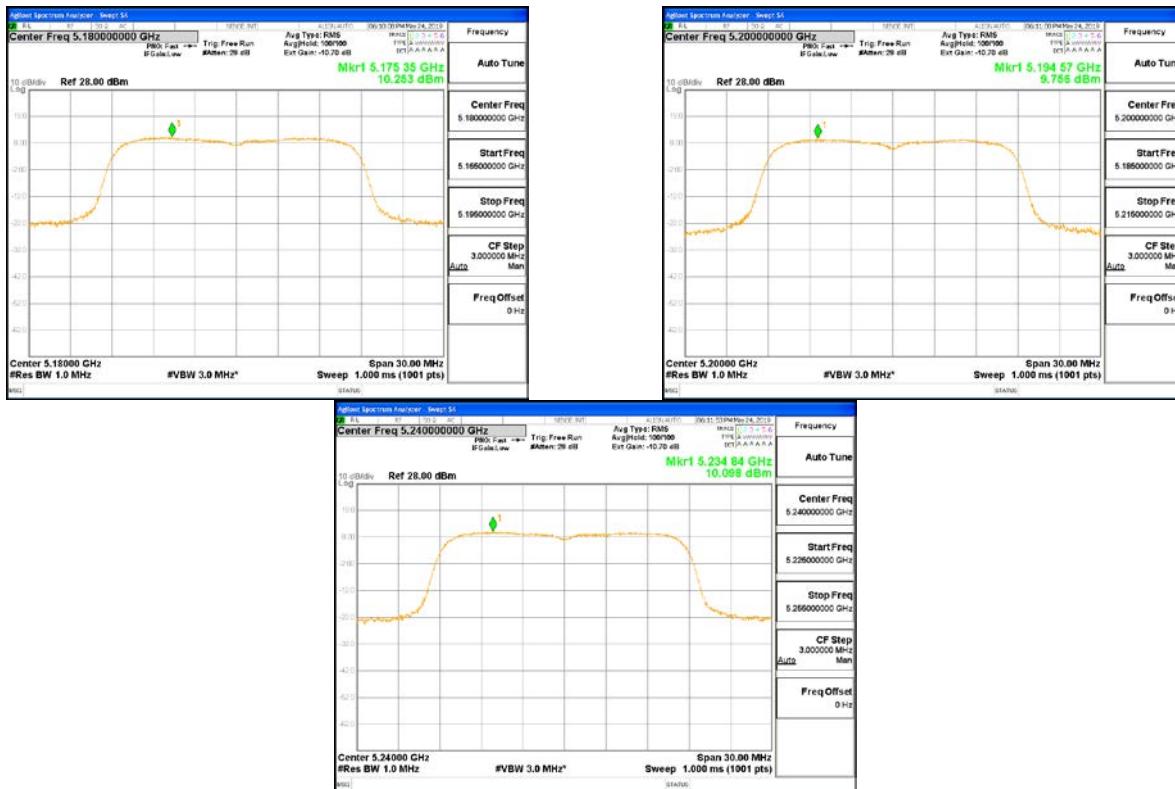
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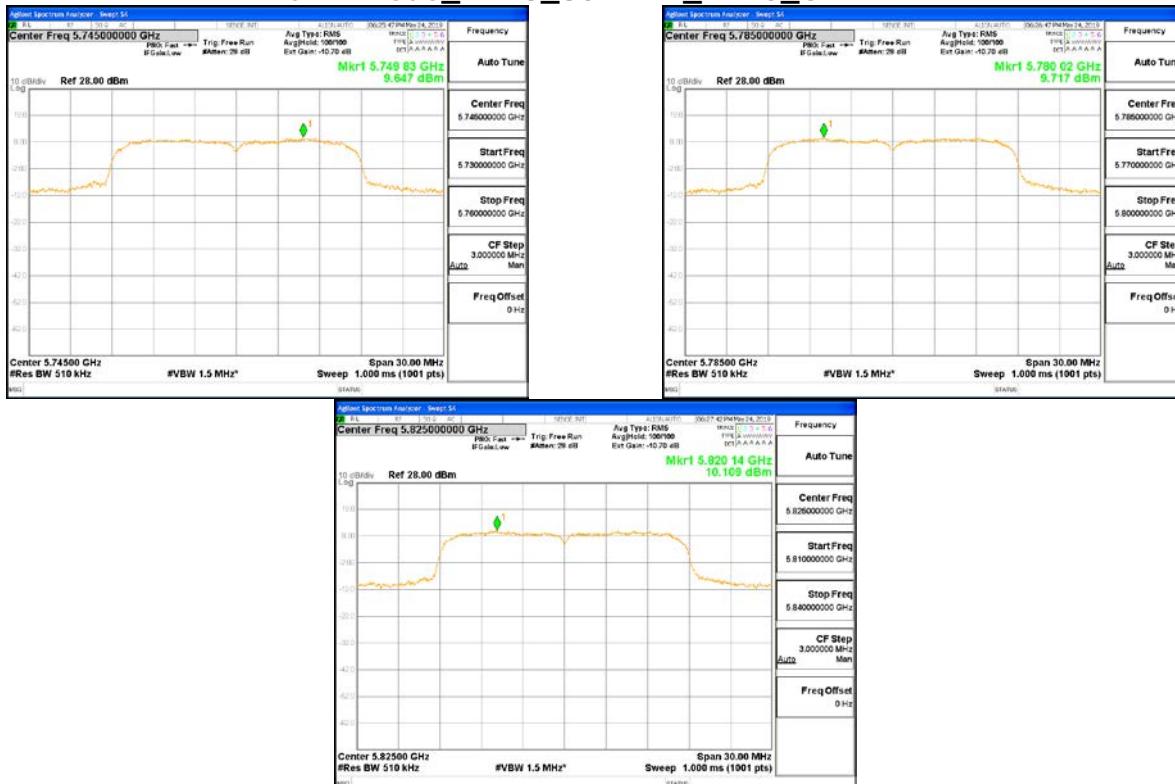
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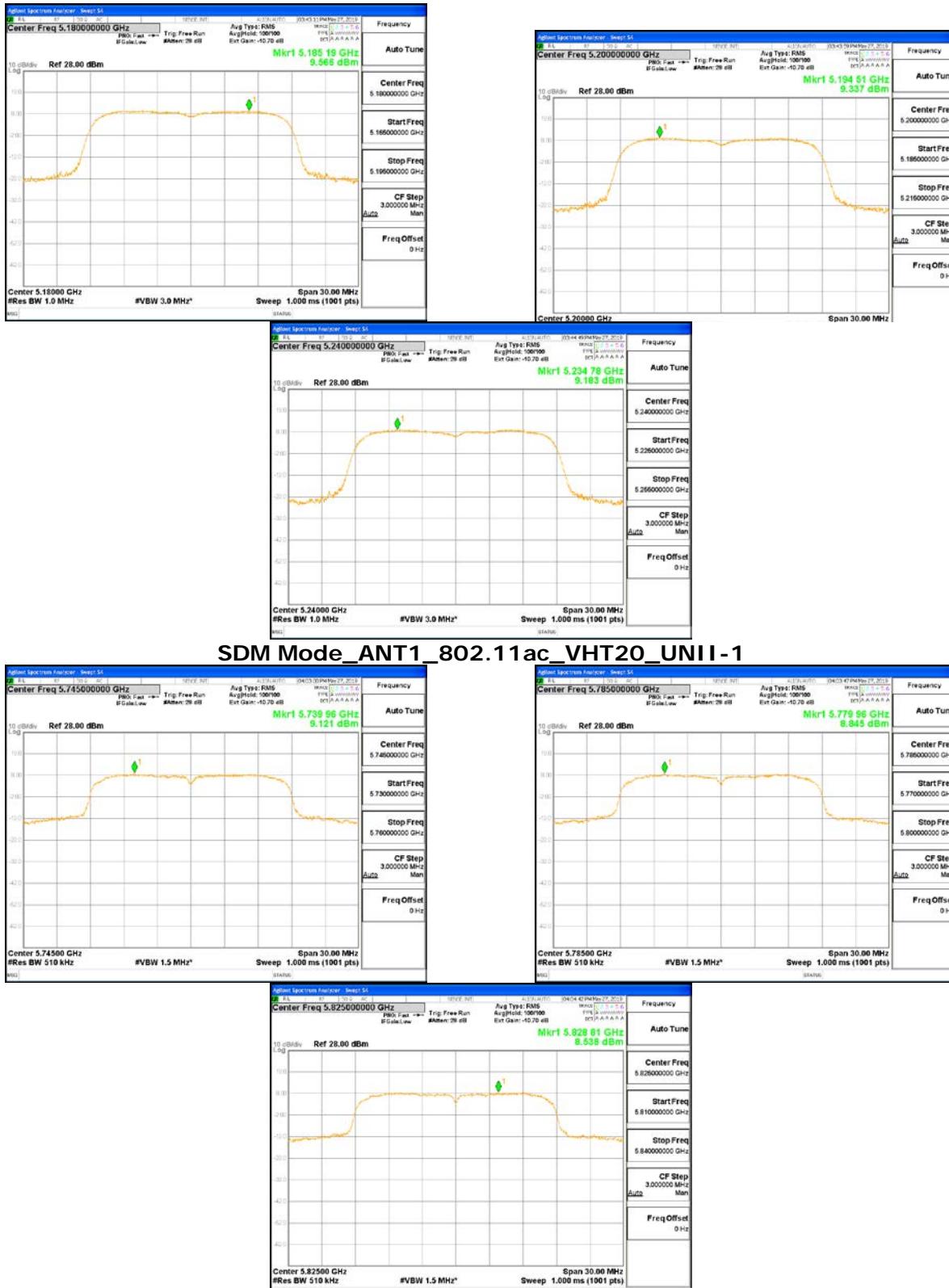
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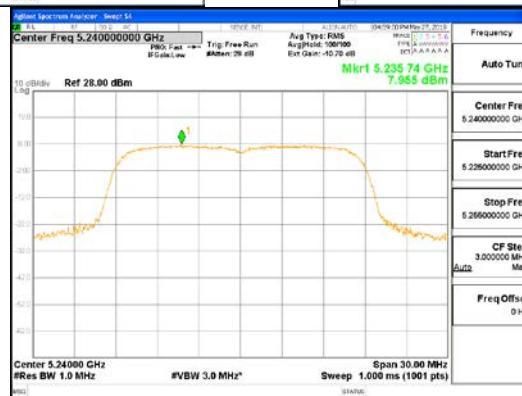
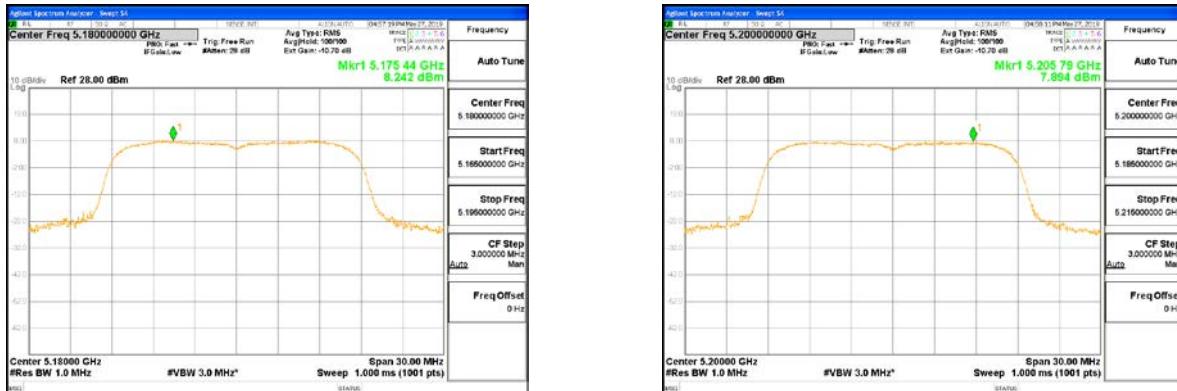
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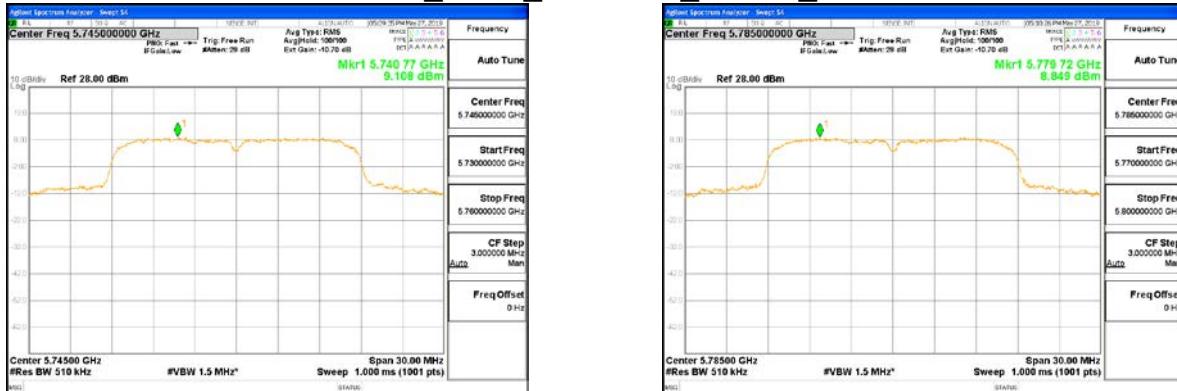
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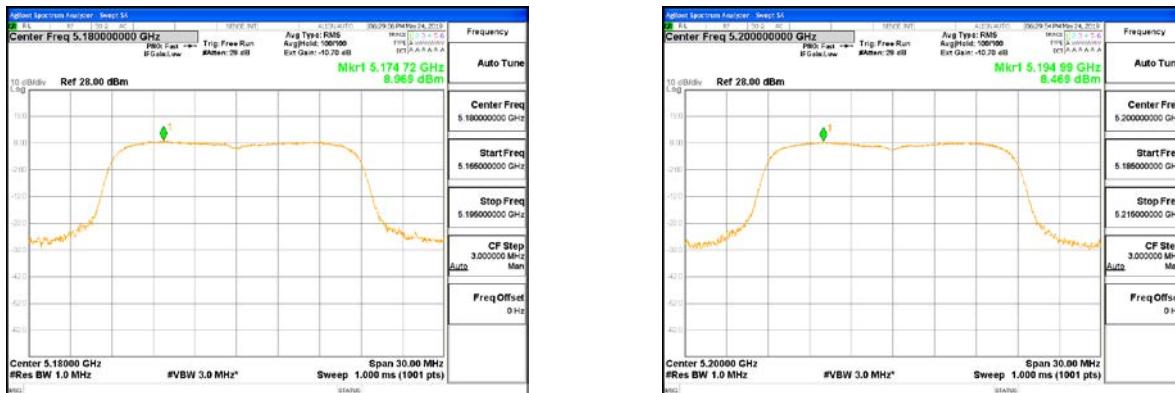
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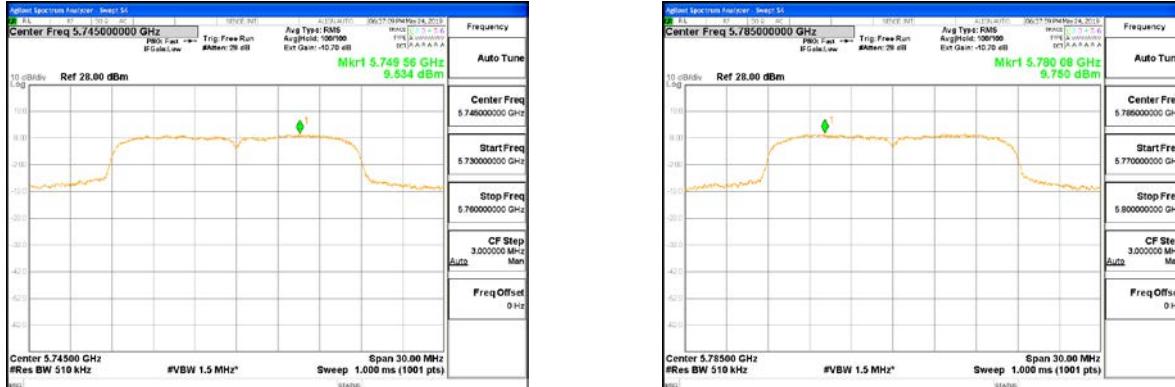
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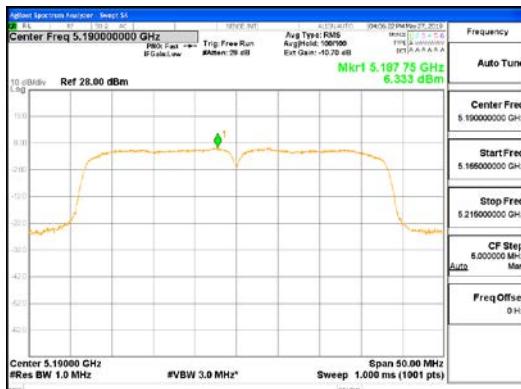


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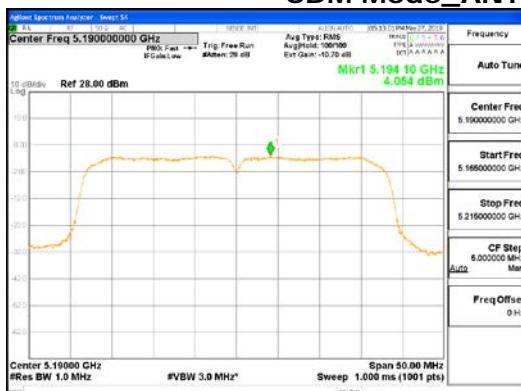
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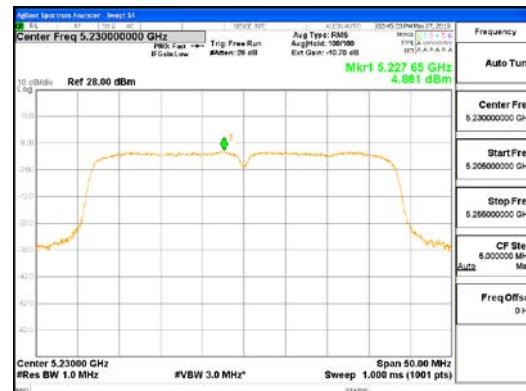


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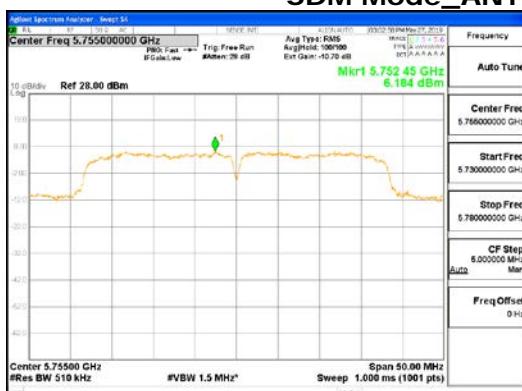
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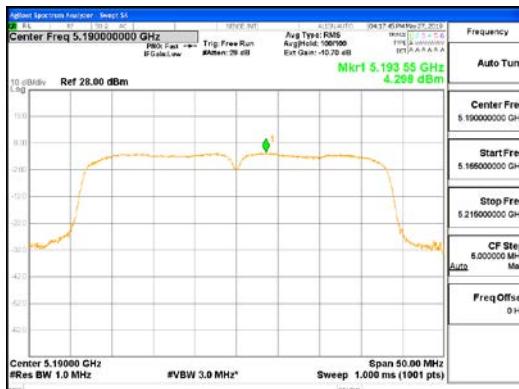


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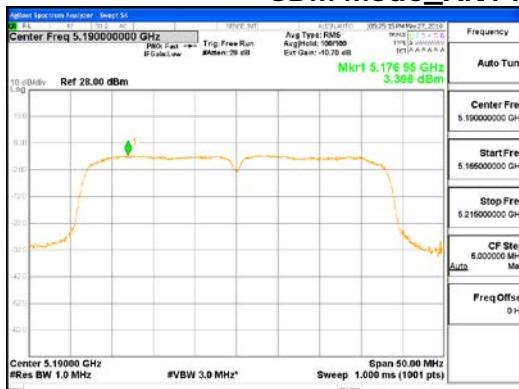
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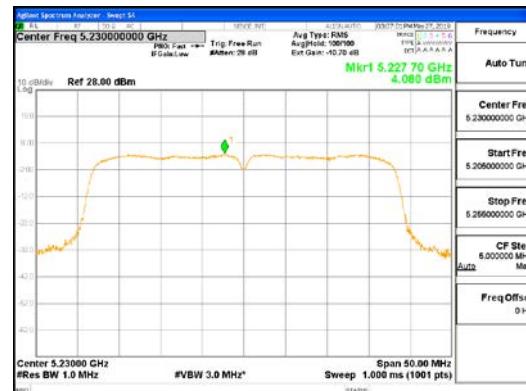


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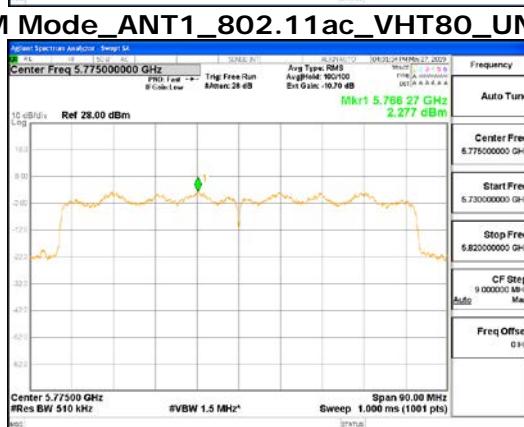
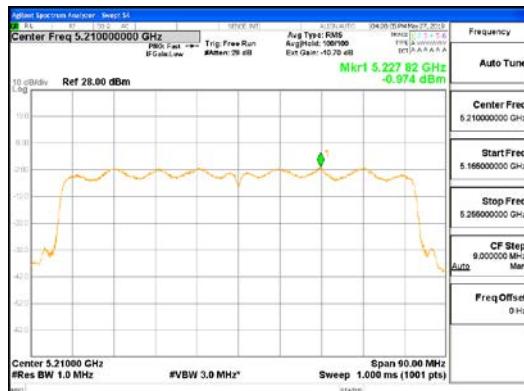
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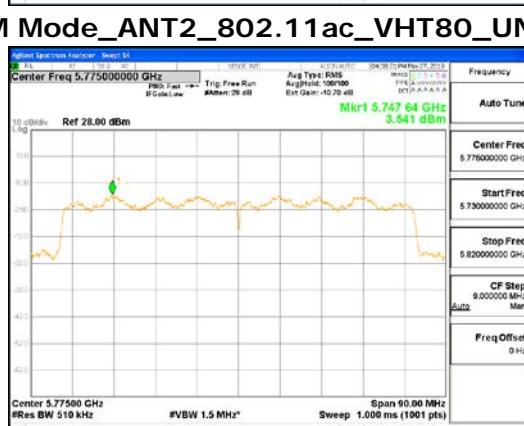
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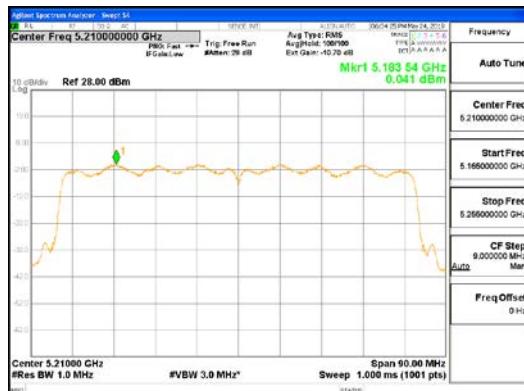
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