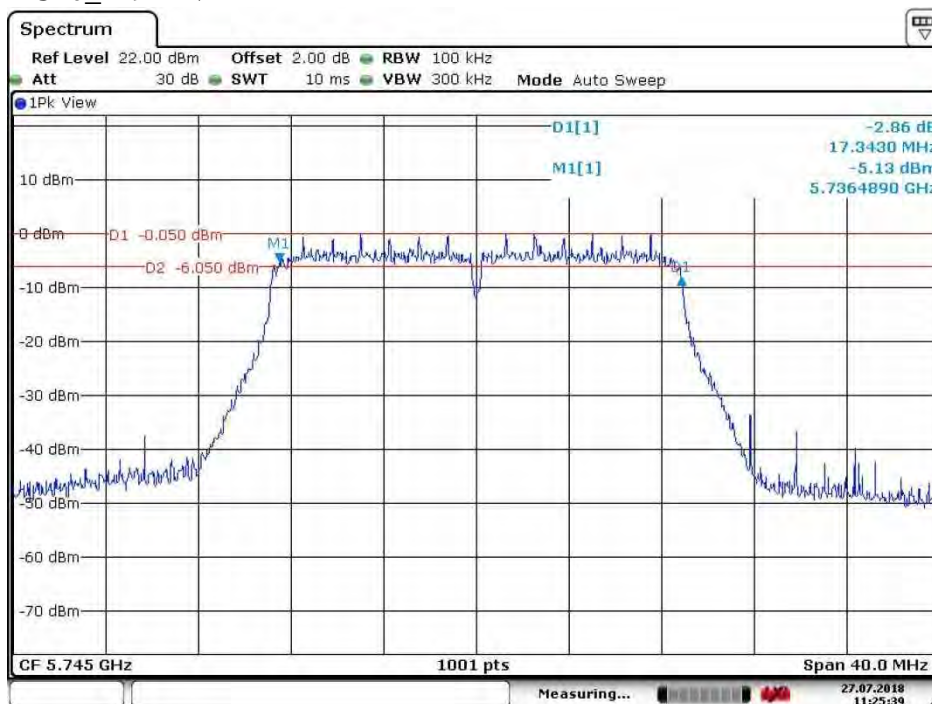
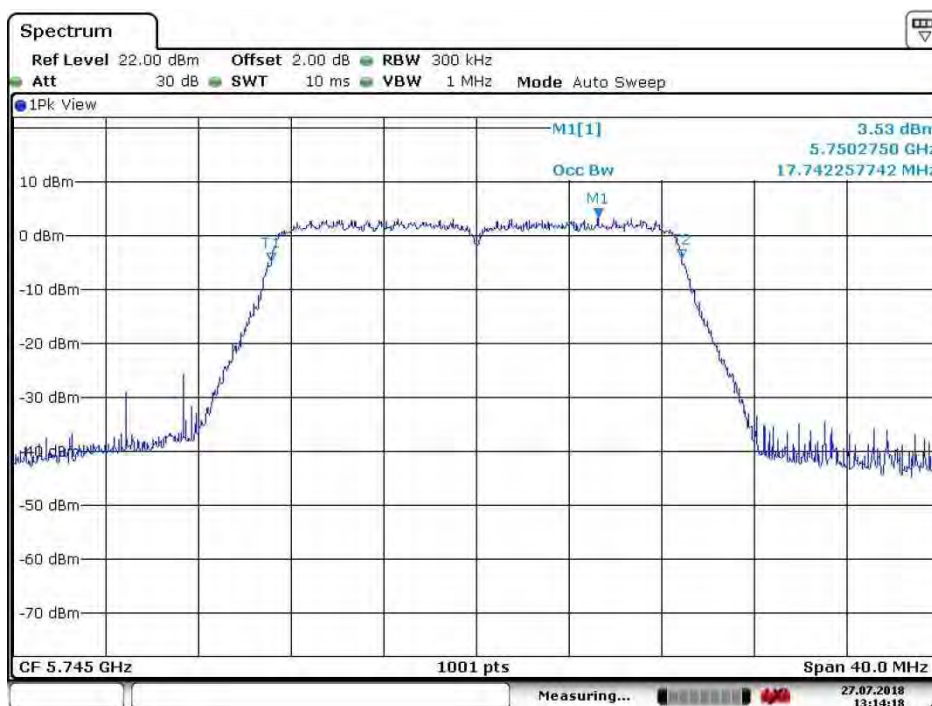




5.5.1.1.9 11AC20_149 ANT 1



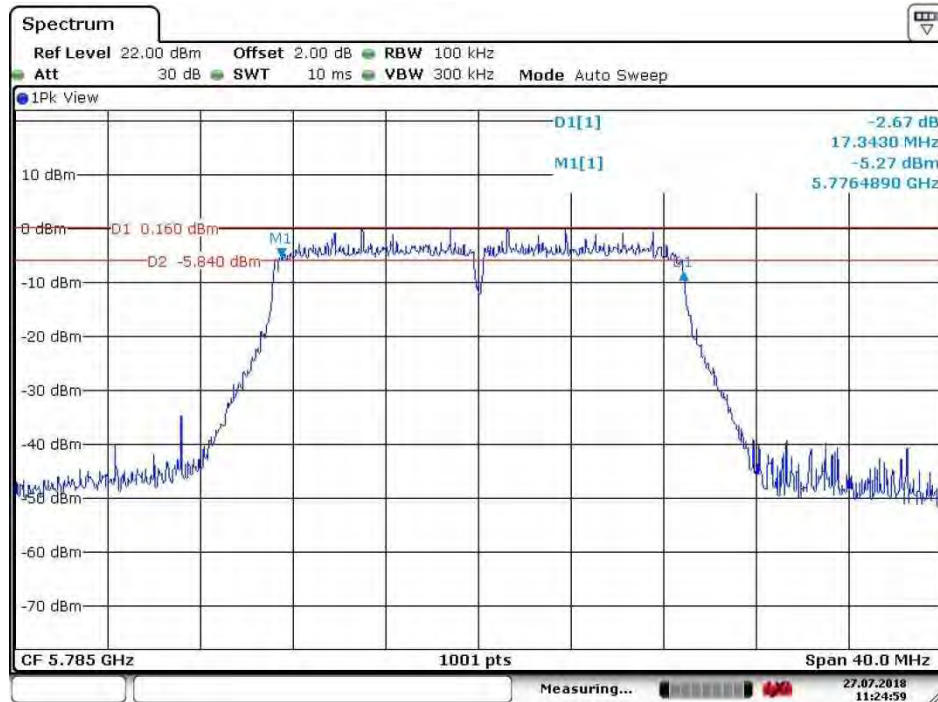
Date: 27.JUL.2018 11:25:39



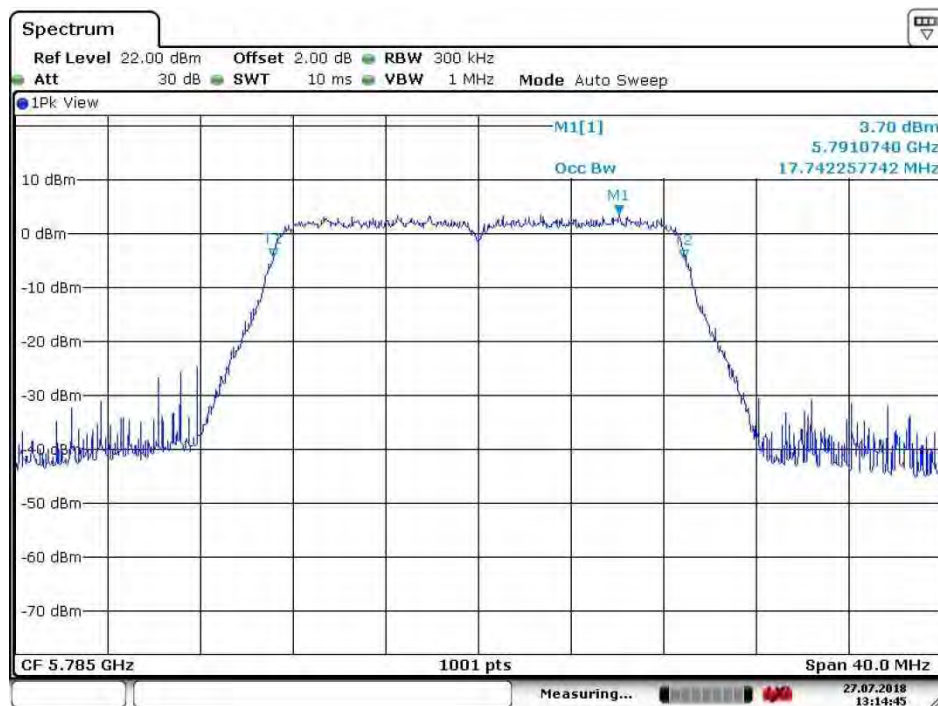
Date: 27.JUL.2018 13:14:18



5.5.1.1.10 11AC20_157 ANT 1

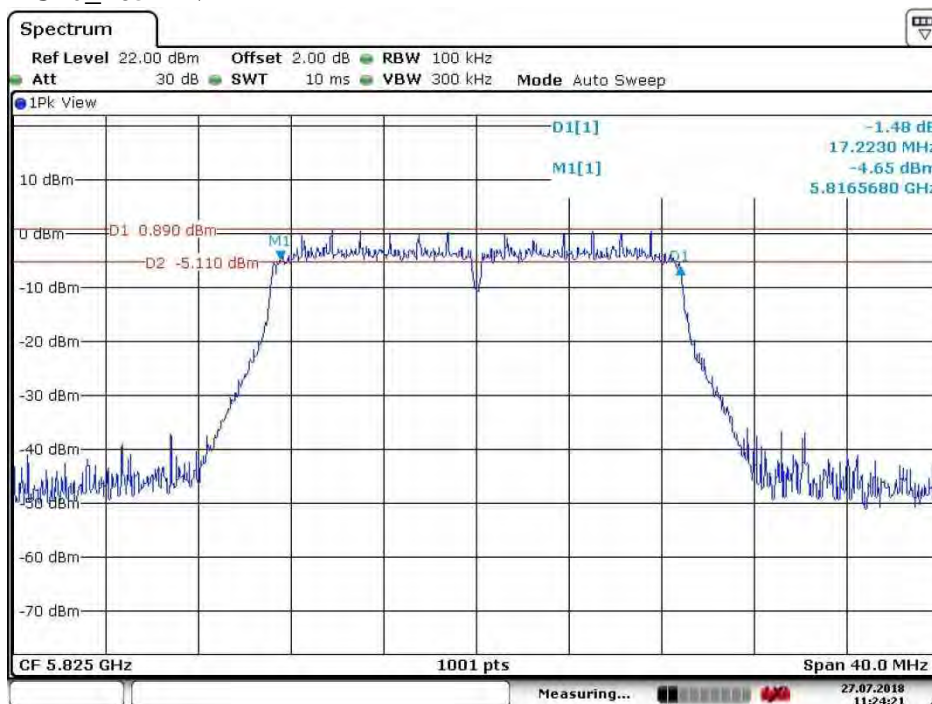


Date: 27 JUL 2018 11:24:59

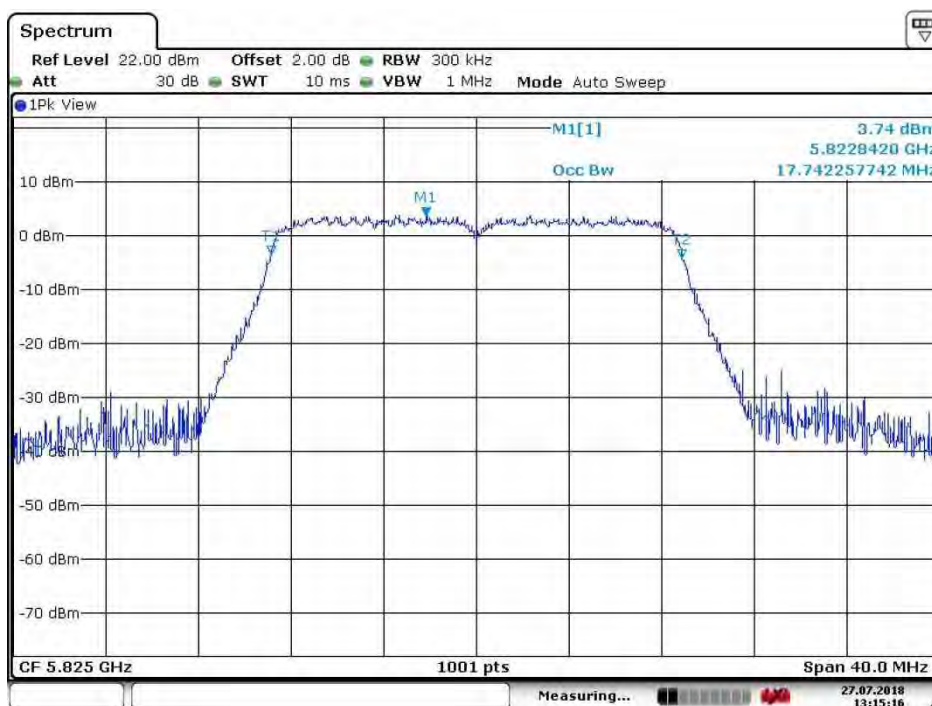


Date: 27 JUL 2018 13:14:45

5.5.1.1.11 11AC20 165 ANT 1



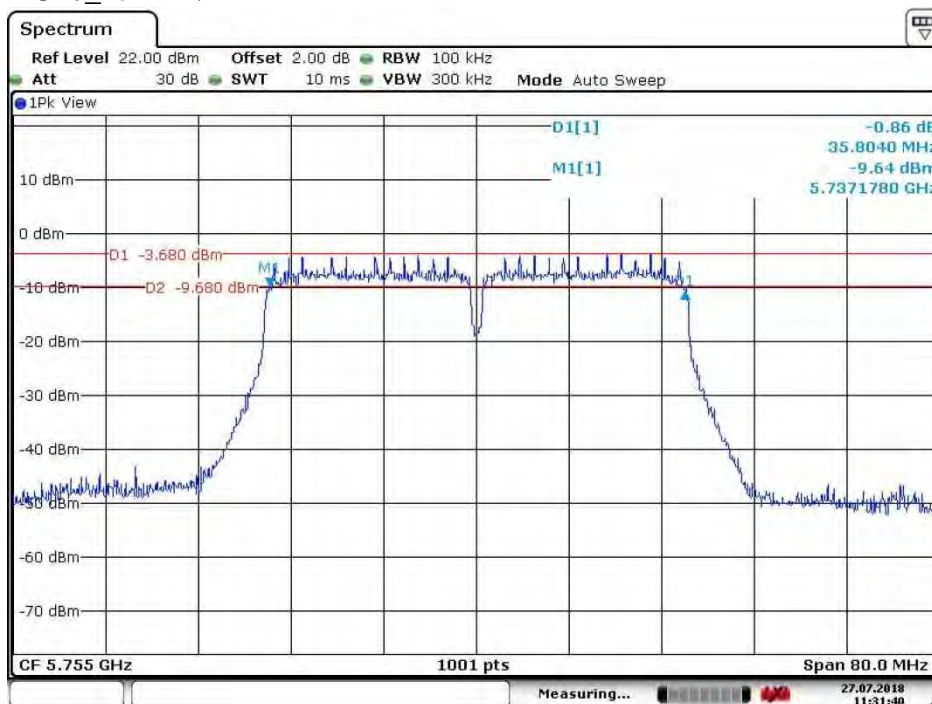
Date: 27 JUL 2018 11:24:21



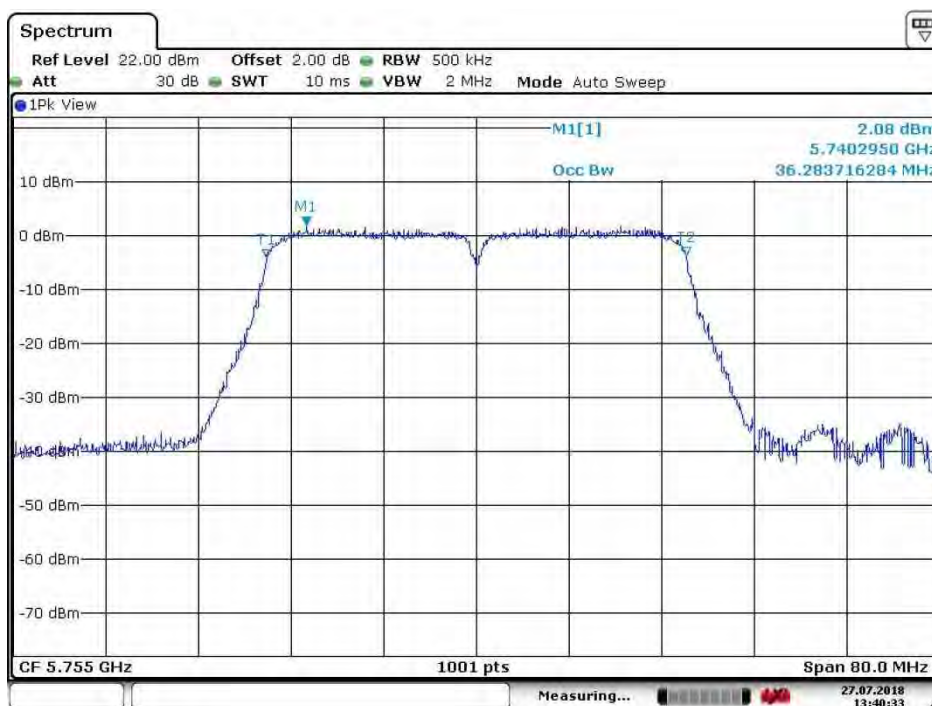
Date: 27 JUL 2018 13:15:17



5.5.1.1.12 11AC40_151 ANT 1



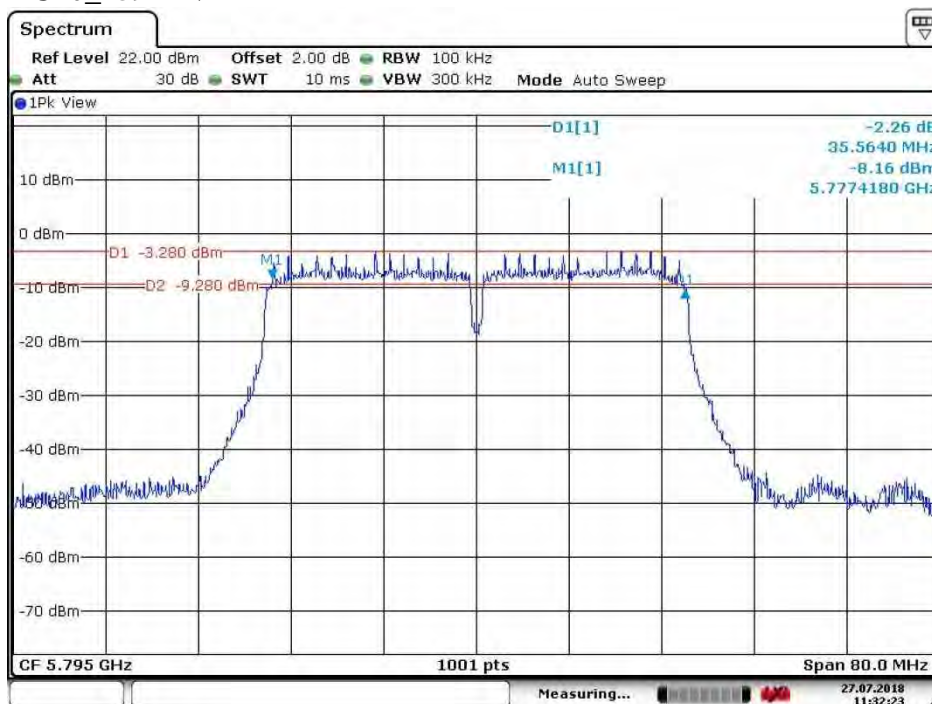
Date: 27 JUL 2018 11:31:40



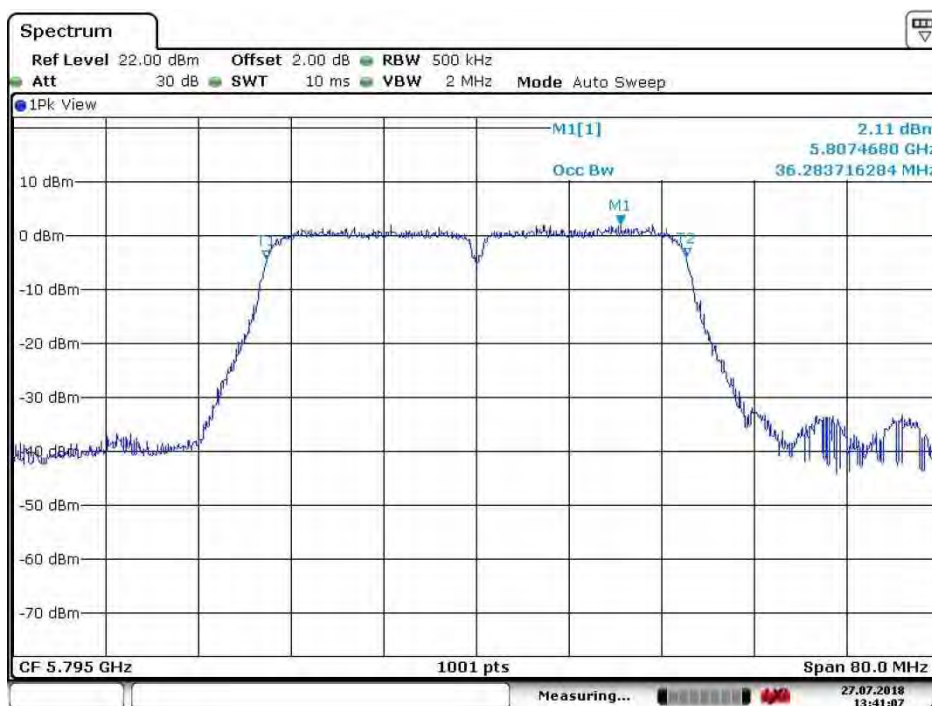
Date: 27 JUL 2018 13:40:33



5.5.1.1.13 11AC40_159 ANT 1



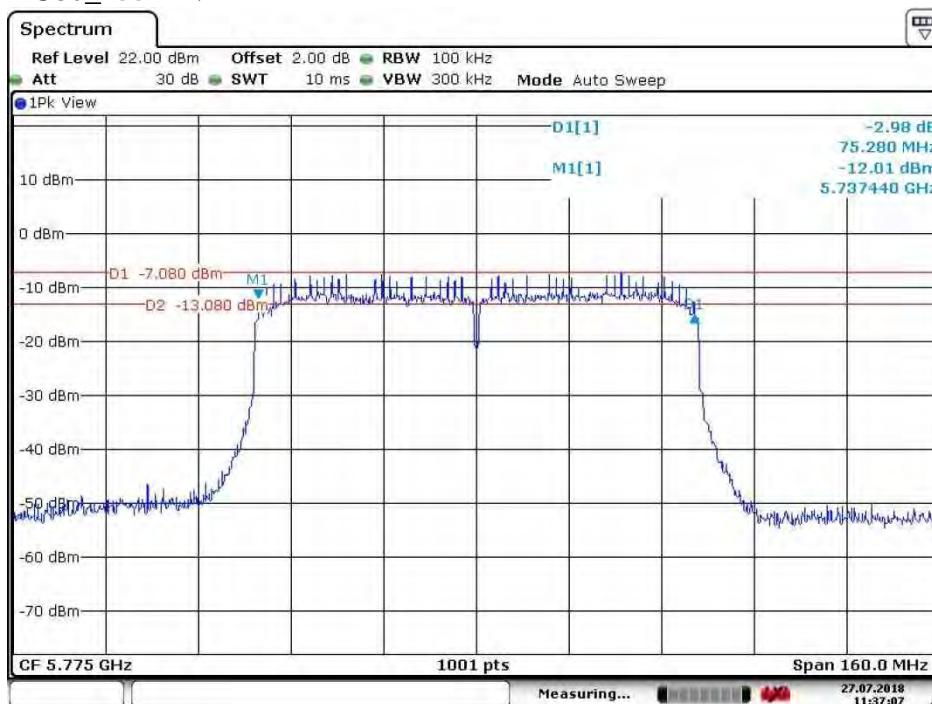
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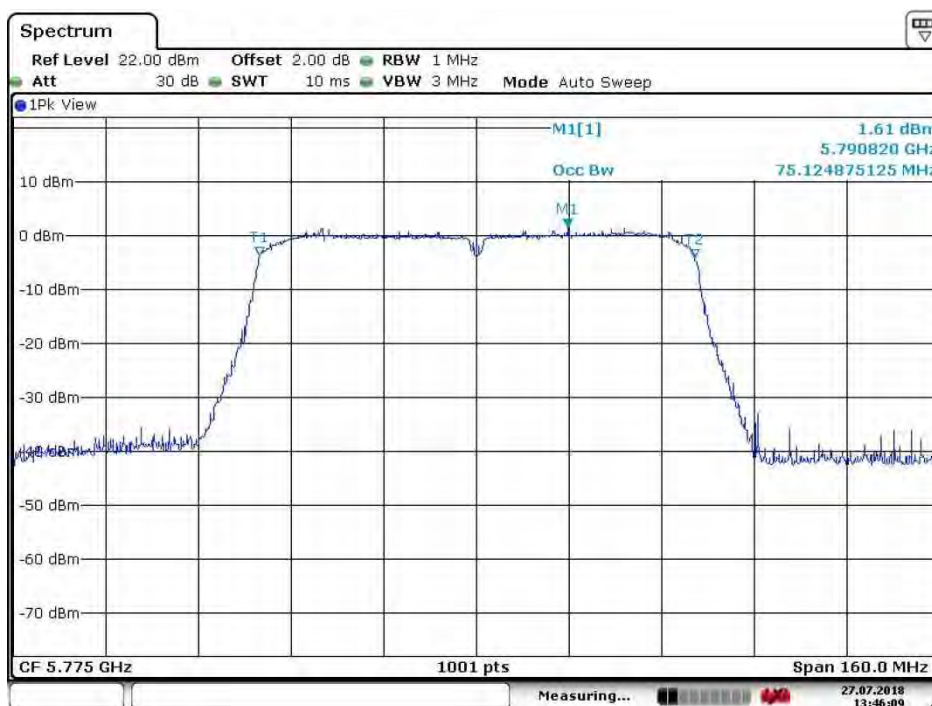
Date: 27 JUL 2018 13:41:07



5.5.1.1.14 11AC80_155 ANT 1



Date: 27 JUL 2018 11:37:07

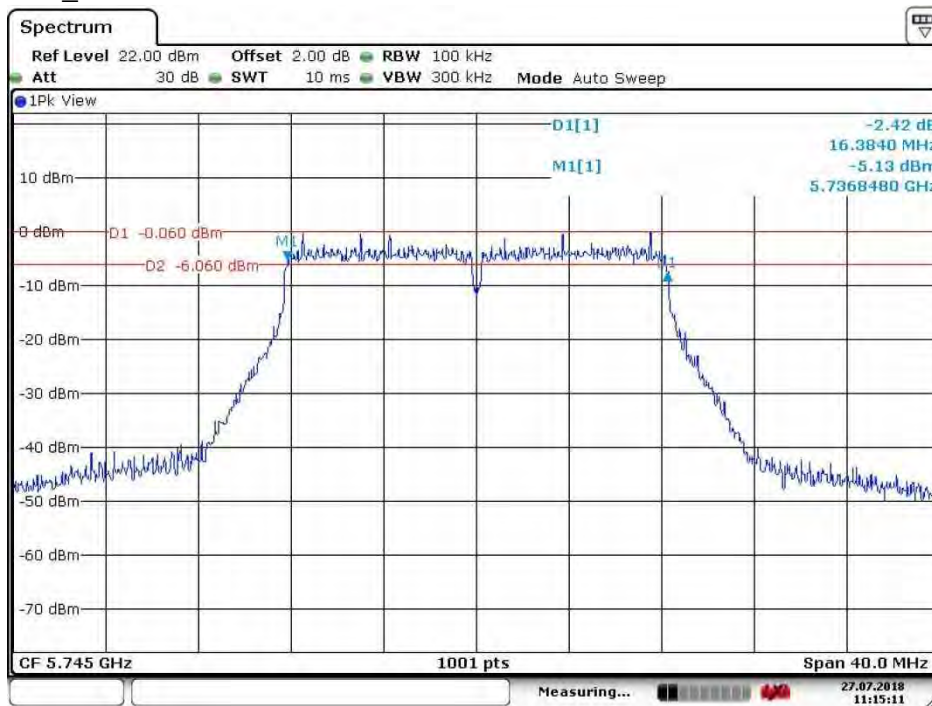


Date: 27 JUL 2018 13:46:08

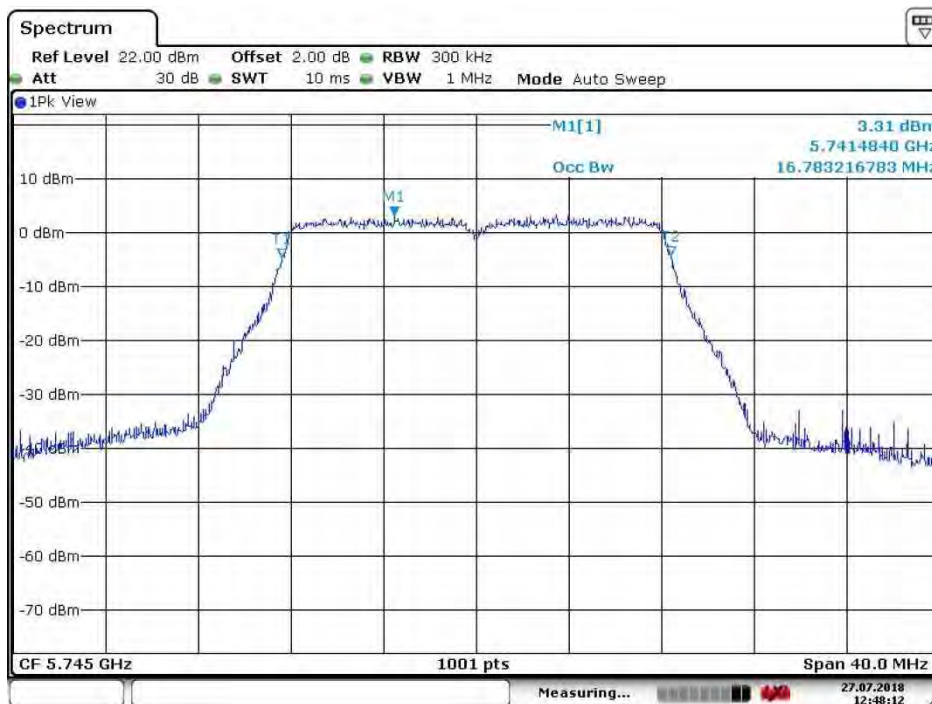


5.5.1.2 SISO_ANT 2

5.5.1.2.1 11A20_149 ANT 2



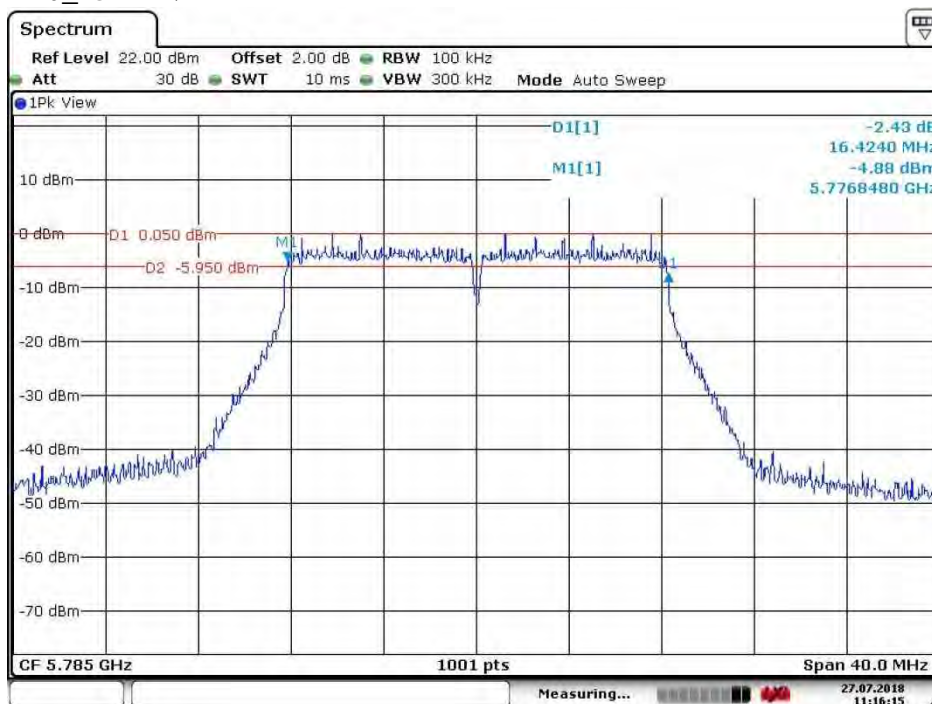
Date: 27 JUL 2018 11:15:12



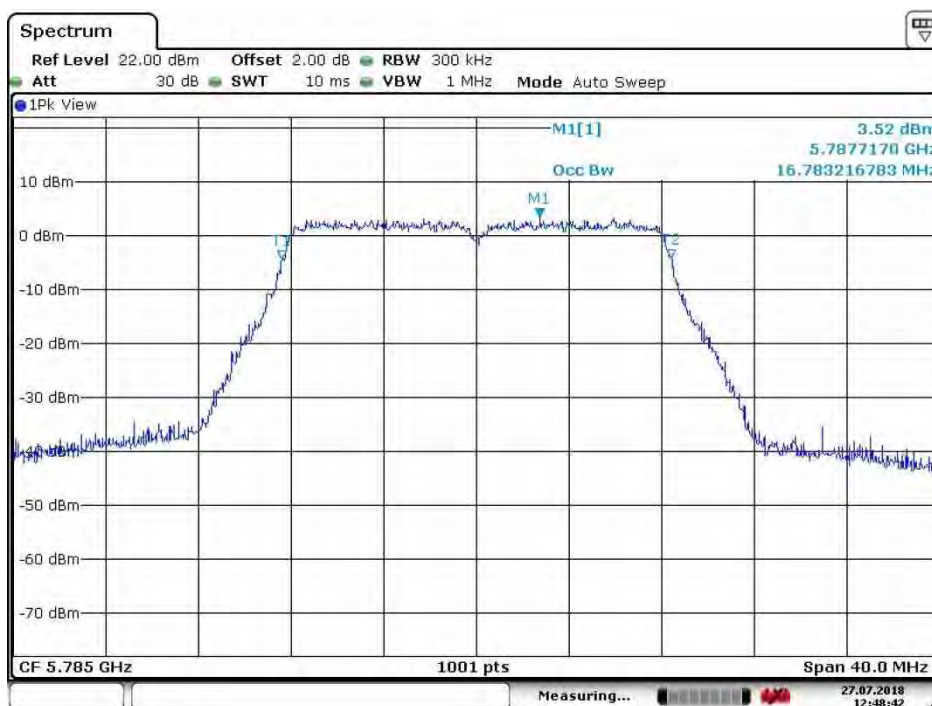
Date: 27 JUL 2018 12:48:13



5.5.1.2.2 11A20_157 ANT 2



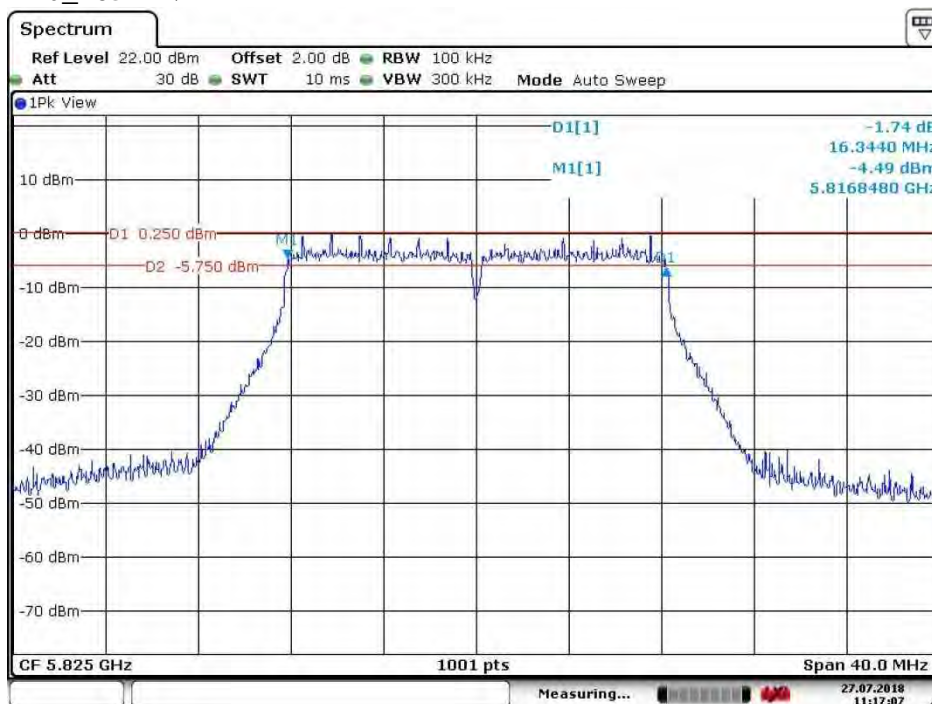
Date: 27 JUL 2018 11:16:15



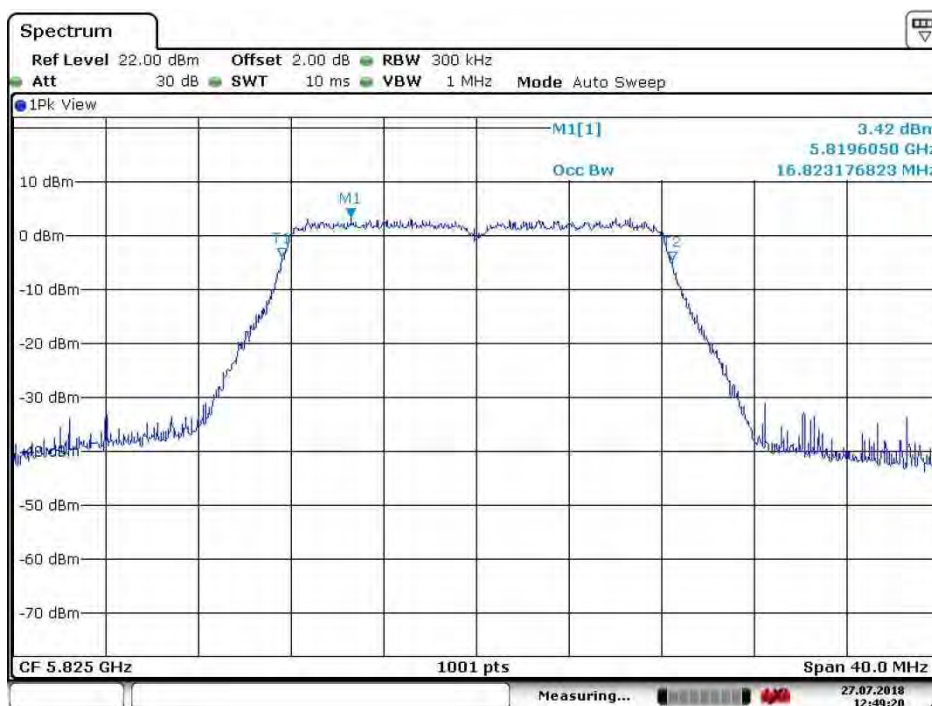
Date: 27 JUL 2018 12:48:42



5.5.1.2.3 11A20_165 ANT 2



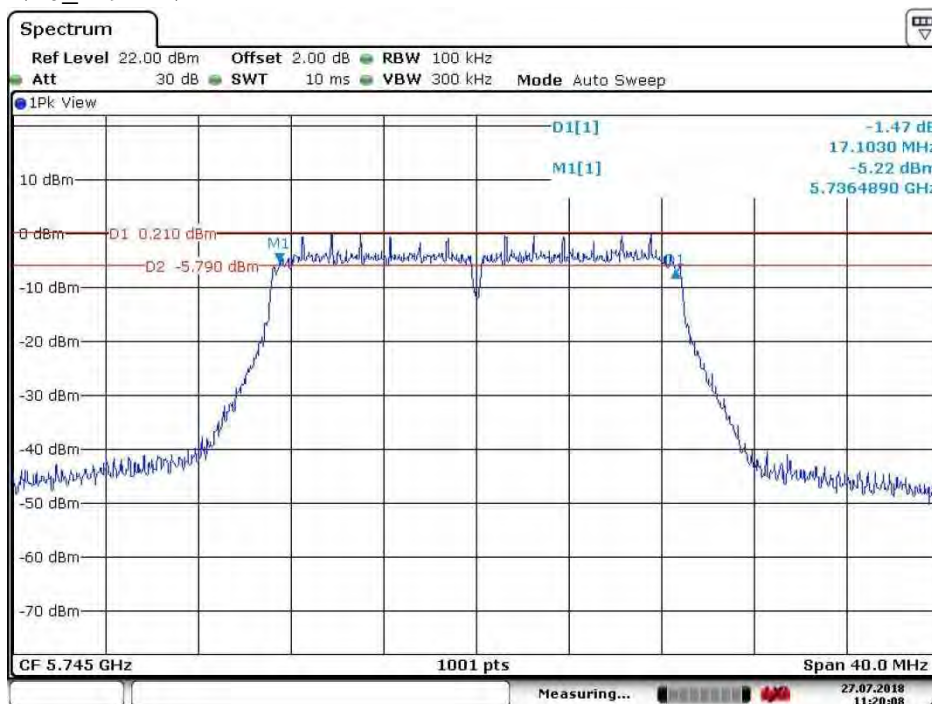
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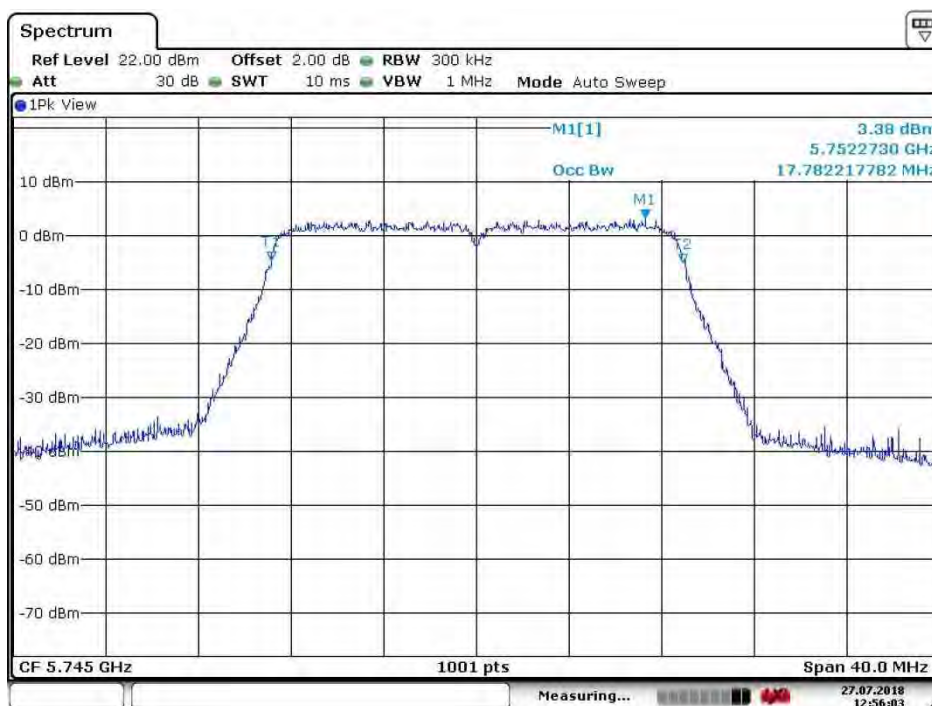
Date: 27 JUL 2018 12:49:21



5.5.1.2.4 11N20_149 ANT 2



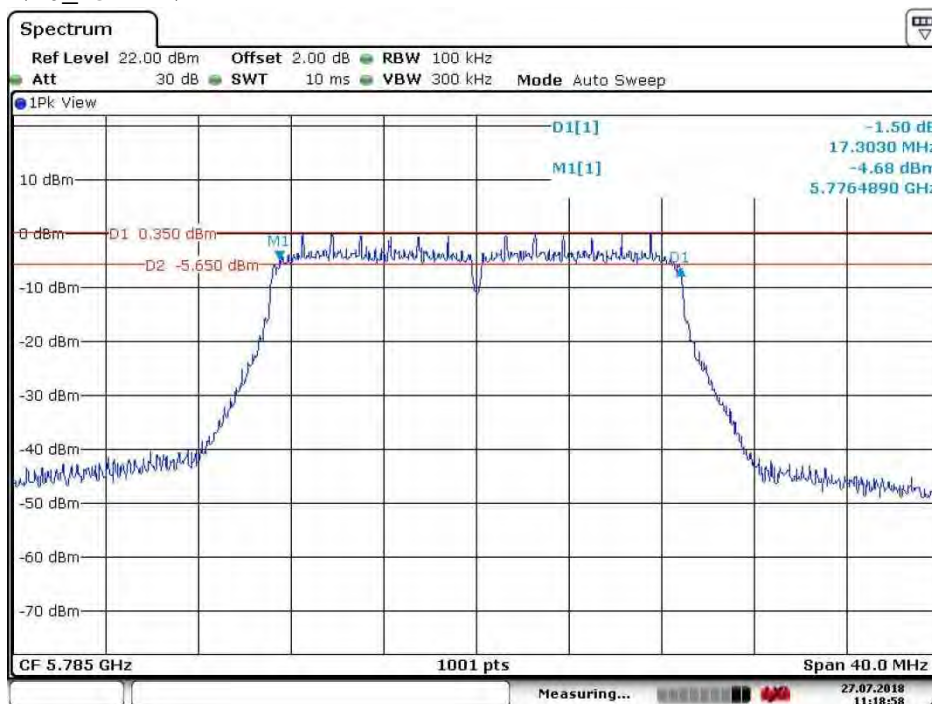
Date: 27.JUL.2018 11:20:09



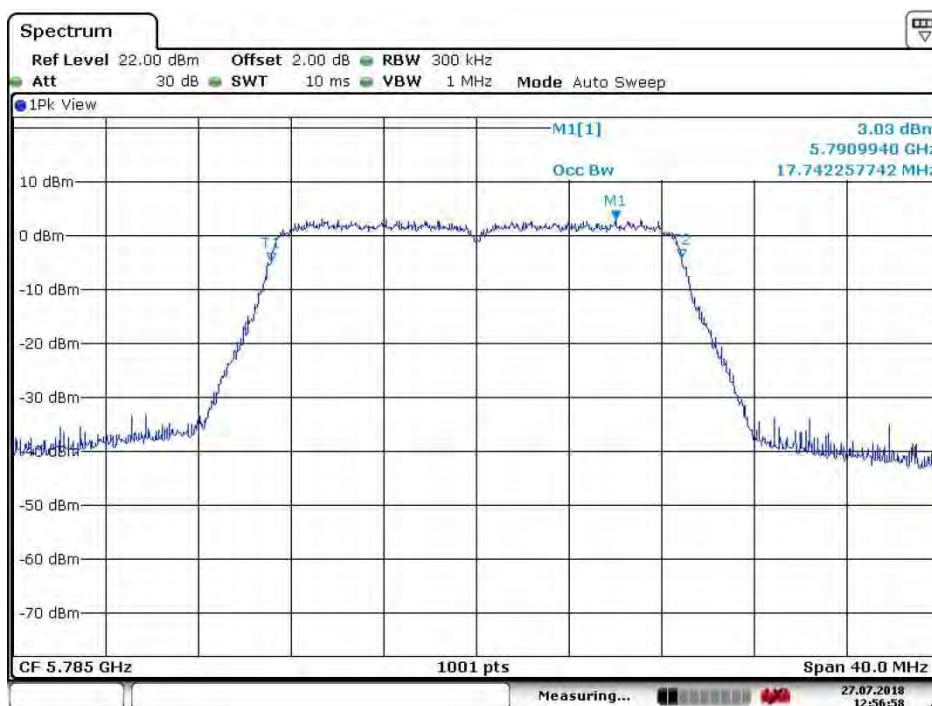
Date: 27.JUL.2018 12:56:03



5.5.1.2.5 11N20_157 ANT 2



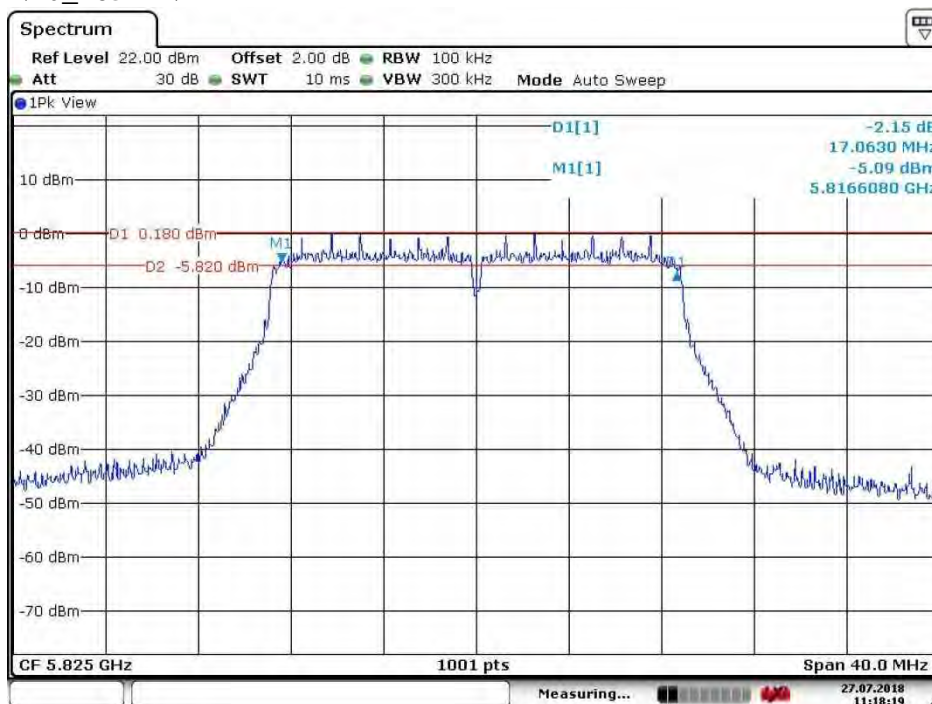
Date: 27 JUL 2018 11:18:57



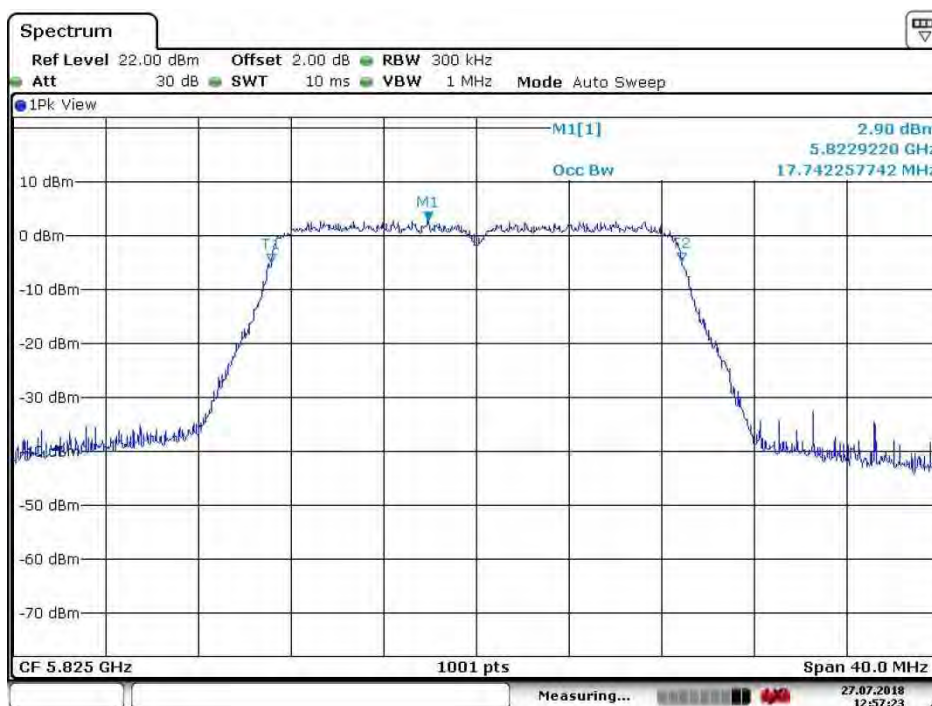
Date: 27 JUL 2018 12:56:58



5.5.1.2.6 11N20_165 ANT 2



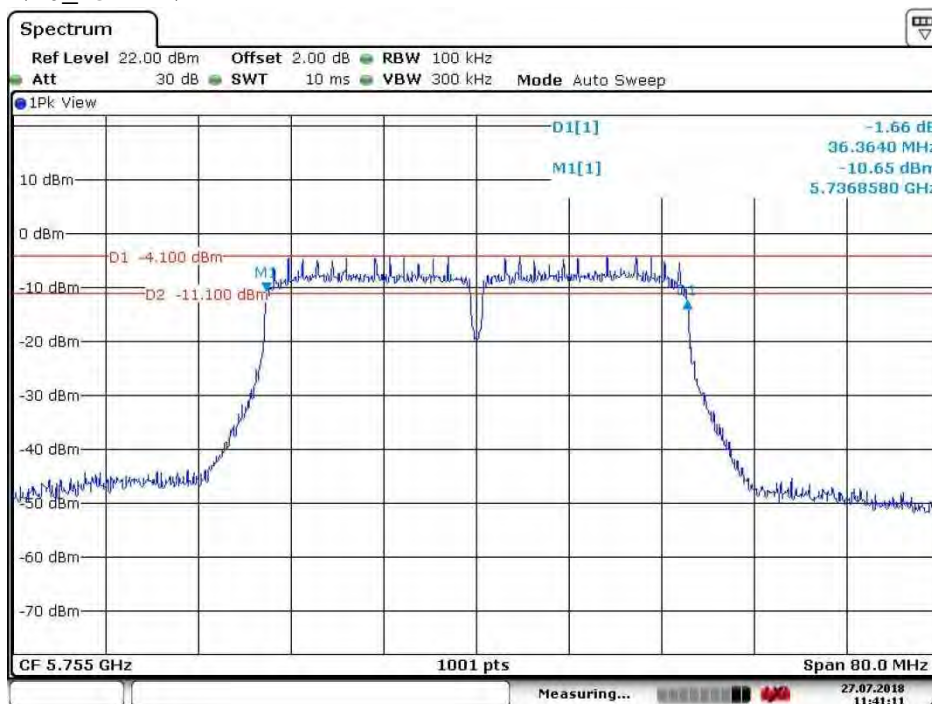
Date: 27.JUL.2018 11:18:19



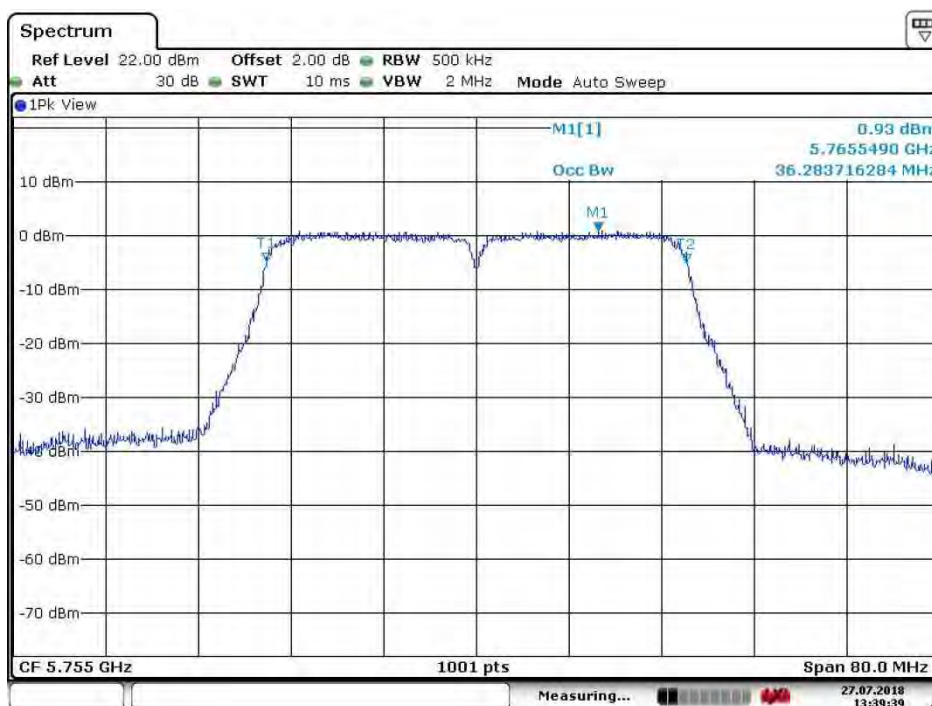
Date: 27.JUL.2018 12:57:23



5.5.1.2.7 11N40_151 ANT 2

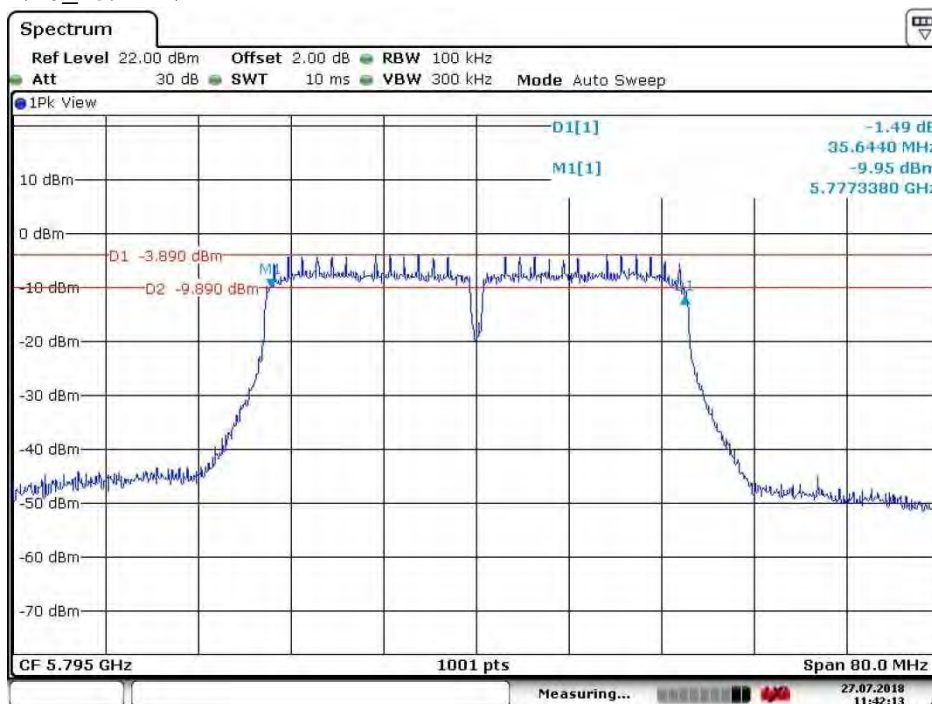


Date: 27.JUL.2018 11:41:11

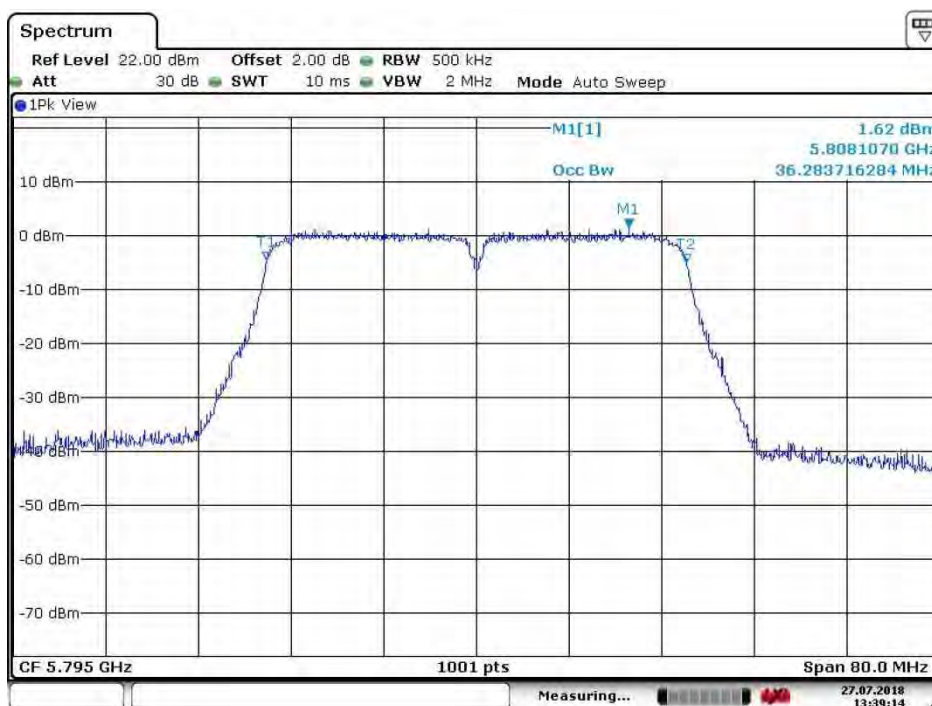


Date: 27.JUL.2018 13:39:40

5.5.1.2.8 11N40 159 ANT 2



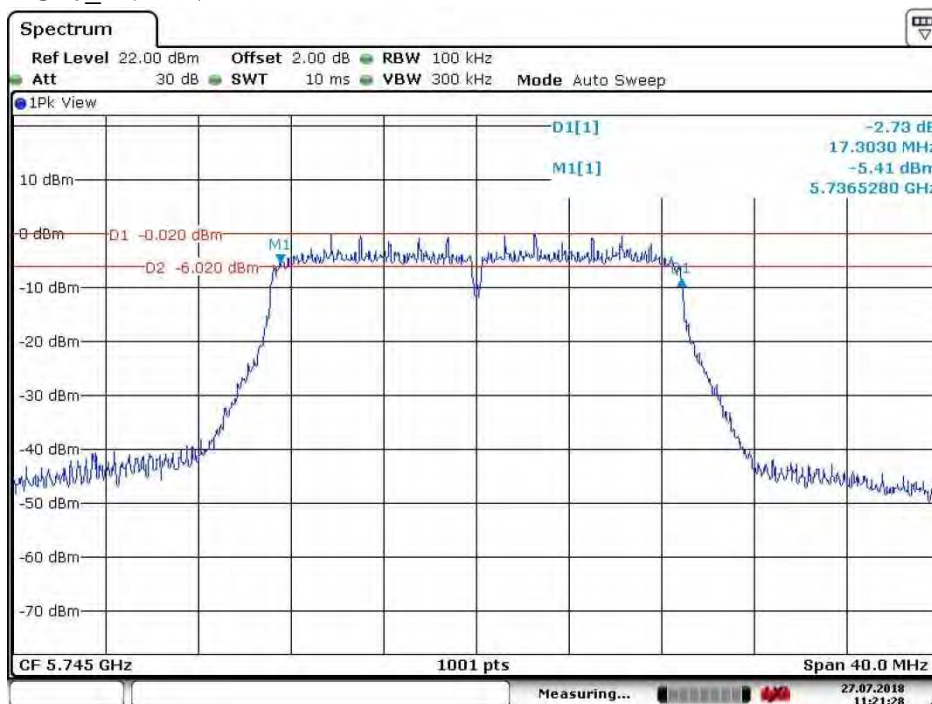
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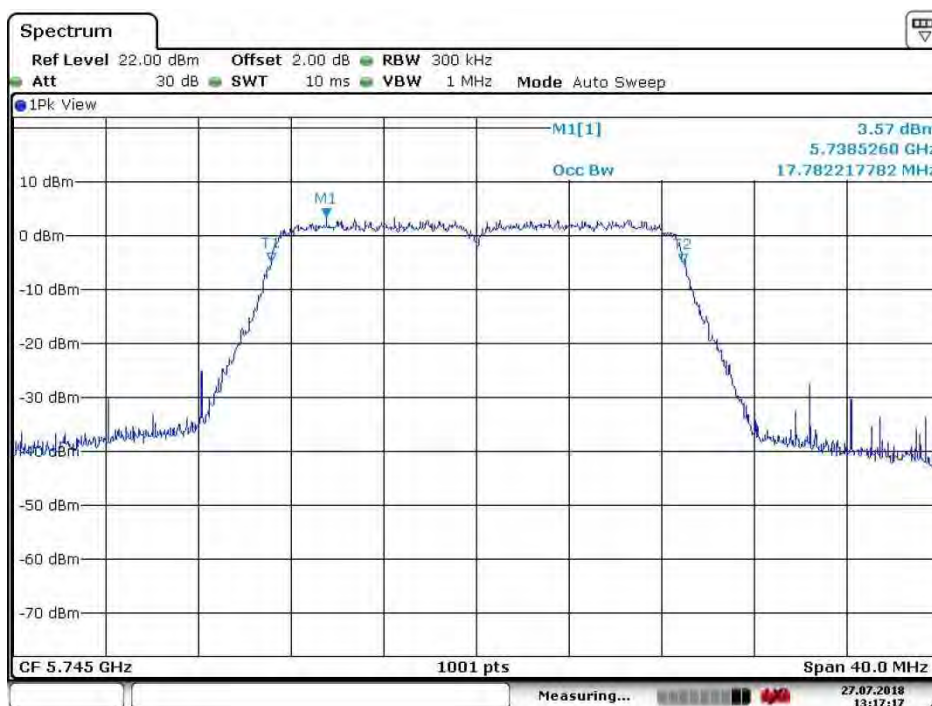
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5.5.1.2.9 11AC20_149 ANT 2

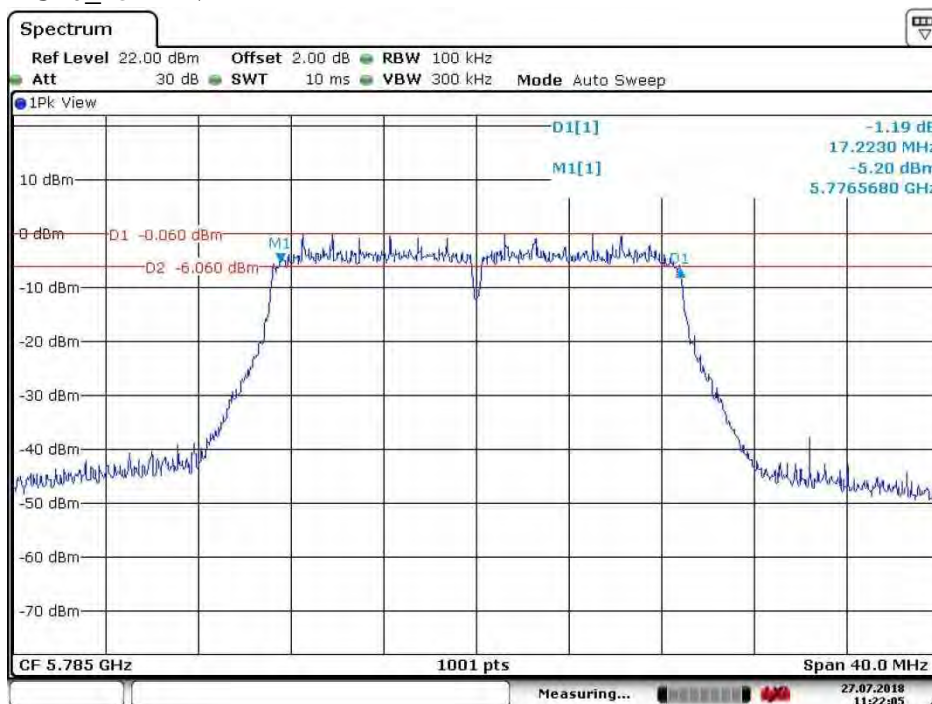


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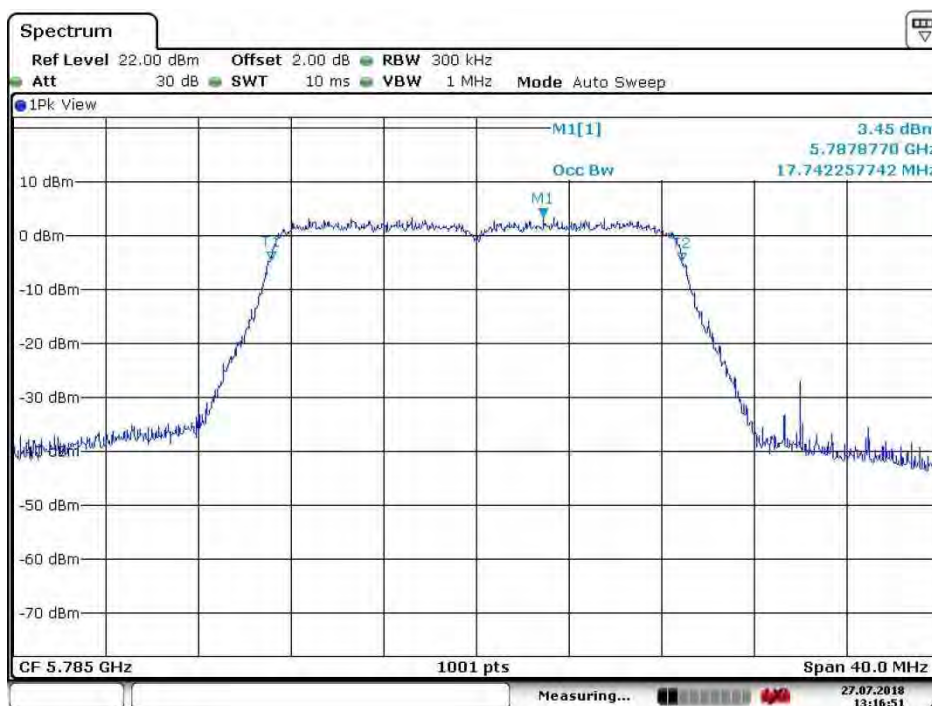


Date: 27 JUL 2018 13:17:17

5.5.1.2.10 11AC20 157 ANT 2



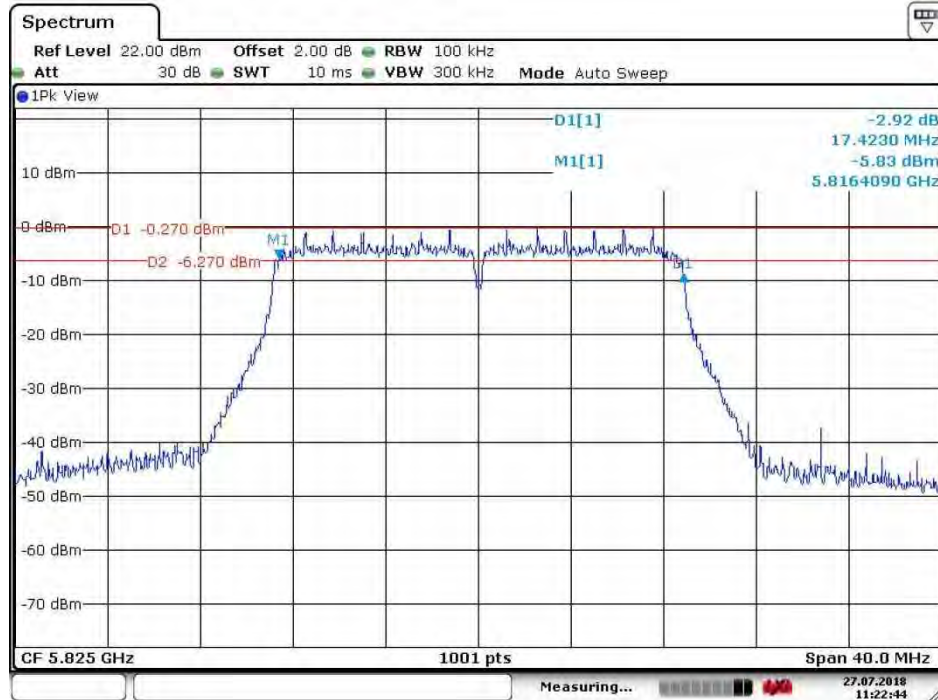
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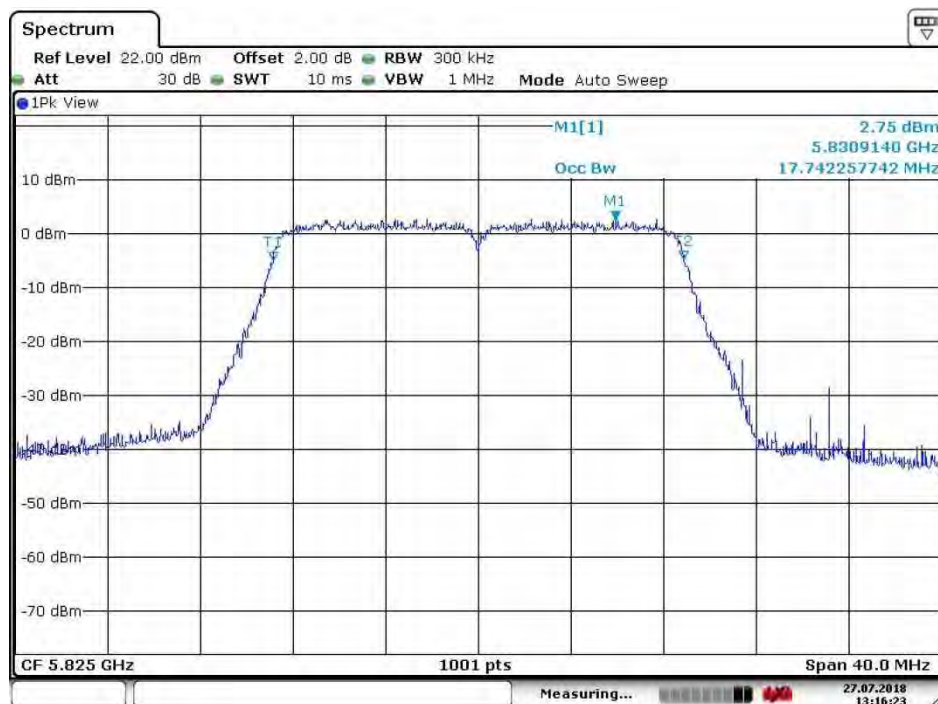
Date: 27 JUL 2018 13:16:52



5.5.1.2.11 11AC20_165 ANT 2



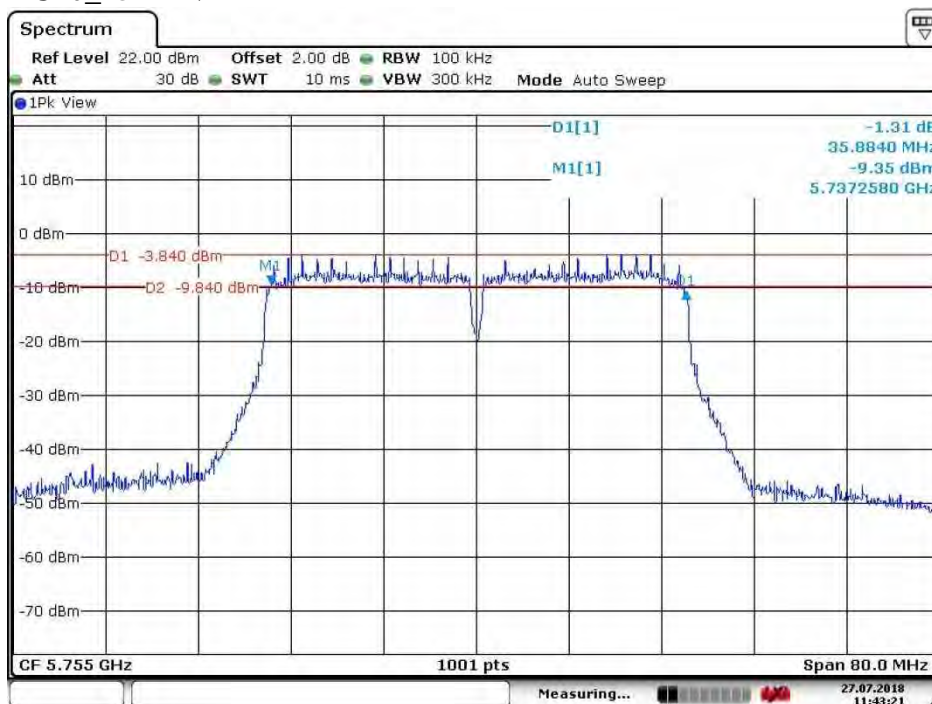
Date: 27.JUL.2018 11:22:44



Date: 27.JUL.2018 13:16:24



5.5.1.2.12 11AC40_151 ANT 2



Date: 27 JUL 2018 11:43:21



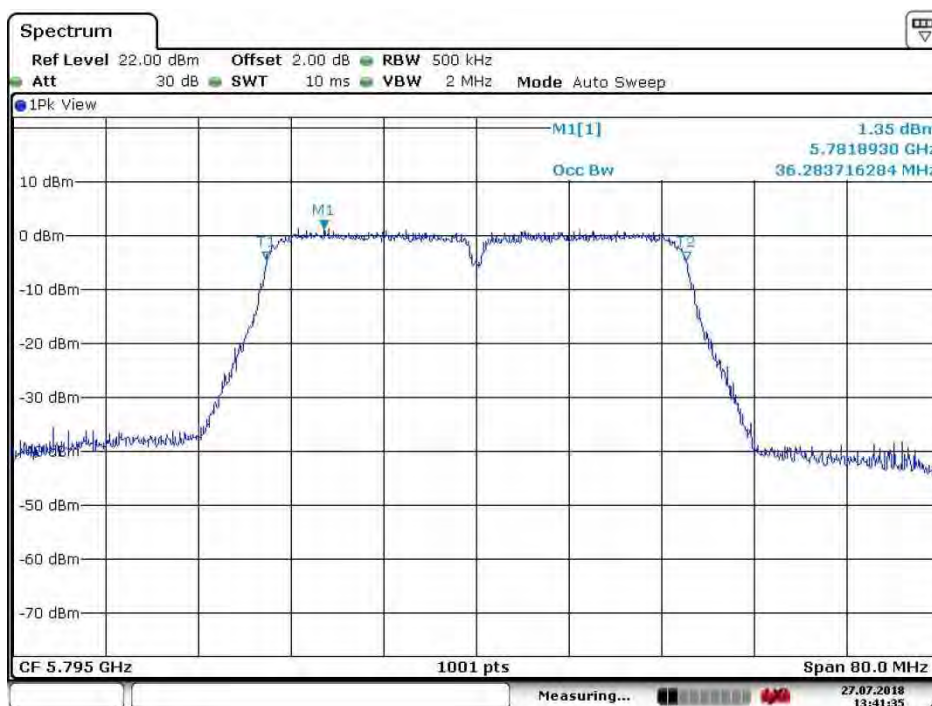
Date: 27 JUL 2018 13:42:02



5.5.1.2.13 11AC40_159 ANT 2



Date: 27 JUL 2018 11:44:19

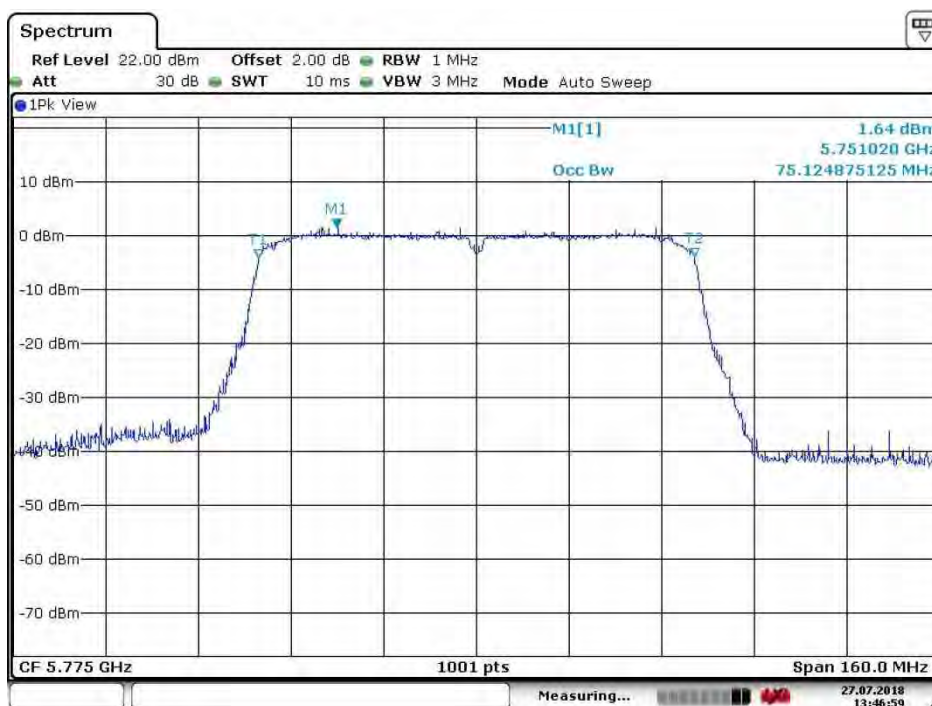


Date: 27 JUL 2018 13:41:35

5.5.1.2.14 11AC80 155 ANT 2



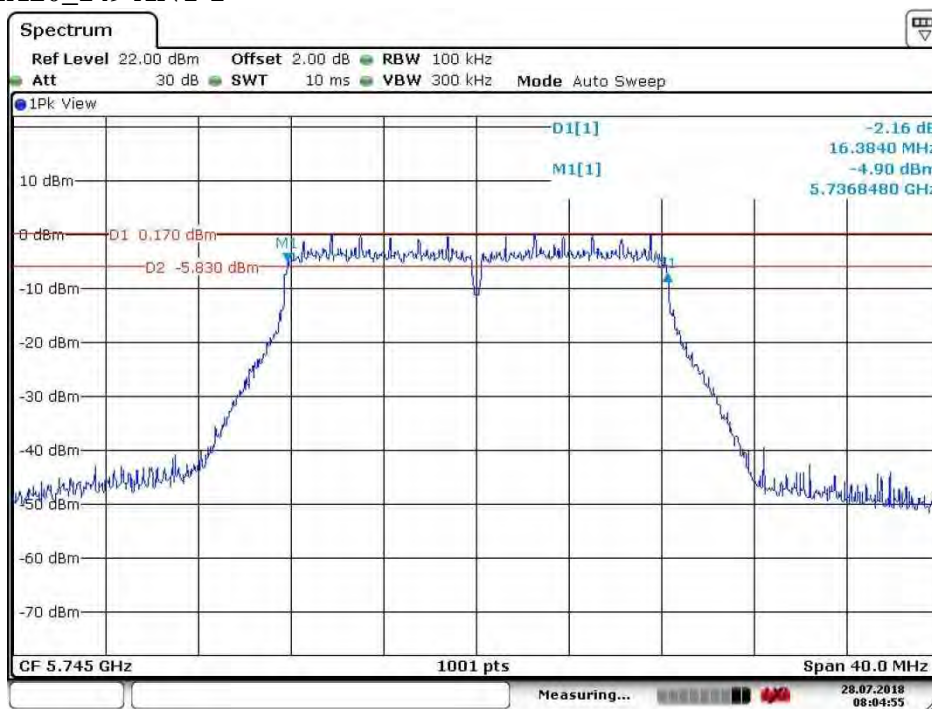
Date: 27 JUL 2018 11:39:15



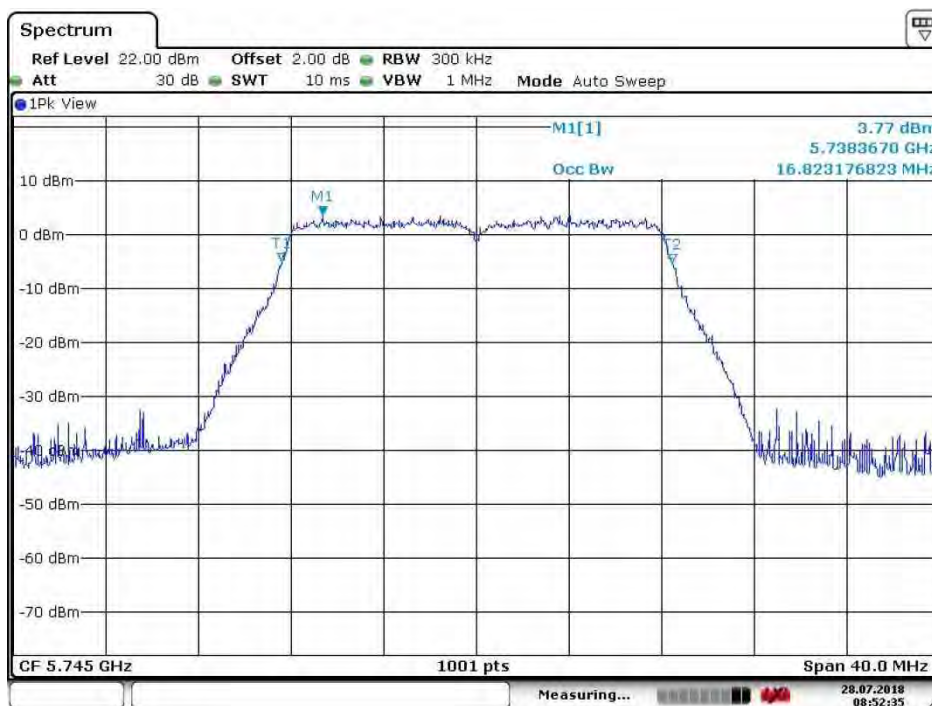
Date: 27 JUL 2018 13:46:59

5.5.1.3 MIMO ANT 1

5.5.1.3.1 11A20 149 ANT 1

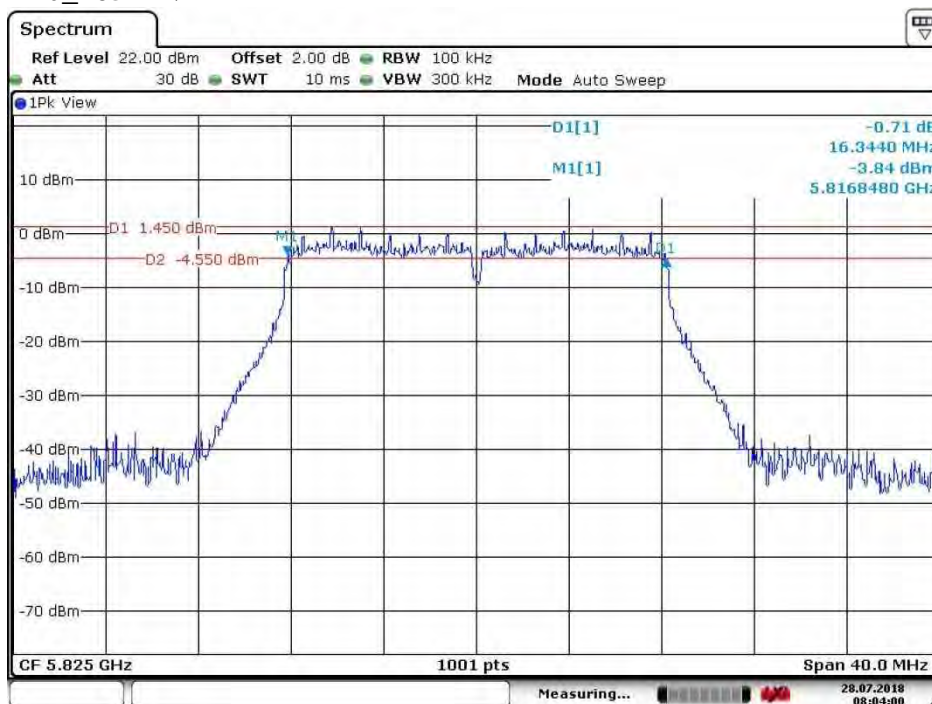


Date: 28 JUL 2018 08:04:56

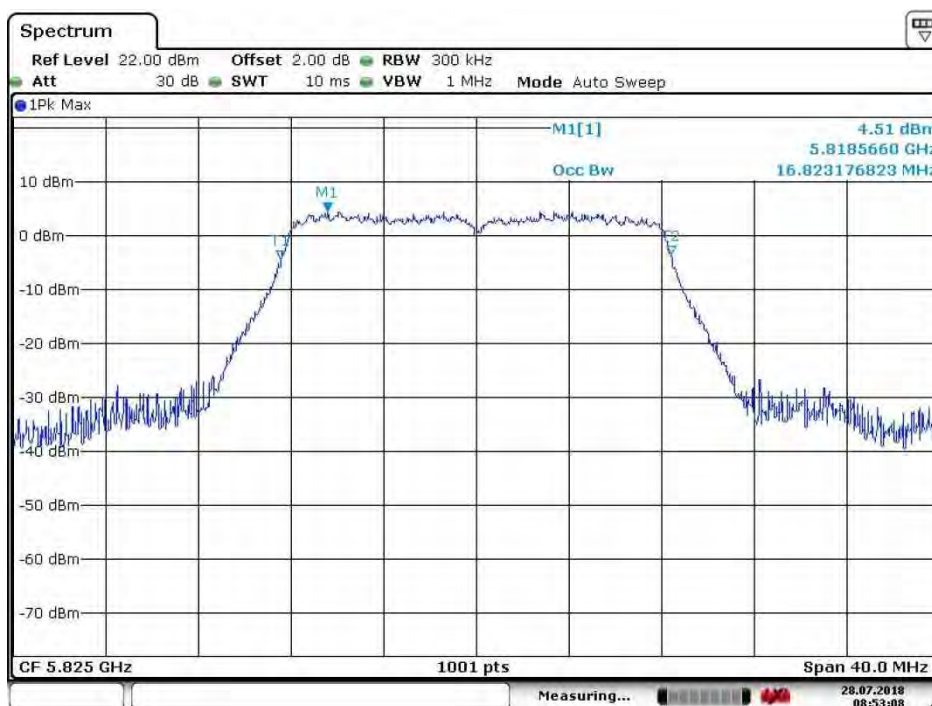


Date: 28.JUL.2018 08:52:35

5.5.1.3.2 11A20 165 ANT 1



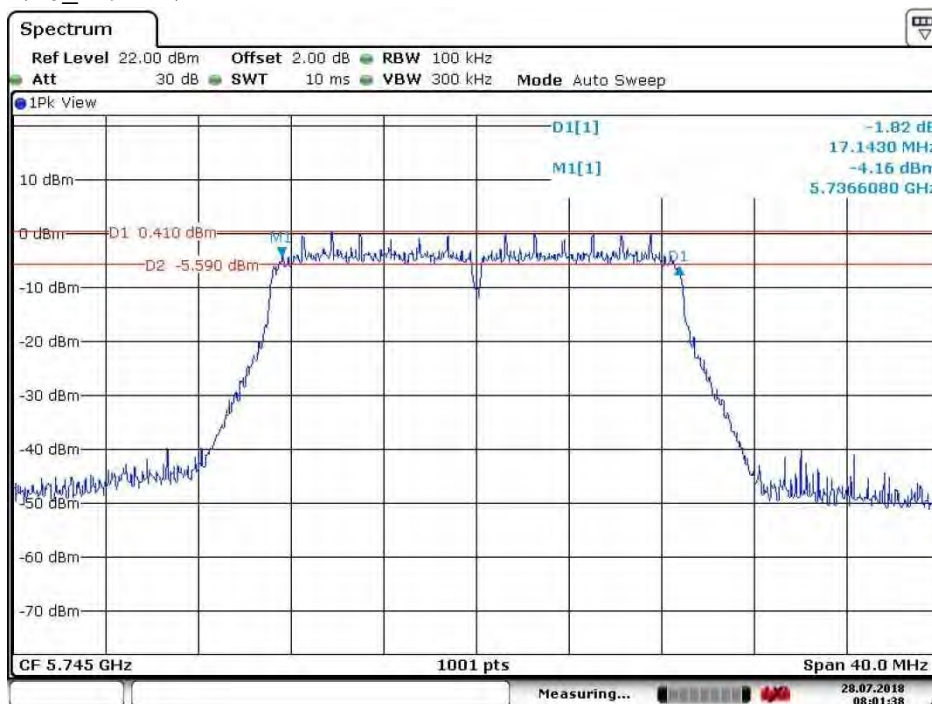
Date: 28 JUL 2018 08:04:00



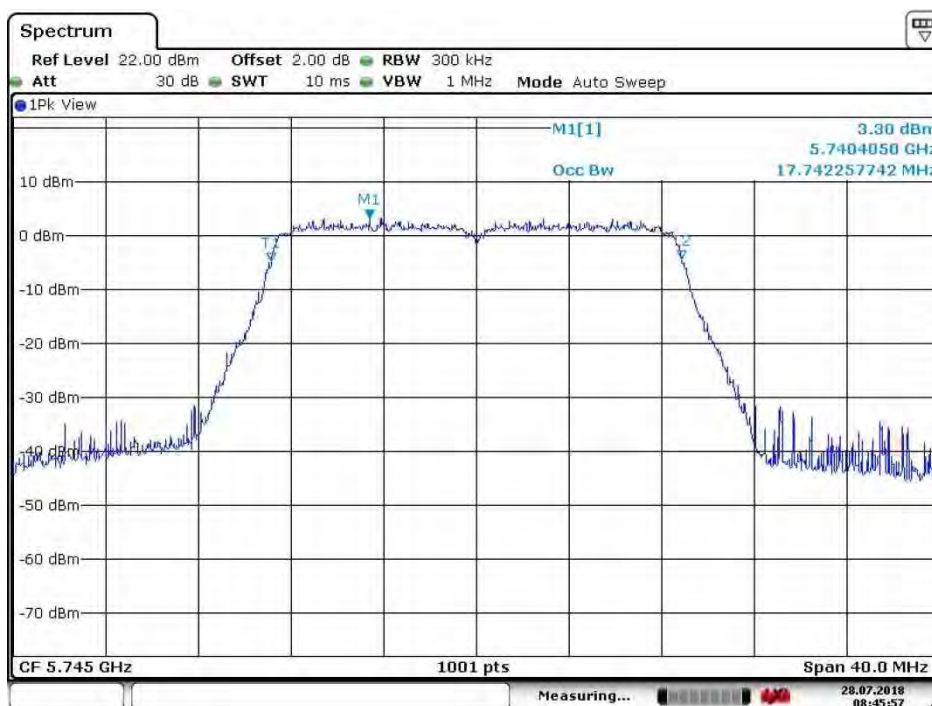
Date: 28 JUL 2018 08:53:09



5.5.1.3.3 11N20_149 ANT 1

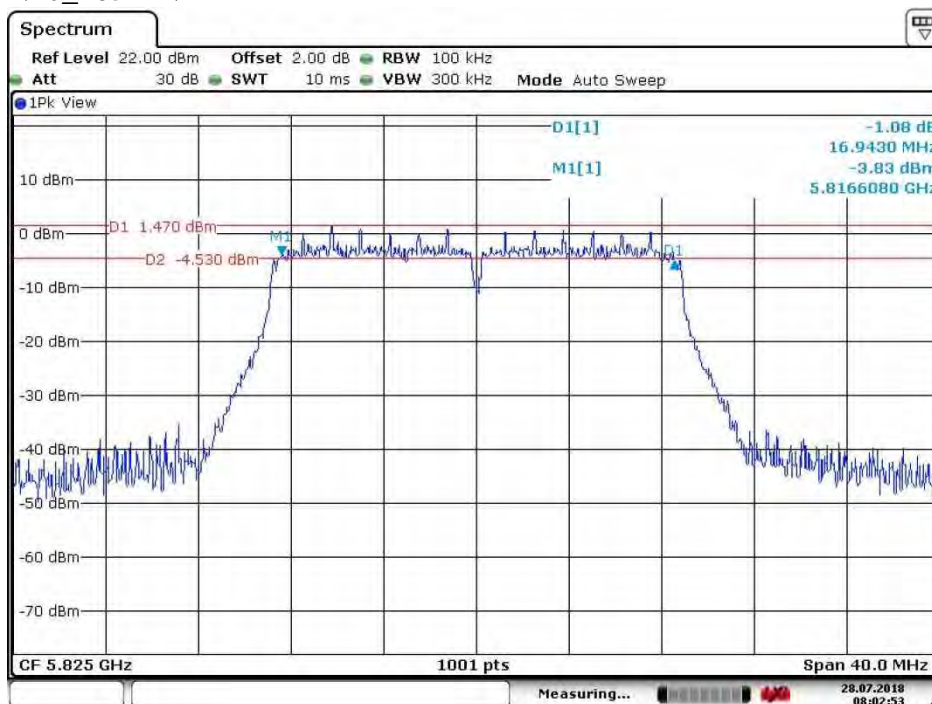


Date: 28.JUL.2018 08:01:38

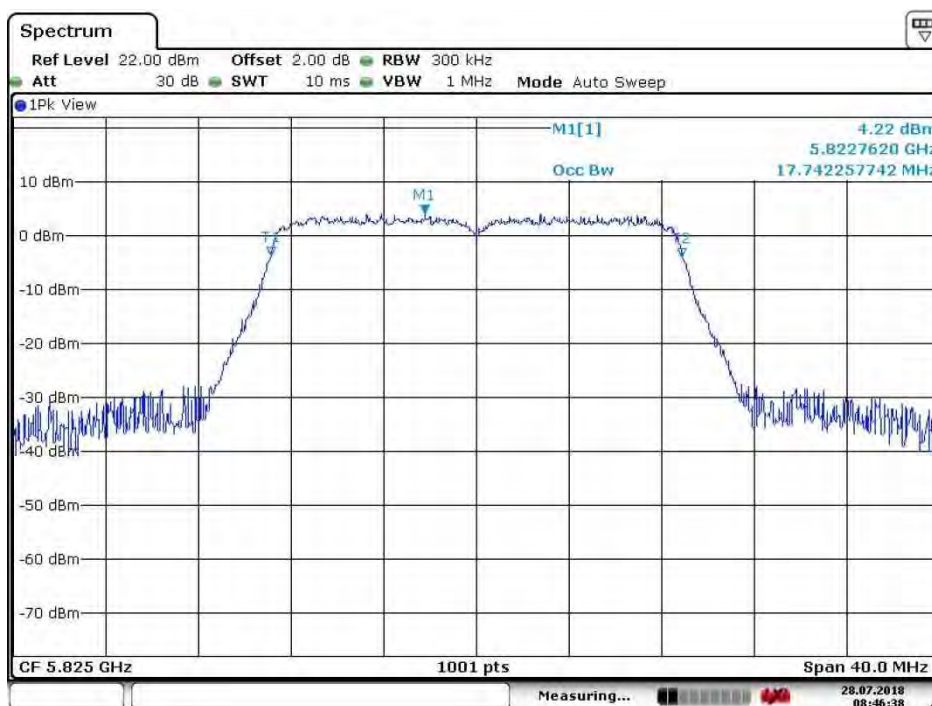


Date: 28.JUL.2018 08:45:57

5.5.1.3.4 11N20 165 ANT 1



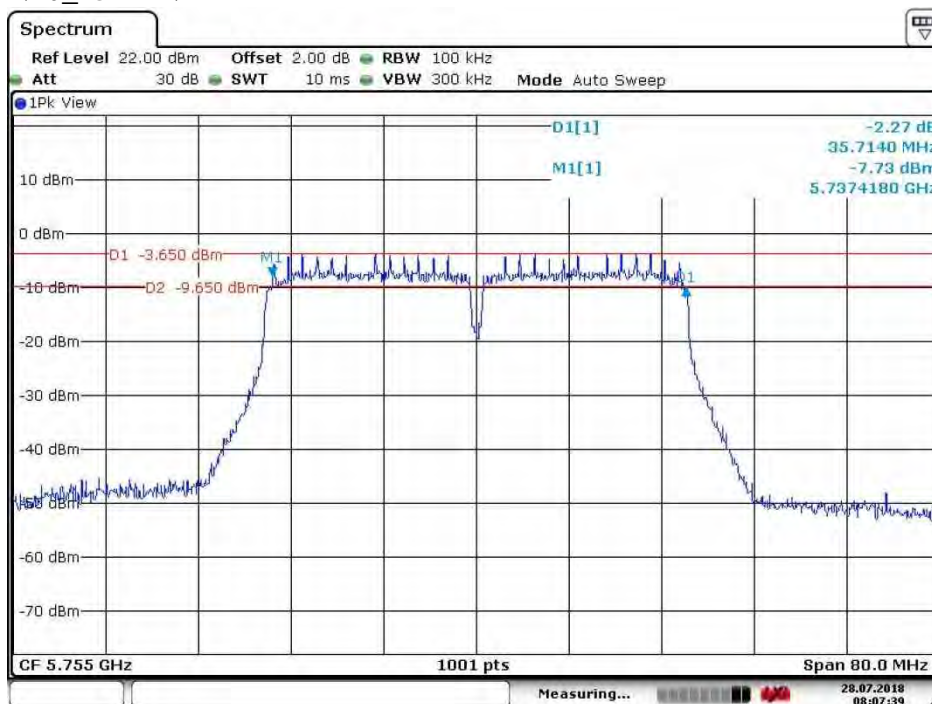
Date: 28 JUL 2018 08:02:53



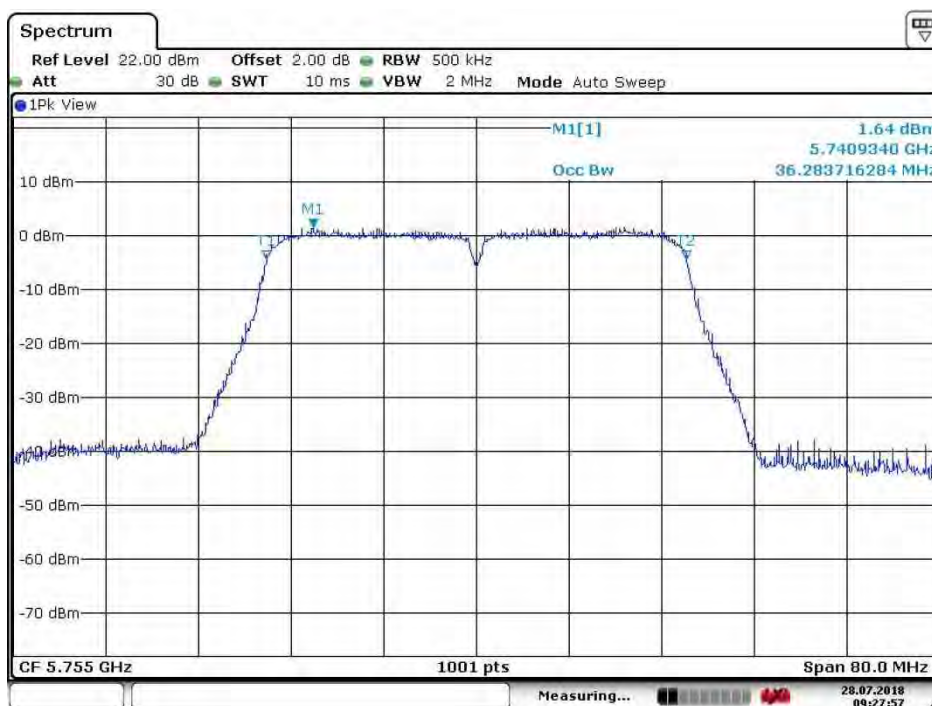
Date: 28 JUL 2018 08:46:38



5.5.1.3.5 11N40_151 ANT 1



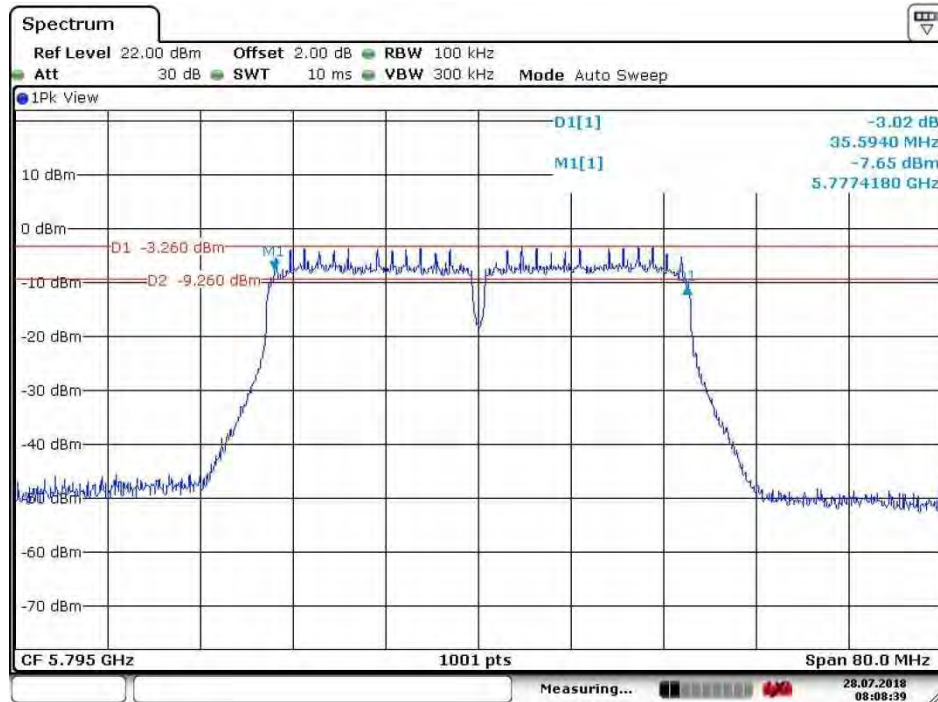
Date: 28 JUL 2018 08:07:39



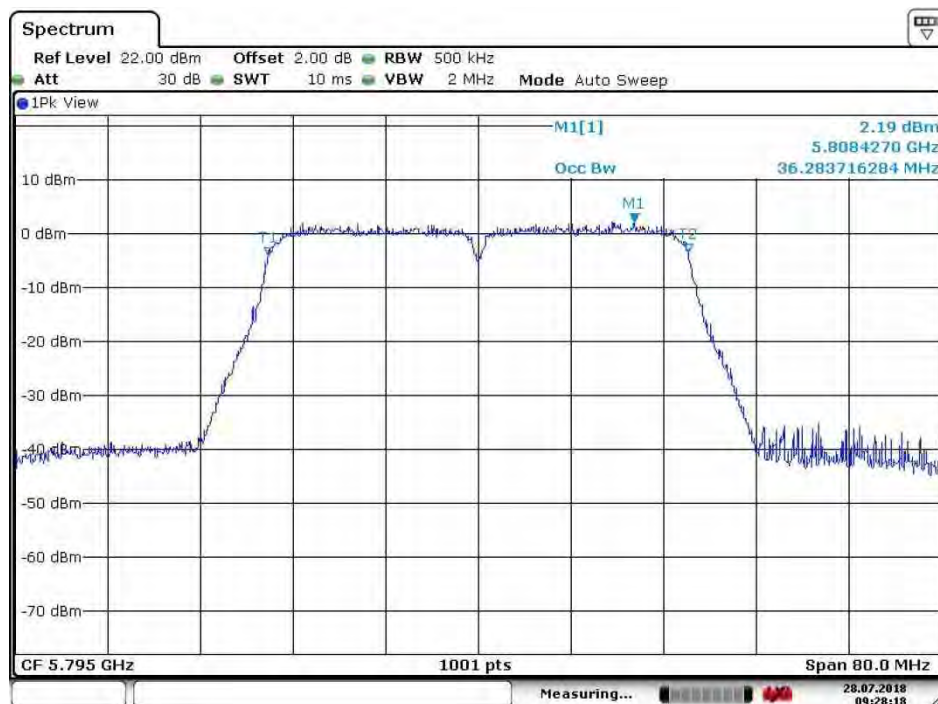
Date: 28 JUL 2018 09:27:57



5.5.1.3.6 11N40_159 ANT 1



Date: 28 JUL 2018 08:08:39



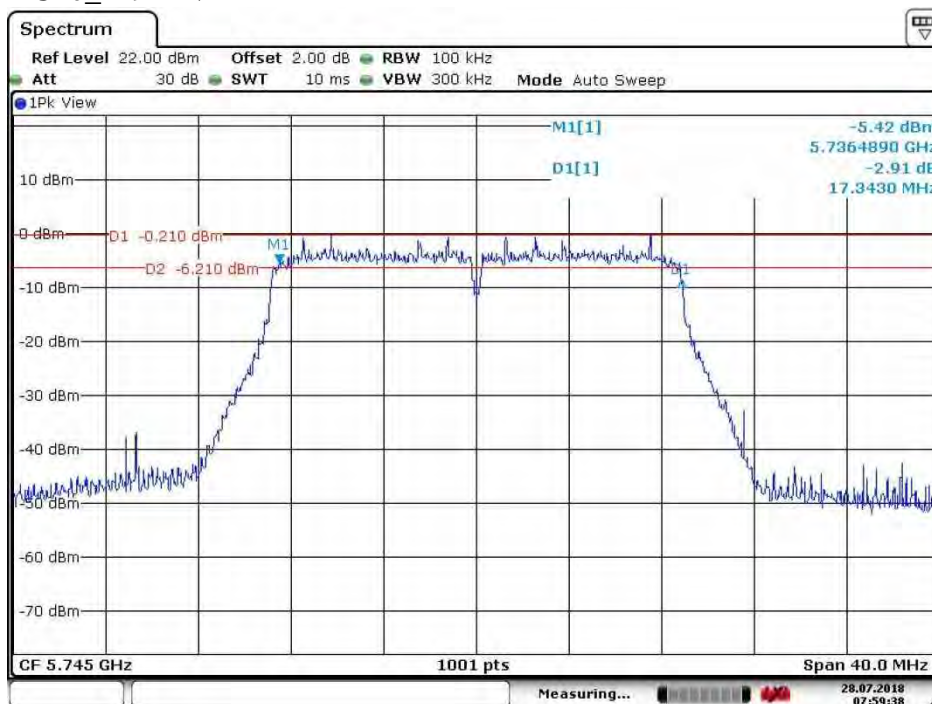
Date: 28 JUL 2018 09:28:19



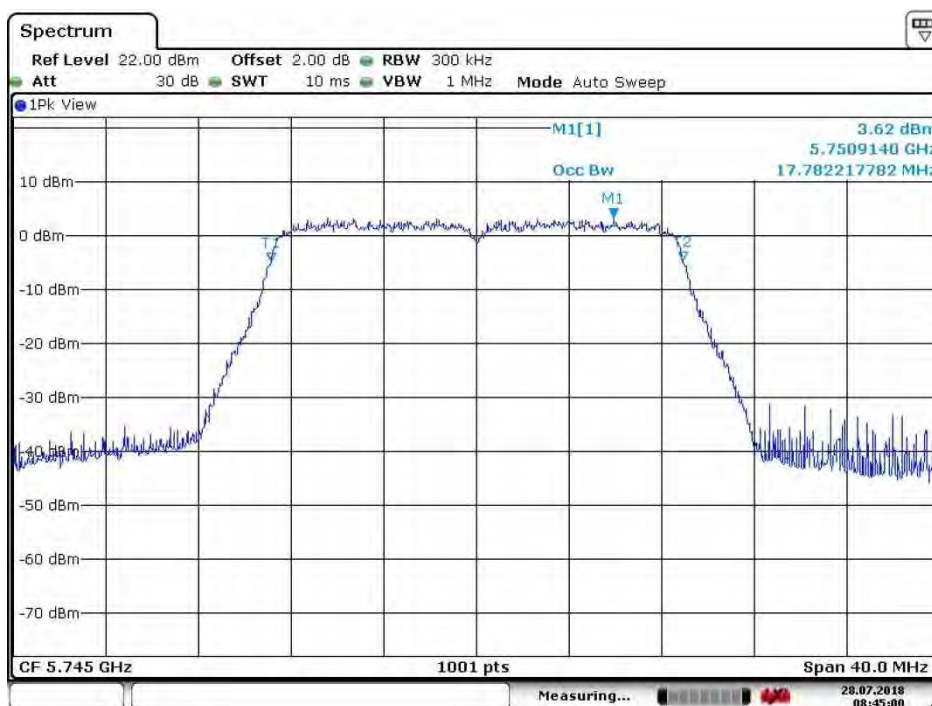
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

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5.5.1.3.7 11AC20_149 ANT 1



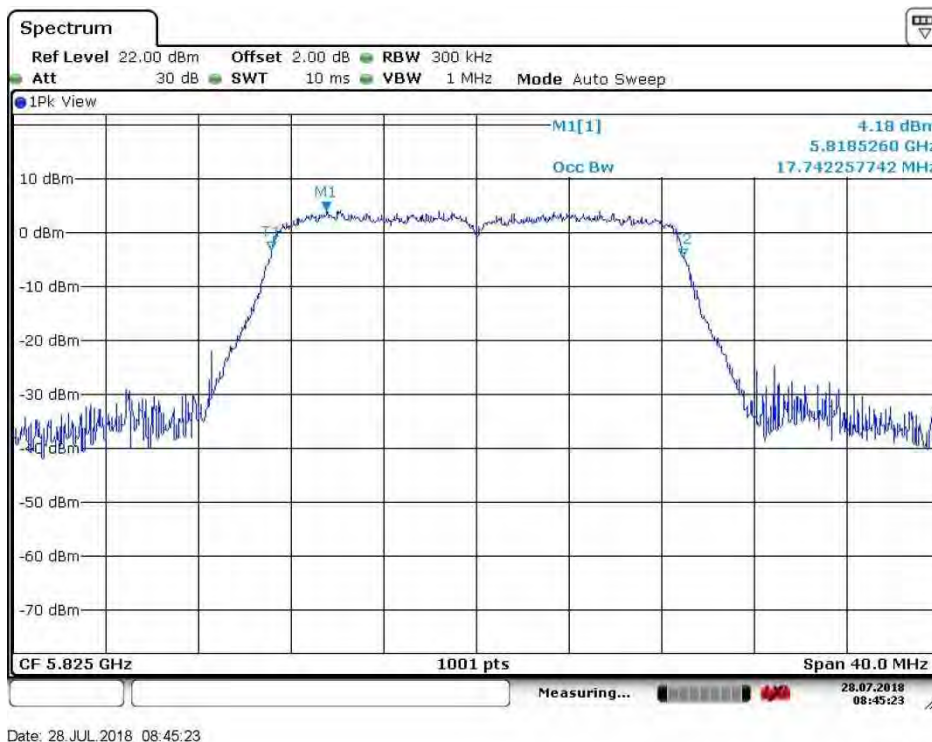
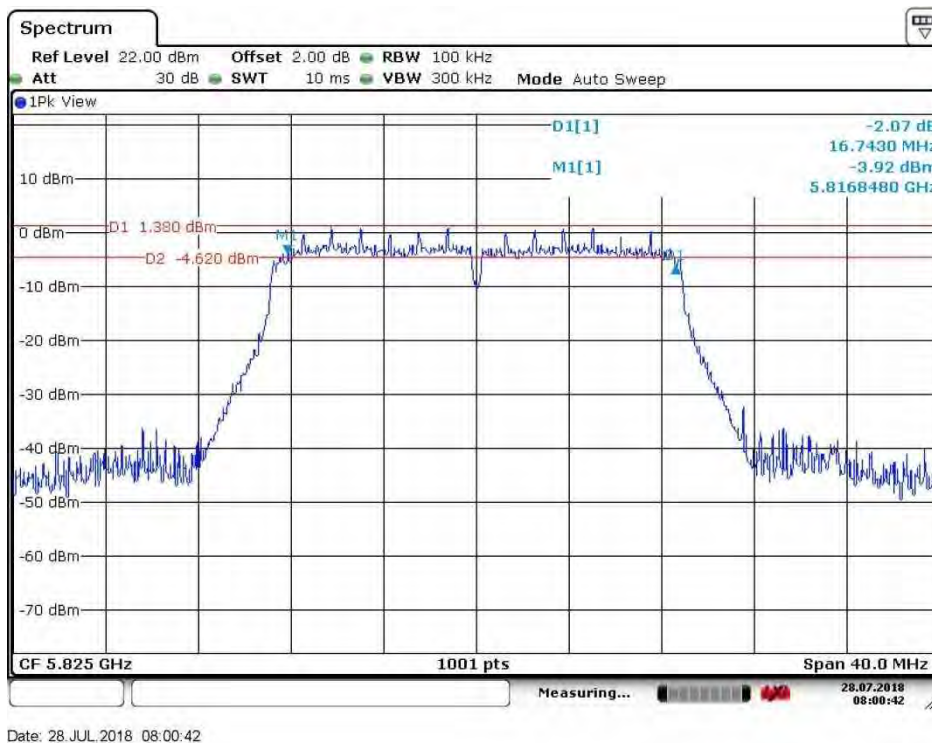
Date: 28 JUL 2018 07:59:38



Date: 28 JUL 2018 08:45:00

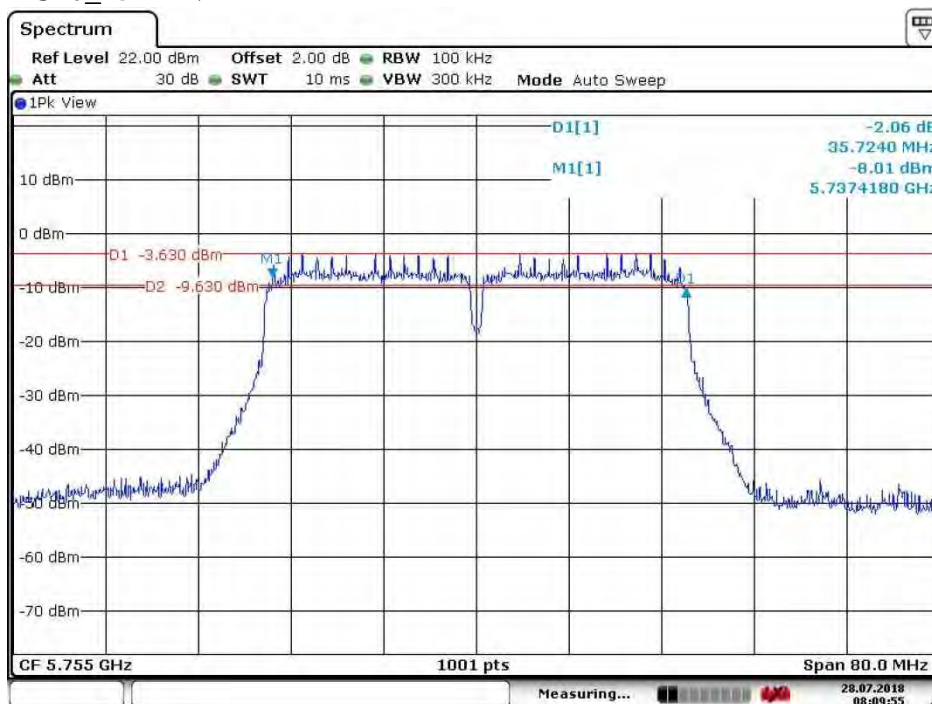


5.5.1.3.8 11AC20_165 ANT 1

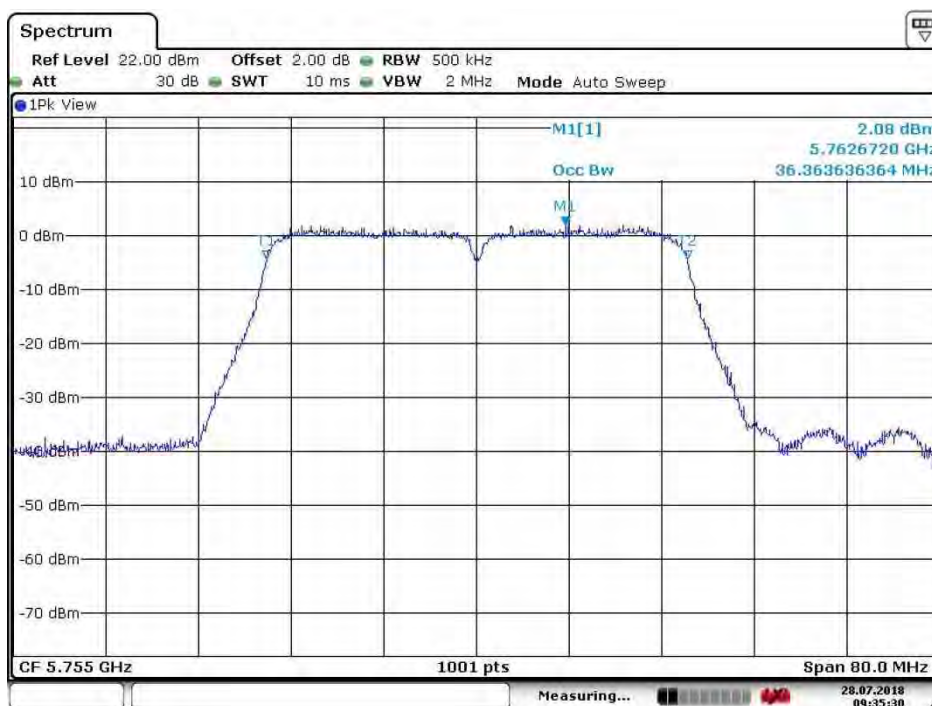




5.5.1.3.9 11AC40_151 ANT 1



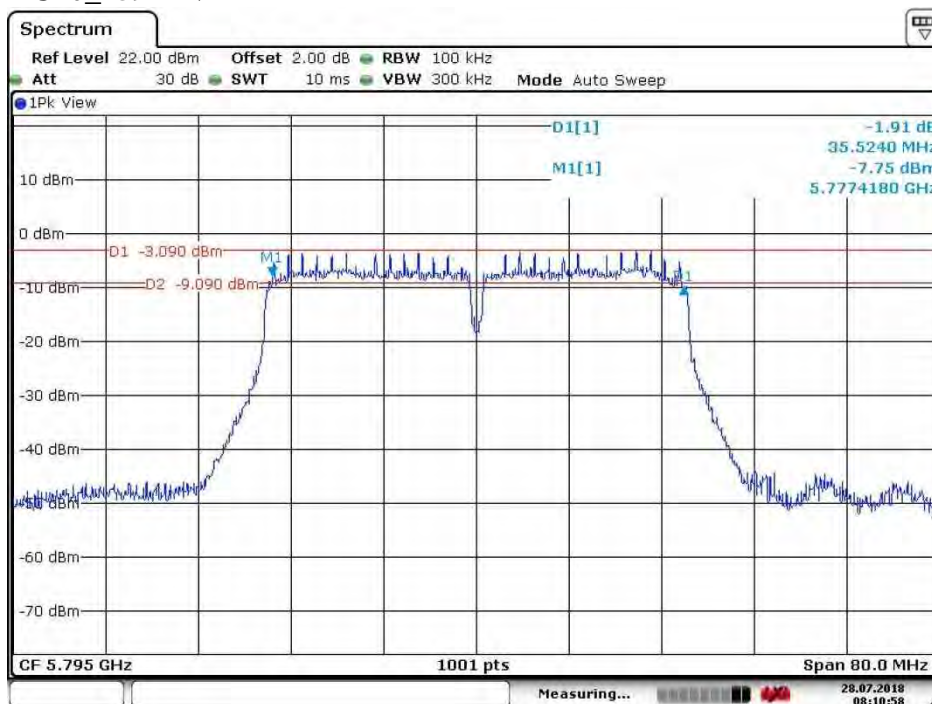
Date: 28 JUL 2018 08:09:55



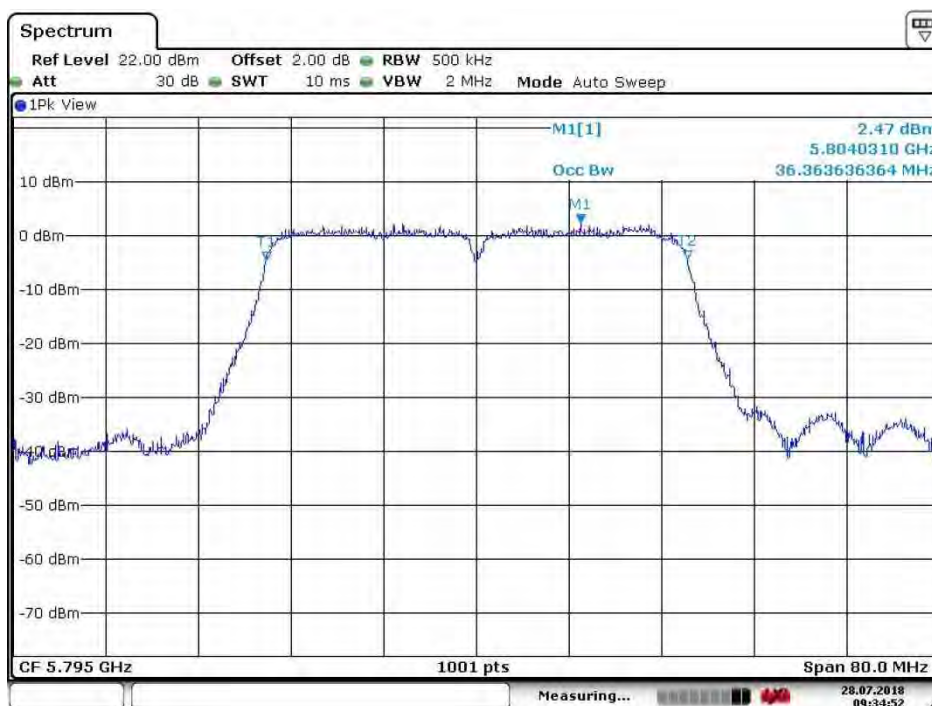
Date: 28 JUL 2018 09:35:31



5.5.1.3.10 11AC40_159 ANT 1

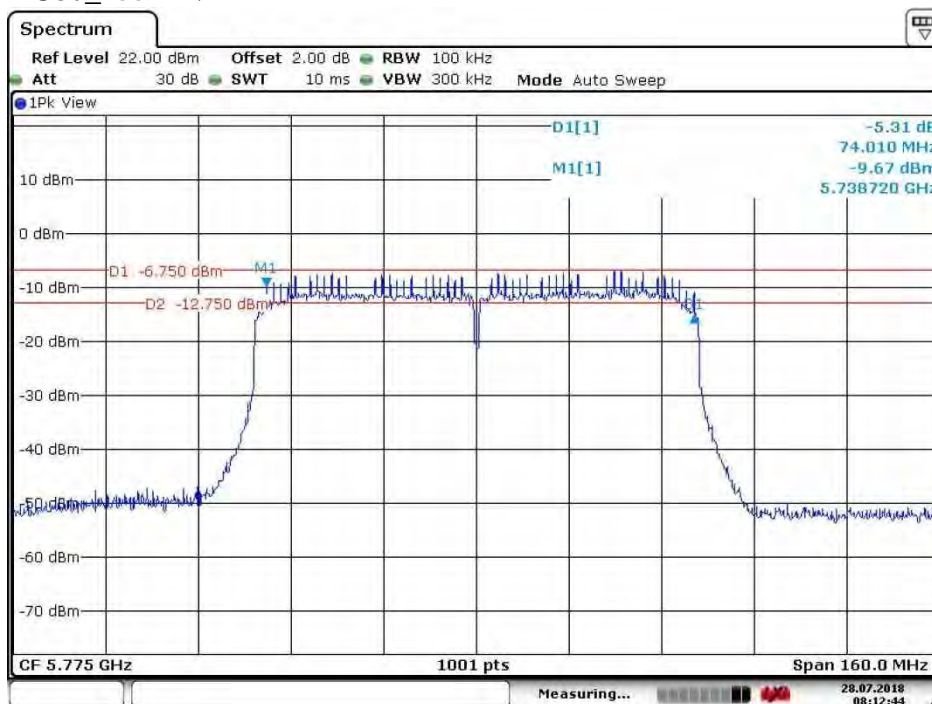


Date: 28 JUL 2018 08:10:59

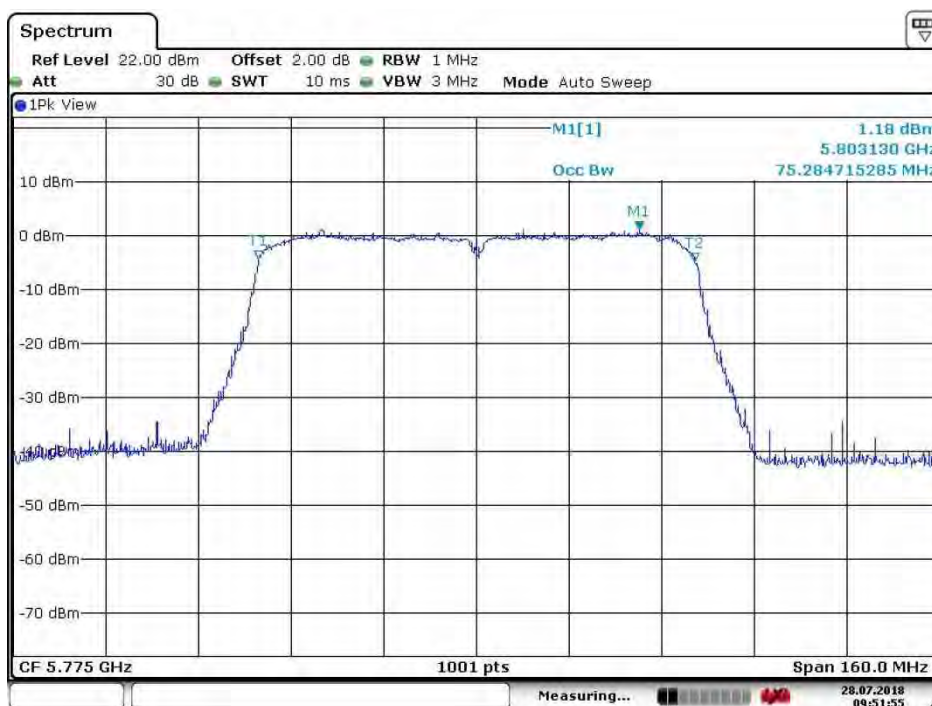


Date: 28 JUL 2018 09:34:53

5.5.1.3.11 11AC80 155 ANT 1



Date: 28 JUL 2018 08:12:44

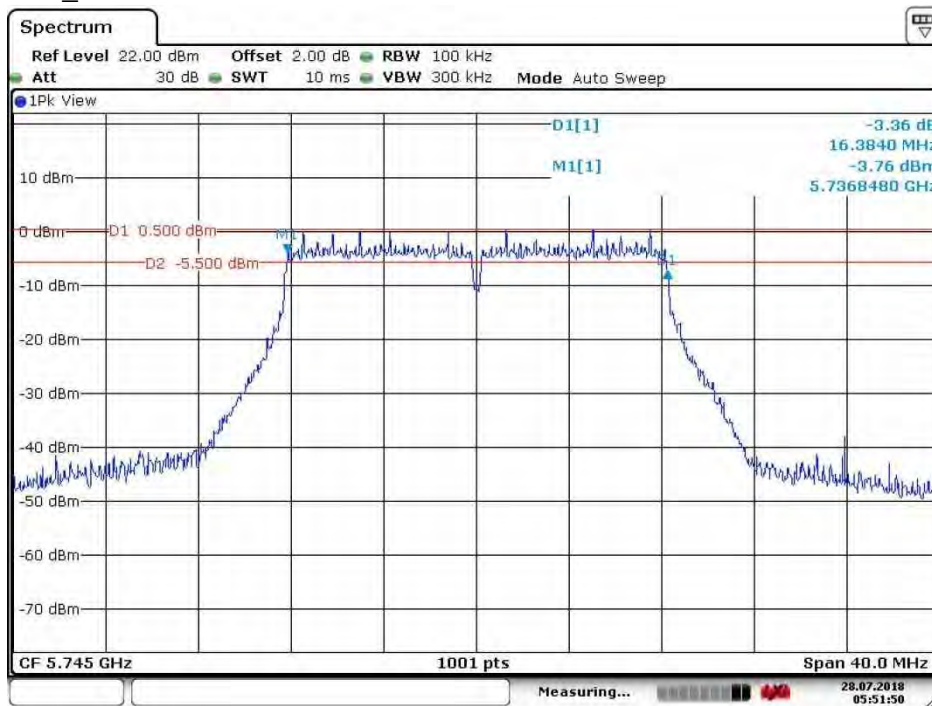


Date: 28 JUL 2018 09:51:56

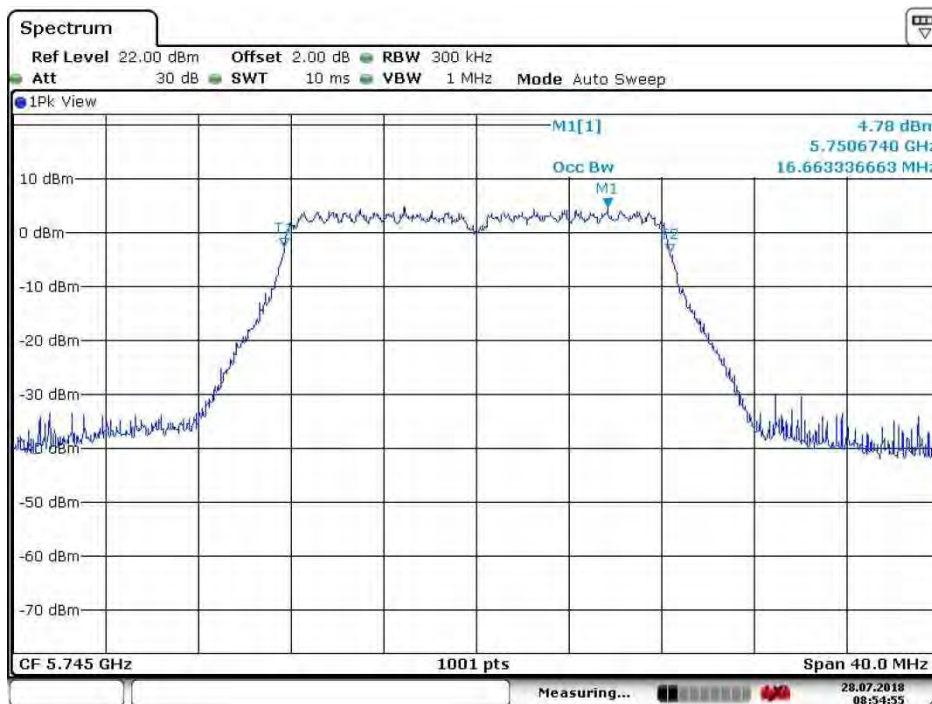


5.5.1.4 MIMO_ANT 2

5.5.1.4.1 11A20_149 ANT 2



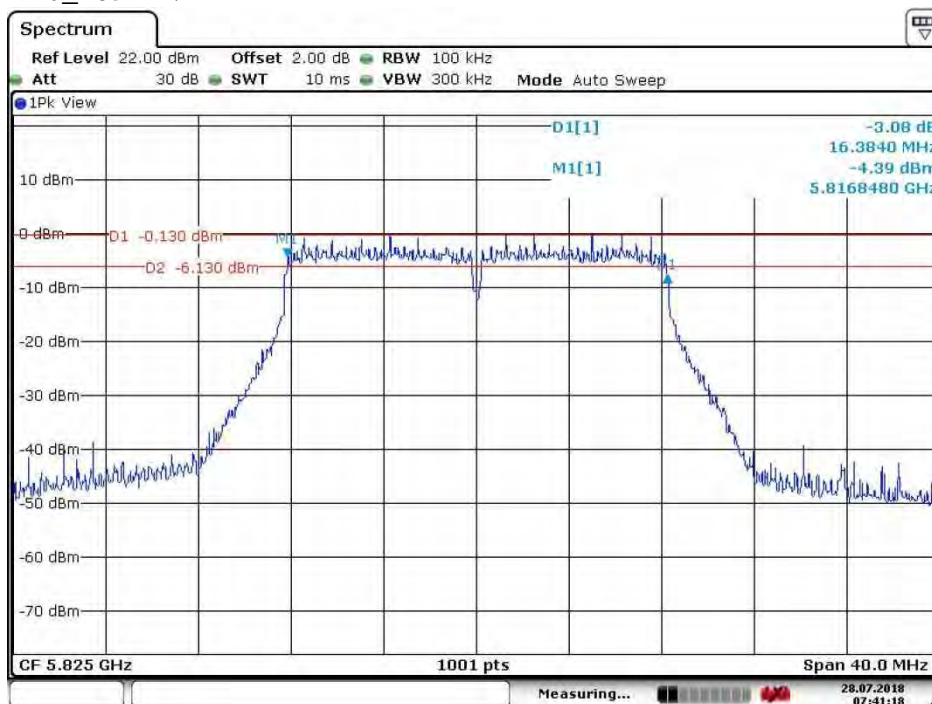
Date: 28 JUL 2018 05:51:51



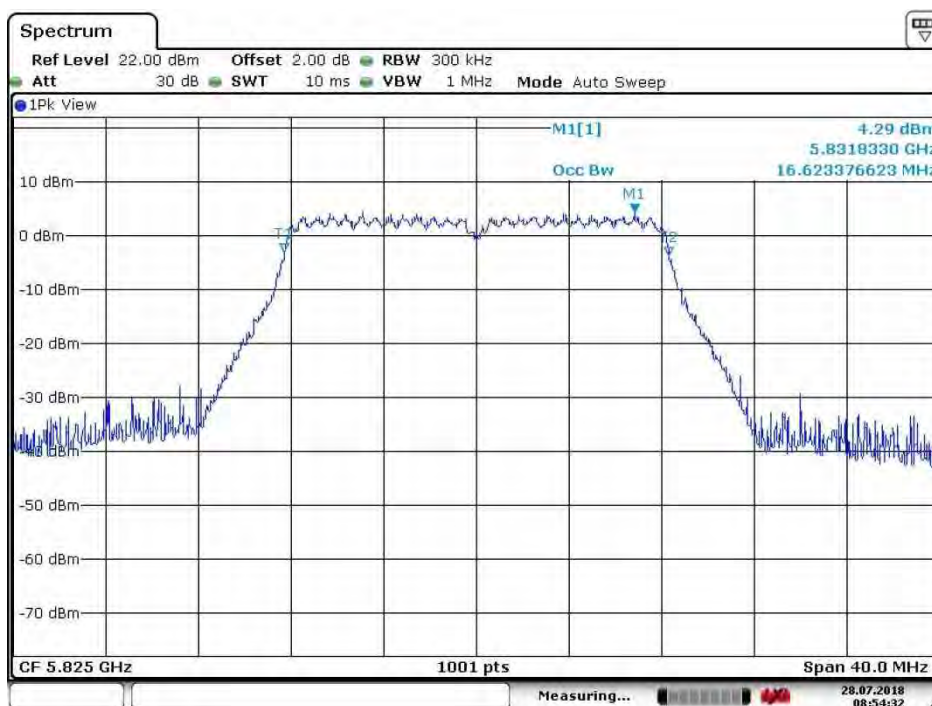
Date: 28 JUL 2018 08:54:55



5.5.1.4.2 11A20_165 ANT 2



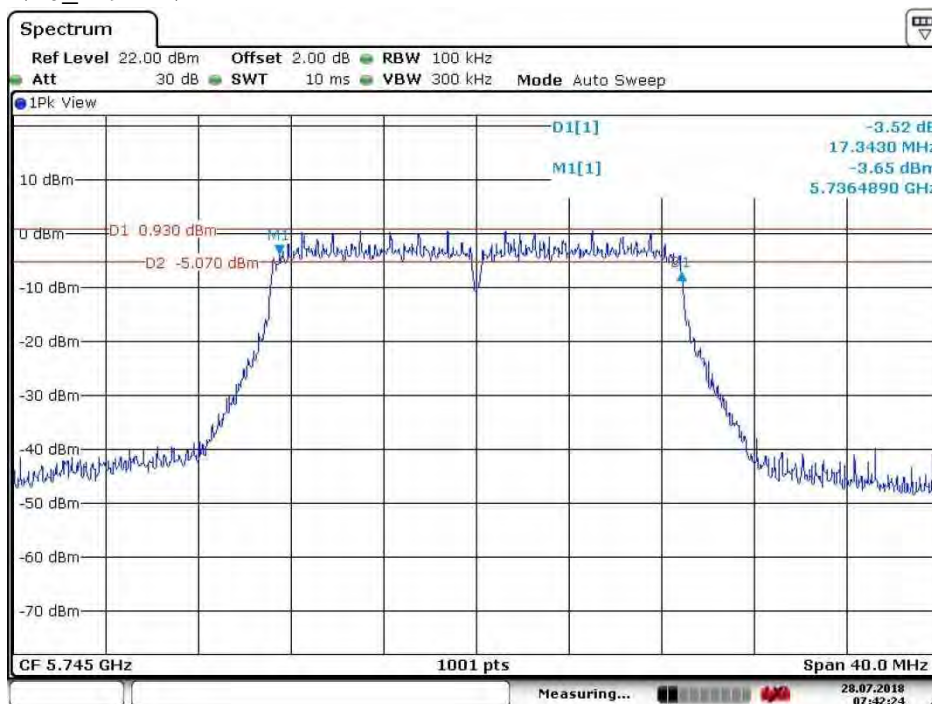
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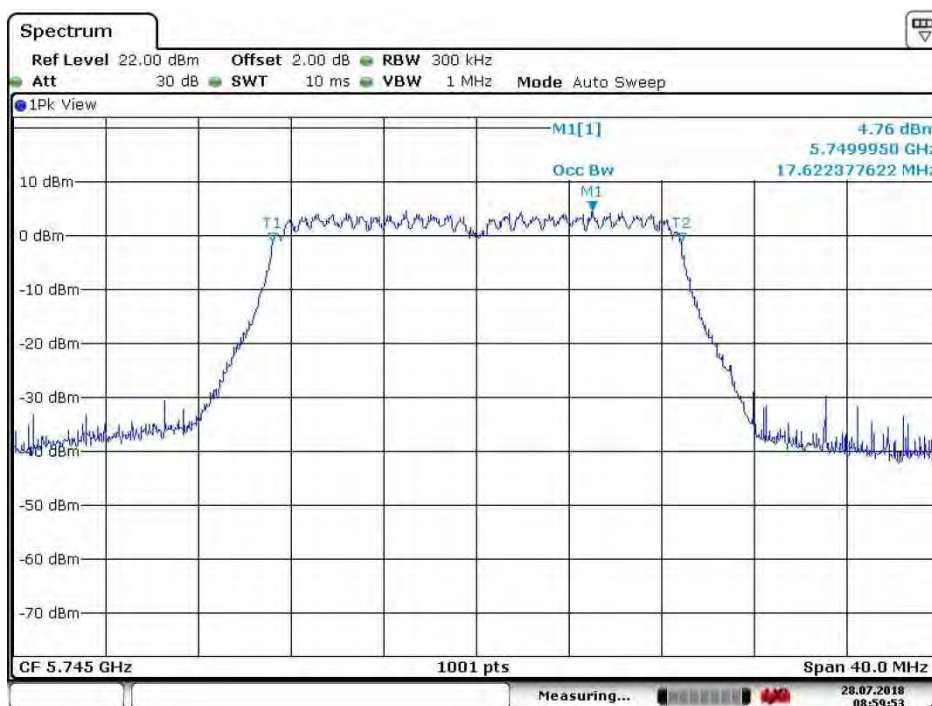
Date: 28 JUL 2018 08:54:32



5.5.1.4.3 11N20_149 ANT 2



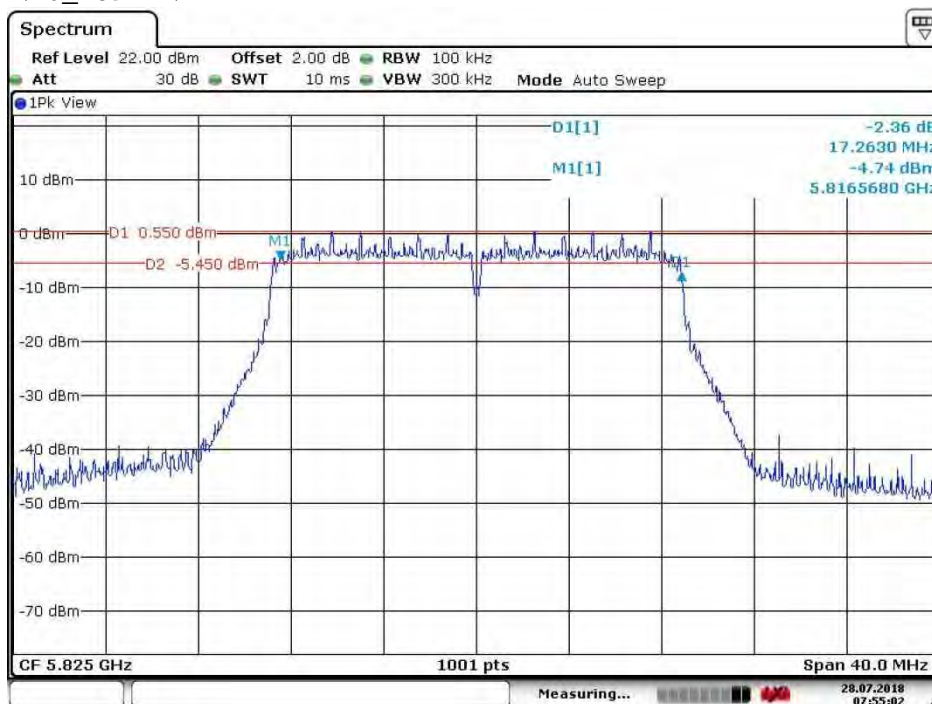
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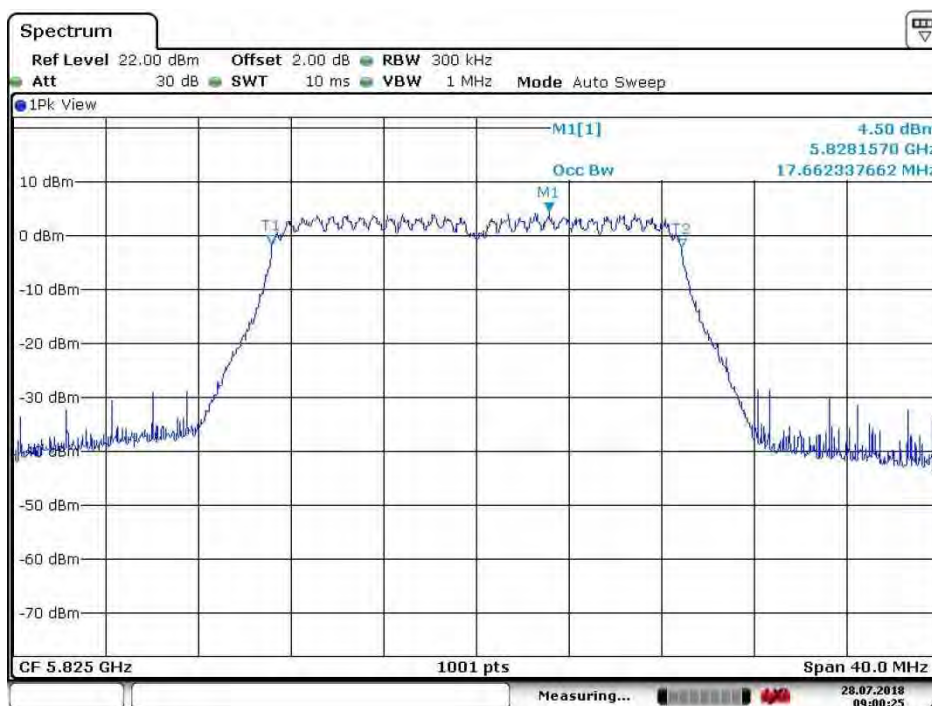
Date: 28 JUL 2018 08:59:53



5.5.1.4.4 11N20_165 ANT 2

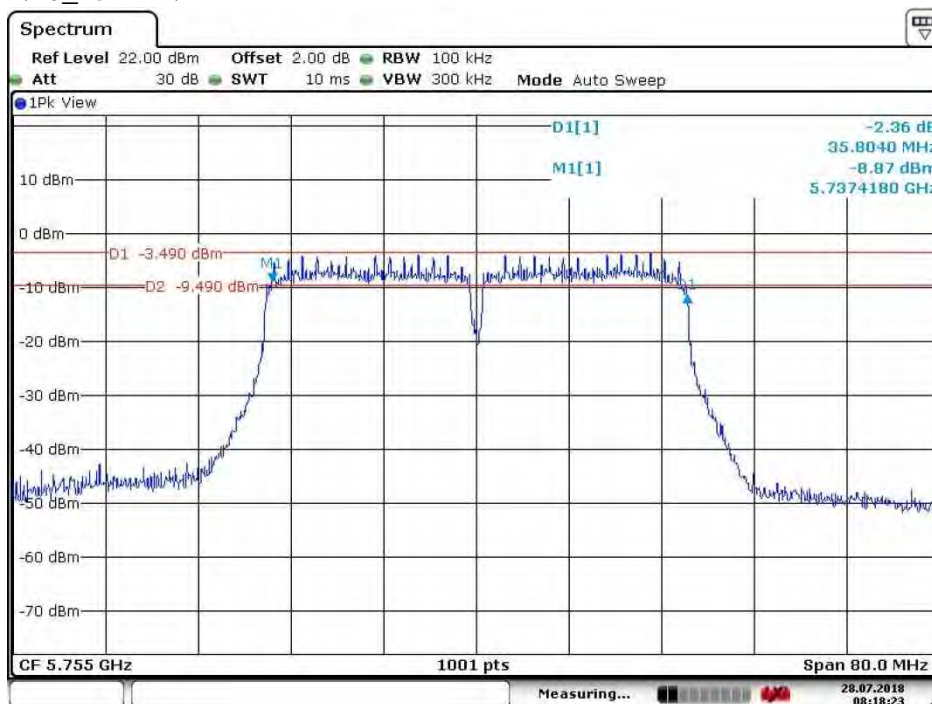


Date: 28 JUL 2018 07:55:02

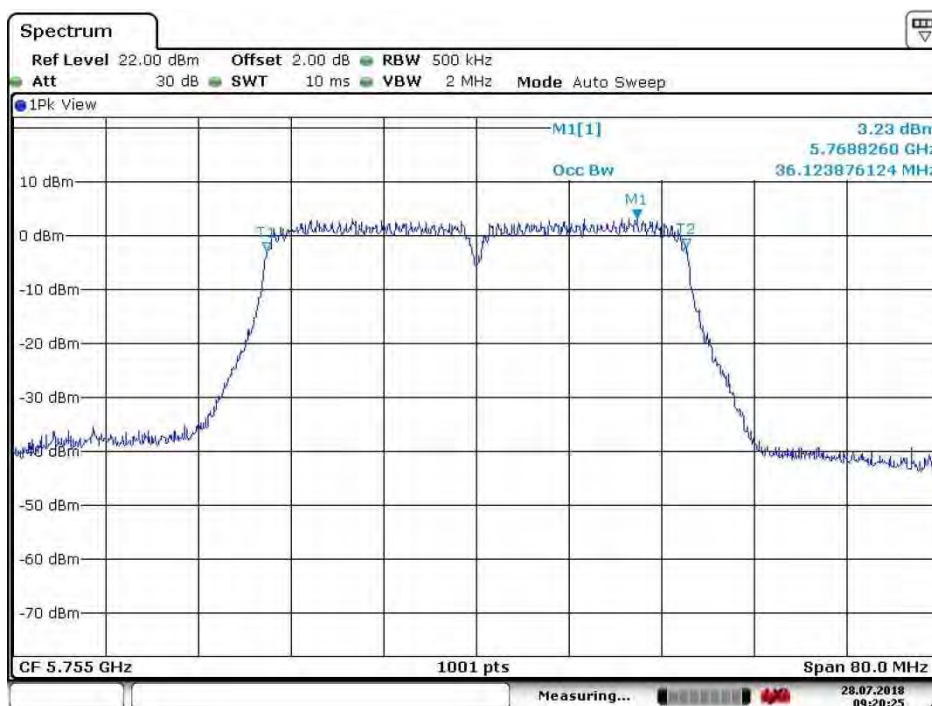


Date: 28 JUL 2018 09:00:26

5.5.1.4.5 11N40 151 ANT 2



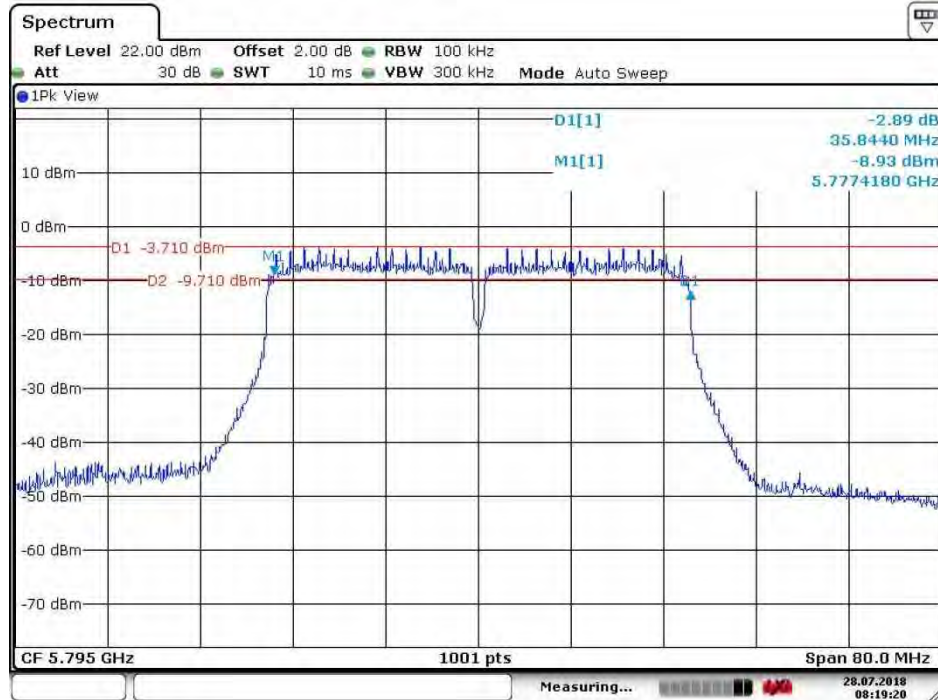
Date: 28 JUL 2018 08:18:23



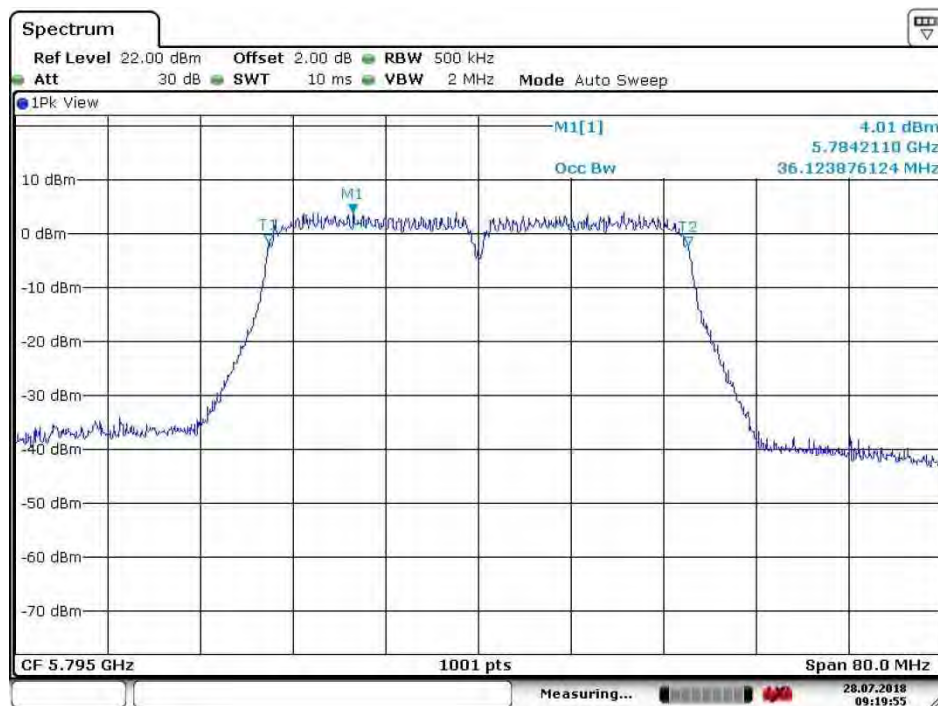
Date: 28 JUL 2018 09:20:25



5.5.1.4.6 11N40_159 ANT 2



Date: 28 JUL 2018 08:19:21

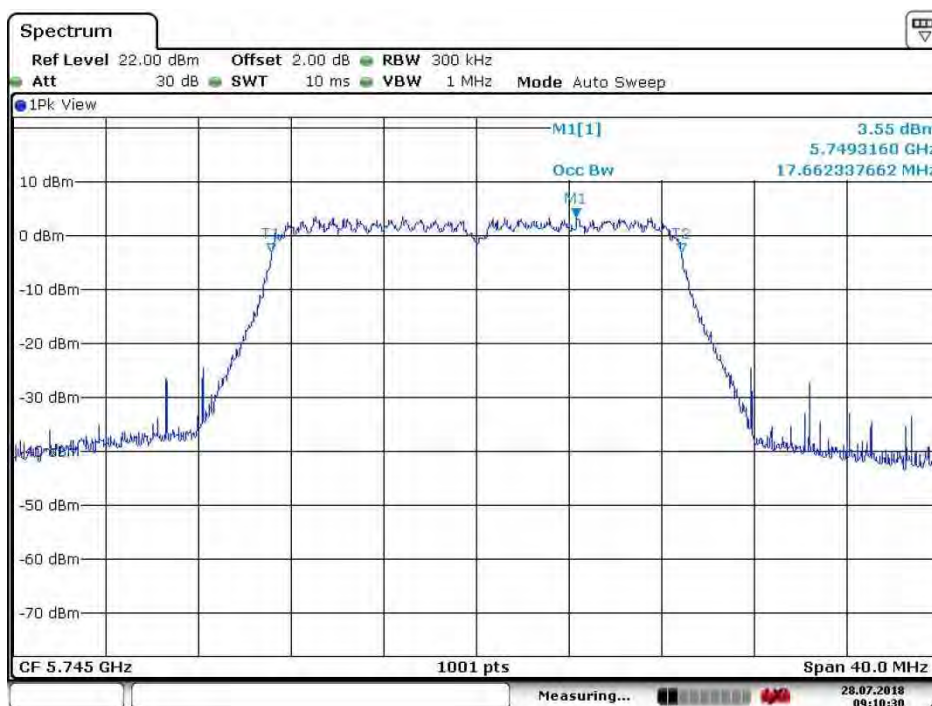


Date: 28 JUL 2018 09:19:55

5.5.1.4.7 11AC20 149 ANT 2



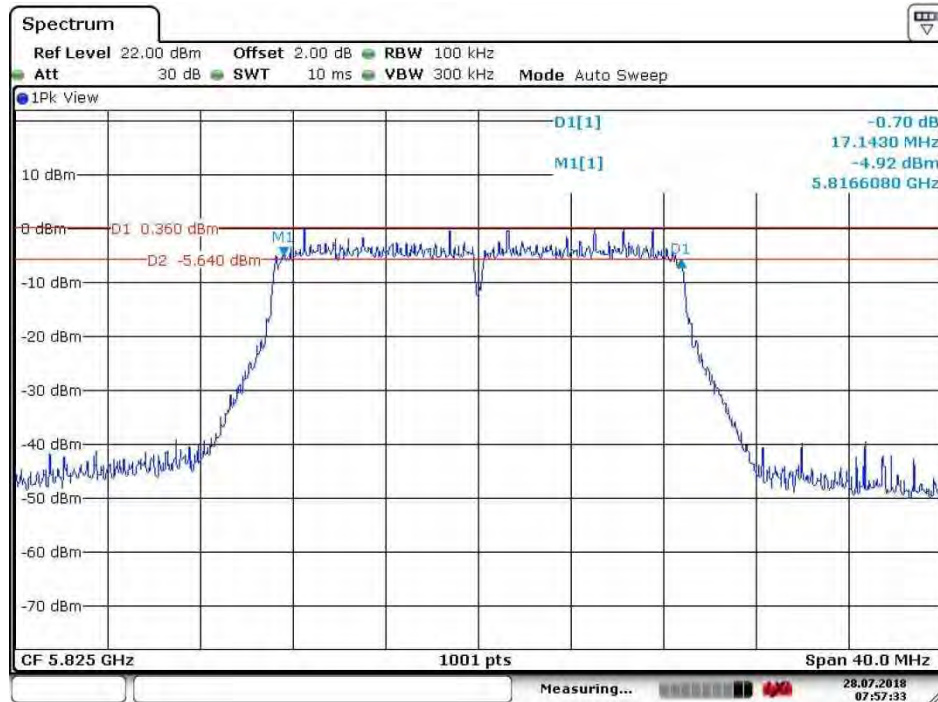
Date: 28 JUL 2018 07:56:29



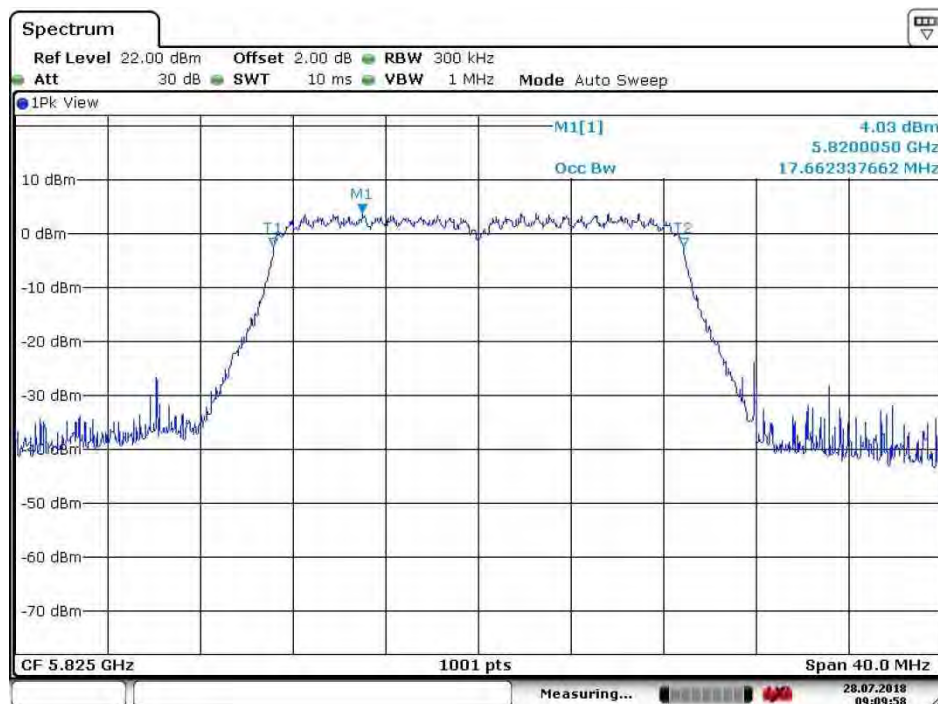
Date: 28 JUL 2018 09:10:30



5.5.1.4.8 11AC20_165 ANT 2

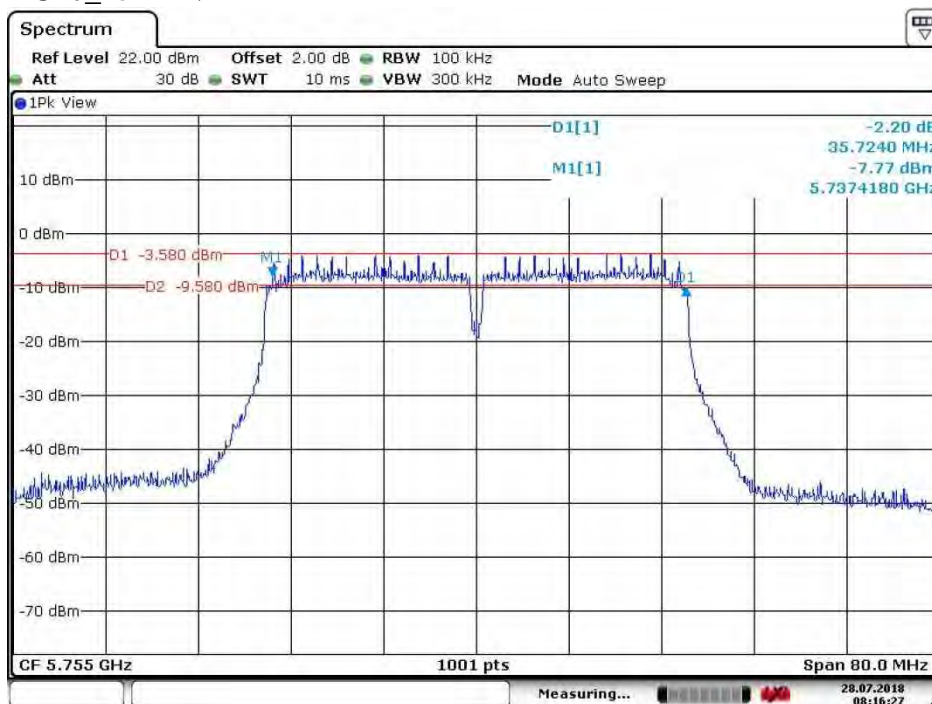


Date: 28 JUL 2018 07:57:33

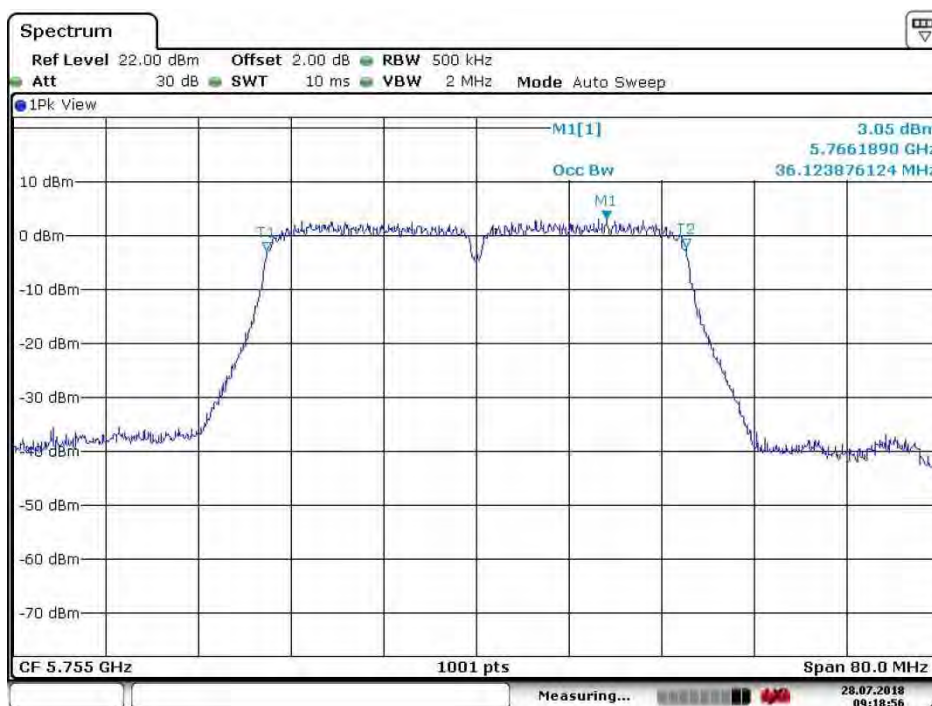


Date: 28 JUL 2018 09:09:58

5.5.1.4.9 11AC40 151 ANT 2

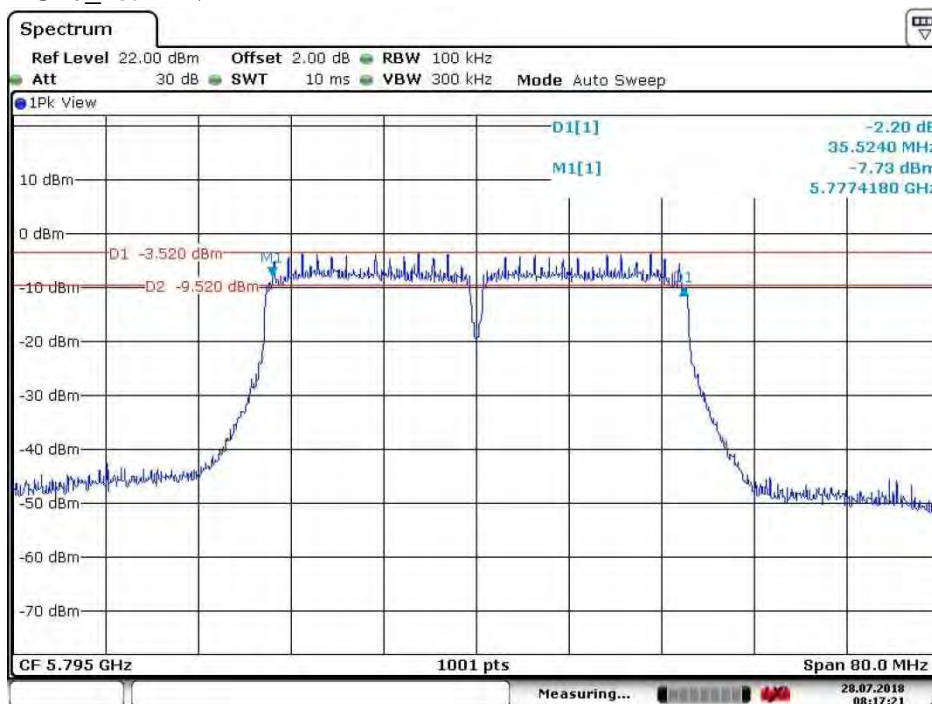


Date: 28 JUL 2018 08:16:27

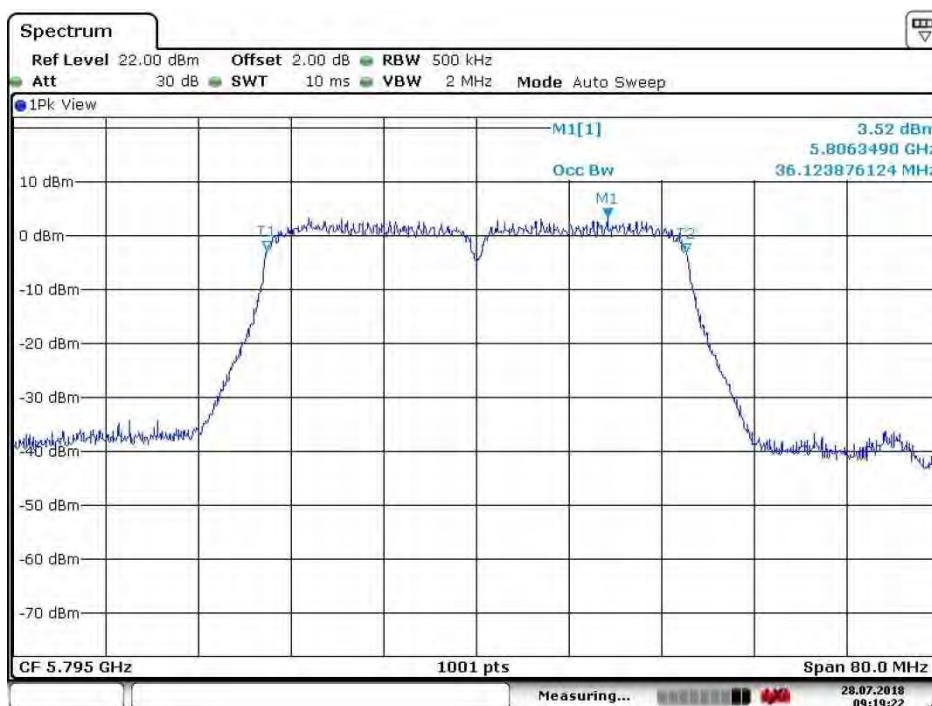


Date: 28 JUL 2018 09:18:56

5.5.1.4.10 11AC40 159 ANT 2

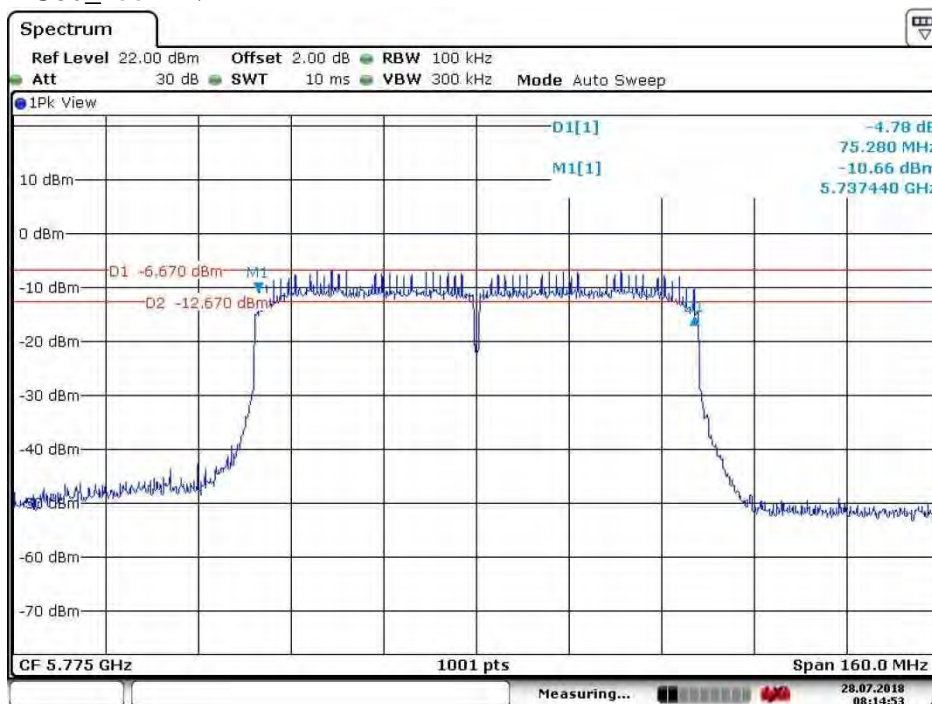


Date: 28 JUL 2018 08:17:22

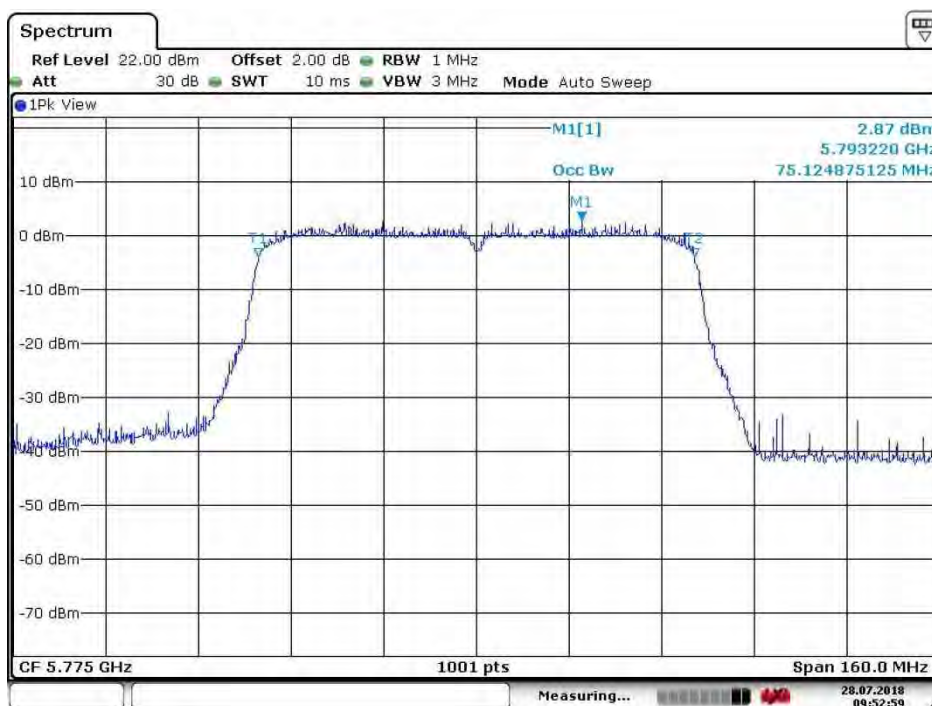


Date: 28 JUL 2018 09:19:22

5.5.1.4.11 11AC80 155 ANT 2



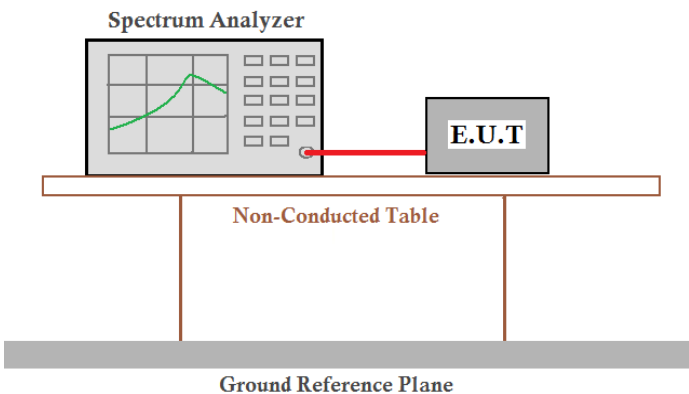
Date: 28 JUL 2018 08:14:53



Date: 28 JUL 2018 09:53:00



5.6 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2013	
Test Setup:		
Test Instruments:	Refer to section 5.10 for details	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80, MCS0 of rate is the worst case of 802.11ac(HT160) Only the worst case is recorded in the report.	
Limit:	Frequency Band	Limit
	5150-5250MHz	The power spectral density less than 11dBm/1MHz
	5250-5350MHz	The power spectral density less than 11dBm/1MHz
	5470-5725MHz	The power spectral density less than 11dBm/1MHz
Test Results:	Pass	

Measurement Data:



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SISO_ANT1				
Test Mode	Test Channel	Frequency [MHz]	Meas. Level (Cond.) [dBm/MHz]	Verdict
11A20_SISO	36	5180	7.81	PASS
	40	5200	7.43	PASS
	48	5240	7.05	PASS
	52	5260	6.77	PASS
	56	5280	6.85	PASS
	64	5320	7.42	PASS
	100	5500	1.46	PASS
	120	5600	7.85	PASS
	140	5700	1.57	PASS
	149	5745	0.51	PASS
	157	5785	0.44	PASS
	165	5825	1.13	PASS
11N20_SISO	36	5180	7.33	PASS
	40	5200	7.16	PASS
	48	5240	6.73	PASS
	52	5260	6.58	PASS
	56	5280	6.77	PASS
	64	5320	6.87	PASS
	100	5500	0.80	PASS
	120	5600	7.77	PASS
	140	5700	1.42	PASS
	149	5745	0.10	PASS
	157	5785	0.53	PASS
	165	5825	0.89	PASS
11N40_SISO	38	5190	3.42	PASS
	46	5230	2.86	PASS
	54	5270	2.56	PASS
	62	5310	2.75	PASS
	102	5510	-3.94	PASS
	142	5710	2.52	PASS
	134	5670	2.45	PASS



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	151	5755	-3.44	PASS
	159	5795	-3.24	PASS
11AC20_SISO	36	5180	7.28	PASS
	40	5200	7.34	PASS
	48	5240	6.88	PASS
	52	5260	6.74	PASS
	56	5280	6.60	PASS
	64	5320	7.10	PASS
	100	5500	0.93	PASS
	120	5600	7.69	PASS
	140	5700	1.43	PASS
	149	5745	0.56	PASS
	157	5785	0.49	PASS
	165	5825	0.91	PASS
11AC40_SISO	38	5190	3.19	PASS
	46	5230	2.69	PASS
	54	5270	2.41	PASS
	62	5310	2.99	PASS
	102	5510	-3.79	PASS
	142	5710	3.92	PASS
	134	5670	2.70	PASS
	151	5755	-3.39	PASS
	159	5795	-2.87	PASS
11AC80_SISO	42	5210	0.01	PASS
	58	5290	-7.18	PASS
	106	5530	-6.95	PASS
	138	5690	-1.38	PASS
	155	5775	-13.22	PASS



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SISO_ANT2				
Test Mode	Test Channel	Frequency [MHz]	Meas. Level (Cond.) [dBm/MHz]	Verdict
11A20_SISO	36	5180	6.10	PASS
	40	5200	5.92	PASS
	48	5240	5.97	PASS
	52	5260	6.15	PASS
	56	5280	6.70	PASS
	64	5320	6.24	PASS
	100	5500	1.65	PASS
	120	5600	6.87	PASS
	140	5700	1.28	PASS
	149	5745	0.41	PASS
	157	5785	0.48	PASS
	165	5825	0.52	PASS
11N20_SISO	36	5180	5.87	PASS
	40	5200	5.95	PASS
	48	5240	5.76	PASS
	52	5260	6.49	PASS
	56	5280	6.18	PASS
	64	5320	5.74	PASS
	100	5500	1.06	PASS
	120	5600	6.27	PASS
	140	5700	1.20	PASS
	149	5745	0.26	PASS
	157	5785	0.44	PASS
	165	5825	0.17	PASS
11N40_SISO	38	5190	1.04	PASS
	46	5230	1.24	PASS
	54	5270	1.74	PASS
	62	5310	1.57	PASS
	102	5510	-3.86	PASS
	142	5710	2.09	PASS



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	134	5670	2.15	PASS
	151	5755	-3.56	PASS
	159	5795	-3.64	PASS
11AC20_SISO	36	5180	5.77	PASS
	40	5200	5.68	PASS
	48	5240	5.81	PASS
	52	5260	6.10	PASS
	56	5280	6.96	PASS
	64	5320	6.01	PASS
	100	5500	1.25	PASS
	120	5600	6.78	PASS
	140	5700	1.43	PASS
	149	5745	0.59	PASS
	157	5785	0.56	PASS
	165	5825	0.24	PASS
11AC40_SISO	38	5190	0.85	PASS
	46	5230	0.74	PASS
	54	5270	1.19	PASS
	62	5310	1.08	PASS
	102	5510	-3.79	PASS
	142	5710	2.31	PASS
	134	5670	1.92	PASS
	151	5755	-3.27	PASS
	159	5795	-3.98	PASS
11AC80_SISO	42	5210	-7.82	PASS
	58	5290	-7.21	PASS
	106	5530	-6.45	PASS
	138	5690	-1.12	PASS
	155	5775	-7.14	PASS



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MIMO_ANT1				
Test Mode	Test Channel	Frequency [MHz]	Meas. Level (Cond.) [dBm/MHz]	Verdict
11A20_CDD	36	5180	1.72	PASS
	48	5240	7.13	PASS
	52	5260	6.97	PASS
	64	5320	1.37	PASS
	100	5500	1.59	PASS
	140	5700	1.81	PASS
	149	5745	1.01	PASS
	165	5825	1.68	PASS
11N20_MIMO	36	5180	1.02	PASS
	48	5240	6.56	PASS
	52	5260	6.41	PASS
	64	5320	0.29	PASS
	100	5500	0.49	PASS
	140	5700	1.51	PASS
	149	5745	0.44	PASS
	165	5825	1.65	PASS
11N40_MIMO	38	5190	-3.54	PASS
	46	5230	3.02	PASS
	54	5270	2.13	PASS
	62	5310	-3.93	PASS
	102	5510	-3.71	PASS
	134	5670	2.84	PASS
	151	5755	-3.26	PASS
	159	5795	-2.67	PASS
11AC20_MIMO	36	5180	1.04	PASS
	48	5240	6.97	PASS
	52	5260	6.68	PASS
	64	5320	0.55	PASS
	100	5500	1.08	PASS
	140	5700	1.31	PASS
	149	5745	0.55	PASS

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	157	5795	-2.70	PASS
	165	5825	1.68	PASS
11AC40_MIMO	38	5190	-3.52	PASS
	46	5230	2.55	PASS
	54	5270	2.94	PASS
	62	5310	-3.70	PASS
	102	5510	-3.68	PASS
	134	5670	2.79	PASS
	151	5755	-3.74	PASS
	159	5795	-3.35	PASS
11AC80_MIMO	42	5210	-6.59	PASS
	58	5290	-6.79	PASS
	106	5530	-6.62	PASS
	138	5690	-1.42	PASS
	155	5775	-6.89	PASS



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MIMO_ANT2				
Test Mode	Test Channel	Frequency [MHz]	Meas. Level (Cond.) [dBm/MHz]	Verdict
11A20_CDD	36	5180	1.17	PASS
	48	5240	6.66	PASS
	52	5260	7.48	PASS
	64	5320	1.11	PASS
	100	5500	1.48	PASS
	140	5700	1.26	PASS
	149	5745	0.90	PASS
	165	5825	1.09	PASS
11N20_MIMO	36	5180	1.08	PASS
	48	5240	7.03	PASS
	52	5260	7.42	PASS
	64	5320	1.53	PASS
	100	5500	2.03	PASS
	140	5700	2.12	PASS
	149	5745	1.26	PASS
	165	5825	1.28	PASS
11N40_MIMO	38	5190	-3.39	PASS
	46	5230	3.44	PASS
	54	5270	2.37	PASS
	62	5310	-4.09	PASS
	102	5510	-2.97	PASS
	134	5670	3.40	PASS
	151	5755	-2.96	PASS
	159	5795	-2.49	PASS
11AC20_MIMO	36	5180	0.45	PASS
	48	5240	6.72	PASS
	52	5260	6.89	PASS
	64	5320	0.84	PASS
	100	5500	1.39	PASS
	140	5700	0.97	PASS
	149	5745	0.71	PASS



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	165	5825	1.18	PASS
11AC40_MIMO	38	5190	-4.01	PASS
	46	5230	2.71	PASS
	54	5270	1.76	PASS
	62	5310	-5.10	PASS
	102	5510	-4.55	PASS
	134	5670	3.17	PASS
	151	5755	-2.93	PASS
	159	5795	-2.68	PASS
11AC80_MIMO	42	5210	-8.16	PASS
	58	5290	-7.62	PASS
	106	5530	-7.45	PASS
	138	5690	-0.60	PASS
	155	5775	-6.39	PASS

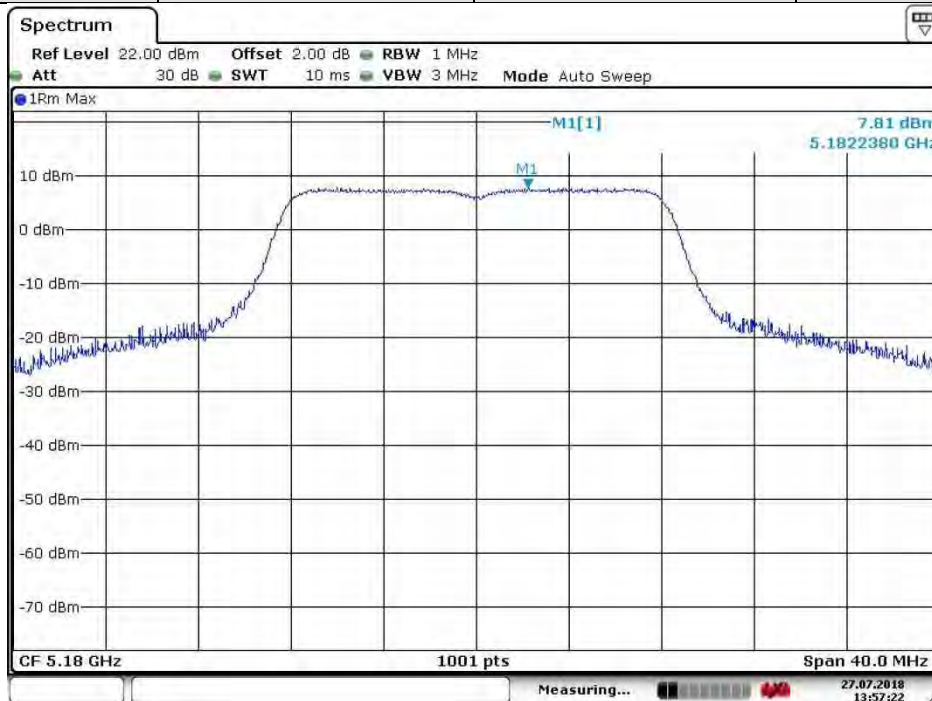


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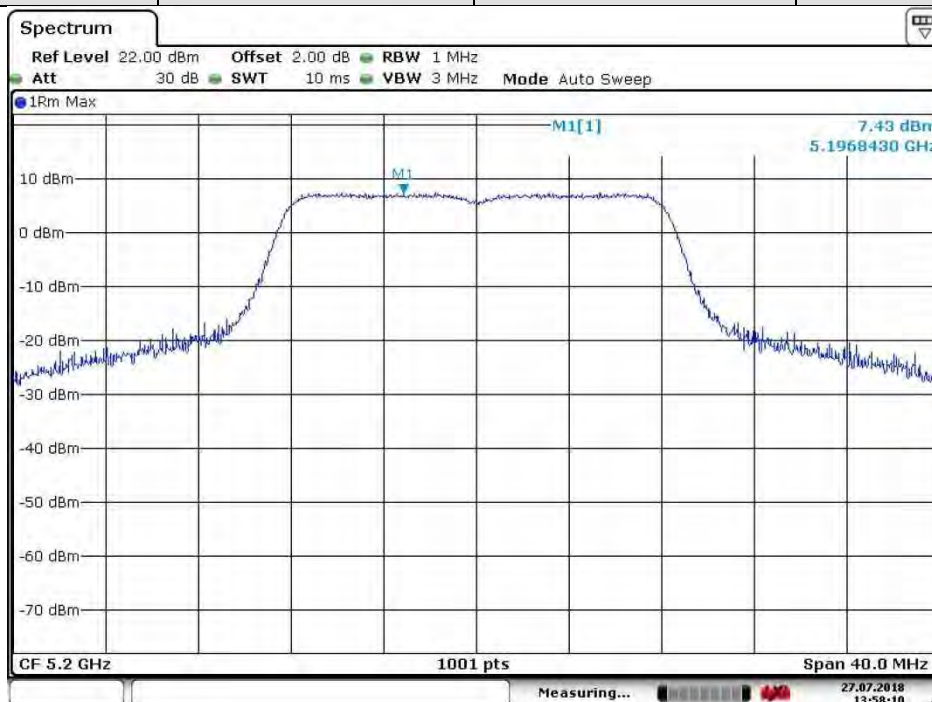
Test plot as follows:
SISO_ANT1

Test mode:	802.11a	Frequency(MHz):	5180
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Date: 27.JUL.2018 13:57:22

Test mode:	802.11a	Frequency(MHz):	5200
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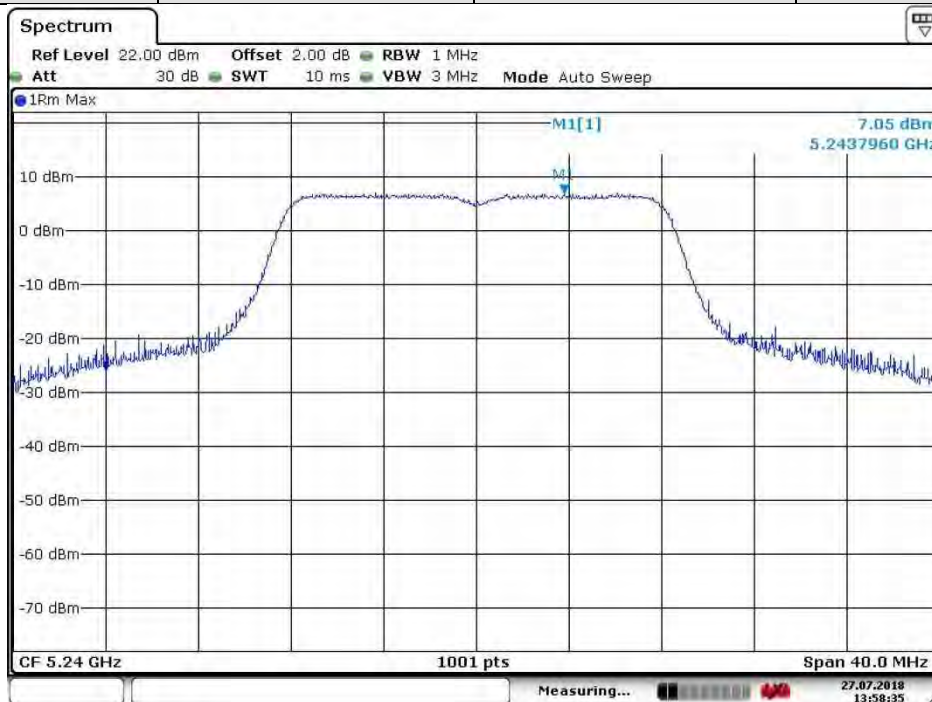
Date: 27.JUL.2018 13:58:11



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Test mode:	802.11a	Frequency(MHz):	5240
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Date: 27.JUL.2018 13:58:35

Test mode:	802.11a	Frequency(MHz):	5260
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Date: 27.JUL.2018 13:58:58