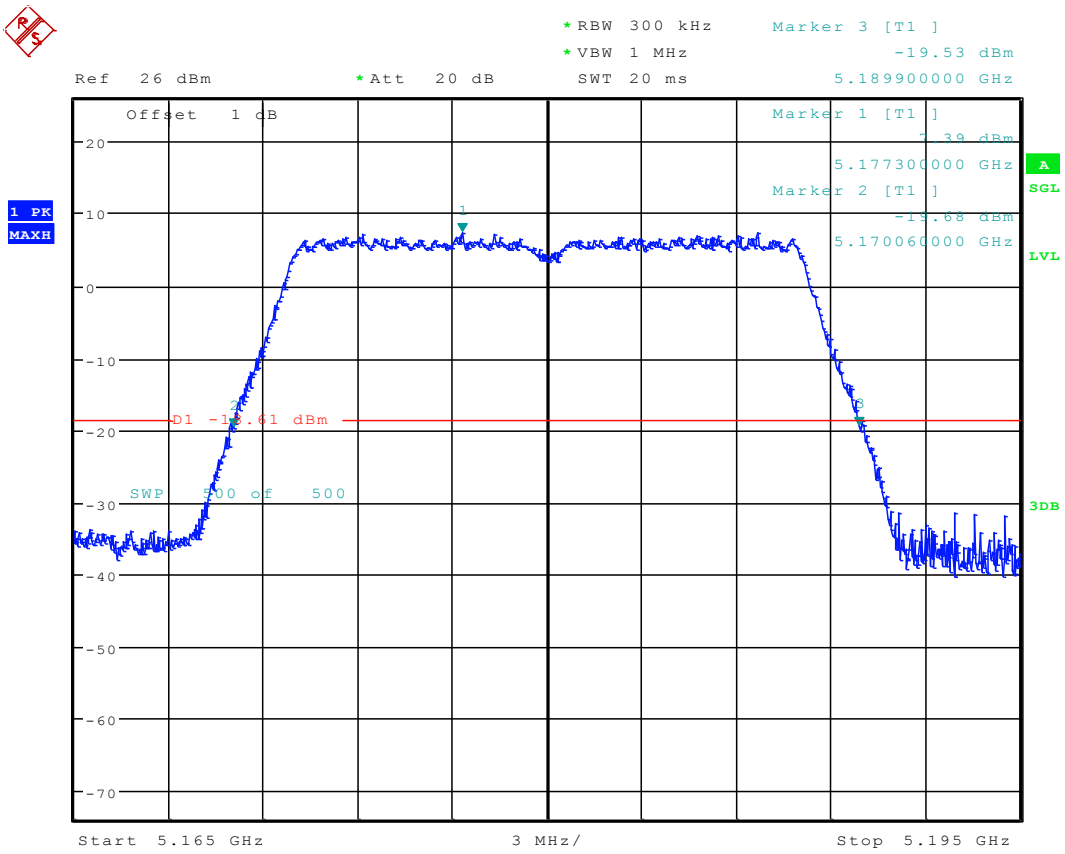
Appendix A U-NII: Emission Bandwidth

1 Result Table for 26dB Emission Bandwidth

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	26dB Emission Bandwidth [MHz]	Verdict
11A20	36	5180	ANT 1	19.84	PASS
	48	5240	ANT 1	20.04	PASS
	52	5260	ANT 1	19.96	PASS
	64	5320	ANT 1	19.82	PASS
	100	5500	ANT 1	20	PASS
	140	5700	ANT 1	19.86	PASS
11N20	36	5180	ANT 1	20.48	PASS
	48	5240	ANT 1	20.42	PASS
	52	5260	ANT 1	20.48	PASS
	64	5320	ANT 1	20.56	PASS
	100	5500	ANT 1	20.5	PASS
	140	5700	ANT 1	20.46	PASS
11N40	38	5190	ANT 1	39.8	PASS
	46	5230	ANT 1	39.62	PASS
	54	5270	ANT 1	39.58	PASS
	62	5310	ANT 1	39.6	PASS
	102	5510	ANT 1	39.68	PASS
	134	5670	ANT 1	39.52	PASS
11AC20	36	5180	ANT 1	20.46	PASS
	48	5240	ANT 1	20.34	PASS
	52	5260	ANT 1	20.52	PASS
	64	5320	ANT 1	20.42	PASS
	100	5500	ANT 1	20.46	PASS
	140	5700	ANT 1	20.44	PASS
11AC40	38	5190	ANT 1	39.58	PASS
	46	5230	ANT 1	39.64	PASS
	54	5270	ANT 1	39.82	PASS
	62	5310	ANT 1	39.6	PASS
	102	5510	ANT 1	39.56	PASS
	134	5670	ANT 1	39.76	PASS
11AC80	42	5210	ANT 1	80.91	PASS
	58	5290	ANT 1	80.91	PASS
	106	5530	ANT 1	80.64	PASS

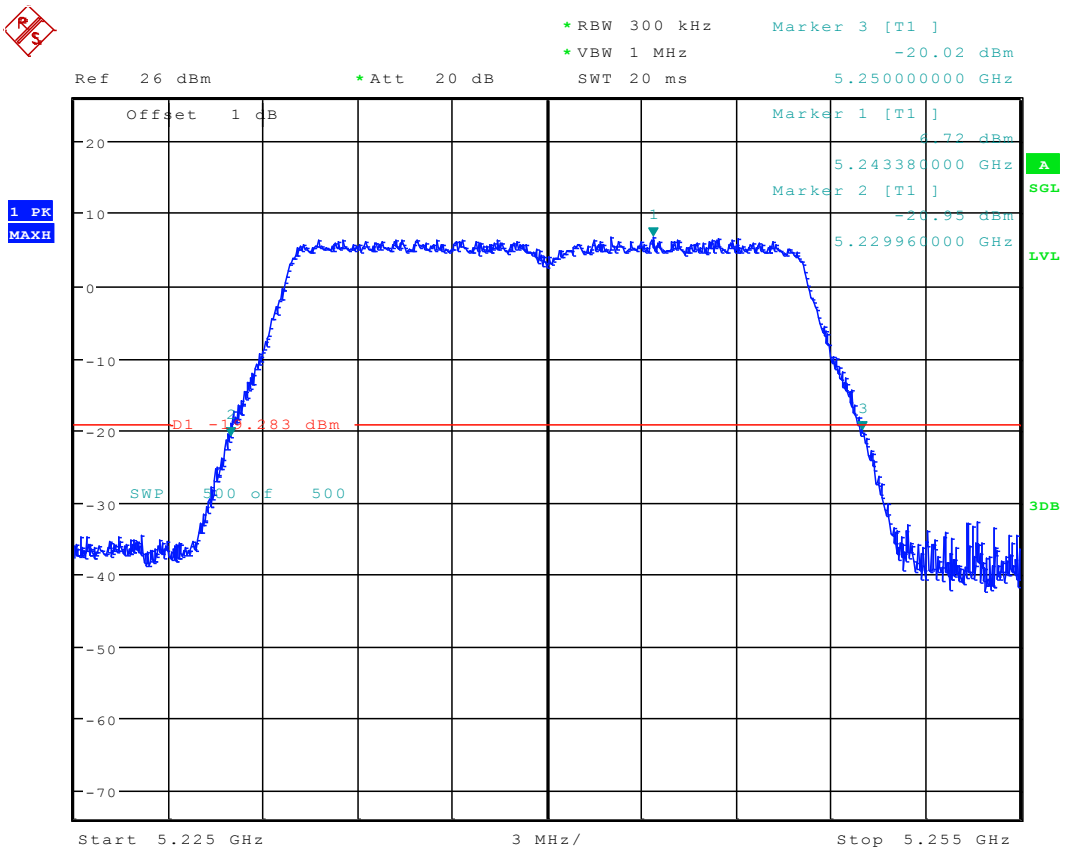
2 Test Plot for 26dB Emission Bandwidth

2.1 11A20_36 ANT 1



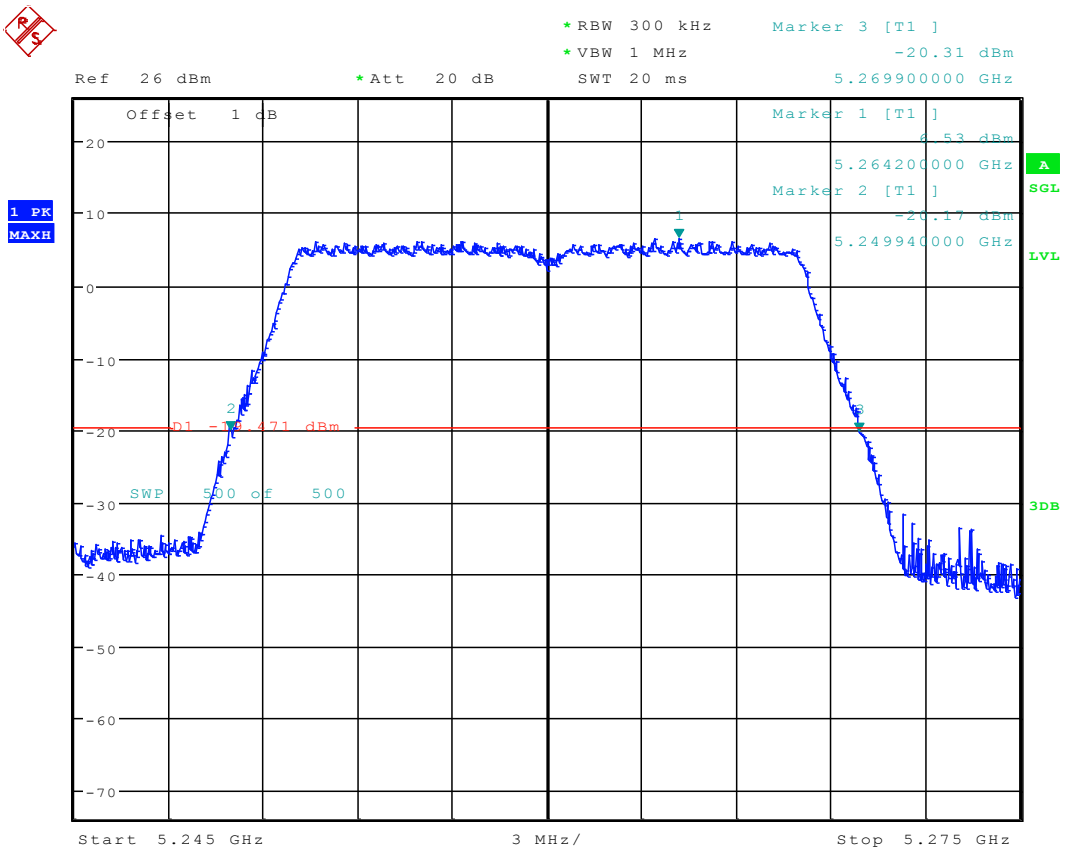
Date: 22.FEB.2018 15:09:11

2.2 11A20_48 ANT 1



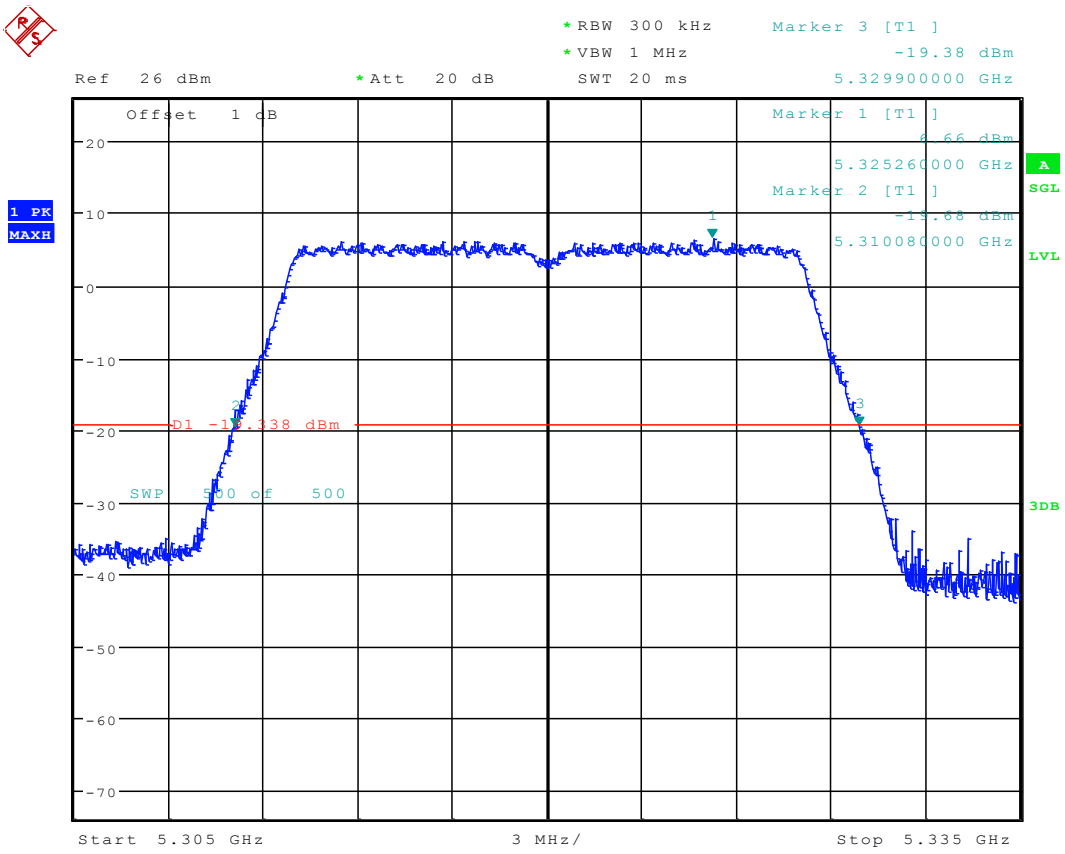
Date: 22.FEB.2018 15:17:53

2.3 11A20_52 ANT 1



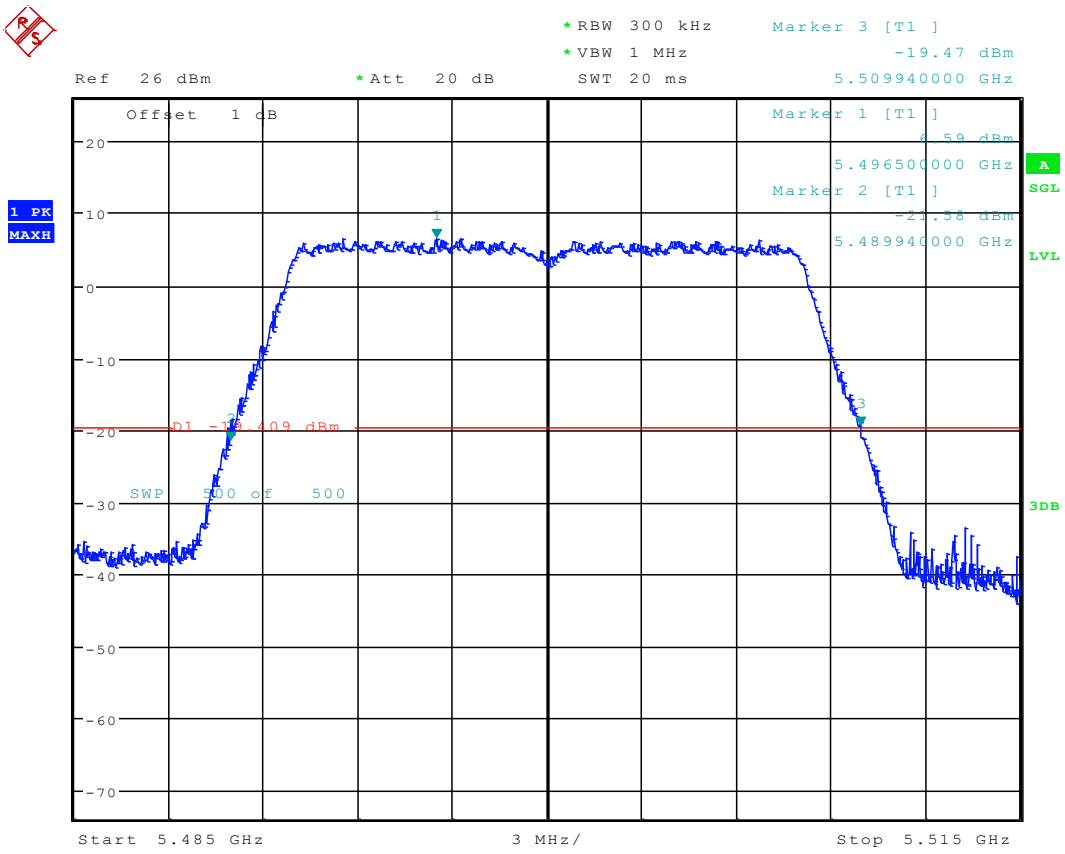
Date: 22.FEB.2018 15:24:26

2.4 11A20_64 ANT 1



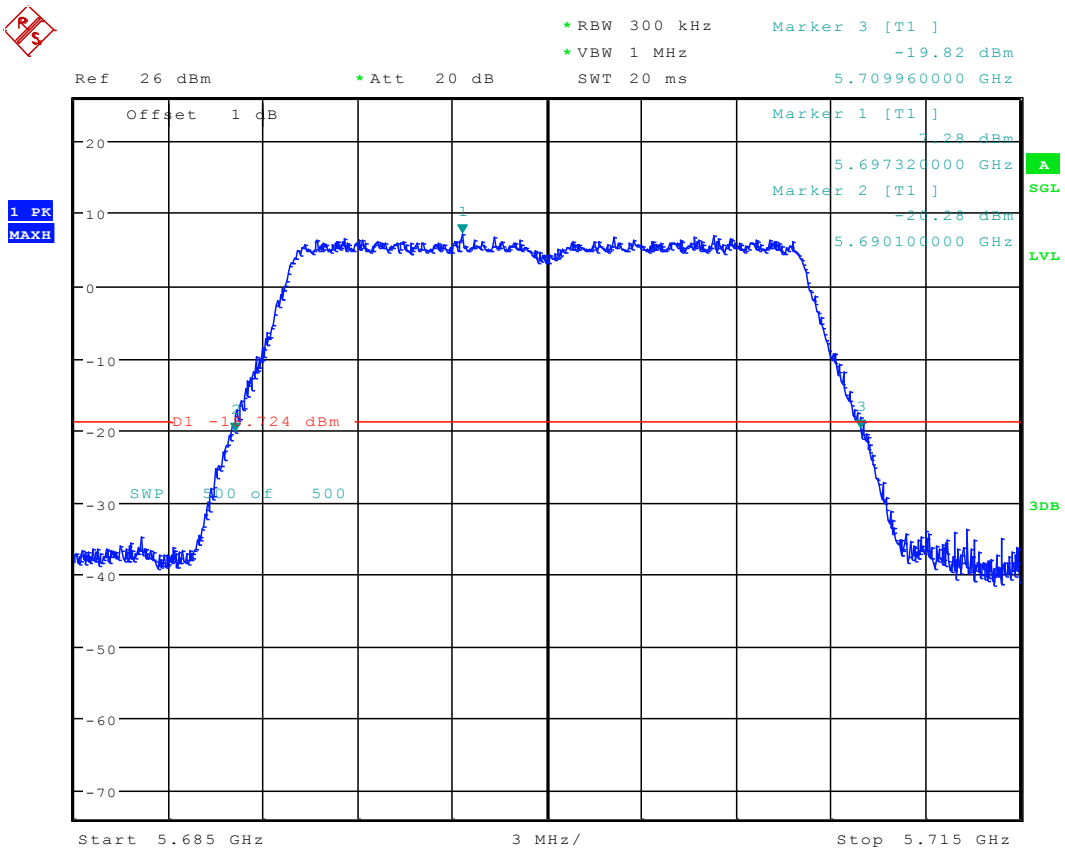
Date: 22.FEB.2018 15:34:52

2.5 11A20_100 ANT 1



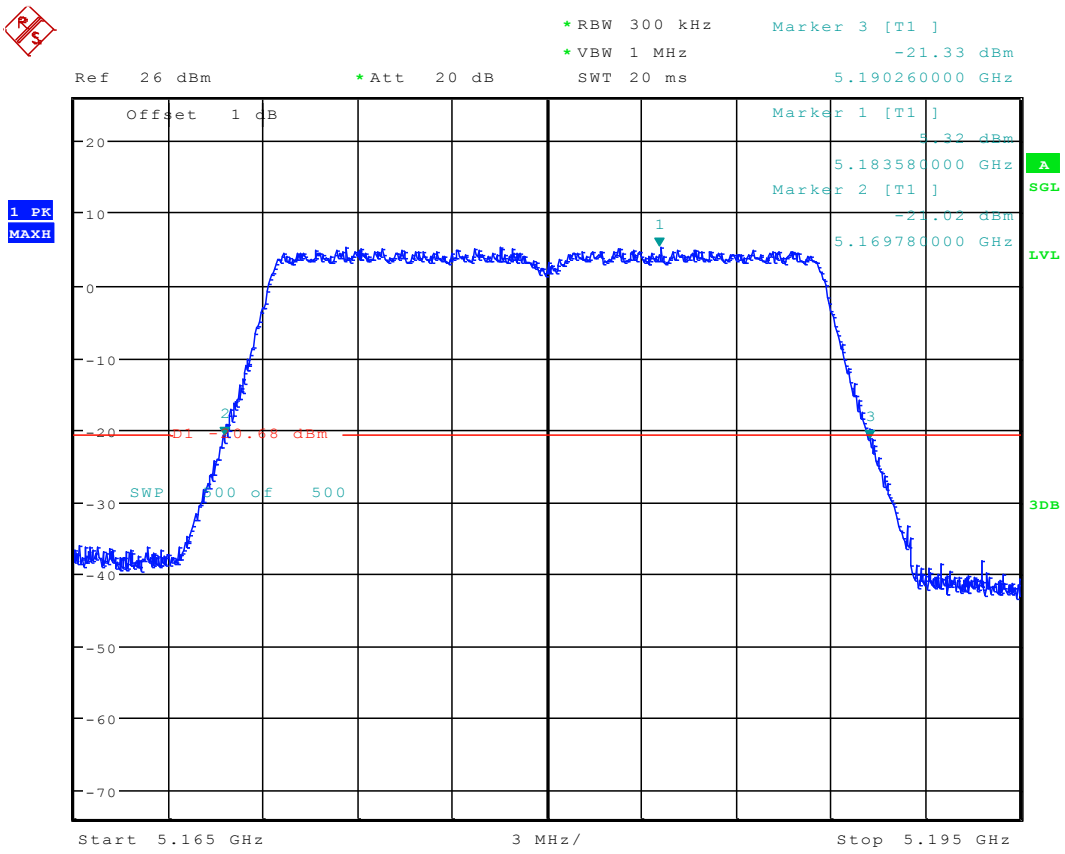
Date: 22.FEB.2018 15:43:38

2.6 11A20_140 ANT 1



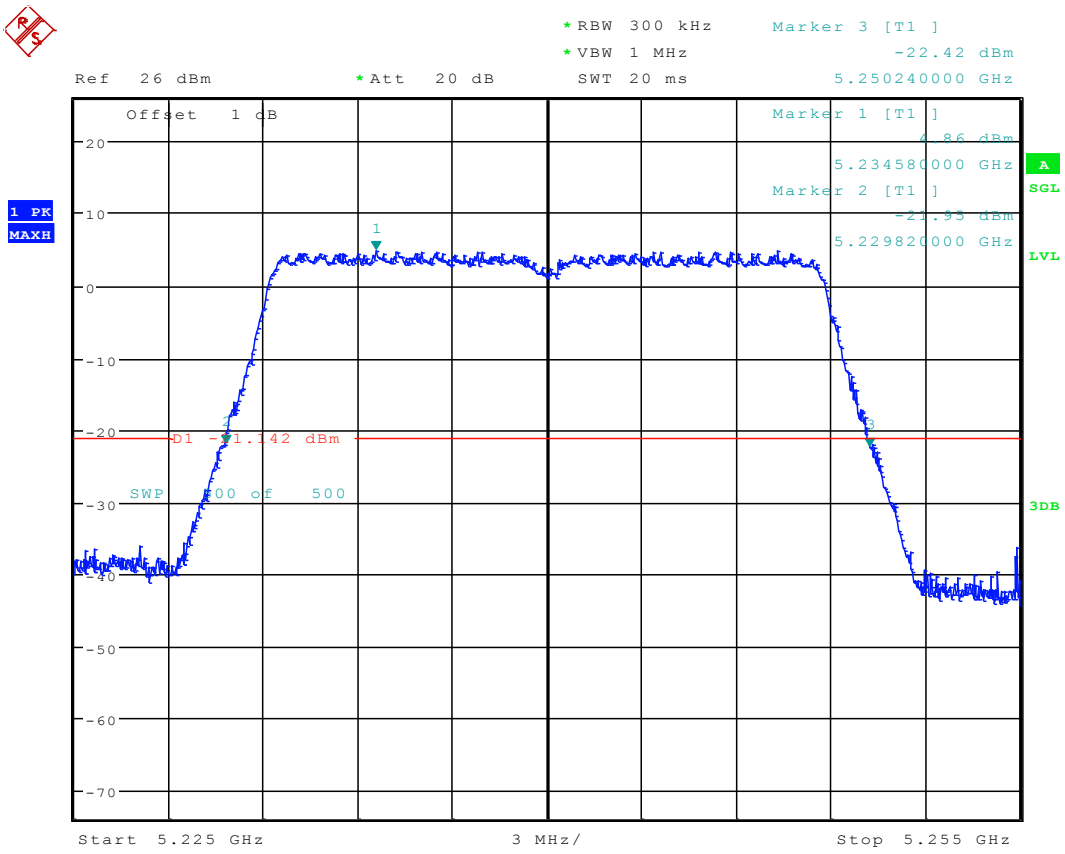
Date: 22.FEB.2018 15:52:48

2.7 11N20_36 ANT 1



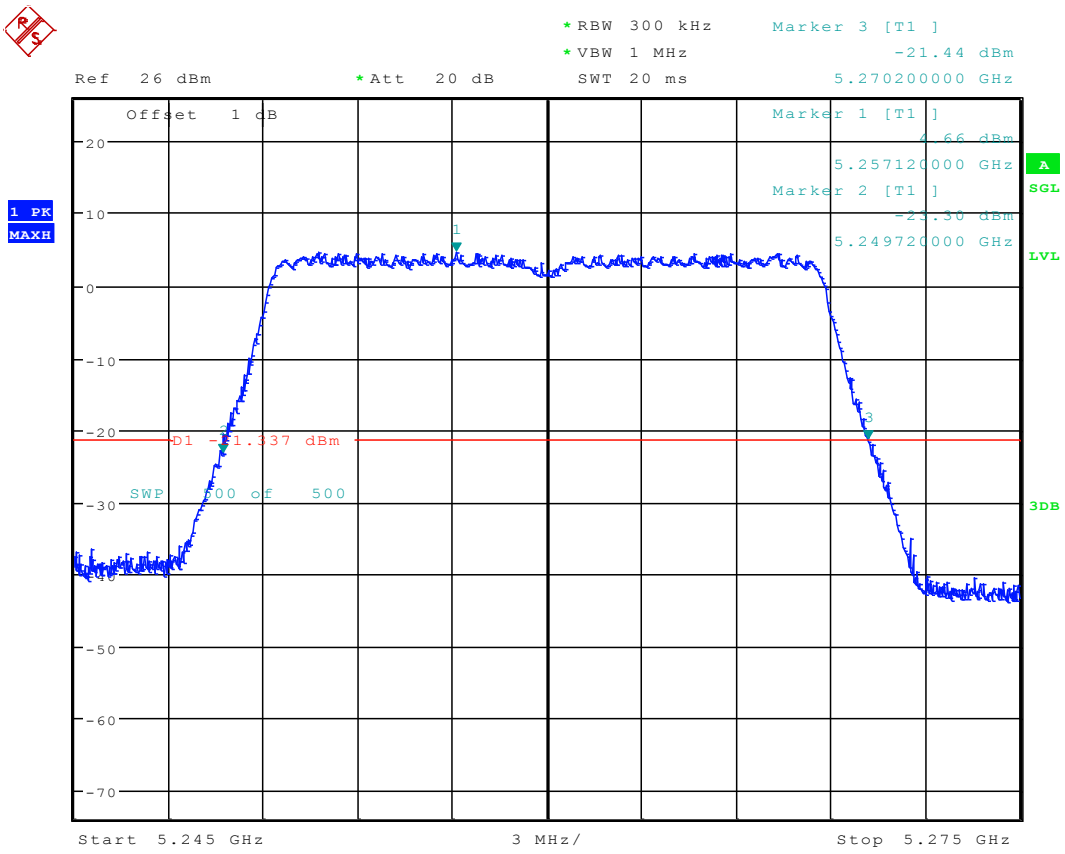
Date: 22.FEB.2018 16:09:40

2.8 11N20_48 ANT 1



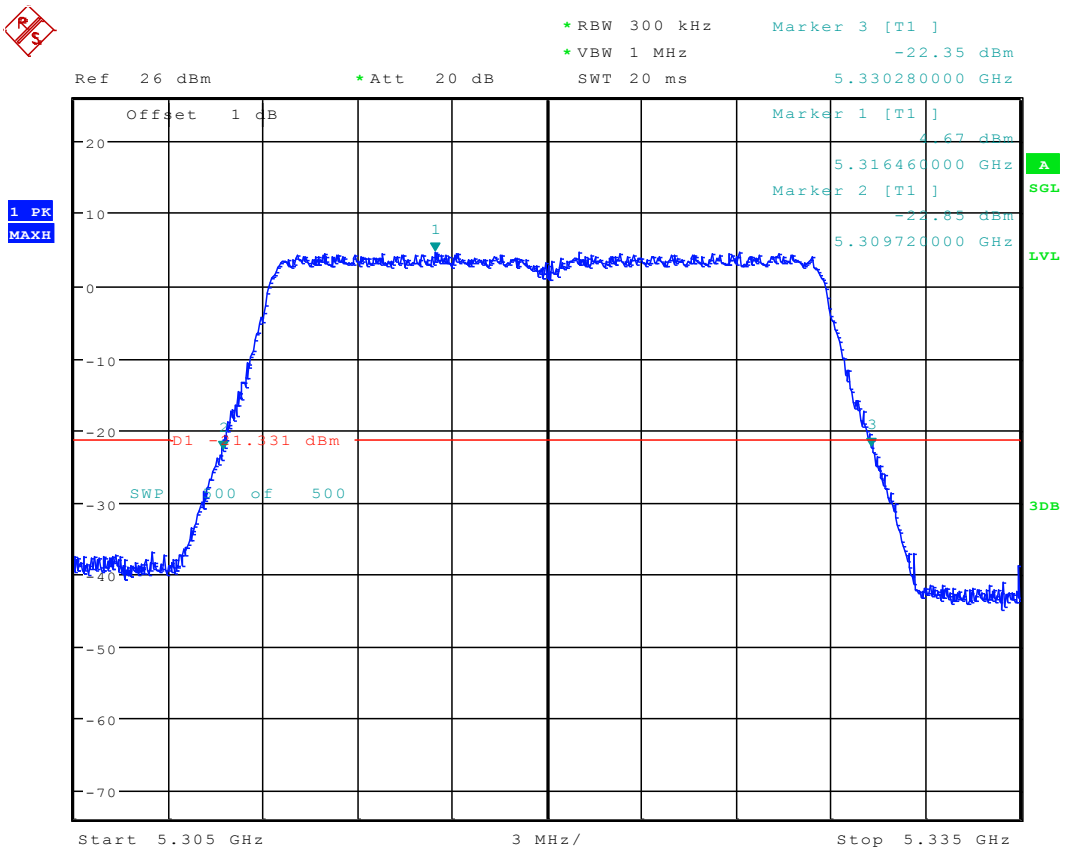
Date: 22.FEB.2018 16:20:30

2.9 11N20_52 ANT 1



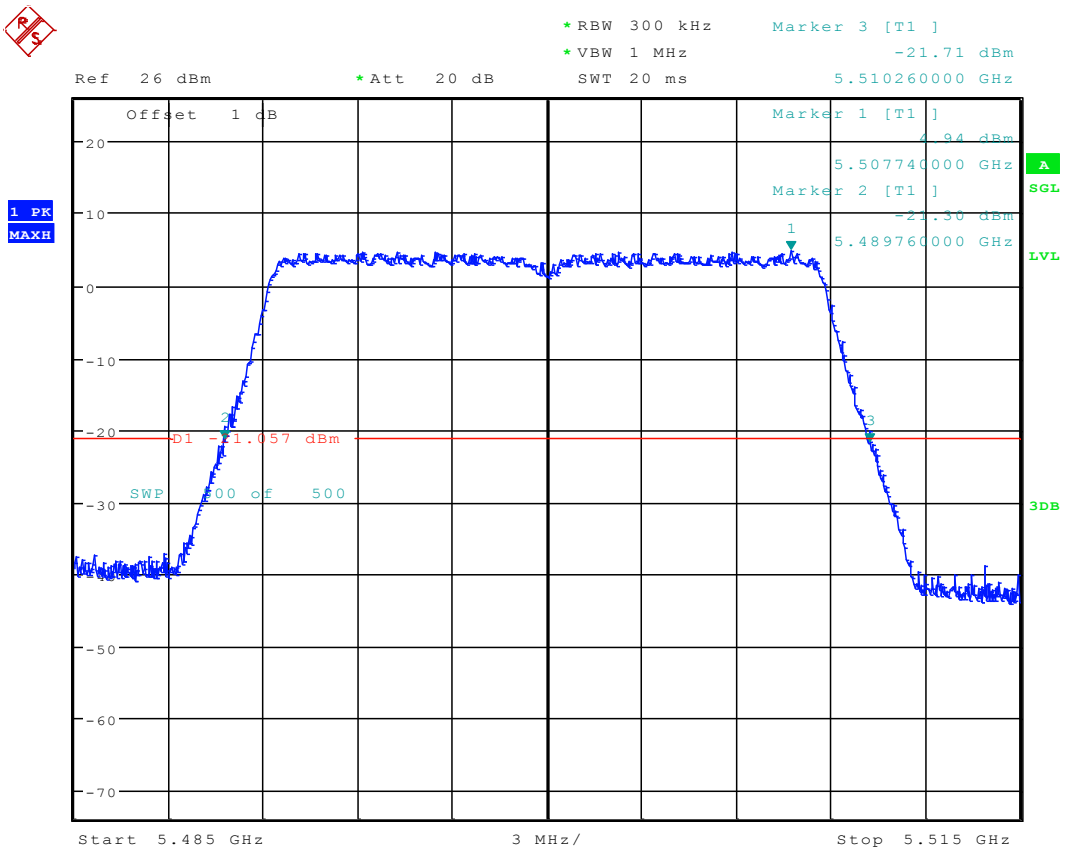
Date: 22.FEB.2018 16:30:48

2.10 11N20_64 ANT 1



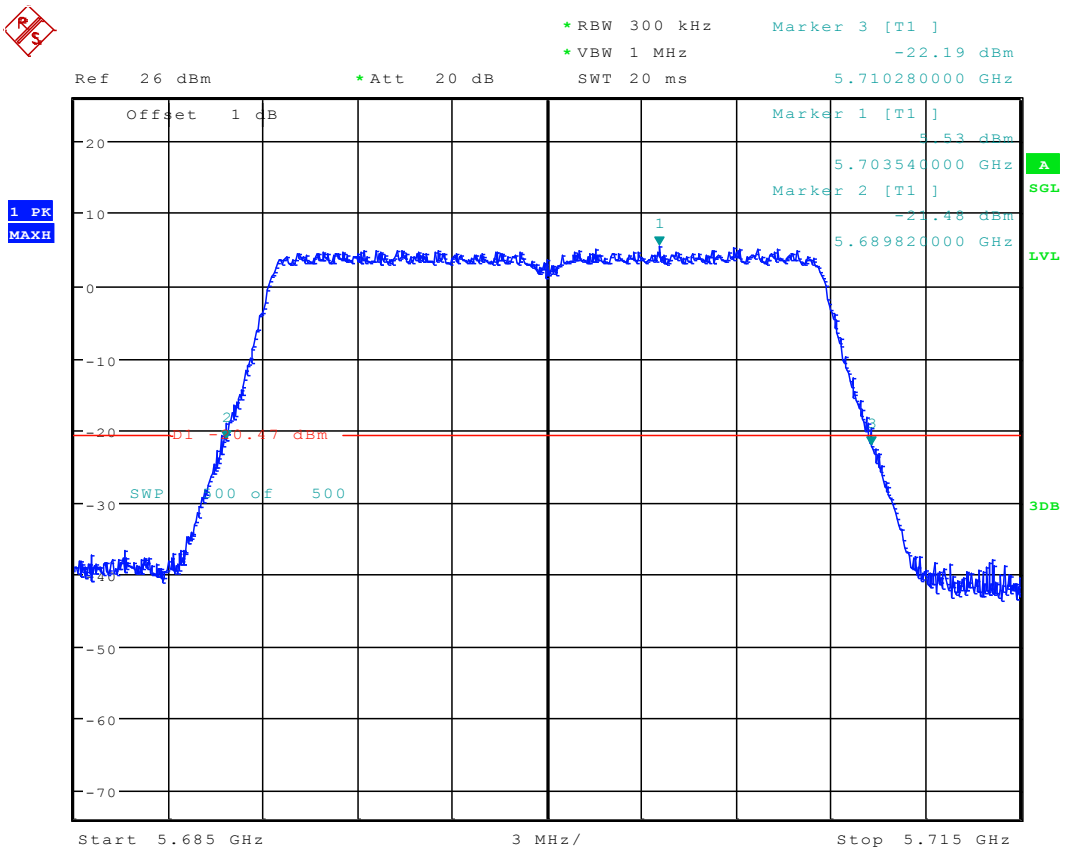
Date: 22.FEB.2018 16:40:54

2.11 11N20_100 ANT 1



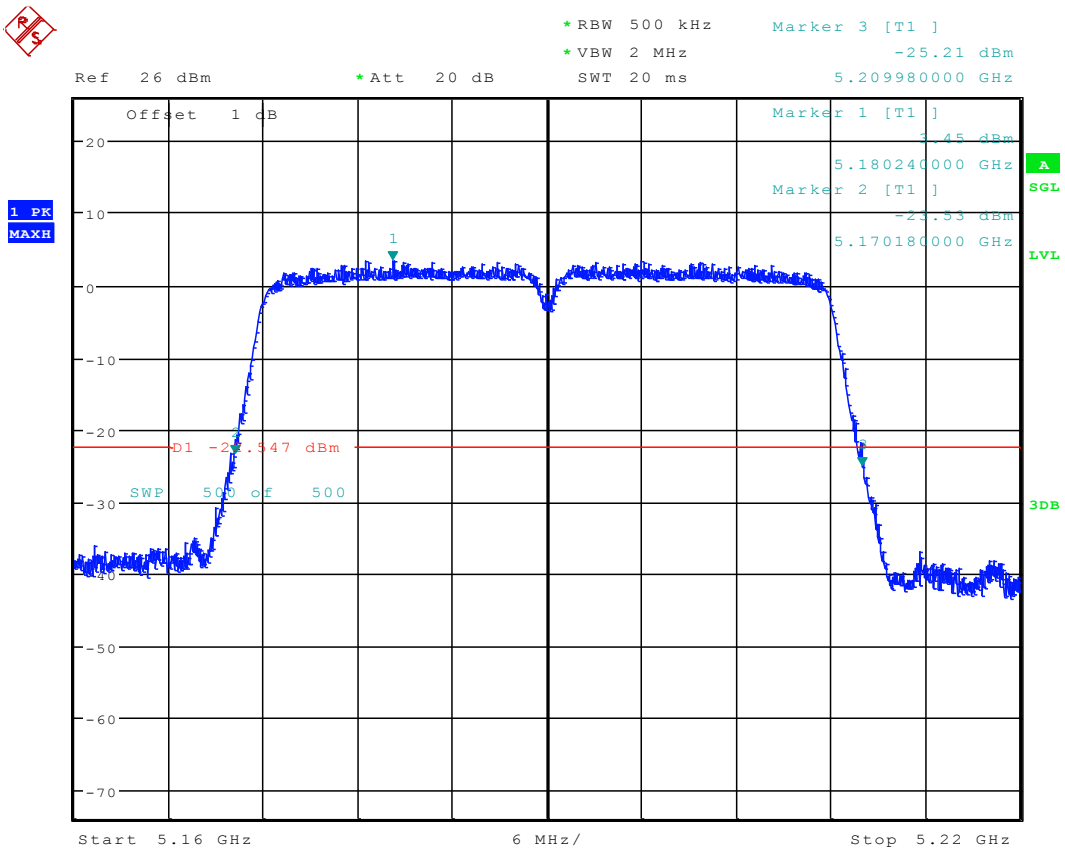
Date: 22.FEB.2018 16:51:38

2.12 11N20_140 ANT 1



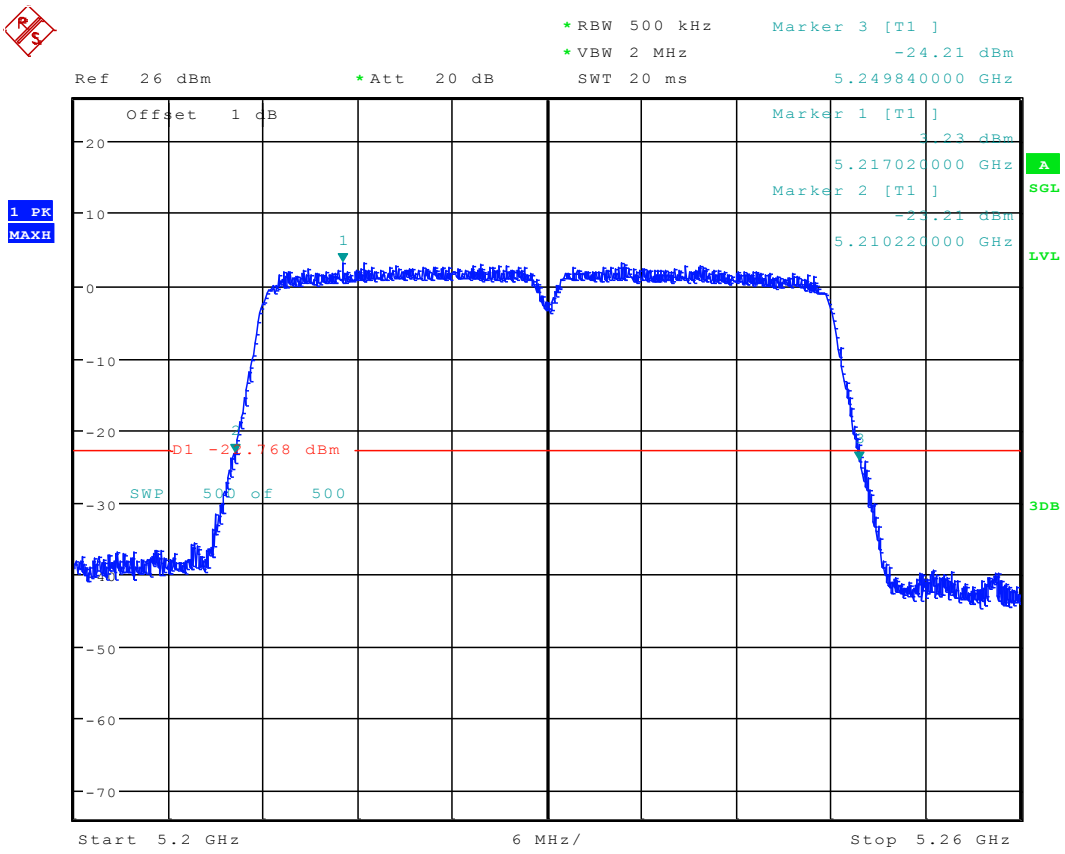
Date: 22.FEB.2018 17:02:20

2.13 11N40_38 ANT 1



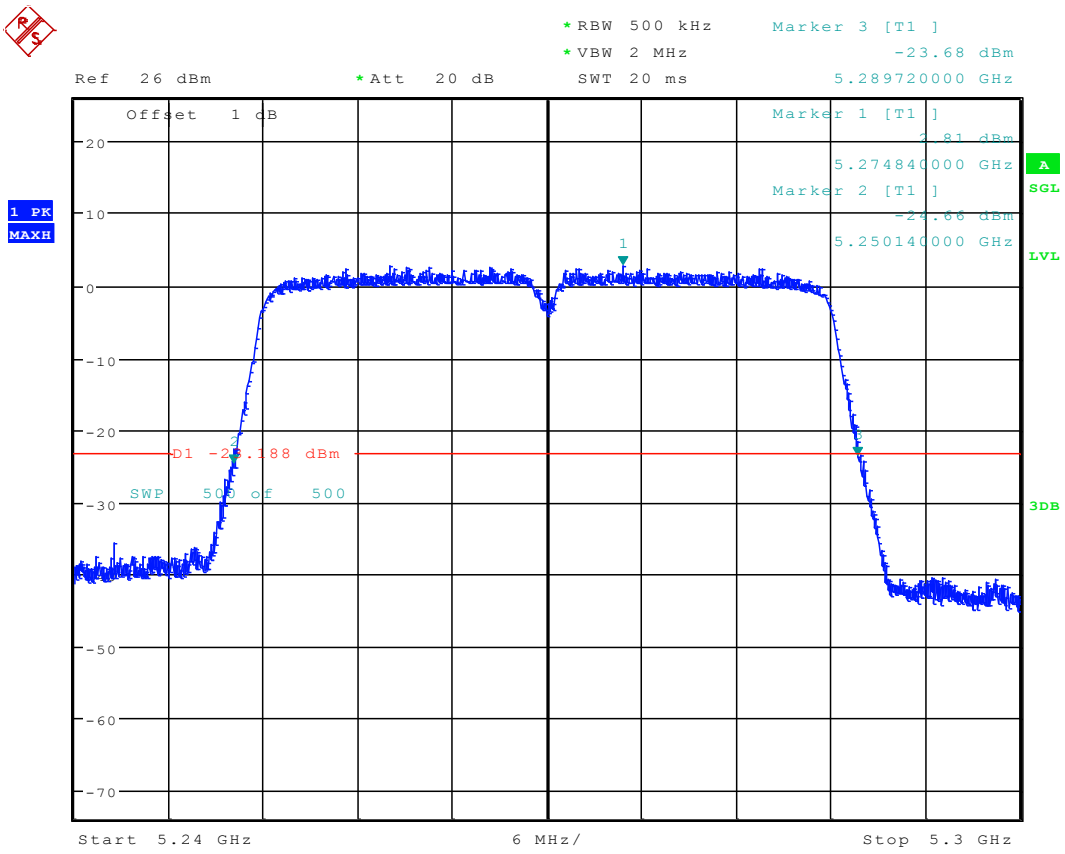
Date: 28.FEB.2018 09:28:01

2.14 11N40_46 ANT 1



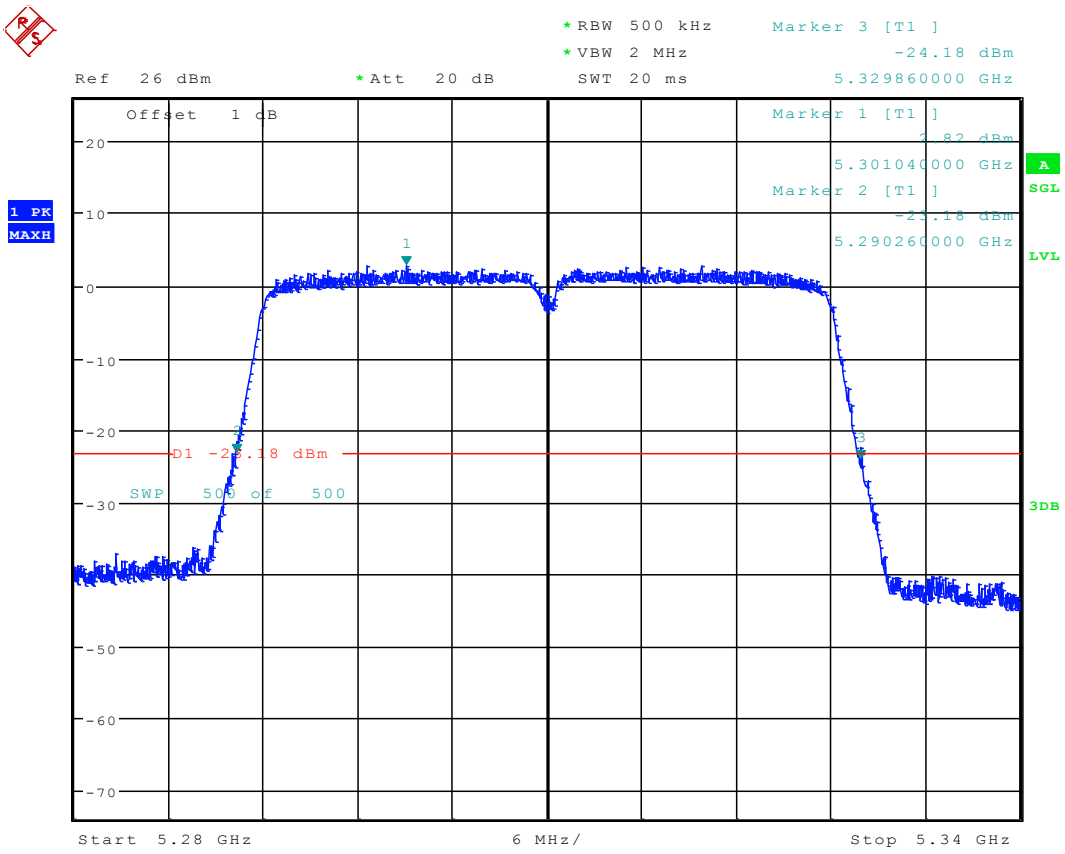
Date: 28.FEB.2018 09:33:24

2.15 11N40_54 ANT 1



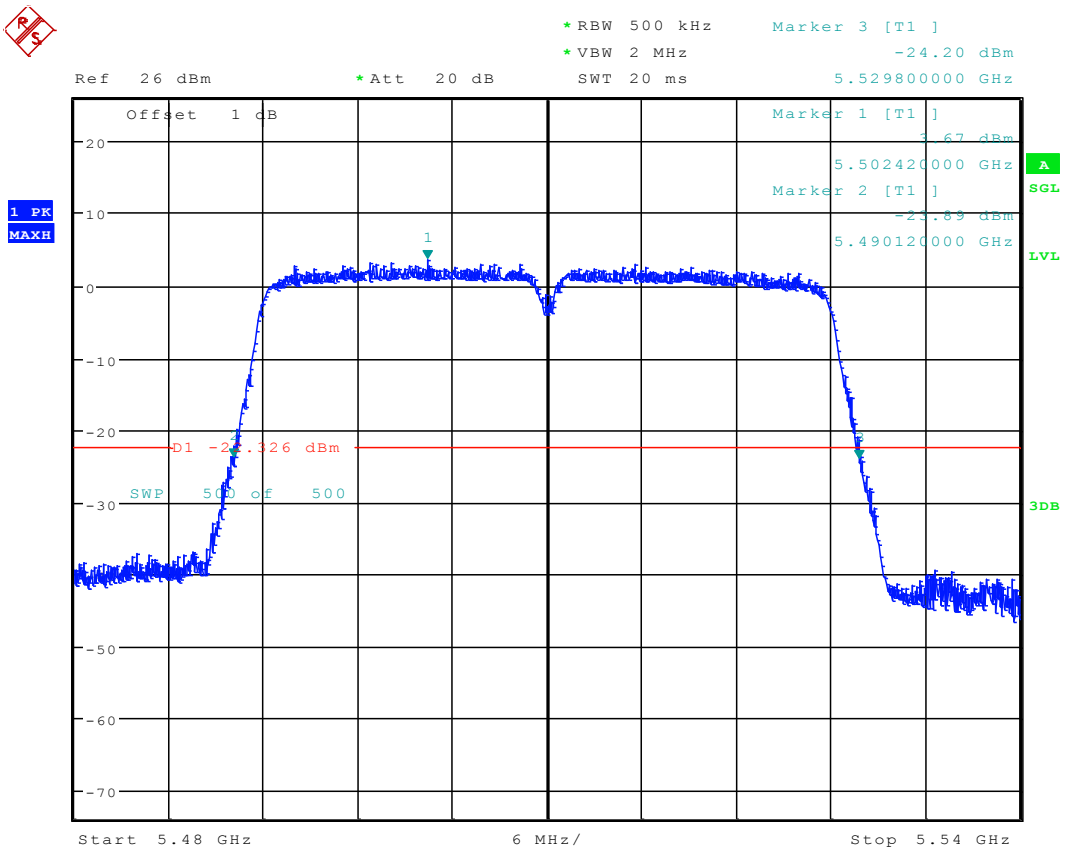
Date: 28.FEB.2018 09:55:10

2.16 11N40_62 ANT 1



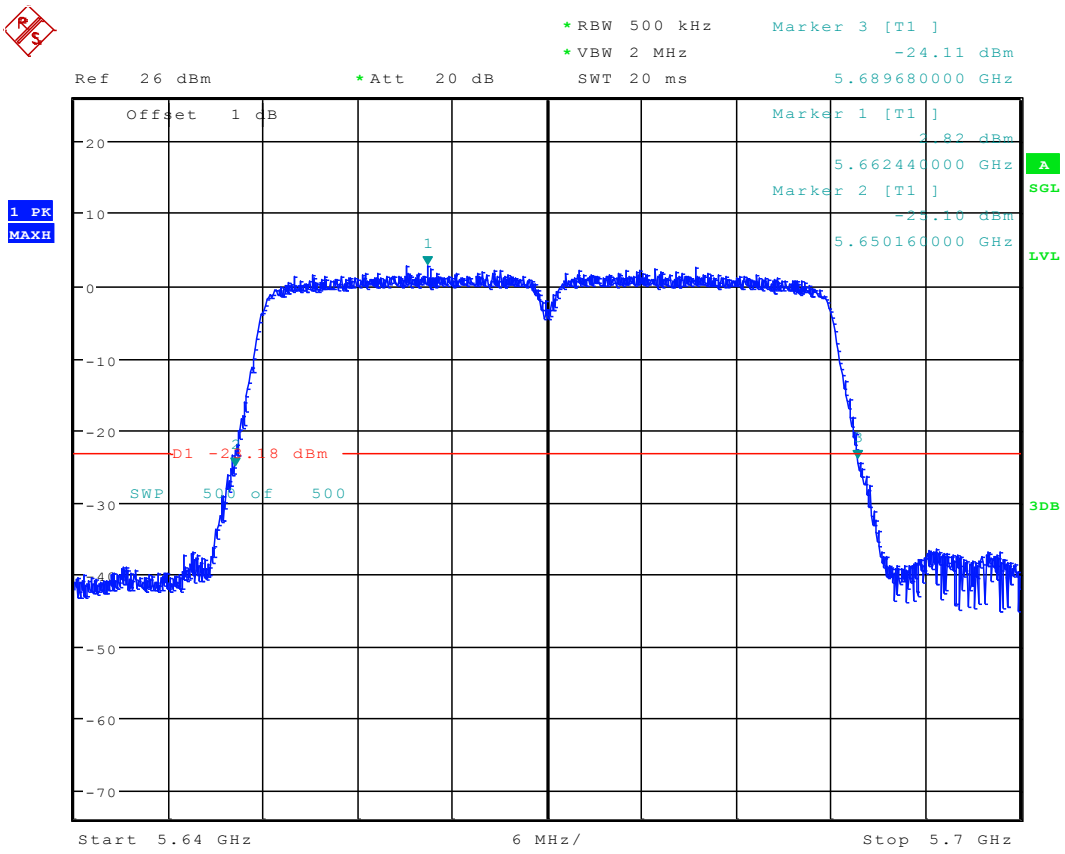
Date: 28.FEB.2018 10:01:50

2.17 11N40_102 ANT 1



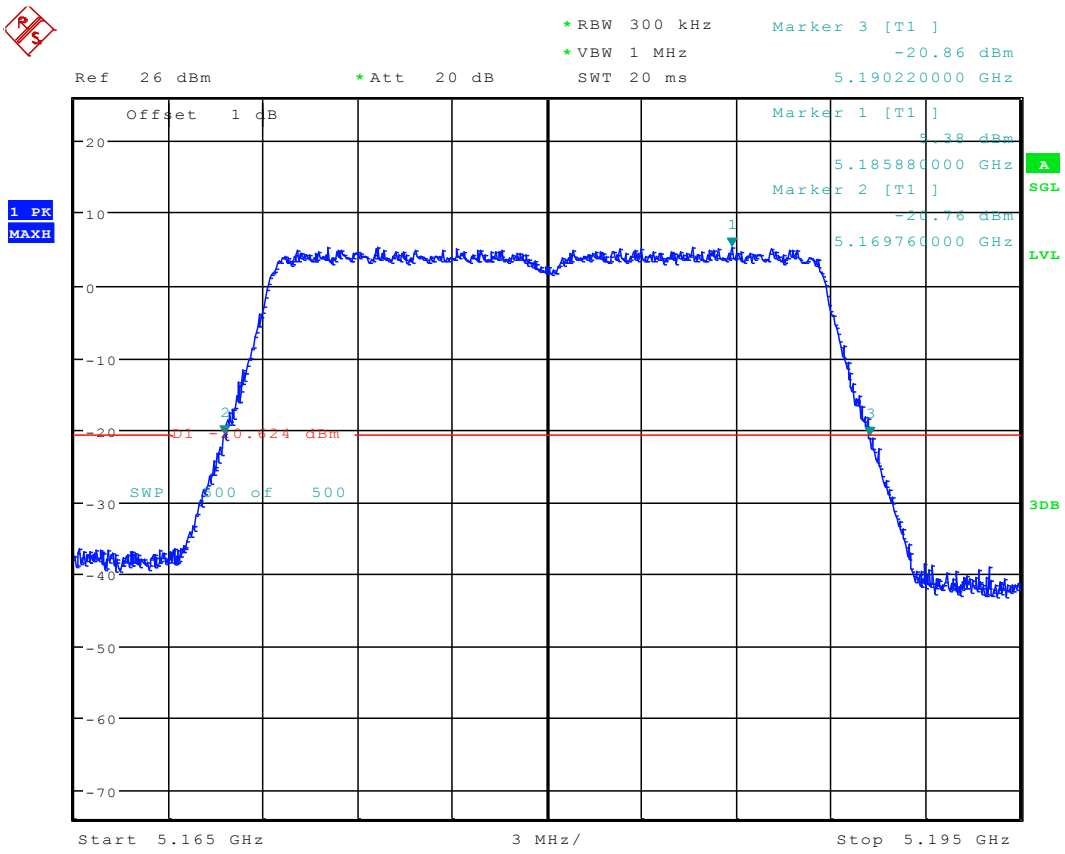
Date: 28.FEB.2018 10:14:04

2.18 11N40_134 ANT 1



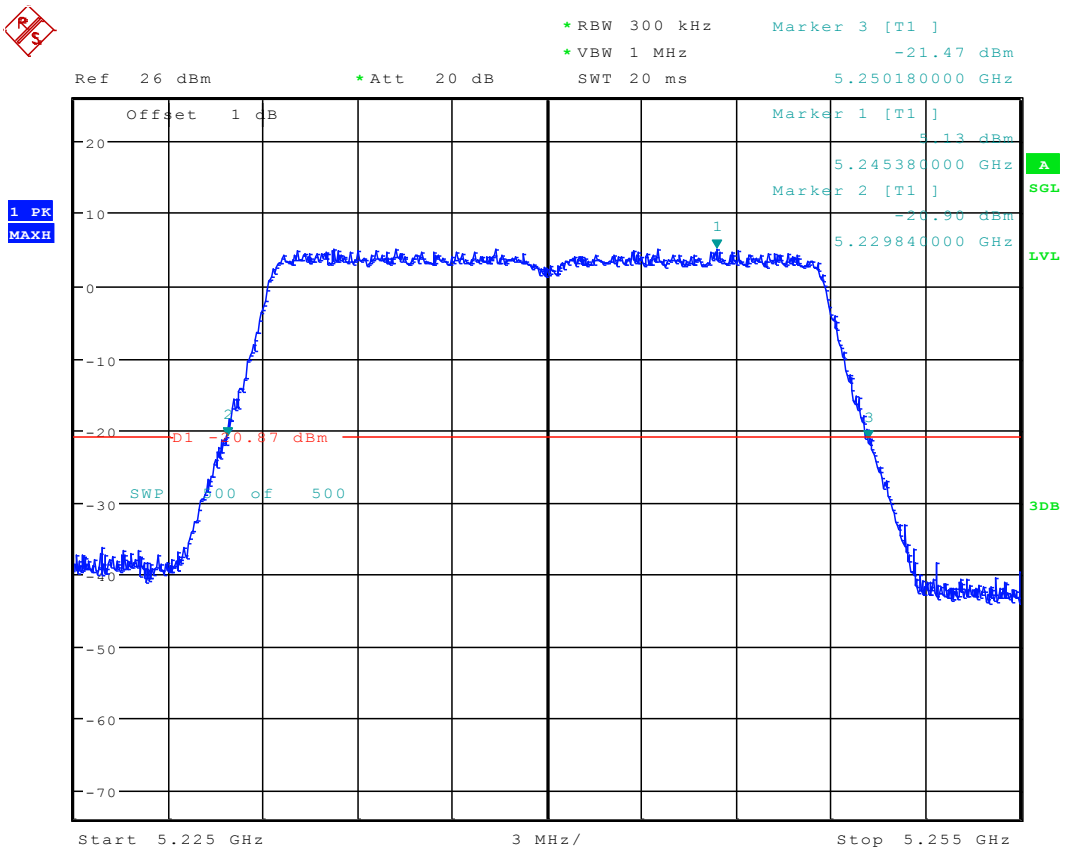
Date: 28.FEB.2018 10:28:34

2.19 11AC20_36 ANT 1



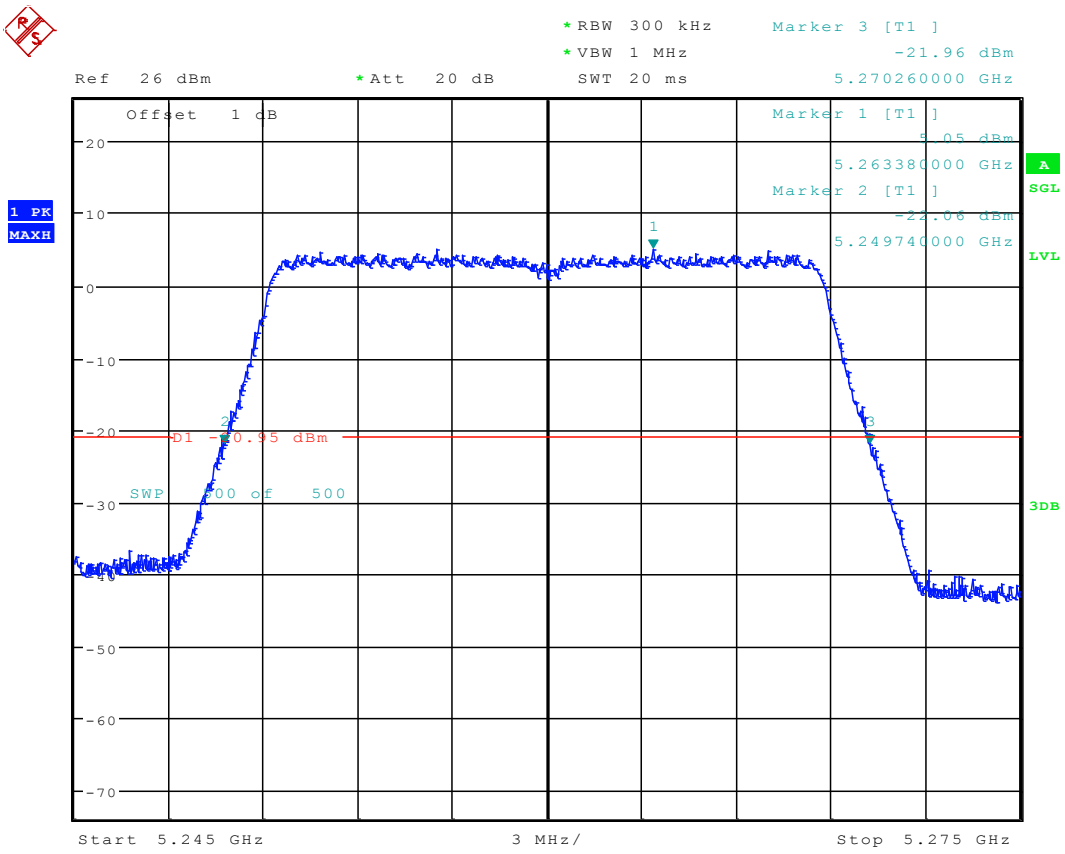
Date: 22.FEB.2018 17:20:30

2.20 11AC20_48 ANT 1



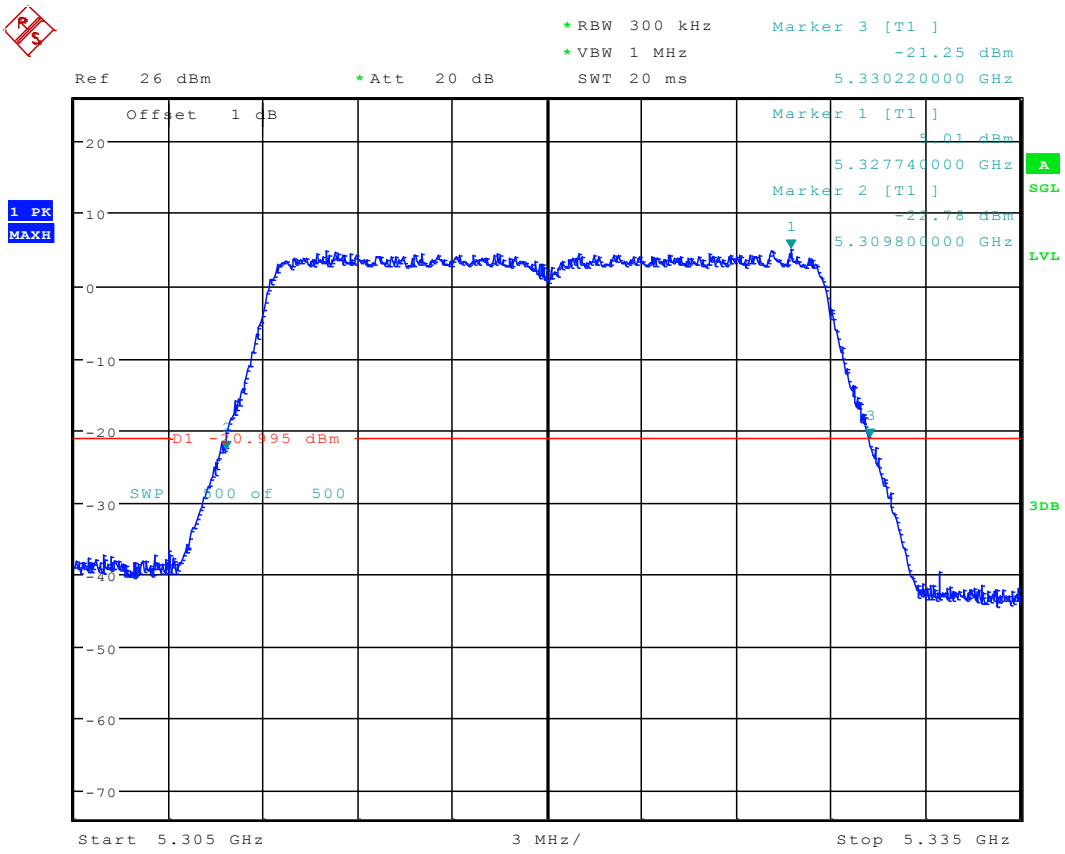
Date: 22.FEB.2018 17:27:00

2.21 11AC20_52 ANT 1



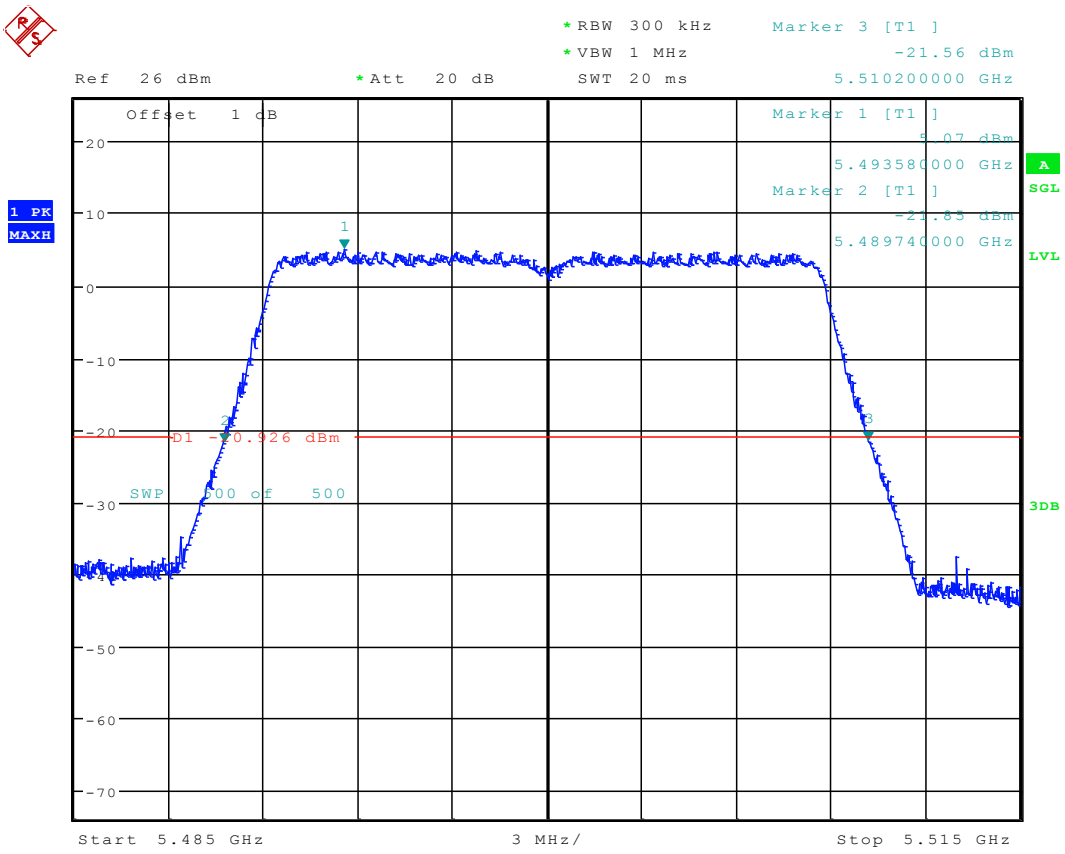
Date: 22.FEB.2018 17:35:57

2.22 11AC20_64 ANT 1



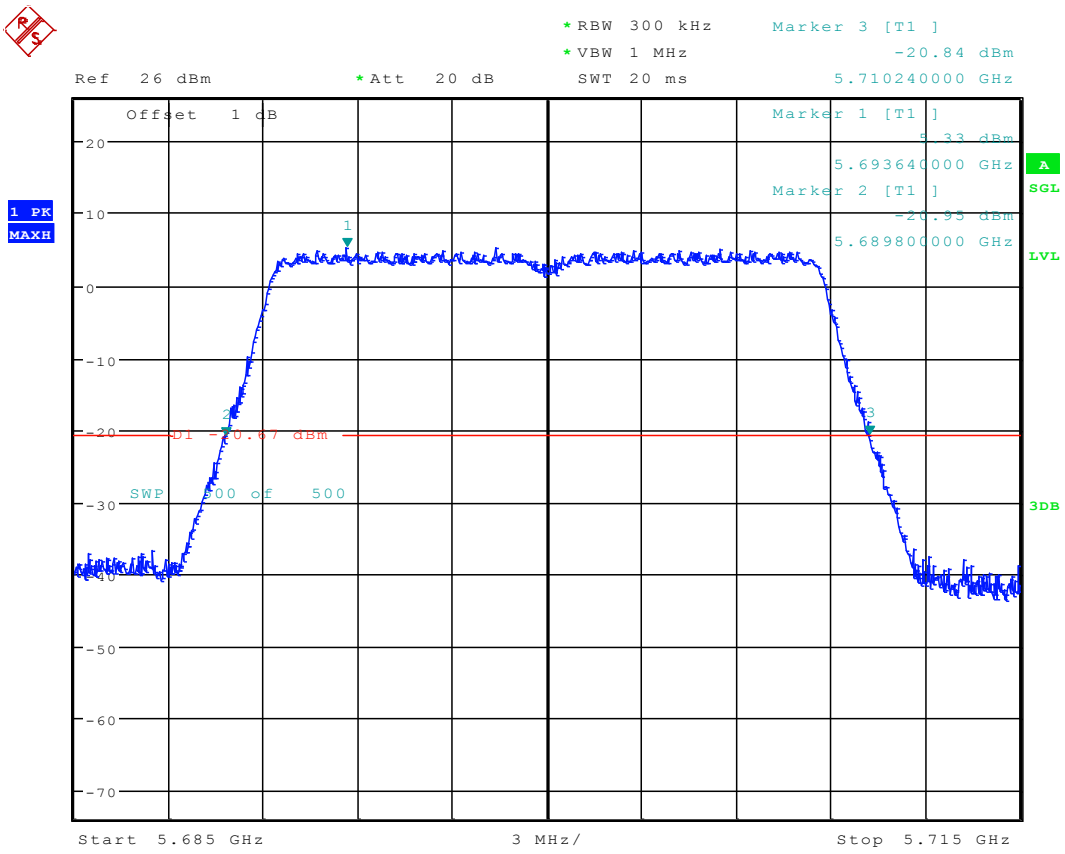
Date: 22.FEB.2018 17:40:26

2.23 11AC20_100 ANT 1



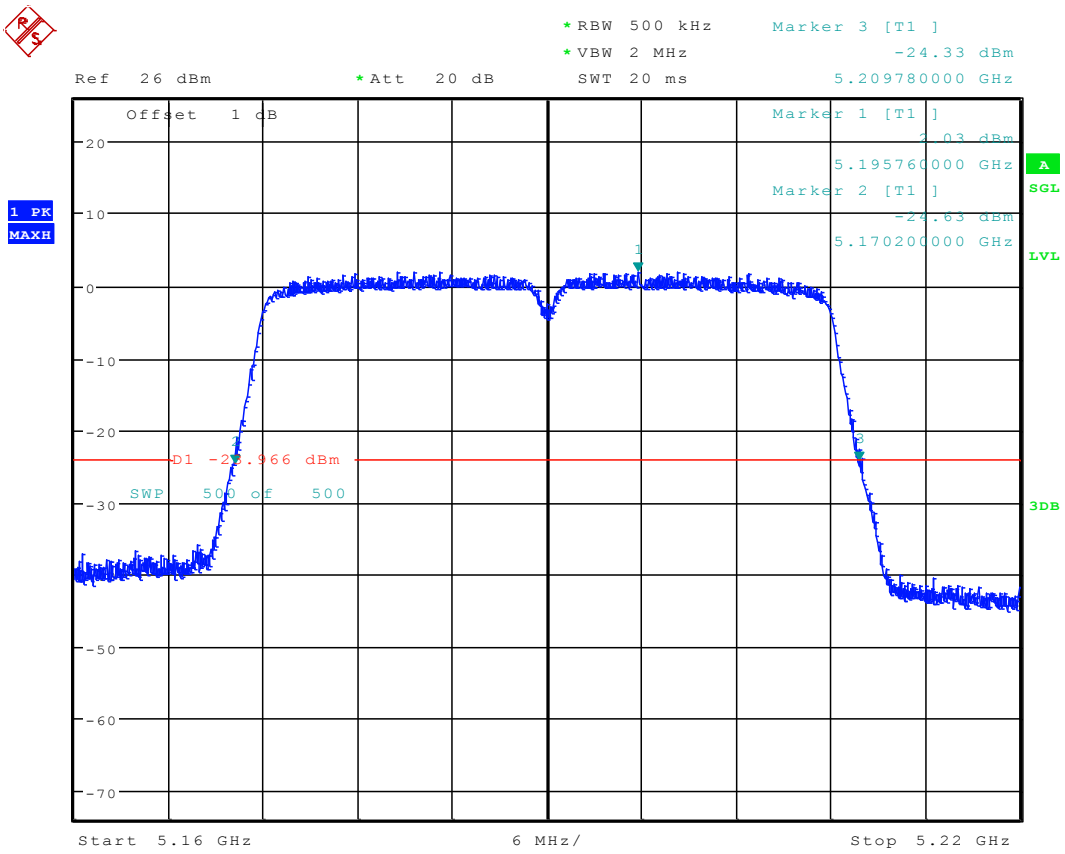
Date: 22.FEB.2018 17:44:22

2.24 11AC20_140 ANT 1

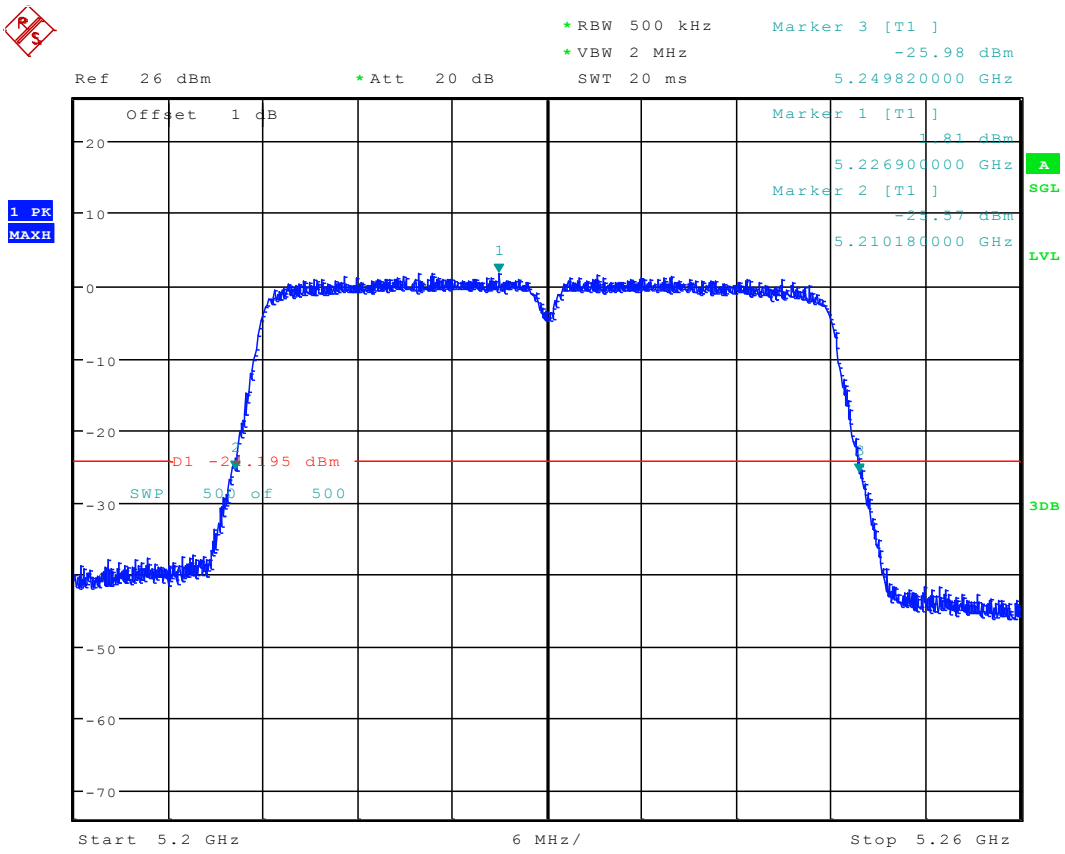


Date: 22.FEB.2018 17:52:30

2.25 11AC40_38 ANT 1

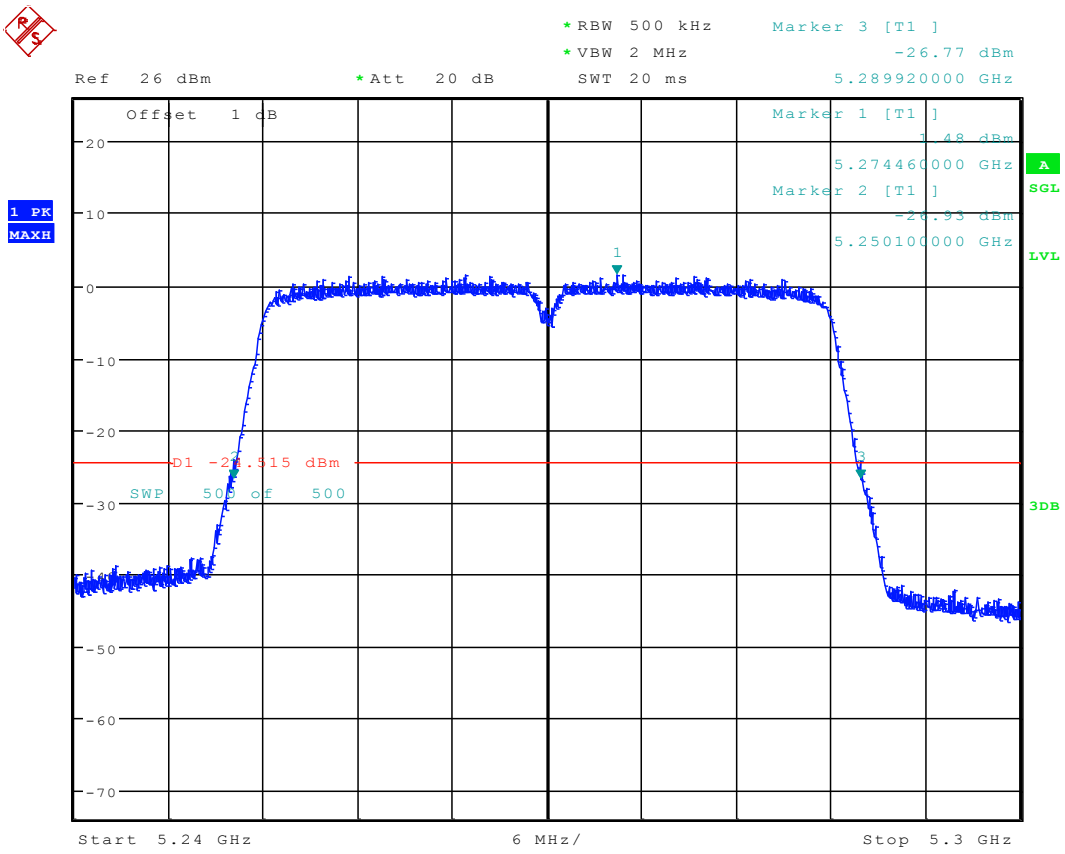


2.26 11AC40_46 ANT 1



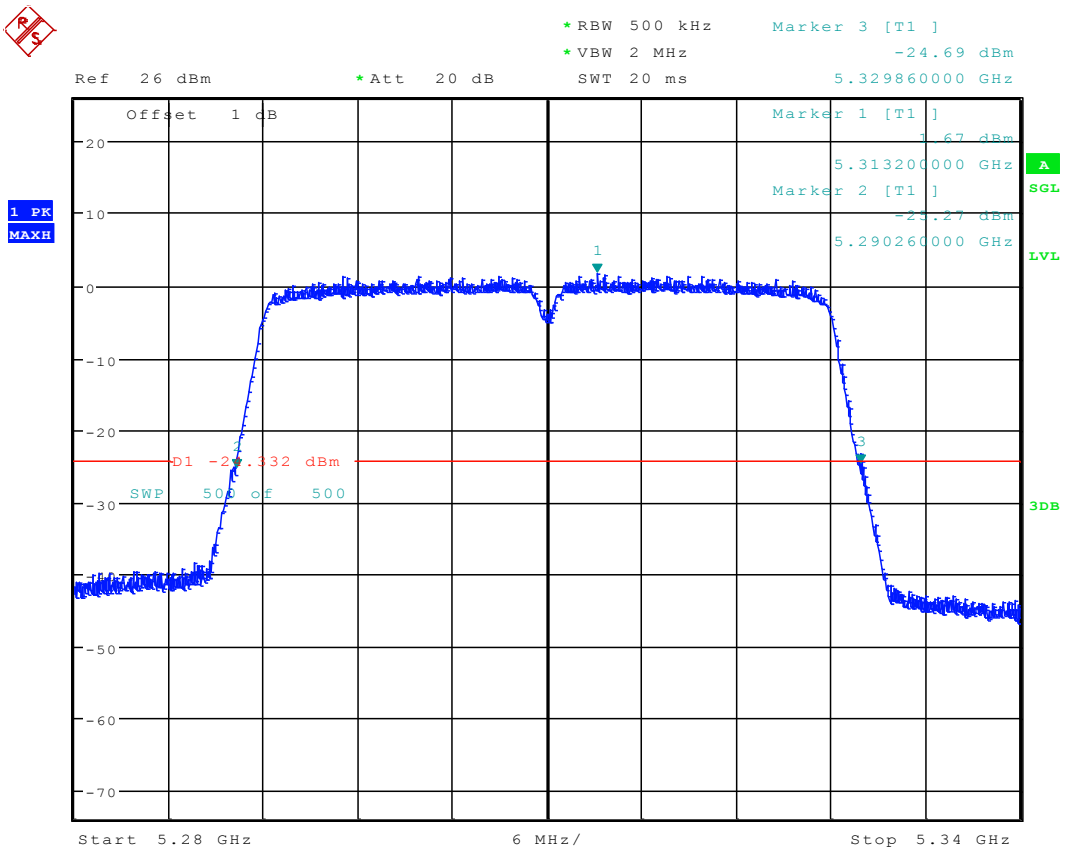
Date: 28.FEB.2018 10:52:24

2.27 11AC40_54 ANT 1



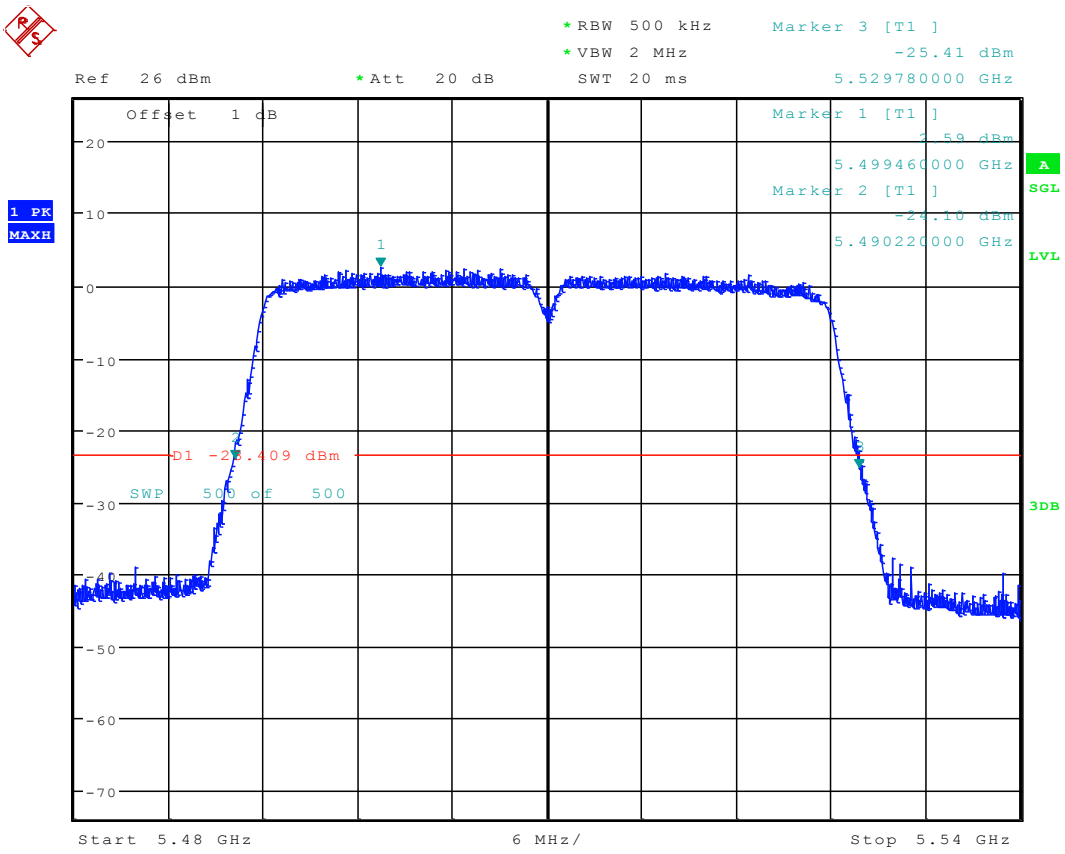
Date: 28.FEB.2018 10:58:47

2.28 11AC40_62 ANT 1



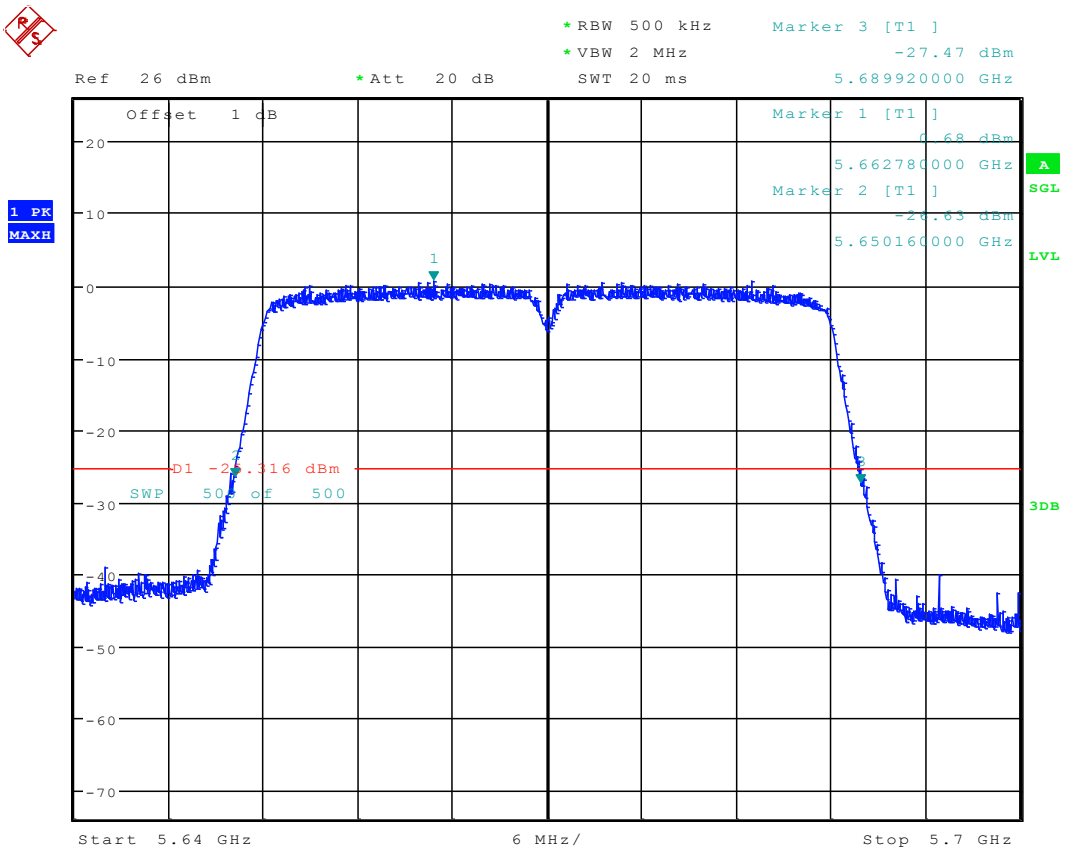
Date: 28.FEB.2018 11:06:34

2.29 11AC40_102 ANT 1



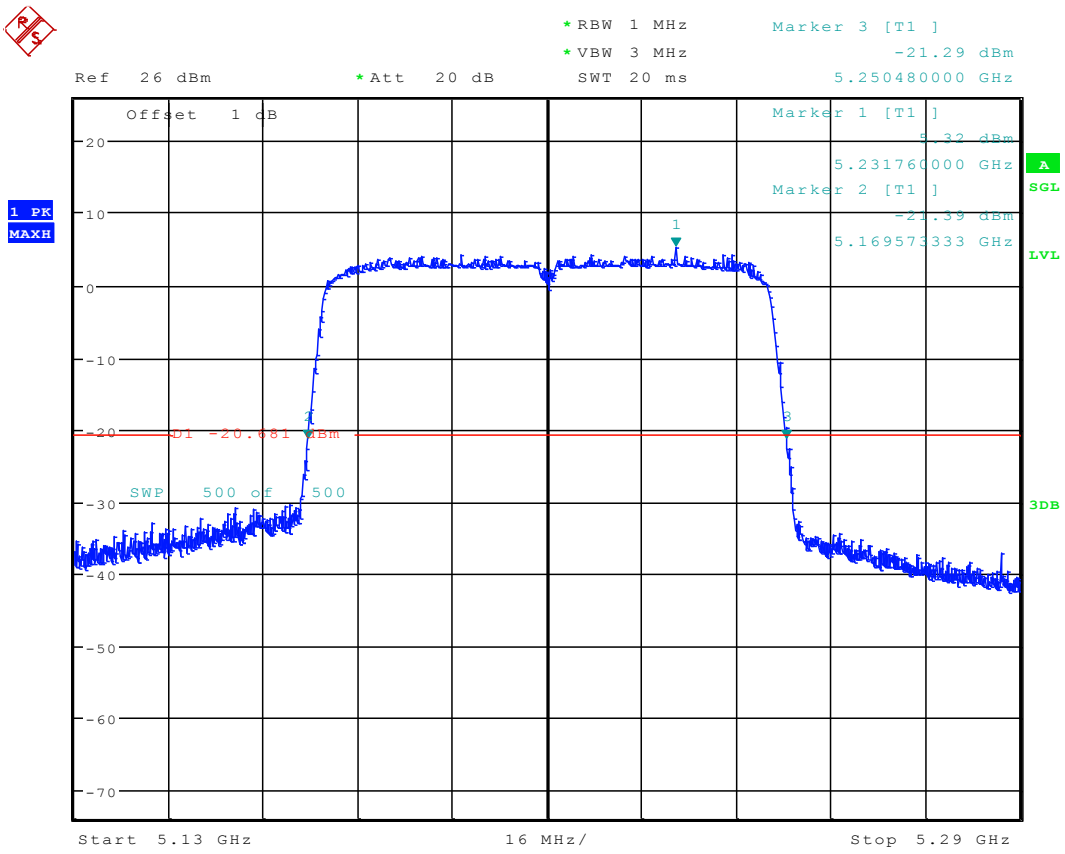
Date: 28.FEB.2018 11:14:18

2.30 11AC40_134 ANT 1



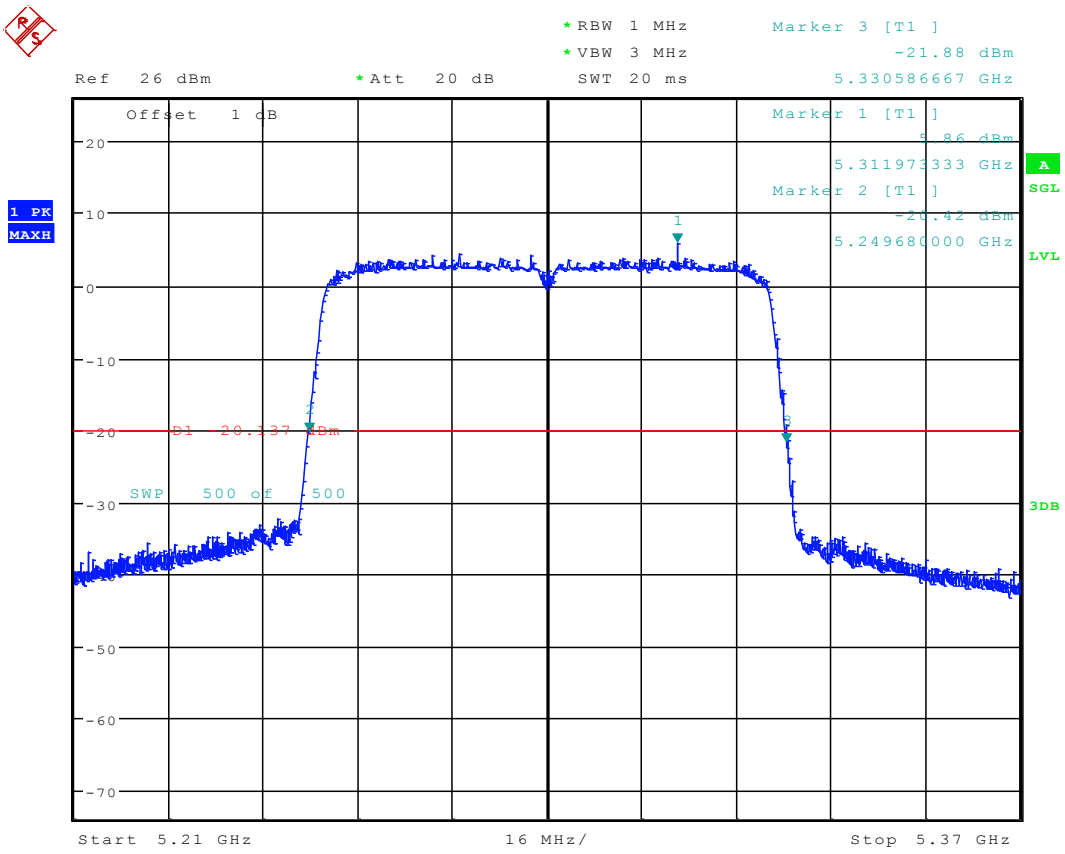
Date: 28.FEB.2018 11:34:34

2.31 11AC80_42 ANT 1



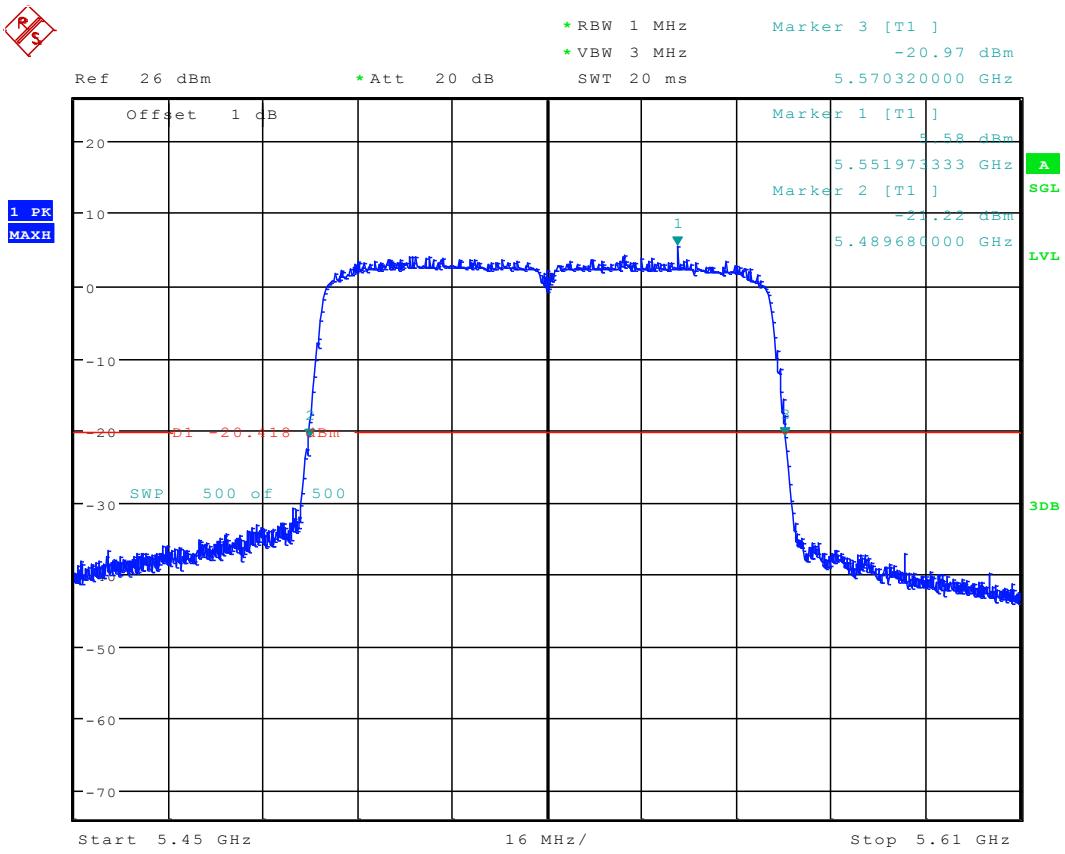
Date: 9.MAR.2018 09:46:20

2.32 11AC80_58 ANT 1



Date: 9.MAR.2018 10:05:42

2.33 11AC80_106 ANT 1



Date: 9.MAR.2018 10:12:50

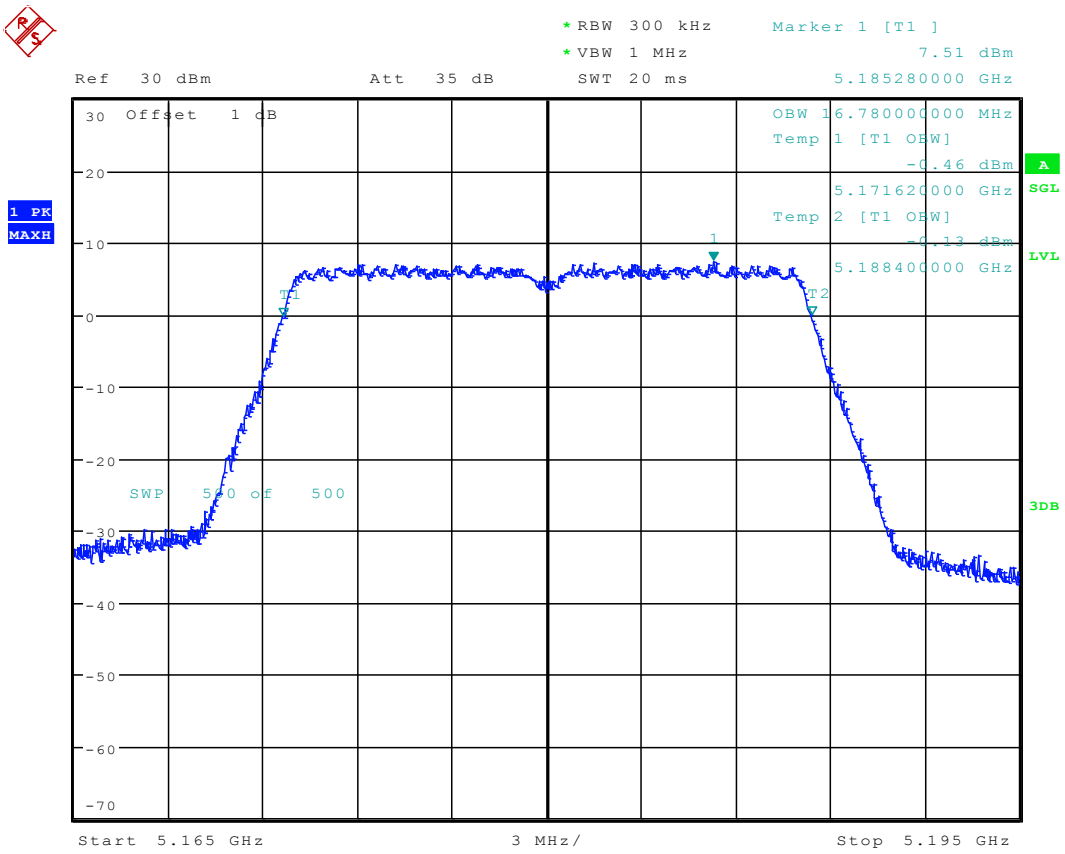
Appendix B Occupied Bandwidth (OBW)

3 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Occupied Bandwidth [MHz]	Verdict
11A20	36	5180	ANT 1	16.78	PASS
	48	5240	ANT 1	16.78	PASS
	52	5260	ANT 1	16.76	PASS
	64	5320	ANT 1	16.78	PASS
	100	5500	ANT 1	16.74	PASS
	140	5700	ANT 1	16.74	PASS
11N20	36	5180	ANT 1	17.74	PASS
	48	5240	ANT 1	17.76	PASS
	52	5260	ANT 1	17.72	PASS
	64	5320	ANT 1	17.74	PASS
	100	5500	ANT 1	17.74	PASS
	140	5700	ANT 1	17.74	PASS
11N40	38	5190	ANT 1	35.96	PASS
	46	5230	ANT 1	35.96	PASS
	54	5270	ANT 1	35.98	PASS
	62	5310	ANT 1	35.98	PASS
	102	5510	ANT 1	35.94	PASS
	134	5670	ANT 1	35.98	PASS
11AC20	36	5180	ANT 1	17.74	PASS
	48	5240	ANT 1	17.76	PASS
	52	5260	ANT 1	17.74	PASS
	64	5320	ANT 1	17.74	PASS
	100	5500	ANT 1	17.76	PASS
	140	5700	ANT 1	17.74	PASS
11AC40	38	5190	ANT 1	35.94	PASS
	46	5230	ANT 1	35.92	PASS
	54	5270	ANT 1	35.94	PASS
	62	5310	ANT 1	35.94	PASS
	102	5510	ANT 1	35.94	PASS
	134	5670	ANT 1	35.94	PASS
11AC80	42	5210	ANT 1	74.88	PASS
	58	5290	ANT 1	74.88	PASS
	106	5530	ANT 1	74.84	PASS

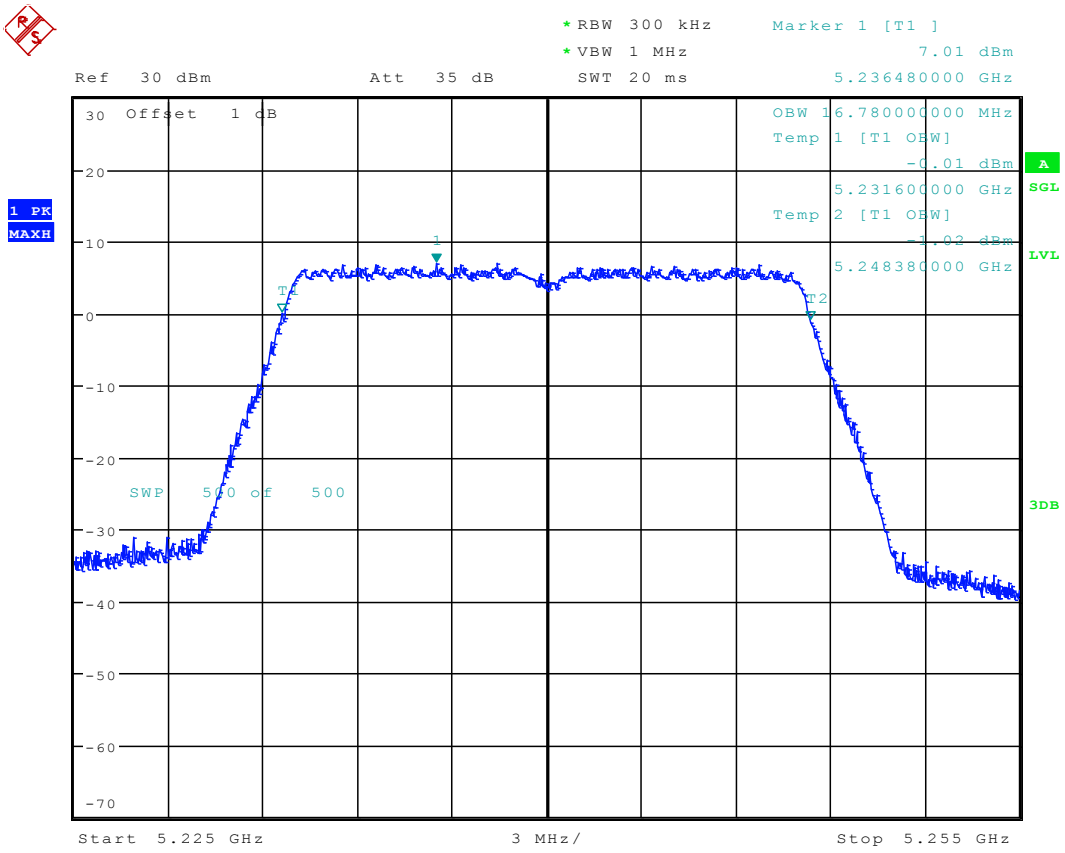
4 Test Plot

4.1 11A20_36 ANT 1



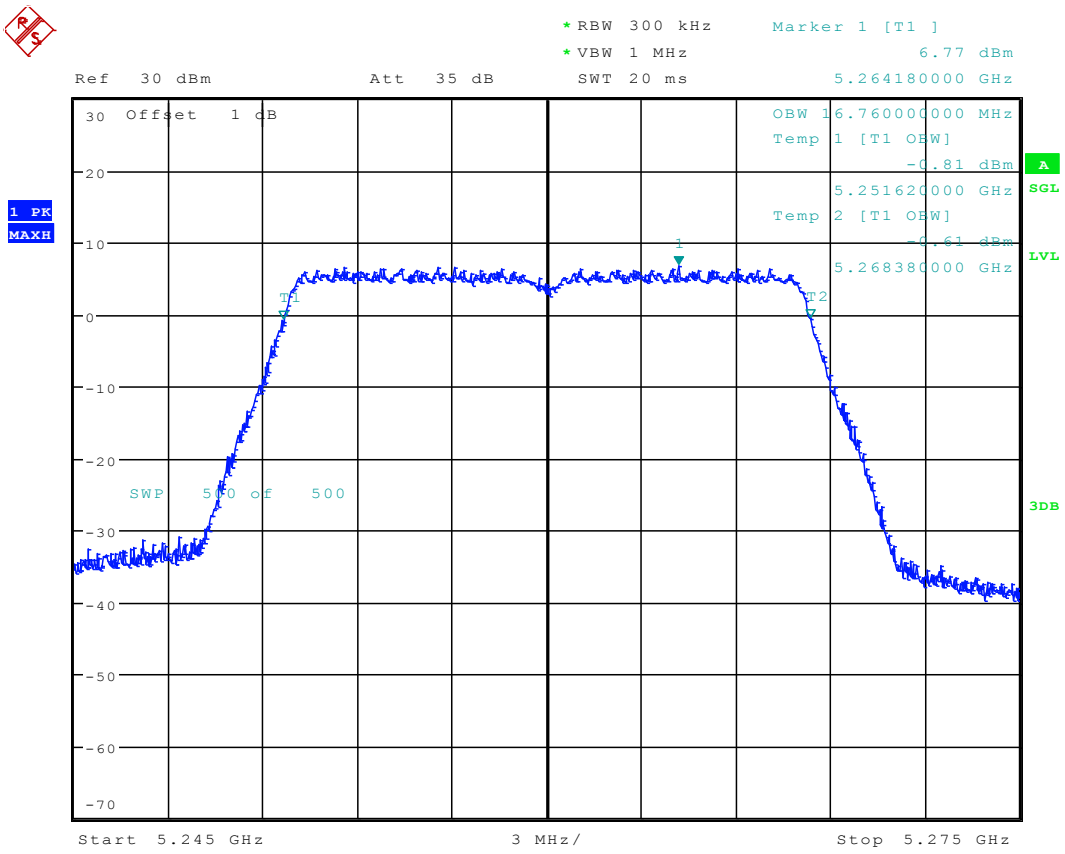
Date: 22.FEB.2018 15:10:00

4.2 11A20_48 ANT 1

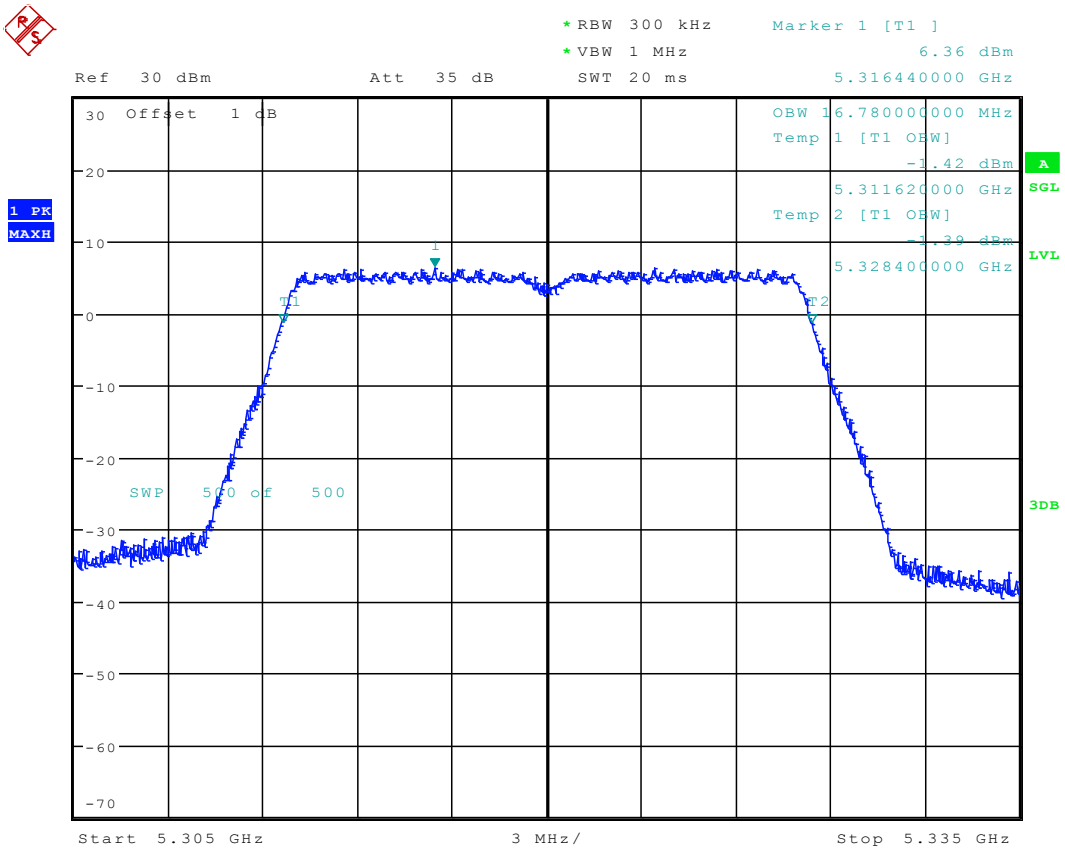


Date: 22.FEB.2018 15:18:41

4.3 11A20_52 ANT 1

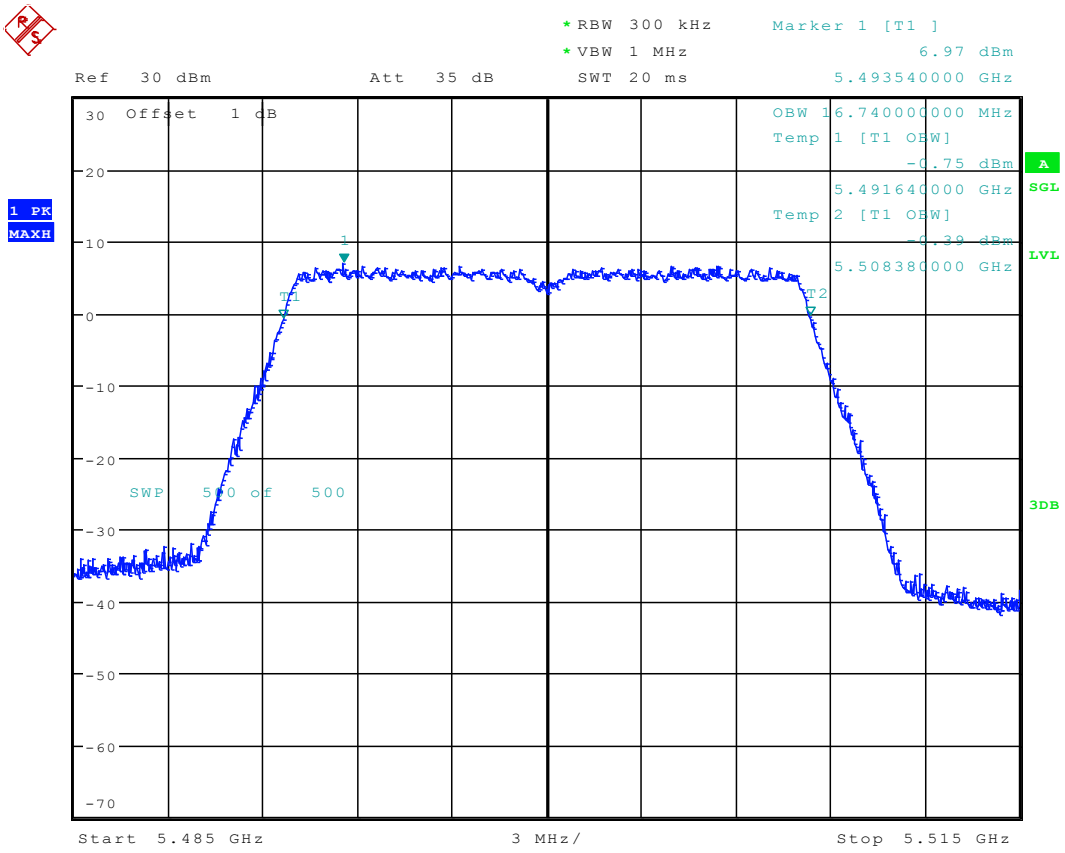


4.4 11A20_64 ANT 1



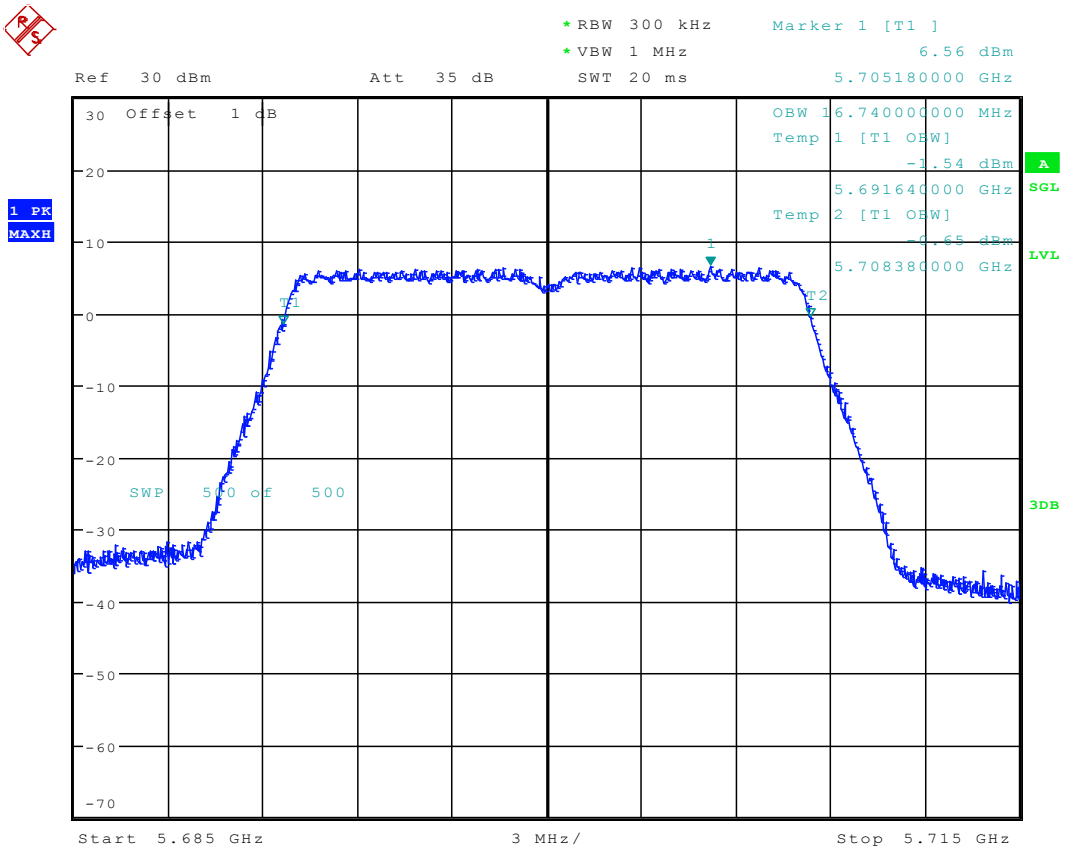
Date: 22.FEB.2018 15:35:36

4.5 11A20_100 ANT 1



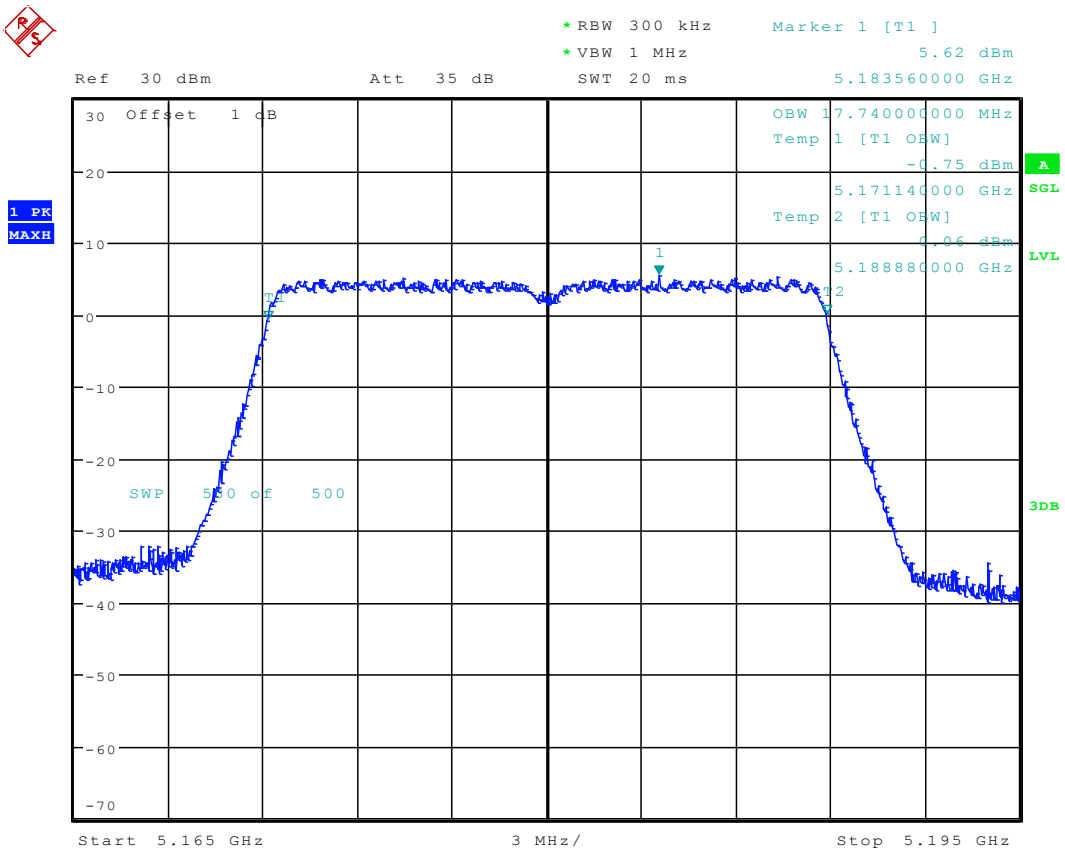
Date: 22.FEB.2018 15:44:24

4.6 11A20_140 ANT 1



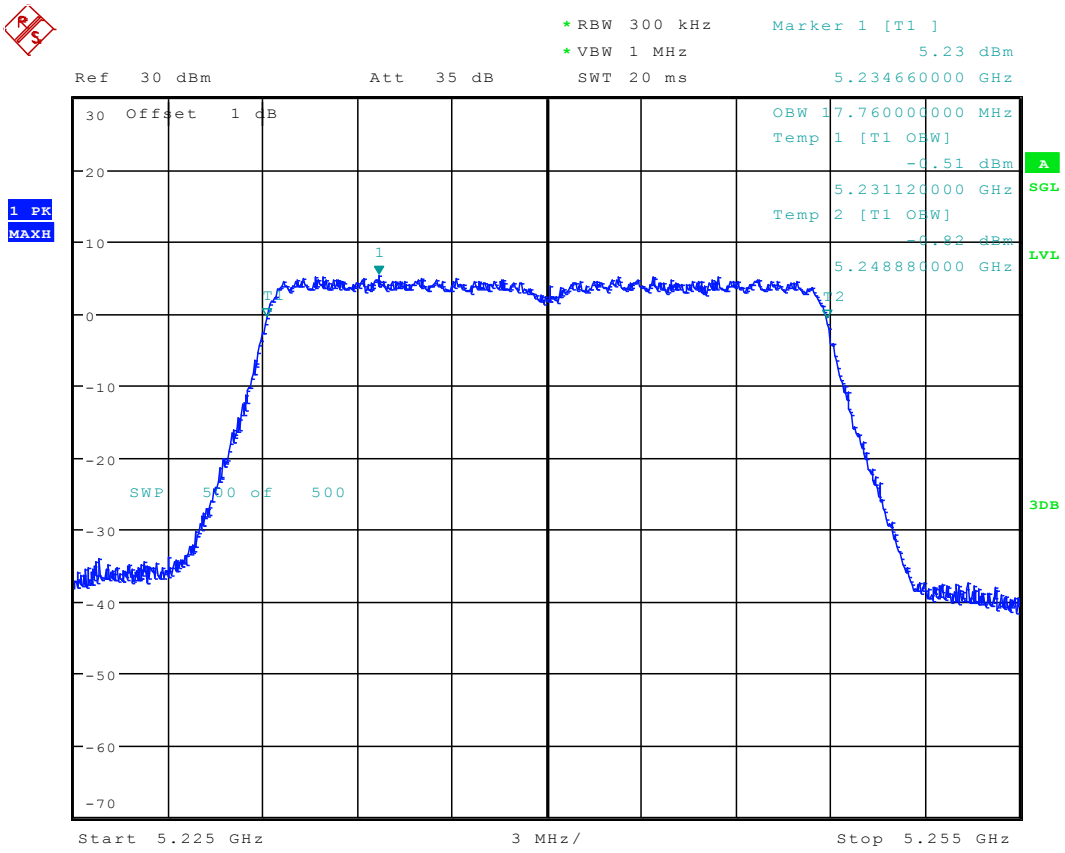
Date: 22.FEB.2018 15:53:33

4.7 11N20_36 ANT 1



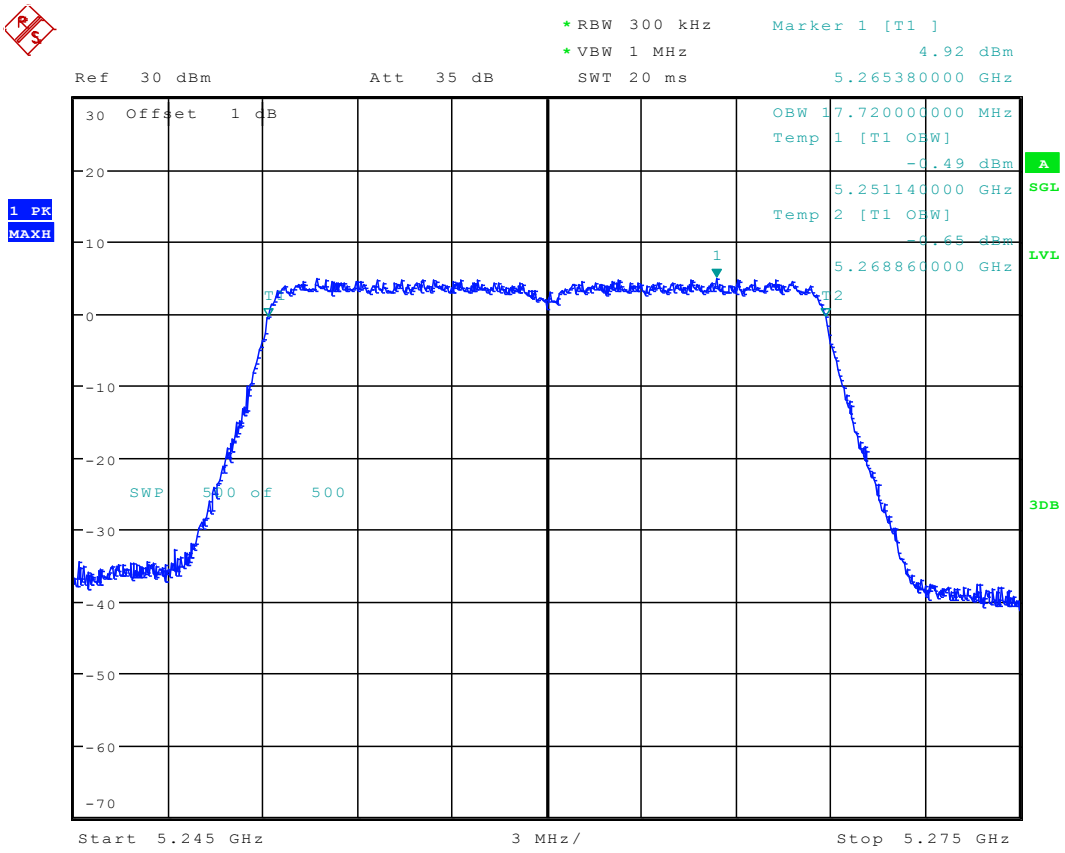
Date: 22.FEB.2018 16:10:27

4.8 11N20_48 ANT 1



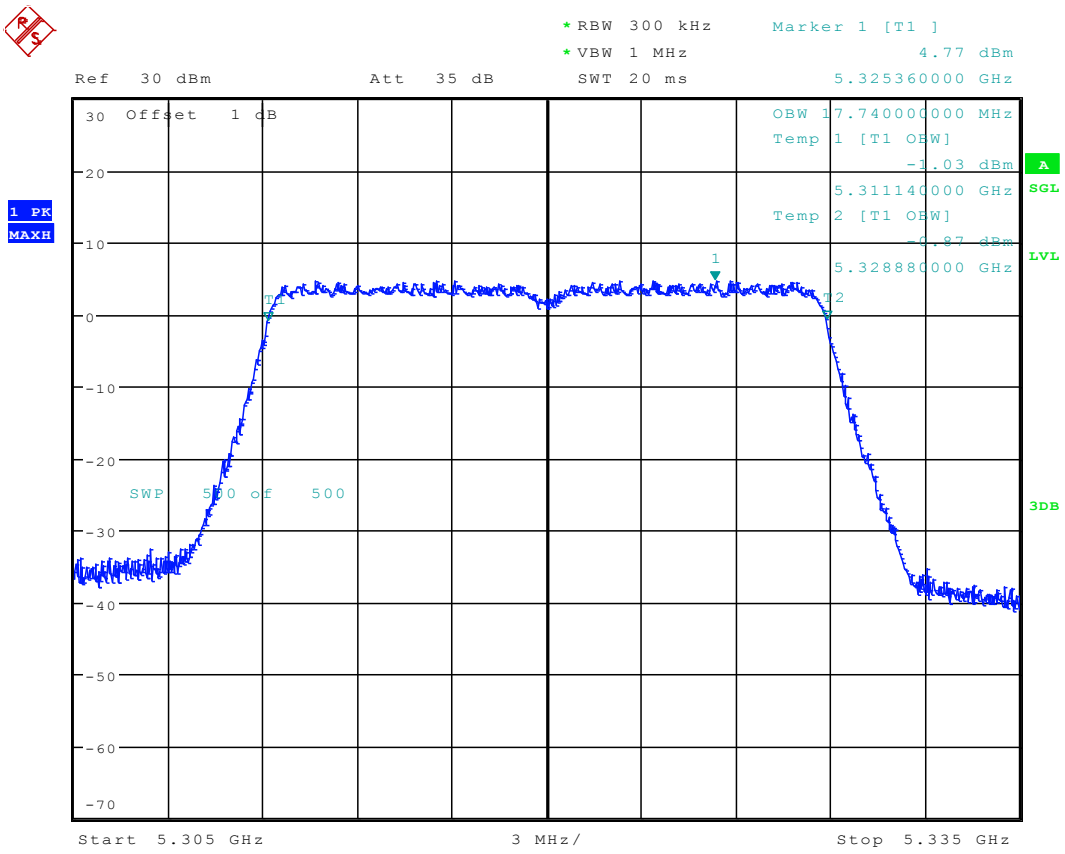
Date: 22.FEB.2018 16:21:18

4.9 11N20_52 ANT 1

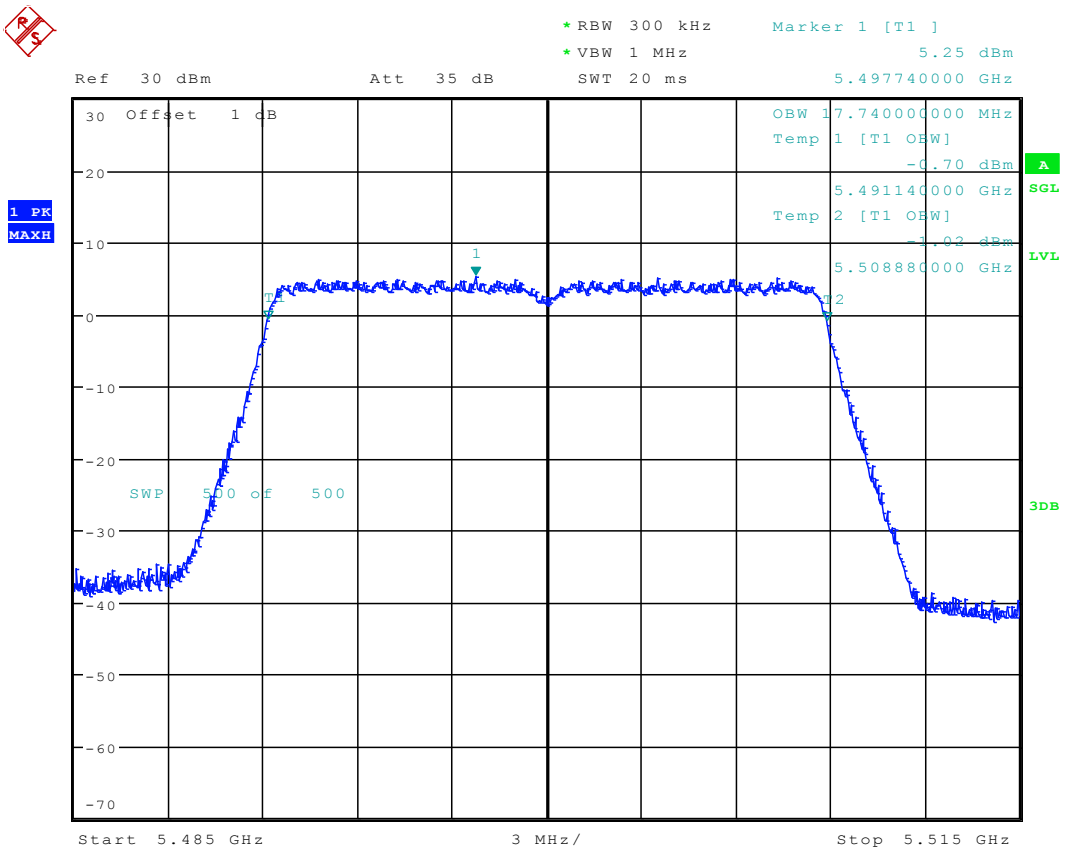


Date: 22.FEB.2018 16:31:35

4.10 11N20_64 ANT 1

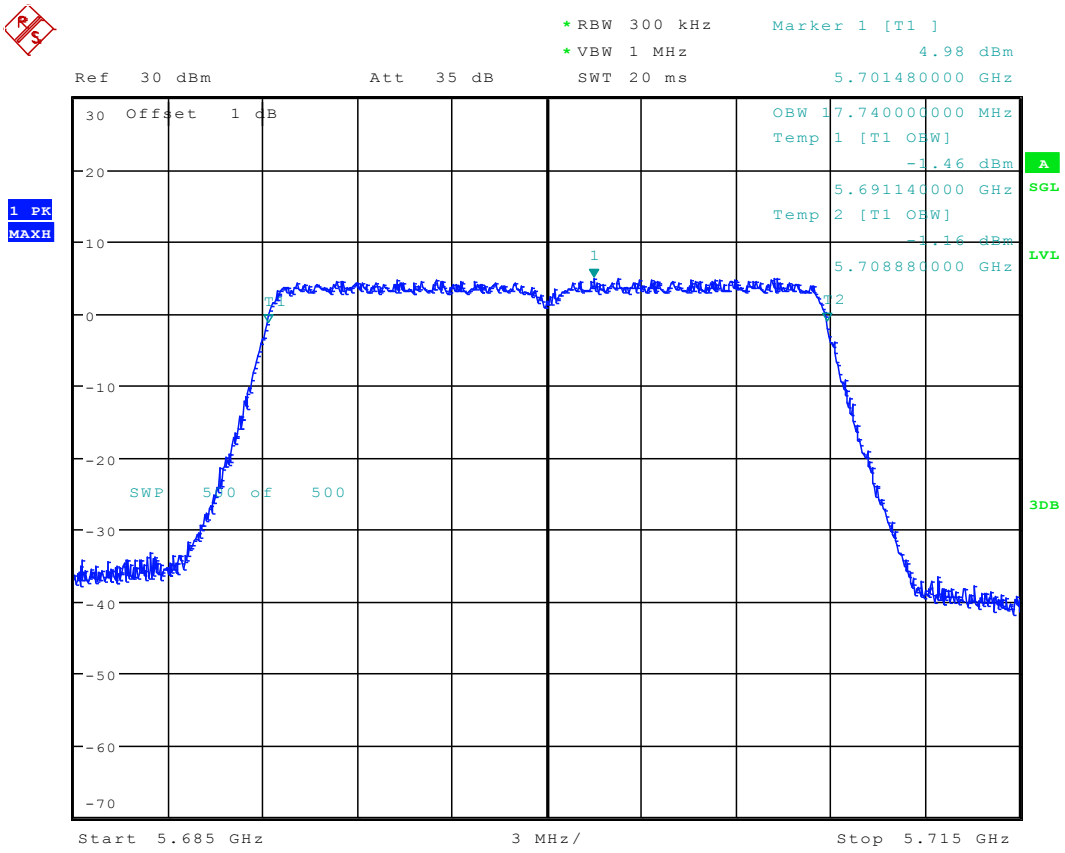


4.11 11N20_100 ANT 1



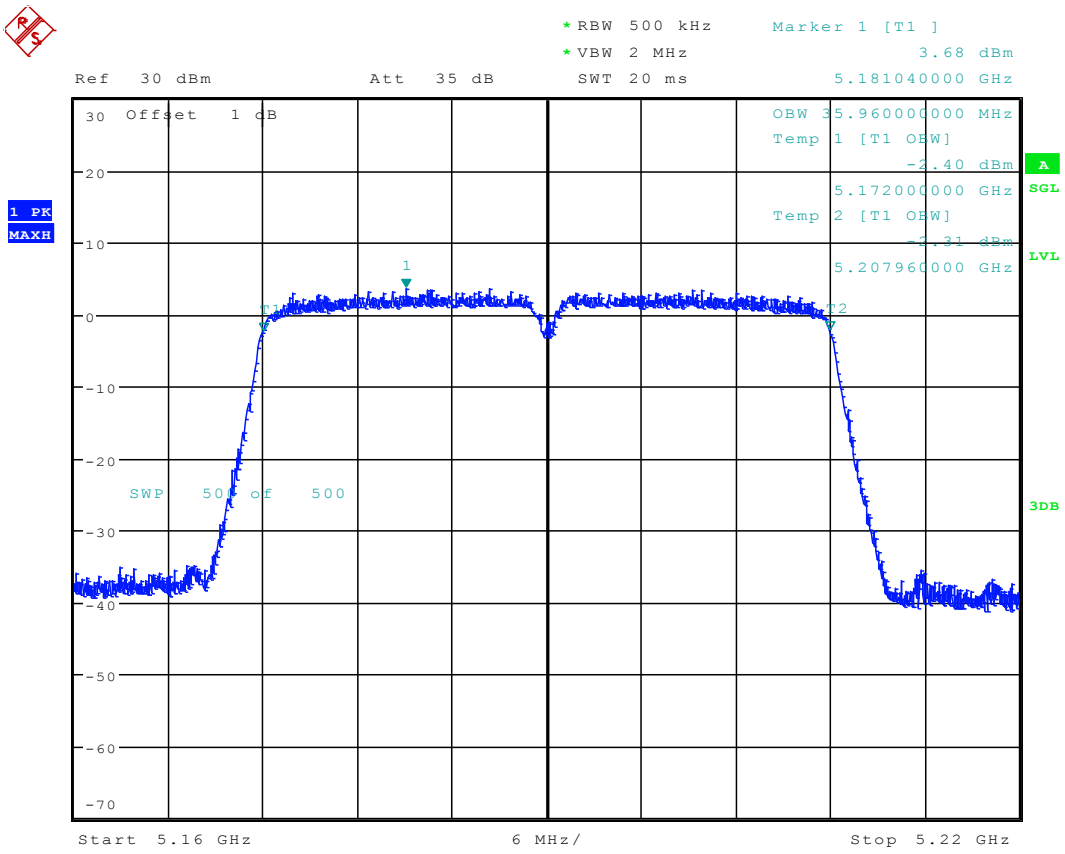
Date: 22.FEB.2018 16:52:24

4.12 11N20_140 ANT 1



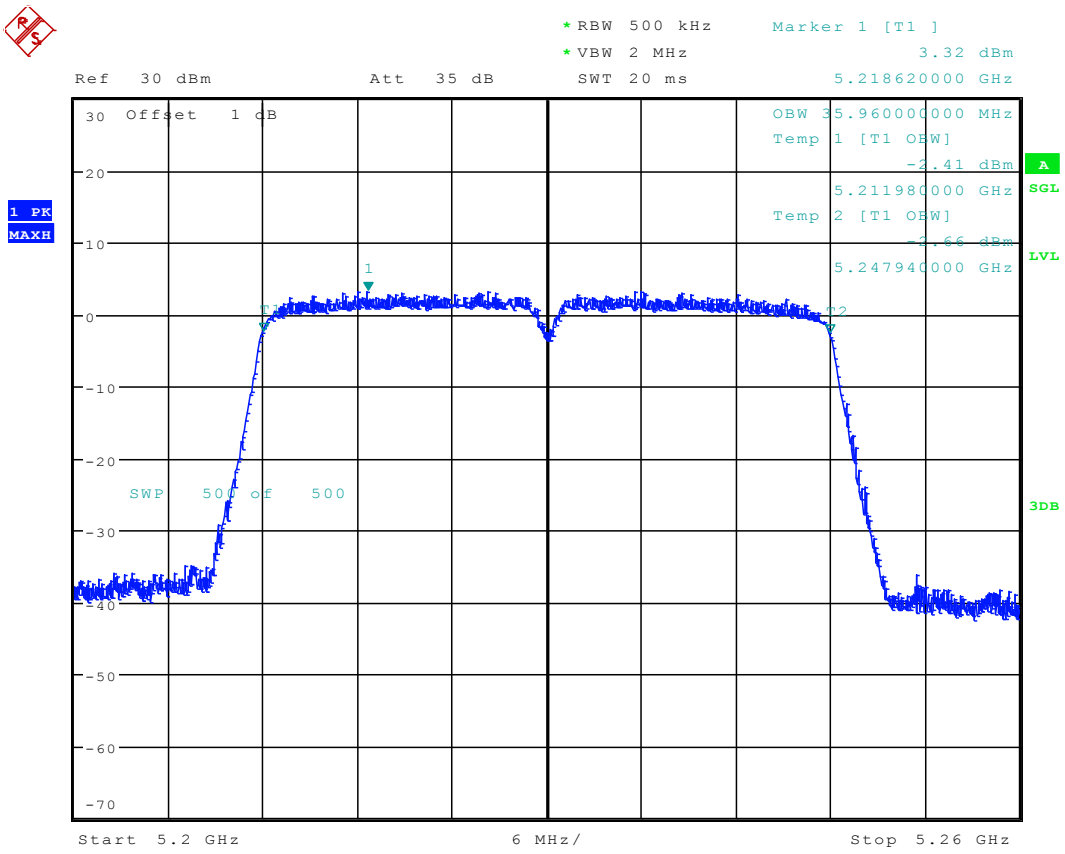
Date: 22.FEB.2018 17:03:05

4.13 11N40_38 ANT 1

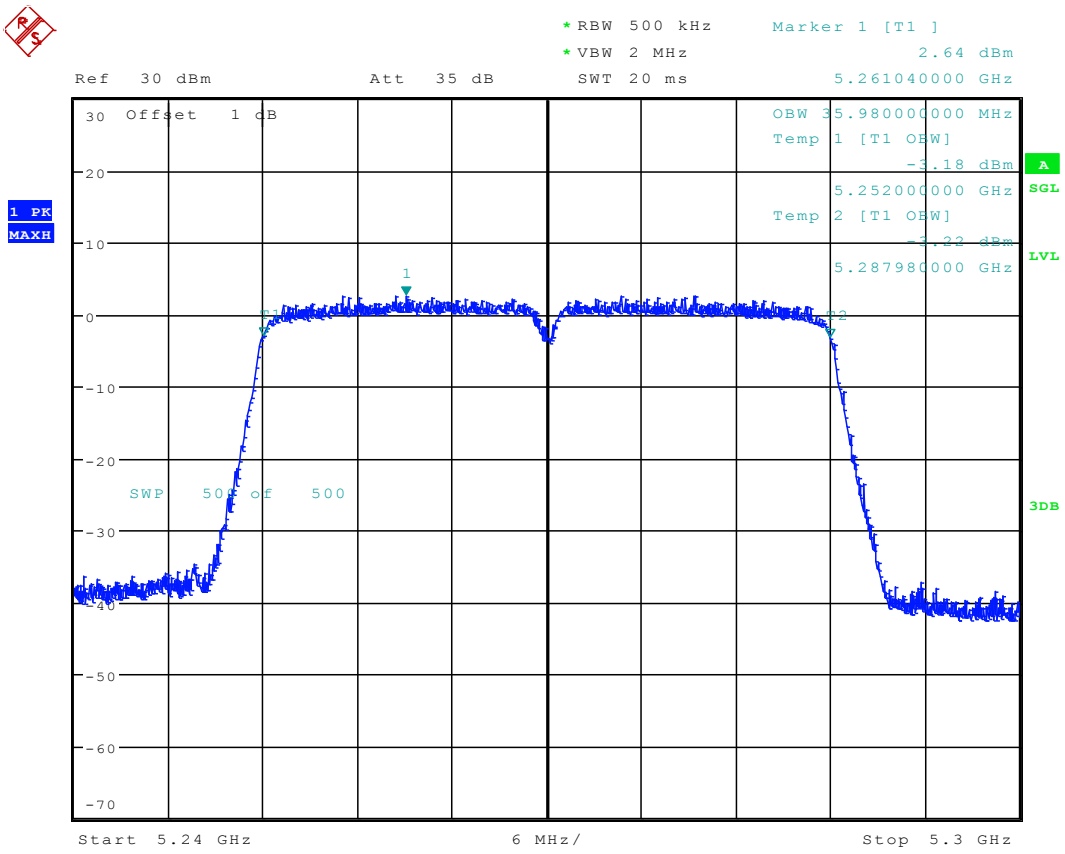


Date: 28.FEB.2018 09:28:51

4.14 11N40_46 ANT 1

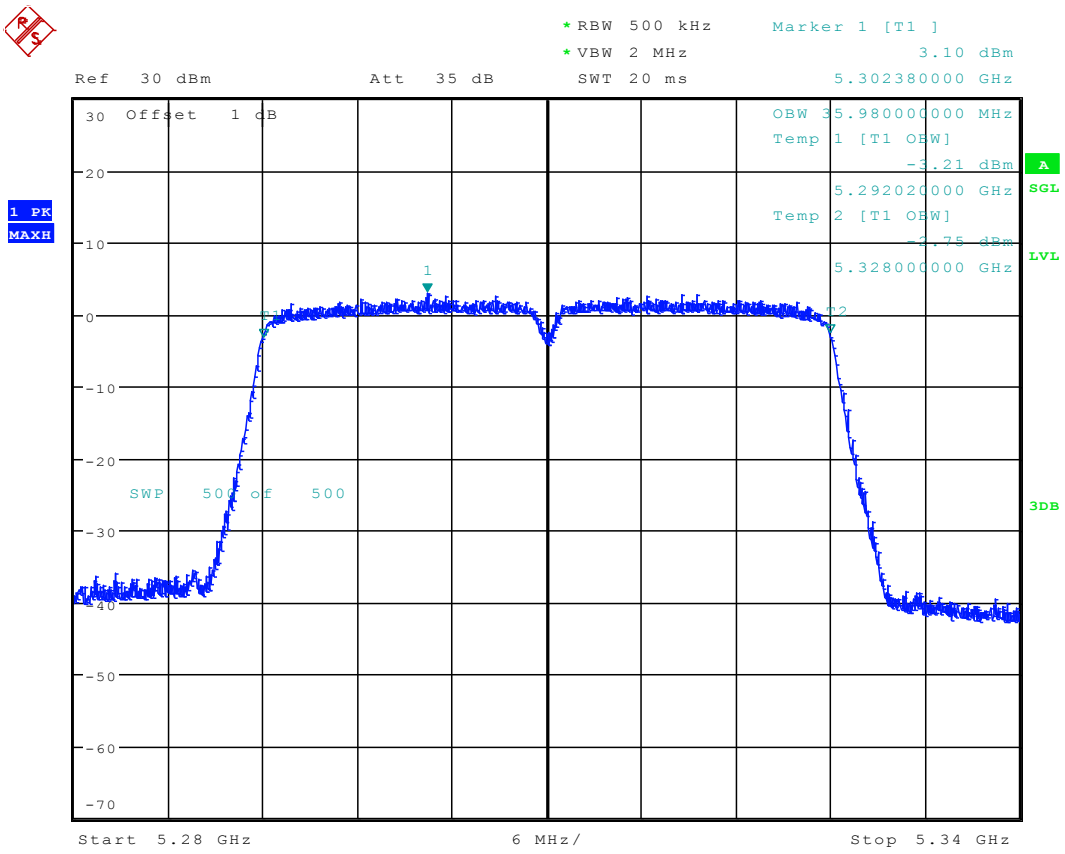


4.15 11N40_54 ANT 1



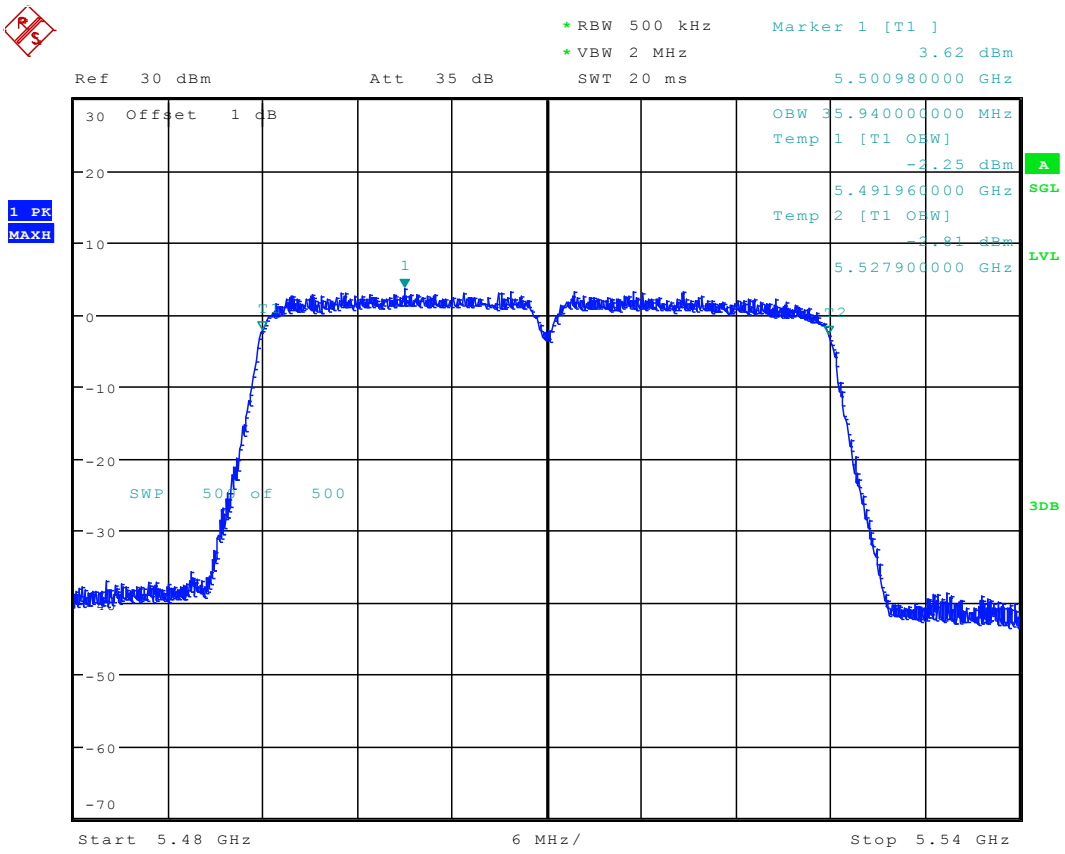
Date: 28.FEB.2018 09:55:59

4.16 11N40_62 ANT 1



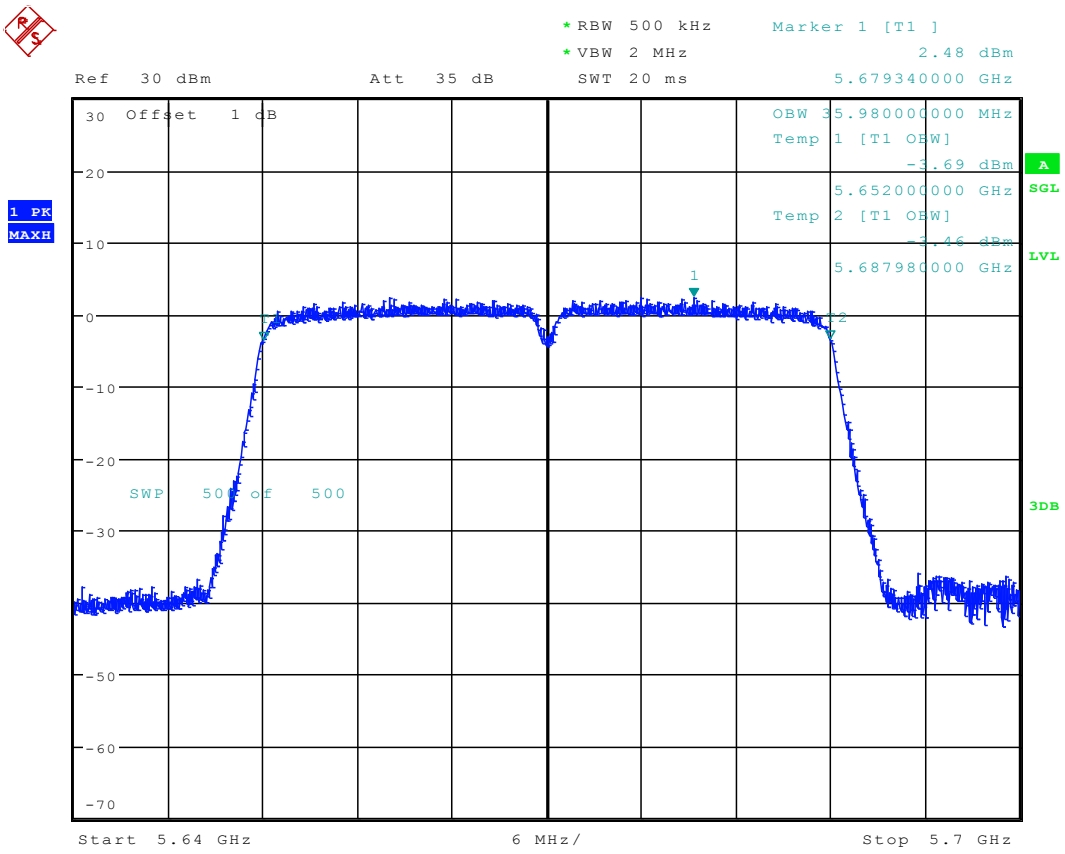
Date: 28.FEB.2018 10:02:39

4.17 11N40_102 ANT 1



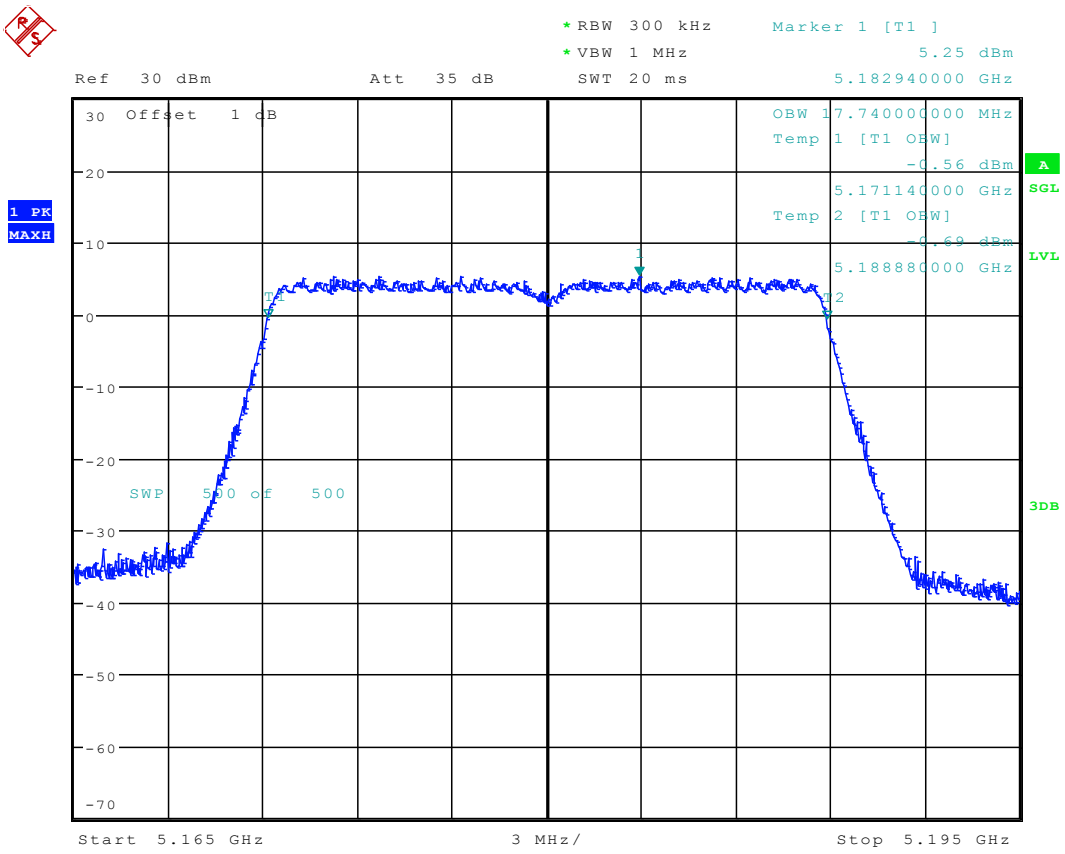
Date: 28.FEB.2018 10:14:53

4.18 11N40_134 ANT 1



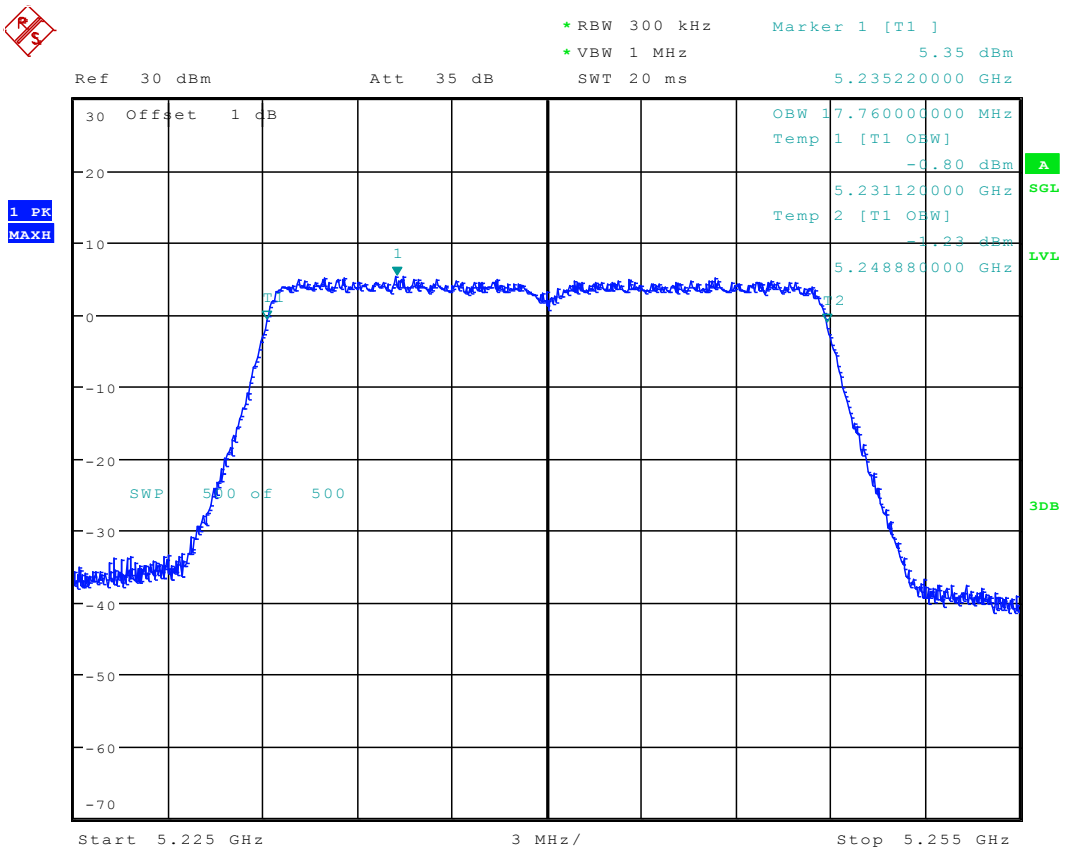
Date: 28.FEB.2018 10:29:23

4.19 11AC20_36 ANT 1



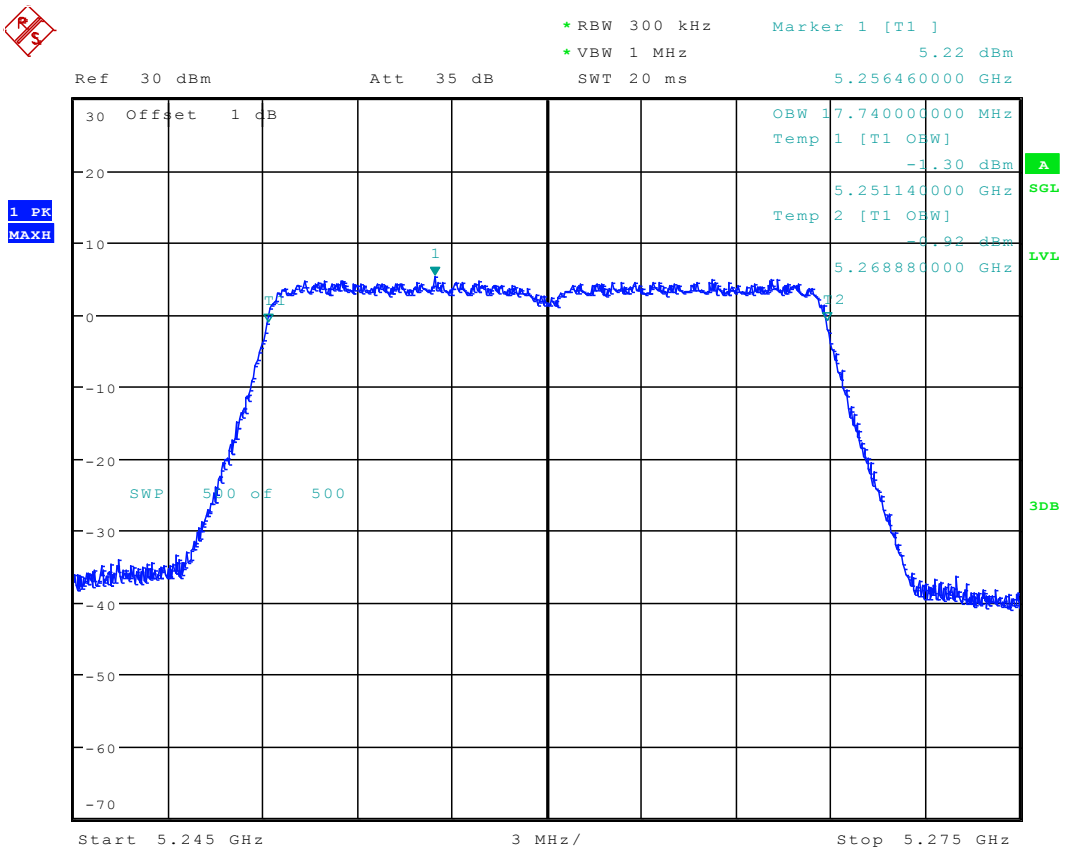
Date: 22.FEB.2018 17:21:17

4.20 11AC20_48 ANT 1



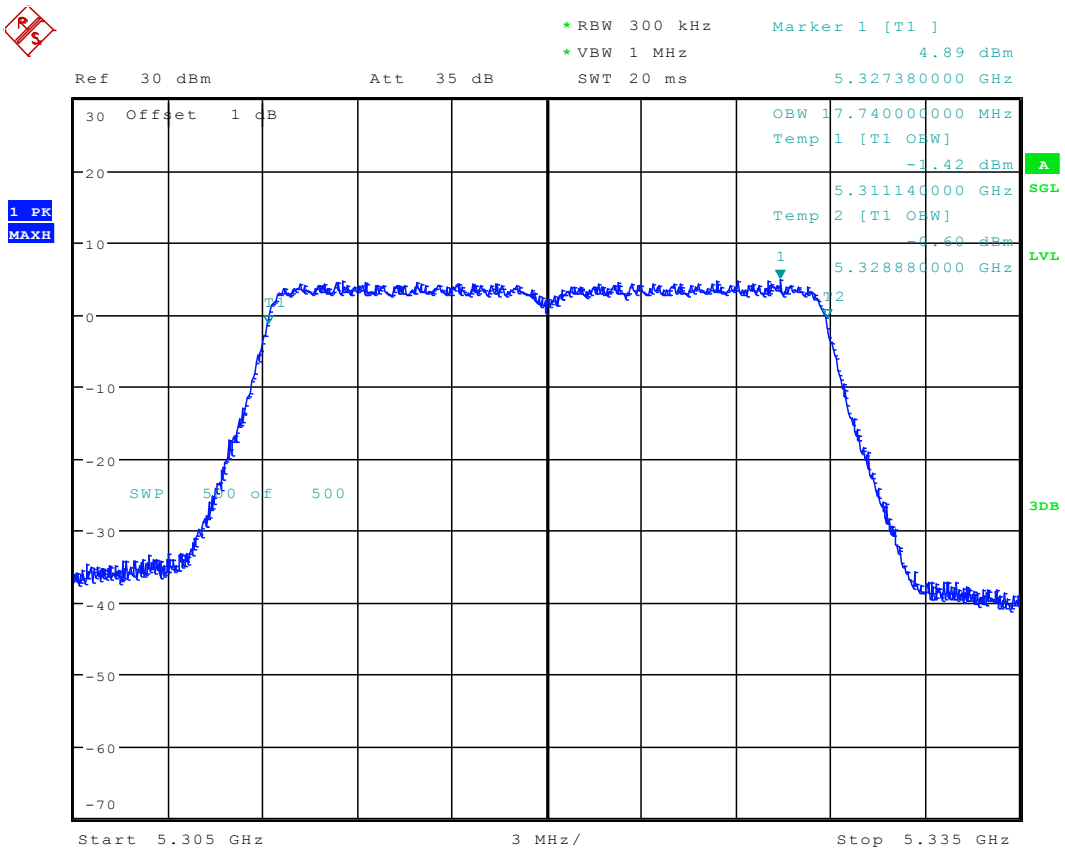
Date: 22.FEB.2018 17:27:48

4.21 11AC20_52 ANT 1



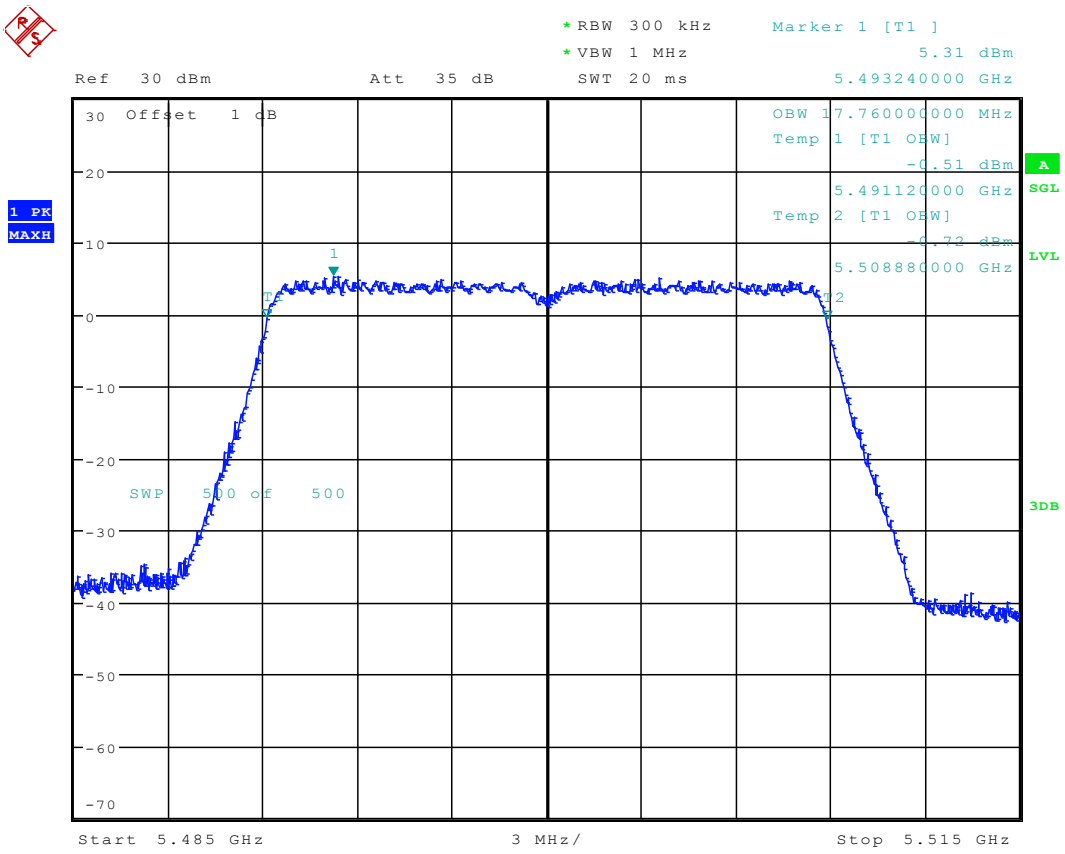
Date: 22.FEB.2018 17:36:44

4.22 11AC20_64 ANT 1

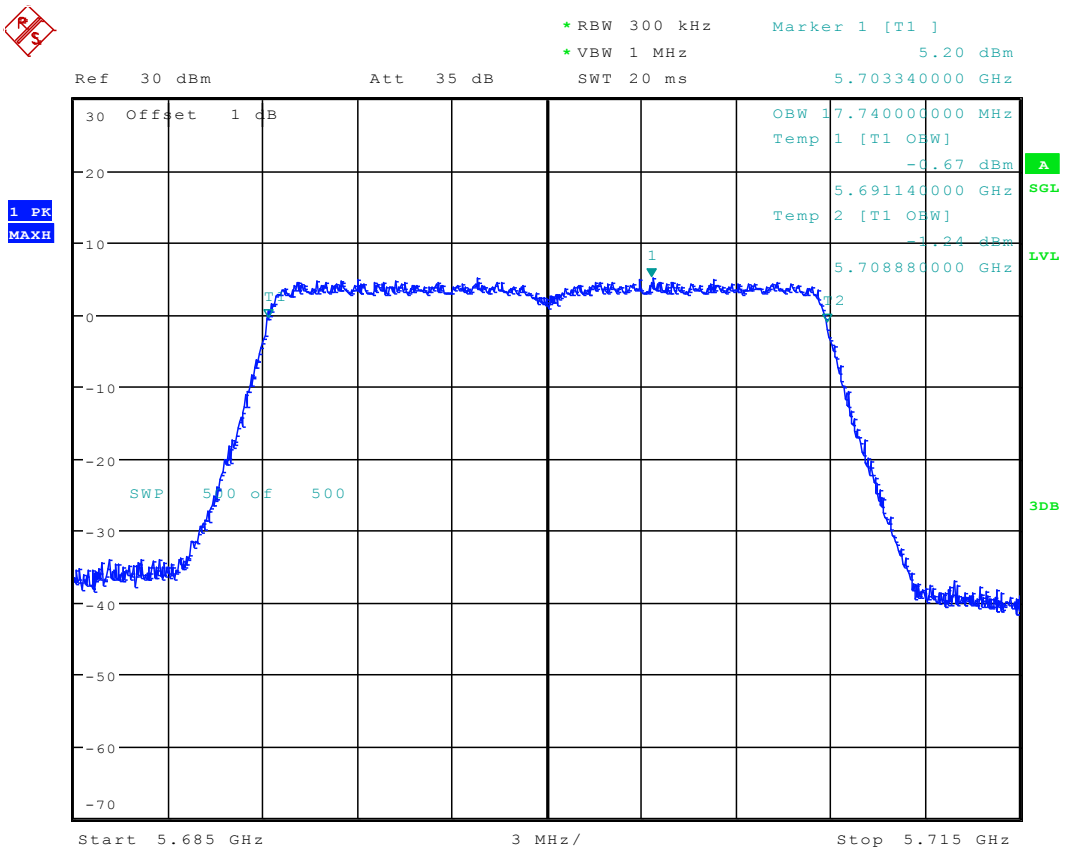


Date: 22.FEB.2018 17:41:10

4.23 11AC20_100 ANT 1

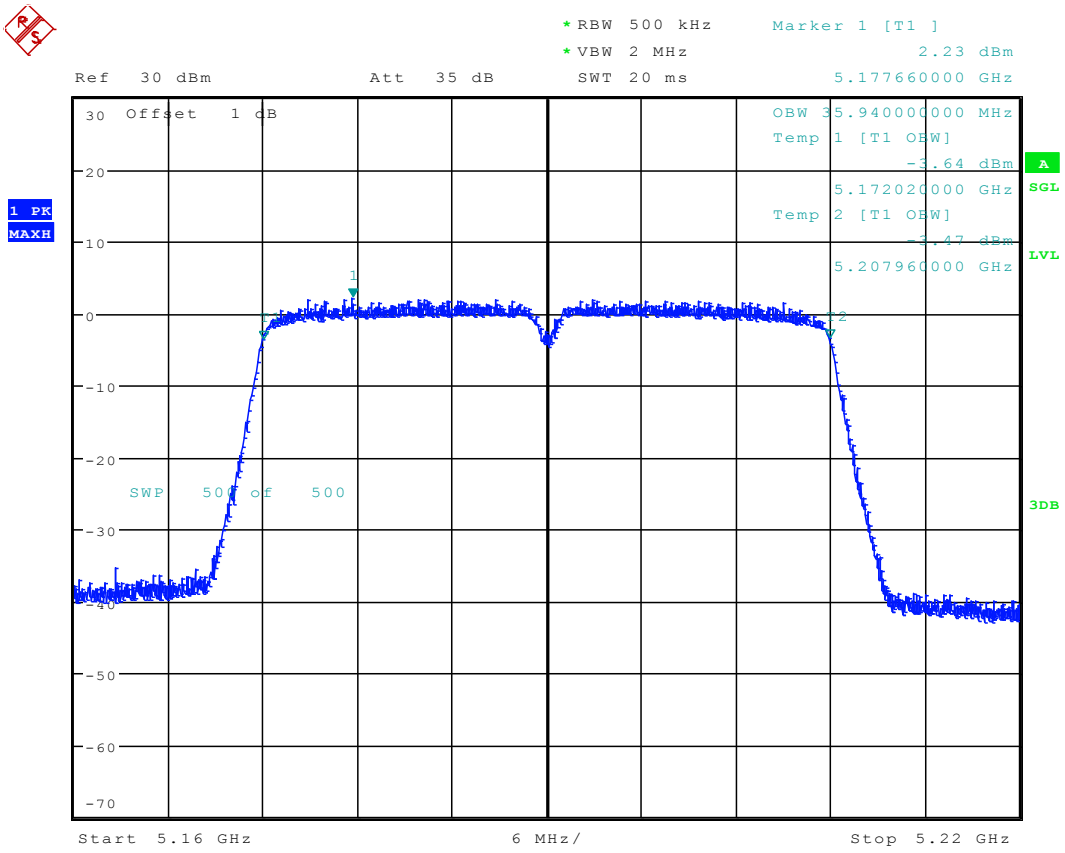


4.24 11AC20_140 ANT 1



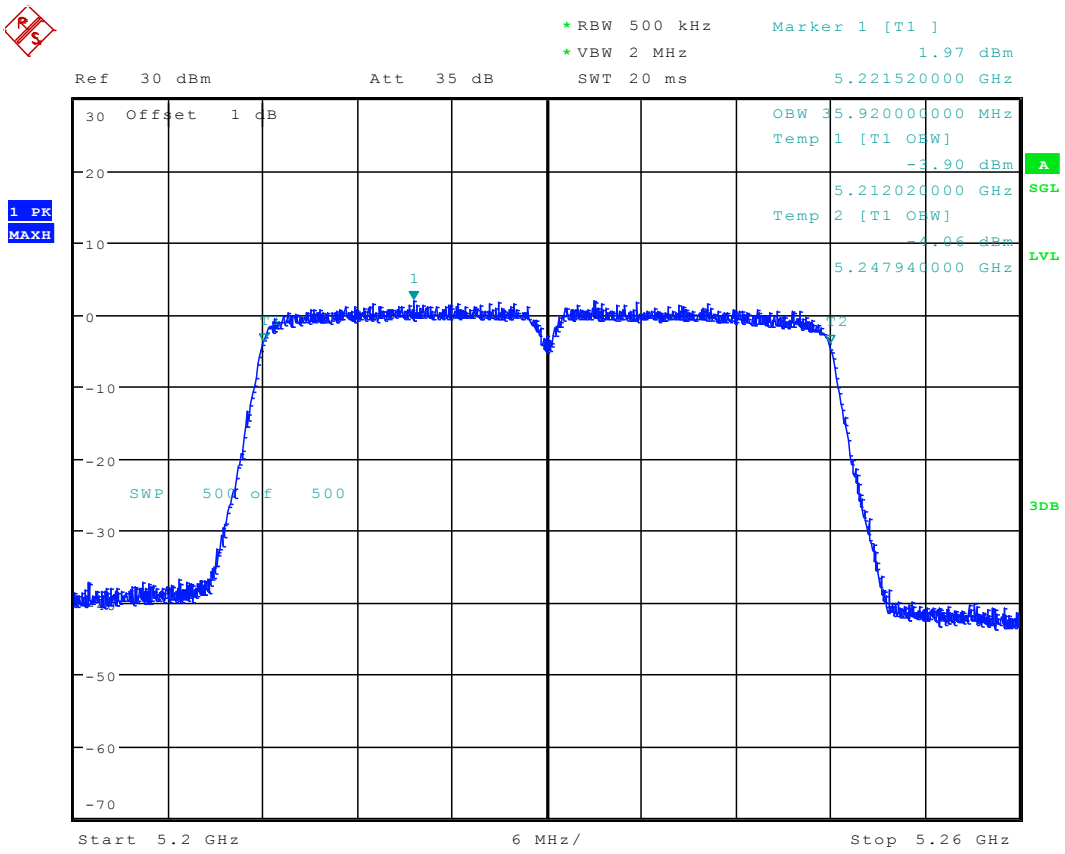
Date: 22.FEB.2018 17:53:14

4.25 11AC40_38 ANT 1



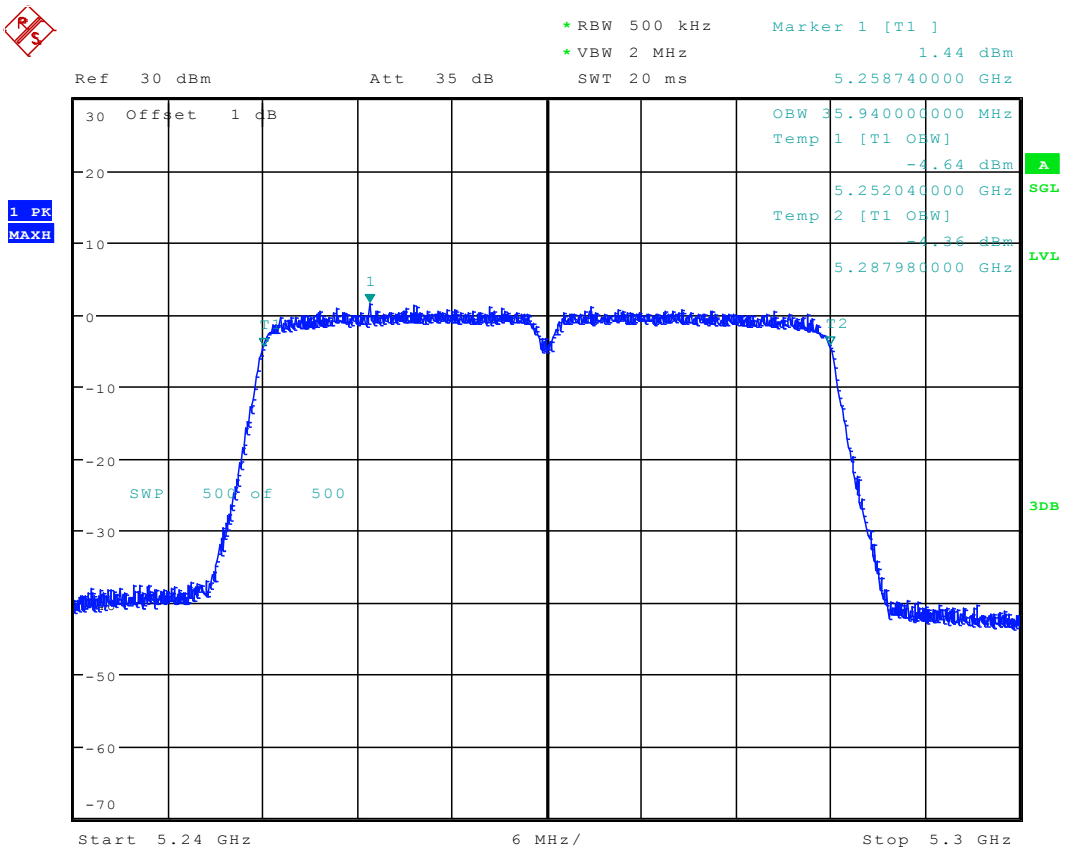
Date: 28.FEB.2018 10:46:10

4.26 11AC40_46 ANT 1

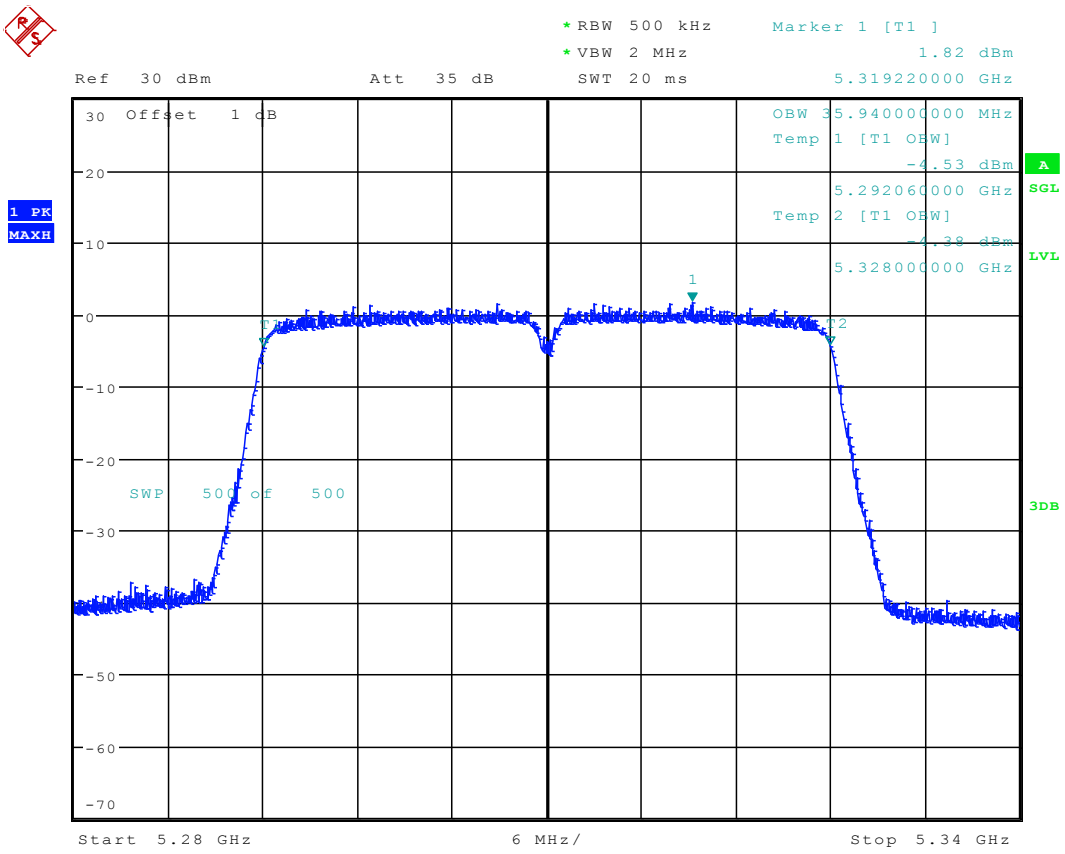


Date: 28.FEB.2018 10:53:15

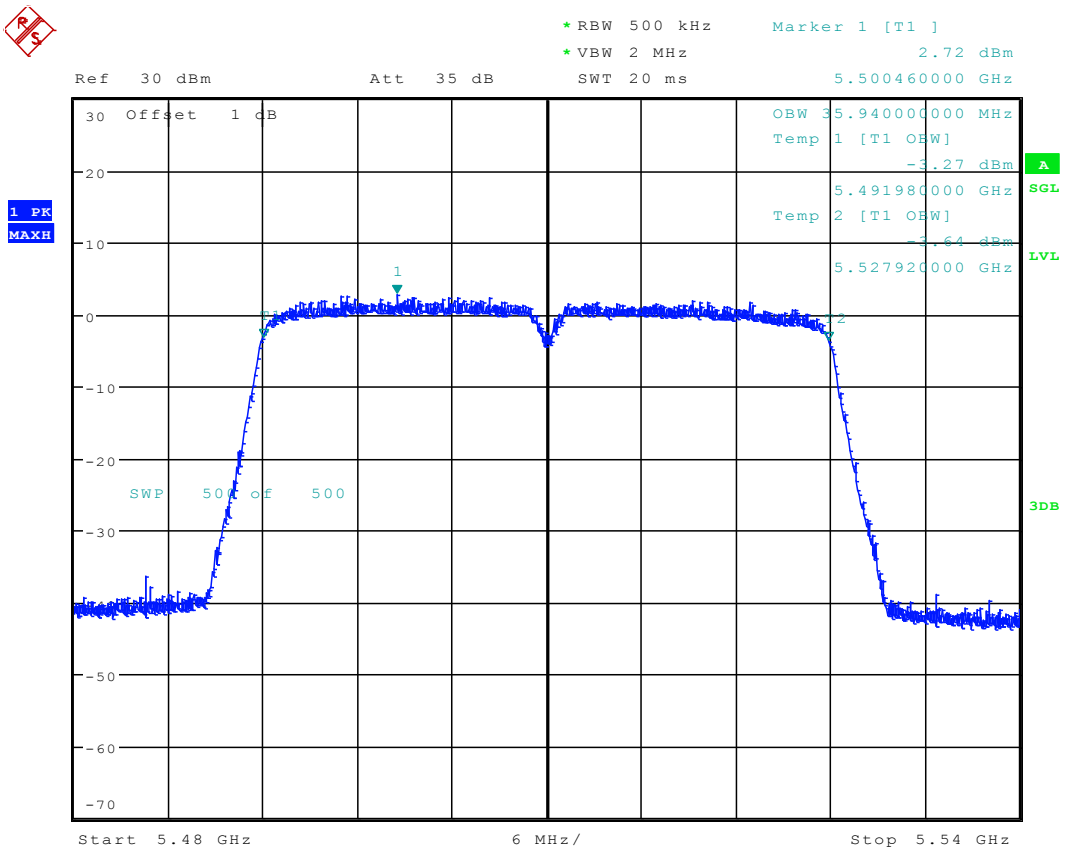
4.27 11AC40_54 ANT 1



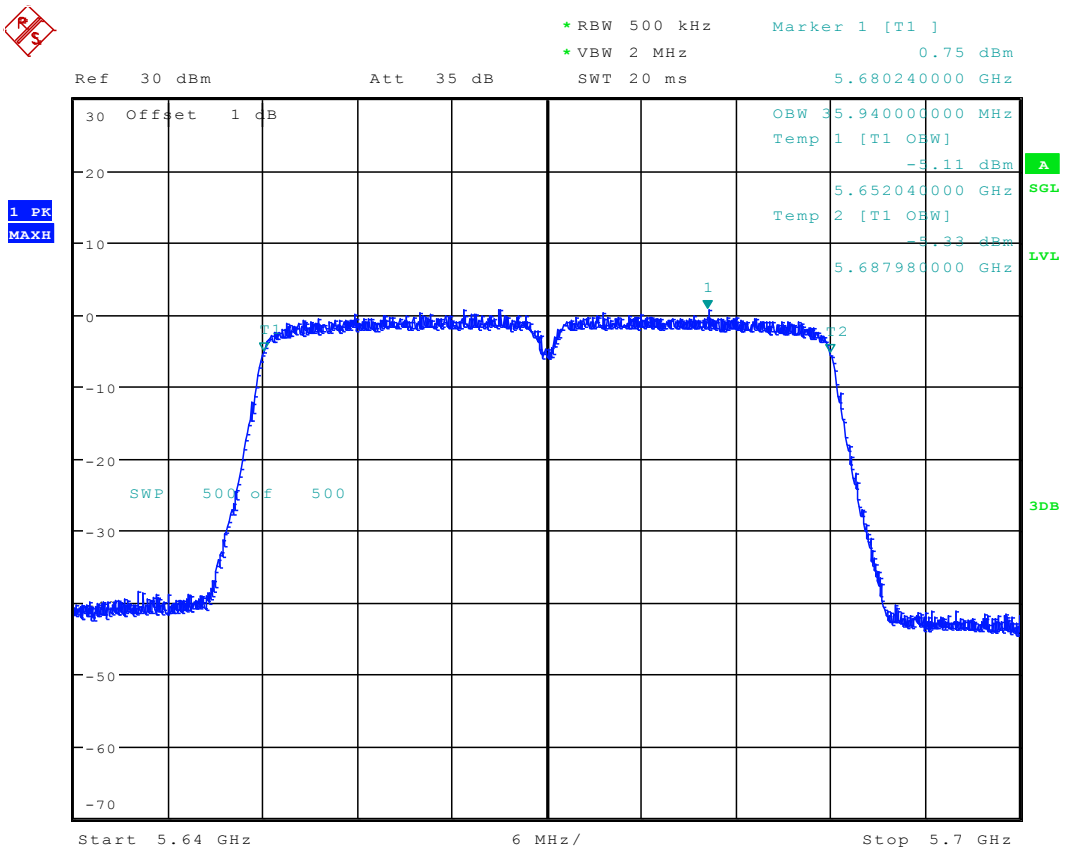
4.28 11AC40_62 ANT 1



4.29 11AC40_102 ANT 1

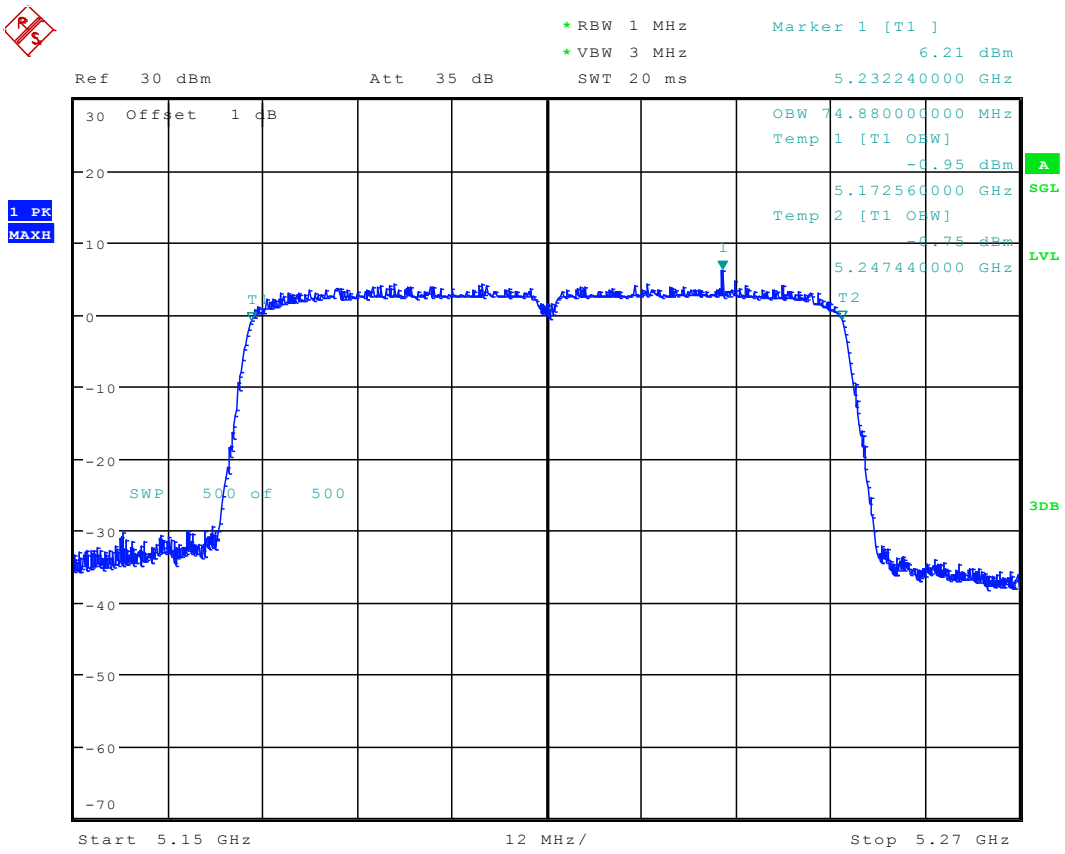


4.30 11AC40_134 ANT 1



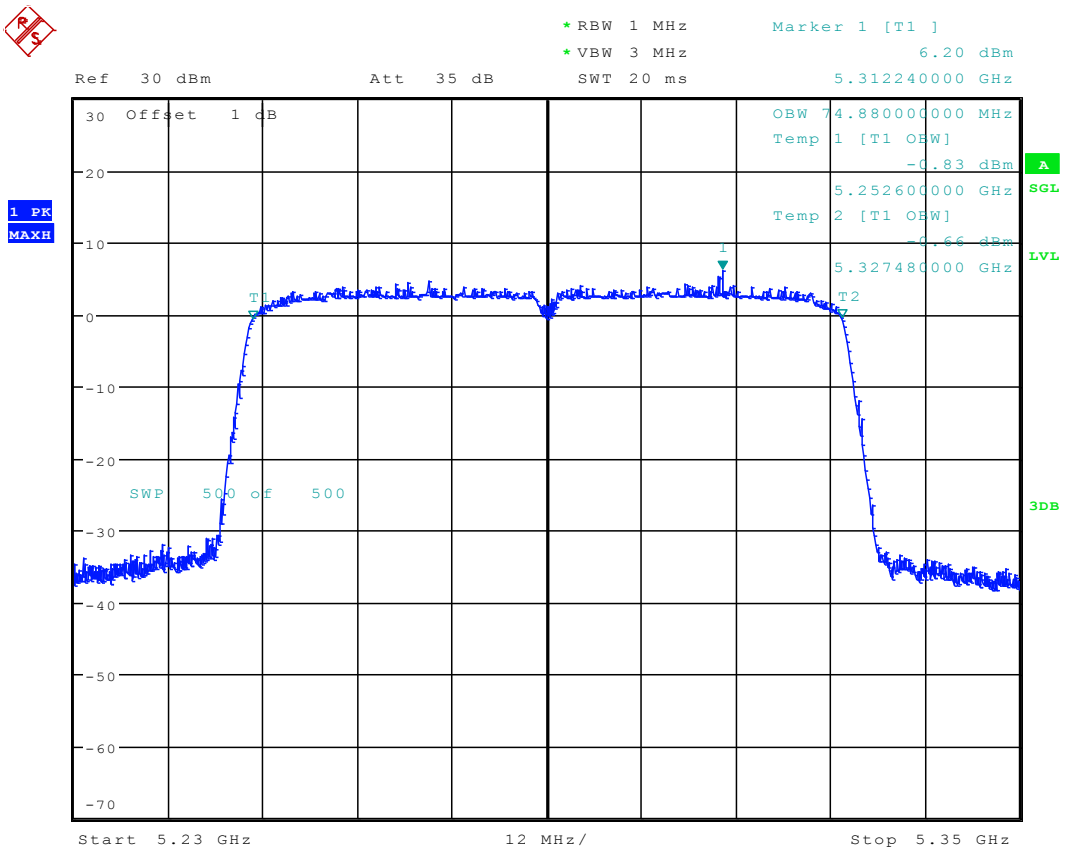
Date: 28.FEB.2018 11:35:23

4.31 11AC80_42 ANT 1



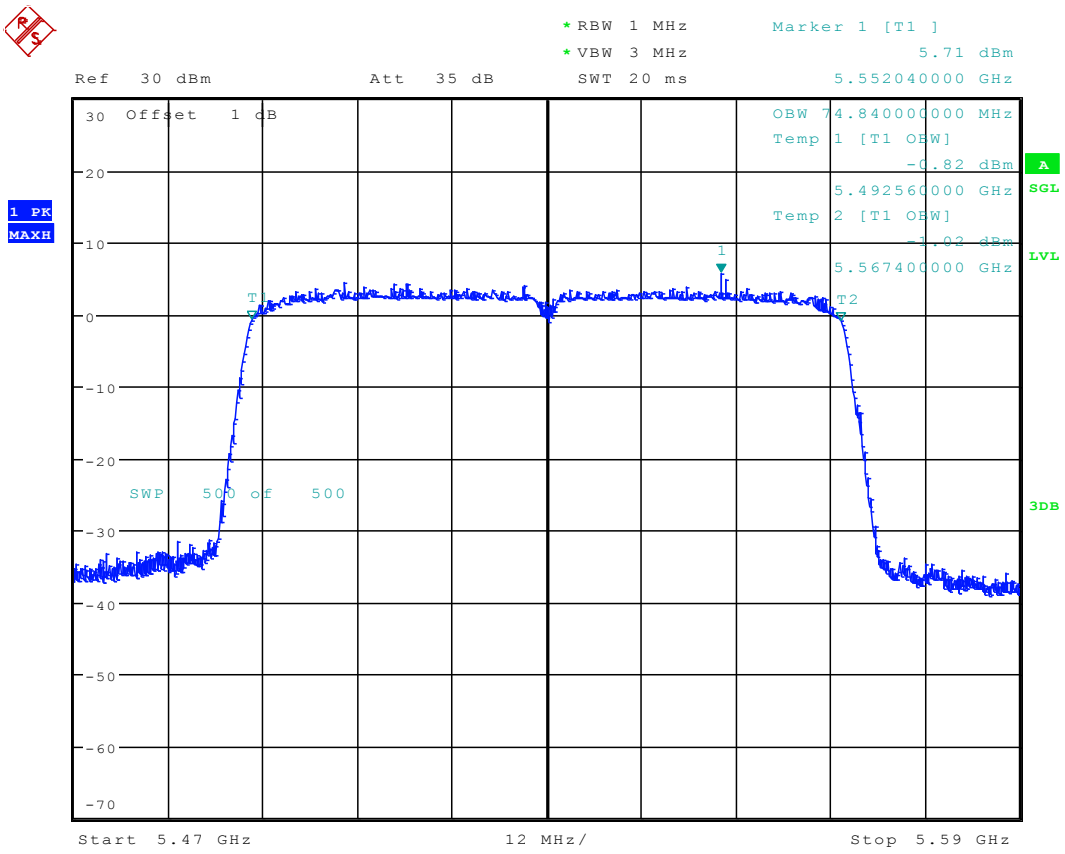
Date: 9.MAR.2018 09:47:53

4.32 11AC80_58 ANT 1



Date: 9.MAR.2018 10:07:08

4.33 11AC80_106 ANT 1



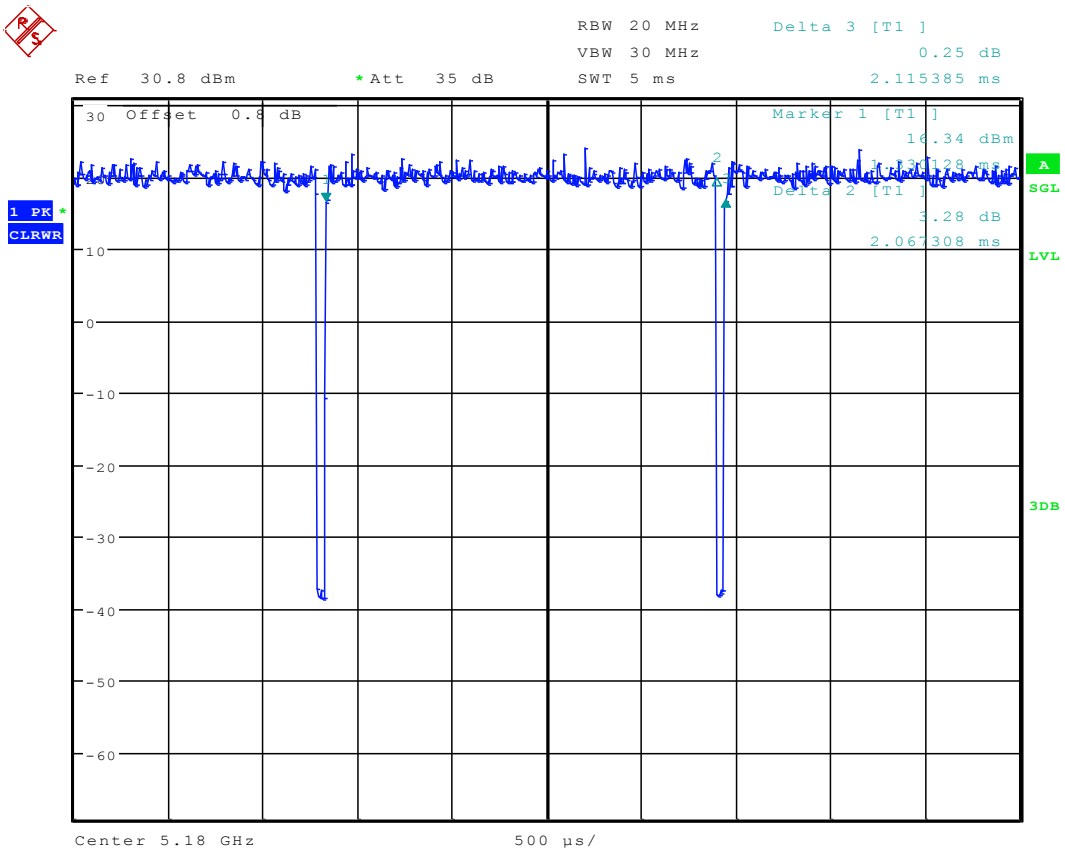
Appendix C: Duty Cycle

5 Part I - Test Results

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Duty cycle [%]
11A20	36,	5180	Ant 1	97.6
	48	5240	Ant 1	97.6
	52	5260	Ant 1	97.6
	64	5320	Ant 1	97.6
	100	5500	Ant 1	97.6
	140	5700	Ant 1	97.6
11N20	36	5180	Ant 1	98
	48	5240	Ant 1	98
	52	5260	Ant 1	98
	64	5320	Ant 1	98
	100	5500	Ant 1	98
	140	5700	Ant 1	98
11N40	38	5190	Ant 1	96
	46	5230	Ant 1	96
	54	5270	Ant 1	96
	62	5310	Ant 1	96
	102	5510	Ant 1	96
	134	5670	Ant 1	96
11AC20	36	5180	Ant 1	99
	48	5240	Ant 1	99
	52	5260	Ant 1	99
	64	5320	Ant 1	99
	100	5500	Ant 1	99
	140	5700	Ant 1	99
11AC40	38	5190	Ant 1	97.6
	46	5230	Ant 1	97.6
	54	5270	Ant 1	97.6
	62	5310	Ant 1	97.6
	102	5510	Ant 1	97.6
	134	5670	Ant 1	97.6
11AC80	42	5210	Ant 1	96.6
	58	5290	Ant 1	96.6
	106	5530	Ant 1	96.6

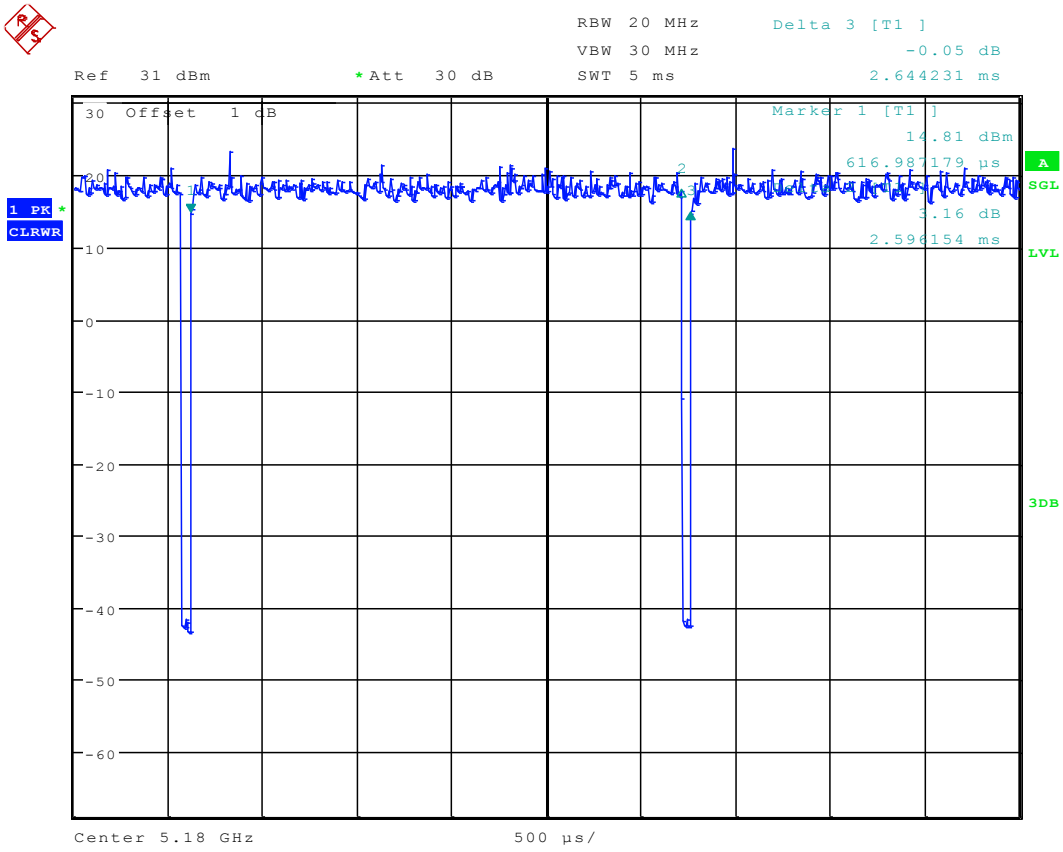
6 Test Plot

6.1 11A20



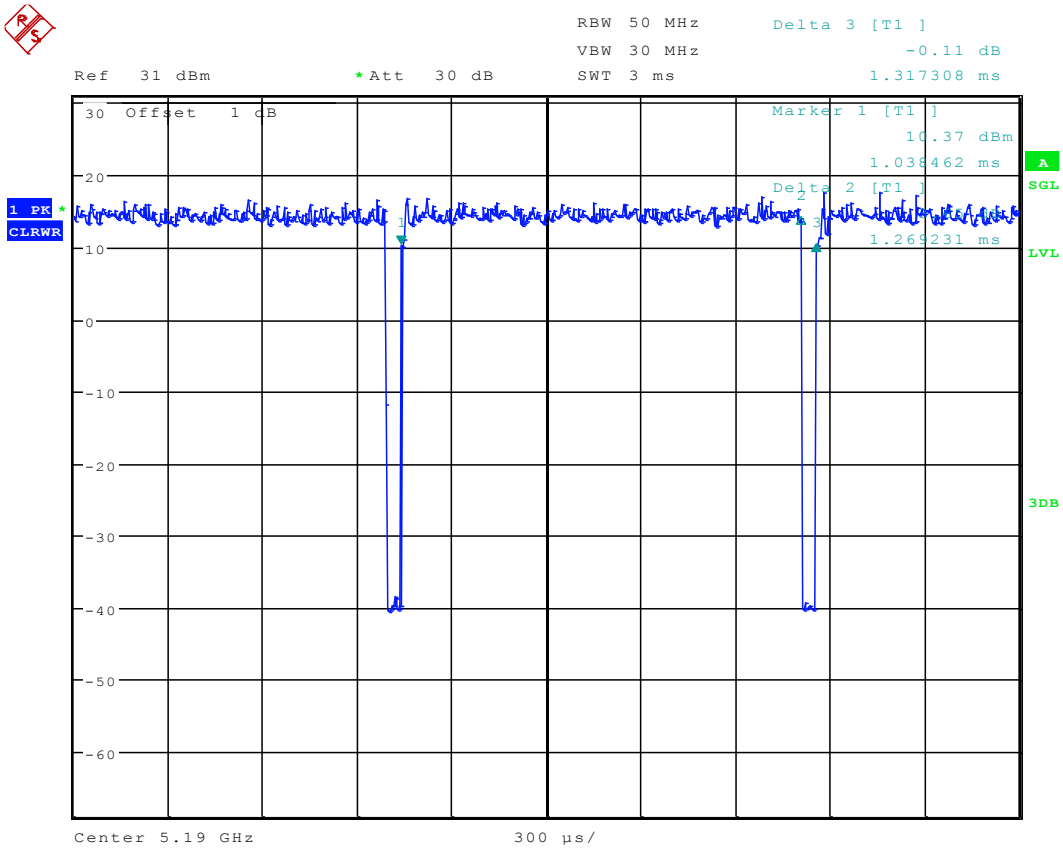
Date: 22.FEB.2018 15:07:19

6.2 11n20



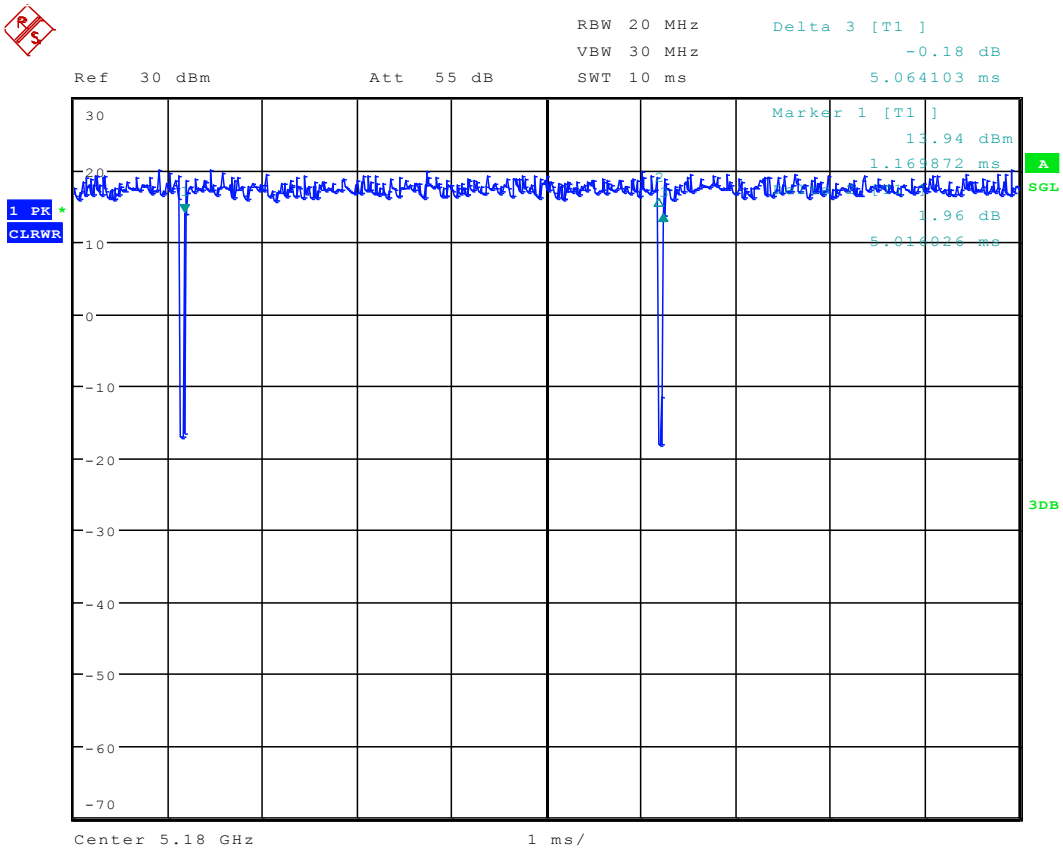
Date: 22.FEB.2018 16:08:41

6.3 11n40



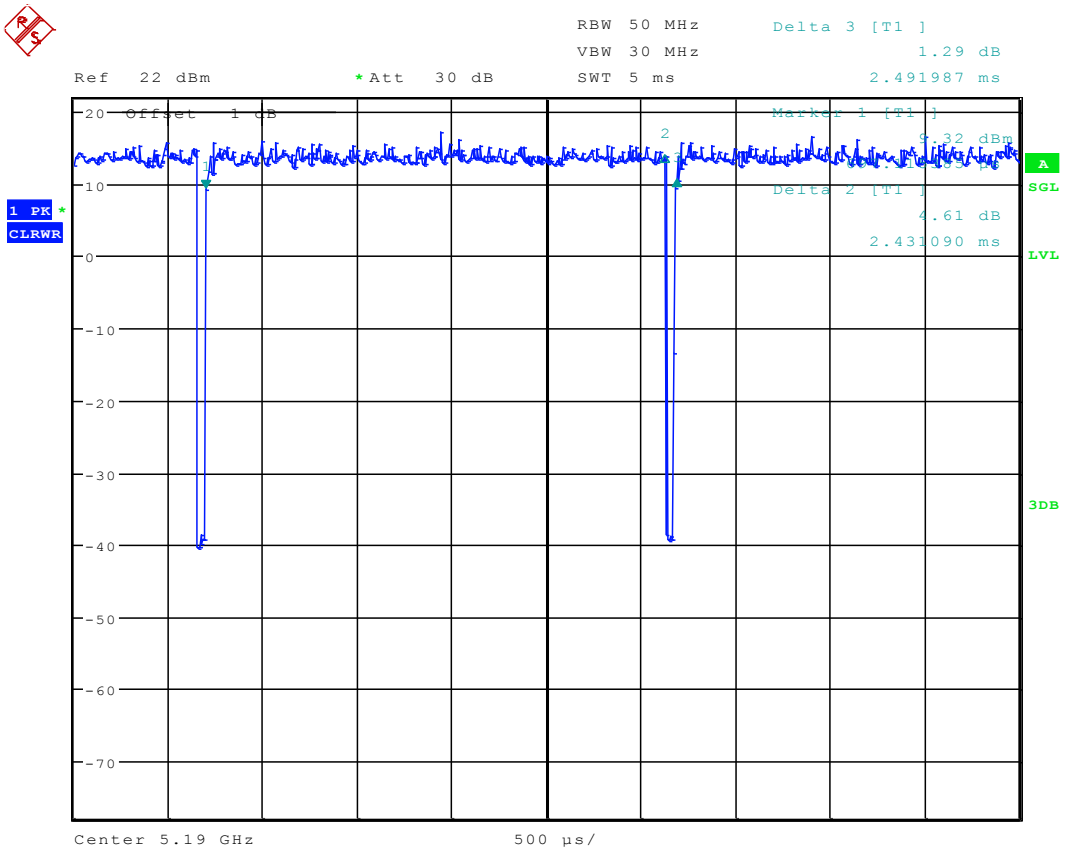
Date: 28.FEB.2018 09:26:29

6.4 11ac20



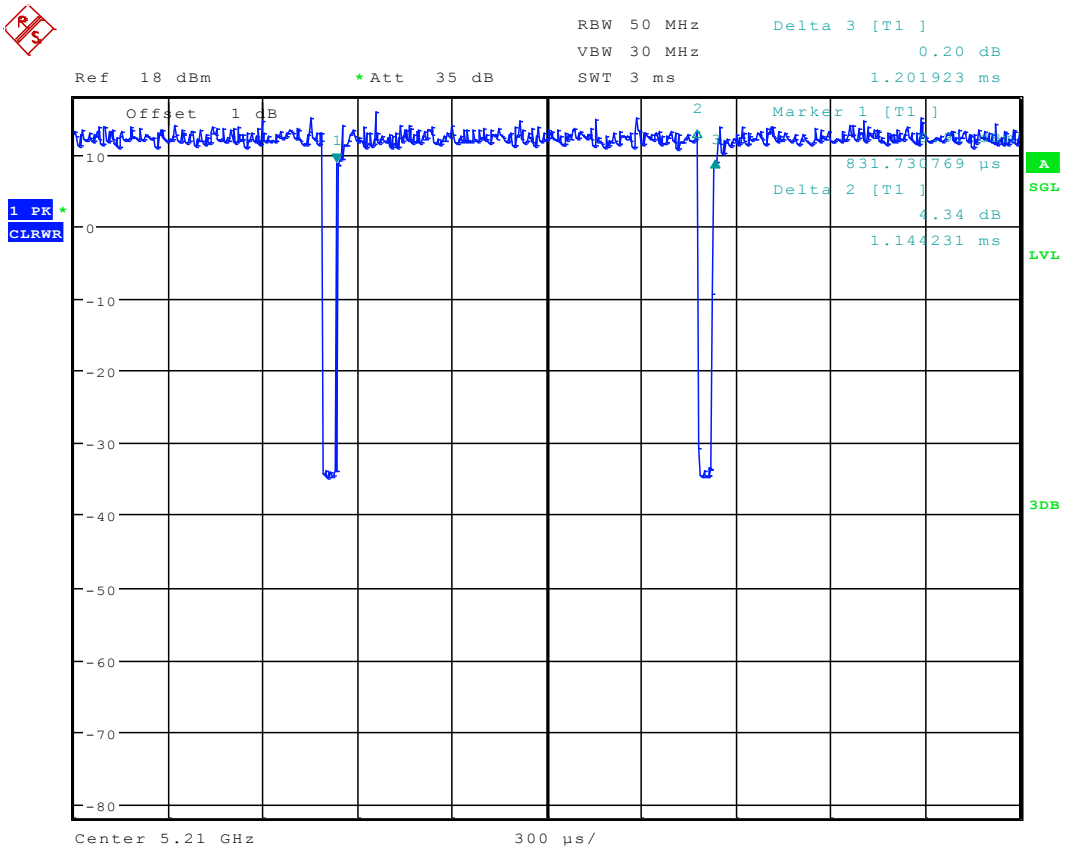
Date: 22.FEB.2018 17:18:35

6.5 11ac40



Date: 28.FEB.2018 10:43:50

6.6 11ac80



Date: 9.MAR.2018 09:42:48

Appendix D: Maximum Conducted Output Power

7 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Meas. Level (Cond.) [dBm]	Verdict
11A20	36	5180	ANT 1	14.81	PASS
	48	5240	ANT 1	14.39	PASS
	52	5260	ANT 1	14.04	PASS
	64	5320	ANT 1	13.86	PASS
	100	5500	ANT 1	14.25	PASS
	140	5700	ANT 1	13.89	PASS
11N20	36	5180	ANT 1	13.13	PASS
	48	5240	ANT 1	12.96	PASS
	52	5260	ANT 1	12.69	PASS
	64	5320	ANT 1	12.52	PASS
	100	5500	ANT 1	12.9	PASS
	140	5700	ANT 1	12.58	PASS
11N40	38	5190	ANT 1	11.88	PASS
	46	5230	ANT 1	11.63	PASS
	54	5270	ANT 1	10.98	PASS
	62	5310	ANT 1	11.06	PASS
	102	5510	ANT 1	11.63	PASS
	134	5670	ANT 1	10.53	PASS
11AC20	36	5180	ANT 1	13.01	PASS
	48	5240	ANT 1	12.93	PASS
	52	5260	ANT 1	12.58	PASS
	64	5320	ANT 1	12.41	PASS
	100	5500	ANT 1	12.82	PASS
	140	5700	ANT 1	12.47	PASS
11AC40	38	5190	ANT 1	10.88	PASS
	46	5230	ANT 1	10.58	PASS
	54	5270	ANT 1	10.31	PASS
	62	5310	ANT 1	10.66	PASS
	102	5510	ANT 1	10.66	PASS
	134	5670	ANT 1	11.16	PASS
11AC80	42	5210	ANT 1	12.01	PASS
	58	5290	ANT 1	12	PASS
	106	5530	ANT 1	11.76	PASS

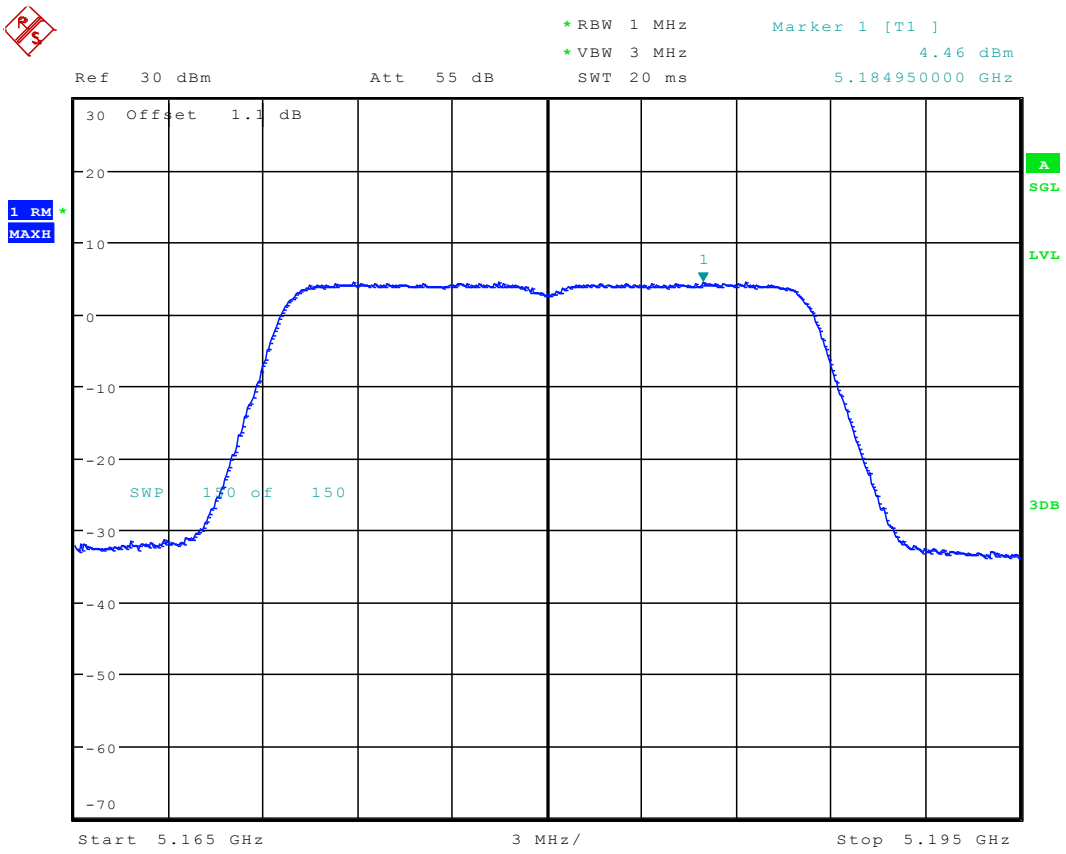
Appendix E: Peak Power Spectral Density Level

8 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Meas. Level (Cond.) [dBm]	Verdict
11A20	36	5180	ANT 1	4.46	PASS
	48	5240	ANT 1	3.94	PASS
	52	5260	ANT 1	3.47	PASS
	64	5320	ANT 1	3.5	PASS
	100	5500	ANT 1	3.69	PASS
	140	5700	ANT 1	3.89	PASS
11N20	36	5180	ANT 1	2.44	PASS
	48	5240	ANT 1	2.05	PASS
	52	5260	ANT 1	1.85	PASS
	64	5320	ANT 1	2.05	PASS
	100	5500	ANT 1	2.2	PASS
	140	5700	ANT 1	2.25	PASS
11N40	38	5190	ANT 1	-1.75	PASS
	46	5230	ANT 1	-1.83	PASS
	54	5270	ANT 1	-2.24	PASS
	62	5310	ANT 1	-2.11	PASS
	102	5510	ANT 1	-1.88	PASS
	134	5670	ANT 1	-2.71	PASS
11AC20	36	5180	ANT 1	2.46	PASS
	48	5240	ANT 1	1.98	PASS
	52	5260	ANT 1	1.64	PASS
	64	5320	ANT 1	1.68	PASS
	100	5500	ANT 1	2.03	PASS
	140	5700	ANT 1	2.14	PASS
11AC40	38	5190	ANT 1	-3.3	PASS
	46	5230	ANT 1	-3.46	PASS
	54	5270	ANT 1	-3.72	PASS
	62	5310	ANT 1	-3.07	PASS
	102	5510	ANT 1	-2.92	PASS
	134	5670	ANT 1	-4.61	PASS
11AC80	42	5210	ANT 1	-4.26	PASS
	58	5290	ANT 1	-4.34	PASS
	106	5530	ANT 1	-4.5	PASS

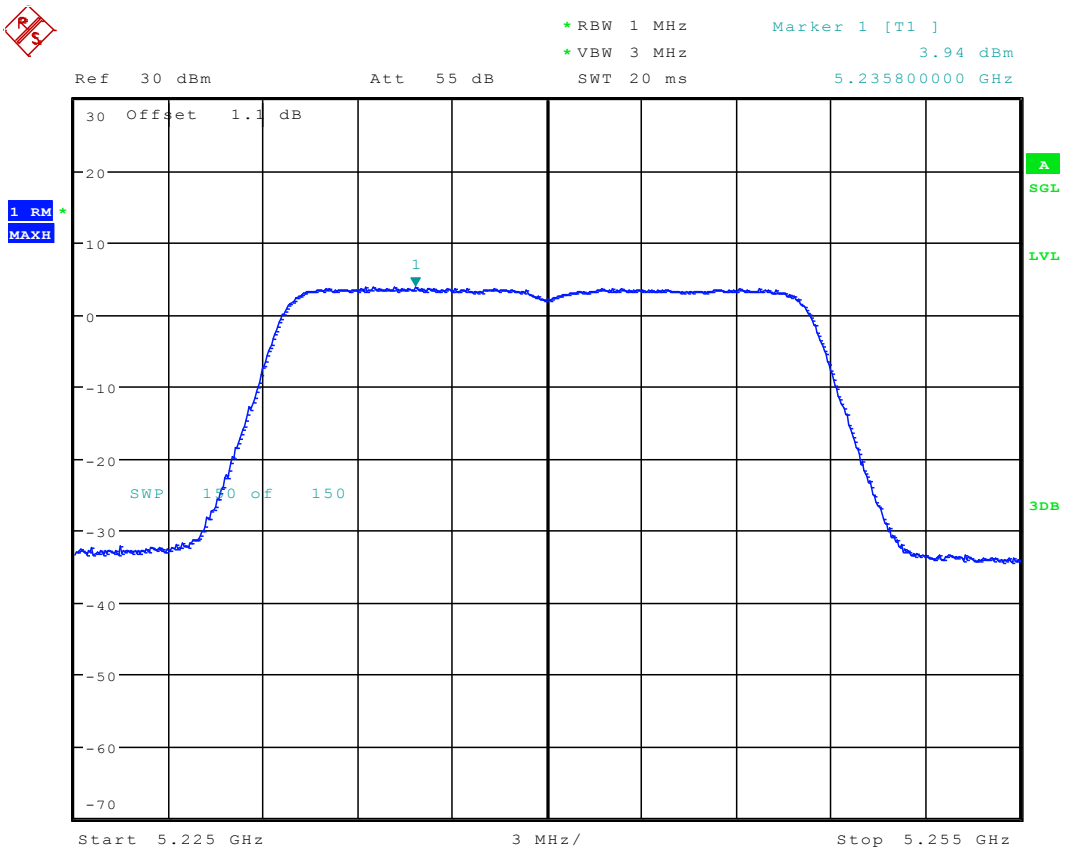
9 Test Plot

9.1 11A20_36 ANT 1



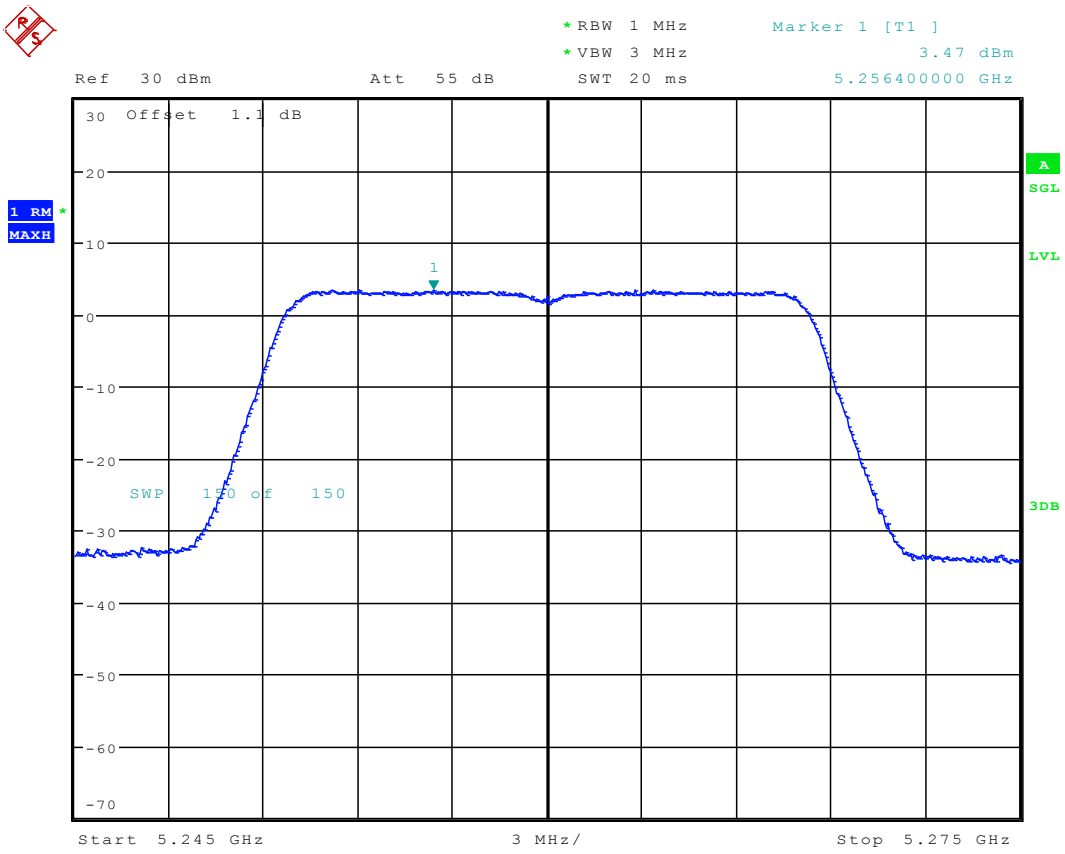
Date: 22.FEB.2018 15:10:30

9.2 11A20_48 ANT 1



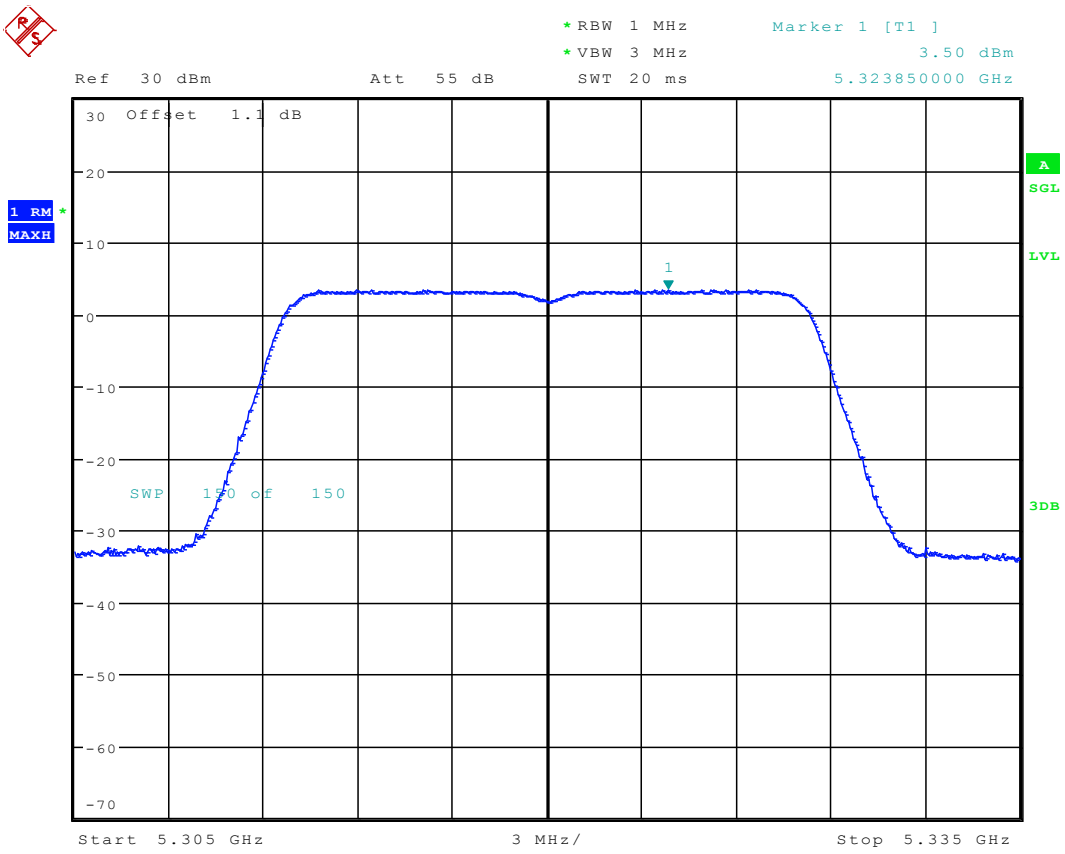
Date: 22.FEB.2018 15:19:11

9.3 11A20_52 ANT 1

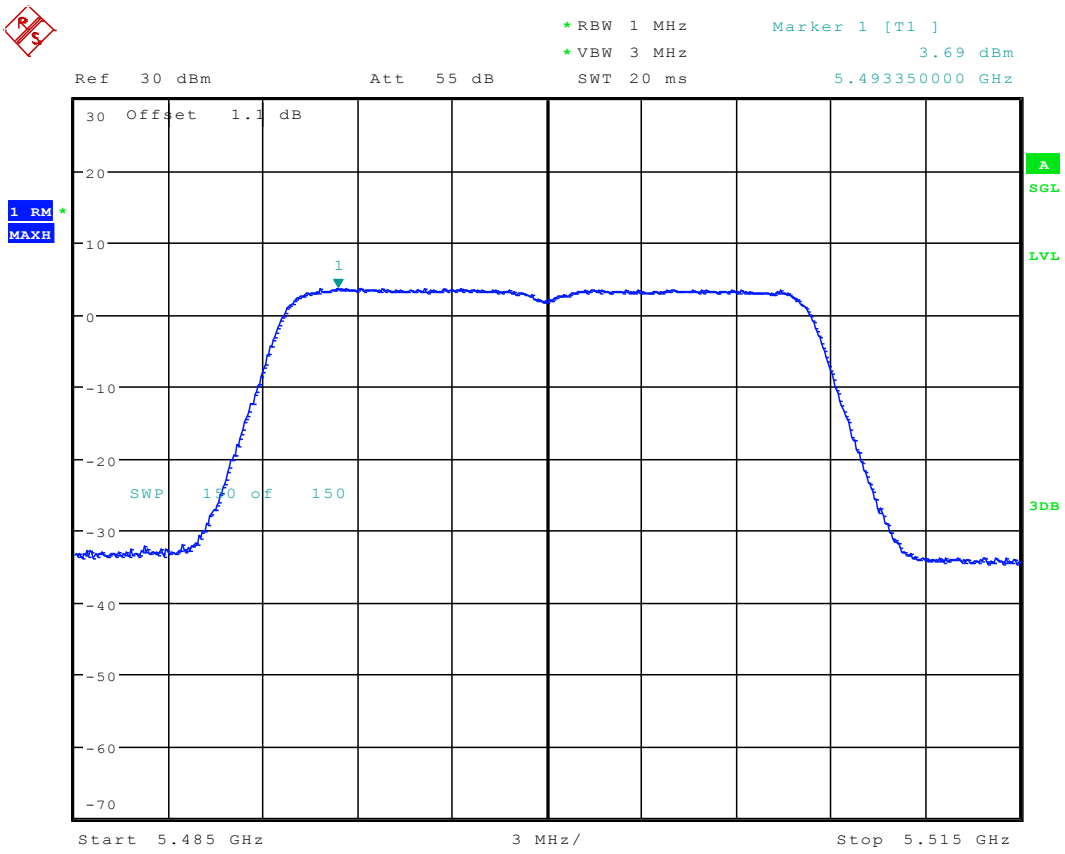


Date: 22.FEB.2018 15:25:42

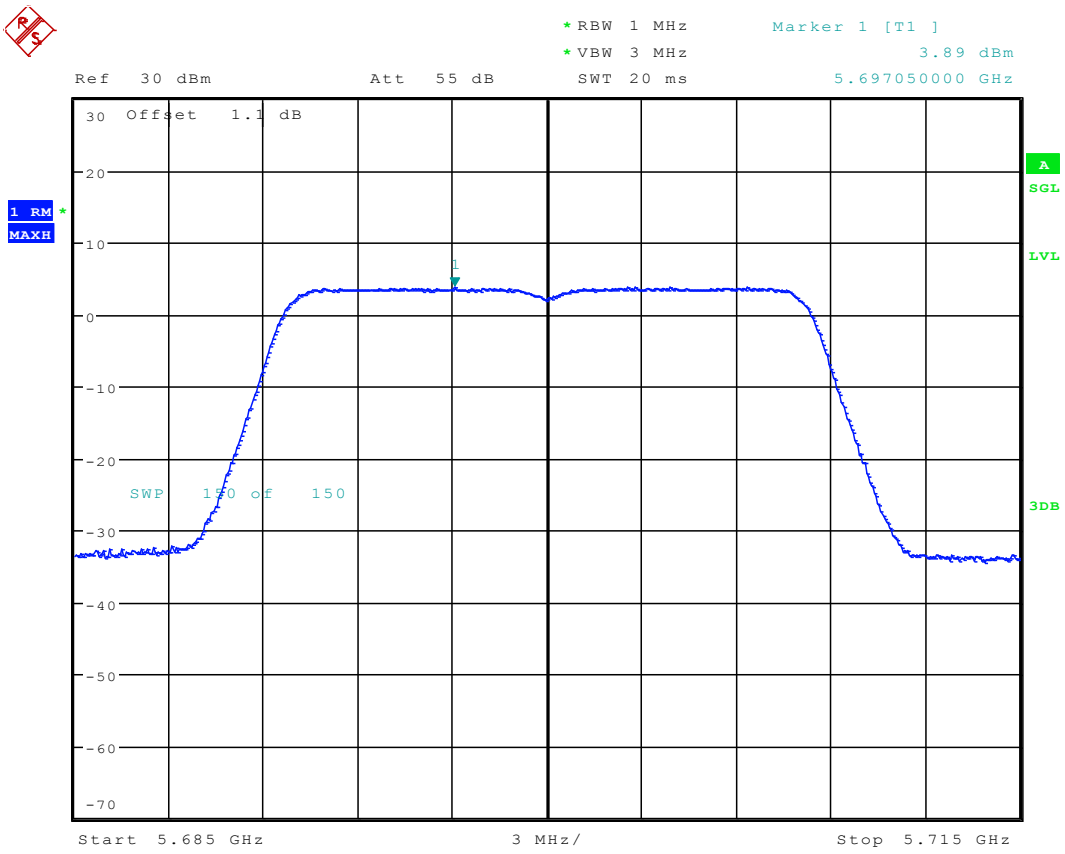
9.4 11A20_64 ANT 1



9.5 11A20_100 ANT 1

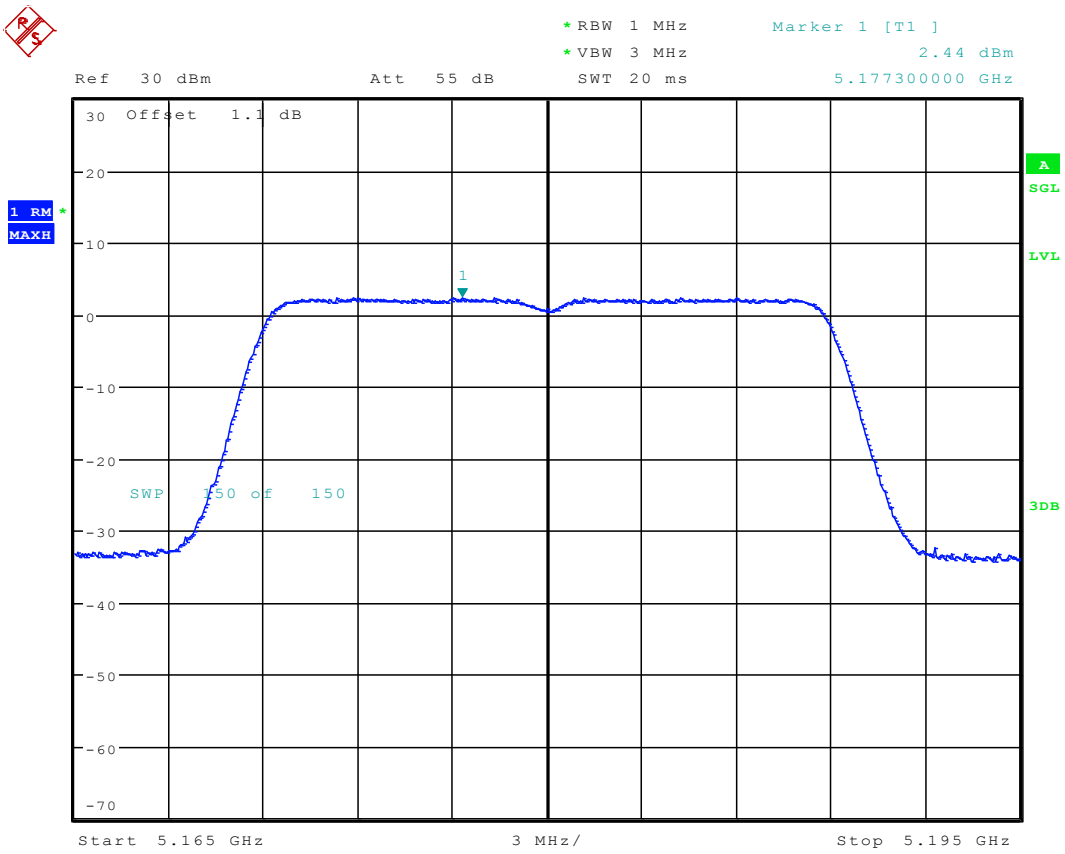


9.6 11A20_140 ANT 1

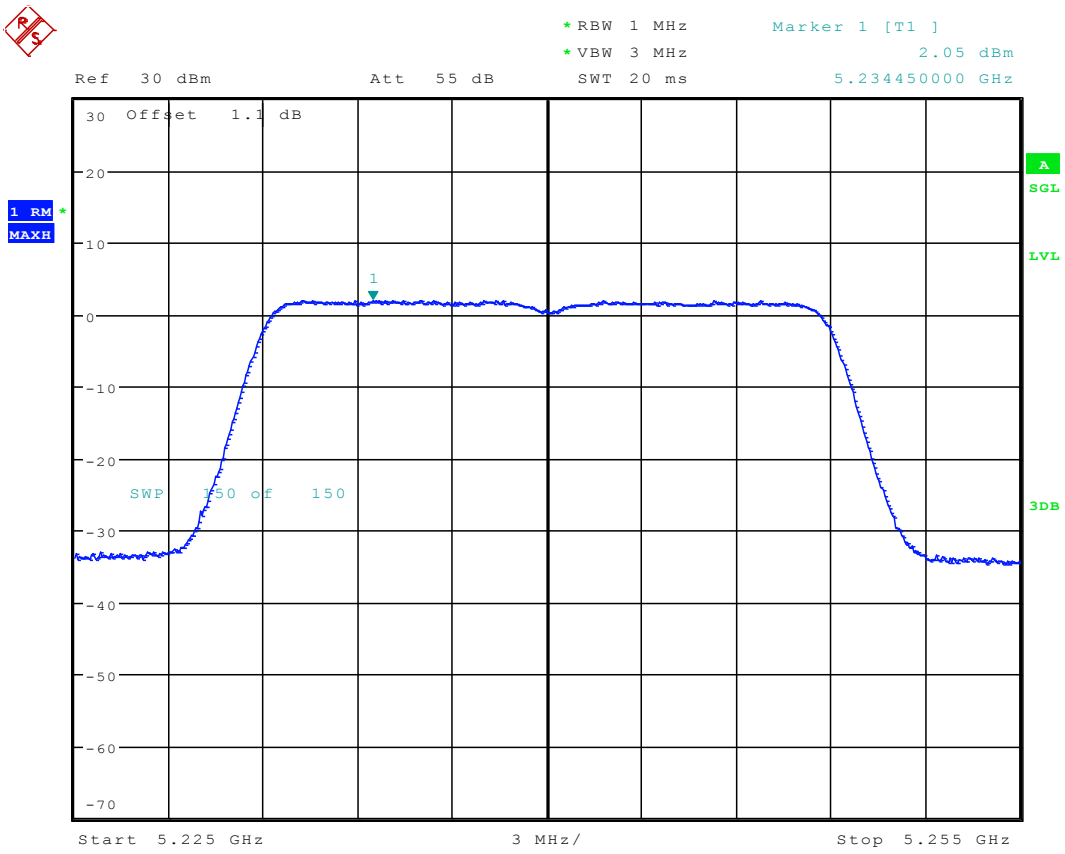


Date: 22.FEB.2018 15:54:02

9.7 11N20_36 ANT 1

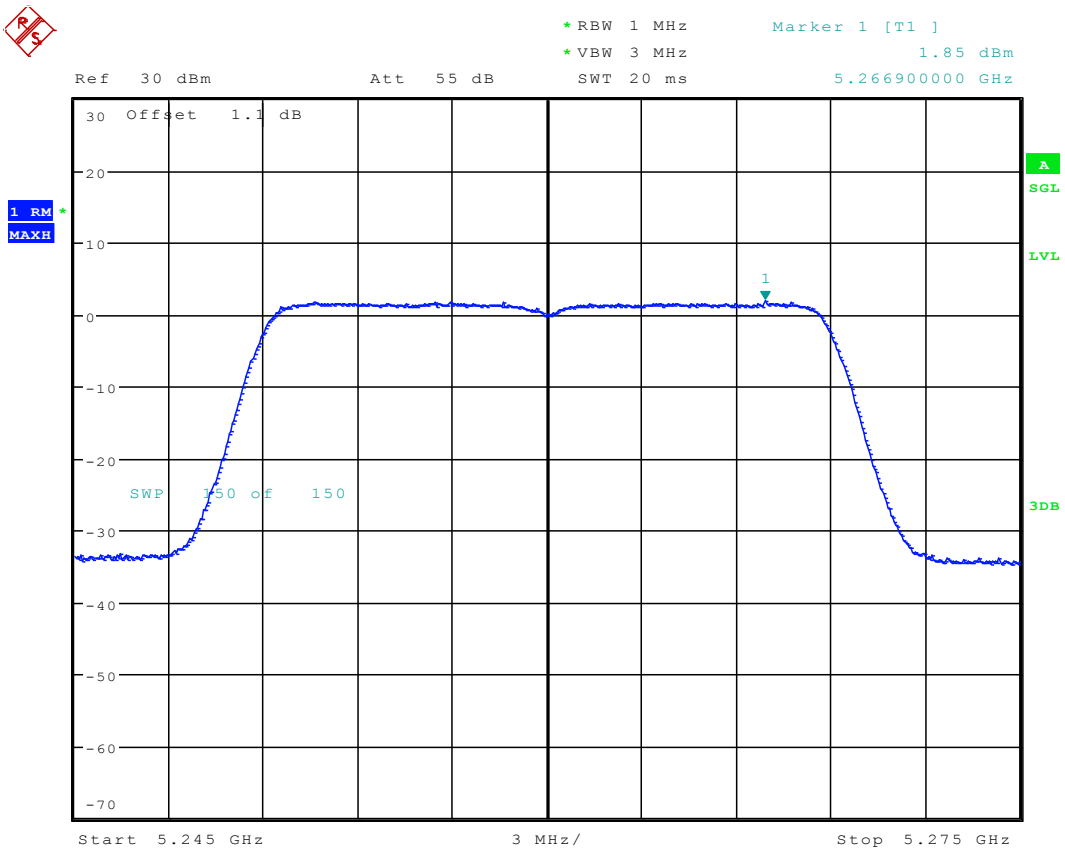


9.8 11N20_48 ANT 1



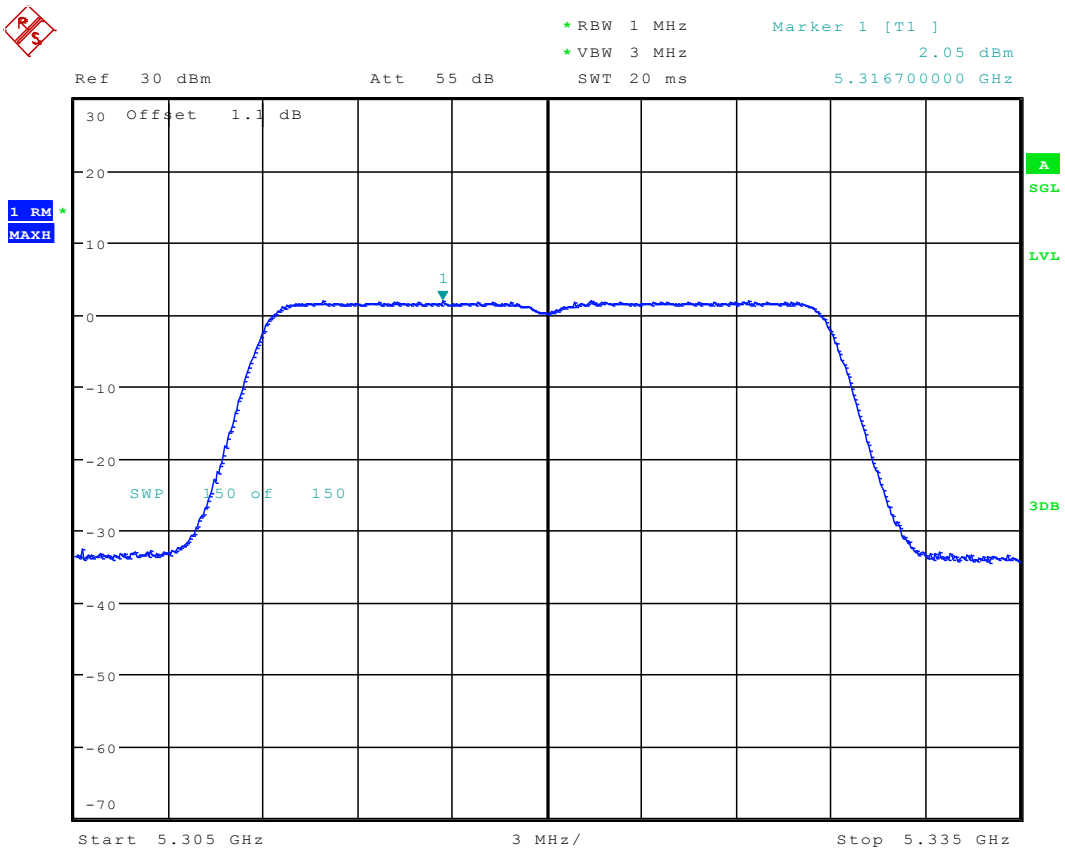
Date: 22.FEB.2018 16:21:48

9.9 11N20_52 ANT 1

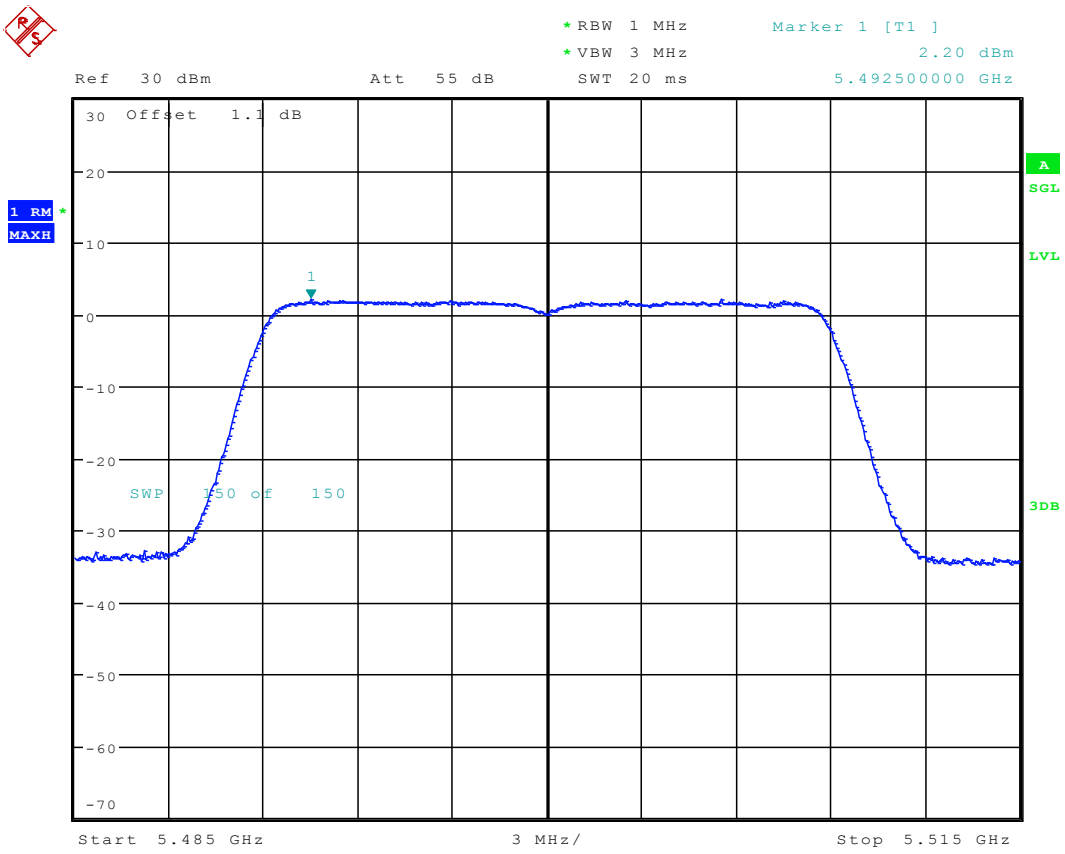


Date: 22.FEB.2018 16:32:05

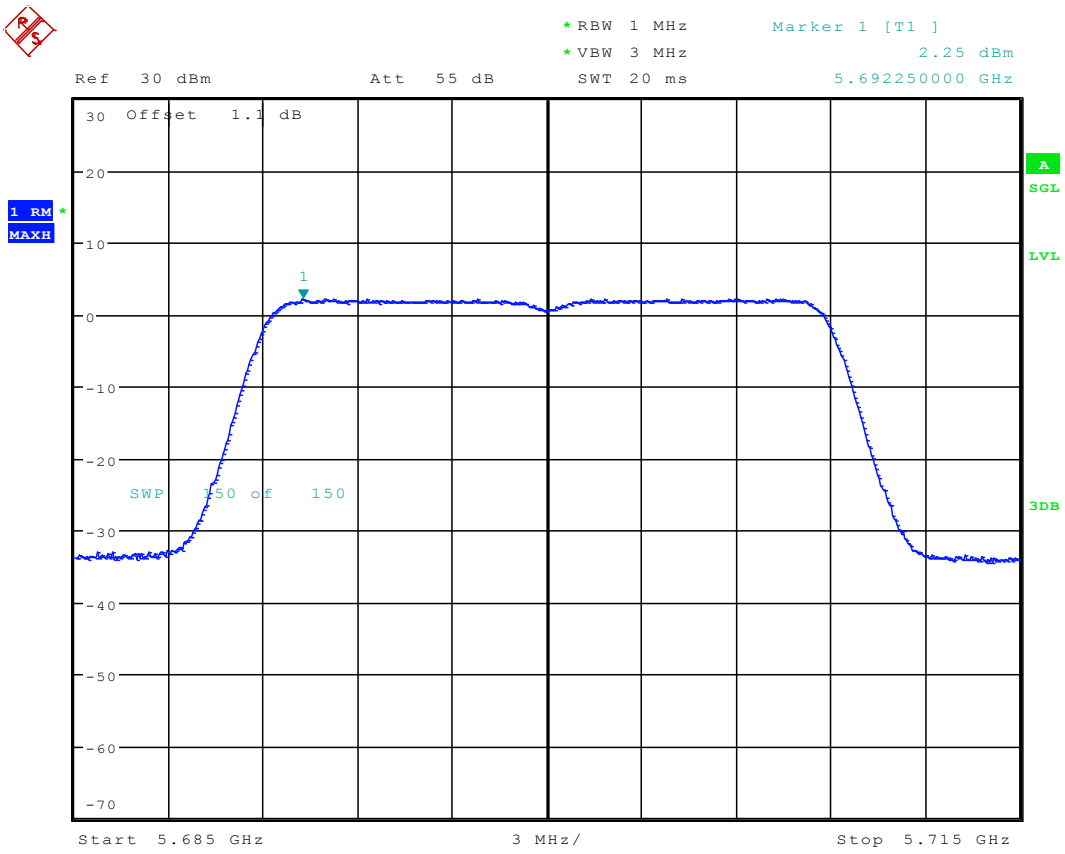
9.10 11N20_64 ANT 1



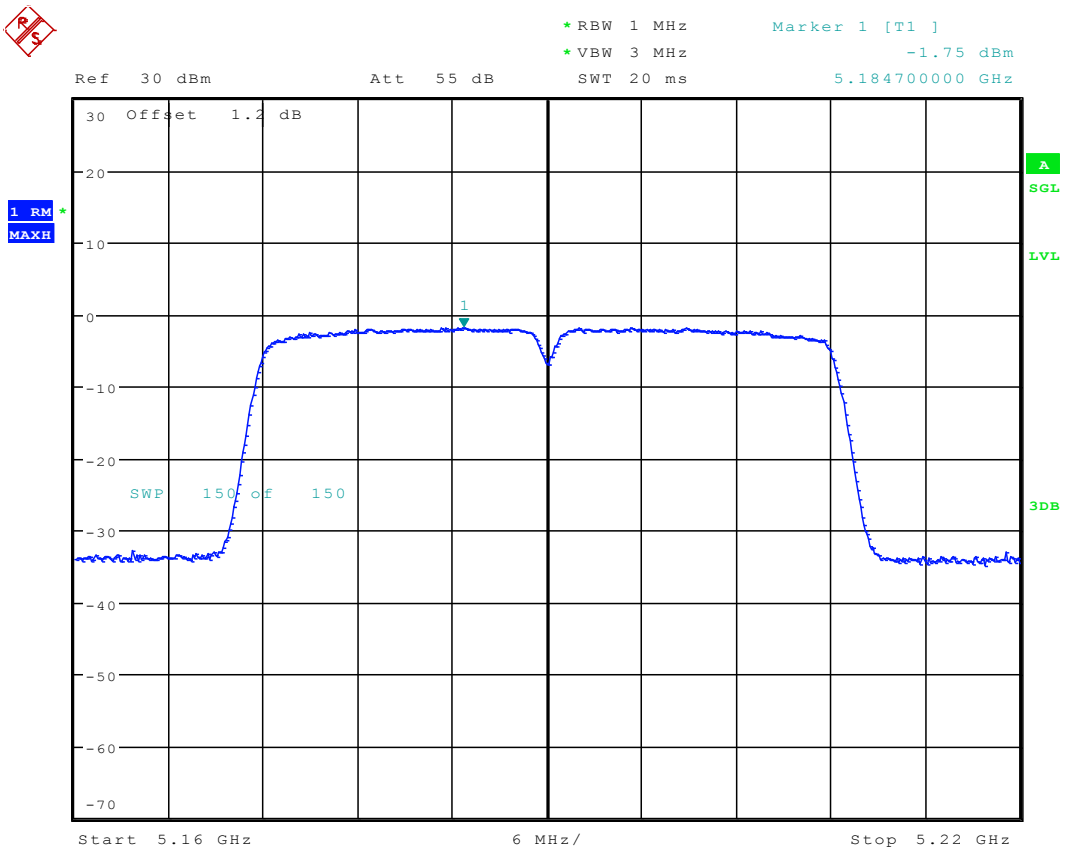
9.11 11N20_100 ANT 1



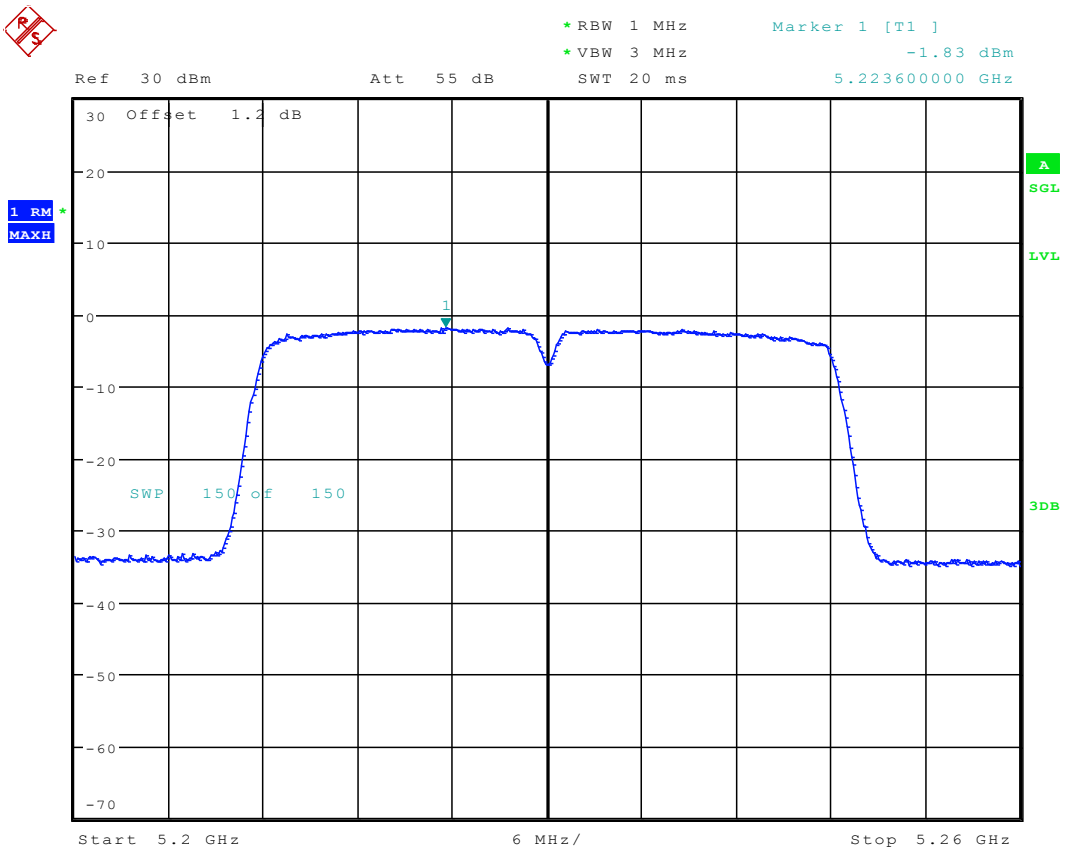
9.12 11N20_140 ANT 1



9.13 11N40_38 ANT 1

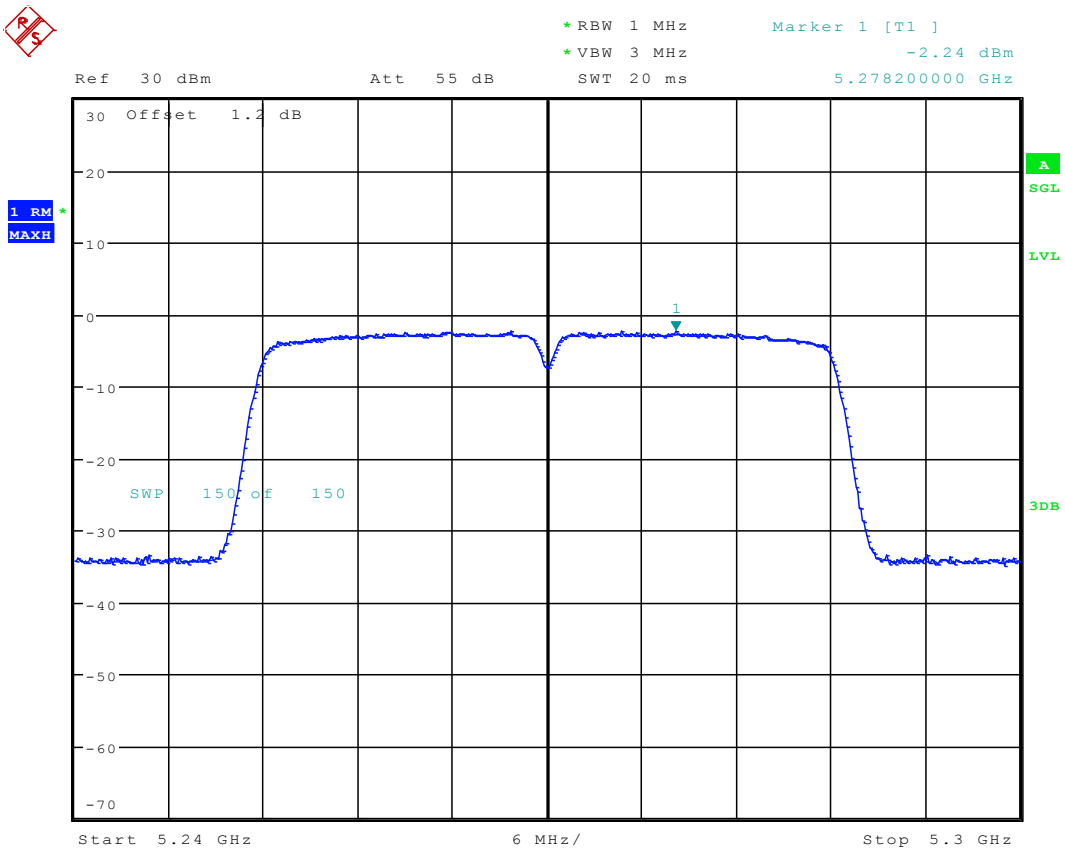


9.14 11N40_46 ANT 1



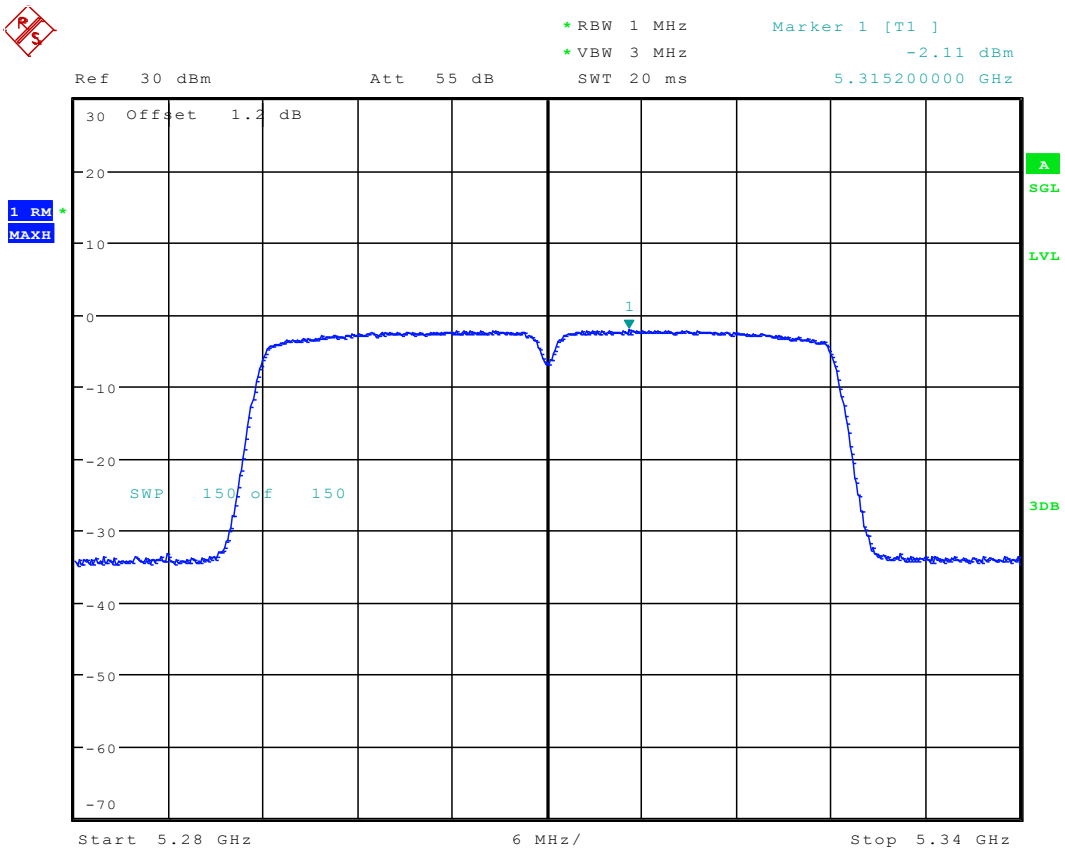
Date: 28.FEB.2018 09:34:44

9.15 11N40_54 ANT 1

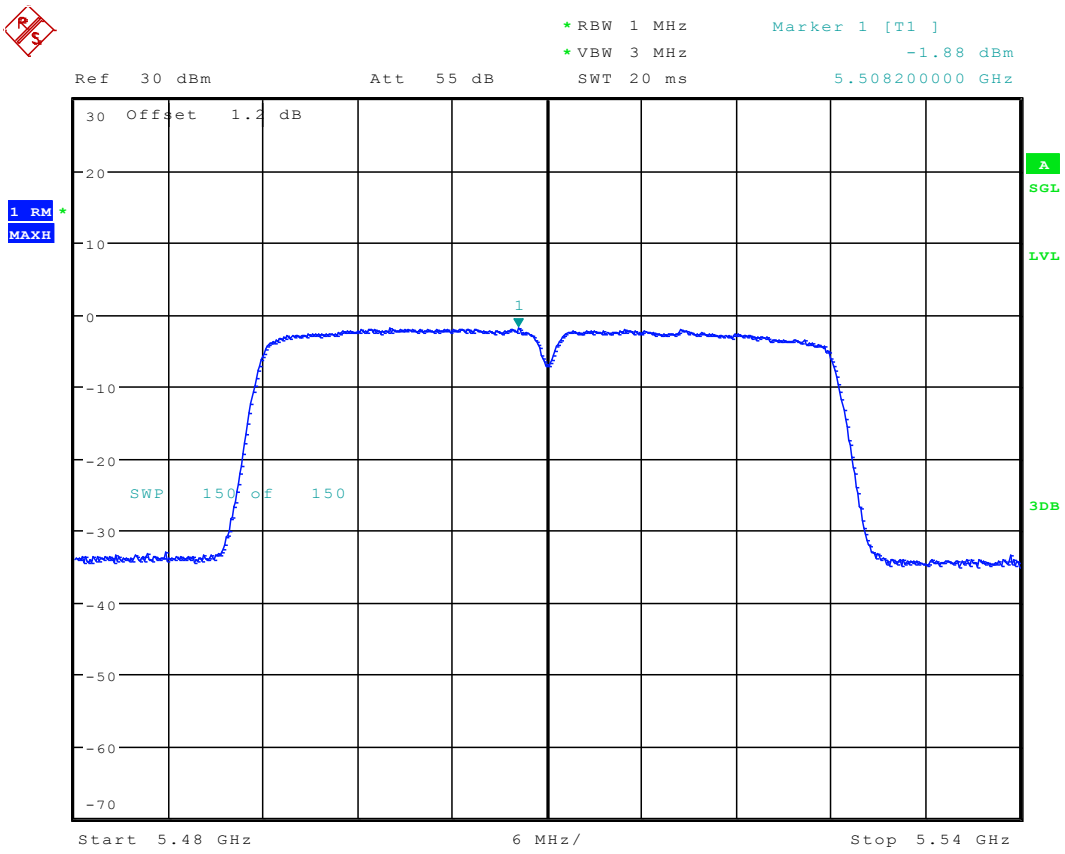


Date: 28.FEB.2018 09:56:28

9.16 11N40_62 ANT 1

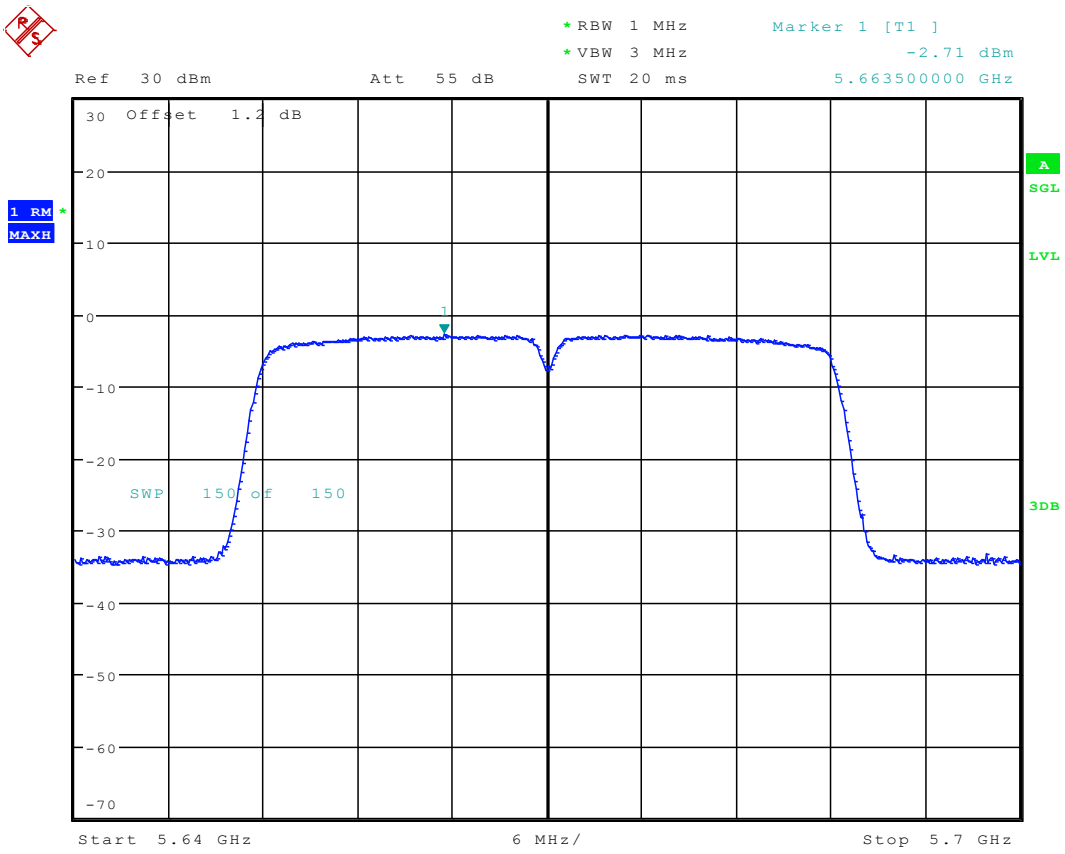


9.17 11N40_102 ANT 1



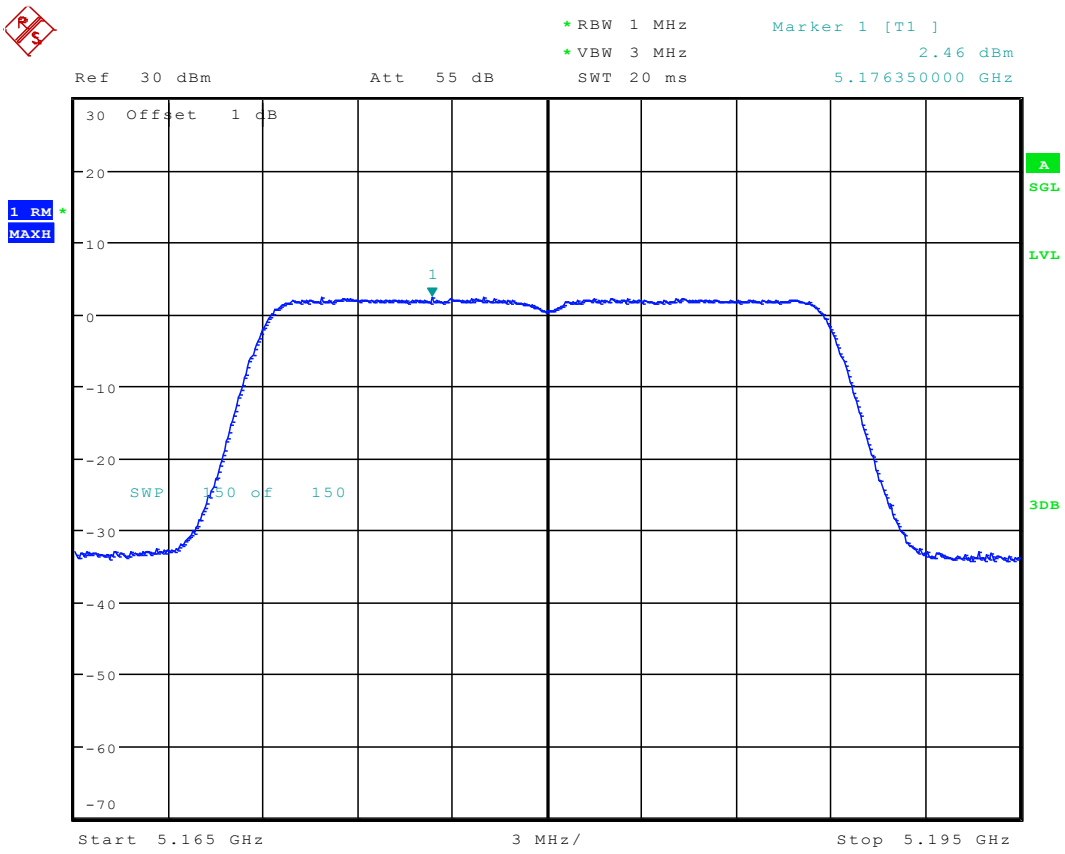
Date: 28.FEB.2018 10:15:21

9.18 11N40_134 ANT 1



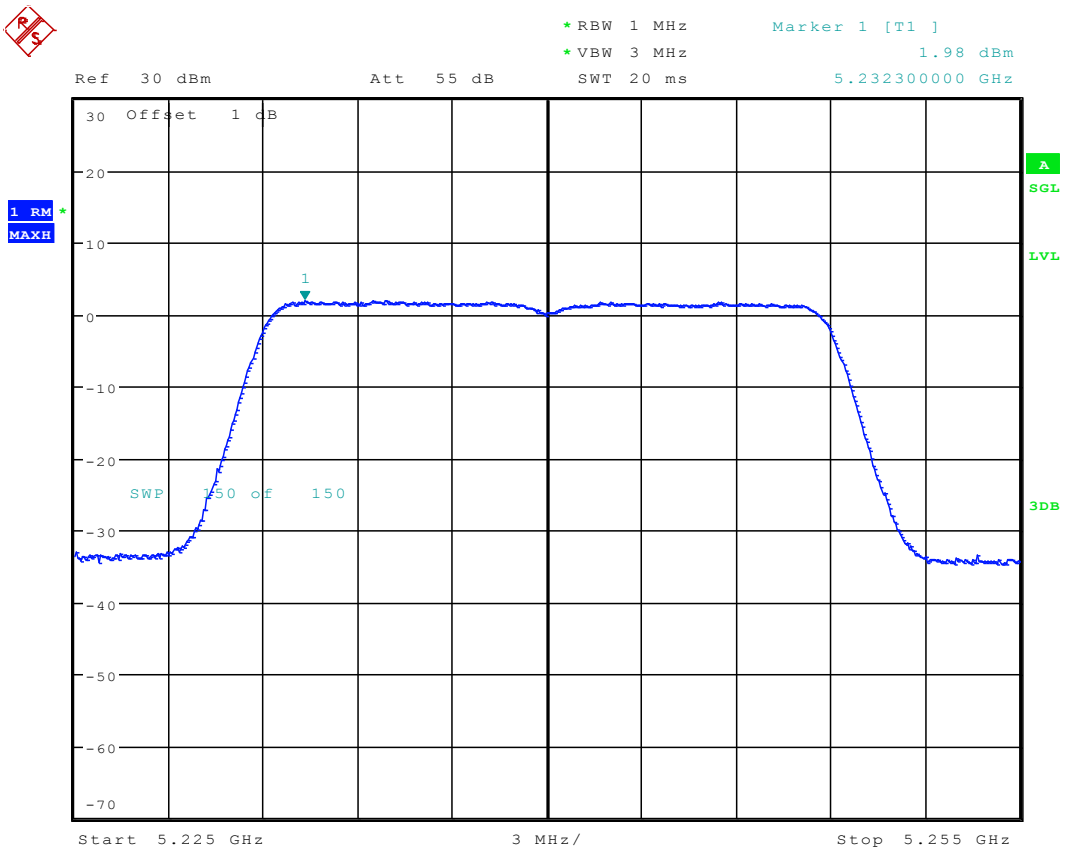
Date: 28.FEB.2018 10:29:52

9.19 11AC20_36 ANT 1



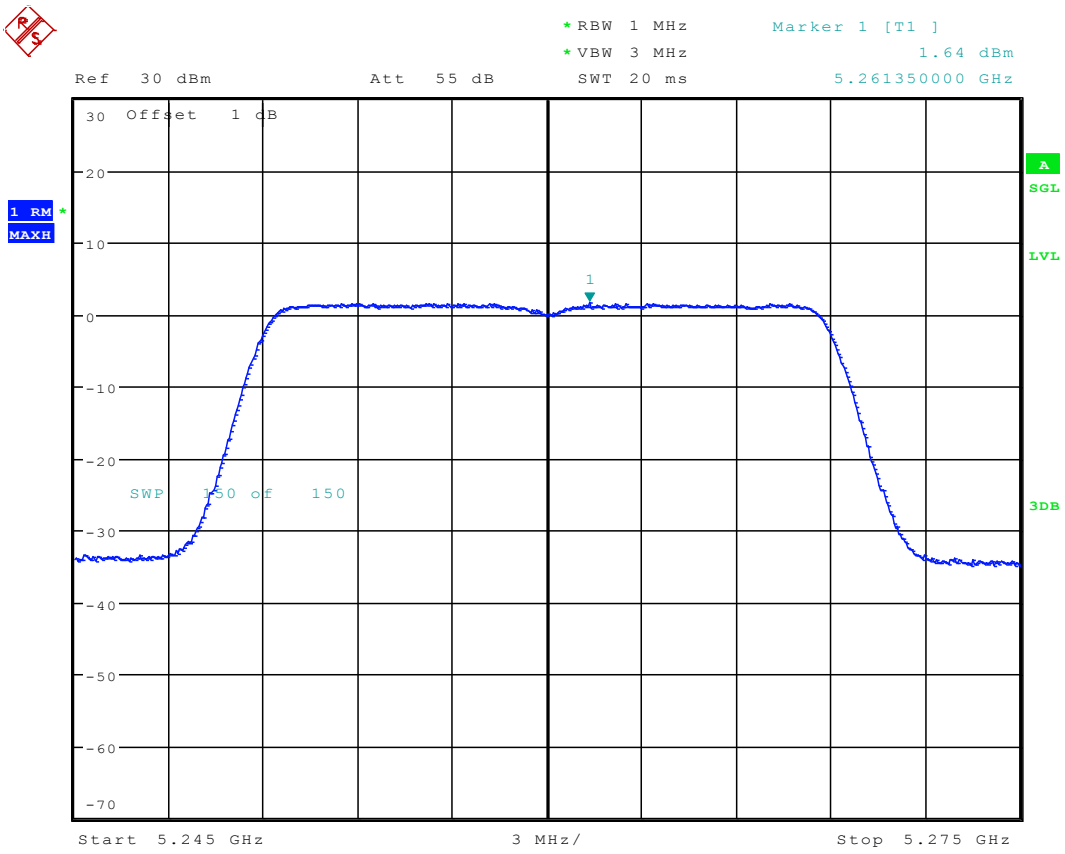
Date: 22.FEB.2018 17:21:48

9.20 11AC20_48 ANT 1



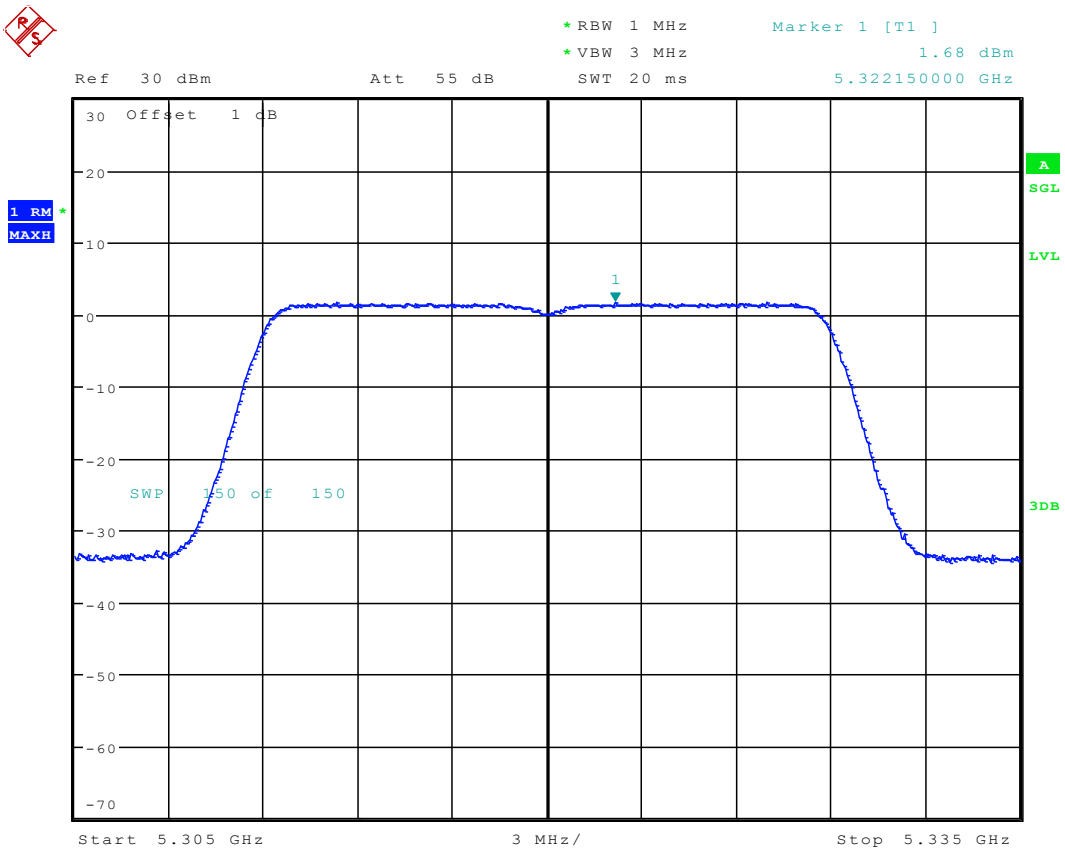
Date: 22.FEB.2018 17:28:18

9.21 11AC20_52 ANT 1

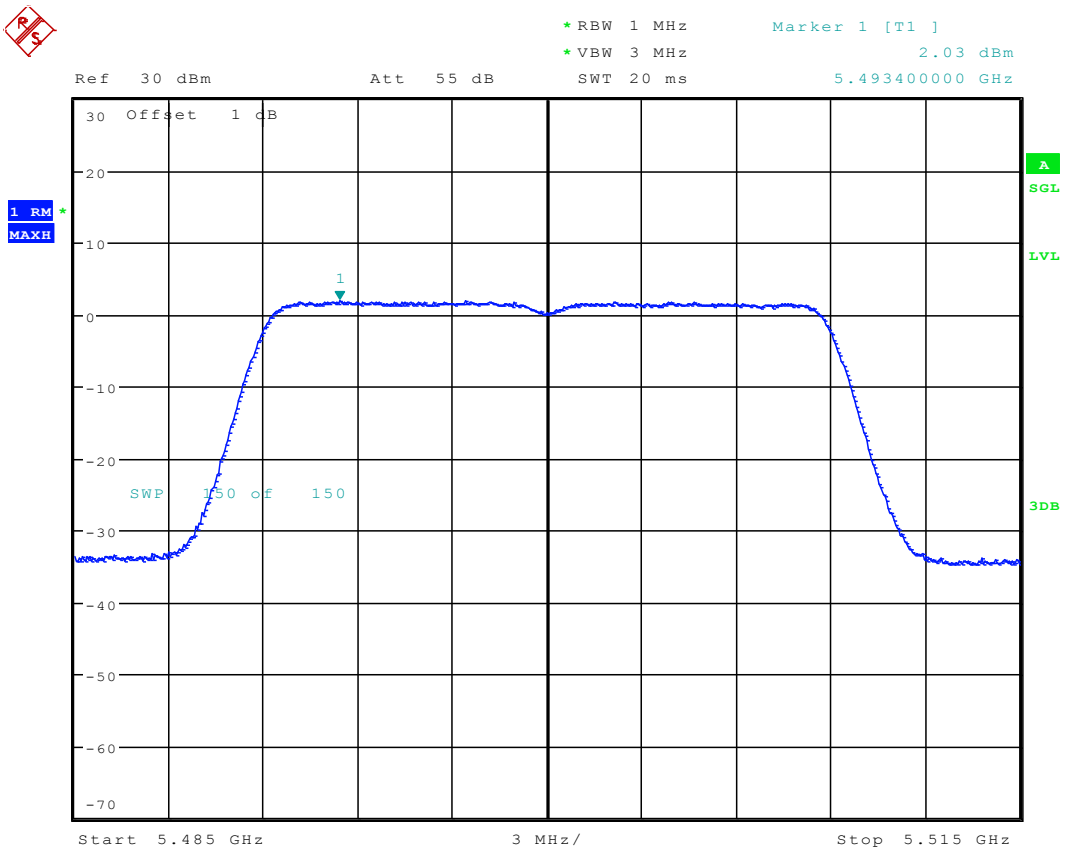


Date: 22.FEB.2018 17:37:14

9.22 11AC20_64 ANT 1

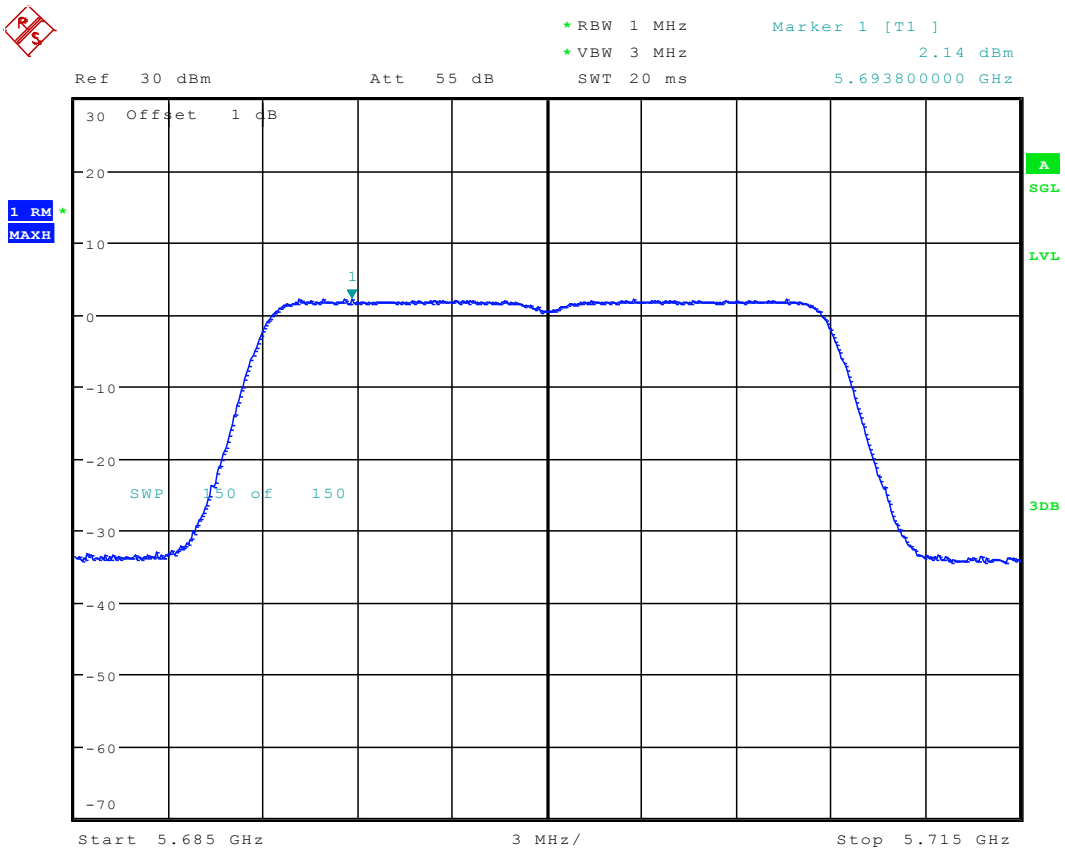


9.23 11AC20_100 ANT 1



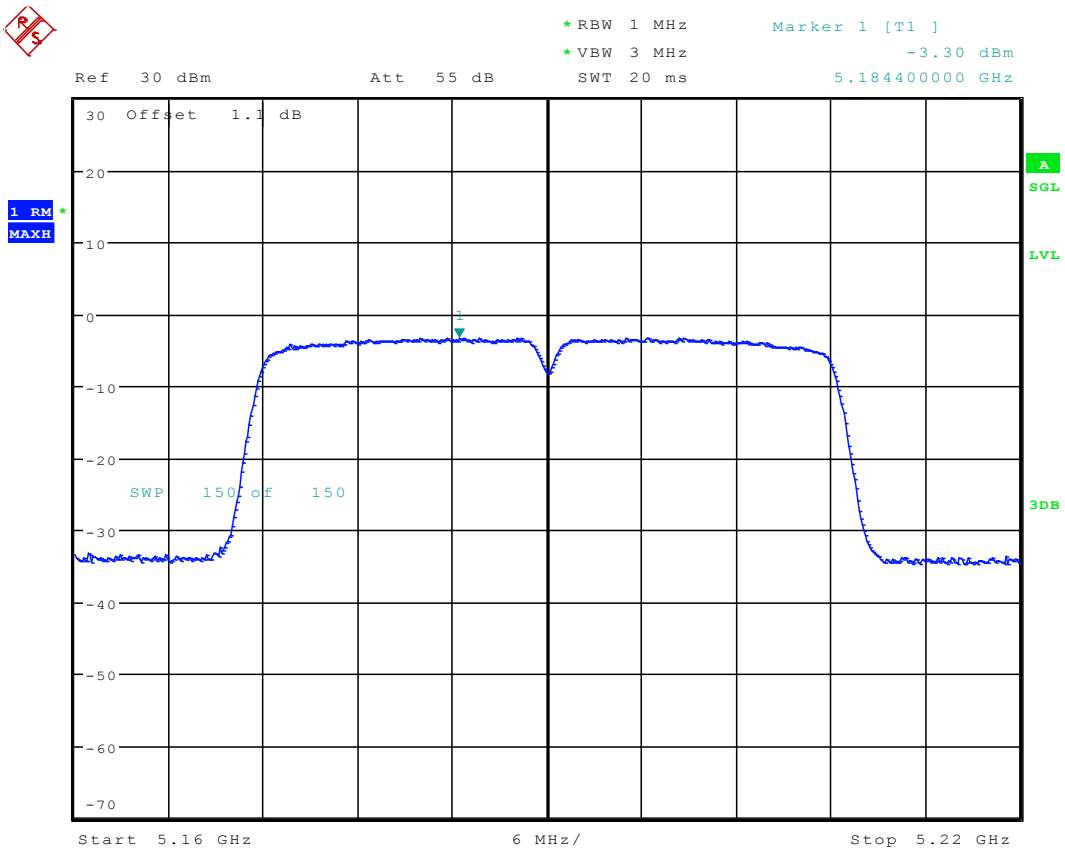
Date: 22.FEB.2018 17:45:37

9.24 11AC20_140 ANT 1



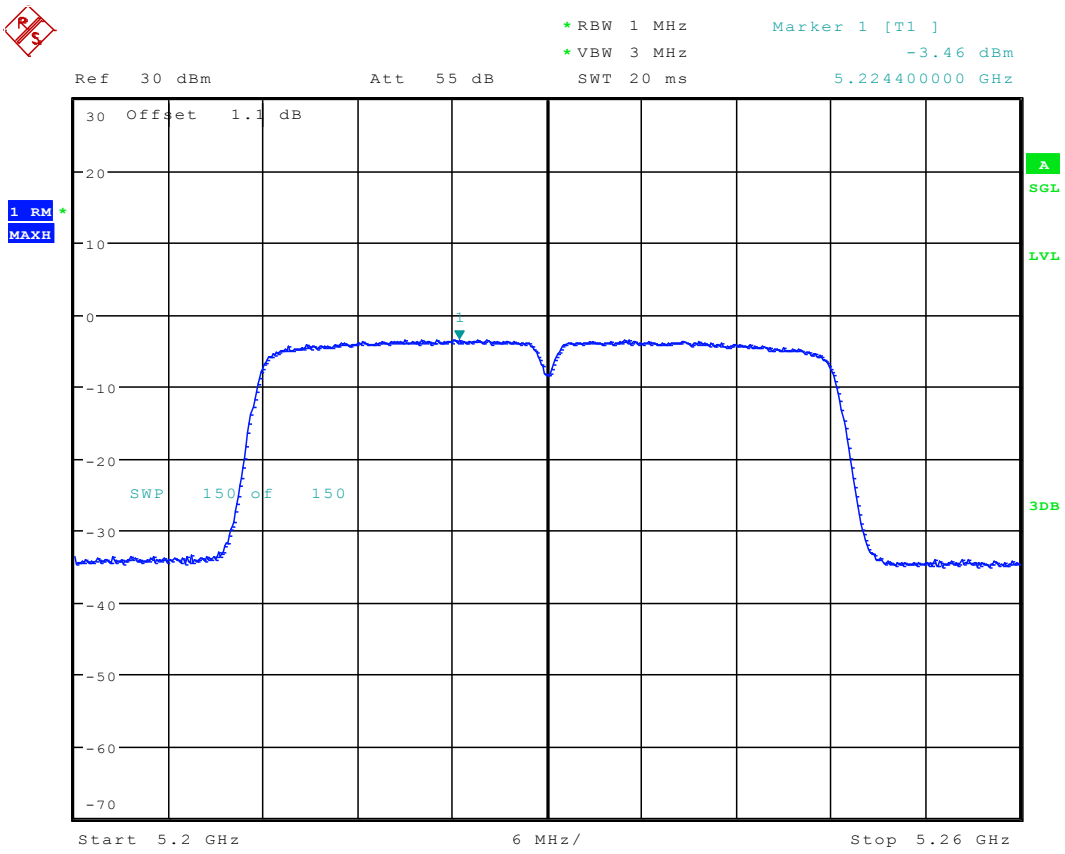
Date: 22.FEB.2018 17:53:44

9.25 11AC40_38 ANT 1



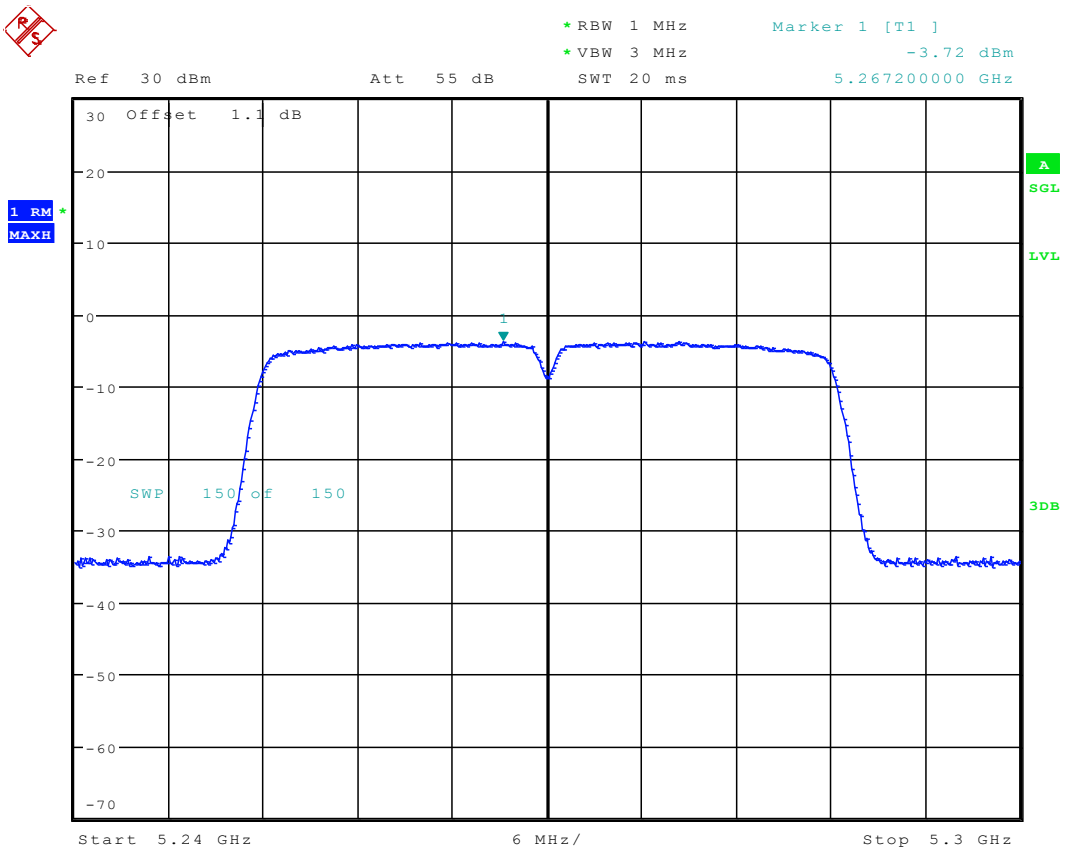
Date: 28.FEB.2018 10:46:39

9.26 11AC40_46 ANT 1



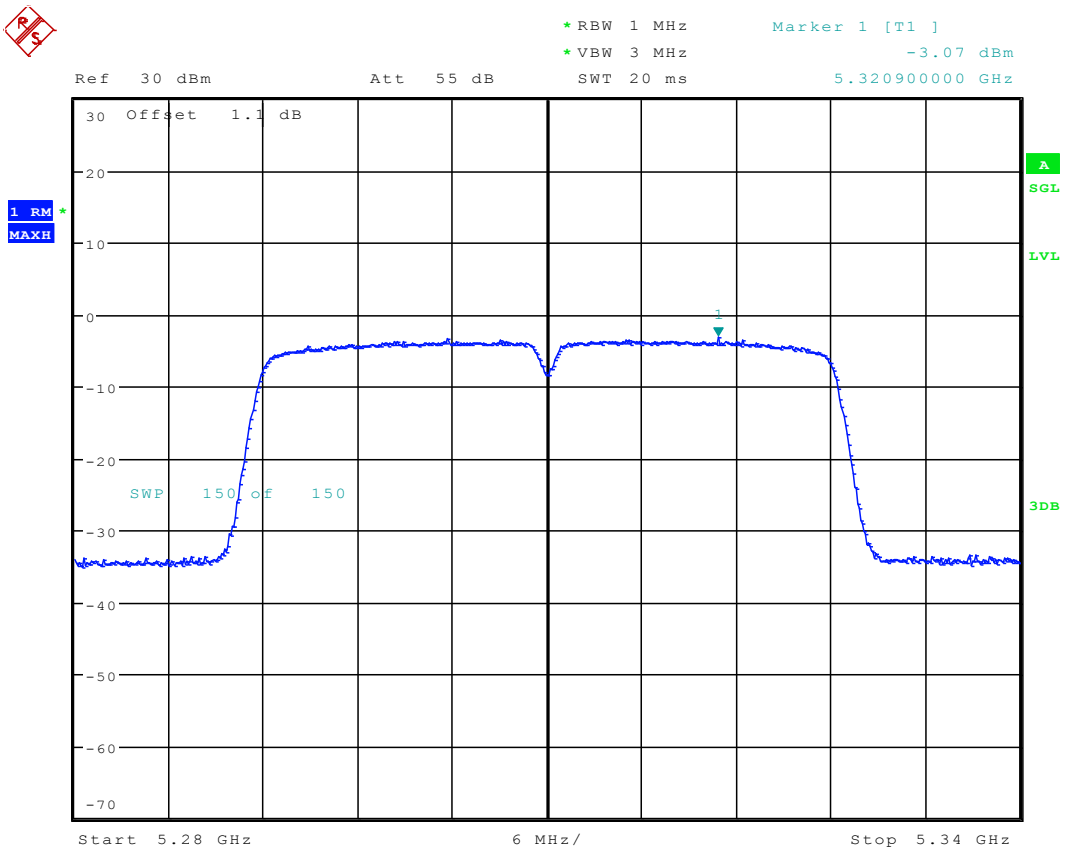
Date: 28.FEB.2018 10:53:44

9.27 11AC40_54 ANT 1



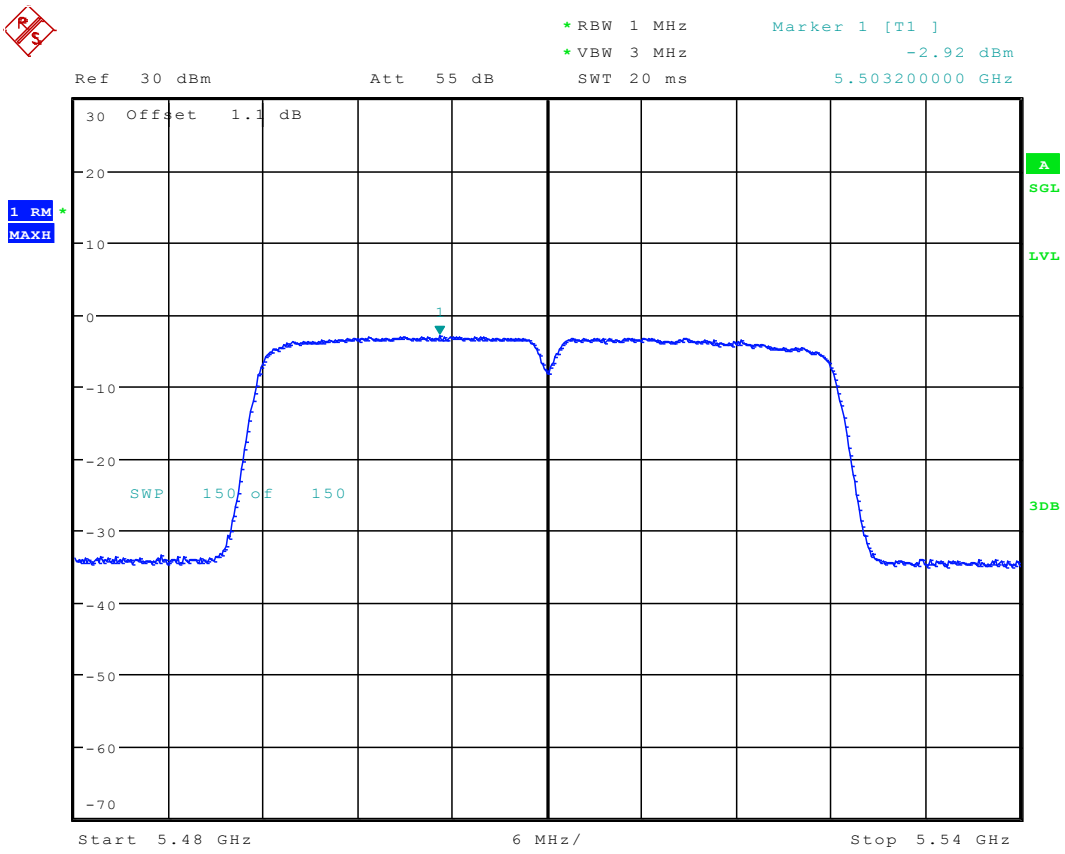
Date: 28.FEB.2018 11:00:05

9.28 11AC40_62 ANT 1

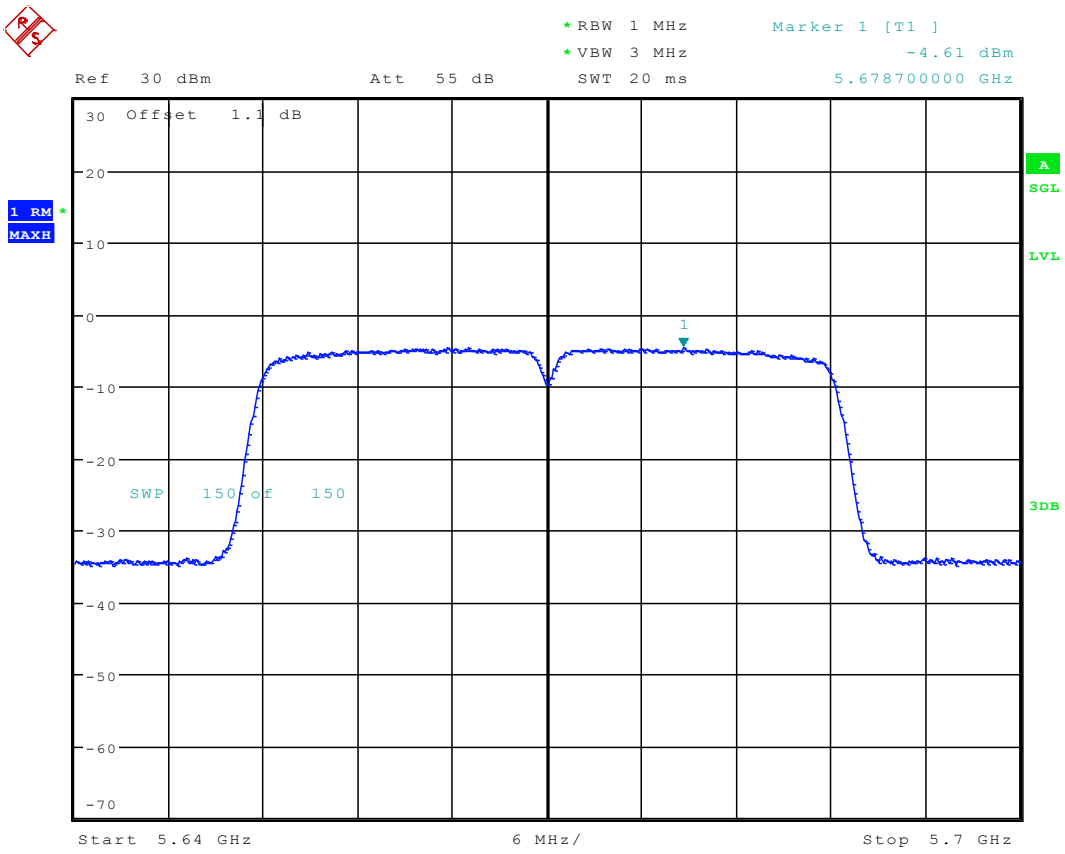


Date: 28.FEB.2018 11:07:52

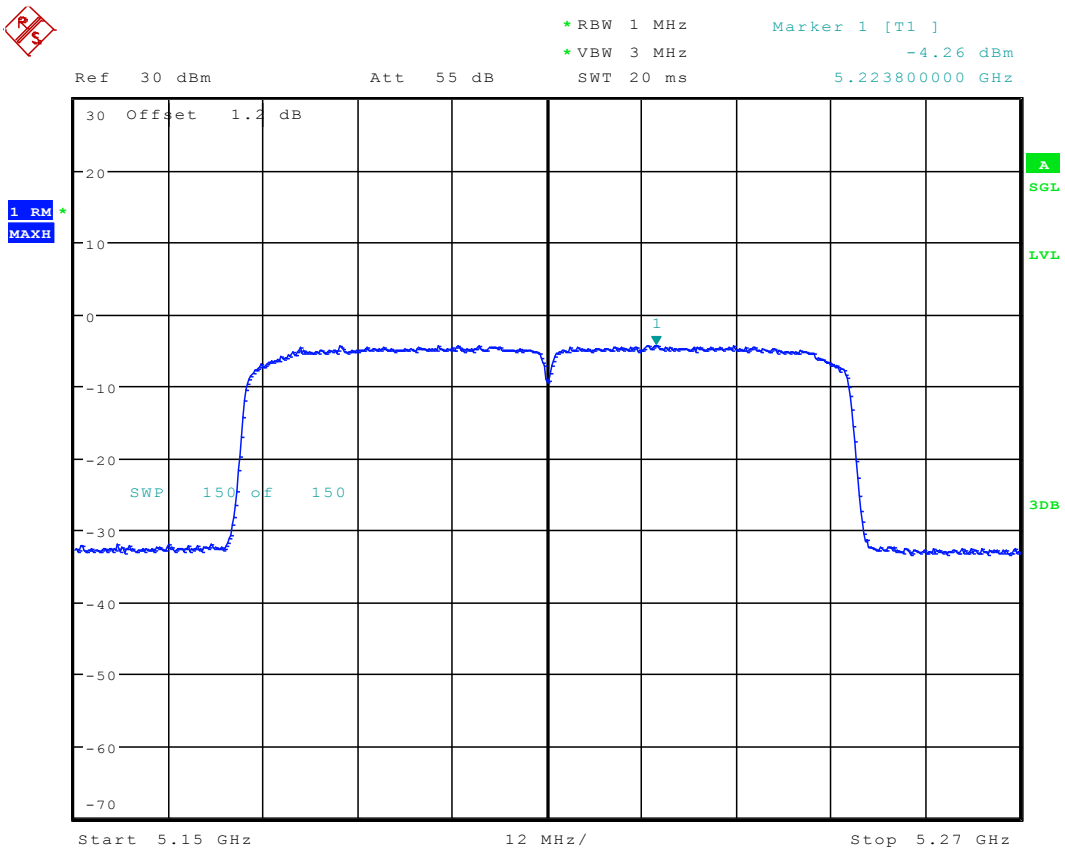
9.29 11AC40_102 ANT 1



9.30 11AC40_134 ANT 1

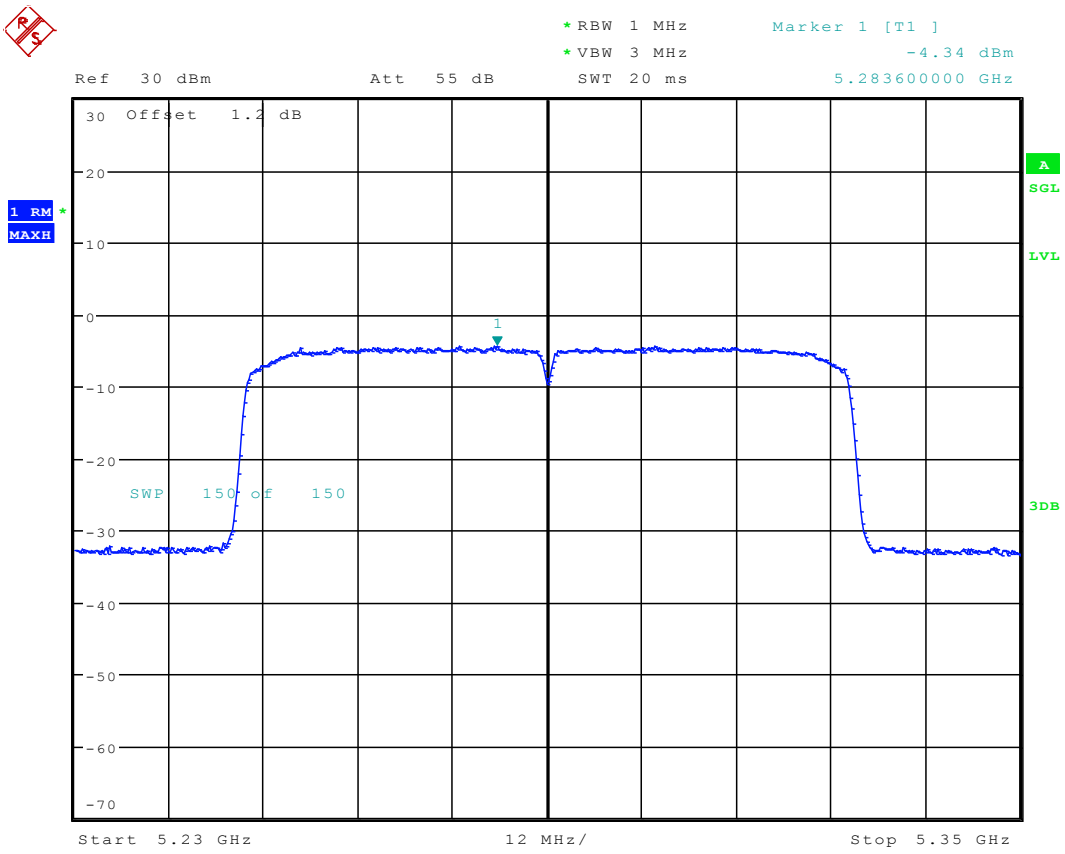


9.31 11AC80_42 ANT 1

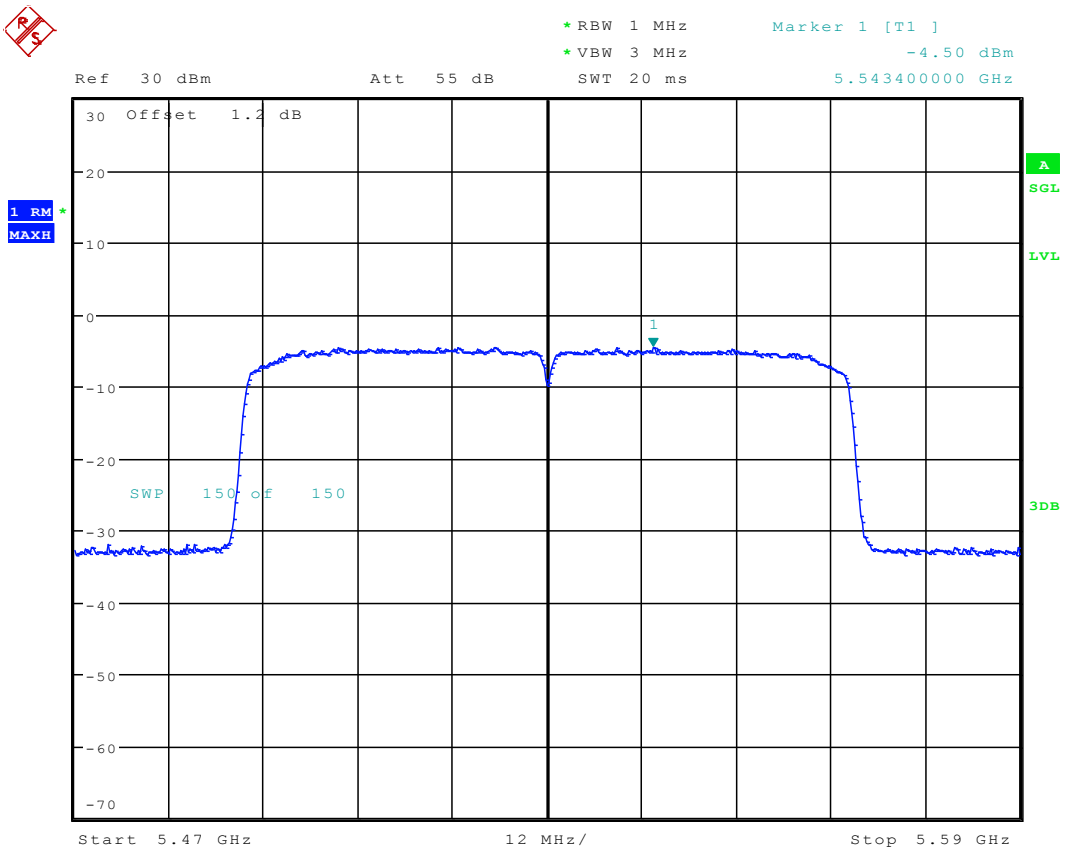


Date: 9.MAR.2018 09:48:34

9.32 11AC80_58 ANT 1



9.33 11AC80_106 ANT 1



Appendix F: Frequencies Stability

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
	5180
V nom(V)	5180.0083
V max(V)	5180.0054
V min(V)	5180.0096
Max. Deviation Frequency	0.0096
Max. Frequency Error (ppm)	1.85

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
	5180
-5	5180.0082
5	5180.0019
15	5180.0071
25	5180.0078
35	5180.0081
45	5180.0077
50	5180.0083
Max. Deviation Frequency	0.0083
Max. Frequency Error (ppm)	1.60

Frequency Error vs. Voltage:

Test Conditions	Measured Fequency (MHz)
	5700
V nom(V)	5700.0029
V max(V)	5700.0047
V min(V)	5700.0069
Max. Deviation Frequency	0.0069
Max. Frequency Error (ppm)	1.21

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Fequency (MHz)
	5700
-5	5700.0018
5	5700.0053
15	5700.0059
25	5700.0038
35	5700.0031
45	5700.0027
50	5700.0045
Max. Deviation Frequency	0.0059
Max. Frequency Error (ppm)	1.04

END