



Appendix A U-NII: Emission Bandwidth

1 Result Table for 26dB Emission Bandwidth

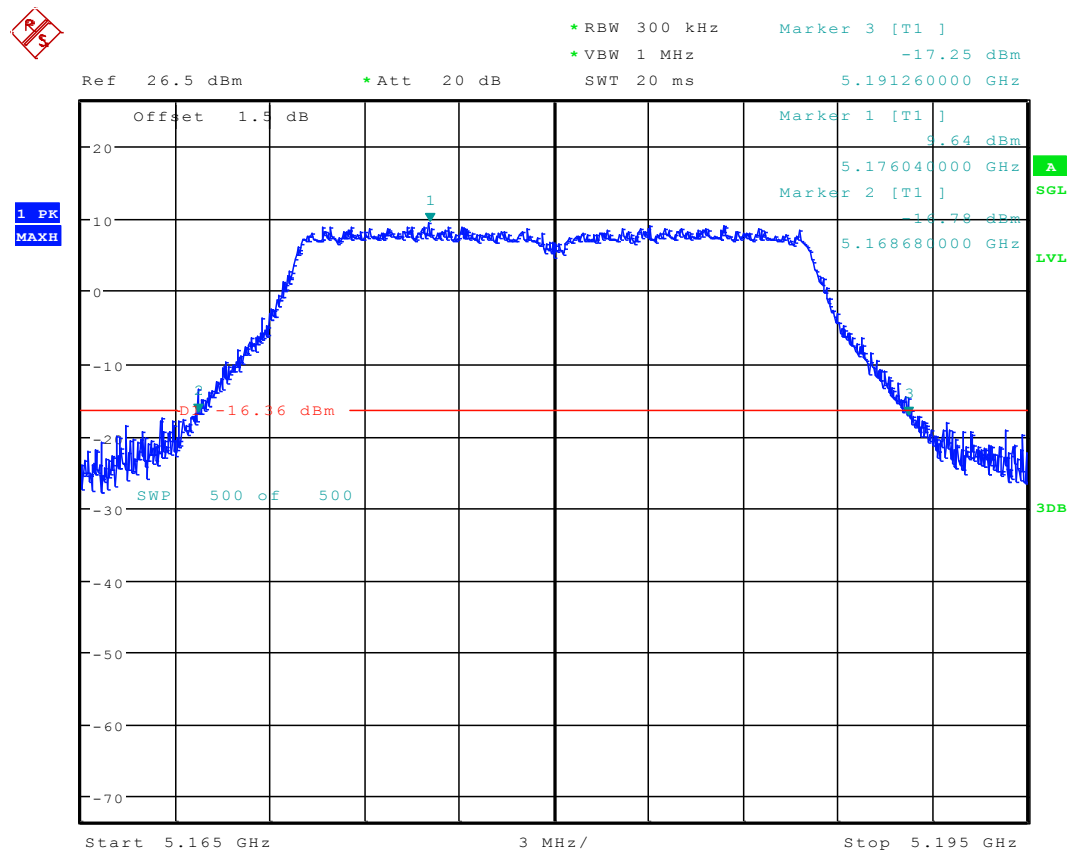
Test Mode	Test Channel	Frequency [MHz]	Antenna Port	26dB Emission Bandwidth [MHz]	Verdict
11A20	36	5180	ANT 1	22.58	PASS
	48	5240	ANT 1	23.04	PASS
	52	5260	ANT 1	23.28	PASS
	64	5320	ANT 1	23.24	PASS
	100	5500	ANT 1	24.6	PASS
	140	5700	ANT 1	25.84	PASS
11N20	36	5180	ANT 1	23.82	PASS
	48	5240	ANT 1	23.94	PASS
	52	5260	ANT 1	23.84	PASS
	64	5320	ANT 1	23.92	PASS
	100	5500	ANT 1	23.1	PASS
	140	5700	ANT 1	23.12	PASS
11N40	38	5190	ANT 1	44.36	PASS
	46	5230	ANT 1	43.6	PASS
	54	5270	ANT 1	44.2	PASS
	62	5310	ANT 1	44.08	PASS
	102	5510	ANT 1	45.24	PASS
	134	5670	ANT 1	44.42	PASS

2 Result Table for 6dB Emission Bandwidth

Test Mode	Test Channel	Frequency [MHz]	ANT	6dB Emission Bandwidth [MHz]	Verdict
11A20	149	5745	ANT 1	16.4	PASS
	165	5825	ANT 1	16.38	PASS
11N20	149	5745	ANT 1	17.62	PASS
	165	5825	ANT 1	17.62	PASS
11N40	151	5755	ANT 1	35.38	PASS
	159	5795	ANT 1	35.18	PASS

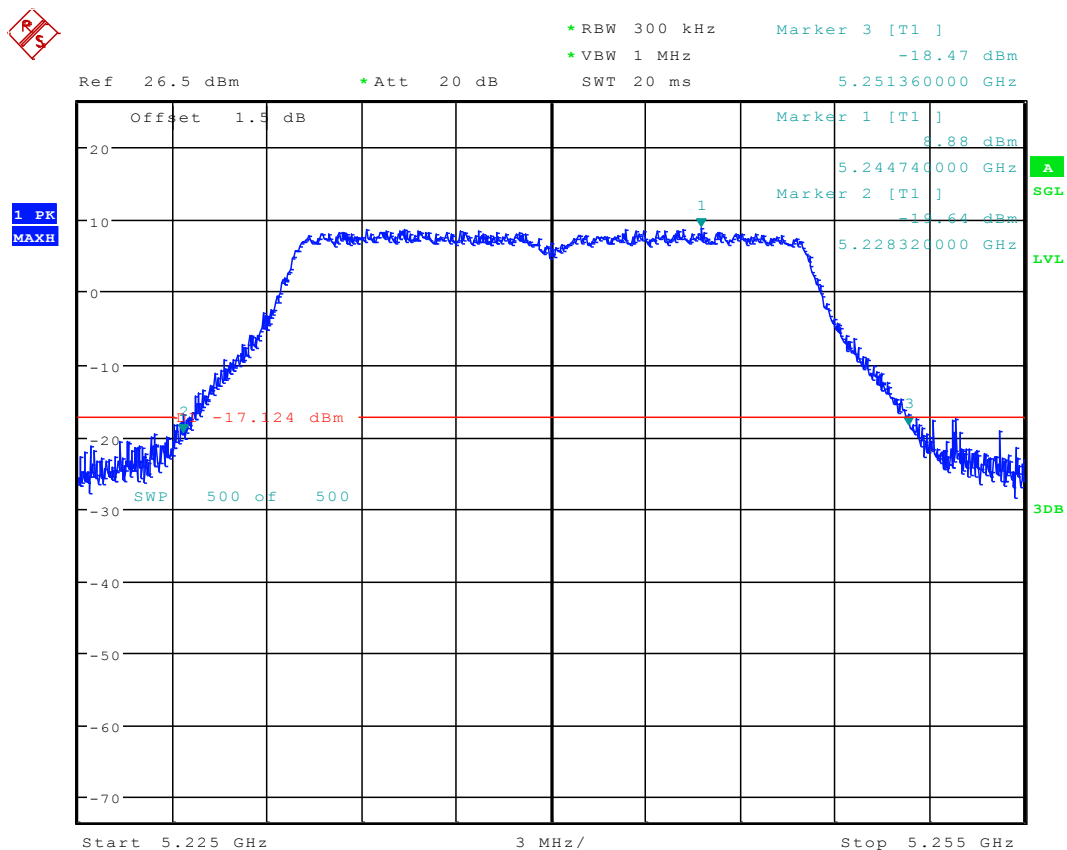
3 Test Plot for 26dB Emission Bandwidth

3.1 11A20_36 ANT 1



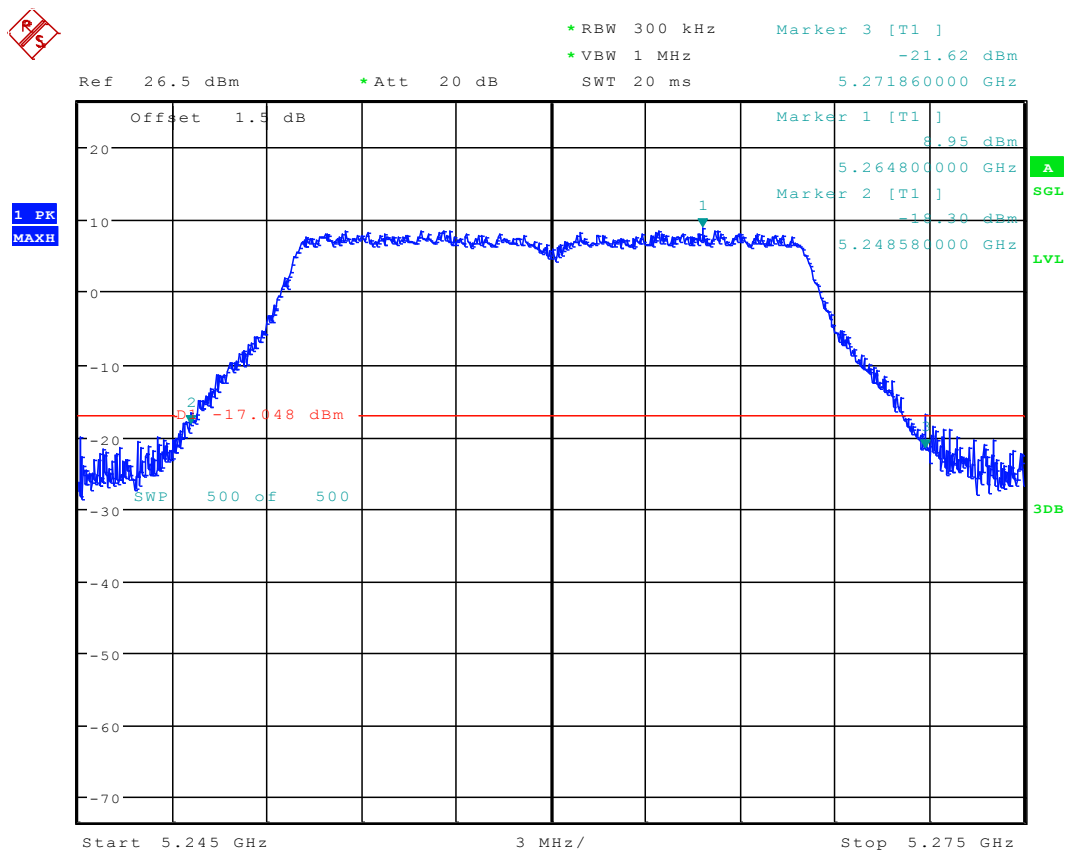
Date: 14.MAY.2017 12:56:59

3.2 11A20_48 ANT 1

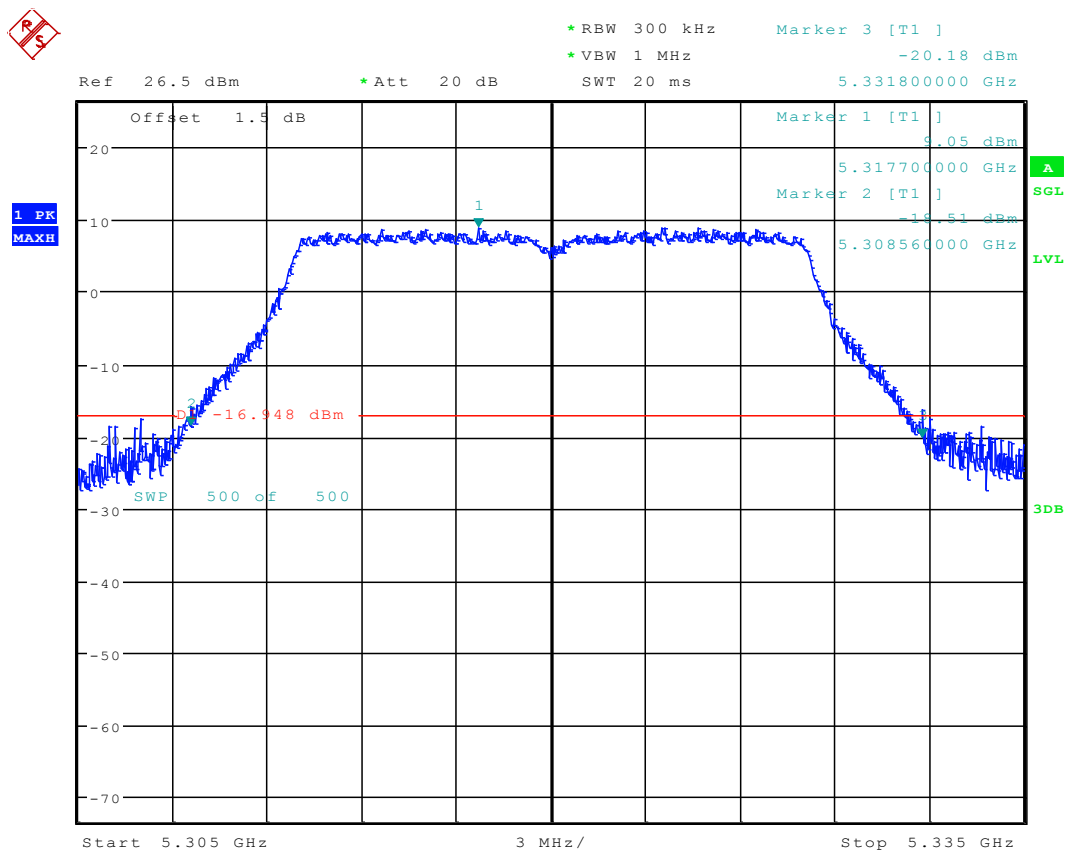


Date: 14.MAY.2017 13:04:31

3.3 11A20_52 ANT 1

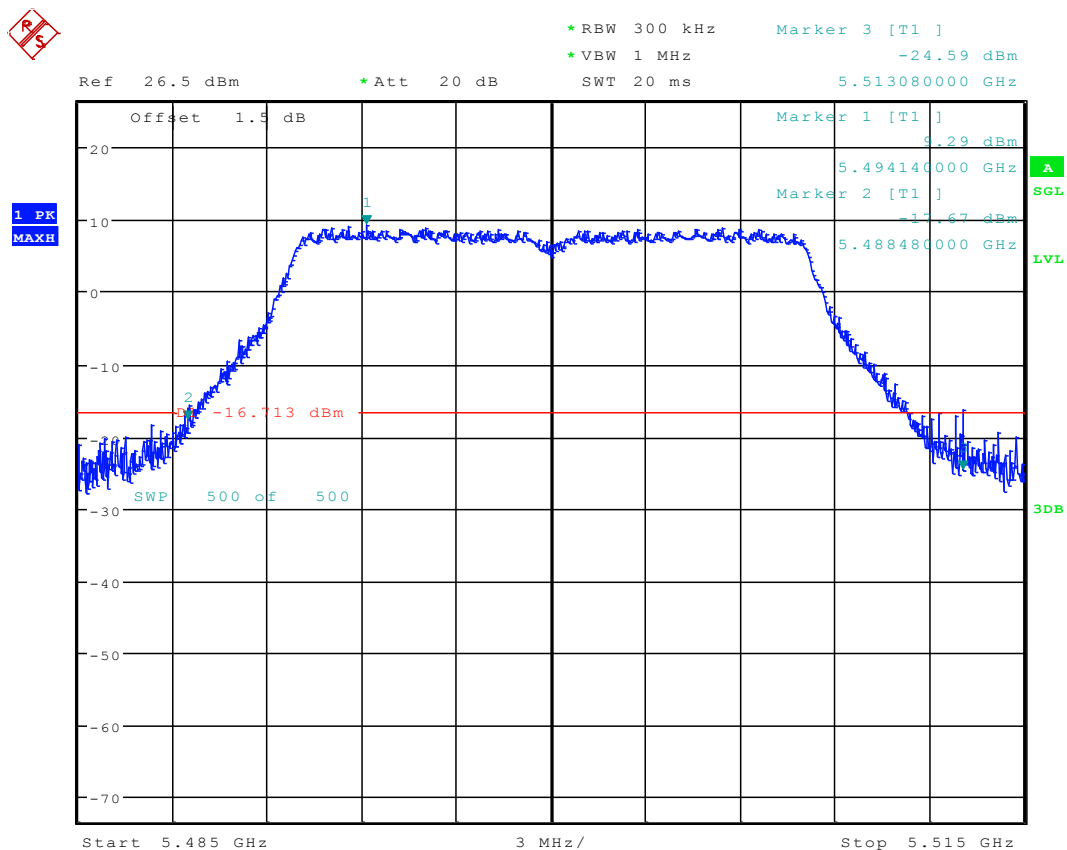


3.4 11A20_64 ANT 1



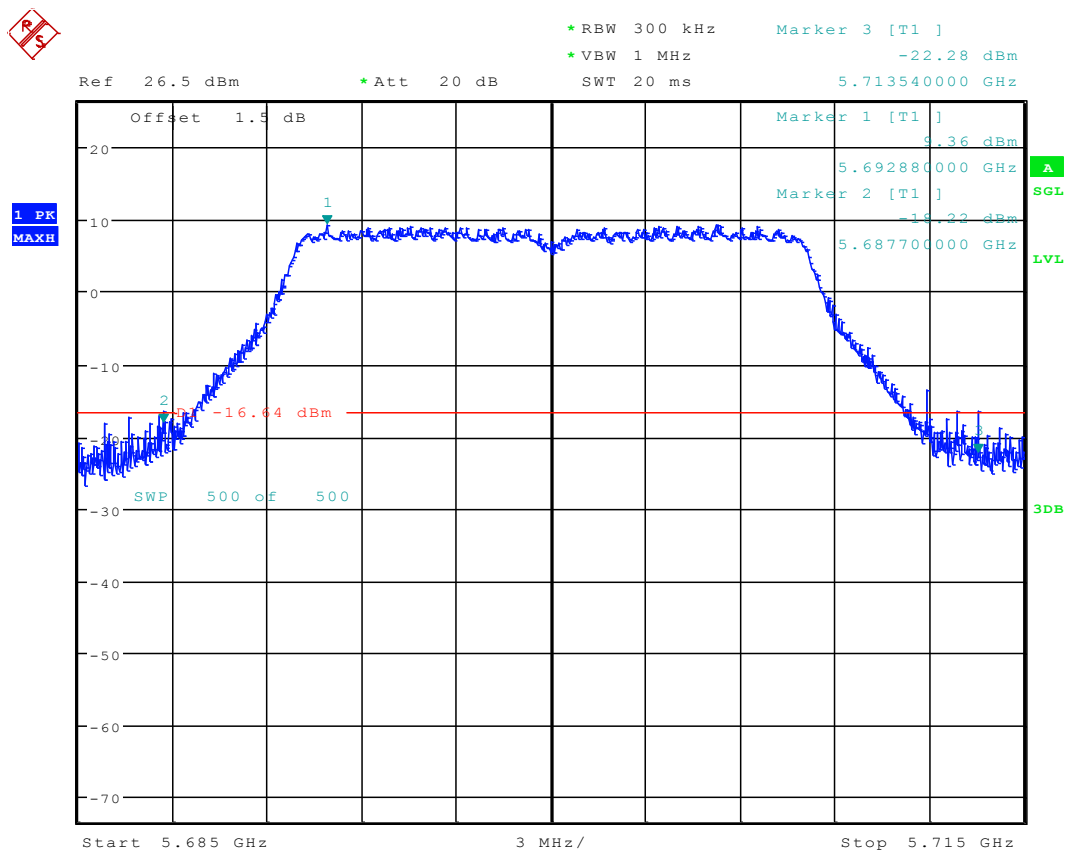
Date: 14.MAY.2017 13:15:58

3.5 11A20_100 ANT 1



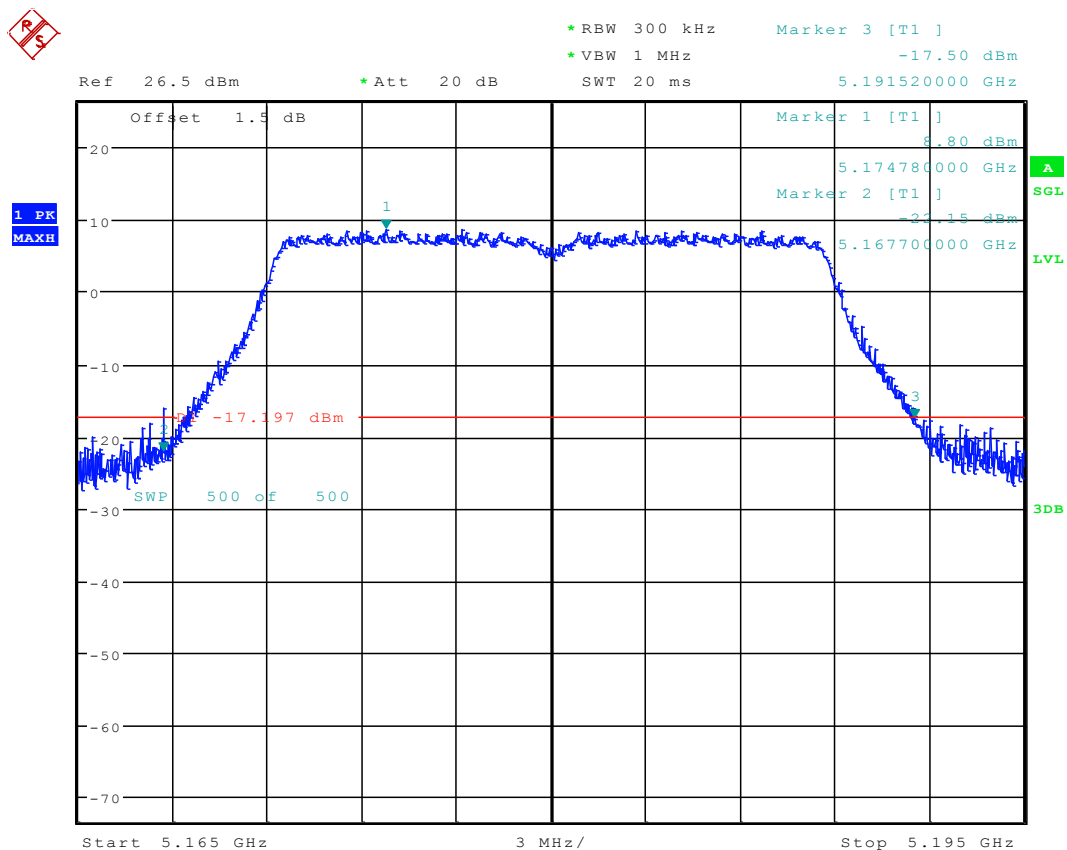
Date: 14.MAY.2017 13:21:55

3.6 11A20_140 ANT 1



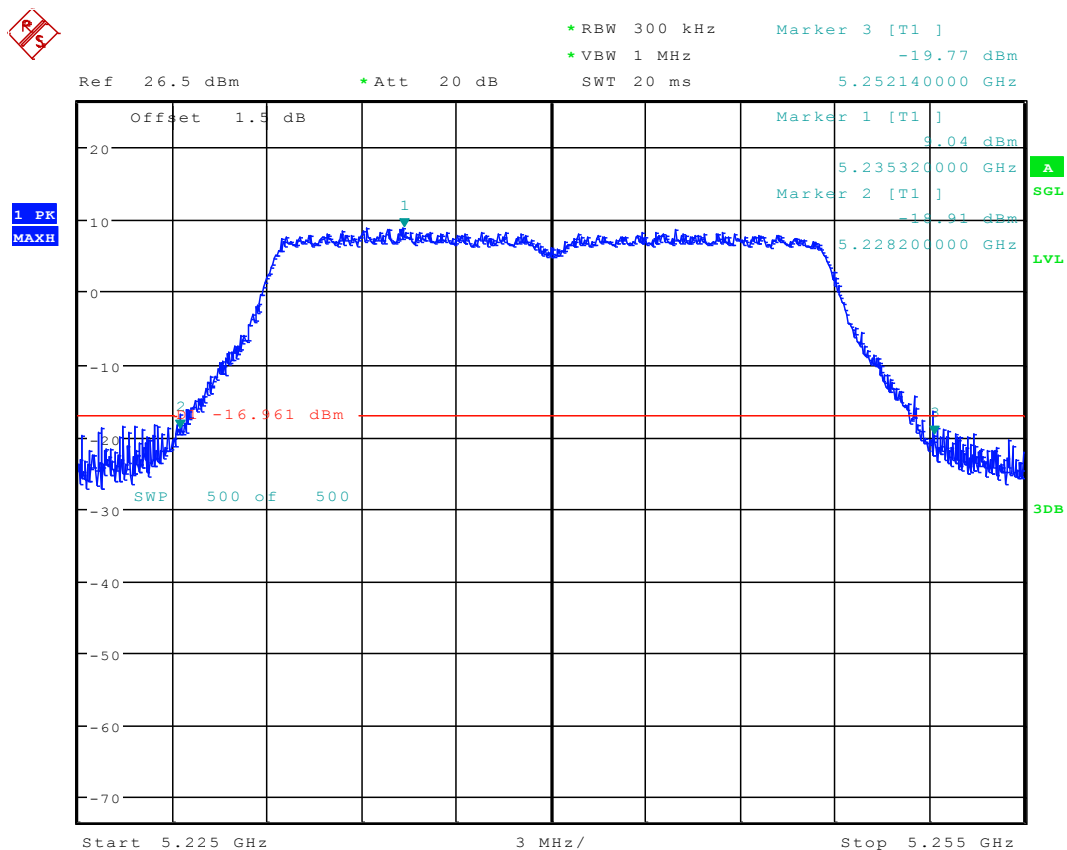
Date: 14.MAY.2017 13:27:19

3.7 11N20_36 ANT 1



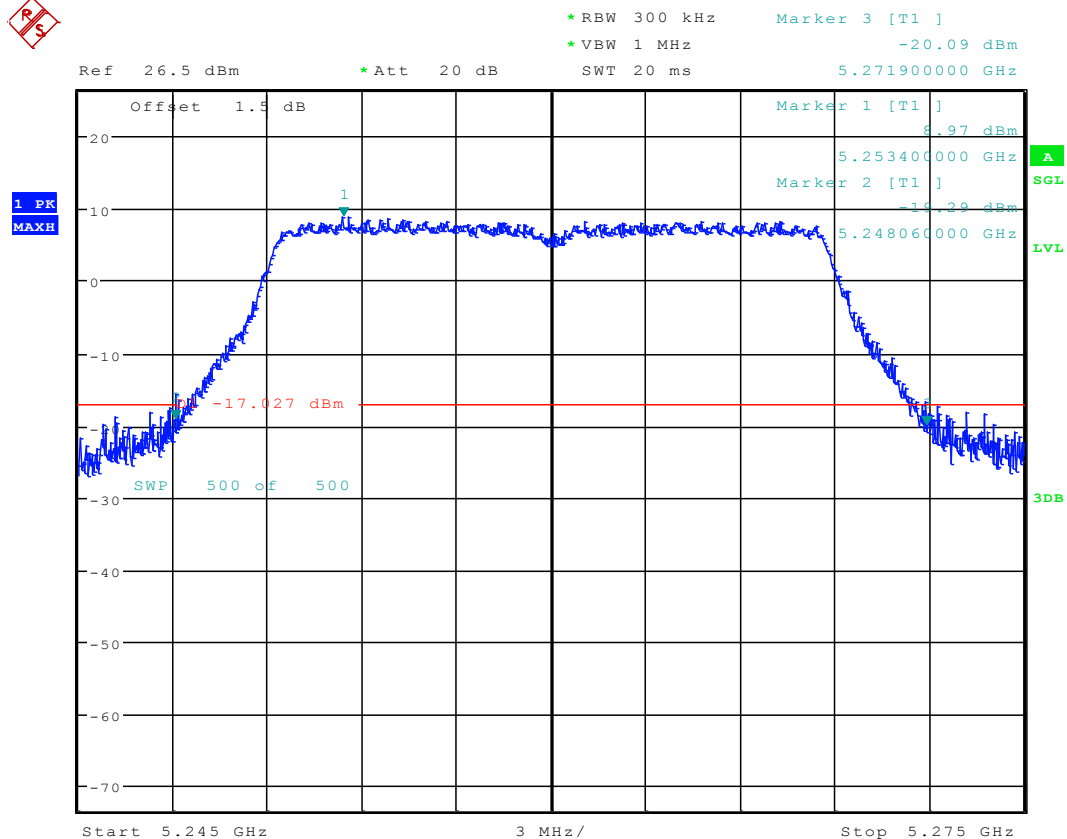
Date: 14.MAY.2017 13:46:53

3.8 11N20_48 ANT 1



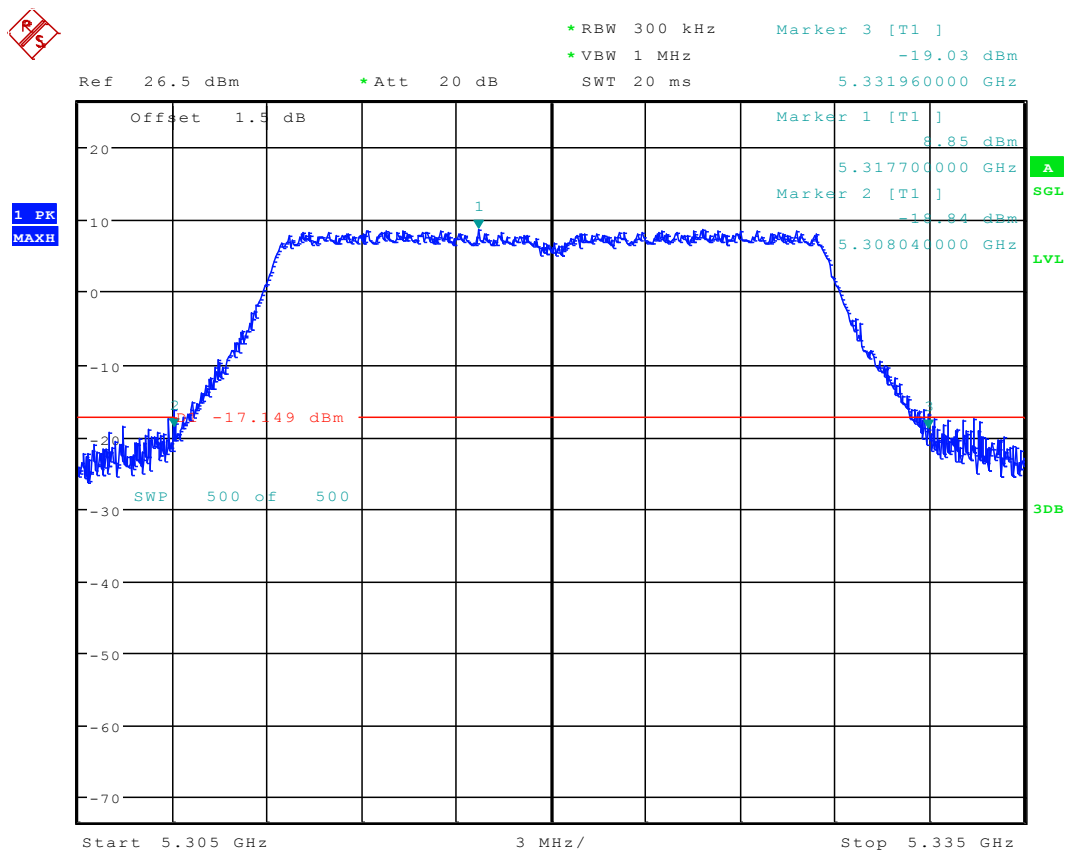
Date: 14.MAY.2017 13:51:53

3.9 11N20_52 ANT 1

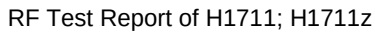


Date: 14.MAY.2017 14:22:18

3.10 11N20_64 ANT 1



Date: 14.MAY.2017 14:27:11



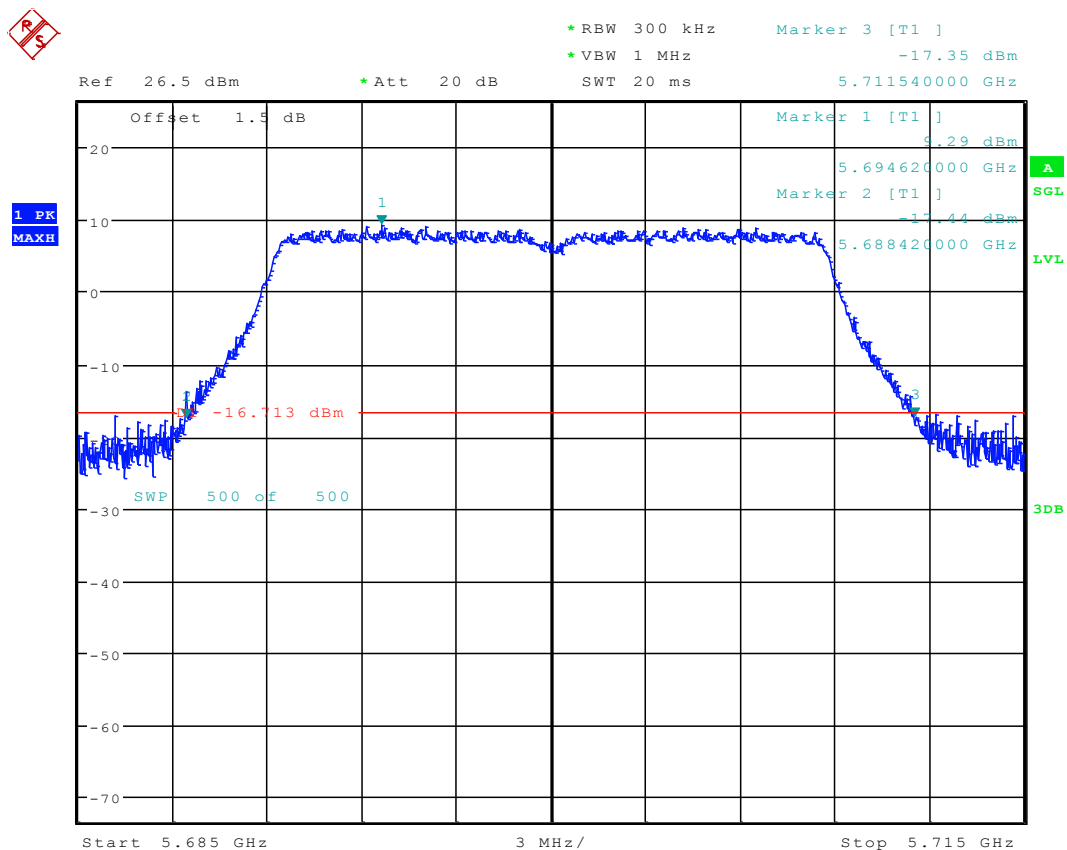
A

SGL

LVL

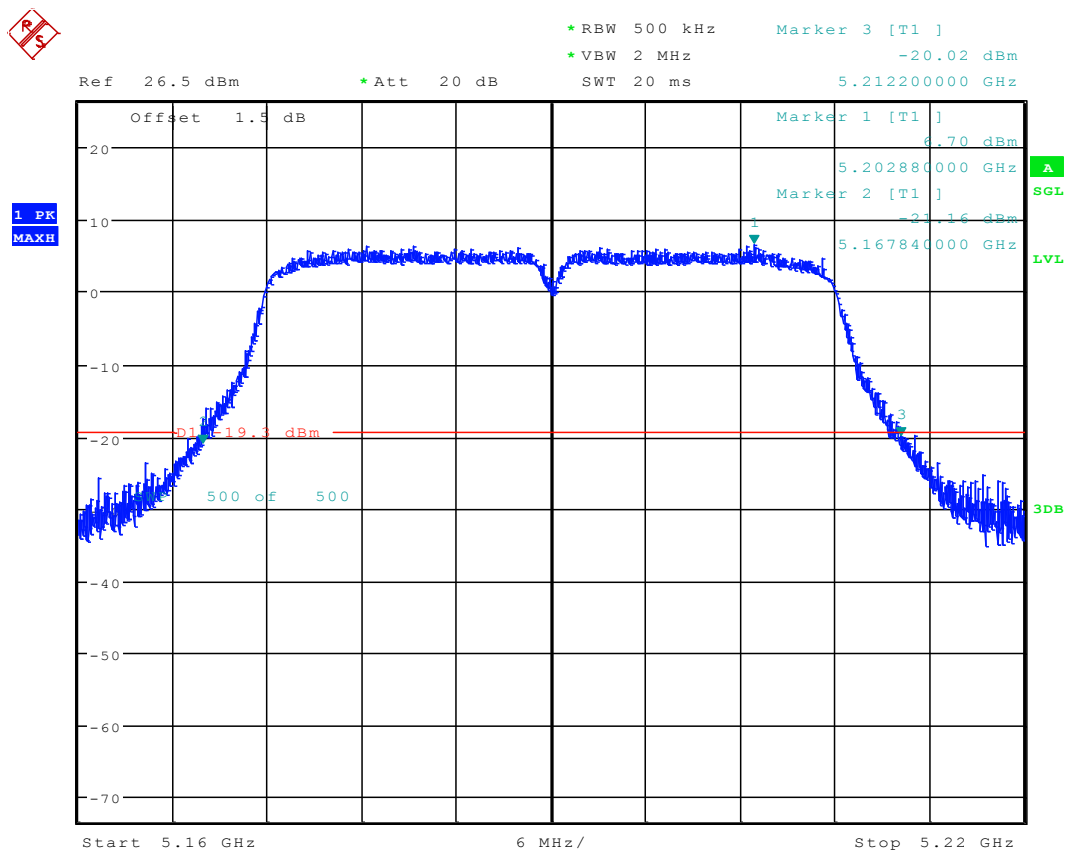
3DB

3.12 11N20_140 ANT 1



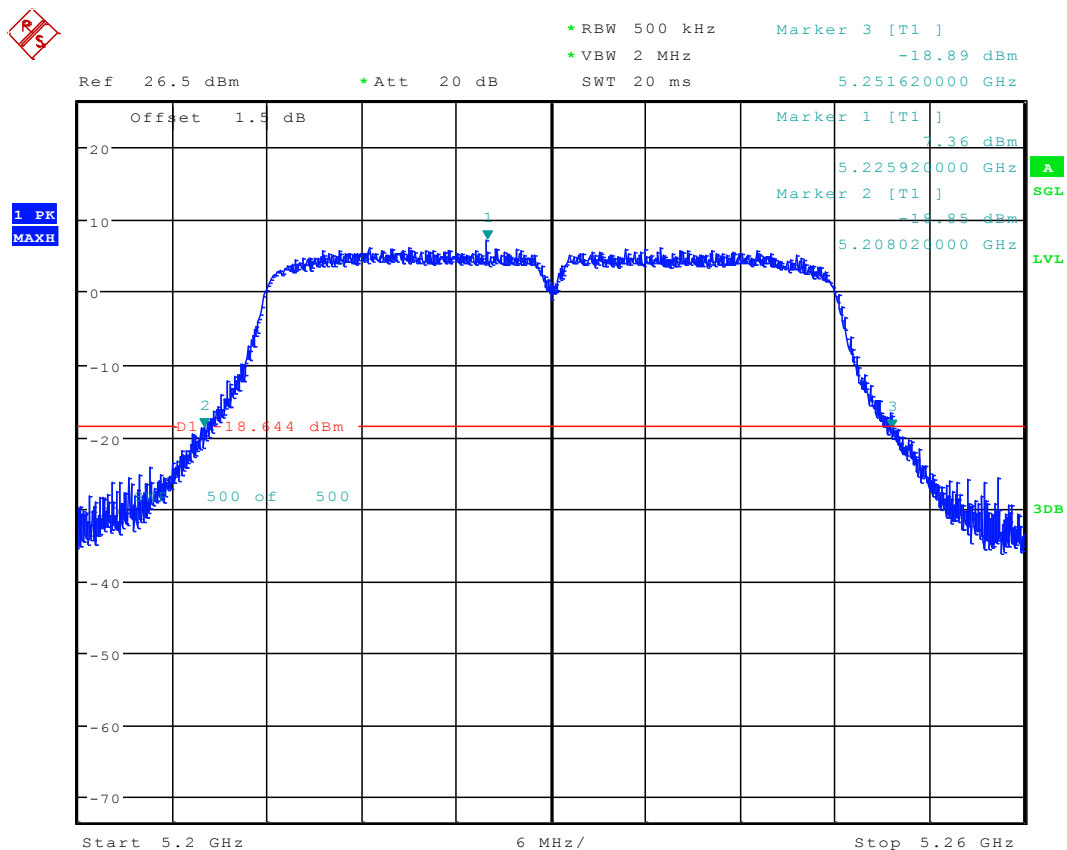
Date: 14.MAY.2017 14:37:29

3.13 11N40_38 ANT 1



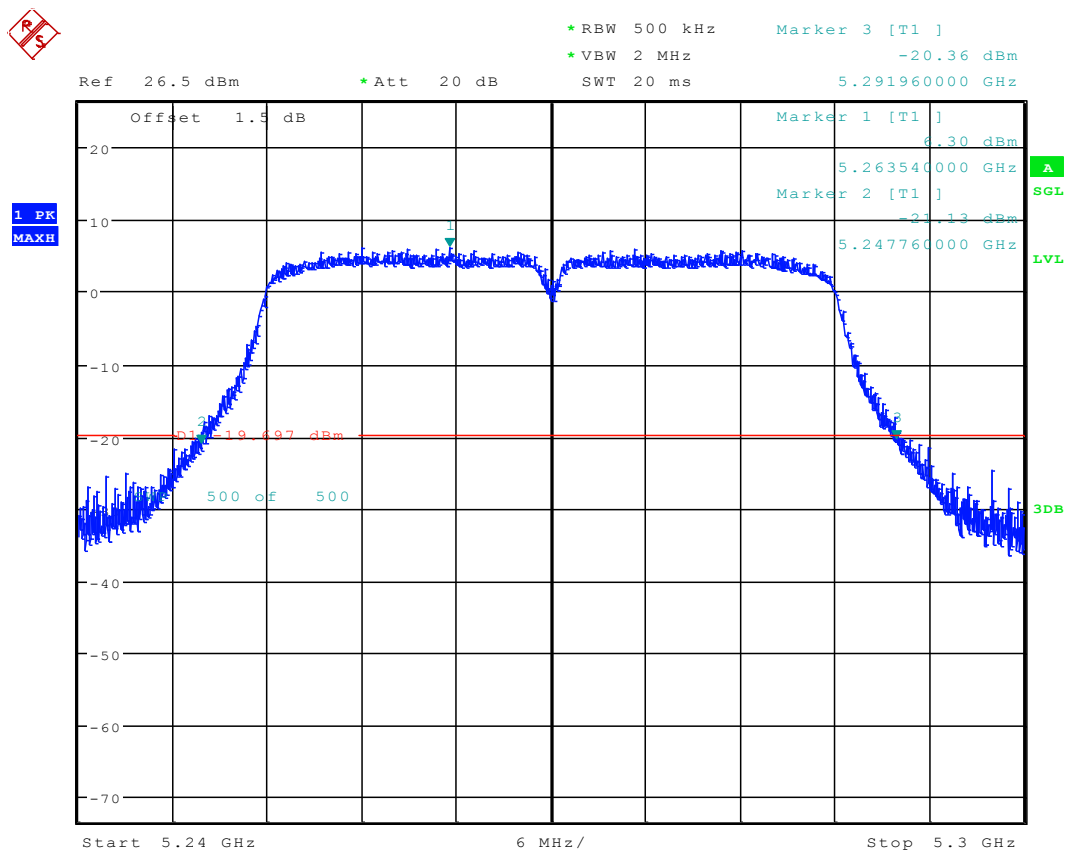
Date: 14.MAY.2017 15:51:54

3.14 11N40_46 ANT 1



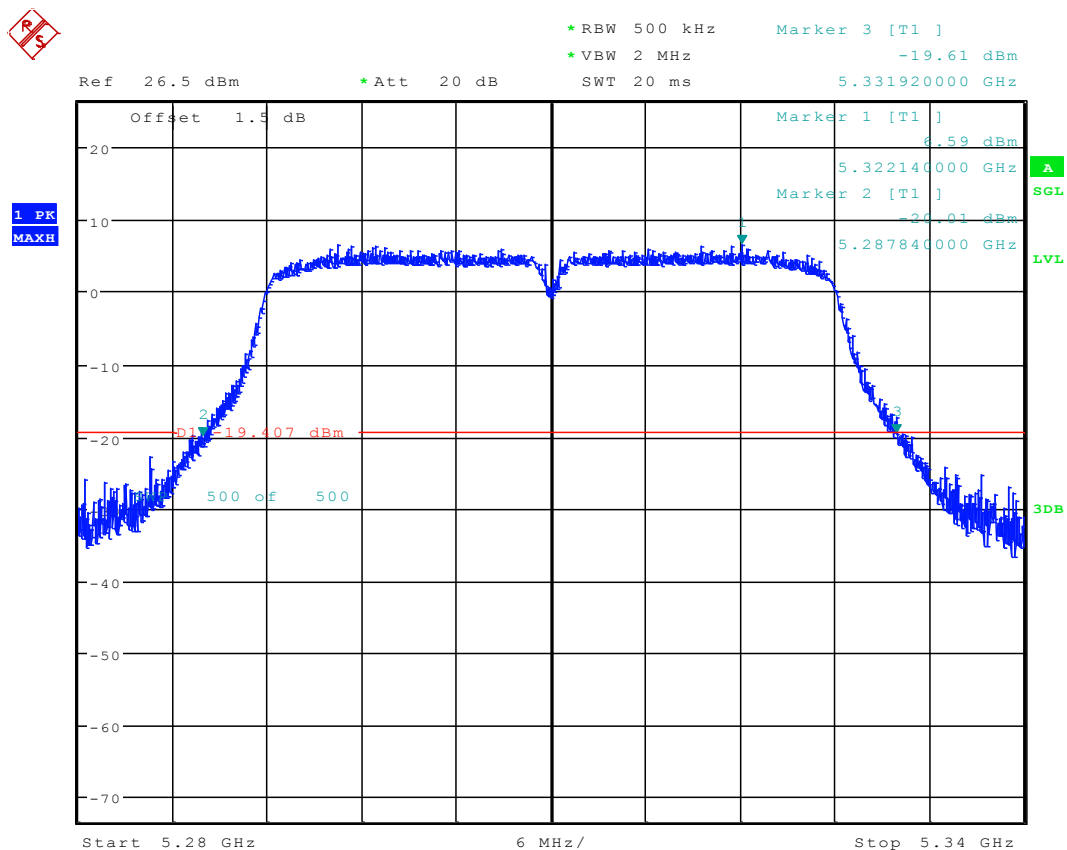
Date: 14.MAY.2017 15:57:00

3.15 11N40_54 ANT 1



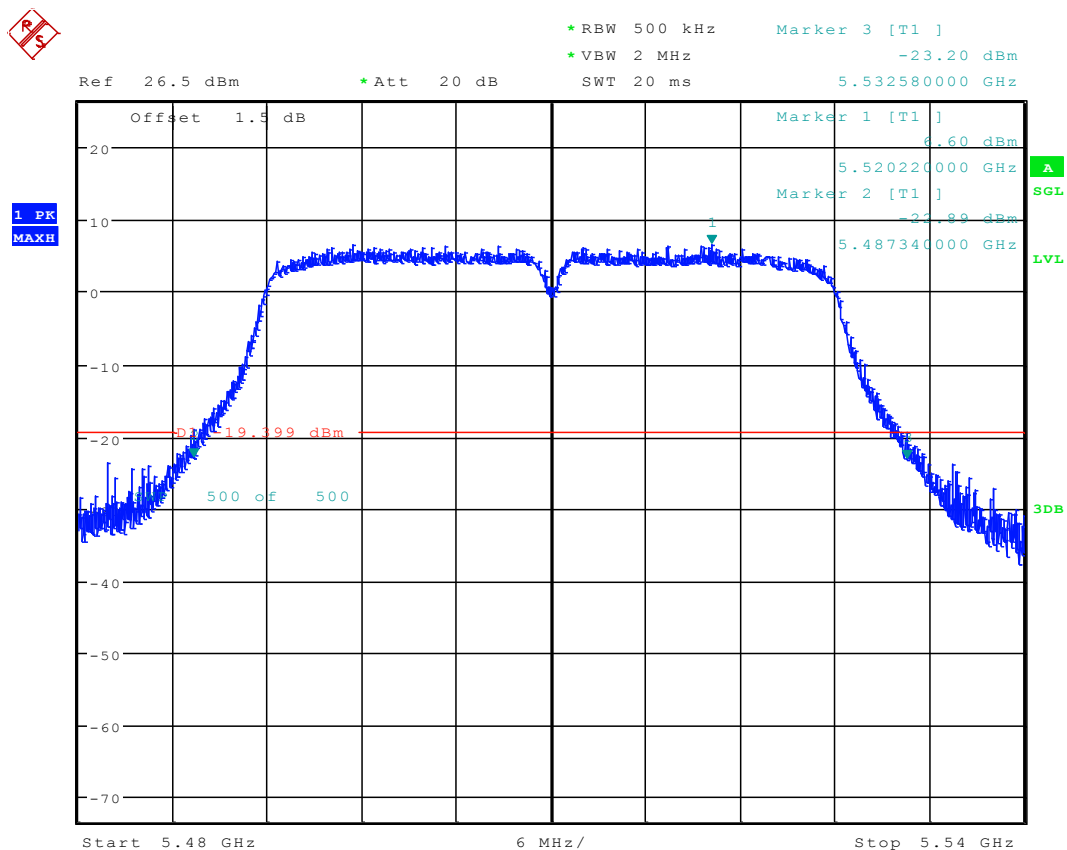
Date: 14.MAY.2017 16:02:05

3.16 11N40_62 ANT 1



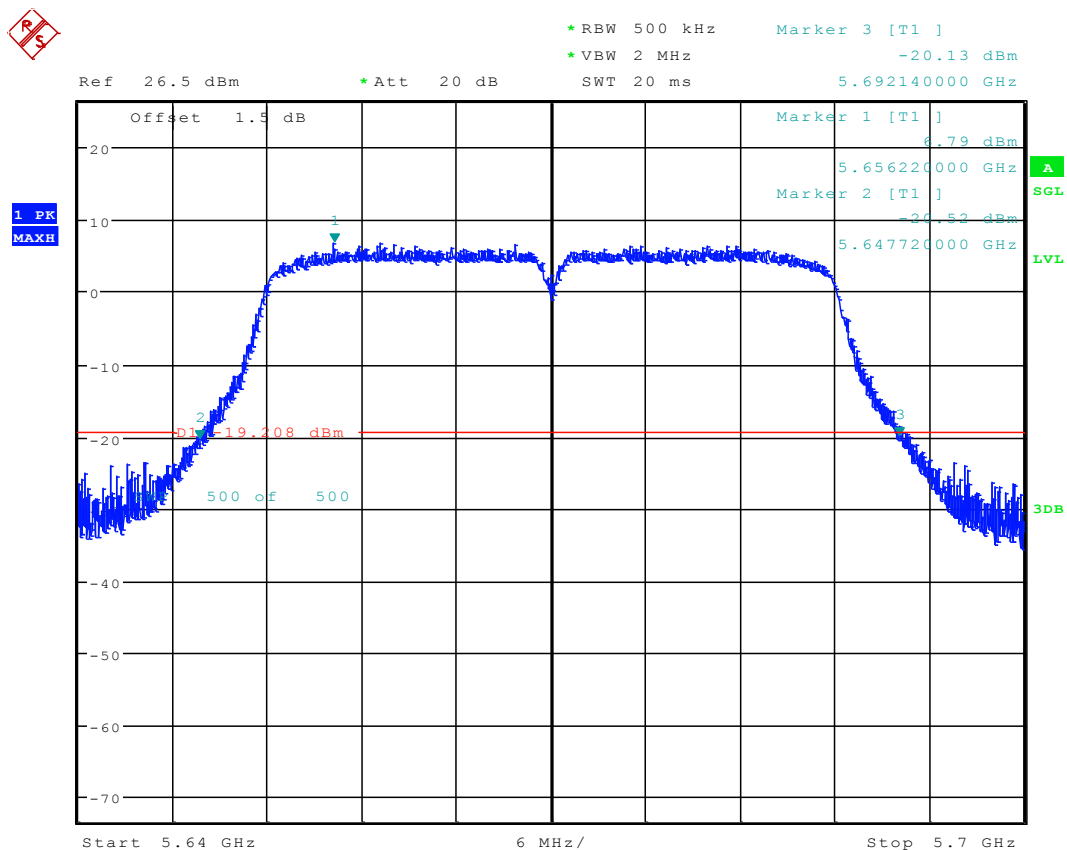
Date: 14.MAY.2017 16:07:37

3.17 11N40_102 ANT 1



Date: 14.MAY.2017 16:13:11

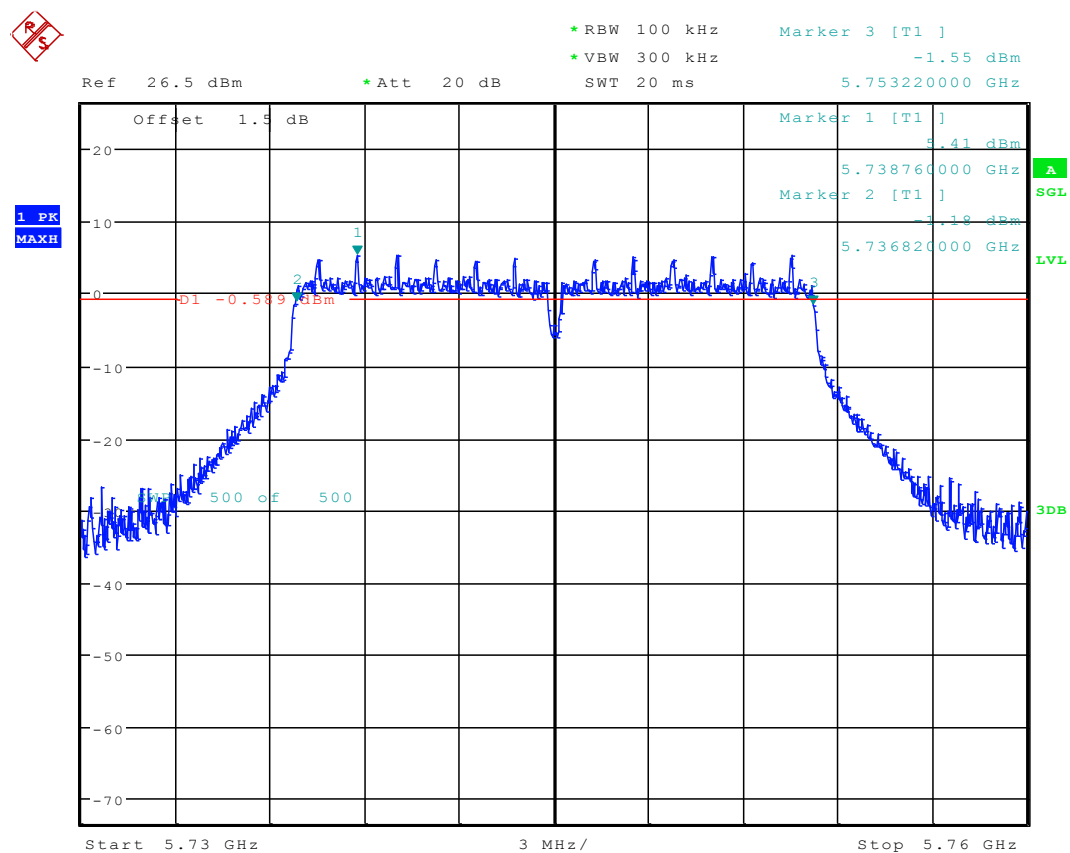
3.18 11N40_134 ANT 1



Date: 14.MAY.2017 16:20:43

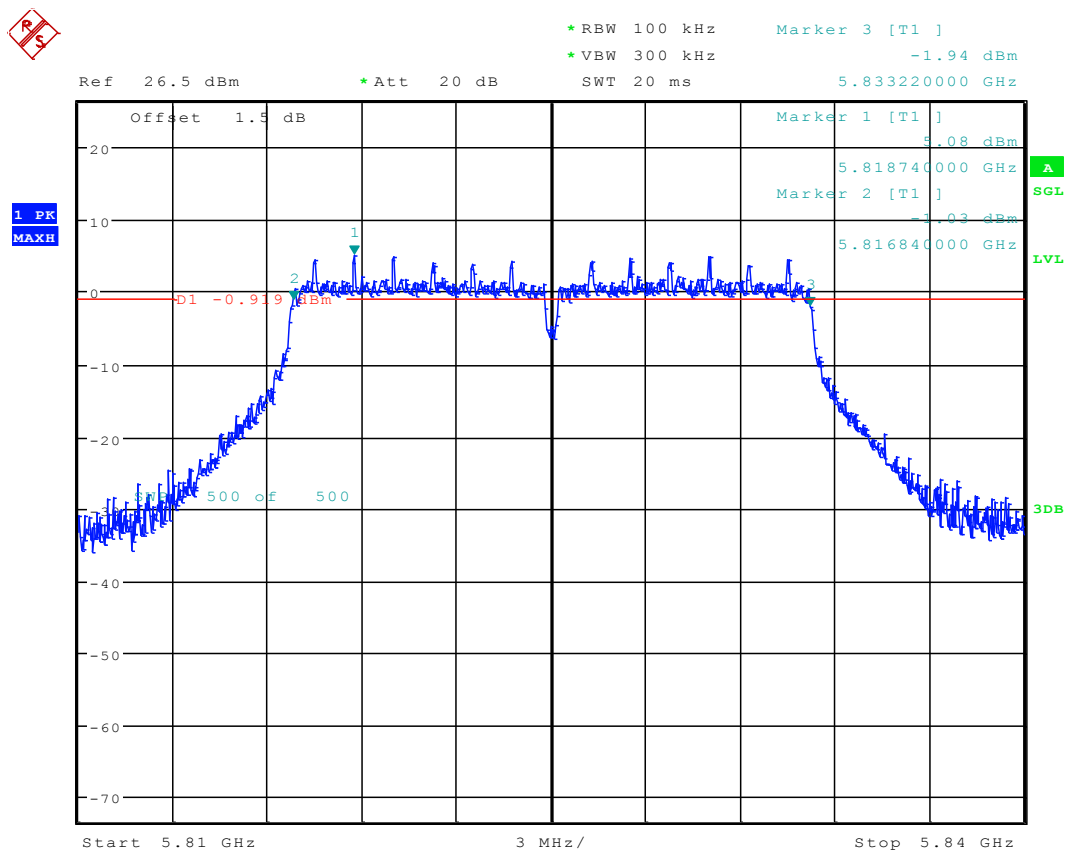
4 Test Plot for 6dB Emission Bandwidth

4.1 11A20_149 ANT 1



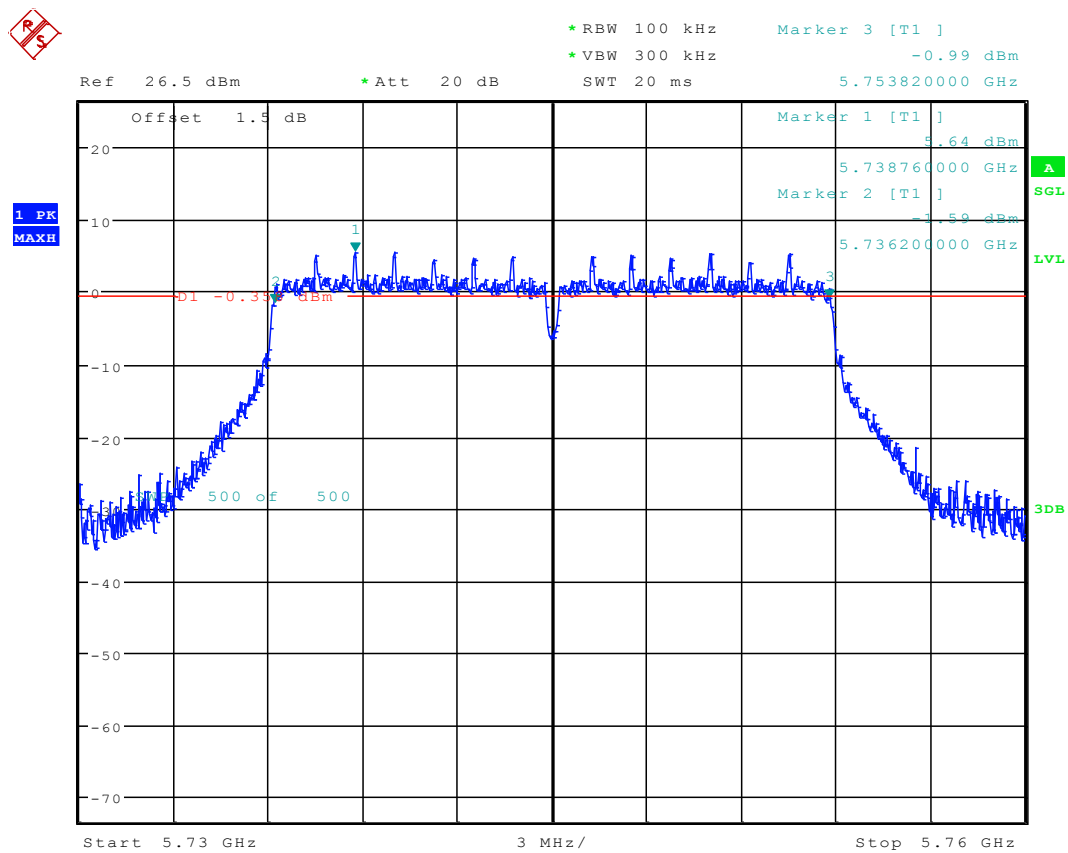
Date: 14.MAY.2017 13:32:42

4.2 11A20_165 ANT 1



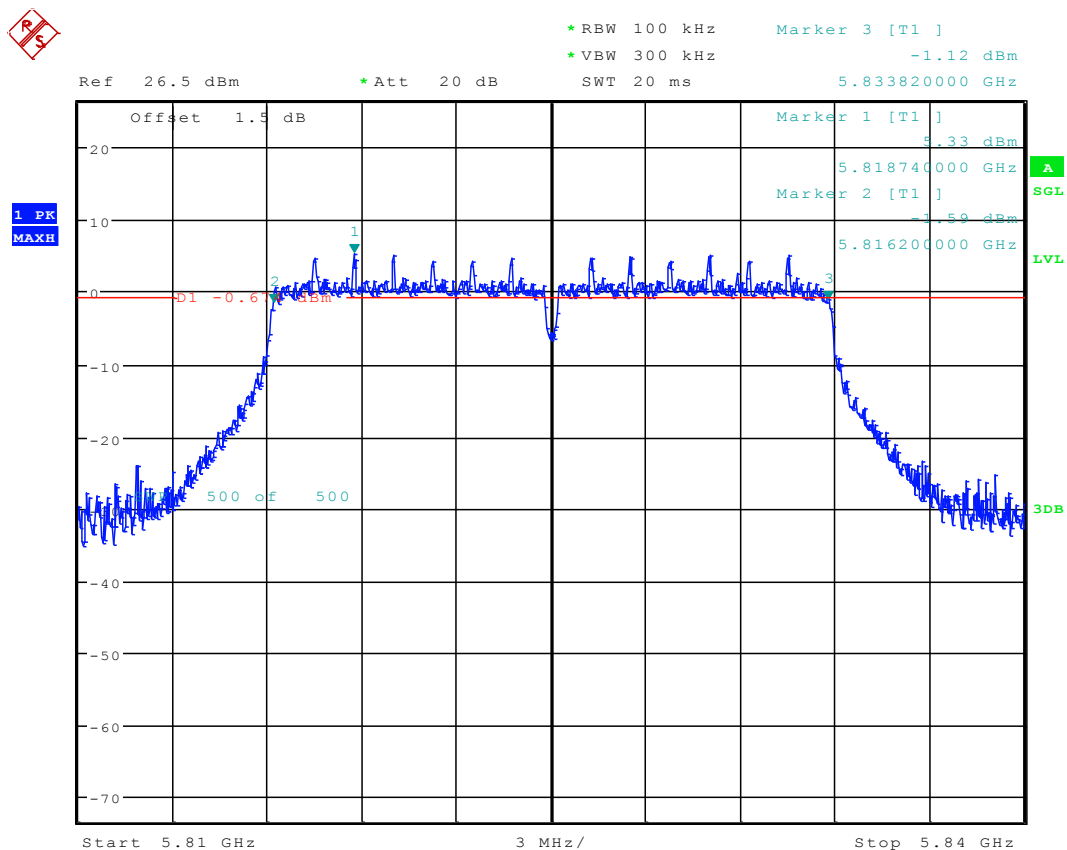
Date: 14.MAY.2017 13:38:44

4.3 11N20_149 ANT 1



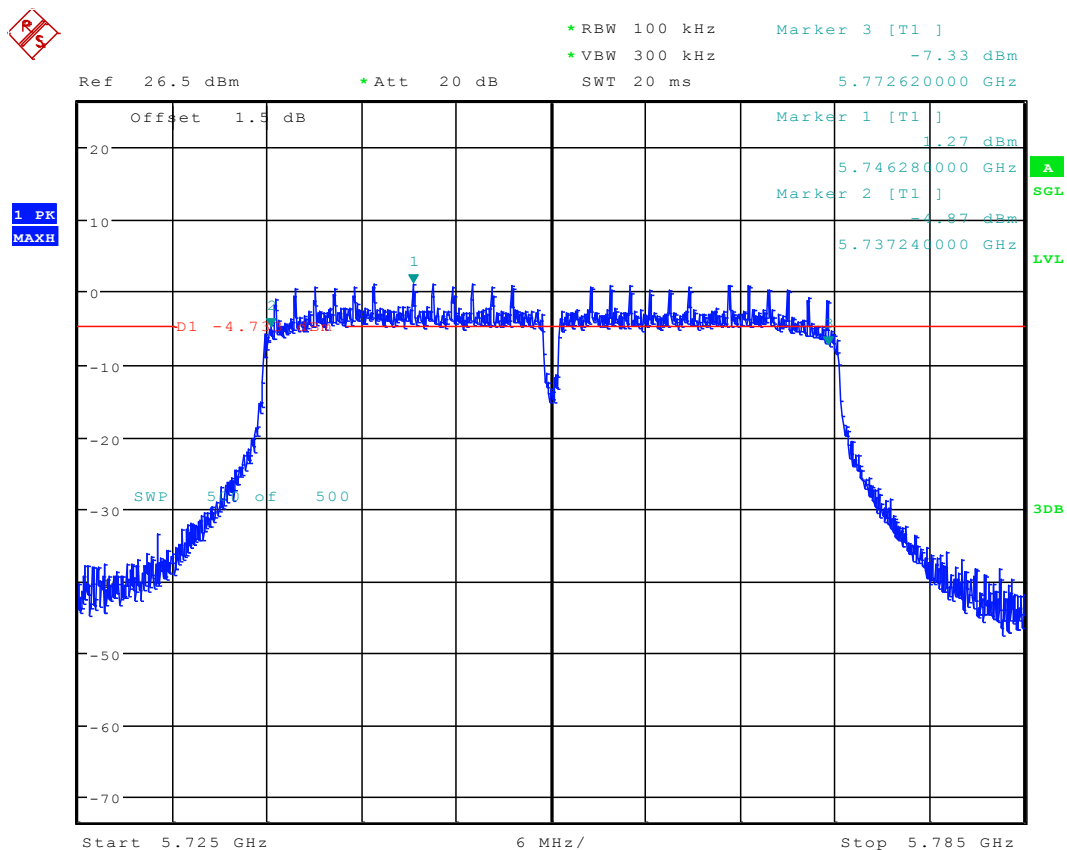
Date: 14.MAY.2017 14:42:50

4.4 11N20_165 ANT 1



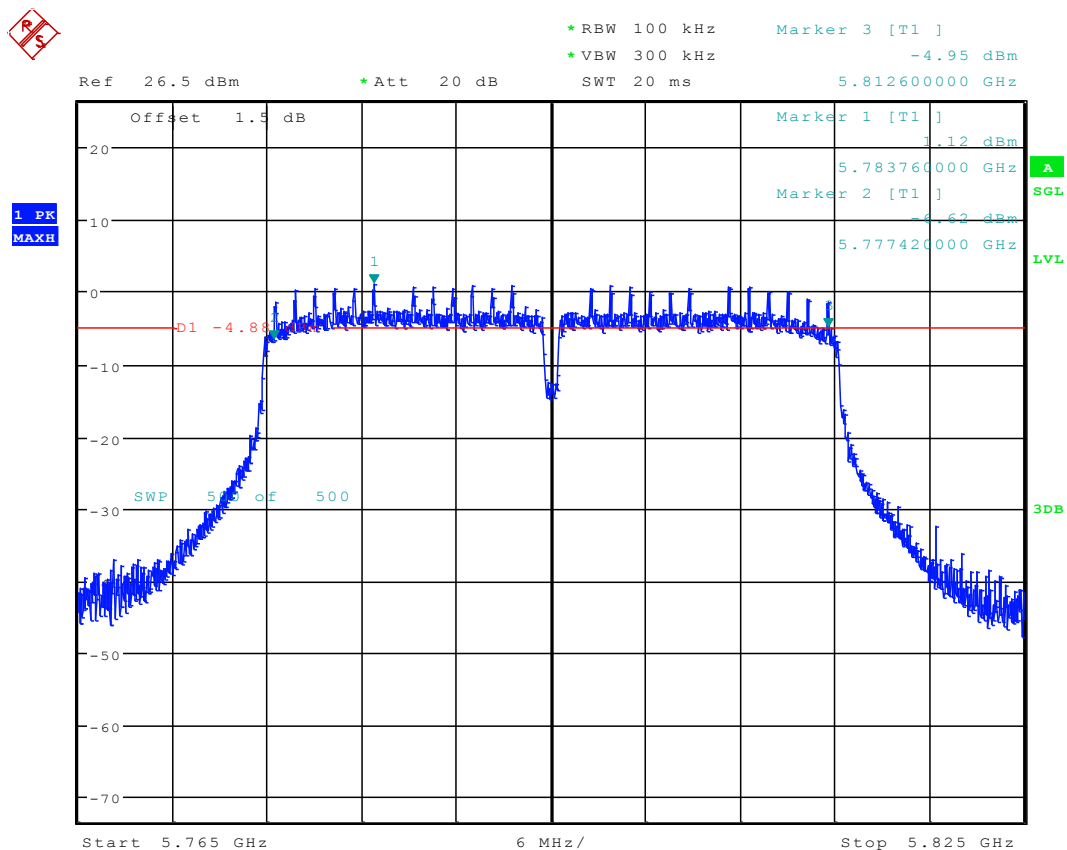
Date: 14.MAY.2017 14:48:48

4.5 11N40_151 ANT 1



Date: 14.MAY.2017 16:25:59

4.6 11N40_159 ANT 1



Date: 14.MAY.2017 16:32:07



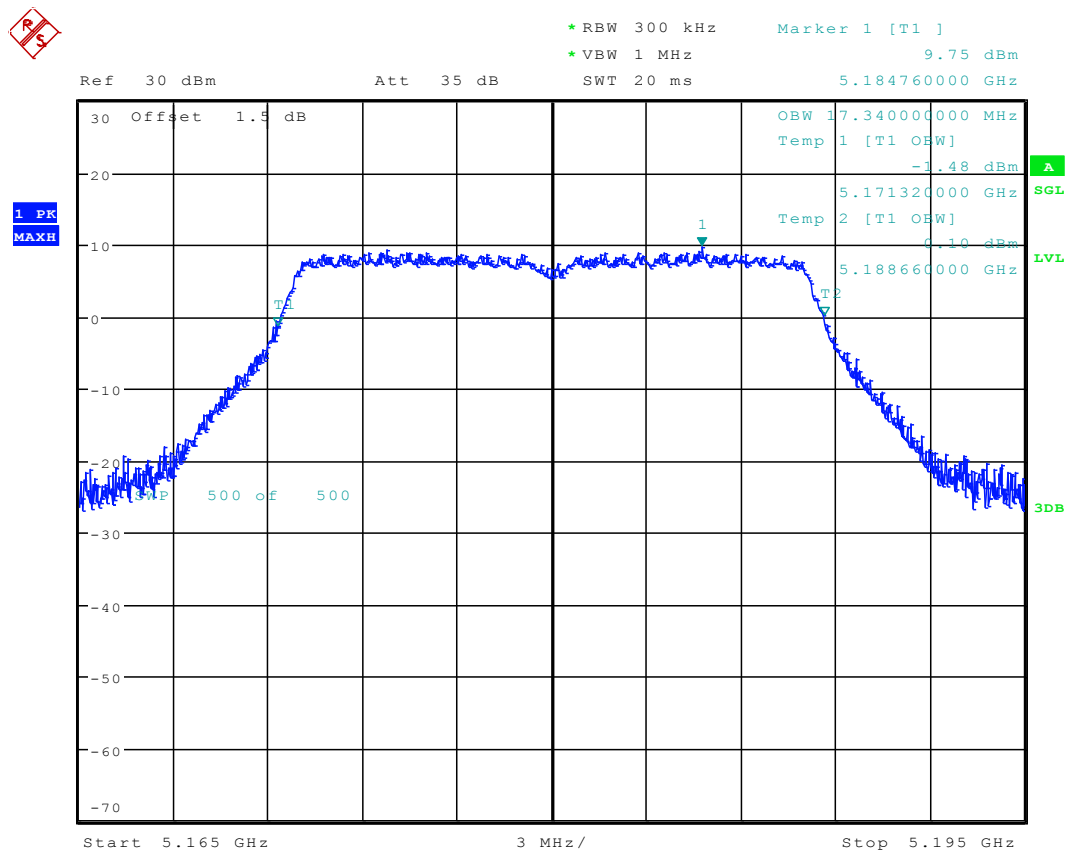
Appendix B Occupied Bandwidth (OBW)

5 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Occupied Bandwidth [MHz]	Verdict
11A20	36	5180	ANT 1	17.34	PASS
	48	5240	ANT 1	17.38	PASS
	52	5260	ANT 1	17.34	PASS
	64	5320	ANT 1	17.38	PASS
	100	5500	ANT 1	17.36	PASS
	140	5700	ANT 1	17.4	PASS
	149	5745	ANT 1	17.38	PASS
	165	5825	ANT 1	17.36	PASS
11N20	36	5180	ANT 1	18.3	PASS
	48	5240	ANT 1	18.3	PASS
	52	5260	ANT 1	18.28	PASS
	64	5320	ANT 1	18.32	PASS
	100	5500	ANT 1	18.3	PASS
	140	5700	ANT 1	18.32	PASS
	149	5745	ANT 1	18.32	PASS
	165	5825	ANT 1	18.32	PASS
11N40	38	5190	ANT 1	36.36	PASS
	46	5230	ANT 1	36.42	PASS
	54	5270	ANT 1	36.42	PASS
	62	5310	ANT 1	36.4	PASS
	102	5510	ANT 1	36.42	PASS
	134	5670	ANT 1	36.38	PASS
	151	5755	ANT 1	36.42	PASS
	159	5795	ANT 1	36.42	PASS

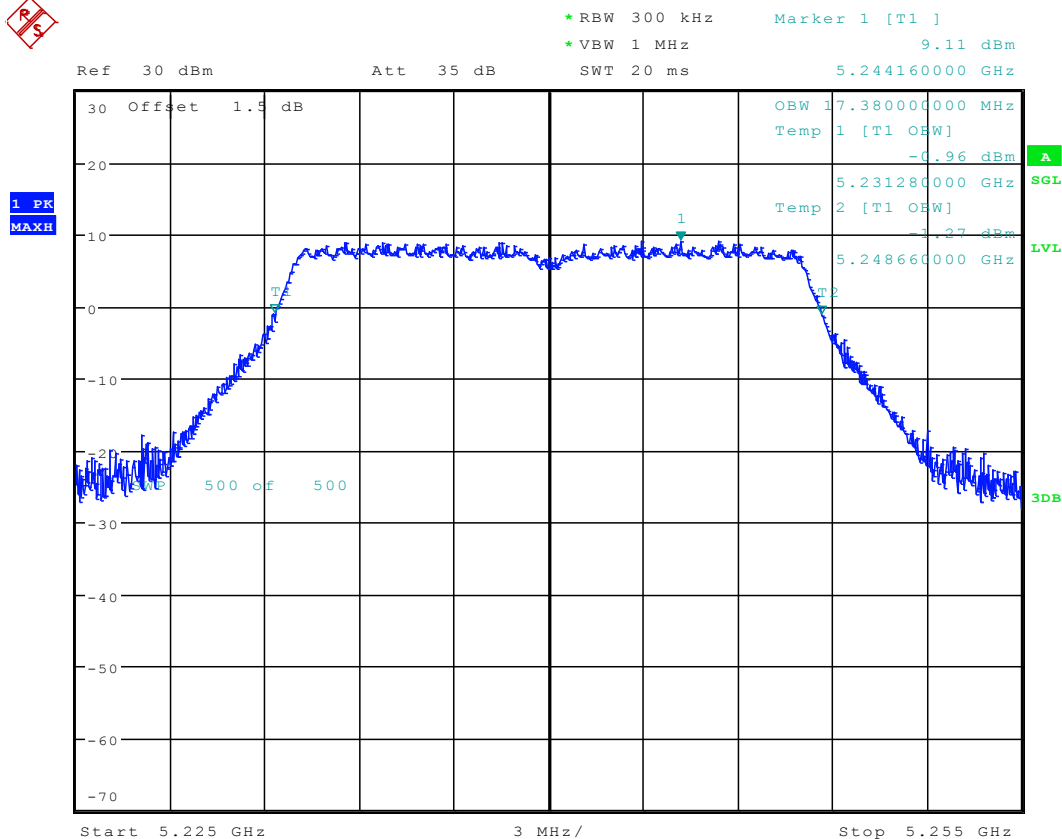
6 Test Plot

6.1 11A20_36 ANT 1



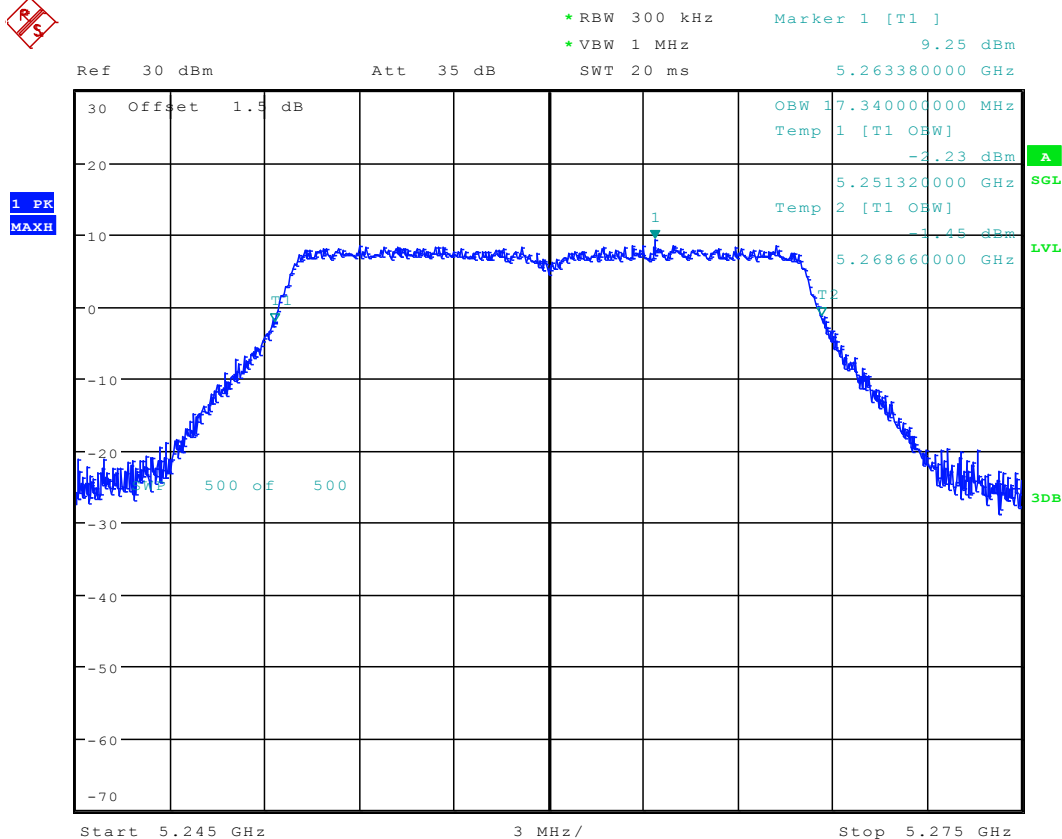
Date: 14.MAY.2017 12:57:46

6.2 11A20_48 ANT 1



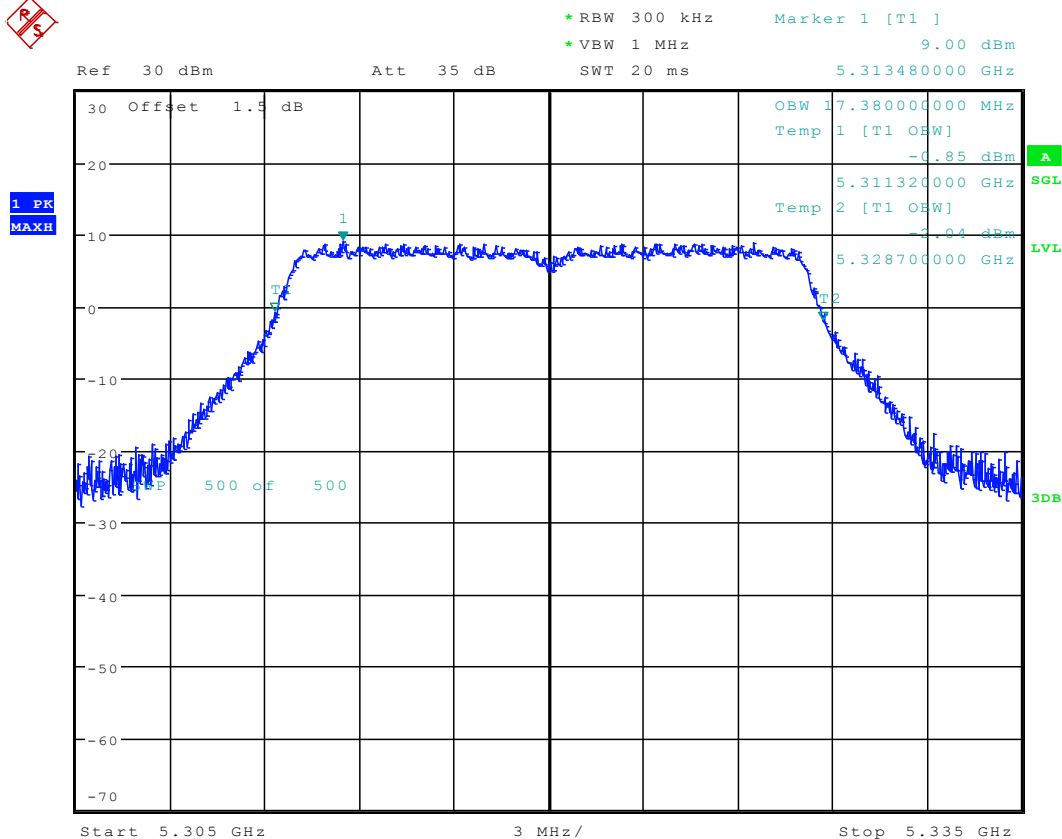
Date: 14.MAY.2017 13:05:18

6.3 11A20_52 ANT 1



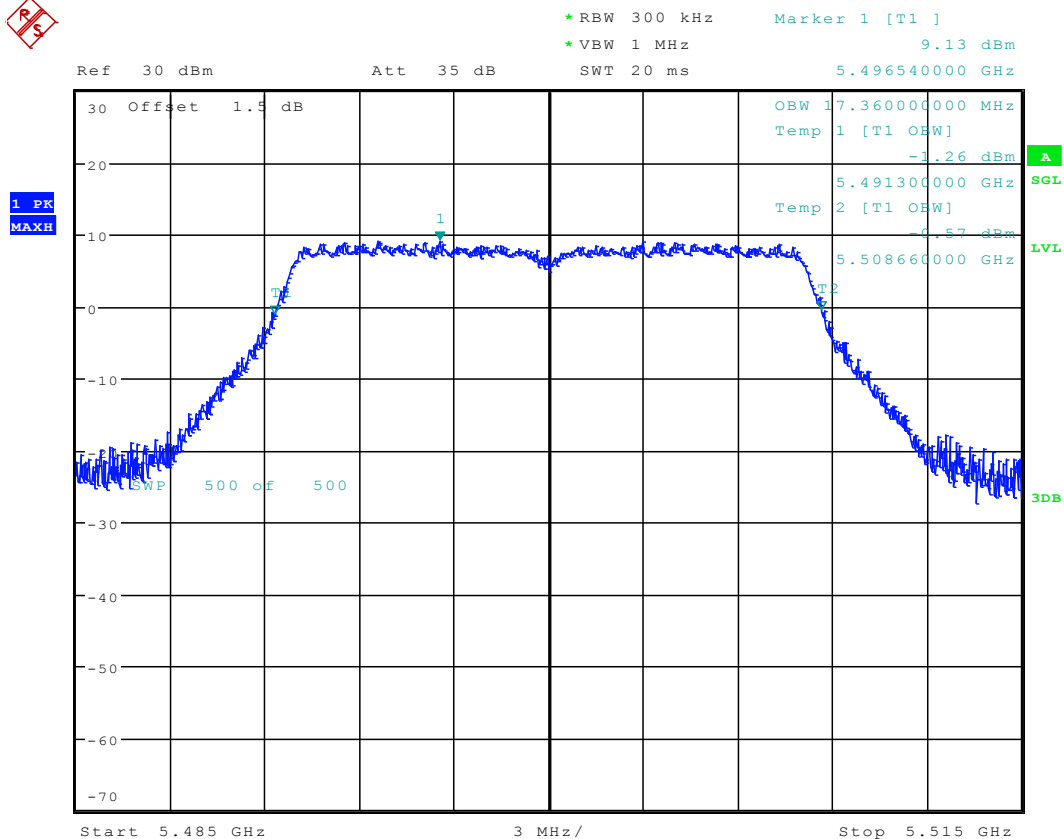
Date: 14.MAY.2017 13:10:50

6.4 11A20_64 ANT 1



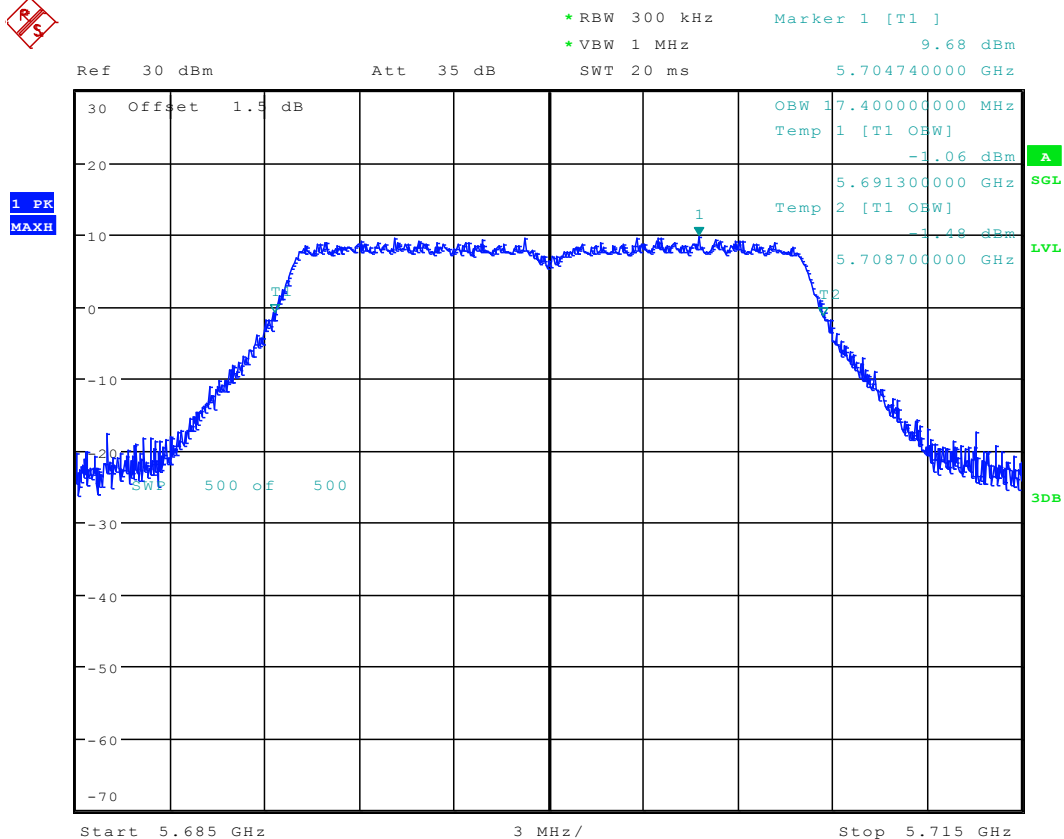
Date: 14.MAY.2017 13:16:42

6.5 11A20_100 ANT 1



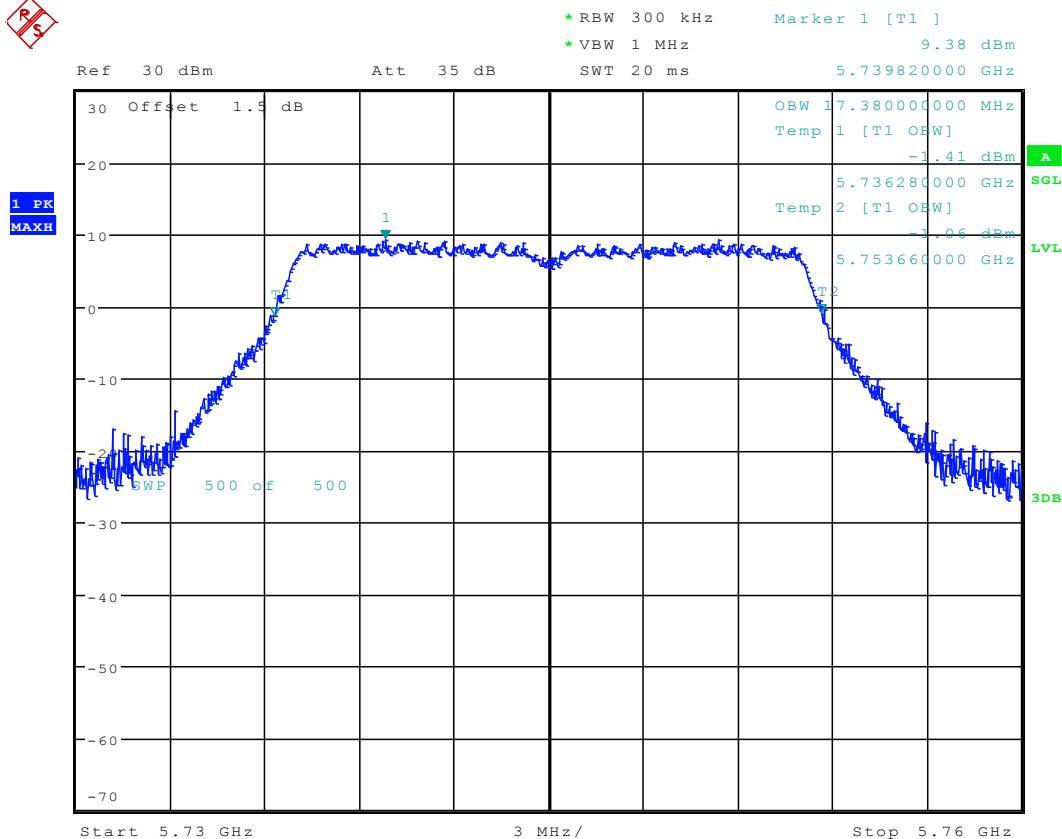
Date: 14.MAY.2017 13:22:40

6.6 11A20_140 ANT 1



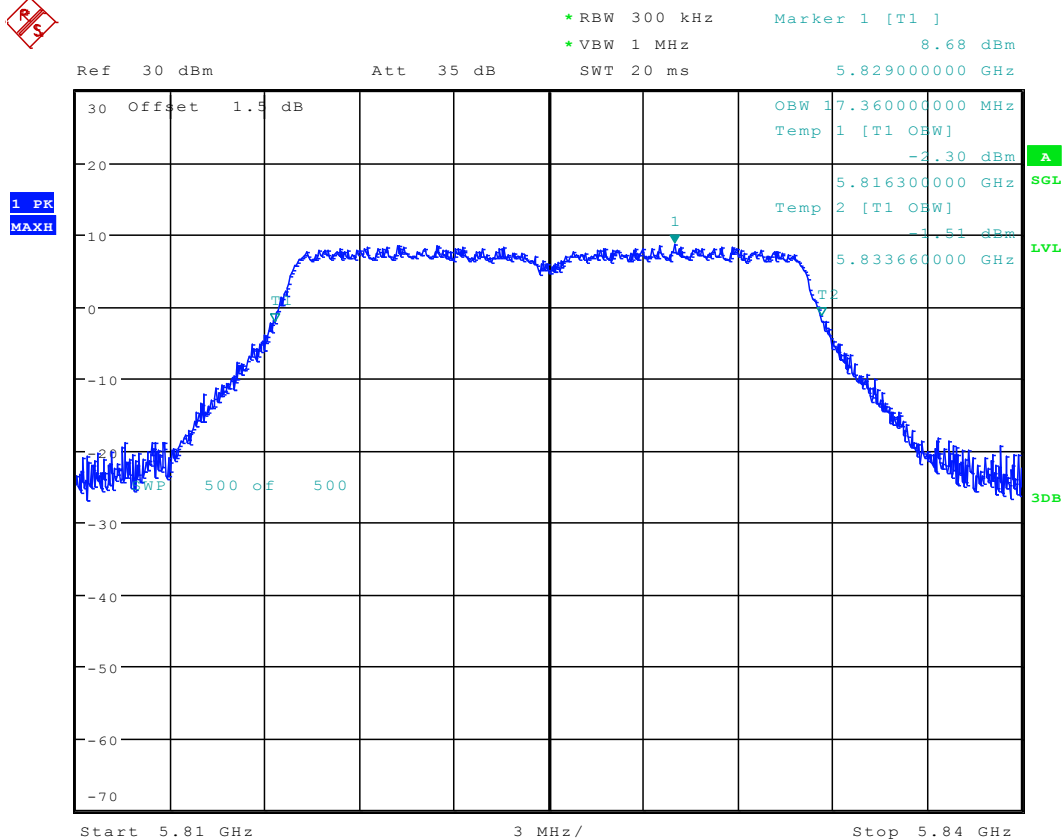
Date: 14.MAY.2017 13:28:03

6.7 11A20_149 ANT 1



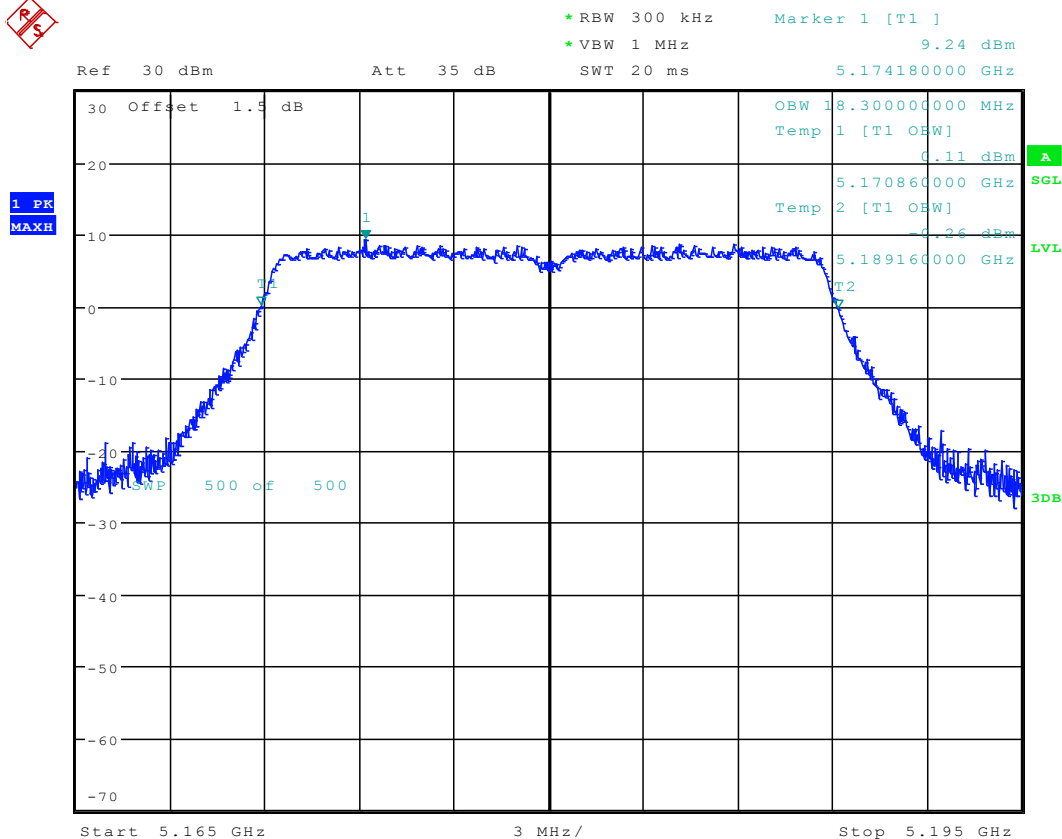
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6.8 11A20_165 ANT 1



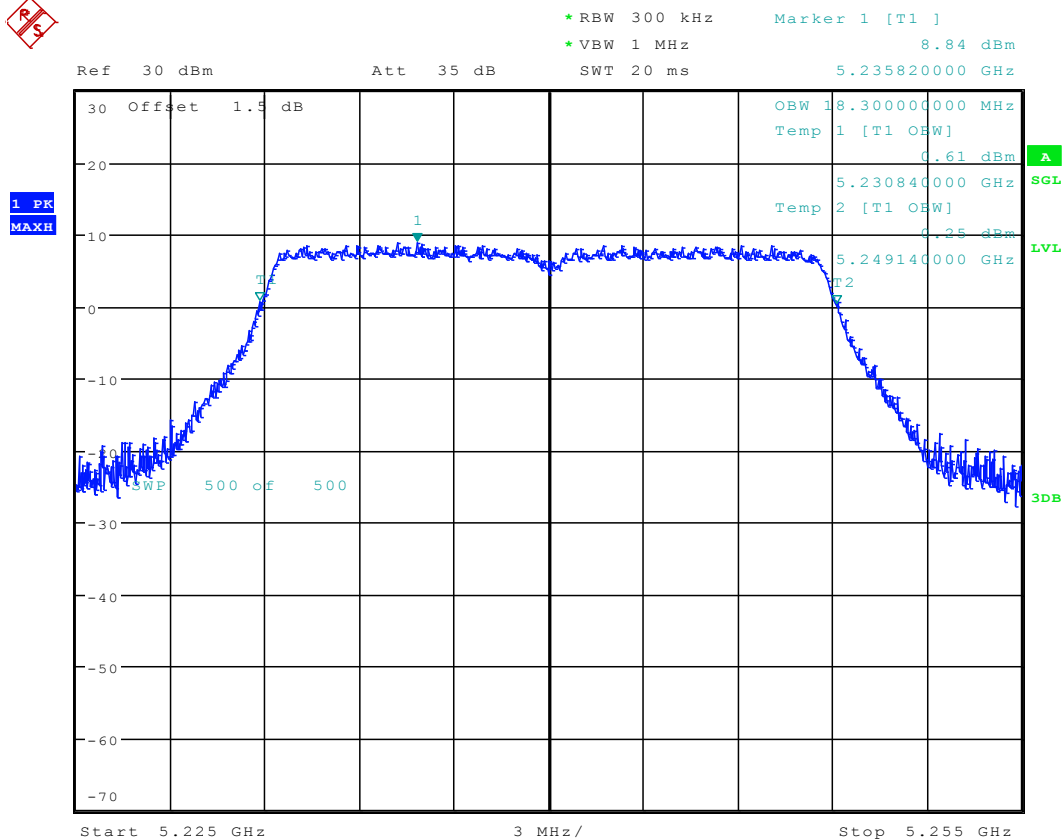
Date: 14.MAY.2017 13:39:33

6.9 11N20_36 ANT 1



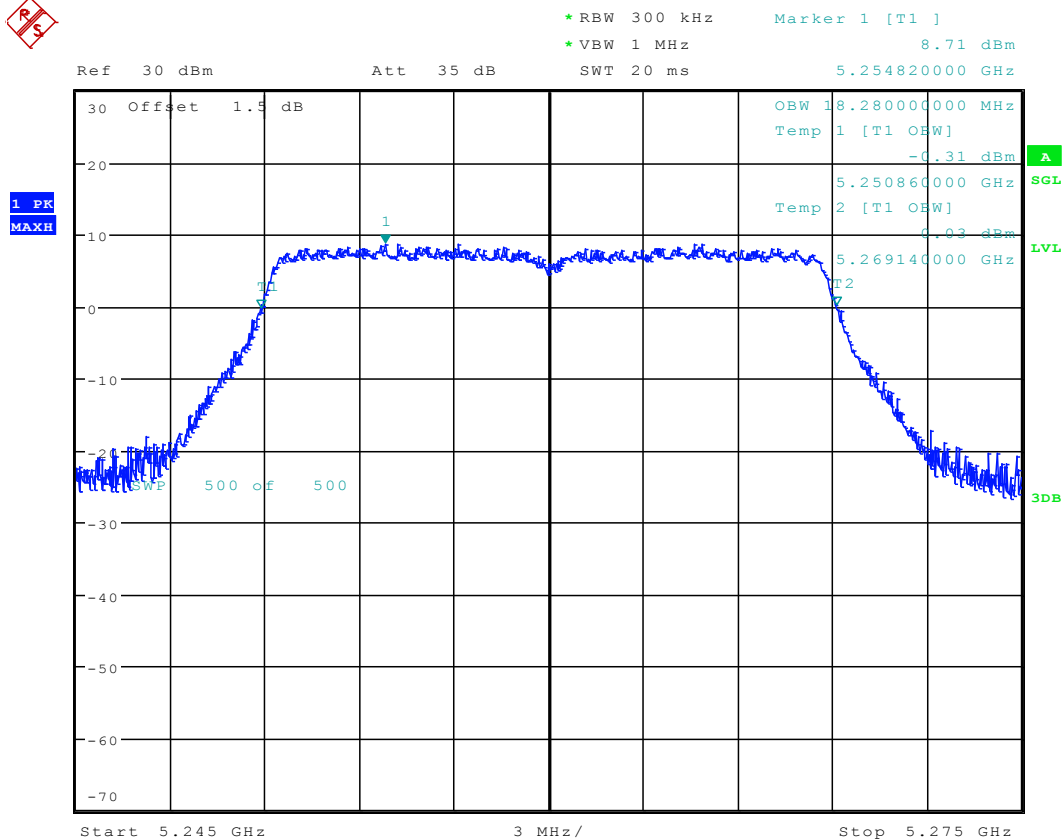
Date: 14.MAY.2017 13:47:40

6.10 11N20_48 ANT 1



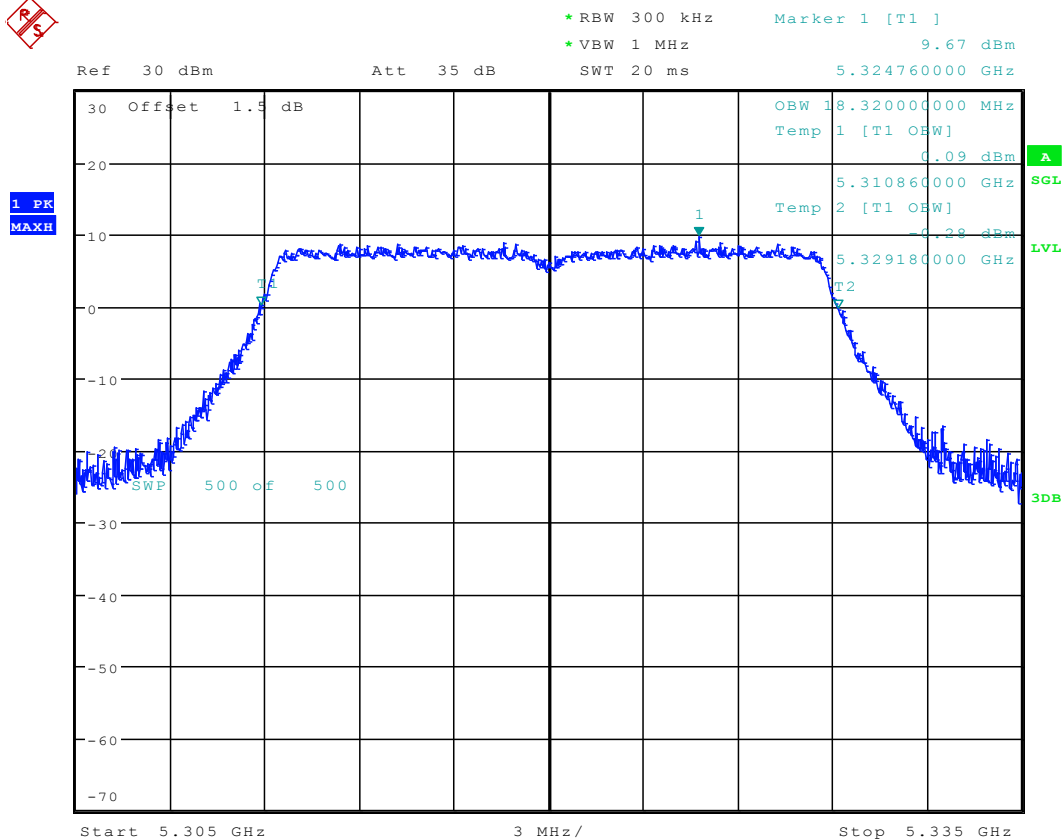
Date: 14.MAY.2017 13:52:41

6.11 11N20_52 ANT 1



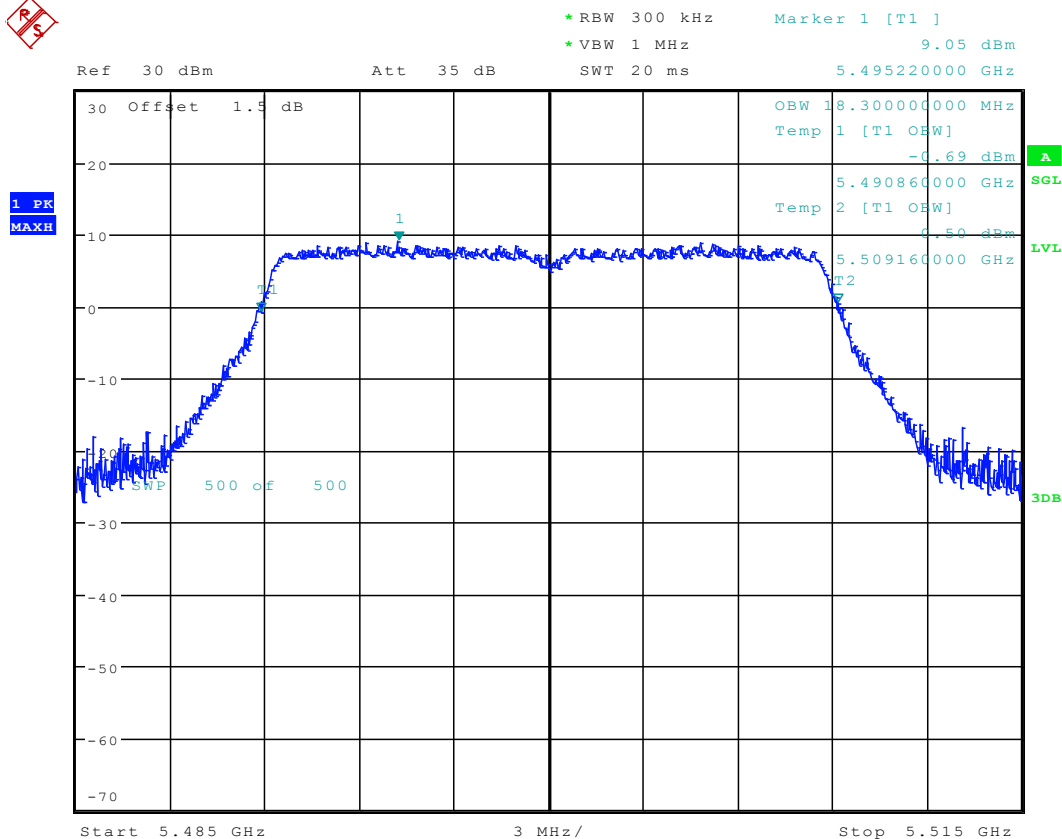
Date: 14.MAY.2017 14:23:05

6.12 11N20_64 ANT 1



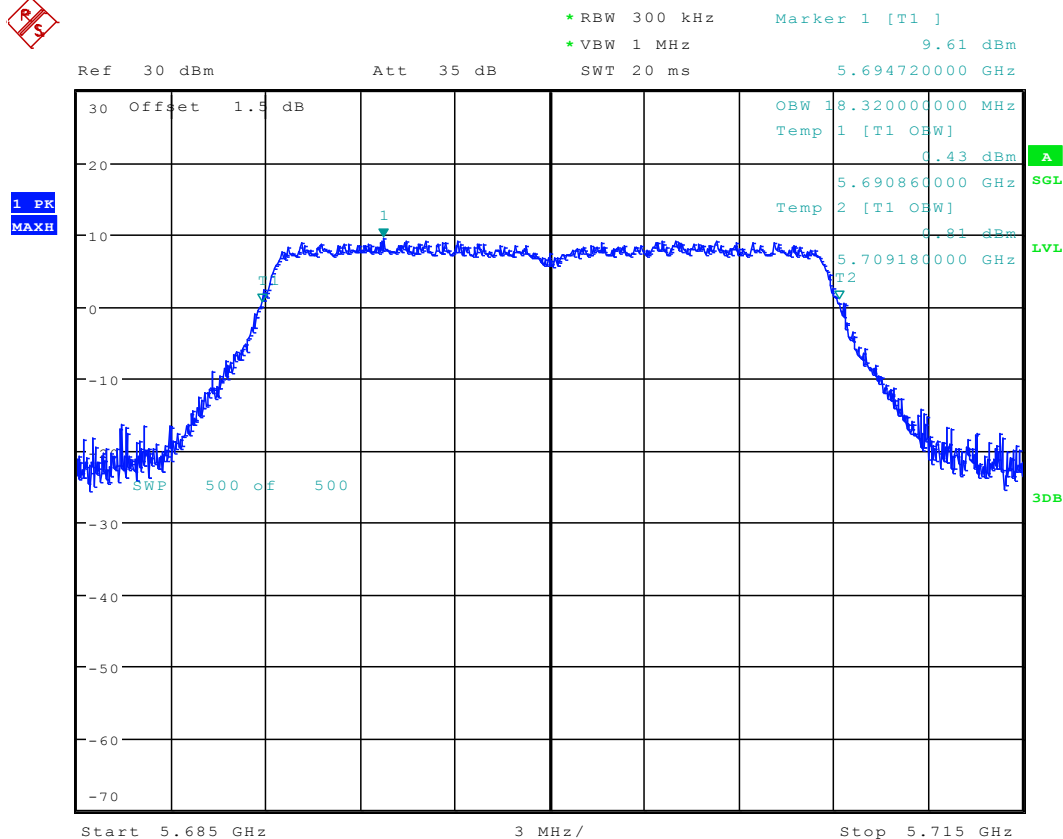
Date: 14.MAY.2017 14:27:56

6.13 11N20_100 ANT 1



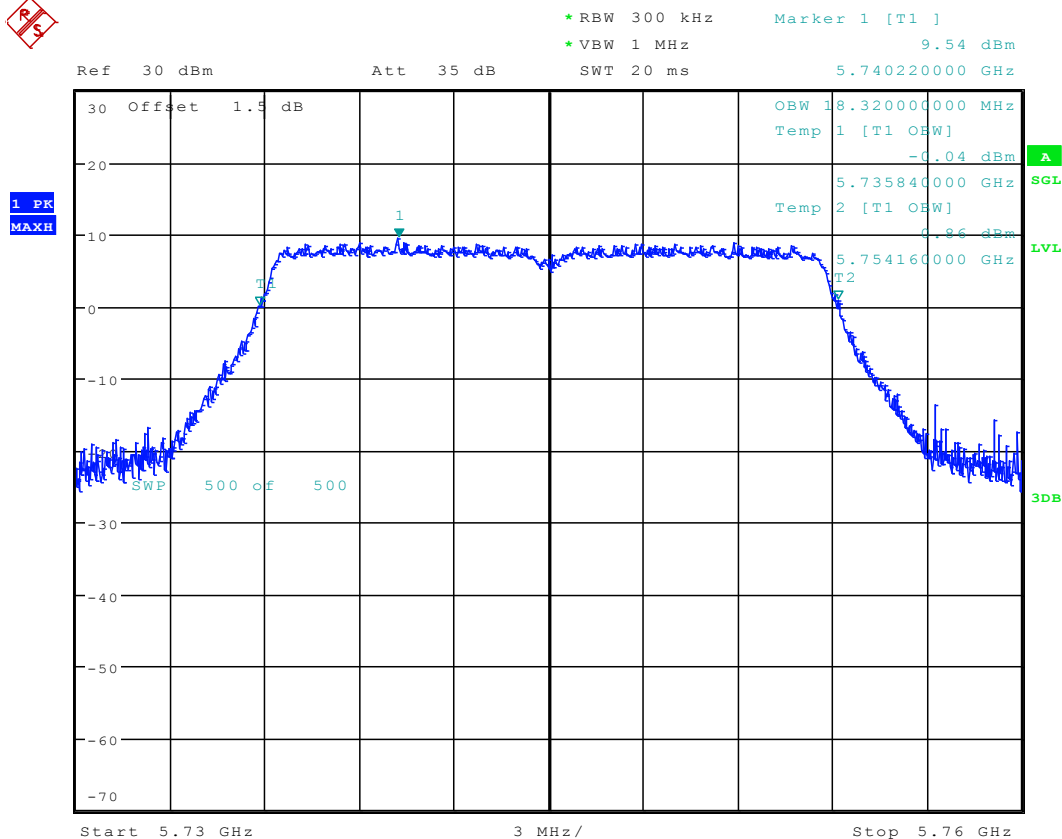
Date: 14.MAY.2017 14:33:03

6.14 11N20_140 ANT 1



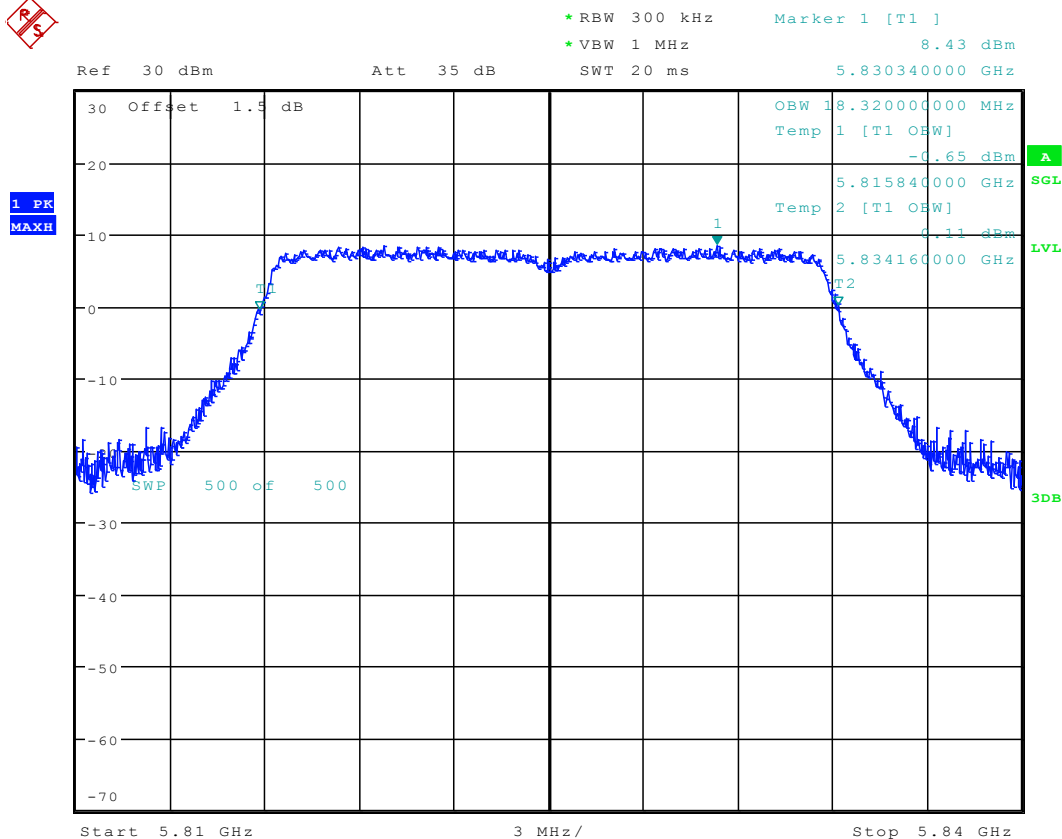
Date: 14.MAY.2017 14:38:14

6.15 11N20_149 ANT 1



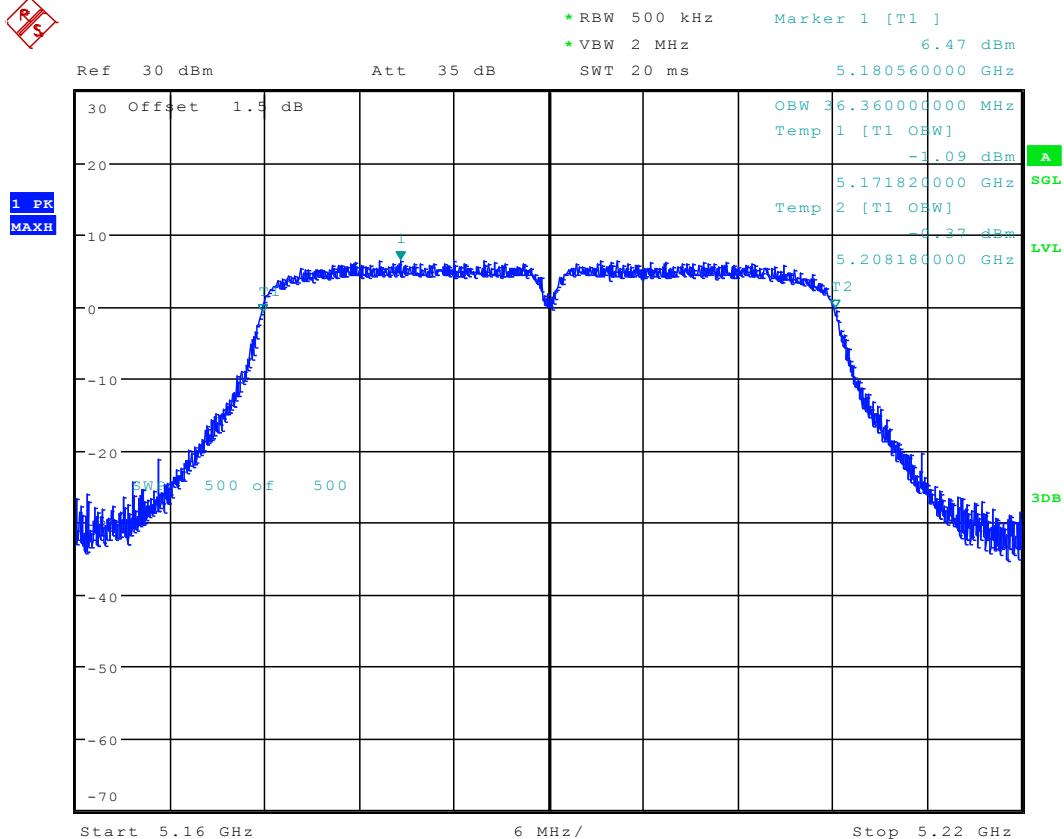
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6.16 11N20_165 ANT 1



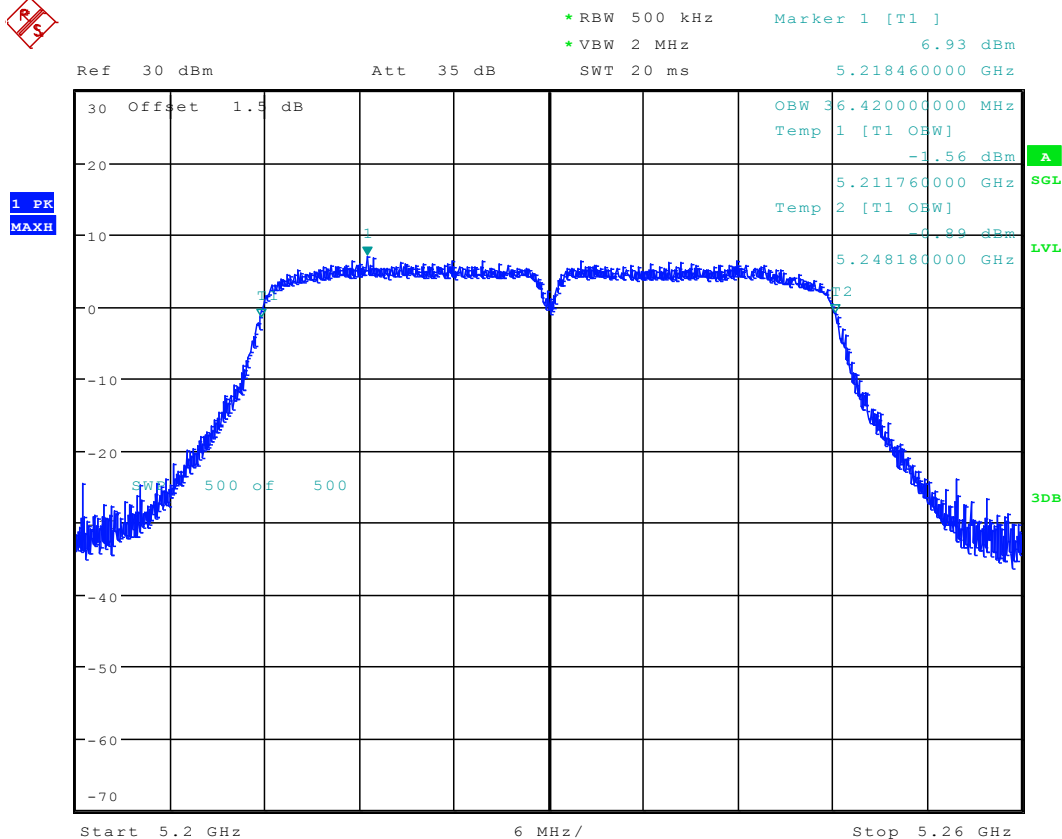
Date: 14.MAY.2017 14:49:35

6.17 11N40_38 ANT 1



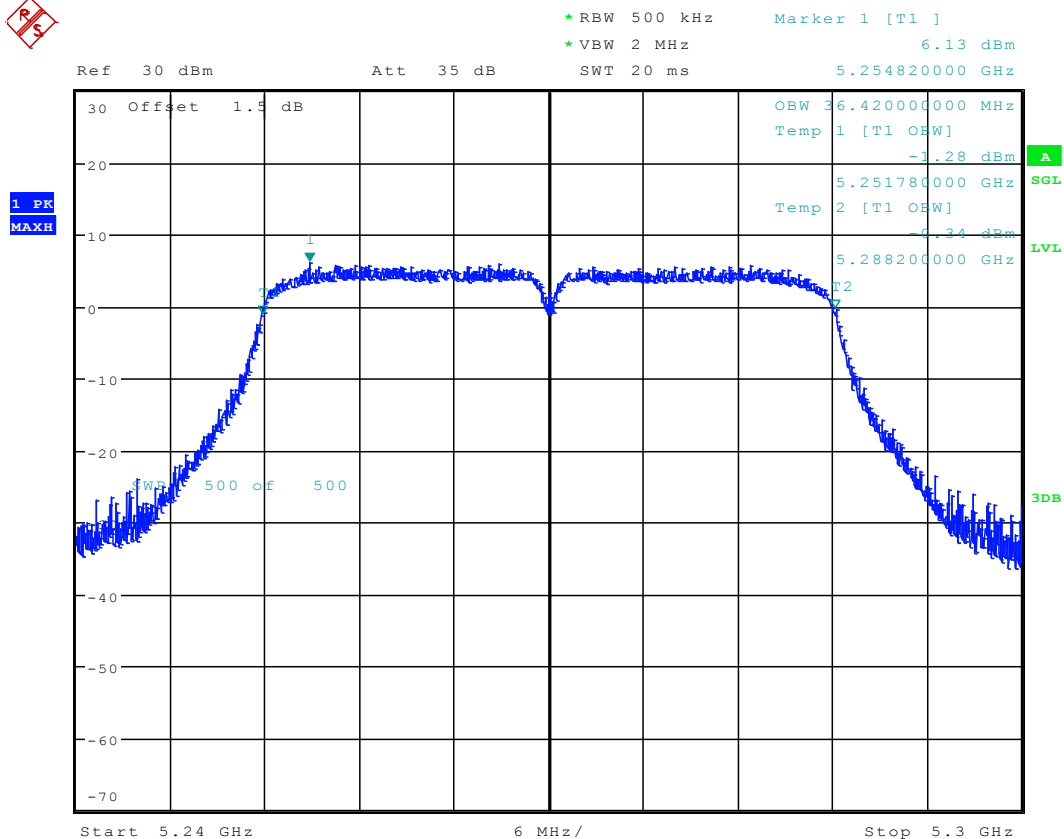
Date: 14.MAY.2017 15:52:43

6.18 11N40_46 ANT 1



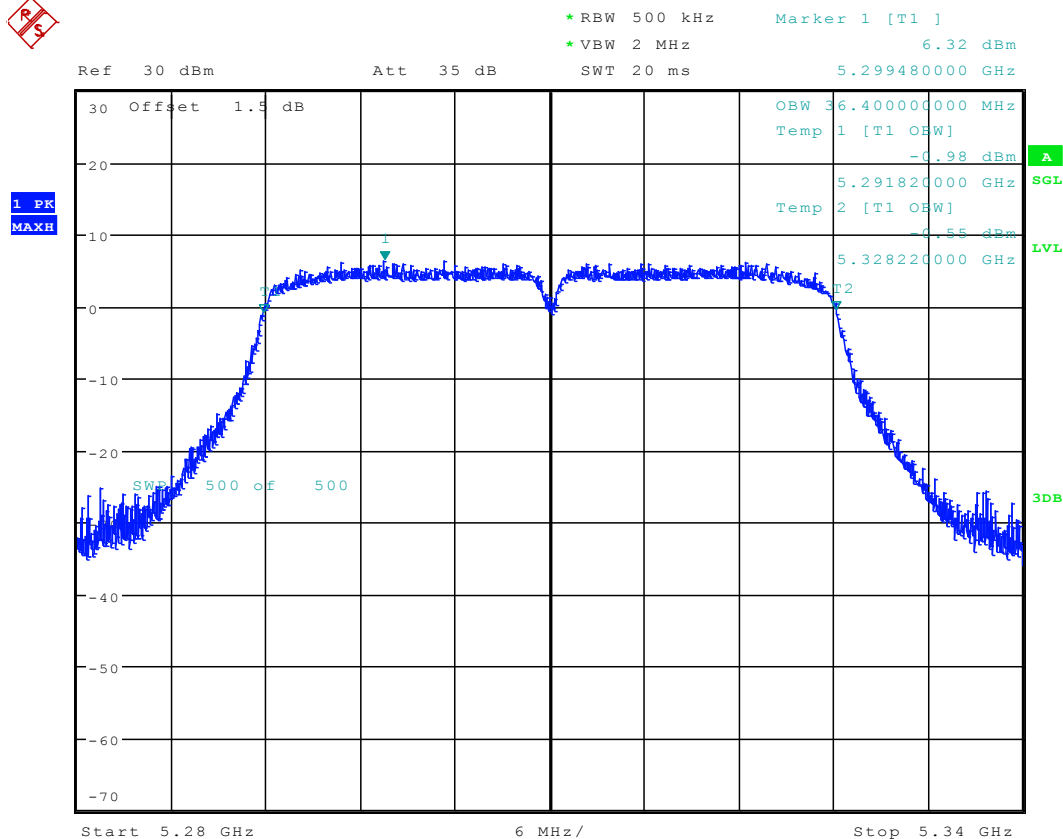
Date: 14.MAY.2017 15:57:51

6.19 11N40_54 ANT 1



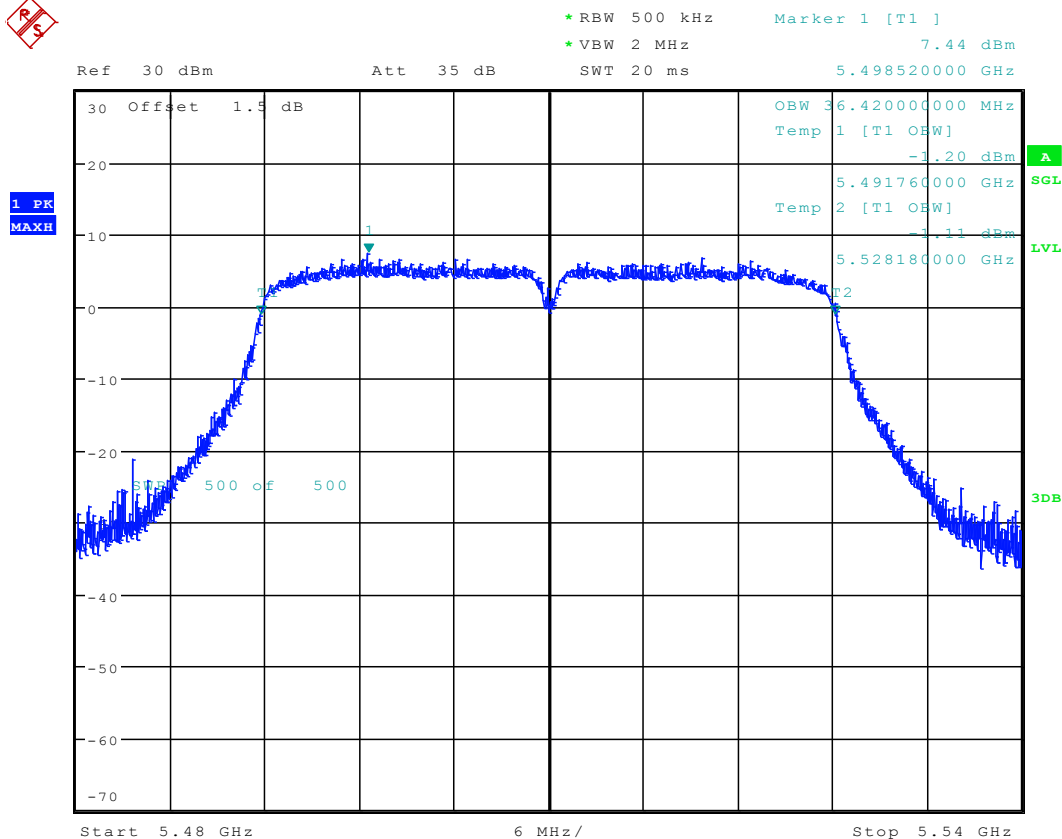
Date: 14.MAY.2017 16:02:54

6.20 11N40_62 ANT 1



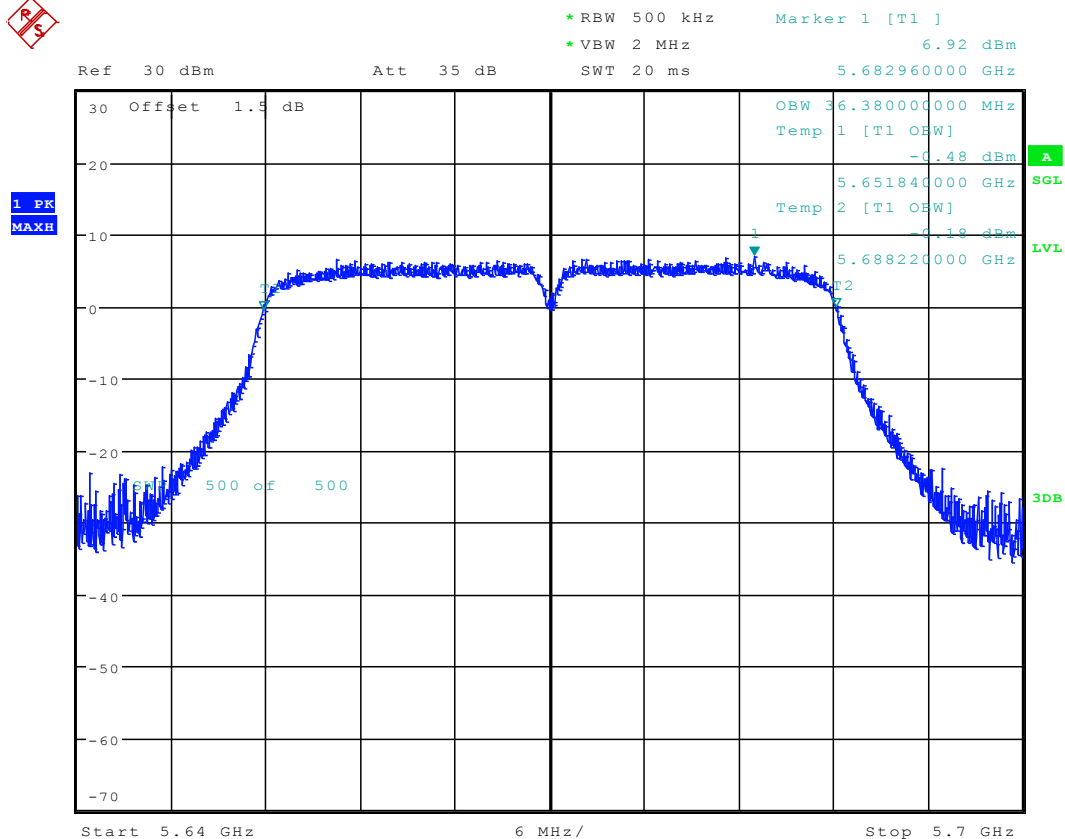
Date: 14.MAY.2017 16:08:26

6.21 11N40_102 ANT 1



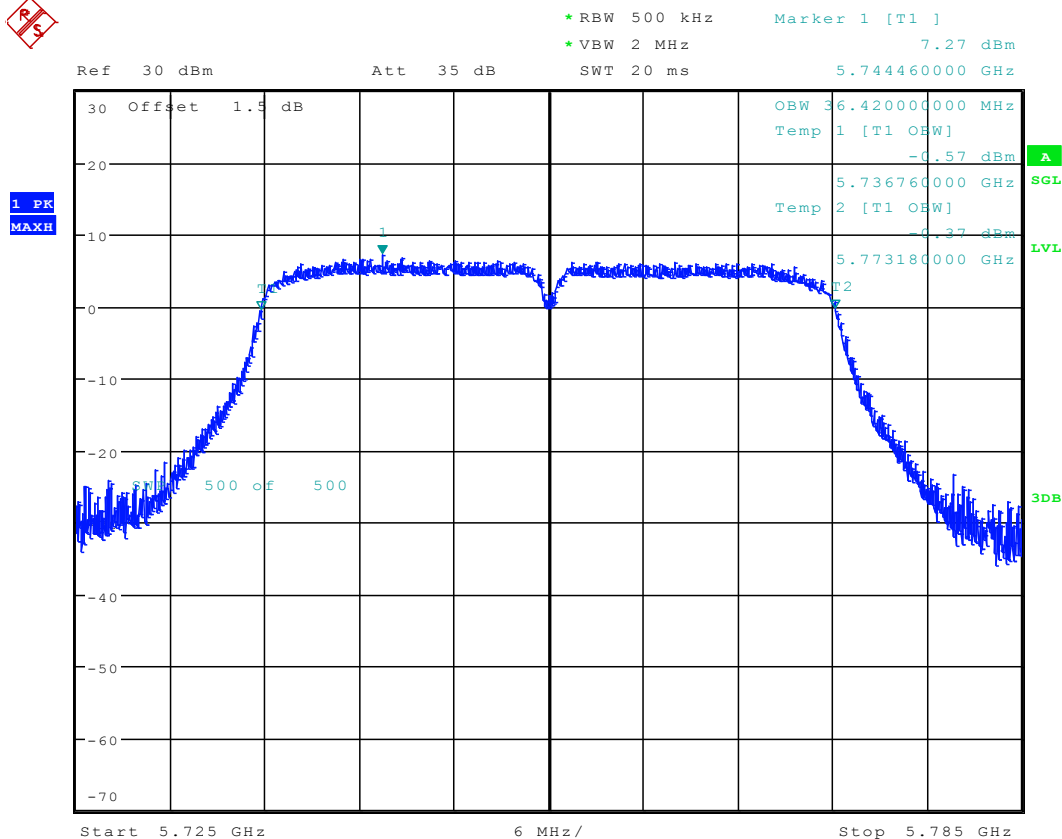
Date: 14.MAY.2017 16:14:00

6.22 11N40_134 ANT 1



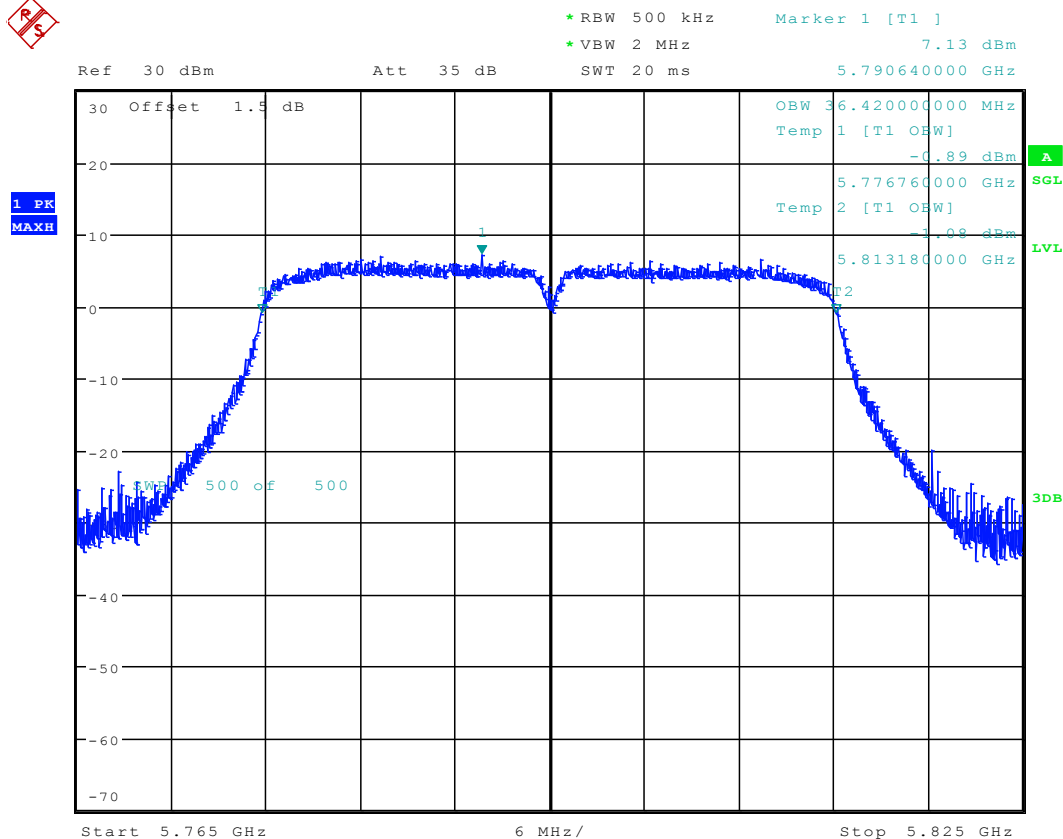
Date: 14.MAY.2017 16:21:32

6.23 11N40_151 ANT 1



Date: 14.MAY.2017 16:26:51

6.24 11N40_159 ANT 1



Date: 14.MAY.2017 16:32:59

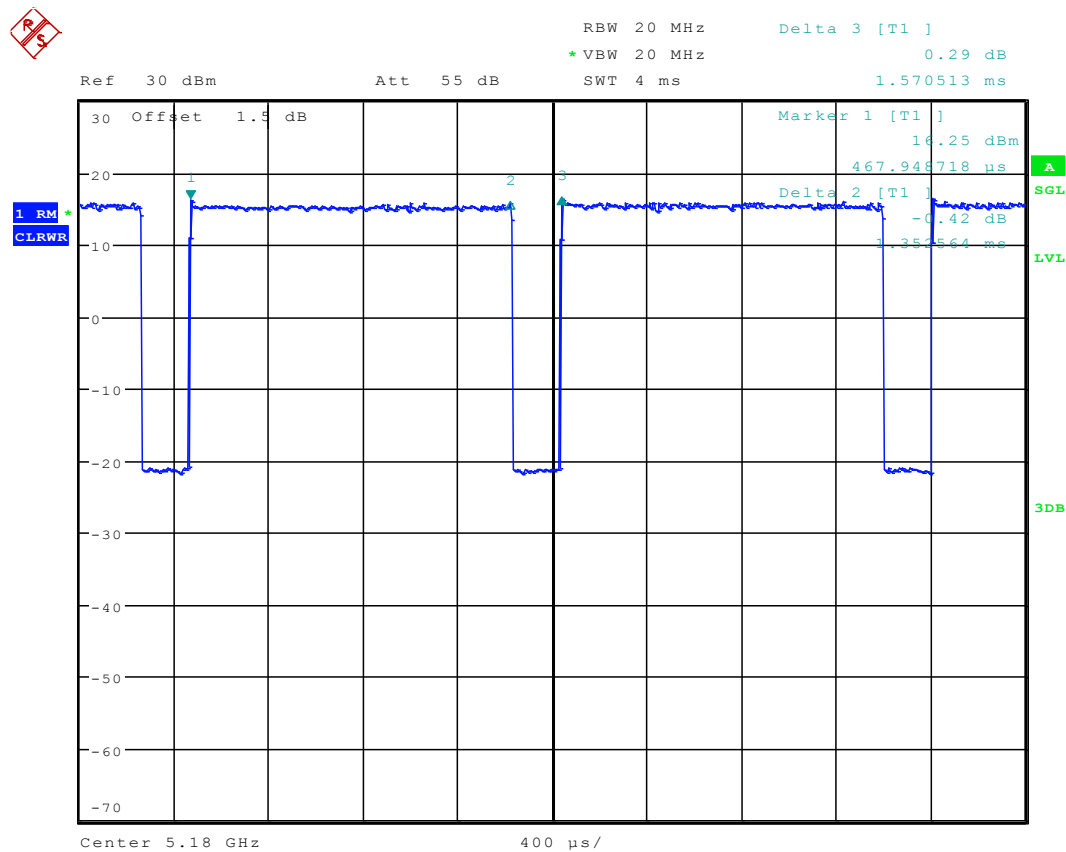
Appendix C: Duty Cycle

7 Part I - Test Results

Test Mode	Antenna Port	Duty cycle [%]
11A20	ANT 1	86.1
11N20	ANT 1	85.4
11N40	ANT 1	75.6

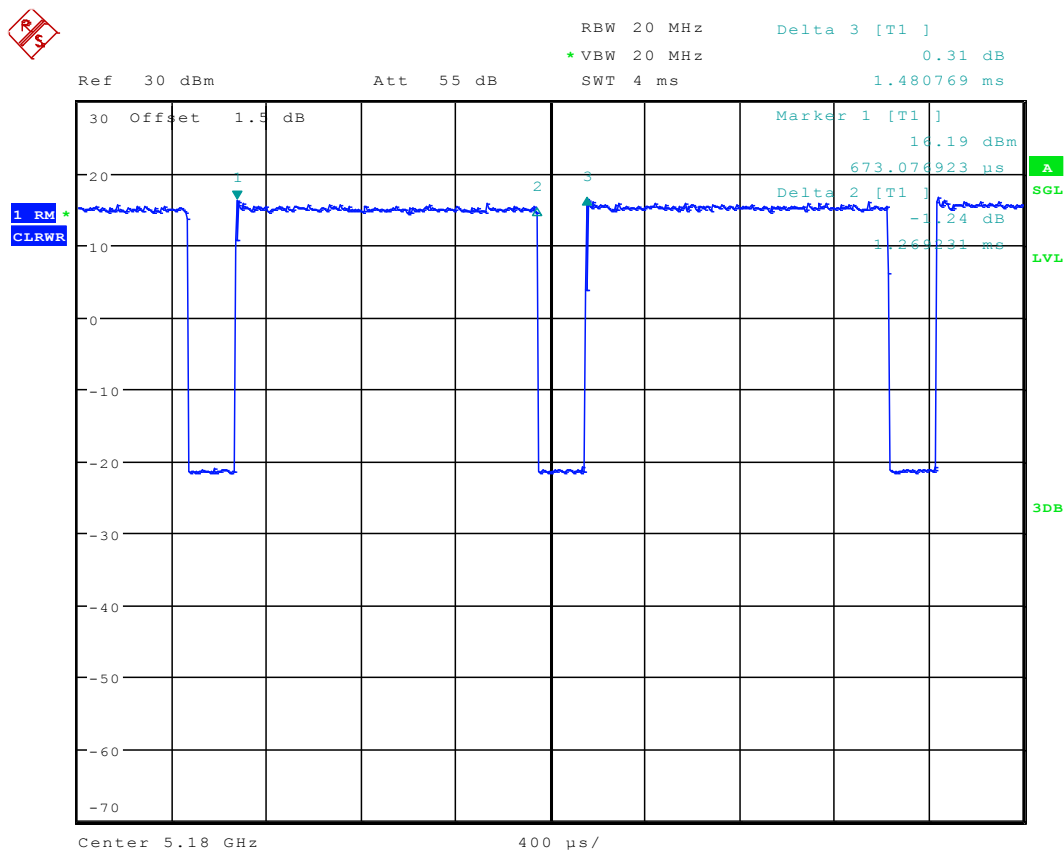
8 Test Plot

8.1 11A20



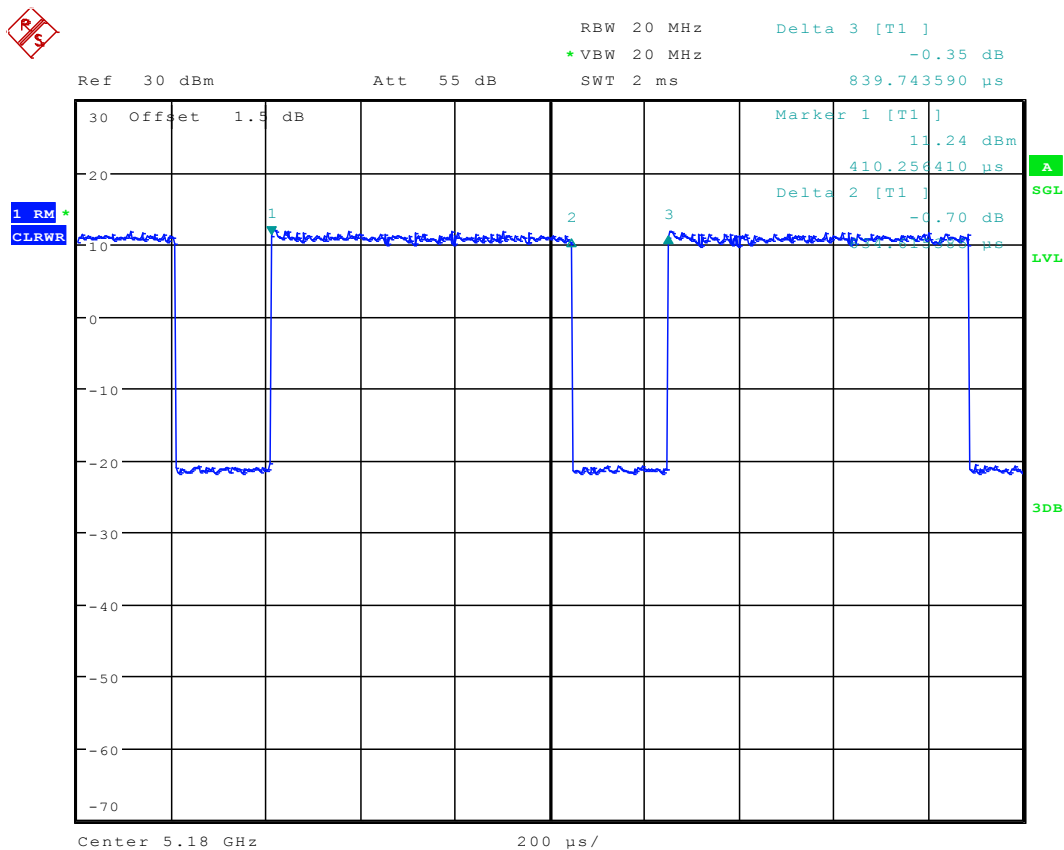
Date: 14.MAY.2017 16:51:11

8.2 11n20



Date: 14.MAY.2017 16:47:58

8.3 11n40



Date: 14.MAY.2017 16:53:12



Appendix D: Maximum Conducted Output Power

9 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Meas. Level (Cond.) [dBm]	Verdict
11A20	36	5180	ANT 1	15.95	PASS
	48	5240	ANT 1	15.77	PASS
	52	5260	ANT 1	15.52	PASS
	64	5320	ANT 1	15.77	PASS
	100	5500	ANT 1	15.97	PASS
	140	5700	ANT 1	16.1	PASS
	149	5745	ANT 1	15.92	PASS
	165	5825	ANT 1	15.31	PASS
11N20	36	5180	ANT 1	15.83	PASS
	48	5240	ANT 1	15.83	PASS
	52	5260	ANT 1	15.71	PASS
	64	5320	ANT 1	15.9	PASS
	100	5500	ANT 1	15.88	PASS
	140	5700	ANT 1	16.14	PASS
	149	5745	ANT 1	15.99	PASS
	165	5825	ANT 1	15.51	PASS
11N40	38	5190	ANT 1	13.83	PASS
	46	5230	ANT 1	13.67	PASS
	54	5270	ANT 1	13.3	PASS
	62	5310	ANT 1	13.46	PASS
	102	5510	ANT 1	13.67	PASS
	134	5670	ANT 1	13.83	PASS
	151	5755	ANT 1	13.92	PASS
	159	5795	ANT 1	13.69	PASS



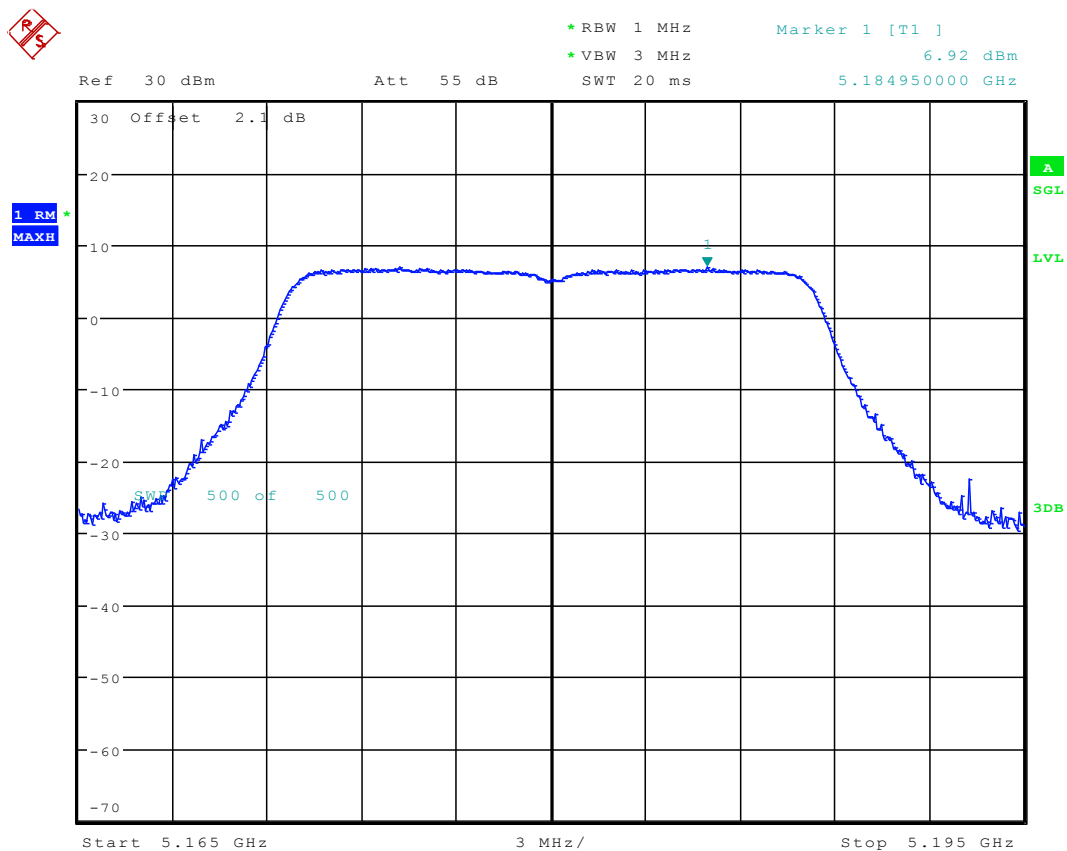
Appendix E: Peak Power Spectral Density Level

10 Result Table

Test Mode	Test Channel	Frequency [MHz]	Antenna Port	Meas. Level (Cond.) [dBm]	Verdict
11A20	36	5180	ANT 1	6.92	PASS
	48	5240	ANT 1	6.82	PASS
	52	5260	ANT 1	6.4	PASS
	64	5320	ANT 1	6.89	PASS
	100	5500	ANT 1	7.06	PASS
	140	5700	ANT 1	7.11	PASS
	149	5745	ANT 1	7.01	PASS
	165	5825	ANT 1	6.44	PASS
11N20	36	5180	ANT 1	6.6	PASS
	48	5240	ANT 1	6.74	PASS
	52	5260	ANT 1	6.5	PASS
	64	5320	ANT 1	6.69	PASS
	100	5500	ANT 1	7.21	PASS
	140	5700	ANT 1	6.9	PASS
	149	5745	ANT 1	6.91	PASS
	165	5825	ANT 1	6.51	PASS
11N40	38	5190	ANT 1	2.75	PASS
	46	5230	ANT 1	2.66	PASS
	54	5270	ANT 1	2.46	PASS
	62	5310	ANT 1	2.51	PASS
	102	5510	ANT 1	2.78	PASS
	134	5670	ANT 1	3.06	PASS
	151	5755	ANT 1	3.06	PASS
	159	5795	ANT 1	2.88	PASS

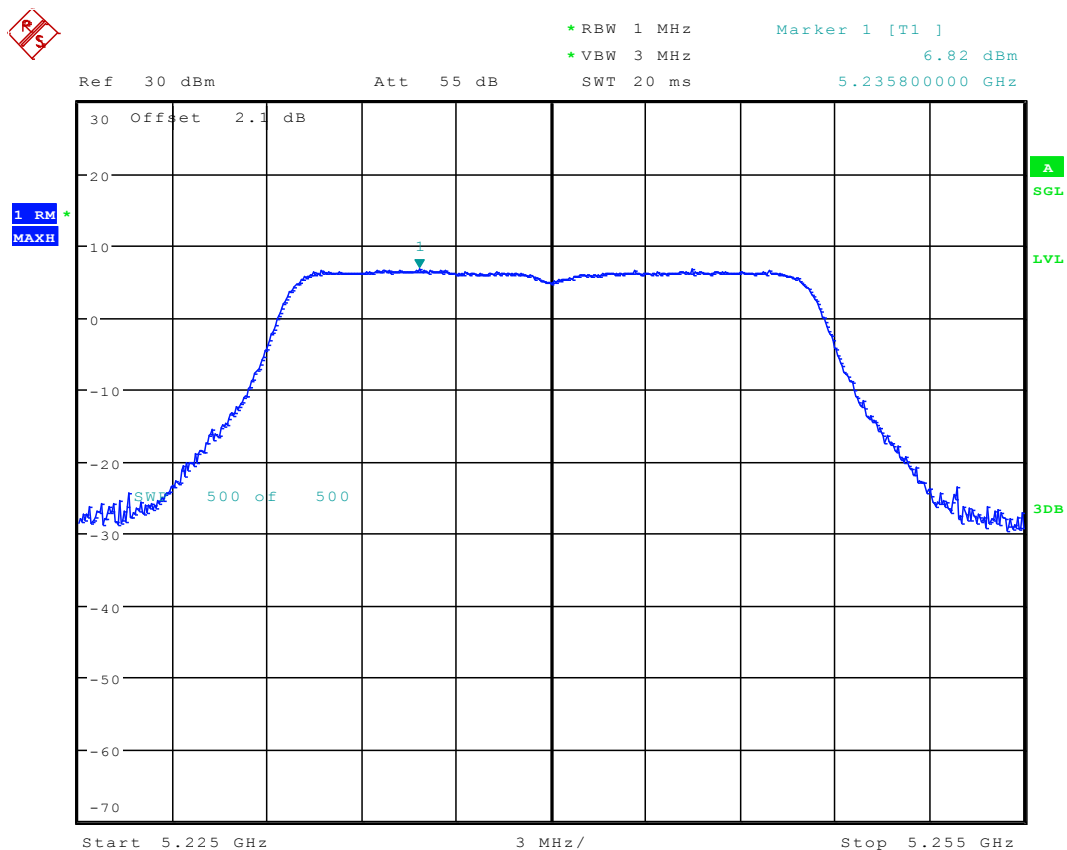
11 Test Plot

11.1 11A20_36 ANT 1



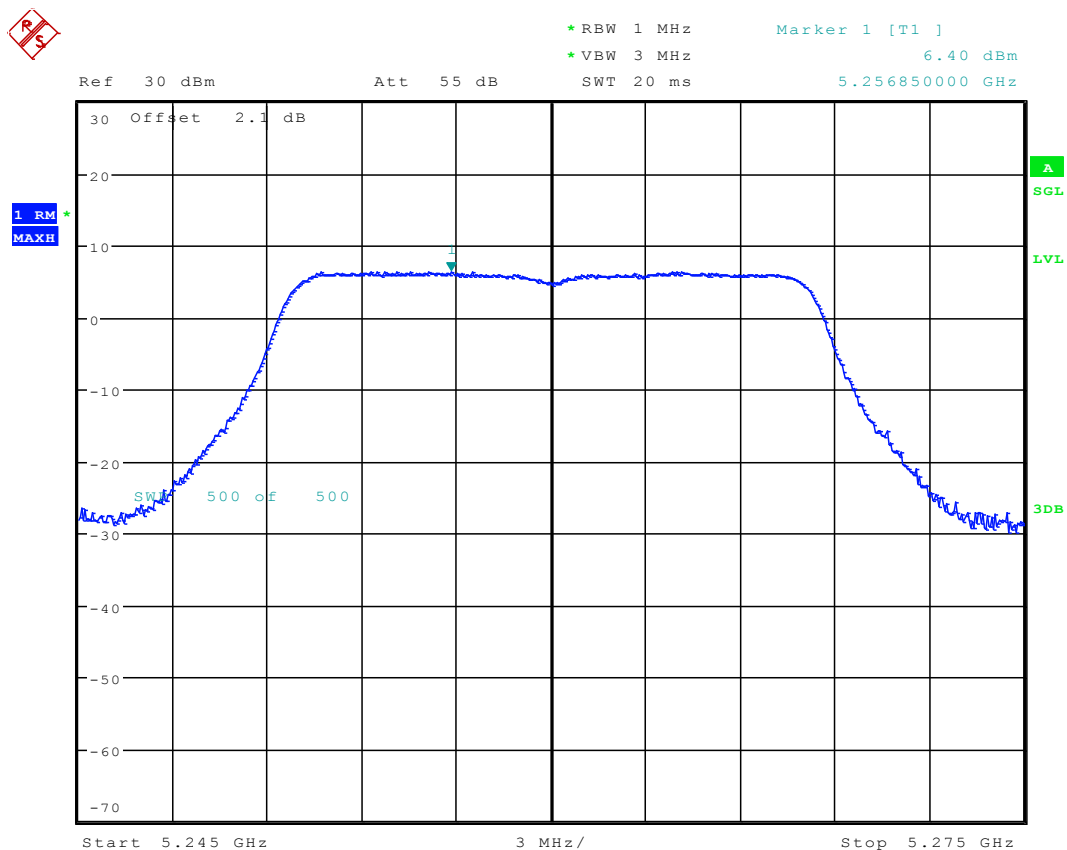
Date: 14.MAY.2017 12:58:39

11.2 11A20_48 ANT 1



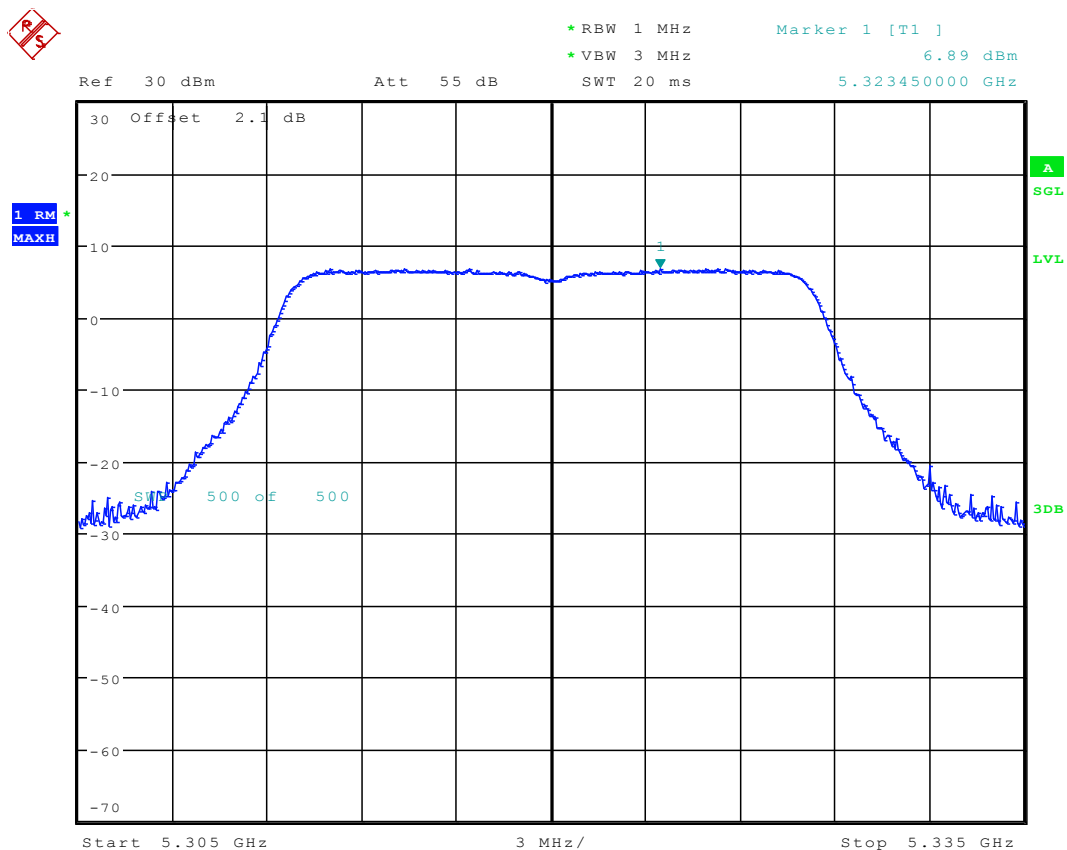
Date: 14.MAY.2017 13:06:12

11.3 11A20_52 ANT 1



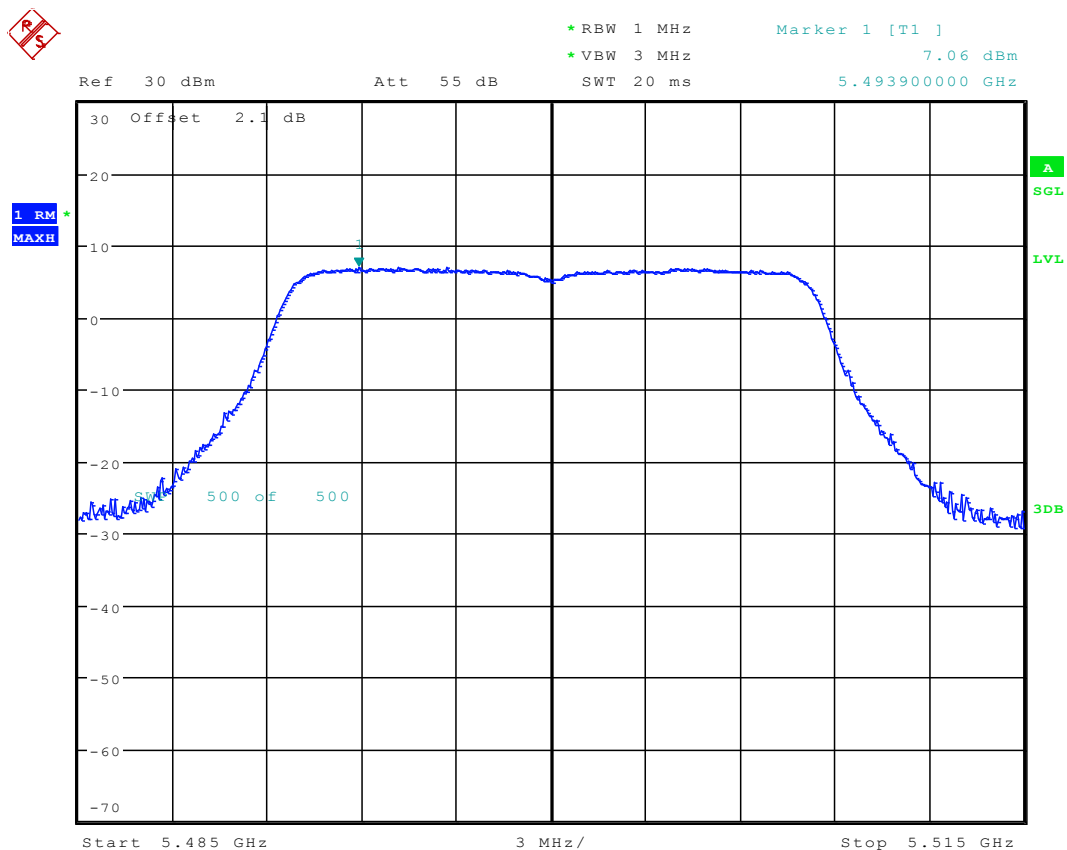
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11.4 11A20_64 ANT 1



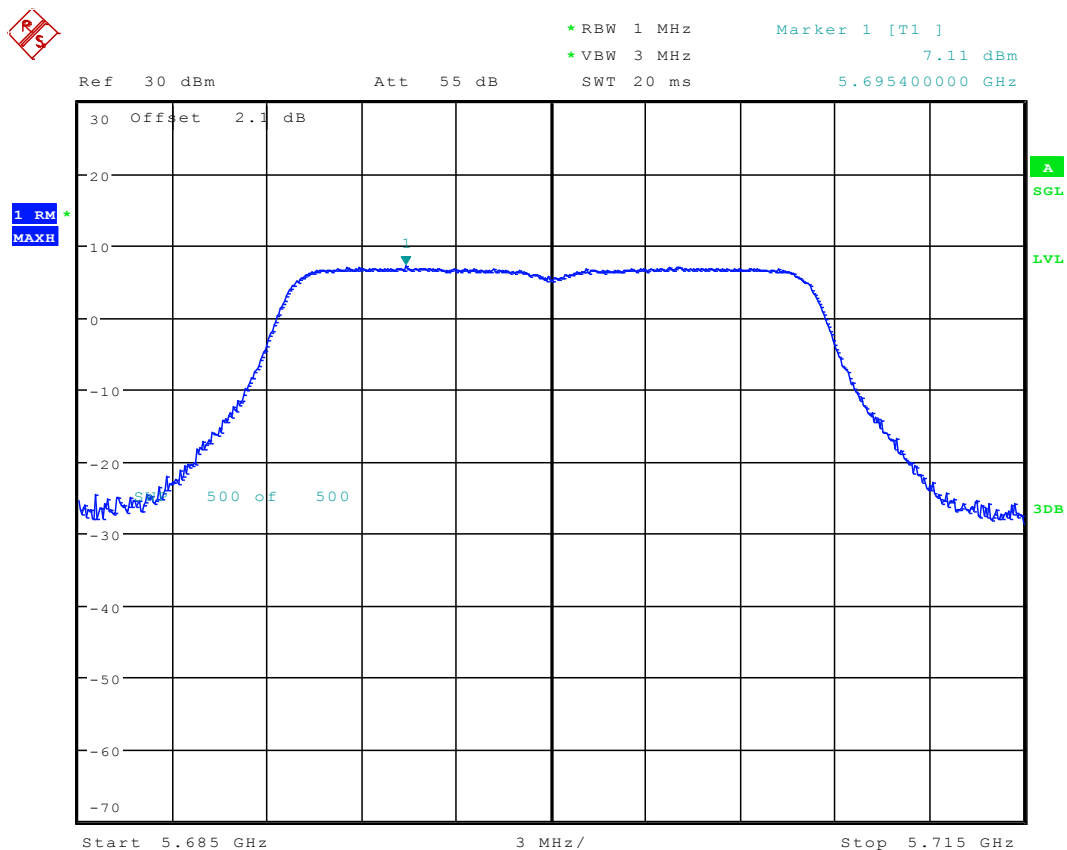
Date: 14.MAY.2017 13:17:33

11.5 11A20_100 ANT 1



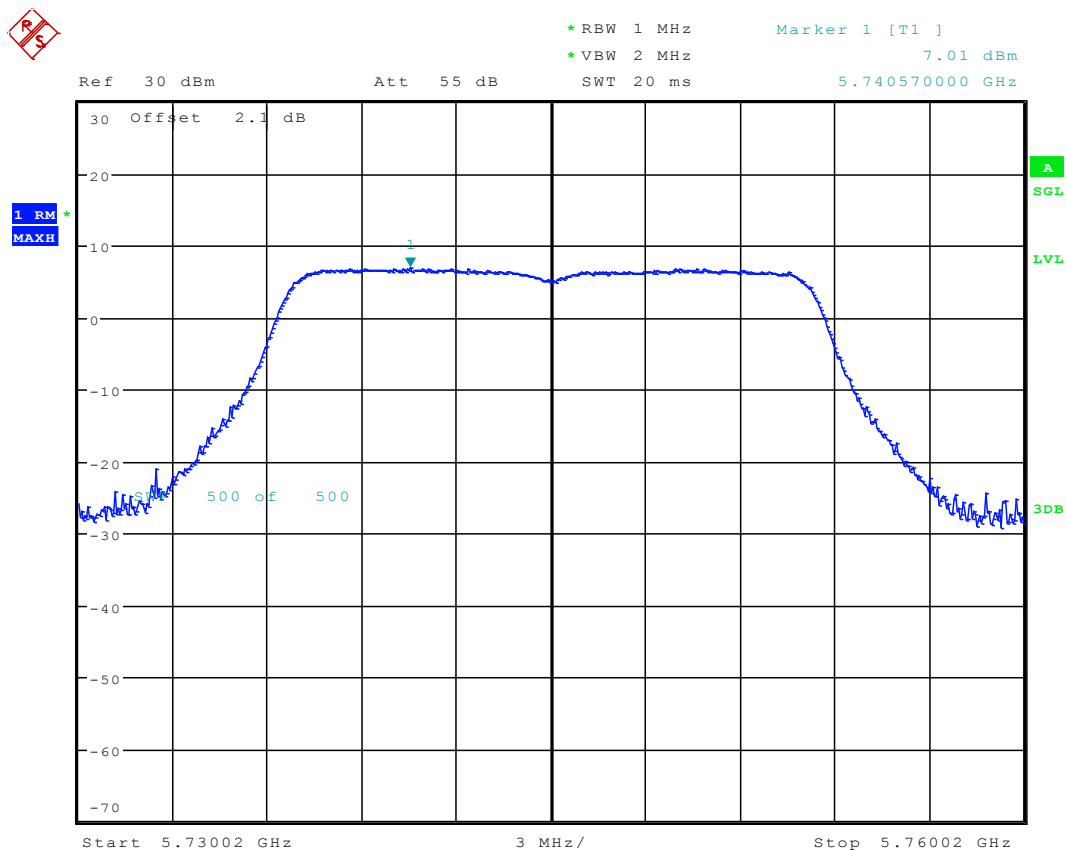
Date: 14.MAY.2017 13:23:34

11.6 11A20_140 ANT 1



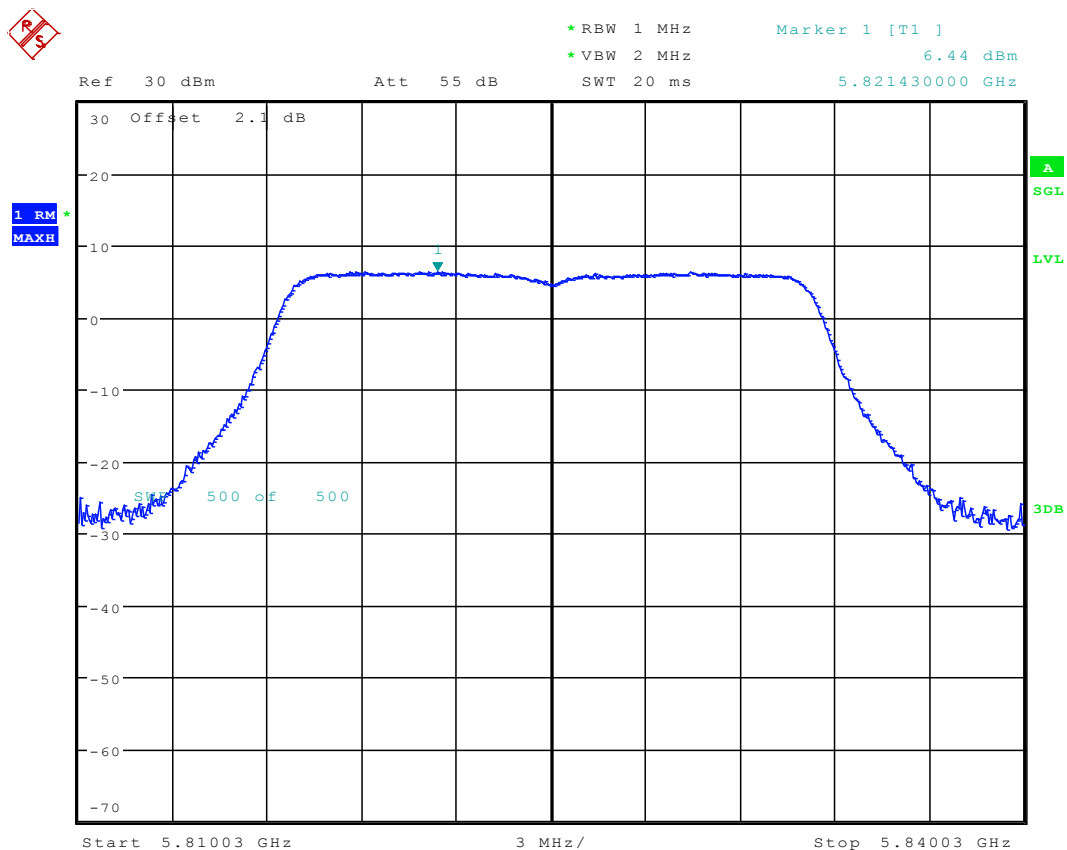
Date: 14.MAY.2017 13:28:54

11.7 11A20_149 ANT 1



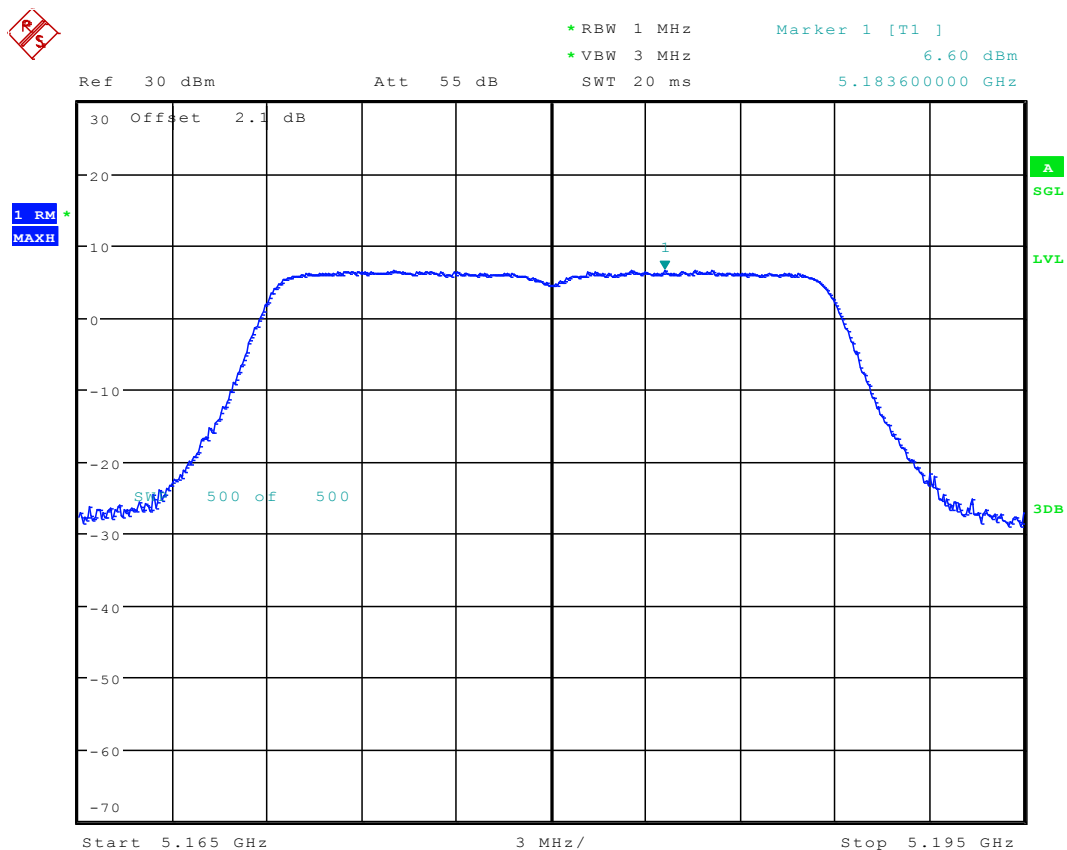
Date: 14.MAY.2017 13:34:57

11.8 11A20_165 ANT 1



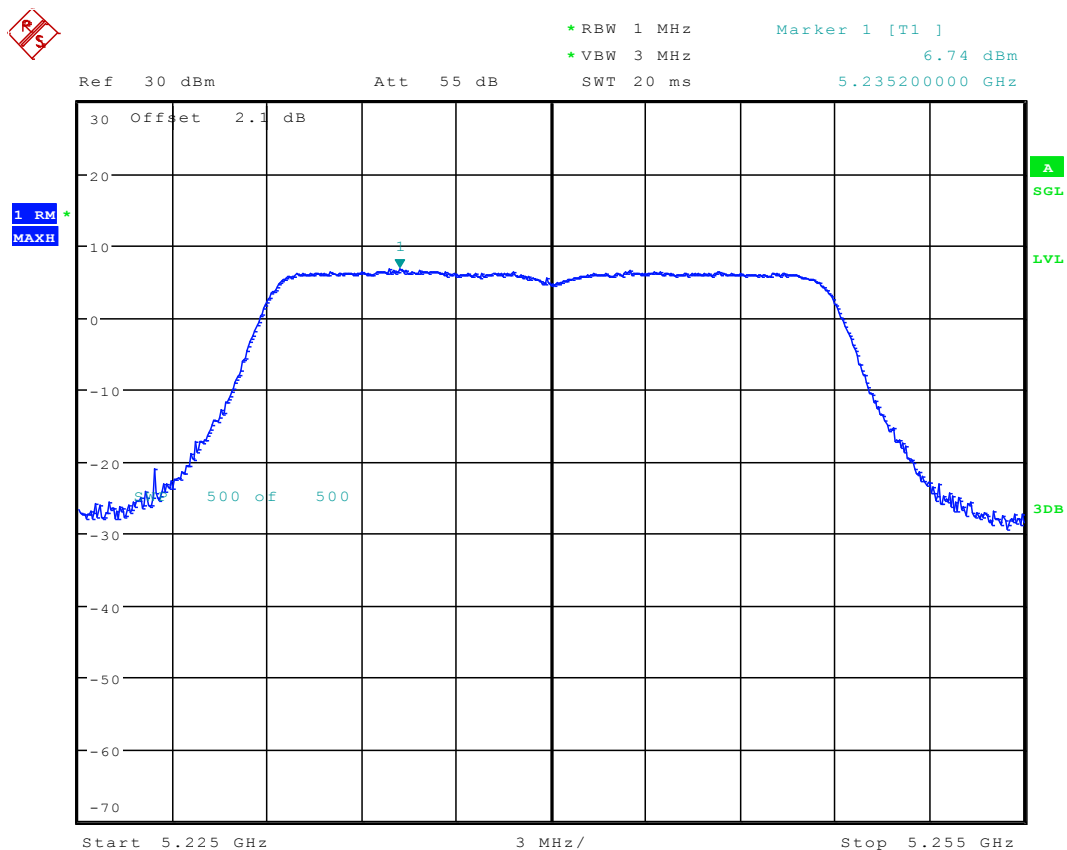
Date: 14.MAY.2017 13:41:01

11.9 11N20_36 ANT 1



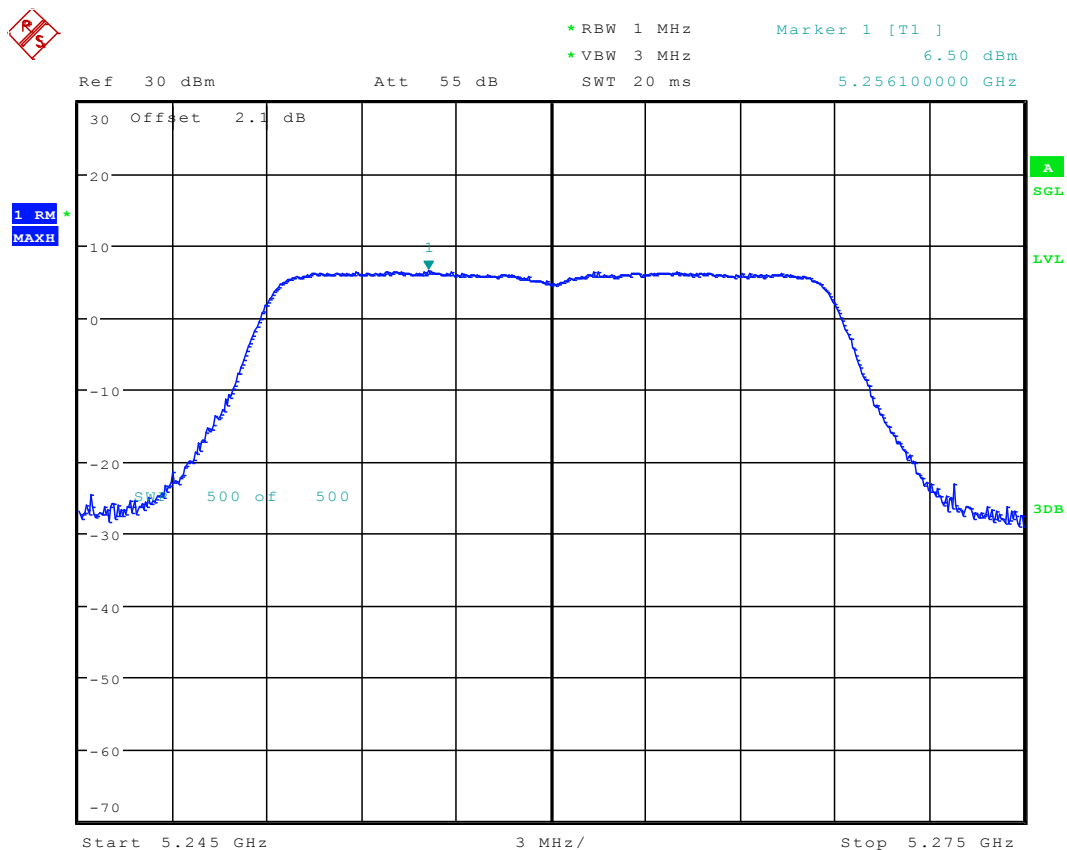
Date: 14.MAY.2017 13:48:33

11.10 11N20_48 ANT 1



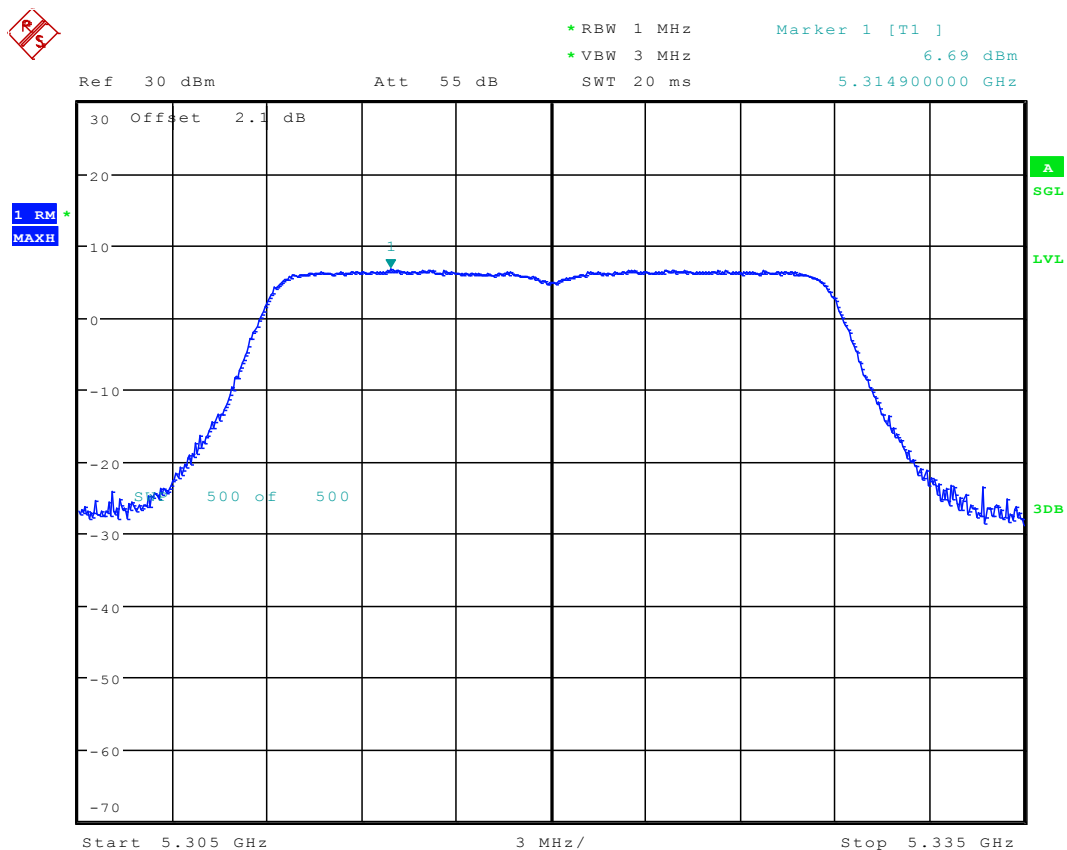
Date: 14.MAY.2017 13:53:35

11.11 11N20_52 ANT 1



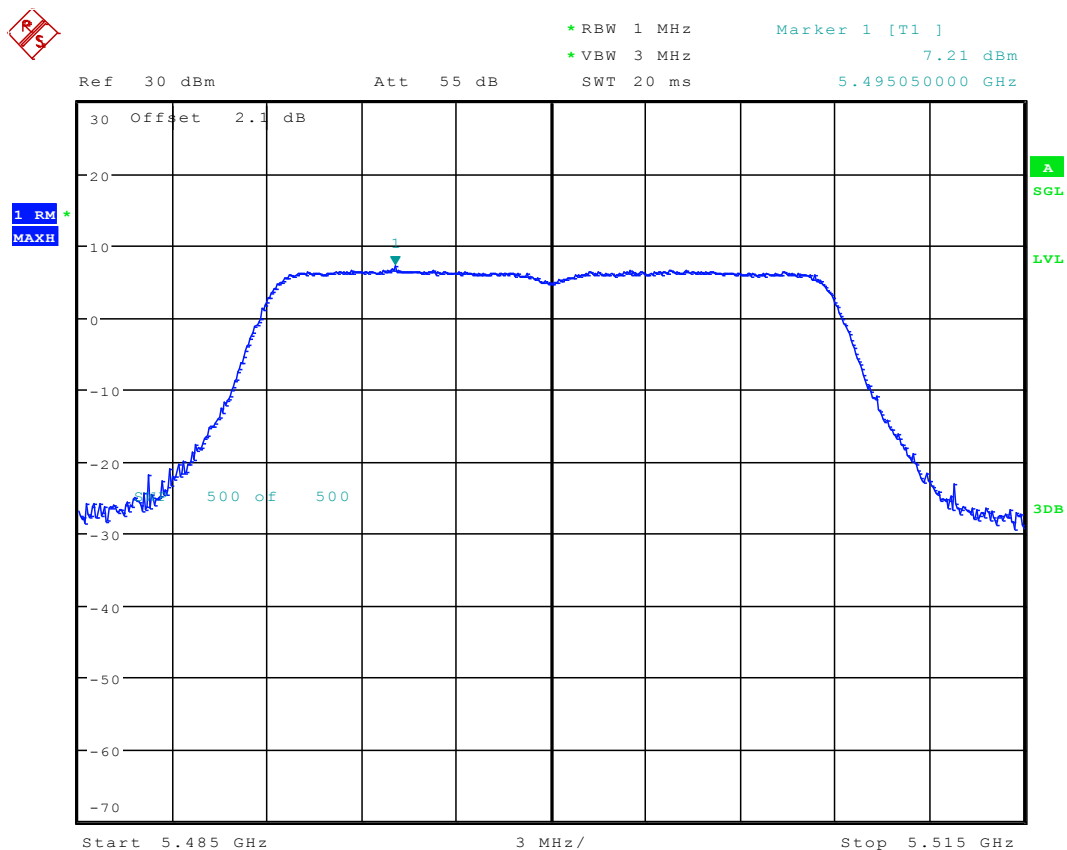
Date: 14.MAY.2017 14:23:58

11.12 11N20_64 ANT 1



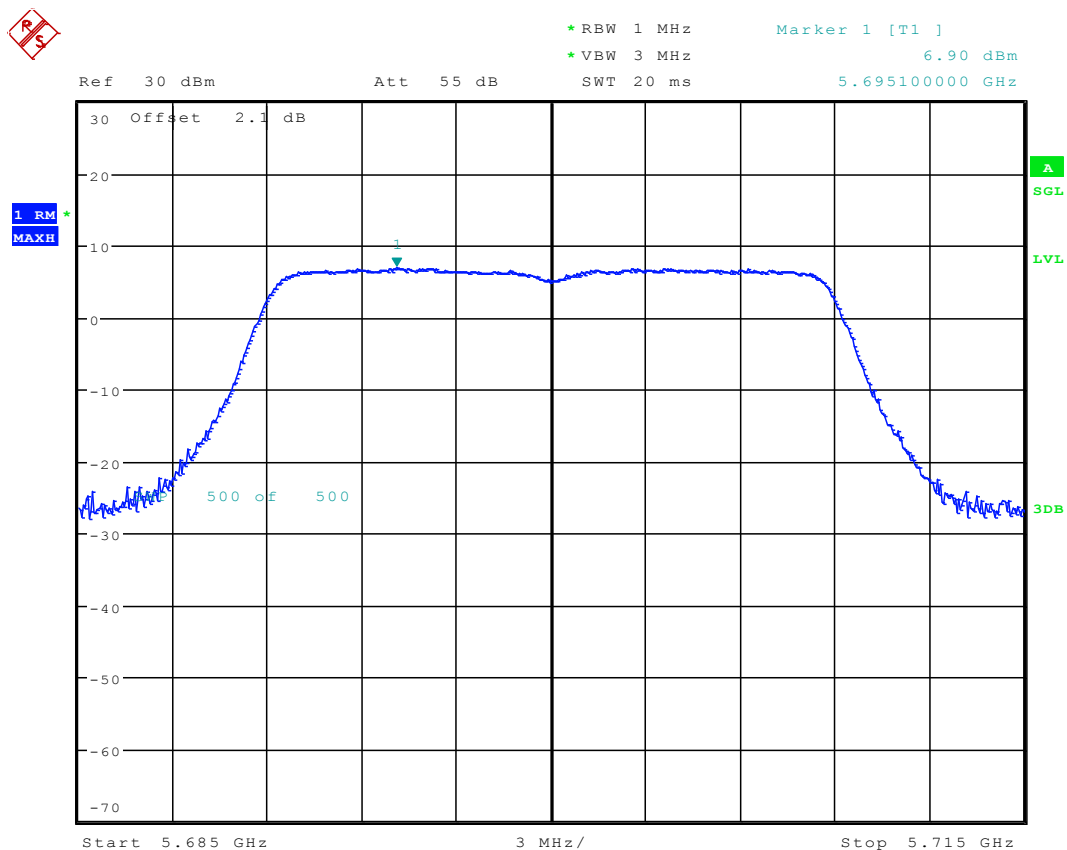
Date: 14.MAY.2017 14:28:46

11.13 11N20_100 ANT 1



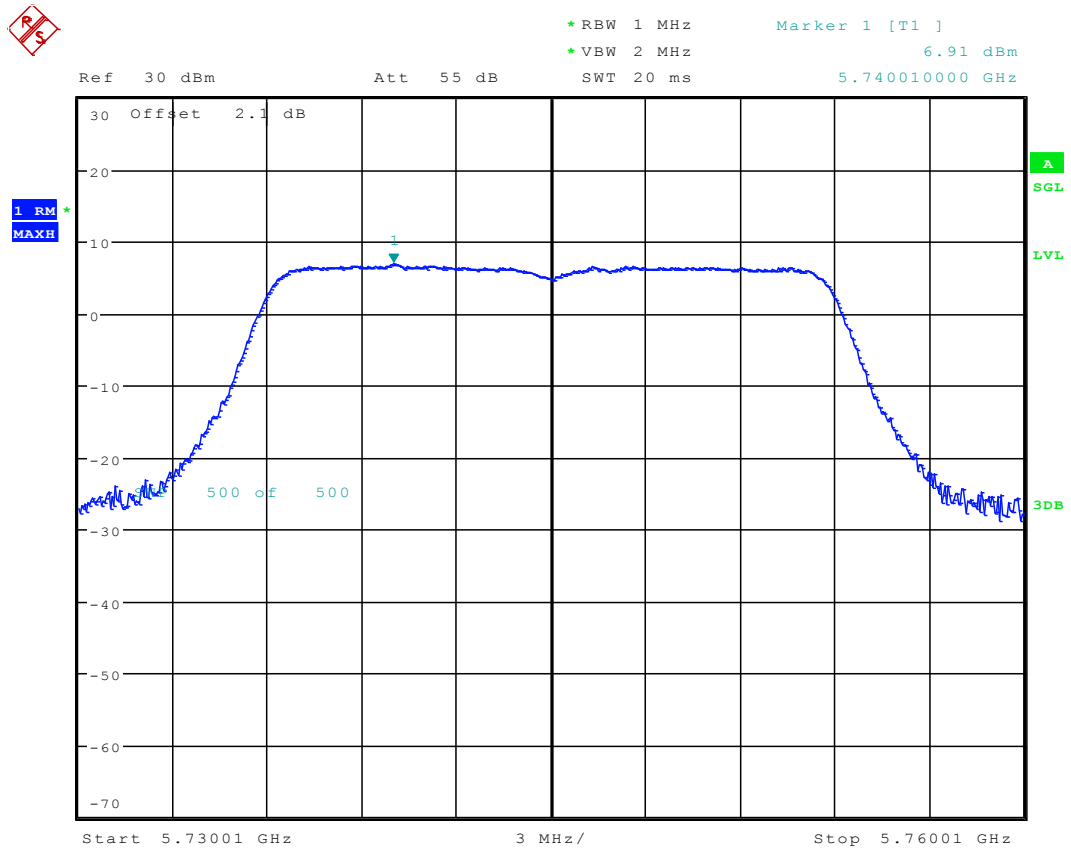
Date: 14.MAY.2017 14:33:56

11.14 11N20_140 ANT 1



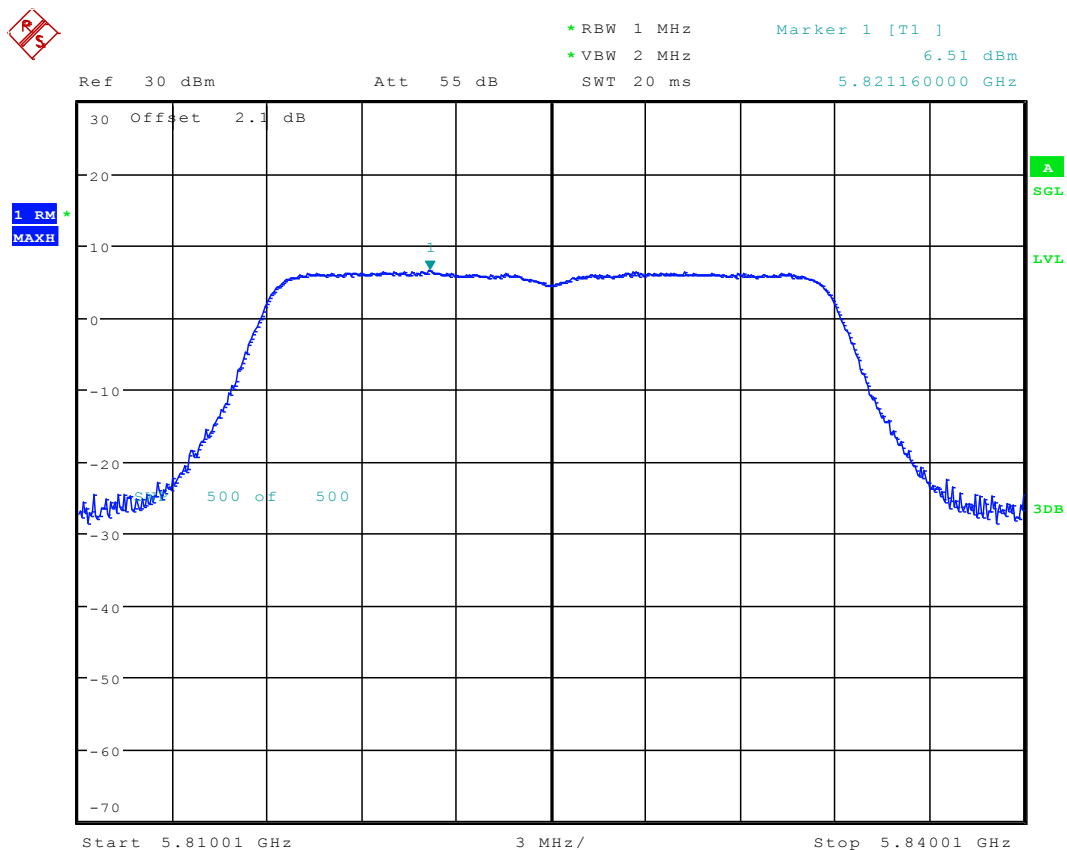
Date: 14.MAY.2017 14:39:05

11.15 11N20_149 ANT 1



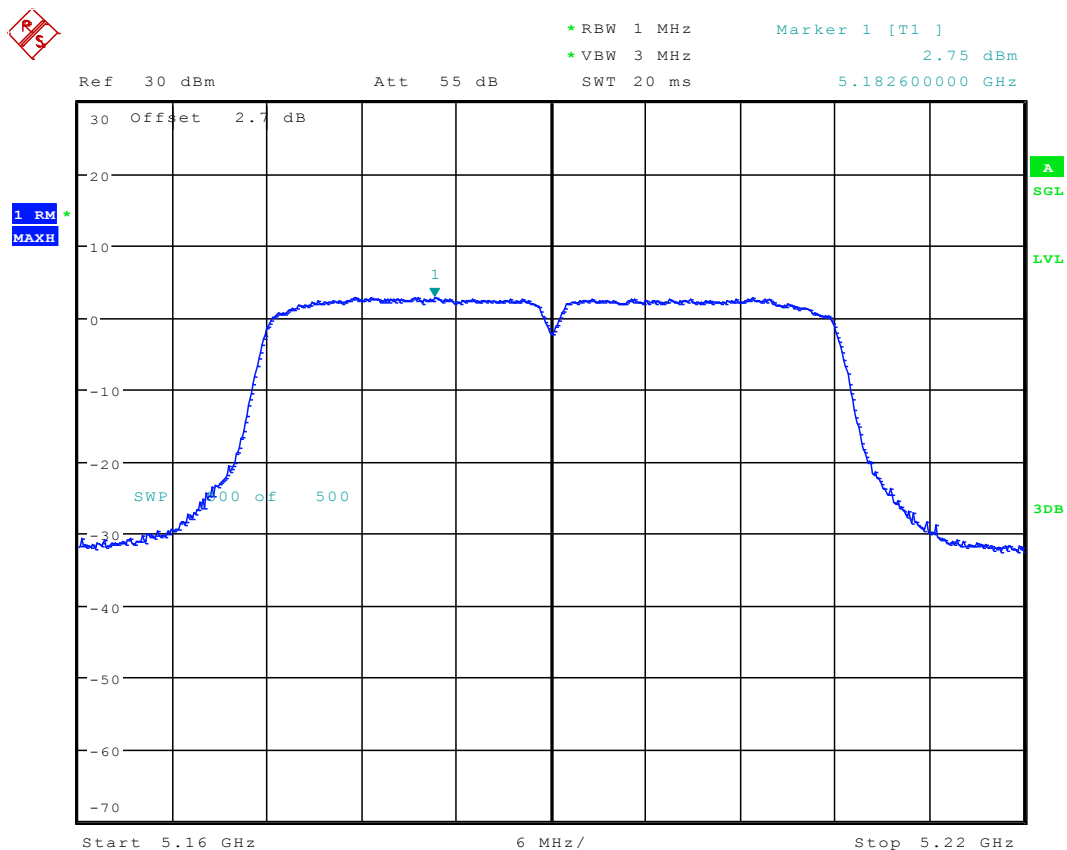
Date: 14.MAY.2017 14:45:05

11.16 11N20_165 ANT 1



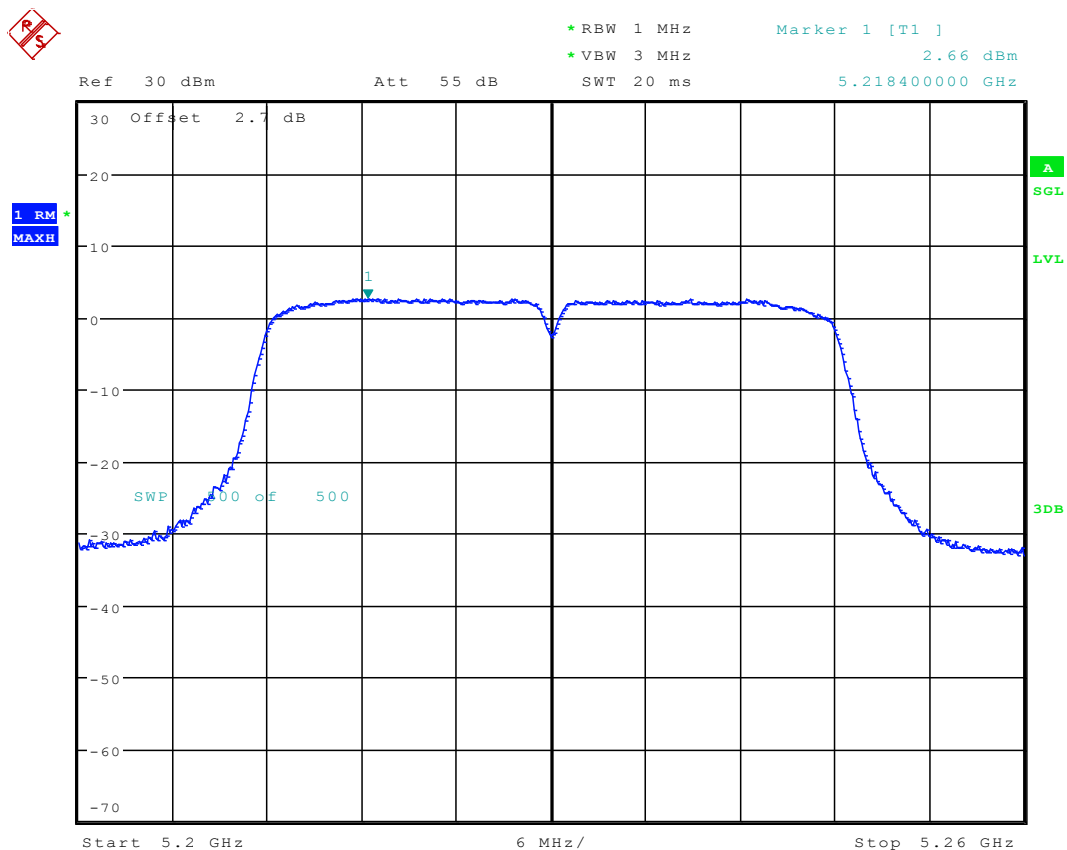
Date: 14.MAY.2017 14:51:03

11.17 11N40_38 ANT 1



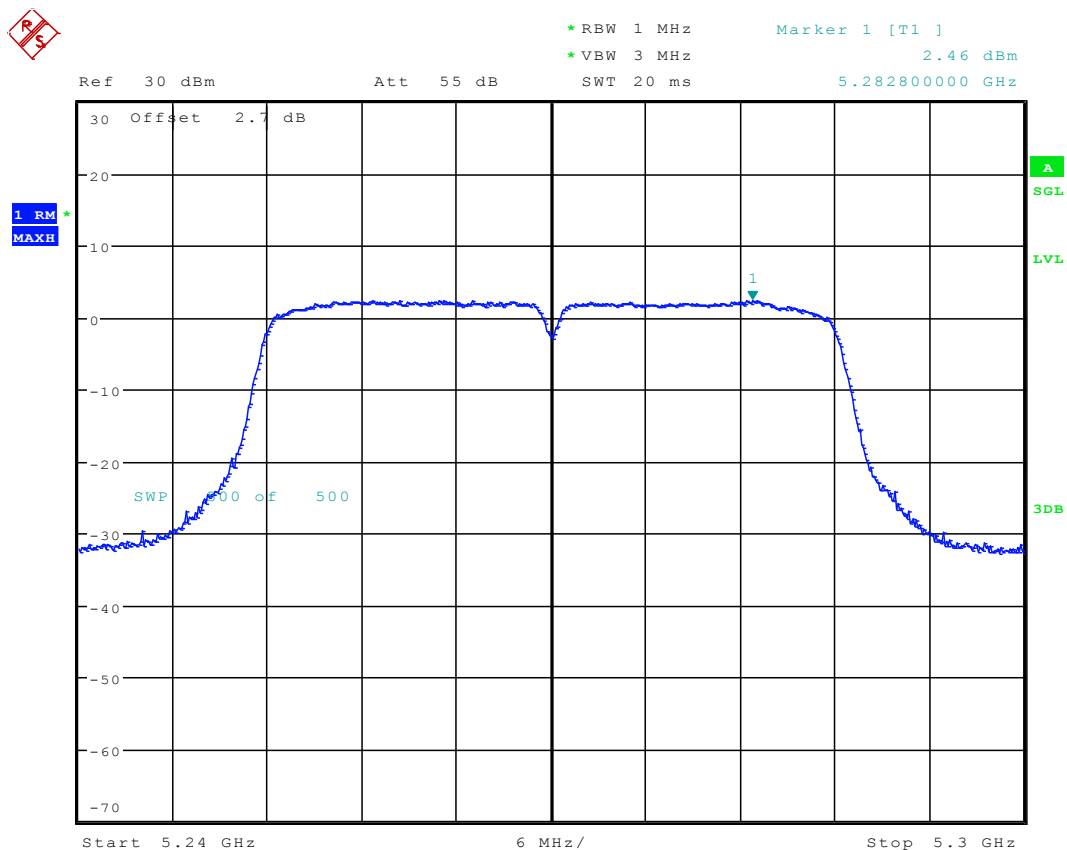
Date: 14.MAY.2017 15:53:28

11.18 11N40_46 ANT 1



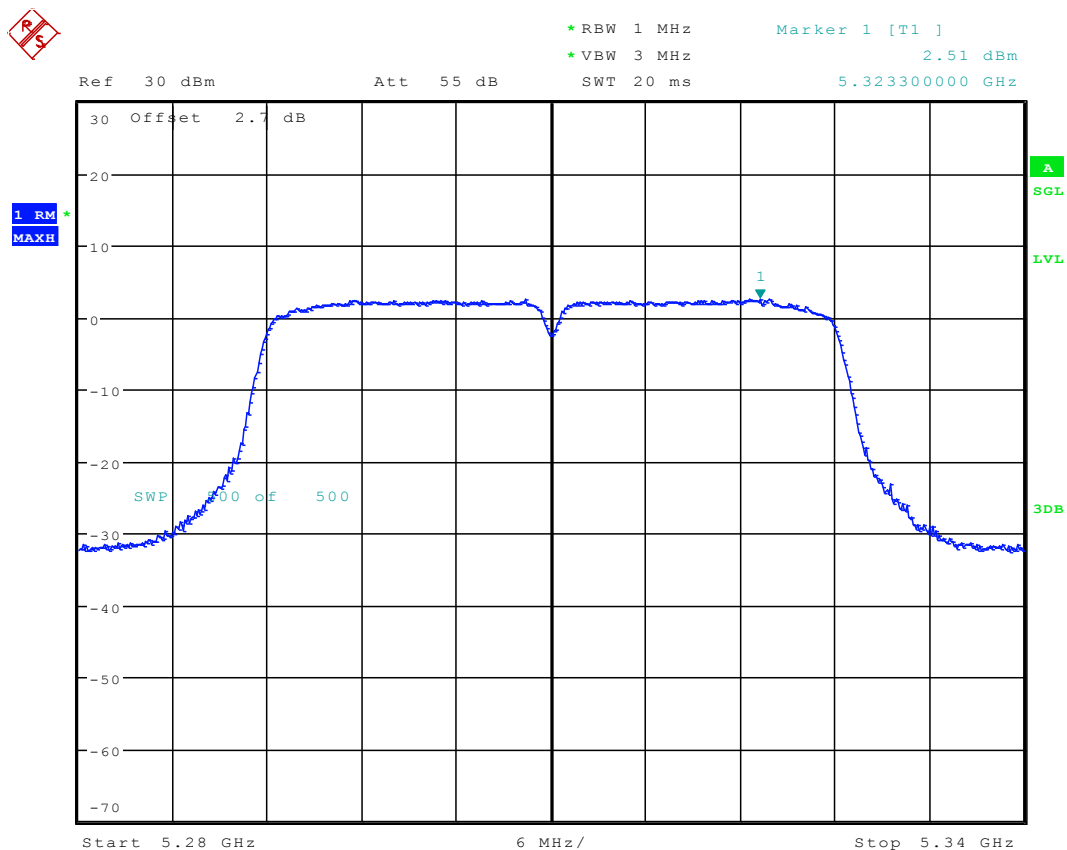
Date: 14.MAY.2017 15:58:37

11.19 11N40_54 ANT 1



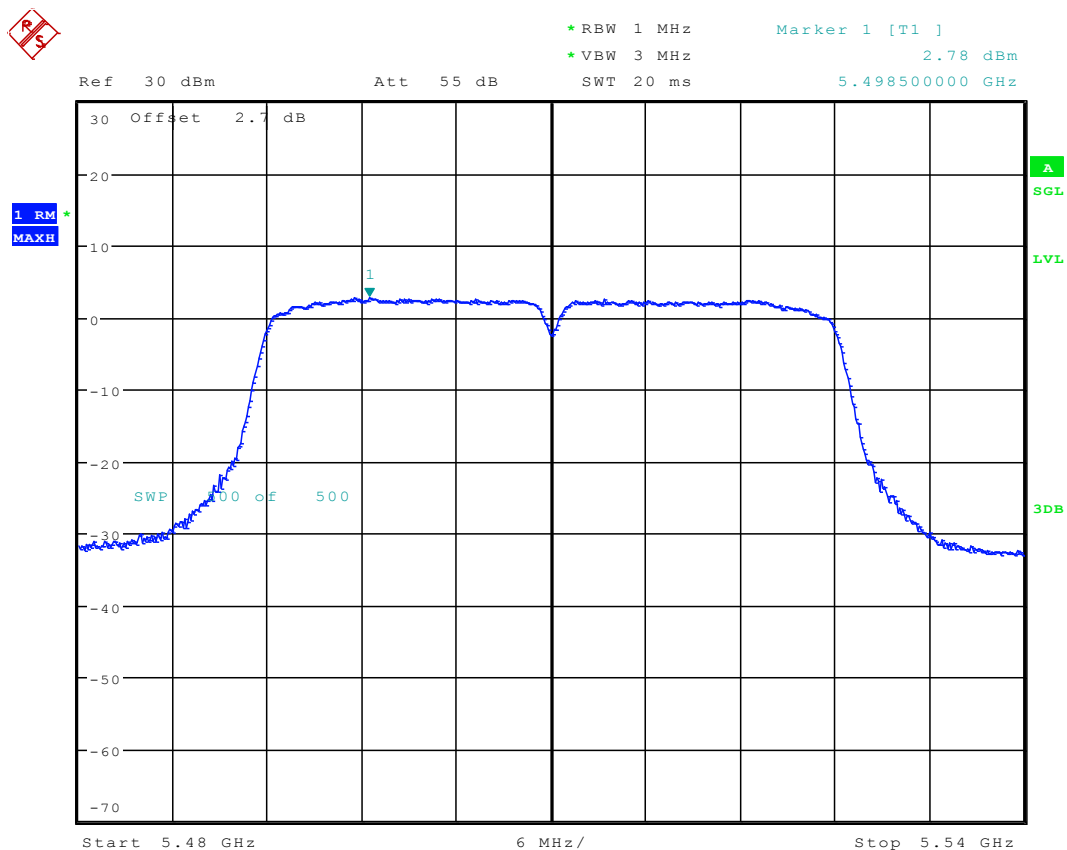
Date: 14.MAY.2017 16:03:38

11.20 11N40_62 ANT 1



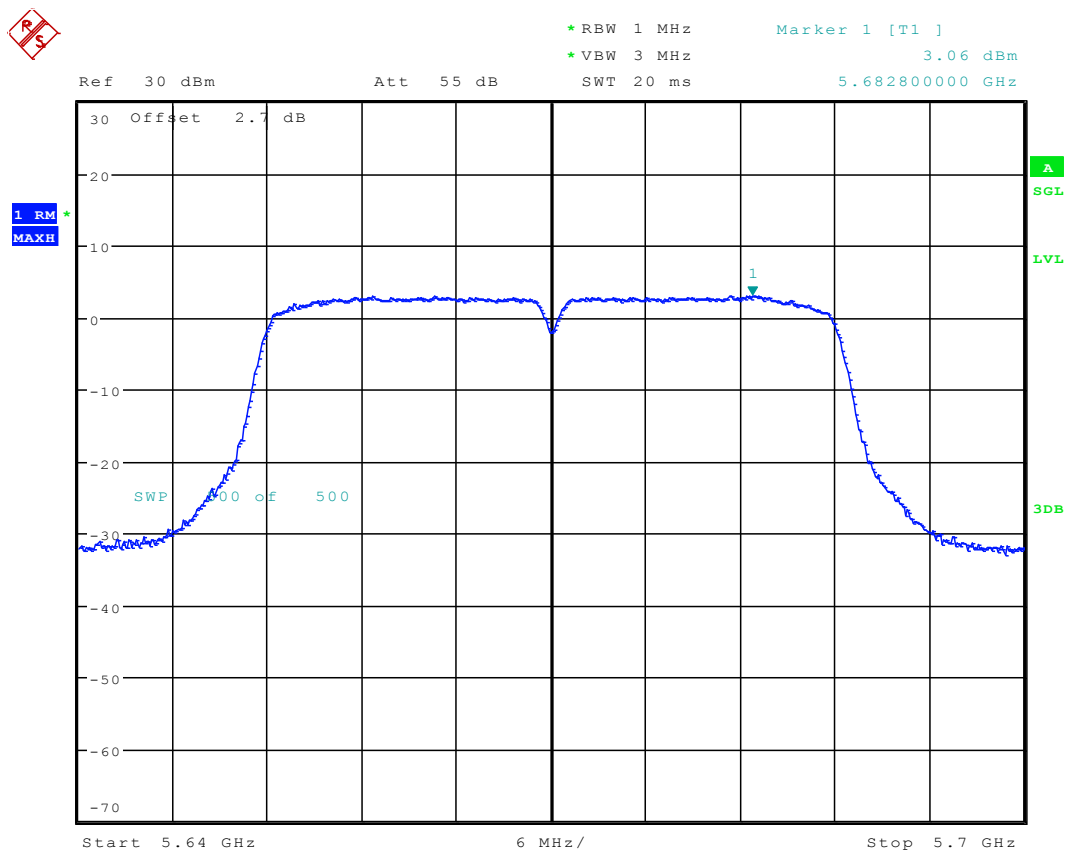
Date: 14.MAY.2017 16:09:10

11.21 11N40_102 ANT 1



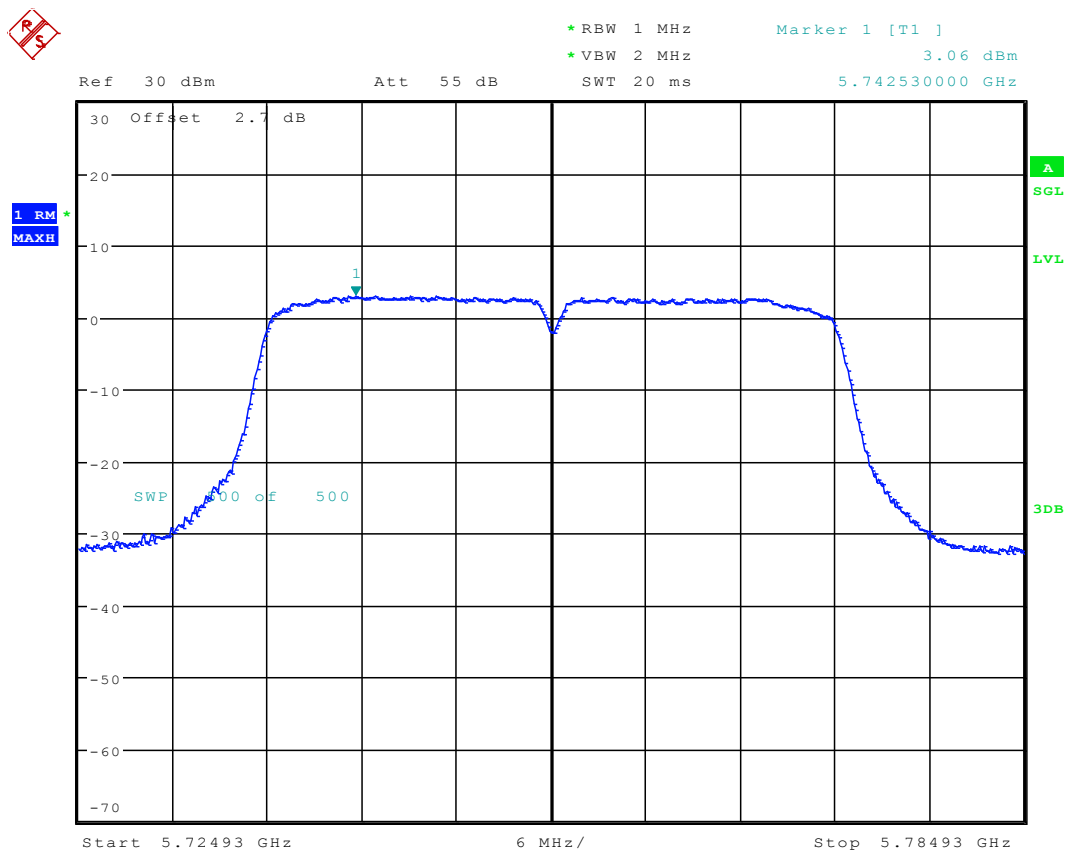
Date: 14.MAY.2017 16:14:44

11.22 11N40_134 ANT 1



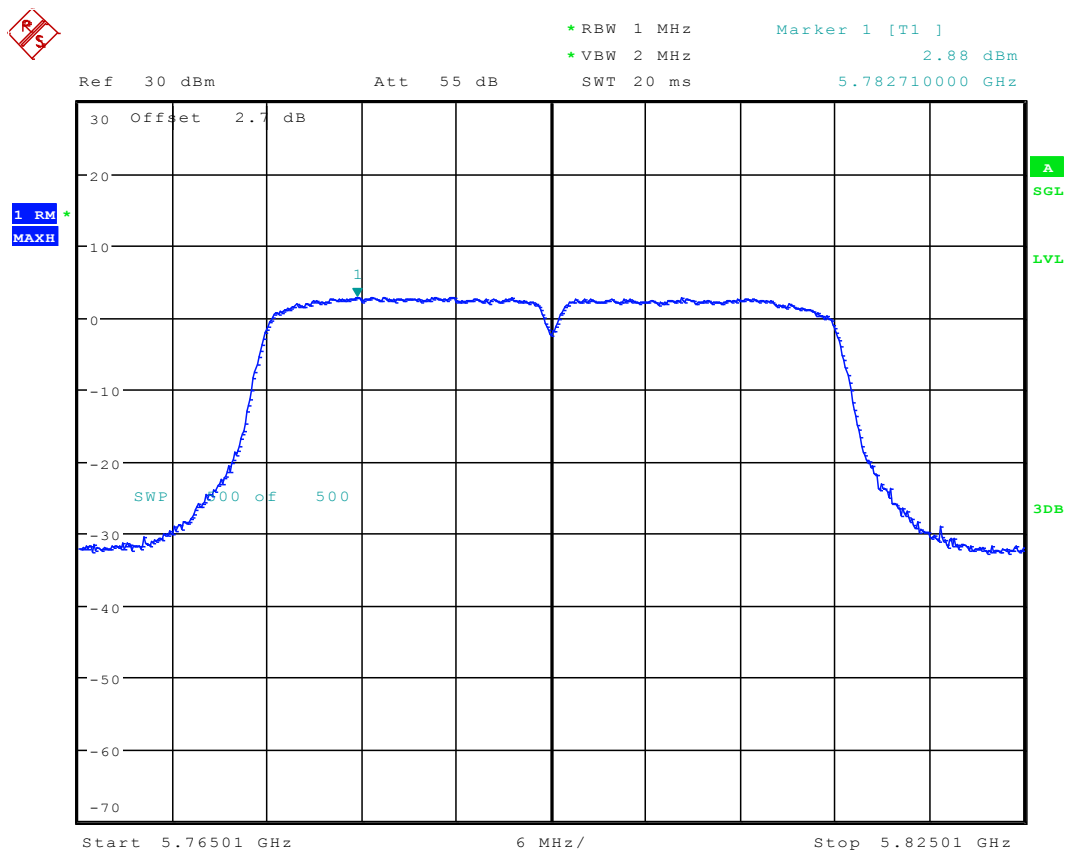
Date: 14.MAY.2017 16:22:16

11.23 11N40_151 ANT 1



Date: 14.MAY.2017 16:28:09

11.24 11N40_159 ANT 1



Date: 14.MAY.2017 16:34:17

Appendix F: Frequencies Stability

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
	5180
V nom(V)	5180.0083
V max(V)	5180.0116
V min(V)	5180.0023
Max. Deviation Frequency	0.0116
Max. Frequency Error (ppm)	2.24

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
	5180
-5	5180.0067
5	5180.0091
15	5180.0093
25	5180.0088
35	5180.0059
45	5180.001
50	5180.0016
Max. Deviation Frequency	0.0093
Max. Frequency Error (ppm)	1.80

Frequency Error vs. Voltage:

Test Conditions	Measured Frequency (MHz)
	5825
V nom(V)	5825.0024
V max(V)	5825.0081
V min(V)	5825.0100
Max. Deviation Frequency	0.01
Max. Frequency Error (ppm)	1.72

Frequency Error vs. Temperature:

Test Conditions (°C)	Measured Frequency (MHz)
	5825
-5	5825.0054
5	5825.0026
15	5825.0055
25	5825.0098
35	5825.0044
45	5825.006
50	5825.0048
Max. Deviation Frequency	0.0098
Max. Frequency Error (ppm)	1.68

END