

Appendix: 5G WiFi

Contents

Appendix A1: Emission Bandwidth3

 Test Result3

 Test Graphs4

Appendix A2: Occupied channel bandwidth10

 Test Result10

 Test Graphs11

Appendix B: Duty Cycle17

 Test Result17

 Test Graphs18

Appendix C: Maximum conducted output power24

 Test Result Channel Power24

 Test Graphs Channel Power25

Appendix D: Maximum power spectral density31

 Test Result31

 Test Graphs32

Appendix E: Frequency Stability38

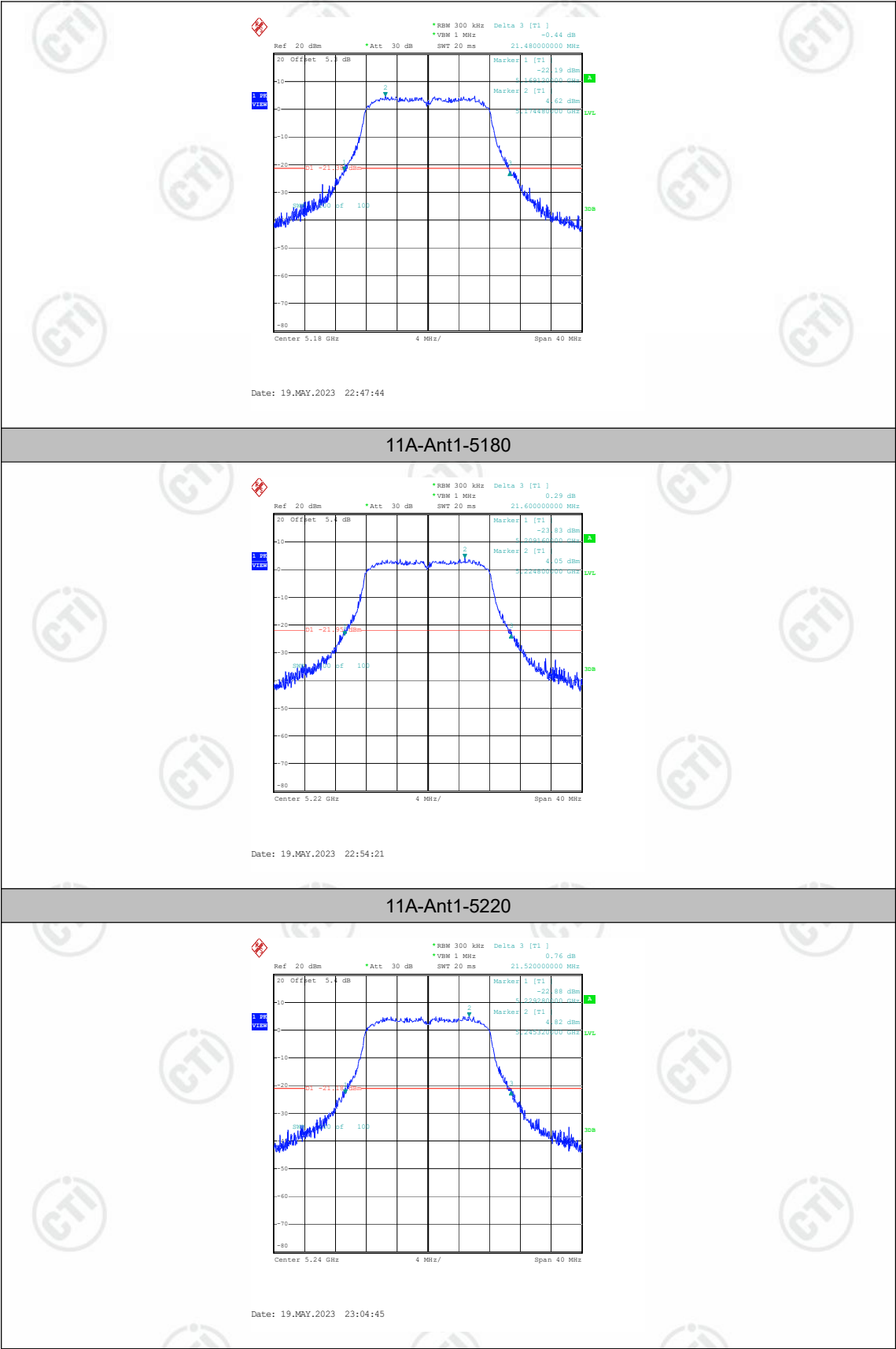
 Test Result38

Appendix A1: Emission Bandwidth

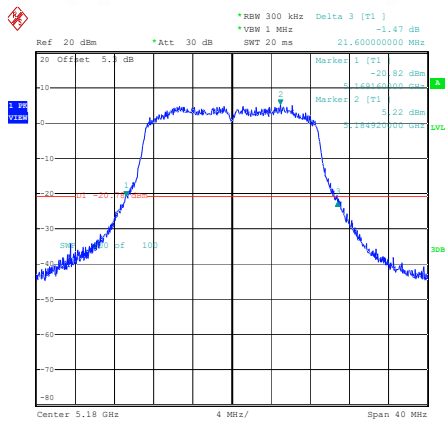
Test Result

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	21.48	5169.12	5190.60	---	---
11A	Ant1	5220	21.60	5209.16	5230.76	---	---
11A	Ant1	5240	21.52	5229.28	5250.80	---	---
11N20SISO	Ant1	5180	21.60	5169.16	5190.76	---	---
11N20SISO	Ant1	5220	21.48	5209.20	5230.68	---	---
11N20SISO	Ant1	5240	21.32	5229.44	5250.76	---	---
11N40SISO	Ant1	5190	40.72	5169.52	5210.24	---	---
11N40SISO	Ant1	5230	41.04	5209.60	5250.64	---	---
11AC20SISO	Ant1	5180	21.52	5169.28	5190.80	---	---
11AC20SISO	Ant1	5220	26.32	5206.76	5233.08	---	---
11AC20SISO	Ant1	5240	25.44	5227.20	5252.64	---	---
11AC40SISO	Ant1	5190	45.52	5167.04	5212.56	---	---
11AC40SISO	Ant1	5230	46.00	5207.44	5253.44	---	---
11AX20SISO	Ant1	5180	26.28	5167.12	5193.40	---	---
11AX20SISO	Ant1	5220	26.76	5206.64	5233.40	---	---
11AX20SISO	Ant1	5240	26.12	5227.28	5253.40	---	---
11AX40SISO	Ant1	5190	45.60	5166.80	5212.40	---	---
11AX40SISO	Ant1	5230	45.36	5207.28	5252.64	---	---

Test Graphs

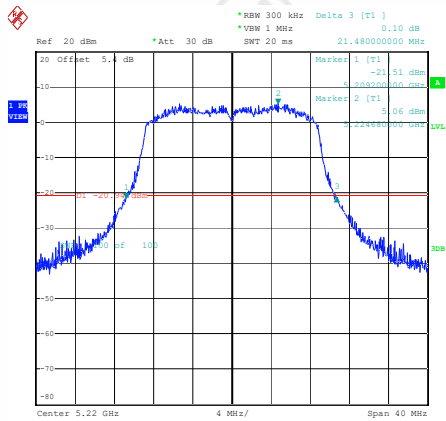


11A-Ant1-5240



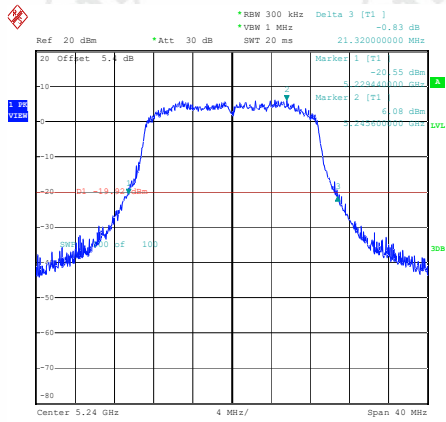
Date: 19.MAY.2023 23:11:18

11N20SISO-Ant1-5180



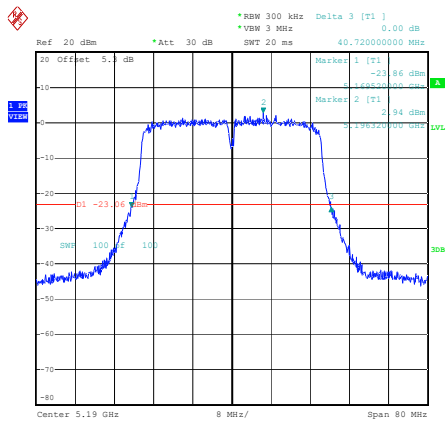
Date: 19.MAY.2023 23:19:20

11N20SISO-Ant1-5220



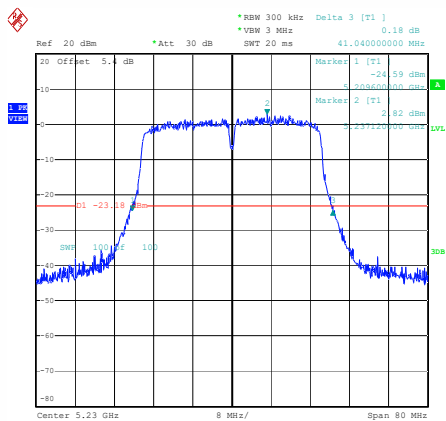
Date: 19.MAY.2023 23:25:35

11N20SISO-Ant1-5240



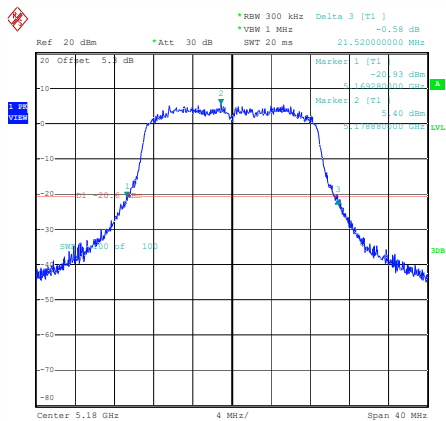
Date: 19.MAY.2023 23:31:12

11N40SISO-Ant1-5190



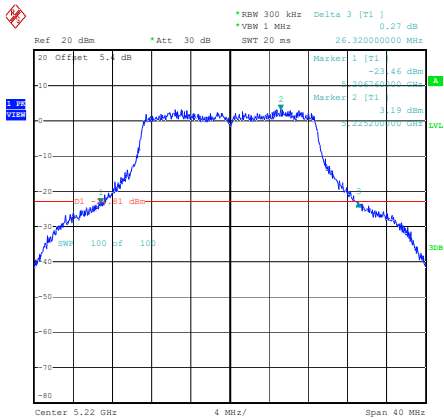
Date: 19.MAY.2023 23:36:42

11N40SISO-Ant1-5230



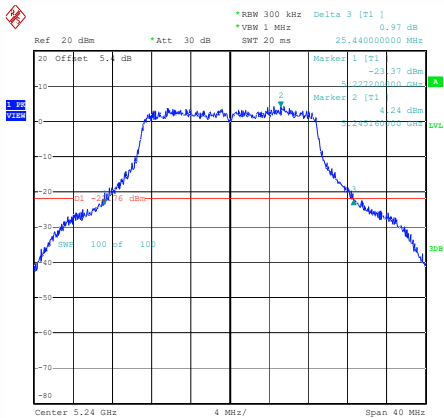
Date: 19.MAY.2023 23:42:54

11AC20SISO-Ant1-5180



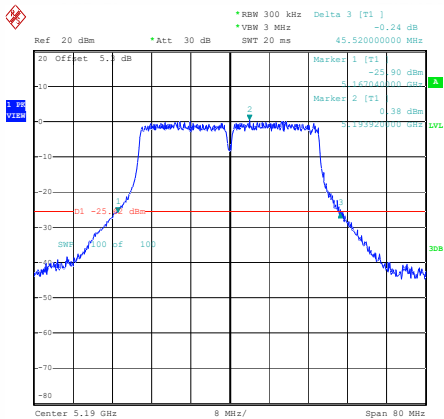
Date: 20.MAY.2023 10:12:07

11AC20SISO-Ant1-5220



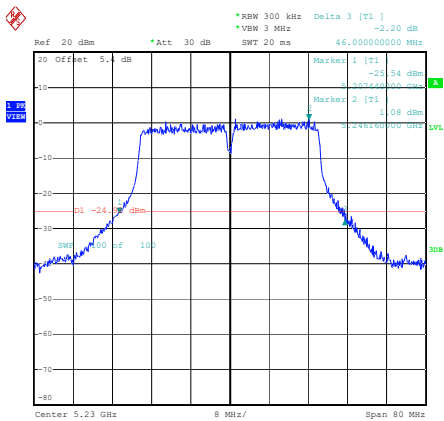
Date: 20.MAY.2023 10:17:56

11AC20SISO-Ant1-5240



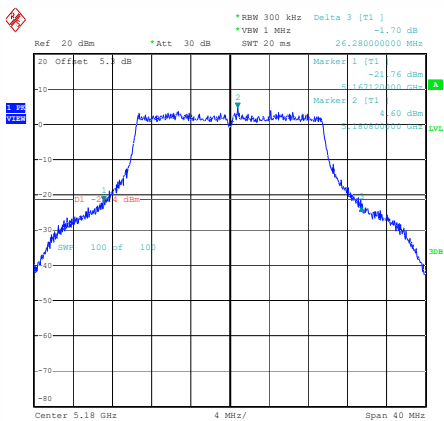
Date: 20.MAY.2023 10:24:46

11AC40SISO-Ant1-5190



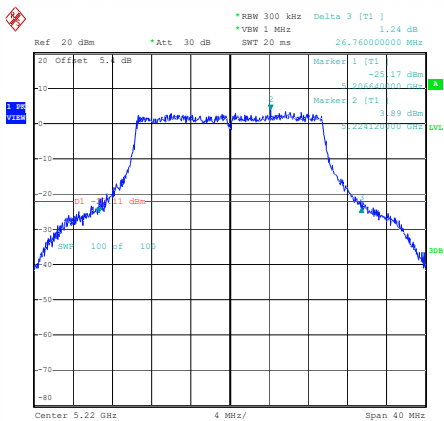
Date: 20.MAY.2023 10:30:25

11AC40SISO-Ant1-5230



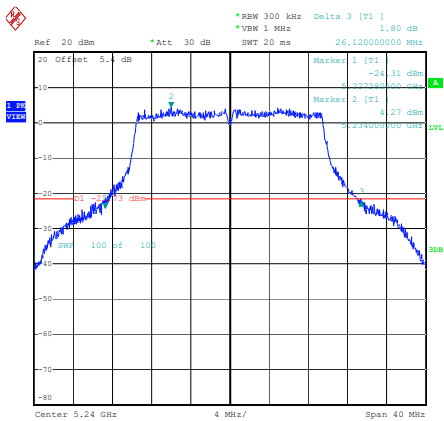
Date: 20.MAY.2023 10:41:14

11AX20SISO-Ant1-5180



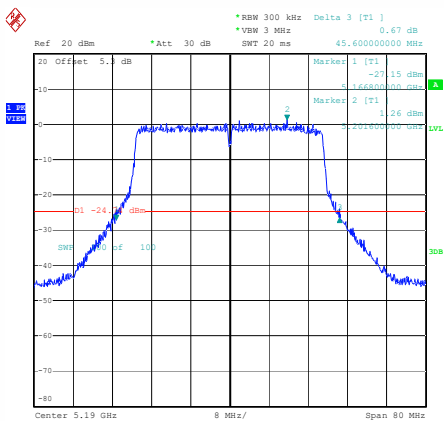
Date: 20.MAY.2023 10:46:55

11AX20SISO-Ant1-5220



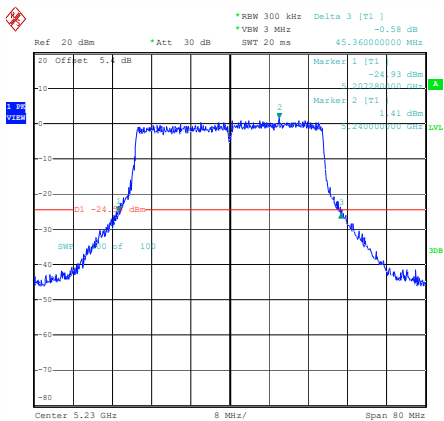
Date: 20.MAY.2023 10:52:53

11AX20SISO-Ant1-5240



Date: 20.MAY.2023 10:58:34

11AX40SISO-Ant1-5190



Date: 20.MAY.2023 11:04:38

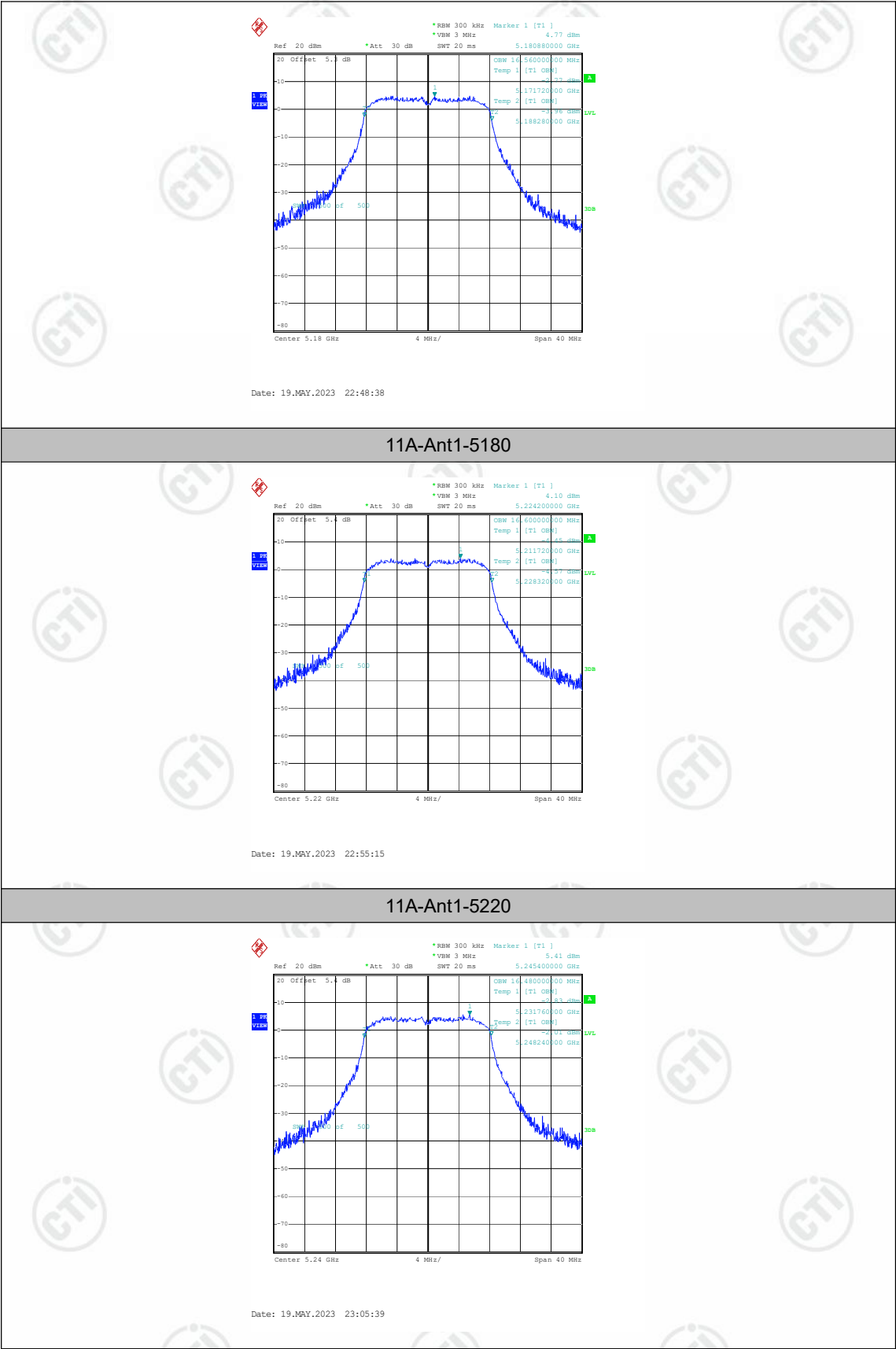
11AX40SISO-Ant1-5230

Appendix A2: Occupied channel bandwidth

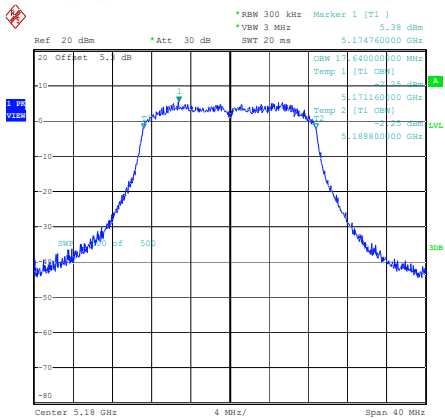
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.56	0.0000	0.0000	---	---
11A	Ant1	5220	16.6	0.0000	0.0000	---	---
11A	Ant1	5240	16.48	0.0000	0.0000	---	---
11N20SISO	Ant1	5180	17.64	0.0000	0.0000	---	---
11N20SISO	Ant1	5220	17.64	0.0000	0.0000	---	---
11N20SISO	Ant1	5240	17.6	0.0000	0.0000	---	---
11N40SISO	Ant1	5190	36.64	0.0000	0.0000	---	---
11N40SISO	Ant1	5230	36.56	0.0000	0.0000	---	---
11AC20SISO	Ant1	5180	17.64	0.0000	0.0000	---	---
11AC20SISO	Ant1	5220	18.56	0.0000	0.0000	---	---
11AC20SISO	Ant1	5240	18.36	0.0000	0.0000	---	---
11AC40SISO	Ant1	5190	38	0.0000	0.0000	---	---
11AC40SISO	Ant1	5230	38	0.0000	0.0000	---	---
11AX20SISO	Ant1	5180	19.6	0.0000	0.0000	---	---
11AX20SISO	Ant1	5220	19.6	0.0000	0.0000	---	---
11AX20SISO	Ant1	5240	19.48	0.0000	0.0000	---	---
11AX40SISO	Ant1	5190	38.96	0.0000	0.0000	---	---
11AX40SISO	Ant1	5230	39.04	0.0000	0.0000	---	---

Test Graphs

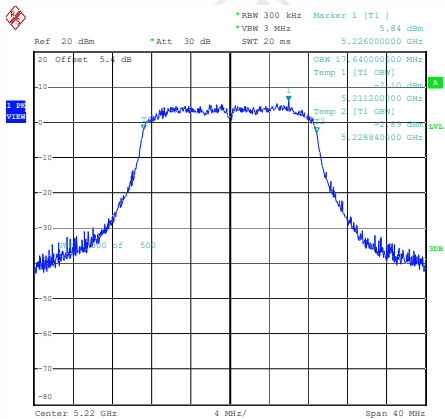


11A-Ant1-5240



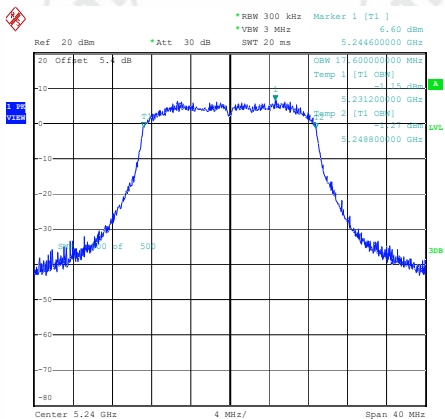
Date: 19.MAY.2023 23:12:12

11N20SISO-Ant1-5180



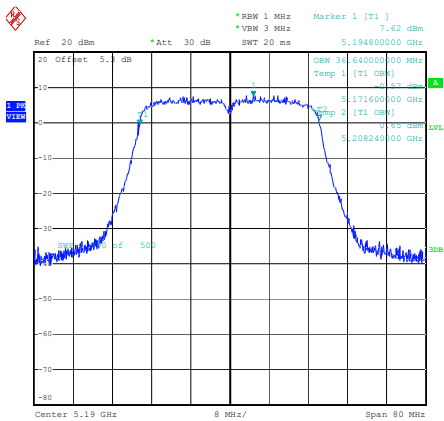
Date: 19.MAY.2023 23:20:14

11N20SISO-Ant1-5220



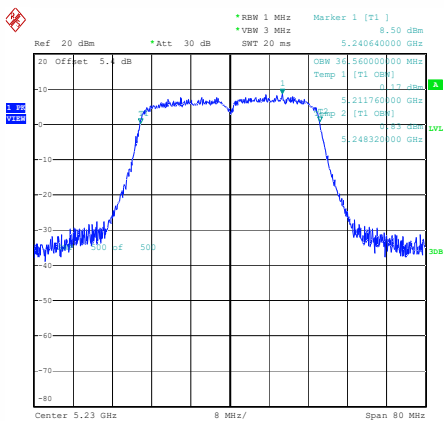
Date: 19.MAY.2023 23:26:29

11N20SISO-Ant1-5240



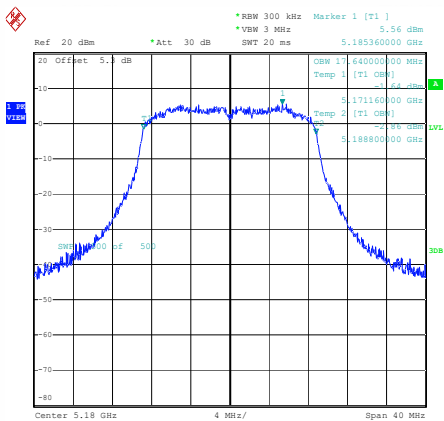
Date: 19.MAY.2023 23:32:05

11N40SISO-Ant1-5190



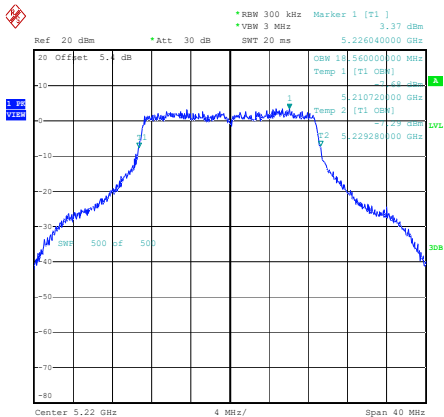
Date: 19.MAY.2023 23:37:36

11N40SISO-Ant1-5230



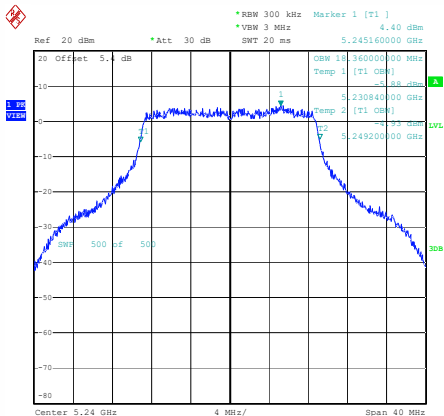
Date: 19.MAY.2023 23:43:48

11AC20SISO-Ant1-5180



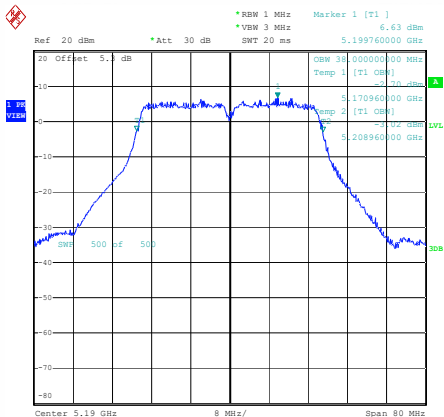
Date: 20.MAY.2023 10:13:01

11AC20SISO-Ant1-5220



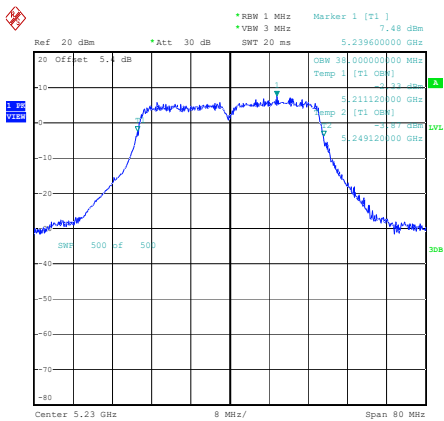
Date: 20.MAY.2023 10:18:50

11AC20SISO-Ant1-5240



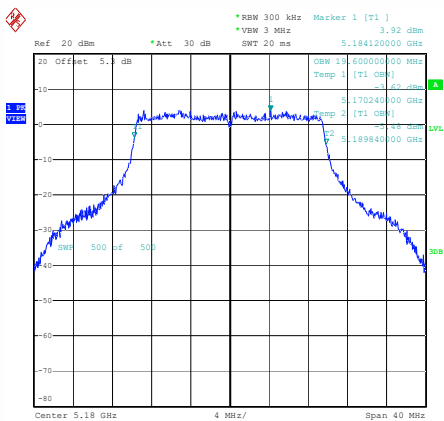
Date: 20.MAY.2023 10:25:39

11AC40SISO-Ant1-5190



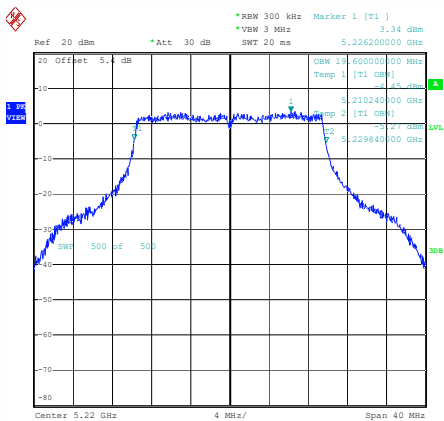
Date: 20.MAY.2023 10:31:19

11AC40SISO-Ant1-5230



Date: 20.MAY.2023 10:42:08

11AX20SISO-Ant1-5180



Date: 20.MAY.2023 10:47:49

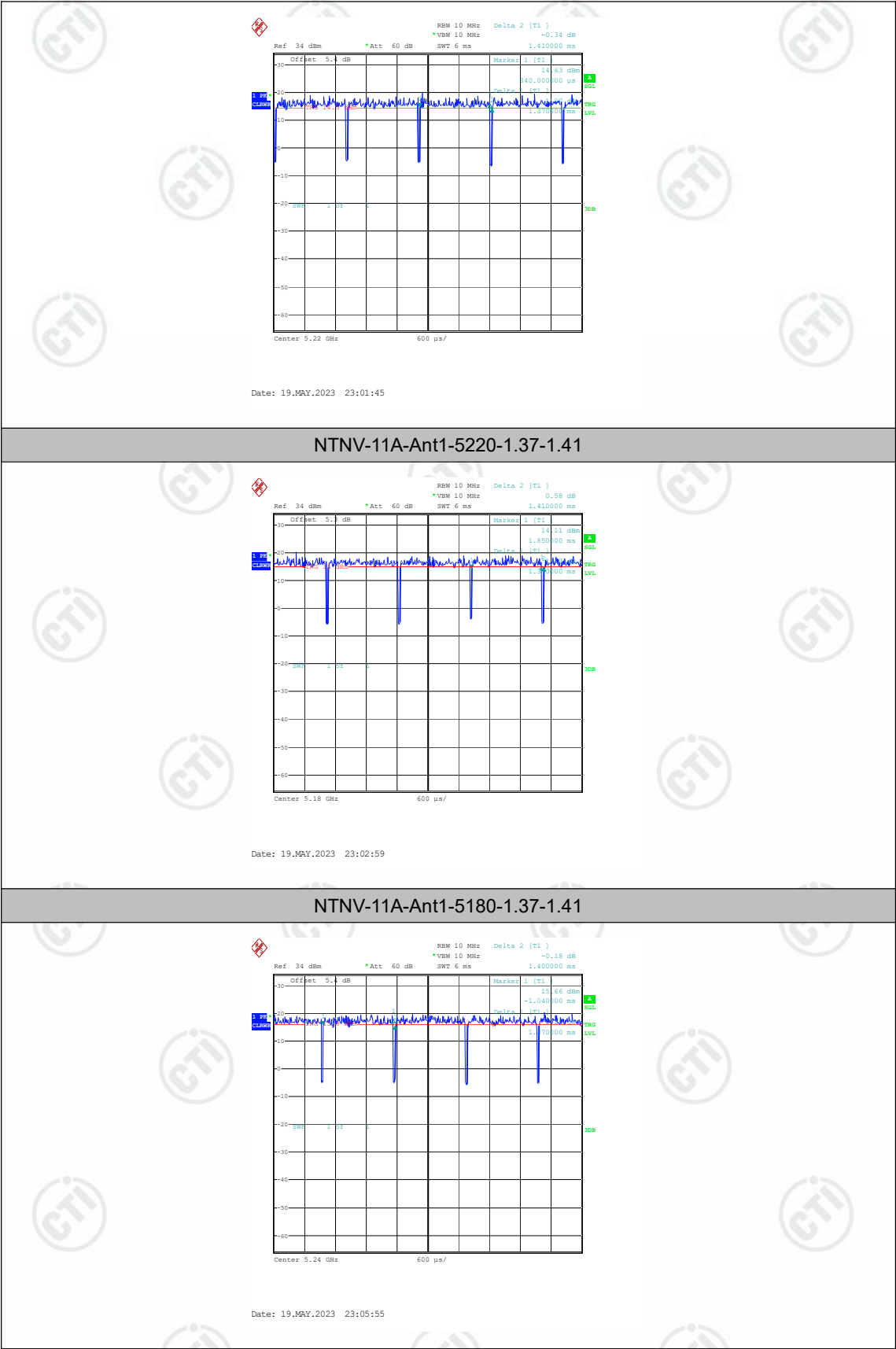
11AX20SISO-Ant1-5220

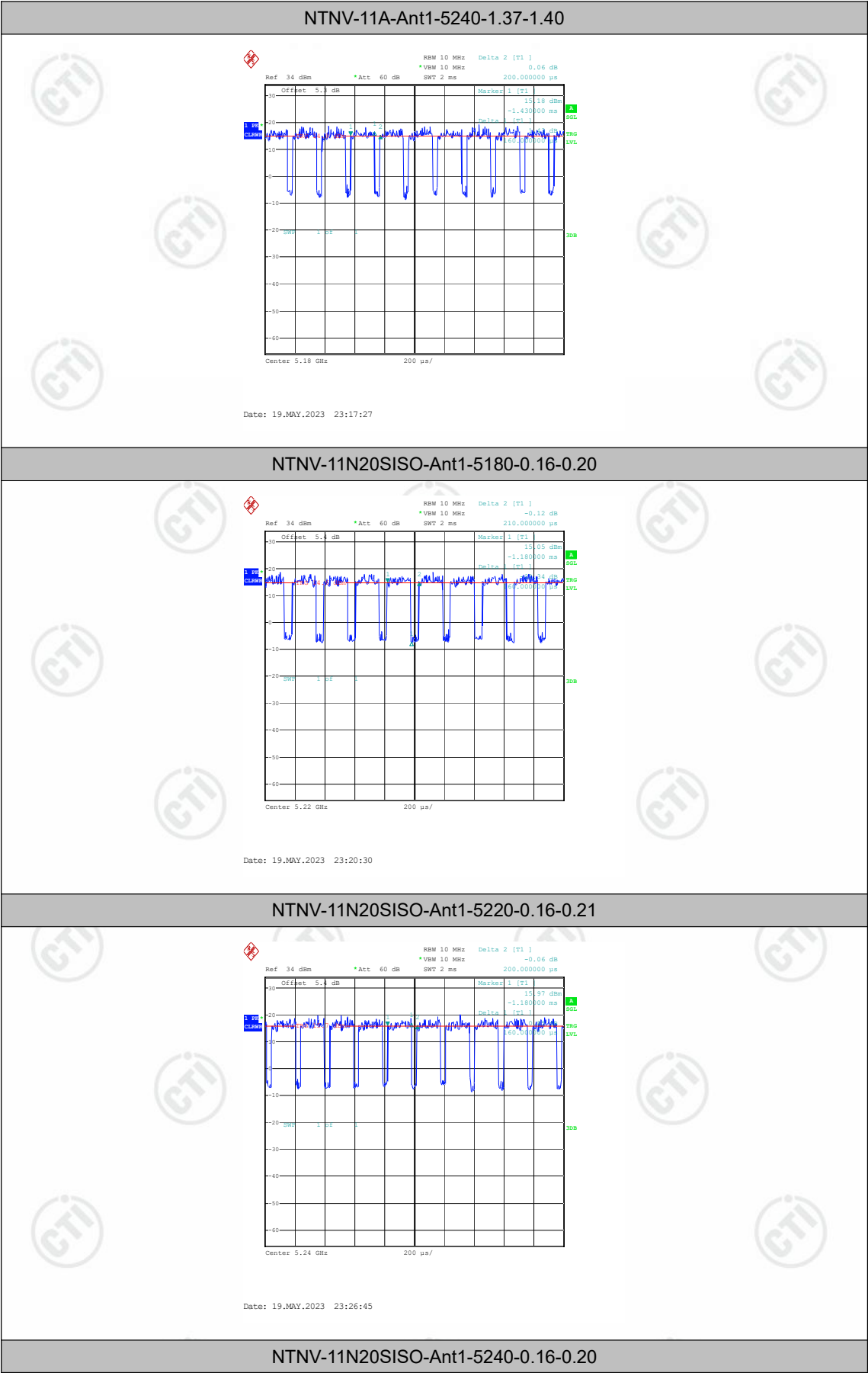
Appendix B: Duty Cycle

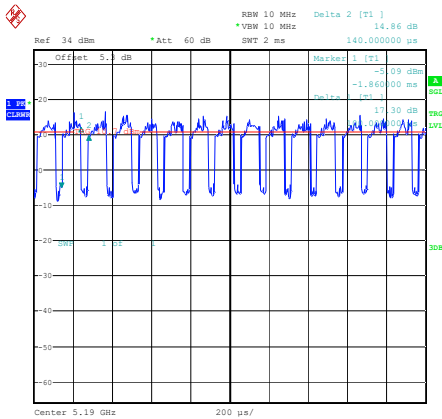
Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5220	1.37	1.41	97.16
11A	Ant1	5180	1.37	1.41	97.16
11A	Ant1	5240	1.37	1.40	97.86
11N20SISO	Ant1	5180	0.16	0.20	80.00
11N20SISO	Ant1	5220	0.16	0.21	76.19
11N20SISO	Ant1	5240	0.16	0.20	80.00
11N40SISO	Ant1	5190	0.10	0.14	71.43
11N40SISO	Ant1	5230	0.00	0.03	100
11AC20SISO	Ant1	5180	0.14	0.18	77.78
11AC20SISO	Ant1	5220	0.15	0.20	75.00
11AC20SISO	Ant1	5240	0.15	0.25	60.00
11AC40SISO	Ant1	5190	0.00	0.02	100
11AC40SISO	Ant1	5230	0.00	0.03	100
11AX20SISO	Ant1	5180	0.12	0.15	80.00
11AX20SISO	Ant1	5220	0.12	0.18	66.67
11AX20SISO	Ant1	5240	0.12	0.16	75.00
11AX40SISO	Ant1	5190	0.00	0.01	100
11AX40SISO	Ant1	5230	0.00	0.02	100

Test Graphs

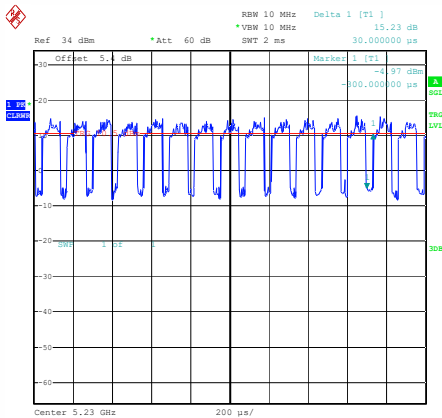






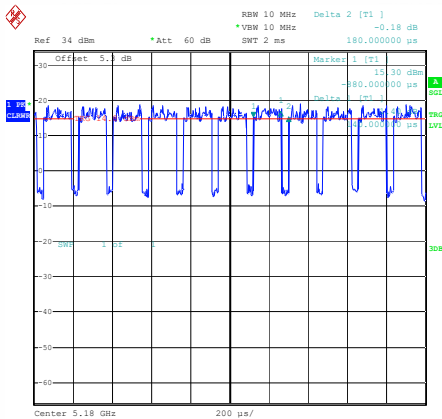
Date: 19.MAY.2023 23:32:22

NTNV-11N40SISO-Ant1-5190-0.10-0.14



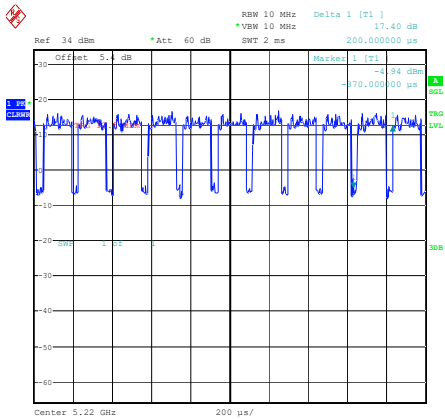
Date: 19.MAY.2023 23:37:51

NTNV-11N40SISO-Ant1-5230-0.00-0.03



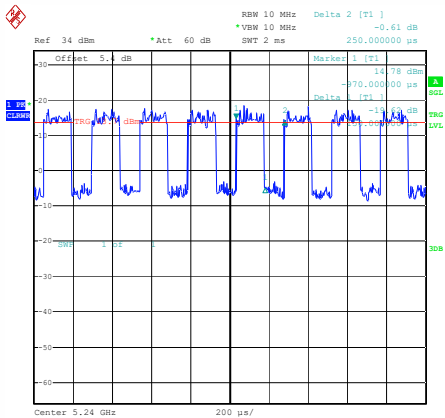
Date: 19.MAY.2023 23:44:04

NTNV-11AC20SISO-Ant1-5180-0.14-0.18



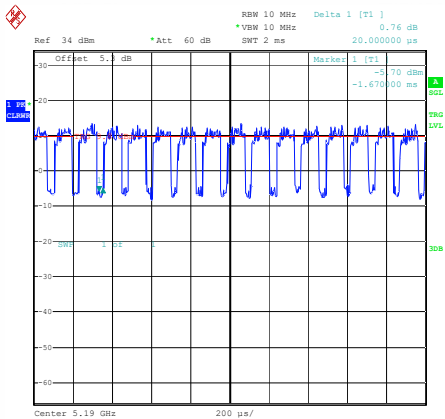
Date: 20.MAY.2023 10:13:16

NTVN-11AC20SISO-Ant1-5220-0.15-0.20



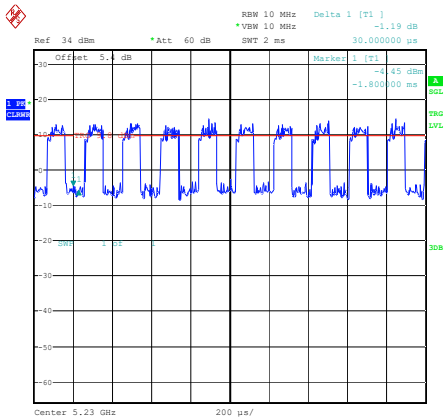
Date: 20.MAY.2023 10:19:06

NTVN-11AC20SISO-Ant1-5240-0.15-0.25



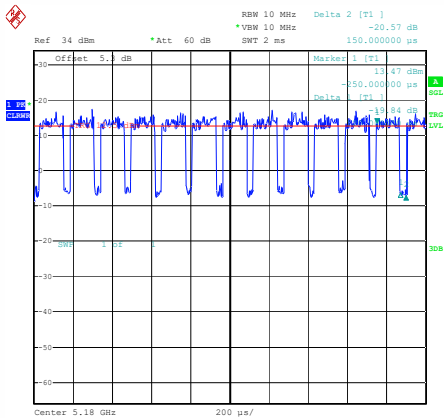
Date: 20.MAY.2023 10:25:54

NTVN-11AC40SISO-Ant1-5190-0.00-0.02



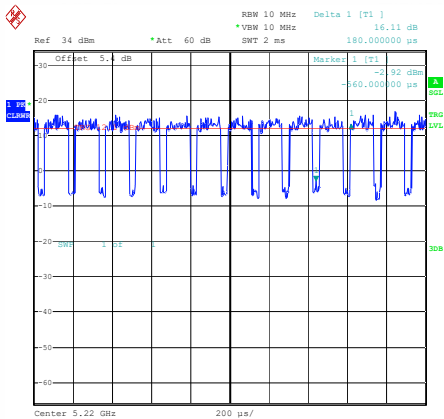
Date: 20.MAY.2023 10:31:34

NTNV-11AC40SISO-Ant1-5230-0.00-0.03



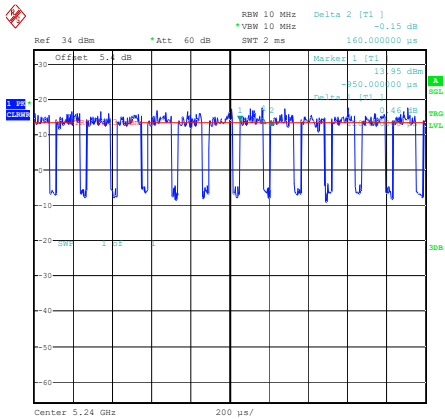
Date: 20.MAY.2023 10:42:24

NTNV-11AX20SISO-Ant1-5180-0.12-0.15



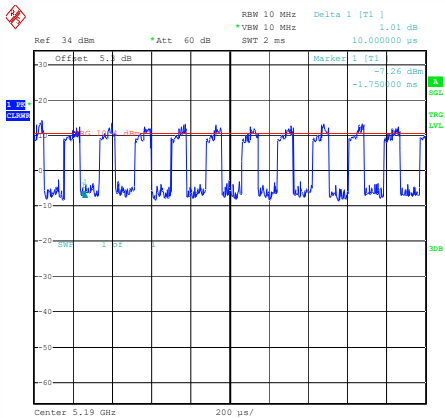
Date: 20.MAY.2023 10:48:04

NTNV-11AX20SISO-Ant1-5220-0.12-0.18



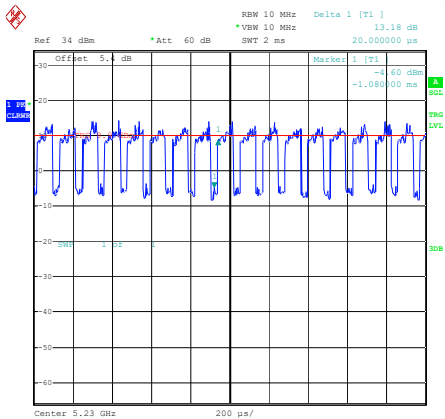
Date: 20.MAY.2023 10:54:03

NTNV-11AX20SISO-Ant1-5240-0.12-0.16



Date: 20.MAY.2023 10:59:43

NTNV-11AX40SISO-Ant1-5190-0.00-0.01



Date: 20.MAY.2023 11:05:40

NTNV-11AX40SISO-Ant1-5230-0.00-0.02

Appendix C: Maximum conducted output power

Test Result Channel Power

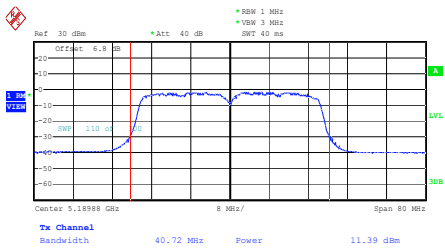
Test Mode	Antenna	Frequency [MHz]	Set Power	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11A	Ant1	5180	---	12.15	100.00	0.00	12.15	≤23.98	2.46	14.61	---	PASS
11A	Ant1	5220	---	11.62	100.00	0.00	11.62	≤23.98	2.46	14.08	---	PASS
11A	Ant1	5240	---	12.75	97.86	0.09	12.84	≤23.98	2.46	15.30	---	PASS
11N20SISO	Ant1	5180	---	11.43	78.95	1.03	12.46	≤23.98	2.46	14.92	---	PASS
11N20SISO	Ant1	5220	---	10.98	76.19	1.18	12.16	≤23.98	2.46	14.62	---	PASS
11N20SISO	Ant1	5240	---	12.19	80.00	0.97	13.16	≤23.98	2.46	15.62	---	PASS
11N40SISO	Ant1	5190	---	9.93	71.43	1.46	11.39	≤23.98	2.46	13.85	---	PASS
11N40SISO	Ant1	5230	---	11.02	100.00	0.00	11.02	≤23.98	2.46	13.48	---	PASS
11AC20SISO	Ant1	5180	---	11.50	77.78	1.09	12.59	≤23.98	2.46	15.05	---	PASS
11AC20SISO	Ant1	5220	---	9.61	75.00	1.25	10.86	≤23.98	2.46	13.32	---	PASS
11AC20SISO	Ant1	5240	---	10.53	60.00	2.22	12.75	≤23.98	2.46	15.21	---	PASS
11AC40SISO	Ant1	5190	---	9.12	100.00	0.00	9.12	≤23.98	2.46	11.58	---	PASS
11AC40SISO	Ant1	5230	---	8.68	100.00	0.00	8.68	≤23.98	2.46	11.14	---	PASS
11AX20SISO	Ant1	5180	---	9.79	80.00	0.97	10.76	≤23.98	2.46	13.22	---	PASS
11AX20SISO	Ant1	5220	---	9.32	66.67	1.76	11.08	≤23.98	2.46	13.54	---	PASS
11AX20SISO	Ant1	5240	---	10.25	75.00	1.25	11.50	≤23.98	2.46	13.96	---	PASS
11AX40SISO	Ant1	5190	---	8.85	100.00	0.00	8.85	≤23.98	2.46	11.31	---	PASS
11AX40SISO	Ant1	5230	---	9.47	100.00	0.00	9.47	≤23.98	2.46	11.93	---	PASS

Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs Channel Power

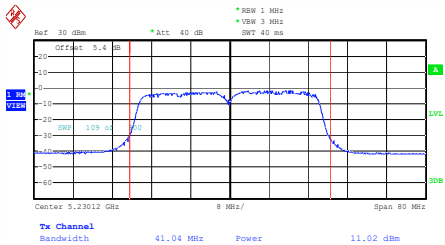






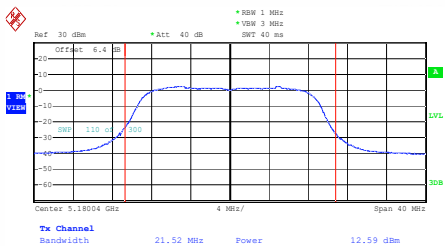
Date: 19.MAY.2023 23:32:45

11N40SISO-Ant1-5190-----9.93-71.43-1.46



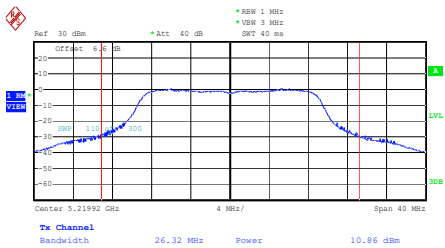
Date: 19.MAY.2023 23:38:14

11N40SISO-Ant1-5230-----11.02-100.00-0.00



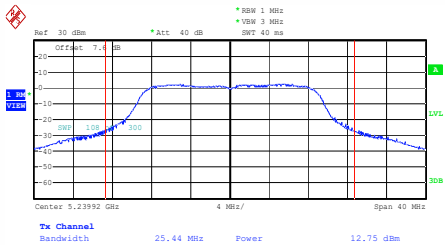
Date: 19.MAY.2023 23:44:27

11AC20SISO-Ant1-5180-----11.50-77.78-1.09



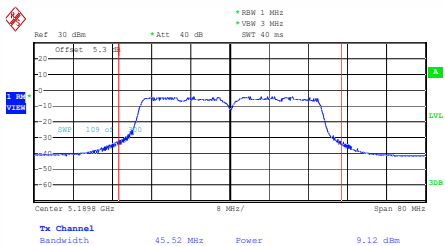
Date: 20.MAY.2023 10:13:40

11AC20SISO-Ant1-5220-----9.61-75.00-1.25



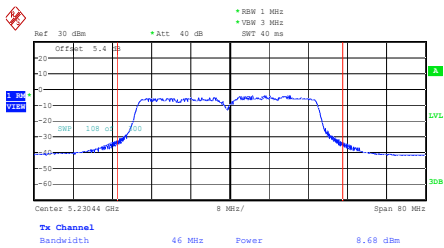
Date: 20.MAY.2023 10:19:29

11AC20SISO-Ant1-5240-----10.53-60.00-2.22



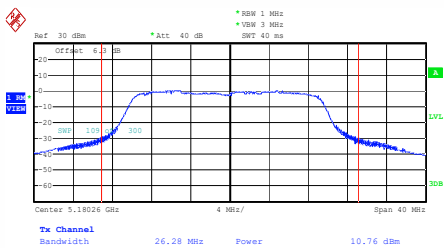
Date: 20.MAY.2023 10:26:18

11AC40SISO-Ant1-5190-----9.12-100.00-0.00



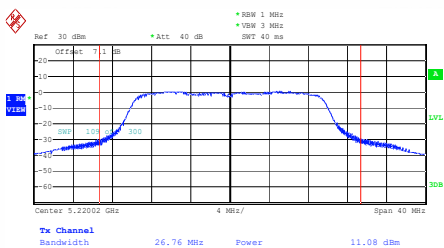
Date: 20.MAY.2023 10:31:57

11AC40SISO-Ant1-5230-----8.68-100.00-0.00



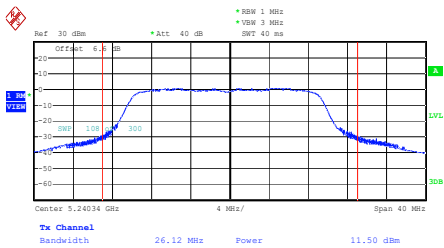
Date: 20.MAY.2023 10:42:48

11AX20SISO-Ant1-5180-----9.79-80.00-0.97



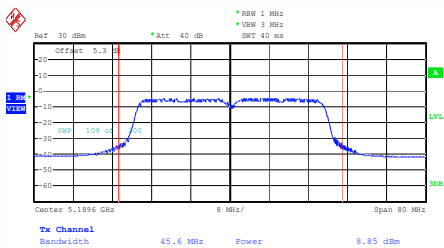
Date: 20.MAY.2023 10:48:27

11AX20SISO-Ant1-5220-----9.32-66.67-1.76



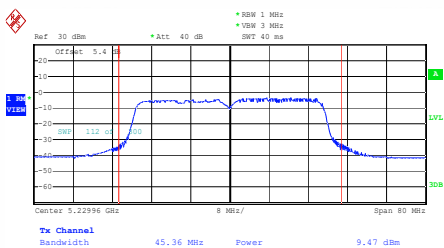
Date: 20.MAY.2023 10:54:26

11AX20SISO-Ant1-5240-----10.25-75.00-1.25



Date: 20.MAY.2023 11:00:06

11AX40SISO-Ant1-5190-----8.85-100.00-0.00



Date: 20.MAY.2023 11:06:00

11AX40SISO-Ant1-5230-----9.47-100.00-0.00

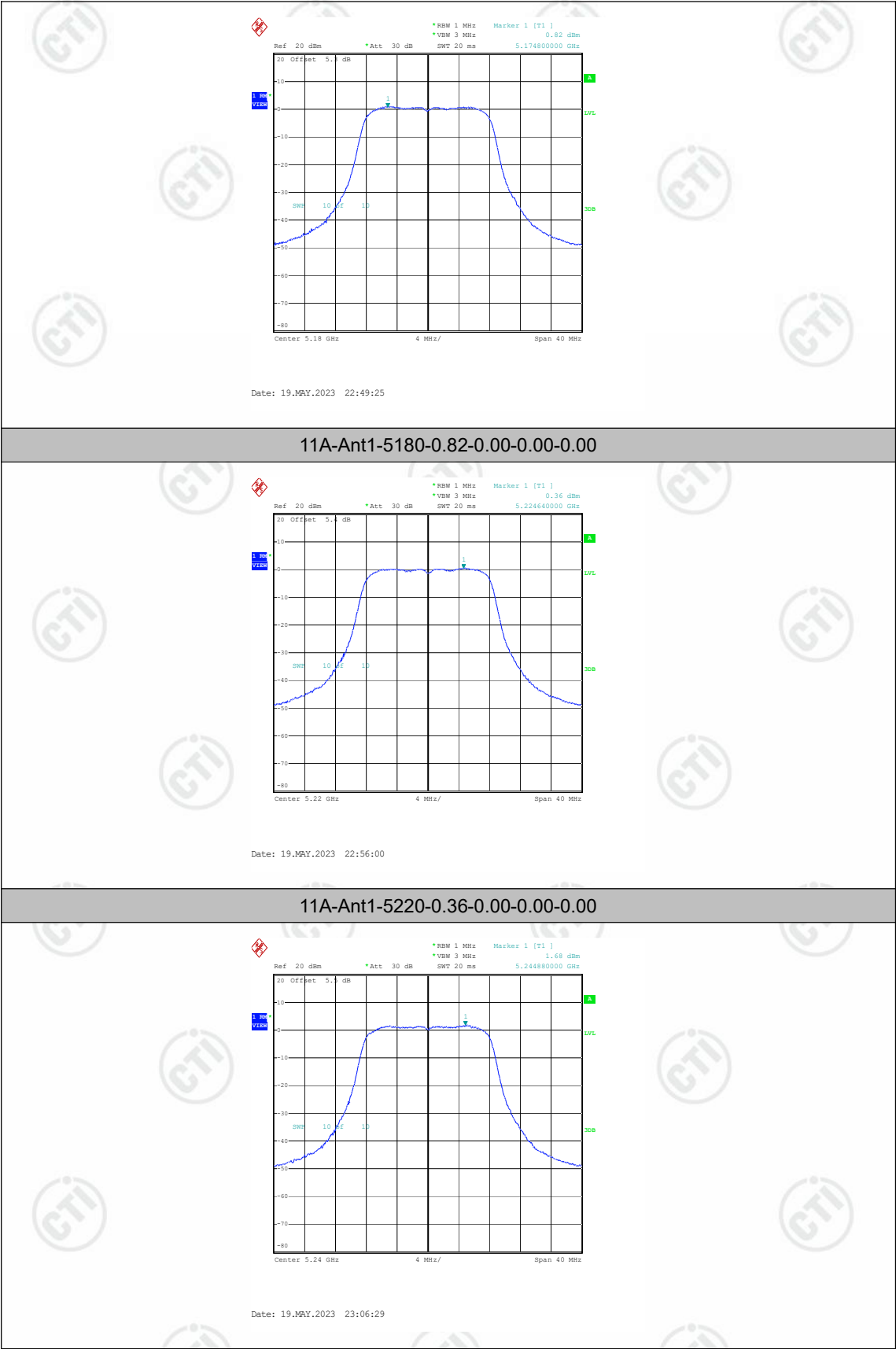
Appendix D: Maximum power spectral density

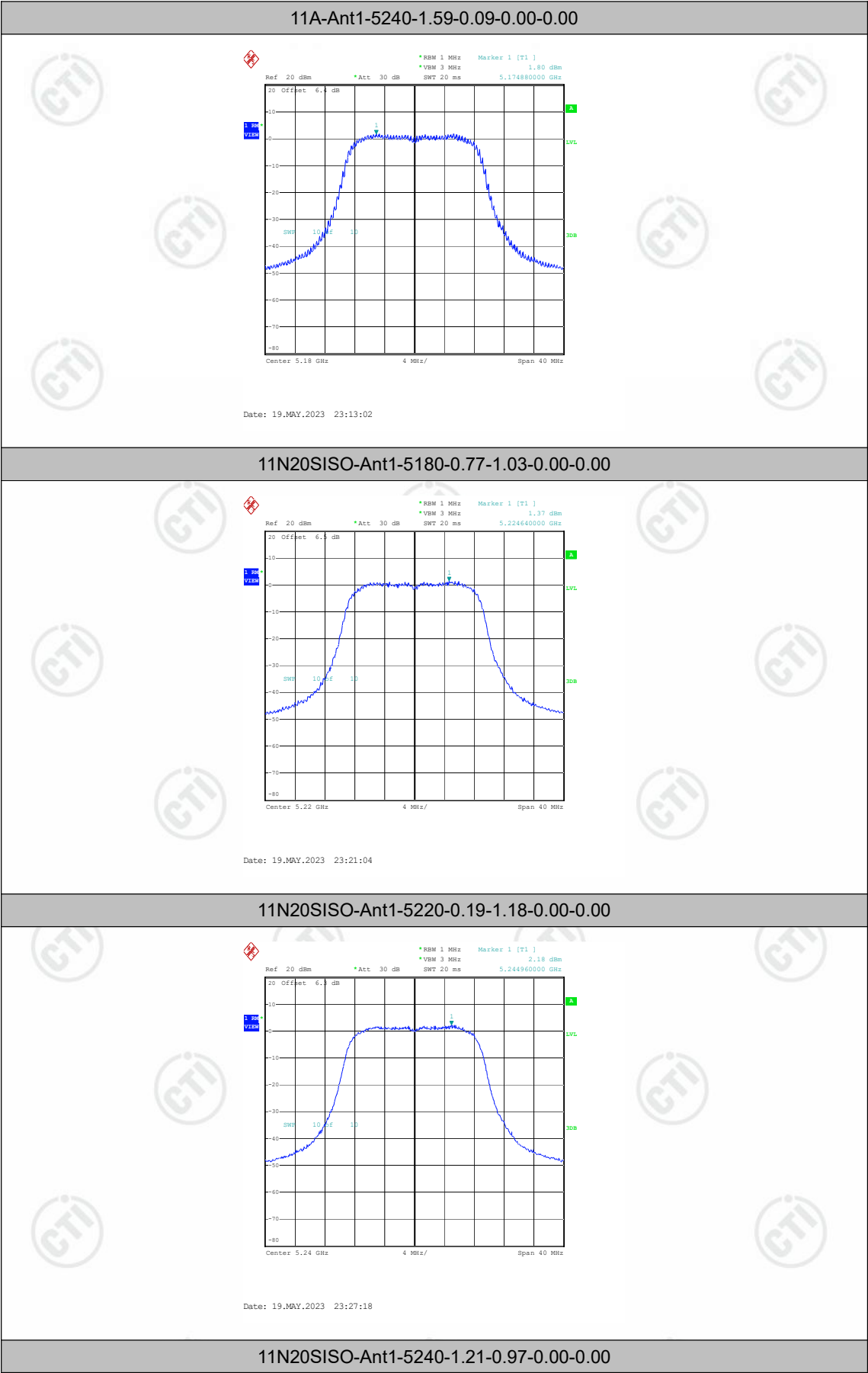
Test Result

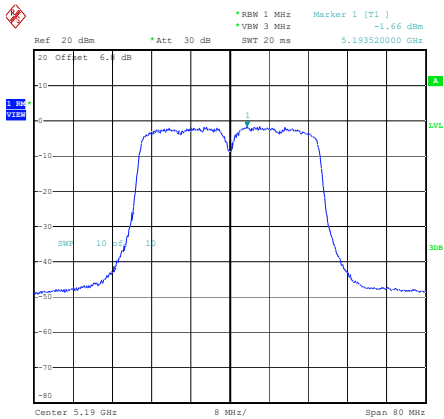
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	0.82	≤11.00	PASS
11A	Ant1	5220	0.36	≤11.00	PASS
11A	Ant1	5240	1.68	≤11.00	PASS
11N20SISO	Ant1	5180	1.8	≤11.00	PASS
11N20SISO	Ant1	5220	1.37	≤11.00	PASS
11N20SISO	Ant1	5240	2.18	≤11.00	PASS
11N40SISO	Ant1	5190	-1.66	≤11.00	PASS
11N40SISO	Ant1	5230	-2.63	≤11.00	PASS
11AC20SISO	Ant1	5180	1.59	≤11.00	PASS
11AC20SISO	Ant1	5220	-0.36	≤11.00	PASS
11AC20SISO	Ant1	5240	1.3	≤11.00	PASS
11AC40SISO	Ant1	5190	-6.09	≤11.00	PASS
11AC40SISO	Ant1	5230	-5.8	≤11.00	PASS
11AX20SISO	Ant1	5180	-0.79	≤11.00	PASS
11AX20SISO	Ant1	5220	-0.42	≤11.00	PASS
11AX20SISO	Ant1	5240	0.2	≤11.00	PASS
11AX40SISO	Ant1	5190	-5.39	≤11.00	PASS
11AX40SISO	Ant1	5230	-4.75	≤11.00	PASS

Note: 1.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

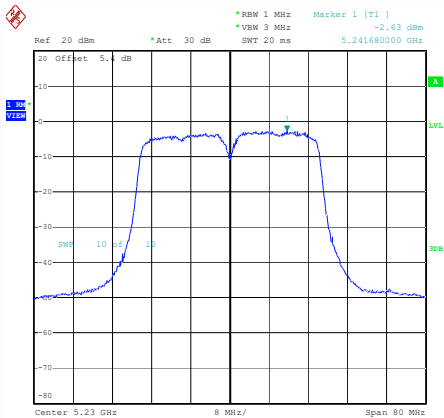






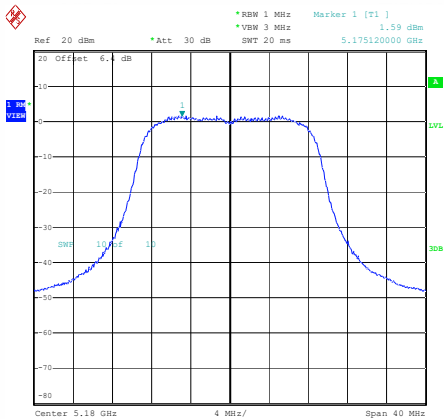
Date: 19.MAY.2023 23:32:55

11N40SISO-Ant1-5190--3.12-1.46-0.00-0.00



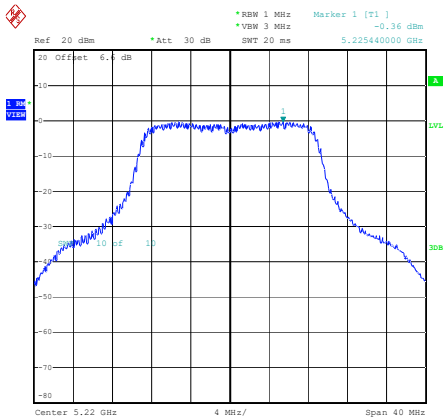
Date: 19.MAY.2023 23:38:24

11N40SISO-Ant1-5230--2.63-0.00-0.00-0.00



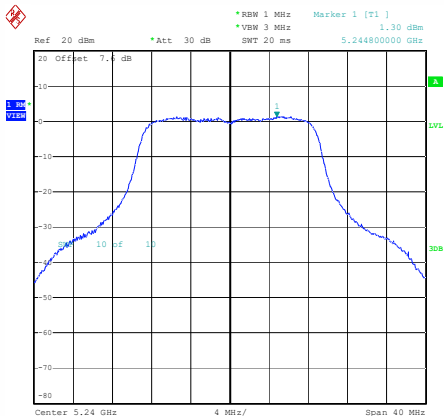
Date: 19.MAY.2023 23:44:37

11AC20SISO-Ant1-5180-0.50-1.09-0.00-0.00



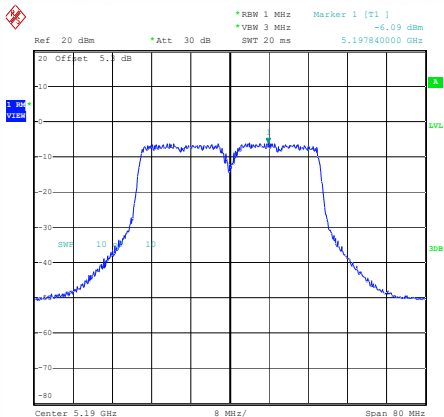
Date: 20.MAY.2023 10:13:51

11AC20SISO-Ant1-5220--1.61-1.25-0.00-0.00



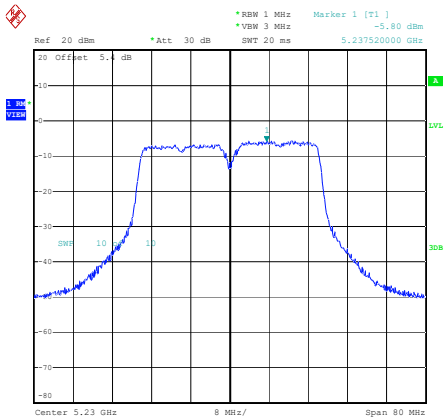
Date: 20.MAY.2023 10:19:40

11AC20SISO-Ant1-5240--0.92-2.22-0.00-0.00



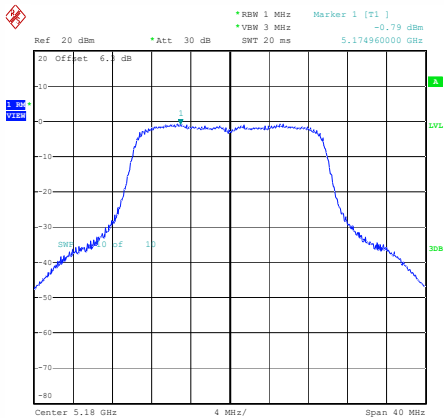
Date: 20.MAY.2023 10:26:28

11AC40SISO-Ant1-5190--6.09-0.00-0.00-0.00



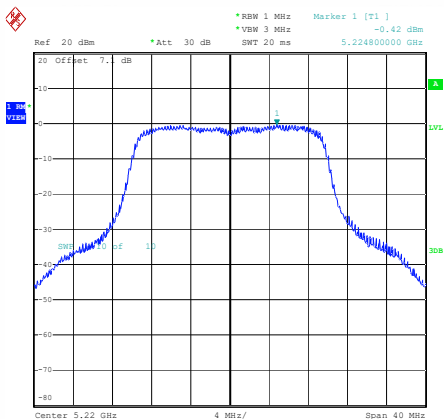
Date: 20.MAY.2023 10:32:08

11AC40SISO-Ant1-5230--5.80-0.00-0.00-0.00



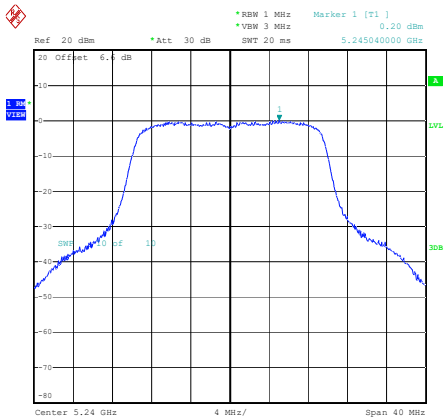
Date: 20.MAY.2023 10:42:58

11AX20SISO-Ant1-5180--1.76-0.97-0.00-0.00



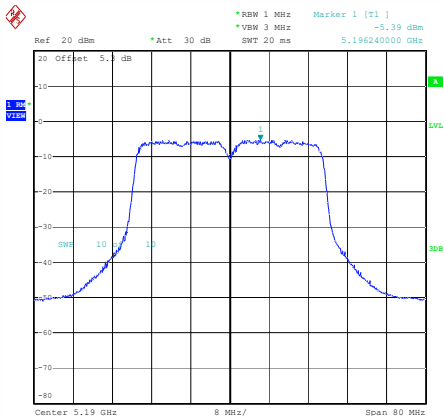
Date: 20.MAY.2023 10:48:37

11AX20SISO-Ant1-5220--2.18-1.76-0.00-0.00



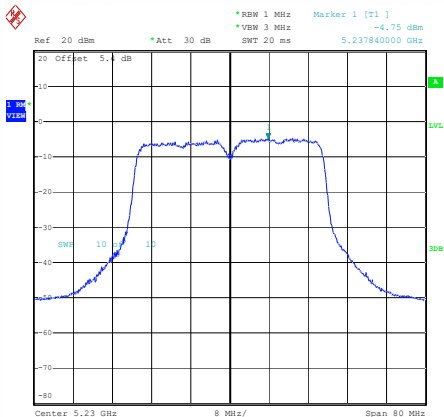
Date: 20.MAY.2023 10:54:37

11AX20SISO-Ant1-5240--1.05-1.25-0.00-0.00



Date: 20.MAY.2023 11:00:16

11AX40SISO-Ant1-5190--5.39-0.00-0.00-0.00



Date: 20.MAY.2023 11:06:09

11AX40SISO-Ant1-5230--4.75-0.00-0.00-0.00

Appendix E: Frequency Stability

Test Result

Test Mode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	LV	NT	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	HV	NT	-20000.00	-3.861004	20	PASS
11A	Ant1	5220	NV	NT	0.00	0.000000	20	PASS
11A	Ant1	5220	LV	NT	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	HV	NT	-20000.00	-3.831418	20	PASS
11A	Ant1	5240	NV	NT	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	LV	NT	0.00	0.000000	20	PASS
11A	Ant1	5240	HV	NT	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	LV	NT	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	HV	NT	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5220	NV	NT	0.00	0.000000	20	PASS
11N20SISO	Ant1	5220	LV	NT	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	HV	NT	-40000.00	-7.662835	20	PASS
11N20SISO	Ant1	5240	NV	NT	20000.00	3.816794	20	PASS
11N20SISO	Ant1	5240	LV	NT	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	HV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	LV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	HV	NT	-40000.00	-7.707129	20	PASS
11N40SISO	Ant1	5230	NV	NT	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	LV	NT	-40000.00	-7.648184	20	PASS
11N40SISO	Ant1	5230	HV	NT	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5180	NV	NT	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5180	LV	NT	-20000.00	-3.861004	20	PASS
11AC20SISO	Ant1	5180	HV	NT	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5220	NV	NT	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	LV	NT	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5220	HV	NT	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5240	NV	NT	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	LV	NT	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5240	HV	NT	-20000.00	-3.816794	20	PASS
11AC40SISO	Ant1	5190	NV	NT	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5190	LV	NT	0.00	0.000000	20	PASS

11AC40SISO	Ant1	5190	HV	NT	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5230	NV	NT	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5230	LV	NT	-40000.00	-7.648184	20	PASS
11AC40SISO	Ant1	5230	HV	NT	0.00	0.000000	20	PASS
11AX20SISO	Ant1	5180	NV	NT	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	LV	NT	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	HV	NT	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5220	NV	NT	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	LV	NT	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	HV	NT	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5240	NV	NT	0.00	0.000000	20	PASS
11AX20SISO	Ant1	5240	LV	NT	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	HV	NT	-20000.00	-3.816794	20	PASS
11AX40SISO	Ant1	5190	NV	NT	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	LV	NT	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	HV	NT	-40000.00	-7.707129	20	PASS
11AX40SISO	Ant1	5230	NV	NT	-40000.00	-7.648184	20	PASS
11AX40SISO	Ant1	5230	LV	NT	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	HV	NT	0.00	0.000000	20	PASS

Test Mode	Antenna	Frequen cy[MHz]	Voltage [Vdc]	Temper ature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	-20	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	-10	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	0	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	10	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	20	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	30	-20000.00	-3.861004	20	PASS
11A	Ant1	5180	NV	40	0.00	0.000000	20	PASS
11A	Ant1	5180	NV	50	-20000.00	-3.861004	20	PASS
11A	Ant1	5220	NV	-30	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	-20	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	-10	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	0	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	10	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	20	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	30	0.00	0.000000	20	PASS
11A	Ant1	5220	NV	40	-20000.00	-3.831418	20	PASS
11A	Ant1	5220	NV	50	-20000.00	-3.831418	20	PASS
11A	Ant1	5240	NV	-30	-20000.00	-3.816794	20	PASS

11A	Ant1	5240	NV	-20	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	-10	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	0	0.00	0.000000	20	PASS
11A	Ant1	5240	NV	10	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	20	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	30	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	40	-20000.00	-3.816794	20	PASS
11A	Ant1	5240	NV	50	-40000.00	-7.633588	20	PASS
11N20SISO	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	-20	0.00	0.000000	20	PASS
11N20SISO	Ant1	5180	NV	-10	-40000.00	-7.722008	20	PASS
11N20SISO	Ant1	5180	NV	0	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	10	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	20	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	30	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	40	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5180	NV	50	-60000.00	-11.583012	20	PASS
11N20SISO	Ant1	5220	NV	-30	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	-20	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	-10	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	0	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	10	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	20	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	30	0.00	0.000000	20	PASS
11N20SISO	Ant1	5220	NV	40	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5220	NV	50	-20000.00	-3.831418	20	PASS
11N20SISO	Ant1	5240	NV	-30	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	NV	-20	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	NV	-10	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	NV	0	20000.00	3.816794	20	PASS
11N20SISO	Ant1	5240	NV	10	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	NV	20	-40000.00	-7.633588	20	PASS
11N20SISO	Ant1	5240	NV	30	-80000.00	-15.267176	20	PASS
11N20SISO	Ant1	5240	NV	40	0.00	0.000000	20	PASS
11N20SISO	Ant1	5240	NV	50	-20000.00	-3.816794	20	PASS
11N40SISO	Ant1	5190	NV	-30	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	-20	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	-10	-40000.00	-7.707129	20	PASS
11N40SISO	Ant1	5190	NV	0	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	10	-40000.00	-7.707129	20	PASS
11N40SISO	Ant1	5190	NV	20	-40000.00	-7.707129	20	PASS

11N40SISO	Ant1	5190	NV	30	-40000.00	-7.707129	20	PASS
11N40SISO	Ant1	5190	NV	40	0.00	0.000000	20	PASS
11N40SISO	Ant1	5190	NV	50	-40000.00	-7.707129	20	PASS
11N40SISO	Ant1	5230	NV	-30	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	-20	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	-10	-40000.00	-7.648184	20	PASS
11N40SISO	Ant1	5230	NV	0	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	10	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	20	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	30	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	40	0.00	0.000000	20	PASS
11N40SISO	Ant1	5230	NV	50	-40000.00	-7.648184	20	PASS
11AC20SISO	Ant1	5180	NV	-30	20000.00	3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	-20	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5180	NV	-10	20000.00	3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	0	-20000.00	-3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	10	-20000.00	-3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	20	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5180	NV	30	-20000.00	-3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	40	-20000.00	-3.861004	20	PASS
11AC20SISO	Ant1	5180	NV	50	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5220	NV	-30	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	-20	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	-10	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	0	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	10	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	20	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	30	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	40	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5220	NV	50	-20000.00	-3.831418	20	PASS
11AC20SISO	Ant1	5240	NV	-30	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	-20	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5240	NV	-10	0.00	0.000000	20	PASS
11AC20SISO	Ant1	5240	NV	0	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	10	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	20	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	30	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	40	-20000.00	-3.816794	20	PASS
11AC20SISO	Ant1	5240	NV	50	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5190	NV	-30	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5190	NV	-20	0.00	0.000000	20	PASS

11AC40SISO	Ant1	5190	NV	-10	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5190	NV	0	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5190	NV	10	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5190	NV	20	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5190	NV	30	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5190	NV	40	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5190	NV	50	-40000.00	-7.707129	20	PASS
11AC40SISO	Ant1	5230	NV	-30	-40000.00	-7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	-20	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5230	NV	-10	40000.00	7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	0	40000.00	7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	10	0.00	0.000000	20	PASS
11AC40SISO	Ant1	5230	NV	20	-40000.00	-7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	30	-40000.00	-7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	40	-40000.00	-7.648184	20	PASS
11AC40SISO	Ant1	5230	NV	50	0.00	0.000000	20	PASS
11AX20SISO	Ant1	5180	NV	-30	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	-20	0.00	0.000000	20	PASS
11AX20SISO	Ant1	5180	NV	-10	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	0	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	10	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	20	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	30	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	40	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5180	NV	50	-20000.00	-3.861004	20	PASS
11AX20SISO	Ant1	5220	NV	-30	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	-20	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	-10	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	0	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	10	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	20	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	30	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	40	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5220	NV	50	-20000.00	-3.831418	20	PASS
11AX20SISO	Ant1	5240	NV	-30	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	-20	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	-10	0.00	0.000000	20	PASS
11AX20SISO	Ant1	5240	NV	0	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	10	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	20	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	30	-20000.00	-3.816794	20	PASS

11AX20SISO	Ant1	5240	NV	40	-20000.00	-3.816794	20	PASS
11AX20SISO	Ant1	5240	NV	50	-20000.00	-3.816794	20	PASS
11AX40SISO	Ant1	5190	NV	-30	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	-20	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	-10	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	0	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	10	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	20	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	30	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	40	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5190	NV	50	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	-30	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	-20	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	-10	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	0	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	10	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	20	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	30	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	40	0.00	0.000000	20	PASS
11AX40SISO	Ant1	5230	NV	50	0.00	0.000000	20	PASS

END OF REPORT