



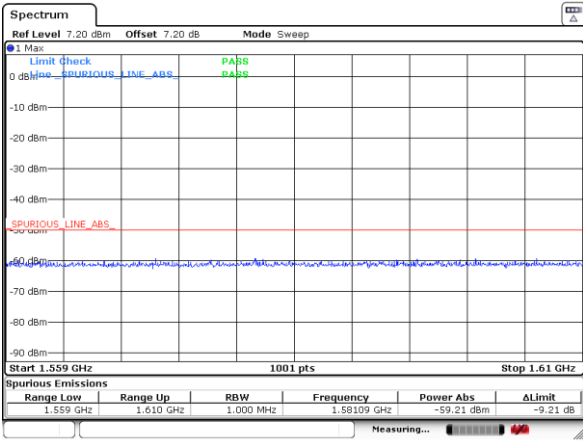
Emission limits for protection of aeronautical service

Band 23 SCS3.75KHz

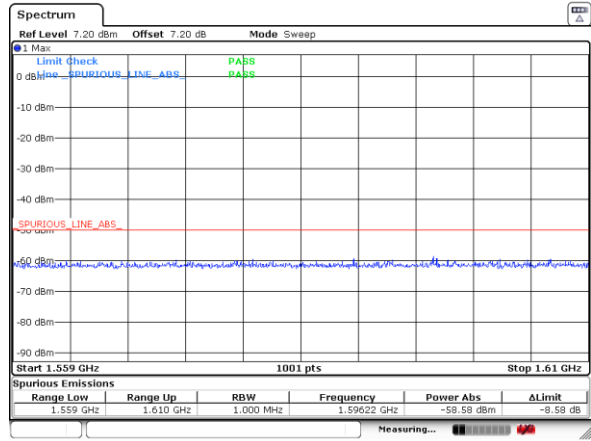
BPSK

Lowest Channel / 1SC1/ Carrier off

Middle Channel / 1SC1/ Carrier off



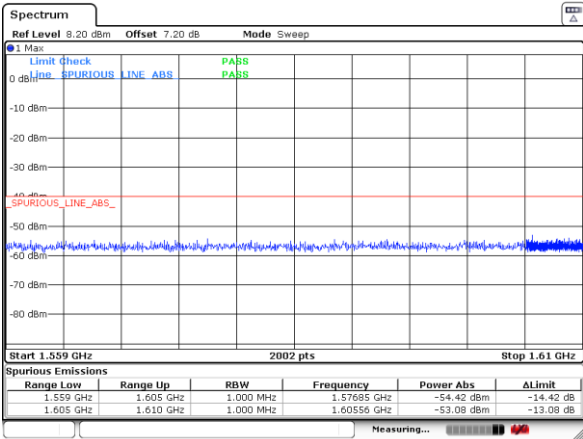
Date: 30_AUG.2023 16:48:49



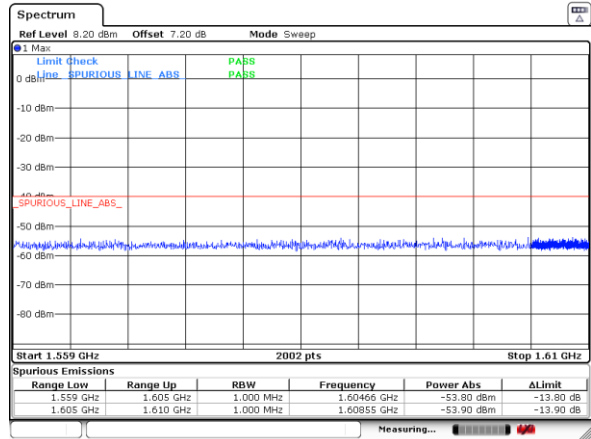
Date: 30_AUG.2023 16:50:11

Lowest Channel / 1SC1/ Carrier on

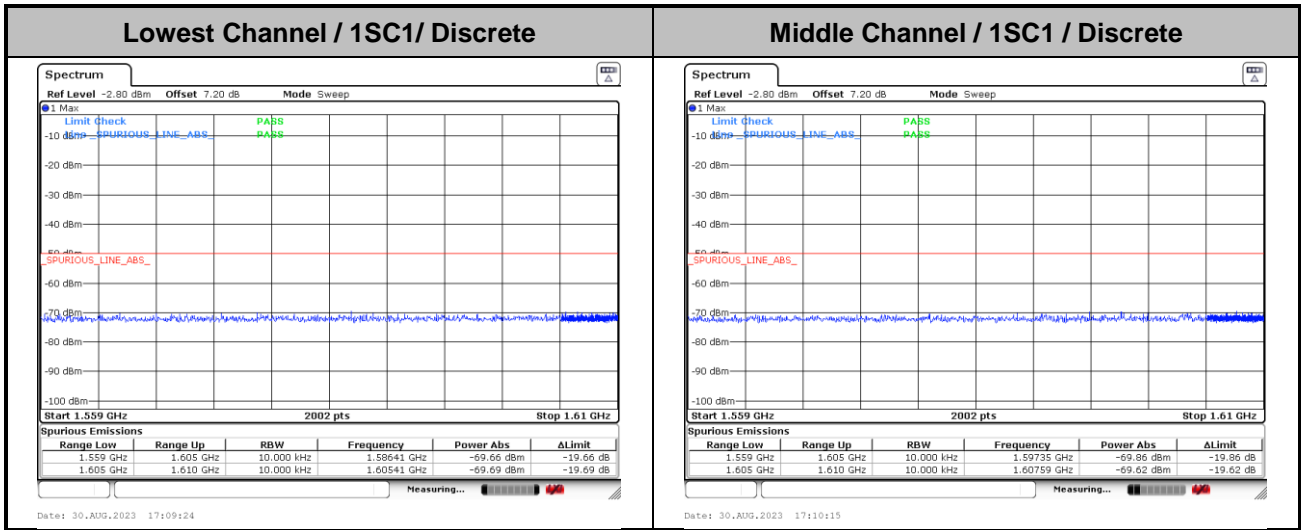
Middle Channel / 1SC1 / Carrier on



Date: 12_SEP.2023 16:51:29



Date: 12_SEP.2023 16:50:05



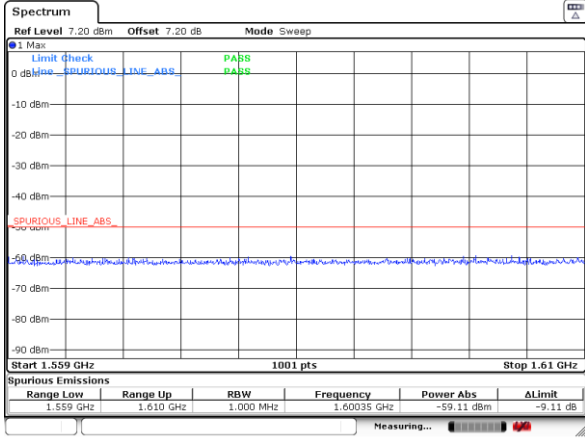


Band 23 SCS3.75KHz

BPSK

Highest Channel / 1SC1/ Carrier off

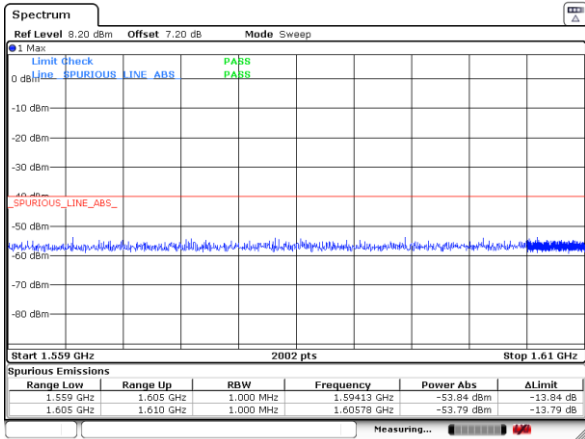
N/A



Date: 30, AUG, 2023 16:46:42

Highest Channel / 1SC1/ Carrier on

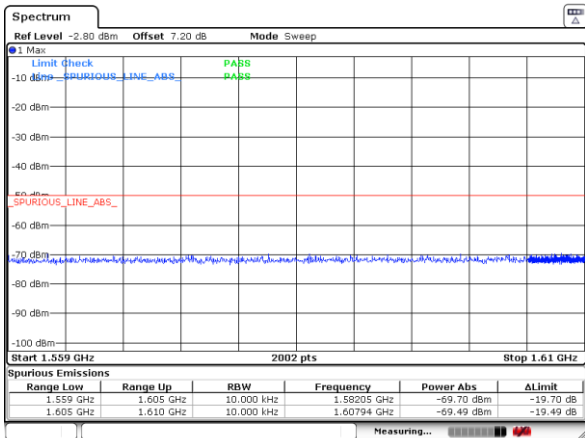
N/A



Date: 12, SEP, 2023 16:53:51

Highest Channel / 1SC1/ Discrete

N/A



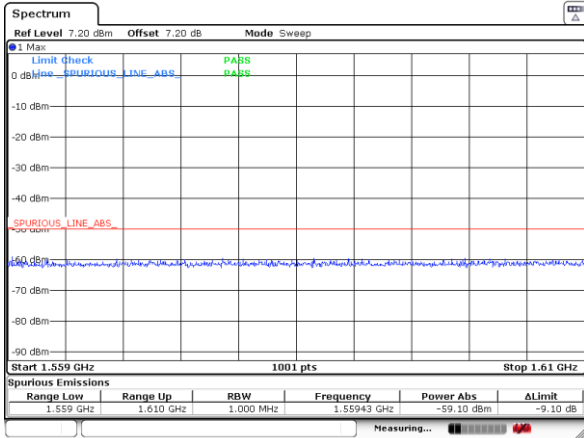
Date: 30, AUG, 2023 17:06:49



Band 23 SCS3.75KHz

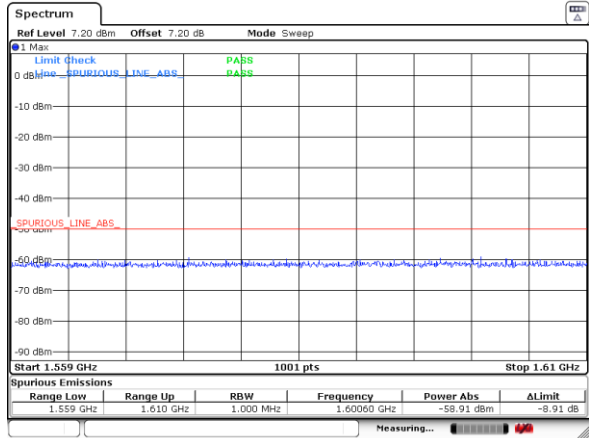
QPSK

Lowest Channel / 1SC1/ Carrier off



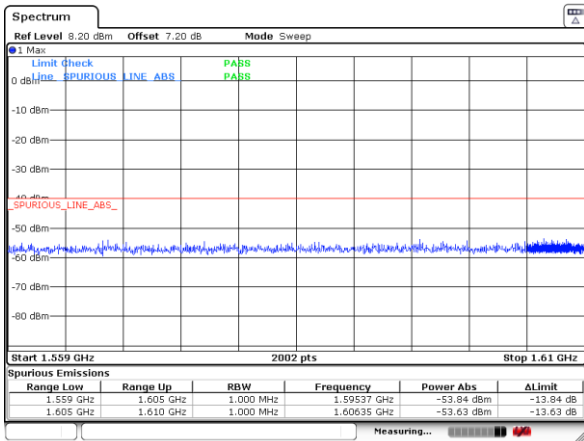
Date: 30_AUG.2023 16:49:09

Middle Channel / 1SC1/ Carrier off



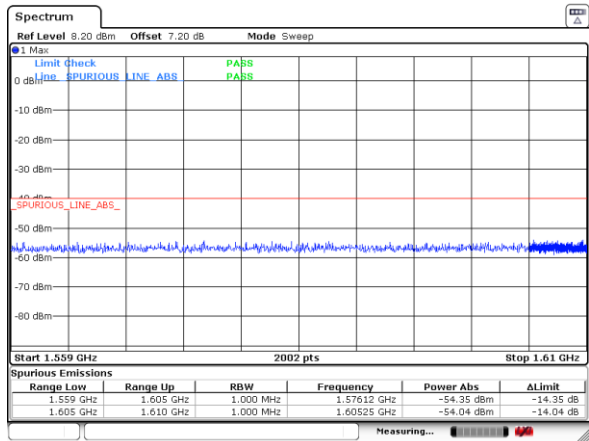
Date: 30_AUG.2023 16:50:31

Lowest Channel / 1SC1/ Carrier on



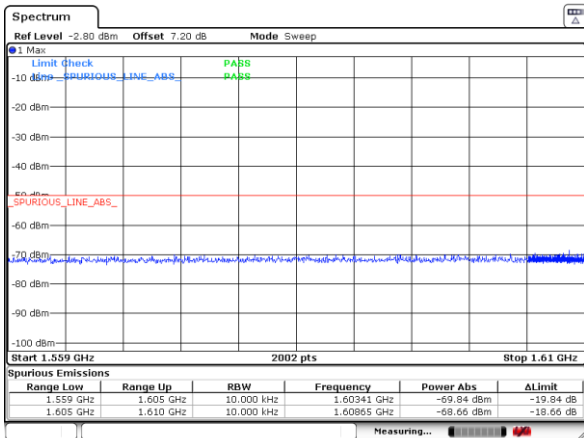
Date: 12_SEP.2023 16:51:54

Middle Channel / 1SC1 / Carrier on



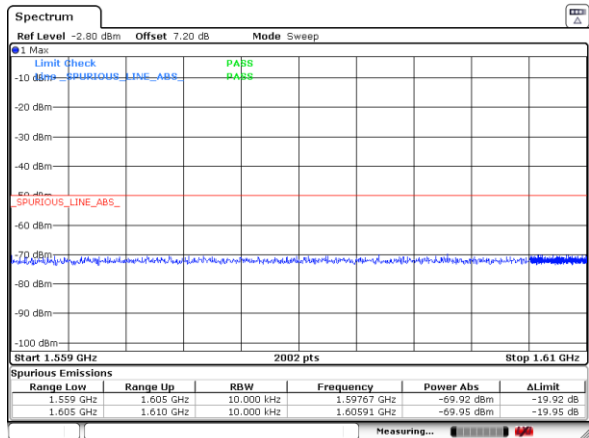
Date: 12_SEP.2023 16:49:31

Lowest Channel / 1SC1/ Discrete



Date: 30_AUG.2023 17:09:50

Middle Channel / 1SC1 / Discrete



Date: 30_AUG.2023 17:11:33

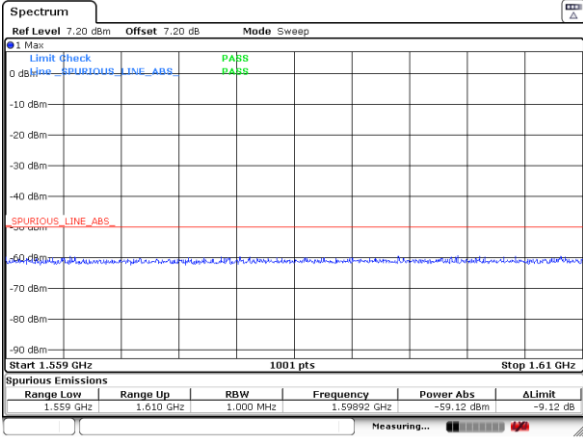


Band 23 SCS3.75KHz

QPSK

Highest Channel / 1SC1/ Carrier off

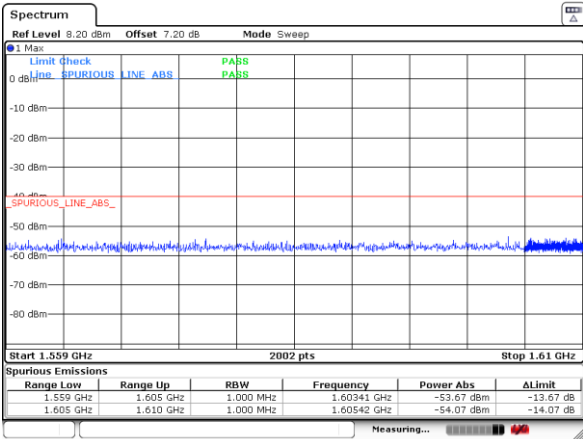
N/A



Date: 30, AUG, 2023 16:47:10

Highest Channel / 1SC1/ Carrier on

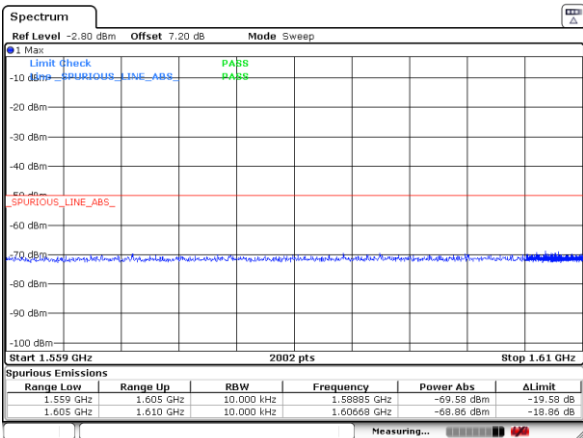
N/A



Date: 12, SEP, 2023 16:53:24

Highest Channel / 1SC1/ Discrete

N/A



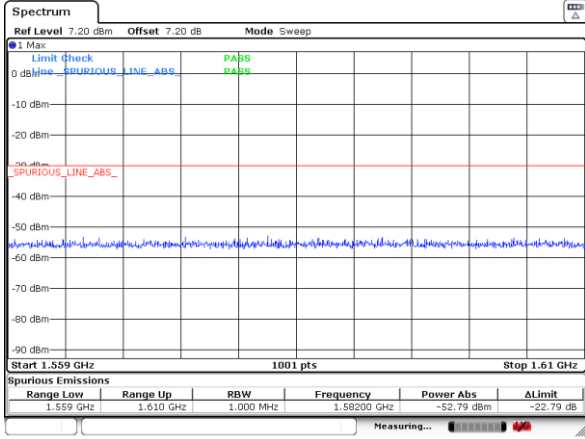
Date: 30, AUG, 2023 17:08:10



Band 23 SCS15KHz

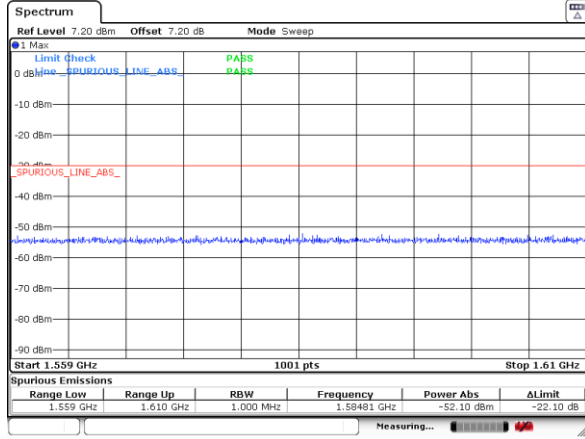
BPSK

Lowest Channel / 1SC1/ Carrier off



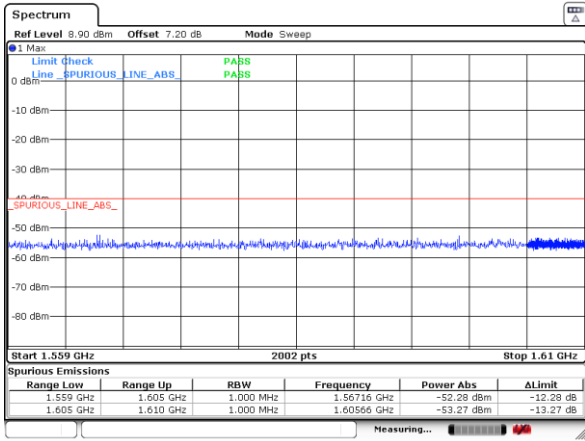
Date: 19_SEP.2023 08:55:48

Middle Channel / 1SC1/ Carrier off



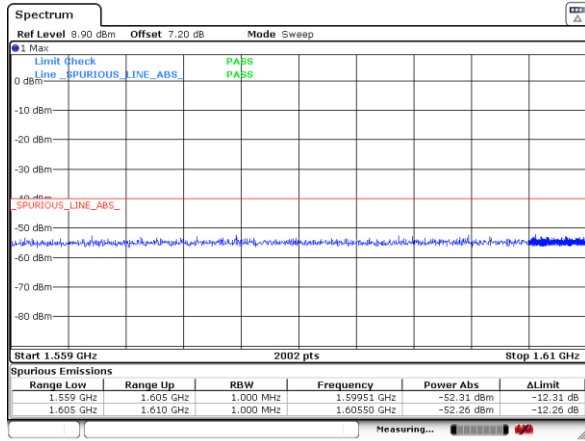
Date: 19_SEP.2023 08:55:16

Lowest Channel / 1SC1/ Carrier on



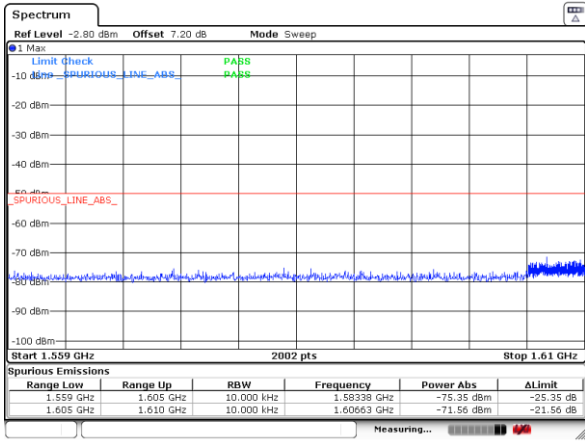
Date: 19_SEP.2023 08:46:07

Middle Channel / 1SC1 / Carrier on



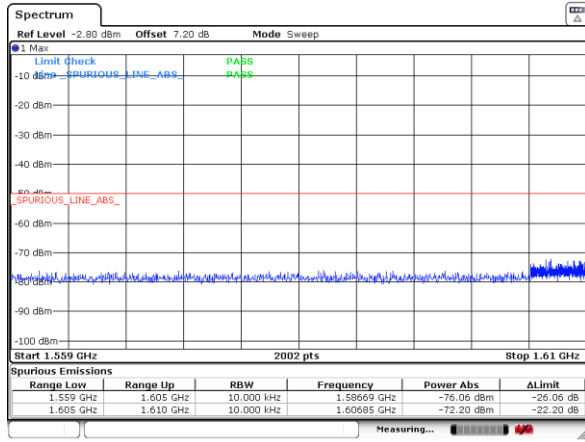
Date: 19_SEP.2023 08:43:34

Lowest Channel / 1SC1/ Discrete



Date: 19_SEP.2023 08:51:42

Middle Channel / 1SC1 / Discrete



Date: 19_SEP.2023 08:53:12

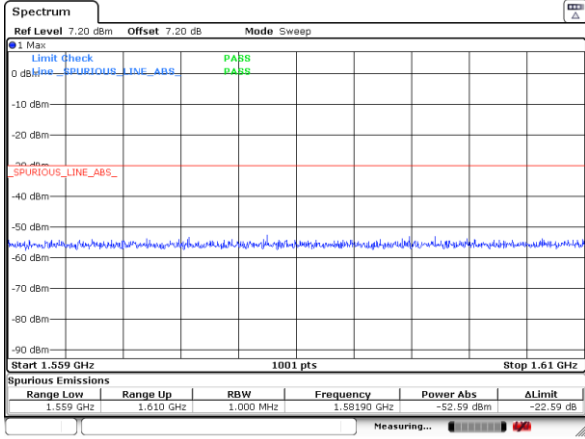


Band 23 SCS15KHz

BPSK

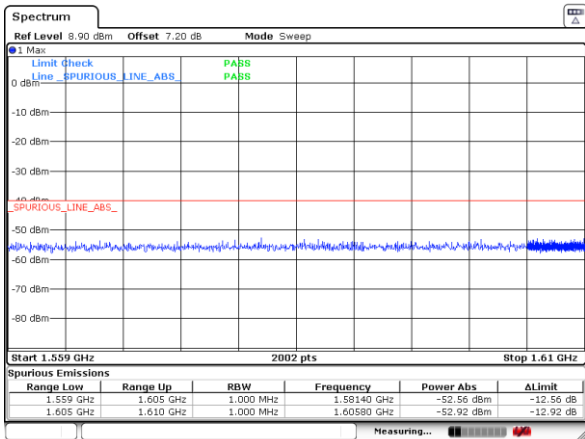
Highest Channel / 1SC1/ Carrier off

N/A



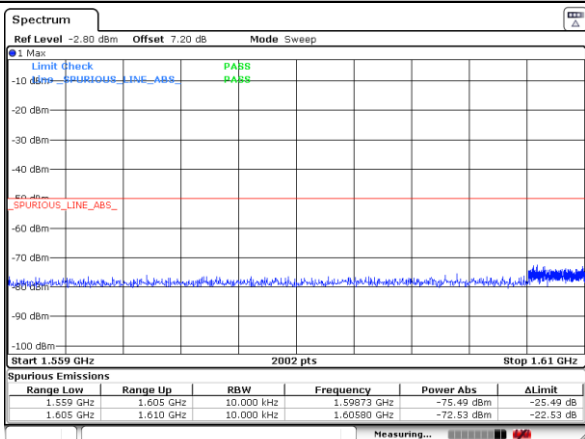
Highest Channel / 1SC1/ Carrier on

N/A



Highest Channel / 1SC1/ Discrete

N/A

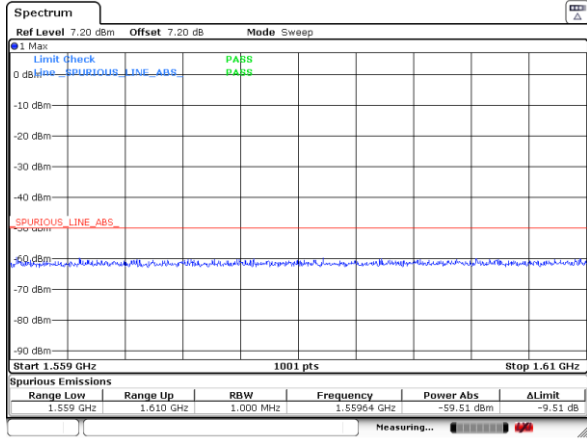




Band 23 SCS15KHz

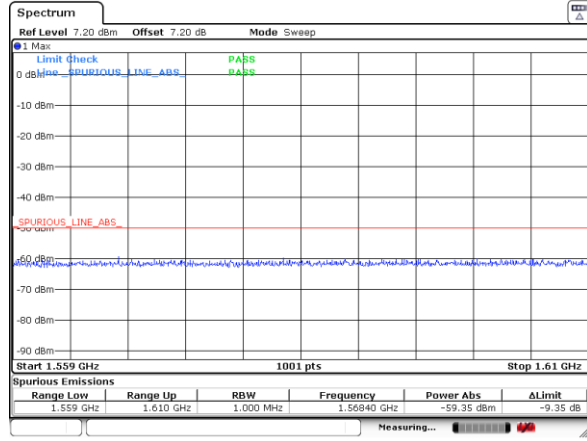
QPSK

Lowest Channel / 1SC1/ Carrier off



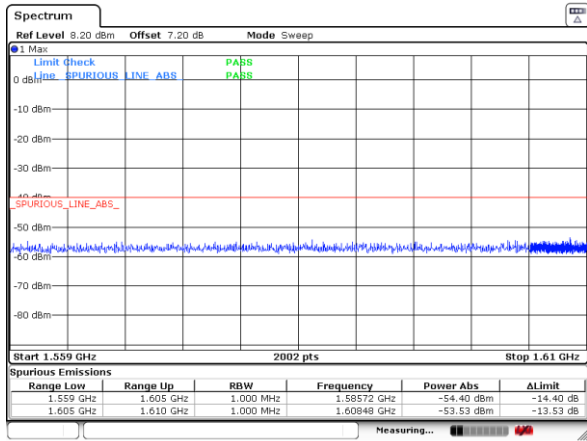
Date: 30.AUG.2023 16:47:27

Middle Channel / 1SC1/ Carrier off



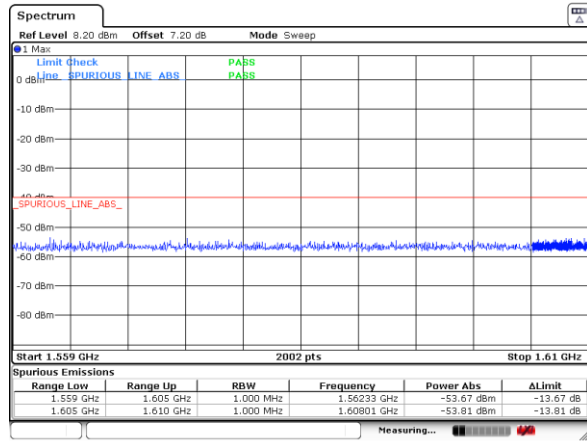
Date: 30.AUG.2023 16:49:28

Lowest Channel / 1SC1/ Carrier on



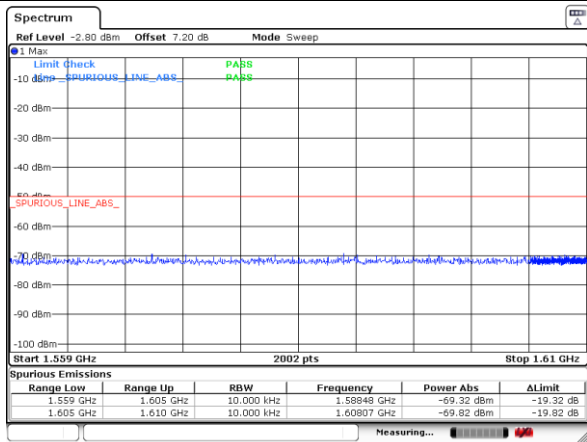
Date: 12.SEP.2023 16:52:13

Middle Channel / 1SC1 / Carrier on



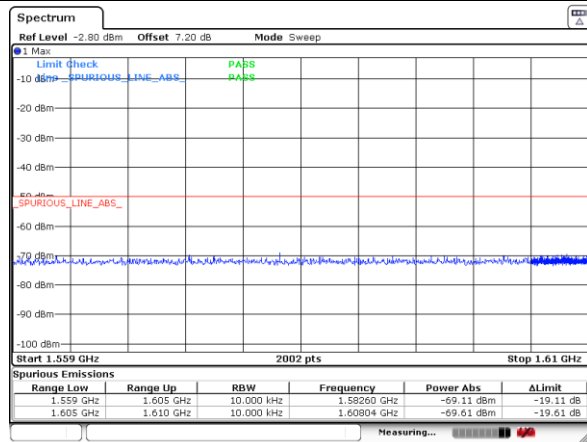
Date: 12.SEP.2023 16:48:06

Lowest Channel / 1SC1/ Discrete



Date: 30.AUG.2023 17:08:36

Middle Channel / 1SC1 / Discrete



Date: 30.AUG.2023 17:09:04

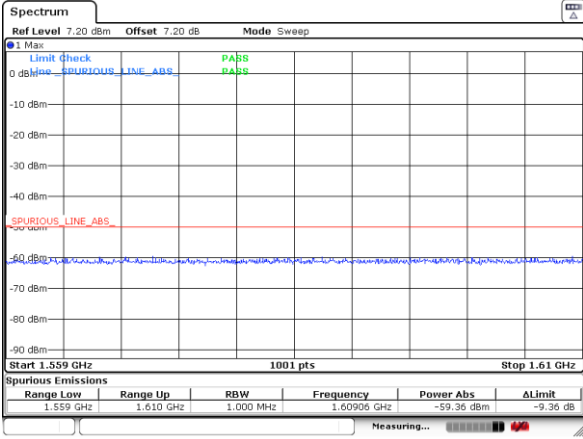


Band 23 SCS15KHz

QPSK

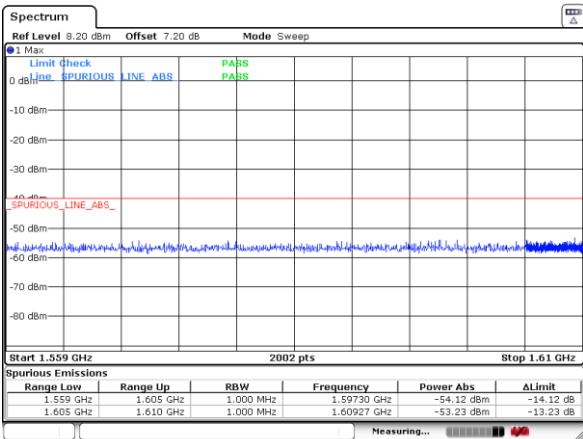
Highest Channel / 1SC1/ Carrier off

N/A



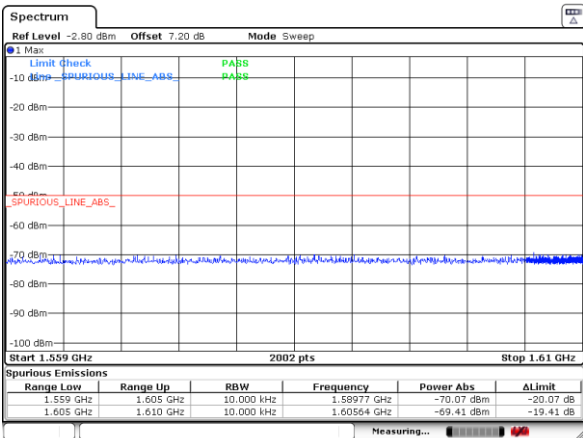
Highest Channel / 1SC1/ Carrier on

N/A



Highest Channel / 1SC1/ Discrete

N/A





Frequency Stability

Test Conditions		LTE Band 23 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	3.75 KHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0004	
20	Minimum Voltage	0.0027	

Note: Normal Voltage =3.3 V. ; Minimum Voltage =2.2 V. ; Maximum Voltage =3.6 V.



Band 255

Conducted Output Power (Average power) and EIRP

Band 255 SCS 3.75kHz							Limit	
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)		EIRP Power (dBm)		Result
		BPSK	QPSK	BPSK	QPSK	BPSK	QPSK	
1626.6	1SC1	22.76	22.79	0.80		23.56	23.59	PASS
	1SC46	22.77	22.78	0.80		23.57	23.58	
1643.5	1SC1	23.44	23.47	0.80		24.24	24.27	
	1SC46	23.43	23.45	0.80		24.23	24.25	
1660.4	1SC1	22.96	22.93	0.80		23.76	23.73	
	1SC46	22.88	22.84	0.80		23.68	23.64	

Band 255 SCS 15kHz							Limit	
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)		EIRP Power (dBm)		Result
		BPSK	QPSK	BPSK	QPSK	BPSK	QPSK	
1626.6	1SC1	22.78	22.74	0.80		23.58	23.54	PASS
	1SC10	22.80	22.85	0.80		23.60	23.65	
	3SC0	-	22.03	0.80		-	22.83	
	3SC9	-	22.14	0.80		-	22.94	
	6SC0	-	21.96	0.80		-	22.76	
	6SC6	-	21.83	0.80		-	22.63	
	12SC0	-	20.95	0.80		-	21.75	
1643.5	1SC1	23.46	23.48	0.80		24.26	24.28	
	1SC10	23.49	23.45	0.80		24.29	24.25	
	3SC0	-	23.27	0.80		-	24.07	
	3SC9	-	23.41	0.80		-	24.21	
	6SC0	-	22.46	0.80		-	23.26	
	6SC6	-	22.65	0.80		-	23.45	
1660.4	12SC0	-	21.63	0.80		-	22.43	
	1SC1	22.91	22.86	0.80		23.71	23.66	
	1SC10	22.75	22.81	0.80		23.55	23.61	
	3SC0	-	22.68	0.80		-	23.48	
	3SC9	-	22.63	0.80		-	23.43	
	6SC0	-	22.02	0.80		-	22.82	
	6SC6	-	21.94	0.80		-	22.74	
	12SC0	-	21.12	0.80		-	21.92	



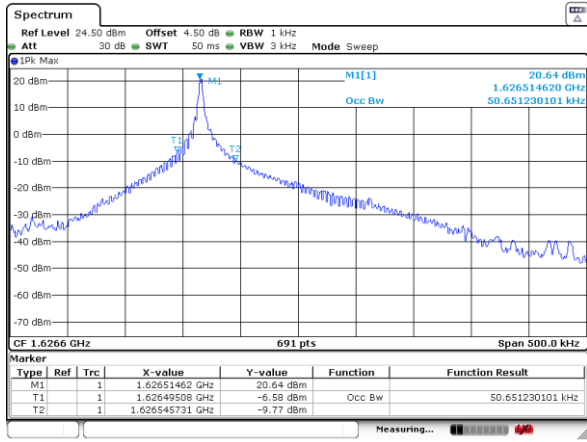
Occupied Bandwidth

Mode	LTE Band 255 : 99%OBW(kHz)													
SCS	3.75kHz				15kHz									
Mod.	BPSK	QPSK	BPSK	QPSK	BPSK	BPSK	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK	QPSK	
SC Size	1SC1	1SC1	1SC46	1SC46	1SC1	1SC10	1SC1	1SC10	3SC0	3SC9	6SC0	6SC6	12SC0	
Lowest CH	50.651	49.928	49.204	50.651	113.603	113.603	112.156	112.156	111.433	107.091	120.116	120.839	181.621	
Middle CH	50.651	51.375	49.928	51.375	112.880	113.603	112.880	110.709	110.709	106.368	120.839	118.669	180.897	
Highest CH	50.651	50.651	49.928	51.375	113.603	121.563	111.433	111.433	109.986	110.709	121.563	120.116	180.174	



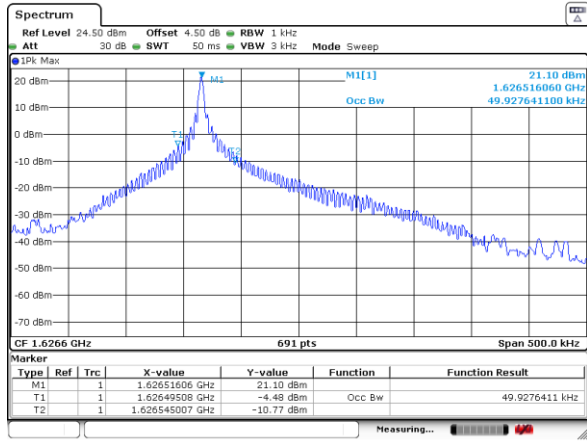
Band 255 SCS3.75KHz

Lowest Channel / 1SC1/ BPSK



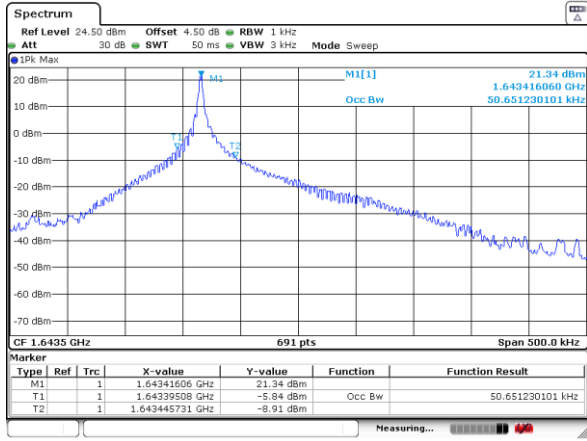
Date: 11.SEP.2023 09:20:39

Lowest Channel / 1SC1 / QPSK



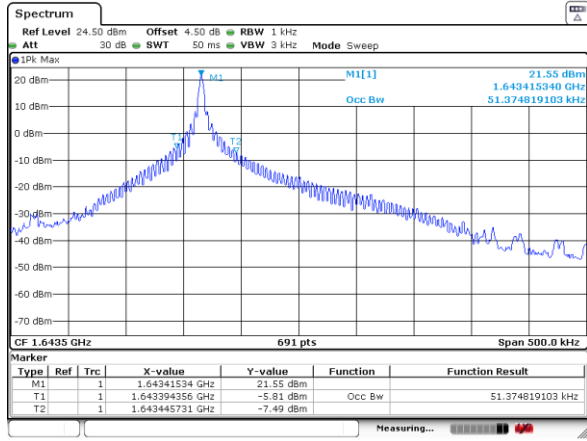
Date: 11.SEP.2023 09:20:10

Middle Channel / 1SC1/ BPSK



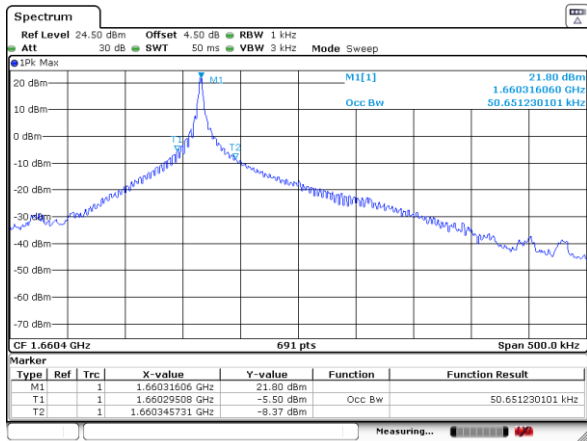
Date: 11.SEP.2023 09:24:26

Middle Channel / 1SC1 / QPSK



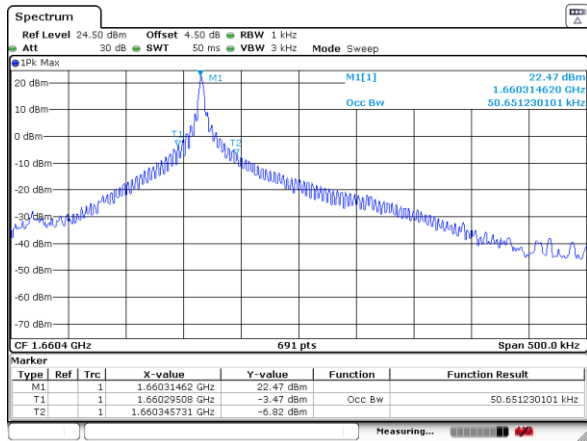
Date: 11.SEP.2023 09:25:05

Highest Channel / 1SC1/ BPSK



Date: 11.SEP.2023 09:15:18

Highest Channel / 1SC1 / QPSK

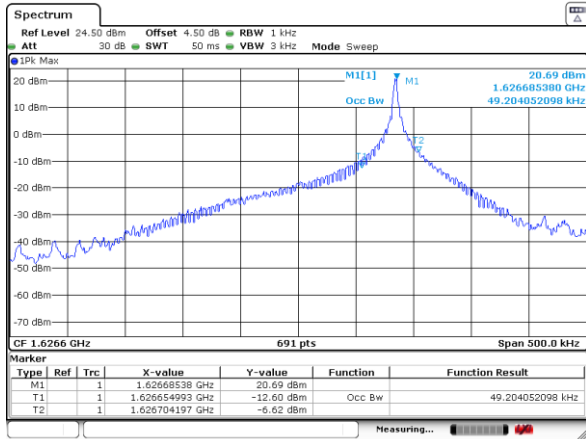


Date: 11.SEP.2023 09:16:21

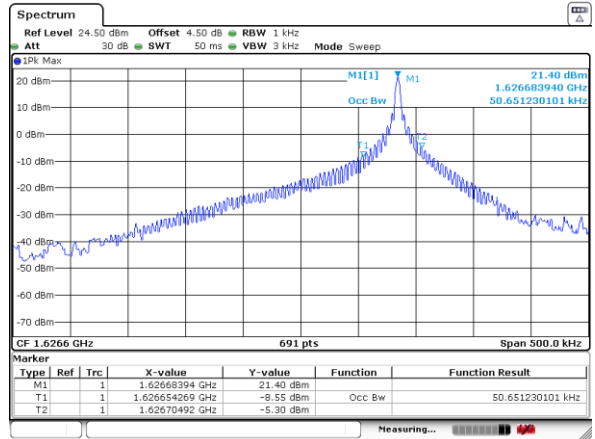


Band 255 SCS3.75KHz

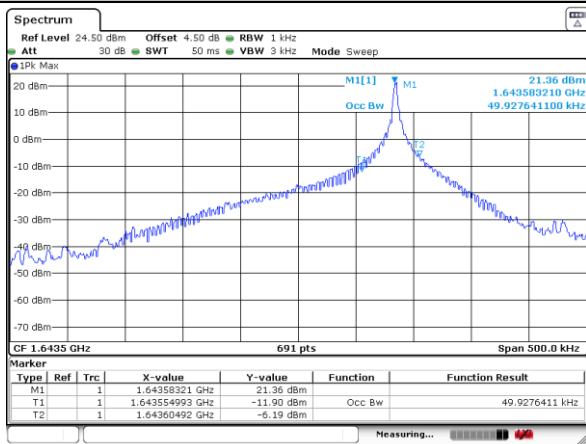
Lowest Channel / 1SC46/ BPSK



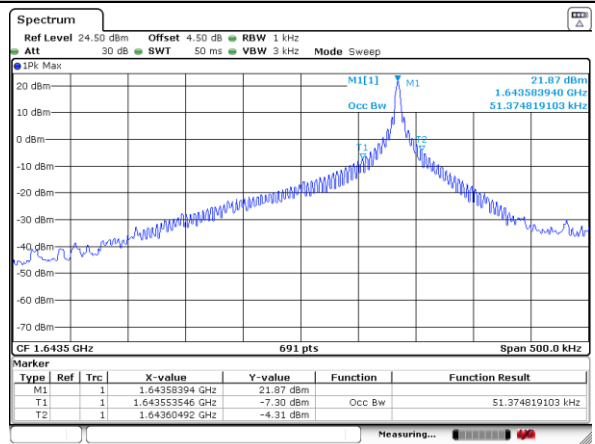
Lowest Channel / 1SC46 / QPSK



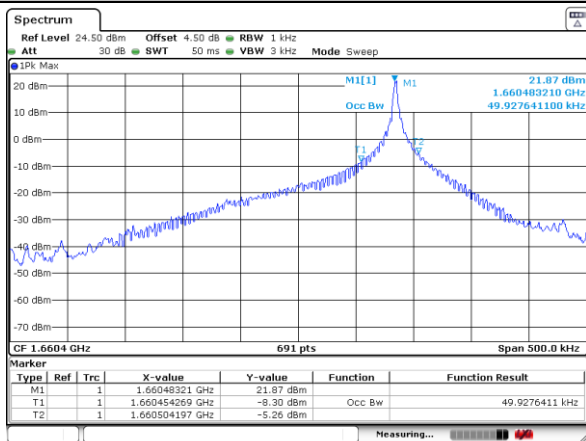
Middle Channel / 1SC46/ BPSK



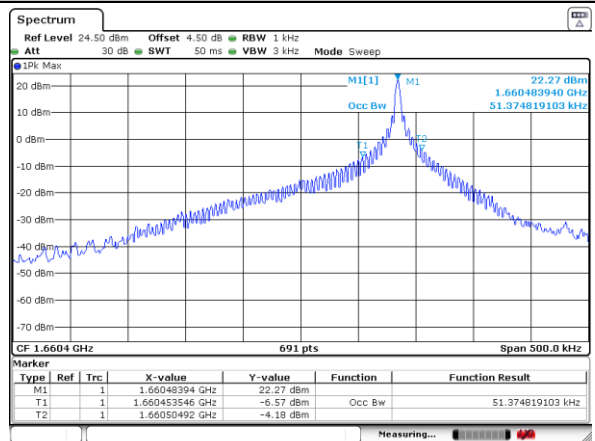
Middle Channel / 1SC46 / QPSK



Highest Channel / 1SC46/ BPSK



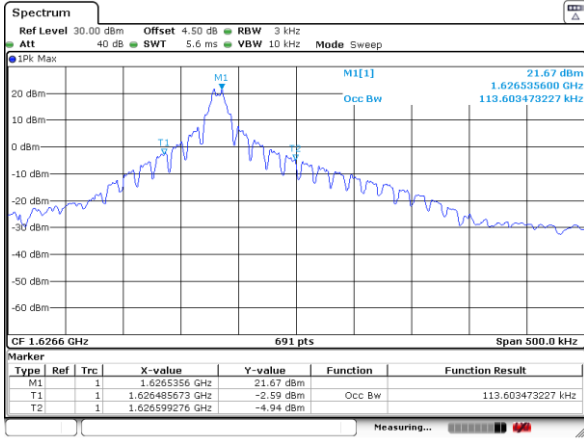
Highest Channel / 1SC46 / QPSK





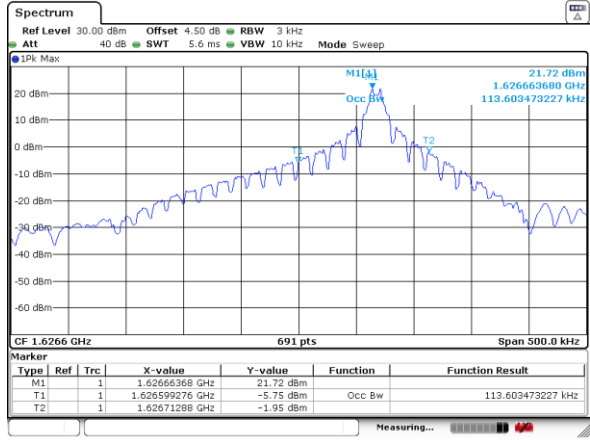
Band 255 SCS15KHz

Lowest Channel / 1SC1/ BPSK



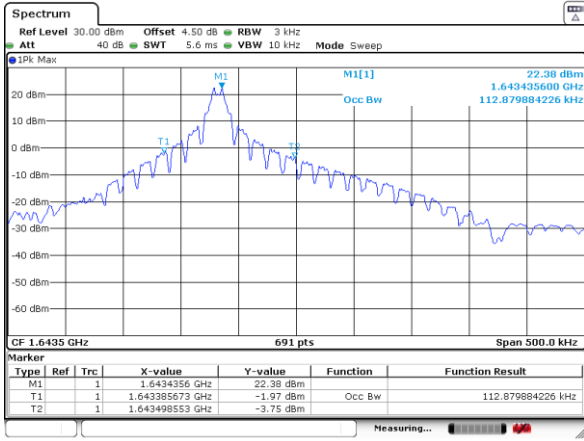
Date: 18_SEP.2023 10:59:50

Lowest Channel / 1SC10 / BPSK



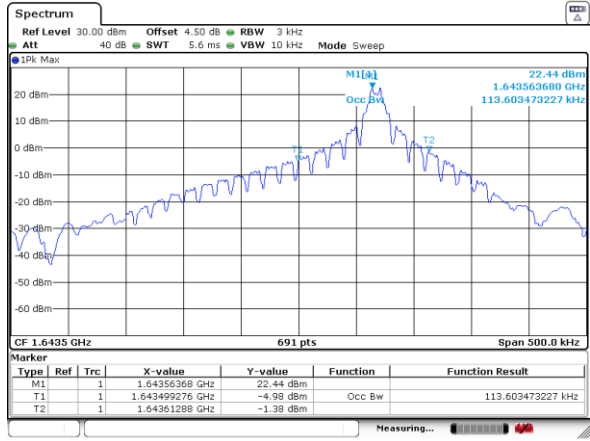
Date: 18_SEP.2023 11:00:15

Middle Channel / 1SC1/ BPSK



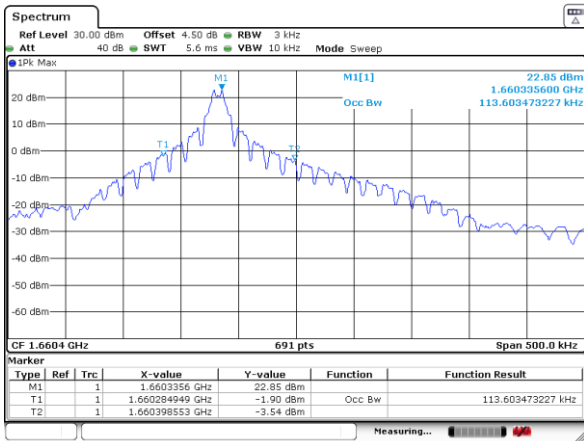
Date: 18_SEP.2023 11:02:06

Middle Channel / 1SC10 / BPSK



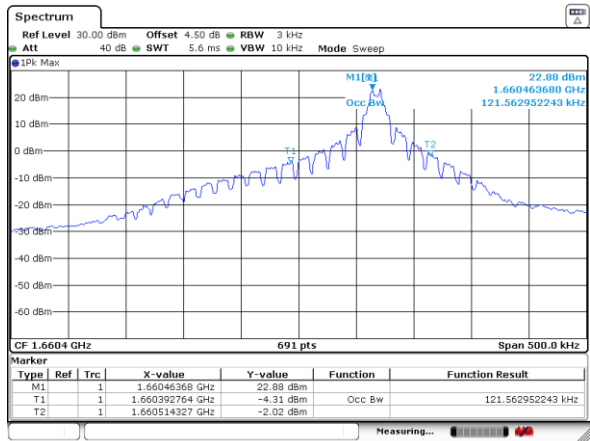
Date: 18_SEP.2023 11:01:42

Highest Channel / 1SC1/ BPSK



Date: 18_SEP.2023 10:58:11

Highest Channel / 1SC10 / BPSK

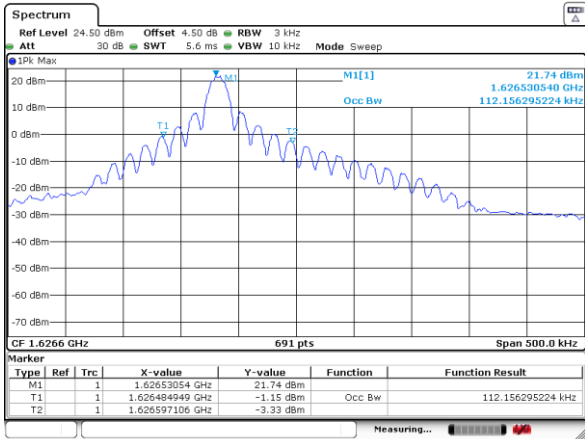


Date: 18_SEP.2023 10:56:01



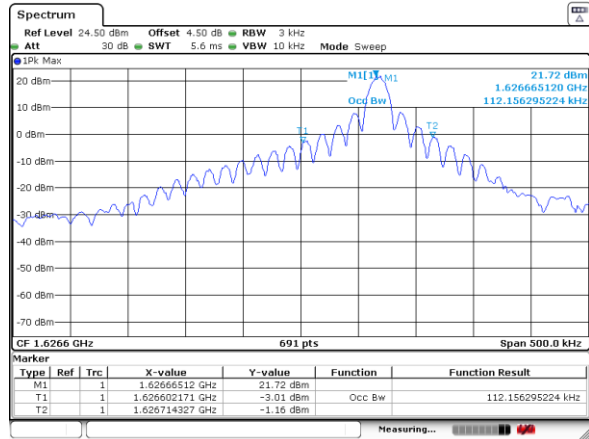
Band 255 SCS15KHz

Lowest Channel / 1SC1/ QPSK



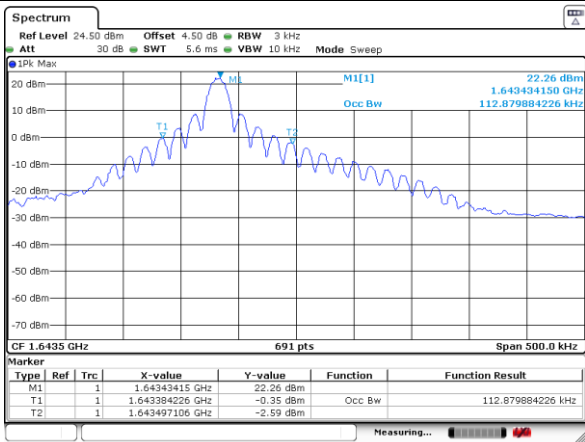
Date: 11.SEP.2023 09:45:49

Lowest Channel / 1SC10 / QPSK



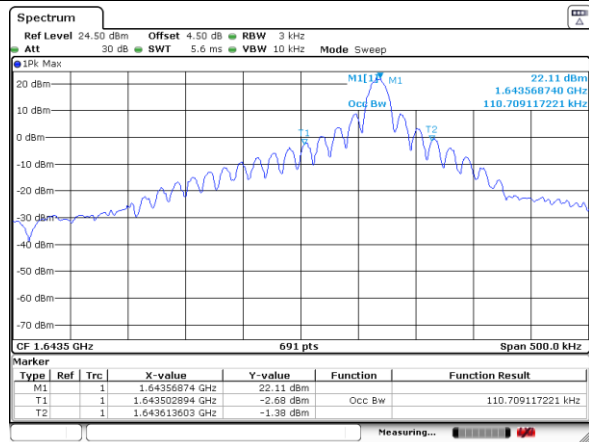
Date: 11.SEP.2023 09:46:33

Middle Channel / 1SC1/ QPSK



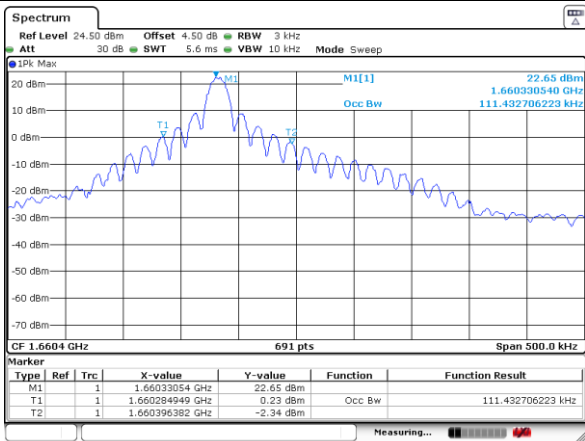
Date: 11.SEP.2023 09:29:34

Middle Channel / 1SC10 / QPSK



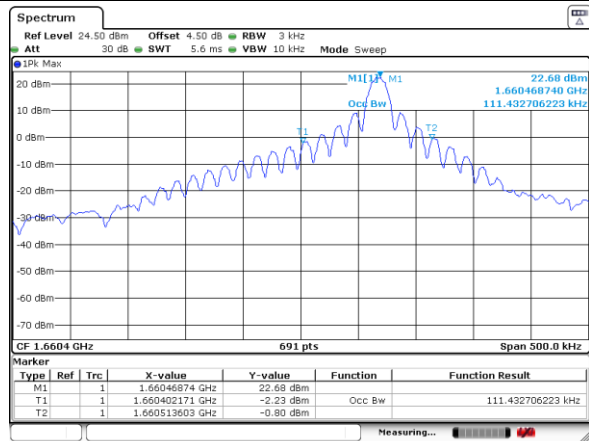
Date: 11.SEP.2023 09:30:52

Highest Channel / 1SC1/ QPSK



Date: 11.SEP.2023 09:51:53

Highest Channel / 1SC10 / QPSK

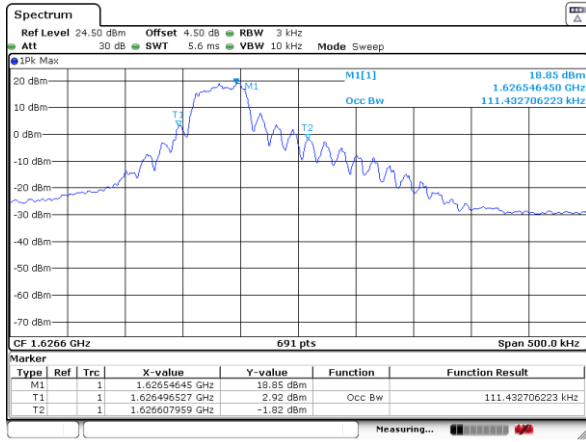


Date: 11.SEP.2023 09:51:11

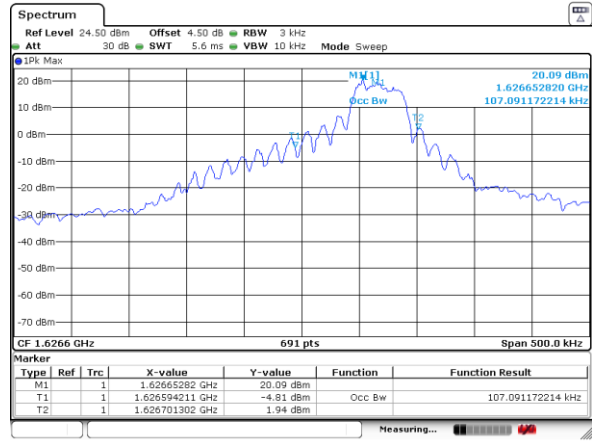


Band 255 SCS15KHz

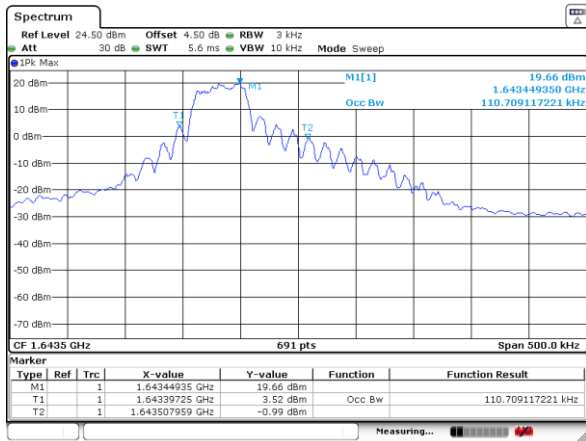
Lowest Channel / 3SC0 / QPSK



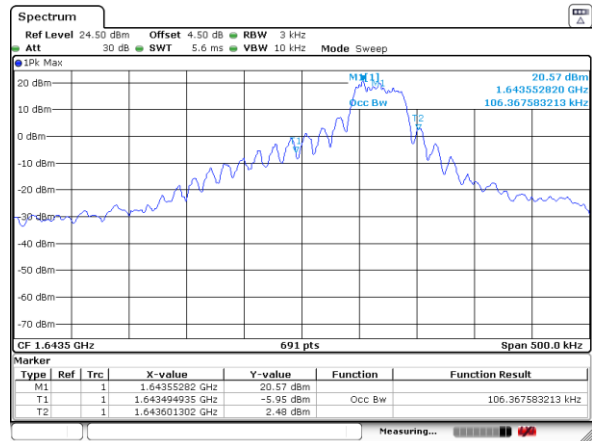
Lowest Channel / 3SC9 / QPSK



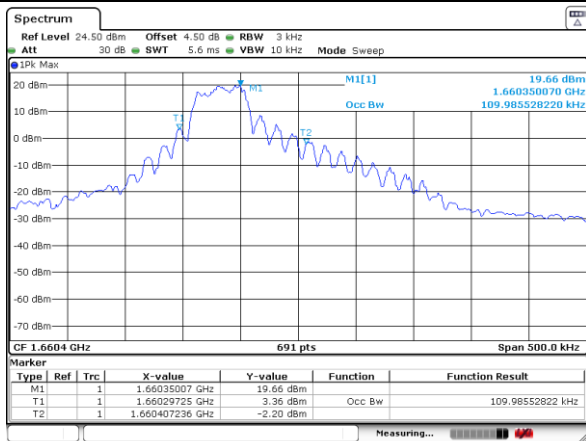
Middle Channel / 3SC0 / QPSK



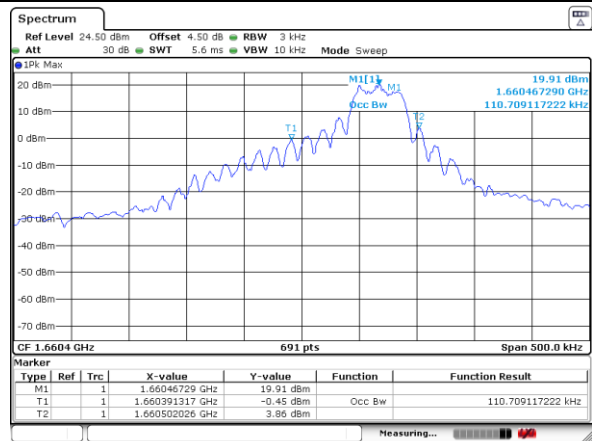
Middle Channel / 3SC9 / QPSK



Highest Channel / 3SC0 / QPSK



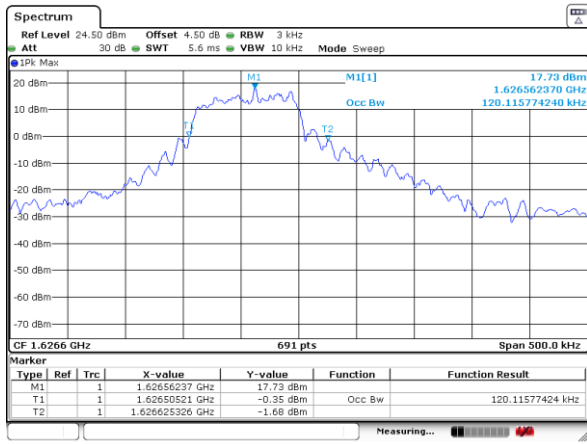
Highest Channel / 3SC9 / QPSK





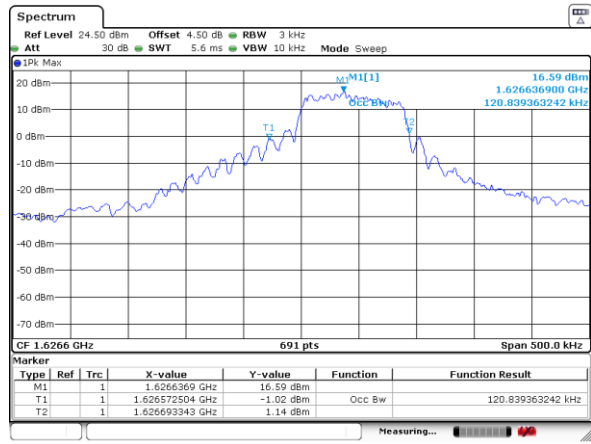
Band 255 SCS15KHz

Lowest Channel / 6SC0/ QPSK



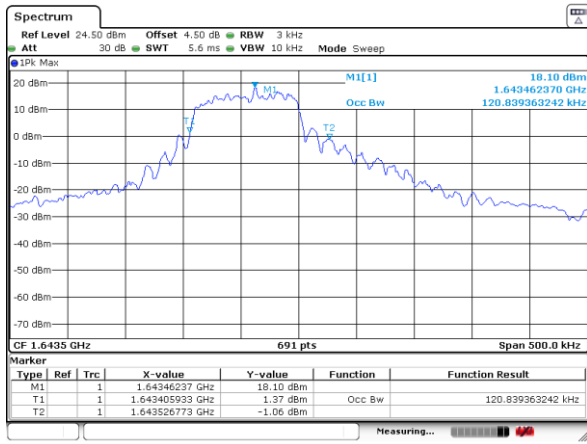
Date: 11.SEP.2023 09:43:23

Lowest Channel / 6SC6 / QPSK



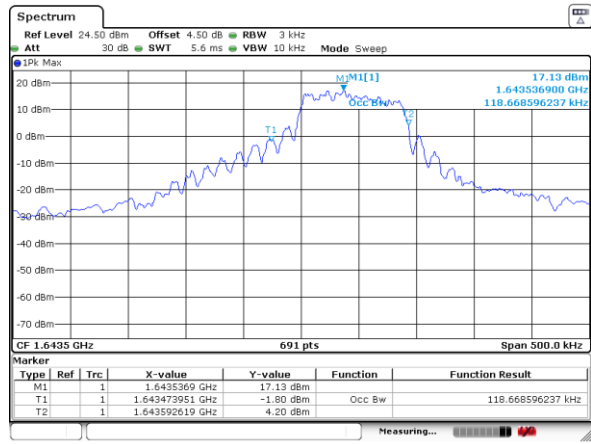
Date: 11.SEP.2023 09:42:15

Middle Channel / 6SC0/ QPSK



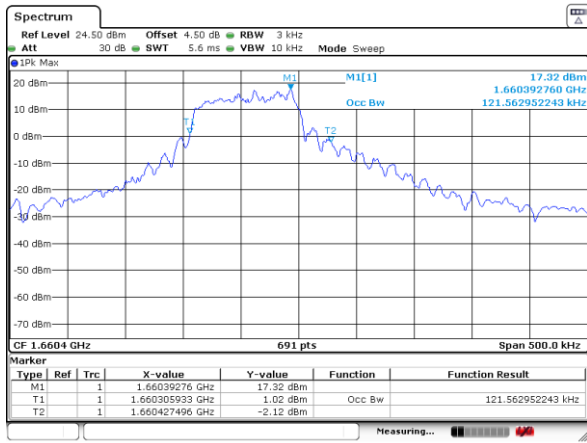
Date: 11.SEP.2023 09:35:01

Middle Channel / 6SC6 / QPSK



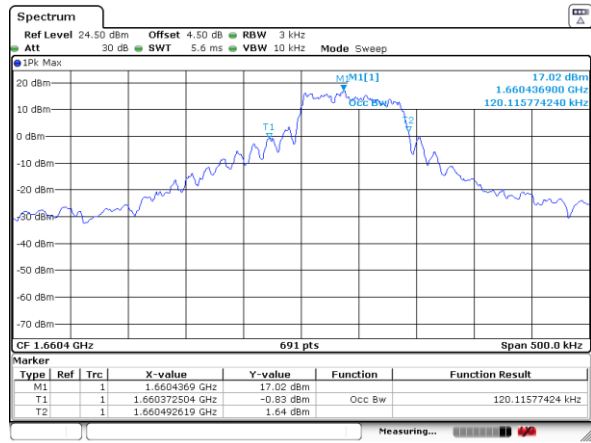
Date: 11.SEP.2023 09:35:42

Highest Channel / 6SC0/ QPSK



Date: 11.SEP.2023 09:53:23

Highest Channel / 6SC6 / QPSK



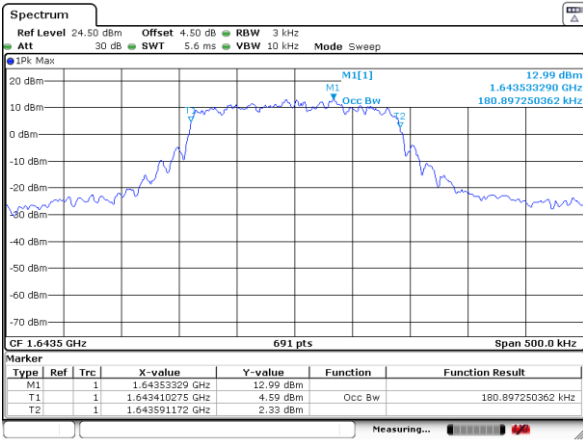
Date: 11.SEP.2023 09:53:51



Band 255 SCS15KHz

Lowest Channel / 12SC0 / QPSK

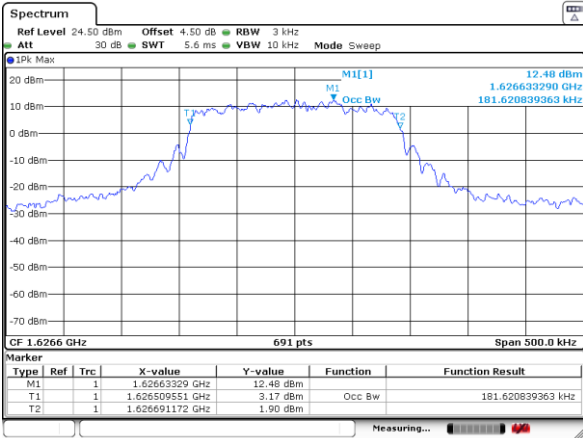
N/A



Date: 11_SEP_2023 09:36:15

Middle Channel /12SC0 / QPSK

N/A



Date: 11_SEP_2023 09:39:43

Highest Channel /12SC0 / QPSK

N/A



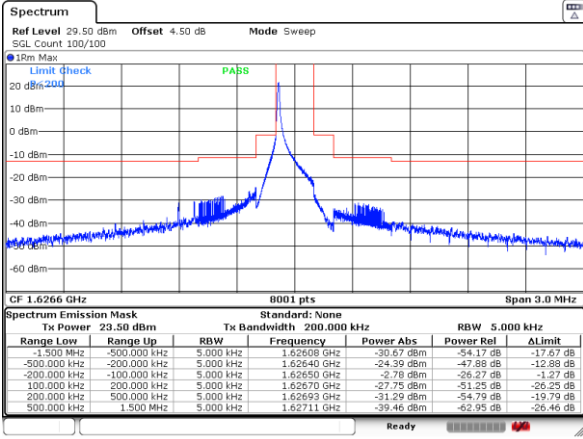
Date: 11_SEP_2023 09:54:17



Conducted Emissions Mask

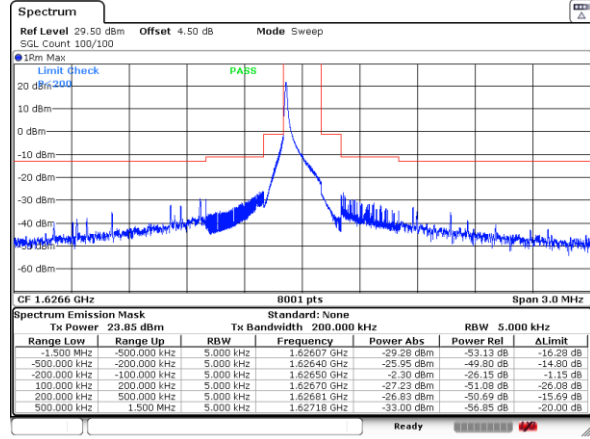
Band 255 SCS3.75KHz

Lowest Channel / 1SC1/ BPSK



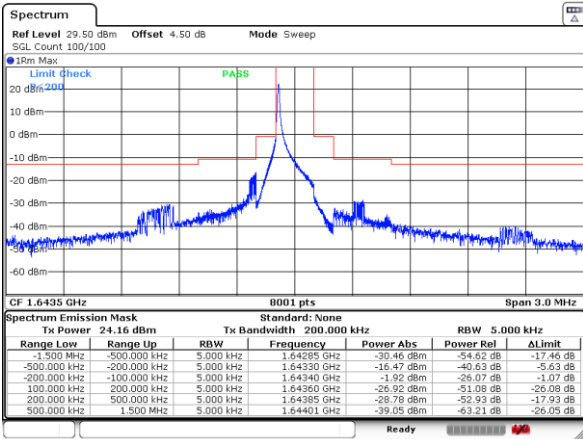
Date: 8_SEP.2023 22:38:45

Lowest Channel / 1SC1 / QPSK



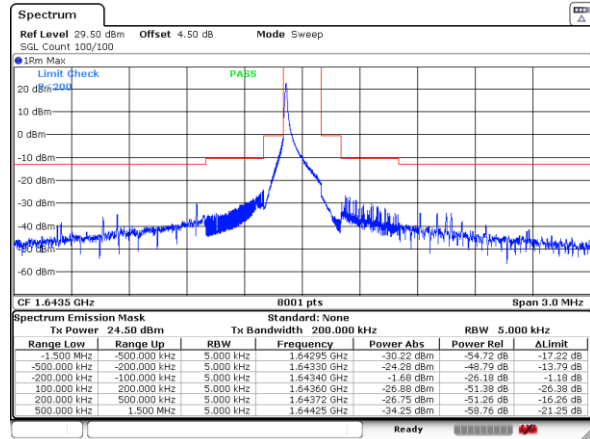
Date: 8_SEP.2023 22:32:08

Middle Channel / 1SC1/ BPSK



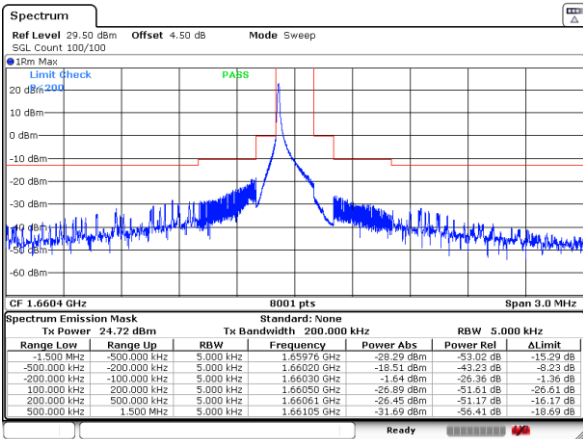
Date: 8_SEP.2023 00:41:40

Middle Channel / 1SC1 / QPSK



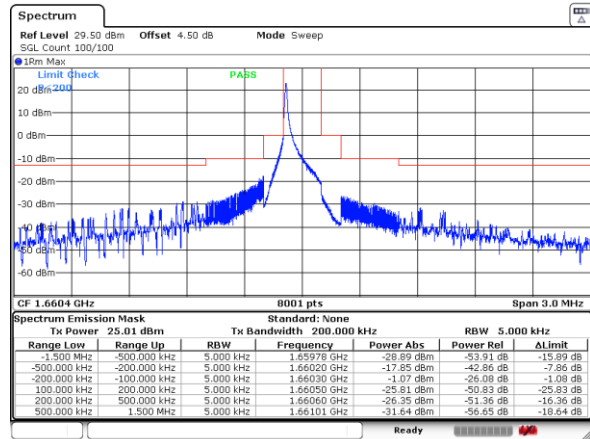
Date: 8_SEP.2023 21:13:29

Highest Channel / 1SC1/ BPSK



Date: 8_SEP.2023 21:29:53

Highest Channel / 1SC1 / QPSK

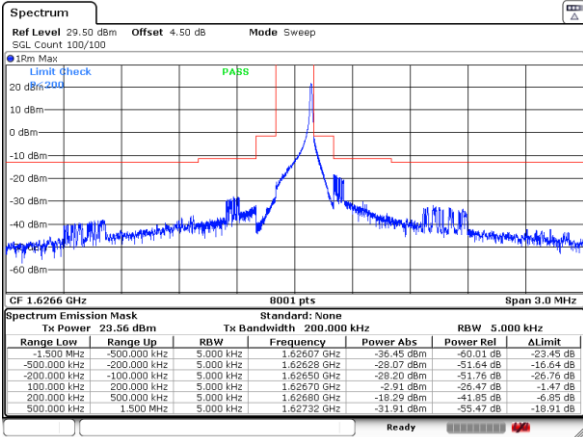


Date: 8_SEP.2023 21:23:41



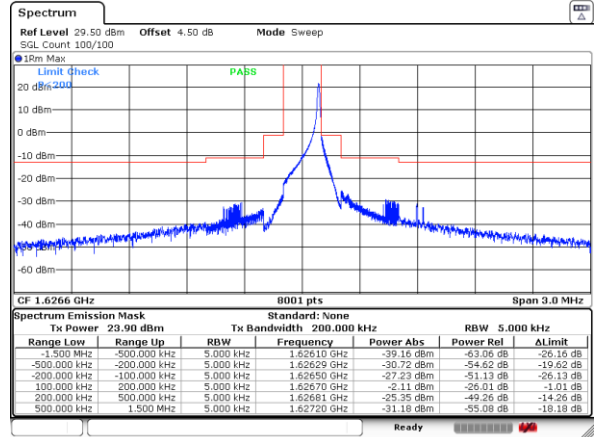
Band 255 SCS3.75KHz

Lowest Channel / 1SC46/ BPSK



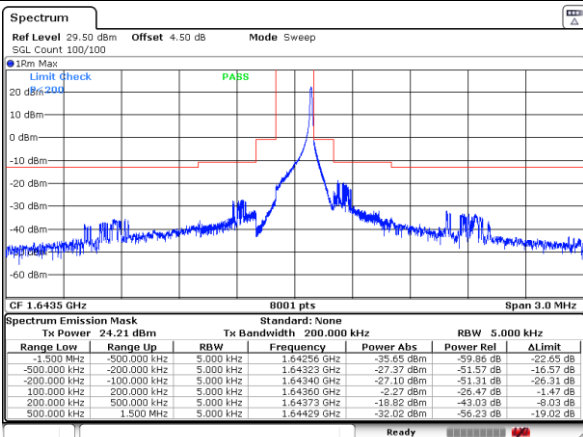
Date: 8_SEP.2023 00:24:32

Lowest Channel / 1SC46/ QPSK



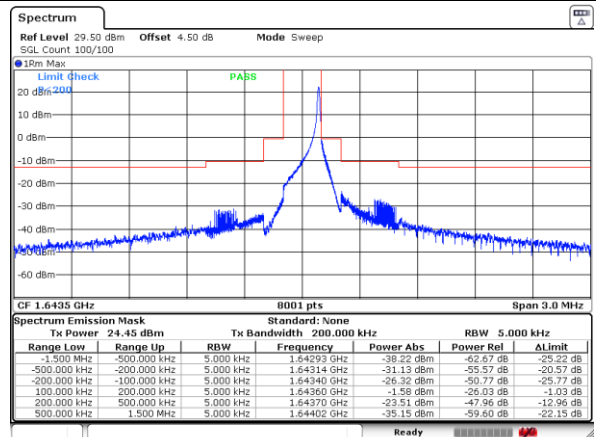
Date: 8_SEP.2023 22:45:15

Middle Channel / 1SC46/ BPSK



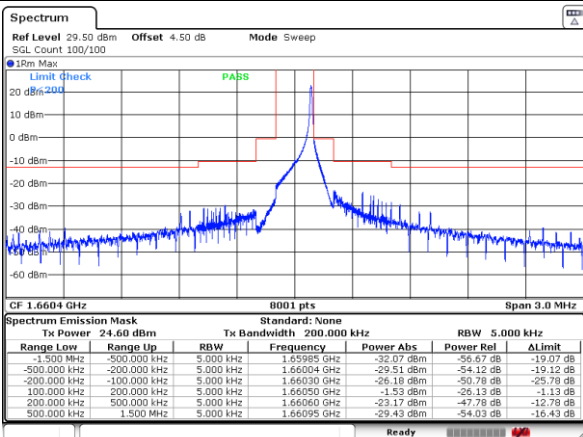
Date: 8_SEP.2023 00:45:04

Middle Channel / 1SC46/ QPSK



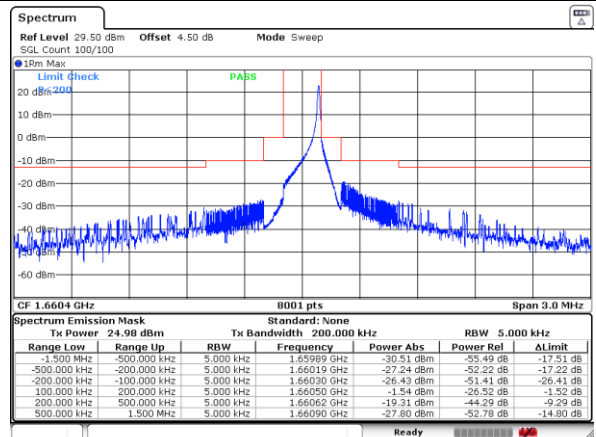
Date: 8_SEP.2023 22:51:52

Highest Channel / 1SC46/ BPSK



Date: 7_SEP.2023 23:35:37

Highest Channel / 1SC46/ QPSK

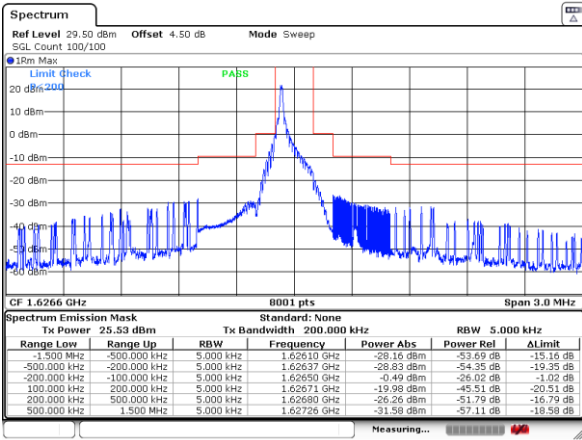


Date: 8_SEP.2023 21:42:04



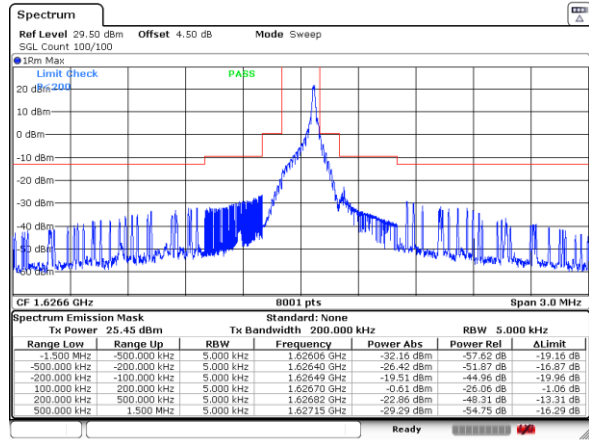
Band 255 SCS15KHz

Lowest Channel / 1SC1/ BPSK



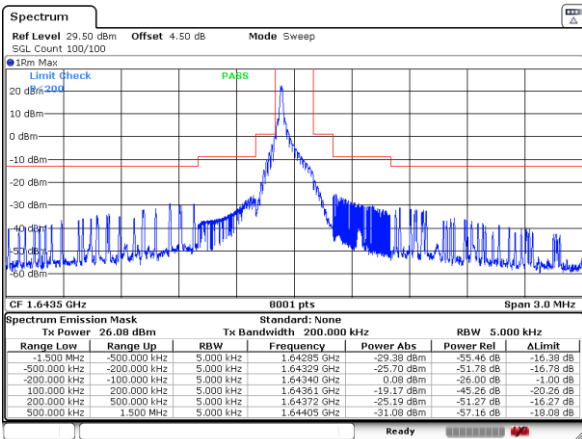
Date: 18_SEP.2023 13:34:10

Lowest Channel / 1SC10 / BPSK



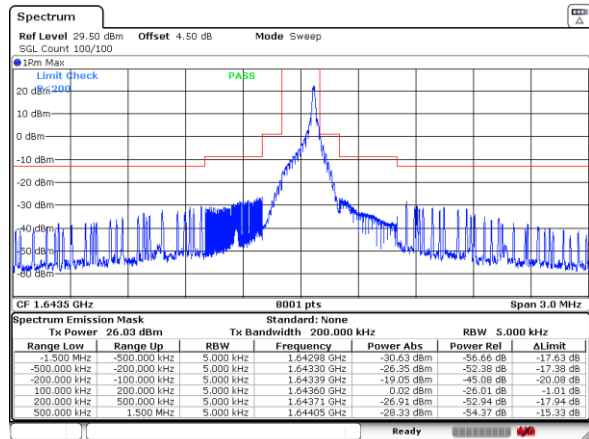
Date: 18_SEP.2023 13:03:52

Middle Channel / 1SC1/ BPSK



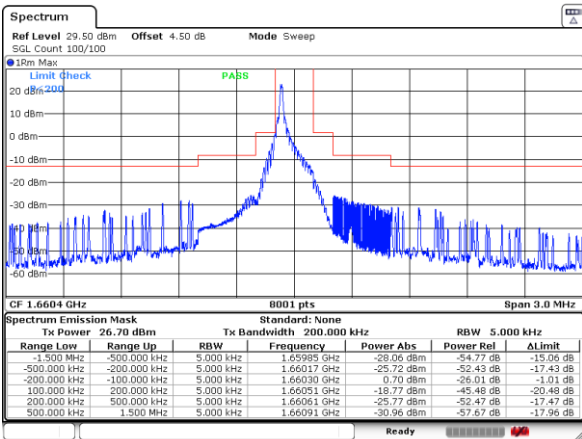
Date: 18_SEP.2023 11:27:01

Middle Channel / 1SC10 / BPSK



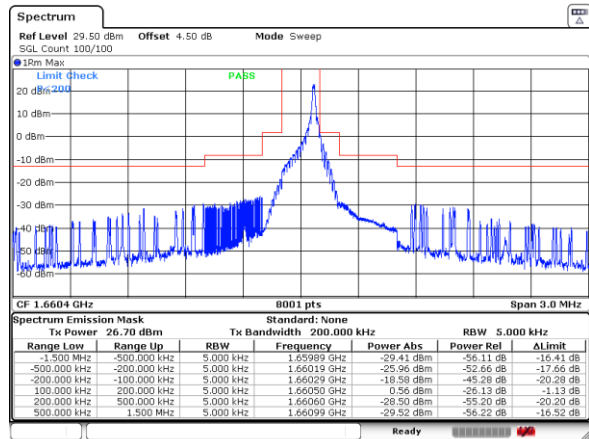
Date: 18_SEP.2023 12:53:38

Highest Channel / 1SC1/ BPSK



Date: 18_SEP.2023 13:48:28

Highest Channel / 1SC10 / BPSK

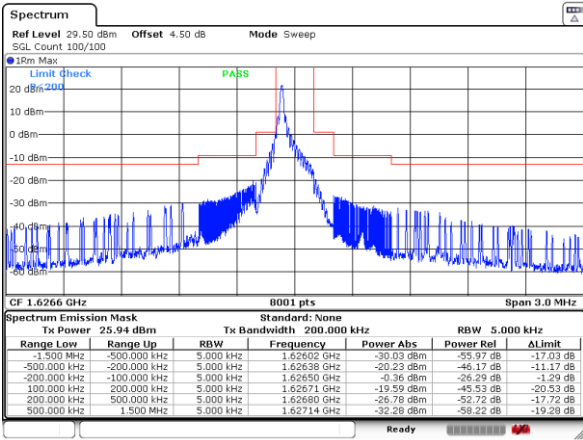


Date: 18_SEP.2023 14:26:08

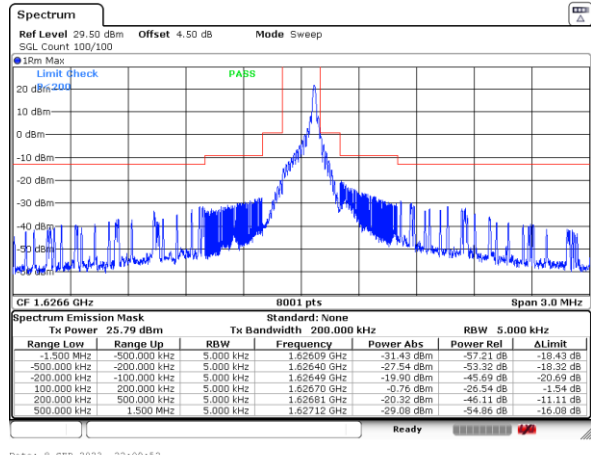


Band 255 SCS15KHz

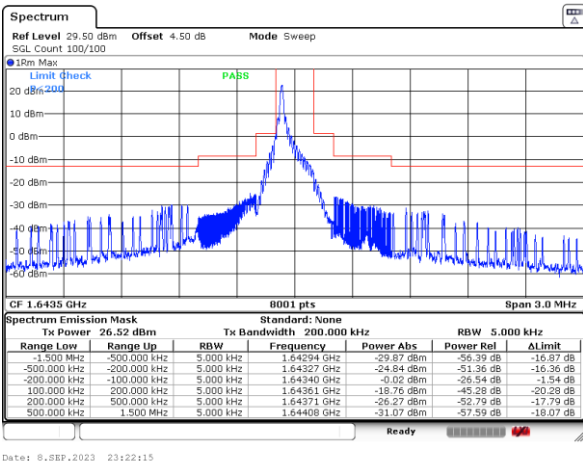
Lowest Channel / 1SC1/ QPSK



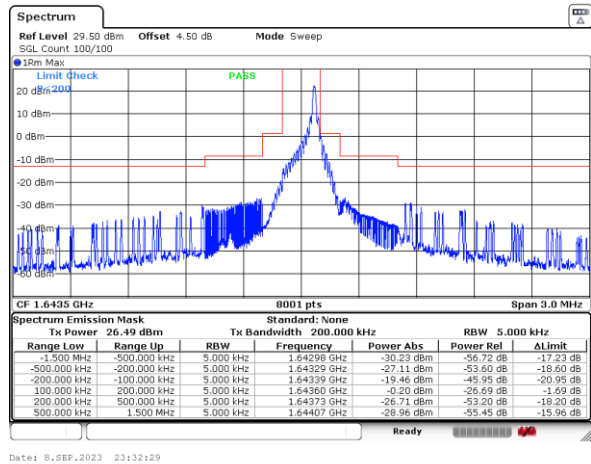
Lowest Channel / 1SC10 / QPSK



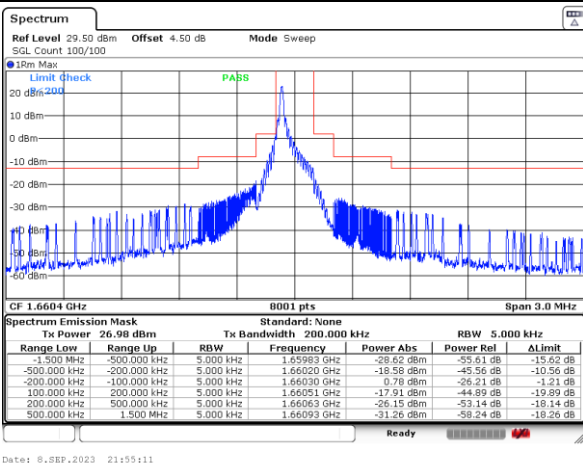
Middle Channel / 1SC1/ QPSK



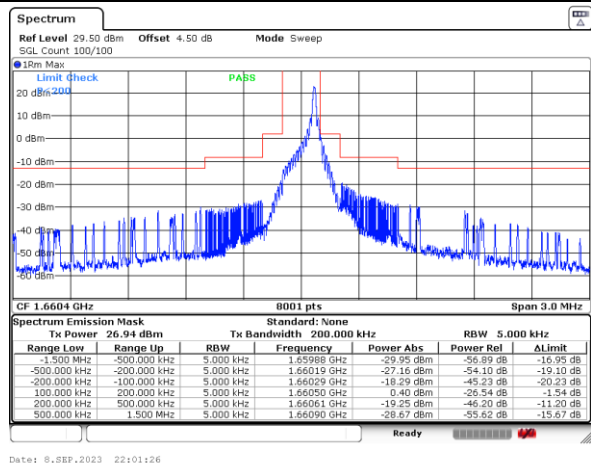
Middle Channel / 1SC10 / QPSK



Highest Channel / 1SC1/ QPSK



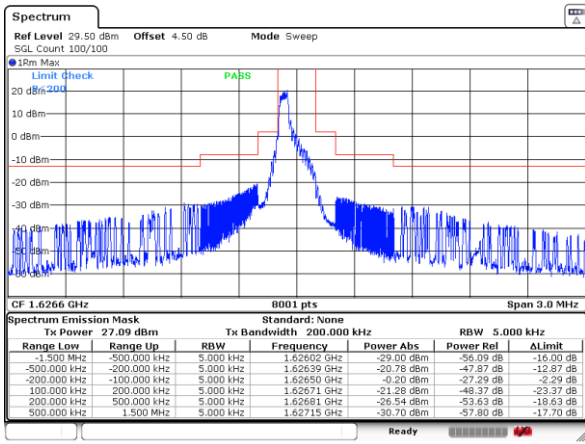
Highest Channel / 1SC10 / QPSK





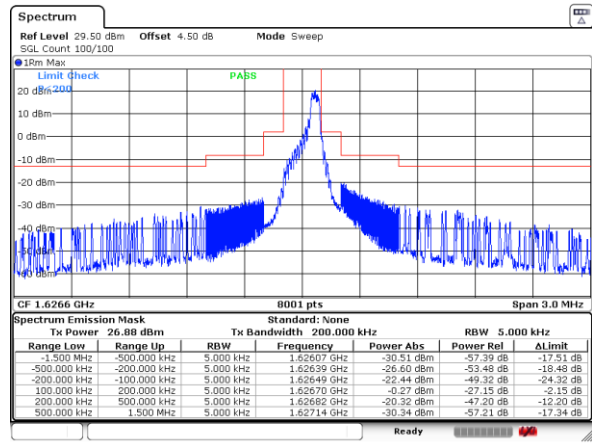
Band 255 SCS15KHz

Lowest Channel / 3SC0 / QPSK



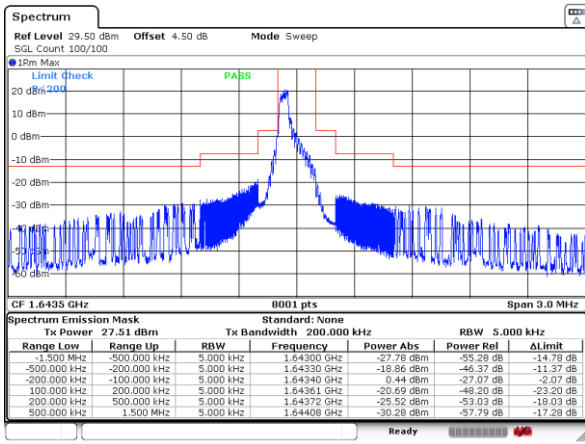
Date: 9,SEP,2023 00:15:03

Lowest Channel / 3SC9 / QPSK



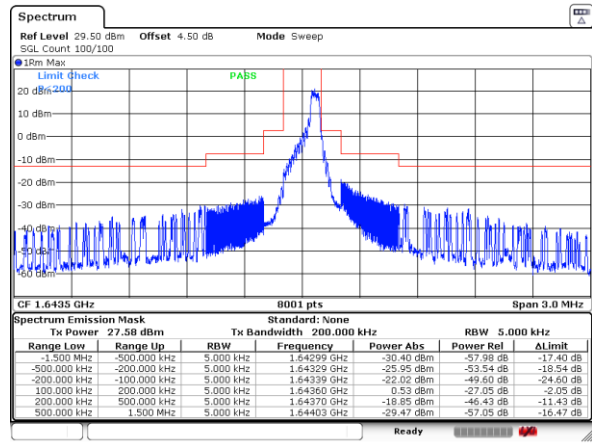
Date: 9,SEP,2023 00:15:16

Middle Channel / 3SC0 / QPSK



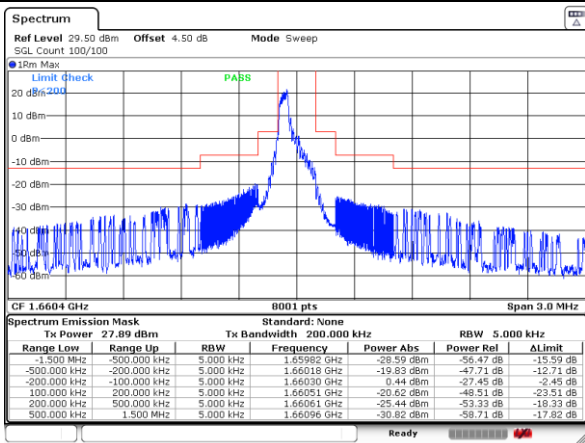
Date: 9,SEP,2023 01:12:19

Middle Channel / 3SC9 / QPSK



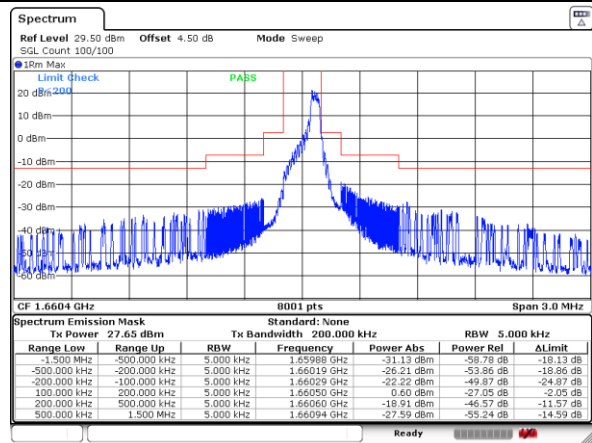
Date: 9,SEP,2023 01:15:57

Highest Channel / 3SC0 / QPSK



Date: 9,SEP,2023 00:38:25

Highest Channel / 3SC9 / QPSK

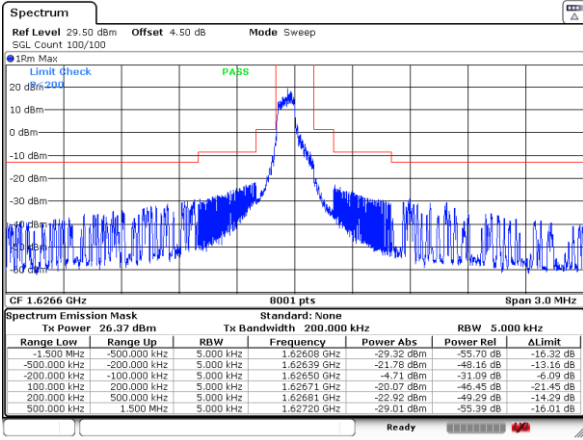


Date: 9,SEP,2023 00:43:25

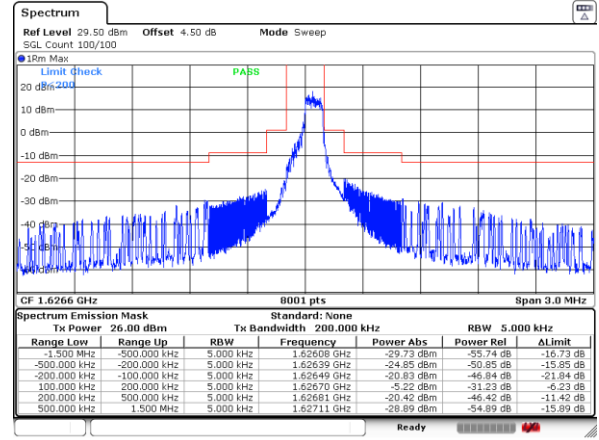


Band 255 SCS15KHz

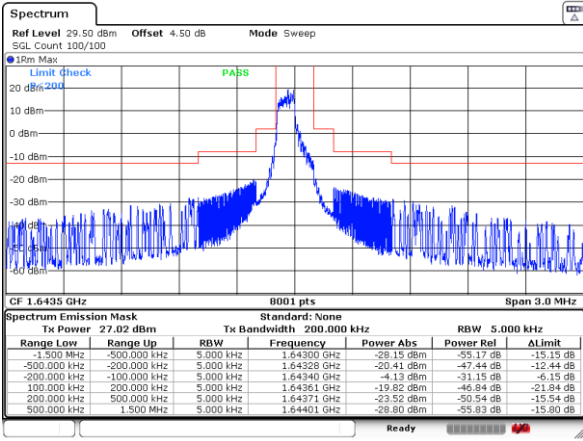
Lowest Channel / 6SC0/ QPSK



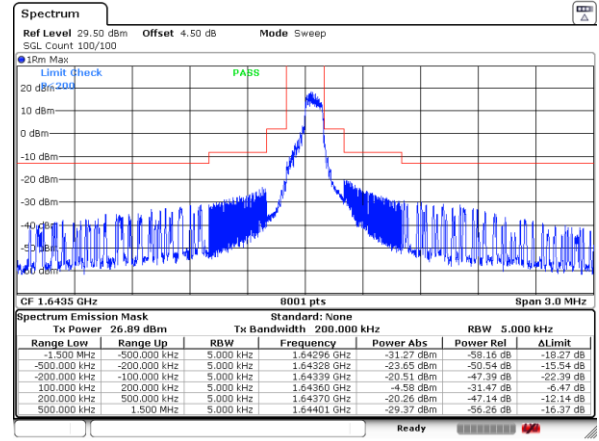
Lowest Channel / 6SC6 / QPSK



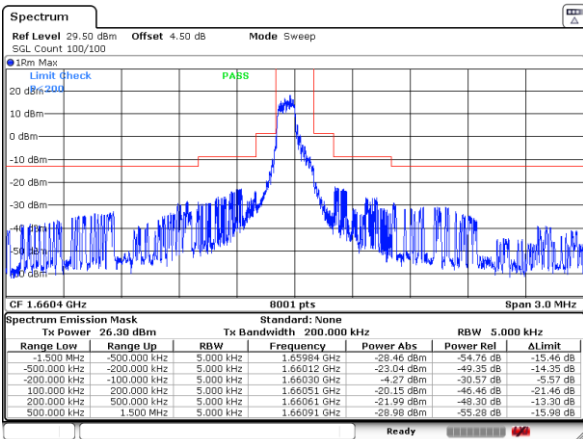
Middle Channel / 6SC0/ QPSK



Middle Channel / 6SC6 / QPSK



Highest Channel / 6SC0/ QPSK



Highest Channel / 6SC6 / QPSK

