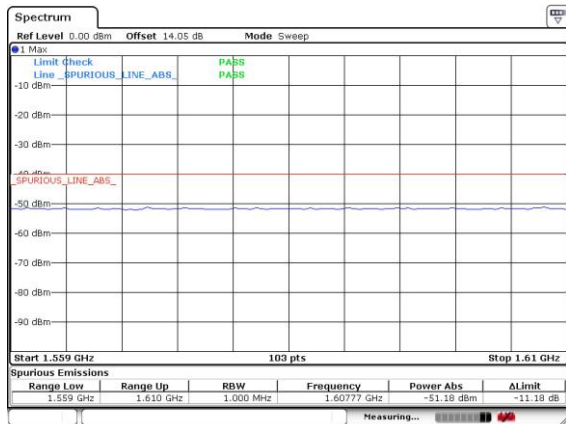


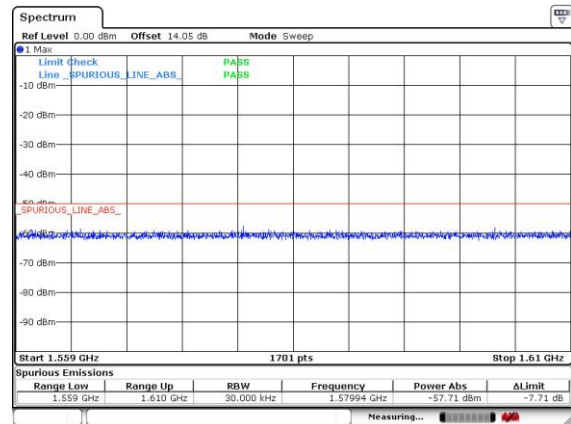


Lowest Channel / 3SC0 Carrier on



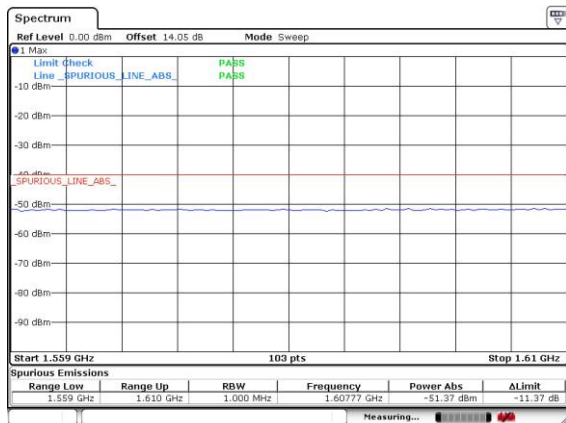
Date: 16.JUL.2024 14:58:40

Lowest Channel / 3SC0 Discrete



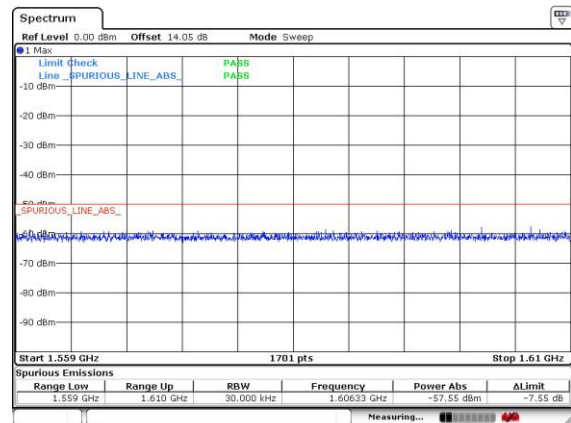
Date: 16.JUL.2024 14:56:51

Middle Channel / 3SC0 Carrier on



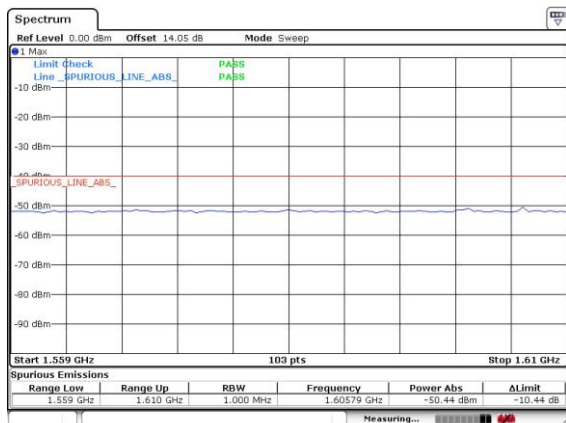
Date: 16.JUL.2024 15:44:28

Middle Channel / 3SC0 Discrete



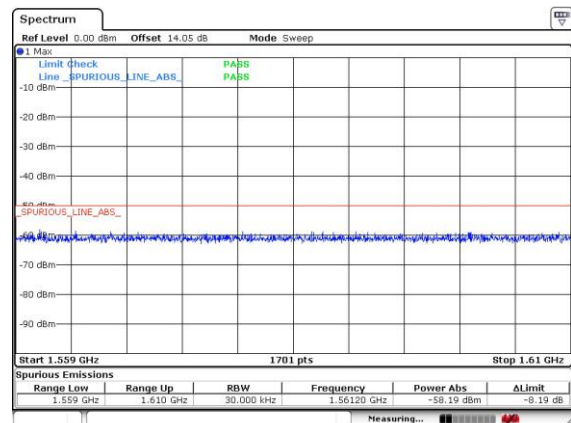
Date: 16.JUL.2024 15:45:03

Highest Channel / 3SC0 Carrier on



Date: 16.JUL.2024 17:37:43

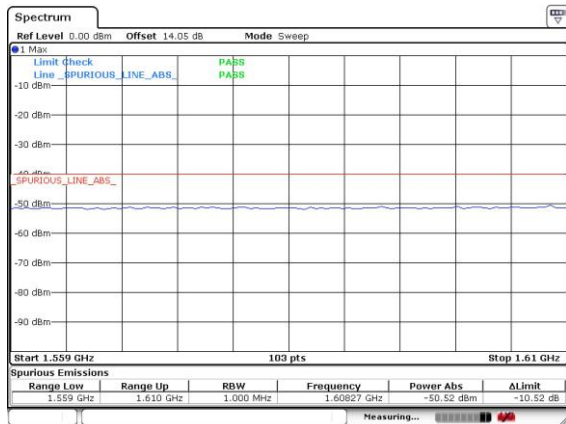
Highest Channel / 3SC0 Discrete



Date: 16.JUL.2024 17:38:12

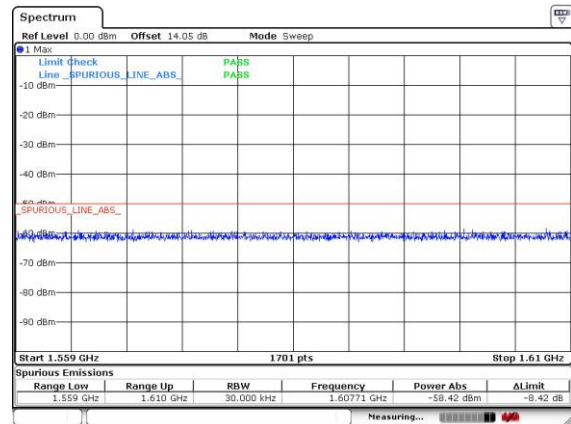


Lowest Channel / 3SC9 Carrier on



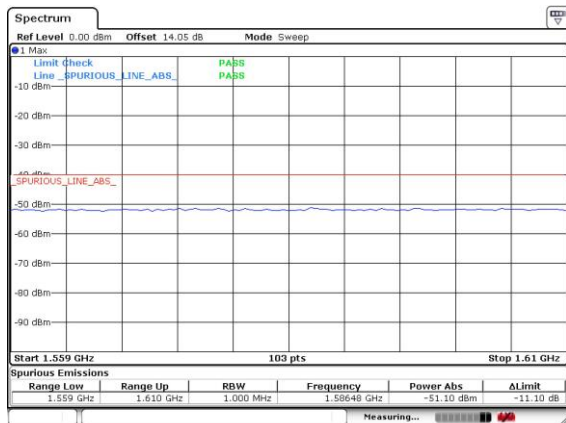
Date: 16.JUL.2024 14:59:52

Lowest Channel / 3SC9 Discrete



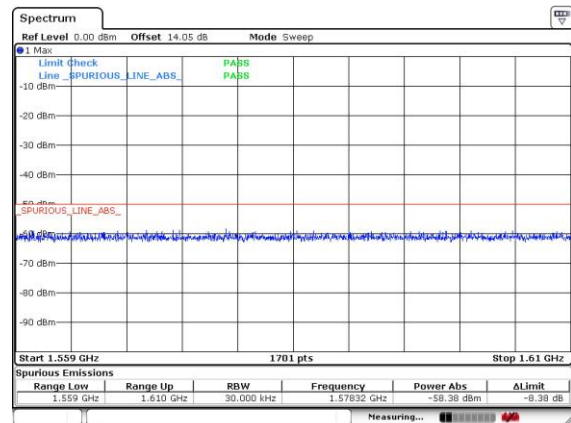
Date: 16.JUL.2024 14:57:58

Middle Channel / 3SC9 Carrier on



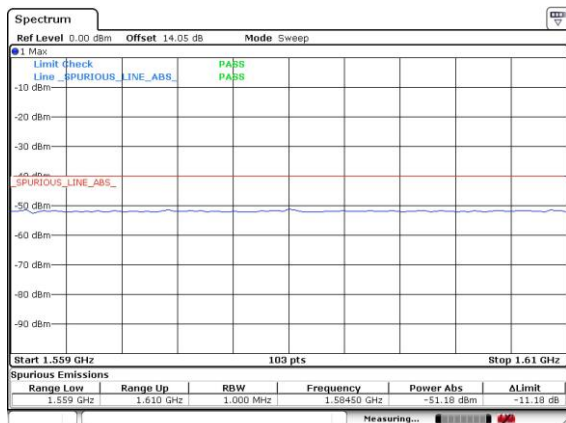
Date: 16.JUL.2024 15:51:09

Middle Channel / 3SC9 Discrete



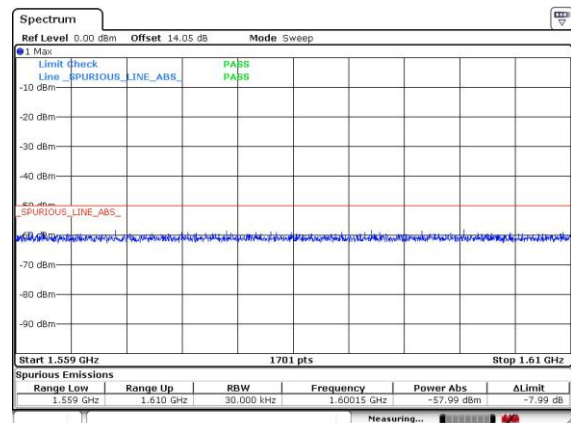
Date: 16.JUL.2024 15:50:33

Highest Channel / 3SC9 Carrier on

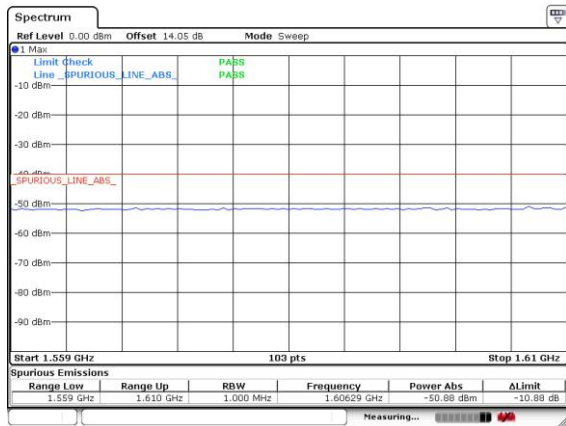


Date: 16.JUL.2024 17:40:44

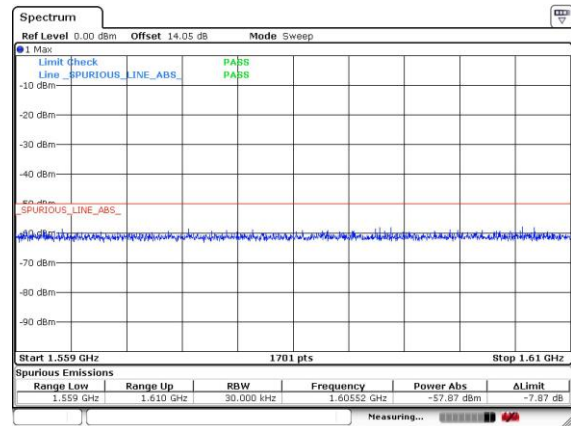
Highest Channel / 3SC9 Discrete



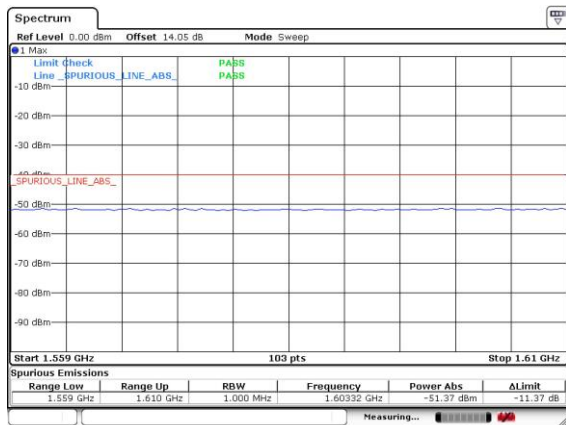
Date: 16.JUL.2024 17:40:00

**Lowest Channel / 6SC0 Carrier on**

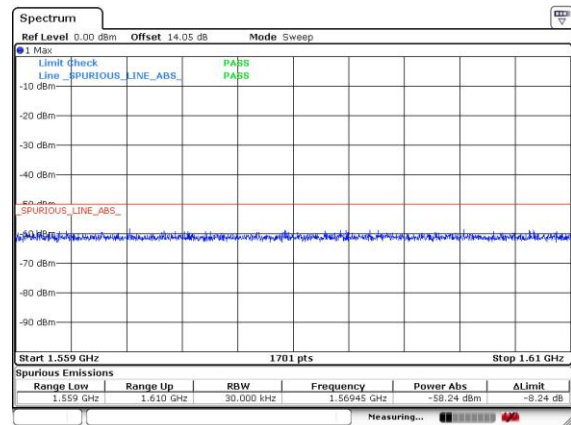
Date: 16.JUL.2024 15:01:05

Lowest Channel / 6SC0 Discrete

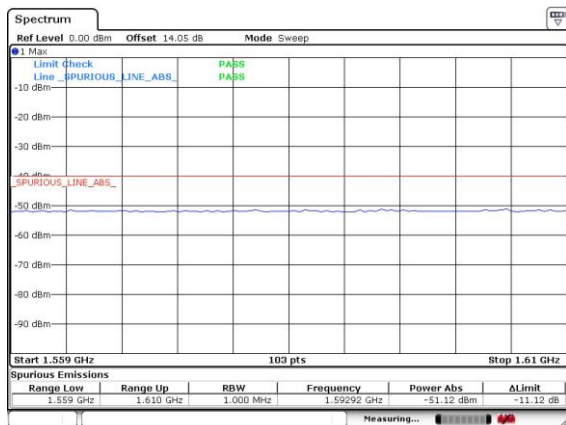
Date: 16.JUL.2024 15:01:31

Middle Channel / 6SC0 Carrier on

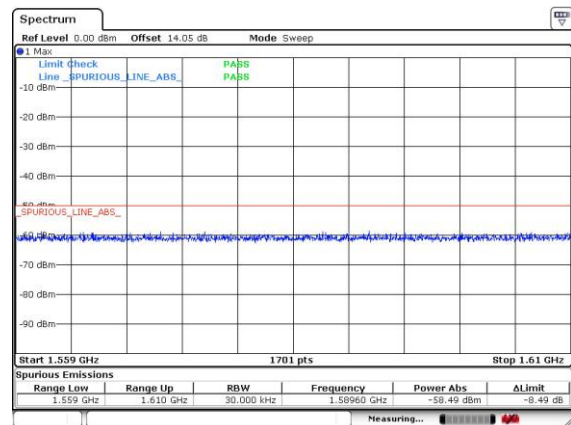
Date: 16.JUL.2024 15:52:39

Middle Channel / 6SC0 Discrete

Date: 16.JUL.2024 15:53:19

Highest Channel / 6SC0 Carrier on

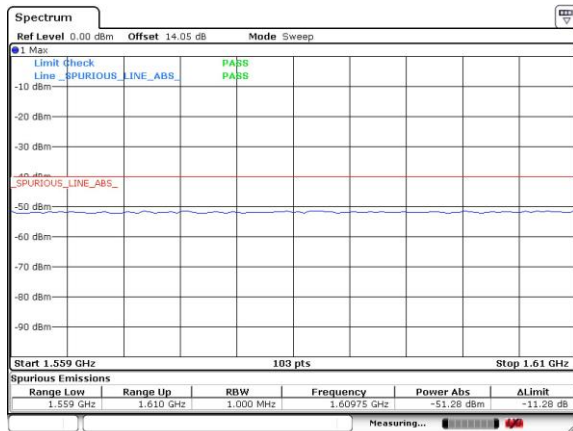
Date: 16.JUL.2024 17:42:54

Highest Channel / 6SC0 Discrete

Date: 16.JUL.2024 17:43:30

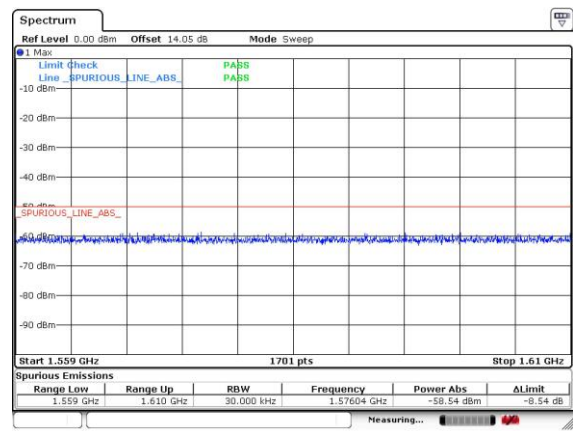


Lowest Channel / 6SC6 Carrier on



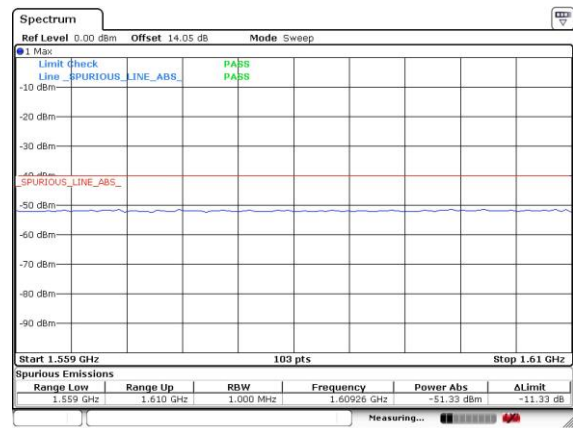
Date: 16.JUL.2024 15:03:21

Lowest Channel / 6SC6 Discrete



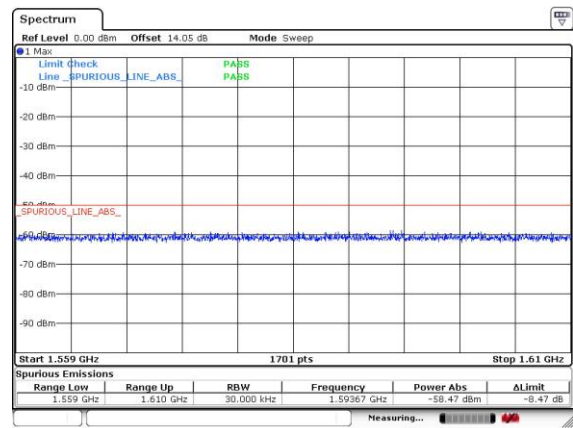
Date: 16.JUL.2024 15:02:59

Middle Channel / 6SC6 Carrier on



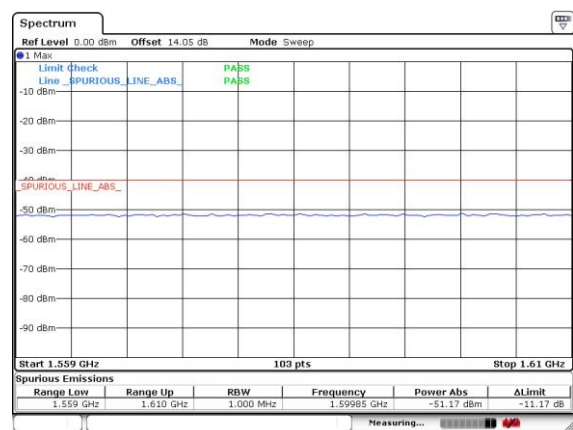
Date: 16.JUL.2024 15:55:27

Middle Channel / 6SC6 Discrete



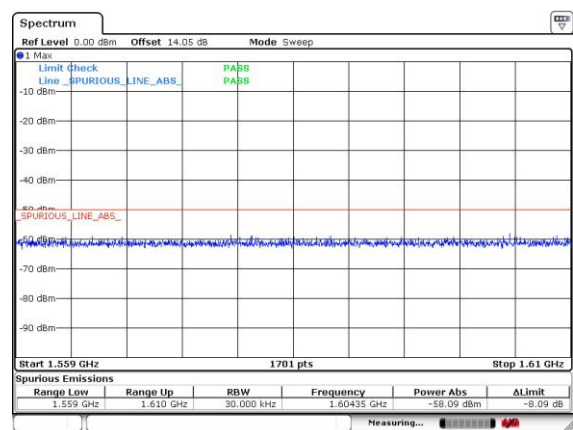
Date: 16.JUL.2024 15:55:02

Highest Channel / 6SC6 Carrier on



Date: 16.JUL.2024 17:45:53

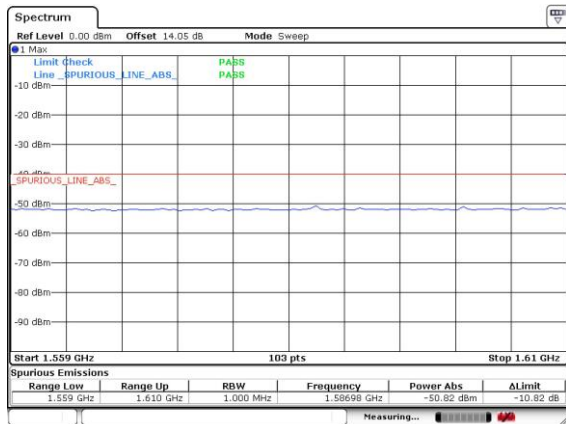
Highest Channel / 6SC6 Discrete



Date: 16.JUL.2024 17:45:28

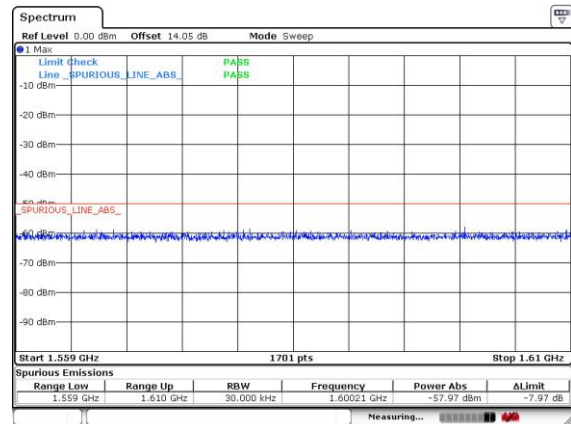


Lowest Channel / 12SC0 Carrier on



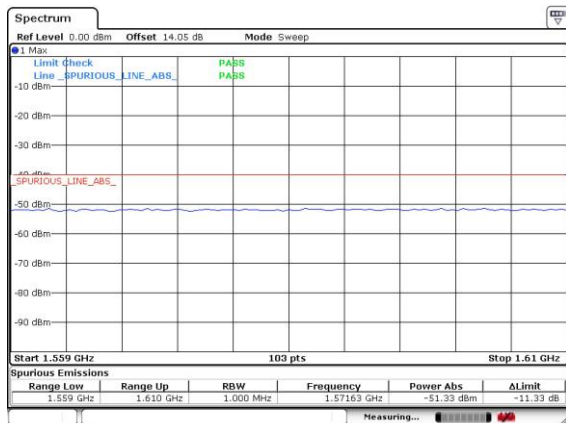
Date: 16.JUL.2024 15:04:39

Lowest Channel / 12SC0 Discrete



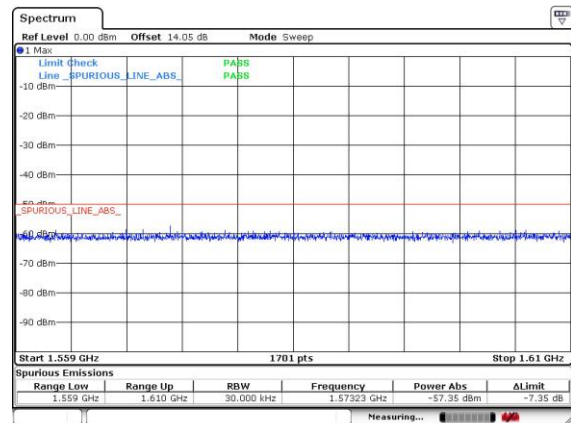
Date: 16.JUL.2024 15:06:13

Middle Channel / 12SC0 Carrier on



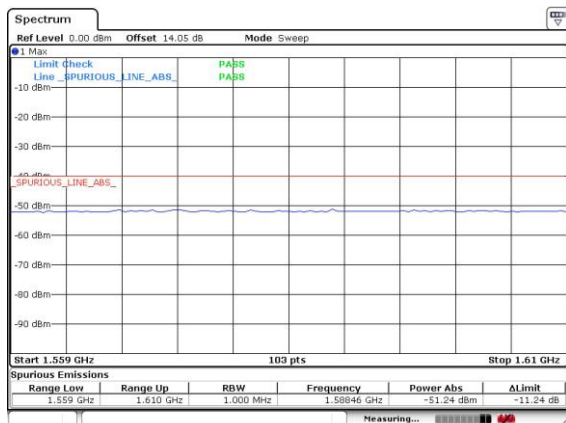
Date: 16.JUL.2024 15:57:39

Middle Channel / 12SC0 Discrete



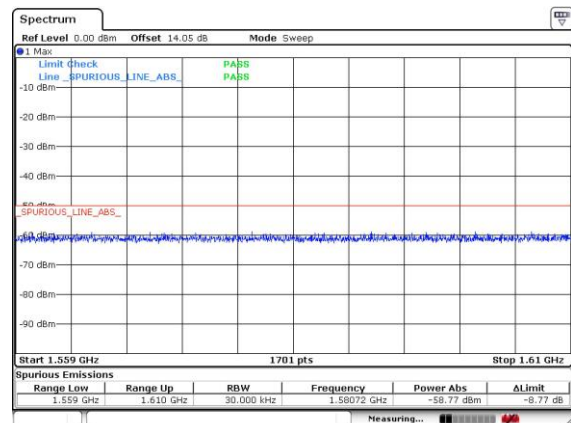
Date: 16.JUL.2024 15:58:15

Highest Channel / 12SC0 Carrier on



Date: 16.JUL.2024 17:47:29

Highest Channel / 12SC0 Discrete



Date: 16.JUL.2024 17:47:59

Frequency Stability

Test Conditions		Band 23(QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	SCS 15kHz	10ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0094	PASS
40	Normal Voltage	0.0064	
30	Normal Voltage	0.0030	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0076	
0	Normal Voltage	0.0053	
20	Maximum Voltage	0.0094	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note: Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.0 V. ; Maximum Voltage =3.6 V.



Band 24

Conducted Output Power (Average power) and EIRP

Band 24 SCS 3.75kHz							Limit
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP Power (dBm)		Result
		BPSK	QPSK		BPSK	QPSK	
1626.6	1SC0	23.14	23.15	7	30.14	30.15	PASS
	1SC47	23.11	23.18	7	30.11	30.18	
1643.5	1SC0	23.27	23.3	7	30.27	30.3	
	1SC47	23.24	23.29	7	30.24	30.29	
1660.4	1SC0	23.13	23.15	7	30.13	30.15	
	1SC47	23.18	23.23	7	30.18	30.23	



Band 24 SCS 15kHz							Limit
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP Power (dBm)		Result
		BPSK	QPSK		BPSK	QPSK	
1626.6	1SC0	23.1	23.12	7	30.1	30.12	PASS
	1SC11	23.13	23.08	7	30.13	30.08	
	3SC0	-	22.73	7	-	29.73	
	3SC9	-	22.65	7	-	29.65	
	6SC0	-	22.11	7	-	29.11	
	6SC6	-	22.08	7	-	29.08	
	12SC0	-	21.07	7	-	28.07	
1643.5	1SC0	23.27	23.24	7	30.27	30.24	
	1SC11	23.17	23.23	7	30.17	30.23	
	3SC0	-	23.06	7	-	30.06	
	3SC9	-	22.82	7	-	29.82	
	6SC0	-	22.32	7	-	29.32	
	6SC6	-	22.32	7	-	29.32	
	12SC0	-	21.09	7	-	28.09	
1660.4	1SC0	23.11	23.18	7	30.11	30.18	
	1SC11	23.12	23.11	7	30.12	30.11	
	3SC0	-	22.97	7	-	29.97	
	3SC9	-	22.83	7	-	29.83	
	6SC0	-	22.14	7	-	29.14	
	6SC6	-	22.21	7	-	29.21	
	12SC0	-	21.09	7	-	28.09	

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	
1626.6	1SC0	23.17	23.19	7	30.17	30.19	PASS
	1SC47	23.18	23.2	7	30.18	30.2	
1643.5	1SC0	23.41	23.42	7	30.41	30.42	
	1SC47	23.43	23.46	7	30.43	30.46	
1660.4	1SC0	23.21	23.21	7	30.21	30.21	
	1SC47	23.23	23.24	7	30.23	30.24	



Band 255 SCS 15kHz							Limit
Test Frequency (MHz)	SC Size	Conducted Power (dBm)		Antenna Gain (dBi)	EIRP Power (dBm)		Result
		BPSK	QPSK		BPSK	QPSK	
1626.6	1SC0	23.17	23.13	7	30.17	30.13	PASS
	1SC11	23.15	23.14	7	30.15	30.14	
	3SC0	-	22.75	7	-	29.75	
	3SC9	-	22.69	7	-	29.69	
	6SC0	-	22.18	7	-	29.18	
	6SC6	-	22.14	7	-	29.14	
	12SC0	-	21.13	7	-	28.13	
1643.5	1SC0	23.38	23.33	7	30.38	30.33	
	1SC11	23.48	23.32	7	30.48	30.32	
	3SC0	-	23.07	7	-	30.07	
	3SC9	-	22.9	7	-	29.9	
	6SC0	-	22.37	7	-	29.37	
	6SC6	-	22.34	7	-	29.34	
	12SC0	-	21.2	7	-	28.2	
1660.4	1SC0	23.18	23.31	7	30.18	30.31	
	1SC11	23.2	23.19	7	30.2	30.19	
	3SC0	-	22.99	7	-	29.99	
	3SC9	-	22.84	7	-	29.84	
	6SC0	-	22.26	7	-	29.26	
	6SC6	-	22.24	7	-	29.24	
	12SC0	-	21.12	7	-	28.12	



Occupied Bandwidth

Mode	Band 255 : 99%OBW(kHz)
SCS	15kHz
Mod.	QPSK
SC Size	12SC0
Lowest CH	181.019
Middle CH	181.019
Highest CH	181.618



Band 255 SCS 15kHz

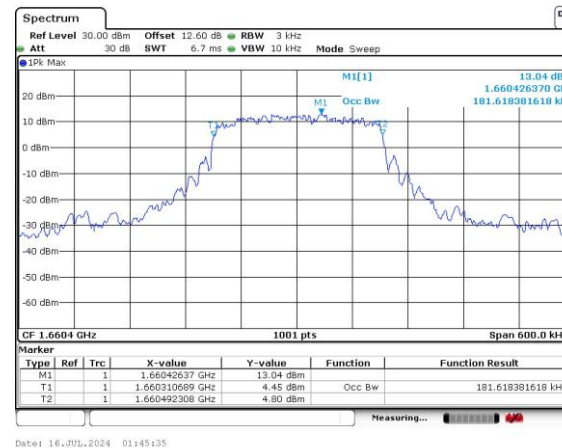
Lowest Channel / 12SC0 / QPSK



Middle Channel / 12SC0 / QPSK



Highest Channel / 12SC0 / QPSK



Conducted Emissions Mask

B255 L CH 1626.6 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.07	-8.82	-	-1.97	-6.85	Pass
3.75	BPSK	1SC47	-7.8	-6.55	-	-1.74	-4.81	Pass
3.75	QPSK	1SC0	-9.34	-8.09	-	-1.57	-6.52	Pass
3.75	QPSK	1SC47	-8.3	-7.05	-	-2.59	-4.46	Pass
15	BPSK	1SC0	-3.79	-2.54	-4.17	-2.67	-1.5	Pass
15	BPSK	1SC11	-3.66	-2.41	-	-2.04	-0.37	Pass
15	QPSK	1SC0	-3.6	-2.35	-	-1.48	-0.87	Pass
15	QPSK	1SC11	-2.5	-1.25	-2.24	-2.02	-0.22	Pass
15	QPSK	3SC0	-11.2	-9.95	-	-2.92	-7.03	Pass
15	QPSK	3SC9	-10.08	-8.83	-	-3.31	-5.52	Pass
15	QPSK	6SC0	-15.45	-14.2	-	-3.92	-10.28	Pass
15	QPSK	6SC6	-14.43	-13.18	-	-3.97	-9.21	Pass
15	QPSK	12SC0	-17.94	-16.69	-	-4.43	-12.26	Pass
B255 M CH 1643.5 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.54	-9.29	-	-2.41	-6.88	Pass
3.75	BPSK	1SC47	-11.55	-10.3	-	-5.53	-4.77	Pass
3.75	QPSK	1SC0	-10.03	-8.78	-	-2.26	-6.52	Pass
3.75	QPSK	1SC47	-9.03	-7.78	-	-3.16	-4.62	Pass
15	BPSK	1SC0	-2.73	-1.48	-4.71	-2.52	-2.19	Pass
15	BPSK	1SC11	-2.69	-1.44	-2.47	-1.54	-0.93	Pass
15	QPSK	1SC0	-2.97	-1.72	-	-1.54	-0.18	Pass
15	QPSK	1SC11	-3.34	-2.09	-3.22	-2.38	-0.84	Pass
15	QPSK	3SC0	-11.85	-10.6	-	-2.92	-7.68	Pass
15	QPSK	3SC9	-9.95	-8.7	-	-2.83	-5.87	Pass
15	QPSK	6SC0	-14.57	-13.32	-	-3.38	-9.94	Pass
15	QPSK	6SC6	-13.8	-12.55	-	-3.18	-9.37	Pass
15	QPSK	12SC0	-17.62	-16.37	-	-4.32	-12.05	Pass

B255 H CH 2019.9 MHz								
SCS (kHz)	Modulation	SC config	Measured Value (dBm / 3 kHz)	Measured Value (dBm / 4 kHz)	Verified Value (dBm / 4 kHz)	Limit (dbm / 4 kHz)	Δlimit (dB)	Result
3.75	BPSK	1SC0	-10.08	-8.83	-	-1.88	-6.95	Pass
3.75	BPSK	1SC47	-7.56	-6.31	-	-1.42	-4.89	Pass
3.75	QPSK	1SC0	-10.03	-8.78	-	-1.89	-6.89	Pass
3.75	QPSK	1SC47	-7.52	-6.27	-	-1.62	-4.65	Pass
15	BPSK	1SC0	-3.87	-2.62	-	-1.92	-0.7	Pass
15	BPSK	1SC11	-2.86	-1.61	-3.03	-2.94	-0.09	Pass
15	QPSK	1SC0	-4.05	-2.8	-	-2.4	-0.4	Pass
15	QPSK	1SC11	-2.27	-1.02	-2.92	-1.35	-1.57	Pass
15	QPSK	3SC0	-11.55	-10.3	-	-2.67	-7.63	Pass
15	QPSK	3SC9	-9.78	-8.53	-	-2.83	-5.7	Pass
15	QPSK	6SC0	-14.21	-12.96	-	-3.31	-9.65	Pass
15	QPSK	6SC6	-14.08	-12.83	-	-3.87	-8.96	Pass
15	QPSK	12SC0	-17.7	-16.45	-	-4.65	-11.8	Pass

Remark: The above results of RBW 3kHz should be added a factor of $10\log(4\text{kHz}/3\text{kHz}) = 1.25\text{dB}$.

If the result of the Mask method with factor fails, then the Channel Power method will be used.

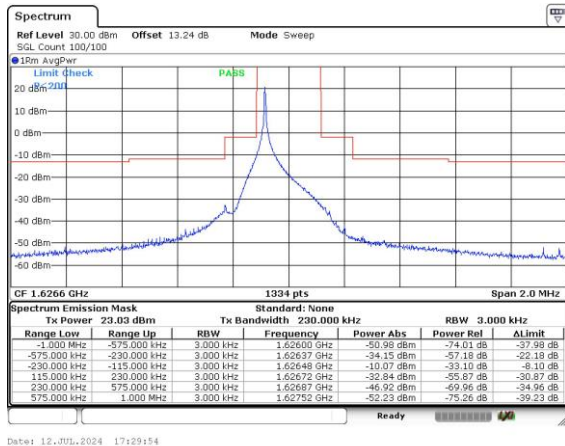
The authorized bandwidth is 230kHz according to FCC Public Notice Report No. SES-02669.



Band 255 SCS 3.75kHz

Lowest Channel / 1SC0 / BPSK

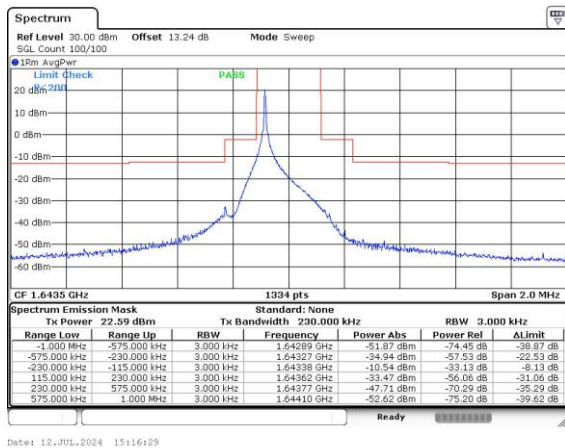
Lowest Channel / 1SC0 / BPSK - CP



N/A

Middle Channel / 1SC0 / BPSK

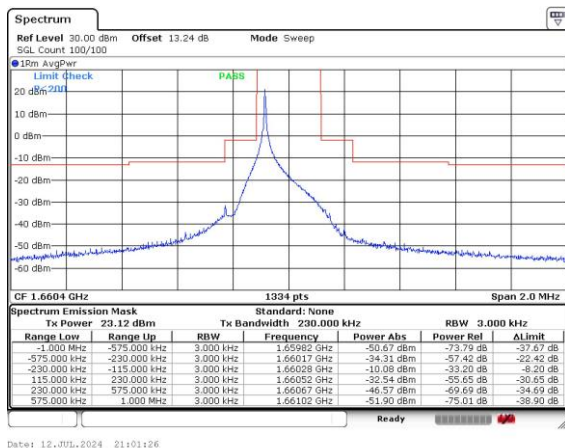
Middle Channel / 1SC0 / BPSK - CP



N/A

Highest Channel / 1SC0 / BPSK

Highest Channel / 1SC0 / BPSK - CP



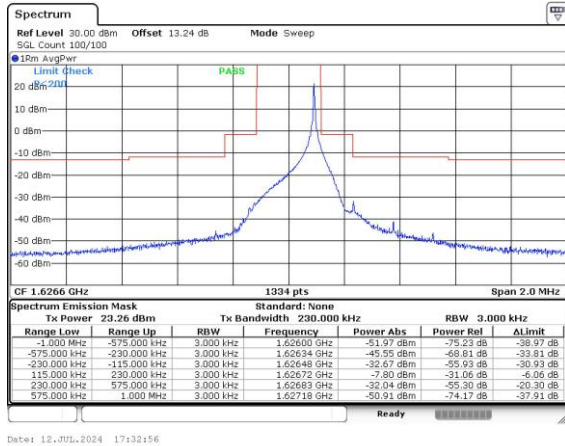
N/A



Band 255 SCS 3.75kHz

Lowest Channel / 1SC47 / BPSK

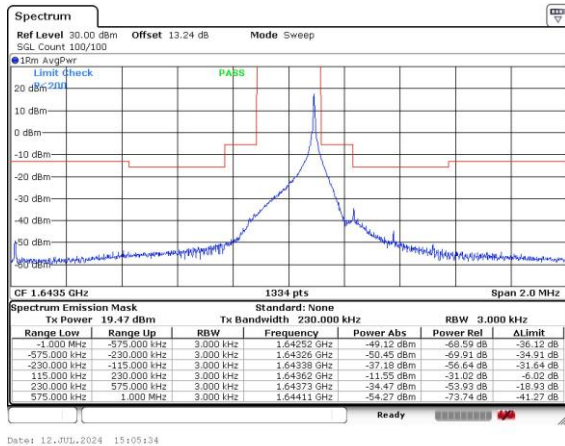
Lowest Channel / 1SC47 / BPSK-CP



N/A

Middle Channel / 1SC47 / BPSK

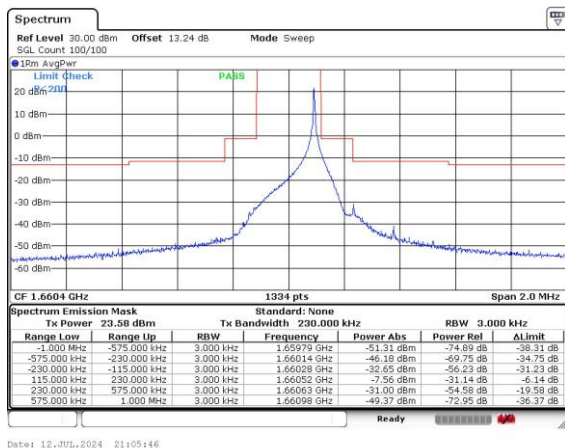
Middle Channel / 1SC47 / BPSK-CP



N/A

Highest Channel / 1SC47 / BPSK

Highest Channel / 1SC47 / BPSK-CP

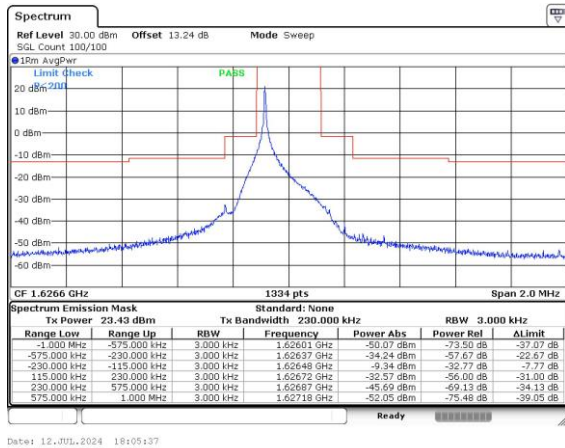


N/A



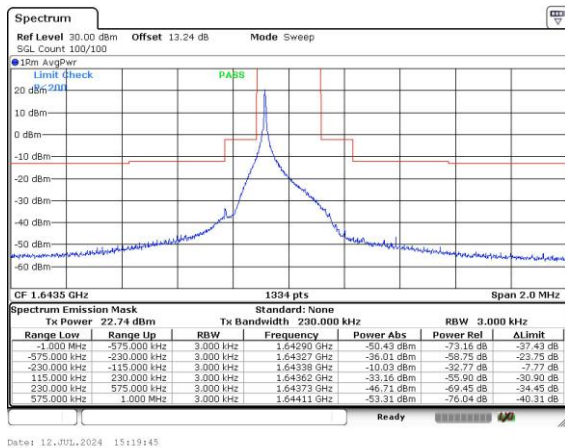
Band 255 SCS 3.75kHz

Lowest Channel / 1SC0 / QPSK



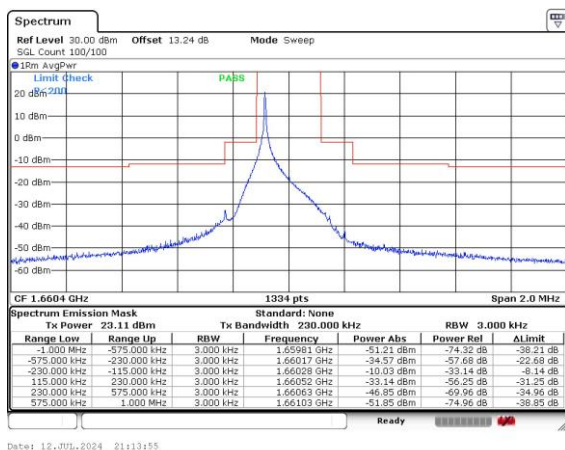
N/A

Middle Channel / 1SC0 / QPSK



N/A

Highest Channel / 1SC0 / QPSK



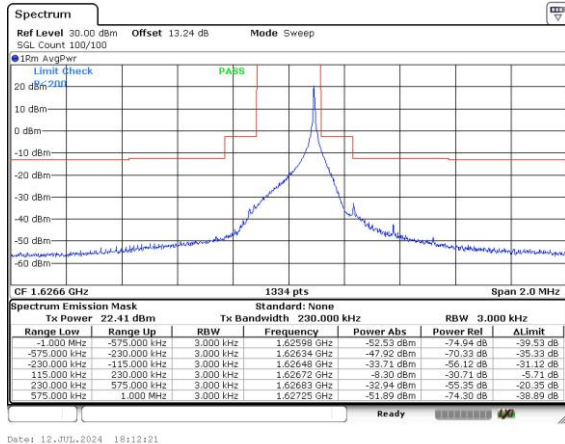
N/A



Band 255 SCS 3.75kHz

Lowest Channel / 1SC47 / QPSK

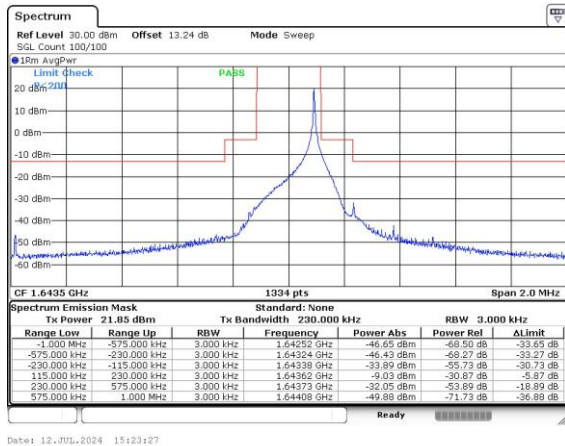
Lowest Channel / 1SC47 / QPSK-CP



N/A

Middle Channel / 1SC47 / QPSK

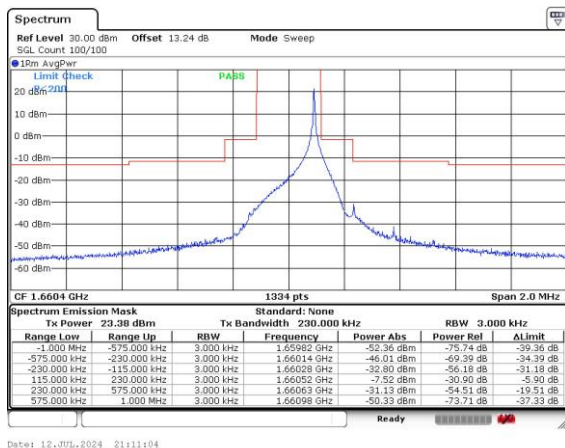
Middle Channel / 1SC47 / QPSK-CP



N/A

Highest Channel / 1SC47 / QPSK

Highest Channel / 1SC47 / QPSK-CP

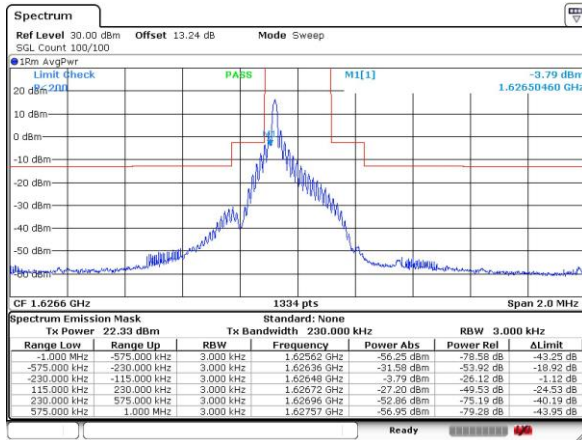


N/A



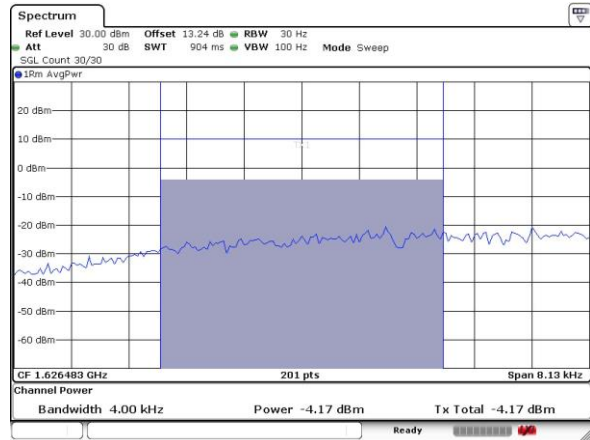
Band 255 SCS 15kHz

Lowest Channel / 1SC0 / BPSK



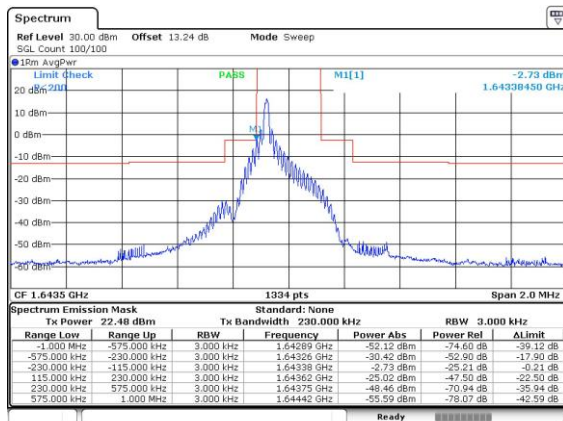
Date: 15.JUL.2024 23:07:38

Lowest Channel / 1SC0 / BPSK - CP



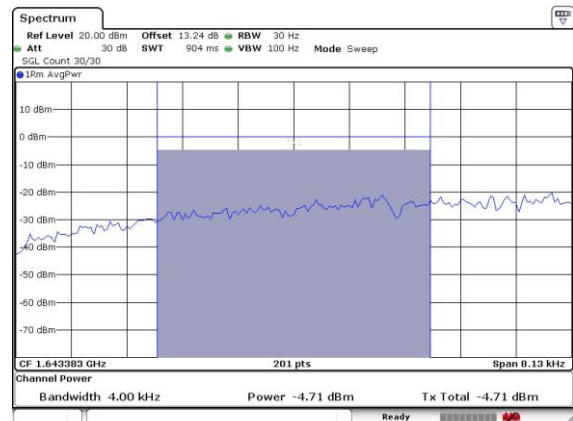
Date: 16.JUL.2024 00:08:53

Middle Channel / 1SC0 / BPSK



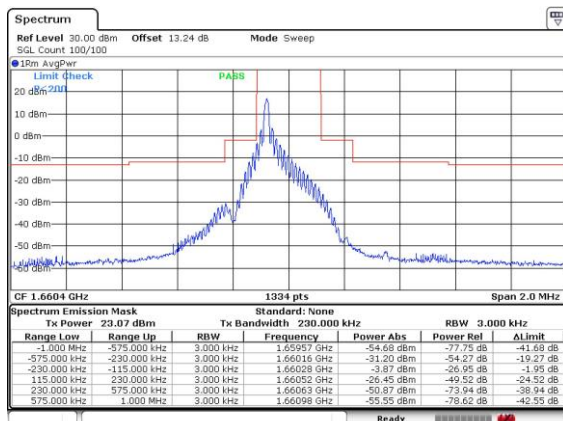
Date: 12.JUL.2024 16:19:37

Middle Channel / 1SC0 / BPSK - CP



Date: 15.JUL.2024 15:17:01

Highest Channel / 1SC0 / BPSK



Date: 12.JUL.2024 20:51:07

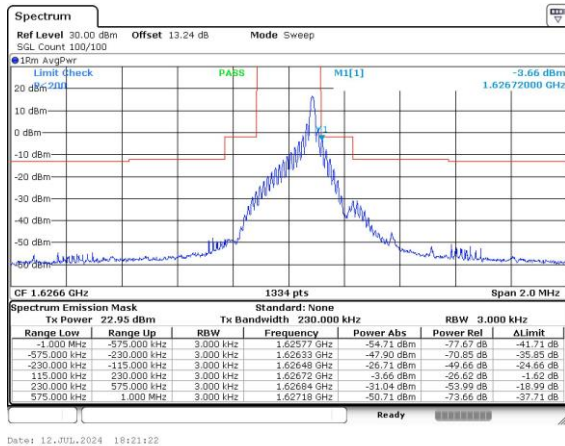
Highest Channel / 1SC0 / BPSK - CP

N/A



Band 255 SCS 15kHz

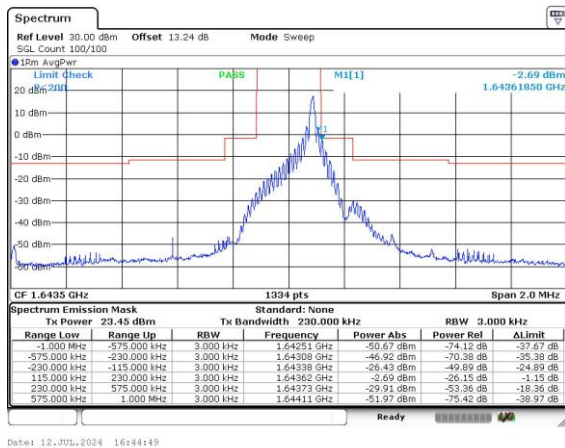
Lowest Channel / 1SC11 / BPSK



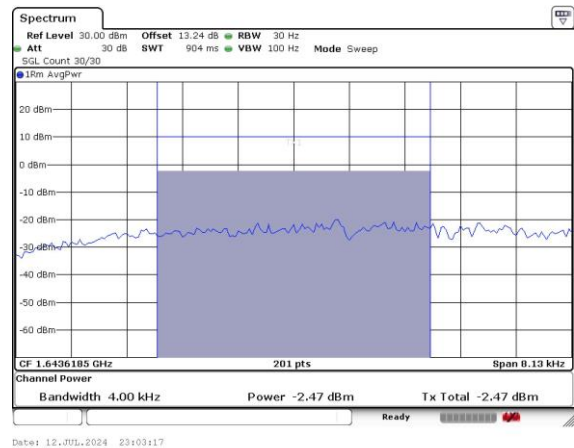
Lowest Channel / 1SC11 / BPSK-CP

N/A

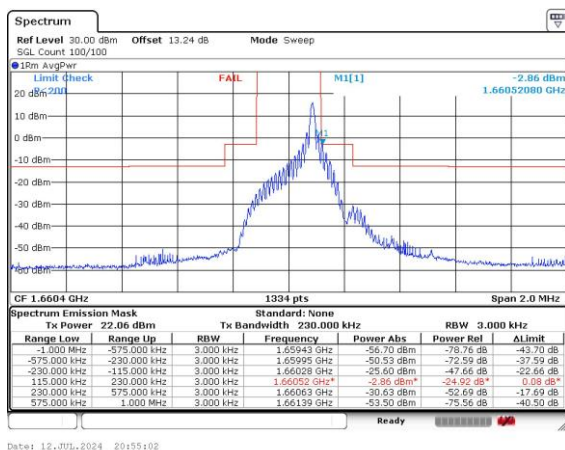
Middle Channel / 1SC11 / BPSK



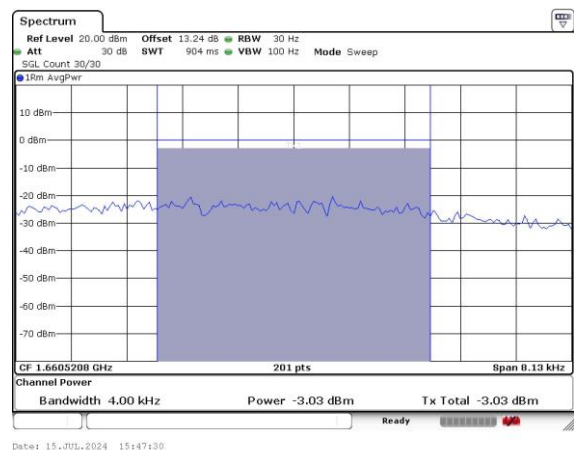
Middle Channel / 1SC11 / BPSK - CP



Highest Channel / 1SC11 / BPSK



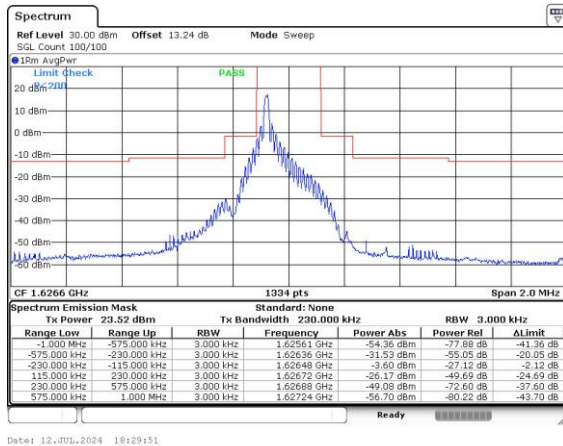
Highest Channel / 1SC11 / BPSK-CP





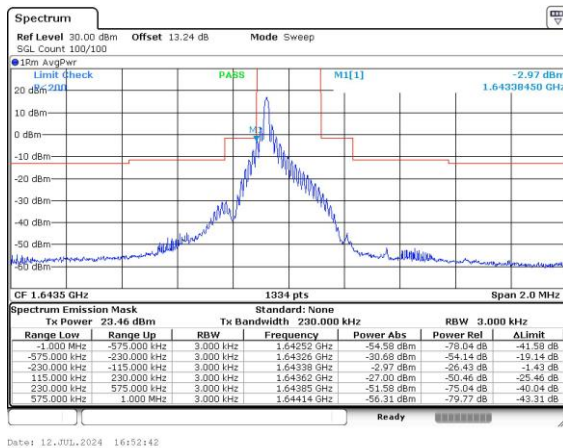
Band 255 SCS 15kHz

Lowest Channel / 1SC0 / QPSK



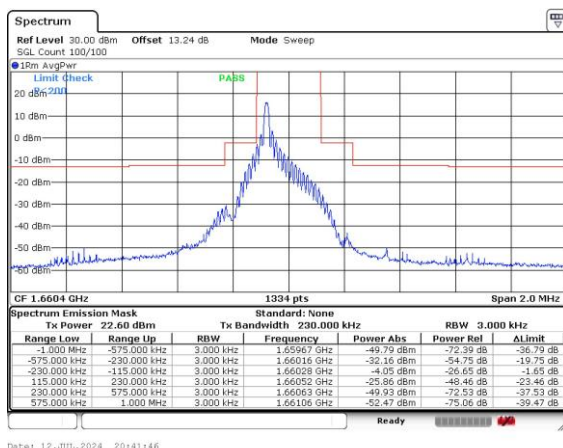
N/A

Middle Channel / 1SC0 / QPSK



N/A

Highest Channel / 1SC0 / QPSK

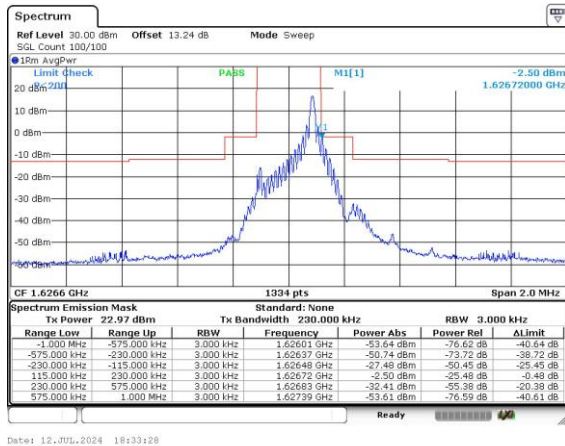


N/A

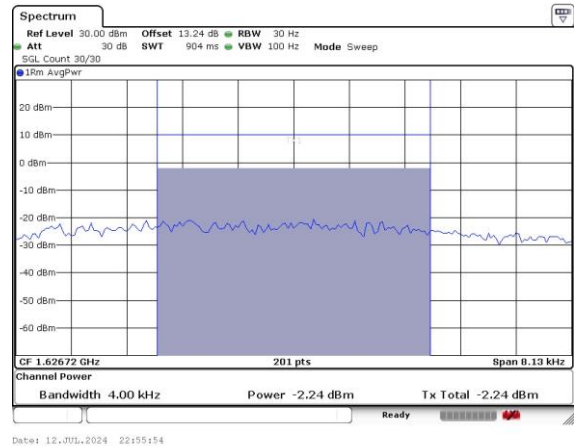


Band 255 SCS 15kHz

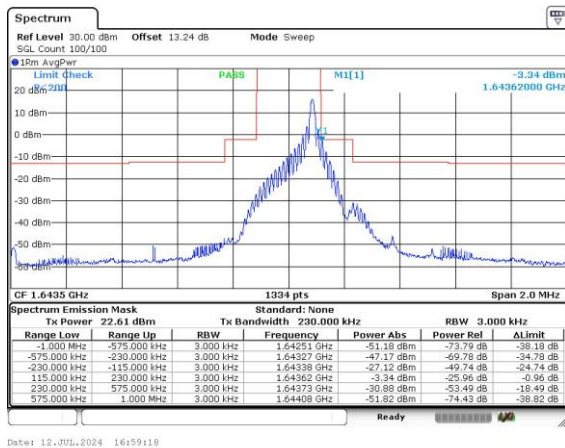
Lowest Channel / 1SC11 / QPSK



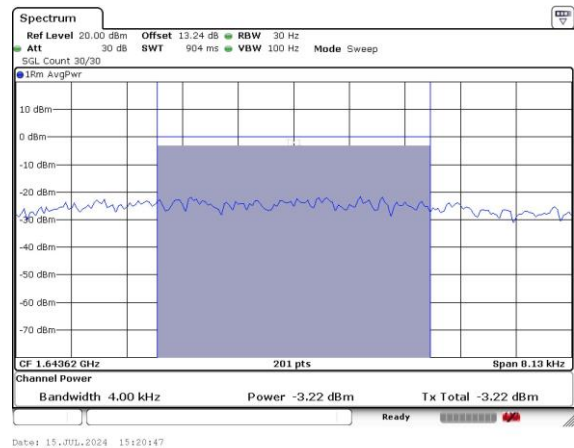
Lowest Channel / 1SC11 / QPSK - CP



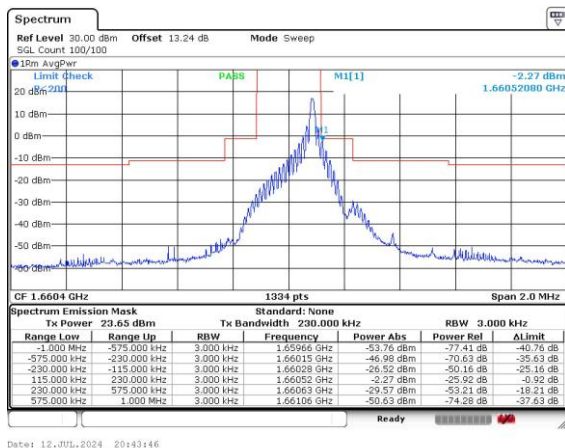
Middle Channel / 1SC11 / QPSK



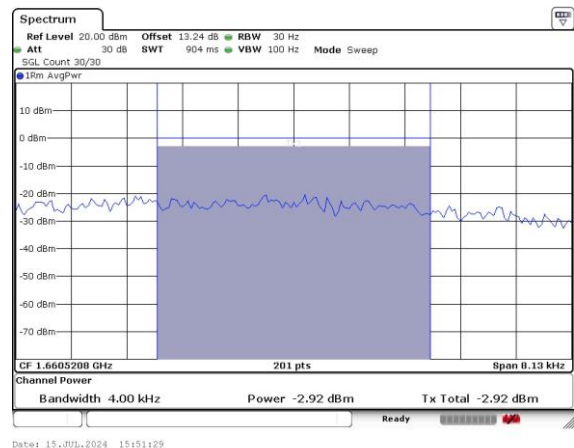
Middle Channel / 1SC11 / QPSK - CP



Highest Channel / 1SC11 / QPSK



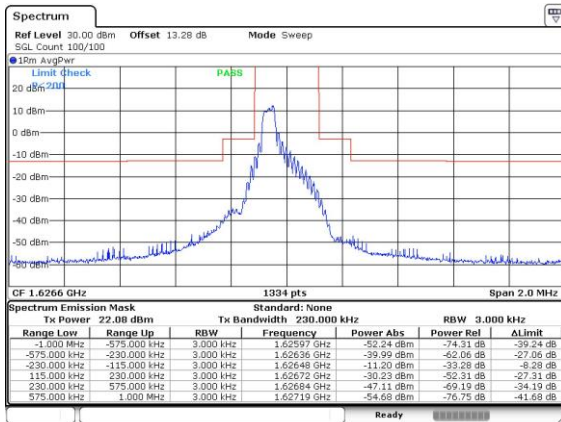
Highest Channel / 1SC11 / QPSK - CP





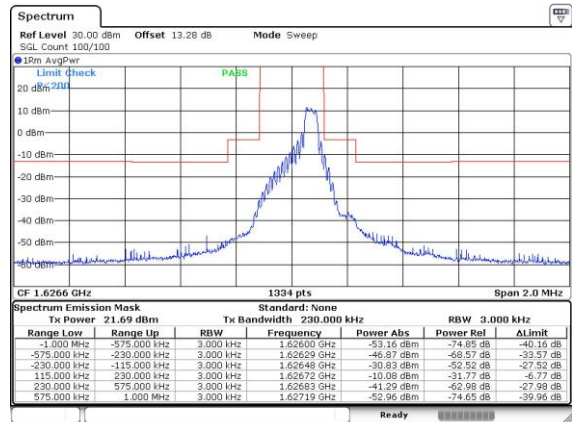
Band 255 SCS 15kHz

Lowest Channel / 3SC0 / QPSK



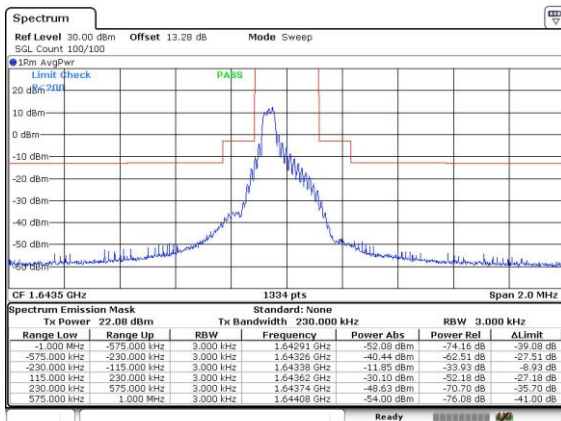
Date: 12.JUL.2024 18:38:28

Lowest Channel / 3SC9 / QPSK



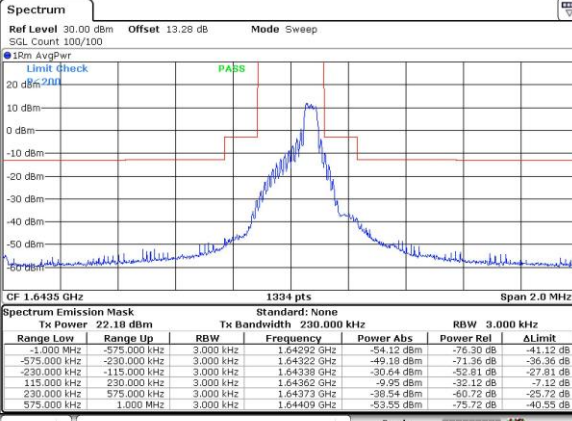
Date: 12.JUL.2024 18:44:29

Middle Channel / 3SC0 / QPSK



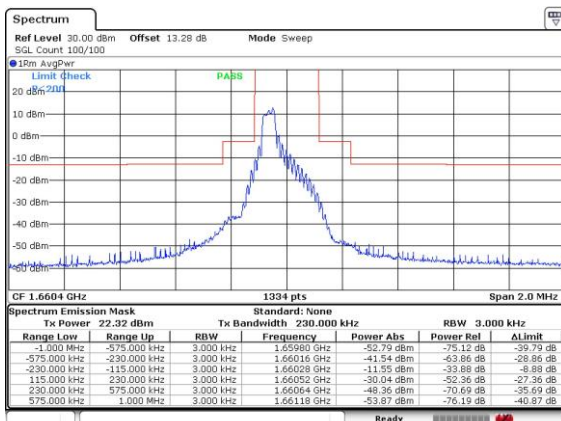
Date: 12.JUL.2024 17:09:52

Middle Channel / 3SC9 / QPSK



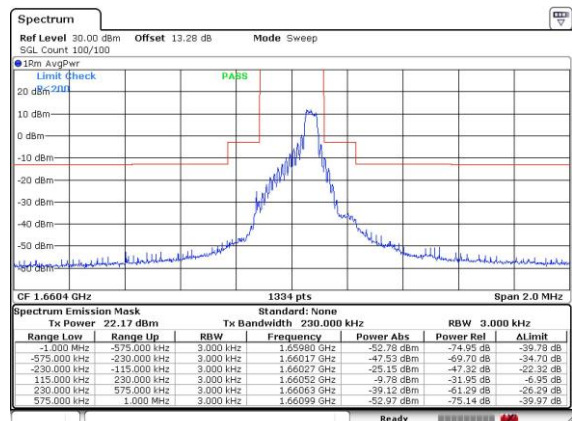
Date: 12.JUL.2024 17:14:20

Highest Channel / 3SC0 / QPSK



Date: 12.JUL.2024 20:38:37

Highest Channel / 3SC9 / QPSK

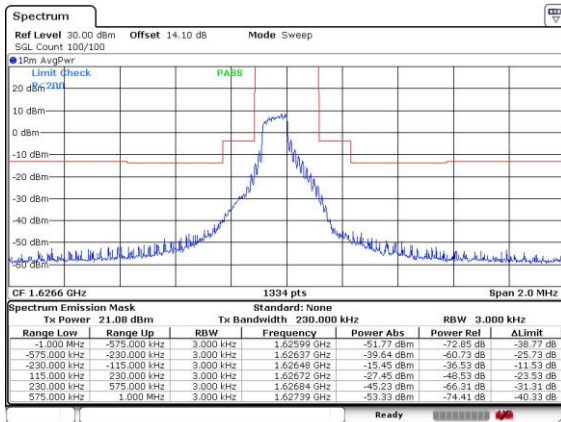


Date: 12.JUL.2024 20:39:50



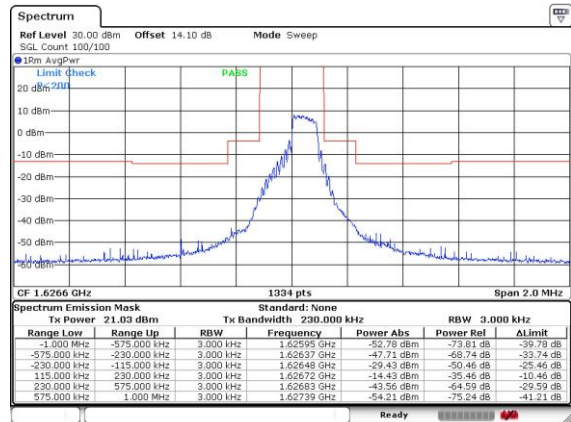
Band 255 SCS 15kHz

Lowest Channel / 6SC0 / QPSK



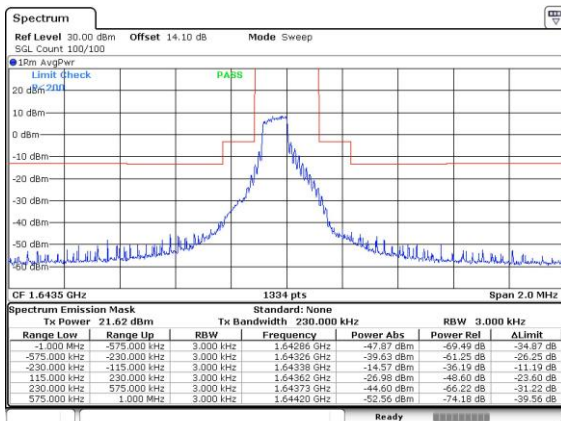
Date: 12.JUL.2024 20:28:49

Lowest Channel / 6SC6 / QPSK



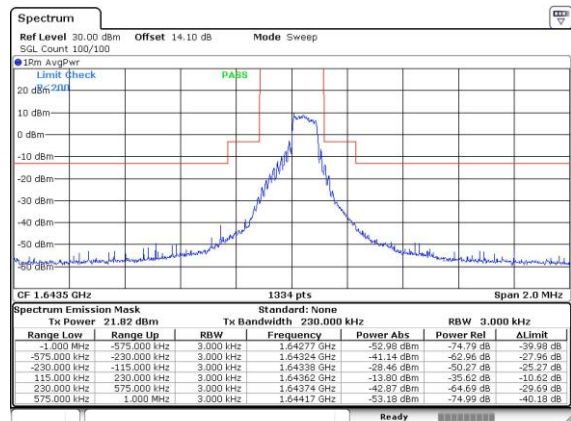
Date: 12.JUL.2024 20:30:21

Middle Channel / 6SC0 / QPSK



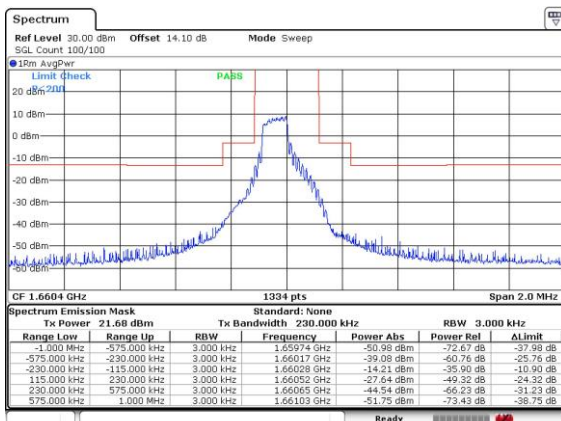
Date: 12.JUL.2024 17:16:48

Middle Channel / 6SC6 / QPSK



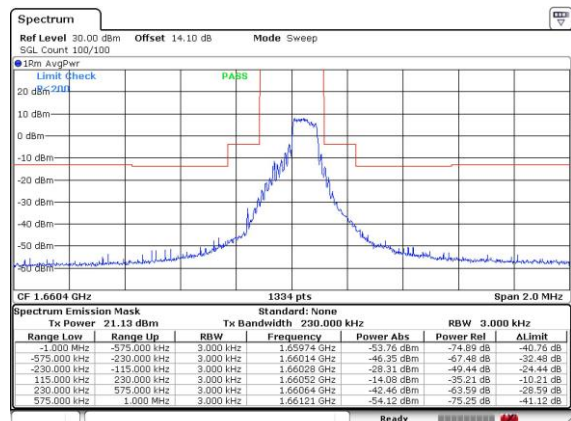
Date: 12.JUL.2024 17:20:55

Highest Channel / 6SC0 / QPSK



Date: 12.JUL.2024 20:35:55

Highest Channel / 6SC6 / QPSK



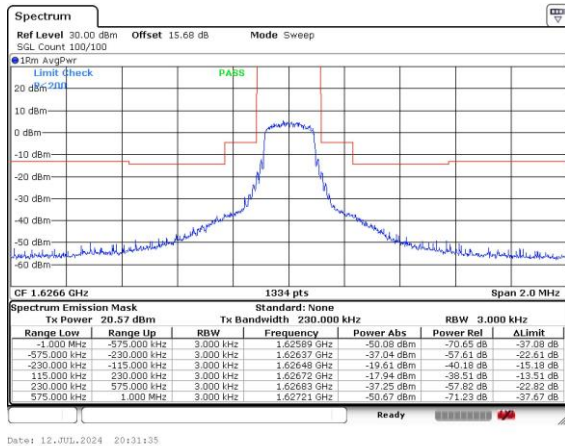
Date: 12.JUL.2024 20:37:06



Band 255 SCS 15kHz

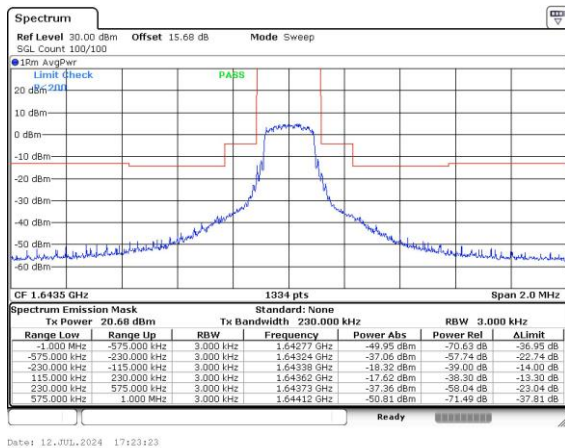
Lowest Channel / 12SC0 / QPSK

N/A



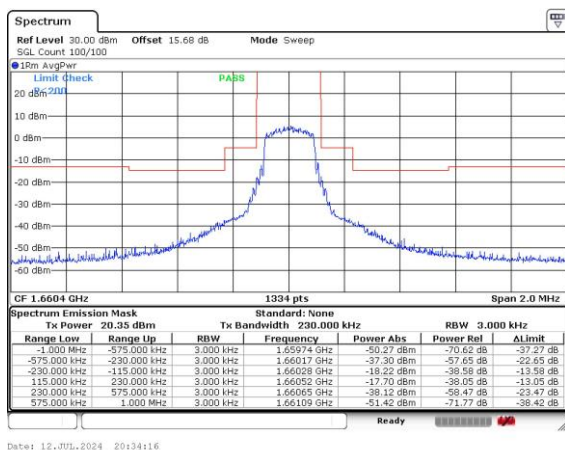
Middle Channel / 12SC0 / QPSK

N/A



Highest Channel / 12SC0 / QPSK

N/A

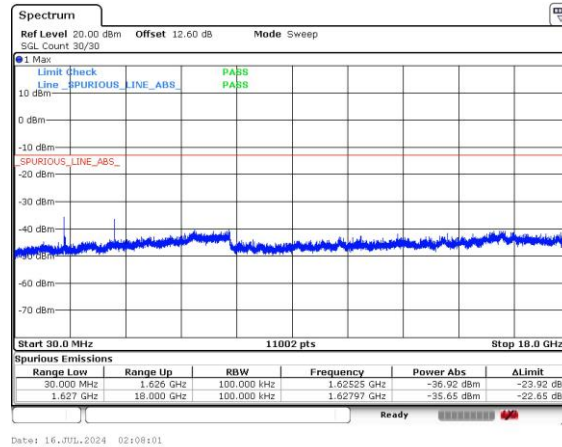




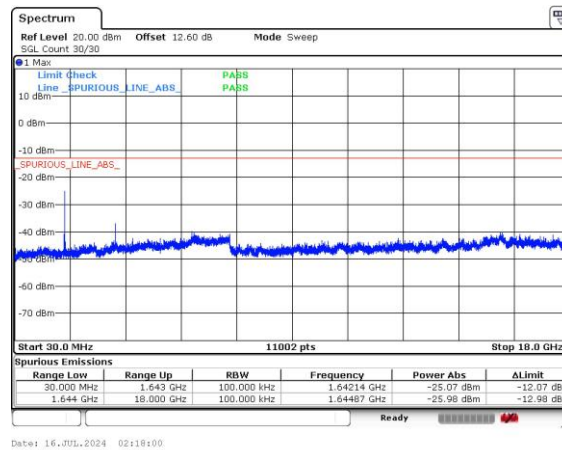
Conducted Spurious Emission

Band 255 SCS 3.75kHz

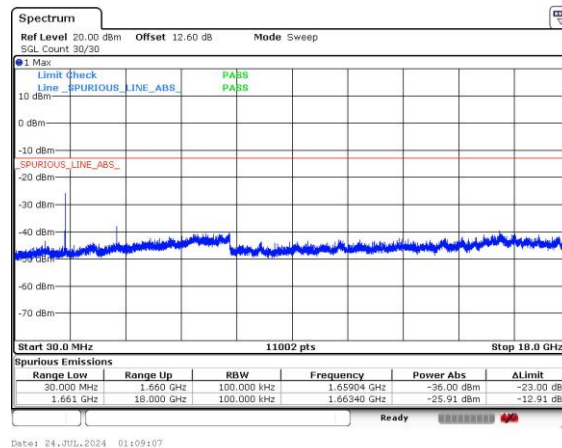
Lowest Channel / 1SC0 / BPSK



Middle Channel / 1SC0 / BPSK



Highest Channel / 1SC0 / BPSK

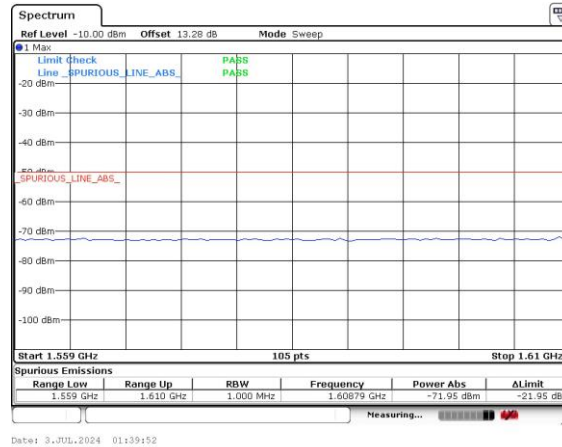




Emission limits for protection of aeronautical service

Band 255

Carrier off

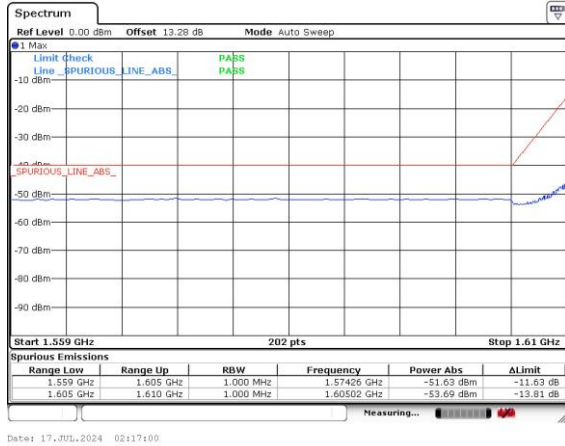




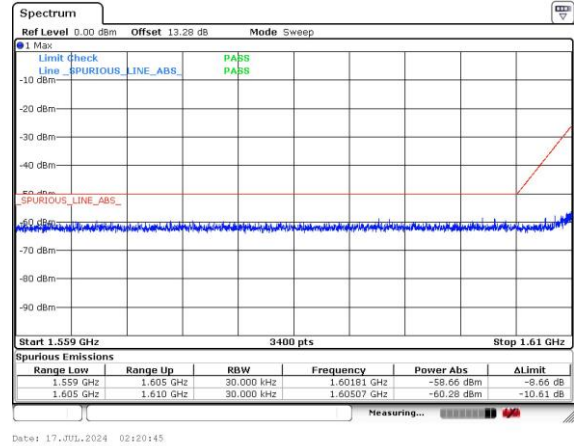
Band 255 SCS 3.75kHz

BPSK

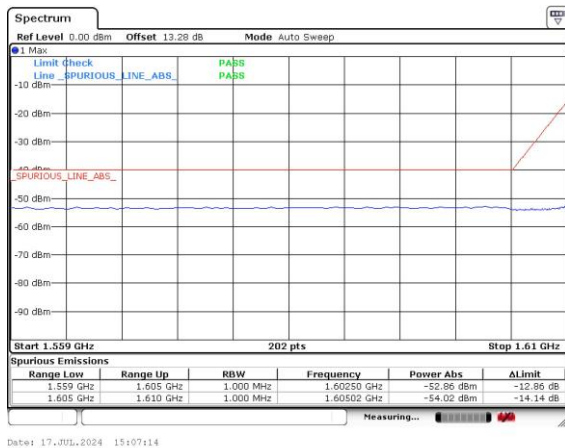
Lowest Channel / 1SC0 Carrier on



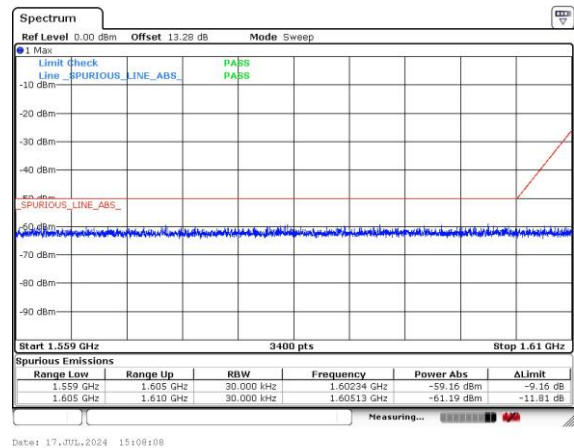
Lowest Channel / 1SC0 Discrete



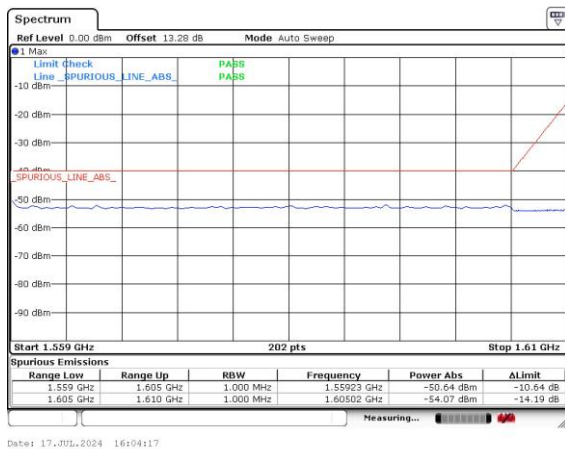
Middle Channel / 1SC0 Carrier on



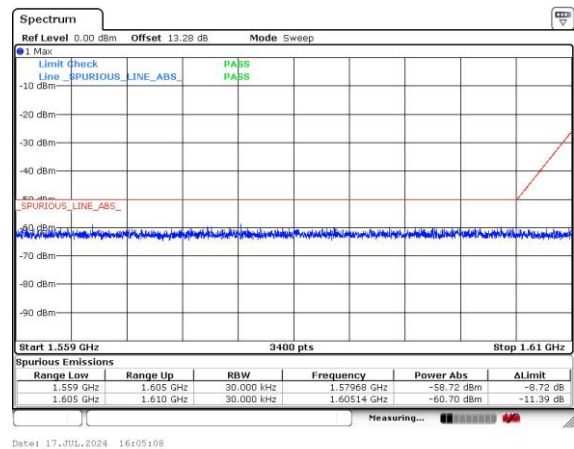
Middle Channel / 1SC0 Discrete



Highest Channel / 1SC0 Carrier on



Highest Channel / 1SC0 Discrete

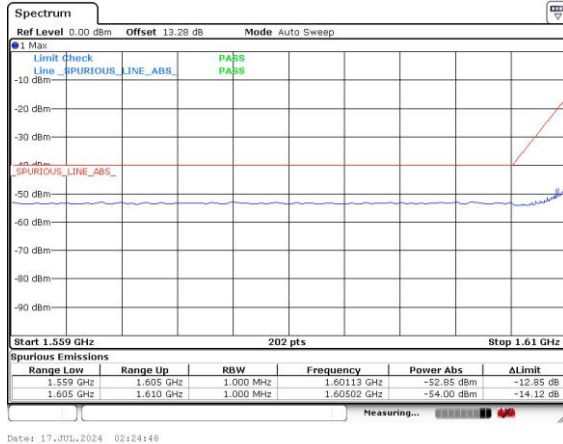




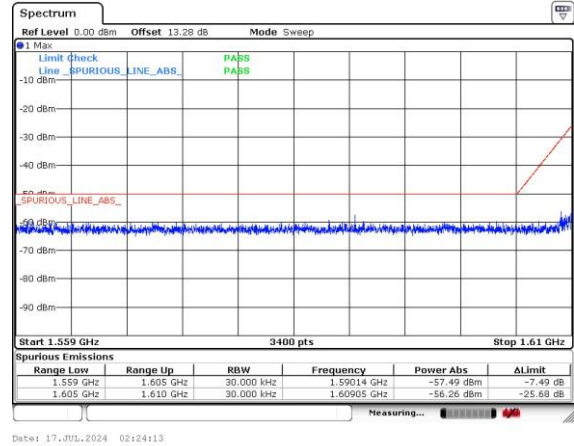
Band 255 SCS 3.75kHz

BPSK

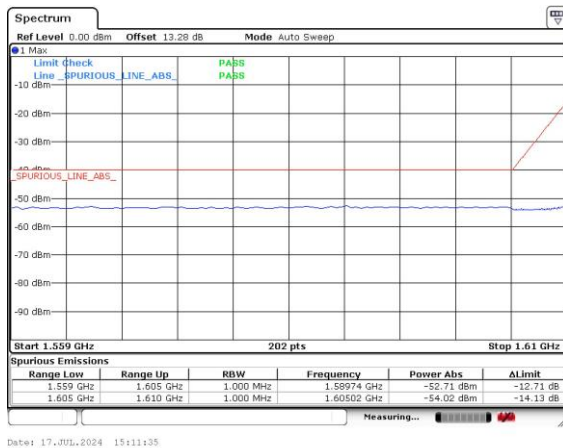
Lowest Channel / 1SC47 Carrier on



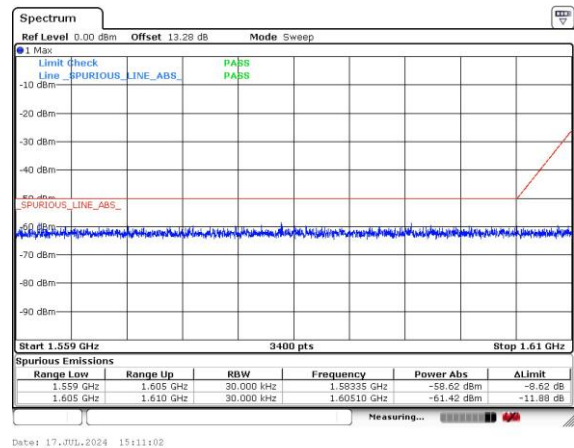
Lowest Channel / 1SC47 Discrete



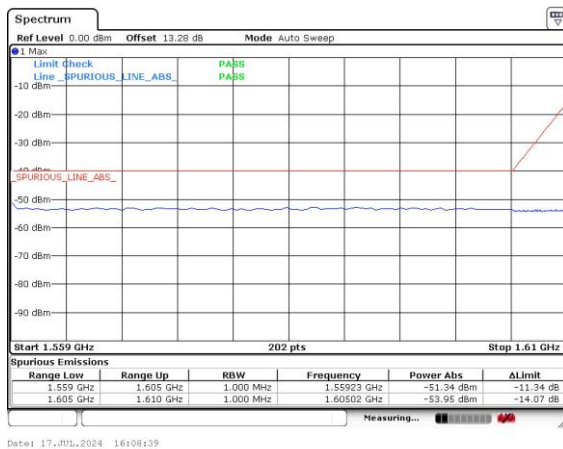
Middle Channel / 1SC47 Carrier on



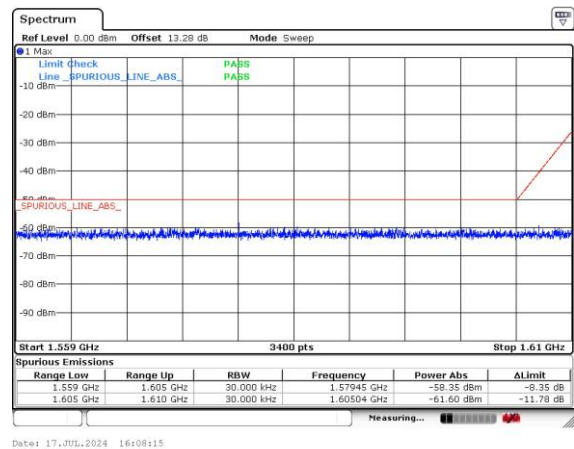
Middle Channel / 1SC47 Discrete



Highest Channel / 1SC47 Carrier on



Highest Channel / 1SC47 Discrete

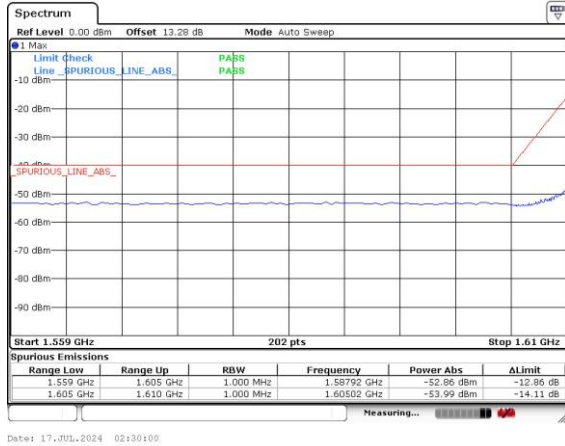




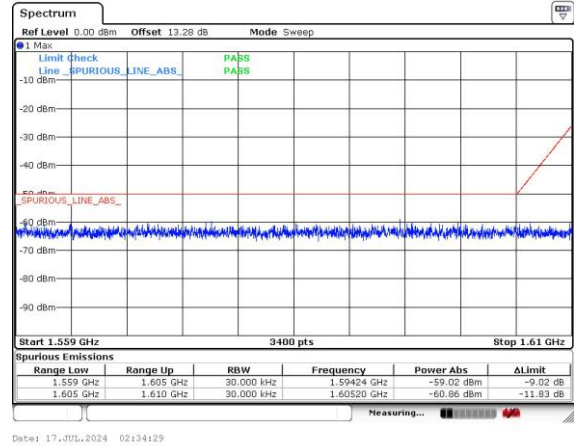
Band 255 SCS 15kHz

BPSK

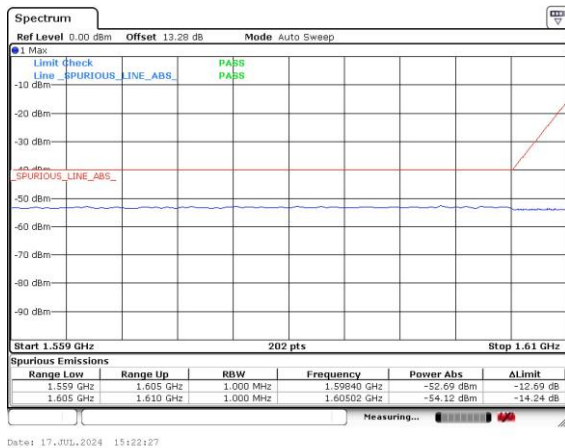
Lowest Channel / 1SC0 Carrier on



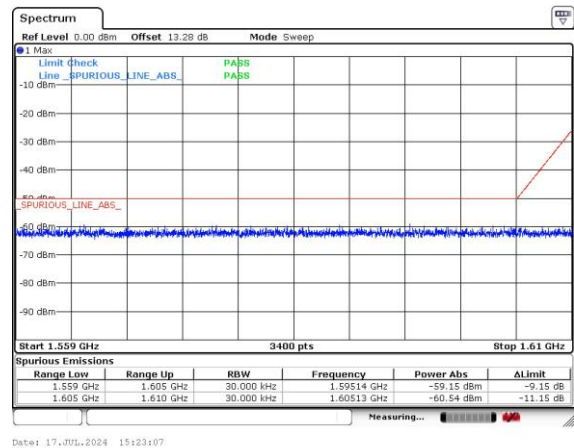
Lowest Channel / 1SC0 Discrete



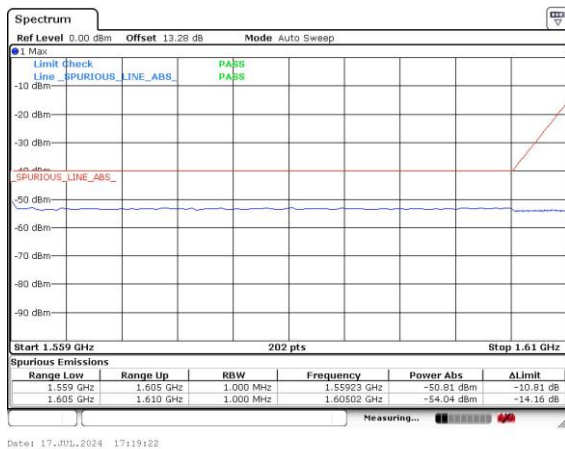
Middle Channel / 1SC0 Carrier on



Middle Channel / 1SC0 Discrete



Highest Channel / 1SC0 Carrier on



Highest Channel / 1SC0 Discrete

