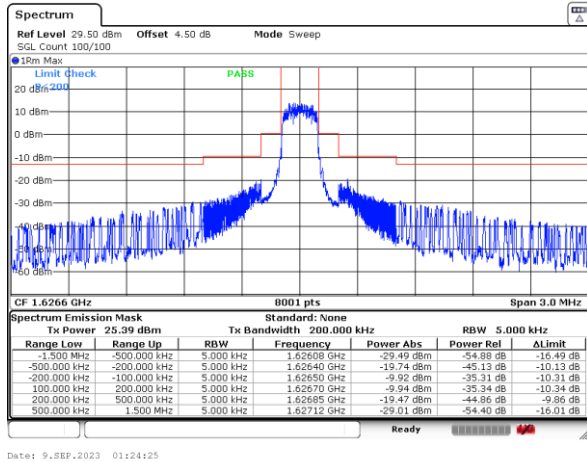




Band 255 SCS15KHz

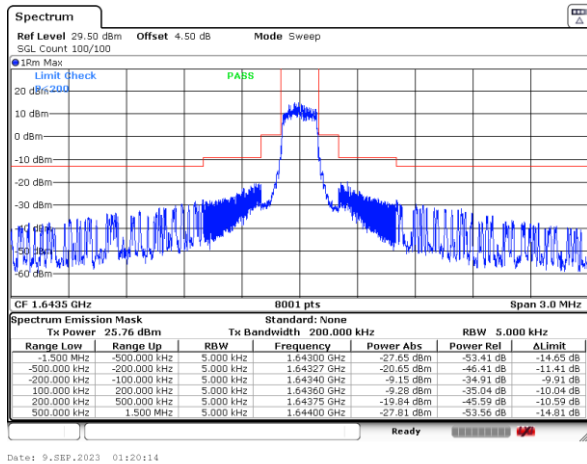
Lowest Channel / 12SC0 / QPSK

N/A



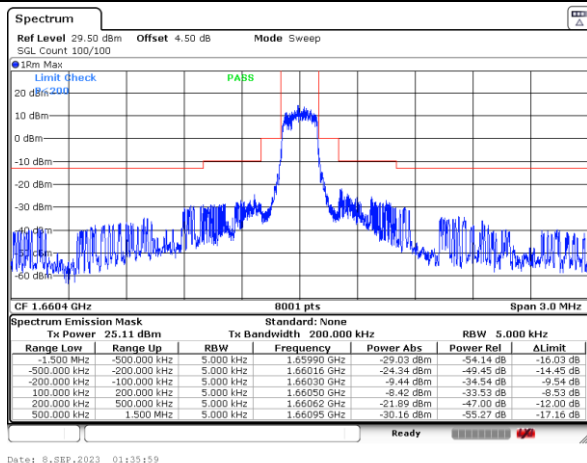
Middle Channel / 12SC0 / QPSK

N/A



Highest Channel / 12SC0 / QPSK

N/A

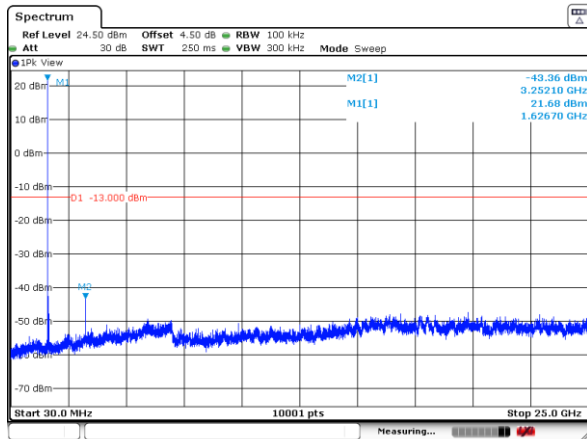




Conducted Spurious Emission

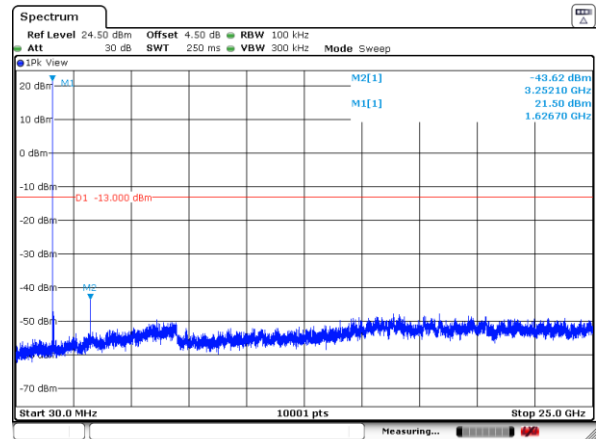
Band 255 SCS3.75KHz

Lowest Channel / 1SC1/ BPSK



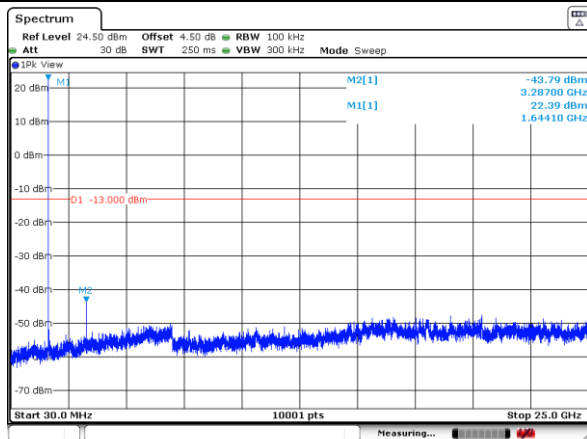
Date: 11.SEP.2023 10:55:57

Lowest Channel / 1SC1 / QPSK



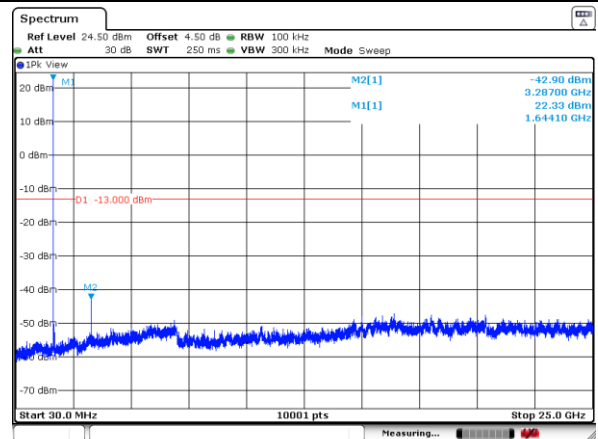
Date: 11.SEP.2023 11:14:27

Middle Channel / 1SC1/ BPSK



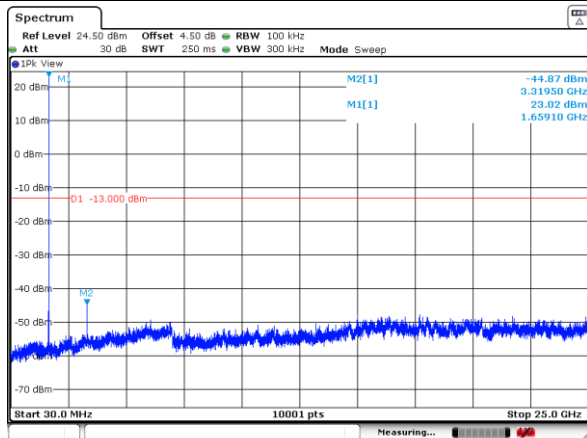
Date: 11.SEP.2023 11:02:51

Middle Channel / 1SC1 / QPSK



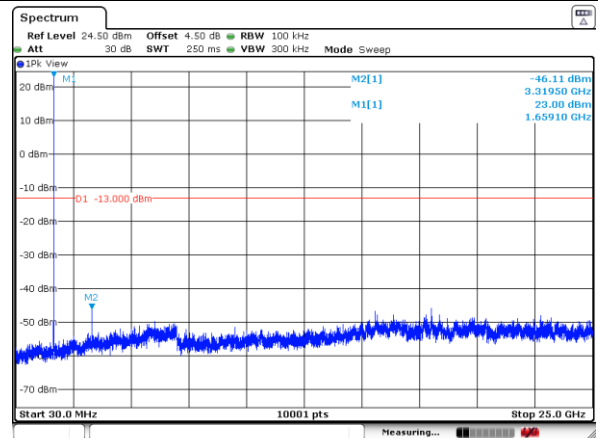
Date: 11.SEP.2023 11:09:31

Highest Channel / 1SC1/ BPSK



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

Highest Channel / 1SC1 / QPSK

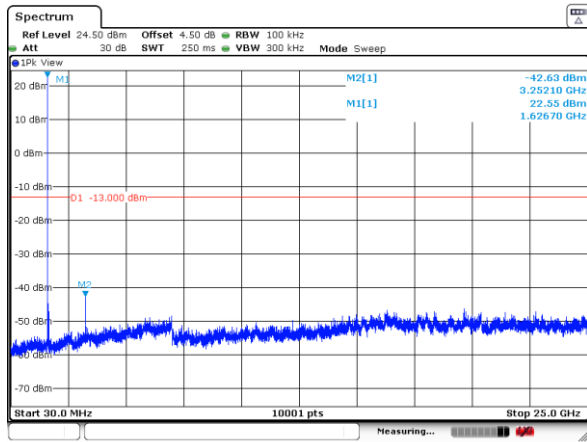


Date: 11.SEP.2023 11:00:43



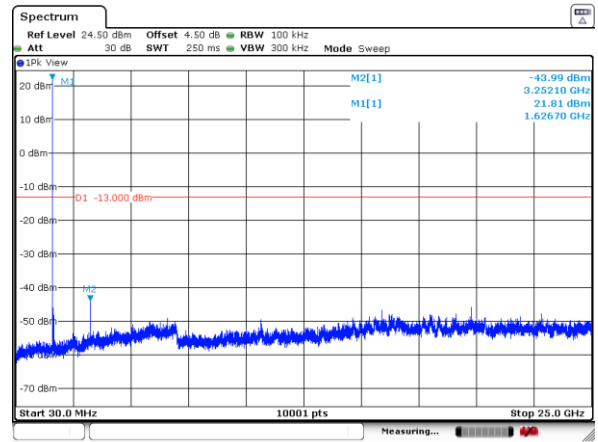
Band 255 SCS15KHz

Lowest Channel / 1SC1/ BPSK



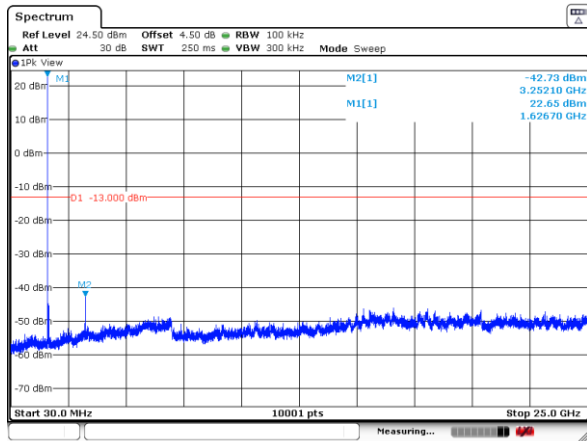
Date: 18,SEP,2023 14:50:15

Lowest Channel / 1SC1/ QPSK



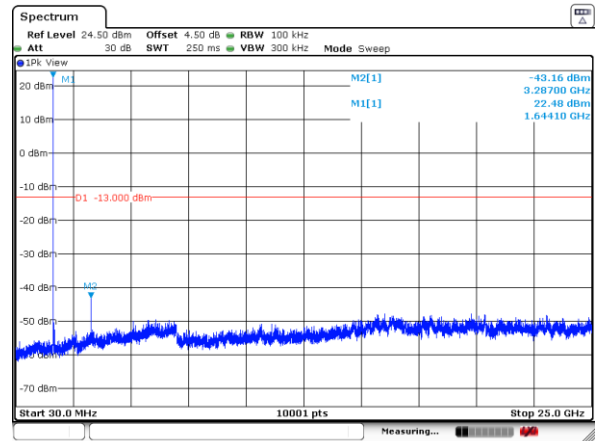
Date: 11,SEP,2023 10:57:55

Middle Channel / 1SC1/ BPSK



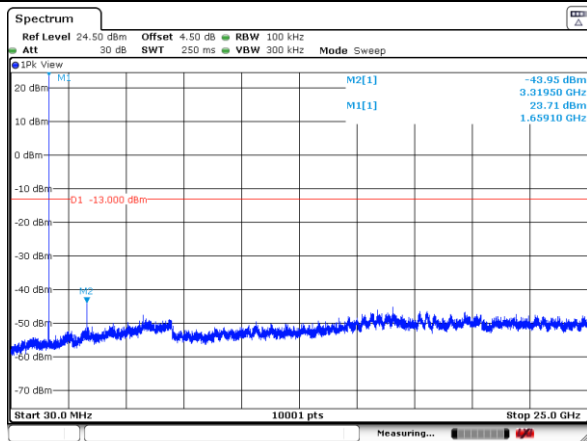
Date: 18,SEP,2023 14:56:35

Middle Channel / 1SC1/ QPSK



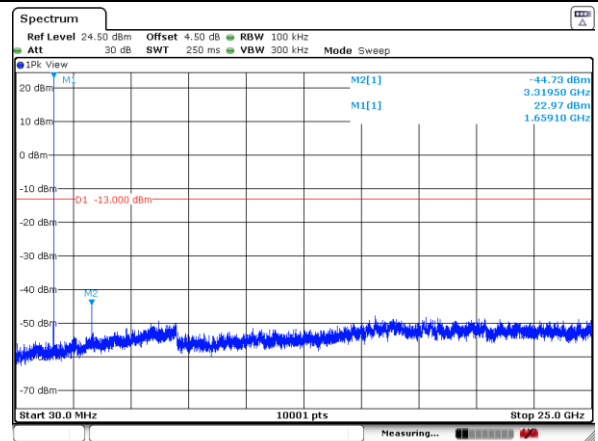
Date: 11,SEP,2023 11:04:16

Highest Channel / 1SC1/ BPSK



Date: 18,SEP,2023 14:58:36

Highest Channel / 1SC1/ QPSK



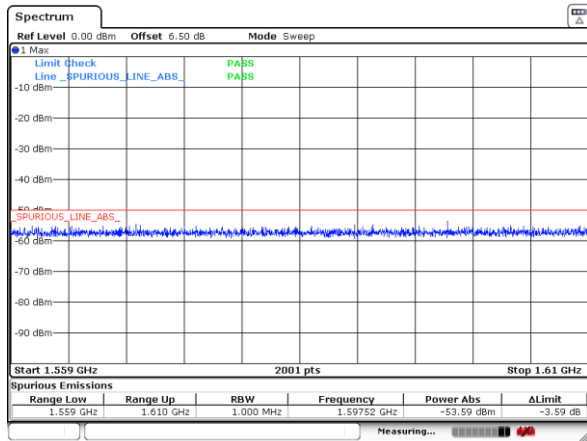
Date: 11,SEP,2023 10:59:42

**Emission limits for protection of aeronautical service**

Band 255 SCS3.75KHz

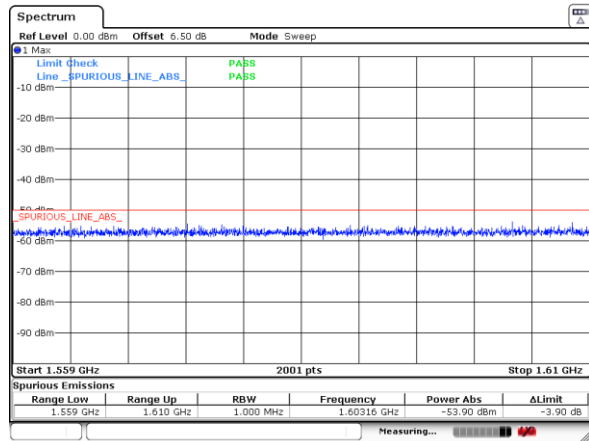
BPSK

Lowest Channel / 1SC1/ Carrier off



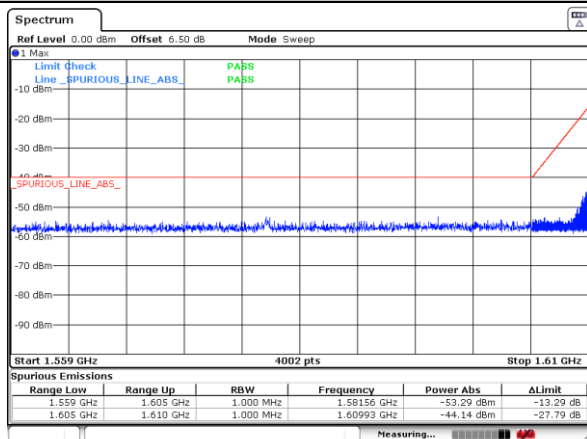
Date: 11.SEP.2023 14:11:59

Middle Channel / 1SC1/ Carrier off



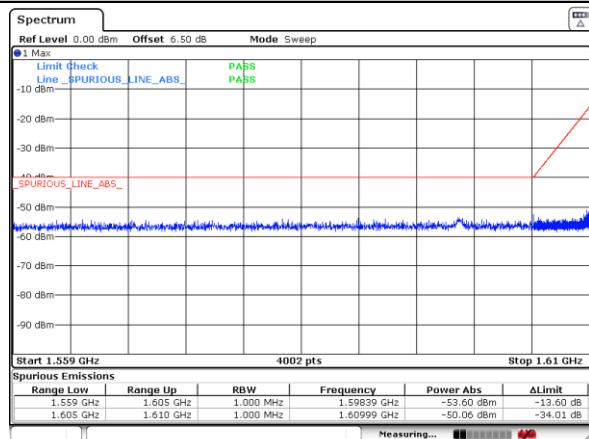
Date: 11.SEP.2023 14:12:19

Lowest Channel / 1SC1/ Carrier on



Date: 11.SEP.2023 13:34:51

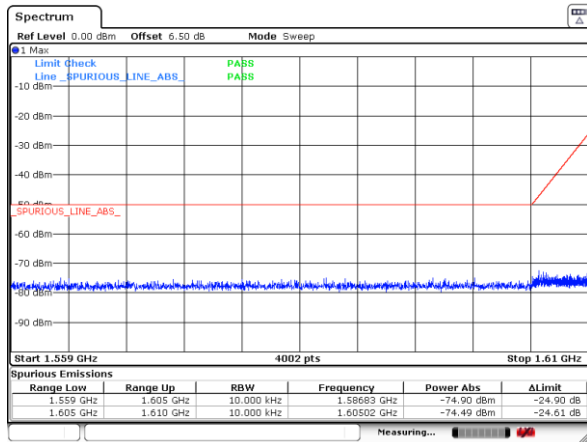
Middle Channel / 1SC1 / Carrier on



Date: 11.SEP.2023 13:36:55

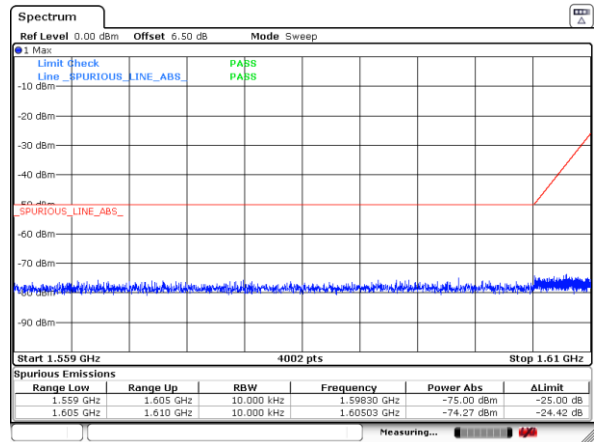


Lowest Channel / 1SC1/ Discrete



Date: 11.SEP.2023 13:57:07

Middle Channel / 1SC1 / Discrete



Date: 12.SEP.2023 15:54:36

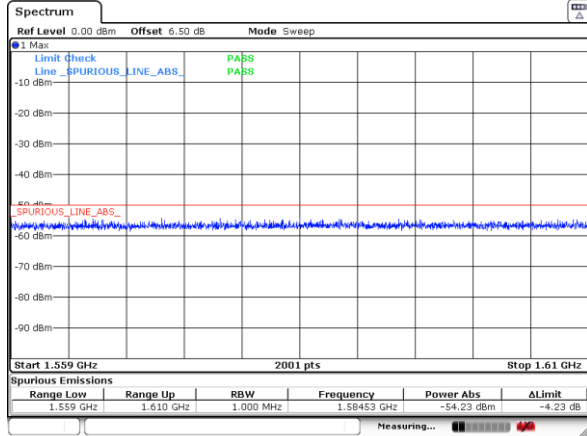


Band 255 SCS3.75KHz

BPSK

Highest Channel / 1SC1/ Carrier off

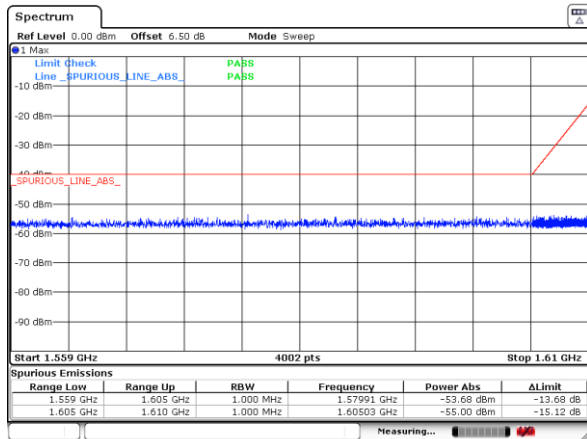
N/A



Date: 11,SEP,2023 14:09:08

Highest Channel / 1SC1/ Carrier on

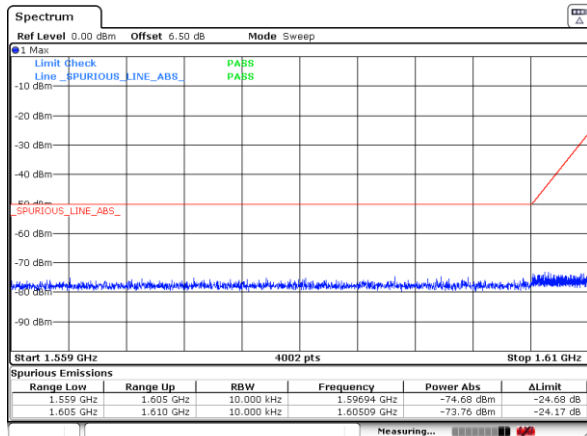
N/A



Date: 11,SEP,2023 13:35:33

Highest Channel / 1SC1/ Discrete

N/A



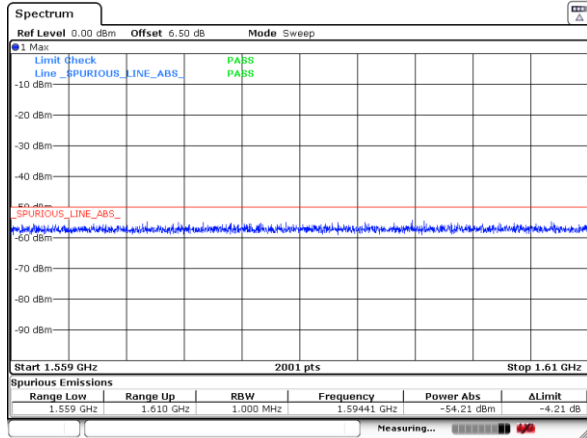
Date: 11,SEP,2023 13:53:42



Band 255 SCS3.75KHz

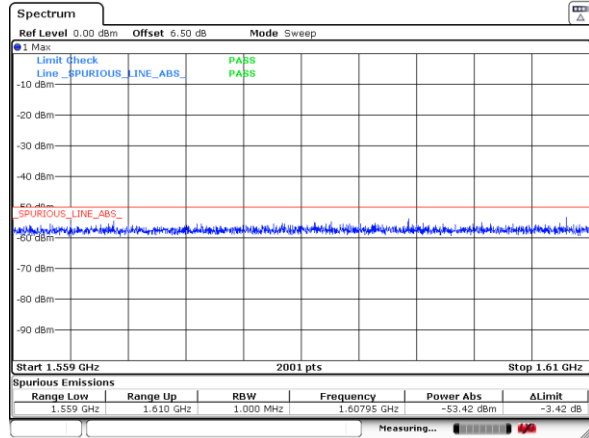
QPSK

Lowest Channel / 1SC1/ Carrier off



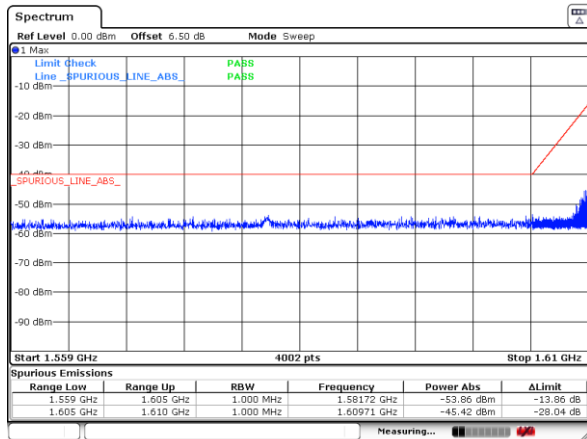
Date: 11.SEP.2023 14:11:37

Middle Channel / 1SC1/ Carrier off



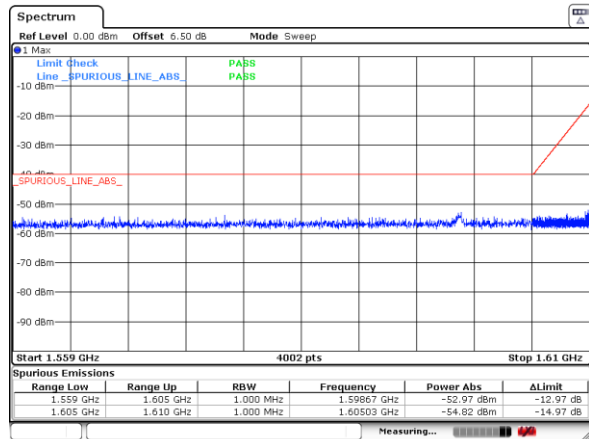
Date: 11.SEP.2023 14:12:41

Lowest Channel / 1SC1/ Carrier on



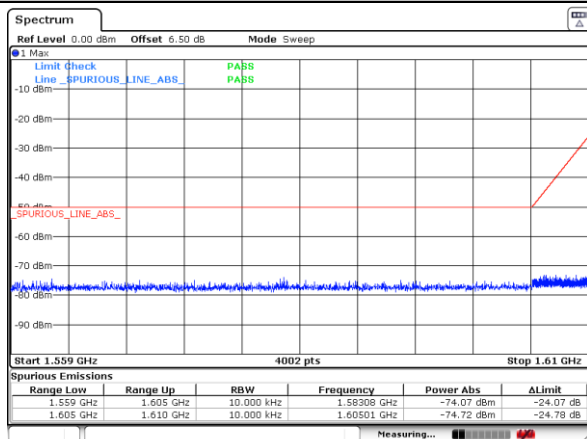
Date: 11.SEP.2023 13:34:14

Middle Channel / 1SC1 / Carrier on



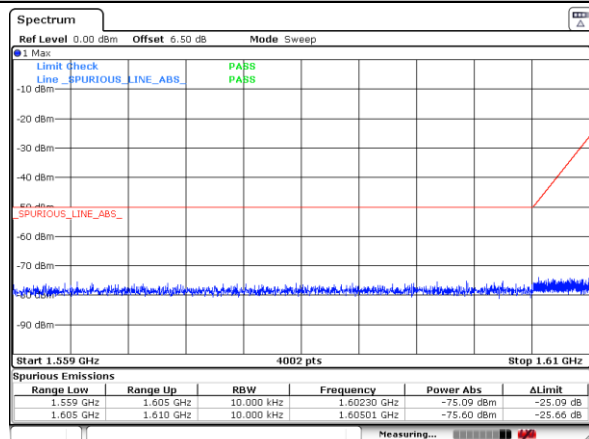
Date: 11.SEP.2023 13:36:25

Lowest Channel / 1SC1/ Discrete



Date: 11.SEP.2023 13:59:10

Middle Channel / 1SC1 / Discrete



Date: 11.SEP.2023 14:01:34

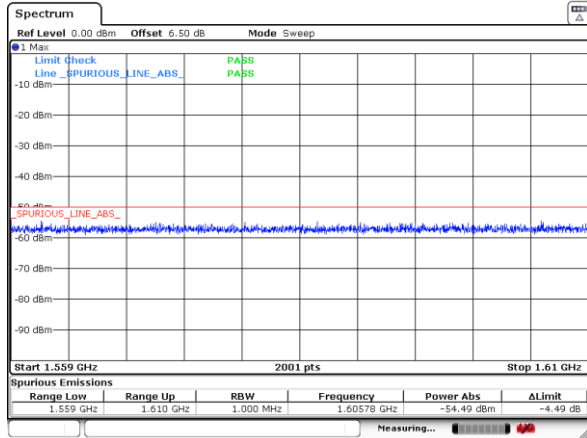


Band 255 SCS3.75KHz

QPSK

Highest Channel / 1SC1/ Carrier off

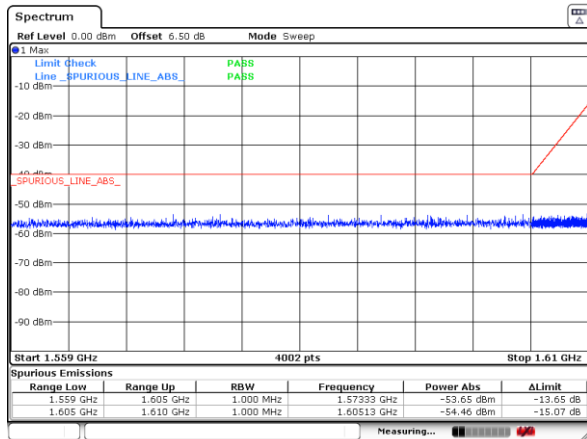
N/A



Date: 11,SEP,2023 14:10:14

Highest Channel / 1SC1/ Carrier on

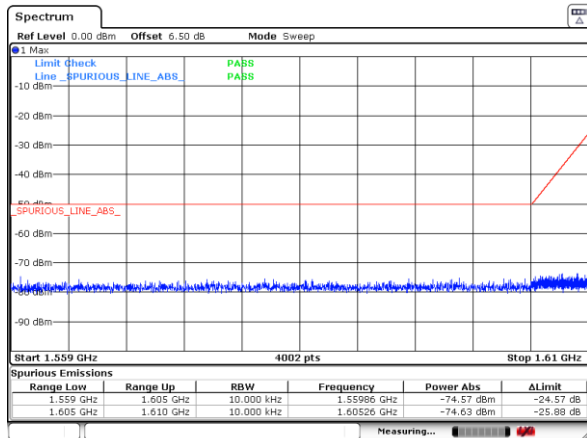
N/A



Date: 11,SEP,2023 13:35:55

Highest Channel / 1SC1/ Discrete

N/A



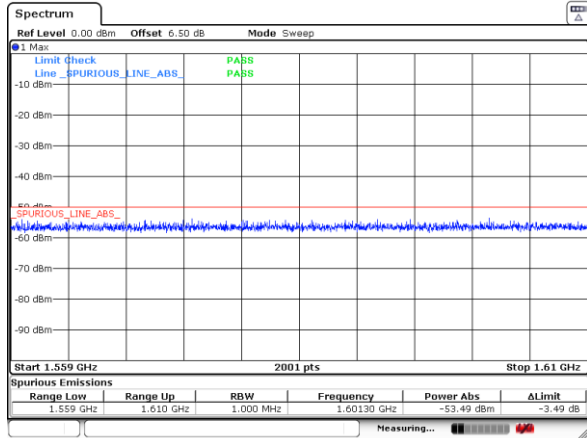
Date: 11,SEP,2023 13:52:32



Band 255 SCS15KHz

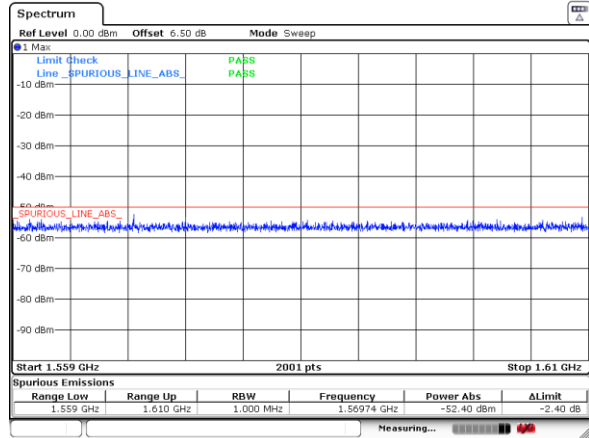
BPSK

Lowest Channel / 1SC1/ Carrier off



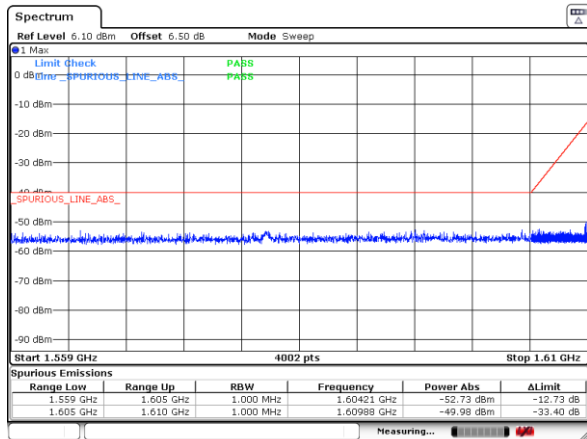
Date: 18,SEP,2023 14:43:27

Middle Channel / 1SC1/ Carrier off



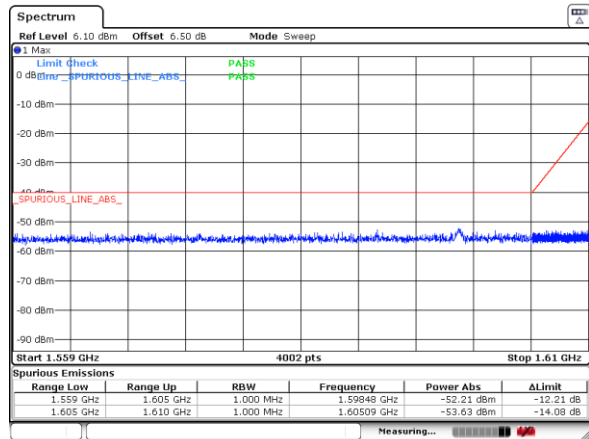
Date: 18,SEP,2023 14:44:03

Lowest Channel / 1SC1/ Carrier on



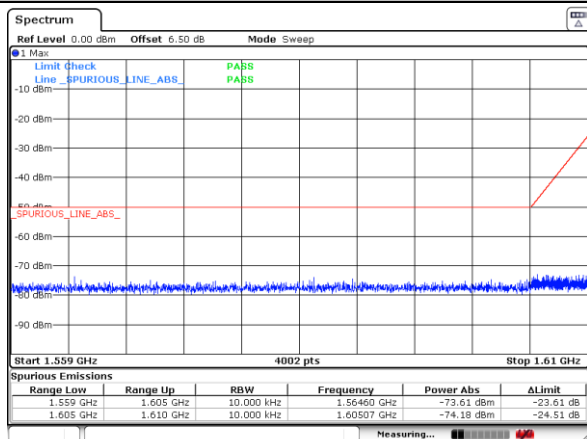
Date: 18,SEP,2023 14:35:19

Middle Channel / 1SC1 / Carrier on



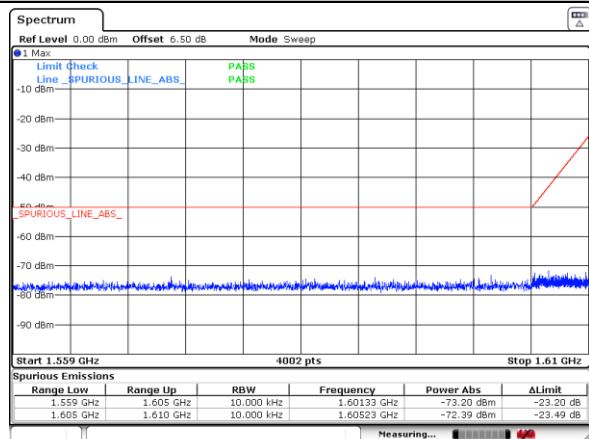
Date: 18,SEP,2023 14:36:12

Lowest Channel / 1SC1/ Discrete



Date: 18,SEP,2023 14:40:32

Middle Channel / 1SC1 / Discrete



Date: 18,SEP,2023 14:39:32

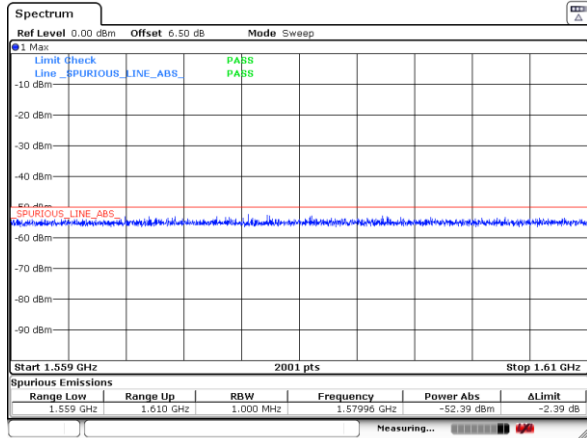


Band 255 SCS15KHz

BPSK

Highest Channel / 1SC1/ Carrier off

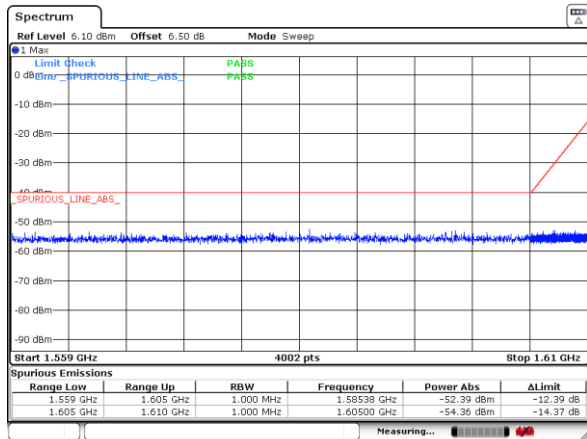
N/A



Date: 18,SEP,2023 14:42:42

Highest Channel / 1SC1/ Carrier on

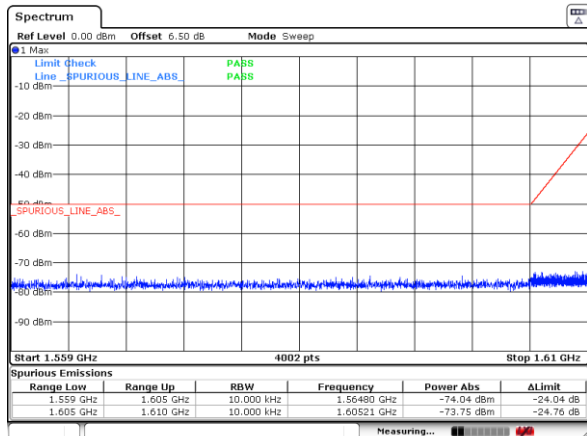
N/A



Date: 18,SEP,2023 14:33:19

Highest Channel / 1SC1/ Discrete

N/A



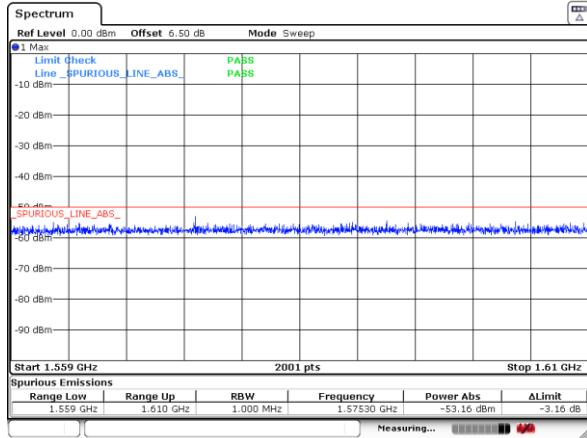
Date: 18,SEP,2023 14:41:13



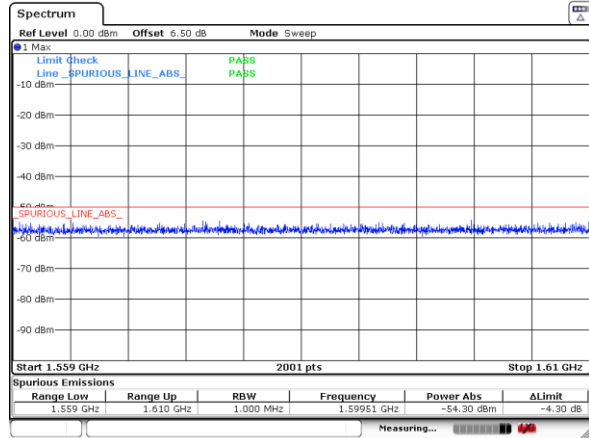
Band 255 SCS15KHz

QPSK

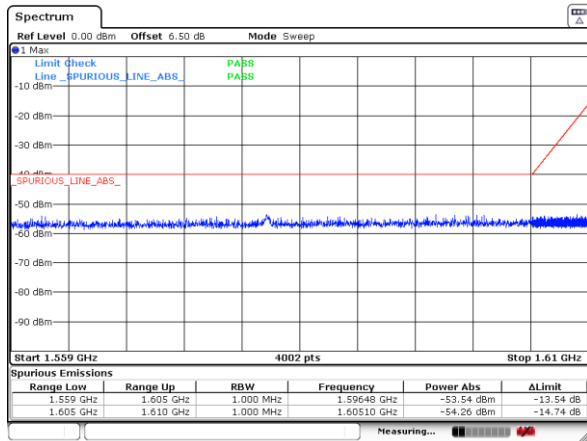
Lowest Channel / 1SC1/ Carrier off



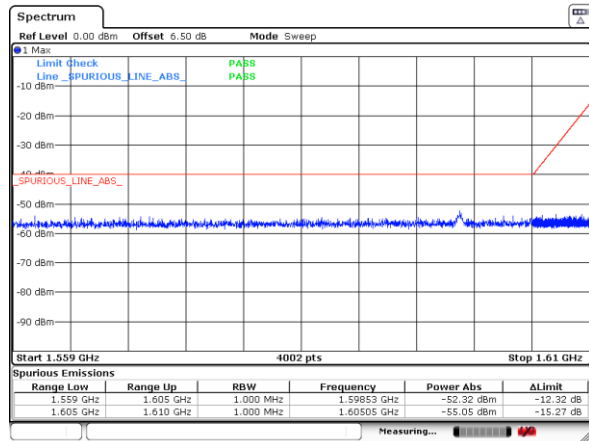
Middle Channel / 1SC1/ Carrier off



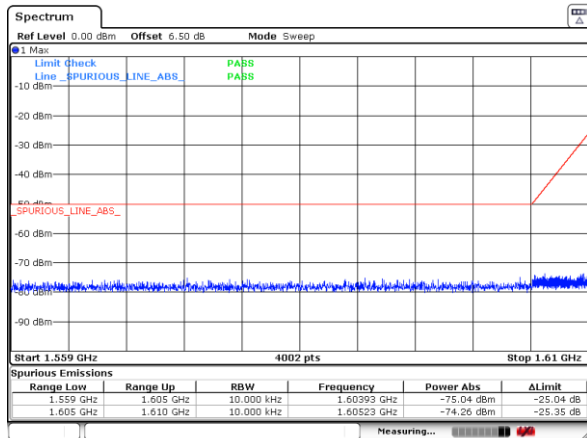
Lowest Channel / 1SC1/ Carrier on



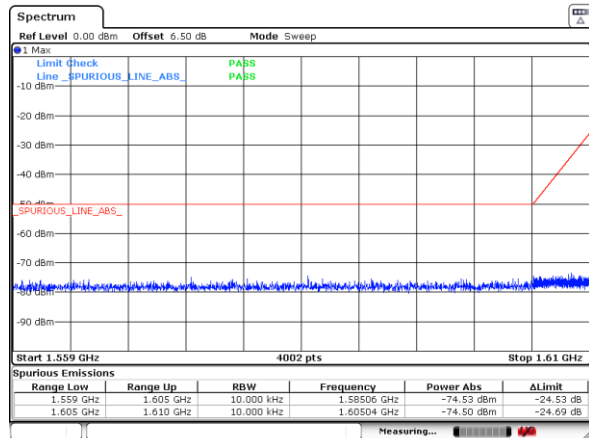
Middle Channel / 1SC1 / Carrier on



Lowest Channel / 1SC1/ Discrete



Middle Channel / 1SC1 / Discrete



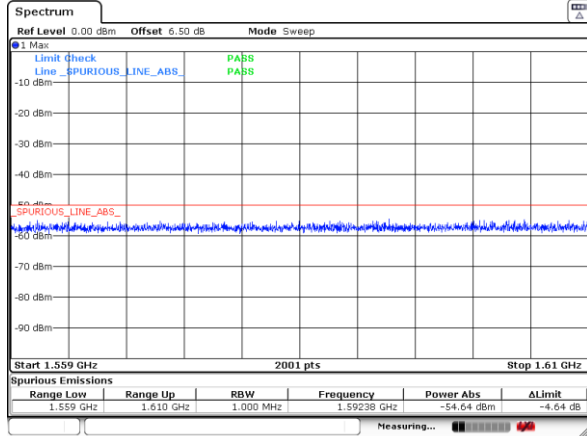


Band 255 SCS15KHz

QPSK

Highest Channel / 1SC1/ Carrier off

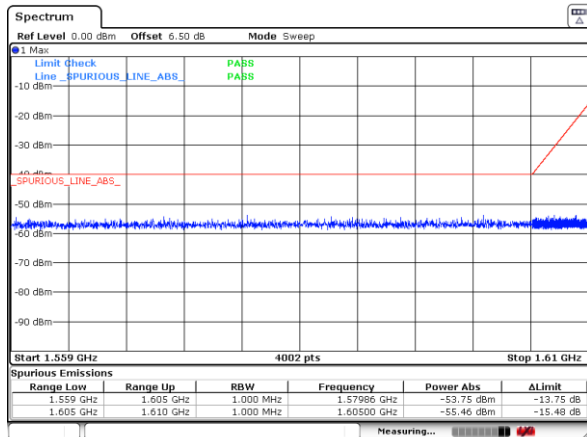
N/A



Date: 11,SEP,2023 14:10:43

Highest Channel / 1SC1/ Carrier on

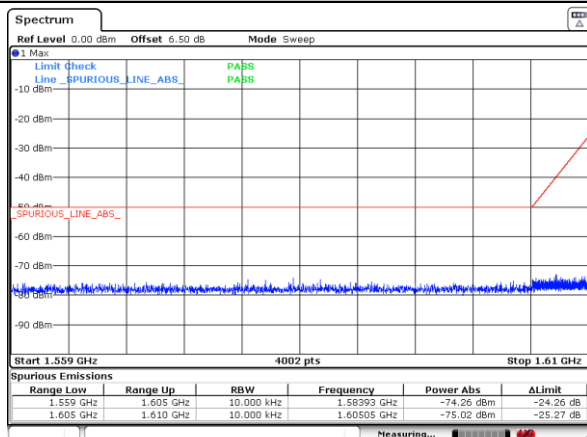
N/A



Date: 11,SEP,2023 13:33:36

Highest Channel / 1SC1/ Discrete

N/A



Date: 11,SEP,2023 13:49:15

**Frequency Stability**

Test Conditions		LTE Band 255 (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.



Appendix C. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Jake zhou	Temperature :	23~25°C
		Relative Humidity :	41~42%

Pre-scanned harmonic for SCS3.75kHz and SCS15kHz testing, we choose the worst mode to test.

Band 23 / SCS 15kHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4005	-44.52	-13	-31.52	-51.82	3.56	13.01	H
	6000	-50.52	-13	-37.52	-57.89	3.92	13.44	H
	7995	-45.55	-13	-32.55	-52.44	4.39	13.43	H
	4005	-57.16	-13	-44.16	-64.46	3.56	13.01	V
	6000	-52.77	-13	-39.77	-60.14	3.92	13.44	V
	7995	-42.03	-13	-29.03	-48.92	4.39	13.43	V
Middle	4020	-48.07	-13	-35.07	-55.37	3.56	13.01	H
	6030	-49.73	-13	-36.73	-57.10	3.92	13.44	H
	8040	-47.27	-13	-34.27	-54.16	4.39	13.43	H
	4020	-59.08	-13	-46.08	-66.38	3.56	13.01	V
	6030	-50.13	-13	-37.13	-57.50	3.92	13.44	V
	8040	-44.25	-13	-31.25	-51.14	4.39	13.43	V
Highest	4035	-49.68	-13	-36.68	-56.98	3.56	13.01	H
	6060	-43.77	-13	-30.77	-51.14	3.92	13.44	H
	8085	-46.68	-13	-33.68	-53.57	4.39	13.43	H
	10095	-48.61	-13	-35.61	-54.26	5.20	13.00	H
	4035	-61.02	-13	-48.02	-68.32	3.56	13.01	V
	6060	-47.02	-13	-34.02	-54.39	3.92	13.44	V
	8085	-45.73	-13	-32.73	-52.62	4.39	13.43	V
	10095	-47.70	-13	-34.70	-55.46	3.09	13.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Band 255 / SCS 3.75kHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3255	-45.50	-13	-32.50	-52.80	3.56	13.01	H
	4875	-60.69	-13	-47.69	-68.06	3.92	13.44	H
	6495	-59.69	-13	-46.69	-66.58	4.39	13.43	H
	8130	-52.15	-13	-39.15	-57.80	5.20	13.00	H
	3255	-59.75	-13	-46.75	-67.05	3.56	13.01	V
	4875	-61.13	-13	-48.13	-68.50	3.92	13.44	V
	6495	-59.48	-13	-46.48	-66.37	4.39	13.43	V
	8130	-48.88	-13	-35.88	-56.64	3.09	13.00	V
Middle	3285	-45.49	-13	-32.49	-52.79	3.56	13.01	H
	4920	-61.65	-13	-48.65	-69.02	3.92	13.44	H
	6570	-55.96	-13	-42.96	-62.85	4.39	13.43	H
	8220	-44.53	-13	-31.53	-50.18	5.20	13.00	H
	3285	-57.84	-13	-44.84	-65.14	3.56	13.01	V
	4920	-61.88	-13	-48.88	-69.25	3.92	13.44	V
	6570	-55.21	-13	-42.21	-62.10	4.39	13.43	V
	8220	-41.41	-13	-28.41	-49.17	3.09	13.00	V
Highest	3315	-46.20	-13	-33.20	-53.50	3.56	13.01	H
	4980	-61.06	-13	-48.06	-68.43	3.92	13.44	H
	6630	-58.82	-13	-45.82	-65.71	4.39	13.43	H
	8295	-45.46	-13	-32.46	-51.11	5.20	13.00	H
	3315	-59.76	-13	-46.76	-67.06	3.56	13.01	V
	4980	-61.24	-13	-48.24	-68.61	3.92	13.44	V
	6630	-59.04	-13	-46.04	-65.93	4.39	13.43	V
	8295	-40.45	-13	-27.45	-48.21	3.09	13.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.