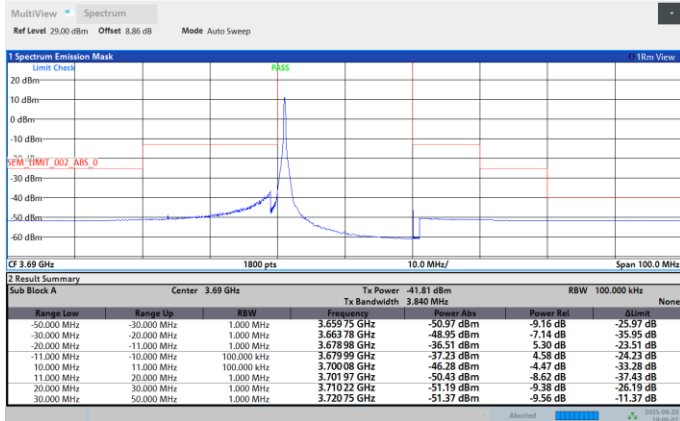
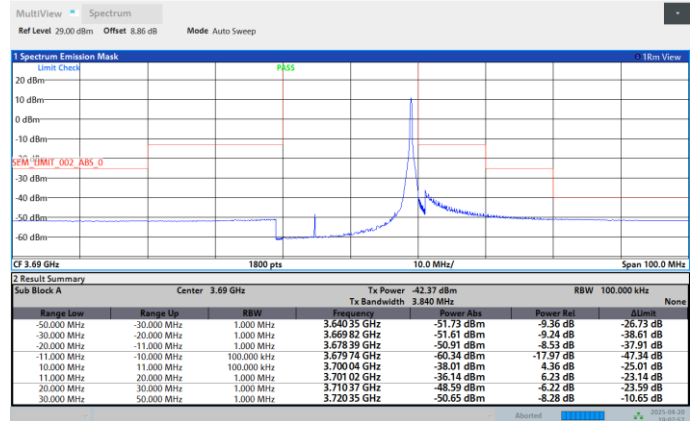
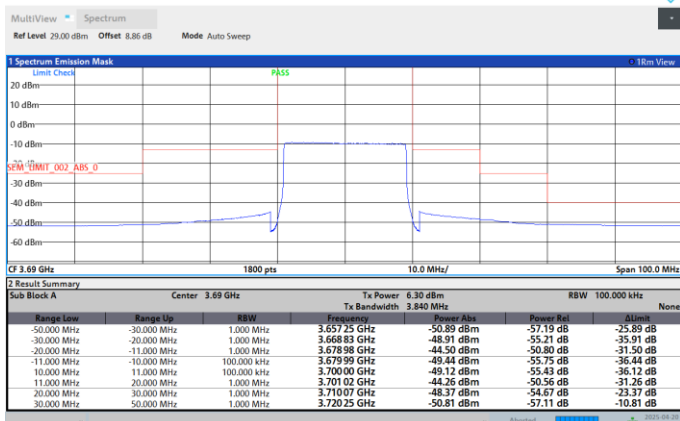




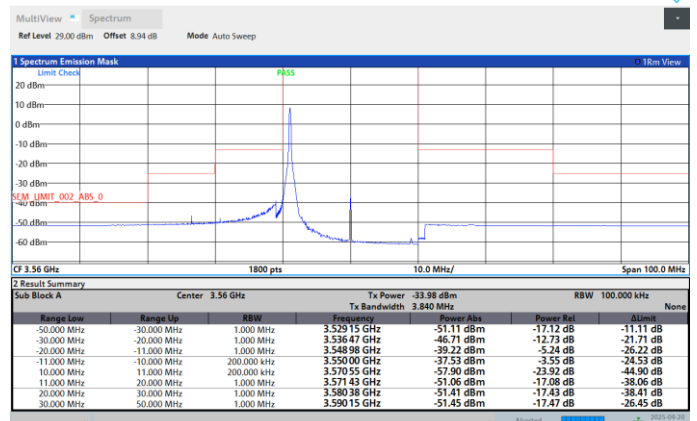
Band48-20MHz-64QAM-3690-100RB#0-PASS



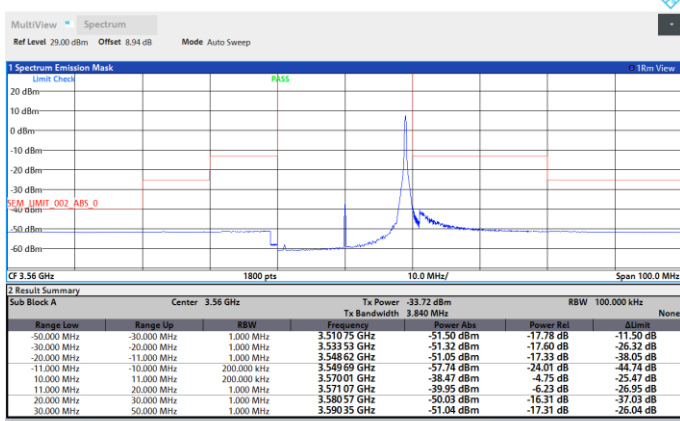
Band48-20MHz-256QAM-3560-1RB#0-PASS



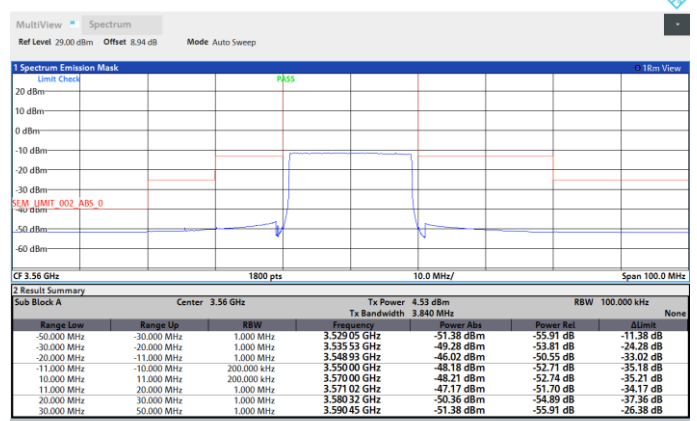
Band48-20MHz-256QAM-3560-1RB#99-PASS



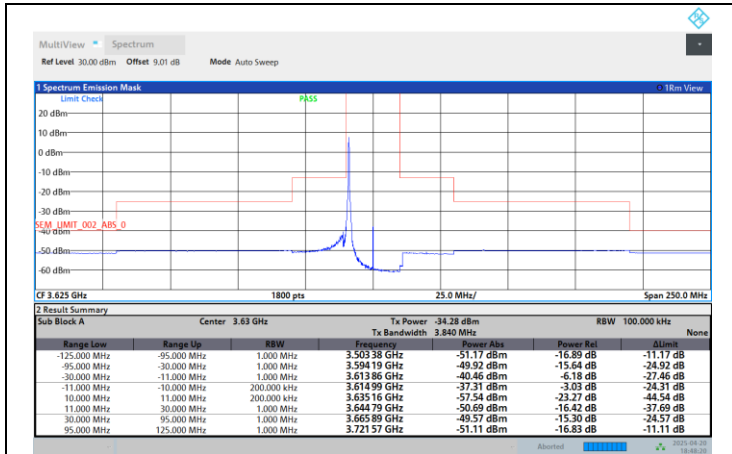
Band48-20MHz-256QAM-3560-100RB#0-PASS



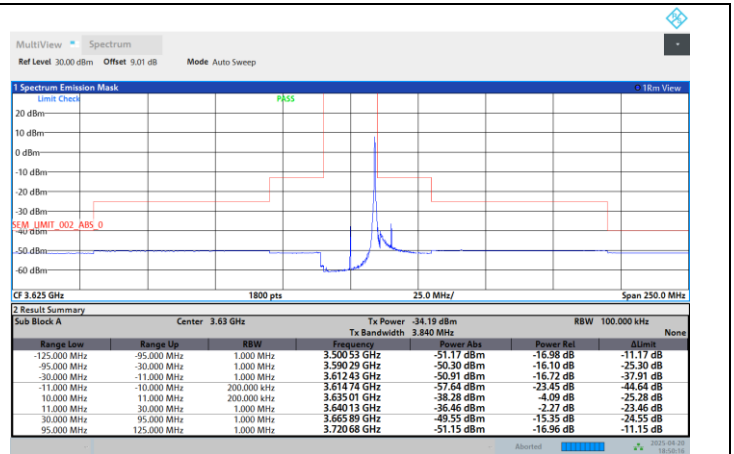
Band48-20MHz-256QAM-3625-1RB#0-PASS



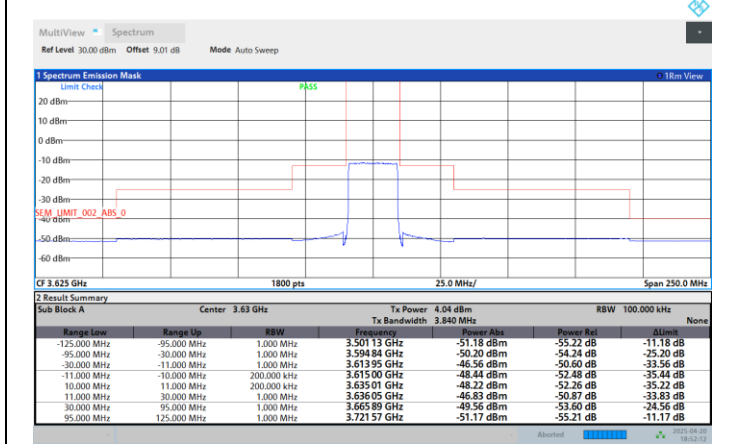
Band48-20MHz-256QAM-3625-1RB#99-PASS



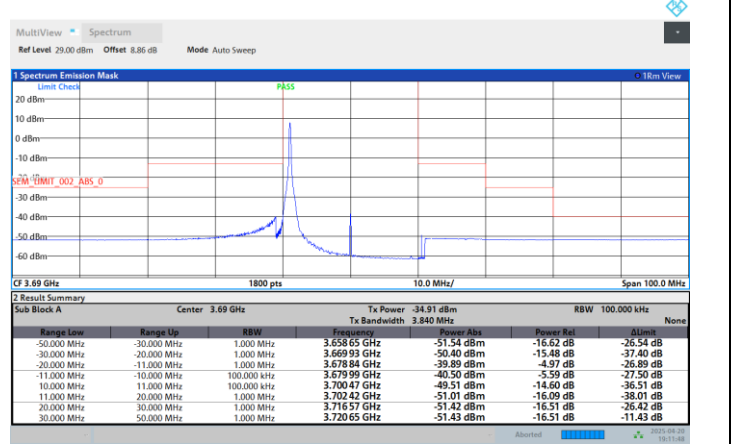
Band48-20MHz-256QAM-3625-100RB#0-PASS



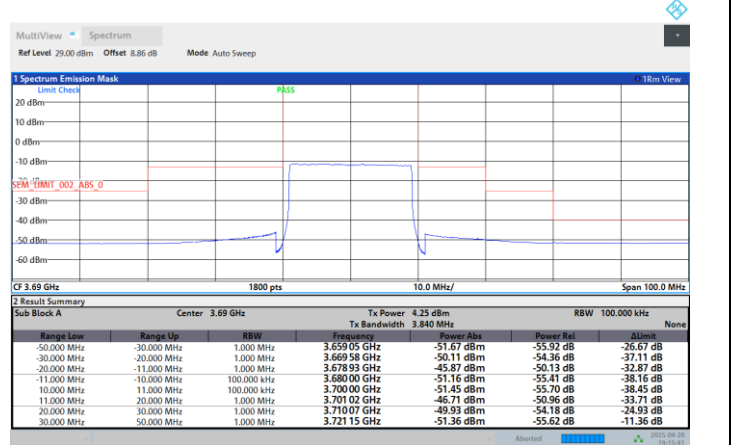
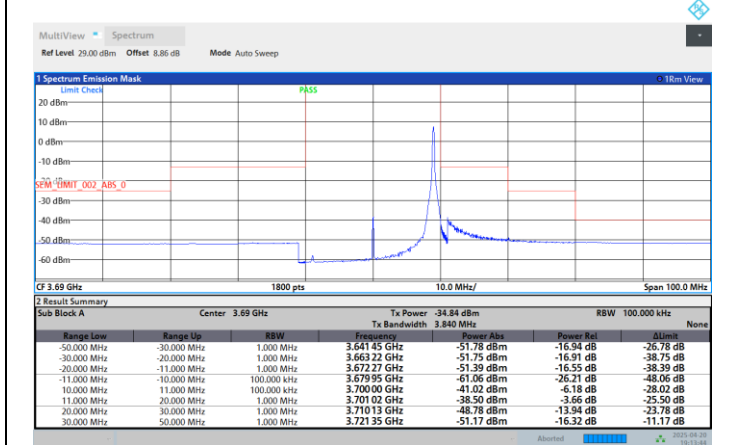
Band48-20MHz-256QAM-3690-1RB#0-PASS



Band48-20MHz-256QAM-3690-1RB#99-PASS



Band48-20MHz-256QAM-3690-100RB#0-PASS



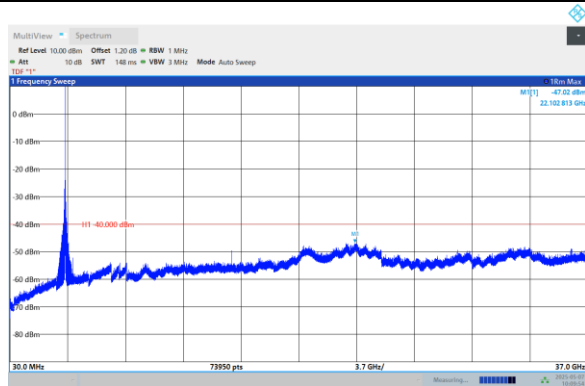
CONDUCTED SPURIOUS EMISSION TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band48	5MHz	QPSK	3552.5	1RB#0	See Graph	PASS
Band48	5MHz	QPSK	3625	1RB#0	See Graph	PASS
Band48	5MHz	QPSK	3697.5	1RB#0	See Graph	PASS
Band48	10MHz	QPSK	3555	1RB#0	See Graph	PASS
Band48	10MHz	QPSK	3625	1RB#0	See Graph	PASS
Band48	10MHz	QPSK	3695	1RB#0	See Graph	PASS
Band48	15MHz	QPSK	3557.5	1RB#0	See Graph	PASS
Band48	15MHz	QPSK	3625	1RB#0	See Graph	PASS
Band48	15MHz	QPSK	3692.5	1RB#0	See Graph	PASS
Band48	20MHz	QPSK	3560	1RB#0	See Graph	PASS
Band48	20MHz	QPSK	3625	1RB#0	See Graph	PASS
Band48	20MHz	QPSK	3690	1RB#0	See Graph	PASS

TEST GRAPHS

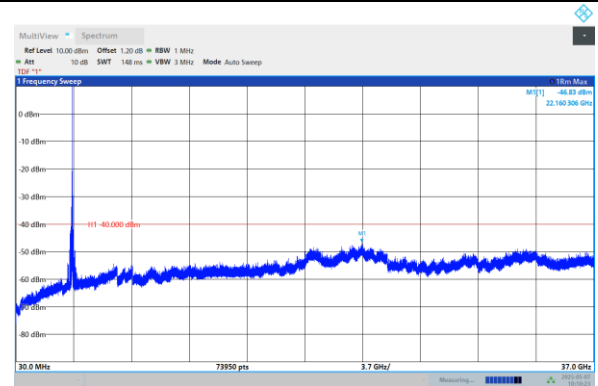
Band48-5MHz-QPSK-3552.5-1RB#0-Range:30~37000M

Hz



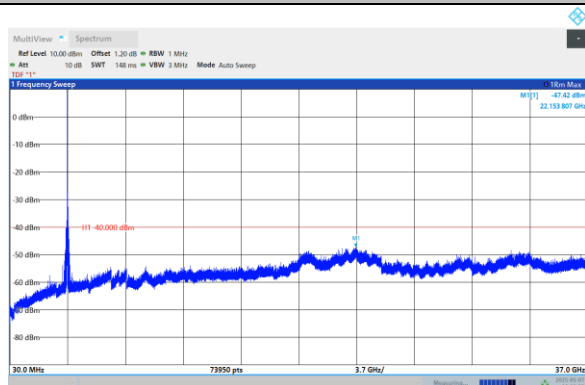
Band48-5MHz-QPSK-3625-1RB#0-Range:30~37000MH

Z



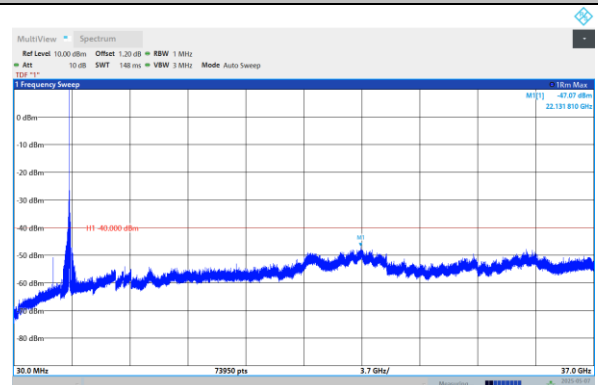
Band48-5MHz-QPSK-3697.5-1RB#0-Range:30~37000M

Hz



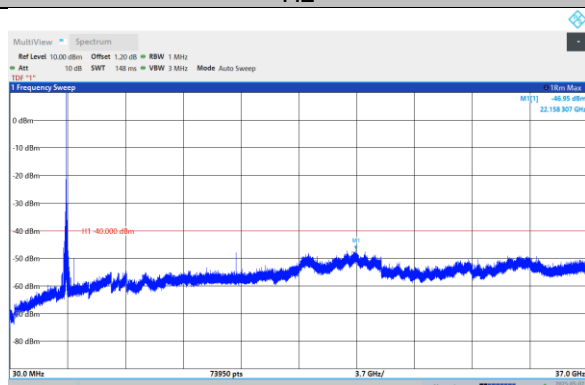
Band48-10MHz-QPSK-3555-1RB#0-Range:30~37000M

Hz



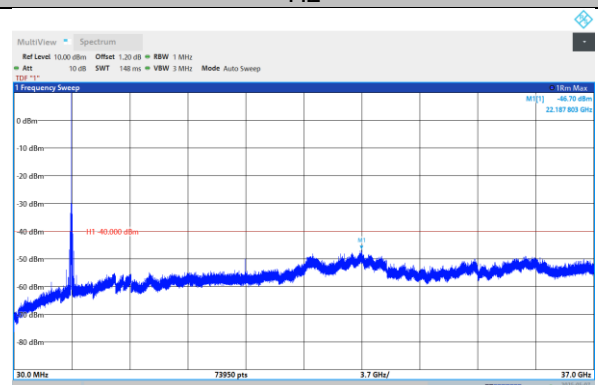
Band48-10MHz-QPSK-3625-1RB#0-Range:30~37000M

Hz



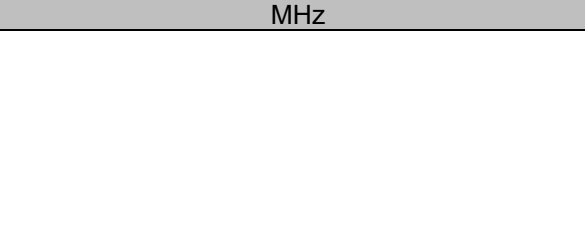
Band48-10MHz-QPSK-3695-1RB#0-Range:30~37000M

Hz



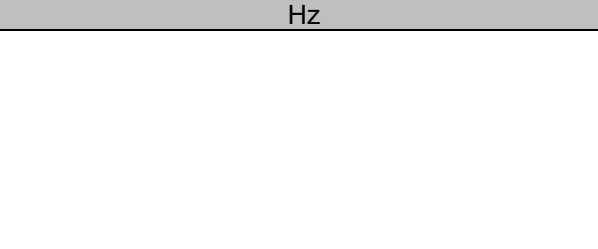
Band48-15MHz-QPSK-3557.5-1RB#0-Range:30~37000

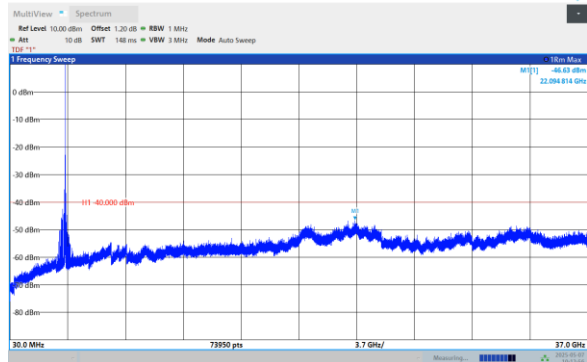
MHz



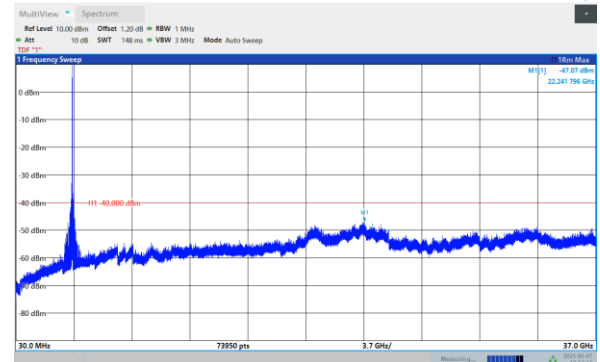
Band48-15MHz-QPSK-3625-1RB#0-Range:30~37000M

Hz

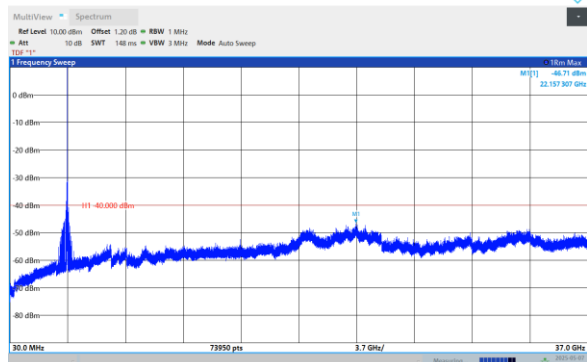




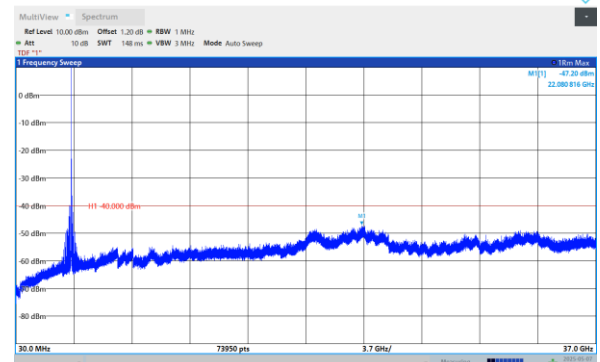
Band48-15MHz-QPSK-3692.5-1RB#0-Range:30~37000 MHz



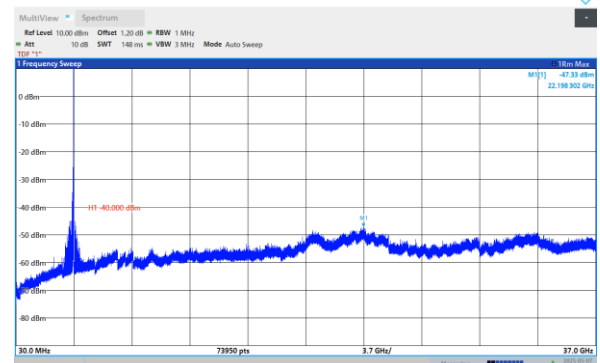
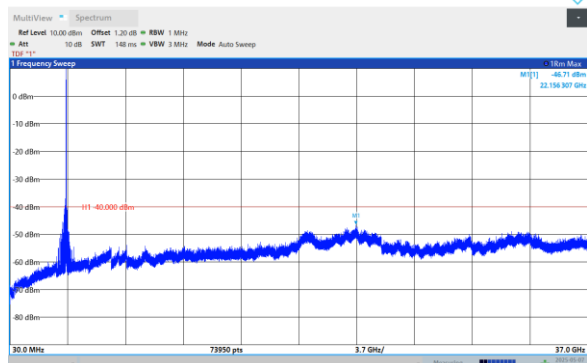
Band48-20MHz-QPSK-3560-1RB#0-Range:30~37000M Hz



Band48-20MHz-QPSK-3625-1RB#0-Range:30~37000M Hz



Band48-20MHz-QPSK-3690-1RB#0-Range:30~37000M Hz



FREQUENCY STABILITY TEST RESULT

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band48	20MHz	QPSK	3560	50RB#0	VL	NT	-8.88	-0.0025	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	VN	NT	6.11	0.0017	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	VH	NT	10.27	0.0029	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	VL	NT	-2.51	-0.0007	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	VN	NT	-33.52	-0.0092	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	VH	NT	-31.36	-0.0087	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	VL	NT	-11.85	-0.0032	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	VN	NT	-22.13	-0.0060	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	VH	NT	9.24	0.0025	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band48	20MHz	QPSK	3560	50RB#0	NV	-30	5.81	0.0016	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	-20	-31.24	-0.0088	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	-10	-11.65	-0.0033	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	0	-7.59	-0.0021	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	10	26.50	0.0074	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	20	-33.16	-0.0093	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	30	1.62	0.0005	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	40	-22.13	-0.0062	±2.5	PASS
Band48	20MHz	QPSK	3560	50RB#0	NV	50	-26.02	-0.0073	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	-30	23.59	0.0065	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	-20	-30.43	-0.0084	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	-10	26.01	0.0072	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	0	-22.70	-0.0063	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	10	-33.26	-0.0092	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	20	17.35	0.0048	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	30	2.94	0.0008	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	40	-0.92	-0.0003	±2.5	PASS
Band48	20MHz	QPSK	3625	50RB#0	NV	50	20.06	0.0055	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	-30	-27.48	-0.0074	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	-20	-0.62	-0.0002	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	-10	5.10	0.0014	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	0	-2.82	-0.0008	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	10	-29.09	-0.0079	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	20	27.66	0.0075	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	30	5.91	0.0016	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	40	-11.38	-0.0031	±2.5	PASS
Band48	20MHz	QPSK	3690	50RB#0	NV	50	25.45	0.0069	±2.5	PASS

RADIATED EMISSION MEASUREMENT

TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE Band 48

CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 55990	FREQUENCY RANGE	Below 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V					
TESTED BY	Jack Liu							
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	36.700	-70.23	-40.00	30.23	-0.17	H	359	2.00
1	57.850	-76.09	-40.00	36.09	-3.76	H	131.9	1.00
1	105.300	-84.99	-40.00	44.99	-10.75	H	1	2.00
1	231.450	-74.63	-40.00	34.63	1.37	H	227.5	1.00
1	431.850	-78.31	-40.00	38.31	2.10	H	355.1	2.00
2	655.929	-75.87	-40.00	35.87	1.50	H	243.1	1.00

MODE	TX channel 55990	FREQUENCY RANGE	Below 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V					
TESTED BY	Jack Liu							
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	33.200	-71.18	-40.00	31.18	-6.98	V	359.1	1.00
1	57.950	-76.27	-40.00	36.27	-4.18	V	5	1.00
1	98.900	-64.80	-40.00	24.80	5.05	V	359.1	1.00
1	200.000	-81.13	-40.00	41.13	-6.63	V	129.6	1.00
1	430.550	-78.97	-40.00	38.97	0.88	V	355.1	2.00
2	806.904	-74.74	-40.00	34.74	2.96	V	308.1	2.00

ABOVE 1GHz WORST-CASE DATA

Note: For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.

LTE BAND 48

CHANNEL BANDWIDTH: 5MHz / QPSK

CH55990

MODE	TX channel 55990	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V					
TESTED BY	Jack Liu							
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,245.500	-48.66	-40.00	8.66	24.60	H	359	2.00
6	10,868.250	-54.50	-40.00	14.50	11.59	H	202.4	1.00

MODE	TX channel 55990	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V					
TESTED BY	Jack Liu							
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,245.500	-50.76	-40.00	10.76	24.60	V	0.9	2.00
6	10,868.250	-60.62	-40.00	20.62	11.59	V	359.1	1.00

--END--