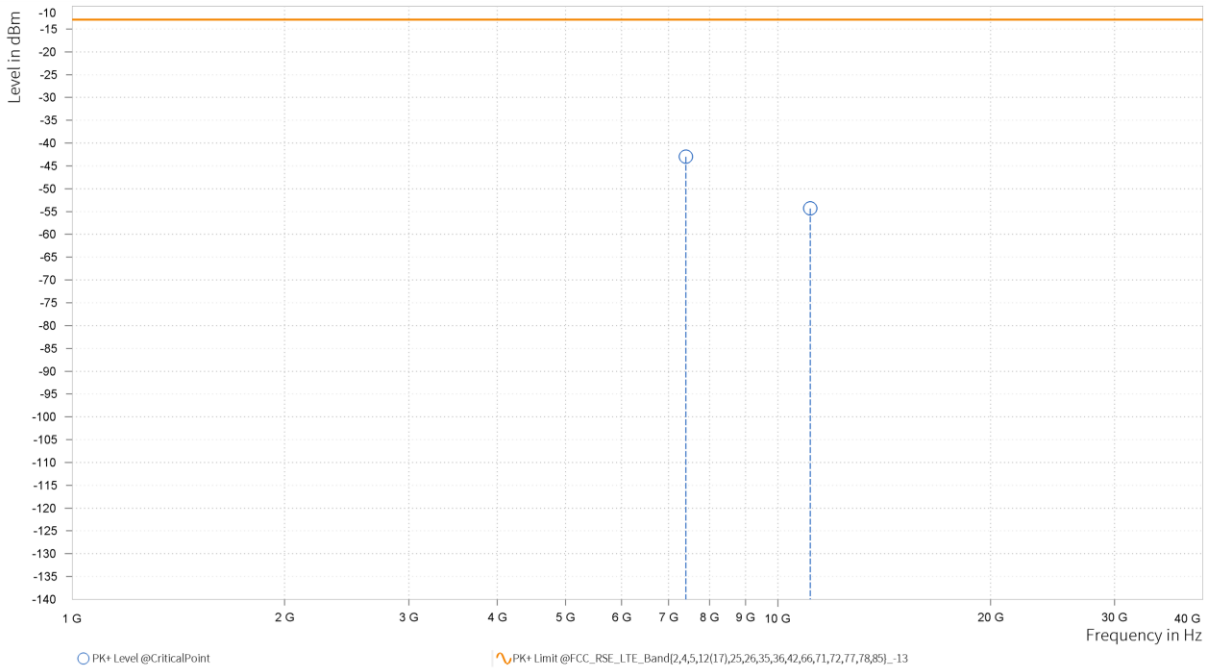
MODE	TX channel 648668	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

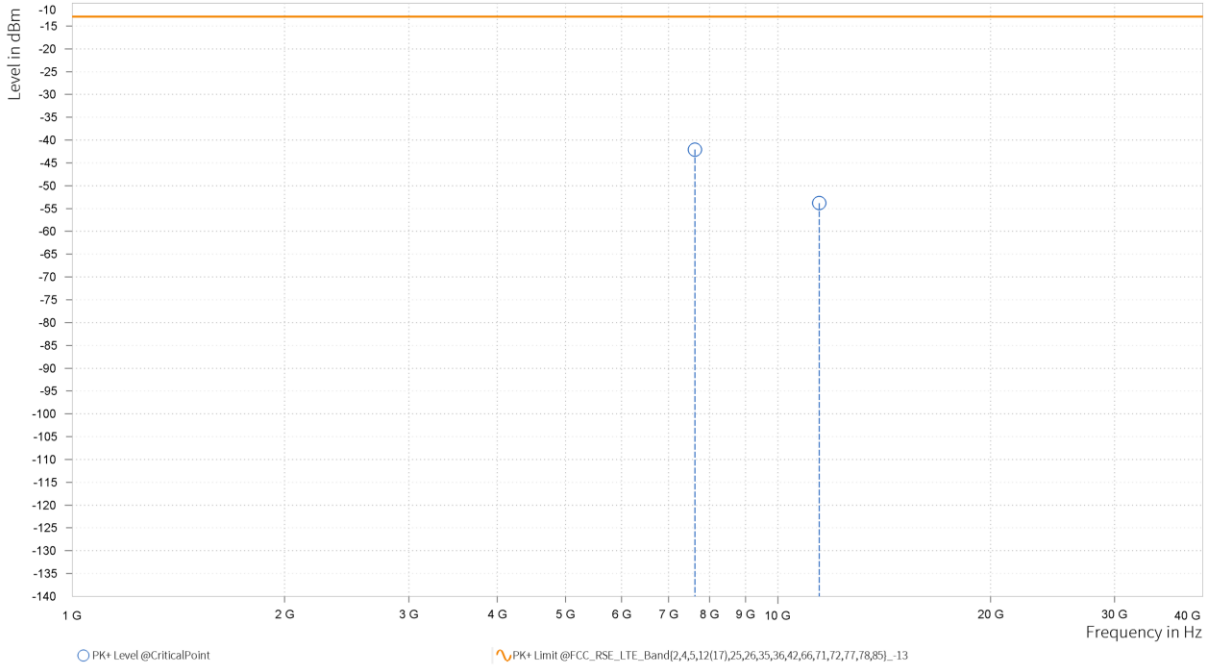
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,406.040	-42.98	-13.00	29.98	30.21	V	123.8	1.00
6	11,109.060	-54.31	-13.00	41.31	17.08	V	358.1	1.00



CH656000

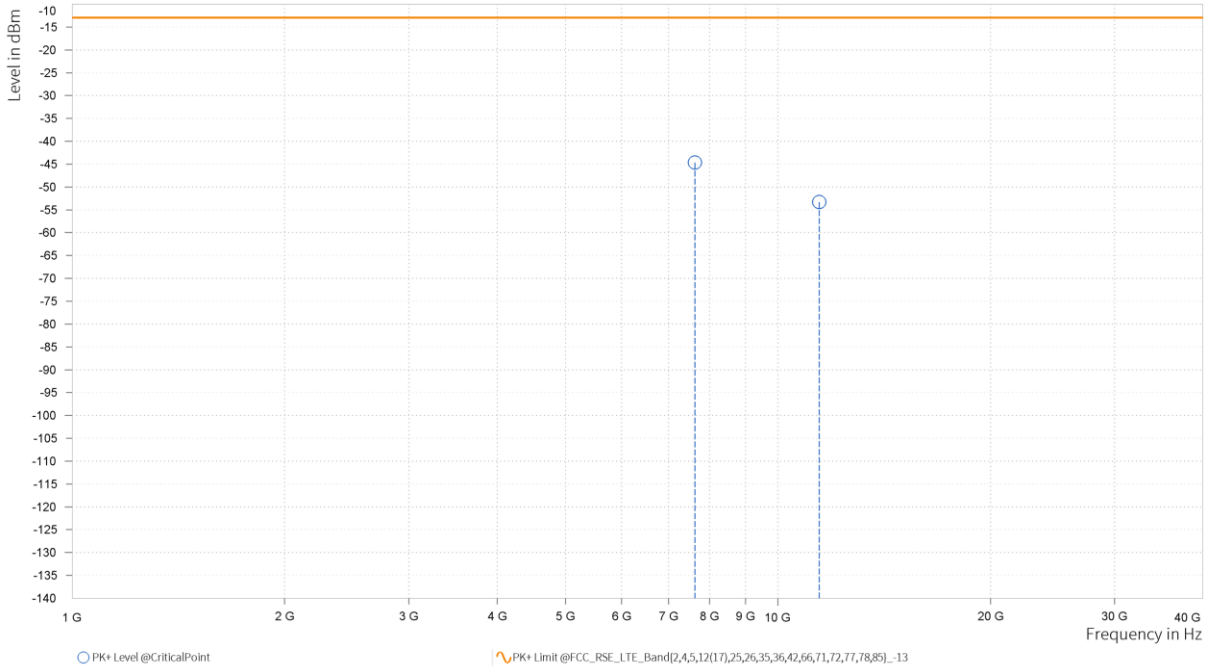
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,626.000	-42.08	-13.00	29.08	30.23	H	194.5	1.00
6	11,439.000	-53.80	-13.00	40.80	18.10	H	1	1.00



MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

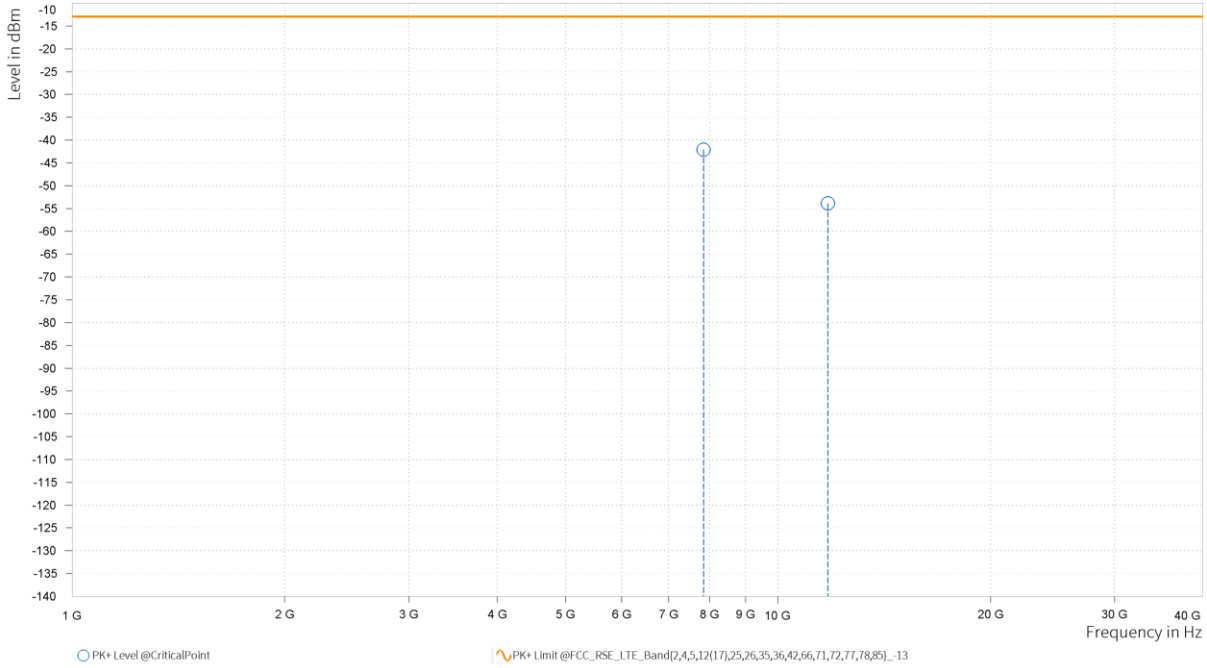
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,626.000	-44.67	-13.00	31.67	30.05	V	359	2.00
6	11,439.000	-53.29	-13.00	40.29	18.19	V	319	1.00



CH663332

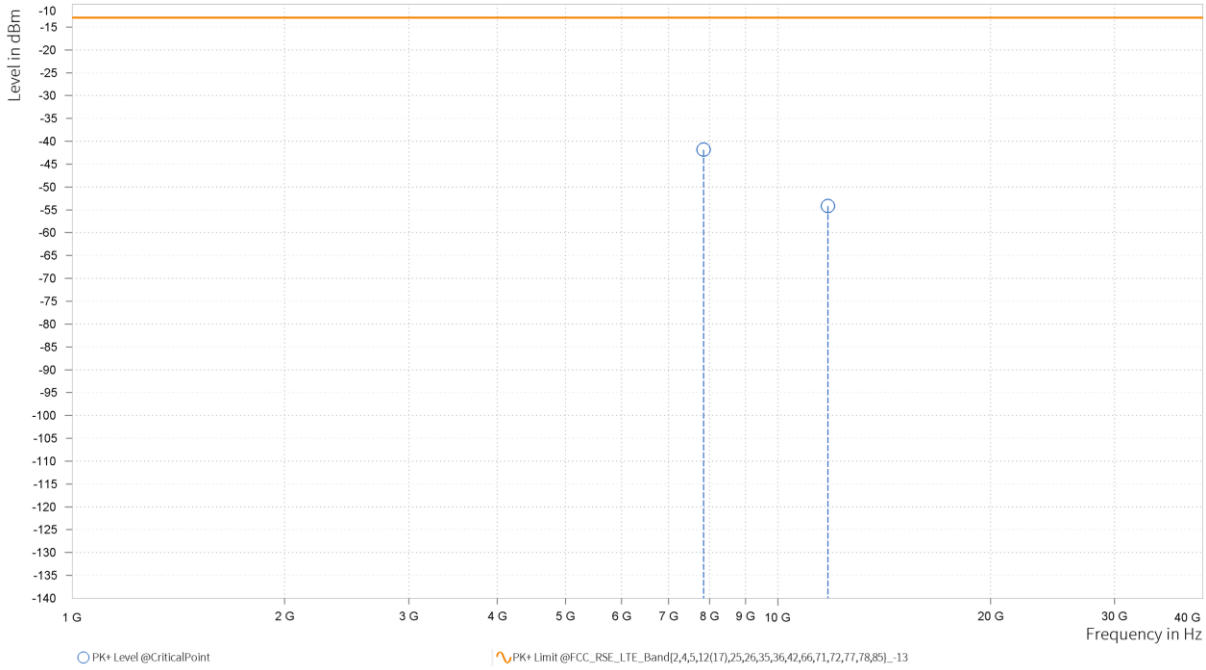
MODE	TX channel 663332	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,845.960	-42.08	-13.00	29.08	30.98	H	1	1.00
6	11,768.940	-53.87	-13.00	40.87	17.90	H	155.6	1.00



MODE	TX channel 663332	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

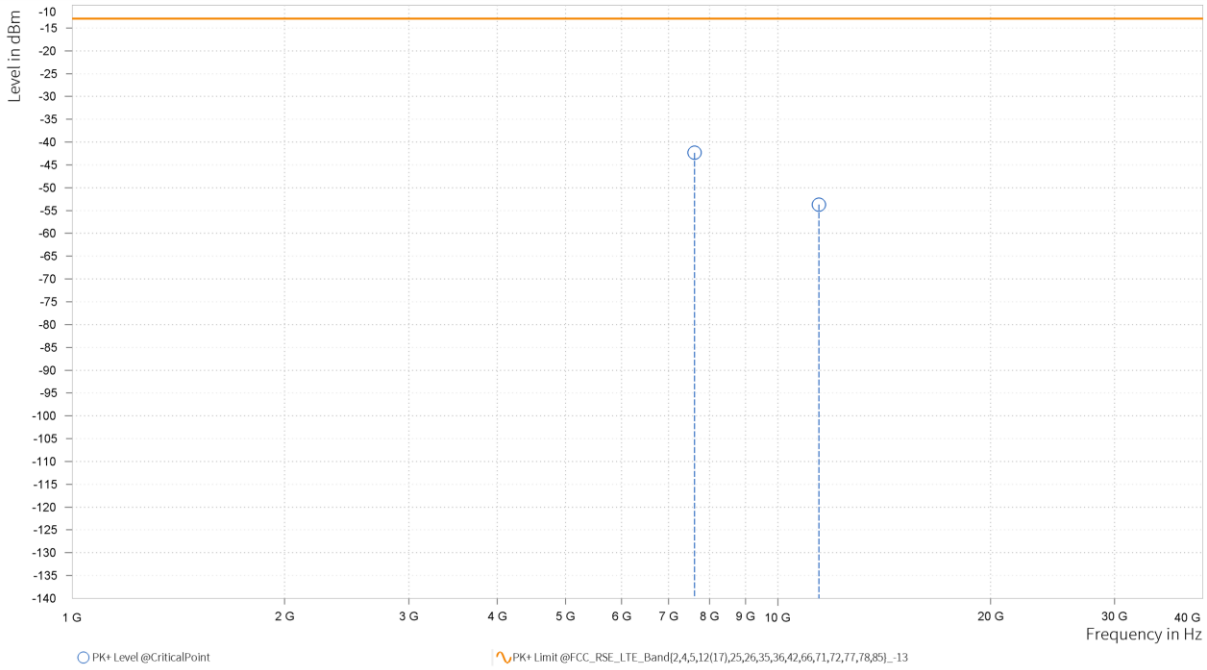
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,845.960	-41.81	-13.00	28.81	30.80	V	198.1	1.00
6	11,768.940	-54.18	-13.00	41.18	18.08	V	261.8	1.00



CHANNEL BANDWIDTH: 70MHz / QPSK

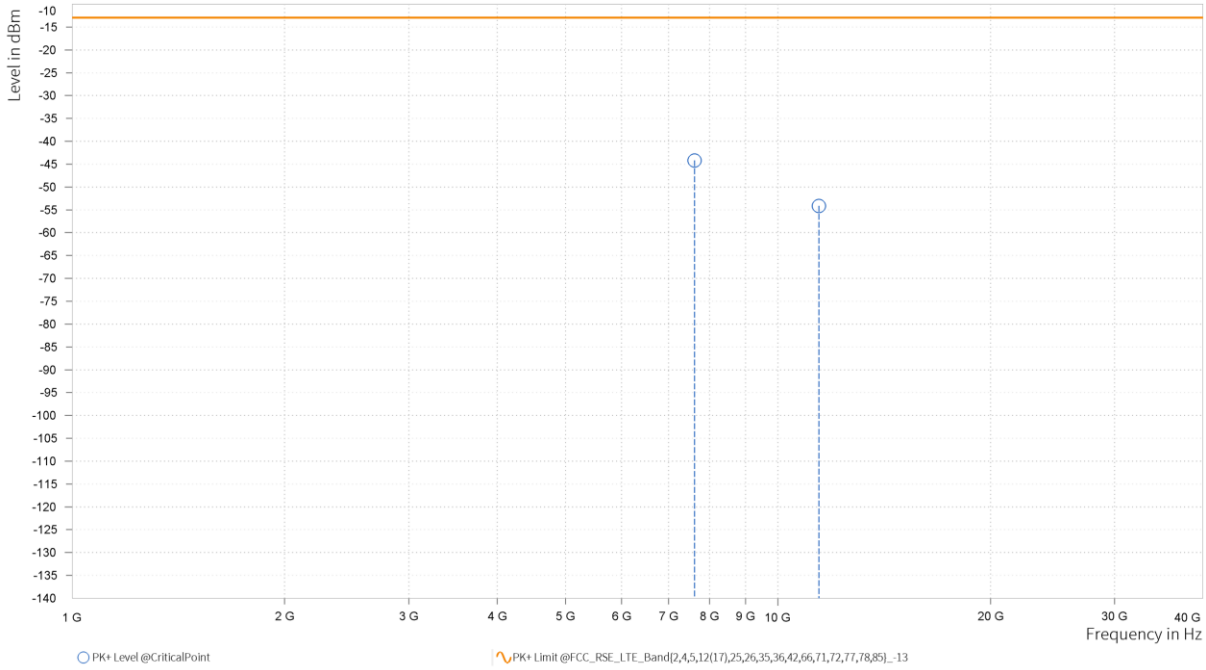
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,617.000	-42.35	-13.00	29.35	30.21	H	110.2	2.00
6	11,425.500	-53.70	-13.00	40.70	17.99	H	207.9	2.00



MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

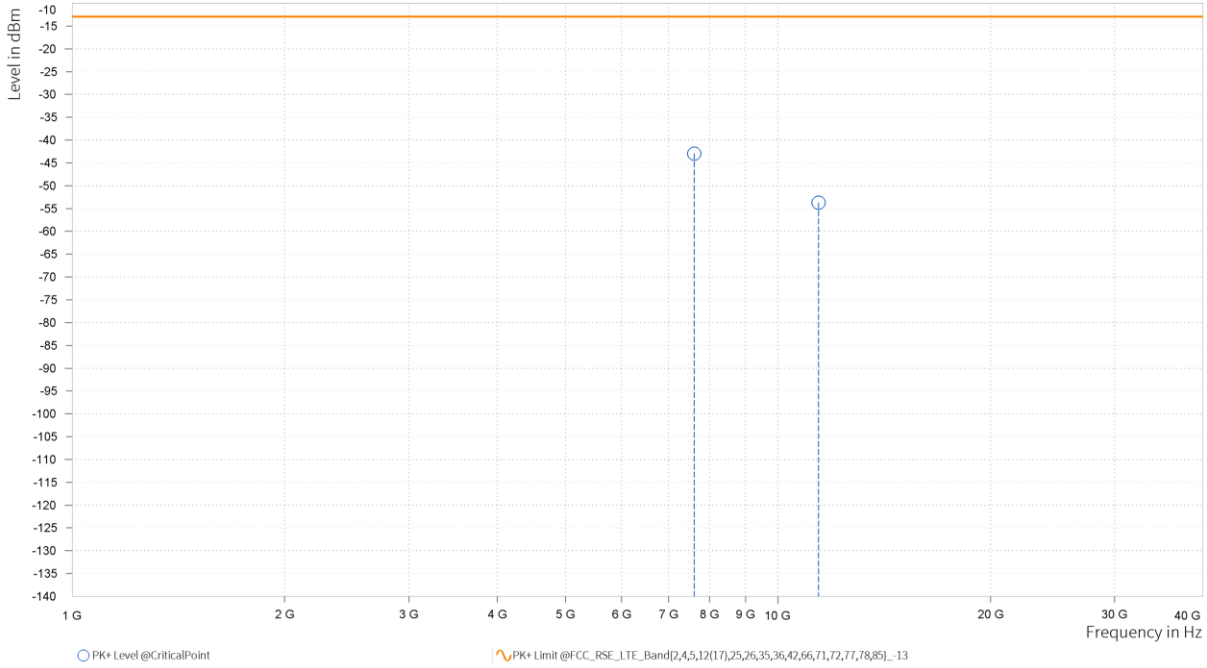
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,617.000	-44.17	-13.00	31.17	30.02	V	55.1	2.00
6	11,425.500	-54.14	-13.00	41.14	18.09	V	103.2	2.00



CHANNEL BANDWIDTH: 80MHz / QPSK

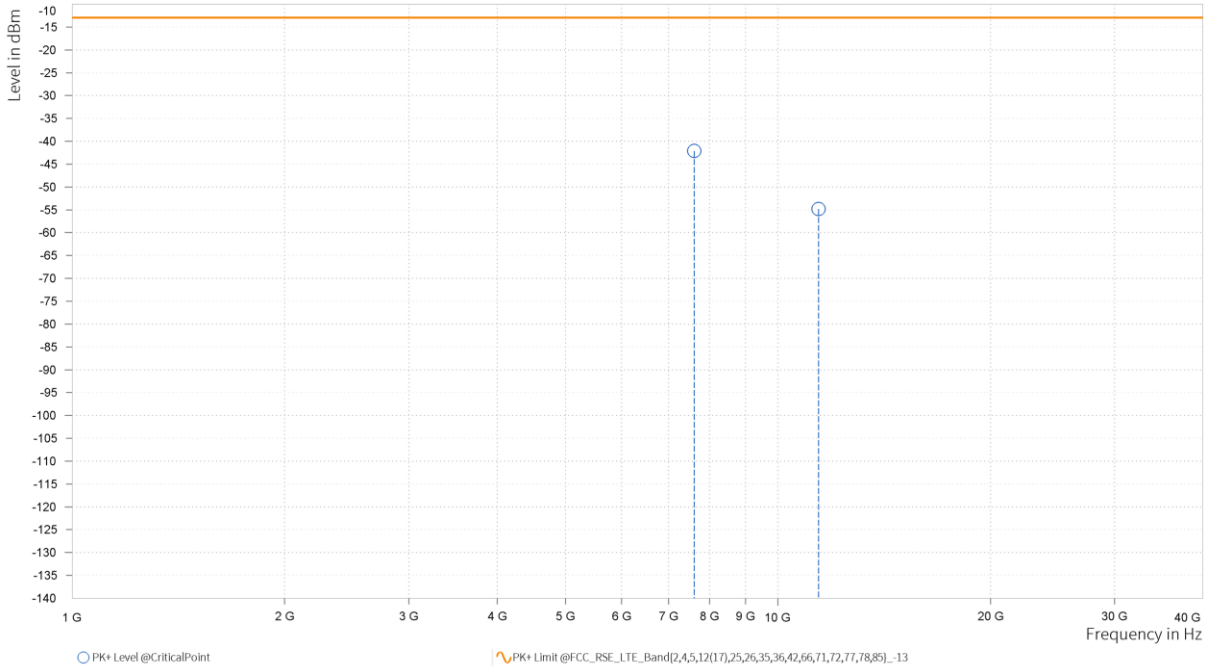
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,608.000	-42.96	-13.00	29.96	30.19	H	0.9	2.00
6	11,412.000	-53.71	-13.00	40.71	17.89	H	311.9	1.00



MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

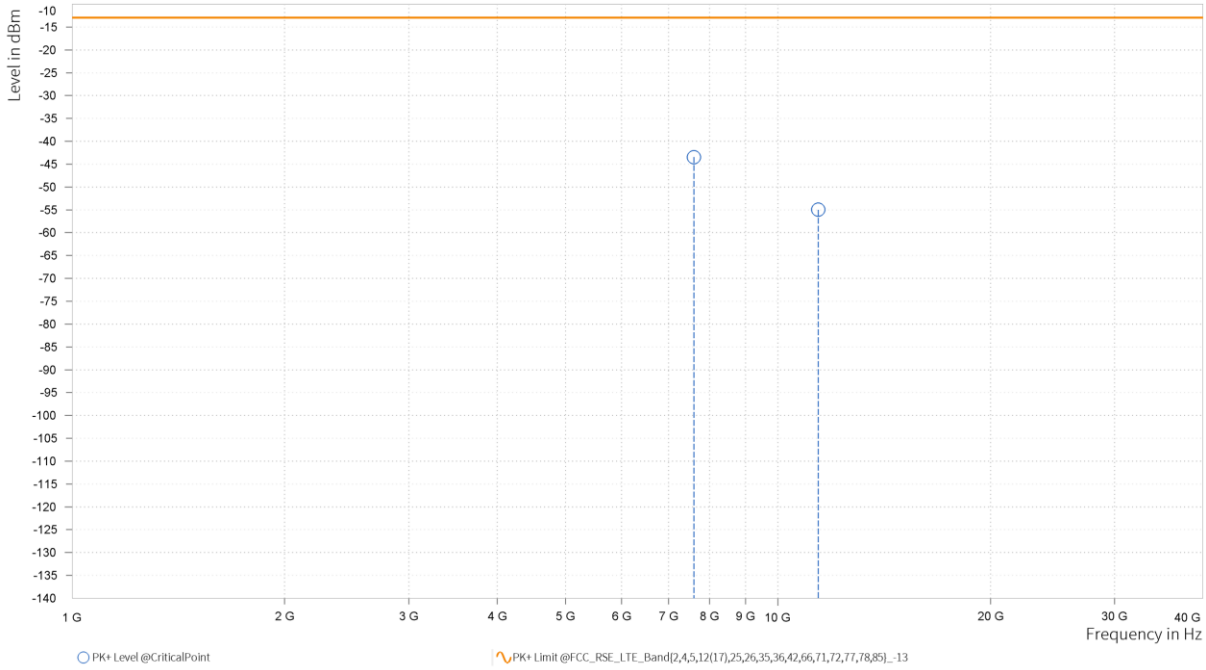
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,608.000	-42.13	-13.00	29.13	29.99	V	1	1.00
6	11,412.000	-54.82	-13.00	41.82	17.98	V	2.2	2.00



CHANNEL BANDWIDTH: 90MHz / QPSK

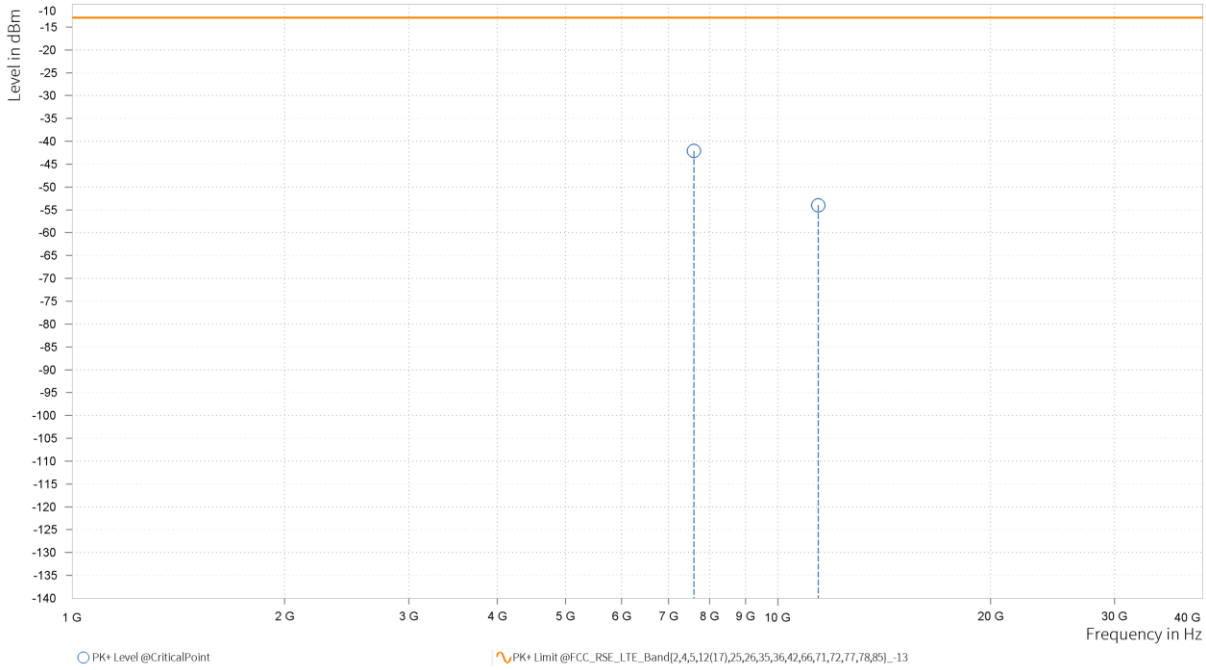
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,599.000	-43.46	-13.00	30.46	30.18	H	309.1	1.00
6	11,398.500	-54.98	-13.00	41.98	17.79	H	100.4	2.00



MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

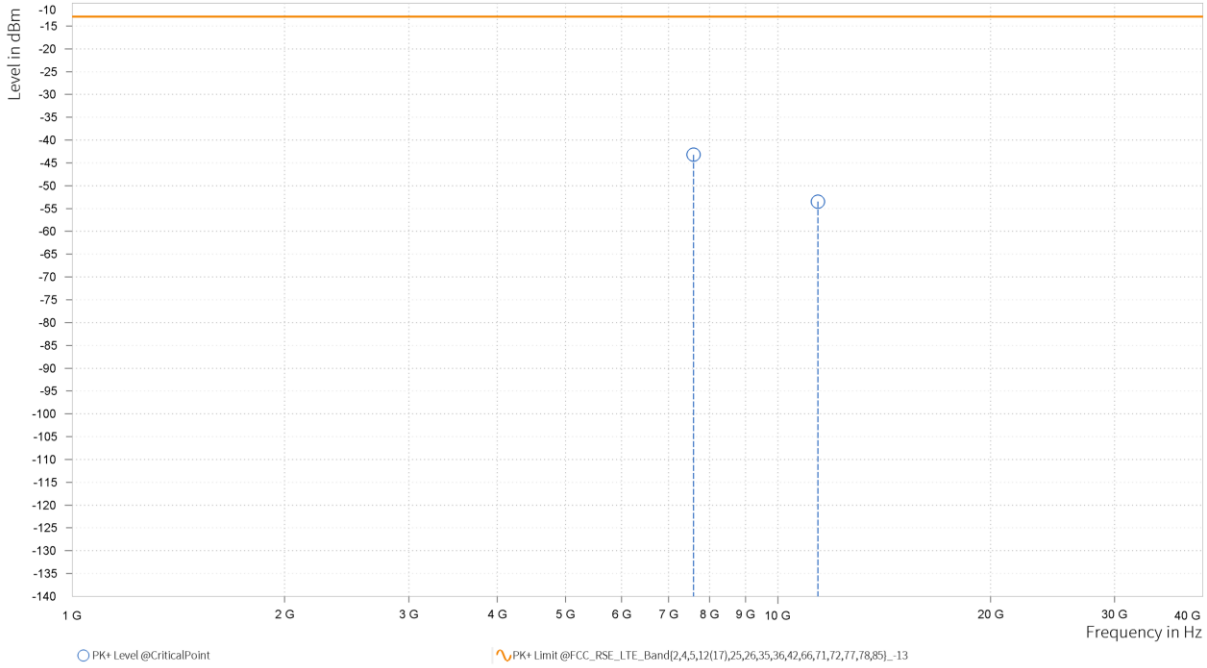
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,599.000	-42.12	-13.00	29.12	29.96	V	0.9	2.00
6	11,398.500	-54.00	-13.00	41.00	17.88	V	261.1	1.00



CHANNEL BANDWIDTH: 100MHz / QPSK

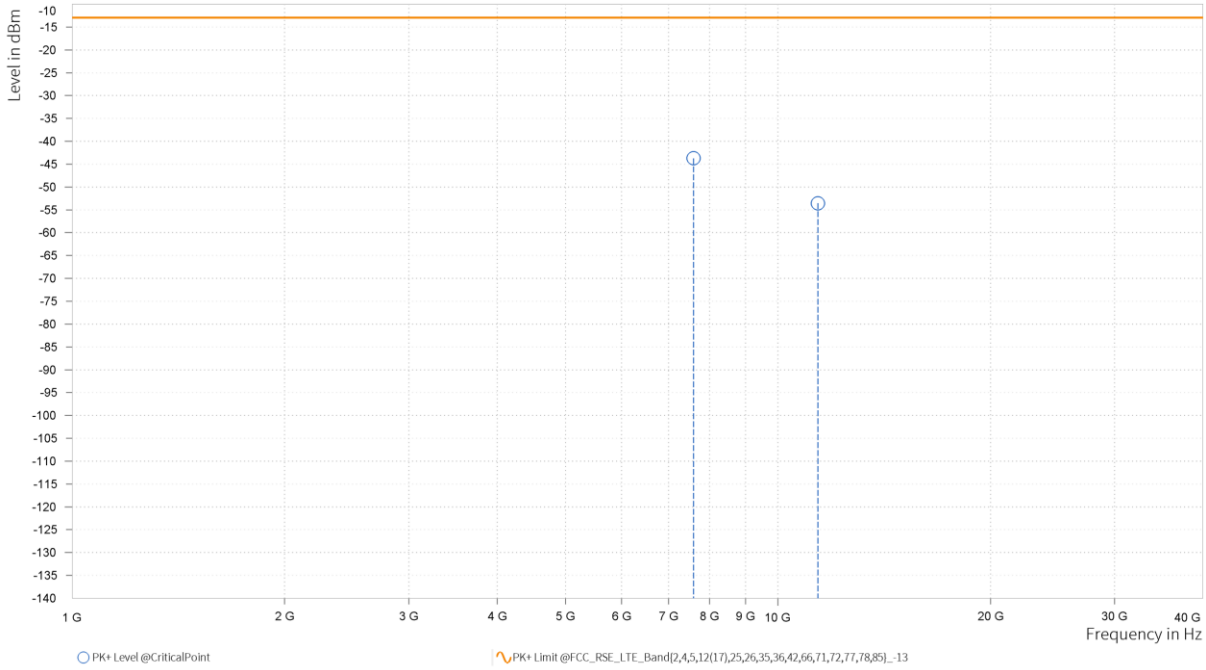
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,590.000	-43.22	-13.00	30.22	30.16	H	359	2.00
6	11,385.000	-53.48	-13.00	40.48	17.73	H	98.2	2.00



MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

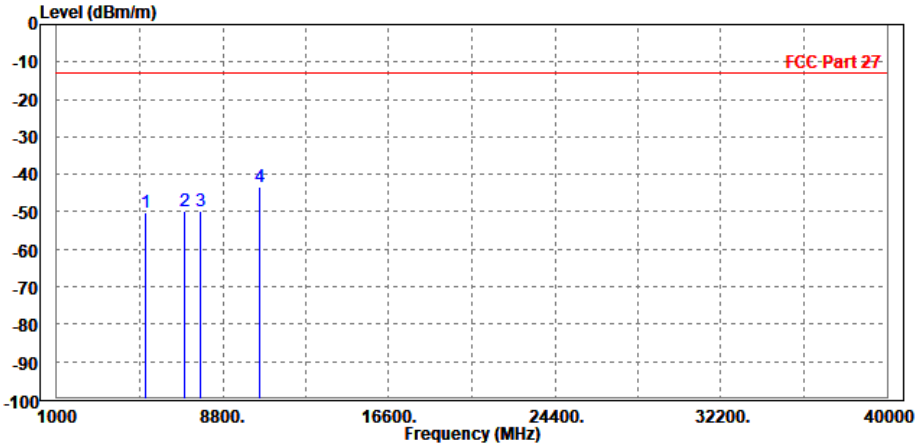
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	7,590.000	-43.72	-13.00	30.72	29.94	V	205.8	1.00
6	11,385.000	-53.57	-13.00	40.57	17.79	V	359.1	1.00



DC_41A-N77A (Part 27Q):
CHANNEL BANDWIDTH: (20+100) MHz

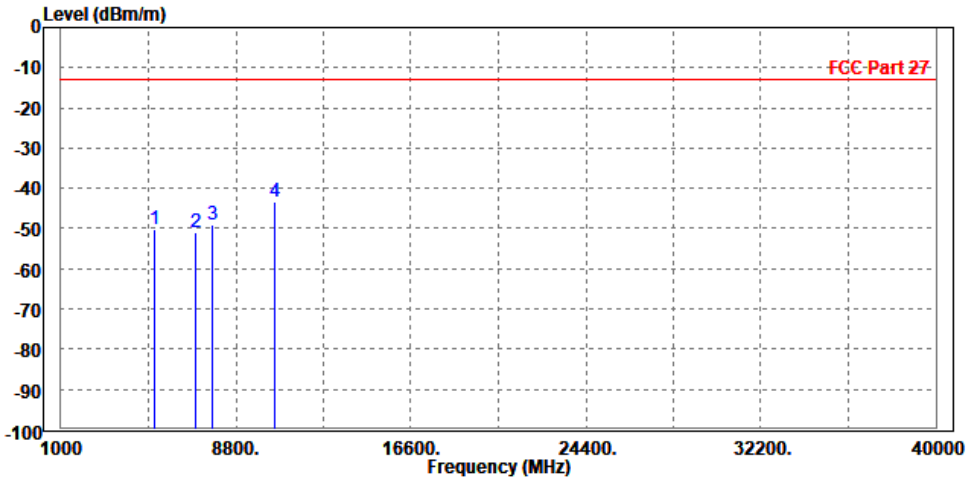
MODE	TX channel 633334	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5186.000	-50.08	-60.73	-13.00	-37.08	10.65	Peak	Horizontal
2	7000.000	-49.94	-62.65	-13.00	-36.94	12.71	Peak	Horizontal
3	7779.000	-49.89	-64.01	-13.00	-36.89	14.12	Peak	Horizontal
4	PP10516.000	-43.49	-61.99	-13.00	-30.49	18.50	Peak	Horizontal



MODE	TX channel 633334	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

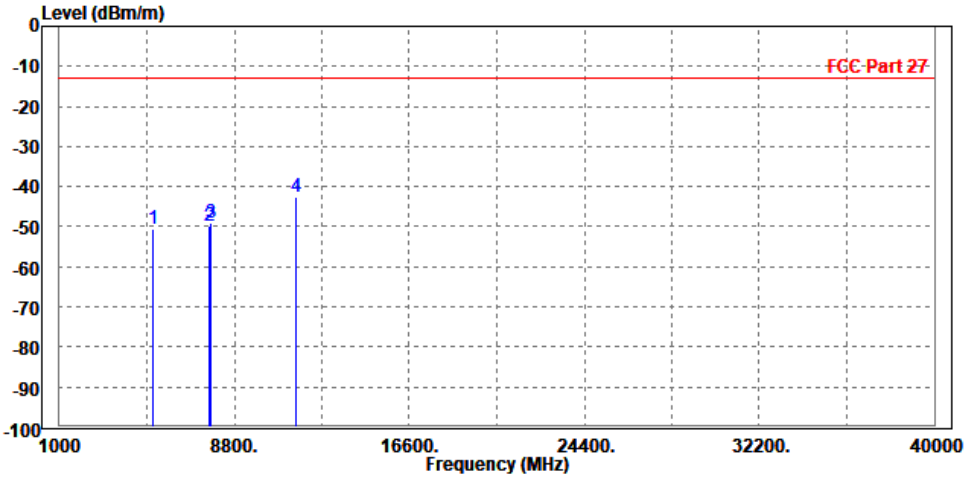
	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5173.000	-50.21	-61.22	-13.00	-37.21	11.01	Peak	Vertical
2	7000.000	-50.89	-63.86	-13.00	-37.89	12.97	Peak	Vertical
3	7779.000	-49.14	-63.54	-13.00	-36.14	14.40	Peak	Vertical
4	PP10500.000	-43.25	-61.87	-13.00	-30.25	18.62	Peak	Vertical



DC_41A-N77A (Part 27O):
CHANNEL BANDWIDTH: (20+100) MHz

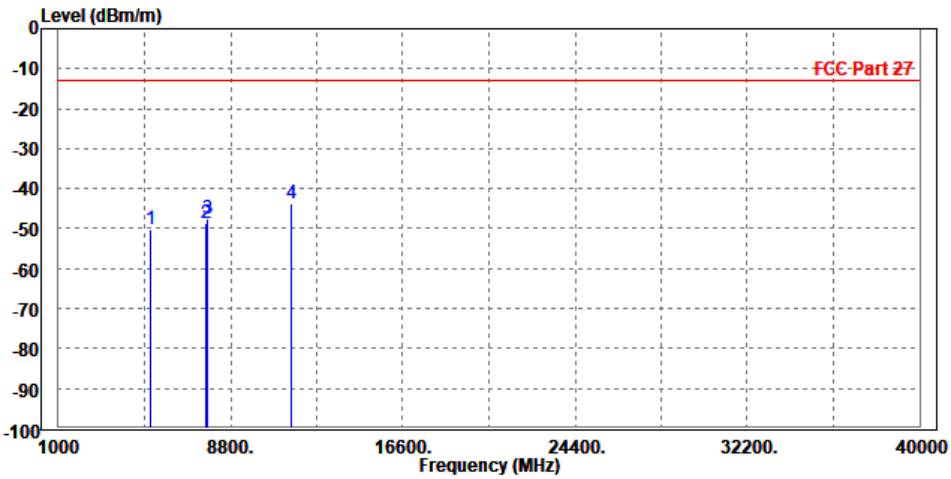
MODE	TX channel 656000	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5173.000	-50.56	-61.20	-13.00	-37.56	10.64	Peak	Horizontal
2	7680.000	-49.69	-63.59	-13.00	-36.69	13.90	Peak	Horizontal
3	7779.000	-48.93	-63.05	-13.00	-35.93	14.12	Peak	Horizontal
4	PP11520.000	-42.67	-61.91	-13.00	-29.67	19.24	Peak	Horizontal



MODE	TX channel 656000	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	5186.000	-50.32	-61.34	-13.00	-37.32	11.02	Peak	Vertical
2	7680.000	-48.49	-62.84	-13.00	-35.49	14.35	Peak	Vertical
3	7779.000	-47.66	-62.06	-13.00	-34.66	14.40	Peak	Vertical
4	PP11530.000	-43.60	-62.47	-13.00	-30.60	18.87	Peak	Vertical

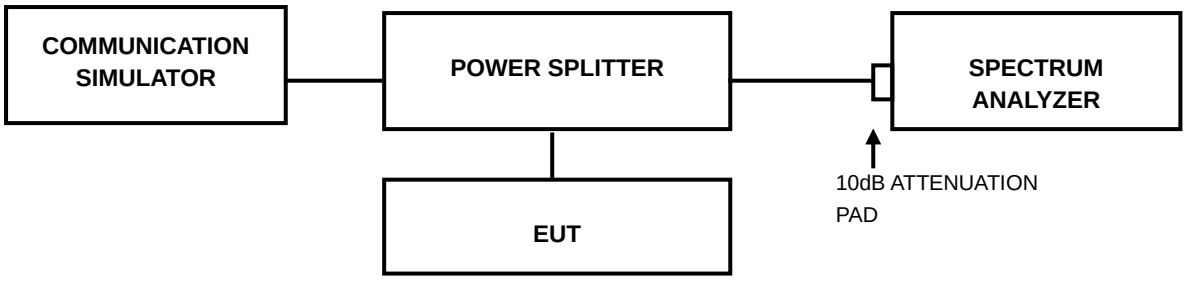


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.

3.7.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

4 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Shenzhen EMC/RF Lab:
Tel: +86-755-88696566
Fax: +86-755-88696577

Email: customerservice.sw@bureauveritas.com
Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--END--