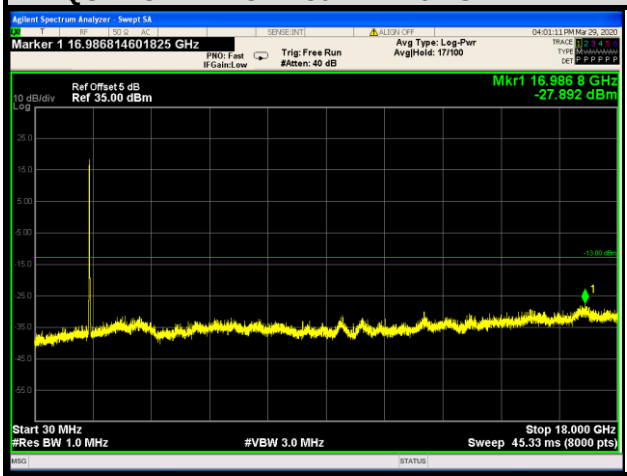
20MHz / QPSK

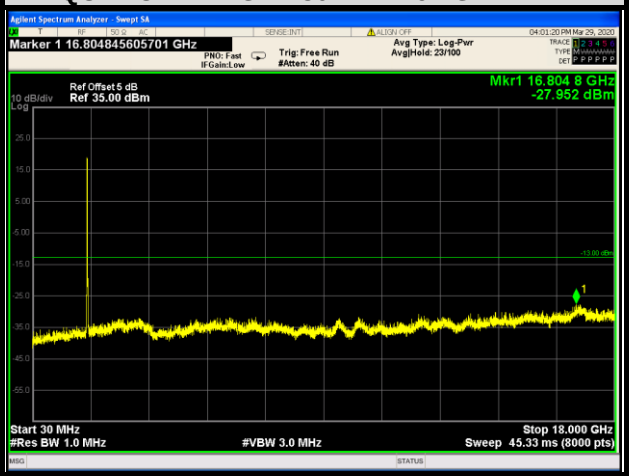
CHANNEL 20050

FREQUENCY RANGE : 30MHz~19.1GHz



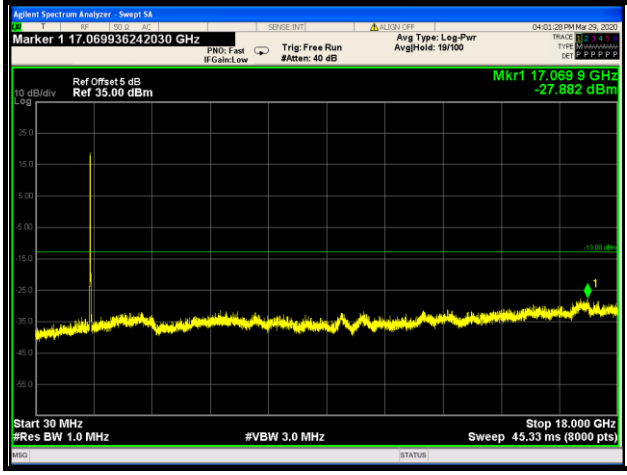
CHANNEL 20175

FREQUENCY RANGE : 30MHz~19.1GHz



CHANNEL 20300

FREQUENCY RANGE : 30MHz~19.1GHz

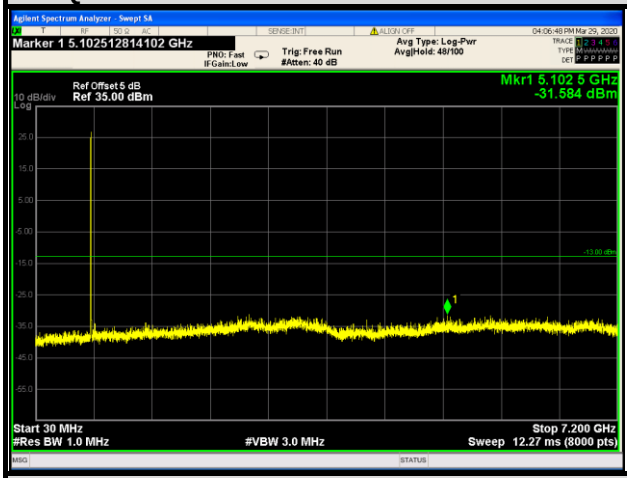


LTE BAND 12

1.4MHz / QPSK

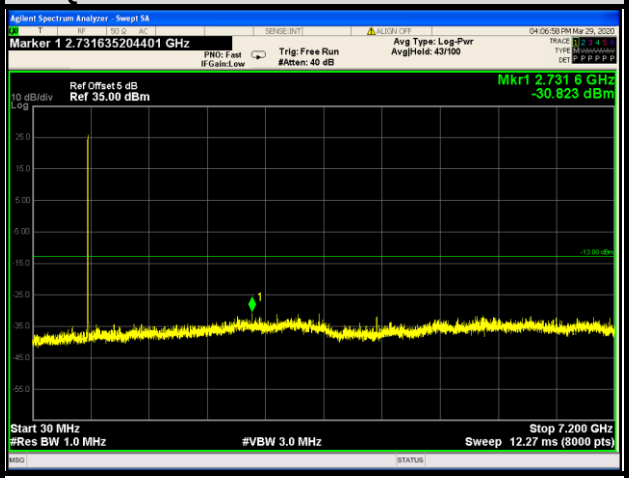
CHANNEL 23017

FREQUENCY RANGE : 30MHz~9GHz



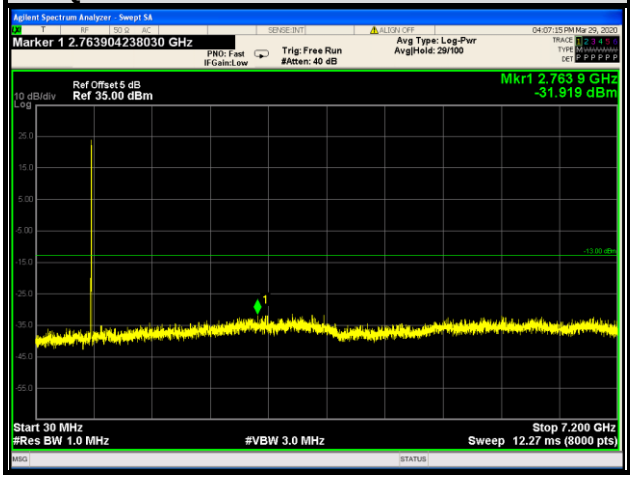
CHANNEL 23095

FREQUENCY RANGE : 30MHz~9GHz



CHANNEL 23173

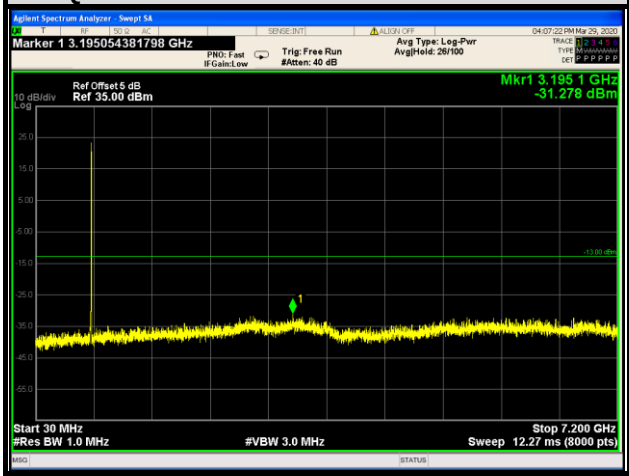
FREQUENCY RANGE : 30MHz~9GHz



3MHz / QPSK

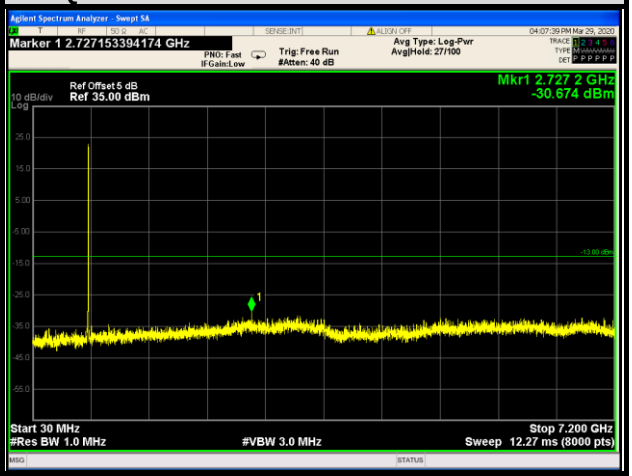
CHANNEL 23025

FREQUENCY RANGE : 30MHz~9GHz



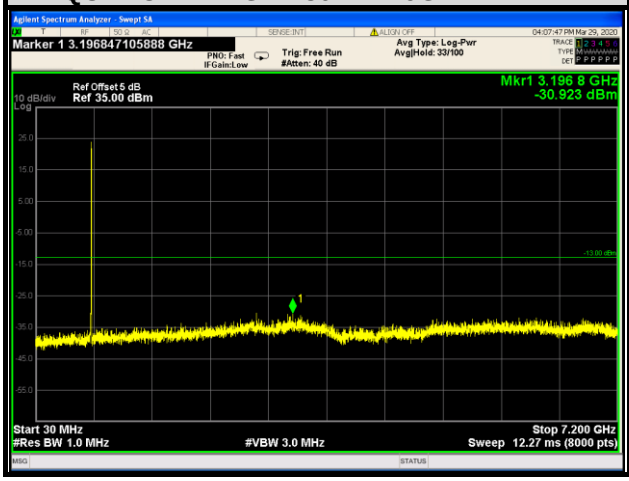
CHANNEL 23095

FREQUENCY RANGE : 30MHz~9GHz



CHANNEL 23165

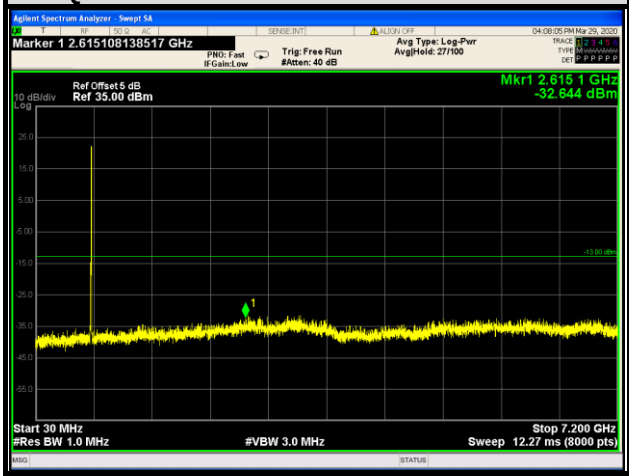
FREQUENCY RANGE : 30MHz~9GHz



5MHz / QPSK

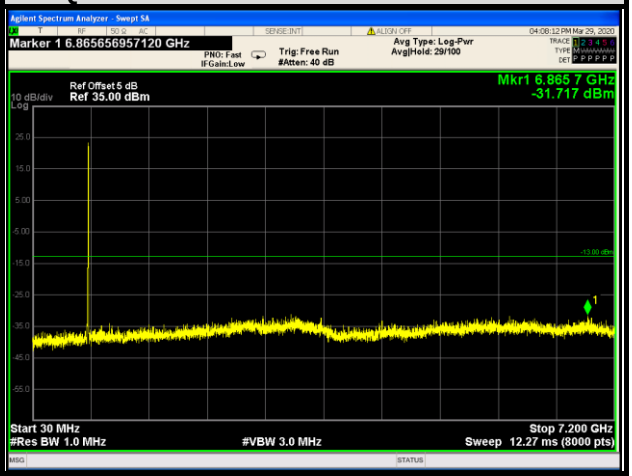
CHANNEL 23035

FREQUENCY RANGE : 30MHz~9GHz



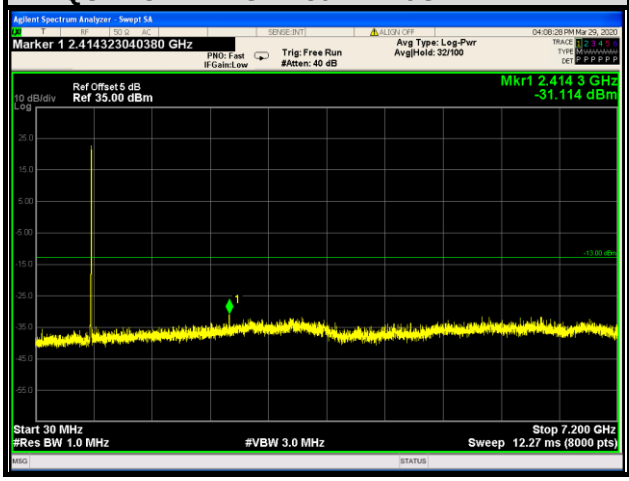
CHANNEL 23095

FREQUENCY RANGE : 30MHz~9GHz



CHANNEL 23155

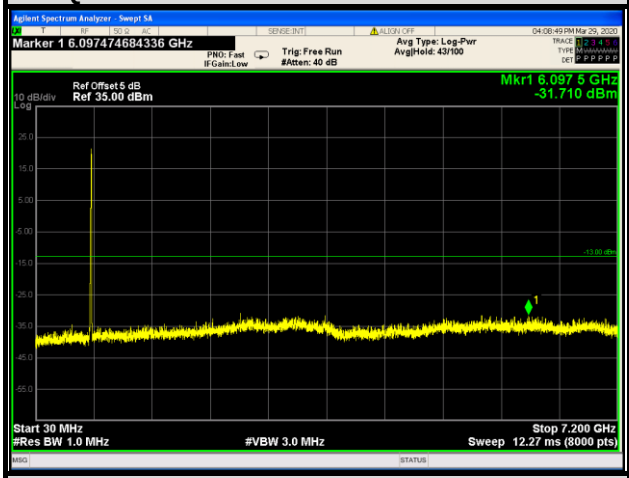
FREQUENCY RANGE : 30MHz~9GHz



10MHz / QPSK

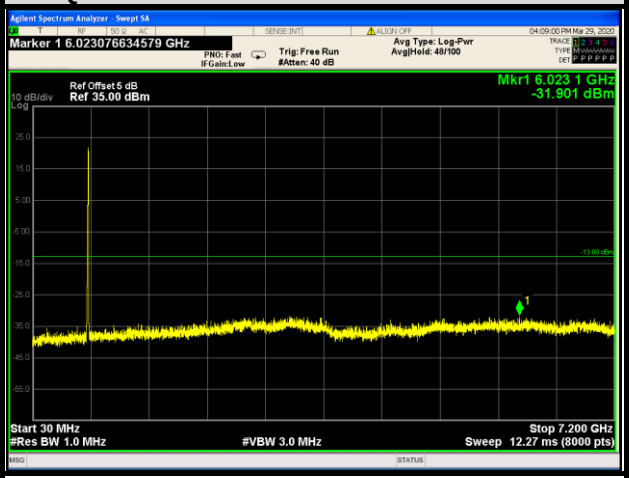
CHANNEL 23060

FREQUENCY RANGE : 30MHz~9GHz



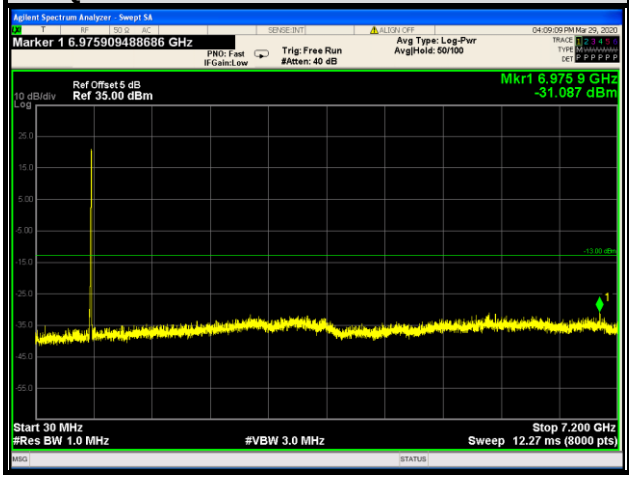
CHANNEL 23095

FREQUENCY RANGE : 30MHz~9GHz



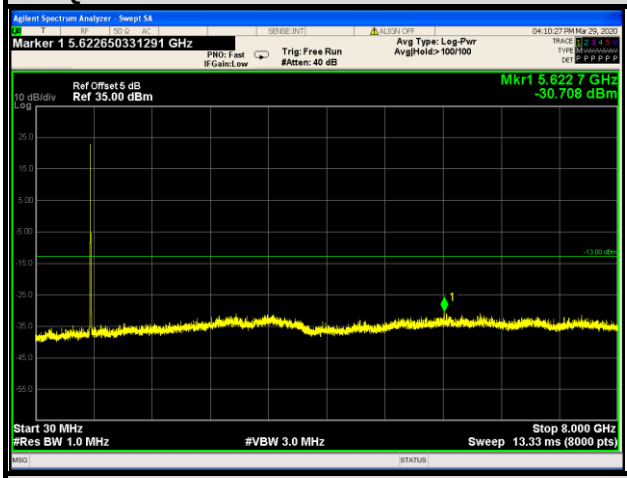
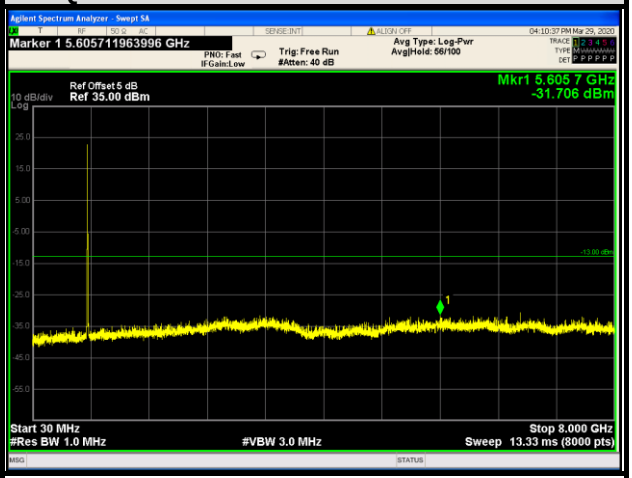
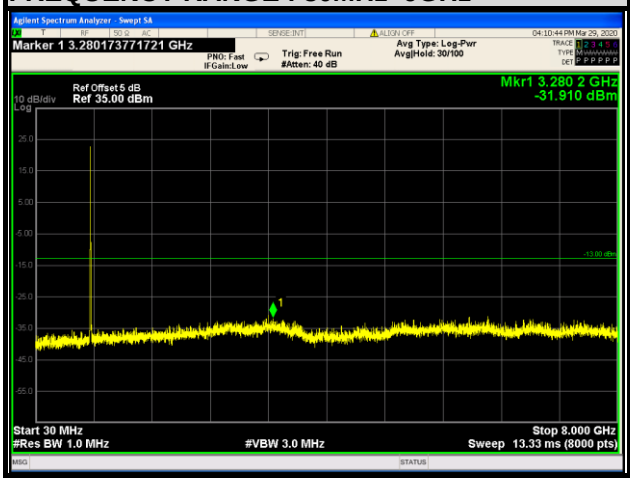
CHANNEL 23130

FREQUENCY RANGE : 30MHz~9GHz



LTE BAND 13

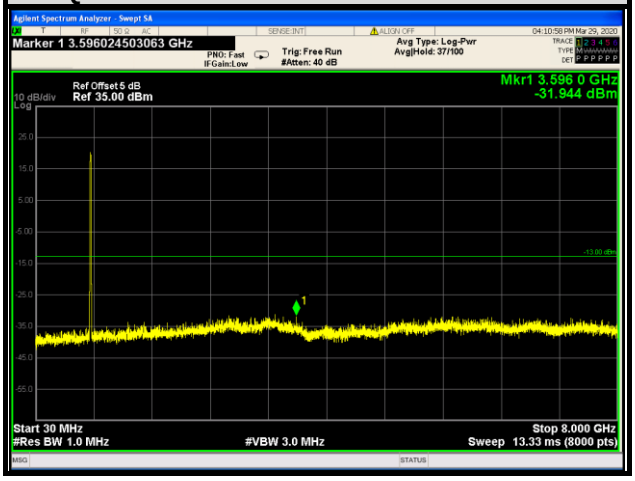
5MHz / QPSK

CHANNEL 23205	CHANNEL 23230
FREQUENCY RANGE : 30MHz~9GHz	FREQUENCY RANGE : 30MHz~9GHz
	
CHANNEL 23255	
FREQUENCY RANGE : 30MHz~9GHz	
	

10MHz / QPSK

CHANNEL 23230

FREQUENCY RANGE : 30MHz~9GHz



3.7 RADIATED EMISSION MEASUREMENT

3.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 log10(P) dB. The limit of emission equal to –13dBm

3.7.2 TEST PROCEDURES

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G

c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.

d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

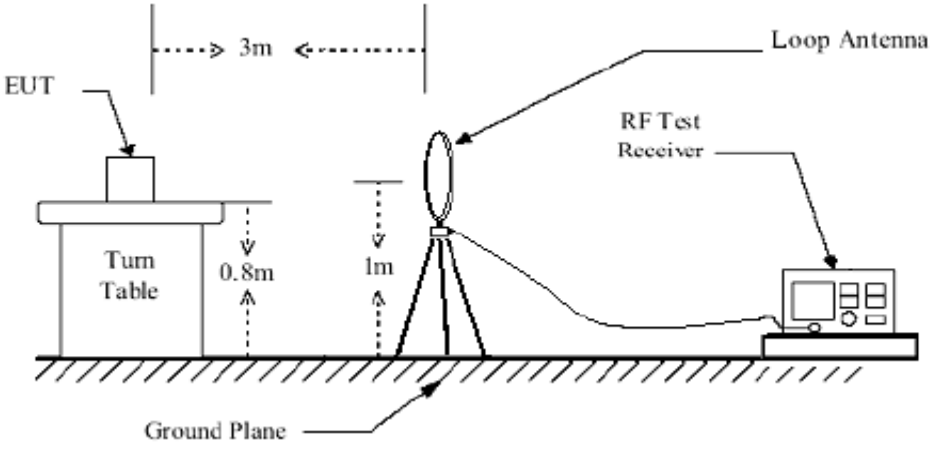
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.7.3 DEVIATION FROM TEST STANDARD

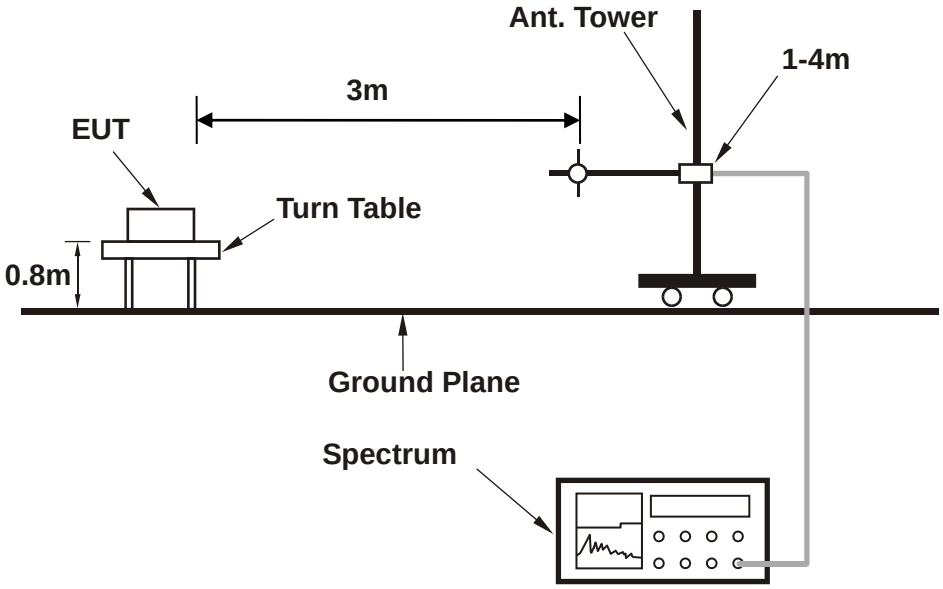
No deviation

3.7.4 TEST SETUP

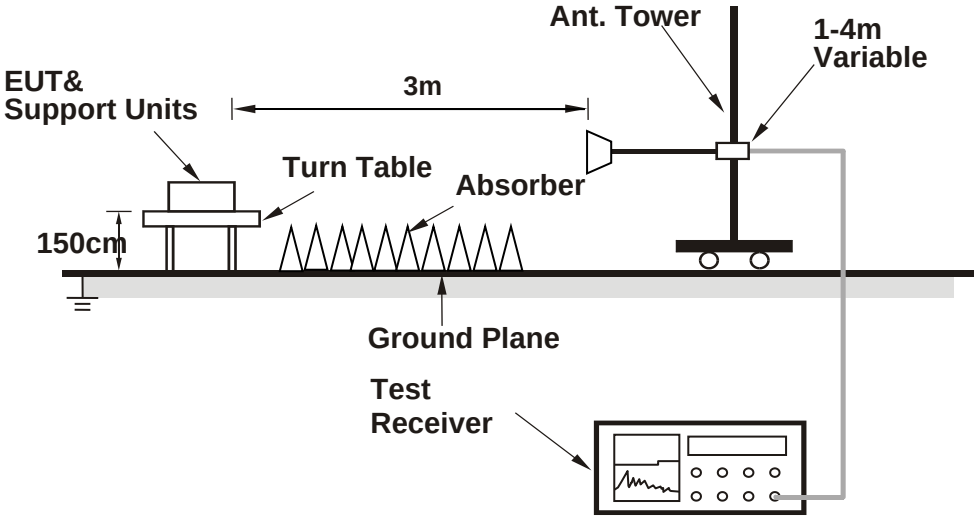
<Below 30MHz>



< Frequency Range 30MHz~1GHz >



< Frequency Range above 1GHz >



For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.7.5 TEST RESULTS

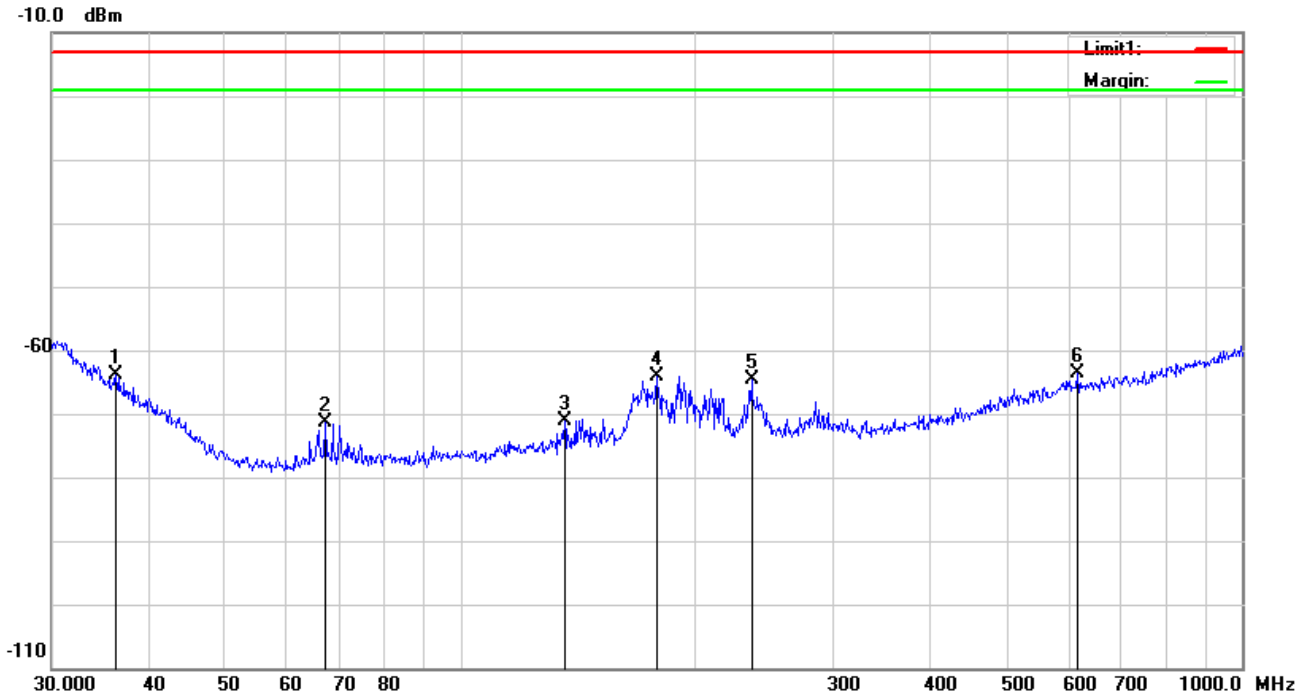
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE Band 4

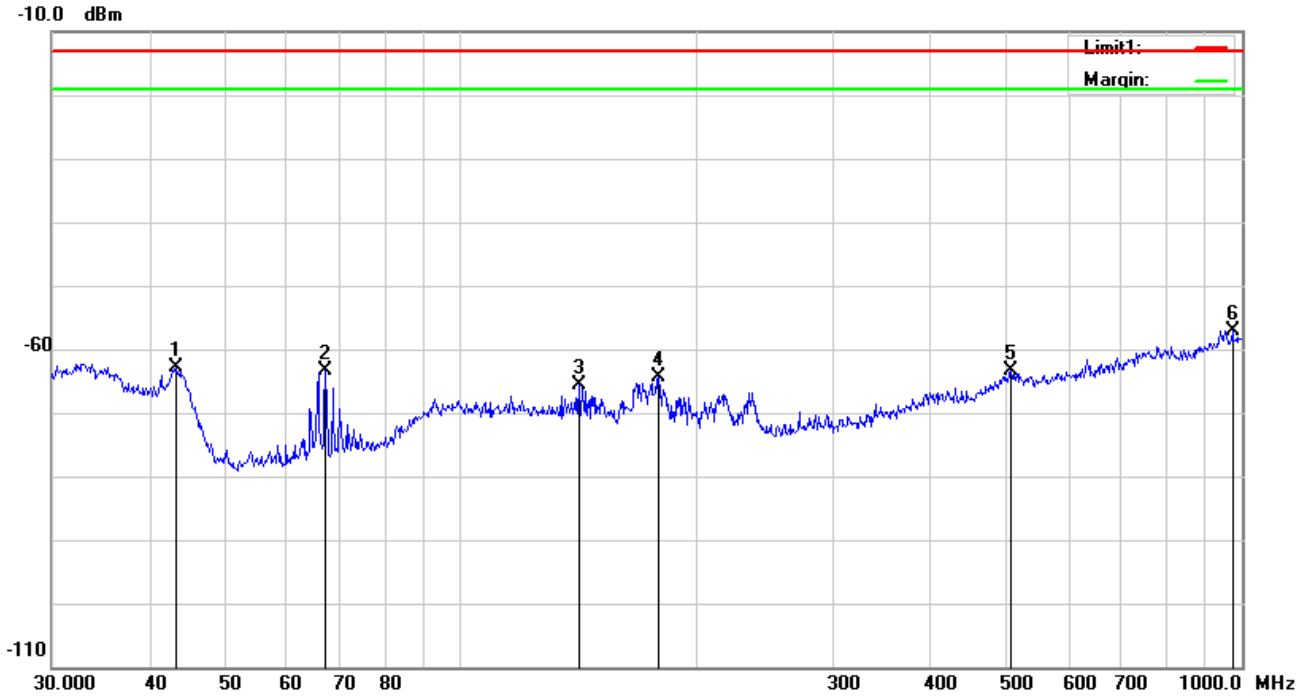
MODE	TX channel 20175	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	36.2541	H	-63.92	peak	-13	-50.92	-72.34	-8.42
2	67.2022	H	-71.49	peak	-13	-58.49	-68.71	2.78
3	135.9822	H	-71.09	peak	-13	-58.09	-70.97	0.12
4	178.1327	H	-64.17	peak	-13	-51.17	-64.56	-0.39
5	235.8164	H	-64.58	peak	-13	-51.58	-65.31	-0.73
6	616.3718	H	-63.67	peak	-13	-50.67	-71.59	-7.92



MODE	TX channel 20175	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	43.2017	V	-62.89	peak	-13	-49.89	-61.01	1.88
2	67.2022	V	-63.26	peak	-13	-50.26	-61.38	1.88
3	141.8262	V	-65.5	peak	-13	-52.5	-70.49	-4.99
4	179.3864	V	-64.31	peak	-13	-51.31	-68.29	-3.98
5	506.4791	V	-63.48	peak	-13	-50.48	-73.22	-9.74
6	972.3374	V	-57.06	peak	-13	-44.06	-71.79	-14.73



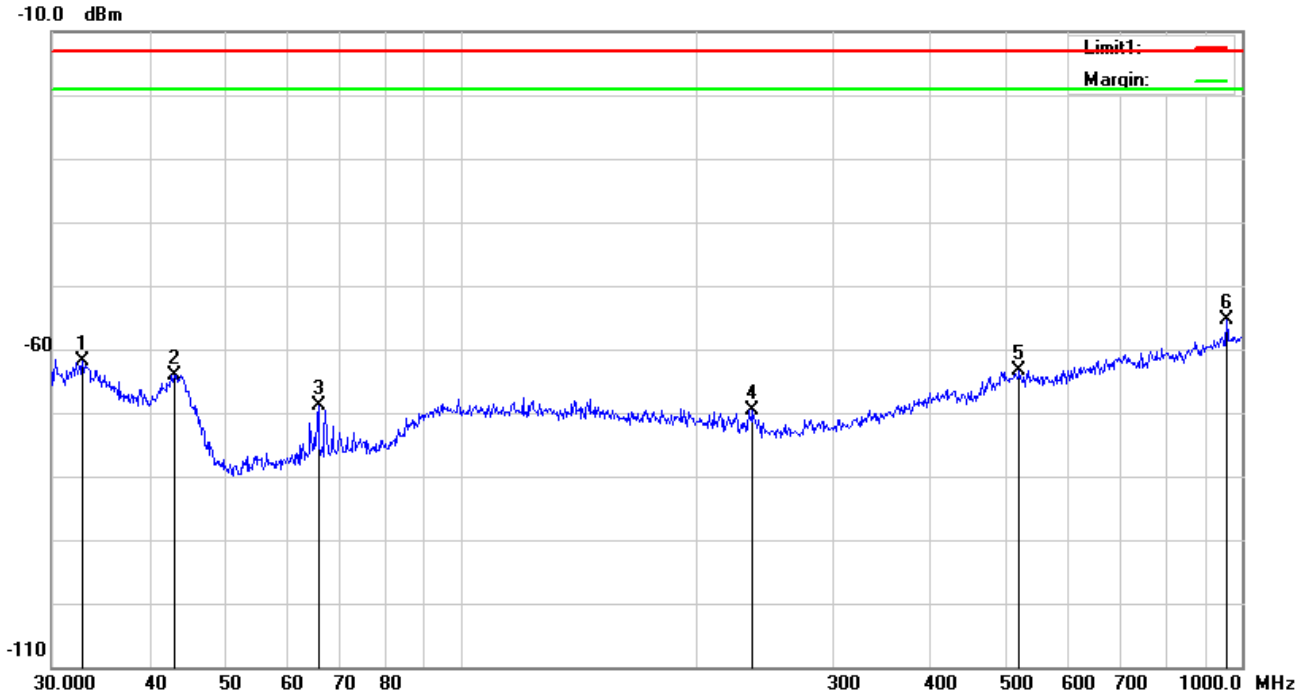
LTE Band 12

MODE	TX channel 23060	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	30.8535	H	-55.32	peak	-13	-42.32	-68.66	-13.34
2	65.8031	H	-74.64	peak	-13	-61.64	-71.66	2.98
3	190.405	H	-68.63	peak	-13	-55.63	-68.91	-0.28
4	357.9287	H	-68.94	peak	-13	-55.94	-71.41	-2.47
5	742.2587	H	-61.83	peak	-13	-48.83	-70.51	-8.68
6	848.0563	H	-60.8	peak	-13	-47.8	-71.58	-10.78

MODE	TX channel 23060	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

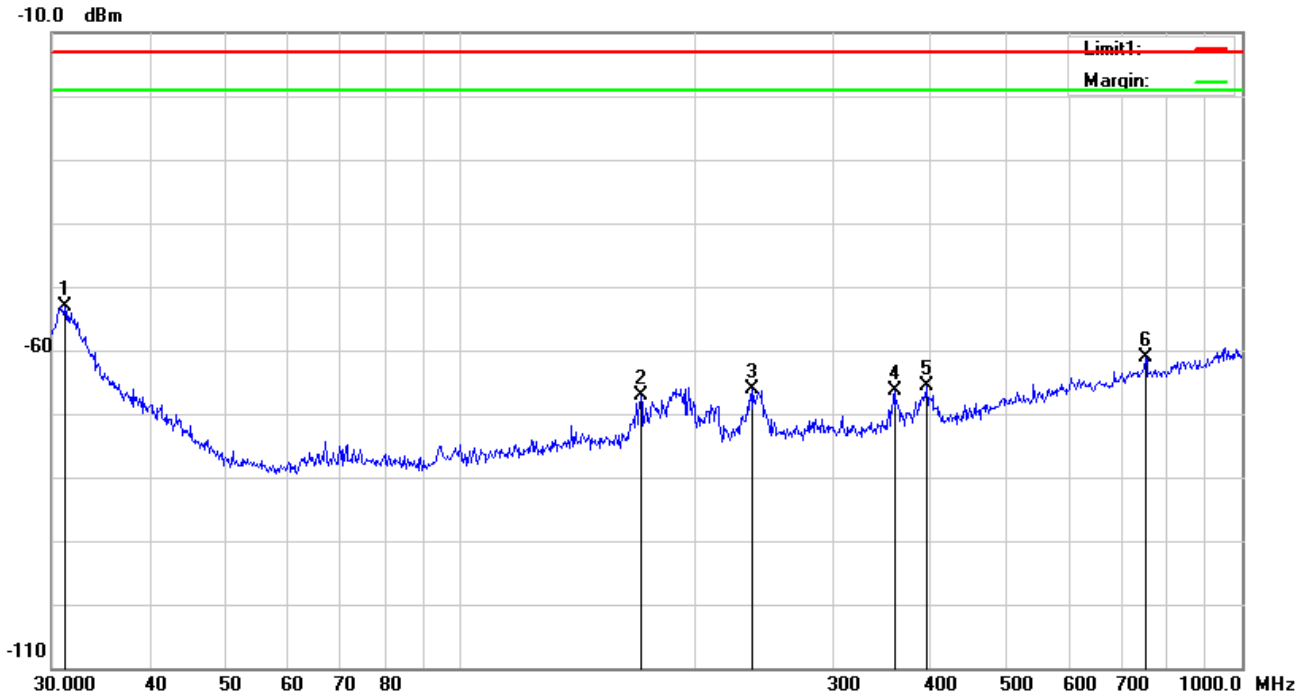
NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	32.8637	V	-61.92	peak	-13	-48.92	-66.64	-4.72
2	43.0505	V	-64.11	peak	-13	-51.11	-62.3	1.81
3	65.8031	V	-68.97	peak	-13	-55.97	-66.81	2.16
4	236.6447	V	-69.64	peak	-13	-56.64	-71.82	-2.18
5	519.0649	V	-63.33	peak	-13	-50.33	-72.84	-9.51
6	955.4381	V	-55.49	peak	-13	-42.49	-70.2	-14.71



LTE Band 13

MODE	TX channel 23255	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	31.1798	H	-53.21	peak	-13	-40.21	-66.25	-13.04
2	170.1948	H	-67.14	peak	-13	-54.14	-67.6	-0.46
3	236.6447	H	-66.2	peak	-13	-53.2	-66.94	-0.74
4	359.186	H	-66.49	peak	-13	-53.49	-68.97	-2.48
5	394.8545	H	-65.66	peak	-13	-52.66	-68.66	-3
6	752.7432	H	-61.2	peak	-13	-48.2	-70.01	-8.81



MODE	TX channel 23255	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 60%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Aaron Liang		

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	32.5198	V	-61.06	peak	-13	-48.06	-66.03	-4.97
2	42.7496	V	-63.05	peak	-13	-50.05	-61.36	1.69
3	67.2022	V	-67.09	peak	-13	-54.09	-65.21	1.88
4	176.8878	V	-66.3	peak	-13	-53.3	-70.36	-4.06
5	400.4319	V	-62.31	peak	-13	-49.31	-68.99	-6.68
6	942.1305	V	-56.7	peak	-13	-43.7	-71.25	-14.55

ABOVE 1GHz

Note: For higher frequency, the emission is too low to be detected.

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3421.4	V	-44.25	PK	-13	-31.25	-62.21	17.96
2	3421.4	H	-42.99	PK	-13	-29.99	-60.95	17.96
3	5132.1	V	-41.76	PK	-13	-28.76	-62.96	21.2
4	5132.1	H	-41.75	PK	-13	-28.75	-62.95	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-33.25	PK	-13	-20.25	-51.21	17.96
2	3465	H	-47.83	PK	-13	-34.83	-65.79	17.96
3	5197.5	V	-36.84	PK	-13	-23.84	-58.04	21.2
4	5197.5	H	-40.67	PK	-13	-27.67	-61.87	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3508.6	V	-45.33	PK	-13	-32.33	-63.29	17.96
2	3508.6	H	-44.68	PK	-13	-31.68	-62.64	17.96
3	5262.9	V	-41.02	PK	-13	-28.02	-62.22	21.2
4	5262.9	H	-40.25	PK	-13	-27.25	-61.45	21.2

Note:

*1, The testing has been conformed to 10*1754.3MHz=17,543MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 4

CHANNEL BANDWIDTH: 3MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3423	V	-44.25	PK	-13	-31.25	-62.21	17.96
2	3423	H	-43.69	PK	-13	-30.69	-61.65	17.96
3	5134.5	V	-40.2	PK	-13	-27.2	-61.4	21.2
4	5134.5	H	-43.12	PK	-13	-30.12	-64.32	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-46.19	PK	-13	-33.19	-64.15	17.96
2	3465	H	-46.33	PK	-13	-33.33	-64.29	17.96
3	5197.5	V	-42.23	PK	-13	-29.23	-63.43	21.2
4	5197.5	H	-41.87	PK	-13	-28.87	-63.07	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3507	V	-46.58	PK	-13	-33.58	-64.54	17.96
2	3507	H	-45.32	PK	-13	-32.32	-63.28	17.96
3	5260.5	V	-40.69	PK	-13	-27.69	-61.89	21.2
4	5260.5	H	-41.75	PK	-13	-28.75	-62.95	21.2

Note:

*1, The testing has been conformed to 10*1753.5MHz=17,535MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 4

CHANNEL BANDWIDTH: 5MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3425	V	-46.36	PK	-13	-33.36	-64.32	17.96
2	3425	H	-43.72	PK	-13	-30.72	-61.68	17.96
3	5137.5	V	-41.95	PK	-13	-28.95	-63.15	21.2
4	5137.5	H	-40.97	PK	-13	-27.97	-62.17	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-46.16	PK	-13	-33.16	-64.12	17.96
2	3465	H	-47.18	PK	-13	-34.18	-65.14	17.96
3	5197.5	V	-40.53	PK	-13	-27.53	-61.73	21.2
4	5197.5	H	-42.8	PK	-13	-29.8	-64	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3505	V	-46.45	PK	-13	-33.45	-64.41	17.96
2	3505	H	-45.86	PK	-13	-32.86	-63.82	17.96
3	5257.5	V	-43.43	PK	-13	-30.43	-64.63	21.2
4	5257.5	H	-41.4	PK	-13	-28.4	-62.6	21.2

Note:

*1, The testing has been conformed to 10*1752.5MHz=17,525MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 4

CHANNEL BANDWIDTH: 10MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3430	V	-46.21	PK	-13	-33.21	-64.17	17.96
2	3430	H	-41.94	PK	-13	-28.94	-59.9	17.96
3	5145	V	-42.25	PK	-13	-29.25	-63.45	21.2
4	5145	H	-42.16	PK	-13	-29.16	-63.36	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-44.05	PK	-13	-31.05	-62.01	17.96
2	3465	H	-49.99	PK	-13	-36.99	-67.95	17.96
3	5197.5	V	-41.03	PK	-13	-28.03	-62.23	21.2
4	5197.5	H	-42.75	PK	-13	-29.75	-63.95	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3500	V	-45.62	PK	-13	-32.62	-63.58	17.96
2	3500	H	-45.2	PK	-13	-32.2	-63.16	17.96
3	5250	V	-40.86	PK	-13	-27.86	-62.06	21.2
4	5250	H	-41.49	PK	-13	-28.49	-62.69	21.2

Note:

*1, The testing has been conformed to 10*1750MHz=17,500MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 4

CHANNEL BANDWIDTH: 15MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3435	V	-42.64	PK	-13	-29.64	-60.6	17.96
2	3435	H	-40.86	PK	-13	-27.86	-58.82	17.96
3	5152.5	V	-40.36	PK	-13	-27.36	-61.56	21.2
4	5152.5	H	-40.04	PK	-13	-27.04	-61.24	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-42.06	PK	-13	-29.06	-60.02	17.96
2	3465	H	-44.53	PK	-13	-31.53	-62.49	17.96
3	5197.5	V	-39	PK	-13	-26	-60.2	21.2
4	5197.5	H	-41.29	PK	-13	-28.29	-62.49	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3495	V	-45.45	PK	-13	-32.45	-63.41	17.96
2	3495	H	-44.76	PK	-13	-31.76	-62.72	17.96
3	5242.5	V	-40.84	PK	-13	-27.84	-62.04	21.2
4	5242.5	H	-41.83	PK	-13	-28.83	-63.03	21.2

Note:

*1, The testing has been conformed to 10*1747.5MHz=17,475MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 4

CHANNEL BANDWIDTH: 20MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3440	V	-46.39	PK	-13	-33.39	-64.35	17.96
2	3440	H	-46.02	PK	-13	-33.02	-63.98	17.96
3	5160	V	-42.11	PK	-13	-29.11	-63.31	21.2
4	5160	H	-42.62	PK	-13	-29.62	-63.82	21.2

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3465	V	-45.11	PK	-13	-32.11	-63.07	17.96
2	3465	H	-46.18	PK	-13	-33.18	-64.14	17.96
3	5197.5	V	-40	PK	-13	-27	-61.2	21.2
4	5197.5	H	-41.3	PK	-13	-28.3	-62.5	21.2

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	3490	V	-45.31	PK	-13	-32.31	-63.27	17.96
2	3490	H	-44.86	PK	-13	-31.86	-62.82	17.96
3	5235	V	-40.95	PK	-13	-27.95	-62.15	21.2
4	5235	H	-40.22	PK	-13	-27.22	-61.42	21.2

Note:

*1, The testing has been conformed to 10*1745MHz=17,450MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1399.4	V	-34.46	PK	-13	-21.46	-44.64	10.18
2	1399.4	H	-37.23	PK	-13	-24.23	-47.41	10.18
3	2798.8	V	-42.26	PK	-13	-29.26	-58.98	16.72
4	2798.8	H	-39.53	PK	-13	-26.53	-56.25	16.72

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1415	V	-32.12	PK	-13	-19.12	-42.3	10.18
2	1415	H	-39.3	PK	-13	-26.3	-49.48	10.18
3	2830	V	-37.72	PK	-13	-24.72	-54.44	16.72
4	2830	H	-32.63	PK	-13	-19.63	-49.35	16.72

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1430.6	V	-32.5	PK	-13	-19.5	-42.68	10.18
2	1430.6	H	-39.02	PK	-13	-26.02	-49.2	10.18
3	2861.2	V	-36.95	PK	-13	-23.95	-53.67	16.72
4	2861.2	H	-34.73	PK	-13	-21.73	-51.45	16.72

Note:

*1, The testing has been conformed to 10*715.3MHz=7,153MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 12

CHANNEL BANDWIDTH: 3MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1401	V	-35.02	PK	-13	-22.02	-45.2	10.18
2	1401	H	-39.95	PK	-13	-26.95	-50.13	10.18
3	2802	V	-41.2	PK	-13	-28.2	-57.92	16.72
4	2802	H	-40.07	PK	-13	-27.07	-56.79	16.72

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1415	V	-34.03	PK	-13	-21.03	-44.21	10.18
2	1415	H	-40.17	PK	-13	-27.17	-50.35	10.18
3	2830	V	-35.04	PK	-13	-22.04	-51.76	16.72
4	2830	H	-32.52	PK	-13	-19.52	-49.24	16.72

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1429	V	-33.49	PK	-13	-20.49	-43.67	10.18
2	1429	H	-39.3	PK	-13	-26.3	-49.48	10.18
3	2858	V	-42.01	PK	-13	-29.01	-58.73	16.72
4	2858	H	-38.28	PK	-13	-25.28	-55	16.72

Note:

*1, The testing has been conformed to 10*714.5MHz=7,145MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 12

CHANNEL BANDWIDTH: 5MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1403	V	-40.63	PK	-13	-27.63	-50.81	10.18
2	1403	H	-40.8	PK	-13	-27.8	-50.98	10.18
3	2806	V	-39.75	PK	-13	-26.75	-56.47	16.72
4	2806	H	-40.65	PK	-13	-27.65	-57.37	16.72

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1415	V	-31.31	PK	-13	-18.31	-41.49	10.18
2	1415	H	-39.04	PK	-13	-26.04	-49.22	10.18
3	2830	V	-36.77	PK	-13	-23.77	-53.49	16.72
4	2830	H	-32.78	PK	-13	-19.78	-49.5	16.72

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1427	V	-31.1	PK	-13	-18.1	-41.28	10.18
2	1427	H	-36.79	PK	-13	-23.79	-46.97	10.18
3	2854	V	-45.44	PK	-13	-32.44	-62.16	16.72
4	2854	H	-40.27	PK	-13	-27.27	-56.99	16.72

Note:

*1, The testing has been conformed to 10*713.5MHz=7,135MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 12

CHANNEL BANDWIDTH: 10MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1408	V	-34.01	PK	-13	-21.01	-44.19	10.18
2	1408	H	-39.52	PK	-13	-26.52	-49.7	10.18
3	2816	V	-33.4	PK	-13	-20.4	-50.12	16.72
4	2816	H	-40.34	PK	-13	-27.34	-57.06	16.72

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1415	V	-33.42	PK	-13	-20.42	-43.6	10.18
2	1415	H	-38.33	PK	-13	-25.33	-48.51	10.18
3	2830	V	-38.75	PK	-13	-25.75	-55.47	16.72
4	2830	H	-34.2	PK	-13	-21.2	-50.92	16.72

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1422	V	-33.81	PK	-13	-20.81	-43.99	10.18
2	1422	H	-39.21	PK	-13	-26.21	-49.39	10.18
3	2844	V	-36.56	PK	-13	-23.56	-53.28	16.72
4	2844	H	-32.33	PK	-13	-19.33	-49.05	16.72

Note:

*1, The testing has been conformed to 10*711MHz=7,110MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 13

CHANNEL BANDWIDTH: 5MHz / QPSK

Low channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1559	V	-30.9	PK	-13	-17.9	-41.08	10.18
2	1559	H	-40.63	PK	-13	-27.63	-50.81	10.18
3	2338.5	V	-50.28	PK	-13	-37.28	-64.51	14.23
4	2338.5	H	-50.12	PK	-13	-37.12	-64.35	14.23

Middle channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1564	V	-34.26	PK	-13	-21.26	-44.44	10.18
2	1564	H	-39.76	PK	-13	-26.76	-49.94	10.18
3	2346	V	-50.55	PK	-13	-37.55	-64.78	14.23
4	2346	H	-50.2	PK	-13	-37.2	-64.43	14.23

High channel

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1569	V	-32.7	PK	-13	-19.7	-42.88	10.18
2	1569	H	-39.81	PK	-13	-26.81	-49.99	10.18
3	2353.5	V	-51.34	PK	-13	-38.34	-65.57	14.23
4	2353.5	H	-50.52	PK	-13	-37.52	-64.75	14.23

Note:

*1, The testing has been conformed to 10*784.5MHz=7,845MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

LTE BAND 13

CHANNEL BANDWIDTH: 10MHz / QPSK

NO.	FREQ. (MHz)	Antenna Polarization (H/V)	EMISSION LEVEL (dBm/m)	DETECTOR (PK/AV)	LIMIT (dBm/m)	MARGIN (dB)	RAW VALUE (dBm)	CORRECTION FACTOR (dB/m)
1	1564	V	-33.63	PK	-13	-20.63	-43.81	10.18
2	1564	H	-41.69	PK	-13	-28.69	-51.87	10.18
3	2346	V	-52.27	PK	-13	-39.27	-66.5	14.23
4	2346	H	-51.48	PK	-13	-38.48	-65.71	14.23

Note:

*1, The testing has been conformed to 10*782 MHz=7,820MHz*

2, All other emissions more than 30 dB below the limit

3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.

4 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

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