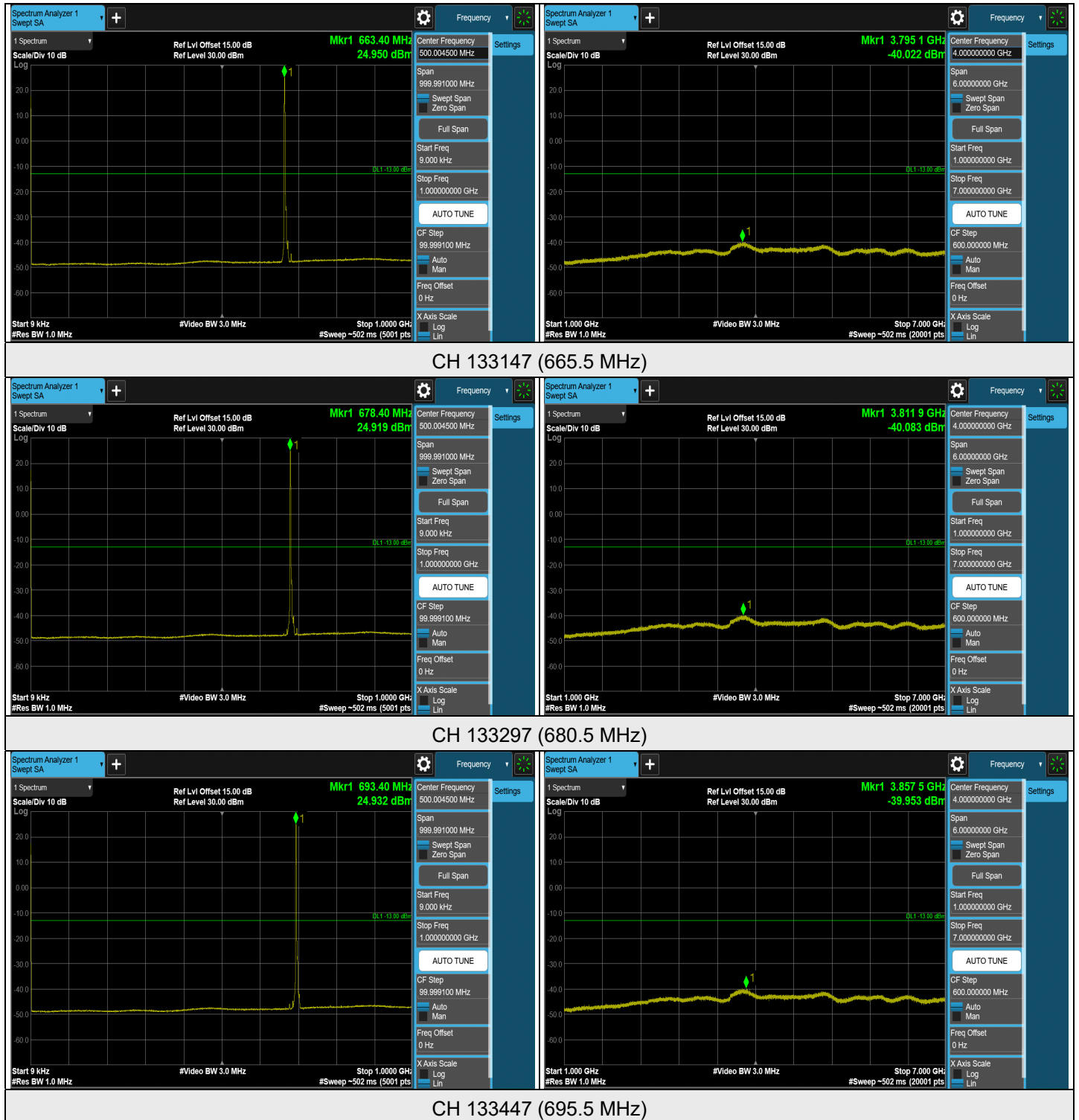




### 7.5.19 LTE Band 71

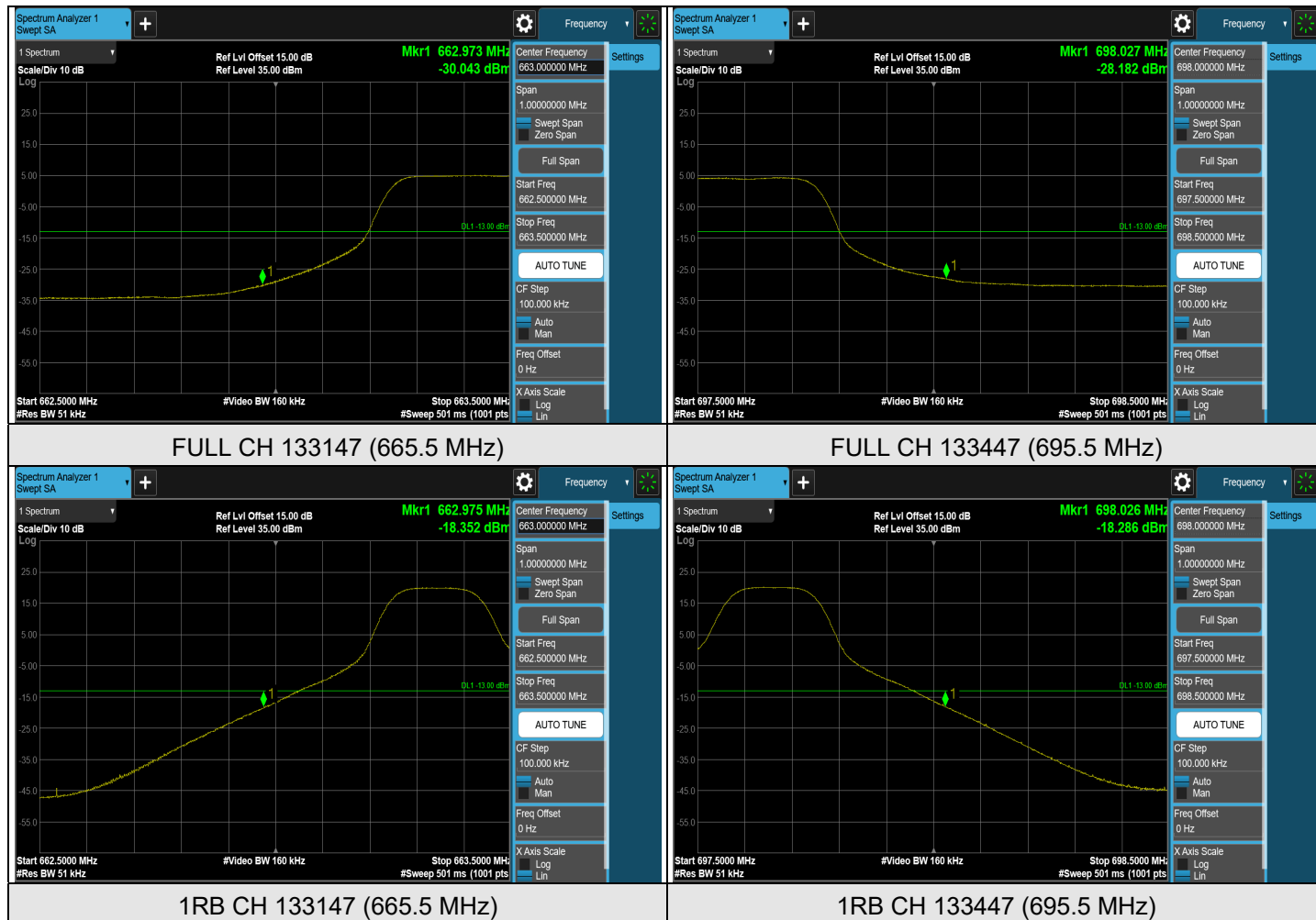
### LTE Band 71, Channel Bandwidth: 5 MHz



Note: The signal at 9 kHz is IF signal from spectrum analyzer.



### LTE Band 71, Channel Bandwidth: 5 MHz

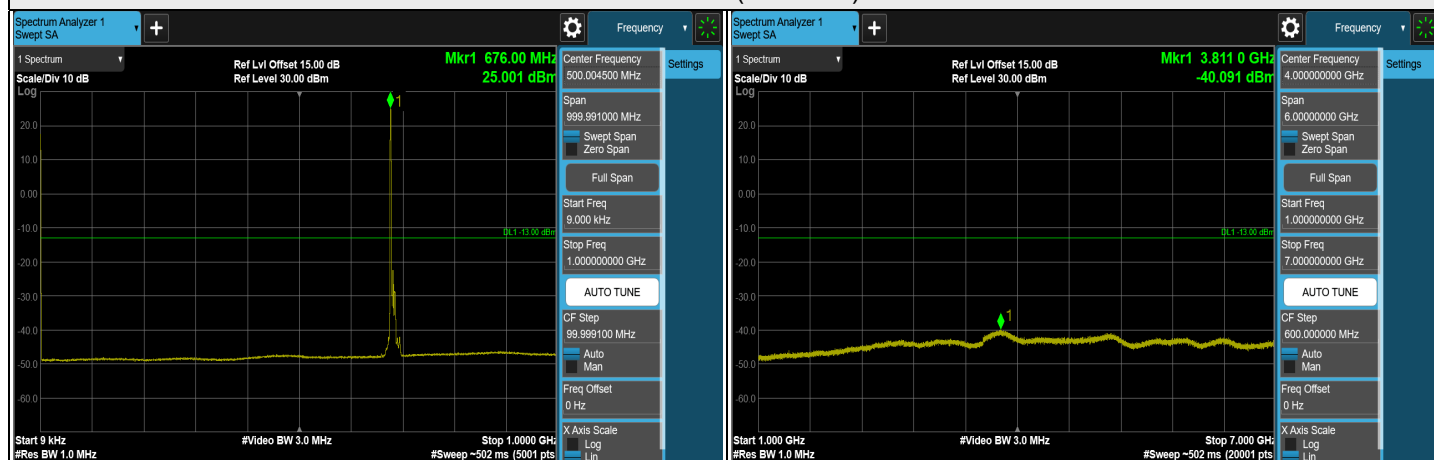




### LTE Band 71, Channel Bandwidth: 10 MHz



CH 133172 (668 MHz)



CH 133297 (680.5 MHz)

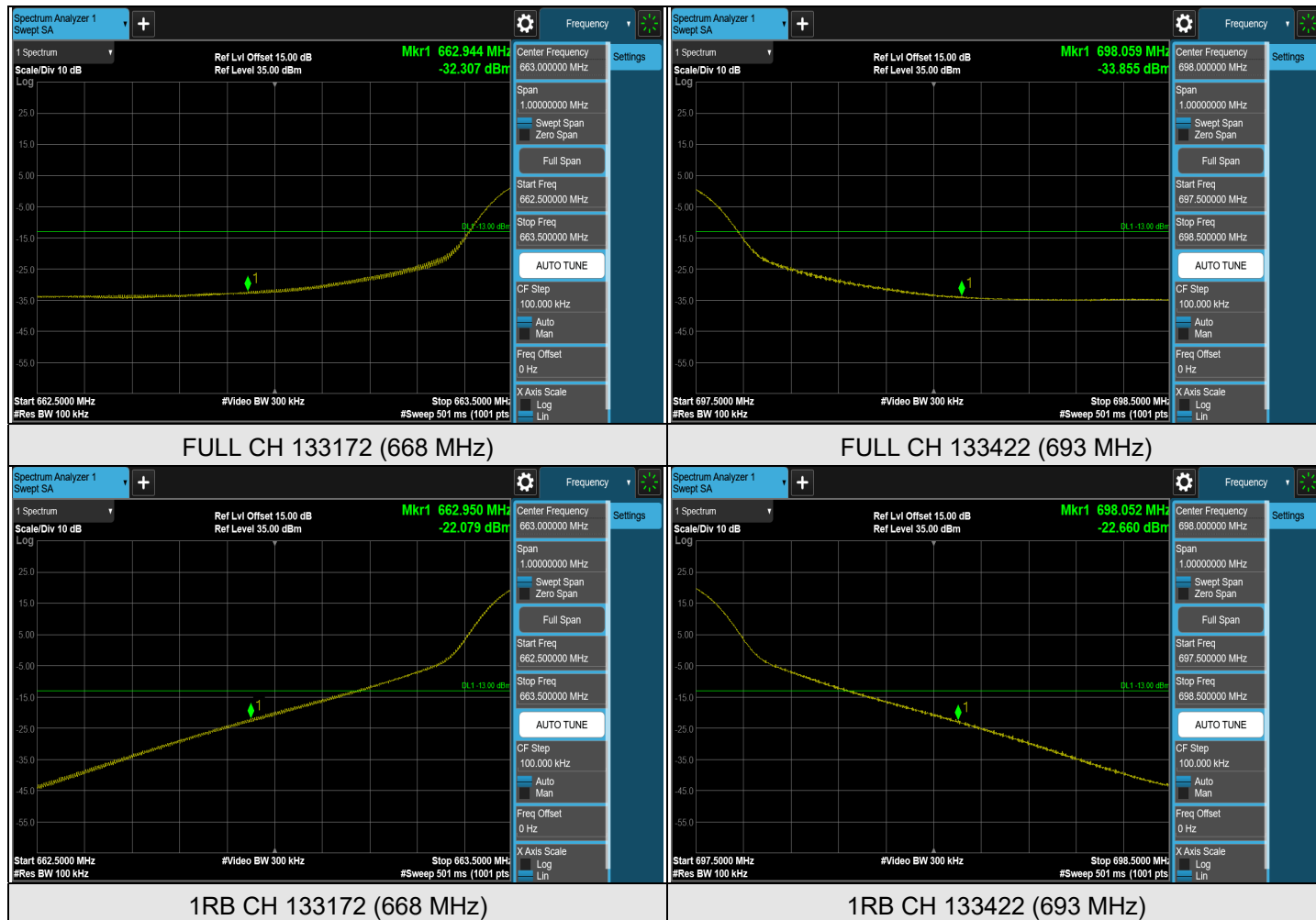


CH 133422 (693 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.



### LTE Band 71, Channel Bandwidth: 10 MHz





### LTE Band 71, Channel Bandwidth: 15 MHz



### CH 133197 (670.5 MHz)



### CH 133297 (680.5 MHz)

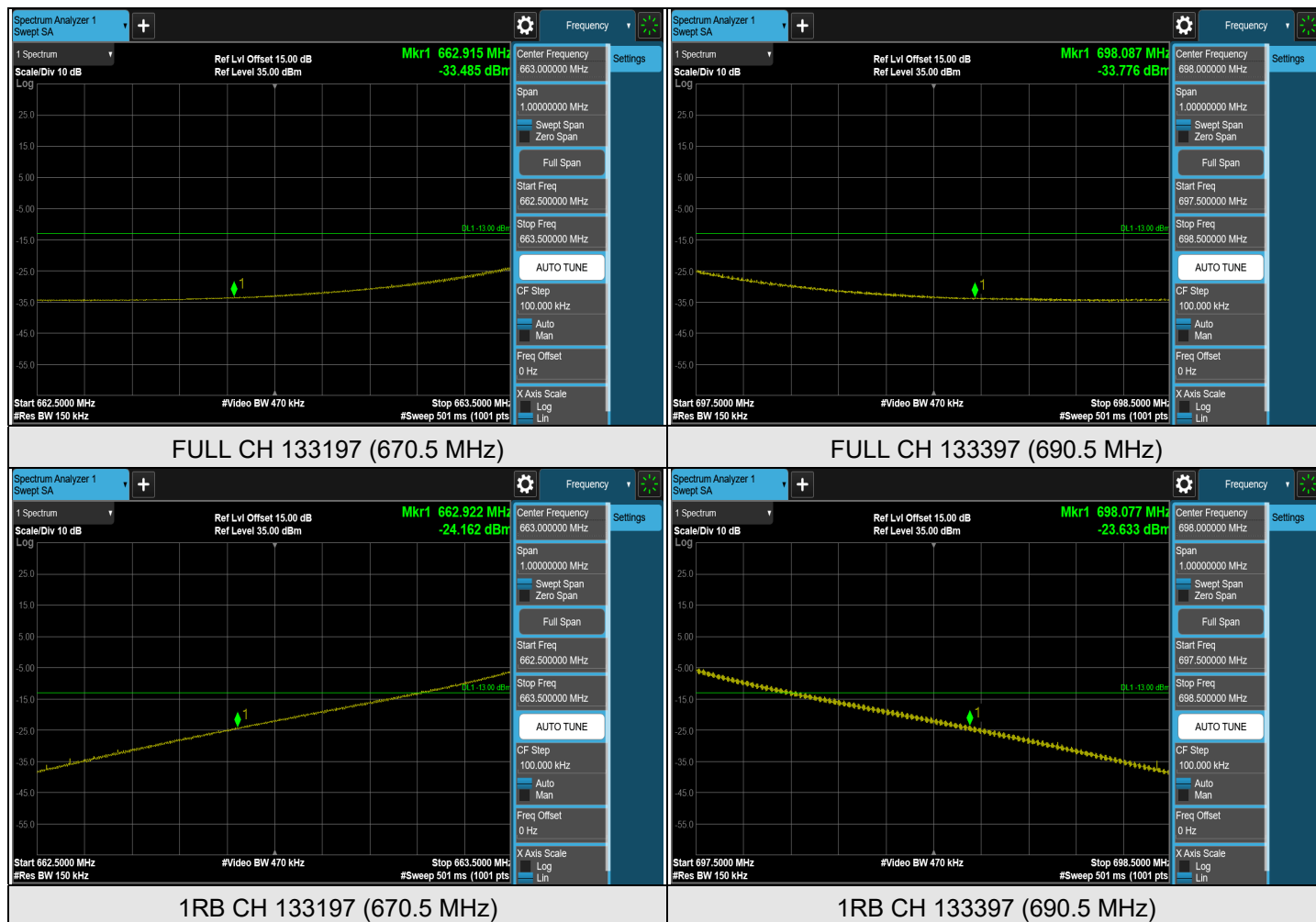


### CH 133397 (690.5 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.



### LTE Band 71, Channel Bandwidth: 15 MHz

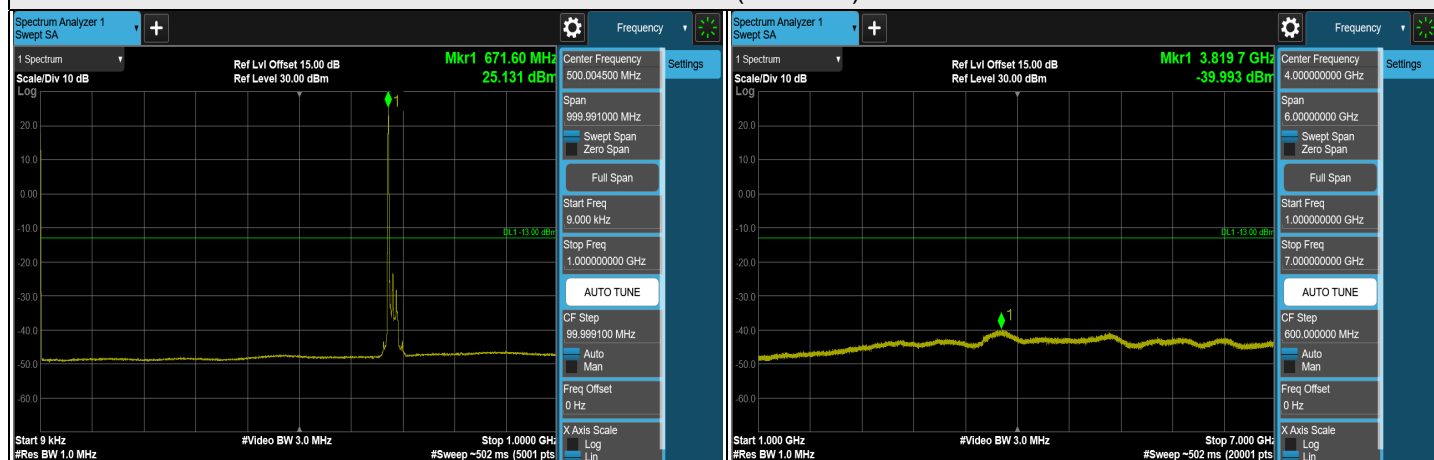




### LTE Band 71, Channel Bandwidth: 20 MHz



### CH 133222 (673 MHz)



### CH 133297 (680.5 MHz)

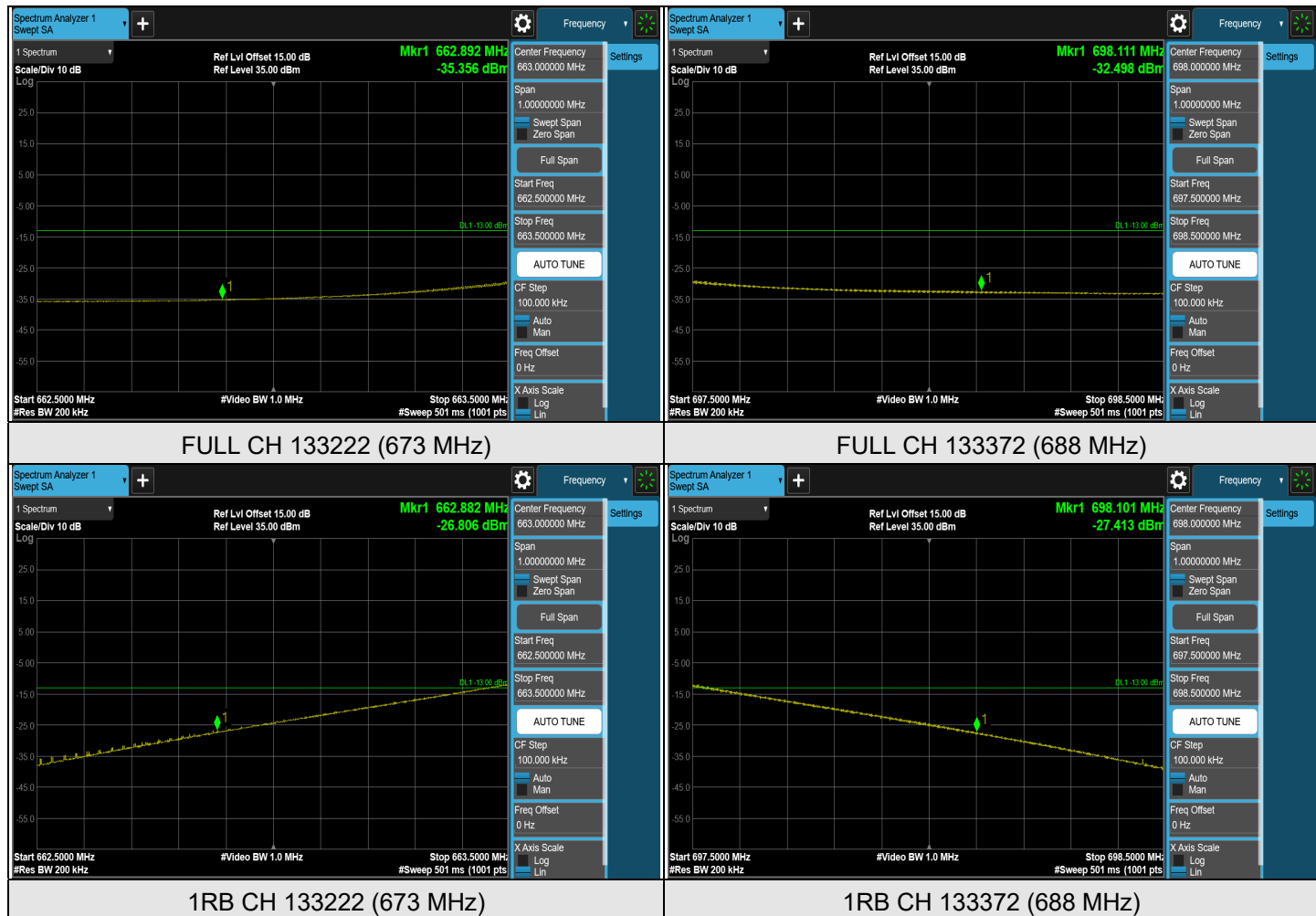


### CH 133372 (688 MHz)

Note: The signal at 9 kHz is IF signal from spectrum analyzer.



### LTE Band 71, Channel Bandwidth: 20 MHz





## 7.6 Radiated Spurious Emissions below 1GHz

### 7.6.1 GSM 850

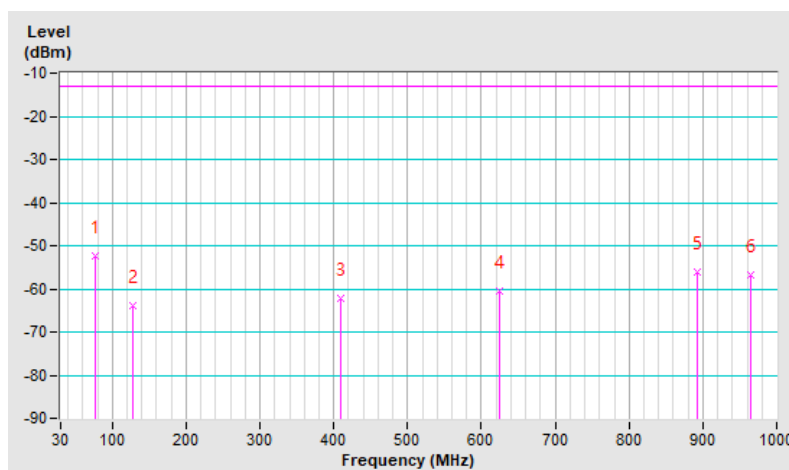
#### With shielding case

<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-52.35	-13.00	-39.35	1.50 H	232	61.25	-113.60
2	127.97	-63.81	-13.00	-50.81	1.00 H	17	47.19	-111.00
3	409.27	-62.07	-13.00	-49.07	1.00 H	9	44.66	-106.73
4	624.61	-60.43	-13.00	-47.43	2.00 H	175	41.72	-102.15
5	893.30	-56.14	-13.00	-43.14	1.50 H	312	42.37	-98.51
6	965.08	-56.66	-13.00	-43.66	2.00 H	235	40.87	-97.53

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

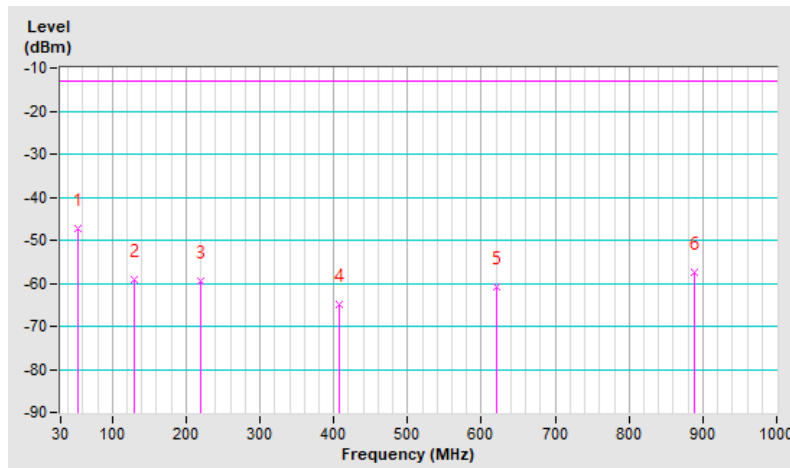


<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-47.17	-13.00	-34.17	1.50 V	18	62.63	-109.80
2	129.91	-59.24	-13.00	-46.24	1.50 V	3	51.58	-110.82
3	219.15	-59.60	-13.00	-46.60	1.50 V	18	53.63	-113.23
4	408.30	-64.80	-13.00	-51.80	1.50 V	349	41.96	-106.76
5	619.76	-60.85	-13.00	-47.85	1.50 V	43	41.39	-102.24
6	889.42	-57.53	-13.00	-44.53	1.50 V	207	41.01	-98.54

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

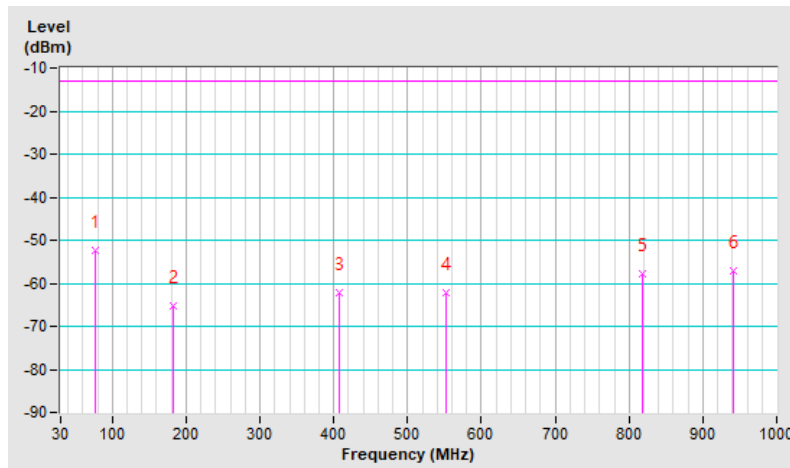


<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-52.39	-13.00	-39.39	2.00 H	164	61.21	-113.60
2	182.29	-65.15	-13.00	-52.15	1.50 H	106	46.55	-111.70
3	407.33	-62.07	-13.00	-49.07	1.00 H	18	44.71	-106.78
4	551.86	-62.08	-13.00	-49.08	1.00 H	215	41.62	-103.70
5	817.64	-57.96	-13.00	-44.96	1.50 H	254	40.93	-98.89
6	941.80	-57.13	-13.00	-44.13	2.00 H	186	40.84	-97.97

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

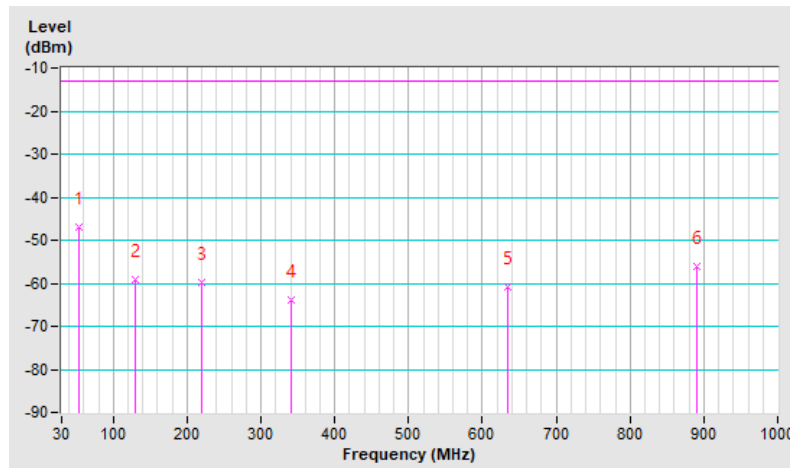


<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-47.06	-13.00	-34.06	1.00 V	313	62.74	-109.80
2	129.91	-59.11	-13.00	-46.11	2.00 V	2	51.71	-110.82
3	219.15	-59.72	-13.00	-46.72	1.50 V	2	53.51	-113.23
4	341.37	-63.99	-13.00	-50.99	1.50 V	180	44.35	-108.34
5	634.31	-60.89	-13.00	-47.89	1.00 V	2	41.07	-101.96
6	891.36	-55.98	-13.00	-42.98	1.00 V	315	42.54	-98.52

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



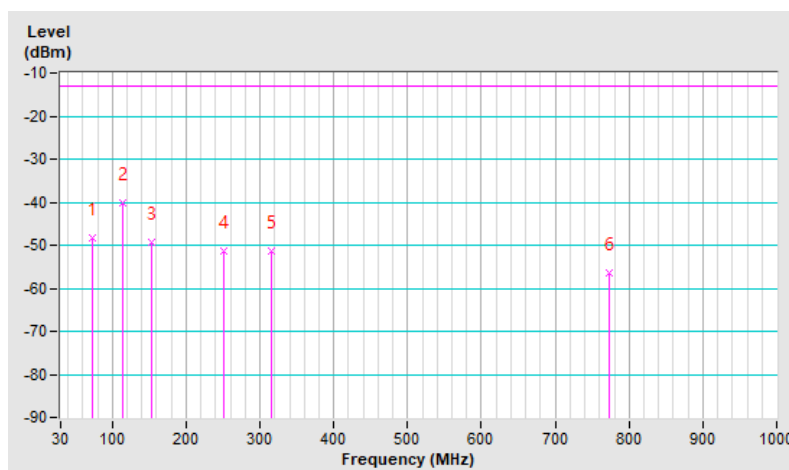
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-48.16	-13.00	-35.16	1.00 H	63	61.56	-109.72
2	114.39	-40.10	-13.00	-27.10	1.50 H	45	69.40	-109.50
3	154.16	-49.16	-13.00	-36.16	1.50 H	63	57.27	-106.43
4	250.19	-51.50	-13.00	-38.50	1.00 H	229	55.61	-107.11
5	315.18	-51.36	-13.00	-38.36	1.00 H	221	53.53	-104.89
6	773.02	-56.35	-13.00	-43.35	1.00 H	168	39.27	-95.62

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

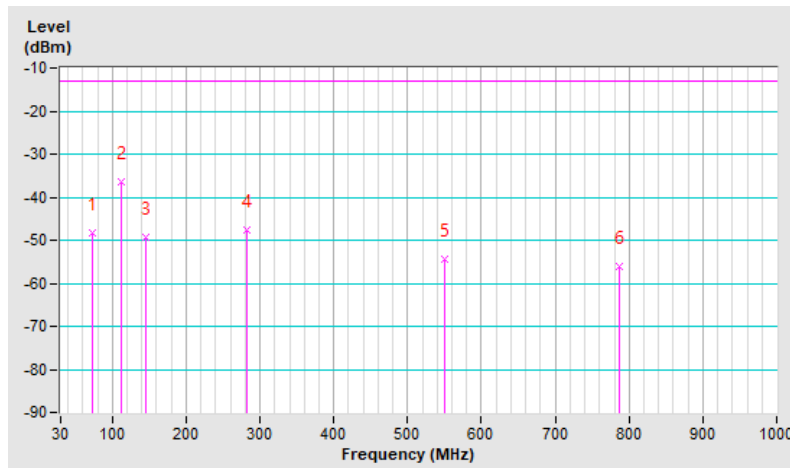


<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-48.33	-13.00	-35.33	1.50 V	57	61.17	-109.50
2	111.48	-36.47	-13.00	-23.47	1.00 V	60	73.29	-109.76
3	144.46	-49.33	-13.00	-36.33	2.00 V	244	57.50	-106.83
4	283.17	-47.50	-13.00	-34.50	1.00 V	204	58.15	-105.65
5	549.92	-54.48	-13.00	-41.48	1.00 V	67	46.35	-100.83
6	787.57	-55.99	-13.00	-42.99	1.00 V	333	39.42	-95.41

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

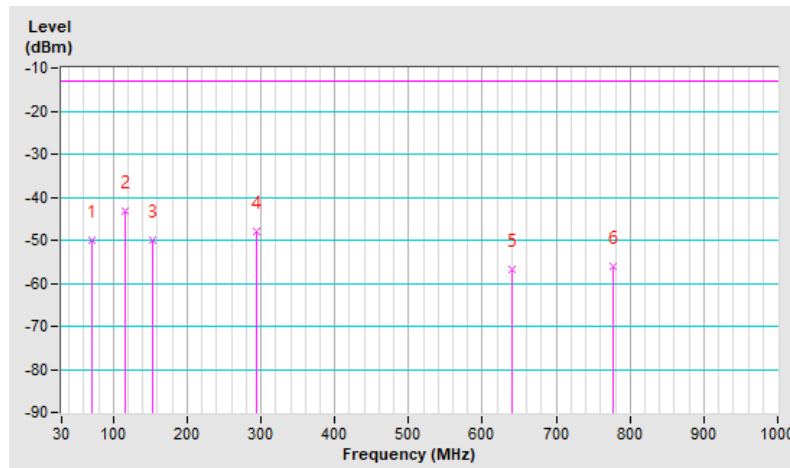


<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	70.74	-49.99	-13.00	-36.99	2.00 H	51	58.97	-108.96
2	116.33	-43.38	-13.00	-30.38	1.00 H	81	65.93	-109.31
3	154.16	-50.05	-13.00	-37.05	2.00 H	71	56.38	-106.43
4	293.84	-47.90	-13.00	-34.90	1.50 H	94	57.55	-105.45
5	641.10	-56.79	-13.00	-43.79	1.00 H	66	41.56	-98.35
6	776.90	-56.04	-13.00	-43.04	1.00 H	6	39.53	-95.57

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

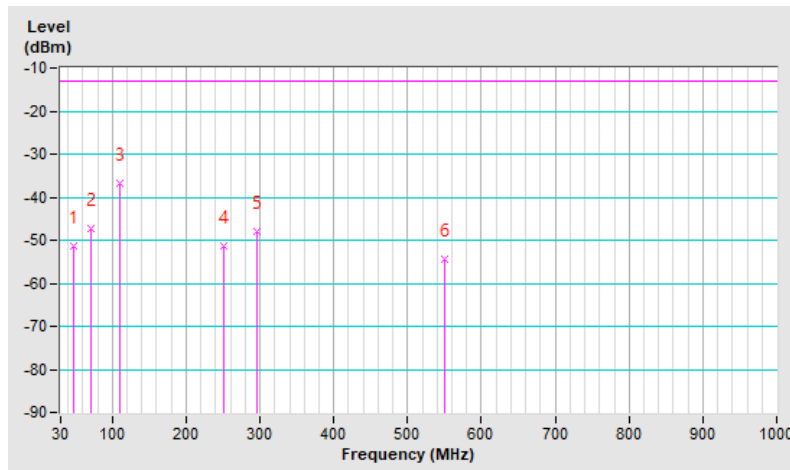


<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.43	-51.51	-13.00	-38.51	1.00 V	52	55.35	-106.86
2	71.71	-47.45	-13.00	-34.45	1.00 V	209	61.78	-109.23
3	110.51	-36.88	-13.00	-23.88	1.50 V	81	72.97	-109.85
4	250.19	-51.41	-13.00	-38.41	1.00 V	207	55.70	-107.11
5	296.75	-47.82	-13.00	-34.82	1.50 V	94	57.55	-105.37
6	549.92	-54.44	-13.00	-41.44	1.00 V	201	46.39	-100.83

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





## 7.6.2 GSM 1900

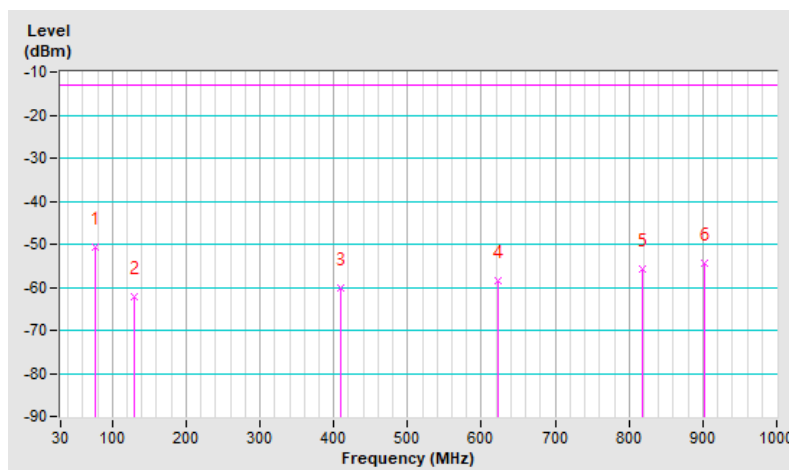
### With shielding case

<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-50.58	-13.00	-37.58	1.00 H	65	60.87	-111.45
2	128.94	-62.34	-13.00	-49.34	1.50 H	225	46.48	-108.82
3	410.24	-60.30	-13.00	-47.30	2.00 H	188	44.25	-104.55
4	622.67	-58.32	-13.00	-45.32	2.00 H	183	41.72	-100.04
5	817.64	-55.82	-13.00	-42.82	1.00 H	52	40.92	-96.74
6	903.00	-54.44	-13.00	-41.44	1.00 H	5	41.85	-96.29

#### Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

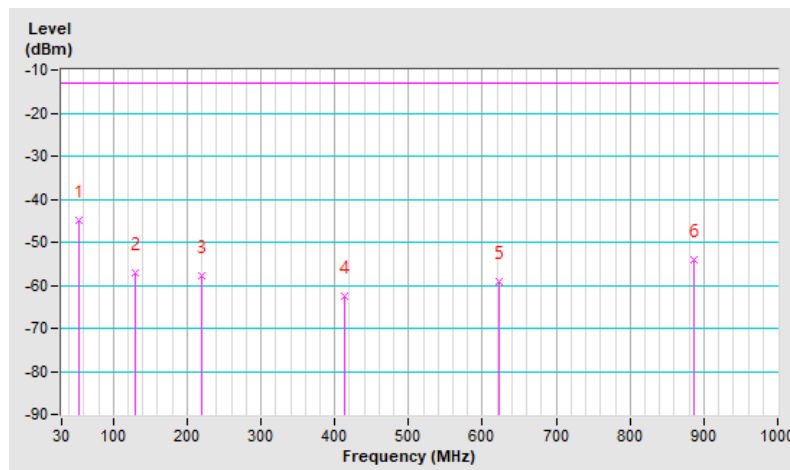


<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-44.91	-13.00	-31.91	1.00 V	4	62.74	-107.65
2	129.91	-57.25	-13.00	-44.25	1.00 V	2	51.42	-108.67
3	220.12	-57.64	-13.00	-44.64	1.50 V	195	53.46	-111.10
4	413.15	-62.56	-13.00	-49.56	1.00 V	116	41.92	-104.48
5	622.67	-59.01	-13.00	-46.01	1.00 V	158	41.03	-100.04
6	886.51	-54.17	-13.00	-41.17	2.00 V	23	42.27	-96.44

**Remarks:**

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

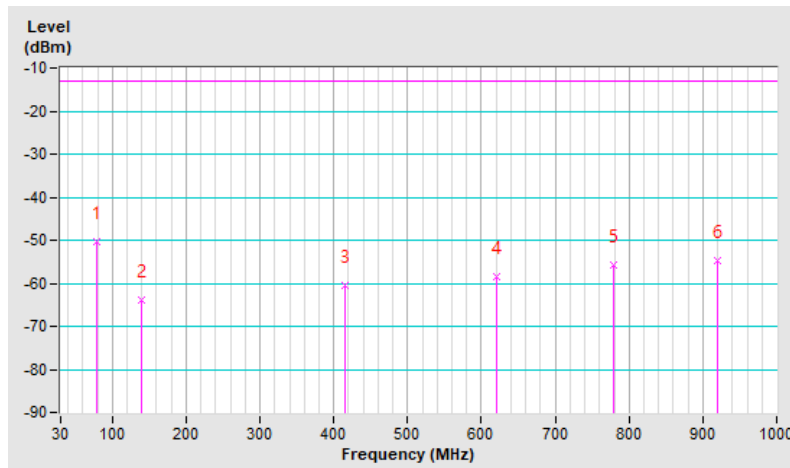


<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-50.39	-13.00	-37.39	1.50 H	218	61.29	-111.68
2	139.61	-63.89	-13.00	-50.89	1.00 H	216	44.16	-108.05
3	416.06	-60.44	-13.00	-47.44	1.00 H	291	43.94	-104.38
4	620.73	-58.40	-13.00	-45.40	1.00 H	108	41.68	-100.08
5	779.81	-55.66	-13.00	-42.66	1.50 H	8	41.16	-96.82
6	920.46	-54.82	-13.00	-41.82	2.00 H	18	41.25	-96.07

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

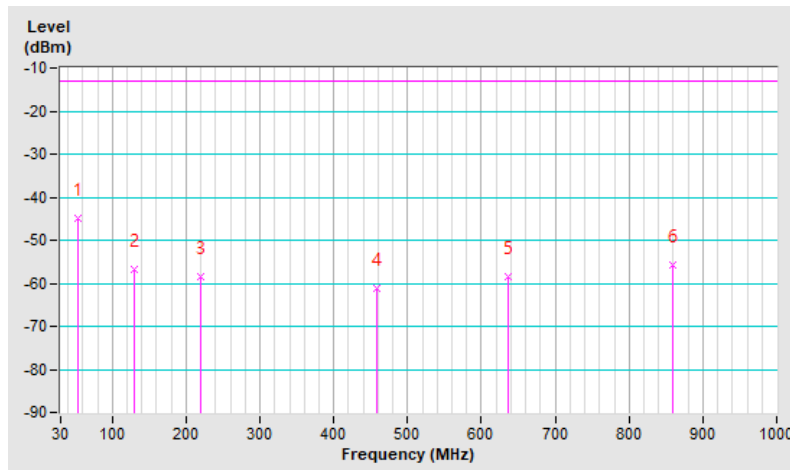


<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-45.03	-13.00	-32.03	1.00 V	2	62.62	-107.65
2	129.91	-56.91	-13.00	-43.91	1.00 V	346	51.76	-108.67
3	220.12	-58.49	-13.00	-45.49	1.00 V	317	52.61	-111.10
4	458.74	-61.26	-13.00	-48.26	2.00 V	286	41.86	-103.12
5	635.28	-58.37	-13.00	-45.37	1.50 V	333	41.41	-99.78
6	858.38	-55.69	-13.00	-42.69	1.00 V	91	41.10	-96.79

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



Without shielding case (only MCU, PMIC, Crystal, EMMC component)

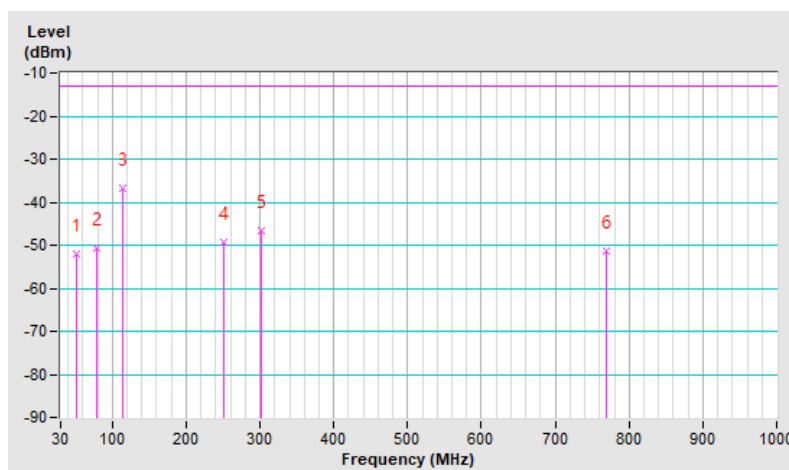
RF Mode	GSM 1900	Channel	CH 661 : 1880.0 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	1 MHz/3 MHz (RMS)
Input Power	4.7 Vdc	Environmental Conditions	23°C, 67% RH
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	52.31	-52.13	-13.00	-39.13	1.00 H	78	52.61	-104.74
2	78.50	-50.67	-13.00	-37.67	1.50 H	55	58.03	-108.70
3	113.42	-36.70	-13.00	-23.70	1.00 H	49	70.71	-107.41
4	250.19	-49.28	-13.00	-36.28	2.00 H	210	55.68	-104.96
5	301.60	-46.59	-13.00	-33.59	1.00 H	89	56.50	-103.09
6	770.11	-51.36	-13.00	-38.36	1.00 H	329	42.15	-93.51

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

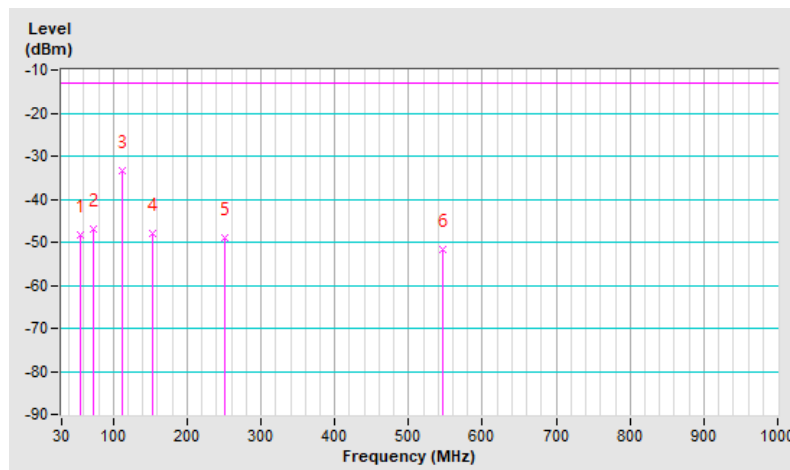


<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	56.19	-48.35	-13.00	-35.35	1.50 V	99	56.60	-104.95
2	73.65	-46.84	-13.00	-33.84	1.00 V	76	60.73	-107.57
3	111.48	-33.48	-13.00	-20.48	2.00 V	60	74.13	-107.61
4	153.19	-48.04	-13.00	-35.04	1.00 V	86	56.40	-104.44
5	250.19	-48.88	-13.00	-35.88	1.00 V	218	56.08	-104.96
6	546.04	-51.70	-13.00	-38.70	1.00 V	202	47.04	-98.74

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



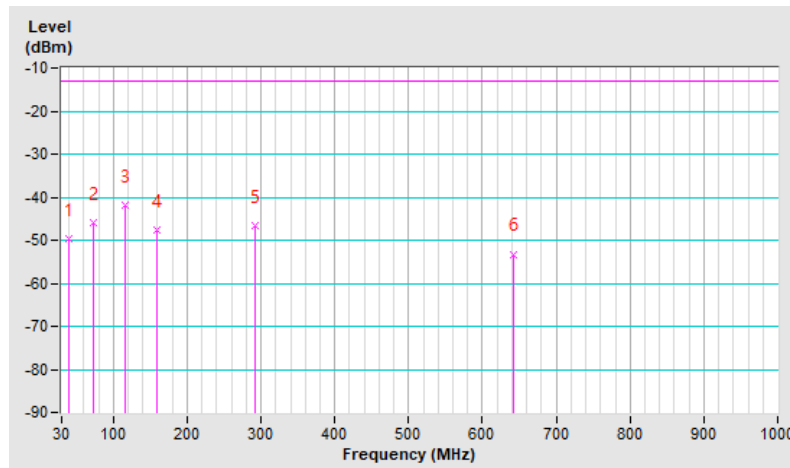
<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	40.67	-49.82	-13.00	-36.82	2.00 H	129	55.45	-105.27
2	72.68	-45.80	-13.00	-32.80	1.00 H	50	61.55	-107.35
3	116.33	-41.83	-13.00	-28.83	1.50 H	64	65.33	-107.16
4	159.01	-47.64	-13.00	-34.64	1.50 H	93	56.61	-104.25
5	292.87	-46.46	-13.00	-33.46	1.00 H	40	56.87	-103.33
6	643.04	-53.22	-13.00	-40.22	1.00 H	172	42.96	-96.18

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

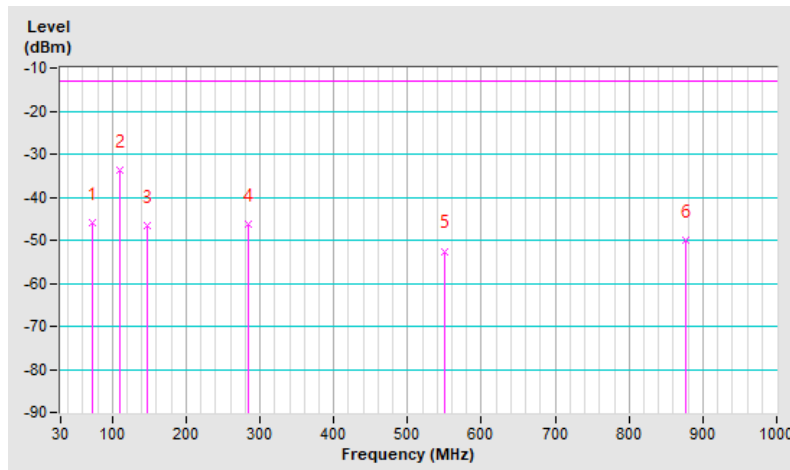


<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-45.77	-13.00	-32.77	1.00 V	78	61.58	-107.35
2	110.51	-33.87	-13.00	-20.87	2.00 V	73	73.83	-107.70
3	146.40	-46.69	-13.00	-33.69	1.00 V	68	57.84	-104.53
4	284.14	-46.13	-13.00	-33.13	1.50 V	205	57.35	-103.48
5	549.92	-52.54	-13.00	-39.54	1.00 V	205	46.14	-98.68
6	876.81	-49.94	-13.00	-36.94	1.00 V	311	41.89	-91.83

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





### 7.6.3 WCDMA Band 2

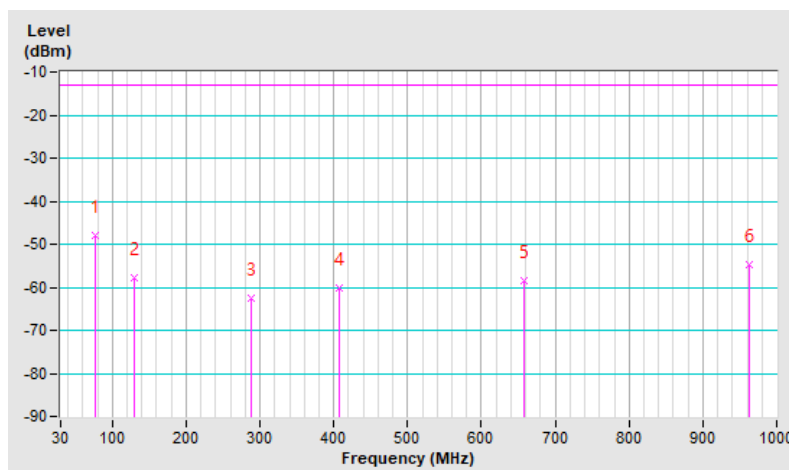
#### With shielding case

<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-48.04	-13.00	-35.04	1.00 H	56	63.41	-111.45
2	129.91	-57.66	-13.00	-44.66	2.00 H	202	51.01	-108.67
3	288.02	-62.41	-13.00	-49.41	1.50 H	189	44.88	-107.29
4	408.30	-60.17	-13.00	-47.17	2.00 H	337	44.44	-104.61
5	658.56	-58.52	-13.00	-45.52	2.00 H	18	41.07	-99.59
6	963.14	-54.69	-13.00	-41.69	1.50 H	182	40.74	-95.43

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

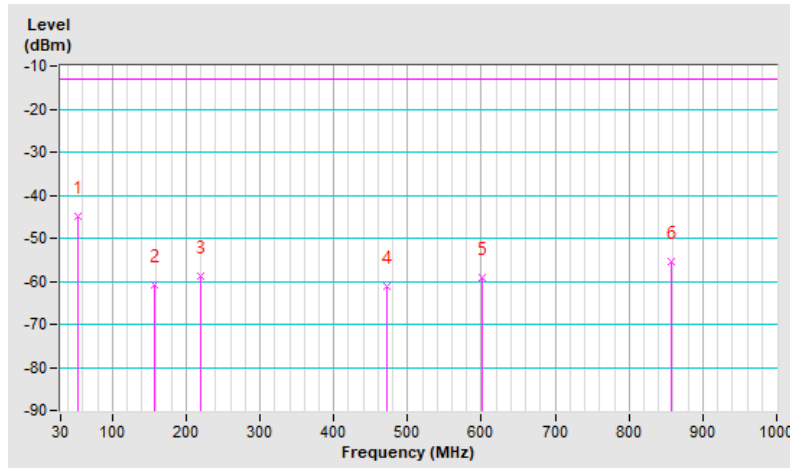


<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-44.80	-13.00	-31.80	1.50 V	356	62.85	-107.65
2	157.07	-60.87	-13.00	-47.87	1.00 V	67	46.81	-107.68
3	220.12	-58.83	-13.00	-45.83	1.00 V	354	52.27	-111.10
4	472.32	-61.25	-13.00	-48.25	1.50 V	99	41.56	-102.81
5	600.36	-59.19	-13.00	-46.19	2.00 V	193	41.44	-100.63
6	857.41	-55.50	-13.00	-42.50	1.00 V	337	41.30	-96.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



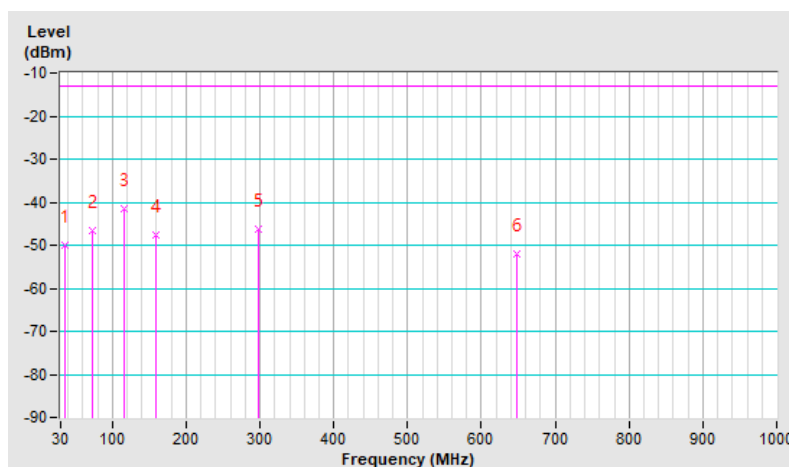
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	35.82	-49.97	-13.00	-36.97	2.00 H	108	55.89	-105.86
2	73.65	-46.65	-13.00	-33.65	1.00 H	43	60.92	-107.57
3	116.33	-41.41	-13.00	-28.41	1.50 H	219	65.75	-107.16
4	159.01	-47.49	-13.00	-34.49	1.50 H	92	56.76	-104.25
5	297.72	-46.36	-13.00	-33.36	1.00 H	100	56.83	-103.19
6	647.89	-52.19	-13.00	-39.19	1.00 H	192	43.95	-96.14

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

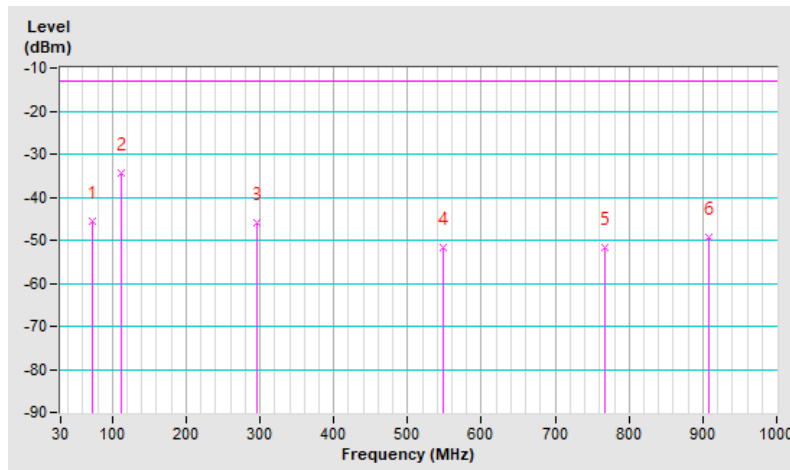


<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880.0 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-45.65	-13.00	-32.65	1.00 V	215	61.92	-107.57
2	112.45	-34.38	-13.00	-21.38	1.50 V	39	73.11	-107.49
3	295.78	-45.77	-13.00	-32.77	1.00 V	105	57.49	-103.26
4	547.98	-51.74	-13.00	-38.74	2.00 V	204	46.97	-98.71
5	767.20	-51.80	-13.00	-38.80	1.00 V	305	41.81	-93.61
6	908.82	-49.46	-13.00	-36.46	1.00 V	292	41.53	-90.99

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



### 7.6.4 WCDMA Band 4

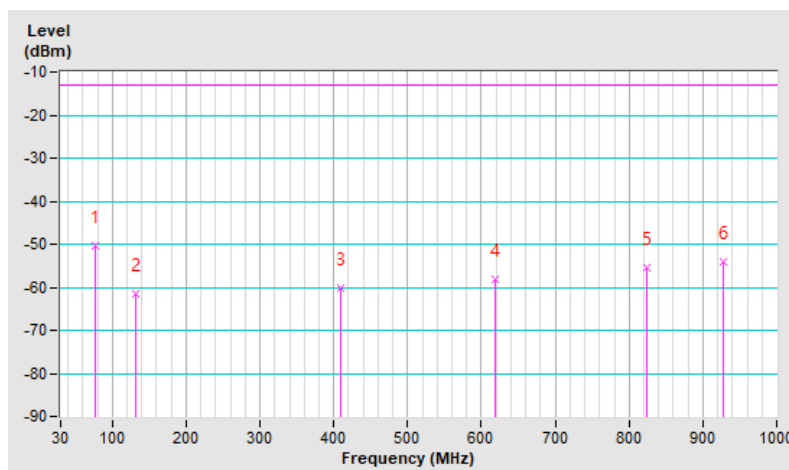
#### With shielding case

<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-50.17	-13.00	-37.17	1.00 H	274	61.28	-111.45
2	130.88	-61.51	-13.00	-48.51	1.00 H	71	47.15	-108.66
3	410.24	-60.08	-13.00	-47.08	1.50 H	240	44.47	-104.55
4	617.82	-58.29	-13.00	-45.29	2.00 H	88	41.83	-100.12
5	823.46	-55.44	-13.00	-42.44	2.00 H	26	41.29	-96.73
6	927.25	-54.06	-13.00	-41.06	1.50 H	223	41.94	-96.00

#### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

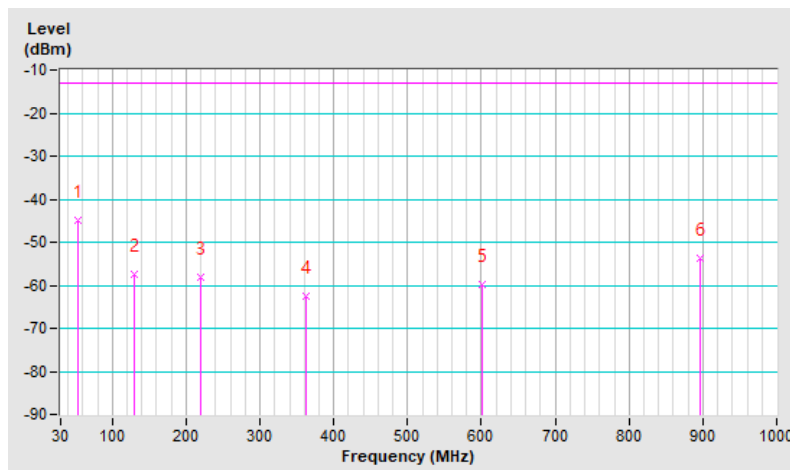


<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-44.90	-13.00	-31.90	1.00 V	337	62.75	-107.65
2	128.94	-57.30	-13.00	-44.30	1.50 V	327	51.52	-108.82
3	220.12	-58.28	-13.00	-45.28	2.00 V	2	52.82	-111.10
4	361.74	-62.64	-13.00	-49.64	1.00 V	2	43.06	-105.70
5	600.36	-59.82	-13.00	-46.82	1.00 V	44	40.81	-100.63
6	897.18	-53.89	-13.00	-40.89	1.50 V	248	42.46	-96.35

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



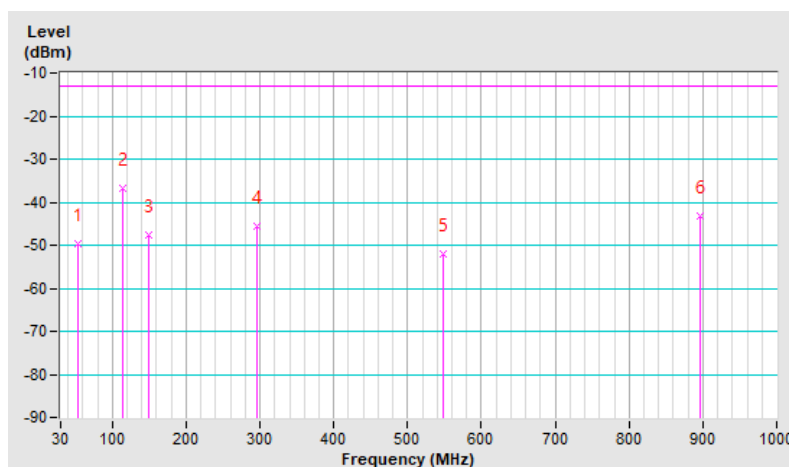
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	54.25	-49.75	-13.00	-36.75	1.00 H	92	55.22	-104.97
2	113.42	-36.85	-13.00	-23.85	2.00 H	71	70.56	-107.41
3	148.34	-47.71	-13.00	-34.71	1.00 H	74	56.85	-104.56
4	296.75	-45.72	-13.00	-32.72	1.50 H	90	57.50	-103.22
5	547.98	-51.88	-13.00	-38.88	1.50 H	205	46.83	-98.71
6	897.18	-43.15	-13.00	-30.15	1.00 H	189	48.25	-91.40

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

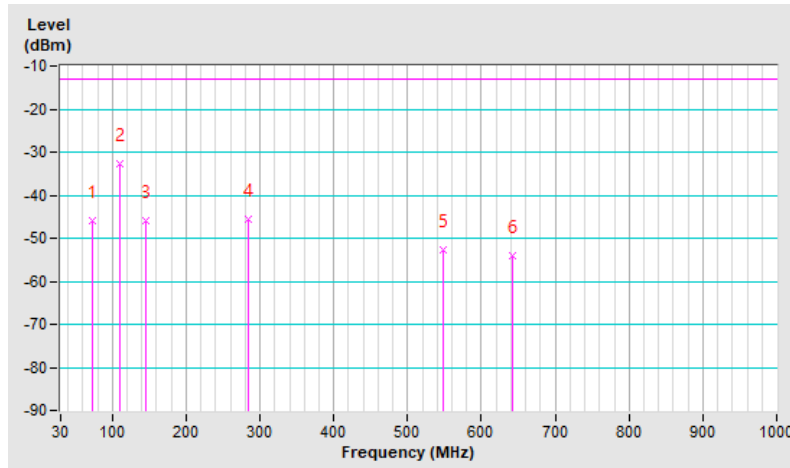


<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-45.98	-13.00	-32.98	1.50 V	37	61.37	-107.35
2	<b>110.51</b>	<b>-32.71</b>	<b>-13.00</b>	<b>-19.71</b>	<b>1.00 V</b>	<b>66</b>	<b>74.99</b>	<b>-107.70</b>
3	145.43	-45.98	-13.00	-32.98	1.00 V	77	58.63	-104.61
4	284.14	-45.48	-13.00	-32.48	1.50 V	205	58.00	-103.48
5	548.95	-52.57	-13.00	-39.57	1.00 V	208	46.12	-98.69
6	642.07	-53.90	-13.00	-40.90	1.00 V	66	42.29	-96.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





## 7.6.5 WCDMA Band 5

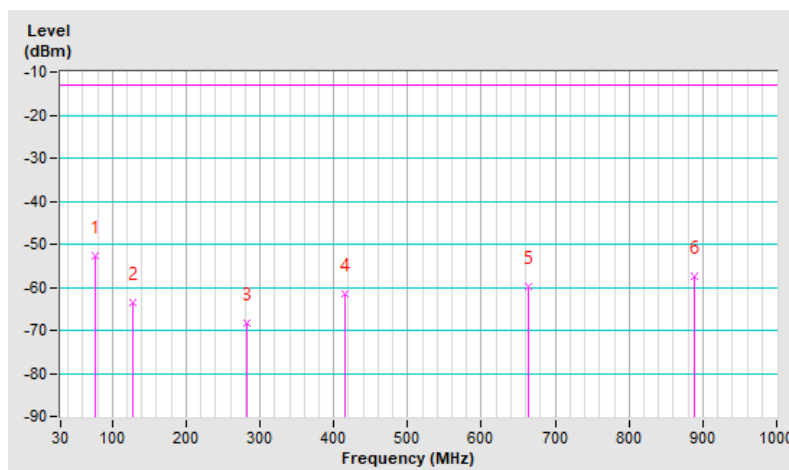
## With shielding case

<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-52.82	-13.00	-39.82	1.00 H	246	60.78	-113.60
2	127.97	-63.46	-13.00	-50.46	1.50 H	73	47.54	-111.00
3	283.17	-68.15	-13.00	-55.15	1.00 H	169	41.41	-109.56
4	415.09	-61.62	-13.00	-48.62	1.00 H	22	44.95	-106.57
5	664.38	-59.76	-13.00	-46.76	1.50 H	44	41.88	-101.64
6	889.42	-57.47	-13.00	-44.47	2.00 H	30	41.07	-98.54

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

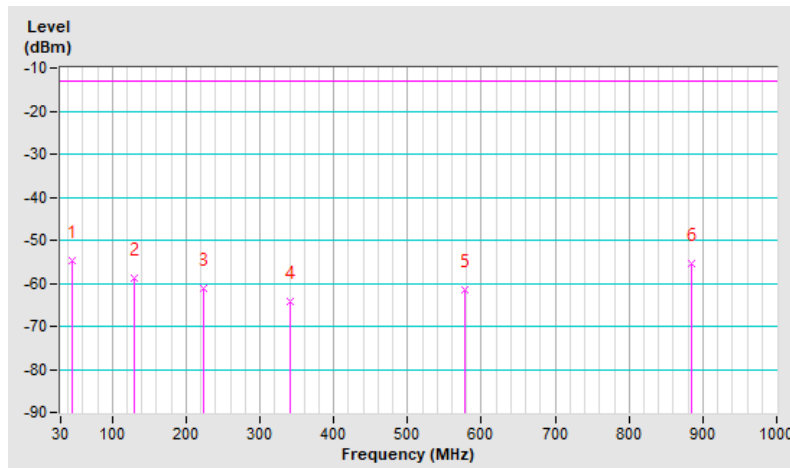


<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	46.49	-54.80	-13.00	-41.80	1.50 V	49	54.84	-109.64
2	129.91	-58.92	-13.00	-45.92	1.50 V	30	51.90	-110.82
3	223.03	-61.20	-13.00	-48.20	1.50 V	2	52.10	-113.30
4	341.37	-64.10	-13.00	-51.10	1.50 V	76	44.24	-108.34
5	578.05	-61.53	-13.00	-48.53	1.50 V	2	41.72	-103.25
6	885.54	-55.34	-13.00	-42.34	1.50 V	214	43.26	-98.60

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



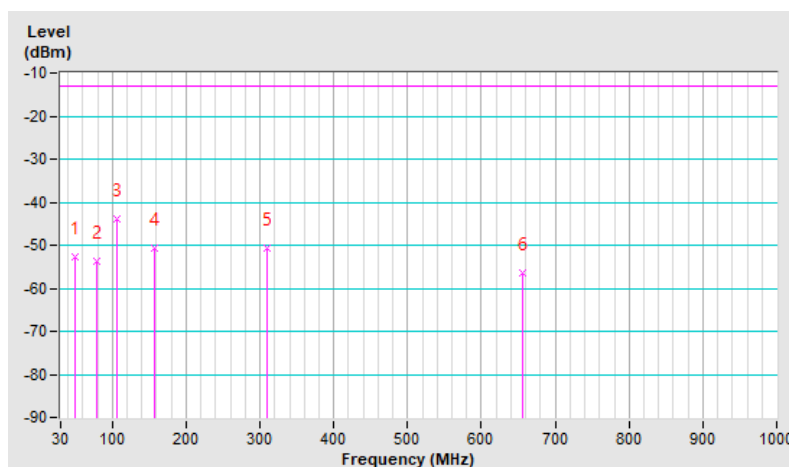
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	50.37	-52.75	-13.00	-39.75	2.00 H	88	54.14	-106.89
2	79.47	-53.77	-13.00	-40.77	1.00 H	57	57.30	-111.07
3	106.63	-43.80	-13.00	-30.80	1.50 H	65	66.45	-110.25
4	158.04	-50.53	-13.00	-37.53	1.00 H	75	55.99	-106.52
5	309.36	-50.61	-13.00	-37.61	1.50 H	220	54.44	-105.05
6	655.65	-56.61	-13.00	-43.61	1.00 H	60	41.63	-98.24

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

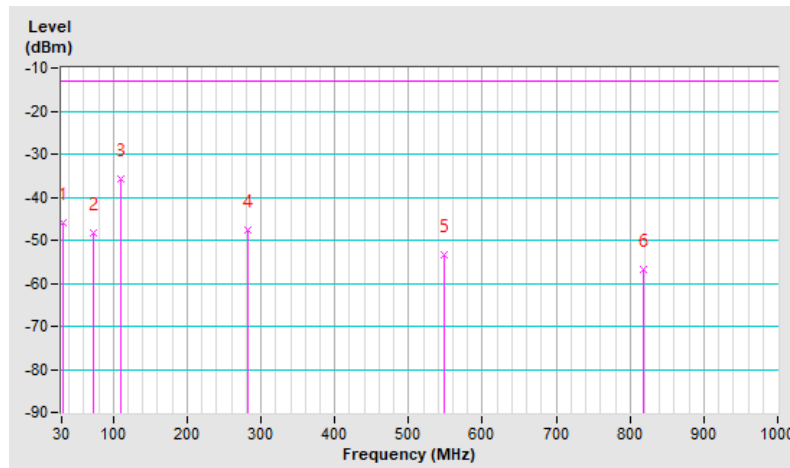


<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.91	-46.09	-13.00	-33.09	1.00 V	49	62.35	-108.44
2	73.65	-48.23	-13.00	-35.23	1.00 V	206	61.49	-109.72
3	110.51	-35.92	-13.00	-22.92	1.50 V	99	73.93	-109.85
4	283.17	-47.77	-13.00	-34.77	1.00 V	211	57.88	-105.65
5	548.95	-53.34	-13.00	-40.34	1.00 V	201	47.50	-100.84
6	818.61	-56.88	-13.00	-43.88	1.00 V	112	38.10	-94.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6.6 LTE Band 2

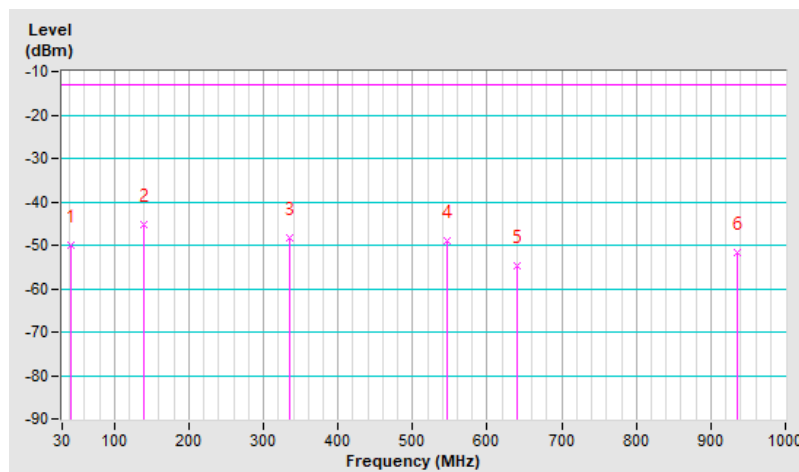
With shielding case

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	21.3°C, 69.7% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-49.88	-13.00	-36.88	1.00 H	16	57.71	-107.59
2	138.64	-45.12	-13.00	-32.12	2.00 H	156	62.95	-108.07
3	335.55	-48.31	-13.00	-35.31	1.00 H	200	57.91	-106.22
4	547.01	-48.83	-13.00	-35.83	1.50 H	186	52.73	-101.56
5	640.13	-54.87	-13.00	-41.87	1.00 H	18	44.79	-99.66
6	935.01	-51.62	-13.00	-38.62	2.00 H	321	44.36	-95.98

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

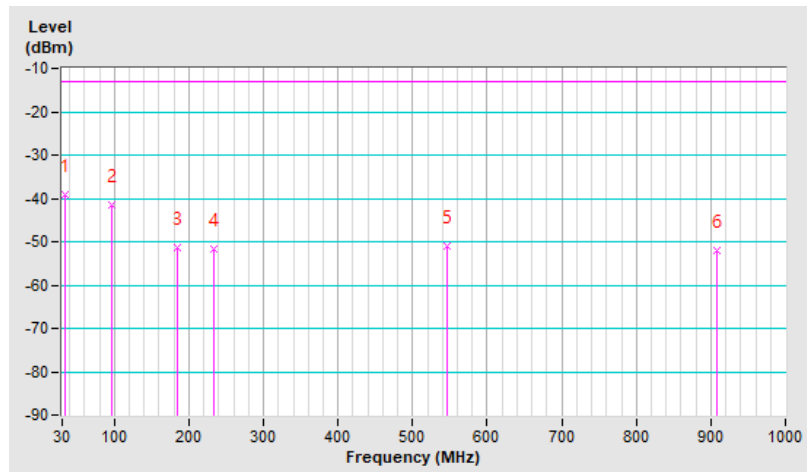


<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	21.3°C, 69.7% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-39.27	-13.00	-26.27	2.00 V	18	68.73	-108.00
2	96.93	-41.50	-13.00	-28.50	1.00 V	216	70.88	-112.38
3	184.23	-51.36	-13.00	-38.36	1.50 V	332	58.42	-109.78
4	233.70	-51.65	-13.00	-38.65	2.00 V	190	58.21	-109.86
5	546.04	-51.02	-13.00	-38.02	1.00 V	184	50.54	-101.56
6	907.85	-52.16	-13.00	-39.16	1.50 V	18	44.03	-96.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



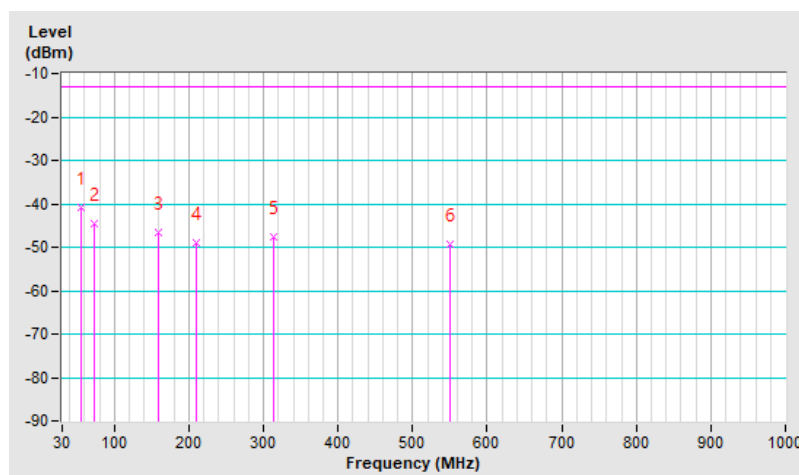
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	55.22	-40.95	-13.00	-27.95	1.00 H	16	63.90	-104.85
2	72.68	-44.51	-13.00	-31.51	1.49 H	49	62.84	-107.35
3	159.01	-46.68	-13.00	-33.68	1.99 H	86	57.57	-104.25
4	209.45	-49.06	-13.00	-36.06	1.49 H	70	58.15	-107.21
5	313.24	-47.54	-13.00	-34.54	1.00 H	214	55.25	-102.79
6	549.92	-49.21	-13.00	-36.21	1.49 H	219	49.47	-98.68

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

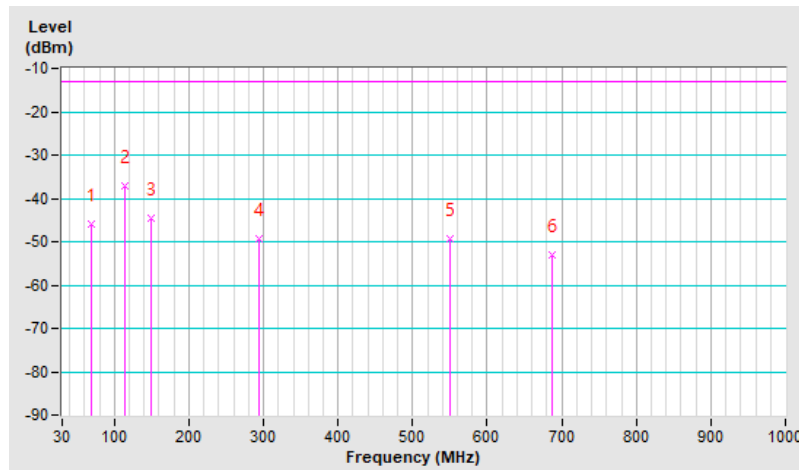


<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	69.77	-45.93	-13.00	-32.93	1.00 V	128	60.70	-106.63
2	114.39	-37.16	-13.00	-24.16	1.00 V	226	70.19	-107.35
3	149.31	-44.63	-13.00	-31.63	1.00 V	76	59.84	-104.47
4	293.84	-49.37	-13.00	-36.37	1.00 V	107	53.93	-103.30
5	550.89	-49.34	-13.00	-36.34	1.00 V	47	49.32	-98.66
6	687.66	-52.97	-13.00	-39.97	1.00 V	5	42.69	-95.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





7.6.7 LTE Band 4

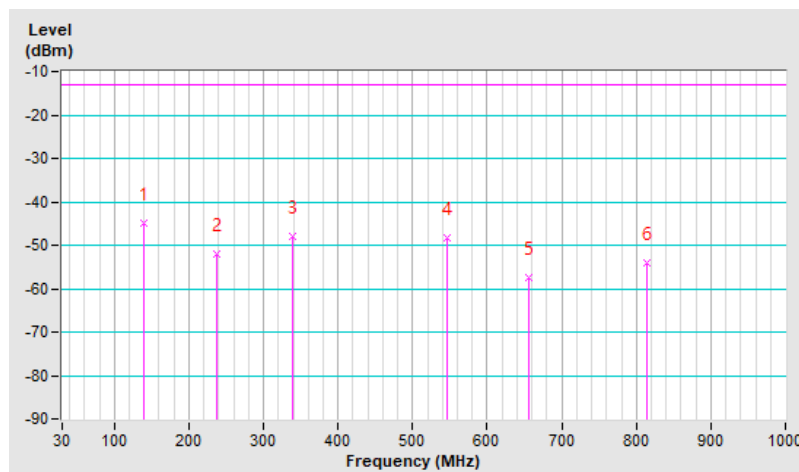
With shielding case

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	21.3°C, 69.7% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	139.61	-44.92	-13.00	-31.92	2.00 H	155	63.13	-108.05
2	236.61	-51.93	-13.00	-38.93	1.00 H	141	57.58	-109.51
3	339.43	-48.11	-13.00	-35.11	1.00 H	217	58.08	-106.19
4	546.04	-48.28	-13.00	-35.28	2.00 H	183	53.28	-101.56
5	656.62	-57.42	-13.00	-44.42	1.00 H	244	42.17	-99.59
6	813.76	-53.97	-13.00	-40.97	1.50 H	18	42.84	-96.81

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

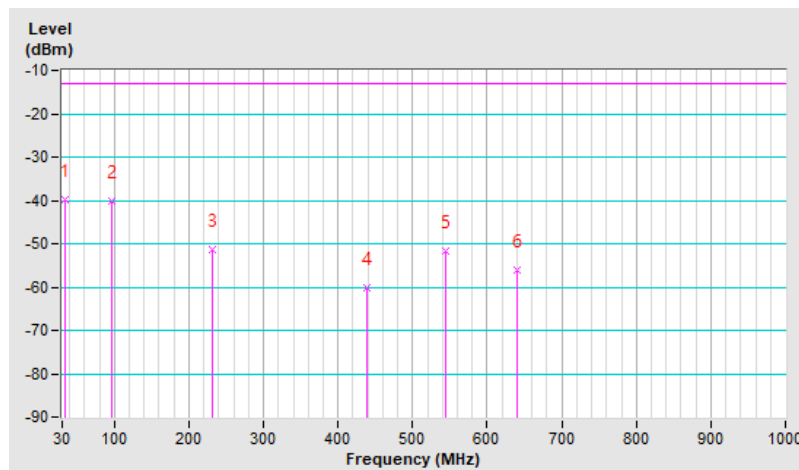


<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	21.3°C, 69.7% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-39.70	-13.00	-26.70	1.50 V	105	68.30	-108.00
2	96.93	-40.19	-13.00	-27.19	1.00 V	217	72.19	-112.38
3	230.79	-51.38	-13.00	-38.38	2.00 V	176	58.94	-110.32
4	439.34	-60.20	-13.00	-47.20	1.00 V	204	43.41	-103.61
5	545.07	-51.64	-13.00	-38.64	2.00 V	176	49.91	-101.55
6	640.13	-56.27	-13.00	-43.27	1.50 V	148	43.39	-99.66

**Remarks:**

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



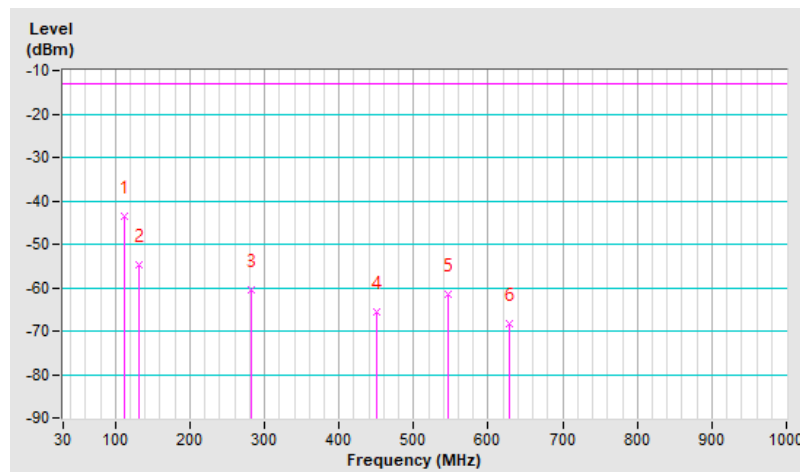
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	111.48	-43.57	-13.00	-30.57	1.00 H	72	64.04	-107.61
2	131.85	-54.80	-13.00	-41.80	1.50 H	90	50.92	-105.72
3	283.17	-60.48	-13.00	-47.48	2.00 H	211	43.02	-103.50
4	450.01	-65.74	-13.00	-52.74	1.50 H	150	34.42	-100.16
5	547.01	-61.38	-13.00	-48.38	1.00 H	211	37.34	-98.72
6	627.52	-68.17	-13.00	-55.17	1.50 H	19	28.35	-96.52

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



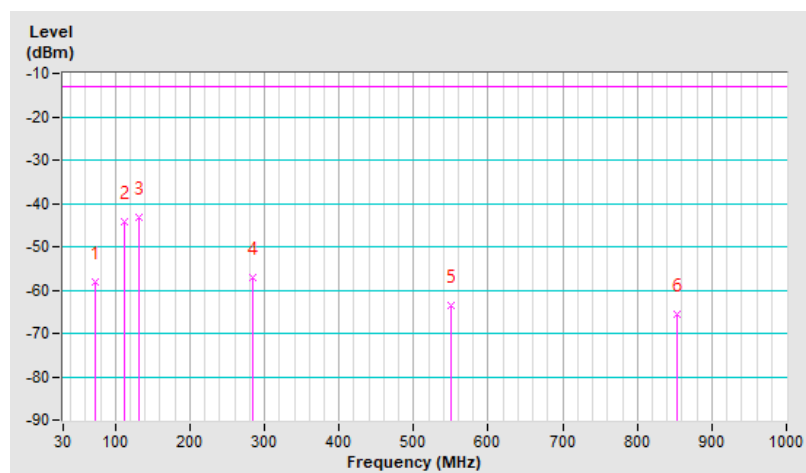
<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-58.27	-13.00	-45.27	2.00 V	204	49.30	-107.57
2	111.48	-44.36	-13.00	-31.36	1.00 V	67	63.25	-107.61
3	130.88	-43.20	-13.00	-30.20	1.50 V	136	62.57	-105.77
4	284.14	-57.10	-13.00	-44.10	1.00 V	199	46.38	-103.48
5	549.92	-63.72	-13.00	-50.72	2.00 V	209	34.96	-98.68
6	852.56	-65.54	-13.00	-52.54	1.00 V	36	26.77	-92.31

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.6.8 LTE Band 5

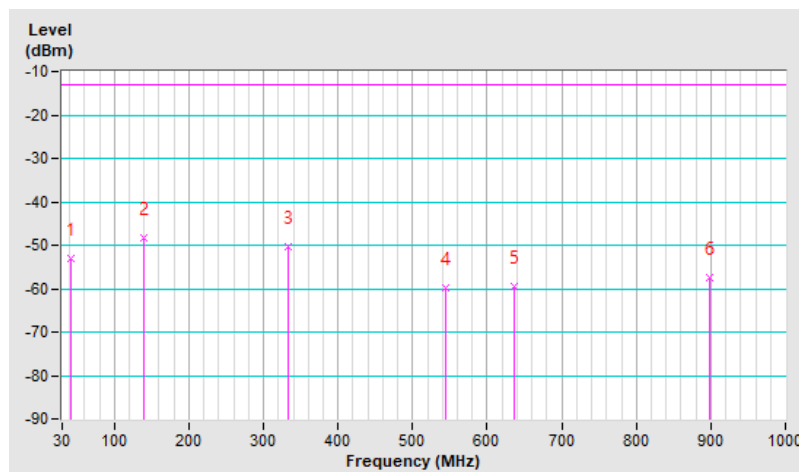
## With shielding case

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-53.17	-13.00	-40.17	2.00 H	49	56.57	-109.74
2	139.61	-48.36	-13.00	-35.36	1.00 H	165	61.84	-110.20
3	333.61	-50.33	-13.00	-37.33	1.50 H	214	58.06	-108.39
4	544.10	-59.69	-13.00	-46.69	1.00 H	126	44.02	-103.71
5	637.22	-59.60	-13.00	-46.60	1.00 H	126	42.29	-101.89
6	898.15	-57.44	-13.00	-44.44	2.00 H	188	41.05	-98.49

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



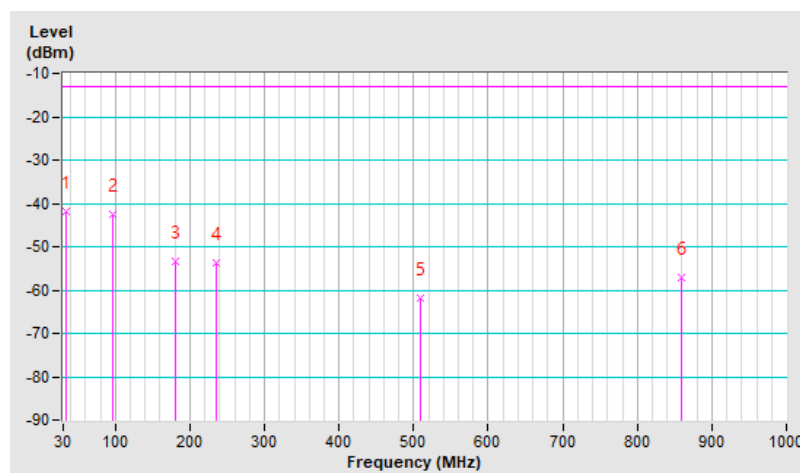
<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	21.3°C, 69.7% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-42.00	-13.00	-29.00	1.50 V	112	68.15	-110.15
2	96.93	-42.45	-13.00	-29.45	1.00 V	195	72.08	-114.53
3	180.35	-53.52	-13.00	-40.52	2.00 V	131	57.99	-111.51
4	235.64	-53.86	-13.00	-40.86	1.00 V	187	57.89	-111.75
5	509.18	-61.91	-13.00	-48.91	2.00 V	153	42.10	-104.01
6	859.35	-57.11	-13.00	-44.11	1.50 V	193	41.83	-98.94

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



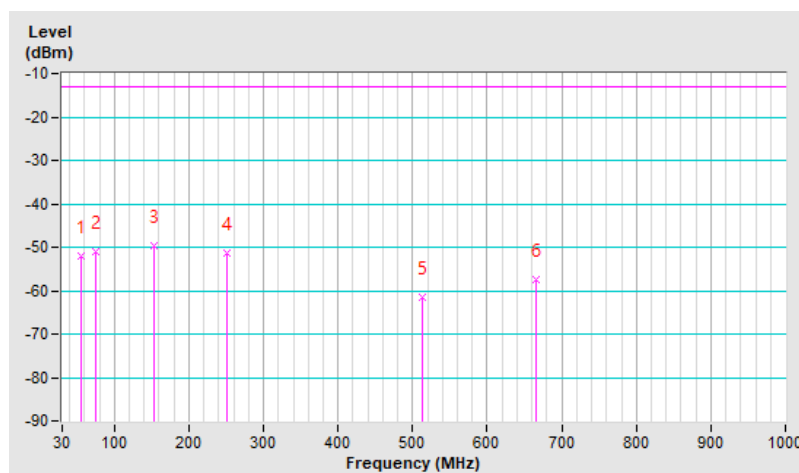
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	56.19	-52.20	-13.00	-39.20	2.00 H	258	54.90	-107.10
2	75.59	-50.87	-13.00	-37.87	1.00 H	192	59.27	-110.14
3	153.19	-49.79	-13.00	-36.79	1.00 H	95	56.80	-106.59
4	250.19	-51.34	-13.00	-38.34	1.50 H	229	55.77	-107.11
5	512.09	-61.66	-13.00	-48.66	2.00 H	29	39.70	-101.36
6	666.32	-57.31	-13.00	-44.31	1.00 H	239	40.83	-98.14

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

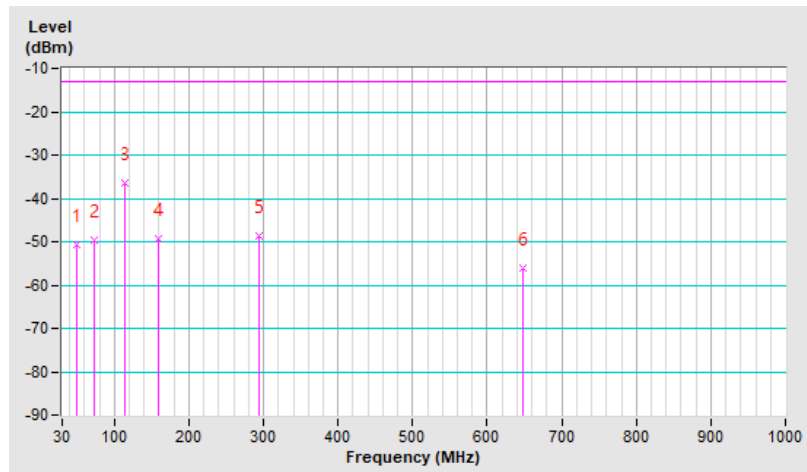


<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	49.40	-50.68	-13.00	-37.68	1.50 V	79	56.20	-106.88
2	72.68	-49.75	-13.00	-36.75	1.00 V	223	59.75	-109.50
3	113.42	-36.29	-13.00	-23.29	2.00 V	76	73.27	-109.56
4	159.01	-49.30	-13.00	-36.30	2.00 V	97	57.10	-106.40
5	294.81	-48.48	-13.00	-35.48	1.00 V	90	56.94	-105.42
6	647.89	-56.10	-13.00	-43.10	1.00 V	60	42.19	-98.29

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





7.6.9 LTE Band 7

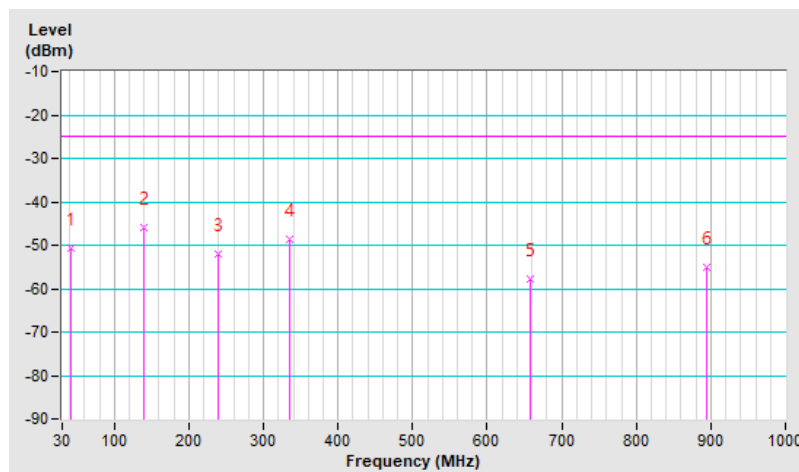
With shielding case

<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-50.84	-25.00	-25.84	1.50 H	58	56.75	-107.59
2	138.64	-46.07	-25.00	-21.07	1.00 H	157	62.00	-108.07
3	238.55	-52.01	-25.00	-27.01	1.00 H	125	57.34	-109.35
4	335.55	-48.62	-25.00	-23.62	2.00 H	206	57.60	-106.22
5	657.59	-57.81	-25.00	-32.81	1.00 H	225	41.78	-99.59
6	895.24	-55.13	-25.00	-30.13	2.00 H	317	41.22	-96.35

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



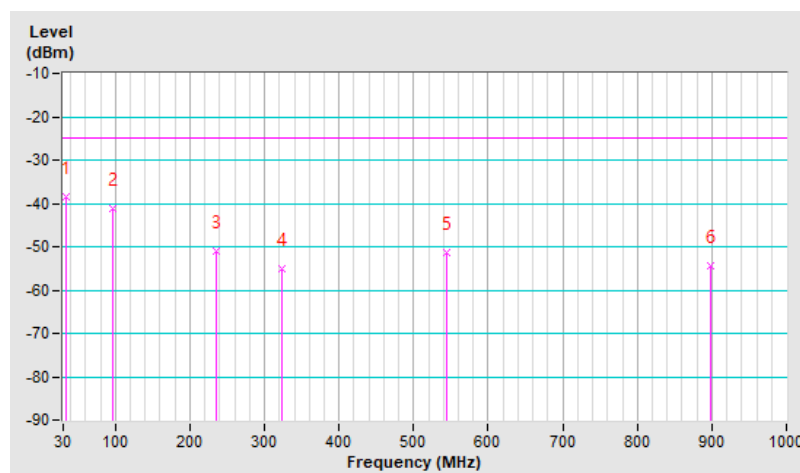
<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-38.47	-25.00	-13.47	1.50 V	2	69.53	-108.00
2	95.96	-41.10	-25.00	-16.10	1.00 V	221	71.59	-112.69
3	235.64	-51.11	-25.00	-26.11	2.00 V	197	58.49	-109.60
4	322.94	-55.11	-25.00	-30.11	1.00 V	242	51.33	-106.44
5	545.07	-51.31	-25.00	-26.31	1.50 V	174	50.24	-101.55
6	898.15	-54.31	-25.00	-29.31	2.00 V	2	42.03	-96.34

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



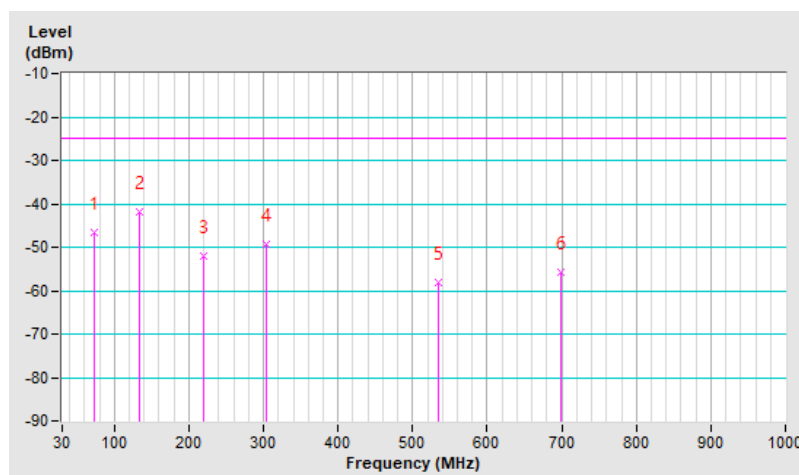
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-46.68	-25.00	-21.68	1.00 H	61	60.67	-107.35
2	132.82	-41.93	-25.00	-16.93	1.50 H	98	63.60	-105.53
3	220.12	-52.11	-25.00	-27.11	1.50 H	6	54.92	-107.03
4	304.51	-49.20	-25.00	-24.20	1.00 H	116	53.82	-103.02
5	534.40	-58.23	-25.00	-33.23	1.00 H	82	40.73	-98.96
6	699.30	-55.88	-25.00	-30.88	1.50 H	325	39.50	-95.38

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

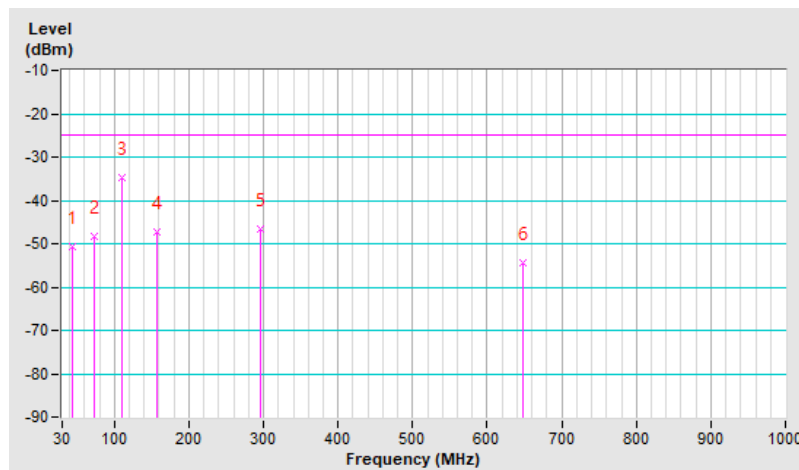


<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	43.58	-50.56	-25.00	-25.56	1.00 V	250	54.47	-105.03
2	73.65	-48.35	-25.00	-23.35	1.00 V	172	59.22	-107.57
3	109.54	-34.60	-25.00	-9.60	1.50 V	67	73.13	-107.73
4	158.04	-47.29	-25.00	-22.29	1.00 V	85	57.08	-104.37
5	296.75	-46.65	-25.00	-21.65	2.00 V	98	56.57	-103.22
6	647.89	-54.53	-25.00	-29.53	1.00 V	56	41.61	-96.14

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6.10 LTE Band 12

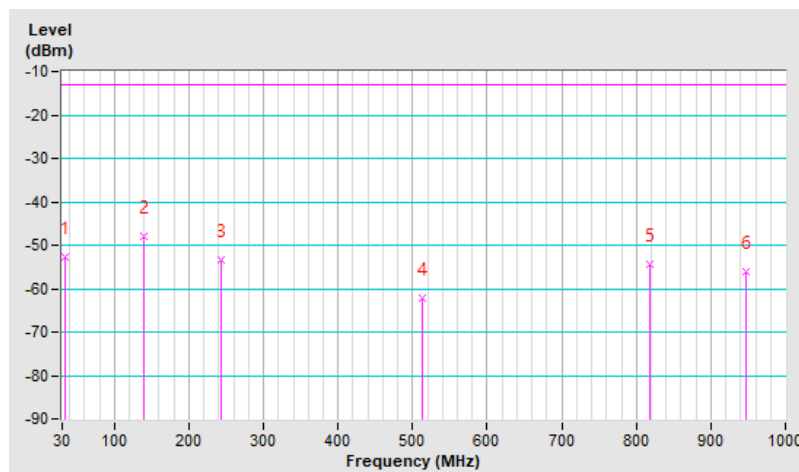
With shielding case

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-52.70	-13.00	-39.70	1.50 H	82	57.45	-110.15
2	138.64	-47.80	-13.00	-34.80	1.00 H	161	62.42	-110.22
3	242.43	-53.27	-13.00	-40.27	2.00 H	142	58.01	-111.28
4	512.09	-62.11	-13.00	-49.11	1.00 H	155	41.84	-103.95
5	818.61	-54.35	-13.00	-41.35	1.00 H	244	44.52	-98.87
6	947.62	-56.10	-13.00	-43.10	2.00 H	26	41.76	-97.86

Remarks:

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

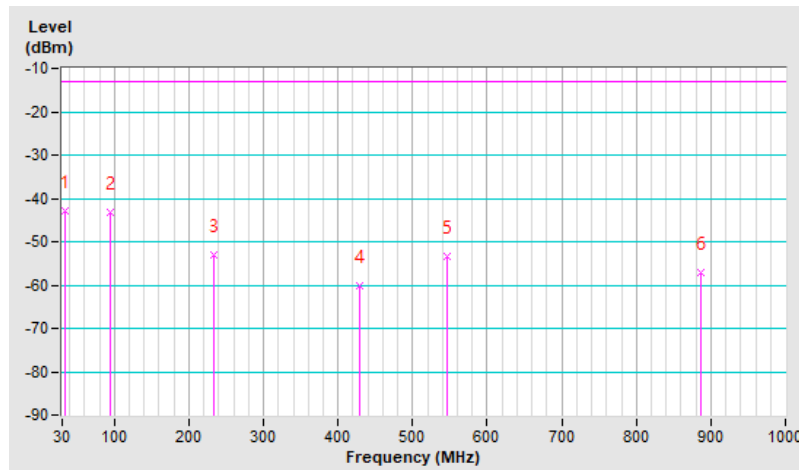


<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.85	-42.76	-13.00	-29.76	2.00 V	82	67.56	-110.32
2	94.99	-43.34	-13.00	-30.34	1.00 V	220	71.59	-114.93
3	233.70	-53.07	-13.00	-40.07	1.00 V	185	58.94	-112.01
4	428.67	-60.16	-13.00	-47.16	1.50 V	192	45.92	-106.08
5	546.04	-53.24	-13.00	-40.24	1.50 V	168	50.47	-103.71
6	887.48	-56.99	-13.00	-43.99	1.00 V	121	41.58	-98.57

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



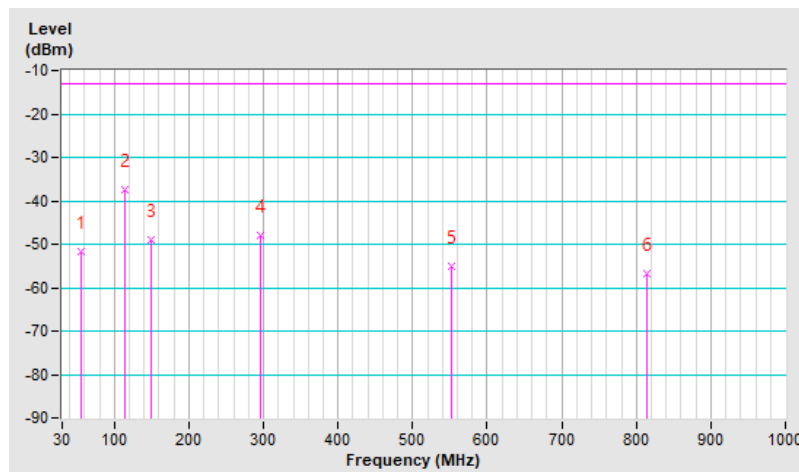
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	55.22	-51.85	-13.00	-38.85	1.50 H	95	55.15	-107.00
2	113.42	-37.61	-13.00	-24.61	1.00 H	66	71.95	-109.56
3	149.31	-48.86	-13.00	-35.86	2.00 H	224	57.76	-106.62
4	296.75	-48.03	-13.00	-35.03	1.00 H	88	57.34	-105.37
5	552.83	-54.92	-13.00	-41.92	1.50 H	211	45.84	-100.76
6	814.73	-56.72	-13.00	-43.72	1.00 H	148	38.31	-95.03

Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

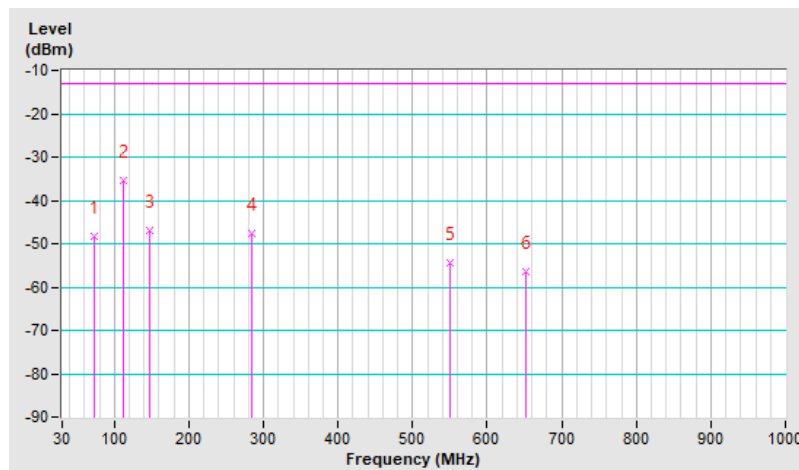


<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-48.18	-13.00	-35.18	1.00 V	57	61.32	-109.50
2	111.48	-35.36	-13.00	-22.36	1.00 V	89	74.40	-109.76
3	146.40	-46.80	-13.00	-33.80	1.50 V	260	59.88	-106.68
4	284.14	-47.56	-13.00	-34.56	1.00 V	207	58.07	-105.63
5	549.92	-54.42	-13.00	-41.42	1.50 V	202	46.41	-100.83
6	651.77	-56.46	-13.00	-43.46	1.00 V	63	41.82	-98.28

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





7.6.11 LTE Band 13

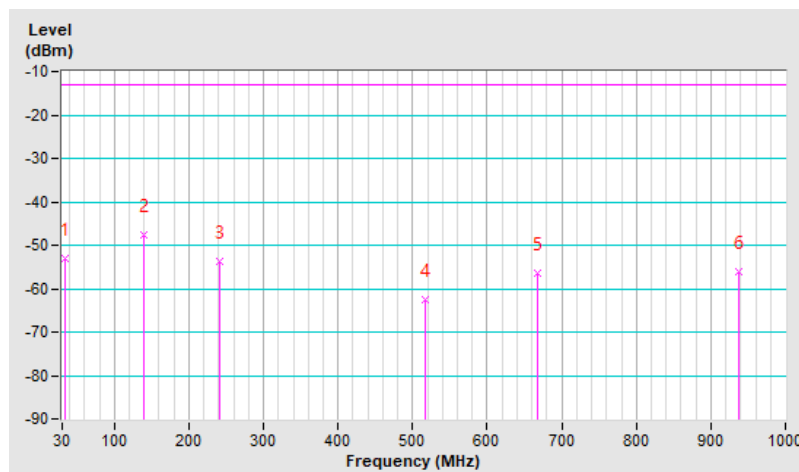
With shielding case

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-53.04	-13.00	-40.04	1.50 H	46	57.11	-110.15
2	138.64	-47.79	-13.00	-34.79	1.00 H	158	62.43	-110.22
3	240.49	-53.60	-13.00	-40.60	1.00 H	132	57.76	-111.36
4	516.94	-62.53	-13.00	-49.53	1.00 H	198	41.36	-103.89
5	667.29	-56.57	-13.00	-43.57	2.00 H	271	45.03	-101.60
6	936.95	-56.22	-13.00	-43.22	1.00 H	169	41.86	-98.08

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

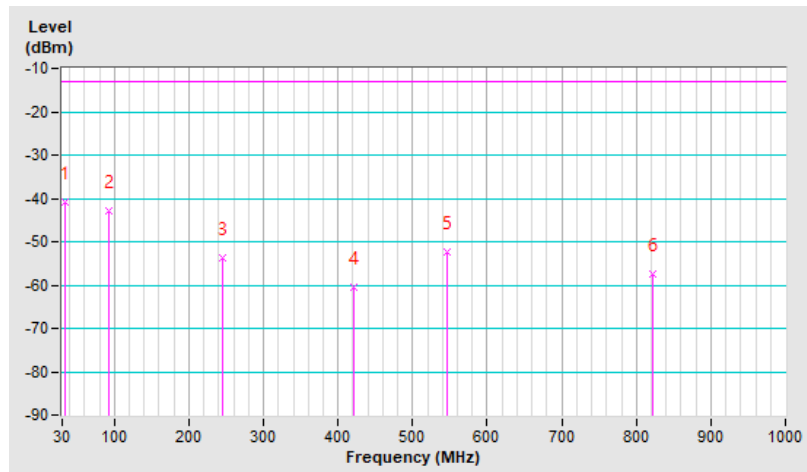


<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-41.00	-13.00	-28.00	2.00 V	88	69.15	-110.15
2	93.05	-42.94	-13.00	-29.94	1.00 V	227	72.20	-115.14
3	244.37	-53.64	-13.00	-40.64	1.00 V	302	57.57	-111.21
4	421.88	-60.36	-13.00	-47.36	1.50 V	210	45.94	-106.30
5	546.04	-52.38	-13.00	-39.38	1.50 V	177	51.33	-103.71
6	822.49	-57.61	-13.00	-44.61	1.00 V	266	41.26	-98.87

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



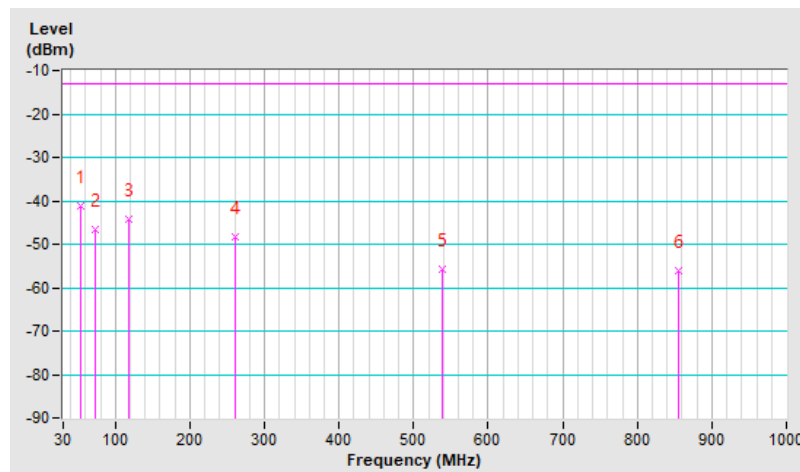
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	54.25	-41.28	-13.00	-28.28	1.50 H	97	65.84	-107.12
2	73.65	-46.55	-13.00	-33.55	2.00 H	52	63.17	-109.72
3	118.27	-44.22	-13.00	-31.22	1.50 H	76	64.93	-109.15
4	260.86	-48.35	-13.00	-35.35	1.00 H	97	58.37	-106.72
5	539.25	-55.69	-13.00	-42.69	1.00 H	76	45.33	-101.02
6	855.47	-56.17	-13.00	-43.17	1.50 H	274	38.26	-94.43

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

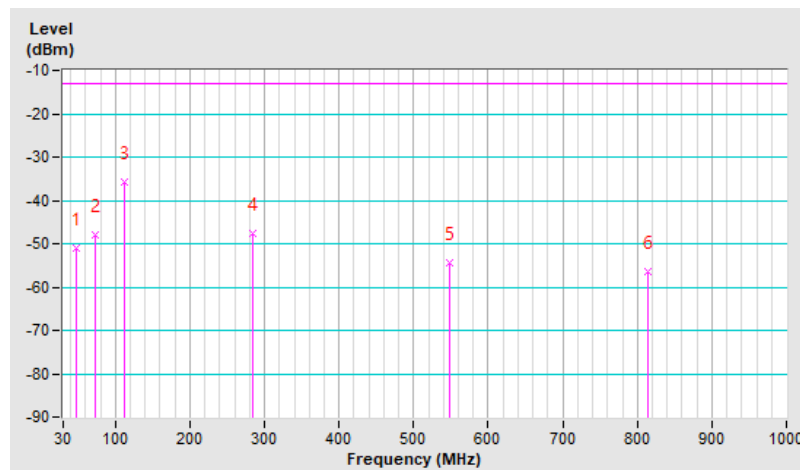


<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.46	-50.97	-13.00	-37.97	1.50 V	72	55.97	-106.94
2	72.68	-48.04	-13.00	-35.04	1.50 V	41	61.46	-109.50
3	112.45	-35.86	-13.00	-22.86	1.00 V	51	73.78	-109.64
4	284.14	-47.60	-13.00	-34.60	1.00 V	209	58.03	-105.63
5	548.95	-54.32	-13.00	-41.32	2.00 V	201	46.52	-100.84
6	813.76	-56.45	-13.00	-43.45	1.00 V	335	38.59	-95.04

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6.12 LTE Band 14

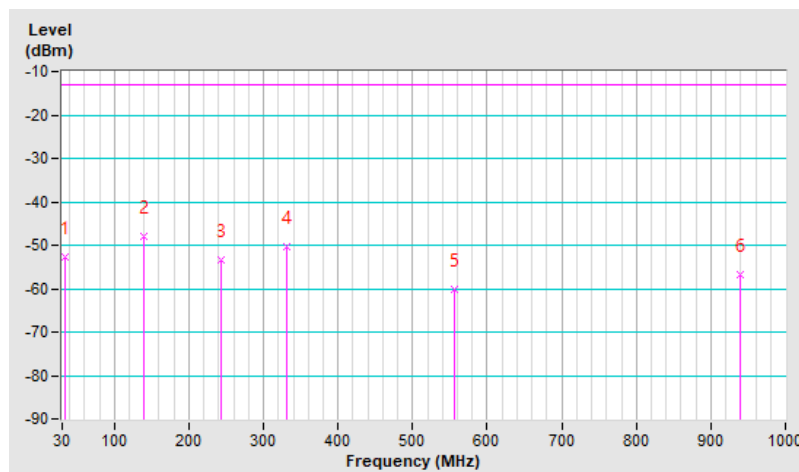
With shielding case

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-52.72	-13.00	-39.72	1.50 H	71	57.43	-110.15
2	138.64	-48.08	-13.00	-35.08	1.00 H	159	62.14	-110.22
3	243.40	-53.40	-13.00	-40.40	2.00 H	146	57.84	-111.24
4	331.67	-50.25	-13.00	-37.25	2.00 H	217	58.16	-108.41
5	556.71	-60.01	-13.00	-47.01	1.00 H	148	43.62	-103.63
6	938.89	-56.78	-13.00	-43.78	1.00 H	165	41.25	-98.03

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

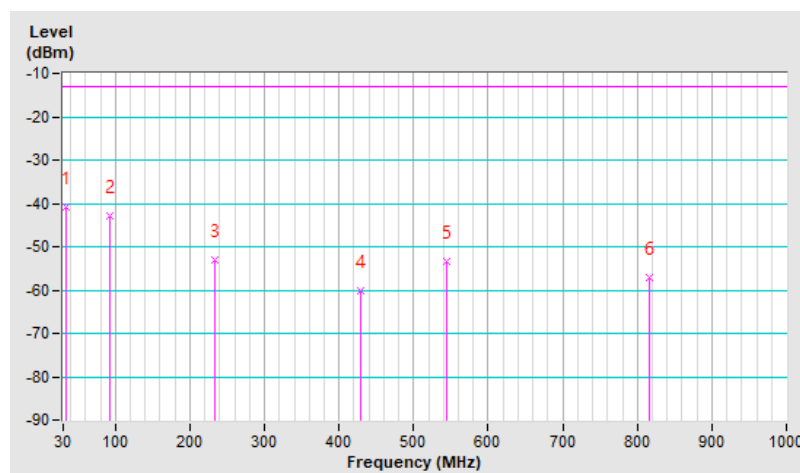


<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-40.70	-13.00	-27.70	1.50 V	115	69.45	-110.15
2	93.05	-42.80	-13.00	-29.80	1.00 V	210	72.34	-115.14
3	232.73	-53.13	-13.00	-40.13	1.00 V	190	59.04	-112.17
4	429.64	-60.22	-13.00	-47.22	2.00 V	207	45.83	-106.05
5	545.07	-53.47	-13.00	-40.47	1.00 V	175	50.23	-103.70
6	816.67	-57.04	-13.00	-44.04	1.50 V	310	41.86	-98.90

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



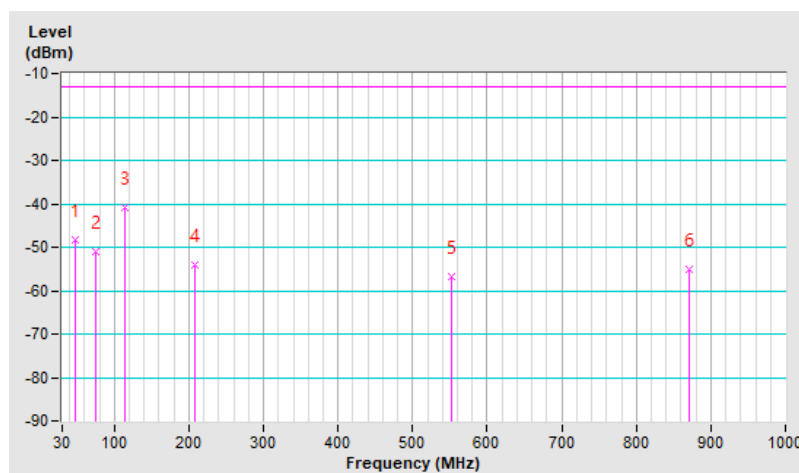
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.43	-48.36	-13.00	-35.36	1.00 H	47	58.50	-106.86
2	75.59	-50.93	-13.00	-37.93	1.50 H	210	59.21	-110.14
3	114.39	-40.80	-13.00	-27.80	2.00 H	78	68.70	-109.50
4	208.48	-54.16	-13.00	-41.16	2.00 H	78	55.22	-109.38
5	551.86	-56.77	-13.00	-43.77	1.50 H	65	44.01	-100.78
6	870.99	-55.11	-13.00	-42.11	1.00 H	10	39.02	-94.13

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

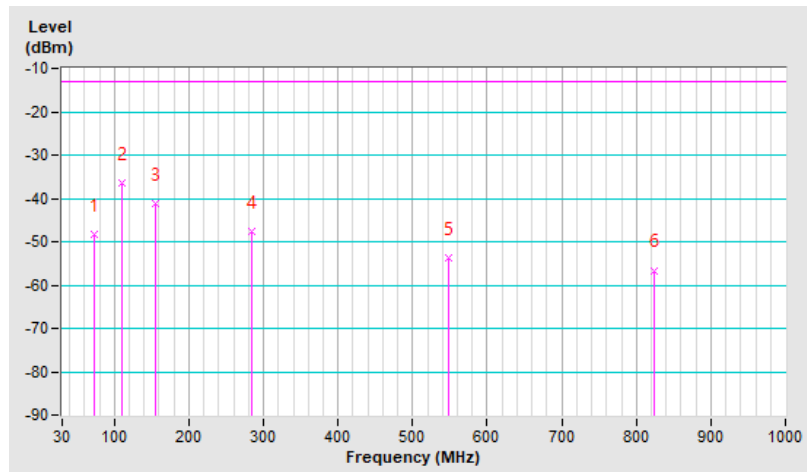


<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	72.68	-48.44	-13.00	-35.44	1.00 V	62	61.06	-109.50
2	109.54	-36.45	-13.00	-23.45	1.00 V	83	73.43	-109.88
3	155.13	-41.04	-13.00	-28.04	1.50 V	8	65.51	-106.55
4	284.14	-47.74	-13.00	-34.74	1.00 V	207	57.89	-105.63
5	548.95	-53.66	-13.00	-40.66	1.50 V	215	47.18	-100.84
6	824.43	-56.61	-13.00	-43.61	1.00 V	10	38.31	-94.92

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





7.6.13 LTE Band 17

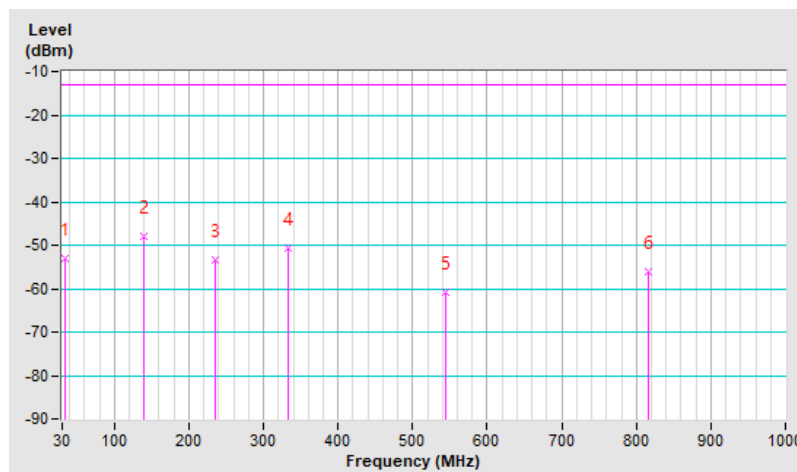
With shielding case

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-52.90	-13.00	-39.90	1.50 H	71	57.25	-110.15
2	139.61	-48.12	-13.00	-35.12	1.00 H	160	62.08	-110.20
3	234.67	-53.53	-13.00	-40.53	1.00 H	130	58.33	-111.86
4	332.64	-50.62	-13.00	-37.62	2.00 H	216	57.78	-108.40
5	544.10	-60.87	-13.00	-47.87	2.00 H	193	42.84	-103.71
6	815.70	-56.16	-13.00	-43.16	1.50 H	231	42.77	-98.93

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

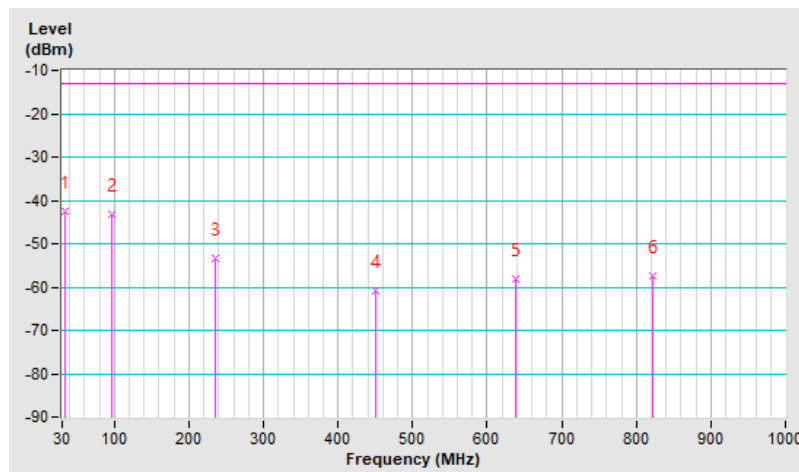


<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-42.54	-13.00	-29.54	1.50 V	101	67.61	-110.15
2	95.96	-43.35	-13.00	-30.35	1.00 V	225	71.49	-114.84
3	235.64	-53.24	-13.00	-40.24	2.00 V	199	58.51	-111.75
4	450.98	-60.88	-13.00	-47.88	1.00 V	191	44.56	-105.44
5	639.16	-58.05	-13.00	-45.05	1.00 V	152	43.79	-101.84
6	821.52	-57.45	-13.00	-44.45	2.00 V	130	41.40	-98.85

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



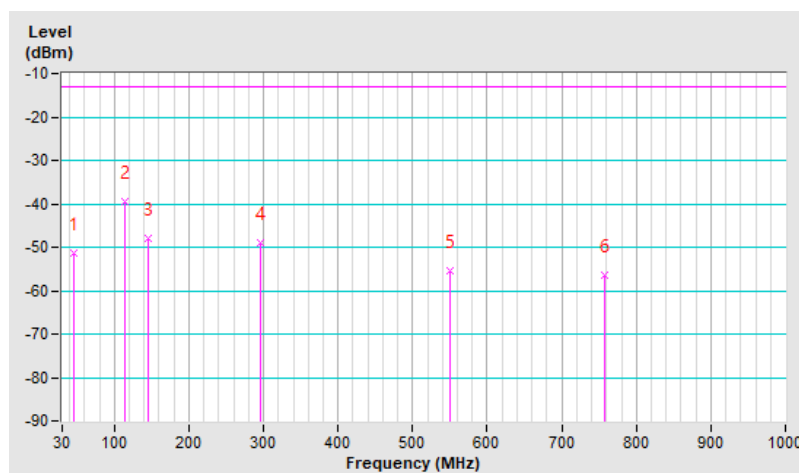
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	46.49	-51.45	-13.00	-38.45	1.00 H	55	55.50	-106.95
2	114.39	-39.48	-13.00	-26.48	1.50 H	89	70.02	-109.50
3	145.43	-48.12	-13.00	-35.12	1.00 H	63	58.64	-106.76
4	296.75	-48.88	-13.00	-35.88	1.50 H	100	56.49	-105.37
5	550.89	-55.32	-13.00	-42.32	2.00 H	205	45.49	-100.81
6	756.53	-56.29	-13.00	-43.29	1.00 H	350	39.84	-96.13

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

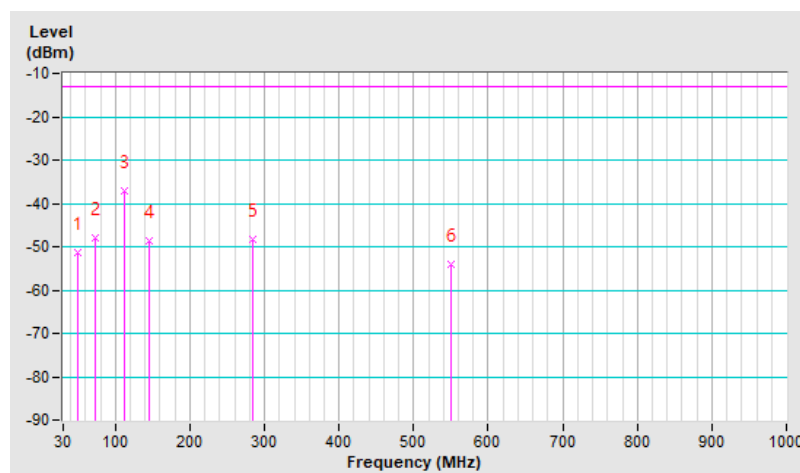


<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	49.40	-51.45	-13.00	-38.45	1.00 V	87	55.43	-106.88
2	73.65	-48.08	-13.00	-35.08	1.00 V	63	61.64	-109.72
3	111.48	-37.21	-13.00	-24.21	1.50 V	55	72.55	-109.76
4	145.43	-48.80	-13.00	-35.80	1.00 V	61	57.96	-106.76
5	285.11	-48.16	-13.00	-35.16	1.00 V	213	57.46	-105.62
6	550.89	-53.93	-13.00	-40.93	1.00 V	192	46.88	-100.81

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



### 7.6.14 LTE Band 25

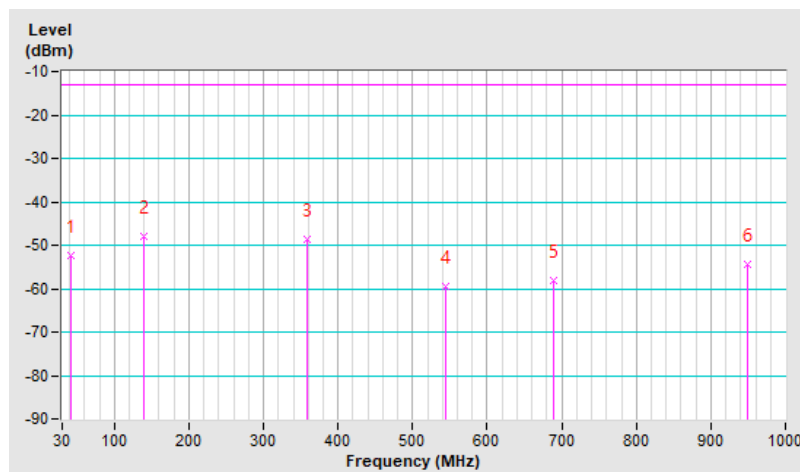
#### With shielding case

<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-52.54	-13.00	-39.54	2.00 H	33	55.05	-107.59
2	139.61	-47.82	-13.00	-34.82	1.00 H	153	60.23	-108.05
3	357.86	-48.64	-13.00	-35.64	1.50 H	20	57.17	-105.81
4	545.07	-59.63	-13.00	-46.63	1.00 H	112	41.92	-101.55
5	688.63	-58.24	-13.00	-45.24	2.00 H	280	40.94	-99.18
6	949.56	-54.24	-13.00	-41.24	1.50 H	155	41.43	-95.67

#### Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

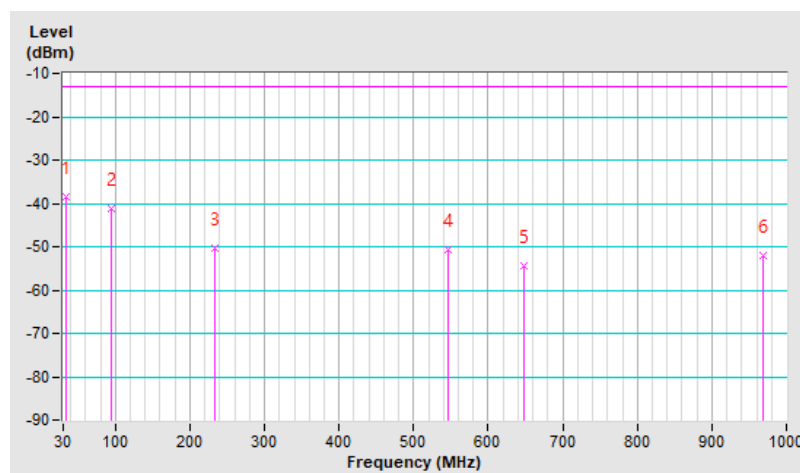


<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-38.41	-13.00	-25.41	2.00 V	98	69.59	-108.00
2	94.99	-41.18	-13.00	-28.18	1.00 V	205	71.60	-112.78
3	232.73	-50.23	-13.00	-37.23	1.50 V	177	59.79	-110.02
4	546.04	-50.65	-13.00	-37.65	1.00 V	164	50.91	-101.56
5	648.86	-54.56	-13.00	-41.56	1.50 V	115	45.04	-99.60
6	967.99	-52.01	-13.00	-39.01	1.00 V	293	43.34	-95.35

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



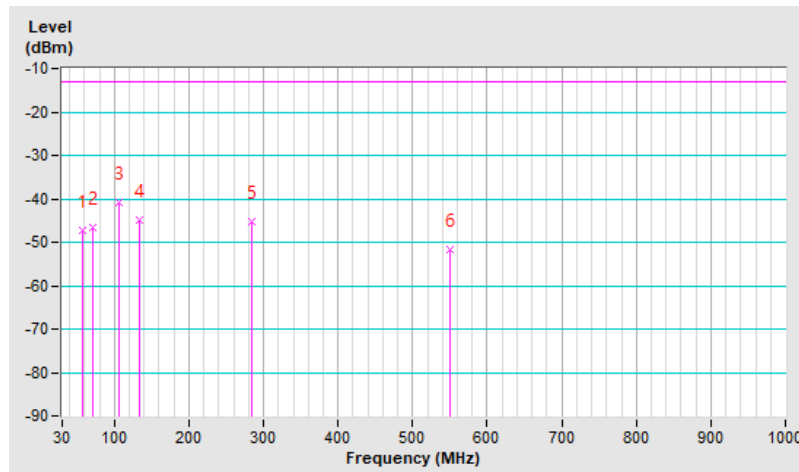
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.16	-47.39	-13.00	-34.39	1.50 H	166	57.78	-105.17
2	71.71	-46.48	-13.00	-33.48	1.50 H	195	60.60	-107.08
3	106.63	-40.99	-13.00	-27.99	1.00 H	76	67.11	-108.10
4	132.82	-44.88	-13.00	-31.88	1.00 H	92	60.65	-105.53
5	284.14	-45.36	-13.00	-32.36	2.00 H	208	58.12	-103.48
6	550.89	-51.72	-13.00	-38.72	1.00 H	205	46.94	-98.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

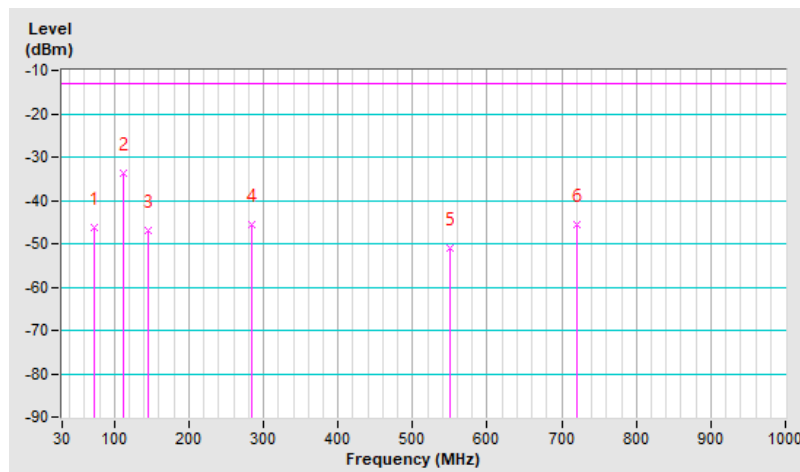


<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-46.29	-13.00	-33.29	1.50 V	216	61.28	-107.57
2	111.48	-33.71	-13.00	-20.71	1.00 V	42	73.90	-107.61
3	144.46	-46.82	-13.00	-33.82	1.00 V	71	57.86	-104.68
4	284.14	-45.58	-13.00	-32.58	1.50 V	210	57.90	-103.48
5	549.92	-50.90	-13.00	-37.90	1.00 V	218	47.78	-98.68
6	719.67	-45.48	-13.00	-32.48	1.00 V	271	49.61	-95.09

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





7.6.15 LTE Band 26 (814-824 MHz)

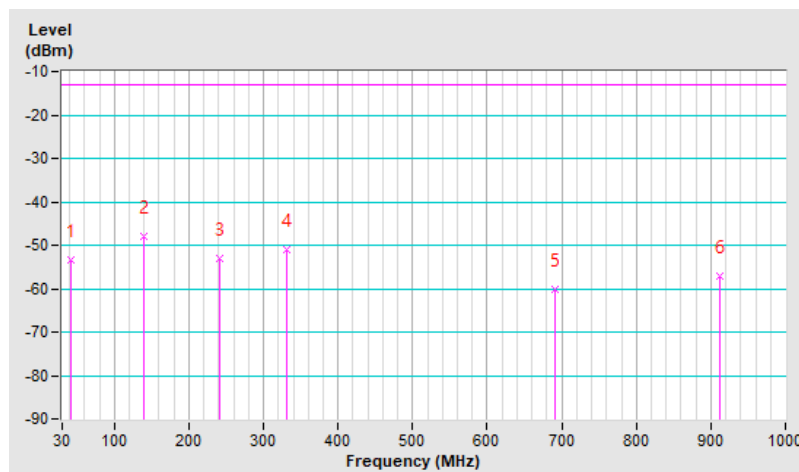
With shielding case

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-53.23	-13.00	-40.23	2.00 H	32	56.51	-109.74
2	138.64	-47.93	-13.00	-34.93	1.50 H	161	62.29	-110.22
3	241.46	-53.00	-13.00	-40.00	1.00 H	136	58.32	-111.32
4	331.67	-50.95	-13.00	-37.95	1.50 H	212	57.46	-108.41
5	691.54	-60.27	-13.00	-47.27	1.00 H	165	41.01	-101.28
6	912.70	-57.20	-13.00	-44.20	1.50 H	199	41.07	-98.27

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

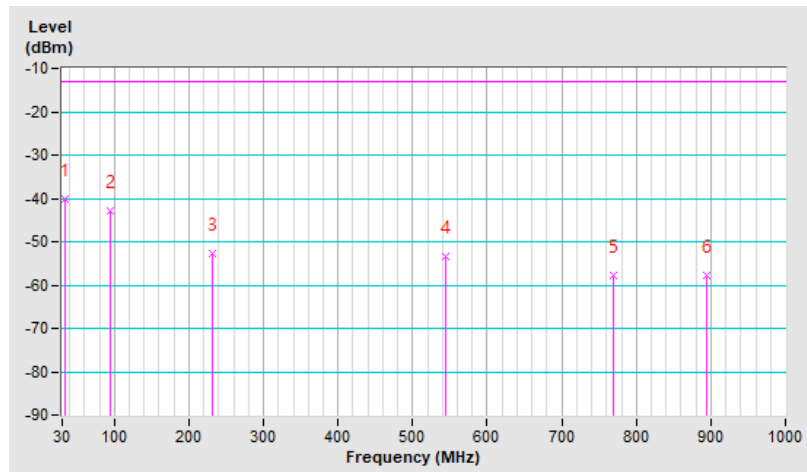


<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-40.33	-13.00	-27.33	2.00 V	85	69.82	-110.15
2	94.02	-42.94	-13.00	-29.94	1.00 V	216	72.14	-115.08
3	231.76	-52.78	-13.00	-39.78	1.00 V	180	59.54	-112.32
4	545.07	-53.44	-13.00	-40.44	1.00 V	162	50.26	-103.70
5	770.11	-57.92	-13.00	-44.92	2.00 V	134	41.33	-99.25
6	895.24	-57.66	-13.00	-44.66	1.50 V	265	40.84	-98.50

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



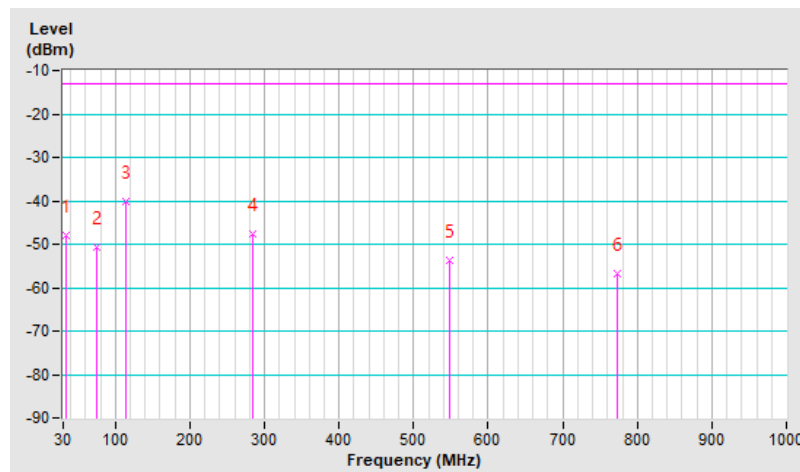
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.85	-47.85	-13.00	-34.85	1.50 H	98	60.38	-108.23
2	75.59	-50.53	-13.00	-37.53	1.00 H	37	59.61	-110.14
3	114.39	-40.33	-13.00	-27.33	1.50 H	84	69.17	-109.50
4	285.11	-47.58	-13.00	-34.58	2.00 H	201	58.04	-105.62
5	548.95	-53.85	-13.00	-40.85	1.00 H	209	46.99	-100.84
6	773.02	-56.87	-13.00	-43.87	1.00 H	319	38.75	-95.62

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

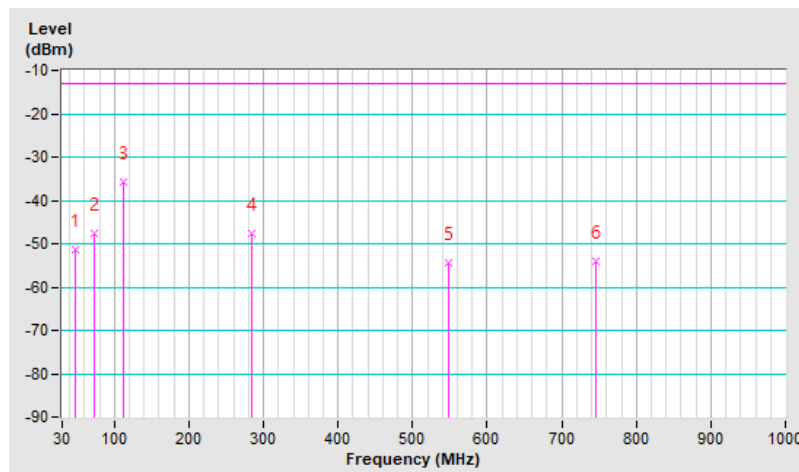


<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.43	-51.37	-13.00	-38.37	1.50 V	32	55.49	-106.86
2	72.68	-47.72	-13.00	-34.72	1.50 V	213	61.78	-109.50
3	111.48	-35.65	-13.00	-22.65	1.00 V	85	74.11	-109.76
4	285.11	-47.61	-13.00	-34.61	1.00 V	208	58.01	-105.62
5	547.98	-54.27	-13.00	-41.27	1.00 V	208	46.59	-100.86
6	745.86	-53.94	-13.00	-40.94	2.00 V	271	42.52	-96.46

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.6.16 LTE Band 26 (824-849 MHz)

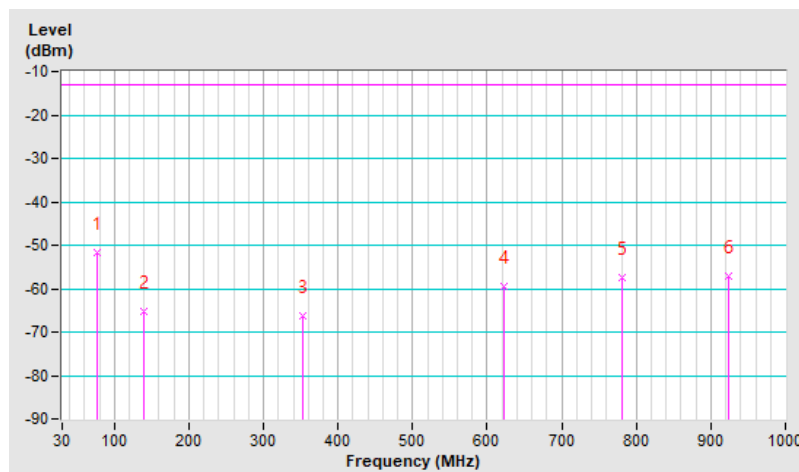
With shielding case

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-51.62	-13.00	-38.62	1.50 H	349	61.98	-113.60
2	139.61	-65.12	-13.00	-52.12	1.00 H	348	45.08	-110.20
3	352.04	-66.13	-13.00	-53.13	1.00 H	55	41.99	-108.12
4	621.70	-59.42	-13.00	-46.42	2.00 H	173	42.79	-102.21
5	781.75	-57.32	-13.00	-44.32	1.50 H	97	41.65	-98.97
6	924.34	-57.01	-13.00	-44.01	1.00 H	2	41.16	-98.17

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

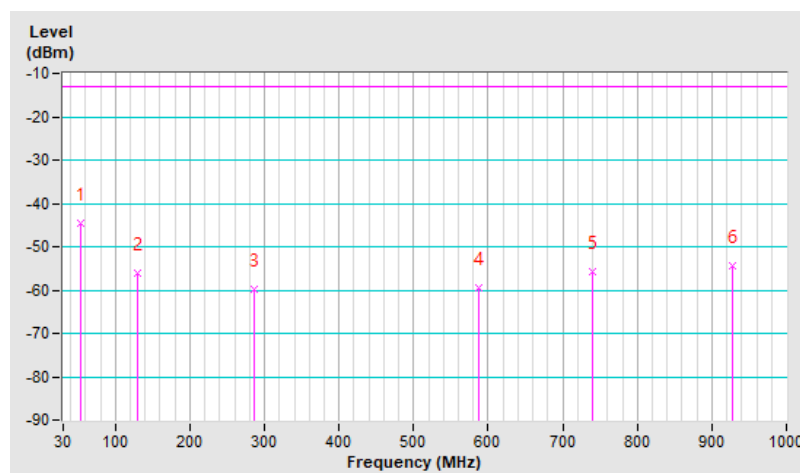


<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-44.43	-13.00	-31.43	1.00 V	225	65.37	-109.80
2	129.91	-56.27	-13.00	-43.27	1.00 V	4	54.55	-110.82
3	286.08	-59.95	-13.00	-46.95	1.50 V	318	49.53	-109.48
4	587.75	-59.59	-13.00	-46.59	1.00 V	333	43.45	-103.04
5	740.04	-55.77	-13.00	-42.77	2.00 V	311	44.04	-99.81
6	928.22	-54.24	-13.00	-41.24	1.50 V	68	43.90	-98.14

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



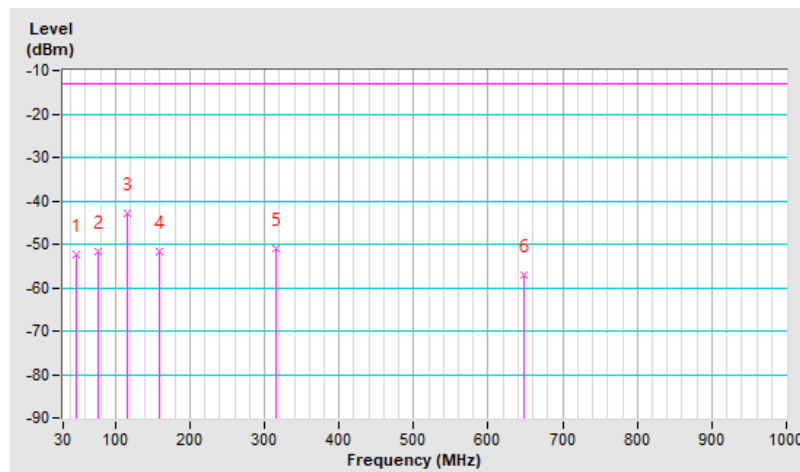
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	47.46	-52.45	-13.00	-39.45	1.50 H	106	54.49	-106.94
2	77.53	-51.63	-13.00	-38.63	1.50 H	66	59.03	-110.66
3	116.33	-42.81	-13.00	-29.81	1.00 H	61	66.50	-109.31
4	159.01	-51.64	-13.00	-38.64	1.00 H	98	54.76	-106.40
5	315.18	-50.93	-13.00	-37.93	1.00 H	221	53.96	-104.89
6	647.89	-57.03	-13.00	-44.03	2.00 H	50	41.26	-98.29

Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

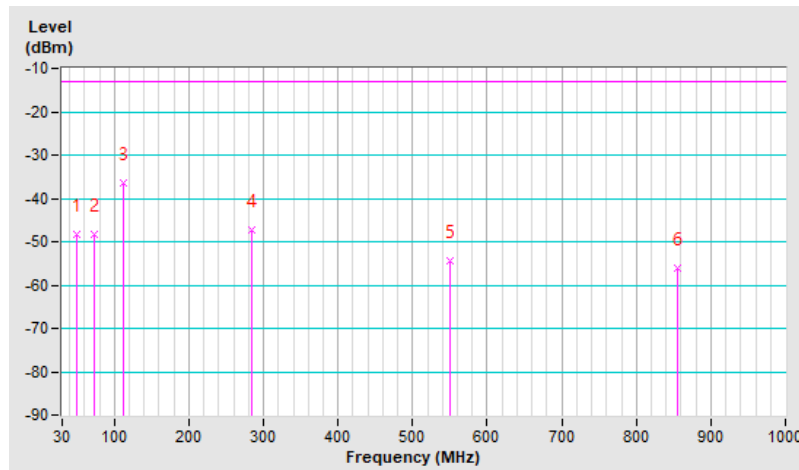


<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	49.40	-48.40	-13.00	-35.40	1.00 V	219	58.48	-106.88
2	72.68	-48.17	-13.00	-35.17	1.50 V	195	61.33	-109.50
3	111.48	-36.50	-13.00	-23.50	1.00 V	93	73.26	-109.76
4	285.11	-47.45	-13.00	-34.45	1.50 V	200	58.17	-105.62
5	550.89	-54.45	-13.00	-41.45	2.00 V	200	46.36	-100.81
6	854.50	-56.18	-13.00	-43.18	1.00 V	64	38.26	-94.44

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





## 7.6.17 LTE Band 41

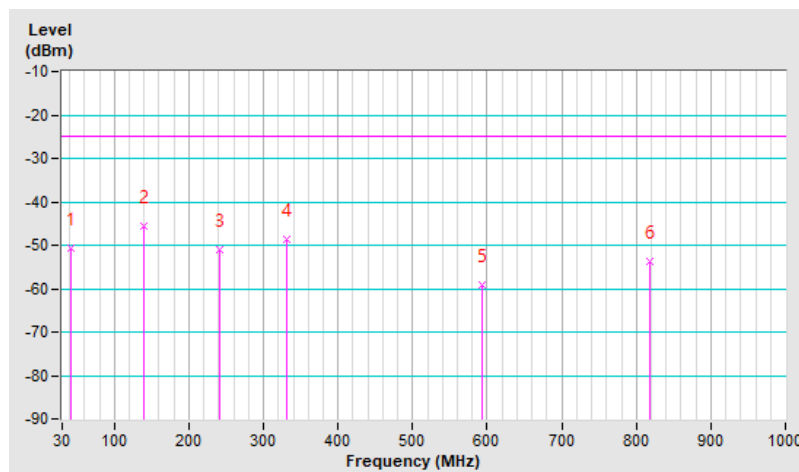
## With shielding case

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.64	-50.81	-25.00	-25.81	2.00 H	58	56.78	-107.59
2	138.64	-45.58	-25.00	-20.58	1.00 H	156	62.49	-108.07
3	241.46	-50.89	-25.00	-25.89	1.50 H	128	58.28	-109.17
4	330.70	-48.64	-25.00	-23.64	1.00 H	212	57.63	-106.27
5	593.57	-59.23	-25.00	-34.23	1.00 H	298	41.53	-100.76
6	818.61	-53.83	-25.00	-28.83	1.50 H	253	42.89	-96.72

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

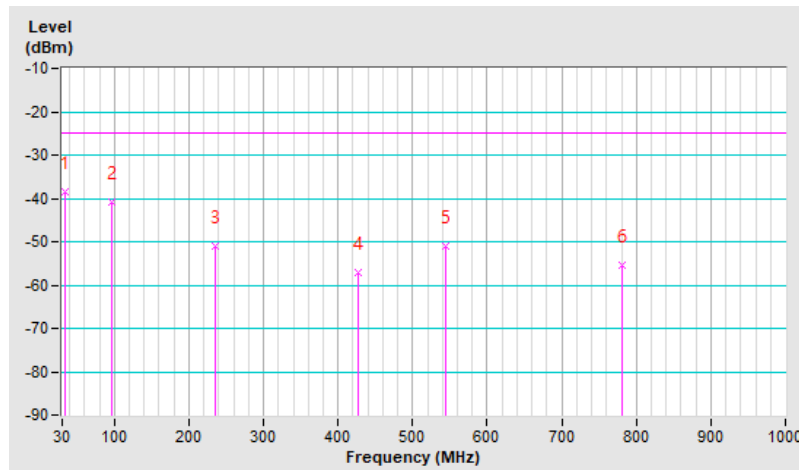


<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-38.63	-25.00	-13.63	2.00 V	88	69.37	-108.00
2	95.96	-40.77	-25.00	-15.77	1.00 V	214	71.92	-112.69
3	234.67	-50.86	-25.00	-25.86	1.50 V	195	58.85	-109.71
4	427.70	-57.18	-25.00	-32.18	1.00 V	210	46.78	-103.96
5	545.07	-50.95	-25.00	-25.95	1.00 V	176	50.60	-101.55
6	780.78	-55.49	-25.00	-30.49	1.50 V	92	41.32	-96.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



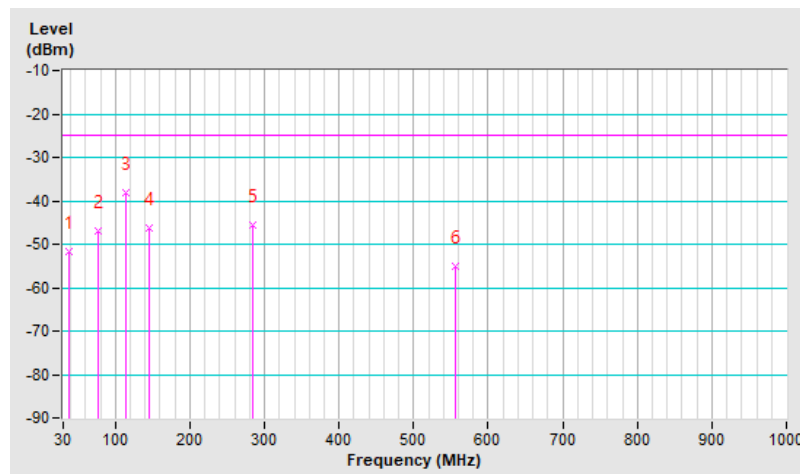
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	38.73	-51.60	-25.00	-26.60	2.00 H	111	53.83	-105.43
2	76.56	-47.08	-25.00	-22.08	1.00 H	59	61.22	-108.30
3	114.39	-38.17	-25.00	-13.17	1.50 H	69	69.18	-107.35
4	145.43	-46.42	-25.00	-21.42	1.00 H	240	58.19	-104.61
5	284.14	-45.48	-25.00	-20.48	1.50 H	203	58.00	-103.48
6	555.74	-55.09	-25.00	-30.09	1.00 H	195	43.43	-98.52

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

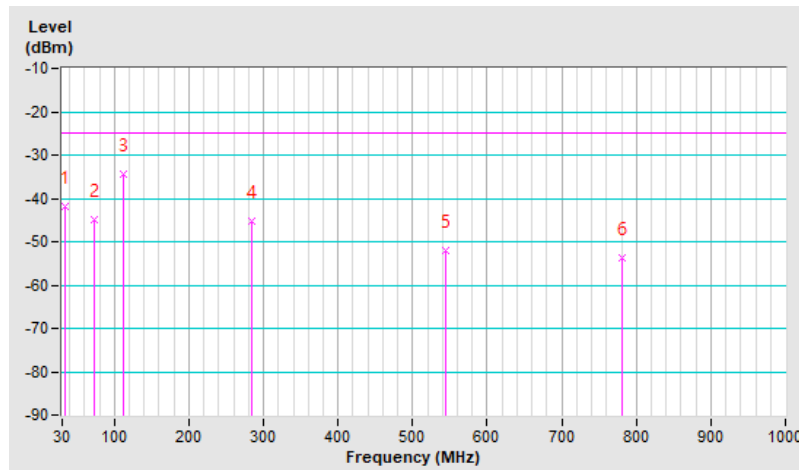


<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	34.85	-41.80	-25.00	-16.80	1.00 V	124	64.28	-106.08
2	73.65	-44.89	-25.00	-19.89	1.00 V	190	62.68	-107.57
<b>3</b>	<b>111.48</b>	<b>-34.37</b>	<b>-25.00</b>	<b>-9.37</b>	<b>1.00 V</b>	<b>74</b>	<b>73.24</b>	<b>-107.61</b>
4	284.14	-45.28	-25.00	-20.28	1.00 V	205	58.20	-103.48
5	545.07	-52.02	-25.00	-27.02	1.50 V	203	46.73	-98.75
6	781.75	-53.89	-25.00	-28.89	1.00 V	6	39.46	-93.35

**Remarks:**

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.6.18 LTE Band 66

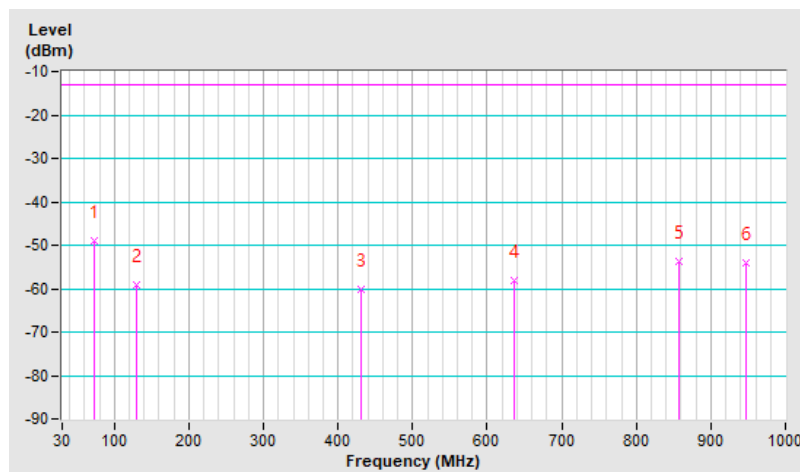
## With shielding case

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-48.90	-13.00	-35.90	1.00 H	135	61.47	-110.37
2	129.91	-58.99	-13.00	-45.99	1.00 H	104	49.68	-108.67
3	430.61	-60.27	-13.00	-47.27	1.50 H	189	43.60	-103.87
4	636.25	-58.07	-13.00	-45.07	2.00 H	35	41.69	-99.76
5	856.44	-53.70	-13.00	-40.70	1.00 H	211	43.10	-96.80
6	947.62	-54.14	-13.00	-41.14	1.50 H	147	41.57	-95.71

**Remarks:**

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

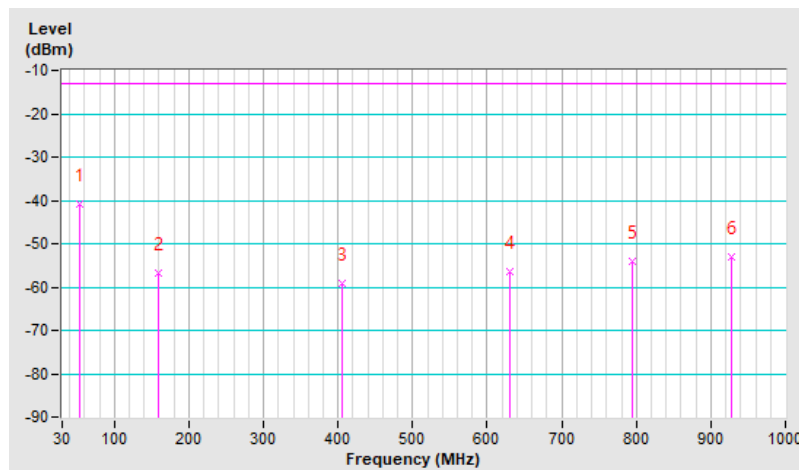


<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-41.01	-13.00	-28.01	1.00 V	48	66.64	-107.65
2	159.01	-56.79	-13.00	-43.79	1.50 V	236	50.92	-107.71
3	406.36	-59.22	-13.00	-46.22	2.00 V	108	45.43	-104.65
4	629.46	-56.36	-13.00	-43.36	2.00 V	125	43.57	-99.93
5	795.33	-54.21	-13.00	-41.21	1.00 V	36	42.64	-96.85
6	928.22	-52.90	-13.00	-39.90	1.00 V	124	43.09	-95.99

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



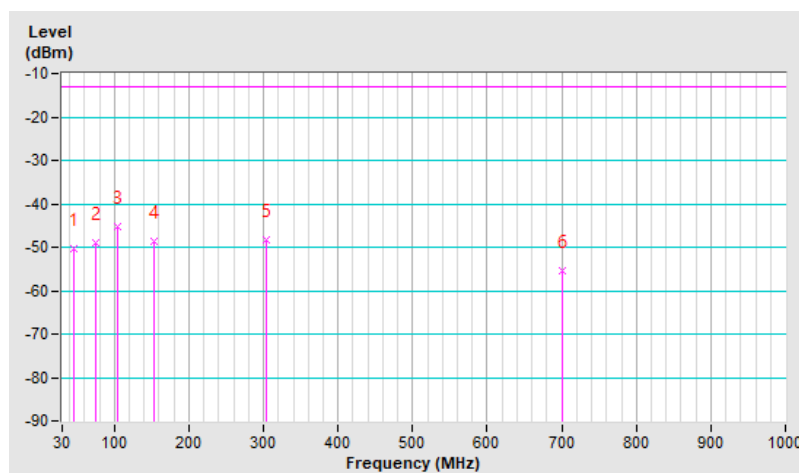
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	46.49	-50.35	-13.00	-37.35	1.50 H	90	54.45	-104.80
2	75.59	-48.89	-13.00	-35.89	1.00 H	55	59.10	-107.99
3	103.72	-45.15	-13.00	-32.15	2.00 H	77	63.33	-108.48
4	154.16	-48.70	-13.00	-35.70	2.00 H	109	55.58	-104.28
5	304.51	-48.44	-13.00	-35.44	1.00 H	206	54.58	-103.02
6	700.27	-55.34	-13.00	-42.34	1.00 H	72	40.03	-95.37

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



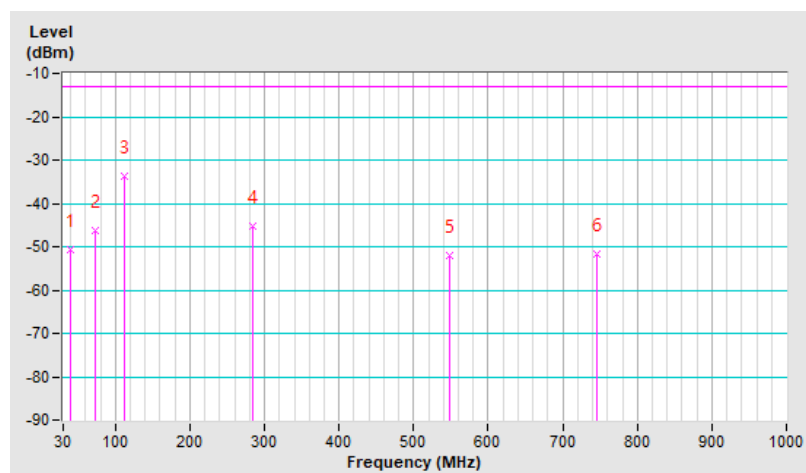
<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.70	-50.54	-13.00	-37.54	1.50 V	167	54.91	-105.45
2	73.65	-46.23	-13.00	-33.23	1.50 V	45	61.34	-107.57
3	111.48	-33.75	-13.00	-20.75	1.00 V	82	73.86	-107.61
4	284.14	-45.40	-13.00	-32.40	1.00 V	201	58.08	-103.48
5	548.95	-52.20	-13.00	-39.20	1.00 V	209	46.49	-98.69
6	745.86	-51.60	-13.00	-38.60	1.00 V	85	42.71	-94.31

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.





### 7.6.19 LTE Band 71

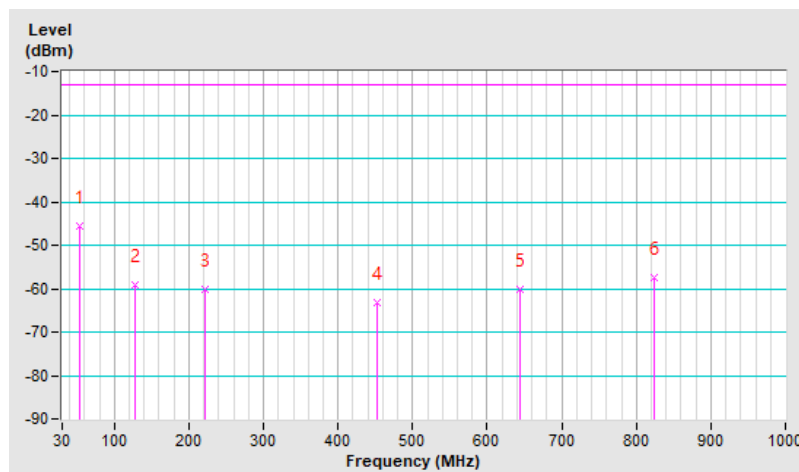
#### With shielding case

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-45.70	-13.00	-32.70	1.00 H	327	64.10	-109.80
2	127.97	-59.16	-13.00	-46.16	1.50 H	13	51.84	-111.00
3	221.09	-60.01	-13.00	-47.01	2.00 H	18	53.25	-113.26
4	452.92	-63.33	-13.00	-50.33	2.00 H	273	42.06	-105.39
5	644.98	-60.19	-13.00	-47.19	1.50 H	150	41.53	-101.72
6	823.46	-57.37	-13.00	-44.37	1.00 H	144	41.51	-98.88

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

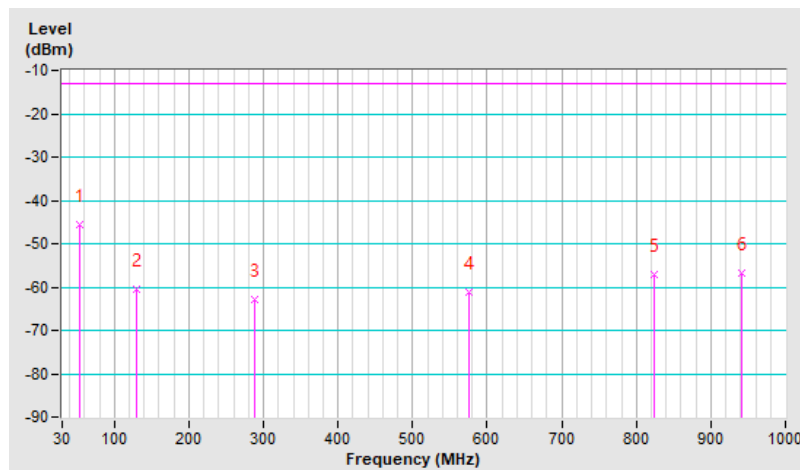


<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-45.53	-13.00	-32.53	1.00 V	329	64.27	-109.80
2	129.91	-60.47	-13.00	-47.47	1.00 V	18	50.35	-110.82
3	288.02	-62.87	-13.00	-49.87	1.00 V	176	46.57	-109.44
4	575.14	-61.05	-13.00	-48.05	1.50 V	18	42.25	-103.30
5	824.43	-57.05	-13.00	-44.05	2.00 V	196	41.84	-98.89
6	941.80	-56.82	-13.00	-43.82	1.50 V	3	41.15	-97.97

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



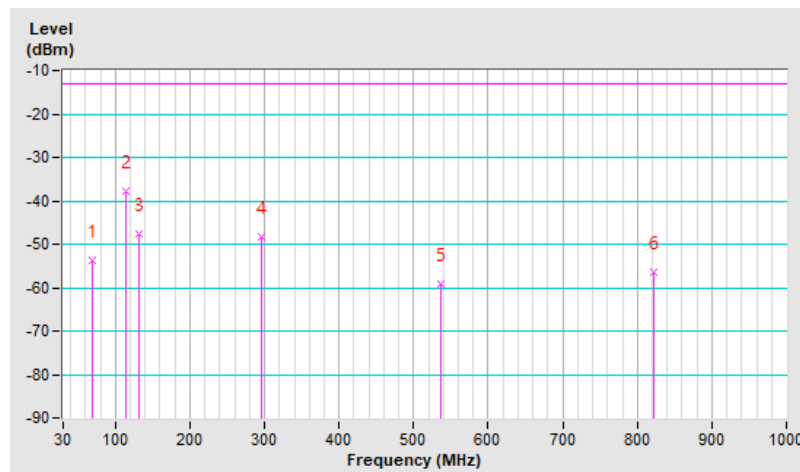
Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	69.77	-53.65	-13.00	-40.65	1.00 H	203	55.13	-108.78
2	113.42	-37.88	-13.00	-24.88	1.00 H	48	71.68	-109.56
3	131.85	-47.54	-13.00	-34.54	1.50 H	77	60.33	-107.87
4	296.75	-48.30	-13.00	-35.30	1.00 H	114	57.07	-105.37
5	537.31	-59.21	-13.00	-46.21	1.00 H	137	41.84	-101.05
6	821.52	-56.34	-13.00	-43.34	2.00 H	1	38.61	-94.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

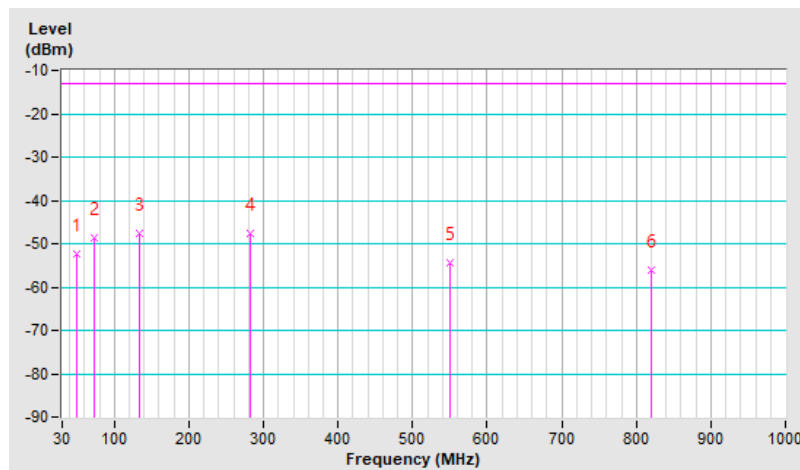


<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	49.40	-52.25	-13.00	-39.25	1.50 V	38	54.63	-106.88
2	73.65	-48.53	-13.00	-35.53	1.00 V	201	61.19	-109.72
3	132.82	-47.64	-13.00	-34.64	2.00 V	82	60.04	-107.68
4	283.17	-47.53	-13.00	-34.53	1.00 V	209	58.12	-105.65
5	550.89	-54.34	-13.00	-41.34	1.00 V	212	46.47	-100.81
6	819.58	-56.23	-13.00	-43.23	1.00 V	193	38.74	-94.97

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
- The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



## 7.7 Radiated Spurious Emissions above 1GHz

### 7.7.1 GSM 850

#### With shielding case

<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 128 : 824.2 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

#### Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-50.23	-13.00	-37.23	2.33 H	309	66.79	-117.02

#### Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-48.42	-13.00	-35.42	1.88 V	257	68.60	-117.02

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-50.21	-13.00	-37.21	2.15 H	82	66.77	-116.98

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-48.52	-13.00	-35.52	2.72 V	178	68.46	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 251 : 848.8 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-50.53	-13.00	-37.53	2.66 H	320	66.42	-116.95

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-48.83	-13.00	-35.83	1.98 V	338	68.12	-116.95

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 128 : 824.2 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-50.46	-13.00	-37.46	3.16 H	134	66.56	-117.02

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-48.13	-13.00	-35.13	1.75 V	300	68.89	-117.02

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.





<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-50.70	-13.00	-37.70	2.78 H	278	66.28	-116.98

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-48.45	-13.00	-35.45	2.61 V	123	68.53	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 251 : 848.8 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-50.45	-13.00	-37.45	1.89 H	241	66.50	-116.95

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-48.71	-13.00	-35.71	2.07 V	35	68.24	-116.95

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 128 : 824.2 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-48.66	-13.00	-35.66	2.00 H	100	68.36	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-46.55	-13.00	-33.55	2.33 V	150	70.47	-117.02

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-48.57	-13.00	-35.57	2.03 H	97	68.41	-116.98

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-46.45	-13.00	-33.45	2.34 V	152	70.53	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	GSM 850	<b>Channel</b>	CH 251 : 848.8 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-48.80	-13.00	-35.80	2.05 H	99	68.15	-116.95

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-46.56	-13.00	-33.56	2.30 V	150	70.39	-116.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 128 : 824.2 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-48.97	-13.00	-35.97	2.65 H	223	68.05	-117.02

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-46.74	-13.00	-33.74	2.80 V	79	70.28	-117.02

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 189 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-48.85	-13.00	-35.85	2.64 H	224	68.13	-116.98

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-46.56	-13.00	-33.56	2.78 V	77	70.42	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	EDGE 850	<b>Channel</b>	CH 251 : 848.8 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-49.05	-13.00	-36.05	2.69 H	203	67.90	-116.95

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-47.03	-13.00	-34.03	2.80 V	88	69.92	-116.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



## 7.7.2 GSM 1900

## With shielding case

<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 512 : 1850.2 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-50.13	-13.00	-37.13	1.89 H	333	57.59	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-47.98	-13.00	-34.98	2.21 V	83	59.74	-107.72

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.



<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 661 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.90	-13.00	-36.90	3.68 H	208	57.90	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.03	-13.00	-35.03	1.23 V	136	59.77	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 810 : 1909.8 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-49.97	-13.00	-36.97	1.32 H	213	57.74	-107.71

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-48.01	-13.00	-35.01	1.40 V	135	59.70	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 512 : 1850.2 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-50.27	-13.00	-37.27	3.29 H	124	57.45	-107.72

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-47.99	-13.00	-34.99	2.08 V	259	59.73	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-50.01	-13.00	-37.01	2.57 H	342	57.79	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.17	-13.00	-35.17	1.85 V	300	59.63	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 810 : 1909.8 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-50.36	-13.00	-37.36	1.98 H	187	57.35	-107.71

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
	3819.60	-47.93	-13.00	-34.93	1.65 V	70	59.78	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 512 : 1850.2 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-48.46	-13.00	-35.46	3.55 H	180	59.26	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-46.45	-13.00	-33.45	1.20 V	145	61.27	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 661 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.48	-13.00	-35.48	3.54 H	184	59.32	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-46.37	-13.00	-33.37	1.15 V	143	61.43	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	GSM 1900	<b>Channel</b>	CH 810 : 1909.8 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-48.64	-13.00	-35.64	3.50 H	200	59.07	-107.71

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-46.55	-13.00	-33.55	1.29 V	149	61.16	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 512 : 1850.2 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-48.69	-13.00	-35.69	2.35 H	329	59.03	-107.72

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3700.40	-46.46	-13.00	-33.46	1.40 V	280	61.26	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 661 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.68	-13.00	-35.68	2.32 H	327	59.12	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-46.38	-13.00	-33.38	1.45 V	287	61.42	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	EDGE 1900	<b>Channel</b>	CH 810 : 1909.8 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-48.76	-13.00	-35.76	2.39 H	333	58.95	-107.71

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3819.60	-46.54	-13.00	-33.54	1.50 V	280	61.17	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

## 7.7.3 WCDMA Band 2

## With shielding case

<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9262 : 1852.4 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3704.80	-48.43	-13.00	-35.43	1.86 H	169	59.29	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3704.80	-46.07	-13.00	-33.07	1.35 V	240	61.65	-107.72

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.01	-13.00	-35.01	3.34 H	355	59.79	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-46.11	-13.00	-33.11	1.96 V	246	61.69	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9538 : 1907.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.20	-48.29	-13.00	-35.29	3.38 H	96	59.43	-107.72

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.20	-45.99	-13.00	-32.99	1.27 V	322	61.73	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9262 : 1852.4 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3704.80	-47.46	-13.00	-34.46	2.33 H	159	60.26	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3704.80	-45.81	-13.00	-32.81	1.00 V	229	61.91	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9400 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-47.38	-13.00	-34.38	2.34 H	152	60.42	-107.80

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-45.66	-13.00	-32.66	1.02 V	223	62.14	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band II	<b>Channel</b>	CH 9538 : 1907.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.20	-47.80	-13.00	-34.80	2.35 H	165	59.92	-107.72

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.20	-45.63	-13.00	-32.63	1.00 V	233	62.09	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

#### 7.7.4 WCDMA Band 4

##### With shielding case

<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1312 : 1712.4 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3424.80	-49.16	-13.00	-36.16	2.41 H	358	59.60	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3424.80	-47.06	-13.00	-34.06	1.10 V	313	61.70	-108.76

##### Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-48.57	-13.00	-35.57	2.59 H	132	59.67	-108.24

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-46.70	-13.00	-33.70	2.74 V	345	61.54	-108.24

**Remarks:**

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1513 : 1752.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.20	-47.90	-13.00	-34.90	2.31 H	304	59.81	-107.71

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.20	-45.94	-13.00	-32.94	1.11 V	110	61.77	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1312 : 1712.4 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3424.80	-48.19	-13.00	-35.19	1.39 H	209	60.57	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3424.80	-46.28	-13.00	-33.28	2.69 V	250	62.48	-108.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1413 : 1732.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-47.52	-13.00	-34.52	1.32 H	205	60.72	-108.24

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-45.46	-13.00	-32.46	2.63 V	247	62.78	-108.24

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band IV	<b>Channel</b>	CH 1513 : 1752.6 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.20	-47.45	-13.00	-34.45	1.44 H	219	60.26	-107.71

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.20	-45.46	-13.00	-32.46	2.70 V	260	62.25	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



## 7.7.5 WCDMA Band 5

## With shielding case

<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4132 : 826.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	-59.42	-13.00	-46.42	2.56 H	227	57.59	-117.01
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	-57.33	-13.00	-44.33	1.88 V	2	59.68	-117.01

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-59.09	-13.00	-46.09	3.63 H	264	57.89	-116.98

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-57.07	-13.00	-44.07	1.74 V	198	59.91	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4233 : 846.6 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 73% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.20	-59.28	-13.00	-46.28	2.16 H	52	57.69	-116.97

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.20	-57.49	-13.00	-44.49	1.67 V	107	59.48	-116.97

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4132 : 826.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	-58.54	-13.00	-45.54	3.20 H	150	58.47	-117.01
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	-57.00	-13.00	-44.00	1.60 V	200	60.01	-117.01

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4182 : 836.4 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-58.24	-13.00	-45.24	3.24 H	157	58.74	-116.98

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-56.84	-13.00	-43.84	1.62 V	205	60.14	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	WCDMA Band V	<b>Channel</b>	CH 4233 : 846.6 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Tim Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.20	-58.92	-13.00	-45.92	3.16 H	140	58.05	-116.97

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.20	-57.17	-13.00	-44.17	1.50 V	211	59.80	-116.97

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

## 7.7.6 LTE Band 2

## With shielding case

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 18607 : 1850.7 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-51.31	-13.00	-38.31	1.91 H	224	56.41	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-48.83	-13.00	-35.83	2.55 V	90	58.89	-107.72

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-51.30	-13.00	-38.30	1.89 H	227	56.50	-107.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.92	-13.00	-35.92	2.61 V	91	58.88	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 19193 : 1909.3 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3818.60	-51.05	-13.00	-38.05	1.89 H	225	56.66	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3818.60	-48.89	-13.00	-35.89	2.55 V	91	58.82	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 18625 : 1852.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-51.23	-13.00	-38.23	1.91 H	223	56.49	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-48.95	-13.00	-35.95	2.55 V	88	58.77	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-51.29	-13.00	-38.29	1.82 H	229	56.51	-107.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.01	-13.00	-36.01	2.61 V	90	58.79	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 19175 : 1907.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.00	-51.15	-13.00	-38.15	1.84 H	228	56.58	-107.73
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.00	-48.96	-13.00	-35.96	2.56 V	91	58.77	-107.73

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18700 : 1860 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-51.37	-13.00	-38.37	1.88 H	222	56.39	-107.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-48.98	-13.00	-35.98	2.56 V	93	58.78	-107.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-51.19	-13.00	-38.19	1.87 H	229	56.61	-107.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-48.83	-13.00	-35.83	2.61 V	88	58.97	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 19100 : 1900 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3800.00	-51.38	-13.00	-38.38	1.82 H	223	56.41	-107.79
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3800.00	-48.90	-13.00	-35.90	2.57 V	92	58.89	-107.79

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 18607 : 1850.7 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-50.05	-13.00	-37.05	1.80 H	179	57.67	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-47.25	-13.00	-34.25	1.94 V	261	60.47	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-50.03	-13.00	-37.03	1.70 H	177	57.77	-107.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-47.15	-13.00	-34.15	1.94 V	266	60.65	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 19193 : 1909.3 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3818.60	-50.13	-13.00	-37.13	1.69 H	187	57.58	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3818.60	-47.15	-13.00	-34.15	1.91 V	270	60.56	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 18625 : 1852.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-49.81	-13.00	-36.81	1.62 H	168	57.91	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-46.92	-13.00	-33.92	1.98 V	260	60.80	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.79	-13.00	-36.79	1.69 H	170	58.01	-107.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-46.82	-13.00	-33.82	2.00 V	255	60.98	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 19175 : 1907.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.00	-50.03	-13.00	-37.03	1.79 H	179	57.70	-107.73
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.00	-47.03	-13.00	-34.03	1.99 V	250	60.70	-107.73

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18700 : 1860 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-49.30	-13.00	-36.30	1.66 H	159	58.46	-107.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-46.52	-13.00	-33.52	1.87 V	249	61.24	-107.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 18900 : 1880 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.22	-13.00	-36.22	1.62 H	155	58.58	-107.80

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-46.40	-13.00	-33.40	1.77 V	247	61.40	-107.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 2 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 19100 : 1900 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3800.00	-49.64	-13.00	-36.64	1.68 H	158	58.15	-107.79
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3800.00	-46.77	-13.00	-33.77	1.90 V	252	61.02	-107.79

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



## 7.7.7 LTE Band 4

## With shielding case

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 19957 : 1710.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-45.85	-13.00	-32.85	1.34 H	137	62.95	-108.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-40.19	-13.00	-27.19	2.41 V	283	68.61	-108.80

## Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-45.02	-13.00	-32.02	1.33 H	134	63.23	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-39.55	-13.00	-26.55	2.43 V	282	68.70	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20393 : 1754.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3508.60	-44.70	-13.00	-31.70	1.40 H	131	63.01	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3508.60	-39.04	-13.00	-26.04	2.44 V	287	68.67	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 19975 : 1712.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-45.86	-13.00	-32.86	1.35 H	138	62.90	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-40.06	-13.00	-27.06	2.43 V	286	68.70	-108.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-44.98	-13.00	-31.98	1.36 H	137	63.27	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-39.58	-13.00	-26.58	2.43 V	281	68.67	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20375 : 1752.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.00	-44.78	-13.00	-31.78	1.39 H	133	62.93	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.00	-39.04	-13.00	-26.04	2.43 V	286	68.67	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20050 : 1720 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-45.37	-13.00	-32.37	1.39 H	134	63.23	-108.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-40.12	-13.00	-27.12	2.42 V	284	68.48	-108.60

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-45.11	-13.00	-32.11	1.37 H	135	63.14	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-39.61	-13.00	-26.61	2.47 V	282	68.64	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20300 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.66	-13.00	-31.66	1.35 H	136	63.20	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-39.13	-13.00	-26.13	2.39 V	280	68.73	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 19957 : 1710.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-44.56	-13.00	-31.56	2.89 H	60	64.24	-108.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-38.78	-13.00	-25.78	2.35 V	120	70.02	-108.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-43.73	-13.00	-30.73	2.88 H	66	64.52	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-38.15	-13.00	-25.15	2.30 V	129	70.10	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20393 : 1754.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3508.60	-43.26	-13.00	-30.26	2.90 H	359	64.45	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3508.60	-37.50	-13.00	-24.50	2.33 V	129	70.21	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 19975 : 1712.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-44.08	-13.00	-31.08	2.96 H	26	64.68	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-38.29	-13.00	-25.29	2.44 V	111	70.47	-108.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-43.48	-13.00	-30.48	2.95 H	33	64.77	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-37.70	-13.00	-24.70	2.54 V	111	70.55	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20375 : 1752.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.00	-43.13	-13.00	-30.13	2.99 H	40	64.58	-107.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3505.00	-37.46	-13.00	-24.46	2.55 V	121	70.25	-107.71

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20050 : 1720 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-43.57	-13.00	-30.57	2.89 H	0	65.03	-108.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-38.11	-13.00	-25.11	2.45 V	105	70.49	-108.60

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20175 : 1732.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-42.91	-13.00	-29.91	2.85 H	55	65.34	-108.25
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-37.38	-13.00	-24.38	2.44 V	102	70.87	-108.25

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 4 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20300 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-43.06	-13.00	-30.06	2.90 H	23	64.80	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-37.20	-13.00	-24.20	2.39 V	111	70.66	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

### 7.7.8 LTE Band 5

#### With shielding case

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20407 : 824.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-59.27	-13.00	-46.27	1.04 H	165	57.75	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-55.52	-13.00	-42.52	2.31 V	262	61.50	-117.02

#### Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-59.16	-13.00	-46.16	1.06 H	167	57.82	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-55.43	-13.00	-42.43	2.25 V	260	61.55	-116.98

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20643 : 848.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-59.36	-13.00	-46.36	1.07 H	167	57.59	-116.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-55.41	-13.00	-42.41	2.28 V	258	61.54	-116.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20425 : 826.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-59.46	-13.00	-46.46	1.07 H	169	57.55	-117.01

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-55.50	-13.00	-42.50	2.33 V	256	61.51	-117.01

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-59.39	-13.00	-46.39	1.08 H	166	57.59	-116.98

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-55.51	-13.00	-42.51	2.32 V	257	61.47	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20625 : 846.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-59.02	-13.00	-46.02	1.01 H	162	57.95	-116.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-55.47	-13.00	-42.47	2.25 V	263	61.50	-116.97

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20450 : 829 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1658.00	-59.49	-13.00	-46.49	1.06 H	167	57.51	-117.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1658.00	-55.43	-13.00	-42.43	2.28 V	256	61.57	-117.00

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-59.23	-13.00	-46.23	1.05 H	169	57.75	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-55.44	-13.00	-42.44	2.29 V	263	61.54	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20600 : 844 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1688.00	-59.09	-13.00	-46.09	1.08 H	168	57.87	-116.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1688.00	-55.51	-13.00	-42.51	2.35 V	258	61.45	-116.96

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20407 : 824.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-52.23	-13.00	-39.23	1.99 H	233	64.79	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-52.12	-13.00	-39.12	2.99 V	150	64.90	-117.02

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-51.88	-13.00	-38.88	1.99 H	243	65.10	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.87	-13.00	-40.87	2.88 V	151	63.11	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 20643 : 848.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-52.14	-13.00	-39.14	2.00 H	235	64.81	-116.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-53.94	-13.00	-40.94	2.88 V	148	63.01	-116.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20425 : 826.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-51.98	-13.00	-38.98	1.79 H	229	65.03	-117.01
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-51.54	-13.00	-38.54	2.90 V	159	65.47	-117.01

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-51.68	-13.00	-38.68	1.81 H	229	65.30	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-51.63	-13.00	-38.63	2.95 V	150	65.35	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20625 : 846.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-52.04	-13.00	-39.04	1.91 H	230	64.93	-116.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-51.94	-13.00	-38.94	2.96 V	158	65.03	-116.97

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20450 : 829 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1658.00	-51.53	-13.00	-38.53	1.90 H	220	65.47	-117.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1658.00	-51.21	-13.00	-38.21	2.89 V	150	65.79	-117.00

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20525 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-51.33	-13.00	-38.33	1.90 H	223	65.65	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-51.04	-13.00	-38.04	2.84 V	152	65.94	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 5 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 20600 : 844 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1688.00	-51.61	-13.00	-38.61	1.89 H	222	65.35	-116.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1688.00	-51.28	-13.00	-38.28	2.88 V	156	65.68	-116.96

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

### 7.7.9 LTE Band 7

#### With shielding case

<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20775 : 2502.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5005.00	-43.76	-25.00	-18.76	2.15 H	55	60.27	-104.03
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5005.00	-40.96	-25.00	-15.96	2.55 V	50	63.07	-104.03

#### Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-43.30	-25.00	-18.30	2.11 H	60	60.36	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-40.37	-25.00	-15.37	2.54 V	50	63.29	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 21425 : 2567.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.00	-43.46	-25.00	-18.46	2.15 H	55	60.20	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.00	-40.46	-25.00	-15.46	2.51 V	54	63.20	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20850 : 2510 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-43.58	-25.00	-18.58	2.12 H	60	60.38	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-40.91	-25.00	-15.91	2.53 V	52	63.05	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-43.26	-25.00	-18.26	2.20 H	57	60.40	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-40.41	-25.00	-15.41	2.47 V	53	63.25	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21350 : 2560 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5120.00	-43.02	-25.00	-18.02	2.17 H	62	60.54	-103.56
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5120.00	-40.50	-25.00	-15.50	2.53 V	51	63.06	-103.56

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 20775 : 2502.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5005.00	-35.77	-25.00	-10.77	1.33 H	69	68.26	-104.03
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5005.00	-33.34	-25.00	-8.34	2.68 V	292	70.69	-104.03

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-35.23	-25.00	-10.23	1.39 H	70	68.43	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-33.19	-25.00	-8.19	2.71 V	288	70.47	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 21425 : 2567.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.00	-35.52	-25.00	-10.52	1.43 H	79	68.14	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5135.00	-33.31	-25.00	-8.31	2.70 V	298	70.35	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 20850 : 2510 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-35.27	-25.00	-10.27	1.25 H	64	68.69	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5020.00	-33.05	-25.00	-8.05	2.70 V	285	70.91	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21100 : 2535 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-34.72	-25.00	-9.72	1.23 H	65	68.94	-103.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-32.54	-25.00	-7.54	2.75 V	286	71.12	-103.66

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 7 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 21350 : 2560 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5120.00	-34.99	-25.00	-9.99	1.29 H	66	68.57	-103.56
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5120.00	-32.67	-25.00	-7.67	2.70 V	289	70.89	-103.56

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



## 7.7.10 LTE Band 12

**With shielding case**

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23017 : 699.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-44.50	-13.00	-31.50	1.16 H	74	72.11	-116.61
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-42.19	-13.00	-29.19	2.23 V	315	74.42	-116.61

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-44.44	-13.00	-31.44	1.12 H	73	72.20	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-42.33	-13.00	-29.33	2.21 V	314	74.31	-116.64

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23173 : 715.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-44.35	-13.00	-31.35	1.17 H	73	72.31	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-42.21	-13.00	-29.21	2.23 V	311	74.45	-116.66

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23035 : 701.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-44.57	-13.00	-31.57	1.18 H	79	72.05	-116.62
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-42.32	-13.00	-29.32	2.22 V	311	74.30	-116.62

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-44.49	-13.00	-31.49	1.16 H	77	72.15	-116.64

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-42.39	-13.00	-29.39	2.24 V	311	74.25	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23155 : 713.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-44.59	-13.00	-31.59	1.12 H	75	72.07	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-42.28	-13.00	-29.28	2.16 V	313	74.38	-116.66

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23060 : 704 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-44.68	-13.00	-31.68	1.21 H	79	71.95	-116.63
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-42.14	-13.00	-29.14	2.17 V	314	74.49	-116.63

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-44.51	-13.00	-31.51	1.21 H	77	72.13	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-42.22	-13.00	-29.22	2.19 V	314	74.42	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23130 : 711 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-44.43	-13.00	-31.43	1.21 H	79	72.22	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-42.23	-13.00	-29.23	2.20 V	311	74.42	-116.65

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23017 : 699.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-40.81	-13.00	-27.81	1.44 H	134	75.80	-116.61
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1399.40	-38.91	-13.00	-25.91	2.88 V	149	77.70	-116.61

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-40.43	-13.00	-27.43	1.40 H	156	76.21	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-38.67	-13.00	-25.67	2.84 V	147	77.97	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 23173 : 715.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-40.64	-13.00	-27.64	1.50 H	159	76.02	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1430.60	-38.76	-13.00	-25.76	2.94 V	146	77.90	-116.66

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23035 : 701.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-40.38	-13.00	-27.38	1.33 H	119	76.24	-116.62
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1403.00	-38.59	-13.00	-25.59	2.70 V	130	78.03	-116.62

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-40.32	-13.00	-27.32	1.39 H	120	76.32	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-38.44	-13.00	-25.44	2.80 V	130	78.20	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23155 : 713.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-40.63	-13.00	-27.63	1.40 H	130	76.03	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-38.66	-13.00	-25.66	2.81 V	150	78.00	-116.66

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23060 : 704 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-40.27	-13.00	-27.27	1.29 H	120	76.36	-116.63
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1408.00	-38.38	-13.00	-25.38	2.66 V	110	78.25	-116.63

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23095 : 707.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-40.08	-13.00	-27.08	1.26 H	118	76.56	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-38.13	-13.00	-25.13	2.64 V	111	78.51	-116.64

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 12 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23130 : 711 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-40.21	-13.00	-27.21	1.30 H	119	76.44	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-38.33	-13.00	-25.33	2.69 V	120	78.32	-116.65

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

## 7.7.11 LTE Band 13

## With shielding case

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23205 : 779.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1559.00	-44.93	-40.00	-4.93	1.34 H	87	69.92	-114.85
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1559.00	-48.40	-40.00	-8.40	1.73 V	66	66.45	-114.85

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-45.16	-40.00	-5.16	1.31 H	85	69.71	-114.87
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-48.43	-40.00	-8.43	1.74 V	65	66.44	-114.87

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23255 : 784.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1569.00	-45.27	-40.00	-5.27	1.27 H	88	69.62	-114.89
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1569.00	-48.44	-40.00	-8.44	1.74 V	61	66.45	-114.89

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-45.05	-40.00	-5.05	1.32 H	83	69.82	-114.87
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-48.30	-40.00	-8.30	1.71 V	63	66.57	-114.87

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23205 : 779.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1559.00	-45.37	-40.00	-5.37	2.25 H	120	69.48	-114.85
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1559.00	-48.59	-40.00	-8.59	1.90 V	289	66.26	-114.85

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-45.22	-40.00	-5.22	2.29 H	129	69.65	-114.87
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-48.54	-40.00	-8.54	1.89 V	280	66.33	-114.87

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23255 : 784.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1569.00	-45.63	-40.00	-5.63	2.18 H	133	69.26	-114.89

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1569.00	-48.86	-40.00	-8.86	1.90 V	277	66.03	-114.89

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 13 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23230 : 782 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-45.03	-40.00	-5.03	2.37 H	126	69.84	-114.87
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-48.23	-40.00	-8.23	1.98 V	289	66.64	-114.87

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

## 7.7.12 LTE Band 14

## With shielding case

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23305 : 790.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1581.00	-49.41	-13.00	-36.41	2.03 H	88	67.68	-117.09
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1581.00	-51.55	-13.00	-38.55	2.53 V	67	65.54	-117.09

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-49.75	-13.00	-36.75	2.04 H	88	67.36	-117.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-51.66	-13.00	-38.66	2.59 V	67	65.45	-117.11

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23355 : 795.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	-49.77	-13.00	-36.77	2.00 H	89	67.37	-117.14
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	-51.54	-13.00	-38.54	2.56 V	68	65.60	-117.14

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-49.53	-13.00	-36.53	2.06 H	90	67.58	-117.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-51.61	-13.00	-38.61	2.56 V	68	65.50	-117.11

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23305 : 790.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1581.00	-48.51	-40.00	-8.51	1.80 H	171	68.58	-117.09
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1581.00	-51.05	-13.00	-38.05	2.70 V	160	66.04	-117.09

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-48.45	-40.00	-8.45	1.79 H	169	68.66	-117.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-51.31	-13.00	-38.31	2.60 V	150	65.80	-117.11

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23355 : 795.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	-48.77	-40.00	-8.77	1.70 H	173	68.37	-117.14
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1591.00	-51.56	-13.00	-38.56	2.51 V	152	65.58	-117.14

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 14 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23330 : 793 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-48.35	-13.00	-35.35	1.83 H	172	68.76	-117.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1586.00	-50.68	-13.00	-37.68	2.73 V	163	66.43	-117.11

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

## 7.7.13 LTE Band 17

## With shielding case

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23755 : 706.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1413.00	-45.68	-13.00	-32.68	1.94 H	74	70.95	-116.63
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1413.00	-42.84	-13.00	-29.84	2.89 V	288	73.79	-116.63

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-45.57	-13.00	-32.57	1.89 H	74	71.07	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-43.05	-13.00	-30.05	2.88 V	290	73.59	-116.64

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23825 : 713.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-45.72	-13.00	-32.72	1.95 H	70	70.94	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-43.06	-13.00	-30.06	2.93 V	286	73.60	-116.66

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23780 : 709 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1418.00	-45.62	-13.00	-32.62	1.92 H	75	71.02	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1418.00	-42.90	-13.00	-29.90	2.89 V	290	73.74	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-45.69	-13.00	-32.69	1.88 H	73	70.95	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-42.95	-13.00	-29.95	2.94 V	288	73.69	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23800 : 711 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-46.00	-13.00	-33.00	1.95 H	75	70.65	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-42.95	-13.00	-29.95	2.90 V	292	73.70	-116.65

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23755 : 706.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1413.00	-39.93	-13.00	-26.93	2.77 H	212	76.70	-116.63
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1413.00	-37.83	-13.00	-24.83	1.46 V	250	78.80	-116.63

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-39.67	-13.00	-26.67	2.72 H	210	76.97	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-37.66	-13.00	-24.66	1.40 V	249	78.98	-116.64

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 23825 : 713.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-39.96	-13.00	-26.96	2.79 H	205	76.70	-116.66
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1427.00	-37.86	-13.00	-24.86	1.44 V	259	78.80	-116.66

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23780 : 709 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1418.00	-39.38	-13.00	-26.38	2.88 H	200	77.26	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1418.00	-37.62	-13.00	-24.62	1.45 V	257	79.02	-116.64

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23790 : 710 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-39.08	-13.00	-26.08	2.82 H	203	77.56	-116.64
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-37.42	-13.00	-24.42	1.42 V	255	79.22	-116.64

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 17 Channel Bandwidth: 10MHz	<b>Channel</b>	CH 23800 : 711 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-39.62	-13.00	-26.62	3.00 H	201	77.03	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1422.00	-37.63	-13.00	-24.63	1.45 V	257	79.02	-116.65

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

## 7.7.14 LTE Band 25

## With shielding case

<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26047 : 1850.7 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-47.11	-13.00	-34.11	1.83 H	167	60.61	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-44.95	-13.00	-31.95	1.00 V	215	62.77	-107.72

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-47.09	-13.00	-34.09	3.46 H	161	60.72	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-45.18	-13.00	-32.18	1.21 V	25	62.63	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26683 : 1914.3 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3828.60	-47.43	-13.00	-34.43	2.21 H	250	60.24	-107.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3828.60	-44.91	-13.00	-31.91	1.80 V	260	62.76	-107.67

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26065 : 1852.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-47.15	-13.00	-34.15	1.39 H	243	60.57	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-45.52	-13.00	-32.52	1.78 V	111	62.20	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-47.55	-13.00	-34.55	2.74 H	149	60.26	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-45.56	-13.00	-32.56	2.06 V	357	62.25	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26665 : 1912.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3825.00	-47.18	-13.00	-34.18	3.85 H	10	60.49	-107.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3825.00	-45.04	-13.00	-32.04	1.53 V	278	62.63	-107.67

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26140 : 1860 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-47.16	-13.00	-34.16	2.34 H	330	60.60	-107.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-45.47	-13.00	-32.47	1.51 V	220	62.29	-107.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-47.63	-13.00	-34.63	3.31 H	152	60.18	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-44.91	-13.00	-31.91	1.47 V	130	62.90	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26590 : 1905 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3810.00	-47.31	-13.00	-34.31	2.71 H	269	60.44	-107.75
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3810.00	-45.26	-13.00	-32.26	1.80 V	253	62.49	-107.75

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26047 : 1850.7 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-46.81	-13.00	-33.81	2.96 H	261	60.91	-107.72
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-45.02	-13.00	-32.02	2.59 V	140	62.70	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-46.72	-13.00	-33.72	2.90 H	274	61.09	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-44.84	-13.00	-31.84	2.49 V	139	62.97	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26683 : 1914.3 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3828.60	-46.96	-13.00	-33.96	3.11 H	280	60.71	-107.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3828.60	-44.97	-13.00	-31.97	2.39 V	159	62.70	-107.67

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26065 : 1852.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-47.00	-13.00	-34.00	3.09 H	248	60.72	-107.72

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-45.12	-13.00	-32.12	2.40 V	119	62.60	-107.72

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-46.24	-13.00	-33.24	3.10 H	248	61.57	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-45.05	-13.00	-32.05	2.50 V	129	62.76	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26665 : 1912.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3825.00	-46.61	-13.00	-33.61	2.99 H	258	61.06	-107.67
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3825.00	-44.71	-13.00	-31.71	2.55 V	133	62.96	-107.67

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26140 : 1860 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-46.73	-13.00	-33.73	3.17 H	245	61.03	-107.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-44.61	-13.00	-31.61	2.36 V	105	63.15	-107.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26365 : 1882.5 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-46.46	-13.00	-33.46	3.15 H	245	61.35	-107.81
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3765.00	-44.34	-13.00	-31.34	2.41 V	106	63.47	-107.81

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 25 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 26590 : 1905 MHz
<b>Frequency Range</b>	1 GHz ~ 20 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3810.00	-46.54	-13.00	-33.54	3.19 H	240	61.21	-107.75
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3810.00	-44.73	-13.00	-31.73	2.39 V	109	63.02	-107.75

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



## 7.7.15 LTE Band 26 (814-824 MHz)

**With shielding case**

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26697 : 814.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1629.40	-57.73	-13.00	-44.73	1.92 H	64	59.34	-117.07
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1629.40	-54.65	-13.00	-41.65	1.61 V	233	62.42	-117.07

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-57.68	-13.00	-44.68	1.99 H	68	59.37	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-54.64	-13.00	-41.64	1.64 V	235	62.41	-117.05

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26783 : 823.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1646.60	-57.70	-13.00	-44.70	1.94 H	66	59.32	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1646.60	-54.54	-13.00	-41.54	1.62 V	235	62.48	-117.02

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26715 : 816.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1633.00	-57.50	-13.00	-44.50	1.90 H	61	59.57	-117.07

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1633.00	-54.72	-13.00	-41.72	1.58 V	233	62.35	-117.07

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-57.62	-13.00	-44.62	1.88 H	62	59.43	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-54.53	-13.00	-41.53	1.61 V	231	62.52	-117.05

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26765 : 821.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1643.00	-57.63	-13.00	-44.63	1.87 H	64	59.41	-117.04
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1643.00	-54.71	-13.00	-41.71	1.64 V	236	62.33	-117.04

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-57.60	-13.00	-44.60	1.87 H	61	59.45	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-54.60	-13.00	-41.60	1.56 V	233	62.45	-117.05

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26697 : 814.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1629.40	-57.31	-13.00	-44.31	1.84 H	110	59.76	-117.07
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1629.40	-54.39	-13.00	-41.39	1.48 V	227	62.68	-117.07

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-57.29	-13.00	-44.29	1.84 H	110	59.76	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-54.18	-13.00	-41.18	1.49 V	227	62.87	-117.05

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26783 : 823.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1646.60	-57.34	-13.00	-44.34	1.81 H	100	59.68	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1646.60	-54.34	-13.00	-41.34	1.59 V	232	62.68	-117.02

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26715 : 816.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1633.00	-57.04	-13.00	-44.04	2.00 H	109	60.03	-117.07
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1633.00	-54.05	-13.00	-41.05	1.20 V	199	63.02	-117.07

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-56.65	-13.00	-43.65	1.99 H	111	60.40	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-53.95	-13.00	-40.95	1.40 V	219	63.10	-117.05

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26765 : 821.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1643.00	-57.40	-13.00	-44.40	1.89 H	118	59.64	-117.04

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1643.00	-54.23	-13.00	-41.23	1.44 V	217	62.81	-117.04

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (814-824 MHz) Channel Bandwidth: 10MHz	<b>Channel</b>	CH 26740 : 819 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-56.77	-13.00	-43.77	2.06 H	105	60.28	-117.05
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1638.00	-53.88	-13.00	-40.88	1.23 V	204	63.17	-117.05

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

## 7.7.16 LTE Band 26 (824-849 MHz)

## With shielding case

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26797 : 824.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-56.38	-13.00	-43.38	2.03 H	94	60.64	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-53.16	-13.00	-40.16	1.48 V	269	63.86	-117.02

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-56.74	-13.00	-43.74	2.62 H	152	60.24	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.48	-13.00	-40.48	1.39 V	115	63.50	-116.98

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 27033 : 848.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-56.67	-13.00	-43.67	1.96 H	160	60.28	-116.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-53.02	-13.00	-40.02	1.95 V	323	63.93	-116.95

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26815 : 826.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-56.30	-13.00	-43.30	1.40 H	84	60.71	-117.01
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-53.23	-13.00	-40.23	1.10 V	137	63.78	-117.01

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-56.17	-13.00	-43.17	2.48 H	116	60.81	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.38	-13.00	-40.38	3.26 V	253	63.60	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 27015 : 846.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-56.36	-13.00	-43.36	1.79 H	301	60.61	-116.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-53.50	-13.00	-40.50	2.63 V	209	63.47	-116.97

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26865 : 831.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1663.00	-56.31	-13.00	-43.31	1.13 H	225	60.69	-117.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1663.00	-53.47	-13.00	-40.47	2.28 V	55	63.53	-117.00

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-56.49	-13.00	-43.49	1.85 H	176	60.49	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.30	-13.00	-40.30	1.39 V	322	63.68	-116.98

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26965 : 841.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1683.00	-56.22	-13.00	-43.22	2.70 H	135	60.76	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1683.00	-53.34	-13.00	-40.34	2.41 V	29	63.64	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26797 : 824.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-56.25	-13.00	-43.25	1.49 H	198	60.77	-117.02
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-53.44	-13.00	-40.44	2.26 V	126	63.58	-117.02

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-56.00	-13.00	-43.00	1.50 H	197	60.98	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.22	-13.00	-40.22	2.29 V	129	63.76	-116.98

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 27033 : 848.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-56.35	-13.00	-43.35	1.55 H	201	60.60	-116.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-53.47	-13.00	-40.47	2.35 V	138	63.48	-116.95

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26815 : 826.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-55.98	-13.00	-42.98	1.30 H	180	61.03	-117.01
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-53.32	-13.00	-40.32	2.21 V	131	63.69	-117.01

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-56.08	-13.00	-43.08	1.36 H	190	60.90	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-53.11	-13.00	-40.11	2.21 V	133	63.87	-116.98

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 5MHz	<b>Channel</b>	CH 27015 : 846.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-56.28	-13.00	-43.28	1.39 H	193	60.69	-116.97
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-53.18	-13.00	-40.18	2.22 V	123	63.79	-116.97

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26865 : 831.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1663.00	-55.75	-13.00	-42.75	1.21 H	177	61.25	-117.00
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1663.00	-52.96	-13.00	-39.96	2.09 V	119	64.04	-117.00

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26915 : 836.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-55.48	-13.00	-42.48	1.21 H	171	61.50	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-52.61	-13.00	-39.61	2.04 V	116	64.37	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 26 (824-849 MHz) Channel Bandwidth: 15MHz	<b>Channel</b>	CH 26965 : 841.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1683.00	-55.66	-13.00	-42.66	1.28 H	179	61.32	-116.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1683.00	-53.08	-13.00	-40.08	2.11 V	129	63.90	-116.98

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



## 7.7.17 LTE Band 41

## With shielding case

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 39675 : 2498.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4997.00	-47.62	-25.00	-22.62	3.07 H	213	56.46	-104.08
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4997.00	-45.55	-25.00	-20.55	1.75 V	181	58.53	-104.08

## Remarks:

- EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit value
- The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-47.35	-25.00	-22.35	3.60 H	247	56.61	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-45.15	-25.00	-20.15	1.16 V	148	58.81	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 41565 : 2687.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.00	-47.50	-25.00	-22.50	3.50 H	77	56.69	-104.19

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.00	-45.65	-25.00	-20.65	1.43 V	201	58.54	-104.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 39750 : 2506 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-47.23	-25.00	-22.23	2.66 H	17	56.76	-103.99
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-45.51	-25.00	-20.51	1.03 V	259	58.48	-103.99

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-47.27	-25.00	-22.27	2.09 H	32	56.69	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-45.07	-25.00	-20.07	1.76 V	285	58.89	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 41490 : 2680 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-47.80	-25.00	-22.80	3.93 H	98	56.39	-104.19
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-45.32	-25.00	-20.32	2.45 V	3	58.87	-104.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 39675 : 2498.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4997.00	-47.49	-25.00	-22.49	1.20 H	68	56.59	-104.08
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4997.00	-44.67	-25.00	-19.67	2.46 V	295	59.41	-104.08

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-47.20	-25.00	-22.20	1.30 H	70	56.76	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-44.12	-25.00	-19.12	2.49 V	297	59.84	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 41565 : 2687.5 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.00	-47.31	-25.00	-22.31	1.33 H	47	56.88	-104.19
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5375.00	-44.51	-25.00	-19.51	2.40 V	287	59.68	-104.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 39750 : 2506 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-46.95	-25.00	-21.95	1.16 H	60	57.04	-103.99
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5012.00	-43.95	-25.00	-18.95	2.35 V	287	60.04	-103.99

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 40620 : 2593 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-46.54	-25.00	-21.54	1.10 H	58	57.42	-103.96
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-43.46	-25.00	-18.46	2.37 V	287	60.50	-103.96

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 41 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 41490 : 2680 MHz
<b>Frequency Range</b>	1 GHz ~ 27 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-47.29	-25.00	-22.29	1.20 H	88	56.90	-104.19
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5360.00	-44.09	-25.00	-19.09	2.40 V	288	60.10	-104.19

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

## 7.7.18 LTE Band 66

## With shielding case

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 131979 : 1710.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-48.29	-13.00	-35.29	3.52 H	76	60.51	-108.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-45.15	-13.00	-32.15	1.73 V	348	63.65	-108.80

## Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-47.50	-13.00	-34.50	2.72 H	13	60.36	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.27	-13.00	-31.27	1.41 V	117	63.59	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 132665 : 1779.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-47.38	-13.00	-34.38	3.70 H	22	60.39	-107.77
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-43.86	-13.00	-30.86	1.37 V	177	63.91	-107.77

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 131997 : 1712.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-48.37	-13.00	-35.37	2.17 H	234	60.39	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-45.21	-13.00	-32.21	1.17 V	45	63.55	-108.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-47.38	-13.00	-34.38	2.39 H	223	60.48	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-43.91	-13.00	-30.91	1.21 V	341	63.95	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 132647 : 1777.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-47.45	-13.00	-34.45	2.09 H	95	60.30	-107.75
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-44.26	-13.00	-31.26	2.03 V	144	63.49	-107.75

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132072 : 1720 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-47.68	-13.00	-34.68	1.21 H	23	60.92	-108.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-44.71	-13.00	-31.71	1.67 V	351	63.89	-108.60

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-47.29	-13.00	-34.29	2.15 H	270	60.57	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.28	-13.00	-31.28	3.71 V	69	63.58	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132572 : 1770 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-47.46	-13.00	-34.46	2.03 H	78	60.28	-107.74
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-44.33	-13.00	-31.33	2.45 V	310	63.41	-107.74

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 131979 : 1710.7 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-47.99	-13.00	-34.99	1.93 H	183	60.81	-108.80
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-45.23	-13.00	-32.23	2.16 V	126	63.57	-108.80

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-46.78	-13.00	-33.78	1.98 H	173	61.08	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.10	-13.00	-31.10	2.06 V	127	63.76	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 1.4MHz	<b>Channel</b>	CH 132665 : 1779.3 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-47.06	-13.00	-34.06	2.00 H	190	60.71	-107.77
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-43.89	-13.00	-30.89	2.03 V	113	63.88	-107.77

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 131997 : 1712.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-47.62	-13.00	-34.62	1.83 H	180	61.14	-108.76
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-44.94	-13.00	-31.94	2.05 V	124	63.82	-108.76

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-47.26	-13.00	-34.26	1.88 H	179	60.60	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-43.88	-13.00	-30.88	2.09 V	125	63.98	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 132647 : 1777.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-46.84	-13.00	-33.84	1.73 H	170	60.91	-107.75
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-44.05	-13.00	-31.05	2.10 V	127	63.70	-107.75

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132072 : 1720 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-47.23	-13.00	-34.23	1.80 H	179	61.37	-108.60
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-44.45	-13.00	-31.45	2.03 V	114	64.15	-108.60

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132322 : 1745 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-46.21	-13.00	-33.21	1.78 H	179	61.65	-107.86
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-43.38	-13.00	-30.38	2.03 V	111	64.48	-107.86

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 66 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 132572 : 1770 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-46.60	-13.00	-33.60	1.83 H	180	61.14	-107.74

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-43.53	-13.00	-30.53	2.05 V	114	64.21	-107.74

**Remarks:**

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

## 7.7.19 LTE Band 71

## With shielding case

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133147 : 665.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1331.00	-55.91	-13.00	-42.91	2.59 H	313	60.97	-116.88
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1331.00	-52.97	-13.00	-39.97	1.34 V	112	63.91	-116.88

## Remarks:

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-56.23	-13.00	-43.23	3.90 H	244	60.54	-116.77
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-53.27	-13.00	-40.27	1.64 V	308	63.50	-116.77

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133447 : 695.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1391.00	-56.04	-13.00	-43.04	1.35 H	314	60.61	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1391.00	-52.73	-13.00	-39.73	3.51 V	293	63.92	-116.65

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133222 : 673 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1346.00	-56.01	-13.00	-43.01	3.53 H	117	60.82	-116.83
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1346.00	-53.14	-13.00	-40.14	1.38 V	130	63.69	-116.83

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-56.08	-13.00	-43.08	1.97 H	3	60.69	-116.77
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-53.00	-13.00	-40.00	2.21 V	252	63.77	-116.77

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133372 : 688 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	23°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1376.00	-56.12	-13.00	-43.12	2.79 H	243	60.59	-116.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1376.00	-53.18	-13.00	-40.18	2.24 V	9	63.53	-116.71

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

Without shielding case (only MCU, PMIC, Crystal, EMMC component)

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133147 : 665.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1331.00	-39.41	-13.00	-26.41	1.60 H	195	77.47	-116.88
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1331.00	-38.06	-13.00	-25.06	2.40 V	125	78.82	-116.88

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3.  $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-39.12	-13.00	-26.12	1.59 H	190	77.65	-116.77
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-37.79	-13.00	-24.79	2.39 V	129	78.98	-116.77

**Remarks:**

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 133447 : 695.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1391.00	-39.09	-13.00	-26.09	1.54 H	191	77.56	-116.65
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1391.00	-37.60	-13.00	-24.60	2.29 V	119	79.05	-116.65

**Remarks:**

1.  $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133222 : 673 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1346.00	-38.82	-13.00	-25.82	1.55 H	203	78.01	-116.83

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1346.00	-37.79	-13.00	-24.79	2.49 V	117	79.04	-116.83

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.





<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133297 : 680.5 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

**Antenna Polarity & Test Distance : Horizontal at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-38.65	-13.00	-25.65	1.52 H	203	78.12	-116.77

**Antenna Polarity & Test Distance : Vertical at 3 m**

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1361.00	-37.38	-13.00	-24.38	2.48 V	117	79.39	-116.77

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

<b>RF Mode</b>	LTE Band 71 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 133372 : 688 MHz
<b>Frequency Range</b>	1 GHz ~ 18 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	4.7 Vdc	<b>Environmental Conditions</b>	22°C, 67% RH
<b>Tested By</b>	Vincent Chen		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1376.00	-39.01	-13.00	-26.01	1.59 H	199	77.70	-116.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1376.00	-37.51	-13.00	-24.51	2.50 V	119	79.20	-116.71

**Remarks:**

- ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
- Margin value = ERP – Limit value
- The other ERP levels were very low against the limit.

## 7.8 Frequency Stability

Input Power:	4.7 Vdc	Environmental Conditions:	22°C, 73% RH	Tested By:	Willy Cheng
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### 7.8.1 GSM 850

#### GSM

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 128 (824.2 MHz)		CH 251 (848.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	824.2000030	0.004	848.8000020	0.002
4.70	824.1999970	-0.004	848.8000040	0.005
4.90	824.2000010	0.001	848.7999970	-0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 128 (824.2 MHz)		CH 251 (848.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	824.1999970	-0.004	848.7999970	-0.004
-30	824.1999960	-0.005	848.8000020	0.002
-20	824.2000010	0.001	848.7999960	-0.005
-10	824.1999960	-0.005	848.7999970	-0.004
0	824.2000040	0.005	848.8000040	0.005
10	824.1999970	-0.004	848.7999960	-0.005
20	824.2000020	0.002	848.7999980	-0.002
30	824.2000030	0.004	848.7999990	-0.001
40	824.2000010	0.001	848.8000040	0.005
50	824.2000020	0.002	848.8000030	0.004
60	824.2000020	0.002	848.7999990	-0.001
70	824.2000030	0.004	848.7999970	-0.004
80	824.1999980	-0.002	848.8000030	0.004
85	824.1999990	-0.001	848.7999990	-0.001

**EDGE**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 128 (824.2 MHz)		CH 251 (848.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	824.2000040	0.005	848.8000030	0.004
4.70	824.1999980	-0.002	848.8000040	0.005
4.90	824.1999960	-0.005	848.8000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 128 (824.2 MHz)		CH 251 (848.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	824.1999970	-0.004	848.8000040	0.005
-30	824.2000010	0.001	848.7999970	-0.004
-20	824.1999970	-0.004	848.8000020	0.002
-10	824.1999970	-0.004	848.7999990	-0.001
0	824.1999990	-0.001	848.8000010	0.001
10	824.1999980	-0.002	848.8000030	0.004
20	824.2000010	0.001	848.8000040	0.005
30	824.2000040	0.005	848.7999960	-0.005
40	824.1999970	-0.004	848.8000040	0.005
50	824.2000010	0.001	848.8000040	0.005
60	824.2000010	0.001	848.7999980	-0.002
70	824.2000010	0.001	848.8000040	0.005
80	824.1999980	-0.002	848.8000010	0.001
85	824.2000030	0.004	848.8000040	0.005

## 7.8.2 GSM 1900

**GSM**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 512 (1850.2 MHz)		CH 810 (1909.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1850.2000020	0.001	1909.7999960	-0.002
4.70	1850.1999960	-0.002	1909.8000030	0.002
4.90	1850.1999980	-0.001	1909.7999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 512 (1850.2 MHz)		CH 810 (1909.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.1999980	-0.001	1909.8000020	0.001
-30	1850.1999960	-0.002	1909.8000030	0.002
-20	1850.1999960	-0.002	1909.8000030	0.002
-10	1850.2000010	0.001	1909.7999970	-0.002
0	1850.2000030	0.002	1909.8000030	0.002
10	1850.1999990	-0.001	1909.8000010	0.001
20	1850.1999990	-0.001	1909.7999970	-0.002
30	1850.1999990	-0.001	1909.8000040	0.002
40	1850.2000020	0.001	1909.7999970	-0.002
50	1850.2000010	0.001	1909.7999970	-0.002
60	1850.2000030	0.002	1909.8000020	0.001
70	1850.2000010	0.001	1909.8000040	0.002
80	1850.1999990	-0.001	1909.7999990	-0.001
85	1850.2000010	0.001	1909.8000020	0.001

**EDGE**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 512 (1850.2 MHz)		CH 810 (1909.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1850.1999980	-0.001	1909.7999990	-0.001
4.70	1850.1999980	-0.001	1909.7999970	-0.002
4.90	1850.1999960	-0.002	1909.8000030	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 512 (1850.2 MHz)		CH 810 (1909.8 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.2000010	0.001	1909.7999990	-0.001
-30	1850.1999970	-0.002	1909.8000010	0.001
-20	1850.1999970	-0.002	1909.8000010	0.001
-10	1850.2000010	0.001	1909.8000010	0.001
0	1850.2000020	0.001	1909.7999960	-0.002
10	1850.1999960	-0.002	1909.7999960	-0.002
20	1850.1999980	-0.001	1909.7999960	-0.002
30	1850.2000030	0.002	1909.7999980	-0.001
40	1850.1999960	-0.002	1909.8000010	0.001
50	1850.2000020	0.001	1909.8000010	0.001
60	1850.1999990	-0.001	1909.8000020	0.001
70	1850.1999990	-0.001	1909.8000010	0.001
80	1850.2000040	0.002	1909.8000040	0.002
85	1850.2000010	0.001	1909.7999990	-0.001

**7.8.3 WCDMA Band 2**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 9262 (1852.4 MHz)</b>		<b>CH 9538 (1907.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1852.3999980	-0.001	1907.6000010	0.001
4.70	1852.3999970	-0.002	1907.5999960	-0.002
4.90	1852.4000030	0.002	1907.6000040	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 9262 (1852.4 MHz)</b>		<b>CH 9538 (1907.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1852.4000040	0.002	1907.5999990	-0.001
-30	1852.4000040	0.002	1907.5999980	-0.001
-20	1852.4000030	0.002	1907.5999980	-0.001
-10	1852.4000030	0.002	1907.5999990	-0.001
0	1852.3999990	-0.001	1907.5999960	-0.002
10	1852.4000020	0.001	1907.5999970	-0.002
20	1852.3999970	-0.002	1907.5999980	-0.001
30	1852.3999970	-0.002	1907.5999970	-0.002
40	1852.3999990	-0.001	1907.5999980	-0.001
50	1852.4000040	0.002	1907.5999970	-0.002
60	1852.3999990	-0.001	1907.5999960	-0.002
70	1852.3999960	-0.002	1907.5999980	-0.001
80	1852.3999980	-0.001	1907.5999990	-0.001
85	1852.3999960	-0.002	1907.5999990	-0.001

**7.8.4 WCDMA Band 4**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 1312 (1712.4 MHz)</b>		<b>CH 1513 (1752.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1712.4000010	0.001	1752.5999960	-0.002
4.70	1712.3999990	-0.001	1752.6000020	0.001
4.90	1712.3999970	-0.002	1752.5999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 1312 (1712.4 MHz)</b>		<b>CH 1513 (1752.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1712.3999960	-0.002	1752.6000040	0.002
-30	1712.4000010	0.001	1752.6000010	0.001
-20	1712.4000030	0.002	1752.6000040	0.002
-10	1712.3999980	-0.001	1752.6000030	0.002
0	1712.4000020	0.001	1752.6000030	0.002
10	1712.3999960	-0.002	1752.6000030	0.002
20	1712.4000010	0.001	1752.6000020	0.001
30	1712.3999970	-0.002	1752.5999960	-0.002
40	1712.3999970	-0.002	1752.6000020	0.001
50	1712.3999960	-0.002	1752.6000020	0.001
60	1712.3999970	-0.002	1752.6000040	0.002
70	1712.4000020	0.001	1752.5999990	-0.001
80	1712.3999980	-0.001	1752.5999970	-0.002
85	1712.3999960	-0.002	1752.5999980	-0.001



**7.8.5 WCDMA Band 5**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 9262 (1852.4 MHz)</b>		<b>CH 9538 (1907.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1852.3999980	-0.001	1907.6000010	0.001
4.70	1852.3999970	-0.002	1907.5999960	-0.002
4.90	1852.4000030	0.002	1907.6000040	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 9262 (1852.4 MHz)</b>		<b>CH 9538 (1907.6 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1852.4000040	0.002	1907.5999990	-0.001
-30	1852.4000040	0.002	1907.5999980	-0.001
-20	1852.4000030	0.002	1907.5999980	-0.001
-10	1852.4000030	0.002	1907.5999990	-0.001
0	1852.3999990	-0.001	1907.5999960	-0.002
10	1852.4000020	0.001	1907.5999970	-0.002
20	1852.3999970	-0.002	1907.5999980	-0.001
30	1852.3999970	-0.002	1907.5999970	-0.002
40	1852.3999990	-0.001	1907.5999980	-0.001
50	1852.4000040	0.002	1907.5999970	-0.002
60	1852.3999990	-0.001	1907.5999960	-0.002
70	1852.3999960	-0.002	1907.5999980	-0.001
80	1852.3999980	-0.001	1907.5999990	-0.001
85	1852.3999960	-0.002	1907.5999990	-0.001

7.8.6 LTE Band 2

**LTE Band 2, Channel Bandwidth: 1.4 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 18607 (1850.7 MHz)		CH 19193 (1909.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1850.6999970	-0.002	1909.3000040	0.002
4.70	1850.7000020	0.001	1909.3000010	0.001
4.90	1850.6999960	-0.002	1909.2999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 18607 (1850.7 MHz)		CH 19193 (1909.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.7000010	0.001	1909.3000010	0.001
-30	1850.6999980	-0.001	1909.2999970	-0.002
-20	1850.6999990	-0.001	1909.3000020	0.001
-10	1850.6999990	-0.001	1909.3000010	0.001
0	1850.7000020	0.001	1909.2999960	-0.002
10	1850.6999960	-0.002	1909.3000010	0.001
20	1850.6999980	-0.001	1909.3000040	0.002
30	1850.7000030	0.002	1909.2999990	-0.001
40	1850.6999980	-0.001	1909.3000030	0.002
50	1850.6999970	-0.002	1909.2999980	-0.001
60	1850.7000030	0.002	1909.3000020	0.001
70	1850.7000040	0.002	1909.3000030	0.002
80	1850.7000030	0.002	1909.2999990	-0.001
85	1850.6999970	-0.002	1909.2999990	-0.001

### LTE Band 2, Channel Bandwidth: 3 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 18615 (1851.5 MHz)		CH 19185 (1908.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1851.5000020	0.001	1908.5000030	0.002
4.70	1851.4999960	-0.002	1908.4999980	-0.001
4.90	1851.5000020	0.001	1908.5000030	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 18615 (1851.5 MHz)		CH 19185 (1908.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1851.5000020	0.001	1908.5000040	0.002
-30	1851.5000010	0.001	1908.5000020	0.001
-20	1851.5000010	0.001	1908.4999980	-0.001
-10	1851.5000020	0.001	1908.5000010	0.001
0	1851.4999980	-0.001	1908.4999970	-0.002
10	1851.5000020	0.001	1908.4999960	-0.002
20	1851.4999970	-0.002	1908.5000010	0.001
30	1851.5000030	0.002	1908.4999970	-0.002
40	1851.5000010	0.001	1908.4999980	-0.001
50	1851.4999980	-0.001	1908.5000020	0.001
60	1851.5000010	0.001	1908.4999980	-0.001
70	1851.5000010	0.001	1908.5000040	0.002
80	1851.5000010	0.001	1908.5000040	0.002
85	1851.4999960	-0.002	1908.5000020	0.001

**LTE Band 2, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 18625 (1852.5 MHz)</b>		<b>CH 19175 (1907.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1852.5000010	0.001	1907.5000040	0.002
4.70	1852.4999990	-0.001	1907.5000030	0.002
4.90	1852.5000040	0.002	1907.5000020	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 18625 (1852.5 MHz)</b>		<b>CH 19175 (1907.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1852.5000020	0.001	1907.4999970	-0.002
-30	1852.4999960	-0.002	1907.5000040	0.002
-20	1852.5000030	0.002	1907.5000010	0.001
-10	1852.5000030	0.002	1907.4999970	-0.002
0	1852.5000040	0.002	1907.5000030	0.002
10	1852.5000010	0.001	1907.4999990	-0.001
20	1852.4999990	-0.001	1907.5000040	0.002
30	1852.4999960	-0.002	1907.4999990	-0.001
40	1852.5000010	0.001	1907.4999990	-0.001
50	1852.4999980	-0.001	1907.5000030	0.002
60	1852.4999980	-0.001	1907.5000030	0.002
70	1852.5000030	0.002	1907.4999960	-0.002
80	1852.5000040	0.002	1907.5000020	0.001
85	1852.4999970	-0.002	1907.4999960	-0.002

**LTE Band 2, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 18650 (1855 MHz)</b>		<b>CH 19150 (1905 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1855.0000040	0.002	1905.0000030	0.002
4.70	1854.9999960	-0.002	1904.9999990	-0.001
4.90	1854.9999980	-0.001	1904.9999970	-0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 18650 (1855 MHz)</b>		<b>CH 19150 (1905 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1854.9999980	-0.001	1904.9999980	-0.001
-30	1854.9999980	-0.001	1904.9999980	-0.001
-20	1855.0000010	0.001	1904.9999960	-0.002
-10	1854.9999960	-0.002	1904.9999960	-0.002
0	1854.9999990	-0.001	1905.0000010	0.001
10	1854.9999960	-0.002	1904.9999960	-0.002
20	1855.0000020	0.001	1905.0000040	0.002
30	1855.0000010	0.001	1904.9999990	-0.001
40	1854.9999990	-0.001	1905.0000040	0.002
50	1854.9999980	-0.001	1905.0000020	0.001
60	1854.9999980	-0.001	1905.0000030	0.002
70	1854.9999990	-0.001	1904.9999990	-0.001
80	1855.0000020	0.001	1904.9999990	-0.001
85	1855.0000020	0.001	1905.0000040	0.002

### LTE Band 2, Channel Bandwidth: 15 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 18675 (1857.5 MHz)		CH 19125 (1902.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1857.5000030	0.002	1902.4999970	-0.002
4.70	1857.5000010	0.001	1902.5000020	0.001
4.90	1857.4999990	-0.001	1902.5000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 18675 (1857.5 MHz)		CH 19125 (1902.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1857.5000030	0.002	1902.5000020	0.001
-30	1857.5000030	0.002	1902.5000010	0.001
-20	1857.4999970	-0.002	1902.5000010	0.001
-10	1857.4999960	-0.002	1902.5000010	0.001
0	1857.5000020	0.001	1902.4999960	-0.002
10	1857.4999990	-0.001	1902.5000010	0.001
20	1857.5000030	0.002	1902.4999990	-0.001
30	1857.5000030	0.002	1902.5000030	0.002
40	1857.5000020	0.001	1902.5000020	0.001
50	1857.4999970	-0.002	1902.5000030	0.002
60	1857.4999960	-0.002	1902.5000040	0.002
70	1857.5000040	0.002	1902.4999990	-0.001
80	1857.5000030	0.002	1902.4999960	-0.002
85	1857.5000020	0.001	1902.4999960	-0.002

**LTE Band 2, Channel Bandwidth: 20 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 18700 (1860 MHz)</b>		<b>CH 19100 (1900 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1860.0000030	0.002	1899.9999960	-0.002
4.70	1859.9999960	-0.002	1900.0000040	0.002
4.90	1860.0000030	0.002	1900.0000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 18700 (1860 MHz)</b>		<b>CH 19100 (1900 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1859.9999970	-0.002	1899.9999980	-0.001
-30	1859.9999960	-0.002	1900.0000030	0.002
-20	1859.9999990	-0.001	1900.0000040	0.002
-10	1860.0000030	0.002	1899.9999970	-0.002
0	1859.9999960	-0.002	1899.9999970	-0.002
10	1859.9999980	-0.001	1899.9999960	-0.002
20	1859.9999970	-0.002	1900.0000040	0.002
30	1860.0000040	0.002	1900.0000030	0.002
40	1859.9999970	-0.002	1899.9999990	-0.001
50	1860.0000040	0.002	1899.9999980	-0.001
60	1859.9999980	-0.001	1900.0000040	0.002
70	1860.0000040	0.002	1899.9999960	-0.002
80	1860.0000040	0.002	1900.0000020	0.001
85	1859.9999970	-0.002	1899.9999960	-0.002

## 7.8.7 LTE Band 4

## LTE Band 4, Channel Bandwidth: 1.4 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 19957 (1710.7 MHz)		CH 20393 (1754.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1710.6999970	-0.002	1754.2999980	-0.001
4.70	1710.7000020	0.001	1754.2999990	-0.001
4.90	1710.6999980	-0.001	1754.2999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 19957 (1710.7 MHz)		CH 20393 (1754.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1710.6999990	-0.001	1754.3000040	0.002
-30	1710.6999960	-0.002	1754.3000040	0.002
-20	1710.6999960	-0.002	1754.2999990	-0.001
-10	1710.6999970	-0.002	1754.3000030	0.002
0	1710.6999990	-0.001	1754.3000030	0.002
10	1710.7000030	0.002	1754.3000020	0.001
20	1710.6999970	-0.002	1754.2999980	-0.001
30	1710.7000020	0.001	1754.3000040	0.002
40	1710.6999980	-0.001	1754.2999960	-0.002
50	1710.7000010	0.001	1754.3000040	0.002
60	1710.7000030	0.002	1754.3000010	0.001
70	1710.6999970	-0.002	1754.3000030	0.002
80	1710.7000030	0.002	1754.3000010	0.001
85	1710.6999960	-0.002	1754.2999960	-0.002



### LTE Band 4, Channel Bandwidth: 3 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 19965 (1711.5 MHz)		CH 20385 (1753.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1711.5000020	0.001	1753.4999980	-0.001
4.70	1711.4999960	-0.002	1753.4999970	-0.002
4.90	1711.4999960	-0.002	1753.4999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 19965 (1711.5 MHz)		CH 20385 (1753.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1711.4999990	-0.001	1753.4999960	-0.002
-30	1711.5000030	0.002	1753.4999990	-0.001
-20	1711.5000010	0.001	1753.4999960	-0.002
-10	1711.4999980	-0.001	1753.5000040	0.002
0	1711.4999980	-0.001	1753.4999960	-0.002
10	1711.5000010	0.001	1753.5000040	0.002
20	1711.4999990	-0.001	1753.4999970	-0.002
30	1711.5000030	0.002	1753.5000040	0.002
40	1711.5000020	0.001	1753.4999970	-0.002
50	1711.5000010	0.001	1753.4999970	-0.002
60	1711.4999970	-0.002	1753.4999960	-0.002
70	1711.5000030	0.002	1753.5000010	0.001
80	1711.4999980	-0.001	1753.4999970	-0.002
85	1711.4999970	-0.002	1753.5000030	0.002

**LTE Band 4, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 19975 (1712.5 MHz)</b>		<b>CH 20375 (1752.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1712.4999990	-0.001	1752.4999960	-0.002
4.70	1712.4999990	-0.001	1752.5000020	0.001
4.90	1712.5000020	0.001	1752.4999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 19975 (1712.5 MHz)</b>		<b>CH 20375 (1752.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1712.4999960	-0.002	1752.5000040	0.002
-30	1712.4999990	-0.001	1752.5000030	0.002
-20	1712.4999960	-0.002	1752.5000020	0.001
-10	1712.5000010	0.001	1752.5000040	0.002
0	1712.5000010	0.001	1752.4999970	-0.002
10	1712.5000010	0.001	1752.5000010	0.001
20	1712.4999980	-0.001	1752.4999960	-0.002
30	1712.5000020	0.001	1752.4999990	-0.001
40	1712.5000040	0.002	1752.5000030	0.002
50	1712.4999990	-0.001	1752.5000010	0.001
60	1712.4999970	-0.002	1752.4999990	-0.001
70	1712.4999960	-0.002	1752.5000030	0.002
80	1712.5000030	0.002	1752.4999980	-0.001
85	1712.4999980	-0.001	1752.5000040	0.002

### LTE Band 4, Channel Bandwidth: 10 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20000 (1715 MHz)		CH 20350 (1750 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1715.0000010	0.001	1749.9999960	-0.002
4.70	1714.9999960	-0.002	1749.9999970	-0.002
4.90	1714.9999960	-0.002	1749.9999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20000 (1715 MHz)		CH 20350 (1750 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1715.0000020	0.001	1750.0000010	0.001
-30	1715.0000040	0.002	1750.0000040	0.002
-20	1715.0000020	0.001	1750.0000010	0.001
-10	1714.9999990	-0.001	1749.9999960	-0.002
0	1714.9999960	-0.002	1749.9999980	-0.001
10	1714.9999960	-0.002	1749.9999980	-0.001
20	1715.0000010	0.001	1749.9999990	-0.001
30	1715.0000040	0.002	1750.0000030	0.002
40	1714.9999960	-0.002	1750.0000040	0.002
50	1714.9999970	-0.002	1749.9999990	-0.001
60	1715.0000020	0.001	1749.9999980	-0.001
70	1714.9999960	-0.002	1750.0000030	0.002
80	1715.0000010	0.001	1750.0000010	0.001
85	1715.0000010	0.001	1750.0000040	0.002

**LTE Band 4, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 20025 (1717.5 MHz)</b>		<b>CH 20325 (1747.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1717.5000040	0.002	1747.5000030	0.002
4.70	1717.5000010	0.001	1747.4999960	-0.002
4.90	1717.4999960	-0.002	1747.5000020	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 20025 (1717.5 MHz)</b>		<b>CH 20325 (1747.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1717.5000010	0.001	1747.4999980	-0.001
-30	1717.5000010	0.001	1747.4999960	-0.002
-20	1717.5000040	0.002	1747.4999970	-0.002
-10	1717.4999990	-0.001	1747.4999970	-0.002
0	1717.5000010	0.001	1747.4999960	-0.002
10	1717.4999960	-0.002	1747.4999960	-0.002
20	1717.5000040	0.002	1747.4999980	-0.001
30	1717.4999960	-0.002	1747.5000020	0.001
40	1717.5000020	0.001	1747.4999990	-0.001
50	1717.5000040	0.002	1747.5000010	0.001
60	1717.4999960	-0.002	1747.4999980	-0.001
70	1717.4999980	-0.001	1747.5000020	0.001
80	1717.4999990	-0.001	1747.4999980	-0.001
85	1717.5000030	0.002	1747.4999980	-0.001

**LTE Band 4, Channel Bandwidth: 20 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 20050 (1720 MHz)</b>		<b>CH 20300 (1745 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1719.9999980	-0.001	1745.0000040	0.002
4.70	1720.0000030	0.002	1745.0000030	0.002
4.90	1720.0000010	0.001	1744.9999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 20050 (1720 MHz)</b>		<b>CH 20300 (1745 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1719.9999980	-0.001	1745.0000030	0.002
-30	1720.0000040	0.002	1745.0000010	0.001
-20	1719.9999990	-0.001	1745.0000040	0.002
-10	1720.0000030	0.002	1744.9999980	-0.001
0	1719.9999980	-0.001	1745.0000020	0.001
10	1720.0000030	0.002	1744.9999980	-0.001
20	1720.0000030	0.002	1745.0000040	0.002
30	1719.9999990	-0.001	1744.9999980	-0.001
40	1720.0000010	0.001	1745.0000040	0.002
50	1720.0000010	0.001	1745.0000020	0.001
60	1720.0000020	0.001	1745.0000030	0.002
70	1720.0000040	0.002	1745.0000040	0.002
80	1720.0000030	0.002	1745.0000020	0.001
85	1720.0000020	0.001	1745.0000010	0.001

7.8.8 LTE Band 5

**LTE Band 5, Channel Bandwidth: 1.4 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20407 (824.7 MHz)		CH 20643 (848.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	824.7000030	0.004	848.2999980	-0.002
4.70	824.7000040	0.005	848.2999960	-0.005
4.90	824.7000010	0.001	848.2999970	-0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20407 (824.7 MHz)		CH 20643 (848.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	824.7000040	0.005	848.2999970	-0.004
-30	824.7000030	0.004	848.2999990	-0.001
-20	824.6999970	-0.004	848.3000010	0.001
-10	824.7000030	0.004	848.2999980	-0.002
0	824.7000010	0.001	848.3000020	0.002
10	824.7000010	0.001	848.2999980	-0.002
20	824.6999990	-0.001	848.2999970	-0.004
30	824.7000030	0.004	848.2999960	-0.005
40	824.6999960	-0.005	848.2999990	-0.001
50	824.6999970	-0.004	848.3000010	0.001
60	824.6999960	-0.005	848.3000040	0.005
70	824.6999970	-0.004	848.2999970	-0.004
80	824.7000040	0.005	848.2999980	-0.002
85	824.6999990	-0.001	848.3000030	0.004

**LTE Band 5, Channel Bandwidth: 3 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20415 (825.5 MHz)		CH 20635 (847.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	825.5000040	0.005	847.5000030	0.004
4.70	825.5000020	0.002	847.5000010	0.001
4.90	825.5000040	0.005	847.4999980	-0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20415 (825.5 MHz)		CH 20635 (847.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	825.4999990	-0.001	847.4999990	-0.001
-30	825.4999970	-0.004	847.5000040	0.005
-20	825.4999960	-0.005	847.4999960	-0.005
-10	825.4999960	-0.005	847.4999980	-0.002
0	825.5000040	0.005	847.4999980	-0.002
10	825.4999990	-0.001	847.5000040	0.005
20	825.4999970	-0.004	847.5000010	0.001
30	825.5000030	0.004	847.5000020	0.002
40	825.5000020	0.002	847.5000020	0.002
50	825.4999990	-0.001	847.5000010	0.001
60	825.4999980	-0.002	847.4999980	-0.002
70	825.5000030	0.004	847.4999960	-0.005
80	825.5000030	0.004	847.5000030	0.004
85	825.4999970	-0.004	847.4999970	-0.004

**LTE Band 5, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 20425 (826.5 MHz)</b>		<b>CH 20625 (846.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	826.4999990	-0.001	846.5000020	0.002
4.70	826.4999960	-0.005	846.4999960	-0.005
4.90	826.4999970	-0.004	846.5000040	0.005

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 20425 (826.5 MHz)</b>		<b>CH 20625 (846.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	826.4999960	-0.005	846.4999990	-0.001
-30	826.5000010	0.001	846.4999990	-0.001
-20	826.5000020	0.002	846.5000040	0.005
-10	826.5000040	0.005	846.5000030	0.004
0	826.4999980	-0.002	846.5000010	0.001
10	826.4999970	-0.004	846.4999980	-0.002
20	826.4999970	-0.004	846.5000020	0.002
30	826.5000030	0.004	846.5000030	0.004
40	826.5000020	0.002	846.5000020	0.002
50	826.4999960	-0.005	846.5000020	0.002
60	826.4999970	-0.004	846.4999960	-0.005
70	826.5000010	0.001	846.5000040	0.005
80	826.5000030	0.004	846.5000030	0.004
85	826.4999990	-0.001	846.4999990	-0.001



**LTE Band 5, Channel Bandwidth: 10 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20450 (829 MHz)		CH 20600 (844 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	829.0000040	0.005	843.9999980	-0.002
4.70	829.0000020	0.002	844.0000040	0.005
4.90	828.9999970	-0.004	843.9999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20450 (829 MHz)		CH 20600 (844 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	828.9999970	-0.004	843.9999970	-0.004
-30	828.9999990	-0.001	843.9999990	-0.001
-20	829.0000010	0.001	843.9999980	-0.002
-10	829.0000040	0.005	843.9999980	-0.002
0	829.0000040	0.005	844.0000010	0.001
10	829.0000030	0.004	843.9999960	-0.005
20	828.9999990	-0.001	843.9999970	-0.004
30	828.9999990	-0.001	843.9999990	-0.001
40	828.9999990	-0.001	844.0000020	0.002
50	829.0000010	0.001	843.9999990	-0.001
60	828.9999980	-0.002	843.9999970	-0.004
70	828.9999960	-0.005	844.0000010	0.001
80	828.9999990	-0.001	844.0000040	0.005
85	829.0000030	0.004	843.9999960	-0.005

### 7.8.9 LTE Band 7

#### LTE Band 7, Channel Bandwidth: 5 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20775 (2502.5 MHz)		CH 21425 (2567.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	2502.4999980	-0.001	2567.4999960	-0.002
4.70	2502.5000020	0.001	2567.4999980	-0.001
4.90	2502.5000040	0.002	2567.4999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20775 (2502.5 MHz)		CH 21425 (2567.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	2502.5000010	0.000	2567.4999980	-0.001
-30	2502.4999980	-0.001	2567.4999980	-0.001
-20	2502.5000030	0.001	2567.4999970	-0.001
-10	2502.4999970	-0.001	2567.4999960	-0.002
0	2502.4999990	0.000	2567.4999970	-0.001
10	2502.5000040	0.002	2567.5000020	0.001
20	2502.4999990	0.000	2567.5000010	0.000
30	2502.4999990	0.000	2567.4999970	-0.001
40	2502.5000010	0.000	2567.4999960	-0.002
50	2502.4999970	-0.001	2567.5000030	0.001
60	2502.4999960	-0.002	2567.4999980	-0.001
70	2502.4999970	-0.001	2567.4999990	0.000
80	2502.5000020	0.001	2567.5000030	0.001
85	2502.4999970	-0.001	2567.5000040	0.002

### LTE Band 7, Channel Bandwidth: 10 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 20800 (2505 MHz)		CH 21400 (2565 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	2504.9999970	-0.001	2565.0000020	0.001
4.70	2504.9999980	-0.001	2565.0000030	0.001
4.90	2504.9999980	-0.001	2565.0000040	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 20800 (2505 MHz)		CH 21400 (2565 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	2504.9999980	-0.001	2564.9999960	-0.002
-30	2505.0000030	0.001	2564.9999990	0.000
-20	2504.9999980	-0.001	2565.0000020	0.001
-10	2505.0000040	0.002	2565.0000020	0.001
0	2504.9999990	0.000	2564.9999990	0.000
10	2504.9999980	-0.001	2565.0000040	0.002
20	2505.0000020	0.001	2564.9999970	-0.001
30	2504.9999990	0.000	2564.9999980	-0.001
40	2505.0000020	0.001	2565.0000030	0.001
50	2505.0000030	0.001	2564.9999990	0.000
60	2504.9999960	-0.002	2564.9999980	-0.001
70	2505.0000030	0.001	2565.0000040	0.002
80	2505.0000020	0.001	2564.9999960	-0.002
85	2504.9999970	-0.001	2565.0000010	0.000

**LTE Band 7, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 20825 (2507.5 MHz)</b>		<b>CH 21375 (2562.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	2507.5000010	0.000	2562.4999970	-0.001
4.70	2507.4999970	-0.001	2562.4999980	-0.001
4.90	2507.5000020	0.001	2562.4999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 20825 (2507.5 MHz)</b>		<b>CH 21375 (2562.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	2507.4999990	0.000	2562.4999970	-0.001
-30	2507.5000010	0.000	2562.5000020	0.001
-20	2507.4999970	-0.001	2562.5000030	0.001
-10	2507.4999990	0.000	2562.5000030	0.001
0	2507.5000020	0.001	2562.5000030	0.001
10	2507.5000010	0.000	2562.5000030	0.001
20	2507.5000010	0.000	2562.4999960	-0.002
30	2507.5000030	0.001	2562.5000040	0.002
40	2507.5000020	0.001	2562.4999990	0.000
50	2507.4999960	-0.002	2562.4999990	0.000
60	2507.5000040	0.002	2562.5000030	0.001
70	2507.5000010	0.000	2562.4999990	0.000
80	2507.4999960	-0.002	2562.4999970	-0.001
85	2507.5000040	0.002	2562.5000010	0.000

**LTE Band 7, Channel Bandwidth: 20 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 20850 (2510 MHz)</b>		<b>CH 21350 (2560 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	2509.9999960	-0.002	2560.0000030	0.001
4.70	2509.9999980	-0.001	2559.9999960	-0.002
4.90	2509.9999990	0.000	2560.0000030	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 20850 (2510 MHz)</b>		<b>CH 21350 (2560 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	2510.0000020	0.001	2560.0000040	0.002
-30	2509.9999990	0.000	2560.0000040	0.002
-20	2510.0000020	0.001	2560.0000040	0.002
-10	2510.0000020	0.001	2559.9999970	-0.001
0	2509.9999980	-0.001	2560.0000030	0.001
10	2510.0000030	0.001	2559.9999980	-0.001
20	2510.0000020	0.001	2559.9999980	-0.001
30	2510.0000010	0.000	2560.0000020	0.001
40	2510.0000010	0.000	2560.0000030	0.001
50	2509.9999980	-0.001	2559.9999980	-0.001
60	2510.0000020	0.001	2560.0000010	0.000
70	2510.0000010	0.000	2560.0000020	0.001
80	2509.9999990	0.000	2560.0000040	0.002
85	2510.0000020	0.001	2560.0000020	0.001

7.8.10 LTE Band 12

**LTE Band 12, Channel Bandwidth: 1.4 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23017 (699.7 MHz)</b>		<b>CH 23173 (715.3 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	699.7000040	0.006	715.2999960	-0.006
4.70	699.6999970	-0.004	715.2999980	-0.003
4.90	699.6999980	-0.003	715.2999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23017 (699.7 MHz)</b>		<b>CH 23173 (715.3 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	699.7000030	0.004	715.2999970	-0.004
-30	699.7000030	0.004	715.3000020	0.003
-20	699.7000010	0.001	715.2999980	-0.003
-10	699.7000020	0.003	715.2999970	-0.004
0	699.6999980	-0.003	715.2999960	-0.006
10	699.7000020	0.003	715.2999980	-0.003
20	699.7000040	0.006	715.2999970	-0.004
30	699.7000020	0.003	715.2999990	-0.001
40	699.7000040	0.006	715.2999970	-0.004
50	699.7000040	0.006	715.3000020	0.003
60	699.7000040	0.006	715.3000020	0.003
70	699.7000020	0.003	715.3000020	0.003
80	699.6999990	-0.001	715.3000020	0.003
85	699.7000020	0.003	715.3000020	0.003

**LTE Band 12, Channel Bandwidth: 3 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 23025 (700.5 MHz)		CH 23165 (714.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	700.4999980	-0.003	714.4999970	-0.004
4.70	700.5000010	0.001	714.4999960	-0.006
4.90	700.4999980	-0.003	714.4999980	-0.003

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 23025 (700.5 MHz)		CH 23165 (714.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	700.5000040	0.006	714.5000030	0.004
-30	700.5000030	0.004	714.5000010	0.001
-20	700.5000030	0.004	714.5000010	0.001
-10	700.4999990	-0.001	714.4999980	-0.003
0	700.4999960	-0.006	714.4999980	-0.003
10	700.4999970	-0.004	714.4999960	-0.006
20	700.5000010	0.001	714.5000020	0.003
30	700.5000030	0.004	714.4999980	-0.003
40	700.5000030	0.004	714.5000020	0.003
50	700.4999990	-0.001	714.4999960	-0.006
60	700.5000030	0.004	714.5000010	0.001
70	700.5000020	0.003	714.5000010	0.001
80	700.5000020	0.003	714.5000030	0.004
85	700.4999990	-0.001	714.4999990	-0.001

**LTE Band 12, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23035 (701.5 MHz)</b>		<b>CH 23155 (713.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	701.5000010	0.001	713.4999980	-0.003
4.70	701.4999960	-0.006	713.4999970	-0.004
4.90	701.5000030	0.004	713.4999960	-0.006

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23035 (701.5 MHz)</b>		<b>CH 23155 (713.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	701.4999980	-0.003	713.4999980	-0.003
-30	701.4999990	-0.001	713.5000030	0.004
-20	701.4999990	-0.001	713.5000010	0.001
-10	701.4999960	-0.006	713.5000030	0.004
0	701.5000030	0.004	713.4999960	-0.006
10	701.5000040	0.006	713.4999980	-0.003
20	701.5000020	0.003	713.5000040	0.006
30	701.5000030	0.004	713.4999990	-0.001
40	701.4999970	-0.004	713.4999960	-0.006
50	701.4999960	-0.006	713.5000030	0.004
60	701.4999980	-0.003	713.5000030	0.004
70	701.5000020	0.003	713.5000010	0.001
80	701.5000020	0.003	713.5000030	0.004
85	701.5000040	0.006	713.4999960	-0.006



**LTE Band 12, Channel Bandwidth: 10 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 23060 (704 MHz)		CH 23130 (711 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	704.0000040	0.006	711.0000040	0.006
4.70	703.9999960	-0.006	711.0000010	0.001
4.90	703.9999970	-0.004	710.9999960	-0.006

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 23060 (704 MHz)		CH 23130 (711 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	704.0000020	0.003	711.0000040	0.006
-30	704.0000020	0.003	711.0000030	0.004
-20	703.9999990	-0.001	711.0000030	0.004
-10	703.9999980	-0.003	711.0000010	0.001
0	703.9999990	-0.001	710.9999990	-0.001
10	703.9999970	-0.004	711.0000040	0.006
20	704.0000040	0.006	710.9999970	-0.004
30	704.0000010	0.001	710.9999970	-0.004
40	703.9999970	-0.004	710.9999980	-0.003
50	704.0000030	0.004	710.9999960	-0.006
60	704.0000030	0.004	711.0000030	0.004
70	704.0000040	0.006	710.9999960	-0.006
80	704.0000010	0.001	710.9999990	-0.001
85	704.0000010	0.001	710.9999990	-0.001

7.8.11 LTE Band 13

**LTE Band 13, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23205 (779.5 MHz)</b>		<b>CH 23255 (784.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	779.5000040	0.005	784.4999980	-0.003
4.70	779.5000010	0.001	784.4999970	-0.004
4.90	779.5000040	0.005	784.5000030	0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23205 (779.5 MHz)</b>		<b>CH 23255 (784.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	779.5000030	0.004	784.5000040	0.005
-30	779.4999990	-0.001	784.5000040	0.005
-20	779.4999980	-0.003	784.4999960	-0.005
-10	779.5000030	0.004	784.5000040	0.005
0	779.4999970	-0.004	784.5000040	0.005
10	779.5000010	0.001	784.5000030	0.004
20	779.4999960	-0.005	784.5000020	0.003
30	779.4999960	-0.005	784.4999960	-0.005
40	779.5000040	0.005	784.5000020	0.003
50	779.5000040	0.005	784.4999970	-0.004
60	779.4999990	-0.001	784.4999970	-0.004
70	779.4999970	-0.004	784.4999970	-0.004
80	779.4999990	-0.001	784.4999960	-0.005
85	779.4999960	-0.005	784.5000040	0.005

**LTE Band 13, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>		
<b>Voltage (Vdc)</b>	<b>CH 23230 (782 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	782.0000020	0.003
4.70	782.0000040	0.005
4.90	782.0000020	0.003

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>		
<b>Temperature (°C)</b>	<b>CH 23230 (782 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	782.0000030	0.004
-30	781.9999960	-0.005
-20	782.0000010	0.001
-10	782.0000010	0.001
0	782.0000040	0.005
10	781.9999970	-0.004
20	781.9999980	-0.003
30	782.0000020	0.003
40	782.0000020	0.003
50	781.9999980	-0.003
60	781.9999970	-0.004
70	781.9999960	-0.005
80	782.0000010	0.001
85	781.9999980	-0.003

## 7.8.12 LTE Band 14

**LTE Band 14, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23305 (790.5 MHz)</b>		<b>CH 23355 (795.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	790.4999970	-0.004	795.5000040	0.005
4.70	790.4999970	-0.004	795.4999990	-0.001
4.90	790.5000010	0.001	795.5000030	0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23305 (790.5 MHz)</b>		<b>CH 23355 (795.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	790.5000010	0.001	795.4999990	-0.001
-30	790.4999970	-0.004	795.5000020	0.003
-20	790.5000040	0.005	795.5000030	0.004
-10	790.4999960	-0.005	795.4999980	-0.003
0	790.5000030	0.004	795.4999990	-0.001
10	790.5000020	0.003	795.5000020	0.003
20	790.5000030	0.004	795.5000020	0.003
30	790.5000020	0.003	795.5000040	0.005
40	790.4999970	-0.004	795.5000020	0.003
50	790.5000030	0.004	795.4999980	-0.003
60	790.4999980	-0.003	795.4999990	-0.001
70	790.5000010	0.001	795.4999980	-0.003
80	790.4999970	-0.004	795.5000040	0.005
85	790.4999980	-0.003	795.5000020	0.003

**LTE Band 14, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>		
<b>Voltage (Vdc)</b>	<b>CH 23330 (793 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	792.9999960	-0.005
4.70	793.0000040	0.005
4.90	792.9999970	-0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>		
<b>Temperature (°C)</b>	<b>CH 23330 (793 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	793.0000030	0.004
-30	792.9999960	-0.005
-20	792.9999960	-0.005
-10	792.9999990	-0.001
0	792.9999990	-0.001
10	793.0000020	0.003
20	793.0000020	0.003
30	793.0000010	0.001
40	793.0000020	0.003
50	792.9999960	-0.005
60	793.0000010	0.001
70	792.9999960	-0.005
80	793.0000020	0.003
85	792.9999990	-0.001

## 7.8.13 LTE Band 17

**LTE Band 17, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23755 (706.5 MHz)</b>		<b>CH 23825 (713.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	706.4999980	-0.003	713.4999990	-0.001
4.70	706.5000030	0.004	713.4999980	-0.003
4.90	706.5000040	0.006	713.4999960	-0.006

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23755 (706.5 MHz)</b>		<b>CH 23825 (713.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	706.5000010	0.001	713.4999990	-0.001
-30	706.4999970	-0.004	713.4999990	-0.001
-20	706.5000040	0.006	713.5000010	0.001
-10	706.5000010	0.001	713.4999960	-0.006
0	706.5000040	0.006	713.4999990	-0.001
10	706.4999990	-0.001	713.5000030	0.004
20	706.5000010	0.001	713.4999970	-0.004
30	706.4999970	-0.004	713.4999980	-0.003
40	706.5000030	0.004	713.5000030	0.004
50	706.5000040	0.006	713.5000010	0.001
60	706.5000030	0.004	713.4999980	-0.003
70	706.4999970	-0.004	713.5000010	0.001
80	706.4999960	-0.006	713.5000040	0.006
85	706.5000040	0.006	713.5000030	0.004

**LTE Band 17, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 23780 (709 MHz)</b>		<b>CH 23800 (711 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	708.9999960	-0.006	710.9999980	-0.003
4.70	709.0000030	0.004	710.9999970	-0.004
4.90	709.0000040	0.006	710.9999980	-0.003

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 23780 (709 MHz)</b>		<b>CH 23800 (711 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	708.9999970	-0.004	710.9999970	-0.004
-30	709.0000040	0.006	710.9999980	-0.003
-20	709.0000020	0.003	711.0000030	0.004
-10	708.9999980	-0.003	711.0000040	0.006
0	708.9999970	-0.004	711.0000030	0.004
10	709.0000040	0.006	711.0000040	0.006
20	708.9999980	-0.003	711.0000010	0.001
30	708.9999980	-0.003	710.9999980	-0.003
40	708.9999970	-0.004	710.9999960	-0.006
50	709.0000030	0.004	711.0000020	0.003
60	708.9999990	-0.001	710.9999960	-0.006
70	708.9999960	-0.006	711.0000030	0.004
80	708.9999990	-0.001	710.9999970	-0.004
85	708.9999960	-0.006	710.9999970	-0.004

7.8.14 LTE Band 25

**LTE Band 25, Channel Bandwidth: 1.4 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26047 (1850.7 MHz)		CH 26683 (1914.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1850.6999980	-0.001	1914.2999960	-0.002
4.70	1850.7000040	0.002	1914.2999980	-0.001
4.90	1850.6999990	-0.001	1914.3000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26047 (1850.7 MHz)		CH 26683 (1914.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1850.7000010	0.001	1914.2999970	-0.002
-30	1850.6999970	-0.002	1914.2999970	-0.002
-20	1850.7000020	0.001	1914.2999980	-0.001
-10	1850.6999960	-0.002	1914.2999960	-0.002
0	1850.7000020	0.001	1914.2999960	-0.002
10	1850.7000010	0.001	1914.3000030	0.002
20	1850.7000010	0.001	1914.2999990	-0.001
30	1850.6999990	-0.001	1914.2999970	-0.002
40	1850.7000030	0.002	1914.3000010	0.001
50	1850.6999970	-0.002	1914.2999990	-0.001
60	1850.7000030	0.002	1914.3000040	0.002
70	1850.7000040	0.002	1914.2999960	-0.002
80	1850.6999960	-0.002	1914.2999990	-0.001
85	1850.6999990	-0.001	1914.2999980	-0.001



### LTE Band 25, Channel Bandwidth: 3 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26055 (1851.5 MHz)		CH 26675 (1913.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1851.5000010	0.001	1913.4999990	-0.001
4.70	1851.5000010	0.001	1913.4999990	-0.001
4.90	1851.4999960	-0.002	1913.5000040	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26055 (1851.5 MHz)		CH 26675 (1913.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1851.4999960	-0.002	1913.4999980	-0.001
-30	1851.4999980	-0.001	1913.5000020	0.001
-20	1851.4999990	-0.001	1913.4999960	-0.002
-10	1851.4999960	-0.002	1913.4999970	-0.002
0	1851.5000040	0.002	1913.4999970	-0.002
10	1851.5000010	0.001	1913.4999960	-0.002
20	1851.4999980	-0.001	1913.4999980	-0.001
30	1851.5000020	0.001	1913.4999970	-0.002
40	1851.4999990	-0.001	1913.5000040	0.002
50	1851.4999990	-0.001	1913.4999970	-0.002
60	1851.5000030	0.002	1913.5000010	0.001
70	1851.5000020	0.001	1913.4999970	-0.002
80	1851.4999970	-0.002	1913.5000010	0.001
85	1851.5000020	0.001	1913.4999970	-0.002

### LTE Band 25, Channel Bandwidth: 5 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26065 (1852.5 MHz)		CH 26665 (1912.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1852.4999990	-0.001	1912.5000010	0.001
4.70	1852.4999970	-0.002	1912.4999980	-0.001
4.90	1852.4999980	-0.001	1912.5000020	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26065 (1852.5 MHz)		CH 26665 (1912.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1852.4999960	-0.002	1912.5000010	0.001
-30	1852.4999970	-0.002	1912.5000020	0.001
-20	1852.4999970	-0.002	1912.5000040	0.002
-10	1852.5000010	0.001	1912.4999970	-0.002
0	1852.4999960	-0.002	1912.5000040	0.002
10	1852.5000040	0.002	1912.4999970	-0.002
20	1852.4999970	-0.002	1912.5000020	0.001
30	1852.5000010	0.001	1912.4999990	-0.001
40	1852.5000030	0.002	1912.5000030	0.002
50	1852.4999980	-0.001	1912.4999980	-0.001
60	1852.4999970	-0.002	1912.4999980	-0.001
70	1852.4999960	-0.002	1912.4999960	-0.002
80	1852.5000040	0.002	1912.5000020	0.001
85	1852.4999990	-0.001	1912.4999960	-0.002

**LTE Band 25, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26090 (1855 MHz)</b>		<b>CH 26640 (1910 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1855.0000020	0.001	1909.9999980	-0.001
4.70	1855.0000020	0.001	1909.9999970	-0.002
4.90	1854.9999970	-0.002	1909.9999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26090 (1855 MHz)</b>		<b>CH 26640 (1910 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1854.9999970	-0.002	1909.9999960	-0.002
-30	1855.0000010	0.001	1909.9999970	-0.002
-20	1854.9999970	-0.002	1910.0000030	0.002
-10	1855.0000030	0.002	1909.9999990	-0.001
0	1854.9999980	-0.001	1910.0000040	0.002
10	1854.9999980	-0.001	1910.0000040	0.002
20	1855.0000040	0.002	1910.0000030	0.002
30	1855.0000010	0.001	1910.0000040	0.002
40	1855.0000030	0.002	1910.0000040	0.002
50	1855.0000040	0.002	1910.0000020	0.001
60	1855.0000020	0.001	1910.0000020	0.001
70	1855.0000030	0.002	1909.9999960	-0.002
80	1855.0000020	0.001	1909.9999960	-0.002
85	1855.0000020	0.001	1910.0000020	0.001

**LTE Band 25, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26115 (1857.5 MHz)</b>		<b>CH 26615 (1907.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1857.5000020	0.001	1907.4999960	-0.002
4.70	1857.4999990	-0.001	1907.4999970	-0.002
4.90	1857.5000020	0.001	1907.5000020	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26115 (1857.5 MHz)</b>		<b>CH 26615 (1907.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1857.4999970	-0.002	1907.4999980	-0.001
-30	1857.5000030	0.002	1907.5000010	0.001
-20	1857.4999970	-0.002	1907.5000010	0.001
-10	1857.5000040	0.002	1907.4999990	-0.001
0	1857.4999990	-0.001	1907.4999960	-0.002
10	1857.5000020	0.001	1907.5000040	0.002
20	1857.5000010	0.001	1907.5000030	0.002
30	1857.5000030	0.002	1907.5000020	0.001
40	1857.5000040	0.002	1907.4999980	-0.001
50	1857.4999960	-0.002	1907.4999970	-0.002
60	1857.4999960	-0.002	1907.4999970	-0.002
70	1857.5000010	0.001	1907.5000030	0.002
80	1857.5000020	0.001	1907.5000020	0.001
85	1857.5000030	0.002	1907.4999960	-0.002

**LTE Band 25, Channel Bandwidth: 20 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26140 (1860 MHz)</b>		<b>CH 26590 (1905 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1860.0000030	0.002	1904.9999990	-0.001
4.70	1859.9999960	-0.002	1905.0000010	0.001
4.90	1859.9999970	-0.002	1904.9999960	-0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26140 (1860 MHz)</b>		<b>CH 26590 (1905 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1860.0000010	0.001	1904.9999990	-0.001
-30	1859.9999990	-0.001	1904.9999970	-0.002
-20	1860.0000010	0.001	1905.0000040	0.002
-10	1859.9999970	-0.002	1905.0000010	0.001
0	1860.0000020	0.001	1905.0000040	0.002
10	1860.0000030	0.002	1905.0000030	0.002
20	1860.0000010	0.001	1904.9999960	-0.002
30	1860.0000030	0.002	1904.9999970	-0.002
40	1860.0000040	0.002	1905.0000030	0.002
50	1859.9999960	-0.002	1905.0000010	0.001
60	1859.9999990	-0.001	1905.0000020	0.001
70	1860.0000030	0.002	1904.9999980	-0.001
80	1860.0000030	0.002	1905.0000020	0.001
85	1859.9999980	-0.001	1905.0000030	0.002

7.8.15 LTE Band 26 (814-824 MHz)

**LTE Band 26, Channel Bandwidth: 1.4 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26697 (814.7 MHz)		CH 26783 (823.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	814.7000030	0.004	823.2999960	-0.005
4.70	814.6999960	-0.005	823.2999960	-0.005
4.90	814.7000040	0.005	823.2999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26697 (814.7 MHz)		CH 26783 (823.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	814.7000020	0.002	823.3000030	0.004
-30	814.6999970	-0.004	823.2999970	-0.004
-20	814.7000010	0.001	823.3000030	0.004
-10	814.6999970	-0.004	823.2999960	-0.005
0	814.7000040	0.005	823.3000040	0.005
10	814.7000020	0.002	823.3000030	0.004
20	814.6999970	-0.004	823.2999980	-0.002
30	814.6999990	-0.001	823.2999980	-0.002
40	814.7000010	0.001	823.2999960	-0.005
50	814.6999970	-0.004	823.2999970	-0.004
60	814.7000040	0.005	823.2999960	-0.005
70	814.7000040	0.005	823.2999990	-0.001
80	814.6999980	-0.002	823.2999970	-0.004
85	814.7000010	0.001	823.3000020	0.002

**LTE Band 26, Channel Bandwidth: 3 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26705 (815.5 MHz)		CH 26775 (822.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	815.4999980	-0.002	822.4999970	-0.004
4.70	815.5000030	0.004	822.5000030	0.004
4.90	815.5000010	0.001	822.5000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26705 (815.5 MHz)		CH 26775 (822.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	815.4999970	-0.004	822.4999960	-0.005
-30	815.4999980	-0.002	822.4999990	-0.001
-20	815.5000030	0.004	822.5000010	0.001
-10	815.5000010	0.001	822.4999970	-0.004
0	815.4999960	-0.005	822.4999980	-0.002
10	815.5000020	0.002	822.5000020	0.002
20	815.4999980	-0.002	822.5000020	0.002
30	815.4999960	-0.005	822.4999990	-0.001
40	815.5000030	0.004	822.4999980	-0.002
50	815.5000020	0.002	822.4999980	-0.002
60	815.5000010	0.001	822.5000010	0.001
70	815.5000020	0.002	822.4999980	-0.002
80	815.5000020	0.002	822.5000030	0.004
85	815.5000010	0.001	822.5000040	0.005

**LTE Band 26, Channel Bandwidth: 5 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26715 (816.5 MHz)		CH 26765 (821.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	816.4999970	-0.004	821.5000030	0.004
4.70	816.5000030	0.004	821.4999980	-0.002
4.90	816.5000040	0.005	821.5000020	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26715 (816.5 MHz)		CH 26765 (821.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	816.4999960	-0.005	821.5000040	0.005
-30	816.5000040	0.005	821.4999970	-0.004
-20	816.4999960	-0.005	821.5000020	0.002
-10	816.5000020	0.002	821.4999960	-0.005
0	816.5000020	0.002	821.4999990	-0.001
10	816.4999990	-0.001	821.4999970	-0.004
20	816.5000030	0.004	821.4999980	-0.002
30	816.4999970	-0.004	821.5000040	0.005
40	816.4999960	-0.005	821.4999990	-0.001
50	816.4999980	-0.002	821.4999980	-0.002
60	816.5000010	0.001	821.5000020	0.002
70	816.5000030	0.004	821.5000040	0.005
80	816.4999960	-0.005	821.4999980	-0.002
85	816.4999990	-0.001	821.5000010	0.001



**LTE Band 26, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>		
<b>Voltage (Vdc)</b>	<b>CH 26740 (819 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	818.9999960	-0.005
4.70	819.0000040	0.005
4.90	819.0000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>		
<b>Temperature (°C)</b>	<b>CH 26740 (819 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	819.0000010	0.001
-30	819.0000040	0.005
-20	818.9999990	-0.001
-10	818.9999960	-0.005
0	819.0000040	0.005
10	818.9999970	-0.004
20	819.0000030	0.004
30	819.0000030	0.004
40	819.0000020	0.002
50	818.9999980	-0.002
60	818.9999960	-0.005
70	818.9999990	-0.001
80	819.0000010	0.001
85	818.9999960	-0.005

7.8.16 LTE Band 26 (824-849 MHz)

**LTE Band 26, Channel Bandwidth: 1.4 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26797 (824.7 MHz)		CH 27033 (848.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	824.6999970	-0.004	848.2999990	-0.001
4.70	824.7000020	0.002	848.3000030	0.004
4.90	824.6999990	-0.001	848.2999980	-0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26797 (824.7 MHz)		CH 27033 (848.3 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	824.6999990	-0.001	848.3000040	0.005
-30	824.7000040	0.005	848.3000020	0.002
-20	824.6999960	-0.005	848.2999970	-0.004
-10	824.7000020	0.002	848.3000030	0.004
0	824.7000030	0.004	848.2999990	-0.001
10	824.6999960	-0.005	848.3000010	0.001
20	824.6999980	-0.002	848.2999980	-0.002
30	824.7000010	0.001	848.3000030	0.004
40	824.6999980	-0.002	848.3000020	0.002
50	824.6999970	-0.004	848.2999990	-0.001
60	824.7000020	0.002	848.2999980	-0.002
70	824.6999990	-0.001	848.2999970	-0.004
80	824.7000040	0.005	848.2999980	-0.002
85	824.7000040	0.005	848.3000040	0.005

**LTE Band 26, Channel Bandwidth: 3 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 26805 (825.5 MHz)		CH 27025 (847.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	825.5000030	0.004	847.4999970	-0.004
4.70	825.5000030	0.004	847.4999970	-0.004
4.90	825.5000040	0.005	847.4999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 26805 (825.5 MHz)		CH 27025 (847.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	825.4999960	-0.005	847.4999960	-0.005
-30	825.4999970	-0.004	847.5000020	0.002
-20	825.4999970	-0.004	847.5000030	0.004
-10	825.4999980	-0.002	847.5000030	0.004
0	825.5000040	0.005	847.4999970	-0.004
10	825.4999960	-0.005	847.5000030	0.004
20	825.4999990	-0.001	847.5000010	0.001
30	825.4999960	-0.005	847.4999980	-0.002
40	825.5000040	0.005	847.4999960	-0.005
50	825.5000030	0.004	847.4999960	-0.005
60	825.4999990	-0.001	847.4999970	-0.004
70	825.4999960	-0.005	847.5000030	0.004
80	825.4999970	-0.004	847.4999990	-0.001
85	825.4999990	-0.001	847.5000010	0.001

**LTE Band 26, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26815 (826.5 MHz)</b>		<b>CH 27015 (846.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	826.4999980	-0.002	846.4999980	-0.002
4.70	826.5000020	0.002	846.5000040	0.005
4.90	826.4999970	-0.004	846.5000030	0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26815 (826.5 MHz)</b>		<b>CH 27015 (846.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	826.5000040	0.005	846.5000010	0.001
-30	826.4999960	-0.005	846.5000030	0.004
-20	826.4999970	-0.004	846.4999970	-0.004
-10	826.4999970	-0.004	846.4999960	-0.005
0	826.4999990	-0.001	846.4999970	-0.004
10	826.5000030	0.004	846.5000030	0.004
20	826.4999970	-0.004	846.4999980	-0.002
30	826.4999960	-0.005	846.5000010	0.001
40	826.5000020	0.002	846.4999970	-0.004
50	826.4999980	-0.002	846.5000040	0.005
60	826.5000030	0.004	846.5000030	0.004
70	826.5000040	0.005	846.4999960	-0.005
80	826.5000020	0.002	846.4999980	-0.002
85	826.5000040	0.005	846.4999990	-0.001

**LTE Band 26, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26840 (829 MHz)</b>		<b>CH 26990 (844 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	829.0000030	0.004	843.9999990	-0.001
4.70	829.0000010	0.001	844.0000030	0.004
4.90	829.0000040	0.005	844.0000010	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26840 (829 MHz)</b>		<b>CH 26990 (844 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	828.9999960	-0.005	844.0000010	0.001
-30	829.0000030	0.004	843.9999960	-0.005
-20	829.0000010	0.001	843.9999970	-0.004
-10	828.9999990	-0.001	843.9999980	-0.002
0	828.9999980	-0.002	844.0000030	0.004
10	829.0000030	0.004	843.9999960	-0.005
20	828.9999970	-0.004	843.9999960	-0.005
30	828.9999980	-0.002	843.9999970	-0.004
40	829.0000020	0.002	844.0000040	0.005
50	829.0000010	0.001	844.0000010	0.001
60	829.0000030	0.004	843.9999970	-0.004
70	829.0000030	0.004	843.9999980	-0.002
80	829.0000030	0.004	844.0000010	0.001
85	829.0000010	0.001	844.0000010	0.001

**LTE Band 26, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 26865 (831.5 MHz)</b>		<b>CH 26965 (841.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	831.5000040	0.005	841.4999970	-0.004
4.70	831.5000010	0.001	841.5000010	0.001
4.90	831.5000020	0.002	841.5000040	0.005

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 26865 (831.5 MHz)</b>		<b>CH 26965 (841.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	831.4999960	-0.005	841.5000010	0.001
-30	831.5000040	0.005	841.5000020	0.002
-20	831.4999980	-0.002	841.4999970	-0.004
-10	831.5000030	0.004	841.5000010	0.001
0	831.5000010	0.001	841.4999970	-0.004
10	831.5000040	0.005	841.4999990	-0.001
20	831.5000010	0.001	841.4999990	-0.001
30	831.5000040	0.005	841.4999990	-0.001
40	831.4999990	-0.001	841.5000010	0.001
50	831.4999970	-0.004	841.4999980	-0.002
60	831.4999990	-0.001	841.4999980	-0.002
70	831.5000040	0.005	841.4999980	-0.002
80	831.5000010	0.001	841.4999980	-0.002
85	831.4999980	-0.002	841.5000020	0.002

## 7.8.17 LTE Band 41

**LTE Band 41, Channel Bandwidth: 5 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 39675 (2498.5 MHz)		CH 41565 (2687.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	2498.5000030	0.001	2687.4999960	-0.001
4.70	2498.4999960	-0.002	2687.4999970	-0.001
4.90	2498.5000020	0.001	2687.5000010	0.000

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 39675 (2498.5 MHz)		CH 41565 (2687.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	2498.5000040	0.002	2687.4999970	-0.001
-30	2498.5000030	0.001	2687.5000030	0.001
-20	2498.5000030	0.001	2687.5000020	0.001
-10	2498.4999960	-0.002	2687.5000020	0.001
0	2498.4999960	-0.002	2687.5000040	0.001
10	2498.5000030	0.001	2687.5000020	0.001
20	2498.4999970	-0.001	2687.4999970	-0.001
30	2498.5000020	0.001	2687.5000020	0.001
40	2498.4999960	-0.002	2687.5000010	0.000
50	2498.4999970	-0.001	2687.5000030	0.001
60	2498.4999980	-0.001	2687.4999980	-0.001
70	2498.5000020	0.001	2687.4999970	-0.001
80	2498.4999970	-0.001	2687.5000040	0.001
85	2498.4999960	-0.002	2687.4999990	0.000

**LTE Band 41, Channel Bandwidth: 10 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 39700 (2501 MHz)		CH 41540 (2685 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	2501.0000040	0.002	2684.9999990	0.000
4.70	2501.0000010	0.000	2684.9999980	-0.001
4.90	2500.9999960	-0.002	2685.0000030	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 39700 (2501 MHz)		CH 41540 (2685 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	2500.9999970	-0.001	2684.9999980	-0.001
-30	2501.0000020	0.001	2685.0000020	0.001
-20	2500.9999970	-0.001	2685.0000010	0.000
-10	2500.9999960	-0.002	2685.0000020	0.001
0	2500.9999980	-0.001	2685.0000030	0.001
10	2501.0000030	0.001	2684.9999970	-0.001
20	2500.9999970	-0.001	2685.0000010	0.000
30	2501.0000010	0.000	2685.0000040	0.001
40	2501.0000010	0.000	2684.9999960	-0.001
50	2501.0000030	0.001	2684.9999980	-0.001
60	2500.9999960	-0.002	2684.9999970	-0.001
70	2501.0000010	0.000	2685.0000020	0.001
80	2501.0000040	0.002	2685.0000030	0.001
85	2500.9999960	-0.002	2684.9999960	-0.001



**LTE Band 41, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 39725 (2503.5 MHz)</b>		<b>CH 41515 (2682.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	2503.4999980	-0.001	2682.5000020	0.001
4.70	2503.4999970	-0.001	2682.4999960	-0.001
4.90	2503.4999990	0.000	2682.4999960	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 39725 (2503.5 MHz)</b>		<b>CH 41515 (2682.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	2503.4999970	-0.001	2682.4999960	-0.001
-30	2503.5000040	0.002	2682.4999960	-0.001
-20	2503.4999960	-0.002	2682.5000040	0.001
-10	2503.4999970	-0.001	2682.4999960	-0.001
0	2503.5000020	0.001	2682.5000040	0.001
10	2503.5000030	0.001	2682.5000020	0.001
20	2503.5000010	0.000	2682.4999990	0.000
30	2503.5000010	0.000	2682.4999970	-0.001
40	2503.5000030	0.001	2682.4999960	-0.001
50	2503.4999980	-0.001	2682.5000040	0.001
60	2503.5000010	0.000	2682.4999970	-0.001
70	2503.4999970	-0.001	2682.5000030	0.001
80	2503.4999980	-0.001	2682.4999990	0.000
85	2503.4999990	0.000	2682.4999980	-0.001

**LTE Band 41, Channel Bandwidth: 20 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 39750 (2506 MHz)		CH 41490 (2680 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	2505.9999990	0.000	2679.9999970	-0.001
4.70	2506.0000040	0.002	2679.9999990	0.000
4.90	2506.0000030	0.001	2679.9999970	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 39750 (2506 MHz)		CH 41490 (2680 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	2505.9999960	-0.002	2680.0000010	0.000
-30	2506.0000020	0.001	2680.0000030	0.001
-20	2506.0000010	0.000	2680.0000010	0.000
-10	2506.0000040	0.002	2679.9999970	-0.001
0	2505.9999990	0.000	2680.0000030	0.001
10	2505.9999990	0.000	2680.0000020	0.001
20	2506.0000040	0.002	2679.9999990	0.000
30	2506.0000030	0.001	2679.9999960	-0.001
40	2506.0000010	0.000	2679.9999980	-0.001
50	2505.9999980	-0.001	2679.9999970	-0.001
60	2505.9999960	-0.002	2679.9999960	-0.001
70	2505.9999970	-0.001	2680.0000040	0.001
80	2506.0000040	0.002	2679.9999990	0.000
85	2506.0000030	0.001	2679.9999970	-0.001

7.8.18 LTE Band 66

**LTE Band 66, Channel Bandwidth: 1.4 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 131979 (1710.7 MHz)</b>		<b>CH 132665 (1779.3 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1710.6999970	-0.002	1779.2999980	-0.001
4.70	1710.6999970	-0.002	1779.3000020	0.001
4.90	1710.6999960	-0.002	1779.2999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 131979 (1710.7 MHz)</b>		<b>CH 132665 (1779.3 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1710.6999970	-0.002	1779.3000020	0.001
-30	1710.6999960	-0.002	1779.3000010	0.001
-20	1710.6999990	-0.001	1779.2999990	-0.001
-10	1710.7000040	0.002	1779.3000030	0.002
0	1710.6999990	-0.001	1779.2999980	-0.001
10	1710.7000020	0.001	1779.2999960	-0.002
20	1710.7000010	0.001	1779.2999970	-0.002
30	1710.7000020	0.001	1779.2999980	-0.001
40	1710.7000010	0.001	1779.3000020	0.001
50	1710.6999990	-0.001	1779.3000020	0.001
60	1710.6999970	-0.002	1779.3000040	0.002
70	1710.7000030	0.002	1779.2999980	-0.001
80	1710.6999960	-0.002	1779.3000030	0.002
85	1710.7000030	0.002	1779.3000030	0.002

**LTE Band 66, Channel Bandwidth: 3 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 131987 (1711.5 MHz)		CH 132657 (1778.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1711.4999990	-0.001	1778.4999980	-0.001
4.70	1711.4999980	-0.001	1778.4999960	-0.002
4.90	1711.4999980	-0.001	1778.4999980	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 131987 (1711.5 MHz)		CH 132657 (1778.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1711.5000020	0.001	1778.5000040	0.002
-30	1711.5000040	0.002	1778.5000040	0.002
-20	1711.4999970	-0.002	1778.5000020	0.001
-10	1711.5000030	0.002	1778.5000010	0.001
0	1711.4999980	-0.001	1778.5000030	0.002
10	1711.4999960	-0.002	1778.4999980	-0.001
20	1711.5000010	0.001	1778.5000020	0.001
30	1711.5000030	0.002	1778.5000020	0.001
40	1711.4999990	-0.001	1778.5000040	0.002
50	1711.5000020	0.001	1778.5000040	0.002
60	1711.4999970	-0.002	1778.5000010	0.001
70	1711.5000020	0.001	1778.4999990	-0.001
80	1711.5000040	0.002	1778.5000040	0.002
85	1711.4999960	-0.002	1778.4999970	-0.002

**LTE Band 66, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 131997 (1712.5 MHz)</b>		<b>CH 132647 (1777.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1712.5000010	0.001	1777.5000040	0.002
4.70	1712.4999990	-0.001	1777.4999980	-0.001
4.90	1712.4999980	-0.001	1777.5000030	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 131997 (1712.5 MHz)</b>		<b>CH 132647 (1777.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1712.4999970	-0.002	1777.5000030	0.002
-30	1712.4999980	-0.001	1777.5000030	0.002
-20	1712.5000030	0.002	1777.5000030	0.002
-10	1712.4999960	-0.002	1777.5000040	0.002
0	1712.4999980	-0.001	1777.4999970	-0.002
10	1712.4999980	-0.001	1777.4999980	-0.001
20	1712.5000010	0.001	1777.5000010	0.001
30	1712.4999990	-0.001	1777.4999990	-0.001
40	1712.5000040	0.002	1777.5000040	0.002
50	1712.5000040	0.002	1777.5000030	0.002
60	1712.4999960	-0.002	1777.4999990	-0.001
70	1712.4999960	-0.002	1777.5000030	0.002
80	1712.4999990	-0.001	1777.4999970	-0.002
85	1712.5000010	0.001	1777.5000020	0.001

**LTE Band 66, Channel Bandwidth: 10 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 132022 (1715 MHz)		CH 132622 (1775 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1714.9999980	-0.001	1774.9999990	-0.001
4.70	1715.0000010	0.001	1775.0000020	0.001
4.90	1714.9999960	-0.002	1774.9999990	-0.001

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 132022 (1715 MHz)		CH 132622 (1775 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1714.9999980	-0.001	1775.0000030	0.002
-30	1714.9999970	-0.002	1774.9999990	-0.001
-20	1715.0000030	0.002	1775.0000010	0.001
-10	1715.0000030	0.002	1774.9999970	-0.002
0	1714.9999970	-0.002	1774.9999980	-0.001
10	1714.9999980	-0.001	1775.0000030	0.002
20	1715.0000020	0.001	1774.9999990	-0.001
30	1714.9999980	-0.001	1774.9999990	-0.001
40	1715.0000030	0.002	1774.9999970	-0.002
50	1714.9999980	-0.001	1775.0000020	0.001
60	1714.9999980	-0.001	1774.9999990	-0.001
70	1715.0000040	0.002	1774.9999970	-0.002
80	1715.0000020	0.001	1775.0000030	0.002
85	1714.9999960	-0.002	1774.9999980	-0.001

**LTE Band 66, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 132047 (1717.5 MHz)</b>		<b>CH 132597 (1772.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	1717.4999960	-0.002	1772.5000010	0.001
4.70	1717.5000020	0.001	1772.4999970	-0.002
4.90	1717.4999980	-0.001	1772.5000030	0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 132047 (1717.5 MHz)</b>		<b>CH 132597 (1772.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	1717.5000030	0.002	1772.5000040	0.002
-30	1717.4999980	-0.001	1772.4999970	-0.002
-20	1717.4999990	-0.001	1772.4999990	-0.001
-10	1717.4999990	-0.001	1772.4999970	-0.002
0	1717.5000040	0.002	1772.5000020	0.001
10	1717.4999980	-0.001	1772.4999970	-0.002
20	1717.4999970	-0.002	1772.5000030	0.002
30	1717.5000040	0.002	1772.4999970	-0.002
40	1717.5000040	0.002	1772.4999980	-0.001
50	1717.5000030	0.002	1772.4999970	-0.002
60	1717.5000010	0.001	1772.4999960	-0.002
70	1717.4999980	-0.001	1772.5000030	0.002
80	1717.5000010	0.001	1772.4999970	-0.002
85	1717.5000010	0.001	1772.4999980	-0.001

**LTE Band 66, Channel Bandwidth: 20 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 132072 (1720 MHz)		CH 132572 (1770 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	1720.0000020	0.001	1770.0000020	0.001
4.70	1719.9999970	-0.002	1770.0000040	0.002
4.90	1720.0000030	0.002	1769.9999970	-0.002

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 132072 (1720 MHz)		CH 132572 (1770 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	1719.9999990	-0.001	1769.9999960	-0.002
-30	1720.0000010	0.001	1769.9999970	-0.002
-20	1719.9999980	-0.001	1769.9999970	-0.002
-10	1719.9999990	-0.001	1769.9999990	-0.001
0	1720.0000010	0.001	1770.0000030	0.002
10	1719.9999960	-0.002	1769.9999990	-0.001
20	1719.9999960	-0.002	1770.0000010	0.001
30	1720.0000020	0.001	1770.0000010	0.001
40	1719.9999960	-0.002	1770.0000030	0.002
50	1720.0000010	0.001	1770.0000020	0.001
60	1720.0000030	0.002	1770.0000030	0.002
70	1720.0000010	0.001	1769.9999980	-0.001
80	1719.9999990	-0.001	1769.9999990	-0.001
85	1720.0000030	0.002	1769.9999960	-0.002



## 7.8.19 LTE Band 71

**LTE Band 71, Channel Bandwidth: 5 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 133147 (665.5 MHz)</b>		<b>CH 133447 (695.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	665.4999970	-0.005	695.4999990	-0.001
4.70	665.4999960	-0.006	695.5000020	0.003
4.90	665.4999970	-0.005	695.5000030	0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 133147 (665.5 MHz)</b>		<b>CH 133447 (695.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	665.4999970	-0.005	695.4999980	-0.003
-30	665.5000020	0.003	695.4999960	-0.006
-20	665.5000020	0.003	695.4999980	-0.003
-10	665.4999980	-0.003	695.5000040	0.006
0	665.5000020	0.003	695.5000030	0.004
10	665.5000040	0.006	695.4999960	-0.006
20	665.4999970	-0.005	695.5000010	0.001
30	665.4999970	-0.005	695.5000030	0.004
40	665.4999990	-0.002	695.5000010	0.001
50	665.5000040	0.006	695.5000010	0.001
60	665.5000010	0.002	695.5000010	0.001
70	665.5000020	0.003	695.5000020	0.003
80	665.4999960	-0.006	695.4999980	-0.003
85	665.5000020	0.003	695.5000020	0.003

**LTE Band 71, Channel Bandwidth: 10 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 133172 (668 MHz)</b>		<b>CH 133422 (693 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	667.9999960	-0.006	692.9999980	-0.003
4.70	668.0000040	0.006	693.0000020	0.003
4.90	667.9999990	-0.001	693.0000030	0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 133172 (668 MHz)</b>		<b>CH 133422 (693 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	668.0000030	0.004	692.9999970	-0.004
-30	668.0000020	0.003	693.0000010	0.001
-20	668.0000040	0.006	693.0000030	0.004
-10	667.9999970	-0.004	693.0000040	0.006
0	667.9999970	-0.004	692.9999990	-0.001
10	667.9999980	-0.003	692.9999960	-0.006
20	668.0000020	0.003	693.0000030	0.004
30	667.9999980	-0.003	692.9999990	-0.001
40	667.9999990	-0.001	693.0000020	0.003
50	667.9999970	-0.004	692.9999980	-0.003
60	667.9999960	-0.006	692.9999990	-0.001
70	668.0000030	0.004	693.0000040	0.006
80	668.0000020	0.003	692.9999980	-0.003
85	667.9999970	-0.004	692.9999990	-0.001

**LTE Band 71, Channel Bandwidth: 15 MHz**

<b>Frequency Stability Versus Voltage</b>				
<b>Voltage (Vdc)</b>	<b>CH 133197 (670.5 MHz)</b>		<b>CH 133397 (690.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
4.50	670.5000040	0.006	690.4999980	-0.003
4.70	670.4999980	-0.003	690.5000020	0.003
4.90	670.5000010	0.001	690.4999960	-0.006

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

<b>Frequency Stability Versus Temperature</b>				
<b>Temperature (°C)</b>	<b>CH 133197 (670.5 MHz)</b>		<b>CH 133397 (690.5 MHz)</b>	
	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>	<b>Frequency (MHz)</b>	<b>Frequency Error (ppm)</b>
-40	670.5000010	0.001	690.5000040	0.006
-30	670.5000020	0.003	690.4999970	-0.004
-20	670.5000040	0.006	690.4999970	-0.004
-10	670.5000010	0.001	690.4999970	-0.004
0	670.4999980	-0.003	690.4999970	-0.004
10	670.4999970	-0.004	690.5000030	0.004
20	670.5000020	0.003	690.5000040	0.006
30	670.5000020	0.003	690.5000020	0.003
40	670.5000020	0.003	690.4999970	-0.004
50	670.4999980	-0.003	690.4999980	-0.003
60	670.4999990	-0.001	690.4999980	-0.003
70	670.4999990	-0.001	690.4999990	-0.001
80	670.4999980	-0.003	690.4999970	-0.004
85	670.5000030	0.004	690.4999970	-0.004

**LTE Band 71, Channel Bandwidth: 20 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 133222 (673 MHz)		CH 133372 (688 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.50	673.0000010	0.001	688.0000010	0.001
4.70	673.0000040	0.006	688.0000040	0.006
4.90	672.9999990	-0.001	687.9999970	-0.004

Note: The applicant defined the normal working voltage is from 4.50 to 4.90 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 133222 (673 MHz)		CH 133372 (688 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-40	673.0000030	0.004	688.0000010	0.001
-30	672.9999990	-0.001	687.9999970	-0.004
-20	673.0000030	0.004	688.0000020	0.003
-10	672.9999960	-0.006	687.9999970	-0.004
0	673.0000020	0.003	688.0000030	0.004
10	672.9999970	-0.004	687.9999970	-0.004
20	672.9999990	-0.001	688.0000020	0.003
30	672.9999980	-0.003	688.0000030	0.004
40	673.0000020	0.003	687.9999990	-0.001
50	673.0000010	0.001	688.0000010	0.001
60	673.0000030	0.004	688.0000010	0.001
70	672.9999970	-0.004	688.0000040	0.006
80	673.0000030	0.004	687.9999970	-0.004
85	673.0000030	0.004	687.9999960	-0.006

## 8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)



## 9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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

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

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