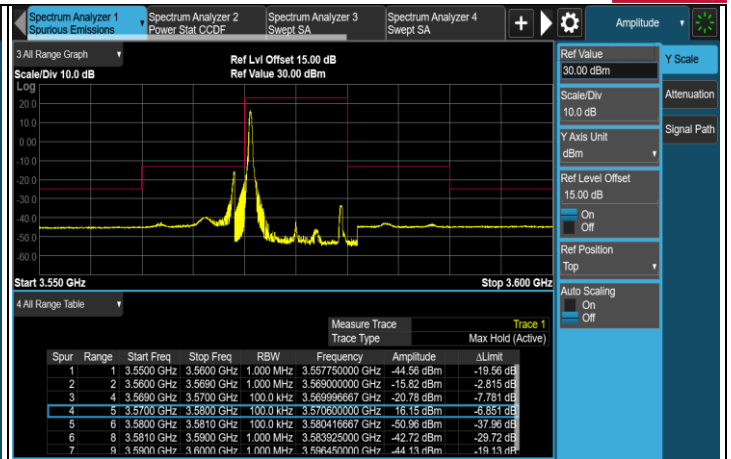
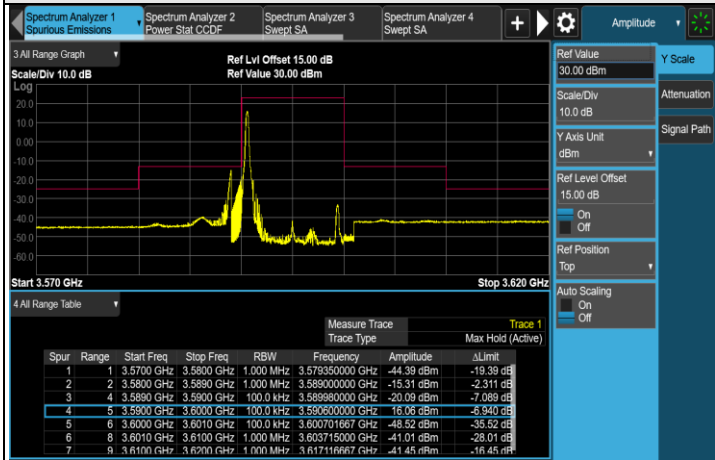


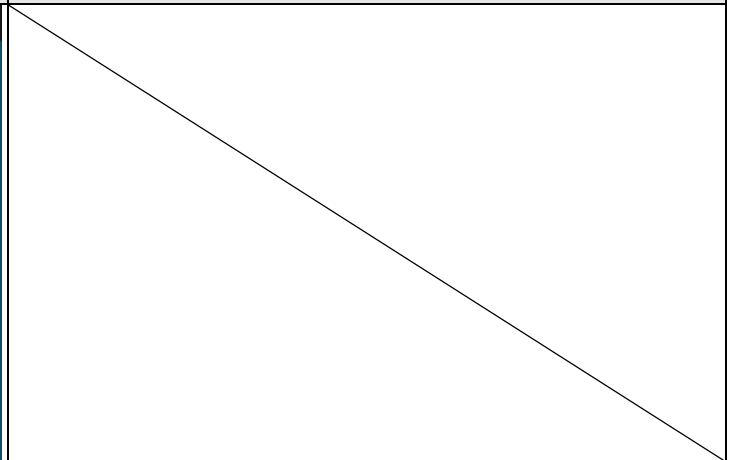
1RB#0 (3555MHz)



1RB#0 (3575MHz)

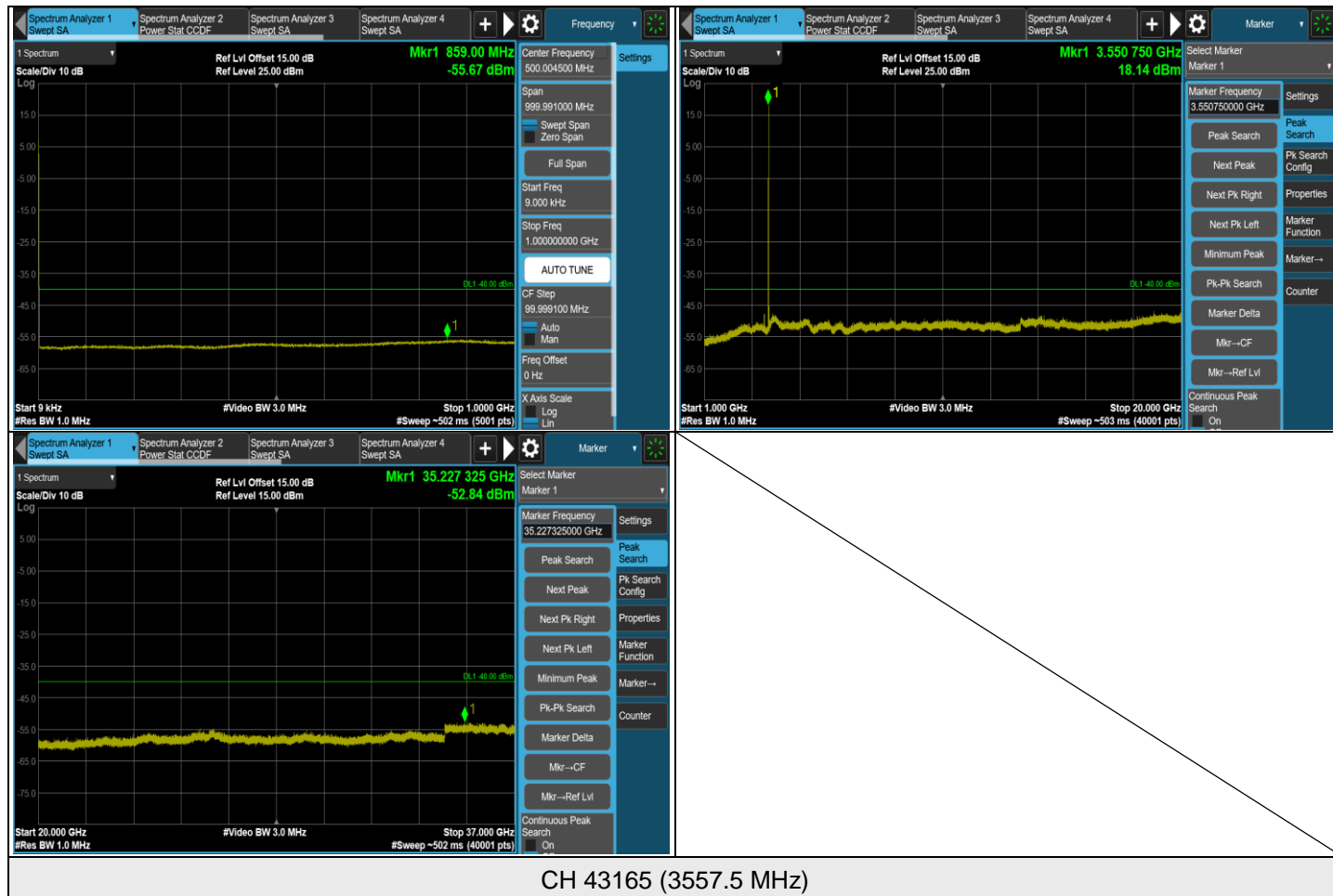


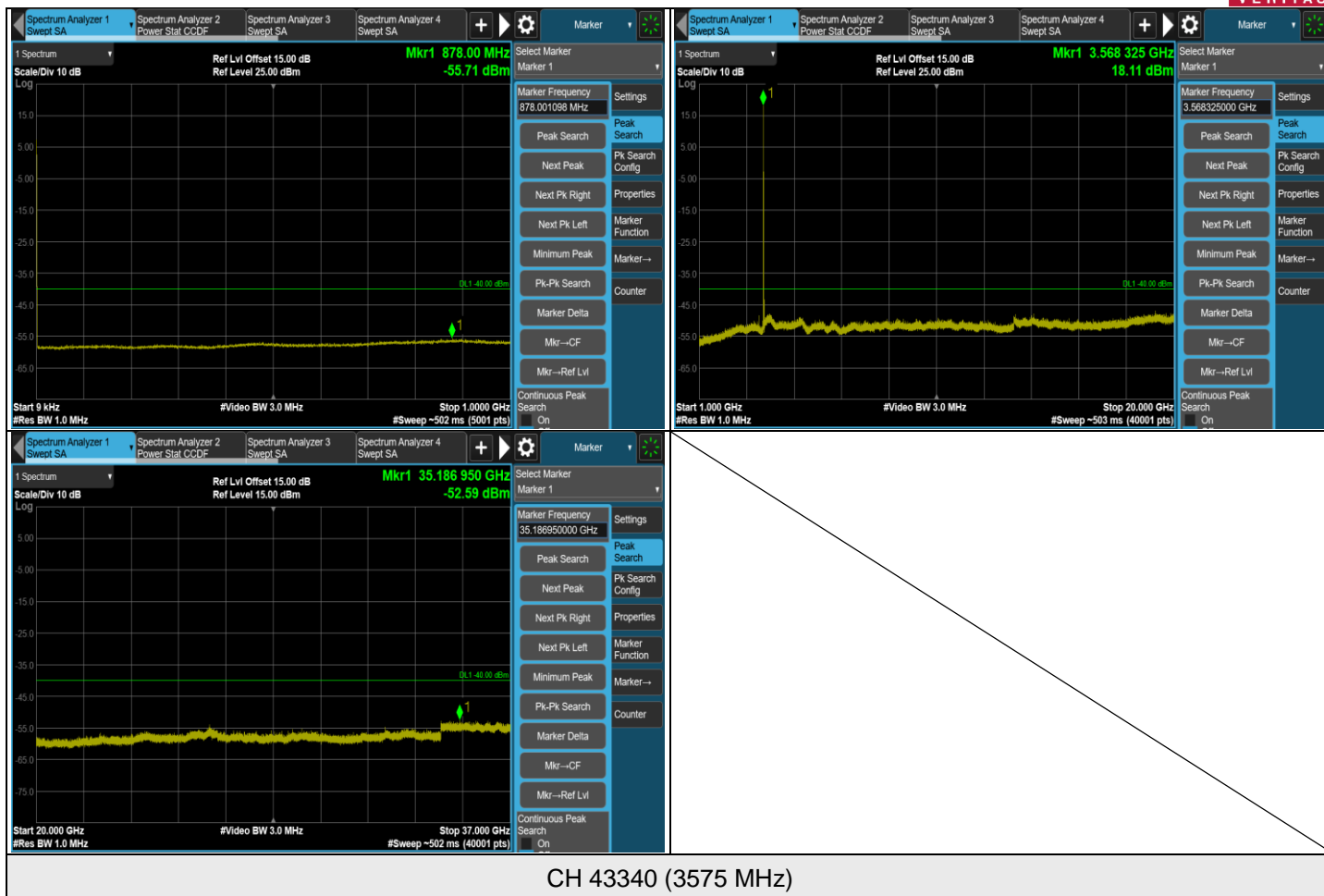
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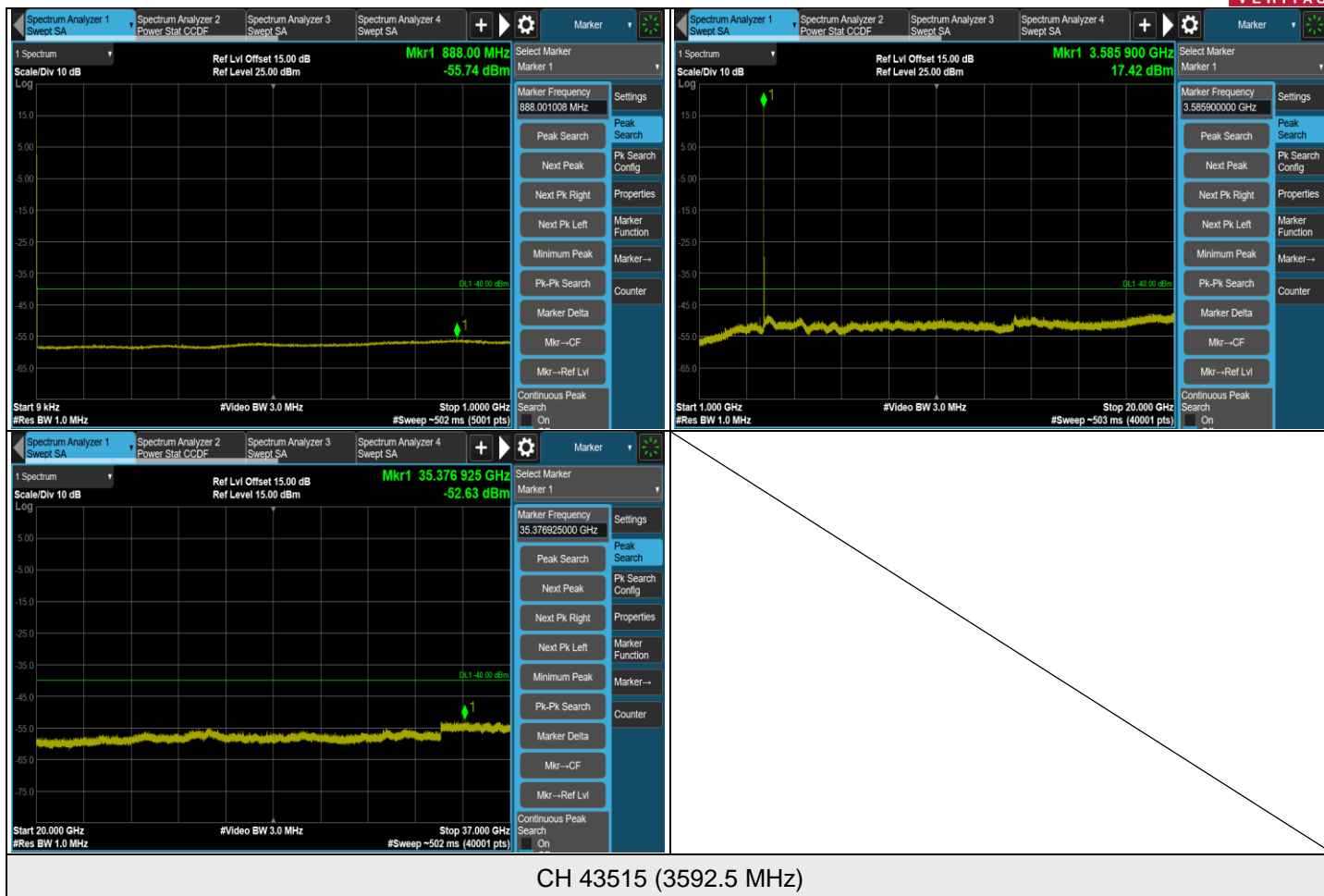


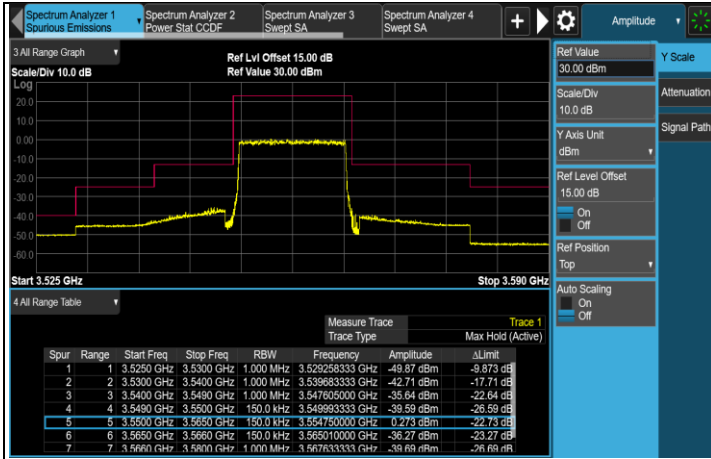


### LTE Band 42, Channel Bandwidth: 15 MHz

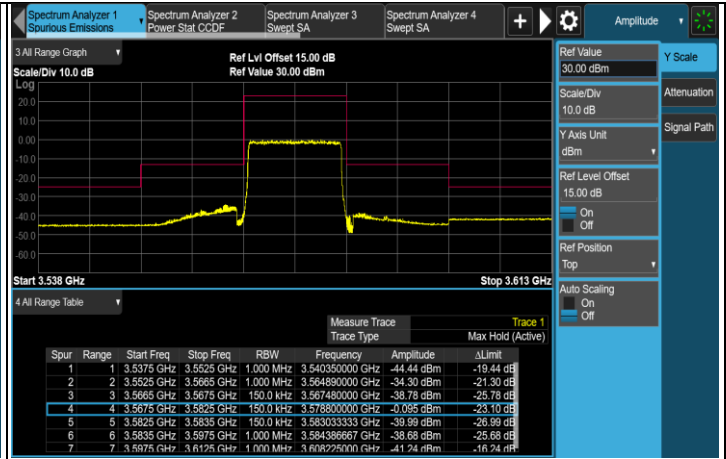




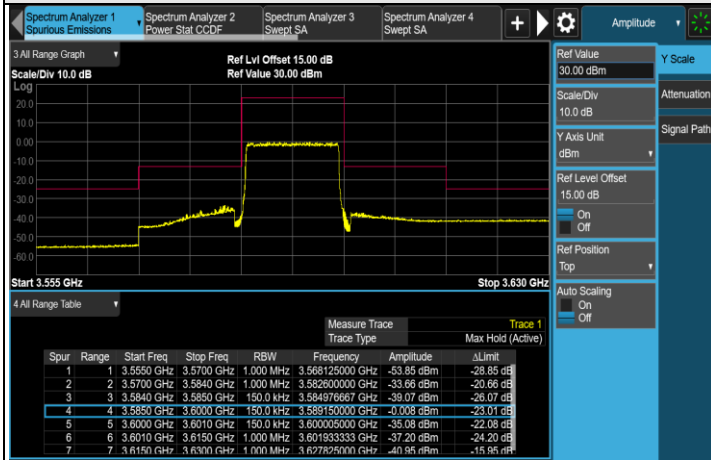




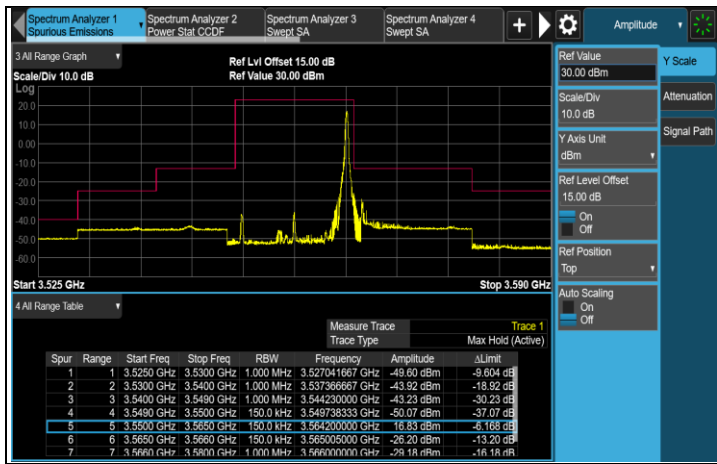
FULL (3557.5MHz)



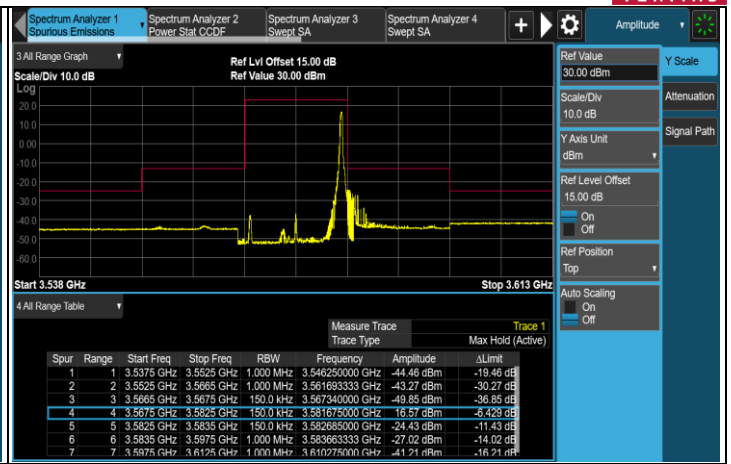
FULL (3575MHz)



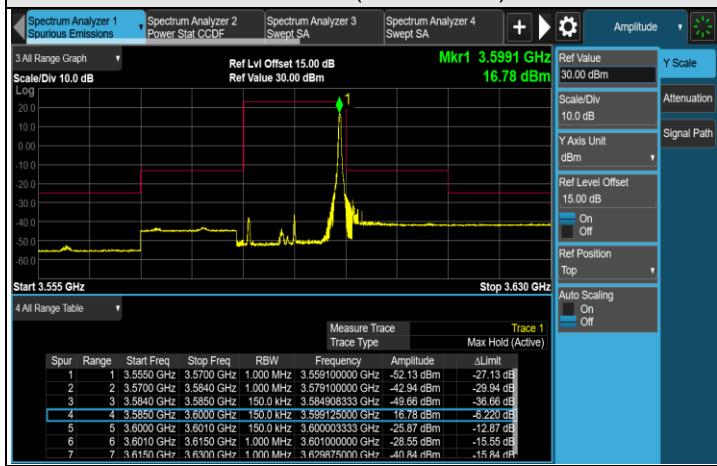
FULL (3592.5MHz)



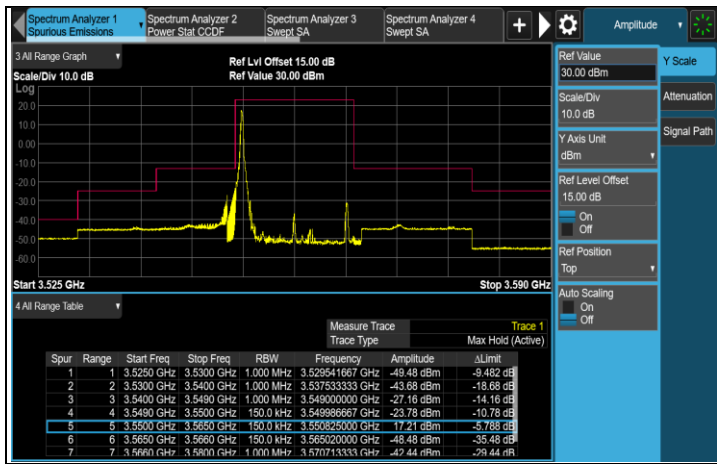
1RB#MAX (3557.5MHz)



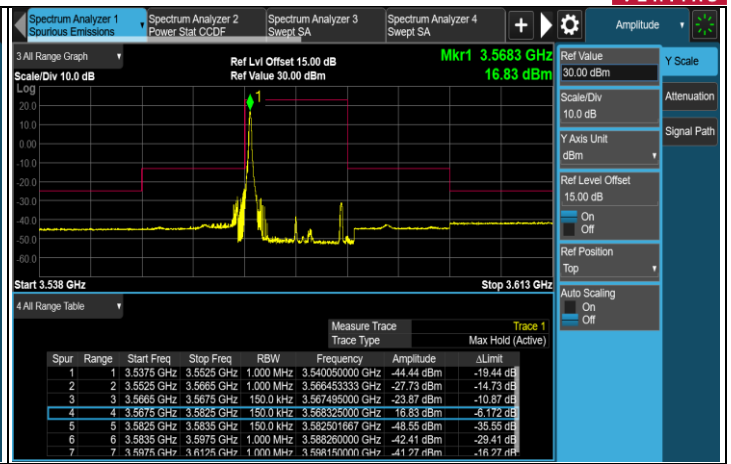
1RB#MAX (3575MHz)



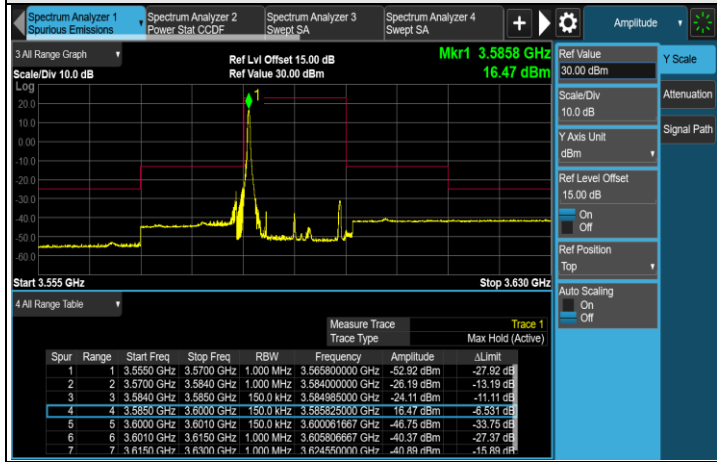
1RB#MAX (3592.5MHz)



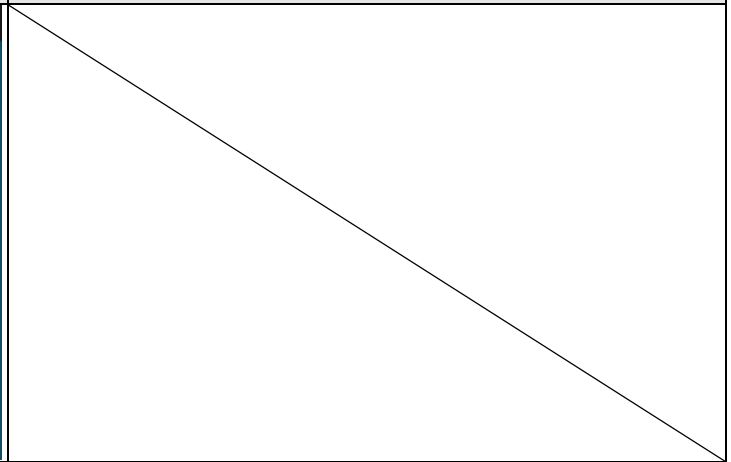
1RB#0 (3557.5MHz)



1RB#0 (3575MHz)

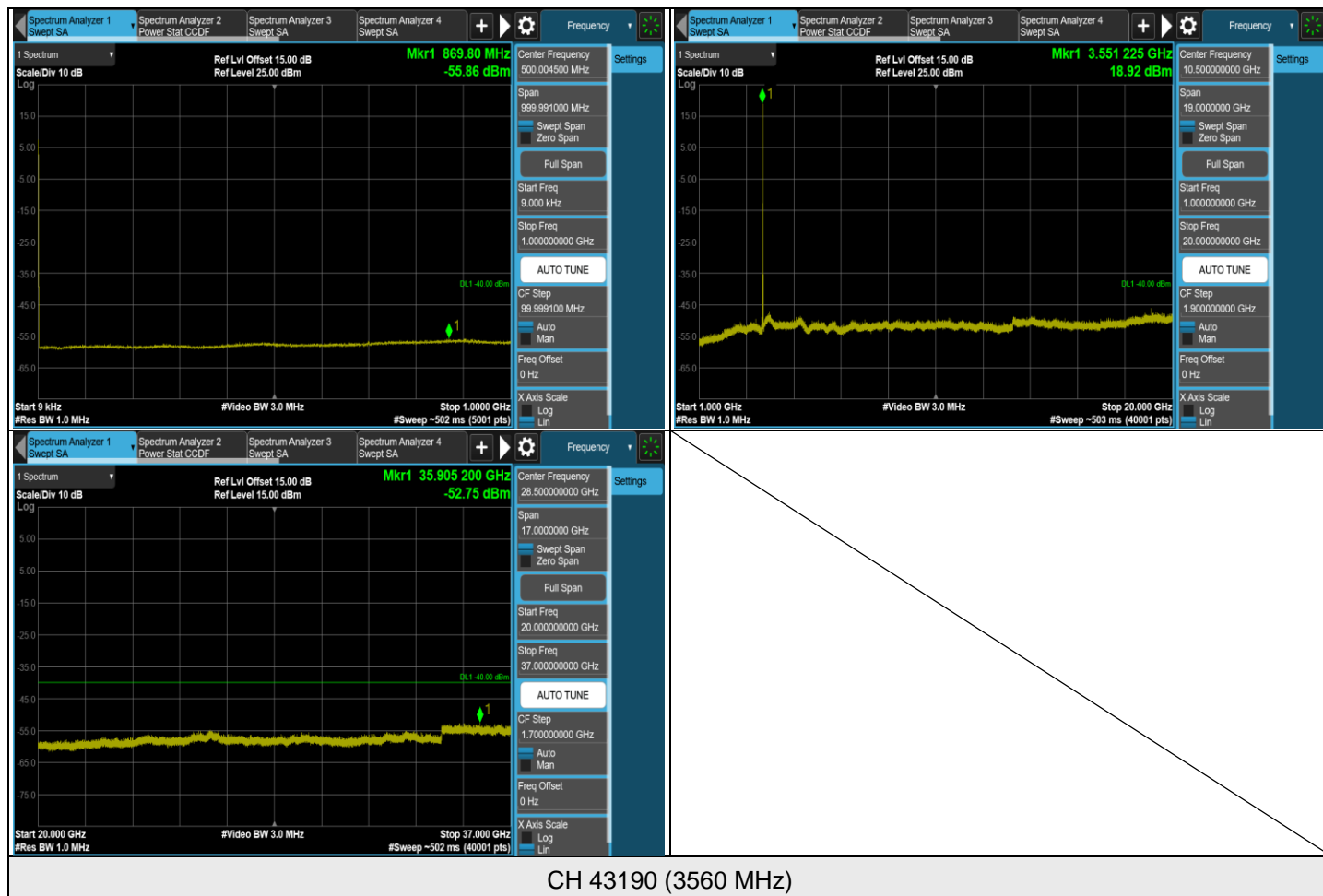


1RB#0 (3592.5MHz)

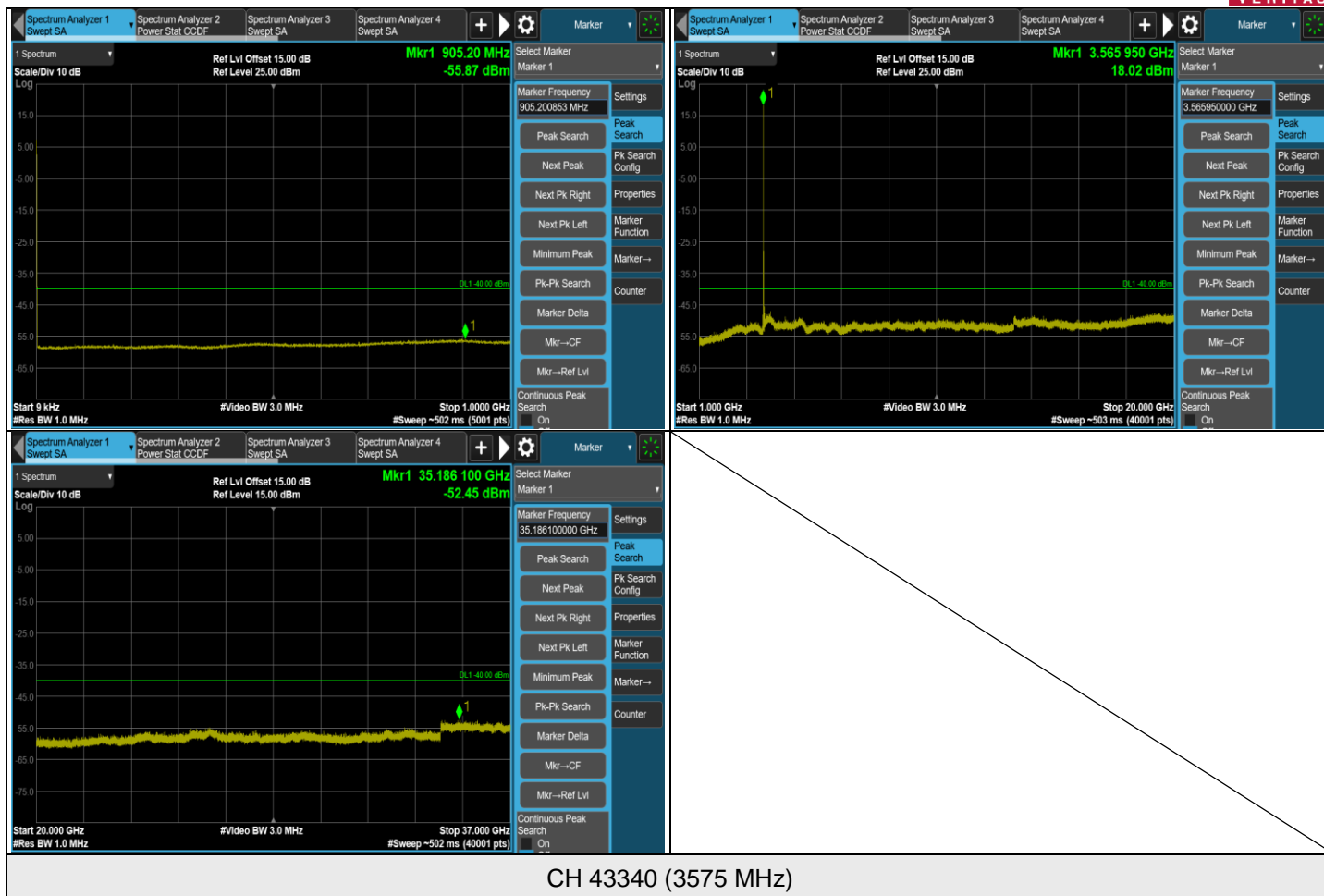


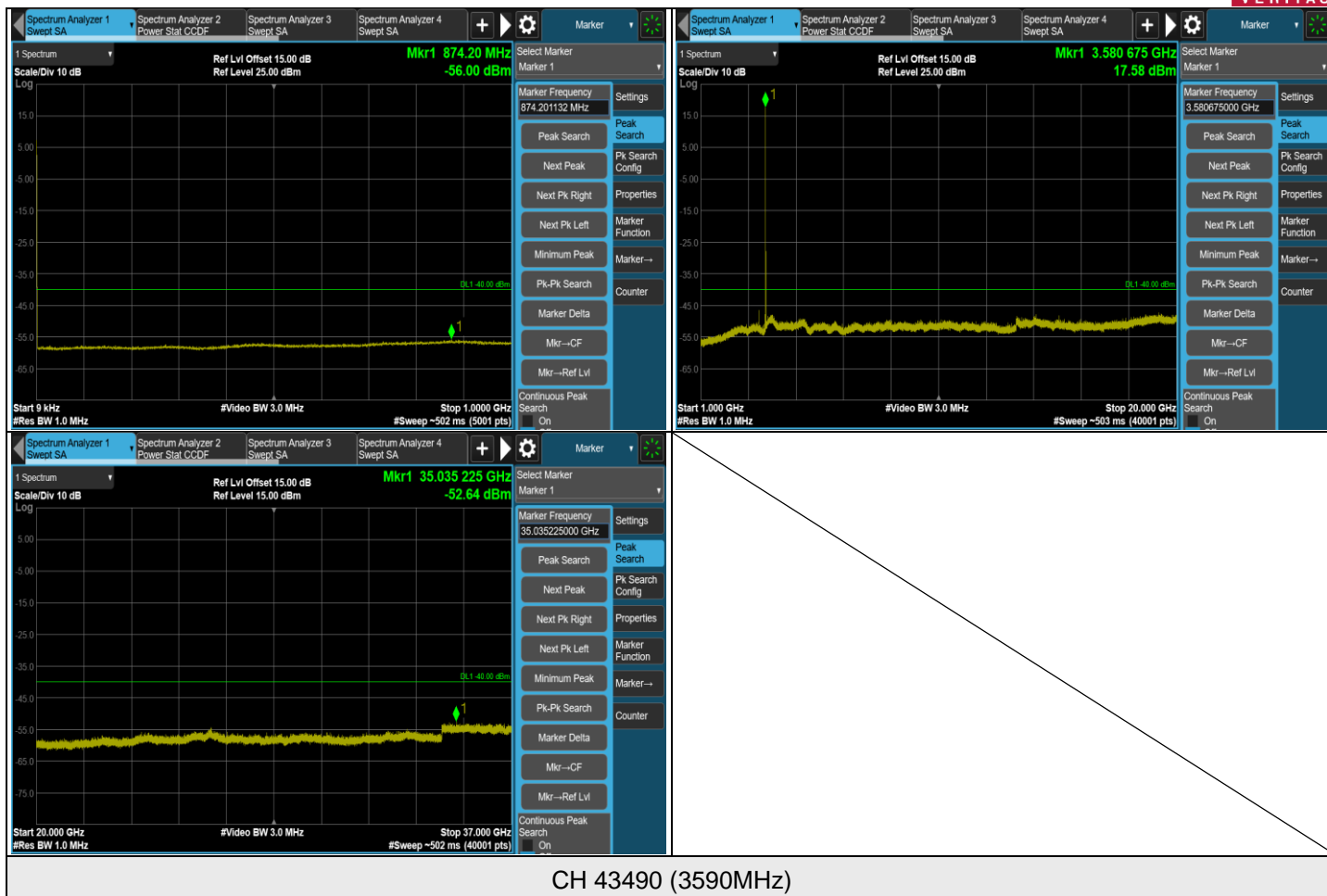


### LTE Band 42, Channel Bandwidth: 20 MHz

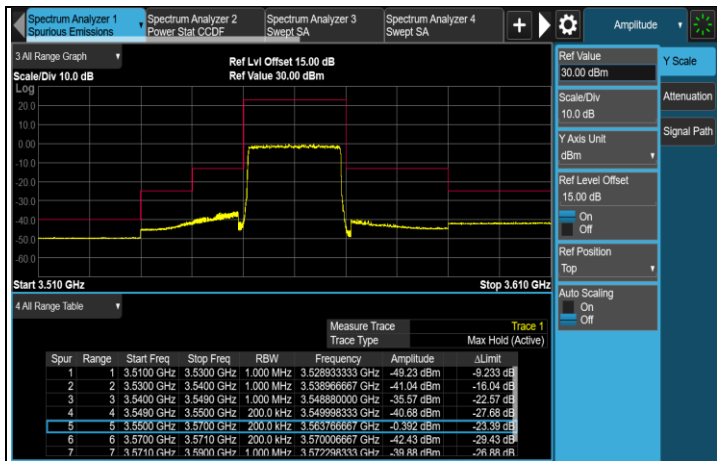




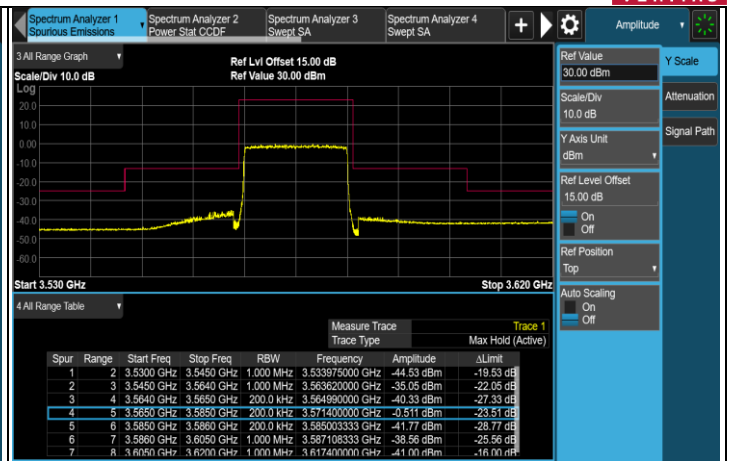




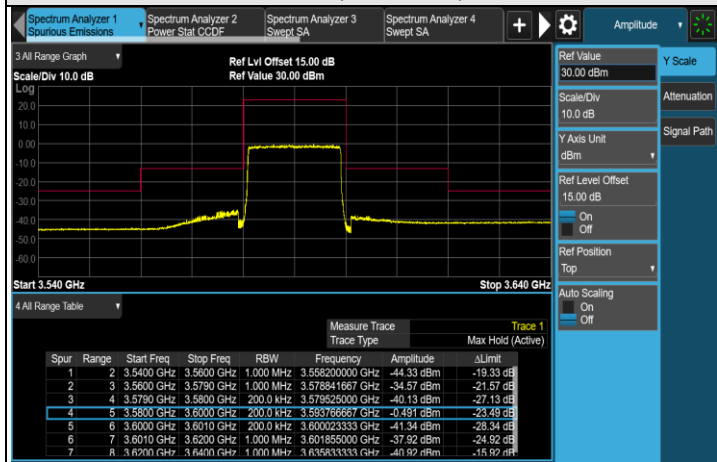
CH 43490 (3590MHz)



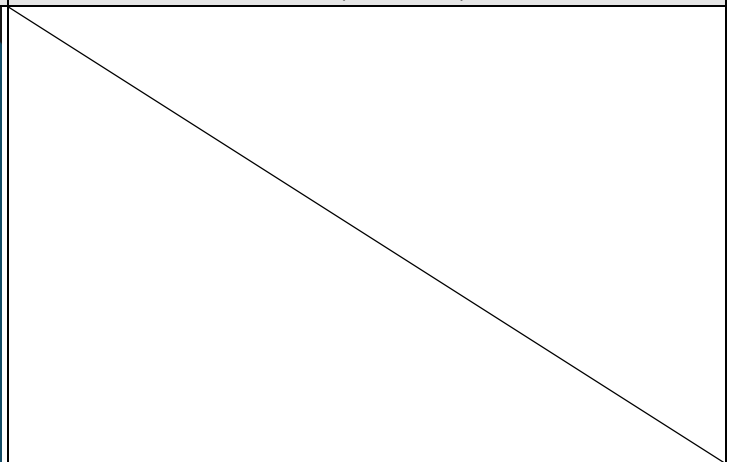
FULL (3560MHz)

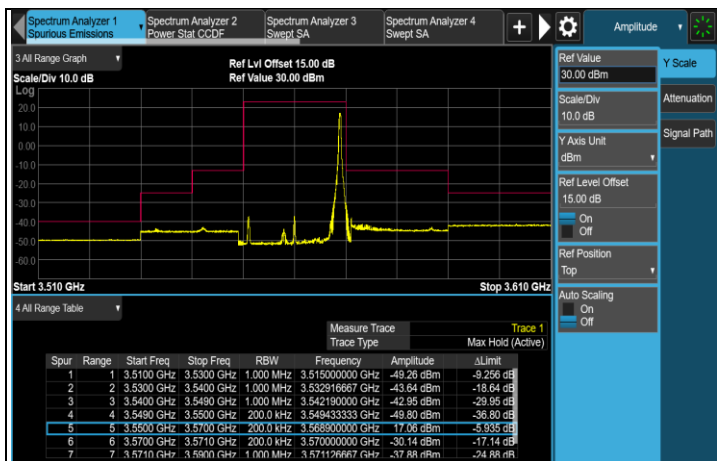


FULL (3575MHz)

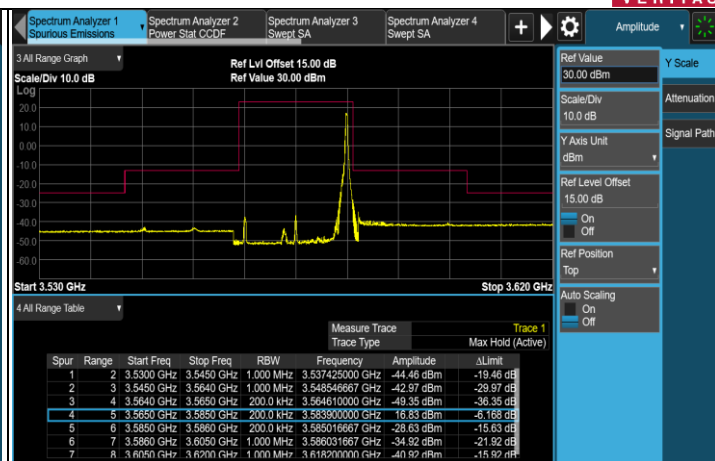


FULL (3590MHz)

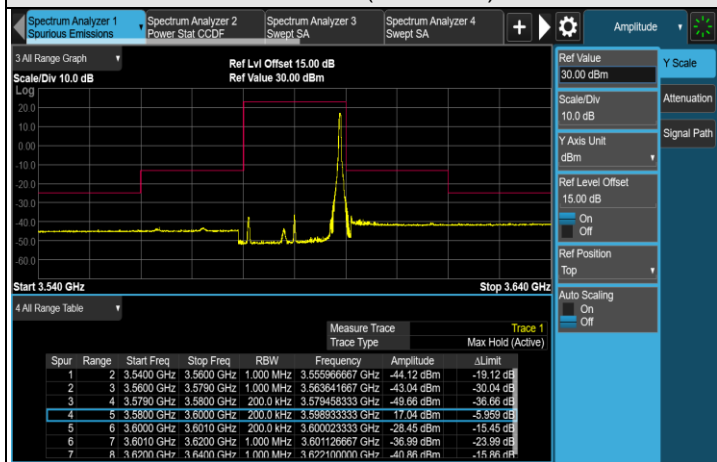




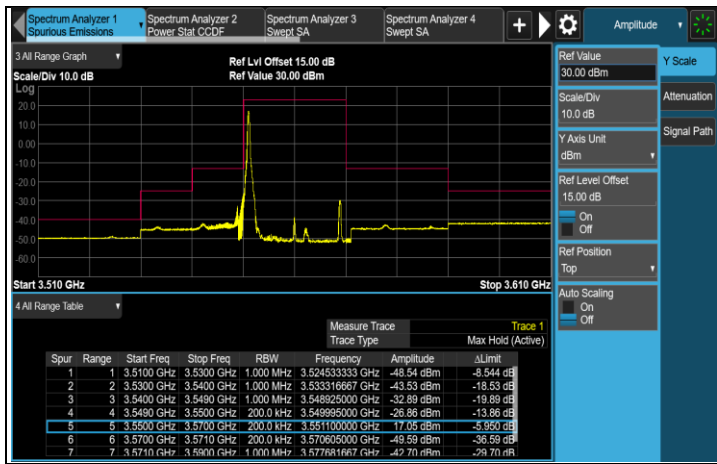
1RB#MAX (3560MHz)



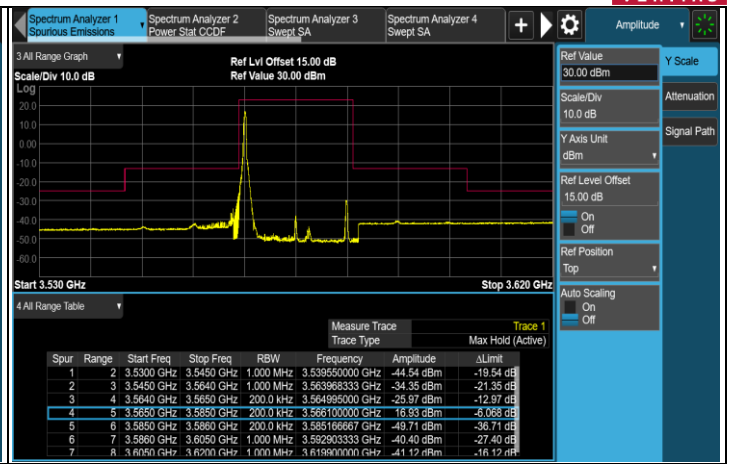
1RB#MAX (3575MHz)



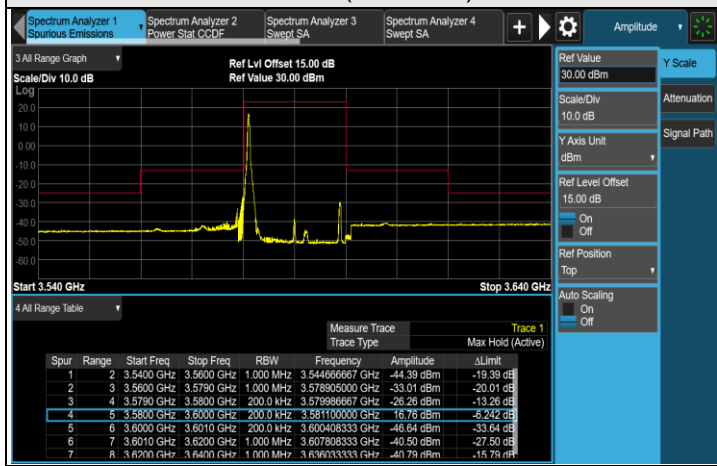
1RB#MAX (3590MHz)



1RB#0 (3560MHz)



1RB#0 (3575MHz)



1RB#0 (3590MHz)

## 7.6 Radiated Spurious Emissions below 1GHz

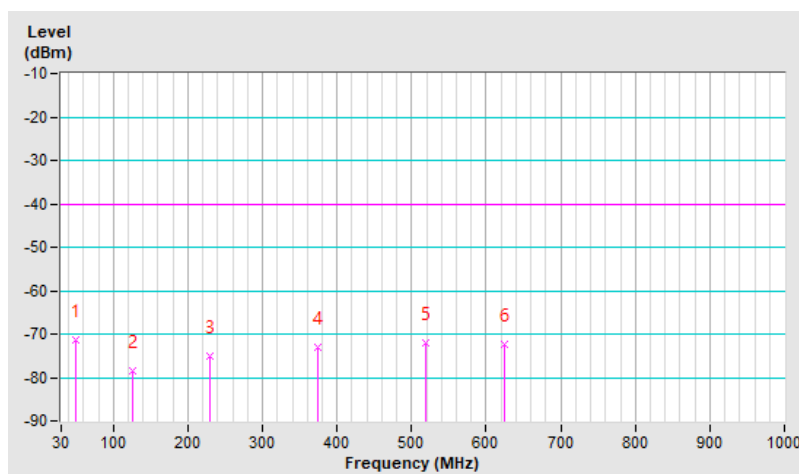
### 7.6.1 LTE Band 42

<b>RF Mode</b>	LTE Band 42 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 43340 : 3575 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	50.26	-71.25	-40.00	-31.25	2.91 H	114	-58.17	-13.08
2	126.59	-78.54	-40.00	-38.54	1.19 H	326	-63.76	-14.78
3	230.21	-75.20	-40.00	-35.20	2.21 H	105	-59.69	-15.51
4	373.66	-72.90	-40.00	-32.90	1.59 H	115	-62.15	-10.75
5	519.16	-72.20	-40.00	-32.20	2.61 H	25	-64.85	-7.35
6	624.16	-72.50	-40.00	-32.50	2.06 H	312	-67.59	-4.91

#### 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) +  $20\log(D)$  – 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.

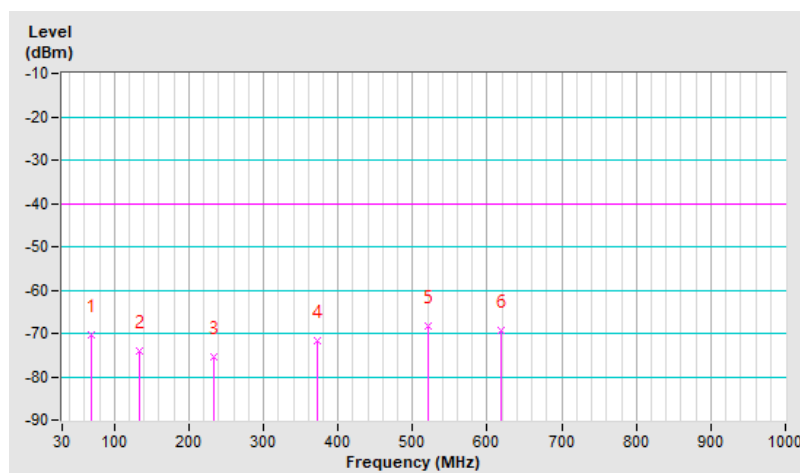


<b>RF Mode</b>	LTE Band 42 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 43340 : 3575 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	69.49	-70.26	-40.00	-30.26	1.85 V	226	-54.71	-15.55
2	134.12	-74.10	-40.00	-34.10	1.08 V	296	-60.11	-13.99
3	232.50	-75.30	-40.00	-35.30	1.96 V	269	-60.09	-15.21
4	371.36	-71.60	-40.00	-31.60	1.86 V	226	-60.77	-10.83
<b>5</b>	<b>520.24</b>	<b>-68.26</b>	<b>-40.00</b>	<b>-28.26</b>	<b>1.56 V</b>	<b>79</b>	<b>-60.92</b>	<b>-7.34</b>
6	618.57	-69.25	-40.00	-29.25	1.55 V	169	-64.23	-5.02

**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.



## 7.6.2 LTE Band 48

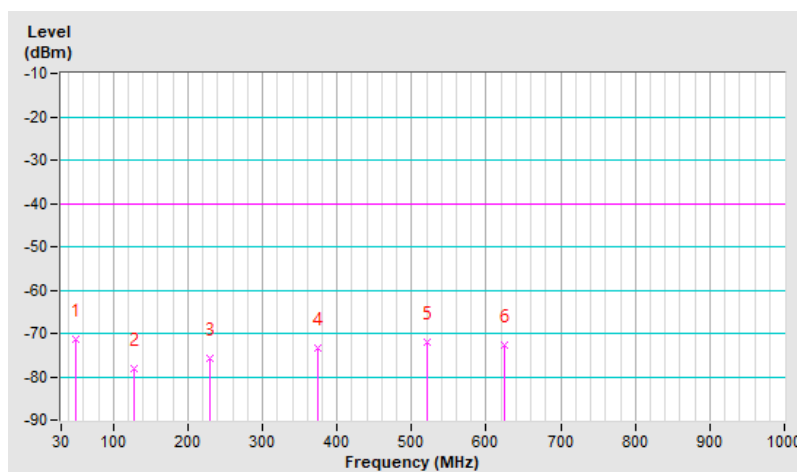
<b>RF Mode</b>	LTE Band 48 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 55990 : 3625 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

## Antenna Polarity &amp; 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	49.40	-71.50	-40.00	-31.50	1.82 H	225	-58.47	-13.03
2	127.00	-78.10	-40.00	-38.10	1.94 H	125	-63.29	-14.81
3	229.82	-75.60	-40.00	-35.60	1.26 H	59	-60.03	-15.57
4	374.35	-73.30	-40.00	-33.30	2.53 H	115	-62.58	-10.72
5	520.82	-71.90	-40.00	-31.90	1.89 H	137	-64.57	-7.33
6	623.64	-72.70	-40.00	-32.70	1.13 H	49	-67.78	-4.92

## 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) +  $20\log(D)$  – 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.



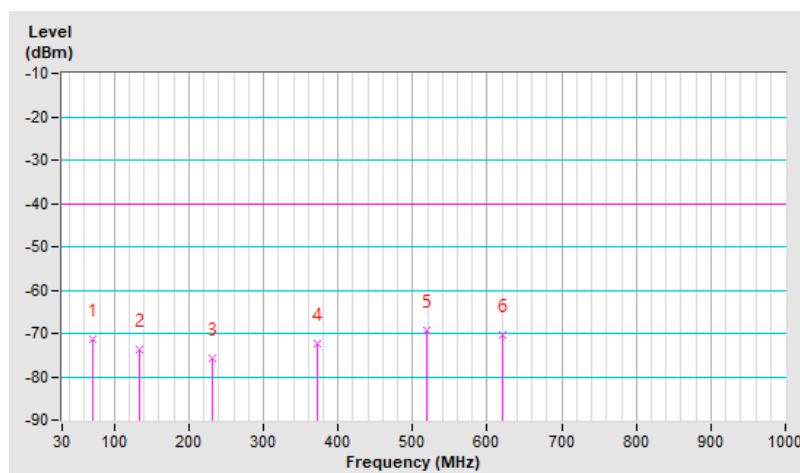


<b>RF Mode</b>	LTE Band 48 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 55990 : 3625 MHz
<b>Frequency Range</b>	30 MHz ~ 1 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	70.74	-71.40	-40.00	-31.40	1.05 V	263	-55.72	-15.68
2	133.79	-73.80	-40.00	-33.80	2.52 V	149	-59.79	-14.01
3	230.79	-75.80	-40.00	-35.80	1.63 V	109	-60.36	-15.44
4	372.41	-72.30	-40.00	-32.30	2.60 V	7	-61.50	-10.80
5	519.85	-69.20	-40.00	-29.20	2.96 V	264	-61.86	-7.34
6	620.73	-70.20	-40.00	-30.20	1.49 V	60	-65.20	-5.00

**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.



## 7.7 Radiated Spurious Emissions above 1GHz

### 7.7.1 LTE Band 42

<b>RF Mode</b>	LTE Band 42 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 43565 : 3597.5 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7195.00	-62.84	-40.00	-22.84	1.21 H	316	24.86	-87.70
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	7195.00	-61.96	-40.00	-21.96	1.96 V	134	25.74	-87.70

#### 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 42 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 43340 : 3575 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

**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	7180.00	-62.55	-40.00	-22.55	1.13 H	135	25.16	-87.71

**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	7150.00	-62.39	-40.00	-22.39	1.76 V	136	25.36	-87.75

**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 42 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 43115 : 3552.5 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7105.00	-62.62	-40.00	-22.62	1.61 H	132	25.03	-87.65
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	7105.00	-62.36	-40.00	-22.36	1.59 V	204	25.29	-87.65

**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 42 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 43490 : 3590 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

**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	7180.00	-62.60	-40.00	-22.60	1.81 H	103	25.11	-87.71

**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	7180.00	-62.53	-40.00	-22.53	1.88 V	260	25.18	-87.71

**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 42 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 43340 : 3575 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7150.00	-62.51	-40.00	-22.51	1.92 H	152	25.24	-87.75
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	7150.00	-61.81	-40.00	-21.81	1.36 V	63	25.94	-87.75

**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 42 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 43190 : 3560.5 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7120.00	-62.29	-40.00	-22.29	1.63 H	322	25.39	-87.68
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	7120.00	-62.38	-40.00	-22.38	1.29 V	236	25.30	-87.68

**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.

**7.7.2 LTE Band 48**

<b>RF Mode</b>	LTE Band 48 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 56715 : 3697.5 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

<b>Antenna Polarity &amp; Test Distance : Horizontal at 3 m</b>								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7395.00	-62.51	-40.00	-22.51	1.27 H	324	24.92	-87.43
<b>Antenna Polarity &amp; Test Distance : Vertical at 3 m</b>								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7395.00	-62.47	-40.00	-22.47	1.95 V	101	24.96	-87.43

**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.





<b>RF Mode</b>	LTE Band 48 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 55990 : 3625 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7250.00	-62.36	-40.00	-22.36	1.29 H	306	25.37	-87.73
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	7250.00	-62.19	-40.00	-22.19	1.52 V	139	25.54	-87.73

**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 48 Channel Bandwidth: 5MHz	<b>Channel</b>	CH 55265 : 3552.5 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7105.00	-62.38	-40.00	-22.38	2.53 H	119	25.27	-87.65
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	7105.00	-62.63	-40.00	-22.63	2.26 V	140	25.02	-87.65

**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 48 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 56640 : 3690 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7380.00	-62.42	-40.00	-22.42	1.47 H	76	25.05	-87.47
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	7380.00	-62.25	-40.00	-22.25	1.59 V	153	25.22	-87.47

**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 48 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 55990 : 3625 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7250.00	-62.39	-40.00	-22.39	1.44 H	53	25.34	-87.73
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	7250.00	-62.69	-40.00	-22.69	1.08 V	218	25.04	-87.73

**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 48 Channel Bandwidth: 20MHz	<b>Channel</b>	CH 55340 : 3560 MHz
<b>Frequency Range</b>	1 GHz ~ 40 GHz	<b>Detector Function &amp; Bandwidth</b>	1 MHz/3 MHz (RMS)
<b>Input Power</b>	120 Vac, 60 Hz	<b>Environmental Conditions</b>	25°C, 67% RH
<b>Tested By</b>	Karl Lee		

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	7120.00	-62.46	-40.00	-22.46	1.58 H	263	25.22	-87.68
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	7120.00	-62.55	-40.00	-22.55	1.92 V	336	25.13	-87.68

**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.

## 7.8 Frequency Stability

Environmental Conditions:	25°C, 60% RH	Tested By:	Willy Chng
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### 7.8.1 LTE Band 42

#### LTE Band 42, Channel Bandwidth: 5 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 43115 (3552.5 MHz)		CH 43565 (3597.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
9.18	3552.499999	0.000	3597.500002	0.001
10.80	3552.500001	0.000	3597.500002	0.001
12.42	3552.499998	-0.001	3597.499996	-0.001

Note: The applicant defined the normal working voltage is from 9.18 to 12.42 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 43115 (3552.5 MHz)		CH 43565 (3597.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3552.499999	0.000	3597.500003	0.001
-20	3552.499999	0.000	3597.500001	0.000
-10	3552.500004	0.001	3597.500004	0.001
0	3552.499997	-0.001	3597.499998	-0.001
10	3552.500001	0.000	3597.500001	0.000
20	3552.500002	0.001	3597.499999	0.000
30	3552.499999	0.000	3597.500004	0.001
40	3552.500001	0.000	3597.500003	0.001
50	3552.499996	-0.001	3597.500002	0.001

**LTE Band 42, Channel Bandwidth: 10 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 43140 (3555 MHz)		CH 43540 (3595 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
9.18	3555.000002	0.001	3595.000004	0.001
10.80	3555.000003	0.001	3594.999997	-0.001
12.42	3554.999999	0.000	3594.999999	0.000

Note: The applicant defined the normal working voltage is from 4.50 to 5.50 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 43140 (3555 MHz)		CH 43540 (3595 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3555.000003	0.001	3595.000004	0.001
-20	3554.999996	-0.001	3595.000004	0.001
-10	3554.999996	-0.001	3594.999999	0.000
0	3555.000003	0.001	3595.000003	0.001
10	3554.999999	0.000	3595.000002	0.001
20	3555.000001	0.000	3595.000003	0.001
30	3555.000003	0.001	3595.000004	0.001
40	3555.000001	0.000	3594.999996	-0.001
50	3555.000004	0.001	3594.999999	0.000

### LTE Band 42, Channel Bandwidth: 15 MHz

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 43165 (3557.5 MHz)		CH 43515 (3592.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
9.18	3557.500004	0.001	3592.499999	0.000
10.80	3557.499998	-0.001	3592.499996	-0.001
12.42	3557.500001	0.000	3592.500002	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 5.50 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 43165 (3557.5 MHz)		CH 43515 (3592.5 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3557.499998	-0.001	3592.500002	0.001
-20	3557.500002	0.001	3592.500002	0.001
-10	3557.499996	-0.001	3592.499997	-0.001
0	3557.499997	-0.001	3592.500003	0.001
10	3557.499999	0.000	3592.499996	-0.001
20	3557.500003	0.001	3592.500003	0.001
30	3557.499998	-0.001	3592.499999	0.000
40	3557.500004	0.001	3592.499996	-0.001
50	3557.500003	0.001	3592.499999	0.000



**LTE Band 42, Channel Bandwidth: 20 MHz**

Frequency Stability Versus Voltage				
Voltage (Vdc)	CH 43190 (3560 MHz)		CH 43490 (3590 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
9.18	3560.000002	0.001	3590.000003	0.001
10.80	3560.000003	0.001	3590.000004	0.001
12.42	3560.000004	0.001	3590.000002	0.001

Note: The applicant defined the normal working voltage is from 4.50 to 5.50 Vdc.

Frequency Stability Versus Temperature				
Temperature (°C)	CH 43190 (3560 MHz)		CH 43490 (3590 MHz)	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3560.000001	0.000	3590.000002	0.001
-20	3560.000002	0.001	3589.999999	0.000
-10	3559.999996	-0.001	3589.999998	-0.001
0	3559.999999	0.000	3589.999996	-0.001
10	3560.000001	0.000	3589.999998	-0.001
20	3560.000001	0.000	3589.999996	-0.001
30	3559.999999	0.000	3589.999996	-0.001
40	3560.000001	0.000	3590.000002	0.001
50	3560.000004	0.001	3590.000001	0.000

## 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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