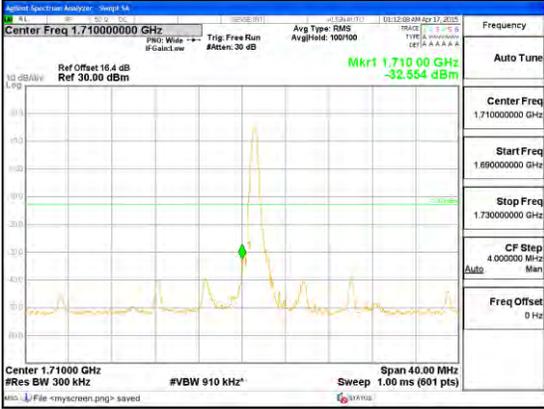
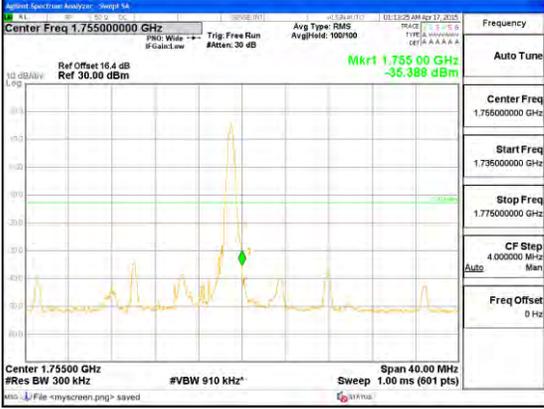
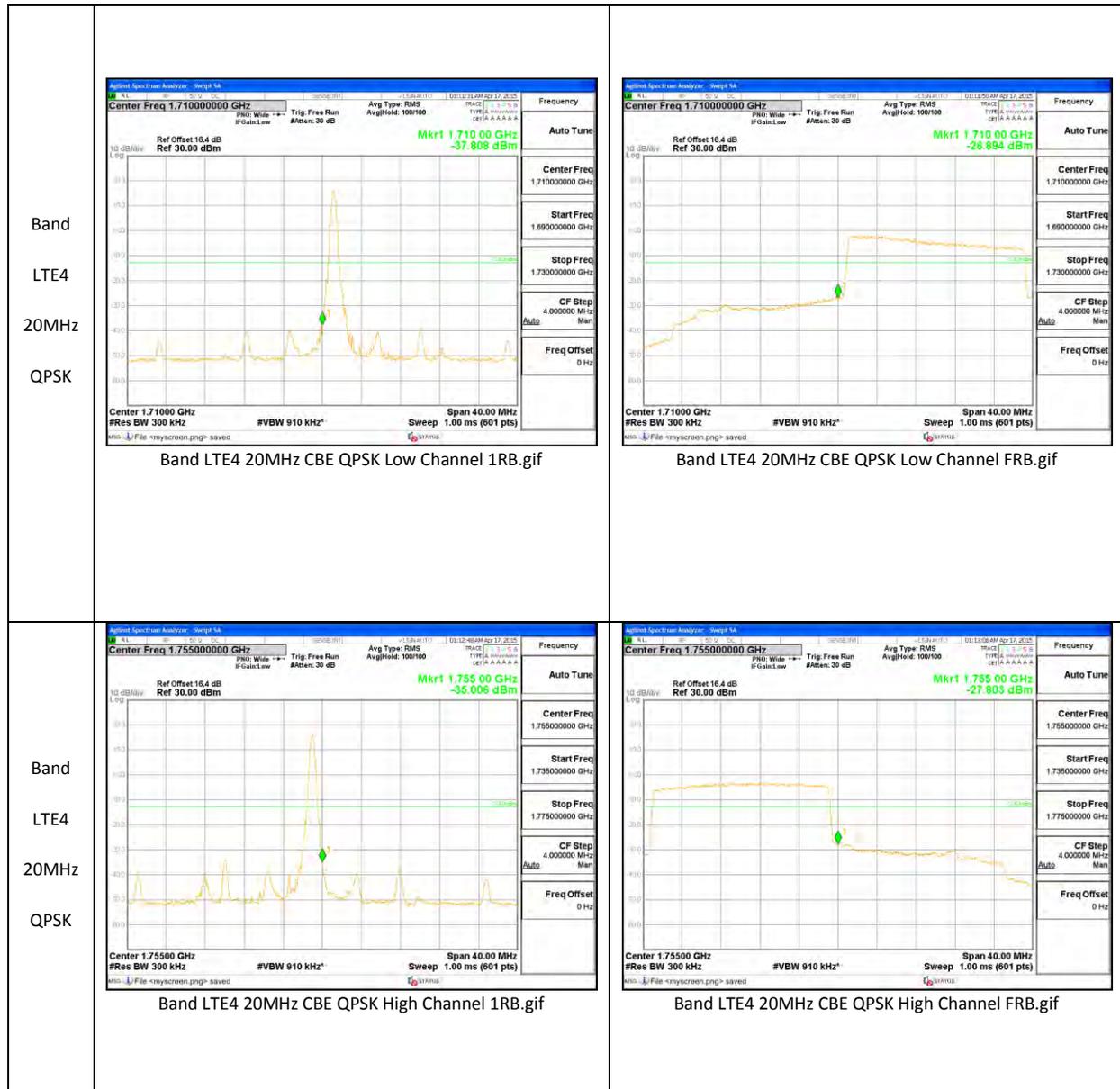
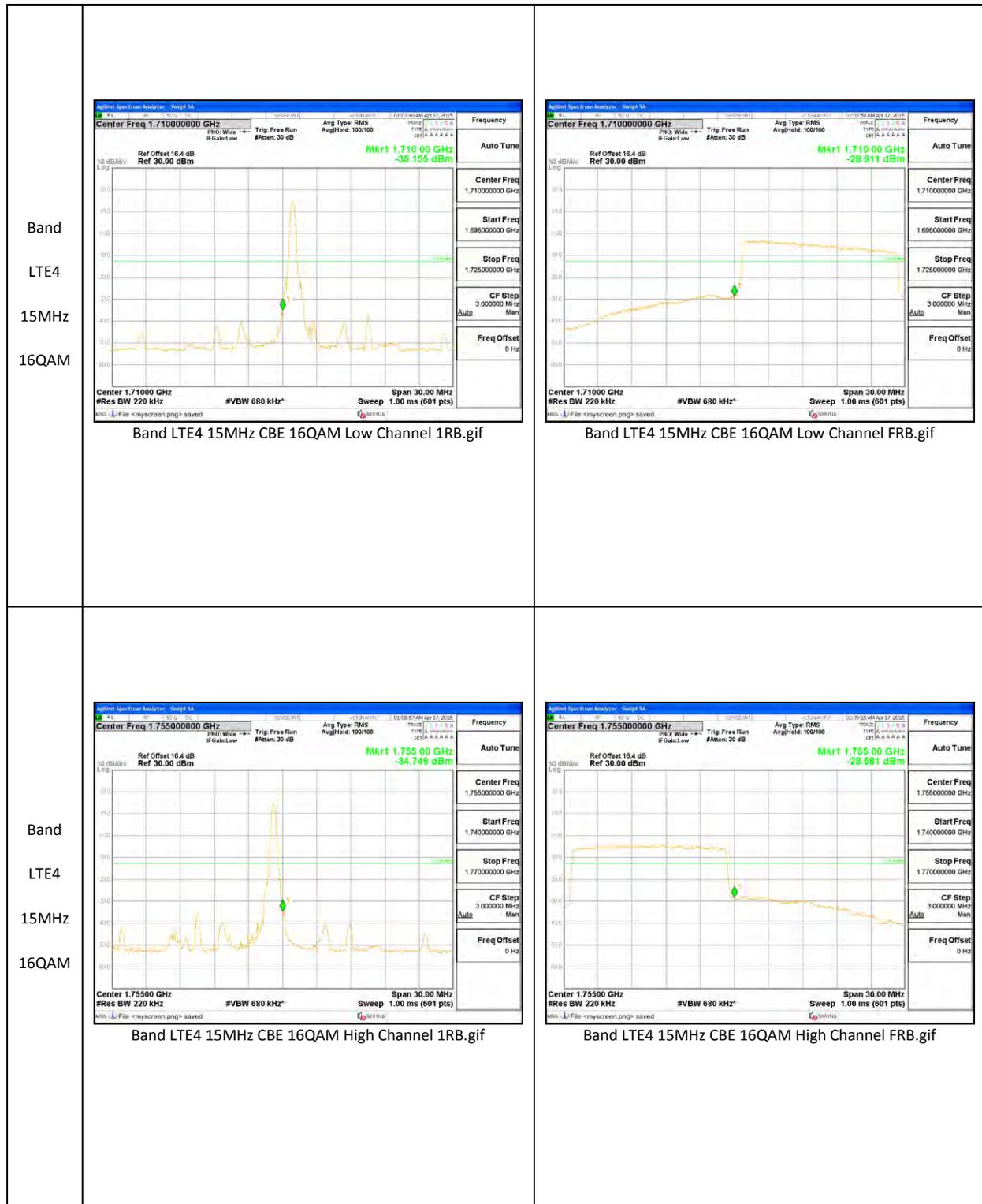
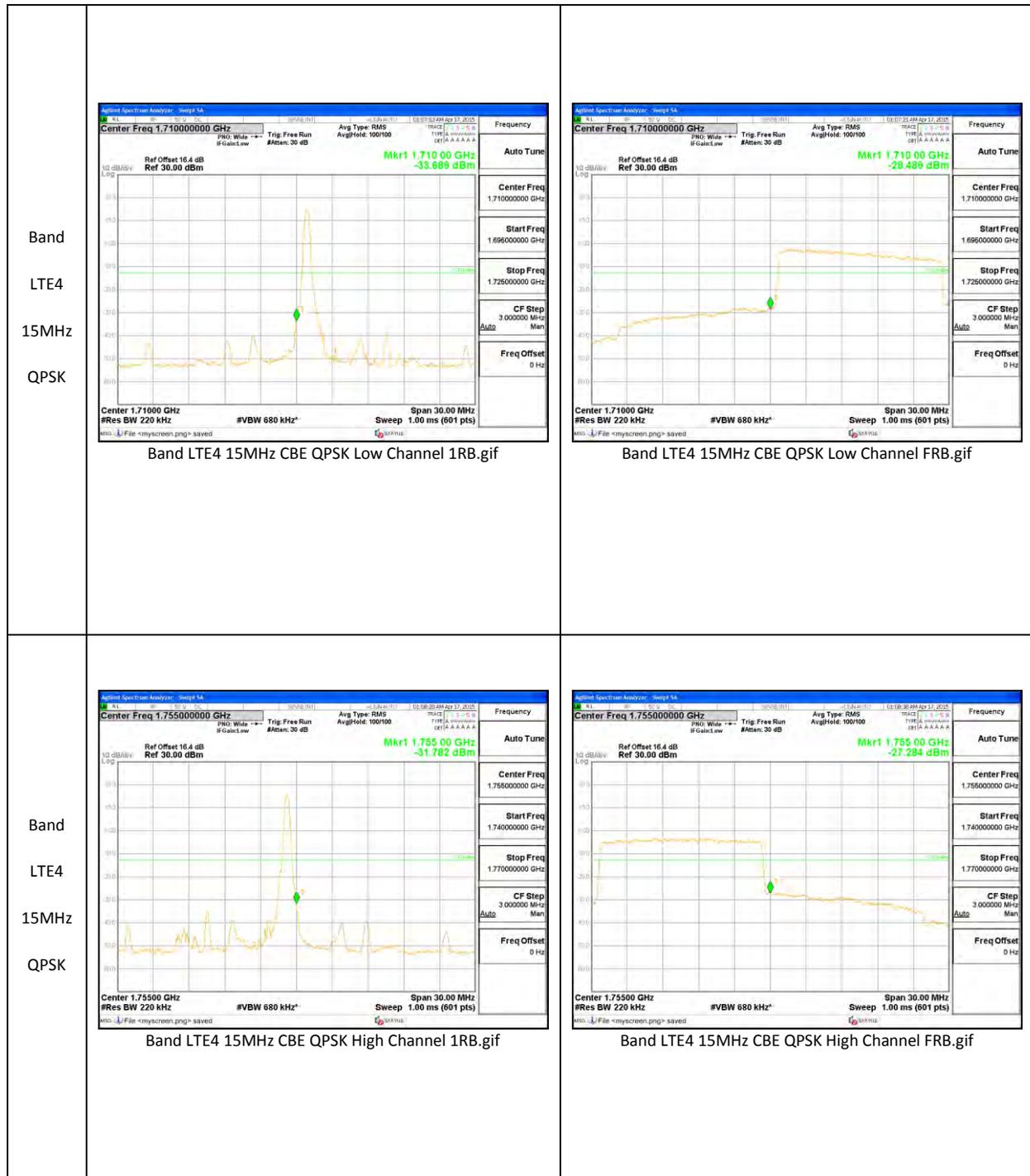


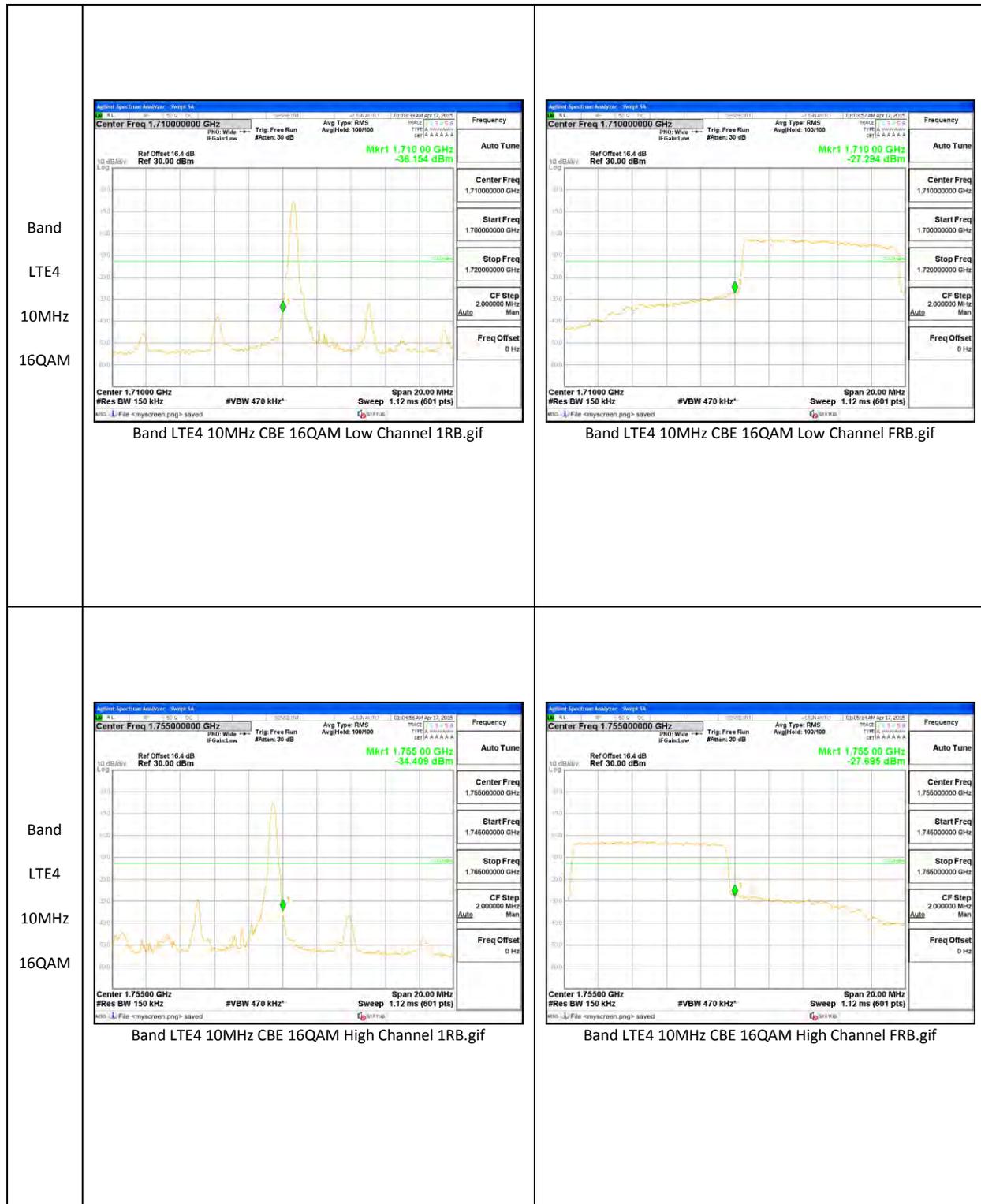
**LTE Band 4**

<p>and                  LTE4                  20MHz                  16QAM</p>	 <p>Band LTE4 20MHz CBE 16QAM Low Channel 1RB.gif</p>	 <p>Band LTE4 20MHz CBE 16QAM Low Channel FRB.gif</p>
<p>Band                  LTE4                  20MHz                  16QAM</p>	 <p>Band LTE4 20MHz CBE 16QAM High Channel 1RB.gif</p>	 <p>Band LTE4 20MHz CBE 16QAM High Channel FRB.gif</p>

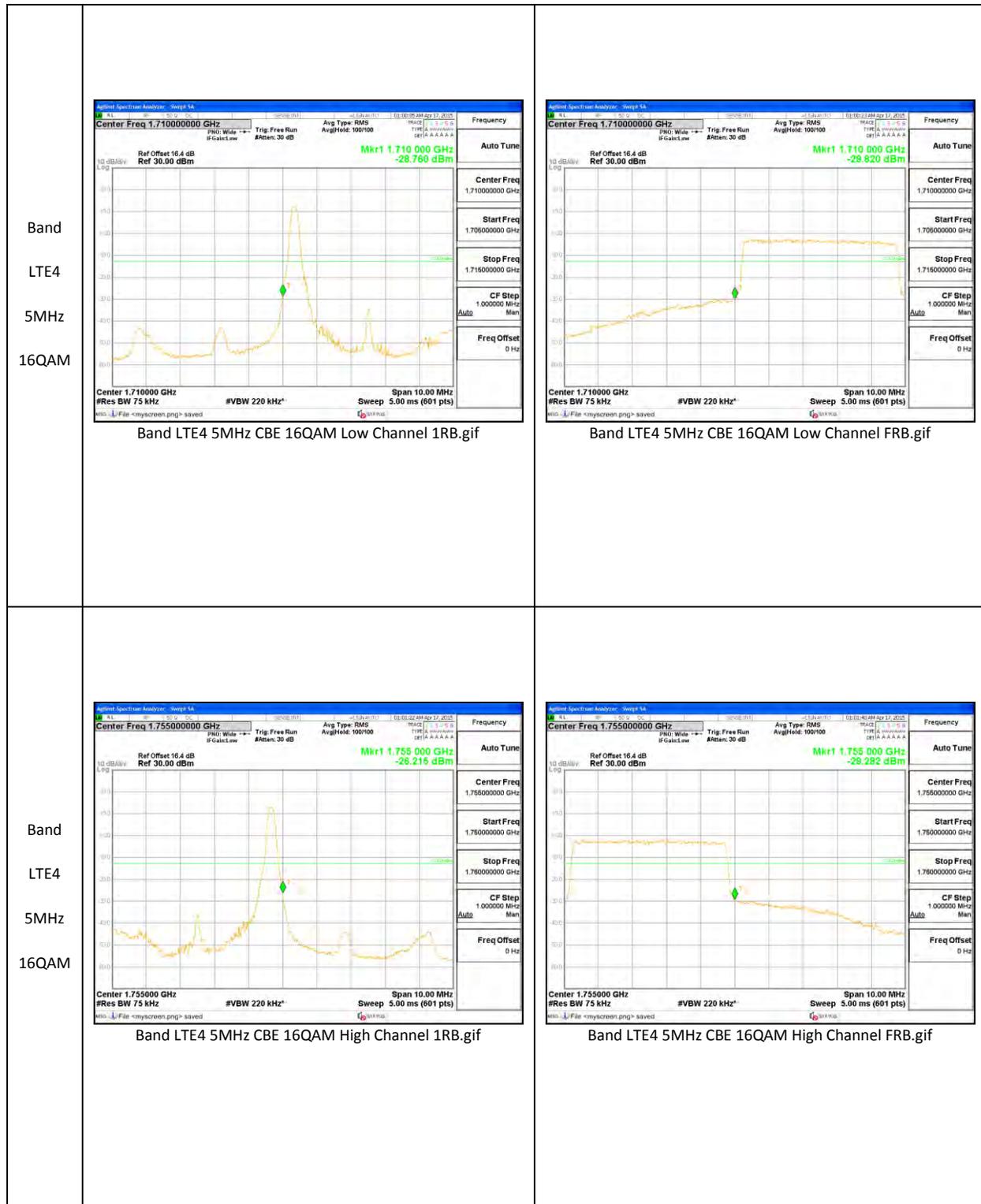


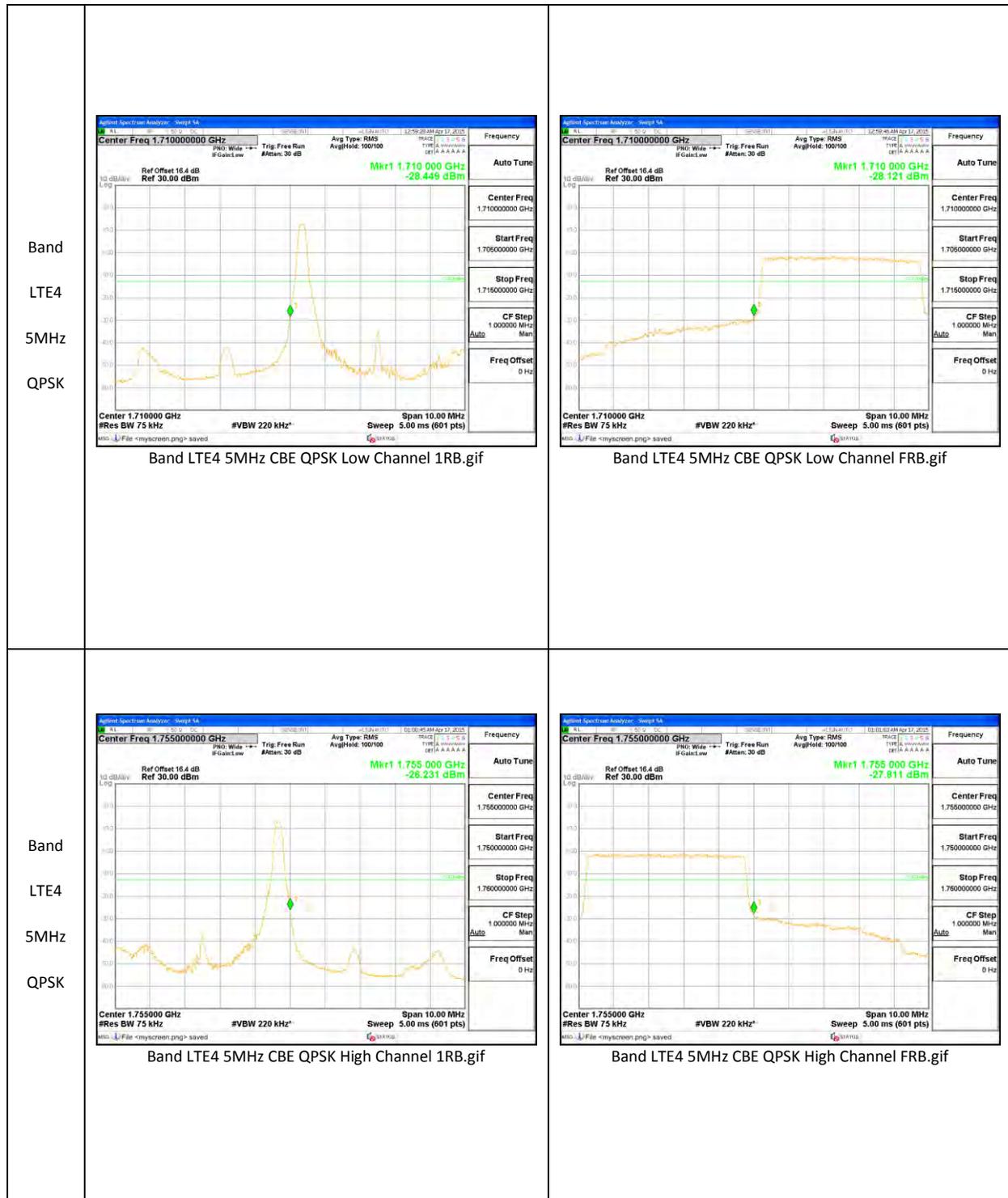


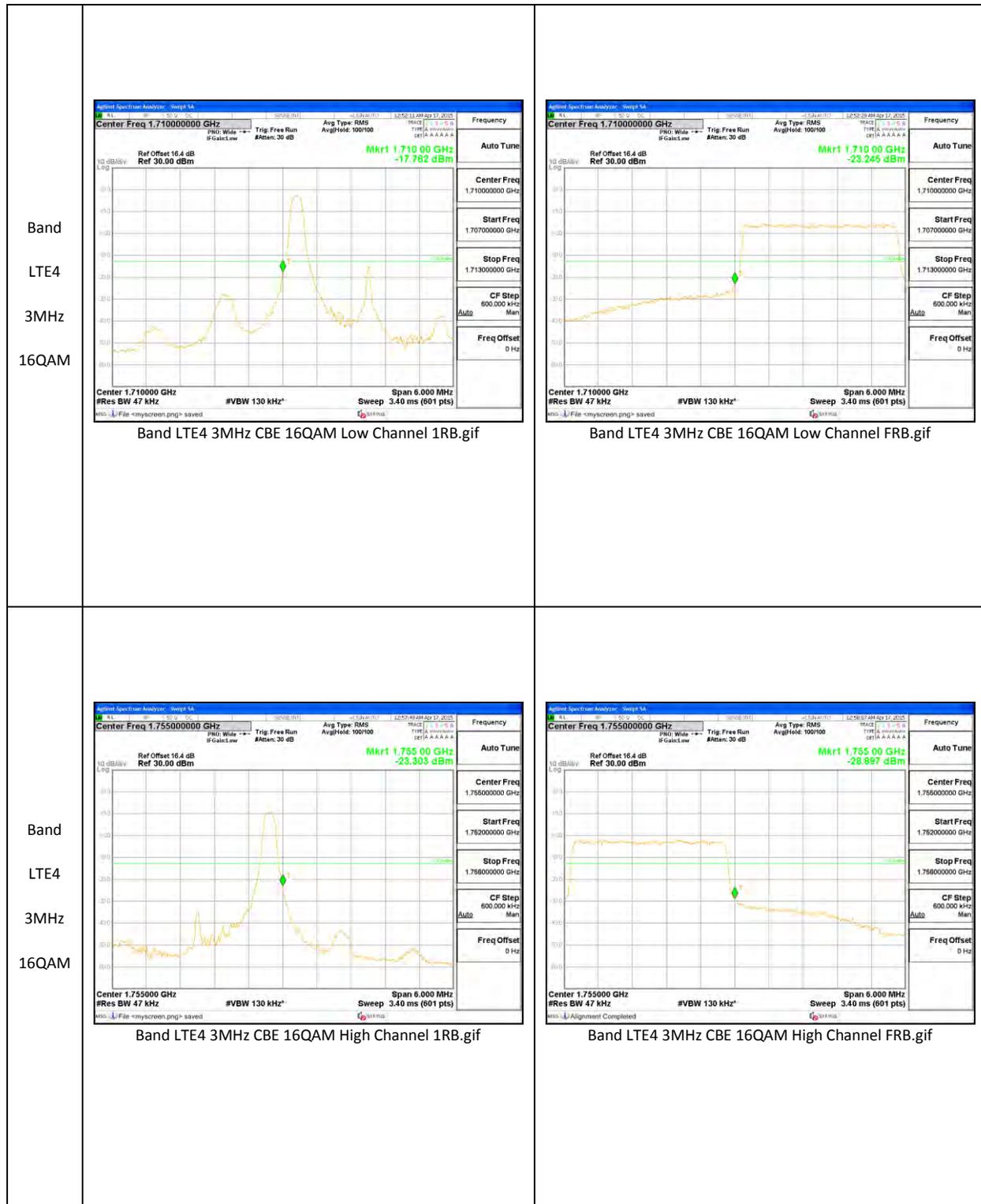


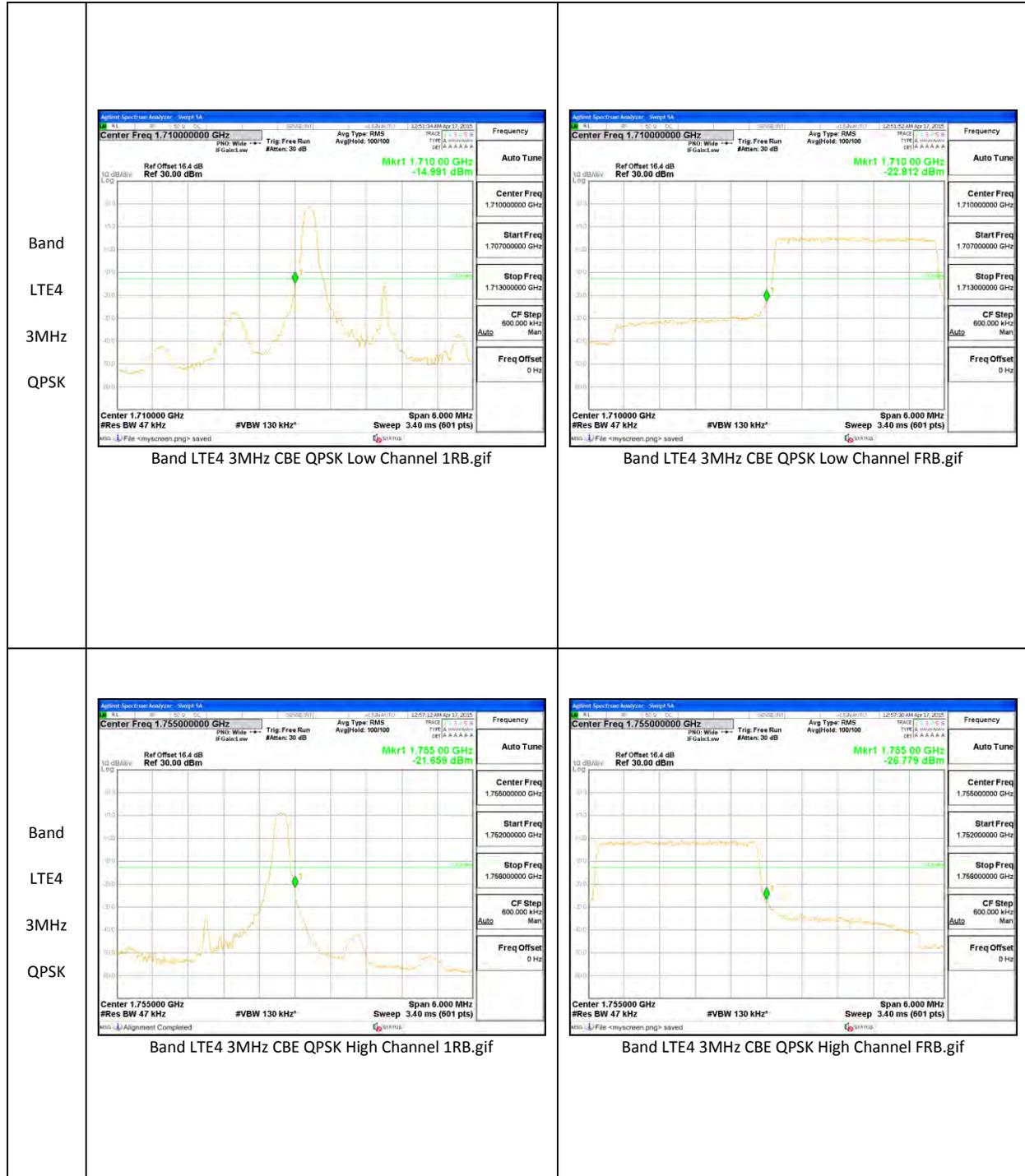


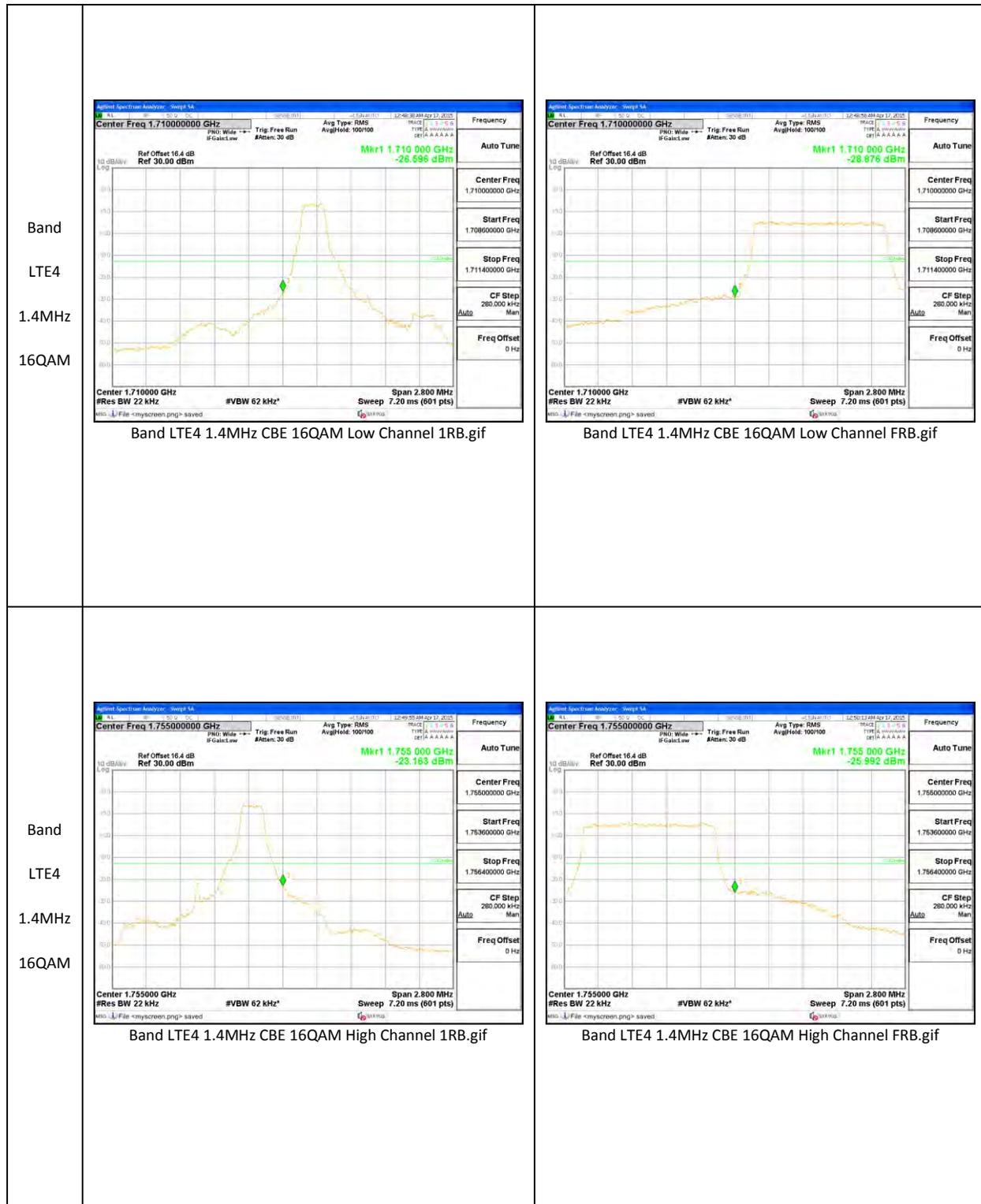
<p>Band LTE4 10MHz QPSK</p>	<p>Center Freq 1.71000000 GHz              Ref Offset 16.4 dB              Ref 30.00 dBm              Mk1 1.710 00 GHz              -36.830 dBm</p> <p>Center Freq 1.71000000 GHz              Start Freq 1.70000000 GHz              Stop Freq 1.72000000 GHz              CF Step 2.000000 MHz              Freq Offset 0 Hz</p> <p>Center 1.71000 GHz              #Res BW 150 kHz              #VBW 470 kHz              Sweep 1.12 ms (601 pts)</p>	<p>Center Freq 1.71000000 GHz              Ref Offset 16.4 dB              Ref 30.00 dBm              Mk1 1.710 00 GHz              -27.238 dBm</p> <p>Center Freq 1.71000000 GHz              Start Freq 1.70000000 GHz              Stop Freq 1.72000000 GHz              CF Step 2.000000 MHz              Freq Offset 0 Hz</p> <p>Center 1.71000 GHz              #Res BW 150 kHz              #VBW 470 kHz              Sweep 1.12 ms (601 pts)</p>
<p>Band LTE4 10MHz CBE QPSK Low Channel 1RB.gif</p>	<p>Band LTE4 10MHz CBE QPSK Low Channel FRB.gif</p>	
<p>Band LTE4 10MHz QPSK</p>	<p>Center Freq 1.75500000 GHz              Ref Offset 16.4 dB              Ref 30.00 dBm              Mk1 1.755 00 GHz              -31.479 dBm</p> <p>Center Freq 1.75500000 GHz              Start Freq 1.74500000 GHz              Stop Freq 1.76500000 GHz              CF Step 2.000000 MHz              Freq Offset 0 Hz</p> <p>Center 1.75500 GHz              #Res BW 150 kHz              #VBW 470 kHz              Sweep 1.12 ms (601 pts)</p>	<p>Center Freq 1.75500000 GHz              Ref Offset 16.4 dB              Ref 30.00 dBm              Mk1 1.755 00 GHz              -26.759 dBm</p> <p>Center Freq 1.75500000 GHz              Start Freq 1.74500000 GHz              Stop Freq 1.76500000 GHz              CF Step 2.000000 MHz              Freq Offset 0 Hz</p> <p>Center 1.75500 GHz              #Res BW 150 kHz              #VBW 470 kHz              Sweep 1.12 ms (601 pts)</p>
<p>Band LTE4 10MHz CBE QPSK High Channel 1RB.gif</p>	<p>Band LTE4 10MHz CBE QPSK High Channel FRB.gif</p>	

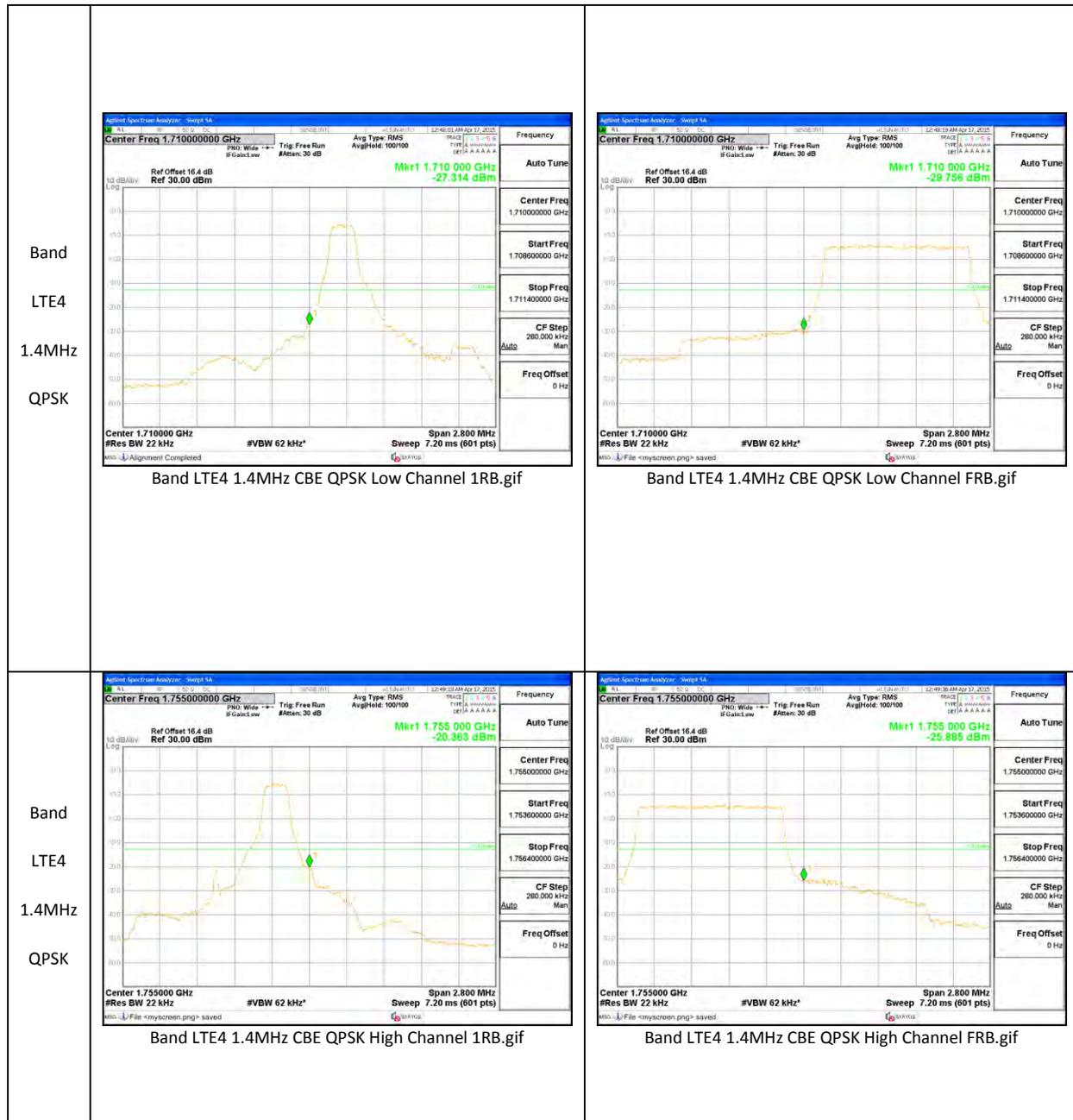




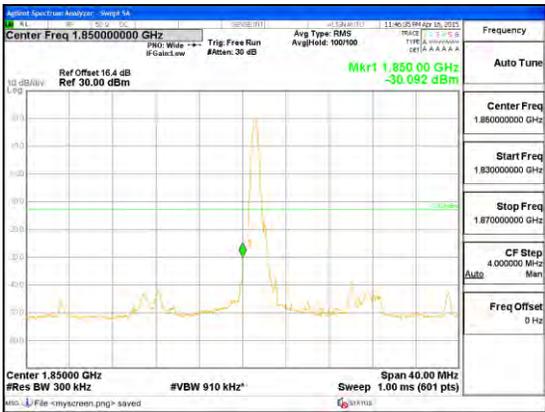
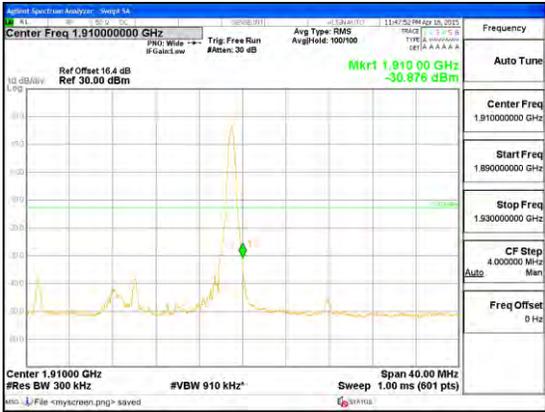


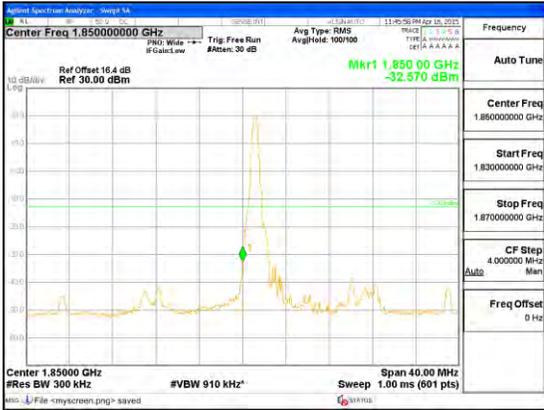
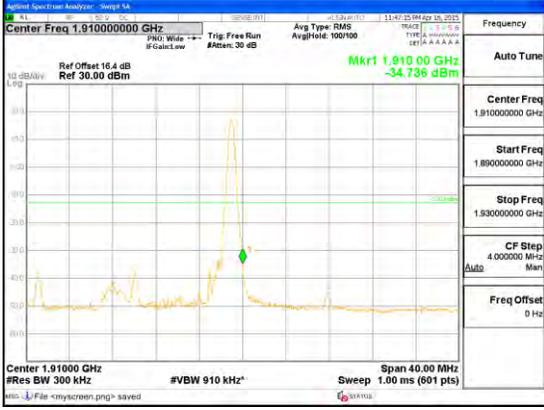


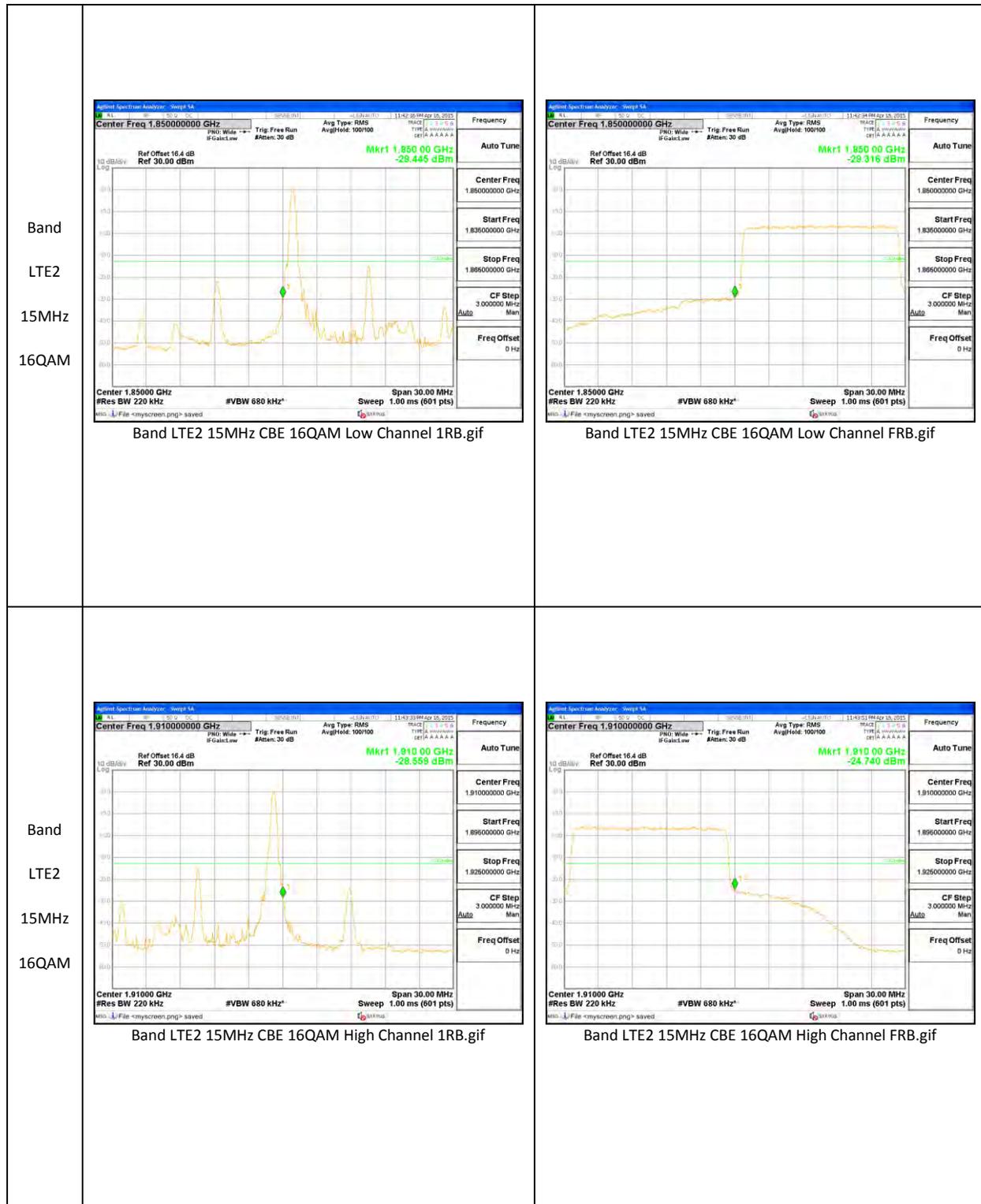


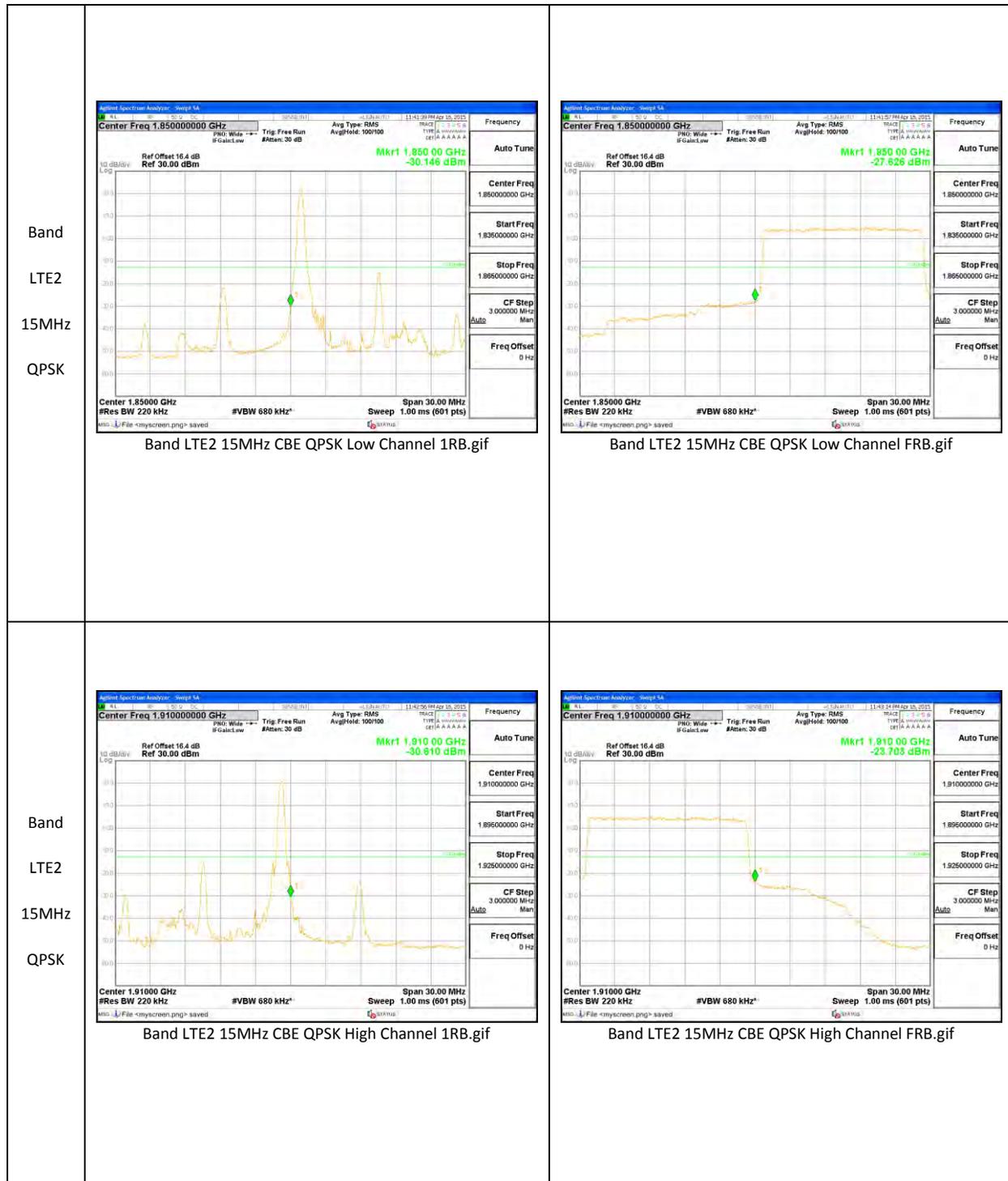


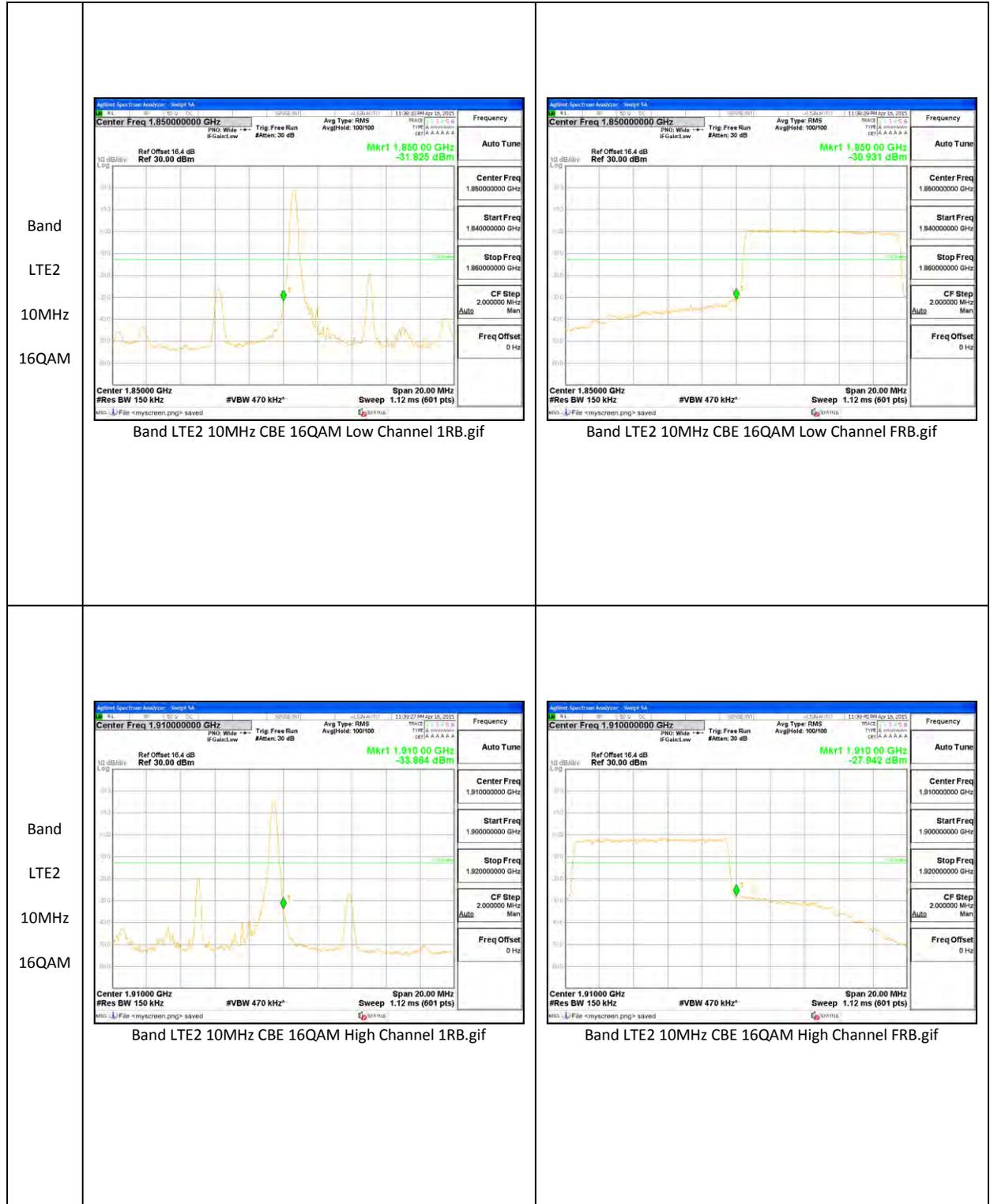
**LTE Band 2**

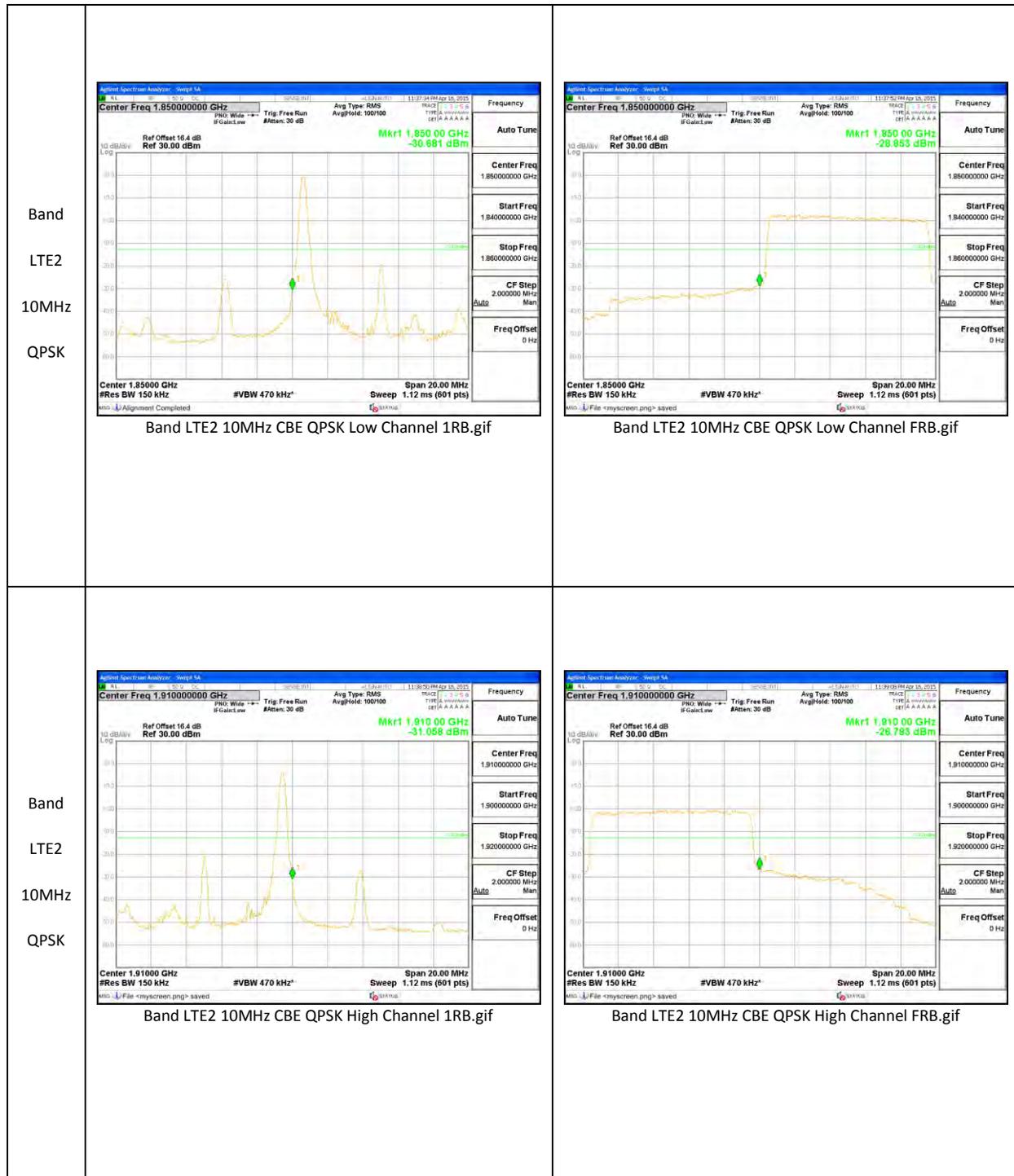
<p>Band LTE2 20MHz 16QAM</p>	 <p>Band LTE2 20MHz CBE 16QAM Low Channel 1RB.gif</p>	 <p>Band LTE2 20MHz CBE 16QAM Low Channel FRB.gif</p>
<p>Band LTE2 20MHz 16QAM</p>	 <p>Band LTE2 20MHz CBE 16QAM High Channel 1RB.gif</p>	 <p>Band LTE2 20MHz CBE 16QAM High Channel FRB.gif</p>

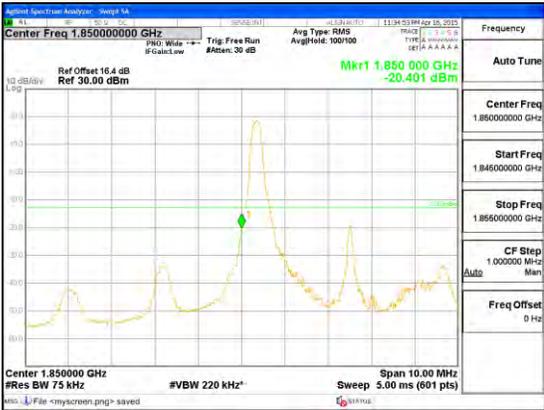
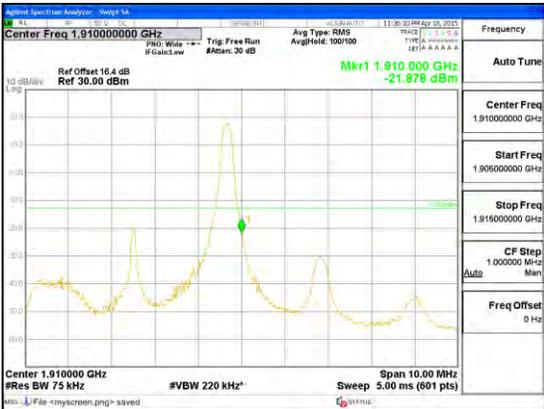
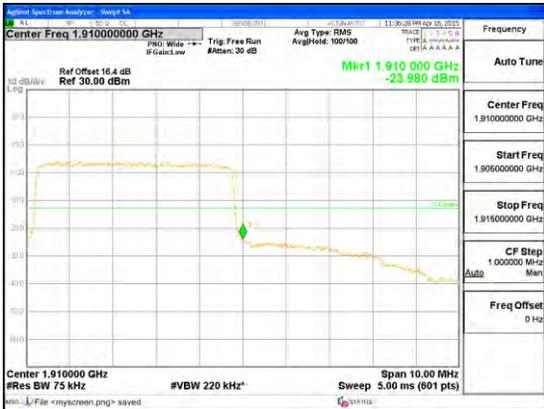
<p>Band LTE2 20MHz QPSK</p>	 <p>Band LTE2 20MHz CBE QPSK Low Channel 1RB.gif</p>	 <p>Band LTE2 20MHz CBE QPSK Low Channel FRB.gif</p>
<p>Band LTE2 20MHz QPSK</p>	 <p>Band LTE2 20MHz CBE QPSK High Channel 1RB.gif</p>	 <p>Band LTE2 20MHz CBE QPSK High Channel FRB.gif</p>



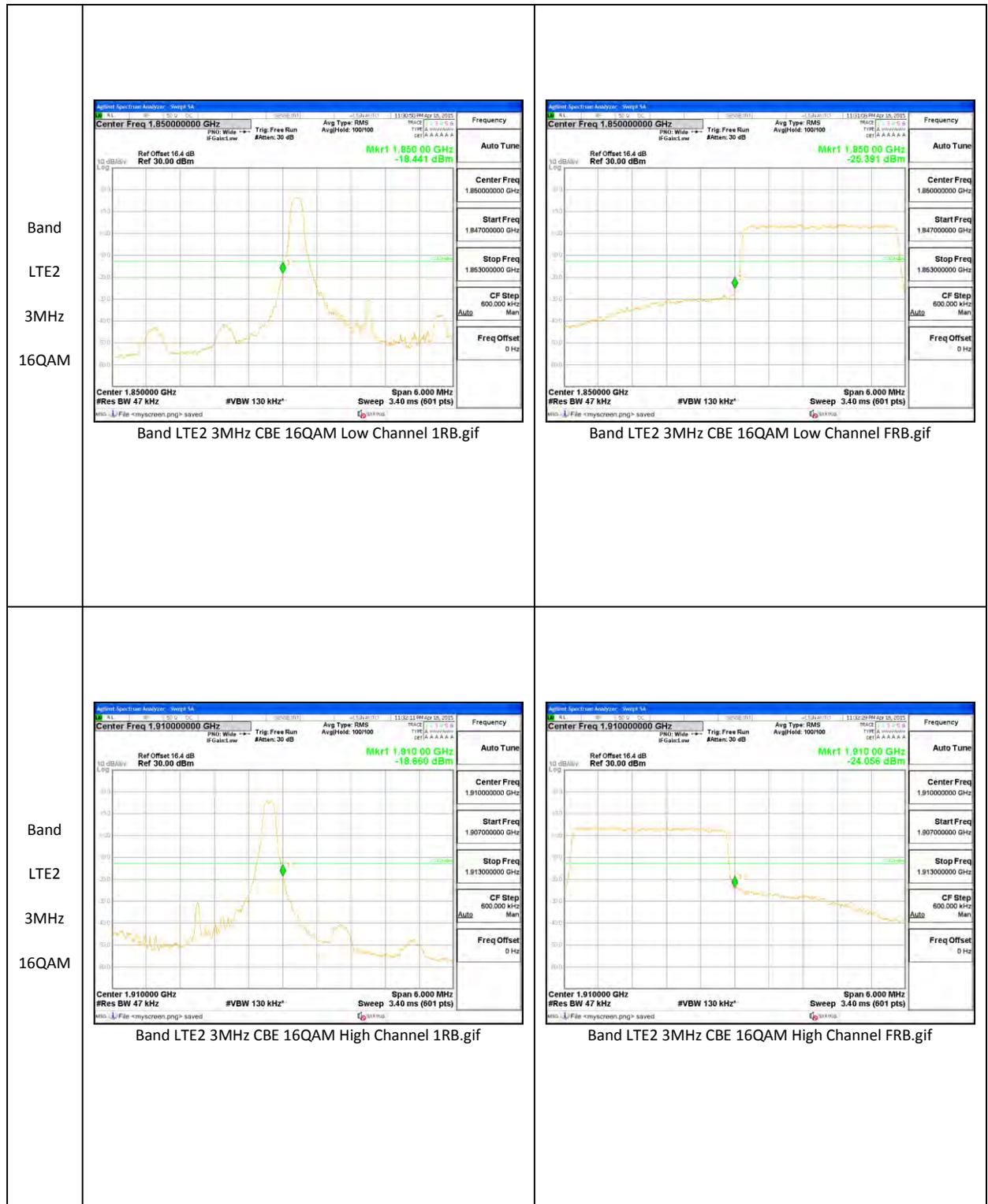


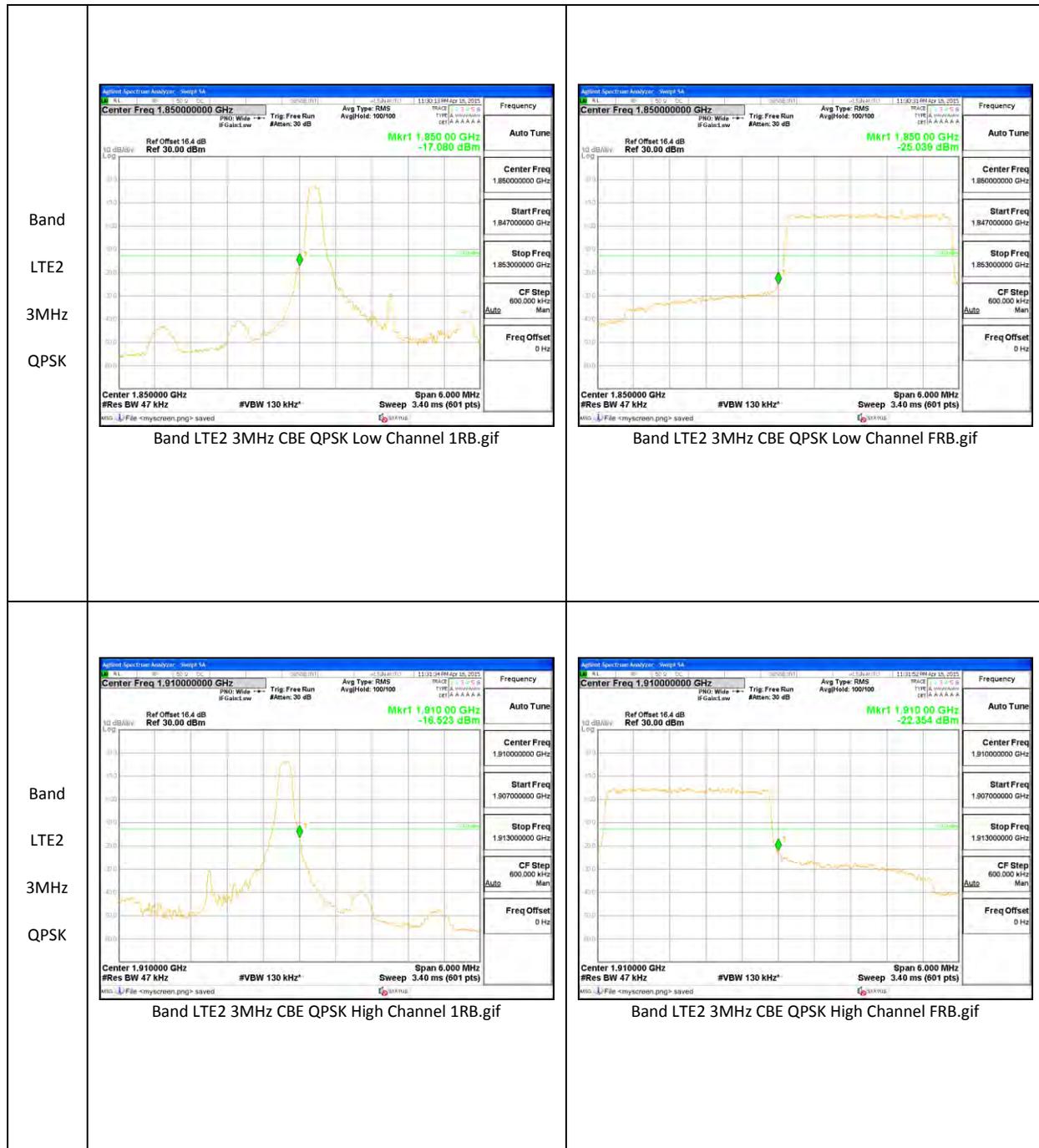


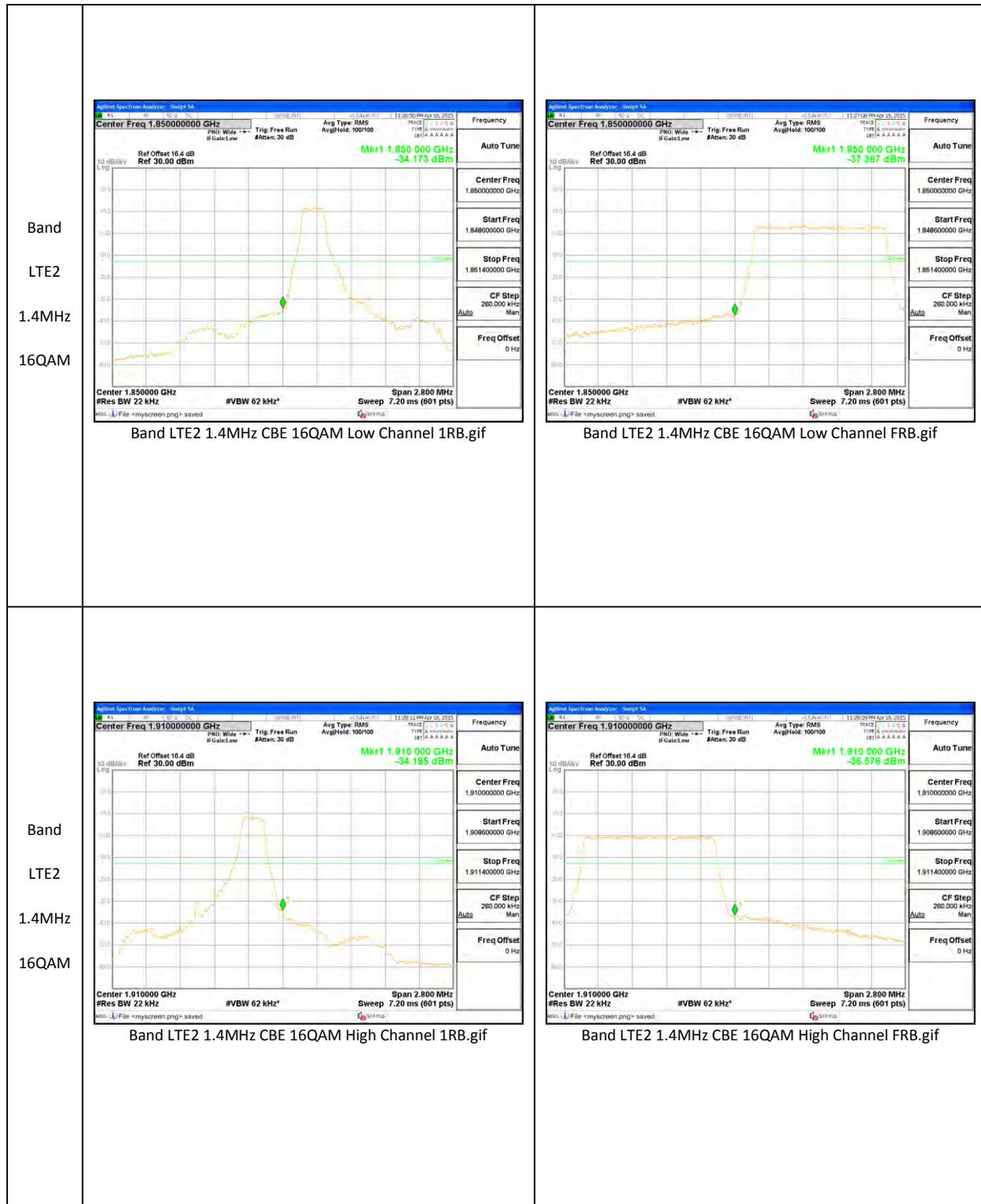


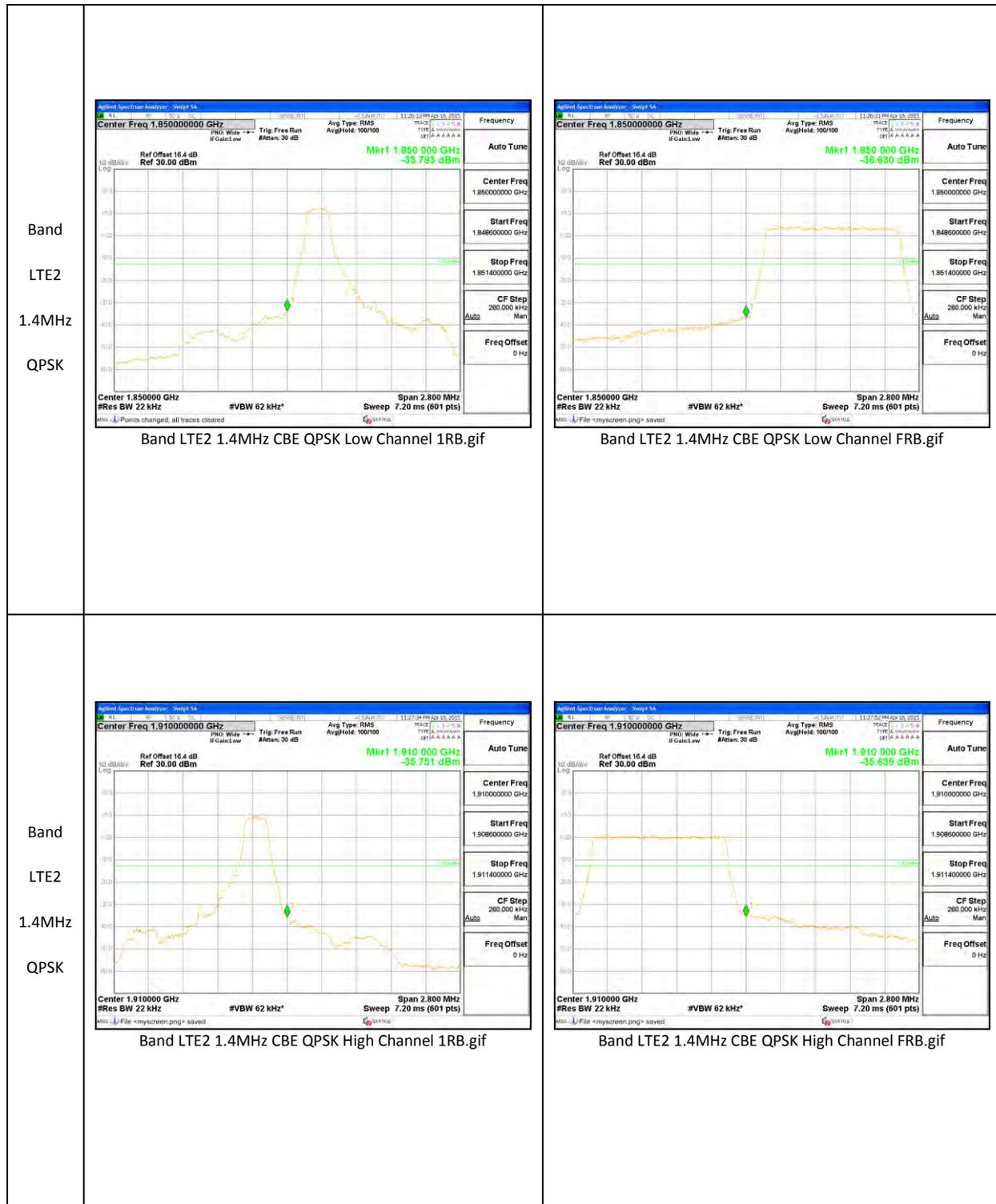
<p>Band LTE2 5MHz 16QAM</p>	 <p>Band LTE2 5MHz CBE 16QAM Low Channel 1RB.gif</p>	 <p>Band LTE2 5MHz CBE 16QAM Low Channel FRB.gif</p>
<p>Band LTE2 5MHz 16QAM</p>	 <p>Band LTE2 5MHz CBE 16QAM High Channel 1RB.gif</p>	 <p>Band LTE2 5MHz CBE 16QAM High Channel FRB.gif</p>

<p>Band LTE2 5MHz QPSK</p>		
<p>Band LTE2 5MHz QPSK</p>		

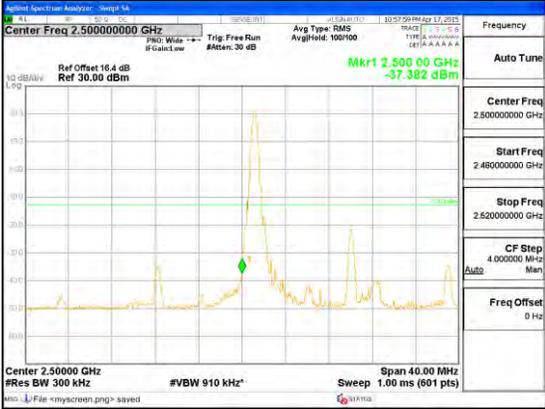
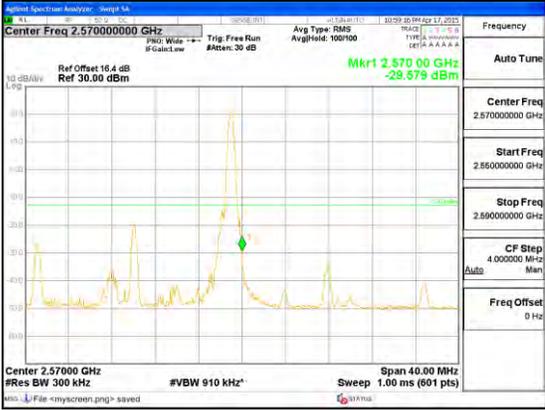


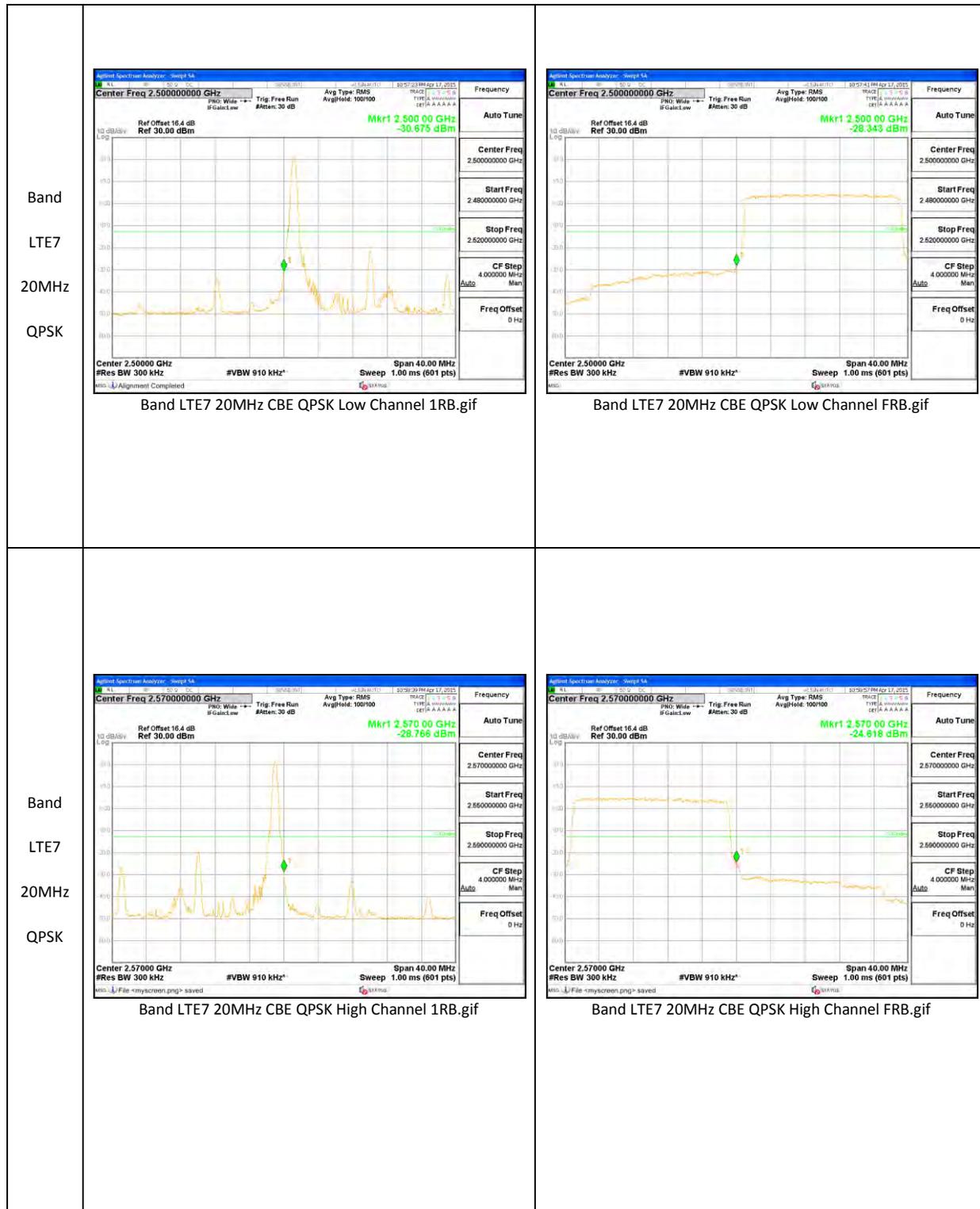


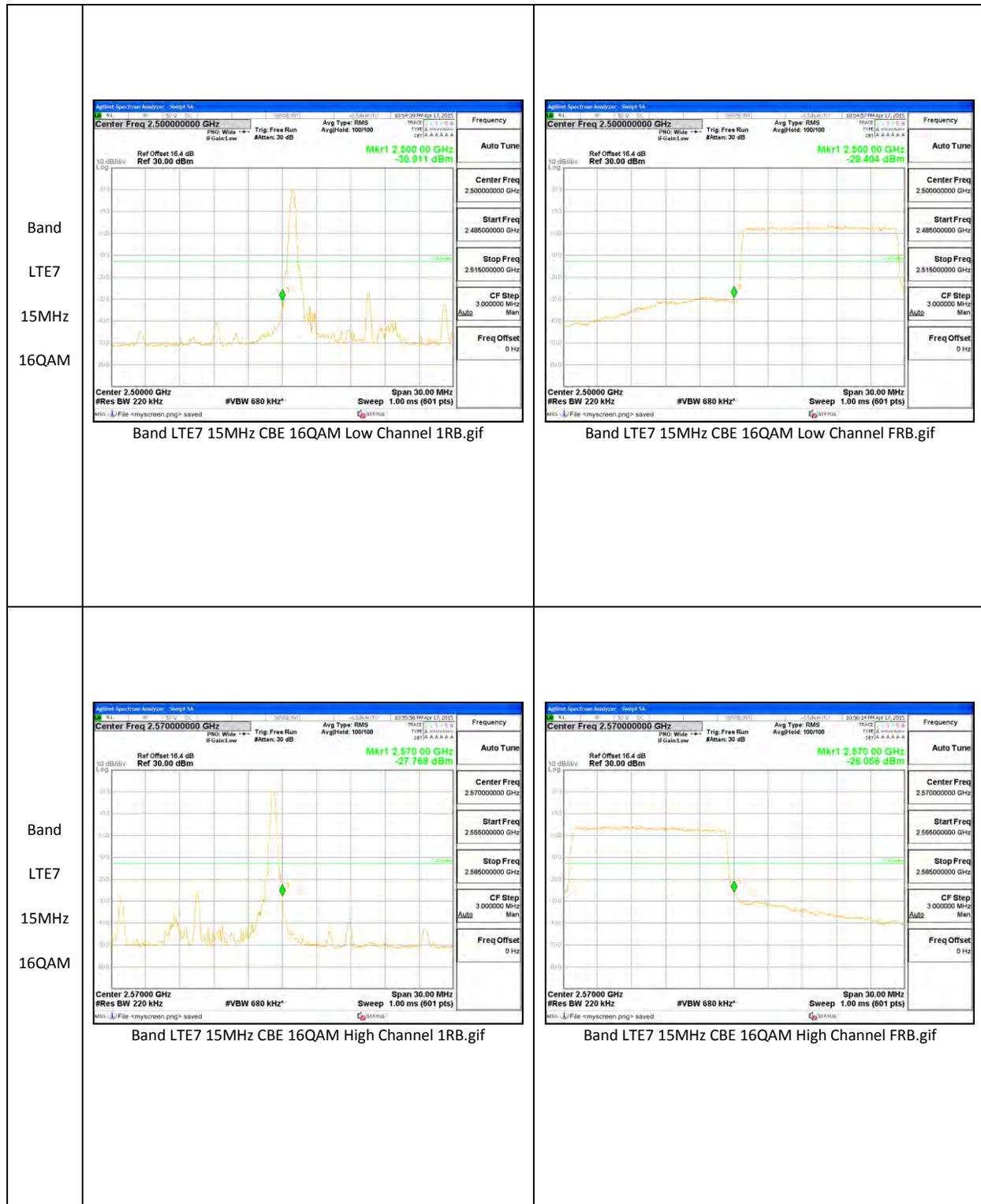


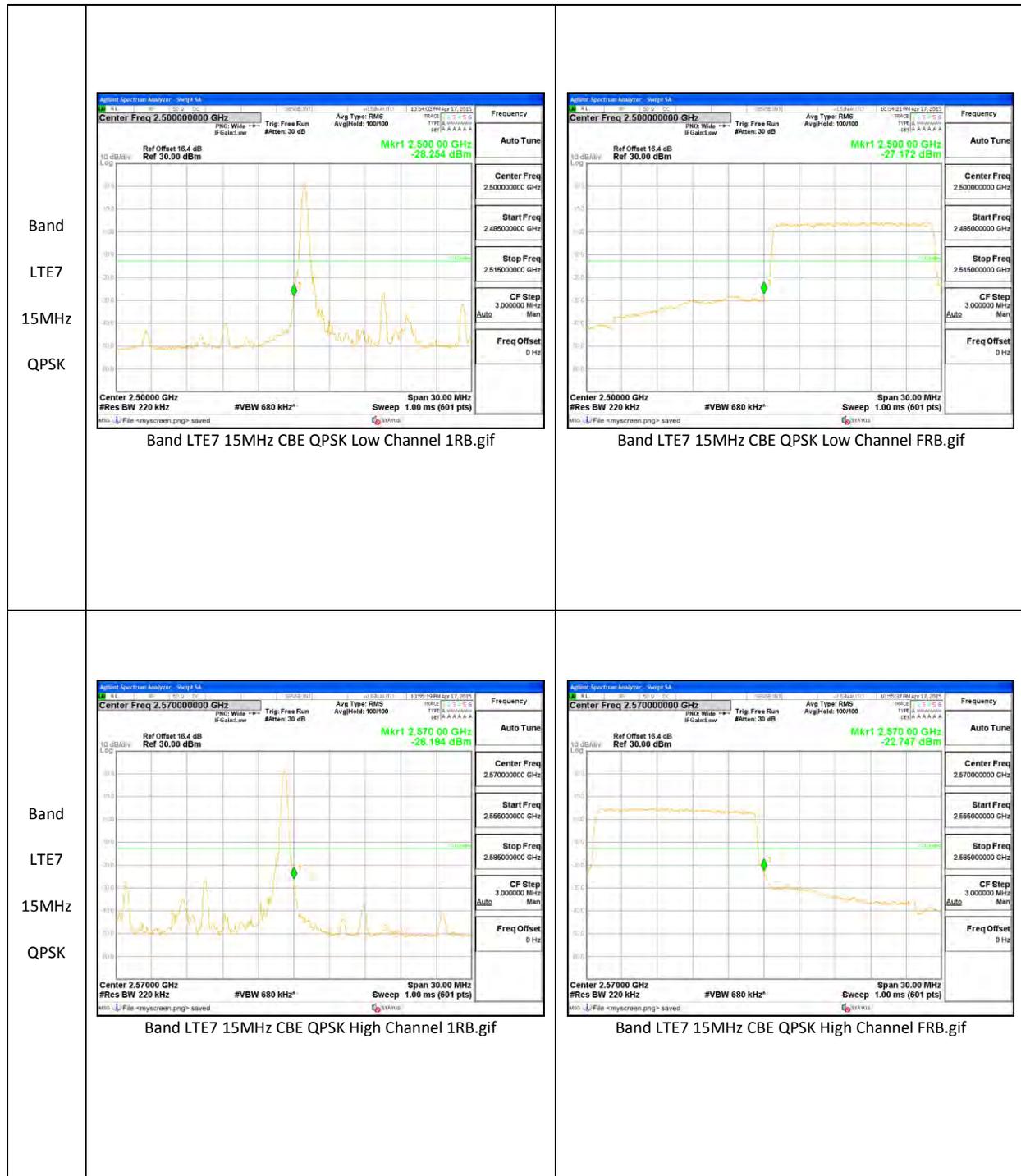


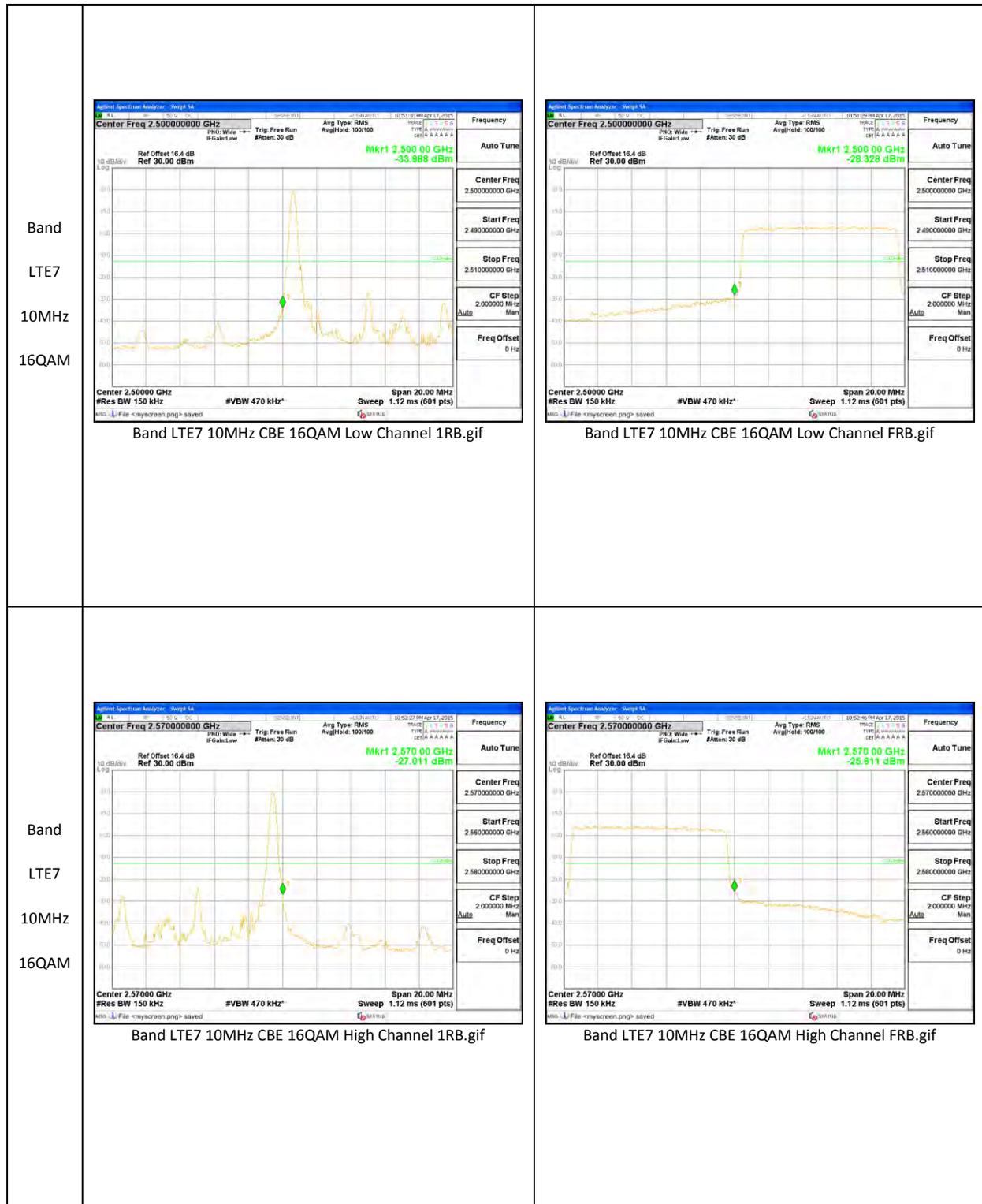
**LTE Band 7**

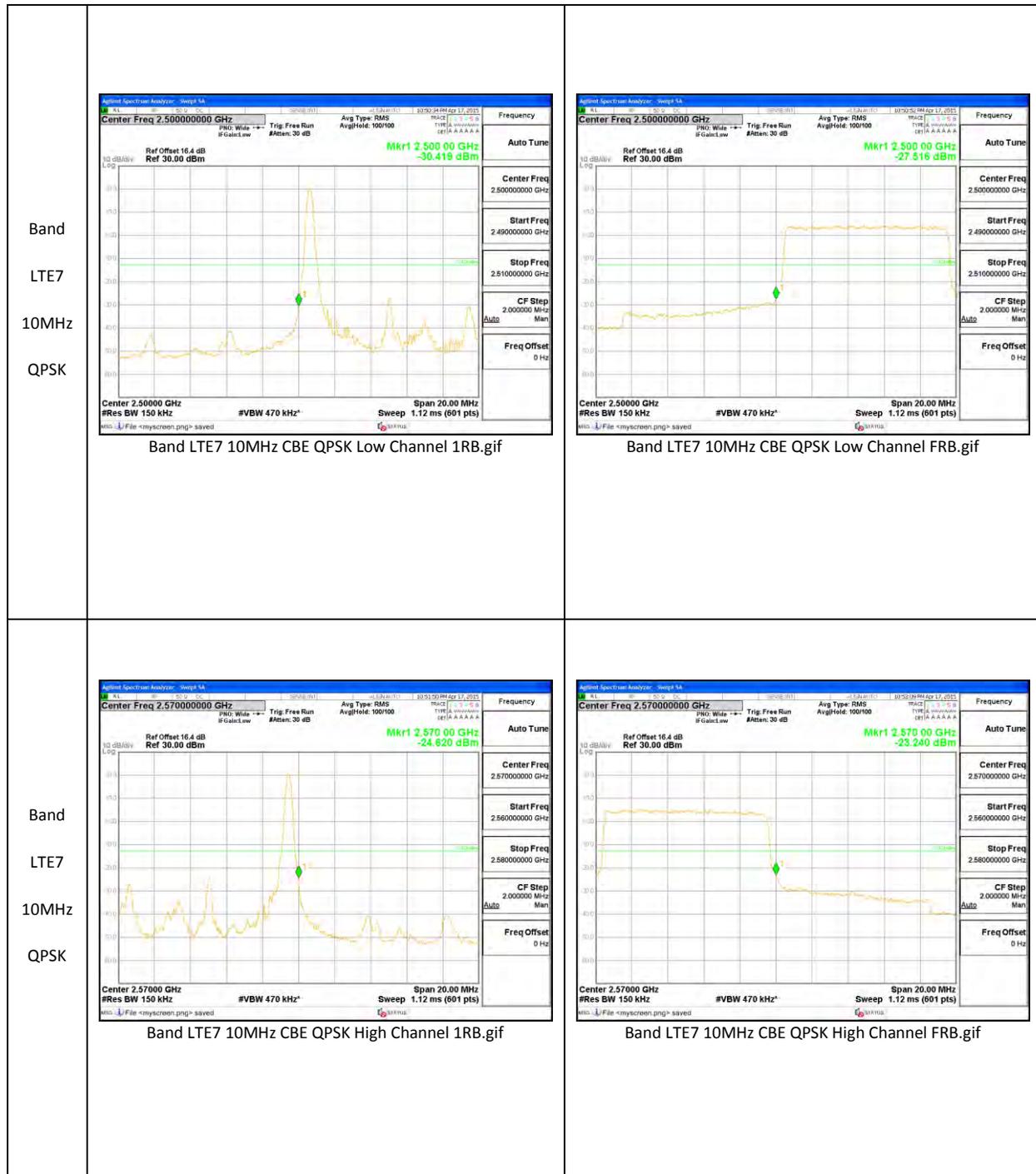
<p>Band LTE7 20MHz 16QAM</p>	 <p>Band LTE7 20MHz CBE 16QAM Low Channel 1RB.gif</p>	 <p>Band LTE7 20MHz CBE 16QAM Low Channel FRB.gif</p>
<p>Band LTE7 20MHz 16QAM</p>	 <p>Band LTE7 20MHz CBE 16QAM High Channel 1RB.gif</p>	 <p>Band LTE7 20MHz CBE 16QAM High Channel FRB.gif</p>

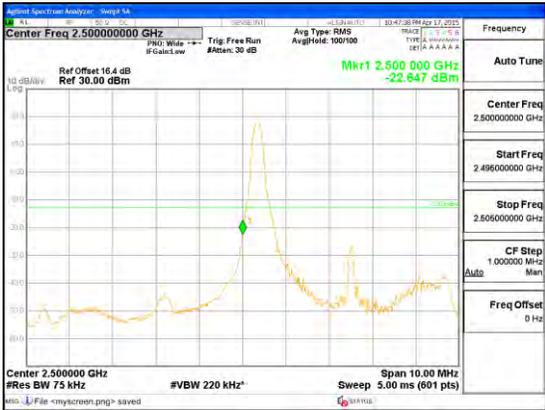
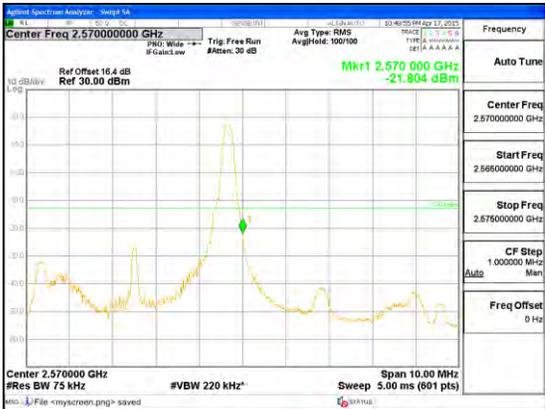


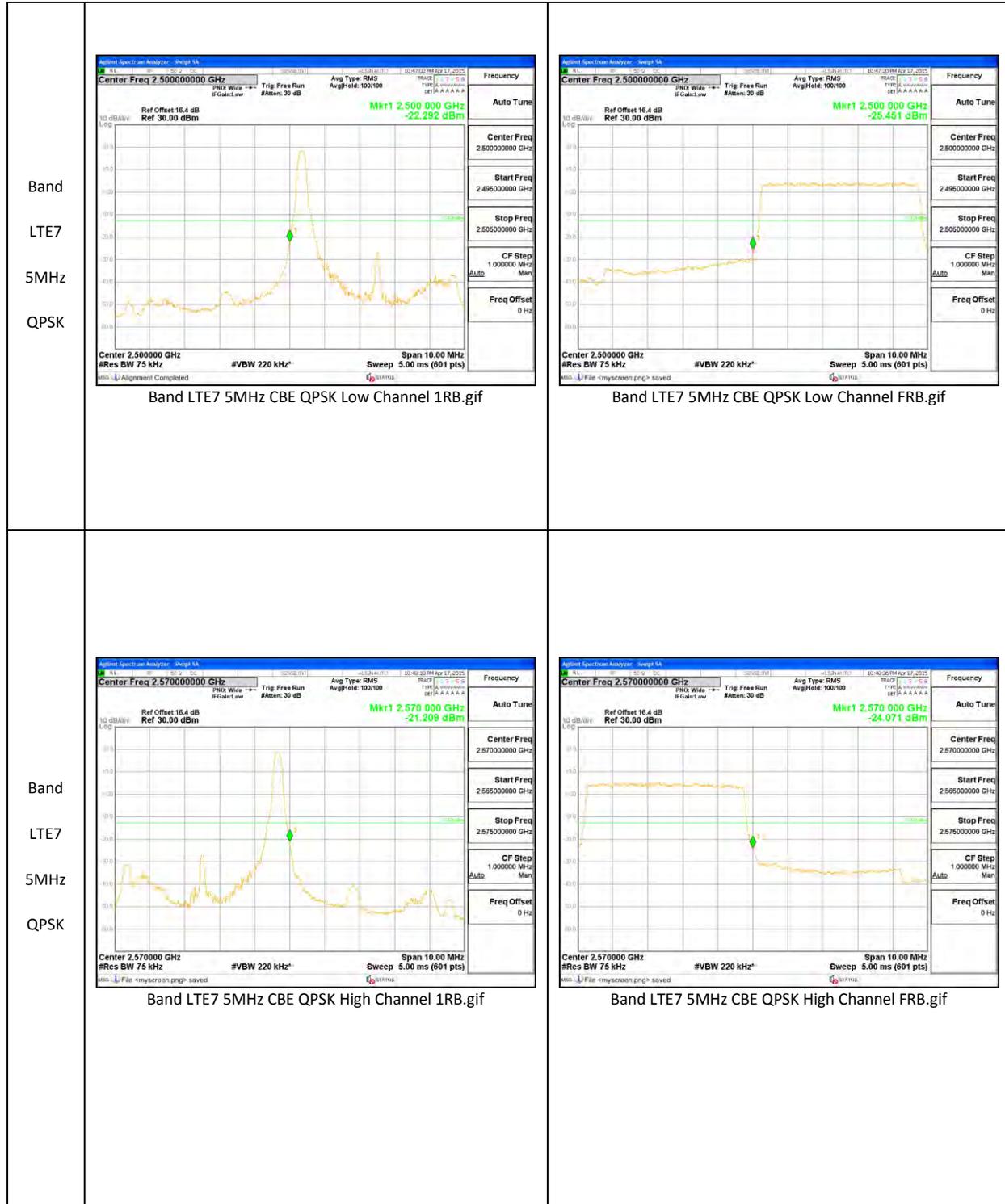






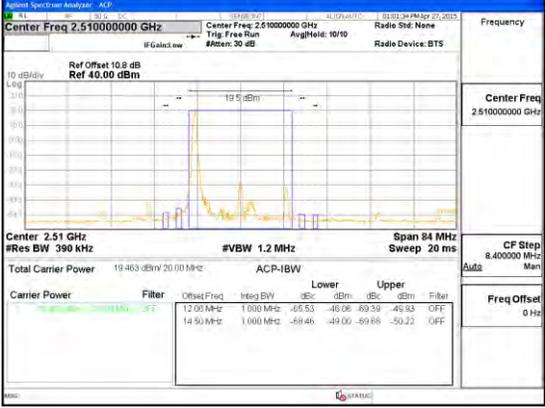
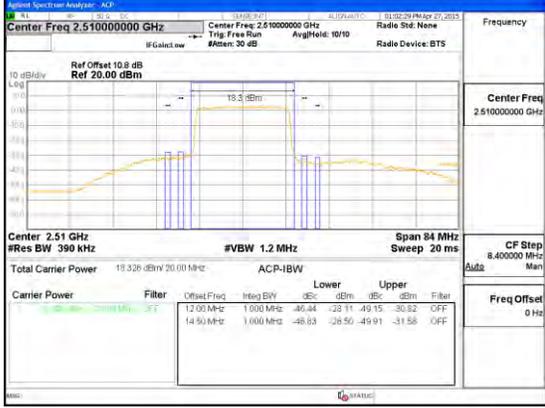
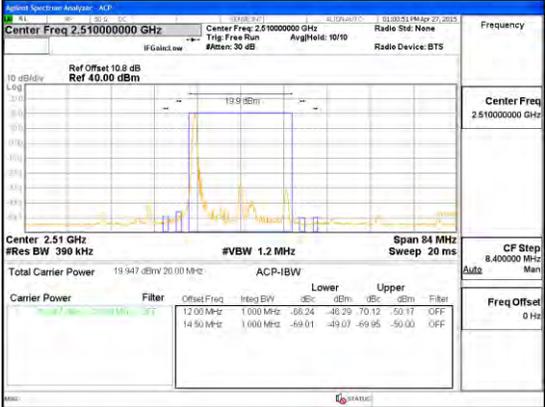


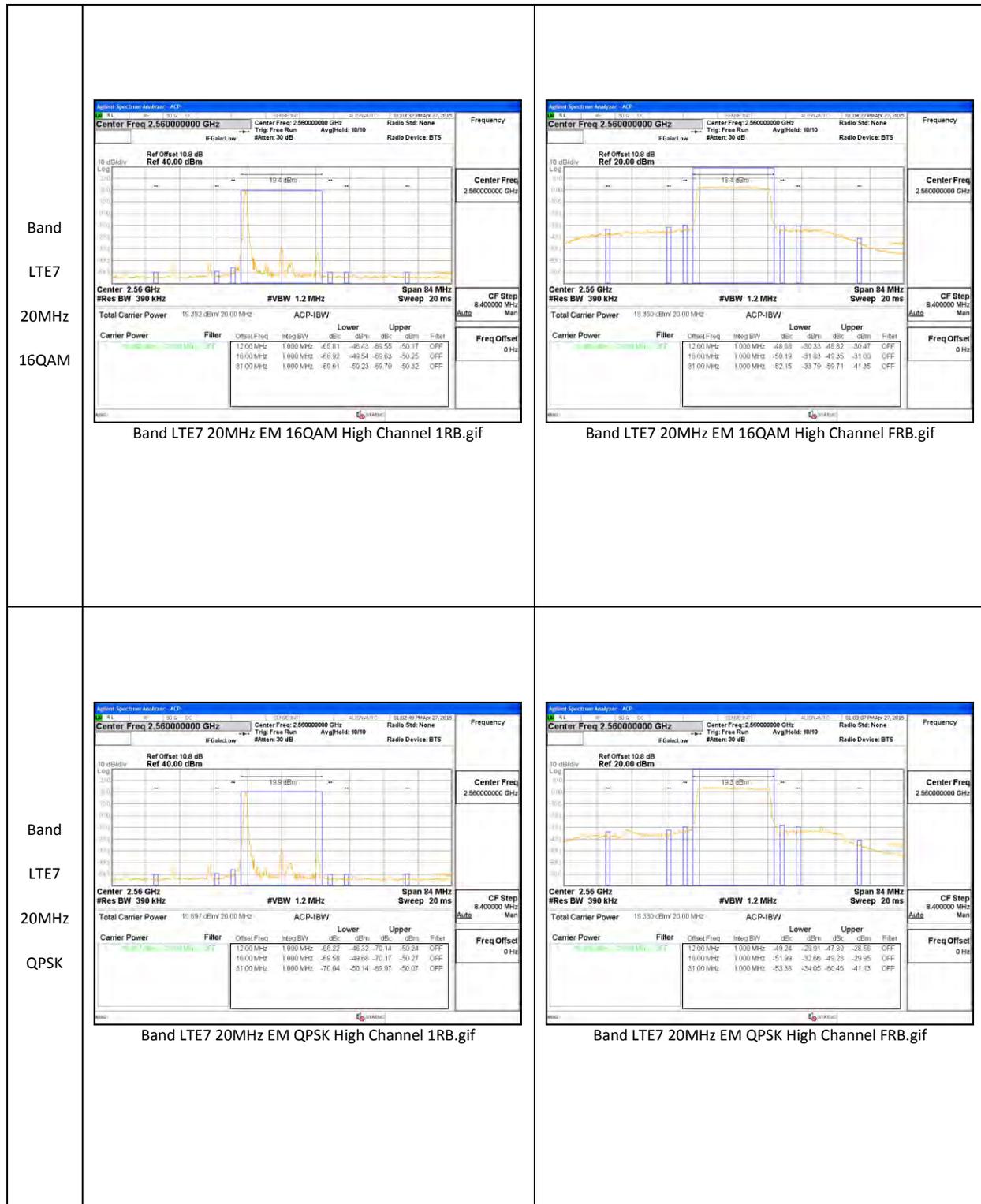
<p>Band LTE7 5MHz 16QAM</p>	 <p>Center Freq 2.50000000 GHz              Start Freq 2.49600000 GHz              Stop Freq 2.50600000 GHz              CF Step 1000000 MHz              Freq Offset 0 Hz</p> <p>Mkr1 2.500 000 GHz              -22.647 dBm</p> <p>Center Freq 2.50000000 GHz              #Res BW 75 kHz              #VBW 220 kHz*              Sweep 5.00 ms (601 pts)</p>	 <p>Center Freq 2.50000000 GHz              Start Freq 2.49600000 GHz              Stop Freq 2.50600000 GHz              CF Step 1000000 MHz              Freq Offset 0 Hz</p> <p>Mkr1 2.500 000 GHz              -26.895 dBm</p> <p>Center Freq 2.50000000 GHz              #Res BW 75 kHz              #VBW 220 kHz*              Sweep 5.00 ms (601 pts)</p>
<p>Band LTE7 5MHz 16QAM</p>	 <p>Center Freq 2.57000000 GHz              Start Freq 2.56600000 GHz              Stop Freq 2.57600000 GHz              CF Step 1000000 MHz              Freq Offset 0 Hz</p> <p>Mkr1 2.570 000 GHz              -21.804 dBm</p> <p>Center Freq 2.57000000 GHz              #Res BW 75 kHz              #VBW 220 kHz*              Sweep 5.00 ms (601 pts)</p>	 <p>Center Freq 2.57000000 GHz              Start Freq 2.56600000 GHz              Stop Freq 2.57600000 GHz              CF Step 1000000 MHz              Freq Offset 0 Hz</p> <p>Mkr1 2.570 000 GHz              -25.284 dBm</p> <p>Center Freq 2.57000000 GHz              #Res BW 75 kHz              #VBW 220 kHz*              Sweep 5.00 ms (601 pts)</p>

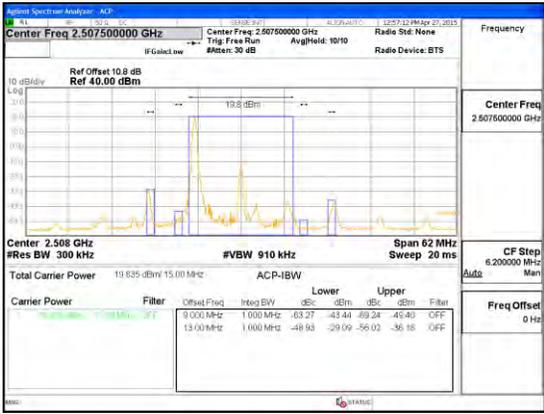
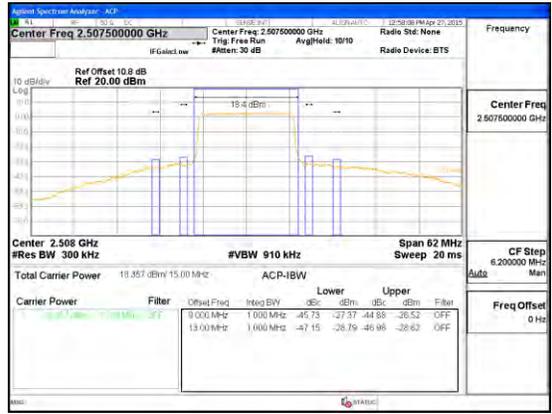
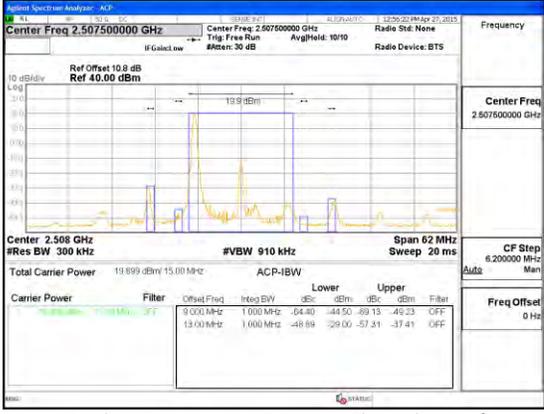
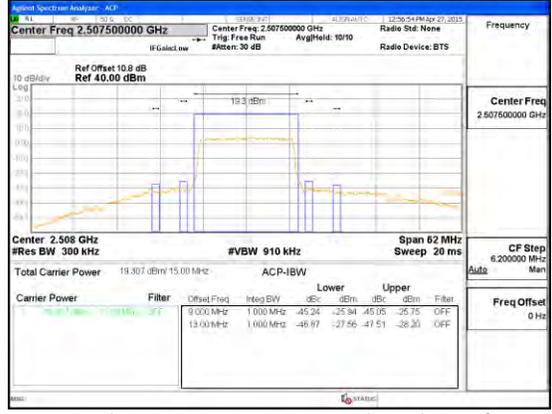


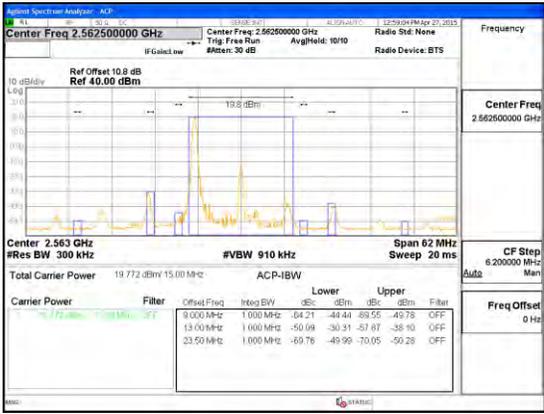
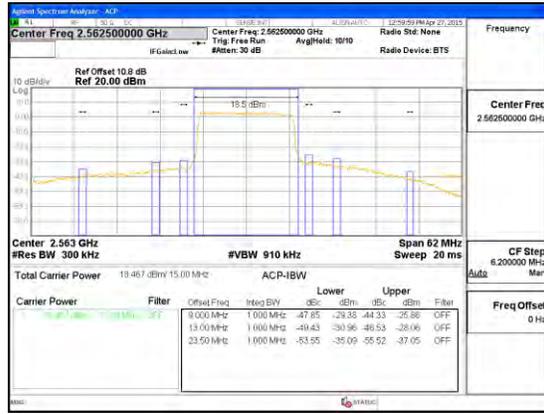
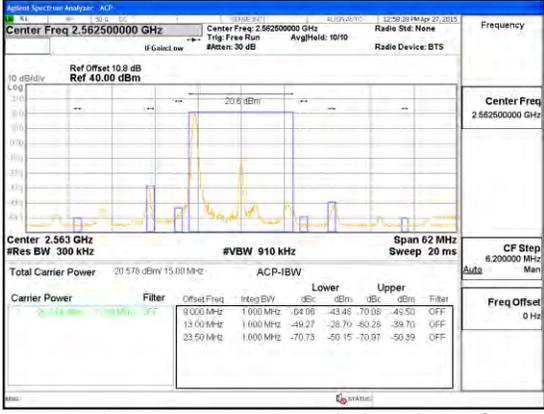
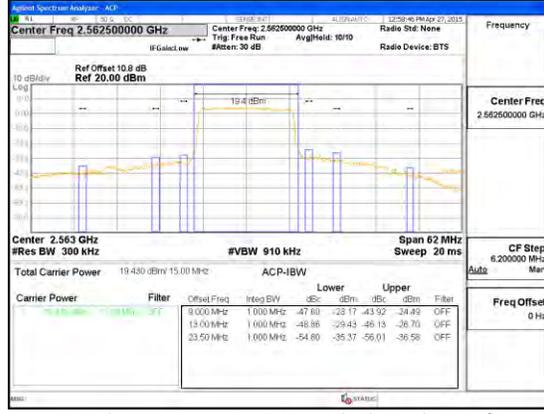
### 10.2.1. EMISSION MASK PLOTS

#### LTE Band 7

<p>Band LTE7 20MHz 16QAM</p>	 <p style="text-align: center;">Band LTE7 20MHz EM 16QAM Low Channel 1RB.gif</p>	 <p style="text-align: center;">Band LTE7 20MHz EM 16QAM Low Channel FRB.gif</p>
<p>Band LTE7 20MHz QPSK</p>	 <p style="text-align: center;">Band LTE7 20MHz EM QPSK Low Channel 1RB.gif</p>	 <p style="text-align: center;">Band LTE7 20MHz EM QPSK Low Channel FRB.gif</p>



<p>Band LTE7 15MHz 16QAM</p>	 <p>Band LTE7 15MHz EM 16QAM Low Channel 1RB.gif</p>	 <p>Band LTE7 15MHz EM 16QAM Low Channel FRB.gif</p>
<p>Band LTE7 15MHz QPSK</p>	 <p>Band LTE7 15MHz EM QPSK Low Channel 1RB.gif</p>	 <p>Band LTE7 15MHz EM QPSK Low Channel FRB.gif</p>

<p>Band LTE7 15MHz 16QAM</p>	 <p>Center Freq 2.56250000 GHz</p> <p>Center Freq 2.563 GHz #Res BW 300 kHz #VBW 910 kHz Span 62 MHz Sweep 20 ms</p> <p>Total Carrier Power 19.772 dBm 15.00 MHz ACP-IBW</p> <table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>17.77</td> <td>100 MHz</td> <td>9.000 MHz</td> <td>1.000 MHz</td> <td>-64.21</td> <td>-44.44</td> <td>-69.55</td> <td>-49.78</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>13.000 MHz</td> <td>1.000 MHz</td> <td>-50.69</td> <td>-30.31</td> <td>-57.07</td> <td>-38.10</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>33.500 MHz</td> <td>1.000 MHz</td> <td>-69.76</td> <td>-49.99</td> <td>-70.05</td> <td>-50.28</td> <td>OFF</td> </tr> </tbody> </table> <p>Band LTE7 15MHz EM 16QAM High Channel 1RB.gif</p>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	17.77	100 MHz	9.000 MHz	1.000 MHz	-64.21	-44.44	-69.55	-49.78	OFF			13.000 MHz	1.000 MHz	-50.69	-30.31	-57.07	-38.10	OFF			33.500 MHz	1.000 MHz	-69.76	-49.99	-70.05	-50.28	OFF	 <p>Center Freq 2.56250000 GHz</p> <p>Center Freq 2.563 GHz #Res BW 300 kHz #VBW 910 kHz Span 62 MHz Sweep 20 ms</p> <p>Total Carrier Power 19.467 dBm 15.00 MHz ACP-IBW</p> <table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>17.77</td> <td>100 MHz</td> <td>9.000 MHz</td> <td>1.000 MHz</td> <td>-64.21</td> <td>-44.44</td> <td>-69.55</td> <td>-49.78</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>13.000 MHz</td> <td>1.000 MHz</td> <td>-50.69</td> <td>-30.31</td> <td>-57.07</td> <td>-38.10</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>33.500 MHz</td> <td>1.000 MHz</td> <td>-69.76</td> <td>-49.99</td> <td>-70.05</td> <td>-50.28</td> <td>OFF</td> </tr> </tbody> </table> <p>Band LTE7 15MHz EM 16QAM High Channel FRB.gif</p>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	17.77	100 MHz	9.000 MHz	1.000 MHz	-64.21	-44.44	-69.55	-49.78	OFF			13.000 MHz	1.000 MHz	-50.69	-30.31	-57.07	-38.10	OFF			33.500 MHz	1.000 MHz	-69.76	-49.99	-70.05	-50.28	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																																		
17.77	100 MHz	9.000 MHz	1.000 MHz	-64.21	-44.44	-69.55	-49.78	OFF																																																																		
		13.000 MHz	1.000 MHz	-50.69	-30.31	-57.07	-38.10	OFF																																																																		
		33.500 MHz	1.000 MHz	-69.76	-49.99	-70.05	-50.28	OFF																																																																		
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																																		
17.77	100 MHz	9.000 MHz	1.000 MHz	-64.21	-44.44	-69.55	-49.78	OFF																																																																		
		13.000 MHz	1.000 MHz	-50.69	-30.31	-57.07	-38.10	OFF																																																																		
		33.500 MHz	1.000 MHz	-69.76	-49.99	-70.05	-50.28	OFF																																																																		
<p>Band LTE7 15MHz QPSK</p>	 <p>Center Freq 2.56250000 GHz</p> <p>Center Freq 2.563 GHz #Res BW 300 kHz #VBW 910 kHz Span 62 MHz Sweep 20 ms</p> <p>Total Carrier Power 20.578 dBm 15.00 MHz ACP-IBW</p> <table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>17.77</td> <td>100 MHz</td> <td>9.000 MHz</td> <td>1.000 MHz</td> <td>-64.08</td> <td>-43.48</td> <td>-70.08</td> <td>-42.53</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>13.000 MHz</td> <td>1.000 MHz</td> <td>-48.27</td> <td>-28.70</td> <td>-63.28</td> <td>-39.70</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>33.500 MHz</td> <td>1.000 MHz</td> <td>-70.73</td> <td>-50.15</td> <td>-70.97</td> <td>-50.39</td> <td>OFF</td> </tr> </tbody> </table> <p>Band LTE7 15MHz EM QPSK High Channel 1RB.gif</p>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	17.77	100 MHz	9.000 MHz	1.000 MHz	-64.08	-43.48	-70.08	-42.53	OFF			13.000 MHz	1.000 MHz	-48.27	-28.70	-63.28	-39.70	OFF			33.500 MHz	1.000 MHz	-70.73	-50.15	-70.97	-50.39	OFF	 <p>Center Freq 2.56250000 GHz</p> <p>Center Freq 2.563 GHz #Res BW 300 kHz #VBW 910 kHz Span 62 MHz Sweep 20 ms</p> <p>Total Carrier Power 19.430 dBm 15.00 MHz ACP-IBW</p> <table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>17.77</td> <td>100 MHz</td> <td>9.000 MHz</td> <td>1.000 MHz</td> <td>-64.08</td> <td>-43.48</td> <td>-70.08</td> <td>-42.53</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>13.000 MHz</td> <td>1.000 MHz</td> <td>-48.27</td> <td>-28.70</td> <td>-63.28</td> <td>-39.70</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>33.500 MHz</td> <td>1.000 MHz</td> <td>-70.73</td> <td>-50.15</td> <td>-70.97</td> <td>-50.39</td> <td>OFF</td> </tr> </tbody> </table> <p>Band LTE7 15MHz EM QPSK High Channel FRB.gif</p>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	17.77	100 MHz	9.000 MHz	1.000 MHz	-64.08	-43.48	-70.08	-42.53	OFF			13.000 MHz	1.000 MHz	-48.27	-28.70	-63.28	-39.70	OFF			33.500 MHz	1.000 MHz	-70.73	-50.15	-70.97	-50.39	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																																		
17.77	100 MHz	9.000 MHz	1.000 MHz	-64.08	-43.48	-70.08	-42.53	OFF																																																																		
		13.000 MHz	1.000 MHz	-48.27	-28.70	-63.28	-39.70	OFF																																																																		
		33.500 MHz	1.000 MHz	-70.73	-50.15	-70.97	-50.39	OFF																																																																		
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																																		
17.77	100 MHz	9.000 MHz	1.000 MHz	-64.08	-43.48	-70.08	-42.53	OFF																																																																		
		13.000 MHz	1.000 MHz	-48.27	-28.70	-63.28	-39.70	OFF																																																																		
		33.500 MHz	1.000 MHz	-70.73	-50.15	-70.97	-50.39	OFF																																																																		

<p>Band LTE7 10MHz 16QAM</p>	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>7.000 MHz</td> <td>1000 MHz</td> <td>9.530 MHz</td> <td>1.000 MHz</td> <td>-65.29</td> <td>-46.21</td> <td>-68.90</td> <td>-46.83</td> <td>OFF</td> </tr> <tr> <td>9.530 MHz</td> <td>1.000 MHz</td> <td></td> <td></td> <td>-66.54</td> <td>-47.46</td> <td>-69.12</td> <td>-50.05</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-65.29	-46.21	-68.90	-46.83	OFF	9.530 MHz	1.000 MHz			-66.54	-47.46	-69.12	-50.05	OFF	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>7.000 MHz</td> <td>1000 MHz</td> <td>9.530 MHz</td> <td>1.000 MHz</td> <td>-45.30</td> <td>-27.32</td> <td>-49.45</td> <td>-31.38</td> <td>OFF</td> </tr> <tr> <td>9.530 MHz</td> <td>1.000 MHz</td> <td></td> <td></td> <td>-48.19</td> <td>-30.11</td> <td>-46.53</td> <td>-28.45</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-45.30	-27.32	-49.45	-31.38	OFF	9.530 MHz	1.000 MHz			-48.19	-30.11	-46.53	-28.45	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-65.29	-46.21	-68.90	-46.83	OFF																																																
9.530 MHz	1.000 MHz			-66.54	-47.46	-69.12	-50.05	OFF																																																
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-45.30	-27.32	-49.45	-31.38	OFF																																																
9.530 MHz	1.000 MHz			-48.19	-30.11	-46.53	-28.45	OFF																																																
<p>Band LTE7 10MHz QPSK</p>	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>7.000 MHz</td> <td>1000 MHz</td> <td>9.530 MHz</td> <td>1.000 MHz</td> <td>-65.08</td> <td>-45.41</td> <td>-69.50</td> <td>-42.85</td> <td>OFF</td> </tr> <tr> <td>9.530 MHz</td> <td>1.000 MHz</td> <td></td> <td></td> <td>-66.87</td> <td>-47.32</td> <td>-69.43</td> <td>-49.78</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-65.08	-45.41	-69.50	-42.85	OFF	9.530 MHz	1.000 MHz			-66.87	-47.32	-69.43	-49.78	OFF	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td>7.000 MHz</td> <td>1000 MHz</td> <td>9.530 MHz</td> <td>1.000 MHz</td> <td>-45.46</td> <td>-26.49</td> <td>-51.15</td> <td>-32.18</td> <td>OFF</td> </tr> <tr> <td>9.530 MHz</td> <td>1.000 MHz</td> <td></td> <td></td> <td>-48.88</td> <td>-29.89</td> <td>-47.39</td> <td>-28.42</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter	7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-45.46	-26.49	-51.15	-32.18	OFF	9.530 MHz	1.000 MHz			-48.88	-29.89	-47.39	-28.42	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-65.08	-45.41	-69.50	-42.85	OFF																																																
9.530 MHz	1.000 MHz			-66.87	-47.32	-69.43	-49.78	OFF																																																
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
7.000 MHz	1000 MHz	9.530 MHz	1.000 MHz	-45.46	-26.49	-51.15	-32.18	OFF																																																
9.530 MHz	1.000 MHz			-48.88	-29.89	-47.39	-28.42	OFF																																																



<p>Band LTE7 5MHz 16QAM</p>	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>4.000 MHz</td> <td>1.000 MHz</td> <td>-58.84</td> <td>-40.13</td> <td>-67.07</td> <td>-48.37</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>7.000 MHz</td> <td>1.000 MHz</td> <td>-65.32</td> <td>-46.61</td> <td>-67.69</td> <td>-49.19</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter			4.000 MHz	1.000 MHz	-58.84	-40.13	-67.07	-48.37	OFF			7.000 MHz	1.000 MHz	-65.32	-46.61	-67.69	-49.19	OFF	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>4.000 MHz</td> <td>1.000 MHz</td> <td>-43.62</td> <td>-25.81</td> <td>-46.76</td> <td>-28.68</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>7.000 MHz</td> <td>1.000 MHz</td> <td>-48.47</td> <td>-30.37</td> <td>-45.90</td> <td>-27.79</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter			4.000 MHz	1.000 MHz	-43.62	-25.81	-46.76	-28.68	OFF			7.000 MHz	1.000 MHz	-48.47	-30.37	-45.90	-27.79	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
		4.000 MHz	1.000 MHz	-58.84	-40.13	-67.07	-48.37	OFF																																																
		7.000 MHz	1.000 MHz	-65.32	-46.61	-67.69	-49.19	OFF																																																
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
		4.000 MHz	1.000 MHz	-43.62	-25.81	-46.76	-28.68	OFF																																																
		7.000 MHz	1.000 MHz	-48.47	-30.37	-45.90	-27.79	OFF																																																
<p>Band LTE7 5MHz QPSK</p>	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>4.000 MHz</td> <td>1.000 MHz</td> <td>-59.77</td> <td>-40.05</td> <td>-67.88</td> <td>-48.16</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>7.000 MHz</td> <td>1.000 MHz</td> <td>-65.75</td> <td>-46.02</td> <td>-68.61</td> <td>-48.88</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter			4.000 MHz	1.000 MHz	-59.77	-40.05	-67.88	-48.16	OFF			7.000 MHz	1.000 MHz	-65.75	-46.02	-68.61	-48.88	OFF	<table border="1"> <thead> <tr> <th>Carrier Power</th> <th>Filter</th> <th>Offset Freq</th> <th>Integ BW</th> <th>dBc</th> <th>dBm</th> <th>dBc</th> <th>dBm</th> <th>Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>4.000 MHz</td> <td>1.000 MHz</td> <td>-44.22</td> <td>-25.21</td> <td>-45.53</td> <td>-29.52</td> <td>OFF</td> </tr> <tr> <td></td> <td></td> <td>7.000 MHz</td> <td>1.000 MHz</td> <td>-48.64</td> <td>-29.62</td> <td>-45.76</td> <td>-26.75</td> <td>OFF</td> </tr> </tbody> </table>	Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter			4.000 MHz	1.000 MHz	-44.22	-25.21	-45.53	-29.52	OFF			7.000 MHz	1.000 MHz	-48.64	-29.62	-45.76	-26.75	OFF
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
		4.000 MHz	1.000 MHz	-59.77	-40.05	-67.88	-48.16	OFF																																																
		7.000 MHz	1.000 MHz	-65.75	-46.02	-68.61	-48.88	OFF																																																
Carrier Power	Filter	Offset Freq	Integ BW	dBc	dBm	dBc	dBm	Filter																																																
		4.000 MHz	1.000 MHz	-44.22	-25.21	-45.53	-29.52	OFF																																																
		7.000 MHz	1.000 MHz	-48.64	-29.62	-45.76	-26.75	OFF																																																



## **10.3. OUT OF BAND EMISSIONS**

### **RULE PART(S)**

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53

### **LIMITS**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

Part 27: (m)(4) (4) For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

### **TEST PROCEDURE**

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

### **MODES TESTED**

GSM, WCDMA and LTE

### **RESULTS**

**10.3.1. OUT OF BAND EMISSIONS RESULT**

**GSM**

Band	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
GSM 850	GPRS	824.2	-18.722	-13	-5.722
		836.6	-18.674	-13	-5.674
		848.8	-18.723	-13	-5.723
	EGPRS	824.2	-19.306	-13	-6.306
		836.6	-18.911	-13	-5.911
		848.8	-18.667	-13	-5.667
GSM 1900	GPRS	1850.2	-18.206	-13	-5.206
		1880	-19.296	-13	-6.296
		1909.8	-18.504	-13	-5.504
	EGPRS	1850.2	-18.369	-13	-5.369
		1880	-17.094	-13	-4.094
		1909.8	-19.044	-13	-6.044

**WCDMA**

Band	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
Band 5	REL99	826.4	-28.95	-13	-15.95
		836.6	-28.89	-13	-15.89
		846.6	-29.51	-13	-16.51
	HSDPA	826.4	-28.05	-13	-15.05
		836.6	-28.77	-13	-15.77
		846.6	-29.164	-13	-16.164
Band 2	REL99	1852.4	-27.88	-13	-14.88
		1880	-28.37	-13	-15.37
		1907.6	-28.90	-13	-15.90
	HSDPA	1852.4	-29.26	-13	-14.745
		1880	-27.74	-13	-14.74
		1907.6	-28.07	-13	-15.07

**LTE Band 12**

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE12	10	QPSK	704	-22.36	-13	-9.36
			707.5	-21.96	-13	-8.96
			711	-21.924	-13	-8.924
		16QAM	704	-21.16	-13	-8.16
			707.5	-21.79	-13	-8.79
			711	-21.896	-13	-8.896
	5	QPSK	701.5	-21.74	-13	-8.74
			707.5	-21.53	-13	-8.53
			713.5	-21.24	-13	-8.24
		16QAM	701.5	-22.44	-13	-9.44
			707.5	-21.736	-13	-8.736
			713.5	-21.745	-13	-8.745
	3	QPSK	700.5	-21.362	-13	-8.362
			707.5	-21.68	-13	-8.68
			714.5	-20.93	-13	-7.93
		16QAM	700.5	-22.617	-13	-9.617
			707.5	-21.725	-13	-8.725
			714.5	-21.877	-13	-8.877
	1.4	QPSK	699.7	-22.131	-13	-9.131
			707.5	-22.55	-13	-9.55
			715.3	-22.229	-13	-9.229
16QAM		699.7	-22.475	-13	-9.475	
		707.5	-21.599	-13	-8.599	
		715.3	-22.753	-13	-9.753	

**LTE Band 17**

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE 17	10	QPSK	709	-22.39	-13	-9.39
			710	-21.652	-13	-8.652
			711	-22.26	-13	-9.26
		16QAM	709	-21.796	-13	-8.796
			710	-22.15	-13	-9.15
			711	-22.30	-13	-9.3
	5	QPSK	706.5	-21.72	-13	-8.72
			710	-21.65	-13	-8.65
			713.5	-21.36	-13	-8.36
		16QAM	706.5	-22.37	-13	-9.37
			710	-22.154	-13	-9.154
			713.5	-21.96	-13	-8.96

**LTE Band 5**

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE5	10	QPSK	829	-22.174	-13	-9.174
			836.5	-22.45	-13	-9.45
			844	-22.009	-13	-9.009
		16QAM	829	-22.58	-13	-9.58
			836.5	-22.05	-13	-9.05
			844	-22.01	-13	-9.01
	5	QPSK	826.5	-22.07	-13	-9.07
			836.5	-21.977	-13	-8.977
			846.5	-21.57	-13	-8.57
		16QAM	826.5	-22.36	-13	-9.36
			836.5	-22.26	-13	-9.26
			846.5	-22.65	-13	-9.65
	3	QPSK	825.5	-23.14	-13	-10.14
			836.5	-22.21	-13	-9.21
			847.5	-22.30	-13	-9.32
		16QAM	825.5	-23.137	-13	-10.137
			836.5	-22.212	-13	-9.212
			847.5	-22.301	-13	-9.301
	1.4	QPSK	824.7	-21.852	-13	-8.852
			836.5	-21.107	-13	-8.107
			848.3	-21.86	-13	-8.86
16QAM		824.7	-22.662	-13	-9.662	
		836.5	-22.415	-13	-9.415	
		848.3	-22.758	-13	-9.758	

**LTE Band 4**

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE4	20	QPSK	1720	-21.909	-13	-8.909
			1732.5	-21.253	-13	-8.253
			1745	-22.909	-13	-9.909
		16QAM	1720	-20.565	-13	-7.565
			1732.5	-16.293	-13	-3.293
			1745	-20.178	-13	-7.178
	15	QPSK	1717.5	-21.388	-13	-8.388
			1732.5	-21.222	-13	-8.222
			1747.5	-22.286	-13	-9.286
		16QAM	1717.5	-21.293	-13	-8.293
			1732.5	-21.717	-13	-8.717
			1747.5	-22.131	-13	-9.131
	10	QPSK	1715	-21.33	-13	-8.33
			1732.5	-21.93	-13	-8.93
			1750	-21.30	-13	-8.32
		16QAM	1715	-22.04	-13	-9.04
			1732.5	-20.34	-13	-8.27
			1750	-21.27	-13	-8.27
	5	QPSK	1712.5	-21.378	-13	-8.378
			1732.5	-22.06	-13	-9.06
			1752.5	-21.18	-13	-8.18
		16QAM	1712.5	-22.04	-13	-9.04
			1732.5	-20.34	-13	-7.34
			1752.5	-21.27	-13	-8.27

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE4	3	QPSK	1711.5	-22.489	-13	-9.489
			1732.5	-22.02	-13	-9.02
			1753.5	-22.221	-13	-9.221
		16QAM	1711.5	-21.44	-13	-8.44
			1732.5	-22.046	-13	-9.046
			1753.5	-21.558	-13	-8.558
	1.4	QPSK	1710.7	-22.24	-13	-9.24
			1732.5	-21.82	-13	-8.82
			1754.3	-21.906	-13	-8.906
		16QAM	1710.7	-21.785	-13	-8.785
			1732.5	-21.874	-13	-8.874
			1754.3	-21.328	-13	-8.328

**LTE Band 2**

Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE2	20	QPSK	1860	-22.25	-13	-9.25
			1880	-22.204	-13	-9.204
			1900	-22.402	-13	-9.402
		16QAM	1860	-21.997	-13	-8.997
			1880	-21.891	-13	-8.891
			1900	-21.876	-13	-8.876
	15	QPSK	1857.5	-21.921	-13	-8.921
			1880	-21.056	-13	-8.056
			1902.5	-21.275	-13	-8.275
		16QAM	1857.5	-21.82	-13	-8.82
			1880	-15.025	-13	-2.025
			1902.5	-21.476	-13	-8.476
	10	QPSK	1855	-22.89	-13	-9.89
			1880	-22.263	-13	-9.263
			1905	-22.136	-13	-9.136
		16QAM	1855	-22.094	-13	-9.094
			1880	-22.15	-13	-9.15
			1905	-21.853	-13	-8.853
	5	QPSK	1852.5	-22.235	-13	-9.235
			1880	-21.56	-13	-8.56
			1907.5	-22.86	-13	-9.86
		16QAM	1852.5	-21.87	-13	-8.87
			1880	-21.90	-13	-8.09
			1907.5	-22.34	-13	-9.34

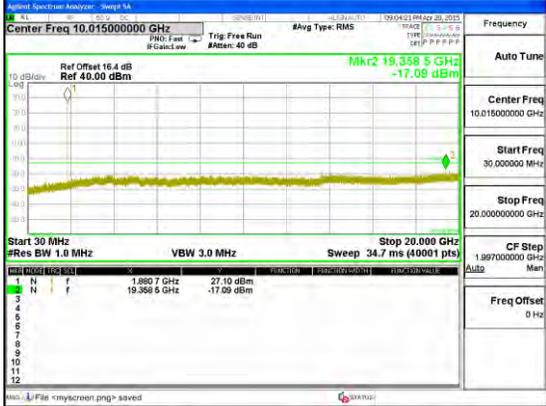
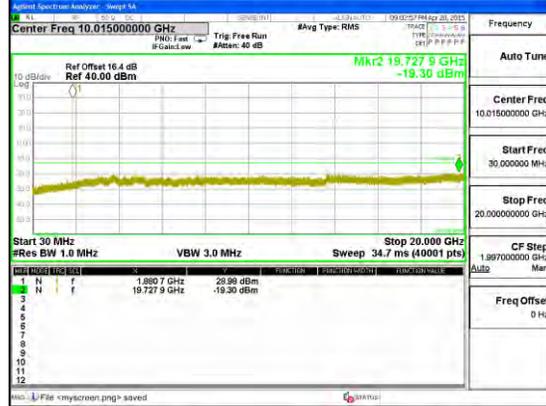
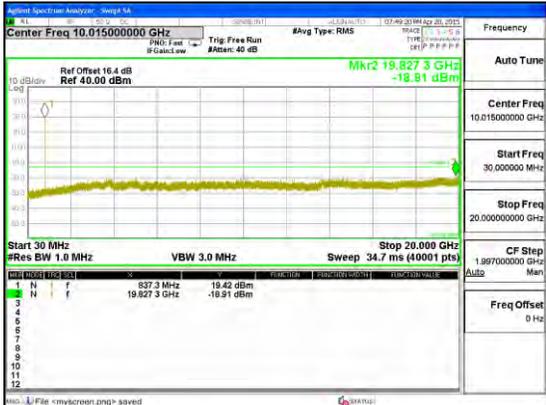
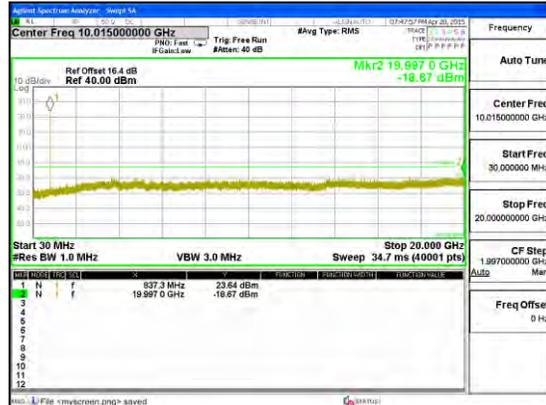
Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE2	3	QPSK	1851.5	-21.163	-13	-8.163
			1880	-22.101	-13	-9.101
			1908.5	-21.911	-13	-8.911
		16QAM	1851.5	-21.653	-13	-8.653
			1880	-21.96	-13	-8.96
			1908.5	-21.881	-13	-8.881
	1.4	QPSK	1850.7	-21.376	-13	-8.376
			1880	-21.728	-13	-8.728
			1909.3	-21.592	-13	-8.592
		16QAM	1850.7	-22.317	-13	-9.317
			1880	-21.999	-13	-8.999
			1909.3	-21.76	-13	-8.76

**LTE Band 7**

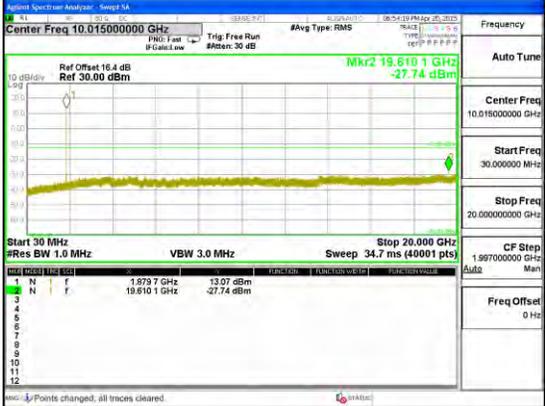
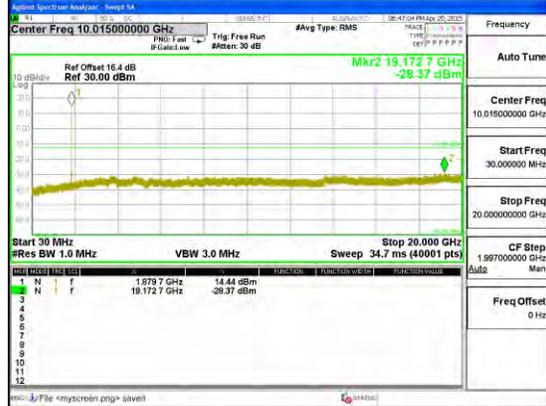
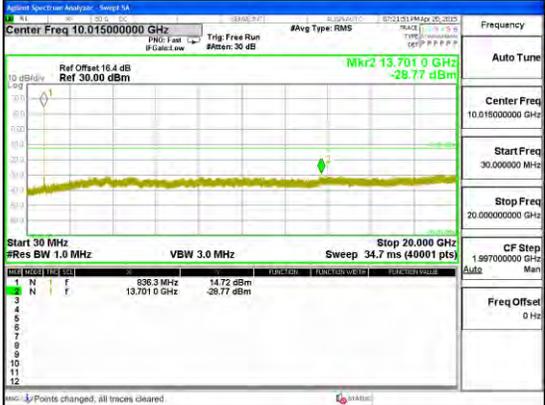
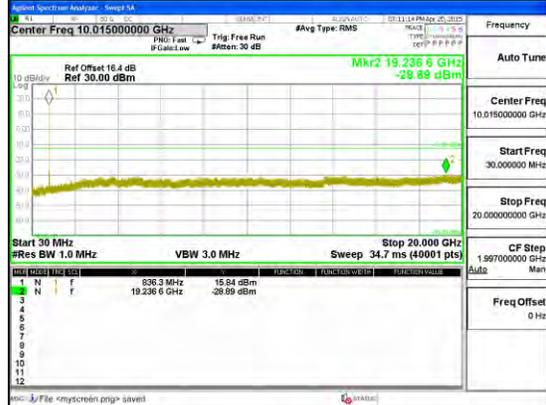
Band	BW (MHz)	Mode	f (MHz)	Spur (dBm)	Spec (dBm)	Delta (dB)
LTE7	20	QPSK	2510	-28.094	-25	-3.094
			2535	-28.359	-25	-3.359
			2560	-28.411	-25	-3.411
		16QAM	2510	-28.284	-25	-3.284
			2535	-28.077	-25	-3.077
			2560	-28.859	-25	-3.859
	15	QPSK	2507.5	-27.619	-25	-2.619
			2535	-27.953	-25	-2.953
			2562.5	-28.396	-25	-3.396
		16QAM	2507.5	-28.326	-25	-3.326
			2535	-28.586	-25	-3.586
			2562.5	-28.258	-25	-3.258
	10	QPSK	2505	-29.017	-25	-4.017
			2535	-28.956	-25	-3.956
			2565	-28.656	-25	-3.656
		16QAM	2505	-28.202	-25	-3.202
			2535	-28.398	-25	-3.398
			2565	-28.531	-25	-3.531
	5	QPSK	2502.5	-29.137	-25	-4.137
			2535	-28.615	-25	-3.615
			2567.5	-28.452	-25	-3.452
		16QAM	2502.5	-27.405	-25	-2.405
			2535	-28.359	-25	-3.359
			2567.5	-28.781	-25	-3.781

**10.3.2. OUT OF BAND EMISSIONS PLOTS**

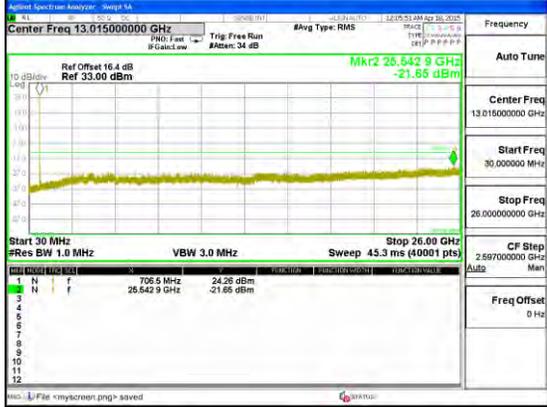
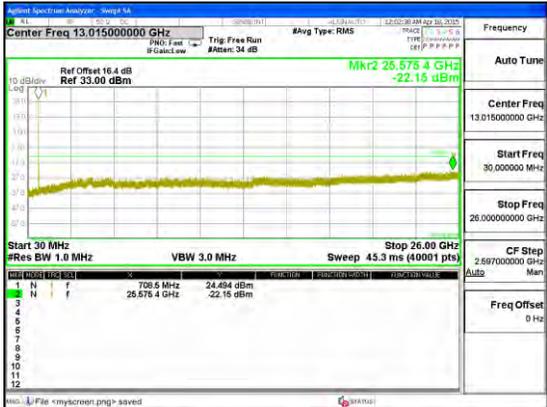
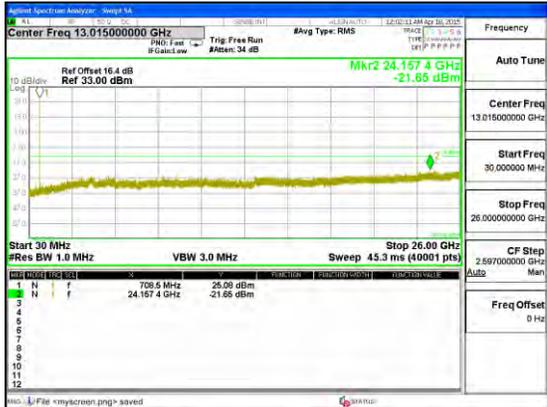
**GSM**

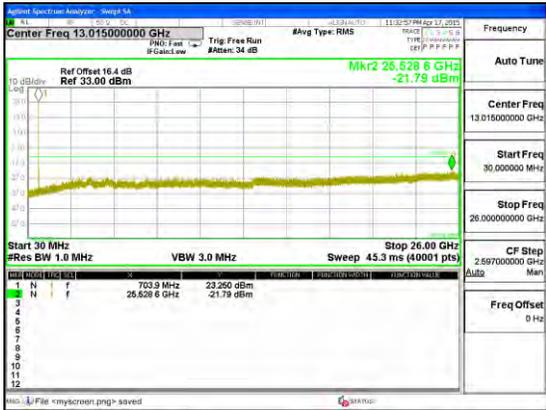
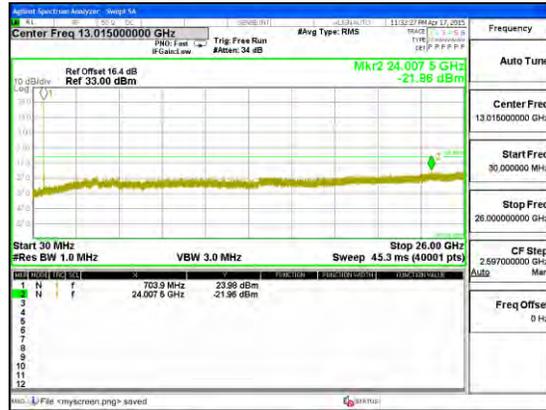
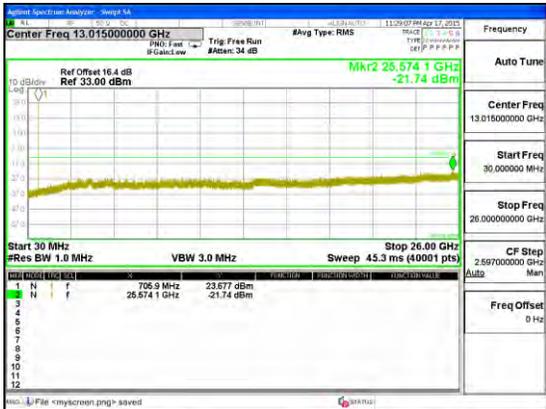
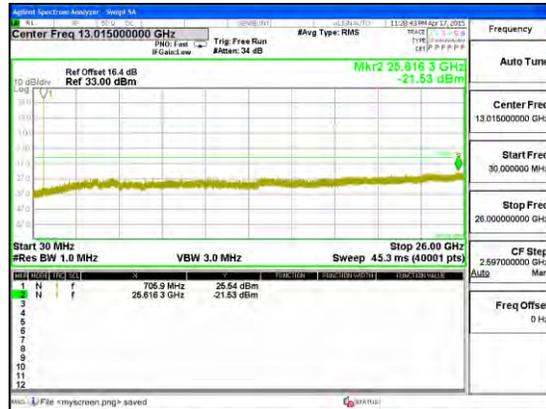
<p>Band GSM1900 EGPRS</p>	 <p>Band GSM1900 EGPRS CSE Mid channel</p>	 <p>Band GSM1900 GPRS CSE Mid channel</p>
<p>Band GSM850 EGPRS</p>	 <p>Band GSM850 EGPRS CSE Mid channel</p>	 <p>Band GSM850 GPRS CSE Mid channel</p>

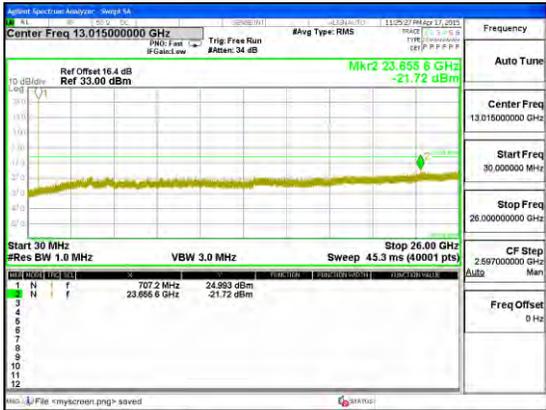
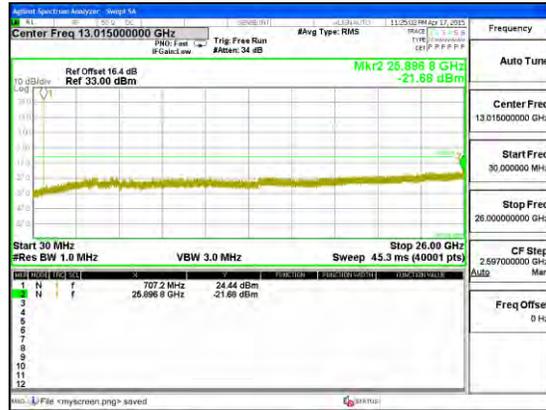
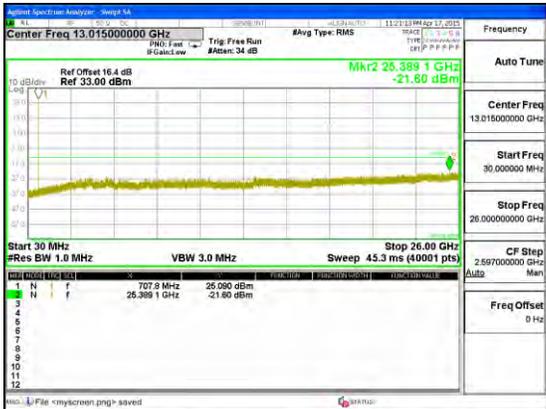
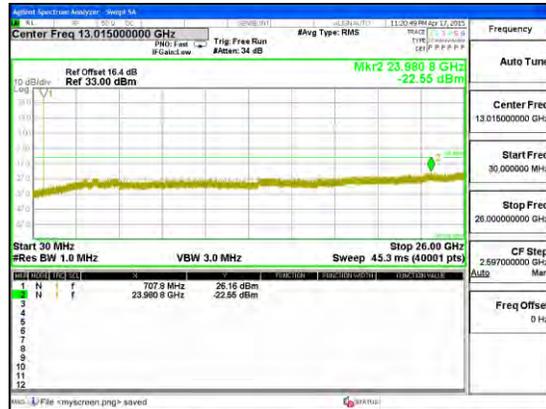
**WCDMA**

<p>Band Band 2 HSDPA</p>	 <p style="text-align: center;">Band WCDMA B2 HSDPA CSE</p>	 <p style="text-align: center;">Band WCDMA B2 REL99 CSE</p>
<p>Band Band 5 HSDPA</p>	 <p style="text-align: center;">Band WCDMA B5 HSDPA CSE</p>	 <p style="text-align: center;">Band WCDMA B5 REL99 CSE</p>

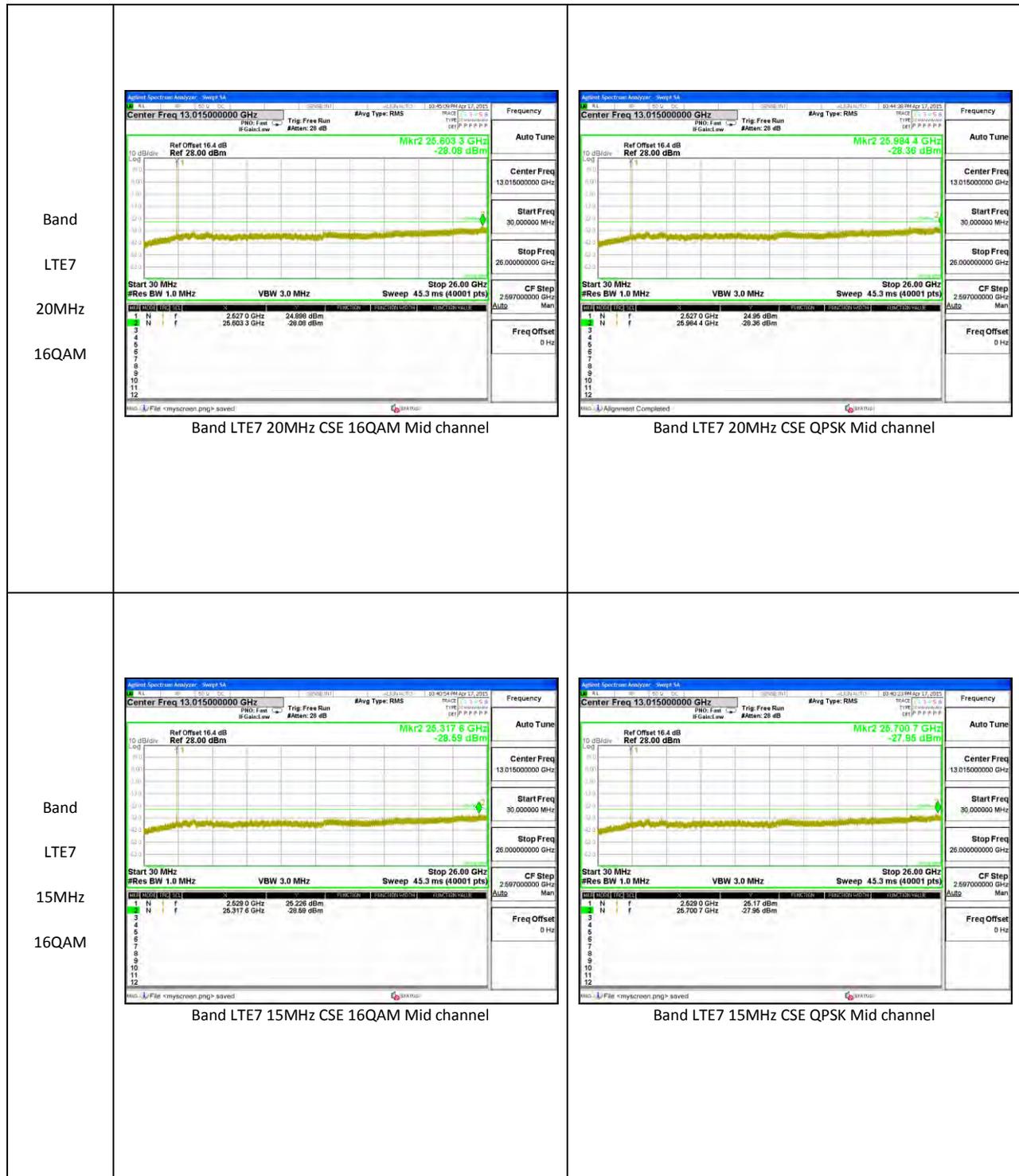
**LTE Band 17**

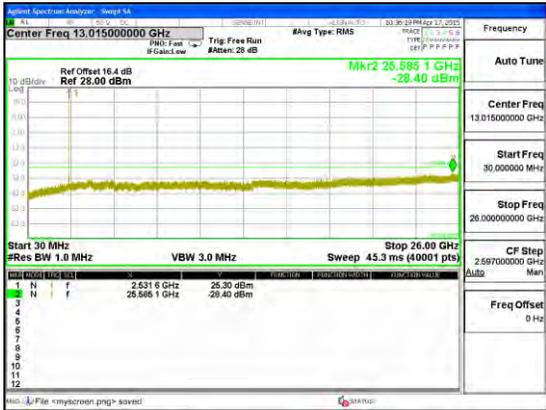
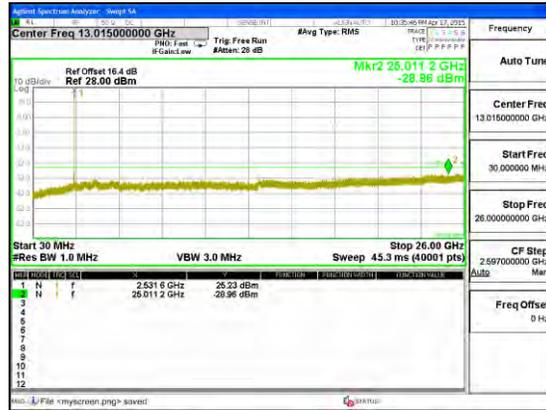
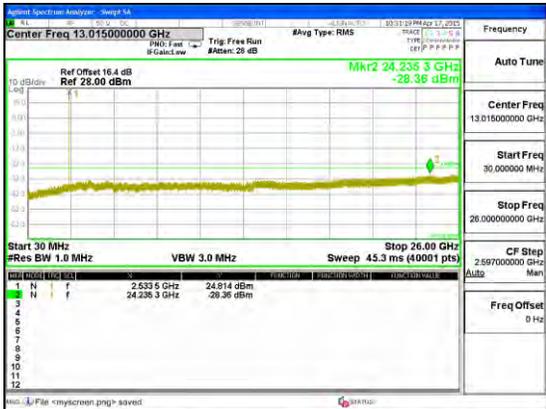
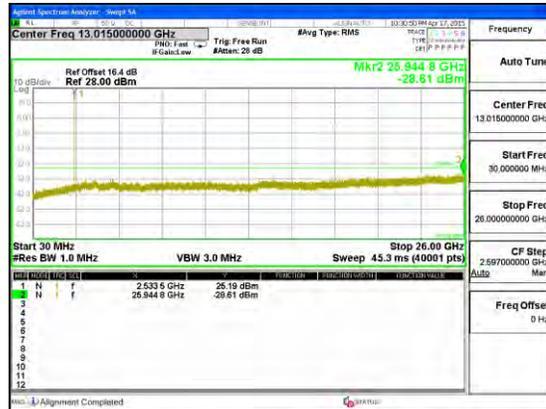
<p>Band LTE17 10MHz 16QAM</p>	 <p>Band LTE17 10MHz CSE 16QAM Mid channel</p>	 <p>Band LTE17 10MHz CSE QPSK Mid channel</p>
<p>Band LTE17 5MHz 16QAM</p>	 <p>Band LTE17 5MHz CSE 16QAM Mid channel</p>	 <p>Band LTE17 5MHz CSE QPSK Mid channel</p>

<p>Band LTE12 10MHz 16QAM</p>	 <p>Band LTE12 10MHz CSE 16QAM Mid channel</p>	 <p>Band LTE12 10MHz CSE QPSK Mid channel</p>
<p>Band LTE12 5MHz 16QAM</p>	 <p>Band LTE12 5MHz CSE 16QAM Mid channel</p>	 <p>Band LTE12 5MHz CSE QPSK Mid channel</p>

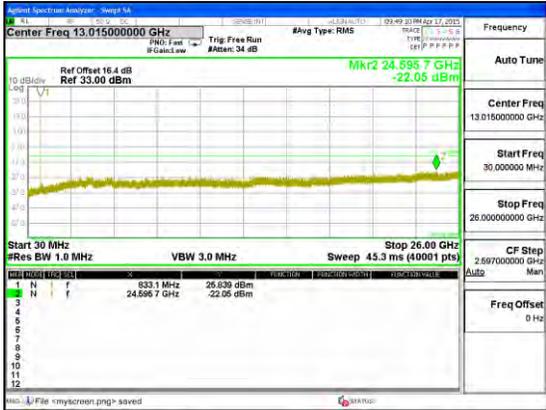
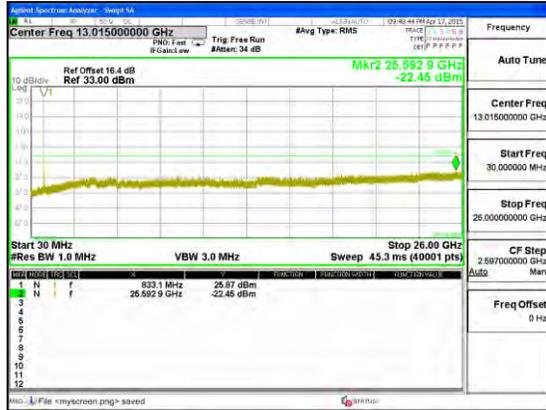
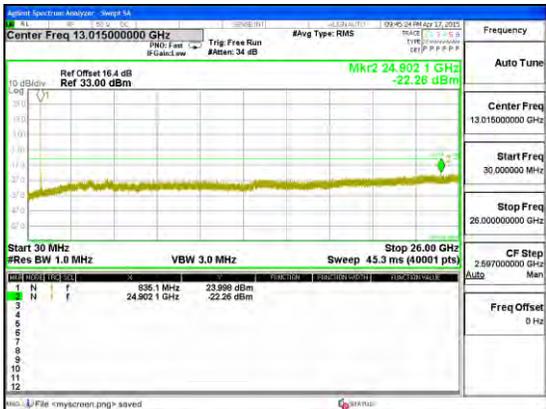
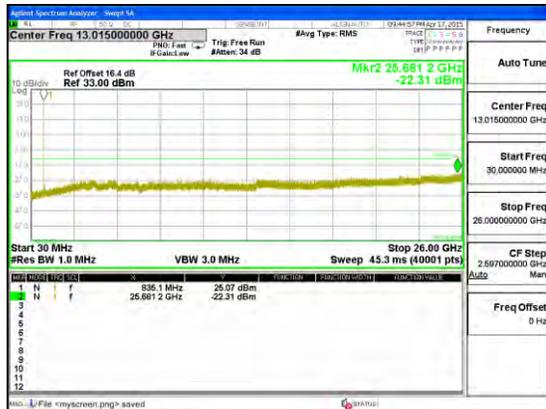
<p>Band LTE12 3MHz 16QAM</p>	 <p>Band LTE12 3MHz CSE 16QAM Mid channel</p>	 <p>Band LTE12 3MHz CSE QPSK Mid channel</p>
<p>Band LTE12 1.4MHz 16QAM</p>	 <p>Band LTE12 1.4MHz CSE 16QAM Mid channel</p>	 <p>Band LTE12 1.4MHz CSE QPSK Mid channel</p>

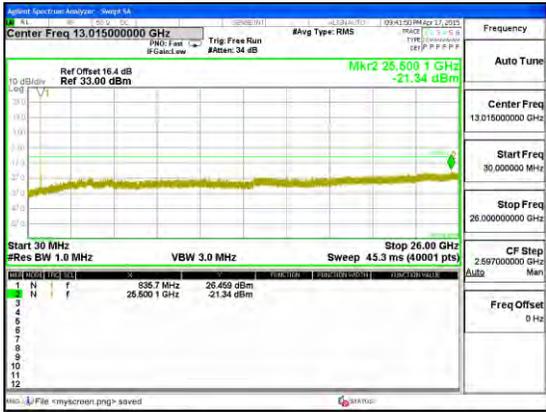
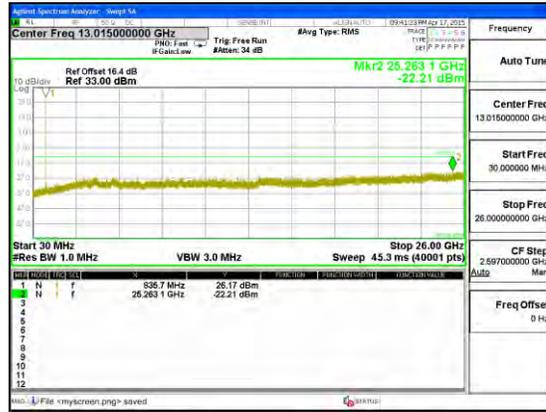
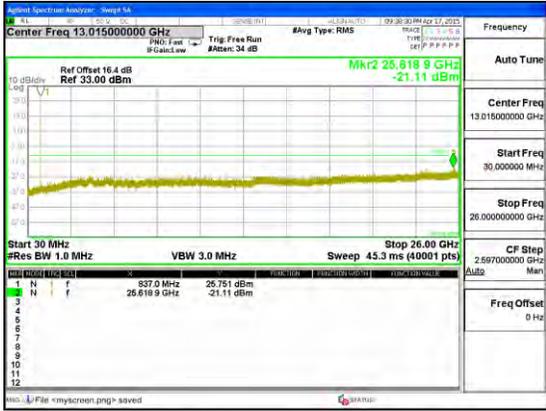
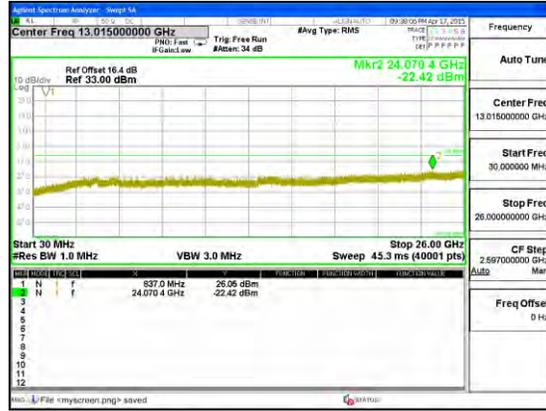
**LTE Band 7**



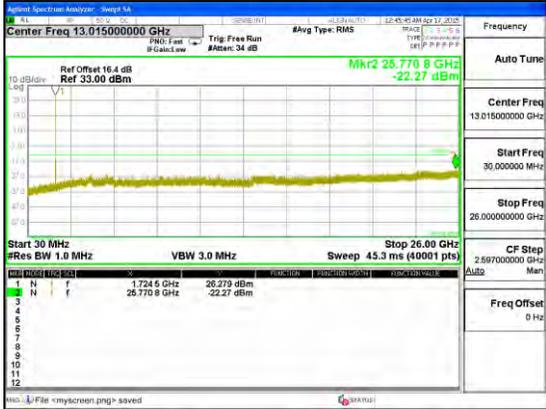
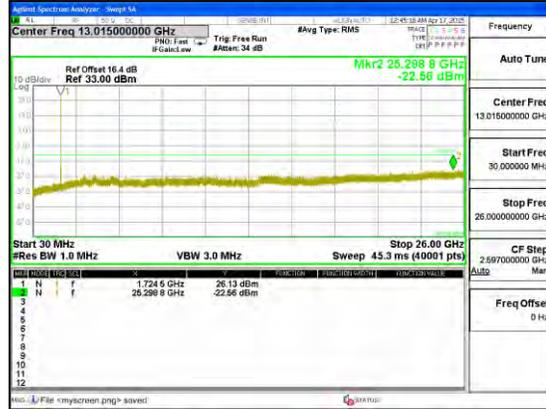
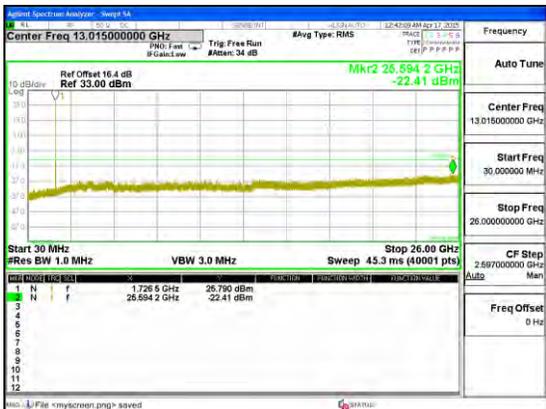
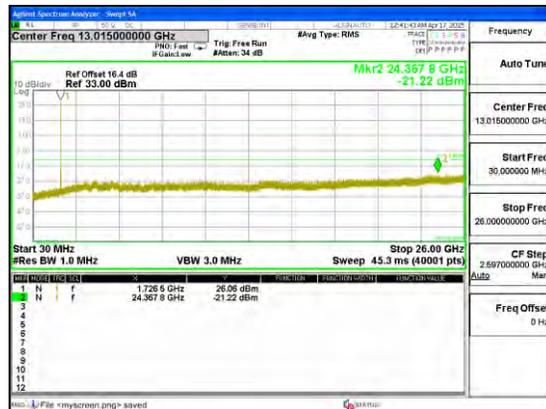
<p>Band LTE7 10MHz 16QAM</p>	 <p>Band LTE7 10MHz CSE 16QAM Mid channel</p>	 <p>Band LTE7 10MHz CSE QPSK Mid channel</p>
<p>Band LTE7 5MHz 16QAM</p>	 <p>Band LTE7 5MHz CSE 16QAM Mid channel</p>	 <p>Band LTE7 5MHz CSE QPSK Mid channel</p>

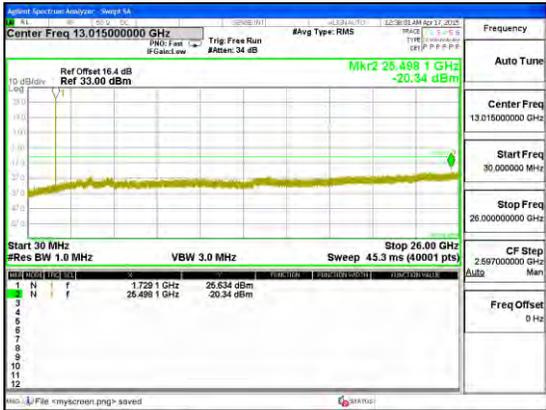
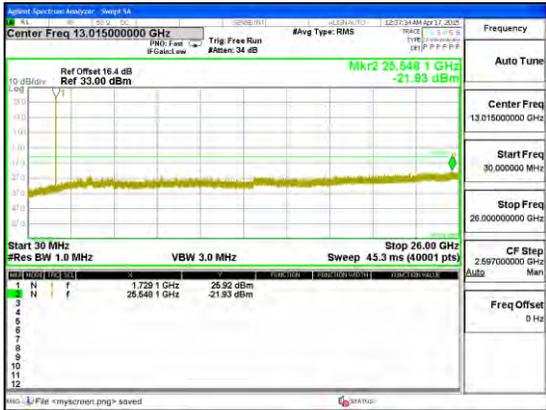
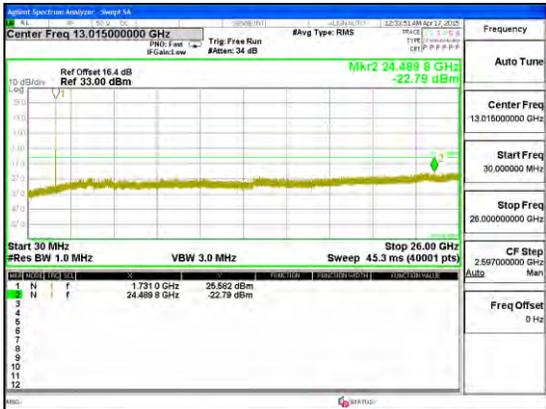
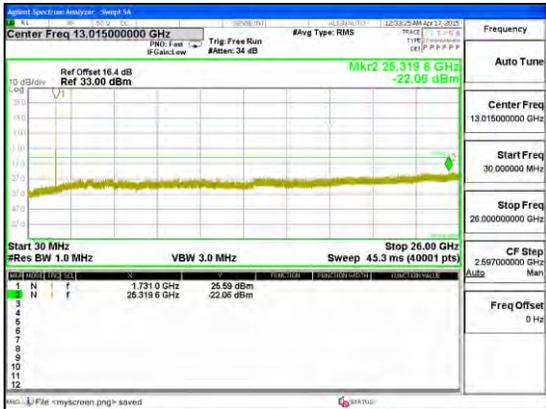
**LTE Band 5**

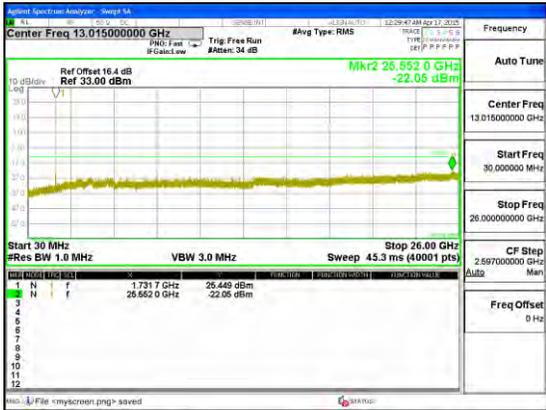
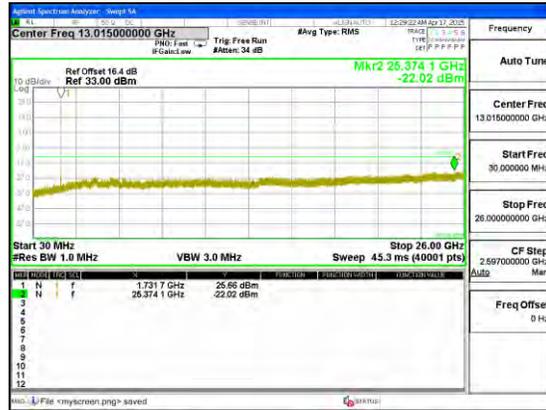
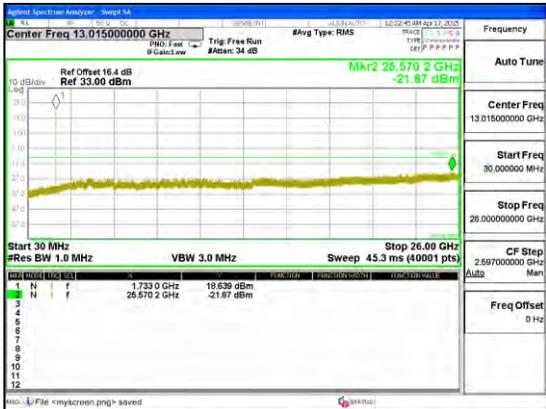
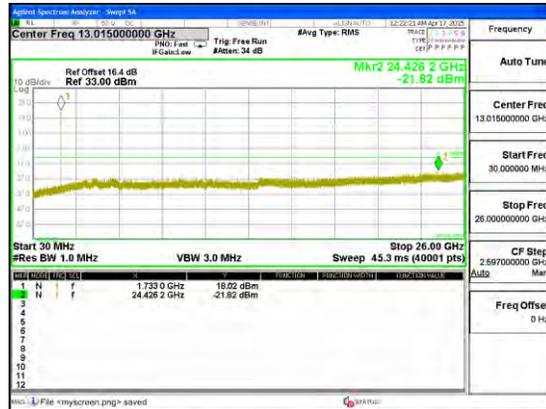
<p>Band LTE5 10MHz 16QAM</p>	 <p style="text-align: center;">Band LTE5 10MHz CSE 16QAM Mid channel</p>	 <p style="text-align: center;">Band LTE5 10MHz CSE QPSK Mid channel</p>
<p>Band LTE5 5MHz 16QAM</p>	 <p style="text-align: center;">Band LTE5 5MHz CSE 16QAM Mid channel</p>	 <p style="text-align: center;">Band LTE5 5MHz CSE QPSK Mid channel</p>

<p>Band LTE5 3MHz 16QAM</p>	 <p>Band LTE5 3MHz CSE 16QAM Mid channel</p>	 <p>Band LTE5 3MHz CSE QPSK Mid channel</p>
<p>Band LTE5 1.4MHz 16QAM</p>	 <p>Band LTE5 1.4MHz CSE 16QAM Mid channel</p>	 <p>Band LTE5 1.4MHz CSE QPSK Mid channel</p>

**LTE Band 4**

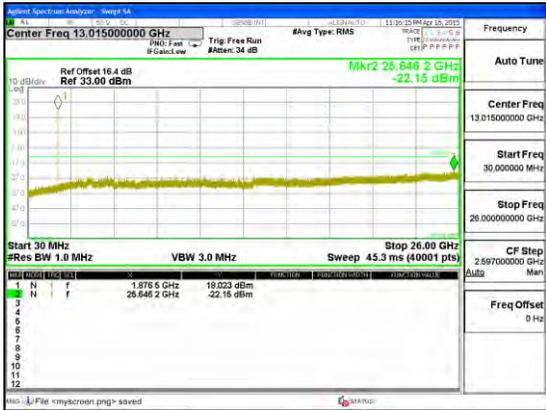
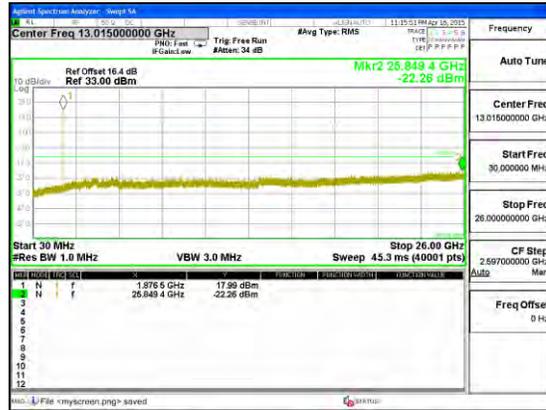
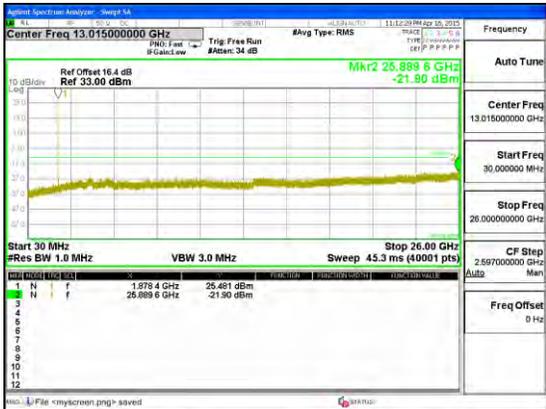
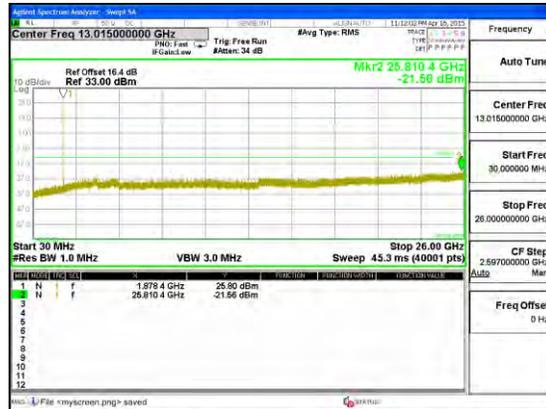
<p>Band LTE4 20MHz 16QAM</p>	 <p>Band LTE4 20MHz CSE 16QAM Mid channel</p>	 <p>Band LTE4 20MHz CSE QPSK Mid channel</p>
<p>Band LTE4 15MHz 16QAM</p>	 <p>Band LTE4 15MHz CSE 16QAM Mid channel</p>	 <p>Band LTE4 15MHz CSE QPSK Mid channel</p>

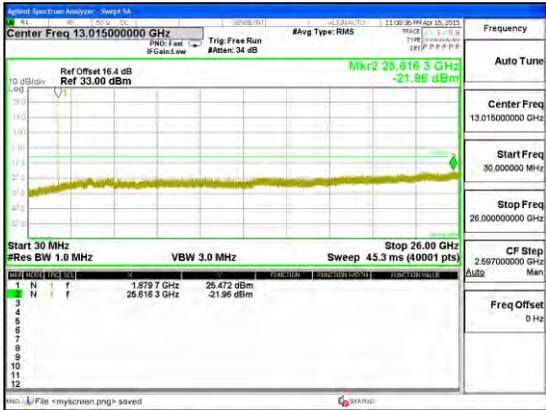
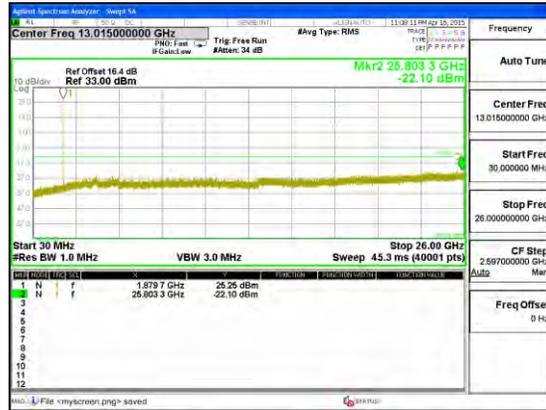
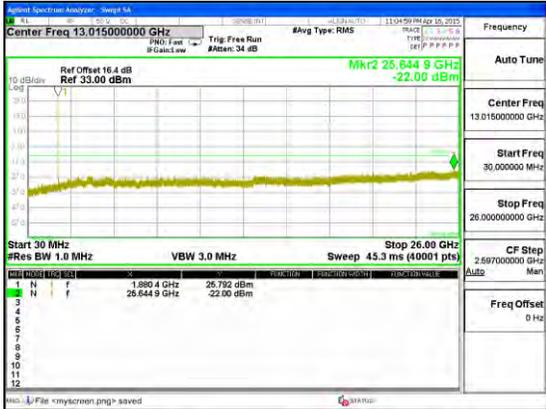
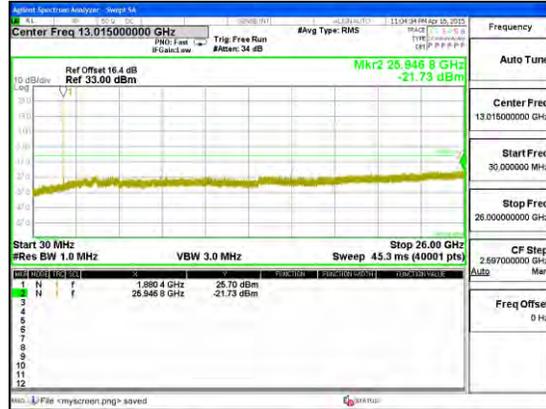
<p>Band LTE4 10MHz 16QAM</p>	 <p style="text-align: center;">Band LTE4 10MHz CSE 16QAM Mid channel</p>	 <p style="text-align: center;">Band LTE4 10MHz CSE QPSK Mid channel</p>
<p>Band LTE4 5MHz 16QAM</p>	 <p style="text-align: center;">Band LTE4 5MHz CSE 16QAM Mid channel</p>	 <p style="text-align: center;">Band LTE4 5MHz CSE QPSK Mid channel</p>

<p>Band LTE4 3MHz 16QAM</p>	 <p>Band LTE4 3MHz CSE 16QAM Mid channel</p>	 <p>Band LTE4 3MHz CSE QPSK Mid channel</p>
<p>Band LTE4 1.4MHz 16QAM</p>	 <p>Band LTE4 1.4MHz CSE 16QAM Mid channel</p>	 <p>Band LTE4 1.4MHz CSE QPSK Mid channel</p>

**LTE Band 2**



<p>Band LTE2 10MHz 16QAM</p>	 <p>Band LTE2 10MHz CSE 16QAM Mid channel</p>	 <p>Band LTE2 10MHz CSE QPSK Mid channel</p>
<p>Band LTE2 5MHz 16QAM</p>	 <p>Band LTE2 5MHz CSE 16QAM Mid channel</p>	 <p>Band LTE2 5MHz CSE QPSK Mid channel</p>

<p>Band LTE2 3MHz 16QAM</p>	 <p>Band LTE2 3MHz CSE 16QAM Mid channel</p>	 <p>Band LTE2 3MHz CSE QPSK Mid channel</p>
<p>Band LTE2 1.4MHz 16QAM</p>	 <p>Band LTE2 1.4MHz CSE 16QAM Mid channel</p>	 <p>Band LTE2 1.4MHz CSE QPSK Mid channel</p>

## **10.4. FREQUENCY STABILITY**

### **RULE PART(S)**

FCC: §2.1055, §22.355, §24.235, §27.54

### **LIMITS**

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations.

§24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§90.213 - The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations.

### **TEST PROCEDURE**

Per KDB 971168 D01 Power Meas License Digital Systems v02r02

### **MODES TESTED**

GSM, WCDMA and LTE

### **RESULTS**

### 10.4.1. FREQUENCY STABILITY RESULTS

#### LTE 2 QPSK 5MHz- MID CHANNEL (1880 MHz)

Reference Frequency: PCS Mid Channel 1880 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1879.999990	0.010	2.5
3.80	40	1879.999990	0.010	2.5
3.80	30	1879.999989	0.010	2.5
<b>3.80</b>	<b>20</b>	<b>1880.000008</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.000009	0.000	2.5
3.80	0	1880.000009	0.000	2.5
3.80	-10	1880.000009	0.000	2.5
3.80	-20	1880.000009	0.000	2.5
3.80	-30	1880.000010	-0.001	2.5

Reference Frequency: PCS Mid Channel 1880 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>3.80</b>	<b>20</b>	<b>1880.000008</b>	<b>0</b>	<b>2.5</b>
4.37	20	1880.000001	-0.001	2.5
3.23(End of volt)	20	1880.000008	0.000	2.5

#### LTE 4 QPSK 5MHz- MID CHANNEL (1732.5 MHz)

Reference Frequency: Cellular Mid Channel 1732.5 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 4331.250 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1732.499992	0.004	2.5
3.80	40	1732.499994	0.004	2.5
3.80	30	1732.499994	0.003	2.5
<b>3.80</b>	<b>20</b>	<b>1732.500000</b>	<b>0</b>	<b>2.5</b>
3.80	10	1732.500007	-0.004	2.5
3.80	0	1732.500006	-0.003	2.5
3.80	-10	1732.500007	-0.004	2.5
3.80	-20	1732.500008	-0.004	2.5
3.80	-30	1732.500001	-0.001	2.5

Reference Frequency: Cellular Mid Channel 1732.500012MHz @ 20°C Limit: to stay +/- 2.5 ppm = 4331.250 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>3.80</b>	<b>20</b>	<b>1732.500000</b>	<b>0</b>	<b>2.5</b>
3.23	20	1732.500008	-0.004	2.5
4.37	20	1732.500006	-0.003	2.5

**LTE 5 QPSK 5MHz– MID CHANNEL (836.5 MHz)**

Reference Frequency: PCS Mid Channel 836.5 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 2091.250 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	836.499996	0.009	2.5
3.80	40	836.499997	0.008	2.5
3.80	30	836.499999	0.005	2.5
<b>3.80</b>	<b>20</b>	<b>836.500003</b>	<b>0</b>	<b>2.5</b>
3.80	10	836.500005	-0.002	2.5
3.80	0	836.500006	-0.003	2.5
3.80	-10	836.500004	-0.001	2.5
3.80	-20	836.500005	-0.002	2.5
3.80	-30	836.500005	-0.002	2.5

Reference Frequency: PCS Mid Channel 836.5 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 2091.250 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>3.80</b>	<b>20</b>	<b>836.500003</b>	<b>0</b>	<b>2.5</b>
4.37	20	836.500005	-0.002	2.5
3.23(End of volt)	20	836.500033	0.000	2.5

**LTE Band 7 QPSK5 MHz :- MID CHANNEL ( 2535 MHz)**

Reference Frequency: Cellular Mid Channel 2535.000019 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 6337.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	2534.999989	0.000	2.5
3.80	40	2534.999991	0.000	2.5
3.80	30	2534.999990	0.000	2.5
<b>3.80</b>	<b>20</b>	<b>2534.999990</b>	<b>0</b>	<b>2.5</b>
3.80	10	2534.999991	0.000	2.5
3.80	0	2534.999993	-0.001	2.5
3.80	-10	2534.999993	-0.001	2.5
3.80	-20	2534.999993	-0.001	2.5
3.80	-30	2534.999992	-0.001	2.5

Reference Frequency: Cellular Mid Channel 2535.000019 MHz @ 20°C Limit: to stay +/- 2.5 ppm = 6337.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>3.80</b>	<b>20</b>	<b>2534.999990</b>	<b>0</b>	<b>2.5</b>
4.30	20	2534.999991	0.000	2.5
3.23	20	2535.000000	0	2.5

**LTE17 QPSK 5 MHz BW – MID CHANNEL(710 MHz)**

Reference Frequency: PCS Mid Channel		710	MHz @ 20°C	
Limit: to stay +/- 2.5 ppm =		1775.000	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	709.999991	0.004	2.5
3.80	40	709.999995	-0.001	2.5
3.80	30	709.999993	0.001	2.5
<b>3.80</b>	<b>20</b>	<b>709.999994</b>	<b>0</b>	<b>2.5</b>
3.80	10	709.999993	0.002	2.5
3.80	0	709.999995	-0.001	2.5
3.80	-10	709.999993	0.001	2.5
3.80	-20	709.999994	0.000	2.5
3.80	-30	709.999992	0.003	2.5

Reference Frequency: PCS Mid Channel		710	MHz @ 20°C	
Limit: to stay +/- 2.5 ppm =		1775.000	Hz	
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>3.80</b>	<b>20</b>	<b>709.999994</b>	<b>0</b>	<b>2.5</b>
4.37	20	709.9999937	0.001	2.5
3.23	20	709.9999944	-0.001	2.5

## 11. RADIATED TEST RESULTS

### 11.1. RADIATED POWER (ERP & EIRP)

#### RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27

#### LIMITS

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50(b) - (10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP. (LTE B13)

27.50(c) - (10) Portable stations (hand-held devices) are limited to 3 watts ERP; (LTE B17)

27.50(d) - (4) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.(Band 4)

27.50(h) - (2) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.(LTE B41 & 7)

#### TEST PROCEDURE

ANSI / TIA / EIA 603C Clause 2.2.17; PSA setting reference to 971168 D01 v02r02

For peak power measurement with a PSA:

a) Set the RBW  $\geq$  OBW; b) Set VBW  $\geq$  3  $\times$  RBW; c) Set span  $\geq$  2  $\times$  RBW; d) Sweep time = auto couple; e) Detector = peak; f) Ensure that the number of measurement points  $\geq$  span/RBW; g) Trace mode = max hold;

For average power measurement with a PSA:

a) Set span to at least 1.5 times the OBW; b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz; c) Set VBW  $\geq$  3  $\times$  RBW; d) Set number of points in sweep  $\geq$  2  $\times$  span / RBW; e) Sweep time = auto-couple; f) Detector = RMS (power averaging); g) Use free run trigger If burst duty cycle  $\geq$  98; h) Use trigger to capture bursts If burst duty cycle < 98; i) Trace average at least 100 traces in power averaging (*i.e.*, RMS) mode. j) Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function.

#### MODES TESTED

GSM, WCDMA and LTE

#### TEST RESULTS

### 11.1.1. ERP/EIRP Results

#### GSM

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
GSM1900	GPRS	512	1850.2	30.03	1006.93
		661	1880	28.65	732.82
		810	1909.8	30.69	1172.20
	EGPRS	512	1850.2	27.41	550.81
		661	1880	27.38	547.02
		810	1909.8	27.27	533.33
Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
GSM850	GPRS	128	824.2	28.29	674.53
		190	836.6	28.77	753.36
		251	848.8	28.74	748.17
	EGPRS	128	824.2	24.04	253.51
		190	836.6	24.52	283.14
		251	848.8	24.23	264.85

#### WCDMA

Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
Band 2	REL99	9262	1852.4	23.94	247.74
		9400	1880	23.16	207.01
		9538	1907.6	22.69	185.78
	HSDPA	9262	1852.4	22.61	182.39
		9400	1880	21.94	156.31
		9538	1907.6	21.91	155.24
Band	Mode	Channel	f(MHz)	ERP / EIRP	
				dBm	mW
Band 5	REL99	4132	826.4	20.46	111.17
		4183	836.6	18.69	73.96
		4233	846.6	21.04	127.06
	HSDPA	4132	826.4	18.94	78.34
		4183	836.6	17.37	54.58
		4233	846.6	18.50	70.79

**11.1.2. LTE ERP/EIRP Results**

**LTE Band 12**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE12	10	QPSK	1/0	704	15.601	36.32
			1/0	707.5	15.001	31.63
			1/0	711	15.271	33.66
		16QAM	1/0	704	15.101	32.37
			1/0	707.5	14.511	28.26
			1/0	711	14.571	28.65
LTE12	5	QPSK	1/0	701.5	14.791	30.14
			1/0	707.5	15.101	32.37
			1/0	713.5	15.691	37.08
		16QAM	1/0	701.5	14.141	25.95
			1/0	707.5	13.801	23.99
			1/0	713.5	15.061	32.07
LTE12	3	QPSK	1/0	700.5	13.901	24.55
			1/0	707.5	15.661	36.82
			1/0	714.5	15.191	33.04
		16QAM	1/0	700.5	14.501	28.19
			1/0	707.5	14.361	27.3
			1/0	714.5	14.241	26.55
LTE12	1.4	QPSK	1/0	699.7	14.501	28.19
			1/0	707.5	15.661	36.82
			1/0	715.3	15.201	33.12
		16QAM	1/0	699.7	14.091	25.65
			1/0	707.5	14.361	27.3
			1/0	715.3	14.791	30.14

**LTE Band 17**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE17	10	QPSK	1/0	709	14.58	28.71
			1/0	710	15.28	33.73
			1/0	711	14.92	31.05
		16QAM	1/0	709	13.89	24.49
			1/0	710	14.1	25.7
			1/0	711	14.3	26.92
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE17	5	QPSK	1/0	706.5	14.96	31.33
			1/0	710	15.45	35.08
			1/0	713.5	15.6	36.31
		16QAM	1/0	706.5	13.71	23.5
			1/0	710	13.84	24.21
			1/0	713.5	15.04	31.92

**LTE Band 5**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE5	10	QPSK	1/0	829	17.731	59.31
			1/0	836.5	18.131	65.03
			1/0	844	19.331	85.72
		16QAM	1/0	829	16.901	48.99
			1/0	836.5	17.661	58.36
			1/0	844	18.731	74.66
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
LTE5	5	QPSK	1/0	826.5	19.06	80.54
			1/0	836.5	19.01	79.62
			1/0	846.5	19.77	94.84
		16QAM	1/0	826.5	18.27	67.14
			1/0	836.5	18.25	66.83
			1/0	846.5	18.94	78.34
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
LTE5	3	QPSK	1/0	825.5	19.14	82.04
			1/0	836.5	19.13	81.85
			1/0	847.5	19.75	94.41
		16QAM	1/0	825.5	19.06	80.54
			1/0	836.5	19.01	79.62
			1/0	847.5	19.77	94.84
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
LTE5	1.4	QPSK	1/0	824.7	19.04	80.17
			1/0	836.5	19.24	83.95
			1/0	848.3	19.55	90.16
		16QAM	1/0	824.7	18.14	65.16
			1/0	836.5	18.35	68.39
			1/0	848.3	18.81	76.03

**LTE Band 4**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE4	20	QPSK	1/0	1720	16.69425	46.71
			1/0	1732.5	18.37105	68.72
			1/0	1745	17.01785	50.33
		16QAM	1/0	1720	16.03425	40.13
			1/0	1732.5	17.55105	56.9
			1/0	1745	16.20785	41.76
LTE4	15	QPSK	1/0	1717.5	16.48791	44.54
			1/0	1732.5	18.02105	63.4
			1/0	1747.5	17.11419	51.45
		16QAM	1/0	1717.5	15.85791	38.53
			1/0	1732.5	17.23105	52.86
			1/0	1747.5	16.28419	42.5
LTE4	10	QPSK	1/0	1715	16.44105	44.07
			1/0	1732.5	17.91105	61.82
			1/0	1750	17.091262	51.18
		16QAM	1/0	1715	15.75105	37.59
			1/0	1732.5	17.13105	51.65
			1/0	1750	16.261262	42.28
LTE4	5	QPSK	1/0	1712.5	15.99425	39.76
			1/0	1732.5	17.60105	57.56
			1/0	1752.5	18.55785	71.74
		16QAM	1/0	1712.5	15.37425	34.47
			1/0	1732.5	16.83105	48.21
			1/0	1752.5	17.87785	61.35

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE4	3	QPSK	1/0	1711.5	15.97791	39.61
			1/0	1732.5	17.60105	57.56
			1/0	1753.5	18.68419	73.86
		16QAM	1/0	1711.5	15.40791	34.74
			1/0	1732.5	16.87105	48.65
			1/0	1753.5	17.95419	62.43
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE4	1.4	QPSK	1/0	1710.7	16.01105	39.91
			1/0	1732.5	17.03105	50.48
			1/0	1754.3	18.581262	72.13
		16QAM	1/0	1710.7	15.32105	34.05
			1/0	1732.5	16.35105	43.16
			1/0	1754.3	17.801262	60.27

**LTE Band 2**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW

LTE2	20	QPSK	1/0	1860	22.05	160.32
			1/0	1880	22.54	179.47
			1/0	1900	23.1	204.17
		16QAM	1/0	1860	21.13	129.72
			1/0	1880	21.65	146.22
			1/0	1900	22.36	172.19
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	15	QPSK	1/0	1857.5	21.96	157.04
			1/0	1880	22.36	172.19
			1/0	1902.5	22.69	185.78
		16QAM	1/0	1857.5	21.01	126.18
			1/0	1880	21.61	144.88
			1/0	1902.5	21.85	153.11
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	10	QPSK	1/0	1855	21.87	153.82
			1/0	1880	22.56	180.3
			1/0	1905	22.16	164.44
		16QAM	1/0	1855	20.91	123.31
			1/0	1880	21.62	145.21
			1/0	1905	21.35	136.46
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	5	QPSK	1/0	1852.5	21.83	152.41
			1/0	1880	22.33	171
			1/0	1907.5	21.84	152.76
		16QAM	1/0	1852.5	20.96	124.74
			1/0	1880	21.51	141.58
			1/0	1907.5	21.02	126.47

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE2	3	QPSK	1/0	1851.5	21.8	151.36

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
		16QAM	1/0	1880	22.53	179.06
			1/0	1908.5	21.8	151.36
			1/0	1851.5	20.91	123.31
			1/0	1880	21.66	146.55
			1/0	1908.5	21.04	127.06
LTE2	1.4	QPSK	1/0	1850.7	21.71	148.25
			1/0	1880	22.35	171.79
			1/0	1909.3	21.82	152.05
		16QAM	1/0	1850.7	20.78	119.67
			1/0	1880	21.43	139
			1/0	1909.3	21.02	126.47

**LTE Band 7**

Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	20	QPSK	1/0	2510	18.794	75.75

			1/0	2535	20.074	101.72
			1/0	2560	20.203	104.79
		16QAM	1/0	2510	18.034	63.59
			1/0	2535	19.594	91.08
			1/0	2560	19.703	93.39
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	15	QPSK	1/0	2507.5	19.134	81.92
			1/0	2535	19.854	96.69
			1/0	2562.5	20.403	109.72
		16QAM	1/0	2507.5	18.734	74.71
			1/0	2535	19.574	90.66
			1/0	2562.5	20.003	100.07
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	10	QPSK	1/0	2505	20.124	102.9
			1/0	2535	20.564	113.87
			1/0	2565	20.803	120.31
		16QAM	1/0	2505	19.304	85.19
			1/0	2535	20.794	120.06
			1/0	2565	21.003	125.98
Band	BW (MHz)	Mode	RB/RB Size	f (MHz)	ERP / EIRP	
					dBm	mW
LTE7	5	QPSK	1/0	2502.5	18.594	72.34
			1/0	2535	19.794	95.37
			1/0	2567.5	19.803	95.57
		16QAM	1/0	2502.5	17.834	60.73
			1/0	2535	19.224	83.64
			1/0	2567.5	19.403	87.16

### 11.1.3. ERP/EIRP PLOTS

**GSM**

Band GSM 1900 EGPRS	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>								
	<b>Company:</b> Sony <b>Project #:</b> 15J20225 <b>Date:</b> 4/20/2015 <b>Test Engineer:</b> R. Alegre <b>Configuration:</b> EUT only <b>Mode:</b> EGPRS 1900								
	<b>Test Equipment:</b>								
	<b>Receiving:</b> Horn T119, and Chamber C SMA Cables								
	<b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable Warehouse								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	<b>Low Ch</b>								
	1850.20	8.74	V	0.9	8.0	15.90	33.0	-17.1	
	1850.20	20.25	H	0.9	8.0	27.41	33.0	-5.6	
	<b>Mid Ch</b>								
1880.00	8.37	V	0.9	8.0	15.53	33.0	-17.5		
1880.00	20.22	H	0.9	8.0	27.38	33.0	-5.6		
<b>High Ch</b>									
1909.80	8.26	V	0.9	8.0	15.42	33.0	-17.6		
1909.80	20.11	H	0.9	8.0	27.27	33.0	-5.7		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

Band GSM 1900 GPRS	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>								
	<b>Company:</b> Sony <b>Project #:</b> 15J20225 <b>Date:</b> 5/4/2015 <b>Test Engineer:</b> D. Mun <b>Configuration:</b> EUT only X-Pos <b>Mode:</b> GPRS 1900								
	<b>Test Equipment:</b> <b>Receiving:</b> Horn T119, and Chamber C SMA Cables <b>Substitution:</b> Horn T59 Substitution, 4ft SMA Cable Warehouse								
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
	1850.20	10.91	V	0.9	8.0	18.07	33.0	-14.9	
	1850.20	22.87	H	0.9	8.0	30.03	33.0	-3.0	
	Mid Ch								
	1880.00	11.55	V	0.9	8.0	18.71	33.0	-14.3	
	1880.00	21.49	H	0.9	8.0	28.65	33.0	-4.4	
High Ch									
1909.80	11.40	V	0.9	8.0	18.56	33.0	-14.4		
1909.80	23.53	H	0.9	8.0	30.69	33.0	-2.3		
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm									

Band GSM 850 EGPRS	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc. Chamber C</b>																																																																																																						
	<b>Company:</b>		Sony																																																																																																				
	<b>Project #:</b>		15J20225																																																																																																				
	<b>Date:</b>		04/29/15																																																																																																				
	<b>Test Engineer:</b>		David Mun																																																																																																				
	<b>Configuration:</b>		EUT Z-position																																																																																																				
	<b>Mode:</b>		EGPRS850																																																																																																				
	<b>Test Equipment:</b>		Receiving: Hybrid T185, and Chamber C N-type Cable Substitution: Dipole T273, 8ft SMA Cable Warehouse.																																																																																																				
	<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="10"><b>Low Ch</b></td> </tr> <tr> <td>824.20</td> <td>24.94</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>24.04</td> <td>38.5</td> <td>-14.4</td> <td></td> </tr> <tr> <td>824.20</td> <td>13.20</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>12.30</td> <td>38.5</td> <td>-26.1</td> <td></td> </tr> <tr> <td colspan="10"><b>Mid Ch</b></td> </tr> <tr> <td>836.60</td> <td>25.42</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>24.52</td> <td>38.5</td> <td>-13.9</td> <td></td> </tr> <tr> <td>836.60</td> <td>13.32</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>12.42</td> <td>38.5</td> <td>-26.0</td> <td></td> </tr> <tr> <td colspan="10"><b>High Ch</b></td> </tr> <tr> <td>848.80</td> <td>25.13</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>24.23</td> <td>38.5</td> <td>-14.2</td> <td></td> </tr> <tr> <td>848.80</td> <td>13.66</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>12.76</td> <td>38.5</td> <td>-25.7</td> <td></td> </tr> </tbody> </table>										f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	<b>Low Ch</b>										824.20	24.94	V	0.9	0.0	24.04	38.5	-14.4		824.20	13.20	H	0.9	0.0	12.30	38.5	-26.1		<b>Mid Ch</b>										836.60	25.42	V	0.9	0.0	24.52	38.5	-13.9		836.60	13.32	H	0.9	0.0	12.42	38.5	-26.0		<b>High Ch</b>										848.80	25.13	V	0.9	0.0	24.23	38.5	-14.2		848.80	13.66	H	0.9	0.0	12.76	38.5	-25.7	
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																														
<b>Low Ch</b>																																																																																																							
824.20	24.94	V	0.9	0.0	24.04	38.5	-14.4																																																																																																
824.20	13.20	H	0.9	0.0	12.30	38.5	-26.1																																																																																																
<b>Mid Ch</b>																																																																																																							
836.60	25.42	V	0.9	0.0	24.52	38.5	-13.9																																																																																																
836.60	13.32	H	0.9	0.0	12.42	38.5	-26.0																																																																																																
<b>High Ch</b>																																																																																																							
848.80	25.13	V	0.9	0.0	24.23	38.5	-14.2																																																																																																
848.80	13.66	H	0.9	0.0	12.76	38.5	-25.7																																																																																																
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm																																																																																																							

Band GSM 850 GPRS	<b>High Frequency Substitution Measurement UL Verification Services, Inc. Chamber C</b>																																																																																																						
	<b>Company:</b>		Sony																																																																																																				
	<b>Project #:</b>		15J20225																																																																																																				
	<b>Date:</b>		04/29/15																																																																																																				
	<b>Test Engineer:</b>		David Mun																																																																																																				
	<b>Configuration:</b>		EUT Z-position																																																																																																				
	<b>Mode:</b>		GPRS850																																																																																																				
	<b>Test Equipment:</b>		Receiving: Hybrid T185, and Chamber C N-type Cable Substitution: Dipole T273, 8ft SMA Cable Warehouse.																																																																																																				
	<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="10"><b>Low Ch</b></td> </tr> <tr> <td>824.20</td> <td>29.19</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>28.29</td> <td>38.5</td> <td>-10.2</td> <td></td> </tr> <tr> <td>824.20</td> <td>13.90</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>13.00</td> <td>38.5</td> <td>-25.4</td> <td></td> </tr> <tr> <td colspan="10"><b>Mid Ch</b></td> </tr> <tr> <td>836.60</td> <td>29.67</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>28.77</td> <td>38.5</td> <td>-9.7</td> <td></td> </tr> <tr> <td>836.60</td> <td>13.71</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>12.81</td> <td>38.5</td> <td>-25.6</td> <td></td> </tr> <tr> <td colspan="10"><b>High Ch</b></td> </tr> <tr> <td>848.80</td> <td>29.64</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>28.74</td> <td>38.5</td> <td>-9.7</td> <td></td> </tr> <tr> <td>848.80</td> <td>13.96</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>13.06</td> <td>38.5</td> <td>-25.4</td> <td></td> </tr> </tbody> </table>										f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	<b>Low Ch</b>										824.20	29.19	V	0.9	0.0	28.29	38.5	-10.2		824.20	13.90	H	0.9	0.0	13.00	38.5	-25.4		<b>Mid Ch</b>										836.60	29.67	V	0.9	0.0	28.77	38.5	-9.7		836.60	13.71	H	0.9	0.0	12.81	38.5	-25.6		<b>High Ch</b>										848.80	29.64	V	0.9	0.0	28.74	38.5	-9.7		848.80	13.96	H	0.9	0.0	13.06	38.5	-25.4	
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																														
<b>Low Ch</b>																																																																																																							
824.20	29.19	V	0.9	0.0	28.29	38.5	-10.2																																																																																																
824.20	13.90	H	0.9	0.0	13.00	38.5	-25.4																																																																																																
<b>Mid Ch</b>																																																																																																							
836.60	29.67	V	0.9	0.0	28.77	38.5	-9.7																																																																																																
836.60	13.71	H	0.9	0.0	12.81	38.5	-25.6																																																																																																
<b>High Ch</b>																																																																																																							
848.80	29.64	V	0.9	0.0	28.74	38.5	-9.7																																																																																																
848.80	13.96	H	0.9	0.0	13.06	38.5	-25.4																																																																																																
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm																																																																																																							

**WCDMA**

Band Band 2 HSDPA	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>																																																																																																
	<b>Company:</b>		Sony																																																																																														
	<b>Project #:</b>		15J20225																																																																																														
	<b>Date:</b>		5/4/2015																																																																																														
	<b>Test Engineer:</b>		D. Mun																																																																																														
	<b>Configuration:</b>		EUT Only																																																																																														
	<b>Location:</b>		Chamber C																																																																																														
	<b>Mode:</b>		HSDPA B2																																																																																														
	<b>Test Equipment:</b>																																																																																																
	Receiving: Horn T119, and Chamber C SMA Cables																																																																																																
Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse																																																																																																	
<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBi)</th> <th>EIRP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9"><b>Low Ch</b></td> </tr> <tr> <td>1852.40</td> <td>5.64</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.75</td> <td>33.0</td> <td>-20.3</td> <td></td> </tr> <tr> <td>1852.40</td> <td>15.50</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>22.61</td> <td>33.0</td> <td>-10.4</td> <td></td> </tr> <tr> <td colspan="9"><b>Mid Ch</b></td> </tr> <tr> <td>1880.00</td> <td>5.51</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.62</td> <td>33.0</td> <td>-20.4</td> <td></td> </tr> <tr> <td>1880.00</td> <td>14.83</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>21.94</td> <td>33.0</td> <td>-11.1</td> <td></td> </tr> <tr> <td colspan="9"><b>High Ch</b></td> </tr> <tr> <td>1907.60</td> <td>5.86</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.97</td> <td>33.0</td> <td>-20.0</td> <td></td> </tr> <tr> <td>1907.60</td> <td>14.80</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>21.91</td> <td>33.0</td> <td>-11.1</td> <td></td> </tr> </tbody> </table>								f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	<b>Low Ch</b>									1852.40	5.64	V	0.9	8.0	12.75	33.0	-20.3		1852.40	15.50	H	0.9	8.0	22.61	33.0	-10.4		<b>Mid Ch</b>									1880.00	5.51	V	0.9	8.0	12.62	33.0	-20.4		1880.00	14.83	H	0.9	8.0	21.94	33.0	-11.1		<b>High Ch</b>									1907.60	5.86	V	0.9	8.0	12.97	33.0	-20.0		1907.60	14.80	H	0.9	8.0	21.91	33.0	-11.1	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																									
<b>Low Ch</b>																																																																																																	
1852.40	5.64	V	0.9	8.0	12.75	33.0	-20.3																																																																																										
1852.40	15.50	H	0.9	8.0	22.61	33.0	-10.4																																																																																										
<b>Mid Ch</b>																																																																																																	
1880.00	5.51	V	0.9	8.0	12.62	33.0	-20.4																																																																																										
1880.00	14.83	H	0.9	8.0	21.94	33.0	-11.1																																																																																										
<b>High Ch</b>																																																																																																	
1907.60	5.86	V	0.9	8.0	12.97	33.0	-20.0																																																																																										
1907.60	14.80	H	0.9	8.0	21.91	33.0	-11.1																																																																																										
Rev. 3.17.11																																																																																																	
Note: For Band 4 EIRP limit is 30dBm																																																																																																	

Band Band 2 REL99	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>																																																																																																
	<b>Company:</b> Sony																																																																																																
	<b>Project #:</b> 15J20225																																																																																																
	<b>Date:</b> 5/4/2015																																																																																																
	<b>Test Engineer:</b> D. Mun																																																																																																
	<b>Configuration:</b> EUT Only																																																																																																
	<b>Location:</b> Chamber C																																																																																																
	<b>Mode:</b> Rel99 B2																																																																																																
	<b>Test Equipment:</b> <b>Receiving: Horn T119, and Chamber C SMA Cables</b> <b>Substitution: Horn T59 Substitution, 4ft SMA Cable Warehouse</b>																																																																																																
	<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBi)</th> <th>EIRP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9">Low Ch</td> </tr> <tr> <td>1852.40</td> <td>5.77</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.88</td> <td>33.0</td> <td>-20.1</td> <td></td> </tr> <tr> <td>1852.40</td> <td>16.83</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>23.94</td> <td>33.0</td> <td>-9.1</td> <td></td> </tr> <tr> <td colspan="9">Mid Ch</td> </tr> <tr> <td>1880.00</td> <td>5.59</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.70</td> <td>33.0</td> <td>-20.3</td> <td></td> </tr> <tr> <td>1880.00</td> <td>16.05</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>23.16</td> <td>33.0</td> <td>-9.8</td> <td></td> </tr> <tr> <td colspan="9">High Ch</td> </tr> <tr> <td>1907.60</td> <td>5.72</td> <td>V</td> <td>0.9</td> <td>8.0</td> <td>12.83</td> <td>33.0</td> <td>-20.2</td> <td></td> </tr> <tr> <td>1907.60</td> <td>15.58</td> <td>H</td> <td>0.9</td> <td>8.0</td> <td>22.69</td> <td>33.0</td> <td>-10.3</td> <td></td> </tr> </tbody> </table>								f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes	Low Ch									1852.40	5.77	V	0.9	8.0	12.88	33.0	-20.1		1852.40	16.83	H	0.9	8.0	23.94	33.0	-9.1		Mid Ch									1880.00	5.59	V	0.9	8.0	12.70	33.0	-20.3		1880.00	16.05	H	0.9	8.0	23.16	33.0	-9.8		High Ch									1907.60	5.72	V	0.9	8.0	12.83	33.0	-20.2		1907.60	15.58	H	0.9	8.0	22.69	33.0	-10.3
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																									
Low Ch																																																																																																	
1852.40	5.77	V	0.9	8.0	12.88	33.0	-20.1																																																																																										
1852.40	16.83	H	0.9	8.0	23.94	33.0	-9.1																																																																																										
Mid Ch																																																																																																	
1880.00	5.59	V	0.9	8.0	12.70	33.0	-20.3																																																																																										
1880.00	16.05	H	0.9	8.0	23.16	33.0	-9.8																																																																																										
High Ch																																																																																																	
1907.60	5.72	V	0.9	8.0	12.83	33.0	-20.2																																																																																										
1907.60	15.58	H	0.9	8.0	22.69	33.0	-10.3																																																																																										
Rev. 3.17.11 Note: For Band 4 EIRP limit is 30dBm																																																																																																	

Band Band 5 HSDPA	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>								
	<b>Company:</b>		Sony						
	<b>Project #:</b>		15J20225						
	<b>Date:</b>		05/04/15						
	<b>Test Engineer:</b>		David Mun						
	<b>Configuration:</b>		EUT only						
	<b>Mode:</b>		HSDPA B5 FUND						
	<b>Test Equipment:</b>		Receiving: Sunol T185, and 3m Chamber C N-type Cable Substitution: Dipole T273, 4ft SMA Cable Warehouse.						
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch								
826.40	19.84	V	0.9	0.0	18.94	38.5	-19.5		
826.40	6.62	H	0.9	0.0	5.72	38.5	-32.7		
Mid Ch									
836.60	18.27	V	0.9	0.0	17.37	38.5	-21.1		
836.60	7.00	H	0.9	0.0	6.10	38.5	-32.3		
High Ch									
846.60	19.40	V	0.9	0.0	18.50	38.5	-19.9		
846.60	8.13	H	0.9	0.0	7.23	38.5	-31.2		
Rev. 3.17.11 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm									

Band Band 5 REL99	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc.</b>								
	<b>Company:</b>		Sony						
	<b>Project #:</b>		15J20225						
	<b>Date:</b>		05/04/15						
	<b>Test Engineer:</b>		David Mun						
	<b>Configuration:</b>		EUT only						
	<b>Mode:</b>		HSDPA B5 FUND						
	<b>Test Equipment:</b>		Receiving: Sunol T185, and 3m Chamber C N-type Cable Substitution: Dipole T273, 4ft SMA Cable Warehouse.						
	f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
	Low Ch 826.40    21.36    V    0.9    0.0    20.46    38.5    -18.0 826.40    6.62    H    0.9    0.0    5.72    38.5    -32.7 Mid Ch 836.60    19.59    V    0.9    0.0    18.69    38.5    -19.8 836.60    7.00    H    0.9    0.0    6.10    38.5    -32.3 High Ch 846.60    21.94    V    0.9    0.0    21.04    38.5    -17.4 846.60    8.13    H    0.9    0.0    7.23    38.5    -31.2								

Rev. 3.17.11  
 Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm



Band  LTE12  10MHz  QPSK	<b>High Frequency Substitution Measurement</b> <b>UL Verification Services, Inc. Chamber C</b>																																																																																																	
	<b>Company:</b>		Sony																																																																																															
	<b>Project #:</b>		15J20225																																																																																															
	<b>Date:</b>		4/28/2015																																																																																															
	<b>Test Engineer:</b>		David Mun																																																																																															
	<b>Configuration:</b>		EUT Z-position																																																																																															
	<b>Mode:</b>		LTE12 10MHz QPSK																																																																																															
	<b>Test Equipment:</b>																																																																																																	
	Receiving: Sunol T185, and 3m Chamber C N-type Cable																																																																																																	
	Substitution: Dipole T273, 4ft SMA Cable Warehouse.																																																																																																	
<table border="1"> <thead> <tr> <th>f MHz</th> <th>SG reading (dBm)</th> <th>Ant. Pol. (H/V)</th> <th>Cable Loss (dB)</th> <th>Antenna Gain (dBd)</th> <th>ERP (dBm)</th> <th>Limit (dBm)</th> <th>Margin (dB)</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td colspan="9"><b>Low Ch</b></td> </tr> <tr> <td>704.00</td> <td>16.50</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>15.60</td> <td>38.5</td> <td>-22.8</td> <td></td> </tr> <tr> <td>704.00</td> <td>4.10</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>3.20</td> <td>38.5</td> <td>-35.2</td> <td></td> </tr> <tr> <td colspan="9"><b>Mid Ch</b></td> </tr> <tr> <td>707.50</td> <td>15.90</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>15.00</td> <td>38.5</td> <td>-23.4</td> <td></td> </tr> <tr> <td>707.50</td> <td>4.45</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>3.55</td> <td>38.5</td> <td>-34.9</td> <td></td> </tr> <tr> <td colspan="9"><b>High Ch</b></td> </tr> <tr> <td>711.00</td> <td>16.17</td> <td>V</td> <td>0.9</td> <td>0.0</td> <td>15.27</td> <td>38.5</td> <td>-23.2</td> <td></td> </tr> <tr> <td>711.00</td> <td>4.31</td> <td>H</td> <td>0.9</td> <td>0.0</td> <td>3.41</td> <td>38.5</td> <td>-35.0</td> <td></td> </tr> </tbody> </table>									f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes	<b>Low Ch</b>									704.00	16.50	V	0.9	0.0	15.60	38.5	-22.8		704.00	4.10	H	0.9	0.0	3.20	38.5	-35.2		<b>Mid Ch</b>									707.50	15.90	V	0.9	0.0	15.00	38.5	-23.4		707.50	4.45	H	0.9	0.0	3.55	38.5	-34.9		<b>High Ch</b>									711.00	16.17	V	0.9	0.0	15.27	38.5	-23.2		711.00	4.31	H	0.9	0.0	3.41	38.5	-35.0	
f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes																																																																																										
<b>Low Ch</b>																																																																																																		
704.00	16.50	V	0.9	0.0	15.60	38.5	-22.8																																																																																											
704.00	4.10	H	0.9	0.0	3.20	38.5	-35.2																																																																																											
<b>Mid Ch</b>																																																																																																		
707.50	15.90	V	0.9	0.0	15.00	38.5	-23.4																																																																																											
707.50	4.45	H	0.9	0.0	3.55	38.5	-34.9																																																																																											
<b>High Ch</b>																																																																																																		
711.00	16.17	V	0.9	0.0	15.27	38.5	-23.2																																																																																											
711.00	4.31	H	0.9	0.0	3.41	38.5	-35.0																																																																																											
Rev. 3.17.11																																																																																																		
Note: For Band 13/17 ERP limit is 34.77dBm; For Band 26 limit is 50dBm																																																																																																		