

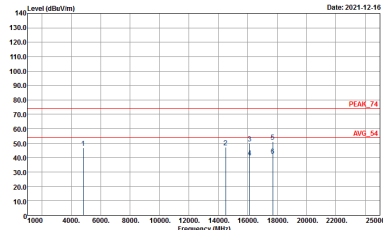
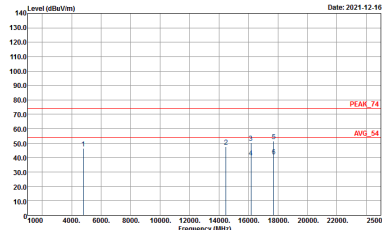


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH39 2480MHz		
	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_S4 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



2.4GHz 2400~2483.5MHz

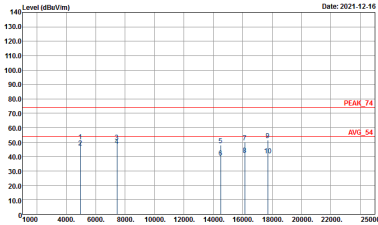
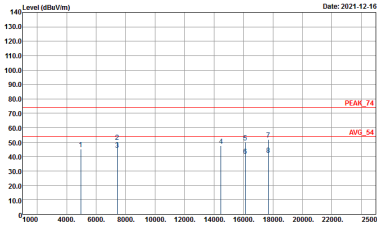
BLE (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
BLE CH00 2402MHz		
Horizontal		Vertical
<p><b>Peak</b></p> <p><b>Avg.</b></p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL Detector : RMS</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL Detector : RMS</p>



BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
	BLE CH19 2440MHz	
	Horizontal	Vertical
<p><b>Peak</b> <b>Avg.</b></p>	<p style="text-align: right;">Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL Detector : Peak</p>	<p style="text-align: right;">Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL Detector : Peak</p>



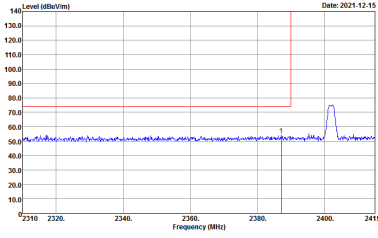
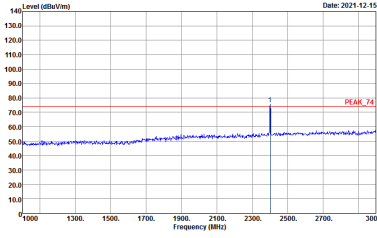
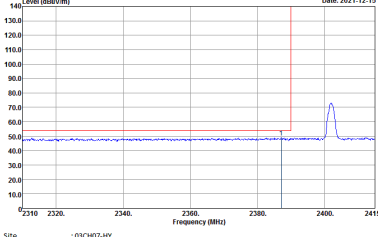
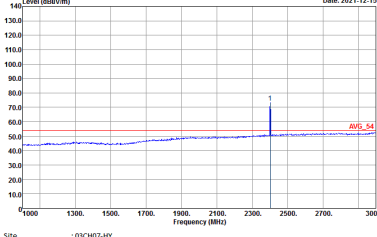
BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
BLE CH39 2480MHz		
	Horizontal	Vertical
<p><b>Peak</b> <b>Avg.</b></p>	<p data-bbox="432 472 810 495">Date: 2021-12-16</p>  <p data-bbox="432 707 660 741">Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL Detector : Peak</p>	<p data-bbox="906 472 1284 495">Date: 2021-12-16</p>  <p data-bbox="906 707 1134 741">Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL Detector : Peak</p>



<2Mbps>

2.4GHz 2400~2483.5MHz

BLE (Band Edge @ 3m)

BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH00 2402MHz		
	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH00 2402MHz		
	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>
Avg	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>



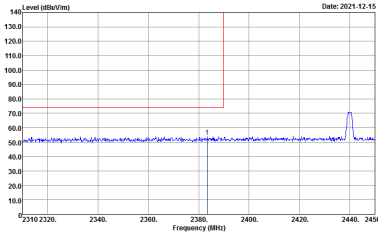
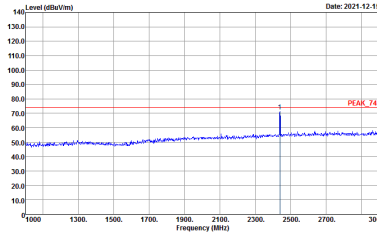
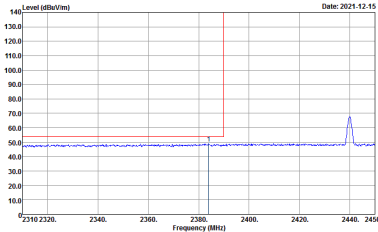
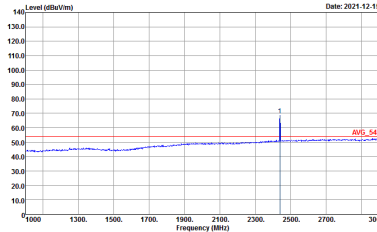
BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
	BLE CH19 2440MHz - L	
	Horizontal	Fundamental
Peak	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : PEAK_BE_24 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : PEAK_24 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : AVG_BE_24 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : AVG_24 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



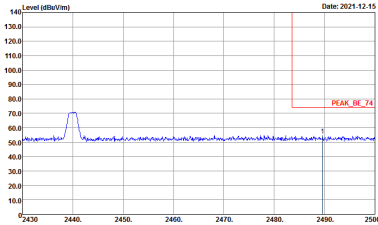
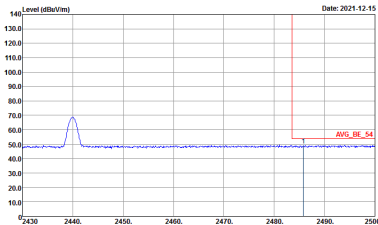
BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH19 2440MHz - R		
	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank





BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH19 2440MHz - L		
	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_S4 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH19 2440MHz - R		
	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank



BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH39 2480MHz		
Horizontal		Fundamental
Peak	<p>Date: 2021-12-15</p> <p>Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2021-12-15</p> <p>Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00066584 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

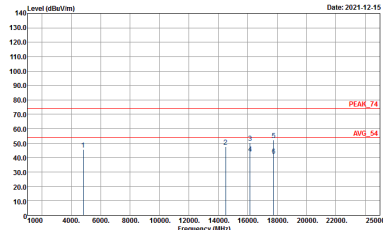
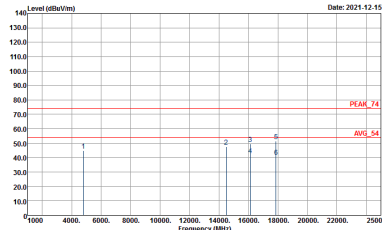


BLE	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
BLE CH39 2480MHz		
	Vertical	Fundamental
Peak	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2021-12-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00066584 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

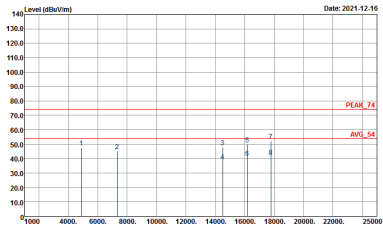
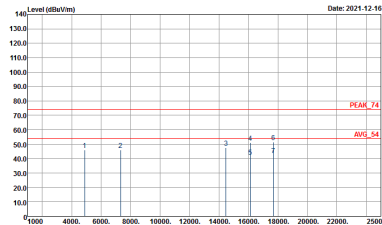


2.4GHz 2400~2483.5MHz

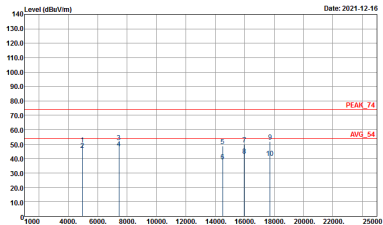
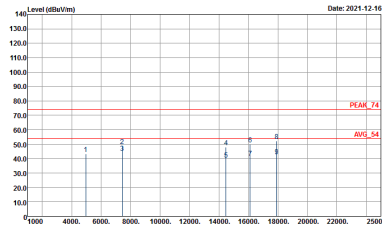
BLE (Harmonic @ 3m)

BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m																									
BLE CH00 2402MHz																										
Horizontal		Vertical																								
<p>Peak</p> <p>Avg.</p>	 <table border="1"> <caption>Horizontal Peak Data</caption> <thead> <tr> <th>Frequency (MHz)</th> <th>Level (dBu/m)</th> </tr> </thead> <tbody> <tr><td>2402</td><td>50.0</td></tr> <tr><td>4804</td><td>50.0</td></tr> <tr><td>7206</td><td>50.0</td></tr> <tr><td>9608</td><td>50.0</td></tr> <tr><td>12010</td><td>50.0</td></tr> </tbody> </table> <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL            Detector : Peak</p>	Frequency (MHz)	Level (dBu/m)	2402	50.0	4804	50.0	7206	50.0	9608	50.0	12010	50.0	 <table border="1"> <caption>Vertical Peak Data</caption> <thead> <tr> <th>Frequency (MHz)</th> <th>Level (dBu/m)</th> </tr> </thead> <tbody> <tr><td>2402</td><td>50.0</td></tr> <tr><td>4804</td><td>50.0</td></tr> <tr><td>7206</td><td>50.0</td></tr> <tr><td>9608</td><td>50.0</td></tr> <tr><td>12010</td><td>50.0</td></tr> </tbody> </table> <p>Site : 03CH07-HY            Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL            Detector : Peak</p>	Frequency (MHz)	Level (dBu/m)	2402	50.0	4804	50.0	7206	50.0	9608	50.0	12010	50.0
Frequency (MHz)	Level (dBu/m)																									
2402	50.0																									
4804	50.0																									
7206	50.0																									
9608	50.0																									
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Frequency (MHz)	Level (dBu/m)																									
2402	50.0																									
4804	50.0																									
7206	50.0																									
9608	50.0																									
12010	50.0																									



<b>BLE</b>	<b>2.4GHz 2400~2483.5MHz Harmonic @ 3m</b>	
	<b>BLE CH19 2440MHz</b>	
	<b>Horizontal</b>	<b>Vertical</b>
<p><b>Peak</b></p> <p><b>Avg.</b></p>	 <p>Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL Detector : Peak</p>	 <p>Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL Detector : Peak</p>



BLE	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
BLE CH39 2480MHz		
	Horizontal	Vertical
Peak Avg.	 <p>Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 HORIZONTAL Detector : Peak</p>	 <p>Date: 2021-12-16</p> <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00066584 VERTICAL Detector : Peak</p>



Emission below 1GHz
2.4GHz BLE (LF)

Table with 2 columns: Horizontal and Vertical. Each column contains a graph of Level (dBm/1m) vs Frequency (MHz) for BLE LF. The graphs show a blue signal line and a red QP limit line. The left graph is for HORIZONTAL and the right for VERTICAL. Both show a peak at approximately 300 MHz.

QP / Peak

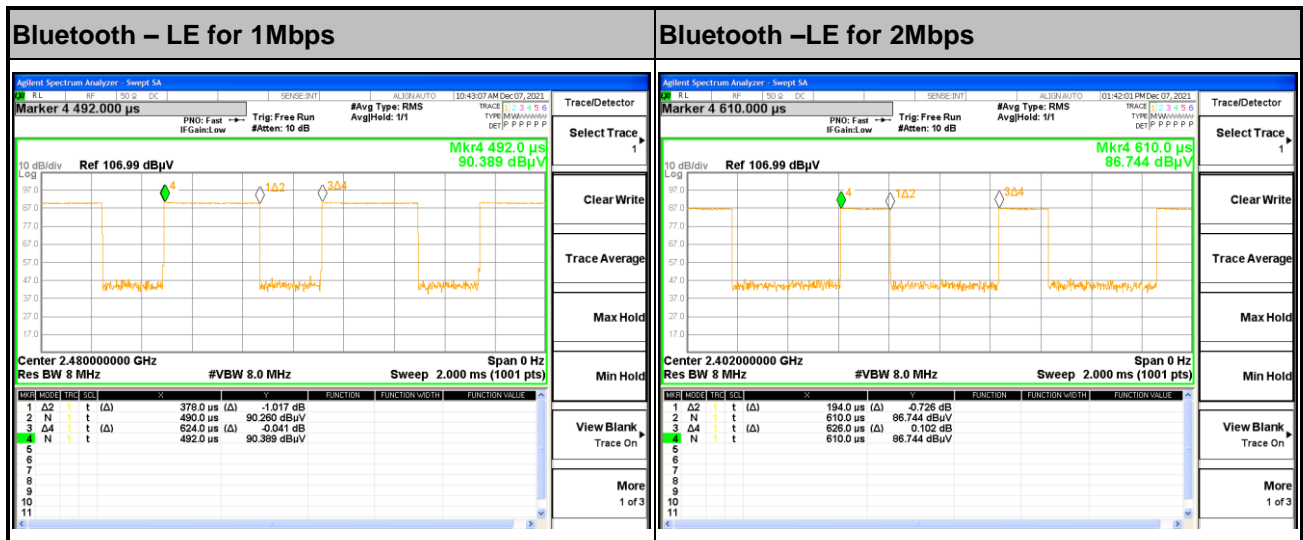




## Appendix E. Duty Cycle Plots

<WM-BAX-BM-57>

Band	Duty Cycle(%)	T(us)	1/T(kHz)	Duty Factor(dB)
Bluetooth –LE for 1Mbps	60.58	378	2.65	2.18
Bluetooth –LE for 2Mbps	30.99	194	5.15	5.09





<NRF52840>

Band	Duty Cycle(%)	T(us)	1/T(kHz)	Duty Factor(dB)
Bluetooth –LE for 1Mbps	62.82	392	2.55	2.02
Bluetooth –LE for 2Mbps	33.17	207	4.83	4.79

