

ANT3:  
Test Graph:

Graphs	
<p>802.11b /LCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Center Freq: 2.412000000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.03 dB Ref 27.03 dBm</p> <p>Mkr3 2.417159 GHz -7.0338 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 14.751 MHz Total Power 16.4 dBm</p> <p>Transmit Freq Error -4.822 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 10.33 MHz x dB -6.00 dB</p>
<p>802.11b /MCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Center Freq: 2.437000000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.11 dB Ref 27.11 dBm</p> <p>Mkr3 2.442364 GHz -9.8680 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 14.925 MHz Total Power 16.2 dBm</p> <p>Transmit Freq Error -25.550 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 10.78 MHz x dB -6.00 dB</p>
<p>802.11b/HCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Center Freq: 2.462000000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.21 dB Ref 27.21 dBm</p> <p>Mkr3 2.466937 GHz -7.8310 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 14.844 MHz Total Power 16.1 dBm</p> <p>Transmit Freq Error -78.504 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 10.03 MHz x dB -6.00 dB</p>

<p>802.11g/LCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.41200000 GHz</p> <p>Ref Offset 7.03 dB Ref 27.03 dBm</p> <p>Mkr3 2.420164 GHz -9.8525 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 30 MHz Sweep 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>12.8 dBm</td> </tr> <tr> <td colspan="3">16.441 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	12.8 dBm	16.441 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-6.00 dB
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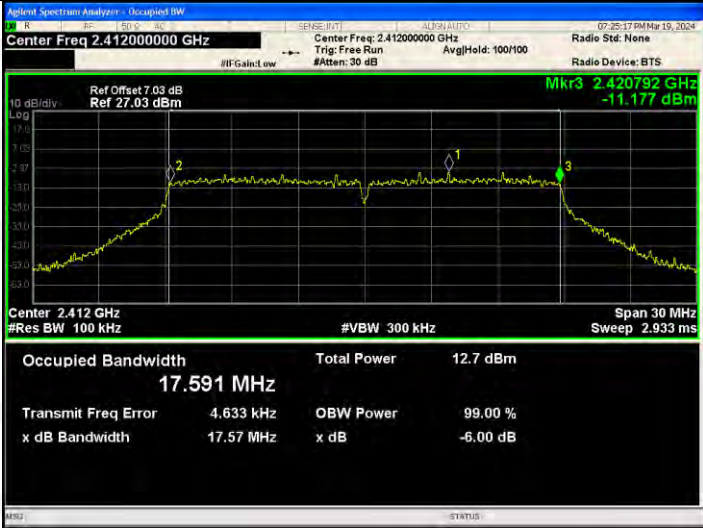

<p>802.11n(HT20)/LC H</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.41200000 GHz</p> <p>Center Freq: 2.41200000 GHz Trig: Free Run #Atten: 30 dB AvgHld: 100/100 Radio Std: None Radio Device: BTS</p> <p>Ref Offset: 7.03 dB Ref: 27.03 dBm</p> <p>Mkr3 2.420792 GHz -11.177 dBm</p> <p>Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>12.7 dBm</td> </tr> <tr> <td colspan="3">17.591 MHz</td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>x dB Bandwidth</td> <td>x dB</td> <td>-6.00 dB</td> </tr> </table>	Occupied Bandwidth	Total Power	12.7 dBm	17.591 MHz			Transmit Freq Error	OBW Power	99.00 %	x dB Bandwidth	x dB	-6.00 dB
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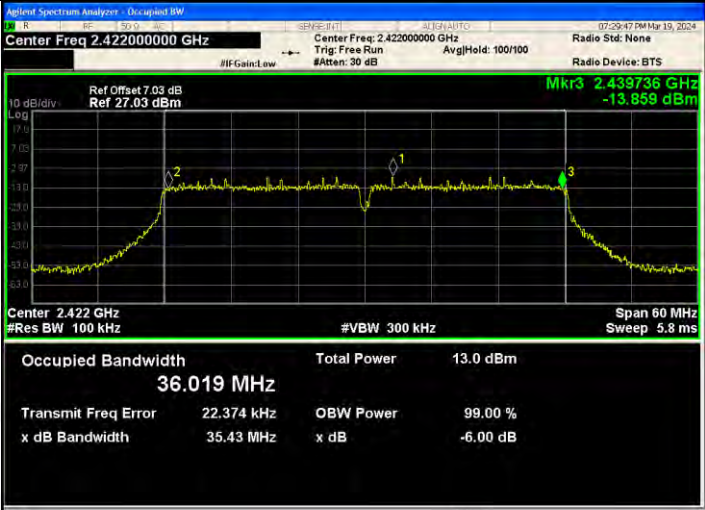
<p>802.11n(HT40)/LC H</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.42200000 GHz</p> <p>Center Freq: 2.42200000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset: 7.03 dB</p> <p>Ref: 27.03 dBm</p> <p>Mkr3 2.439736 GHz</p> <p>-13.859 dBm</p> <p>Center 2.422 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 36.019 MHz</p> <p>Total Power 13.0 dBm</p> <p>Transmit Freq Error 22.374 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.43 MHz</p> <p>x dB -6.00 dB</p>
<p>802.11n(HT40)/MC H</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.43700000 GHz</p> <p>Center Freq: 2.43700000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset: 7.11 dB</p> <p>Ref: 27.11 dBm</p> <p>Mkr3 2.454773 GHz</p> <p>-12.822 dBm</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 35.986 MHz</p> <p>Total Power 13.2 dBm</p> <p>Transmit Freq Error 22.912 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.50 MHz</p> <p>x dB -6.00 dB</p>
<p>802.11n(HT40)/HC H</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.45200000 GHz</p> <p>Center Freq: 2.45200000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset: 7.2 dB</p> <p>Ref: 27.20 dBm</p> <p>Mkr3 2.469699 GHz</p> <p>-14.095 dBm</p> <p>Center 2.452 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 35.997 MHz</p> <p>Total Power 13.3 dBm</p> <p>Transmit Freq Error -38.471 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.47 MHz</p> <p>x dB -6.00 dB</p>

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<p>802.11b /MCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.43700000 GHz</p> <p>Center Freq: 2.43700000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.11 dB Ref 27.11 dBm</p> <p>Mkr3 2.442243 GHz -6.9863 dBm</p> <p>Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 14.872 MHz Total Power 15.8 dBm</p> <p>Transmit Freq Error 11.929 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 10.46 MHz x dB -6.00 dB</p>
<p>802.11b/HCH</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.46200000 GHz</p> <p>Center Freq: 2.46200000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset 7.21 dB Ref 27.21 dBm</p> <p>Mkr3 2.467211 GHz -8.2487 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <p>Occupied Bandwidth 14.876 MHz Total Power 15.7 dBm</p> <p>Transmit Freq Error -83.439 kHz OBW Power 99.00 %</p> <p>x dB Bandwidth 10.59 MHz x dB -6.00 dB</p>

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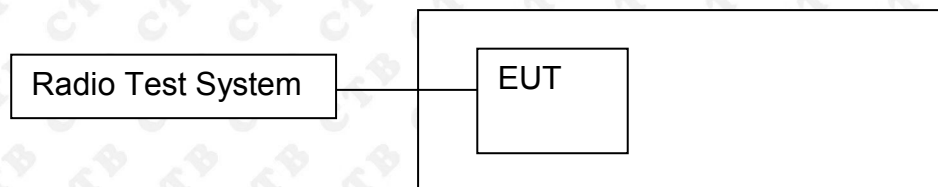
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x dB Bandwidth																			
17.34 MHz																			
<p>802.11n(HT20)/HC H</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.46200000 GHz</p> <p>Center Freq: 2.46200000 GHz</p> <p>Trig: Free Run #Atten: 30 dB AvgHld: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>Ref Offset: 7.21 dB Ref: 27.21 dBm</p> <p>Mkr3 2.470779 GHz -11.305 dBm</p> <p>Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms</p> <table border="1"> <tr> <td>Occupied Bandwidth</td> <td>Total Power</td> <td>12.7 dBm</td> </tr> <tr> <td>17.608 MHz</td> <td></td> <td></td> </tr> <tr> <td>Transmit Freq Error</td> <td>OBW Power</td> <td>99.00 %</td> </tr> <tr> <td>-20.087 kHz</td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>x dB Bandwidth</td> <td></td> <td></td> </tr> <tr> <td>17.60 MHz</td> <td></td> <td></td> </tr> </table>	Occupied Bandwidth	Total Power	12.7 dBm	17.608 MHz			Transmit Freq Error	OBW Power	99.00 %	-20.087 kHz	x dB	-6.00 dB	x dB Bandwidth			17.60 MHz		
Occupied Bandwidth	Total Power	12.7 dBm																	
17.608 MHz																			
Transmit Freq Error	OBW Power	99.00 %																	
-20.087 kHz	x dB	-6.00 dB																	
x dB Bandwidth																			
17.60 MHz																			

<p>802.11n(HT40)/LC H</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.42200000 GHz</p> <p>Center Freq: 2.42200000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset 7.03 dB</p> <p>Ref 27.03 dBm</p> <p>Mkr3 2.439736 GHz</p> <p>-13.859 dBm</p> <p>Center 2.422 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 36.019 MHz</p> <p>Total Power 13.0 dBm</p> <p>Transmit Freq Error 22.374 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.43 MHz</p> <p>x dB -6.00 dB</p>
<p>802.11n(HT40)/MC H</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.43700000 GHz</p> <p>Center Freq: 2.43700000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset 7.11 dB</p> <p>Ref 27.11 dBm</p> <p>Mkr3 2.454773 GHz</p> <p>-12.822 dBm</p> <p>Center 2.437 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 35.986 MHz</p> <p>Total Power 13.2 dBm</p> <p>Transmit Freq Error 22.912 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.50 MHz</p> <p>x dB -6.00 dB</p>
<p>802.11n(HT40)/HC H</p>	 <p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.45200000 GHz</p> <p>Center Freq: 2.45200000 GHz</p> <p>Trig: Free Run</p> <p>#Atten: 30 dB</p> <p>Avg/Hold: 100/100</p> <p>Radio Std: None</p> <p>Radio Device: BTS</p> <p>10 dB/div</p> <p>Ref Offset 7.2 dB</p> <p>Ref 27.20 dBm</p> <p>Mkr3 2.469699 GHz</p> <p>-14.095 dBm</p> <p>Center 2.452 GHz</p> <p>#Res BW 100 kHz</p> <p>#VBW 300 kHz</p> <p>Span 60 MHz</p> <p>Sweep 5.8 ms</p> <p>Occupied Bandwidth 35.997 MHz</p> <p>Total Power 13.3 dBm</p> <p>Transmit Freq Error -38.471 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 35.47 MHz</p> <p>x dB -6.00 dB</p>



## 11. POWER SPECTRAL DENSITY

### 11.1 Block Diagram Of Test Setup



### 11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

### 11.3 Test procedure

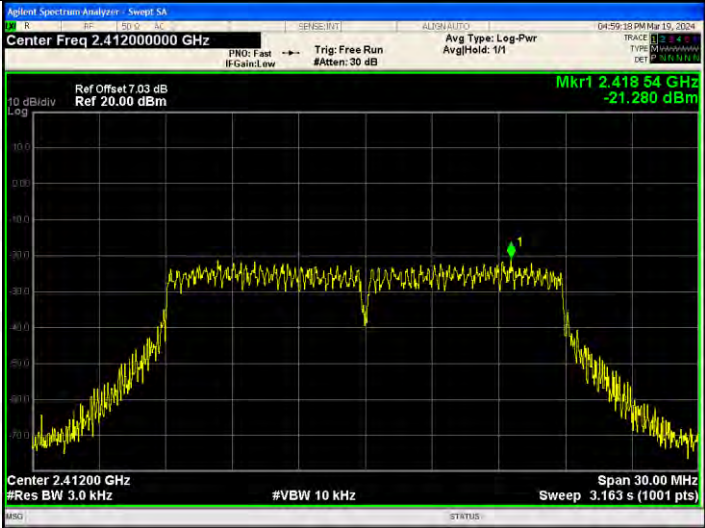
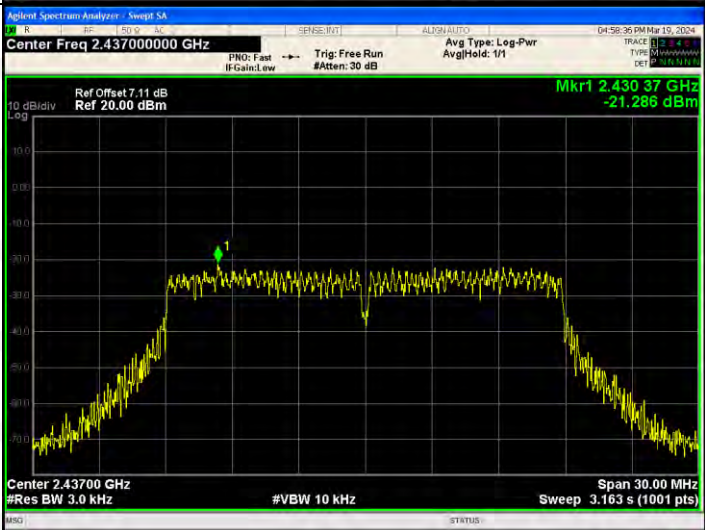

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
4. Set the VBW  $\geq 3 \times \text{RBW}$ .
5. Detector = Peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

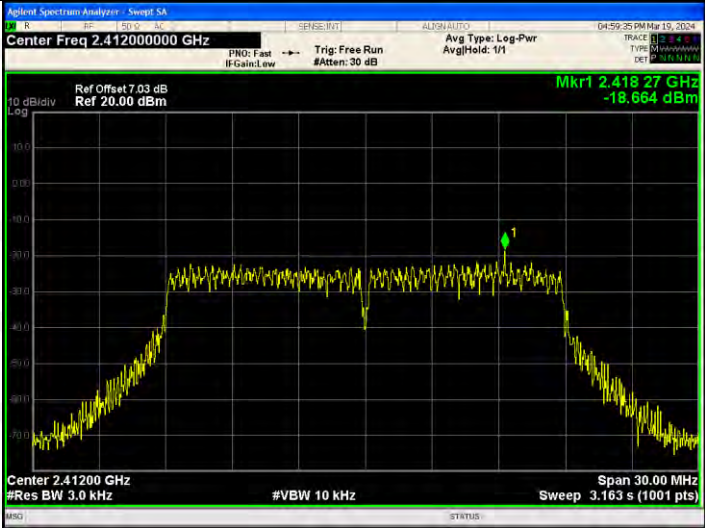
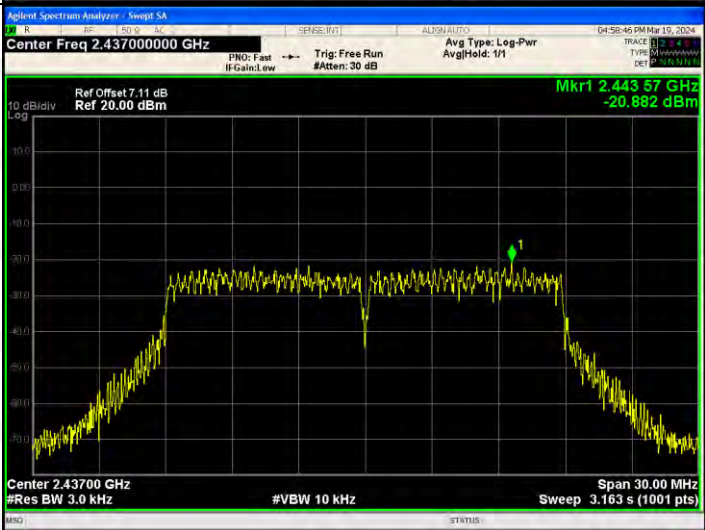

11.4 Test Result

Mode	Channel.	Power Spectral Density [dBm /3KHz] ANT 1	Power Spectral Density [dBm /3KHz] ANT 2	Power Spectral Density [dBm /3KHz] ANT 3	Power Spectral Density [dBm /3KHz] ANT 4	Power Spectral Density [dBm /3KHz]Total I	Limit(dB m)
802.11b	LCH	-15.343	-15.896	-16.436	-15.550	/	8
	MCH	-14.185	-15.620	-15.296	-16.434	/	8
	HCH	-14.622	-15.734	-14.883	-15.644	/	8
802.11g	LCH	-21.280	-18.557	-19.539	-19.274	/	8
	MCH	-21.286	-17.586	-17.748	-19.793	/	8
	HCH	-22.363	-18.344	-18.826	-18.785	/	8
802.11n(H T20)	LCH	-18.664	-19.811	-19.951	-18.509	-13.16	8
	MCH	-20.882	-19.261	-19.750	-19.236	-13.71	8
	HCH	-21.025	-18.268	-19.120	-19.750	-13.41	8
802.11n(H T40)	LCH	-25.359	-22.988	-22.006	-22.28	-16.96	8
	MCH	-24.646	-21.591	-22.627	-20.945	-16.22	8
	HCH	-24.914	-22.299	-21.153	-22.138	-16.40	8

**ANT1:  
Test Graph**

Graphs	
802.11b /LCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.412000000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.410 71 GHz -15.343 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b /MCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.437000000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.437 75 GHz -14.185 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b/HCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.462000000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.460 71 GHz -14.622 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>

<p>802.11g/LCH</p>	
<p>802.11g/MCH</p>	
<p>802.11g/HCH</p>	

<p>802.11n(HT20)/LC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.418 27 GHz -18.664 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
<p>802.11n(HT20)/MC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.443 57 GHz -20.882 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
<p>802.11n(HT20)/HC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.456 80 GHz -21.025 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>

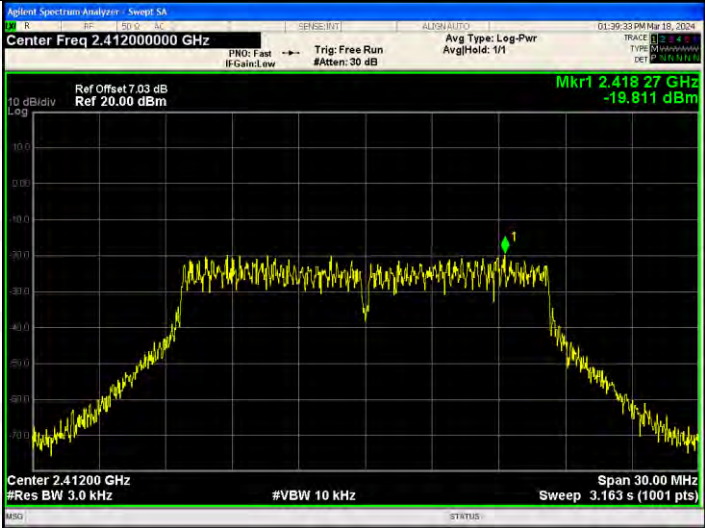
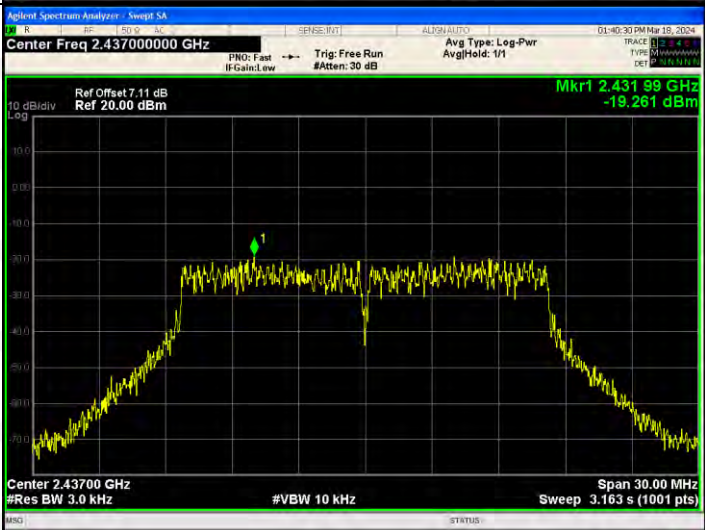

<p>802.11n(HT40)/LC H</p>	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.422000000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.419 78 GHz -25.359 dBm Center 2.42200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)</p>
<p>802.11n(HT40)/MC H</p>	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.437000000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.445 70 GHz -24.646 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)</p>
<p>802.11n(HT40)/HC H</p>	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.452000000 GHz Ref Offset 7.2 dB Ref 20.00 dBm Mkr1 2.455 72 GHz -24.914 dBm Center 2.45200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)</p>

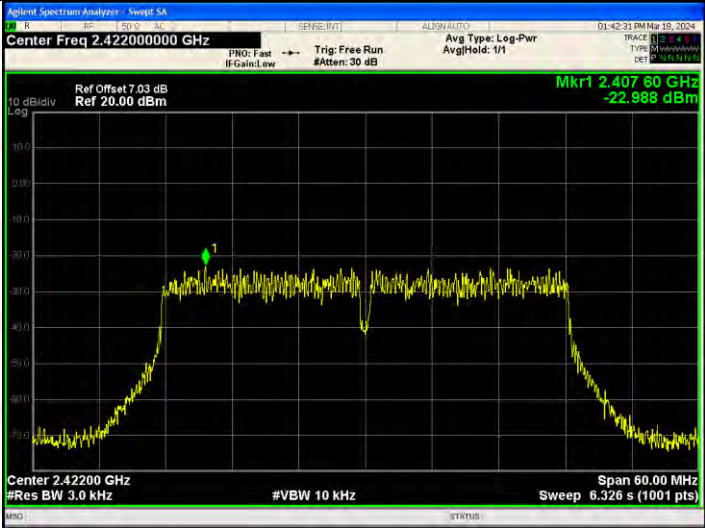

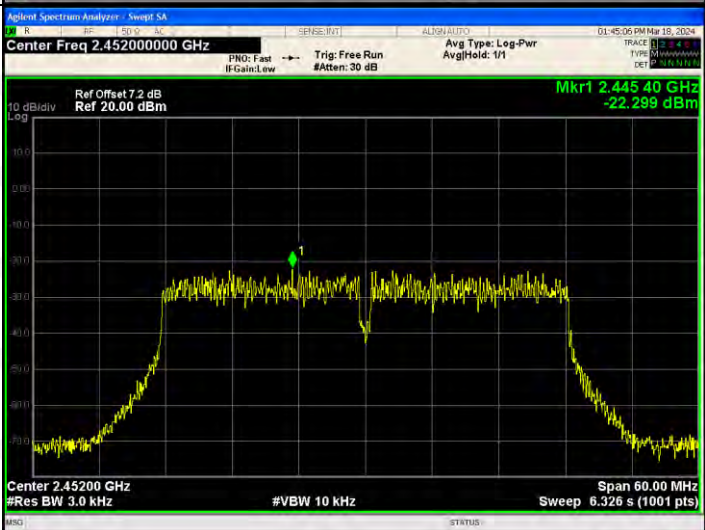
**ANT 2:  
Test Graph**

Graphs	
802.11b /LCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.41185 GHz -15.996 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b /MCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.43682 GHz -15.620 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b/HCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.46278 GHz -15.734 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>

<p>802.11g/LCH</p>		
<p>802.11g/MCH</p>		
<p>802.11g/HCH</p>		


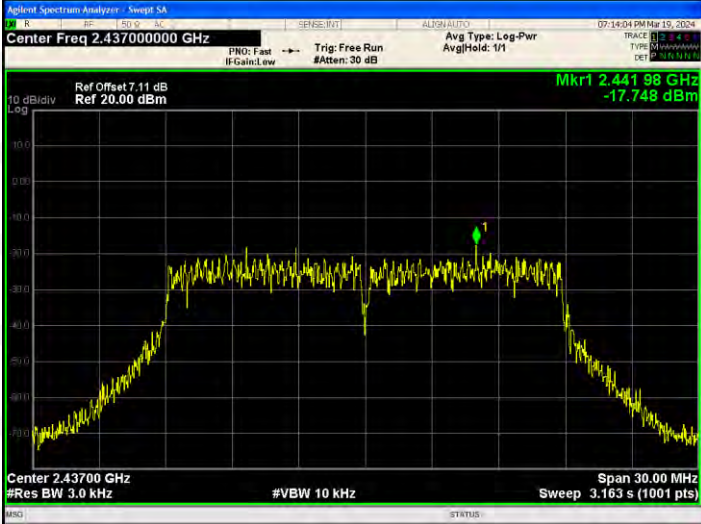



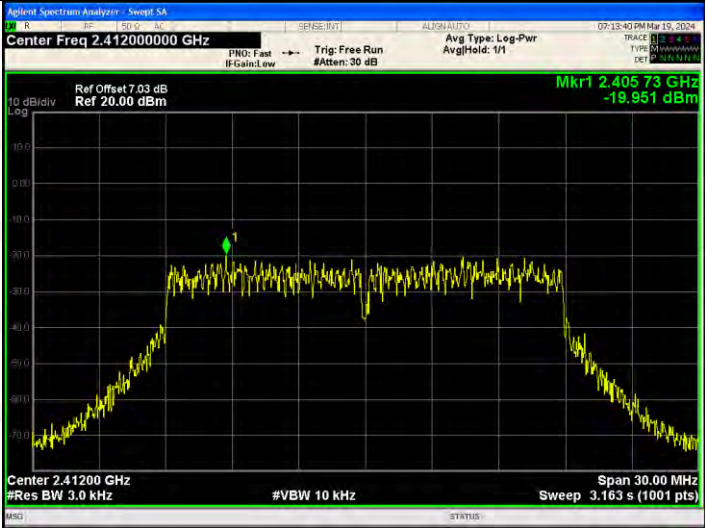


<p>802.11n(HT20)/LC H</p>		
<p>802.11n(HT20)/MC H</p>		
<p>802.11n(HT20)/HC H</p>		

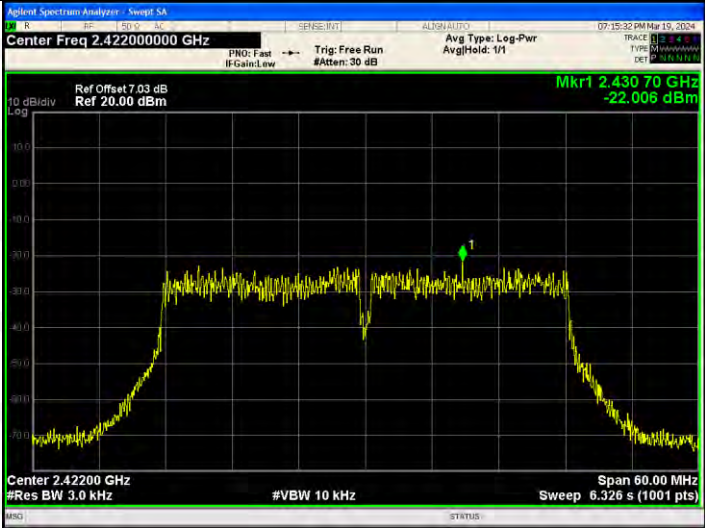


<p>802.11n(HT40)/LC H</p>		
<p>802.11n(HT40)/MC H</p>		
<p>802.11n(HT40)/HC H</p>		

**ANT3:  
Test Graph**

Graphs	
802.11b /LCH	<p>Agilent Spectrum Analyzer - Swept SA          Center Freq 2.41200000 GHz          Ref Offset 7.03 dB          Ref 20.00 dBm          Mkr1 2.410 14 GHz          -16.436 dBm          Center 2.41200 GHz          #Res BW 3.0 kHz #VBW 10 kHz          Span 30.00 MHz          Sweep 3.163 s (1001 pts)</p>
802.11b /MCH	<p>Agilent Spectrum Analyzer - Swept SA          Center Freq 2.43700000 GHz          Ref Offset 7.11 dB          Ref 20.00 dBm          Mkr1 2.438 74 GHz          -15.296 dBm          Center 2.43700 GHz          #Res BW 3.0 kHz #VBW 10 kHz          Span 30.00 MHz          Sweep 3.163 s (1001 pts)</p>
802.11b/HCH	<p>Agilent Spectrum Analyzer - Swept SA          Center Freq 2.46200000 GHz          Ref Offset 7.21 dB          Ref 20.00 dBm          Mkr1 2.463 74 GHz          -14.883 dBm          Center 2.46200 GHz          #Res BW 3.0 kHz #VBW 10 kHz          Span 30.00 MHz          Sweep 3.163 s (1001 pts)</p>

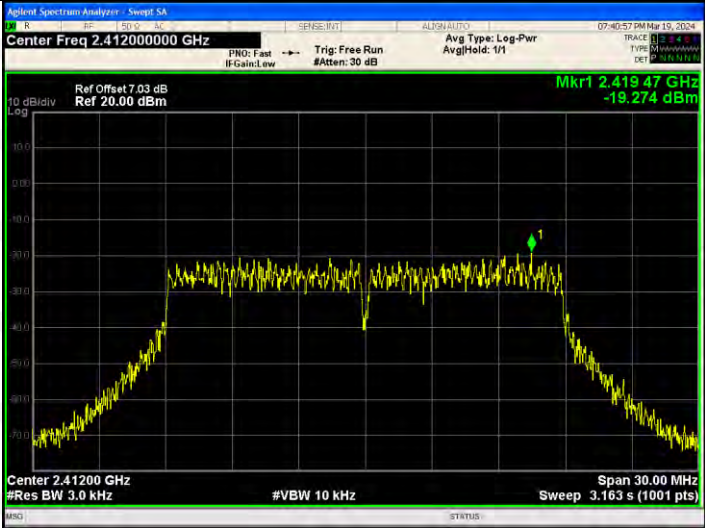


<p>802.11g/LCH</p>		
<p>802.11g/MCH</p>		
<p>802.11g/HCH</p>		

<p>802.11n(HT20)/LC H</p>		
<p>802.11n(HT20)/MC H</p>		
<p>802.11n(HT20)/HC H</p>		

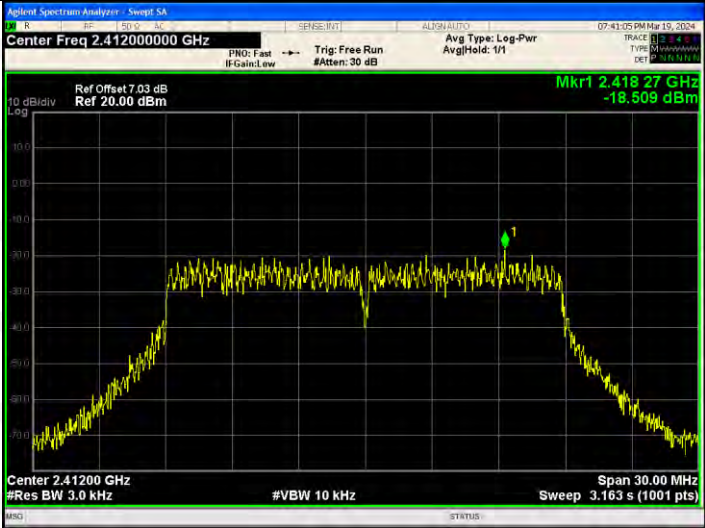


<p>802.11n(HT40)/LC H</p>		
<p>802.11n(HT40)/MC H</p>		
<p>802.11n(HT40)/HC H</p>		

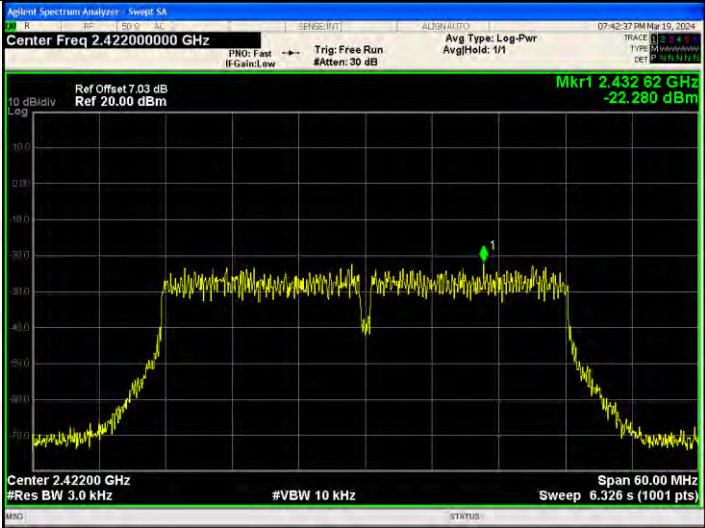


**ANT 4:  
Test Graph**

Graphs	
802.11b /LCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.41185 GHz -15.560 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b /MCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.43739 GHz -16.434 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
802.11b/HCH	<p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.46017 GHz -15.644 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>

<p>802.11g/LCH</p>		
<p>802.11g/MCH</p>		
<p>802.11g/HCH</p>		



<p>802.11n(HT20)/LC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.418 27 GHz -18.509 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
<p>802.11n(HT20)/MC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.430 13 GHz -19.236 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>
<p>802.11n(HT20)/HC H</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.456 89 GHz -19.750 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)</p>

<p>802.11n(HT40)/LC H</p>		
<p>802.11n(HT40)/MC H</p>		
<p>802.11n(HT40)/HC H</p>		

## 12. ANTENNA REQUIREMENT

### 15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

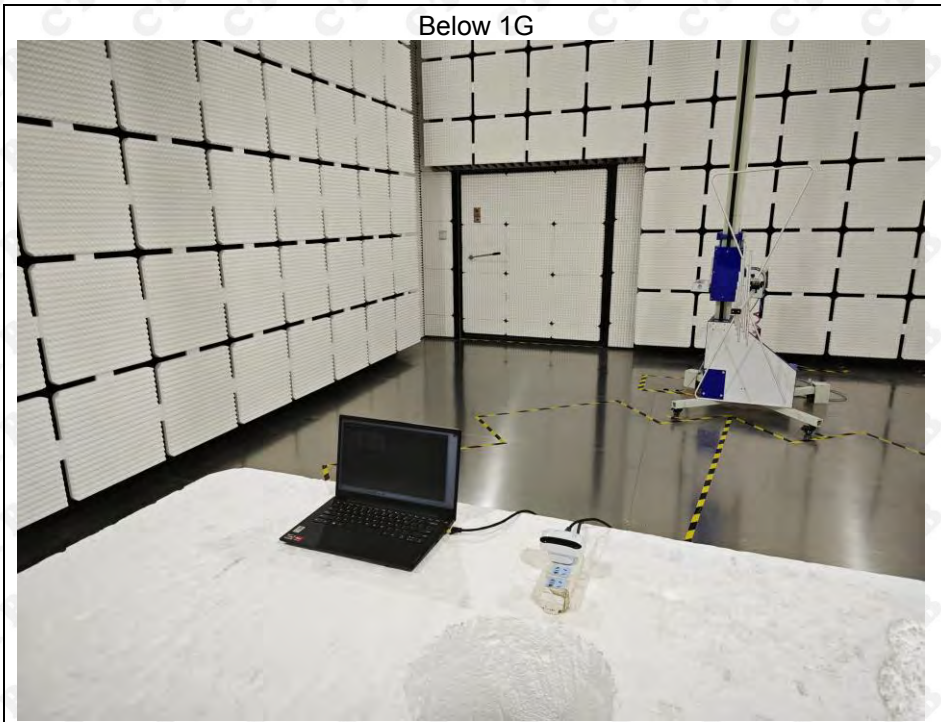
### EUT Antenna:

The antenna is PCB antenna and no consideration of replacement. The best case gain of the antenna is WiFi (2.4G): Ant1: 1.44dBi, Ant2: 1.44dBi, Ant3: 1.44dBi, Ant4: 1.44dBi.

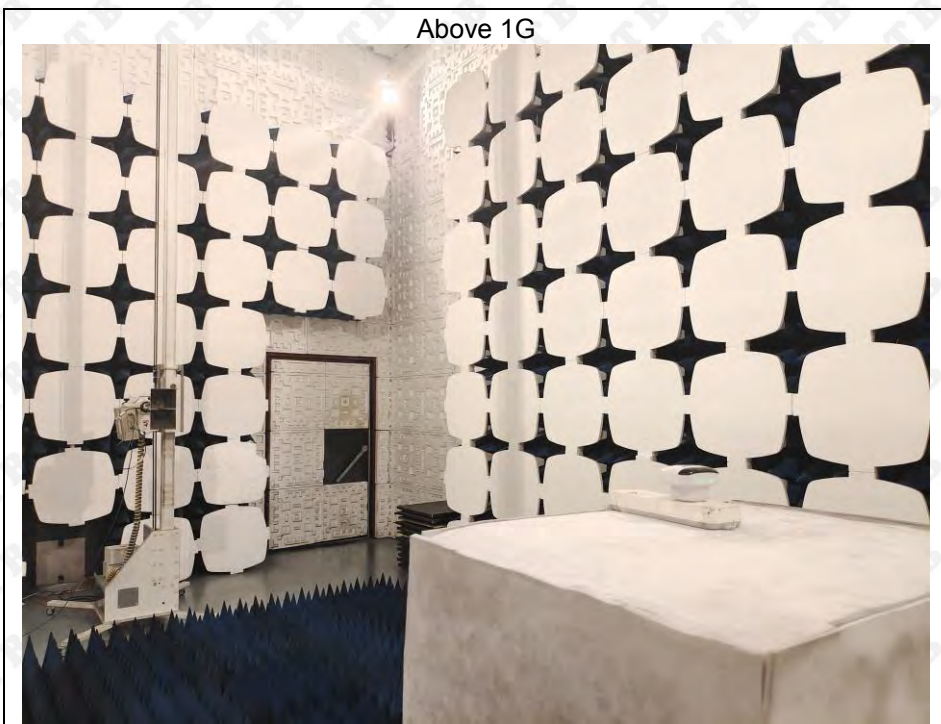
### 13. EUT TEST SETUP PHOTOGRAPHS

#### Radiated Emission

Below 1G



Above 1G



## Conducted Emission



\*\*\*\*\* END OF REPORT \*\*\*\*\*