

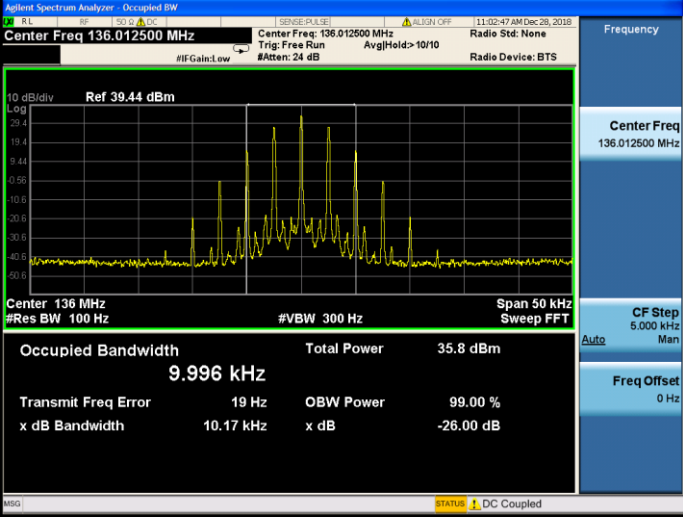
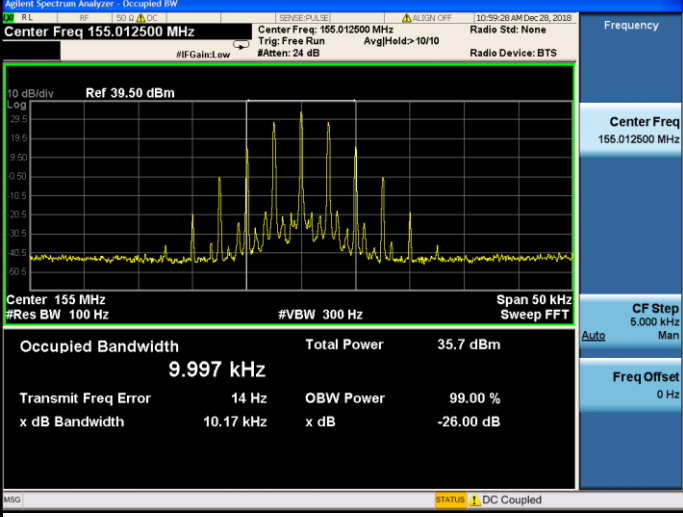
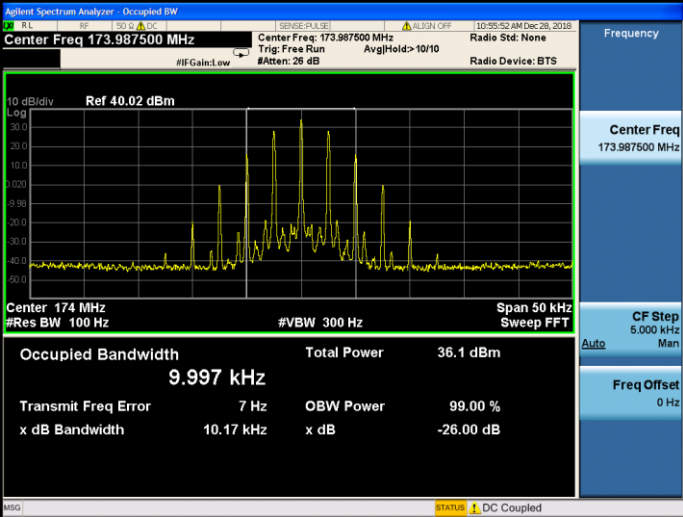


Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH _L	Agilent Spectrum Analyzer - Occupied BW Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None Trig: Free Run AvgHld: 10/10 Radio Device: BTS #IF Gain: Low #Atten: 20 dB 10 dB/div Ref 35.38 dBm Center 136 MHz Span 50 kHz #Res BW 100 Hz #VBW 300 Hz Sweep FFT Occupied Bandwidth 7.851 kHz Total Power 36.7 dBm Transmit Freq Error -99 Hz OBW Power 99.00 % x dB Bandwidth 9.934 kHz x dB -26.00 dB MSG STATUS DC Coupled
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Radio Std: None Trig: Free Run AvgHld: 10/10 Radio Device: BTS #IF Gain: Low #Atten: 22 dB 10 dB/div Ref 36.91 dBm Center 155 MHz Span 50 kHz #Res BW 100 Hz #VBW 300 Hz Sweep FFT Occupied Bandwidth 8.010 kHz Total Power 37.9 dBm Transmit Freq Error -23 Hz OBW Power 99.00 % x dB Bandwidth 10.38 kHz x dB -26.00 dB MSG STATUS DC Coupled
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 173.987500 MHz Center Freq: 173.987500 MHz Radio Std: None Trig: Free Run AvgHld: 10/10 Radio Device: BTS #IF Gain: Low #Atten: 24 dB 10 dB/div Ref 38.06 dBm Center 174 MHz Span 50 kHz #Res BW 100 Hz #VBW 300 Hz Sweep FFT Occupied Bandwidth 7.833 kHz Total Power 38.6 dBm Transmit Freq Error -34 Hz OBW Power 99.00 % x dB Bandwidth 9.845 kHz x dB -26.00 dB MSG STATUS DC Coupled



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _L	
TX-ANH	FM	CH _{M2}	
TX-ANH	FM	CH _H	



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANL	FM	CH _L	Agilent Spectrum Analyzer - Occupied BW Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Trig: Free Run AvgHld: >10/10 Radio Std: None Radio Device: BTS #IF Gain: Low #Atten: 20 dB Ref 34.27 dBm 10 dB/div L 9.9 24.3 14.3 4.27 -5.73 -15.7 -25.7 -35.7 -45.7 -55.7 Center 136 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 9.991 kHz Total Power 30.7 dBm Transmit Freq Error 31 Hz OBW Power 99.00 % x dB Bandwidth 10.17 kHz x dB -26.00 dB MSG STATUS DC Coupled
TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Trig: Free Run AvgHld: >10/10 Radio Std: None Radio Device: BTS #IF Gain: Low #Atten: 20 dB Ref 35.16 dBm 10 dB/div L 9.9 25.2 15.2 4.84 -5.16 -15.2 -25.2 -35.2 -45.2 -55.2 Center 155 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 9.996 kHz Total Power 31.4 dBm Transmit Freq Error 19 Hz OBW Power 99.00 % x dB Bandwidth 10.17 kHz x dB -26.00 dB MSG STATUS DC Coupled
TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 173.987500 MHz Center Freq: 173.987500 MHz Trig: Free Run AvgHld: >10/10 Radio Std: None Radio Device: BTS #IF Gain: Low #Atten: 20 dB Ref 35.88 dBm 10 dB/div L 9.9 25.9 15.9 4.12 -5.88 -15.9 -25.9 -35.9 -45.9 -55.9 Center 174 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 9.997 kHz Total Power 32.0 dBm Transmit Freq Error 12 Hz OBW Power 99.00 % x dB Bandwidth 10.17 kHz x dB -26.00 dB MSG STATUS DC Coupled



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIAS OFF 01:56:26 PM Dec 28, 2018 Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Center 136 MHz Span 120 kHz Total Power Ref 35.54 dBm 0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.42</td><td>(-1.49)</td><td>0.0</td><td>35.42</td><td>(-1.49)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.42</td><td>(-4.43)</td><td>-12.15 k</td><td>-36.64</td><td>(-4.28)</td><td>12.20 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-38.48</td><td>(-18.48)</td><td>-12.50 k</td><td>-38.11</td><td>(-18.11)</td><td>12.50 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <MASK D.state> recalled (STATUS) Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.42	(-1.49)	0.0	35.42	(-1.49)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.42	(-4.43)	-12.15 k	-36.64	(-4.28)	12.20 k	12.50 kHz	60.00 kHz	100.0 Hz	-38.48	(-18.48)	-12.50 k	-38.11	(-18.11)	12.50 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.42	(-1.49)	0.0	35.42	(-1.49)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-36.42	(-4.43)	-12.15 k	-36.64	(-4.28)	12.20 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-38.48	(-18.48)	-12.50 k	-38.11	(-18.11)	12.50 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIAS OFF 01:57:07 PM Dec 28, 2018 Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Center 136 MHz Span 120 kHz Total Power Ref 38.68 dBm 0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>26.62</td><td>(-10.29)</td><td>-800.0</td><td>27.00</td><td>(-9.91)</td><td>700.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.67</td><td>(-5.13)</td><td>-12.50 k</td><td>-39.57</td><td>(-5.03)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.47</td><td>(-16.47)</td><td>-13.25 k</td><td>-37.63</td><td>(-17.63)</td><td>12.85 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <Temp.png> saved (STATUS) Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	26.62	(-10.29)	-800.0	27.00	(-9.91)	700.0	5.625 kHz	12.50 kHz	100.0 Hz	-39.67	(-5.13)	-12.50 k	-39.57	(-5.03)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.47	(-16.47)	-13.25 k	-37.63	(-17.63)	12.85 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	26.62	(-10.29)	-800.0	27.00	(-9.91)	700.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-39.67	(-5.13)	-12.50 k	-39.57	(-5.03)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-36.47	(-16.47)	-13.25 k	-37.63	(-17.63)	12.85 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIAS OFF 01:47:04 PM Dec 28, 2018 Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Center 155 MHz Span 120 kHz Total Power Ref 35.63 dBm 0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.40</td><td>(-1.51)</td><td>0.0</td><td>35.47</td><td>(-1.44)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.39</td><td>(-8.05)</td><td>-12.20 k</td><td>-41.76</td><td>(-7.60)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-39.81</td><td>(-19.81)</td><td>-15.75 k</td><td>-39.26</td><td>(-19.26)</td><td>15.80 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <MASK D.state> recalled (STATUS) Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.40	(-1.51)	0.0	35.47	(-1.44)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-40.39	(-8.05)	-12.20 k	-41.76	(-7.60)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-39.81	(-19.81)	-15.75 k	-39.26	(-19.26)	15.80 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.40	(-1.51)	0.0	35.47	(-1.44)	50.00																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-40.39	(-8.05)	-12.20 k	-41.76	(-7.60)	12.45 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-39.81	(-19.81)	-15.75 k	-39.26	(-19.26)	15.80 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 155.012500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 155 MHz Span 120 kHz Total Power Ref 39.23 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>24.53</td><td>(-12.38)</td><td>-450.0</td><td>27.70</td><td>(-9.22)</td><td>1.650 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-35.62</td><td>(-4.37)</td><td>-12.05 k</td><td>-39.72</td><td>(-5.20)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.97</td><td>(-17.97)</td><td>-13.45 k</td><td>-36.20</td><td>(-16.20)</td><td>12.95 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	24.53	(-12.38)	-450.0	27.70	(-9.22)	1.650 k	5.625 kHz	12.50 kHz	100.0 Hz	-35.62	(-4.37)	-12.05 k	-39.72	(-5.20)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.97	(-17.97)	-13.45 k	-36.20	(-16.20)	12.95 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	24.53	(-12.38)	-450.0	27.70	(-9.22)	1.650 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-35.62	(-4.37)	-12.05 k	-39.72	(-5.20)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.97	(-17.97)	-13.45 k	-36.20	(-16.20)	12.95 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 173.987500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 174 MHz Span 120 kHz Total Power Ref 35.77 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.63</td><td>(-1.52)</td><td>0.0</td><td>35.69</td><td>(-1.46)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.36</td><td>(-6.06)</td><td>-12.50 k</td><td>-42.92</td><td>(-8.63)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-38.38</td><td>(-18.38)</td><td>-15.40 k</td><td>-38.64</td><td>(-18.64)</td><td>15.00 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.63	(-1.52)	0.0	35.69	(-1.46)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-40.36	(-6.06)	-12.50 k	-42.92	(-8.63)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-38.38	(-18.38)	-15.40 k	-38.64	(-18.64)	15.00 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.63	(-1.52)	0.0	35.69	(-1.46)	50.00																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-40.36	(-6.06)	-12.50 k	-42.92	(-8.63)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-38.38	(-18.38)	-15.40 k	-38.64	(-18.64)	15.00 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 173.987500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 174 MHz Span 120 kHz Total Power Ref 39.13 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>24.92</td><td>(-12.23)</td><td>0.0</td><td>25.47</td><td>(-11.68)</td><td>350.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-38.25</td><td>(-6.14)</td><td>-12.20 k</td><td>-36.79</td><td>(-3.23)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.96</td><td>(-15.96)</td><td>-12.70 k</td><td>-37.66</td><td>(-17.66)</td><td>14.30 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	24.92	(-12.23)	0.0	25.47	(-11.68)	350.0	5.625 kHz	12.50 kHz	100.0 Hz	-38.25	(-6.14)	-12.20 k	-36.79	(-3.23)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.96	(-15.96)	-12.70 k	-37.66	(-17.66)	14.30 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	24.92	(-12.23)	0.0	25.47	(-11.68)	350.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-38.25	(-6.14)	-12.20 k	-36.79	(-3.23)	12.40 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-35.96	(-15.96)	-12.70 k	-37.66	(-17.66)	14.30 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNL	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 136.012500 MHz Trig: Free Run #Atten: 40 dB Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 36.0 dBm 10 dB/div Log 26.0 16.0 6.0 4.0 14.0 34.0 54.0 Center 136 MHz Span 120 kHz Total Power Ref 30.36 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>30.08</td><td>(-1.50)</td><td>0.0</td><td>30.12</td><td>(-1.46)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-45.71</td><td>(-8.03)</td><td>-12.20 k</td><td>-45.40</td><td>(-7.00)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-43.01</td><td>(-23.01)</td><td>-13.05 k</td><td>-42.70</td><td>(-22.70)</td><td>13.10 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Man Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	30.08	(-1.50)	0.0	30.12	(-1.46)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-45.71	(-8.03)	-12.20 k	-45.40	(-7.00)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-43.01	(-23.01)	-13.05 k	-42.70	(-22.70)	13.10 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	30.08	(-1.50)	0.0	30.12	(-1.46)	50.00																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-45.71	(-8.03)	-12.20 k	-45.40	(-7.00)	12.30 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-43.01	(-23.01)	-13.05 k	-42.70	(-22.70)	13.10 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNL	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 136.012500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 36.0 dBm 10 dB/div Log 26.0 16.0 6.0 4.0 14.0 34.0 54.0 Center 136 MHz Span 120 kHz Total Power Ref 33.44 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>20.11</td><td>(-11.48)</td><td>-1.800 k</td><td>20.89</td><td>(-10.70)</td><td>1.700 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-44.99</td><td>(-5.14)</td><td>-12.50 k</td><td>-43.76</td><td>(-4.63)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.68</td><td>(-21.68)</td><td>-16.05 k</td><td>-41.31</td><td>(-21.31)</td><td>12.50 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Man Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	20.11	(-11.48)	-1.800 k	20.89	(-10.70)	1.700 k	5.625 kHz	12.50 kHz	100.0 Hz	-44.99	(-5.14)	-12.50 k	-43.76	(-4.63)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.68	(-21.68)	-16.05 k	-41.31	(-21.31)	12.50 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	20.11	(-11.48)	-1.800 k	20.89	(-10.70)	1.700 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-44.99	(-5.14)	-12.50 k	-43.76	(-4.63)	12.40 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-41.68	(-21.68)	-16.05 k	-41.31	(-21.31)	12.50 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 155.012500 MHz Trig: Free Run #Atten: 40 dB Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 37.0 dBm 10 dB/div Log 27.0 17.0 7.0 3.0 13.0 43.0 63.0 Center 155 MHz Span 120 kHz Total Power Ref 31.67 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>31.06</td><td>(-1.50)</td><td>0.0</td><td>31.11</td><td>(-1.45)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-44.31</td><td>(-5.43)</td><td>-12.50 k</td><td>-41.34</td><td>(-5.73)</td><td>12.05 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-43.82</td><td>(-23.82)</td><td>-12.95 k</td><td>-43.20</td><td>(-23.20)</td><td>14.05 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Man Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	31.06	(-1.50)	0.0	31.11	(-1.45)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-44.31	(-5.43)	-12.50 k	-41.34	(-5.73)	12.05 k	12.50 kHz	60.00 kHz	100.0 Hz	-43.82	(-23.82)	-12.95 k	-43.20	(-23.20)	14.05 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	31.06	(-1.50)	0.0	31.11	(-1.45)	50.00																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-44.31	(-5.43)	-12.50 k	-41.34	(-5.73)	12.05 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-43.82	(-23.82)	-12.95 k	-43.20	(-23.20)	14.05 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 Center Freq 155.012500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 37.0 dBm IF Gain: Low #Atten: 40 dB PASS 10 dB/div Log 27.0 17.0 7.0 3.0 13.0 23.0 33.0 43.0 53.0 Center 155 MHz Span 120 kHz Total Power Ref 34.60 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>21.29</td><td>(-11.27)</td><td>-1.300 k</td><td>22.73</td><td>(-9.83)</td><td>800.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-42.22</td><td>(-4.80)</td><td>-12.30 k</td><td>-43.05</td><td>(-4.18)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-40.75</td><td>(-20.75)</td><td>-16.35 k</td><td>-40.75</td><td>(-20.75)</td><td>14.60 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <Temp.png> saved STATUS Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	21.29	(-11.27)	-1.300 k	22.73	(-9.83)	800.0	5.625 kHz	12.50 kHz	100.0 Hz	-42.22	(-4.80)	-12.30 k	-43.05	(-4.18)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-40.75	(-20.75)	-16.35 k	-40.75	(-20.75)	14.60 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	21.29	(-11.27)	-1.300 k	22.73	(-9.83)	800.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-42.22	(-4.80)	-12.30 k	-43.05	(-4.18)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-40.75	(-20.75)	-16.35 k	-40.75	(-20.75)	14.60 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 Center Freq 173.987500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 37.0 dBm IF Gain: Low #Atten: 40 dB PASS 10 dB/div Log 27.0 17.0 7.0 3.0 13.0 23.0 33.0 43.0 53.0 Center 174 MHz Span 120 kHz Total Power Ref 32.08 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>31.83</td><td>(-1.46)</td><td>0.0</td><td>31.89</td><td>(-1.41)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.11</td><td>(-1.33)</td><td>-12.45 k</td><td>-39.39</td><td>(-1.61)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-42.69</td><td>(22.69)</td><td>-14.30 k</td><td>-42.89</td><td>(22.89)</td><td>14.35 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <MASK D.state> recalled STATUS Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	31.83	(-1.46)	0.0	31.89	(-1.41)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-39.11	(-1.33)	-12.45 k	-39.39	(-1.61)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-42.69	(22.69)	-14.30 k	-42.89	(22.89)	14.35 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	31.83	(-1.46)	0.0	31.89	(-1.41)	50.00																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-39.11	(-1.33)	-12.45 k	-39.39	(-1.61)	12.45 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-42.69	(22.69)	-14.30 k	-42.89	(22.89)	14.35 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 Center Freq 173.987500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS Ref Offset 26 dB Ref 37.0 dBm IF Gain: Low #Atten: 40 dB PASS 10 dB/div Log 27.0 17.0 7.0 3.0 13.0 23.0 33.0 43.0 53.0 Center 174 MHz Span 120 kHz Total Power Ref 35.04 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>21.86</td><td>(-11.44)</td><td>-350.0</td><td>22.12</td><td>(-11.18)</td><td>1.700 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.84</td><td>(-4.60)</td><td>-12.10 k</td><td>-41.22</td><td>(-3.80)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-40.45</td><td>(-20.45)</td><td>-14.00 k</td><td>-38.84</td><td>(-18.84)</td><td>13.15 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> File <Temp.png> saved STATUS Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	21.86	(-11.44)	-350.0	22.12	(-11.18)	1.700 k	5.625 kHz	12.50 kHz	100.0 Hz	-39.84	(-4.60)	-12.10 k	-41.22	(-3.80)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-40.45	(-20.45)	-14.00 k	-38.84	(-18.84)	13.15 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	21.86	(-11.44)	-350.0	22.12	(-11.18)	1.700 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-39.84	(-4.60)	-12.10 k	-41.22	(-3.80)	12.40 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-40.45	(-20.45)	-14.00 k	-38.84	(-18.84)	13.15 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 136 MHz Span 120 kHz Total Power Ref 35.36 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>Peak</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.28</td><td>(-1.58)</td><td>0.0</td><td>35.28</td><td>(-1.58)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-41.30</td><td>(-6.72)</td><td>-12.50 k</td><td>-43.95</td><td>(-9.37)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-40.67</td><td>(-20.67)</td><td>-14.75 k</td><td>-40.39</td><td>(-20.39)</td><td>14.80 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <MASK D.state> recalled Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.28	(-1.58)	0.0	35.28	(-1.58)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-41.30	(-6.72)	-12.50 k	-43.95	(-9.37)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-40.67	(-20.67)	-14.75 k	-40.39	(-20.39)	14.80 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.28	(-1.58)	0.0	35.28	(-1.58)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-41.30	(-6.72)	-12.50 k	-43.95	(-9.37)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-40.67	(-20.67)	-14.75 k	-40.39	(-20.39)	14.80 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 136 MHz Span 120 kHz Total Power Ref 35.40 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>Peak</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>33.41</td><td>(-3.44)</td><td>0.0</td><td>33.41</td><td>(-3.44)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-34.84</td><td>(-0.62)</td><td>-12.45 k</td><td>-35.96</td><td>(-1.38)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.86</td><td>(-15.86)</td><td>-12.50 k</td><td>-36.01</td><td>(-16.01)</td><td>12.55 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <Temp.png> saved Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	33.41	(-3.44)	0.0	33.41	(-3.44)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-34.84	(-0.62)	-12.45 k	-35.96	(-1.38)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.86	(-15.86)	-12.50 k	-36.01	(-16.01)	12.55 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	33.41	(-3.44)	0.0	33.41	(-3.44)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-34.84	(-0.62)	-12.45 k	-35.96	(-1.38)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-35.86	(-15.86)	-12.50 k	-36.01	(-16.01)	12.55 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANH	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Radio Std: None Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 26 dB Ref 41.0 dBm Center 155 MHz Span 120 kHz Total Power Ref 35.48 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>Peak</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.45</td><td>(-1.54)</td><td>0.0</td><td>35.45</td><td>(-1.54)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-43.64</td><td>(-11.38)</td><td>-12.20 k</td><td>-44.66</td><td>(-11.31)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.46</td><td>(-17.46)</td><td>-13.55 k</td><td>-37.50</td><td>(-17.50)</td><td>13.55 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <MASK D.state> recalled Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.45	(-1.54)	0.0	35.45	(-1.54)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-43.64	(-11.38)	-12.20 k	-44.66	(-11.31)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.46	(-17.46)	-13.55 k	-37.50	(-17.50)	13.55 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.45	(-1.54)	0.0	35.45	(-1.54)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-43.64	(-11.38)	-12.20 k	-44.66	(-11.31)	12.35 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.46	(-17.46)	-13.55 k	-37.50	(-17.50)	13.55 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Ref Offset 26 dB Ref 41.0 dBm IF Gain: Low Radio Std: None Radio Device: BTS Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz 10 dB/div Log



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANL	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 11:04:47 AM Dec 26, 2018 Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS 10 dB/div Ref Offset 26 dB Ref 36.0 dBm Log 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 -5.0 -10.0 -15.0 -20.0 -25.0 -30.0 -35.0 -40.0 -45.0 -50.0 Center 136 MHz Span 120 kHz Total Power Ref 30.87 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>30.34</td><td>(-1.43)</td><td>0.0</td><td>30.34</td><td>(-1.43)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-46.16</td><td>(-6.50)</td><td>-12.50 k</td><td>-48.77</td><td>(-9.10)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.69</td><td>(-21.69)</td><td>-14.30 k</td><td>-41.81</td><td>(-21.81)</td><td>14.35 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <MASK D.state> recalled (STATUS) Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	30.34	(-1.43)	0.0	30.34	(-1.43)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-46.16	(-6.50)	-12.50 k	-48.77	(-9.10)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.69	(-21.69)	-14.30 k	-41.81	(-21.81)	14.35 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
			Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																							
			0.0 Hz	5.625 kHz	100.0 Hz	30.34	(-1.43)	0.0	30.34	(-1.43)	0.0																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-46.16	(-6.50)	-12.50 k	-48.77	(-9.10)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-41.69	(-21.69)	-14.30 k	-41.81	(-21.81)	14.35 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 11:05:09 AM Dec 26, 2018 Center Freq 136.012500 MHz Center Freq: 136.012500 MHz Radio Std: None IF Gain: Low Trig: Free Run #Atten: 40 dB Avg: 100.00% of 10 Radio Device: BTS 10 dB/div Ref Offset 26 dB Ref 36.0 dBm Log 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 -5.0 -10.0 -15.0 -20.0 -25.0 -30.0 -35.0 -40.0 -45.0 -50.0 Center 136 MHz Span 120 kHz Total Power Ref 30.78 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>28.46</td><td>(-3.31)</td><td>0.0</td><td>28.48</td><td>(-3.29)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.93</td><td>(-1.63)</td><td>-12.45 k</td><td>-40.41</td><td>(-0.74)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.28</td><td>(-21.28)</td><td>-12.50 k</td><td>-42.21</td><td>(-22.21)</td><td>16.40 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <Temp.png> saved (STATUS) Frequency Center Freq 136.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	28.46	(-3.31)	0.0	28.48	(-3.29)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-40.93	(-1.63)	-12.45 k	-40.41	(-0.74)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.28	(-21.28)	-12.50 k	-42.21	(-22.21)	16.40 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
			Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																							
			0.0 Hz	5.625 kHz	100.0 Hz	28.46	(-3.31)	0.0	28.48	(-3.29)	50.00																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-40.93	(-1.63)	-12.45 k	-40.41	(-0.74)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-41.28	(-21.28)	-12.50 k	-42.21	(-22.21)	16.40 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 11:01:49 AM Dec 26, 2018 Center Freq 155.012500 MHz Center Freq: 155.012500 MHz Radio Std: None IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS 10 dB/div Ref Offset 26 dB Ref 37.0 dBm Log 37.0 32.0 27.0 22.0 17.0 12.0 7.0 2.0 -3.0 -8.0 -13.0 -18.0 -23.0 -28.0 -33.0 -38.0 -43.0 -48.0 -53.0 Center 155 MHz Span 120 kHz Total Power Ref 31.53 dBm 0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak > dBm</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>31.22</td><td>(-1.47)</td><td>0.0</td><td>31.26</td><td>(-1.43)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-42.00</td><td>(-3.62)</td><td>-12.45 k</td><td>-42.17</td><td>(-3.43)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-42.06</td><td>(-22.06)</td><td>-12.85 k</td><td>-42.63</td><td>(-22.63)</td><td>12.90 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> File <MASK D.state> recalled (STATUS) Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	31.22	(-1.47)	0.0	31.26	(-1.43)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-42.00	(-3.62)	-12.45 k	-42.17	(-3.43)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-42.06	(-22.06)	-12.85 k	-42.63	(-22.63)	12.90 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
			Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																							
			0.0 Hz	5.625 kHz	100.0 Hz	31.22	(-1.47)	0.0	31.26	(-1.43)	50.00																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-42.00	(-3.62)	-12.45 k	-42.17	(-3.43)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-42.06	(-22.06)	-12.85 k	-42.63	(-22.63)	12.90 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 155.012500 MHz Trig: Free Run Radio Std: None Radio Device: BTS 11:02:11 AM Dec 28, 2018 10 dB/div Log Ref Offset 26 dB Ref 37.0 dBm Center 155 MHz Span 120 kHz Total Power Ref 31.86 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak ></th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>29.37</td><td>(-3.32)</td><td>0.0</td><td>29.37</td><td>(-3.32)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.93</td><td>(-1.18)</td><td>-12.50 k</td><td>-40.00</td><td>(-1.26)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-39.52</td><td>(-19.52)</td><td>-12.50 k</td><td>-37.16</td><td>(-17.16)</td><td>12.50 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 155.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	29.37	(-3.32)	0.0	29.37	(-3.32)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-39.93	(-1.18)	-12.50 k	-40.00	(-1.26)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-39.52	(-19.52)	-12.50 k	-37.16	(-17.16)	12.50 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	29.37	(-3.32)	0.0	29.37	(-3.32)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-39.93	(-1.18)	-12.50 k	-40.00	(-1.26)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-39.52	(-19.52)	-12.50 k	-37.16	(-17.16)	12.50 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 173.987500 MHz Trig: Free Run Radio Std: None Radio Device: BTS 01:27:12 PM Jan 02, 2019 10 dB/div Log Ref Offset 26 dB Ref 41.0 dBm Center 174 MHz Span 120 kHz Total Power Ref 35.85 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak ></th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>35.76</td><td>(-1.60)</td><td>0.0</td><td>35.76</td><td>(-1.60)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-41.26</td><td>(-7.91)</td><td>-12.40 k</td><td>-41.19</td><td>(-8.07)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-38.02</td><td>(-18.02)</td><td>-16.65 k</td><td>-37.98</td><td>(-17.98)</td><td>15.10 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.76	(-1.60)	0.0	35.76	(-1.60)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-41.26	(-7.91)	-12.40 k	-41.19	(-8.07)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-38.02	(-18.02)	-16.65 k	-37.98	(-17.98)	15.10 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	35.76	(-1.60)	0.0	35.76	(-1.60)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-41.26	(-7.91)	-12.40 k	-41.19	(-8.07)	12.45 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-38.02	(-18.02)	-16.65 k	-37.98	(-17.98)	15.10 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 173.987500 MHz Trig: Free Run Radio Std: None Radio Device: BTS 01:27:34 PM Jan 02, 2019 10 dB/div Log Ref Offset 26 dB Ref 41.0 dBm Center 174 MHz Span 120 kHz Total Power Ref 35.88 dBm/0.0125 MHz <table><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>< Peak ></th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>33.90</td><td>(-3.47)</td><td>0.0</td><td>33.90</td><td>(-3.47)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.27</td><td>(-2.20)</td><td>-12.50 k</td><td>-40.754</td><td>(-2.66)</td><td>7.550 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-34.98</td><td>(-14.98)</td><td>-12.50 k</td><td>-34.73</td><td>(-14.73)</td><td>12.55 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 173.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	33.90	(-3.47)	0.0	33.90	(-3.47)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.27	(-2.20)	-12.50 k	-40.754	(-2.66)	7.550 k	12.50 kHz	60.00 kHz	100.0 Hz	-34.98	(-14.98)	-12.50 k	-34.73	(-14.73)	12.55 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak >	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	33.90	(-3.47)	0.0	33.90	(-3.47)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-36.27	(-2.20)	-12.50 k	-40.754	(-2.66)	7.550 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-34.98	(-14.98)	-12.50 k	-34.73	(-14.73)	12.55 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										

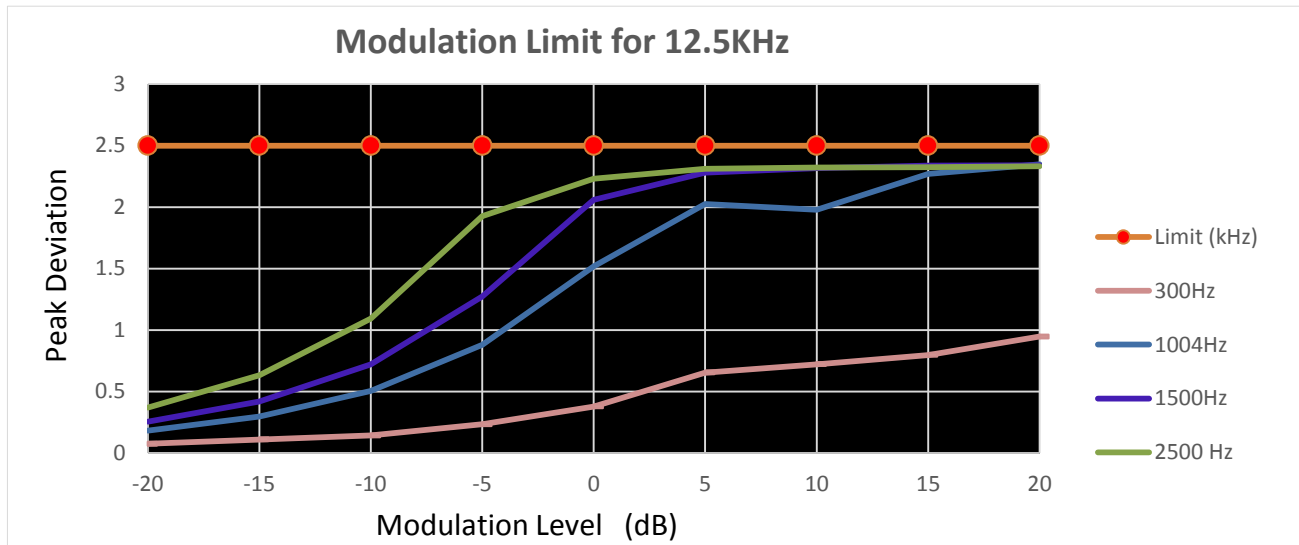
**Appendix D:Modulation Limit**

Operation Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak frequency deviation (kHz)				Limit (kHz)	Result
				300Hz	1004Hz	1500Hz	2500 Hz		
TX-ANH	FM	CH _{M2}	-20	0.075	0.183	0.256	0.37	2.5	PASS
TX-ANH	FM	CH _{M2}	-15	0.111	0.297	0.42	0.632	2.5	PASS
TX-ANH	FM	CH _{M2}	-10	0.143	0.505	0.721	1.093	2.5	PASS
TX-ANH	FM	CH _{M2}	-5	0.234	0.88	1.274	1.927	2.5	PASS
TX-ANH	FM	CH _{M2}	0	0.378	1.519	2.06	2.23	2.5	PASS
TX-ANH	FM	CH _{M2}	5	0.654	2.024	2.28	2.311	2.5	PASS
TX-ANH	FM	CH _{M2}	10	0.722	1.978	2.316	2.322	2.5	PASS
TX-ANH	FM	CH _{M2}	15	0.797	2.27	2.338	2.325	2.5	PASS
TX-ANH	FM	CH _{M2}	20	0.947	2.348	2.34	2.332	2.5	PASS



Appendix D:Modulation Limit

TEST PLOT RESULT



**Appendix E:Aduio Frequency Response**

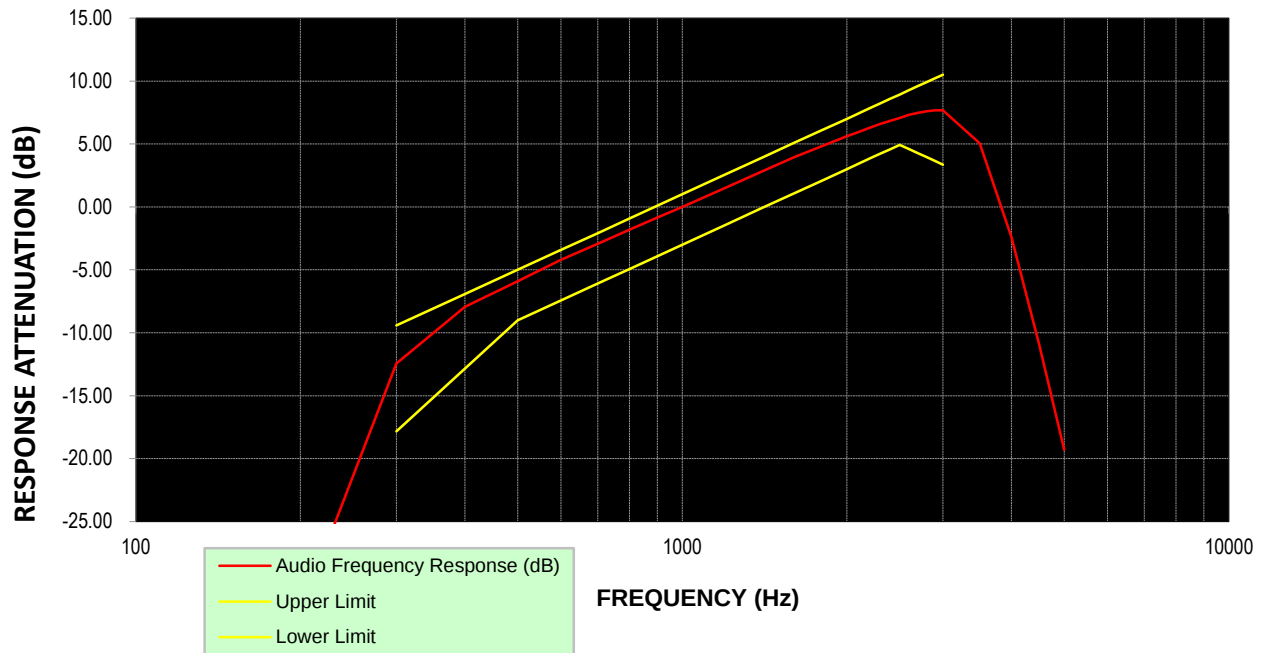
Operation Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-ANH	FM	CH _{M2}	100	-32.09	-	-	PASS
TX-ANH	FM	CH _{M2}	200	-32.25	-	-	PASS
TX-ANH	FM	CH _{M2}	300	-12.43	-17.84	-9.42	PASS
TX-ANH	FM	CH _{M2}	400	-7.94	-12.86	-6.93	PASS
TX-ANH	FM	CH _{M2}	500	-5.90	-9.00	-5.00	PASS
TX-ANH	FM	CH _{M2}	600	-4.20	-7.42	-3.42	PASS
TX-ANH	FM	CH _{M2}	700	-2.94	-6.09	-2.09	PASS
TX-ANH	FM	CH _{M2}	800	-1.81	-4.93	-0.93	PASS
TX-ANH	FM	CH _{M2}	900	-0.84	-3.91	0.09	PASS
TX-ANH	FM	CH _{M2}	1000	0.01	-3.00	1.00	PASS
TX-ANH	FM	CH _{M2}	1200	1.51	-1.42	2.58	PASS
TX-ANH	FM	CH _{M2}	1400	2.81	-0.09	3.91	PASS
TX-ANH	FM	CH _{M2}	1600	3.93	1.07	5.07	PASS
TX-ANH	FM	CH _{M2}	1800	4.83	2.09	6.09	PASS
TX-ANH	FM	CH _{M2}	2000	5.62	3.00	7.00	PASS
TX-ANH	FM	CH _{M2}	2100	5.96	3.42	7.42	PASS
TX-ANH	FM	CH _{M2}	2200	6.29	3.83	7.83	PASS
TX-ANH	FM	CH _{M2}	2300	6.58	4.21	8.21	PASS
TX-ANH	FM	CH _{M2}	2400	6.83	4.58	8.58	PASS
TX-ANH	FM	CH _{M2}	2500	7.08	4.93	8.93	PASS
TX-ANH	FM	CH _{M2}	2600	7.31	4.59	9.27	PASS
TX-ANH	FM	CH _{M2}	2700	7.48	4.27	9.60	PASS
TX-ANH	FM	CH _{M2}	2800	7.60	3.95	9.91	PASS
TX-ANH	FM	CH _{M2}	2900	7.68	3.65	10.22	PASS
TX-ANH	FM	CH _{M2}	3000	7.68	3.35	10.51	PASS
TX-ANH	FM	CH _{M2}	3500	5.06	-	-	PASS
TX-ANH	FM	CH _{M2}	4000	-2.40	-	-	PASS
TX-ANH	FM	CH _{M2}	4500	-10.96	-	-	PASS
TX-ANH	FM	CH _{M2}	5000	-19.31	-	-	PASS



Appendix E:Aduio Frequency Response

TEST PLOT RESULT

Aduio Freqeuncy Response For 12.5kHz



Note: The highest audio frequency response at 3kHz<3.125kHz, so meet the requirement.

**Appendix F:Frequency Stability Test & Temperature**

Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _L	CH _{M2}	CH _H		
TX-DNH	4FSK	V _N	-30	-0.079	<u>0.044</u>	-0.110	±5.0	PASS
TX-DNH	4FSK	V _N	-20	-0.066	0.035	-0.094	±5.0	PASS
TX-DNH	4FSK	V _N	-10	-0.059	0.028	-0.085	±5.0	PASS
TX-DNH	4FSK	V _N	0	-0.043	0.021	-0.063	±5.0	PASS
TX-DNH	4FSK	V _N	10	-0.034	0.011	-0.048	±5.0	PASS
TX-DNH	4FSK	V _N	20	-0.027	-0.003	-0.039	±5.0	PASS
TX-DNH	4FSK	V _N	30	-0.038	0.009	-0.059	±5.0	PASS
TX-DNH	4FSK	V _N	40	-0.046	0.018	-0.069	±5.0	PASS
TX-DNH	4FSK	V _N	55	-0.053	0.035	-0.079	±5.0	PASS
TX-DNL	4FSK	V _N	-30	-0.074	-0.060	-0.062	±5.0	PASS
TX-DNL	4FSK	V _N	-20	-0.060	-0.053	-0.055	±5.0	PASS
TX-DNL	4FSK	V _N	-10	-0.054	-0.045	-0.042	±5.0	PASS
TX-DNL	4FSK	V _N	0	-0.041	-0.035	-0.037	±5.0	PASS
TX-DNL	4FSK	V _N	10	-0.034	-0.026	-0.027	±5.0	PASS
TX-DNL	4FSK	V _N	20	-0.025	-0.021	-0.021	±5.0	PASS
TX-DNL	4FSK	V _N	30	-0.035	-0.031	-0.032	±5.0	PASS
TX-DNL	4FSK	V _N	40	-0.045	-0.039	-0.037	±5.0	PASS
TX-DNL	4FSK	V _N	55	-0.033	-0.028	-0.029	±5.0	PASS
TX-ANH	FM	V _N	-30	<u>0.252</u>	0.246	0.247	±5.0	PASS
TX-ANH	FM	V _N	-20	0.246	0.235	0.236	±5.0	PASS
TX-ANH	FM	V _N	-10	0.233	0.225	0.227	±5.0	PASS
TX-ANH	FM	V _N	0	0.226	0.219	0.221	±5.0	PASS
TX-ANH	FM	V _N	10	0.220	0.217	0.214	±5.0	PASS
TX-ANH	FM	V _N	20	0.208	0.203	0.205	±5.0	PASS
TX-ANH	FM	V _N	30	0.220	0.213	0.218	±5.0	PASS
TX-ANH	FM	V _N	40	0.227	0.222	0.221	±5.0	PASS
TX-ANH	FM	V _N	55	0.236	0.227	0.232	±5.0	PASS
TX-ANL	FM	V _N	-30	0.249	0.247	0.233	±5.0	PASS
TX-ANL	FM	V _N	-20	0.245	0.245	0.227	±5.0	PASS
TX-ANL	FM	V _N	-10	0.235	0.237	0.224	±5.0	PASS
TX-ANL	FM	V _N	0	0.234	0.226	0.217	±5.0	PASS
TX-ANL	FM	V _N	10	0.221	0.218	0.212	±5.0	PASS
TX-ANL	FM	V _N	20	0.213	0.210	0.200	±5.0	PASS
TX-ANL	FM	V _N	30	0.225	0.226	0.216	±5.0	PASS
TX-ANL	FM	V _N	40	0.231	0.233	0.223	±5.0	PASS
TX-ANL	FM	V _N	55	0.241	0.235	0.227	±5.0	PASS

**Appendix G:Frequency Stability Test & Voltage**

Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)			Limit (ppm)	Result
		Voltage	Temperature	CH _L	CH _{M2}	CH _H		
TX-DNH	4FSK	V _N	T _N	-0.027	-0.003	-0.039	±5.0	PASS
TX-DNH	4FSK	V _L	T _N	-0.076	-0.035	-0.074	±5.0	PASS
TX-DNH	4FSK	V _H	T _N	-0.047	-0.027	-0.061	±5.0	PASS
TX-DNL	4FSK	V _N	T _N	-0.071	-0.031	-0.088	±5.0	PASS
TX-DNL	4FSK	V _L	T _N	-0.056	-0.045	-0.072	±5.0	PASS
TX-DNL	4FSK	V _H	T _N	-0.045	-0.028	-0.062	±5.0	PASS
TX-ANH	FM	V _N	T _N	0.208	0.203	0.205	±5.0	PASS
TX-ANH	FM	V _L	T _N	0.245	0.242	0.240	±5.0	PASS
TX-ANH	FM	V _H	T _N	0.227	0.223	0.230	±5.0	PASS
TX-ANL	FM	V _N	T _N	0.245	0.253	0.248	±5.0	PASS
TX-ANL	FM	V _L	T _N	0.241	0.233	0.234	±5.0	PASS
TX-ANL	FM	V _H	T _N	0.231	0.222	0.229	±5.0	PASS

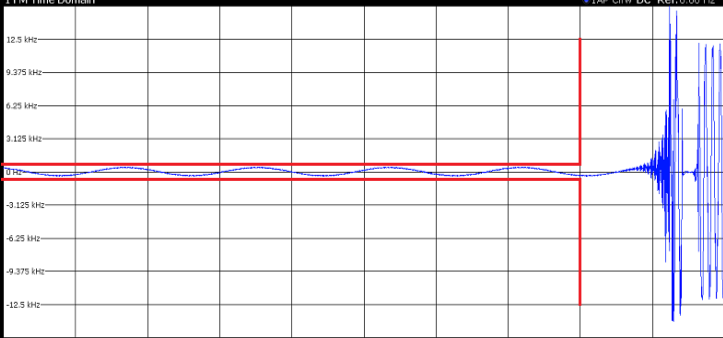


Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M2}	MultiViewSpectrumAnalog Demod Ref Level 38.00 dBm Offset 21.00 dB ATT 40 dB AQT 100 ms DBW 25 kHz Freq 155.0125 MHz TRG:IPK(17MHz) YIG Bypass 1 FM Time Domain CF 155.0125 MHz 1001 pts 10.0 ms/ 4 Result Summary Carrier Power 30.13 dBm Carrier Offset 8.15 Hz FM +Peak 12.398 kHz -Peak -17.03 kHz +Peak/2 14.714 kHz RMS 2.7457 kHz Mod. Freq. SINAD THD Analog Demod: Waiting for Trigger... Measuring... 29.12.2018 09:18:27 OFF-ON
TX-DNH	4FSK	CH _{M2}	MultiViewSpectrumAnalog Demod Ref Level 38.00 dBm Offset 21.00 dB ATT 40 dB AQT 100 ms DBW 25 kHz Freq 155.0125 MHz TRG:IPK(17MHz) YIG Bypass 1 FM Time Domain CF 155.0125 MHz 1001 pts 10.0 ms/ 4 Result Summary Carrier Power 30.11 dBm Carrier Offset 12.71 Hz FM +Peak 16.484 kHz -Peak -18.544 kHz +Peak/2 17.514 kHz RMS 2.1417 kHz Mod. Freq. SINAD THD Analog Demod: Waiting for Trigger... Measuring... 29.12.2018 09:21:33 ON-OFF
TX-ANH	FM	CH _{M2}	MultiViewSpectrumAnalog Demod Ref Level 38.00 dBm Offset 21.00 dB ATT 40 dB AQT 100 ms DBW 25 kHz Freq 155.0125 MHz TRG:IPK(17MHz) YIG Bypass 1 FM Time Domain CF 155.0125 MHz 1001 pts 10.0 ms/ 4 Result Summary Carrier Power 30.14 dBm Carrier Offset 9.20 Hz FM +Peak 12.228 kHz -Peak -12.213 kHz +Peak/2 12.22 kHz RMS 2.7414 kHz Mod. Freq. SINAD THD Analog Demod: Waiting for Trigger... Measuring... 29.12.2018 09:27:53 OFF-ON

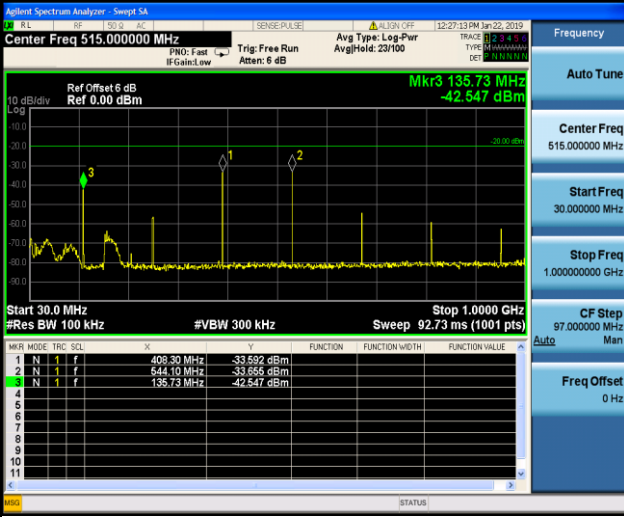
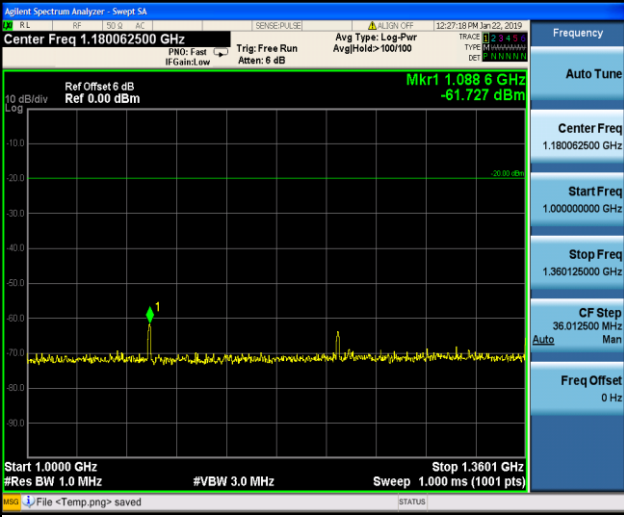
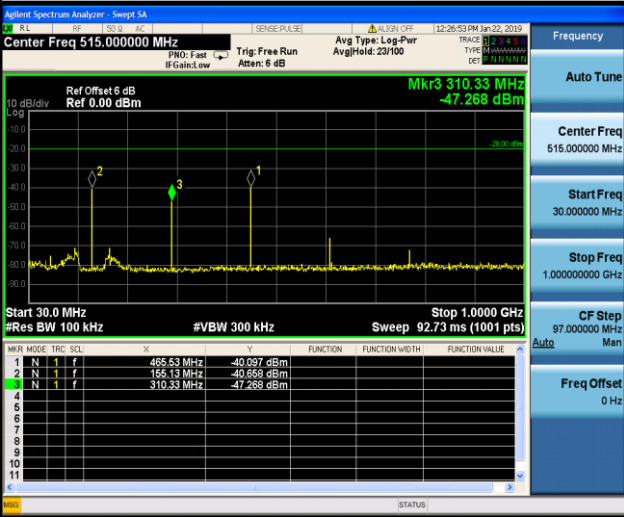


Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _{M2}	MultiView Spectrum Analog Demod Ref Level 38.00 dBm Offset 21.00 dB Att 40 dB AQT 100 ms DBW 25 kHz Freq 155.0125 MHz TFCI IPSC (170kHz) MCG Bypass 1 FM Time Domain 1AP Clw DC Ref:0.00 Hz  CF 155.0125 MHz 1001 pts 10.0 ms/ 4 Result Summary Carrier Power 30.12 dBm Carrier Offset 14.07 Hz +Peak -Peak +Peak/2 RMS Mod. Freq. SINAD THD FM 15.652 kHz -14.084 kHz 14.868 kHz 2.1269 kHz Analog Demod: Waiting for Trigger... Measuring... 29.12.2018 09:26:35 Date: 29.0 EC 2018 09:28:35 ON-OFF



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _L	 30MHz~1GHz
TX-DNH	4FSK	CH _L	 1GHz~10th Harmonic
TX-DNH	4FSK	CH _{M2}	 30MHz~1GHz

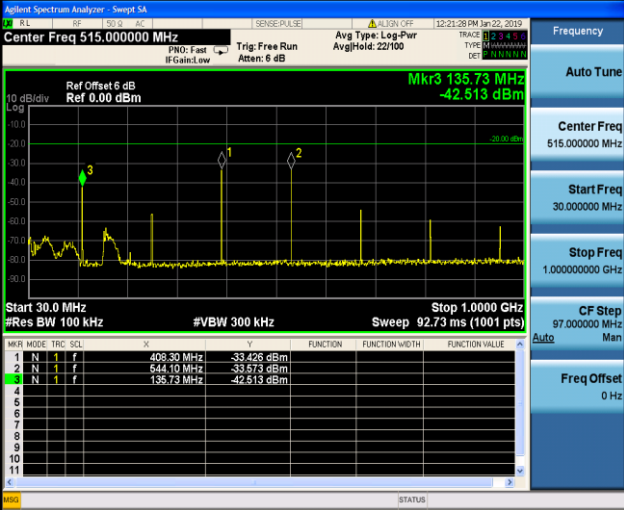
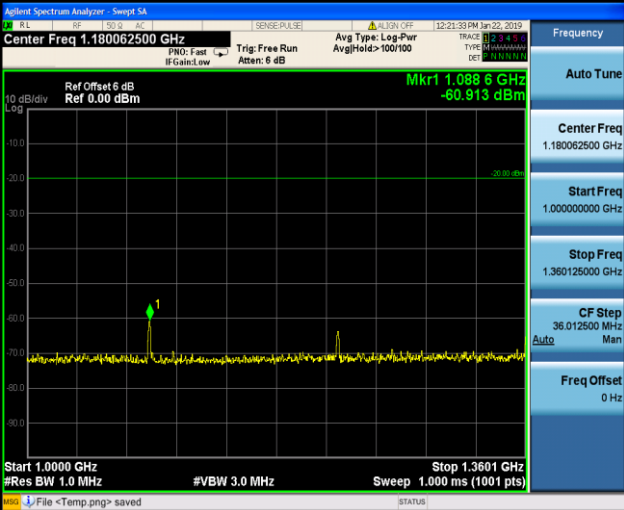
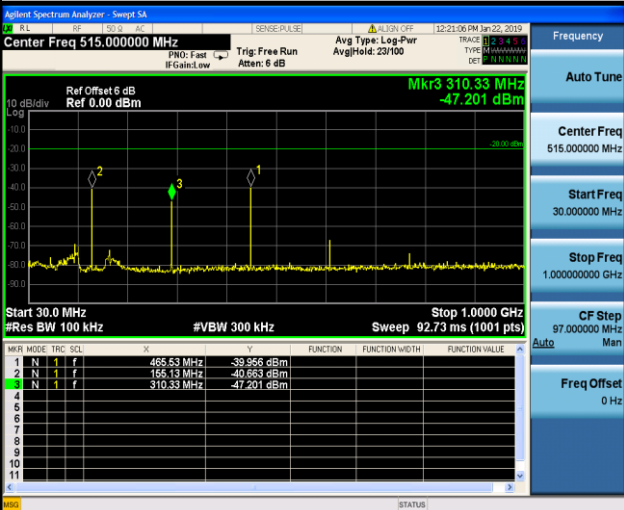


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																				
TX-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Sweep SA Center Freq 1.275062500 GHz Ref Offset 6 dB Ref 0.00 dBm Mkr1 1.468 7 GHz -69.005 dBm Start 1.0000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts) File <Temp.png> saved Frequency Auto Tune Center Freq 1.275062500 GHz Start Freq 1.000000000 GHz Stop Freq 1.650125000 GHz CF Step 65.012500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic																																				
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Sweep SA Center Freq 515.000000 MHz Ref Offset 6 dB Ref 0.00 dBm Mkr3 348.16 MHz -40.079 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Trc</th><th>SCL</th><th>F</th><th>Power</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>521.79 MHz</td><td>-34.779 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>173.56 MHz</td><td>-38.840 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td>348.16 MHz</td><td>-40.079 dBm</td><td></td><td></td><td></td></tr></table> Frequency Auto Tune Center Freq 515.000000 MHz Start Freq 30.000000 MHz Stop Freq 1.000000000 GHz CF Step 97.000000 MHz Auto Man Freq Offset 0 Hz 30MHz~1GHz	Mkr	Mode	Trc	SCL	F	Power	Function	Function Width	Function Value	1	N	1	f	521.79 MHz	-34.779 dBm				2	N	1	f	173.56 MHz	-38.840 dBm				3	N	1	f	348.16 MHz	-40.079 dBm			
Mkr	Mode	Trc	SCL	F	Power	Function	Function Width	Function Value																															
1	N	1	f	521.79 MHz	-34.779 dBm																																		
2	N	1	f	173.56 MHz	-38.840 dBm																																		
3	N	1	f	348.16 MHz	-40.079 dBm																																		
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Sweep SA Center Freq 1.369937500 GHz Ref Offset 6 dB Ref 0.00 dBm Mkr1 1.044 4 GHz -58.287 dBm Start 1.0000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts) File <Temp.png> saved Frequency Auto Tune Center Freq 1.369937500 GHz Start Freq 1.000000000 GHz Stop Freq 1.739875000 GHz CF Step 73.987500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic																																				



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _L	 30MHz~1GHz
TX-ANH	FM	CH _L	 1GHz~10th Harmonic
TX-ANH	FM	CH _{M2}	 30MHz~1GHz



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _{M2}	Agilent Spectrum Analyzer - Sweep SA Center Freq 1.275062500 GHz Ref Offset 6 dB Ref 0.00 dBm Mkr1 1.468 2 GHz -68.839 dBm Start 1.0000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts) Stop 1.5501 GHz Frequency Auto Tune Center Freq 1.275062500 GHz Start Freq 1.000000000 GHz Stop Freq 1.550125000 GHz CF Step 55.012500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic
TX-ANH	FM	CH _H	Agilent Spectrum Analyzer - Sweep SA Center Freq 515.000000 MHz Ref Offset 6 dB Ref 0.00 dBm Mkr3 348.16 MHz -40.513 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) Stop 1.0000 GHz Frequency Auto Tune Center Freq 515.000000 MHz Start Freq 30.000000 MHz Stop Freq 1.000000000 GHz CF Step 97.000000 MHz Auto Man Freq Offset 0 Hz 30MHz~1GHz
TX-ANH	FM	CH _H	Agilent Spectrum Analyzer - Sweep SA Center Freq 1.369937500 GHz Ref Offset 6 dB Ref 0.00 dBm Mkr1 1.044 4 GHz -60.716 dBm Start 1.0000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 1.000 ms (1001 pts) Stop 1.7399 GHz Frequency Auto Tune Center Freq 1.369937500 GHz Start Freq 1.000000000 GHz Stop Freq 1.739875000 GHz CF Step 73.987500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic

----End of Report----