

Project No.	SHT1912030901EW		
Test sample No.	YPHT19120309004	Model No.	DXDMR500
Start test date	2019/12/16	Finish date	2019/12/18
Temperature	22.2	Humidity	56
Test Engineer	Linshuang.Chen	Auditor	<i>William.wang</i>

Appendix clause	Test Item	Test date (M/D)	Test Result (PASS/FAIL)
A	Maximum Transmitter Power	2019/12/16	PASS
B	Occupied Bandwidth	2019/12/18	PASS
C	Emission Mask	2019/12/18	PASS
D	Modulation Limit	2019/12/17	PASS
E	Aduio Frequency Response	2019/12/17	PASS
F	Frequency Stability Test & Temperature	2019/12/16	PASS
G	Frequency Stability Test & Voltage	2019/12/16	PASS
H	Transmitter Frequency Behavior	2019/12/17	PASS
I	Spurious Emission On Antenna Port	2019/12/18	PASS
Note			

**Appendix A:Maximum Transmitter Power**

Operation Mode	Modulation Type	Test Channel	Measured Power(dBm)	Measured Power(W)	Rated Power(W)	Percentage (%)	Limit (%)	Result
TX-DNH	4FSK	CH _L	36.4	4.37	4.00	9.1	±20	PASS
TX-DNH	4FSK	CH _{M1}	36.3	4.27	4.00	6.6	±20	PASS
TX-DNH	4FSK	CH _{M2}	36.2	4.17	4.00	4.2	±20	PASS
TX-DNH	4FSK	CH _{M3}	36.0	3.98	4.00	-0.5	±20	PASS
TX-DNH	4FSK	CH _H	36.1	4.07	4.00	1.8	±20	PASS
TX-DNL	4FSK	CH _L	30.7	1.17	1.00	17.5	±20	PASS
TX-DNL	4FSK	CH _{M1}	30.5	1.12	1.00	12.2	±20	PASS
TX-DNL	4FSK	CH _{M2}	30.7	1.17	1.00	17.5	±20	PASS
TX-DNL	4FSK	CH _{M3}	29.7	0.93	1.00	-6.7	±20	PASS
TX-DNL	4FSK	CH _H	30.5	1.12	1.00	12.2	±20	PASS
TX-ANH	FM	CH _L	35.9	3.88	4.00	-3.0	±20	PASS
TX-ANH	FM	CH _{M1}	35.7	3.72	4.00	-6.9	±20	PASS
TX-ANH	FM	CH _{M2}	35.7	3.69	4.00	-7.8	±20	PASS
TX-ANH	FM	CH _{M3}	35.5	3.52	4.00	-12.1	±20	PASS
TX-ANH	FM	CH _H	36.1	4.09	4.00	2.3	±20	PASS
TX-ANL	FM	CH _L	30.4	1.09	1.00	8.6	±20	PASS
TX-ANL	FM	CH _{M1}	30.7	1.17	1.00	17.2	±20	PASS
TX-ANL	FM	CH _{M2}	30.6	1.15	1.00	14.8	±20	PASS
TX-ANL	FM	CH _{M3}	29.1	0.81	1.00	-18.7	±20	PASS
TX-ANL	FM	CH _H	30.6	1.14	1.00	14.3	±20	PASS

**Appendix B:Occupied Bandwidth**

Operation Mode	Modulation Type	Test Channel	Occupied Bandwidth		99% Limit(kHz)	Result
			99%(kHz)	26dB(kHz)		
TX-DNH	4FSK	CH _L	7.734	9.877	≤11.25	PASS
TX-DNH	4FSK	CH _{M1}	7.779	9.808	≤11.25	PASS
TX-DNH	4FSK	CH _{M2}	7.771	10.07	≤11.25	PASS
TX-DNH	4FSK	CH _{M3}	7.546	9.651	≤11.25	PASS
TX-DNH	4FSK	CH _H	7.776	9.905	≤11.25	PASS
TX-DNL	4FSK	CH _L	7.755	9.716	≤11.25	PASS
TX-DNL	4FSK	CH _{M1}	7.572	9.841	≤11.25	PASS
TX-DNL	4FSK	CH _{M2}	7.661	9.802	≤11.25	PASS
TX-DNL	4FSK	CH _{M3}	7.817	9.843	≤11.25	PASS
TX-DNL	4FSK	CH _H	7.719	9.802	≤11.25	PASS
TX-ANH	FM	CH _L	5.239	10.13	≤11.25	PASS
TX-ANH	FM	CH _{M1}	5.242	10.12	≤11.25	PASS
TX-ANH	FM	CH _{M2}	5.240	10.12	≤11.25	PASS
TX-ANH	FM	CH _{M3}	5.214	10.12	≤11.25	PASS
TX-ANH	FM	CH _H	5.271	10.12	≤11.25	PASS
TX-ANL	FM	CH _L	5.277	10.13	≤11.25	PASS
TX-ANL	FM	CH _{M1}	5.219	10.12	≤11.25	PASS
TX-ANL	FM	CH _{M2}	5.256	10.12	≤11.25	PASS
TX-ANL	FM	CH _{M3}	5.221	10.12	≤11.25	PASS
TX-ANL	FM	CH _H	5.256	10.12	≤11.25	PASS



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Occupied BW Center Freq 400.012500 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Ref 39.76 dBm Occupied Bandwidth 7.734 kHz Total Power 42.9 dBm Transmit Freq Error 98 Hz x dB Bandwidth 9.877 kHz OBW Power 99.00 % x dB -26.00 dB Frequency 400.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS DC Coupled
TX-DNH	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Occupied BW Center Freq 405.987500 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Ref 39.56 dBm Occupied Bandwidth 7.779 kHz Total Power 42.7 dBm Transmit Freq Error 108 Hz x dB Bandwidth 9.808 kHz OBW Power 99.00 % x dB -26.00 dB Frequency 405.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS DC Coupled
TX-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 406.112500 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Ref 39.56 dBm Occupied Bandwidth 7.771 kHz Total Power 42.7 dBm Transmit Freq Error 57 Hz x dB Bandwidth 10.07 kHz OBW Power 99.00 % x dB -26.00 dB Frequency 406.112500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS DC Coupled



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M3}	Agilent Spectrum Analyzer - Occupied BW Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 39.40 dBm Center 438 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.546 kHz Total Power 42.8 dBm Transmit Freq Error 177 Hz OBW Power 99.00 % x dB Bandwidth 9.651 kHz x dB -26.00 dB Frequency Center Freq 438.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 39.91 dBm Center 470 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.776 kHz Total Power 43.1 dBm Transmit Freq Error 128 Hz OBW Power 99.00 % x dB Bandwidth 9.905 kHz x dB -26.00 dB Frequency Center Freq 469.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled
TX-DNL	4FSK	CH _L	Agilent Spectrum Analyzer - Occupied BW Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Trig: Free Run Avg/Hold: >10/10 Radio Std: None Radio Device: BTS Ref 34.48 dBm Center 400 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.755 kHz Total Power 37.5 dBm Transmit Freq Error 118 Hz OBW Power 99.00 % x dB Bandwidth 9.716 kHz x dB -26.00 dB Frequency Center Freq 400.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Occupied BW Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 34.76 dBm Center 406 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.572 kHz Total Power 38.0 dBm Transmit Freq Error 138 Hz OBW Power 99.00 % x dB Bandwidth 9.841 kHz x dB -26.00 dB STATUS DC Coupled
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 34.80 dBm Center 406.1 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.661 kHz Total Power 38.0 dBm Transmit Freq Error 87 Hz OBW Power 99.00 % x dB Bandwidth 9.802 kHz x dB -26.00 dB STATUS DC Coupled
TX-DNL	4FSK	CH _{M3}	Agilent Spectrum Analyzer - Occupied BW Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 33.19 dBm Center 438 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.817 kHz Total Power 36.4 dBm Transmit Freq Error 138 Hz OBW Power 99.00 % x dB Bandwidth 9.843 kHz x dB -26.00 dB STATUS DC Coupled



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 34.31 dBm Center 470 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 7.719 kHz Total Power 37.5 dBm Transmit Freq Error 151 Hz OBW Power 99.00 % x dB Bandwidth 9.802 kHz x dB -26.00 dB Frequency Center Freq 469.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled
TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Occupied BW Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 39.70 dBm Center 400 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.239 kHz Total Power 36.2 dBm Transmit Freq Error -113 Hz OBW Power 99.00 % x dB Bandwidth 10.13 kHz x dB -26.00 dB Frequency Center Freq 400.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled
TX-ANH	FM	CH _{M1}	Agilent Spectrum Analyzer - Occupied BW Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 39.68 dBm Center 406 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.242 kHz Total Power 36.0 dBm Transmit Freq Error -130 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB Frequency Center Freq 405.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto STATUS DC Coupled

Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run #Atten: 24 dB Radio Device: BTS Frequency Center Freq 406.112500 MHz CF Step 5.000 kHz Sweep FFT Auto Freq Offset 0 Hz Occupied Bandwidth 5.240 kHz Total Power 35.7 dBm Transmit Freq Error -105 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB STATUS DC Coupled
TX-ANH	FM	CH _{M3}	Agilent Spectrum Analyzer - Occupied BW Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Trig: Free Run #Atten: 22 dB Radio Device: BTS Frequency Center Freq 438.012500 MHz CF Step 5.000 kHz Sweep FFT Auto Freq Offset 0 Hz Occupied Bandwidth 5.214 kHz Total Power 35.7 dBm Transmit Freq Error -118 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB STATUS DC Coupled
TX-ANH	FM	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Trig: Free Run #Atten: 24 dB Radio Device: BTS Frequency Center Freq 469.987500 MHz CF Step 5.000 kHz Sweep FFT Auto Freq Offset 0 Hz Occupied Bandwidth 5.271 kHz Total Power 36.1 dBm Transmit Freq Error -135 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB STATUS DC Coupled



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 400.012500 MHz Center Freq: 400.012500 MHz Trig: Free Run #Att: 18 dB Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Frequency Center Freq 400.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto Occupied Bandwidth 5.277 kHz Total Power 31.0 dBm Transmit Freq Error -122 Hz OBW Power 99.00 % x dB Bandwidth 10.13 kHz x dB -26.00 dB Span 50 kHz Sweep FFT #Res BW 100 Hz #VBW 300 Hz Ref 34.49 dBm 10 dB/div Log 14.9 34.5 4.40 5.51 18.5 25.5 35.5 45.5 55.5 Center 400 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.277 kHz Total Power 31.0 dBm Transmit Freq Error -122 Hz OBW Power 99.00 % x dB Bandwidth 10.13 kHz x dB -26.00 dB STATUS DC Coupled
TX-ANL	FM	CH _{M1}	Agilent Spectrum Analyzer - Occupied BW Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Trig: Free Run #Att: 18 dB Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Frequency Center Freq 405.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto Occupied Bandwidth 5.219 kHz Total Power 31.2 dBm Transmit Freq Error -115 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB Span 50 kHz Sweep FFT #Res BW 100 Hz #VBW 300 Hz Ref 34.75 dBm 10 dB/div Log 14.8 34.8 4.75 5.25 15.3 25.3 35.3 45.3 55.3 Center 406 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.219 kHz Total Power 31.2 dBm Transmit Freq Error -115 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB STATUS DC Coupled
TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Occupied BW Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run #Att: 18 dB Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Frequency Center Freq 406.112500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz Auto Occupied Bandwidth 5.256 kHz Total Power 30.8 dBm Transmit Freq Error -110 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB Span 50 kHz Sweep FFT #Res BW 100 Hz #VBW 300 Hz Ref 34.61 dBm 10 dB/div Log 14.6 34.6 4.61 5.39 18.4 25.4 35.4 45.4 55.4 Center 406.1 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.256 kHz Total Power 30.8 dBm Transmit Freq Error -110 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB STATUS DC Coupled



Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANL	FM	CH _{M3}	Agilent Spectrum Analyzer - Occupied BW Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 33.04 dBm 10 dB/div Log 23.0 13.0 3.04 6.96 17.0 27.0 37.0 47.0 57.0 Center 438 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.221 kHz Total Power 29.5 dBm Transmit Freq Error -113 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB Frequency Center Freq 438.012500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz STATUS DC Coupled
TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Occupied BW Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Trig: Free Run Avg/Hold: 10/10 Radio Std: None Radio Device: BTS Ref 34.23 dBm 10 dB/div Log 34.2 14.2 4.23 6.77 15.8 25.8 35.8 45.8 55.8 Center 470 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 5.256 kHz Total Power 30.5 dBm Transmit Freq Error -137 Hz OBW Power 99.00 % x dB Bandwidth 10.12 kHz x dB -26.00 dB Frequency Center Freq 469.987500 MHz CF Step 5.000 kHz Man Freq Offset 0 Hz 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 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Radio Std: None Trig: Free Run #Atten: 40 dB Radio Device: BTS PASS IF Gain: low Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Mask Trace Spectrum Center 400 MHz Span 120 kHz Total Power Ref 36.17 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>36.18</td><td>(-0.99)</td><td>-100.0</td><td>23.71</td><td>(-13.46)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-37.41</td><td>(-4.23)</td><td>-12.35 k</td><td>-37.81</td><td>(-6.09)</td><td>12.15 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.21</td><td>(-17.21)</td><td>-12.95 k</td><td>-36.61</td><td>(-16.61)</td><td>13.95 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></tbody></table> File <MASK.D.state> recalled STATUS Frequency Center Freq 400.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	36.18	(-0.99)	-100.0	23.71	(-13.46)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-37.41	(-4.23)	-12.35 k	-37.81	(-6.09)	12.15 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.21	(-17.21)	-12.95 k	-36.61	(-16.61)	13.95 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	36.18	(-0.99)	-100.0	23.71	(-13.46)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-37.41	(-4.23)	-12.35 k	-37.81	(-6.09)	12.15 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.21	(-17.21)	-12.95 k	-36.61	(-16.61)	13.95 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 _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Radio Std: None Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS PASS IF Gain: low Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Mask Trace Spectrum Center 400 MHz Span 120 kHz Total Power Ref 39.62 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>25.84</td><td>(-11.33)</td><td>-850.0</td><td>28.24</td><td>(-8.93)</td><td>700.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-38.25</td><td>(-4.35)</td><td>-12.45 k</td><td>-37.25</td><td>(-3.35)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.17</td><td>(-17.17)</td><td>-13.20 k</td><td>-36.62</td><td>(-16.62)</td><td>19.00 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></tbody></table> File <Temp.png> saved STATUS Frequency Center Freq 400.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	25.84	(-11.33)	-850.0	28.24	(-8.93)	700.0	5.625 kHz	12.50 kHz	100.0 Hz	-38.25	(-4.35)	-12.45 k	-37.25	(-3.35)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.17	(-17.17)	-13.20 k	-36.62	(-16.62)	19.00 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	25.84	(-11.33)	-850.0	28.24	(-8.93)	700.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-38.25	(-4.35)	-12.45 k	-37.25	(-3.35)	12.45 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.17	(-17.17)	-13.20 k	-36.62	(-16.62)	19.00 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 _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None Trig: Free Run #Atten: 40 dB Radio Device: BTS PASS IF Gain: low Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.0 -29.0 -39.0 -49.0 Mask Trace Spectrum Center 406 MHz Span 120 kHz Total Power Ref 36.06 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>36.10</td><td>(-0.85)</td><td>-100.0</td><td>14.35</td><td>(-22.60)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.33</td><td>(-9.57)</td><td>-11.85 k</td><td>-42.59</td><td>(-8.11)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.02</td><td>(-15.02)</td><td>-13.10 k</td><td>-34.88</td><td>(-14.88)</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 405.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	36.10	(-0.85)	-100.0	14.35	(-22.60)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-39.33	(-9.57)	-11.85 k	-42.59	(-8.11)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.02	(-15.02)	-13.10 k	-34.88	(-14.88)	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	36.10	(-0.85)	-100.0	14.35	(-22.60)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-39.33	(-9.57)	-11.85 k	-42.59	(-8.11)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-35.02	(-15.02)	-13.10 k	-34.88	(-14.88)	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	—	(—)	—	—	(—)	—																																																										

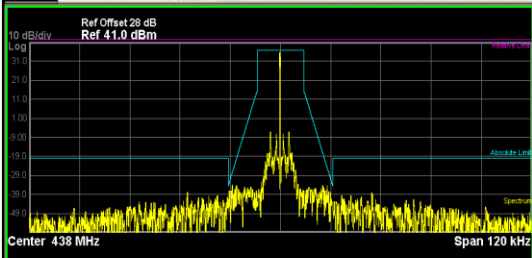
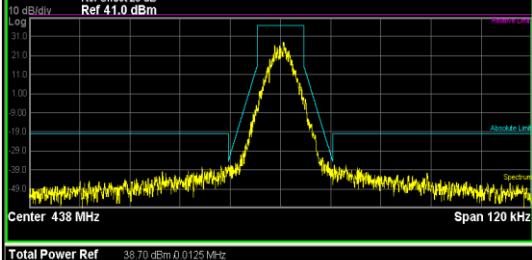
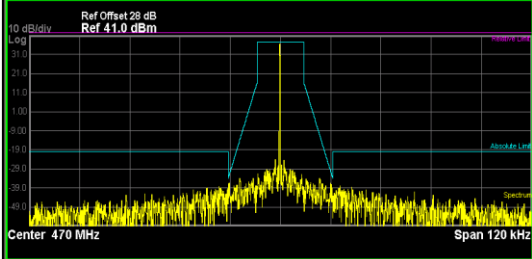


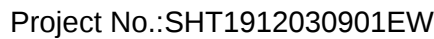
Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS IF Gain: Low #Atten: 40 dB Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 Center 406 MHz Span 120 kHz Total Power Ref 39.71 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>26.43</td><td>(-10.52)</td><td>-600.0</td><td>26.56</td><td>(-10.40)</td><td>1.550 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-37.46</td><td>(-2.98)</td><td>-12.50 k</td><td>-37.47</td><td>(-4.45)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.08</td><td>(-15.08)</td><td>-14.45 k</td><td>-35.48</td><td>(-15.48)</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> MSG File <Temp.png> saved STATUS Frequency Center Freq 405.987500 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	26.43	(-10.52)	-600.0	26.56	(-10.40)	1.550 k	5.625 kHz	12.50 kHz	100.0 Hz	-37.46	(-2.98)	-12.50 k	-37.47	(-4.45)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.08	(-15.08)	-14.45 k	-35.48	(-15.48)	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	26.43	(-10.52)	-600.0	26.56	(-10.40)	1.550 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-37.46	(-2.98)	-12.50 k	-37.47	(-4.45)	12.30 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-35.08	(-15.08)	-14.45 k	-35.48	(-15.48)	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-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS IF Gain: Low #Atten: 40 dB Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 Center 406.1 MHz Span 120 kHz Total Power Ref 35.99 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>36.04</td><td>(-0.93)</td><td>-100.0</td><td>17.03</td><td>(-19.94)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-41.56</td><td>(-7.10)</td><td>-12.50 k</td><td>-39.89</td><td>(-6.52)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.90</td><td>(-17.90)</td><td>-15.50 k</td><td>-37.74</td><td>(-17.74)</td><td>15.30 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> MSG File <MASK.D> state recalled STATUS Frequency Center Freq 406.112500 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	36.04	(-0.93)	-100.0	17.03	(-19.94)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-41.56	(-7.10)	-12.50 k	-39.89	(-6.52)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.90	(-17.90)	-15.50 k	-37.74	(-17.74)	15.30 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	36.04	(-0.93)	-100.0	17.03	(-19.94)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-41.56	(-7.10)	-12.50 k	-39.89	(-6.52)	12.35 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.90	(-17.90)	-15.50 k	-37.74	(-17.74)	15.30 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	—	(—)	—	—	(—)	—																																																										
TX-DNH	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None Radio Device: BTS IF Gain: Low #Atten: 40 dB Ref Offset 28 dB Ref 41.0 dBm 10 dB/div Log 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 31.0 21.0 11.0 1.00 0.00 -9.00 -19.00 -29.00 -39.00 -49.00 Center 406.1 MHz Span 120 kHz Total Power Ref 38.59 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>27.76</td><td>(-9.22)</td><td>-150.0</td><td>26.76</td><td>(-10.22)</td><td>550.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.96</td><td>(-5.40)</td><td>-12.10 k</td><td>-39.32</td><td>(-4.86)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.96</td><td>(-16.96)</td><td>-14.95 k</td><td>-36.47</td><td>(-16.47)</td><td>14.10 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> MSG File <Temp.png> saved STATUS Frequency Center Freq 406.112500 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	27.76	(-9.22)	-150.0	26.76	(-10.22)	550.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.96	(-5.40)	-12.10 k	-39.32	(-4.86)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.96	(-16.96)	-14.95 k	-36.47	(-16.47)	14.10 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	27.76	(-9.22)	-150.0	26.76	(-10.22)	550.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-36.96	(-5.40)	-12.10 k	-39.32	(-4.86)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-36.96	(-16.96)	-14.95 k	-36.47	(-16.47)	14.10 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	—	(—)	—	—	(—)	—																																																										



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 438.012500 MHz PASS Ref Offset 28 dB Ref 41.0 dBm  Center 438 MHz Span 120 kHz Total Power Ref 35.51 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>35.56</td><td>(-1.19)</td><td>-100.0</td><td>12.83</td><td>(-23.92)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-37.30</td><td>(-5.16)</td><td>-12.15 k</td><td>-37.75</td><td>(-7.06)</td><td>11.95 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.78</td><td>(-17.78)</td><td>-22.20 k</td><td>-38.27</td><td>(-18.27)</td><td>21.95 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 438.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.56	(-1.19)	-100.0	12.83	(-23.92)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-37.30	(-5.16)	-12.15 k	-37.75	(-7.06)	11.95 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.78	(-17.78)	-22.20 k	-38.27	(-18.27)	21.95 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	35.56	(-1.19)	-100.0	12.83	(-23.92)	0.0																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-37.30	(-5.16)	-12.15 k	-37.75	(-7.06)	11.95 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-37.78	(-17.78)	-22.20 k	-38.27	(-18.27)	21.95 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 _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 438.012500 MHz PASS Ref Offset 28 dB Ref 41.0 dBm  Center 438 MHz Span 120 kHz Total Power Ref 38.70 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>26.48</td><td>(-10.26)</td><td>-1.350 k</td><td>27.83</td><td>(-8.92)</td><td>800.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.97</td><td>(-2.28)</td><td>-12.50 k</td><td>-38.59</td><td>(-3.90)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.67</td><td>(-16.67)</td><td>-14.10 k</td><td>-36.41</td><td>(-16.41)</td><td>15.70 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 438.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	26.48	(-10.26)	-1.350 k	27.83	(-8.92)	800.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.97	(-2.28)	-12.50 k	-38.59	(-3.90)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.67	(-16.67)	-14.10 k	-36.41	(-16.41)	15.70 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	26.48	(-10.26)	-1.350 k	27.83	(-8.92)	800.0																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-36.97	(-2.28)	-12.50 k	-38.59	(-3.90)	12.50 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-36.67	(-16.67)	-14.10 k	-36.41	(-16.41)	15.70 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 469.987500 MHz PASS Ref Offset 28 dB Ref 41.0 dBm  Center 470 MHz Span 120 kHz Total Power Ref 36.84 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>36.28</td><td>(-1.07)</td><td>-150.0</td><td>-1.547</td><td>(-38.90)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.70</td><td>(-4.43)</td><td>-12.25 k</td><td>-37.00</td><td>(-4.01)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-38.27</td><td>(-18.27)</td><td>-14.55 k</td><td>-38.03</td><td>(-18.03)</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 469.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	36.28	(-1.07)	-150.0	-1.547	(-38.90)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.70	(-4.43)	-12.25 k	-37.00	(-4.01)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-38.27	(-18.27)	-14.55 k	-38.03	(-18.03)	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	36.28	(-1.07)	-150.0	-1.547	(-38.90)	0.0																																																							
5.625 kHz	12.50 kHz	100.0 Hz	-36.70	(-4.43)	-12.25 k	-37.00	(-4.01)	12.35 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-38.27	(-18.27)	-14.55 k	-38.03	(-18.03)	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	—	(—)	—	—	(—)	—																																																										

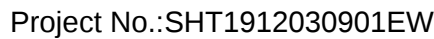


Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																								
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 469.987500 MHz Ref Offset 28 dB Ref 41.0 dBm Center 470 MHz Span 120 kHz Total Power Ref 39.94 dBm 0.0125 MHz <table border="1"> <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>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>27.04</td> <td>(-10.32)</td> <td>-100.0</td> <td>28.96</td> <td>(-8.40)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-33.93</td> <td>(-1.29)</td> <td>-12.30 k</td> <td>-35.96</td> <td>(-1.87)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-35.48</td> <td>(-15.48)</td> <td>-15.80 k</td> <td>-34.23</td> <td>(-14.23)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	27.04	(-10.32)	-100.0	28.96	(-8.40)	5.625 kHz	12.50 kHz	100.0 Hz	-33.93	(-1.29)	-12.30 k	-35.96	(-1.87)	12.50 kHz	60.00 kHz	100.0 Hz	-35.48	(-15.48)	-15.80 k	-34.23	(-14.23)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	27.04	(-10.32)	-100.0	28.96	(-8.40)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-33.93	(-1.29)	-12.30 k	-35.96	(-1.87)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-35.48	(-15.48)	-15.80 k	-34.23	(-14.23)																																																				
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 400.012500 MHz Ref Offset 28 dB Ref 36.0 dBm Center 400 MHz Span 120 kHz Total Power Ref 30.65 dBm 0.0125 MHz <table border="1"> <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>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>30.69</td> <td>(-1.19)</td> <td>-100.0</td> <td>18.87</td> <td>(-13.01)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-42.94</td> <td>(5.92)</td> <td>-12.15 k</td> <td>-46.02</td> <td>(6.46)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-42.42</td> <td>(-22.42)</td> <td>-16.10 k</td> <td>-42.93</td> <td>(-22.93)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	30.69	(-1.19)	-100.0	18.87	(-13.01)	5.625 kHz	12.50 kHz	100.0 Hz	-42.94	(5.92)	-12.15 k	-46.02	(6.46)	12.50 kHz	60.00 kHz	100.0 Hz	-42.42	(-22.42)	-16.10 k	-42.93	(-22.93)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	30.69	(-1.19)	-100.0	18.87	(-13.01)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-42.94	(5.92)	-12.15 k	-46.02	(6.46)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-42.42	(-22.42)	-16.10 k	-42.93	(-22.93)																																																				
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 400.012500 MHz Ref Offset 28 dB Ref 36.0 dBm Center 400 MHz Span 120 kHz Total Power Ref 33.64 dBm 0.0125 MHz <table border="1"> <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>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>20.82</td> <td>(-11.05)</td> <td>-600.0</td> <td>20.37</td> <td>(-11.50)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-42.90</td> <td>(-3.34)</td> <td>-12.50 k</td> <td>-40.58</td> <td>(-3.20)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-40.38</td> <td>(-20.38)</td> <td>-15.95 k</td> <td>-38.66</td> <td>(-18.66)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	20.82	(-11.05)	-600.0	20.37	(-11.50)	5.625 kHz	12.50 kHz	100.0 Hz	-42.90	(-3.34)	-12.50 k	-40.58	(-3.20)	12.50 kHz	60.00 kHz	100.0 Hz	-40.38	(-20.38)	-15.95 k	-38.66	(-18.66)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	20.82	(-11.05)	-600.0	20.37	(-11.50)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-42.90	(-3.34)	-12.50 k	-40.58	(-3.20)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-40.38	(-20.38)	-15.95 k	-38.66	(-18.66)																																																				
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 _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 8.31 100.00 120.00 Center Freq 405.987500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS 09/09/22 AM Dec 18, 2019 Ref Offset 28 dB Ref 36.0 dBm 10 dB/div Log 26.0 16.0 6.00 4.00 24.0 34.0 44.0 54.0 Center 406 MHz Span 120 kHz Total Power Ref 31.17 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>31.21</td><td>(-0.88)</td><td>-100.0</td><td>11.83</td><td>(-20.27)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-42.28</td><td>(-5.48)</td><td>-12.15 k</td><td>-46.94</td><td>(-8.33)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.80</td><td>(-21.80)</td><td>-14.30 k</td><td>-40.41</td><td>(-20.41)</td><td>14.10 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> File <MASK.D.state> recalled STATUS Frequency Center Freq 405.987500 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	31.21	(-0.88)	-100.0	11.83	(-20.27)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-42.28	(-5.48)	-12.15 k	-46.94	(-8.33)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.80	(-21.80)	-14.30 k	-40.41	(-20.41)	14.10 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	31.21	(-0.88)	-100.0	11.83	(-20.27)	0.0																																																								
5.625 kHz	12.50 kHz	100.0 Hz	-42.28	(-5.48)	-12.15 k	-46.94	(-8.33)	12.40 k																																																											
12.50 kHz	60.00 kHz	100.0 Hz	-41.80	(-21.80)	-14.30 k	-40.41	(-20.41)	14.10 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 _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 8.31 100.00 120.00 Center Freq 405.987500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS 09/09/22 AM Dec 18, 2019 Ref Offset 28 dB Ref 36.0 dBm 10 dB/div Log 26.0 16.0 6.00 4.00 24.0 34.0 44.0 54.0 Center 406 MHz Span 120 kHz Total Power Ref 34.06 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>21.08</td><td>(-11.01)</td><td>-1.150 k</td><td>24.72</td><td>(-7.37)</td><td>800.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.40</td><td>(2.15)</td><td>-12.35 k</td><td>-43.62</td><td>(4.28)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-39.86</td><td>(-19.86)</td><td>-13.25 k</td><td>-39.63</td><td>(-19.63)</td><td>15.40 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></table> File <Temp.png> saved STATUS Frequency Center Freq 405.987500 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	21.08	(-11.01)	-1.150 k	24.72	(-7.37)	800.0	5.625 kHz	12.50 kHz	100.0 Hz	-40.40	(2.15)	-12.35 k	-43.62	(4.28)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-39.86	(-19.86)	-13.25 k	-39.63	(-19.63)	15.40 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	21.08	(-11.01)	-1.150 k	24.72	(-7.37)	800.0																																																								
5.625 kHz	12.50 kHz	100.0 Hz	-40.40	(2.15)	-12.35 k	-43.62	(4.28)	12.50 k																																																											
12.50 kHz	60.00 kHz	100.0 Hz	-39.86	(-19.86)	-13.25 k	-39.63	(-19.63)	15.40 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-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask 0 8.31 100.00 120.00 Center Freq 406.112500 MHz Trig: Free Run IF Gain: Low Radio Std: None Radio Device: BTS 09/11/25 AM Dec 18, 2019 Ref Offset 28 dB Ref 36.0 dBm 10 dB/div Log 26.0 16.0 6.00 4.00 24.0 34.0 44.0 54.0 Center 406.1 MHz Span 120 kHz Total Power Ref 31.17 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>31.24</td><td>(-0.93)</td><td>-100.0</td><td>13.50</td><td>(-18.67)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-43.22</td><td>(-3.94)</td><td>-12.50 k</td><td>-43.63</td><td>(-5.81)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.40</td><td>(-21.40)</td><td>-12.65 k</td><td>-42.25</td><td>(-22.25)</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 406.112500 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	31.24	(-0.93)	-100.0	13.50	(-18.67)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-43.22	(-3.94)	-12.50 k	-43.63	(-5.81)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.40	(-21.40)	-12.65 k	-42.25	(-22.25)	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	31.24	(-0.93)	-100.0	13.50	(-18.67)	0.0																																																								
5.625 kHz	12.50 kHz	100.0 Hz	-43.22	(-3.94)	-12.50 k	-43.63	(-5.81)	12.30 k																																																											
12.50 kHz	60.00 kHz	100.0 Hz	-41.40	(-21.40)	-12.65 k	-42.25	(-22.25)	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	—	(—)	—	(—)	(—)	—																																																											

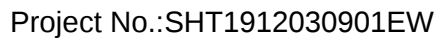


Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																								
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 406.112500 MHz Ref Offset 26 dB Ref 36.0 dBm Center Freq 406.1 MHz Span 120 kHz Total Power Ref 34.84 dBm 0.0125 MHz <table border="1"> <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>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>21.31</td> <td>(-10.85)</td> <td>800.0</td> <td>21.30</td> <td>(-10.87)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-40.90</td> <td>(-4.53)</td> <td>-12.10 k</td> <td>-39.93</td> <td>(-2.47)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-40.13</td> <td>(-20.13)</td> <td>-16.60 k</td> <td>-38.11</td> <td>(-18.11)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	21.31	(-10.85)	800.0	21.30	(-10.87)	5.625 kHz	12.50 kHz	100.0 Hz	-40.90	(-4.53)	-12.10 k	-39.93	(-2.47)	12.50 kHz	60.00 kHz	100.0 Hz	-40.13	(-20.13)	-16.60 k	-38.11	(-18.11)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	21.31	(-10.85)	800.0	21.30	(-10.87)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-40.90	(-4.53)	-12.10 k	-39.93	(-2.47)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-40.13	(-20.13)	-16.60 k	-38.11	(-18.11)																																																				
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 _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 438.012500 MHz Ref Offset 26 dB Ref 35.0 dBm Center Freq 438 MHz Span 120 kHz Total Power Ref 28.98 dBm 0.0125 MHz <table border="1"> <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>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>28.97</td> <td>(-1.56)</td> <td>-100.0</td> <td>6.288</td> <td>(-24.24)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-45.46</td> <td>(-5.28)</td> <td>-12.40 k</td> <td>-45.64</td> <td>(-6.91)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-42.50</td> <td>(-22.50)</td> <td>-13.45 k</td> <td>-41.00</td> <td>(-21.00)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	28.97	(-1.56)	-100.0	6.288	(-24.24)	5.625 kHz	12.50 kHz	100.0 Hz	-45.46	(-5.28)	-12.40 k	-45.64	(-6.91)	12.50 kHz	60.00 kHz	100.0 Hz	-42.50	(-22.50)	-13.45 k	-41.00	(-21.00)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	28.97	(-1.56)	-100.0	6.288	(-24.24)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-45.46	(-5.28)	-12.40 k	-45.64	(-6.91)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-42.50	(-22.50)	-13.45 k	-41.00	(-21.00)																																																				
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 _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 438.012500 MHz Ref Offset 26 dB Ref 35.0 dBm Center Freq 438 MHz Span 120 kHz Total Power Ref 32.22 dBm 0.0125 MHz <table border="1"> <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>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>19.16</td> <td>(-11.37)</td> <td>800.0</td> <td>18.63</td> <td>(-11.90)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-43.42</td> <td>(-3.96)</td> <td>-12.30 k</td> <td>-43.56</td> <td>(-2.65)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-43.36</td> <td>(-23.36)</td> <td>-13.50 k</td> <td>-42.58</td> <td>(-22.58)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	19.16	(-11.37)	800.0	18.63	(-11.90)	5.625 kHz	12.50 kHz	100.0 Hz	-43.42	(-3.96)	-12.30 k	-43.56	(-2.65)	12.50 kHz	60.00 kHz	100.0 Hz	-43.36	(-23.36)	-13.50 k	-42.58	(-22.58)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	19.16	(-11.37)	800.0	18.63	(-11.90)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-43.42	(-3.96)	-12.30 k	-43.56	(-2.65)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-43.36	(-23.36)	-13.50 k	-42.58	(-22.58)																																																				
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 _H	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF FSK AC SENSE:PULSE ALIGN OFF 09:05:17 AM Dec 18, 2019 Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Radio Std: None PASS IFGain:Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 28 dB Ref 36.0 dBm Log 10 dB/div 20.0 18.0 16.0 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 -2.0 -4.0 -6.0 -8.0 -10.0 -12.0 -14.0 -16.0 -18.0 -20.0 Center 470 MHz Span 120 kHz Total Power Ref 31.21 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>30.67</td><td>(-0.95)</td><td>-100.0</td><td>-3.217</td><td>(-34.84)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-47.67</td><td>(-7.86)</td><td>-12.50 k</td><td>-43.19</td><td>(-4.11)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-42.35</td><td>(-22.35)</td><td>-15.75 k</td><td>-40.92</td><td>(-20.92)</td><td>15.50 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></tbody></table> MSO File <MASK.D.state> recalled STATUS Frequency Center Freq 469.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	30.67	(-0.95)	-100.0	-3.217	(-34.84)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-47.67	(-7.86)	-12.50 k	-43.19	(-4.11)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-42.35	(-22.35)	-15.75 k	-40.92	(-20.92)	15.50 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	30.67	(-0.95)	-100.0	-3.217	(-34.84)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-47.67	(-7.86)	-12.50 k	-43.19	(-4.11)	12.40 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-42.35	(-22.35)	-15.75 k	-40.92	(-20.92)	15.50 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 _H	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF FSK AC SENSE:PULSE ALIGN OFF 09:05:47 AM Dec 18, 2019 Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Radio Std: None PASS IFGain:Low Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 28 dB Ref 36.0 dBm Log 10 dB/div 20.0 18.0 16.0 14.0 12.0 10.0 8.0 6.0 4.0 2.0 0.0 -2.0 -4.0 -6.0 -8.0 -10.0 -12.0 -14.0 -16.0 -18.0 -20.0 Center 470 MHz Span 120 kHz Total Power Ref 33.90 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>20.24</td><td>(-11.39)</td><td>-1.100 k</td><td>20.91</td><td>(-10.71)</td><td>1.400 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.14</td><td>(-1.78)</td><td>-12.30 k</td><td>-41.71</td><td>(-2.63)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-40.60</td><td>(-20.60)</td><td>-12.60 k</td><td>-39.73</td><td>(-19.73)</td><td>13.70 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> MSO File <Temp.png> saved STATUS Frequency Center Freq 469.987500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	20.24	(-11.39)	-1.100 k	20.91	(-10.71)	1.400 k	5.625 kHz	12.50 kHz	100.0 Hz	-40.14	(-1.78)	-12.30 k	-41.71	(-2.63)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-40.60	(-20.60)	-12.60 k	-39.73	(-19.73)	13.70 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	20.24	(-11.39)	-1.100 k	20.91	(-10.71)	1.400 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-40.14	(-1.78)	-12.30 k	-41.71	(-2.63)	12.40 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-40.60	(-20.60)	-12.60 k	-39.73	(-19.73)	13.70 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 RL RF FSK AC SENSE:PULSE ALIGN OFF 09:00:19 AM Dec 18, 2019 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Radio Std: None PASS IFGain:Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 28 dB Ref 41.0 dBm Log 10 dB/div 30.0 21.0 11.0 1.00 -9.00 -19.0 -29.0 -39.0 -49.0 Center 400 MHz Span 120 kHz Total Power Ref 36.23 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>36.25</td><td>(-0.87)</td><td>-100.0</td><td>23.39</td><td>(-13.73)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-36.56</td><td>(-6.24)</td><td>-11.95 k</td><td>-39.84</td><td>(-5.89)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.70</td><td>(-16.70)</td><td>-16.05 k</td><td>-36.63</td><td>(-16.63)</td><td>15.85 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></tbody></table> MSO File <MASK.D.state> recalled STATUS Frequency Center Freq 400.012500 MHz CF Step 12.000 kHz Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	36.25	(-0.87)	-100.0	23.39	(-13.73)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-36.56	(-6.24)	-11.95 k	-39.84	(-5.89)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.70	(-16.70)	-16.05 k	-36.63	(-16.63)	15.85 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	36.25	(-0.87)	-100.0	23.39	(-13.73)	0.0																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-36.56	(-6.24)	-11.95 k	-39.84	(-5.89)	12.45 k																																																										
12.50 kHz	60.00 kHz	100.0 Hz	-36.70	(-16.70)	-16.05 k	-36.63	(-16.63)	15.85 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	—	(—)	—	—	(—)	—																																																										



Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																								
TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 400.012500 MHz Span 120 kHz Total Power Ref 36.28 dBm 0.0125 MHz <table border="1"> <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>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>34.95</td> <td>(-2.18)</td> <td>-100.0</td> <td>27.33</td> <td>2.400 k</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-35.01</td> <td>(-2.87)</td> <td>-12.20 k</td> <td>-36.69</td> <td>-3.10</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-35.80</td> <td>(-15.80)</td> <td>-14.00 k</td> <td>-35.23</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	34.95	(-2.18)	-100.0	27.33	2.400 k	5.625 kHz	12.50 kHz	100.0 Hz	-35.01	(-2.87)	-12.20 k	-36.69	-3.10	12.50 kHz	60.00 kHz	100.0 Hz	-35.80	(-15.80)	-14.00 k	-35.23	-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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	34.95	(-2.18)	-100.0	27.33	2.400 k																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-35.01	(-2.87)	-12.20 k	-36.69	-3.10																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-35.80	(-15.80)	-14.00 k	-35.23	-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	-	(-)	-	(-)	-																																																				
TX-ANH	FM	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Span 120 kHz Total Power Ref 36.29 dBm 0.0125 MHz <table border="1"> <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>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>36.18</td> <td>(-0.84)</td> <td>-150.0</td> <td>-8.480</td> <td>(-45.50)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-38.43</td> <td>(-5.47)</td> <td>-12.30 k</td> <td>-41.31</td> <td>(-6.89)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-36.84</td> <td>(-16.84)</td> <td>-13.85 k</td> <td>-36.72</td> <td>(-16.72)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	36.18	(-0.84)	-150.0	-8.480	(-45.50)	5.625 kHz	12.50 kHz	100.0 Hz	-38.43	(-5.47)	-12.30 k	-41.31	(-6.89)	12.50 kHz	60.00 kHz	100.0 Hz	-36.84	(-16.84)	-13.85 k	-36.72	(-16.72)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	36.18	(-0.84)	-150.0	-8.480	(-45.50)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-38.43	(-5.47)	-12.30 k	-41.31	(-6.89)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-36.84	(-16.84)	-13.85 k	-36.72	(-16.72)																																																				
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 _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Span 120 kHz Total Power Ref 36.13 dBm 0.0125 MHz <table border="1"> <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>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>34.83</td> <td>(-2.19)</td> <td>-150.0</td> <td>27.11</td> <td>(-9.91)</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-37.71</td> <td>(-3.66)</td> <td>-12.45 k</td> <td>-37.03</td> <td>(-4.80)</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-34.34</td> <td>(-14.34)</td> <td>-14.35 k</td> <td>-35.88</td> <td>(-15.88)</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> </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> </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> </tr> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	34.83	(-2.19)	-150.0	27.11	(-9.91)	5.625 kHz	12.50 kHz	100.0 Hz	-37.71	(-3.66)	-12.45 k	-37.03	(-4.80)	12.50 kHz	60.00 kHz	100.0 Hz	-34.34	(-14.34)	-14.35 k	-35.88	(-15.88)	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)	Upper ΔLim(dB)	Freq (Hz)																																																				
0.0 Hz	5.625 kHz	100.0 Hz	34.83	(-2.19)	-150.0	27.11	(-9.91)																																																				
5.625 kHz	12.50 kHz	100.0 Hz	-37.71	(-3.66)	-12.45 k	-37.03	(-4.80)																																																				
12.50 kHz	60.00 kHz	100.0 Hz	-34.34	(-14.34)	-14.35 k	-35.88	(-15.88)																																																				
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	-	(-)	-	(-)	-																																																				