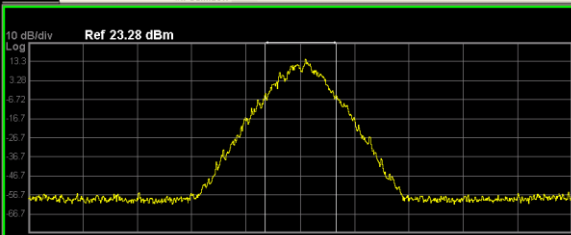


Appendix B:Occupied Bandwidth

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Occupied BW RT SP 50 S DC (SENSE:PULSE) ALISH OFF 09:58:19 AM Nov 21, 2018 Center Freq 479.987500 MHz Center Freq: 479.987500 MHz Trig: Free Run Avg/Hold: > 10/10 Radio Std: None #IFGain: Low #Atten: 8 dB Radio Device: BTS 10 dB/div Ref 23.28 dBm  Center 480 MHz #Res BW 100 Hz #VBW 300 Hz Span 50 kHz Sweep FFT Occupied Bandwidth 6.508 kHz Total Power 25.5 dBm Transmit Freq Error 61 Hz OBW Power 99.00 % x dB Bandwidth 8.870 kHz x dB -26.00 dB MSG STATUS DC Coupled Frequency Center Freq 479.987500 MHz CF Step 5.000 kHz Man Auto Freq Offset 0 Hz



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 IF ADC SENSE PULSE ALIGN OFF 10:14:54 AM Nov 21, 2018 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Mask Spectrum Center 400 MHz Span 120 kHz Total Power Ref 19.90 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>19.70</td><td>(-1.79)</td><td>0.0</td><td>19.92</td><td>(-1.57)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.54</td><td>(-5.69)</td><td>-12.35 k</td><td>-51.99</td><td>(-5.68)</td><td>12.00 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.38</td><td>(-33.38)</td><td>-16.00 k</td><td>-52.94</td><td>(-32.94)</td><td>24.60 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></tbody></table> MSG File <MASK D.state> recalled STATUS Frequency Center Freq 400.012500 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	19.70	(-1.79)	0.0	19.92	(-1.57)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-54.54	(-5.69)	-12.35 k	-51.99	(-5.68)	12.00 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.38	(-33.38)	-16.00 k	-52.94	(-32.94)	24.60 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)																																																										
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TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF IF ADC SENSE PULSE ALIGN OFF 10:15:31 AM Nov 21, 2018 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run Avg: 100.00% of 10 Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Mask Spectrum Center 400 MHz Span 120 kHz Total Power Ref 22.96 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>12.27</td><td>(-9.22)</td><td>-900.0</td><td>12.54</td><td>(-8.95)</td><td>550.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-49.29</td><td>(-0.43)</td><td>-12.35 k</td><td>-50.02</td><td>(-0.81)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-52.04</td><td>(-32.04)</td><td>-13.20 k</td><td>-51.42</td><td>(-31.42)</td><td>13.00 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> MSG File <Temp.png> saved STATUS Frequency Center Freq 400.012500 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	12.27	(-9.22)	-900.0	12.54	(-8.95)	550.0	5.625 kHz	12.50 kHz	100.0 Hz	-49.29	(-0.43)	-12.35 k	-50.02	(-0.81)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-52.04	(-32.04)	-13.20 k	-51.42	(-31.42)	13.00 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)																																																										
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TX-DNH	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF IF ADC SENSE PULSE ALIGN OFF 10:02:04 AM Nov 21, 2018 Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 26.0 dBm 10 dB/div Log 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 Mask Spectrum Center 406 MHz Span 120 kHz Total Power Ref 20.52 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>19.93</td><td>(-1.73)</td><td>0.0</td><td>20.00</td><td>(-1.66)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.54</td><td>(-6.22)</td><td>-12.30 k</td><td>-52.90</td><td>(-3.85)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.60</td><td>(-33.60)</td><td>-19.25 k</td><td>-53.23</td><td>(-33.23)</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></tbody></table> MSG 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	19.93	(-1.73)	0.0	20.00	(-1.66)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-54.54	(-6.22)	-12.30 k	-52.90	(-3.85)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.60	(-33.60)	-19.25 k	-53.23	(-33.23)	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	—	(—)	—	—	(—)	—
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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 Ref Offset 27 dB Ref 26.0 dBm 10 dB/div Log 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 -22.0 -24.0 -26.0 -28.0 -30.0 -32.0 -34.0 -36.0 -38.0 -40.0 -42.0 -44.0 -46.0 -48.0 -50.0 -52.0 -54.0 -56.0 -58.0 -60.0 -62.0 -64.0 -66.0 -68.0 -70.0 -72.0 -74.0 -76.0 -78.0 -80.0 -82.0 -84.0 -86.0 -88.0 -90.0 -92.0 -94.0 -96.0 -98.0 -100.0 -102.0 -104.0 -106.0 -108.0 -110.0 -112.0 -114.0 -116.0 -118.0 -120.0 -122.0 -124.0 -126.0 -128.0 -130.0 -132.0 -134.0 -136.0 -138.0 -140.0 -142.0 -144.0 -146.0 -148.0 -150.0 -152.0 -154.0 -156.0 -158.0 -160.0 -162.0 -164.0 -166.0 -168.0 -170.0 -172.0 -174.0 -176.0 -178.0 -180.0 -182.0 -184.0 -186.0 -188.0 -190.0 -192.0 -194.0 -196.0 -198.0 -200.0 -202.0 -204.0 -206.0 -208.0 -210.0 -212.0 -214.0 -216.0 -218.0 -220.0 -222.0 -224.0 -226.0 -228.0 -230.0 -232.0 -234.0 -236.0 -238.0 -240.0 -242.0 -244.0 -246.0 -248.0 -250.0 -252.0 -254.0 -256.0 -258.0 -260.0 -262.0 -264.0 -266.0 -268.0 -270.0 -272.0 -274.0 -276.0 -278.0 -280.0 -282.0 -284.0 -286.0 -288.0 -290.0 -292.0 -294.0 -296.0 -298.0 -300.0 -302.0 -304.0 -306.0 -308.0 -310.0 -312.0 -314.0 -316.0 -318.0 -320.0 -322.0 -324.0 -326.0 -328.0 -330.0 -332.0 -334.0 -336.0 -338.0 -340.0 -342.0 -344.0 -346.0 -348.0 -350.0 -352.0 -354.0 -356.0 -358.0 -360.0 -362.0 -364.0 -366.0 -368.0 -370.0 -372.0 -374.0 -376.0 -378.0 -380.0 -382.0 -384.0 -386.0 -388.0 -390.0 -392.0 -394.0 -396.0 -398.0 -400.0 -402.0 -404.0 -406.0 -408.0 -410.0 -412.0 -414.0 -416.0 -418.0 -420.0 -422.0 -424.0 -426.0 -428.0 -430.0 -432.0 -434.0 -436.0 -438.0 -440.0 -442.0 -444.0 -446.0 -448.0 -450.0 -452.0 -454.0 -456.0 -458.0 -460.0 -462.0 -464.0 -466.0 -468.0 -470.0 -472.0 -474.0 -476.0 -478.0 -480.0 -482.0 -484.0 -486.0 -488.0 -490.0 -492.0 -494.0 -496.0 -498.0 -500.0 -502.0 -504.0 -506.0 -508.0 -510.0 -512.0 -514.0 -516.0 -518.0 -520.0 -522.0 -524.0 -526.0 -528.0 -530.0 -532.0 -534.0 -536.0 -538.0 -540.0 -542.0 -544.0 -546.0 -548.0 -550.0 -552.0 -554.0 -556.0 -558.0 -560.0 -562.0 -564.0 -566.0 -568.0 -570.0 -572.0 -574.0 -576.0 -578.0 -580.0 -582.0 -584.0 -586.0 -588.0 -590.0 -592.0 -594.0 -596.0 -598.0 -600.0 -602.0 -604.0 -606.0 -608.0 -610.0 -612.0 -614.0 -616.0 -618.0 -620.0 -622.0 -624.0 -626.0 -628.0 -630.0 -632.0 -634.0 -636.0 -638.0 -640.0 -642.0 -644.0 -646.0 -648.0 -650.0 -652.0 -654.0 -656.0 -658.0 -660.0 -662.0 -664.0 -666.0 -668.0 -670.0 -672.0 -674.0 -676.0 -678.0 -680.0 -682.0 -684.0 -686.0 -688.0 -690.0 -692.0 -694.0 -696.0 -698.0 -700.0 -702.0 -704.0 -706.0 -708.0 -710.0 -712.0 -714.0 -716.0 -718.0 -720.0 -722.0 -724.0 -726.0 -728.0 -730.0 -732.0 -734.0 -736.0 -738.0 -740.0 -742.0 -744.0 -746.0 -748.0 -750.0 -752.0 -754.0 -756.0 -758.0 -760.0 -762.0 -764.0 -766.0 -768.0 -770.0 -772.0 -774.0 -776.0 -778.0 -780.0 -782.0 -784.0 -786.0 -788.0 -790.0 -792.0 -794.0 -796.0 -798.0 -800.0 -802.0 -804.0 -806.0 -808.0 -810.0 -812.0 -814.0 -816.0 -818.0 -820.0 -822.0 -824.0 -826.0 -828.0 -830.0 -832.0 -834.0 -836.0 -838.0 -840.0 -842.0 -844.0 -846.0 -848.0 -850.0 -852.0 -854.0 -856.0 -858.0 -860.0 -862.0 -864.0 -866.0 -868.0 -870.0 -872.0 -874.0 -876.0 -878.0 -880.0 -882.0 -884.0 -886.0 -888.0 -890.0 -892.0 -894.0 -896.0 -898.0 -900.0 -902.0 -904.0 -906.0 -908.0 -910.0 -912.0 -914.0 -916.0 -918.0 -920.0 -922.0 -924.0 -926.0 -928.0 -930.0 -932.0 -934.0 -936.0 -938.0 -940.0 -942.0 -944.0 -946.0 -948.0 -950.0 -952.0 -954.0 -956.0 -958.0 -960.0 -962.0 -964.0 -966.0 -968.0 -970.0 -972.0 -974.0 -976.0 -978.0 -980.0 -982.0 -984.0 -986.0 -988.0 -990.0 -992.0 -994.0 -996.0 -998.0 -1000.0 -1002.0 -1004.0 -1006.0 -1008.0 -1010.0 -1012.0 -1014.0 -1016.0 -1018.0 -1020.0 -1022.0 -1024.0 -1026.0 -1028.0 -1030.0 -1032.0 -1034.0 -1036.0 -1038.0 -1040.0 -1042.0 -1044.0 -1046.0 -1048.0 -1050.0 -1052.0 -1054.0 -1056.0 -1058.0 -1060.0 -1062.0 -1064.0 -1066.0 -1068.0 -1070.0 -1072.0 -1074.0 -1076.0 -1078.0 -1080.0 -1082.0 -1084.0 -1086.0 -1088.0 -1090.0 -1092.0 -1094.0 -1096.0 -1098.0 -1100.0 -1102.0 -1104.0 -1106.0 -1108.0 -1110.0 -1112.0 -1114.0 -1116.0 -1118.0 -1120.0 -1122.0 -1124.0 -1126.0 -1128.0 -1130.0 -1132.0 -1134.0 -1136.0 -1138.0 -1140.0 -1142.0 -1144.0 -1146.0 -1148.0 -1150.0 -1152.0 -1154.0 -1156.0 -1158.0 -1160.0 -1162.0 -1164.0 -1166.0 -1168.0 -1170.0 -1172.0 -1174.0 -1176.0 -1178.0 -1180.0 -1182.0 -1184.0 -1186.0 -1188.0 -1190.0 -1192.0 -1194.0 -1196.0 -1198.0 -1200.0 -1202.0 -1204.0 -1206.0 -1208.0 -1210.0 -1212.0 -1214.0 -1216.0 -1218.0 -1220.0 -1222.0 -1224.0 -1226.0 -1228.0 -1230.0 -1232.0 -1234.0 -1236.0 -1238.0 -1240.0 -1242.0 -1244.0 -1246.0 -1248.0 -1250.0 -1252.0 -1254.0 -1256.0 -1258.0 -1260.0 -1262.0 -1264.0 -1266.0 -1268.0 -1270.0 -1272.0 -1274.0 -1276.0 -1278.0 -1280.0 -1282.0 -1284.0 -1286.0 -1288.0 -1290.0 -1292.0 -1294.0 -1296.0 -1298.0 -1300.0 -1302.0 -1304.0 -1306.0 -1308.0 -1310.0 -1312.0 -1314.0 -1316.0 -1318.0 -1320.0 -1322.0 -1324.0 -1326.0 -1328.0 -1330.0 -1332.0 -1334.0 -1336.0 -1338.0 -1340.0 -1342.0 -1344.0 -1346.0 -1348.0 -1350.0 -1352.0 -1354.0 -1356.0 -1358.0 -1360.0 -1362.0 -1364.0 -1366.0 -1368.0 -1370.0 -1372.0 -1374.0 -1376.0 -1378.0 -1380.0 -1382.0 -1384.0 -1386.0 -1388.0 -1390.0 -1392.0 -1394.0 -1396.0 -1398.0 -1400.0 -1402.0 -1404.0 -1406.0 -1408.0 -1410.0 -1412.0 -1414.0 -1416.0 -1418.0 -1420.0 -1422.0 -1424.0 -1426.0 -1428.0 -1430.0 -1432.0 -1434.0 -1436.0 -1438.0 -1440.0 -1442.0 -1444.0 -1446.0 -1448.0 -1450.0 -1452.0 -1454.0 -1456.0 -1458.0 -1460.0 -1462.0 -1464.0 -1466.0 -1468.0 -1470.0 -1472.0 -1474.0 -1476.0 -1478.0 -1480.0 -1482.0 -1484.0 -1486.0 -1488.0 -1490.0 -1492.0 -1494.0 -1496.0 -1498.0 -1500.0 -1502.0 -1504.0 -1506.0 -1508.0 -1510.0 -1512.0 -1514.0 -1516.0 -1518.0 -1520.0 -1522.0 -1524.0 -1526.0 -1528.0 -1530.0 -1532.0 -1534.0 -1536.0 -1538.0 -1540.0 -1542.0 -1544.0 -1546.0 -1548.0 -1550.0 -1552.0 -1554.0 -1556.0 -1558.0 -1560.0 -1562.0 -1564.0 -1566.0 -1568.0 -1570.0 -1572.0 -1574.0 -1576.0 -1578.0 -1580.0 -1582.0 -1584.0 -1586.0 -1588.0 -1590.0 -1592.0 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-2094.0 -2096.0 -2098.0 -2100.0 -2102.0 -2104.0 -2106.0 -2108.0 -2110.0 -2112.0 -2114.0 -2116.0 -2118.0 -2120.0 -2122.0 -2124.0 -2126.0 -2128.0 -2130.0 -2132.0 -2134.0 -2136.0 -2138.0 -2140.0 -2142.0 -2144.0 -2146.0 -2148.0 -2150.0 -2152.0 -2154.0 -2156.0 -2158.0 -2160.0 -2162.0 -2164.0 -2166.0 -2168.0 -2170.0 -2172.0 -2174.0 -2176.0 -2178.0 -2180.0 -2182.0 -2184.0 -2186.0 -2188.0 -2190.0 -2192.0 -2194.0 -2196.0 -2198.0 -2200.0 -2202.0 -2204.0 -2206.0 -2208.0 -2210.0 -2212.0 -2214.0 -2216.0 -2218.0 -2220.0 -2222.0 -2224.0 -2226.0 -2228.0 -2230.0 -2232.0 -2234.0 -2236.0 -2238.0 -2240.0 -2242.0 -2244.0 -2246.0 -2248.0 -2250.0 -2252.0 -2254.0 -2256.0 -2258.0 -2260.0 -2262.0 -2264.0 -2266.0 -2268.0 -2270.0 -2272.0 -2274.0 -2276.0 -2278.0 -2280.0 -2282.0 -2284.0 -2286.0 -2288



Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 443.050000 MHz Ref Offset 28 dB Ref 24.0 dBm Center 443.1 MHz Span 120 kHz Total Power Ref 19.20 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>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>18.74</td> <td>(-1.08)</td> <td>0.0</td> <td>18.74</td> <td>(-1.08)</td> <td>0.0</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-52.56</td> <td>(-2.76)</td> <td>-12.25 k</td> <td>-52.63</td> <td>(-2.47)</td> <td>12.30 k</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-51.82</td> <td>(-31.82)</td> <td>-12.75 k</td> <td>-52.24</td> <td>(-32.24)</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> </tbody> </table>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	18.74	(-1.08)	0.0	18.74	(-1.08)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-52.56	(-2.76)	-12.25 k	-52.63	(-2.47)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-51.82	(-31.82)	-12.75 k	-52.24	(-32.24)	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	-	(-)	-	-	(-)	-
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TX-DNH	4FSK	CH _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 443.050000 MHz Ref Offset 28 dB Ref 24.0 dBm Center 443.1 MHz Span 120 kHz Total Power Ref 22.15 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>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>9.244</td> <td>(-10.58)</td> <td>-950.0</td> <td>12.57</td> <td>(7.25)</td> <td>550.0</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-52.41</td> <td>(1.89)</td> <td>-12.35 k</td> <td>-50.67</td> <td>(0.15)</td> <td>12.35 k</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-51.03</td> <td>(-31.03)</td> <td>-15.55 k</td> <td>-52.02</td> <td>(-32.02)</td> <td>12.70 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>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	9.244	(-10.58)	-950.0	12.57	(7.25)	550.0	5.625 kHz	12.50 kHz	100.0 Hz	-52.41	(1.89)	-12.35 k	-50.67	(0.15)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-51.03	(-31.03)	-15.55 k	-52.02	(-32.02)	12.70 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	-	(-)	-	-	(-)	-
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TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 479.987500 MHz Ref Offset 27 dB Ref 26.0 dBm Center 480 MHz Span 120 kHz Total Power Ref 20.25 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>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>19.78</td> <td>(-2.29)</td> <td>0.0</td> <td>20.30</td> <td>(-1.76)</td> <td>50.00</td> </tr> <tr> <td>5.625 kHz</td> <td>12.50 kHz</td> <td>100.0 Hz</td> <td>-53.99</td> <td>(-4.62)</td> <td>-12.50 k</td> <td>-54.14</td> <td>(-6.95)</td> <td>12.20 k</td> </tr> <tr> <td>12.50 kHz</td> <td>60.00 kHz</td> <td>100.0 Hz</td> <td>-53.16</td> <td>(-33.16)</td> <td>-14.85 k</td> <td>-52.34</td> <td>(-32.34)</td> <td>13.20 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>	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	19.78	(-2.29)	0.0	20.30	(-1.76)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-53.99	(-4.62)	-12.50 k	-54.14	(-6.95)	12.20 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.16	(-33.16)	-14.85 k	-52.34	(-32.34)	13.20 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	-	(-)	-	-	(-)	-
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Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK QPSK SENSE PULSE ALIGN OFF 09:57:51 AM Nov 21, 2018 Center Freq 479.987500 MHz Center Freq: 479.987500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS IF Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 26.0 dBm 10 dB/div Log 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 -55.0 -60.0 Mask Limit Reference Line Spectrum Center 480 MHz Span 120 kHz Total Power Ref 23.27 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>13.53</td><td>(-8.54)</td><td>-250.0</td><td>12.78</td><td>(-9.29)</td><td>550.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-51.08</td><td>(-3.17)</td><td>-12.30 k</td><td>-52.85</td><td>(-3.48)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-51.41</td><td>(-31.41)</td><td>-15.75 k</td><td>-50.97</td><td>(-30.97)</td><td>17.40 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> MSG File <Temp.png> saved STATUS Frequency Center Freq 479.987500 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	13.53	(-8.54)	-250.0	12.78	(-9.29)	550.0	5.625 kHz	12.50 kHz	100.0 Hz	-51.08	(-3.17)	-12.30 k	-52.85	(-3.48)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-51.41	(-31.41)	-15.75 k	-50.97	(-30.97)	17.40 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	—	(—)	—	—	(—)	—
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12.50 kHz	60.00 kHz	100.0 Hz	-51.41	(-31.41)	-15.75 k	-50.97	(-30.97)	17.40 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 _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK QPSK SENSE PULSE ALIGN OFF 10:35:43 AM Nov 21, 2018 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS IF Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 -55.0 -60.0 Mask Limit Reference Line Spectrum Center 400 MHz Span 120 kHz Total Power Ref 19.62 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>19.09</td><td>(-1.74)</td><td>0.0</td><td>19.10</td><td>(-1.73)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-56.40</td><td>(-8.34)</td><td>-12.15 k</td><td>-54.66</td><td>(-6.60)</td><td>12.15 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.96</td><td>(-33.96)</td><td>-16.55 k</td><td>-52.63</td><td>(-32.63)</td><td>13.25 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> MSG File <MASK D state> recalled STATUS Frequency Center Freq 400.012500 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	19.09	(-1.74)	0.0	19.10	(-1.73)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-56.40	(-8.34)	-12.15 k	-54.66	(-6.60)	12.15 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.96	(-33.96)	-16.55 k	-52.63	(-32.63)	13.25 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)																																																										
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4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
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TX-DNL	4FSK	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK QPSK SENSE PULSE ALIGN OFF 10:36:18 AM Nov 21, 2018 Center Freq 400.012500 MHz Center Freq: 400.012500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS IF Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 -55.0 -60.0 Mask Limit Reference Line Spectrum Center 400 MHz Span 120 kHz Total Power Ref 22.56 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>10.70</td><td>(-10.13)</td><td>-150.0</td><td>9.689</td><td>(-11.14)</td><td>700.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-50.78</td><td>(-0.90)</td><td>-12.40 k</td><td>-52.63</td><td>(-2.39)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-52.19</td><td>(-32.19)</td><td>-13.35 k</td><td>-50.85</td><td>(-30.85)</td><td>13.75 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> MSG File <Temp.png> saved STATUS Frequency Center Freq 400.012500 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	10.70	(-10.13)	-150.0	9.689	(-11.14)	700.0	5.625 kHz	12.50 kHz	100.0 Hz	-50.78	(-0.90)	-12.40 k	-52.63	(-2.39)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-52.19	(-32.19)	-13.35 k	-50.85	(-30.85)	13.75 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)																																																										
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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 RL SP FSK AC SENSE PULSE ALIGN OFF 10:03:36 AM Nov 21, 2018 Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 405.987500 MHz 406.000000 MHz 406.012500 MHz 406.025000 MHz 406.037500 MHz 406.050000 MHz 406.062500 MHz 406.075000 MHz 406.087500 MHz 406.100000 MHz 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406 MHz Span 120 kHz Total Power Ref 19.38 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>18.72</td><td>(-1.83)</td><td>0.0</td><td>18.92</td><td>(-1.63)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-57.37</td><td>(-7.58)</td><td>-12.35 k</td><td>-58.07</td><td>(-8.27)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.32</td><td>(-33.32)</td><td>-13.65 k</td><td>-52.39</td><td>(-32.39)</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> MSG File <MASK.D.state> recalled (STATUS) Frequency Center Freq 405.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz <tr><td>TX-DNL</td><td>4FSK</td><td>CH_{M1}</td><td> Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:04:16 AM Nov 21, 2018 Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 405.987500 MHz 406.000000 MHz 406.012500 MHz 406.025000 MHz 406.037500 MHz 406.050000 MHz 406.062500 MHz 406.075000 MHz 406.087500 MHz 406.100000 MHz 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406 MHz Span 120 kHz Total Power Ref 21.98 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>8.111</td><td>(-12.44)</td><td>-600.0</td><td>13.77</td><td>(-6.78)</td><td>500.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.95</td><td>(-4.43)</td><td>-12.45 k</td><td>-52.91</td><td>(-3.48)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-50.51</td><td>(-30.51)</td><td>-13.60 k</td><td>-52.37</td><td>(-32.37)</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> MSG File <Temp.png> saved (STATUS) Frequency Center Freq 405.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz <tr><td>TX-DNL</td><td>4FSK</td><td>CH_{M2}</td><td> Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:32:57 AM Nov 21, 2018 Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406.1 MHz Span 120 kHz Total Power Ref 19.29 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>18.94</td><td>(-1.56)</td><td>0.0</td><td>18.94</td><td>(-1.56)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-56.27</td><td>(-5.69)</td><td>-12.45 k</td><td>-55.82</td><td>(-7.79)</td><td>12.10 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.52</td><td>(-33.52)</td><td>-19.25 k</td><td>-53.06</td><td>(-33.06)</td><td>15.45 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 </td></tr></td></tr>	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	18.72	(-1.83)	0.0	18.92	(-1.63)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-57.37	(-7.58)	-12.35 k	-58.07	(-8.27)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.32	(-33.32)	-13.65 k	-52.39	(-32.39)	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	—	(—)	—	—	(—)	—	TX-DNL	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:04:16 AM Nov 21, 2018 Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 405.987500 MHz 406.000000 MHz 406.012500 MHz 406.025000 MHz 406.037500 MHz 406.050000 MHz 406.062500 MHz 406.075000 MHz 406.087500 MHz 406.100000 MHz 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406 MHz Span 120 kHz Total Power Ref 21.98 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>8.111</td><td>(-12.44)</td><td>-600.0</td><td>13.77</td><td>(-6.78)</td><td>500.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.95</td><td>(-4.43)</td><td>-12.45 k</td><td>-52.91</td><td>(-3.48)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-50.51</td><td>(-30.51)</td><td>-13.60 k</td><td>-52.37</td><td>(-32.37)</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> MSG File <Temp.png> saved (STATUS) Frequency Center Freq 405.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz <tr><td>TX-DNL</td><td>4FSK</td><td>CH_{M2}</td><td> Agilent Spectrum Analyzer - 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TX-DNL	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:04:16 AM Nov 21, 2018 Center Freq 405.987500 MHz Center Freq: 405.987500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run Avg: 100.00% of 10 #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 405.987500 MHz 406.000000 MHz 406.012500 MHz 406.025000 MHz 406.037500 MHz 406.050000 MHz 406.062500 MHz 406.075000 MHz 406.087500 MHz 406.100000 MHz 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406 MHz Span 120 kHz Total Power Ref 21.98 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>8.111</td><td>(-12.44)</td><td>-600.0</td><td>13.77</td><td>(-6.78)</td><td>500.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.95</td><td>(-4.43)</td><td>-12.45 k</td><td>-52.91</td><td>(-3.48)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-50.51</td><td>(-30.51)</td><td>-13.60 k</td><td>-52.37</td><td>(-32.37)</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> MSG File <Temp.png> saved (STATUS) Frequency Center Freq 405.987500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz <tr><td>TX-DNL</td><td>4FSK</td><td>CH_{M2}</td><td> Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:32:57 AM Nov 21, 2018 Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406.1 MHz Span 120 kHz Total Power Ref 19.29 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>18.94</td><td>(-1.56)</td><td>0.0</td><td>18.94</td><td>(-1.56)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-56.27</td><td>(-5.69)</td><td>-12.45 k</td><td>-55.82</td><td>(-7.79)</td><td>12.10 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.52</td><td>(-33.52)</td><td>-19.25 k</td><td>-53.06</td><td>(-33.06)</td><td>15.45 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 </td></tr>	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	8.111	(-12.44)	-600.0	13.77	(-6.78)	500.0	5.625 kHz	12.50 kHz	100.0 Hz	-54.95	(-4.43)	-12.45 k	-52.91	(-3.48)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-50.51	(-30.51)	-13.60 k	-52.37	(-32.37)	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-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:32:57 AM Nov 21, 2018 Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406.1 MHz Span 120 kHz Total Power Ref 19.29 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>18.94</td><td>(-1.56)</td><td>0.0</td><td>18.94</td><td>(-1.56)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-56.27</td><td>(-5.69)</td><td>-12.45 k</td><td>-55.82</td><td>(-7.79)</td><td>12.10 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.52</td><td>(-33.52)</td><td>-19.25 k</td><td>-53.06</td><td>(-33.06)</td><td>15.45 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	18.94	(-1.56)	0.0	18.94	(-1.56)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-56.27	(-5.69)	-12.45 k	-55.82	(-7.79)	12.10 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.52	(-33.52)	-19.25 k	-53.06	(-33.06)	15.45 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	—	(—)	—	—	(—)	—																																																																			
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TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL SP FSK AC SENSE PULSE ALIGN OFF 10:32:57 AM Nov 21, 2018 Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Radio Std: None PASS IF Gain: Low Trig: Free Run #Atten: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 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 Frequency 406.112500 MHz 406.125000 MHz 406.137500 MHz 406.150000 MHz 406.162500 MHz 406.175000 MHz 406.187500 MHz 406.200000 MHz 406.212500 MHz 406.225000 MHz 406.237500 MHz 406.250000 MHz 406.262500 MHz 406.275000 MHz 406.287500 MHz 406.300000 MHz 406.312500 MHz 406.325000 MHz 406.337500 MHz 406.350000 MHz 406.362500 MHz 406.375000 MHz 406.387500 MHz 406.400000 MHz 406.412500 MHz 406.425000 MHz 406.437500 MHz 406.450000 MHz 406.462500 MHz 406.475000 MHz 406.487500 MHz 406.500000 MHz 406.512500 MHz 406.525000 MHz 406.537500 MHz 406.550000 MHz 406.562500 MHz 406.575000 MHz 406.587500 MHz 406.600000 MHz 406.612500 MHz 406.625000 MHz 406.637500 MHz 406.650000 MHz 406.662500 MHz 406.675000 MHz 406.687500 MHz 406.700000 MHz 406.712500 MHz 406.725000 MHz 406.737500 MHz 406.750000 MHz 406.762500 MHz 406.775000 MHz 406.787500 MHz 406.800000 MHz 406.812500 MHz 406.825000 MHz 406.837500 MHz 406.850000 MHz 406.862500 MHz 406.875000 MHz 406.887500 MHz 406.900000 MHz 406.912500 MHz 406.925000 MHz 406.937500 MHz 406.950000 MHz 406.962500 MHz 406.975000 MHz 406.987500 MHz 407.000000 MHz Center 406.1 MHz Span 120 kHz Total Power Ref 19.29 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>18.94</td><td>(-1.56)</td><td>0.0</td><td>18.94</td><td>(-1.56)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-56.27</td><td>(-5.69)</td><td>-12.45 k</td><td>-55.82</td><td>(-7.79)</td><td>12.10 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-53.52</td><td>(-33.52)</td><td>-19.25 k</td><td>-53.06</td><td>(-33.06)</td><td>15.45 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	18.94	(-1.56)	0.0	18.94	(-1.56)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-56.27	(-5.69)	-12.45 k	-55.82	(-7.79)	12.10 k	12.50 kHz	60.00 kHz	100.0 Hz	-53.52	(-33.52)	-19.25 k	-53.06	(-33.06)	15.45 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	—	(—)	—	—	(—)	—																																																																																																																																						
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Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-DNL	4FSK	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF SD AC SENSE PULSE ALIGN OFF 10:33:37 AM Nov 21, 2018 Center Freq 406.112500 MHz Center Freq: 406.112500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS If Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 20.0 15.0 10.0 5.00 0.00 -5.00 -10.00 -15.00 -20.00 -25.00 -30.00 -35.00 -40.00 -45.00 -50.00 406.0 406.1 406.2 406.3 406.4 406.5 406.6 406.7 406.8 406.9 407.0 406.1 MHz Span 120 kHz Total Power Ref 21.52 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>10.21</td><td>(-10.29)</td><td>-600.0</td><td>13.14</td><td>(-7.36)</td><td>450.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-52.89</td><td>(-4.13)</td><td>-12.20 k</td><td>-51.54</td><td>(-1.69)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-52.64</td><td>(-32.64)</td><td>-15.05 k</td><td>-52.04</td><td>(-32.04)</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></table> File <Temp.png> saved STATUS Frequency Center Freq 406.112500 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	10.21	(-10.29)	-600.0	13.14	(-7.36)	450.0	5.625 kHz	12.50 kHz	100.0 Hz	-52.89	(-4.13)	-12.20 k	-51.54	(-1.69)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-52.64	(-32.64)	-15.05 k	-52.04	(-32.04)	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 >	Upper ΔLim(dB)	Freq (Hz)																																																										
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12.50 kHz	60.00 kHz	100.0 Hz	-52.64	(-32.64)	-15.05 k	-52.04	(-32.04)	15.85 k																																																										
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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 RL RF SD AC SENSE PULSE ALIGN OFF 10:26:08 PM Nov 23, 2018 Center Freq 443.050000 MHz Center Freq: 443.050000 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS If Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 28 dB Ref 36.0 dBm 10 dB/div Log 20.0 15.0 10.0 5.00 0.00 -5.00 -10.00 -15.00 -20.00 -25.00 -30.00 -35.00 -40.00 -45.00 -50.00 443.0 443.1 443.2 443.3 443.4 443.5 443.6 443.7 443.8 443.9 444.0 443.1 MHz Span 120 kHz Total Power Ref 30.89 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>29.38</td><td>(-2.37)</td><td>0.0</td><td>30.97</td><td>(-0.78)</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-43.17</td><td>(-3.84)</td><td>-12.45 k</td><td>-43.50</td><td>(-3.82)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-41.54</td><td>(-21.54)</td><td>-12.50 k</td><td>-41.34</td><td>(-21.34)</td><td>12.60 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 <MASK.D.state> recalled STATUS Frequency Center Freq 443.050000 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	29.38	(-2.37)	0.0	30.97	(-0.78)	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-43.17	(-3.84)	-12.45 k	-43.50	(-3.82)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-41.54	(-21.54)	-12.50 k	-41.34	(-21.34)	12.60 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 >	Upper ΔLim(dB)	Freq (Hz)																																																										
0.0 Hz	5.625 kHz	100.0 Hz	29.38	(-2.37)	0.0	30.97	(-0.78)	50.00																																																										
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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 RL RF SD AC SENSE PULSE ALIGN OFF 10:26:50 PM Nov 23, 2018 Center Freq 443.050000 MHz Center Freq: 443.050000 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None PASS If Gain: Low Attenu: 40 dB Radio Device: BTS Ref Offset 28 dB Ref 36.0 dBm 10 dB/div Log 20.0 15.0 10.0 5.00 0.00 -5.00 -10.00 -15.00 -20.00 -25.00 -30.00 -35.00 -40.00 -45.00 -50.00 443.0 443.1 443.2 443.3 443.4 443.5 443.6 443.7 443.8 443.9 444.0 443.1 MHz Span 120 kHz Total Power Ref 34.33 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>21.36</td><td>(-10.39)</td><td>-100.0</td><td>23.86</td><td>(-7.89)</td><td>1.050 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-41.29</td><td>(-3.42)</td><td>-12.25 k</td><td>-41.34</td><td>(-3.11)</td><td>12.30 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-42.97</td><td>(-22.97)</td><td>-13.15 k</td><td>-40.29</td><td>(-20.29)</td><td>13.65 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 443.050000 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	21.36	(-10.39)	-100.0	23.86	(-7.89)	1.050 k	5.625 kHz	12.50 kHz	100.0 Hz	-41.29	(-3.42)	-12.25 k	-41.34	(-3.11)	12.30 k	12.50 kHz	60.00 kHz	100.0 Hz	-42.97	(-22.97)	-13.15 k	-40.29	(-20.29)	13.65 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	21.36	(-10.39)	-100.0	23.86	(-7.89)	1.050 k																																																										
5.625 kHz	12.50 kHz	100.0 Hz	-41.29	(-3.42)	-12.25 k	-41.34	(-3.11)	12.30 k																																																										
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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 Center Freq 479.987500 MHz Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 15.0 5.00 5.00 15.0 35.0 45.0 55.0 65.0 Center 480 MHz Span 120 kHz Total Power Ref 19.38 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>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>18.86</td><td>(-1.81)</td><td>0.0</td><td>18.91</td><td>(-1.76)</td><td>50.00</td><td>50.00</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-52.47</td><td>(-4.97)</td><td>-12.05 k</td><td>-54.18</td><td>(-5.95)</td><td>12.15 k</td><td>12.15 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-54.06</td><td>(-34.06)</td><td>-13.95 k</td><td>-54.27</td><td>(-34.27)</td><td>22.90 k</td><td>22.90 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><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><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><td>—</td></tr></table> File <MASK.D.state> recalled STATUS Frequency Center Freq 479.987500 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	18.86	(-1.81)	0.0	18.91	(-1.76)	50.00	50.00	5.625 kHz	12.50 kHz	100.0 Hz	-52.47	(-4.97)	-12.05 k	-54.18	(-5.95)	12.15 k	12.15 k	12.50 kHz	60.00 kHz	100.0 Hz	-54.06	(-34.06)	-13.95 k	-54.27	(-34.27)	22.90 k	22.90 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	18.86	(-1.81)	0.0	18.91	(-1.76)	50.00	50.00																																																																	
5.625 kHz	12.50 kHz	100.0 Hz	-52.47	(-4.97)	-12.05 k	-54.18	(-5.95)	12.15 k	12.15 k																																																																	
12.50 kHz	60.00 kHz	100.0 Hz	-54.06	(-34.06)	-13.95 k	-54.27	(-34.27)	22.90 k	22.90 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	—	(—)	—	—	(—)	—	—																																																																	
TX-DNL	4FSK	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 479.987500 MHz Ref Offset 27 dB Ref 25.0 dBm 10 dB/div Log 15.0 5.00 5.00 15.0 35.0 45.0 55.0 65.0 Center 480 MHz Span 120 kHz Total Power Ref 21.49 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>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>10.88</td><td>(-9.78)</td><td>-900.0</td><td>13.64</td><td>(-7.02)</td><td>500.0</td><td>500.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-54.16</td><td>(-3.39)</td><td>-12.50 k</td><td>-53.00</td><td>(-2.23)</td><td>12.50 k</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-52.89</td><td>(-32.89)</td><td>-14.70 k</td><td>-50.52</td><td>(-30.52)</td><td>14.70 k</td><td>14.70 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><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><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><td>—</td></tr></table> File <Temp.png> saved STATUS Frequency Center Freq 479.987500 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	10.88	(-9.78)	-900.0	13.64	(-7.02)	500.0	500.0	5.625 kHz	12.50 kHz	100.0 Hz	-54.16	(-3.39)	-12.50 k	-53.00	(-2.23)	12.50 k	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-52.89	(-32.89)	-14.70 k	-50.52	(-30.52)	14.70 k	14.70 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	10.88	(-9.78)	-900.0	13.64	(-7.02)	500.0	500.0																																																																	
5.625 kHz	12.50 kHz	100.0 Hz	-54.16	(-3.39)	-12.50 k	-53.00	(-2.23)	12.50 k	12.50 k																																																																	
12.50 kHz	60.00 kHz	100.0 Hz	-52.89	(-32.89)	-14.70 k	-50.52	(-30.52)	14.70 k	14.70 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	—	(—)	—	—	(—)	—	—																																																																	

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

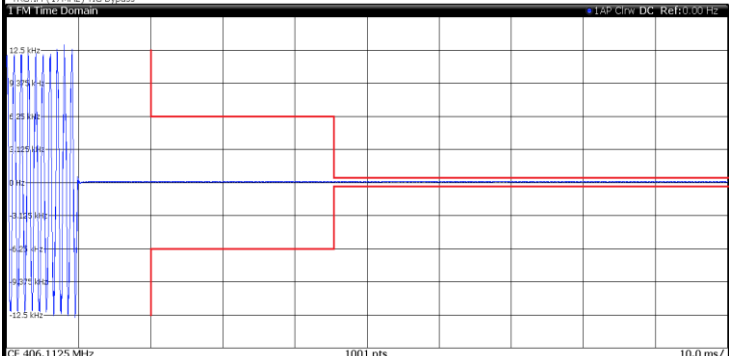
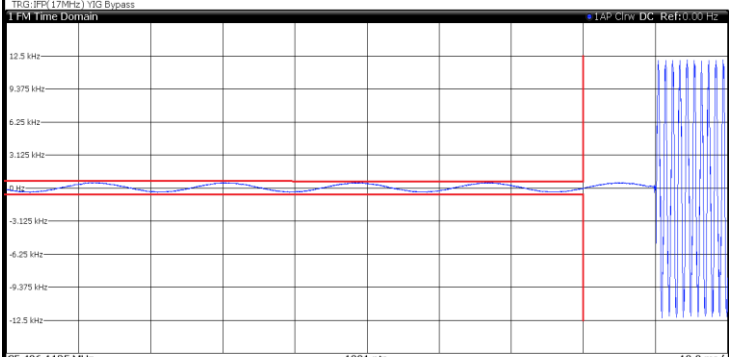
Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)					Limit (ppm)	Result
		Voltage	Temperature	CH _L	CH _{M1}	CH _{M2}	CH _{M3}	CH _{M4}		
TX-DNH	4FSK	V _N	-30	<u>0.090</u>	-0.059	-0.073	-0.047	-0.077	±5.0	PASS
TX-DNH	4FSK	V _N	-20	0.086	-0.053	-0.065	-0.044	-0.070	±5.0	PASS
TX-DNH	4FSK	V _N	-10	0.079	-0.052	-0.063	-0.044	-0.068	±5.0	PASS
TX-DNH	4FSK	V _N	0	0.071	-0.045	-0.057	-0.037	-0.060	±5.0	PASS
TX-DNH	4FSK	V _N	10	0.063	-0.039	-0.047	-0.033	-0.053	±5.0	PASS
TX-DNH	4FSK	V _N	20	0.056	-0.035	-0.043	-0.029	-0.046	±5.0	PASS
TX-DNH	4FSK	V _N	30	0.070	-0.042	-0.053	-0.036	-0.055	±5.0	PASS
TX-DNH	4FSK	V _N	40	0.073	-0.047	-0.057	-0.037	-0.058	±5.0	PASS
TX-DNH	4FSK	V _N	55	0.076	-0.049	-0.058	-0.040	-0.063	±5.0	PASS
TX-DNL	4FSK	V _N	-30	0.061	0.084	-0.096	-0.093	-0.040	±5.0	PASS
TX-DNL	4FSK	V _N	-20	0.055	0.075	-0.086	-0.082	-0.035	±5.0	PASS
TX-DNL	4FSK	V _N	-10	0.051	0.066	-0.075	-0.074	-0.032	±5.0	PASS
TX-DNL	4FSK	V _N	0	0.041	0.056	-0.064	-0.065	-0.026	±5.0	PASS
TX-DNL	4FSK	V _N	10	0.039	0.049	-0.058	-0.054	-0.024	±5.0	PASS
TX-DNL	4FSK	V _N	20	0.033	0.043	-0.051	-0.048	-0.021	±5.0	PASS
TX-DNL	4FSK	V _N	30	0.044	0.058	-0.065	-0.063	-0.026	±5.0	PASS
TX-DNL	4FSK	V _N	40	0.048	0.065	-0.075	-0.074	-0.032	±5.0	PASS
TX-DNL	4FSK	V _N	55	0.055	0.071	-0.087	-0.081	-0.037	±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 _{M1}	CH _{M2}	CH _{M3}	CH _{M4}		
TX-DNH	4FSK	V _N	T _N	0.056	-0.035	-0.043	-0.029	-0.046	±5.0	PASS
TX-DNH	4FSK	V _L	T _N	<u>0.090</u>	-0.054	-0.069	-0.044	-0.069	±5.0	PASS
TX-DNH	4FSK	V _H	T _N	0.065	-0.041	-0.049	-0.033	-0.052	±5.0	PASS
TX-DNL	4FSK	V _N	T _N	0.033	0.043	-0.051	-0.048	-0.021	±5.0	PASS
TX-DNL	4FSK	V _L	T _N	0.052	<u>0.065</u>	-0.081	-0.072	-0.034	±5.0	PASS
TX-DNL	4FSK	V _H	T _N	0.044	0.058	-0.064	-0.064	-0.028	±5.0	PASS

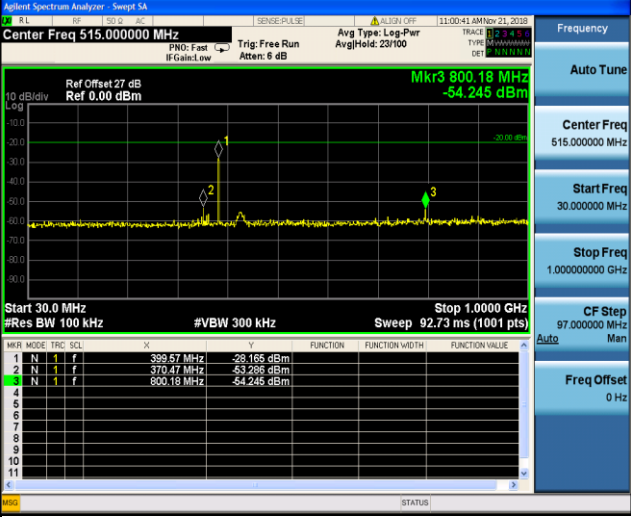
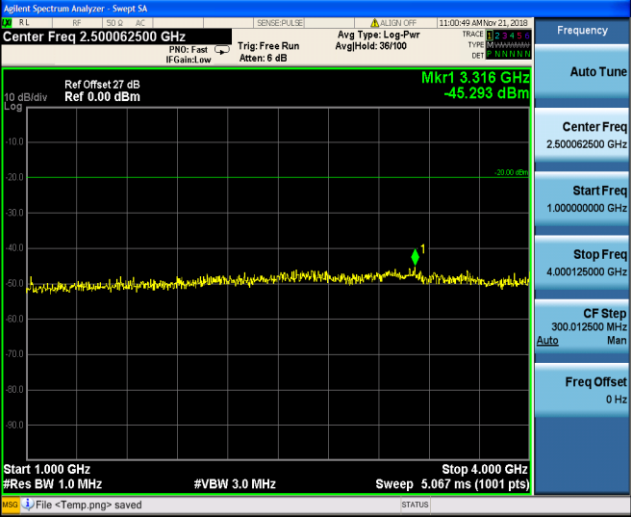
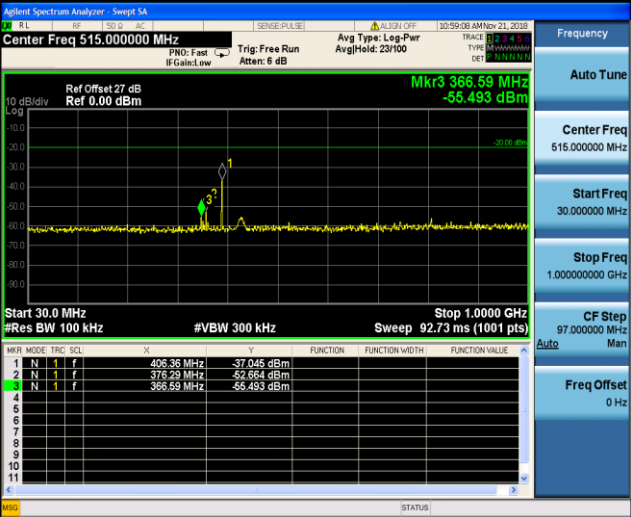


Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																								
TX-DNH	4FSK	CH _{M2}	MultiViewSpectrumAnalog Demod Ref Level 37.00 dBm Offset 20.50 dB Att 26 dB AQT 100 ms DBW 25 kHz Freq 406.1125 MHz TRG:IFPK(17MHz) YIG Bypass 1 FM Time Domain  CF 406.1125 MHz1001 pts10.0 ms/ 4 Result Summary <table><tr><td></td><td>Carrier Power</td><td>25.81 dBm</td><td>Carrier Offset</td><td>58.19 Hz</td><td></td><td></td><td></td></tr><tr><td>+Peak</td><td>13.001 kHz</td><td>-12.745 kHz</td><td>12.873 kHz</td><td>8.7439 kHz</td><td>Mod. Freq.</td><td>1.0 kHz</td><td>SINAD</td></tr><tr><td>-Peak</td><td></td><td></td><td></td><td></td><td></td><td></td><td>THD</td></tr><tr><td>+Peak/2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>RMS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> Analog Demod: Waiting for Trigger... Measuring... 22.11.2018 11:02:31 Date: 22.NOV.2018 11:02:31 OFF~ON		Carrier Power	25.81 dBm	Carrier Offset	58.19 Hz				+Peak	13.001 kHz	-12.745 kHz	12.873 kHz	8.7439 kHz	Mod. Freq.	1.0 kHz	SINAD	-Peak							THD	+Peak/2								RMS							
	Carrier Power	25.81 dBm	Carrier Offset	58.19 Hz																																							
+Peak	13.001 kHz	-12.745 kHz	12.873 kHz	8.7439 kHz	Mod. Freq.	1.0 kHz	SINAD																																				
-Peak							THD																																				
+Peak/2																																											
RMS																																											
TX-DNH	4FSK	CH _{M2}	MultiViewSpectrumAnalog Demod Ref Level 37.00 dBm Offset 20.50 dB Att 26 dB AQT 100 ms DBW 25 kHz Freq 406.1125 MHz TRG:IFPK(17MHz) YIG Bypass 1 FM Time Domain  CF 406.1125 MHz1001 pts10.0 ms/ 4 Result Summary <table><tr><td></td><td>Carrier Power</td><td>25.71 dBm</td><td>Carrier Offset</td><td>41.25 Hz</td><td></td><td></td><td></td></tr><tr><td>+Peak</td><td>12.13 kHz</td><td>-12.28 kHz</td><td>12.205 kHz</td><td>8.7244 kHz</td><td>Mod. Freq.</td><td>998.86 Hz</td><td>SINAD</td></tr><tr><td>-Peak</td><td></td><td></td><td></td><td></td><td></td><td></td><td>THD</td></tr><tr><td>+Peak/2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>RMS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> Analog Demod: Waiting for Trigger... Measuring... 22.11.2018 11:01:53 Date: 22.NOV.2018 11:01:52 ON-OFF		Carrier Power	25.71 dBm	Carrier Offset	41.25 Hz				+Peak	12.13 kHz	-12.28 kHz	12.205 kHz	8.7244 kHz	Mod. Freq.	998.86 Hz	SINAD	-Peak							THD	+Peak/2								RMS							
	Carrier Power	25.71 dBm	Carrier Offset	41.25 Hz																																							
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RMS																																											

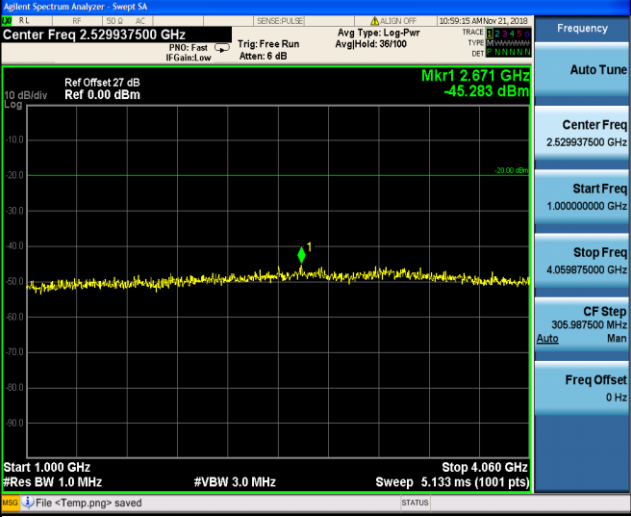
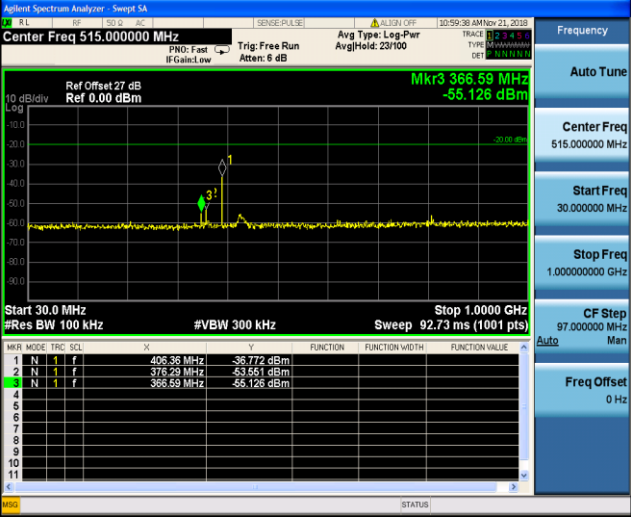


Appendix I:Spurious Emission On Antenna Port

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 _{M1}	 30MHz~1GHz

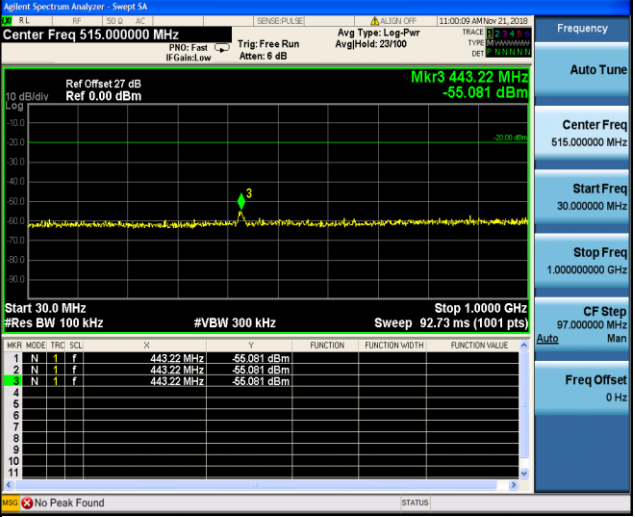
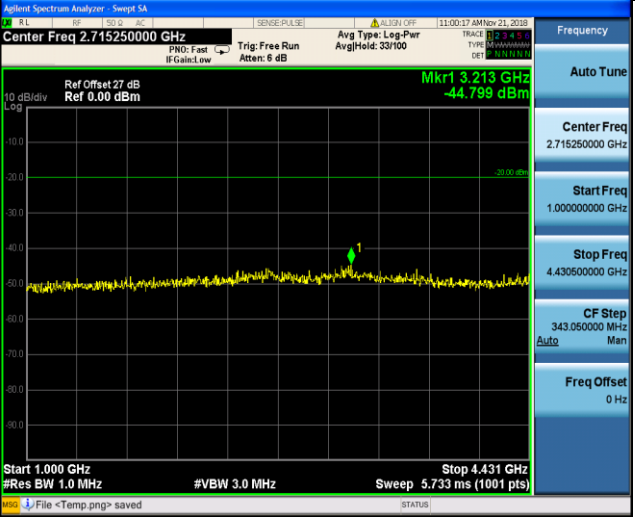
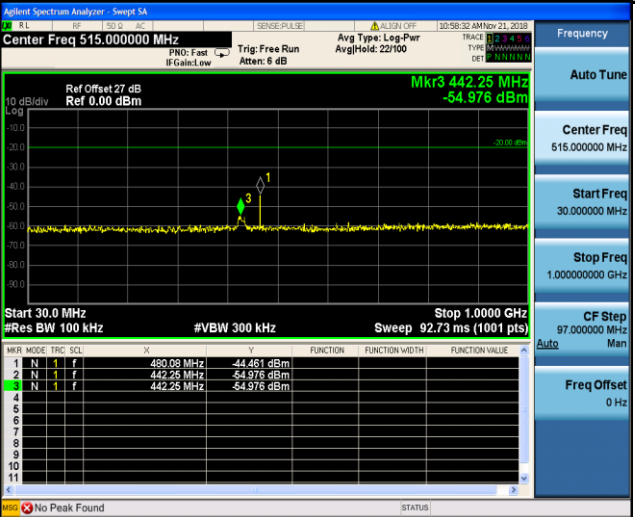


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M1}	 1GHz~10th Harmonic
TX-DNH	4FSK	CH _{M2}	 30MHz~1GHz
TX-DNH	4FSK	CH _{M2}	 1GHz~10th Harmonic



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M3}	 30MHz~1GHz
TX-DNH	4FSK	CH _{M3}	 1GHz~10th Harmonic
TX-DNH	4FSK	CH _H	 30MHz~1GHz



Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Sweep 1A Center Freq 2.899937500 GHz Ref Offset 27 dB Ref 0.00 dBm Mkr1 3.185 GHz -44.962 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.353 ms (1001 pts) Frequency Auto Tune Center Freq 2.899937500 GHz Start Freq 1.000000000 GHz Stop Freq 4.799875000 GHz CF Step 379.987500 MHz Auto Man Freq Offset 0 Hz File <Temp.png> saved 1GHz~10th Harmonic

-----End of Report-----