



Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANL	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 400.012500 MHz Ref Offset 37 dB Ref 43.0 dBm 10 dB/div Log 30.0 23.0 13.0 3.00 7.00 17.0 27.0 37.0 47.0 Center 400 MHz Span 120 kHz Total Power Ref 37.80 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>37.18</td><td>(-1.56)</td><td>-100.0</td><td>31.16</td><td>(-7.57)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-32.56</td><td>(-6.40)</td><td>-11.60 k</td><td>-32.04</td><td>(-6.97)</td><td>11.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-37.25</td><td>(-17.25)</td><td>-19.85 k</td><td>-36.29</td><td>(-16.29)</td><td>19.70 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 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	37.18	(-1.56)	-100.0	31.16	(-7.57)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-32.56	(-6.40)	-11.60 k	-32.04	(-6.97)	11.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-37.25	(-17.25)	-19.85 k	-36.29	(-16.29)	19.70 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)																																																										
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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-ANL	FM	CH _L	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 400.012500 MHz Ref Offset 37 dB Ref 43.0 dBm 10 dB/div Log 30.0 23.0 13.0 3.00 7.00 17.0 27.0 37.0 47.0 Center 400 MHz Span 120 kHz Total Power Ref 37.42 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>35.89</td><td>(-2.85)</td><td>-100.0</td><td>28.27</td><td>(-10.47)</td><td>2.400 k</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-35.67</td><td>(-2.97)</td><td>-12.50 k</td><td>-35.17</td><td>(-2.46)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-34.48</td><td>(-14.48)</td><td>-12.50 k</td><td>-33.42</td><td>(-13.42)</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 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	35.89	(-2.85)	-100.0	28.27	(-10.47)	2.400 k	5.625 kHz	12.50 kHz	100.0 Hz	-35.67	(-2.97)	-12.50 k	-35.17	(-2.46)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-34.48	(-14.48)	-12.50 k	-33.42	(-13.42)	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)																																																										
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12.50 kHz	60.00 kHz	100.0 Hz	-34.48	(-14.48)	-12.50 k	-33.42	(-13.42)	15.70 k																																																										
4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
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12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Ref Offset 37 dB Ref 42.0 dBm 10 dB/div Log 32.0 22.0 12.0 8.00 18.0 28.0 38.0 48.0 Center 406 MHz Span 120 kHz Total Power Ref 35.98 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>35.94</td><td>(-1.57)</td><td>-50.00</td><td>35.60</td><td>(-1.91)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-38.58</td><td>(-5.38)</td><td>-12.40 k</td><td>-37.87</td><td>(-5.03)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-38.05</td><td>(-18.05)</td><td>-15.05 k</td><td>-38.45</td><td>(-18.45)</td><td>15.00 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 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	35.94	(-1.57)	-50.00	35.60	(-1.91)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-38.58	(-5.38)	-12.40 k	-37.87	(-5.03)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-38.05	(-18.05)	-15.05 k	-38.45	(-18.45)	15.00 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																										
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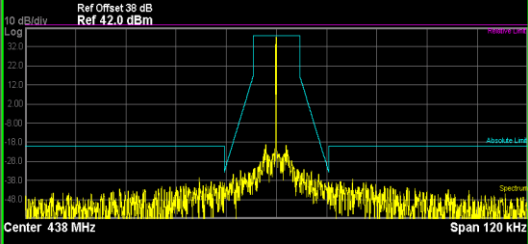
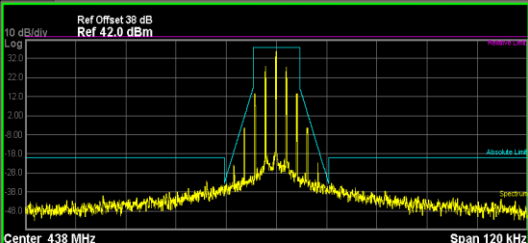
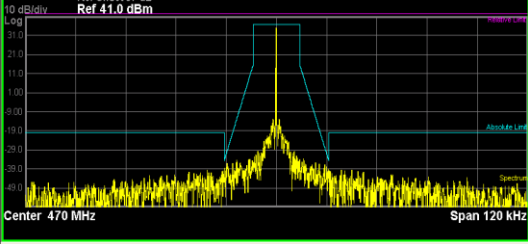


Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANL	FM	CH _{M1}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 405.987500 MHz Ref Offset 37 dB Ref 42.0 dBm 10 dB/div Log 32.0 22.0 12.0 2.00 8.00 18.0 28.0 38.0 48.0 Center 406 MHz Span 120 kHz Total Power Ref 36.00 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>34.58</td><td>(-2.93)</td><td>-50.00</td><td>33.99</td><td>(-3.52)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-35.71</td><td>(-1.78)</td><td>-12.50 k</td><td>-36.96</td><td>(-3.40)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.66</td><td>(-15.66)</td><td>-15.10 k</td><td>-34.29</td><td>(-14.29)</td><td>12.50 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 405.987500 MHz CF Step 12.000 kHz Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	34.58	(-2.93)	-50.00	33.99	(-3.52)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-35.71	(-1.78)	-12.50 k	-36.96	(-3.40)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.66	(-15.66)	-15.10 k	-34.29	(-14.29)	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)																																																										
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TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 406.112500 MHz Ref Offset 37 dB Ref 42.0 dBm 10 dB/div Log 32.0 22.0 12.0 2.00 8.00 18.0 28.0 38.0 48.0 Center 406.1 MHz Span 120 kHz Total Power Ref 36.01 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>35.95</td><td>(-1.78)</td><td>-50.00</td><td>34.17</td><td>(-3.55)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-40.83</td><td>(7.12)</td><td>-12.50 k</td><td>-42.98</td><td>(9.99)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.35</td><td>(-16.35)</td><td>-14.35 k</td><td>-36.96</td><td>(-16.96)</td><td>12.80 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></table> Frequency Center Freq 406.112500 MHz CF Step 12.000 kHz Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.95	(-1.78)	-50.00	34.17	(-3.55)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-40.83	(7.12)	-12.50 k	-42.98	(9.99)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.35	(-16.35)	-14.35 k	-36.96	(-16.96)	12.80 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
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TX-ANL	FM	CH _{M2}	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 406.112500 MHz Ref Offset 37 dB Ref 42.0 dBm 10 dB/div Log 32.0 22.0 12.0 2.00 8.00 18.0 28.0 38.0 48.0 Center 406.1 MHz Span 120 kHz Total Power Ref 36.06 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>34.55</td><td>(-3.17)</td><td>-50.00</td><td>32.21</td><td>(-5.52)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-35.27</td><td>(-3.01)</td><td>-12.30 k</td><td>-35.38</td><td>(-1.67)</td><td>12.50 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-35.69</td><td>(-15.69)</td><td>-12.95 k</td><td>-35.75</td><td>(-15.75)</td><td>15.25 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></table> Frequency Center Freq 406.112500 MHz CF Step 12.000 kHz Auto Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	34.55	(-3.17)	-50.00	32.21	(-5.52)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-35.27	(-3.01)	-12.30 k	-35.38	(-1.67)	12.50 k	12.50 kHz	60.00 kHz	100.0 Hz	-35.69	(-15.69)	-12.95 k	-35.75	(-15.75)	15.25 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	—	(—)	—	—	(—)	—
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Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																															
TX-ANL	FM	CH _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 01:46:02 PM Sep 11, 2018 Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Radio Std: None Trig: Free Run #Attenu: 40 dB Radio Device: BTS PASS IF Gain: Low Ref Offset 38 dB Ref 42.0 dBm 10 dB/div Log  Center 438 MHz Span 120 kHz Total Power Ref 37.51 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>36.93</td><td>(-0.83)</td><td>-50.00</td><td>31.72</td><td>(-6.04)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-39.39</td><td>(-5.71)</td><td>-12.50 k</td><td>-38.86</td><td>(-5.54)</td><td>12.45 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.38</td><td>(-16.38)</td><td>-18.40 k</td><td>-37.34</td><td>(-17.34)</td><td>18.25 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 438.012500 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	36.93	(-0.83)	-50.00	31.72	(-6.04)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-39.39	(-5.71)	-12.50 k	-38.86	(-5.54)	12.45 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.38	(-16.38)	-18.40 k	-37.34	(-17.34)	18.25 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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12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—																																																										
TX-ANL	FM	CH _{M3}	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 01:46:24 PM Sep 11, 2018 Center Freq 438.012500 MHz Center Freq: 438.012500 MHz Radio Std: None Trig: Free Run Avg: 100.00% of 10 #Attenu: 40 dB Radio Device: BTS PASS IF Gain: Low Ref Offset 38 dB Ref 42.0 dBm 10 dB/div Log  Center 438 MHz Span 120 kHz Total Power Ref 37.42 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>35.66</td><td>(-2.10)</td><td>-50.00</td><td>29.44</td><td>(-8.32)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-35.18</td><td>(-1.86)</td><td>-12.45 k</td><td>-35.06</td><td>(-2.47)</td><td>12.35 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-32.47</td><td>(-12.47)</td><td>-16.60 k</td><td>-33.27</td><td>(-13.27)</td><td>13.10 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> MSG File <Temp.png> saved (STATUS) Frequency Center Freq 438.012500 MHz CF Step 12.000 kHz Auto Man Freq Offset 0 Hz	Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	35.66	(-2.10)	-50.00	29.44	(-8.32)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-35.18	(-1.86)	-12.45 k	-35.06	(-2.47)	12.35 k	12.50 kHz	60.00 kHz	100.0 Hz	-32.47	(-12.47)	-16.60 k	-33.27	(-13.27)	13.10 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
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TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask RL RF 50.0 AC SENSE PULSE ALIGN OFF 01:26:05 PM Sep 11, 2018 Center Freq 469.987500 MHz Center Freq: 469.987500 MHz Radio Std: None Trig: Free Run #Attenu: 40 dB Radio Device: BTS PASS IF Gain: Low Ref Offset 37 dB Ref 41.0 dBm 10 dB/div Log  Center 470 MHz Span 120 kHz Total Power Ref 35.51 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>34.89</td><td>(-1.76)</td><td>-50.00</td><td>34.80</td><td>(-1.85)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-38.78</td><td>(-3.99)</td><td>-12.50 k</td><td>-39.06</td><td>(-5.00)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-39.67</td><td>(-19.67)</td><td>-16.45 k</td><td>-39.46</td><td>(-19.46)</td><td>12.55 k</td></tr><tr><td>4.000 MHz</td><td>8.000 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>8.000 MHz</td><td>12.50 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr><tr><td>12.50 MHz</td><td>15.00 MHz</td><td>1.000 MHz</td><td>—</td><td>(—)</td><td>—</td><td>—</td><td>(—)</td><td>—</td></tr></tbody></table> MSG File <MASK D.state> recalled (STATUS) Frequency Center Freq 469.987500 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	34.89	(-1.76)	-50.00	34.80	(-1.85)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-38.78	(-3.99)	-12.50 k	-39.06	(-5.00)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-39.67	(-19.67)	-16.45 k	-39.46	(-19.46)	12.55 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	—	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	—	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	—	(—)	—
			Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	< Peak > dBm	Upper ΔLim(dB)	Freq (Hz)																																																							
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Appendix C:Emission Mask

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																																	
TX-ANL	FM	CH _H	Agilent Spectrum Analyzer - Spectrum Emission Mask Center Freq 469.987500 MHz PASS Ref Offset 37 dB Ref 41.0 dBm Center Freq: 469.987500 MHz Trig: Free Run Avg: 100.00% of 10 Radio Std: None IF Gain: Low #Atten: 40 dB Radio Device: BTS 10 dB/div Log 31.0 27.0 11.0 7.00 9.00 19.0 38.0 40.0 Center 470 MHz Span 120 kHz Total Power Ref 35.43 dBm/0.0125 MHz <table><thead><tr><th>Start Freq</th><th>Stop Freq</th><th>Integ BW</th><th>dBm</th><th>Lower ΔLim(dB)</th><th>Freq (Hz)</th><th>Peak</th><th>Upper ΔLim(dB)</th><th>Freq (Hz)</th></tr></thead><tbody><tr><td>0.0 Hz</td><td>5.625 kHz</td><td>100.0 Hz</td><td>33.80</td><td>(-2.86)</td><td>-50.00</td><td>33.58</td><td>(-3.07)</td><td>0.0</td></tr><tr><td>5.625 kHz</td><td>12.50 kHz</td><td>100.0 Hz</td><td>-38.67</td><td>(-3.89)</td><td>-12.50 k</td><td>-37.72</td><td>(-3.66)</td><td>12.40 k</td></tr><tr><td>12.50 kHz</td><td>60.00 kHz</td><td>100.0 Hz</td><td>-36.62</td><td>(-16.62)</td><td>-18.00 k</td><td>-35.26</td><td>(-15.26)</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></tbody></table> File <Temp.png> saved STATUS Frequency Center Freq 469.987500 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	Upper ΔLim(dB)	Freq (Hz)	0.0 Hz	5.625 kHz	100.0 Hz	33.80	(-2.86)	-50.00	33.58	(-3.07)	0.0	5.625 kHz	12.50 kHz	100.0 Hz	-38.67	(-3.89)	-12.50 k	-37.72	(-3.66)	12.40 k	12.50 kHz	60.00 kHz	100.0 Hz	-36.62	(-16.62)	-18.00 k	-35.26	(-15.26)	12.50 k	4.000 MHz	8.000 MHz	1.000 MHz	—	(—)	—	(—)	(—)	—	8.000 MHz	12.50 MHz	1.000 MHz	—	(—)	—	(—)	(—)	—	12.50 MHz	15.00 MHz	1.000 MHz	—	(—)	—	(—)	(—)	—
			Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	Peak	Upper ΔLim(dB)	Freq (Hz)																																																									
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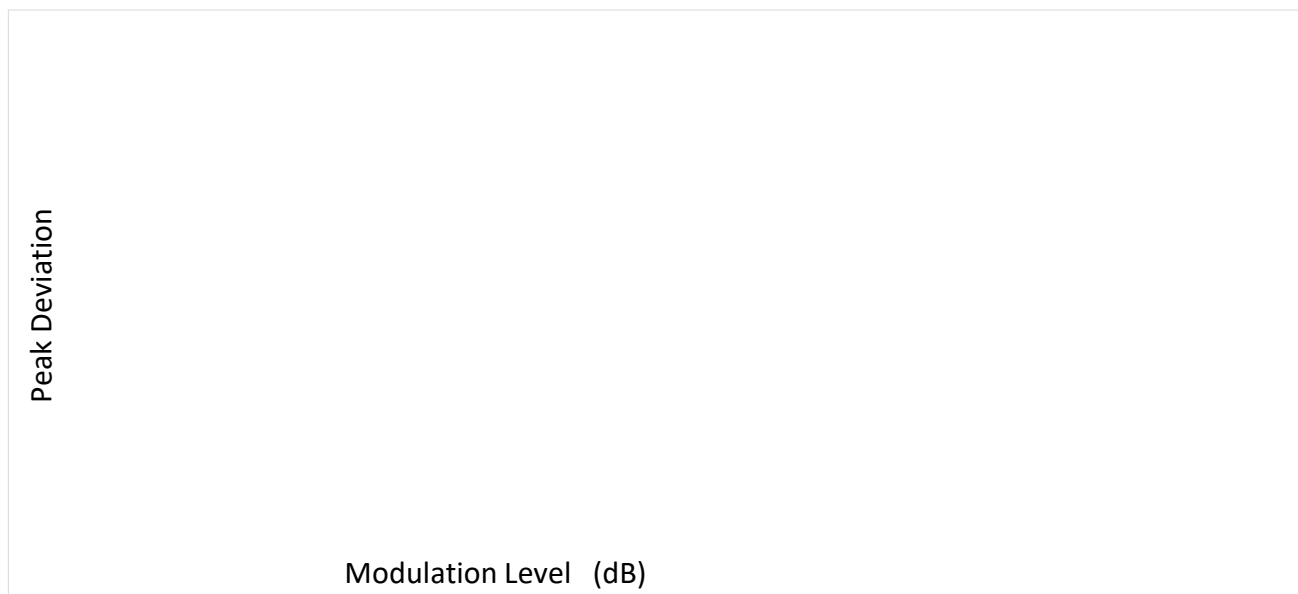
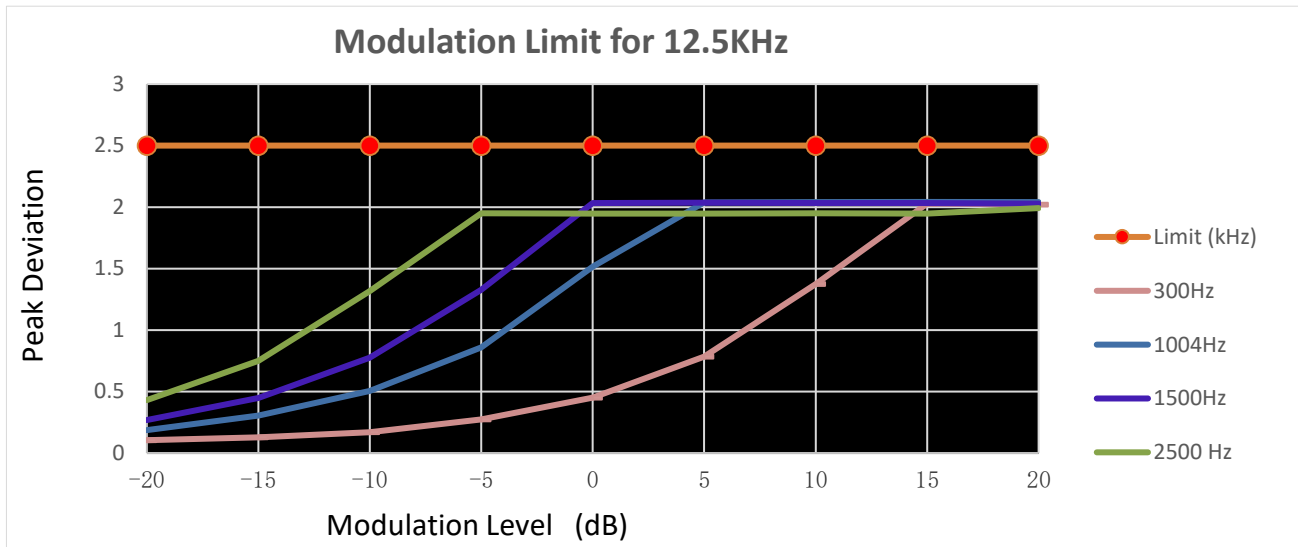
**Appendix D:Modulation Limit**

Operation Mode	Modulation Type	Test Channel	Modulation Level (dB)	Peak frequency deviation (kHz)				Limit (kHz)	Result
				300Hz	1004Hz	1500Hz	2500 Hz		
TX-ANH	FM	CH _{M2}	-20	0.105	0.187	0.269	0.431	2.5	PASS
TX-ANH	FM	CH _{M2}	-15	0.128	0.304	0.449	0.75	2.5	PASS
TX-ANH	FM	CH _{M2}	-10	0.171	0.505	0.776	1.317	2.5	PASS
TX-ANH	FM	CH _{M2}	-5	0.273	0.86	1.329	1.951	2.5	PASS
TX-ANH	FM	CH _{M2}	0	0.452	1.516	2.033	1.946	2.5	PASS
TX-ANH	FM	CH _{M2}	5	0.783	2.037	2.036	1.947	2.5	PASS
TX-ANH	FM	CH _{M2}	10	1.374	2.041	2.032	1.951	2.5	PASS
TX-ANH	FM	CH _{M2}	15	2.029	2.042	2.033	1.947	2.5	PASS
TX-ANH	FM	CH _{M2}	20	2.019	2.041	2.028	1.992	2.5	PASS



Appendix D:Modulation Limit

TEST PLOT RESULT



**Appendix E:Aduio Frequency Response**

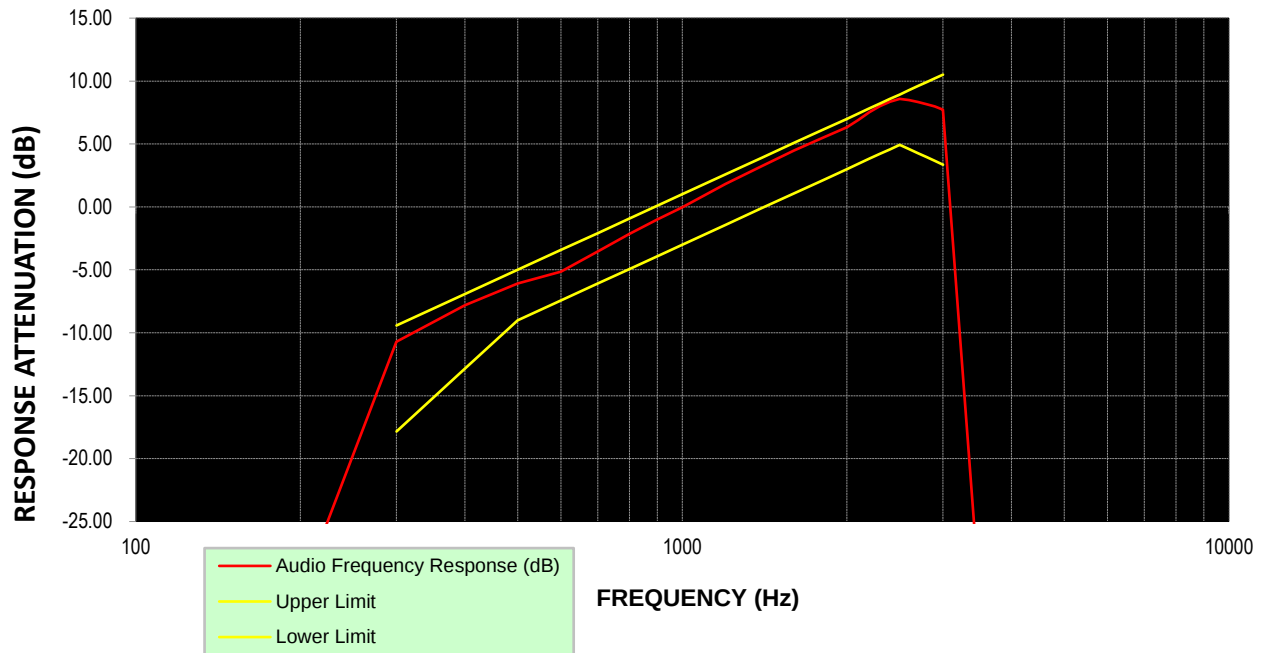
Operation Mode	Modulation Type	Test Channel	Frequency (Hz)	Audio Frequency Response (dB)	Lower Limit	Upper Limit	Result
TX-ANH	FM	CH _{M2}	100	-29.45	-	-	PASS
TX-ANH	FM	CH _{M2}	200	-30.66	-	-	PASS
TX-ANH	FM	CH _{M2}	300	-10.72	-17.84	-9.42	PASS
TX-ANH	FM	CH _{M2}	400	-7.82	-12.86	-6.93	PASS
TX-ANH	FM	CH _{M2}	500	-6.08	-9.00	-5.00	PASS
TX-ANH	FM	CH _{M2}	600	-5.14	-7.42	-3.42	PASS
TX-ANH	FM	CH _{M2}	700	-3.55	-6.09	-2.09	PASS
TX-ANH	FM	CH _{M2}	800	-2.15	-4.93	-0.93	PASS
TX-ANH	FM	CH _{M2}	900	-1.00	-3.91	0.09	PASS
TX-ANH	FM	CH _{M2}	1000	-0.04	-3.00	1.00	PASS
TX-ANH	FM	CH _{M2}	1200	1.82	-1.42	2.58	PASS
TX-ANH	FM	CH _{M2}	1400	3.26	-0.09	3.91	PASS
TX-ANH	FM	CH _{M2}	1600	4.47	1.07	5.07	PASS
TX-ANH	FM	CH _{M2}	1800	5.45	2.09	6.09	PASS
TX-ANH	FM	CH _{M2}	2000	6.34	3.00	7.00	PASS
TX-ANH	FM	CH _{M2}	2100	6.91	3.42	7.42	PASS
TX-ANH	FM	CH _{M2}	2200	7.52	3.83	7.83	PASS
TX-ANH	FM	CH _{M2}	2300	8.00	4.21	8.21	PASS
TX-ANH	FM	CH _{M2}	2400	8.36	4.58	8.58	PASS
TX-ANH	FM	CH _{M2}	2500	8.58	4.93	8.93	PASS
TX-ANH	FM	CH _{M2}	2600	8.49	4.59	9.27	PASS
TX-ANH	FM	CH _{M2}	2700	8.35	4.27	9.60	PASS
TX-ANH	FM	CH _{M2}	2800	8.17	3.95	9.91	PASS
TX-ANH	FM	CH _{M2}	2900	7.97	3.65	10.22	PASS
TX-ANH	FM	CH _{M2}	3000	7.73	3.35	10.51	PASS
TX-ANH	FM	CH _{M2}	3500	-31.13	-	-	PASS
TX-ANH	FM	CH _{M2}	4000	-31.36	-	-	PASS
TX-ANH	FM	CH _{M2}	4500	-30.71	-	-	PASS
TX-ANH	FM	CH _{M2}	5000	-30.28	-	-	PASS



Appendix E:Aduio Frequency Response

TEST PLOT RESULT

Aduio Freqeuncy Response For 12.5kHz



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

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

Operation Mode	Modulation Type	Test Conditions		Frequency error (ppm)					Limit (ppm)	Result
		Voltage	Temperature	CH _L	CH _{M1}	CH _{M2}	CH _{M3}	CH _H		
TX-DNH	4FSK	V _N	-30	-0.164	-0.101	-0.173	-0.169	-0.171	±5.0	PASS
TX-DNH	4FSK	V _N	-20	-0.172	-0.097	-0.182	-0.172	-0.179	±5.0	PASS
TX-DNH	4FSK	V _N	-10	-0.162	-0.102	-0.178	-0.178	-0.167	±5.0	PASS
TX-DNH	4FSK	V _N	0	-0.166	-0.106	-0.177	-0.174	-0.170	±5.0	PASS
TX-DNH	4FSK	V _N	10	-0.163	-0.100	-0.180	-0.175	-0.166	±5.0	PASS
TX-DNH	4FSK	V _N	20	-0.157	-0.097	-0.166	-0.162	-0.163	±5.0	PASS
TX-DNH	4FSK	V _N	30	-0.164	-0.102	-0.171	-0.164	-0.174	±5.0	PASS
TX-DNH	4FSK	V _N	40	-0.158	-0.104	-0.171	-0.173	-0.171	±5.0	PASS
TX-DNH	4FSK	V _N	55	-0.173	-0.101	-0.176	-0.168	-0.176	±5.0	PASS
TX-DNL	4FSK	V _N	-30	-0.134	-0.175	-0.135	-0.172	-0.154	±5.0	PASS
TX-DNL	4FSK	V _N	-20	-0.147	-0.180	-0.133	-0.174	-0.157	±5.0	PASS
TX-DNL	4FSK	V _N	-10	-0.140	-0.172	-0.133	-0.168	-0.160	±5.0	PASS
TX-DNL	4FSK	V _N	0	-0.143	-0.177	-0.139	-0.170	-0.157	±5.0	PASS
TX-DNL	4FSK	V _N	10	-0.136	-0.171	-0.134	-0.173	-0.152	±5.0	PASS
TX-DNL	4FSK	V _N	20	-0.134	-0.168	-0.130	-0.164	-0.149	±5.0	PASS
TX-DNL	4FSK	V _N	30	-0.141	-0.180	-0.142	-0.177	-0.150	±5.0	PASS
TX-DNL	4FSK	V _N	40	-0.140	-0.173	-0.142	-0.167	-0.155	±5.0	PASS
TX-DNL	4FSK	V _N	55	-0.146	-0.180	-0.140	-0.165	-0.150	±5.0	PASS
TX-ANH	FM	V _N	-30	-0.171	-0.182	-0.176	-0.180	-0.180	±5.0	PASS
TX-ANH	FM	V _N	-20	-0.168	-0.175	-0.176	-0.170	-0.171	±5.0	PASS
TX-ANH	FM	V _N	-10	-0.177	-0.179	-0.175	-0.165	-0.181	±5.0	PASS
TX-ANH	FM	V _N	0	-0.173	-0.167	-0.168	-0.174	-0.180	±5.0	PASS
TX-ANH	FM	V _N	10	-0.173	-0.176	-0.182	-0.171	-0.178	±5.0	PASS
TX-ANH	FM	V _N	20	-0.166	-0.166	-0.166	-0.164	-0.168	±5.0	PASS
TX-ANH	FM	V _N	30	-0.175	-0.176	-0.174	-0.164	-0.174	±5.0	PASS
TX-ANH	FM	V _N	40	-0.169	-0.167	-0.181	-0.165	-0.180	±5.0	PASS
TX-ANH	FM	V _N	55	-0.180	-0.178	-0.172	-0.164	-0.174	±5.0	PASS
TX-ANL	FM	V _N	-30	-0.181	-0.166	-0.174	-0.172	-0.167	±5.0	PASS
TX-ANL	FM	V _N	-20	-0.175	-0.175	-0.170	-0.168	-0.168	±5.0	PASS
TX-ANL	FM	V _N	-10	-0.169	-0.166	-0.177	-0.176	-0.175	±5.0	PASS
TX-ANL	FM	V _N	0	-0.173	-0.175	-0.167	-0.166	-0.181	±5.0	PASS
TX-ANL	FM	V _N	10	-0.176	-0.164	-0.169	-0.167	-0.175	±5.0	PASS
TX-ANL	FM	V _N	20	-0.166	-0.164	-0.166	-0.164	-0.165	±5.0	PASS
TX-ANL	FM	V _N	30	-0.168	-0.169	-0.166	-0.176	-0.177	±5.0	PASS
TX-ANL	FM	V _N	40	-0.174	-0.178	-0.182	-0.167	-0.172	±5.0	PASS
TX-ANL	FM	V _N	55	-0.174	-0.165	-0.173	-0.166	-0.180	±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 _H		
TX-DNH	4FSK	V _N	T _N	-0.157	<u>-0.097</u>	-0.166	-0.162	-0.163	±5.0	PASS
TX-DNH	4FSK	V _L	T _N	-0.160	-0.099	-0.168	-0.164	-0.166	±5.0	PASS
TX-DNH	4FSK	V _H	T _N	-0.161	-0.102	-0.174	-0.164	-0.165	±5.0	PASS
TX-DNL	4FSK	V _N	T _N	-0.134	-0.168	<u>-0.130</u>	-0.164	-0.149	±5.0	PASS
TX-DNL	4FSK	V _L	T _N	-0.135	-0.171	-0.131	-0.166	-0.151	±5.0	PASS
TX-DNL	4FSK	V _H	T _N	-0.142	-0.172	-0.132	-0.170	-0.152	±5.0	PASS
TX-ANH	FM	V _N	T _N	-0.166	-0.166	-0.166	-0.164	-0.168	±5.0	PASS
TX-ANH	FM	V _L	T _N	-0.168	-0.167	-0.167	-0.164	-0.169	±5.0	PASS
TX-ANH	FM	V _H	T _N	-0.176	-0.168	-0.176	-0.170	-0.170	±5.0	PASS
TX-ANL	FM	V _N	T _N	-0.166	-0.164	-0.166	-0.164	-0.165	±5.0	PASS
TX-ANL	FM	V _L	T _N	-0.167	-0.166	-0.169	-0.165	-0.165	±5.0	PASS
TX-ANL	FM	V _H	T _N	-0.170	-0.167	-0.168	-0.167	-0.167	±5.0	PASS



Appendix H:Transmitter Frequency Behavior

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT												
TX-DNH	4FSK	CH _{M2}	Tek 预览 Ch1 100mV M 10.0ms A Ch1 0.00 V OFF~ON												
TX-DNH	4FSK	CH _{M2}	Tek 预览 Ch1 100mV M 10.0ms A Ch1 0.00 V ON~OFF												
TX-ANH	FM	CH _{M2}	MultiView Spectrum Analog Demod Start -10.0 ms 1001 pts 10.0 ms/ 4 Result Summary <table><tr><th></th><th>Carrier Power</th><th>Carrier Offset</th><th>Mod. Freq.</th><th>SINAD</th><th>THD</th></tr><tr><td>FM</td><td>12.451 kHz</td><td>-12.109 kHz</td><td>12.28 kHz</td><td>8.6702 kHz</td><td>1.0273 kHz</td></tr></table> Aborted 13.09.2018 11:11:30 Date: 13.SEP.2018 11:11:30 OFF~ON		Carrier Power	Carrier Offset	Mod. Freq.	SINAD	THD	FM	12.451 kHz	-12.109 kHz	12.28 kHz	8.6702 kHz	1.0273 kHz
	Carrier Power	Carrier Offset	Mod. Freq.	SINAD	THD										
FM	12.451 kHz	-12.109 kHz	12.28 kHz	8.6702 kHz	1.0273 kHz										



Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT														
TX-ANH	FM	CH _{M2}	1 FM Time Domain Carrier Power 43.52 dBm Carrier Offset 23.70 Hz <table border="1"> <thead> <tr> <th></th> <th>Peak</th> <th>Peak/2</th> <th>RMS</th> <th>Mod. Freq.</th> <th>SINAD</th> <th>THD</th> </tr> </thead> <tbody> <tr> <td>FM</td> <td>12.081 kHz</td> <td>-12.089 kHz</td> <td>12.085 kHz</td> <td>2.9641 kHz</td> <td></td> <td></td> </tr> </tbody> </table> Date: 13.SEP.2018 11:13:19 ON-OFF		Peak	Peak/2	RMS	Mod. Freq.	SINAD	THD	FM	12.081 kHz	-12.089 kHz	12.085 kHz	2.9641 kHz		
	Peak	Peak/2	RMS	Mod. Freq.	SINAD	THD											
FM	12.081 kHz	-12.089 kHz	12.085 kHz	2.9641 kHz													

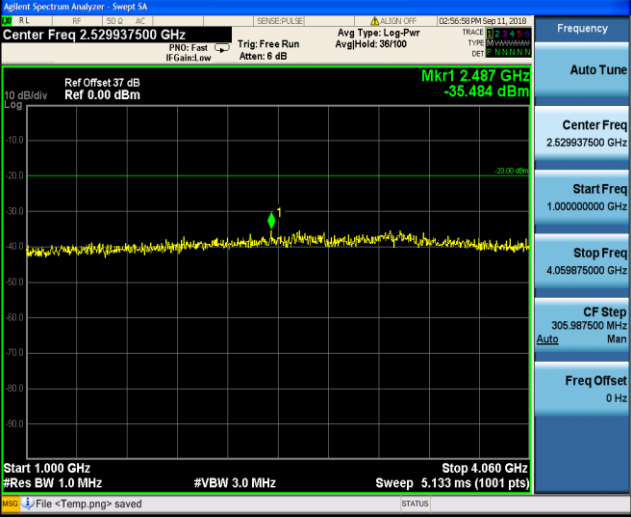
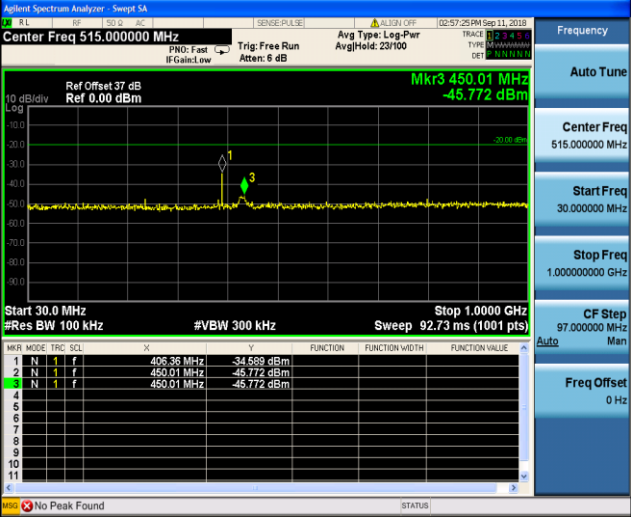


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Sweep 5A Center Freq 515.000000 MHz Ref Offset 37 dB Ref 0.00 dBm Mkr3 445.16 MHz -44.742 dBm Start 30.0 MHz #Res BW 100 kHz Stop 1.0000 GHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) Frequency Auto Tune Center Freq 515.000000 MHz Start Freq 30.000000 MHz Stop Freq 1.000000000 GHz CF Step 97.000000 MHz Freq Offset 0 Hz 30MHz~1GHz
TX-DNH	4FSK	CH _L	Agilent Spectrum Analyzer - Sweep 5A Center Freq 2.500062500 GHz Ref Offset 37 dB Ref 0.00 dBm Mkr1 3.292 GHz -35.344 dBm Start 1.000 GHz #Res BW 1.0 MHz Stop 4.000 GHz #VBW 3.0 MHz Sweep 5.067 ms (1001 pts) Frequency Auto Tune Center Freq 2.500062500 GHz Start Freq 1.000000000 GHz Stop Freq 4.000125000 GHz CF Step 300.012500 MHz Freq Offset 0 Hz 1GHz~10th Harmonic
TX-DNH	4FSK	CH _{M1}	Agilent Spectrum Analyzer - Sweep 5A Center Freq 515.000000 MHz Ref Offset 37 dB Ref 0.00 dBm Mkr3 444.19 MHz -45.425 dBm Start 30.0 MHz #Res BW 100 kHz Stop 1.0000 GHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) Frequency Auto Tune Center Freq 515.000000 MHz Start Freq 30.000000 MHz Stop Freq 1.000000000 GHz CF Step 97.000000 MHz Freq Offset 0 Hz 30MHz~1GHz

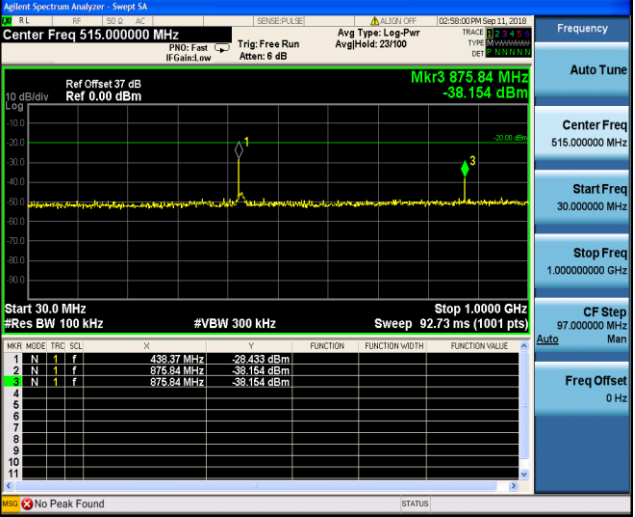
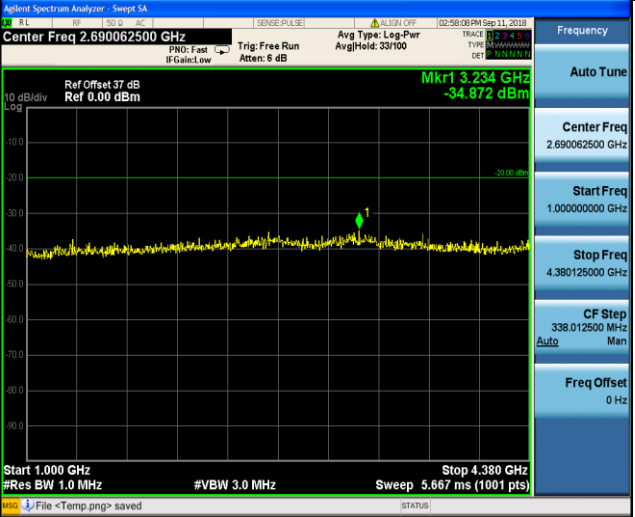
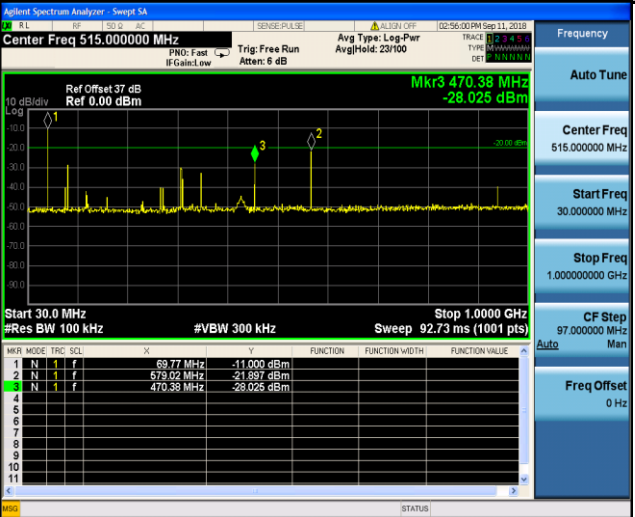


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M1}	 Agilent Spectrum Analyzer - Sweep SA Center Freq 2.529937500 GHz Ref Offset 37 dB Ref 0.00 dBm Mkr1 2.487 GHz -35.484 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 5.133 ms (1001 pts) File <Temp.png> saved 1GHz~10th Harmonic
TX-DNH	4FSK	CH _{M2}	 Agilent Spectrum Analyzer - Sweep SA Center Freq 515.000000 MHz Ref Offset 37 dB Ref 0.00 dBm Mkr3 450.01 MHz -45.772 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) No Peak Found 30MHz~1GHz
TX-DNH	4FSK	CH _{M2}	 Agilent Spectrum Analyzer - Sweep SA Center Freq 2.530562500 GHz Ref Offset 37 dB Ref 0.00 dBm Mkr1 3.143 GHz -35.015 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 5.133 ms (1001 pts) File <Temp.png> saved 1GHz~10th Harmonic



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-DNH	4FSK	CH _{M3}	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 515.000000 MHz Ref Offset 37 dB Ref 0.00 dBm Mkr3 875.84 MHz -38.154 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Stop 1.0000 GHz Sweep 92.73 ms (1001 pts) Mkr MODE TRG SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 1 N 1 f 438.37 MHz -28.433 dBm 2 N 1 f 875.84 MHz -38.154 dBm 3 N 1 f 875.84 MHz -38.154 dBm No Peak Found 30MHz~1GHz
TX-DNH	4FSK	CH _{M3}	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 2.690062500 GHz Ref Offset 37 dB Ref 0.00 dBm Mkr1 3.234 GHz -34.872 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Stop 4.380 GHz Sweep 5.667 ms (1001 pts) File <Temp.png> saved 1GHz~10th Harmonic
TX-DNH	4FSK	CH _H	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 515.000000 MHz Ref Offset 37 dB Ref 0.00 dBm Mkr3 470.38 MHz -28.025 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Stop 1.0000 GHz Sweep 92.73 ms (1001 pts) Mkr MODE TRG SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 1 N 1 f 69.77 MHz -11.000 dBm 2 N 1 f 519.02 MHz -21.897 dBm 3 N 1 f 470.38 MHz -28.025 dBm 30MHz~1GHz

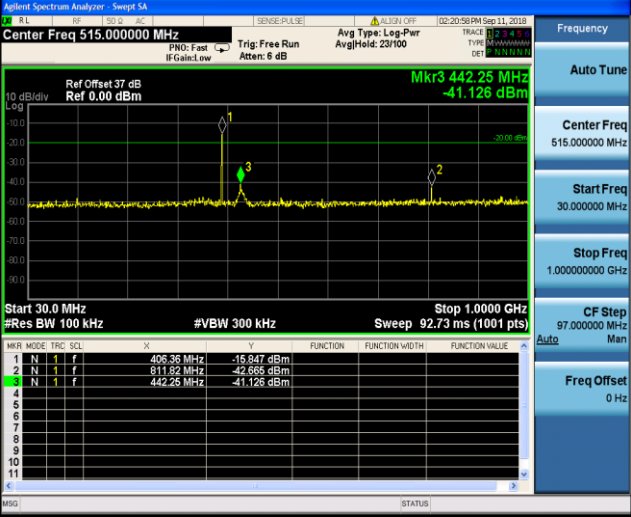
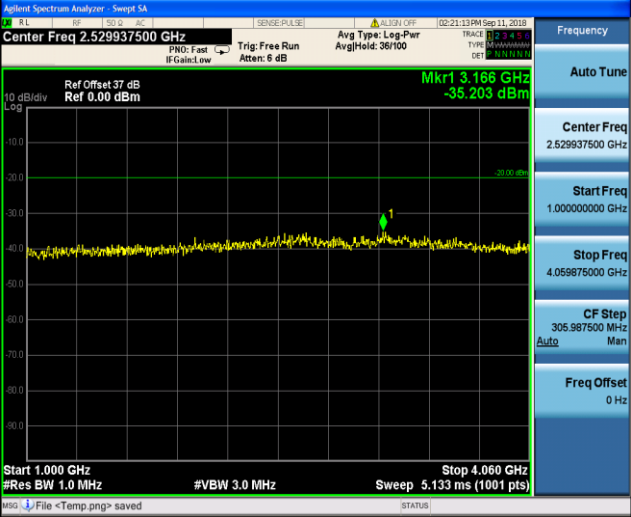
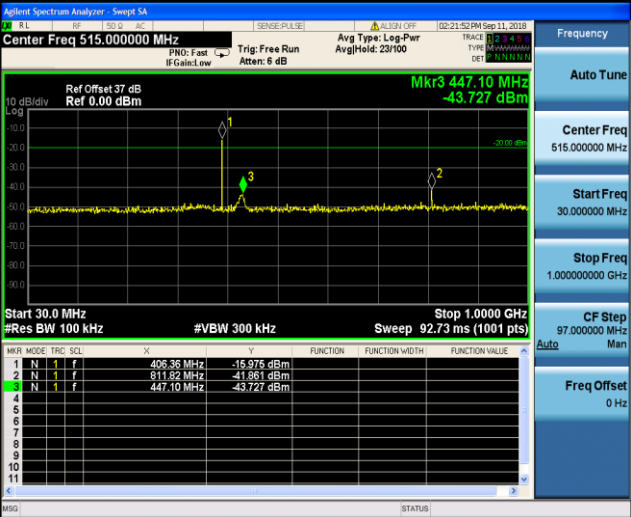


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT																																																																																																												
TX-DNH	4FSK	CH _H	Agilent Spectrum Analyzer - Sweep 5A Center Freq 2.849937500 GHz Ref Offset: 37 dB Ref 0.00 dBm Trig: Free Run Atten: 6 dB PN0: Fast IF Gain: Low Avg Type: Log-Pwr AvalgHold: 33/100 ALIAS OFF 02:56:15 PM Sep 11, 2018 TRACE 1 TYPE MEASUREMENT DET 10 dB/Div Log Mkr1 3.150 GHz -34.973 dBm 30.00 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Stop 4.700 GHz Sweep 6.200 ms (1001 pts) File <Temp.png> saved STATUS Frequency Auto Tune Center Freq 2.849937500 GHz Start Freq 1.000000000 GHz Stop Freq 4.699875000 GHz CF Step 369.987500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic																																																																																																												
TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Sweep 5A Center Freq 515.000000 MHz Ref Offset: 37 dB Ref 0.00 dBm Trig: Free Run Atten: 6 dB PN0: Fast IF Gain: Low Avg Type: Log-Pwr AvalgHold: 23/100 ALIAS OFF 02:23:36 PM Sep 11, 2018 TRACE 1 TYPE MEASUREMENT DET 10 dB/Div Log Mkr3 444.19 MHz -44.025 dBm 30.00 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Stop 1.000 GHz Sweep 92.73 ms (1001 pts) File <Temp.png> saved STATUS Frequency Auto Tune Center Freq 515.000000 MHz Start Freq 30.000000 MHz Stop Freq 1.000000000 GHz CF Step 97.000000 MHz Auto Man Freq Offset 0 Hz <table><tr><th>MKR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>N</td><td>1</td><td>f</td><td>399.57 MHz</td><td>-5.944 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td>800.19 MHz</td><td>-43.562 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td>444.19 MHz</td><td>-44.025 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> 30MHz~1GHz	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	399.57 MHz	-5.944 dBm				2	N	1	f	800.19 MHz	-43.562 dBm				3	N	1	f	444.19 MHz	-44.025 dBm				4									5									6									7									8									9									10									11								
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TX-ANH	FM	CH _L	Agilent Spectrum Analyzer - Sweep 5A Center Freq 2.500062500 GHz Ref Offset: 37 dB Ref 0.00 dBm Trig: Free Run Atten: 6 dB PN0: Fast IF Gain: Low Avg Type: Log-Pwr AvalgHold: 36/100 ALIAS OFF 02:23:27 PM Sep 11, 2018 TRACE 1 TYPE MEASUREMENT DET 10 dB/Div Log Mkr1 3.181 GHz -34.663 dBm 30.00 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Stop 4.000 GHz Sweep 5.067 ms (1001 pts) File <Temp.png> saved STATUS Frequency Auto Tune Center Freq 2.500062500 GHz Start Freq 1.000000000 GHz Stop Freq 4.000125000 GHz CF Step 300.012500 MHz Auto Man Freq Offset 0 Hz 1GHz~10th Harmonic																																																																																																												



Appendix I:Spurious Emission On Antenna Port

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

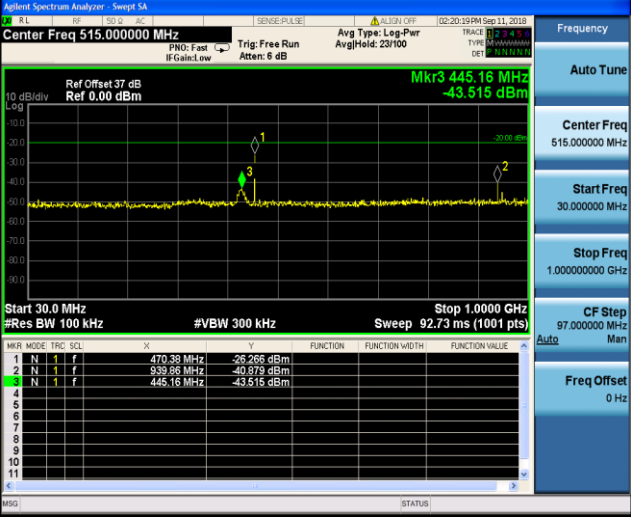


Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _{M2}	Agilent Spectrum Analyzer - Swept SA Center Freq 2.530562500 GHz PNO: Fast IF Gain: Low Trig: Free Run Atten: 6 dB Avg Type: Log-Pwr AvgHold: 36/100 Ref Offset 37 dB Ref 0.00 dBm Mkr1 2.580 GHz -35.330 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 5.133 ms (1001 pts) File <Temp.png> saved 1GHz~10th Harmonic
TX-ANH	FM	CH _{M3}	Agilent Spectrum Analyzer - Swept SA Center Freq 515.000000 MHz PNO: Fast IF Gain: Low Trig: Free Run Atten: 6 dB Avg Type: Log-Pwr AvgHold: 23/100 Ref Offset 37 dB Ref 0.00 dBm Mkr3 875.84 MHz -38.583 dBm Mkr1 438.37 MHz -56.584 dBm Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts) Mkr MODE TRG SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 1 N 1 f 438.37 MHz -56.584 dBm 2 N 1 f 875.84 MHz -38.583 dBm 3 N 1 f 875.84 MHz -38.583 dBm 4 S 5 S 6 S 7 S 8 S 9 S 10 S 11 S No Peak Found 30MHz~1GHz
TX-ANH	FM	CH _{M3}	Agilent Spectrum Analyzer - Swept SA Center Freq 2.690062500 GHz PNO: Fast IF Gain: Low Trig: Free Run Atten: 6 dB Avg Type: Log-Pwr AvgHold: 33/100 Ref Offset 37 dB Ref 0.00 dBm Mkr1 3.265 GHz -35.634 dBm Start 1.000 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 5.667 ms (1001 pts) File <Temp.png> saved 1GHz~10th Harmonic



Appendix I:Spurious Emission On Antenna Port

Operation Mode	Modulation Type	Test Channel	TEST PLOT RESULT
TX-ANH	FM	CH _H	 30MHz~1GHz
TX-ANH	FM	CH _H	 1GHz~10th Harmonic

----End of Report----