

5.2 Emission in the Frequency Range up to 30MHz

5.2.1 Conducted Emission

RESULT:**N/A**

Test requirement : FCC 15.207(a)
Test procedure : KDB 558074 D01v05r02
ANSI C63.10: 2013

Note:

This test was not performed since the EUT is a DC powered device which is powered by the storage battery in the vehicle.

5.3 Emission in the Frequency Range above 30MHz

5.3.1 Radiated Band-Edge

RESULT:**Pass**

Date of testing : 10.03.2020
Ambient temperature : 26.1°C
Relative humidity : 32.7%
Atmospheric pressure : 101kPa
Test requirement : FCC 15.247(d)
FCC 15.205(a)
FCC 15.209(a)
Test procedure : KDB 558074 D01v05r02
ANSI C63.10: 2013
Test voltage : DC 13V
Test modes applied : TM1, TM3, TM4, TM6, TM7, TM9, TM12, TM15, TM18

Note:

All the test modes were applied, only the worst case were shown in this report.

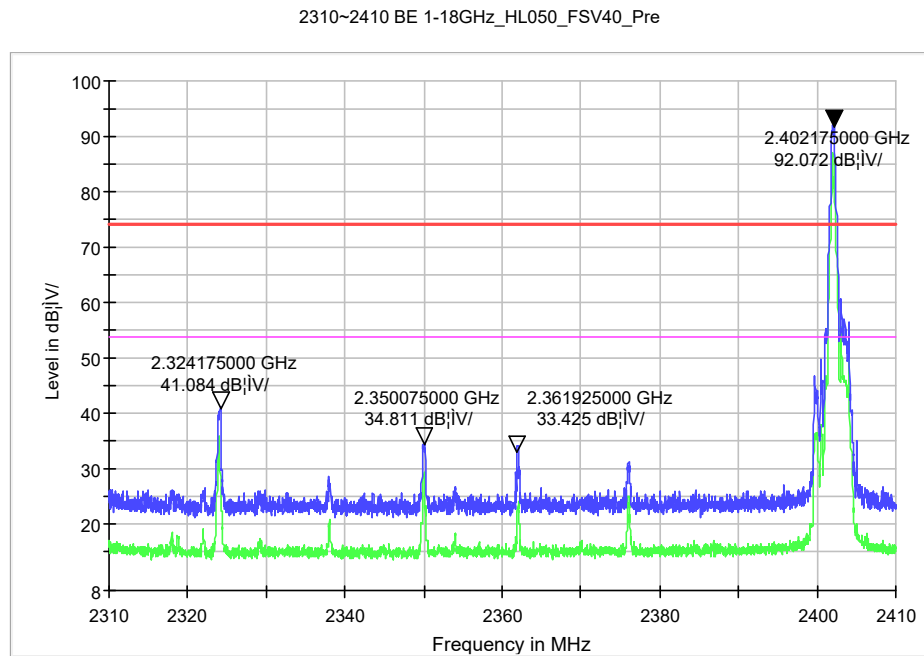
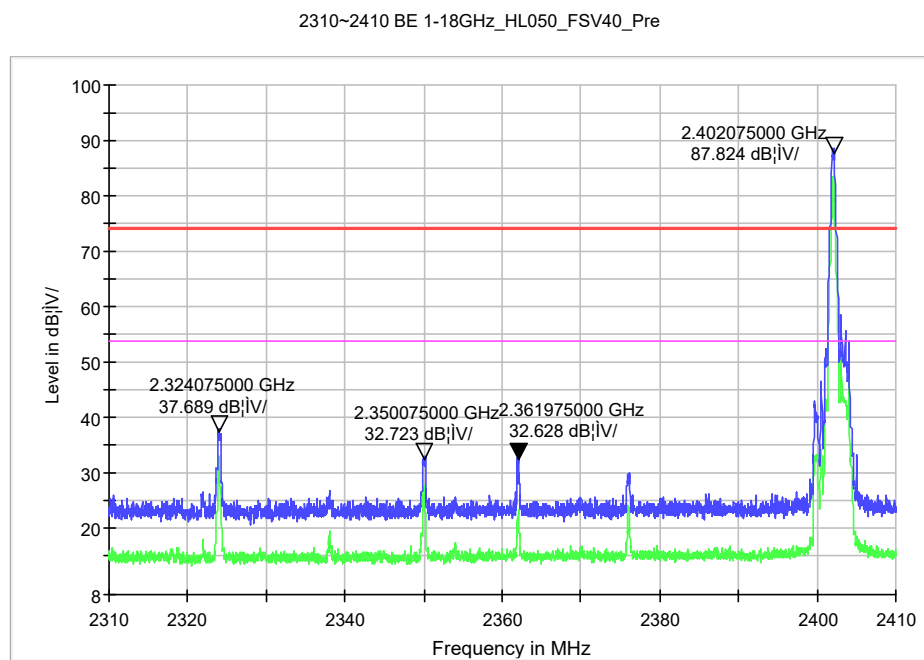
Figure 70: Radiated Band-Edge, TM1, H

Figure 71: Radiated Band-Edge, TM1, V


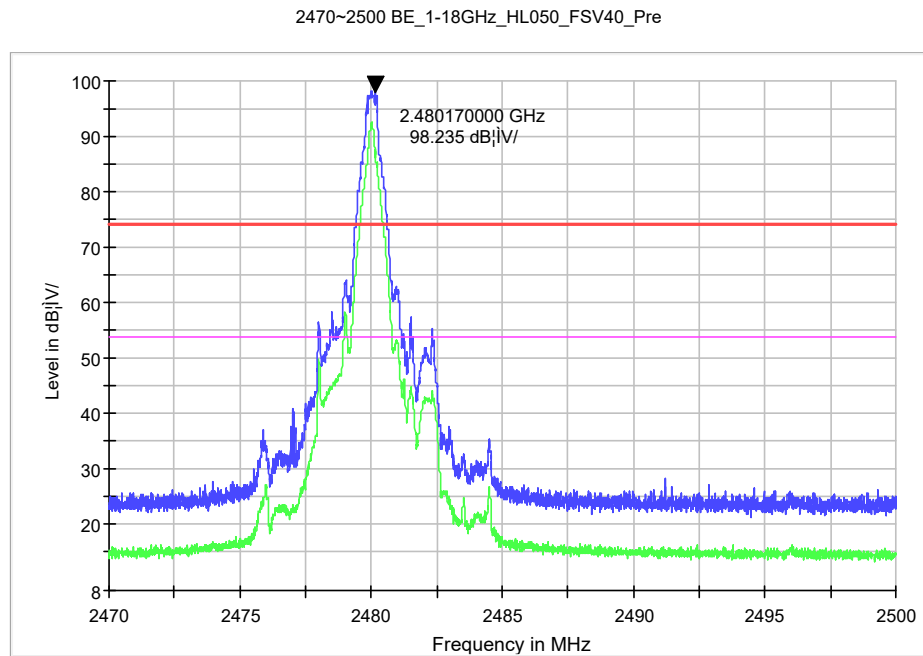
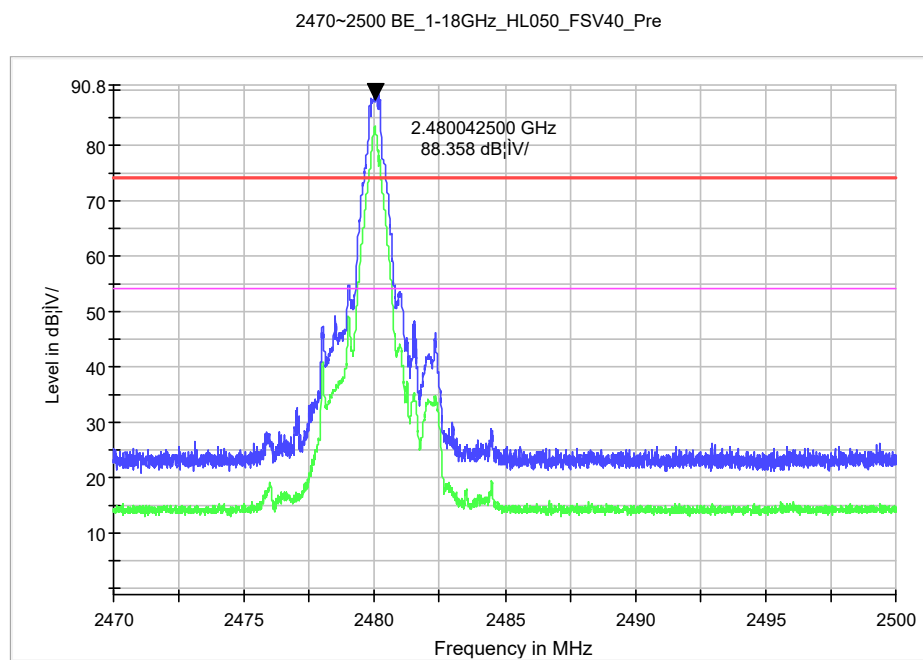
Figure 72: Radiated Band-Edge, TM3, H

Figure 73: Radiated Band-Edge, TM3, V


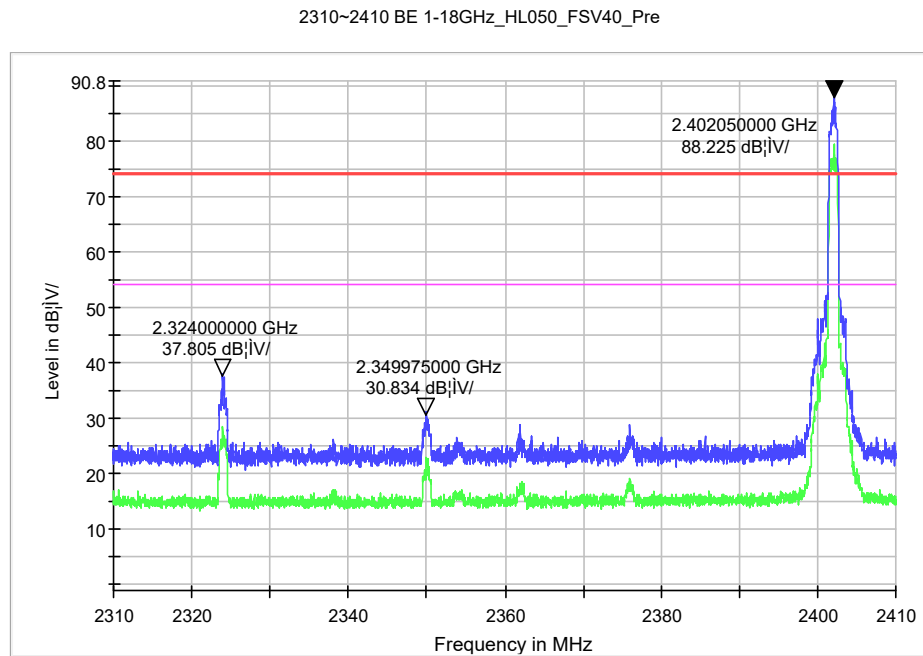
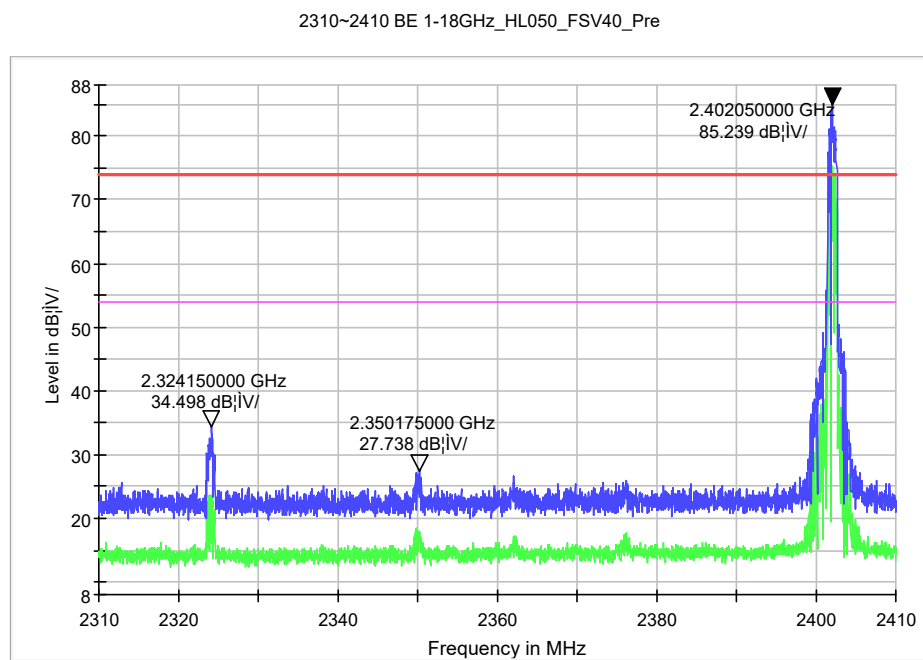
Figure 74: Radiated Band-Edge, TM4, H

Figure 75: Radiated Band-Edge, TM4, V


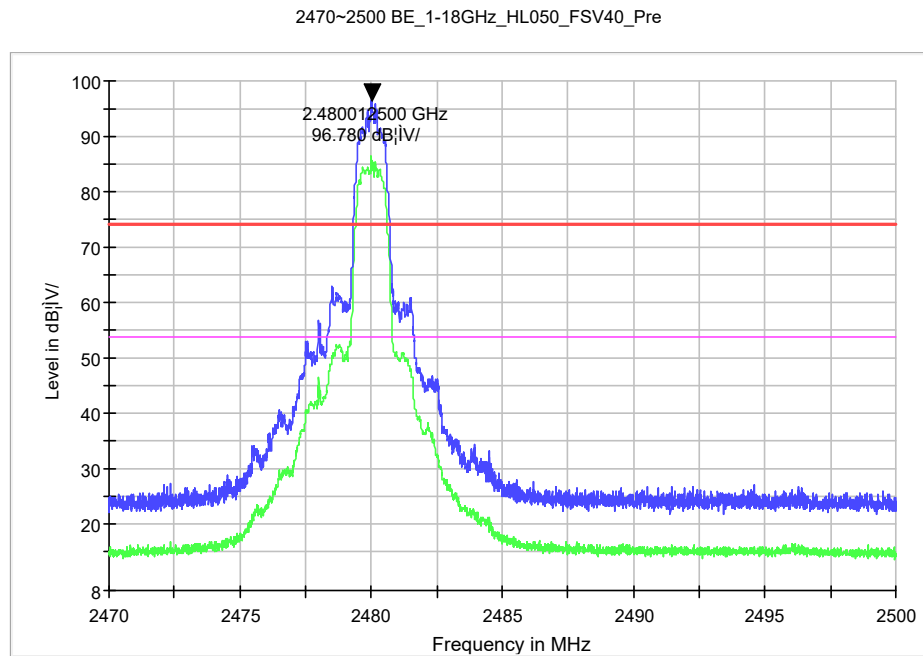
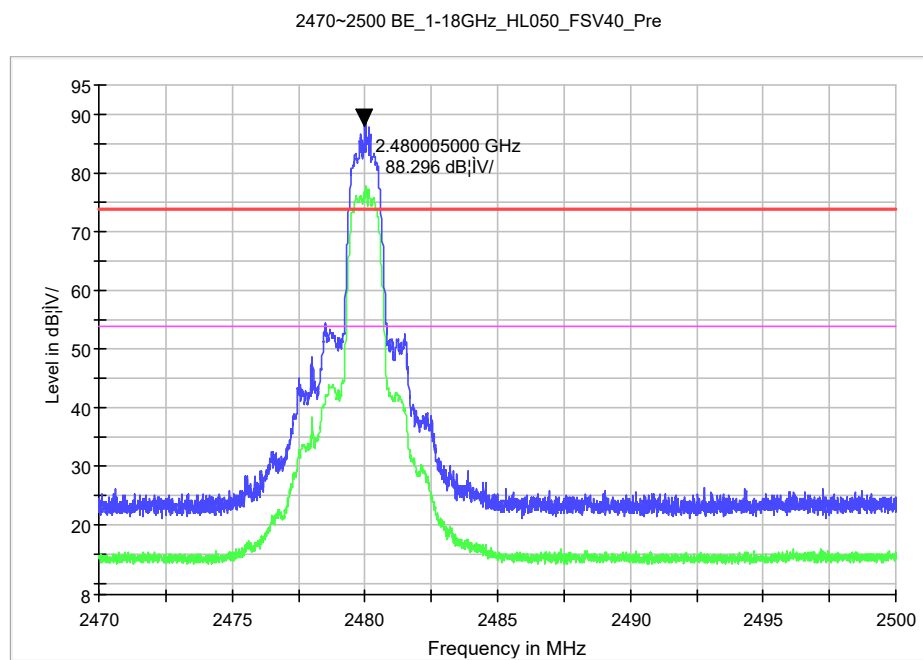
Figure 76: Radiated Band-Edge, TM6, H

Figure 77: Radiated Band-Edge, TM6, V


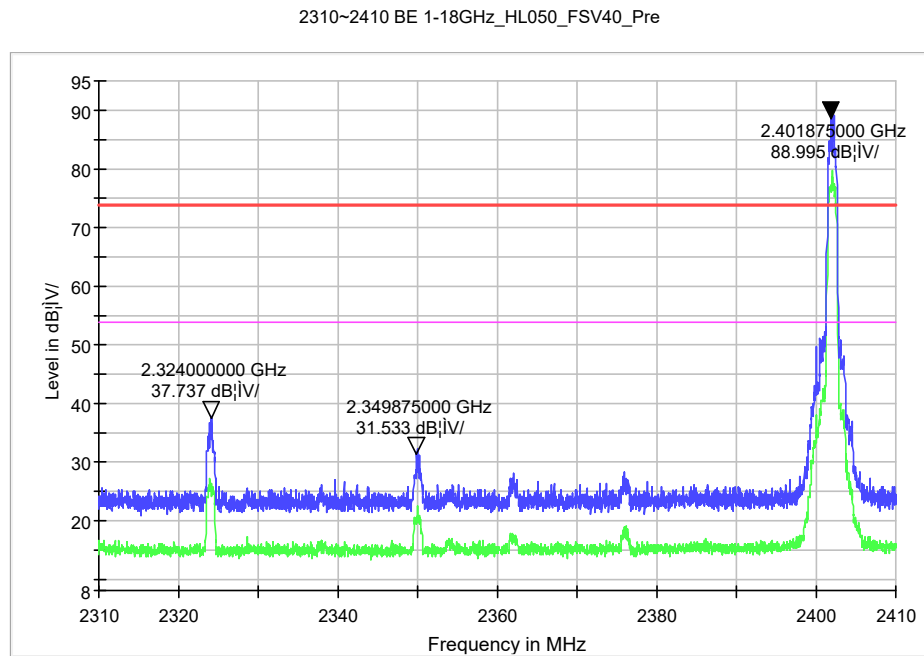
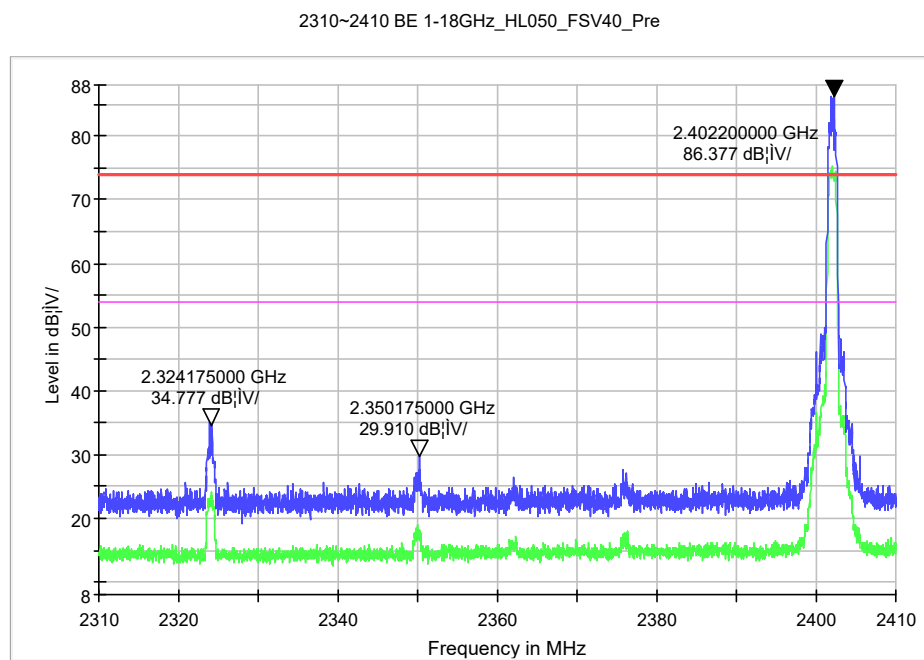
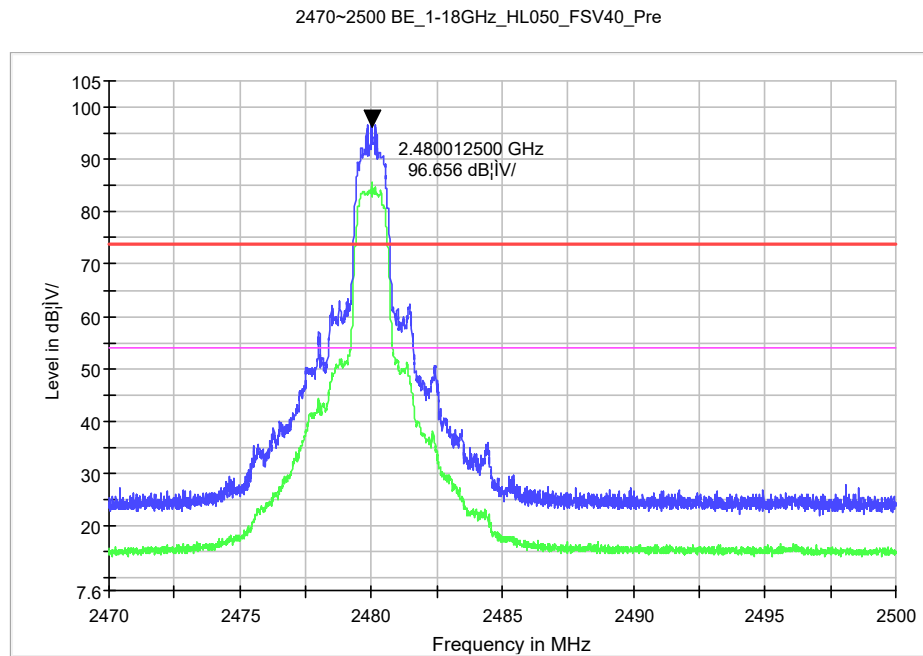
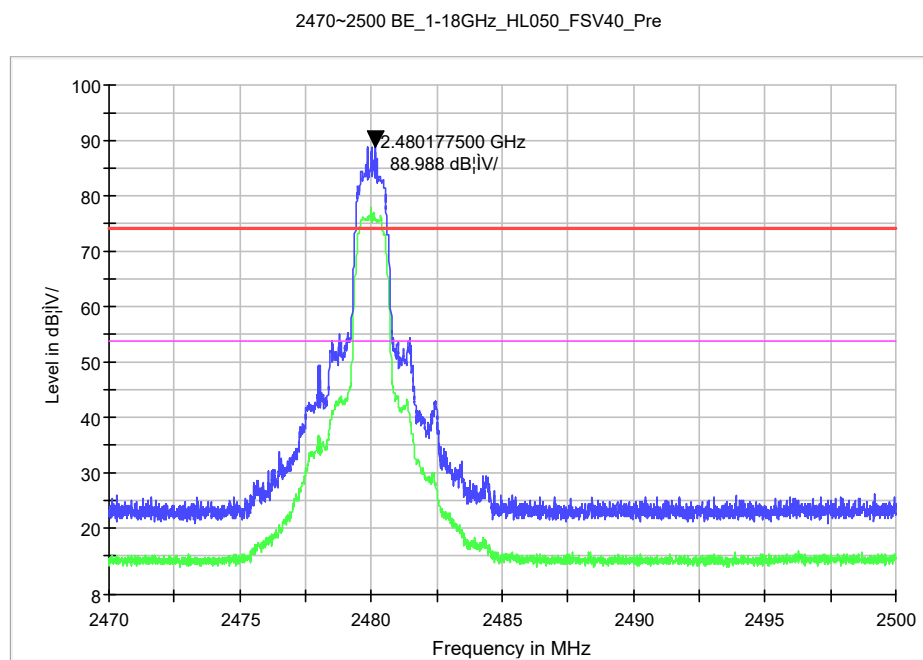
Figure 78: Radiated Band-Edge, TM7, H

Figure 79: Radiated Band-Edge, TM7, V


Figure 80: Radiated Band-Edge, TM9, H

Figure 81: Radiated Band-Edge, TM9, V


5.3.2 Radiated Spurious Emission

RESULT:**Pass**

Date of testing : 10.03.2020~08.04.2020
Ambient temperature : 23.2°C
Relative humidity : 38.5%
Atmospheric pressure : 101kPa
Test requirement : FCC Part 15.209(a)
FCC Part 15.247(d)
Test procedure : KDB 558074 D01v05r02
ANSI C63.10: 2013
Test voltage : DC 13V
Test modes applied : TM1 to TM9
Kind of test site : 3m Anechoic Chamber

Figure 82: Radiated Spurious Emission, TM1, 30MHz to 1GHz, H

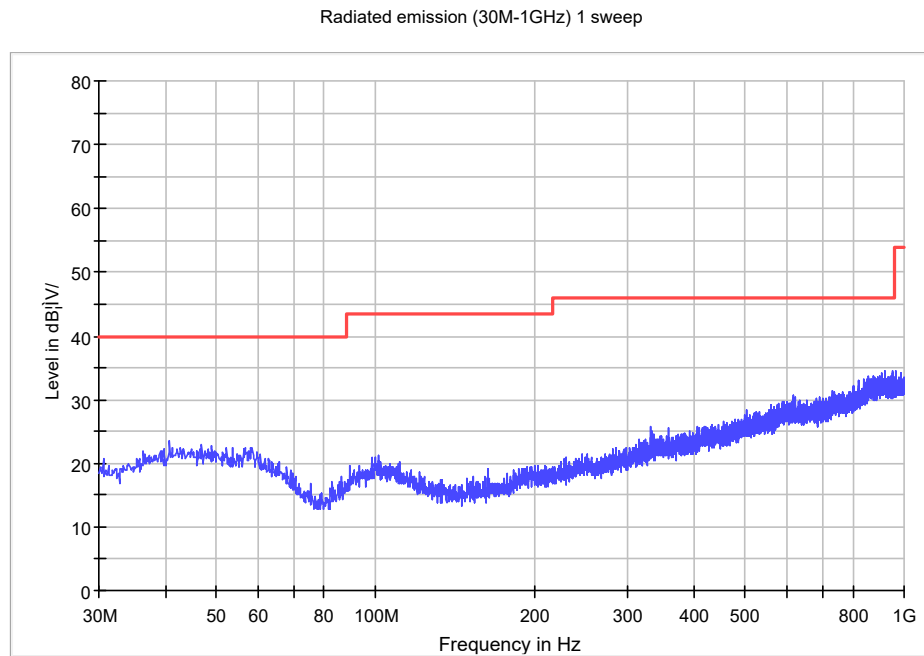


Figure 83: Radiated Spurious Emission, TM1, 30MHz to 1GHz, V

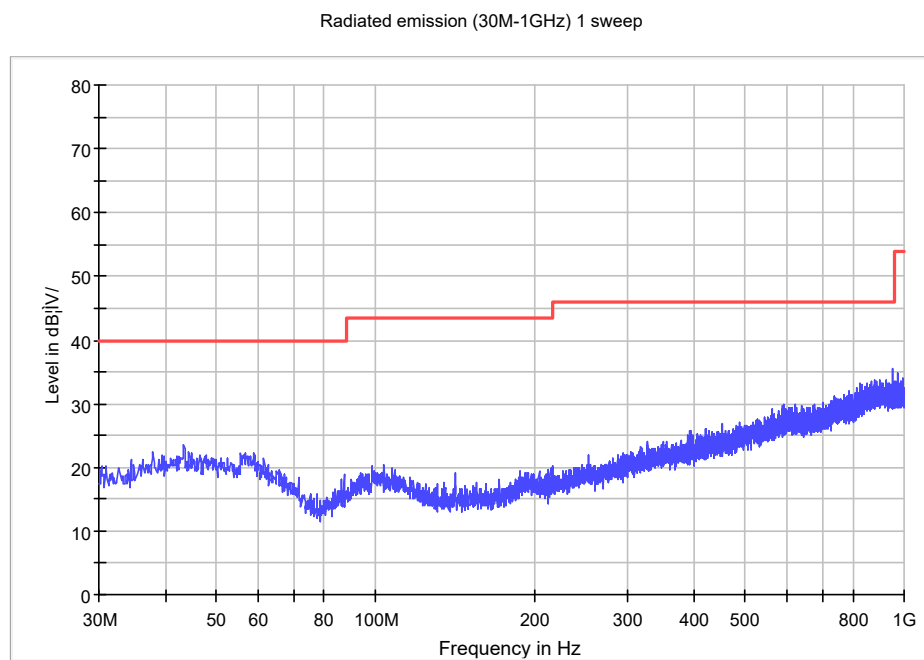


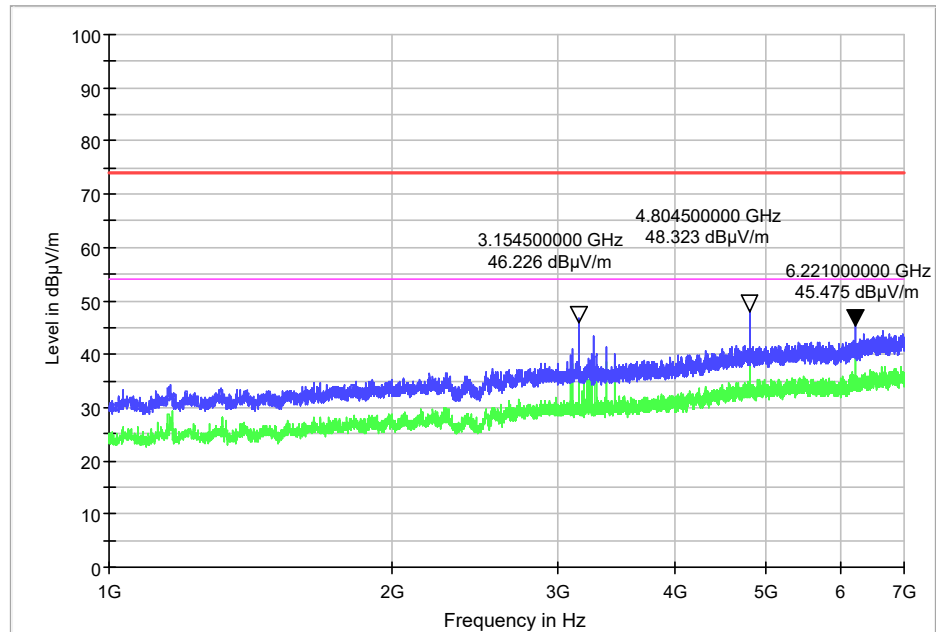
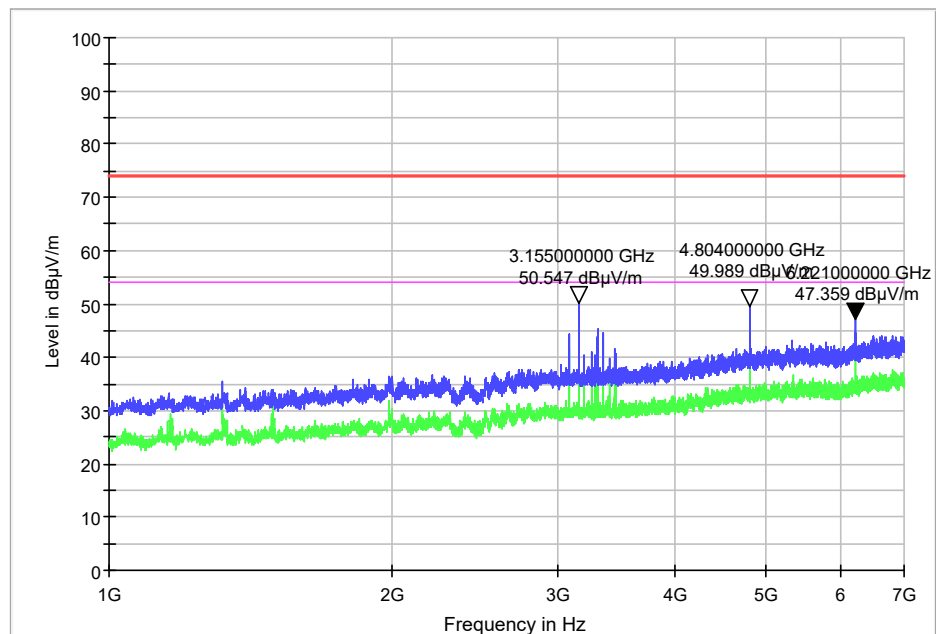
Figure 84: Radiated Spurious Emission, TM1, 1GHz to 7GHz, H

Figure 85: Radiated Spurious Emission, TM1, 1GHz to 7GHz, V


Figure 86: Radiated Spurious Emission, TM1, 7GHz to 18GHz, H

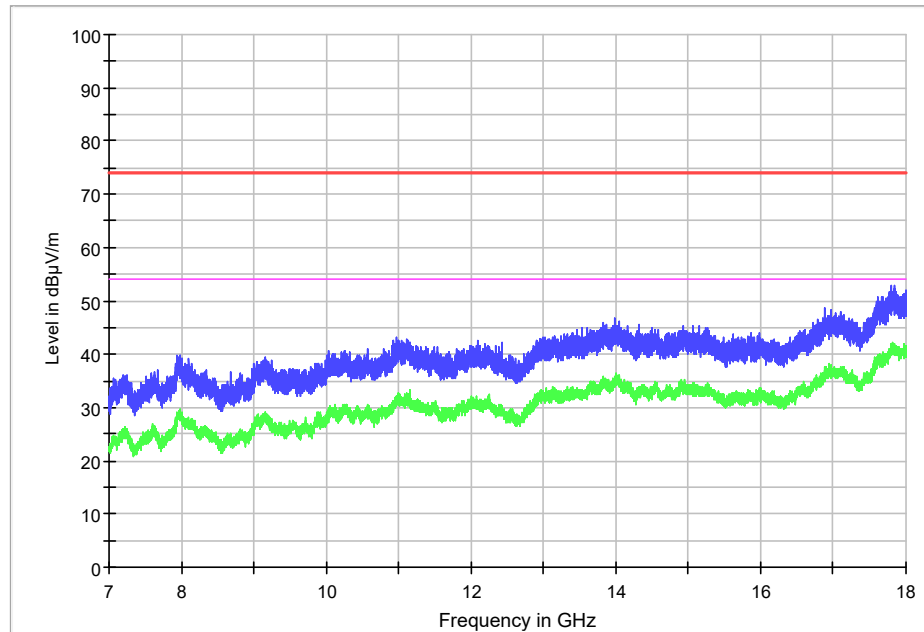


Figure 87: Radiated Spurious Emission, TM1, 7GHz to 18GHz, V

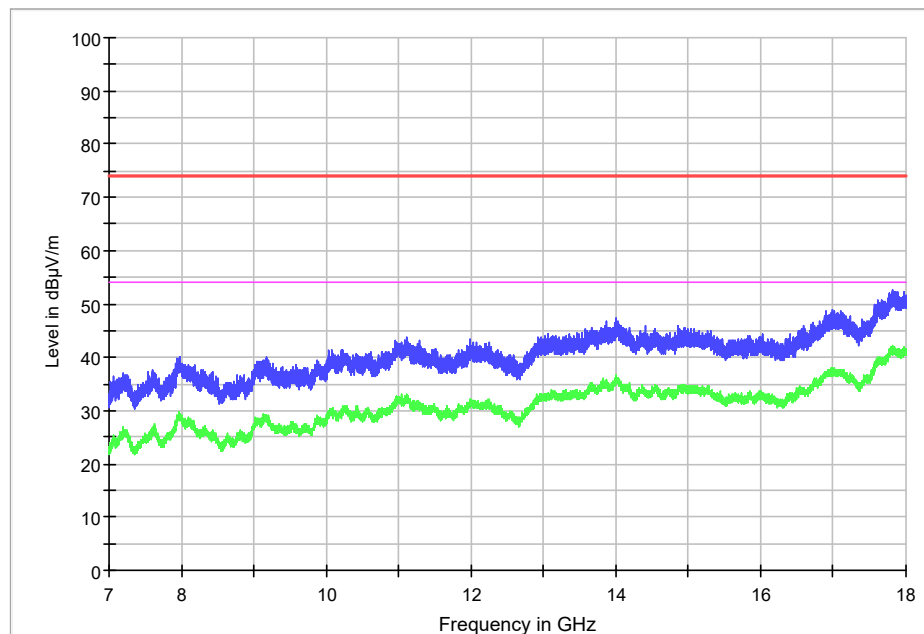


Figure 88: Radiated Spurious Emission, TM1, 18GHz to 25GHz, H

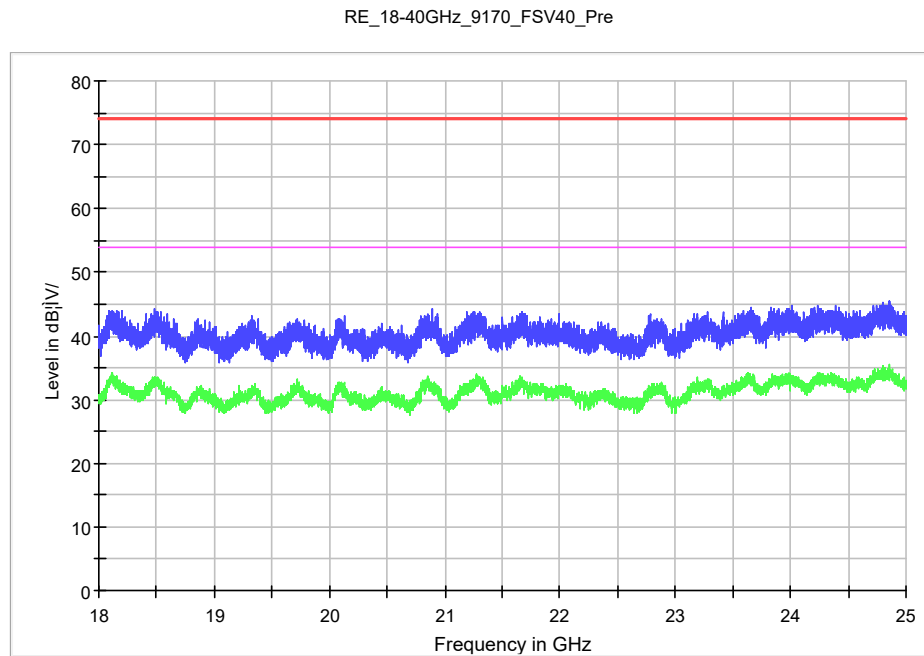


Figure 89: Radiated Spurious Emission, TM1, 18GHz to 25GHz, V

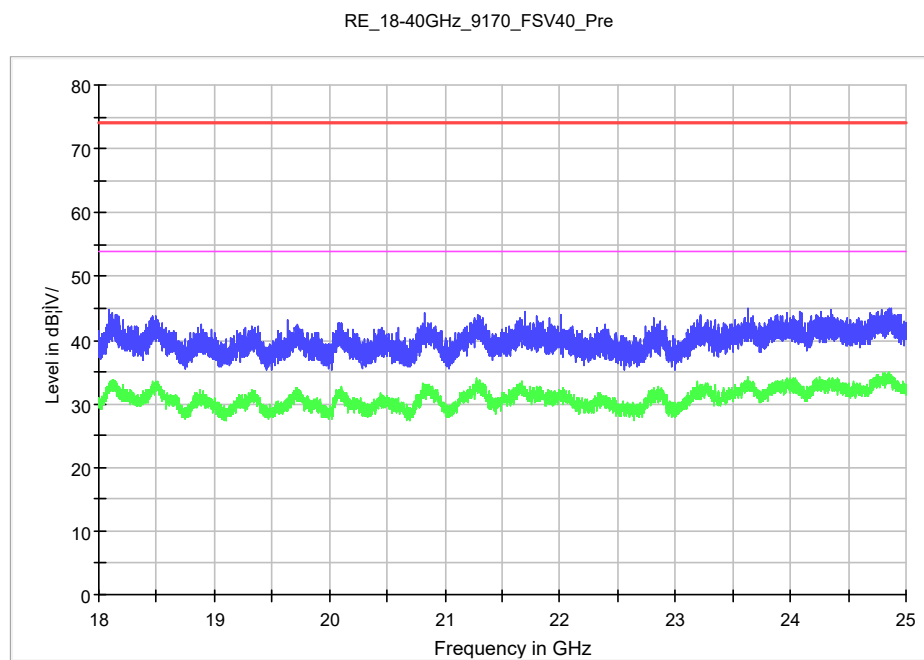


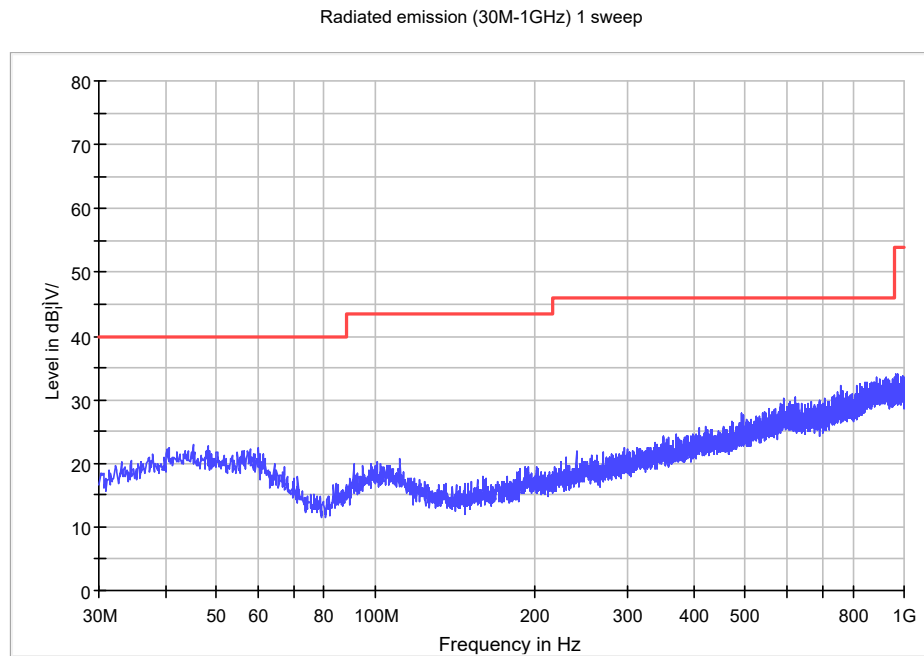
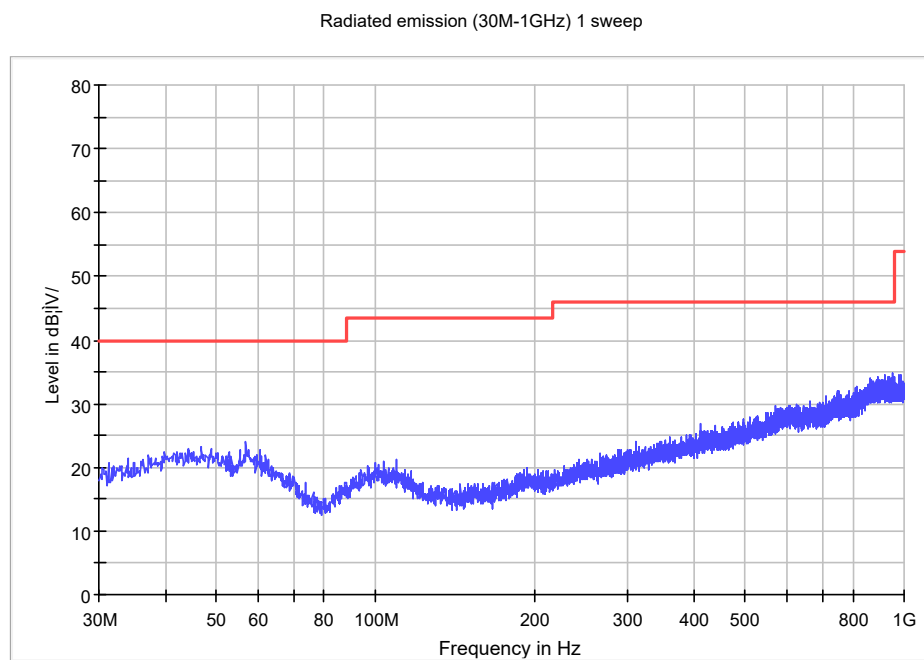
Figure 90: Radiated Spurious Emission, TM2, 30MHz to 1GHz, H

Figure 91: Radiated Spurious Emission, TM2, 30MHz to 1GHz, V


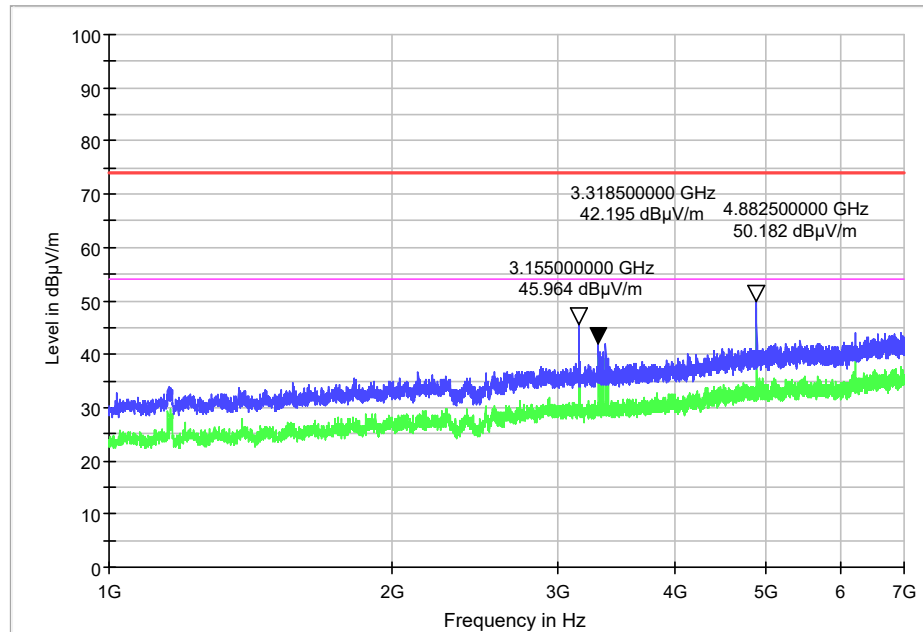
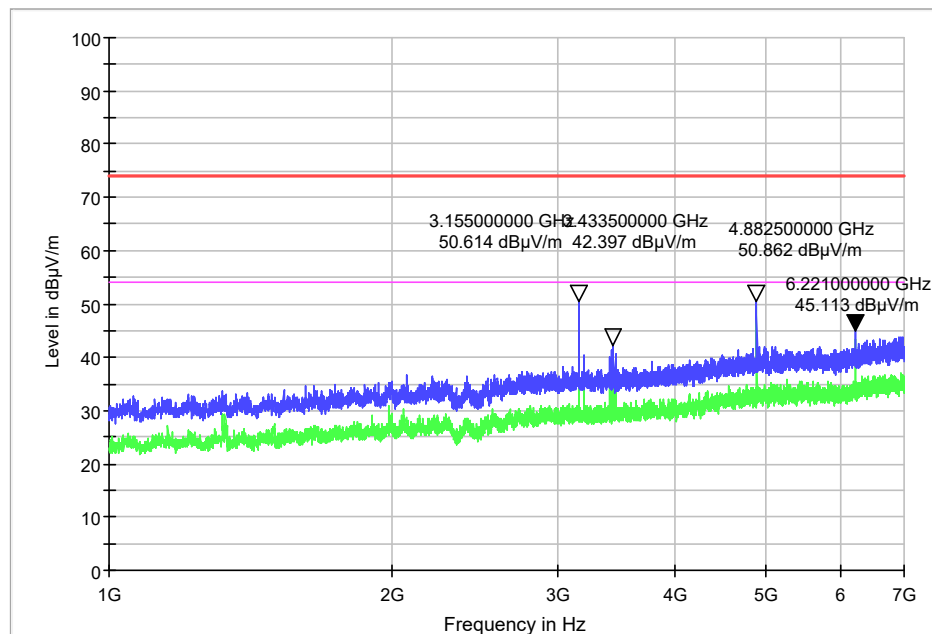
Figure 92: Radiated Spurious Emission, TM2, 1GHz to 7GHz, H

Figure 93: Radiated Spurious Emission, TM2, 1GHz to 7GHz, V


Figure 94: Radiated Spurious Emission, TM2, 7GHz to 18GHz, H

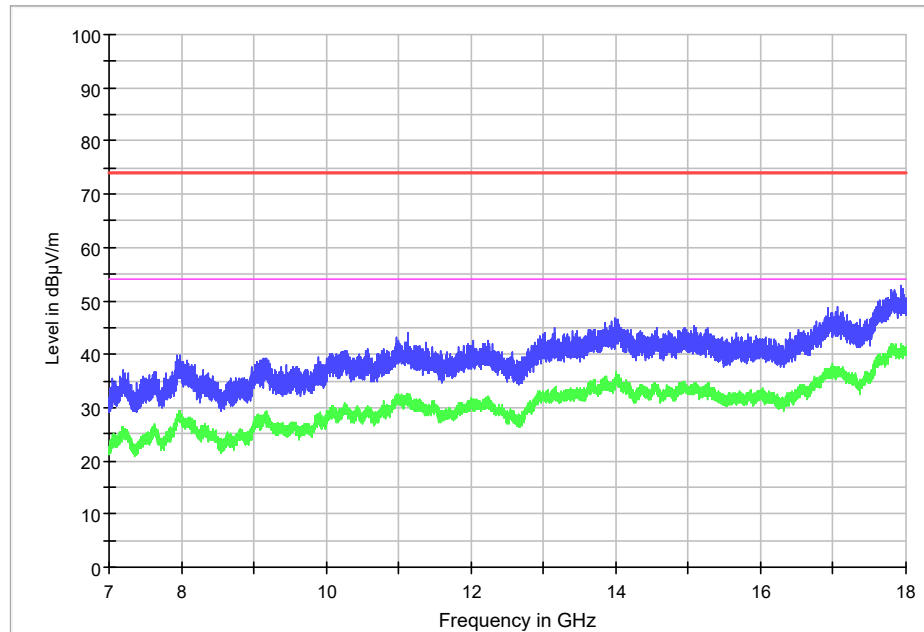


Figure 95: Radiated Spurious Emission, TM2, 7GHz to 18GHz, V

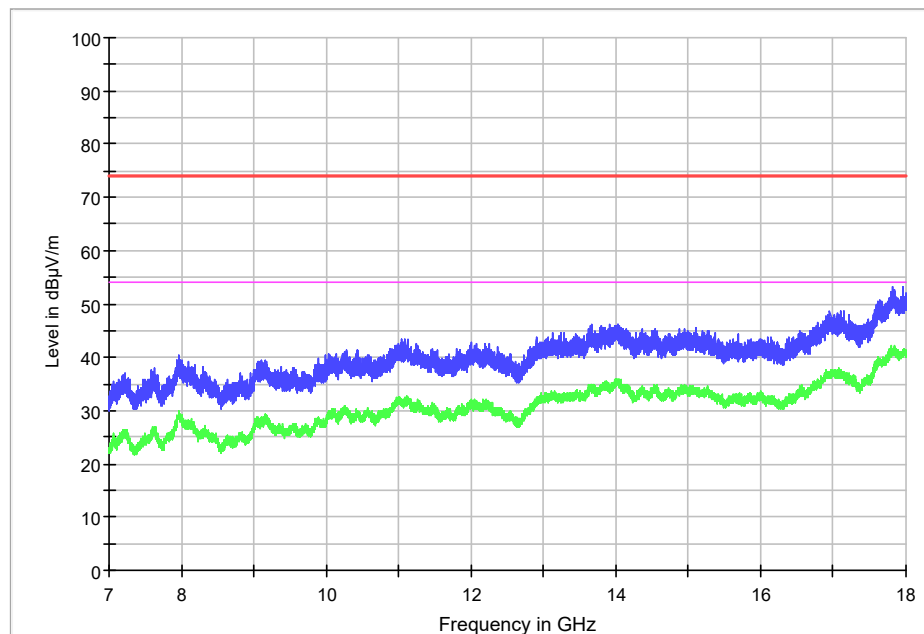


Figure 96: Radiated Spurious Emission, TM2, 18GHz to 25GHz, H

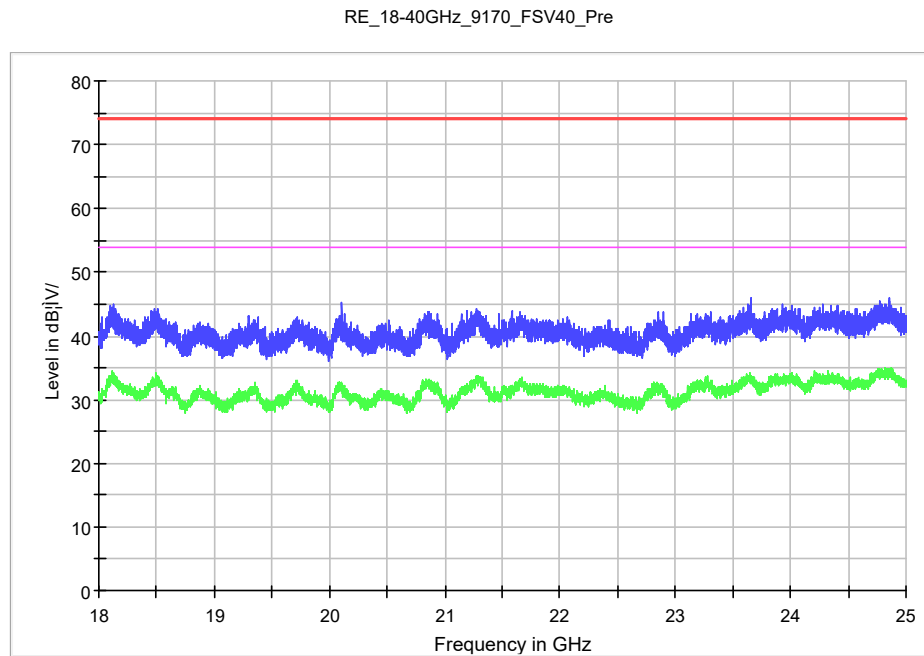


Figure 97: Radiated Spurious Emission, TM2, 18GHz to 25GHz, V

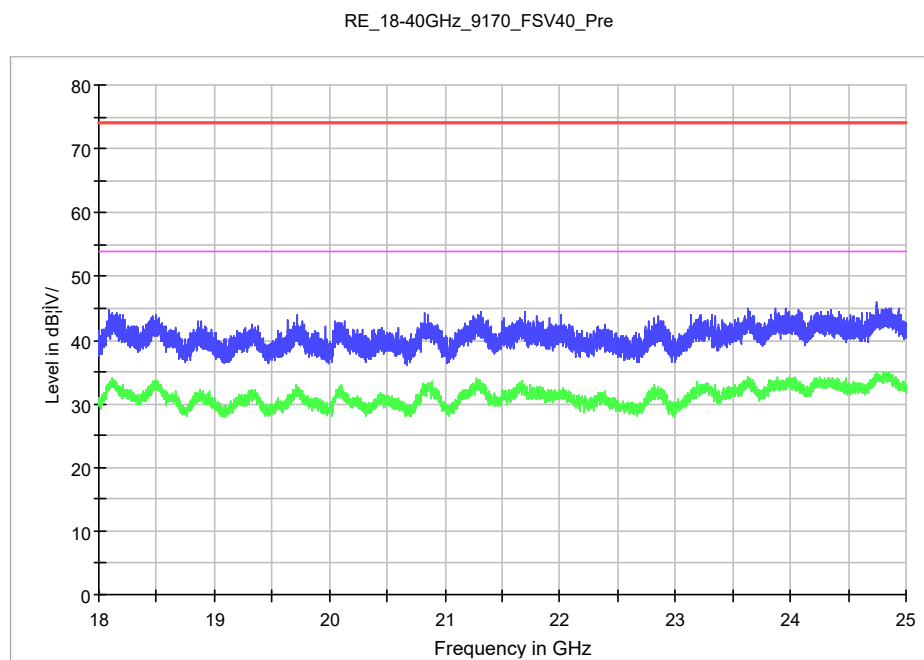


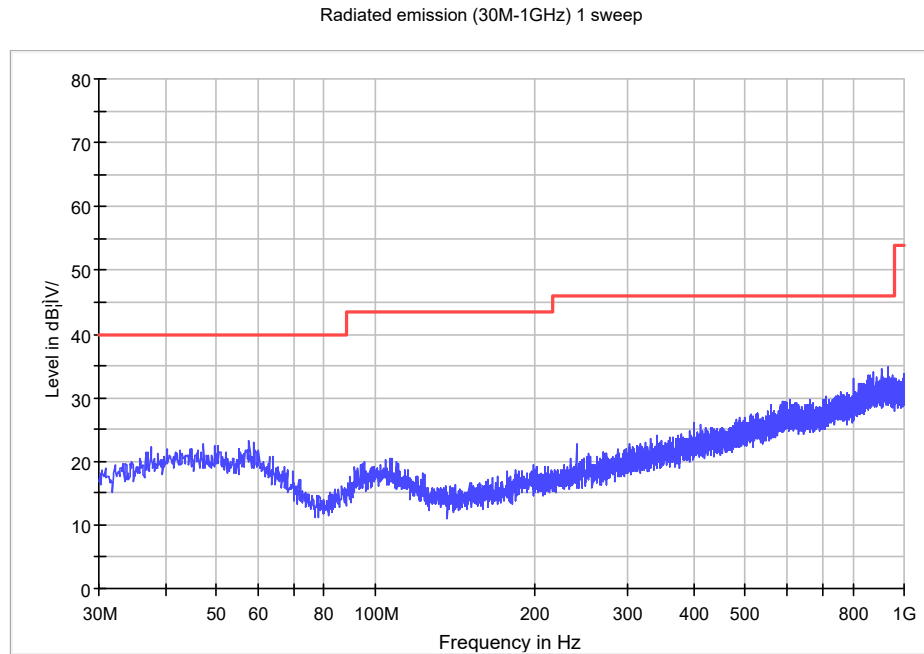
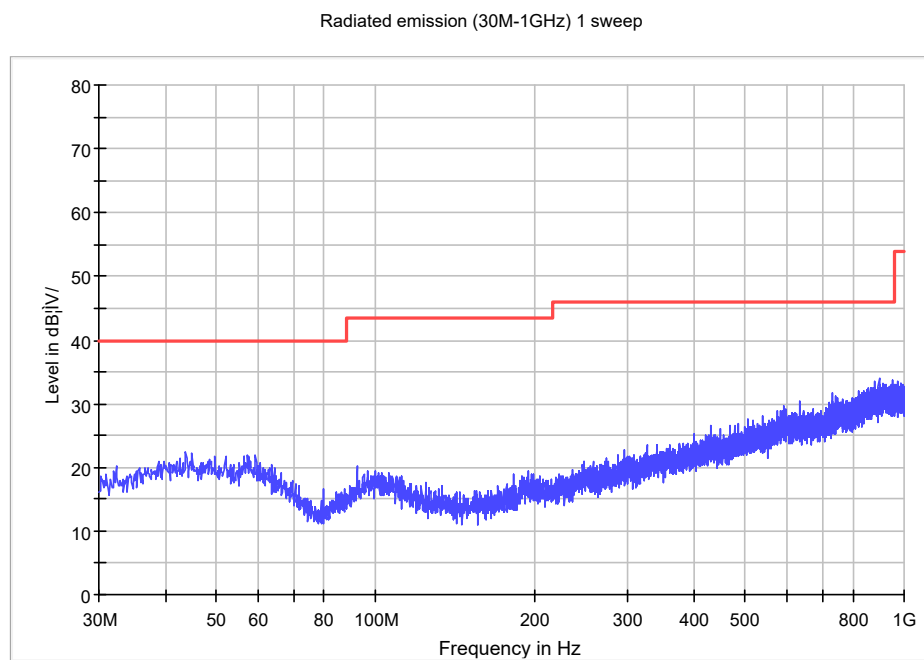
Figure 98: Radiated Spurious Emission, TM3, 30MHz to 1GHz, H

Figure 99: Radiated Spurious Emission, TM3, 30MHz to 1GHz, V


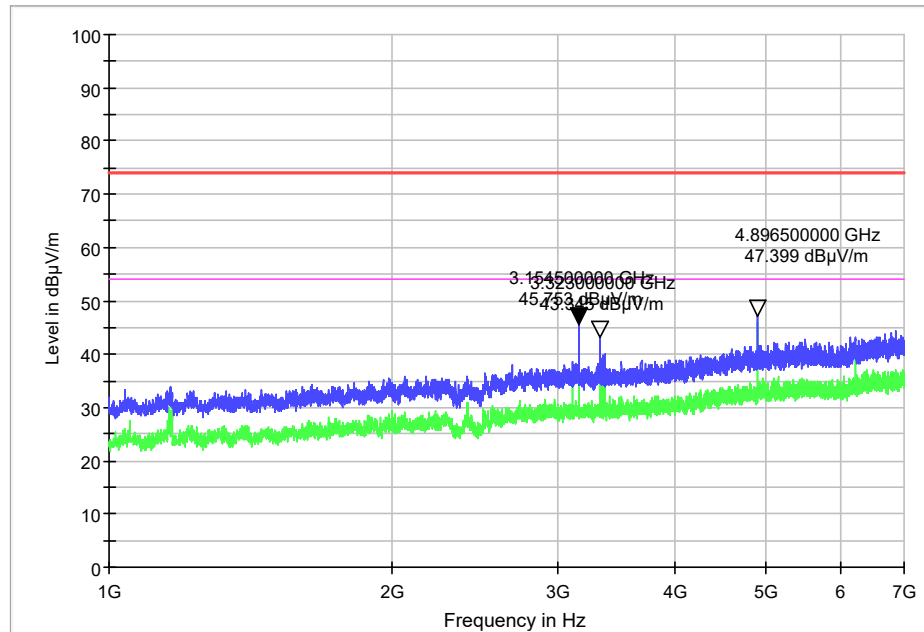
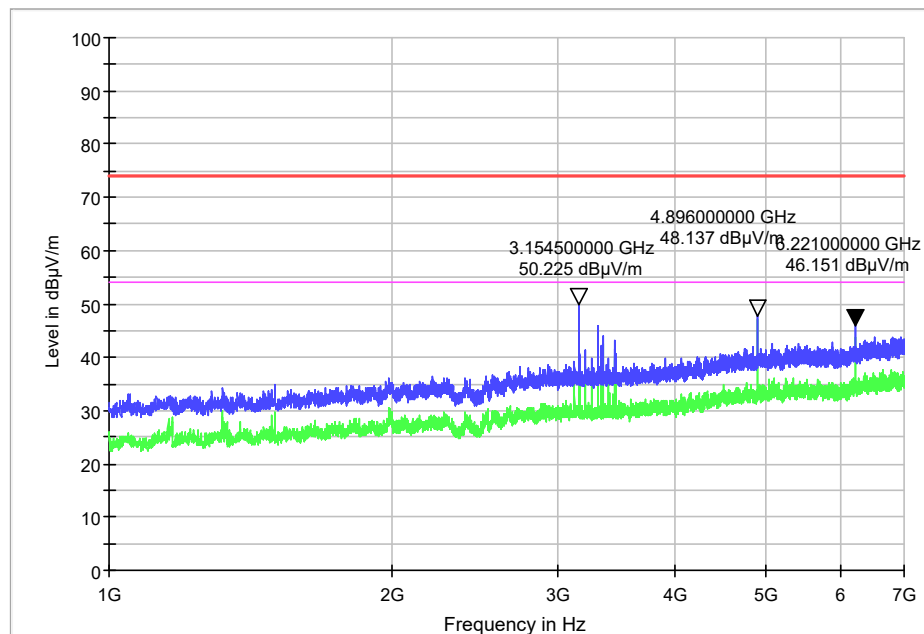
Figure 100: Radiated Spurious Emission, TM3, 1GHz to 7GHz, H

Figure 101: Radiated Spurious Emission, TM3, 1GHz to 7GHz, V


Figure 102: Radiated Spurious Emission, TM3, 7GHz to 18GHz, H

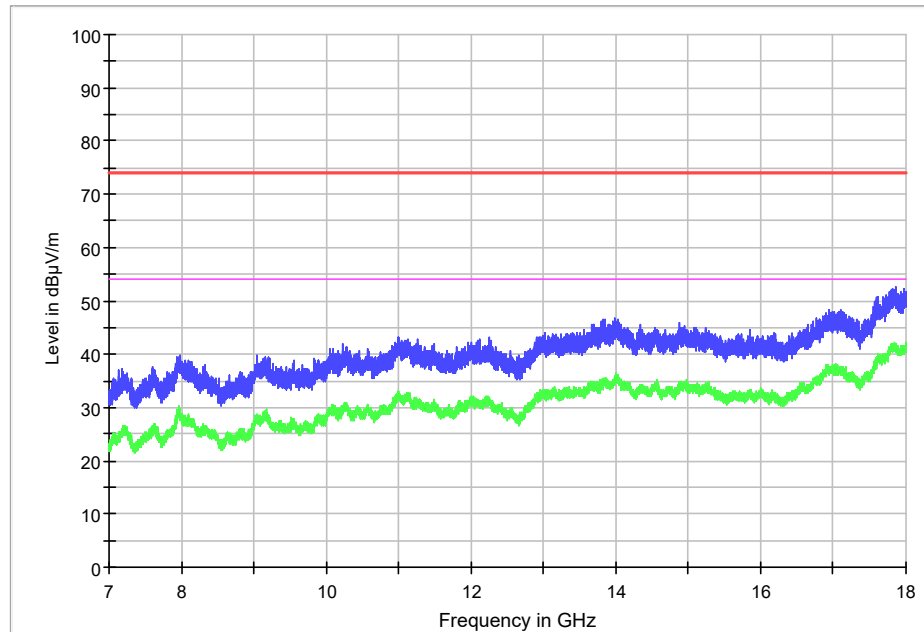


Figure 103: Radiated Spurious Emission, TM3, 7GHz to 18GHz, V

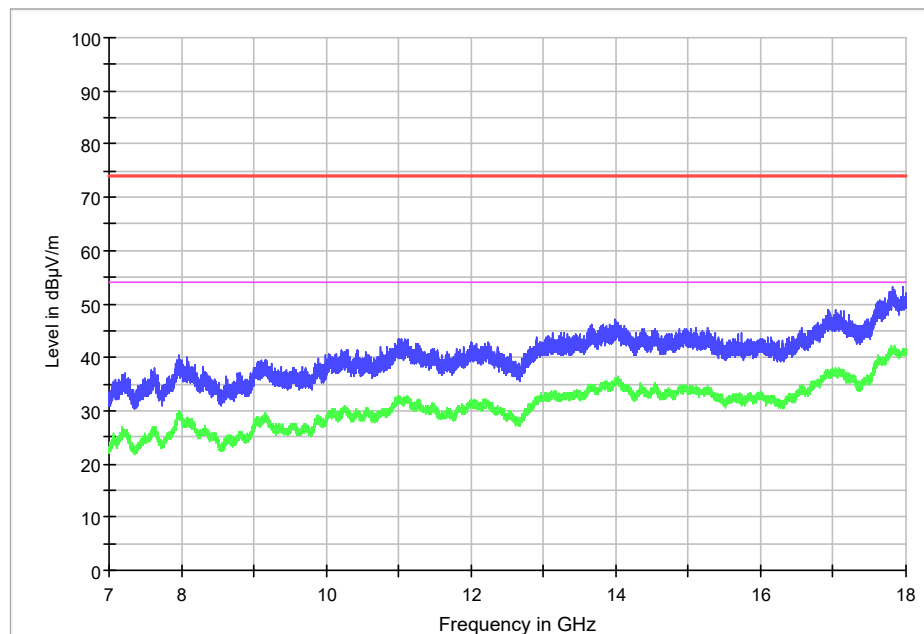


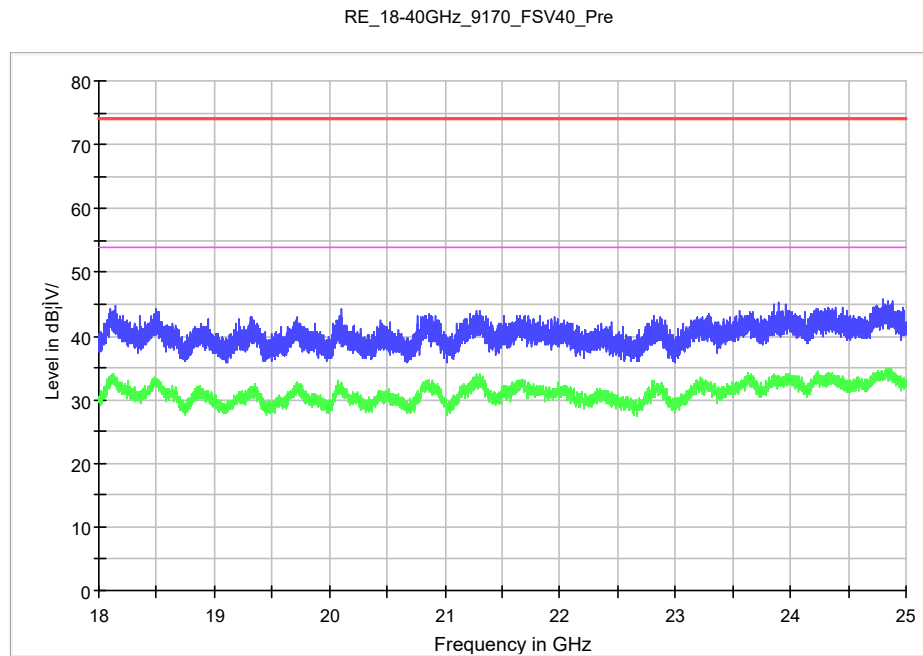
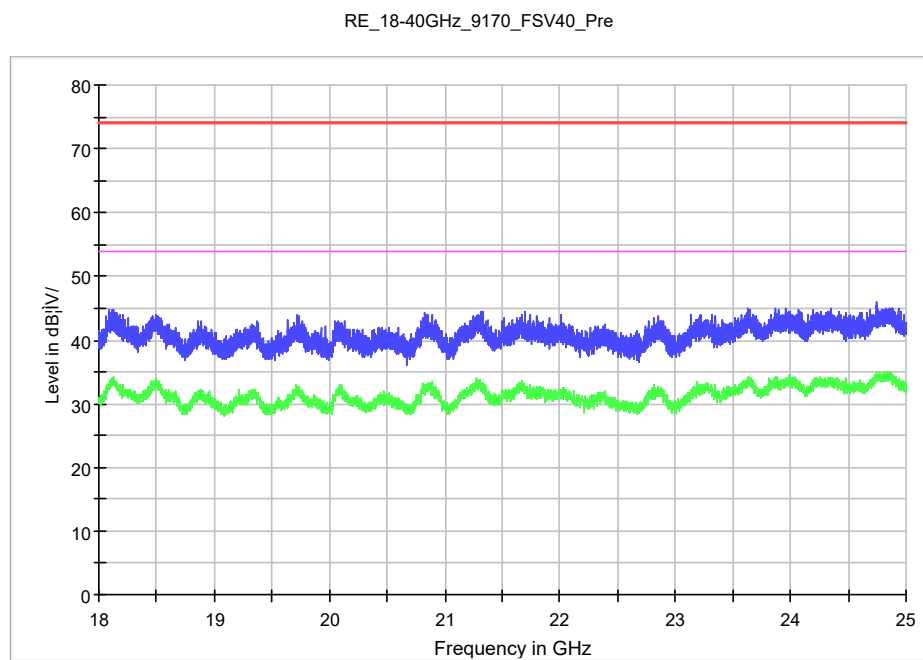
Figure 104: Radiated Spurious Emission, TM3, 18GHz to 25GHz, H

Figure 105: Radiated Spurious Emission, TM3, 18GHz to 25GHz, V


Figure 106: Radiated Spurious Emission, TM4, 30MHz to 1GHz, H

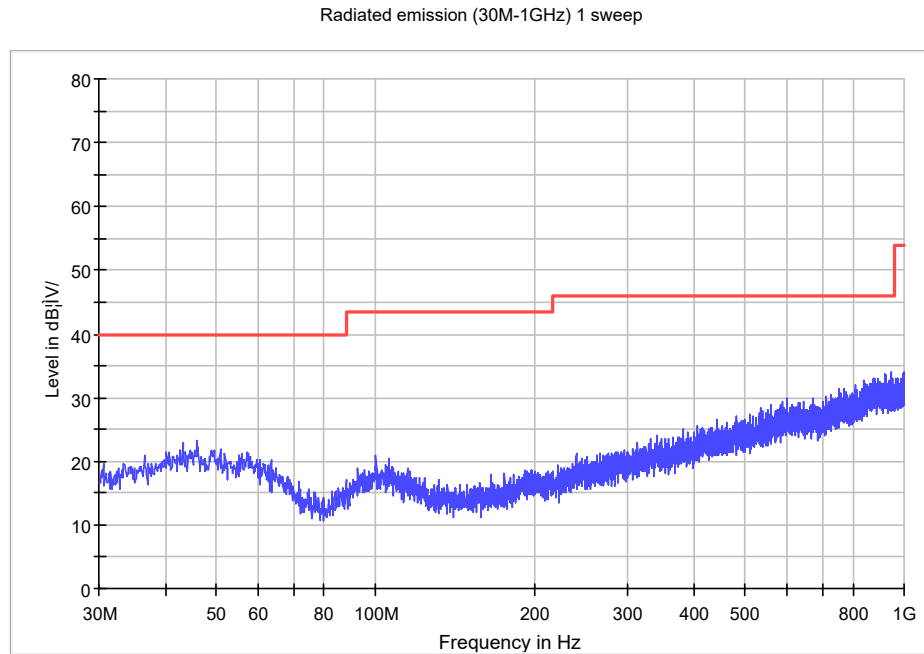


Figure 107: Radiated Spurious Emission, TM4, 30MHz to 1GHz, V

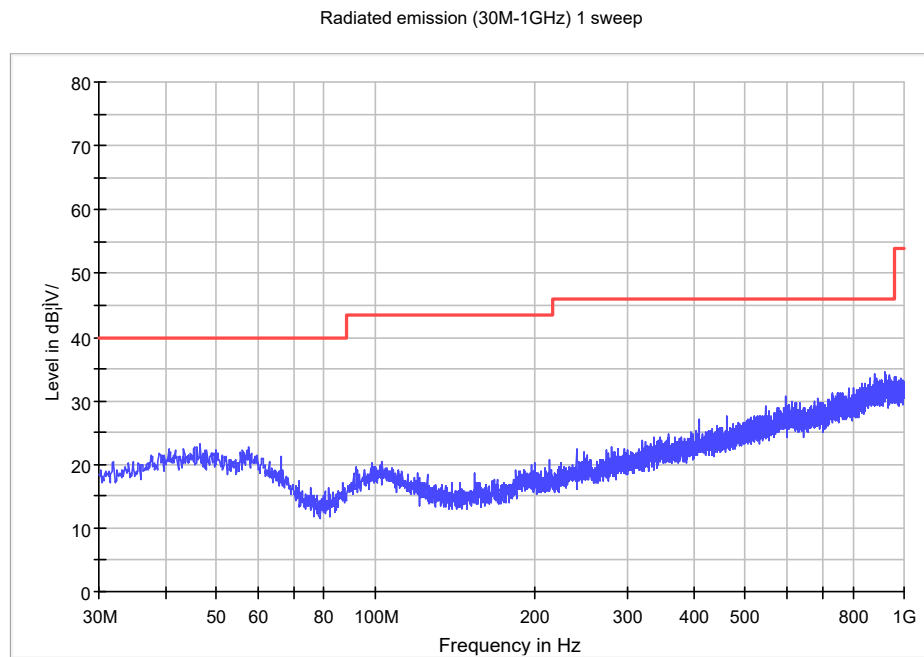


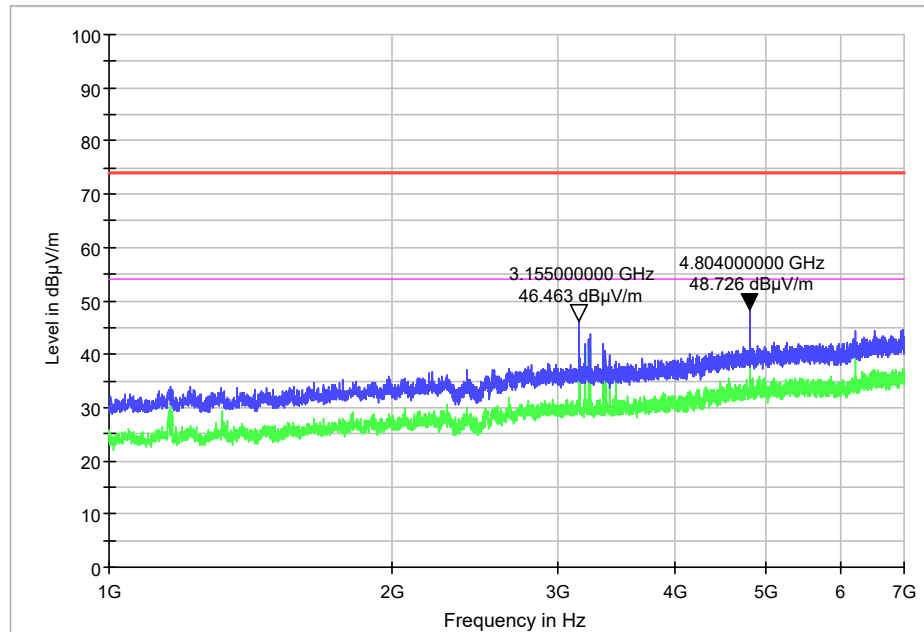
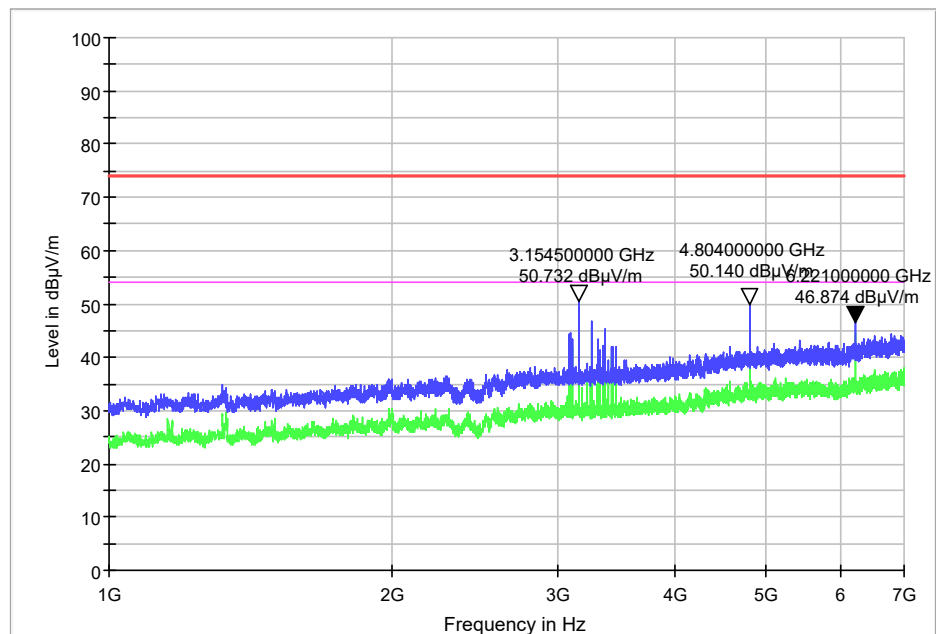
Figure 108: Radiated Spurious Emission, TM4, 1GHz to 7GHz, H

Figure 109: Radiated Spurious Emission, TM4, 1GHz to 7GHz, V


Figure 110: Radiated Spurious Emission, TM4, 7GHz to 18GHz, H

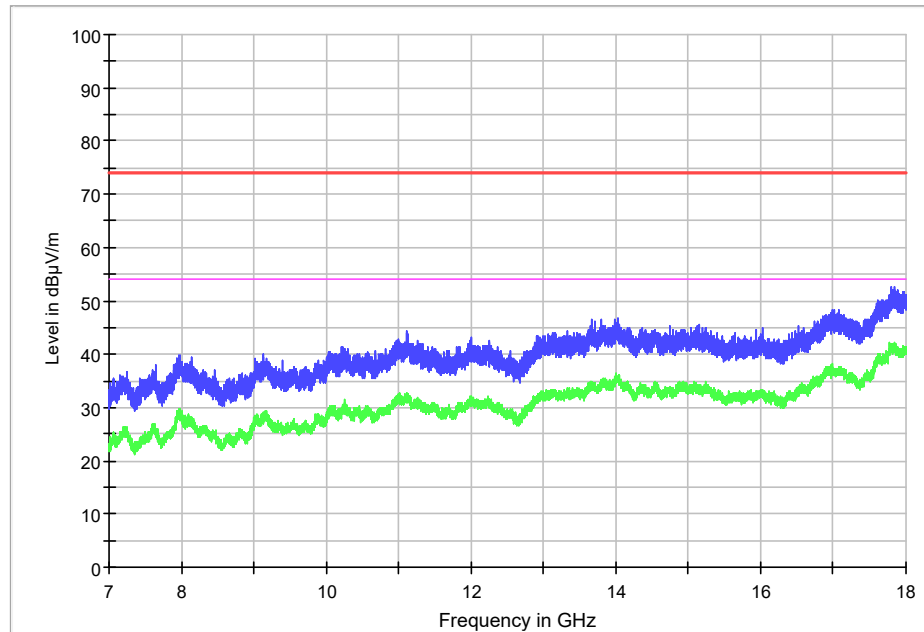


Figure 111: Radiated Spurious Emission, TM4, 7GHz to 18GHz, V

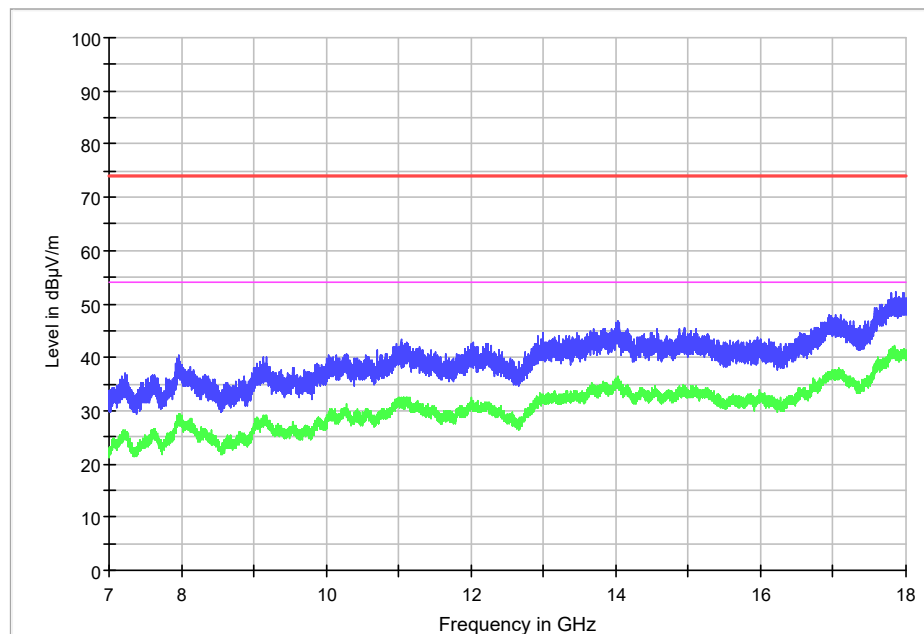


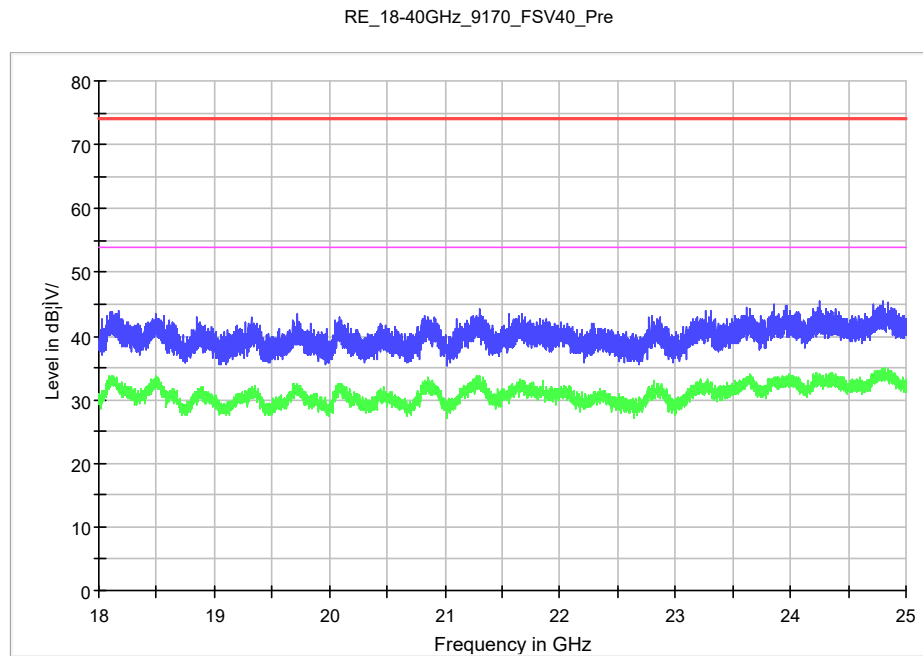
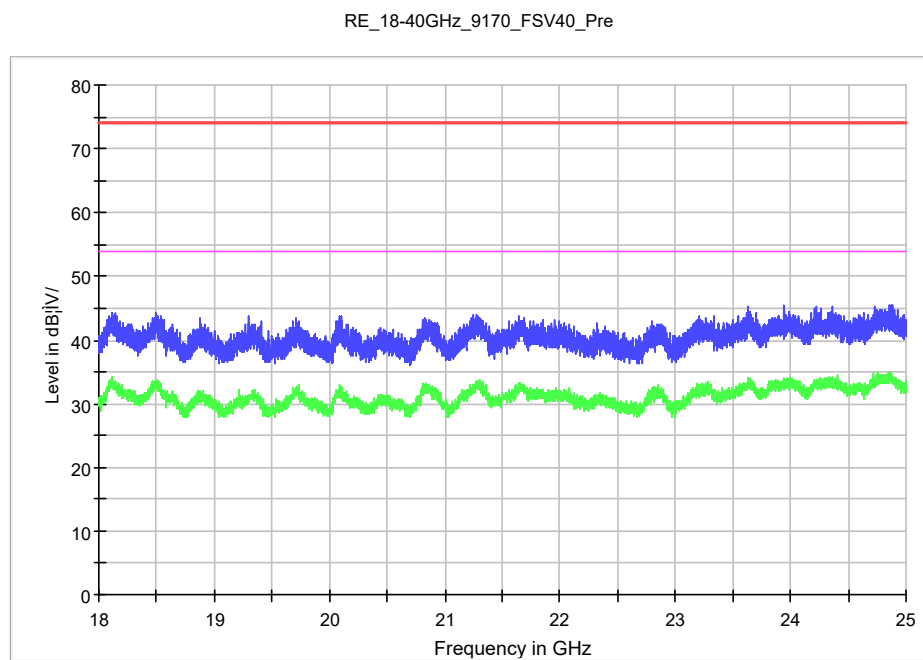
Figure 112: Radiated Spurious Emission, TM4, 18GHz to 25GHz, H

Figure 113: Radiated Spurious Emission, TM4, 18GHz to 25GHz, V


Figure 114: Radiated Spurious Emission, TM5, 30MHz to 1GHz, H

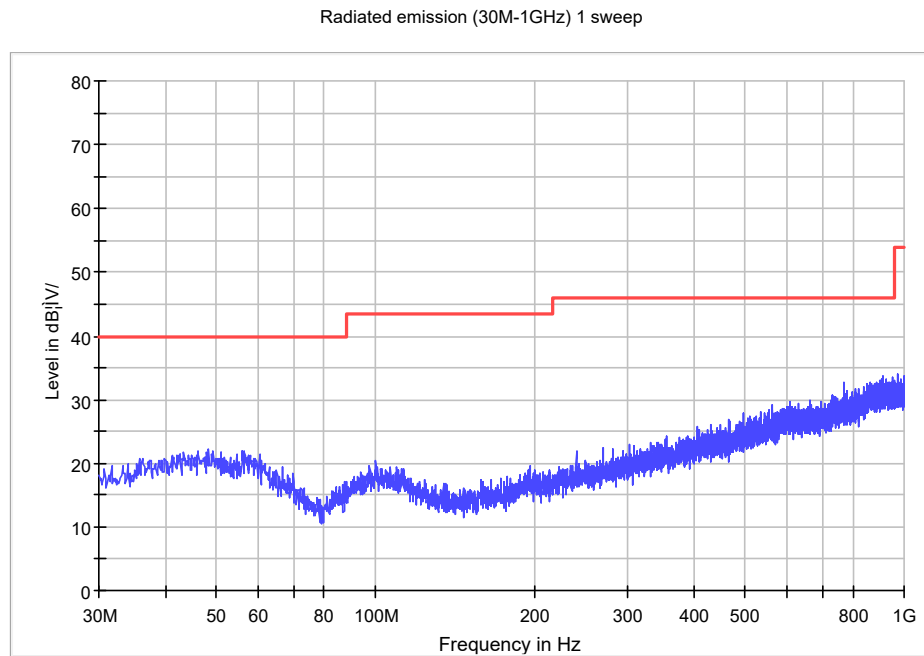


Figure 115: Radiated Spurious Emission, TM5, 30MHz to 1GHz, V

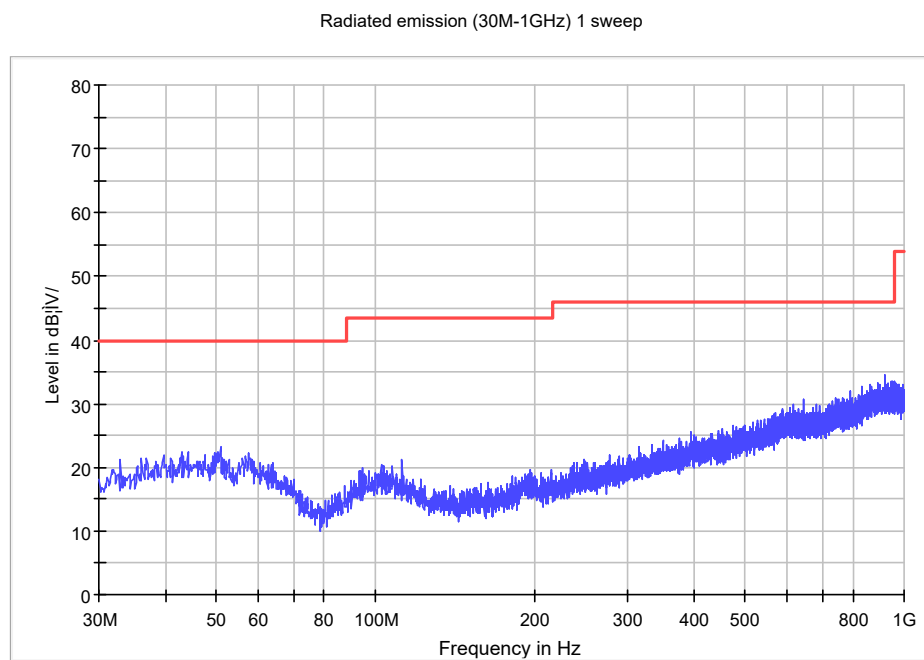


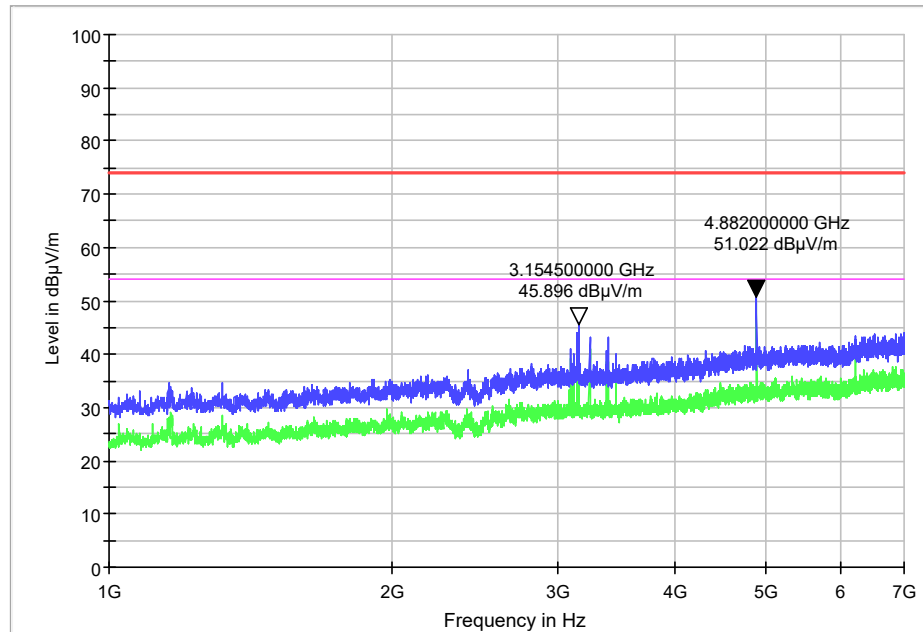
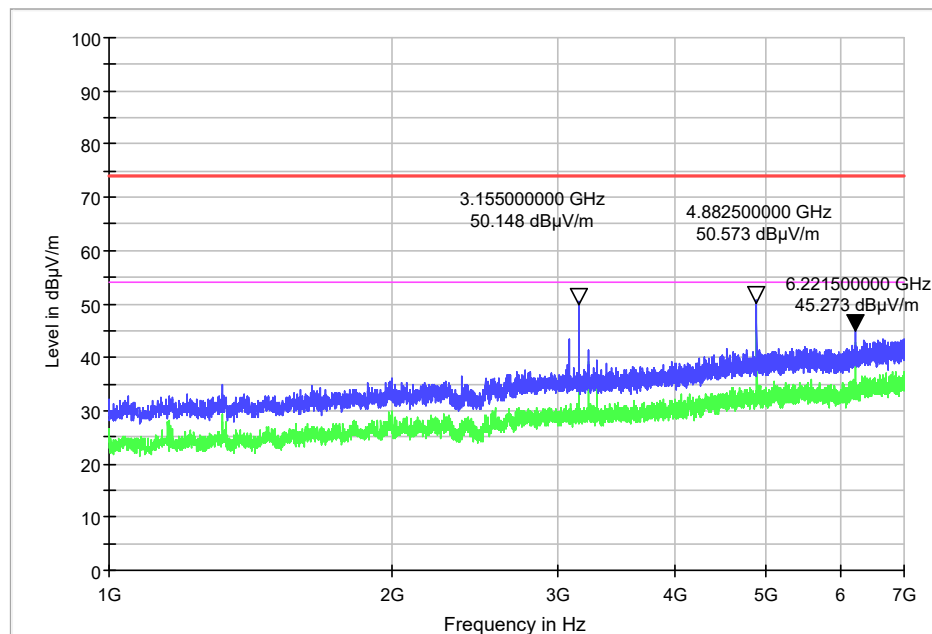
Figure 116: Radiated Spurious Emission, TM5, 1GHz to 7GHz, H

Figure 117: Radiated Spurious Emission, TM5, 1GHz to 7GHz, V


Figure 118: Radiated Spurious Emission, TM5, 7GHz to 18GHz, H

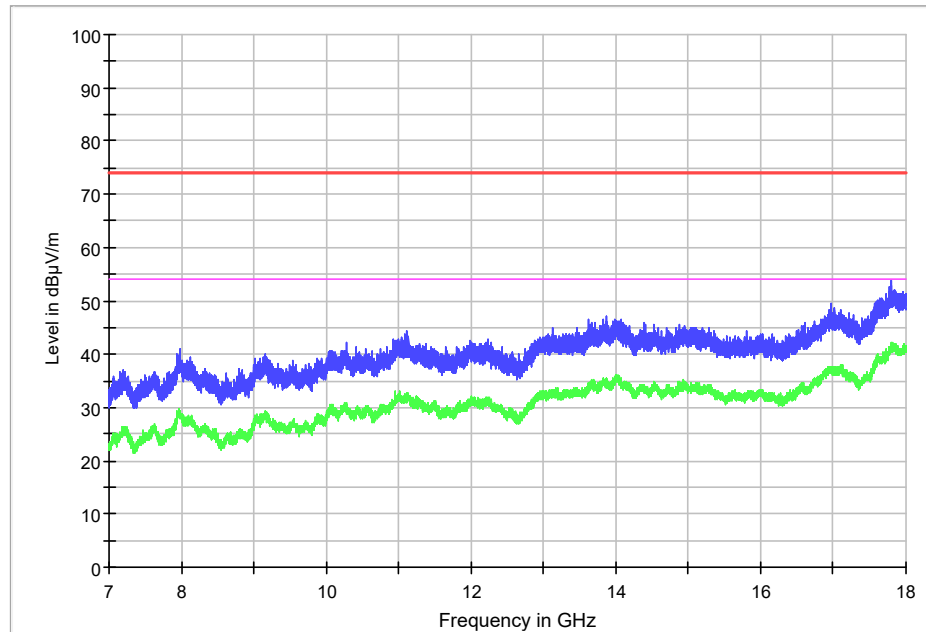


Figure 119: Radiated Spurious Emission, TM5, 7GHz to 18GHz, V

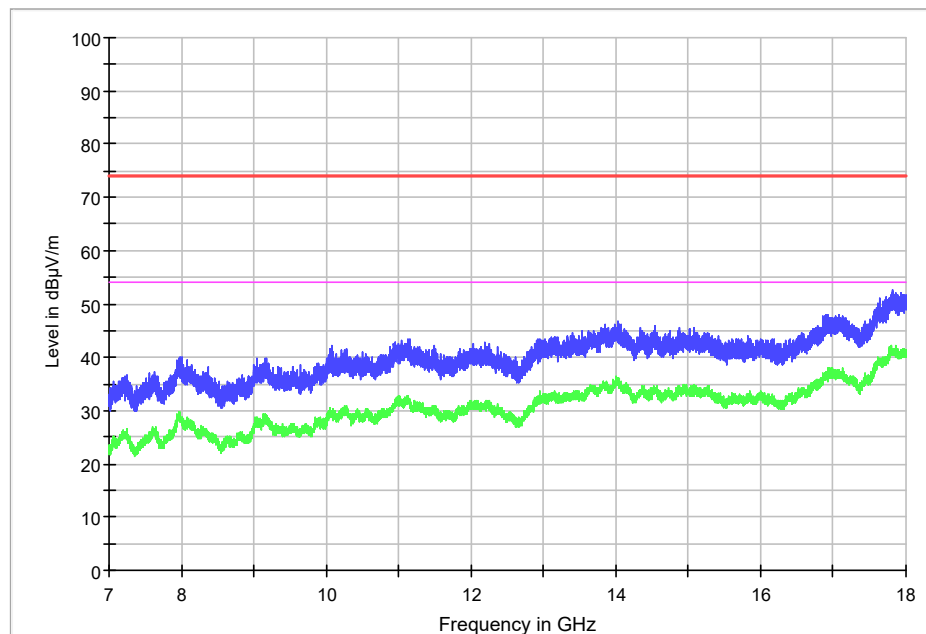


Figure 120: Radiated Spurious Emission, TM5, 18GHz to 25GHz, H

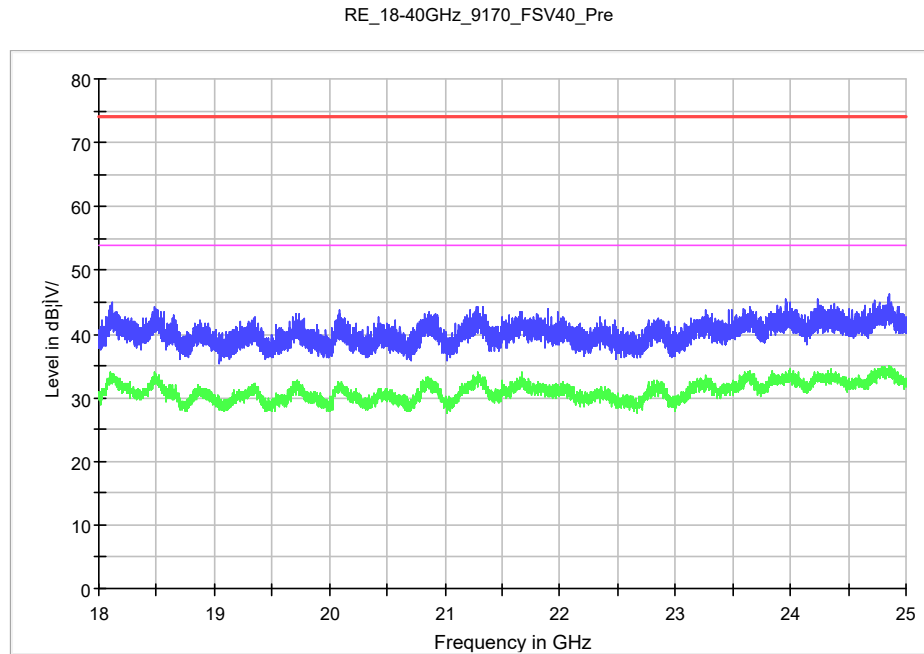


Figure 121: Radiated Spurious Emission, TM5, 18GHz to 25GHz, V

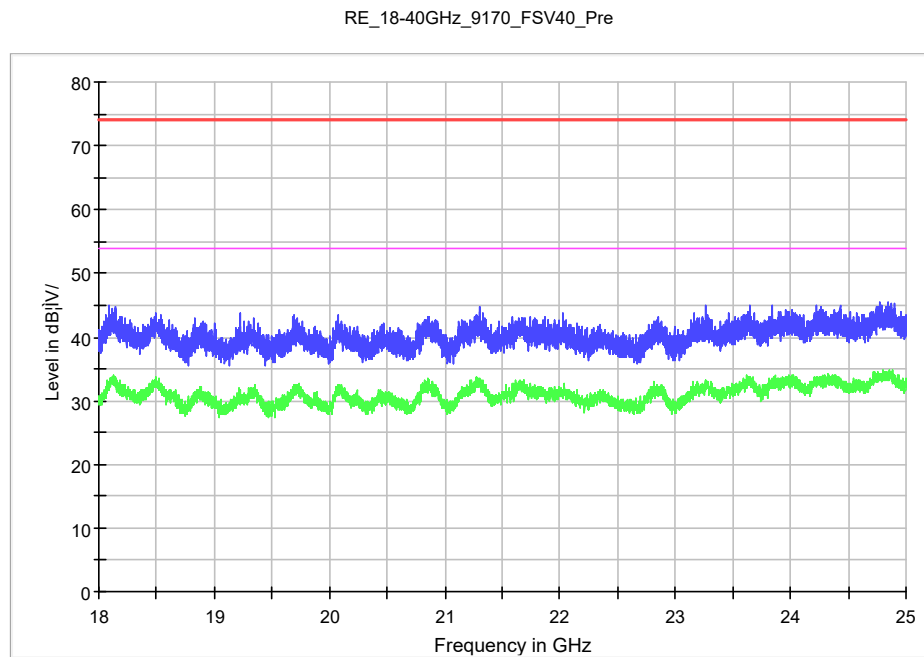


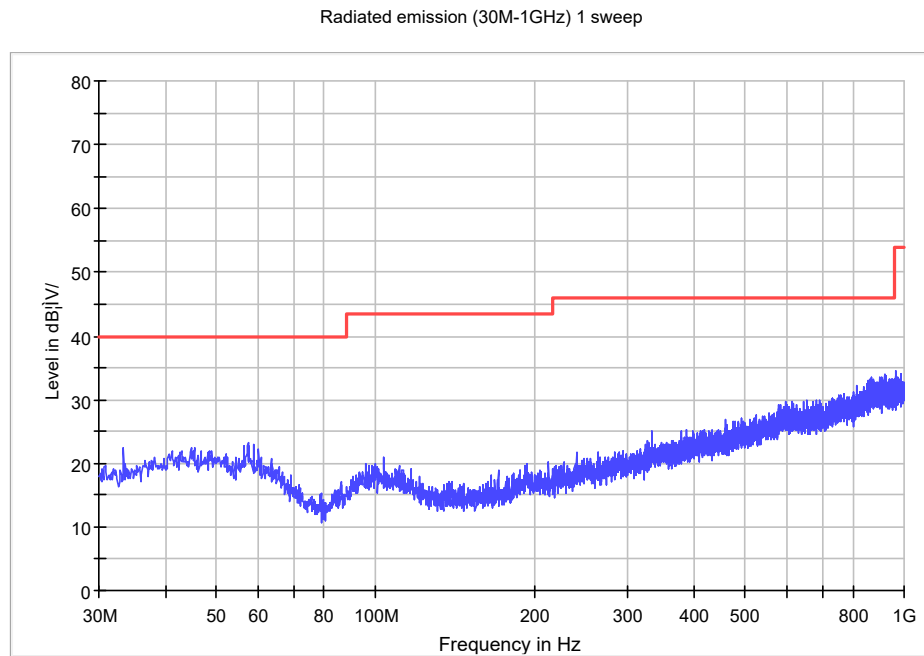
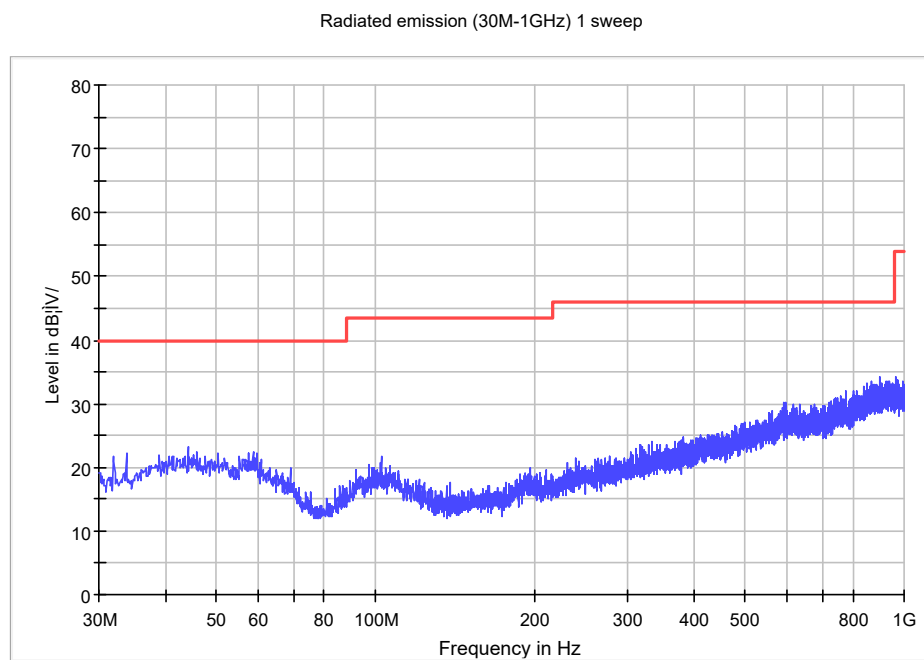
Figure 122: Radiated Spurious Emission, TM6, 30MHz to 1GHz, H

Figure 123: Radiated Spurious Emission, TM6, 30MHz to 1GHz, V


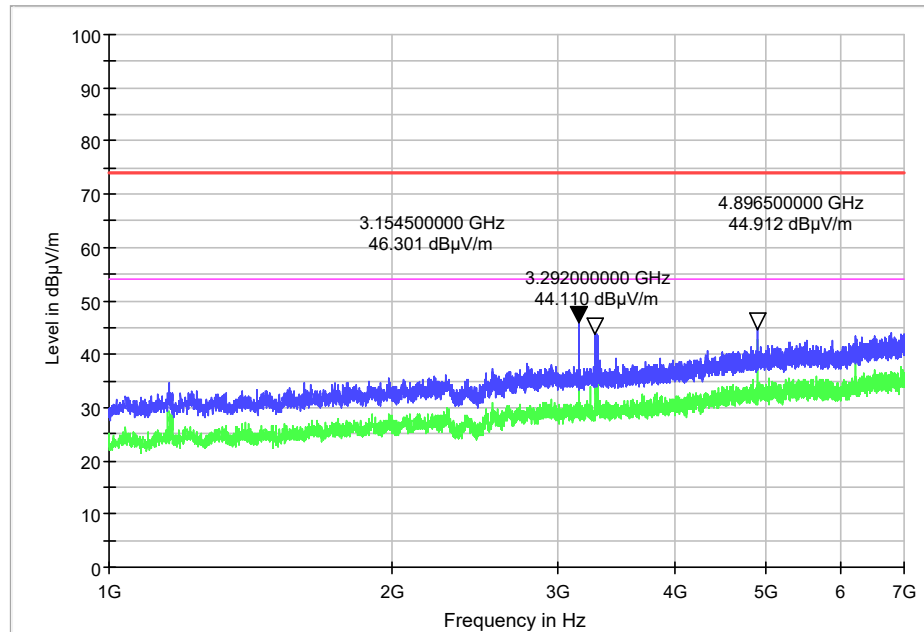
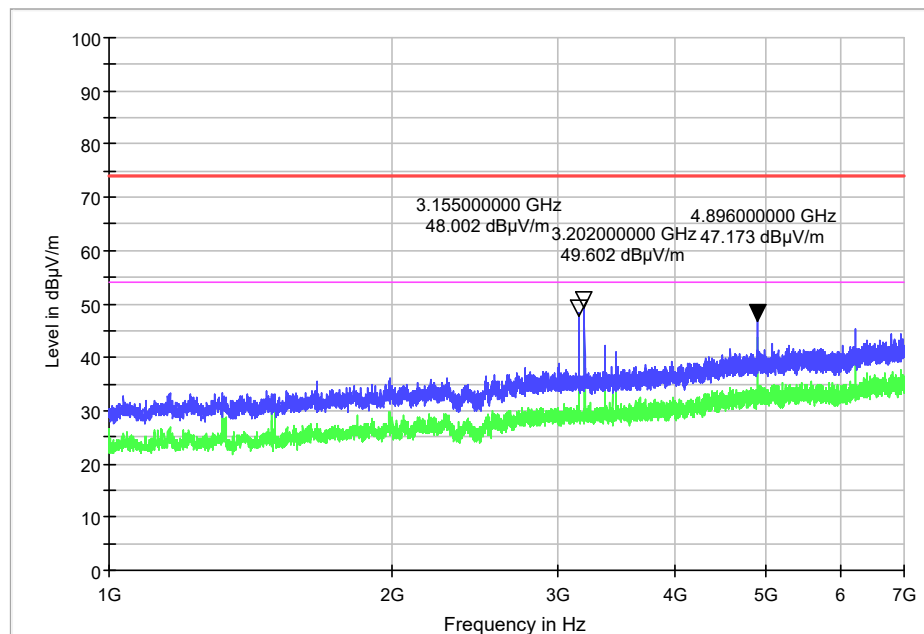
Figure 124: Radiated Spurious Emission, TM6, 1GHz to 7GHz, H

Figure 125: Radiated Spurious Emission, TM6, 1GHz to 7GHz, V


Figure 126: Radiated Spurious Emission, TM6, 7GHz to 18GHz, H

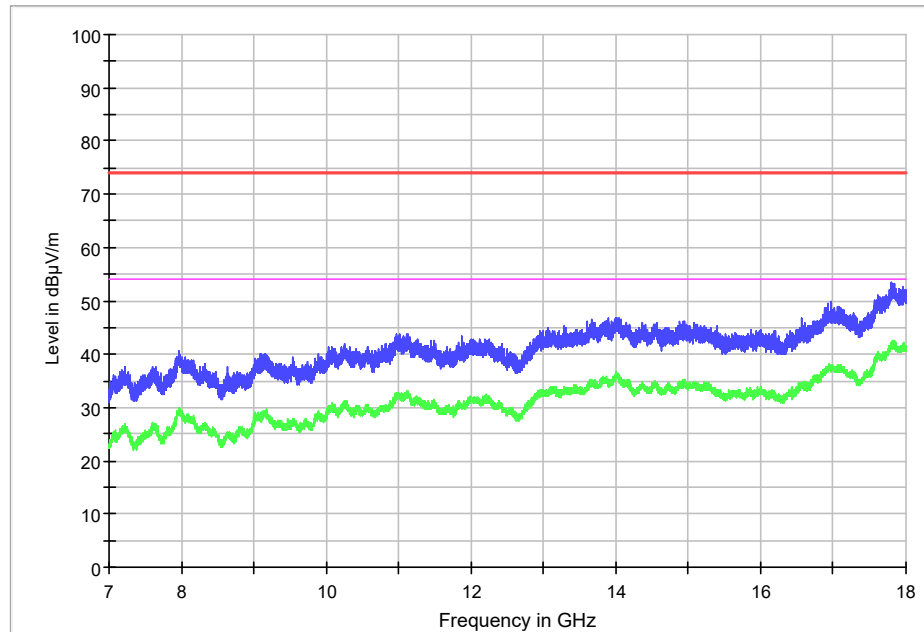


Figure 127: Radiated Spurious Emission, TM6, 7GHz to 18GHz, V

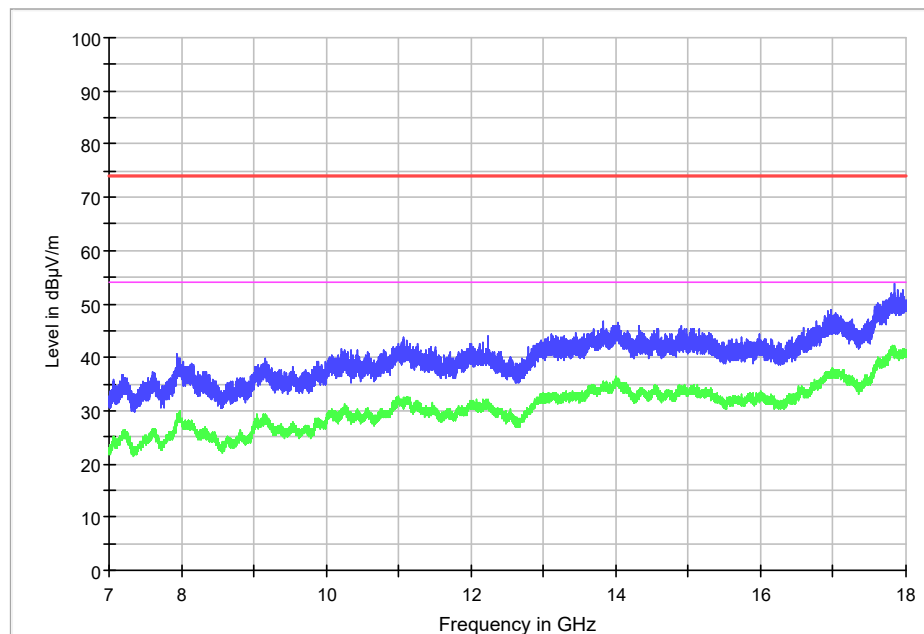


Figure 128: Radiated Spurious Emission, TM6, 18GHz to 25GHz, H

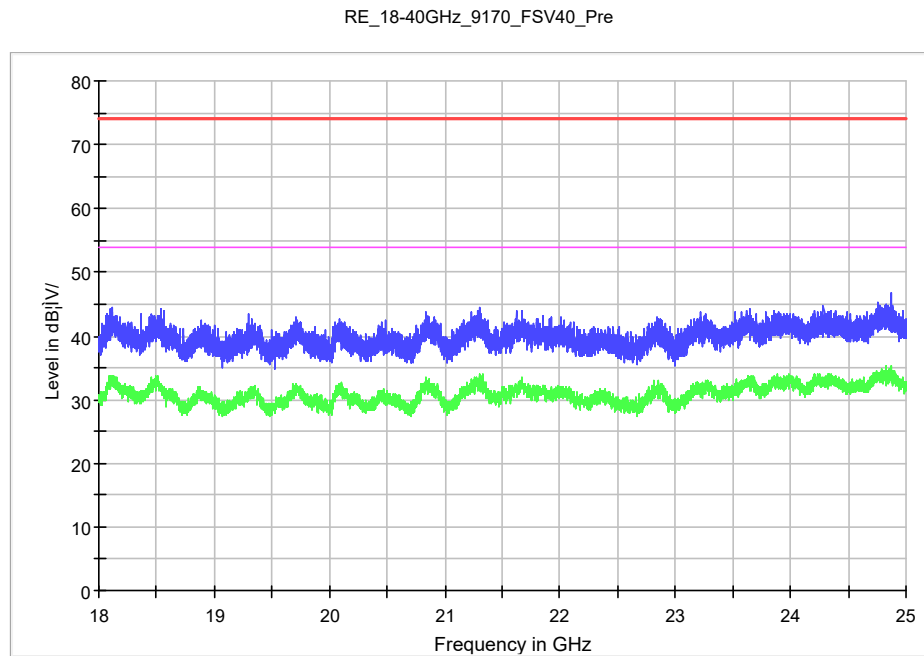


Figure 129: Radiated Spurious Emission, TM6, 18GHz to 25GHz, V

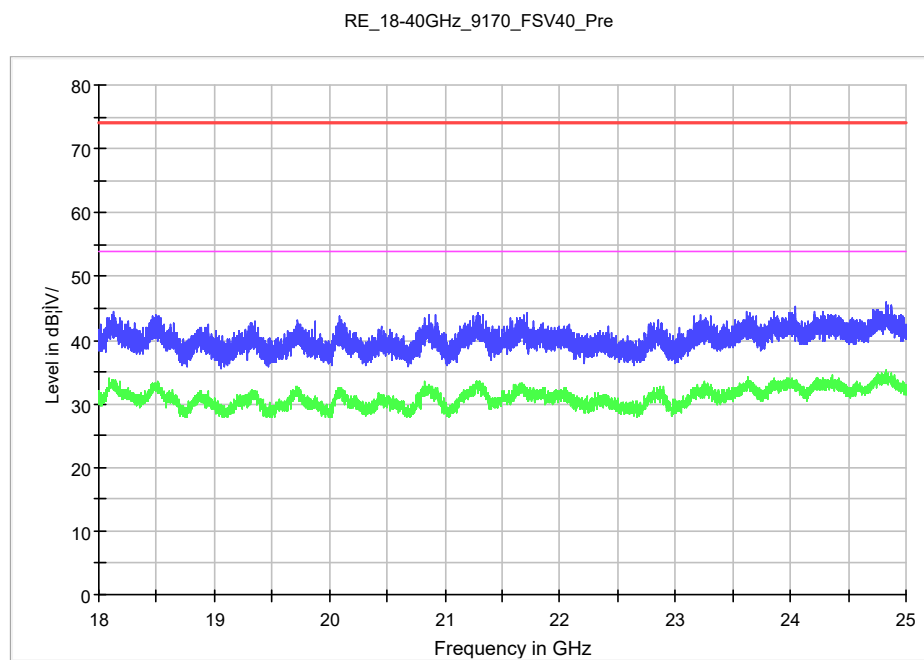


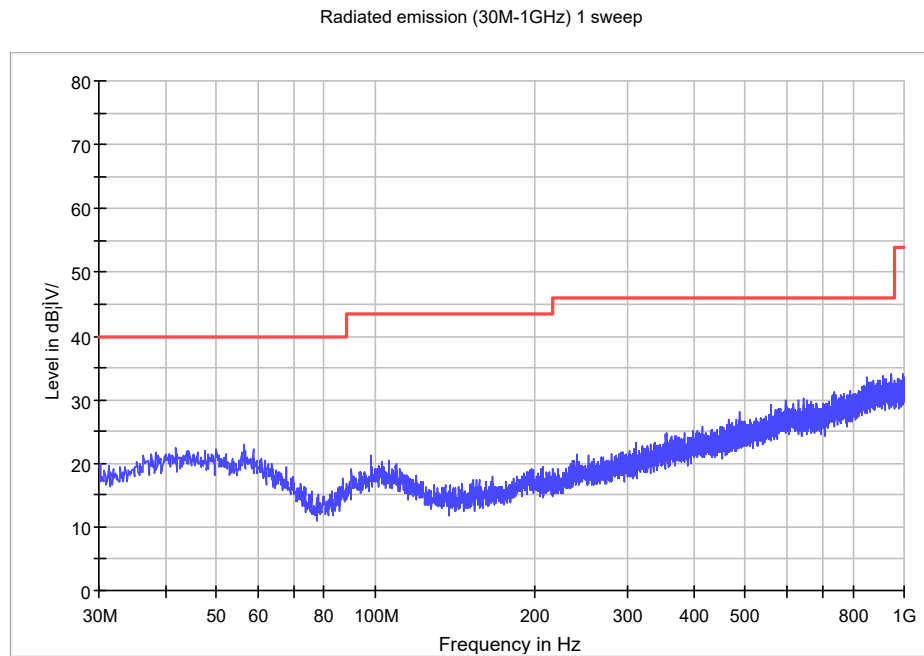
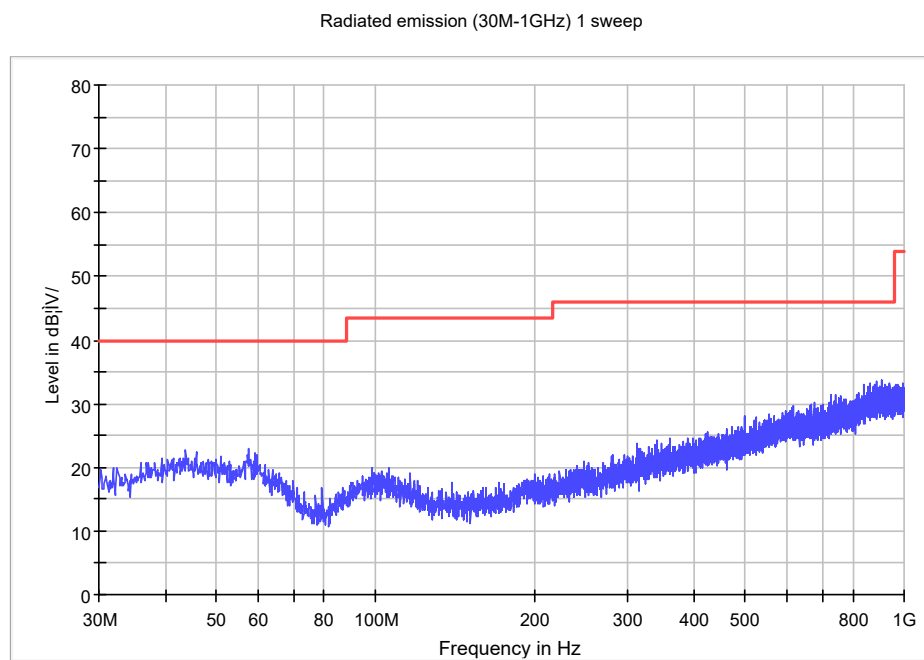
Figure 130: Radiated Spurious Emission, TM7, 30MHz to 1GHz, H

Figure 131: Radiated Spurious Emission, TM7, 30MHz to 1GHz, V


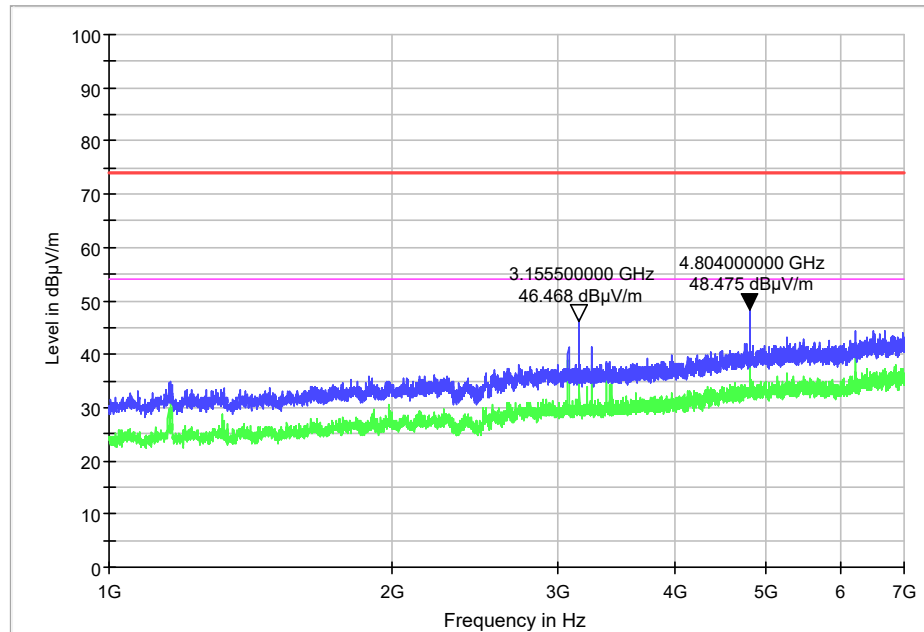
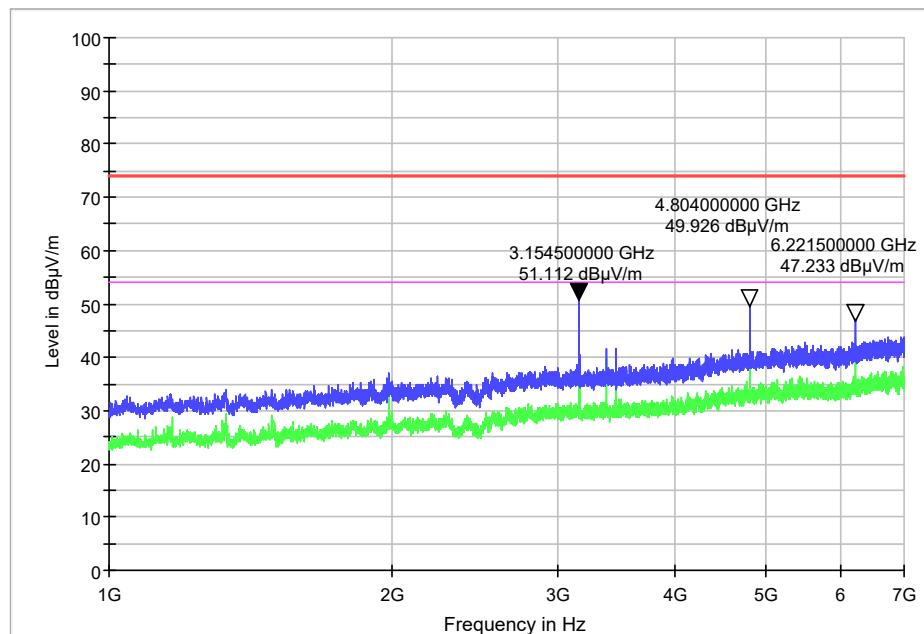
Figure 132: Radiated Spurious Emission, TM7, 1GHz to 7GHz, H

Figure 133: Radiated Spurious Emission, TM7, 1GHz to 7GHz, V


Figure 134: Radiated Spurious Emission, TM7, 7GHz to 18GHz, H

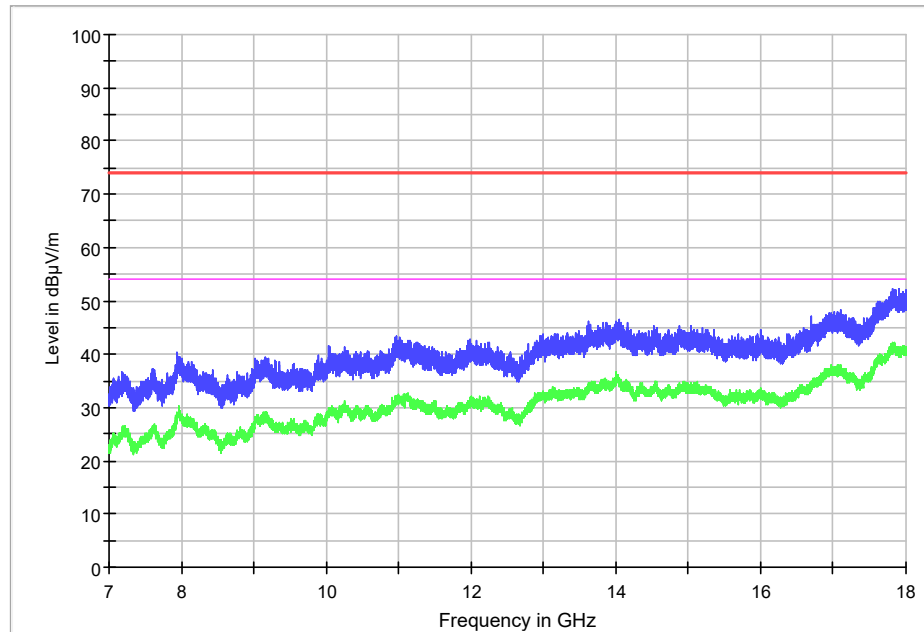


Figure 135: Radiated Spurious Emission, TM7, 7GHz to 18GHz, V

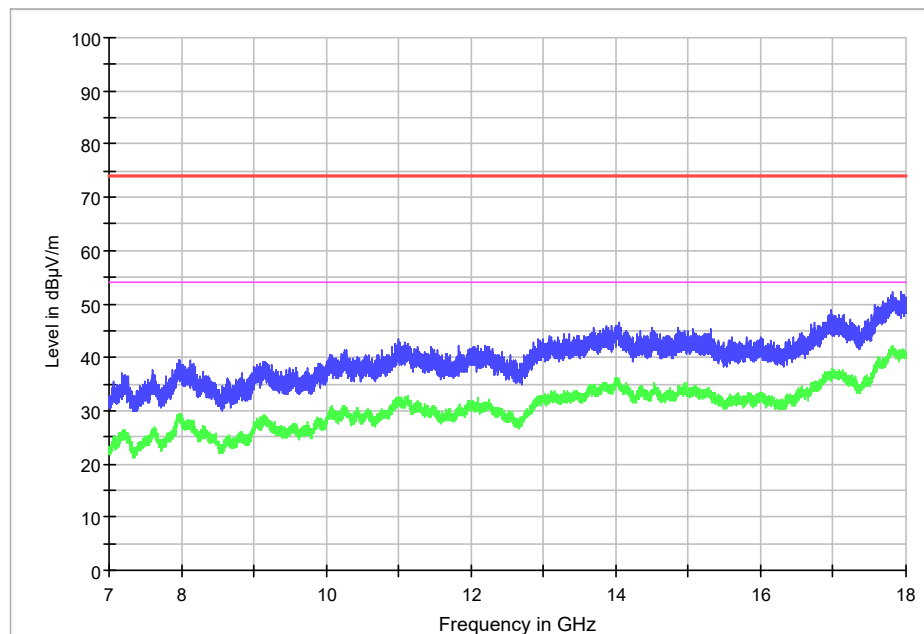


Figure 136: Radiated Spurious Emission, TM7, 18GHz to 25GHz, H

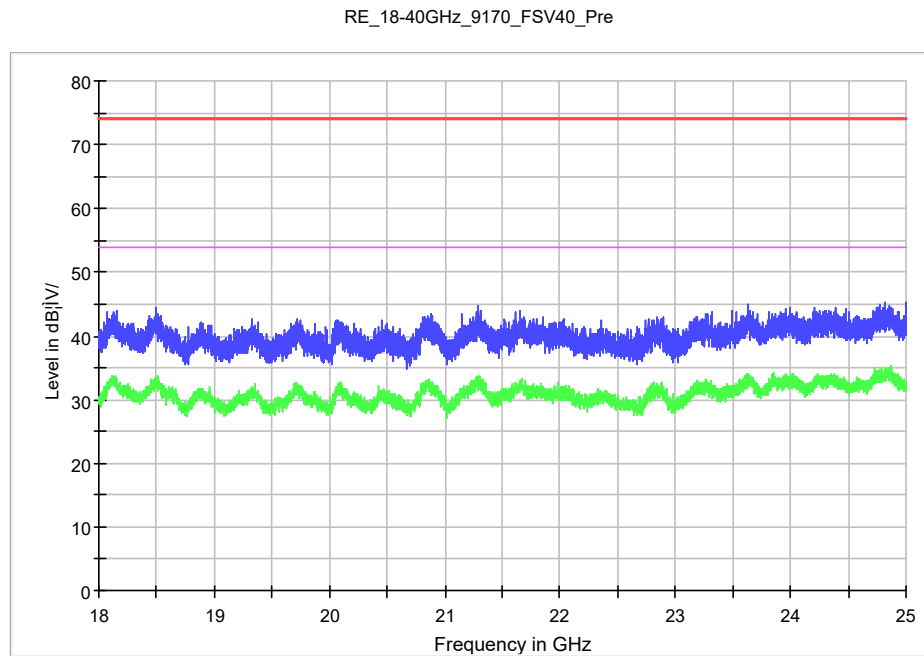


Figure 137: Radiated Spurious Emission, TM7, 18GHz to 25GHz, V

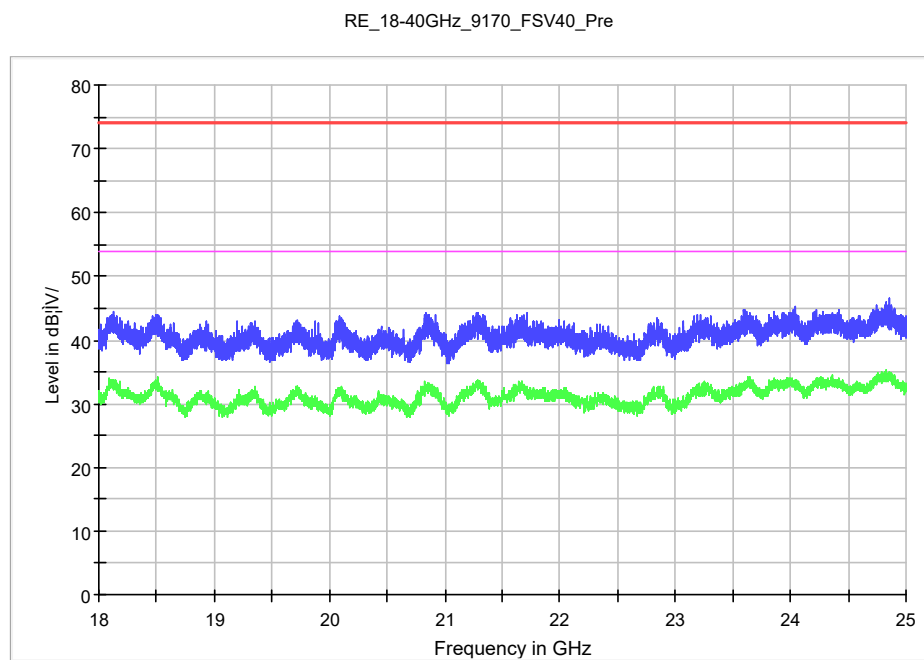


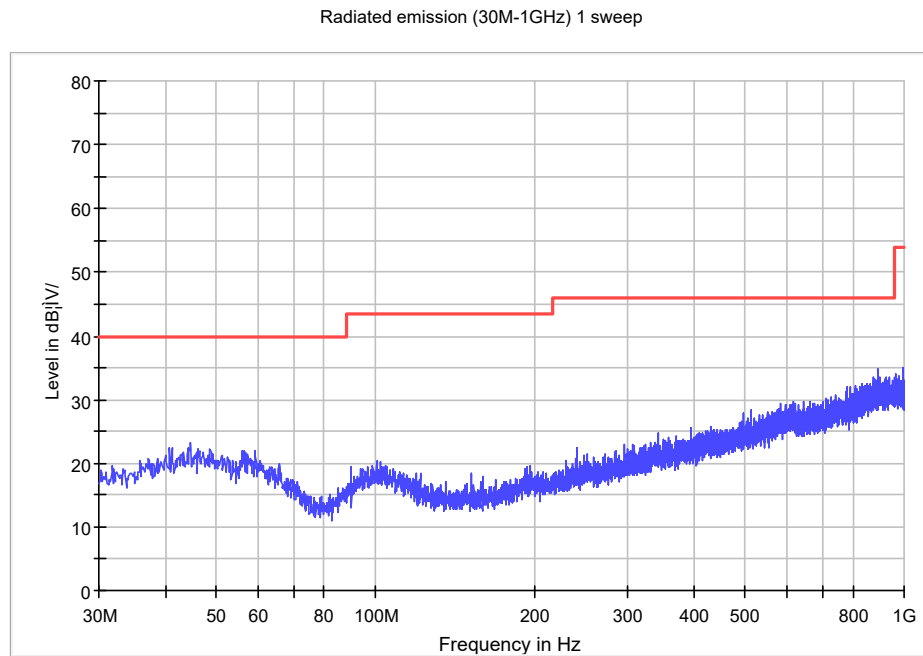
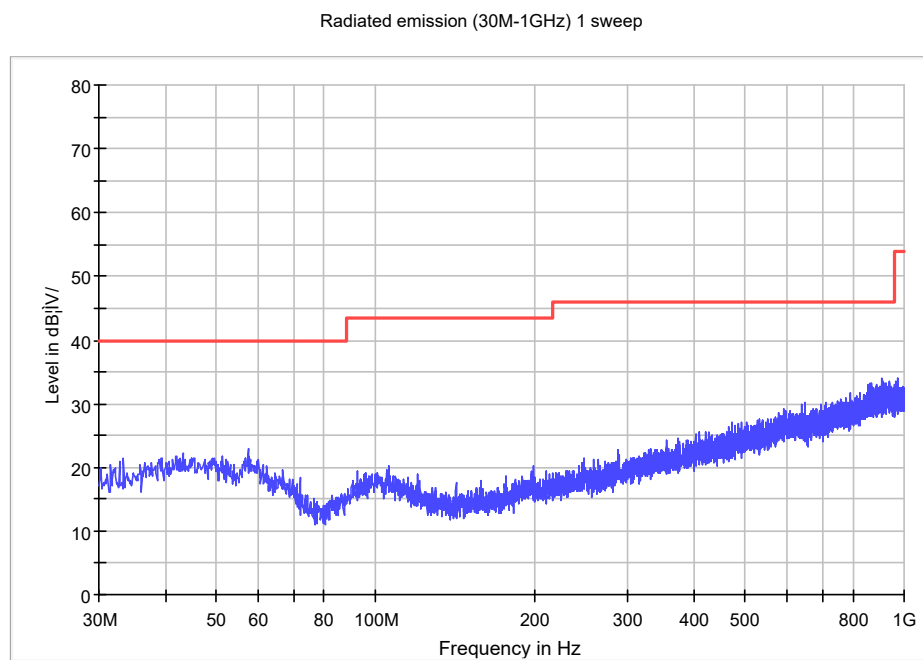
Figure 138: Radiated Spurious Emission, TM8, 30MHz to 1GHz, H

Figure 139: Radiated Spurious Emission, TM8, 30MHz to 1GHz, V


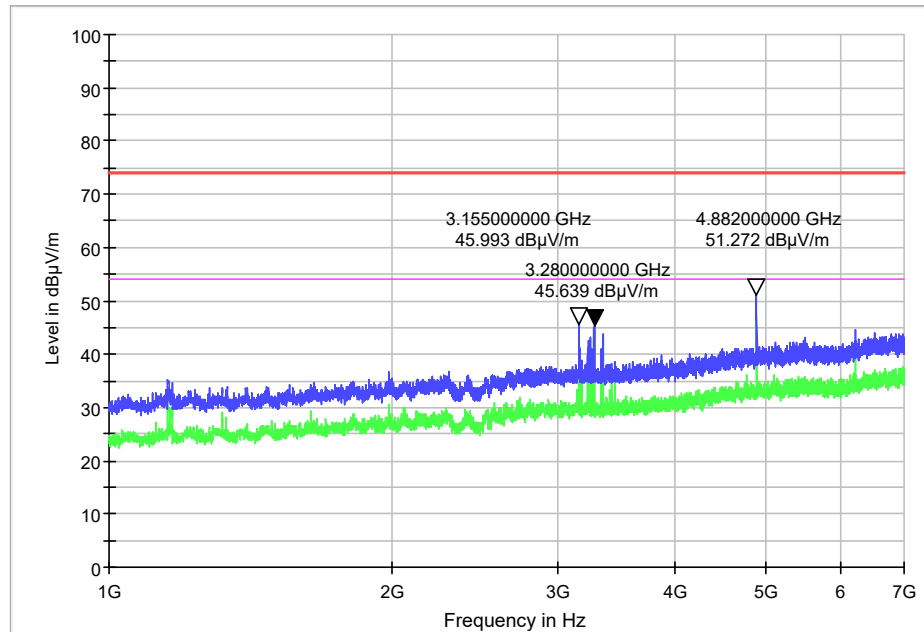
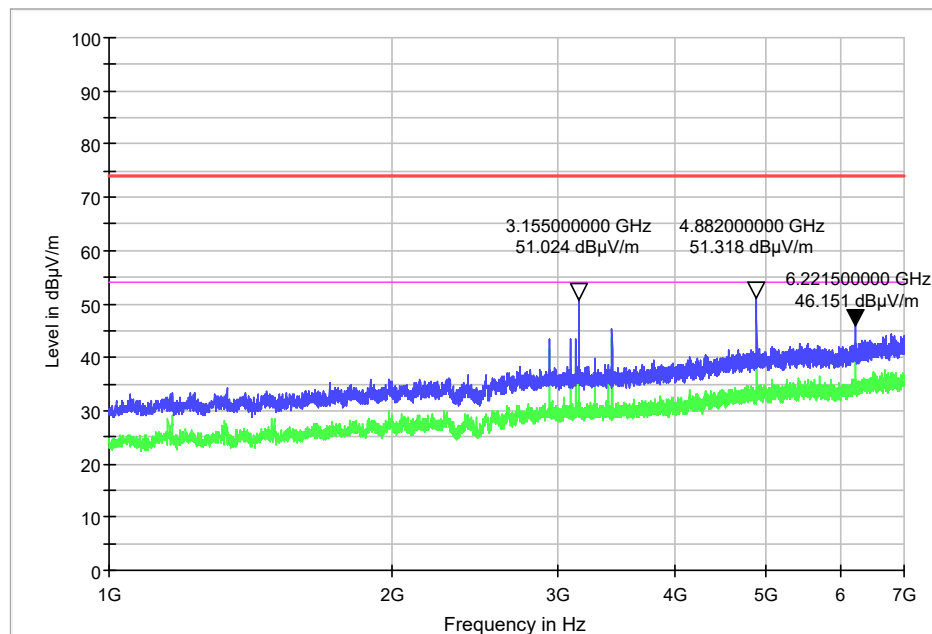
Figure 140: Radiated Spurious Emission, TM8, 1GHz to 7GHz, H

Figure 141: Radiated Spurious Emission, TM8, 1GHz to 7GHz, V


Figure 142: Radiated Spurious Emission, TM8, 7GHz to 18GHz, H

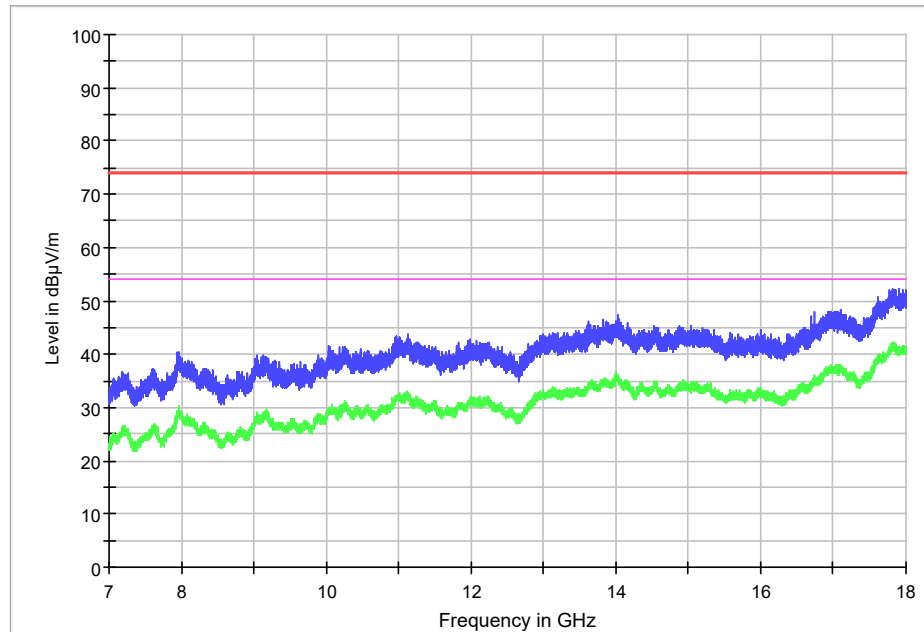


Figure 143: Radiated Spurious Emission, TM8, 7GHz to 18GHz, V

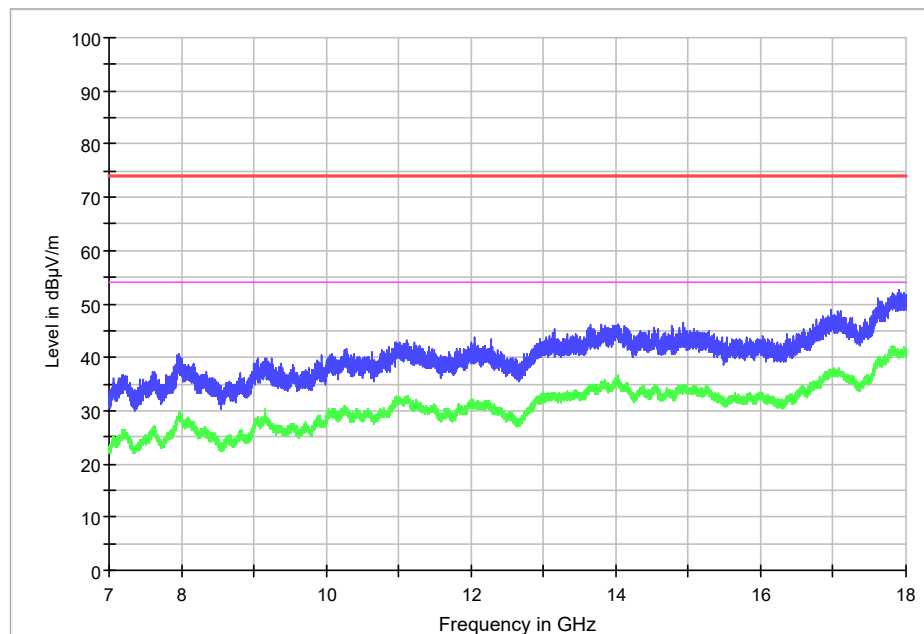


Figure 144: Radiated Spurious Emission, TM8, 18GHz to 25GHz, H

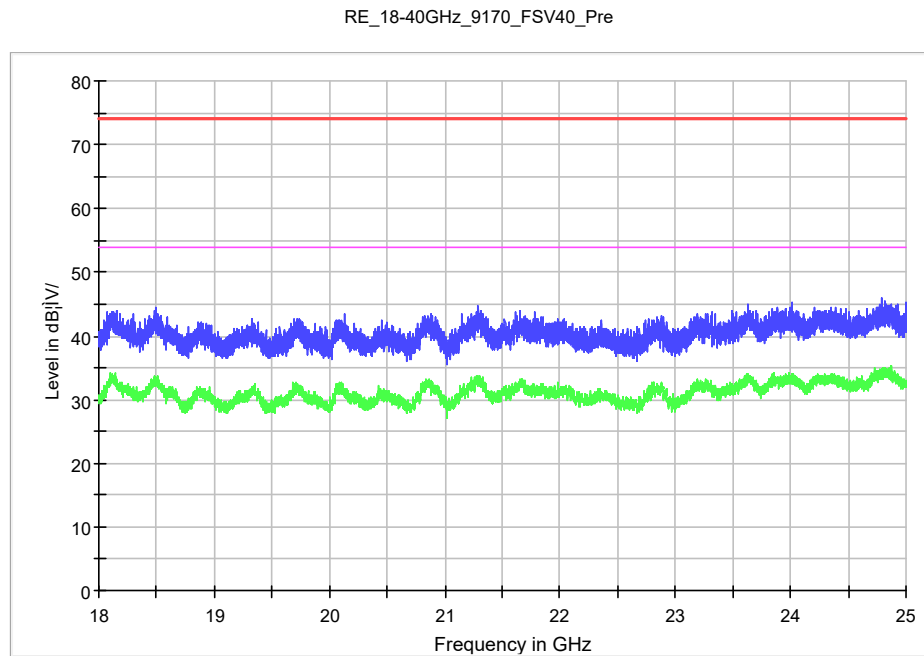


Figure 145: Radiated Spurious Emission, TM8, 18GHz to 25GHz, V

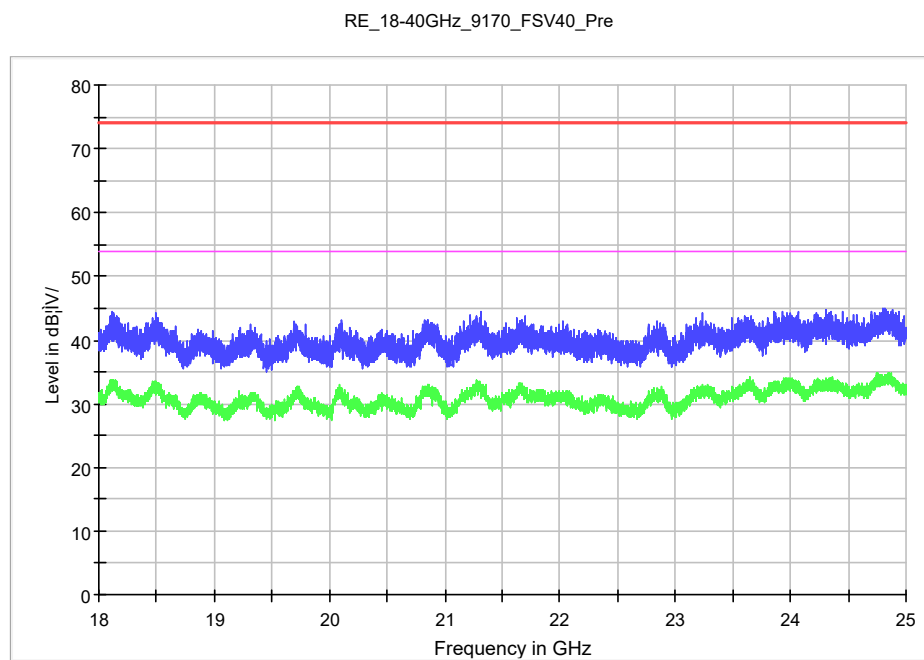


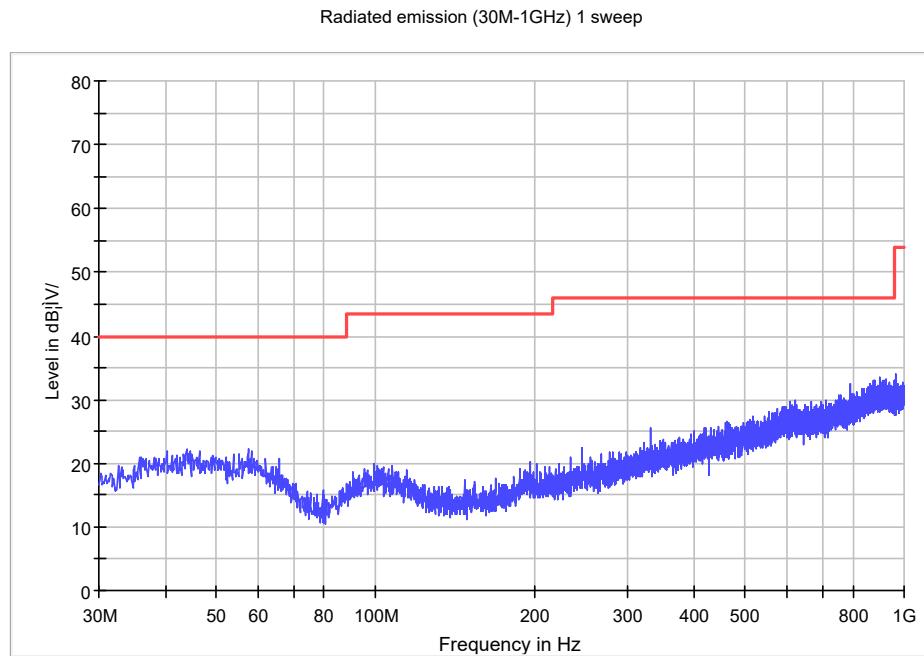
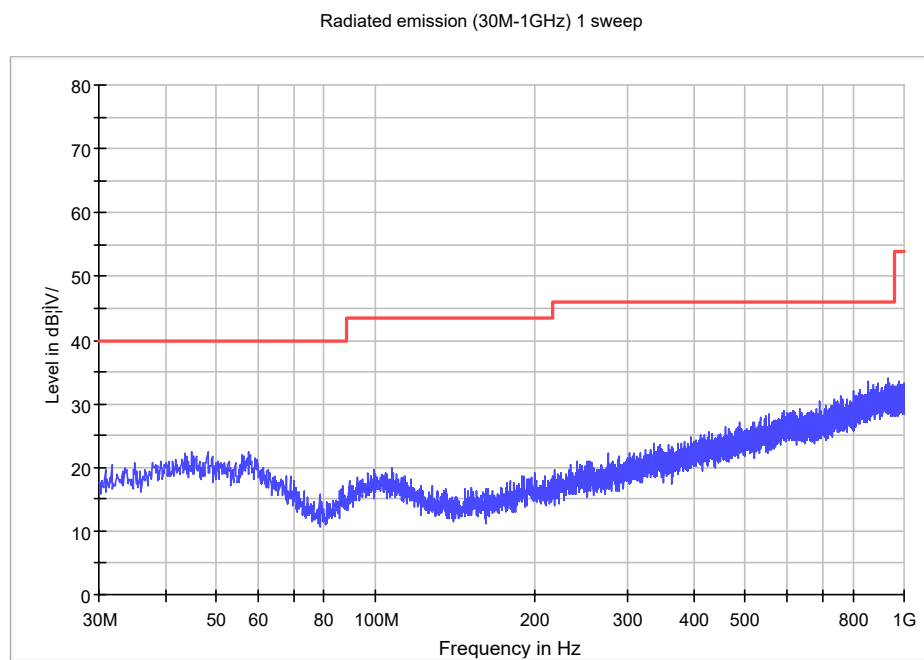
Figure 146: Radiated Spurious Emission, TM9, 30MHz to 1GHz, H

Figure 147: Radiated Spurious Emission, TM9, 30MHz to 1GHz, V


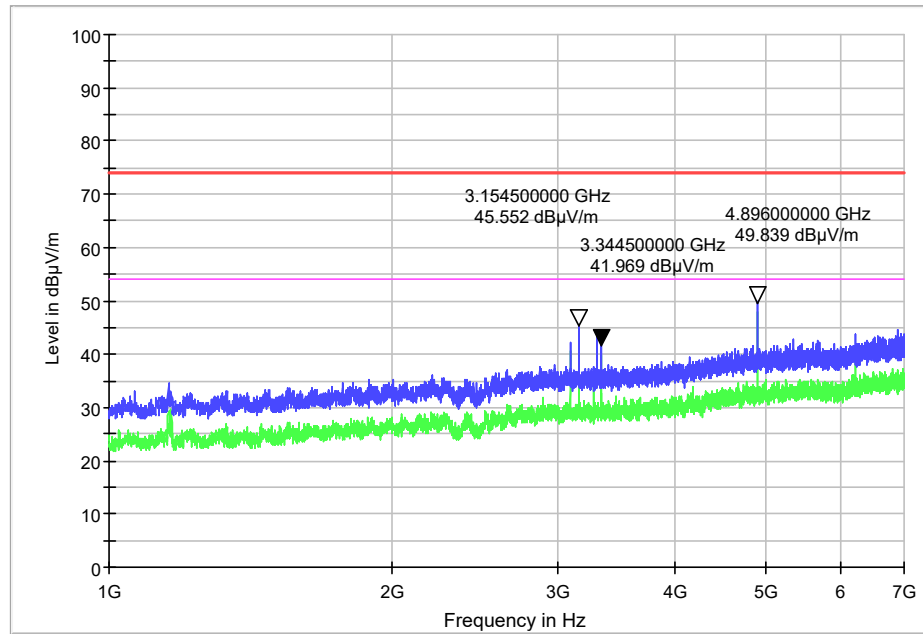
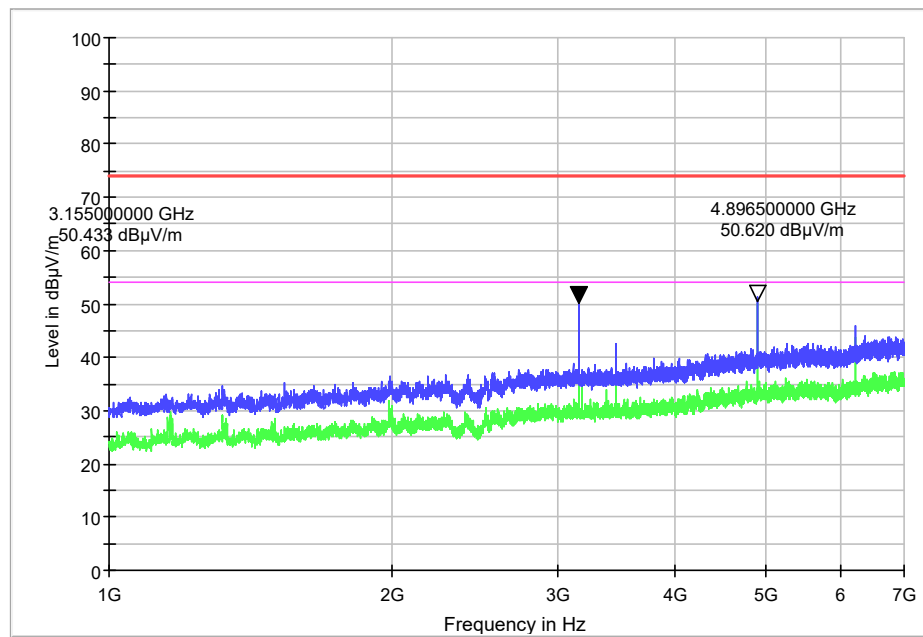
Figure 148: Radiated Spurious Emission, TM9, 1GHz to 7GHz, H

Figure 149: Radiated Spurious Emission, TM9, 1GHz to 7GHz, V


Figure 150: Radiated Spurious Emission, TM9, 7GHz to 18GHz, H

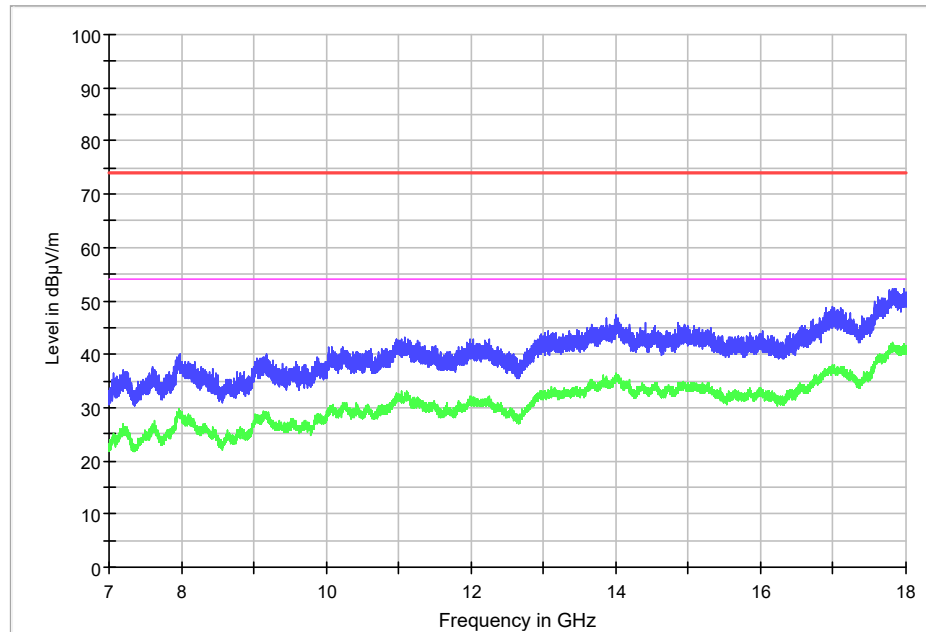


Figure 151: Radiated Spurious Emission, TM9, 7GHz to 18GHz, V

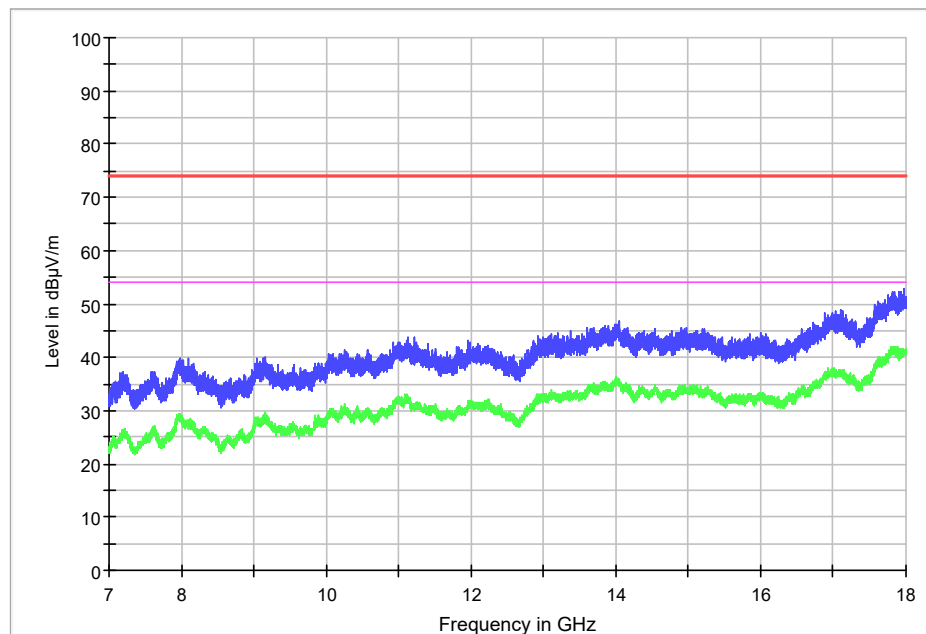


Figure 152: Radiated Spurious Emission, TM9, 18GHz to 25GHz, H

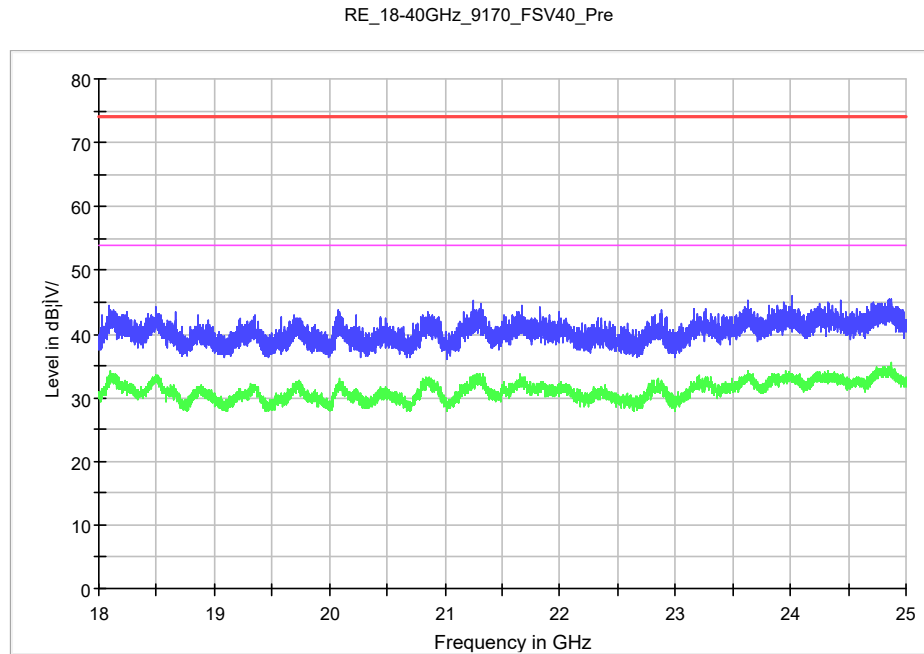
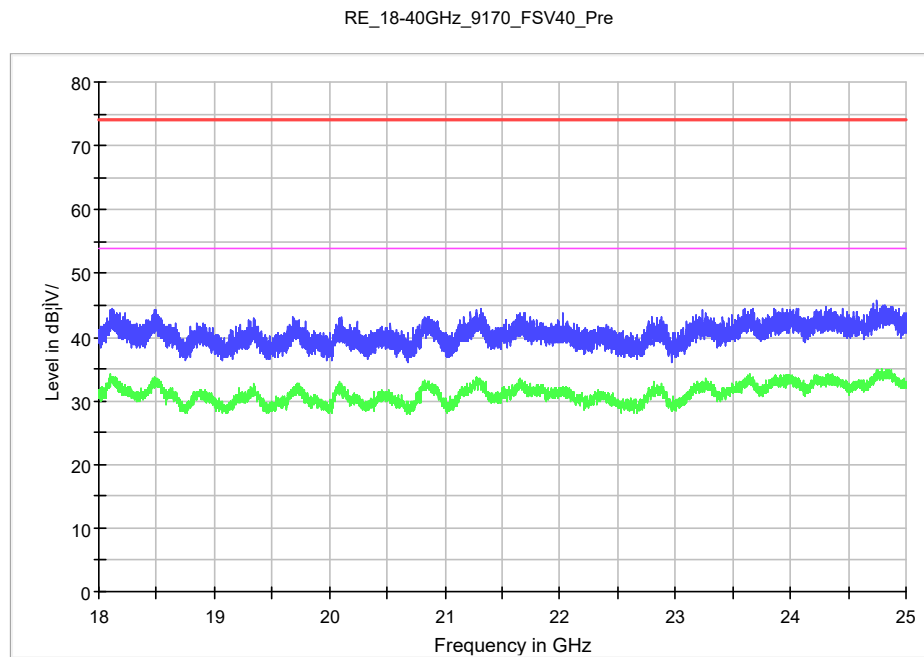


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