

Compliance data for 15.517(c)

The radiated emissions above 960 MHz from the transmitter shall comply with the AVG limits in Table 5 when measured using a **resolution bandwidth of 1 MHz**. The following are the worst case emissions with the receiving antenna in both horizontal and vertical polarities.

Table 1. Radiated Emissions above 960 MHz, CFR 15.517 (c), 15.521(g)

Frequency Range (MHz)	EIRP AVG Limit (dBm)	Field Strength AVG Limit at 3 meters (dBuV/m)
960 -1610	-75.3	19.9
1610 – 1990	-53.3	41.9
1990 – 3100	-51.3	43.9
3100 - 10600	-41.3	53.9
Above 10600	-51.3	43.9

The worst-case radiated emission for the EUT in the range above 960 MHz was 1.0 dB below the limit at 2716.00 MHz All other radiated emissions were at least 4.6 dB below the CFR 15.509 limits. This data can be found in the table below.

Table 2. Radiated Emissions from Transmitter Test Data Above 960 MHz

Above 960 MHz							
Test: Radiated Emissions				Client: Sanitag Technologies Corporation			
Project: 17-0275				Model: AT-004-H			
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
1009.00	46.78	-22.09	24.69	39.9*	1.0m./HORZ	15.2	PK
1009.00	46.78	-39.79~	6.99	19.9	1.0m./HORZ	12.9	PK
5086.25	56.14	-7.59	48.55	53.9	1.0m./HORZ	5.3	PK
16446.00	56.70	-2.87	53.83	63.9*	1.0m./HORZ	10.1	PK
16446.00	56.70	-20.57~	36.13	43.9	1.0m./HORZ	7.8	PK

Note 1: (*)= Peak Limit applied

Note 2: (~)=Duty cycle factor applied to Peak value compared to AVG limit

Note 3: measurements made at 1 meter are extrapolated back to 3 meter using an inverse extrapolation factor of -9.5 dB.

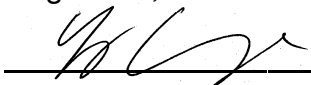
Note 4: Preamplifier used for making measurements. The Preamplifier is rated for 30 dB of gain.

Sample Calculation at 1009.00 MHz:

Magnitude of Measured Frequency	46.78 dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	-22.09 dB/m
Corrected Result	24.69 dBuV/m

Test Date: August 19, 2017

Tested by

Signature: 

Name: George Yang

Preamp factors:
Preamp Model: 8449B
Preamp Serial No.:
3008A00480

(MHz)	AMPLITUDE
950.0	-37.8
955.4	-37.7
960.8	-37.7
966.2	-37.8
971.7	-37.6
977.1	-37.7
982.7	-37.7
988.2	-37.7
993.8	-37.8
999.4	-37.8
1005.1	-37.8
1010.8	-37.8
1016.5	-37.8
1022.2	-37.8
1028.0	-37.8
1033.8	-37.8
1039.6	-37.7
1045.5	-37.7
1051.4	-37.7
1057.4	-37.6
1063.3	-37.6
1069.3	-37.7
1075.4	-37.8
1081.5	-37.7
1087.6	-37.8
1093.7	-37.7
1099.9	-37.7
1106.1	-37.8

1112.4	-37.8
1118.7	-37.7
1125.0	-37.7
1131.3	-37.6
1137.7	-37.6
1144.2	-37.5
1150.6	-37.5
1157.1	-37.4
1163.7	-37.5
1170.2	-37.5
1176.9	-37.5
1183.5	-37.5
1190.2	-37.5
1196.9	-37.6
1203.7	-37.5
1210.5	-37.5
1217.3	-37.5
1224.2	-37.4
1231.1	-37.2
1238.1	-37.1
1245.1	-37.1
1252.1	-37.0
1259.2	-37.0
1266.3	-37.0
1273.5	-37.0
1280.7	-37.1
1287.9	-37.1
1295.2	-37.1
1302.5	-37.1
1309.9	-37.1
1317.3	-37.0
1324.7	-36.9
1332.2	-36.8
1339.7	-36.7
1347.3	-36.7
1354.9	-36.6
1362.6	-36.6
1370.3	-36.5
1378.0	-36.6
1385.8	-36.6
1393.6	-36.5
1401.5	-36.7
1409.4	-36.7

1417.4	-36.6
1425.4	-36.5
1433.5	-36.5
1441.6	-36.5
1449.7	-36.5
1457.9	-36.4
1466.1	-36.4
1474.4	-36.4
1482.8	-36.4
1491.1	-36.3
1499.6	-36.2
1508.0	-36.2
1516.6	-36.2
1525.1	-36.3
1533.7	-36.2
1542.4	-36.2
1551.1	-36.2
1559.9	-36.3
1568.7	-36.2
1577.6	-36.2
1586.5	-36.2
1595.5	-36.2
1604.5	-36.1
1613.5	-36.1
1622.7	-36.1
1631.8	-36.1
1641.1	-36.1
1650.3	-36.1
1659.7	-36.1
1669.0	-36.1
1678.5	-36.1
1688.0	-36.1
1697.5	-36.1
1707.1	-36.0
1716.7	-36.1
1726.4	-36.0
1736.2	-36.1
1746.0	-36.0
1755.9	-36.0
1765.8	-36.0
1775.8	-36.0
1785.8	-36.0
1795.9	-36.0

1806.0	-35.9
1816.3	-36.0
1826.5	-36.0
1836.8	-36.0
1847.2	-35.9
1857.7	-35.9
1868.2	-35.9
1878.7	-35.9
1889.3	-35.9
1900.0	-35.8
1910.7	-35.8
1921.5	-35.9
1932.4	-35.9
1943.3	-36.0
1954.3	-35.9
1965.4	-35.9
1976.5	-35.9
1987.6	-35.8
1998.9	-35.7
2010.2	-35.8
2021.5	-35.8
2032.9	-35.8
2044.4	-35.9
2056.0	-35.8
2067.6	-35.9
2079.3	-35.8
2091.0	-35.9
2102.9	-36.0
2114.7	-35.9
2126.7	-35.9
2138.7	-36.0
2150.8	-36.0
2162.9	-36.0
2175.2	-35.9
2187.5	-36.0
2199.8	-36.1
2212.3	-36.3
2224.8	-36.4
2237.3	-36.5
2250.0	-36.6
2262.7	-36.6
2275.5	-36.6
2288.3	-36.6

2301.3	-36.7
2314.3	-36.8
2327.4	-36.9
2340.5	-37.1
2353.7	-37.3
2367.0	-37.3
2380.4	-37.1
2393.9	-37.0
2407.4	-36.8
2421.0	-36.6
2434.7	-36.6
2448.4	-36.5
2462.3	-36.4
2476.2	-36.3
2490.2	-36.2
2504.3	-36.0
2518.4	-35.9
2532.6	-35.8
2547.0	-35.7
2561.3	-35.7
2575.8	-35.7
2590.4	-35.7
2605.0	-35.6
2619.7	-35.5
2634.5	-35.4
2649.4	-35.4
2664.4	-35.3
2679.5	-35.2
2694.6	-35.2
2709.8	-35.2
2725.1	-35.2
2740.6	-35.2
2756.0	-35.2
2771.6	-35.1
2787.3	-35.0
2803.0	-34.9
2818.9	-35.0
2834.8	-35.0
2850.8	-35.1
2866.9	-35.2
2883.1	-35.1
2899.4	-35.0
2915.8	-34.7

2932.3	-34.7
2948.9	-34.8
2965.5	-34.9
2982.3	-35.1
2999.1	-35.1
3016.1	-35.0
3033.1	-34.8
3050.3	-34.7
3067.5	-34.7
3084.8	-34.8
3102.3	-34.9
3119.8	-35.0
3137.4	-35.0
3155.2	-34.8
3173.0	-34.7
3190.9	-34.7
3209.0	-34.8
3227.1	-34.9
3245.3	-34.9
3263.7	-34.8
3282.1	-34.7
3300.7	-34.6
3319.3	-34.7
3338.1	-34.7
3356.9	-34.7
3375.9	-34.7
3395.0	-34.4
3414.2	-34.4
3433.5	-34.4
3452.9	-34.4
3472.4	-34.6
3492.0	-34.4
3511.8	-34.3
3531.6	-34.2
3551.6	-34.1
3571.6	-34.3
3591.8	-34.3
3612.1	-34.2
3632.5	-34.1
3653.1	-34.1
3673.7	-34.1
3694.5	-34.2
3715.3	-34.2

3736.3	-34.0
3757.4	-34.0
3778.7	-34.1
3800.0	-34.2
3821.5	-34.1
3843.1	-34.0
3864.8	-34.0
3886.7	-34.0
3908.6	-34.2
3930.7	-34.1
3952.9	-34.0
3975.3	-34.0
3997.7	-33.9
4020.3	-34.0
4043.1	-33.9
4065.9	-33.8
4088.9	-33.9
4112.0	-34.0
4135.2	-33.9
4158.6	-33.7
4182.1	-33.7
4205.7	-33.7
4229.5	-33.8
4253.4	-33.7
4277.4	-33.5
4301.6	-33.6
4325.9	-33.6
4350.4	-33.6
4375.0	-33.5
4399.7	-33.4
4424.5	-33.6
4449.5	-33.6
4474.7	-33.6
4500.0	-33.4
4525.4	-33.3
4551.0	-33.4
4576.7	-33.6
4602.6	-33.4
4628.6	-33.3
4654.7	-33.3
4681.0	-33.4
4707.5	-33.4
4734.1	-33.1

4760.9	-33.1
4787.8	-33.1
4814.8	-33.0
4842.0	-32.9
4869.4	-32.8
4896.9	-32.8
4924.6	-32.7
4952.4	-32.7
4980.4	-32.6
5008.5	-32.6
5036.8	-32.6
5065.3	-32.6
5093.9	-32.6
5122.7	-32.6
5151.7	-32.5
5180.8	-32.6
5210.1	-32.6
5239.5	-32.7
5269.1	-32.6
5298.9	-32.6
5328.8	-32.8
5359.0	-32.7
5389.2	-32.7
5419.7	-32.9
5450.3	-32.9
5481.1	-32.8
5512.1	-32.9
5543.3	-33.0
5574.6	-32.9
5606.1	-32.9
5637.8	-33.0
5669.6	-33.0
5701.7	-32.9
5733.9	-33.0
5766.3	-33.0
5798.9	-33.0
5831.7	-33.2
5864.6	-33.1
5897.7	-33.1
5931.1	-33.2
5964.6	-33.1
5998.3	-33.3
6032.2	-33.3

6066.3	-33.2
6100.6	-33.3
6135.1	-33.4
6169.7	-33.2
6204.6	-33.4
6239.7	-33.4
6274.9	-33.1
6310.4	-33.4
6346.0	-33.3
6381.9	-33.1
6418.0	-33.4
6454.2	-33.3
6490.7	-33.2
6527.4	-33.3
6564.3	-33.3
6601.4	-33.3
6638.7	-33.4
6676.2	-33.3
6713.9	-33.4
6751.9	-33.4
6790.0	-33.4
6828.4	-33.4
6867.0	-33.5
6905.8	-33.4
6944.8	-33.5
6984.1	-33.4
7023.5	-33.3
7063.2	-33.5
7103.2	-33.2
7143.3	-33.4
7183.7	-33.4
7224.3	-33.1
7265.1	-33.4
7306.1	-33.3
7347.4	-33.2
7389.0	-33.4
7430.7	-33.3
7472.7	-33.4
7514.9	-33.3
7557.4	-33.5
7600.1	-33.4
7643.1	-33.5
7686.3	-33.5

7729.7	-33.4
7773.4	-33.5
7817.3	-33.4
7861.5	-33.4
7905.9	-33.4
7950.6	-33.4
7995.5	-33.3
8040.7	-33.3
8086.1	-33.4
8131.8	-33.3
8177.8	-33.4
8224.0	-33.3
8270.5	-33.3
8317.2	-33.5
8364.2	-33.3
8411.5	-33.4
8459.0	-33.3
8506.8	-33.4
8554.9	-33.2
8603.3	-33.2
8651.9	-33.2
8700.8	-33.1
8749.9	-33.1
8799.4	-33.2
8849.1	-32.7
8899.1	-33.2
8949.4	-32.7
9000.0	-32.9
9000	-33
10000	-35.7
12000	-33.6
14000	-31.3
15000	-32
16000	-32.5
17000	-31.3
18000	-30.8
19000	-28.8
20000	-29.6