

FCC ID: ESD-SA824894NE

Exhibit 2

Engineering Report d)Spurious Emissions, Antenna Terminal (2.1051)

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NAME OF TEST:

Spurious Emissions at Antenna Terminals

SPECIFICATION:

47 CFR 2.1051, 22.917

GUIDE:

EIA/IS-19-B-1988

TIA/EIA/IS-137-A-1996

TEST EQUIPMENT:

As per attached page

MEASUREMENT PROCEDURE

- The EUT was connected to a coaxial attenuator and then to a Spectrum Analyzer.
- A notch filter was introduced to reduce or eliminate spurious emission which could be generated internally in the spectrum analyzer.
- 3. Measurements were made over the range from 45 kHz to 10 GHz for the worst case modulation so both the highest and lowest R.F. power settings.
- 4. All other emissions were 20 dB or more below the limit.
- Spectrum analyzer bandwidth was set to section 22.917(h) as applicable.
- 6. MEASUREMENT RESULTS: ATTACHED

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NAME OF TEST: Unwanted Emissions (Transmitter Conducted) 98b0375: 1998-Nov-23 Mon 14:06:00

STATE: 1:Low Power

MHZ EMISSION, MHZ 836.400000 1672.708333 -36.6 -44.3 -23.0 836.400000 2509.590000 -47.8 -55.5 -34.0	FREQUENCY TUNED,	FREQUENCY	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
836.400000 3345.670000 -49.5 -57.2 -30.2 836.400000 4181.966667 -50.5 -58.2 -37. 836.400000 5018.471667 -50.3 -58 -37. 836.400000 5854.573333 -50.5 -58.2 -37. 836.400000 6690.735000 -48.5 -56.2 -35. 836.400000 7527.783333 -48.5 -56.2 -35. 836.400000 8364.1133333 -48.6 -56.3 -35. 836.400000 9200.481667 -48.5 -56.2 -35. 836.400000 10036.348333 -49.5 -57.2 -36. 836.400000 10873.493333 -46.1 -53.8 -35. 836.400000 10873.493333 -48.8 -56.5 -35.	836.400000 836.400000 836.400000 836.400000 836.400000 836.400000 836.400000 836.400000 836.400000 836.400000 836.400000	EMISSION, MHz 1672.708333 2509.590000 3345.670000 4181.966667 5018.471667 5854.573333 6690.735000 7527.783333 8364.113333 9200.481667 10036.348333 10873.493333 11709.381667	-36.6 -47.8 -49.5 -50.5 -50.3 -50.5 -48.5 -48.5 -48.6 -48.5 -49.5 -46.1 -48.8	-44.3 -55.5 -57.2 -58.2 -58.2 -56.2 -56.2 -56.3 -56.2 -57.2 -53.8 -56.5	-23.6 -34.8 -36.5 -37.5 -37.5 -35.5 -35.5 -35.6 -35.5 -35.6 -35.5 -36.5 -36.5 -36.5

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NAME OF TEST: Unwanted Emissions (Transmitter Conducted) g98c0003: 1998-Dec-01 Tue 15:04:00

STATE: 1:Low Power

FREQUENCY	FREQUENCY	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
TUNED, MHz	EMISSION, MHZ 1648.076667	-37.8	-45.5	-24.8
824.04000 824.04000	2471.975000	-65.7	-73.4	-52.7
824.04000	3296.073333	-68.3	-76 -75	-55.3
824.04000	4119.735000	-67.7	75.4 76.4	-54.7 -55.7
824.04000	4944.456667 5768.043333	-68.7 -68	-75.4 -75.7	-5 5
824.04000 824.04000	6591.938333	-67.5	-75.2	-54.5
824.04000	7416.110000	-67.5	-75.2	-54.5
824.04000	8240.623333	-67.8 -66.8	-75.5 -74.5	-54.8 -53.8
824.04000	9064.698333 9888.918333	-67.7	-74.3 -75.4	-54.7
824.04000 824.04000	10712.440000	-67.5	-75.2	-54.5
824.04000	11536.906667	-67.2	-74.9	-54.2 -53.8
824.04000	12360.736667	-66.8	-74.5	-55.0

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Unwanted Emissions (Transmitter Conducted)

NAME OF TEST: Unwanted Emissi 98c0001: 1998-Dec-01 Tue 14:44:00

STATE: 2:High Power

PROJENCY	FREQUENCY	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
FREQUENCY		,		
TUNED, MHz	EMISSION, MHz	-28.1	-55.8	-15.1
848.97000	1697.940000		-73.7	-33
848.97000	2546.915000	-46		-34.8
848.97000	3395.531667	-47.8	-75.5	-
848.97000	4244.490000	-47.6	-75.3	-34.6
	5093.578333	-48.5	-76.2	-35.5
848.97000	5943.148333	-48	-75.7	-35
848.97000		- 47. 5	-75.2	-34.5
848.97000	6791.931667		-74	-33.3
848.97000	7640.768333	-46.3		-35 -35
848.97000	8489.295000	-48	-75.7	
848.97000	9338.280000	-47.1	-74.8	-34.1
- ·	10188.075000	-47.3	-75	-34.3
848.97000		-47.5	-75.2	-34.5
848.97000	11036.350000	-47 -47	-74.7	-34
848.97000	11885.923333		-74.2	-33.5
848.97000	12734.668333	-46.5	-14.2	33.0

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NAME OF TEST: Unwanted Emissions (Transmitter Conducted)

g98c0004: 1998-Dec-01 Tue 15:09:00

STATE: 2:High Power

FREQUENCY	FREQUENCY	LEVEL, dBm	LEVEL, dBc	MARGIN, dB
TUNED, MHz_	EMISSION, MHz			
824.04000	1648.076667	-28.8	-56.5	-15.8
824.04000	2471.806667	-47	-74.7	-34
	3295.861667	-47.5	-75.2	-34.5
824.04000	4120.546667	-48.8	-76.5	-35.8
824.04000	4944.265000	-48.3	-76	-35.3
824.04000	5767.901667	-48.6	-76.3	-35.6
824.04000	6591.838333	-47.5	-75.2	-34.5
824.04000	7415.863333	-47.1	-74.8	-34.1
824.04000	8240.328333	-46.6	-74.3	-33.6
824.04000	9064.245000	-47.3	 75	-34.3
824.04000	9888.886667	-47.6	-75.3	-34.6
824.04000	10712.021667	-46.6	-74.3	-33.6
824.04000	11536.118333	-47.8	-75.5	-34.8
824.04000	12360.445000	-47.5	-75.2	-34.5
824.04000	12300.445000	17.5	-	