



Appendix A

Transmitter Output Power According to FCC Part 2.1046 & Part 22.913



Conducted Power of Transmitter

TEST CONDITIONS		RF Output Power (Conducted)					
		Channel128(L)		Channel192(M)		Channel251(H)	
		824.2MHz		837.0MHz		848.8MHz	
		dBm		dBm		dBm	
T_{nom} / V_{nom}		Measured	Limit	Measured	Limit	Measured	Limit
TM1		30.29	38.5	31.41	38.5	31.32	38.5
TM2		25.06	38.5	26.07	38.5	26.02	38.5
TEST CONDITIONS		Channel4132(L)		Channel4182(M)		Channel4233(H)	
		826.4MHz		836.4MHz		846.6MHz	
		dBm		dBm		dBm	
		T_{nom} / V_{nom}		Measured	Limit	Measured	Limit
TM3		21.14	38.5	21.31	38.5	21.39	38.5
TM4	Case1	20.64	38.5	20.78	38.5	20.94	38.5
	Case2	20.45	38.5	20.53	38.5	20.59	38.5
	Case3	19.86	38.5	19.97	38.5	20.04	38.5
	Case4	18.89	38.5	19.02	38.5	19.11	38.5



Effective Radiated Power of Transmitter (ERP)

Test Mode	Freq. [MHz]	Meas. Level [dBm]	Substitution Antenna Type	SGP [dBm]	Substitution Gain [dBi]	Cable Loss [dB]	Substitution Level (ERP)	FCC limit [dBm]	Result
							[dBm]		
TM1	824.2	32.42	Dipole Ant.	35.57	-2.75	0.6	32.22	38.5	Pass
TM1	837.0	33.54	Dipole Ant.	36.81	-2.87	0.6	33.34	38.5	Pass
TM1	848.8	33.45	Dipole Ant.	37.01	-2.85	0.6	33.56	38.5	Pass
TM2	824.2	27.19	Dipole Ant.	30.34	-2.75	0.6	26.99	38.5	Pass
TM2	837.0	28.2	Dipole Ant.	31.47	-2.87	0.6	28	38.5	Pass
TM2	848.8	28.15	Dipole Ant.	31.4	-2.85	0.6	27.95	38.5	Pass
TM3	826.4	23.27	Dipole Ant.	26.42	-2.75	0.6	23.07	38.5	Pass
TM3	836.4	23.44	Dipole Ant.	26.71	-2.87	0.6	23.24	38.5	Pass
TM3	846.6	23.52	Dipole Ant.	27.17	-2.85	0.6	23.72	38.5	Pass

Note: a, For getting the ERP (Efficient Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

-----The END-----