



Appendix A

Transmitter Output Power According to FCC Part 2.1046 & Part24.232



Conducted Power of Transmitter

		RF Output Power (Conducted)		
TEST CONDITIONS		Channel512(B)	Channel661(M)	Channel810(T)
		1850.2MHz	1880.0MHz	1909.8MHz
		dBm	dBm	dBm
T_{nom} / V_{nom}		Measured	Measured	Measured
TM1		29.91	29.79	29.65
TM2		25.65	25.41	25.48
TEST CONDITIONS		Channel9262(B)	Channel9400(M)	Channel9538(T)
		1852.4MHz	1880.0MHz	1907.6MHz
		dBm	dBm	dBm
T_{nom} / V_{nom}		Measured	Measured	Measured
TM3		22.70	22.67	22.72
TM4	Case1	22.70	22.61	22.71
	Case2	22.58	22.64	22.72
	Case3	22.28	22.32	22.49
	Case4	22.34	22.45	22.53
TM5	Case1	20.83	20.84	20.88
	Case2	19.89	20.02	19.94
	Case3	19.78	19.83	19.84
	Case4	19.73	19.76	19.76
	Case5	20.82	20.87	20.85



Peak-to-Average Ratio

Table 1 Measurement Results

TEST CONDITIONS		Channel128(B)		Channel192(M)		Channel251(T)	
		1850.2MHz		837.0MHz		1909.8MHz	
		dBm		dBm		dBm	
T_{nom} / V_{nom}		Measured	Limit	Measured	Limit	Measured	Limit
TM1		0.89	13.0	0.87	13.0	0.68	13.0
TM2		3.21	13.0	3.85	13.0	3.56	13.0
TEST CONDITIONS		Channel9262(B)		Channel9400(M)		Channel9538(T)	
		1852.4MHz		1880.0MHz		1907.6MHz	
		dBm		dBm		dBm	
T_{nom} / V_{nom}		Measured	Limit	Measured	Limit	Measured	Limit
TM3		2.99	13.0	3.01	13.0	2.99	13.0
TM4	Case1	2.86	13.0	2.43	13.0	2.46	13.0
	Case2	2.79	13.0	2.53	13.0	2.88	13.0
	Case3	2.33	13.0	2.41	13.0	2.15	13.0
	Case4	2.43	13.0	2.43	13.0	2.13	13.0
TM5	Case1	2.99	13.0	2.46	13.0	2.58	13.0
	Case2	2.56	13.0	2.32	13.0	2.44	13.0
	Case3	2.32	13.0	2.57	13.0	2.42	13.0
	Case4	2.42	13.0	2.49	13.0	2.56	13.0
	Case5	2.86	13.0	2.88	13.0	2.79	13.0



Effective Isotropic Radiated Power of Transmitter (EIRP)

Test Mode	Freq. [MHz]	Meas. Level [dBm]	Substitution Antenna Type	SGP [dBm]	Substitution Gain [dBi]	Cable Loss [dB]	Substitution Level (EIRP)	FCC limit [dBm]	Result
							[dBm]		
TM1	1850.2	30.91	Horn Ant.	27.41	4.5	1	30.91	33	Pass
TM1	1880.0	30.79	Horn Ant.	27.29	4.5	1	30.79	33	Pass
TM1	1909.8	30.65	Horn Ant.	26.85	4.8	1	30.65	33	Pass
TM2	1850.2	26.65	Horn Ant.	23.15	4.5	1	26.65	33	Pass
TM2	1880.0	26.41	Horn Ant.	22.91	4.5	1	26.41	33	Pass
TM2	1909.8	26.48	Horn Ant.	22.68	4.8	1	26.48	33	Pass
TM3	1852.4	23.70	Horn Ant.	20.20	4.5	1	23.70	33	Pass
TM3	1880.0	22.67	Horn Ant.	19.17	4.5	1	22.67	33	Pass
TM3	1907.6	22.72	Horn Ant.	18.92	4.8	1	22.72	33	Pass

Note: a, For getting the EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should take to calculate it,

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

b, SGP=Signal Generator Level

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