



Appendix A

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



Conducted Power of Transmitter

TEST CONDITIONS		RF Output Power (Conducted)					
		Channel512(L)		Channel661(M)		Channel810(H)	
		1850.2MHz		1880.0MHz		1909.8MHz	
		dBm		dBm		dBm	
T_{nom} / V_{nom}		Measured	Limit	Measured	Limit	Measured	Limit
TM1		29.12	33	29.06	33	28.51	33
TM2		25.82	33	25.78	33	25.22	33
TEST CONDITIONS		Channel9262(L)		Channel9400(M)		Channel9538(H)	
		1852.4MHz		1880.0MHz		1907.6MHz	
		dBm		dBm		dBm	
		T_{nom} / V_{nom}		Measured	Limit	Measured	Limit
TM3		21.65	33	21.73	33	21.56	33
TM4	Case1	20.57	33	20.56	33	20.48	33
	Case2	20.36	33	20.26	33	20.33	33
	Case3	20.28	33	20.23	33	20.19	33
	Case4	19.21	33	19.28	33	19.16	33



Peak-to-Average Ratio

TEST CONDITIONS		Peak-to-Average Ratio					
		Channel512(L)		Channel661(M)		Channel810(H)	
		1850.2MHz		1880.0MHz		1909.8MHz	
		dB		dB		dB	
T_{nom} / V_{nom}		Measured	Limit	Measured	Limit	Measured	Limit
TM1		0.21	13	0.32	13	0.44	13
TM2		3.41	13	3.22	13	3.34	13
TEST CONDITIONS		Channel9262(L)		Channel9400(M)		Channel9538(H)	
		1852.4MHz		1880.0MHz		1907.6MHz	
		dB		dB		dB	
		T_{nom} / V_{nom}		Measured	Limit	Measured	Limit
TM3		2.54	13	2.66	13	2.75	13
TM4	Case1	2.7	13	2.86	13	2.8	13
	Case2	2.54	13	2.67	13	2.64	13
	Case3	2.47	13	2.38	13	2.31	13
	Case4	2.29	13	2.52	13	2.47	13



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	31.82	Horn Ant.	28.12	4.5	1	31.62	33	Pass
TM1	1880.0	31.76	Horn Ant.	28.31	4.5	1	31.81	33	Pass
TM1	1909.8	31.21	Horn Ant.	27.21	4.8	1	31.01	33	Pass
TM2	1850.2	28.52	Horn Ant.	25.2	4.5	1	28.7	33	Pass
TM2	1880.0	28.48	Horn Ant.	25.1	4.5	1	28.6	33	Pass
TM2	1909.8	27.92	Horn Ant.	24.22	4.8	1	28.02	33	Pass
TM3	1852.4	24.35	Horn Ant.	20.65	4.5	1	24.15	33	Pass
TM3	1880.0	24.43	Horn Ant.	20.73	4.5	1	24.23	33	Pass
TM3	1907.6	24.26	Horn Ant.	20.26	4.8	1	24.06	33	Pass

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

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

b, SGP=Signal Generator Level

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