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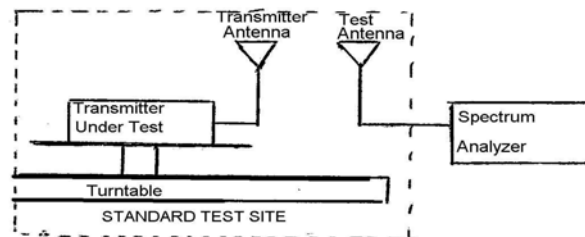
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Name of Test: EIRP Carrier Power (Radiated)**Specification:** TIA/EIA 603A (Substitution Method)

2.2.17.1 Definition: The average radiated power of a licensed device is the equivalent power required, when delivered to a half-wave dipole or horn antenna, to produce at a distant point the same average received power as produced by the licensed device.

2.2.17.2 Method of Measurement:

a) Connect the equipment as illustrated. Place the transmitter to be tested on the turntable in the standard test site.



b) Raise and lower the test antenna from 1m to 6 m with the transmitter facing the antenna and record the highest received signal in dB as LVL.

c) Repeat step b) for seven additional readings at 45° interval positions of the turntable.

d) Replace the transmitter under test with a half-wave or horn vertically polarized antenna. The center of the antenna should be at the same location as the transmitter under test. Connect the antenna to a signal generator with a known output power and record the path loss in dB or LOSS.

e) Calculate the average radiated output power from the readings in step c) and d) by the following:

$$\text{average radiated power} = 10 \log_{10} \sum 10(\text{LVL} - \text{LOSS})/10 \text{ (dBm)}$$

Results

	1850.2 MHz		1880 MHz		1909.8 MHz	
	LVL, dbm	Path Loss, db	LVL, dbm	Path Loss, db	LVL, dbm	Path Loss, db
0°	28.1	0.8	18.4	-0.1	24.0	0.1
45°	13.8	0.8	29.4	-0.1	22.6	0.1
90°	24.5	0.8	23.2	-0.1	29.9	0.1
135°	21.4	0.8	21.9	-0.1	21.2	0.1
180°	23.4	0.8	21.2	-0.1	21.8	0.1
225°	15.3	0.8	24.1	-0.1	24.7	0.1
270°	22.8	0.8	20.5	-0.1	20.8	0.1
315°	24.4	0.8	23.4	-0.1	18.6	0.1
Av. Radiated Power:		1850.2 MHz 22.51 dbm	1880.0 MHz 22.66 dbm	1909.8 MHz 23.05 dbm		