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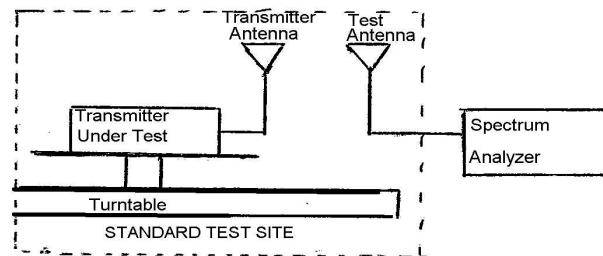
NAME OF TEST: ERP Carrier Power (Radiated)

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:

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

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RESULTS

	136.05 MHz LVL, dbm	156.75 MHz LVL, dbm	173.84 MHz LVL, dbm	Path Loss, db
0°	35.7	34.4	35.1	1.1
45°	35.3	34.0	34.8	1.1
90°	35.1	33.8	34.3	1.1
135°	34.8	33.3	33.9	1.1
180°	34.4	33.1	33.8	1.1
225°	34.7	33.6	34.6	1.1
270°	35.0	33.9	34.8	1.1
315°	35.2	34.1	34.9	1.1

	136.05 MHz	156.75 MHz	173.84 MHz
Av. Radiated Power:	36.13 dbm	34.88 dbm	35.65 dbm