Maximum Permissible Exposure

Aruba Network APINR108, APINR109

FCC, Part 15 Subpart C §**15.407(f)**
Industry Canada RSS-Gen §5.6

Calculations for Maximum Permissible Exposure Levels

Power Density = Pd (mW/cm^2) = EIRP/(4πd^2)

EIRP = P * G

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

Numeric Gain = 10 ^ (G (dBi)/10)

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is 1.0 mW/cm^2

Note: for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

Specification
Maximum Permissible Exposure Limits

FCC §1.1310 Limit = 1mW / cm^2 from 1.310 Table 1

RSS-Gen §5.6 Category I and Category II equipment shall comply with the applicable requirements of RSS-102.

Laboratory Measurement Uncertainty for Power Measurements

Measurement uncertainty	$\pm$1.33 dB

5250 – 5350 MHz

Antenna Model	Type	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ 1mW/cm^2 Limit(cm)	Power Density @ 20cm (mW/cm^2)
AP-ANT-1B	Omni	5.8	4	16.16	41.30	3.54	0.03
AP-ANT-13B	Omni	3.3	2	16.16	41.30	2.65	0.02
AP-ANT-16	Omni	4.7	3	16.16	41.30	3.11	0.02
AP-ANT-17	Directional 120 Deg	5.0	3	16.16	41.30	3.22	0.03
AP-ANT-18	Directional 60 Deg	7.5	6	14.66	29.24	3.62	0.03
AP-ANT-19	Omni	6.0	4	16.16	41.30	3.62	0.03

*Note: for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.