

Company: Silver Spring Networks

Evaluation of: MicroAP 5
To: FCC CFR 47 Part 1.1310

Report No.: SSNT135_MPE Rev A Report

MPE REPORT



MPE TEST REPORT



Evaluation of: Silver Spring Networks MicroAP 5
to

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: SSNT135-MPE Rev A Report

This report supersedes: NONE

Applicant: Silver Spring Networks
230 W Tasman Drive
San Jose, California 95134
USA

Product Function: Plug in Radio Device

Issue Date: 3rd Feb 2017

This Test Report is Issued Under the Authority of:

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1. MAXIMUM PERMISSABLE EXPOSURE

Calculations for Maximum Permissible Exposure Levels

Power Density = P_d (mW/cm²) = $EIRP / (4 \cdot \pi \cdot d^2)$

$EIRP = P \cdot G$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

Numeric Gain = $10^{(G \text{ (dBi)} / 10)}$

The calculations in the table below use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Source Based Time Average Correction (dB)	Calculated Power Density (mW/cm ²) @ 20cm	Limit of Power Density (mW/cm ²) @ 20cm
902 - 925	1.2	1.32	30	1000	0	0.262	0.601
2400 - 2483.5	5.6	3.63	27	501.19	0	0.362	1
LTE FDD Band II	3.5	2.24	24	251.19	-12	0.007	1
LTE FDD Band V	1	1.26	24	251.19	-12	0.004	0.551

Assessment for simultaneous operation Scenarios:

1. 900 MHz and 2.4GHz and LTE band II

Total Evaluation: $(0.262/0.601) + (0.362/1) + (0.007/1) = 0.805 \leq 1$

2. 900 MHz and 2.4GHz and LTE band V

Total Evaluation: $(0.262/0.601) + (0.362/1) + (0.004/1) = 0.805 \leq 1$

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 = 1.310 Table 1



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