



EMC Test Data

Client:	Hewlett Packard Company	Job Number:	J98746
Model:	SDGOB-1505	T-Log Number:	T98753
Contact:	Tarandeep Kaur	Project Manager:	Sheareen Jacobs
Standard:	FCC 15.247 / FCC 15.E / RSS-247 / LP0002	Project Coordinator:	Irene Rademacher
		Class:	N/A

Maximum Permissible Exposure

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 8/26/2015

Test Engineer: Mark Hill

General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density (W/m^2), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

Summary of Results

Device complies with Power Density requirements at 20cm separation:	Yes
---	-----

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Note: Calculations are based on worse case wifi operation. BLE operation has lower conducted power/eirp.

Power values used are taken from either the measured power, when they exceed the rated power, or the rated power



EMC Test Data

Client:	Hewlett Packard Company	Job Number:	J98746
Model:	SDGOB-1505	T-Log Number:	T98753
Contact:	Tarandeep Kaur	Project Manager:	Sheareen Jacobs
Standard:	FCC 15.247 / FCC 15.E / RSS-247 / LP0002	Project Coordinator:	Irene Rademacher
		Class:	N/A

FCC MPE Calculation

Use: General

Antenna: Internal Antenna: 2.5dBi @ 2.4GHz, 3.5dBi @ 5GHz
External Antenna: 0.7dBi @ 2.4GHz, 1.9dBi @ 5GHz

Calculations using highest eirp per band for either antenna option

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
2437	18.5	70.8	0	2.5	18.5	125.89	0.025	1.000
2437	21.5	141.3	0	2.5	21.5	251.19	0.050	1.000
5240	18.9	77.6	0	3.5	18.9	173.78	0.035	1.000
5230	20.0	100.0	0	3.5	20.0	223.87	0.045	1.000
5260	19.8	95.5	0	3.5	19.8	213.80	0.043	1.000
5270	18.8	75.9	0	3.5	18.8	169.82	0.034	1.000
5700	19.5	89.1	0	3.5	19.5	199.53	0.040	1.000
5550	19.0	79.4	0	3.5	19.0	177.83	0.035	1.000
5785	18.7	74.1	0	3.5	18.7	165.96	0.033	1.000
5795	16.4	43.7	0	3.5	16.4	97.72	0.019	1.000

Industry Canada MPE Calculation

Use: General

Antenna: Internal Antenna: 2.5dBi @ 2.4GHz, 3.5dBi @ 5GHz
External Antenna: 0.7dBi @ 2.4GHz, 1.9dBi @ 5GHz

Calculations using highest eirp per band for either antenna option

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	EIRP Limit mW
2437	18.5	70.8	0	2.5	18.5	125.89	0.025	2703.01
2437	21.5	141.3	0	2.5	21.5	251.19	0.050	2703.01
5240	18.9	77.6	0	3.5	18.9	173.78	0.035	4561.02
5230	19.5	89.1	0	3.5	19.5	199.53	0.040	4555.07
5260	19.8	95.5	0	3.5	19.8	213.80	0.043	4572.91
5270	18.8	75.9	0	3.5	18.8	169.82	0.034	4578.85
5700	18.5	70.8	0	3.5	18.5	158.49	0.032	4830.99
5550	19.5	89.1	0	3.5	19.5	199.53	0.040	4743.74
5785	18.7	74.1	0	3.5	18.7	165.96	0.033	4880.11
5795	16.4	43.7	0	3.5	16.4	97.72	0.019	4885.87