

RF Exposure Report

Project Number: 4185288

Report Number: 4185288EMC05

Revision Level: 0

Client: ADTRAN, Inc.

Equipment Under Test: Indoor Wireless Access Point

Model: BSAP-3045

FCC ID: HDCBSAP304X

Applicable Standards: 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498

FCC OET Bulletin 65 Supplement

Remarks: This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

TABLE OF CONTENTS

1	GENERAL INFORMATION.....	3
1.1	CLIENT INFORMATION.....	3
1.2	TEST LABORATORY.....	3
1.3	GENERAL INFORMATION OF EUT.....	3
1.4	OPERATING MODES AND CONDITIONS.....	3
2	RF EXPOSURE.....	4
2.1	TEST RESULT.....	4
2.2	TEST METHOD.....	4
2.3	SINGLE TRANSMISSION RF EXPOSURE LEVELS.....	4
2.4	SIMULTANEOUS TRANSMISSION RF EXPOSURE LEVELS.....	4

1 General Information

1.1 Client Information

Name: ADTRAN, Inc.
Address: 901 Explorer Blvd.
City, State, Zip, Country: Huntsville, AL 35806, USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Type of Product: Indoor Wireless Access Point
Model Number: BSAP-3045
Serial Number: 30454316050013

Frequency Ranges: 2400-2483.5MHz, 5725-5850MHz
Data Modes (2.4GHz): 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40),
Data Modes (5GHz): 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20),
802.11ac (VHT40), 802.11ac (VHT80)
Antenna: Ventev, 2.4/5 GHz, 12/13 dBi Directional Antenna (P/N:
M6012013O3D36820)

Rated Voltage: 48Vdc (PoE)
Test Voltage: 48Vdc (PoE)

Sample Received Date: 01 August 2017
Dates of testing: 08 – 16 August 2017

1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum conducted power while maintaining compliance with the EIRP limits was considered.

2 RF Exposure

2.1 Test Result

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 Test Method

Using the maximum measured conducted power and provided directional antenna gains, the power density was calculated.

2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density $EIRP_{avg}/(4\pi R^2)$ mW/cm ²	FCC mW/cm ²	% of Limit	Verdict
Type	MHz				dBm	mW					
WLAN 2.4	2400-2483.5	24.0	12.0	0.0	36.0	3981	31	0.330	1.00	33%	Pass
WLAN 5 GHz (UNII-1)	5150-5250	23.0	13.0	0.0	36.0	3981	31	0.330	1.00	33%	Pass
WLAN 5.8 GHz (UNII-3)	5725-5850	23.0	13.0	0.0	36.0	3981	31	0.330	1.00	33%	Pass

2.4 Simultaneous transmission RF Exposure Levels

Simultaneous Transmissions - Percent of Limit			
	WLAN 2.4	WLAN 5 GHz (UNII-1)	WLAN 5.8 GHz (UNII-3)
WLAN 2.4		66%	66%
WLAN 5 GHz (UNII-1)	66%		
WLAN 5.8 GHz (UNII-3)	66%		

Note: Highlighted color simply aids in identifying the highest level (Percentage of the limit).