

RF EXPOSURE EVALUATION REPORT

FCC ID : 2BEA6AH8108
Equipment : Wi-Fi Halow Module
Brand Name : Vantron
Model Name : VT-MOB-AH-8108
Applicant : All Inspire Health
19 Morris Avenue, Building 128, Brooklyn, NY 11205
Manufacturer : All Inspire Health
19 Morris Avenue, Building 128, Brooklyn, NY 11205
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



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History of this test report

Report No.	Version	Description	Issued Date
FA671501-01	Rev. 01	Initial issue of report	Oct. 07, 2026

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wi-Fi Halow Module
Brand Name	Vantron
Model Name	VT-MOB-AH-8108
FCC ID	2BEA6AH8108
Wireless Technology and Frequency Range	Bluetooth: 2400 MHz ~ 2483.5 MHz HaLow: 902 MHz ~ 928 MHz
Mode	Bluetooth LE HaLow: 802.11ah
HW Version	V0B

Reviewed by: Jason Wang

Report Producer: Wan Liu

2. Maximum RF average output power among production units

	Mode	Channel	Frequency (MHz)	Ant 1	Ant 2
				Tune-Up Limit	Tune-Up Limit
Bluetooth	LE 1Mbps	0	2402	8	8
		19	2440	8	8
		39	2480	8	8
	LE 2Mbps	0	2402	8	8
		19	2440	8	8
		39	2480	8	8
	LE 125K	0	2402	8	8
		19	2440	8	8
		39	2480	8	8
	LE 500K	0	2402	8	8
		19	2440	8	8
		39	2480	8	8

Ant 1					
	Mode	Data Rate	Channel	Frequency (MHz)	Tune-Up Limit
802.11ah	1	MCS0	3	903.5	25.00
	1	MCS0	25	914.5	25.00
	1	MCS0	49	926.5	25.00
	2	MCS0	6	905	24.50
	2	MCS0	26	915	24.50
	2	MCS0	46	925	24.50
	4	MCS0	8	906	22.50
	4	MCS0	32	918	22.50
	4	MCS0	40	922	22.00
	8	MCS0	12	908	22.50
	8	MCS0	28	916	22.50

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum PG (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
Bluetooth	1.0	8.0	9.0	7.94	0.002	1.000	0.002
HaLow	0.9	25.0	25.9	389.05	0.077	0.601	0.129

4.1. Collocated Power Density Calculation

HaLow Power Density / Limit	Bluetooth Power Density / Limit	Σ (Power Density / Limit) of HaLow +Bluetooth
0.129	0.002	0.131

Note:

1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for HaLow + Bluetooth.
2. Considering the HaLow module collocation with the Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.