



Certification Exhibit

FCC ID: ASU-B3X2L9TQ7WA

FCC Rule Part: 47 CFR Part 2.1091

Project Number: 721004402

Manufacturer: Savant Systems Inc
Model Name / Number: HST-DIRECTORC-01
Variant Model Name / Number: HST-DIRECTOR-01

RF Exposure

General Information:

Applicant: Savant Systems Inc
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Purpose:

The purpose of this document is the RF exposure evaluation of the HST-DIRECTORC-01 model in accordance with FCC 47 CFR Part 2.1091.

Description:

The Savant HST-DIRECTORC-01 Power Director is a central energy management controller designed for integration within Savant smart home systems. It facilitates real-time monitoring and control of connected power modules, supporting up to 20 modules via Bluetooth Low Energy (BLE) communication in addition to external cellular communications.

HST-DIRECTORC-01 model contains Nordic BLE radio co-located with pre-approved Murata BLE/BT Classic/2.4 & 5 GHz Wi-Fi radio module (FCC ID: VPYLB1ZM /IC ID: 772C-LB1ZM) and pre-approved Cellular radio module (FCC ID: 2AJYU-8PYA007 / IC ID: 23761-8PYA008).

HST-DIRECTOR-01 variant model is depopulated version of the HST-DIRECTORC-01 which contains Nordic BLE radio co-located with pre-approved Murata BLE/BT Classic/2.4 & 5 GHz Wi-Fi radio module (FCC ID: VPYLB1ZM /IC ID: 772C-LB1ZM).

The simultaneous transmission evaluation is documented in a separate document.

Technical Information (BLE) – “Radio 1”:

Frequency Range (MHz): 2402 - 2480
Antenna Type: Flexible Printed Circuit (FPC)
Antenna Gains: 2 dBi
Maximum Transmitter Conducted Power: 2.8dBm, 1.91mW
Maximum System EIRP: 4.8dBm, 3.02mW
Exposure Conditions: 20 centimeters

RF Exposure Calculation

Table 1: Device Characteristics (BLE)

Technical Parameters	Radio 1
Frequency (GHz)	2.402
Frequency (MHz)	2402
Separation Distance (cm)	20.00
Separation Distance (m)	0.2000
Antenna Gain (dBi)	2.00
ERP Easily Determined	YES
1-g body or 10-g extremity	Body
Conducted Power (dBm)	2.80
Conducted Power (mW)	1.91
Duty Factor (Source-Based) %	100.0
Maximum (Source-Based) Time-Averaged Conducted Power (mW)	1.91
Maximum (Source-Based) Time-Averaged ERP (mW)	1.84
Maximum (Source-Based) Time-Averaged EIRP (mW)	3.02
Maximum Output (mW)	1.91

Table 2: 47 CFR 1.1307(b)(3)(i)(c) MPE-Based Exemption ERP (W) – (BLE)

Technical Parameters	Radio 1
$\lambda / 2\pi$ (m)	0.020
$R \geq \lambda / 2\pi$	YES
Maximum (Source-Based) Time-Averaged ERP (W)	0.0018
ERP Threshold (W)	0.7680
Exemption	YES
Contribution Ratio (ERP / ERP_{th})	0.002

Conclusion

Exemption from Routine Environmental Evaluation applies.