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SAR EXCLUSION REPORT

Manufacturer:	**AFL Test and Inspection** **16 Eastgate Park Road** **Belmont, New Hampshire 03220 USA**
Applicant:	**Same As Above**
Product Name:	**FlexScan**
Product Description:	The FlexScan is an optical time domain reflectometer used on optical fiber networks.
Model(s):	**FS200-304U*** **Denotes actual model tested as representative of product family that includes models FS200-50/-60/-100/-300/-303/-304 and TS100-60/-70/-100.*
FCC ID:	**2ANTH-FS2TS1**
Testing Commenced:	2021-06-21
Testing Ended:	2022-08-31
Test Results:	**In Compliance** The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Standards:

- **KDB 447498 D04 v00 Interim guidance**
- **FCC Rule Part 1.1307(b)(3)(i)(a)**

Evaluation Conducted by:

Julius Chiller, EMC/Wireless Engineer

Report Reviewed by:

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1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to FCC rules and KDB558074.

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P25243C-04E	First Issue	2022-10-05	K. Littell

2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
RF Exposure for Device <20cm from Human	KDB 447498 D04 v00 Interim guidance FCC Rule Part 1.1307(b)(3)(i)(a)	Complies

Modifications Made to the Equipment
None

3 ENGINEERING STATEMENT

This report has been prepared on behalf of AFL Test and Inspection to provide documentation for the testing described herein. This equipment has been tested and found to comply with the SAR Exclusion levels listed in FCC Rule Part 1.1307(b)(3)(i)(a) and KDB 447498 D04 v00 Interim guidance.

4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: **FlexScan**
Model: FS200-304U*
Serial No.: 2E50WE1685
FCC ID: **2ANTH-FS2TS1**

**Denotes actual model tested as representative of product family that includes models FS200-50/-60/-100/-300/-303/-304 and TS100-60/-70/-100.*

4.2 Trade Name:

FlexScan

4.3 Power Supply:

Charger, AFL 4050-000031MR

4.4 Applicable Rules:

KDB 447498 D04 v00 Interim guidance
FCC Rule Part 1.1307(b)(3)(i)(a)

4.5 Equipment Category:

Radio Transmitter-DTS

4.6 Antenna:

Wi-Fi = Integral, 1.9dBi Chip
Bluetooth = Integral 0.5dBi Chip

4.7 Accessories:

N/A

4.8 Test Item Condition:

The equipment to be tested was received in good condition.

5 RF EXPOSURE FOR DEVICE <20cm FROM HUMAN

5.1 Requirements:

Distance Used: **5mm**

Limit: 4.3mW

Formula Used for Results: Results taken from the output power recorded in the Grant of Authorization for the Bluetooth Module, but reduced power, and new power measurements recorded with power settings reduced. Results taken from Test Report F2P25243C-01E for the Wi-Fi module. Transmitters cannot transmit simultaneously.

Results: **Highest Output Power: Mid-channel, 3.85dBm (2.43 mW)**
Max Antenna Gain: 1.9dBi
E.I.R.P., Wi-Fi: 5.75dBm (3.758 mW)
E.I.R.P., Bluetooth: 3.93 mW BLE EDR High Channel, which was the highest of all Bluetooth measurements from all modes.

Maximum output power of the Bluetooth module was turned down to 5.441dBm. Max antenna gain was 0.5dBi. The max E.I.R.P. would be 5.941dBm or 3.93 mW.