

# FCC Radio Test Report

**FCC ID** : Z8H89FT0066  
**Equipment** : XV2-2T Outdoor Wi-Fi 6 Access point  
**Brand Name** : Cambium Networks  
**Model Name** : XV2-2T, XV2-2T1  
**Applicant** : Cambium Networks Inc.  
3800 Golf Road Suite 360 Rolling Meadows IL United States 60008  
**Manufacturer** : Lite-On Network Communication (Dongguan) Limited  
No.30 QingXi-Keji Road, QingXi Town, DongGuan City, Guangdong Province, P.R. China  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Apr. 09, 2021, and testing was started from Apr. 09, 2021 and completed on Jun. 24, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Jackson Tsai

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## History of this test report

Report No.	Version	Description	Issued Date
FR142329-04AD	01	Initial issue of report	Mar. 24, 2022



### Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
-	15.207	AC Power-line Conducted Emissions	PASS	refer to 1.1.4
-	15.247(a)	20dB Bandwidth	PASS	refer to 1.1.4
-	15.247(a)	Carrier Frequency Separation	PASS	refer to 1.1.4
-	15.247(b)	Maximum Conducted Output Power	PASS	refer to 1.1.4
-	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	refer to 1.1.4
-	15.247(a)	Time of Occupancy (Dwell Time)	PASS	refer to 1.1.4
-	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	refer to 1.1.4
-	15.247(d)	Emissions in Restricted Frequency Bands	PASS	refer to 1.1.4

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and explanations:</b>
None

Reviewed by: **Sam Tsai**  
Report Producer: **Debby Hung**

# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

- ◆ Bluetooth BR uses a GFSK (1Mbps).
- ◆ Bluetooth EDR uses a combination of  $\pi/4$ -DQPSK (2Mbps) and 8DPSK (3Mbps).
- ◆ Bluetooth BR/EDR uses as a system using FHSS modulation.
- ◆ BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

Model: XV2-2T <Group 1>

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	LYNwave	Snow Leopard	PIFA antenna	I-PEX	2.4G
2	LYNwave	Snow Leopard	PIFA antenna	I-PEX	2.4G
3	LYNwave	Snow Leopard	PIFA antenna	I-PEX	5G
4	LYNwave	Snow Leopard	PIFA antenna	I-PEX	5G
5	LYNwave	Snow Leopard	PIFA antenna	I-PEX	BT

Ant.	Port	Gain (dBi)					BT
		2.4G	5G				
			U-NII-1	U-NII-2A	U-NII-2C		
1	1	5.2	-	-	-	-	-
2	2	5.3	-	-	-	-	-
3	1	-	8.1	8.1	9.3	9.0	-
4	2	-	8.6	8.6	8.9	8.6	-
5	1	-	-	-	-	-	5.6

Note 1: The EUT has five antennas.

**For 2.4GHz function:**

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 5 (port 1) could transmit/receive.

**For 5GHz function:**

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

**Model: XV2-2T1 <Group 2>**

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	M-gear	Snow leopard_120deg	Array patch	I-PEX	2.4G
2	M-gear	Snow leopard_120deg	Array patch	I-PEX	2.4G
3	M-gear	Snow leopard_120deg	Array patch	I-PEX	5G
4	M-gear	Snow leopard_120deg	Array patch	I-PEX	5G
5	LYNwave	Snow Leopard	PIFA antenna	I-PEX	BT

Ant.	Port	Gain (dBi)					BT
		2.4G	5G				
			U-NII-1	U-NII-2A	U-NII-2C	U-NII-3	
1	1	11.9	-	-	-	-	-
2	2	11.7	-	-	-	-	-
3	1	-	14.31	13.37	14.00	13.05	-
4	2	-	14.57	14.38	13.03	12	-
5	1	-	-	-	-	-	5.6

Note 1: The EUT has five antennas.

**For 2.4GHz function:**

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 5 (port 1) could transmit/receive.

**For 5GHz function:**

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.



### 1.1.3 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Model Name	Antenna	Description
XV2-2T	Group 1	All the models are identical, the only difference is that the Wi-Fi antennas for each model are different.
XV2-2T1	Group 2	

### 1.1.4 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR142329AD

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
<ol style="list-style-type: none"><li>1. Model:XV2-2T1 was added.</li><li>2. Group 2 Antenna was added for XV2-2T1 used.</li></ol>	BT antenna is same as original report, therefore test results refer to the original report.