

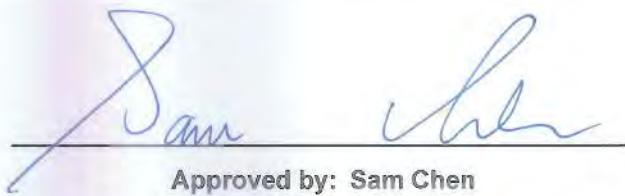


RADIO EXPOSURE TEST REPORT

FCC ID : HED-MLTGCNLR
Equipment : 60GHz Long Haul terminal
Brand Name : Edgecore
Model Name : MLTG-CN LR
Applicant : Accton Technology Corp
No. 1, Creation Rd. III, Science-based Industrial Park Hsin Chu 30077, Taiwan R.O.C.
Manufacturer(1) : Accton Technology Corp
No. 1, Creation Rd. III, Science-based Industrial Park Hsin Chu 30077, Taiwan R.O.C.
Manufacturer(2) : Accton Technology Corporation Zhunan Factory
1F & 4F & 5F , No. 1, Keyi St., Zhunan Township, Miaoli County 350, Taiwan
Standard : 47 CFR Part 2.1091

The product was received on Oct. 22, 2021, and testing was started from Nov. 02, 2021 and completed on Feb. 07, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sportun International Inc. Hsinchu Laboratory
No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Exposure evaluation	PASS	-

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Penny Kao



1 General Description

1.1 EUT General Information

The Channel Plan(s)		
Evaluation Mode	Operating Frequency (GHz)	Modulation Type
57-71 GHz	Channel 1: 58.32 GHz Channel 2: 60.48 GHz Channel 3: 62.64 GHz Channel 4: 64.80 GHz	OFDM

1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Accton	123400001485A	Dish	IPEX	40

Note: The above information was declared by manufacturer.

1.3 Accessories

Accessories
DC connector plug*1
Cable glands*3

1.4 Testing Location

Testing Location Information		
Test Lab. : Sporton International Inc. Hsinchu Laboratory		
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065	FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.	
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.	



2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

15.255(g) Regardless of the power density levels permitted under this section, devices operating under the provisions of this section are subject to the radio frequency radiation exposure requirements specified in §§1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
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

Note: f = frequency in MHz ; *Plane-wave equivalent power density



2.2 MPE Calculation Method

The MPE was calculated at 193 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$



2.3 Calculated Result and Limit

Worst-case Integrated Band Power of Unwanted Emission (30MHz ~ 40GHz)						
Start (MHz)	Stop (MHz)	Limit (dBuV/m at 3m)	Limit (mW EIRP)	RBW (MHz)	Num Intervals	Integrated Band Power (mW)
30	88	40	3.01995E-06	0.1	580	0.002
88	216	43.5	6.76083E-06	0.1	1280	0.009
216	960	46	1.20226E-05	0.1	7440	0.089
960	1000	54	7.58578E-05	0.1	400	0.030
1000	40000	54	7.58578E-05	1	39000	2.958
Total						3.089

Total Integrated Band Power of All Emission (30MHz ~ 200GHz)				
Test Frequency (GHz)	30MHz ~ 40GHz Integrated Band Power (mW)	40 ~ 200GHz EIRP (dBm)	40 ~ 200GHz EIRP (mW)	30MHz ~ 200GHz Total Integrated Band Power (mW)
58.32	3.089	54.77	299790.28	299793.369
62.64		56.17	413891.03	413894.120
64.8		55.02	317930.75	317933.835

Maximum Permissible Exposure of Fundamental Emissions							
Separation Distance(cm)	193						
Maximum EIPR Power of Test Frequency (GHz)	Ant. Gain (dBi)	Average EIRP Power (dBm)	Tolerance (dB)	Tune-up Average EIRP Power (dBm)	Tune-up Average EIRP Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
62.64	40	56.17	0.50	56.67	464393.38	0.993	1.00

Maximum Permissible Exposure of Fundamental + Unwanted Emissions								
Separation Distance(cm)	193							
Maximum EIPR Power of Test Frequency (GHz)	Ant. Gain (dBi)	Average EIRP Power (dBm)	Average EIRP Power (mW)	Tolerance (dB)	Tune-up Average EIRP Power (dBm)	Tune-up Average EIRP Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)
62.64	40	56.17	413894.12	0.50	56.67	464396.84	0.993	1.00

—————THE END—————