



RADIO EXPOSURE TEST REPORT

FCC ID : W2Z-01000013
Equipment : HDMI wireless 60G Extender
Brand Name : FUJIFILM Corporation
Model Name : HDV-W561 RX
Applicant : FUJIFILM Corporation
7-3, Akasaka 9-chome, Minato-ku, Tokyo 107-0052,
Japan
Manufacturer : Shenzhen HDCVT Technology Co.,Ltd
Floor 7,Building 5 ,Lihe industrial Park SongBai
Rd ,Nanshan District,Shenzhen ,GuangDong China
Standard : 47 CFR Part 2.1091

The product was received on Feb. 23, 2022, and testing was started from Feb. 25, 2022 and completed on Mar. 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

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 EUT General Information	5
1.2 Antenna Information	5
1.3 Accessories	5
1.4 Testing Location	5
2 Maximum Permissible Exposure	6
2.1 Limit of Maximum Permissible Exposure	6
2.2 MPE Calculation Method.....	6
2.3 Calculated Result and Limit.....	7
Photographs of EUT v01	



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: **Wendy Pan**



1 General Description

1.1 EUT General Information

Frequency Range	57-71 GHz	
The Channel Plan(s)		
Evaluation Mode	Operating Frequency	Modulation Type
Low-rate PHY (LRP) Band	Channel 2 LRP: 60.16-60.80GHz: Channel 0: 60.16275GHz Channel 1: 60.62138GHz Channel 2: 60.48000GHz Channel 3: 60.63863GHz Channel 4: 60.79725GHz Channel 3 LRP: 62.32-62.96 GHz: Channel 0: 62.32275GHz Channel 1: 62.48138GHz Channel 2: 62.64000GHz Channel 3: 62.79863GHz Channel 4: 62.95725GHz	BPSK

1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Phase Array Antenna	N/A	18

Note: The above information was declared by manufacturer.

1.3 Accessories

N/A

1.4 Testing Location

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



2 Maximum Permissible Exposure

2.1 Limit of Maximum Permissible Exposure

(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 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

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

Exposure Environment: General Population / Uncontrolled Exposure

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)
60.16275	3.089	15.68	37.01	40.102
60.79725		14.90	30.94	34.025
62.95725		13.68	23.32	26.412

Maximum Permissible Exposure of Fundamental Emissions							
Separation Distance (cm)	20						
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)
60.16275	18	15.68	0.50	16.18	41.53	0.008	1.00



Maximum Permissible Exposure of Fundamental + Unwanted Emissions								
Separation Distance (cm)		20						
Maximum EIRP Power of Test Frequency (GHz)	Antenna 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)
60.16275	18	16.03	40.10	0.50	17.99	44.99	0.009	1.00

————THE END————