



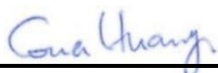
RF EXPOSURE EVALUATION REPORT

FCC ID : 2AP64-2872
Equipment : Digital Media Receiver
Model Name : C1125P
Applicant : Gargantuan LLC
303 North Glenoaks Blvd., Ste 200
Burbank, CA 91502
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part 2.1091 and it complies with applicable limit.

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

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.



Approved by: Cona Huang / Deputy Manager

SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory
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History of this test report

Report No.	Version	Description	Issued Date
FA840308-05	Rev. 01	Initial issue of report	Jul. 27, 2020

**1. Description of Equipment Under Test (EUT)**

Product Feature & Specification	
EUT Type	Digital Media Receiver
Model Name	C1125P
FCC ID	2AP64-2872
Wireless Technology and Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2472 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Reviewed by: Jason Wang

Report Producer: Ching Chen

2. Maximum RF average output power among production units

Bluetooth	Average Power (dBm)				
	BR / EDR			v5.0 BLE	
	1Mbps	2Mbps	3Mbps	1M	2M
ANT 1	5.5	5.5	5.5	5.5	5.5
ANT 2	7.5	7.5	7.5	7.5	7.5

	Transmitter Antenna			ANT 1	ANT 2
	Mode	Channel	Frequency (MHz)	Tune-up Limit	Tune-up Limit
2.4GHz WLAN	802.11b	CH 1	2412	20.0	19.5
		CH 6	2437	20.0	19.5
		CH 11	2462	20.0	19.5
		CH 12	2467	15.0	17.0
		CH 13	2472	13.0	14.5
	802.11g	CH 1	2412	15.0	16.5
		CH 6	2437	17.0	18.5
		CH 10	2457		18.0
		CH 11	2462	15.0	15.0
		CH 12	2467	11.0	12.0
		CH 13	2472	9.5	9.0
	802.11n-HT20	CH 1	2412	15.0	15.0
		CH 2	2417		18.5
		CH 6	2437	17.5	19.0
		CH 10	2457	17.0	17.5
		CH 11	2462	13.5	14.0
		CH 12	2467	11.0	11.5
		CH 13	2472	9.5	9.0



5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 1 Tune-up Limit	Ant 2 Tune-up Limit
	802.11a 6Mbps	36	5180	19.50	19.50
		44	5220	19.50	20.00
		48	5240	19.50	20.00
	802.11n-HT20 MCS0	36	5180	19.50	19.50
		44	5220	19.50	19.50
		48	5240	19.50	20.00
	802.11n-HT40 MCS0	38	5190	14.00	15.00
		46	5230	19.00	19.00
	802.11ac-VHT20 MCS0	36	5180	19.00	19.50
		44	5220	19.50	19.50
		48	5240	19.50	19.50
	802.11ac-VHT40 MCS0	38	5190	14.00	15.00
		46	5230	18.50	19.00
	802.11ac-VHT80 MCS0	42	5210	14.00	13.50

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 1 Tune-up Limit	Ant 2 Tune-up Limit
	802.11a 6Mbps	52	5260	19.50	19.50
		60	5300	19.50	19.50
		64	5320	19.50	18.50
	802.11n-HT20 MCS0	52	5260	19.50	19.00
		60	5300	20.00	20.00
		64	5320	19.00	18.00
	802.11n-HT40 MCS0	54	5270	19.00	19.00
		62	5310	15.50	16.00
	802.11ac-VHT20 MCS0	52	5260	19.00	19.00
		60	5300	20.00	20.00
		64	5320	19.00	18.00
	802.11ac-VHT40 MCS0	54	5270	18.50	18.50
		62	5310	15.50	16.00
	802.11ac-VHT80 MCS0	58	5290	15.00	14.50

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 1 Tune-up Limit	Ant 2 Tune-up Limit
	802.11a 6Mbps	100	5500	17.50	17.50
		116	5580	19.50	19.50
		140	5700	17.00	16.50
		144	5720	19.50	20.00
	802.11n-HT20 MCS0	100	5500	17.50	16.50
		116	5580	19.50	20.00
		140	5700	16.50	15.50
		144	5720	19.50	20.00
	802.11n-HT40 MCS0	102	5510	13.00	13.00
		110	5550	19.00	19.50
		134	5670	17.00	18.00
		142	5710	20.00	20.00
	802.11ac-VHT20 MCS0	100	5500	17.50	16.50
		116	5580	19.50	20.00
		140	5700	16.00	15.50
		144	5720	19.50	20.00
	802.11ac-VHT40 MCS0	102	5510	13.00	13.00
		110	5550	19.00	19.00
		134	5670	17.00	18.00
		142	5710	20.00	20.00
	802.11ac-VHT80 MCS0	106	5530	12.50	11.50
		122	5610	18.50	19.00
		138	5690	19.00	19.00

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Ant 1 Tune-up Limit	Ant 2 Tune-up Limit
	802.11a 6Mbps	149	5745	19.00	20.00
		157	5785	19.00	20.00
		165	5825	19.00	20.00
	802.11n-HT20 MCS0	149	5745	19.00	19.00
		157	5785	19.00	19.00
		165	5825	19.00	19.50
	802.11n-HT40 MCS0	151	5755	18.00	18.50
		159	5795	18.00	18.00
	802.11ac-VHT20 MCS0	149	5745	19.00	19.00
		157	5785	19.00	19.00
		165	5825	19.00	19.50
	802.11ac-VHT40 MCS0	151	5755	18.00	18.50
		159	5795	18.00	18.00
	802.11ac-VHT80 MCS0	155	5775	17.00	17.50



3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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				
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

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:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)	Power Density / Limit
2.4GHz WLAN ANT 1	2.10	20.00	22.100	0.162	162.181	0.032	1.000	0.032
2.4GHz WLAN ANT 2	1.90	19.50	21.400	0.138	138.038	0.027	1.000	0.027
5.2GHz WLAN ANT 1	3.70	19.50	23.200	0.209	208.930	0.042	1.000	0.042
5.2GHz WLAN ANT 2	3.50	20.00	23.500	0.224	223.872	0.045	1.000	0.045
5.3GHz WLAN ANT 1	4.50	20.00	24.500	0.282	281.838	0.056	1.000	0.056
5.3GHz WLAN ANT 2	4.00	20.00	24.000	0.251	251.189	0.050	1.000	0.050
5.5GHz WLAN ANT 1	4.50	20.00	24.500	0.282	281.838	0.056	1.000	0.056
5.5GHz WLAN ANT 2	4.00	20.00	24.000	0.251	251.189	0.050	1.000	0.050
5.8GHz WLAN ANT 1	3.90	19.00	22.900	0.195	194.984	0.039	1.000	0.039
5.8GHz WLAN ANT 2	4.00	20.00	24.000	0.251	251.189	0.050	1.000	0.050
Bluetooth ANT 1	2.10	5.50	7.600	0.006	5.754	0.001	1.000	0.001
Bluetooth ANT 2	1.90	7.50	9.400	0.009	8.710	0.002	1.000	0.002

Note:

- For conservativeness, the lowest frequency of each band is used to determine the MPE limit of that band.

4.2. Collocated Power Density Calculation

WLAN Power Density / Limit	Bluetooth Power Density / Limit	Σ (Power Density / Limit) of WLAN+Bluetooth
0.056	0.002	0.058

Note:

- Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission) / (corresponding MPE limit)], for WLAN + Bluetooth.
- Considering the WWAN module collocation with the WLAN and Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density / limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.