FCC RF EXPOSURE REPORT

FCC ID: I4L-RF1430

Project No.	:	2011C072
Equipment	:	Wireless Keyboard
Brand Name	:	MSI
Test Model	:	RF1430
Series Model	:	N/A
Applicant	:	Micro-Star Int'l Co.,Ltd.
Address	:	No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan
Manufacturer	:	Micro-Star Int'l Co.,Ltd.
Address	:	No.69, Lide St., Zhonghe Dist., New Taipei City 235, Taiwan
Factory	:	Dong Guan You Hong Plastic & Electric Co.,Ltd
Address	:	Zhen Hua Road, Tie Lu Keng Village, Qi Shi Town, DongGuan city
Date of Receipt	:	Nov. 11, 2020
Date of Test	:	Nov. 13, 2020 ~ Dec. 01, 2020
Issued Date	:	Dec. 25, 2020
Report Version	:	R01
Test Sample	:	Engineering Sample No.: DG2020111158.
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1 & KDB447498 D01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Dec. 14, 2020
R01	Only updated the applicant and manufacturer information.	Dec. 25, 2020

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Keyboard	
Brand Name	MSI	
Test Model	RF1430	
Series Model	N/A	
Model Difference(s)	N/A	
Power Source	Supplied from battery.	
Power Rating	3V ⎓ 5mA	
Product Description	Operation Frequency	2402 MHz ~ 2480 MHz
	Modulation Technology	GFSK
	Bit Rate of Transmitter	2 Mbps
	Max. Output Power	-5.07 dBm (0.0003 W)

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2402	21	2442
02	2404	22	2444
03	2406	23	2446
04	2408	24	2448
05	2410	25	2450
06	2412	26	2452
07	2414	27	2454
08	2416	28	2456
09	2418	29	2458
10	2420	30	2460
11	2422	31	2462
12	2424	32	2464
13	2426	33	2466
14	2428	34	2468
15	2430	35	2470
16	2432	36	2472
17	2434	37	2474
18	2436	38	2476
19	2438	39	2478
20	2440	40	2480

3. Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	IBM 2.4 GHz	Internal	N/A	-1.52

2. GENERAL CONCULUSION

According to FCC KDB447498 D01, Appendix A, SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Appendix A - SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and ≤ 50 mm

MHz	5	10	15	20	25	30	35	40	45	50	mm
150	39	77	116	155	194	232	271	310	349	387	SAR Test Exclusion Thresholds (mW)
300	27	55	82	110	137	164	192	219	246	274	
450	22	45	67	89	112	134	157	179	201	224	
835	16	33	49	66	82	98	115	131	148	164	
900	16	32	47	63	79	95	111	126	142	158	
1500	12	24	37	49	61	73	86	98	110	122	
1900	11	22	33	44	54	65	76	87	98	109	
2450	10	19	29	38	48	57	67	77	86	96	
3600	8	16	24	32	40	47	55	63	71	79	
5200	7	13	20	26	33	39	46	53	59	66	
5400	6	13	19	26	32	39	45	52	58	65	
5800	6	12	19	25	31	37	44	50	56	62	

3. TEST RESULTS

Tune up tolerance (dBm)
2.4G SRD
≤ -5.0

Max. Output Power (dBm)	Max. Output Power (mW)	Limit (mW)
-5.00	0.32	10

Note:
(1) Output power including tune up tolerance.
(2) The maximum measured output peak power of this EUT is 0.32mW, less than 10mW at 5mm distance.
Conclusion: No SAR evaluation required since transmitter power is below FCC threshold.

End of Test Report