

RF EXPOSURE EVALUATION REPORT

FCC ID : 2A4DH-6387
Equipment : Digital Media Receiver
Model Name : K3R6AT
Applicant : Amazon.com Services LLC
410 Terry Avenue N, Seattle, WA 98109-5210 United States
Standard : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

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.

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



Approved by: Cona Huang / Deputy Manager



SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

1. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	4
2. MAXIMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	5
3. DETERMINATION OF EXEMPTION	13
4. RF EXPOSURE EVALUATION	14
4.1. Standalone assessment	14
4.2. Collocated assessment	15



History of this test report

Report No.	Version	Description	Issued Date
FA2N1818-01	Rev. 01	Initial issue of report	May 10, 2023



1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Digital Media Receiver
Model Name	K3R6AT
FCC ID	2A4DH-6387
Wireless Technology and Frequency Range	WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	WLAN: 802.11a/b/g/n/ac/ax HT20/HT40/VHT20/VHT40/VHT80/HE20/HE40/HE80 Bluetooth BR/EDR/LE

Reviewed by: Jason Wang

Report Producer: Paula Chen



2. Maximum RF average output power among production units

<Bluetooth>

Table with 7 columns: Band, Channel, Frequency, Data rate/BW, Ant., Average power (dBm), Tuneup (Average power). Rows include BT3.0 and BT5.0 across various channels and frequencies.

<2.4GHz WLAN>

Table with 7 columns: Band, Channel, Frequency, Data rate/BW, Ant., Average power (dBm), Tuneup (Average power). Rows include 802.11b, 802.11g, 802.11n HT20, and 802.11ax HE20 across various channels and frequencies.



<5GHz WLAN>

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH36	5180 MHz	6M	0+1 (CDD)	19.87	20.00
802.11a	CH44	5220 MHz	6M	0+1 (CDD)	20.51	21.00
802.11a	CH48	5240 MHz	6M	0+1 (CDD)	20.56	21.00
802.11n HT20	CH36	5180 MHz	MCS 0	0+1 (CDD)	19.26	19.50
802.11n HT20	CH44	5220 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11n HT20	CH48	5240 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11n HT40	CH38	5190 MHz	MCS 0	0+1 (CDD)	17.92	18.00
802.11n HT40	CH46	5230 MHz	MCS 0	0+1 (CDD)	18.66	19.00
802.11ac VHT20	CH36	5180 MHz	MCS 0	0+1 (CDD)	19.41	19.50
802.11ac VHT20	CH44	5220 MHz	MCS 0	0+1 (CDD)	18.66	19.00
802.11ac VHT20	CH48	5240 MHz	MCS 0	0+1 (CDD)	18.66	19.00
802.11ac VHT40	CH38	5190 MHz	MCS 0	0+1 (CDD)	18.08	18.50
802.11ac VHT40	CH46	5230 MHz	MCS 0	0+1 (CDD)	18.66	19.00
802.11ac VHT80	CH42	5210 MHz	MCS 0	0+1 (CDD)	16.31	16.50
802.11ax HE20	CH36	5180 MHz	MCS 0	0+1 (CDD)	19.51	20.00
802.11ax HE20	CH36	5180 MHz	MCS 0	0+1 (CDD)	10.41	10.50
802.11ax HE20	CH36	5180 MHz	MCS 0	0+1 (CDD)	13.01	13.50
802.11ax HE20	CH36	5180 MHz	MCS 0	0+1 (CDD)	16.66	17.00
802.11ax HE20	CH44	5220 MHz	MCS 0	0+1 (CDD)	18.81	19.00
802.11ax HE20	CH44	5220 MHz	MCS 0	0+1 (CDD)	10.11	10.50
802.11ax HE20	CH44	5220 MHz	MCS 0	0+1 (CDD)	11.96	12.00
802.11ax HE20	CH44	5220 MHz	MCS 0	0+1 (CDD)	14.91	15.00
802.11ax HE20	CH48	5240 MHz	MCS 0	0+1 (CDD)	18.76	19.00
802.11ax HE20	CH48	5240 MHz	MCS 0	0+1 (CDD)	8.76	9.00
802.11ax HE20	CH48	5240 MHz	MCS 0	0+1 (CDD)	11.96	12.00
802.11ax HE20	CH48	5240 MHz	MCS 0	0+1 (CDD)	14.61	15.00
802.11ax HE40	CH38	5190 MHz	MCS 0	0+1 (CDD)	18.17	18.50
802.11ax HE40	CH38	5190 MHz	MCS 0	0+1 (CDD)	15.73	16.00
802.11ax HE40	CH46	5230 MHz	MCS 0	0+1 (CDD)	18.86	19.00
802.11ax HE40	CH46	5230 MHz	MCS 0	0+1 (CDD)	17.31	17.50
802.11ax HE80	CH42	5210 MHz	MCS 0	0+1 (CDD)	16.67	17.00
802.11ax HE80	CH42	5210 MHz	MCS 0	0+1 (CDD)	14.57	15.00



RF EXPOSURE EVALUATION REPORT

Report No. : FA2N1818-01

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH52	5260 MHz	6M	0+1 (CDD)	20.62	21.00
802.11a	CH60	5300 MHz	6M	0+1 (CDD)	19.71	20.00
802.11a	CH64	5320 MHz	6M	0+1 (CDD)	18.91	19.00
802.11n HT20	CH52	5260 MHz	MCS 0	0+1 (CDD)	18.61	19.00
802.11n HT20	CH60	5300 MHz	MCS 0	0+1 (CDD)	18.46	18.50
802.11n HT20	CH64	5320 MHz	MCS 0	0+1 (CDD)	18.41	18.50
802.11n HT40	CH54	5270 MHz	MCS 0	0+1 (CDD)	18.86	19.00
802.11n HT40	CH62	5310 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11ac VHT20	CH52	5260 MHz	MCS 0	0+1 (CDD)	18.76	19.00
802.11ac VHT20	CH60	5300 MHz	MCS 0	0+1 (CDD)	18.56	19.00
802.11ac VHT20	CH64	5320 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11ac VHT40	CH54	5270 MHz	MCS 0	0+1 (CDD)	18.76	19.00
802.11ac VHT40	CH62	5310 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11ac VHT80	CH58	5290 MHz	MCS 0	0+1 (CDD)	16.30	16.50
802.11ax HE20	CH52	5260 MHz	MCS 0	0+1 (CDD)	18.86	19.00
802.11ax HE20	CH52	5260 MHz	MCS 0	0+1 (CDD)	9.46	9.50
802.11ax HE20	CH52	5260 MHz	MCS 0	0+1 (CDD)	12.32	12.50
802.11ax HE20	CH52	5260 MHz	MCS 0	0+1 (CDD)	14.71	15.00
802.11ax HE20	CH60	5300 MHz	MCS 0	0+1 (CDD)	18.66	19.00
802.11ax HE20	CH60	5300 MHz	MCS 0	0+1 (CDD)	10.21	10.50
802.11ax HE20	CH60	5300 MHz	MCS 0	0+1 (CDD)	12.16	12.50
802.11ax HE20	CH60	5300 MHz	MCS 0	0+1 (CDD)	15.16	15.50
802.11ax HE20	CH64	5320 MHz	MCS 0	0+1 (CDD)	18.61	19.00
802.11ax HE20	CH64	5320 MHz	MCS 0	0+1 (CDD)	8.71	9.00
802.11ax HE20	CH64	5320 MHz	MCS 0	0+1 (CDD)	11.57	12.00
802.11ax HE20	CH64	5320 MHz	MCS 0	0+1 (CDD)	14.81	15.00
802.11ax HE40	CH54	5270 MHz	MCS 0	0+1 (CDD)	19.01	19.50
802.11ax HE40	CH54	5270 MHz	MCS 0	0+1 (CDD)	17.51	18.00
802.11ax HE40	CH62	5310 MHz	MCS 0	0+1 (CDD)	18.77	19.00
802.11ax HE40	CH62	5310 MHz	MCS 0	0+1 (CDD)	16.96	17.00
802.11ax HE80	CH58	5290 MHz	MCS 0	0+1 (CDD)	16.46	16.50
802.11ax HE80	CH58	5290 MHz	MCS 0	0+1 (CDD)	13.61	14.00



RF EXPOSURE EVALUATION REPORT

Report No. : FA2N1818-01

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH100	5500 MHz	6M	0+1 (CDD)	19.93	20.00
802.11a	CH116	5580 MHz	6M	0+1 (CDD)	20.36	20.50
802.11a	CH140	5700 MHz	6M	0+1 (CDD)	20.41	20.50
802.11a	CH144	5720 MHz	6M	0+1 (CDD)	21.13	21.50
802.11n HT20	CH100	5500 MHz	MCS 0	0+1 (CDD)	18.41	18.50
802.11n HT20	CH116	5580 MHz	MCS 0	0+1 (CDD)	18.52	19.00
802.11n HT20	CH140	5700 MHz	MCS 0	0+1 (CDD)	19.21	19.50
802.11n HT20	CH144	5720 MHz	MCS 0	0+1 (CDD)	19.28	19.50
802.11n HT40	CH102	5510 MHz	MCS 0	0+1 (CDD)	18.57	19.00
802.11n HT40	CH110	5550 MHz	MCS 0	0+1 (CDD)	18.57	19.00
802.11n HT40	CH134	5670 MHz	MCS 0	0+1 (CDD)	19.70	20.00
802.11n HT40	CH142	5710 MHz	MCS 0	0+1 (CDD)	19.41	19.50
802.11ac VHT20	CH100	5500 MHz	MCS 0	0+1 (CDD)	18.51	19.00
802.11ac VHT20	CH116	5580 MHz	MCS 0	0+1 (CDD)	18.71	19.00
802.11ac VHT20	CH140	5700 MHz	MCS 0	0+1 (CDD)	19.21	19.50
802.11ac VHT20	CH144	5720 MHz	MCS 0	0+1 (CDD)	19.22	19.50
802.11ac VHT40	CH102	5510 MHz	MCS 0	0+1 (CDD)	18.64	19.00
802.11ac VHT40	CH110	5550 MHz	MCS 0	0+1 (CDD)	18.67	19.00
802.11ac VHT40	CH134	5670 MHz	MCS 0	0+1 (CDD)	19.64	20.00
802.11ac VHT40	CH142	5710 MHz	MCS 0	0+1 (CDD)	19.45	19.50
802.11ac VHT80	CH106	5530 MHz	MCS 0	0+1 (CDD)	17.87	18.00
802.11ac VHT80	CH122	5610 MHz	MCS 0	0+1 (CDD)	18.46	18.50
802.11ac VHT80	CH138	5690 MHz	MCS 0	0+1 (CDD)	19.61	20.00
802.11ax HE20	CH100	5500 MHz	MCS 0	0+1 (CDD)	18.61	19.00
802.11ax HE20	CH100	5500 MHz	MCS 0	0+1 (CDD)	9.11	9.50
802.11ax HE20	CH100	5500 MHz	MCS 0	0+1 (CDD)	12.11	12.50
802.11ax HE20	CH100	5500 MHz	MCS 0	0+1 (CDD)	15.26	15.50
802.11ax HE20	CH116	5580 MHz	MCS 0	0+1 (CDD)	18.91	19.00
802.11ax HE20	CH116	5580 MHz	MCS 0	0+1 (CDD)	10.36	10.50
802.11ax HE20	CH116	5580 MHz	MCS 0	0+1 (CDD)	12.16	12.50
802.11ax HE20	CH116	5580 MHz	MCS 0	0+1 (CDD)	15.61	16.00
802.11ax HE20	CH140	5700 MHz	MCS 0	0+1 (CDD)	19.41	19.50
802.11ax HE20	CH140	5700 MHz	MCS 0	0+1 (CDD)	10.47	10.50
802.11ax HE20	CH140	5700 MHz	MCS 0	0+1 (CDD)	12.96	13.00
802.11ax HE20	CH140	5700 MHz	MCS 0	0+1 (CDD)	16.16	16.50
802.11ax HE20	CH144	5720 MHz	MCS 0	0+1 (CDD)	19.53	20.00
802.11ax HE20	CH144	5720 MHz	MCS 0	0+1 (CDD)	10.58	11.00
802.11ax HE20	CH144	5720 MHz	MCS 0	0+1 (CDD)	13.21	13.50
802.11ax HE20	CH144	5720 MHz	MCS 0	0+1 (CDD)	16.16	16.50
802.11ax HE40	CH102	5510 MHz	MCS 0	0+1 (CDD)	18.78	19.00
802.11ax HE40	CH102	5510 MHz	MCS 0	0+1 (CDD)	16.82	17.00
802.11ax HE40	CH110	5590 MHz	MCS 0	0+1 (CDD)	18.77	19.00
802.11ax HE40	CH110	5590 MHz	MCS 0	0+1 (CDD)	17.26	17.50
802.11ax HE40	CH134	5670 MHz	MCS 0	0+1 (CDD)	19.94	20.00
802.11ax HE40	CH134	5670 MHz	MCS 0	0+1 (CDD)	18.00	18.00
802.11ax HE40	CH142	5710 MHz	MCS 0	0+1 (CDD)	19.61	20.00
802.11ax HE40	CH142	5710 MHz	MCS 0	0+1 (CDD)	17.64	18.00
802.11ax HE80	CH106	5530 MHz	MCS 0	0+1 (CDD)	18.21	18.50
802.11ax HE80	CH106	5530 MHz	MCS 0	0+1 (CDD)	16.07	16.50
802.11ax HE80	CH122	5610 MHz	MCS 0	0+1 (CDD)	18.97	19.00
802.11ax HE80	CH122	5610 MHz	MCS 0	0+1 (CDD)	17.27	17.50
802.11ax HE80	CH138	5690 MHz	MCS 0	0+1 (CDD)	19.81	20.00
802.11ax HE80	CH138	5690 MHz	MCS 0	0+1 (CDD)	17.78	18.00



RF EXPOSURE EVALUATION REPORT

Report No. : FA2N1818-01

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH149	5745 MHz	6M	0+1 (CDD)	20.01	20.50
802.11a	CH157	5785 MHz	6M	0+1 (CDD)	20.37	20.50
802.11a	CH165	5825 MHz	6M	0+1 (CDD)	20.17	20.50
802.11n HT20	CH149	5745 MHz	MCS 0	0+1 (CDD)	18.16	18.50
802.11n HT20	CH157	5785 MHz	MCS 0	0+1 (CDD)	18.37	18.50
802.11n HT20	CH165	5825 MHz	MCS 0	0+1 (CDD)	18.17	18.50
802.11n HT40	CH151	5755 MHz	MCS 0	0+1 (CDD)	18.21	18.50
802.11n HT40	CH159	5795 MHz	MCS 0	0+1 (CDD)	18.41	18.50
802.11ac VHT20	CH149	5745 MHz	MCS 0	0+1 (CDD)	18.11	18.50
802.11ac VHT20	CH157	5785 MHz	MCS 0	0+1 (CDD)	18.33	18.50
802.11ac VHT20	CH165	5825 MHz	MCS 0	0+1 (CDD)	18.13	18.50
802.11ac VHT40	CH151	5755 MHz	MCS 0	0+1 (CDD)	18.11	18.50
802.11ac VHT40	CH159	5795 MHz	MCS 0	0+1 (CDD)	18.37	18.50
802.11ac VHT80	CH155	5775 MHz	MCS 0	0+1 (CDD)	17.71	18.00
802.11ax HE20	CH149	5745 MHz	MCS 0	0+1 (CDD)	18.26	18.50
802.11ax HE20	CH149	5745 MHz	MCS 0	0+1 (CDD)	10.72	11.00
802.11ax HE20	CH149	5745 MHz	MCS 0	0+1 (CDD)	14.16	14.50
802.11ax HE20	CH149	5745 MHz	MCS 0	0+1 (CDD)	17.61	18.00
802.11ax HE20	CH157	5785 MHz	MCS 0	0+1 (CDD)	18.47	18.50
802.11ax HE20	CH157	5785 MHz	MCS 0	0+1 (CDD)	11.66	12.00
802.11ax HE20	CH157	5785 MHz	MCS 0	0+1 (CDD)	14.31	14.50
802.11ax HE20	CH157	5785 MHz	MCS 0	0+1 (CDD)	17.21	17.50
802.11ax HE20	CH165	5825 MHz	MCS 0	0+1 (CDD)	18.27	18.50
802.11ax HE20	CH165	5825 MHz	MCS 0	0+1 (CDD)	10.76	11.00
802.11ax HE20	CH165	5825 MHz	MCS 0	0+1 (CDD)	14.31	14.50
802.11ax HE20	CH165	5825 MHz	MCS 0	0+1 (CDD)	17.82	18.00
802.11ax HE40	CH151	5755 MHz	MCS 0	0+1 (CDD)	18.41	18.50
802.11ax HE40	CH151	5755 MHz	MCS 0	0+1 (CDD)	17.92	18.00
802.11ax HE40	CH159	5795 MHz	MCS 0	0+1 (CDD)	18.73	19.00
802.11ax HE40	CH159	5795 MHz	MCS 0	0+1 (CDD)	16.42	16.50
802.11ax HE80	CH155	5775 MHz	MCS 0	0+1 (CDD)	18.06	18.50
802.11ax HE80	CH155	5775 MHz	MCS 0	0+1 (CDD)	15.66	16.00
802.11ax HE80	CH155	5775 MHz	MCS 0	0+1 (CDD)	15.61	16.00



<6GHz WLAN>

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH001	5955 MHz	6M	0	3.20	3.50
802.11a	CH049	6195 MHz	6M	0	3.30	3.50
802.11a	CH093	6415 MHz	6M	0	2.90	3.00
802.11a	CH001	5955 MHz	6M	0+1 (CDD)	0.62	1.00
802.11a	CH049	6195 MHz	6M	0+1 (CDD)	0.36	0.50
802.11a	CH093	6415 MHz	6M	0+1 (CDD)	0.07	0.50
802.11ax HE20	CH001	5955 MHz	MCS 0	0+1 (CDD)	0.43	0.50
802.11ax HE20	CH001	5955 MHz	MCS 0	0+1 (CDD)	-8.29	-8.00
802.11ax HE20	CH001	5955 MHz	MCS 0	0+1 (CDD)	-5.29	-5.00
802.11ax HE20	CH001	5955 MHz	MCS 0	0+1 (CDD)	-2.12	-2.00
802.11ax HE20	CH049	6195 MHz	MCS 0	0+1 (CDD)	0.57	1.00
802.11ax HE20	CH049	6195 MHz	MCS 0	0+1 (CDD)	-7.64	-7.50
802.11ax HE20	CH049	6195 MHz	MCS 0	0+1 (CDD)	-4.89	-4.50
802.11ax HE20	CH049	6195 MHz	MCS 0	0+1 (CDD)	-2.79	-2.50
802.11ax HE20	CH093	6415 MHz	MCS 0	0+1 (CDD)	0.31	0.50
802.11ax HE20	CH093	6415 MHz	MCS 0	0+1 (CDD)	-8.29	-8.00
802.11ax HE20	CH093	6415 MHz	MCS 0	0+1 (CDD)	-6.17	-6.00
802.11ax HE20	CH093	6415 MHz	MCS 0	0+1 (CDD)	-2.59	-2.50
802.11ax HE40	CH003	5965 MHz	MCS 0	0+1 (CDD)	2.75	3.00
802.11ax HE40	CH003	5965 MHz	MCS 0	0+1 (CDD)	1.45	1.50
802.11ax HE40	CH051	6205 MHz	MCS 0	0+1 (CDD)	2.32	2.50
802.11ax HE40	CH051	6205 MHz	MCS 0	0+1 (CDD)	1.31	1.50
802.11ax HE40	CH091	6405 MHz	MCS 0	0+1 (CDD)	2.81	3.00
802.11ax HE40	CH091	6405 MHz	MCS 0	0+1 (CDD)	0.96	1.00
802.11ax HE80	CH007	5985 MHz	MCS 0	0+1 (CDD)	5.88	6.00
802.11ax HE80	CH007	5985 MHz	MCS 0	0+1 (CDD)	4.17	4.50
802.11ax HE80	CH055	6225 MHz	MCS 0	0+1 (CDD)	5.81	6.00
802.11ax HE80	CH055	6225 MHz	MCS 0	0+1 (CDD)	3.51	4.00
802.11ax HE80	CH087	6385 MHz	MCS 0	0+1 (CDD)	5.51	6.00
802.11ax HE80	CH087	6385 MHz	MCS 0	0+1 (CDD)	3.86	4.00

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH097	6435 MHz	6M	0	3.40	3.50
802.11a	CH105	6475 MHz	6M	0	3.30	3.50
802.11a	CH113	6515 MHz	6M	0	3.50	3.50
802.11a	CH097	6435 MHz	6M	0+1 (CDD)	0.21	0.50
802.11a	CH105	6475 MHz	6M	0+1 (CDD)	0.46	0.50
802.11a	CH113	6515 MHz	6M	0+1 (CDD)	0.27	0.50
802.11ax HE20	CH097	6435 MHz	MCS 0	0+1 (CDD)	0.91	1.00
802.11ax HE20	CH097	6435 MHz	MCS 0	0+1 (CDD)	-8.58	-8.50
802.11ax HE20	CH097	6435 MHz	MCS 0	0+1 (CDD)	-5.23	-5.00
802.11ax HE20	CH097	6435 MHz	MCS 0	0+1 (CDD)	-2.59	-2.50
802.11ax HE20	CH105	6475 MHz	MCS 0	0+1 (CDD)	0.56	1.00
802.11ax HE20	CH105	6475 MHz	MCS 0	0+1 (CDD)	-7.73	-7.50
802.11ax HE20	CH105	6475 MHz	MCS 0	0+1 (CDD)	-4.94	-4.50
802.11ax HE20	CH105	6475 MHz	MCS 0	0+1 (CDD)	-1.94	-1.50
802.11ax HE20	CH113	6515 MHz	MCS 0	0+1 (CDD)	0.88	1.00
802.11ax HE20	CH113	6515 MHz	MCS 0	0+1 (CDD)	-8.68	-8.50
802.11ax HE20	CH113	6515 MHz	MCS 0	0+1 (CDD)	-5.48	-5.00
802.11ax HE20	CH113	6515 MHz	MCS 0	0+1 (CDD)	-2.40	-2.00
802.11ax HE40	CH099	6445 MHz	MCS 0	0+1 (CDD)	2.67	3.00
802.11ax HE40	CH099	6445 MHz	MCS 0	0+1 (CDD)	1.21	1.50
802.11ax HE40	CH107	6485 MHz	MCS 0	0+1 (CDD)	2.11	2.50
802.11ax HE40	CH107	6485 MHz	MCS 0	0+1 (CDD)	1.31	1.50
802.11ax HE40	CH115	6525 MHz	MCS 0	0+1 (CDD)	2.67	3.00
802.11ax HE40	CH115	6525 MHz	MCS 0	0+1 (CDD)	1.15	1.50
802.11ax HE80	CH103	6465 MHz	MCS 0	0+1 (CDD)	5.66	6.00
802.11ax HE80	CH103	6465 MHz	MCS 0	0+1 (CDD)	4.36	4.50
802.11ax HE80	CH119	6545 MHz	MCS 0	0+1 (CDD)	5.61	6.00
802.11ax HE80	CH119	6545 MHz	MCS 0	0+1 (CDD)	4.11	4.50



RF EXPOSURE EVALUATION REPORT

Report No. : FA2N1818-01

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH117	6535 MHz	6M	0	3.80	4.00
802.11a	CH149	6695 MHz	6M	0	3.70	4.00
802.11a	CH181	6855 MHz	6M	0	3.50	3.50
802.11a	CH185	6875 MHz	6M	0	3.00	3.00
802.11a	CH117	6535 MHz	6M	0+1 (CDD)	0.54	1.00
802.11a	CH149	6695 MHz	6M	0+1 (CDD)	0.33	0.50
802.11a	CH181	6855 MHz	6M	0+1 (CDD)	0.21	0.50
802.11a	CH185	6875 MHz	6M	0+1 (CDD)	0.10	0.50
802.11ax HE20	CH117	6535 MHz	MCS 0	0+1 (CDD)	1.31	1.50
802.11ax HE20	CH117	6535 MHz	MCS 0	0+1 (CDD)	-8.00	-8.00
802.11ax HE20	CH117	6535 MHz	MCS 0	0+1 (CDD)	-4.96	-4.50
802.11ax HE20	CH117	6535 MHz	MCS 0	0+1 (CDD)	-1.87	-1.50
802.11ax HE20	CH149	6695 MHz	MCS 0	0+1 (CDD)	1.27	1.50
802.11ax HE20	CH149	6695 MHz	MCS 0	0+1 (CDD)	-7.58	-7.50
802.11ax HE20	CH149	6695 MHz	MCS 0	0+1 (CDD)	-5.34	-5.00
802.11ax HE20	CH149	6695 MHz	MCS 0	0+1 (CDD)	-2.34	-2.00
802.11ax HE20	CH181	6855 MHz	MCS 0	0+1 (CDD)	1.37	1.50
802.11ax HE20	CH181	6855 MHz	MCS 0	0+1 (CDD)	-8.19	-8.00
802.11ax HE20	CH181	6855 MHz	MCS 0	0+1 (CDD)	-5.89	-5.50
802.11ax HE20	CH181	6855 MHz	MCS 0	0+1 (CDD)	-2.94	-2.50
802.11ax HE20	CH185	6875 MHz	MCS 0	0+1 (CDD)	0.74	1.00
802.11ax HE20	CH185	6875 MHz	MCS 0	0+1 (CDD)	-8.04	-8.00
802.11ax HE20	CH185	6875 MHz	MCS 0	0+1 (CDD)	-6.12	-6.00
802.11ax HE20	CH185	6875 MHz	MCS 0	0+1 (CDD)	-2.98	-2.50
802.11ax HE40	CH123	6565 MHz	MCS 0	0+1 (CDD)	2.80	3.00
802.11ax HE40	CH123	6565 MHz	MCS 0	0+1 (CDD)	1.56	2.00
802.11ax HE40	CH147	6685 MHz	MCS 0	0+1 (CDD)	2.77	3.00
802.11ax HE40	CH147	6685 MHz	MCS 0	0+1 (CDD)	1.32	1.50
802.11ax HE40	CH179	6845 MHz	MCS 0	0+1 (CDD)	3.10	3.50
802.11ax HE40	CH179	6845 MHz	MCS 0	0+1 (CDD)	1.04	1.50
802.11ax HE40	CH187	6885 MHz	MCS 0	0+1 (CDD)	3.27	3.50
802.11ax HE40	CH187	6885 MHz	MCS 0	0+1 (CDD)	1.41	1.50
802.11ax HE80	CH135	6625 MHz	MCS 0	0+1 (CDD)	5.67	6.00
802.11ax HE80	CH135	6625 MHz	MCS 0	0+1 (CDD)	4.18	4.50
802.11ax HE80	CH151	6705 MHz	MCS 0	0+1 (CDD)	5.47	5.50
802.11ax HE80	CH151	6705 MHz	MCS 0	0+1 (CDD)	4.48	4.50
802.11ax HE80	CH167	6785 MHz	MCS 0	0+1 (CDD)	5.28	5.50
802.11ax HE80	CH167	6785 MHz	MCS 0	0+1 (CDD)	3.66	4.00
802.11ax HE80	CH183	6865 MHz	MCS 0	0+1 (CDD)	5.87	6.00
802.11ax HE80	CH183	6865 MHz	MCS 0	0+1 (CDD)	4.08	4.50



RF EXPOSURE EVALUATION REPORT

Report No. : FA2N1818-01

Band	Channel	Frequency	Data rate/BW	Ant.	Average power (dBm)	Tuneup (Average power)
802.11a	CH189	6895 MHz	6M	0	4.70	5.00
802.11a	CH209	6995 MHz	6M	0	5.00	5.00
802.11a	CH229	7095 MHz	6M	0	4.50	4.50
802.11a	CH233	7115 MHz	6M	0	4.30	4.50
802.11a	CH189	6895 MHz	6M	0+1 (CDD)	1.21	1.50
802.11a	CH209	6995 MHz	6M	0+1 (CDD)	1.60	2.00
802.11a	CH229	7095 MHz	6M	0+1 (CDD)	1.70	2.00
802.11a	CH233	7115 MHz	6M	0+1 (CDD)	1.24	1.50
802.11ax HE20	CH189	6895 MHz	MCS 0	0+1 (CDD)	1.65	2.00
802.11ax HE20	CH189	6895 MHz	MCS 0	0+1 (CDD)	-7.87	-7.50
802.11ax HE20	CH189	6895 MHz	MCS 0	0+1 (CDD)	-5.14	-5.00
802.11ax HE20	CH189	6895 MHz	MCS 0	0+1 (CDD)	-1.84	-1.50
802.11ax HE20	CH209	6995 MHz	MCS 0	0+1 (CDD)	2.30	2.50
802.11ax HE20	CH209	6995 MHz	MCS 0	0+1 (CDD)	-5.74	-5.50
802.11ax HE20	CH209	6995 MHz	MCS 0	0+1 (CDD)	-3.74	-3.50
802.11ax HE20	CH209	6995 MHz	MCS 0	0+1 (CDD)	-1.14	-1.00
802.11ax HE20	CH229	7095 MHz	MCS 0	0+1 (CDD)	1.80	2.00
802.11ax HE20	CH229	7095 MHz	MCS 0	0+1 (CDD)	-6.53	-6.50
802.11ax HE20	CH229	7095 MHz	MCS 0	0+1 (CDD)	-4.29	-4.00
802.11ax HE20	CH229	7095 MHz	MCS 0	0+1 (CDD)	-1.59	-1.50
802.11ax HE20	CH233	7115 MHz	MCS 0	0+1 (CDD)	2.22	2.50
802.11ax HE20	CH233	7115 MHz	MCS 0	0+1 (CDD)	-6.64	-6.50
802.11ax HE20	CH233	7115 MHz	MCS 0	0+1 (CDD)	-4.78	-4.50
802.11ax HE20	CH233	7115 MHz	MCS 0	0+1 (CDD)	-2.03	-2.00
802.11ax HE40	CH195	6925 MHz	MCS 0	0+1 (CDD)	3.79	4.00
802.11ax HE40	CH195	6925 MHz	MCS 0	0+1 (CDD)	2.82	3.00
802.11ax HE40	CH211	7005 MHz	MCS 0	0+1 (CDD)	4.28	4.50
802.11ax HE40	CH211	7005 MHz	MCS 0	0+1 (CDD)	2.77	3.00
802.11ax HE40	CH227	7085 MHz	MCS 0	0+1 (CDD)	4.24	4.50
802.11ax HE40	CH227	7085 MHz	MCS 0	0+1 (CDD)	2.78	3.00
802.11ax HE80	CH199	6945 MHz	MCS 0	0+1 (CDD)	6.61	7.00
802.11ax HE80	CH199	6945 MHz	MCS 0	0+1 (CDD)	5.84	6.00
802.11ax HE80	CH215	7025 MHz	MCS 0	0+1 (CDD)	7.04	7.50
802.11ax HE80	CH215	7025 MHz	MCS 0	0+1 (CDD)	5.27	5.50

3. Determination of exemption

Per 1.1307(b)(3), (i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

- (A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);
- (B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold Pth (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:

$$P_{th} \text{ (mW)} = ERP_{20cm} (d / 20)^x \text{ for distance } d \leq 20cm$$

$$P_{th} \text{ (mW)} = ERP_{20cm} \text{ for distance } 20cm < d \leq 40cm$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20cm} \sqrt{f}} \right)$$

$ERP_{20cm} \text{ (mW)}$	$0.3 \text{ GHz} \leq f < 1.5 \text{ GHz}:$	$2040 f$
	$1.5 \text{ GHz} \leq f \leq 6 \text{ GHz}:$	3060

- (C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2.$
1.34-30	$3,450 R^2/f^2.$
30-300	$3.83 R^2.$
300-1,500	$0.0128 R^2 f.$
1,500-100,000	$19.2 R^2.$



4. RF Exposure Evaluation

4.1. Standalone assessment

General Note:

1. Pi means the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm.
2. Pth means the exemption threshold power (Pth) according to the § 1.1307(b)(3)(i)(B) formula for fixed, mobile, or portable RF source i.
3. In this report was used Part1.1307(b)(3)(i)(B) perform RF Exposure evaluation
4. The distance of 20cm is for this device.

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum ERP (dBm)	Maximum EIRP (mW)	Maximum ERP (mW)	P _{th}	P _{th} (mW)	Part1.1307 option(b) Threshold (mW)	Part1.1307 option(b) P/P _{th}
WLAN2.4GHz Band	2.00	20.00	22.00	19.85	158.49	96.61	20.00	100.00	3060.000	0.033
WLAN5GHz Band	5.00	21.50	26.50	24.35	446.68	272.27	24.35	272.27	3060.000	0.089
WLAN6GHz Band	5.00	7.50	12.50	10.35	17.78	10.84	10.35	10.84	3060.000	0.004
Bluetooth	2.00	7.00	9.00	6.85	7.94	4.84	7.00	5.01	3060.000	0.002

4.2. Collocated assessment

General Note:

1. Either MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (*Evaluated_k* term) shall be used to determine exemption for simultaneous transmission according to Formula (C.1).
2. The sum of the ratios of the applicable terms for MPE-based and MPE shall be less than 1, to determine WLAN 2.4GHz + WLAN 5GHz + WLAN 6GHz simultaneous transmission exposure compliance.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1 \quad (C.1)$$

<WLAN 2.4GHz + BT>

WLAN 2.4GHz Pi/Pth Ratio	Bluetooth Pi/Pth Ratio	Σ (Pi/Pth Ratio) of WLAN 2.4GHz + Bluetooth
0.033	0.002	0.035

<WLAN 5GHz + BT>

WLAN 5GHz Pi/Pth Ratio	Bluetooth Pi/Pth Ratio	Σ (Pi/Pth Ratio) of WLAN 5GHz + Bluetooth
0.089	0.002	0.091

<WLAN 6GHz + BT>

WLAN 6GHz Pi/Pth Ratio	Bluetooth Pi/Pth Ratio	Σ (Pi/Pth Ratio) of WLAN 5GHz + Bluetooth
0.004	0.002	0.006

<WLAN 2.4GHz + WLAN 5GHz>

WLAN 2.4GHz Pi/Pth Ratio	WLAN 5GHz Pi/Pth Ratio	Σ (Pi/Pth Ratio) of WLAN 2.4GHz + WLAN 5GHz
0.033	0.089	0.122

<WLAN 5GHz + WLAN 6GHz>

WLAN 5GHz Pi/Pth Ratio	WLAN 6GHz Pi/Pth Ratio	Σ (Pi/Pth Ratio) of WLAN 5GHz + WLAN 6GHz
0.089	0.004	0.093

Conclusion:

According to 47 CFR §1.1307, the RF exposure analysis concludes that the RF Exposure is FCC compliant.