

10400.00 11575.00 12750.00

(C)

%RH

Temperature:

Humidity:

9225.00

Vertical



[TestMode: TX mid channel]; [Polarity: Vertical]

Radiated Emission Measurement Project No.: REH Data:#4 2022/10/10 10:00:27 dBuV/m 80.0 FCC Part15 (PK) 70 60 50 40 30 20 10

(MHz)

Polarization:

Power:

Limit: FCC Part15 (PK)

1000.000 2175.00

3350.00

4525.00

5700.00

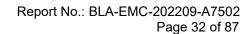
Note:

Site

EUT: Bluetooth Headset M/N: BH22QT21A Mode: TX-M

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2386.500	40.91	-1.11	39.80	74.00	-34.20	peak	
2		4882.000	39.26	4.37	43.63	74.00	-30.37	peak	
3		7323.000	38.80	8.21	47.01	74.00	-26.99	peak	
4		8508.250	39.95	9.13	49.08	74.00	-24.92	peak	
5		9764.000	37.66	11.30	48.96	74.00	-25.04	peak	
6	10	11727.750	39.68	13.77	53.45	74.00	-20.55	peak	
7	*	11727.750	35.55	13.77	49.32	54.00	-4.68	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only





[TestMode: TX high channel]; [Polarity: Horizontal]

Radiated Emission Measurement Project No.: REH Data:#5 2022/10/10 10:04:37 dBuV/m 80.0 FCC Part15 (PK) 70 60 FCC Part15g(AV) 50 40 30 20

10

EUT: Bluetooth Headset

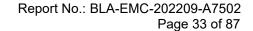
M/N: BH22QT21A Mode: TX-H

Note:

1000.000 2175.00 10400.00 11575.00 12750.00 3350.00 4525.00 5700.00 (MHz) 9225.00 Site Polarization: Horizontal Temperature: (C) Limit: FCC Part15 (PK) Humidity: %RH Power:

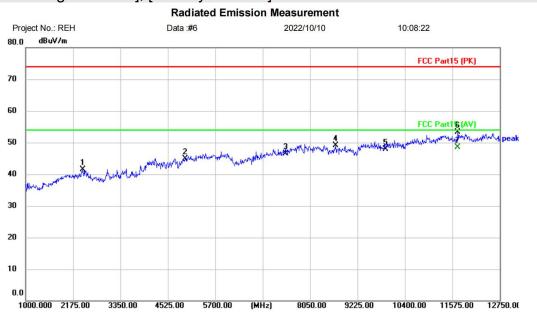
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2445.250	44.40	-1.65	42.75	74.00	-31.25	peak	
2		4960.000	38.85	5.42	44.27	74.00	-29.73	peak	
3		7440.000	38.40	8.48	46.88	74.00	-27.12	peak	
4		8672.750	39.35	9.21	48.56	74.00	-25.44	peak	
5		9920.000	36.76	11.69	48.45	74.00	-25.55	peak	
6	1.3	11751.250	39.31	13.79	53.10	74.00	-20.90	peak	
7	*	11751.250	35.75	13.79	49.54	54.00	-4.46	AVG	

*:Maximum data x:Over limit !:over margin (Reference Only





[TestMode: TX high channel]; [Polarity: Vertical]



Polarization:

Power:

Vertical

Temperature:

Humidity:

(C)

%RH

Limit: FCC Part15 (PK)

EUT: Bluetooth Headset M/N: BH22QT21A Mode: TX-H

Note:

Site

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2421.750	42.91	-1.39	41.52	74.00	-32.48	peak	
2	4960.000	39.45	5.42	44.87	74.00	-29.13	peak	
3	7440.000	38.08	8.48	46.56	74.00	-27.44	peak	
4	8684.500	39.83	9.21	49.04	74.00	-24.96	peak	
5	9920.000	36.20	11.69	47.89	74.00	-26.11	peak	
6	11704.250	39.62	13.77	53.39	74.00	-20.61	peak	
7 *	11704.250	34.67	13.77	48.44	54.00	-5.56	AVG	

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}



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16 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS

Test Standard	47 CFR Part 15, Subpart C 15.247					
Test Method	ANSI C63.10 (2013) Section 6.10.5					
Test Mode (Pre-Scan)	TX					
Test Mode (Final Test)	TX					
Tester	Jozu					
Temperature	25℃					
Humidity	60%					

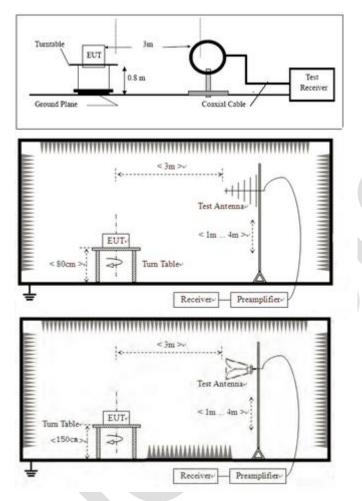
16.1 LIMITS

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.



16.2 BLOCK DIAGRAM OF TEST SETUP



16.3 PROCEDURE

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.



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h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.

j. Repeat above procedures until all frequencies measured was complete.

Remark 1: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.





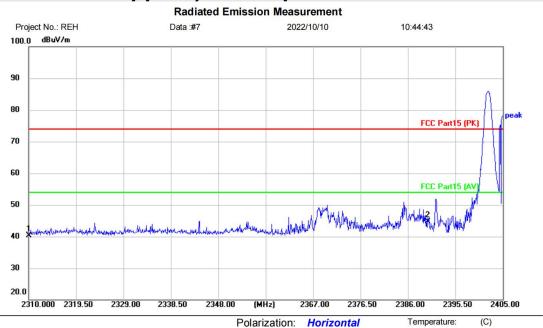
Humidity:

%RH

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16.4 TEST DATA

[TestMode: TX low channel]; [Polarity: Horizontal]



Limit: FCC Part15 (PK) EUT: Bluetooth Headset M/N: BH22QT21A

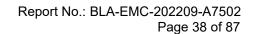
Mode: TX-L Note:

Site

No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2310.000	44.64	-4.27	40.37	74.00	-33.63	peak	
2 *	2390.000	48.49	-3.82	44.67	74.00	-29.33	peak	

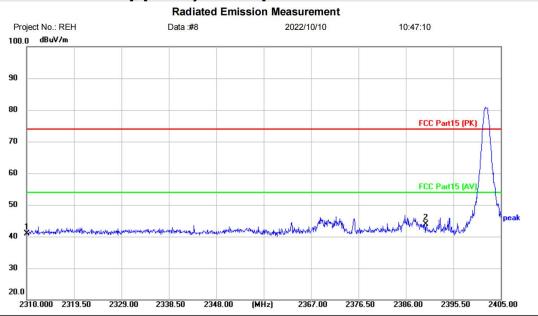
Power:

*:Maximum data x:Over limit !:over margin (Reference Only





[TestMode: TX low channel]; [Polarity: Vertical]



Polarization:

Power:

Vertical

Temperature:

Humidity:

(C)

%RH

Limit: FCC Part15 (PK)

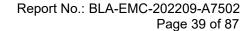
Mode: TX-L Note:

Site

EUT: Bluetooth Headset
M/N: BH22QT21A

No. MI	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2310.000	45.22	-4.27	40.95	74.00	-33.05	peak	
2 *	2390.000	47.82	-3.82	44.00	74.00	-30.00	peak	

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}



Temperature:

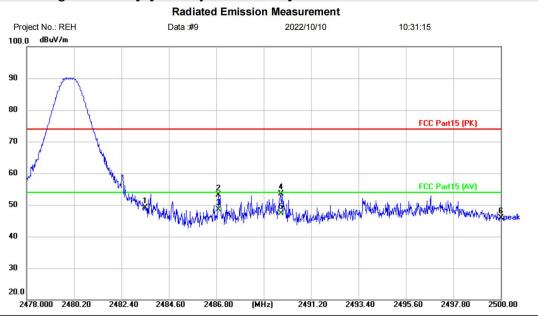
Humidity:

(C)

%RH



[TestMode: TX high channel]; [Polarity: Horizontal]



Polarization: Horizontal

Limit: FCC Part15 (PK)

EUT: Bluetooth Headset M/N: BH22QT21A

Mode: TX-H

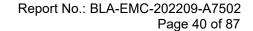
Note:

Site

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2483.500	53.05	-3.96	49.09	74.00	-24.91	peak	
2		2486.910	56.99	-3.98	53.01	74.00	-20.99	peak	
3	*	2486.910	52.47	-3.98	48.49	54.00	-5.51	AVG	
4		2489.792	57.53	-3.97	53.56	74.00	-20.44	peak	
5		2489.792	51.28	-3.97	47.31	54.00	-6.69	AVG	
6		2500.000	49.81	-4.00	45.81	74.00	-28.19	peak	

Power:

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}

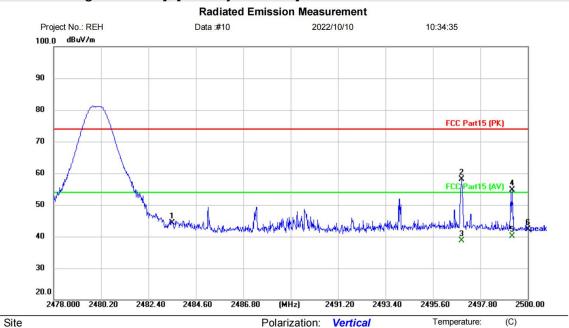


Humidity:

%RH



[TestMode: TX high channel]; [Polarity: Vertical]



Limit: FCC Part15 (PK) EUT: Bluetooth Headset

M/N: BH22QT21A Mode: TX-H

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	2483.500	48.32	-3.96	44.36	74.00	-29.64	peak	
2	2496.942	62.10	-3.99	58.11	74.00	-15.89	peak	
3	2496.942	42.67	-3.99	38.68	54.00	-15.32	AVG	
4	2499.274	58.71	-4.00	54.71	74.00	-19.29	peak	
5 *	2499.274	44.14	-4.00	40.14	54.00	-13.86	AVG	
6	2500.000	46.31	-4.00	42.31	74.00	-31.69	peak	

Power:

*:Maximum data x:Over limit !:over margin \(\text{Reference Only}



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17 CONDUCTED BAND EDGES MEASUREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247					
Test Method	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2					
Test Mode (Pre-Scan)	TX					
Test Mode (Final Test)	TX					
Tester	Jozu					
Temperature	25℃					
Humidity	60%					

17.1 LIMITS

Limit:

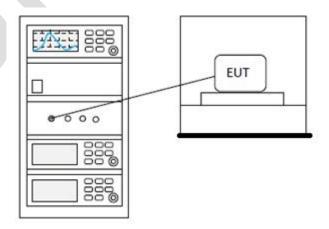
spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the

restricted bands, as defined in §15.205(a), must also comply with the radiated

emission limits specified in §15.209(a) (see §15.205(c)).

In any 100 kHz bandwidth outside the frequency band in which the spread

17.2 BLOCK DIAGRAM OF TEST SETUP





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17.3 TEST DATA





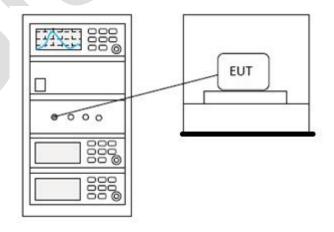
18 DWELL TIME

Test Standard	47 CFR Part 15, Subpart C 15.247					
Test Method	ANSI C63.10 (2013) Section 7.8.4					
Test Mode (Pre-Scan)	TX					
Test Mode (Final Test)	TX					
Tester	Jozu					
Temperature	25℃					
Humidity	60%					

18.1 LIMITS

Frequency(MHz)	Limit
	0.4S within a 20S period(20dB
002.029	bandwidth<250kHz)
902-928	0.4S within a 10S period(20dB
	bandwidth≥250kHz)
	0.4S within a period of 0.4S multiplied by the
2400-2483.5	number
	of hopping channels
5725-5850	0.4S within a 30S period

18.2 BLOCK DIAGRAM OF TEST SETUP

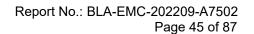




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18.3 TEST DATA







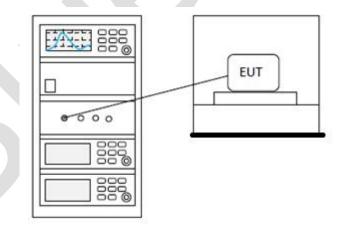
19 HOPPING CHANNEL NUMBER

Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.3				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Jozu				
Temperature	25℃				
Humidity	60%				

19.1 LIMITS

Frequency range(MHz)	Number of hopping channels (minimum)		
002.020	50 for 20dB bandwidth <250kHz		
902-928	25 for 20dB bandwidth ≥250kHz		
2400-2483.5	15		
5725-5850	75		

19.2 BLOCK DIAGRAM OF TEST SETUP



19.3 TEST DATA



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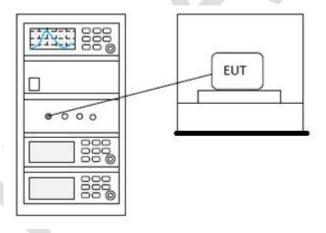
20 CARRIER FREQUENCIES SEPARATION

Test Standard	47 CFR Part 15, Subpart C 15.247				
Test Method	ANSI C63.10 (2013) Section 7.8.2				
Test Mode (Pre-Scan)	TX				
Test Mode (Final Test)	TX				
Tester	Jozu				
Temperature	25℃				
Humidity	60%				

20.1 LIMITS

Limit: 2/3 of the 20dB bandwidth base on the transmission power is less than 0.125W

20.2 BLOCK DIAGRAM OF TEST SETUP



20.3 TEST DATA



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21 APPENDIX

Maximum Conducted Output Power

Condition	Mode	Frequency	Antenna	Conducted Power	Limit	Verdict
		(MHz)		(dBm)	(dBm)	
NVNT	1-DH1	2402	Ant1	-4.768	21	Pass
NVNT	1-DH1	2441	Ant1	-5.029	21	Pass
NVNT	1-DH1	2480	Ant1	-4.239	21	Pass
NVNT	2-DH1	2402	Ant1	-3.921	21	Pass
NVNT	2-DH1	2441	Ant1	-4.3	21	Pass
NVNT	2-DH1	2480	Ant1	-3.383	21	Pass

Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1





Power NVNT 1-DH1 2480MHz Ant1



Power NVNT 2-DH1 2402MHz Ant1





Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



