

FCC RADIO TEST REPORT

FCC ID: 2A38HCD60RBTEB

Product : PERSONAL BLUETOOTH CD PLAYER
WITH FM RADIO

Trade Mark: BRAND,JENSEN

Model Name : CD-60R-BTEB

CD-60R-BTEB, CD-105TX-BTEB,
DS105TX-BF, CD-60R-BTXXXXX

Family Model : (Where XXXXX denote any printable
characters in the ASCII Standard
Character Table to represent variances in
cosmetics or buyers)

Report No. : S23052902101003

Prepared for

Jenmart Industrial (HK) Co., Limited
Units A&B, 15/F, Neich Tower, 128 Gloucester Road, Wanchai,
Hong Kong

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name : Jenmart Industrial (HK) Co., Limited
Address : Units A&B, 15/F, Neich Tower, 128 Gloucester Road, Wanchai, Hong Kong
Manufacture's Name : Dongguan City WangniudunYinghui Electronics Factory
Address : ChijiaoluduanZhenzhong Road, Wangniudun Town, Dongguan City, China
Product description
Product name : PERSONAL BLUTOOTH CD PLAYER WITH FM RADIO
Model and/or type reference : CD-60R-BTEB
Family Model : CD-60R-BTEB, CD-105TX-BTEB, DS105TX-BF, CD-60R-BTXXXXXX (Where XXXXX denote any printable characters in the ASCII Standard Character Table to represent variances in cosmetics or buyers)
Rating(s) : DC 5V 1A
Sample number : S230529021001
Standards : FCC 47 CFR Part 15, Subpart C §15.239

Test procedure ANSI C63.10-2013

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test :
Date (s) of performance of tests : May 29, 2023 ~ Jul 21, 2023
Date of Issue : Jul. 27, 2023
Test Result : **Pass**

Testing Engineer : Gavan Zhang
 (Gavan Zhang)

Authorized Signatory : Alex
 (Alex Li)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15, Subpart C (15.239)			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	Pass	
15.203	Antenna Requirement	Pass	
15.239	Radiated Spurious Emission	Pass	
15.239	20dB Bandwidth	Pass	
15.205 15.239	Spurious Emission in Restricted Band	Pass	

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd
 Add. : 1/F, Building E, Fenda Science Park, Sanwei Community,Xixiang Street
 Bao'an District, Shenzhen 518126 P.R. China
 FCC FRN Registration No.: 463705; IC Registration No.:9270A-1
 CNAS Registration No.:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$
8	Occupied bandwidth	$\pm 3.7\text{dB}$

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	
Trade Name	BRAND,JENSEN	
FCC ID	2A38HCD60RBTEB	
Model Name	CD-60R-BTEB	
Family Model	CD-60R-BTEB, CD-105TX-BTEB, DS105TX-BF, CD-60R-BTXXXXX (Where XXXXX denote any printable characters in the ASCII Standard Character Table to represent variances in cosmetics or buyers)	
Model Difference	All models are the same circuit and RF module, except the model name	
Product Description	The EUT is a PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	
	Product Type	Low Power Communication Device Transmitter
	Operation Frequency:	88.5-102.9MHz
	Modulation Type:	FM
	Number Of Channel	3CH.
	Antenna Designation:	FM Antenna
	Antenna Gain(Peak)	0 dBi
	Field Strength:	43.35 dBuV/m
Adapter	N/A	
Battery	N/A	
Power supply	DC 5V 1A	
Hard Ware Version	V1.0	
Firmware version	V1.1	
Soft Ware Version	V.17	

Note:

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

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Carrier Frequency and Channel list:

Channel	Frequency(MHz)
1	88.5
2	93.7
3	102.9

Pretest Mode	Description
Mode 1	88.5MHz
Mode 2	93.7MHz
Mode 3	102.9MHz

For Conducted Emission	
Final Test Mode	Description
Mode 1	88.5MHz

Note: Three kinds of frequency (88.5MHz, 93.7MHz, 102.9MHz) has been tested, but and the worst result was report.

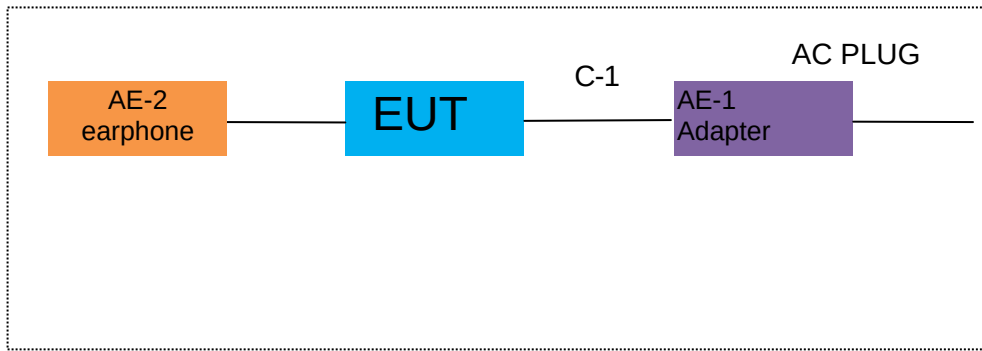
For Radiated Emission	
Final Test Mode	Description
Mode 1	88.5MHz
Mode 2	93.7MHz
Mode 3	102.9MHz

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) During testing, the EUT was actively playing music set to its maximum audio volume in order to generate the worst case emissions (e.g. to generate the maximum bandwidth during bandwidth test). No test tones were used for testing. The tuning range of the EUT was manually verified and the conclusion is that it only works at selected channels within 88.5-102.9MHz, not below and not above this range.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

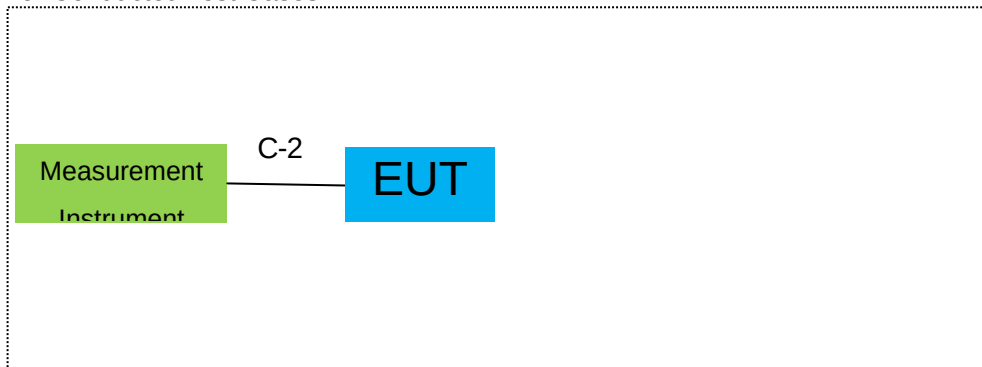
For AC Conducted Emission Mode



For Radiated Test Cases



For Conducted Test Cases



Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
AE-1	Adapter	N/A	N/A	N/A	Peripherals
AE-2	earphone	N/A	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	Power Cable	NO	NO	0.6m
C-2	RF Cable	YES	NO	0.1m

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	N9020A	MY49100060	2023.05.29	2024.05.28	1 year
2	Test Receiver	R&S	ESPI	101318	2023.05.29	2024.05.28	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2023.03.27	2024.03.26	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2023.05.06	2026.05.05	3 year
5	Horn Antenna	EM	EM-AH-10180	2011071402	2022.03.31	2025.03.30	3 year
6	Amplifier	EMC	EMC051835SE	980246	2023.05.29	2024.05.28	1 year
7	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2022.06.17	2025.06.16	3 year
8	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2022.06.17	2025.06.16	3 year
9	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

AC Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2023.03.27	2024.03.26	1 year
2	LISN	R&S	ENV216	101313	2023.03.27	2024.03.26	1 year
3	LISN	SCHWARZBECK	NNLK 8129	8129245	2023.03.27	2024.03.26	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2023.05.06	2026.05.05	3 year
5	Test Cable (9KHz-30MHz)	N/A	C01	N/A	2023.05.06	2026.05.05	3 year
6	Test Cable (9KHz-30MHz)	N/A	C02	N/A	2023.05.06	2026.05.05	3 year
7	Test Cable (9KHz-30MHz)	N/A	C03	N/A	2023.05.06	2026.05.05	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Aux Equipment & Test Cable which is scheduled for calibration every 2 or 3 years.

3. ANTENNA REQUIREMENT

3.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

3.2 EUT ANTENNA

The EUT antenna is permanent attached spring antenna. It comply with the standard requirement.

3.3 CONDUCTED EMISSION MEASUREMENT

3.3.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56*	56-46*
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. *Decreases with the logarithm of the frequency
2. The lower limit shall apply at the transition frequencies
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

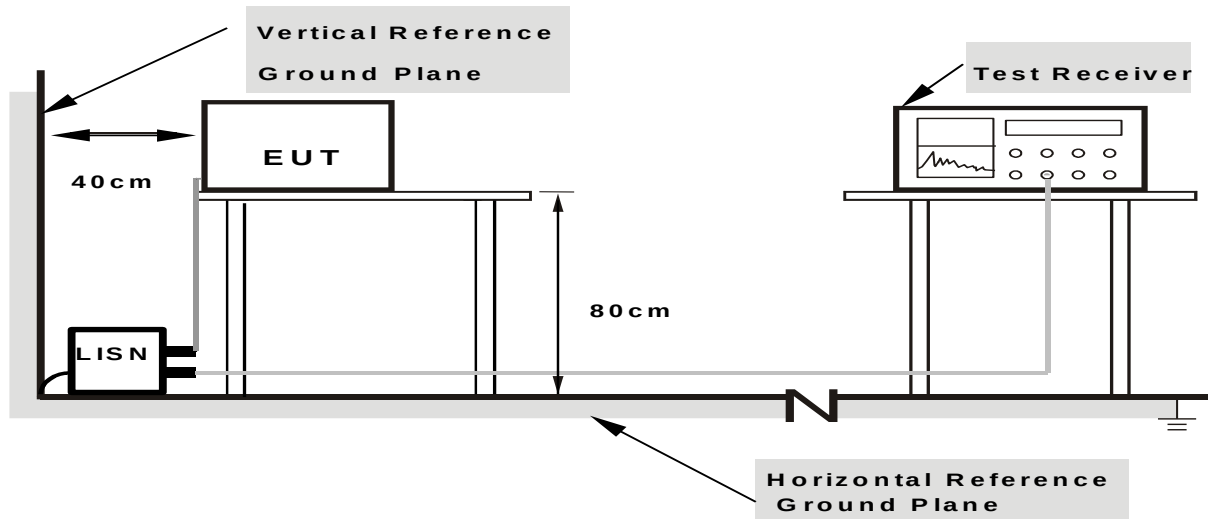
3.3.2 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.3.3 DEVIATION FROM TEST STANDARD

No deviation

3.3.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

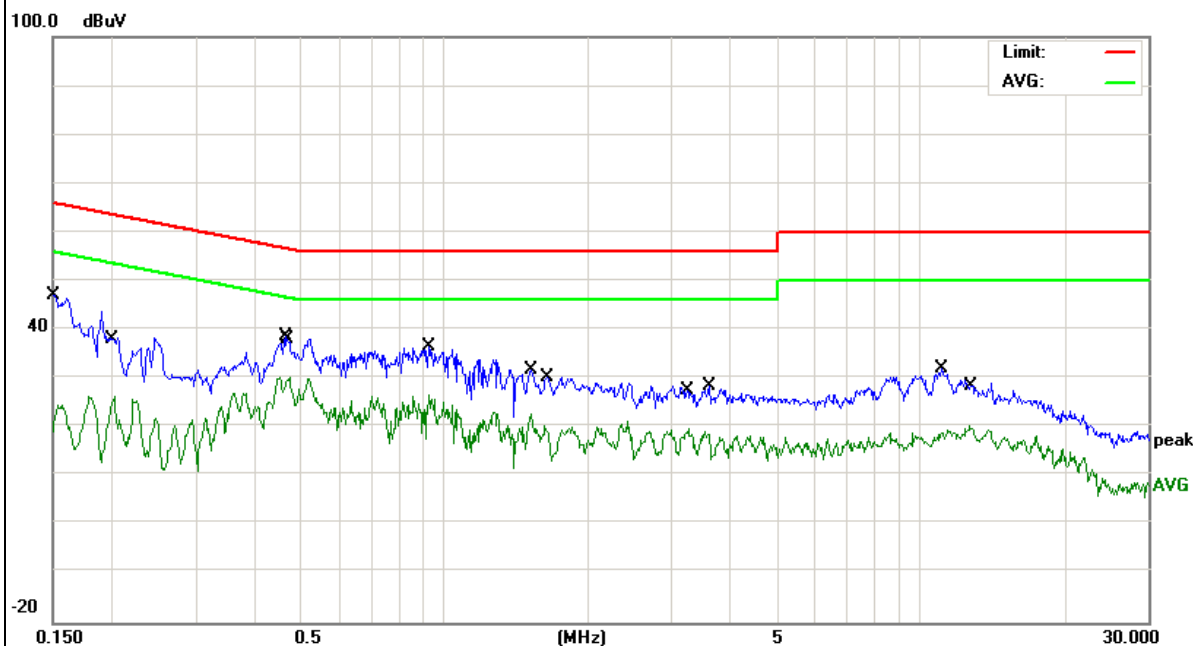
3.2.5 TEST RESULT

EUT :	PERSONAL BLUTOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5V from adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1500	37.25	9.93	47.18	66.00	-18.82	QP
0.2020	16.24	10.03	26.27	53.53	-27.26	AVG
0.4620	28.15	10.57	38.72	56.66	-17.94	QP
0.4711	19.62	10.59	30.21	46.49	-16.28	AVG
0.9260	25.03	11.52	36.55	56.00	-19.45	QP
0.9260	15.16	11.52	26.68	46.00	-19.32	AVG
1.5220	9.95	12.70	22.65	46.00	-23.35	AVG
1.6377	17.42	12.94	30.36	56.00	-25.64	QP
3.2540	10.17	9.67	19.84	46.00	-26.16	AVG
3.5900	18.76	9.67	28.43	56.00	-27.57	QP
11.0616	22.39	9.69	32.08	60.00	-27.92	QP
12.6820	10.53	9.70	20.23	50.00	-29.77	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

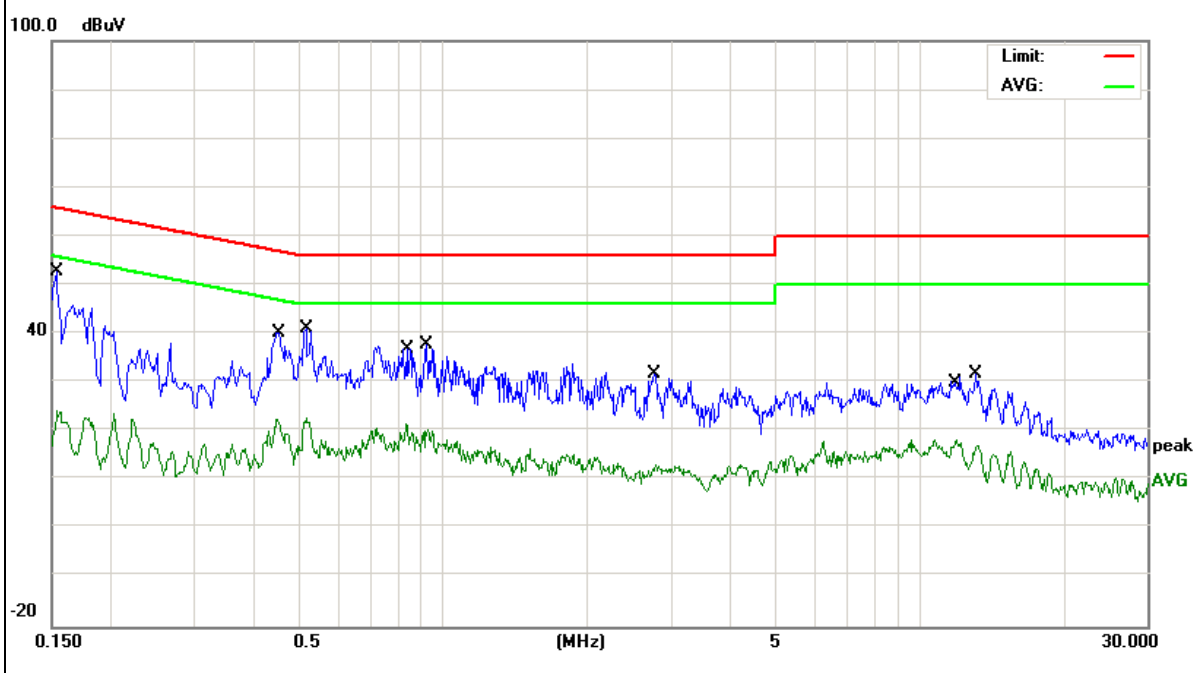


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5V from adapter AC 120V/60Hz	Test Mode :	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1539	42.83	9.93	52.76	65.78	-13.02	QP
0.1539	13.28	9.93	23.21	55.78	-32.57	AVG
0.4460	11.95	10.55	22.50	46.95	-24.45	AVG
0.4500	29.58	10.55	40.13	56.87	-16.74	QP
0.5140	30.44	10.67	41.11	56.00	-14.89	QP
0.5140	12.05	10.67	22.72	46.00	-23.28	AVG
0.8337	10.16	11.32	21.48	46.00	-24.52	AVG
0.9220	26.16	11.50	37.66	56.00	-18.34	QP
2.7700	22.11	9.67	31.78	56.00	-24.22	QP
2.7940	3.37	9.67	13.04	46.00	-32.96	AVG
11.9496	8.64	9.70	18.34	50.00	-31.66	AVG
13.1136	21.93	9.70	31.63	60.00	-28.37	QP

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.4 RADIATED EMISSION MEASUREMENT

3.4.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/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

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.239)

Frequency of Emission (MHz)	Field Strength of fundamental (dBuV/m)	
88-108	Peak	AVG
	68	48

Notes:

- (1) Fcc part15.239 (b) The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in Section 15.35 for limiting peak emissions apply.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.4.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

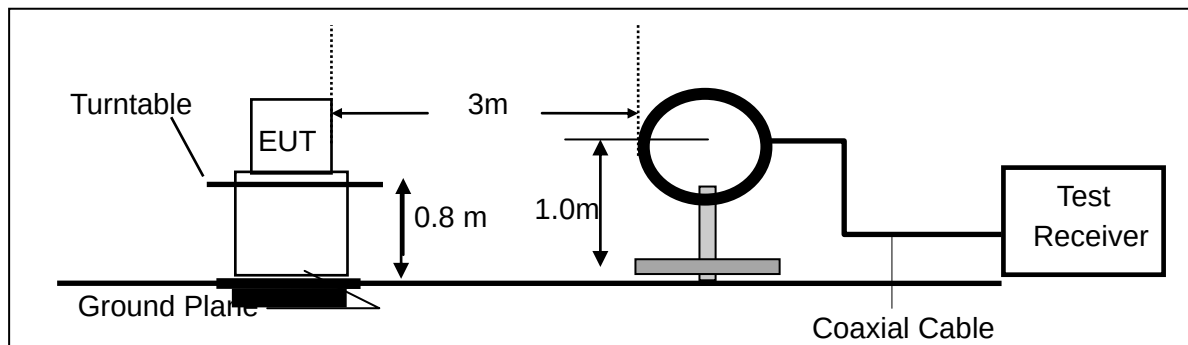
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

3.4.3 DEVIATION FROM TEST STANDARD

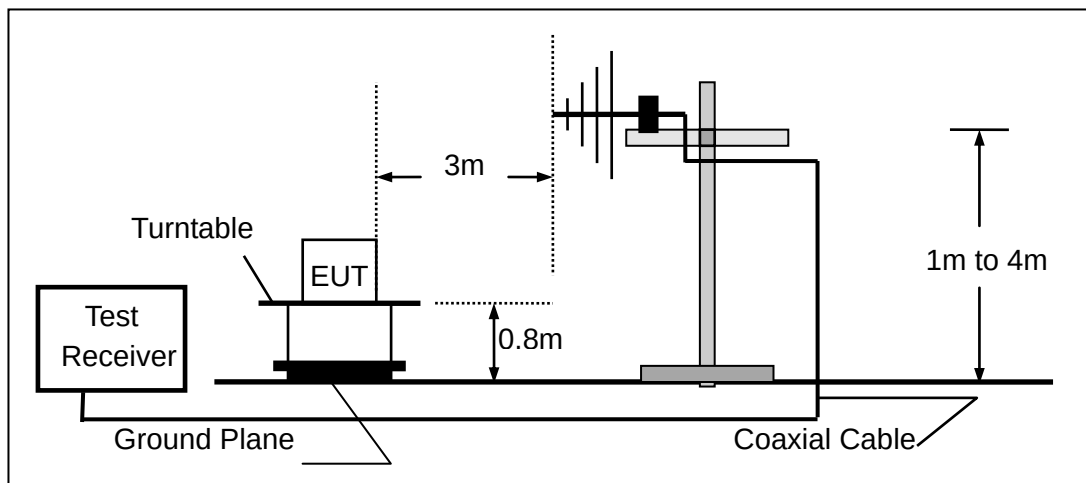
No deviation

3.4.4 TEST SETUP

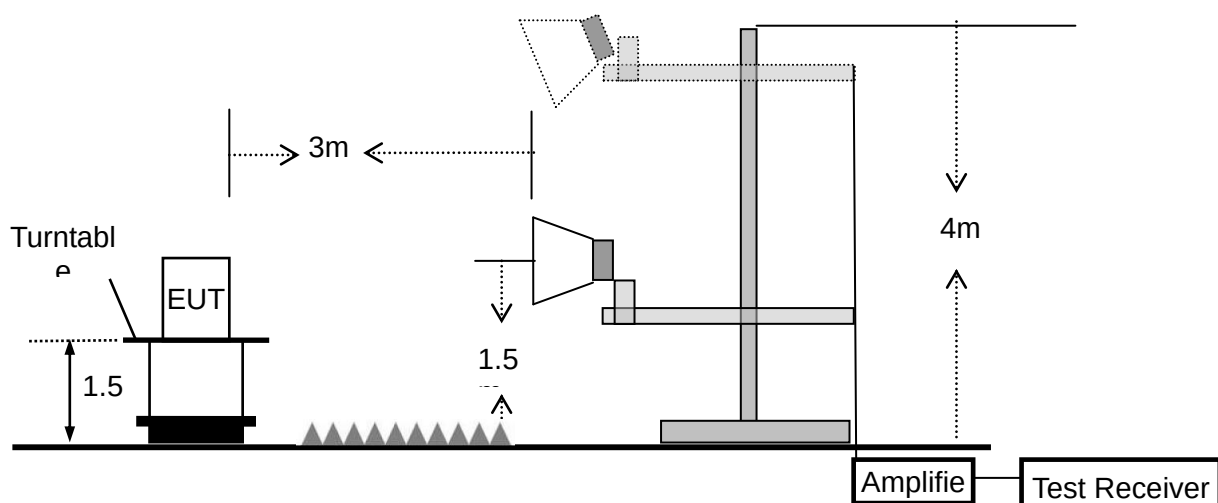
(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz



3.4.5 TEST RESULTS (BLOW 30MHz)

EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name. :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

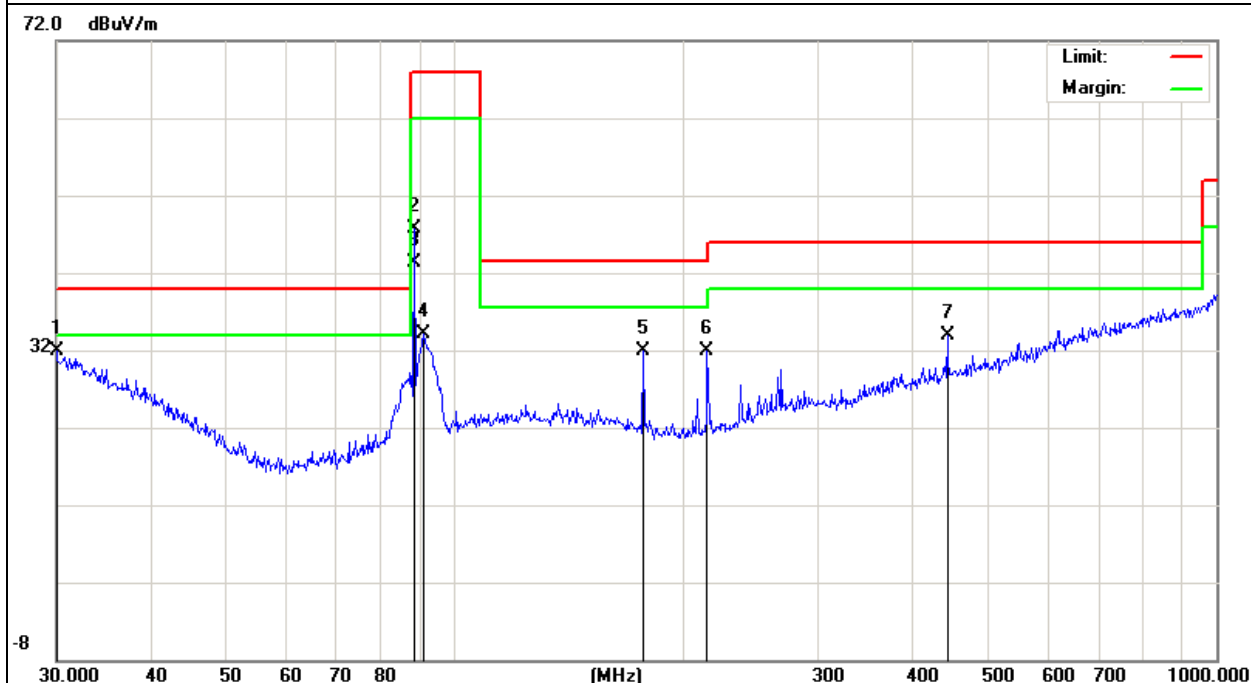
3.4.6 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	88.5MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
30.0000	5.51	26.47	31.98	40.00	-8.02	QP
88.3421	31.20	16.51	47.71	68.00	-20.29	peak
88.3421	26.84	16.51	43.35	48.00	-4.65	AVG
90.8554	17.29	16.83	34.12	68.00	-33.88	QP
176.8878	14.81	17.11	31.92	43.50	-11.58	QP
214.5143	15.08	16.79	31.87	43.50	-11.63	QP
443.2943	9.77	24.04	33.81	46.00	-12.19	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

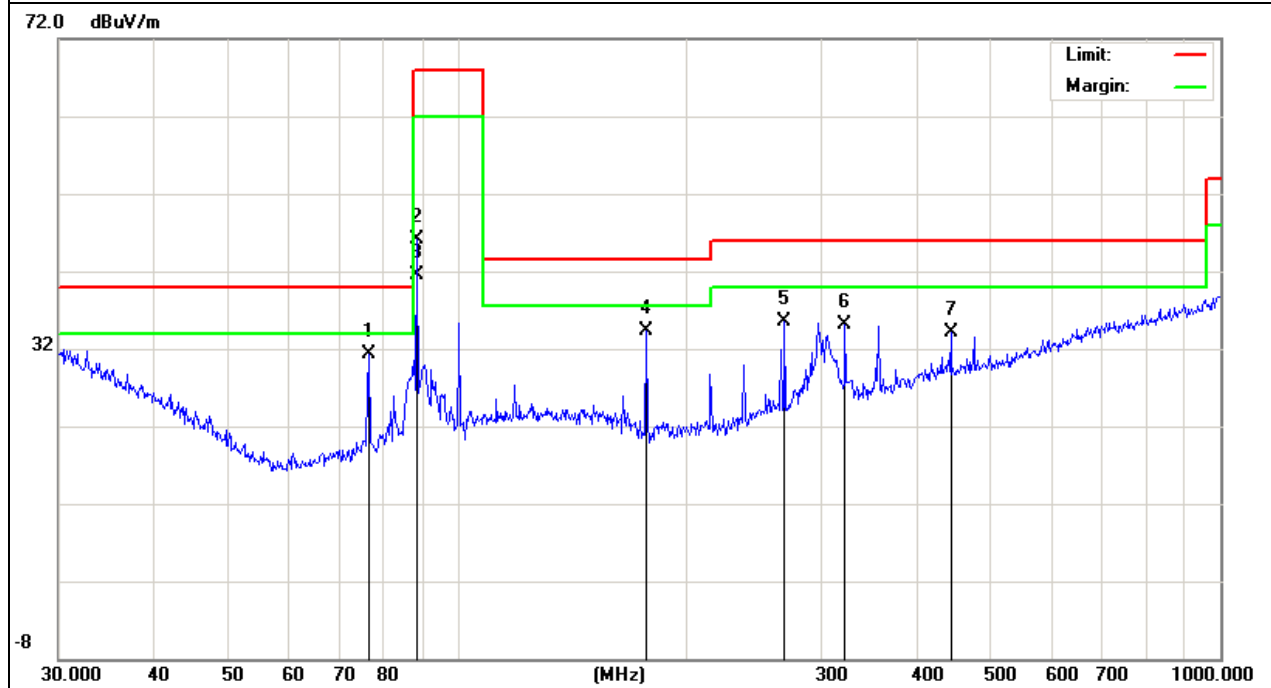


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	88.5MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
76.5121	16.46	14.75	31.21	40.00	-8.79	QP
88.3421	29.66	16.51	46.17	68.00	-21.83	peak
88.3421	24.95	16.51	41.46	48.00	-6.54	AVG
176.8874	17.17	17.11	34.28	43.50	-9.22	QP
268.4852	15.83	19.72	35.55	46.00	-10.45	QP
322.1886	14.52	20.56	35.08	46.00	-10.92	QP
443.2943	10.08	24.04	34.12	46.00	-11.88	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

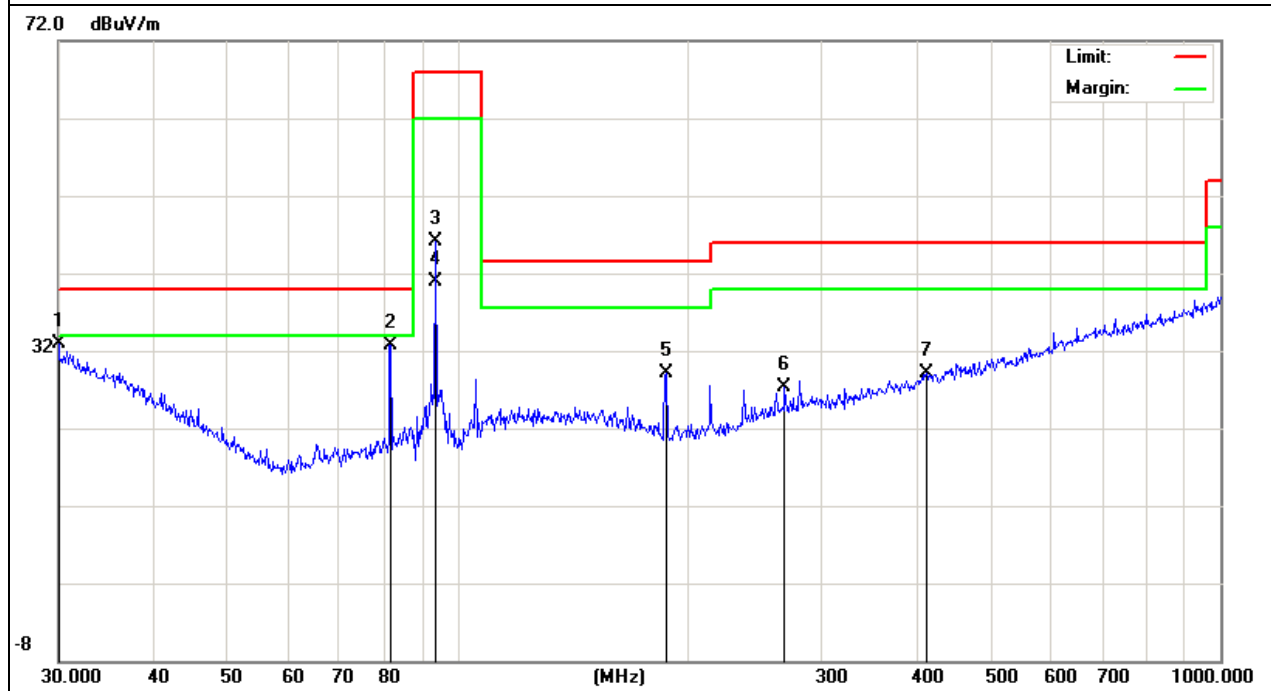


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	93.7MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
30.0000	6.53	26.47	33.00	40.00	-7.00	QP
81.7831	17.10	15.63	32.73	40.00	-7.27	QP
93.7685	29.00	17.13	46.13	68.00	-21.87	peak
93.7685	23.85	17.13	40.98	48.00	-7.02	AVG
187.7530	12.51	16.55	29.06	43.50	-14.44	QP
268.4852	7.58	19.72	27.30	46.00	-18.70	QP
411.8240	5.56	23.47	29.03	46.00	-16.97	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

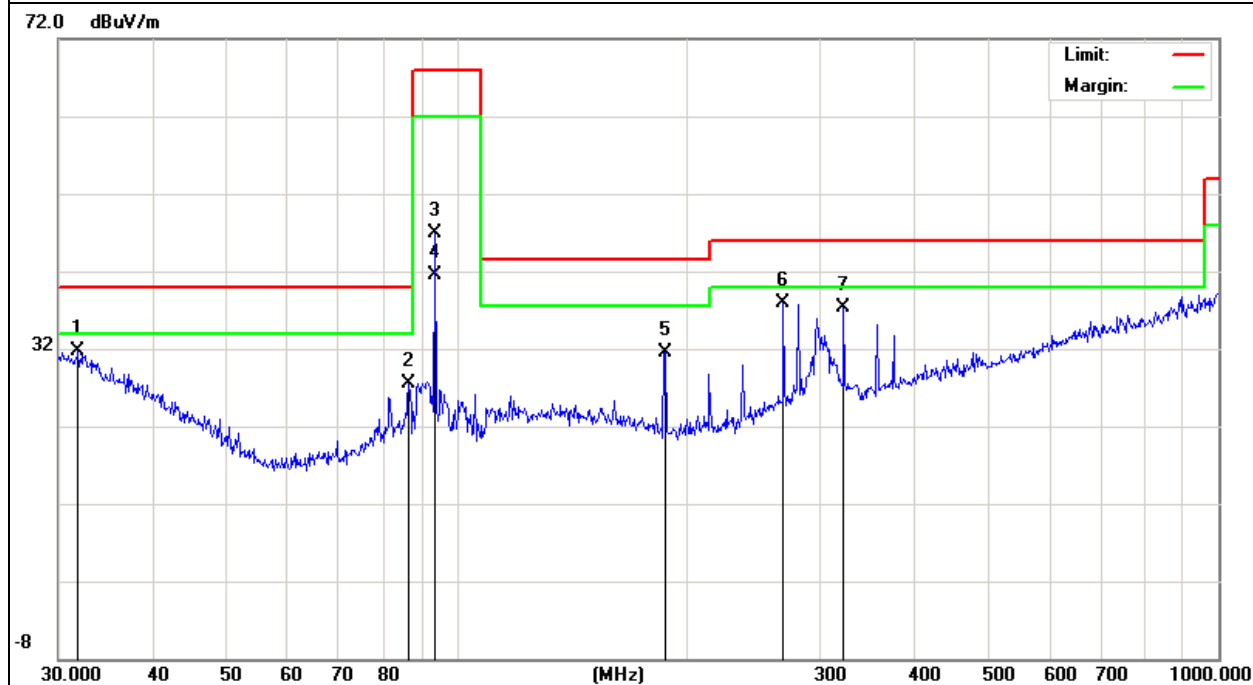


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	93.7MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
31.8427	6.17	25.45	31.62	40.00	-8.38	QP
86.5027	11.15	16.28	27.43	40.00	-12.57	QP
93.7685	29.69	17.13	46.82	68.00	-21.18	peak
93.7685	24.36	17.13	41.49	48.00	-6.51	AVG
187.7530	14.95	16.55	31.50	43.50	-12.00	QP
268.4852	18.21	19.72	37.93	46.00	-8.07	QP
322.1886	16.74	20.56	37.30	46.00	-8.70	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

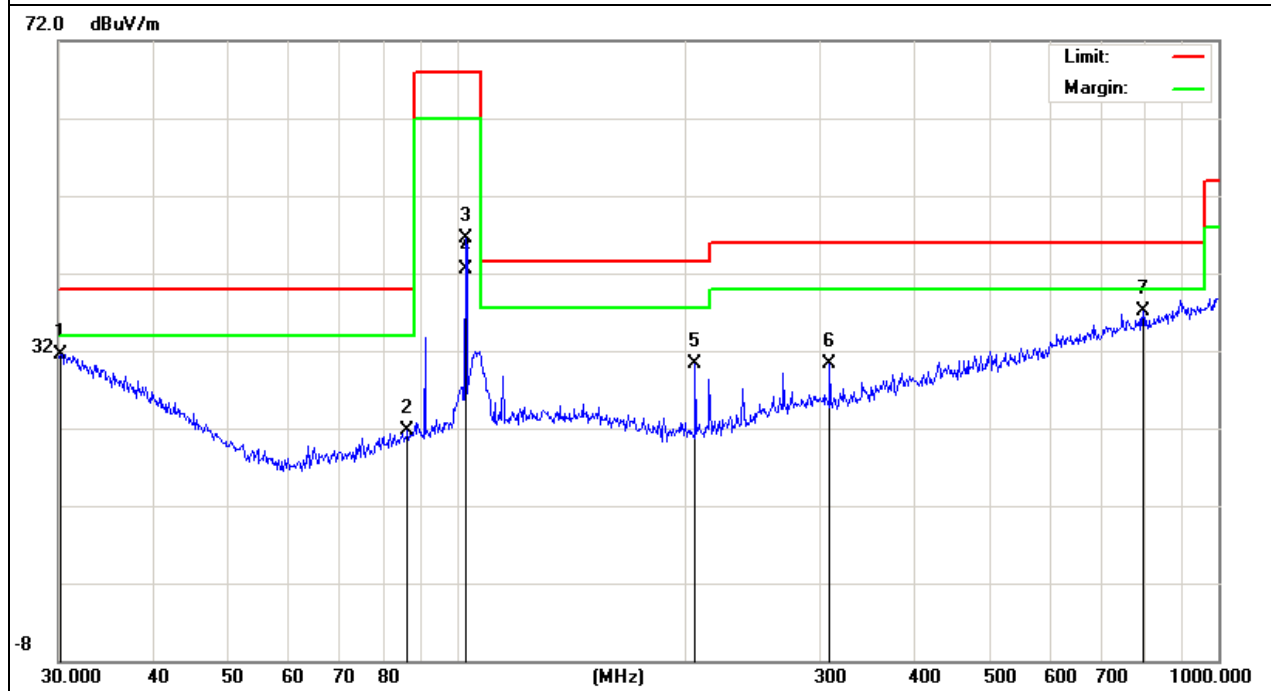


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	102.9MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
30.2110	5.24	26.35	31.59	40.00	-8.41	QP
86.2001	5.56	16.23	21.79	40.00	-18.21	QP
102.7192	28.54	17.91	46.45	68.00	-21.55	peak
102.7192	24.63	17.91	42.54	48.00	-5.46	AVG
205.6750	13.85	16.52	30.37	43.50	-13.13	QP
308.9125	10.06	20.31	30.37	46.00	-15.63	QP
796.1830	7.61	29.50	37.11	46.00	-8.89	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

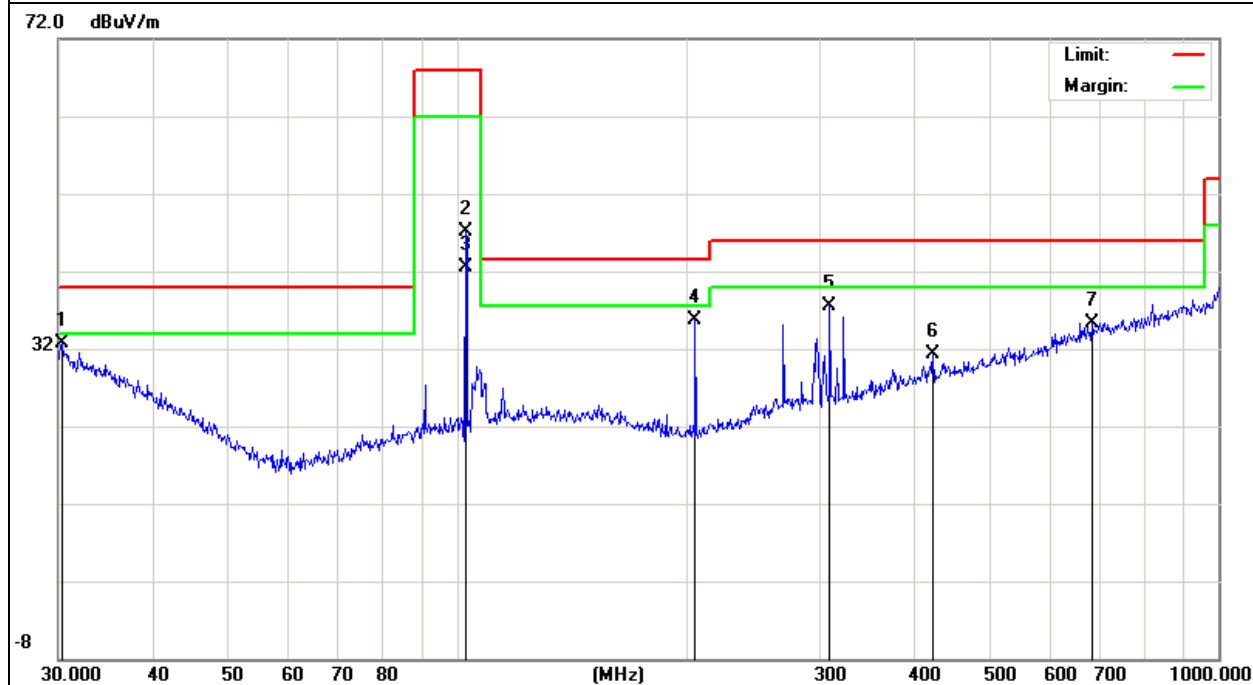


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	102.9MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
30.3170	6.35	26.29	32.64	40.00	-7.36	QP
102.7192	29.11	17.91	47.02	68.00	-20.98	peak
102.7192	24.68	17.91	42.59	48.00	-5.41	AVG
205.6750	19.21	16.52	35.73	43.50	-7.77	QP
308.9125	17.29	20.31	37.60	46.00	-8.40	QP
422.0577	7.58	23.68	31.26	46.00	-14.74	QP
682.3482	7.68	27.66	35.34	46.00	-10.66	QP

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

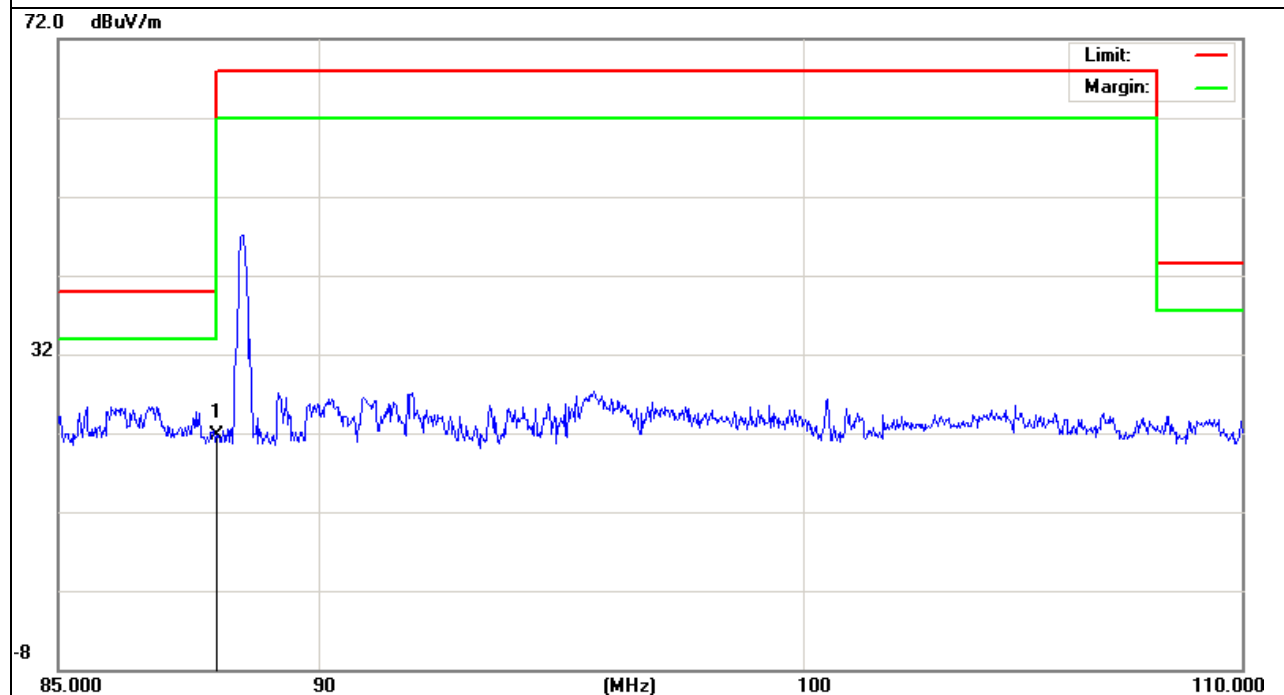


3.4.7 TEST RESULTS (BAND EDGE EMISSION)

EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	88.5MHz	Polarization :	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
88.0000	5.25	16.48	21.73	40.00	-18.27	QP

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

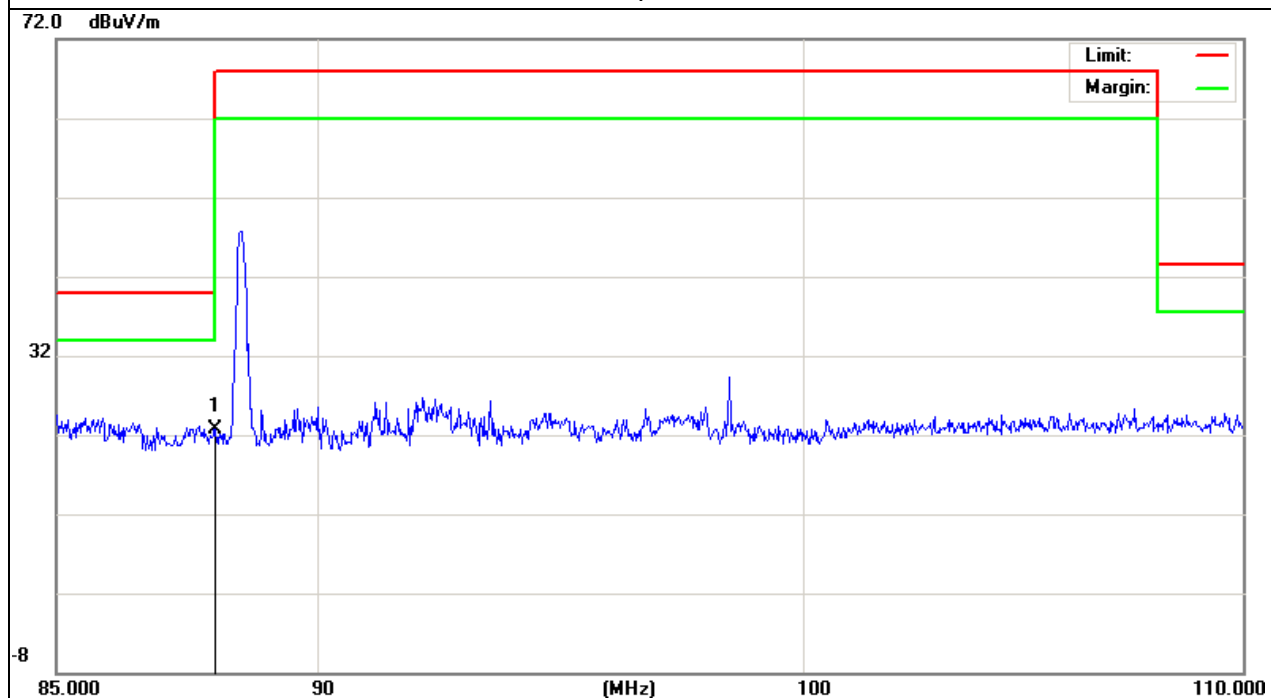


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	88.5MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
88.0000	6.28	16.48	22.76	40.00	-17.24	QP

Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

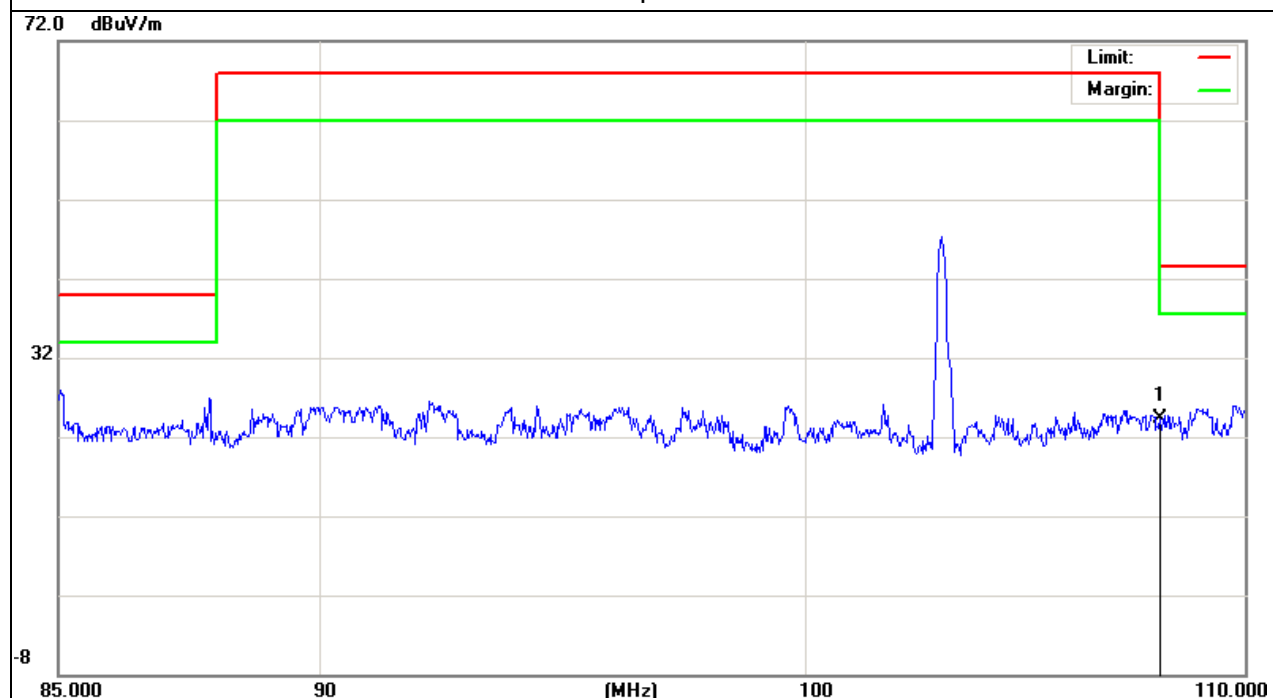


EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	102.9MHz	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
108.0000	6.07	18.23	24.30	43.50	-19.20	QP

Remark:

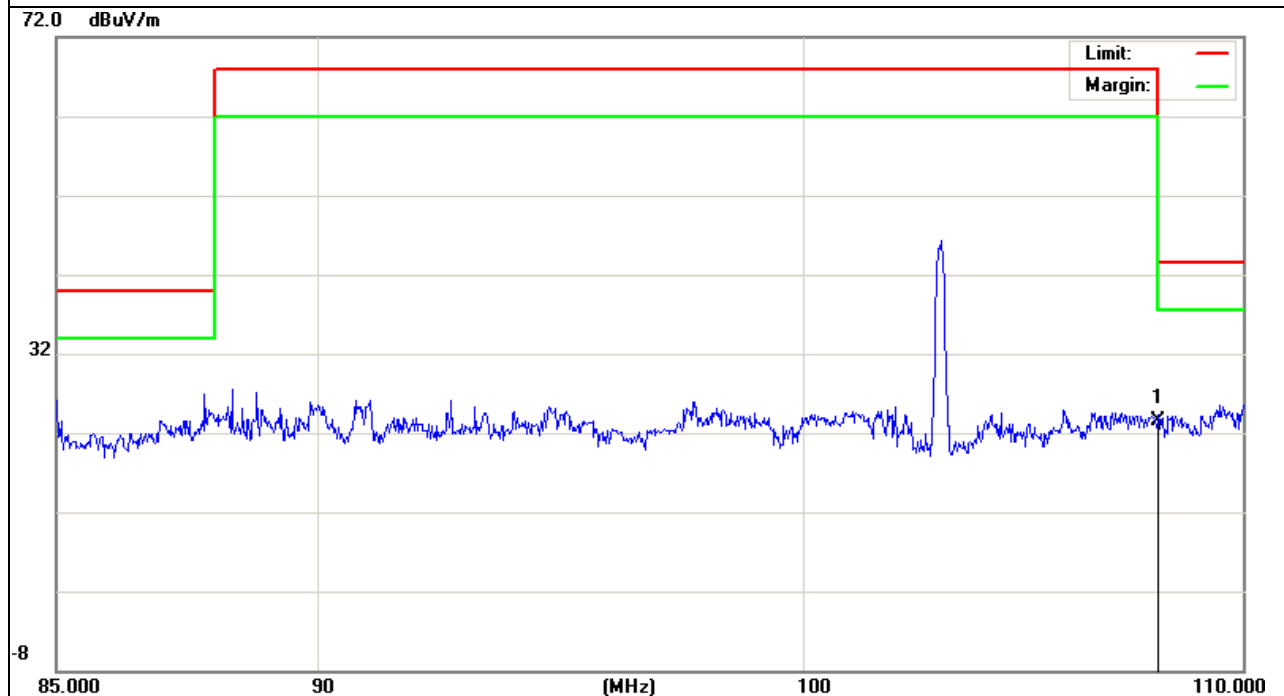
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 5.0V
Test Mode :	102.9MHz	Polarization :	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
108.0000	5.36	18.23	23.59	43.50	-19.91	

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



4. 20DB BANDWIDTH TEST

4.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting : RBW= 10KHz, VBW $\geq$ RBW, Sweep time = Auto.

4.2 DEVIATION FROM STANDARD

No deviation.

4.3 TEST SETUP

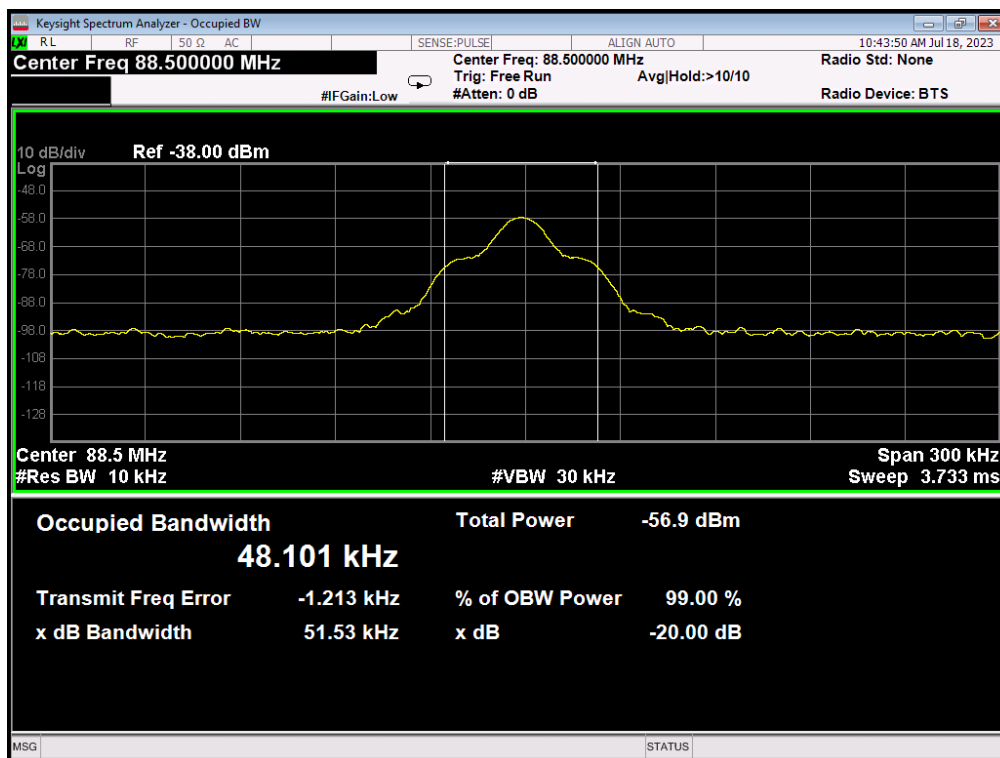


4.4 TEST RESULTS

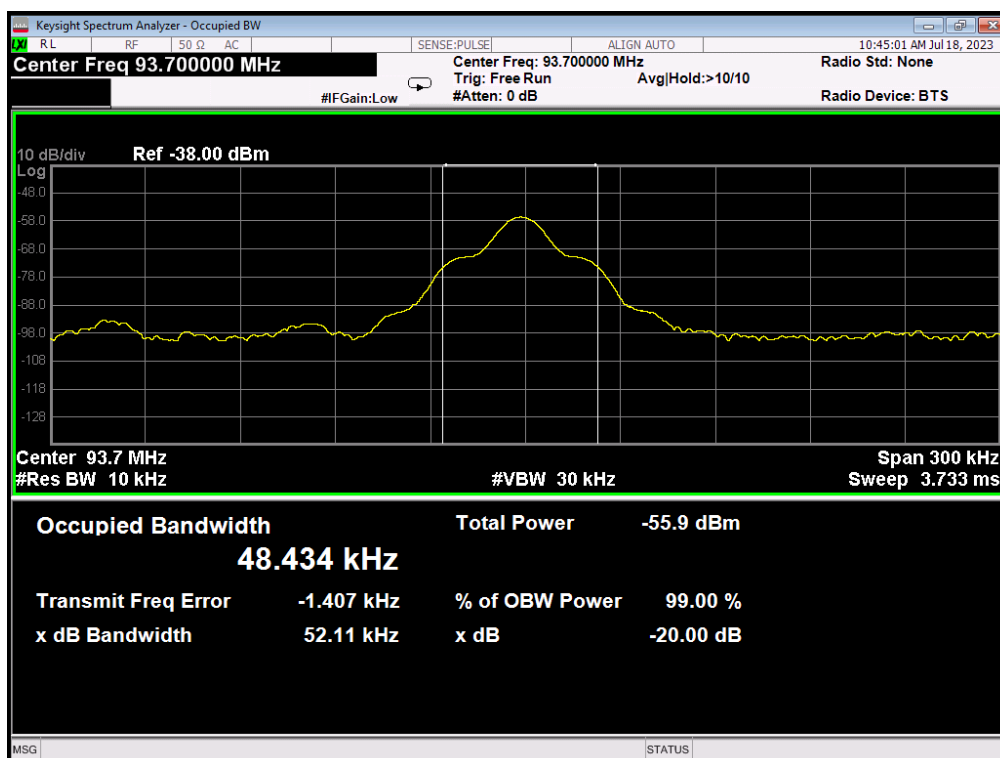
EUT :	PERSONAL BLUETOOTH CD PLAYER WITH FM RADIO	Model Name :	CD-60R-BTEB
Temperature :	26 °C	Relative Humidity :	53%
Pressure :	1020 hPa	Test Power :	DC 5.0V
Test Mode :	TX		

Test Channel	Frequency (MHz)	20 dBc Bandwidth (KHz)	Limit (KHz)
Low	88.5	51.53	200
Mid	93.7	52.11	200
High	102.9	53.12	200

The Lowest Channel: 88.5MHz



The Middle Channel: 93.7MHz



The High Channel:102.9MHz

