

Prüfbericht-Nr.: <i>Test report no.:</i>	CN24T40Q 001	Auftrags-Nr.: <i>Order no.:</i>	170390856	Seite 1 von 27 <i>Page 1 of 27</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2024.10.14	
Auftraggeber: <i>Client:</i>	ONWARD BRANDS LLC 767 5TH AVE FL 37TH NEW YORK, NY 10153, USA			
Prüfgegenstand: <i>Test item:</i>	Modern Wireless Headset (Trademark: Incase)			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	OB1998			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	FCC CFR Title 47, Part 15, Subpart C, Section 15.247 RSS-247 Issue 3 August 2023 RSS-Gen Issue 5 March 2019			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-06-09	Please refer to Photo Document		
Prüfmuster-Nr.: <i>Test sample no:</i>	LP24070228C05-S118			
Prüfzeitraum: <i>Testing period:</i>	2025-03-21-2025-03-27			
Ort der Prüfung: <i>Place of testing:</i>	Refer to section 2.1			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Guangdong) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>			genehmigt von: <i>authorized by:</i>	
Datum: <i>Date:</i>	2025-06-23	Ausstellungsdatum: <i>Issue date:</i>		2025-06-23
Stellung / Position:	Sachverständige(r)/Expert		Sachverständige(r)/Expert	
Sonstiges / Other:	FCC ID: 2BCOY-OB1998 IC: 32736-OB1998 HVIN: OB1998			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

Prüfbericht-Nr.: CN24T40Q 001
Test report no.:

Page 2 of 27
Seite 2 von 27

Anmerkungen
Remarks

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. <i>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</i> <i>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</i>
2	As contractually agreed, this document has been signed digitally only. TÜV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TÜV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. <i>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</i>
3	Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report. <i>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</i>
4	The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019. <i>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</i>

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 6dB BANDWIDTH

RESULT: Pass

5.1.5 99% BANDWIDTH

RESULT: Pass

5.1.6 20dB BANDWIDTH

RESULT: Pass

5.1.7 CARRIER FREQUENCY SEPARATION

RESULT: Pass

5.1.8 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.9 TIME OF OCCUPANCY

RESULT: Pass

5.1.10 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH

RESULT: Pass

5.1.11 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.12 CONDUCTED EMISSION ON AC MAINS

RESULT: N/A

Contents

1	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
2	TEST SITES	6
2.1	TEST FACILITIES	6
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	6
2.3	TRACEABILITY	6
2.4	CALIBRATION	7
2.5	MEASUREMENT UNCERTAINTY.....	7
2.6	LOCATION OF ORIGINAL DATA.....	7
2.7	STATUS OF FACILITY USED FOR TESTING.....	7
3	GENERAL PRODUCT INFORMATION	8
3.1	PRODUCT FUNCTION AND INTENDED USE.....	8
3.2	RATINGS AND SYSTEM DETAILS	8
3.3	INDEPENDENT OPERATION MODES	10
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS.....	10
3.5	SUBMITTED DOCUMENTS.....	10
4	TEST SET-UP AND OPERATION MODES	11
4.1	PRINCIPLE OF CONFIGURATION SELECTION	11
4.2	TEST OPERATION AND TEST SOFTWARE.....	11
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	11
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....	11
4.5	TEST SETUP DIAGRAM	12
5	TEST RESULTS	14
5.1	TRANSMITTER REQUIREMENT & TEST SUITES	14
5.1.1	<i>Antenna Requirement</i>	<i>14</i>
5.1.2	<i>Maximum Peak Conducted Output Power</i>	<i>15</i>
5.1.3	<i>Conducted Power Spectral Density</i>	<i>17</i>
5.1.4	<i>6dB Bandwidth</i>	<i>18</i>
5.1.5	<i>99% Bandwidth</i>	<i>19</i>
5.1.6	<i>20dB Bandwidth</i>	<i>20</i>
5.1.7	<i>Carrier Frequency Separation</i>	<i>21</i>
5.1.8	<i>Number of Hopping Frequency</i>	<i>22</i>
5.1.9	<i>Time of Occupancy</i>	<i>23</i>
5.1.10	<i>Conducted Spurious Emissions Measured in 100 kHz Bandwidth.....</i>	<i>24</i>
5.1.11	<i>Radiated Spurious Emission.....</i>	<i>25</i>
5.1.12	<i>Conducted Emission on AC Mains</i>	<i>26</i>
6	PHOTOGRAPHS OF THE TEST SET-UP	27
7	LIST OF TABLES.....	27

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Bluetooth (BR & EDR) Operation(OB1998).

Appendix B: Test Results of Bluetooth (Low Energy) Operation(OB998).

Appendix C: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

Dongguan Lepont Testing Service Co., Ltd.

Room 102, Building 11, No.7, Houjie Science And Technology Avenue, Houjie, Dongguan, Guangdong, China.

FCC Accreditation Designation No.: CN1351

ISED wireless device testing laboratory: 20133

TÜV Rheinland (Guangdong) Co., Ltd. subcontract all test to Dongguan Lepont Testing Service Co., Ltd. And all tests at this site have been conducted under the supervision of a TÜV Rheinland engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
Spectrum analyzer	Agilent	N9020A	MY49100060	Jan. 06, 2026
Vector source	Agilent	N5182A	MY47420382	Jan. 06, 2026
Analog signal source	Agilent	N5171B	MY51350292	Jan. 06, 2026
All instrument	Rohde & Schwarz	CMW 500	1201.002K50	Jan. 06, 2026
High and low temperature chamber	Math-mart	MT-1202-40	LEP-E041	Jan. 06, 2026
control unit	Tonscend	JS0806-2	10165	Jan. 06, 2026
Testing software	Tonscend	JSTS1120-3	Ver 2.6.77.0518	N/A
Unwanted Emission Testing				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	Rohde & Schwarz	ESR 3	101849	Dec. 22, 2025
TRILOG Broadband Antenna (30-1000MHz)	Schwarzbeck	VULB 9163	743	Nov. 20, 2022
Signal Amplifier	HP	8447D	1726A01222	Jan. 06, 2026
Spectrum analyzer	Agilent	N9020A	MY49100060	Jan. 06, 2026
Horn antenna	Schwarzbeck	BBHA 9120D	01875	Nov. 20, 2022
Preamplifier	Schwarzbeck	BBN 9718B	00010	Jan. 6, 2026
Test software	EZ-EMC	Fala	EMEC-3A1	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Uncertainty (k=2)
RF output power, conducted	± 1.06 dB
Occupied Channel Bandwidth	± 1.42%
Unwanted Emissions, conducted	± 2.51 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	± 3.70 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	± 3.70 dB
Power Spectral Density, conducted	±1.06dB
Time	±5%
Duty cycle	±5%

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B & C of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

Dongguan Lepont Testing Service Co., Ltd. Test facility located at Room 102, Building 11, No.7, Houjie Science and Technology Avenue, Houjie, Dongguan, Guangdong, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a wireless headset, which supports Classic Bluetooth and Bluetooth low energy wireless technologies.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	Modern Wireless Headset
Type Designation:	OB1998
Trademark:	Incase
FCC ID:	2BCOY-OB1998
IC:	32736-OB1998
HVIN:	OB1998
Operating Voltage:	Internal battery operated (5Vdc, 400mA)
Operating Temperature Range:	0 °C ~ +40 °C
Technical Specification of Bluetooth (dual mode)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Channel Number:	BR & EDR mode:79 channels, Low Energy mode:40 channels
Channel Separation:	BR & EDR mode:1MHz, Low Energy mode:2MHz
Data Rate:	BR & EDR mode: 1Mbps, 2Mbps, 3Mbps Low Energy mode: 1Mbps, 2Mbps
Antenna Type:	Chip Antenna
Antenna Gain:	0.39 dBi (Provided by the Client)

Table 4: RF Channel and Frequency of Bluetooth BR & EDR

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	2402.00	20	2422.00	40	2442.00	60	2462.00
1	2403.00	21	2423.00	41	2443.00	61	2463.00
2	2404.00	22	2424.00	42	2444.00	62	2464.00
3	2405.00	23	2425.00	43	2445.00	63	2465.00
4	2406.00	24	2426.00	44	2446.00	64	2466.00
5	2407.00	25	2427.00	45	2447.00	65	2467.00
6	2408.00	26	2428.00	46	2448.00	66	2468.00
7	2409.00	27	2429.00	47	2449.00	67	2469.00
8	2410.00	28	2430.00	48	2450.00	68	2470.00
9	2411.00	29	2431.00	49	2451.00	69	2471.00
10	2412.00	30	2432.00	50	2452.00	70	2472.00
11	2413.00	31	2433.00	51	2453.00	71	2473.00
12	2414.00	32	2434.00	52	2454.00	72	2474.00
13	2415.00	33	2435.00	53	2455.00	73	2475.00
14	2416.00	34	2436.00	54	2456.00	74	2476.00
15	2417.00	35	2437.00	55	2457.00	75	2477.00
16	2418.00	36	2438.00	56	2458.00	76	2478.00
17	2419.00	37	2439.00	57	2459.00	77	2479.00
18	2420.00	38	2440.00	58	2460.00	78	2480.00
19	2421.00	39	2441.00	59	2461.00		

Test frequencies are lowest channel: 2402 MHz, middle channel: 2441 MHz and highest channel: 2480 MHz for Bluetooth BR & EDR

Table 5: RF Channel and Frequency of Bluetooth LE

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz for Bluetooth LE

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth transmitting mode (BR & EDR mode)
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, Bluetooth transmitting mode (Bluetooth LE mode)
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- C. On, Transmitting on Hopping channel
- D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|------------------------------|-------------------------|
| - Application Form | - Operation Description |
| - ID Label and Location Info | - Block Diagram |
| - Schematics | - PCB Layout |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model **OB1998** in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Lenovo	Xiaoxin Pro IA5HR	PF490VB0

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

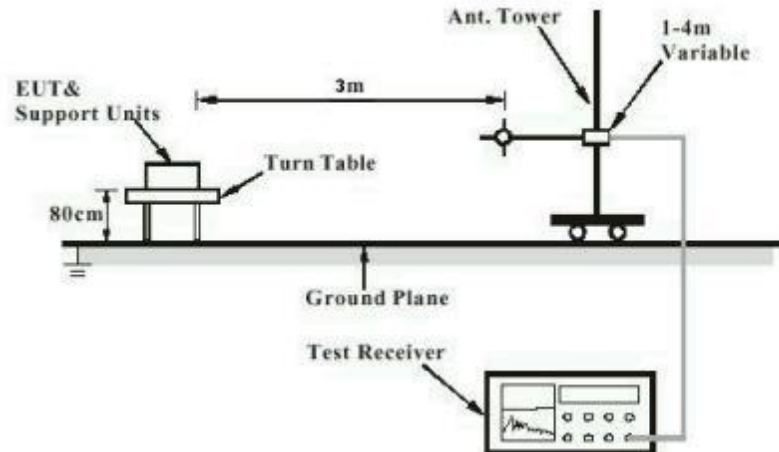


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



Diagram of Measurement Configuration for Mains Conduction Measurement

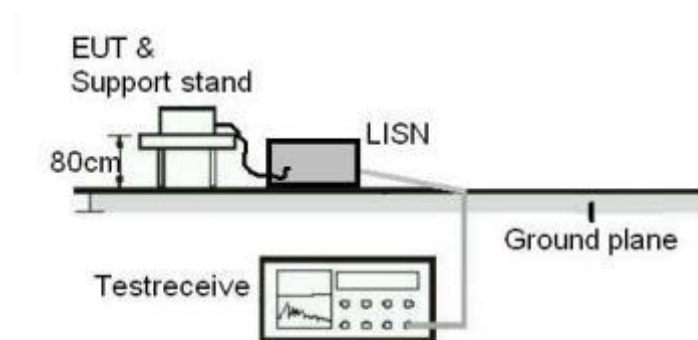
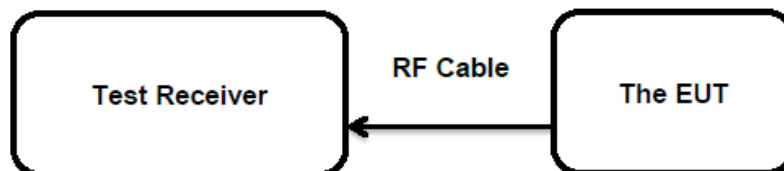


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

The EUT has an Chip Antenna, the directional gain of antenna is 0.39 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 15 von 27
Page 15 of 27

5.1.2 Maximum Peak Conducted Output Power

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(b)(1)&(3) RSS-247 Clause 5.4(b)&(d)
Basic standard	: ANSI C63.10: 2013
Limits	: FHSS < 0.125 Watts, DSSS < 1.0 Watts
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For details refer to following test result.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 16 von 27
Page 16 of 27

Table 7: Test Result of Maximum Peak Conducted Output Power, Bluetooth BR & EDR

Test Mode	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	2402	2.09	≤20.97	PASS
DH5	2441	2.96	≤20.97	PASS
DH5	2480	3.06	≤20.97	PASS
2DH5	2402	2.35	≤20.97	PASS
2DH5	2441	3.37	≤20.97	PASS
2DH5	2480	3.34	≤20.97	PASS
3DH5	2402	2.85	≤20.97	PASS
3DH5	2441	3.79	≤20.97	PASS
3DH5	2480	3.91	≤20.97	PASS

Table 8: Test Result of Maximum Peak Conducted Output Power, Bluetooth LE

TestMode	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	2402	0.79	≤30	1.18	≤36	PASS
BLE_1M	2440	1.76	≤30	2.15	≤36	PASS
BLE_1M	2480	1.90	≤30	2.29	≤36	PASS
BLE_2M	2402	0.81	≤30	1.20	≤36	PASS
BLE_2M	2440	1.79	≤30	2.18	≤36	PASS
BLE_2M	2480	1.97	≤30	2.36	≤36	PASS

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): 0.39 dBi

5.1.3 Conducted Power Spectral Density

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(e) RSS-247 Clause 5.2(b)
Basic standard	: ANSI C63.10: 2013
Limits	: < 8 dBm / 3kHz
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 18 von 27
Page 18 of 27

5.1.4 6dB Bandwidth

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(a)(2) RSS-247 Clause 5.2(a)
Basic standard	: ANSI C63.10: 2013
Limits	: > 500 KHz
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 19 von 27
Page 19 of 27

5.1.5 99% Bandwidth

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(a)
RSS-Gen Clause 6.7
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2025-03-20 to 2025-03-27
Input voltage : Internal battery operated (5.0V DC)
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 22.8 °C
Relative humidity : 35 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A & B.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 20 von 27
Page 20 of 27

5.1.6 20dB Bandwidth

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(a)(1)
RSS-247 Clause 5.1(a)
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2025-03-20 to 2025-03-27
Input voltage : Internal battery operated (5.0V DC)
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 22.8 °C
Relative humidity : 35 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 21 von 27
Page 21 of 27

5.1.7 Carrier Frequency Separation

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(a)(1) RSS-247 Clause 5.1(b)
Basic standard	: ANSI C63.10: 2013
Limits	: $\geq 25\text{kHz}$ or 2/3 of 20dB bandwidth, whichever is greater
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: C
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 22 von 27
Page 22 of 27

5.1.8 Number of Hopping Frequency

RESULT:

Pass

Test Specification

Test standard	: FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	: ANSI C63.10: 2013
Limits	: ≥ 15 non-overlapping channels
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: C
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

5.1.9 Time of Occupancy

RESULT:

Pass

Test Specification

Test standard	: FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	: ANSI C63.10: 2013
Limits	: < 0.4s
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: C
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

5.1.10 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	: ANSI C63.10: 2013
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A & B.

5.1.11 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Section 8.9 & 8.10
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2025-03-20 to 2025-03-27
Input voltage	: Internal battery operated (5.0V DC)
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix A & B.

Prüfbericht - Nr.: CN24T40Q 001
Test Report No.:

Seite 26 von 27
Page 26 of 27

5.1.12 Conducted Emission on AC Mains

RESULT:

N/A

Test Specification

Test standard	: FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	: ANSI C63.4:2014
Frequency range	: 0.15 – 30MHz
Classification	: Class B
Limits	: FCC Part 15.207(a) RSS-Gen Table 4
Kind of test site	: Shielded Room

Note: Bluetooth function will be disabled when product is in charging.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix C.

7 List of Tables

Table 1: List of Test and Measurement Equipment.....	6
Table 2: Measurement Uncertainty.....	7
Table 3: Technical Specification of EUT.....	8
Table 4: RF Channel and Frequency of Bluetooth BR & EDR	9
Table 5: RF Channel and Frequency of Bluetooth LE.....	9
Table 6: List of Accessories and Auxiliary Equipment.....	11
Table 7: Test Result of Maximum Peak Conducted Output Power, Bluetooth BR & EDR	16
Table 8: Test Result of Maximum Peak Conducted Output Power, Bluetooth LE	16