Certificate of Test

NCT CO., LTD. 211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, 18511, Republic of Korea (Tel: +82-31-323-6070 / Fax: +82-31-323-6071)	Report No.: NW2411-F002 Page (1) / (7)	element

1. **Client**
   - ○ Name : moon moon
   - ○ Address : 5floor, eunha building, 229, Chuncheon-ro, Chuncheon-si, Gangwon-do, 24259, Republic of Korea
   - ○ Date of Receipt : 2024-10-28

2. **Use of Report :** FCC Approval

3. **Test Sample**
   - ○ Description / Model : Smart Bottle / STARHALO Terra
   - ○ FCC ID : 2BLXMTERRA

4. **Place of Test :** ■ Fixed test □ Field test
   (Address:211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, 18511, Republic of Korea)

5. **Date of Test :** 2024-11-02 ~ 2024-11-07

6. **Test method used :** FCC Part 1.1310

7. **Testing Environment :**
   - ○ Temperature: (25 ± 5) °C, Humidity: Less than 75 % R.H.
   - * Unless specified otherwise in the individual methods, the tests were conducted on ambient conditions.

8. **Test Results :** Refer to the test results

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This Test Report cannot be reproduced, except in full
This test report is not related to KOLAS recognition and RRA designation.

Affirmation	**Tested by** Jiwon, Hong (signature)	**Technical Manager** Il-shin, Kim (signature)

Nov 08, 2024

NCT CO., LTD. (seal)

Contact us at report@nct.re.kr to confirm the authenticity of this repor

Table of contents

1. General Information ---------- 3

2. Information's about Test Item ---------- 4

3. Test Report ---------- 6

3.1 Test Report Version ---------- 6

3.2 RF Exposure evaluation ---------- 7

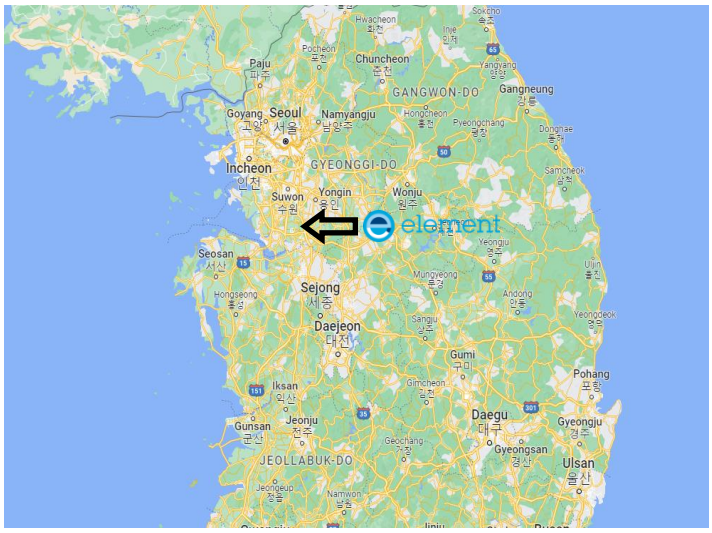
211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, Korea 18511
www.nct.re.kr TEL: +82-31-323-6070 FAX: +82-31-323-6071

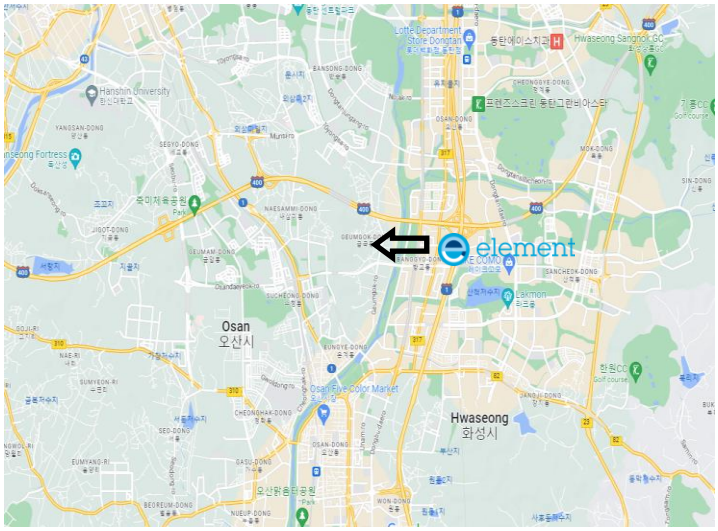
1. General Information's

1.1 Test Performed

Laboratory	:	NCT Co., Ltd.
Address	:	211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, 18511, Korea
Telephone	:	+82-31-323-6070
Facsimile	:	+82-31-323-6071
FCC Designation No.	:	KR0166
FCC Registration Number	:	409631

1.2 Site Map





2. Information's about Test Item

2.1 Applicant Information

Company name : moon moon

Address : 5floor, eunha building, 229, Chuncheon-ro, Chuncheon-si, Gangwon-do, 24259, Republic of Korea

Telephone : +82-10-4296-8296

Facsimile : -

2.2 Equipment Information

Equipment description	Smart Bottle
Model and/or type reference	STARHALO Terra
Additional model name	-
Serial number	Prototype
EUT condition	Pre-production, not damaged
Number of channels	40 ch
Modulation type	GFSK
EUT power source	DC 3.70 V
Hardware version	V 1.0
Software version	V 0.62
Test software name(version)	Tera Term (version 4.96)

2.3 Antenna Information

Type	Model name	Gain	Note.
Chip antenna	AA055U	2.5 dBi	-

211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, Korea 18511
www.nct.re.kr TEL: +82-31-323-6070 FAX: +82-31-323-6071

2.4 Tested Frequency

LE 1M	Low frequency	Middle frequency	High frequency
Frequency (MHz)	2 402	2 440	2 480

211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, Korea 18511
www.nct.re.kr TEL: +82-31-323-6070 FAX: +82-31-323-6071

3. Test Report

3.1 Test Report Version

Test Report No.	Date	Description
NW2411-F002	2024-11-08	Initial issue

211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, Korea 18511
www.nct.re.kr TEL: +82-31-323-6070 FAX: +82-31-323-6071

3.2 RF Exposure evaluation

- **MPE Calculations : Bluetooth LE 1M**

Following FCC KDB 447498 D01 “General SAR test exclusion guidance” - 4.3.1 a)

a) For 100 MHz to 6 GHz and test separation distances ≤ 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

Modulation	Frequency (MHz)	Min. Test separation distance	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance		Standalone SAR Test exclusion thresholds for 100MHz to 6GHz at test separation distance ≤ 50 mm	Limit	Result
		(mm)	(dBm)	(dB)	(dBm)	(mW)			
BT LE	2402	5.00	-3.40	± 0.50	-2.90	0.51	0.1590	3.00	**PASS**
	2440		-3.52		-3.02	0.50	0.1559	3.00	**PASS**
	2480		-3.99		-3.49	0.45	0.1410	3.00	**PASS**

211-71, Geumgok-ro, Hwaseong-si, Gyeonggi-do, Korea 18511
www.nct.re.kr TEL: +82-31-323-6070 FAX: +82-31-323-6071