

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-F004 Page (1) / (7)	
1. Client ○ Name : Remote Solution Co., Ltd. ○ Address(FCC) : 92, Chogokri, Nammyun, Kimchon City, Kyungbuk, Republic of Korea ○ Address(IC) : 326-14, Apo-daero, Nam-myeon, Gimcheon-si, Gyeongsangbuk-do 39662, Korea (Republic Of) ○ Date of Receipt : 2024-07-16 2. Use of Report : FCC/IC Certification 3. Test Sample ○ Description / Model Name : Proflame Remote Control Plus / Remote Plus ○ FCC ID : TX4RE39A ○ IC : 11438A-RE39A 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 : 2024-10-10 ~ 2024-11-01 6. Test method used : FCC Part 1.1310, RSS-102 Issue 6(2023-12) 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 Namhyoung, Kwon 	Technical Manager Il-shin, Kim 
Nov 21, 2024 NCT CO., LTD. 		

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

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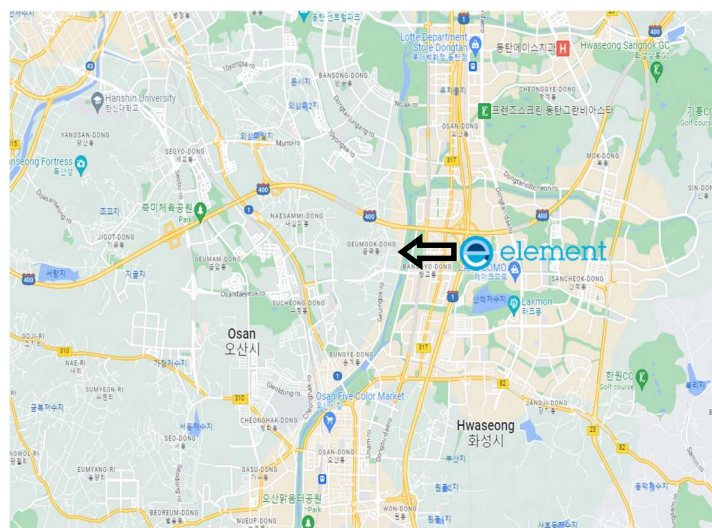
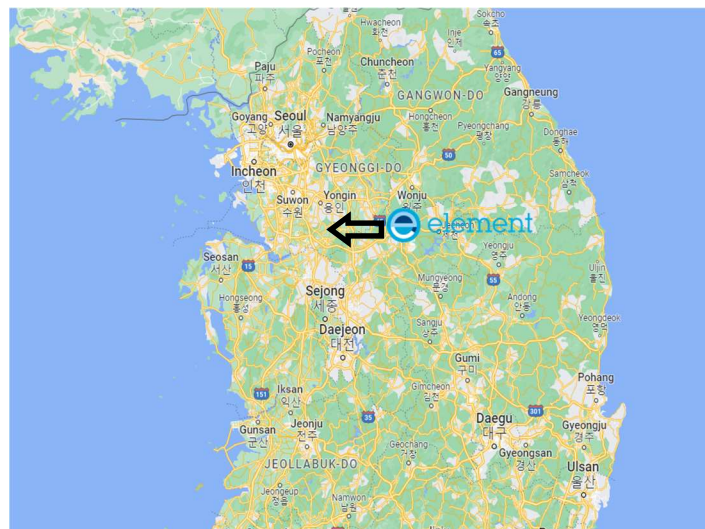
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1. General Information's

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



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2. Information's about Test Item

2.1 Applicant Information

Company name : Remote Solution Co., Ltd.
Address(FCC) : 92, Chogokri, Nammyun, Kimchon City, Kyungbuk, Republic of Korea
Address(IC) : 326-14, Apo-daero, Nam-myeon, Gimcheon-si, Gyeongsangbuk-do
39662, Korea (Republic Of)
Telephone : +82 31-390-1592
Facsimile : -

2.2 Equipment Information

Equipment description	Proflame Remote Control Plus
Model and/or type reference	Remote Plus
Additional model name	-
Serial number	Prototype
EUT condition	Pre-production, not damaged
Frequency range(s)	2 402 MHz to 2 480 MHz
Number of channels	40 ch
Modulation type	GFSK
EUT power source	DC 3.0 V
Hardware version	V 1.0
Software version	V 1.0
Test software name(version)	V 2.1

2.3 Antenna Information

Type	Model name	Gain	Note.
PCB Antenna	-	3.51 dBi	-

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3. Test Report

3.1 Test Report Version

Test report no.	Date	Description
NW2411-F004	2024-11-21	Initial issue

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3.2 RF Exposure Evaluation

3.2.1 FCC Test Procedure

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:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR,}$$

where

- $f(\text{GHz})$ 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

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

3.2.2 IC Test Procedure

The SAR exclusion table from RSS-102 is reproduced below:

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤ 5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤ 300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1 900	7 mW	10 mW	18 mW	34 mW	60 mW
2 450	4 mW	7 mW	15 mW	30 mW	52 mW
3 500	2 mW	6 mW	16 mW	32 mW	55 mW
5 800	1 mW	6 mW	15 mW	27 mW	41 mW
Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of 50 mm
≤ 300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1 900	99 mW	153 mW	225 mW	316 mW	431 mW
2 450	83 mW	123 mW	173 mW	235 mW	309 mW
3 500	86 mW	124 mW	170 mW	225 mW	290 mW
5 800	56 mW	71 mW	85 mW	97 mW	106 mW

3.2.3 Test Result

Test mode	Max antenna gain	Measured max RF output power	Tune-up tolerance	Max. power with tune-up tolerance	
	(dBi)	(dBm)	(dB)	(dBm)	(mW)
2.4 GHz Transceiver	3.51	3.07	± 0.50	3.57	2.28
High frequency	Min. test separation distance	Maximum estimated SAR(S)	FCC limit	IC limit	Result
(MHz)	(mm)	(mW)	(mW)	(mW)	
2 480	5.00	0.72	3.00	3.94	PASS

Note 1 : $S = ((P(\text{mW}) / R) * \sqrt{f(\text{GHz})})$

** - S(mW): Maximum estimated SAR

- P(mW): Max tuneup power

- R(mm): Min. test separation distance

- f(GHz): the RF channel transmit frequency

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