

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No. : OT-193-RWD-014
AGR No. : A18DA-181
Applicant : Ncm Co.,Ltd
Address : 9.Ansantekom 1-gil,Sangnok-gu,Ansan-si,Gyeonggi-do,Korea
Manufacturer : Ncm Co.,Ltd
Address : 9.Ansantekom 1-gil,Sangnok-gu,Ansan-si,Gyeonggi-do,Korea
Type of Equipment : Remote Controller
FCC ID. : 2ASMT-S-20
Model Name : S-20
Serial number : N/A
Total page of Report : 7 pages (including this page)
Date of Incoming : January 14, 2019
Date of issue : March 07, 2019

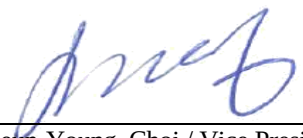
SUMMARY

The equipment complies with the regulation; **FCC PART 15 SUBPART C Section 15.247**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by: 
 Jae-Ho Lee / Chief Engineer
 ONETECH Corp.

Approved by: 
 Keun-Young, Choi / Vice President
 ONETECH Corp.

CONTENTS

PAGE

1. VERIFICATION OF COMPLIANCE	4
2. GENERAL INFORMATION	5
2.1 PRODUCT DESCRIPTION.....	5
2.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT.....	5
3. EUT MODIFICATIONS.....	5
4. MAXIMUM PERMISSIBLE EXPOSURE	6
4.1 RF EXPOSURE LIMIT	6
4.2 EUT DESCRIPTION.....	6
4.3 TEST RESULT CALCULATED MPE SAFE DISTANCE	7

Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-193-RWD-014	March 07, 2019	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

Applicant : Ncm Co.,Ltd
Address : 9.Ansantekom 1-gil,Sangnok-gu,Ansan-si,Gyeonggi-do,Korea
Contact Person : Shoufu Yang / Manager
Telephone No. : +82-31-419-4070
FCC ID : 2ASMT-S-20
Model Name : S-20
Brand Name : -
Serial Number : N/A
Date : March 07, 2019

EQUIPMENT CLASS	<i>DTS – DIGITAL TRNSMISSION SYSTEM</i>
E.U.T. DESCRIPTION	Remote Controller
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The Ncm Co.,Ltd, Model S-20 (referred to as the EUT in this report) is a Remote Controller. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	Remote Controller
Operating Frequency	2 422 MHz
RF Output Power	-5.73 dBm
Number of Channel	1 Channels
Modulation Type	FSK
Antenna Type	PCB Antenna
Antenna Gain	1.325 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	3.58 MHz
Rated Supply Voltage	DC 4.5 V

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 RF Exposure Limit

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 ~ 100 000 MHz.

4.2 EUT Description

Kind of EUT	Remote Controller
Operating Frequency Band	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz ☐ WLAN: 2 412 MHz ~ 2 462 MHz ☐ WLAN: 5 180 MHz ~ 5 240 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☐ Bluetooth: 2 402 MHz ~ 2 480 MHz ☐ Bluetooth BLE: 2 402 MHz ~ 2 480 MHz ☒ 2 422 MHz
MAX. RF OUTPUT POWER	-5.73 dBm
Antenna Gain	1.325 dBi
Exposure Evaluation Applied	☐ MPE ☐ SAR ☒ SAR Test Exclusion Evaluation

4.3 Test Result Calculated MPE Safe Distance

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Mim. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= (0.3/5) \times \sqrt{2.422} = 0.09$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
2 422	-5.73 ± 0.5	-5.23	0.3	5	0.09



Tested by: Yu-Seog, Sim / Assistant Manager