



RF EXPOSURE REPORT

Applicant	:	Nomenta Industries International BV
Address of Applicant	:	Kenaupark 33-2,2011 MR Haarlem 2011 Netherlands
Manufacturer	:	Nomenta Industries International BV
Address of Manufacturer	:	Kenaupark 33-2,2011 MR Haarlem 2011 Netherlands
Equipment under Test	:	Synergy, Lite Up Play, Sphere, Atmos
Model No.	:	Synergy-35, Synergy-50, Synergy-65, Lite Up Play, Sphere, Atmos
Trade Mark	:	Kooduu
FCC ID	:	2ASCWSYN2ATSH
Test Standard(s)	:	KDB447498 D01 General RF Exposure Guidance v06
Report No.	:	DDT-RE22051001-2E06
Issue Date	:	Jul. 11, 2022
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

Table of Contents

1. General Test Information.....5

1.1. Description of EUT5

1.2. Accessories of EUT5

1.3. Test laboratory5

2. RF Exposure evaluation for FCC.....6

2.1. Assessment procedure.....6

2.2. Assess result.....6

Test Report Declare

Applicant	:	Nomenta Industries International BV
Address of Applicant	:	Kenaupark 33-2,2011 MR Haarlem 2011 Netherlands
Equipment under Test	:	Synergy, Lite Up Play, Sphere, Atmos
Model No.	:	Synergy-35, Synergy-50, Synergy-65, Lite Up Play, Sphere, Atmos
Trade Mark	:	Kooduu
Manufacturer	:	Nomenta Industries International BV
Address of Manufacturer	:	Kenaupark 33-2,2011 MR Haarlem 2011 Netherlands

Test Standard Used:

KDB447498 D01 General RF Exposure Guidance v06

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-R22051001-2E06		
Date of Receipt:	Jun. 06, 2022	Date of Test:	Jun. 06, 2022 ~ Jul. 11, 2022

Prepared By:**Approved By:***Ziqin Chen*Ziqin Chen/Engineer*Damon Hu*Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Jul. 11, 2022	

1. General Test Information

1.1. Description of EUT

EUT Name	: Synergy, Lite Up Play, Sphere, Atmos
Model Number	: Synergy-35, Synergy-50, Synergy-65, Lite Up Play, Sphere, Atmos
Difference of model number	: Above models are identical in schematic and structure, only the name and colour are different for all the models, therefore the test performed on the model Synergy-35.
EUT Function Description	: Please reference user manual of this device
Power Supply	: DC 5V powered by external adapter, or 7.4V built-in lithium battery

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

1.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
N/A	N/A	N/A	N/A

1.3. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2. RF Exposure evaluation for FCC

2.1. Assessment procedure

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

2.2. Assess result

Manufacturing Tolerance:

BT:

Mode	Antenna	Frequency [MHz]	Target Power	Tolerance $\pm$ (dBm)
GFSK (Peak)	Ant1	2402	0	1
		2441	0	1
		2480	-2	1
$\pi/4$ DQPSK (Peak)	Ant1	2402	0	1
		2441	0	1
		2480	-2	1
8DPSK (Peak)	Ant1	2402	0	1
		2441	0	1
		2480	-2	1

BLE:

Mode	Antenna	Frequency [MHz]	Target Power	Tolerance $\pm$ (dBm)
GFSK 1M(Peak)	Ant1	2402	0	1
		2440	0	1
		2480	-2	1

Estimation Result:

Worse case is as below: [2441 MHz, 1 dBm, (1.26 mW) output power]

$(1.26/5) \cdot [\sqrt{2.441(\text{GHz})}] = 0.393 < 3.0$ for 1-g SAR

Then SAR evaluation is not required.