

TEST REPORT

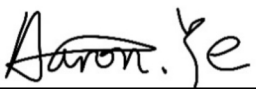
Product Name : Smart Sprinkler
Brand Name : NEO
Model : NAS-WV05W
Series Model : NAS-WV03W, NAS-WV09W, NAS-WV14W, NAS-WV15W,
NAS-WV16W
Applicant : **NEO Smart Technology (GuangDong) Co. · LTD**
Address : Floor 7, 8, 9, 10, Building 28, No. 29, Licheng Industrial Avenue,
Shuikou Street, Huicheng District, Huizhou City
Manufacturer : **NEO Smart Technology (GuangDong) Co. · LTD**
Address : Floor 7, 8, 9, 10, Building 28, No. 29, Licheng Industrial Avenue,
Shuikou Street, Huicheng District, Huizhou City
Standard(s) : EN IEC 62311:2020
EN 50665:2017
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Issued By: **Guangdong Asia Hongke Test Technology Limited**

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Note: This device has been tested and found to comply with the standard(s) listed, this test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. This report shall not be reproduced except in full, without the written approval of Guangdong Asia Hongke Test Technology Limited. If there is a need to alter or revise this document, the right belongs to Guangdong Asia Hongke Test Technology Limited, and it should give a prior written notice of the revision document. This test report must not be used by the client to claim product endorsement.

Guangdong Asia Hongke Test Technology Limited

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Report Revise Record

Report Version	Issued Date	Notes
M0	Dec 05, 2025	Initial Release

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1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

EN62311: Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

EN50665: Generic standard for assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)

Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0Hz to 300GHz) (Official Journal L 197 of 30 July 1999).

1.2 Test Facility

Test Laboratory:

Guangdong Asia Hongke Test Technology Limited

B1/F, Building 11, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

The test facility is recognized, certified or accredited by the following organizations:

FCC-Registration No.: 251906 Designation Number: CN1376

Guangdong Asia Hongke Test Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC —Registration No.: 31737 CAB identifier: CN0165

The 3m Semi-anechoic chamber of Guangdong Asia Hongke Test Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 31737

A2LA-Lab Cert. No.: 7133.01

Guangdong Asia Hongke Test Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.3 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Guangdong Asia Hongke Test Technology Limited's quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Asia Hongke laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Power Line Conducted Emission	150KHz~30MHz	±1.20 dB	(1)
Disturbance Power Emission	30MHz~300MHz	±2.96 dB	(1)
Radiated Emission Test	30MHz~1GHz	±3.75 dB	(1)
Radiated Emission Test	1GHz~18GHz	±3.88 dB	(1)

The report uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

2 GENERAL INFORMATION

2.1 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	15°C -35°C
Relative Humidity	35%-95 %
Air Pressure	101KPa

2.2 General Description of EUT

Product Name:	Smart Sprinkler
Model/Type reference:	NAS-WV05W
Serial Model:	NAS-WV03W, NAS-WV09W, NAS-WV14W, NAS-WV15W, NAS-WV16W
Model difference:	All models are same as the samples except model name, all the models are electrical identical same mechanical structure and design.
Power Supply:	DC 6V
Battery:	DC 1.5V*4
Hardware Version:	NAS-WV05W17-V2-2024.03.05
Software Version:	N/A
WIFI 2.4GHz:	
Supported type:	802.11b/g/n(H20)/n(H40)/ax(HE20)/ax(HE40)
Modulation:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11ax: OFDMA (1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK)
Operation frequency:	802.11b/g/n(H20)/ax(HE20): 2412MHz~2472MHz 802.11n(H40)/ax(HE40):2422MHz~2462MHz
Channel number:	802.11b/g/n(H20)/ax(HE20): 13 802.11n(H40)/ax(HE40):9
Channel separation:	5MHz
Antenna type:	Tube antenna
Antenna gain:	3.33dBi
Bluetooth LE:	
Supported type:	Bluetooth Low Energy
Modulation:	GFSK
Operation frequency:	2402MHz to 2480MHz
Channel number:	40
Channel separation:	2 MHz
Antenna type:	Tube antenna
Antenna gain:	3.33dBi

Remark: The above DUT's information was declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

3 Assessment method and test result

3.1 Assessment methods

Far Field strength calculation according to the output power.

3.2 Limit

According to EN 62311, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields
(0Hz to 300GHz, unperturbed rms values)

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (uT)	Equivalent plane wave power density S_{eq} (W/m ²)
0-1Hz	--	3.2×10^4	4×10^4	--
1-8Hz	10000	$3.2 \times 10^4 / f^2$	$4 \times 10^4 / f^2$	--
8-25Hz	10000	$4000/f$	$5000/f$	--
0.025-0.8KHz	$250/f$	$4/f$	$5/f$	--
0.8-3KHz	$250/f$	5	6.25	--
3-150KHz	87	5	6.25	--
0.15-1MHz	87	$0.73/f$	$0.92/f$	--
1-10MHz	$87/f^{1/2}$	$0.73/f$	$0.92/f$	--
10-400MHz	28	0.073	0.092	2
400-2000MHz	$1.375f^{1/2}$	$0.0037f^{1/2}$	$0.0046f^{1/2}$	$f/200$
2-300GHz	61	0.16	0.20	10

Notes:

1. f as indicated in the frequency range column.
2. For frequencies between 100kHz and 10GHz, S_{eq} , E^2 , H^2 and B^2 are to be averaged over any six-minute period.
3. For frequencies exceeding 10GHz, S_{eq} , E^2 , H^2 and B^2 are to be averaged over any $68/f^{1.05}$ -minute period (.in GHz).

No E-field value is provided for frequencies <1Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 20kV/m. Spark discharges causing stress or annoyance should be avoided.

Assessment methods

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

The Far Field strength calculation follow the Formula below:

$$E = \eta_0 H = \frac{\sqrt{30PG(\theta, \phi)}}{r}$$

Where:

E: E-field strength (V/m)

P: power input to antenna (Watt)

G: is the antenna gain relative to an isotropic antenna.

θ, ϕ : are elevation and azimuth angles to point of investigation.

r: is the distance from observation point to the antenna.

η_0 : is the characteristic impedance of free space.

Result

From the maximum EUT RF output power, the minimum mobile separation distance, r=20cm, the RF power density can be obtained.

Test Mode	Minimum Separation Distance (cm)	Output Power EIRP (dBm)	Output Power EIRP (W)	E-field strength At 20 cm (V/m)	E-field strength Limit (V/m)
BLE	20	3.05	0.0020	1.8052	61
WIFI 2.4G	20	16.40	0.0437	8.3952	61

3.3 Conclusion

RF exposure assessment has been performed to prove that this unit will not generate the harmful EMF emission above the reference level as specified in EC Council Recommendation (1999/519/EC)

***** End of Report *****