

Clean-Air LED-Leuchte mit Nanopartikel-Filter und UVC Desinfektion



Optional mit Fernbedienung



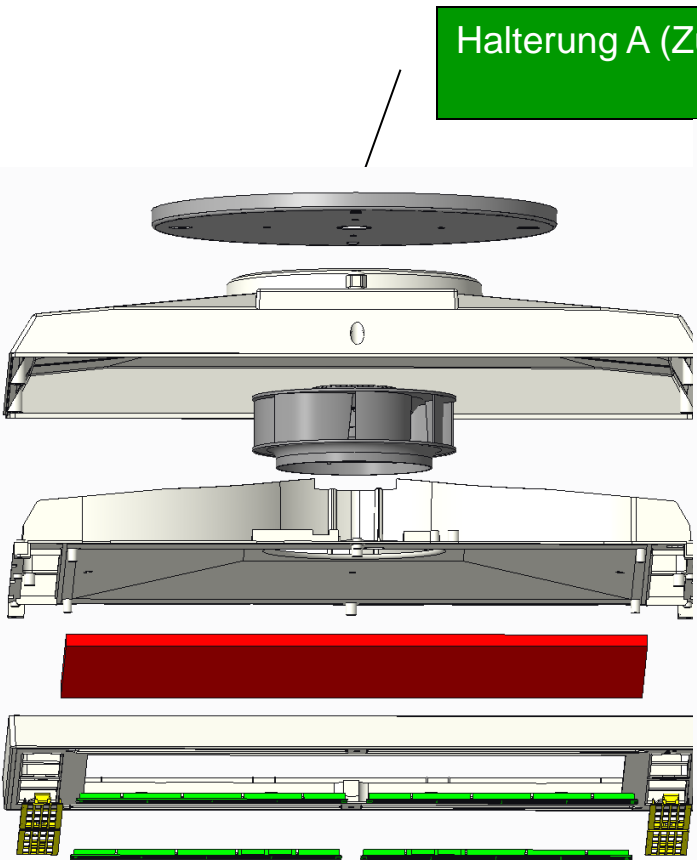
Produkt-Besonderheiten

- Einfache, leicht zu installierende und preiswerte Möglichkeit, die Luft in geschlossenen Räumen zu reinigen und zu desinfizieren
- Reinigt die Luft von luftgetragenen Partikel.
- Zerstört Viren und Bakterien durch intensive LED-UVC-Strahlung
- Keine UVC-Strahlung nach außen
- Wirkt antibios, antiviral und kann effizient Viren entfernen inkl. H1N1, Escherichia coli, staphylococcus aureus, Candida albicans, pseudomonas aeruginosa, usw.
- Kann in Räumen Formaldehyd, Benzene, Toluene, Xylene, Ammonia, TVOC-Konzentrationen deutlich reduzieren.
- 24 Stunden Schutzfunktion, unabhängig ob das Licht ein- oder ausgeschaltet ist.
- Filter mit neuartigem Nano-Filter-Material, antiseptisch und Anti-viral.
- Filter sind einfach austauschbar.
- Automatische Anzeige für Filterwechsel nach ca. 2000 Betriebsstunden
- Erste Wahl für Krankenhäuser, Schulen, Kindergarten, Büros, Reinräume, Labore usw.

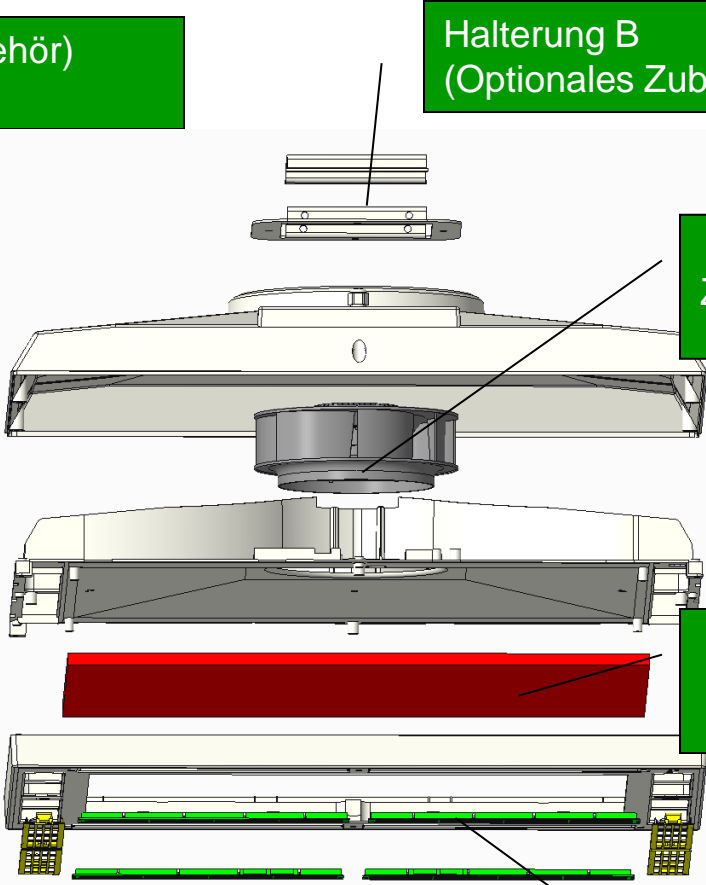
Spezifikation

Artikel	Metolight LED-RDL-6060-50W-NW-CLAIR
Leistung	50W (LED panel light: 40W, Lüfter:10W)
Spannung	AC220-240V,50-60Hz/ AC100-277V,50-60Hz(Optional)
PF	>0.9 (Flicker free)
Lumen (lm)	4000
CRI Ra	>80
CCT (K)	3000/4000/5000/6500(Optional)
UGR	<23/<19(Optional)
Steuerung	NA/0-10V Dimmer/Dali Dimmer/2.4G Remote control/ (Optional)
Geräuschpegel	<40dB
Lüfter	Industrie-Radiallüfter, 60 cbm/h
LGP	PMMA
Abmessungen (mm)	598×598×120
Lebensdauer LED	Ca. 30.000 h
Gewicht	7.9 kg

Innere Struktur



Halterung A (Zubehör)



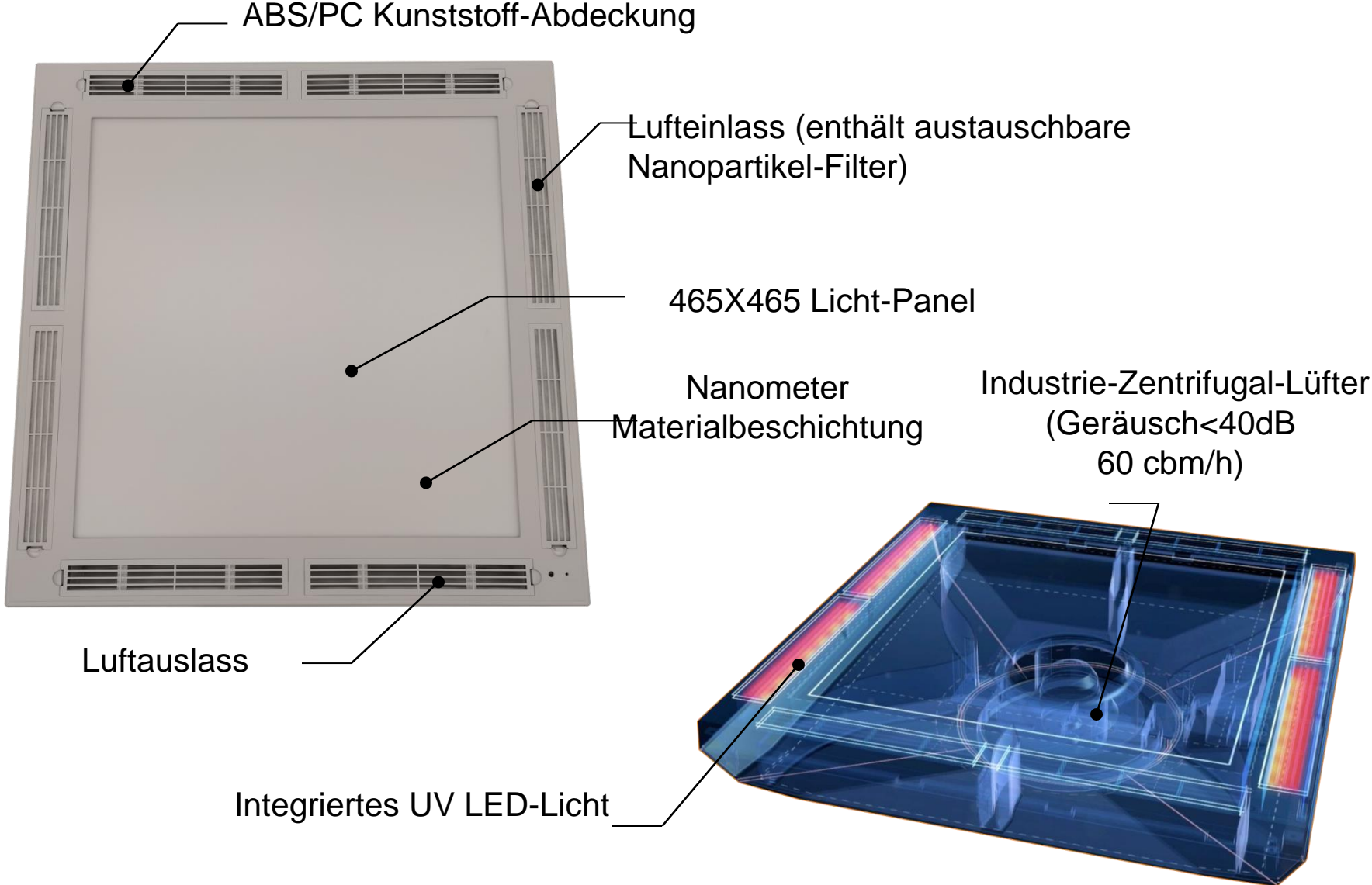
Halterung B (Optionales Zubehör)

Industrie Zentrifugal-Lüfter 60 cbm/h

LED Panel (mit PMMA Abdeckung)

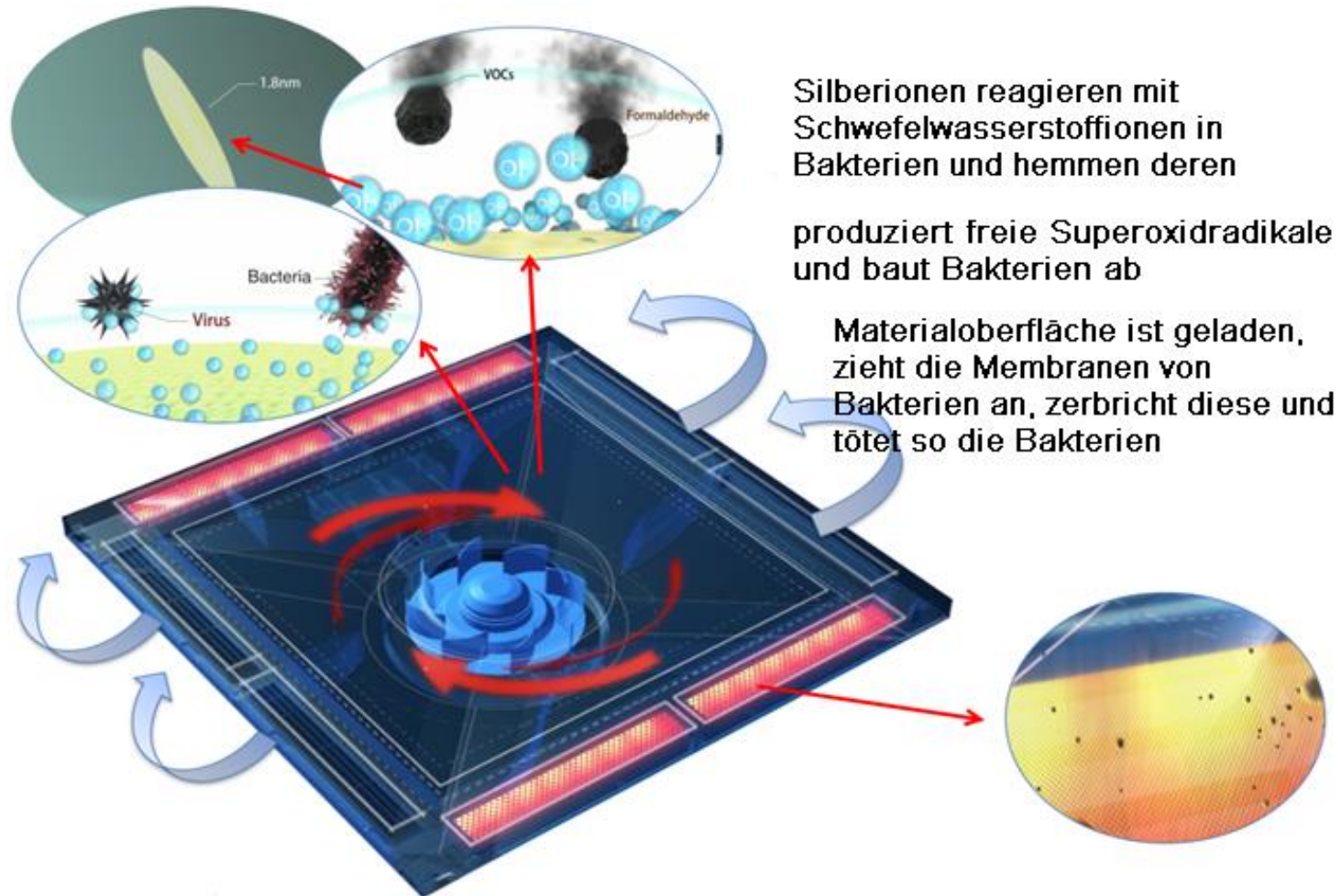
Ein- / Ausgang Luftfilter

Struktur Information

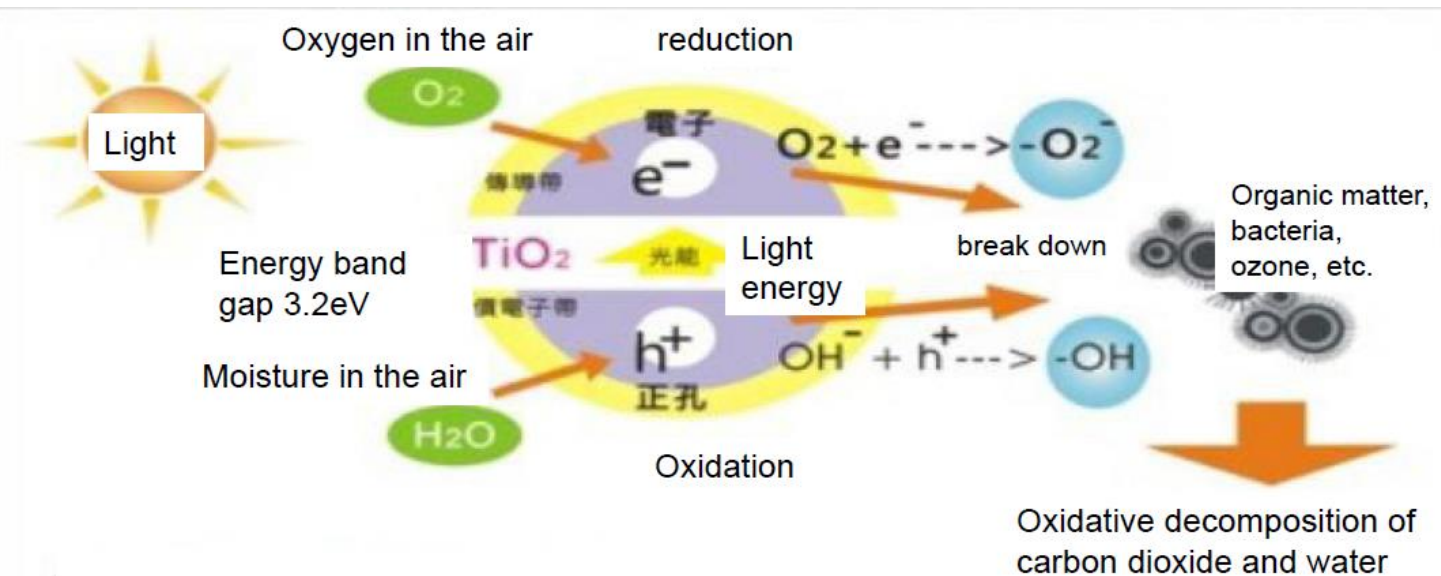


Funktionsprinzip für antiseptischen / antiviralen Effekt

Drei Arten von antiseptischen und antiviralen Mechanismen bieten Ihnen einen 24-Stunden-Allwetterschutz gegen Bakterien und Viren mit / ohne Licht ◦

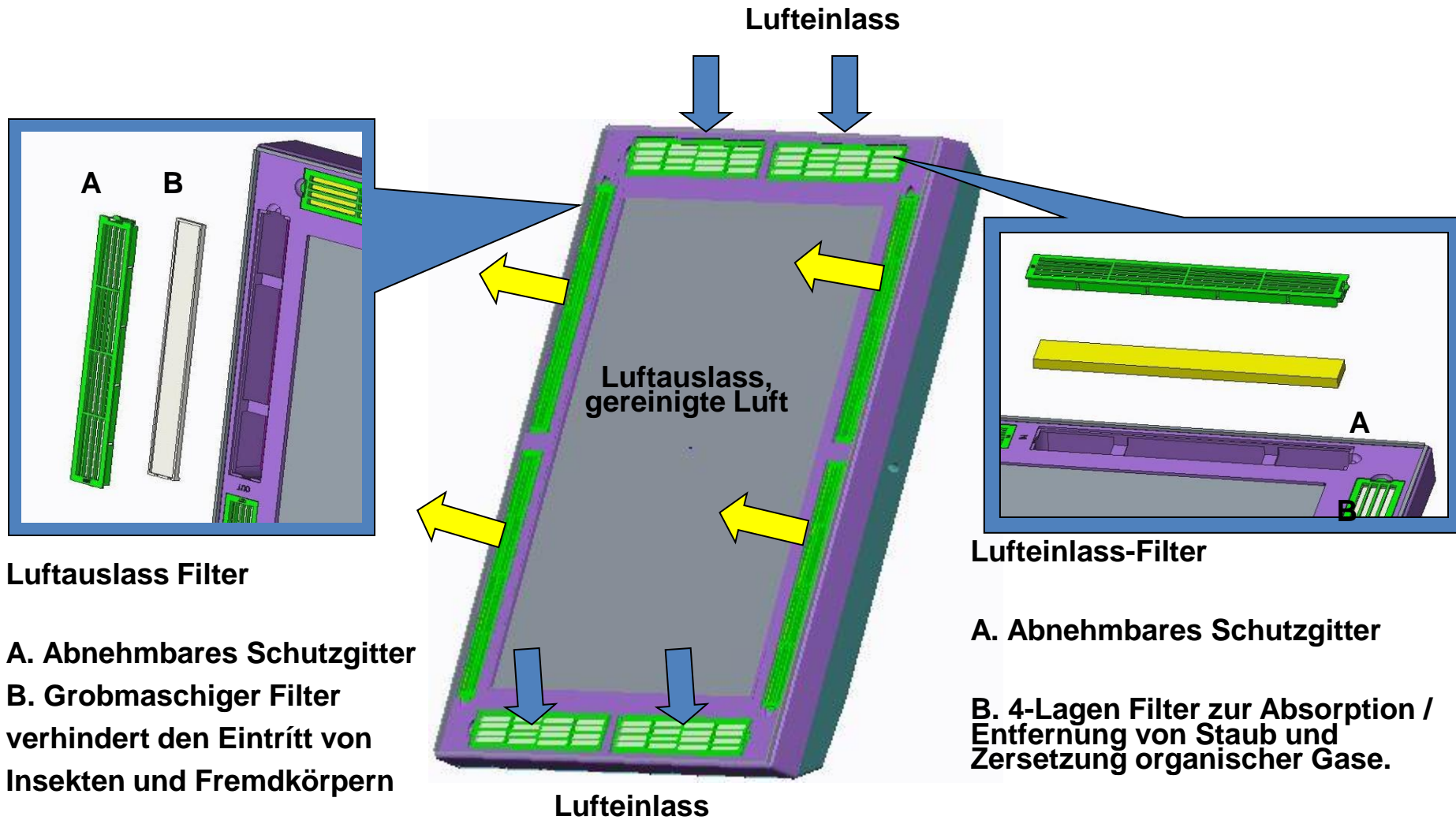


Wie wirkt die neuartige Nanometer-Materialbeschichtung?



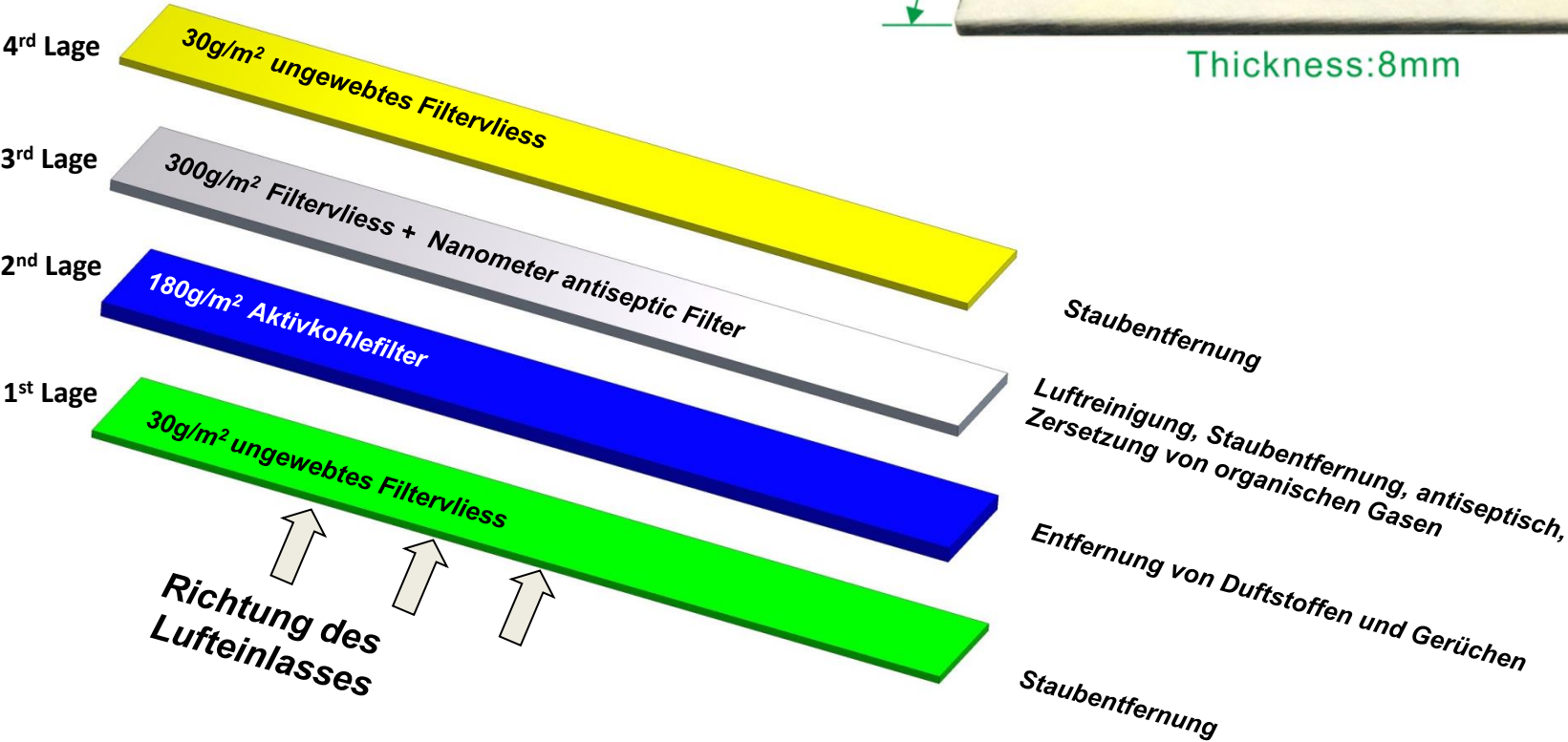
Die neue Nanometer-Materialbeschichtung ist eine antimikrobielle Beschichtung auf der Basis von Titandioxid-Nanopartikeln und 100% natürlichen und biologisch abbaubaren, umweltfreundlichen Inhaltsstoffen. Seine photokatalytischen Wirkungen eines intrinsischen und natürlichen Teils von Titandioxid (TiO₂) führen zu einer superoxidierenden Wirkung, wenn die behandelte Oberfläche natürlichem künstlichem Licht ausgesetzt wird. Dieser oxidierende Effekt eliminiert Luftschadstoffe, die neutralisiert werden, und neutralisiert auch Viren wie das Coronavirus und Bakterien, wodurch alle Bereiche nur durch Lichteinwirkung zu selbstdesinfizierenden Oberflächen werden. Die Beschichtung eliminiert und zersetzt nicht nur Mikroben, sondern lässt die Oberfläche mit einem kontinuierlichen und langfristigen Effekt perfekt geschützt, wodurch die Übertragung von Krankheiten an öffentlichen oder überfüllten Orten (Sektoren) effizient reduziert wird. Jegliche organische Substanz, die entweder in der Umgebungsluft oder direkt auf der Oberfläche mit der behandelten Oberfläche in Kontakt kommt, wird zersetzt, neutralisiert oder deaktiviert.

Spezifikation und Anleitungen zum Filter



Aufbau und Funktion des Lufteinlass-Filters

Filteraufbau
Abmessungen 226 x 29 x 8 mm (L x B x H)



Anleitung für Filterwechsel

Haltbarkeit der Filter	2160 Stunden
Phänomen nach Ablauf der Haltbarkeit	Lüfter schaltet ab, Leuchte arbeitet weiter, LED Anzeige leuchtet auf.
Austausch der Filter	Den Anweisungen für den Filterwechsel auf der Verpackung folgen. Öffnen Sie die Filter-Schutzgitter, alten Filter entnehmen, neuen Filter seitenrichtig einsetzen, Schutzgitter wieder aufsetzen.
RESET Taste drücken	Drücken Sie die Reset-Taste links der Anzeige-LED für 4 Sekunden. LED Licht schaltet kurz ab und das Luftumwälzsystem startet neu (Lüftergeräusch hörbar). Der integrierte Zeitgeber wird zurückgesetzt und startet neu bis zum nächsten Filterwechsel.



LED Anzeige

RESET Taste

SGS Test-Berichte



Test Report

GZF20-018737-02

Date: 18 Sep 2020

Client Name: Guangdong Yueliang Technology Co.,LTD.
 Client Address: Kaixin Industrial Park, Yanhe Road, Sanhe Economy develop district, Huiyang, Huizhou City, Guangdong, China.
 Sample Name: Nano bactericidal coating sheet
 Manufacturer: /
 Sample Batch No.: /
 Production Date: /

Above information and sample(s) were submitted and certified by the client. SGS quotes the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS reference No.: CP20-046305
 Date of sample received: 09 Sep 2020
 Testing period: 09 Sep 2020 - 18 Sep 2020
 Test Requested: Selected test(s) as requested by client.
 Test Method: Please refer to next page(s).
 Test Result(s): Please refer to next page(s).

The current test report is the English version of report number GZF20-018737-01. In case of any discrepancy between Chinese version and English version, the Chinese version shall prevail.
 Unless otherwise stated the results shown in this test report refer only to the items tested. This document cannot be used for publicity, without prior written approval of the SGS.



SGS Authorized Signature

SGS-CSTC Standards Technical Services Co.,Ltd. Guangzhou Branch
 Page 1 of 3



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed hereof available on request or accessible at <http://www.sgs.com/term-and-conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/term-and-conditions/Electronic-Documents.aspx>. Client's attention is drawn to the limitation of liability, indemnification and arbitration clauses therein. Any failure of this document to advise the information contained herein fulfills the Company's liability at the time of its issuance only and within the limits of Client's instructions, if any. The Company's sole responsibility as to the Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written approval of the Company. Any unauthorized alteration, deletion or modification of the content or appearance of this document is prohibited and will be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of a signed document request a certificate, please contact us at telephone: (86-755)83719443, or email: china@sgs.com.
 凡欲验证本报告的真实性,请向本公司索取证书,联系电话:(86-755)83719443,或电邮:china@sgs.com
 中国·广州·经济技术开发及区科学城科丰路16号 邮编:510663 1 400-891-0488 1 (86-20)8075027 www.sgs.com.cn
 中国·广州·经济技术开发及区科学城科丰路16号 邮编:510663 1 400-891-0488 1 (86-20)8075027 e sgschina@sgs.com

Member of the SGS Group (SGS SA)

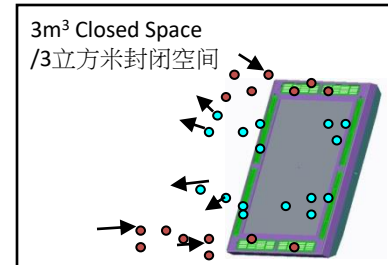
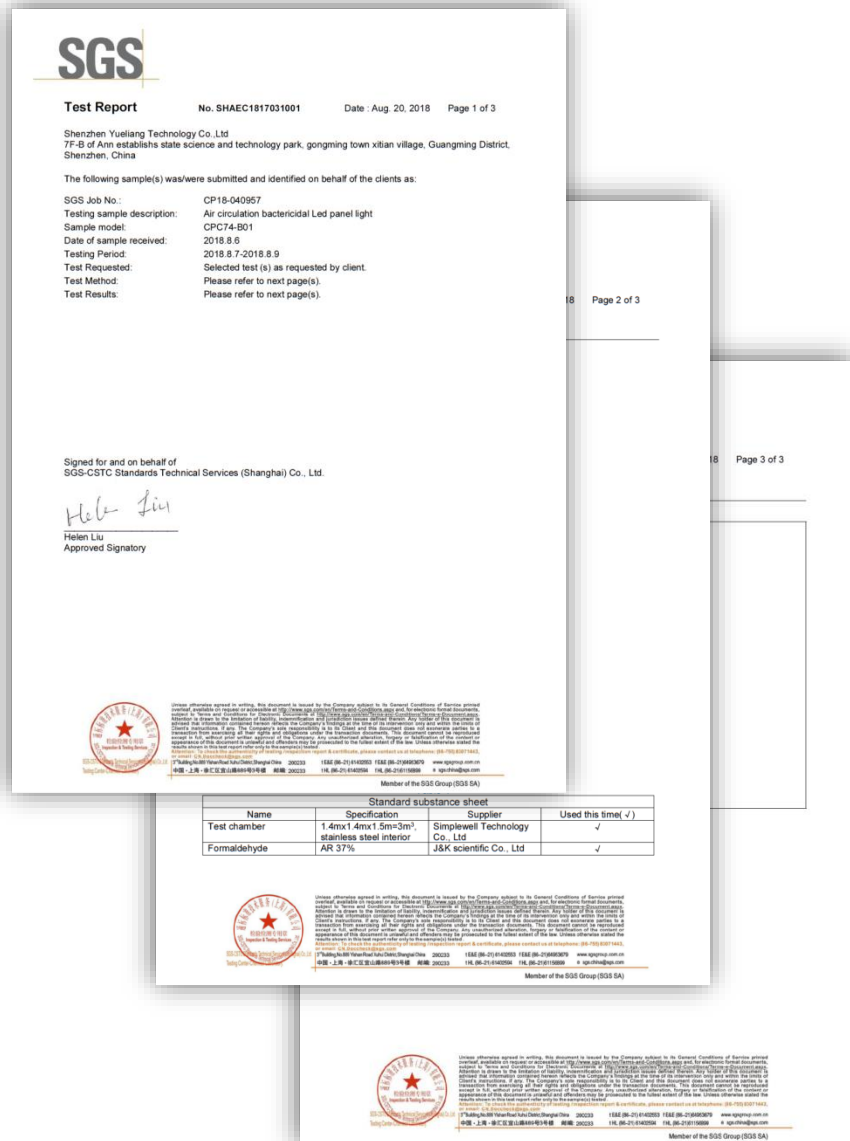


Member of the SGS Group (SGS SA)

Member of the SGS Group (SGS SA)

Bactericidal virus Test	
Name of test bacteria	Average antibacterial rate(%)
Candida albicans ATCC 10231	> 90%
Escherichia coli ATCC 8739	> 99.9%
Staphylococcus aureus ATCC 6538P	> 99.9%
Pseudomonas aeruginosa ATCC 9027	> 99.8%
H1N1	> 99.3%

Licht-Panel SGS Formaldehyd-Zersetzung Test durch SGS



Test time(min)	Formaldehyde concentration(mg/m ³)
0	1.3201
2.5	1.2869
7.5	1.2857
12.5	1.2694
17.5	1.2296
22.5	1.2291
27.5	1.2247
32.5	1.1741
37.5	1.1670
R ²	0.9489
Ke(min ⁻¹)	0.0031
CADR(m ³ /hr)	0.4

Pass the SGS Lab Test

Conduct the experiment according to national standard GB18801-2015.

GB18801 - 2015

Use 30-cubic meters experimental chamber.

SGS Antiseptic Test für Licht-Panel

SGS **MA** **ILAC-MRA** **CNAS** 中国认可 国际互认 检测 TESTING CNAS L0167
2017191612Z

Test Report GZF20-015069-02 Date: 05 Aug 2020

Client Name: Guangdong Yueliang Technology Co.,LTD.
Client Address: Kaixin Industrial Park, Yanhe Road, Sanhe Economy develop district, Huaiyang, Huizhou City, Guangdong, China.

Sample Name: Nano bactericidal coating sheet
Manufacturer: /
Sample Batch No.: /
Production Date: /

中国认可 国际互认 检测 TESTING CNAS L0167

25 Aug 2020
Huaiyang, Huizhou City,

the information with
of any discrepancy
This document cannot be

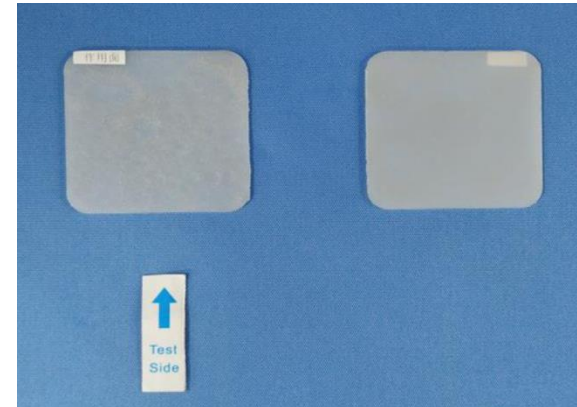
SGS Reference No.: CP20-036565
Date of Sample Received: 28 Jul 2020
Testing Period: 28 Jul 2020 - 05 Aug 2020
Test Requested: Selected test(s) as requested by client.
Test Method: Please refer to next page(s).
Test Result(s): Please refer to next page(s).

The current test report is the English version of report number GZF20-015069-01. In case of any discrepancy between Chinese version and English version, the Chinese version shall prevail.
Unless otherwise stated the results shown in this test report refer only to the items tested. This document cannot be used for publicity, without prior written approval of the SGS.

SGS Authorized Signature
SGS-CSTC Standards Technical Services Co.,Ltd. Guangzhou Branch
Page 1 of 3

Member of the SGS Group (SGS SA)

中国·广州·经济技术开发区科学城科丰路166号 邮编: 510663 1 400-091-0488 1 86-20-8075027 www.sgs.com.cn



Shiny surface (expanded panel)
Antiseptic test

Pass the SGS lab test
Conduct the experiment according to national standard GB/T31402-2015/ISO 22196:2007(IDT)
GB/T31402-2015/ISO 22196:2007(IDT)
Removal rate of staphylococcus and Escherichia coli reaches 99%

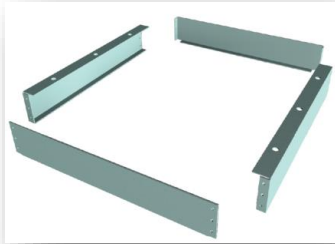
Anwendungsbeispiele



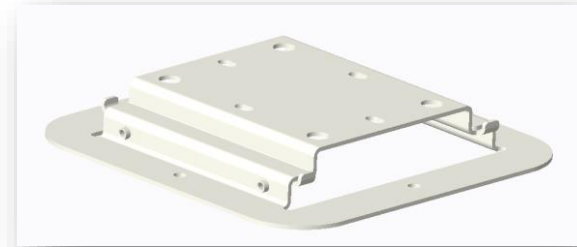
Optionales Zubehör



2.4G Fernbedienung



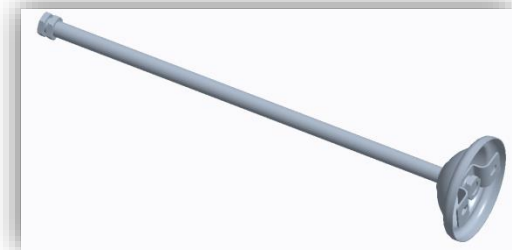
Montagerahmen für Deckenaufbau



Montagebügel für Deckenaufbau



Set Abhängseile



Pendel für Deckenabhängung

Test-Reports SGS Staphylococcus

Test Report

GZF20-016965-02

Date: 25 Aug 2020

Sample Description :

Specimen No.	SGS Sample ID	Description
1	GZF20-016965.001	Block sample

Test Result(s) :

Test Requested : Test of antimicrobial activity

Test Method : GB/T 31402-2015/ISO 22196:2007(IDT) Plastics-Measurement of antibacterial activity on plastic surfaces

GZF20-016965.001

Test organism	Staphylococcus aureus ATCC 6538P
Concentration of bacteria (CFU/mL)	1.9x10 ⁶
Volume of test inoculum (mL)	0.2
U ₀	4.35
U _t	5.94
A _t	-0.20
B (CFU/cm ²)	8.7x10 ⁵
C (CFU/cm ²)	0.63
R	6.1
*Antibacterial activity (%)	>99.9

Notes :

- 1.The untreated sample is plastic film without antimicrobial activity, provided by SGS laboratory.
- 2.U₀: the average log value of bacteria number that recovered from the untreated sample immediately after inoculation (CFU/cm²).
- 3.U_t: the average log value of bacteria number that recovered from the untreated sample after "24 h" inoculation (CFU/cm²).
- 4.A_t: the average log value of bacteria number that recovered from the treated sample after "24 h" inoculation (CFU/cm²).
- 5.R: the value of antimicrobial activity, R=U_t-A_t.
6. *The calculation formula of the antibacterial activity rate is $[(B-C)/B] * 100\%$;
B: arithmetic average of the numbers of bacteria obtained from untreated samples after 24 h incubation (CFU/cm²);
C: arithmetic average of the numbers of bacteria obtained from treated samples after 24 h incubation (CFU/cm²).
- 7.Pre-treatment: UV sterilization of both sides for 15min.

Test-Report SGS - Formaldehyde

Table of Results:

Reference Standard: GB/T 18801-2015

Test Item: Clean air delivery rate (CADR) of Formaldehyde.

Clean air delivery rate (CADR) of Formaldehyde:0.4 m³/h

Remark :

(1) Test chamber: 3m³

(2) Natural decay: $K_n=0.0007(\text{min}^{-1})$

(3) 1st round data for Formaldehyde CADR testing

Temperature:25.3 °C Humidity:59.0 Rh%

Test time (min)	Formaldehyde concentration (mg/m ³)
0.00	1.3201
2.50	1.2869
7.50	1.2857
12.50	1.2694
17.50	1.2296
22.50	1.2291
27.50	1.2247
32.50	1.1741
37.50	1.1670
R ²	0.9489
Ke(min ⁻¹)	0.0031
CADR (m ³ /hr)	0.4

(4) 2nd round data for Formaldehyde CADR testing

Temperature:25.6 °C Humidity:57.8 Rh%

Test time (min)	Formaldehyde concentration (mg/m ³)
0.00	1.5449
2.50	1.5410
7.50	1.5186
12.50	1.5165
17.50	1.5134
22.50	1.4853
27.50	1.4512
32.50	1.4472
37.50	1.4285
R ²	0.9529
Ke(min ⁻¹)	0.0021
CADR (m ³ /hr)	0.3

Table 1

Standard substance sheet			
Name	Specification	Supplier	Used this time(√)
Test chamber	1.4m×1.4m×1.5m=3m ³ , stainless steel interior	Simplewell Technology Co., Ltd	√
Formaldehyde	AR 37%	J&K scientific Co., Ltd	√

Test-Report SGS – Escherichia coli

Test Report

GZF20-015089-02

Date: 05 Aug 2020

Sample Description :

Specimen No.	SGS Sample ID	Description
1	GZF20-015089.001	Block sample

Test Result(s) :

Test Requested : Test of antimicrobial activity

Test Method : GB/T 31402-2015/ISO 22196:2007(IDT) Plastics-Measurement of antibacterial activity on plastic surfaces

GZF20-015089.001

Test organism	Escherichia coli ATCC 8739
Test inoculum (CFU/mL)	5.3x10 ⁵
Volume of test inoculum (mL)	0.2
U ₀	3.82
U _t	5.03
A _t	-0.20
B (CFU/cm ²)	1.1x10 ⁵
C (CFU/cm ²)	0.63
R	5.2
*Antibacterial activity (%)	>99.9

Notes :

- 1.The untreated sample is plastic film without antimicrobial activity, provided by SGS laboratory.
- 2.U₀: the average log value of bacteria number that recovered from the untreated sample immediately after inoculation (CFU/cm²).
- 3.U_t: the average log value of bacteria number that recovered from the untreated sample after "24 h" inoculation (CFU/cm²).
- 4.A_t: the average log value of bacteria number that recovered from the treated sample after "24 h" inoculation (CFU/cm²).
- 5.R: the value of antimicrobial activity, R=U_t-A_t.
6. *The calculation formula of the antibacterial activity rate is $[(B-C)/B] * 100\%$;
B: arithmetic average of the numbers of bacteria obtained from untreated samples after 24 h incubation (CFU/cm²);
C: arithmetic average of the numbers of bacteria obtained from treated samples after 24 h incubation (CFU/cm²).
- 7.Pre-treatment: UV sterilization of both sides for 15min.

Test-Report SGS – H1N1 – influenza virus



Test Report

GZF20-017387-01

Date: 10 Oct 2020

Sample Description:

Specimen No.	SGS Sample ID	Description
1	GZF20-017387.001	Equipment

TEST RESULT(S):

Air virus elimination effect*

Test Method: Refer to Technical Standard for Disinfection (2002 Ministry of Health P.R.China)-2.1.3

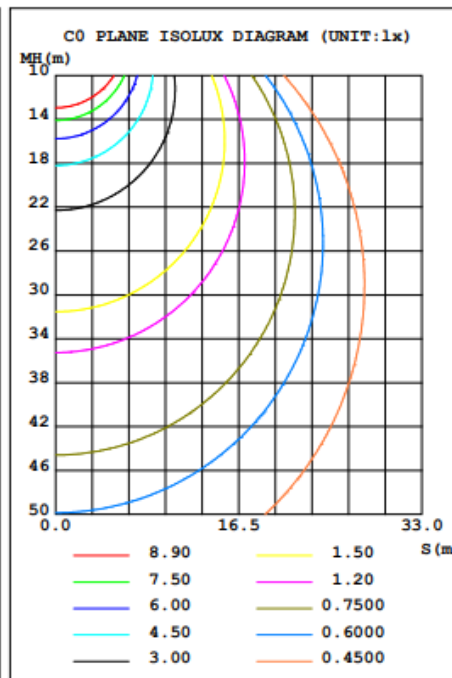
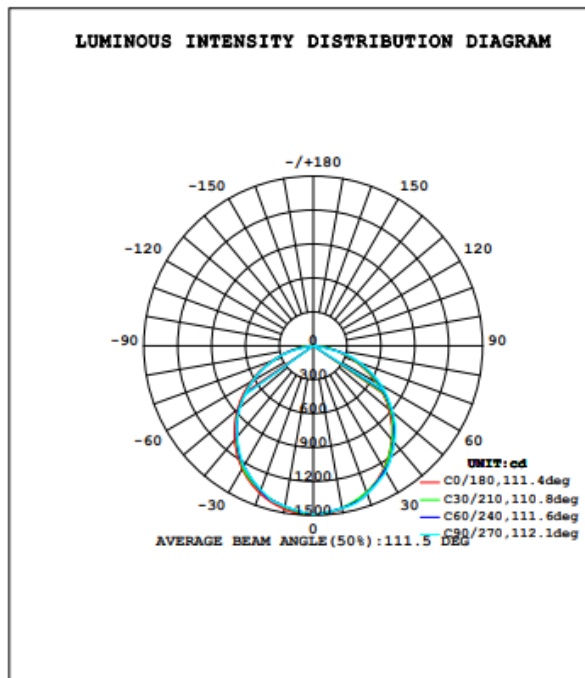
Virus and host cell	Action time	Serial Number	Air virus content (TCID ₅₀ /m ³)	Killing rate (%)
H1N1 Influenza A virus (A/PR/8/34) Host cell: MDCK	0 (CK)	1	2.40×10 ⁶	-
		2	3.24×10 ⁶	-
		3	4.07×10 ⁶	-
	2h	1	< 1.62×10 ²	> 99.99
		2	< 1.62×10 ²	> 99.99
		3	< 1.62×10 ²	> 99.99

Remark:

- 1.The natural decay of the microorganisms in the air had been eliminated.
2. *The test was carried out by external laboratory assessed as competent.
3. The sample was placed in a 1m³ test chamber for testing.

Test-Report Photometrische Daten

DATA OF LAMP		PHOTOMETRIC DATA Eff: 102.15 lm/W			
MODEL		I _{max} (cd)	1492	S/MH (C0/180)	1.25
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	4139.1	η UP, DN (C0-180)	0.0, 51.3
NOMINAL FLUX (lm)	4139.12	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 48.7
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-06-11

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.292
 Humidity: 65.0%
 Test Distance: 6.100m [K=1.0000]
 Remarks: