

EIKOScare



RoHS
Compliant

FEATURES

SERIES: DOWNLIGHT R3000
LIGHT ENGINE: 1 X VVLE35 D13 3000 900mA 27-50V
NOMINAL POWER: 45W (28W) / White (Enhance) Antimicrobial Mode
SYSTEM CONSUMPTION: 48W (31W) / White (Enhance) Antimicrobial Mode
NOMINAL FLUX: 3.200lm White Antimicrobial Mode
OUTPUT FLUX: 2.250lm White Antimicrobial Mode
TEMPERATURE COLOUR: 4.000K White Antimicrobial Mode
CRI: >80 White Antimicrobial Mode
 Small colour tolerance MacAdam 3. White Antimicrobial Mode
SPAM LIFE: L70 / F50 >36.000h
WARRANTY: 3 YEARS

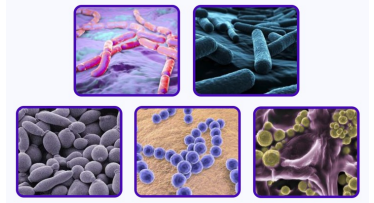
Disinfection Technology: The fixture includes vyv Antimicrobial Light Technology which uses antimicrobial effect of visible light at 405 nm (violet). This technology is safe for humans, animals and plants when exposed to either of both modes (White and Enhance).

Applications: Hospitals, Food Industry, Labs, Gyms, Offices, Public Transport.

DESCRIPTION: Round 230 mm Downlight LED fixture for recessed installation with DUAL vyv Antimicrobial Light Technology (White Antimicrobial Light Mode/ Enhanced Antimicrobial Light Mode)

- Vyv VVLE35 PCB LED Dual Antimicrobial Light Technology
- Osram or Tridonic electronic driver
- Regulable DSI-DALI-SWITCH DIM-BLUETOOTH CASAMBI READY optional
- Box with electronica for Mode Switching.
- Automatic wire connectors WAGO or WIELAND.
- Aluminium ring thermotreatment painted on white, black or grey (RAL9006).
- Electrical connection for flexible or rigid wires without tools.
- Hight transmittance Conical Deglaring Prism. High visual comfort.
- Internal opal methacrylate film for higher comfort.
- Passive high power heatsink block.
- Ceiling fastening by means of three spring fasteners.

CLASIFICATION: REFERENCE: UNE-EN 60598. CLASS II IP-20 (RECESSED SIDE) IP-X4 (EXPOSED SIDE)



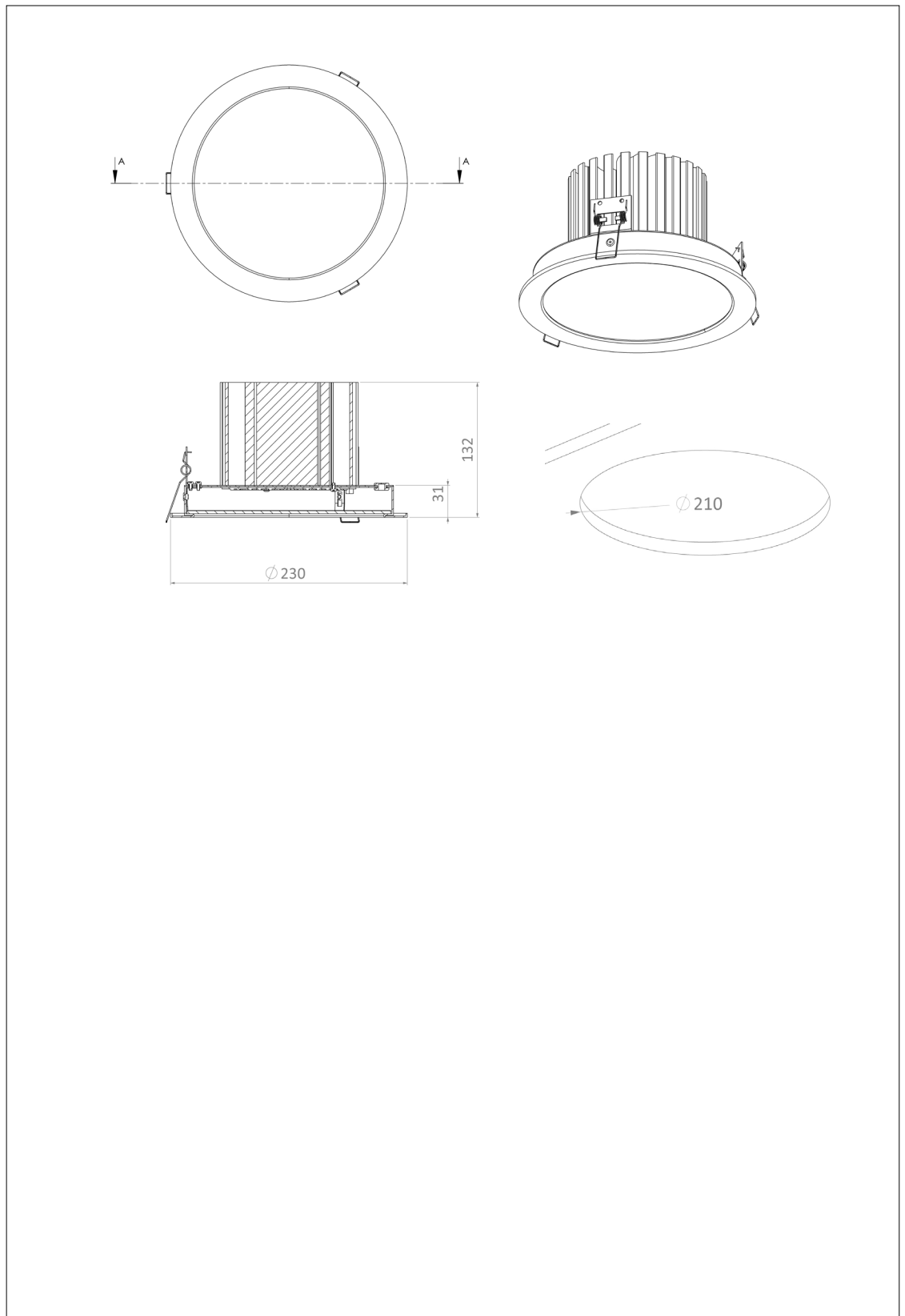
Model	Reference	Nominal Power	Nominal Flux	Dimensions mm	IP Recessed / Exposed
DOWNLIGHT R3000 2044R	EIK-192 230 VVLE35 CDP	45 W	3.200 lm	R 230, H 132	IP 20 IP 44
DOWNLIGHT R3000 2054R	EIK-192 230 VVLE35 CDP 54	45 W	3.200 lm	R 230, H 132	IP 20 IP 54

OPTIONS:

Reference	Description
& CW	Color of painted sufaces: White
& CB	Color of painted sufaces: Black
& CG	Color of painted sufaces: Grey (RAL 9006)

SET		COMPONENT			STANDARD	TREATMENT	TEST
P.	DESCRIPTION	P.	DESCRIPTION	MATERIAL			
1	CUERPO EXTERIOR RING	1-1	STILL 0,5mm	AP-01	UNE.360865	PAINTED	EN-90598-1
		1-2	ALUMINUM				DIN 50017
		1-3	PAINT COLOUR: WHITE, BLACK OR GREY (RAL 9006)	EPOXI POLIESTER	UNE. 20152		UNE. 20152
2	ELECTRICAL	2-1	ELECTRONIC DRIVER OSRAM OR TRIDONIC				UNE. EN EN60598 COMPLIANT
		2-2					
		2-3					
		2-4					
		2-5	WIRE CONNECTORS		UNE-2117		
		2-6					
		2-7	WIRES	Cu. 0,75 mm2. PVC- 105	DIN-1712		
3	OPTICS	3-1	MICROPRISMATIC DIFUSSER	CDP JUNGBECKER			
		3-2					
4	PACKAGING	4-1	CARDBOARD	KRAFT BICOLOR			

UNE EN 60598: PART 1: General requirements and tests
 DIN 50017: Corrosion and aging testing
 UNE 20152: Ballast for fluorescent lamps
 UNE 21117: Wires





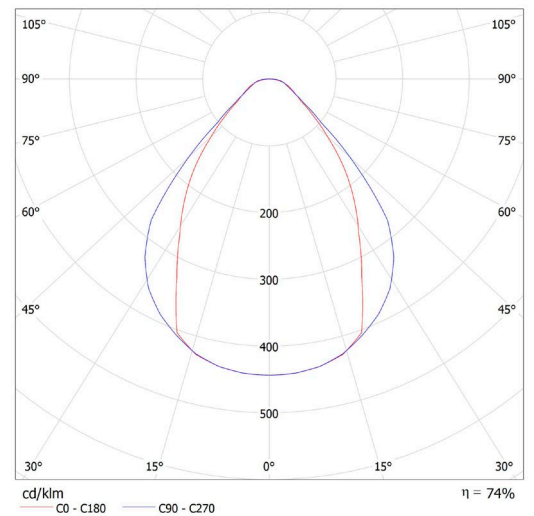
PHOTOMETRIC DATA

DOWNLIGHT R3000

Valoración de deslumbramiento según UGR											
		70	70	50	30	70	70	50	30	30	
ρ Techo		50	30	50	30	50	30	50	30	30	
ρ Paredes		20	20	20	20	20	20	20	20	20	
ρ Suelo		20	20	20	20	20	20	20	20	20	
Tamaño del local X Y	Mirado en perpendicular al eje de lámpara					Mirado longitudinalmente al eje de lámpara					
	2H	2H	16.1	17.1	16.3	17.3	17.5	16.0	17.0	16.3	17.2
	3H	16.8	17.8	17.1	18.0	18.3	16.3	17.2	16.6	17.5	17.7
	4H	17.3	18.2	17.6	18.4	18.7	16.5	17.3	16.8	17.6	17.9
	6H	17.7	18.5	18.0	18.8	19.1	16.6	17.4	17.0	17.7	18.0
	8H	17.8	18.6	18.2	18.9	19.2	16.7	17.4	17.0	17.8	18.1
	12H	18.0	18.7	18.3	19.0	19.3	16.7	17.4	17.1	17.8	18.1
4H	2H	16.2	17.0	16.5	17.3	17.6	16.1	17.0	16.5	17.3	17.6
	3H	17.1	17.8	17.5	18.2	18.5	16.6	17.4	17.0	17.7	18.0
	4H	17.7	18.3	18.0	18.6	19.0	16.9	17.5	17.3	17.9	18.2
	6H	18.2	18.8	18.6	19.1	19.5	17.1	17.7	17.6	18.1	18.5
	8H	18.4	18.9	18.8	19.3	19.7	17.2	17.8	17.7	18.1	18.5
	12H	18.6	19.0	19.0	19.4	19.9	17.3	17.8	17.8	18.2	18.6
8H	4H	17.7	18.2	18.2	18.6	19.0	17.0	17.5	17.4	17.9	18.3
	6H	18.4	18.8	18.8	19.2	19.6	17.3	17.8	17.8	18.2	18.6
	8H	18.6	19.0	19.1	19.4	19.9	17.5	17.9	18.0	18.3	18.8
	12H	18.8	19.2	19.3	19.6	20.1	17.6	17.9	18.1	18.4	18.9
12H	4H	17.7	18.2	18.2	18.6	19.0	17.0	17.5	17.5	17.9	18.3
	6H	18.4	18.7	18.8	19.2	19.6	17.4	17.7	17.9	18.2	18.7
	8H	18.7	19.0	19.1	19.4	19.9	17.5	17.8	18.0	18.3	18.8

Variación de la posición del espectador para separaciones S entre luminarias			
S = 1.0H	+0.4 / -0.6		+0.8 / -1.3
S = 1.5H	+1.3 / -1.1		+2.2 / -2.0
S = 2.0H	+2.4 / -1.7		+3.7 / -2.6
Tabla estándar	BK03		BK02
Sumando de corrección	-0.5		-1.7
Índice de deslumbramiento corregido en relación a 3834lm Flujo luminoso total			

Los valores UGR se calculan según CIE Publ. 117. Spacing-to-Height-Ratio = 0.25.

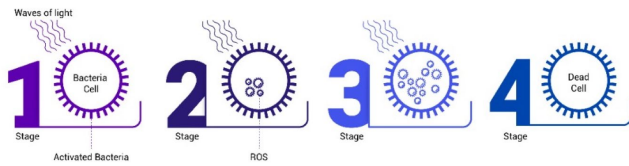


Bacteria

- Gram Positive**
 Staphylococcus aureus (incl. MRSA)
 Clostridium perfringens
 Clostridium difficile
 Enterococcus faecalis
 Staphylococcus epidermidis
 Staphylococcus hyicus
 Streptococcus pyogenes
 Listeria monocytogenes
 Bacillus cereus
 Mycobacterium terrae
 Lactococcus lactis
 Lactobacillus plantarum
 Bacillus circulans
 Streptococcus thermophilus
- Gram Negative**
 Acinetobacter baumannii
 Pseudomonas aeruginosa
 Klebsiella pneumoniae
 Proteus vulgaris
 Escherichia coli
 Salmonella enteritidis
 Shigella sonnei
 Serratia spp.
 Salmonella typhimurium

Bacterial Endospores

- Bacillus cereus
Clostridium difficile
- Yeast and filamentous fungi**
 Aspergillus niger
 Candida albicans
 Saccharomyces cerevisiae

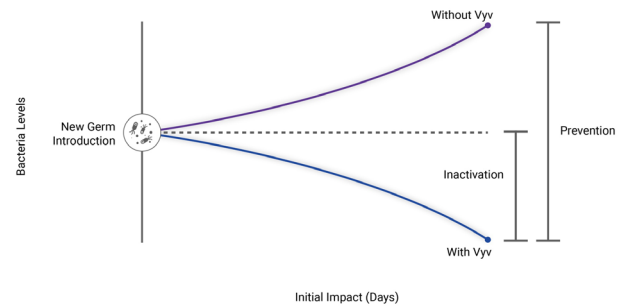
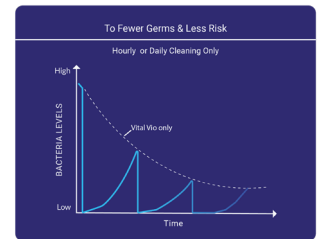
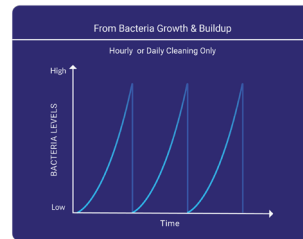
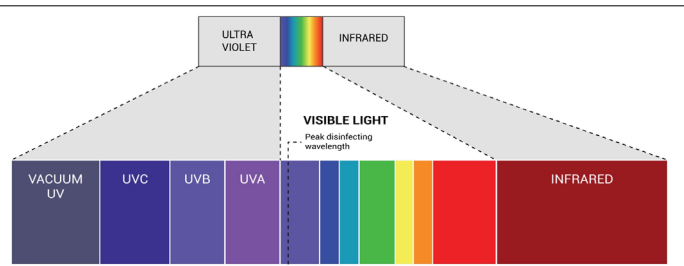


Vyv's antimicrobial light wavelengths initiate a photo-reaction with endogenous non-iron porphyrin molecules found only in microorganisms. The porphyrin molecules are photo activated. Vyv's light frequencies excite the porphyrins, causing a break-off of excess Reactive Oxygen Species (ROS). This causes irreparable damage within the cell, ultimately destroying the cellular membrane from the inside out.

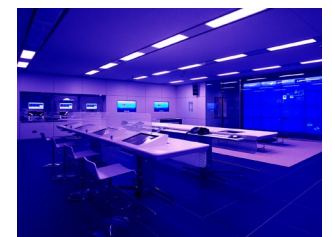
Vyv attacks the cell from multiple vectors preventing the cell from building up any new defenses against this form of attack. This is unlike approaches used with antibiotics that can cause germs to mutate and develop resistance.

Use Vyv anywhere and get a new kind of continuous antimicrobial

Comparison Category	Vyv	Ultraviolet (UV-C)
Timing of Antimicrobial Impact	Continuous	Point in time
Used Around People	✓ Yes Meets IEC standards for unrestricted & continuous use	✗ No Does not meet IEC standards for unrestricted & continuous use
Environmental Considerations	No degradation effects to materials	Material degradation to materials such as plastics & rubber
Use Case Applications	Occupied & unoccupied spaces - broad use cases	Unoccupied spaces only
Kill Mechanism	Destruction of cell via ROS produced by porphyrin molecules when excited by 405nm light.	Destruction of DNA/RNA - all genetic material
Delivery Mechanism	Individual LEDs allow for integration into any size light, space, etc	Primarily bulbs, early stage LEDs (expensive, inefficient)
Investment (capital, people, service)	Low/Med. upfront cost, one time install, no manual labor or service	Med/High upfront cost, regular bulb replacements, manual operation & oversight w/each use



Vyv Antimicrobial+Light™



Vyv Enhanced Antimicrobial™