

**Class I, Div. 2, Groups A,B,C,D**  
**Class I, Zone 2, Groups IIC, IIB, IIA**  
**Class II, Div. 1 & 2, Groups E,F,G**  
**Class III**  
**Suitable for wet locations**  
**Marine**  
**NEMA 3, 4X**



**FEATURES-SPECIFICATIONS**

**CERTILITE® LED**

**Applications**

CERTILITE® MBL LED fixtures are designed for installations where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambients can be expected. They can be used in locations made hazardous by the presence of flammable vapors or gases or combustible dusts as defined by the NEC.

Typical applications include manufacturing plants, and certain chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and storage facilities.

**Compliances**

- UL-8750 for LED lighting
- UL Marine type lighting fixtures (HID models) UL-844 Standard for lighting fixtures for hazardous locations, Class I, Division 2; Class II, Divisions 1 and 2; Class III
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations
- Enclosed and gasketed
- NEMA 3, 4X

**Materials**

- Ballast tank, splice box and guards (MBAG, VMAG) corrosion resistant copper-free aluminum alloy
- Baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- Reflectors - Polyester reinforced fiberglass

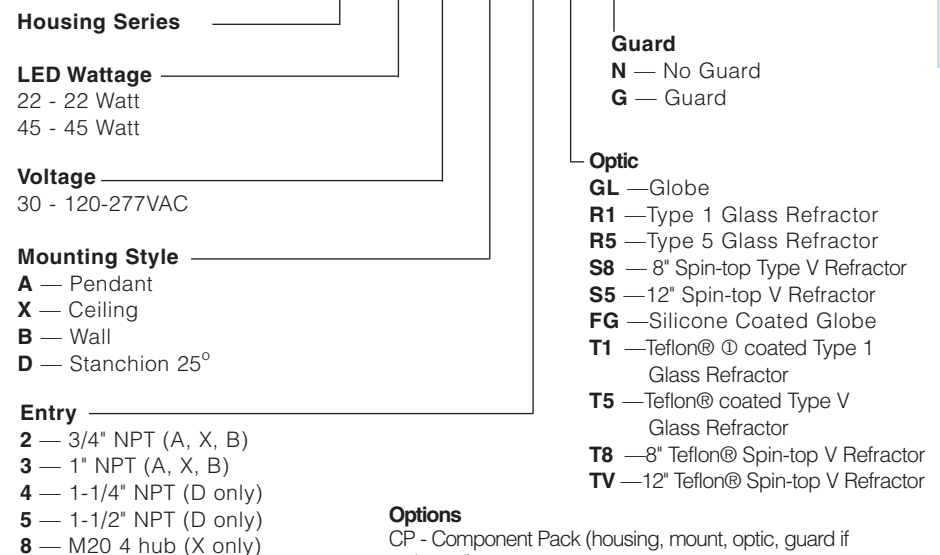
**LED Luminaire Features and Standards**

- Compact in Size with Traditional Industrial Appearance and Suitability
- Wide variety of optics including globes, globes with reflectors, all-glass refractors, and spin-top refractors
- Optional Mounting arrangements including Pendant, Wall, Ceiling, and Stanchion
- MBL LED Housings can be retrofitted to existing MB splice boxes; upgrade from Fluorescent or HID
- Energy Savings - less than 50 Watts of Power; 25 Watts for MBL2230
- Long Life - 50,000 - 60,000 maintenance free hours to 70% initial lumens
- Crisp White Light for Excellent Color Rendering - Chromaticity 5000°K (CCT); 70 CRI

- Ambient suitability -40°C to 40°C (to 55°C for MBL2230)
- Instant on - including after power interruption
- "World Voltage" 120-277VAC 50/60Hz
- Solder-LESS LED Board Connections – Vibration Resistant
- Dual Drivers - Redundant Systems (built-in backup), or for additional energy savings half of MBL4530 can be turned off
- LM80-08\* Measurement of lumen maintenance for LED light sources
- LM79-08\* Certified "Absolute" Photometry, including Chromaticity Color for Solid State Lighting
- L70 Values - Industry Nomenclature for Hours of use to 70% of Initial Lumens

\* LM-xx are Illumination Engineering Society Standards designed to promote uniformity in testing procedures among test labs and manufacturers. For more information go to [www.ies.org](http://www.ies.org)

**Catalog Number Logic** **MBL 45 30 A 2 R5 G**



**Options**

CP - Component Pack (housing, mount, optic, guard if selected)

AN - Assembled Fixture (components as selected)

①Teflon® is a registered trademark of DuPont, Inc.



**KILLARK®**



PENDANT



WALL



CEILING



STANCHION



### ORDERING INFORMATION

#### MBL SERIES PENDANT WITH OPTIC AND GUARD ①

WATTS	HUB SIZE②	VOLTAGE③	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V REFRACTOR & GUARD
22	3/4"	120-277VAC	MBL2230A2GLG	MBL2230A2R1G	MBL2230A2R5G	MBL2230A2S8G	MBL2230A2S5G
45	3/4"	120-277VAC	MBL4530A2GLG	MBL4530A2R1G	MBL4530A2R5G	MBL4530A2S8G	MBL4530A2S5G

#### MBL SERIES CEILING WITH OPTIC AND GUARD ①

WATTS	HUB SIZE②	VOLTAGE③	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V REFRACTOR & GUARD
22	3/4"	120-277VAC	MBL2230X2GLG	MBL2230X2R1G	MBL2230X2R5G	MBL2230X2S8G	MBL2230X2S5G
45	3/4"	120-277VAC	MBL4530X2GLG	MBL4530X2R1G	MBL4530X2R5G	MBL4530X2S8G	MBL4530X2S5G

#### MBL SERIES WALL WITH OPTIC AND GUARD ①

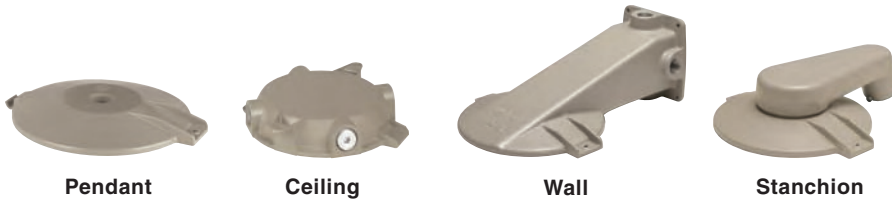
WATTS	HUB SIZE②	VOLTAGE③	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V REFRACTOR & GUARD
22	3/4"	120-277VAC	MBL2230B2GLG	MBL2230B2R1G	MBL2230B2R5G	MBL2230B2S8G	MBL2230B2S5G
45	3/4"	120-277VAC	MBL4530B2GLG	MBL4530B2R1G	MBL4530B2R5G	MBL4530B2S8G	MBL4530B2S5G

#### MBL SERIES 25° STANCHION WITH OPTIC AND GUARD ①

WATTS	HUB SIZE④	VOLTAGE⑤	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	8" SPIN-TOP TYPE V REFRACTOR & GUARD	12" SPIN-TOP TYPE V REFRACTOR & GUARD
22	1-1/4"	120-277VAC	MBL2230D4GLG	MBL2230D4R1G	MBL2230D4R5G	MBL2230D4S8G	MBL2230D4S5G
45	1-1/4"	120-277VAC	MBL4530D4GLG	MBL4530D4R1G	MBL4530D4R5G	MBL4530D4S8G	MBL4530D4S5G

- ① Catalog numbers shown are with Guard; to omit guard change ending G to N; e.g. MBL2230A2GLN
- ② Catalog numbers shown are with 3/4" conduit openings; change "2" to "3" for 1" e.g. MBL2230A3GLG
- ③ 120VAC through 277VAC 50/60Hz
- ④ Catalog numbers shown are with 1-1/4" conduit openings; change "4" to "5" for 1-1/2" e.g. MBL2230D5GLG





MB MOUNTING BRACKETS				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	WALL	STANCHION	
MBA-2	MBX-2	MBB-2	—	3/4"
MBA-3	MBX-3	MBB-3	—	1"
—	MBX-8*	—	—	M20
—	—	—	MBD-4	1-1/4"
—	—	—	MBD-5	1-1/2"

\* MBX-8 furnished with 3 non-metallic plugs

MBL LED OPTICS AND ACCESSORIES		
DESCRIPTION	OPTIC LOGIC	GUARD
Globe (glass)	MBG (GL)	MBAG
Reflector (all glass) Type I	VMR171 (R1)	VMAG17
Reflector (all glass) Type V	VMR175 (R5)	VMAG17
Reflector (spin top) 8" Type V	VZRG1550 (S8)	VMRWG8
Reflector (spin top) 12" Type V	VZRG2550 (S5)	VMRWGS
Globe (Silicone coated)	MBGT (FG)	MBAG
Reflector Teflon® ① coated (all glass) Type I	VMR171T (T1)	VMAG17
Reflector Teflon® coated (all glass) Type V	VMR175T (T5)	VMAG17
Reflector (spin top) 8" Type V	VZRG1550T (T8)	VMRWG8
Reflector (spin top) 12" Type V	VZRG2550T (TV)	VMRWGS
Reflector for MBG Globe - DOME ②	VMPSD-17	NA
Reflector for MBG Globe - ANGLE ②	VMPA-17	NA
120VAC Photocell with FS Style Cover	VMFSPC1	NA
208-277VAC Photocell with FS Style Cover	VMFSPC2	NA
3-sided EXIT Accessory (use without guard)	VEXA100B	NA

① Teflon is a registered trademark of DuPont, Inc.

② Reflectors for use with MBG/MBAG only; VMG17 globe with VMAG17 guard will fit without reflector.

MBL LED HOUSINGS WITH DRIVERS AND LEDS - ELECTRICAL RATINGS					
CAT. NO.	VOLTAGE 50/60HZ	WATTAGE	AMPS 120/277	CIL <sup>③</sup>	WEIGHT
MBL2230	120-277VAC	25.8	.215/.093	1980	8 LBS
MBL4530	120-277VAC	48.4	.416/.180	3960	15.5 LBS

THERMAL PERFORMANCE DATA (ANY OPTIC)					
CAT. NO.	AMBIENT	C1D2	C2D1	L70	SUPPLY WIRE
MBL2230	40°C	T4A	T4 (EFG)	60,000 HRS	75°C
MBL2230	55°C	T4	T4(EFG)	50,000 HRS	90°C
MBL4530	40°C	T4A	T4(EFG)	55,000 HRS	90°C

③ CIL = Calculated Initial Lumens of LED component based on mfg. data and driver current INSIDE the optic. This value is provided as a reference only for comparison to traditional light sources such as incandescent, HID, or fluorescent which use initial values in "relative" photometry. KILLARK LED luminaires are tested using the Absolute photometry method (LM79-08), which calculates delivered lumens only. KILLARK's LED luminaires provide very bright white 5000° K (CCT) color and can appear brighter than traditional light sources with higher lumen values under both photopic and scotopic conditions.

④ Driver THD < 20%, Powerfactor 99% @ 120V; Line Regulation 2%; Load regulation 5%; Protected against Over-voltage and Over-current.

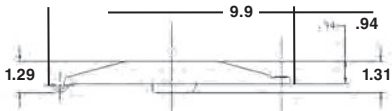
⑤ VMRWG8 Plated Steel, VMRWGS 316 Stainless Steel.

OPTICS

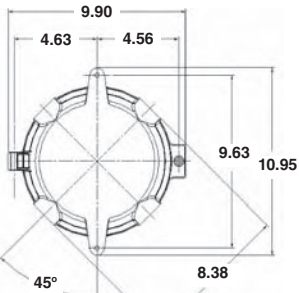


ACCESSORIES

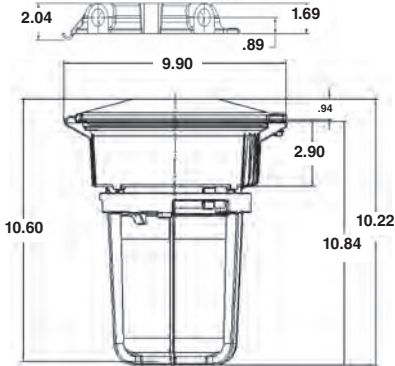




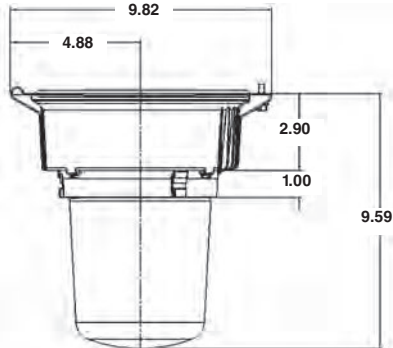
**MBA Pendant**



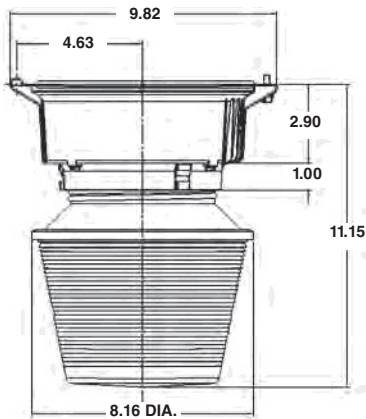
**MBX Ceiling**



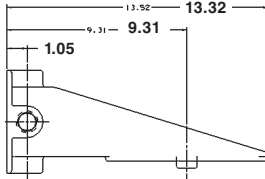
**MBL Pendant, Globe, Guard**



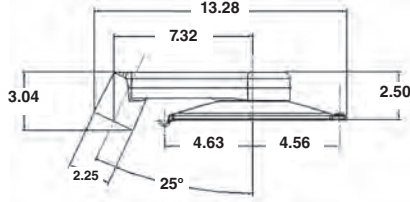
**MBL & MBG Globe Only**



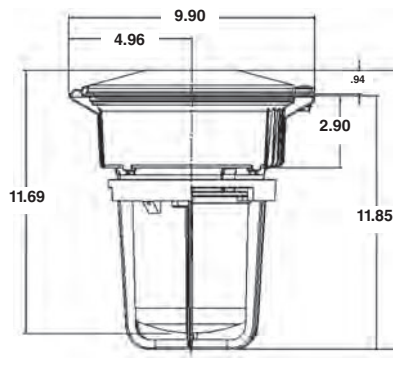
**MBL & 8" Type V Spin-top**



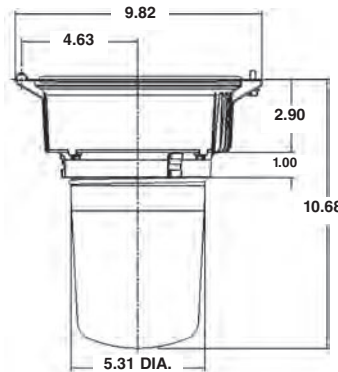
**MBB Wall Mount**



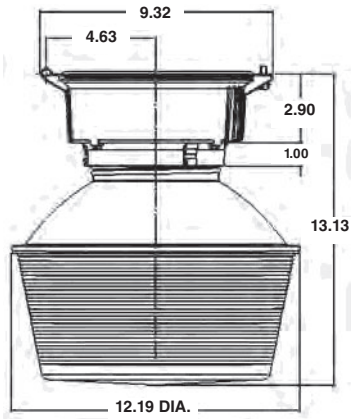
**MBD Stanchion**



**MBL Pendant, Refractor, Guard**

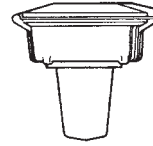


**MBL & VMR Refractor**



**MBL & 12" Type V Spin-top**

**LED 45 Watt Globe Only**



**Zonal Lumen Summary**

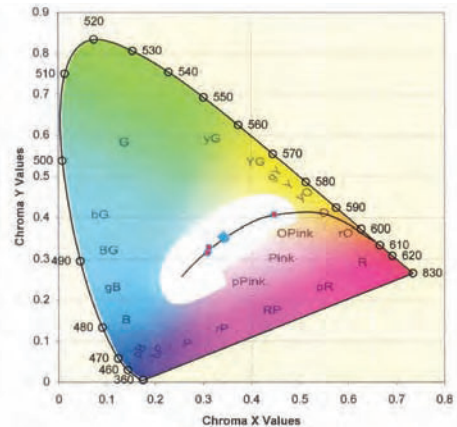
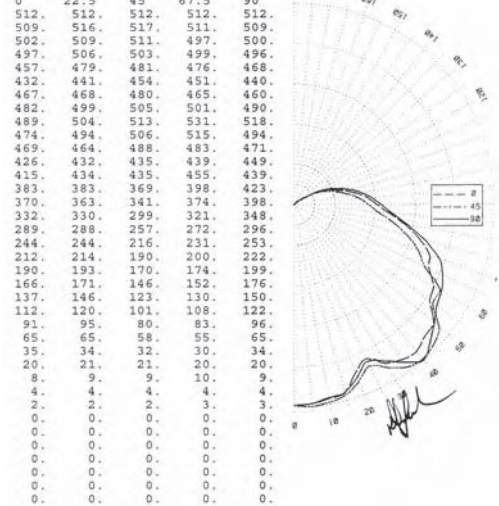
Zone	Lumens	%Lamp	%Fixt
0-30	397	N.A.	13.5%
0-40	710	N.A.	24.2%
0-60	1488	N.A.	50.6%
0-90	2471	N.A.	84.1%
90-120	430	N.A.	14.6%
90-130	460	N.A.	15.6%
90-150	468	N.A.	15.9%
90-180	468	N.A.	15.9%
0-180	2940	N.A.	100

**Absolute Photometry**

Total Luminaire Efficiency = N.A.%

Spacing to Mounting Height Ratio 1.5

**CANDLEPOWER DISTRIBUTION**



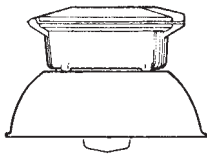
Chromaticity 5101°K (CCT); 72.2 CRI

Certified Report BAL15302.0

① 22W model values approx. 50% of 45W



**LED 45Watt Globe and Dome Reflector** ①

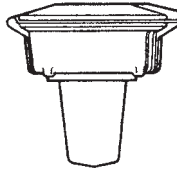


**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixt
0-30	502	N.A.	19.4%
0-40	896	N.A.	34.6%
0-60	1859	N.A.	71.8%
0-90	2577	N.A.	99.5%
90-120	7	N.A.	0.3%
90-130	11	N.A.	0.4%
90-150	13	N.A.	0.5%
90-180	13	N.A.	0.5%
0-180	2590	N.A.	100

**Absolute Photometry**  
Total Luminaire Efficiency = N.A.%  
Spacing to Mounting Height Ratio 1.5

**LED 45Watt Glass Type V Refractor** ①

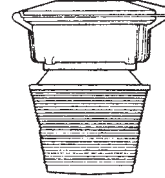


**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixt
0-30	386	N.A.	13.3%
0-40	631	N.A.	21.7%
0-60	1305	N.A.	44.8%
0-90	2519	N.A.	86.6%
90-120	315	N.A.	10.8%
90-130	355	N.A.	12.2%
90-150	390	N.A.	13.4%
90-180	391	N.A.	13.4%
0-180	2910	N.A.	100

**Absolute Photometry**  
Total Luminaire Efficiency = N.A.%  
Spacing to Mounting Height Ratio 1.3

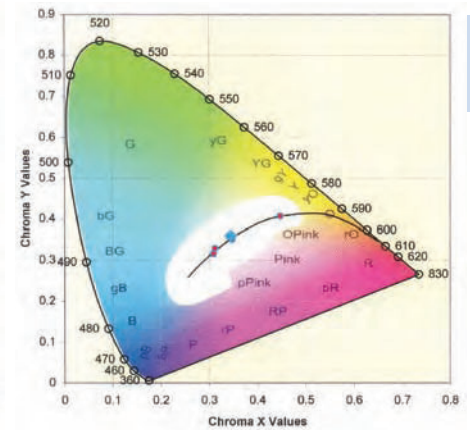
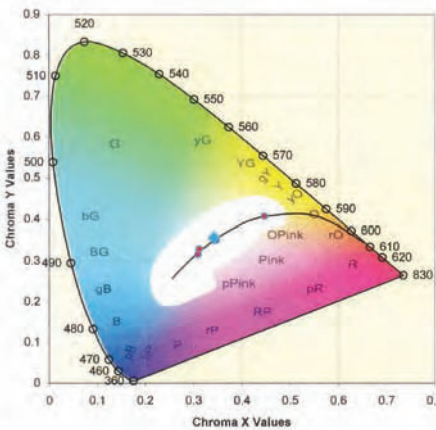
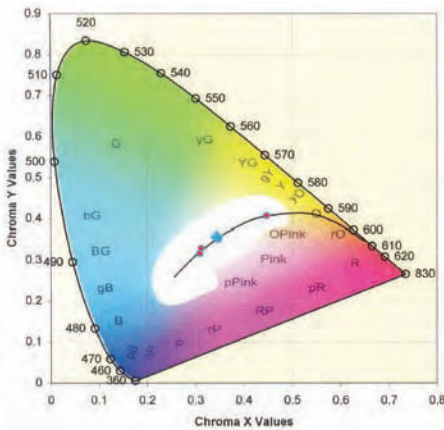
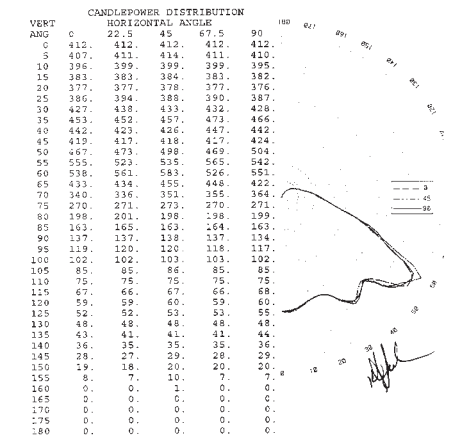
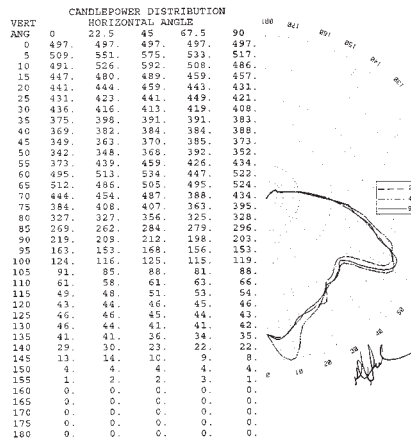
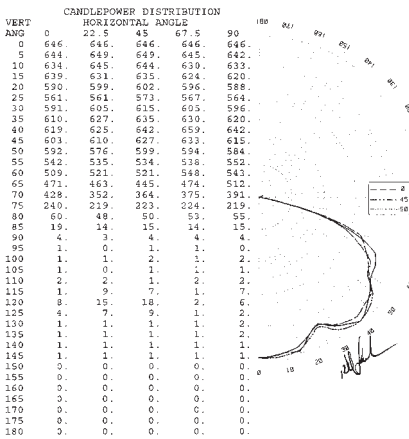
**LED 45Watt 8" Spin-top Type V Refractor** ①



**Zonal Lumen Summary**

Zone	Lumens	%Lamp	%Fixt
0-30	328	N.A.	12.1%
0-40	617	N.A.	22.7%
0-60	1429	N.A.	52.5%
0-90	2332	N.A.	85.7%
90-120	287	N.A.	10.6%
90-130	334	N.A.	12.3%
90-150	384	N.A.	14.1%
90-180	388	N.A.	14.3%
0-180	2720	N.A.	100

**Absolute Photometry**  
Total Luminaire Efficiency = N.A.%  
Spacing to Mounting Height Ratio 1.6



① 22W model values approx. 50% of 45W