ZANEEN

MICRO RECESSED

E9I141-

base number

Color Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro Brand: Platek Division: Exterior Mounting Type: Recessed Mounting Location: In-Ground Subcategory: Drive Over

PHYSICAL Shape: Round Diameter (mm): 95 Diameter (in): 3 1/4 Height (mm): 97 Height (in): 3 13/16 Light Distribution: Direct Weight (kg): 0.55 Weight (lbs): 1.2 Load Resistance (kg): 2000 Load Resistance (lbs): 4409

Installation Requirement: Installation in sleeve set in concrete with a 20 - 30cm / 8 - 12" gravel drain bed

Diffuser: Clear tempered glass

Fixture Finish: SST

Fixture Material: Aluminum Die Cast

Cable Details: Supplied with 1 power cable 1m in length

ELECTRICAL

Lamp Type: LED Input Wattage (W): 2.5 Total Output Wattage (W): 2 Driver Included: No Driver Location: Remote Driver Type: Constant Current - Universal Driver Class: Class 2 Housing: (Not included - see components) L9A09600 allows for external driver (non-dimming - 120 / 277Vac [-25

Input Voltage (V): 120 - 277 Constant Current (MA): 700

Upon Request: External w/L9A09600 ONLY: Non-dimming 120 / 277Vac min. operating temperature -25°C; if a lower operating temperature is required it must be REMOTE / (Not included - see components [IP65 or higher enclosure to be supplied by others]) Remote: (- 40°C) 0-10Vdc dimming (120 / 277Vac) / (-25°C) Phase dimming

Number of LEDs: 1

Color Temperature (°K): 3000 / 4000 Max. Delivered Lumen (lm): 130 / 135 Nominal Lumen (lm): 250 / 260

CRI: >80 CRI

Lamp Life (hrs): 60000

OPTICAL

Optic°: Asymmetric

Beam Angle: 62

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards

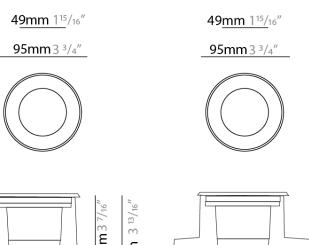
IP rating: IP68

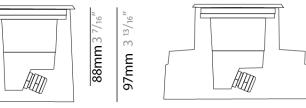
IK Rating: IK10

ZaugeRationg: **6**0. **७3.6**24, T 1800-388-3382, F 416-247-9319, www.zaneen.com

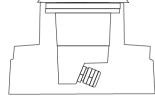
PROJECT TYPE SPECIFIER QUANTITY DATE











Wide Housing L9A09600



Page 1/20

88mm 3 7/16



E9I141-

PROJECT	
TYPE	
SPECIFIER	
QUANTITY	
DATE	





ZANEEN.

MICRO RECESSED

E9I157-

base number Color

Color Lens Temperature Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro

Brand: Platek

Division: Exterior

Mounting Type: Recessed

Mounting Location: In-Ground

Subcategory: Drive Over

PHYSICAL

Shape: Round

Diameter (mm): 95

Diameter (in): 3 ¾

Height (mm): 97

Height (in): 3 ⅓

Light Distribution: Indirect

Weight (kg): 0.55

Weight (lbs): 1.2

Load Resistance (kg): 2000

Load Resistance (lbs): 4409

Installation Requirement: Installation in sleeve set in concrete with a 20

Installation Requirement: Installation in sleeve set in concrete with a 20 - 30cm / 8 - 12" gravel drain bed

Diffuser: Clear tempered glass

Fixture Finish: SST

Fixture Material: Aluminum Die Cast

Cable Details: Supplied with 1 power cable 0.5m in length

ELECTRICAL

Lamp Type: LED

Input Wattage (W): 5.9

Total Output Wattage (W): 5

Dimming: Non-Dimming / Phase Dimming (120Vac only) / 0-10V

Dimming

Driver Included: No

Driver Location: Remote

Driver Type: Constant Current - 120/277Vac

Driver Class: Class 2

Input Voltage (V): 120 - 277

Constant Current (MA): 500

Upon Request: (Included) external w/L9A09600 only: Non-dimming 120 / 277Vac - min. operating temperature -25°C; if a lower operating temperature is required it must be REMOTE and is NOT included / (Not included - see components [IP65 or higher enclosure to be supplied by others]) Remote: (- 40°C) 0-10Vdc dimming (120 / 277Vac) / (-40°C) Phase dimming @120Vac only

LED

Number of LEDs: 3

Color Temperature (°K): 3000 / 4000

Max. Delivered Lumen (lm): 435 - 465 / 450 - 485

Nominal Lumen (lm): 570 / 600

Lamp Life (hrs): 60000

OPTICAL

Optic°: 12 / 33 / 44

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards

IP rating: IP68
IK Rating: IK10

Bug Rating: B0 U3 G0

Bug Rating: BU U3 GU

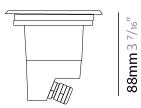
Linen Request: Higher Maximum sen pient I ampre, at wire zaneen.com

PROJECT
TYPE
SPECIFIER
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DATE



Ø95mm 3 3/4"









E9I157-







MICRO ROLL OVER RECESSED

E91560-

base number

Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro	
Subseries: Micro Roll Over	
Brand: Platek	
Division: Exterior	
Mounting Type: Recessed	
Mounting Location: In-Ground	
Subcategory: Marker	

DHACICVI

PHISICAL
Shape: Round
Diameter (mm): 95
Diameter (in): 3 ³ / ₄
Height (mm): 114
Height (in): 4 ½
Light Distribution: Uplight
Weight (kg): 0.4
Weight (lbs): 0.88
Load Resistance (kg): 2000
Load Resistance (lbs): 4409
Installation Requirement: Installation in sleeve set in concrete with a 2

- 30cm / 8 - 12" gravel drain bed

Screws: No visible screws

Diffuser: Clear tempered glass

Fixture Finish: SST

Fixture Material: Stainless Steel AISI 316L

Cable Details: Supplied with 1 power cable 0.5m in length

ELECTRICAL

Lamp Type: LED
Input Wattage (W): 2.9
Total Output Wattage (W): 1.5
Driver Included: No
Driver Location: Remote
Driver Type: Constant Current - Universal
Input Voltage (V): 120 - 277
Constant Current (MA): 350
Upon Request: (Not included - see components [IP65 or higher enclosure to be supplied by others]) 0-10Vdc dimming / Phase dimming / Non-dimming 120/277Vac

LED

Number of LEDs: 1

Color Temperature (°K): 3000 / 4000 Max. Delivered Lumen (lm): 15 / 16 Nominal Lumen (lm): 190 / 200 CRI: >80 CRI

Lamp Life (hrs): 60000

OPTICAL

Optic°: 1 Opening

RATINGS AND CERTIFICATIONS

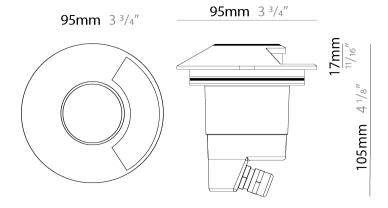
Certified By: Certified for North American Standards IP rating: IP68 IK Rating: IK10

Bug Rating: B0 U1 G0 Marine Grade: Stainless Steel AISI 316L

Upon Request: Higher Maximum Ambient Temperature

PROJECT TYPE SPECIFIER QUANTITY DATE







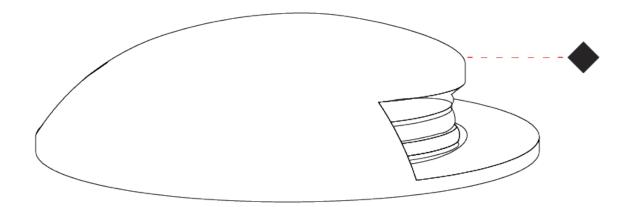
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MICRO ROLL OVER RECESSED

E9I560-

PROJECT	
ТҮРЕ	
SPECIFIER	
QUANTITY	
DATE	





ZANEEN.

MICRO ROLL OVER RECESSED

E9I561-

base number

Temperature

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro
Subseries: Micro Roll Over
Brand: Platek
Division: Exterior
Mounting Type: Recessed
Mounting Location: In-Ground
Subcategory: Marker

PHYSICAL

Shape: Round
Diameter (mm): 95
Diameter (in): 3 ¾
Height (mm): 114
Height (in): 4 ½
Light Distribution: Uplight
Weight (kg): 0.4
Weight (lbs): 0.88
Load Resistance (kg): 2000
Load Resistance (lbs): 4409

Installation Requirement: Installation in sleeve set in concrete with a 20 - 30cm / 8 - 12" gravel drain bed

Screws: No visible screws
Diffuser: Clear tempered glass

Diffuser: Clear tempered glass
Fixture Finish: SST

Fixture Material: Stainless Steel AISI 316L

Cable Details: Supplied with 1 power cable 0.5m in length

ELECTRICAL

Lamp Type: LED
Input Wattage (W): 2.9
Total Output Wattage (W): 1.5
Driver Included: No
Driver Location: Remote
Driver Type: Constant Current - Universal
Input Voltage (V): 120 - 277
Constant Current (MA): 350
Upon Request: (Not included - see components [IP65 or higher enclosure to be supplied by others!) 0.10//dc dimming / Phase dimming

Upon Request: (Not included - see components [IP65 or higher enclosure to be supplied by others]) 0-10Vdc dimming / Phase dimming / Non-dimming 120/277Vac

LED

Number of LEDs: 1

Color Temperature (°K): 3000 / 4000

Max. Delivered Lumen (lm): 35 / 37

Nominal Lumen (lm): 190 / 200

CRI: >80 CRI

Lamp Life (hrs): 60000

OPTICAL

Optic°: 2 Openings

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards

IP rating: IP68

IK Rating: IK10

Bug Rating: B0 U1 G0

Marine Grade: Stainless Steel AISI 316L

Upon Request: Higher Maximum Ambient Temperature

PROJECT

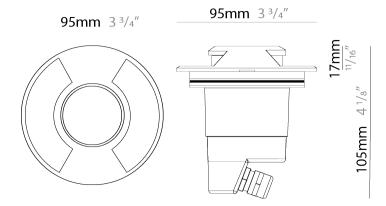
TYPE

SPECIFIER

QUANTITY

DATE







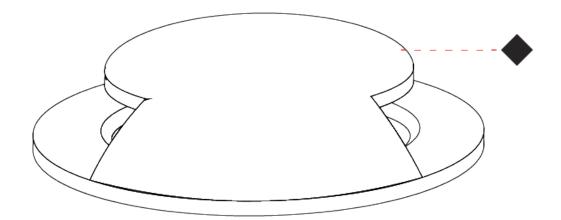
Page 7/20



MICRO ROLL OVER RECESSED

E9I561-

PROJECT	
ТҮРЕ	
SPECIFIER	
QUANTITY	
DATE	





ZANEEN

MICRO RECESSED

E9I564-

base number

Temperature Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro Brand: Platek Division: Exterior Mounting Type: Recessed Mounting Location: In-Ground Subcategory: Drive Over

PHYSICAL

Shape: Round Diameter (mm): 95 Diameter (in): 3 3/4

Height (mm): 88

Height (in): 3 1/2

Light Distribution: Uplight Weight (kg): 0.5

Weight (lbs): 1.1

Load Resistance (kg): 2000

Load Resistance (lbs): 4409

Installation Requirement: Installation in sleeve set in concrete with a 20 - 30cm / 8 - 12" gravel drain bed

Screws: No visible screws

Diffuser: Clear tempered glass

Fixture Finish: SST

Fixture Material: Stainless Steel AISI 316L

Cable Details: Supplied with 1 power cable 5m in length

Lamp Type: LED

Input Wattage (W): 5.9 / RGBW 6

Total Output Wattage (W): 5 / RGBW 6

Driver Included: No

Driver Location: Remote

Driver Type: White LED - Constant Voltage - 120 / 277Vac RGBW -

Constant Current - Universal

Housing: (Not included - see components) L9A09600 allows for external driver (non-dimming - 120 / 277Vac [-30

Input Voltage (V): 120 - 277

Output Voltage (V): 24

Upon Request: (Not included - see components [IP65 or higher enclosure to be supplied by others]) 0-10Vdc dimming / Phase dimming / Non-dimming 120/277Vac / DMX

Number of LEDs: 3 / RGBW 4

Color Temperature (°K): 3000 / 4000 / RGBW

Max. Delivered Lumen (lm): 435 - 465 / 450 - 485

Nominal Lumen (lm): 570 / 600

CRI: >80 CRI

Lamp Life (hrs): 60000

OPTICAL

Optic°: 12 / 33 / 44

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards IP rating: IP68

IK Rating: IK10

Bug Rating: B0 U3 G0

Marine Grade: Stainless Steel AISI 316L

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PROJECT TYPE

SPECIFIER

QUANTITY DATE



49mm 115/16"

95mm 3 3/4"

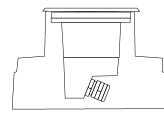


Slim Housing

L9A09500

88mm³ 7/16"





49mm 115/16"

95mm 3 3/4"

Wide Housing L9A09500



Page 9/20

97mm 3 ¹³/16

88mm 3 ^{7/16}



E9I564-





ZANEEN®

MICRO RECESSED

E9I570-

base number Color

Color Lens Temperature Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro	
Brand: Platek	
Division: Exterior	
Mounting Type: Recessed	
Mounting Location: In-Ground	
Subcategory: Drive Over	

PHYSICAL	
Shape: Round	
Diameter (mm): 95	
Diameter (in): 3 ¾	
Height (mm): 88	
Height (in): 3 ½	
Light Distribution: Uplight	

Weight (kg): 0.5 Weight (lbs): 1.1

Load Resistance (kg): 2000 Load Resistance (lbs): 4409

Installation Requirement: Installation in sleeve set in concrete with a 20 - 30cm / 8 - 12" gravel drain bed

Screws: No visible screws
Diffuser: Clear tempered glass

Fixture Finish: SST

Fixture Material: Stainless Steel AISI 316L

Cable Details: Supplied with 1 power cable 0.5m in length

FI FCTRICAL

ELECTRICAL
Lamp Type: LED
Input Wattage (W): 5.9
Total Output Wattage (W): 5
Driver Included: No
Driver Location: Remote
Driver Type: Constant Voltage - Universal
Driver Class: Class 2
Housing: (Not included - see components) L9A09600 allows for external

driver (non-dimming - 120 / 277Vac - [-Input Voltage (V): 120 - 277

Constant Current (MA): 500

Upon Request: (Included) Integral w/L9A09600 ONLY - Non-dimming 120 / 277Vac / (Not included - see components [IP65 or higher enclosure to be supplied by others]) Remote: 0-10Vdc dimming / Phase dimming

LED

Number of LEDs: 3

@120Vac only

Color Temperature (°K): 3000 / 4000

Max. Delivered Lumen (lm): 440 - 465 / 450 - 485

Nominal Lumen (lm): 570 / 600

CRI: >80 CRI

Lamp Life (hrs): 60000

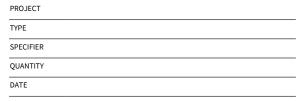
OPTICAL

Optic°: 12 / 33 / 44

RATINGS AND CERTIFICATIONS

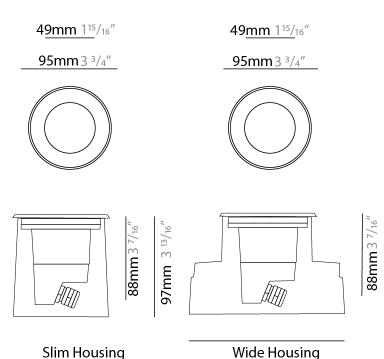
Certified By: Certified for North American Standards
IP rating: IP68
IK Rating: IK10

Bug Rating: B0 U3 G0









L9A09500



L9A09500

Page 11/20

97mm 3 ¹³/16



E9I570-





ZANEEN_®

MICRO RECESSED

E91630-

base number Lens Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro	
Brand: Platek	
Division: Exterior	
Mounting Type: Recessed	
Mounting Location: In-Ground	
Subcategory: Drive Over	

Mounting Location: In-Ground
Subcategory: Drive Over
PHYSICAL
Shape: Round
Diameter (mm): 95
Diameter (in): 3 ³ / ₄
Height (mm): 97
Height (in): 3 ¹³ / ₁₆
Light Distribution: Direct
Weight (kg): 0.55
Weight (lbs): 1.2
Load Resistance (kg): 2000
Load Resistance (lbs): 4409
Installation Requirement: Installation in sleeve set in concrete with a 20 $_{-}$ 30cm / 8 - 12" gravel drain bed
Diffuser: Clear tempered glass
Fixture Finish: SST

ELECTRICAL

IK Rating: IK10

Bug Rating: B0 U5 G0

Fixture Material: Aluminum Die Cast

Cable Details: Supplied with 1 power cable 1m in length

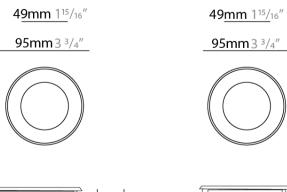
2220111012
Lamp Type: LED
Input Wattage (W): 6
Total Output Wattage (W): 6
Dimming: Bluetooth technology or DMX
Control Gear: DMX
Driver Included: No
Driver Location: Remote
Driver Type: Constant Current - Universal
Driver Class: Class 2
Input Voltage (V): 120 - 277
Constant Current (MA): 500

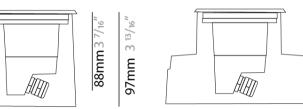
LED
Number of LEDs: 4
Color Temperature (°K): RGBW
CRI: >80 CRI
Lamp Life (hrs): 60000
Special LEDs offerings: RGBW
OPTICAL
Optic°: 12 / 33 / 44
RATINGS AND CERTIFICATIONS
Certified By: Certified for North American Standards
IP rating: IP68



SPECIFIER QUANTITY DATE







Wide Housing Slim Housing L9A09500 L9A09600



Upon Request: Higher Maximum Ambient Temperature

88mm 3 ⁷/16



E9I630-





ZANEEN_®

MICRO RECESSED

E9Q042-

base number

Color	Lens
Temperature	Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro	
Brand: Platek	
Division: Exterior	
Mounting Type: Recessed	
Mounting Location: Ceiling	
Subcategory: Downlight	

Mounting Location: Ceiling	
Subcategory: Downlight	
PHYSICAL	
Shape: Round	
Diameter (mm): 95	
Diameter (in): 3 ³ / ₄	
Height (mm): 88	
Height (in): 3 ½	
Ceiling Thickness (mm): 10 - 20	
Ceiling Thickness (in): 3/8 - 13/16	
Light Distribution: Downlight	
Weight (kg): 0.55	
Weight (lbs): 1.2	
Load Resistance (kg): 2000	
Load Resistance (lbs): 4409	
Screws: No visible screws	
Diffuser: Clear tempered glass	
Fixture Finish: SST	
Fixture Material: Aluminum Die Cast	
Cable Details: Supplied with power cable 2 x 1,00 mm2 in length	

ELECTRICAL

ELECTRICAL
Lamp Type: LED
Input Wattage (W): 5.9 / 2
Total Output Wattage (W): 5 / 2
Driver Included: No
Driver Location: Remote
Driver Type: Constant Current - 120 / 277Vac
Driver Class: Class 2
Input Voltage (V): 120 - 277
Constant Current (MA): (5W) 350 / (2W) 700
Upon Request: (Not included - see components [IP65 or higher enclosure to be supplied by others]) 0-10Vdc dimming / Phase dimming / Non-dimming 120/277Vac
LED

Cut-out Measurements: 80mm / 3 1/8" diameter

LED

Number of LEDs: 3 / 1

Color Temperature (°K): 3000 / 4000 Max. Delivered Lumen (lm): 130 - 465 / 135 - 485 Nominal Lumen (lm): 570 / 600 CRI: >80 CRI Lamp Life (hrs): 60000

OPTICAL

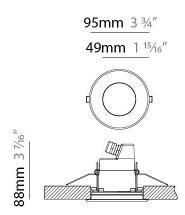
Optic°: 12 / 33 / 44 / ASY

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards	
IP rating: IP68	
IK Rating: IK10	
Bug Rating: B1 U0 G0	
Upon Request: Higher Maximum Ambient Temperature	

PROJECT TYPE SPECIFIER QUANTITY DATE





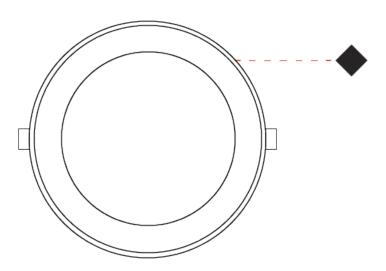


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E9Q042-





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ZANEEN.

MICRO RECESSED

E9Q108-

base number

Options

1.To build a product code in our configurator select the specify button on the base model # product page

2. To build a manual product code on this datasheet choose from the options listed below in blue font and add the suffix to the base model #

GENERAL

Series: Micro
Brand: Platek
Division: Exterior
Mounting Type: Recessed
Mounting Location: Ceiling
Subcategory: Downlight

Subcategory: Downlight **PHYSICAL** Shape: Round Diameter (mm): 95 Diameter (in): 3 1/4 Height (mm): 88 Height (in): $3\frac{1}{2}$ Ceiling Thickness (mm): 10 - 20 Ceiling Thickness (in): 3/8 - 13/16 Light Distribution: Downlight Weight (kg): 0.55 Weight (lbs): 1.2 Load Resistance (kg): 2000 Load Resistance (lbs): 4409 Screws: No visible screws Diffuser: Clear tempered glass Fixture Finish: SST Fixture Material: Aluminum Die Cast Cable Details: Supplied with power cable 2 x 1,00 mm2 in length

ELECTRICAL

Lamp Type: LED
Input Wattage (W): 6
Total Output Wattage (W): 6
Dimming: Bluetooth technology or DMX
Control Gear: DMX
Driver Included: No
Driver Location: Remote
Driver Type: Constant Current - 120 / 277Vac
Driver Class: Class 2
Input Voltage (V): 120 - 277
Constant Current (MA): 500

Cut-out Measurements: 80mm / 3 1/8" diameter

LED

Number of LEDs: 4
Color Temperature (°K): RGBW
CRI: >80 CRI
Lamp Life (hrs): 60000
Special LEDs offerings: RGBW

OPTICAL

Optic°: 12 / 33 / 44

RATINGS AND CERTIFICATIONS

Certified By: Certified for North American Standards

IP rating: IP68

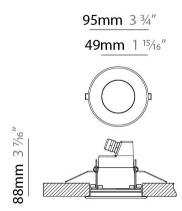
IK Rating: IK10

Bug Rating: B1 U0 G0

Upon Request: Higher Maximum Ambient Temperature

PROJECT	
ТУРЕ	
SPECIFIER	
QUANTITY	
DATE	



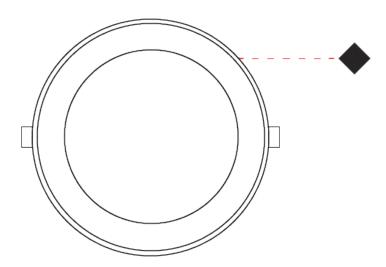






E9Q108-





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MICRO

PROJECT		
TYPE		
SPECIFIER		
QUANTITY		
DATE		

Fixture Finish

Stainless Steel Inox - SST



Digital: Not all screens are calibrated the same, and therefore, colors will appear differently between screens. **Physical:** When texture is involved, there will be variations in color, character and tone within a product series and between product families.





MICRO

PROJECT
TYPE
SPECIFIER
QUANTITY
DATE

LEGEND

- T	Tues o		A		special LED (upon request) BCP, BCPW tupoble
<u></u>	floor-mounted	¥	pivotable	⊛	special LED (upon request) RGB, RGBW, tunable, gold+, meat+, art+, fashion+
7	wall and ceiling: recessed and surface mounted	S	rotating	0	warm dim / natural dimming LED
\uparrow	ceiling-mounted and wall-mounted	Œ	illuminate tilted	0	rechargeable battery powered
\rightarrow	wall-mounted	T	color of suspension cable	THESE	fixture with natural vivid LED (upon request)
Y	omni-directional light distribution	1	length of suspension cable	CRI	color rendering index
	direct light distribution		reflector degree selection	(K)	color temperature
X	direct/indirect light distribution	s s	super spot	(LM)	lumen (luminous flux)
M	indirect light distribution	*	lens	₩)	efficacy (lumens per watt)
	asymmetric light distribution	8	lens pack	UGR	Unified Glare Rating (UGR) range from 5-40
	aura light distribution	0	shine ring	*	marine grade (AISI 316 stainless steel)
R	round wall or ceiling cut-out	0	integrated shine ring with diffuser	3	walk on
4	square wall or ceiling cut-out		free individual colors 01-29	②	drive on
4	the supplied jig specifies the cutout dimensions	Ċ	individual colors: 00 (free of charge), 01-25 (extra charge)	DSC	Dark Sky Compliance
d •,→	minimum distance (meters) lamp - object	•	luminaire part to be colored (F1)	Ġ	Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor)
$\hat{\pm}$	recessed depth		luminaire part to be colored (F2)		lamp protected against explosion
1	ceiling thickness in mm		luminaire part to be colored (F3)		blown glass using traditional methods by master glass blower
1	ceiling thickness selection		luminaire part to be colored (F4)	()	acoustic material
	dimmable DP (phase), DV (0-10V), DD (dali), DS (step-dim)	•	luminaire part to be colored (F5)		protection class I, protection insulation
- Laco	included or excluded LED driver/transformer/ control gear	•	color of 3-circuit adaptor		protection class II, protection insulation
४	separately switchable	\odot	indirect diffuser	. (1)	ETL Certified to UL and CSA Standards
9	sensor	O	direct diffuser	.(N) us	UL Certified to UL and CSA Standards
	remote control	(3)	ball-proof (upon request)	(I)	CSA Certified to UL and CSA Standards
9	available upon request	0	accessory	Z	Certified for North American Standards

IP RATING

IP20	protected against ingress of solid bodies greater than 12.5mm (finger)
IP33	protected against ingress of solid bodies greater than 2.5mm protected against sprays of water up to 60 degrees from the vertical (rain)
IP40	protected against ingress of solid bodies greater than 1mm (wire) no protection against the ingress of moisture
IP43	protected against ingress of solid bodies greater than 1mm (wire) protected against sprays of water up to 60 degrees from the vertical (rain)
IP44	protected against ingress of solid bodies greater than 1mm (wire) protected against water splashed from all directions
IP54	protected against limited ingress of dust (wet rooms/covered outdoor areas) protected against water splashed from all directions
IP65	protected against ingress of dust protected against jets of water
IP66	protected against ingress of dust protected against powerful jets of water or heavy seas
IP67	protected against ingress of dust protected against immersion of water between 15cm - 1m for 30 minutes
IP68	protected against ingress of dust protected against immersion of water under pressure for long periods

IK RATING

above the surface)

IK02	above the surface)
IK03	protected against 0.35 joules impact (equivalent to 0.25kg mass dropped from 140mm above the surface)
IK04	protected against 0.5 joules impact (equivalent to 0.25kg mass dropped from 200mm above the surface)
IK05	protected against 0.7 joules impact (equivalent to 0.25kg mass dropped from 280mm above the surface)
IKO6	protected against 1 joules impact (equivalent to 0.25kg mass dropped from 400mm above the surface)
1K07	protected against 2 joules impact (equivalent to 0.5kg mass dropped from 400mm above the surface)
IKOB	protected against 5 joules impact (equivalent to 1.7kg mass dropped from 300mm above the surface)
IK09	protected against 10 joules impact (equivalent to 5.0kg mass dropped from 200mm above the surface)

protected against 20 joules impact (equivalent to 5.0kg mass dropped from 400mm above the surface)

protected against 0.14 joules impact (equivalent to 0.25kg mass dropped from 56mm

protected against 0.2 joules impact (equivalent to 0.25kg mass dropped from 80mm