

### **INVADER SHORT SURFACE**

A33268-		-	-	-	-
base number	Color	Finishes (Diamond)	Finishes (Triangle)	Finishes (Circle)	Reflector

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: Invader Standard	
Subseries: Invader Short	
Brand: Prolicht	
Division: Architectural	
Mounting Type: Surface	
Mounting Location: Wall	
Subcategory: Spots	

Mounting Type: Surface
Mounting Location: Wall
Subcategory: Spots
PHYSICAL
Shape: Cylinder
Diameter (mm): 75
Diameter (in): 2 15/16
Height (mm): 150
Depth (mm): 115
Height (in): $5\frac{7}{8}$
Depth (in): 4 ½
Light Distribution: Downlight
Weight (kg): 0.753
Weight (lbs): 1.66
Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /

COM / ABZ / JAG / OBR / MOS / ROR Fixture Material: Aluminum

ELECTRICAL
Lamp Type: LED (Zhaga Standard)
Input Wattage (W): 7.7
Total Output Wattage (W): 7
Dimming: Non-Dimmable
Driver Included: Yes
Driver Location: Integrated
Driver Type: Constant Current
Driver Class: Class 2
Input Voltage (V): 120
Constant Current (MA): 350
Upon Request: (Not included - see components) Remote: 0-10Vdc dimming / Phase dimming @120Vac only / Non-dimming 120/277Vac

#### LED

Number of LEDs: 1	
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Color Temperature (°K): 2700 / 3000 / 3500 / 4000 Max. Delivered Lumen (lm): 390 / 400 / 421 / 430 CRI: >90 CRI Lamp Life (hrs): 50000

### OPTICAL

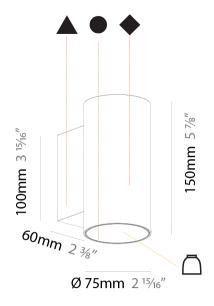
Reflector°: 20 / 40 / 60

### **RATINGS AND CERTIFICATIONS**

Certified By: Certified for North American Standards IP rating: IP20

PROJECT		
TYPE		
SPECIFIER		
QUANTITY		
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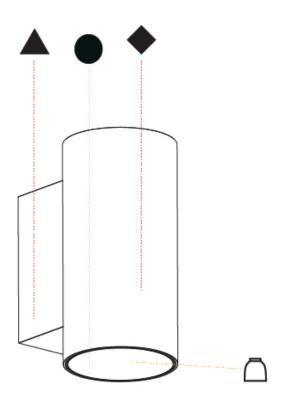




# **INVADER SHORT SURFACE**

A33268-

PROJECT	
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SPECIFIER	
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DATE	







A37952	-	-	-
hase number	Color	Finishes	Lens

Temperature (Diamond)

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

Options

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: Invader Standard	
Brand: Prolicht	
Division: Architectural	
Mounting Type: Recessed	
Mounting Location: Ceiling	
Subcategory: Downlight	

Mounting Location: Ceiling Subcategory: Downlight  PHYSICAL  Shape: Round Diameter (mm): 45 Diameter (in): 1 $\frac{3}{4}$ Height (mm): 49 Height (in): 1 $\frac{15}{16}$ Ceiling Thickness (mm): 10 / 12.5 / 15 Ceiling Thickness (in): 3/8 or 1/2 or 9/16 Min. Recessing Depth (mm): 150 Min. Recessing Depth (in): 5 $\frac{7}{6}$ Light Distribution: Downlight Weight (kg): 0.084 Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR	Mounting Type: Recessed	
PHYSICAL  Shape: Round  Diameter (mm): 45  Diameter (in): 1 $\frac{3}{4}$ Height (mm): 49  Height (in): 1 $\frac{15}{16}$ Ceiling Thickness (mm): 10 / 12.5 / 15  Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 $\frac{7}{6}$ Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Mounting Location: Ceiling	
Shape: Round  Diameter (mm): 45  Diameter (in): 1 <sup>3</sup> / <sub>4</sub> Height (mm): 49  Height (in): 1 <sup>15</sup> / <sub>16</sub> Ceiling Thickness (mm): 10 / 12.5 / 15  Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 <sup>7</sup> / <sub>8</sub> Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Subcategory: Downlight	
Diameter (mm): 45  Diameter (in): $1^{\frac{3}{4}}$ Height (mm): 49  Height (in): $1^{\frac{15}{16}}$ Ceiling Thickness (mm): $10 / 12.5 / 15$ Ceiling Thickness (in): $3/8$ or $1/2$ or $9/16$ Min. Recessing Depth (mm): $150$ Min. Recessing Depth (in): $5^{\frac{7}{8}}$ Light Distribution: Downlight  Weight (kg): $0.084$ Weight (lbs): $0.185$ Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	PHYSICAL	
Diameter (in): 1 $\frac{3}{4}$ ,  Height (mm): 49  Height (in): 1 $\frac{15}{16}$ Ceiling Thickness (mm): 10 / 12.5 / 15  Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 $\frac{7}{8}$ Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Shape: Round	
Height (im): 49  Height (in): 1 15/16  Ceiling Thickness (mm): 10 / 12.5 / 15  Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (in): 5 7/8  Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Diameter (mm): 45	
Height (in): 1 <sup>15</sup> / <sub>16</sub> Ceiling Thickness (mm): 10 / 12.5 / 15  Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 <sup>7</sup> / <sub>8</sub> Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Diameter (in): 1 <sup>3</sup> / <sub>4</sub>	
Ceiling Thickness (mm): 10 / 12.5 / 15 Ceiling Thickness (in): 3/8 or 1/2 or 9/16 Min. Recessing Depth (mm): 150 Min. Recessing Depth (in): 5 1/8 Light Distribution: Downlight Weight (kg): 0.084 Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Height (mm): 49	
Ceiling Thickness (in): 3/8 or 1/2 or 9/16  Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 ½  Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Height (in): 1 15/16	
Min. Recessing Depth (mm): 150  Min. Recessing Depth (in): 5 $\frac{7}{6}$ Light Distribution: Downlight  Weight (kg): 0.084  Weight (lbs): 0.185  Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG  LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Ceiling Thickness (mm): 10 / 12.5 / 15	
Min. Recessing Depth (in): 5 \( \frac{7}{8} \) Light Distribution: Downlight Weight (kg): 0.084 Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Ceiling Thickness (in): 3/8 or 1/2 or 9/16	
Light Distribution: Downlight Weight (kg): 0.084 Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Min. Recessing Depth (mm): 150	
Weight (kg): 0.084 Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Min. Recessing Depth (in): 5 $\frac{7}{8}$	
Weight (lbs): 0.185 Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC /	Light Distribution: Downlight	
Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC ,	Weight (kg): 0.084	
LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC ,	Weight (lbs): 0.185	
	LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM	

Cut-out Measurements: Dia: 41mm / 15/8"

Fixture Material: Aluminum

**ELECTRICAL** Lamp Type: LED (Zhaga Standard) Input Wattage (W): 2.2 Total Output Wattage (W): 2 Dimming: Non-Dimmable Driver Included: No Driver Location: Remote Driver Type: Constant Current - 120 / 277Vac Driver Class: Class 2 Input Voltage (V): 120 - 277 Constant Current (MA): 700 Upon Request: 0-10Vdc dimming / Phase dimming 120Vac

#### LED

Number of LEDs: 1

Color Temperature (°K): 2700 / 3000 / 3500 / 4000 Max. Delivered Lumen (lm): 160 / 170 / 176 / 180 Nominal Lumen (lm): 160 / 170 / 176 / 180 CRI: >90 CRI Lamp Life (hrs): 50000

**OPTICAL** 

Reflector°: 12 / 20 / 35

#### **RATINGS AND CERTIFICATIONS**

Certified By: Certified for North American Standards

IP rating: IP20

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QUANTITY		
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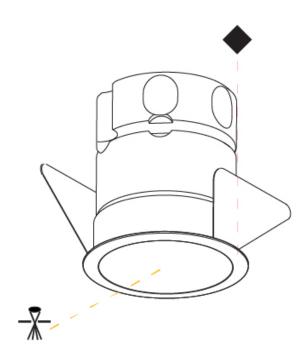






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A37959		-	-
base number	Color	Finishes	Reflec
	Temperature	(Diamond)	Option

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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: Invader Standard	
Brand: Prolicht	
Division: Architectural	
Mounting Type: Recessed	
Mounting Location: Ceiling	
Subcategory: Downlight	

Mounting Type: Recessed
Mounting Location: Ceiling
Subcategory: Downlight
PHYSICAL
Shape: Round
Diameter (mm): 45
Diameter (in): 1 ¾
Height (mm): 71
Height (in): 2 13/16
Ceiling Thickness (mm): 10 / 12.5 / 15
Ceiling Thickness (in): 3/8 or 1/2 or 9/16
Min. Recessing Depth (mm): 150
Min. Recessing Depth (in): 5 1/8
Light Distribution: Downlight
Weight (kg): 0.102
Weight (lbs): 0.23
Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG , LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR

Fixture Material: Aluminum

Cut-out Measurements: Dia: 41mm / 15/8"

**ELECTRICAL** Lamp Type: LED (Zhaga Standard) Input Wattage (W): 7.7 Total Output Wattage (W): 7 Dimming: Non-Dimmable Driver Included: No Driver Location: Remote Driver Type: Constant Current - 120 / 277Vac Driver Class: Class 2 Input Voltage (V): 120 - 277 Constant Current (MA): 250 Upon Request: 0-10Vdc dimming / Phase dimming 120Vac

#### LED

Number of LEDs: 1

Color Temperature (°K): 2700 / 3000 / 3500 / 4000 Max. Delivered Lumen (lm): 630 / 650 / 686 / 700

Nominal Lumen (lm): 731 / 762 / 801 / 817

CRI: >90 CRI Lamp Life (hrs): 50000

#### **OPTICAL**

Reflector°: 33 / 47 / 65

#### **RATINGS AND CERTIFICATIONS**

Certified By: Certified for North American Standards

IP rating: IP20

PROJECT		
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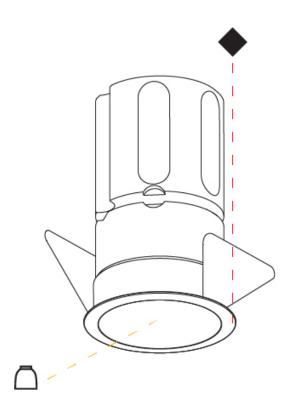






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base number

Temperature (Diamond) (Triangle)

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: Invader Standard	
Subseries: Invader On Round	
Brand: Prolicht	
Division: Architectural	
Mounting Type: Surface	
Mounting Location: Ceiling	
Subcategory: Spots	

#### PHYSICAL

Shape:	Cylinder

Diameter (mm): 75

Diameter (in): 2 15/16

Height (mm): 150 Height (in): 5 1/8

Light Distribution: Downlight

Weight (kg): 0.489

Weight (lbs): 1.08

Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG / LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC / COM / ABZ / JAG / OBR / MOS / ROR

Fixture Material: Aluminum Die Cast

### **ELECTRICAL**

Lamp Type: LED (Zhaga Standard)

Input Wattage (W): 11

Total Output Wattage (W): 10

Dimming: Non-Dimmable

Driver Included: Yes

Driver Location: Integrated

**Driver Type: Constant Current** 

Driver Class: Class 2

Input Voltage (V): 120

Constant Current (MA): 350

Upon Request: Remote: 0-10Vdc dimming / Phase dimming 120Vac /

Non-dimming 120/277Vac

#### LED

#### Number of LEDs: 1

Color Temperature (°K): 2700 / 3000 / 3500 / 4000

Max. Delivered Lumen (lm): 660 / 680 / 715 / 730

CRI: >90 CRI

Lamp Life (hrs): 50000

### OPTICAL

Reflector°: 20 / 40 / 60

### **RATINGS AND CERTIFICATIONS**

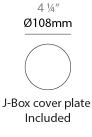
Certified By: Certified for North American Standards

IP rating: IP20

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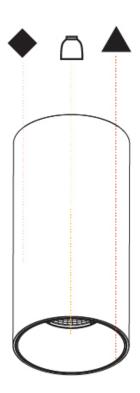


Ø 75mm 2 15/16"



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A3D012		-	-	-	-
base number	Color	Finishes	Finishes	Finishes	Reflector
	Temperature	(Diamond)	(Triangle)	(Circle)	Options

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

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#### **GENERAL**

Series: Invader Standard	
Subseries: Invader On Round	
Brand: Prolicht	
Division: Architectural	
Mounting Type: Surface	
Mounting Location: Ceiling	
Subcategory: Spots	

Mounting Location: Ceiling
Subcategory: Spots
PHYSICAL
Shape: Cylinder
Diameter (mm): 75
Diameter (in): 2 15/16
Height (mm): 300
Height (in): 11 13/16
Light Distribution: Downlight
Weight (kg): 0.92
Weight (lbs): 2.02
Fixture Finish: SSR / BKV / CWI / CRY / HAB / UFT / ITA / RUA / FTG / MYG LOD / PUS / FRO / FUP / KIA / POP / BLS / SPG / MEY / GOH / GUM / CHC

COM / ABZ / JAG / OBR / MOS / ROR

Fixture Material: Aluminum Die Cast

**ELECTRICAL** Lamp Type: LED (Zhaga Standard) Input Wattage (W): 11 Total Output Wattage (W): 10 Dimming: Non-Dimmable Driver Included: Yes Driver Location: Integrated **Driver Type: Constant Current** Driver Class: Class 2 Input Voltage (V): 120 Constant Current (MA): 350 Upon Request: Remote: 0-10Vdc dimming / Phase dimming 120Vac / Non-dimming 120/277Vac

LED

Number of LEDs: 1

Color Temperature (°K): 2700 / 3000 / 3500 / 4000

Max. Delivered Lumen (lm): 660 / 680 / 715 / 730

CRI: >90 CRI

Lamp Life (hrs): 50000

### OPTICAL

Reflector°: 20 / 40 / 60

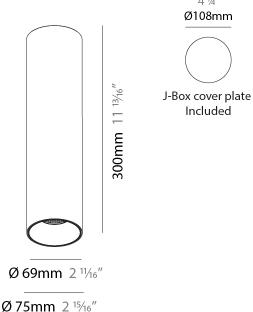
### **RATINGS AND CERTIFICATIONS**

Certified By: Certified for North American Standards

IP rating: IP20

PROJECT		
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A3D012-

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## **INVADER STANDARD**

COLOR FINISH CHART

PROJECT		
TYPE		
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QUANTITY		
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#### **Fixture Finish**



**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.

**Gun Metal:** No Gun Metal finish is alike. It combines a mixture of transparent and black color particles which ensures a highly individual effect and no luminaire being identical. **Champagne Cream, Copper Mine, Ancient Bronze + Jazz Gold:** These finishes have slight fading from specific powder coating production. Each luminaire will slightly vary.





## **INVADER STANDARD**

PROJECT		
TYPE		
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# **LEGEND**

					T
<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	X	illuminate tilted	0	rechargeable battery powered
$\rightarrow$	wall-mounted	I	color of suspension cable	THOSE THOSE	fixture with natural vivid LED (upon request)
Y	omni-directional light distribution		length of suspension cable	CRI	color rendering index
lack	direct light distribution		reflector degree selection	(°K)	color temperature
X	direct/indirect light distribution	s s	super spot	(LM)	lumen (luminous flux)
Y	indirect light distribution	*	lens	₩	efficacy (lumens per watt)
	asymmetric light distribution	8	lens pack	UGR	Unified Glare Rating (UGR) range from 5-40
X	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
$\Box$	square wall or ceiling cut-out	Ċ	free individual colors 01-29	<b>②</b>	drive on
£	the supplied jig specifies the cutout dimensions	C	individual colors: 00 (free of charge), 01-25 (extra charge)	OSC	Dark Sky Compliance
<b>d</b> •+D	minimum distance (meters) lamp - object	<b>♦</b>	luminaire part to be colored (F1)	Ġ	Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor)
$\pm$	recessed depth		luminaire part to be colored (F2)		lamp protected against explosion
<u></u>	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)	<b>♦</b> ®	acoustic material
	dimmable DP (phase), DV (0-10V), DD (dali), DS (step-dim)		luminaire part to be colored (F5)		protection class I, protection insulation
Civaco	included or excluded LED driver/transformer/ control gear	•	color of 3-circuit adaptor		protection class II, protection insulation
8	separately switchable	$\odot$	indirect diffuser	. <b>@</b>	ETL Certified to UL and CSA Standards
<b>9</b>	sensor	0	direct diffuser	c (U) us	UL Certified to UL and CSA Standards
	remote control	0	ball-proof (upon request)	<b>(II</b> )	CSA Certified to UL and CSA Standards
9	available upon request	9	accessory	$\mathbf{Z}$	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