

PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____

INVADER STANDARD RECESSED

A35601-

base number	Color	Finishes	Finishes	Reflector
	Temperature	(Diamond)	(Triangle)	Options

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

PHYSICAL

Shape: Round
 Diameter (mm): 109
 Diameter (in): 4 5/16
 Height (mm): 105
 Height (in): 4 1/8
 Min. Recessing Depth (mm): 120
 Min. Recessing Depth (in): 4 3/4
 Light Distribution: Adjustable / Direct
 Weight (kg): 0.434
 Weight (lbs): 0.96
 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: 104mm / 4 1/8"

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
 Input Wattage (W): 14.3
 Total Output Wattage (W): 13
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
 Driver Included: No
 Driver Location: Recessed Housing
 Driver Type: Constant Current - Universal
 Housing: See components
 Input Voltage (V): 120 - 277
 Constant Current (MA): 350

LED

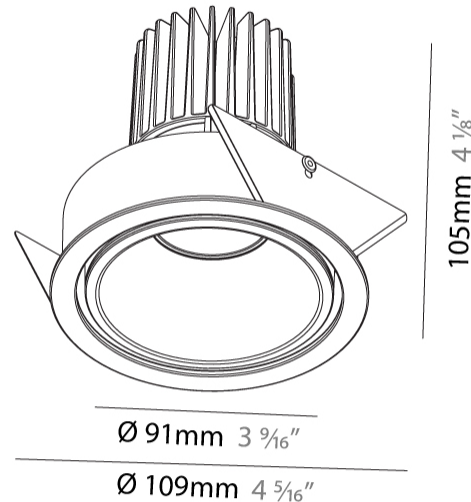
Number of LEDs: 1
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000
 Max. Delivered Lumen (lm): 890 / 920 / 970 / 990
 Nominal Lumen (lm): 1304 / 1352 / 1421 / 1450
 CRI: >90 CRI
 Lamp Life (hrs): 50000

OPTICAL

Reflector: 20 / 40 / 60
 Adjustability: Rotational 180°; Tilt 30°

RATINGS AND CERTIFICATIONS

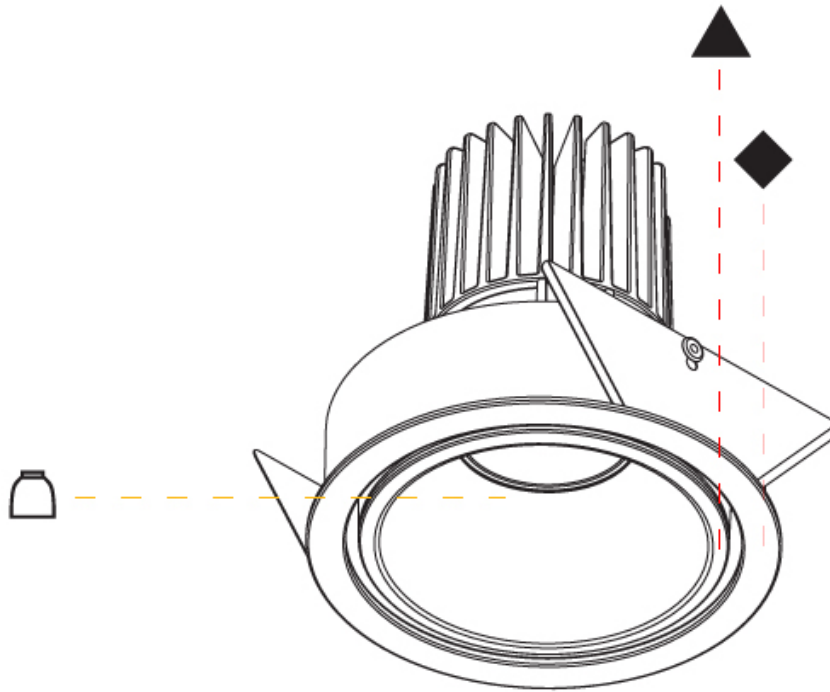
Certified By: Certified for North American Standards
 IP rating: IP20



INVADER STANDARD RECESSED

A35601-

PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____



PROJECT	
TYPE	
SPECIFIER	
QUANTITY	
DATE	

INVADER STANDARD RECESSED

A35602-

base number	Color Temperature	Finishes (Diamond)	Reflector Options
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- To build a product code in our configurator select the specify button on the base model # product page
- 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 Standard
Brand: Prolight
Division: Architectural
Mounting Type: Recessed
Mounting Location: Ceiling
Subcategory: Downlight

PHYSICAL

Shape: Round
Diameter (mm): 85
Diameter (in): 3 3/8
Height (mm): 105
Height (in): 4 1/8
Ceiling Thickness (mm): 5 - 30
Min. Recessing Depth (mm): 110
Min. Recessing Depth (in): 4 5/16
Light Distribution: Downlight
Weight (kg): 0.322
Weight (lbs): 0.71
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: 80mm 3 1/8"

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
Input Wattage (W): 14.3
Total Output Wattage (W): 13
Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
Driver Included: No
Driver Location: Recessed Housing
Driver Type: Constant Current - Universal
Housing: See components
Input Voltage (V): 120 - 277
Constant Current (MA): 350

LED

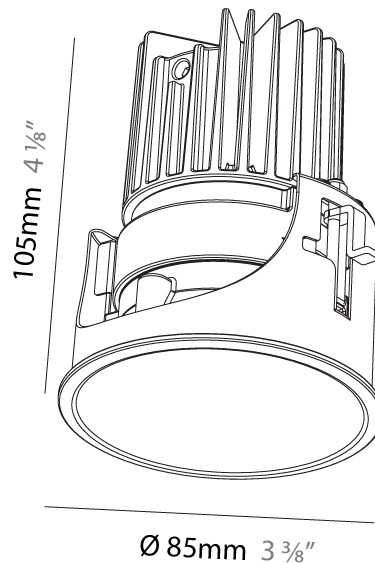
Number of LEDs: 1
Color Temperature (°K): 2700 / 3000 / 3500 / 4000
Max. Delivered Lumen (lm): 870 / 910 / 951 / 970
Nominal Lumen (lm): 1304 / 1352 / 1421 / 1450
CRI: >90 CRI
Lamp Life (hrs): 50000

OPTICAL

Reflector: 20 / 40 / 60

RATINGS AND CERTIFICATIONS

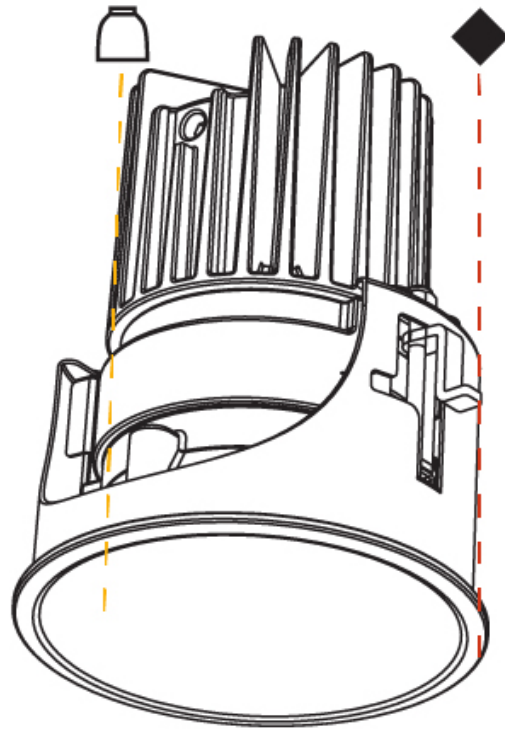
Certified By: Certified for North American Standards
IP rating: IP20



INVADER STANDARD RECESSED

A35602-

PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____



PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____

INVADER STANDARD RECESSED

A35603-

base number	Color Temperature	Finishes (Diamond)	Reflector Options
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- To build a product code in our configurator select the specify button on the base model # product page
- 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

PHYSICAL

Shape: Round
 Diameter (mm): 85
 Diameter (in): 3 3/8
 Height (mm): 87
 Height (in): 3 7/16
 Ceiling Thickness (mm): 10 / 12.5 / 15
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16
 Min. Recessing Depth (mm): 90
 Light Distribution: Downlight
 Weight (kg): 0.233
 Weight (lbs): 0.51
 Fixture Material: Aluminum Die Cast
 Cut-out Measurements: Dia: 80mm 3 1/8"

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
 Input Wattage (W): 9.9
 Total Output Wattage (W): 9
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
 Driver Included: No
 Driver Location: Recessed Housing
 Driver Type: Constant Current - Universal
 Housing: See components
 Input Voltage (V): 120 - 277
 Constant Current (MA): 250

LED

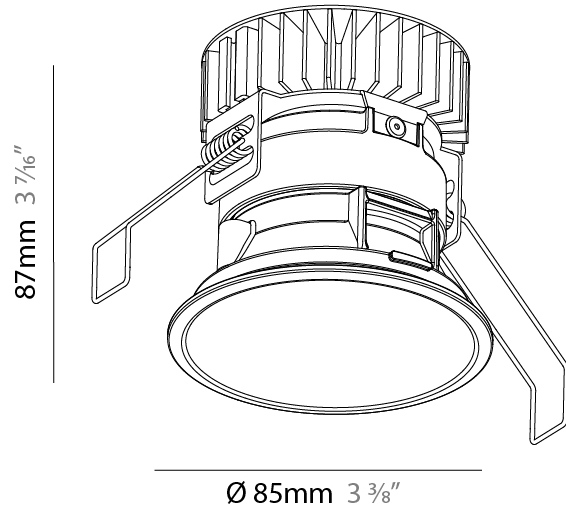
Number of LEDs: 1
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000
 Max. Delivered Lumen (lm): 650 / 680 / 715 / 730
 Nominal Lumen (lm): 960 / 995 / 1046 / 1067
 CRI: >90 CRI
 Lamp Life (hrs): 50000

OPTICAL

Reflector: 20 / 40 / 60

RATINGS AND CERTIFICATIONS

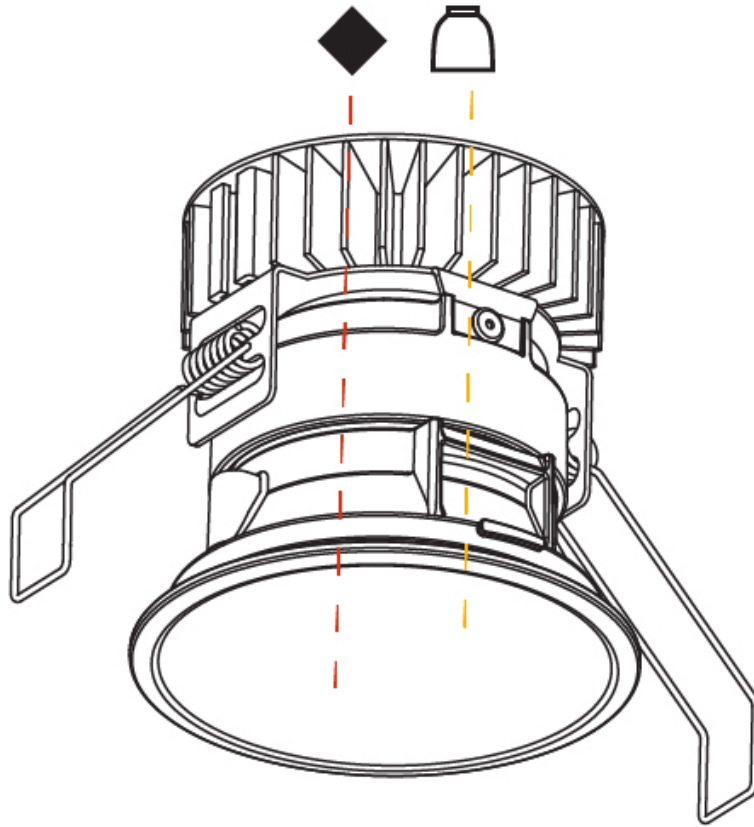
Certified By: Certified for North American Standards
 IP rating: IP20



INVADER STANDARD RECESSED

A35603-

PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____



A

PROJECT
TYPE
SPECIFIER
QUANTITY
DATE

INVADER STANDARD TRIMLESS

A35826-

base number	Color Temperature	Finishes (Diamond)	Ceiling Thickness	Reflector Options
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- To build a product code in our configurator select the specify button on the base model # product page
- 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: Trimless
 Mounting Location: Ceiling
 Subcategory: Downlight

PHYSICAL

Shape: Round
 Diameter (mm): 71
 Diameter (in): 2 ¹³/₁₆
 Depth (mm): 99
 Depth (in): 3 ⁷/₈
 Ceiling Thickness (mm): 10 / 12.5 / 15
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16
 Min. Recessing Depth (mm): 115
 Min. Recessing Depth (in): 4 ¹/₂
 Light Distribution: Downlight
 Weight (kg): 0.342
 Weight (lbs): 3/4
 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: 79mm / 3 1/8"
 Upon Request: Unique Sizes Unique Ceiling Thickness

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
 Input Wattage (W): 13.3
 Total Output Wattage (W): 12
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
 Driver Included: No
 Driver Location: Recessed Housing
 Driver Type: Constant Current - Universal
 Driver Class: Class 2
 Housing: See components
 Input Voltage (V): 120 - 277
 Constant Current (MA): 350

LED

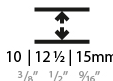
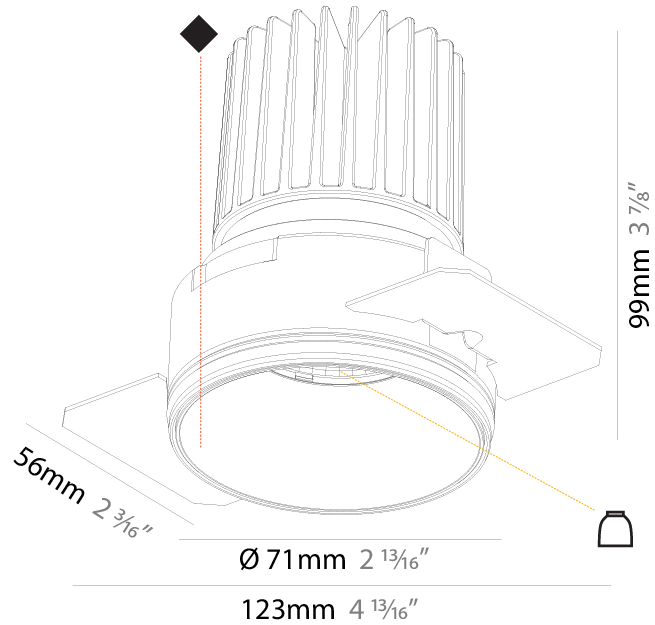
Number of LEDs: 1
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000
 Max. Delivered Lumen (lm): 890 / 920 / 970 / 990
 Nominal Lumen (lm): 1304 / 1352 / 1421 / 1450
 CRI: >90 CRI
 Lamp Life (hrs): 50000
 Upon Request: RGB-W Tunable White Special Color Temperature

OPTICAL

Reflector: 20 / 40 / 60
 Adjustability: Fixed
 Upon Request: Special Beam Angles

RATINGS AND CERTIFICATIONS

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



INVADER STANDARD TRIMLESS

A35826-

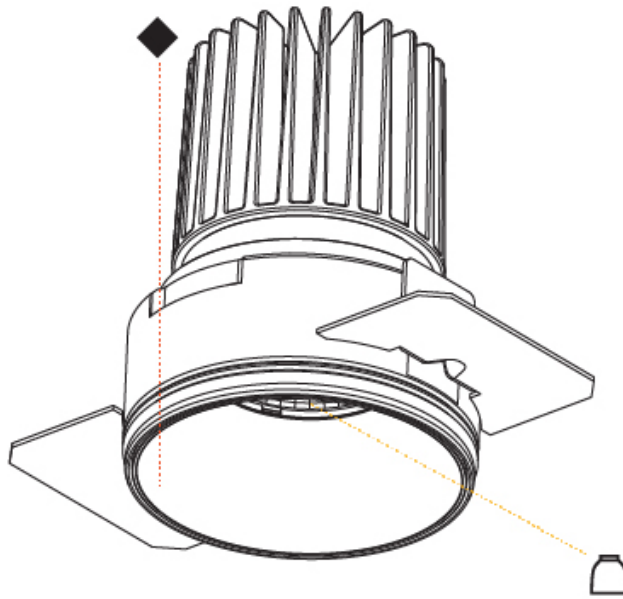
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



A

INVADER STANDARD TRIMLESS

A37912-

base number Color Finishes Reflector
 Temperature (Diamond) Options

- To build a product code in our configurator select the specify button on the base model # product page
- 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: Trimless
 Mounting Location: Ceiling
 Subcategory: Downlight

PHYSICAL

Shape: Round
 Diameter (mm): 39
 Diameter (in): 1 9/16
 Height (mm): 72
 Height (in): 2 13/16
 Ceiling Thickness (mm): 10 / 12 / 15
 Ceiling Thickness (in): 3/8 or 1/2 or 9/16
 Min. Recessing Depth (mm): 150
 Min. Recessing Depth (in): 5 7/8
 Light Distribution: Downlight
 Weight (kg): 0.129
 Weight (lbs): 0.28
 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: 45mm / 1 3/4"
 Upon Request: Unique Sizes Unique Ceiling Thickness

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
 Input Wattage (W): 7.7
 Total Output Wattage (W): 6.8
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
 Driver Included: No
 Driver Location: Remote
 Driver Type: Constant Current - 120 / 277Vac
 Input Voltage (V): 120 - 277
 Constant Current (MA): 250

LED

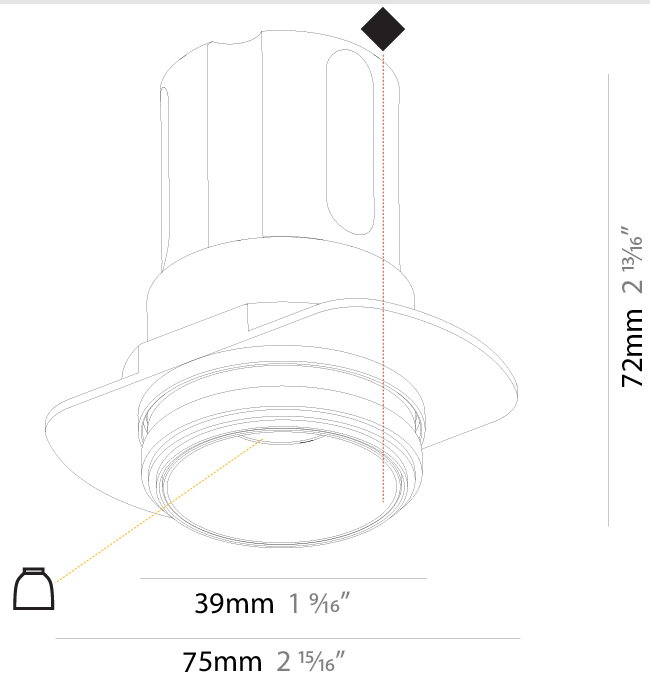
Number of LEDs: 1
 Color Temperature (°K): 2700 / 3000 / 3500 / 4000
 Max. Delivered Lumen (lm): 660 / 690 / 725 / 740
 Nominal Lumen (lm): 734 / 762 / 801 / 817
 CRI: >90 CRI
 Lamp Life (hrs): 50000
 Upon Request: RGB-W Tunable White Special Color Temperature

OPTICAL

Reflector°: 33 / 47 / 65
 Upon Request: Special Beam Angles

RATINGS AND CERTIFICATIONS

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



INVADER STANDARD TRIMLESS

A37912-

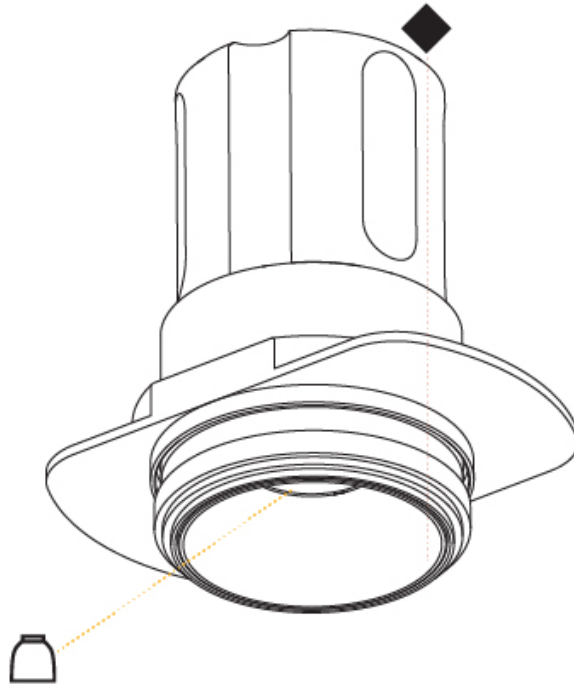
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



A

PROJECT
TYPE
SPECIFIER
QUANTITY
DATE

INVADER STANDARD RECESSED

A37946-

base number	Color Temperature	Finishes (Diamond)	Reflector Options
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- To build a product code in our configurator select the specify button on the base model # product page
- 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

PHYSICAL

Shape: Round
Diameter (mm): 148
Diameter (in): 5 ¹³ / ₁₆
Height (mm): 130
Height (in): 5 ¹ / ₈
Ceiling Thickness (mm): 5 - 30
Ceiling Thickness (in): 1/16 - 1 3/16
Min. Recessing Depth (mm): 140
Min. Recessing Depth (in): 5 ¹ / ₂
Light Distribution: Downlight
Weight (kg): 0.9
Weight (lbs): 1.98
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
Cut-out Measurements: 142mm / 5 9/16"

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
Input Wattage (W): 28.6
Total Output Wattage (W): 26
Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
Driver Included: No
Driver Location: Recessed Housing
Driver Type: Constant Current - Universal
Housing: See components
Input Voltage (V): 120 - 277
Constant Current (MA): 700

LED

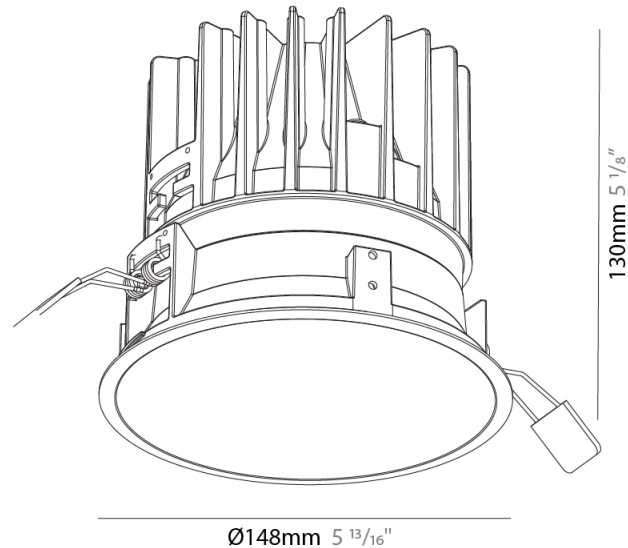
Number of LEDs: 1
Color Temperature (°K): 2700 / 3000 / 3500 / 4000
Max. Delivered Lumen (lm): 2210 / 2270 / 2391 / 2440
Nominal Lumen (lm): 3210 / 3290 / 3459
CRI: >90 CRI
Lamp Life (hrs): 50000

OPTICAL

Reflector°: 18 / 26 / 40

RATINGS AND CERTIFICATIONS

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



INVADER STANDARD RECESSED

A37946-

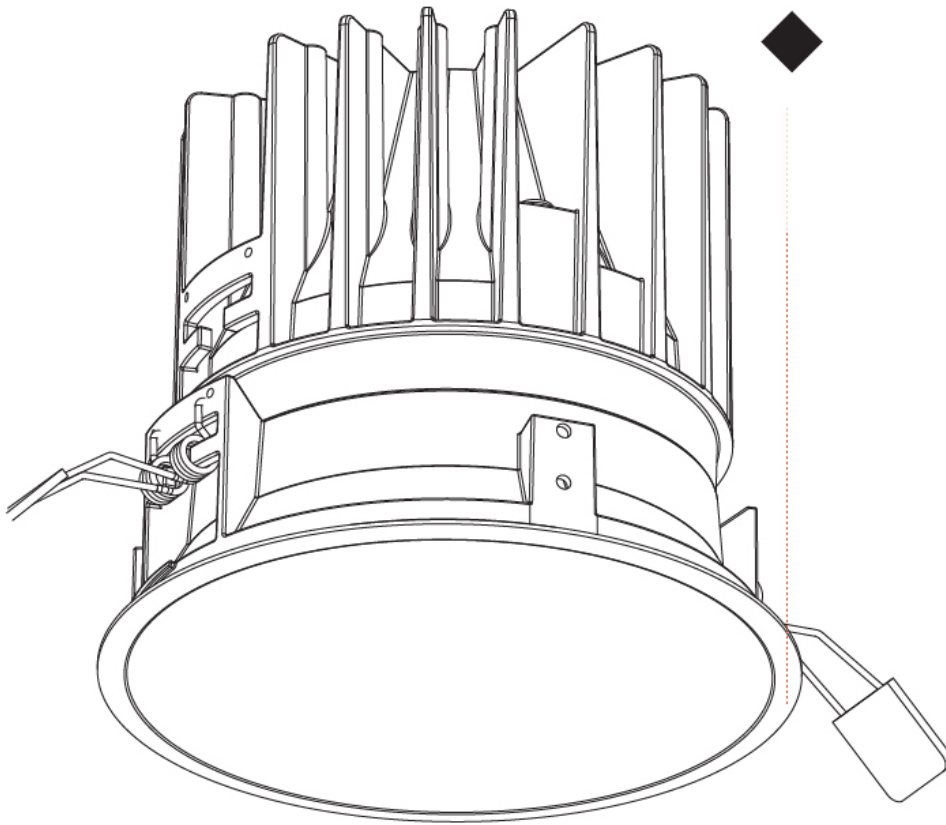
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



A

PROJECT
TYPE
SPECIFIER
QUANTITY
DATE

INVADER ADJUSTABLE RECESSED

A37962-

base number	Color Temperature	Finishes (Diamond)	Finishes (Triangle)	Reflector Options
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- To build a product code in our configurator select the specify button on the base model # product page
- 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 Adjustable
 Brand: Prolicht
 Division: Architectural
 Mounting Type: Recessed
 Mounting Location: Ceiling
 Subcategory: Downlight

PHYSICAL

Shape: Round
 Diameter (mm): 62
 Diameter (in): 2 7/16
 Height (mm): 74
 Height (in): 2 15/16
 Min. Recessing Depth (mm): 150
 Min. Recessing Depth (in): 5 7/8
 Light Distribution: Adjustable / Direct
 Weight (kg): 0.138
 Weight (lbs): 0.304
 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: 57mm / 2 1/4"

ELECTRICAL

Lamp Type: LED (Zhaga Standard)
 Input Wattage (W): 7.7
 Total Output Wattage (W): 7
 Dimming: Tri-Mode (Non-Dimming and Phase Dimming (120Vac only) and 0-10V Dimming)
 Driver Included: No
 Driver Location: Remote
 Driver Type: Constant Current - 120 / 277Vac
 Input Voltage (V): 120 - 277
 Constant Current (MA): 250

LED

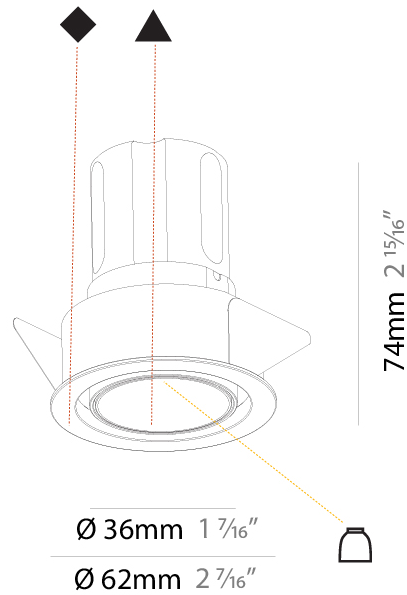
Number of LEDs: 1
 Color Temperature (°K): [2700 / 3000 / 3500 / 4000](#)
 Max. Delivered Lumen (lm): 660 / 690 / 725 / 740
 CRI: >90 CRI
 Lamp Life (hrs): 50000

OPTICAL

Reflector°: [33 / 47 / 65](#)
 Adjustability: Rotational 180°; Tilt 30°

RATINGS AND CERTIFICATIONS

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



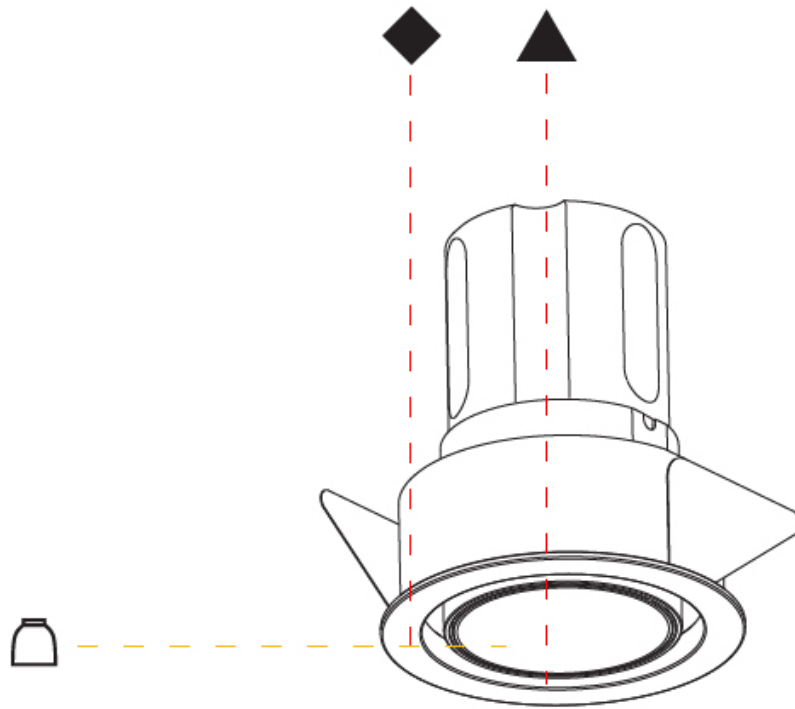
150mm 5 7/8"
 57mm 2 1/4"
 10 - 15mm 3/8" - 9/16"
 180°
 ± 15°
 ↑



INVADER ADJUSTABLE RECESSED

A37962-

PROJECT	_____
TYPE	_____
SPECIFIER	_____
QUANTITY	_____
DATE	_____



A

INVADER ON SQUARE SURFACE

A3D229-

base number LED Dimming Color Temperature Finishes (Diamond) Finishes (Triangle) Reflector Options

- To build a product code in our configurator select the specify button on the base model # product page
- 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 Square
 Brand: Prolicht
 Division: Architectural
 Mounting Type: Surface
 Mounting Location: Ceiling
 Subcategory: Spots

PHYSICAL

Shape: Square
 Length (mm): 75
 Length (in): 2 ¹⁵/₁₆
 Width (mm): 75
 Width (in): 2 ¹⁵/₁₆
 Height (mm): 125
 Height (in): 5 ⁷/₈
 Light Distribution: Downlight
 Weight (kg): 0.449
 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): 10
 Total Output Wattage (W): 9.1
 Dimming: [Tri-Mode \(Non-Dimming and Phase Dimming \(120Vac only\) and 0-10V Dimming\)](#)
 Driver Included: No
 Driver Location: Integrated
 Driver Type: Constant Current - Universal
 Driver Class: Class 2
 Input Voltage (V): 120 - 277
 Constant Current (MA): 500

LED

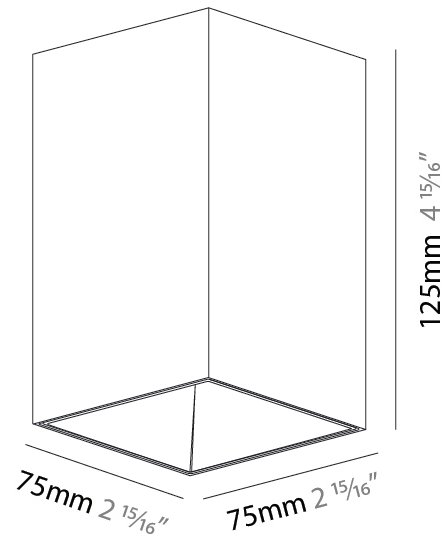
Number of LEDs: 1
 Color Temperature (°K): [2700 / 3000 / 3500 / 4000](#)
 Max. Delivered Lumen (lm): Max. 939
 CRI: >90 CRI
 Lamp Life (hrs): 50000

OPTICAL

Reflector°: [18 / 34 / 60](#)

RATINGS AND CERTIFICATIONS

Certified By: CSA Certified to UL and CSA Standards
 IP rating: IP20



INVADER ON SQUARE SURFACE

A3D229-

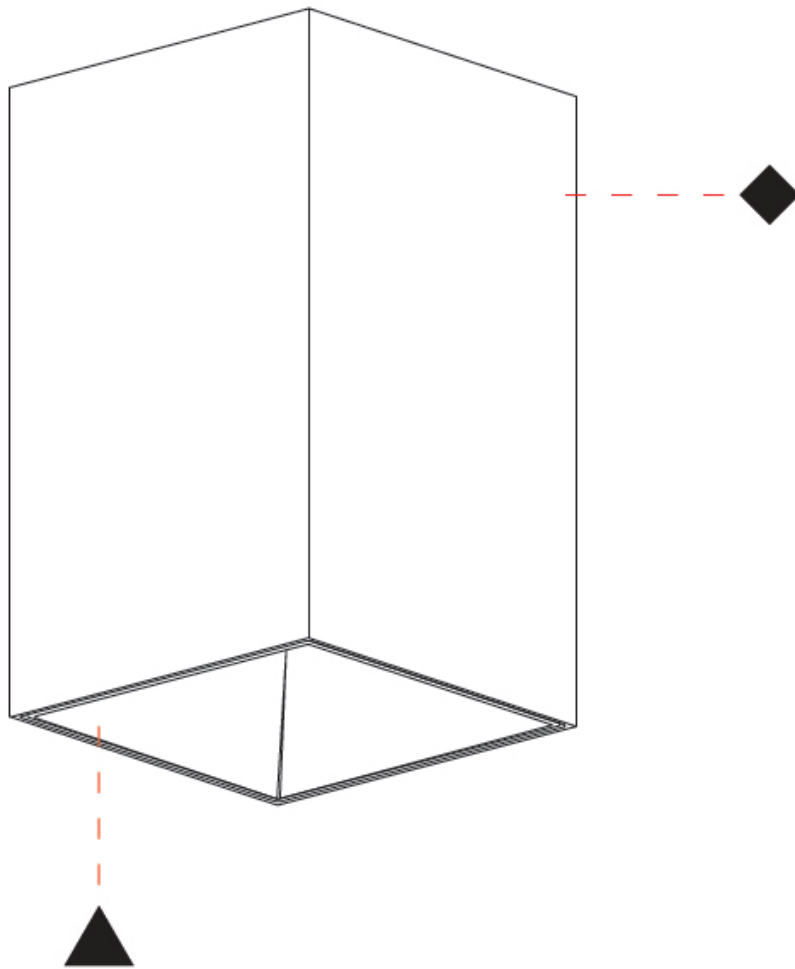
PROJECT

TYPE

SPECIFIER

QUANTITY

DATE



INVADER STANDARD COLOR FINISH CHART

PROJECT _____

TYPE _____

SPECIFIER _____

QUANTITY _____

DATE _____

Fixture Finish

Sparkling Silver - 01 (SSR)



Black Velvet - 02 (BKV)



Crystal White - 03 (CWI)



Creamy - 04 (CRY)



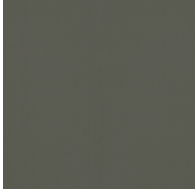
Hampton Bay - 05 (HAB)



Urban Forest - 07 (UFT)



In the Army - 08 (ITA)



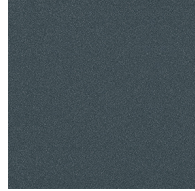
Rusty Angel - 09 (RUA)



Fade to Gray - 12 (FTG)



Mysterious Gray - 13 (MYG)



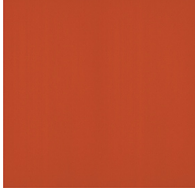
Lost Dream - 15 (LOD)



Purple Sky - 16 (PUS)



Fresh Oh - 17 (FRO)



Funky P. - 18 (FUP)



Kissing Aphrodite - 19 (KIA)



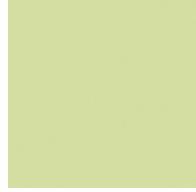
Poseidon's Paradise - 20 (POP)



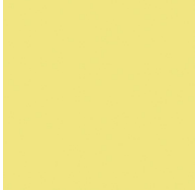
Blue Sky - 21 (BLS)



Spring Green - 22 (SPG)



Mellow Yellow - 23 (MEY)



Golden Heart - 24 (GOH)



Gun Metal - 25 (GUM)



Champagne Cream - 26 (CHC)



Copper Mine - 27 (COM)



Ancient Bronze - 28 (ABZ)



Jazz Gold - 29 (JAG)



Olive Breeze - 30 (OBR)



Moonlight Silver - 31 (MOS)



Rosewood Red - 32 (ROR)



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.













LEGEND

 floor-mounted	 pivotable	 special LED (upon request) RGB, RGBW, tunable, gold+, meat+, art+, fashion+
 wall and ceiling: recessed and surface mounted	 rotating	 warm dim / natural dimming LED
 ceiling-mounted and wall-mounted	 illuminate tilted	 rechargeable battery powered
 wall-mounted	 color of suspension cable	 fixture with natural vivid LED (upon request)
 omni-directional light distribution	 length of suspension cable	 color rendering index
 direct light distribution	 reflector degree selection	 color temperature
 direct/indirect light distribution	 super spot	 lumen (luminous flux)
 indirect light distribution	 lens	 efficacy (lumens per watt)
 asymmetric light distribution	 lens pack	 Unified Glare Rating (UGR) range from 5-40
 aura light distribution	 shine ring	 marine grade (AISI 316 stainless steel)
 round wall or ceiling cut-out	 integrated shine ring with diffuser	 walk on
 square wall or ceiling cut-out	 free individual colors 01-29	 drive on
 the supplied jig specifies the cutout dimensions	 individual colors: 00 (free of charge), 01-25 (extra charge)	 Dark Sky Compliance
 minimum distance (meters) lamp - object	 luminaire part to be colored (F1)	 Americans with Disabilities Act (less than 4" off the wall located between 27"-84" from floor)
 recessed depth	 luminaire part to be colored (F2)	 lamp protected against explosion
 ceiling thickness in mm	 luminaire part to be colored (F3)	 blown glass using traditional methods by master glass blower
 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
 included or excluded LED driver/transformer/control gear	 color of 3-circuit adaptor	 protection class II, protection insulation
 separately switchable	 indirect diffuser	 ETL Certified to UL and CSA Standards
 sensor	 direct diffuser	 UL Certified to UL and CSA Standards
 remote control	 ball-proof (upon request)	 CSA Certified to UL and CSA Standards
 available upon request	 accessory	 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

 IK01	protected against 0.14 joules impact (equivalent to 0.25kg mass dropped from 56mm above the surface)
 IK02	protected against 0.2 joules impact (equivalent to 0.25kg mass dropped from 80mm 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)
 IK06	protected against 1 joules impact (equivalent to 0.25kg mass dropped from 400mm above the surface)
 IK07	protected against 2 joules impact (equivalent to 0.5kg mass dropped from 400mm above the surface)
 IK08	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)
 IK10	protected against 20 joules impact (equivalent to 5.0kg mass dropped from 400mm above the surface)