

# GD4DS / ISD402

4" Gravity BIOS Square Lensed Downlight - Wet Location



JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

**ELECTRICAL DATA: (Data Based On 3000K/82CRI Configuration)**

LED Light Engine	Nominal Delivered Lumen*	System Wattage**	Efficacy	LED Light Engine	Nominal Delivered Lumen*	System Wattage**	Efficacy
BS05	500lm	10W	50 lm/W	BS2	1500lm	27W	56 lm/W
BS1	1000lm	18W	56 lm/W	BS3	2000lm	34W	59 lm/W

\*Delivered lumen output will vary depending on CCT, CRI, optic and reflector finish. | \*\*System Wattage includes driver and LED Module consumption.

**FEATURES**

- BIOS Illuminated: Blue Spectrum Peak Emission at 490 nm
- High delivered lumens maintained in ceiling from 1/2" to 2 1/4" using patent pending design
- Future proof luminaire with easy module install via twist-to-lock mounting and driver access through raised junction box

**LED LIGHT ENGINE**

- 3000K, 3500K or 4000K w/ CRI 80+ and R9 > 90
- 2 Step MacAdam (2 SDCM)
- Rated life of >50,000 hours L70 based on LED testing per LM-80-08 and projected values using IESNA TM21-11

**DIMMING**

- Phase Dimming 120V only, Forward 1% / Reverse 5%
- 0-10V Dimming 1%
- EldoLED 0-10V 0.1% or 1%
- Lutron® LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology
- Lutron® LTEA2W Hi-Lume 1% 2-Wire LED driver (120V forward phase only)
- DMX512 RDM 0.1%

**OPTICS**

- 20° Spot, 30° Narrow Flood, 40° Flood and 50° Wide Flood
- Optics and filter media are field customizable

**ELECTRICAL SYSTEM**

- Dedicated voltage options of 120V or 277V. Must be specified in catalog code.
- This product complies with IEEE C62.41 for surge endurance up to 2.5KV. Additional surge protection recommended. Damage from power surge is not covered by warranty.

**FRAME CONSTRUCTION**

Constructed from 16 and 18 gauge heavy duty powder coated cold rolled steel frame with a large access junction box. ETL listed for through wiring. LED light engine and driver are accessible from above or below ceiling. Innovative collar is field selectable for ceiling thicknesses from 1/2" to 2 1/4" without reducing delivered lumens.

**REFLECTOR**

Specification grade reflector with 1.5mm thickness. Reflector available in haze, white, clear, black or wheat finish. Consult factory for other colors. Regressed lens available in two lens types; Clear Tempered or Solite. Architectural, discrete polished self flange standard. Optional painted white flange is available. Meets RP-1 requirements with controlled light distribution at a 55° cut off.

**INSTALLATION**

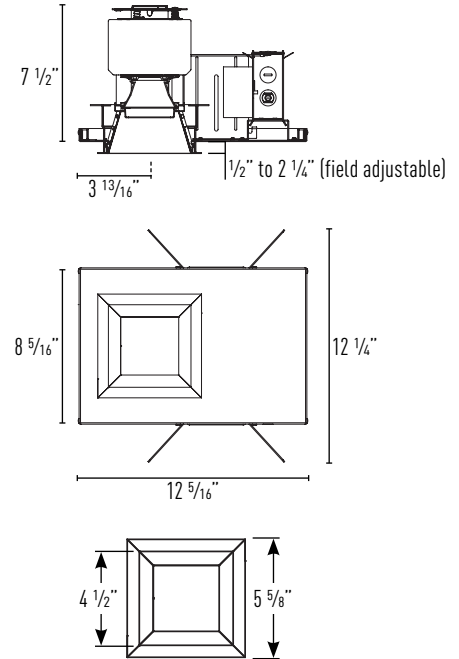
The luminaire is type Non-IC. Insulation must be kept at a minimum of 3" away from fixture. Accommodates ceiling thickness from 1/2" to 2 1/4". Universal mounting brackets included. Compatible with C-channel, flat bar, wood joist bar hanger and EMT. Bar hangers must be ordered separately. C-channel is recommended for T-bar ceilings. Max. ambient temperature: 95°F (35°C).

**EMERGENCY BACKUP**

Remote test switch included. External battery operates LED load of up to 7W at a minimum of 450 lumens for 90 minutes (EM7), or 20W at a minimum of 1250 lumens for 90 minutes (EM20).

**LISTING / WARRANTY**

- ETL Listed to US and Canadian standards for wet locations
- 5-Year Intense LED Limited Warranty
- This product is covered by U.S. Pat. No. 10,274,148.



Ceiling Cut Out: 5 1/4" x 5 1/4"  
 Maximum Ceiling Thickness: 2 1/4"  
 Minimum Ceiling Thickness: 1/2"

Housing Part Number: (Example: NA/TBD)

Housing	Wattage	CCT / CRI	Dimming	Voltage	Optic	Options
GD4DS	BS05 <sup>1</sup> (10W)	30 (3000K / 80 CRI)	-DIM <sup>2</sup> (Phase Dimming)	blank (120V)	-SP (20° Spot)	EM7 (7W Emergency Backup)
	BS1 (18W)	35 (3500K / 80 CRI)	-D101 (0-10V Dimming 1%)	27 (277V)	-NF (30° Narrow Flood)	IOTA ILB-CP07-A)
	BS2 (27W)	40 (4000K / 80 CRI)	-ED10V1 (eldoLED 0-10V 1%)		-FL (40° Flood)	EM20 <sup>3</sup> (20W Emergency Backup)
	BS3 (34W)		-ED10V01 (eldoLED 0-10V 0.1%)		-WF (50° Wide Flood)	IOTA ILB-CP20-HE-S)
			-LUT (Lutron® LDE1 EcoSystem 1%)			
			-LUT2 <sup>2</sup> (Lutron® LTEA2W 2-Wire 1%)			
			-DMXR (DMX512 RDM 0.1%)			

Reflector Part Number: (Example: ISD402HZ-SF-CR)

Reflector	Reflector Finish	Trim	Lens Type
ISD402	HZ (Haze)	-SF (Self Flanged)	-CR (Clear Tempered)
	W (White)	-SF <sup>W</sup> (Self Flanged White)	-SL (Solite)
	C (Clear)		
	B <sup>4</sup> (Black)		
	WHT <sup>4</sup> (Wheat)		

**Bar Hangers**

- 1100 (C-Channel Bar Hangers)
- 1200 (Flat Bar Hangers)
- 1400 (Wood Joist Bar Hangers)

**Replacement Optics**

- IP-OP63SP (20° Spot Optic)
- IP-OP63NF (30° Narrow Flood Optic)
- IP-OP63FL (40° Flood Optic)
- IP-OP63WF (50° Wide Flood Optic)

**Notes:**

- BS05 Not Available With (DIM) Phase Dimming
- Available in 120V only
- EM20 Not Available with BS05 & BS01
- Consult factory for lead times
- Trimless options are for use with mud ring accessory only

GRAVITY L/M0119/22 P-10

INTENSE LIGHTING | 3340 E La Palma Ave, Anaheim, CA 92806 | tel 714 630-9877 | fax 714 630-9883

For Intense Lighting's limited product warranty, go to [www.intenselighting.com](http://www.intenselighting.com). For a printed copy of the warranty, you may call 800 961-5321.

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# GD4DR / IRD402

4" Gravity BIOS Lensed Downlight - Wet Location



JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

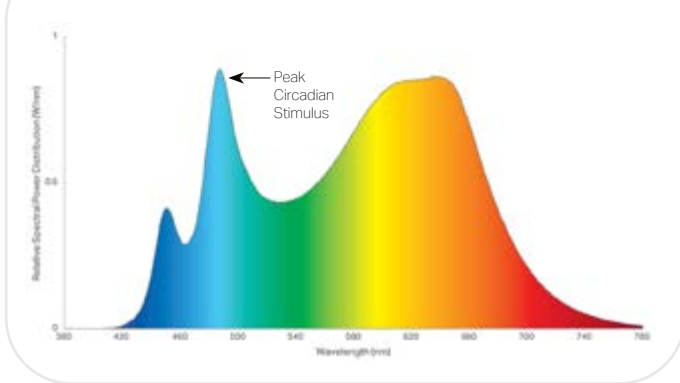
## 0-10V Dimming Electrical Table: System Wattage

Lumen Package	Voltage	Wattage	VA	Input Current	Power Factor
BS05	120V	9.35W	10.18	0.08	0.918
	277V	10.47W	14.50	0.05	0.722
BS1	120V	17.05W	17.38	0.14	0.981
	277V	18.45W	21.51	0.08	0.858
BS2	120V	26.61W	26.95	0.22	0.987
	277V	27.90W	31.25	0.11	0.893
BS3	120V	33.84W	34.11	0.28	0.992
	277V	35.12W	38.89	0.14	0.903

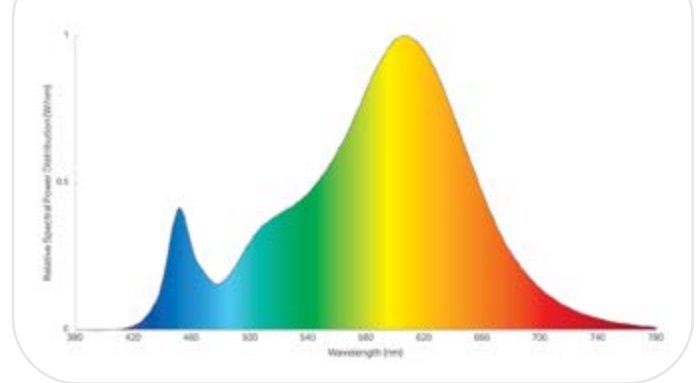
## Phase Dimming Electrical Table: System Wattage

Lumen Package	Voltage	Wattage	VA	Input Current	Power Factor
BS1	120V	16.60W	17.07	0.14	0.972
	277V	-	-		
BS2	120V	26.00W	26.42	0.22	0.984
	277V	-	-		
BS3	120V	33.16W	33.16	0.28	1.000
	277V	-	-		

BIOS Dynamic SkyBlue - High M/P Ratio SPD (3500K Day)



BIOS Dynamic SkyBlue - Low M/P Ratio SPD (2700K Night)



JOB NAME		CATALOG NUMBER	
NOTES		TYPE	

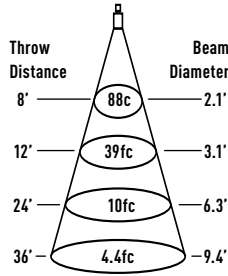
## GD4DSL1 ISD402

Report #: ILL20190103-1.001  
ILL20181219-2.001  
ILL20181219-5.001  
ILL20181219-8.001  
ILL20181219-11.001

### CCT MULTIPLIERS:

	82 CRI	92 CRI
2700K	(x 0.95)	(x 0.79)
3000K	(x 1.00)	(x 0.82)
3500K	(x 1.02)	(x 0.85)
4000K	(x 1.03)	(x 0.88)

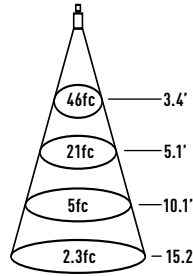
### -NS (14° Narrow Spot)



Footcandles at Nadir  
Watts: 10      LPW: 81.8  
Lumens: 818      CCT: 3000K

Luminance	
Degree	CBCP
0°	5651
5°	4160
15°	657
25°	387
35°	48
45°	27

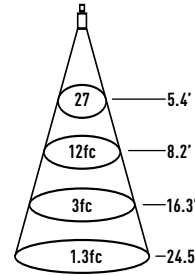
### -SP (20° Spot)



Footcandles at Nadir  
Watts: 10      LPW: 87.6  
Lumens: 876      CCT: 3000K

Luminance	
Degree	CBCP
0°	2968
5°	2662
15°	1048
25°	447
35°	76
45°	35

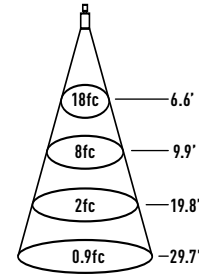
### -NF (30° Narrow Flood)



Footcandles at Nadir  
Watts: 10      LPW: 87.5  
Lumens: 875      CCT: 3000K

Luminance	
Degree	CBCP
0°	1737
5°	1655
15°	1103
25°	539
35°	108
45°	39

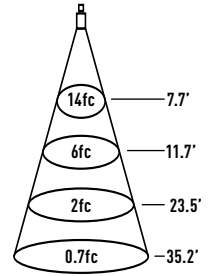
### -FL (40° Flood)



Footcandles at Nadir  
Watts: 10      LPW: 77.5  
Lumens: 775      CCT: 3000K

Luminance	
Degree	CBCP
0°	1127
5°	1083
15°	813
25°	464
35°	173
45°	69

### -WF (50° Wide Flood)



Footcandles at Nadir  
Watts: 10      LPW: 77.0  
Lumens: 770      CCT: 3000K

Luminance	
Degree	CBCP
0°	889
5°	874
15°	745
25°	481
35°	200
45°	79

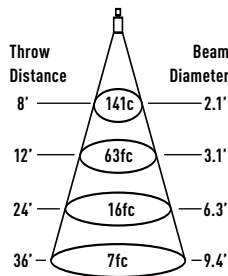
## GD4DSL2 ISD402

Report #: ILL20190103-1.002  
ILL20181219-2.002  
ILL20181219-5.002  
ILL20181219-8.002  
ILL20181219-11.002

### CCT MULTIPLIERS:

	82 CRI	92 CRI
2700K	(x 0.95)	(x 0.79)
3000K	(x 1.00)	(x 0.82)
3500K	(x 1.02)	(x 0.85)
4000K	(x 1.03)	(x 0.88)

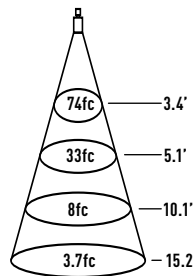
### -NS (14° Narrow Spot)



Footcandles at Nadir  
Watts: 14      LPW: 93.1  
Lumens: 1304      CCT: 3000K

Luminance	
Degree	CBCP
0°	9011
5°	6633
15°	1048
25°	618
35°	76
45°	43

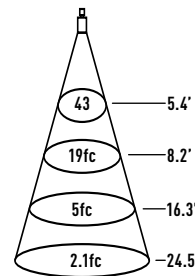
### -SP (20° Spot)



Footcandles at Nadir  
Watts: 14      LPW: 99.8  
Lumens: 1398      CCT: 3000K

Luminance	
Degree	CBCP
0°	4733
5°	4244
15°	1671
25°	713
35°	121
45°	56

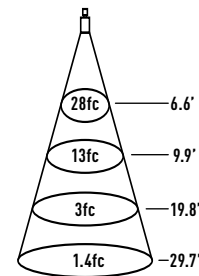
### -NF (30° Narrow Flood)



Footcandles at Nadir  
Watts: 14      LPW: 99.6  
Lumens: 1395      CCT: 3000K

Luminance	
Degree	CBCP
0°	2770
5°	2638
15°	1759
25°	860
35°	172
45°	62

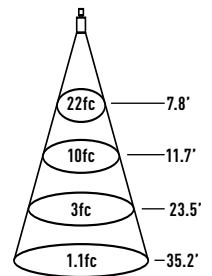
### -FL (40° Flood)



Footcandles at Nadir  
Watts: 14      LPW: 88.3  
Lumens: 1236      CCT: 3000K

Luminance	
Degree	CBCP
0°	1798
5°	1727
15°	1296
25°	740
35°	275
45°	110

### -WF (50° Wide Flood)



Footcandles at Nadir  
Watts: 14      LPW: 87.7  
Lumens: 1227      CCT: 3000K

Luminance	
Degree	CBCP
0°	1418
5°	1393
15°	1188
25°	766
35°	318
45°	125