

**SITE PLAN - ELECTRICAL LIGHTING CALCULATIONS**  
 NORTH  
 SCALE: 1"=40'-0"

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**WESTFIELD WASHINGTON SCHOOLS**  
 322 West Main Street  
 Westfield, Indiana 46074

**PROJECT:**  
 WESTFIELD HIGH SCHOOL  
 ATHLETICS  
 LOCKER ROOM BUILDING  
 18250 NORTH UNION STREET  
 Westfield, Indiana 46074

**Scope Drawings:**  
 These drawings indicate the general scope of the project in terms of architectural design, concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.  
 The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.  
 On the basis of the general scope indicated or described, the trade contractor shall furnish all items required for the proper installation and completion of the work.

**Revisions:**


<b>Issue Date</b> 01/22/13	<b>Drawn By</b> NML	<b>Checked By</b> WJU
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**Drawing Title:**  
 SITE  
 PLAN  
 ELECTRICAL  
 LIGHTING  
 CALCULATIONS

**Certified By:**  
 GREGORY M. STEPHENS  
 No. PE19700036  
 STATE OF INDIANA  
 PROFESSIONAL ENGINEER

**Drawing Number:**  
 EL100

**Project Number:**  
 12150

## FEATURES & SPECIFICATIONS

**INTENDED USE** — Ideal for a wide variety of low- to medium-height ceiling applications, and for shower and outdoor applications where a wet lensed fixture is required. The system maintains 70% lumen output at more than 50,000 hours.

**CONSTRUCTION** — 16-gauge galvanized steel mounting/plaster frame with torsion springs to mount open conical shape reflector.

Rugged, one-piece, die-cast housing with white interior dome reflector.

LED light source shielded from direct view.

Vertically adjustable mounting brackets that use 16-gauge flat bar hangers (included), 1/2" conduit or C channel T bar fasteners. Provides 3-3/4" total adjustment.

Post installation adjustment possible from above or below the ceiling.

Galvanized steel junction box with bottom-hinged access covers and spring latches. Two combination 1/2"-3/4" and three 1/2" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out) No. 12 AWG conductors, rated for 90°C.

Fixture height of 5-3/4" allows installation in shallow plenum applications.

Secondary housing adjustment system for precise, final ceiling-to-flange alignment.

Maximum 1-1/2" ceiling thickness.

**ELECTRICAL** — Utilizes high-brightness LEDs mounted to a metal core circuit board, ensuring cool-running operation, 3500K, CRI > 80.

Thermal control ensures cool running LEDs.

Thermal protection provided against improper insulation use.

High-efficiency, electronic LED driver mounted in the junction box.

Luminaire should be installed in applications where ambient temperatures do not exceed 50°C. Ambient temperatures that exceed 50°C will result in reduced lamp life and will void warranty.

Input wattage for 600L is 15.6W. Input wattage for 900L is 25.0W.

The DOM6 LED with DIM option operates with all 0-10V dimming switches. The following dimming switches have been confirmed to dim to 10% output:

Synergy® model number: [ISD BC 120/277](#)

Leviton® model number: IP710-DLX

Lutron® model number: NTFITV-WH. For on/off control, this switch requires a power pack. Consult Lutron for more information.

**LISTINGS** — CSA Certified to U.S. and Canadian safety standards. Wet location listed.

**WARRANTY** — Five-year limited warranty. Complete warranty terms located at:

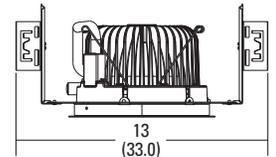
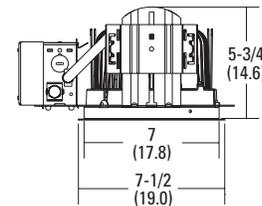
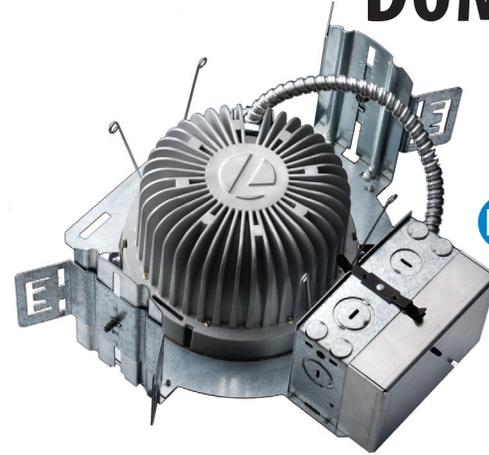
[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

Note: Specifications subject to change without notice.

Catalog Number
Notes
Type

# DOM DOM6 LED

6" WET LENS  
LED



### Specifications

- Aperture: 6-3/4 (17.1)
- Ceiling opening: 7 (17.8)
- Overlap trim: 7-1/2 (19.0)
- Height: 5-3/4 (14.6)
- Length: 11-1/8 (28.3)
- Standard width: 13 (33.0)

All dimensions are inches (centimeters) unless otherwise specified.

### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** DOM6 LED 900L 35K 120 DL64

DOM6 LED Series	Lumen output <sup>1</sup>	Color temperature	Voltage	Reflector <sup>3</sup>	Options
DOM6 LED	600L 900L	35K 3500K	120 277 347 <sup>2</sup>	DL61 White splay, flat clear lens	DIM 0-10V dimming driver, 10% minimum light output
		40K 4000K		DL6B1 Black baffle, flat clear lens	ELR Emergency battery pack with remote test switch 100% lumen output at 90 minutes
				DL64 White splay, fresnel lens	ELRB722 Bodine® emergency battery pack with remote test switch provides 86% light output or roughly 770 lumens, for up to 90 minutes (900L only) <sup>4</sup>
		DL6B4 Black baffle, flat fresnel lens		NSD Sensor Switch nLight™ dimming relay; must be ordered with DIM option <sup>5</sup>	
		DL6T73 White splay, tempered prismatic lens			
DL6B73 Black baffle, tempered prismatic lens					

<b>Accessories:</b> Order as separate catalog number.	
ISD BC 120/277 WH	Synergy white switch
ISD BC 120/277 IV	Synergy ivory switch

### Notes

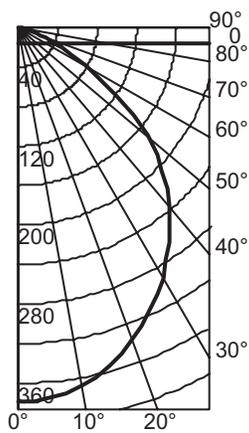
- Total system delivered lumens; power factor > 0.90.
- Not available with ELR and ELRB722
- White integral flange.
- ELRB722 available only with 900L.
- One 5A relay with one 0-10 VDC dimming output, shipped installed. Requires additional nLight bus power supply.

# DOM6 LED 6" WET LENS LED

## PHOTOMETRICS

DOM6 LED 900L DL64; 784 delivered lumens, input watts: 24.9, Test No. LTL 17962. Tested in accordance with IESNA LM-79-2008.

Polar Plot



Intensity Distribution		Zonal Lumen Summary	
Vertical Angle	Horizontal Angle	Zone	Lumens % Lamp
0	0	0° - 30°	280.3 35.8
5	376	0° - 40°	445.7 56.9
15	355	0° - 60°	711.6 90.8
25	315	0° - 90°	784.0 100.0
35	266	90° - 180°	0.0 0.0
45	206	0° - 180°	784.0 *100.0
55	121	*Total Efficiency	
65	49		
75	17		
85	3		
90	0		

RCR	pf	pc	pw	Coefficients of Utilization					
				80%		70%		50%	
				50%	30%	50%	30%	50%	30%
0	0	119	119	116	116	111	111		
1	1	107	103	105	102	101	98		
2	2	95	90	94	88	90	86		
3	3	85	78	84	77	81	75		
4	4	77	69	75	68	73	67		
5	5	69	61	68	61	66	60		
6	6	63	55	62	54	60	53		
7	7	57	49	57	49	55	48		
8	8	53	45	52	45	51	44		
9	9	49	41	48	41	47	40		
10	10	45	38	45	37	44	37		

### Notes

- Actual performance may differ as a result of end-user environment and application.
- Actual wattage may differ by +/-5% when operating between 120-347V +/-10%.

## FEATURES & SPECIFICATIONS

**INTENDED USE** — For building- and wall-mounted applications.

**CONSTRUCTION** — Rugged, die-cast, single-piece aluminum housing. Die-cast door frame has a 1/8" thick tempered glass lens. Door frame is fully gasketed with one-piece solid silicone.

**OPTICS** — Segmented reflectors for superior uniformity and control. Reflectors are interchangeable. Three full cutoff distributions available: FT (forward throw), MD (medium throw) and WT (wide throw).

**ELECTRICAL** — Ballast: 50W-150W utilizes a high reactance, high power factor ballast. Metal halide 150W and below are standard with pulse-start technology. 35S utilizes a reactance high power factor ballast. 175W utilizes a constant-wattage autotransformer ballast. CSA, NOM or INTL required for probe start shipments outside of the US for 175M. Not available 175M SCWA. Ceramic metal halide lamps are recommended for use in applications where superior color rendition, lumen maintenance and longer lamp life are desired.

Quick disconnect plug easily disconnects reflector from ballast. Ballasts are 100% factory-tested.

Socket: Porcelain, medium-base socket with copper alloy, nickel-plated screw shell and center contact. UL listed 660W, 600V 4KV pulse rated.

Finish: Standard finish is textured dark bronze (DDBT) corrosion-resistant polyester powder finish. Additional architectural colors are available. Striping is also available.

**INSTALLATION** — Universal mounting mechanism with integral mounting support allows fixture to hinge down. Bubble level provides correct alignment with each installation.

**LISTINGS** — UL Listed (standard). CSA Certified (see Options). Suitable for wet locations (damp location listed in lens-up orientation). WLU option offers wet location listing in up orientation (see Options). IP65 rated. 25°C ambient. ELED: U.S. Patent No. 7,737,640.

**WARRANTY** — 1-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

Note: Specifications subject to change without notice.



Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

Catalog Number
Notes
Type



Decorative Wall-Mounted Lighting

# WST

**METAL HALIDE: 50W-175W**

**HIGH PRESSURE SODIUM: 35W-150W**

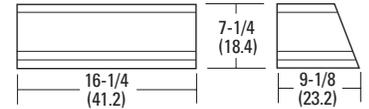
### Specifications

Length: 16-1/4 (41.2)

Depth: 9-1/8 (23.2)

Overall Height: 7-1/4 (18.4)

\*Weight: 30 lbs (13.6 kg)



All dimensions are inches (centimeters) unless otherwise indicated.

\*Weight as configured in example below.

### ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

**Example: WST 100M FTTB LPI**

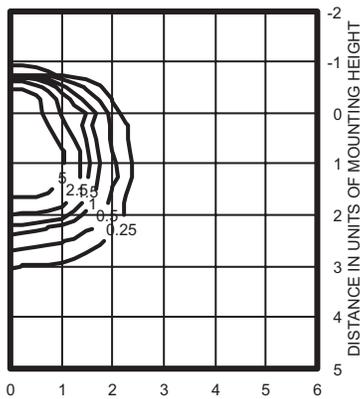
WST	Wattage/source			Distribution	Voltage	Ballast	Mounting	Options
<b>WST</b>	<b>High pressure sodium</b>	<b>Metal halide</b>	<b>Ceramic metal halide</b>	<b>FT</b> Forward throw	<b>120</b>	<b>(blank)</b> Magnetic ballast	<b>(blank)</b> Surface mount	<b>Shipped installed in fixture</b>
	35S <sup>1</sup>	50M	50MHC	<b>MD</b> Medium throw (coated lamp std.)	208 <sup>3</sup>	CWI Constant wattage isolated	<b>Shipped separately</b> <sup>7</sup>	SF Single fuse (120, 277, 347V) <sup>8</sup>
	50S	<b>70M</b>	70MHC	<b>WT</b> Wide throw	240 <sup>3</sup>	<b>Pulse Start</b> ™ NO RESTRICTION SERVICE	BBW Surface mount back box	DF Double fuse (208, 240V) <sup>8</sup>
	70S	<b>100M</b>	100MHC		<b>277</b>		UT5 Uptilt 5 degrees	DC12 Emergency circuit 12-volt (35W lamp included) <sup>9</sup>
	100S	<b>150M</b>	150MHC		<b>347</b>			2DC12 Emergency circuit 12-volt (two 35W lamps included) <sup>9</sup>
	150S	175M <sup>2</sup>	150MHC		<b>TB</b> <sup>4</sup>			DC2012 Emergency circuit 12-volt (20W lamp included) <sup>9</sup>
					23050HZ <sup>5</sup>	SCWA Super CSA pulse start ballast <sup>6</sup>		2DC2012 Emergency circuit 12-volt (two 20W lamps included) <sup>9</sup>

Options (continued)			Finish <sup>16</sup>	Lamp <sup>18</sup>
ELED	Emergency LED secondary source battery pack with time delay (-4°F min. operating temperature) <sup>10</sup>	QRS Quartz restrike system <sup>11, 15</sup>	<b>(blank)</b> Dark bronze, textured	<b>LPI</b> Lamp included
2ELED	Emergency LED secondary source (two modules) battery pack with time delay (-4°F min. operating temperature) <sup>10</sup>	WLU Wet location door for up orientation	DSST Sandstone, textured	<b>L/LP</b> Less lamp
DFL	Diffusing lens	<b>CSA</b> CSA certified	<b>DNAT</b> Natural aluminum, textured	
EC	Emergency circuit <sup>11, 12</sup>	NOM NOM certified <sup>5</sup>	<b>DWHG</b> White, textured	
IBS	Internal backlight shield <sup>13</sup>	INTL International shipment for 175M	<b>DBLB</b> Black, textured	
<b>PE</b>	Photoelectric cell-button type (n/a TB) <sup>14</sup>		<b>CRT</b> Non-stick protective coating <sup>17</sup>	
			<b>Super Durable Finishes</b>	
			DDBXD Dark bronze	
			DBLXD Black	
			DNAXD Natural aluminum	
			DWHXD White	
			DDBTXD Textured dark bronze	
			DBLBXD Textured black	
			DNATXD Textured natural aluminum	
			DWHGXD Textured white	

# WST Metal Halide, High Pressure Sodium Wall Mounted

## WST 150MHC FT LTL11069P

ISOILLUMINANCE PLOT (Footcandle)

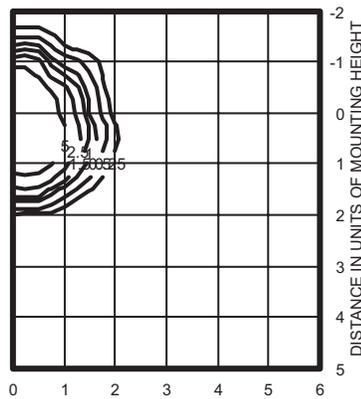


150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 14000 rated lumens.

Luminaire Efficiency: 52.9%

## WST 150MHC MD LTL11068P

ISOILLUMINANCE PLOT (Footcandle)

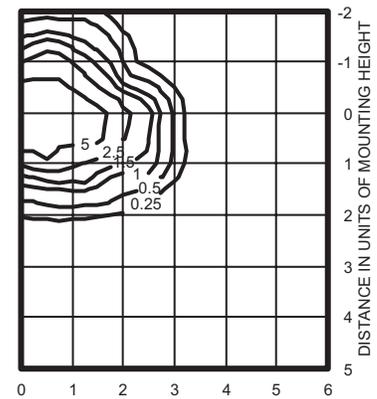


150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 12500 rated lumens.

Luminaire Efficiency: 60.2%

## WST 150MHC WT LTL11070P

ISOILLUMINANCE PLOT (Footcandle)



150W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 14000 rated lumens.

Luminaire Efficiency: 62.5%

Lamp	Initial lumens	Mounting height			
		10'	12'	14'	16'
<b>Metal Halide</b>					
50W MH	3,900	0.43	0.30	0.22	0.17
70W MH	5,500	0.62	0.43	0.31	0.24
100W MH	8,500	0.95	0.66	0.48	0.37
150W MH	12,500	1.41	0.98	0.72	0.55
175W MH	12,800	1.44	1.0	0.73	0.56
<b>High Pressure Sodium</b>					
35W HPS	1,250	0.26	0.18	0.13	0.10
50W HPS	4,000	0.45	0.31	0.23	0.17
70W HPS	6,400	0.72	0.50	0.37	0.28
100W HPS	9,500	1.07	0.74	0.54	0.41
150W HPS	16,000	1.80	1.25	0.91	0.70

Emergency Option Lamp Compatibility							
Lamp options	DC12	2DC12	DC2012	2DC2012	EC	ELED	2ELED
# of lamps/wattage							
35S	■	■	■	■	■	■	■
50S	■	■	■	■	■	■	■
70S	■	■	■	■	■	■	■
100S	■	■	■	■	■	■	■
150S	■	■	■	■	■	■	■
50M	■	■	■	■	■	■	■
70M	■	■	■	■	■	■	■
100M	■	■	■	■	■	■	■
150M	■	■	■	■	■	■	■
175M	■	■	■	■	■	■	■

### Notes

- 120V.
- These wattages do not comply with California Title 20 regulations.
- Must specify CWI for use in Canada.
- Optional multi-tap ballast (120, 208, 240, 277V); (120, 277, 347V in Canada; ships as 120V/347V).
- Consult factory for available wattages.
- Available with 150M or 150MHC only.
- May be ordered as an accessory with prefix "WS". Must specify finish.
- Not available with DC options.
- Not available with ELED, SF, DF, EC or QRS.
- Maximum wattage 100M, 70S. Must specify 120V or 277V. Not available with QRS, EC or DC.
- Maximum allowable wattage lamp included.
- Not available with ELED, QRS or DCs.
- Not available with medium throw (MD, MDU, MDU5) distributions.
- Must be ordered with fixture; cannot be field installed.
- Not available with ELED, EC or DCs.
- See [www.lithonia.com/archcolors](http://www.lithonia.com/archcolors) for additional color options.
- Black finish only.
- Must be specified. L/LP not available with MHC.