



16" Lowbay 4650 Lm

Soft View Optical Lens



DDS16

APPLICATION

16" Lumen Max DDS series performance pendant for low and mid-bay applications. Prismatic refractor provides horizontal and vertical light distribution. Aluminum reflector is designed for maximum downlight with capability to customize with shade colors.

FEATURES

Domed fixture housing (DDS) blends seamlessly with modern environments. Single-stage optical system for smooth light distribution. Optional integral LED diffusion lens (TF2) available for maximum visual comfort. LED module and driver designed for ease of maintenance and replacement. Optional safety cable, variety of optical lenses, enclosures, and mounting methods available.

FINISH

Multi-stage polyester powder-coat process applied on our dedicated paint lines. Variety of standard and custom finishes are available. All exposed materials are chromate pretreated to resist corrosion. Standard Matte White interior finish on reflectors.

ELECTRONICS

Light engine features high brightness white LED's. 3-step MacAdam Ellipse binning. Standard CRI: 80/90. Custom LED configurations are available; consult factory. Variety of electronic 120V/277V and dimming drivers.

CONSTRUCTION

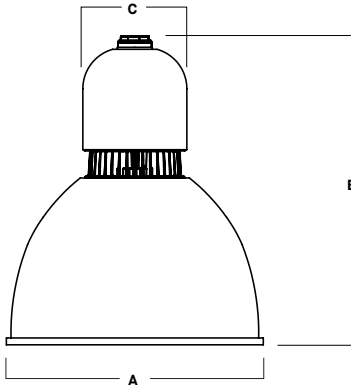
Housing constructed of spun and machined aluminum. Die-cast aluminum heat sink. Reflector made of spun .060" aluminum. Refractor made of cast UV stabilized acrylic.

CODE COMPLIANCE

BAA compliant. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Manufactured and tested to UL standards No. 1598/8750.

QUICK SHIP

Quick Ship Surface highlights products that can ship in 5 - 10 working days.



A	B	C
16.2 411.5 mm	19.6 487.7 mm	6.5 165.1 mm

Dimensioned with **PRISMATIC**

NOMINAL LUMENS / WATTAGE DATA			
PART NUMBER	DELIVERED LUMENS ¹	SYSTEM WATTS	LPW
DDS16GV15L	1252	10	125
DDS16GV27L	2133	18	119
DDS16GV37L	3152	26	121
DDS16GV55L	4636	39	119

¹ Nominal Delivered Lumens with 35K TF2 DF16

SERIES	LUMENS ¹	CCT	DRIVER / DIMMING ²	SAFETY OPTIONS ³	MOUNTING ⁴	SHADE	ENCLOSURE OPTIONS	OPTIONS	FINISH ¹³	MOUNTING OPTION ¹⁵
DDS16GV	15L 1250 Lm	80 CRI	EX Electronic Driver, 120V/277V DX 1% 0-10V, 120V/277V DS2WI ELV/TRIAC, 120V	ENCLOSURES TF2 4" Frosted Dome MF2 4" Frosted Mini	HM 5/8" Hang Straight PM 5/8" Rigid Pendant CD 5/8" Cord / Cable Mount CD72 72" Cord / Cable Mount HC 5/16" Hook & Cord NM2 27/8" 1/2" NPT Hub NM3 27/8" 3/4" NPT Hub	PRISMATIC DF16 16" Diffuse PR16 16" Clear OP16 16" Opal	ACCESSORIES DR16D 16" Spun Door BC16 16" Band Clamp RS16 16" Refractor Shroud	SC2 Safety Cable, Refractor to Door	MW 14 Matte White MB 14 Matte Black PT 14 Platinum Silver CC Custom Color	FCHMA Field Cuttable Mounting Kit for Hang Mount Fixtures
	27L 2150 Lm	27K 2700K								
	37L 3150 Lm	30K 3000K								
	55L 4650 Lm	35K 3500K 40K 4000K								
		90 CRI		SAFETY OPTIONS	EM. BATTERY OPTIONS	ALUMINUM	DR16DWAG 16" Door with Wire Guard			
		27HK 2700K 30HK 3000K 35HK 3500K 40HK 4000K		FS Fusing SC1 Safety Cable	EMCR 10W Canopy Mounted EM EMRM 7W Remote EM EMEN 7W Remote with Enclosure	AL16/MWI 16" Matte White Inside AL16/FCI 16" Fixture Color Inside	FO White Optical Acrylic PP Prismatic Polycarbonate PC Clear Polycarbonate			
							WAG16 16" Wire Guard			

GREEN TEXT INDICATES QUICK SHIP OPTIONS

EXAMPLE: DDS16GV37L35KEXTF2/HM36/AL16/MWI/MW

NOTES:

1 Nominal Delivered Lumens with 35K TF2 DF16 2 Contact Factory for Additional Options 3 See Product Options Page for Details 4 See Mounting Page for Details on Components 5 Specify Length in Inches: See Mounting Page for Available Lengths 6 Mounting Supplied by Others 7 Not Available with EMCR 8 12" Leads Unless Specified 9 Reflector Finished Matte White with Finish Color Out 10 Same Finish as Housing 11 Same Finish as Housing / For Use with Prismatic Shades Only 12 No Color 13 Reference Color Sheet Located on Product Webpage for Full List of Available Colors 14 Standard Finishes 15 Field Cuttable Mounting Kit only Available with HM Stem



PROJECT: _____
 QUANTITY: _____ TYPE: _____



16" ALUMINUM & PRISMATIC

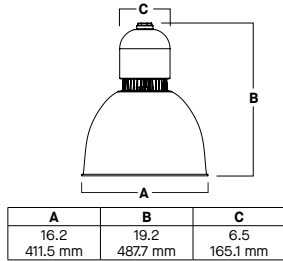
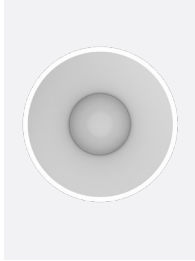
DDS SERIES / FIXTURE OPTIONS



SERIES TYPE

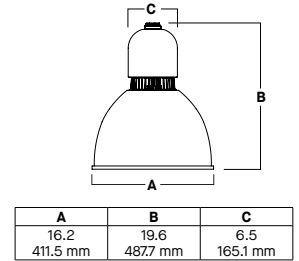
ALUMINUM

BOTTOM VIEW



PRISMATIC

BOTTOM VIEW



STANDARD FINISHES

MW MATTE WHITE



DDS16/AL16 HM MATTE WHITE

MB MATTE BLACK



DDS16/AL16 HM MATTE BLACK

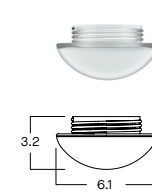
PT PLATINUM SILVER



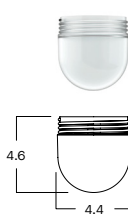
DDS16/AL16 HM PLATINUM SILVER

ENCLOSURES

TF2 4" FROSTED DOME



MF2 4" FROSTED MINI



MOUNTING TYPES

HM / PM HANG STRAIGHT / PENDANT



DDS16/AL16 SHOWN WITH PM

CD CORD / CABLE MOUNT



DDS16/AL16 SHOWN WITH CD

HC HOOK CORD



DDS16/AL16 SHOWN WITH HC

NM NO MOUNT



DDS16/AL16 SHOWN WITH NM



MOUNTING & ACCESSORIES

SOME OPTIONS NOT AVAILABLE ON ALL FIXTURES. CONSULT SPECIFICATION SHEETS. SEE INDIVIDUAL SPECIFICATION SHEETS OR CONSULT FACTORY FOR ADDITIONAL INFORMATION. NOTE: THIS IS TYPICAL OF RLM SPECIFICATION FOR MOUNTING. INDIVIDUAL FIXTURES OR PROJECTS MAY HAVE SPECIALIZED REQUIREMENTS.



ADDITIONS

FS - Fusing

Slow blow type fuse protects fixture against voltage surges. Factory installed.



SAFETY CABLE OPTIONS

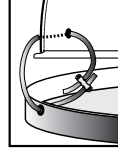
SC1 - Safety Cable

1/16" stainless steel safety cable for added support. Standard kit is 18" and double barrel locks are provided. Approved for California seismic requirements. Rated at 50 lbs.



SC2 - Safety Cable, Refractor to Door

1/16" Stainless steel cable holds door to fixture



ENCLOSURES

TF2 - 4" Frosted Dome



MF2 - 4" Frosted Mini



OPTIONS

DOOR

DR16D-16" Spun Door
BC16-16" Band Clamp
RS16-16" Refractor Shroud

LENSES

CNFR-Conical Frosted Lens
CN-Conical Lens
DL-Drop Lens
FO-White Optical Acrylic
PP-Prismatic Polycarbonate
PC-Clear Polycarbonate



DR16D SHOWN WITH CN

DOOR & GUARD

DR16DWAG-16" Door with Wire Guard

LENSES

FO-White Optical Acrylic
PP-Prismatic Polycarbonate
PC-Clear Polycarbonate



DR16DWAG SHOWN WITH FO

GUARD OPTION

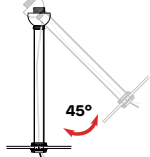
WAG16-16" Wire Guard



MOUNTING TYPES

HM* - Hang Straight

45° SWIVEL 5/8" OD STEM - 3/8" IP

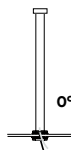


ORDER: **HM** (Length)
 SPECIFY LENGTH:
HM3 - 3" **HM24** - 24"
HM6 - 6" **HM36** - 36"
HM12 - 12" **HM48** - 48"
HM18 - 18" **HM72** - 72"
HMLC(XX)
 Custom Length
 (Specify in Inches)

TO TRIM HM STEM IN FIELD ORDER FCHMA KIT.

PM* - Ridgid Pendant Mount

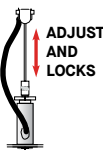
RIGID 5/8" OD STEM - 3/8" IP



ORDER: **PM** (Length)
 SPECIFY LENGTH:
PM3 - 3" **PM24** - 24"
PM6 - 6" **PM36** - 36"
PM12 - 12" **PM48** - 48"
PM18 - 18" **PM72** - 72"
PMLC(XX)
 Custom Length
 (Specify in Inches)

CD - Cord / Cable Mount

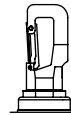
SJ CORD WITH 1/16 SS CABLE



ORDER: **CD** (Length)
 SPECIFY LENGTH:
CD36 - 36"
CD72 - 72"
CD144 - 144"
CDLC(XX)
 Custom Length
 (Specify in Inches)

HC - Hook & Cord

FOR INDEPENDENT MOUNTING



ORDER: **HC** (Length)
 SPECIFY LENGTH:
HC36 - 36"
HC72 - 72"
HC144 - 144"
HCLC(XX)
 Custom Length
 (Specify in Inches)

NM2 - 1/2" NPT Hub

NM3 - 3/4" NPT Hub
 FOR INDEPENDENT MOUNTING



ORDER: **NMX** (Length)
 SPECIFY LENGTH:
NM2(12) - 12" Leads are Standard
NM3(12) - 12" Leads are Standard
NMXLC(XX)
 Custom Length
 (Specify in Inches)

*MAXIMUM ONE PIECE STEM LENGTH IS 72".
 LONGER LENGTHS ARE POSSIBLE USING MULTIPLE STEMS AND COUPLERS.

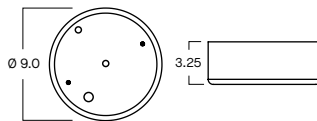
MOUNTING OPTION

FCHMA - Field Cuttable Mounting Kit For Hang Mount Fixtures



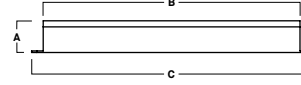
EMERGENCY BATTERY OPTIONS

EMCR - Large Driver Canopy For 10W Emergency Battery



REMOTE EMERGENCY BATTERY OPTIONS

EMRM* - 7W Remote Emergency Battery (50' Max)



A	B	C
1.3	12.6	13.0

EMEN* - 7W Remote Emergency Battery with Enclosure (50' Max)



A	B	C
2.0	17.0	6.2

*OTHER EM BATTERY SIZES AVAILABLE. CONSULT FACTORY



16" PRISMATIC

DDS SERIES / PHOTOMETRIC DATA



DDS16GV 55L 35K EX TF2 DF16 NL

CANDLEPOWER CURVE TEST SP-00856_5	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT										
	0°	0° - 10°	183	4%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 30°	1509	33%							FC *	W/Sq. Ft.	FC *	W/Sq. Ft.
	20°	0° - 60°	2835	61%	6'	53 fc	9.0'	14 fc	14'	8'	61	0.62	49	0.62
	40°	90° - 120°	658	14%	8'	30 fc	12.0'	8 fc	18'	10'	30	0.31	24	0.31
	60°	90° - 150°	888	19%	10'	19 fc	15.0'	5 fc	22'	12'	25	0.25	15	0.18
	80°	0° - 90°	3732	80%	12'	13 fc	18.0'	3 fc	Delivered Illuminance Rating: (DIR)					
	90°	90° - 180°	905	20%	14'	10 fc	21.0'	3 fc	98 FC per W/Sq. Ft. 79 FC per W/Sq. Ft.					
	100°	Total	4636	100%	16'	7 fc	24.0'	2 fc	2' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 4.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 4.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	120°				18'	5 fc	30.0'	1 fc						
	140°				20'	5 fc	30.0'	1 fc						
	160°				24'	3 fc	36.0'	1 fc						
	180°													

Delivered Lumens: 4636
Luminaire Watts: 39
LER: 118.87

CP at 0° (Nadir): 1920
CRI: 80+

Beam Angle: 74°
Spacing Ratio: 1.19

Lumen Multiplier: 15L x 0.27, 27L x 0.46, 37L x 0.61
CCT Multiplier: 27K x 0.97, 30K x 0.99, 40K x 1.03

DDS16GV 55L 35K EX TF2 PR16 NL

CANDLEPOWER CURVE TEST SP-00858_5	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY	MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT										
	0°	0° - 10°	314	6%	Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 30°	2693	56%							FC *	W/Sq. Ft.	FC *	W/Sq. Ft.
	20°	0° - 60°	4394	91%	6'	91 fc	8.5'	25 fc	14'	8'	74	0.62	63	0.62
	40°	90° - 120°	123	3%	8'	51 fc	11.3'	14 fc	18'	10'	37	0.31	31	0.31
	60°	90° - 150°	139	3%	10'	33 fc	14.1'	9 fc	22'	12'	30	0.25	18	0.18
	80°	0° - 90°	4690	97%	12'	23 fc	17.0'	6 fc	Delivered Illuminance Rating: (DIR)					
	90°	90° - 180°	142	3%	14'	17 fc	19.8'	5 fc	119 FC per W/Sq. Ft. 101 FC per W/Sq. Ft.					
	100°	Total	4832	100%	16'	13 fc	22.6'	3 fc	2' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 4.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 4.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	120°				18'	8 fc	28.3'	2 fc						
	140°				20'	8 fc	28.3'	2 fc						
	160°				24'	6 fc	33.9'	2 fc						
	180°													

Delivered Lumens: 4832
Luminaire Watts: 39
LER: 123.90

CP at 0° (Nadir): 3279
CRI: 80+

Beam Angle: 71°
Spacing Ratio: 1.17

Lumen Multiplier: 15L x 0.27, 27L x 0.46, 37L x 0.61
CCT Multiplier: 27K x 0.97, 30K x 0.99, 40K x 1.03



16" ALUMINUM

DDS SERIES / PHOTOMETRIC DATA



DDS16GV 55L 35K EX TF2 AL16 MWI NL

CANDLEPOWER CURVE TEST SP-00860_5		INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE DIRECT FOOTCANDLES BASED ON DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT					
	0°			Mounting Height AFF	FC at Center on Floor	Beam Diameter	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	2492	0° - 10° 236 5%	6'	69 fc	9.7'	16 fc	14'	8'	FC *	W/Sq. Ft.	FC *	W/Sq. Ft.
	5°	2471	0° - 20° 879 20%	8'	39 fc	12.9'	9 fc	18'	10'	64	0.62	53	0.62
	15°	2282	0° - 30° 1839 43%	10'	25 fc	16.2'	6 fc	22'	12'	32	0.31	26	0.31
	25°	2097	0° - 40° 2837 66%	12'	17 fc	19.4'	4 fc	Delivered Illuminance Rating: (DIR) 103 FC per W/Sq. Ft. 85 FC per W/Sq. Ft.					
	35°	1647	0° - 60° 3798 88%	14'	13 fc	22.6'	3 fc						
	45°	709	0° - 80° 4255 99%	16'	10 fc	25.9'	2 fc	2' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 4.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 4.5' x 2.50 * Average Footcandles at 2.5' Above Floor					
	55°	416	0° - 90° 4301 100%	20'	6 fc	32.3'	1 fc						
	90°	7	Total 4313 100%	24'	4 fc	38.8'	1 fc						

Delivered Lumens: 4313
Luminaire Watts: 39
LER: 110.59

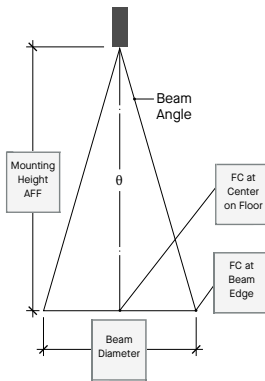
CP at 0° (Nadir): 2492
CRI: 80+

Beam Angle: 78°
Spacing Ratio: 1.17

Lumen Multiplier: 15L x 0.27, 27L x 0.46, 37L x 0.61
CCT Multiplier: 27K x 0.97, 30K x 0.99, 40K x 1.03

HOW TO USE PERFORMANCE DATA

SINGLE UNIT



Cone of Light of a single, symmetrical beam luminaire. Direct initial illumination (FC) and Beam Angle diameter directly beneath fixture; shown at different distances from aperture to horizontal plane. Calculated using Inverse Square Law.

$$FC_H = CP \times (\cos \theta) \div D^2$$

$$\text{Beam Diam.} = \frac{1}{2} \text{Beam Angle (Tan)} \times 2D$$

- CP Candela at 0° (Nadir)
- Cos θ Cosine of θ Angle
- D Distance (Mounting Height AFF)
- FC_H Footcandles, Horizontal
- Beam Angle Cone of light to 50% max. CP
- Beam Diam. Pattern of light at Beam Angle

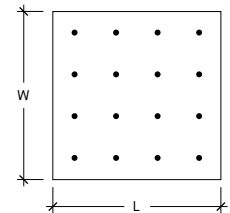
MULTIPLE UNITS

Square grid layout of multiple luminaires in unfurnished, square rooms of different proportions (Room Cavity Ratios) with 80/50/20% room surface reflectances. 2' Suspension Length to aperture. Initial average illumination (FC) calculated at 2.5' above floor, using Zonal Cavity Method. W/Sq. Ft. of layout shown for each ceiling height and RCR.

Delivered Illuminance Rating (DIR®):
System performance indicator expressed as ratio of approximate initial FC per W/Sq. Ft. delivered to horizontal plane below, for the range of ceiling heights indicated.

- To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio):
 $FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}$

- To estimate Sq. Ft. per fixture for a specific target FC:
 $\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}$



- To estimate Fixture Quantity in a room:
 $\text{Fixture Qty.} = \text{Sq. Ft. of Rm.} \div \text{Sq. Ft. per fixture}$

- To estimate Watts/Sq. Ft.:
 $W / \text{Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}$

