

18-29W LED



DENALI SERIES™ FLOODLIGHT

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

GET A QUOTE >

DE - LED - x31 - FL - SAP - 12 - 11 - C

Example:

Series **DE** - Denali Series™ Floodlight

Source **LED** - 'X' Module with Cold Phosphor Technology

LED Type
x30 - 18WLED/2.7K
x31 - 18WLED/3K
x32 - 18WLED/4K
x33 - 29WLED/2.7K
x34 - 29WLED/3K
x35 - 29WLED/4K

Optics
SP - Spot (20°)
FL - Flood (40°)
WFL - Wide Flood (60°)

Finish

Configure Driver Housing Separately Driver Housing Required

INTEGRAL DRIVER HOUSINGS:
HP2 - HP2 Housing
PM2 - Universal Power Module 2
PM2D - Universal Power Module 2 Dual
PC - Power Canopy
PPII - Power Pipe II
TMB - Pole Mount or Tenon Mount
REMOTE DRIVER HOUSINGS:
HP2RM - HP2 Remote Housing
PM2RM - Universal Power Module 2 Remote
PM2DRM - Universal Power Module 2 Dual Remote
RM - Remote Wall Mount
DRM - Dual Remote Wall Mount

Aluminum Finish

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

Premium Finish

ABP Antique Brass Powder	CMG Cascade Mountain Granite	RMG Rocky Mountain Granite
AMG Aleutian Mountain Granite	CRI Cracked Ice	SDS Sonoran Desert Sandstone
AQW Antique White	CRM Cream	SMG Sierra Mountain Granite
BCM Black Chrome	HUG Hunter Green	TXF Textured Forest
BGE Beige	MDS Mojave Desert Sandstone	WCP Weathered Copper
BPP Brown Patina Powder	NBP Natural Brass Powder	WIR Weathered Iron
CAP Clear Anodized Powder	OCP Old Copper	<i>Also available in RAL Finishes See submittal SUB-1439-00</i>

Lens Type
9 - Clear (Standard) **10** - Spread Lens* **12** - Soft Focus Lens* **13** - Rectilinear Lens*

Shielding
11 - Honeycomb Baffle*
**Accommodates up to 2 Lens/Shielding media*

Cap Style
A - 45° **B** - 90° **C** - Flush **D** - 45° less Weep Hole (Interior Use Only) **E** - 90° less Weep Hole (Interior Use Only)

LM79 DATA

BK No.	Lumens (Source)	CCT (Typ.)	CRI (Ra. Typ.)	Color Consistency	Input Watts (Typ.)
x30	1300	2700K	>80	±40K	18
x31	1300	3000K	>80	±50K	18
x32	1300	4000K	>80	±70K	18
x33	2000	2700K	>80	±40K	29
x34	2000	3000K	>80	±50K	29
x35	2000	4000K	>80	±70K	29

L70 DATA

Minimum Rated Life (hrs.) 70% of initial lumens (L70)
50,000
50,000
50,000
50,000
50,000
50,000

OPTICAL DATA

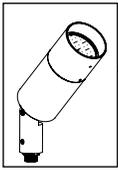
Beam Type	Angle
Spot	20°
Flood	40°
Wide Flood	60°

B-K LIGHTING

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 www.bklighting.com • info@bklighting.com

SUBMITTAL DATE
12-16-14

DRAWING NUMBER
SUB001113

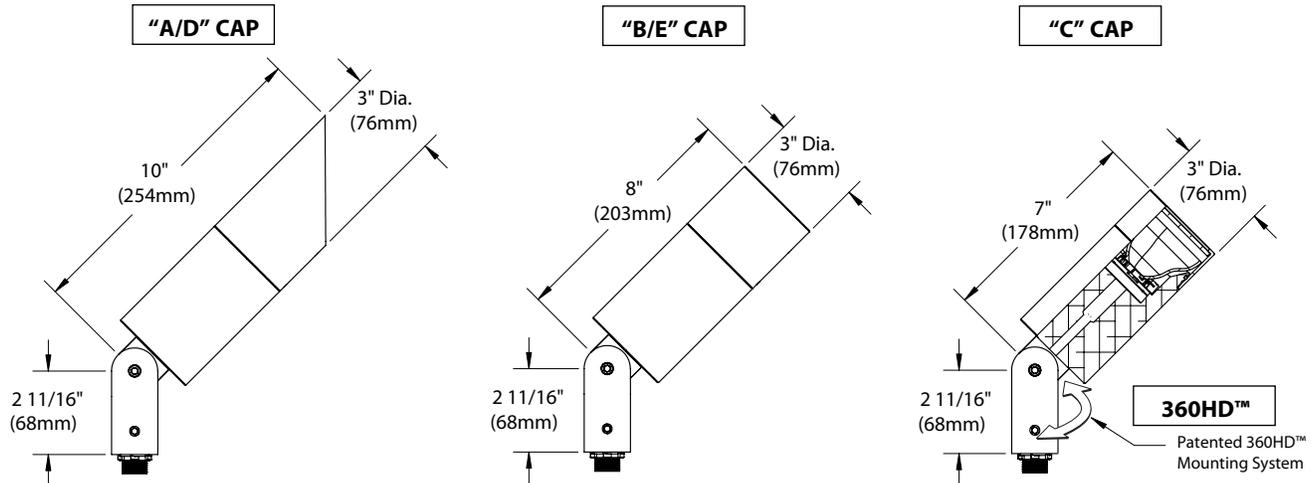


18-29W LED



DENALI SERIES™ FLOODLIGHT

PROJECT:	
TYPE:	

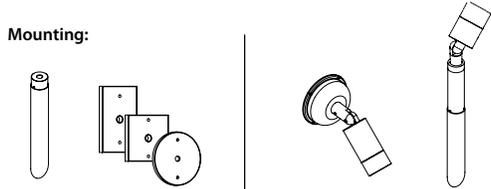


All dimensions indicated on this submittal are nominal. Contact Technical Sales if you require more stringent specifications.

Accessories (Configure separately)

Drivers (Configure separately)

Mounting:

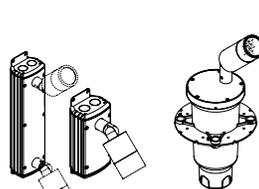


Power Pipe™

Canopies

Power Canopy™

Power Pipe™



PM2D & PM2

HP2

TMB

HP2RM

PM2DRM & PM2RM

RM & DRM

Drivers:

SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials

Furnished in Copper-Free Aluminum (Type 6061-T6).

Body

Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. Integral knuckle for maximum mechanical strength. High temperature, silicone 'O' Ring provides water-tight seal.

Knuckle

Patented 360HD™ Mounting System features a mechanical taper-lock, which allows a full 180° vertical adjustment without the use of serrated teeth, which inherently limit aiming. High temperature, silicone 'O' Ring provides water-tight seal and compressive resistance to maintain fixture position. Design withstands 73 lb. static load prior to movement to ensure decades of optical alignment. 1/2" pipe thread for mounting. Biaxial source control additionally provides 360° horizontal rotation in addition to vertical adjustment. 'Aim-And-Lock' Technology allows precision adjustment without the redundant tightening and loosening of knuckle screw.

Cap

Fully machined. Accommodates [2] lens or louver media. Choose from 45° cutoff ('A' or 'D'), 1" deep bezel with 90° cutoff ('B' or 'E') or flush lens ('C') cap styles. 'A' and 'B' caps include weep-hole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

Lens

Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment.

BKSSL®

Integrated solid state system with 'x' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance.

LM-80 certified. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

Color Management

Corrected cold phosphor technology delivers near-perfect natural white light. Long term phosphor maintenance over product life. Exact color point conformity exceeds ANSI C78.377 standard. Provides uniform beam with no color variation over angle. Module exceeds 80 CRI (RA>80, R9>16).

Remote Driver

For use with remote LED driver. See remote driver submittal to determine remote distance and wiring requirements prior to detailing field installation of any remote wiring.

Optics

Interchangeable OPTIKIT™ modules permit field changes to optical distribution.

Wiring

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware

Tamper-resistant, stainless steel hardware. 360HD™ hardware is additionally black oxide treated for additional corrosion resistance.

Finish

StarGuard®, our exclusive RoHS compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

Warranty

5 year limited warranty.

Certification and Listing

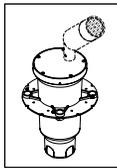
ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE (www.lightingfacts.com). ETL Listed to ANSI/UL Standards 1598, 8750 and Certified to CAN/CSA Standard C22.2 No. 250. RoHS compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Additionally suitable for installation within 4' of the ground. IP66 Rated. Made in USA.



*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

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		12-16-14	SUB001113

360HD Patent is covered in whole or in part by U.S. Patent No. 6,161,948



Precision²
HP2 In-Grade Lighting

BKSSL
SOLID STATE LIGHTING

THE POWER OF



HP² DRIVER HOUSING

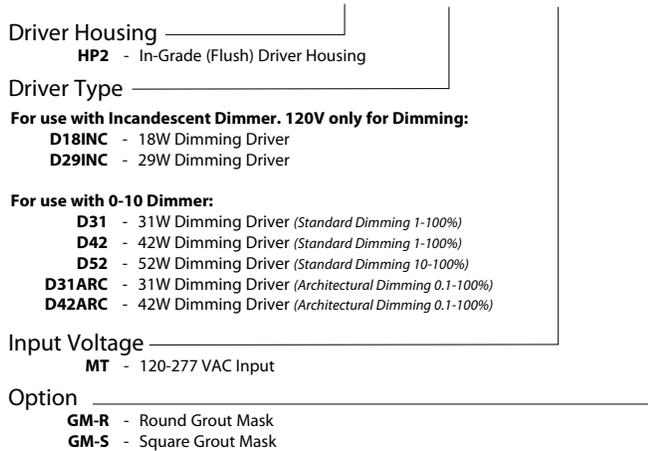
PROJECT:	
TYPE:	
CATALOG NUMBER:	
LAMP(S):	
NOTES:	

CATALOG NUMBER LOGIC



Example

HP2 - D31ARC - MT - GM-R



DRIVER ELECTRICAL DATA

TYPE	AC INPUT RANGE	Frequency Hz	DIMMING	POWER FACTOR AT FULL LOAD	THD	OPER. AMBIENT TEMPERATURE	DIMMER TYPE	DIMMER RANGE
D18INC	120-277	50/60	YES	>0.94	≤5%	-30° C ~ 50° C	Incandescent	10-100%
D29INC	120-277	50/60	YES	>0.94	≤5%	-30° C ~ 50° C	Incandescent	10-100%
D31	120/208/240/277	50/60	YES	>0.9	≤20%	-20° C ~ 50° C	0-10V	1-100%
D42	120/208/240/277	50/60	YES	>0.9	≤20%	-20° C ~ 50° C	0-10V	1-100%
D52	120/208/240/277	50/60	YES	>0.9	≤20%	-30° C ~ 60° C	0-10V	10-100%
D31ARC	120/208/240/277	50/60	YES	>0.9	≤20%	-20° C ~ 50° C	0-10V	0.1-100%
D42ARC	120/208/240/277	50/60	YES	>0.9	≤20%	-20° C ~ 50° C	0-10V	0.1-100%

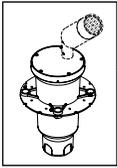
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SUBMITTAL DATE
12-16-14

DRAWING NUMBER
SUB-2184-00

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Precision²
IP-68 Rated In-Grade Lighting

BKSSL
SOLID STATE LIGHTING

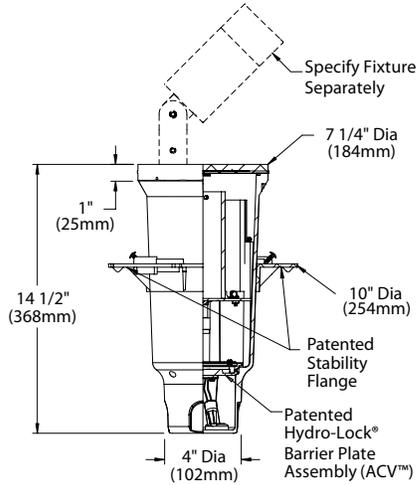
Constant Current Driver



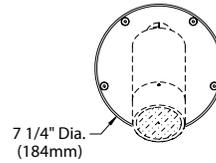
HP² DRIVER HOUSING

PROJECT:	
TYPE:	

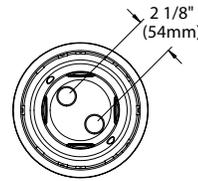
SIDE VIEW



TOP VIEW



BOTTOM VIEW



All dimensions indicated on this submittal are nominal. Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Faceplate

Solid, 1/2" machined 6061T6 copper-free aluminum with (5) black oxide, captive, stainless steel mounting screws.

Housing

Corrosion-free composite, made from high strength, thermoformed, sheet molded polyester compound. Glass reinforced, flame retardant and UV stabilized. (2) Bottom-Entry, 3/4" NPT female conduit entries with knockout plugs and (4) side flats for 1/2" or 3/4" conduit adapters.

Patented Stability Flange

Corrosion-free composite flange projects into installation substrate to reinforce housing stability. Integral REBAR saddles simplify installation onto concrete form. (4) Orthogonal bosses permit use of 1/2" PCV conduit or EMT to simplify vertical position and leveling of housing. Pre-set self-tapping screws anchor housing at proper elevation.

Installation

Integral, copper-free aluminum concrete pour collar (CPC), furnished in Black finish, permits for direct burial installation in soil or concrete. Consult Drainage Installation Guide for In-Grade Fixtures (DIG-IT) for compliance with proper soil preparation and drainage requirements prior to installation.

Driver (18-29W)

For use with [1] 1.05A, Class A, constant current driver. 120-277VAC (nominal) primary input voltage. 50/60Hz. >0.94 Power Factor. <15.0A in-rush current, 0.25A input current, ≤20%THD (nominal at 120VAC full load). Output over-voltage, over-current, and short circuit protection with auto recovery. EMC: FCC47CFR Part 15 Class B compliant. Dimming driver for use with standard incandescent dimmers. 10-100% range.

Driver (31-52W)

[1] 1.05A (D31, D42) or 1.4A (D52), Class A, constant current driver. 120-277VAC (nominal) primary input voltage. 50/60Hz. >0.90 Power Factor, <15.0A in-rush current, ≤20%THD (nominal at 120VAC full load). Output over-voltage, over-current, and short circuit protection with auto recovery. EMC: FCC47CFR Part 15 Class B compliant. Dimming driver for use with standard 0-10V dimmers and switch controls. 0.1-100% range (Refer to driver electrical data).

Water Management

Self Evacuating Airtight Lamp Module (S.E.A.L.™). IP-68 rated, vacuum sealed enclosure. Patented Anti-Condensation Valve (ACV™) eliminates condensation on interior components. Hightemperature silicone 'O' Ring at faceplate. Patented HydroLock® technology provides fail safe water barrier between junction box and interior components. Anti-siphon valve (ASV™) prevents "wicking" through conductor insulation.

Wiring / Connectors

Teflon® coated wire, 18 gauge, 600V, 250°C rated and certified to UL1659 standard. OptiLock® and gear tray quick disconnects. [3] Water-Tight connectors supplied for line connection. Maximum [2] #10 & [1] #18. Minimum [1] #12 & [1] #18.

Finish

StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Finish to match fixture (specified separately.)

Warranty

5 year limited warranty.

Listings

IP-68 Rated Enclosure. ETL Listed to ANSI/UL Standard 1598 and Certified to CAN/CSA Standard C22.2 No. 250. RoHs compliant. Made in the USA.



*Teflon is a registered trademark of DuPont Corporation.

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SUBMITTAL DATE
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DRAWING NUMBER
SUB-2184-00

Precision2® and its features are covered in whole or in part by U.S. Patent Nos. 7,033,038; 6,254,258 B1; 7,249,867 B2; 7,370,988 B2; 7,553,042; 7,560,148; and 7,699,489

Denali Series™ - Flood

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	616
Watts	17.7
Lumens per Watt (Efficacy)	34

Color Accuracy Color Rendering Index (CRI)	79
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Light Color
Correlated Color Temperature (CCT) **2556 (Warm White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-D8PLTG (10/24/2011)
Model Number: DE-LED-X21-FL-9-C
Type: Other

Denali Series™

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	603
Watts	17.5
Lumens per Watt (Efficacy)	34

Color Accuracy Color Rendering Index (CRI)	81
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Light Color
Correlated Color Temperature (CCT) **2918 (Warm White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-GCEYF3 (10/24/2011)
Model Number: DE-LED-X22-FL-9-C
Type: Other

Denali Series™ - Flood

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	642
Watts	17.9
Lumens per Watt (Efficacy)	35

Color Accuracy Color Rendering Index (CRI)	81
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Light Color
Correlated Color Temperature (CCT) **3919 (Bright White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-H2G16L (10/24/2011)
Model Number: DE-LED-X23-FL-9-C
Type: Other

Denali Series™ - Spot

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	649
Watts	17.9
Lumens per Watt (Efficacy)	36

Color Accuracy Color Rendering Index (CRI)	81
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Light Color
Correlated Color Temperature (CCT) **3999 (Bright White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-BM6YSA (10/24/2011)
Model Number: DE-LED-X23-SP-9-C
Type: Other

Denali Series™ - Wide Flood

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	672
Watts	17.9
Lumens per Watt (Efficacy)	37

Color Accuracy Color Rendering Index (CRI)	81
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Light Color
Correlated Color Temperature (CCT) **3951 (Bright White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-DNDGMK (10/24/2011)
Model Number: DE-LED-X23-WFL-9-C
Type: Other

Denali Series™ - Flood

LED lighting facts®
A Program of the U.S. DOE

Light Output (Lumens)	927
Watts	28.2
Lumens per Watt (Efficacy)	32

Color Accuracy Color Rendering Index (CRI)	79
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Light Color
Correlated Color Temperature (CCT) **2677 (Warm White)**

Warm White	Bright White	Daylight
2700K	3000K	4500K
		6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the **Label Reference Guide**.

Registration Number: GCXY-548M1Y (10/24/2011)
Model Number: DE-LED-X24-FL-9-C
Type: Other

Denali Series™ - Flood

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	918
Watts	28.7
Lumens per Watt (Efficacy)	32

Color Accuracy Color Rendering Index (CRI)	82
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Light Color Correlated Color Temperature (CCT)	2899 (Warm White)
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Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

Warranty** Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: GCXV-XFL72D (Revised 10/25/2011)
Model Number: DE-LED-X25-FL-9-C
Type: Other

Denali Series™ - Flood

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	954
Watts	28.5
Lumens per Watt (Efficacy)	33

Color Accuracy Color Rendering Index (CRI)	82
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Light Color Correlated Color Temperature (CCT)	3972 (Bright White)
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Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

Warranty** Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: GCXV-PMJYG7 (5/30/2012)
Model Number: DE-LED-X26-FL-9-C
Type: Other

Denali Series™ - Spot

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	971
Watts	28.5
Lumens per Watt (Efficacy)	34

Color Accuracy Color Rendering Index (CRI)	82
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Light Color Correlated Color Temperature (CCT)	4043 (Bright White)
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Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

Warranty** Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: GCXV-VLXJVG (5/30/2012)
Model Number: DE-LED-X26-SP-9-C
Type: Other

Denali Series™ - Spot Rectilinear

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	1027
Watts	28.5
Lumens per Watt (Efficacy)	36

Color Accuracy Color Rendering Index (CRI)	82
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Light Color Correlated Color Temperature (CCT)	4014 (Bright White)
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Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

Warranty** Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: GCXV-4H11T8 (5/30/2012)
Model Number: DE-LED-X26-SP-13-C
Type: Other

Denali Series™ - Wide Flood

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	1005
Watts	28.5
Lumens per Watt (Efficacy)	35

Color Accuracy Color Rendering Index (CRI)	83
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Light Color Correlated Color Temperature (CCT)	4005 (Bright White)
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Warm White | Bright White | Daylight
2700K | 3000K | 4500K | 6500K

Warranty** Yes

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: GCXV-XKPAH1 (5/30/2012)
Model Number: DE-LED-X26-WLF-9-C
Type: Other