

DSE

Edge Lit Surface Mount LED Downlight

Product Description

The DSE Edge Lit LED Surface Mount Series offers a slimline profile downlight in both round and square apertures. The edge-lit technology uses a reflective light guide panel that disperses light through a diffused lens, making it a practical and economical solution with high performance. The driverless design allows the DSE to snap mount into most 4" junction boxes with no concern for plenum depth. Available in a variety of diameters, the DSE brings a clean aesthetic and excellent performance to any area of the home.

Construction

- Aluminum backplate with integral snap tabs
- Injection molded polymer trim
- Available in round or square configurations

Optical System

- Precision engineered optical stack creates uniform light distribution that maximizes lumen output
- CCT offered at 2700K, 3000K, 4000K, 5000K
- Utilizes high performing LEDs with a greater than 90 CRI and an R9 greater than 50

Electrical

- Driverless design minimizes installation height
- Input voltage of 120VAC, 50/60Hz
- Dimmable to less than 5% with compatible TRIAC dimmers
- Operating temperature of 0° to 120°F (-18°C to 49°C)
- TM-21 Reported L70(9K) hours >54,000
- Meets FCC Part 15B Class B requirements
- Emergency option available on DSE8 models only

Finish

- Matte White

Mounting and Installation

- Surface mounts with integral snap tabs to most 4" junction boxes
- Mounting plate included
- Mount plate includes features to keep fixtures aligned in an installation
- Suitable for wet locations

Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the electrical distribution panel

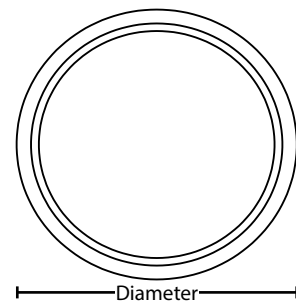
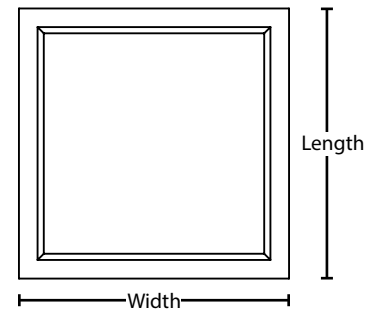
Dimensions			
Square	Diameter	Width/Length	Height
DSE4-SQ	-	4.35in (110mm)	0.67in (17mm)
DSE6-SQ	-	6.25in (159mm)	0.67in (17mm)
DSE9-SQ	-	9.00in (229mm)	0.67in (17mm)
Round			
DSE5-RD	5.35in (136mm)	-	0.67in (17mm)
DSE8-RD	7.94in (202mm)	-	0.67in (17mm)
DSE9-RD	9.0in (229mm)	-	0.67in (17mm)

Project

Catalog

Type

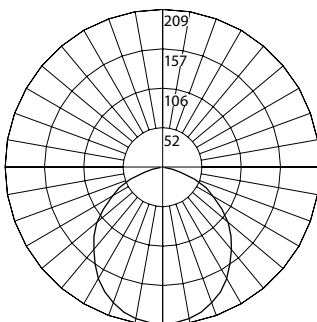
Date



Photometric Data

DSE4-SQ 2700K

Input Voltage (VAC)	120V
System Level Power (W)	10.0
Delivered Lumens (Lm)	613
System Efficacy (Lm/W)	61.3
Correlated Color Temp (K)	2733
Color Rendering Index (CRI)	92
Beam Angle	114°
Spacing Criteria	1.29



Intensity Summary (Candle Power)

Angle	Mean CP
0	209
5	209
15	202
25	189
35	170
45	144
55	113
65	77
75	41
85	9
90	0

CCT Data Multiplier

DLE621203KRD	1.029
DLE621204KRD	1.056
DLE621205KRD	1.078

Cone of Light Tabulation

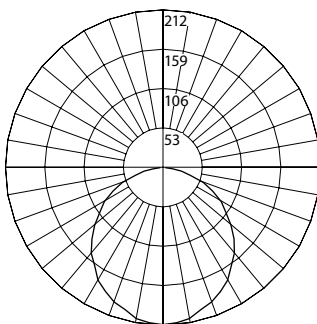
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	13.1	12.4
6	5.8	18.6
8	3.3	24.8
10	2.1	31.0
12	1.5	37.2
14	1.1	43.4
16	0.8	49.7

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	164	26.8%
0-40	270	44.1%
0-60	483	78.7%
0-90	613	100.0%
90-180	0	0.0%
0-180	613	100.0%

DSE5-RD 2700K

Input Voltage (VAC)	120V
System Level Power (W)	10.0
Delivered Lumens (Lm)	614
System Efficacy (Lm/W)	61.4
Correlated Color Temp (K)	2742
Color Rendering Index (CRI)	93
Beam Angle	114°
Spacing Criteria	1.25



Intensity Summary (Candle Power)

Angle	Mean CP
0	212
5	211
15	204
25	191
35	170
45	144
55	112
65	77
75	41
85	9
90	1

CCT Data Multiplier

DLE621203KSQ	1.029
DLE621204KSQ	1.056
DLE621205KSQ	1.078

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	13.3	12.3
6	5.9	18.4
8	3.3	24.5
10	2.1	30.7
12	1.5	36.8
14	1.1	43.0
16	0.8	49.1

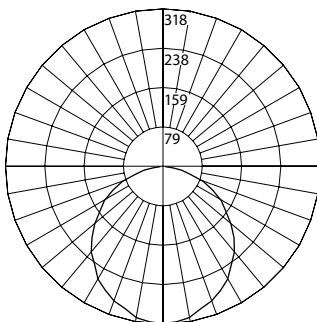
Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	166	27.0%
0-40	272	44.3%
0-60	484	78.7%
0-90	614	100.0%
90-180	0	0.0%
0-180	614	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

DSE6-SQ 2700K

Input Voltage (VAC)	120V
System Level Power (W)	13.4
Delivered Lumens (Lm)	922
System Efficacy (Lm/W)	68.8
Correlated Color Temp (K)	2694
Color Rendering Index (CRI)	93
Beam Angle	114°
Spacing Criteria	1.04



Intensity Summary (Candle Power)

Angle	Mean CP
0	318
5	315
15	305
25	284
35	254
45	215
55	169
65	116
75	62
85	15
90	0

CCT Data Multiplier

DLE621203KSQ	1.029
DLE621204KSQ	1.056
DLE621205KSQ	1.078

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	19.8	12.3
6	8.8	18.5
8	5.0	24.6
10	3.1	30.8
12	2.2	36.9
14	1.6	43.1
16	1.2	49.2

Zonal Lumen Summary

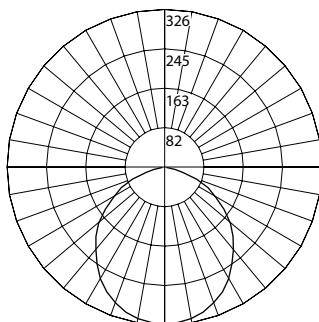
Zone	Lumens	% of Luminaire
0-30	248	26.9%
0-40	407	44.2%
0-60	725	78.6%
0-90	922	100.0%
90-180	0	0.0%
0-180	922	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Photometric Data

DSE8-RD 2700K

Input Voltage (VAC)	120V
System Level Power (W)	13.4
Delivered Lumens (Lm)	950
System Efficacy (Lm/W)	70.9
Correlated Color Temp (K)	2731
Color Rendering Index (CRI)	93
Beam Angle	114°
Spacing Criteria	1.25



Intensity Summary (Candle Power)

Angle	Mean CP
0	326
5	325
15	314
25	294
35	263
45	222
55	174
65	119
75	64
85	15
90	1

CCT Data Multiplier

DLE621203KRD	1.029
DLE621204KRD	1.056
DLE621205KRD	1.078

Cone of Light Tabulation

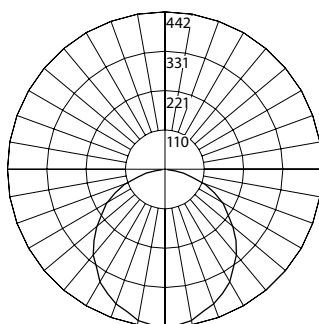
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	20.4	12.4
6	9.1	18.5
8	5.1	24.7
10	3.3	30.9
12	2.3	37.1
14	1.7	43.3
16	1.3	49.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	255	26.8%
0-40	419	44.1%
0-60	746	78.5%
0-90	950	100.0%
90-180	0	0.0%
0-180	950	100.0%

DSE9-RD 2700K

Input Voltage (VAC)	120V
System Level Power (W)	19.0
Delivered Lumens (Lm)	1278
System Efficacy (Lm/W)	67.3
Correlated Color Temp (K)	2783
Color Rendering Index (CRI)	93
Beam Angle	113°
Spacing Criteria	1.29



Intensity Summary (Candle Power)

Angle	Mean CP
0	442
5	440
15	425
25	396
35	353
45	298
55	233
65	160
75	86
85	22
90	0

CCT Data Multiplier

DLE621203KSQ	1.029
DLE621204KSQ	1.056
DLE621205KSQ	1.078

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	27.6	12.2
6	12.3	18.3
8	6.9	24.4
10	4.4	30.4
12	3.1	36.5
14	2.3	42.5
16	1.7	48.6

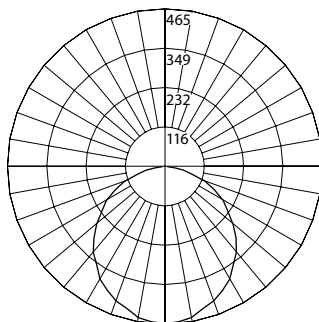
Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	344	27.0%
0-40	565	44.3%
0-60	1004	78.6%
0-90	1278	100.0%
90-180	0	0.0%
0-180	1278	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

DSE9-SQ 2700K

Input Voltage (VAC)	120V
System Level Power (W)	18.9
Delivered Lumens (Lm)	1340
System Efficacy (Lm/W)	70.9
Correlated Color Temp (K)	2746
Color Rendering Index (CRI)	94
Beam Angle	113°
Spacing Criteria	1.25



Intensity Summary (Candle Power)

Angle	Mean CP
0	465
5	463
15	447
25	416
35	370
45	311
55	242
65	167
75	91
85	24
90	1

CCT Data Multiplier

DLE621203KSQ	1.029
DLE621204KSQ	1.056
DLE621205KSQ	1.078

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	29.0	12.0
6	12.9	18.1
8	7.3	24.1
10	4.7	30.1
12	3.2	36.1
14	2.4	42.1
16	1.8	48.2

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	362	27.0%
0-40	594	44.3%
0-60	1050	78.4%
0-90	1340	100.0%
90-180	0	0.0%
0-180	1340	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Performance Data - Round			
Model Number	Lumens	Watts	Lumens/Watt
DSE521202KRD	614	10.0	61.4
DSE521203KRD	632	10.0	63.2
DSE521204KRD	648	10.0	64.8
DSE521205KRD	662	10.0	66.2
DSE821202KRD	950	13.4	70.9
DSE821203KRD	978	13.4	73.0
DSE821204KRD	1003	13.4	74.9
DSE821205KRD	1024	13.4	76.4
DSE921202KRD	1278	19.0	67.3
DSE921203KRD	1315	19.0	69.2
DSE921204KRD	1350	19.0	71.1
DSE921205KRD	1378	19.0	72.5

Performance Data - Square			
Model Number	Lumens	Watts	Lumens/Watt
DSE421202KSQ	613	10.0	61.3
DSE421203KSQ	631	10.0	63.1
DSE421204KSQ	647	10.0	64.7
DSE421205KSQ	661	10.0	66.1
DSE621202KSQ	922	13.4	68.8
DSE621203KSQ	951	13.4	71.0
DSE621204KSQ	974	13.4	72.7
DSE621205KSQ	994	13.4	74.2
DSE921202KSQ	1340	18.9	70.7
DSE921203KSQ	1379	18.9	73.0
DSE921204KSQ	1415	18.9	74.9
DSE921205KSQ	1445	18.9	76.5

Recommended Dimmers*

Lutron DIVA DVELV-303P

Lutron Skylar SELV-300P

Leviton C22-06672-1LW

**Not a complete list.
Check compatibility before installation.*

Ordering Information - Round Trim

Example: DSE821203KRDWH

Series	Size	Version	Voltage	CCT's	Trim Shape	Trim Color	Emergency ¹
DSE	5 (5 inch)	2 (Version 2)	120	2K (2700 K)	RD (Round)	WH (White)	_____ (none)
	8 (8 inch)			3K (3000 K)			EM (EMID1010WH)
	9 (9 inch)			4K (4000 K)			
				5K (5000 K)			

1) EM only available for DSE8 models

Ordering Information - Square Trim

Example: DSE621203KSQWH

Series	Size	Version	Voltage	CCT's	Trim Shape	Trim Color
DSE	4 (4 inch)	2 (Version 2)	120	2K (2700 K)	SQ (Square)	WH (White)
	6 (6 inch)			3K (3000 K)		
	9 (9 inch)			4K (4000 K)		
				5K (5000 K)		

Specifications and dimensions subject to change without notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.