

# DSE

## Edge Lit Surface Mount LED Downlight

### Product Description

The DSEv3 Selectable Surface Mount Downlight offers a slim profile in both round and square apertures with CCT selectability. 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. Available in a variety of diameters, the DSEv3 brings flexible option with a clean aesthetic and excellent performance to any area of the home.

#### Construction

- Aluminum backplate with integral mounting tabs
- Injection molded polymer trim
- CCT Selection switch on back of fixture
- Available in round or square configurations

#### Optical System

- Precision engineered optical stack creates uniform light distribution that maximizes lumen output
- Dual emitter array enables CCT selection of 2700, 3000, 3500, 4000, or 5000K
- Utilizes high performing LEDs with a greater than 90 CRI and an R9 greater than 50

#### Electrical

- Input voltage of 120VAC, 50/60Hz
- Dimmable to less than 5% with compatible TRIAC or ELV dimmers
- Operating temperature of -4°F to 104°F (-20°C to 40°C)

#### Finish

- Matte White
- Accessory color trims available in Black, Nickel and Oil-Rubbed Bronze

#### Mounting and Installation

- Driverless design minimizes installation height
- Surface mounts with to most 4" junction boxes using included mounting plate
- Mounting plate includes features to allow fixture alignment

#### Listings

- LM-79, LM-80 testing performed in accordance with IESNA standards
- cETLus 1598 Listed for wet locations
- ENERGYSTAR listed
- CA Title 24 (JA8) Compliant
- Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5) for closet use
- RoHS Compliant
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions per ANSI C63.4:2014
- LED lumen maintenance: L70(9k)>54,000 hrs

#### 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

Project

Catalog

Type

Date



## Ordering

### Round Trim

Example: DSE83120SRDWH

Series	Size	Version	Voltage	CCT's	Trim Shape	Trim Color
DSE	5 (5 inch)	3	120	S (2700/3000/3500/4000/5000K)	RD (Round)	WH (White)
	8 (8 inch)					
	9 (9 inch)					

### Square Trim

Example: DSE63120SSQWH

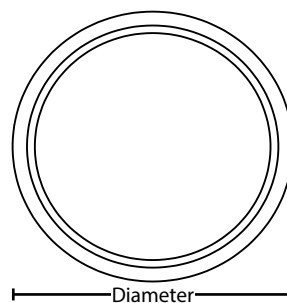
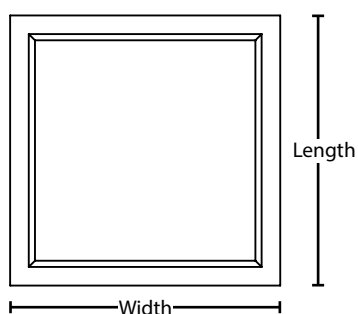
Series	Size	Version	Voltage	CCT's	Trim Shape	Trim Color
DSE	4 (4 inch)	3	120	S (2700/3000/3500/4000/5000K)	SQ (Square)	WH (White)
	6 (6 inch)					
	9 (9 inch)					

Specifications and dimensions subject to change without notice

## Accessories

Round Fixtures		Square Fixtures	
5" Round Black Trim	DSE5-1-TR-RD-BK	4" Square Black Trim	DSE4-1-TR-SQ-BK
5" Round Oil Rubbed Bronze Trim	DSE5-1-TR-RD-OB	4" Square Oil Rubbed Bronze Trim	DSE4-1-TR-SQ-OB
5" Round Nickel Trim	DSE5-1-TR-RD-NK	4" Square Nickel Trim	DSE4-1-TR-SQ-NK
8" Round Black Trim	DSE8-1-TR-RD-BK	6" Square Black Trim	DSE6-1-TR-SQ-BK
8" Round Oil Rubbed Bronze Trim	DSE8-1-TR-RD-OB	6" Square Oil Rubbed Bronze Trim	DSE6-1-TR-SQ-OB
8" Round Nickel Trim	DSE8-1-TR-RD-NK	6" Square Nickel Trim	DSE6-1-TR-SQ-NK
9" Round Black Trim	DSE9-1-TR-RD-BK	9" Square Black Trim	DSE9-1-TR-SQ-BK
9" Round Oil Rubbed Bronze Trim	DSE9-1-TR-RD-OB	9" Square Oil Rubbed Bronze Trim	DSE9-1-TR-SQ-OB
9" Round Nickel Trim	DSE9-1-TR-RD-NK	9" Square Nickel Trim	DSE9-1-TR-SQ-NK

## Dimensions

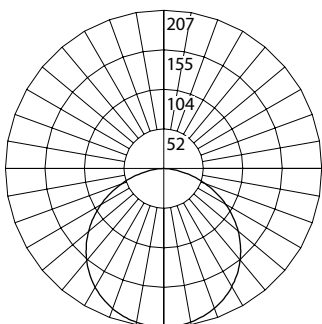


Dimensions				
Square	Diameter	Width/Length	Height	Height (w/ switch)
DSE4-SQ	-	4.35in (110mm)		
DSE6-SQ	-	6.25in (159mm)	0.67in (17mm)	1.00in (25mm)
DSE9-SQ	-	9.00in (229mm)		
Round				
DSE5-RD	5.35in (136mm)	-		
DSE8-RD	7.50in (191mm)	-	0.67in (17mm)	1.00in (25mm)
DSE9-RD	9.00in (229mm)	-		

## Photometric Data

### DSE5-RD (2700K Setting)

Input Voltage (VAC)	120V
System Level Power (W)	10.4
Delivered Lumens (Lm)	615
System Efficacy (Lm/W)	59.1
Correlated Color Temp (K)	2697
Color Rendering Index (CRI)	94 R9=63
Beam Angle	116
Spacing Criteria	1.30



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	207
5	206
15	201
25	189
35	170
45	145
55	113
65	78
75	41
85	9
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	12.9	12.7
6	5.8	19.0
8	3.2	25.4
10	2.1	31.7

#### Zonal Lumen Summary

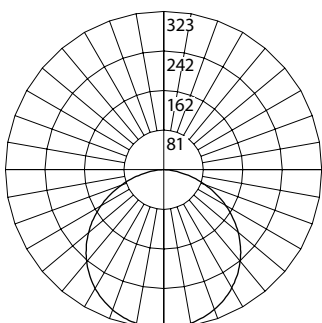
Zone	Lumens	% of Luminaire
0-30	163	26.5%
0-40	269	43.8%
0-60	481	78.3%
0-90	615	100%
90-180	0	0%
0-180	615	100%

#### CCT Data Multiplier

3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

### DSE8-RD (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	15.6
Delivered Lumens (Lm)	948
System Efficacy (Lm/W)	60.8
Correlated Color Temp (K)	2781
Color Rendering Index (CRI)	92 R9=53
Beam Angle	115
Spacing Criteria	1.29



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	323
5	322
15	312
25	292
35	261
45	221
55	173
65	118
75	62
85	14
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	20.2	12.4
6	9.0	18.7
8	5.0	24.9
10	3.2	31.1

#### Zonal Lumen Summary

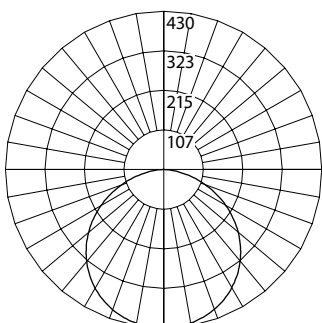
Zone	Lumens	% of Luminaire
0-30	254	26.7%
0-40	418	44.1%
0-60	744	78.5%
0-90	948	100%
90-180	0	0%
0-180	948	100%

#### CCT Data Multiplier

3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

### DSE9-RD (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	18.1
Delivered Lumens (Lm)	1261
System Efficacy (Lm/W)	69.7
Correlated Color Temp (K)	2784
Color Rendering Index (CRI)	92 R9=54
Beam Angle	114
Spacing Criteria	1.28



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	430
5	428
15	415
25	388
35	347
45	293
55	228
65	155
75	81
85	19
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	26.9	12.4
6	12.0	18.6
8	6.7	24.8
10	4.3	31.0

#### Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	338	26.8%
0-40	556	44.1%
0-60	990	78.5%
0-90	1261	100%
90-180	0	0%
0-180	1261	100%

#### CCT Data Multiplier

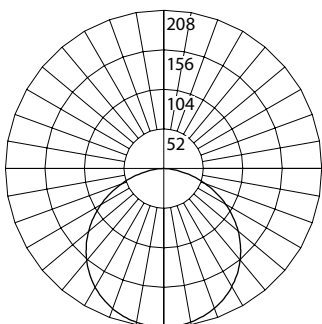
3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

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

## Photometric Data

### DSE4-SQ (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	10.7
Delivered Lumens (Lm)	617
System Efficacy (Lm/W)	57.7
Correlated Color Temp (K)	2787
Color Rendering Index (CRI)	92 R9=57
Beam Angle	116
Spacing Criteria	1.29



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	208
5	207
15	201
25	188
35	169
45	143
55	112
65	77
75	40
85	9
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	13.0	12.8
6	5.8	19.2
8	3.3	25.6
10	2.1	32.0

#### Zonal Lumen Summary

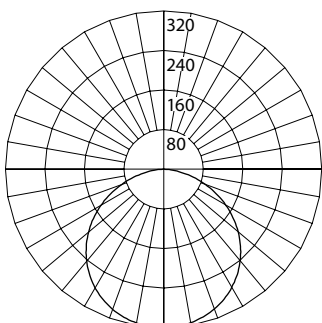
Zone	Lumens	% of Luminaire
0-30	164	26.6%
0-40	270	43.8%
0-60	483	78.4%
0-90	617	100%
90-180	0	0%
0-180	617	100%

#### CCT Data Multiplier

3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

### DSE6-SQ (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	15.6
Delivered Lumens (Lm)	944
System Efficacy (Lm/W)	60.5
Correlated Color Temp (K)	2784
Color Rendering Index (CRI)	90 R9=57
Beam Angle	115
Spacing Criteria	1.30



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	319
5	318
15	309
25	290
35	260
45	221
55	173
65	118
75	62
85	14
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	20.0	12.6
6	8.9	18.9
8	5.0	25.2
10	3.2	31.5

#### Zonal Lumen Summary

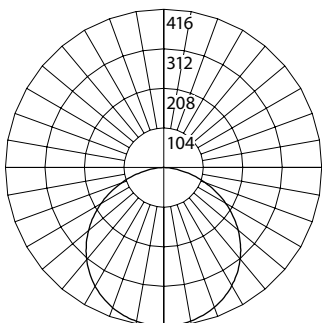
Zone	Lumens	% of Luminaire
0-30	251	26.6%
0-40	414	43.9%
0-60	741	78.4%
0-90	944	100%
90-180	0	0%
0-180	944	100%

#### CCT Data Multiplier

3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

### DSE9-SQ (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	18.6
Delivered Lumens (Lm)	1219
System Efficacy (Lm/W)	65.5
Correlated Color Temp (K)	2768
Color Rendering Index (CRI)	92 R9=56
Beam Angle	114
Spacing Criteria	1.28



#### Intensity Summary (Candle Power)

Angle	Mean CP
0	415
5	413
15	401
25	375
35	336
45	284
55	221
65	150
75	78
85	18
90	0

#### Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	26.0	12.4
6	11.5	18.7
8	6.5	24.9
10	4.1	31.1

#### Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	326	26.8%
0-40	537	44.1%
0-60	957	78.5%
0-90	1218	100%
90-180	0	0%
0-180	1219	100%

#### CCT Data Multiplier

3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

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
DSE53 (2700K)	615		59.1
DSE53 (3000K)	627		60.3
DSE53 (3500K)	633	10.4	60.9
DSE53 (4000K)	646		62.1
DSE53 (5000K)	641		61.6
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DSE83 (2700K)	948		60.8
DSE83 (3000K)	966		61.9
DSE83 (3500K)	976	15.6	62.6
DSE83 (4000K)	996		63.8
DSE83 (5000K)	989		63.4
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DSE93 (2700K)	1261		69.7
DSE93 (3000K)	1285		71.0
DSE93 (3500K)	1298	18.1	71.7
DSE93 (4000K)	1325		73.2
DSE93 (5000K)	1315		72.7

Performance Data - Square			
Model Number	Lumens	Watts	Lumens/Watt
DSE43 (2700K)	617		57.7
DSE43 (3000K)	629		58.8
DSE43 (3500K)	635	10.7	59.3
DSE43 (4000K)	648		60.6
DSE43 (5000K)	643		60.1
<hr/>			
DSE63 (2700K)	944		60.5
DSE63 (3000K)	962		61.7
DSE63 (3500K)	972	15.6	62.3
DSE63 (4000K)	992		63.6
DSE63 (5000K)	984		63.1
<hr/>			
DSE93 (2700K)	1219		65.5
DSE93 (3000K)	1243		66.8
DSE93 (3500K)	1255	18.6	67.5
DSE93 (4000K)	1281		68.9
DSE93 (5000K)	1271		68.3

**Recommended Dimmers\***

- Lutron Skylark SCL-153P
- Lutron Diva DVCL-153P
- Lutron DIVA DVELV-300P
- Lutron Skylark SELV-300P
- Lutron Maestro MAELV-600

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

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.

