

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 (on 4-9")
- Steel mounting frame (on 11 & 15")
- Injection molded polymer trim
- CCT Selection switch on back of fixture
- Available in round (5-15") or square (4-9") 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 (on 4-9")

Mounting and Installation

- Driverless design minimizes installation height
- All sizes surface mount to most 4" junction boxes using included mounting
- Pendant mount option available on 11" and 15" models
- Mounting plate includes features to allow fixture alignment for square fixtures

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)					
	11 (11 inch)					
	15 (15 inch)					

Square Trim

Example: DSE63120SSQWH

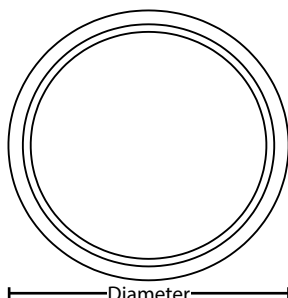
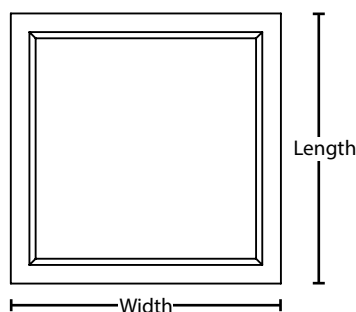
Series	Size	Version	Voltage	CCT's	Trim Shape	Trim Color
DSE	4 (4 inch)	3	120	S (2700/3000/3500/4000/5000K)	SQ (Square)	WH (White)
	6 (6 inch)					
	9 (9 inch)					

Specifications and dimensions subject to change without notice

Accessories

Round Fixtures		Square Fixtures		11" & 15" Accessories	
5" Round Black Trim	DSE5-1-TR-RD-BK	4" Square Black Trim	DSE4-1-TR-SQ-BK	Pendant Mount Kit	DSE1115-PEND-KIT
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

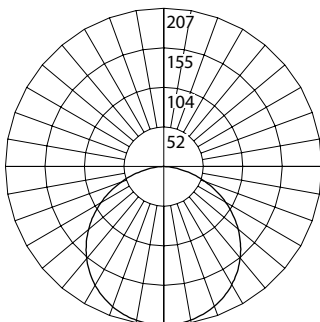


Dimensions				
Square	Diameter	Width/Length	Height	Height (w/ switch)
DSE4-SQ	-	4.35in (110mm)		
DSE6-SQ	-	6.25in (159mm)	0.67in (17mm)	1.00in (25mm)
DSE9-SQ	-	9.00in (229mm)		
Round				
DSE5-RD	5.35in (136mm)	-		
DSE8-RD	7.50in (191mm)	-		1.00in (25mm)
DSE9-RD	9.00in (229mm)	-	0.67in (17mm)	
DSE11-RD	11.00in (280mm)	-		
DSE15-RD	15.00in (380mm)	-		0.67in (17mm)

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

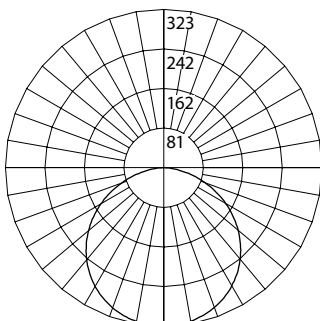
Zone	Lumens	% of Luminaire
0-30	163	26.5%
0-40	269	43.8%
0-60	481	78.3%
0-90	615	100%
90-180	0	0%
0-180	615	100%

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

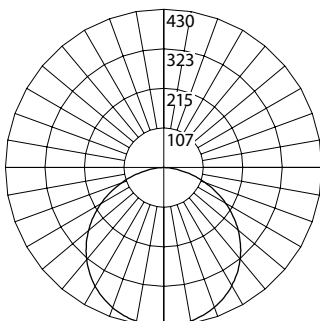
Zone	Lumens	% of Luminaire
0-30	254	26.7%
0-40	418	44.1%
0-60	744	78.5%
0-90	948	100%
90-180	0	0%
0-180	948	100%

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

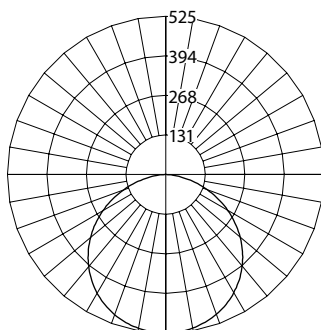
3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

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

Photometric Data

DSE11 (2700K Setting)

Input Voltage (VAC)	120V
System Level Power (W)	15.9
Delivered Lumens (Lm)	1523
System Efficacy (Lm/W)	95.8
Correlated Color Temp (K)	2700
Color Rendering Index (CRI)	90
Beam Angle	113.6
Spacing Criteria	1.28



Intensity Summary (Candle Power)

Angle	Mean CP
0	523
5	519
15	503
25	470
35	420
45	357
55	281
65	196
75	107
85	30
90	4

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	32.6	12.2
6	14.5	18.3
8	8.2	24.5
10	5.2	30.6

Zonal Lumen Summary

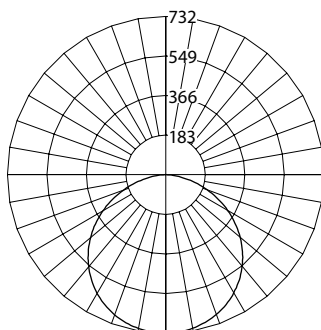
Zone	Lumens	% of Luminaire
0-30	407	26.7%
0-40	668	43.9%
0-60	1188	78%
0-90	1523	100%
90-180	0	0%
0-180	1523	100%

CCT Data Multiplier

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

DSE15 (2700K Setting)

Input Voltage (VAC)	120
System Level Power (W)	19.1
Delivered Lumens (Lm)	2020
System Efficacy (Lm/W)	105.8
Correlated Color Temp (K)	2700
Color Rendering Index (CRI)	90
Beam Angle	109.0
Spacing Criteria	1.25



Intensity Summary (Candle Power)

Angle	Mean CP
0	728
5	726
15	701
25	650
35	574
45	478
55	371
65	256
75	141
85	42
90	7

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	45.7	11.2
6	20.3	16.8
8	11.4	22.4
10	7.3	28.0

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	561	27.8%
0-40	914	45.3%
0-60	1596	79%
0-90	2020	100%
90-180	0	0%
0-180	2020	100%

CCT Data Multiplier

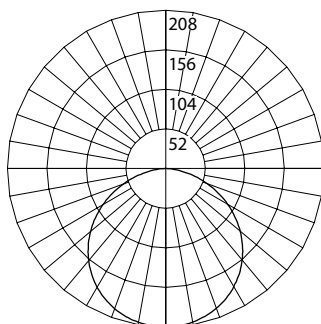
3000K	1.019
3500K	1.030
4000K	1.051
5000K	1.043

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

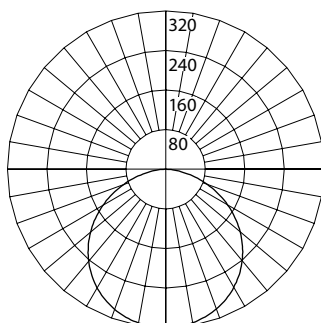
Zone	Lumens	% of Luminaire
0-30	164	26.6%
0-40	270	43.8%
0-60	483	78.4%
0-90	617	100%
90-180	0	0%
0-180	617	100%

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

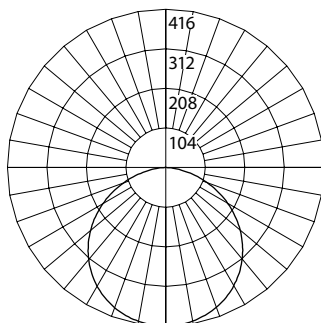
Zone	Lumens	% of Luminaire
0-30	251	26.6%
0-40	414	43.9%
0-60	741	78.4%
0-90	944	100%
90-180	0	0%
0-180	944	100%

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	10.4	59.1
DSE53 (3000K)	627		60.3
DSE53 (3500K)	633		60.9
DSE53 (4000K)	646		62.1
DSE53 (5000K)	641		61.6
DSE83 (2700K)	948	15.6	60.8
DSE83 (3000K)	966		61.9
DSE83 (3500K)	976		62.6
DSE83 (4000K)	996		63.8
DSE83 (5000K)	989		63.4
DSE93 (2700K)	1261	18.1	69.7
DSE93 (3000K)	1285		71.0
DSE93 (3500K)	1298		71.7
DSE93 (4000K)	1325		73.2
DSE93 (5000K)	1315		72.7
DSE113 (2700K)	1523	15.9	95.8
DSE113 (3000K)	1552		97.6
DSE113 (3500K)	1569		98.7
DSE113 (4000K)	1601		100.7
DSE113 (5000K)	1588		99.9
DSE153 (2700K)	2020	19.1	105.8
DSE153 (3000K)	2058		107.8
DSE153 (3500K)	2081		108.9
DSE153 (4000K)	2123		111.2
DSE153 (5000K)	2107		110.3

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