



LyteCaster LED Downlights are ideal general purpose downlighting solution, providing comfortable, quality light. Available in new construction and remodeler frame with interchangeable light engine that is offered in two lumen packages. The downlight is wet location listed and comes in 3 standard option.

Complete unit = Housing + Downlight or Adjustable Light Engine + Trim (order each separately)

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Qty: _____
 Notes: _____

Housing

example: L4R10AE1VB

Series	Lumens	Installation (all with AirSeal IC)	Dimming	Version
L4R				VB
L4R LyteCaster 4" downlight (for round and square configurations)	06 650lm 10 1000lm	A New Construction w/ Screws AN New Construction w/ Nails R Remodeler	E1 Phase Control (ELV/TRIAC 120V)	VB Version B
	06 650lm 10 1000lm	A New Construction w/ Screws AN New Construction w/ Nails R Remodeler	Z10U 0-10V (Universal 120-277V)	

Downlight Light Engine

example: L4R10927VB

Series	Lumens	CRI/CCT	Finishes	Version
L4R				VB
L4R LyteCaster 4" round downlight (compatible with square trims)	06 650lm 10 1000lm	927 90 CRI / 2700K 930 90 CRI / 3000K 935 90 CRI / 3500K 940 90 CRI / 4000K 950 90 CRI / 5000K	— Specified with Trim below (for downlight models only)	VB Version B

Adjustable Light Engine

example: L4RA10927WVB

Series	Lumens	CRI/CCT	Finishes	Version
L4RA			W	VB
L4RA LyteCaster 4" round adjustable (trim is integrated)	06 650lm 10 1000lm	927 90 CRI / 2700K 930 90 CRI / 3000K 935 90 CRI / 3500K 940 90 CRI / 4000K 950 90 CRI / 5000K	W White Reflector / White Flange (integral to light engine for adjustable, do not specify Trim separately)	VB Version B

Trim (for downlights only)

example: L4RDD

Series	Style/Finish/Flange
L4R LyteCaster 4" round downlight L4S LyteCaster 4" square downlight	DD Open Downlight / Clear Diffuse / White Flange DW Open Downlight / White Finish / White Flange BW Baffle Downlight / White Finish / White Flange

L4 LyteCaster LED 4"

Round & Square downlights and Round adjustables (650lm & 1000lm)

Features

- Housing:** UL listed for direct contact with thermal insulation. Airseal® housing minimizes air leakage to less than 2 CFM at 1.57PSF (or 75PA), which complies with the International Energy Conservation Code, and Washington State Energy Code (Section 502.4). This reduces heat loss and condensation in ceiling.
- Housing (new construction):** .026" galvanized steel. Access door for inspection of junction box.
- Housing (remodeler):** .032" aluminum. Integral retaining spring secures housing to ceilings up to 2" thick. Removable for access to junction box and ceiling plenum. 5½" maximum for use in 2"x6" joist construction and shallow plenum applications.
- Junction Box (new construction):** 2½"x5¾"x2" (27 cu. in.) .032" galvanized steel. UL listed 90°C supply conductors. Rated for branch circuit wiring supplying connected luminaires (daisy chaining).
- Junction Box (remodeler):** 2½"x2½"x4¾" (29 cu in.) .031" galvanized steel. UL listed for 90°C supply conductors. Rated for branch circuit wiring supplying connected luminaires.
- Retaining clips:** Permits fast and easy installation of light engine/trim.
- Lower frame and top cover:** .026" galvanized steel. Accommodates ceilings up to 1" (25mm) thick. Deep integral lip is ⅜" (9.5mm) with four notches at 90° apart to simplify alignment. Locks into position along length of mounting bars with locking screws.
- Driver – ELV /Triac:** 120V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class B) for EMI /RFI (conducted & radiated). Class A sound rating.
- Driver – 0-10V:** 120/277V, 50/60Hz. RoHS compliant, Class 2 power supply. Complies with FCC rules per Title 47 Part 15 (Class A) for EMI /RFI (conducted & radiated). Class A sound rating.
- Mounting bars:** .059" galvanized steel. Bars pivot for easy attachment and wire-in below ceiling line. Bars extend to accommodate 16" (406mm) to 24" (610mm) O.C. joist spacing. Bars can accommodate 12" (305mm) O.C. joist spacing after a slight field modification (see instruction sheet). Features integral self tapping phillips/square drive screws for secure attachment to wood or metal construction. Also available with integral nails. Attaches to T-bar ceilings without the need of accessories. Bars installed on shortest dimension of frame, but can be easily repositioned 90° from original position.
- Ceiling cutout:** 4⅞" (111mm).

Dimming Compatibility

SR1200ZTUNV	Philips Sunrise
IPE04, IP7	Leviton Illumatech
6615-P	Leviton Decora
DVLEV-303P	Lutron Diva
S-603P	Lutron Skylark

See LED-DIM Specification Sheet for more.

Electronic dimming driver

Class 2 electronic LED Driver with less than 1 second start up.

RoHS compliant, suitable for damp locations. 120v 50/06Hz
>.9 power factor. Sound rating Class "A" (<24dB). Complies with FCC CFR title 47 part 15 Class B for EMI/RFI
Dimmable with standard electronic low voltage (ELV) & Triac dimmers
Dims to less than or equal to 10% of relative high output.

ENERGY STAR®

0-10v (Z10) dimming is Energy Star qualified. Electronic low voltage (E) dimming is not Energy Star qualified.

Labels

cULus Listed Type I.C., frames are suitable for damp location and wet listed for use in covered ceilings. Trims are cULus suitable for damp location. Complies with Air Leakage. ENERGY STAR® certified.

Warranty



5 year limited warranty
Visit [Signify.com/warranties](https://www.signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

Electrical specifications

Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty. (see [Signify.com/warranties](https://www.signify.com/warranties) for details)

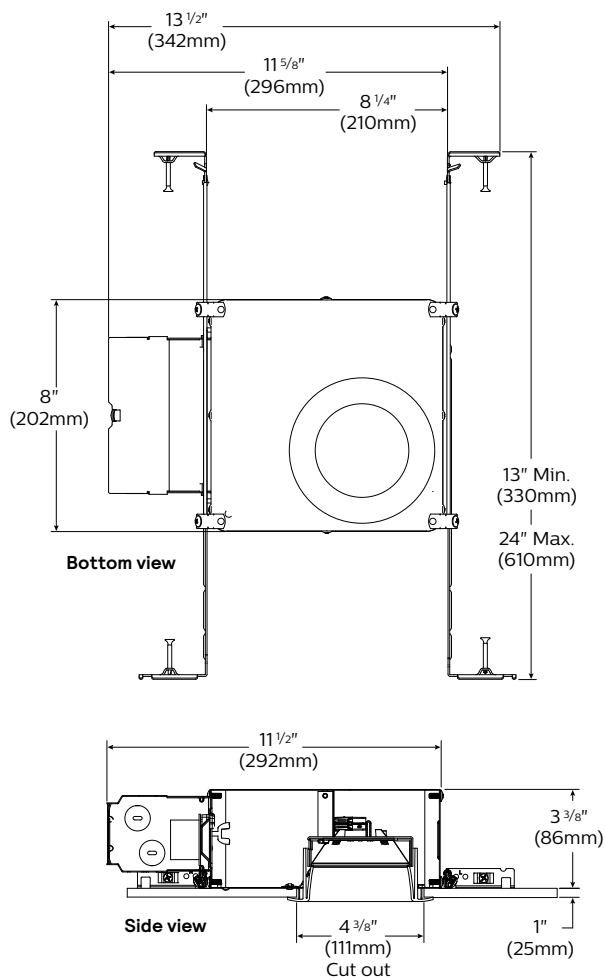
Frame-in kit	Lumens	Input volts	Input freq.	Input current	LED drive current	Input power	LED power	THD Factor @ Max Load	Power Factor @ Max Load
L4R06_E1VB	650	120V	50/60Hz	0.049A	0.15A	5.8W	4.9W	<15%	>0.9
L4R06_Z10UVB		120V	50/60Hz	0.050A	0.15A	6.0W	4.9W	<15%	>0.9
		277V	50/60Hz	0.022A	0.15A	6.1W	4.9W	<15%	>0.9
L4R10_E1VB	1000	120V	50/60Hz	0.075A	0.22A	9.0W	7.4W	<15%	>0.9
L4R10_Z10UVB	1000	120V	50/60Hz	0.073A	0.22A	8.8W	7.4W	<10%	>0.9
		277V	50/60Hz	0.032A	0.22A	9.0W	7.4W	<10%	>0.9



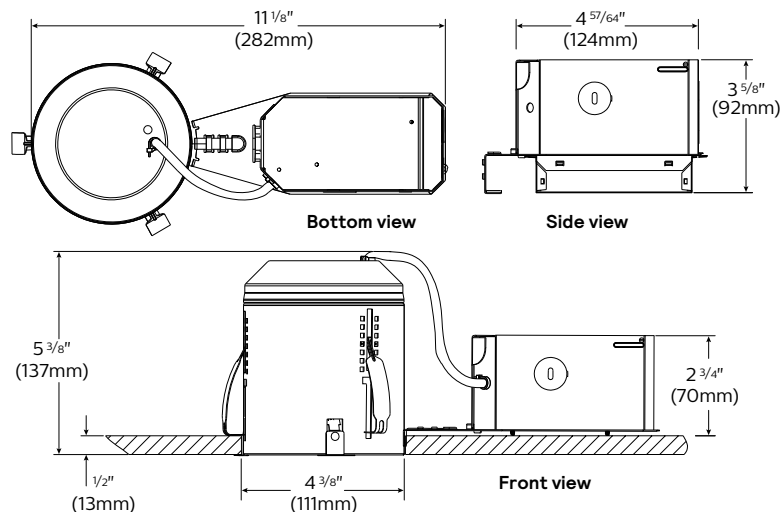
L4 LyteCaster LED 4"

Round & Square downlights and Round adjustables (650lm & 1000lm)

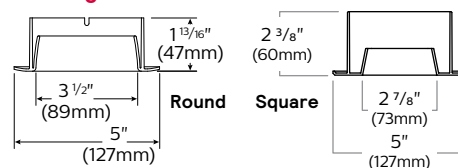
New construction housing



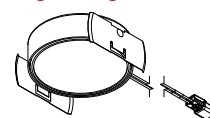
Remodeler housing



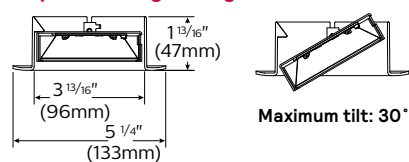
Downlight trim



Light engine



Adjustable light engine/trim



L4 LyteCaster LED 4"

Round & Square downlights and Round adjustables (650lm & 1000lm)



AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering
and high efficacy



Standard CRI 90

Better color rendering
and low efficacy



AccuRender

Best color rendering,
color preference and high efficacy

Enjoy design flexibility

Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple color temperatures (CCTs) and lumen packages offered

Promote savings

High efficacy, with no penalty:

- Energy efficacy compares well to conventional 80 CRI
- Up to 25% more energy savings vs competitor 90 CRI¹
- Helps meet Title 24 requirements

Show your true colors

High color rendering:

- True to life colors to help energize your environment and render better flesh tones critical for healthcare hospitality and retail applications.
- R_a up to 94 CRI • R_f up to 92 TM-30
- R_g up to 67 CRI • R_{f,h1} up to 91 TM-30
- G_a up to 99 CRI • R_g up to 100 TM-30
- C₉ up to 94 CRI • R_{ca,h1} up to -5% TM-30

Achieve color balance

Best in class color consistency:

- Promote aesthetic harmony in your space with ≤ 2 SDCM

L4 LyteCaster LED 4"

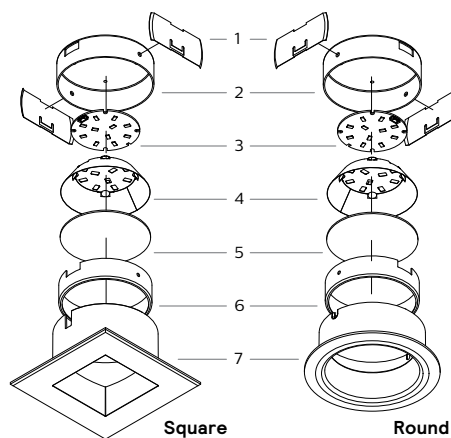
Round & Square downlights and Round adjustables (650lm & 1000lm)

Light Engine



Components

1. **Retaining clips:** 29 gauge Stainless Steel, allows tool-less installation of light engine to trim.
2. **Engine housing:** (0.05") thick powder coated aluminum provides integrated thermal management allowing for a low profile at less than 3-1/2" tall.
3. **LED board:** High efficiency mid-flux LED's.
4. **Mixing chamber:** 98% reflective, highly diffuse film.
5. **Diffusion lens:** (0.06") thick acrylic opal lens provides an even source of illumination.
6. **Retaining ring:** (0.04") thick powder coated aluminum, secures module components.
7. **Reflector:** 30% glass reinforced injection molded polycarbonate is durable and provides a 70° cutoff to the source.



Trim & Finish options



Open Downlight
Clear Diffuse
White Flange
(DD)



Open Downlight
White Finish
White Flange
(DW)



Baffle Downlight
White Finish
White Flange
(BW)



White Reflector
White Flange
(adjustable)



Open Downlight
Clear Diffuse
White Flange
(DD)



Open Downlight
White Finish
White Flange
(DW)

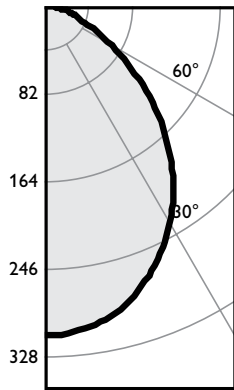


Baffle Downlight
White Finish
White Flange
(BW)

L4 LyteCaster LED 4"

Round & Square downlights and Round adjustables (650lm & 1000lm)

Round, 650lm engine, 90CRI / 3500K, 103lm/W at 6W



Housing:
L4R06AZ10UVB
Light Engine:
L4R06935VB
Trim:
L4RDW

Angle	Mean CP	Lumens
0	304	
5	302	29
10	296	
15	285	81
20	270	
25	251	119
30	230	
35	206	135
40	179	
45	151	125
50	121	
55	93	92
60	66	
65	46	50
70	33	
75	23	25
80	14	
85	6	7
90	0	

Output lumens: 629lm
Input Watts: 6.1W
Spacing Crit.: 1.14
Beam Angle: 90°
Efficacy: 103.1lm/W
CCT: 3500K
CRI: 90
Report no: STMR-1151

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	12	5.7'
6'	8	6.8'
7'	6	8.0'
8'	5	9.1'
9'	4	10.3'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	26.0	0.27
6'	17.0	0.18
7'	12.0	0.13
8'	10.0	0.11
9'	8.0	0.08

38"x38"x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	110	110	106	102	104	98	100	94	96	92	87
	2	102	102	94	88	93	82	89	80	86	79	75
	3	94	94	84	77	83	71	80	69	77	68	65
	4	87	87	76	68	74	61	72	60	70	60	57
	5	80	80	68	60	67	54	65	53	63	53	50
	6	74	74	62	54	61	48	60	47	58	47	45
	7	69	69	57	49	56	43	55	43	53	42	40
	8	65	65	52	44	51	39	50	38	49	38	36
	9	61	61	48	40	48	35	46	35	45	35	33
10	57	57	45	37	44	32	43	32	42	32	30	

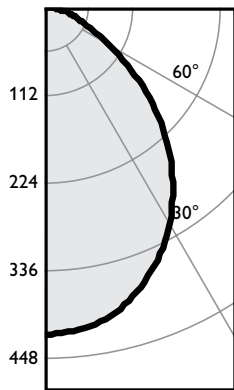
Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	224	35.6%
0-40	353	56.1%
0-60	551	87.6%
0-90	629	100.0%

CRI and CCT adjustment factors

90CRI 2700K: = 0.92
90CRI 3000K: = 0.96
90CRI 3500K: = 1.00
90CRI 4000K: = 1.02
90CRI 5000K: = 1.02

Round, 1000lm engine, 90CRI / 3500K, 98lm/W at 9W



Housing:
L4R10AE1VB
L4R10AZ10UVB
Light Engine:
L4R10935VB
Trim:
L4RDW

Angle	Mean CP	Lumens
0	417	
5	414	39
10	407	
15	393	111
20	372	
25	347	160
30	318	
35	284	177
40	247	
45	208	160
50	168	
55	128	115
60	91	
65	63	64
70	45	
75	32	34
80	20	
85	8	9
90	0	

Output lumens: 869lm
Input Watts: 8.8W
Spacing Crit.: 1.16
Beam Angle: 90°
Efficacy: 98.3lm/W
CCT: 3500K
CRI: 90
Report no: STMR-1149.R

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	17	5.8'
6'	12	7.0'
7'	9	8.1'
8'	7	9.3'
9'	5	10.4'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	36.0	0.39
6'	24.0	0.26
7'	17.0	0.18
8'	14.0	0.15
9'	11.0	0.12

38"x38"x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	110	106	103	100	104	98	100	95	96	92	87
	2	102	94	88	83	93	82	89	81	86	79	75
	3	94	84	77	71	83	70	80	69	77	68	65
	4	86	75	67	61	74	61	72	60	69	59	56
	5	80	68	60	53	67	53	65	53	63	52	50
	6	74	61	53	47	61	47	59	47	57	46	44
	7	69	56	48	42	55	42	54	42	52	41	39
	8	64	51	43	38	51	38	49	37	48	37	35
	9	60	47	39	34	47	34	46	34	45	34	32
10	56	44	36	31	43	31	42	31	41	31	29	

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	224	35.6%
0-40	353	56.1%
0-60	551	87.6%
0-90	629	100.0%

CRI and CCT adjustment factors

90CRI 2700K: = 0.92
90CRI 3000K: = 0.96
90CRI 3500K: = 1.00
90CRI 4000K: = 1.02
90CRI 5000K: = 1.02

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

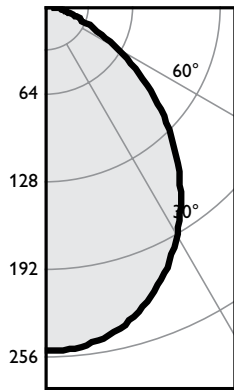
2. Wattage controlled to within +/- 5%.

Note: Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

L4 LyteCaster LED 4"

Round & Square downlights and Round adjustables (650lm & 1000lm)

Square, 650lm engine, 90 CRI / 3500 K, 84lm/W at 6W



Housing:
L4R06AZ10UVB
Light Engine:
L4R06935VB
Trim:
L4SDW

Angle	Mean CP	Lumens
0	246	
5	244	23
10	240	
15	232	65
20	220	
25	205	94
30	188	
35	168	105
40	147	
45	125	96
50	101	
55	78	70
60	57	
65	38	38
70	24	
75	16	17
80	10	
85	4	5
90	0	

Output lumens: 514lm
Input Watts: 6.1W
Spacing Crit.: 1.16
Beam Angle: 90°
Efficacy: 84.3lm/W
CCT: 3500 K
CRI: 90
Report no: STMR-1153

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	10	5.8'
6'	7	7.0'
7'	5	8.1'
8'	4	9.3'
9'	3	10.4'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	22.0	0.27
6'	14.0	0.18
7'	10.0	0.13
8'	8.0	0.11
9'	7.0	0.08

38"x38"x10' Room, Workplane 2.5'
above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	110	110	106	102	104	98	100	94	96	92	87
	2	102	102	94	88	93	82	89	80	86	79	75
	3	94	94	84	77	83	71	80	69	77	68	65
	4	87	87	76	68	74	61	72	60	70	60	57
	5	80	80	68	60	67	54	65	53	63	53	50
	6	74	74	62	54	61	48	60	47	58	47	45
	7	69	69	57	49	56	43	55	43	53	42	40
	8	65	65	52	44	51	39	50	38	49	38	36
	9	61	61	48	40	48	35	46	35	45	35	33
10	57	57	45	37	44	32	43	32	42	32	30	

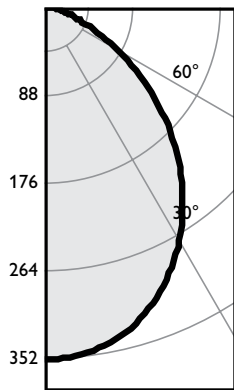
Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	183	35.6%
0-40	288	56.0%
0-60	454	88.3%
0-90	514	100.0%

CRI and CCT adjustment factors

90CRI 2700K: = 0.92
90CRI 3000K: = 0.96
90CRI 3500K: = 1.00
90CRI 4000K: = 1.02
90CRI 5000K: = 1.02

Square, 1000lm engine, 90 CRI / 3500 K, 82lm/W at 9W



Housing:
L4R10AE1VB
L4R10AZ10UVB
Light Engine:
L4R10935VB
Trim:
L4SDW

Angle	Mean CP	Lumens
0	348	
5	346	33
10	340	
15	329	92
20	312	
25	290	134
30	266	
35	238	148
40	207	
45	175	135
50	142	
55	110	98
60	79	
65	53	53
70	34	
75	23	24
80	14	
85	6	7
90	0	

Output lumens: 724lm
Input Watts: 8.8W
Spacing Crit.: 1.16
Beam Angle: 90°
Efficacy: 82.3lm/W
CCT: 3500 K
CRI: 90
Report no: STMR-1149.S

Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	14	5.8'
6'	10	7.0'
7'	7	8.1'
8'	5	9.3'
9'	4	10.4'

* Beam diameter is where foot-candles drop to 50% of maximum.

Multiple unit data - RCR 2

Spacing on center	Initial Center Beam Foot-Candles	Watts per Sq. Ft.
5'	30.0	0.39
6'	20.0	0.26
7'	14.0	0.18
8'	12.0	0.15
9'	10.0	0.12

38"x38"x10' Room, Workplane 2.5'
above floor, 80/50/20% Reflectances

Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
	1	110	106	103	100	104	98	100	95	96	92	87
	2	102	94	88	83	93	82	89	81	86	79	75
	3	94	84	77	71	83	70	80	69	77	68	65
	4	86	75	67	61	74	61	72	60	69	59	56
	5	80	68	60	53	67	53	65	53	63	52	50
	6	74	61	53	47	61	47	59	47	57	46	44
	7	69	56	48	42	55	42	54	42	52	41	39
	8	64	51	43	38	51	38	49	37	48	37	35
	9	60	47	39	34	47	34	46	34	45	34	32
10	56	44	36	31	43	31	42	31	41	31	29	

Zonal lumens & percentages

Zone	Lumens	%Luminaire
0-30	259	35.8%
0-40	407	56.2%
0-60	640	88.4%
0-90	724	100.0%

CRI and CCT adjustment factors

90CRI 2700K: = 0.92
90CRI 3000K: = 0.96
90CRI 3500K: = 1.00
90CRI 4000K: = 1.02
90CRI 5000K: = 1.02

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Wattage controlled to within +/- 5%.

Note: Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.



© 2023 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Signify North America Corporation
400 Crossing Blvd, Suite 600
Bridgewater, NJ 08807
Telephone: 800-555-0050

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone: 800-668-9008

All trademarks are owned by Signify Holding or their respective owners.