



**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: L5R15AE1VA

Series	Lumens	Installation (all with AirSeal IC)	Dimming	Version
<b>L5R</b>				
L5R LyteCaster 5" downlight (for round and square configurations)	10 1000lm 15 1500lm	A New Construction w/ Screws AN New Construction w/ Nails R Remodeler	E1 Phase Control (ELV/TRIAC 120V)	VA Version A
	10 1000lm 15 1500lm	A New Construction w/ Screws AN New Construction w/ Nails R Remodeler	Z10U 0-10V (Universal 120-277V)	VB Version B

### Downlight Light Engine

example: L5R15930VB

Series	Lumens	CRI/CCT	Finishes	Version
<b>L5R</b>				<b>VB</b>
L5R LyteCaster 5" round downlight (compatible with square trims)	10 1000lm 15 1500lm	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: L5R15930WVB

Series	Lumens	CRI/CCT	Finishes	Version
<b>L5RA</b>			<b>W</b>	<b>VB</b>
L5RA Lytecaster 5" round adjustable (trim is integrated)	10 1000lm 15 1500lm	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: L5RDW

Series	Style/Finish/Flange
L5R LyteCaster 5" round downlight L5S LyteCaster 5" square downlight	DD Open Downlight / Clear Diffuse / White Flange DW Open Downlight / White Finish / White Flange BW Baffle Downlight / White Finish / White Flange



# L5R & L6S LyteCaster LED 5"

Round & Square downlights and Round adjustables (1000lm & 1500lm)

## 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 ¾" (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:** 5½" (140mm).

## Dimming Compatibility

<b>SR1200ZTUNV</b>	Philips Sunrise
<b>IPE04, IP7</b>	Leviton Illumatech
<b>6615-P</b>	Leviton Decora
<b>DVLEV-303P</b>	Lutron Diva
<b>DVTV, DVSCTV</b>	Lutron Diva
<b>S-603P</b>	Lutron Skylark
<b>NFTV, NTSTO-DV</b>	Lutron Nova
<b>QSGRJ-XP, QSGRJ-XE</b>	Lutron Grafix Eye Qs
<b>QSGR-XF</b>	Lutron Grafix Eye Qs

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. 5 year limited warranty

## Electrical specifications

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

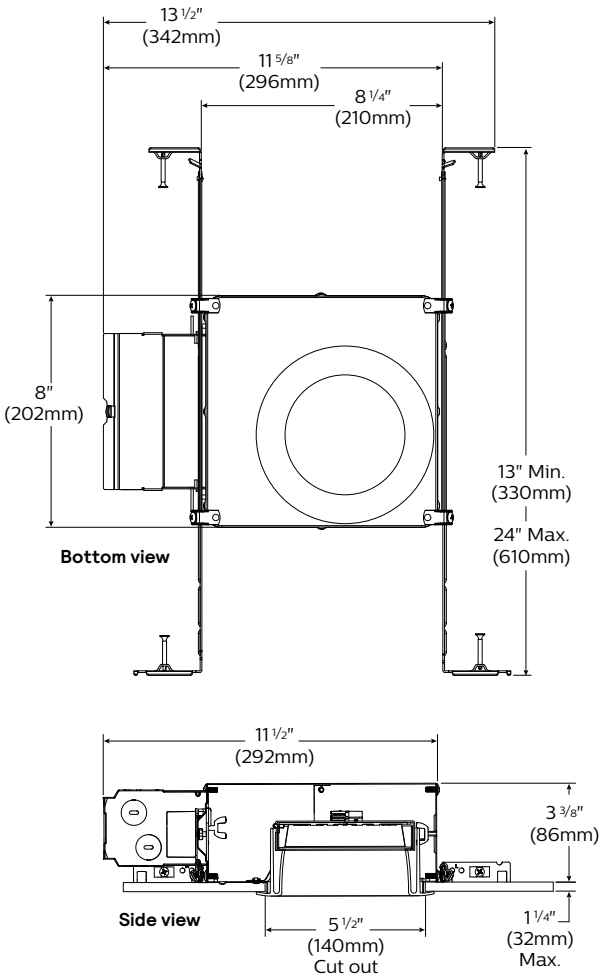
Frame-in kit	Lumens	Input volts	Input freq.	Input current	LED drive current	Input power	LED power	THD Factor @ Max Load	Power Factor @ Max Load
L5R10_E1VA	1000	120V	50/60Hz	0.10A	260mA	12W	10W	<20%	>0.9
L5R10_Z10UVB	1000	120V	50/60Hz	0.08A	250mA	10W	8W	<10%	>0.9
		277V	50/60Hz	0.04A	250mA	10W	8W	<10%	>0.9
L5R15_E1VA	1500	120V	50/60Hz	0.16A	375mA	15W	13W	<20%	>0.9
L5R15_Z10UVB	1500	120V	50/60Hz	0.11A	350mA	14W	12W	<10%	>0.95
		277V	50/60Hz	0.05A	350mA	14W	12W	<10%	>0.95



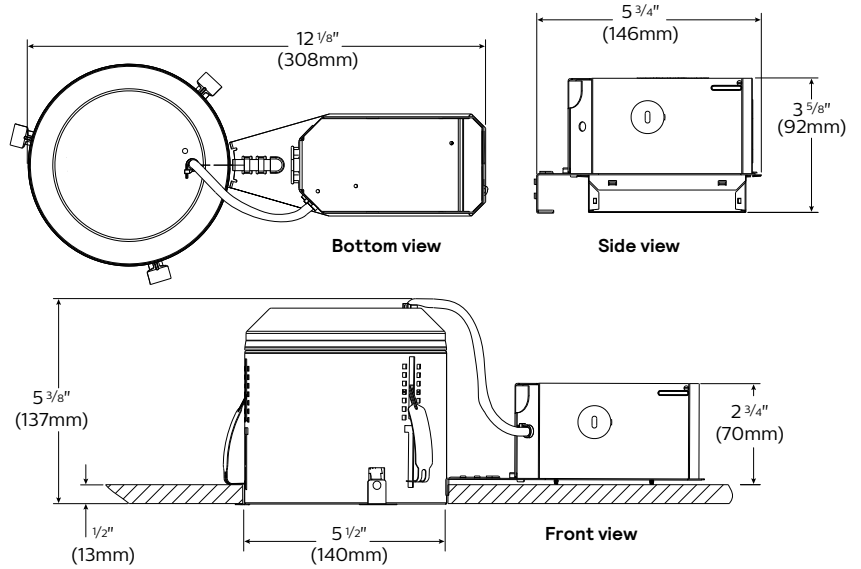
# L5R & L6S LyteCaster LED 5"

Round & Square downlights and Round adjustables (1000lm & 1500lm)

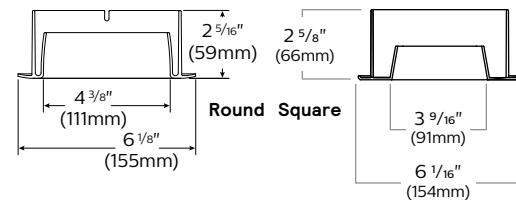
## New construction housing



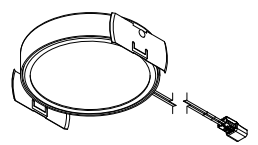
## Remodeler housing



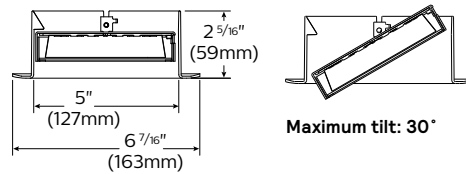
## Downlight trim



## Light engine



## Adjustable light engine/trim



# L5R & L6S LyteCaster LED 5"

Round & Square downlights and Round adjustables (1000lm & 1500lm)



## 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 CRI<sup>1</sup>
- 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<sub>a</sub> up to 94 CRI    • R<sub>f</sub> up to 92 TM-30
- R<sub>g</sub> up to 67 CRI    • R<sub>r,hi</sub> up to 91 TM-30
- G<sub>a</sub> up to 99 CRI    • R<sub>g</sub> up to 100 TM-30
- C<sub>9</sub> up to 94 CRI    • R<sub>cs,hi</sub> up to -5% TM-30

### Achieve color balance

Best in class color consistency:

- Promote aesthetic harmony in your space with  $\leq 2$  SDCM

# L5R & L6S LyteCaster LED 5"

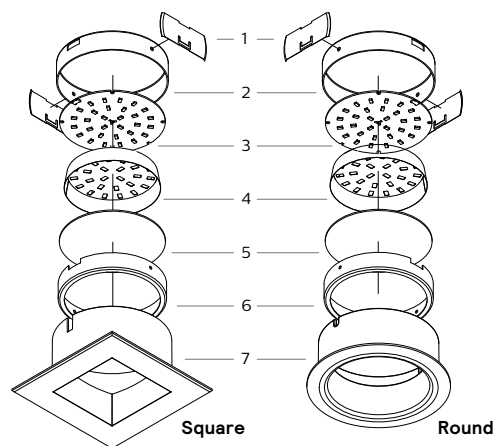
Round & Square downlights and Round adjustables (1000lm & 1500lm)

## Light Engine

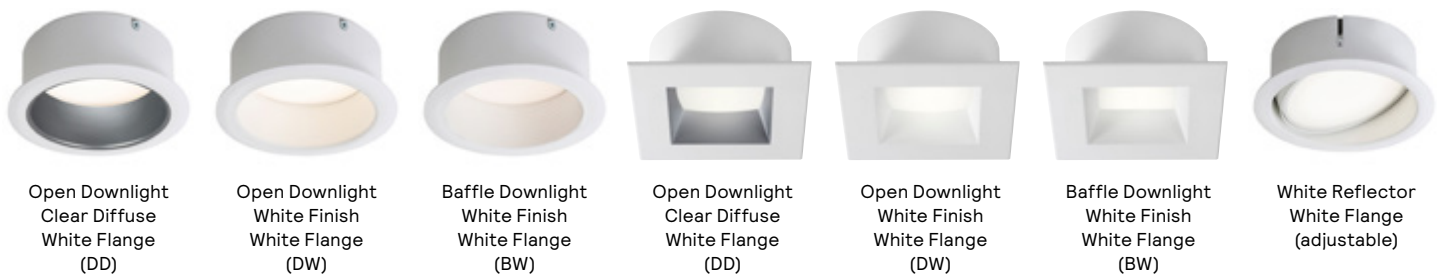


## Components

- 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.



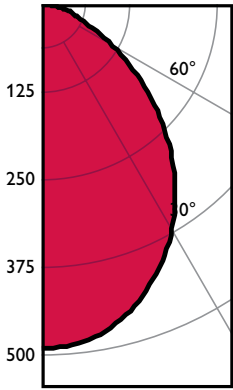
## Trim & Finish options



# L5R & L6S LyteCaster LED 5"

## Round & Square downlights and Round adjustables (1000lm & 1500lm)

### Round, 1000lm engine, 90CRI / 3500K, 95lm/W at 11W



Angle	Mean CP	Lumens
0	490	
5	488	46
10	478	
15	459	129
20	435	
25	405	186
30	370	
35	330	206
40	288	
45	243	186
50	196	
55	151	135
60	109	
65	74	76
70	53	
75	38	40
80	21	
85	5	7
90	0	

#### Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	20	5.7'
6'	14	6.8'
7'	10	8.0'
8'	8	9.1'
9'	6	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'	42.0	0.47
6'	28.0	0.31
7'	20.0	0.22
8'	17.0	0.19
9'	13.0	0.15

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

#### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10		
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	362	35.7%
0-40	568	56.1%
0-60	890	87.9%
0-90	1013	100.0%

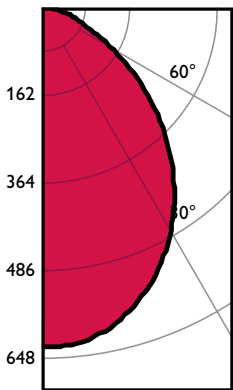
#### CRI and CCT adjustment factors

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

Housing:  
L5RAE1VA  
L5R10AZ10UVB  
Light Engine:  
L5R10935VB  
Trim:  
L5RDW

Output lumens: 1013lm  
Input Watts: 10.7W  
Spacing Crit.: 1.14  
Beam Angle: 89°  
Efficacy: 94.7lm/W  
CCT: 3500K  
CRI: 90  
Report no: STMR-662

### Round, 1500lm engine, 90CRI / 3500K, 97lm/W at 14W



Angle	Mean CP	Lumens
0	630	
5	627	59
10	614	
15	590	166
20	559	
25	521	240
30	477	
35	426	266
40	372	
45	315	242
50	255	
55	198	177
60	143	
65	98	100
70	70	
75	49	52
80	28	
85	7	11
90	0	

#### Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	25	5.7'
6'	17	6.8'
7'	13	8.0'
8'	10	9.1'
9'	8	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'	55.0	0.60
6'	36.0	0.39
7'	26.0	0.28
8'	21.0	0.23
9'	17.0	0.19

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

#### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10		
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	465	35.4%
0-40	731	55.7%
0-60	1150	87.7%
0-90	1312	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

Housing:  
L5R15AE1VA  
L5R15AZ10UVB  
Light Engine:  
L5R15935VB  
Trim:  
L5RDW

Output lumens: 1312lm  
Input Watts: 13.5W  
Spacing Crit.: 1.14  
Beam Angle: 90°  
Efficacy: 97.2lm/W  
CCT: 3500K  
CRI: 90  
Report no: STMR-663

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

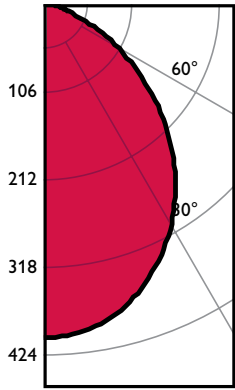
2. Wattage controlled to within +/- 5%.

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

# L5R & L6S LyteCaster LED 5"

Round & Square downlights and Round adjustables (1000lm & 1500lm)

## Square, 1000lm engine, 90CRI / 3500K, 89lm/W at 10W



Angle	Mean CP	Lumens
0	402	
5	400	38
10	392	
15	378	106
20	358	
25	334	154
30	307	
35	276	172
40	242	
45	207	159
50	170	
55	134	120
60	98	
65	66	66
70	41	
75	27	29
80	17	
85	7	8
90	0	

### Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	16	5.8'
6'	11	7.0'
7'	8	8.1'
8'	6	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	0.43
6'	23.0	0.28
7'	17.0	0.20
8'	14.0	0.17
9'	11.0	0.13

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

### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10		
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	298	29.4%
0-40	470	46.4%
0-60	749	73.9%
0-90	1013	100.0%

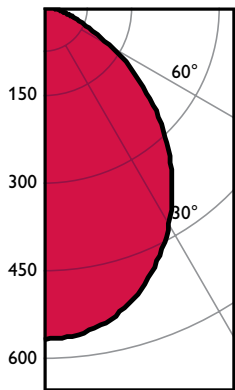
### CRI and CCT adjustment factors

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

Housing:  
L5RAE1VA  
L5R10AZ10UVB  
Light Engine:  
L5R10935VB  
Trim:  
L5SDW

Output lumens: 853lm  
Input Watts: 9.6W  
Spacing Crit.: 1.16  
Beam Angle: 90°  
Efficacy: 88.9lm/W  
CCT: 3500K  
CRI: 90  
Report no: STMR-666

## Square, 1500lm engine, 90CRI / 3500K, 81lm/W at 14W



Angle	Mean CP	Lumens
0	567	
5	563	59
10	552	
15	531	166
20	503	
25	467	240
30	427	
35	382	266
40	333	
45	282	242
50	229	
55	178	177
60	128	
65	85	100
70	55	
75	37	52
80	22	
85	10	11
90	0	

### Single unit data

Height to Lighted Plane	Initial Center Beam Foot-Candles	Beam Dia. (ft)*
5'	23	5.7'
6'	16	6.8'
7'	12	8.0'
8'	9	9.1'
9'	7	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'	49.0	0.64
6'	32.0	0.42
7'	23.0	0.30
8'	19.0	0.25
9'	15.0	0.20

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

### Coefficients of utilization

Ceiling	80%				70%		50%		30%		0%	
	70	50	30	10	50	10	50	10	50	10		
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	418	35.8%
0-40	656	56.1%
0-60	1032	88.3%
0-90	1169	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

Housing:  
L5R15AE1VA  
L5R15AZ10UVB  
Light Engine:  
L5R15935VB  
Trim:  
L5SDW

Output lumens: 1169lm  
Input Watts: 14.4W  
Spacing Crit.: 1.14  
Beam Angle: 90°  
Efficacy: 81.2lm/W  
CCT: 3500K  
CRI: 90  
Report no: STMR-1150.S

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.

