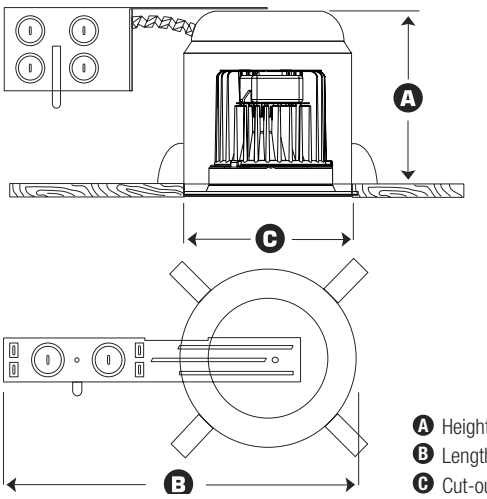
Catalog Number	HLD6R	HLD6R-AT
Project Name	Type	6" Architectural Remodel NON-IC Housing with Front Loading LED Module



SAME DAY SHIPPING AVAILABLE

1200 LUMENS

TO BE USED WITH RL600 SERIES LED MODULE LIGHTING COMPONENT

Ⓐ Height = 7-1/4"
Ⓑ Length =13"
Ⓒ Cut-out = 6-3/4"

DESCRIPTION - 6" Remodel NON-IC housing for use with RL600 LED series LED Module trims. Designed for remodel installations and suitable for use in NON-insulation covered ceilings. The HLD6R-AT housing is engineered with a unique 'EZ-connect' wiring system, that when used with the RL600 series trim, with California Title-24 (compliances pending). The unique EZ-connect system also meets other state and national regulatory mandates. LED Module connects effortlessly to housing, virtually eliminating mis-wiring and potential shock hazards.

Driver and LED engine can be easily accessed from below the ceiling, allowing for simple hassle free maintenance.

NOTE** - **Complete system includes HLD6R-AT housing and LED Modules RL600 series trim. RL600 LED Modules trim must be ordered separately.

SPECIFICATION

HOUSING - Die-formed aluminum for maximum heat dissipation and rust protection. Housing can be installed in 1/2" to 1-3/8" thick ceilings. Housing is NON-IC rated for and insulation must be keep 3" away from all side. May be installed in 2" x 8" joist construction.

CONNECTION - Polarity-specific EZ-connect system engineered to match with Elite LED Module trims. Meets strict code requirements where Edison Base Sockets have been banned.

INSTALLATION - For fast and easy installation in existing plaster or mechanical ceilings the housing installs from below the ceiling. Four preinstalled spring clips with secure the housing firmly into ceiling to accommodate different ceiling thicknesses form 1/2" to 1-3/8".

JUNCTION BOX - UL Listed for through-branch circuit wiring, provided with eight ½" knockouts and four Romex knockouts with true pry-out slots and strain clamps.

THERMAL PROTECTION - Standard thermal protection device guards against improper installation and misuse of insulation material.

ELITE LED MODULE - HLD6R-AT unique 'EZ-connect' wiring system is Title 24-2013 compliant when used with the RL600 series module. RL600 series modules are rated to last up to 50,000hrs as tested in accordance with LM-80 standards. Available lumen packages include up to 650 (14W), 900 (16W) & 1200 (24W) delivered lumens. Driver and LED Engine are found on the module itself. The Elite **LED Module** system is fully dimmable down to 1% of initial light output with a 0-10 Volt dimmer when ordered with the following options (DIM10-120, DIM10-277). Triac & Electronic Low Voltage dimming driver also available when ordered with the following options (DIMTR-120). Consult Factory for details.

LISTING

c-UL-us- listed for Damp location. Feed Through Wiring.
LM79 / LM80

DIMMING INFORMATION

DIMTR (Triac & Electronic Low Voltage Dimming)
DIM10 (0-10V Dimming)

PROUDLY ASSEMBLED in AMERICA

c UL us LISTED

Example: **HLD6R-AT-DIMTR-120-RL630-650L-DIMTR-120-30K-W-WH**

HLD6R

HOUSING TYPE

☐ **HLD6R-AT-DIMTR-120 -** Used For Triac Dimming Module
☐ **HLD6R-AT-277 -** Used For Non Dimming Module

TRIM TYPE	650L/900L SERIES	1200L SERIES	PAGE #
☐ **RL630** (BAFFLE)	☐ 650L-DIMTR-120 ☐ 650L-277 (non dimmable) ☐ 900L-277 (non dimmable)	☐ 1200L-DIMTR-120	190
TRIM TYPE	**650L/900L SERIES**	**1200L SERIES**	**PAGE #**
☐ **RL611** (BAFFLE WALL WASH)	☐ 650L-DIMTR-120 ☐ 650L-277 (non dimmable) ☐ 900L-277 (non dimmable)	☐ 1200L-DIMTR-120	190
TRIM TYPE	**650L/900L SERIES**	**1200L SERIES**	**PAGE #**
☐ **RL607** (REFLECTOR)	☐ 650L-DIMTR-120 ☐ 650L-277 (non dimmable) ☐ 900L-277 (non dimmable)	☐ 1200L-DIMTR-120	190
TRIM TYPE	**650L/900L SERIES**	**1200L SERIES**	**PAGE #**
☐ **RL622** (REFLECTOR WALL WASH)	☐ 650L-DIMTR-120 ☐ 650L-277 (non dimmable) ☐ 900L-277 (non dimmable)	☐ 1200L-DIMTR-120	190

TRIM TYPE	650L/900L SERIES	PAGE #
☐ **RL660** (BAFFLE)	☐ 650L-DIMTR-120 ☐ 900L-DIMTR-120	208
TRIM TYPE	**650L/900L SERIES**	**PAGE #**
☐ **RL661** (REFLECTOR)	☐ 650L-DIMTR-120 ☐ 900L-DIMTR-120	208
TRIM TYPE	**750L SERIES**	**PAGE #**
☐ **RL625** (BAFFLE)	☐ 750L-DIMTR-120	206
TRIM TYPE	**750L SERIES**	**PAGE #**
☐ **RL663** (ADJ. BAFFLE)	☐ 750L-DIMTR-120	188
TRIM TYPE	**850L SERIES**	**PAGE #**
☐ **RL628**	☐ 850L-DIMTR-120	188

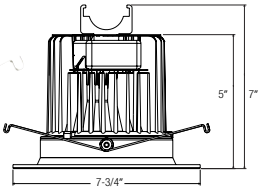
HOUSING TYPE

☐ **HLD6R-AT-DIM10-120** Used For 0-10V Dimming Module. 120V input
☐ **HLD6R-AT-DIM10-277** Used For 0-10V Dimming Module. 277V input

TRIM TYPE	900L/1200L SERIES	PAGE #
☐ **RL630** (BAFFLE)	☐ 900L-DIM10-MVOLT ☐ 1200L-DIM10-MVOLT	190
TRIM TYPE	**900L/1200L SERIES**	**PAGE #**
☐ **RL611** (BAFFLE WALL WASH)	☐ 900L-DIM10-MVOLT ☐ 1200L-DIM10-MVOLT	190
TRIM TYPE	**900L/1200L SERIES**	**PAGE #**
☐ **RL607** (REFLECTOR)	☐ 900L-DIM10-MVOLT ☐ 1200L-DIM10-MVOLT	190
TRIM TYPE	**900L/1200L SERIES**	**PAGE #**
☐ **RL622** (REFLECTOR WALL WASH)	☐ 900L-DIM10-MVOLT ☐ 1200L-DIM10-MVOLT	190

☐ Reset

BAFFLE



RL630- (A) - (B) - (C) - (D) - (E)

(A) LUMEN SERIES	(B) VOLTAGE/DRIVER	(C) CCT	(D) CRI	(E) FINISH
❑ 650L	❑ DIMTR-120 ❑ 277 (non dimmable)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ W-WH ❑ SN-SN ❑ P-WH ❑ P-BK ❑ CP-CP ❑ BZ-BZ
❑ 900L	❑ DIMTR-120 ❑ DIM10-MVOLT ❑ 277 (non dimmable)			
❑ 1200L	❑ DIMTR-120 ❑ DIM10-MVOLT			
LED (Retrofit) Die-cast Aluminum Lensed Stepped Baffle				
See ordering chart for compatible housing on page 110, 111, 112 & 113				

RL630- (A) - (B) - (C) - (D) **-W-WH**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier 1.0

RL630- (A) - (B) - (C) - (D) **-P-WH**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier .75

RL630- (A) - (B) - (C) - (D) **-SN-SN**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier .92

RL630- (A) - (B) - (C) - (D) **-CP-CP**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier .87

RL630- (A) - (B) - (C) - (D) **-P-BK**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier .75

RL630- (A) - (B) - (C) - (D) **-BZ-BZ**
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)

Photometric Multiplier .85

BAFFLE WALL WASH

RL611- (A) - (B) - (C) - (D) - (E)

(A) LUMENS	(B) VOLTAGE/DRIVER	(C) CCT	(D) CRI	(E) FINISH
❑ 650L	❑ DIMTR-120 ❑ 277 (non dimmable)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ W-W-WH ❑ SN-SN-WH ❑ P-W-WH ❑ P-BK-WH ❑ CP-CP-WH ❑ BZ-BZ-WH
❑ 900L	❑ DIMTR-120 ❑ DIM10-MVOLT ❑ 277 (non dimmable)			
❑ 1200L	❑ DIMTR-120 ❑ DIM10-MVOLT			
LED (Retrofit) Die-cast Aluminum Lensed Stepped Baffle Wall Wash				
See ordering chart for compatible housing on page 110, 111, 112 & 113				

Ordering Guide for Compatible Housing

RL630-650L-DIMTR-120 **RL630-900L-DIMTR-120**	Page	**RL630-650L-DIM10** **RL630-900L-DIM10**	Page	**RL630-1200L-DIMTR**	Page	**RL630-1200L-DIM10**	Page	**RL630-650L-277**(Non Dimmable) **RL630-900L-277** (Non Dimmable)	Page
LD6IC-AT-DIMTR-120	312	LD6IC-AT-DIM10-120	312	LD6-AT-DIMTR-120	314	LD6-AT-DIM10-120	314	LD600IC-AT-277	310
LD6RIC-AT-DIMTR-120	313	LD6IC-AT-DIM10-277	312	LD6R-AT-DIMTR-120	315	LD6-AT-DIM10-277	314	LD6IC-AT-277	312
LD6-AT-DIMTR-120	314	LD6-AT-DIM10-120	314	LD600IC-AT-120	310	LD6R-AT-DIM10-120	315	LD6RIC-AT-277	313
LD6R-AT-DIMTR-120	315	LD6-AT-DIM10-277	314	HLD6-AT-DIMTR-120	112	LD6R-AT-DIM10-277	315	LD6-AT-277	314
LD600IC-AT-120	310	LD6RIC-AT-DIM10-120	313	HLD6R-AT-DIMTR-120	113	LD600IC-AT-120	310	LD6R-AT-277	315
HLD6IC-AT-DIMTR-120	110	LD6RIC-AT-DIM10-277	313	EZ6IC-AT	868	LD600IC-AT-277	310	HLD6IC-AT-277	110
HLD6RIC-AT-DIMTR-120	111	LD6R-AT-DIM10-120	315	EZ6RIC-AT	868	HLD6-AT-DIM10-120	112	HLD6RIC-AT-277	111
HLD6-AT-DIMTR-120	112	LD6R-AT-DIM10-277	315			HLD6-AT-DIM10-277	112	HLD6-AT-277	112
HLD6R-AT-DIMTR-120	113	LD600IC-AT-120	310			HLD6R-AT-DIM10-120	113	HLD6R-AT-277	113
EZ6IC-AT	868	LD600IC-AT-277	310			HLD6R-AT-DIM10-277	113	EZ6IC-AT	868
EZ6RIC-AT	868	HLD6IC-AT-DIM10-120	110					EZ6RIC-AT	868
		HLD6RIC-AT-DIM10-120	111						
		HLD6-AT-DIM10-120	112						
		HLD6R-AT-DIM10-120	113						
		HLD6IC-AT-DIM10-277	110						
		HLD6RIC-AT-DIM10-277	111						
		HLD6-AT-DIM10-277	112						
		HLD6R-AT-DIM10-277	113						

REFLECTOR

RL607-(A)-(B)-(C)-(D)-(E)

(A) LUMENS	(B) VOLTAGE/DRIVER	(C) CCT	(D) CRI	(E) FINISH
❑ 650L	❑ DIMTR-120 ❑ 277 (non dimmable)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ SN-WH ❑ CL-WH ❑ CL-CH ❑ SN-SN ❑ RG-WH ❑ RG-PB ❑ MB-WH ❑ MB-BK ❑ CP-CP ❑ BZ-BZ
❑ 900L	❑ DIMTR-120 ❑ DIM10-MVOLT ❑ 277 (non dimmable)			
❑ 1200L	❑ DIMTR-120 ❑ DIM10-MVOLT			
LED (Retrofit) Die-cast Aluminum Lensed Reflector				
See ordering chart for compatible housing on page 110, 111, 112 & 113				

RL607-(A)-(B)-(C)-(D)-MB-WH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .77

RL607-(A)-(B)-(C)-(D)-MB-BK
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .77

RL607-(A)-(B)-(C)-(D)-CL-WH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier 1.0

RL607-(A)-(B)-(C)-(D)-BZ-BZ
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .87

RL607-(A)-(B)-(C)-(D)-SN-WH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .87

RL607-(A)-(B)-(C)-(D)-CL-CH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier 1.0

RL607-(A)-(B)-(C)-(D)-CP-CP
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .90

RL607-(A)-(B)-(C)-(D)-SN-SN
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .87

RL607-(A)-(B)-(C)-(D)-W-WH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .95

RL607-(A)-(B)-(C)-(D)-RG-PB
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .90

RL607-(A)-(B)-(C)-(D)-RG-WH
(WATTAGE) (VOLTAGE/DRIVER) (CCT) (CRI)
Photometric Multiplier .90

REFLECTOR WALL WASH

RL622-(A)-(B)-(C)-(D)-(E)

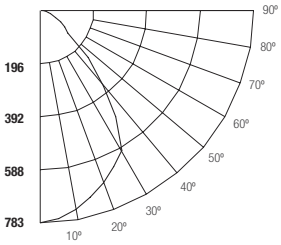
(A) LUMENS	(B) VOLTAGE/DRIVER	(C) CCT	(D) CRI	(E) FINISH
❑ 650L	❑ DIMTR-120 ❑ 277 (non dimmable)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ SN-W-WH ❑ CL-W-WH ❑ CL-CH-WH ❑ SN-SN-WH ❑ RG-W-WH ❑ RG-PB-WH ❑ MB-W-WH ❑ MB-BK-WH ❑ CP-CP-WH ❑ BZ-BZ-WH
❑ 900L	❑ DIMTR-120 ❑ DIM10-MVOLT ❑ 277 (non dimmable)			
❑ 1200L	❑ DIMTR-120 ❑ DIM10-MVOLT			
LED (Retrofit) Die-cast Aluminum Lensed Stepped Reflector Wall Wash				
See ordering chart for compatible housing on page 110, 111, 112 & 113				

RL630-1200L-DIMTR-120-85-40K-W-WH

TEST NO.: **EL-0913116**

INPUT WATTS: **20.9** LUMENS: **1262** CRI: **85+** EFFICACY: **60.4** CCT: **4000K** SPACING CRITERIA: **1.18**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	49.0	6.7’
8.0	12.2	13.5’
12.0	5.4	20.2’
16.0	3.1	27.0’
20.0	2.0	33.7’
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	274.32	21.80	21.70
0-30	569.29	45.30	45.10
0-40	879.88	70.00	69.70
0-60	1169.47	93.00	92.70
0-80	1251.5	99.50	99.20
0-90	1261.62	100.30	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	19084	21982	19743
55	10247	10338	7143
65	8114	6385	6002
75	6477	6128	5910
85	7114	6504	729

Lumens Per Zone

Zone	Lumens
0-10	72.87
10-20	201.45
20-30	294.97
30-40	310.59
40-50	201.79
50-60	87.80
60-70	51.70
70-80	30.32
80-90	10.12

Candela Tabulation

	0
0	783
5	770
15	713
25	638
35	479
45	246
55	107
65	62
75	30
85	11
90	1.6

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	102	102	102	100
	1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
	2	104	98	92	88	102	96	91	87	93	89	85	89	86	83	87	84	81	80
	3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
	4	91	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
	5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57
	6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52
	7	74	63	55	50	73	62	55	50	60	54	49	59	53	49	58	53	49	47
	8	70	58	51	46	68	57	50	45	56	50	45	55	49	45	54	49	45	43
	9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	40
	10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

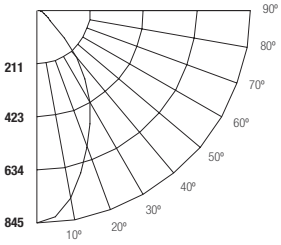
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

RL630-900L-DIMTR-120-85-40K-W-WH

TEST NO.: **EL-0913115**

INPUT WATTS: **14.7** LUMENS: **911** CRI: **85+** EFFICACY: **62** CCT: **4000K** SPACING CRITERIA: **0.94**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	52.8	4.6’
8.0	13.2	9.3’
12.0	5.9	13.9’
16.0	3.3	18.6’
20.0	2.1	23.2’
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	258.97	28.50	28.40
0-30	486.23	53.60	53.30
0-40	697.47	76.90	76.50
0-60	866.44	95.50	95.00
0-80	906.95	100.00	99.40
0-90	912.15	100.60	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	11937	13586	11937
55	5112	5584	3378
65	4015	3123	3083
75	3166	3117	3022
85	3437	3375	396

Lumens Per Zone

Zone	Lumens
0-10	75.34
10-20	183.63
20-30	227.26
30-40	211.24
40-50	124.55
50-60	44.41
60-70	25.30
70-80	15.21
80-90	5.19

Candela Tabulation

	0
0	845
5	822
15	668
25	500
35	332
45	154
55	53
65	30
75	14
85	5
90	0

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
	1	113	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
	2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82
	3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	76	75
	4	93	84	78	73	91	83	77	72	81	75	71	79	74	70	77	73	70	68
	5	88	78	71	66	86	77	70	65	75	69	65	73	68	64	71	67	64	62
	6	82	72	65	60	81	71	65	60	69	64	59	68	63	59	67	62	58	57
	7	78	67	60	55	76	66	60	55	65	59	55	63	58	54	62	58	54	52
	8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
	9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
	10	66	55	48	44	65	54	48	44	53	47	43	52	47	43	52	47	43	42

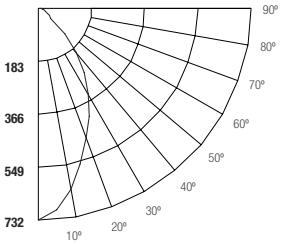
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

RL630-650L-DIMTR-120-85-40K-W-WH

TEST NO.: **EL-0913114**

INPUT WATTS: **13.9** LUMENS: **767** CRI: **85+** EFFICACY: **55.2** CCT: **4000K** SPACING CRITERIA: **0.92**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	45.7	4.4’
8.0	11.4	8.8’
12.0	5.1	13.2’
16.0	2.9	17.6’
20.0	1.8	22.0’
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	222.89	29.20	29.10
0-30	413.37	54.20	53.90
0-40	586.81	77.00	76.50
0-60	728.39	95.50	95.00
0-80	762.44	100.00	99.40
0-90	766.94	100.60	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	9878	11109	9966
55	4364	4678	2782
65	3397	2582	2547
75	2673	2569	2508
85	3117	2866	308

Lumens Per Zone

Zone	Lumens
0-10	65.23
10-20	157.66
20-30	190.48
30-40	173.44
40-50	103.69
50-60	37.90
60-70	21.27
70-80	12.78
80-90	4.49

Candela Tabulation

	0
0	731
5	698
15	556
25	410
35	271
45	127
55	45
65	26
75	12
85	4
90	1

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
	1	113	109	106	104	110	107	105	102	103	101	99	99	98	96	96	94	93	91
	2	106	100	95	91	104	98	94	90	95	91	88	92	89	86	89	86	84	82
	3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	76	75
	4	93	84	78	73	91	83	77	72	81	76	71	79	74	71	77	73	70	68
	5	88	78	71	66	86	77	70	66	75	69	65	73	68	64	72	67	64	62
	6	83	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
	7	78	67	60	55	76	66	60	55	65	59	55	64	58	54	63	58	54	53
	8	74	63	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
	9	70	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45
	10	66	55	48	44	65	55	48	44	54	48	44	53	47	44	52	47	44	42

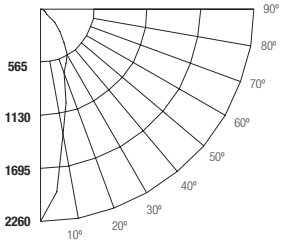
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

RL607-1200L-DIMTR-120-90-30K-CL-WH

TEST NO.: **EL-101372**

INPUT WATTS: **19** LUMENS: **1209** CRI: **90+** EFFICACY: **63.6** CCT: **3000K** SPACING CRITERIA: **0.54**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	141.2	1.7'
8.0	35.3	3.5'
12.0	15.7	5.2'
16.0	8.8	6.9'
20.0	5.6	8.7'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	420.37	35.20	34.80
0-30	701.34	58.70	58.00
0-40	972.62	81.50	80.40
0-60	1181.9	99.00	97.70
0-80	1207.54	101.10	99.90
0-90	1209.2	101.30	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	15769	17594	14146
55	6465	6577	3945
65	3802	2465	2048
75	1684	952	671
85	2231	1219	44

Lumens Per Zone

Zone	Lumens
0-10	159.82
10-20	260.54
20-30	280.98
30-40	271.27
40-50	157.67
50-60	51.61
60-70	19.86
70-80	5.77
80-90	1.66

Candela Tabulation

	0
0	2259
5	1951
15	1035
25	635
35	436
45	203
55	67
65	29
75	7
85	3
90	1

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	103	103	103	101
	1	114	111	109	106	112	109	107	104	105	103	101	101	100	98	98	96	95	93
	2	108	103	98	94	106	101	97	93	97	94	91	94	92	89	92	89	87	86
	3	102	95	89	85	100	93	88	84	91	86	83	88	84	81	86	83	80	78
	4	96	88	82	77	94	87	81	76	84	79	75	82	78	75	80	77	74	72
	5	91	81	75	70	89	81	74	70	79	73	69	77	72	69	75	71	68	66
	6	86	76	69	65	84	75	69	64	74	68	64	72	67	64	71	66	63	62
	7	81	71	64	60	80	70	64	60	69	63	59	68	63	59	67	62	59	57
	8	77	67	60	56	76	66	60	56	65	59	55	64	59	55	63	58	55	53
	9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	51	50
	10	70	59	53	49	69	59	53	49	58	52	49	57	52	48	56	52	48	47

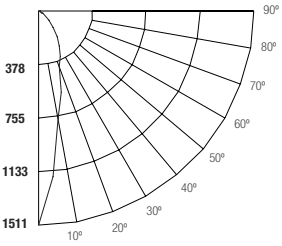
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

RL607-900L-DIMTR-120-90-30K-CL-WH

TEST NO.: **EL-101373**

INPUT WATTS: **15.3** LUMENS: **685** CRI: **90+** EFFICACY: **44.8** CCT: **3000K** SPACING CRITERIA: **0.50**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	94.4	1.6'
8.0	23.6	3.1'
12.0	10.5	4.7'
16.0	5.9	6.3'
20.0	3.8	7.8'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	266.20	39.50	38.90
0-30	431.58	64.00	63.00
0-40	574.52	85.20	83.90
0-60	673.89	99.90	98.40
0-80	683.85	101.40	99.90
0-90	684.65	101.50	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	7338	8178	6841
55	2273	2771	1492
65	1352	965	805
75	652	339	188
85	1100	685	25

Lumens Per Zone

Zone	Lumens
0-10	102.77
10-20	163.43
20-30	165.38
30-40	142.94
40-50	77.70
50-60	21.67
60-70	7.79
70-80	2.16
80-90	0.81

Candela Tabulation

	0
0	1510
5	1172
15	593
25	353
35	223
45	94
55	23
65	10
75	3
85	1
90	1

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	102
	1	115	112	109	107	112	110	107	105	106	104	102	102	100	99	98	97	96	94
	2	109	104	99	96	107	102	98	95	99	95	93	96	93	91	93	91	89	87
	3	103	96	91	87	101	95	90	86	92	88	85	90	86	83	87	84	82	80
	4	98	90	84	79	96	88	83	79	86	82	78	84	80	77	82	79	76	74
	5	92	84	77	73	91	83	77	73	81	76	72	79	75	71	78	74	71	69
	6	88	78	72	68	86	78	72	67	76	71	67	75	70	66	73	69	66	64
	7	83	74	67	63	82	73	67	63	72	66	62	70	66	62	69	65	62	60
	8	79	69	63	59	78	69	63	59	68	62	58	67	62	58	66	61	58	56
	9	76	66	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53
	10	72	62	56	52	71	62	56	52	61	55	52	60	55	52	59	55	52	50

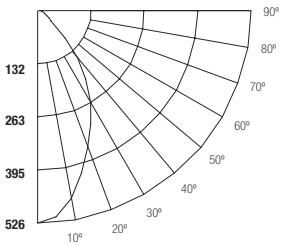
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

RL630-650L-DIMTR-120-90-30K-W-WH

TEST NO.: **EL-101346**

INPUT WATTS: **13** LUMENS: **622** CRI: **90+** EFFICACY: **47.8** CCT: **3000K** SPACING CRITERIA: **1.00**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	32.7	5.1'
8.0	8.2	10.2'
12.0	3.6	15.2'
16.0	2.0	20.3'
20.0	1.3	25.4'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	167.54	27.10	26.90
0-30	320.63	51.80	51.50
0-40	465.48	75.20	74.80
0-60	589.52	95.20	94.70
0-80	618.59	99.90	99.40
0-90	622.19	100.50	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	9550	10480	9401
55	4827	4324	2489
65	3310	2029	2022
75	2108	1991	1945
85	2382	2199	220

Lumens Per Zone

Zone	Lumens
0-10	47.42
10-20	120.13
20-30	153.09
30-40	144.85
40-50	89.85
50-60	34.19
60-70	18.46
70-80	10.61
80-90	3.59

Candela Tabulation

	0
0	522
5	523
15	455
25	255
35	243
45	123
55	50
65	25
75	9
85	3
90	0

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%			30%			10%			0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	100
	1	113	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
	2	106	100	95	90	103	98	93	89	94	91	87	91	88	85	88	86	84	82
	3	99	91	85	80	97	90	84	79	87	82	78	84	80	77	82	78	76	74
	4	93	83	77	72	91	82	76	71	80	75	70	78	73	69	76	72	69	67
	5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61
	6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	57	56
	7	77	66	59	54	75	65	58	54	64	58	53	63	57	53	61	56	53	51
	8	72	61	54	50	71	61	54	49	60	53	49	58	53	49	57	52	49	47
	9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44
	10	65	54	47	43	64	53	47	42	52	46	42	51	46	42	51	46	42	41

***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*