




690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Architectural Review Board Staff Report

Project type: Amended Architectural Elevations
Meeting Date: November 14, 2019
From: Chris Dietz, Planner 
Location: 40 THF Blvd
Description: **Chesterfield Commons East, Lot 7 (Target)**: Amended Architectural Elevations for a retail anchor on a 16.6-acre tract of land, zoned “PC” Planned Commercial District located on the southwest corner of the intersection of THF Boulevard and Chesterfield Commons Drive (17T140341).

PROPOSAL SUMMARY

Kimley-Horn and Associates, on behalf of Target Corporation, has submitted Amended Architectural Elevations for a 143,000 square-foot anchor retail building located in the Chesterfield Commons East subdivision. The proposed changes are limited entirely to the elevations themselves, with no proposed changes to the parking lot, landscaping or building footprint.

Proposed changes include:

- Replacing material on a portion of the main façade along the north elevation from brick to synthetic wood.
- Applying silver 3M film to the framing of each of the two main entrances (Currently blue and green).
- Retrofitting existing soffit lighting to LED fixtures over each of the main entrances.
- Recoating each of the south, east and west elevations with paint to match existing color.

HISTORY OF SUBJECT SITE

The original Site Development Concept Plan for this parcel was approved in 2000 after being rezoned from “NU” Non- Urban District to “PC” Planned Commercial District” via Ordinance 1653 and amended in 2001 as Chesterfield Valley Plaza development. In 2004, the property was rezoned once more, combining both an adjacent “C-8” Planned Commercial District and this “PC” Planned Commercial District into one district by way of Ordinance 2128, establishing the Chesterfield Commons East subdivision. Ordinance 2128 is currently the governing site-specific ordinance.

A Design Package was required as part of the Site Development Concept Plan for the Chesterfield Commons development per the site-specific ordinance and was approved in May 2001. The approved Design Package matches that of Chesterfield Commons, essentially rendering Chesterfield Commons East an extension of the

(Continued)

overall Commons area. The following architectural design guidelines are included in the Design Package pertaining to the retail center:

1. Maintain the hierarchy between the anchor stores, junior anchors and small shops.
2. Create uniformity in the overall design concept while respecting and providing for each Tenant's identity and trade dress.
3. Provide for flexible, visible signability.
4. Utilize proven, high quality materials to create and preserve a design of high quality and maintainability.
5. Provide for a high level of pedestrian animation between the parking area and the storefront.



Figure 1: Aerial of Subject Site

STAFF ANALYSIS

A. Materials and Color

The existing primary building material is brick, consistent with adjacent properties and other developments within the Chesterfield Commons area. These existing materials are to be kept in place and washed. Existing paint on the north, south, east and west elevations is to remain in place as well and will be recoated to match each of the existing colors.

(Continued)

The north elevation holds the majority of changes proposed in this request. This includes the addition of simulated wood panels fastened to the existing façade in the style of “Madison Walnut” Stonewood phenolic resin panels, measuring 32”x 8” with 16” x 8” courses in running bond in the upper center area of the storefront.

Silver 3M film is proposed to cover existing green and blue framing at the main entrances, as shown below:



Figure 2: Existing Entrance Colors

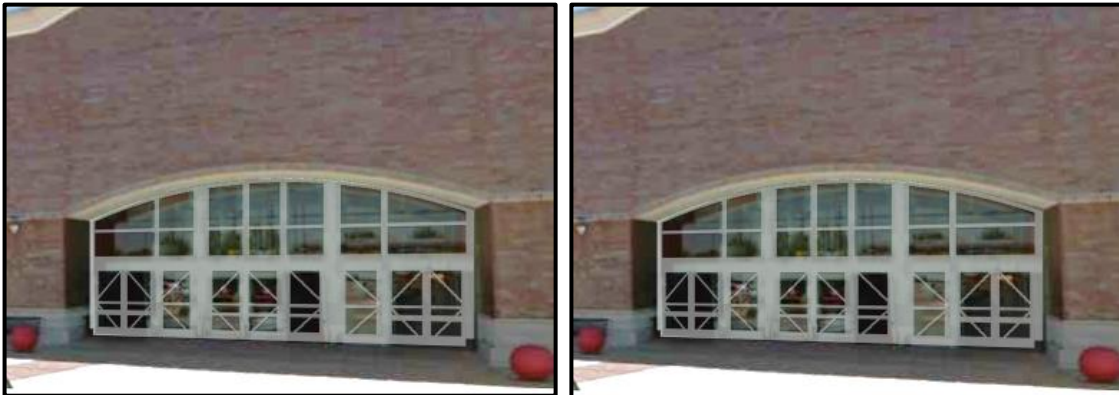


Figure 3: Proposed Entrance Color and Material

Figures 4.a and 4.b depict the existing and proposed modifications to the north elevation as part of this request:



Figure 4.a: Existing North Elevation

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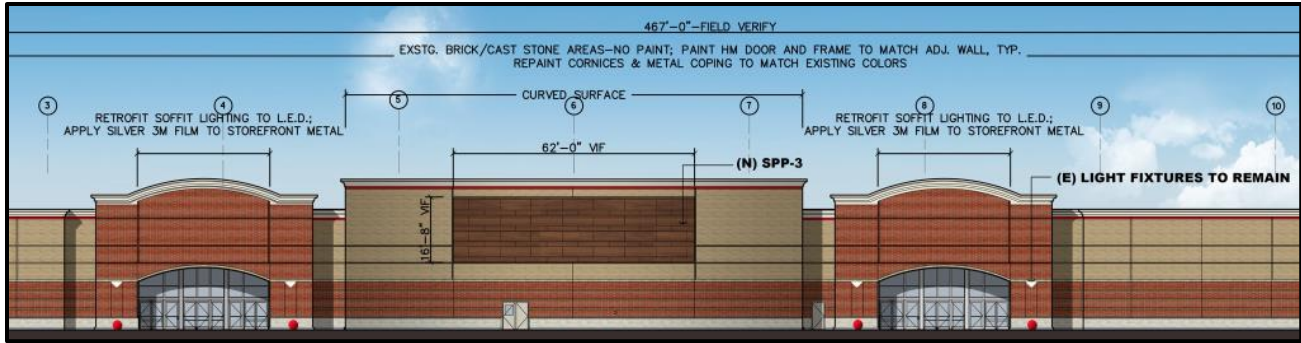


Figure 4.b: Proposed North Elevation Segment

B. Lighting

One minor update to this structure regarding lighting is the replacement of existing soffit lighting over each of the two main entrances to LED fixtures. All other lighting fixtures are to remain unchanged. Please refer to the North Elevation and Cutsheets within the packet for further details regarding this proposed change.

C. Landscaping

The existing planters on the north elevation are proposed to remain unchanged. No other changes are proposed to the existing landscaping. However, Staff has advised applicant that the site must address any landscape deficiencies before any occupancy permit is issued.

D. Signage

Signage is not part of the proposal before the Architectural Review Board and will be reviewed separately.

E. Renderings:



Figure 5: Daytime Rendering

(Continued)



Figure 6: Nighttime Rendering

DEPARTMENTAL INPUT

Staff has reviewed the Amended Architectural Elevations and found the submittal to be compliant with all of City of Chesterfield's code requirements. Staff requests review and recommendation on the Amended Architectural Elevations for Chesterfield Commons East, Lot 7 (Target).

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application.

- 1) "I move to forward the Amended Architectural Elevations for Chesterfield Commons East, Lot 7 (Target), as presented, with a recommendation for approval (or denial)."

- 2) "I move to forward the Amended Architectural Elevations for Chesterfield Commons East, Lot 7 (Target) with the following recommendations..."

Attachments

1. Architectural Review Packet Submittal



November 5, 2019

City of Chesterfield
Planning and Development Services
690 Chesterfield Pkwy West
Chesterfield, MO 63017

**Re: Target – Architect’s Statement of Design
40 THF Blvd
Chesterfield, MO 63005**

To Whom It May Concern,

Target is planning to remodel the interior of the store at 40 THF Boulevard and make many improvements to the store layout and finishes. In conjunction with the interior work Target is planning a modest update to the exterior. Existing brick and precast concrete will be cleaned. Painted areas will be re-painted to match existing colors. The center of the front wall is to receive a layer of simulated wood-grain panels with a dark walnut finish to compliment the warm brick tones of the existing wall. The aluminum framing of the two entrance storefronts are currently blue and green; the metal framing elements of each entrance will be wrapped with a durable, metallic silver film manufactured by 3M, to update the color.



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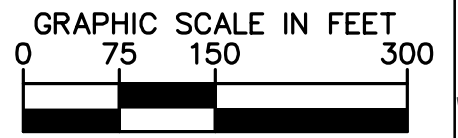
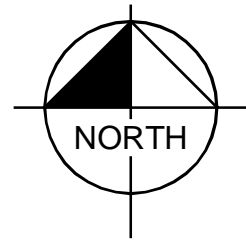


CHESTERFIELD AIRPORT RD.

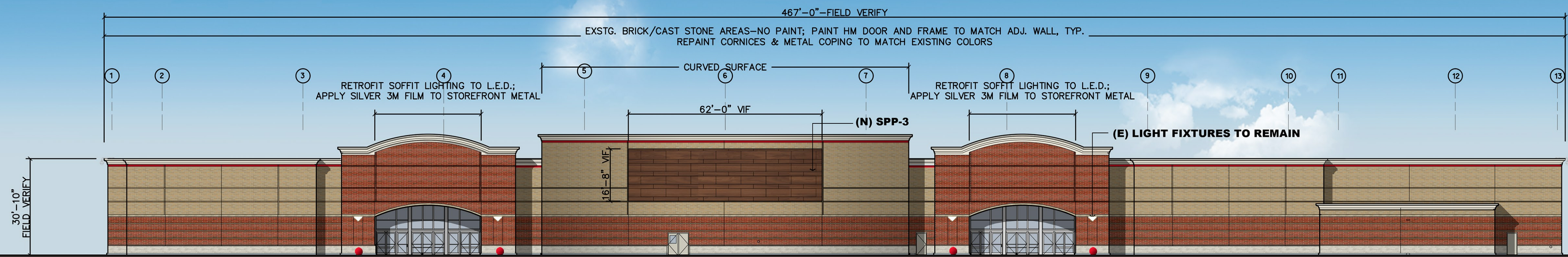
40TH BLVD.

EX. TARGET BUILDING
138,000± SF

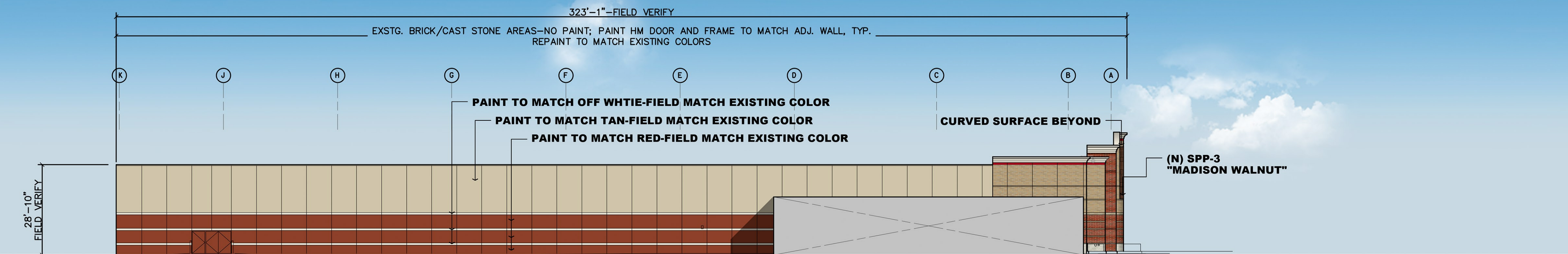
EDISON AVE.



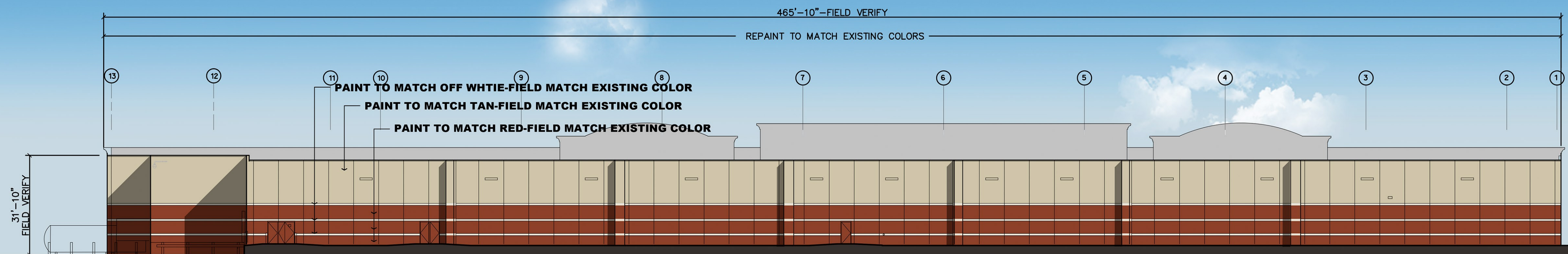
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City of Chesterfield
Nov 04 2019
Department of Public Services



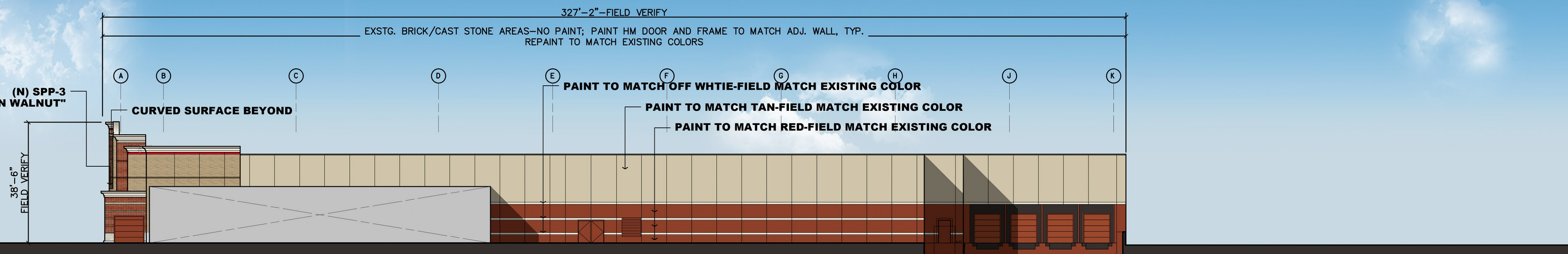
North Elevation







East Elevation



South Elevation



West Elevation

-  OFF WHITE-FIELD MATCH EXISTING COLOR
-  TAN-FIELD MATCH EXISTING COLOR
-  RED-FIELD MATCH EXISTING COLOR
-  SIMULATED WOOD:
STONEWOOD PHENOLIC RESIN PANELS
"MADISON WALNUT" 16" x 8' & 32" x 8'
COURSES IN RUNNING BOND

- NOTE:**
- * ALL COLORS ARE FOR REFERENCE ONLY.
 - * EXISTING BRICK, ICCMU, CAST STONE & AREAS-NO PAINT; PAINT HM DOOR AND FRAME TO MATCH ADJ. WALL, TYP.
 - * RESEAL ICCMU AND CAST STONE CAP.
 - *EXISTING LIGHT FIXTURES TO REMAIN
 - *STORE EXTERIOR WALLS ARE PRIMARILY BRICK, ICCMU & PRECAST CONCRETE
 - *BEN-4 : TRADITIONAL, COLOR.....BLACK





T-1353 Chesterfield, MO: Exterior Elevation Refresh

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City of Chesterfield
Nov 04 2019
Department of Public Services




T-1353 Chesterfield, MO: Exterior Elevation Refresh

RECEIVED
City of Chesterfield
Nov 04 2019
Department of Public Services



T-1353 Chesterfield, MO: Exterior Elevation Refresh

October 15, 2019 

ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- One fixture converts nearly any manufacturers incandescent, CFL or H.I.D. fixtures with a rough-in inner diameter of 7-5/8" to 8-1/8" diameter to high efficiency LED
- All installation can be performed from below the ceiling with out removing existing fixture
- Energy savings up to 50-60% vs. CFL and HID
- Superior-quality white LED light output using Chip on Board technology
- No harmful ultraviolet or infrared wavelengths • No lead or mercury

PRODUCT SPECIFICATIONS

OPTICS

Hyperbolic: Unique hyperbolic shape optimized for small, directional LED source, maximizes fixture efficiency while creating the "Silent Ceiling" appearance by reducing lamp image and aperture brightness • Geometry of hyperbolic curve provides unique aperture appearance and smoother light distribution • Narrow Flood, medium flood and wide flood distributions available

Parabolic/Lens: Computer-optimized parabolic reflector with frosted convexed lens regressed into cone provides uniform distribution with no striations • Concealed LED array provides superior aesthetic appeal both on and off

Wall Wash: Available in Hyperbolic and Parabolic. Both are computer-optimized with an integral wall wash kicker and frosted bubble lens regressed into reflector, providing uniform distributions with no striations

Finishes: Low iridescent specular, semi-specular and diffuse Alzak® finishes available with integral white flange • See reflector options for other colors and finishes

Baffle: White or black painted deep multi-groove aluminum baffle insert with integral white painted flange and frosted convexed glass lens

ELECTRICAL

LED Light Engine: Compact light source delivers uniform illumination without pixilation, enabling excellent beam control • Consistent fixture-to-fixture color temperature within 3 SDCM • Replaceable light engine with quick connector mounts directly to heat sink and is easily replaceable • CRI> 80 standard, 90 & 97 CRI available, see options for compatibility

Passive Cooling: Aluminum heat sink integrated directly with housing provides superior thermal management to ensure the long life of LED

Active Cooling: Low noise, high efficiency, long life fan with ultra-low thermal resistance heat sink ensures long life and maximum performance of LEDs on light weight units of 4500 lumens and higher • Active cooling unit easily accessible from above or below the ceiling

LED Driver: Power factor >0.9 • Easily replaceable from above or below the ceiling

Dimming: Dimmable via 0-10V protocol standard • Optional drivers available for use with Lutron EcoSystem, 2-wire dimmers DMXR, or DALI • For a list of compatible dimmers, see [LED-DIM](#).

Life: Rated for 60,000 hours at 70% lumen maintenance • Available with optional Lumen Depreciation Indicator (LDI)

Operation Temperature: -20° C to 50° C

Emergency Battery Pack (Optional) output: Provides a minimum of 600 (BR), or 1100 (HBR) lumens for a minimum duration of 90 minutes

ORDERING INFORMATION: Complete Catalog# Example Includes (Rough-In, option, reflector): LRT8 08LM 27K 120 G3 90CRI ZT F HW CS PF

ROUGH-IN							REFLECTOR*			
SERIES	LIGHT ENGINE LUMENS	COLOR TEMP.	VOLTAGE	GENERATION	CRI	DRIVER	ROUGH-IN OPTIONS	TRIM STYLE	FINISH	TRIM OPTIONS
LRT8										
LRT8	08LM 800 Lumens	27K 2700K	120 120 Volt	G3 Generation 3	80CRI 80+ CRI	±FD Forward or Reverse Phase Dimming Driver (120V only)	±F Fuse and Fuse Holder	HM Hyperbolic - Medium	CD Clear Diffuse	PF White Flange (Not available on WH finish)
13LM 1300 Lumens	15LM 1500 Lumens	30K 3000K	277 277 Volt		90CRI 90+ CRI	*FDL Forward Phase Dimming Lutron Driver 120V Only	CP Chicago Plenum	HN Hyperbolic - Narrow	CS Clear Specular	AE1BN Enabled with Atrius™:
17LM 1700 Lumens	23LM 2300 Lumens	35K 3500K	347 347 Volt		97CRI 97+ CRI	*PD Lutron Ecosystem Dimming Driver	LDI Lumen Depreciation Indicator (Cannot be used w/BR or HBR options, EZ1 or EZB drivers)	HW Hyperbolic - Wide	SS Clear Semi-Specular	WET Wet Location (Only available w/ P & BAF options)
28LM 2800 Lumens	33LM 3300 Lumens	40K 4000K	*MVOLT Multi-Volt (120-277 Volt)			ZT 0-10V Dimming	+BR Emergency Battery Pack w/Remote Test Switch	HWS Hyperbolic Single Wall Wash	BL Black Baffle	
40LM 4000 Lumens	45LM 4500 Lumens					DMXR DMX/RDM Driver	+HBR High Lumen Emergency Battery Pack w/Remote Test Switch	P Parabolic Reflector Trim	WH White	
45LM 4500 Lumens	50LM 5000 Lumens					DMXC DMX/RDM Driver w/ Phoenix Connectors (Not compatible w/ CP option)	#INC Medium base socket adapter for quick retro-fit of incandescent fixtures (120V only)	WC Corner Wall Wash		
55LM 5500 Lumens	60LM 6000 Lumens					DALI DALI Control Dimming	#NL nLight® Dimming Pack Controls (Not compatible with CP option). Only use w/ ZT, EZ1 and EZB drivers.	WD Double Wall Wash		
65LM 6500 Lumens	70LM 7000 Lumens					EZ1 eLdsLED 0-10V ECD driver. Linear dimming to 1% min. (Up to 5500 lumens max.)	#NLER nLight® Dimming Pack Controls. ER controls fixtures on emergency circuit operation (Not compatible with CP option). Only use w/ ZT, EZ1 and EZB drivers.	WS Single Wall Wash		
75LM 7500 Lumens	80LM 8000 Lumens					EZB eLdsLED 0-10V Solo driver. Logarithmic dimming to <1% (Up to 5500 lumens max.)		BAF Baffle (Black or White)		
85LM 8500 Lumens	90LM 9000 Lumens									

* Only 800, 1300, 1500 & 1700 lumen fixtures are multi-volt (120/277V), if using (F, NL or NLER) voltage must be specified
 • Not available for 4000 lumens and up
 # INC option requires 120V at socket
 + Not available for 347V or CP
 • 97CRI (2700 & 3000K only)
 † Not available for 4500 lumens and up

J7.1.19G3





**800 TO 9000 LUMEN
8" LED RETRO-FIT**

HYPERBOLIC / PARABOLIC / WALLWASH

LRT8 SERIES

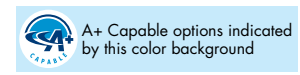
Type	Cat. No.
Project:	
Notes:	



LABELS AND LISTINGS

- UL & cUL listed for damp locations • UL spacing requirement for 4000 lumen and above: minimum of 4' between fixture centers, 3" overhead clearance, 2' from fixture center to side wall • RoHS compliant • EMI complies with FCC 47, Part 15, Class A • ENERGY STAR® Certified, see back page for designated products • I.B.E.W. Union made • ARRA Compliant

Warranty: 5 years when used in accordance with manufacturing guidelines. Specifications subject to change without notice.

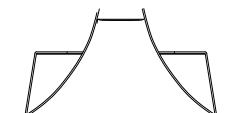


PRODUCT SPECIFICATIONS (cont.)

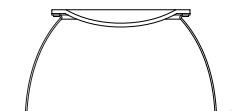
MECHANICAL

Retro-fit Housing: Housing installs from below ceiling • Secured in place by three (3) tension clips • Tension clips accommodate ceilings from 1/2" to 1-1/8" thick • Integral heat sink conducts heat away from LED light engine • Driver is accessible from below the ceiling and can be upgraded to accommodate future technology improvements.

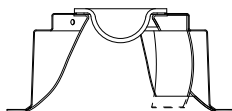
TRIMS:



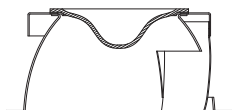
HYPERBOLIC



PARABOLIC



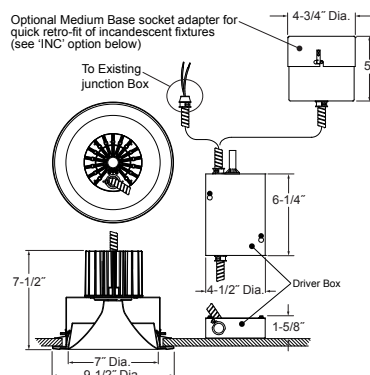
HYPERBOLIC WALLWASH



PARABOLIC WALLWASH

APERTURE: 7" Dia.
 CEILING CUTOUT: 8-1/8" Dia.
 OVERLAP: 9-1/2" Dia.

PASSIVE COOLING DIMENSIONS: 800 - 9000 Lumens



ENERGY STAR® Certified

	PRODUCT#	FIXTURE CONFIGURATIONS = ENERGY STAR
	MVOLT (120V-277V), 80 CRI LRT8 (XXLM) (YYK) MVOLT G3 80CRI (ZZ) (CC) ▲	Lumen Package: XX = 08LM*, 13LM*, 15LM CCT: YY = 27K, 30K, 35K, 40K Voltage: MVOLT (120V-277V) CRI: 80CRI Trim Type: ZZ = HN, HM, HW, P Trim Color/Finish: CC = CS, CSS, CD
	120V/277V, 80 CRI LRT8 (XXLM) (YYK) (V) G3 80CRI (ZZ) (CC) ▲	Lumen Package: XX = 17LM, 23LM, 28LM, 33LM, 40LM, 45LM, 50LM, 55LM, 60LM, 65LM, 70LM, 75LM, 80LM, 85LM, 90LM CCT: YY = 27K, 30K, 35K, 40K Voltage: V = 120, 277 CRI: 80CRI Trim Type: ZZ = HN, HM, HW, P Trim Color/Finish: CC = CS, CSS, CD

▲ PD and FDL options are not ENERGY STAR® Certified.

* Indicated lumen packages are not ENERGY STAR® Certified with -DMXR or -DALI options when used with 277 volts.

ENGINEERING DATA: 347 Volt available, consult factory

VOLTAGE																		
120																		
LIGHT ENGINE LUMENS	800	1300	1500	1700	2300	2800	3300	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000
CCT																		
2700K/3000K/3500K/4000K																		
INPUT CURRENT	0.064	0.102	0.12	0.151	0.202	0.250	0.290	0.375	0.358	0.383	0.426	0.457	0.501	0.553	0.604	0.645	0.694	0.769
INPUT WATTAGE	7.7W	12.2W	14.4W	18.1W	24.1W	29.8W	34.6W	45.0W	42.3W	45.3W	50.4W	54.7W	59.9W	66.2W	72.2W	77.1W	82.9W	92.0W
INPUT FREQUENCY	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
THD%	6.67	4.30	4.01	3.68	5.59	5.70	4.16	3.93	14.00	13.26	14.48	4.61	4.66	3.97	4.24	3.81	3.74	3.53
POWER FACTOR	0.991	0.993	0.993	0.995	0.994	0.995	0.997	0.998	0.996	0.996	0.996	0.996	0.996	0.997	0.996	0.996	0.996	0.996
VOLTAGE																		
277																		
LIGHT ENGINE LUMENS	800	1300	1500	1700	2300	2800	3300	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000
CCT																		
2700K/3000K/3500K/4000K																		
INPUT CURRENT	0.032	0.050	0.058	0.073	0.095	0.113	0.135	0.168	0.177	0.192	0.204	0.220	0.222	0.251	0.288	0.306	0.334	0.345
INPUT WATTAGE	8.2W	12.5W	14.6W	18.3W	24.3W	29.5W	35.0W	44.3W	42.8W	45.9W	50.8W	54.8W	61.1W	63.4W	72.7W	77.0W	83.7W	88.9W
INPUT FREQUENCY	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
THD%	11.15	10.45	10.99	11.11	10.06	8.38	8.48	7.98	21.91	19.95	21.30	22.02	23.02	21.97	20.07	19.57	17.10	14.74
POWER FACTOR	0.915	0.889	0.903	0.911	0.921	0.942	0.935	0.955	0.874	0.864	0.898	0.900	0.994	0.910	0.912	0.908	0.904	0.906

HYPERBOLIC

DELIVERED LUMENS/LUMENS PER WATT (40K 80CRI)																		
	08LM 40K		13LM 40K		15LM 40K		17LM 40K		23LM 40K		28LM 40K		33LM 40K		40LM 40K		45LM 40K	
TRIM/FINISH	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
HN CS	871	93.7	1413	93.6	1618	91.4	1796	80.9	2305	77.3	2501	83.9	2874	83.1	3488	77.7	4198	101.2
HN CSS	776	83.4	1258	83.3	1441	81.4	1599	72.0	2052	68.9	2316	77.7	2662	76.9	3230	71.9	3536	85.2
HN CD	701	75.4	1137	75.3	1302	73.5	1444	65.1	1854	62.2	2100	70.5	2413	69.8	2929	65.2	3313	79.8
HM CS	852	91.6	1369	90.7	1582	89.4	1756	79.1	2254	75.6	2436	81.8	2800	80.9	3398	75.7	3806	91.7
HM CSS	832	89.5	1350	89.4	1546	87.3	1715	77.3	2202	73.9	2363	79.3	2716	78.5	3296	73.4	3626	87.4
HM CD	738	79.4	1197	79.3	1371	77.5	1521	68.5	1953	65.5	2158	72.4	2480	71.7	3010	67.0	3200	77.1
HW CS	910	97.9	1472	97.5	1690	95.5	1876	84.5	2408	80.8	2628	88.2	3020	87.3	3665	81.6	3992	96.2
HW CSS	878	94.4	1423	94.3	1630	92.1	1809	81.5	2322	77.9	2532	85.0	2910	84.1	3532	78.7	3680	88.7
HW CD	841	90.4	1363	90.3	1561	88.2	1732	78.0	2224	74.6	2426	81.4	2788	80.6	3384	75.4	3396	81.8
	50LM 40K		55LM 40K		60LM 40K		65LM 40K		70LM 40K		75LM 40K		80LM 40K		85LM 40K		90LM 40K	
TRIM/FINISH	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
HN CS	4570	99.8	5107	97.5	5265	96.4	5771	97.7	6325	95.3	6688	93.3	7005	92.3	7463	90.7	7906	86.4
HN CSS	3849	84.0	4302	82.1	4436	81.2	4862	82.3	5328	80.2	5634	78.6	5901	77.7	6287	76.4	6660	72.8
HN CD	3607	78.7	4031	76.9	4156	76.1	4555	77.1	4992	75.2	5279	73.6	5529	72.8	5891	71.6	6240	68.2
HM CS	4143	90.5	4631	88.4	4774	87.4	5233	88.5	5734	86.4	6064	84.6	6351	83.7	6767	82.2	7168	78.3
HM CSS	3947	86.2	4412	84.2	4548	83.3	4985	84.4	5463	82.3	5777	80.6	6050	79.7	6447	78.3	6829	74.6
HM CD	3483	76.0	3893	74.3	4013	73.5	4399	74.4	4821	72.6	5098	71.1	5339	70.3	5689	69.1	6026	65.9
HW CS	4345	94.9	4857	92.7	5007	91.7	5488	92.9	6014	90.6	6360	88.7	6661	87.8	7097	86.2	7518	82.2
HW CSS	4006	87.5	4477	85.4	4615	84.5	5059	85.6	5544	83.5	5863	81.8	6140	80.9	6542	79.5	6930	75.7
HW CD	3697	80.7	4132	78.9	4260	78.0	4669	79.0	5117	77.1	5411	75.5	5667	74.7	6038	73.4	6396	69.9

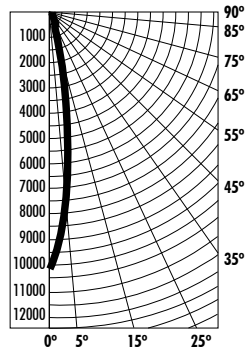
PARABOLIC

DELIVERED LUMENS/LUMENS PER WATT (40K 80CRI)																		
	08LM 40K		13LM 40K		15LM 40K		17LM 40K		23LM 40K		28LM 40K		33LM 40K		40LM 40K		45LM 40K	
TRIM/FINISH	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P CS	719	77.3	1155	76.5	1336	75.5	1482	66.8	1903	63.9	2051	68.8	2357	68.1	2860	63.7	3377	81.4
P CSS	721	77.5	1158	76.7	1339	75.6	1486	66.9	1907	64.0	2053	68.9	2360	68.2	2864	63.8	3392	81.7
P CD	622	66.9	999	66.2	1155	65.3	1282	57.8	1646	55.2	1764	59.2	2027	58.6	2460	54.8	2939	70.8
	50LM 40K		55LM 40K		60LM 40K		65LM 40K		70LM 40K		75LM 40K		80LM 40K		85LM 40K		90LM 40K	
TRIM/FINISH	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P CS	3676	80.3	4108	78.4	4235	77.6	4642	78.5	5087	76.6	5380	75.0	5634	74.2	6003	72.9	6359	69.5
P CSS	3692	80.6	4127	78.8	4254	77.9	4663	78.9	5110	77.0	5404	75.4	5660	74.6	6030	73.3	6388	69.8
P CD	3199	69.9	3576	68.2	3686	67.5	4041	68.4	4428	66.7	4683	65.3	4904	64.6	5225	63.5	5535	60.5

BEAM SPREAD

TRIM	800-2300 LUMEN	2800-4000 LUMEN	4500-9000 LUMEN
LRT8 HN CS	15°	16°	24°
LRT8 HN CSS	20°	22°	28°
LRT8 HN CD	32°	36°	50°
LRT8 HM CS	48°	53°	64°
LRT8 HM CSS	48°	53°	64°
LRT8 HM CD	60°	60°	64°
LRT8 HW CS	68°	68°	70°
LRT8 HW CSS	68°	68°	70°
LRT8 HW CD	68°	68°	70°
	800-4000 LUMEN	4500-9000 LUMEN	
LRT8 P CS	32°	40°	
LRT8 P CSS	32°	40°	
LRT8 P CD	70°	70°	
LRT8 BAF BL	76°	76°	

Catalog Number: LRT8 13LM 40K MVOLT G3; HN CS
 PHOTOMETRIC REPORT
 Test Number: PRO6152984
 Total Lumen Output: 1413
 Center Beam Candlepower: 10,137
 Luminaire Efficacy: 93.6 lm/w (4K)
 Luminaire Spacing Criteria: 0.29
 Luminaire: Clear Specular Alzak® R,
 Narrow Flood Hyperbolic Reflector.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	10137	
5°	7100	678
15°	1016	288
25°	587	272
35°	275	173
45°	0	0
55°	0	0
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	281.6	137.3	1.6'
7'	206.9	100.9	1.8'
8'	158.4	77.2	2.1'
9'	125.1	61.0	2.3'
10'	101.4	49.4	2.6'
11'	83.8	40.8	2.9'
12'	70.4	34.3	3.1'
13'	60.0	29.2	3.4'
14'	51.7	25.2	3.6'
15'	45.1	22.0	3.9'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	1238	87.7
0-40°	1411	100.0
0-60°	1411	100.0
0-90°	1411	100.0
90-180°	0	0.0
0-180°	1411	100.0

CCT MULTIPLIER
(800-2300 Lumens)

27K = 0.91 35K = 0.98
 30K = 0.96 40K = Baseline

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	64	56	49
6' x 6'	44	39	34
7' x 7'	33	29	25
8' x 8'	25	22	19
9' x 9'	20	17	15
10' x 10'	16	14	12
11' x 11'	13	12	10
12' x 12'	11	10	8

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	0
55°	0
65°	0
75°	0
85°	0

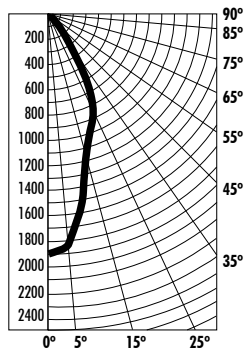
COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0	
0	116	116	116	116	113	113	113	113	108	108	108	103	103	103	99	
1	112	109	108	106	109	107	106	104	104	102	101	100	99	98	97	
2	108	104	101	99	106	103	100	98	99	97	95	97	95	93	94	
3	104	99	96	93	102	98	95	92	96	93	91	94	91	89	91	
4	101	95	91	88	99	94	91	88	92	89	87	91	88	86	89	
5	98	92	87	84	96	91	87	84	89	86	83	88	85	83	86	
6	94	88	84	81	93	88	84	81	86	83	80	85	82	80	84	
7	92	85	81	78	91	85	81	78	84	80	77	83	79	77	82	
8	89	82	78	75	88	82	78	75	81	77	75	80	77	75	79	
9	87	80	76	73	86	79	76	73	79	75	73	78	75	72	77	
10	84	78	74	71	83	77	73	71	77	73	71	76	73	70	75	

Catalog Number: LRT8 13LM 40K 120 G3; HM CS

PHOTOMETRIC REPORT
 Test Number: PRO2150594
 Total Lumen Output: 1369
 Center Beam Candlepower: 1895
 Luminaire Efficacy: 90.7 lm/w (4K)
 Luminaire Spacing Criteria: 0.66
 Luminaire: Clear Specular Alzak® Reflector,
 Open Bottom, Medium Distribution.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	1893	
5°	1845	176
15°	1191	338
25°	915	423
35°	402	252
45°	228	177
55°	0	0
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	52.6	20.2	5.3'
7'	38.6	14.8	6.1'
8'	29.6	11.4	7.0'
9'	23.4	9.0	7.9'
10'	18.9	7.3	8.8'
11'	15.6	6.0	9.7'
12'	13.1	5.1	10.5'
13'	11.2	4.3	11.4'
14'	9.7	3.7	12.3'
15'	8.4	3.2	13.2'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	937	68.5
0-40°	1189	86.9
0-60°	1366	99.8
0-90°	1368	100.0
90-180°	0	0.0
0-180°	1368	100.0

CCT MULTIPLIER
(800-2300 Lumens)

27K = 0.91 35K = 0.98
 30K = 0.96 40K = Baseline

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	61	49	38
6' x 6'	42	34	26
7' x 7'	31	25	19
8' x 8'	24	19	15
9' x 9'	19	15	12
10' x 10'	15	12	9
11' x 11'	13	10	8
12' x 12'	11	8	7

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	12,995
55°	0
65°	0
75°	319
85°	0

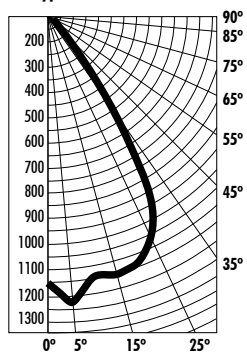
COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0	
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	
1	112	110	107	105	110	107	105	103	103	102	100	100	98	97	96	
2	107	102	98	94	104	100	96	93	97	94	91	94	92	89	91	
3	101	95	90	86	99	93	89	85	91	87	84	88	85	83	86	
4	96	88	83	79	94	87	82	78	85	81	77	83	80	76	81	
5	91	83	77	73	89	82	76	72	80	75	72	78	74	71	77	
6	86	78	72	67	85	77	71	67	75	70	67	74	70	66	73	
7	82	73	67	63	81	72	66	62	71	66	62	70	65	62	69	
8	78	69	63	59	77	68	62	58	67	62	58	66	61	58	65	
9	74	65	59	55	73	64	59	55	63	58	55	62	58	54	62	
10	71	61	55	52	70	61	55	51	60	55	51	59	54	51	58	

Catalog Number: LRT8 13LM 40K 120 G3; HW CS

PHOTOMETRIC REPORT
 Test Number: PRO2150596
 Total Lumen Output: 1472
 Center Beam Candlepower: 1245
 Luminaire Efficacy: 97.5 lm/w (4K)
 Luminaire Spacing Criteria: 1.03
 Luminaire: Clear Specular Alzak® Reflector,
 Open Bottom, Wide Distribution.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	1155	
5°	1236	118
15°	1152	327
25°	1068	494
35°	574	360
45°	218	169
55°	1	1
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	32.1	9.7	8.2'
7'	23.6	7.1	9.6'
8'	18.0	5.5	10.9'
9'	14.3	4.3	12.3'
10'	11.5	3.5	13.7'
11'	9.5	2.9	15.0'
12'	8.0	2.4	16.4'
13'	6.8	2.1	17.8'
14'	5.9	1.8	19.1'
15'	5.1	1.6	20.5'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	939	63.8
0-40°	1299	88.3
0-60°	1469	99.8
0-90°	1471	100.0
90-180°	0	0
0-180°	1471	100.0

CCT MULTIPLIER
(800-2300 Lumens)

27K = 0.91 35K = 0.98
 30K = 0.96 40K = Baseline

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	65	52	39
6' x 6'	45	36	27
7' x 7'	33	26	20
8' x 8'	25	20	15
9' x 9'	20	16	12
10' x 10'	16	13	10
11' x 11'	13	11	8
12' x 12'	11	9	7

LUMINANCE DATA

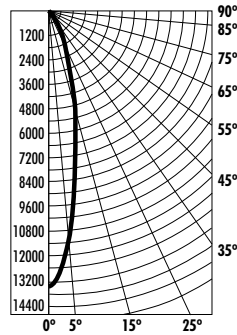
Angle in Degrees	Candela/M ²
45°	12,416
55°	70
65°	217
75°	0
85°	0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0	
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	
1	111	108	106	103	108	106	104	102	102	100	99	98	97	96	95	
2	105	100	96	93	103	98	95	92	95	92	90	92	90	88	90	
3	99	93	88	84	97	92	87	83	89	85	82	87	83	80	84	
4	94	86	81	76	92	85	80	76	83	78	75	81	77	74	79	
5	89	80	74	70	87	79	74	70	78	73	69	76	72	68	74	
6	84	75	69	64	83	74	68	64	73	67	64	71	67	63	70	
7	79	70	64	59	78	69	63	59	68	63	59	67	62	59	66	
8	75	65	59	55	74	65	59	55	63	58	55	63	58	54	62	
9	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	
10	68	58	52	48	67	57	51	48</								

Catalog Number: LRT8 45LM 40K (G3); HN CS
PHOTOMETRIC REPORT
Test Number: PRO6150281
Total Lumen Output: 4198
Center Beam Candelperower: 13,290
Luminaire Efficacy: 101.2 lm/w (4K)
Luminaire Spacing Criteria: 0.43
Luminaire: Clear Specular Alzak®,
 Narrow Flood Hyperbolic Reflector.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela Lumens
0°	13290
5°	11505 1098
15°	5207 1476
25°	2344 1085
35°	854 537
45°	0 0
55°	0 0
65°	0 0
75°	0 0
85°	0 0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	369.2	172.5	2.6'
7'	271.2	126.7	3.0'
8'	207.7	97.0	3.4'
9'	164.1	76.7	3.9'
10'	132.9	62.1	4.3'
11'	109.8	51.3	4.7'
12'	92.3	43.1	5.2'
13'	78.6	36.7	5.6'
14'	67.8	31.7	6.0'
15'	59.1	27.6	6.5'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	3659	87.2
0-40°	4195	100.0
0-60°	4195	100.0
0-90°	4195	100.0
90-180°	0	0
0-180°	4195	100.0

CCT MULTIPLIER
(3300-4000 Lumens)

27K = 0.91 35K = 0.99
 30K = 0.96 40K = 1.00

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	188	161	134
6' x 6'	131	112	93
7' x 7'	96	82	69
8' x 8'	73	63	52
9' x 9'	58	50	41
10' x 10'	47	40	34
11' x 11'	39	33	28
12' x 12'	33	28	23

LUMINANCE DATA

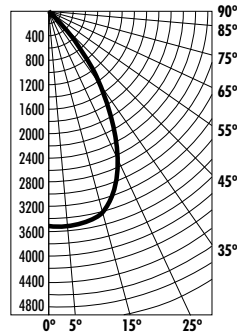
Angle in Degrees	Candela/M ²
45°	0
55°	0
65°	0
75°	0
85°	0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	113	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	105	101	99	107	103	100	97	100	97	95	97	95	93	94	93	91	90
3	104	99	95	92	103	98	94	91	95	92	90	93	90	88	91	89	87	86
4	100	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	82
5	97	90	85	82	95	89	85	81	87	83	81	86	82	80	84	81	79	78
6	93	86	81	77	92	85	80	77	84	80	77	82	79	76	81	78	76	74
7	90	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	72	71
8	86	79	74	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68
9	83	75	71	67	82	75	70	67	74	70	67	73	70	67	73	69	67	66
10	80	73	68	65	80	72	68	65	71	67	64	71	67	64	70	67	64	63

Catalog Number: LRT8 45LM 40K (G3); HM CS
PHOTOMETRIC REPORT
Test Number: PRO5151282
Total Lumen Output: 3807
Center Beam Candelperower: 3598
Luminaire Efficacy: 91.7 lm/w (4K)
Luminaire Spacing Criteria: 0.96
Luminaire: Clear Specular Alzak®,
 Medium Flood Hyperbolic Reflector.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela Lumens
0°	3561
5°	3595 343
15°	3469 983
25°	2626 1216
35°	1454 913
45°	452 350
55°	0 0
65°	0 0
75°	0 0
85°	0 0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	98.9	30.6	7.5'
7'	72.7	22.5	8.7'
8'	55.6	17.2	10.0'
9'	44.0	13.6	11.2'
10'	35.6	11.0	12.4'
11'	29.4	9.1	13.7'
12'	24.7	7.6	14.9'
13'	21.1	6.5	16.2'
14'	18.2	5.6	17.4'
15'	15.8	4.9	18.7'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	2542	66.8
0-40°	3455	90.8
0-60°	3805	100.0
0-90°	3805	100.0
90-180°	0	0
0-180°	3805	100.0

CCT MULTIPLIER
(3300-4000 Lumens)

27K = 0.91 35K = 0.99
 30K = 0.96 40K = 1.00

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	169	136	104
6' x 6'	117	94	72
7' x 7'	86	69	53
8' x 8'	66	53	40
9' x 9'	52	42	32
10' x 10'	42	34	26
11' x 11'	35	28	21
12' x 12'	29	24	18

LUMINANCE DATA

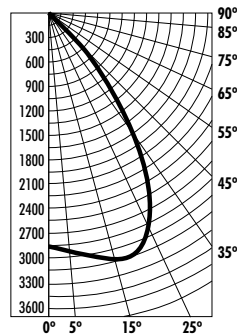
Angle in Degrees	Candela/M ²
45°	24011
55°	0
65°	0
75°	0
85°	0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	112	109	107	104	109	107	105	103	103	101	100	99	98	97	96	95	94	92
2	106	101	97	94	104	100	96	93	96	93	91	93	91	89	91	89	87	85
3	101	94	89	85	99	93	88	85	90	86	83	88	85	82	86	83	81	79
4	95	88	82	78	94	87	81	78	85	80	77	83	79	76	81	77	75	73
5	90	82	76	72	89	81	75	71	79	74	71	78	73	70	76	72	69	68
6	86	77	71	66	84	76	70	66	74	69	66	73	68	65	72	68	65	63
7	81	72	66	61	80	71	65	61	70	65	61	69	64	61	67	63	60	59
8	77	67	61	57	76	67	61	57	66	60	57	65	60	57	64	59	56	55
9	73	63	57	53	72	63	57	53	61	56	53	61	56	53	60	56	53	51
10	70	60	54	50	69	59	54	50	58	53	50	58	53	50	57	53	49	48

Catalog Number: LRT8 45LM 40K (G3); HW CS
PHOTOMETRIC REPORT
Test Number: PRO5151382
Total Lumen Output: 3992
Center Beam Candelperower: 3195
Luminaire Efficacy: 96.2 lm/w (4K)
Luminaire Spacing Criteria: 1.1
Luminaire: Clear Specular Alzak®,
 Wide Flood Hyperbolic Reflector.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela Lumens
0°	2843
5°	2992 286
15°	3171 899
25°	2874 1330
35°	1702 1069
45°	525 407
55°	0 0
65°	0 0
75°	0 0
85°	0 0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	79.0	23.8	8.6'
7'	58.0	17.5	10.1'
8'	44.4	13.4	11.5'
9'	35.1	10.6	12.9'
10'	28.4	8.6	14.4'
11'	23.5	7.1	15.8'
12'	19.7	5.9	17.3'
13'	16.8	5.1	18.7'
14'	14.5	4.4	20.1'
15'	12.6	3.8	21.6'

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	2515	63.0
0-40°	3584	89.8
0-60°	3990	100.0
0-90°	3990	100.0
90-180°	0	0
0-180°	3990	100.0

CCT MULTIPLIER
(3300-4000 Lumens)

27K = 0.91 35K = 0.99
 30K = 0.96 40K = 1.00

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	176	141	105
6' x 6'	122	98	73
7' x 7'	90	72	54
8' x 8'	69	55	41
9' x 9'	54	43	33
10' x 10'	44	35	26
11' x 11'	36	29	22
12' x 12'	30	24	18

LUMINANCE DATA

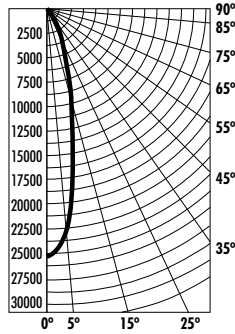
Angle in Degrees	Candela/M ²
45°	27872
55°	0
65°	0
75°	0
85°	0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98
1	111	108	106	104	109	106	104	102	102	100	99	99	97	96	95	94	93	91
2	105	100	96	93	103	99	95	92	95	92	90	93	90	88	90	88	86	84
3	100	93	88	84	98	92	87	83	89	85	82	87	83	81	84	82	79	78
4	94	86	81	76	92	85	80	76	83	79	75	81	77	74	79	76	73	72
5	89	80	74	70	87	79	74	69	78	73	69	76	72	68	74	71	68	66
6	84	75	69	64	83	74	68	64	72	67	63	71	66	63	70	66	63	61

Catalog Number: LRT8 90LM 40K (G3); HN CS
 PHOTOMETRIC REPORT
 Test Number: PR06150291
 Total Lumen Output: 7906
 Center Beam Candlepower: 25,029
 Luminaire Efficacy: 86.4 lm/w (4K)
 Luminaire Spacing Criteria: 0.43
 Luminaire: Clear Specular Alzak®,
 Narrow Flood Hyperbolic Reflector.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	25029	
5°	21668	2068
15°	9805	2779
25°	4414	2043
35°	1609	1011
45°	1	1
55°	0	0
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	695.3	324.8	2.6'
7'	510.8	238.7	3.0'
8'	391.1	182.7	3.4'
9'	309.0	144.4	3.9'
10'	250.3	116.9	4.3'
11'	206.9	96.6	4.7'
12'	173.8	81.2	5.2'
13'	148.1	69.2	5.6'
14'	127.7	59.7	6.0'
15'	111.2	52.0	6.5'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	354	304	253
6' x 6'	246	211	176
7' x 7'	181	155	129
8' x 8'	138	119	99
9' x 9'	109	94	78
10' x 10'	89	76	63
11' x 11'	73	63	52
12' x 12'	61	53	44

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	57
55°	0
65°	0
75°	327
85°	0

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	6890	87.2
0-40°	7901	100.0
0-60°	7902	100.0
0-90°	7904	100.0
90-180°	0	0
0-180°	7904	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

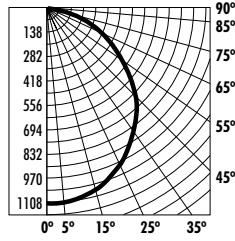
Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	113	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	105	101	99	107	103	100	97	100	97	95	97	95	93	94	93	91	90
3	104	99	95	92	103	98	94	91	95	92	90	93	90	88	91	89	87	86
4	100	94	90	86	99	93	89	86	91	88	85	89	86	84	88	85	83	82
5	97	90	85	82	95	89	85	81	87	83	81	86	82	80	84	81	79	78
6	93	86	81	77	92	85	80	77	84	80	77	82	79	76	81	78	76	74
7	90	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	72	71
8	86	79	74	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68
9	83	75	71	67	82	75	70	67	74	70	67	73	70	67	73	69	67	66
10	80	73	68	65	80	72	68	65	71	67	64	71	67	64	70	67	64	63

CCT MULTIPLIER

(3300-4000 Lumens)
27K = 0.91 35K = 0.99
30K = 0.96 40K = 1.00

Catalog Number: LRT8 90LM 40K (G3); HM CS
 PHOTOMETRIC REPORT
 Test Number: PR05151292
 Total Lumen Output: 7168
 Center Beam Candlepower: 6776
 Luminaire Efficacy: 78.3 lm/w (4K)
 Luminaire Spacing Criteria: 0.96
 Luminaire: Clear Specular Alzak®,
 Medium Flood Hyperbolic Reflector.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	6707	
5°	6770	646
15°	6534	1852
25°	4946	2289
35°	2738	1720
45°	852	660
55°	0	0
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	186.3	57.6	7.5'
7'	136.9	42.3	8.7'
8'	104.8	32.4	10.0'
9'	82.8	25.6	11.2'
10'	67.1	20.7	12.4'
11'	55.4	17.1	13.7'
12'	46.6	14.4	14.9'
13'	39.7	12.3	16.2'
14'	34.2	10.6	17.4'
15'	29.8	9.2	18.7'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	318	255	195
6' x 6'	221	177	135
7' x 7'	162	130	99
8' x 8'	124	100	76
9' x 9'	98	79	60
10' x 10'	80	64	49
11' x 11'	66	53	40
12' x 12'	55	44	34

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	45220
55°	0
65°	0
75°	0
85°	0

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	4787	66.8
0-40°	6507	90.8
0-60°	7167	100.0
0-90°	7167	100.0
90-180°	0	0
0-180°	7167	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

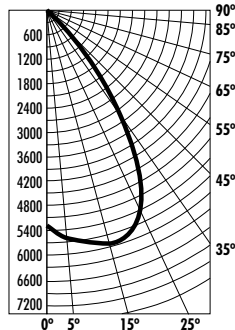
Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	112	109	107	104	109	107	105	103	103	101	100	99	98	97	96	95	94	92
2	106	101	97	94	104	100	96	93	96	93	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	85	90	86	83	88	85	82	86	83	81	79
4	95	88	82	78	94	87	82	78	85	80	77	83	79	76	81	77	75	73
5	90	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68
6	86	77	71	66	84	76	70	66	74	69	66	73	68	65	72	68	65	63
7	81	72	66	61	80	71	65	61	70	65	61	69	64	61	68	63	60	59
8	77	67	61	57	76	67	61	57	66	60	57	65	60	57	64	59	56	55
9	73	63	57	53	72	63	57	53	61	56	53	61	56	53	60	56	53	51
10	70	60	54	50	69	59	54	50	58	53	50	58	53	50	57	53	49	48

CCT MULTIPLIER

(3300-4000 Lumens)
27K = 0.91 35K = 0.99
30K = 0.96 40K = 1.00

Catalog Number: LRT8 90LM 40K (G3); HW CS
 PHOTOMETRIC REPORT
 Test Number: PR05151392
 Total Lumen Output: 7518
 Center Beam Candlepower: 6017
 Luminaire Efficacy: 82.2 lm/w (4K)
 Luminaire Spacing Criteria: 1.1
 Luminaire: Clear Specular Alzak®,
 Wide Flood Hyperbolic Reflector.
 CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	5355	
5°	5634	538
15°	5971	1693
25°	5412	2505
35°	3205	2013
45°	989	766
55°	2	2
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	148.7	44.7	8.6'
7'	109.3	32.9	10.1'
8'	83.7	25.2	11.5'
9'	66.1	19.9	12.9'
10'	53.5	16.1	14.4'
11'	44.3	13.3	15.8'
12'	37.2	11.2	17.3'
13'	31.7	9.5	18.7'
14'	27.3	8.2	20.1'
15'	23.8	7.2	21.6'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	331	265	198
6' x 6'	230	184	138
7' x 7'	169	135	101
8' x 8'	129	103	78
9' x 9'	102	82	61
10' x 10'	83	66	50
11' x 11'	68	55	41
12' x 12'	57	46	34

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	52490
55°	164
65°	0
75°	0
85°	0

ZONAL LUMEN SUMMARY

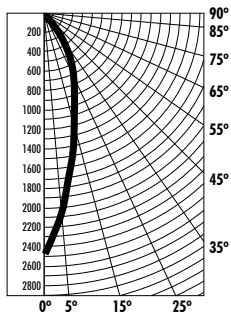
Zone	Lumens%	%Fixtures
0-30°	4736	63.0
0-40°	6749	89.8
0-60°	7517	100.0
0-90°	7517	100.0
90-180°	0	0
0-180°	7517	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	117	117	117	117	114	114	114	114	109	109	109	104	104	104	100	100	100	98
1	111	108	106	104	109	106	104	102	102	101	99	99	97	96	95	94	93	91
2	105	100	96	93	103	99	95	92	96	92	90	93	90	88	90	88	86	84
3	100	93	88	84	98	92	87	83	89	85	82	87	83	81	84	82	79	78
4	94	86	81	76	92	85	80	76	83	79	75	81	77	74	79	76	73	72
5	89	80	74	70	87	79	74	69	78	73	69	76	72	68	74	71	68	66
6	84	75	69	64	83	74	68	64	72	67	63	71	67	63	70	66	63	61
7	79	70	64	59	78	69	63	59	68	63	59	67	62	58	65	61	58	57

Catalog Number: LRT8 13LM 40K 120 G3; P CS
PHOTOMETRIC REPORT
Test Number: PRO2150691
Total Lumen Output: 1155
Luminaire Efficacy: 76.5 lm/w (4K)
Luminaire Spacing Criteria: 0.48
Luminaire: Clear Specular Alzak®, Cone with Frosted Glass Convex Lens, Enclosed bottom.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	2435	
5°	2096	200
15°	1171	332
25°	760	352
35°	363	228
45°	51	40
55°	0	0
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	67.6	30.8	3.1'
7'	49.7	22.6	3.6'
8'	38.1	17.3	4.1'
9'	30.1	13.7	4.6'
10'	24.4	11.1	5.1'
11'	20.1	9.2	5.6'
12'	16.9	7.7	6.1'
13'	14.4	6.6	6.6'
14'	12.4	5.7	7.1'
15'	10.8	4.9	7.6'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 20% Floors

Luminaire Spacing	Room Cavity Ratio		
	RCR1	RCR4	RCR8
5' x 5'	52	43	34
6' x 6'	36	30	24
7' x 7'	26	22	17
8' x 8'	20	17	13
9' x 9'	16	13	11
10' x 10'	13	11	9
11' x 11'	11	9	7
12' x 12'	9	7	6

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	2931
55°	0
65°	0
75°	0
85°	1182

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	884	76.5
0-40°	1112	96.3
0-60°	1152	99.8
0-90°	1154	100.0
90-180°	0	0
0-180°	1154	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

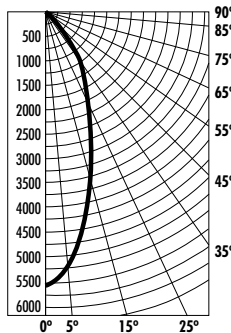
Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
	PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	116	116	116	116	110	110	110	106	106	106	101	101	101	99
1	113	110	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	94
2	108	103	100	96	106	102	98	95	98	96	93	96	93	91	93	91	89	88
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	88	86	84	82
4	98	91	86	82	96	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	89	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68
7	85	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65
8	82	73	67	63	80	72	67	63	71	66	63	70	66	63	69	65	62	61
9	78	69	64	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	64	60	56	64	59	56	63	59	56	55

CCT MULTIPLIER

(800-2300 Lumens)
27K = 0.91 35K = 0.98
30K = 0.96 40K = Baseline

Catalog Number: LRT8 45LM 40K (G3); P CS
PHOTOMETRIC REPORT
Test Number: PRO6150285
Total Lumen Output: 3377
Luminaire Efficacy: 81.4 lm/w (4K)
Luminaire Spacing Criteria: 0.64
Luminaire: Clear Specular Alzak®, Parabolic Cone, Frosted Convex Glass Lens.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	5516	
5°	5231	499
15°	3526	999
25°	2194	1016
35°	1111	698
45°	206	159
55°	5	4
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	153.2	63.3	4.4'
7'	112.6	46.5	5.1'
8'	86.2	35.6	5.9'
9'	68.1	28.2	6.6'
10'	55.2	22.8	7.4'
11'	45.6	18.8	8.1'
12'	38.3	15.8	8.8'
13'	32.6	13.5	9.6'
14'	28.1	11.6	10.3'
15'	24.5	10.1	11.0'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio			
	RCR1	RCR4	RCR8	RCR8
5' x 5'	150	124	99	
6' x 6'	104	86	68	
7' x 7'	76	63	50	
8' x 8'	59	49	39	
9' x 9'	46	38	30	
10' x 10'	37	31	25	
11' x 11'	31	26	20	
12' x 12'	26	22	17	

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	11713
55°	350
65°	0
75°	0
85°	0

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	2514	74.5
0-40°	3212	95.2
0-60°	3376	100.0
0-90°	3376	100.0
90-180°	0	0
0-180°	3376	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

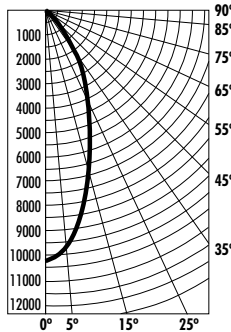
Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
	PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	89	88
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82
4	98	91	86	82	96	90	85	81	88	84	80	86	82	79	84	81	78	77
5	94	86	80	76	92	85	79	76	83	78	75	81	77	74	80	76	74	72
6	89	81	75	71	88	80	74	71	78	74	70	77	73	70	76	72	69	68
7	85	76	70	66	84	75	70	66	74	69	66	73	69	65	72	68	65	64
8	81	72	66	62	80	71	66	62	70	65	62	69	65	62	68	64	61	60
9	77	68	63	59	76	68	62	59	67	62	58	66	61	58	65	61	58	57
10	74	65	59	56	73	64	59	55	64	59	55	63	58	55	62	58	55	54

CCT MULTIPLIER

(3300-4000 Lumens)
27K = 0.91 35K = 0.99
30K = 0.96 40K = 1.00

Catalog Number: LRT8 90LM 40K (G3); P CS
PHOTOMETRIC REPORT
Test Number: PRO6150295
Total Lumen Output: 6359
Luminaire Efficacy: 69.5 lm/w (4K)
Luminaire Spacing Criteria: 0.64
Luminaire: Clear Specular Alzak®, Parabolic Cone, Frosted Convex Glass Lens.
CIE-Type: Direct



CANDLEPOWER DISTRIBUTION
(Candelas)

Angle	Candela	Lumens
0°	10388	
5°	9851	940
15°	6640	1882
25°	4133	1913
35°	2092	1314
45°	387	300
55°	9	8
65°	0	0
75°	0	0
85°	0	0

INITIAL FOOTCANDLES

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Footcandles Beam Edge	Beam Diameter
6'	288.6	119.3	4.4'
7'	212.0	87.6	5.1'
8'	162.3	67.1	5.9'
9'	128.2	53.0	6.6'
10'	103.9	42.9	7.4'
11'	85.9	35.5	8.1'
12'	72.1	29.8	8.8'
13'	61.5	25.4	9.6'
14'	53.0	21.9	10.3'
15'	46.2	19.1	11.0'

AVERAGE INITIAL FOOTCANDLES

Reflectances: 80% Ceiling, 50% Walls, 30% Floors

Luminaire Spacing	Room Cavity Ratio			
	RCR1	RCR4	RCR8	RCR8
5' x 5'	282	234	186	
6' x 6'	196	163	129	
7' x 7'	144	119	95	
8' x 8'	110	91	73	
9' x 9'	87	72	57	
10' x 10'	71	59	46	
11' x 11'	58	48	38	
12' x 12'	49	41	32	

LUMINANCE DATA

Angle in Degrees	Candela/M ²
45°	22058
55°	659
65°	0
75°	0
85°	0

ZONAL LUMEN SUMMARY

Zone	Lumens%	%Fixtures
0-30°	4735	74.5
0-40°	6050	95.2
0-60°	6358	100.0
0-90°	6358	100.0
90-180°	0	0
0-180°	6358	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method)

Effective Floor Reflectance 20%

PCC	80			70			50			30			10			0		
	PW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	90	88
3	103	97	92	88	101	96	91	88	93	89	86	91	88	85	88	86	84	82
4	98	91	86	82	96	90	85	81	88	84	80	86	82	79	84	81	78	77
5	94	86	80	76	92	85	79	76	83	78	75	81	77	74	80	76	74	72
6	89	81	75	71	88	80	74	71	78	74								

PERFORMANCE DATA

LUMINAIRES SPACED 2' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); HWS CSSS Spread: Single Wall Test #: PR03161095

Single Unit						Lamp	Multiple Units On 2' Centers*			Multiple Units On 3' Centers*			Multiple Units On 4' Centers*		
Lateral Distance From Fixture 2' From Wall						BXRA N4000 4000K	Spaced 2' From Wall			Spaced 2' From Wall			Spaced 2' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
49	37	17	8	5	5	1'	87	84	87	65	56	65	57	34	57
89	63	30	13	7	6	2'	154	148	154	114	96	114	100	60	100
107	80	40	16	9	7	3'	193	189	193	138	125	138	120	81	120
78	67	42	20	10	7	4'	170	169	170	117	119	117	94	86	94
49	46	36	21	12	8	5'	132	134	132	90	95	90	68	74	68
31	34	28	20	13	9	6'	101	108	101	71	78	71	52	59	52
23	26	23	18	13	10	7'	85	90	85	61	65	61	45	49	45
19	21	18	15	12	10	8'	72	77	72	52	57	52	40	51	40
14	16	15	12	10	8	9'	57	61	57	42	47	42	32	33	32
10	12	10	9	8	6	10'	41	45	41	32	35	32	23	26	23

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

LUMINAIRES SPACED 3' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); HWS CSSS Spread: Single Wall Test #: PR03161095

Single Unit						Lamp	Multiple Units On 3' Centers*			Multiple Units On 4' Centers*			Multiple Units On 6' Centers*		
Lateral Distance From Fixture 3' From Wall						BXRA N4000 4000K	Spaced 3' From Wall			Spaced 3' From Wall			Spaced 3' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
18	17	12	8	6	5	1'	35	34	35	29	27	29	23	13	23
34	30	21	14	9	7	2'	63	61	63	50	46	50	40	23	40
45	39	26	17	11	8	3'	79	75	79	64	56	64	51	29	51
53	47	33	20	12	9	4'	93	90	93	74	68	74	59	36	59
48	43	33	22	14	10	5'	91	91	91	71	71	71	53	41	53
38	36	30	22	16	11	6'	83	83	83	64	66	64	45	41	45
30	29	25	21	16	12	7'	72	74	72	56	58	56	38	39	38
21	23	21	18	14	12	8'	61	65	61	46	51	46	31	33	31
16	18	16	14	12	11	9'	49	54	49	38	42	38	25	27	25
11	13	13	10	10	9	10'	39	41	39	29	33	29	20	21	20

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

LUMINAIRES SPACED 4' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); HWS CSSS Spread: Single Wall Test #: PR03161095

Single Unit						Lamp	Multiple Units On 3' Centers*			Multiple Units On 4' Centers*			Multiple Units On 6' Centers*		
Lateral Distance From Fixture 4' From Wall						BXRA N4000 4000K	Spaced 4' From Wall			Spaced 4' From Wall			Spaced 4' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
11	11	9	7	6	5	1'	24	24	24	20	20	20	15	12	15
21	19	15	12	9	8	2'	44	44	44	36	35	36	27	22	27
25	23	19	15	11	9	3'	53	53	53	43	41	43	32	27	32
30	27	22	16	12	10	4'	63	63	63	50	48	50	38	31	38
34	31	25	19	14	11	5'	72	72	72	57	55	57	42	36	42
33	31	26	20	15	12	6'	75	75	75	59	58	59	42	38	42
30	28	24	20	16	12	7'	72	73	72	57	56	57	39	38	39
25	24	21	18	15	13	8'	66	68	66	52	53	52	36	35	36
19	19	17	15	13	11	9'	56	57	56	44	45	44	30	29	30
14	14	14	12	11	10	10'	43	45	43	34	35	34	23	25	23

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

*Based on minimum of five luminaires. Reflectances: 80, 50, 20. Values are rounded to nearest whole footcandle.

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.

PERFORMANCE DATA

LUMINAIRES SPACED 2' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); WS CSS Spread: Single Wall Test #: PRO6152391

Single Unit						Lamp	Multiple Units On 2' Centers*			Multiple Units On 3' Centers*			Multiple Units On 4' Centers*		
Lateral Distance From Fixture 2' From Wall						BXRA N4000 4000K	Spaced 2' From Wall			Spaced 2' From Wall			Spaced 2' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
59	44	21	10	6	5	1'	105	102	105	78	67	78	68	41	68
75	55	27	13	8	6	2'	134	131	134	99	86	99	86	55	86
69	55	31	15	9	7	3'	135	134	135	97	91	97	83	62	83
58	48	32	18	10	7	4'	127	126	127	92	87	92	73	64	73
44	40	29	19	12	8	5'	113	116	113	81	81	81	62	61	62
31	33	26	20	14	10	6'	98	105	98	69	75	69	53	56	53
24	27	24	18	14	11	7'	88	95	88	63	69	63	47	51	47
20	23	20	16	13	11	8'	78	85	78	57	63	57	43	44	43
15	18	16	14	11	10	9'	64	69	64	47	53	47	35	37	35
10	13	12	10	9	7	10'	47	52	47	37	41	37	26	30	26

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

LUMINAIRES SPACED 3' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); WS CSS Spread: Single Wall Test #: PRO6152391

Single Unit						Lamp	Multiple Units On 3' Centers*			Multiple Units On 4' Centers*			Multiple Units On 6' Centers*		
Lateral Distance From Fixture 3' From Wall						BXRA N4000 4000K	Spaced 3' From Wall			Spaced 3' From Wall			Spaced 3' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
26	23	16	11	7	6	1'	47	46	47	38	35	38	31	18	31
33	30	21	14	10	8	2'	62	61	62	51	46	51	40	23	40
37	33	23	16	11	9	3'	67	67	67	54	50	54	44	26	44
36	33	25	17	12	9	4'	68	67	68	54	52	54	42	30	42
33	30	24	18	13	10	5'	67	67	67	53	52	53	39	32	39
31	28	23	18	14	11	6'	65	66	65	53	51	53	37	32	37
27	25	22	18	14	12	7'	63	64	63	50	50	50	35	32	35
21	22	19	16	13	12	8'	57	61	57	44	47	44	30	30	30
16	18	16	14	12	11	9'	49	52	49	37	41	37	25	26	25
12	13	13	10	10	9	10'	39	43	39	29	35	29	20	21	20

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

LUMINAIRES SPACED 4' FROM WALL

Catalog Number: LRT8 90LM 40K (G3 80CRI ZT); WS CSS Spread: Single Wall Test #: PRO6152391

Single Unit						Lamp	Multiple Units On 3' Centers*			Multiple Units On 4' Centers*			Multiple Units On 6' Centers*		
Lateral Distance From Fixture 4' From Wall						BXRA N4000 4000K	Spaced 4' From Wall			Spaced 4' From Wall			Spaced 4' From Wall		
0'	1'	2'	3'	4'	5'	Distance From Ceiling	CL	CL	CL	CL	CL	CL	CL	CL	CL
17	15	12	9	7	6	1'	35	35	35	28	28	28	21	17	21
22	20	16	12	10	8	2'	47	47	47	38	37	38	28	23	28
24	22	18	14	11	9	3'	51	52	51	41	40	41	31	26	31
25	23	19	15	12	10	4'	54	54	54	43	43	43	32	28	32
25	23	20	16	13	10	5'	56	56	56	44	44	44	32	29	32
24	22	19	16	13	11	6'	56	56	56	45	44	45	32	30	32
23	21	18	16	13	11	7'	55	56	55	44	44	44	32	29	32
21	20	17	15	13	12	8'	53	55	53	43	43	43	31	28	31
18	17	15	13	11	10	9'	47	48	47	38	38	38	27	25	27
13	13	12	10	9	9	10'	41	41	41	31	32	31	21	22	21

CCT MULTIPLIER	
27K = 0.91	35K = 0.99
30K = 0.96	40K = 1.00

*Based on minimum of five luminaires. Reflectances: 80, 50, 20. Values are rounded to nearest whole footcandle.

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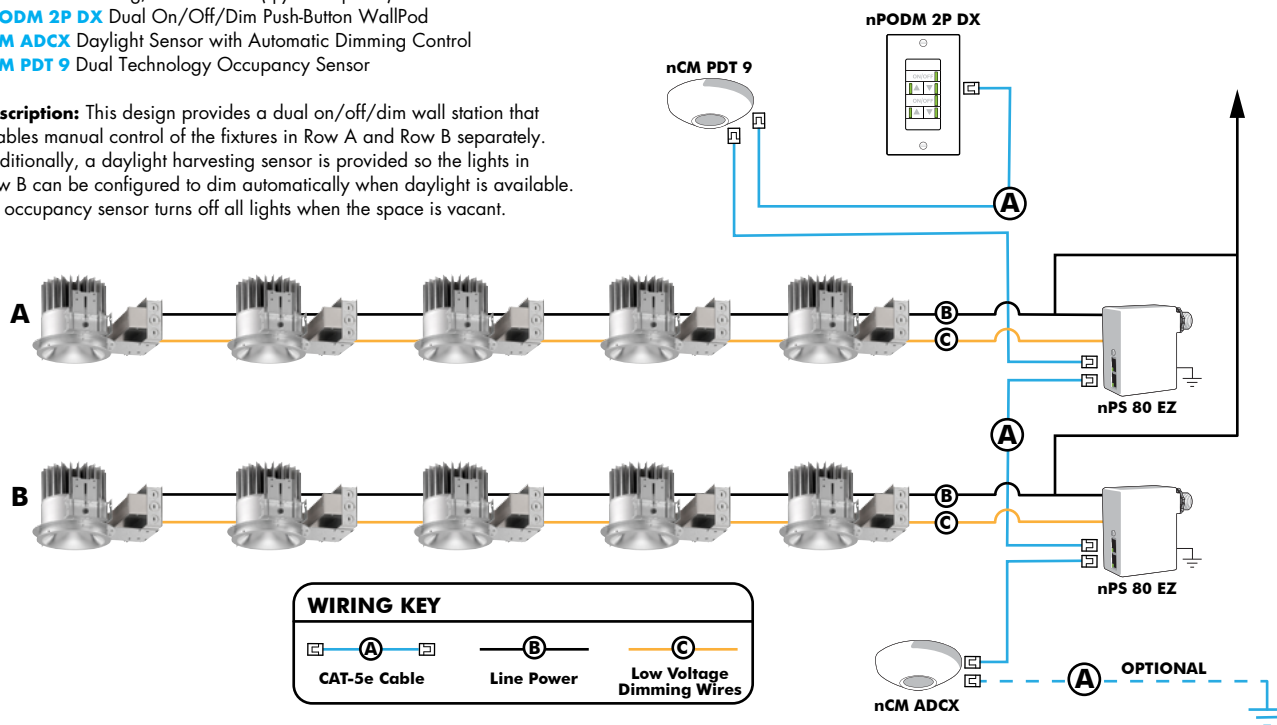
EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.

- nPS 80 EZ Dimming/Control Pack (qty: 2 required)
- nPODM 2P DX Dual On/Off/Dim Push-Button WallPod
- nCM ADCX Daylight Sensor with Automatic Dimming Control
- nCM PDT 9 Dual Technology Occupancy Sensor

Description: This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.



Push-Button Wallpod
Traditional tactile buttons and LED user feedback

Graphic Wallpod
Full color touch screen provides a sophisticated look and feel

nLight® Controls Accessories:			
Order as separate catalog number. Visit www.sensorswitch.com/nLight for complete listing of nLight controls.			
WallPod Stations	Model number	Occupancy sensors	Model Number
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls	Model Number	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX
Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model Number
		10', CAT5 10FT	CAT5 10FT J1
		15, CAT5 15FT	CAT5 15FT J1

Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brand's specification for chromatic consistency.
- This luminaire is part of an A+ Certified solution for nLight control networks when ordered with drivers marked by a Shaded background*
- This Luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details