

Type:
Project:

LC-93™

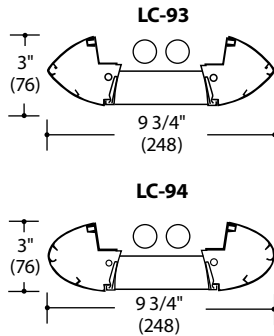
P-ID-9300

LC-94™

P-ID-9400

Pendant Mounted Indirect/Direct

Specifications



HOUSING. Two-sided housing, 6063 T5 extruded aluminum.

END CAPS. Required at each end of row and at both ends of an individual fixture. Flat end caps are standard; of 14-gauge steel, no holes or knockouts. **ECS** option: die-cast sculpted end caps with no exposed fasteners. All end caps are finished to match housing.

UPPER SIDE REFLECTORS. Die-formed specular anodized aluminum.

PARABOLIC BAFFLE. Die-formed semi-specular aluminum baffles. Snap-fit construction provides easy removal and access to wireway. Two safety tethers secure baffle to fixture. See diffusers for shielding choices.

ALTERNATE DISTRIBUTION OPTION. Opaque or specially perforated top reflectors are available to provide either 100% or 60% downlight. See Alternate distribution options for details.

LAMPING. Available in two- and three-lamp T8 cross-sections. Lamp access/replacement from above. Removal of baffle is not required.

BALLAST. Electronic Ballast (ELB), high power factor, thermally protected Class P, Sound Rated A, less than 10% THD, manufactured by a UL Listed manufacturer, as available, determined by Litecontrol. Ballasts with a voltage range of 120 to 277 will be used when fixture configuration and ballast availability allow. The minimum number of ballasts will be used.

TANDEM WIRING. When selected from Ordering guide below, fixtures wired to switch in-line lamps separately, providing two or three (three-lamp cross-section fixtures only) levels of light.

PRE-WIRING. Fixtures are supplied with #12 AWG type THHN wire for branch circuits. One end will have factory-installed push-in quick-connects. The other end will be stripped back 1/2" for quick connection in field. For fixtures to accommodate special circuits such as night light and emergency, etc., in-field wiring will be required. See Pre-wiring Information for details.

ROW JOINING. Litecontrol's at-joint flat strap supporting two fixtures allows one-person, one-hand-free fixture joining and installation. Support points are centered above the midpoint of joint "on seam" for aligned, symmetrical appearance. Fixture end headers are threaded in two locations to allow easy row joining without removing reflectors.

SYSTEM CONNECTORS. Corners, tees and crosses available. Sides are extruded aluminum with filler plate across bottom. Bottom and sides have no exposed fasteners or knockouts. Each system connector shall have a rigid cross-member with a .687" diameter stem hole at center to accept any of Litecontrol's pendant assemblies.

SUSPENSION. Aircraft cable or rigid stem pendants attach to fixture using Litecontrol's easy-hang system, with one attachment plate for use at any support point. **FAI/ACC** field adjustable 51" is standard. See Aircraft Cables and Stems for details. For aircraft cable mounting at various "non-feed" positions along fixture, an adjustable mounting yoke (**AMY**) is available.

CERTIFICATION. Fixture and electrical components shall be UL and/or CUL Listed and shall bear the I.B.E.W., A.F. of L. label.

Note: Litecontrol reserves the right to change specifications without notice for product development and improvement.

Ordering guide

Product, Lamping, & Length						Options							
P -	ID -	93	6	12	T8 -	PBSS -	TCWM -	TW -	ELB -	2CWQ -	LP/EF -	120	
Mounting	Distribution	Series	Lamp Count	Nominal Length(ft)	Lamp Type	Diffuser	Finish	Tandem Wiring	Ballast	Pre-Wiring	Other options	Volts	
P Pendant-Mounted	ID Indirect/ Direct	93 94	2, 3 →	4	T8	PBSS PBCWM see Diffuser	TCWM (Textured Matte White) is standard see LiteColors™ in Product Guide for other finishes	-- →	ELB is standard DA/ELB HEL/ELB ECO/ELB see Ballast Options	1CWQ	LP/EF F AMY ECS CV PFCV see Other options	120 277	
			4, 6 →	8				TW →		2CWQ			
			6, 9 →	12									
Mounting Options - add to end of order number Aircraft Cables <input type="checkbox"/> FAI/ACC (field adjustable) <i>standard</i> <input type="checkbox"/> ACC (fixed)			see notes										
Stems <input type="checkbox"/> P6S (stem) <input type="checkbox"/> SC/P6 (sloped ceiling) <input type="checkbox"/> EQ/P6 (earthquake)													
Cross-section lamping 2-T8 3-T8 2-T8 3-T8 P-ID-9300 P-ID-9400						Also available with 2-lamp and 3-lamp T5 or T5HO lamping. Contact factory for details.						P-ID-93612T8-PBSS-TCWM-TW-ELB-2CWQ-LP/EF-120-FAI/ACC is a typical catalog number for a 6-lamp (2 lamps in cross-section), 12-foot long T8 fixture with semi-specular parabolic baffle, Textured Matte White finish, tandem-wired electronic ballast, pre-wired with two-circuit branch wiring and quick-connects, low-profile emergency fluorescent ballast, 120 volts, mounted with field adjustable aircraft cables.	

Questions to Ask

1. 120 or 277 volt?
2. Row information? Desired fixture length?
3. Diffuser type?
4. White, LiteColor, or special color?
5. Tandem wiring?
6. Cables or stems, what length?
7. Other options?

Diffusers

- PBSS** Parabolic Semi-specular Baffle. 13 cells, producing 25° lengthwise and crosswise shielding.
PBCWM Parabolic Baffle finished Matte White. 13 cells, producing 25° lengthwise and crosswise shielding.

Ballast options

Specify in place of **ELB**, contact factory for availability/compatibility with lampping:

- DA/ELB** Advance Mark VII Dimming Ballast.
HEL/ELB Osram Sylvania Dimming Ballast.
ECO/ELB Lutron ECO-10 Dimming Ballast.

Other options

- LP/EF** Low-profile Emergency Fluorescent Ballast. Battery-powered ballast from a UL Listed manufacturer will operate one lamp for 1 1/2 hours.
F Fuse. Slow or fast blow determined by Litecontrol.
AMY Adjustable Mounting Yoke. Used for aircraft cable mounting at various "non-feed" positions along the fixture. Contact factory for guidance and instructions on support and layout requirements for this option.
ECS End Cap Sculpted. Die-cast aluminum sculpted end caps with no exposed fasteners.

Alternate distribution options

The indirect/direct distribution of the standard fixture is approximately 63% / 37%. The following options modify that ratio. Not recommended with AMY option (in-field modifications required – consult factory).

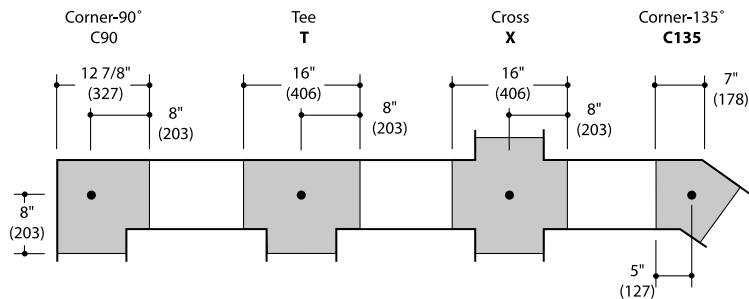
- CV** Solid Top Reflector. Provides 100% direct distribution, finished in high-reflectance Matte White. Can be added or removed in field.
PFCV 40/60 Perforated Top Reflector. Provides 41% indirect, 59% direct distribution, finished in high-reflectance Matte White. Can be added or removed in field.

System connectors

Catalog Number

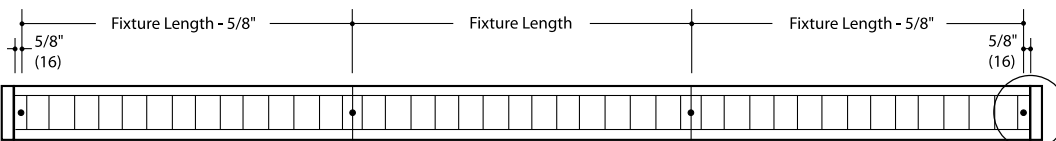
Series	Connector - Finish
P-ID-9300 or P-ID-9400	C90
P-ID-9300 or P-ID-9400	C135
P-ID-9300 or P-ID-9400	T
P-ID-9300 or P-ID-9400	X

P-ID-9300-C90-TCWM is a typical catalog number for a 90° corner connector finished Textured Matte White.



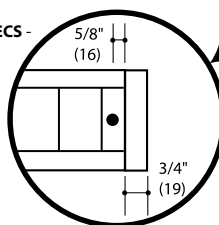
Planning for installation

Row diagram

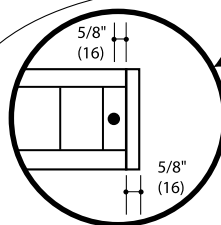


Fixture Lengths: 4'-3", 8'-6", 12'-9"
 • Indicates pendant locations

9400
 optional ECS -
 sculpted
 end cap



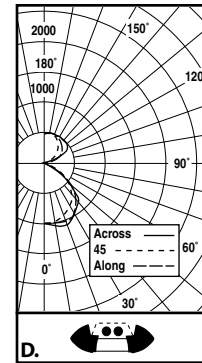
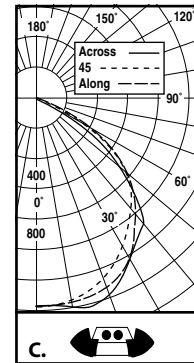
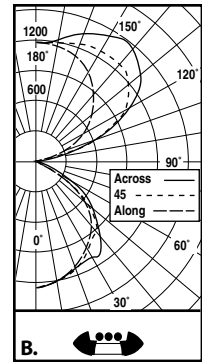
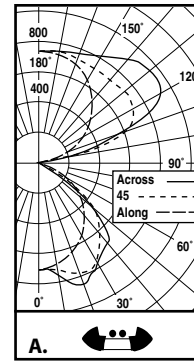
9300
 optional ECS
 sculpted
 end cap



Click on
**Quick Find 93
 94**

litecontrol.com

Photometric data



A. P-ID-9324T8-PBSS
 88.3% Efficiency Indirect/Direct % = 63/37
 ITL Certified Test Report #ITL51266

B. P-ID-9334T8-PBSS
 89.4% Efficiency Indirect/Direct % = 63/37
 ITL Certified Test Report #ITL51268

C. P-ID-9324T8-PBSS-CV-ELB
 56.2% Efficiency Indirect/Direct % = 0/100
 Litecontrol Certified Test Report #31021340

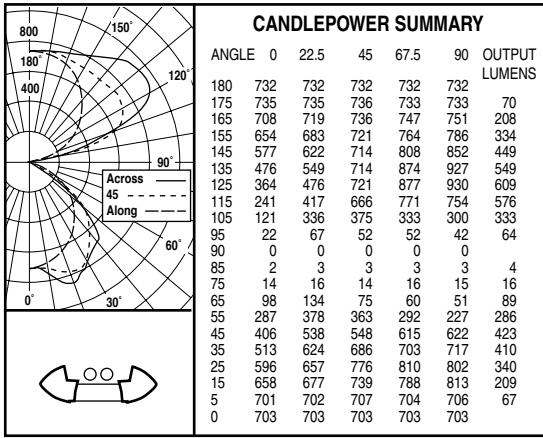
D. P-ID-9324T8-PBSS-PFCV-ELB
 73.6% Efficiency Indirect/Direct % = 41/59
 Litecontrol Certified Test Report #31121340

For complete photometric information, see website.

LITECONTROL ... an employee owned company

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PHOTOMETRIC DATA: PBSS BAFFLE

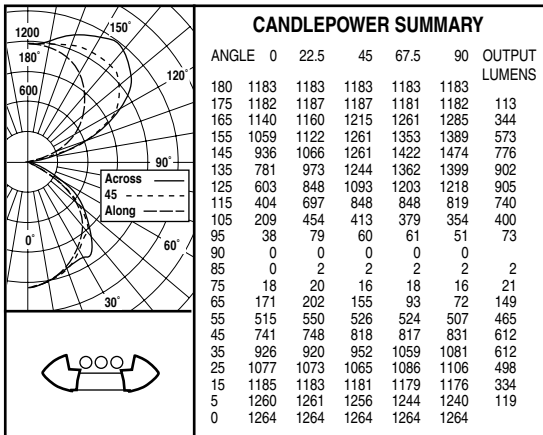


		P-ID-9324T8-PBSS										88.3% Efficiency							
		ITL Certified Test Report #ITL51266																	
RCC	RW	80				70				50		30		10		0			
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
RCR	0	.92	.92	.92	.92	.83	.83	.83	.83	.67	.67	.67	.52	.52	.52	.39	.39	.39	.32
1		.84	.81	.78	.75	.76	.74	.71	.69	.60	.58	.56	.47	.46	.45	.35	.35	.34	.29
2		.77	.71	.66	.62	.70	.65	.61	.57	.53	.50	.48	.42	.40	.38	.32	.31	.30	.25
3		.71	.63	.57	.52	.64	.58	.52	.48	.47	.44	.41	.38	.35	.33	.29	.27	.26	.22
4		.65	.56	.50	.45	.59	.51	.46	.41	.42	.38	.35	.34	.31	.29	.26	.24	.22	.19
5		.60	.50	.43	.38	.54	.46	.40	.36	.38	.33	.30	.30	.27	.25	.23	.21	.20	.17
6		.55	.45	.38	.33	.50	.41	.35	.31	.34	.30	.26	.27	.24	.22	.21	.19	.17	.15
7		.51	.40	.34	.29	.46	.37	.31	.27	.31	.26	.23	.25	.22	.19	.19	.17	.15	.13
8		.47	.37	.30	.26	.43	.34	.28	.24	.28	.24	.20	.23	.19	.17	.18	.15	.14	.12
9		.44	.33	.27	.23	.40	.31	.25	.21	.26	.21	.18	.21	.18	.15	.16	.14	.12	.11
10		.41	.30	.24	.20	.37	.28	.23	.19	.23	.19	.16	.19	.16	.14	.15	.13	.11	.10

Floor Cavity Reflectance .20

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	3192	56.0	63.4
90-0°	1844	32.3	36.6
180-0°	5036	88.3	100.0

ANGLE	0°	45°	90°
45°	1351	1823	2069
55°	1177	1489	931
65°	546	417	284
75°	127	127	136
85°	54	81	81



		P-ID-9334T8-PBSS										89.4% Efficiency							
		ITL Certified Test Report #ITL51268																	
RCC	RW	80				70				50		30		10		0			
		70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
RCR	0	.93	.93	.93	.93	.84	.84	.84	.84	.68	.68	.68	.53	.53	.53	.39	.39	.39	.33
1		.85	.82	.79	.76	.77	.75	.72	.70	.61	.59	.57	.48	.47	.46	.36	.35	.35	.29
2		.78	.72	.67	.63	.71	.66	.62	.58	.54	.51	.48	.43	.41	.39	.32	.31	.30	.25
3		.72	.64	.58	.53	.65	.58	.53	.49	.48	.44	.41	.38	.36	.33	.29	.27	.26	.22
4		.66	.57	.50	.45	.59	.52	.46	.42	.43	.39	.35	.34	.31	.29	.26	.24	.23	.19
5		.60	.51	.44	.39	.55	.46	.40	.36	.38	.34	.31	.31	.28	.25	.24	.22	.20	.17
6		.56	.45	.39	.34	.50	.42	.36	.31	.34	.30	.27	.28	.25	.22	.22	.19	.18	.15
7		.51	.41	.34	.29	.47	.38	.32	.27	.31	.27	.23	.25	.22	.20	.20	.17	.16	.13
8		.48	.37	.31	.26	.43	.34	.28	.24	.28	.24	.21	.23	.20	.17	.18	.16	.14	.12
9		.44	.34	.27	.23	.40	.31	.25	.22	.26	.22	.19	.21	.18	.16	.17	.14	.13	.11
10		.41	.31	.25	.21	.38	.29	.23	.19	.24	.20	.17	.20	.16	.14	.15	.13	.12	.10

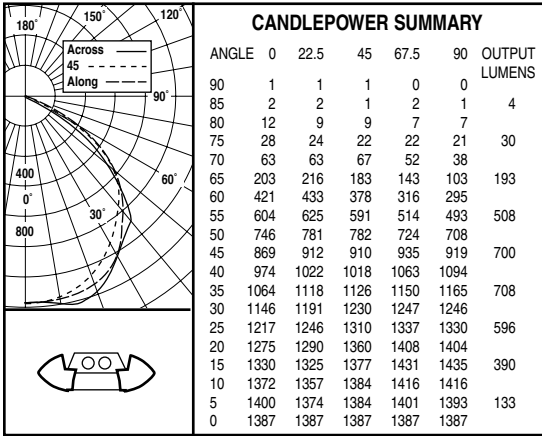
Floor Cavity Reflectance .20

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	4828	56.5	63.2
90-0°	2814	32.9	36.8
180-0°	7642	89.4	100.0

ANGLE	0°	45°	90°
45°	2465	2721	2765
55°	2112	2157	2079
65°	952	863	401
75°	164	145	145
85°	0	54	54



PHOTOMETRIC DATA: CV



P-ID-9324T8-PBSS-CV-ELB 56.2% Efficiency
Litecontrol Certified Test Report #31021340

RCC RW	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR 0	.67	.67	.67	.67	.65	.65	.65	.65	.62	.62	.62	.60	.60	.60	.57	.57	.57	.56	.56	.56	.56
1	.63	.61	.59	.57	.61	.60	.58	.56	.57	.56	.55	.55	.54	.53	.53	.52	.51	.50	.50	.50	.50
2	.58	.55	.52	.50	.57	.54	.51	.49	.52	.50	.48	.50	.49	.47	.49	.47	.46	.45	.45	.45	.45
3	.54	.50	.46	.43	.53	.49	.45	.43	.47	.44	.42	.46	.43	.41	.44	.42	.41	.40	.40	.40	.40
4	.50	.45	.41	.38	.49	.44	.40	.37	.43	.39	.37	.41	.39	.36	.40	.38	.36	.35	.35	.35	.35
5	.46	.40	.36	.33	.45	.40	.35	.32	.38	.35	.32	.37	.34	.32	.36	.34	.31	.30	.30	.30	.30
6	.43	.36	.32	.29	.42	.36	.31	.28	.35	.31	.28	.34	.30	.28	.33	.30	.28	.27	.27	.27	.27
7	.39	.33	.28	.25	.39	.32	.28	.25	.31	.27	.25	.31	.27	.25	.30	.27	.24	.23	.23	.23	.23
8	.36	.29	.25	.22	.36	.29	.25	.22	.28	.24	.22	.28	.24	.21	.27	.24	.21	.20	.20	.20	.20
9	.33	.26	.22	.19	.33	.26	.22	.19	.25	.21	.19	.25	.21	.19	.24	.21	.18	.18	.18	.18	.18
10	.31	.24	.20	.17	.30	.24	.20	.17	.23	.19	.17	.23	.19	.16	.22	.19	.16	.15	.15	.15	.15

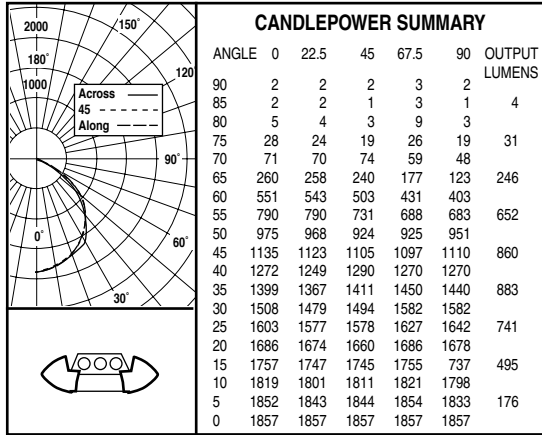
Floor Cavity Reflectance .20

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	0	.00	.00
90-0°	3258	56.19	100.00
180-0°	3258	56.19	100.00

LUMINANCE SUMMARY (fL)

ANGLE	0°	45°	90°
45°	2896	3045	3074
55°	2479	2439	2033
65°	1130	1025	578
75°	252	199	193
85°	57	28	28



P-ID-9334T8-PBSS-CV-ELB 46.9% Efficiency
Litecontrol Certified Test Report #31031340

RCC RW	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR 0	.56	.56	.56	.56	.55	.55	.55	.55	.52	.52	.52	.50	.50	.50	.48	.48	.48	.47	.47	.47	.47
1	.52	.51	.49	.48	.51	.50	.48	.47	.48	.47	.46	.46	.45	.44	.44	.44	.43	.42	.42	.42	.42
2	.49	.46	.44	.41	.48	.45	.43	.41	.43	.42	.40	.42	.41	.39	.41	.39	.38	.37	.37	.37	.37
3	.45	.41	.38	.36	.44	.41	.38	.36	.40	.37	.35	.38	.36	.35	.37	.36	.34	.33	.33	.33	.33
4	.42	.37	.34	.31	.41	.37	.34	.31	.36	.33	.31	.35	.32	.30	.34	.32	.30	.29	.29	.29	.29
5	.39	.34	.30	.27	.38	.33	.30	.27	.32	.29	.27	.31	.29	.27	.30	.28	.26	.25	.25	.25	.25
6	.36	.30	.27	.24	.35	.30	.26	.24	.29	.26	.24	.28	.26	.23	.28	.25	.23	.22	.22	.22	.22
7	.33	.27	.24	.21	.32	.27	.23	.21	.26	.23	.21	.26	.23	.21	.25	.22	.20	.20	.20	.20	.20
8	.30	.25	.21	.18	.30	.24	.21	.18	.24	.20	.18	.23	.20	.18	.22	.20	.18	.17	.17	.17	.17
9	.28	.22	.18	.16	.27	.22	.18	.16	.21	.18	.16	.21	.18	.16	.20	.18	.16	.15	.15	.15	.15
10	.26	.20	.16	.14	.25	.20	.16	.14	.19	.16	.14	.19	.16	.14	.19	.16	.14	.13	.13	.13	.13

Floor Cavity Reflectance .20

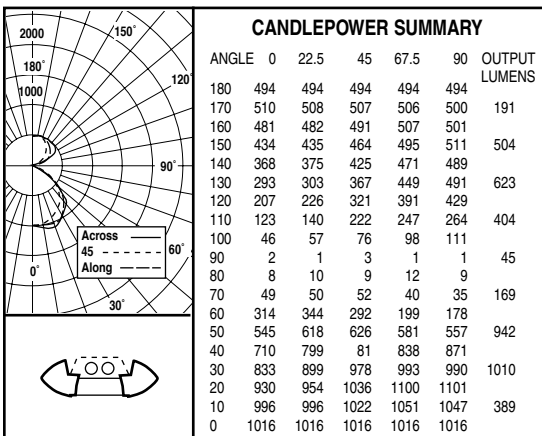
ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	0	.00	.00
90-0°	4083	46.94	100.00
180-0°	4083	46.94	100.00

LUMINANCE SUMMARY (fL)

ANGLE	0°	45°	90°
45°	3782	3696	3713
55°	3245	3014	2818
65°	1452	1344	687
75°	252	175	175
85°	58	39	27

PHOTOMETRIC DATA: PFCV



P-ID-9324T8-PBSS-PFCV-ELB 73.6% Efficiency
Litecontrol Certified Test Report #31121340

RCC RW	80				70				50				30				10				0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR 0	.80	.80	.80	.80	.75	.75	.75	.75	.65	.65	.65	.56	.56	.56	.47	.47	.47	.43	.43	.43	.43
1	.75	.72	.69	.67	.70	.67	.65	.63	.59	.57	.56	.51	.50	.49	.44	.43	.42	.39	.39	.39	.39
2	.69	.64	.60	.57	.64	.60	.57	.54	.53	.50	.48	.46	.44	.43	.40	.39	.37	.34	.34	.34	.34
3	.64	.57	.53	.49	.59	.54	.50	.46	.48	.44	.42	.42	.39	.37	.36	.35	.33	.30	.30	.30	.30
4	.59	.51	.46	.42	.55	.48	.44	.40	.43	.39	.36	.38	.35	.33	.33	.31	.29	.27	.27	.27	.27
5	.54	.46	.40	.36	.50	.43	.38	.34	.38	.34	.31	.34	.31	.28	.30	.27	.25	.23	.23	.23	.23
6	.50	.41	.35	.31	.46	.39	.34	.30	.35	.31	.27	.31	.27	.25	.27	.24	.22	.21	.21	.21	.21
7	.46	.37	.31	.27	.43	.35	.30	.26	.31	.27	.24	.28	.24	.22	.24	.22	.20	.19	.19	.19	.19
8	.42	.33	.28	.24	.39	.31	.26	.23	.28	.24	.21	.25	.21	.19	.22	.19	.17	.16	.16	.16	.16
9	.39	.30	.24	.21	.36	.28	.23	.20	.25	.21	.18	.22	.19	.16	.20	.17	.15	.13	.13	.13	.13
10	.36	.27	.22	.18	.34	.26	.21	.17	.23	.19	.16	.20	.17	.15	.18	.15	.13	.12	.12	.12	.12

Floor Cavity Reflectance .20

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% LUMINAIRE
180-90°	1756	30.29	41.15
90-0°	2512	43.32	58.85
180-0°	4269	73.61	100.00

LUMINANCE SUMMARY (fL)

ANGLE	0°	45°	90°
45°	1467	1685	1750
55°	1280	1363	958
65°	597	502	308
75°	139	146	121
85°	56	57	57

