



LUMINAIRE TESTING LABORATORY, INC.



905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

LTL NUMBER: 07743

DATE: 11-03-2003

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: LMPI/D03-PH-SE-WR-4-W-PB-F01M-120-T8/T8

LUMINAIRE: EXTRUDED ALUMINUM HOUSING WITH PERFORATED SECTION AND
TRANSLUCENT WHITE ACRYLIC INSERT, FORMED WHITE ENAMEL
ALUMINUM REFLECTORS, 32 CELL, 3/4" DEEP, FORMED SEMI-SPECULAR
ALUMINUM LOUVER, OPEN TOP.

LAMPS: THREE 32 WATT T8 LINEAR FLUORESCENT LAMPS RATED AT 2850 LUMENS
EACH.

LAMP CATALOG NUMBER: PHILIPS F32T8/TL841

BALLASTS: ONE ADVANCE REL-1P32-SC AND

ONE ENERGY SAVINGS ES-2/1-T8-32/25/17/15-UNV-A-IS

NOTE: THIS TEST WAS CALCULATED USING MEASURED DATA FROM LTL TEST
NUMBERS 06294 AND 07740.

MOUNTING: WALL

LUMEN TO CANDELA RATIO USED = 9.18

TOTAL INPUT WATTS = 86.9 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PERPENDICULAR TO THE LAMPS.

CANDELA DISTRIBUTION

FLUX

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	
0	742	742	742	742	742	742	742	742	742	
5	741	743	745	738	734	741	746	743	744	71
15	782	767	743	713	700	714	735	758	772	209
25	782	762	726	667	638	663	718	748	769	328
35	689	674	655	600	554	596	643	643	662	393
45	559	532	520	496	443	488	497	498	522	387
55	375	358	339	334	303	323	310	316	329	290
65	81	108	108	69	54	60	83	73	48	88
75	36	35	27	20	16	12	11	9	9	20
85	21	20	13	10	2	3	3	3	3	9
90	11	9	6	3	1	2	1	1	0	
95	101	119	132	129	56	35	52	52	59	93
105	530	551	551	478	265	163	135	136	143	346
115	969	978	902	712	502	385	315	283	285	579
125	1245	1195	1074	906	723	625	529	481	477	716
135	1352	1317	1223	1048	920	851	763	701	697	758
145	1431	1392	1306	1173	1085	1036	977	925	921	710
155	1431	1404	1344	1271	1217	1178	1153	1116	1119	575
165	1411	1394	1373	1337	1305	1285	1267	1255	1264	373
175	1380	1374	1375	1362	1354	1345	1337	1331	1334	129
180	1359	1359	1359	1359	1359	1359	1359	1359	1359	

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	607	7.1	10.0
0- 40	1001	11.7	16.5
0- 60	1678	19.6	27.6
0- 90	1796	21.0	29.6
90-120	1018	11.9	16.8
90-130	1734	20.3	28.5
90-150	3202	37.4	52.7
90-180	4278	50.0	70.4
0-180	6074	71.0	100.0

TOTAL LUMINAIRE EFFICIENCY: 71.0%

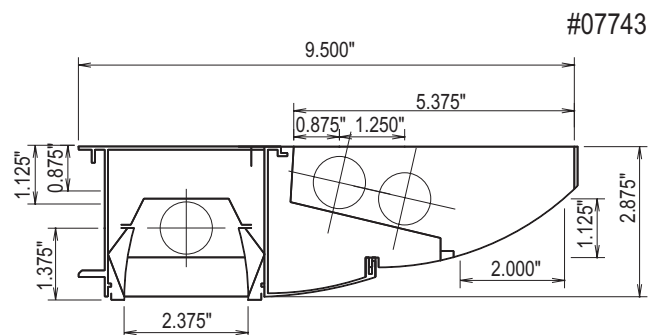
TOTAL REFLECTANCE OF PAINT: 90.4%

CIE TYPE: SEMI-INDIRECT

PLANE: 0-DEG 90-DEG 180-DEG

SPACING CRITERIA: 1.4 1.2 1.4

SHIELDING ANGLES: 33 27



#07743

TESTED BY HERSCHEL SCHRECK
CHECKED BY MIKE GRATHER

THIS REPORT BASED ON LM-41 AND OTHER PERTINENT IESNA PROCEDURES.



LUMINAIRE TESTING LABORATORY, INC.



SUSTAINING
MEMBER

905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

LTL NUMBER: 07743

DATE: 11-03-2003

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

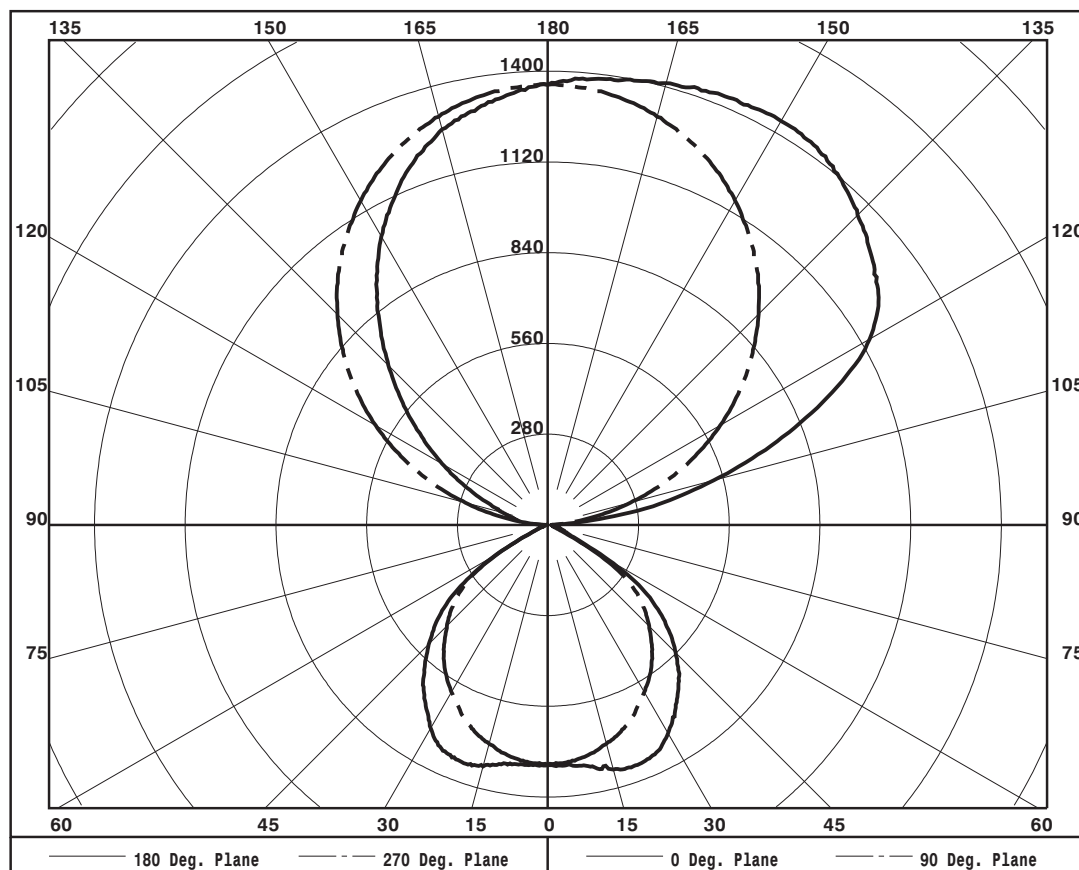
ZONAL LUMEN SUMMARY

0- 5	18.
5- 10	53.
10- 15	88.
15- 20	121.
20- 25	151.
25- 30	176.
30- 35	193.
35- 40	200.
40- 45	199.
45- 50	188.
50- 55	165.
55- 60	125.
60- 65	64.
65- 70	24.
70- 75	12.
75- 80	8.
80- 85	6.
85- 90	3.
90- 95	15.
95-100	78.
100-105	142.
105-110	205.
110-115	265.
115-120	315.
120-125	348.
125-130	368.
130-135	379.
135-140	379.
140-145	367.
145-150	343.
150-155	309.
155-160	266.
160-165	215.
165-170	158.
170-175	96.
175-180	32.

PLANE: 0-DEG 90-DEG
LUMINOUS LENGTH: 4.375 47.750
HEIGHT OF SIDE: 1.125 0.000

LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	6753.	6753.	6753.
45	4625.	4805.	5702.
55	3317.	3445.	4808.
65	796.	1262.	1163.
75	412.	385.	563.
85	298.	247.	209.



LTL NUMBER: 07743

DATE: 11-03-2003

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CANDELA DISTRIBUTION

[illegible]



LUMINAIRE TESTING LABORATORY, INC.



SUSTAINING
MEMBER

905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

LTL NUMBER: 07743

DATE: 11-03-2003

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

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
0	73	73	73	73	65	65	65	65	51	51	51	38	38	38	27	27	27	21
1	67	64	61	59	60	58	55	54	45	44	43	34	34	33	24	24	23	19
2	61	57	53	49	55	51	48	45	41	38	36	31	30	28	22	21	21	17
3	56	50	45	42	50	45	41	38	36	33	31	28	26	25	20	19	18	15
4	51	44	39	35	46	40	36	33	32	29	27	25	23	21	18	17	16	13
5	47	40	34	30	42	36	31	28	29	26	23	22	20	18	16	15	14	11
6	43	35	30	26	39	32	28	24	26	23	20	20	18	16	15	13	12	10
7	40	32	26	23	36	29	24	21	23	20	18	18	16	14	13	12	11	9
8	37	29	23	20	33	26	21	18	21	18	15	16	14	12	12	10	9	8
9	34	26	21	17	31	23	19	16	19	16	13	15	12	11	11	9	8	6
10	32	23	18	15	28	21	17	14	17	14	12	13	11	9	10	8	7	6

NOTE: THE ZONAL CAVITY CALCULATION TECHNIQUE IS ACCURATE WHEN LUMINAIRES WITH SYMMETRIC CANDELA DISTRIBUTIONS ARE EMPLOYED AND WHEN THE LUMINAIRES ARE LOCATED SYMMETRICALLY THROUGHOUT THE ROOM. THIS UNIT HAS SPECIAL CHARACTERISTICS AND THEREFORE THESE COEFFICIENTS SHOULD BE USED WITH CAUTION.

THIS TEST WAS CONDUCTED USING RELATIVE PHOTOMETRY TECHNIQUES ACCORDING TO STANDARD IESNA PROCEDURES. THE USER MUST THEREFORE USE CAUTION IN THE FOLLOWING SITUATIONS: 1) THIS TEST WAS PERFORMED USING A SPECIFIC BALLAST/LAMP COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER BALLAST/LAMP COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. 2) ACCORDING TO IESNA PROCEDURES, THE BALLAST(S) AND LAMP(S) ARE PRESUMED TO PRODUCE 100% OF RATED OUTPUT. AN APPROPRIATE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATINGS AND LUMINOUS INTENSITY VALUES GIVEN. 3) THIS TEST WAS CONDUCTED IN A CONTROLLED LABORATORY ENVIRONMENT WHERE THE AMBIENT TEMPERATURE WAS HELD AT 25 C ± 1 C. FIELD PERFORMANCE MAY DIFFER PARTICULARLY IN REGARDS TO CHANGE IN LUMINOUS OUTPUT AS A RESULT OF DIFFERENCE IN AMBIENT TEMPERATURE AND METHOD OF MOUNTING THE LUMINAIRE.



LUMINAIRE TESTING LABORATORY, INC.



SUSTAINING
MEMBER

905 Harrison Street · Allentown, PA 18103 · (610) 770-1044 · Fax (610) 770-8912 · www.LuminaireTesting.com

INITIAL ILLUMINATION OF 50 FOOTCANDLES USING LTL TEST NUMBER 07743

LUMINAIRE SUSPENSION LENGTH = 1.5

WORKING PLANE HEIGHT = 2.50

FLOOR REFLECTANCE = 20

ROOM HT CEIL RF WALL RF		8				9				10				12			
		80		70		80		70		80		70		80		70	
		70	50	50	30	70	50	50	30	70	50	50	30	70	50	50	30
WIDTH	LENGTH																
10.	10.	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3
10.	15.	2	2	3	3	2	3	3	3	2	3	3	3	3	3	3	4
15.	20.	3	4	4	4	4	4	4	5	4	4	5	5	4	5	5	6
15.	30.	5	5	6	6	5	5	6	6	5	6	6	7	6	6	7	8
20.	20.	4	5	5	5	4	5	5	6	5	5	6	6	5	6	6	7
20.	30.	6	6	7	7	6	7	7	8	6	7	8	8	7	8	9	9
20.	40.	8	8	9	10	8	9	10	10	8	9	10	11	9	10	11	12
20.	60.	11	12	13	14	12	12	14	14	12	13	14	15	13	14	15	17
30.	30.	9	9	10	10	9	9	10	11	9	10	11	12	10	11	12	13
30.	40.	11	12	13	13	11	12	13	14	12	13	14	15	12	13	15	16
30.	50.	14	14	16	16	14	15	16	17	14	15	17	18	15	16	18	19
30.	60.	16	17	19	19	17	17	19	20	17	18	20	21	18	19	21	23
60.	60.	31	32	36	36	32	33	36	37	32	33	37	38	33	35	39	40
60.	80.	41	42	47	48	42	43	48	49	42	44	48	50	43	45	50	52
60.	100.	51	52	58	59	52	53	59	60	52	54	60	62	53	56	62	64
100.	100.	84	85	95	96	84	86	96	97	85	87	97	99	87	90	100	102

QUANTITY OF LUMINAIRES