



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING MEMBER of the IESNA

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

LTL NUMBER: 13056

DATE: 04-21-2008

PREPARED FOR: PRECISION ARCHITECTURAL LIGHTING

CATALOG NUMBER: MLP-I1/D2-4-X-OP/PBW-X-120-T5

LUMINAIRE: EXTRUDED ALUMINUM HOUSING, FORMED SPECULAR ALUMINUM UPPER REFLECTOR, FORMED WHITE ENAMEL ALUMINUM LOWER REFLECTOR, 30 CELL, 3/4" DEEP, FORMED WHITE ENAMEL ALUMINUM BAFFLE.

LAMPS: THREE 28 WATT T5 LINEAR FLUORESCENT LAMPS RATED AT 2610 LUMENS EACH

LAMP CATALOG NUMBER: PHILIPS F28T5/835/ALTO

BALLASTS: TWO ADVANCE ICN-2S28

MOUNTING: WALL

NOTE: THIS TEST WAS CALCULATED USING MEASURED DATA FROM LTL TEST NUMBERS 12734 AND 12723.

LUMEN TO CANDELA RATIO USED = 9.18

TOTAL INPUT WATTS = 84.4 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PERPENDICULAR TO THE LAMPS.

CANDELA DISTRIBUTION

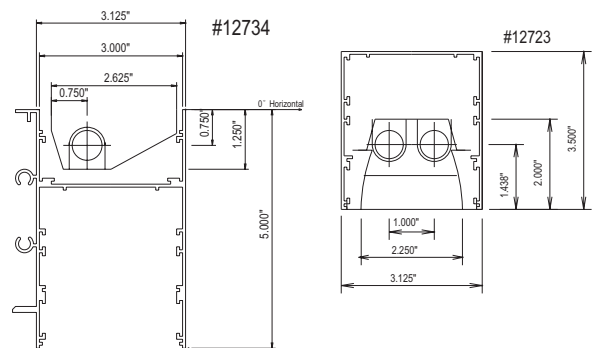
FLUX

Table with 11 columns: Candela values (0.0 to 180.0) and Flux values (124 to 55). Rows represent beam angles from 0 to 180 degrees.

ZONAL LUMEN SUMMARY

Table with 4 columns: ZONE, LUMENS, %LAMP, %FIXT. Rows show lumen and percentage for various beam zones.

TOTAL LUMINAIRE EFFICIENCY: 59.1%
CIE TYPE: GENERAL DIFFUSE
PLANE: 0-DEG 90-DEG 180-DEG
SPACING CRITERIA: 1.1 1.1 1.1
SHIELDING ANGLES: 34 29



Approved By: MG



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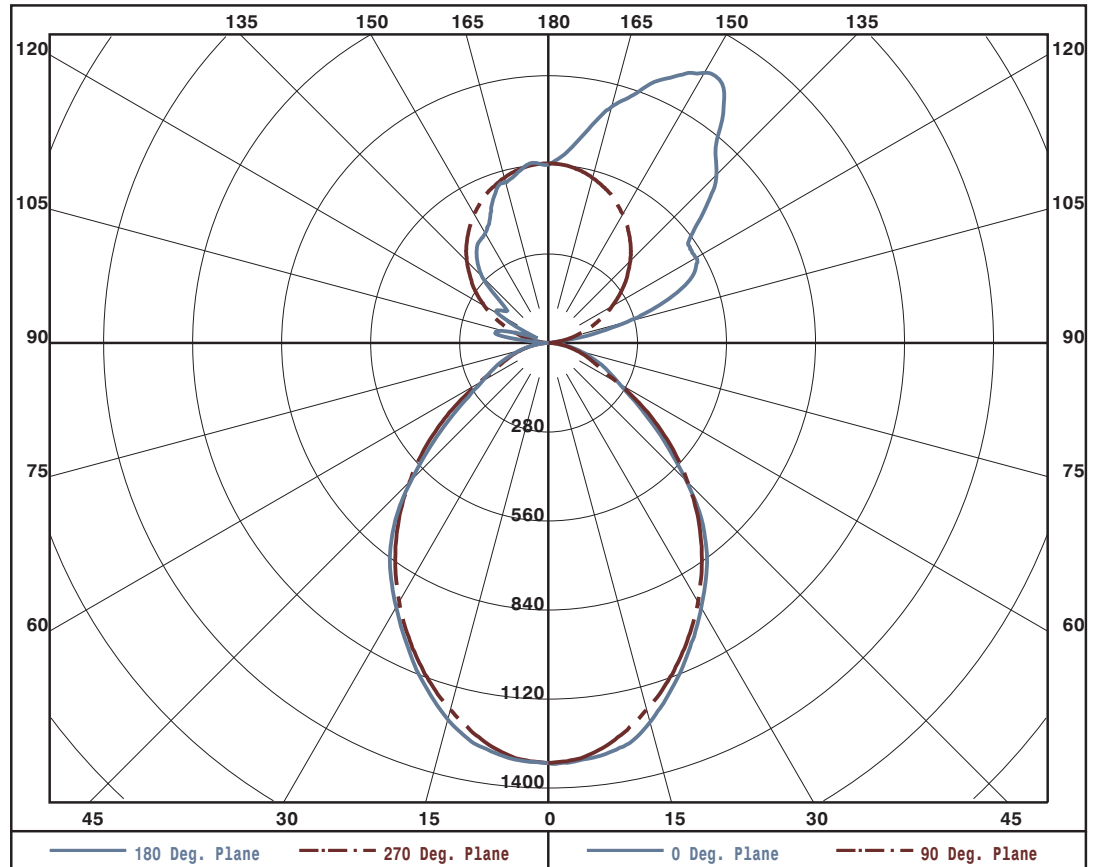
### ZONAL LUMEN SUMMARY

0- 5	32.
5- 10	93.
10- 15	148.
15- 20	194.
20- 25	228.
25- 30	251.
30- 35	261.
35- 40	261.
40- 45	248.
45- 50	220.
50- 55	183.
55- 60	141.
60- 65	105.
65- 70	81.
70- 75	60.
75- 80	40.
80- 85	22.
85- 90	4.
90- 95	5.
95-100	41.
100-105	75.
105-110	94.
110-115	119.
115-120	142.
120-125	159.
125-130	171.
130-135	189.
135-140	194.
140-145	190.
145-150	174.
150-155	152.
155-160	127.
160-165	99.
165-170	70.
170-175	41.
175-180	14.

PLANE: 0-DEG 90-DEG  
 LUMINOUS LENGTH: 2.250 44.875

### LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	20278.	20278.	20278.
45	13329.	13264.	13524.
55	9313.	10089.	10170.
65	7519.	7155.	6211.
75	6405.	5872.	5397.
85	5108.	4755.	3699.





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CANDELA DISTRIBUTION

Table with 10 columns representing candela values at various angles (0.0 to 180.0) and 19 rows representing different measurement points (0 to 180).



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

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.