



LUMINAIRE TESTING LABORATORY, INC.



SUSTAINING
MEMBER

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

LTL NUMBER: 07048

DATE: 12-10-2002

PREPARED FOR: VANTAGE LUMINAIRES

CATALOG NUMBER: 8HF1-32E 8600SCL

LUMINAIRE: FORMED STEEL HOUSING, SPUN SPECULAR ALUMINUM REFLECTOR,
NO ENCLOSURE.

LAMP: ONE SYLVANIA CF32DT/E/IN/830 RATED AT 2400 LUMENS.

BALLAST: ONE ADVANCE ICF-2S26-H1-LD

MOUNTING: RECESSED

TOTAL INPUT WATTS = 34.7 AT 120.0 VOLTS

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	FLUX
0	627	627	627	627	627	627	627	627	627	
5	648	651	674	690	703	696	683	666	656	69
15	650	756	885	939	908	913	851	774	743	235
25	630	621	658	732	735	682	611	644	759	310
35	636	624	618	629	632	626	625	620	714	392
45	522	579	668	694	709	698	641	554	570	483
55	295	326	346	344	346	347	325	284	280	286
65	11	11	11	11	11	11	11	12	12	10
75	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	614	25.6	34.4
0- 40	1007	41.9	56.4
0- 60	1776	74.0	99.4
0- 90	1786	74.4	100.0
90-180	0	0.0	0.0
0-180	1786	74.4	100.0

TOTAL LUMINAIRE EFFICIENCY: 74.4%

CIE TYPE: DIRECT

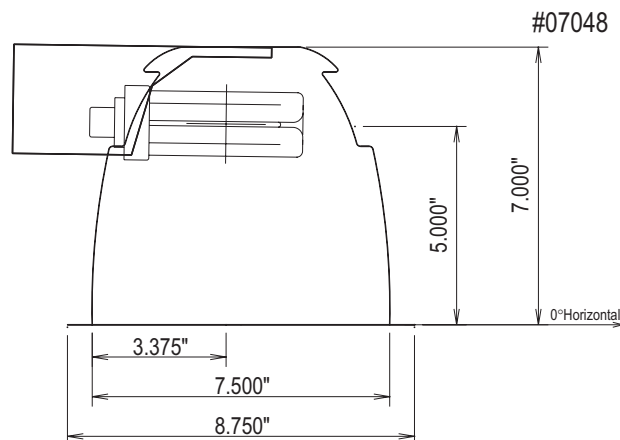
PLANE: 0-DEG 90-DEG 180-DEG

SPACING CRITERIA: 1.5 1.6 1.6

LUMINOUS DIAMETER: 7.500

LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	21997.	21997.	21997.
45	25898.	33142.	35176.
55	18043.	21163.	21163.
65	913.	913.	913.
75	0.	0.	0.
85	0.	0.	0.



TESTED BY HERSCHEL SCHRECK
CHECKED BY MIKE GRATHER

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



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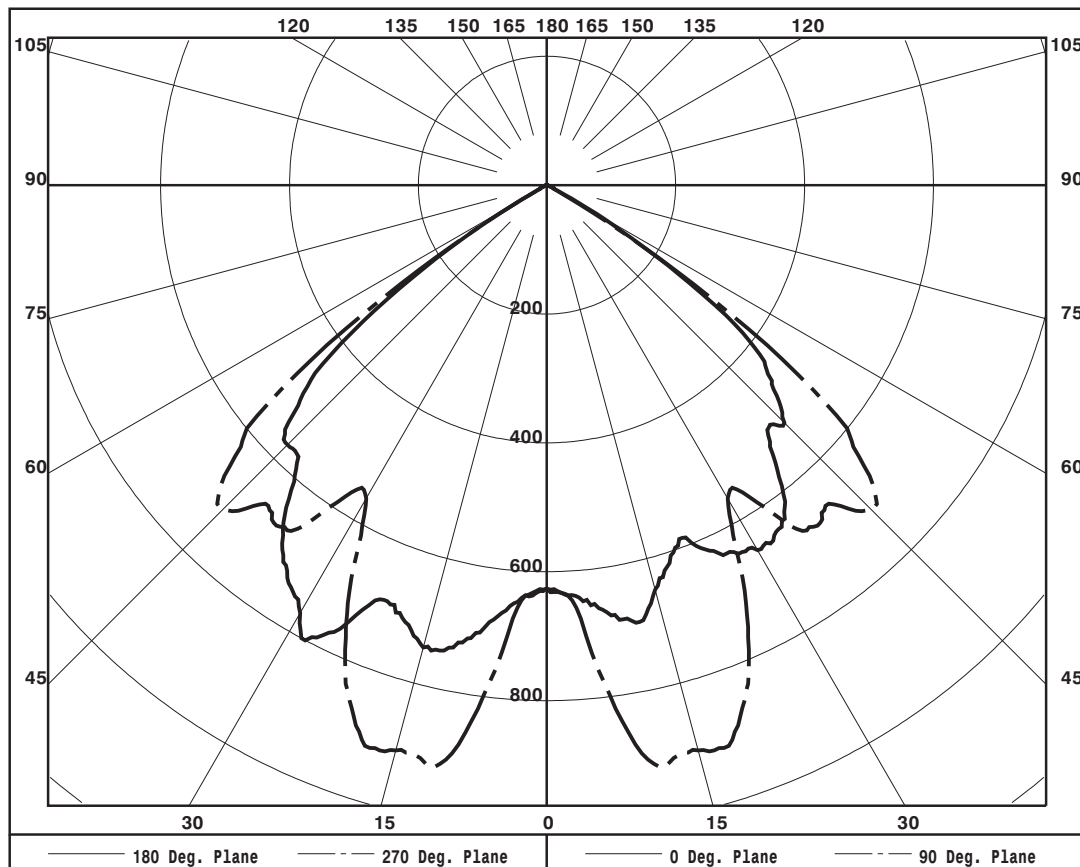
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CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0
0	627	627	627	627	627	627	627	627	627
5	648	651	674	690	703	696	683	666	656
10	684	723	809	881	905	865	801	749	714
15	650	756	885	939	908	913	851	774	743
20	596	683	830	876	877	840	780	704	693
25	630	621	658	732	735	682	611	644	759
30	654	631	580	563	562	524	547	644	767
35	636	624	618	629	632	626	625	620	714
40	546	621	672	667	664	677	667	599	618
45	522	579	668	694	709	698	641	554	570
50	445	493	577	600	617	617	576	498	486
55	295	326	346	344	346	347	325	284	280
60	90	80	60	51	44	44	44	44	47
65	11	11	11	11	11	11	11	12	12
70	3	2	1	1	1	1	1	2	2
75	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0

ZONAL LUMEN SUMMARY

0- 5	15.
5- 10	53.
10- 15	99.
15- 20	137.
20- 25	152.
25- 30	159.
30- 35	178.
35- 40	215.
40- 45	238.
45- 50	245.
50- 55	205.
55- 60	81.
60- 65	7.
65- 70	3.
70- 75	0.
75- 80	0.
80- 85	0.
85- 90	0.





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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	89	89	89	89	86	86	86	86	83	83	83	79	79	79	76	76	76	74
1	83	81	79	77	81	79	77	75	76	75	73	73	72	71	71	70	69	67
2	78	74	70	67	76	72	69	66	70	67	65	68	65	63	66	64	62	61
3	73	67	62	59	71	66	62	58	64	60	57	62	59	56	60	58	55	54
4	68	61	55	51	66	60	55	51	58	54	51	56	53	50	55	52	49	48
5	63	55	49	45	61	54	49	45	52	48	44	51	47	44	50	46	44	42
6	58	49	44	40	57	49	43	39	47	43	39	46	42	39	45	41	38	37
7	53	44	38	34	52	44	38	34	43	38	34	42	37	34	41	37	34	32
8	49	40	34	30	48	39	33	30	38	33	29	37	33	29	36	32	29	28
9	45	35	29	26	44	35	29	25	34	29	25	33	29	25	32	28	25	24
10	41	32	26	22	40	31	26	22	31	26	22	30	25	22	29	25	22	21

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.



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VISUAL COMFORT PROBABILITY TABLE

RATED LUMENS PER LAMP 2400.

100. FC. ROOM		REFLECTANCES 80/50/20 LUMINAIRES 0 DEG PLANE				LUMINAIRES 90 DEG PLANE			
W	L	8.5	10.0	13.0	16.0	8.5	10.0	13.0	16.0
20	20	58	45	30	26	55	43	28	21
20	30	58	45	38	30	55	43	36	27
20	40	58	45	38	36	55	43	36	33
20	60	58	45	38	36	55	43	36	33
30	20	58	51	37	26	55	49	35	23
30	30	58	51	43	31	55	49	41	29
30	40	58	51	43	37	55	49	41	34
30	60	58	51	43	37	55	49	41	34
30	80	58	51	43	37	55	49	41	34
40	20	58	51	41	31	55	49	38	27
40	30	58	51	45	36	55	49	43	34
40	40	58	51	45	41	55	49	44	37
40	60	58	51	45	41	55	49	44	37
40	80	59	51	45	41	55	49	44	37
40	100	59	51	46	41	55	49	44	38
60	30	58	51	45	38	55	49	43	37
60	40	58	51	45	42	55	49	43	40
60	60	59	51	45	42	55	49	44	40
60	80	59	52	45	42	55	49	44	40
60	100	59	52	45	42	55	49	44	40
100	40	58	51	45	42	55	49	43	40
100	60	59	51	45	42	55	49	44	40
100	80	59	51	45	42	55	49	44	40
100	100	59	51	45	42	55	49	44	40

THIS TABLE WAS CALCULATED ACCORDING TO IESNA LM-42-72. THE VCP CALCULATION PROCEDURE IS MOST ACCURATE FOR LUMINAIRES THAT EXHIBIT THE FOLLOWING CHARACTERISTICS. 1). LUMINAIRE IS RELATIVELY CONSISTANT IN LUMINANCE 2). LUMINAIRE HAS WELL-DEFINED LUMINOUS EDGES AND 3). LUMINAIRE UTILIZES FLUORESCENT LAMPS. CAUTION SHOULD BE USED WHEN APPLYING VCP VALUES BASED ON LUMINAIRES THAT DO NOT CONFORM TO THE ABOVE CONDITIONS.



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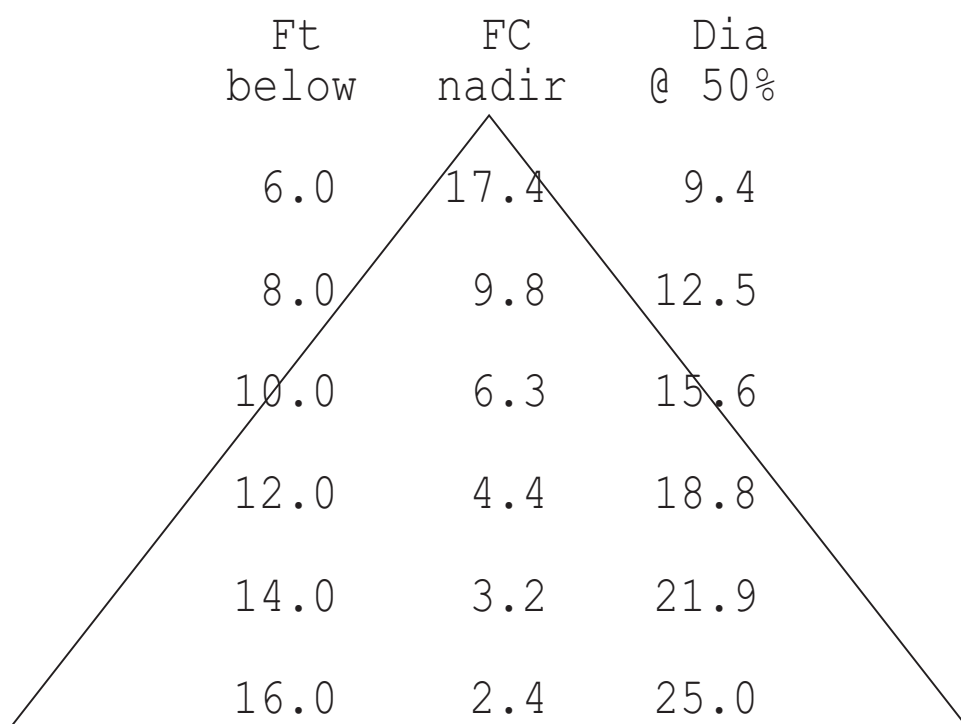


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LTL TEST #07048

CIRCLE-OF-LIGHT



NOTE: 'Dia' spans the edge-points that are half of nadir FC