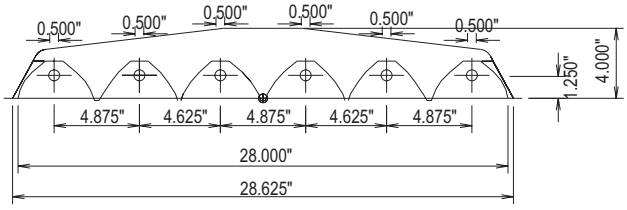
LTL LUMINAIRE TESTING LABORATORY, INC.

IES SUSTAINING MEMBER

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

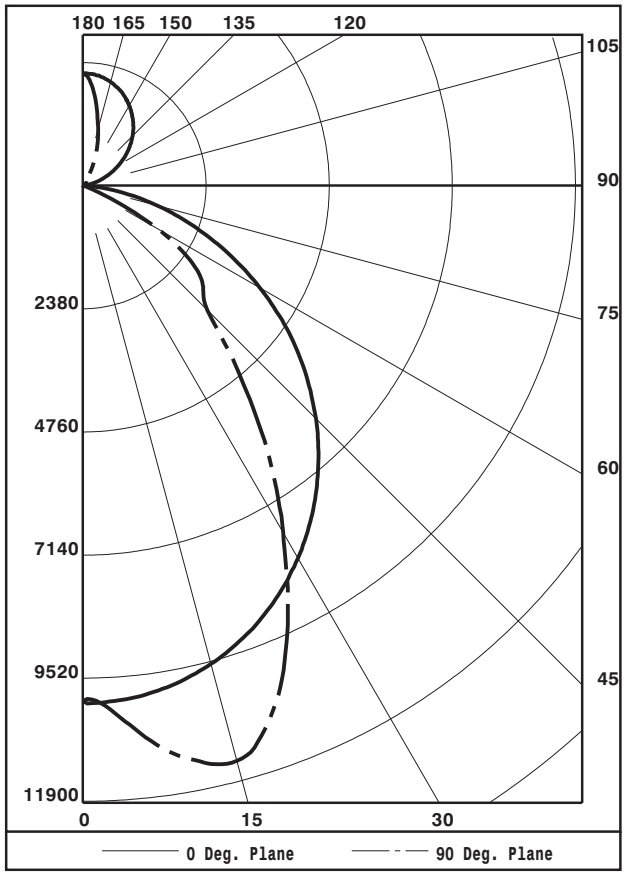
LTL NUMBER: 07866 DATE: 12-22-2003
PREPARED FOR: SIM-KAR LIGHTING
CATALOG NUMBER: ADJUST-654-A
LUMINAIRE: FORMED STEEL HOUSING WITH CAST ALUMINUM ENDS, FORMED SPECULAR ALUMINUM REFLECTORS WITH 42, 1/2" X 5" SLOTS ABOVE LAMPS, NO ENCLOSURE. LAMPS IN MEDIUM POSITION.
LAMPS: SIX 54 WATT HIGH OUTPUT T5 LINEAR FLUORESCENT LAMPS RATED AT 4400 LUMENS EACH.
LAMP CATALOG NUMBER: SYLVANIA FP54/841/HO
BALLAST: ONE MAGNETEK B254PUNV-D AND TWO ADVANCE ICN-2S54
LER: 82.9 BASED ON A MEASURED BALLAST FACTOR OF 123.9%
MOUNTING: PENDENT
LUMEN TO CANDELA RATIO USED = 9.18
TOTAL INPUT WATTS =368.8 AT 120.0 VOLTS
THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMPS.

#07866



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	9960	9960	9960	9960	9960	
5	9957	10034	10248	10414	10462	988
15	9571	10308	11096	11453	11507	3059
25	8814	10171	10515	9727	9370	4537
35	7735	9309	7933	6640	6201	4809
45	6371	7267	5024	3739	3397	4053
55	4808	4524	2584	2676	2557	3017
65	3105	2045	1623	883	610	1609
75	1498	857	126	11	4	467
85	222	1	3	4	7	43
90	0	4	15	25	27	
95	18	15	34	52	52	39
105	247	28	44	53	59	73
115	616	39	57	67	74	125
125	995	167	44	64	69	181
135	1359	514	76	53	53	263
145	1657	904	382	125	87	361
155	1906	1344	862	595	507	460
165	2075	1803	1429	1205	1143	422
175	2167	2118	2048	1980	1957	189
180	2164	2164	2164	2164	2164	



ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT
0- 30	8583	32.5	34.8
0- 40	13392	50.7	54.2
0- 60	20463	77.5	82.9
0- 90	22582	85.5	91.4
90-120	237	0.9	1.0
90-130	418	1.6	1.7
90-150	1041	3.9	4.2
90-180	2113	8.0	8.6
0-180	24695	93.5	100.0

TOTAL LUMINAIRE EFFICIENCY: 93.5%
CIE TYPE: DIRECT
PLANE: 0-DEG 90-DEG
SPACING CRITERIA: 1.2 1.2

TESTED BY HERSCHEL SCHRECK
CHECKED BY MIKE GRATHER

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

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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	109	109	109	109	106	106	106	106	99	99	99	94	94	94	88	88	88	86
1	102	99	96	93	99	96	93	91	91	89	87	86	84	83	81	80	79	77
2	95	89	84	80	92	87	82	79	82	79	76	78	75	73	75	72	70	68
3	88	81	74	70	86	79	73	68	75	70	66	71	67	64	68	65	62	60
4	82	73	66	61	79	71	65	60	68	62	58	65	60	57	62	58	55	53
5	76	65	58	53	73	64	57	52	61	55	51	58	54	50	56	52	49	47
6	70	59	52	47	68	58	51	46	56	50	45	53	48	44	51	47	43	41
7	65	54	46	41	63	53	46	41	51	44	40	49	43	39	47	42	39	37
8	60	49	41	36	58	48	41	36	46	40	35	44	39	35	42	38	34	32
9	55	44	37	32	54	43	36	32	41	35	31	40	34	30	38	33	30	28
10	52	40	33	28	50	39	33	28	38	32	28	36	31	27	35	30	27	25

PLANE:	0-DEG	90-DEG
LUMINOUS LENGTH:	48.125	28.625

LUMINANCE IN CANDELA PER SQUARE METER

ANGLE IN DEG	AVERAGE 0-DEG	AVERAGE 45-DEG	AVERAGE 90-DEG
0	11206.	11206.	11206.
45	10137.	7994.	5405.
55	9431.	5069.	5016.
65	8266.	4321.	1624.
75	6512.	548.	17.
85	2866.	39.	90.

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	0.0	22.5	45.0	67.5	90.0
0	9960	9960	9960	9960	9960
5	9957	10034	10248	10414	10462
10	9812	10181	10773	11126	11221
15	9571	10308	11096	11453	11507
20	9237	10323	11140	10959	10770
25	8814	10171	10515	9727	9370
30	8314	9857	9370	8157	7748
35	7735	9309	7933	6640	6201
40	7071	8415	6446	5115	4658
45	6371	7267	5024	3739	3397
50	5611	5935	3665	2990	3033
55	4808	4524	2584	2676	2557
60	3955	3231	2195	1934	1680
65	3105	2045	1623	883	610
70	2278	1260	723	205	118
75	1498	857	126	11	4
80	791	177	4	4	0
85	222	1	3	4	7
90	0	4	15	25	27
95	18	15	34	52	52
100	103	20	39	52	60
105	247	28	44	53	59
110	426	33	48	59	67
115	616	39	57	67	74
120	807	66	50	64	73
125	995	167	44	64	69
130	1183	335	53	52	52
135	1359	514	76	53	53
140	1515	704	179	69	69
145	1657	904	382	125	87
150	1786	1108	612	329	229
155	1906	1344	862	595	507
160	1999	1583	1129	887	810
165	2075	1803	1429	1205	1143
170	2128	1985	1764	1592	1536
175	2167	2118	2048	1980	1957
180	2164	2164	2164	2164	2164

ZONAL LUMEN SUMMARY

0- 5	240.
5- 10	748.
10- 15	1279.
15- 20	1779.
20- 25	2160.
25- 30	2377.
30- 35	2445.
35- 40	2364.
40- 45	2163.
45- 50	1890.
50- 55	1650.
55- 60	1368.
60- 65	1014.
65- 70	595.
70- 75	316.
75- 80	151.
80- 85	37.
85- 90	7.
90- 95	16.
95-100	22.
100-105	30.
105-110	43.
110-115	57.
115-120	68.
120-125	80.
125-130	101.
130-135	121.
135-140	142.
140-145	166.
145-150	195.
150-155	224.
155-160	236.
160-165	227.
165-170	196.
170-175	138.
175-180	51.

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.