



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: 18375
 PREPARED FOR: LUMETTA, INC.
 CATALOG NUMBER: FP5542Z
 LUMINAIRE: FORMED STEEL HOUSING WITH WHITE REFLECTOR, TRANSLUCENT WHITE PLASTIC SIDE DIFFUSERS WITH TRANSLUCENT WHITE PLASTIC UPPER AND LOWER LENSES.
 LAMP: TWO HORIZONTAL 32 WATT TRIPLE TUBE COMPACT FLUORESCENT LAMPS RATED AT 2400 LUMENS EACH.
 LAMP CATALOG NUMBER: SYLVANIA CF32DT/E/IN/835
 BALLAST: ONE FULHAM RACEHORSE RH4-UNV-242-C
 MOUNTING: PENDANT
 ELECTRICAL VALUES: 120.0VAC, 0.5754A, 68.92W

DATE: 06-14-2010

Candela Distribution

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	Flux
0	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	
5	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	28.7
15	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	87.4
25	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	143.5
35	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304	190.4
45	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	225.9
55	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	246.6
65	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	251.9
75	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	242.7
85	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203	223.9
90	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	
95	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	221.2
105	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	250.9
115	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	285.1
125	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	298.6
135	371	371	371	371	371	371	371	371	371	371	371	371	371	371	371	371	286.2
145	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	247.1
155	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	184.2
165	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386	110.7
175	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	39.8
180	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	

Zonal Lumen Summary

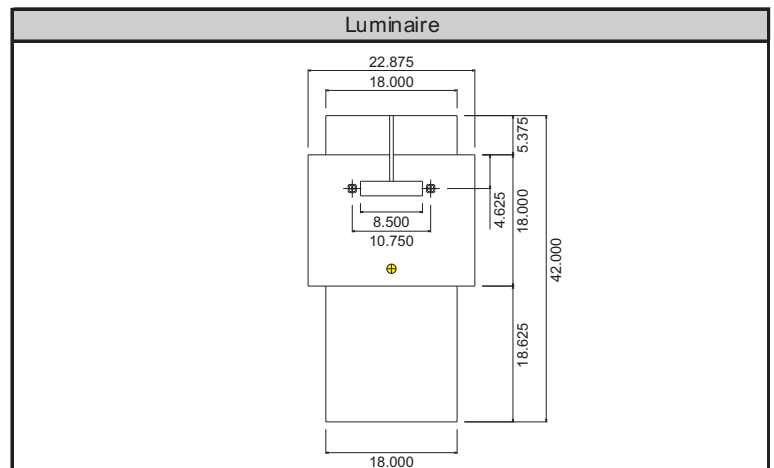
Zone	Lumens	% of Lamp	% of Luminaire
0-30	259.6	5.4%	7.3%
0-40	450.0	9.4%	12.6%
0-60	922.5	19.2%	25.9%
0-90	1641.0	34.2%	46.0%
90-180	1923.6	40.1%	54.0%
0-180	3564.6	74.3%	100.0%

Total luminaire efficiency: 74.3%

CIE Type: Direct/Indirect

Spacing Criterion: 1.51

Total reflectance of paint: 83.2



Approved By: MG

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



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Candela Tabulation (5 degree Vertical Increments)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307	307
5	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298
10	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303	303
15	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309
20	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311	311
25	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310
30	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
35	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304
40	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298
45	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292
50	284	284	284	284	284	284	284	284	284	284	284	284	284	284	284	284
55	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275
60	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265	265
65	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254
70	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242	242
75	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229
80	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217
85	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203
90	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199	199
95	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201
100	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
105	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237
110	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263	263
115	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
120	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312	312
125	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334	334
130	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353
135	371	371	371	371	371	371	371	371	371	371	371	371	371	371	371	371
140	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385
145	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394
150	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
155	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
160	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394
165	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386	386
170	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402	402
175	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424
180	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440

Zonal Lumen Tabulation (5 degree zones)

Zone	Lumens	Zone	Lumens	Zone	Lumens	Zone	Lumens
0-5	7.2	45-50	116.5	90-95	108.9	135-140	140.0
5-10	21.5	50-55	121.7	95-100	112.3	140-145	130.2
10-15	36.3	55-60	124.9	100-105	120.5	145-150	116.8
15-20	51.1	60-65	126.2	105-110	130.4	150-155	100.8
20-25	65.2	65-70	125.7	110-115	139.3	155-160	83.4
25-30	78.2	70-75	123.2	115-120	145.8	160-165	64.2
30-35	90.0	75-80	119.5	120-125	149.1	165-170	46.5
35-40	100.5	80-85	114.3	125-130	149.4	170-175	29.5
40-45	109.4	85-90	109.5	130-135	146.2	175-180	10.3



Coefficients of Utilization - Zonal Cavity Method												
Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
Wall Reflectance	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)												
0	0.857	0.857	0.857	0.857	0.789	0.789	0.789	0.789	0.724	0.724	0.724	0.724
1	0.762	0.714	0.671	0.633	0.697	0.655	0.618	0.584	0.635	0.599	0.567	0.537
2	0.686	0.61	0.548	0.497	0.626	0.56	0.505	0.46	0.568	0.511	0.464	0.423
3	0.621	0.529	0.458	0.402	0.566	0.485	0.422	0.373	0.513	0.443	0.388	0.344
4	0.565	0.463	0.389	0.333	0.514	0.424	0.359	0.309	0.466	0.388	0.33	0.285
5	0.516	0.408	0.334	0.28	0.47	0.375	0.309	0.26	0.425	0.343	0.284	0.24
6	0.474	0.363	0.29	0.239	0.431	0.334	0.269	0.222	0.391	0.306	0.248	0.205
7	0.436	0.325	0.255	0.206	0.397	0.3	0.236	0.192	0.36	0.275	0.218	0.178
8	0.403	0.294	0.226	0.18	0.368	0.271	0.21	0.168	0.334	0.248	0.194	0.155
9	0.374	0.266	0.202	0.158	0.341	0.246	0.187	0.148	0.311	0.226	0.173	0.137
10	0.348	0.243	0.181	0.14	0.318	0.225	0.168	0.131	0.29	0.207	0.156	0.122

Ceiling Cavity Reflectance	50				30			10			0
Wall Reflectance	70	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)											
0	0.602	0.602	0.602	0.602	0.492	0.492	0.492	0.39	0.39	0.39	0.342
1	0.521	0.494	0.47	0.448	0.398	0.38	0.363	0.309	0.296	0.284	0.241
2	0.463	0.42	0.384	0.353	0.337	0.31	0.286	0.259	0.24	0.223	0.185
3	0.416	0.364	0.322	0.287	0.291	0.259	0.233	0.223	0.2	0.18	0.147
4	0.377	0.319	0.274	0.238	0.255	0.221	0.193	0.195	0.17	0.149	0.12
5	0.345	0.282	0.236	0.201	0.226	0.191	0.163	0.173	0.147	0.126	0.1
6	0.317	0.252	0.207	0.173	0.202	0.167	0.14	0.156	0.129	0.109	0.085
7	0.293	0.227	0.182	0.15	0.183	0.148	0.122	0.141	0.115	0.095	0.074
8	0.272	0.206	0.162	0.131	0.166	0.132	0.107	0.129	0.103	0.083	0.065
9	0.253	0.188	0.145	0.116	0.152	0.119	0.095	0.118	0.093	0.074	0.057
10	0.237	0.172	0.131	0.103	0.14	0.108	0.085	0.109	0.084	0.066	0.051

Average Luminance Table (cd/m²)

	0	45	90
0	1158	1158	1158
45	592	592	592
55	531	531	531
65	481	481	481
75	439	439	439
85	407	407	407

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.

