



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: 18372

DATE: 08-02-2010

PREPARED FOR: LUMETTA, INC.

CATALOG NUMBER: FP560

LUMINAIRE: FORMED ALUMINUM AND STEEL HOUSING WITH WHITE ENAMEL STEEL REFLECTOR, WHITE PLASTIC SIDE DIFFUSER WITH TRANSLUCENT WHITE PLASTIC TOP AND BOTTOM LENSES AND LOWER ALUMINUM DECORATIVE TRIM.

LAMP: FOUR HORIZONTAL 42 WATT TRIPLE TUBE COMPACT FLUORESCENT LAMPS RATED AT 3200 LUMENS EACH.

LAMP CATALOG NUMBER: SYLVANIA CF42DT/E/IN/835

BALLAST: TWO FULHAM RACEHORSE 4 RH4-UNV-242-C

MOUNTING: PENDANT

ELECTRICAL VALUES: 120.0VAC, 1.5986A, 191.3W

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	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	
5	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	134.3
15	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	386.7
25	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	590.5
35	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	718.8
45	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979	755.2
55	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	698.6
65	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569	563.8
75	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	378.0
85	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	184.6
90	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	
95	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	165.1
105	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	366.4
115	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596	589.8
125	828	828	828	828	828	828	828	828	828	828	828	828	828	828	828	828	739.8
135	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	780.3
145	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	713.4
155	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	573.0
165	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	370.9
175	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	132.0
180	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	

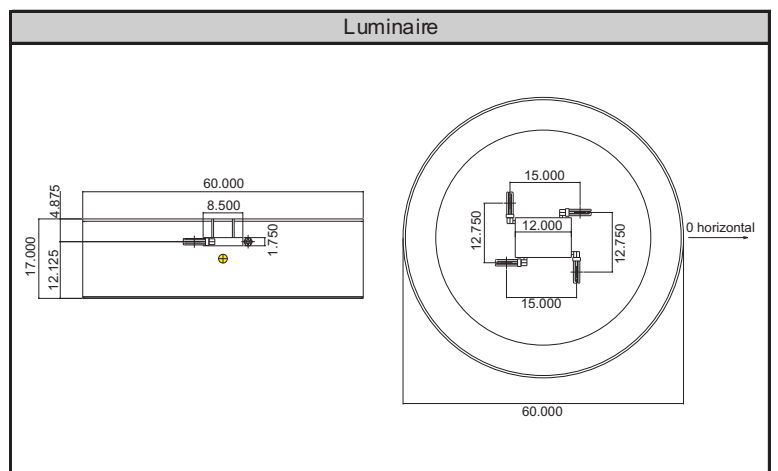
Zonal Lumen Summary

Zone	Lumens	% of Lamp	% of Luminaire
0-30	1111.5	8.7%	12.6%
0-40	1830.3	14.3%	20.7%
0-60	3284.1	25.7%	37.1%
0-90	4410.5	34.5%	49.9%
90-180	4430.5	34.6%	50.1%
0-180	8841.0	69.1%	100.0%

Total luminaire efficiency: 69.1%

CIE Type: Direct/Indirect

Spacing Criterion: 1.28



Approved By: MG

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



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

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	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419	1419
5	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413	1413
10	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396	1396
15	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370
20	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331	1331
25	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281	1281
30	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221	1221
35	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149	1149
40	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068	1068
45	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979	979
50	883	883	883	883	883	883	883	883	883	883	883	883	883	883	883	883
55	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781
60	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676
65	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569	569
70	463	463	463	463	463	463	463	463	463	463	463	463	463	463	463	463
75	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357	357
80	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257	257
85	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
90	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
95	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141
100	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230
105	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
110	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472
115	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596	596
120	716	716	716	716	716	716	716	716	716	716	716	716	716	716	716	716
125	828	828	828	828	828	828	828	828	828	828	828	828	828	828	828	828
130	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931
135	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013
140	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075	1075
145	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139	1139
150	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198	1198
155	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242	1242
160	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276	1276
165	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310	1310
170	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357	1357
175	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395
180	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416	1416

Zonal Lumen Tabulation (5 degree zones)

Zone	Lumens	Zone	Lumens	Zone	Lumens	Zone	Lumens
0-5	33.9	45-50	376.1	90-95	66.5	135-140	386.8
5-10	100.5	50-55	361.9	95-100	98.5	140-145	369.2
10-15	164.1	55-60	336.7	100-105	153.1	145-150	344.1
15-20	222.6	60-65	302.8	105-110	213.3	150-155	308.9
20-25	274.0	65-70	261.0	110-115	270.4	155-160	264.1
25-30	316.5	70-75	214.1	115-120	319.4	160-165	212.9
30-35	348.9	75-80	164.0	120-125	357.0	165-170	157.9
35-40	370.0	80-85	113.4	125-130	382.8	170-175	98.4
40-45	379.1	85-90	71.2	130-135	393.4	175-180	33.6



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	0.8	0.8	0.8	0.8	0.74	0.74	0.74	0.74	0.682	0.682	0.682	0.682
1	0.727	0.689	0.656	0.626	0.67	0.638	0.609	0.583	0.616	0.589	0.564	0.541
2	0.66	0.598	0.547	0.504	0.608	0.554	0.509	0.471	0.558	0.511	0.472	0.439
3	0.601	0.523	0.463	0.416	0.553	0.484	0.432	0.39	0.507	0.448	0.401	0.364
4	0.549	0.461	0.397	0.349	0.505	0.427	0.371	0.327	0.462	0.395	0.345	0.307
5	0.503	0.409	0.344	0.297	0.462	0.38	0.322	0.279	0.424	0.352	0.3	0.262
6	0.463	0.365	0.301	0.256	0.425	0.34	0.282	0.241	0.39	0.315	0.264	0.226
7	0.427	0.329	0.266	0.223	0.393	0.306	0.25	0.21	0.361	0.284	0.234	0.198
8	0.395	0.297	0.237	0.196	0.364	0.277	0.223	0.185	0.335	0.258	0.209	0.175
9	0.368	0.271	0.213	0.174	0.339	0.253	0.2	0.165	0.312	0.235	0.188	0.155
10	0.343	0.248	0.192	0.155	0.316	0.232	0.181	0.147	0.291	0.216	0.17	0.139

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	0.575	0.575	0.575	0.575	0.477	0.477	0.477	0.387	0.387	0.387	0.345
1	0.516	0.496	0.478	0.461	0.412	0.399	0.387	0.334	0.325	0.316	0.279
2	0.466	0.432	0.402	0.377	0.358	0.337	0.318	0.29	0.275	0.262	0.229
3	0.422	0.378	0.343	0.314	0.314	0.288	0.266	0.255	0.236	0.22	0.191
4	0.385	0.335	0.296	0.266	0.279	0.25	0.226	0.227	0.205	0.188	0.162
5	0.353	0.299	0.259	0.228	0.249	0.219	0.195	0.203	0.181	0.162	0.14
6	0.325	0.268	0.228	0.198	0.225	0.193	0.17	0.184	0.16	0.142	0.122
7	0.301	0.243	0.203	0.173	0.204	0.173	0.149	0.167	0.144	0.125	0.107
8	0.28	0.221	0.181	0.153	0.186	0.155	0.132	0.153	0.13	0.112	0.095
9	0.261	0.202	0.164	0.137	0.171	0.14	0.119	0.141	0.118	0.101	0.085
10	0.245	0.186	0.149	0.123	0.158	0.128	0.107	0.131	0.108	0.091	0.077

Average Luminance Table (cd/m²)

	0	45	90
0	778	778	778
45	558	558	558
55	493	493	493
65	416	416	416
75	323	323	323
85	199	199	199

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.

