

LTL NUMBER: 18785

DATE : 04-16-2010

PREPARED FOR: MERCURY LIGHTING

CATALOG NUMBER: ZKV-22G-224-HO-T5-ELB-UNI

LUMINAIRE: FORMED WHITE ENAMEL STEEL HOUSING, FORMED WHITE ENAMEL STEEL REFLECTORS, FROSTED PLASTIC DIFFUSERS BELOW LAMPS.

LAMP: TWO 24 WATT HIGH OUTPUT T5 LINEAR FLUORESCENT LAMPS RATED AT 1760 LUMENS EACH.

LAMP CATALOG NUMBER: SYLVANIA FP24/835/HO

BALLAST: ONE ADVANCE "CENTIUM" ICN-2S24

MOUNTING: RECESSED

ELECTRICAL VALUES: 120.0VAC, 0.4364A, 52.15W

Candela Distribution

[illegible]

Zonal Lumen Summary

Zone	Lumens	% of Lamp	% of Luminaire
0-30	754.0	21.4%	26.4%
0-40	1263.3	35.9%	44.3%
0-60	2331.2	66.2%	81.8%
0-90	2851.3	81.0%	100.0%
90-180	0.0	0.0%	0.0%
0-180	2851.3	81.0%	100.0%

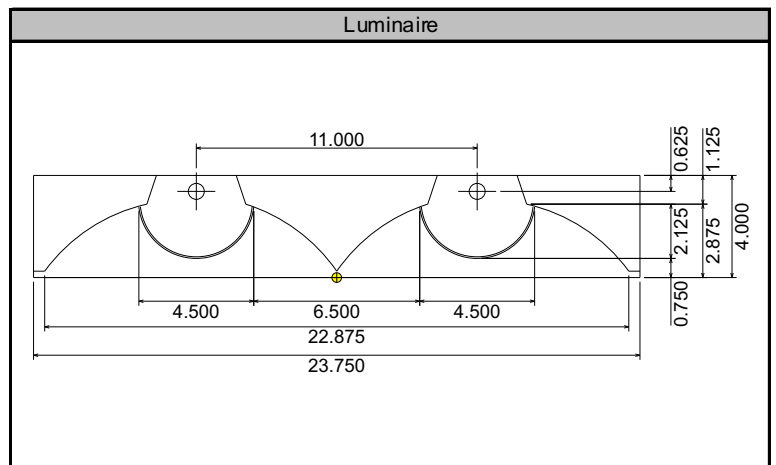
Total luminaire efficiency: 81.0%

CIE Type: Direct

Spacing Criterion:

0 deg: 1.22	90 deg: 1.47
180 deg: 1.22	270 deg: 1.47

Total reflectance of paint: 90.6



Approved By: _____

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	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937
5	936	933	933	936	937	936	933	933	936	933	933	936	937	936	933	933
10	922	922	927	935	938	935	927	922	922	922	927	935	938	935	927	922
15	899	902	916	932	938	932	916	902	899	902	916	932	938	932	916	902
20	866	875	901	927	937	927	901	875	866	875	901	927	937	927	901	875
25	823	839	880	918	933	918	880	839	823	839	880	918	933	918	880	839
30	772	796	853	904	922	904	853	796	772	796	853	904	922	904	853	796
35	712	745	820	882	904	882	820	745	712	745	820	882	904	882	820	745
40	642	687	778	851	876	851	778	687	642	687	778	851	876	851	778	687
45	566	622	730	811	839	811	730	622	566	622	730	811	839	811	730	622
50	484	549	671	760	787	760	671	549	484	549	671	760	787	760	671	549
55	400	471	602	689	709	689	602	471	400	471	602	689	709	689	602	471
60	317	390	521	589	586	589	521	390	317	390	521	589	586	589	521	390
65	241	310	423	421	377	421	423	310	241	310	423	421	377	421	423	310
70	169	231	287	214	180	214	287	231	169	231	287	214	180	214	287	231
75	106	152	143	102	90	102	143	152	106	152	143	102	90	102	143	152
80	56	77	63	51	48	51	63	77	56	77	63	51	48	51	63	77
85	18	22	21	19	18	19	21	22	18	22	21	19	18	19	21	22
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Zonal Lumen Tabulation (5 degree zones)

Zone	Lumens	Zone	Lumens	Zone	Lumens	Zone	Lumens
0-5	22.4	45-50	277.0	90-95	0.0	135-140	0.0
5-10	66.6	50-55	268.5	95-100	0.0	140-145	0.0
10-15	109.5	55-60	247.4	100-105	0.0	145-150	0.0
15-20	149.9	60-65	208.9	105-110	0.0	150-155	0.0
20-25	186.7	65-70	148.8	110-115	0.0	155-160	0.0
25-30	218.9	70-75	89.3	115-120	0.0	160-165	0.0
30-35	245.1	75-80	48.0	120-125	0.0	165-170	0.0
35-40	264.2	80-85	21.1	125-130	0.0	170-175	0.0
40-45	275.1	85-90	4.1	130-135	0.0	175-180	0.0



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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	0.988	0.988	0.988	0.988	0.964	0.964	0.964	0.964	0.942	0.942	0.942	0.942
1	0.909	0.868	0.832	0.8	0.886	0.849	0.816	0.786	0.864	0.831	0.801	0.774
2	0.829	0.757	0.699	0.65	0.806	0.741	0.688	0.642	0.785	0.726	0.677	0.635
3	0.756	0.664	0.594	0.538	0.735	0.65	0.585	0.533	0.715	0.638	0.577	0.529
4	0.691	0.586	0.51	0.453	0.671	0.575	0.504	0.45	0.653	0.564	0.498	0.447
5	0.634	0.522	0.444	0.388	0.616	0.512	0.439	0.386	0.599	0.503	0.435	0.384
6	0.584	0.468	0.391	0.337	0.568	0.46	0.387	0.335	0.552	0.452	0.383	0.334
7	0.541	0.422	0.347	0.296	0.526	0.416	0.344	0.294	0.511	0.409	0.341	0.293
8	0.502	0.384	0.311	0.262	0.488	0.378	0.309	0.261	0.476	0.373	0.307	0.261
9	0.468	0.351	0.281	0.235	0.456	0.346	0.279	0.234	0.444	0.341	0.277	0.234
10	0.438	0.323	0.256	0.212	0.427	0.319	0.254	0.211	0.416	0.315	0.253	0.211

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	0.9	0.9	0.9	0.9	0.862	0.862	0.862	0.827	0.827	0.827	0.81
1	0.823	0.796	0.772	0.749	0.765	0.745	0.726	0.736	0.72	0.705	0.688
2	0.746	0.697	0.656	0.62	0.671	0.636	0.606	0.647	0.618	0.592	0.575
3	0.678	0.614	0.562	0.519	0.591	0.547	0.51	0.571	0.533	0.501	0.484
4	0.619	0.544	0.486	0.441	0.525	0.475	0.435	0.507	0.464	0.429	0.411
5	0.568	0.486	0.426	0.379	0.47	0.417	0.375	0.455	0.408	0.371	0.354
6	0.524	0.437	0.376	0.33	0.424	0.369	0.328	0.411	0.362	0.325	0.308
7	0.485	0.396	0.335	0.291	0.385	0.33	0.289	0.374	0.324	0.287	0.271
8	0.452	0.362	0.302	0.259	0.352	0.297	0.257	0.342	0.293	0.256	0.24
9	0.423	0.332	0.273	0.232	0.323	0.27	0.231	0.315	0.266	0.23	0.215
10	0.397	0.307	0.249	0.21	0.299	0.246	0.209	0.292	0.243	0.208	0.194

Average Luminance Table (cd/m²)

	0	45	90
0	2776	2776	2776
45	2369	3058	3513
55	2065	3111	3660
65	1686	2965	2641
75	1215	1634	1032
85	610	705	620

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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