

Photometric Report - (ecs-dts4-mn-532-unv-23n-00w) - Page 1 of 4

Sun Jul 19 12:04:56 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-dts4-mn-532-unv-23n-00w

OPTIONS:

Spawning 1 rays for each reaction.
Random number generator seed: 8.
Tracing 5 reflections.
Stop tracing ray at 1.0% of initial magnitude.
Tracing 500270 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
5952(41.0%)	0
5592(38.6%)	1
1080(7.5%)	2
476(3.3%)	3
176(1.2%)	4
104(0.7%)	5
13383(92.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
182(1.3%)	2805(19.4%)	LAMP-F032311
14(0.1%)	216(1.5%)	LAMP-F032312
428(3.0%)	7554(52.1%)	Refl-Poly1
43(0.3%)	431(3.0%)	Refl-Poly2
203(1.4%)	2030(14.0%)	Refl-Poly3
871(6.0%)	13039(89.9%)	Total

Absorbed(%)	Incident(%)	Material Name
196(1.4%)	3022(20.8%)	PHOSGLAS
428(3.0%)	7554(52.1%)	ALMIRO04
246(1.7%)	2461(17.0%)	PAINT006
871(6.0%)	13039(89.9%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 244.89 (1.7%)
fell below continuation minimum: 0.00 (0.0%)
could not find in/out refractor facet: 0.00 (0.0%)
reached try limit for scatter bounce: 0.00 (0.0%)
lost elsewhere(i.e. outside distrib): 0.00 (0.0%)

Photometric Report - (ecs-dts4-mn-532-unv-23n-00w) - Page 2 of 4

Number of Lamps: 5 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.8791 Length: 4.0000 Height: 0.2634
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	4849	4849	4849	4849	4849
5.00	5039	5051	5197	5162	5410
10.00	5055	4952	5039	5007	4924
15.00	4750	4931	4974	4758	4703
20.00	4670	4801	4579	4280	4413
25.00	4673	4583	4167	3910	3685
30.00	4301	4178	3796	3282	3198
35.00	4103	3874	3231	2969	3005
40.00	3688	3451	2791	2831	2909
45.00	3364	2939	2571	2878	3087
50.00	2979	2520	2429	2902	2994
55.00	2526	2061	2391	2632	2623
60.00	2066	1751	2196	2286	2278
65.00	1681	1518	1823	1899	1973
70.00	1174	1197	1422	1593	1622
75.00	778	881	1073	1203	1173
80.00	467	567	657	684	654
85.00	197	213	189	154	132
90.00	17.8	21.3	17.6	15.6	16.4

Photometric Report - (ecs-dts4-mn-532-unv-23n-00w) - Page 3 of 4

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	29.00
5.0	2.5- 7.5	246.44
10.0	7.5- 12.5	475.61
15.0	12.5- 17.5	687.69
20.0	17.5- 22.5	853.05
25.0	22.5- 27.5	975.21
30.0	27.5- 32.5	1028.10
35.0	32.5- 37.5	1071.06
40.0	37.5- 42.5	1089.80
45.0	42.5- 47.5	1125.31
50.0	47.5- 52.5	1137.63
55.0	52.5- 57.5	1084.13
60.0	57.5- 62.5	997.38
65.0	62.5- 67.5	877.70
70.0	67.5- 72.5	722.37
75.0	72.5- 77.5	546.97
80.0	77.5- 82.5	333.10
85.0	82.5- 87.5	98.24
90.0	87.5- 92.5	9.82

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	3762	25.9	28.1
0- 40	5897	40.7	44.0
0- 60	10295	71.0	76.9
0- 90	13384	92.3	100.0
90-120	5	0.0	0.0
90-130	5	0.0	0.0
90-150	5	0.0	0.0
90-180	5	0.0	0.0
0-180	13389	92.3	100.0

Total Luminaire Optical Efficiency = 92.3%

Luminaire Spacing Criterion:

0 deg	90 deg
1.31	1.03

Average Luminaire Luminance (cd/m²):

	0	45	90
0	6944.54	6944.54	6944.54
45	6392.70	4545.40	5483.56
50	6154.68	4610.97	5715.86
55	5764.54	4940.81	5456.75
60	5310.79	5021.74	5249.83
65	4992.05	4706.91	5139.73
70	4163.58	4251.23	4904.30
75	3455.57	3844.47	4260.82
80	2802.07	2965.18	3006.24
85	1844.87	1163.69	833.77

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

pcc	.8				.7				.5			
pw	.7	.5	.3	.1	.7	.5	.3	.1	.5	.3	.1	
RCR												
0	110	110	110	110	107	107	107	107	102	102	102	
1	100	96	92	88	97	93	90	86	89	86	84	
2	91	83	77	71	88	81	75	70	78	73	69	
3	83	73	65	59	80	71	64	58	68	62	57	
4	76	64	56	50	73	63	55	49	61	54	49	
5	69	57	49	43	67	56	48	43	54	47	42	
6	64	52	43	37	62	51	43	37	49	42	37	
7	59	47	39	33	58	46	38	33	45	38	33	
8	55	43	35	29	54	42	35	29	41	34	29	
9	52	39	32	27	50	39	31	26	38	31	26	
10	49	36	29	24	47	36	29	24	35	28	24	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	98	98	98	94	94	94	92
1	86	83	81	83	81	79	77
2	75	71	67	72	69	66	63
3	66	61	56	63	59	55	53
4	59	53	48	57	52	47	45
5	53	46	42	51	45	41	39
6	48	41	37	46	41	36	34
7	43	37	32	42	36	32	30
8	40	34	29	39	33	29	27
9	37	31	26	36	30	26	24
10	34	28	24	33	28	24	22