

Photometric Report - (ecs-dts4-mn-432-unv-14n-00w) - Page 1 of 4

Sun Jul 19 12:06:53 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-dts4-mn-432-unv-14n-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 499456 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
4818(41.5%)	0
4697(40.5%)	1
761(6.6%)	2
344(3.0%)	3
108(0.9%)	4
68(0.6%)	5
10797(93.1%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
102(0.9%)	1562(13.5%)	LAMP-F032311
8(0.1%)	129(1.1%)	LAMP-F032312
338(2.9%)	5959(51.4%)	Refl-Poly1
34(0.3%)	341(2.9%)	Refl-Poly2
175(1.5%)	1759(15.2%)	Refl-Poly3
659(5.7%)	9751(84.1%)	Total

Absorbed(%)	Incident(%)	Material Name
110(1.0%)	1691(14.6%)	PHOSGLAS
338(2.9%)	5959(51.4%)	ALMIRO04
210(1.8%)	2100(18.1%)	PAINT006
659(5.7%)	9751(84.1%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 142.81 (1.2%)
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%)

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Number of Lamps: 4 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	3760	3760	3760	3760	3760
5.00	3427	3832	3862	3854	3777
10.00	3793	3798	3982	3875	3776
15.00	3820	3852	3789	3755	3803
20.00	3620	3729	3572	3483	3572
25.00	3481	3567	3418	3199	3131
30.00	3294	3313	3095	2802	2720
35.00	3157	3020	2726	2604	2538
40.00	2937	2765	2446	2390	2421
45.00	2563	2425	2130	2307	2389
50.00	2310	2093	1991	2321	2488
55.00	1984	1745	1916	2199	2192
60.00	1603	1499	1775	1854	1822
65.00	1279	1221	1462	1537	1569
70.00	940	976	1141	1229	1254
75.00	640	723	849	975	1005
80.00	371	445	545	578	560
85.00	136	178	154	120	110
90.00	22.6	14.0	17.2	14.8	17.7

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	22.48
5.0	2.5- 7.5	180.93
10.0	7.5- 12.5	367.40
15.0	12.5- 17.5	539.38
20.0	17.5- 22.5	673.99
25.0	22.5- 27.5	781.25
30.0	27.5- 32.5	837.08
35.0	32.5- 37.5	880.16
40.0	37.5- 42.5	905.48
45.0	42.5- 47.5	904.77
50.0	47.5- 52.5	924.22
55.0	52.5- 57.5	892.09
60.0	57.5- 62.5	811.75
65.0	62.5- 67.5	700.90
70.0	67.5- 72.5	572.18
75.0	72.5- 77.5	446.11
80.0	77.5- 82.5	274.49
85.0	82.5- 87.5	78.40
90.0	87.5- 92.5	9.05

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	2968	25.6	27.5
0- 40	4724	40.7	43.7
0- 60	8310	71.6	76.9
0- 90	10798	93.1	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	10802	93.1	100.0

Total Luminaire Optical Efficiency = 93.1%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.30	1.10

Average Luminaire Luminance (cd/m²):

	0	45	90
0	5384.33	5384.33	5384.33
45	4871.08	3765.29	4243.01
50	4772.40	3779.11	4750.60
55	4528.48	3959.47	4559.82
60	4121.11	4059.05	4198.68
65	3799.25	3775.22	4088.49
70	3333.80	3412.30	3789.48
75	2840.96	3043.78	3651.54
80	2225.96	2462.65	2574.09
85	1271.63	946.90	692.50

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	108	108	108	108	103	103	103	
1	101	96	92	88	98	94	90	87	90	87	84	
2	91	83	77	71	89	82	76	71	78	73	69	
3	83	73	65	59	81	71	64	58	69	62	57	
4	76	64	56	50	74	63	55	49	61	54	49	
5	70	58	49	43	68	56	48	43	54	47	42	
6	64	52	43	37	62	51	43	37	49	42	37	
7	60	47	39	33	58	46	38	33	45	38	32	
8	55	43	35	29	54	42	35	29	41	34	29	
9	52	39	32	26	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	99	99	99	94	94	94	93
1	86	84	82	83	81	79	77
2	75	71	67	72	69	66	64
3	66	61	56	64	59	55	53
4	59	53	48	57	52	47	45
5	53	46	42	51	45	41	39
6	48	41	36	46	40	36	34
7	43	37	32	42	36	32	30
8	40	33	29	39	33	29	27
9	37	30	26	36	30	26	24
10	34	28	24	33	28	23	22