

Photometric Report - (ecs-smc4-wn-432-unv-14n-prs) - Page 1 of 4

Sat Jul 18 14:45:07 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-smc4-wn-432-unv-14n-prs

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
3161(27.3%)	0
3729(32.1%)	1
1432(12.3%)	2
715(6.2%)	3
400(3.5%)	4
223(1.9%)	5
9662(83.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
240(2.1%)	3686(31.8%)	LAMP-FO32311
13(0.1%)	214(1.9%)	LAMP-FO32312
777(6.7%)	8982(77.4%)	Refl-Poly1
38(0.3%)	382(3.3%)	Refl-Poly2
295(2.6%)	3598(31.0%)	Tran-Lens1
1366(11.8%)	16864(145.4%)	Total

Absorbed(%)	Incident(%)	Material Name
254(2.2%)	3901(33.6%)	PHOSGLAS
777(6.7%)	8982(77.4%)	ANOWHT01
38(0.3%)	382(3.3%)	PAINT006
295(2.6%)	3598(31.0%)	PRISM001
1366(11.8%)	16864(145.4%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 570.74 (4.9%)
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: 1.8177 Length: 4.0000 Height: 0.2606
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	3047	3047	3047	3047	3047
5.00	3050	3139	3110	3189	2969
10.00	3147	3117	3081	3148	3177
15.00	3043	3005	2950	3002	2869
20.00	3084	3039	2902	2883	2931
25.00	2921	2876	2797	2733	2756
30.00	2766	2738	2672	2652	2639
35.00	2618	2625	2507	2500	2539
40.00	2472	2442	2385	2444	2456
45.00	2387	2270	2218	2187	2214
50.00	2153	2000	2007	2056	2053
55.00	1926	1807	1760	1841	1855
60.00	1702	1525	1505	1561	1578
65.00	1350	1196	1268	1251	1268
70.00	1070	959	981	1013	1034
75.00	732	677	725	854	886
80.00	416	441	488	527	523
85.00	147	167	154	124	96.4
90.00	17.5	17.6	14.2	14.1	13.7

Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	18.22
5.0	2.5- 7.5	148.67
10.0	7.5- 12.5	297.62
15.0	12.5- 17.5	422.52
20.0	17.5- 22.5	554.56
25.0	22.5- 27.5	651.16
30.0	27.5- 32.5	737.57
35.0	32.5- 37.5	802.53
40.0	37.5- 42.5	857.49
45.0	42.5- 47.5	869.71
50.0	47.5- 52.5	857.24
55.0	52.5- 57.5	819.30
60.0	57.5- 62.5	739.43
65.0	62.5- 67.5	623.97
70.0	67.5- 72.5	515.75
75.0	72.5- 77.5	405.60
80.0	77.5- 82.5	259.88
85.0	82.5- 87.5	77.39
90.0	87.5- 92.5	8.42

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	2448	21.1	25.3
0- 40	4050	34.9	41.9
0- 60	7402	63.8	76.6
0- 90	9663	83.3	100.0
90-120	4	0.0	0.0
90-130	4	0.0	0.0
90-150	4	0.0	0.0
90-180	4	0.0	0.0
0-180	9667	83.3	100.0

Total Luminaire Optical Efficiency = 83.3%

Luminaire Spacing Criterion:

0 deg	90 deg
1.33	1.29

Average Luminaire Luminance (cd/m²):

	0	45	90
0	4511.61	4511.61	4511.61
45	4691.41	4047.50	4053.39
50	4601.31	3930.97	4038.90
55	4547.41	3753.36	3974.09
60	4527.30	3550.21	3742.77
65	4149.34	3373.57	3398.06
70	3930.12	3021.24	3210.77
75	3367.37	2673.89	3301.49
80	2588.95	2265.05	2460.76
85	1432.22	976.42	620.32

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

pcc	.8			.7			.5			.3			.1			0		
pw	.7	.5	.3	.1	.7	.5	.3	.1	.5	.3	.1	.5	.3	.1	.5	.3	.1	0
RCR																		
0	98	98	98	98	96	96	96	96	92	92	92	88	88	88	84	84	84	83
1	90	85	82	78	87	84	80	77	80	77	75	77	74	72	74	72	70	68
2	81	74	68	63	79	72	67	62	69	65	61	67	63	59	64	61	58	56
3	74	65	58	52	71	63	57	51	61	55	51	58	54	50	56	52	49	47
4	67	57	49	44	65	56	49	43	54	47	43	52	46	42	50	45	41	40
5	62	51	43	37	60	50	42	37	48	41	37	46	41	36	45	40	36	34
6	57	45	38	32	55	45	37	32	43	37	32	42	36	32	40	35	31	29
7	52	41	34	28	51	40	33	28	39	33	28	38	32	28	37	31	28	26
8	49	37	30	25	47	37	30	25	36	29	25	35	29	25	34	28	25	23
9	45	34	27	22	44	34	27	22	33	27	22	32	26	22	31	26	22	20
10	43	31	25	20	41	31	25	20	30	24	20	29	24	20	29	24	20	18