Sun Apr 29 18:38:35 2012

IESNA:LM-63-1995
Photopia 2.0.0.17 PHOTOMETRIC REPORT
PROJECT: ecs-smp4-mn-332-unv-13n-318
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 499884 initial lamp rays.
  Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
1585(18.2%)	0
2270(26.1%)	1
1419(16.3%)	2
398(4.6%)	3
183(2.1%)	4
94(1.1%)	5
5951(68.4%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
88(1.0%)	1350(15.5%)	LAMP-FO32311
5(0.1%)	80(0.9%)	LAMP-FO32312
358(4.1%)	6253(71.9%)	Refl-Poly1
2029(23.3%)	5572(64.0%)	Refl-Poly2
8(0.1%)	89(1.0%)	Refl-Poly3
2489(28.6%)	13347(153.4%)	Total

Absorbed(%)	Incident(%)	Material Name
93(1.1%)	1431(16.5%)	PHOSGLAS
358(4.1%)	6253(71.9%)	ALMIRO04
2029(23.3%)	5572(64.0%)	AL1500G4
8(0.1%)	89(1.0%)	PAINT006
2489(28.6%)	13347(153.4%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	258.64 (	3.0%)
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%)

Number of Lamps: 3 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.7433 Length: 4.0000 Height: 0.3904
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	1757	1757	1757	1757	1757
5.00	1841	1814	2062	2104	2054
10.00	1802	2011	2206	2331	2376
15.00	1830	2062	2385	2619	2729
20.00	1718	2111	2571	2673	2705
25.00	1718	2161	2512	2599	2563
30.00	1660	2145	2426	2413	2396
35.00	1566	2102	2235	2146	2252
40.00	1478	1934	1989	1978	1977
45.00	1351	1773	1782	1623	1561
50.00	1183	1558	1454	1134	997
55.00	1030	1286	1009	733	647
60.00	858	967	639	562	581
65.00	643	590	401	456	474
70.00	347	253	224	185	142
75.00	94.9	72.4	47.7	26.0	22.2
80.00	13.3	9.89	7.17	5.49	3.31
85.00	1.10	1.30	1.48	0.960	0.580
90.00	0.420	0.220	0.180	0.000	0.000

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	10.51
5.0	2.5- 7.5	94.68
10.0	7.5- 12.5	205.55
15.0	12.5- 17.5	331.45
20.0	17.5- 22.5	448.35
25.0	22.5- 27.5	545.07
30.0	27.5- 32.5	617.43
35.0	32.5- 37.5	659.57
40.0	37.5- 42.5	671.95
45.0	42.5- 47.5	642.86
50.0	47.5- 52.5	549.60
55.0	52.5- 57.5	434.02
60.0	57.5- 62.5	342.67
65.0	62.5- 67.5	249.08
70.0	67.5- 72.5	116.69
75.0	72.5- 77.5	27.09
80.0	77.5- 82.5	4.17
85.0	82.5- 87.5	0.63
90.0	87.5- 92.5	0.08

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	1933	22.2	32.5
0- 40	3240	37.2	54.4
0- 60	5380	61.8	90.4
0- 90	5951	68.4	100.0
90-120	0	0.0	0.0
90-130	0	0.0	0.0
90-150	0	0.0	0.0
90-180	0	0.0	0.0
0-180	5951	68.4	100.0

Total Luminaire Optical Efficiency = 68.4%

Luminaire Spacing Criterion:

0 deg	90 deg
1.37	1.68

Average Luminaire Luminance (cd/m^2):

	0	45	90
0	2711.99	2711.99	2711.99
45	2687.72	3170.06	2784.52
50	2543.87	2748.17	1888.90
55	2432.58	2049.83	1318.43
60	2266.17	1415.27	1291.52
65	1941.06	984.86	1169.32
70	1236.61	621.43	396.50
75	414.91	153.76	72.25
80	76.27	27.84	12.96
85	9.21	7.28	2.89

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	81	81	81	81	79	79	79	79	76	76	76	72	72	72	69	69	69	68
1	76	73	71	68	74	71	69	67	69	67	65	66	65	63	64	62	61	60
2	70	65	61	58	68	64	60	57	61	58	56	59	57	54	57	55	53	52
3	64	58	53	49	62	57	52	48	55	51	48	53	50	47	51	48	46	45
4	59	52	46	42	57	51	46	42	49	45	41	47	44	41	46	43	40	39
5	54	46	41	36	53	46	40	36	44	39	36	43	39	36	42	38	35	34
6	50	42	36	32	49	41	36	32	40	35	32	39	35	31	38	34	31	30
7	47	38	32	28	45	37	32	28	36	32	28	35	31	28	34	31	28	26
8	43	35	29	25	42	34	29	25	33	28	25	32	28	25	32	28	25	23
9	40	32	26	23	39	31	26	23	30	26	22	30	25	22	29	25	22	21
10	38	29	24	20	37	29	24	20	28	24	20	27	23	20	27	23	20	19