Mon Apr 23 19:10:27 2012

IESNA:LM-63-1995
Photopia 2.0.0.17 PHOTOMETRIC REPORT
PROJECT: ecs-ill4-mn-332-unv-13n
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
3911(45.0%)	0
3392(39.0%)	1
630(7.2%)	2
132(1.5%)	3
36(0.4%)	4
14(0.2%)	5
8117(93.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
38(0.4%)	593(6.8%)	LAMP-FO32311
1(0.0%)	30(0.3%)	LAMP-FO32312
297(3.4%)	5275(60.6%)	Refl-Poly1
338(3.9%)	5899(67.8%)	Total

Absorbed(%)	Incident(%)	Material Name
40(0.5%)	624(7.2%)	PHOSGLAS
297(3.4%)	5275(60.6%)	ALMIRO04
338(3.9%)	5899(67.8%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	32.14 (	0.4%)
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):	211.79 (	2.4%)

Number of Lamps: 3 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.2075 Length: 4.0000 Height: 0.2952
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	2617	2617	2617	2617	2617
5.00	2755	2718	2927	2706	2891
10.00	2639	2717	2806	2840	2780
15.00	2654	2682	2714	2647	2704
20.00	2552	2644	2552	2458	2452
25.00	2467	2530	2362	2224	2199
30.00	2358	2379	2118	2113	2184
35.00	2171	2168	2006	2038	2066
40.00	2022	1941	1847	1937	1846
45.00	1848	1700	1688	1635	1605
50.00	1645	1496	1524	1490	1549
55.00	1394	1315	1289	1468	1521
60.00	1147	1077	1181	1337	1380
65.00	855	883	1056	1169	1153
70.00	671	698	895	917	926
75.00	442	545	653	765	802
80.00	276	369	529	688	731
85.00	134	260	436	581	613
90.00	75.5	167	327	456	519

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	15.65
5.0	2.5- 7.5	133.45
10.0	7.5- 12.5	263.48
15.0	12.5- 17.5	380.30
20.0	17.5- 22.5	476.05
25.0	22.5- 27.5	547.26
30.0	27.5- 32.5	608.52
35.0	32.5- 37.5	654.72
40.0	37.5- 42.5	674.71
45.0	42.5- 47.5	654.01
50.0	47.5- 52.5	641.02
55.0	52.5- 57.5	620.73
60.0	57.5- 62.5	576.68
65.0	62.5- 67.5	510.56
70.0	67.5- 72.5	426.02
75.0	72.5- 77.5	342.15
80.0	77.5- 82.5	281.90
85.0	82.5- 87.5	225.33
90.0	87.5- 92.5	170.81

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	2109	24.2	25.7
0- 40	3408	39.2	41.5
0- 60	5955	68.4	72.6
0- 90	8118	93.3	99.0
90-120	85	1.0	1.0
90-130	85	1.0	1.0
90-150	85	1.0	1.0
90-180	85	1.0	1.0
0-180	8203	94.3	100.0

Total Luminaire Optical Efficiency = 94.3%

Luminaire Spacing Criterion:

0 deg	90 deg
1.31	1.24

Average Luminaire Luminance (cd/m^2):

	0	45	90
0	5831.94	5831.94	5831.94
45	5422.72	4342.35	4063.85
50	5241.86	4165.32	4159.58
55	4901.11	3790.71	4380.44
60	4532.58	3788.67	4320.88
65	3890.37	3755.36	3987.37
70	3635.50	3601.76	3609.95
75	2980.95	3054.94	3612.92
80	2495.46	2982.64	3930.45
85	1860.61	3119.09	4133.75

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	111	111	111	111	108	108	108	108	103	103	103
1	100	94	90	86	97	92	88	84	88	85	82
2	90	82	75	69	87	80	73	68	76	71	66
3	82	71	63	57	79	70	62	56	67	61	55
4	75	63	54	48	73	62	54	48	59	52	47
5	69	56	48	41	67	55	47	41	53	46	40
6	63	51	42	36	62	50	42	36	48	41	35
7	59	46	37	32	57	45	37	31	44	36	31
8	55	42	34	28	53	41	33	28	40	33	28
9	51	38	31	25	50	38	30	25	37	30	25
10	48	35	28	23	47	35	28	23	34	27	23

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	99	99	99	95	95	95	93
1	84	82	79	81	79	77	75
2	73	69	65	70	67	63	61
3	64	59	54	62	57	53	51
4	57	51	46	55	50	45	43
5	51	45	40	50	44	39	37
6	46	40	35	45	39	35	33
7	42	36	31	41	35	31	29
8	39	32	28	38	32	27	26
9	36	29	25	35	29	25	23
10	33	27	23	32	27	23	21