Tue Apr 24 15:02:37 2012

IESNA:LM-63-1995
Photopia 2.0.0.17 PHOTOMETRIC REPORT
PROJECT: ecs-mci4-mn-332-unv-13n-0ww
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
3499(40.2%)	0
3234(37.2%)	1
767(8.8%)	2
324(3.7%)	3
142(1.6%)	4
74(0.9%)	5
8042(92.4%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
130(1.5%)	2000(23.0%)	LAMP-FO32311
7(0.1%)	123(1.4%)	LAMP-FO32312
352(4.0%)	6215(71.4%)	Refl-Poly1
490(5.6%)	8339(95.9%)	Total

Absorbed(%)	Incident(%)	Material Name
137(1.6%)	2124(24.4%)	PHOSGLAS
352(4.0%)	6215(71.4%)	ALMIRO04
490(5.6%)	8339(95.9%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	166.93 (	1.9%)
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%)

Number of Lamps: 3 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 0.9067 Length: 4.0000 Height: 0.1980
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	2600	2600	2600	2600	2600
5.00	2655	2767	2717	2688	2634
10.00	2817	2669	2584	2566	2627
15.00	2662	2506	2520	2502	2463
20.00	2527	2432	2452	2260	2168
25.00	2493	2335	2201	2099	2132
30.00	2307	2229	2029	2190	2263
35.00	2164	1993	1980	2211	2257
40.00	1996	1835	2000	2179	2178
45.00	1782	1690	1931	2089	2123
50.00	1575	1512	1780	1928	1964
55.00	1378	1389	1661	1619	1595
60.00	1113	1221	1414	1394	1397
65.00	917	1040	1133	1110	1101
70.00	697	835	875	861	886
75.00	527	598	633	633	650
80.00	331	372	394	365	352
85.00	156	153	127	101	91.1
90.00	26.8	10.1	0.940	0.000	0.000

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	15.55
5.0	2.5- 7.5	129.20
10.0	7.5- 12.5	250.82
15.0	12.5- 17.5	357.88
20.0	17.5- 22.5	444.90
25.0	22.5- 27.5	518.17
30.0	27.5- 32.5	598.32
35.0	32.5- 37.5	659.89
40.0	37.5- 42.5	713.54
45.0	42.5- 47.5	742.56
50.0	47.5- 52.5	733.71
55.0	52.5- 57.5	691.05
60.0	57.5- 62.5	627.14
65.0	62.5- 67.5	533.08
70.0	67.5- 72.5	433.13
75.0	72.5- 77.5	324.54
80.0	77.5- 82.5	198.77
85.0	82.5- 87.5	68.82
90.0	87.5- 92.5	3.36

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	2004	23.0	24.9
0- 40	3322	38.2	41.3
0- 60	6165	70.9	76.6
0- 90	8043	92.4	100.0
90-120	2	0.0	0.0
90-130	2	0.0	0.0
90-150	2	0.0	0.0
90-180	2	0.0	0.0
0-180	8044	92.5	100.0

Total Luminaire Optical Efficiency = 92.5%

Luminaire Spacing Criterion:

0 deg	90 deg
1.30	1.33

Average Luminaire Luminance (cd/m^2):

	0	45	90
0	7716.86	7716.86	7716.86
45	7125.16	6815.31	7313.74
50	6866.11	6706.61	7197.18
55	6660.18	6765.81	6292.94
60	6087.16	6319.94	6018.46
65	5824.16	5657.28	5267.97
70	5323.01	4996.80	4805.78
75	5099.81	4250.28	4104.50
80	4421.03	3245.36	2690.05
85	3382.40	1361.77	887.39

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	95	91	87	97	93	89	86	89	86	83	
2	90	82	76	70	88	81	75	69	77	72	68	
3	82	72	64	58	80	70	63	57	68	61	56	
4	75	63	55	49	73	62	54	48	60	53	47	
5	69	56	48	41	67	55	47	41	53	46	41	
6	63	50	42	36	61	50	42	36	48	41	35	
7	58	46	37	31	57	45	37	31	43	36	31	
8	54	41	33	28	53	41	33	28	40	33	28	
9	51	38	30	25	49	37	30	25	36	30	25	
10	47	35	27	23	46	34	27	22	34	27	22	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	98	98	98	94	94	94	92
1	85	83	81	82	80	78	76
2	74	70	66	71	68	65	63
3	65	60	55	63	58	54	52
4	57	52	47	55	50	46	44
5	51	45	40	50	44	40	38
6	46	40	35	45	39	35	33
7	42	36	31	41	35	31	29
8	38	32	27	37	32	27	25
9	35	29	25	34	29	24	23
10	33	27	22	32	26	22	20