Sat Jul 18 18:12:13 2009

IESNA:LM-63-1995
Photopia 2.0.0.17 PHOTOMETRIC REPORT
PROJECT: ecs-exw4-mn-554-unv-32h-a0w
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 500270 initial lamp rays.
  Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
0(0.0%)	0
8686(34.7%)	1
10000(40.0%)	2
2383(9.5%)	3
982(3.9%)	4
510(2.0%)	5
22563(90.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
194(0.8%)	2965(11.9%)	LAMP-F54T5HO1
11(0.0%)	178(0.7%)	LAMP-F54T5HO2
1108(4.4%)	19443(77.8%)	Refl-Poly1
103(0.4%)	1039(4.2%)	Refl-Poly2
25(0.1%)	26202(104.8%)	Tran-Lens1
1443(5.8%)	49829(199.3%)	Total

Absorbed(%)	Incident(%)	Material Name
205(0.8%)	3143(12.6%)	PHOSGLAS
1108(4.4%)	19443(77.8%)	ALMIRO04
103(0.4%)	1039(4.2%)	PAINT006
25(0.1%)	26202(104.8%)	ACRYLIC1
1443(5.8%)	49829(199.3%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	992.75 (	4.0%)
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: 5 Lumens per Lamp: 5000
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.8791 Length: 4.0000 Height: 0.2566
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	9311	9311	9311	9311	9311
5.00	10090	9817	9887	9654	9941
10.00	9541	9294	9390	9294	9220
15.00	9504	9549	9288	9307	9181
20.00	9077	8912	8891	8289	8274
25.00	8665	8749	8160	7467	7235
30.00	8372	8180	7222	6600	6422
35.00	7676	7373	6436	5767	5490
40.00	7106	6653	5503	4756	4466
45.00	6302	5747	4582	4177	4336
50.00	5444	4854	3726	4085	4293
55.00	4683	3803	3318	3840	3847
60.00	3700	2915	2990	3416	3539
65.00	2706	2180	2577	2872	2976
70.00	1798	1476	1976	2179	2233
75.00	965	978	1301	1295	1239
80.00	437	504	576	600	560
85.00	91.3	106	102	44.4	35.8
90.00	6.23	4.38	1.20	1.85	0.000

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	55.68
5.0	2.5- 7.5	470.25
10.0	7.5- 12.5	888.97
15.0	12.5- 17.5	1329.53
20.0	17.5- 22.5	1629.50
25.0	22.5- 27.5	1872.08
30.0	27.5- 32.5	2014.33
35.0	32.5- 37.5	2056.09
40.0	37.5- 42.5	1999.26
45.0	42.5- 47.5	1921.05
50.0	47.5- 52.5	1840.44
55.0	52.5- 57.5	1709.17
60.0	57.5- 62.5	1535.69
65.0	62.5- 67.5	1300.28
70.0	67.5- 72.5	984.64
75.0	72.5- 77.5	618.84
80.0	77.5- 82.5	293.93
85.0	82.5- 87.5	43.05
90.0	87.5- 92.5	1.45

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	7215	28.9	32.0
0- 40	11290	45.2	50.0
0- 60	18545	74.2	82.2
0- 90	22564	90.3	100.0
90-120	1	0.0	0.0
90-130	1	0.0	0.0
90-150	1	0.0	0.0
90-180	1	0.0	0.0
0-180	22564	90.3	100.0

Total Luminaire Optical Efficiency = 90.3%

Luminaire Spacing Criterion:

0 deg	90 deg
1.30	1.06

Average Luminaire Luminance (cd/m^2):

	0	45	90
0	13334.29	13334.29	13334.29
45	11993.86	8127.29	7726.44
50	11266.73	7099.96	8226.36
55	10710.84	6889.15	8037.13
60	9538.03	6875.25	8198.01
65	8059.35	6694.76	7800.74
70	6401.21	5953.82	6797.77
75	4307.67	4705.51	4540.02
80	2641.81	2632.24	2600.63
85	865.96	636.95	229.72

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	107	107	107	107	105	105	105	105	100	100	100	
1	99	95	91	88	96	93	90	87	89	86	84	
2	90	83	78	73	88	82	76	72	79	74	70	
3	83	74	67	61	81	72	66	61	70	64	60	
4	76	66	58	52	74	64	57	52	62	56	51	
5	70	59	51	45	68	58	51	45	56	50	45	
6	65	53	46	40	63	52	45	40	51	44	39	
7	60	49	41	36	59	48	41	35	46	40	35	
8	56	44	37	32	55	44	37	32	43	36	32	
9	53	41	34	29	51	40	33	29	39	33	29	
10	49	38	31	26	48	37	31	26	36	30	26	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	96	96	96	92	92	92	90
1	86	83	81	82	81	79	77
2	76	72	69	73	70	67	65
3	67	62	59	65	61	58	56
4	60	55	51	58	54	50	48
5	54	49	44	53	48	44	42
6	49	44	39	48	43	39	37
7	45	39	35	44	39	35	33
8	42	36	31	40	35	31	30
9	38	33	28	37	32	28	27
10	36	30	26	35	30	26	24