

Photometric Report - (ecs-eco4-mn-554-unv-32h-00w) - Page 1 of 4

Fri Jul 17 16:58:33 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-eco4-mn-554-unv-32h-00w

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
10958(43.8%)	0
8968(35.9%)	1
1686(6.7%)	2
1036(4.1%)	3
330(1.3%)	4
201(0.8%)	5
23181(92.7%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
384(1.5%)	5930(23.7%)	LAMP-F54T5H01
16(0.1%)	262(1.1%)	LAMP-F54T5H02
905(3.6%)	15714(62.9%)	Refl-Poly1
45(0.2%)	455(1.8%)	Refl-Poly2
1352(5.4%)	22363(89.5%)	Total

Absorbed(%)	Incident(%)	Material Name
401(1.6%)	6192(24.8%)	PHOSGLAS
905(3.6%)	15714(62.9%)	ALMIRO04
45(0.2%)	455(1.8%)	PAINT006
1352(5.4%)	22363(89.5%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 465.74 (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): 0.12 (0.0%)

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Number of Lamps: 5 Lumens per Lamp: 5000
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.3047 Length: 4.0000 Height: 0.1911
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	6284	6284	6284	6284	6284
5.00	6213	5995	5845	6155	5968
10.00	6150	5899	6073	6073	6360
15.00	6346	5788	6491	6803	7044
20.00	5887	5754	6632	7149	7329
25.00	5352	5946	6778	7269	7476
30.00	5259	5832	6874	6917	6817
35.00	4883	5785	6588	6058	6155
40.00	4650	5532	5925	5894	5985
45.00	4092	5217	5429	5676	5835
50.00	3703	4712	4913	5241	5444
55.00	3246	4096	4468	5236	5497
60.00	2825	3574	4252	4500	4280
65.00	2256	2959	3619	3353	3252
70.00	1859	2381	2625	2816	3009
75.00	1350	1707	2054	2514	2576
80.00	848	1112	1516	1520	1423
85.00	355	511	485	397	381
90.00	47.7	24.4	8.75	3.77	2.46

Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	37.58
5.0	2.5- 7.5	287.67
10.0	7.5- 12.5	578.23
15.0	12.5- 17.5	914.23
20.0	17.5- 22.5	1225.29
25.0	22.5- 27.5	1529.29
30.0	27.5- 32.5	1758.24
35.0	32.5- 37.5	1882.46
40.0	37.5- 42.5	1996.80
45.0	42.5- 47.5	2062.54
50.0	47.5- 52.5	2040.68
55.0	52.5- 57.5	2039.86
60.0	57.5- 62.5	1884.36
65.0	62.5- 67.5	1575.52
70.0	67.5- 72.5	1320.68
75.0	72.5- 77.5	1090.51
80.0	77.5- 82.5	713.08
85.0	82.5- 87.5	240.36
90.0	87.5- 92.5	8.50

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	5418	21.7	23.4
0- 40	9185	36.7	39.6
0- 60	17283	69.1	74.5
0- 90	23182	92.7	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	23186	92.7	100.0

Total Luminaire Optical Efficiency = 92.7%

Luminaire Spacing Criterion:

0 deg	90 deg
1.24	1.49

Average Luminaire Luminance (cd/m²):

	0	45	90
0	12961.50	12961.50	12961.50
45	11392.16	13923.53	14844.78
50	11241.51	13545.96	14871.88
55	10927.78	13431.78	16348.48
60	10761.48	14168.71	14083.59
65	9987.06	13643.92	12077.56
70	9911.07	11494.40	12939.31
75	9130.98	10821.25	13272.95
80	7928.17	10122.13	9235.83
85	5434.54	4463.10	3372.00

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	108	108	108	108	103	103	103	
1	100	95	91	87	97	93	89	85	89	86	83	
2	90	82	75	69	87	80	74	68	77	71	67	
3	81	71	63	57	79	70	62	56	67	60	55	
4	74	62	54	47	72	61	53	47	59	52	46	
5	68	55	47	40	66	54	46	40	52	45	39	
6	62	50	41	35	61	49	40	34	47	40	34	
7	58	45	36	30	56	44	36	30	42	35	30	
8	54	40	32	27	52	40	32	27	39	31	26	
9	50	37	29	24	49	36	29	24	35	28	24	
10	47	34	26	21	45	33	26	21	33	26	21	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	98	98	98	94	94	94	92
1	85	83	80	82	80	78	76
2	74	69	65	71	67	64	62
3	64	59	54	62	57	53	51
4	57	50	46	54	49	45	43
5	50	44	39	49	43	38	36
6	45	39	34	44	38	33	31
7	41	34	30	40	34	29	27
8	37	31	26	36	30	26	24
9	34	28	23	33	28	23	21
10	32	25	21	31	25	21	19