

Photometric Report - (ecs-exw4-mn-632-unv-23n-a0w) - Page 1 of 4

Sat Jul 18 18:18:18 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-exw4-mn-632-unv-23n-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 499416 initial lamp rays.
 Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
0(0.0%)	0
5933(34.1%)	1
6277(36.1%)	2
1630(9.4%)	3
796(4.6%)	4
434(2.5%)	5
15072(86.6%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
321(1.8%)	4899(28.2%)	LAMP-F032311
25(0.1%)	392(2.3%)	LAMP-F032312
752(4.3%)	13315(76.5%)	Refl-Poly1
70(0.4%)	703(4.0%)	Refl-Poly2
16(0.1%)	17449(100.3%)	Tran-Lens1
1186(6.8%)	36760(211.3%)	Total

Absorbed(%)	Incident(%)	Material Name
347(2.0%)	5291(30.4%)	PHOSGLAS
752(4.3%)	13315(76.5%)	ALMIRO04
70(0.4%)	703(4.0%)	PAINT006
16(0.1%)	17449(100.3%)	ACRYLIC1
1186(6.8%)	36760(211.3%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 1141.07 (6.6%)
 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%)

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Number of Lamps: 6 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.8791 Length: 4.0000 Height: 0.2634
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	6368	6368	6368	6368	6368
5.00	6478	6377	6295	6495	6091
10.00	6428	6375	6288	6169	6270
15.00	6171	6353	6193	5954	6003
20.00	6075	6049	5788	5654	5472
25.00	5791	5686	5459	5131	4994
30.00	5394	5365	4973	4503	4394
35.00	5105	4976	4327	3924	3794
40.00	4643	4346	3798	3255	3122
45.00	4241	3886	3132	2986	3046
50.00	3685	3225	2655	2852	3002
55.00	2939	2615	2340	2677	2684
60.00	2435	2015	2116	2259	2159
65.00	1798	1488	1696	1790	1739
70.00	1234	1080	1193	1244	1261
75.00	689	655	738	792	760
80.00	274	311	349	304	307
85.00	65.0	65.8	49.4	35.4	27.3
90.00	0.910	3.04	1.75	1.87	0.000

Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	38.08
5.0	2.5- 7.5	303.98
10.0	7.5- 12.5	599.22
15.0	12.5- 17.5	872.02
20.0	17.5- 22.5	1090.41
25.0	22.5- 27.5	1254.95
30.0	27.5- 32.5	1352.23
35.0	32.5- 37.5	1389.31
40.0	37.5- 42.5	1346.01
45.0	42.5- 47.5	1322.52
50.0	47.5- 52.5	1267.57
55.0	52.5- 57.5	1172.38
60.0	57.5- 62.5	1031.00
65.0	62.5- 67.5	837.44
70.0	67.5- 72.5	613.39
75.0	72.5- 77.5	385.05
80.0	77.5- 82.5	169.24
85.0	82.5- 87.5	26.85
90.0	87.5- 92.5	0.97

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	4809	27.6	31.9
0- 40	7556	43.4	50.1
0- 60	12518	71.9	83.0
0- 90	15072	86.6	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	15073	86.6	100.0

Total Luminaire Optical Efficiency = 86.6%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.26	1.06

Average Luminaire Luminance (cd/m²):

	0	45	90
0	9119.41	9119.41	9119.41
45	8059.51	5537.36	5410.36
50	7612.84	5039.42	5731.52
55	6706.77	4837.01	5583.01
60	6261.47	4839.55	4974.97
65	5340.21	4380.12	4532.10
70	4373.70	3566.19	3812.58
75	3062.38	2644.17	2759.72
80	1646.67	1574.11	1411.36
85	609.05	304.60	172.15

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	103	103	103	103	101	101	101	101	96	96	96
1	95	91	88	85	93	89	86	83	86	83	81
2	87	80	75	70	85	79	74	69	76	71	68
3	79	71	64	59	77	70	63	58	67	62	57
4	73	63	56	50	71	62	55	50	60	54	49
5	67	57	49	44	66	56	49	43	54	48	43
6	62	51	44	38	61	50	43	38	49	43	38
7	58	47	39	34	56	46	39	34	45	38	34
8	54	43	35	31	53	42	35	30	41	35	30
9	50	39	32	28	49	39	32	28	38	32	27
10	47	36	30	25	46	36	29	25	35	29	25

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	92	92	92	88	88	88	86
1	82	80	78	79	78	76	74
2	73	69	66	70	67	65	63
3	65	60	56	62	59	55	54
4	58	53	49	56	52	48	46
5	52	47	42	51	46	42	40
6	47	42	38	46	41	37	35
7	43	38	33	42	37	33	32
8	40	34	30	39	34	30	28
9	37	31	27	36	31	27	26
10	34	29	25	33	28	25	23