

Photometric Report - (ecs-umx4-mn-632-unv-23n) - Page 1 of 4

Fri Apr 27 17:12:23 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-umx4-mn-632-unv-23n

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
7747(44.5%)	0
7730(44.4%)	1
1025(5.9%)	2
164(0.9%)	3
30(0.2%)	4
13(0.1%)	5
16713(96.1%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
33(0.2%)	494(2.8%)	LAMP-F032311
1(0.0%)	25(0.1%)	LAMP-F032312
601(3.5%)	10869(62.5%)	Refl-Poly1
636(3.7%)	11389(65.5%)	Total

Absorbed(%)	Incident(%)	Material Name
34(0.2%)	520(3.0%)	PHOSGLAS
601(3.5%)	10869(62.5%)	ALMIRO04
636(3.7%)	11389(65.5%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 28.98 (0.2%)
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): 21.62 (0.1%)

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Number of Lamps: 6 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.9583 Length: 4.0000 Height: 0.1292
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	5022	5022	5022	5022	5022
5.00	4823	5090	4748	4996	4712
10.00	4819	4826	4721	4671	4923
15.00	4688	4612	4717	5107	5079
20.00	4581	4630	5016	4951	4983
25.00	4431	4402	4776	4696	4744
30.00	4207	4404	4561	4597	4603
35.00	3780	4141	4212	4452	4561
40.00	3560	3859	4140	4479	4599
45.00	3230	3528	3921	4331	4255
50.00	2916	3181	3701	4029	4090
55.00	2499	2856	3402	3483	3437
60.00	2090	2478	2999	2958	3066
65.00	1681	2133	2384	2600	2656
70.00	1297	1648	1954	2085	2100
75.00	943	1268	1442	1425	1438
80.00	579	809	847	946	984
85.00	292	374	491	555	590
90.00	85.4	124	139	165	163

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	30.04
5.0	2.5- 7.5	234.10
10.0	7.5- 12.5	454.23
15.0	12.5- 17.5	685.22
20.0	17.5- 22.5	908.27
25.0	22.5- 27.5	1069.20
30.0	27.5- 32.5	1231.06
35.0	32.5- 37.5	1334.32
40.0	37.5- 42.5	1458.45
45.0	42.5- 47.5	1504.11
50.0	47.5- 52.5	1513.13
55.0	52.5- 57.5	1426.48
60.0	57.5- 62.5	1306.98
65.0	62.5- 67.5	1153.13
70.0	67.5- 72.5	951.02
75.0	72.5- 77.5	704.94
80.0	77.5- 82.5	456.69
85.0	82.5- 87.5	253.92
90.0	87.5- 92.5	75.72

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	3973	22.8	23.7
0- 40	6657	38.3	39.7
0- 60	12494	71.8	74.6
0- 90	16713	96.1	99.8
90-120	38	0.2	0.2
90-130	38	0.2	0.2
90-150	38	0.2	0.2
90-180	38	0.2	0.2
0-180	16751	96.3	100.0

Total Luminaire Optical Efficiency = 96.3%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.23	1.40

Average Luminaire Luminance (cd/m²):

	0	45	90
0	6901.44	6901.44	6901.44
45	6081.36	7124.27	7757.17
50	6003.07	7306.33	8106.73
55	5721.73	7413.79	7525.98
60	5440.39	7356.43	7562.72
65	5110.51	6745.44	7566.53
70	4785.75	6593.36	7141.36
75	4469.68	6079.67	6125.83
80	3871.40	4810.33	5667.90
85	3362.50	4312.38	5300.84

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	114	114	114	114	111	111	111	111	106	106	106
1	103	98	94	89	100	96	92	88	92	88	85
2	93	85	77	72	90	83	76	71	79	74	69
3	84	74	65	59	82	72	64	58	69	62	57
4	77	65	56	49	75	63	55	49	61	54	48
5	70	57	48	42	68	56	48	41	54	47	41
6	65	51	42	36	63	50	42	36	49	41	35
7	60	46	38	31	58	46	37	31	44	37	31
8	56	42	34	28	54	41	33	28	40	33	28
9	52	39	30	25	50	38	30	25	37	30	25
10	48	35	28	22	47	35	27	22	34	27	22

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	102	102	102	98	98	98	96
1	88	85	83	84	82	80	78
2	76	71	67	73	69	66	64
3	66	61	56	64	59	55	53
4	59	52	47	56	51	47	44
5	52	46	40	50	45	40	38
6	47	40	35	45	39	35	33
7	43	36	31	41	35	31	29
8	39	32	27	38	32	27	25
9	36	29	24	35	29	24	23
10	33	27	22	32	26	22	20