

Photometric Report - (ecs-slt4-mn-132-unv-11n-cb11) - Page 1 of 4

Sun Apr 29 17:11:27 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-slt4-mn-132-unv-11n-cb11

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 500066 initial lamp rays.

Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
1029( 35.5%)	0
653( 22.5%)	1
278( 9.6%)	2
199( 6.9%)	3
108( 3.7%)	4
74( 2.6%)	5
2344( 80.8%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
50( 1.8%)	771( 26.6%)	LAMP-FO32311
2( 0.1%)	43( 1.5%)	LAMP-FO32312
75( 2.6%)	1349( 46.5%)	Refl-Poly1
235( 8.1%)	2175( 75.0%)	Refl-Poly2
364( 12.6%)	4339(149.6%)	Total

  

Absorbed(%)	Incident(%)	Material Name
53( 1.8%)	814( 28.1%)	PHOSGLAS
75( 2.6%)	1349( 46.5%)	ALMIRO04
235( 8.1%)	2175( 75.0%)	PAINT006
364( 12.6%)	4339(149.6%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	191.60 ( 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: 1 Lumens per Lamp: 2900  
 Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00  
 Luminaire Width: 0.4792 Length: 4.0000 Height: 0.2426  
 Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	709	709	709	709	709
5.00	743	753	744	705	709
10.00	665	679	688	682	708
15.00	645	659	662	635	662
20.00	630	612	595	584	565
25.00	545	551	533	537	572
30.00	503	486	485	512	526
35.00	436	433	438	459	481
40.00	371	357	401	431	446
45.00	305	304	343	403	439
50.00	239	257	306	382	428
55.00	173	197	259	350	416
60.00	126	152	221	340	405
65.00	104	127	193	330	395
70.00	76.3	99.7	187	334	409
75.00	55.0	80.8	177	345	413
80.00	36.6	64.4	166	354	436
85.00	20.3	48.9	166	341	423
90.00	6.25	38.6	142	316	401
95.00	6.03	33.9	127	280	348
100.00	6.09	30.6	115	273	331
105.00	5.63	27.3	91.0	211	264
110.00	4.70	25.7	63.2	133	165
115.00	5.56	24.0	48.6	72.2	74.3
120.00	3.67	17.8	38.7	38.5	16.2
125.00	3.65	16.5	33.3	33.3	9.49
130.00	2.80	13.8	28.6	25.9	6.05
135.00	2.41	12.8	23.9	19.9	4.40
140.00	2.03	7.97	18.2	14.3	4.69
145.00	1.39	8.22	12.1	10.1	2.32
150.00	0.940	4.20	10.1	7.11	1.99
155.00	0.790	3.39	5.68	4.29	0.970
160.00	0.220	2.14	3.27	2.26	0.220
165.00	0.000	1.03	1.43	1.08	0.820
170.00	0.000	0.600	0.620	0.000	0.390
175.00	0.000	0.000	0.000	0.000	0.000
180.00	0.000	0.000	0.000	0.000	0.000

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Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	4.24
5.0	2.5- 7.5	34.97
10.0	7.5- 12.5	65.08
15.0	12.5- 17.5	92.55
20.0	17.5- 22.5	111.91
25.0	22.5- 27.5	126.18
30.0	27.5- 32.5	136.92
35.0	32.5- 37.5	140.61
40.0	37.5- 42.5	140.73
45.0	42.5- 47.5	137.73
50.0	47.5- 52.5	134.16
55.0	52.5- 57.5	123.58
60.0	57.5- 62.5	116.07
65.0	62.5- 67.5	111.83
70.0	67.5- 72.5	111.14
75.0	72.5- 77.5	110.79
80.0	77.5- 82.5	110.81
85.0	82.5- 87.5	106.13
90.0	87.5- 92.5	95.94
95.0	92.5- 97.5	84.33
100.0	97.5-102.5	79.18
105.0	102.5-107.5	61.45
110.0	107.5-112.5	39.51
115.0	112.5-117.5	22.95
120.0	117.5-122.5	12.45
125.0	122.5-127.5	10.06
130.0	127.5-132.5	7.64
135.0	132.5-137.5	5.81
140.0	137.5-142.5	3.85
145.0	142.5-147.5	2.54
150.0	147.5-152.5	1.56
155.0	152.5-157.5	0.82
160.0	157.5-162.5	0.37
165.0	162.5-167.5	0.14
170.0	167.5-172.5	0.03
175.0	172.5-177.5	0.00
180.0	177.5-180.0	0.00

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	501	17.3	21.4
0- 40	781	26.9	33.3
0- 60	1306	45.0	55.7
0- 90	1963	67.7	83.8
90-120	342	11.8	14.6
90-130	362	12.5	15.4
90-150	379	13.1	16.1
90-180	381	13.1	16.2
0-180	2344	80.8	100.0

Total Luminaire Optical Efficiency = 80.8%

Luminaire Spacing Criterion:

0 deg	90 deg
1.07	1.12

Average Luminaire Luminance (cd/m<sup>2</sup>):

	0	45	90
0	3980.25	3980.25	3980.25
45	2283.85	1942.47	2314.11
50	1945.74	1808.65	2333.99
55	1555.96	1613.41	2366.33
60	1282.22	1462.00	2420.80
65	1224.83	1382.62	2519.08
70	1073.34	1461.44	2809.66
75	973.51	1538.59	3103.60
80	880.99	1642.93	3645.93
85	772.92	1919.26	4012.60

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

pcc	.8				.7				.5			.3			.1			0
pw	.7	.5	.3	.1	.7	.5	.3	.1	.5	.3	.1	.5	.3	.1	.5	.3	.1	0
RCR																		
0	93	93	93	93	89	89	89	89	82	82	82	76	76	76	70	70	70	67
1	82	77	72	69	78	74	70	66	68	65	62	62	60	57	57	55	53	51
2	74	66	60	55	70	63	58	53	58	54	50	54	50	47	49	46	44	41
3	67	58	51	45	64	55	49	44	51	46	41	47	43	39	43	40	37	34
4	61	51	44	38	58	49	42	37	45	40	35	42	37	33	39	35	31	29
5	56	46	38	33	54	44	37	32	41	35	30	38	33	29	35	31	27	25
6	52	41	34	28	50	40	33	28	37	31	27	34	29	25	32	27	24	22
7	48	37	30	25	46	36	29	25	34	28	24	31	26	22	29	25	21	20
8	45	34	27	22	43	33	26	22	31	25	21	29	24	20	27	23	19	18
9	42	31	25	20	40	30	24	20	28	23	19	27	22	18	25	21	17	16
10	39	29	22	18	38	28	22	18	26	21	17	25	20	17	23	19	16	14