

Photometric Report - (ecs-scw4-mn-232-unv-12n) - Page 1 of 5

Fri Apr 27 20:38:23 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-scw4-mn-232-unv-12n

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 500092 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
0(0.0%)	0
1876(32.3%)	1
1484(25.6%)	2
454(7.8%)	3
308(5.3%)	4
182(3.1%)	5
4306(74.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
145(2.5%)	2206(38.0%)	LAMP-FO32311
9(0.2%)	140(2.4%)	LAMP-FO32312
254(4.4%)	4456(76.8%)	Refl-Poly1
12(0.2%)	126(2.2%)	Refl-Poly2
497(8.6%)	6185(106.6%)	Tran-Lens1
918(15.8%)	13116(226.1%)	Total

Absorbed(%)	Incident(%)	Material Name
154(2.7%)	2347(40.5%)	PHOSGLAS
254(4.4%)	4456(76.8%)	ALMIRO04
12(0.2%)	126(2.2%)	PAINT006
497(8.6%)	6185(106.6%)	PRISM001
918(15.8%)	13116(226.1%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 574.13 (9.9%)
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): 0.00 (0.0%)

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Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	6.11
5.0	2.5- 7.5	49.89
10.0	7.5- 12.5	98.28
15.0	12.5- 17.5	143.64
20.0	17.5- 22.5	178.53
25.0	22.5- 27.5	209.01
30.0	27.5- 32.5	237.32
35.0	32.5- 37.5	254.13
40.0	37.5- 42.5	267.33
45.0	42.5- 47.5	269.47
50.0	47.5- 52.5	264.61
55.0	52.5- 57.5	263.51
60.0	57.5- 62.5	250.68
65.0	62.5- 67.5	241.57
70.0	67.5- 72.5	226.39
75.0	72.5- 77.5	211.82
80.0	77.5- 82.5	198.97
85.0	82.5- 87.5	175.44
90.0	87.5- 92.5	156.86
95.0	92.5- 97.5	132.69
100.0	97.5-102.5	111.40
105.0	102.5-107.5	91.77
110.0	107.5-112.5	70.76
115.0	112.5-117.5	55.97
120.0	117.5-122.5	42.62
125.0	122.5-127.5	29.33
130.0	127.5-132.5	20.33
135.0	132.5-137.5	14.38
140.0	137.5-142.5	10.66
145.0	142.5-147.5	7.73
150.0	147.5-152.5	5.45
155.0	152.5-157.5	3.62
160.0	157.5-162.5	2.98
165.0	162.5-167.5	1.84
170.0	167.5-172.5	1.20
175.0	172.5-177.5	0.56
180.0	177.5-180.0	0.11

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	800	13.8	18.6
0- 40	1307	22.5	30.3
0- 60	2366	40.8	54.9
0- 90	3625	62.5	84.2
90-120	563	9.7	13.1
90-130	623	10.7	14.5
90-150	669	11.5	15.5
90-180	682	11.8	15.8
0-180	4307	74.3	100.0

Total Luminaire Optical Efficiency = 74.3%

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Luminaire Spacing Criterion:

0 deg	90 deg	180 deg	270 deg
1.23	0.70	1.21	2.06

Average Luminaire Luminance (cd/m²):

	0	45	90	135	180
0	4758.81	4758.81	4758.81	4758.81	4758.81
45	3447.33	837.46	458.68	893.84	3310.34
50	2881.03	587.60	304.50	584.39	2911.58
55	2630.19	400.46	261.18	397.15	2573.62
60	2176.62	314.41	183.33	289.58	2260.70
65	1943.36	221.84	177.93	214.99	1937.97
70	1743.08	186.34	104.62	153.29	1751.96
75	1389.19	115.63	122.88	106.13	1527.23
80	1208.35	118.62	90.78	106.33	1243.46
85	854.03	70.94	83.39	81.79	838.50

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	.5	.3	.1	0
RCR																					
0	85	85	85	85	82	82	82	82	76	76	76	70	70	70	65	65	65	62			
1	75	71	67	63	72	68	64	61	62	60	57	58	55	53	53	51	49	47			
2	68	60	55	50	64	58	53	48	53	49	45	49	46	42	45	42	40	37			
3	61	52	46	40	58	50	44	39	46	41	37	43	38	35	39	36	33	31			
4	56	46	39	34	53	44	38	33	41	35	31	38	33	29	35	31	28	26			
5	51	41	34	29	49	39	33	28	36	31	27	34	29	25	31	27	24	22			
6	47	37	30	25	45	35	29	24	33	27	23	30	26	22	28	24	21	19			
7	43	33	26	22	41	32	26	21	30	24	20	28	23	19	26	21	18	17			
8	40	30	24	19	39	29	23	19	27	22	18	25	21	17	24	19	16	15			
9	38	27	21	17	36	27	21	17	25	20	16	23	19	15	22	18	15	13			
10	35	25	19	15	34	24	19	15	23	18	14	21	17	14	20	16	13	12			