

Photometric Report - (ecs-egi4-wn-232-unv-12n) - Page 1 of 4

Fri Jul 17 17:44:10 2009

IESNA:LM-63-1995
Photopia 2.0.0.17 PHOTOMETRIC REPORT
PROJECT: ecs-egi4-wn-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
2753(47.5%)	0
1457(25.1%)	1
327(5.7%)	2
325(5.6%)	3
121(2.1%)	4
96(1.7%)	5
5081(87.6%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
141(2.4%)	2175(37.5%)	LAMP-F032311
7(0.1%)	109(1.9%)	LAMP-F032312
333(5.7%)	3857(66.5%)	Refl-Poly1
482(8.3%)	6143(105.9%)	Total

Absorbed(%)	Incident(%)	Material Name
149(2.6%)	2285(39.4%)	PHOSGLAS
333(5.7%)	3857(66.5%)	ANOWHT01
482(8.3%)	6143(105.9%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 235.91 (4.1%)
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: 2 Lumens per Lamp: 2900
 Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
 Luminaire Width: 0.5872 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	1295	1295	1295	1295	1295
5.00	1354	1242	1300	1296	1233
10.00	1259	1256	1259	1285	1290
15.00	1206	1251	1243	1248	1306
20.00	1240	1221	1240	1270	1294
25.00	1151	1184	1226	1238	1226
30.00	1123	1136	1192	1218	1247
35.00	1070	1119	1150	1195	1242
40.00	1039	1054	1112	1168	1205
45.00	938	999	1087	1117	1152
50.00	916	926	1001	1065	1107
55.00	809	883	944	996	1011
60.00	747	796	863	907	925
65.00	654	716	757	827	847
70.00	543	610	670	760	774
75.00	414	488	568	588	613
80.00	283	359	395	453	459
85.00	144	192	257	296	315
90.00	47.7	73.8	120	156	172
95.00	19.0	28.5	57.0	84.1	98.2
100.00	10.1	13.1	12.3	22.3	38.1
105.00	4.78	6.80	4.85	0.510	0.180
110.00	2.38	4.19	2.33	0.620	0.000
115.00	2.70	2.68	1.02	0.090	0.000
120.00	1.42	0.900	0.520	0.000	0.000
125.00	0.700	0.450	0.320	0.000	0.000
130.00	0.000	0.380	0.110	0.000	0.000
135.00	0.000	0.000	0.090	0.000	0.000
140.00	0.000	0.000	0.000	0.000	0.000
145.00	0.000	0.000	0.000	0.000	0.000
150.00	0.000	0.000	0.000	0.000	0.000
155.00	0.000	0.000	0.000	0.000	0.000
160.00	0.000	0.000	0.000	0.000	0.000
165.00	0.000	0.000	0.000	0.000	0.000
170.00	0.000	0.000	0.000	0.000	0.000
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	7.74
5.0	2.5- 7.5	61.30
10.0	7.5- 12.5	120.76
15.0	12.5- 17.5	177.27
20.0	17.5- 22.5	234.27
25.0	22.5- 27.5	280.16
30.0	27.5- 32.5	324.16
35.0	32.5- 37.5	363.18
40.0	37.5- 42.5	392.47
45.0	42.5- 47.5	411.69
50.0	47.5- 52.5	420.20
55.0	52.5- 57.5	418.96
60.0	57.5- 62.5	403.69
65.0	62.5- 67.5	378.85
70.0	67.5- 72.5	347.55
75.0	72.5- 77.5	285.47
80.0	77.5- 82.5	213.04
85.0	82.5- 87.5	133.01
90.0	87.5- 92.5	63.11
95.0	92.5- 97.5	31.15
100.0	97.5-102.5	9.69
105.0	102.5-107.5	1.94
110.0	107.5-112.5	1.07
115.0	112.5-117.5	0.64
120.0	117.5-122.5	0.25
125.0	122.5-127.5	0.13
130.0	127.5-132.5	0.05
135.0	132.5-137.5	0.01
140.0	137.5-142.5	0.00
145.0	142.5-147.5	0.00
150.0	147.5-152.5	0.00
155.0	152.5-157.5	0.00
160.0	157.5-162.5	0.00
165.0	162.5-167.5	0.00
170.0	167.5-172.5	0.00
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	1037	17.9	20.4
0- 40	1760	30.3	34.6
0- 60	3411	58.8	67.1
0- 90	5005	86.3	98.5
90-120	76	1.3	1.5
90-130	76	1.3	1.5
90-150	76	1.3	1.5
90-180	76	1.3	1.5
0-180	5082	87.6	100.0

Total Luminaire Optical Efficiency = 87.6%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.29	1.46

Average Luminaire Luminance (cd/m²):

	0	45	90
0	5934.25	5934.25	5934.25
45	5889.79	5980.52	6120.59
50	6285.76	5884.38	6249.86
55	6178.24	6007.75	6146.55
60	6479.90	6042.44	6136.96
65	6627.56	5937.71	6242.09
70	6681.28	6025.24	6460.21
75	6542.55	6031.72	5960.53
80	6314.55	5181.59	5390.50
85	5529.45	4448.11	4709.77

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	104	104	104	104	101	101	101	101	96	96	96
1	92	87	83	79	90	85	81	77	81	78	74
2	83	74	67	61	80	73	66	61	69	64	59
3	75	64	56	50	72	63	55	49	60	53	48
4	68	56	48	41	66	55	47	41	52	45	40
5	62	50	41	35	60	49	40	34	46	39	34
6	57	44	36	30	55	43	35	30	42	34	29
7	53	40	32	26	51	39	31	26	38	31	25
8	49	36	28	23	47	35	28	23	34	27	22
9	45	33	25	20	44	32	25	20	31	25	20
10	43	30	23	18	41	30	23	18	29	22	18

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	92	92	92	88	88	88	86
1	77	74	72	74	72	69	67
2	66	61	57	63	59	56	54
3	57	52	47	55	50	46	44
4	50	44	39	48	43	38	36
5	45	38	33	43	37	33	31
6	40	34	29	38	33	28	26
7	36	30	25	35	29	25	23
8	33	27	22	32	26	22	20
9	30	24	20	29	24	20	18
10	28	22	18	27	22	18	16