

Photometric Report - (ecs-sgs4-wn-132-unv-11n) - Page 1 of 4

Tue Oct 13 14:56:28 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-sgs4-wn-132-unv-11n

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
1854(63.9%)	0
681(23.5%)	1
58(2.0%)	2
98(3.4%)	3
15(0.5%)	4
21(0.7%)	5
2729(94.1%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
27(0.9%)	416(14.4%)	LAMP-F032311
1(0.0%)	21(0.7%)	LAMP-F032312
106(3.7%)	1215(41.9%)	Refl-Poly1
135(4.7%)	1653(57.0%)	Total

Absorbed(%)	Incident(%)	Material Name
28(1.0%)	437(15.1%)	PHOSGLAS
106(3.7%)	1215(41.9%)	ANOWHT01
135(4.7%)	1653(57.0%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 35.43 (1.2%)
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): 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: 0.3750 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	483	483	483	483	483
5.00	483	487	458	444	463
10.00	451	455	475	469	495
15.00	467	468	456	484	486
20.00	427	456	461	480	512
25.00	416	431	456	496	517
30.00	393	427	463	492	512
35.00	383	405	453	484	518
40.00	356	387	451	492	497
45.00	316	373	438	493	509
50.00	293	349	428	490	506
55.00	254	328	427	495	527
60.00	225	317	419	496	512
65.00	192	295	417	473	497
70.00	160	287	385	443	457
75.00	130	247	329	374	384
80.00	99.3	182	249	316	343
85.00	54.8	119	219	303	336
90.00	25.6	99.1	207	292	327
95.00	12.4	92.7	215	291	333
100.00	3.55	60.5	209	298	333
105.00	2.14	23.3	151	270	311
110.00	1.94	3.79	86.0	197	233
115.00	1.11	1.41	33.8	117	153
120.00	0.200	0.660	2.79	52.1	77.3
125.00	0.100	0.100	0.100	5.25	20.6
130.00	0.000	0.040	0.000	0.000	0.000
135.00	0.090	0.000	0.000	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	2.89
5.0	2.5- 7.5	22.23
10.0	7.5- 12.5	44.54
15.0	12.5- 17.5	66.82
20.0	17.5- 22.5	87.43
25.0	22.5- 27.5	107.11
30.0	27.5- 32.5	125.70
35.0	32.5- 37.5	140.98
40.0	37.5- 42.5	154.69
45.0	42.5- 47.5	166.22
50.0	47.5- 52.5	174.99
55.0	52.5- 57.5	184.22
60.0	57.5- 62.5	189.80
65.0	62.5- 67.5	189.92
70.0	67.5- 72.5	183.15
75.0	72.5- 77.5	159.84
80.0	77.5- 82.5	130.60
85.0	82.5- 87.5	114.11
90.0	87.5- 92.5	106.19
95.0	92.5- 97.5	105.39
100.0	97.5-102.5	99.34
105.0	102.5-107.5	79.51
110.0	107.5-112.5	52.12
115.0	112.5-117.5	28.46
120.0	117.5-122.5	11.20
125.0	122.5-127.5	1.77
130.0	127.5-132.5	0.00
135.0	132.5-137.5	0.00
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	392	13.5	14.3
0- 40	673	23.2	24.7
0- 60	1372	47.3	50.3
0- 90	2298	79.3	84.2
90-120	424	14.6	15.5
90-130	431	14.9	15.8
90-150	431	14.9	15.8
90-180	431	14.9	15.8
0-180	2729	94.1	100.0

Total Luminaire Optical Efficiency = 94.1%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.23	1.59

Average Luminaire Luminance (cd/m²):

	0	45	90
0	3469.42	3469.42	3469.42
45	3110.36	3505.99	3840.42
50	3145.87	3628.78	4008.48
55	3043.14	3871.95	4419.60
60	3052.92	4113.62	4599.18
65	3040.98	4506.89	4851.99
70	3082.19	4661.25	4924.20
75	3226.74	4578.60	4651.79
80	3467.52	4101.08	4800.00
85	3293.53	4448.01	5600.35

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	108	108	108	108	104	104	104	104	96	96	96
1	95	89	83	78	90	85	80	76	78	74	71
2	84	75	67	60	80	72	65	58	66	60	55
3	76	64	55	48	72	62	53	47	56	50	44
4	69	56	46	39	65	54	45	38	49	42	36
5	63	49	40	33	59	47	39	32	43	36	30
6	57	44	35	28	55	42	34	27	39	31	26
7	53	39	30	24	50	38	30	24	35	28	22
8	49	36	27	21	47	34	26	21	32	25	20
9	46	32	24	19	44	31	24	18	29	22	17
10	43	30	22	17	41	29	21	16	27	20	16

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	89	89	89	82	82	82	79
1	72	69	66	66	63	61	58
2	60	56	51	55	51	48	45
3	52	46	41	47	43	39	36
4	45	39	34	41	36	32	29
5	40	34	29	37	31	27	24
6	36	29	24	33	27	23	21
7	32	26	21	30	24	20	18
8	29	23	19	27	22	18	16
9	27	21	17	25	20	16	14
10	25	19	15	23	18	14	12