

Photometric Report - (ecs-egs4-wn-132-unv-11n) - Page 1 of 4

Tue Apr 24 10:20:08 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-egs4-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
1879(64.8%)	0
563(19.4%)	1
70(2.4%)	2
114(3.9%)	3
23(0.8%)	4
34(1.2%)	5
2685(92.6%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
38(1.3%)	592(20.4%)	LAMP-F032311
1(0.1%)	30(1.0%)	LAMP-F032312
111(3.8%)	1274(44.0%)	Refl-Poly1
152(5.3%)	1897(65.4%)	Total

Absorbed(%)	Incident(%)	Material Name
40(1.4%)	622(21.5%)	PHOSGLAS
111(3.8%)	1274(44.0%)	ANOWHT01
152(5.3%)	1897(65.4%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 62.28 (2.1%)
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: 1 Lumens per Lamp: 2900
 Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
 Luminaire Width: 0.2550 Length: 4.0000 Height: 0.1234
 Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	458	458	458	458	458
5.00	421	410	421	459	424
10.00	429	433	430	440	453
15.00	417	411	428	447	447
20.00	406	415	441	446	452
25.00	386	405	425	450	464
30.00	370	383	431	452	482
35.00	343	381	417	460	468
40.00	333	355	417	472	492
45.00	293	337	416	481	488
50.00	271	319	414	470	500
55.00	226	311	409	474	504
60.00	198	301	411	480	499
65.00	176	285	404	475	485
70.00	142	281	376	444	463
75.00	118	247	330	403	426
80.00	91.8	189	269	334	365
85.00	59.6	127	220	309	334
90.00	27.4	102	218	303	332
95.00	9.96	97.2	218	305	337
100.00	2.06	60.2	198	301	331
105.00	0.570	33.9	152	249	287
110.00	0.160	11.4	107	195	231
115.00	0.400	2.39	63.1	142	176
120.00	0.100	0.280	25.7	97.7	120
125.00	0.070	0.130	4.20	50.2	70.6
130.00	0.090	0.000	0.040	8.83	26.0
135.00	0.090	0.000	0.000	0.000	0.480
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	2.74
5.0	2.5- 7.5	20.46
10.0	7.5- 12.5	41.50
15.0	12.5- 17.5	60.95
20.0	17.5- 22.5	81.12
25.0	22.5- 27.5	98.74
30.0	27.5- 32.5	115.92
35.0	32.5- 37.5	130.81
40.0	37.5- 42.5	145.91
45.0	42.5- 47.5	157.28
50.0	47.5- 52.5	166.89
55.0	52.5- 57.5	174.92
60.0	57.5- 62.5	182.80
65.0	62.5- 67.5	185.62
70.0	67.5- 72.5	180.82
75.0	72.5- 77.5	165.62
80.0	77.5- 82.5	137.73
85.0	82.5- 87.5	116.49
90.0	87.5- 92.5	109.93
95.0	92.5- 97.5	108.34
100.0	97.5-102.5	98.01
105.0	102.5-107.5	76.63
110.0	107.5-112.5	55.27
115.0	112.5-117.5	36.69
120.0	117.5-122.5	21.81
125.0	122.5-127.5	10.09
130.0	127.5-132.5	2.30
135.0	132.5-137.5	0.03
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	361	12.5	13.5
0- 40	623	21.5	23.2
0- 60	1287	44.4	47.9
0- 90	2221	76.6	82.7
90-120	441	15.2	16.4
90-130	463	16.0	17.2
90-150	464	16.0	17.3
90-180	464	16.0	17.3
0-180	2685	92.6	100.0

Total Luminaire Optical Efficiency = 92.6%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.20	1.61

Average Luminaire Luminance (cd/m²):

	0	45	90
0	4837.43	4837.43	4837.43
45	4245.78	4546.14	4905.98
50	4292.43	4743.39	5209.84
55	3975.51	4953.55	5485.76
60	3971.97	5317.53	5733.95
65	4132.12	5668.03	5940.11
70	4044.11	5805.53	6128.50
75	4313.02	5699.19	6195.58
80	4748.10	5336.18	5928.75
85	5332.45	5168.42	6197.13

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	106	106	106	106	101	101	101	101	93	93	93
1	92	86	81	76	88	83	78	73	76	72	68
2	82	73	65	58	78	70	62	56	64	58	53
3	74	62	53	46	70	60	51	45	54	48	42
4	67	54	45	38	63	52	43	37	47	40	34
5	61	48	38	32	58	46	37	31	42	34	29
6	56	42	33	27	53	41	32	26	37	30	25
7	52	38	29	23	49	36	28	22	34	26	21
8	48	34	26	20	45	33	25	20	30	24	19
9	44	31	23	18	42	30	23	17	28	21	16
10	41	29	21	16	39	28	20	15	26	19	15

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	86	86	86	79	79	79	76
1	69	66	63	63	61	58	55
2	58	53	49	53	49	45	42
3	50	44	39	45	40	36	33
4	43	37	32	39	34	30	27
5	38	32	27	35	29	25	23
6	34	28	23	31	26	22	19
7	31	25	20	28	23	19	16
8	28	22	17	26	20	16	14
9	26	20	15	24	18	15	13
10	24	18	14	22	17	13	11