

Photometric Report - (ecs-rpt4-wn-332-unv-13n-318) - Page 1 of 4

Sun Apr 29 18:31:10 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-rpt4-wn-332-unv-13n-318

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 499884 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
1586(18.2%)	0
2135(24.5%)	1
1109(12.8%)	2
475(5.5%)	3
229(2.6%)	4
131(1.5%)	5
5666(65.1%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
151(1.7%)	2323(26.7%)	LAMP-F032311
8(0.1%)	129(1.5%)	LAMP-F032312
668(7.7%)	6685(76.8%)	Refl-Poly1
1779(20.5%)	5020(57.7%)	Refl-Poly2
9(0.1%)	95(1.1%)	Refl-Poly3
2618(30.1%)	14254(163.8%)	Total

Absorbed(%)	Incident(%)	Material Name
160(1.8%)	2452(28.2%)	PHOSGLAS
668(7.7%)	6685(76.8%)	AMWHITE0
1779(20.5%)	5020(57.7%)	AL1500G4
9(0.1%)	95(1.1%)	PAINT006
2618(30.1%)	14254(163.8%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 414.95 (4.8%)
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: 3 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.7433 Length: 4.0000 Height: 0.3904
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	2014	2014	2014	2014	2014
5.00	1998	2118	2140	2151	2215
10.00	2057	2052	2106	2147	2094
15.00	2006	2021	2027	2105	2127
20.00	1943	1960	2009	2062	2158
25.00	1902	1937	2004	2076	2064
30.00	1768	1806	1896	2096	2134
35.00	1658	1671	1857	2052	2047
40.00	1533	1632	1783	1884	1857
45.00	1379	1473	1662	1541	1439
50.00	1223	1331	1409	1152	1098
55.00	1055	1194	1041	945	945
60.00	886	948	778	790	852
65.00	659	659	567	596	596
70.00	377	330	305	246	209
75.00	98.4	96.7	60.7	46.1	39.6
80.00	17.0	13.4	8.74	7.50	5.48
85.00	2.16	1.39	2.04	0.940	1.12
90.00	0.000	0.370	0.530	0.000	0.790

Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	12.04
5.0	2.5- 7.5	101.70
10.0	7.5- 12.5	199.41
15.0	12.5- 17.5	291.53
20.0	17.5- 22.5	378.76
25.0	22.5- 27.5	463.33
30.0	27.5- 32.5	530.94
35.0	32.5- 37.5	584.13
40.0	37.5- 42.5	616.09
45.0	42.5- 47.5	589.61
50.0	47.5- 52.5	530.38
55.0	52.5- 57.5	469.20
60.0	57.5- 62.5	401.71
65.0	62.5- 67.5	304.27
70.0	67.5- 72.5	151.17
75.0	72.5- 77.5	36.06
80.0	77.5- 82.5	5.52
85.0	82.5- 87.5	0.82
90.0	87.5- 92.5	0.18

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	1702	19.6	30.0
0- 40	2862	32.9	50.5
0- 60	4965	57.1	87.6
0- 90	5667	65.1	100.0
90-120	0	0.0	0.0
90-130	0	0.0	0.0
90-150	0	0.0	0.0
90-180	0	0.0	0.0
0-180	5667	65.1	100.0

Total Luminaire Optical Efficiency = 65.1%

Luminaire Spacing Criterion:

0 deg	90 deg
1.29	1.50

Average Luminaire Luminance (cd/m²):

	0	45	90
0	3108.92	3108.92	3108.92
45	2742.81	2956.08	2567.07
50	2631.17	2662.11	2081.98
55	2492.98	2114.01	1927.86
60	2339.35	1722.90	1894.19
65	1991.89	1391.84	1471.73
70	1341.67	847.04	582.63
75	430.00	195.93	128.55
80	97.16	33.93	21.46
85	18.08	10.04	5.57

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	77	77	77	77	75	75	75	75	72	72	72	69	69	69	66	66	66	65			
1	72	69	67	65	70	68	65	64	65	63	62	62	61	60	60	59	58	57			
2	66	61	57	54	64	60	56	53	58	55	52	55	53	51	54	52	50	48			
3	60	54	49	45	59	53	49	45	51	47	44	49	46	43	48	45	43	41			
4	55	48	43	39	54	47	42	38	46	41	38	44	40	37	43	40	37	36			
5	51	43	37	33	50	42	37	33	41	36	33	40	36	32	38	35	32	31			
6	47	39	33	29	46	38	33	29	37	32	29	36	32	28	35	31	28	27			
7	43	35	30	26	42	34	29	26	34	29	25	33	28	25	32	28	25	24			
8	40	32	27	23	39	31	26	23	31	26	23	30	26	22	29	25	22	21			
9	38	29	24	20	37	29	24	20	28	24	20	27	23	20	27	23	20	19			
10	35	27	22	18	34	27	22	18	26	21	18	25	21	18	25	21	18	17			