

Photometric Report - (ecs-rgt4-wn-454-unv-22h-prs) - Page 1 of 4

Sat Jul 18 14:54:57 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-rgt4-wn-454-unv-22h-prs

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 499456 initial lamp rays.

Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
5441( 27.2%)	0
7092( 35.5%)	1
2702( 13.5%)	2
1118( 5.6%)	3
595( 3.0%)	4
291( 1.5%)	5
17241( 86.2%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
261( 1.3%)	4012( 20.1%)	LAMP-F54T5H01
10( 0.1%)	154( 0.8%)	LAMP-F54T5H02
1311( 6.6%)	15080( 75.4%)	Refl-Poly1
60( 0.3%)	605( 3.0%)	Refl-Poly2
533( 2.7%)	6504( 32.5%)	Tran-Lens1
2177( 10.9%)	26358(131.8%)	Total

Absorbed(%)	Incident(%)	Material Name
271( 1.4%)	4166( 20.8%)	PHOSGLAS
1311( 6.6%)	15080( 75.4%)	ANOWHT01
60( 0.3%)	605( 3.0%)	PAINT006
533( 2.7%)	6504( 32.5%)	PRISM001
2177( 10.9%)	26358(131.8%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	581.08 ( 2.9%)
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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Number of Lamps: 4 Lumens per Lamp: 5000  
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00  
Luminaire Width: 1.8177 Length: 4.0000 Height: 0.2606  
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	5632	5632	5632	5632	5632
5.00	5718	5560	5844	5610	5562
10.00	5594	5622	5723	5474	5508
15.00	5422	5666	5501	5234	5238
20.00	5371	5354	5293	5209	5242
25.00	5251	5197	5052	4939	4919
30.00	4937	4945	4811	4690	4559
35.00	4771	4675	4523	4506	4454
40.00	4566	4424	4229	4321	4320
45.00	4314	3970	3846	3951	3868
50.00	3774	3494	3499	3514	3641
55.00	3555	3153	3106	3260	3329
60.00	3096	2588	2671	2742	2800
65.00	2427	2140	2249	2349	2265
70.00	1890	1673	1792	1732	1774
75.00	1251	1242	1277	1547	1588
80.00	708	763	956	1053	1097
85.00	239	286	289	207	168
90.00	27.0	23.3	31.6	21.8	19.0

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Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	33.68
5.0	2.5- 7.5	270.56
10.0	7.5- 12.5	532.33
15.0	12.5- 17.5	770.75
20.0	17.5- 22.5	991.85
25.0	22.5- 27.5	1174.07
30.0	27.5- 32.5	1315.08
35.0	32.5- 37.5	1439.69
40.0	37.5- 42.5	1534.25
45.0	42.5- 47.5	1536.49
50.0	47.5- 52.5	1492.14
55.0	52.5- 57.5	1454.88
60.0	57.5- 62.5	1299.25
65.0	62.5- 67.5	1128.25
70.0	67.5- 72.5	905.15
75.0	72.5- 77.5	725.99
80.0	77.5- 82.5	495.94
85.0	82.5- 87.5	134.42
90.0	87.5- 92.5	13.66

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	4406	22.0	25.5
0- 40	7275	36.4	42.2
0- 60	13187	65.9	76.5
0- 90	17242	86.2	100.0
90-120	7	0.0	0.0
90-130	7	0.0	0.0
90-150	7	0.0	0.0
90-180	7	0.0	0.0
0-180	17248	86.2	100.0

Total Luminaire Optical Efficiency = 86.2%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.31	1.22

Average Luminaire Luminance (cd/m<sup>2</sup>):

	0	45	90
0	8338.19	8338.19	8338.19
45	8478.88	7016.61	7083.28
50	8066.56	6854.76	7161.99
55	8394.95	6621.51	7132.82
60	8236.85	6298.95	6640.42
65	7458.42	5985.66	6069.61
70	6939.99	5521.44	5508.57
75	5754.37	4711.23	5917.90
80	4406.10	4440.50	5156.43
85	2324.69	1829.76	1079.21

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	102	102	102	102	100	100	100	100	95	95	95
1	93	89	85	82	91	87	83	80	83	80	78
2	84	77	71	66	82	75	70	65	72	67	63
3	76	67	60	54	74	66	59	54	63	57	53
4	70	59	51	45	68	58	51	45	56	49	44
5	64	53	45	39	62	52	44	39	50	43	38
6	59	47	39	34	57	46	39	33	45	38	33
7	55	43	35	30	53	42	35	29	41	34	29
8	51	39	31	26	49	38	31	26	37	31	26
9	47	36	28	23	46	35	28	23	34	28	23
10	44	33	26	21	43	32	26	21	31	25	21

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	91	91	91	88	88	88	86
1	80	77	75	77	75	73	71
2	69	65	62	67	63	60	59
3	61	56	52	58	54	51	49
4	54	48	44	52	47	43	41
5	48	42	38	46	41	37	35
6	43	37	33	42	37	33	31
7	39	33	29	38	33	29	27
8	36	30	26	35	30	26	24
9	33	27	23	32	27	23	21
10	31	25	21	30	25	21	19