

Photometric Report - (ecs-rgt2-mn-231(u6)-unv-12n-prs) - Page 1 of 4

Sat Jul 18 12:54:26 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-rgt2-mn-231(u6)-unv-12n-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 502000 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
1020(18.9%)	0
1797(33.3%)	1
1016(18.8%)	2
343(6.4%)	3
207(3.8%)	4
124(2.3%)	5
4510(83.5%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
132(2.5%)	2328(43.1%)	LAMP-F31T8U61
6(0.1%)	106(2.0%)	LAMP-F31T8U62
259(4.8%)	4563(84.5%)	Refl-Poly1
175(3.3%)	2116(39.2%)	Tran-Lens1
574(10.6%)	9114(168.8%)	Total

Absorbed(%)	Incident(%)	Material Name
138(2.6%)	2435(45.1%)	PHOSGLAS
259(4.8%)	4563(84.5%)	ALMIRO04
175(3.3%)	2116(39.2%)	PRISM001
574(10.6%)	9114(168.8%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 335.27 (6.2%)
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: 2 Lumens per Lamp: 2700
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 2.0000 Length: 2.0000 Height: 0.2944
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	1551	1551	1551	1551	1551
5.00	1512	1596	1532	1477	1508
10.00	1521	1476	1460	1432	1500
15.00	1428	1438	1431	1381	1347
20.00	1439	1405	1359	1287	1278
25.00	1391	1360	1272	1265	1234
30.00	1314	1265	1191	1193	1220
35.00	1248	1198	1150	1148	1182
40.00	1130	1061	1078	1165	1168
45.00	1027	954	1023	1091	1097
50.00	913	845	950	1013	1040
55.00	751	742	874	964	999
60.00	617	628	796	889	879
65.00	495	533	710	727	673
70.00	345	457	568	453	408
75.00	260	364	343	351	349
80.00	177	208	215	213	197
85.00	83.8	79.7	66.9	54.3	46.3
90.00	12.6	5.21	4.30	3.61	3.33

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Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	9.28
5.0	2.5- 7.5	73.03
10.0	7.5- 12.5	139.89
15.0	12.5- 17.5	199.95
20.0	17.5- 22.5	253.54
25.0	22.5- 27.5	301.70
30.0	27.5- 32.5	336.85
35.0	32.5- 37.5	370.31
40.0	37.5- 42.5	392.23
45.0	42.5- 47.5	400.17
50.0	47.5- 52.5	397.29
55.0	52.5- 57.5	387.90
60.0	57.5- 62.5	363.33
65.0	62.5- 67.5	317.10
70.0	67.5- 72.5	238.74
75.0	72.5- 77.5	180.43
80.0	77.5- 82.5	111.09
85.0	82.5- 87.5	36.31
90.0	87.5- 92.5	2.89

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	1139	21.1	25.3
0- 40	1876	34.7	41.6
0- 60	3442	63.7	76.3
0- 90	4511	83.5	100.0
90-120	1	0.0	0.0
90-130	1	0.0	0.0
90-150	1	0.0	0.0
90-180	1	0.0	0.0
0-180	4512	83.6	100.0

Total Luminaire Optical Efficiency = 83.6%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.26	1.18

Average Luminaire Luminance (cd/m²):

	0	45	90
0	4174.73	4174.73	4174.73
45	3406.81	3221.00	3639.03
50	3252.47	3185.39	3704.27
55	2910.34	3161.49	3873.38
60	2647.58	3149.46	3769.14
65	2393.55	3125.39	3257.25
70	1934.76	2841.38	2287.38
75	1747.16	2008.80	2339.45
80	1496.84	1530.41	1660.87
85	964.12	611.07	533.17

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	99	99	99	99	97	97	97	97	93	93	93	89	89	89	85	85	85	83			
1	90	86	83	79	88	84	81	78	81	78	75	78	75	73	74	73	71	69			
2	82	75	69	64	80	73	68	63	70	65	61	67	63	60	65	62	59	57			
3	74	65	58	52	72	64	57	52	61	56	51	59	54	50	57	53	49	47			
4	68	57	50	44	66	56	49	44	54	48	43	52	47	42	50	46	42	40			
5	62	51	43	37	60	50	43	37	48	42	37	47	41	36	45	40	36	34			
6	57	46	38	32	56	45	38	32	43	37	32	42	36	32	41	35	31	30			
7	53	41	34	28	51	41	33	28	39	33	28	38	32	28	37	32	28	26			
8	49	38	30	25	48	37	30	25	36	30	25	35	29	25	34	29	25	23			
9	46	34	27	23	45	34	27	23	33	27	22	32	26	22	31	26	22	21			
10	43	32	25	20	42	31	25	20	30	24	20	30	24	20	29	24	20	19			