

Photometric Report - (ecs-rgt4-wn-232-unv-12n-prs) - Page 1 of 4

Sat Jul 18 14:40:24 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-rgt4-wn-232-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 500092 initial lamp rays.  
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
1433( 24.7%)	0
2008( 34.6%)	1
827( 14.3%)	2
362( 6.2%)	3
202( 3.5%)	4
96( 1.7%)	5
4931( 85.0%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
67( 1.2%)	1038( 17.9%)	LAMP-FO32311
3( 0.1%)	61( 1.1%)	LAMP-FO32312
405( 7.0%)	4820( 83.1%)	Refl-Poly1
19( 0.3%)	194( 3.3%)	Refl-Poly2
173( 3.0%)	2117( 36.5%)	Tran-Lens1
670( 11.6%)	8230(141.9%)	Total

Absorbed(%)	Incident(%)	Material Name
71( 1.2%)	1099( 19.0%)	PHOSGLAS
405( 7.0%)	4820( 83.1%)	ANOWHT01
19( 0.3%)	194( 3.3%)	PAINT006
173( 3.0%)	2117( 36.5%)	PRISM001
670( 11.6%)	8230(141.9%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 197.88 ( 3.4%)  
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: 2900  
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	1530	1530	1530	1530	1530
5.00	1444	1428	1488	1473	1385
10.00	1455	1407	1457	1472	1480
15.00	1363	1374	1378	1495	1488
20.00	1319	1405	1427	1499	1487
25.00	1275	1359	1434	1492	1505
30.00	1244	1299	1445	1442	1418
35.00	1140	1294	1389	1368	1345
40.00	1072	1244	1308	1316	1347
45.00	1003	1199	1217	1245	1285
50.00	944	1090	1124	1165	1188
55.00	831	982	1006	1060	1031
60.00	738	844	884	875	859
65.00	620	696	714	700	683
70.00	481	562	527	502	475
75.00	320	401	343	252	238
80.00	195	214	133	126	121
85.00	72.4	62.7	48.5	35.6	34.2
90.00	8.98	9.10	6.45	6.82	6.59

Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	9.15
5.0	2.5- 7.5	69.31
10.0	7.5- 12.5	138.09
15.0	12.5- 17.5	201.15
20.0	17.5- 22.5	268.75
25.0	22.5- 27.5	328.71
30.0	27.5- 32.5	378.01
35.0	32.5- 37.5	416.05
40.0	37.5- 42.5	447.18
45.0	42.5- 47.5	465.53
50.0	47.5- 52.5	466.55
55.0	52.5- 57.5	446.60
60.0	57.5- 62.5	403.62
65.0	62.5- 67.5	342.98
70.0	67.5- 72.5	266.39
75.0	72.5- 77.5	168.64
80.0	77.5- 82.5	85.25
85.0	82.5- 87.5	27.31
90.0	87.5- 92.5	4.13

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	1197	20.6	24.3
0- 40	2027	34.9	41.1
0- 60	3834	66.1	77.7
0- 90	4931	85.0	100.0
90-120	2	0.0	0.0
90-130	2	0.0	0.0
90-150	2	0.0	0.0
90-180	2	0.0	0.0
0-180	4933	85.1	100.0

Total Luminaire Optical Efficiency = 85.1%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.21	1.36

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

	0	45	90
0	2265.21	2265.21	2265.21
45	1971.39	2219.65	2352.98
50	2017.26	2201.14	2336.84
55	1962.01	2144.96	2209.42
60	1963.00	2085.95	2036.86
65	1904.15	1900.42	1830.42
70	1765.51	1622.32	1474.75
75	1471.04	1264.08	885.14
80	1216.35	618.52	568.90
85	704.67	306.65	220.40

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	101	101	101	101	98	98	98	98	94	94	94	
1	92	88	84	81	90	86	83	80	82	80	77	
2	83	76	70	65	81	74	69	64	71	67	63	
3	75	66	59	53	73	65	58	53	62	57	52	
4	69	58	51	45	67	57	50	44	55	49	44	
5	63	52	44	38	61	51	43	38	49	42	37	
6	58	46	38	33	56	45	38	33	44	37	32	
7	53	42	34	29	52	41	34	29	40	33	28	
8	50	38	30	25	48	37	30	25	36	30	25	
9	46	35	27	23	45	34	27	22	33	27	22	
10	43	32	25	20	42	31	25	20	30	24	20	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	90	90	90	86	86	86	84
1	79	77	75	76	74	72	71
2	69	65	61	66	63	60	58
3	60	55	51	58	54	50	48
4	53	48	43	51	46	43	41
5	47	41	37	46	41	37	35
6	42	37	32	41	36	32	30
7	38	32	28	37	32	28	26
8	35	29	25	34	29	25	23
9	32	26	22	31	26	22	21
10	30	24	20	29	24	20	18