

Photometric Report - (ecs-rcn2-wn-217-unv-12n-frl) - Page 1 of 4

Fri Apr 03 16:45:34 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-rcn2-wn-217-unv-12n-frl

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
0( 0.0%)	0
891( 33.0%)	1
764( 28.3%)	2
226( 8.4%)	3
199( 7.4%)	4
84( 3.1%)	5
2166( 80.2%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
39( 1.5%)	605( 22.4%)	LAMP-FO17311
5( 0.2%)	92( 3.4%)	LAMP-FO17312
255( 9.5%)	2554( 94.6%)	Refl-Poly1
18( 0.7%)	189( 7.0%)	Refl-Poly2
2( 0.1%)	2421( 89.7%)	Tran-Lens1
9( 0.4%)	111( 4.1%)	Tran-Lens2
332( 12.3%)	5973(221.3%)	Total

  

Absorbed(%)	Incident(%)	Material Name
45( 1.7%)	697( 25.8%)	PHOSGLAS
255( 9.5%)	2554( 94.6%)	AMWHITE0
18( 0.7%)	189( 7.0%)	PAINT006
2( 0.1%)	2421( 89.7%)	ACRYLIC1
9( 0.4%)	111( 4.1%)	PRISM001
332( 12.3%)	5973(221.3%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 201.45 ( 7.5%)  
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: 1350  
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00  
Luminaire Width: 1.8125 Length: 2.0000 Height: 0.2579  
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	826	826	826	826	826
5.00	772	741	725	773	736
10.00	733	741	718	739	740
15.00	708	724	738	724	708
20.00	681	709	710	704	725
25.00	671	673	671	693	713
30.00	623	652	663	672	702
35.00	595	598	623	639	667
40.00	550	559	589	635	642
45.00	495	509	548	591	596
50.00	417	448	504	549	559
55.00	361	399	456	486	491
60.00	296	316	378	396	394
65.00	219	260	286	290	283
70.00	157	181	197	156	141
75.00	87.6	103	85.8	61.7	53.8
80.00	38.3	39.8	25.4	23.6	23.0
85.00	7.59	7.35	6.84	6.94	5.77
90.00	0.290	0.410	0.760	0.740	0.660

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Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	4.94
5.0	2.5- 7.5	35.75
10.0	7.5- 12.5	69.82
15.0	12.5- 17.5	102.64
20.0	17.5- 22.5	132.44
25.0	22.5- 27.5	158.08
30.0	27.5- 32.5	181.54
35.0	32.5- 37.5	195.75
40.0	37.5- 42.5	209.51
45.0	42.5- 47.5	212.58
50.0	47.5- 52.5	208.88
55.0	52.5- 57.5	198.32
60.0	57.5- 62.5	170.37
65.0	62.5- 67.5	135.10
70.0	67.5- 72.5	88.04
75.0	72.5- 77.5	42.55
80.0	77.5- 82.5	16.12
85.0	82.5- 87.5	3.80
90.0	87.5- 92.5	0.33

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	591	21.9	27.3
0- 40	983	36.4	45.4
0- 60	1794	66.5	82.8
0- 90	2166	80.2	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	2167	80.2	100.0

Total Luminaire Optical Efficiency = 80.2%

Luminaire Spacing Criterion:

0 deg	90 deg
1.13	1.26

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

	0	45	90
0	2453.64	2453.64	2453.64
45	1841.29	1931.21	2189.65
50	1671.12	1896.58	2207.80
55	1577.37	1852.45	2113.32
60	1437.00	1684.41	1878.56
65	1204.05	1425.84	1521.92
70	1009.59	1120.63	877.75
75	678.40	573.56	403.06
80	378.67	207.63	217.65
85	104.52	73.00	74.85

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	0
RCR																		
0	95	95	95	95	93	93	93	93	89	89	89	85	85	85	81	81	81	80
1	88	84	81	78	85	82	79	77	79	77	74	76	74	72	73	71	70	68
2	80	74	68	64	78	72	67	63	69	65	62	67	63	60	64	61	59	57
3	73	65	58	53	71	63	57	53	61	56	52	59	54	51	57	53	50	48
4	67	57	50	45	65	56	50	45	54	48	44	52	47	43	50	46	43	41
5	61	51	44	38	59	50	43	38	48	42	38	47	41	37	45	41	37	35
6	56	46	39	33	55	45	38	33	43	37	33	42	37	33	41	36	32	31
7	52	41	34	29	51	41	34	29	39	33	29	38	33	29	37	32	29	27
8	48	37	31	26	47	37	30	26	36	30	26	35	30	26	34	29	25	24
9	45	34	28	23	44	34	28	23	33	27	23	32	27	23	31	26	23	21
10	42	32	25	21	41	31	25	21	30	25	21	30	24	21	29	24	21	19