

Photometric Report - (ecs-wui4-mn-432-unv-14n) - Page 1 of 4

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IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-wui4-mn-432-unv-14n

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
4998(43.1%)	0
4181(36.0%)	1
362(3.1%)	2
664(5.7%)	3
138(1.2%)	4
181(1.6%)	5
10526(90.7%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
217(1.9%)	3328(28.7%)	LAMP-F032311
10(0.1%)	167(1.4%)	LAMP-F032312
444(3.8%)	7907(68.2%)	Refl-Poly1
673(5.8%)	11403(98.3%)	Total

Absorbed(%)	Incident(%)	Material Name
228(2.0%)	3495(30.1%)	PHOSGLAS
444(3.8%)	7907(68.2%)	ALMIRO04
673(5.8%)	11403(98.3%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 353.19 (3.0%)
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): 46.90 (0.4%)

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Number of Lamps: 4 Lumens per Lamp: 2900
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.9300 Length: 4.0000 Height: 0.2410
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	4597	4597	4597	4597	4597
5.00	4837	4830	4890	5052	4915
10.00	4884	4931	4951	4676	4620
15.00	4849	4800	4505	4219	4126
20.00	4628	4593	4059	3711	3560
25.00	4457	4271	3579	3224	3046
30.00	4214	3874	3169	2495	2403
35.00	4061	3483	2564	2135	2129
40.00	3588	3049	2082	1871	1841
45.00	3258	2502	1785	1642	1615
50.00	2893	2051	1491	1485	1524
55.00	2500	1656	1269	1461	1547
60.00	2028	1289	1183	1403	1426
65.00	1584	960	1092	1226	1265
70.00	1142	752	958	1096	1141
75.00	762	583	821	956	1012
80.00	428	464	645	609	559
85.00	195	294	245	177	141
90.00	123	126	65.4	13.4	0.000

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	27.49
5.0	2.5- 7.5	234.66
10.0	7.5- 12.5	459.50
15.0	12.5- 17.5	638.83
20.0	17.5- 22.5	771.33
25.0	22.5- 27.5	858.62
30.0	27.5- 32.5	880.19
35.0	32.5- 37.5	886.37
40.0	37.5- 42.5	855.94
45.0	42.5- 47.5	810.56
50.0	47.5- 52.5	759.53
55.0	52.5- 57.5	719.53
60.0	57.5- 62.5	664.87
65.0	62.5- 67.5	584.05
70.0	67.5- 72.5	508.33
75.0	72.5- 77.5	429.70
80.0	77.5- 82.5	298.45
85.0	82.5- 87.5	120.65
90.0	87.5- 92.5	36.41

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	3414	29.4	32.4
0- 40	5174	44.6	49.1
0- 60	8231	71.0	78.1
0- 90	10527	90.7	99.8
90-120	18	0.2	0.2
90-130	18	0.2	0.2
90-150	18	0.2	0.2
90-180	18	0.2	0.2
0-180	10545	90.9	100.0

Total Luminaire Optical Efficiency = 90.9%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.36	0.92

Average Luminaire Luminance (cd/m²):

	0	45	90
0	6409.14	6409.14	6409.14
45	6058.33	3112.87	2830.79
50	5855.11	2798.64	2878.02
55	5596.05	2598.78	3191.74
60	5120.22	2690.12	3268.58
65	4627.49	2811.79	3291.19
70	3994.81	2872.45	3462.92
75	3349.40	2970.10	3719.13
80	2562.26	2971.25	2628.21
85	1846.06	1569.80	929.11

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	108	108	108	108	105	105	105	105	101	101	101
1	98	94	90	87	96	92	88	85	88	85	82
2	90	82	76	71	87	81	75	70	77	73	68
3	82	73	65	60	80	71	64	59	68	63	58
4	75	65	57	51	73	64	56	51	61	55	50
5	70	58	50	44	68	57	50	44	55	49	44
6	65	53	45	39	63	52	44	39	50	44	39
7	60	48	40	35	59	47	40	35	46	39	35
8	56	44	37	32	55	44	36	31	42	36	31
9	53	41	34	29	51	40	33	29	39	33	28
10	50	38	31	26	48	37	31	26	36	30	26

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	96	96	96	92	92	92	90
1	85	82	80	81	79	78	76
2	74	70	67	72	68	65	63
3	66	61	57	64	59	56	54
4	59	54	49	57	52	49	47
5	54	48	43	52	47	43	41
6	49	43	38	47	42	38	36
7	45	39	34	44	38	34	32
8	41	35	31	40	35	31	29
9	38	32	28	37	32	28	26
10	36	30	26	35	30	26	24