

Photometric Report - (ecs-xvt4-ms-132-unv-11n-cal) - Page 1 of 4

Fri Apr 29 11:41:15 2011

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-xvt4-ms-132-unv-11n-cal

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 500066 initial lamp rays.
Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
0(0.0%)	0
1065(36.7%)	1
1205(41.6%)	2
256(8.9%)	3
85(3.0%)	4
51(1.8%)	5
2664(91.9%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
12(0.4%)	183(6.3%)	LAMP-FO32311
0(0.0%)	10(0.3%)	LAMP-FO32312
126(4.4%)	2224(76.7%)	Refl-Poly1
3(0.1%)	3125(107.8%)	Tran-Lens1
142(4.9%)	5544(191.2%)	Total

Absorbed(%)	Incident(%)	Material Name
12(0.4%)	193(6.7%)	PHOSGLAS
126(4.4%)	2224(76.7%)	ALMIRO04
3(0.1%)	3125(107.8%)	POLYCRB1
142(4.9%)	5544(191.2%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 92.82 (3.2%)
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: 1 Lumens per Lamp: 2900
 Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
 Luminaire Width: 0.5196 Length: 4.0000 Height: 0.1935
 Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	925	925	925	925	925
5.00	890	894	851	878	940
10.00	873	895	862	839	839
15.00	897	848	817	780	819
20.00	825	824	775	826	889
25.00	801	762	797	902	906
30.00	754	728	839	889	880
35.00	685	684	815	808	827
40.00	641	655	746	718	701
45.00	570	619	659	626	623
50.00	485	557	564	558	539
55.00	413	489	478	440	429
60.00	336	394	376	365	356
65.00	257	305	290	287	304
70.00	193	217	223	265	277
75.00	128	141	186	202	204
80.00	72.3	95.1	127	111	112
85.00	35.9	56.3	46.3	32.7	28.0
90.00	15.5	22.8	15.2	12.3	13.4
95.00	16.4	19.9	11.8	8.46	8.52
100.00	16.6	23.1	14.3	8.63	8.00
105.00	12.8	16.6	28.8	17.5	13.1
110.00	10.1	11.8	26.0	31.9	29.8
115.00	7.17	11.0	15.3	28.0	30.0
120.00	4.43	6.60	9.30	16.2	22.9
125.00	3.97	3.97	9.38	9.16	8.22
130.00	1.64	3.69	7.76	8.90	10.3
135.00	2.02	2.65	4.27	7.94	8.53
140.00	1.60	1.63	2.55	5.06	5.68
145.00	1.50	0.850	2.00	2.77	2.50
150.00	0.310	0.640	0.460	3.81	3.18
155.00	0.200	0.190	0.000	0.900	0.540
160.00	0.220	0.120	0.000	0.000	0.220
165.00	0.000	0.000	0.000	0.000	0.000
170.00	0.000	0.000	0.000	0.000	0.000
175.00	0.000	0.000	0.000	0.000	0.000
180.00	0.000	0.000	0.000	0.000	0.000

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Zonal Lumens		
Cone	Between	Lumens
0.0	0.0- 2.5	5.53
5.0	2.5- 7.5	42.24
10.0	7.5- 12.5	82.15
15.0	12.5- 17.5	117.14
20.0	17.5- 22.5	153.84
25.0	22.5- 27.5	192.02
30.0	27.5- 32.5	224.17
35.0	32.5- 37.5	240.76
40.0	37.5- 42.5	245.75
45.0	42.5- 47.5	242.24
50.0	47.5- 52.5	229.92
55.0	52.5- 57.5	205.07
60.0	57.5- 62.5	175.77
65.0	62.5- 67.5	144.44
70.0	67.5- 72.5	121.11
75.0	72.5- 77.5	92.02
80.0	77.5- 82.5	57.46
85.0	82.5- 87.5	22.83
90.0	87.5- 92.5	8.87
95.0	92.5- 97.5	7.18
100.0	97.5-102.5	7.88
105.0	102.5-107.5	10.04
110.0	107.5-112.5	11.53
115.0	112.5-117.5	9.05
120.0	117.5-122.5	5.43
125.0	122.5-127.5	3.21
130.0	127.5-132.5	2.76
135.0	132.5-137.5	1.95
140.0	137.5-142.5	1.13
145.0	142.5-147.5	0.60
150.0	147.5-152.5	0.46
155.0	152.5-157.5	0.08
160.0	157.5-162.5	0.02
165.0	162.5-167.5	0.00
170.0	167.5-172.5	0.00
175.0	172.5-177.5	0.00
180.0	177.5-180.0	0.00

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	701	24.2	26.3
0- 40	1178	40.6	44.2
0- 60	2068	71.3	77.6
0- 90	2599	89.6	97.5
90-120	53	1.8	2.0
90-130	60	2.1	2.3
90-150	65	2.3	2.5
90-180	66	2.3	2.5
0-180	2665	91.9	100.0

Total Luminaire Optical Efficiency = 91.9%

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Luminaire Spacing Criterion:

0 deg	90 deg
1.21	1.38

Average Luminaire Luminance (cd/m²):

	0	45	90
0	4788.24	4788.24	4788.24
45	3983.35	3718.87	3324.05
50	3692.75	3354.02	3006.59
55	3485.27	3026.77	2529.89
60	3210.84	2569.61	2240.02
65	2858.70	2166.65	2071.05
70	2573.53	1858.58	2072.59
75	2172.68	1763.53	1706.68
80	1692.57	1410.07	1076.42
85	1373.29	625.08	316.70

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	100	100	100	
1	99	94	91	87	96	92	89	85	88	85	82	
2	90	82	76	71	87	80	75	70	77	72	68	
3	82	72	65	59	79	71	64	58	68	62	57	
4	75	64	56	50	73	63	55	49	60	54	48	
5	69	57	49	43	67	56	48	42	54	47	42	
6	63	51	43	37	62	50	43	37	48	42	36	
7	59	46	38	33	57	46	38	33	44	37	32	
8	55	42	34	29	53	42	34	29	40	33	29	
9	51	39	31	26	50	38	31	26	37	30	26	
10	48	36	28	24	46	35	28	23	34	28	23	

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	95	95	95	91	91	91	89
1	84	82	79	80	78	77	75
2	73	69	66	70	67	64	62
3	65	60	56	62	58	54	52
4	58	52	48	55	51	47	45
5	52	46	41	50	45	40	38
6	47	41	36	45	40	35	34
7	42	36	32	41	36	31	30
8	39	33	28	38	32	28	26
9	36	30	25	35	29	25	24
10	33	27	23	32	27	23	21