

Photometric Report - (ecs-smv4-ws-132-unv-11n-cal) - Page 1 of 4

Fri Apr 27 19:18:39 2012

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-smv4-ws-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
1010(34.9%)	1
684(23.6%)	2
219(7.6%)	3
229(7.9%)	4
101(3.5%)	5
2245(77.4%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
75(2.6%)	1149(39.6%)	LAMP-FO32311
3(0.1%)	59(2.0%)	LAMP-FO32312
261(9.0%)	2956(101.9%)	Refl-Poly1
2(0.1%)	2561(88.3%)	Tran-Lens1
343(11.8%)	6726(231.9%)	Total

Absorbed(%)	Incident(%)	Material Name
79(2.7%)	1208(41.7%)	PHOSGLAS
261(9.0%)	2956(101.9%)	ANOWHT01
2(0.1%)	2561(88.3%)	ACRYLIC1
343(11.8%)	6726(231.9%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 311.09 (10.7%)
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: 0.3080 Length: 4.0000 Height: 0.1906
 Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	727	727	727	727	727
5.00	735	736	721	712	779
10.00	722	735	687	736	705
15.00	715	708	683	683	695
20.00	679	684	681	672	665
25.00	687	670	652	659	629
30.00	653	634	630	620	637
35.00	616	588	594	601	590
40.00	579	560	553	556	554
45.00	519	512	516	519	516
50.00	488	481	458	477	495
55.00	435	429	415	430	436
60.00	377	371	367	372	374
65.00	314	311	301	280	278
70.00	249	245	222	205	203
75.00	178	174	144	135	130
80.00	101	93.6	83.1	72.8	67.9
85.00	49.9	39.8	33.3	25.8	25.6
90.00	16.2	17.4	12.5	7.84	6.98
95.00	24.0	12.2	6.80	4.56	4.47
100.00	19.4	11.1	6.78	4.25	3.78
105.00	13.2	7.61	5.79	5.37	5.10
110.00	10.4	5.95	3.22	3.49	4.31
115.00	6.25	4.17	2.05	1.66	1.66
120.00	5.12	2.82	1.20	0.990	1.14
125.00	2.61	1.99	0.460	0.280	0.190
130.00	0.800	1.45	0.430	0.000	0.000
135.00	1.24	0.880	0.560	0.000	0.000
140.00	0.850	0.490	0.430	0.000	0.000
145.00	0.490	0.280	0.290	0.000	0.000
150.00	0.320	0.230	0.080	0.000	0.000
155.00	0.000	0.090	0.000	0.000	0.000
160.00	0.000	0.110	0.000	0.000	0.000
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	4.35
5.0	2.5- 7.5	34.93
10.0	7.5- 12.5	68.33
15.0	12.5- 17.5	98.59
20.0	17.5- 22.5	126.97
25.0	22.5- 27.5	152.82
30.0	27.5- 32.5	173.23
35.0	32.5- 37.5	187.53
40.0	37.5- 42.5	196.84
45.0	42.5- 47.5	200.07
50.0	47.5- 52.5	200.16
55.0	52.5- 57.5	191.86
60.0	57.5- 62.5	176.44
65.0	62.5- 67.5	147.60
70.0	67.5- 72.5	115.66
75.0	72.5- 77.5	80.44
80.0	77.5- 82.5	45.05
85.0	82.5- 87.5	18.68
90.0	87.5- 92.5	6.76
95.0	92.5- 97.5	5.16
100.0	97.5-102.5	4.55
105.0	102.5-107.5	3.69
110.0	107.5-112.5	2.58
115.0	112.5-117.5	1.47
120.0	117.5-122.5	0.97
125.0	122.5-127.5	0.46
130.0	127.5-132.5	0.24
135.0	132.5-137.5	0.20
140.0	137.5-142.5	0.12
145.0	142.5-147.5	0.06
150.0	147.5-152.5	0.03
155.0	152.5-157.5	0.01
160.0	157.5-162.5	0.01
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	569	19.6	25.4
0- 40	943	32.5	42.0
0- 60	1723	59.4	76.7
0- 90	2223	76.7	99.0
90-120	21	0.7	0.9
90-130	22	0.8	1.0
90-150	23	0.8	1.0
90-180	23	0.8	1.0
0-180	2246	77.4	100.0

Total Luminaire Optical Efficiency = 77.4%

Luminaire Spacing Criterion:

0 deg	90 deg
1.32	1.28

Average Luminaire Luminance (cd/m²):

	0	45	90
0	6349.55	6349.55	6349.55
45	6121.67	4332.78	3937.82
50	6274.11	3987.05	3870.59
55	6200.38	3778.08	3523.20
60	6084.76	3535.34	3157.48
65	5883.35	3098.41	2469.17
70	5620.88	2465.88	1922.75
75	5098.72	1765.19	1321.75
80	3989.14	1139.00	757.94
85	3240.77	523.33	318.51

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	91	91	91	91	89	89	89	89	85	85	85	81	81	81	78	78	78	76				
1	83	80	76	73	81	78	75	72	74	72	70	71	69	67	68	67	65	63				
2	76	69	64	59	73	68	63	58	65	60	57	62	58	55	59	57	54	52				
3	69	60	54	49	67	59	53	48	57	51	47	54	50	46	52	49	45	44				
4	63	53	46	41	61	52	46	41	50	44	40	48	43	39	46	42	39	37				
5	57	47	40	35	56	46	40	35	45	39	34	43	38	34	41	37	33	32				
6	53	42	35	30	51	42	35	30	40	34	30	39	33	29	37	33	29	27				
7	49	38	31	27	48	38	31	26	36	30	26	35	30	26	34	29	26	24				
8	45	35	28	24	44	34	28	23	33	27	23	32	27	23	31	26	23	21				
9	42	32	25	21	41	31	25	21	30	25	21	30	24	21	29	24	21	19				
10	40	29	23	19	39	29	23	19	28	23	19	27	22	19	27	22	19	17				