

Photometric Report - (ecs-dts4-mn-854-unv42h-00w) - Page 1 of 4

Sun Jul 19 11:54:50 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-dts4-mn-854-unv42h-00w

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 498480 initial lamp rays.

Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
16254(40.6%)	0
15264(38.2%)	1
3039(7.6%)	2
1460(3.7%)	3
595(1.5%)	4
317(0.8%)	5
36931(92.3%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
545(1.4%)	8458(21.1%)	LAMP-F54T5H01
26(0.1%)	417(1.0%)	LAMP-F54T5H02
1335(3.3%)	23634(59.1%)	Refl-Poly1
107(0.3%)	1070(2.7%)	Refl-Poly2
349(0.9%)	3490(8.7%)	Refl-Poly3
2364(5.9%)	37071(92.7%)	Total

Absorbed(%)	Incident(%)	Material Name
572(1.4%)	8875(22.2%)	PHOSGLAS
1335(3.3%)	23634(59.1%)	ALMIRO04
456(1.1%)	4561(11.4%)	PAINT006
2364(5.9%)	37071(92.7%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit:	703.63 (1.8%)
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: 8 Lumens per Lamp: 5000
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 1.8791 Length: 4.0000 Height: 0.2566
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	15016	15016	15016	15016	15016
5.00	14393	14692	13869	13541	13930
10.00	14231	13789	13013	12747	12973
15.00	14255	13581	12743	13590	13527
20.00	14029	12372	12935	13896	14571
25.00	13378	11974	13058	12710	12105
30.00	12676	11568	12060	9926	9365
35.00	11308	11240	10100	8731	8425
40.00	10363	10571	8285	7829	7764
45.00	9201	9183	7087	7250	7172
50.00	8265	7801	6476	6259	6193
55.00	6965	6259	5510	5844	6027
60.00	5742	5134	4808	5943	6305
65.00	4720	3786	4640	5483	5130
70.00	3472	3000	3964	3960	4080
75.00	2178	2355	2916	3279	3444
80.00	1230	1465	1914	1913	1800
85.00	437	592	508	416	390
90.00	52.3	42.2	44.3	52.2	44.8

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	89.80
5.0	2.5- 7.5	671.97
10.0	7.5- 12.5	1264.77
15.0	12.5- 17.5	1908.34
20.0	17.5- 22.5	2507.58
25.0	22.5- 27.5	2923.61
30.0	27.5- 32.5	3054.13
35.0	32.5- 37.5	3139.13
40.0	37.5- 42.5	3148.82
45.0	42.5- 47.5	3072.26
50.0	47.5- 52.5	2914.61
55.0	52.5- 57.5	2706.34
60.0	57.5- 62.5	2599.95
65.0	62.5- 67.5	2339.07
70.0	67.5- 72.5	1892.96
75.0	72.5- 77.5	1503.75
80.0	77.5- 82.5	918.67
85.0	82.5- 87.5	263.35
90.0	87.5- 92.5	25.67

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	10835	27.1	29.3
0- 40	17093	42.7	46.3
0- 60	28685	71.7	77.6
0- 90	36932	92.3	100.0
90-120	13	0.0	0.0
90-130	13	0.0	0.0
90-150	13	0.0	0.0
90-180	13	0.0	0.0
0-180	36945	92.4	100.0

Total Luminaire Optical Efficiency = 92.4%

Luminaire Spacing Criterion:

0 deg	90 deg
1.24	1.04

Average Luminaire Luminance (cd/m²):

	0	45	90
0	21503.76	21503.76	21503.76
45	17511.60	12568.89	12779.90
50	17105.82	12341.12	11865.95
55	15930.45	11437.97	12593.50
60	14801.27	11053.40	14603.99
65	14060.09	12055.15	13447.32
70	12360.87	11941.98	12423.85
75	9723.46	10549.70	12623.28
80	7437.10	8745.65	8367.20
85	4142.08	3183.63	2499.52

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	110	110	110	110	107	107	107	107	102	102	102		
1	100	96	92	88	98	94	90	87	90	87	84		
2	91	83	77	72	89	82	76	71	78	73	69		
3	83	73	66	60	81	72	65	59	69	63	58		
4	76	65	57	51	74	64	56	50	61	55	50		
5	70	58	50	44	68	57	49	43	55	48	43		
6	65	52	44	38	63	52	44	38	50	43	38		
7	60	48	40	34	58	47	39	34	45	39	33		
8	56	43	36	30	54	43	35	30	42	35	30		
9	52	40	32	27	51	39	32	27	38	32	27		
10	49	37	30	25	48	36	29	25	36	29	25		

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	98	98	98	94	94	94	92
1	86	84	81	83	81	79	77
2	75	71	68	72	69	66	64
3	66	61	57	64	60	56	54
4	59	53	49	57	52	48	46
5	53	47	42	52	46	42	40
6	48	42	37	47	41	37	35
7	44	38	33	43	37	33	31
8	40	34	30	39	34	30	28
9	37	31	27	36	31	27	25
10	35	29	25	34	28	24	23