

Photometric Report - (ecs-dts4-mn-754-unv-42h-00w) - Page 1 of 4

Sun Jul 19 11:56:52 2009

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-dts4-mn-754-unv-42h-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 499996 initial lamp rays.

Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens(%)	Reflection
14412(41.2%)	0
13812(39.5%)	1
2689(7.7%)	2
1010(2.9%)	3
426(1.2%)	4
216(0.6%)	5
32567(93.0%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
382(1.1%)	5932(17.0%)	LAMP-F54T5H01
19(0.1%)	301(0.9%)	LAMP-F54T5H02
1089(3.1%)	19311(55.2%)	Refl-Poly1
91(0.3%)	910(2.6%)	Refl-Poly2
390(1.1%)	3906(11.2%)	Refl-Poly3
1973(5.6%)	30362(86.8%)	Total

Absorbed(%)	Incident(%)	Material Name
402(1.1%)	6234(17.8%)	PHOSGLAS
1089(3.1%)	19311(55.2%)	ALMIRO04
481(1.4%)	4816(13.8%)	PAINT006
1973(5.6%)	30362(86.8%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 459.23 (1.3%)
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: 7 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	12673	12673	12673	12673	12673
5.00	13650	13157	13422	12871	12522
10.00	13665	12780	11873	11687	11568
15.00	13239	11893	11497	11889	12143
20.00	12888	11395	11790	12161	12057
25.00	11762	10785	11709	10838	10123
30.00	11287	10498	10661	8425	8102
35.00	10298	9946	8789	7267	7261
40.00	9268	9247	7152	6712	6853
45.00	8455	7988	6155	6182	6128
50.00	7200	6705	5488	5565	5518
55.00	6304	5426	4730	5106	5594
60.00	5180	4316	4268	5193	5603
65.00	4243	3358	4069	4852	4856
70.00	3073	2550	3533	3685	3629
75.00	2006	1984	2565	2919	2983
80.00	1065	1294	1646	1749	1653
85.00	383	501	456	373	335
90.00	73.8	47.0	45.5	51.0	40.2

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	75.79
5.0	2.5- 7.5	627.45
10.0	7.5- 12.5	1164.95
15.0	12.5- 17.5	1701.36
20.0	17.5- 22.5	2241.18
25.0	22.5- 27.5	2564.07
30.0	27.5- 32.5	2691.24
35.0	32.5- 37.5	2733.83
40.0	37.5- 42.5	2745.71
45.0	42.5- 47.5	2675.85
50.0	47.5- 52.5	2531.79
55.0	52.5- 57.5	2380.94
60.0	57.5- 62.5	2274.77
65.0	62.5- 67.5	2089.97
70.0	67.5- 72.5	1689.35
75.0	72.5- 77.5	1318.74
80.0	77.5- 82.5	816.20
85.0	82.5- 87.5	230.52
90.0	87.5- 92.5	27.48

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	9670	27.6	29.7
0- 40	15137	43.2	46.5
0- 60	25257	72.2	77.5
0- 90	32567	93.0	100.0
90-120	14	0.0	0.0
90-130	14	0.0	0.0
90-150	14	0.0	0.0
90-180	14	0.0	0.0
0-180	32581	93.1	100.0

Total Luminaire Optical Efficiency = 93.1%

Luminaire Spacing Criterion:

0 deg	90 deg
1.29	1.04

Average Luminaire Luminance (cd/m²):

	0	45	90
0	18149.22	18149.22	18149.22
45	16090.80	10916.26	10919.24
50	14902.51	10458.40	10574.18
55	14418.74	9819.73	11687.47
60	13352.29	9811.59	12979.66
65	12640.30	10571.38	12727.12
70	10939.90	10642.16	11048.81
75	8957.31	9278.94	10935.01
80	6439.91	7521.52	7683.41
85	3631.45	2859.64	2150.58

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	108	108	108	108	103	103	103
1	101	96	92	89	98	94	91	87	90	87	85
2	92	84	78	72	89	82	76	71	79	74	70
3	84	74	66	60	81	72	65	60	69	63	58
4	77	65	57	51	74	64	57	51	62	55	50
5	71	59	50	44	69	58	50	44	56	49	43
6	65	53	45	39	63	52	44	38	50	43	38
7	61	48	40	34	59	47	40	34	46	39	34
8	56	44	36	31	55	43	36	31	42	35	30
9	53	40	33	28	51	40	33	28	39	32	27
10	50	37	30	25	48	37	30	25	36	29	25

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	99	99	99	95	95	95	93
1	87	84	82	83	81	80	78
2	76	72	68	73	70	67	65
3	67	62	57	65	60	56	54
4	60	54	49	58	53	49	47
5	54	48	43	52	47	42	40
6	49	42	38	47	42	37	35
7	44	38	34	43	38	33	31
8	41	35	30	40	34	30	28
9	38	32	27	37	31	27	25
10	35	29	25	34	29	25	23