

Photometric Report - (ecs-dts4-mn-832-unv24n-00w) - Page 1 of 4

Thu May 19 11:16:28 2011

IESNA:LM-63-1995

Photopia 2.0.0.17 PHOTOMETRIC REPORT

PROJECT: ecs-dts4-mn-832-unv24n-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
9163( 39.5%)	0
7517( 32.4%)	1
1892(  8.2%)	2
1120(  4.8%)	3
514(  2.2%)	4
337(  1.5%)	5
20546( 88.6%)	Total

LUMEN INTERACTION WITH SYSTEM:

Absorbed(%)	Incident(%)	Layer Name
581( 2.5%)	8927( 38.5%)	LAMP-FO32311
38( 0.2%)	600( 2.6%)	LAMP-FO32312
797( 3.4%)	14118( 60.9%)	Refl-Poly1
111( 0.5%)	654( 2.8%)	Refl-Poly2
239( 1.0%)	1840( 7.9%)	Refl-Poly3
1768( 7.6%)	26142(112.7%)	Total

  

Absorbed(%)	Incident(%)	Material Name
620( 2.7%)	9528( 41.1%)	PHOSGLAS
797( 3.4%)	14118( 60.9%)	ALMIRO04
111( 0.5%)	654( 2.8%)	PAINT002
239( 1.0%)	1840( 7.9%)	PAINT007
1768( 7.6%)	26142(112.7%)	Total

UNACCOUNTED LUMENS:

reached interreflection limit: 885.09 ( 3.8%)  
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: 2900  
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00  
Luminaire Width: 1.8791 Length: 4.0000 Height: 0.2634  
Photometry Type: C Units: feet

Candela Distribution:

	0.00	22.50	45.00	67.50	90.00
0.00	6983	6983	6983	6983	6983
5.00	7046	6795	6859	7041	6856
10.00	6790	6915	6666	7066	7059
15.00	6669	7178	6913	7019	7252
20.00	6564	6779	6761	6983	6996
25.00	6486	6582	6605	6476	6477
30.00	6017	6138	6221	5808	5565
35.00	5677	5759	5501	5210	5381
40.00	5472	5278	4904	4941	5077
45.00	4928	4830	4402	4758	4818
50.00	4283	4166	4137	4453	4350
55.00	3624	3584	3774	3926	3993
60.00	3090	3006	3270	3442	3373
65.00	2507	2471	2789	2743	2684
70.00	1878	1990	2128	2182	2104
75.00	1257	1421	1508	1456	1495
80.00	806	845	803	764	733
85.00	268	291	236	187	181
90.00	26.5	27.8	22.6	17.6	18.4

Zonal Lumens

Cone	Between	Lumens
0.0	0.0- 2.5	41.76
5.0	2.5- 7.5	330.20
10.0	7.5- 12.5	656.07
15.0	12.5- 17.5	995.58
20.0	17.5- 22.5	1279.64
25.0	22.5- 27.5	1514.09
30.0	27.5- 32.5	1641.57
35.0	32.5- 37.5	1729.16
40.0	37.5- 42.5	1796.73
45.0	42.5- 47.5	1827.77
50.0	47.5- 52.5	1792.24
55.0	52.5- 57.5	1694.21
60.0	57.5- 62.5	1536.76
65.0	62.5- 67.5	1316.42
70.0	67.5- 72.5	1067.65
75.0	72.5- 77.5	762.53
80.0	77.5- 82.5	429.45
85.0	82.5- 87.5	128.17
90.0	87.5- 92.5	12.39

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixt
0- 30	5607	24.2	27.3
0- 40	9063	39.1	44.1
0- 60	16058	69.2	78.1
0- 90	20546	88.6	100.0
90-120	6	0.0	0.0
90-130	6	0.0	0.0
90-150	6	0.0	0.0
90-180	6	0.0	0.0
0-180	20552	88.6	100.0

Total Luminaire Optical Efficiency = 88.6%

Luminaire Spacing Criterion:

0 deg	90 deg
1.28	1.20

Average Luminaire Luminance (cd/m<sup>2</sup>):

	0	45	90
0	10000.37	10000.37	10000.37
45	9363.33	7782.42	8558.44
50	8848.78	7854.08	8304.89
55	8270.57	7801.16	8307.09
60	7943.70	7479.30	7774.07
65	7443.80	7202.17	6993.87
70	6660.05	6362.32	6361.02
75	5582.25	5407.20	5431.28
80	4840.92	3627.31	3368.13
85	2512.52	1453.43	1145.86

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	105	105	105	105	103	103	103	103	98	98	98
1	96	92	88	85	94	90	86	83	86	83	81
2	87	80	74	69	85	78	73	68	75	70	66
3	79	70	63	57	77	68	62	56	66	60	55
4	72	62	54	48	70	61	53	48	58	52	47
5	67	55	47	41	65	54	47	41	52	46	40
6	61	50	42	36	60	49	41	36	47	40	35
7	57	45	37	32	55	44	37	31	43	36	31
8	53	41	33	28	52	40	33	28	39	32	28
9	49	37	30	25	48	37	30	25	36	29	25
10	46	35	27	23	45	34	27	23	33	27	23

pcc	.3			.1			0
pw	.5	.3	.1	.5	.3	.1	0
RCR							
0	94	94	94	90	90	90	88
1	83	80	78	79	77	76	74
2	72	68	65	69	66	63	61
3	63	58	54	61	57	53	51
4	56	51	46	54	50	46	44
5	50	45	40	49	44	40	38
6	46	40	35	44	39	35	33
7	41	35	31	40	35	31	29
8	38	32	28	37	31	27	26
9	35	29	25	34	29	25	23
10	32	27	22	32	26	22	21