



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING
MEMBER
of the
IESNA

905 Harrison Street · Allentown, PA 18103 · 610-770-1044 · Fax 610-770-8912 · www.LuminaireTesting.com

LTL NUMBER: 18367 DATE: 07-29-2010
 PREPARED FOR: LUMETTA, INC.
 CATALOG NUMBER: P548
 LUMINAIRE: FORMED ALUMINUM AND STEEL HOUSING, WHITE PLASTIC SIDE
 DIFFUSER WITH TRANSLUCENT WHITE PLASTIC BOTTOM LENS, OPEN
 TOP.
 LAMP: THREE FROSTED HORIZONTAL 150 WATT A21 INCANDESCENT LAMPS RATED
 AT 2780 LUMENS EACH.
 LAMP CATALOG NUMBER: GE 150W
 MOUNTING: PENDANT

Candela Distribution

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	Flux
0	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	
5	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	88.7
15	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	255.9
25	850	850	850	850	850	850	850	850	850	850	850	850	850	850	850	850	391.9
35	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	479.4
45	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657	507.0
55	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	473.0
65	390	390	390	390	390	390	390	390	390	390	390	390	390	390	390	390	385.9
75	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	263.8
85	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	134.8
90	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	
95	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	118.7
105	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	250.9
115	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	393.5
125	538	538	538	538	538	538	538	538	538	538	538	538	538	538	538	538	479.5
135	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	491.8
145	727	727	727	727	727	727	727	727	727	727	727	727	727	727	727	727	454.8
155	794	794	794	794	794	794	794	794	794	794	794	794	794	794	794	794	366.1
165	841	841	841	841	841	841	841	841	841	841	841	841	841	841	841	841	237.7
175	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	85.2
180	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	

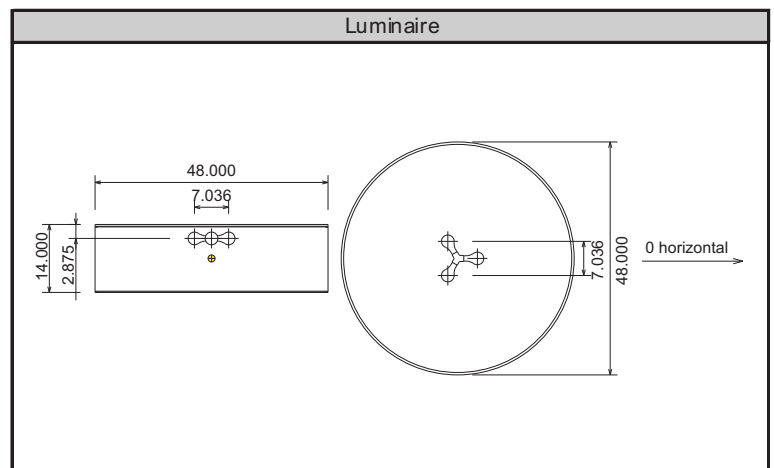
Zonal Lumen Summary

Zone	Lumens	% of Lamp	% of Luminaire
0-30	736.6	8.8%	12.6%
0-40	1216.0	14.6%	20.8%
0-60	2196.1	26.3%	37.5%
0-90	2980.5	35.7%	50.9%
90-180	2878.2	34.5%	49.1%
0-180	5858.7	70.2%	100.0%

Total luminaire efficiency: 70.2%

CIE Type: Direct/Indirect

Spacing Criterion: 1.29



Approved By: MG

THIS REPORT BASED ON LM-46 AND OTHER PERTINENT IESNA PROCEDURES.



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Candela Tabulation (5 degree Vertical Increments)

	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937
5	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933	933
10	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923
15	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906
20	882	882	882	882	882	882	882	882	882	882	882	882	882	882	882	882
25	850	850	850	850	850	850	850	850	850	850	850	850	850	850	850	850
30	812	812	812	812	812	812	812	812	812	812	812	812	812	812	812	812
35	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766	766
40	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714	714
45	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657	657
50	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595
55	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529	529
60	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460	460
65	390	390	390	390	390	390	390	390	390	390	390	390	390	390	390	390
70	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319
75	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
80	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183	183
85	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
90	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
95	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103	103
100	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
105	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237
110	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318	318
115	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398
120	473	473	473	473	473	473	473	473	473	473	473	473	473	473	473	473
125	538	538	538	538	538	538	538	538	538	538	538	538	538	538	538	538
130	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590
135	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636
140	683	683	683	683	683	683	683	683	683	683	683	683	683	683	683	683
145	727	727	727	727	727	727	727	727	727	727	727	727	727	727	727	727
150	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764
155	794	794	794	794	794	794	794	794	794	794	794	794	794	794	794	794
160	817	817	817	817	817	817	817	817	817	817	817	817	817	817	817	817
165	841	841	841	841	841	841	841	841	841	841	841	841	841	841	841	841
170	869	869	869	869	869	869	869	869	869	869	869	869	869	869	869	869
175	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906	906
180	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922	922

Zonal Lumen Tabulation (5 degree zones)

Zone	Lumens	Zone	Lumens	Zone	Lumens	Zone	Lumens
0-5	22.4	45-50	253.0	90-95	48.4	135-140	244.1
5-10	66.4	50-55	244.5	95-100	70.3	140-145	235.2
10-15	108.5	55-60	228.5	100-105	105.9	145-150	219.6
15-20	147.4	60-65	206.5	105-110	145.0	150-155	197.2
20-25	181.7	65-70	179.4	110-115	181.5	155-160	168.9
25-30	210.3	70-75	148.4	115-120	212.1	160-165	136.5
30-35	232.3	75-80	115.4	120-125	233.9	165-170	101.2
35-40	247.1	80-85	82.1	125-130	245.6	170-175	63.3
40-45	254.0	85-90	52.7	130-135	247.6	175-180	21.9



Coefficients of Utilization - Zonal Cavity Method												
Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)												
0	0.815	0.815	0.815	0.815	0.754	0.754	0.754	0.754	0.696	0.696	0.696	0.696
1	0.739	0.701	0.667	0.636	0.682	0.649	0.619	0.593	0.628	0.6	0.574	0.551
2	0.671	0.607	0.555	0.511	0.618	0.563	0.517	0.478	0.568	0.52	0.48	0.446
3	0.611	0.531	0.469	0.421	0.562	0.492	0.438	0.395	0.516	0.455	0.408	0.369
4	0.558	0.467	0.402	0.353	0.513	0.434	0.376	0.332	0.471	0.402	0.351	0.311
5	0.511	0.415	0.348	0.3	0.47	0.385	0.326	0.283	0.431	0.357	0.305	0.265
6	0.47	0.37	0.305	0.259	0.432	0.345	0.286	0.244	0.397	0.32	0.268	0.229
7	0.434	0.333	0.269	0.225	0.399	0.311	0.253	0.213	0.367	0.289	0.237	0.2
8	0.402	0.302	0.24	0.198	0.37	0.281	0.226	0.187	0.34	0.262	0.212	0.177
9	0.373	0.275	0.215	0.176	0.344	0.257	0.203	0.166	0.317	0.239	0.19	0.157
10	0.348	0.251	0.194	0.157	0.322	0.235	0.183	0.149	0.296	0.219	0.172	0.141

Ceiling Cavity Reflectance	50				30			10			0
	70	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)											
0	0.589	0.589	0.589	0.589	0.49	0.49	0.49	0.4	0.4	0.4	0.357
1	0.528	0.507	0.488	0.471	0.422	0.408	0.396	0.344	0.334	0.325	0.288
2	0.475	0.44	0.41	0.384	0.367	0.345	0.325	0.298	0.283	0.269	0.236
3	0.431	0.386	0.35	0.32	0.322	0.294	0.272	0.262	0.242	0.225	0.196
4	0.393	0.341	0.302	0.27	0.285	0.255	0.231	0.233	0.21	0.192	0.166
5	0.36	0.304	0.263	0.231	0.255	0.223	0.198	0.208	0.185	0.166	0.143
6	0.332	0.273	0.232	0.201	0.229	0.197	0.173	0.188	0.164	0.145	0.124
7	0.307	0.247	0.206	0.176	0.208	0.176	0.152	0.172	0.147	0.128	0.109
8	0.286	0.225	0.184	0.156	0.19	0.158	0.135	0.157	0.133	0.114	0.097
9	0.267	0.206	0.166	0.139	0.174	0.143	0.121	0.145	0.12	0.103	0.087
10	0.25	0.189	0.151	0.125	0.161	0.13	0.109	0.134	0.11	0.093	0.079

Average Luminance Table (cd/m²)

	0	45	90
0	803	803	803
45	581	581	581
55	516	516	515
65	440	440	440
75	346	346	346
85	225	225	225

THIS TEST WAS CONDUCTED USING RELATIVE PHOTOMETRY TECHNIQUES ACCORDING TO STANDARD IESNA PROCEDURES. THE USER MUST THEREFORE USE CAUTION IN THE FOLLOWING SITUATIONS: 1) THIS TEST WAS PERFORMED USING A SPECIFIC BALLAST/LAMP COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER BALLAST/LAMP COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. 2) ACCORDING TO IESNA PROCEDURES, THE BALLAST(S) AND LAMP(S) ARE PRESUMED TO PRODUCE 100% OF RATED OUTPUT. AN APPROPRIATE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATINGS AND LUMINOUS INTENSITY VALUES GIVEN. 3) THIS TEST WAS CONDUCTED IN A CONTROLLED LABORATORY ENVIRONMENT WHERE THE AMBIENT TEMPERATURE WAS HELD AT 25 °C ±1°C. FIELD PERFORMANCE MAY DIFFER PARTICULARLY IN REGARDS TO CHANGE IN LUMINOUS OUTPUT AS A RESULT OF DIFFERENCE IN AMBIENT TEMPERATURE AND METHOD OF MOUNTING THE LUMINAIRE.

