



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: 17160 DATE: 11-10-2009
 PREPARED FOR: SPECIALTY LIGHTING INDUSTRIES
 CATALOG NUMBER: 800/801-LED
 LUMINAIRE: EXTRUDED WHITE ENAMEL ALUMINUM HOUSING, FROSTED PLASTIC ENCLOSURE.
 LAMP: SIX WHITE LEDS WITH CLEAR LINEAR PRISMATIC PLASTIC OPTICS BELOW EACH
 LED POWER SUPPLY: ONE HATCH TRANSFORMERS RS12-60M
 MOUNTING: RECESSED
 ELECTRICAL VALUES: 120.0VAC, 0.1587A, 12.42W, PF=0.652
 NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.*

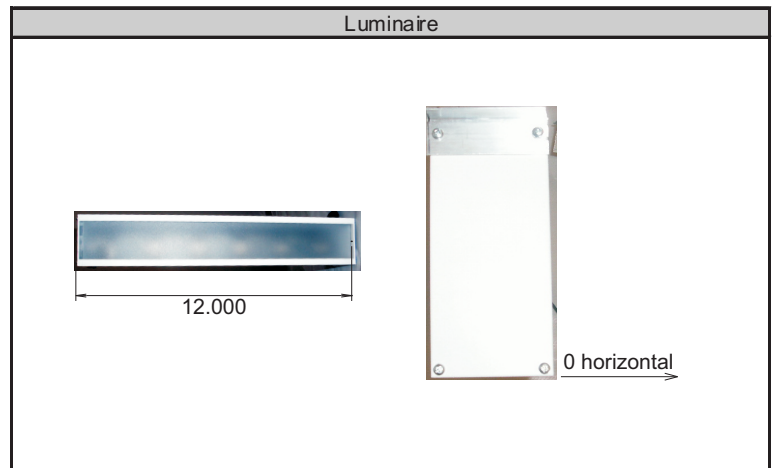
Candela Distribution

	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	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	
5	666	654	625	600	588	600	625	654	666	654	625	600	588	600	625	654	55.7
15	537	462	342	269	245	269	342	462	537	462	342	269	245	269	342	462	100.7
25	306	227	136	94	82	94	136	227	306	227	136	94	82	94	136	227	75.3
35	124	88	50	34	31	34	50	88	124	88	50	34	31	34	50	88	40.2
45	44	33	21	17	15	17	21	33	44	33	21	17	15	17	21	33	20.1
55	18	15	12	11	10	11	12	15	18	15	12	11	10	11	12	15	11.8
65	10	9	8	7	7	7	8	9	10	9	8	7	7	7	8	9	8.0
75	6	5	4	4	3	4	4	5	6	5	4	4	3	4	4	5	4.8
85	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1.1
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Zonal Lumen Summary

Zone	Lumens	% of Lamp	% of Luminaire
0-30	231.6	N/A	72.9%
0-40	271.8	N/A	85.6%
0-60	303.7	N/A	95.6%
0-90	317.7	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	317.7	N/A	100.0%

Total lumen Output: 317.7 Lumens
 Luminaire efficacy: 25.6 Lumens per Watt
 CIE Type: Direct
 Spacing Criterion: 0 deg: 0.74 90 deg: 0.39
 180 deg: 0.74 270 deg: 0.39



Approved By: MG

*DATA WAS ACQUIRED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY. A UDT MODEL #211 PHOTODETECTOR AND UDT MODEL #S370 OPTOMETER COMBINATION WERE USED AS A STANDARD. A SPECTRAL MISMATCH CORRECTION FACTOR WAS EMPLOYED BASED ON THE SPECTRAL RESPONSIVITY OF THE PHOTODETECTOR AND THE SPECTRAL POWER DISTRIBUTION OF THE TEST SUBJECT.

TESTING WAS PERFORMED IN ACCORDANCE WITH IES LM-79-08.
 TEST ANGULAR INCREMENTS AND REPORT FORMATTING WAS BASED ON IES LM-41-98 AND LM-46-04.



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	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684	684
5	666	654	625	600	588	600	625	654	666	654	625	600	588	600	625	654
10	616	573	489	425	401	425	489	573	616	573	489	425	401	425	489	573
15	537	462	342	269	245	269	342	462	537	462	342	269	245	269	342	462
20	426	340	222	160	143	160	222	340	426	340	222	160	143	160	222	340
25	306	227	136	94	82	94	136	227	306	227	136	94	82	94	136	227
30	201	145	83	56	48	56	83	145	201	145	83	56	48	56	83	145
35	124	88	50	34	31	34	50	88	124	88	50	34	31	34	50	88
40	74	54	31	23	20	23	31	54	74	54	31	23	20	23	31	54
45	44	33	21	17	15	17	21	33	44	33	21	17	15	17	21	33
50	29	21	15	13	12	13	15	21	29	21	15	13	12	13	15	21
55	18	15	12	11	10	11	12	15	18	15	12	11	10	11	12	15
60	13	11	10	9	9	9	10	11	13	11	10	9	9	9	10	11
65	10	9	8	7	7	7	8	9	10	9	8	7	7	7	8	9
70	8	7	6	5	5	5	6	7	8	7	6	5	5	5	6	7
75	6	5	4	4	3	4	4	5	6	5	4	4	3	4	4	5
80	4	3	2	2	2	2	2	3	4	3	2	2	2	2	2	3
85	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Zonal Lumen Tabulation (5 degree zones)

Zone	Lumens	Zone	Lumens	Zone	Lumens	Zone	Lumens
0-5	15.7	45-50	8.4	90-95	0.0	135-140	0.0
5-10	40.0	50-55	6.5	95-100	0.0	140-145	0.0
10-15	50.7	55-60	5.3	100-105	0.0	145-150	0.0
15-20	50.0	60-65	4.4	105-110	0.0	150-155	0.0
20-25	42.5	65-70	3.6	110-115	0.0	155-160	0.0
25-30	32.7	70-75	2.8	115-120	0.0	160-165	0.0
30-35	23.7	75-80	1.9	120-125	0.0	165-170	0.0
35-40	16.6	80-85	1.0	125-130	0.0	170-175	0.0
40-45	11.6	85-90	0.2	130-135	0.0	175-180	0.0



Utilization of Lumens - Zonal Cavity Method												
Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
Wall Reflectance	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **											
0	387.4	387.4	387.4	387.4	378.2	378.2	378.2	378.2	369.4	369.4	369.4	369.4
1	367.8	357.4	348.2	339.9	359.5	350.2	341.9	334.4	351.6	343.3	335.8	329.1
2	348.7	330.8	316.2	304.1	341.2	325.1	311.8	300.6	334.1	319.6	307.5	297.2
3	330.9	307.9	290.4	276.6	324.2	303.3	287.2	274.3	317.8	298.9	284	272.1
4	314.5	288.1	269	254.7	308.4	284.3	266.6	253.1	302.7	280.7	264.3	251.6
5	299.4	270.6	250.9	236.6	293.9	267.5	249.1	235.5	288.7	264.5	247.3	234.5
6	285.4	255.3	235.4	221.4	280.5	252.7	234	220.6	275.8	250.2	232.6	219.9
7	272.5	241.6	221.9	208.3	268.1	239.4	220.8	207.8	263.9	237.3	219.7	207.2
8	260.6	229.3	210	196.9	256.7	227.5	209.1	196.5	252.9	225.7	208.2	196.1
9	249.7	218.3	199.4	186.9	246.1	216.7	198.7	186.6	242.7	215.2	198	186.2
10	239.6	208.3	190	177.9	236.3	206.9	189.4	177.7	233.2	205.6	188.8	177.4

Ceiling Cavity Reflectance	50				30			10			0
Wall Reflectance	70	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **										
0	353	353	353	353	338	338	338	324.2	324.2	324.2	317.7
1	336.9	330.4	324.4	318.9	318.5	313.8	309.4	307.6	303.9	300.4	294.7
2	321	309.3	299.3	290.7	299.8	291.6	284.5	291	284.4	278.5	273.2
3	306	290.5	278	267.7	282.8	272.3	263.5	275.6	266.9	259.5	254.4
4	292.1	273.8	259.7	248.6	267.4	255.4	245.7	261.5	251.3	242.9	238
5	279.3	258.9	243.9	232.4	253.6	240.5	230.3	248.7	237.4	228.3	223.6
6	267.3	245.4	229.9	218.4	241	227.3	216.9	236.9	224.8	215.4	210.9
7	256.2	233.3	217.6	206.1	229.5	215.5	205	226	213.5	203.9	199.6
8	245.9	222.3	206.5	195.3	219.1	204.8	194.5	216	203.2	193.6	189.4
9	236.4	212.2	196.6	185.6	209.5	195.2	185	206.9	193.9	184.4	180.3
10	227.5	203.1	187.6	176.9	200.7	186.5	176.5	198.4	185.4	176	172

Average Luminance Table (cd/m²)

	0	45	90
0	58938	58938	58938
45	5337	2577	1876
55	2717	1796	1527
65	1981	1585	1402
75	1941	1468	1145
85	1921	739	591

THIS TEST WAS CONDUCTED USING PHOTOMETRY TECHNIQUES ACCORDING TO STANDARD IES 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) 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.

