



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING
MEMBER
of the
IESNA

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LTL NUMBER: 17114

DATE: 11-05-2009

PREPARED FOR: SPECIALTY LIGHTING

CATALOG NUMBER: 1240-LED

LUMINAIRE: FORMED ALUMINUM HOUSING, SPUN SPECULAR PLASTIC REFLECTOR,
FROSTED LINEAR PRISMATIC GLASS LENS ABOVE CAST WHITE ENAMEL
ALUMINUM TRIM.

LAMP: 1 WHITE LED

LED POWER SUPPLY: ONE HIGH PERFECTION TECH LP1025-36-C0700

MOUNTING: RECESSED

ELECTRICAL VALUES: 120.0VAC, 0.2149A, 25.70W, PF=0.996

NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED
PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.*

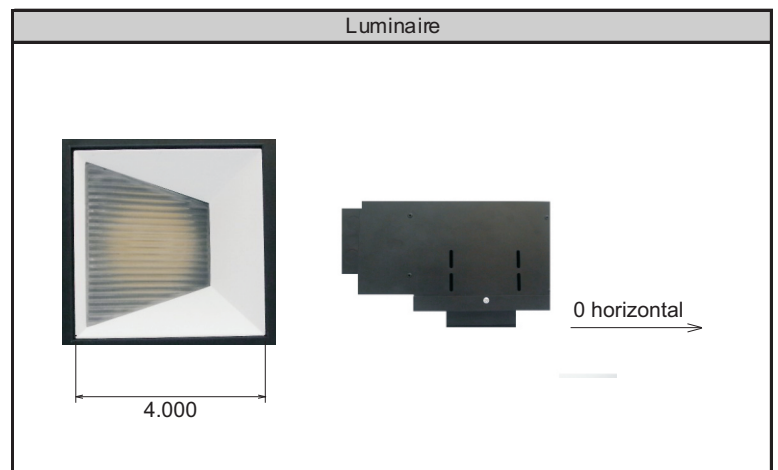
Candela Distribution

	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	662	662	662	662	662	662	662	662	662	662	662	662	662	662	662	662	
5	678	675	661	647	629	616	605	600	616	600	605	616	629	647	661	675	58.2
15	534	551	526	495	463	428	397	372	388	372	397	428	463	495	526	551	126.9
25	280	307	298	280	254	230	200	174	179	174	200	230	254	280	298	307	113.5
35	128	139	140	136	125	116	104	94	93	94	104	116	125	136	140	139	76.7
45	70	74	73	72	70	68	66	63	63	63	66	68	70	72	73	74	54.0
55	47	48	49	48	46	46	43	40	40	40	43	46	46	48	49	48	41.1
65	34	35	35	32	30	29	24	18	18	18	24	29	30	32	35	35	28.1
75	19	19	16	13	11	10	4	3	4	3	4	10	11	13	16	19	12.0
85	2	3	2	1	1	0	0	1	1	1	0	0	1	1	2	3	1.9
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	298.7	N/A	58.3%
0-40	375.4	N/A	73.3%
0-60	470.5	N/A	91.8%
0-90	512.4	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	512.4	N/A	100.0%

Total lumen Output: 512.4 Lumens
 Luminaire efficacy: 19.9 Lumens per Watt
 CIE Type: Direct
 Spacing Criterion: 0 deg: 0.74 90 deg: 0.66
 180 deg: 0.56 270 deg: 0.66



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	662	662	662	662	662	662	662	662	662	662	662	662	662	662	662	662
5	678	675	661	647	629	616	605	600	616	600	605	616	629	647	661	675
10	629	635	613	587	558	533	512	495	512	495	512	533	558	587	613	635
15	534	551	526	495	463	428	397	372	388	372	397	428	463	495	526	551
20	407	432	414	385	352	322	288	258	266	258	288	322	352	385	414	432
25	280	307	298	280	254	230	200	174	179	174	200	230	254	280	298	307
30	188	207	205	196	178	163	141	124	124	124	141	163	178	196	205	207
35	128	139	140	136	125	116	104	94	93	94	104	116	125	136	140	139
40	92	98	98	96	91	87	81	76	76	76	81	87	91	96	98	98
45	70	74	73	72	70	68	66	63	63	63	66	68	70	72	73	74
50	56	59	59	58	57	56	54	51	51	51	54	56	57	58	59	59
55	47	48	49	48	46	46	43	40	40	40	43	46	46	48	49	48
60	40	42	42	40	38	38	34	29	29	29	34	38	38	40	42	42
65	34	35	35	32	30	29	24	18	18	18	24	29	30	32	35	35
70	27	28	26	22	21	19	14	8	7	8	14	19	21	22	26	28
75	19	19	16	13	11	10	4	3	4	3	4	10	11	13	16	19
80	9	10	8	5	4	2	1	1	2	1	1	2	4	5	8	10
85	2	3	2	1	1	0	0	1	1	1	0	0	1	1	2	3
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	15.5	45-50	25.0	90-95	0.0	135-140	0.0
5-10	42.8	50-55	22.0	95-100	0.0	140-145	0.0
10-15	60.6	55-60	19.1	100-105	0.0	145-150	0.0
15-20	66.3	60-65	16.0	105-110	0.0	150-155	0.0
20-25	61.6	65-70	12.1	110-115	0.0	155-160	0.0
25-30	52.0	70-75	7.8	115-120	0.0	160-165	0.0
30-35	42.3	75-80	4.1	120-125	0.0	165-170	0.0
35-40	34.4	80-85	1.6	125-130	0.0	170-175	0.0
40-45	29.0	85-90	0.3	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	624.9	624.9	624.9	624.9	610	610	610	610	595.8	595.8	595.8	595.8
1	587.8	568.4	551.1	535.7	574	556.6	541	526.9	561	545.4	531.3	518.5
2	550.8	517	489.3	466.3	538	507.5	482.2	460.9	526	498.4	475.2	455.6
3	516.4	472.8	439.5	413.3	504.7	465	434.3	409.8	493.7	457.5	429.2	406.3
4	485.1	435	398.8	371.6	474.5	428.6	394.9	369.3	464.4	422.4	391.1	366.9
5	456.8	402.4	365.2	338.1	447.1	397.1	362.2	336.4	438	392	359.3	334.8
6	431	374.3	336.9	310.5	422.3	369.8	334.6	309.3	414	365.5	332.3	308.1
7	407.7	349.6	312.8	287.3	399.7	345.9	310.9	286.5	392.3	342.2	309.1	285.6
8	386.5	328	292	267.5	379.3	324.8	290.5	266.9	372.6	321.6	289	266.3
9	367.2	308.8	273.8	250.5	360.7	306.1	272.6	250	354.6	303.4	271.4	249.5
10	349.6	291.8	257.9	235.6	343.7	289.4	256.8	235.2	338.2	287	255.8	234.8

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	569.4	569.4	569.4	569.4	545.1	545.1	545.1	522.9	522.9	522.9	512.4
1	536.8	524.3	512.9	502.4	504.9	495.8	487.3	487.1	479.9	473.1	463.5
2	503.8	481.3	462.1	445.5	465.5	449.7	435.8	450.9	438	426.5	417.2
3	473.4	443.5	419.4	399.6	430.5	410.2	393.2	418.5	401.5	386.9	377.9
4	445.9	410.8	383.8	362.4	400	376.8	358	389.9	370.1	353.7	344.8
5	421.2	382.3	353.6	331.7	373.2	348.2	328.6	364.8	343	325.5	316.9
6	398.9	357.3	327.8	305.9	349.7	323.6	303.7	342.5	319.5	301.5	293.1
7	378.6	335.2	305.6	283.9	328.7	302.1	282.3	322.6	298.8	280.7	272.6
8	360.1	315.7	286.1	265	310.1	283.4	263.8	304.9	280.7	262.6	254.8
9	343.3	298.2	269	248.6	293.4	266.8	247.6	288.9	264.5	246.7	239.2
10	327.9	282.6	253.9	234.1	278.4	252	233.4	274.4	250.2	232.6	225.4

Average Luminance Table (cd/m²)

	0	45	90
0	64097	64097	64097
45	9639	10049	9598
55	7888	8293	7787
65	7823	7961	6863
75	6948	6163	4202
85	2662	1997	666

Note: The zonal cavity calculation technique is accurate when luminaires with symmetric candela distributions are employed and when the luminaires are located symmetrically throughout the room. This unit has special characteristics and therefore these values should be used with caution.

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.

