



LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING
MEMBER
of the
IESNA

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LTL NUMBER: 14948
PREPARED FOR: SIGNTEX, INC.
CATALOG NUMBER: MLD 10L2

DATE: 03-06-2009

LUMINAIRE: FORMED STEEL HOUSING, FORMED WHITE ENAMEL STEEL REFLECTOR,
CLEAR LINEAR PRISMATIC PLASTIC LENS.

LAMP: 2 WHITE LEDS WITH CLEAR PLASTIC OPTICS BELOW EACH.

MOUNTING: RECESSED

ELECTRICAL VALUES: 7.84VDC, 1.200A, 9.41W

NOTE: UPON REQUEST, THIS DATA WAS PRORATED TO INTENSITY VALUES MEASURED IMMEDIATELY FOLLOWING SWITCH-ON. TEST WAS PERFORMED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.* VERTICAL TEST DATA WAS ACQUIRED IN 1/2 DEGREE INCREMENTS.

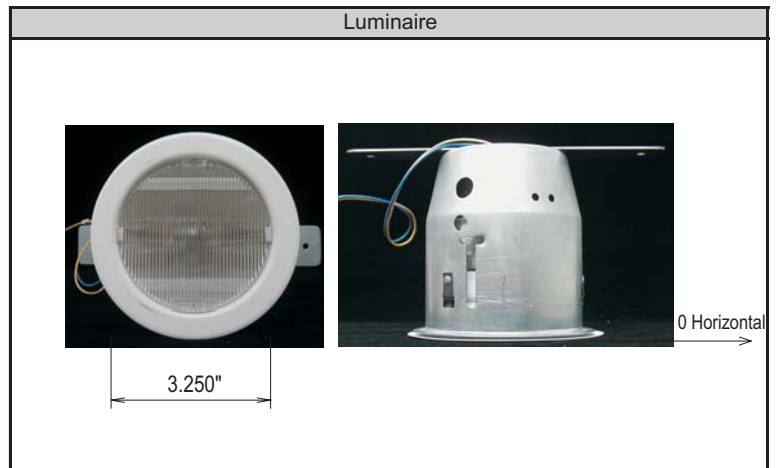
Candela Distribution

	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	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	
5	182	177	154	134	128	134	154	177	182	177	154	134	128	134	154	177	13.6
15	220	144	69	45	41	45	69	144	220	144	69	45	41	45	69	144	27.1
25	251	89	34	24	22	24	34	89	251	89	34	24	22	24	34	89	33.8
35	406	76	20	15	14	15	20	76	406	76	20	15	14	15	20	76	47.0
45	286	60	14	9	10	9	14	60	286	60	14	9	10	9	14	60	47.6
55	575	44	10	6	7	6	10	44	575	44	10	6	7	6	10	44	74.1
65	252	28	7	5	4	5	7	28	252	28	7	5	4	5	7	28	42.1
75	52	12	3	2	2	2	3	12	52	12	3	2	2	2	3	12	12.8
85	7	3	0	0	0	0	0	3	7	3	0	0	0	0	0	3	2.0
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	74.5	N/A	24.8%
0-40	121.5	N/A	40.5%
0-60	243.2	N/A	81.0%
0-90	300.2	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	300.2	N/A	100.0%

Total lumen Output: 300.2 Lumens
Luminaire efficacy: 31.9 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0 deg: 3.10 90 deg: 0.28
 180 deg: 3.10 270 deg: 0.28



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.



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	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174
5	182	177	154	134	128	134	154	177	182	177	154	134	128	134	154	177
10	204	166	107	77	68	77	107	166	204	166	107	77	68	77	107	166
15	220	144	69	45	41	45	69	144	220	144	69	45	41	45	69	144
20	225	111	45	32	29	32	45	111	225	111	45	32	29	32	45	111
25	251	89	34	24	22	24	34	89	251	89	34	24	22	24	34	89
30	352	76	26	19	17	19	26	76	352	76	26	19	17	19	26	76
35	406	76	20	15	14	15	20	76	406	76	20	15	14	15	20	76
40	253	71	18	12	12	12	18	71	253	71	18	12	12	12	18	71
45	286	60	14	9	10	9	14	60	286	60	14	9	10	9	14	60
50	457	53	13	8	9	8	13	53	457	53	13	8	9	8	13	53
55	575	44	10	6	7	6	10	44	575	44	10	6	7	6	10	44
60	445	36	9	4	6	4	9	36	445	36	9	4	6	4	9	36
65	252	28	7	5	4	5	7	28	252	28	7	5	4	5	7	28
70	115	20	5	3	3	3	5	20	115	20	5	3	3	3	5	20
75	52	12	3	2	2	2	3	12	52	12	3	2	2	2	3	12
80	22	6	2	1	1	1	2	6	22	6	2	1	1	1	2	6
85	7	3	0	0	0	0	0	3	7	3	0	0	0	0	0	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	3.9	45-50	26.8	90-95	0.0	135-140	0.0
5-10	9.7	50-55	36.9	95-100	0.0	140-145	0.0
10-15	12.8	55-60	37.2	100-105	0.0	145-150	0.0
15-20	14.3	60-65	26.6	105-110	0.0	150-155	0.0
20-25	15.5	65-70	15.5	110-115	0.0	155-160	0.0
25-30	18.3	70-75	8.4	115-120	0.0	160-165	0.0
30-35	24.3	75-80	4.4	120-125	0.0	165-170	0.0
35-40	22.7	80-85	1.8	125-130	0.0	170-175	0.0
40-45	20.8	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	366.1	366.1	366.1	366.1	357.4	357.4	357.4	357.4	349.1	349.1	349.1	349.1
1	336.4	321.2	307.7	295.6	327.9	314.1	301.8	290.7	319.8	307.3	296.1	285.9
2	305.9	279	256.9	238.5	297.6	273	252.7	235.6	289.7	267.4	248.7	232.8
3	278.1	243.2	216.7	195.7	270.2	238.3	213.6	193.9	262.7	233.5	210.6	192.1
4	253.6	213.8	185.1	163.5	246.2	209.6	182.8	162.4	239.2	205.6	180.5	161.2
5	232.3	189.6	160.3	139	225.4	186.1	158.5	138.2	219	182.7	156.8	137.4
6	213.7	169.6	140.6	120.1	207.5	166.6	139.2	119.5	201.7	163.8	137.8	119
7	197.6	153.1	124.8	105.3	192	150.5	123.7	104.9	186.7	148.1	122.6	104.5
8	183.5	139.3	112	93.47	178.5	137.1	111	93.16	173.7	135	110.1	92.85
9	171.2	127.6	101.4	83.92	166.7	125.7	100.6	83.69	162.3	123.9	99.87	83.45
10	160.5	117.7	92.58	76.09	156.3	116	91.94	75.9	152.4	114.5	91.31	75.72

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	333.6	333.6	333.6	333.6	319.4	319.4	319.4	306.3	306.3	306.3	300.2
1	304.7	294.6	285.4	276.9	282.9	275.4	268.5	272.2	266.1	260.5	254.3
2	275.1	256.7	241	227.4	246.9	233.7	222.2	237.8	226.9	217.2	210.7
3	248.9	224.5	204.9	188.7	216.2	199.4	185.4	208.5	194.3	182.2	175.6
4	226.4	198	176.2	158.9	190.9	172	156.7	184.3	168	154.6	147.9
5	207.2	176.2	153.4	135.9	170.2	150.1	134.4	164.6	147	132.9	126.4
6	190.9	158.3	135.1	117.9	153.1	132.5	116.8	148.3	130	115.7	109.4
7	176.9	143.4	120.4	103.6	139	118.3	102.8	134.8	116.3	102.1	95.97
8	164.8	130.9	108.3	92.24	127.1	106.6	91.64	123.6	105	91.04	85.2
9	154.4	120.4	98.4	82.97	117.1	96.97	82.51	114	95.58	82.05	76.46
10	145.2	111.4	90.08	75.35	108.6	88.89	74.98	105.9	87.73	74.62	69.28

Average Luminance Table (cd/m²)

	0	45	90
0	24426	24426	24426
45	56711	2844	2068
55	140762	2465	1700
65	83696	2423	1442
75	27974	1601	1224
85	11468	280	0

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.

