LTL 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: 21329 DATE: 11/03/2010
PREPARED FOR: SIGNTEX, INC
CATALOG NUMBER: MUE10X-T
LUMINAIRE: EXTRUDED ALUMINUM HOUSING, FROSTED PLASTIC ENCLOSURE.
LAMP: SIX WHITE LEDS
MOUNTING: SURFACE
ELECTRICAL VALUES: 24.00VDC, 0.4474A, 10.74W
NOTE: UPON REQUEST THIS DATA WAS PRORATED TO INTENSITY VALUES MEASURED IMMEDIATELY FOLLOWING SWITCH-ON. TEST WAS PERFORMED USING THE CALIBRATED METHOD OF ABSOLUTE PHOTOMETRY.* VERTICAL TEST DATA WAS ACQUIRED IN ½ DEGREE INCREMENTS.

Candela Distribution

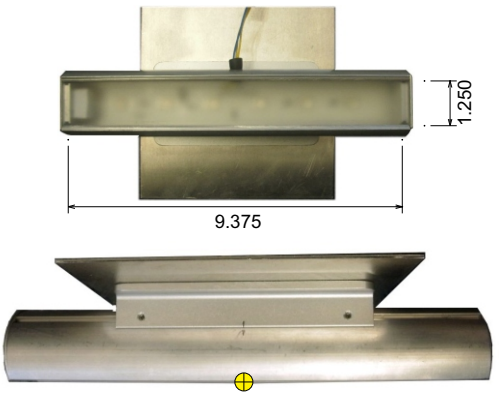
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	Flux
0	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	
5	344	345	344	344	346	344	344	345	344	345	344	344	346	344	344	345	32.5
15	318	319	321	321	323	321	321	319	318	319	321	321	323	321	321	319	89.9
25	247	257	273	281	283	281	273	257	247	257	273	281	283	281	273	257	122.6
35	118	137	186	218	224	218	186	137	118	137	186	218	224	218	186	137	110.9
45	44	53	86	128	138	128	86	53	44	53	86	128	138	128	86	53	70.0
55	23	24	35	56	67	56	35	24	23	24	35	56	67	56	35	24	36.7
65	15	15	17	24	28	24	17	15	15	15	17	24	28	24	17	15	19.3
75	8	8	8	11	12	11	8	8	8	8	8	11	12	11	8	8	9.8
85	1	1	1	2	4	2	1	1	1	1	1	2	4	2	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	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	245.0	N/A	49.6%
0-40	356.0	N/A	72.1%
0-60	462.6	N/A	93.7%
0-90	494.0	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	494.0	N/A	100.0%

Total lumen Output 494.0 Lumens
Luminaire efficacy: 46.0 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0 deg: 0.97 90 deg: 1.12
180 deg: 0.97 270 deg: 1.12

Luminaire



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.

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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	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348
5	344	345	344	344	346	344	344	345	344	345	344	344	346	344	344	345
10	333	334	334	334	336	334	334	334	333	334	334	334	336	334	334	334
15	318	319	321	321	323	321	321	319	318	319	321	321	323	321	321	319
20	290	295	300	302	305	302	300	295	290	295	300	302	305	302	300	295
25	247	257	273	281	283	281	273	257	247	257	273	281	283	281	273	257
30	182	200	237	254	257	254	237	200	182	200	237	254	257	254	237	200
35	118	137	186	218	224	218	186	137	118	137	186	218	224	218	186	137
40	71	86	132	175	183	175	132	86	71	86	132	175	183	175	132	86
45	44	53	86	128	138	128	86	53	44	53	86	128	138	128	86	53
50	30	35	55	87	98	87	55	35	30	35	55	87	98	87	55	35
55	23	24	35	56	67	56	35	24	23	24	35	56	67	56	35	24
60	18	19	24	36	44	36	24	19	18	19	24	36	44	36	24	19
65	15	15	17	24	28	24	17	15	15	15	17	24	28	24	17	15
70	11	11	12	16	19	16	12	11	11	11	12	16	19	16	12	11
75	8	8	8	11	12	11	8	8	8	8	8	11	12	11	8	8
80	5	5	5	7	8	7	5	5	5	5	5	7	8	7	5	5
85	1	1	1	2	4	2	1	1	1	1	1	2	4	2	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	8.3		45-50	29.7		90-95	0.0		135-140	0.0
5-10	24.3		50-55	21.4		95-100	0.0		140-145	0.0
10-15	38.9		55-60	15.3		100-105	0.0		145-150	0.0
15-20	51.0		60-65	11.1		105-110	0.0		150-155	0.0
20-25	59.7		65-70	8.2		110-115	0.0		155-160	0.0
25-30	62.9		70-75	5.9		115-120	0.0		160-165	0.0
30-35	59.8		75-80	3.9		120-125	0.0		165-170	0.0
35-40	51.2		80-85	2.0		125-130	0.0		170-175	0.0
40-45	40.3		85-90	0.3		130-135	0.0		175-180	0.0

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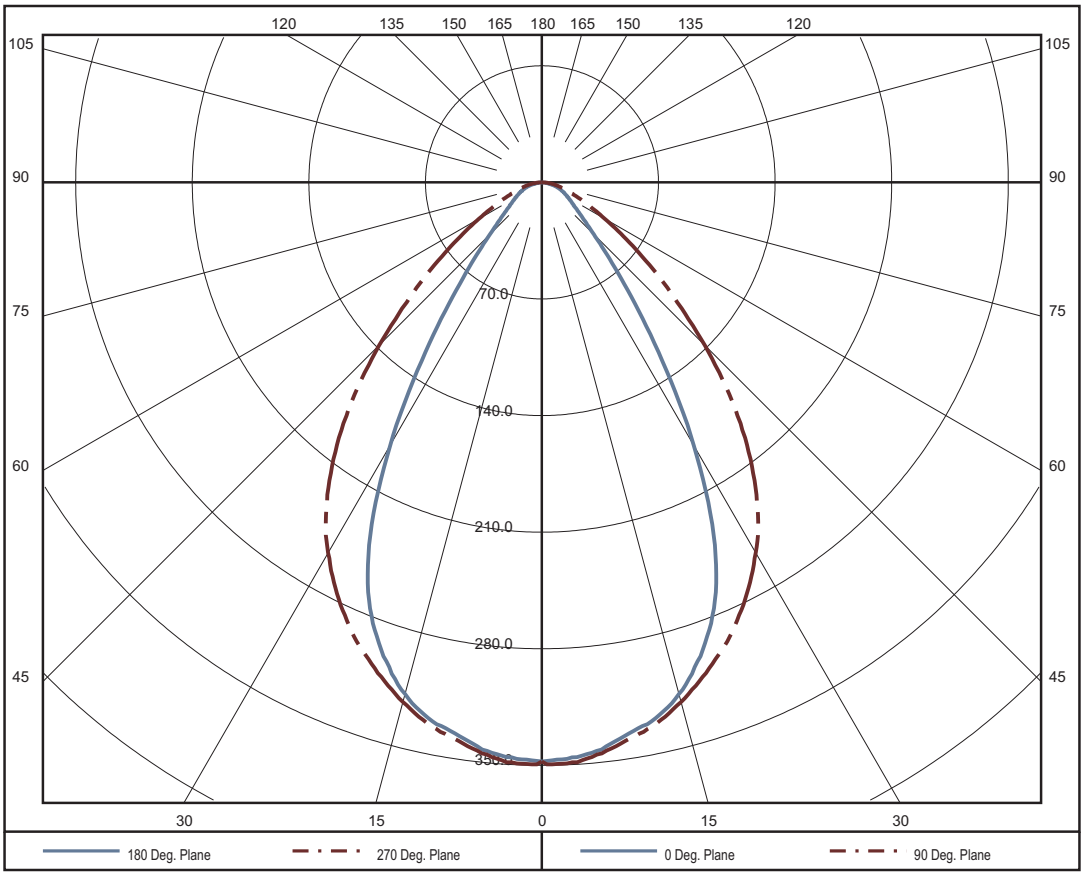
Utilization of Lumens - Zonal Cavity Method												
Effective Floor Cavity Reflectance 20%												
Ceiling Cavity Reflectance	90				80				70			
Wall Reflectance	70	50	30	10	70	50	30	10	70	50	30	10
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **											
0	602.4	602.4	602.4	602.4	588.1	588.1	588.1	588.1	574.4	574.4	574.4	574.4
1	565.6	546.3	529.2	513.9	552.2	535	519.5	505.5	539.6	524.1	510.1	497.4
2	528.4	494.8	467.2	444.3	516	485.5	460.3	439.1	504.3	476.7	453.6	434.1
3	493.4	449.6	416.2	390	481.9	442.1	411.2	386.6	471.1	434.8	406.3	383.4
4	461	410.4	374	346.5	450.5	404.1	370.2	344.2	440.6	398.1	366.5	342
5	431.3	376.2	338.4	310.9	421.7	371	335.5	309.3	412.7	365.9	332.7	307.8
6	404.2	346.3	308.2	281.3	395.4	341.9	306	280.2	387.2	337.6	303.7	279.1
7	379.4	320	282.3	256.2	371.5	316.3	280.5	255.4	364	312.6	278.7	254.6
8	356.9	296.9	259.9	234.8	349.7	293.6	258.4	234.2	342.9	290.5	257	233.6
9	336.4	276.4	240.3	216.3	329.8	273.6	239.1	215.9	323.6	270.9	237.9	215.4
10	317.7	258.1	223.2	200.2	311.8	255.7	222.2	199.8	306.1	253.4	221.2	199.5

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	548.9	548.9	548.9	548.9	525.5	525.5	525.5	504.1	504.1	504.1	494
1	516.2	503.7	492.4	482	485	475.9	467.5	467.8	460.6	453.8	444.5
2	482.6	460.1	440.9	424.3	444.9	429	415.1	430.7	417.8	406.2	397.1
3	451.2	421.1	396.9	377	408.5	388	370.8	396.8	379.6	364.9	355.9
4	422.3	386.7	359.4	337.8	376.2	352.6	333.6	366.3	346.2	329.5	320.7
5	396	356.4	327.2	304.9	347.5	322	301.9	339.2	317	299.1	290.4
6	372	329.5	299.4	277	322	295.3	274.9	314.9	291.3	272.9	264.4
7	350.2	305.7	275.3	253.1	299.3	271.9	251.6	293.2	268.7	250.1	241.8
8	330.3	284.6	254.2	232.5	279	251.5	231.3	273.8	248.8	230.2	222.2
9	312.2	265.8	235.6	214.5	260.9	233.4	213.6	256.4	231.2	212.8	205.1
10	295.7	248.9	219.3	198.8	244.7	217.4	198.1	240.7	215.6	197.5	190

Average Luminance Table (cd/m²)

	0	45	90
0	45993	45993	45993
45	8277	16173	25889
55	5247	8124	15379
65	4616	5255	8840
75	3929	4210	6335
85	1429	2143	5477

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.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