



Filename: LLLSA48L23W1500L40KSA

Manufacturer: TEXAS FLUORESCENTS

Lamp: LED Module

Lamp Output: Total Luminaire Lumens: 1775.7

Max Candela: 499.3 at Horizontal: 90°, Vertical: 12°

Input Wattage: 27.1

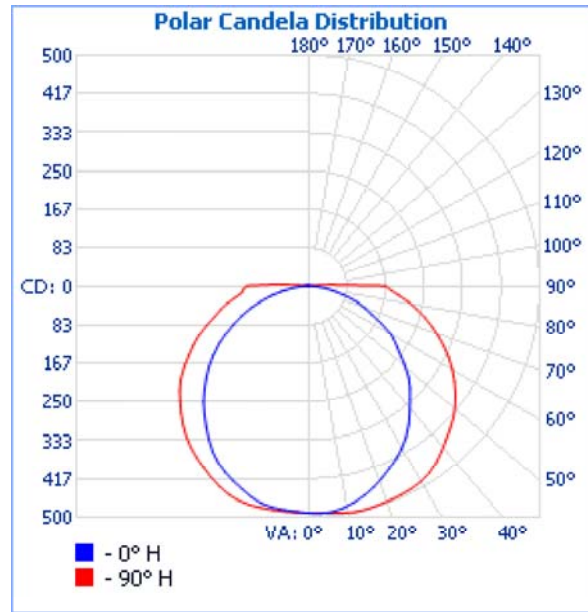
Luminous Opening: Rectangle w/Luminous Sides (L: 48.03", W: 1.18", H: 1.18")

Test: LLLSA48L23W1500L40KSA

Test Date: 07-Nov-2017 10:02:27

Test Lab: Radiant Vision Systems ProSource

Photometry : Type C



**Roadway Summary**

Cutoff Classification:	N/A	
Distribution:	TYPE II, VERY SHORT	
Max Cd, 90 Deg Vert:	166.8	
Max Cd, 80 to <90 Deg:	219.5	
	Lumens % Lamp	
Downward Street Side:	873.9	49.2%
Downward House Side:	874.7	49.3%
Downward Total:	1,748.7	98.5%
Upward Street Side:	13.1	0.7%
Upward House Side:	14.2	0.8%
Upward Total:	27.3	1.5%
Total Lumens:	1,775.9	100%

**Flood Summary**

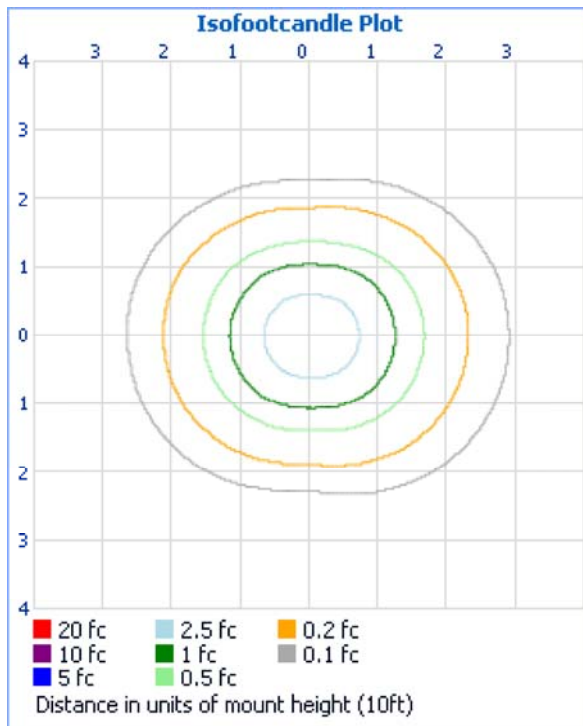
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	99.1%	1,759.9	n/a	167.3
Beam (50%):	75.2%	1,335.7	143.5	111.7
Total:	100%	1,775.7		

**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	394.5	22.2%
0-40	657.0	37%
0-60	1,216.7	68.5%
60-90	531.7	29.9%
70-100	321.9	18.1%
90-120	27.3	1.5%
0-90	1,748.4	98.5%
90-180	27.3	1.5%
0-180	1,775.7	100%

**Lumens Per Zone**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	46.7	2.6%	90-100	27.3	1.5%
10-20	136.7	7.7%	100-110	0.0	0%
20-30	211.1	11.9%	110-120	0	0%
30-40	262.4	14.8%	120-130	0	0%
40-50	284.8	16.0%	130-140	0	0%
50-60	274.9	15.5%	140-150	0	0%
60-70	237.1	13.4%	150-160	0	0%
70-80	177.2	10.0%	160-170	0	0%
80-90	117.5	6.6%	170-180	0	0%



**Illuminance at a Distance**

	Center Beam fc	Beam Width	
1.7R	170 fc	5.0 ft	10.3 ft
3.3R	45.1 fc	9.7 ft	20.0 ft
5.0R	19.6 fc	14.7 ft	30.3 ft
6.7R	10.9 fc	19.7 ft	40.6 ft
8.3R	7.13 fc	24.5 ft	50.3 ft
10.0R	4.91 fc	29.5 ft	60.6 ft

■ Vert. Spread: 111.7°  
■ Horiz. Spread: 143.5°

**Coefficients Of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance: 20%

RCC %:	80				70				50				30				10				0			
RW %:	70	50	30	0	70	50	30	0	50	30	20	0	50	30	20	0	50	30	20	0	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	.98	1.10	1.10	1.10	1.10	1.05	1.05	1.05	1.05	1.01	1.01	1.01	1.01	1.01	1.01	1.01	.98
1	1.06	1.00	.95	.90	1.03	.97	.93	.78	.93	.89	.85	.85	.89	.85	.82	.82	.85	.82	.79	.77	.85	.82	.79	.77
2	.95	.86	.78	.71	.92	.84	.76	.64	.80	.74	.68	.68	.76	.71	.66	.66	.73	.68	.65	.62	.73	.68	.65	.62
3	.86	.74	.65	.58	.83	.73	.64	.53	.69	.62	.56	.56	.66	.60	.55	.55	.63	.58	.54	.51	.63	.58	.54	.51
4	.79	.65	.56	.49	.76	.64	.55	.45	.61	.53	.47	.47	.59	.52	.46	.46	.56	.50	.46	.43	.56	.50	.46	.43
5	.72	.58	.49	.41	.70	.57	.48	.39	.55	.47	.40	.40	.52	.45	.40	.40	.50	.44	.39	.37	.50	.44	.39	.37
6	.66	.52	.43	.36	.64	.51	.42	.34	.49	.41	.35	.35	.47	.40	.35	.35	.45	.39	.34	.32	.45	.39	.34	.32
7	.61	.47	.38	.31	.60	.46	.37	.30	.45	.37	.31	.31	.43	.36	.31	.31	.41	.35	.30	.28	.41	.35	.30	.28
8	.57	.43	.34	.28	.55	.42	.34	.27	.41	.33	.27	.27	.39	.32	.27	.27	.38	.32	.27	.25	.38	.32	.27	.25
9	.53	.39	.31	.25	.52	.39	.30	.24	.37	.30	.25	.25	.36	.29	.24	.24	.35	.29	.24	.22	.35	.29	.24	.22
10	.50	.36	.28	.23	.49	.36	.28	.22	.34	.27	.22	.22	.33	.27	.22	.22	.32	.26	.22	.20	.32	.26	.22	.20

**Candela Table - Type C**

	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	2	
0	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	491	
3	493	493	493	493	493	493	492	492	492	492	492	491	491	490	489	489	489	489	489	489	489	489	490	490	490	490	490	491	4
6	492	491	492	491	491	492	492	493	494	494	494	493	491	490	488	487	487	487	487	488	489	490	491	491	491	492	491	491	4
9	486	486	487	487	488	489	491	493	496	497	497	495	493	489	487	485	484	484	485	486	487	488	490	491	491	491	491	491	4
12	478	479	481	484	486	487	489	493	497	499	499	497	493	489	485	482	481	481	481	481	481	481	483	486	487	487	487	489	4
15	468	469	474	479	483	486	489	493	497	499	498	496	494	490	484	479	477	474	472	471	474	477	481	483	483	483	484	487	4
18	457	459	464	472	479	485	490	494	496	497	496	494	493	489	480	475	471	466	461	463	466	470	475	479	479	481	484	4	
21	444	447	453	465	474	482	490	494	495	495	495	493	492	486	474	466	460	453	451	453	457	461	466	470	473	475	478	4	
24	431	434	442	453	466	477	486	492	493	494	495	492	486	479	465	454	444	438	440	442	444	447	453	459	464	467	470	4	
27	418	422	430	443	457	468	479	487	490	491	491	485	477	469	458	443	427	422	427	427	427	427	434	443	448	455	458	462	4
30	404	408	420	433	447	458	469	480	485	487	484	477	470	460	448	431	411	407	412	409	411	423	433	438	444	449	453	4	



180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Luminaire Report Summary**

IESNA:LM-63-2002  
[TEST] LLLSA48L23W1500L40KSA  
[TESTDATE] 07-Nov-2017 10:02:27  
[TESTLAB] Radiant Vision Systems ProSource  
[ISSUEDATE] 11/7/2017 11:05:15 AM  
[MANUFAC] TEXAS FLUORESCENTS  
[LAMP] LED Module  
[\_TOTALLUMINAIRELUMENS] 1775.7  
[\_NUMBEROFRAYS]10000000  
[DRIVER TYPE] (1) AC\_A100VD24H4.1  
[BOARD TYPE] LED TAPE 48"  
[COLOR TEMP] 3,911 CCT  
[LUMEN/WATT] 66 LM/WT  
[CRI] 86.1

[OTHER] Absolute Photometry measurement

FILE: CREATED USING ABSOLUTE PHOTOMETRY  
FILE: CANDELA MULTIPLIER: 1  
FILE: VERTICAL ANGLES: 61, HORIZONTAL ANGLES: 37  
FILE: COORDINATE SYSTEM: TYPE C  
FILE: UNIT OF MEASURE: METRIC  
FILE: BALLAST FACTOR: 1

Photometrics Pro 1.3.29 copyright 2003-2017 by jSolutions, Inc.  
Reported data calculated from manufacturer's data file, based on IES recommended methods.