



lighting facts^{CM}

A Program of the U.S. DOE

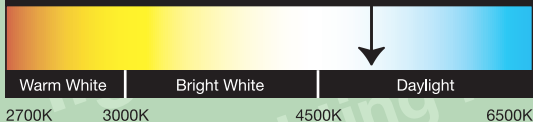
Light Output (Lumens)	1610
Watts	19.7
Lumens per Watt (Efficacy)	81

Color Accuracy	69
Color Rendering Index (CRI)	

Light Color

Correlated Color Temperature (CCT)

5038 (Daylight)



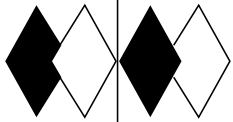
All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results. Products qualified under the DOE ENERGY STAR® program have the ENERGY STAR mark on this label.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: DEPP-8X5DBA

Model Number: FX

Type: Other



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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

DATE: 10/20/09

REPORT NUMBER: ITL63301

PREPARED FOR: LEDDYNAMICS, INC.

CATALOG NUMBER: E25T8-48-C5S

LUMINAIRE: FABRICATED WHITE PAINTED METAL STRIP BALLAST HOUSING.

LAMP: ONE 20-WATT T-8 STYLE 4-FOOT LINEAR LED LAMP WITH BI-PIN CONTACTS AND INTEGRAL LED DRIVER. LAMP CONSISTS OF: EXTRUDED WHITE PAINTED METAL HOUSING, 36 WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS) ON 4 CIRCUIT BOARDS, EXTRUDED LINEAR PRISMATIC PLASTIC LENS, MOLDED WHITE PLASTIC END CAPS. LENS PRISMS IN AND PARALLEL WITH LENGTH OF HOUSING, LAMP HORIZONTAL WITH LEADS VERTICAL BASE-UP POSITION.

BALLAST: BALLAST WISE DXE132M8

THE 0 DEGREE PLANE IS PARALLEL WITH THE LAMP.

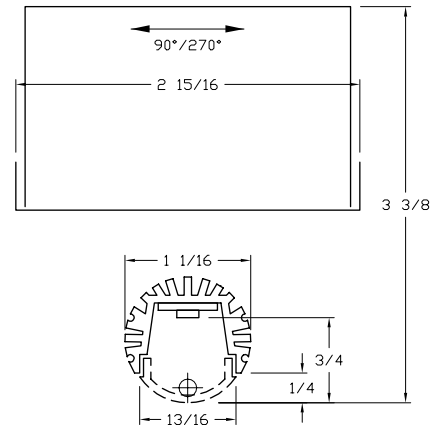
MOUNTING: SURFACE

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE BALLAST. LAMP INFORMATION PROVIDED BY CLIENT.

TOTAL INPUT WATTS = 19.7 AT 120.0 VOLTS

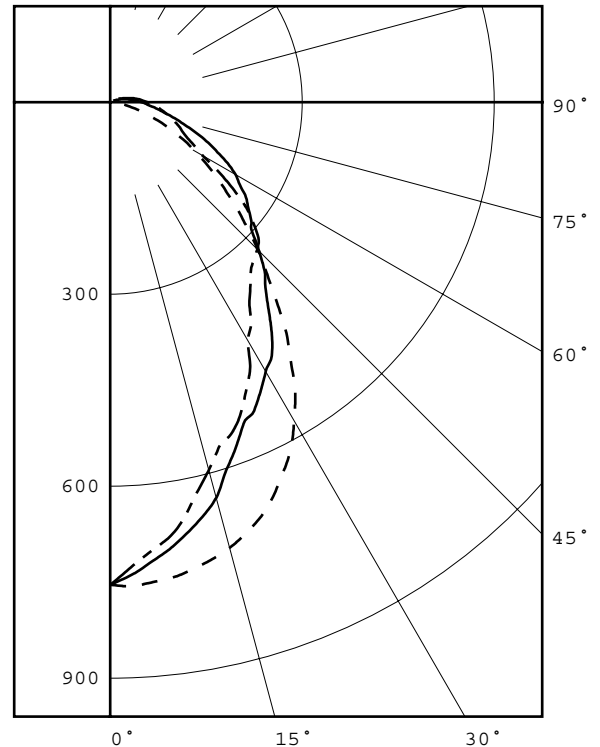
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 33.25 FEET



CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	FLUX
0	754	754	754	754	754	69
5	753	740	722	712	706	181
15	721	672	640	598	595	252
25	639	583	532	513	501	273
35	491	468	440	395	379	260
45	326	376	329	321	325	220
55	202	256	259	255	232	150
65	110	146	185	145	134	95
75	43	79	110	99	100	58
85	5	37	62	69	71	32
90	0	24	49	56	57	14
95	0	13	36	42	47	5
105	0	2	17	22	24	2
115	0	0	5	10	11	0
125	0	0	1	4	5	0
135	0	0	0	0	1	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0



LEGEND:
0-deg: - - - - -
45-deg: = = = = =
90-deg: - - - - -

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%FIXT
0- 30	501	31.1
0- 40	774	48.1
0- 60	1254	77.9
0- 90	1557	96.7
90-120	51	3.2
90-130	53	3.3
90-150	53	3.3
90-180	53	3.3
0-180	1610	100.0

EFFICACY = 81.7 Lm/W

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.1 0.9

Checked M.KLOPF

Approved R.BEATTIE



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 PREPARED FOR: LEDDYNAMICS, INC.

DATE: 10/20/09

CANDELA DISTRIBUTION

	0.0	22.5	45.0	67.5	90.0	ZONAL LUMEN	SUMMARY
0.0	754	754	754	754	754	0- 5	18.
5.0	753	740	722	712	706	5- 10	51.
10.0	741	714	685	671	661	10- 15	79.
15.0	721	672	640	598	595	15- 20	101.
20.0	689	627	574	556	552	20- 25	120.
25.0	639	583	532	513	501	25- 30	132.
30.0	575	523	486	451	430	30- 35	137.
35.0	491	468	440	395	379	35- 40	136.
40.0	403	431	377	345	342	40- 45	133.
45.0	326	376	329	321	325	45- 50	127.
50.0	260	318	288	298	291	50- 55	118.
55.0	202	256	259	255	232	55- 60	102.
60.0	153	192	226	193	167	60- 65	83.
65.0	110	146	185	145	134	65- 70	67.
70.0	72	108	146	118	116	70- 75	53.
75.0	43	79	110	99	100	75- 80	42.
80.0	22	56	82	84	85	80- 85	32.
85.0	5	37	62	69	71	85- 90	25.
90.0	0	24	49	56	57	90- 95	18.
95.0	0	13	36	42	47	95-100	13.
100.0	0	7	26	32	36	100-105	9.
105.0	0	2	17	22	24	105-110	5.
110.0	0	0	10	15	17	110-115	3.
115.0	0	0	5	10	11	115-120	2.
120.0	0	0	3	6	8	120-125	1.
125.0	0	0	1	4	5	125-130	1.
130.0	0	0	0	1	3	130-135	0.
135.0	0	0	0	0	1	135-140	0.
140.0	0	0	0	0	0	140-145	0.
145.0	0	0	0	0	0	145-150	0.
150.0	0	0	0	0	0	150-155	0.
155.0	0	0	0	0	0	155-160	0.
160.0	0	0	0	0	0	160-165	0.
165.0	0	0	0	0	0	165-170	0.
170.0	0	0	0	0	0	170-175	0.
175.0	0	0	0	0	0	175-180	0.
180.0	0	0	0	0	0		



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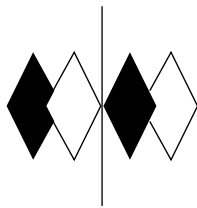
PREPARED FOR: LEDDYNAMICS, INC.

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	108	103	99	95	105	101	97	93	96	92	90	91	89	86	87	85	83	81
2	99	91	84	78	96	88	82	77	84	79	75	81	76	73	77	74	71	68
3	90	80	72	66	88	78	71	65	75	69	64	72	67	62	69	64	61	58
4	83	72	63	57	81	70	62	56	67	60	55	65	59	54	62	57	53	51
5	77	64	56	49	75	63	55	49	61	54	48	58	52	47	56	51	47	44
6	71	58	50	44	69	57	49	43	55	48	43	53	47	42	51	46	41	39
7	66	53	45	39	64	52	44	39	51	43	38	49	42	38	47	42	37	35
8	62	49	41	35	60	48	40	35	46	39	34	45	39	34	44	38	34	32
9	58	45	37	32	56	44	37	32	43	36	31	42	35	31	40	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	28	38	32	28	26

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



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REPORT NUMBER: ITL63302 Page 1 of 1
DATE: 10/21/09
PREPARED FOR: LEDDYNAMICS, INC.
CATALOG NUMBER: E25T8-48-C5S

LUMINAIRE: FABRICATED WHITE PAINTED METAL STRIP BALLAST HOUSING.

LAMP: ONE 20-WATT T-8 STYLE 4-FOOT LINEAR LED LAMP WITH BI-PIN CONTACTS AND INTEGRAL LED DRIVER. LAMP CONSISTS OF: EXTRUDED WHITE PAINTED METAL HOUSING, 36 WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS) ON 4 CIRCUIT BOARDS, EXTRUDED LINEAR PRISMATIC PLASTIC LENS, MOLDED WHITE PLASTIC END CAPS. LENS PRISMS IN AND PARALLEL WITH LENGTH OF HOUSING, LAMP HORIZONTAL WITH LEDES VERTICAL BASE-UP POSITION.

BALLAST: BALLAST WISE DXE132M8

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE BALLAST. LAMP INFORMATION PROVIDED BY CLIENT.

INSTRUMENTATION: Kikusui PCR500L AC Power Source
Yokogawa WT210 Digital Power Meter
Optronics OL770 Spectroradiometer
ITL 1.5 Meter Diameter Integrating Sphere

OBJECT OF TEST: Measure the Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and input electrical parameters.

PROCEDURE: The luminaire was provided by customer and the LEDs had an unknown number of burn hours. The luminaire was mounted inside the integrating sphere in a horizontal position (LEDS aimed down). The luminaire was allowed to stabilize at 120 VAC input. After stabilization occurred, CCT, CRI, x/y chromaticity coordinates, ANSI C78.377 Duv, and input electrical data were measured with the luminaire operating in the integrating sphere. In order to measure the mean performance, twenty data sets were recorded and averaged within the OL770. Readings were taken with the luminaire operating at 120 VAC input in a 25 +/- 1 degree Celsius free air ambient and in accordance with IESNA LM-79-08. All data are traceable to the National Institute of Standards and Technology.

RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3447
Chromaticity Ordinate y	0.3588
Correlated Color Temp CCT (K)	5038
Color Rendering Index (CRI)	69
ANSI C78.377-2008 Duv	0.004
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (mA AC)	571
Input Power (Watts)	19.9

Checked: <u>N Gully</u>
Approved: <u>R Bergin</u>

Government Procurement Qualifying Statement
EverLED[™] Products

Buy American Act

The Buy American Act (BAA) section 1605 applies restrictions to government procurement of goods that are not domestic end products. BAA requires that manufactured products meet a two part test to define a domestic end product, see Federal Acquisition Regulation (FAR) part 25.101:

1. The product must be manufactured in the United States; and
2. The cost of components and materials must contain over 50% domestic content.

The American Recovery and Reinvestment Act (ARRA) of 2009 waives the above requirement that products must contain 50% domestic content and requires that products are manufactured in the United States. The waiver applies to Commercially available Off-The-Shelf (COTS) items that are sold or offered to the public, see Federal Register volume 74 number 10 dated January 15, 2009 pages 2713 to 2715.

Section 1605 of the Buy American Act also requires that the regulations are made in a manner consistent with United States obligations under international agreements. Trade agreements with other countries requires that government procurement not exclude products from those nations. The World Trade Organization (WTO) Government Procurement Agreement (GPA) includes over 30 countries listed in FAR part 25.003. Other trade agreements also apply.

EverLED Products

The EverLED product line includes commercial off-the-shelf standard products sold to the public, industry, institutions, government agencies, and others. All EverLED products are manufactured in our facility located in Randolph, Vermont, United States. The following products are qualified for government procurement under the BAA and ARRA regulations:

EverLED-TR Tube Replacement – The product is fully assembled and tested in our Randolph facility. Product modules including internal driver and light engines are also manufactured in our Randolph facility.

EverLED LVL.2 Light Fixture - The product is fully assembled and tested in our Randolph facility. Product modules including internal driver and light engines are also manufactured in our Randolph facility. The product is sometimes sold with accessories such as a power supply. We stock standard off-the-shelf accessories for our products. The accessories may or may not be manufactured in the United States. US made accessories or accessories from a WTO GPA country are available upon request, please discuss this with our sales team.

DockLED - The product is fully assembled and tested in our Randolph facility. Product modules including internal driver and light engines are also manufactured in our Randolph facility.

12-29-2009