

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: METALUX

Report Number: P182406

Luminaire Tested: **22FR-24-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182406
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26769)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FR-24-UNV-L835-CD1-U
Description: METALUX 2X2 FR TROFFER LED FIXTURE

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2345.1 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

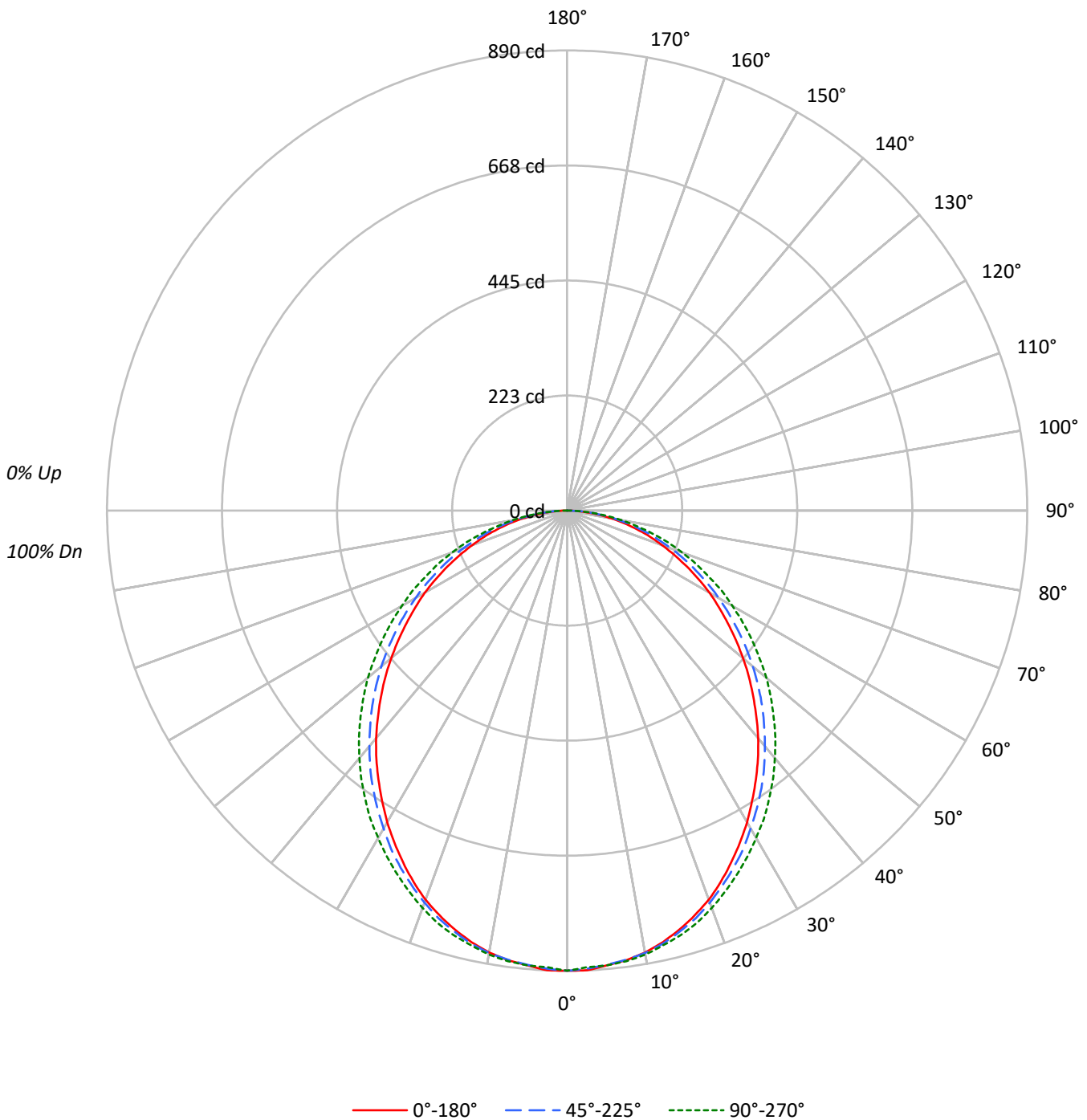
Input Watts (W): 21.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2395	2395	2395
5°	2385	2382	2385
10°	2372	2374	2382
15°	2337	2348	2368
20°	2294	2311	2342
25°	2230	2262	2307
30°	2162	2206	2271
35°	2089	2152	2237
40°	2020	2090	2196
45°	1937	2028	2150
50°	1859	1963	2106
55°	1778	1891	2046
60°	1711	1824	1986
65°	1624	1751	1923
70°	1534	1684	1857
75°	1445	1612	1768
80°	1333	1503	1643
85°	1173	1359	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.8	3.6
10°-20°	237.8	10.1
20°-30°	351.4	15.0
30°-40°	410.7	17.5
40°-50°	412.5	17.6
50°-60°	362.6	15.5
60°-70°	274.3	11.7
70°-80°	163.6	7.0
80°-90°	48.4	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	673.0	28.7
0°-40°	1083.7	46.2
0°-60°	1858.8	79.3
0°-90°	2345.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2345.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	883	884	882	882	883	84
15°	839	841	843	847	850	236
25°	751	755	762	772	777	346
35°	636	643	655	671	681	398
45°	509	514	533	553	565	393
55°	379	385	403	425	436	340
65°	255	258	275	294	302	253
75°	139	143	155	166	170	148
85°	38	39	44	47	46	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.9	889.9	889.9	889.9	889.9
2.5°	889.9	888.9	886.9	884.9	883.9
5°	882.9	883.9	881.9	881.9	882.9
7.5°	876.9	876.9	875.9	876.9	878.9
10°	867.9	868.9	868.9	867.9	871.9
12.5°	854.9	855.9	857.9	857.9	860.9
15°	838.9	840.9	842.9	846.9	849.9
17.5°	820.9	823.9	826.9	831.9	835.9
20°	800.9	802.9	806.9	812.9	817.9
22.5°	776.9	779.9	784.9	792.9	797.9
25°	750.9	754.9	761.9	771.9	776.9
27.5°	723.9	728.9	737.9	747.9	754.9
30°	695.9	700.9	709.9	722.9	730.9
32.5°	665.9	671.9	682.9	696.9	707.9
35°	636.0	643.0	655.0	670.9	680.9
37.5°	606.0	612.0	626.0	643.0	654.0
40°	575.0	580.0	595.0	614.0	625.0
42.5°	542.0	548.0	564.0	584.0	596.0
45°	509.0	514.0	533.0	553.0	565.0
47.5°	477.0	483.0	501.0	522.0	534.0
50°	444.0	451.0	469.0	491.0	503.0
52.5°	411.0	417.0	436.0	458.0	469.0
55°	379.0	385.0	403.0	425.0	436.0
57.5°	348.0	353.0	371.0	392.0	403.0
60°	318.0	321.0	339.0	360.0	369.0
62.5°	286.0	290.0	307.0	327.0	338.0
65°	255.0	258.0	275.0	294.0	302.0
67.5°	224.0	228.0	245.0	262.0	270.0
70°	195.0	199.0	214.0	230.0	236.0
72.5°	168.0	171.0	183.0	198.0	204.0
75°	139.0	143.0	155.0	166.0	170.0
77.5°	113.0	116.0	126.0	135.0	137.0
80°	86.0	89.0	97.0	104.0	106.0
82.5°	61.0	64.0	70.0	75.0	76.0
85°	38.0	39.0	44.0	47.0	46.0
87.5°	16.0	17.0	18.0	18.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)