

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: P182401

Luminaire Tested: **24FR-72-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26767)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-72-UNV-L835-CD1-U
Description: METALUX 2X4 FR TROFFER LED FIXTURE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7237.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

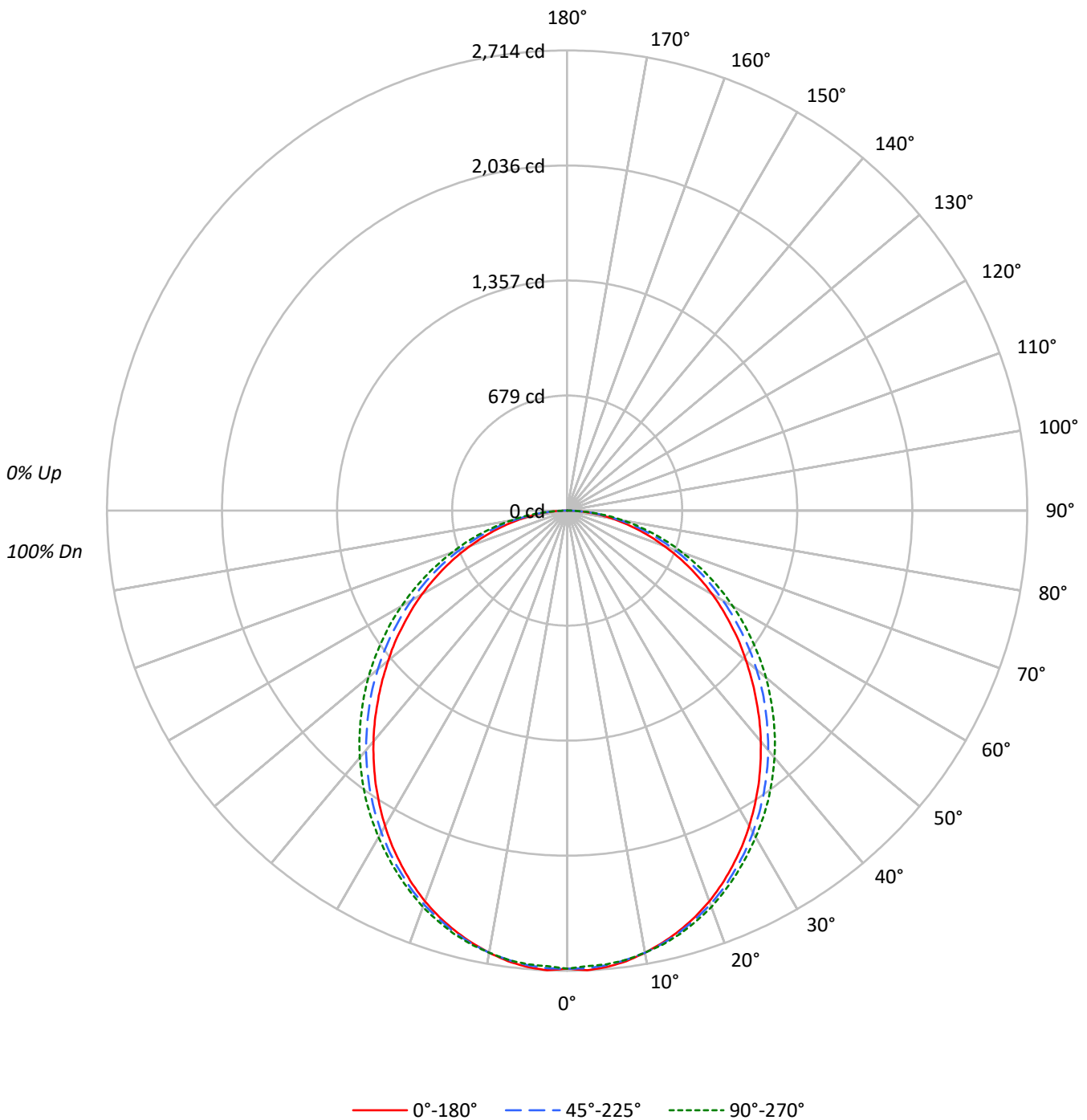
Input Watts (W): 73.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70					70			
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62	70	65	61	59					59			
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50					50			
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44					44			
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27					27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3635	3635	3635
5°	3649	3635	3628
10°	3617	3617	3617
15°	3572	3584	3598
20°	3512	3539	3562
25°	3429	3476	3509
30°	3337	3405	3456
35°	3234	3325	3402
40°	3121	3241	3342
45°	3001	3147	3272
50°	2882	3053	3203
55°	2772	2952	3120
60°	2661	2853	3035
65°	2538	2754	2948
70°	2390	2643	2842
75°	2244	2525	2742
80°	2077	2374	2617
85°	1854	2203	2391



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.2	3.5
10°-20°	724.2	10.0
20°-30°	1075.4	14.9
30°-40°	1261.9	17.4
40°-50°	1273.1	17.6
50°-60°	1124.7	15.5
60°-70°	854.5	11.8
70°-80°	511.3	7.1
80°-90°	156.7	2.2
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°	2054.8	28.4
0°-40°	3316.7	45.8
0°-60°	5714.6	79.0
0°-90°	7237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2702	2702	2702	2702	2702	
5°	2702	2681	2691	2688	2686	256
15°	2564	2552	2573	2580	2583	723
25°	2310	2306	2341	2353	2364	1064
35°	1969	1976	2024	2052	2071	1230
45°	1577	1594	1654	1702	1720	1217
55°	1182	1201	1258	1312	1330	1058
65°	797	816	865	909	926	790
75°	432	453	486	514	527	458
85°	120	131	143	151	155	135
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2701.6	2701.6	2701.6	2701.6	2701.6
2.5°	2713.7	2692.9	2701.6	2698.1	2689.4
5°	2701.6	2680.7	2691.1	2687.6	2685.9
7.5°	2680.7	2661.5	2672.0	2672.0	2672.0
10°	2647.6	2631.9	2647.6	2647.6	2647.6
12.5°	2609.3	2595.4	2614.5	2616.3	2619.7
15°	2564.0	2551.9	2572.7	2579.7	2583.2
17.5°	2511.8	2501.4	2524.0	2534.5	2537.9
20°	2452.6	2442.2	2471.8	2478.7	2487.5
22.5°	2384.8	2379.5	2410.9	2417.8	2428.3
25°	2309.9	2306.4	2341.2	2353.4	2363.9
27.5°	2233.3	2231.6	2269.9	2285.5	2296.0
30°	2148.0	2149.8	2191.5	2210.7	2224.6
32.5°	2059.2	2064.5	2109.7	2132.4	2149.8
35°	1968.7	1975.7	2024.4	2052.3	2071.4
37.5°	1873.0	1883.4	1935.7	1968.7	1987.9
40°	1777.2	1789.4	1845.1	1880.0	1902.6
42.5°	1678.0	1693.7	1749.4	1794.7	1813.8
45°	1577.1	1594.5	1653.7	1702.4	1719.8
47.5°	1477.8	1500.5	1557.9	1606.7	1625.8
50°	1376.9	1397.8	1458.7	1509.2	1530.1
52.5°	1282.9	1302.0	1359.5	1411.7	1430.9
55°	1181.9	1201.1	1258.5	1312.5	1329.9
57.5°	1086.2	1103.6	1159.3	1213.3	1230.7
60°	988.7	1006.1	1060.1	1108.8	1128.0
62.5°	893.0	910.4	964.3	1009.6	1027.0
65°	797.2	816.4	865.1	908.6	926.0
67.5°	703.2	722.4	767.6	809.4	823.3
70°	607.5	628.4	671.9	710.2	722.4
72.5°	518.7	539.6	577.9	611.0	626.7
75°	431.7	452.6	485.7	513.5	527.4
77.5°	348.1	369.0	395.1	417.8	430.0
80°	268.1	287.2	306.4	329.0	337.7
82.5°	191.5	207.1	222.8	240.2	247.2
85°	120.1	130.6	142.7	151.4	154.9
87.5°	52.2	59.2	60.9	62.7	60.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)