

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: P474078

Luminaire Tested: **24CZ2-75HE-S-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474078
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-S-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

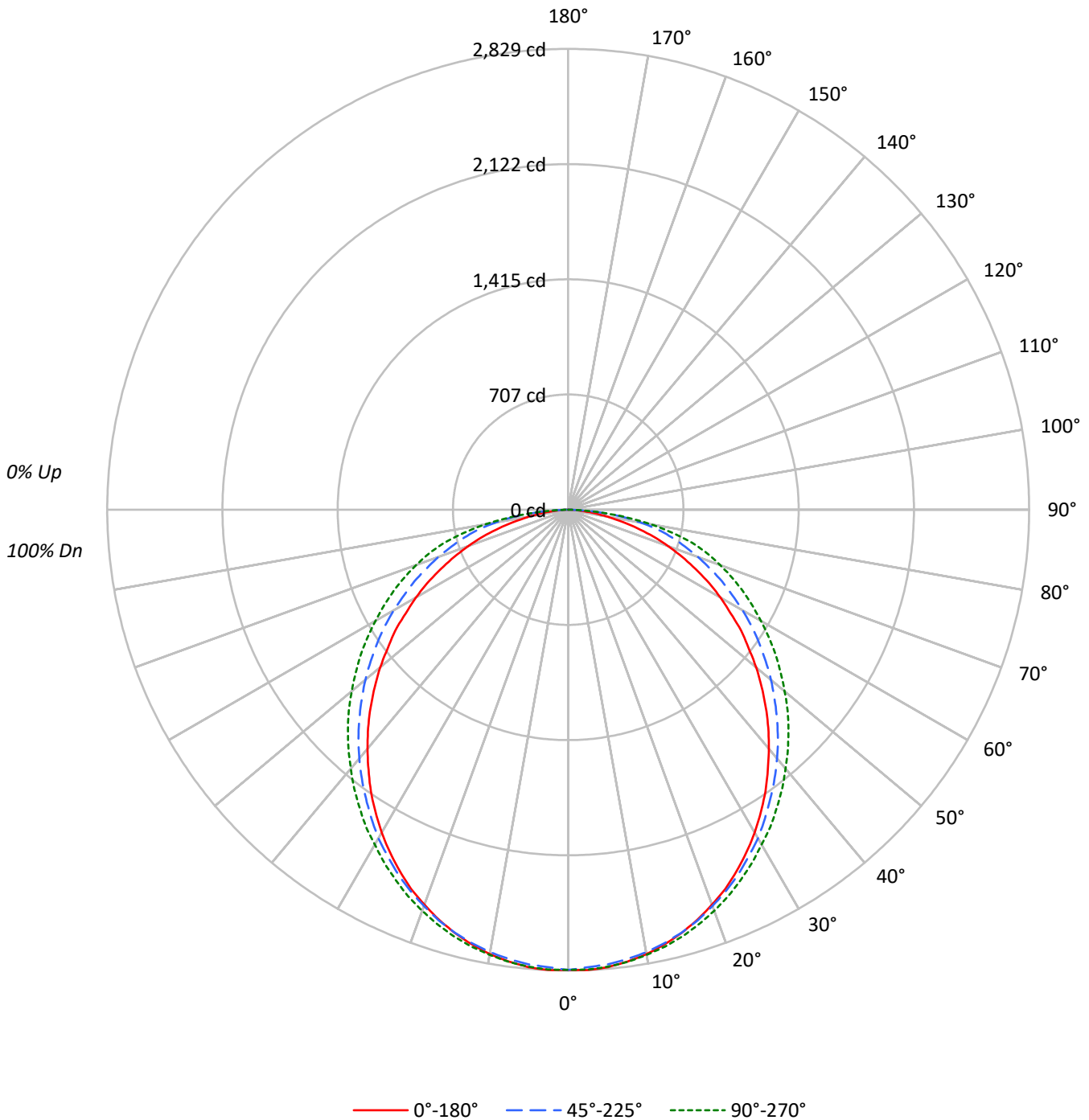
Lumens per Lamp: N/A
Luminaire Lumens: 8093.7 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 55.4
Input Voltage (V): 120
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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	61		68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3801	3801	3801
5°	3807	3783	3803
10°	3785	3769	3791
15°	3746	3744	3776
20°	3695	3706	3752
25°	3634	3665	3722
30°	3557	3619	3687
35°	3468	3555	3666
40°	3365	3503	3645
45°	3263	3448	3638
50°	3153	3401	3629
55°	3041	3359	3649
60°	2901	3327	3674
65°	2747	3314	3763
70°	2563	3332	3896
75°	2281	3428	4105
80°	1864	3502	4007
85°	1314	3058	3120



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.1	3.3
10°-20°	760.7	9.4
20°-30°	1140.3	14.1
30°-40°	1358.1	16.8
40°-50°	1400.3	17.3
50°-60°	1277.8	15.8
60°-70°	1021.8	12.6
70°-80°	667.4	8.2
80°-90°	200.4	2.5
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°	2168.0	26.8
0°-40°	3526.1	43.6
0°-60°	6204.2	76.7
0°-90°	8093.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8093.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2825	2825	2825	2825	2825	
5°	2818	2813	2801	2818	2816	267
15°	2690	2691	2688	2711	2711	758
25°	2448	2452	2469	2505	2507	1127
35°	2111	2126	2164	2219	2232	1319
45°	1715	1746	1812	1888	1912	1323
55°	1296	1333	1432	1526	1555	1154
65°	863	921	1041	1143	1182	856
75°	439	512	659	766	790	466
85°	85	153	198	202	202	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2825.1	2825.1	2825.1	2825.1	2825.1
2.5°	2829.1	2825.1	2810.4	2827.7	2825.1
5°	2818.4	2813.1	2801.1	2818.4	2815.8
7.5°	2797.1	2794.5	2782.5	2802.5	2799.8
10°	2770.6	2767.9	2758.6	2778.5	2774.5
12.5°	2733.3	2732.0	2725.4	2749.3	2746.6
15°	2689.5	2690.8	2688.1	2710.7	2710.7
17.5°	2638.9	2637.6	2642.9	2670.9	2668.2
20°	2580.4	2581.8	2588.4	2620.3	2620.3
22.5°	2519.3	2518.0	2532.6	2564.5	2567.2
25°	2447.5	2451.5	2468.8	2504.7	2507.3
27.5°	2370.4	2377.0	2398.3	2439.5	2443.5
30°	2289.3	2297.3	2329.2	2367.7	2373.1
32.5°	2200.2	2217.5	2246.8	2295.9	2309.2
35°	2111.2	2125.8	2164.3	2218.8	2232.1
37.5°	2012.8	2036.7	2080.6	2140.4	2157.7
40°	1915.7	1939.7	1994.2	2056.6	2075.3
42.5°	1817.3	1842.6	1905.1	1975.6	1995.5
45°	1715.0	1745.6	1812.0	1887.8	1911.7
47.5°	1610.0	1645.9	1717.6	1800.1	1826.7
50°	1506.3	1542.2	1624.6	1709.7	1733.6
52.5°	1394.6	1439.8	1527.5	1619.3	1643.2
55°	1296.2	1333.4	1431.8	1526.2	1555.4
57.5°	1180.5	1231.1	1336.1	1431.8	1459.7
60°	1078.2	1124.7	1236.4	1333.4	1365.3
62.5°	974.5	1022.3	1134.0	1244.4	1273.6
65°	862.8	921.3	1041.0	1143.3	1181.9
67.5°	756.5	817.6	939.9	1048.9	1088.8
70°	651.4	713.9	846.9	958.5	990.4
72.5°	547.7	612.9	751.1	860.1	897.4
75°	438.7	511.8	659.4	765.8	789.7
77.5°	336.3	417.4	566.3	638.1	655.4
80°	240.6	329.7	452.0	503.9	517.2
82.5°	158.2	244.6	337.7	365.6	361.6
85°	85.1	152.9	198.1	202.1	202.1
87.5°	33.2	61.2	62.5	47.9	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)