

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: P272121

Luminaire Tested: **24CZ2-75HE-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P272121  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-UNV-L930-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (392) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6248.0 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

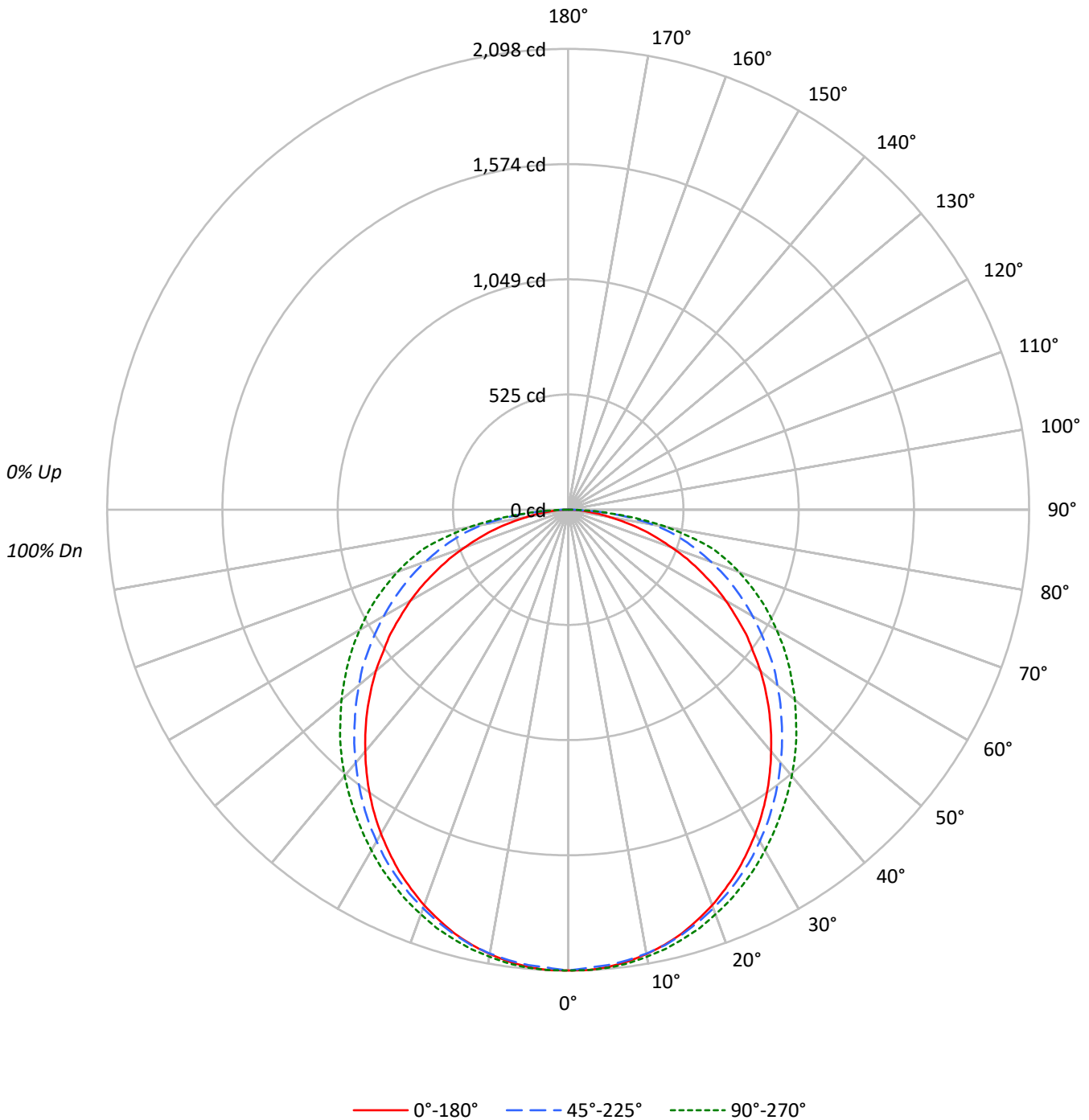
Input Watts (W): 55.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2822	2822	2822
5°	2822	2811	2828
10°	2806	2803	2823
15°	2783	2788	2818
20°	2744	2765	2807
25°	2699	2740	2795
30°	2647	2708	2783
35°	2589	2675	2774
40°	2523	2641	2780
45°	2460	2615	2793
50°	2392	2601	2820
55°	2319	2597	2871
60°	2228	2609	2946
65°	2111	2649	3074
70°	1961	2715	3249
75°	1789	2851	3523
80°	1471	3070	3522
85°	1127	2833	3026



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.4	3.2
10°-20°	566.4	9.1
20°-30°	852.3	13.6
30°-40°	1021.5	16.3
40°-50°	1064.5	17.0
50°-60°	990.3	15.9
60°-70°	815.7	13.1
70°-80°	555.5	8.9
80°-90°	183.4	2.9
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°	1617.1	25.9
0°-40°	2638.6	42.2
0°-60°	4693.4	75.1
0°-90°	6248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2098	2098	2098	2098	2098	
5°	2089	2089	2081	2092	2094	198
15°	1998	2000	2002	2021	2023	563
25°	1818	1827	1845	1877	1883	837
35°	1576	1595	1629	1672	1689	985
45°	1293	1320	1374	1443	1468	997
55°	988	1022	1107	1195	1224	881
65°	663	719	832	930	966	658
75°	344	421	548	646	678	363
85°	73	142	184	196	196	90
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2097.7	2097.7	2097.7	2097.7	2097.7
2.5°	2097.7	2097.7	2087.3	2097.7	2097.7
5°	2089.4	2089.4	2081.1	2091.5	2093.6
7.5°	2074.8	2076.9	2068.6	2081.1	2083.1
10°	2054.0	2056.0	2051.9	2064.4	2066.5
12.5°	2028.9	2031.0	2031.0	2045.6	2047.7
15°	1997.7	1999.7	2001.8	2020.6	2022.7
17.5°	1958.0	1964.3	1968.5	1991.4	1995.6
20°	1916.3	1922.6	1930.9	1955.9	1960.1
22.5°	1868.4	1876.7	1891.3	1918.4	1924.7
25°	1818.3	1826.7	1845.4	1876.7	1883.0
27.5°	1762.0	1774.5	1797.5	1830.8	1839.2
30°	1703.6	1716.1	1743.3	1778.7	1791.2
32.5°	1641.1	1657.8	1689.0	1728.7	1741.2
35°	1576.4	1595.2	1628.6	1672.4	1689.0
37.5°	1507.6	1528.5	1568.1	1616.1	1636.9
40°	1436.7	1461.7	1503.5	1559.8	1582.7
42.5°	1365.8	1388.8	1440.9	1501.4	1526.4
45°	1292.8	1320.0	1374.2	1443.0	1468.0
47.5°	1217.8	1244.9	1309.5	1382.5	1405.4
50°	1142.7	1169.8	1242.8	1320.0	1347.1
52.5°	1061.4	1096.8	1180.2	1257.4	1284.5
55°	988.4	1021.8	1107.3	1194.8	1224.0
57.5°	905.0	944.6	1038.4	1130.2	1161.5
60°	827.8	869.5	969.6	1063.5	1094.7
62.5°	748.6	794.5	900.8	996.7	1032.2
65°	663.1	719.4	832.0	930.0	965.5
67.5°	586.0	644.3	763.2	863.3	894.6
70°	498.4	569.3	690.2	790.3	825.8
72.5°	423.3	494.2	621.4	719.4	754.9
75°	344.1	421.2	548.4	646.4	677.7
77.5°	264.8	350.3	477.5	552.6	563.0
80°	189.8	279.4	396.2	440.0	454.6
82.5°	133.5	214.8	291.9	321.1	329.5
85°	73.0	141.8	183.5	196.0	196.0
87.5°	31.3	60.5	73.0	75.1	77.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)