

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: P474428

Luminaire Tested: **24CZ2-75HE-HRP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474428
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-HRP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6308.4 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

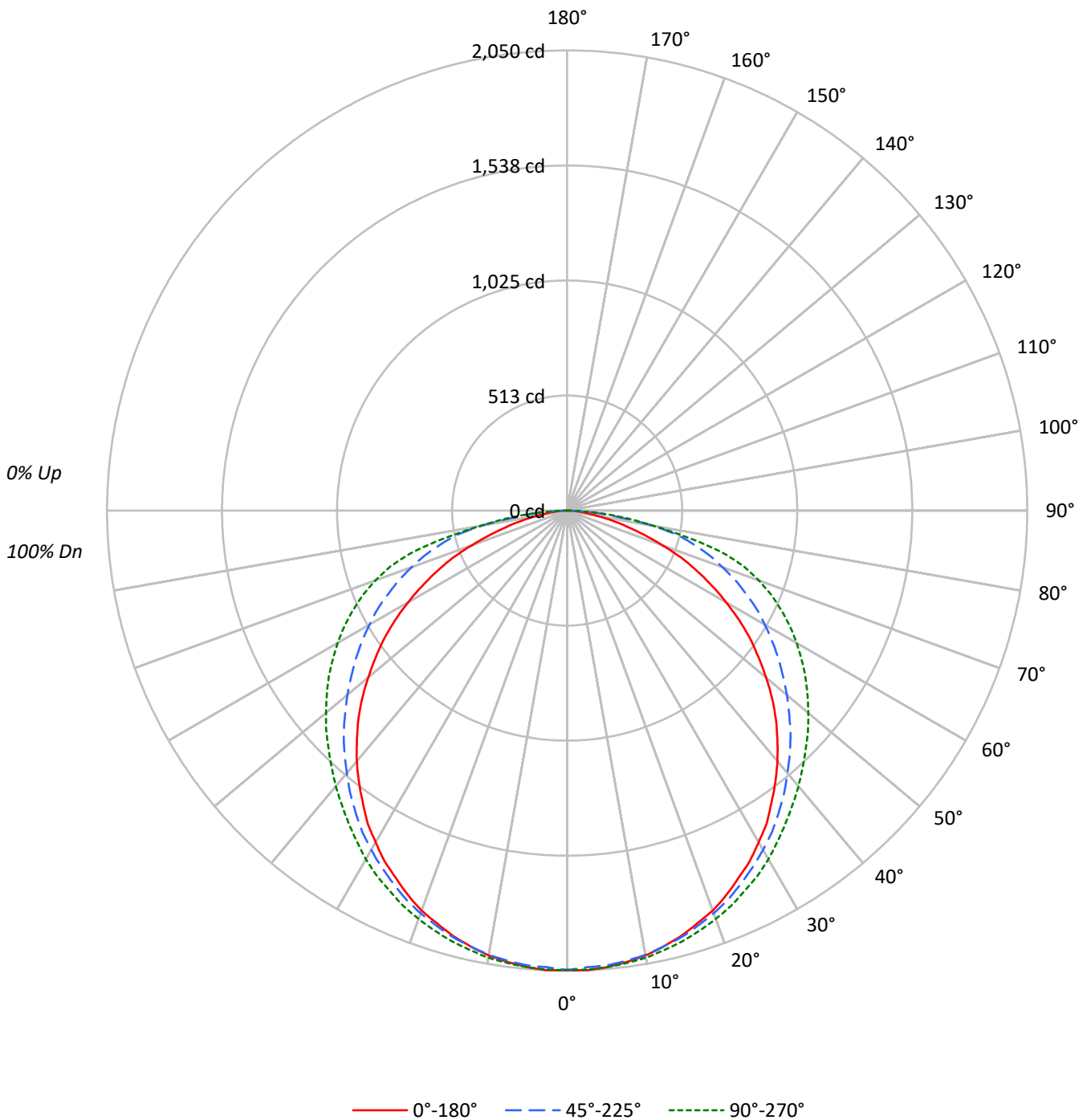
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90		92	90	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	59		68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	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	38		50	43	38		49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2754	2754	2754
5°	2757	2747	2757
10°	2749	2746	2764
15°	2733	2741	2766
20°	2715	2734	2772
25°	2682	2721	2776
30°	2651	2712	2786
35°	2607	2698	2789
40°	2560	2681	2816
45°	2503	2678	2859
50°	2422	2676	2936
55°	2335	2695	3042
60°	2203	2736	3176
65°	2035	2800	3355
70°	1777	2898	3574
75°	1442	3048	3693
80°	1065	2989	2989
85°	817	2201	2485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.9	3.1
10°-20°	556.8	8.8
20°-30°	847.6	13.4
30°-40°	1029.2	16.3
40°-50°	1087.4	17.2
50°-60°	1026.1	16.3
60°-70°	853.1	13.5
70°-80°	561.2	8.9
80°-90°	153.0	2.4
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°	1598.3	25.3
0°-40°	2627.5	41.7
0°-60°	4741.0	75.2
0°-90°	6308.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6308.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2047	2047	2047	2047	2047	
5°	2042	2042	2034	2042	2042	194
15°	1962	1965	1968	1986	1986	553
25°	1806	1817	1833	1865	1870	833
35°	1587	1606	1643	1685	1698	994
45°	1315	1342	1408	1476	1503	1013
55°	996	1038	1149	1257	1297	887
65°	639	713	880	1009	1054	632
75°	277	404	586	694	710	299
85°	53	116	143	159	161	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2046.7	2046.7	2046.7	2046.7	2046.7
2.5°	2049.5	2046.7	2036.2	2046.7	2046.7
5°	2041.6	2041.6	2033.5	2041.6	2041.6
7.5°	2028.3	2028.3	2022.9	2033.5	2033.5
10°	2012.3	2012.3	2009.9	2022.9	2022.9
12.5°	1988.7	1991.2	1988.7	2004.5	2004.5
15°	1962.2	1964.9	1967.6	1986.0	1986.0
17.5°	1928.0	1933.2	1938.6	1959.5	1962.2
20°	1896.3	1898.7	1909.3	1933.2	1935.9
22.5°	1854.0	1861.9	1875.2	1898.7	1906.9
25°	1806.3	1816.9	1832.9	1864.6	1869.7
27.5°	1761.6	1769.5	1790.6	1825.0	1835.6
30°	1706.0	1719.3	1745.6	1780.0	1793.3
32.5°	1653.2	1666.5	1698.2	1735.0	1745.6
35°	1587.3	1605.7	1642.6	1684.9	1698.2
37.5°	1523.9	1542.3	1587.3	1634.7	1650.7
40°	1457.7	1478.9	1526.6	1581.9	1603.0
42.5°	1386.5	1415.5	1468.3	1529.0	1552.9
45°	1315.2	1341.7	1407.6	1476.2	1502.7
47.5°	1238.7	1270.4	1341.7	1423.6	1455.3
50°	1156.9	1196.4	1278.3	1368.0	1402.4
52.5°	1075.0	1119.7	1212.2	1312.5	1349.6
55°	995.6	1037.9	1148.7	1257.2	1296.7
57.5°	908.6	961.4	1082.9	1198.9	1238.7
60°	818.6	876.9	1016.7	1138.2	1180.4
62.5°	728.9	795.0	953.3	1075.0	1119.7
65°	639.1	713.1	879.6	1008.9	1053.9
67.5°	551.9	633.7	810.7	940.3	985.0
70°	451.6	554.6	736.7	863.6	908.6
72.5°	359.1	478.1	665.4	784.4	824.0
75°	277.3	404.1	586.3	694.4	710.4
77.5°	203.3	330.1	504.4	541.3	544.0
80°	137.4	264.0	385.7	380.3	385.7
82.5°	89.7	198.1	242.9	272.1	274.6
85°	52.9	116.3	142.6	158.6	161.0
87.5°	26.3	39.6	50.1	52.9	58.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)