

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: P276101

Luminaire Tested: **24CZ2-60HE-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276101
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: 24CZ2-60HE-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5875.6 lumens
Efficiency: N/A
Efficacy: 129.7 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

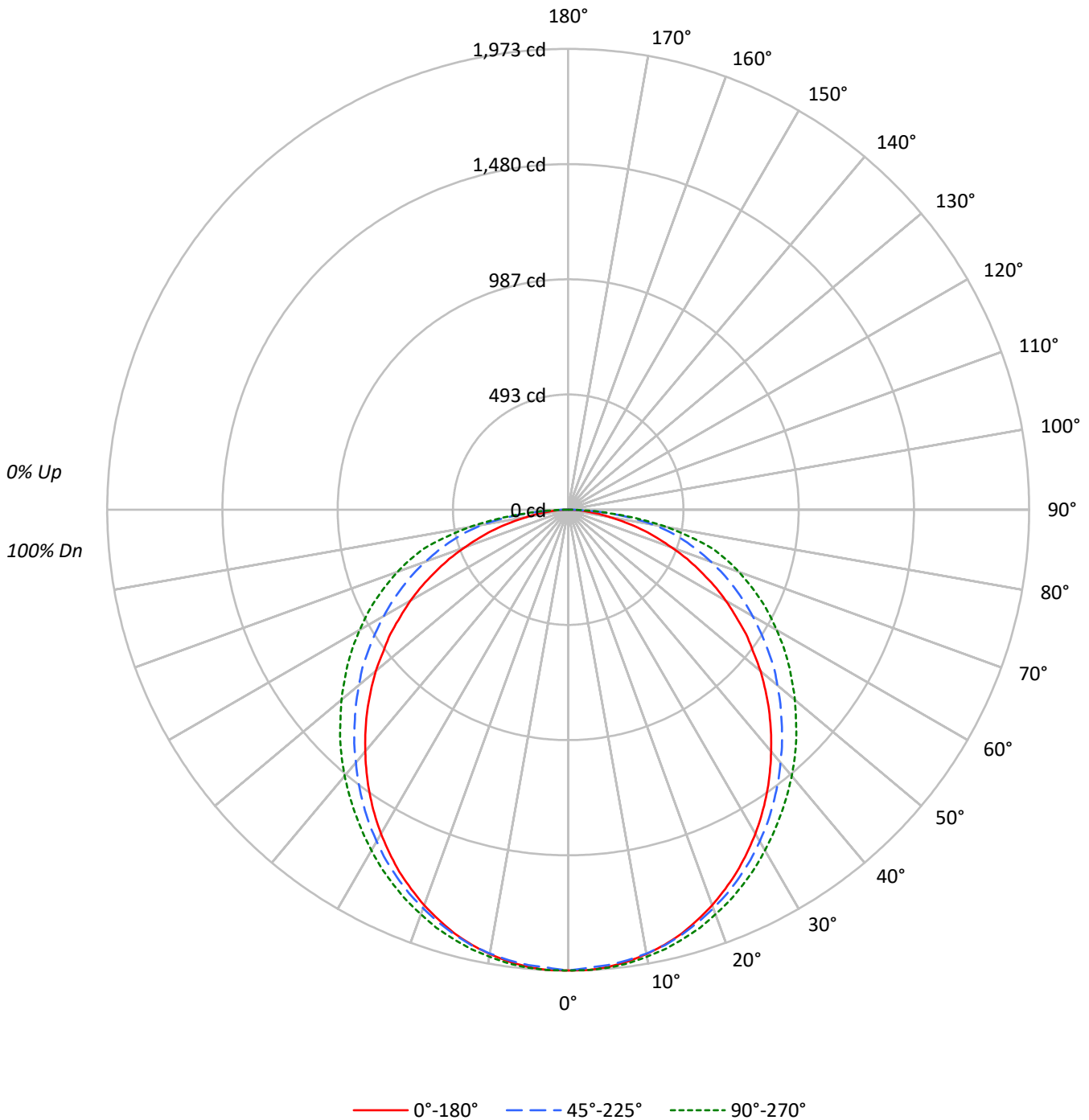
Input Watts (W): 45.291
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2654	2654	2654
5°	2654	2643	2659
10°	2639	2636	2655
15°	2617	2622	2650
20°	2580	2600	2639
25°	2538	2576	2629
30°	2489	2547	2617
35°	2435	2516	2609
40°	2373	2483	2614
45°	2313	2459	2627
50°	2249	2446	2652
55°	2180	2443	2700
60°	2095	2454	2770
65°	1985	2491	2890
70°	1844	2554	3055
75°	1682	2681	3313
80°	1382	2887	3312
85°	1059	2665	2845



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	3.2
10°-20°	532.6	9.1
20°-30°	801.6	13.6
30°-40°	960.6	16.3
40°-50°	1001.0	17.0
50°-60°	931.3	15.9
60°-70°	767.0	13.1
70°-80°	522.4	8.9
80°-90°	172.5	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°	1520.8	25.9
0°-40°	2481.3	42.2
0°-60°	4413.7	75.1
0°-90°	5875.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5875.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1965	1965	1957	1967	1969	186
15°	1879	1880	1882	1900	1902	529
25°	1710	1718	1735	1765	1771	787
35°	1482	1500	1532	1573	1588	927
45°	1216	1241	1292	1357	1380	938
55°	930	961	1041	1124	1151	829
65°	624	676	782	875	908	619
75°	324	396	516	608	637	341
85°	69	133	173	184	184	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1972.7	1972.7	1972.7	1972.7	1972.7
2.5°	1972.7	1972.7	1962.9	1972.7	1972.7
5°	1964.9	1964.9	1957.0	1966.8	1968.8
7.5°	1951.1	1953.1	1945.3	1957.0	1959.0
10°	1931.5	1933.5	1929.6	1941.3	1943.3
12.5°	1908.0	1910.0	1910.0	1923.7	1925.7
15°	1878.6	1880.5	1882.5	1900.2	1902.1
17.5°	1841.3	1847.2	1851.1	1872.7	1876.6
20°	1802.1	1808.0	1815.8	1839.4	1843.3
22.5°	1757.0	1764.9	1778.6	1804.1	1810.0
25°	1709.9	1717.8	1735.4	1764.9	1770.7
27.5°	1657.0	1668.8	1690.3	1721.7	1729.6
30°	1602.1	1613.9	1639.4	1672.7	1684.5
32.5°	1543.3	1559.0	1588.4	1625.6	1637.4
35°	1482.5	1500.1	1531.5	1572.7	1588.4
37.5°	1417.8	1437.4	1474.6	1519.7	1539.3
40°	1351.1	1374.6	1413.8	1466.8	1488.4
42.5°	1284.4	1306.0	1355.0	1411.9	1435.4
45°	1215.8	1241.3	1292.3	1357.0	1380.5
47.5°	1145.2	1170.7	1231.5	1300.1	1321.7
50°	1074.6	1100.1	1168.7	1241.3	1266.8
52.5°	998.1	1031.5	1109.9	1182.5	1207.9
55°	929.5	960.9	1041.3	1123.6	1151.1
57.5°	851.1	888.3	976.6	1062.8	1092.2
60°	778.5	817.7	911.8	1000.1	1029.5
62.5°	704.0	747.1	847.1	937.3	970.7
65°	623.6	676.5	782.4	874.6	907.9
67.5°	551.0	605.9	717.7	811.8	841.2
70°	468.7	535.3	649.1	743.2	776.5
72.5°	398.1	464.7	584.4	676.5	709.9
75°	323.6	396.1	515.7	607.9	637.3
77.5°	249.0	329.4	449.1	519.7	529.5
80°	178.4	262.8	372.6	413.8	427.5
82.5°	125.5	202.0	274.5	302.0	309.8
85°	68.6	133.3	172.6	184.3	184.3
87.5°	29.4	56.9	68.6	70.6	72.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)