

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: P261079

Luminaire Tested: **24CZ-LD5-60-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261079
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-60-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5648.1 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

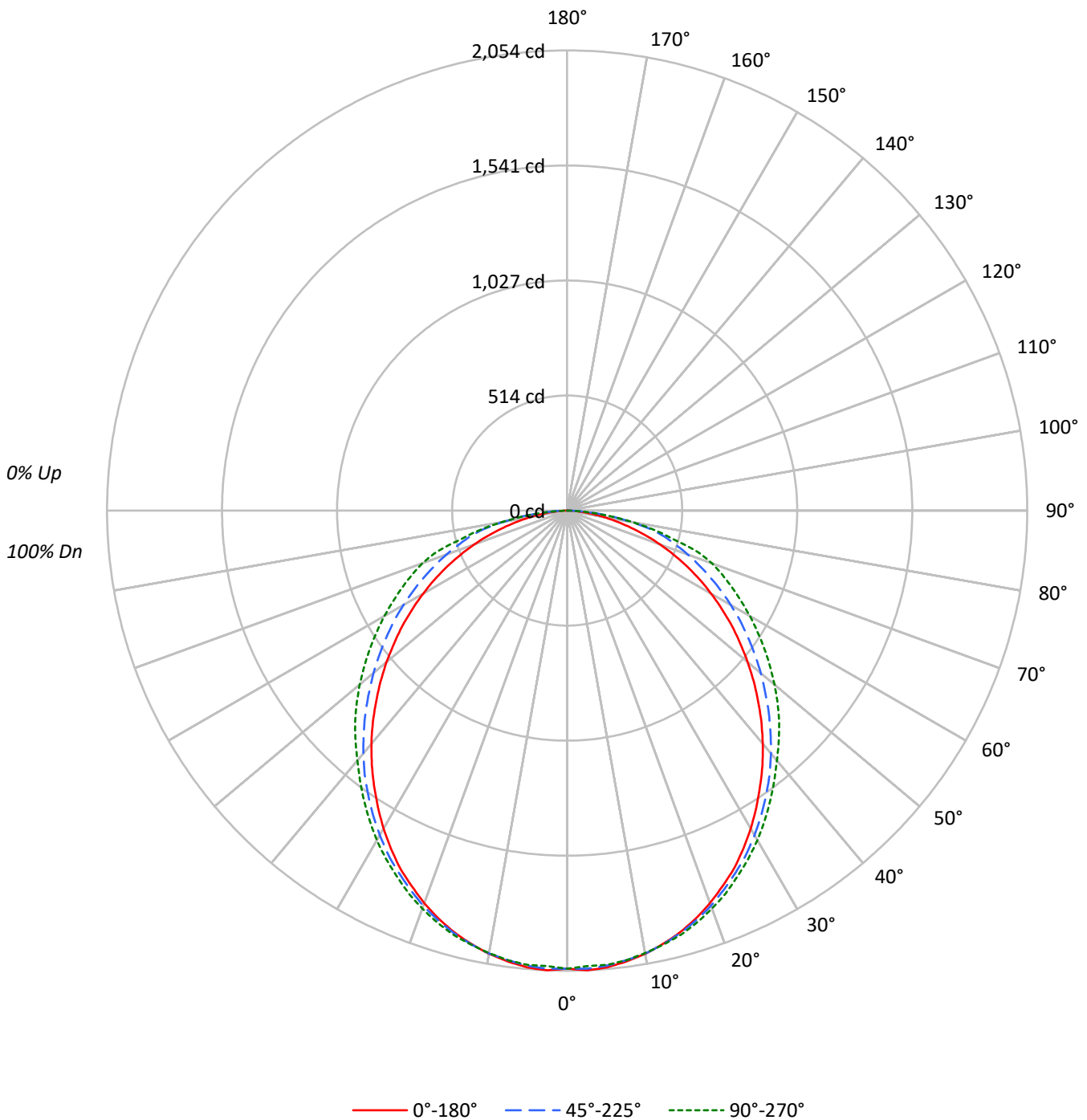
Input Watts (W): 45.418968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2751	2751	2751
5°	2764	2754	2749
10°	2745	2742	2740
15°	2715	2720	2730
20°	2669	2688	2707
25°	2617	2645	2673
30°	2546	2599	2639
35°	2466	2544	2596
40°	2387	2485	2558
45°	2296	2421	2546
50°	2203	2360	2529
55°	2107	2310	2522
60°	1998	2271	2534
65°	1879	2244	2585
70°	1730	2255	2706
75°	1534	2335	2521
80°	1282	2214	2272
85°	957	1769	1624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	3.4
10°-20°	549.8	9.7
20°-30°	819.4	14.5
30°-40°	964.5	17.1
40°-50°	980.1	17.4
50°-60°	881.2	15.6
60°-70°	696.2	12.3
70°-80°	441.7	7.8
80°-90°	121.9	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°	1562.5	27.7
0°-40°	2527.0	44.7
0°-60°	4388.4	77.7
0°-90°	5648.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5648.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2045	2045	2045	2045	2045	
5°	2047	2030	2039	2035	2035	194
15°	1949	1940	1953	1958	1960	549
25°	1763	1761	1782	1793	1800	811
35°	1502	1511	1549	1566	1580	939
45°	1206	1224	1272	1310	1338	931
55°	898	921	985	1049	1075	802
65°	590	620	705	782	812	585
75°	295	346	449	489	485	314
85°	62	107	115	105	105	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.7	2044.7	2044.7	2044.7	2044.7
2.5°	2054.1	2039.1	2046.6	2042.8	2035.3
5°	2046.6	2029.7	2039.1	2035.3	2035.3
7.5°	2029.7	2016.5	2024.1	2022.2	2024.1
10°	2009.0	1995.9	2007.1	2007.1	2005.3
12.5°	1980.8	1969.6	1982.7	1982.7	1984.6
15°	1948.9	1939.5	1952.6	1958.3	1960.2
17.5°	1909.4	1900.0	1916.9	1922.6	1928.2
20°	1864.3	1860.5	1877.5	1883.1	1890.6
22.5°	1813.6	1813.6	1830.5	1838.0	1849.3
25°	1762.8	1760.9	1781.6	1792.9	1800.4
27.5°	1702.7	1704.6	1730.9	1742.2	1751.5
30°	1638.8	1642.5	1672.6	1685.8	1698.9
32.5°	1571.1	1578.6	1612.5	1627.5	1640.7
35°	1501.6	1511.0	1548.6	1565.5	1580.5
37.5°	1432.1	1445.2	1484.7	1501.6	1518.5
40°	1358.8	1370.0	1415.1	1435.8	1456.5
42.5°	1283.6	1298.6	1343.7	1373.8	1398.2
45°	1206.5	1223.5	1272.3	1309.9	1338.1
47.5°	1129.5	1152.0	1199.0	1249.8	1274.2
50°	1052.4	1075.0	1127.6	1184.0	1208.4
52.5°	973.5	996.1	1056.2	1114.5	1140.8
55°	898.3	920.9	984.8	1048.7	1075.0
57.5°	819.4	843.8	915.2	981.0	1007.3
60°	742.3	766.8	843.8	913.4	941.6
62.5°	667.2	693.5	774.3	847.6	875.8
65°	590.1	620.2	704.8	781.8	811.9
67.5°	514.9	548.8	637.1	717.9	749.9
70°	439.8	479.2	573.2	655.9	687.8
72.5°	366.5	409.7	509.3	592.0	608.9
75°	295.1	345.8	449.2	488.6	484.9
77.5°	227.4	283.8	381.5	389.0	400.3
80°	165.4	227.4	285.7	300.7	293.2
82.5°	109.0	171.0	204.8	197.3	195.5
85°	62.0	107.1	114.6	105.2	105.2
87.5°	26.3	43.2	37.6	28.2	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)