

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: P260994

Luminaire Tested: **24CZ-LD5-50-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260994  
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-LD5-50-S-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5383.0 lumens  
Efficiency: N/A  
Efficacy: 147.3 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

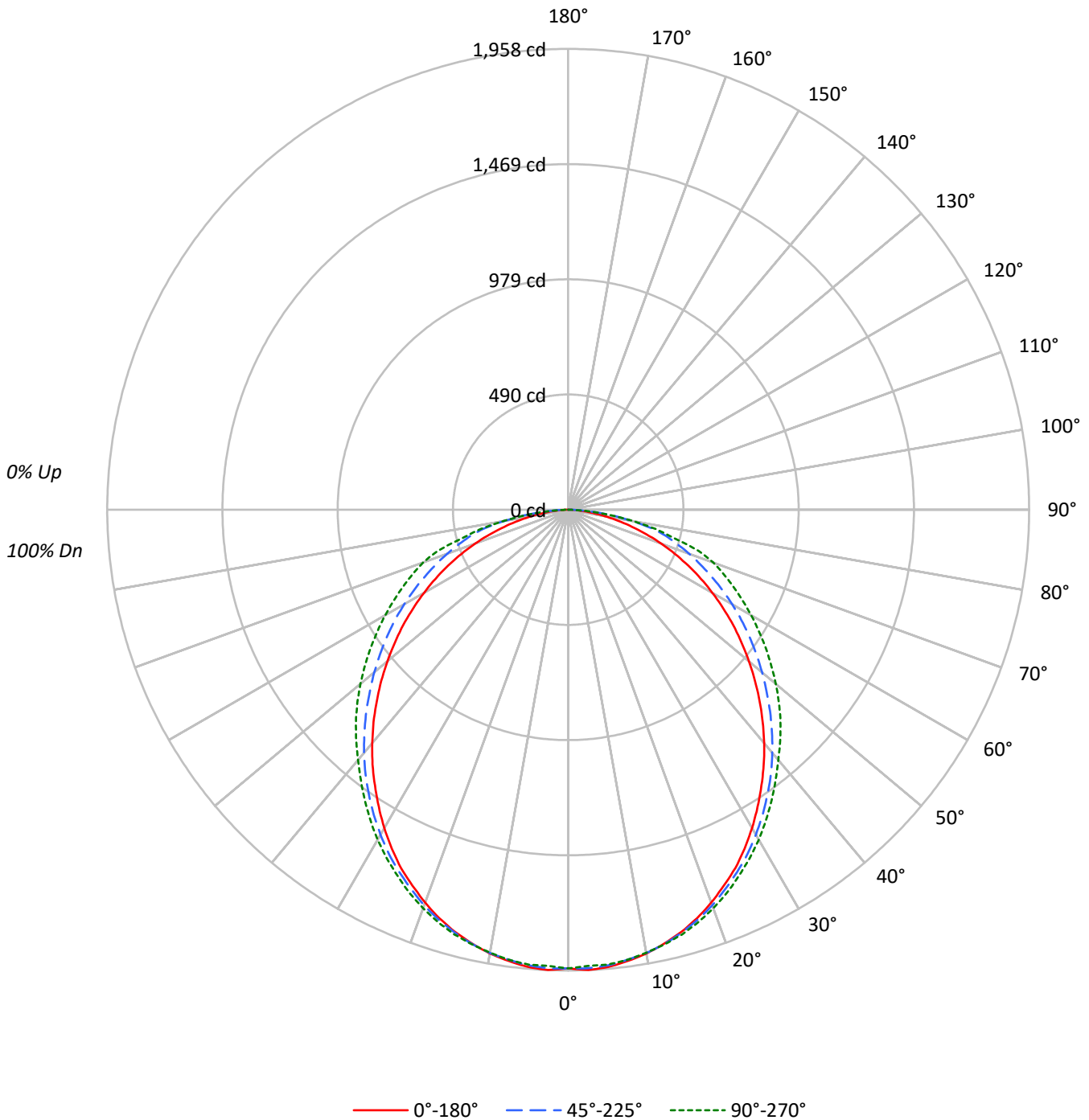
Input Watts (W): 36.533376  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2622	2622	2622
5°	2634	2625	2620
10°	2616	2613	2611
15°	2587	2592	2602
20°	2544	2562	2580
25°	2494	2521	2547
30°	2427	2477	2516
35°	2351	2424	2474
40°	2275	2369	2438
45°	2188	2307	2427
50°	2099	2250	2411
55°	2008	2202	2403
60°	1904	2164	2415
65°	1791	2138	2464
70°	1649	2149	2579
75°	1462	2226	2402
80°	1221	2110	2165
85°	912	1687	1548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.2	3.4
10°-20°	524.0	9.7
20°-30°	780.9	14.5
30°-40°	919.2	17.1
40°-50°	934.1	17.4
50°-60°	839.9	15.6
60°-70°	663.5	12.3
70°-80°	420.9	7.8
80°-90°	116.2	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°	1489.1	27.7
0°-40°	2408.4	44.7
0°-60°	4182.4	77.7
0°-90°	5383.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5383.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1950	1934	1943	1940	1940	185
15°	1857	1848	1861	1866	1868	523
25°	1680	1678	1698	1709	1716	772
35°	1431	1440	1476	1492	1506	895
45°	1150	1166	1213	1248	1275	887
55°	856	878	939	999	1024	765
65°	562	591	672	745	774	557
75°	281	330	428	466	462	299
85°	59	102	109	100	100	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1948.7	1948.7	1948.7	1948.7	1948.7
2.5°	1957.7	1943.4	1950.5	1947.0	1939.8
5°	1950.5	1934.4	1943.4	1939.8	1939.8
7.5°	1934.4	1921.9	1929.0	1927.3	1929.0
10°	1914.7	1902.2	1912.9	1912.9	1911.1
12.5°	1887.8	1877.1	1889.6	1889.6	1891.4
15°	1857.4	1848.4	1861.0	1866.4	1868.1
17.5°	1819.8	1810.8	1826.9	1832.3	1837.7
20°	1776.8	1773.2	1789.3	1794.7	1801.9
22.5°	1728.4	1728.4	1744.6	1751.7	1762.5
25°	1680.1	1678.3	1698.0	1708.7	1715.9
27.5°	1622.8	1624.6	1649.6	1660.4	1669.3
30°	1561.9	1565.4	1594.1	1606.6	1619.2
32.5°	1497.4	1504.5	1536.8	1551.1	1563.7
35°	1431.1	1440.1	1475.9	1492.0	1506.3
37.5°	1364.8	1377.4	1415.0	1431.1	1447.2
40°	1295.0	1305.7	1348.7	1368.4	1388.1
42.5°	1223.3	1237.7	1280.7	1309.3	1332.6
45°	1149.9	1166.0	1212.6	1248.4	1275.3
47.5°	1076.5	1098.0	1142.7	1191.1	1214.4
50°	1003.0	1024.5	1074.7	1128.4	1151.7
52.5°	927.8	949.3	1006.6	1062.1	1087.2
55°	856.2	877.7	938.6	999.4	1024.5
57.5°	780.9	804.2	872.3	935.0	960.0
60°	707.5	730.8	804.2	870.5	897.4
62.5°	635.8	660.9	737.9	807.8	834.7
65°	562.4	591.1	671.7	745.1	773.8
67.5°	490.8	523.0	607.2	684.2	714.7
70°	419.1	456.7	546.3	625.1	655.6
72.5°	349.3	390.5	485.4	564.2	580.3
75°	281.2	329.6	428.1	465.7	462.1
77.5°	216.7	270.5	363.6	370.8	381.5
80°	157.6	216.7	272.3	286.6	279.4
82.5°	103.9	163.0	195.2	188.1	186.3
85°	59.1	102.1	109.3	100.3	100.3
87.5°	25.1	41.2	35.8	26.9	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)