

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: P260995

Luminaire Tested: **24CZ-LD5-50-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260995
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-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5434.0 lumens
Efficiency: N/A
Efficacy: 145.1 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

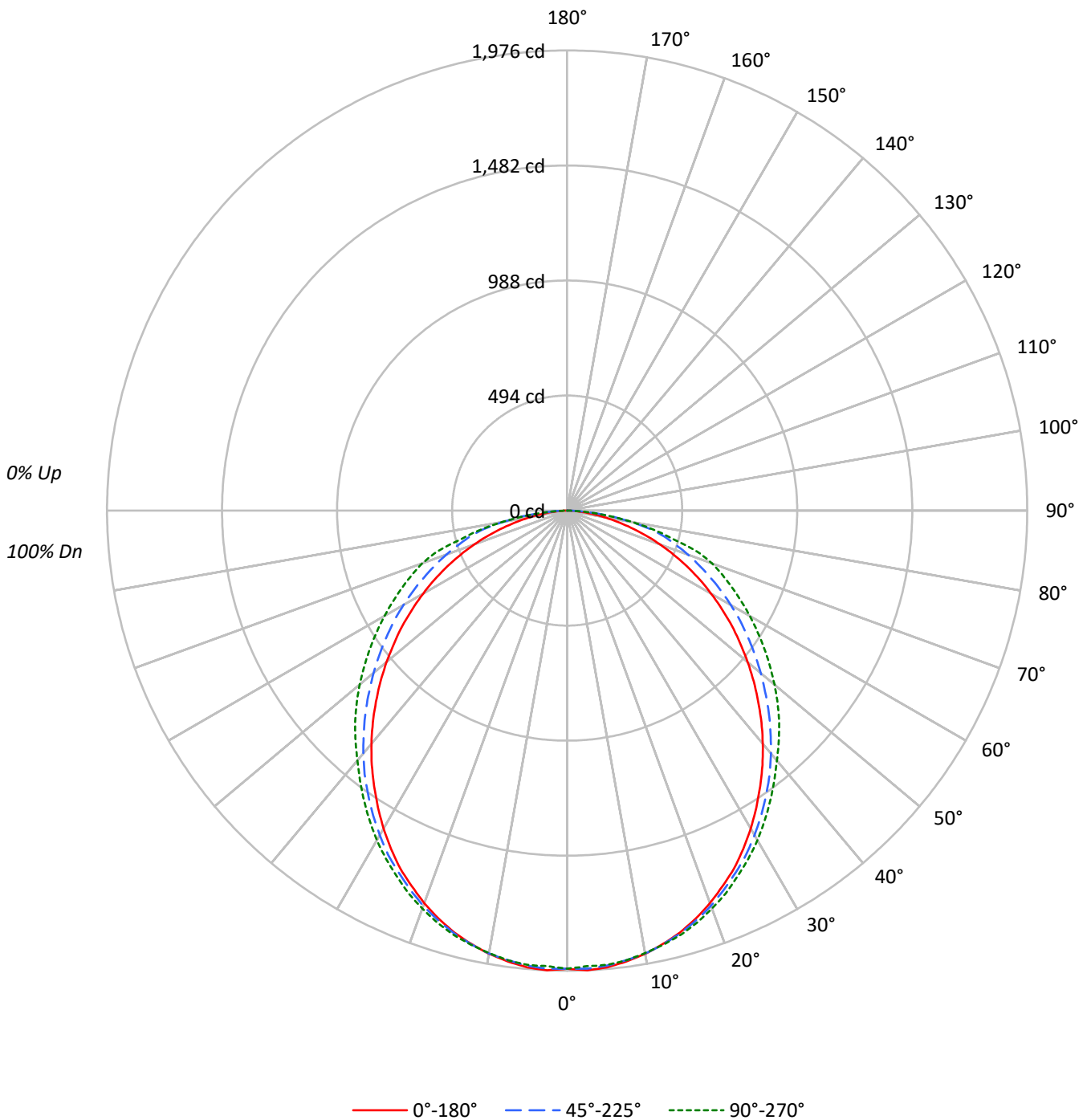
Input Watts (W): 37.461888
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2647	2647	2647
5°	2659	2650	2645
10°	2641	2638	2636
15°	2612	2617	2627
20°	2568	2586	2604
25°	2518	2545	2572
30°	2450	2500	2539
35°	2373	2447	2498
40°	2296	2391	2461
45°	2209	2329	2450
50°	2119	2271	2434
55°	2027	2222	2426
60°	1922	2185	2438
65°	1807	2159	2487
70°	1664	2170	2603
75°	1476	2246	2425
80°	1233	2129	2186
85°	922	1703	1564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	3.4
10°-20°	529.0	9.7
20°-30°	788.3	14.5
30°-40°	927.9	17.1
40°-50°	943.0	17.4
50°-60°	847.8	15.6
60°-70°	669.8	12.3
70°-80°	424.9	7.8
80°-90°	117.3	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°	1503.2	27.7
0°-40°	2431.2	44.7
0°-60°	4222.0	77.7
0°-90°	5434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5434.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1967	1967	1967	1967	1967	
5°	1969	1953	1962	1958	1958	187
15°	1875	1866	1879	1884	1886	528
25°	1696	1694	1714	1725	1732	780
35°	1445	1454	1490	1506	1521	904
45°	1161	1177	1224	1260	1287	896
55°	864	886	947	1009	1034	772
65°	568	597	678	752	781	562
75°	284	333	432	470	466	302
85°	60	103	110	101	101	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1967.2	1967.2	1967.2	1967.2	1967.2
2.5°	1976.2	1961.8	1969.0	1965.4	1958.2
5°	1969.0	1952.7	1961.8	1958.2	1958.2
7.5°	1952.7	1940.1	1947.3	1945.5	1947.3
10°	1932.9	1920.2	1931.0	1931.0	1929.2
12.5°	1905.7	1894.9	1907.5	1907.5	1909.3
15°	1875.0	1866.0	1878.6	1884.0	1885.8
17.5°	1837.0	1828.0	1844.3	1849.7	1855.1
20°	1793.6	1790.0	1806.3	1811.7	1818.9
22.5°	1744.8	1744.8	1761.1	1768.3	1779.2
25°	1696.0	1694.2	1714.1	1724.9	1732.2
27.5°	1638.1	1639.9	1665.3	1676.1	1685.1
30°	1576.7	1580.3	1609.2	1621.9	1634.5
32.5°	1511.6	1518.8	1551.3	1565.8	1578.5
35°	1444.7	1453.7	1489.9	1506.1	1520.6
37.5°	1377.8	1390.4	1428.4	1444.7	1460.9
40°	1307.3	1318.1	1361.5	1381.4	1401.3
42.5°	1234.9	1249.4	1292.8	1321.7	1345.2
45°	1160.8	1177.1	1224.1	1260.2	1287.4
47.5°	1086.7	1108.4	1153.6	1202.4	1225.9
50°	1012.5	1034.2	1084.9	1139.1	1162.6
52.5°	936.6	958.3	1016.1	1072.2	1097.5
55°	864.3	886.0	947.4	1008.9	1034.2
57.5°	788.3	811.8	880.5	943.8	969.1
60°	714.2	737.7	811.8	878.7	905.9
62.5°	641.9	667.2	744.9	815.5	842.6
65°	567.7	596.7	678.0	752.2	781.1
67.5°	495.4	528.0	612.9	690.7	721.4
70°	423.1	461.1	551.5	631.0	661.8
72.5°	352.6	394.2	490.0	569.6	585.8
75°	283.9	332.7	432.1	470.1	466.5
77.5°	218.8	273.0	367.0	374.3	385.1
80°	159.1	218.8	274.8	289.3	282.1
82.5°	104.9	164.5	197.1	189.9	188.0
85°	59.7	103.1	110.3	101.3	101.3
87.5°	25.3	41.6	36.2	27.1	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)