

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: P260574

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-50-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5277.0 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

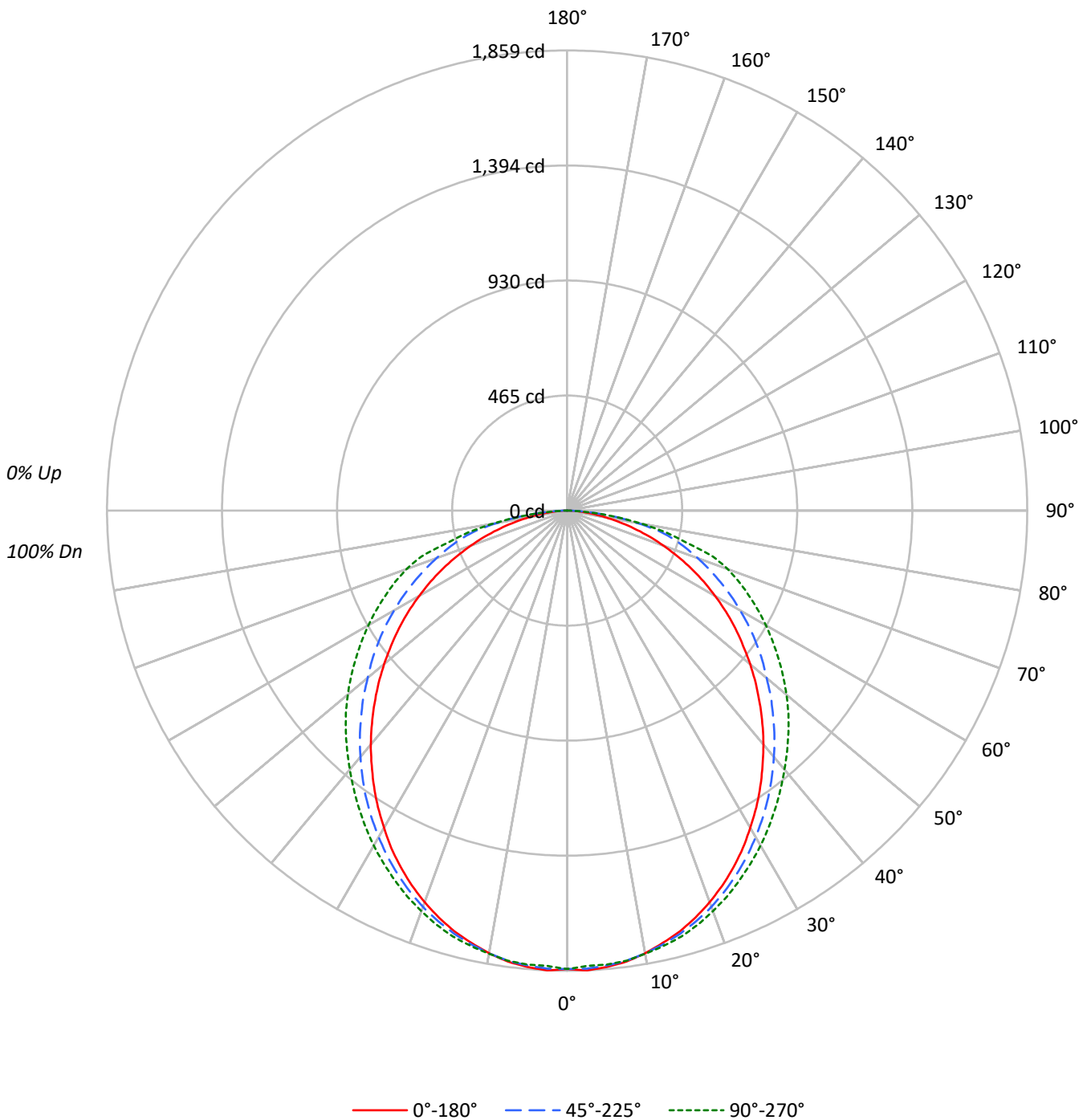
Input Watts (W): 36.533376
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2492	2492	2492
5°	2499	2492	2487
10°	2481	2481	2483
15°	2451	2464	2482
20°	2411	2440	2465
25°	2360	2406	2446
30°	2299	2366	2428
35°	2235	2327	2410
40°	2167	2282	2399
45°	2094	2238	2406
50°	2020	2201	2420
55°	1945	2187	2445
60°	1857	2173	2494
65°	1760	2174	2577
70°	1628	2210	2715
75°	1456	2311	2583
80°	1218	2212	2366
85°	920	1701	1618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.0	3.3
10°-20°	498.1	9.4
20°-30°	744.6	14.1
30°-40°	883.3	16.7
40°-50°	909.2	17.2
50°-60°	834.1	15.8
60°-70°	674.4	12.8
70°-80°	437.7	8.3
80°-90°	120.7	2.3
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°	1417.7	26.9
0°-40°	2301.0	43.6
0°-60°	4044.3	76.6
0°-90°	5277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1852	1852	1852	1852	1852	
5°	1850	1838	1845	1843	1841	176
15°	1760	1753	1769	1776	1782	496
25°	1590	1592	1621	1635	1648	732
35°	1360	1371	1416	1447	1467	851
45°	1100	1118	1176	1232	1265	849
55°	829	855	932	1008	1042	741
65°	553	585	683	773	809	546
75°	280	332	444	497	497	298
85°	60	101	110	107	105	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1852.0	1852.0	1852.0	1852.0	1852.0
2.5°	1859.2	1844.7	1852.0	1850.1	1841.1
5°	1850.1	1837.5	1844.7	1842.9	1841.1
7.5°	1837.5	1824.9	1833.9	1832.1	1833.9
10°	1815.8	1805.0	1815.8	1817.6	1817.6
12.5°	1788.7	1779.7	1794.1	1797.7	1801.4
15°	1759.8	1752.6	1768.8	1776.1	1781.5
17.5°	1723.7	1718.3	1738.1	1747.2	1754.4
20°	1683.9	1682.1	1703.8	1712.8	1721.9
22.5°	1638.8	1638.8	1664.0	1674.9	1687.5
25°	1590.0	1591.8	1620.7	1635.1	1647.8
27.5°	1537.6	1539.4	1573.7	1591.8	1606.2
30°	1479.8	1487.0	1523.1	1546.6	1562.9
32.5°	1421.9	1431.0	1470.7	1497.8	1515.9
35°	1360.5	1371.3	1416.5	1447.2	1467.1
37.5°	1297.3	1309.9	1358.7	1393.0	1416.5
40°	1234.0	1248.5	1299.1	1338.8	1365.9
42.5°	1167.2	1183.4	1239.5	1286.4	1315.3
45°	1100.3	1118.4	1176.2	1232.2	1264.7
47.5°	1033.5	1055.2	1116.6	1178.0	1212.4
50°	964.8	986.5	1051.5	1122.0	1156.3
52.5°	896.2	921.5	993.7	1066.0	1100.3
55°	829.3	854.6	932.3	1008.2	1042.5
57.5°	760.7	786.0	870.9	950.4	984.7
60°	690.2	719.1	807.6	888.9	926.9
62.5°	621.5	652.2	746.2	832.9	869.1
65°	552.9	585.4	683.0	773.3	809.4
67.5°	482.4	520.4	621.5	713.7	751.6
70°	413.8	455.3	561.9	654.1	690.2
72.5°	346.9	392.1	502.3	596.2	617.9
75°	280.1	332.4	444.5	496.9	496.9
77.5°	216.8	274.6	379.4	399.3	410.1
80°	157.2	220.4	285.5	309.0	305.3
82.5°	104.8	168.0	204.2	204.2	198.7
85°	59.6	101.2	110.2	106.6	104.8
87.5°	25.3	37.9	34.3	27.1	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)