

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: P229979

Luminaire Tested: **24CZ-LD5-55-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229979  
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-LD5-55-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5283.0 lumens  
Efficiency: N/A  
Efficacy: 115.3 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

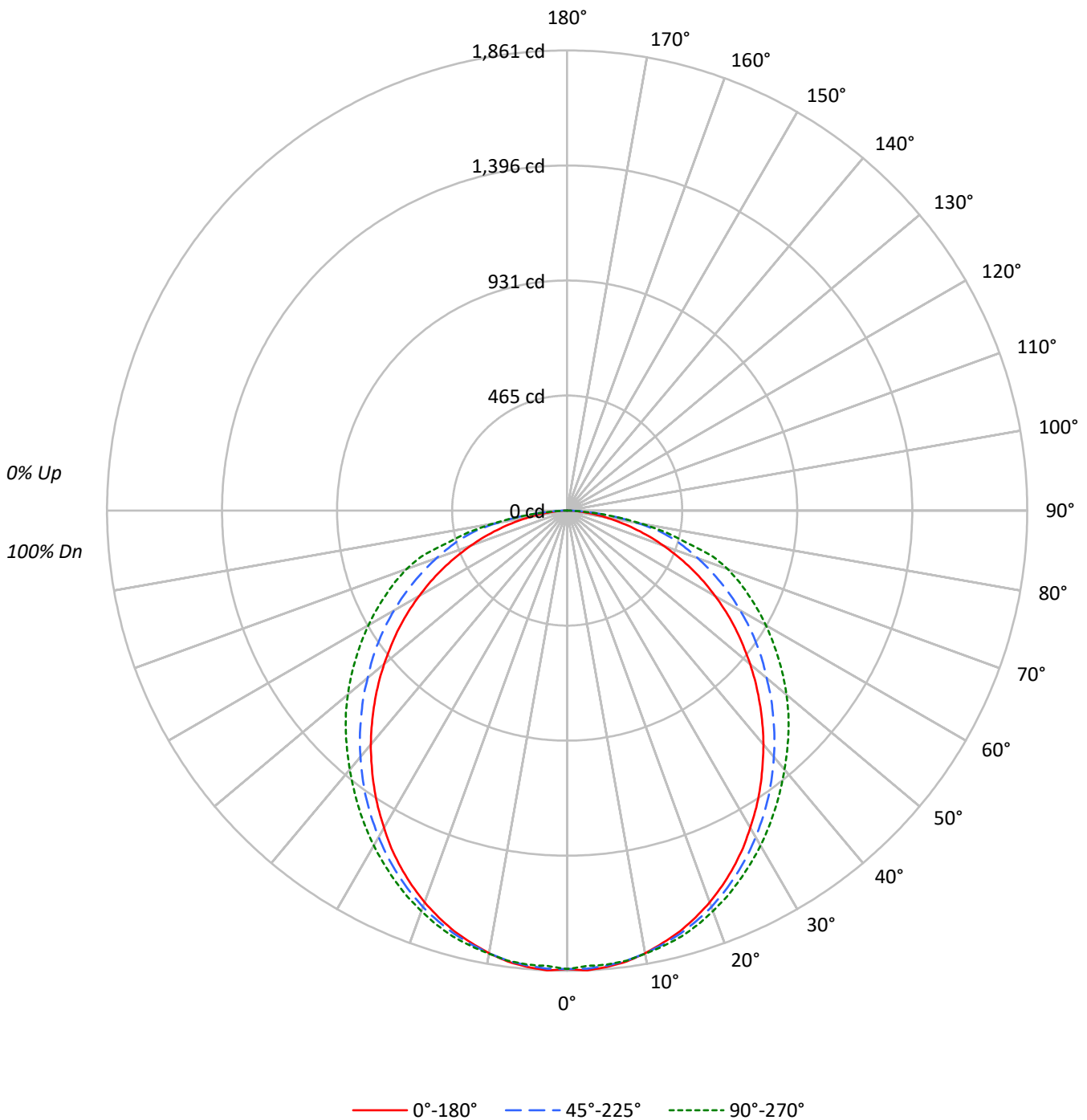
Input Watts (W): 45.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2495	2495	2495
5°	2502	2494	2489
10°	2484	2484	2486
15°	2454	2467	2484
20°	2414	2442	2468
25°	2363	2409	2449
30°	2302	2369	2431
35°	2237	2329	2413
40°	2170	2284	2402
45°	2096	2241	2409
50°	2022	2204	2423
55°	1948	2190	2448
60°	1859	2176	2497
65°	1762	2177	2580
70°	1629	2213	2718
75°	1458	2313	2586
80°	1220	2214	2369
85°	922	1703	1619



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.2	3.3
10°-20°	498.6	9.4
20°-30°	745.5	14.1
30°-40°	884.3	16.7
40°-50°	910.2	17.2
50°-60°	835.0	15.8
60°-70°	675.1	12.8
70°-80°	438.2	8.3
80°-90°	120.8	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°	1419.3	26.9
0°-40°	2303.6	43.6
0°-60°	4048.9	76.6
0°-90°	5283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5283.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1852	1840	1847	1845	1843	176
15°	1762	1755	1771	1778	1784	496
25°	1592	1594	1622	1637	1650	733
35°	1362	1373	1418	1449	1469	852
45°	1102	1120	1178	1234	1266	850
55°	830	856	933	1009	1044	742
65°	554	586	684	774	810	547
75°	280	333	445	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°	1854.1	1854.1	1854.1	1854.1	1854.1
2.5°	1861.3	1846.8	1854.1	1852.2	1843.2
5°	1852.2	1839.6	1846.8	1845.0	1843.2
7.5°	1839.6	1826.9	1836.0	1834.2	1836.0
10°	1817.9	1807.0	1817.9	1819.7	1819.7
12.5°	1790.7	1781.7	1796.2	1799.8	1803.4
15°	1761.8	1754.6	1770.9	1778.1	1783.5
17.5°	1725.6	1720.2	1740.1	1749.1	1756.4
20°	1685.8	1684.0	1705.7	1714.8	1723.8
22.5°	1640.6	1640.6	1665.9	1676.8	1689.5
25°	1591.8	1593.6	1622.5	1637.0	1649.7
27.5°	1539.3	1541.1	1575.5	1593.6	1608.1
30°	1481.4	1488.7	1524.8	1548.4	1564.6
32.5°	1423.6	1432.6	1472.4	1499.5	1517.6
35°	1362.1	1372.9	1418.1	1448.9	1468.8
37.5°	1298.7	1311.4	1360.2	1394.6	1418.1
40°	1235.4	1249.9	1300.6	1340.3	1367.5
42.5°	1168.5	1184.8	1240.9	1287.9	1316.8
45°	1101.6	1119.7	1177.6	1233.6	1266.2
47.5°	1034.7	1056.4	1117.9	1179.4	1213.7
50°	965.9	987.6	1052.7	1123.3	1157.7
52.5°	897.2	922.5	994.9	1067.2	1101.6
55°	830.3	855.6	933.4	1009.3	1043.7
57.5°	761.5	786.8	871.9	951.4	985.8
60°	691.0	719.9	808.6	889.9	927.9
62.5°	622.2	653.0	747.0	833.9	870.1
65°	553.5	586.1	683.7	774.2	810.4
67.5°	483.0	520.9	622.2	714.5	752.5
70°	414.2	455.8	562.5	654.8	691.0
72.5°	347.3	392.5	502.9	596.9	618.6
75°	280.4	332.8	445.0	497.4	497.4
77.5°	217.1	274.9	379.9	399.8	410.6
80°	157.4	220.7	285.8	309.3	305.7
82.5°	104.9	168.2	204.4	204.4	199.0
85°	59.7	101.3	110.3	106.7	104.9
87.5°	25.3	38.0	34.4	27.1	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)