

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: P230055

Luminaire Tested: **24CZ-LD5-60-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230055  
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-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

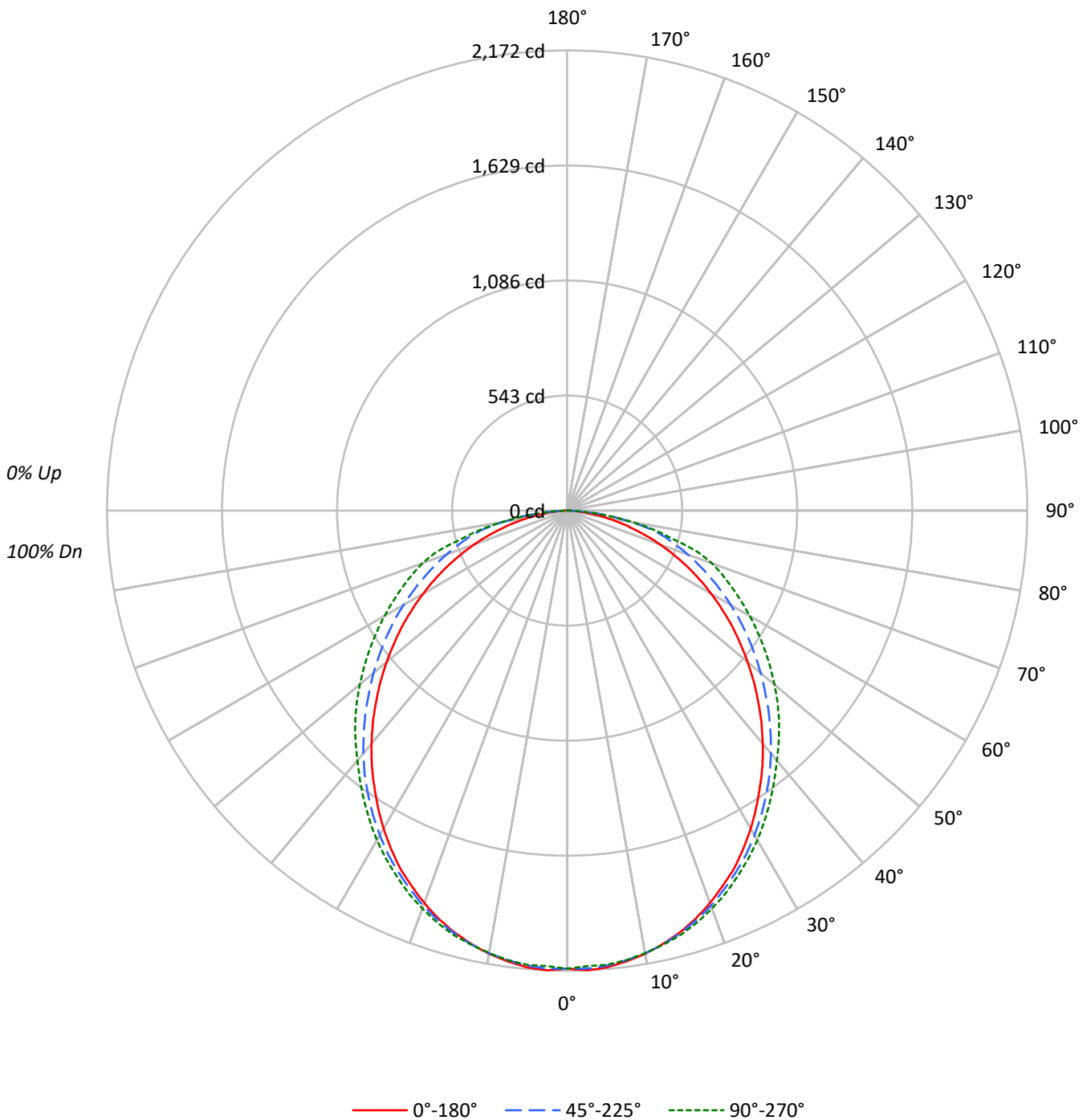
Lumens per Lamp: N/A  
Luminaire Lumens: 5972.0 lumens  
Efficiency: N/A  
Efficacy: 114.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 52.17  
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°	2909	2909	2909
5°	2923	2912	2907
10°	2902	2899	2897
15°	2870	2876	2887
20°	2822	2842	2862
25°	2767	2797	2826
30°	2692	2748	2791
35°	2608	2689	2745
40°	2523	2628	2705
45°	2427	2560	2692
50°	2329	2496	2674
55°	2228	2442	2666
60°	2112	2401	2679
65°	1987	2372	2733
70°	1829	2384	2861
75°	1622	2469	2665
80°	1355	2340	2402
85°	1013	1871	1718



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.4	3.4
10°-20°	581.3	9.7
20°-30°	866.3	14.5
30°-40°	1019.8	17.1
40°-50°	1036.4	17.4
50°-60°	931.8	15.6
60°-70°	736.1	12.3
70°-80°	467.0	7.8
80°-90°	128.9	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°	1652.1	27.7
0°-40°	2671.9	44.7
0°-60°	4640.0	77.7
0°-90°	5972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5972.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2162	2162	2162	2162	2162	
5°	2164	2146	2156	2152	2152	205
15°	2061	2051	2065	2071	2073	580
25°	1864	1862	1884	1896	1904	857
35°	1588	1598	1637	1655	1671	993
45°	1276	1294	1345	1385	1415	984
55°	950	974	1041	1109	1137	848
65°	624	656	745	827	858	618
75°	312	366	475	517	513	332
85°	66	113	121	111	111	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2162.0	2162.0	2162.0	2162.0	2162.0
2.5°	2171.9	2156.0	2164.0	2160.0	2152.0
5°	2164.0	2146.1	2156.0	2152.0	2152.0
7.5°	2146.1	2132.2	2140.1	2138.1	2140.1
10°	2124.2	2110.3	2122.2	2122.2	2120.2
12.5°	2094.4	2082.5	2096.4	2096.4	2098.4
15°	2060.6	2050.7	2064.6	2070.6	2072.6
17.5°	2018.9	2009.0	2026.9	2032.8	2038.8
20°	1971.2	1967.2	1985.1	1991.1	1999.0
22.5°	1917.6	1917.6	1935.4	1943.4	1955.3
25°	1863.9	1861.9	1883.8	1895.7	1903.6
27.5°	1800.3	1802.3	1830.1	1842.0	1852.0
30°	1732.8	1736.7	1768.5	1782.4	1796.3
32.5°	1661.2	1669.2	1704.9	1720.8	1734.7
35°	1587.7	1597.6	1637.4	1655.3	1671.2
37.5°	1514.2	1528.1	1569.8	1587.7	1605.6
40°	1436.7	1448.6	1496.3	1518.2	1540.0
42.5°	1357.2	1373.1	1420.8	1452.6	1478.4
45°	1275.7	1293.6	1345.3	1385.0	1414.8
47.5°	1194.3	1218.1	1267.8	1321.4	1347.3
50°	1112.8	1136.6	1192.3	1251.9	1277.7
52.5°	1029.3	1053.2	1116.8	1178.4	1206.2
55°	949.8	973.7	1041.2	1108.8	1136.6
57.5°	866.4	892.2	967.7	1037.3	1065.1
60°	784.9	810.7	892.2	965.7	995.5
62.5°	705.4	733.2	818.7	896.2	926.0
65°	624.0	655.7	745.2	826.6	858.4
67.5°	544.5	580.2	673.6	759.1	792.9
70°	465.0	506.7	606.1	693.5	727.3
72.5°	387.5	433.2	538.5	625.9	643.8
75°	312.0	365.6	474.9	516.6	512.7
77.5°	240.4	300.1	403.4	411.3	423.3
80°	174.9	240.4	302.0	317.9	310.0
82.5°	115.3	180.8	216.6	208.6	206.7
85°	65.6	113.3	121.2	111.3	111.3
87.5°	27.8	45.7	39.7	29.8	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)