

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: P#

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
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-LD5-50SE-S-UNV-L840-CD1-U  
Description: CRUZE 2x4 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

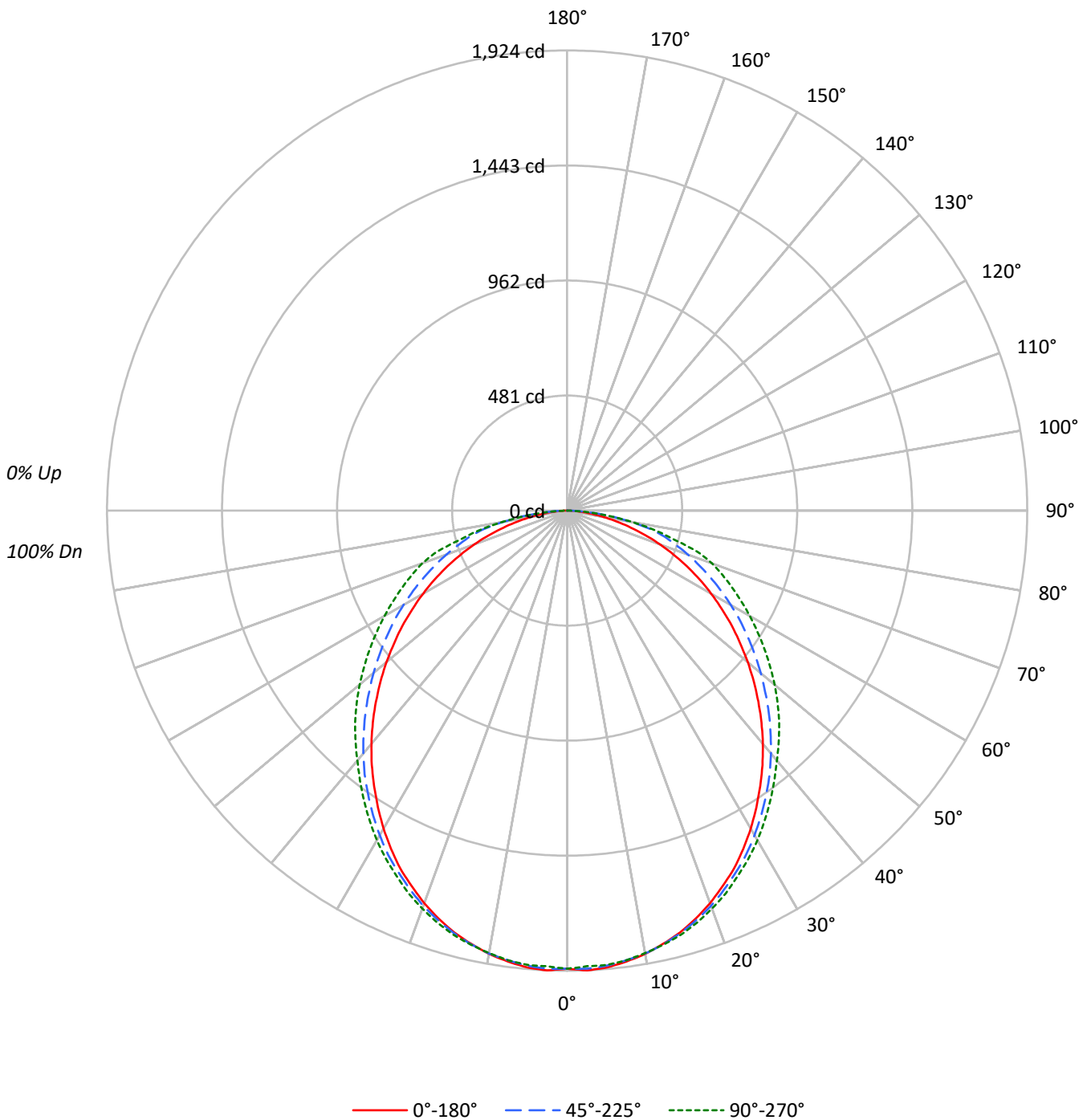
Lumens per Lamp: N/A  
Luminaire Lumens: 5291.5 lumens  
Efficiency: N/A  
Efficacy: 113.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 46.56  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2577	2577	2577
5°	2584	2568	2564
10°	2560	2545	2544
15°	2526	2512	2524
20°	2478	2471	2491
25°	2424	2418	2447
30°	2351	2362	2403
35°	2271	2298	2350
40°	2190	2229	2300
45°	2098	2154	2272
50°	2004	2080	2236
55°	1906	2012	2205
60°	1794	1948	2185
65°	1671	1888	2187
70°	1517	1844	2229
75°	1314	1826	1990
80°	1051	1594	1658
85°	698	1032	969



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.1	3.4
10°-20°	515.1	9.7
20°-30°	767.6	14.5
30°-40°	903.6	17.1
40°-50°	918.3	17.4
50°-60°	825.6	15.6
60°-70°	652.2	12.3
70°-80°	413.8	7.8
80°-90°	114.2	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°	1463.8	27.7
0°-40°	2367.4	44.7
0°-60°	4111.3	77.7
0°-90°	5291.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5291.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1916	1916	1916	1916	1916	
5°	1917	1902	1910	1907	1907	182
15°	1826	1817	1829	1835	1836	514
25°	1652	1650	1669	1680	1687	759
35°	1407	1416	1451	1467	1481	880
45°	1130	1146	1192	1227	1254	872
55°	842	863	923	982	1007	752
65°	553	581	660	732	761	548
75°	276	324	421	458	454	294
85°	58	100	107	99	99	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1915.6	1915.6	1915.6	1915.6	1915.6
2.5°	1924.4	1910.3	1917.4	1913.9	1906.8
5°	1917.4	1901.5	1910.3	1906.8	1906.8
7.5°	1901.5	1889.2	1896.2	1894.5	1896.2
10°	1882.2	1869.8	1880.4	1880.4	1878.6
12.5°	1855.7	1845.2	1857.5	1857.5	1859.3
15°	1825.8	1817.0	1829.3	1834.6	1836.4
17.5°	1788.8	1780.0	1795.9	1801.2	1806.4
20°	1746.6	1743.1	1758.9	1764.2	1771.2
22.5°	1699.0	1699.0	1714.9	1721.9	1732.5
25°	1651.5	1649.7	1669.1	1679.7	1686.7
27.5°	1595.2	1596.9	1621.6	1632.1	1640.9
30°	1535.3	1538.8	1567.0	1579.3	1591.6
32.5°	1471.9	1479.0	1510.7	1524.7	1537.1
35°	1406.8	1415.6	1450.8	1466.6	1480.7
37.5°	1341.6	1354.0	1390.9	1406.8	1422.6
40°	1273.0	1283.5	1325.8	1345.2	1364.5
42.5°	1202.5	1216.6	1258.9	1287.1	1309.9
45°	1130.4	1146.2	1192.0	1227.2	1253.6
47.5°	1058.2	1079.3	1123.3	1170.8	1193.7
50°	986.0	1007.1	1056.4	1109.2	1132.1
52.5°	912.0	933.2	989.5	1044.1	1068.7
55°	841.6	862.7	922.6	982.5	1007.1
57.5°	767.7	790.5	857.4	919.1	943.7
60°	695.5	718.4	790.5	855.7	882.1
62.5°	625.0	649.7	725.4	794.1	820.5
65°	552.9	581.0	660.3	732.4	760.6
67.5°	482.4	514.1	596.9	672.6	702.5
70°	412.0	449.0	537.0	614.5	644.4
72.5°	343.3	383.8	477.1	554.6	570.5
75°	276.4	324.0	420.8	457.8	454.3
77.5°	213.0	265.9	357.4	364.5	375.0
80°	154.9	213.0	267.6	281.7	274.7
82.5°	102.1	160.2	191.9	184.9	183.1
85°	58.1	100.4	107.4	98.6	98.6
87.5°	24.6	40.5	35.2	26.4	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)