

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-LD5-55SE-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-LD5-55SE-S-UNV-L840-CD1-U  
Description: CRUZE 2x4 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

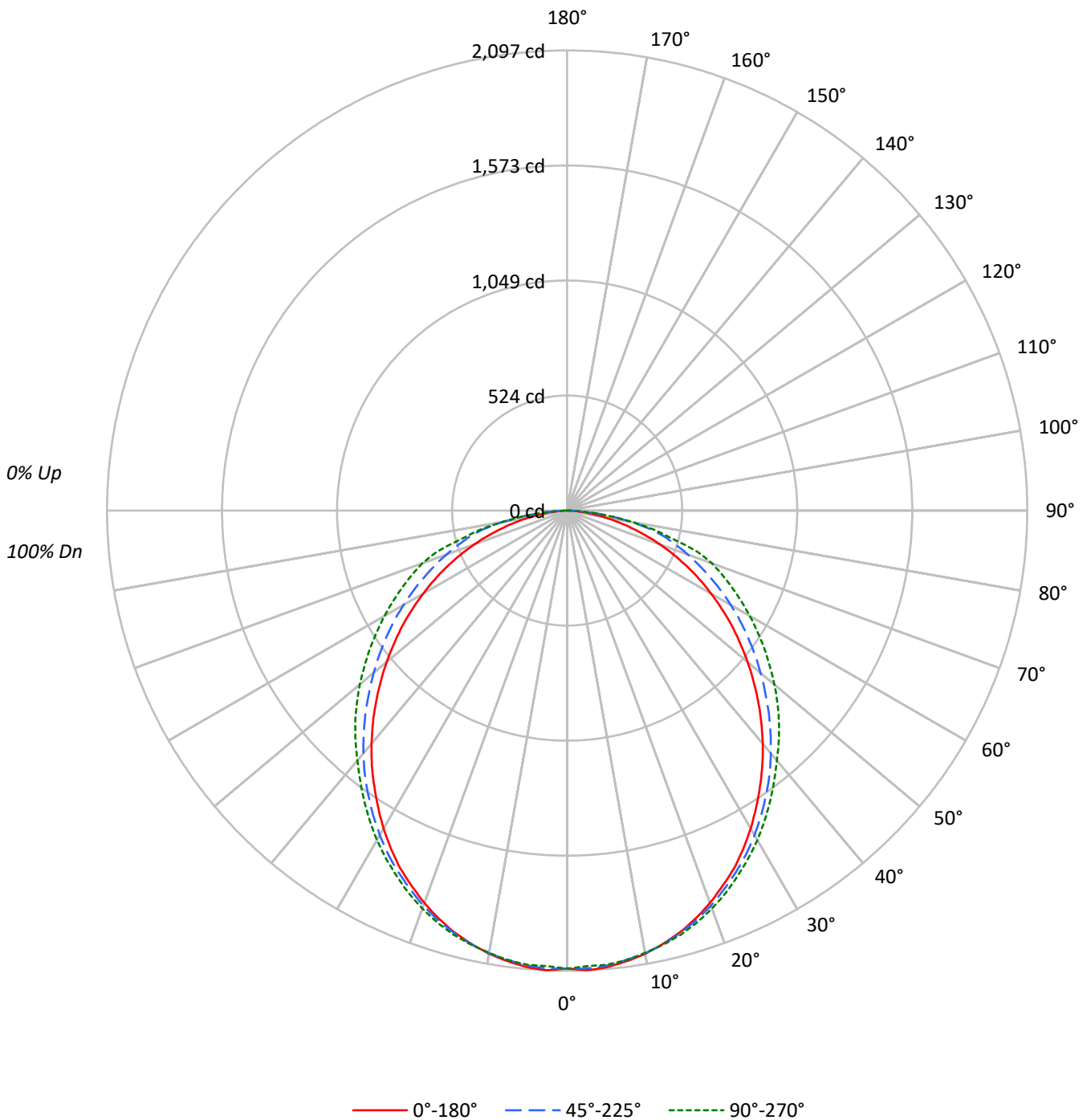
Lumens per Lamp: N/A  
Luminaire Lumens: 5764.8 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 54.69  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26

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

	0°	45°	90°
0°	2808	2808	2808
5°	2815	2798	2794
10°	2789	2773	2772
15°	2752	2737	2750
20°	2700	2692	2714
25°	2640	2634	2666
30°	2562	2574	2618
35°	2474	2503	2560
40°	2386	2429	2506
45°	2286	2347	2475
50°	2183	2266	2437
55°	2077	2192	2402
60°	1954	2123	2380
65°	1820	2056	2383
70°	1652	2009	2428
75°	1432	1989	2168
80°	1146	1737	1806
85°	760	1125	1055



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.3	3.4
10°-20°	561.2	9.7
20°-30°	836.3	14.5
30°-40°	984.4	17.1
40°-50°	1000.4	17.4
50°-60°	899.4	15.6
60°-70°	710.6	12.3
70°-80°	450.8	7.8
80°-90°	124.4	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°	1594.8	27.7
0°-40°	2579.2	44.7
0°-60°	4479.1	77.7
0°-90°	5764.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5764.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2087	2087	2087	2087	2087	
5°	2089	2072	2081	2077	2077	198
15°	1989	1980	1993	1999	2001	560
25°	1799	1797	1818	1830	1838	827
35°	1533	1542	1581	1598	1613	959
45°	1232	1249	1299	1337	1366	950
55°	917	940	1005	1070	1097	819
65°	602	633	719	798	829	597
75°	301	353	458	499	495	321
85°	63	109	117	107	107	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2087.0	2087.0	2087.0	2087.0	2087.0
2.5°	2096.6	2081.2	2088.9	2085.1	2077.4
5°	2088.9	2071.6	2081.2	2077.4	2077.4
7.5°	2071.6	2058.2	2065.9	2064.0	2065.9
10°	2050.5	2037.1	2048.6	2048.6	2046.7
12.5°	2021.8	2010.3	2023.7	2023.7	2025.6
15°	1989.2	1979.6	1993.0	1998.7	2000.7
17.5°	1948.9	1939.3	1956.5	1962.3	1968.1
20°	1902.8	1899.0	1916.3	1922.0	1929.7
22.5°	1851.0	1851.0	1868.3	1876.0	1887.5
25°	1799.3	1797.3	1818.4	1829.9	1837.6
27.5°	1737.9	1739.8	1766.6	1778.2	1787.7
30°	1672.7	1676.5	1707.2	1720.6	1734.0
32.5°	1603.6	1611.3	1645.8	1661.1	1674.6
35°	1532.6	1542.2	1580.6	1597.8	1613.2
37.5°	1461.7	1475.1	1515.4	1532.6	1549.9
40°	1386.8	1398.4	1444.4	1465.5	1486.6
42.5°	1310.1	1325.5	1371.5	1402.2	1427.1
45°	1231.5	1248.7	1298.6	1337.0	1365.7
47.5°	1152.8	1175.8	1223.8	1275.6	1300.5
50°	1074.2	1097.2	1150.9	1208.5	1233.4
52.5°	993.6	1016.6	1078.0	1137.5	1164.3
55°	916.9	939.9	1005.1	1070.3	1097.2
57.5°	836.3	861.3	934.2	1001.3	1028.1
60°	757.7	782.6	861.3	932.2	961.0
62.5°	681.0	707.8	790.3	865.1	893.9
65°	602.3	633.0	719.3	798.0	828.7
67.5°	525.6	560.1	650.3	732.7	765.4
70°	448.9	489.1	585.0	669.4	702.1
72.5°	374.0	418.2	519.8	604.2	621.5
75°	301.2	352.9	458.4	498.7	494.9
77.5°	232.1	289.6	389.4	397.1	408.6
80°	168.8	232.1	291.6	306.9	299.2
82.5°	111.3	174.6	209.1	201.4	199.5
85°	63.3	109.3	117.0	107.4	107.4
87.5°	26.9	44.1	38.4	28.8	26.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)