

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-LD5-45SE-S-UNV-L850-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-LD5-45SE-S-UNV-L850-CD1-U  
Description: CRUZE 2x4 LED TROFFER

Light Source: -  
Ballast/Driver: -

**Summary**

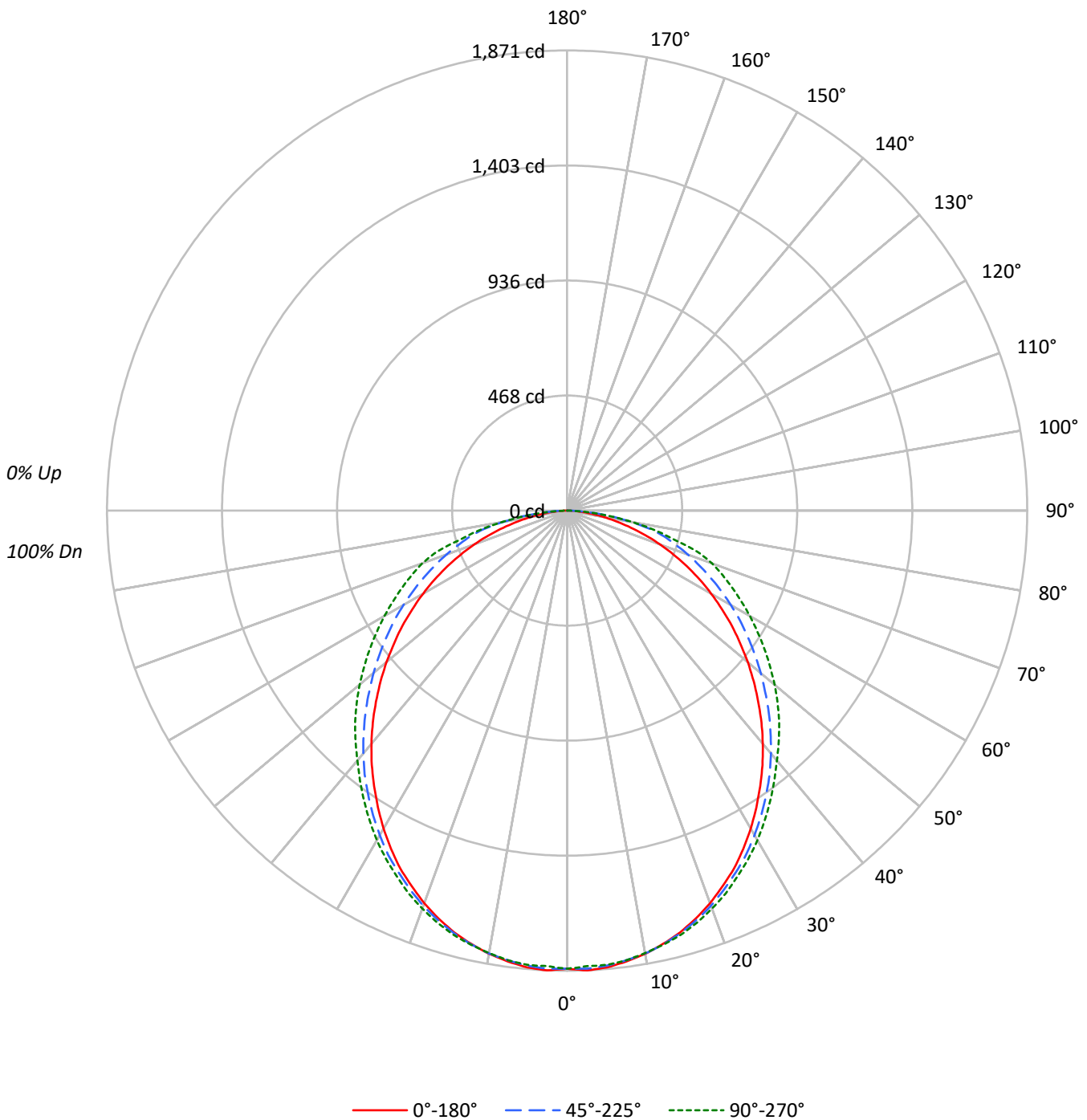
Lumens per Lamp: N/A  
Luminaire Lumens: 5145.4 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 39.91  
Input Voltage (V): NR  
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°	2506	2506	2506
5°	2513	2497	2493
10°	2490	2475	2474
15°	2457	2443	2455
20°	2410	2403	2422
25°	2357	2351	2380
30°	2286	2297	2337
35°	2208	2234	2285
40°	2129	2168	2237
45°	2040	2094	2209
50°	1949	2022	2175
55°	1854	1956	2144
60°	1744	1895	2124
65°	1624	1835	2127
70°	1475	1793	2167
75°	1278	1776	1935
80°	1023	1550	1612
85°	678	1003	942



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	3.4
10°-20°	500.9	9.7
20°-30°	746.4	14.5
30°-40°	878.6	17.1
40°-50°	892.9	17.4
50°-60°	802.8	15.6
60°-70°	634.2	12.3
70°-80°	402.4	7.8
80°-90°	111.1	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°	1423.4	27.7
0°-40°	2302.0	44.7
0°-60°	3997.7	77.7
0°-90°	5145.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5145.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1863	1863	1863	1863	1863	
5°	1864	1849	1858	1854	1854	177
15°	1775	1767	1779	1784	1786	500
25°	1606	1604	1623	1633	1640	738
35°	1368	1376	1411	1426	1440	856
45°	1099	1115	1159	1193	1219	848
55°	818	839	897	955	979	731
65°	538	565	642	712	740	533
75°	269	315	409	445	442	286
85°	56	98	104	96	96	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1862.7	1862.7	1862.7	1862.7	1862.7
2.5°	1871.3	1857.6	1864.4	1861.0	1854.2
5°	1864.4	1849.0	1857.6	1854.2	1854.2
7.5°	1849.0	1837.0	1843.9	1842.2	1843.9
10°	1830.2	1818.2	1828.5	1828.5	1826.8
12.5°	1804.5	1794.2	1806.2	1806.2	1807.9
15°	1775.4	1766.8	1778.8	1784.0	1785.7
17.5°	1739.5	1730.9	1746.3	1751.4	1756.6
20°	1698.4	1694.9	1710.3	1715.5	1722.3
22.5°	1652.1	1652.1	1667.5	1674.4	1684.7
25°	1605.9	1604.2	1623.0	1633.3	1640.2
27.5°	1551.1	1552.8	1576.8	1587.1	1595.6
30°	1492.9	1496.3	1523.7	1535.7	1547.7
32.5°	1431.3	1438.1	1468.9	1482.6	1494.6
35°	1367.9	1376.5	1410.7	1426.1	1439.8
37.5°	1304.6	1316.6	1352.5	1367.9	1383.3
40°	1237.8	1248.1	1289.2	1308.0	1326.8
42.5°	1169.3	1183.0	1224.1	1251.5	1273.8
45°	1099.1	1114.6	1159.1	1193.3	1219.0
47.5°	1028.9	1049.5	1092.3	1138.5	1160.8
50°	958.8	979.3	1027.2	1078.6	1100.9
52.5°	886.8	907.4	962.2	1015.3	1039.2
55°	818.4	838.9	897.1	955.3	979.3
57.5°	746.5	768.7	833.8	893.7	917.7
60°	676.3	698.5	768.7	832.1	857.7
62.5°	607.8	631.7	705.4	772.1	797.8
65°	537.6	565.0	642.0	712.2	739.6
67.5°	469.1	499.9	580.4	654.0	683.1
70°	400.6	436.6	522.2	597.5	626.6
72.5°	333.9	373.2	464.0	539.3	554.7
75°	268.8	315.0	409.2	445.1	441.7
77.5°	207.2	258.5	347.5	354.4	364.7
80°	150.7	207.2	260.2	273.9	267.1
82.5°	99.3	155.8	186.6	179.8	178.1
85°	56.5	97.6	104.4	95.9	95.9
87.5°	24.0	39.4	34.2	25.7	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)