

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: P261255

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261255  
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-L82765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5319.0 lumens  
Efficiency: N/A  
Efficacy: 130.3 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

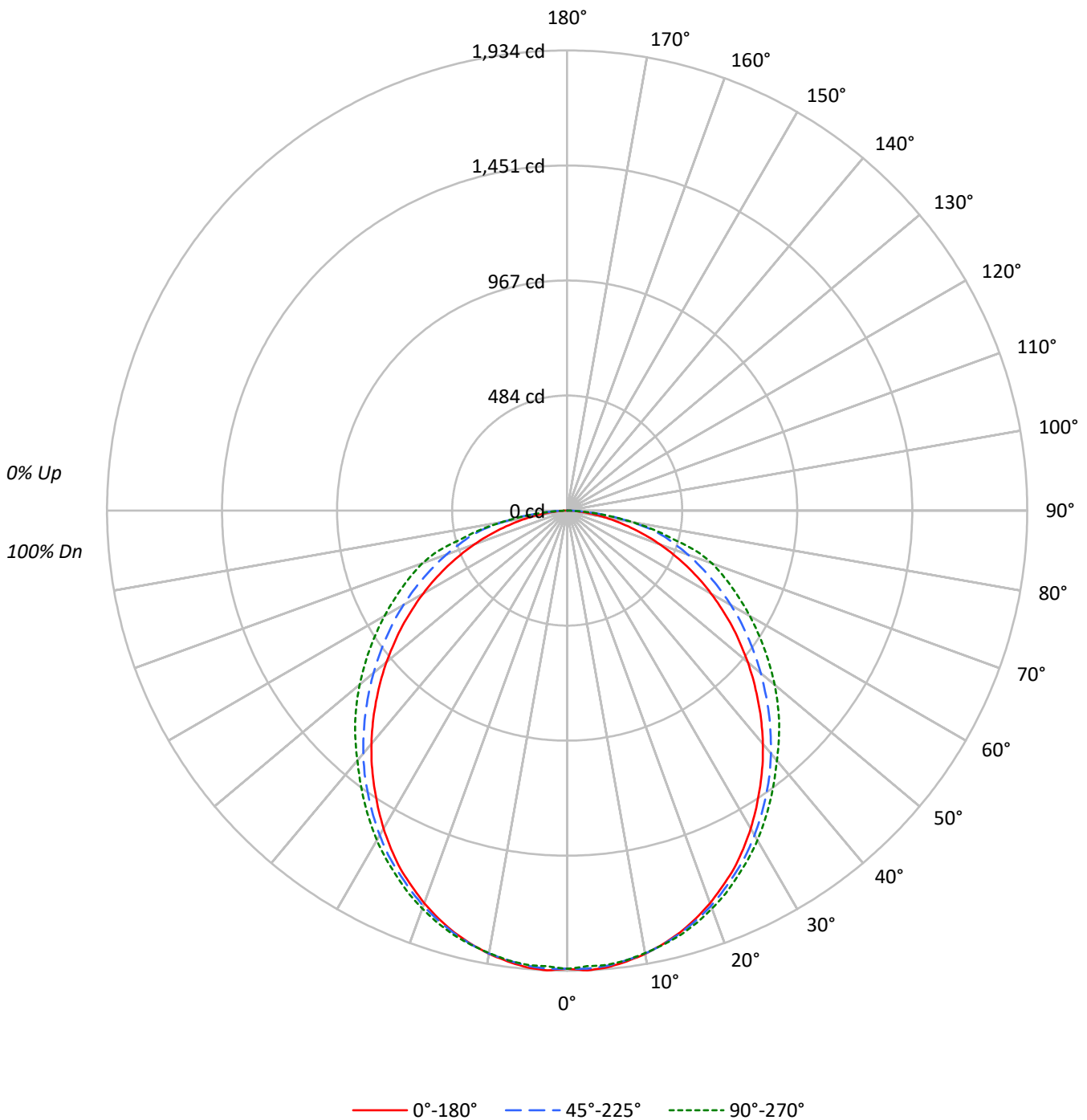
Input Watts (W): 40.827  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2591	2591	2591
5°	2603	2594	2589
10°	2585	2582	2580
15°	2556	2562	2571
20°	2514	2532	2549
25°	2465	2491	2517
30°	2398	2447	2486
35°	2323	2395	2445
40°	2248	2341	2409
45°	2162	2280	2398
50°	2075	2223	2382
55°	1985	2175	2375
60°	1881	2139	2386
65°	1769	2113	2434
70°	1629	2124	2548
75°	1445	2199	2374
80°	1206	2084	2139
85°	902	1667	1530



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.1	3.4
10°-20°	517.8	9.7
20°-30°	771.6	14.5
30°-40°	908.3	17.1
40°-50°	923.0	17.4
50°-60°	829.9	15.6
60°-70°	655.6	12.3
70°-80°	415.9	7.8
80°-90°	114.8	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°	1471.4	27.7
0°-40°	2379.7	44.7
0°-60°	4132.7	77.7
0°-90°	5319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5319.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1927	1911	1920	1917	1917	183
15°	1835	1826	1839	1844	1846	517
25°	1660	1658	1678	1688	1696	763
35°	1414	1423	1458	1474	1488	885
45°	1136	1152	1198	1234	1260	877
55°	846	867	927	988	1012	755
65°	556	584	664	736	765	550
75°	278	326	423	460	457	296
85°	58	101	108	99	99	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1925.6	1925.6	1925.6	1925.6	1925.6
2.5°	1934.4	1920.3	1927.3	1923.8	1916.7
5°	1927.3	1911.4	1920.3	1916.7	1916.7
7.5°	1911.4	1899.0	1906.1	1904.3	1906.1
10°	1891.9	1879.6	1890.2	1890.2	1888.4
12.5°	1865.4	1854.8	1867.2	1867.2	1868.9
15°	1835.3	1826.5	1838.9	1844.2	1845.9
17.5°	1798.1	1789.3	1805.2	1810.5	1815.8
20°	1755.7	1752.1	1768.1	1773.4	1780.4
22.5°	1707.9	1707.9	1723.8	1730.9	1741.5
25°	1660.1	1658.3	1677.8	1688.4	1695.5
27.5°	1603.5	1605.2	1630.0	1640.6	1649.5
30°	1543.3	1546.8	1575.1	1587.5	1599.9
32.5°	1479.6	1486.7	1518.5	1532.7	1545.1
35°	1414.1	1422.9	1458.3	1474.3	1488.4
37.5°	1348.6	1361.0	1398.2	1414.1	1430.0
40°	1279.6	1290.2	1332.7	1352.2	1371.6
42.5°	1208.8	1223.0	1265.4	1293.7	1316.8
45°	1136.2	1152.2	1198.2	1233.6	1260.1
47.5°	1063.7	1084.9	1129.2	1176.9	1199.9
50°	991.1	1012.3	1061.9	1115.0	1138.0
52.5°	916.8	938.0	994.6	1049.5	1074.3
55°	846.0	867.2	927.4	987.6	1012.3
57.5°	771.6	794.7	861.9	923.9	948.6
60°	699.1	722.1	794.7	860.1	886.7
62.5°	628.3	653.1	729.2	798.2	824.7
65°	555.7	584.0	663.7	736.2	764.6
67.5°	484.9	516.8	600.0	676.1	706.2
70°	414.1	451.3	539.8	617.7	647.8
72.5°	345.1	385.8	479.6	557.5	573.4
75°	277.9	325.6	423.0	460.2	456.6
77.5°	214.1	267.2	359.3	366.4	377.0
80°	155.7	214.1	269.0	283.2	276.1
82.5°	102.7	161.1	192.9	185.8	184.1
85°	58.4	100.9	108.0	99.1	99.1
87.5°	24.8	40.7	35.4	26.5	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)