

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: P261388

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261388  
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-L92765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4716.0 lumens  
Efficiency: N/A  
Efficacy: 116.0 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

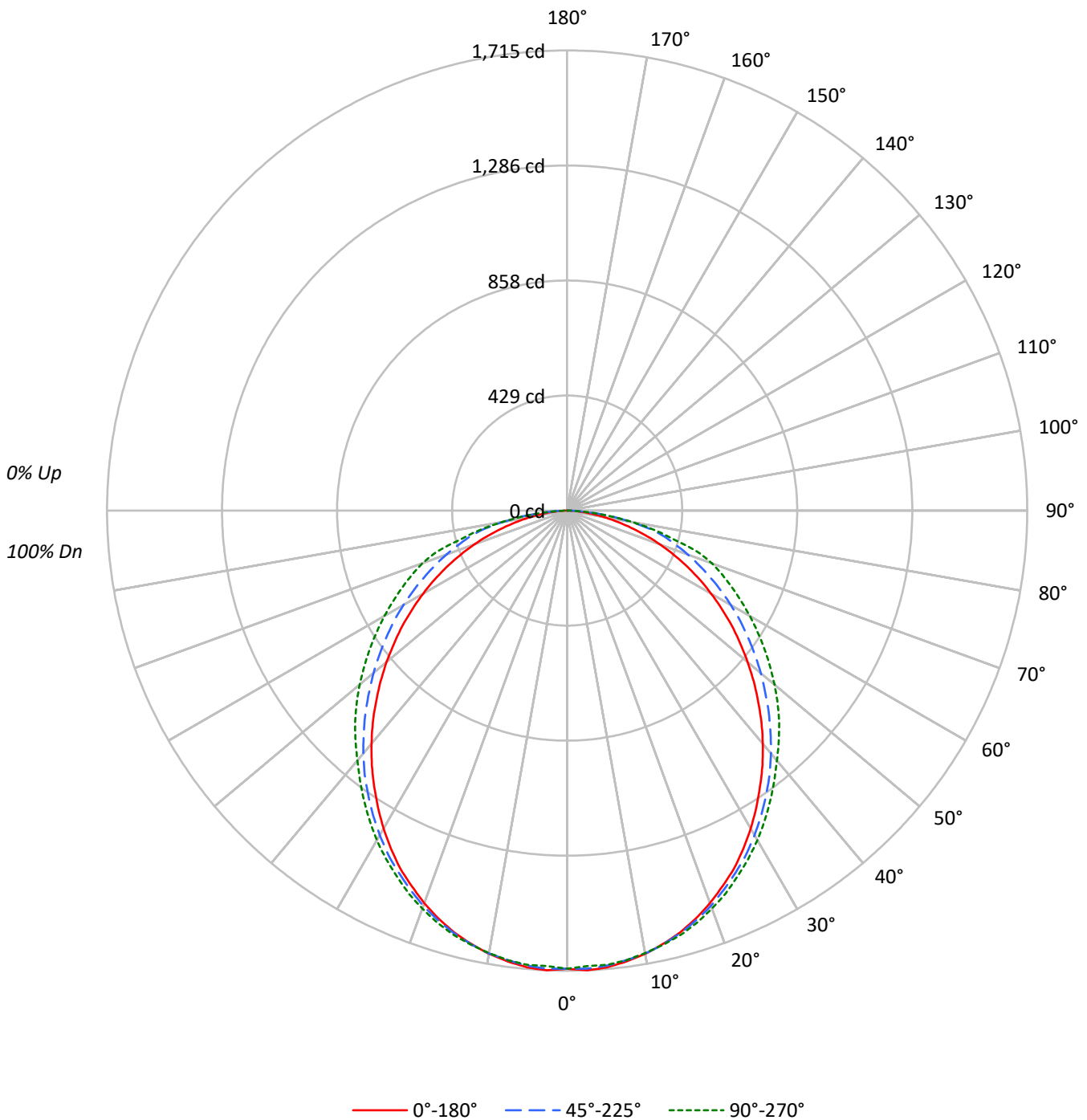
Input Watts (W): 40.641  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2297	2297	2297
5°	2308	2300	2295
10°	2292	2290	2288
15°	2267	2271	2280
20°	2229	2245	2260
25°	2185	2208	2232
30°	2126	2170	2204
35°	2059	2124	2168
40°	1993	2075	2136
45°	1917	2021	2126
50°	1839	1971	2112
55°	1760	1929	2106
60°	1668	1896	2116
65°	1569	1873	2158
70°	1445	1883	2259
75°	1281	1949	2105
80°	1070	1848	1897
85°	800	1477	1357



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.4	3.4
10°-20°	459.1	9.7
20°-30°	684.1	14.5
30°-40°	805.3	17.1
40°-50°	818.4	17.4
50°-60°	735.8	15.6
60°-70°	581.3	12.3
70°-80°	368.8	7.8
80°-90°	101.8	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°	1304.6	27.7
0°-40°	2110.0	44.7
0°-60°	3664.2	77.7
0°-90°	4716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4716.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1707	1707	1707	1707	1707	
5°	1709	1695	1703	1699	1699	162
15°	1627	1619	1630	1635	1637	458
25°	1472	1470	1488	1497	1503	677
35°	1254	1262	1293	1307	1320	784
45°	1007	1022	1062	1094	1117	777
55°	750	769	822	876	898	670
65°	493	518	588	653	678	488
75°	246	289	375	408	405	262
85°	52	89	96	88	88	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1707.3	1707.3	1707.3	1707.3	1707.3
2.5°	1715.1	1702.6	1708.8	1705.7	1699.4
5°	1708.8	1694.7	1702.6	1699.4	1699.4
7.5°	1694.7	1683.7	1690.0	1688.4	1690.0
10°	1677.5	1666.5	1675.9	1675.9	1674.3
12.5°	1653.9	1644.5	1655.5	1655.5	1657.1
15°	1627.3	1619.4	1630.4	1635.1	1636.7
17.5°	1594.3	1586.5	1600.6	1605.3	1610.0
20°	1556.6	1553.5	1567.6	1572.3	1578.6
22.5°	1514.3	1514.3	1528.4	1534.7	1544.1
25°	1471.9	1470.3	1487.6	1497.0	1503.3
27.5°	1421.7	1423.3	1445.2	1454.6	1462.5
30°	1368.3	1371.5	1396.6	1407.6	1418.5
32.5°	1311.8	1318.1	1346.4	1358.9	1369.9
35°	1253.8	1261.6	1293.0	1307.1	1319.7
37.5°	1195.7	1206.7	1239.7	1253.8	1267.9
40°	1134.5	1143.9	1181.6	1198.9	1216.1
42.5°	1071.8	1084.3	1122.0	1147.1	1167.5
45°	1007.4	1021.5	1062.3	1093.7	1117.3
47.5°	943.1	961.9	1001.1	1043.5	1063.9
50°	878.7	897.6	941.5	988.6	1009.0
52.5°	812.8	831.7	881.9	930.5	952.5
55°	750.1	768.9	822.3	875.6	897.6
57.5°	684.2	704.6	764.2	819.1	841.1
60°	619.8	640.2	704.6	762.6	786.2
62.5°	557.1	579.0	646.5	707.7	731.2
65°	492.7	517.8	588.4	652.8	677.9
67.5°	430.0	458.2	532.0	599.4	626.1
70°	367.2	400.1	478.6	547.6	574.3
72.5°	306.0	342.1	425.3	494.3	508.4
75°	246.4	288.7	375.0	408.0	404.9
77.5°	189.9	236.9	318.5	324.8	334.2
80°	138.1	189.9	238.5	251.1	244.8
82.5°	91.0	142.8	171.0	164.8	163.2
85°	51.8	89.4	95.7	87.9	87.9
87.5°	22.0	36.1	31.4	23.5	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)