

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: P261294

Luminaire Tested: **24CZ-LD5-50-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261294  
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-LD5-50-S-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4177.0 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

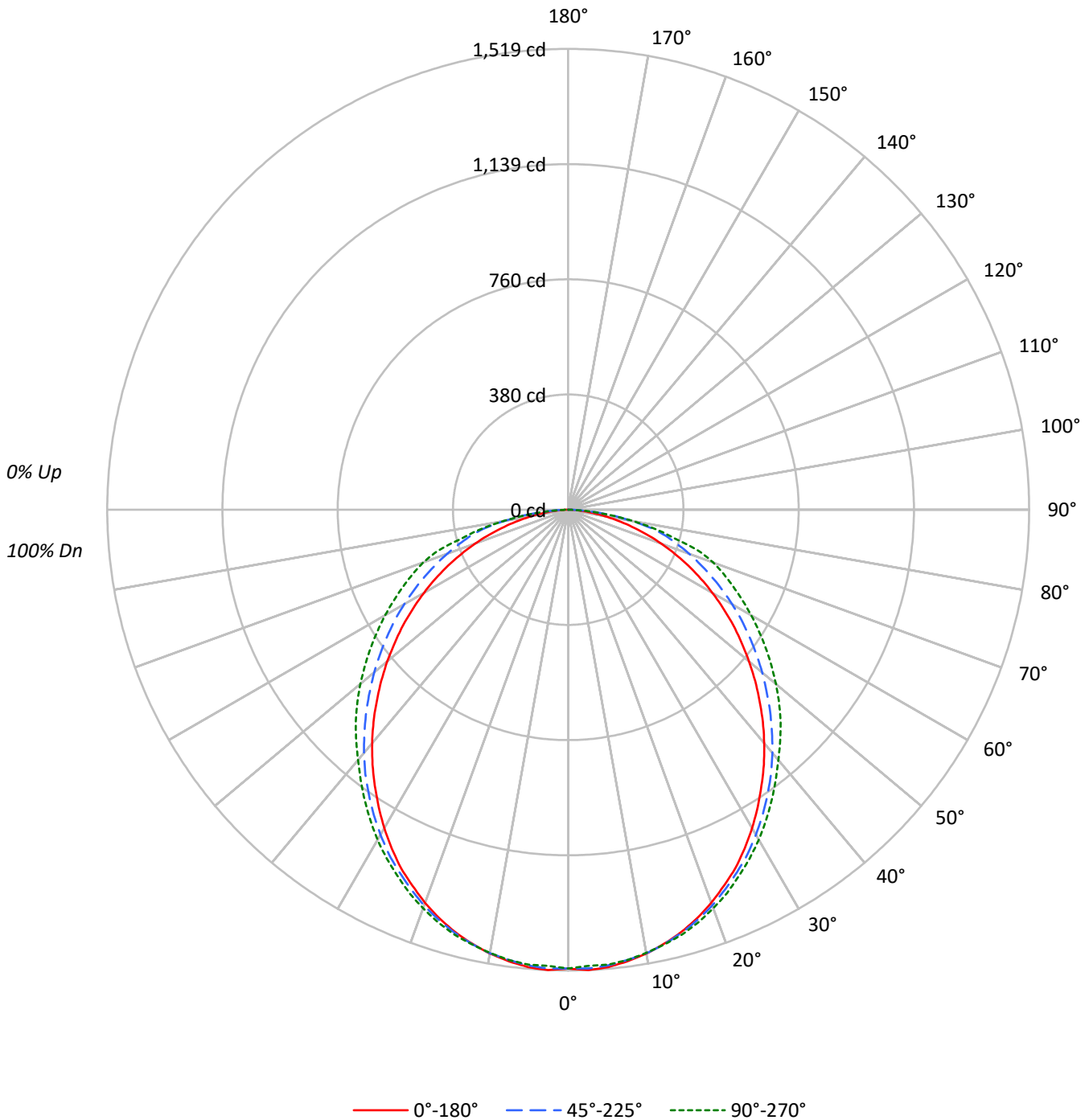
Input Watts (W): 35.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2035	2035	2035
5°	2044	2037	2033
10°	2030	2028	2026
15°	2008	2011	2019
20°	1974	1988	2002
25°	1935	1956	1977
30°	1883	1922	1952
35°	1824	1881	1920
40°	1765	1838	1892
45°	1698	1790	1883
50°	1629	1746	1871
55°	1558	1708	1865
60°	1477	1679	1874
65°	1389	1659	1911
70°	1279	1668	2001
75°	1134	1727	1864
80°	948	1637	1680
85°	709	1309	1201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	3.4
10°-20°	406.6	9.7
20°-30°	605.9	14.5
30°-40°	713.3	17.1
40°-50°	724.9	17.4
50°-60°	651.7	15.6
60°-70°	514.9	12.3
70°-80°	326.6	7.8
80°-90°	90.1	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°	1155.5	27.7
0°-40°	1868.8	44.7
0°-60°	3245.4	77.7
0°-90°	4177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4177.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1512	1512	1512	1512	1512	
5°	1514	1501	1508	1505	1505	144
15°	1441	1434	1444	1448	1450	406
25°	1304	1302	1318	1326	1332	599
35°	1110	1117	1145	1158	1169	695
45°	892	905	941	969	990	689
55°	664	681	728	776	795	593
65°	436	459	521	578	600	432
75°	218	256	332	361	359	232
85°	46	79	85	78	78	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1512.2	1512.2	1512.2	1512.2	1512.2
2.5°	1519.1	1508.0	1513.5	1510.8	1505.2
5°	1513.5	1501.0	1508.0	1505.2	1505.2
7.5°	1501.0	1491.3	1496.9	1495.5	1496.9
10°	1485.7	1476.0	1484.4	1484.4	1483.0
12.5°	1464.9	1456.6	1466.3	1466.3	1467.7
15°	1441.3	1434.3	1444.0	1448.2	1449.6
17.5°	1412.1	1405.1	1417.6	1421.8	1426.0
20°	1378.7	1375.9	1388.5	1392.6	1398.2
22.5°	1341.2	1341.2	1353.7	1359.3	1367.6
25°	1303.7	1302.3	1317.6	1325.9	1331.5
27.5°	1259.2	1260.6	1280.0	1288.4	1295.3
30°	1211.9	1214.7	1237.0	1246.7	1256.4
32.5°	1161.9	1167.5	1192.5	1203.6	1213.3
35°	1110.5	1117.4	1145.2	1157.7	1168.9
37.5°	1059.1	1068.8	1098.0	1110.5	1123.0
40°	1004.9	1013.2	1046.6	1061.8	1077.1
42.5°	949.3	960.4	993.7	1016.0	1034.0
45°	892.3	904.8	940.9	968.7	989.6
47.5°	835.3	852.0	886.7	924.2	942.3
50°	778.3	795.0	833.9	875.6	893.7
52.5°	719.9	736.6	781.1	824.2	843.6
55°	664.3	681.0	728.3	775.5	795.0
57.5°	606.0	624.0	676.9	725.5	745.0
60°	549.0	567.1	624.0	675.5	696.3
62.5°	493.4	512.9	572.6	626.8	647.7
65°	436.4	458.6	521.2	578.2	600.4
67.5°	380.8	405.8	471.2	530.9	554.5
70°	325.2	354.4	423.9	485.1	508.7
72.5°	271.0	303.0	376.6	437.8	450.3
75°	218.2	255.7	332.2	361.4	358.6
77.5°	168.2	209.9	282.1	287.7	296.0
80°	122.3	168.2	211.3	222.4	216.8
82.5°	80.6	126.5	151.5	145.9	144.5
85°	45.9	79.2	84.8	77.8	77.8
87.5°	19.5	32.0	27.8	20.8	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)