

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: P260818

Luminaire Tested: **24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4231.0 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

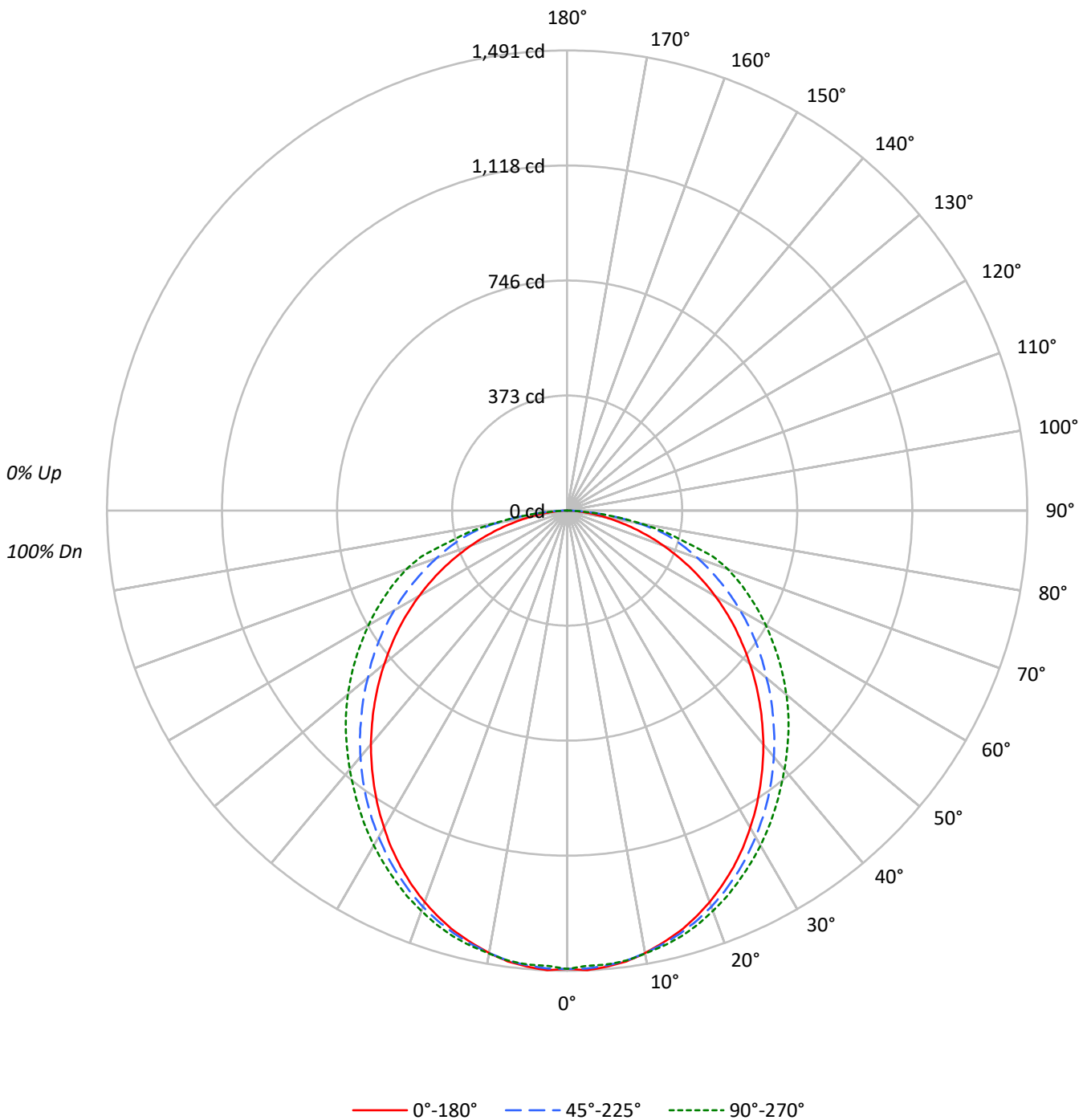
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P260818

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P260818

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K

**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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	1998	1998	1998
5°	2004	1998	1994
10°	1989	1989	1991
15°	1965	1975	1990
20°	1933	1956	1977
25°	1893	1929	1961
30°	1843	1897	1947
35°	1792	1865	1932
40°	1738	1829	1924
45°	1679	1795	1930
50°	1619	1765	1941
55°	1560	1753	1961
60°	1489	1742	2000
65°	1411	1743	2066
70°	1305	1772	2177
75°	1167	1853	2071
80°	976	1774	1897
85°	738	1365	1297



TEST NUMBER: P260818

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.3	3.3
10°-20°	399.4	9.4
20°-30°	597.0	14.1
30°-40°	708.2	16.7
40°-50°	729.0	17.2
50°-60°	668.7	15.8
60°-70°	540.7	12.8
70°-80°	350.9	8.3
80°-90°	96.8	2.3
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°	1136.7	26.9
0°-40°	1844.9	43.6
0°-60°	3242.6	76.6
0°-90°	4231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4231.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1485	1485	1485	1485	1485	
5°	1483	1473	1479	1478	1476	141
15°	1411	1405	1418	1424	1428	397
25°	1275	1276	1299	1311	1321	587
35°	1091	1100	1136	1160	1176	682
45°	882	897	943	988	1014	681
55°	665	685	748	808	836	594
65°	443	469	548	620	649	438
75°	224	267	356	398	398	239
85°	48	81	88	86	84	59
90°	0	0	0	0	0	



TEST NUMBER: P260818

CATALOG NUMBER: 24CZ-LD5-40SE-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1484.9	1484.9	1484.9	1484.9	1484.9
2.5°	1490.7	1479.1	1484.9	1483.4	1476.2
5°	1483.4	1473.3	1479.1	1477.6	1476.2
7.5°	1473.3	1463.1	1470.4	1468.9	1470.4
10°	1455.9	1447.2	1455.9	1457.3	1457.3
12.5°	1434.2	1426.9	1438.5	1441.4	1444.3
15°	1411.0	1405.2	1418.2	1424.0	1428.4
17.5°	1382.0	1377.7	1393.6	1400.8	1406.6
20°	1350.1	1348.7	1366.1	1373.3	1380.6
22.5°	1313.9	1313.9	1334.2	1342.9	1353.0
25°	1274.8	1276.3	1299.4	1311.0	1321.2
27.5°	1232.8	1234.2	1261.8	1276.3	1287.8
30°	1186.4	1192.2	1221.2	1240.0	1253.1
32.5°	1140.1	1147.3	1179.2	1200.9	1215.4
35°	1090.8	1099.5	1135.7	1160.4	1176.3
37.5°	1040.1	1050.3	1089.4	1116.9	1135.7
40°	989.4	1001.0	1041.6	1073.4	1095.2
42.5°	935.8	948.9	993.8	1031.4	1054.6
45°	882.2	896.7	943.1	988.0	1014.1
47.5°	828.6	846.0	895.3	944.5	972.0
50°	773.6	791.0	843.1	899.6	927.1
52.5°	718.5	738.8	796.8	854.7	882.2
55°	664.9	685.2	747.5	808.3	835.9
57.5°	609.9	630.2	698.2	762.0	789.5
60°	553.4	576.6	647.5	712.7	743.2
62.5°	498.3	523.0	598.3	667.8	696.8
65°	443.3	469.4	547.6	620.0	649.0
67.5°	386.8	417.2	498.3	572.2	602.6
70°	331.7	365.1	450.5	524.4	553.4
72.5°	278.1	314.4	402.7	478.1	495.4
75°	224.5	266.6	356.4	398.4	398.4
77.5°	173.8	220.2	304.2	320.2	328.8
80°	126.0	176.7	228.9	247.7	244.8
82.5°	84.0	134.7	163.7	163.7	159.4
85°	47.8	81.1	88.4	85.5	84.0
87.5°	20.3	30.4	27.5	21.7	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)