

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: P260968

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260968  
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-LD5-50SE-UNV-L92765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4624.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 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

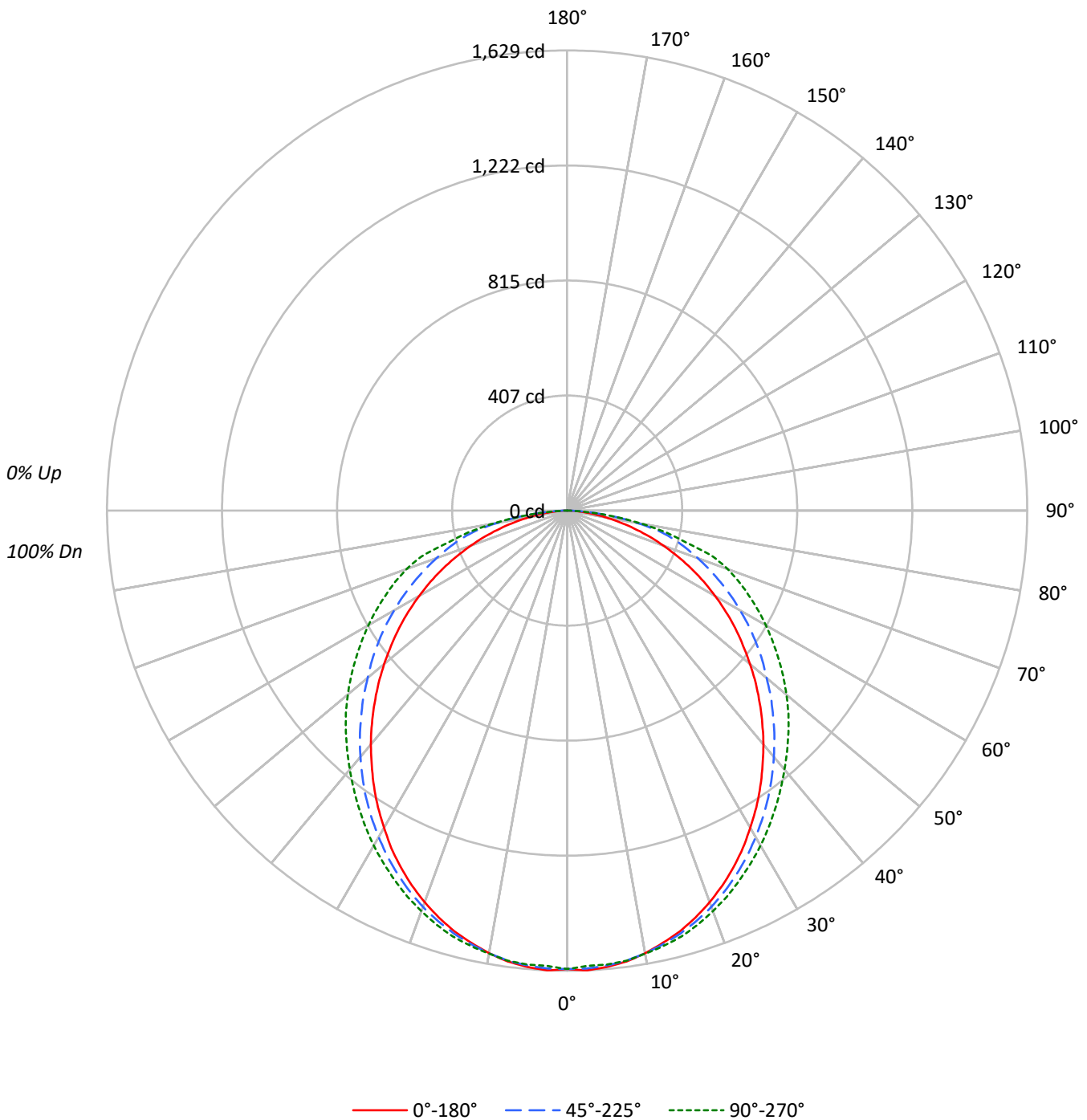
Input Watts (W): 40.641  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2183	2183	2183
5°	2190	2183	2179
10°	2174	2174	2176
15°	2148	2159	2174
20°	2113	2138	2160
25°	2068	2108	2144
30°	2014	2073	2128
35°	1958	2039	2112
40°	1899	1999	2102
45°	1835	1961	2109
50°	1770	1929	2121
55°	1705	1916	2143
60°	1628	1904	2186
65°	1543	1905	2258
70°	1426	1937	2379
75°	1276	2025	2263
80°	1067	1938	2073
85°	806	1491	1417



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.3	3.3
10°-20°	436.4	9.4
20°-30°	652.5	14.1
30°-40°	774.0	16.7
40°-50°	796.7	17.2
50°-60°	730.8	15.8
60°-70°	590.9	12.8
70°-80°	383.5	8.3
80°-90°	105.7	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°	1242.3	26.9
0°-40°	2016.3	43.6
0°-60°	3543.8	76.6
0°-90°	4624.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4624.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1623	1623	1623	1623	1623	
5°	1621	1610	1616	1615	1613	154
15°	1542	1536	1550	1556	1561	434
25°	1393	1395	1420	1433	1444	641
35°	1192	1202	1241	1268	1286	746
45°	964	980	1031	1080	1108	744
55°	727	749	817	883	914	649
65°	484	513	598	678	709	479
75°	245	291	390	435	435	261
85°	52	89	97	93	92	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1622.8	1622.8	1622.8	1622.8	1622.8
2.5°	1629.1	1616.5	1622.8	1621.2	1613.3
5°	1621.2	1610.1	1616.5	1614.9	1613.3
7.5°	1610.1	1599.0	1607.0	1605.4	1607.0
10°	1591.1	1581.6	1591.1	1592.7	1592.7
12.5°	1567.4	1559.5	1572.1	1575.3	1578.5
15°	1542.0	1535.7	1550.0	1556.3	1561.0
17.5°	1510.4	1505.6	1523.0	1531.0	1537.3
20°	1475.5	1474.0	1493.0	1500.9	1508.8
22.5°	1436.0	1436.0	1458.1	1467.6	1478.7
25°	1393.2	1394.8	1420.1	1432.8	1443.9
27.5°	1347.3	1348.9	1379.0	1394.8	1407.5
30°	1296.6	1303.0	1334.6	1355.2	1369.5
32.5°	1246.0	1253.9	1288.7	1312.5	1328.3
35°	1192.2	1201.7	1241.2	1268.1	1285.6
37.5°	1136.7	1147.8	1190.6	1220.6	1241.2
40°	1081.3	1094.0	1138.3	1173.2	1196.9
42.5°	1022.7	1037.0	1086.1	1127.2	1152.6
45°	964.2	980.0	1030.7	1079.7	1108.2
47.5°	905.6	924.6	978.4	1032.2	1062.3
50°	845.4	864.4	921.4	983.2	1013.3
52.5°	785.3	807.4	870.8	934.1	964.2
55°	726.7	748.9	816.9	883.4	913.5
57.5°	666.5	688.7	763.1	832.8	862.8
60°	604.8	630.1	707.7	778.9	812.2
62.5°	544.6	571.5	653.9	729.9	761.5
65°	484.5	513.0	598.5	677.6	709.3
67.5°	422.7	456.0	544.6	625.4	658.6
70°	362.6	399.0	492.4	573.1	604.8
72.5°	304.0	343.6	440.1	522.5	541.5
75°	245.4	291.3	389.5	435.4	435.4
77.5°	190.0	240.6	332.5	349.9	359.4
80°	137.7	193.2	250.1	270.7	267.6
82.5°	91.8	147.2	178.9	178.9	174.2
85°	52.2	88.7	96.6	93.4	91.8
87.5°	22.2	33.2	30.1	23.7	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)