

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: P260812

Luminaire Tested: **24CZ-LD5-40SE-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260812  
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-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3954.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 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

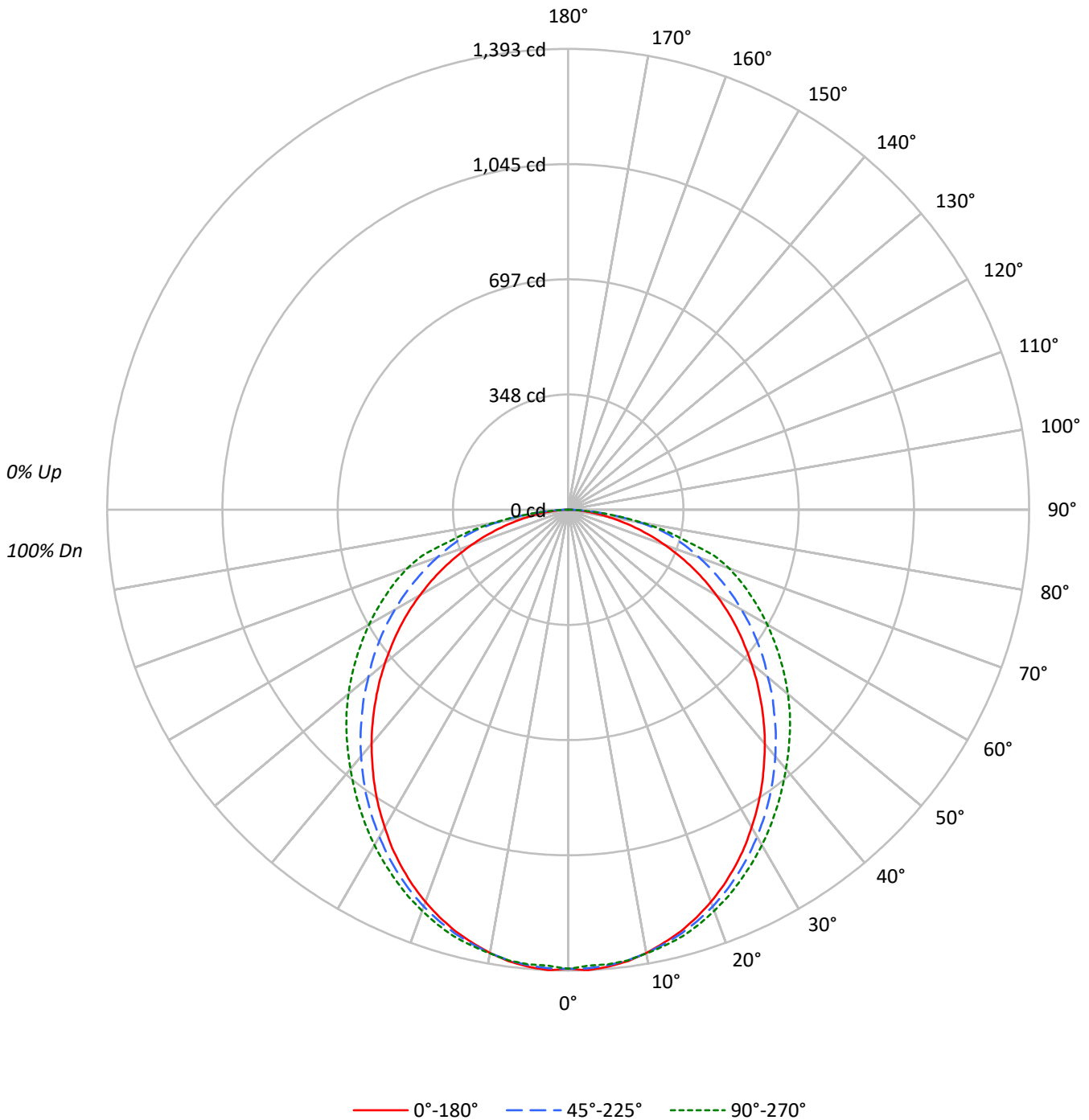
Input Watts (W): 30.597  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1867	1867	1867
5°	1872	1867	1863
10°	1859	1859	1861
15°	1837	1846	1859
20°	1807	1828	1847
25°	1769	1803	1833
30°	1723	1773	1819
35°	1674	1743	1806
40°	1624	1710	1798
45°	1569	1677	1803
50°	1513	1649	1814
55°	1458	1639	1832
60°	1392	1629	1869
65°	1319	1629	1931
70°	1220	1656	2035
75°	1091	1731	1935
80°	913	1657	1773
85°	690	1275	1212



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.1	3.3
10°-20°	373.2	9.4
20°-30°	557.9	14.1
30°-40°	661.9	16.7
40°-50°	681.2	17.2
50°-60°	624.9	15.8
60°-70°	505.3	12.8
70°-80°	328.0	8.3
80°-90°	90.4	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°	1062.3	26.9
0°-40°	1724.1	43.6
0°-60°	3030.3	76.6
0°-90°	3954.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3954.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1377	1382	1381	1380	132
15°	1319	1313	1325	1331	1335	371
25°	1191	1193	1214	1225	1235	548
35°	1019	1028	1061	1084	1099	637
45°	824	838	881	923	948	636
55°	621	640	699	755	781	555
65°	414	439	512	579	606	409
75°	210	249	333	372	372	223
85°	45	76	83	80	78	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1387.6	1387.6	1387.6	1387.6	1387.6
2.5°	1393.1	1382.2	1387.6	1386.3	1379.5
5°	1386.3	1376.8	1382.2	1380.9	1379.5
7.5°	1376.8	1367.3	1374.1	1372.8	1374.1
10°	1360.6	1352.4	1360.6	1361.9	1361.9
12.5°	1340.3	1333.5	1344.3	1347.0	1349.7
15°	1318.6	1313.2	1325.4	1330.8	1334.9
17.5°	1291.5	1287.5	1302.4	1309.1	1314.5
20°	1261.7	1260.4	1276.6	1283.4	1290.2
22.5°	1227.9	1227.9	1246.9	1255.0	1264.5
25°	1191.3	1192.7	1214.4	1225.2	1234.7
27.5°	1152.1	1153.4	1179.2	1192.7	1203.5
30°	1108.8	1114.2	1141.3	1158.9	1171.0
32.5°	1065.4	1072.2	1102.0	1122.3	1135.8
35°	1019.4	1027.5	1061.4	1084.4	1099.3
37.5°	972.0	981.5	1018.1	1043.8	1061.4
40°	924.6	935.5	973.4	1003.2	1023.5
42.5°	874.6	886.7	928.7	963.9	985.6
45°	824.5	838.0	881.3	923.3	947.7
47.5°	774.4	790.6	836.7	882.7	908.4
50°	722.9	739.2	787.9	840.7	866.4
52.5°	671.5	690.4	744.6	798.7	824.5
55°	621.4	640.3	698.6	755.4	781.1
57.5°	570.0	588.9	652.5	712.1	737.8
60°	517.2	538.8	605.2	666.1	694.5
62.5°	465.7	488.7	559.1	624.1	651.2
65°	414.3	438.6	511.7	579.4	606.5
67.5°	361.5	389.9	465.7	534.8	563.2
70°	310.0	341.2	421.0	490.1	517.2
72.5°	259.9	293.8	376.4	446.8	463.0
75°	209.8	249.1	333.0	372.3	372.3
77.5°	162.5	205.8	284.3	299.2	307.3
80°	117.8	165.2	213.9	231.5	228.8
82.5°	78.5	125.9	153.0	153.0	148.9
85°	44.7	75.8	82.6	79.9	78.5
87.5°	19.0	28.4	25.7	20.3	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)