

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: P261235

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261235  
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-LD5-40SE-S-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4251.0 lumens  
Efficiency: N/A  
Efficacy: 136.4 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

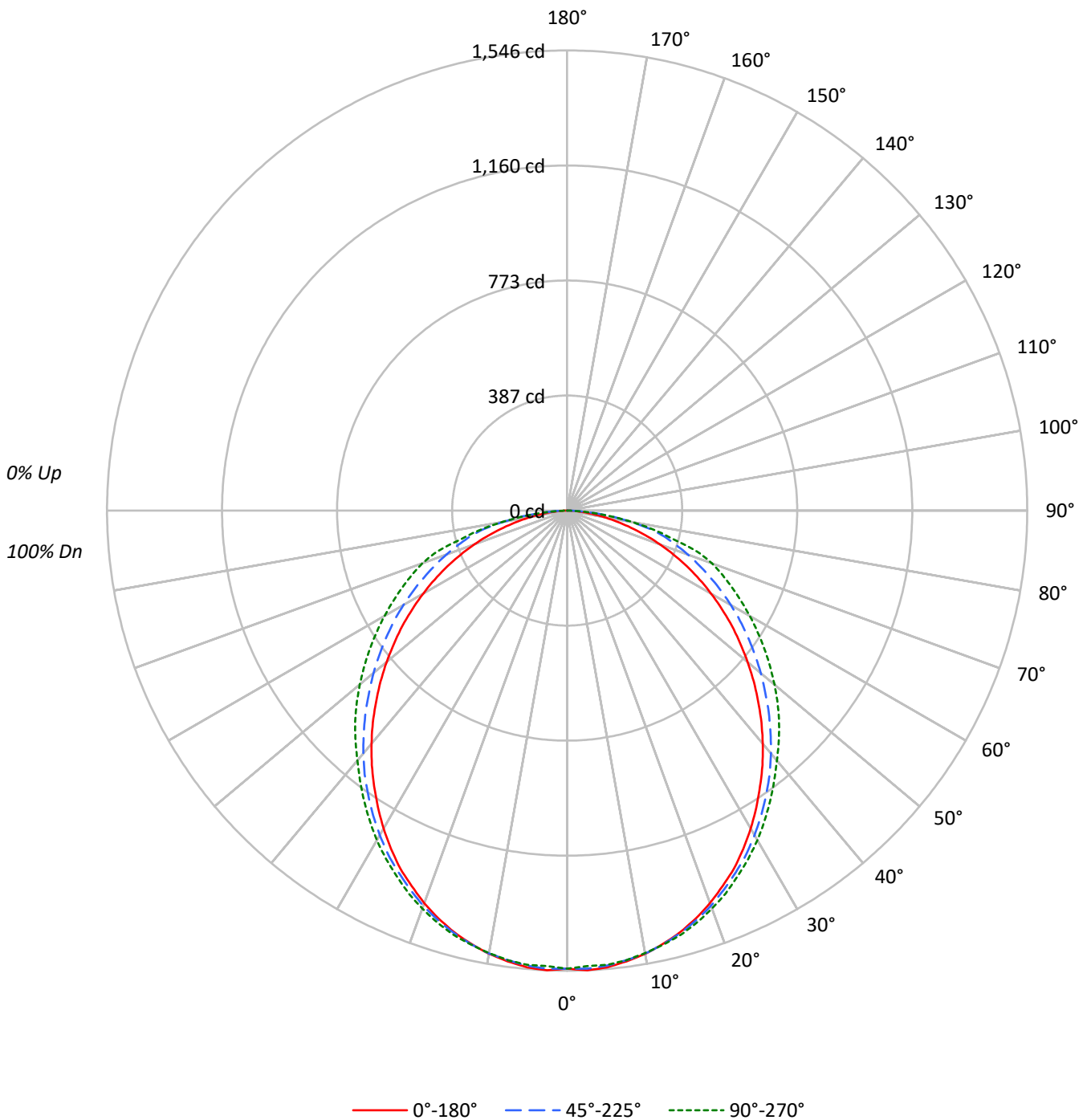
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2071	2071	2071
5°	2081	2073	2069
10°	2066	2064	2062
15°	2043	2047	2055
20°	2009	2023	2038
25°	1970	1991	2012
30°	1916	1956	1987
35°	1856	1914	1954
40°	1796	1871	1925
45°	1728	1822	1916
50°	1658	1777	1904
55°	1586	1739	1898
60°	1503	1709	1907
65°	1414	1689	1945
70°	1302	1697	2037
75°	1155	1758	1897
80°	965	1666	1710
85°	721	1332	1223



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	3.4
10°-20°	413.8	9.7
20°-30°	616.7	14.5
30°-40°	725.9	17.1
40°-50°	737.7	17.4
50°-60°	663.3	15.6
60°-70°	524.0	12.3
70°-80°	332.4	7.8
80°-90°	91.7	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°	1176.0	27.7
0°-40°	1901.9	44.7
0°-60°	3302.9	77.7
0°-90°	4251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4251.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1540	1528	1535	1532	1532	146
15°	1467	1460	1470	1474	1475	413
25°	1327	1325	1341	1349	1355	610
35°	1130	1137	1166	1178	1190	707
45°	908	921	958	986	1007	701
55°	676	693	741	789	809	604
65°	444	467	530	588	611	440
75°	222	260	338	368	365	236
85°	47	81	86	79	79	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1538.9	1538.9	1538.9	1538.9	1538.9
2.5°	1546.0	1534.7	1540.4	1537.5	1531.9
5°	1540.4	1527.6	1534.7	1531.9	1531.9
7.5°	1527.6	1517.7	1523.4	1522.0	1523.4
10°	1512.1	1502.2	1510.7	1510.7	1509.2
12.5°	1490.8	1482.4	1492.3	1492.3	1493.7
15°	1466.8	1459.7	1469.6	1473.9	1475.3
17.5°	1437.1	1430.0	1442.8	1447.0	1451.2
20°	1403.2	1400.3	1413.1	1417.3	1423.0
22.5°	1365.0	1365.0	1377.7	1383.3	1391.8
25°	1326.8	1325.4	1340.9	1349.4	1355.1
27.5°	1281.5	1282.9	1302.7	1311.2	1318.3
30°	1233.4	1236.2	1258.9	1268.8	1278.7
32.5°	1182.5	1188.2	1213.6	1224.9	1234.8
35°	1130.2	1137.2	1165.5	1178.3	1189.6
37.5°	1077.8	1087.7	1117.4	1130.2	1142.9
40°	1022.7	1031.1	1065.1	1080.7	1096.2
42.5°	966.1	977.4	1011.3	1034.0	1052.4
45°	908.1	920.8	957.6	985.9	1007.1
47.5°	850.1	867.1	902.4	940.6	959.0
50°	792.1	809.1	848.7	891.1	909.5
52.5°	732.7	749.7	794.9	838.8	858.6
55°	676.1	693.1	741.2	789.3	809.1
57.5°	616.7	635.1	688.8	738.4	758.2
60°	558.7	577.1	635.1	687.4	708.6
62.5°	502.1	521.9	582.8	637.9	659.1
65°	444.1	466.8	530.4	588.4	611.0
67.5°	387.6	413.0	479.5	540.3	564.4
70°	331.0	360.7	431.4	493.6	517.7
72.5°	275.8	308.4	383.3	445.6	458.3
75°	222.1	260.3	338.1	367.8	364.9
77.5°	171.2	213.6	287.1	292.8	301.3
80°	124.5	171.2	215.0	226.3	220.7
82.5°	82.0	128.7	154.2	148.5	147.1
85°	46.7	80.6	86.3	79.2	79.2
87.5°	19.8	32.5	28.3	21.2	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)