

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: P261034

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261034  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4335.0 lumens  
Efficiency: N/A  
Efficacy: 139.3 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

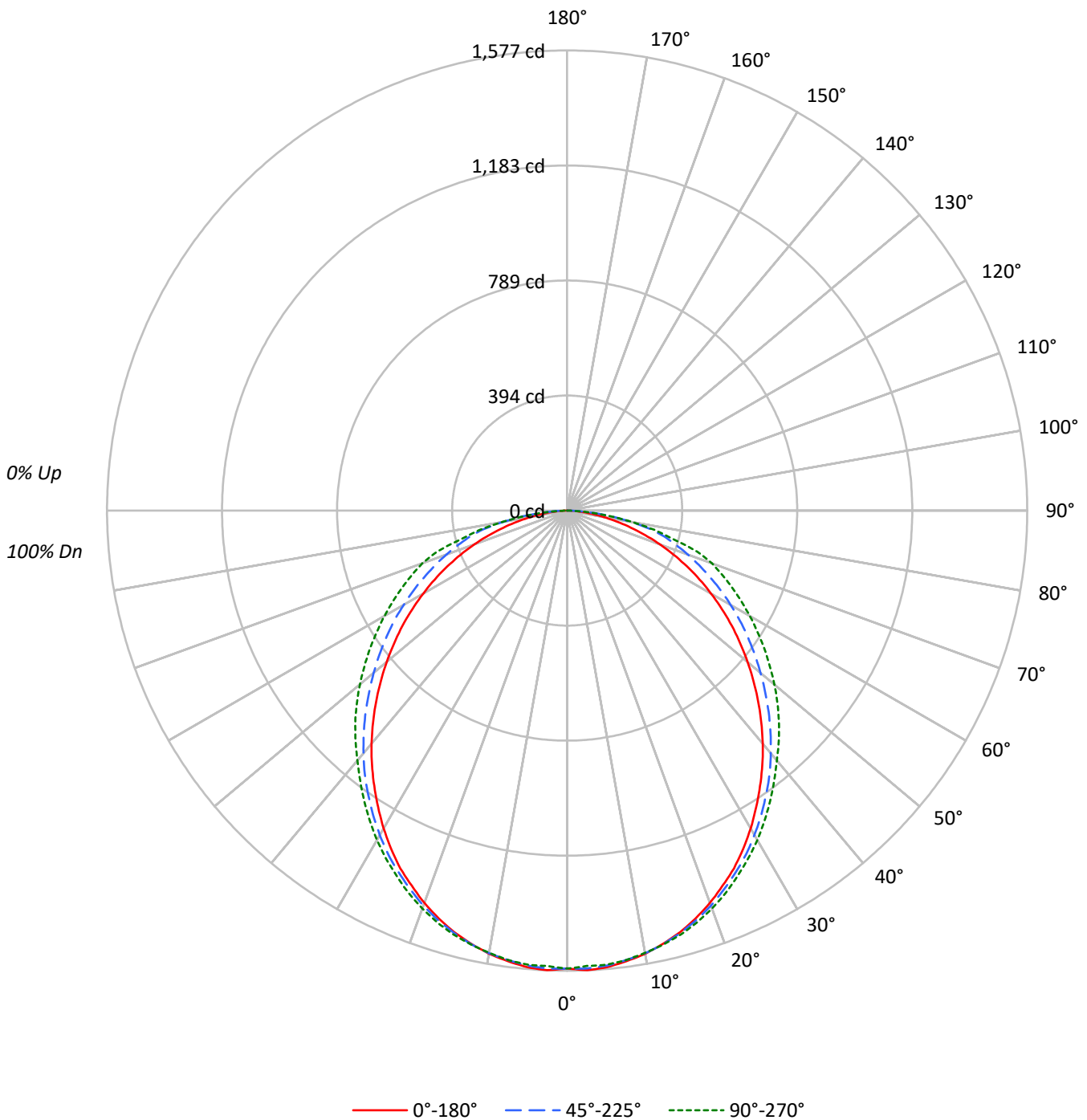
Input Watts (W): 31.110453  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2111	2111	2111
5°	2122	2114	2110
10°	2107	2105	2103
15°	2084	2088	2096
20°	2049	2063	2078
25°	2009	2030	2051
30°	1954	1995	2026
35°	1893	1952	1993
40°	1832	1908	1963
45°	1762	1858	1954
50°	1691	1812	1941
55°	1617	1773	1936
60°	1533	1743	1945
65°	1442	1722	1984
70°	1328	1731	2077
75°	1177	1792	1934
80°	983	1698	1743
85°	735	1359	1247



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.4	3.4
10°-20°	422.0	9.7
20°-30°	628.9	14.5
30°-40°	740.3	17.1
40°-50°	752.3	17.4
50°-60°	676.4	15.6
60°-70°	534.3	12.3
70°-80°	339.0	7.8
80°-90°	93.6	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°	1199.2	27.7
0°-40°	1939.5	44.7
0°-60°	3368.1	77.7
0°-90°	4335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1569	1569	1569	1569	1569	
5°	1571	1558	1565	1562	1562	149
15°	1496	1489	1499	1503	1504	421
25°	1353	1352	1367	1376	1382	622
35°	1152	1160	1189	1202	1213	721
45°	926	939	976	1005	1027	715
55°	690	707	756	805	825	616
65°	453	476	541	600	623	449
75°	226	265	345	375	372	241
85°	48	82	88	81	81	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1569.3	1569.3	1569.3	1569.3	1569.3
2.5°	1576.6	1565.0	1570.8	1567.9	1562.1
5°	1570.8	1557.8	1565.0	1562.1	1562.1
7.5°	1557.8	1547.7	1553.5	1552.0	1553.5
10°	1541.9	1531.8	1540.5	1540.5	1539.1
12.5°	1520.3	1511.7	1521.7	1521.7	1523.2
15°	1495.8	1488.6	1498.7	1503.0	1504.4
17.5°	1465.5	1458.3	1471.3	1475.6	1479.9
20°	1430.9	1428.0	1441.0	1445.3	1451.1
22.5°	1391.9	1391.9	1404.9	1410.7	1419.3
25°	1353.0	1351.5	1367.4	1376.1	1381.8
27.5°	1306.8	1308.3	1328.5	1337.1	1344.3
30°	1257.8	1260.7	1283.8	1293.8	1303.9
32.5°	1205.9	1211.6	1237.6	1249.1	1259.2
35°	1152.5	1159.7	1188.6	1201.5	1213.1
37.5°	1099.1	1109.2	1139.5	1152.5	1165.5
40°	1042.9	1051.5	1086.1	1102.0	1117.9
42.5°	985.2	996.7	1031.3	1054.4	1073.2
45°	926.0	939.0	976.5	1005.4	1027.0
47.5°	866.9	884.2	920.3	959.2	978.0
50°	807.8	825.1	865.5	908.7	927.5
52.5°	747.2	764.5	810.6	855.4	875.5
55°	689.5	706.8	755.8	804.9	825.1
57.5°	628.9	647.6	702.5	752.9	773.1
60°	569.8	588.5	647.6	701.0	722.7
62.5°	512.1	532.3	594.3	650.5	672.2
65°	452.9	476.0	540.9	600.0	623.1
67.5°	395.2	421.2	489.0	551.0	575.5
70°	337.5	367.8	439.9	503.4	527.9
72.5°	281.3	314.4	390.9	454.4	467.3
75°	226.5	265.4	344.7	375.0	372.1
77.5°	174.5	217.8	292.8	298.6	307.2
80°	126.9	174.5	219.2	230.8	225.0
82.5°	83.7	131.3	157.2	151.5	150.0
85°	47.6	82.2	88.0	80.8	80.8
87.5°	20.2	33.2	28.8	21.6	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)