

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: P261030

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261030  
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-LD5-35SE-S-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3846.0 lumens  
Efficiency: N/A  
Efficacy: 140.8 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

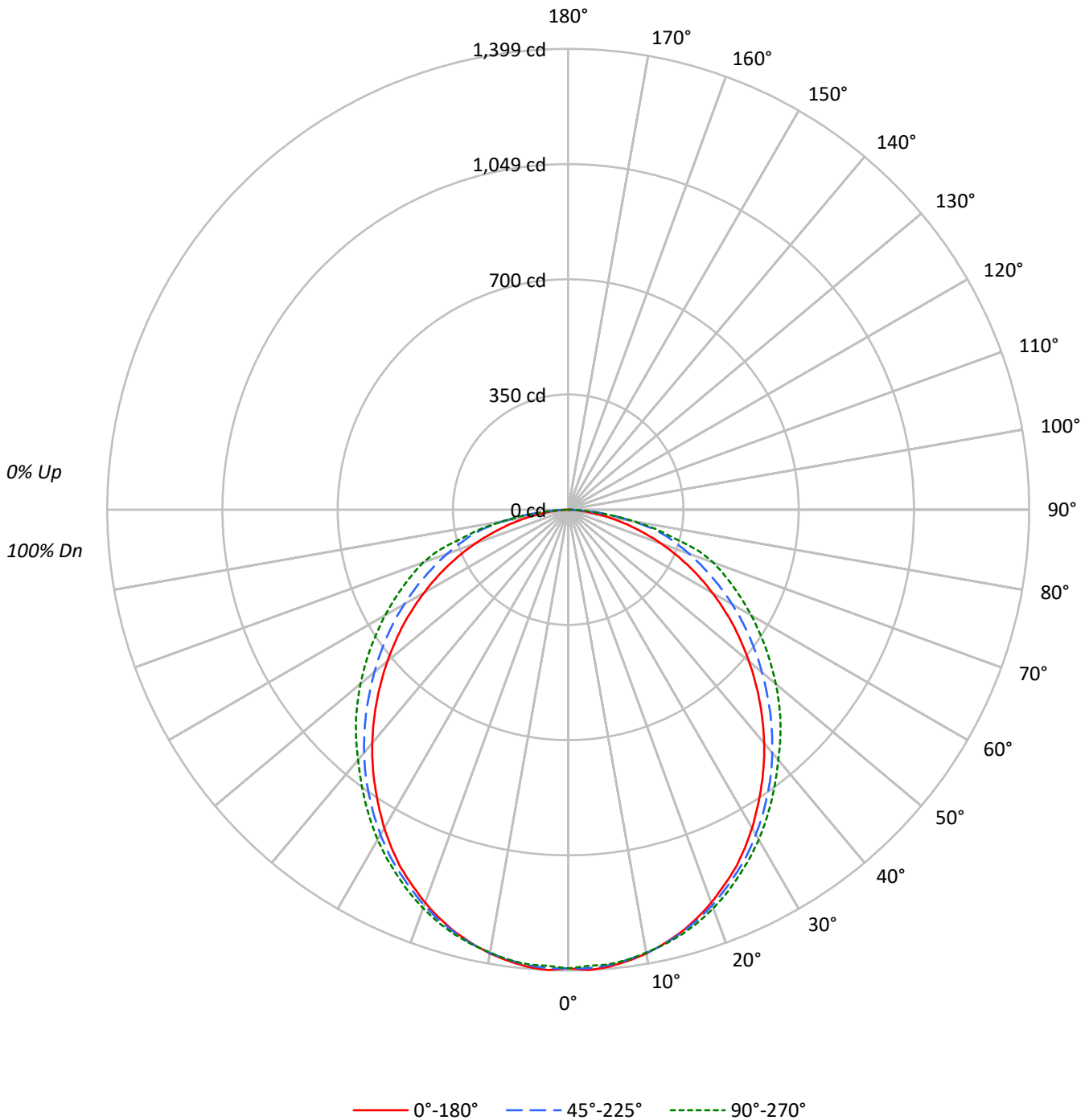
Input Watts (W): 27.31596  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1873	1873	1873
5°	1882	1875	1872
10°	1869	1867	1865
15°	1849	1852	1859
20°	1818	1830	1843
25°	1782	1801	1820
30°	1734	1769	1797
35°	1679	1732	1768
40°	1625	1692	1742
45°	1563	1649	1734
50°	1500	1607	1723
55°	1435	1573	1717
60°	1360	1546	1725
65°	1279	1528	1760
70°	1178	1535	1843
75°	1044	1590	1717
80°	872	1507	1547
85°	651	1206	1107



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.6	3.4
10°-20°	374.4	9.7
20°-30°	557.9	14.5
30°-40°	656.8	17.1
40°-50°	667.4	17.4
50°-60°	600.1	15.6
60°-70°	474.0	12.3
70°-80°	300.7	7.8
80°-90°	83.0	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°	1063.9	27.7
0°-40°	1720.7	44.7
0°-60°	2988.2	77.7
0°-90°	3846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1392	1392	1392	1392	1392	
5°	1394	1382	1388	1386	1386	132
15°	1327	1321	1330	1334	1335	374
25°	1200	1199	1213	1221	1226	552
35°	1022	1029	1054	1066	1076	640
45°	822	833	866	892	911	634
55°	612	627	671	714	732	546
65°	402	422	480	532	553	398
75°	201	236	306	333	330	214
85°	42	73	78	72	72	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1392.3	1392.3	1392.3	1392.3	1392.3
2.5°	1398.7	1388.5	1393.6	1391.0	1385.9
5°	1393.6	1382.1	1388.5	1385.9	1385.9
7.5°	1382.1	1373.1	1378.2	1377.0	1378.2
10°	1368.0	1359.1	1366.7	1366.7	1365.4
12.5°	1348.8	1341.1	1350.1	1350.1	1351.4
15°	1327.1	1320.7	1329.6	1333.5	1334.7
17.5°	1300.2	1293.8	1305.3	1309.1	1313.0
20°	1269.5	1266.9	1278.4	1282.3	1287.4
22.5°	1234.9	1234.9	1246.4	1251.6	1259.2
25°	1200.4	1199.1	1213.2	1220.8	1226.0
27.5°	1159.4	1160.7	1178.6	1186.3	1192.7
30°	1115.9	1118.5	1138.9	1147.9	1156.9
32.5°	1069.8	1075.0	1098.0	1108.2	1117.2
35°	1022.5	1028.9	1054.5	1066.0	1076.2
37.5°	975.1	984.1	1011.0	1022.5	1034.0
40°	925.2	932.9	963.6	977.7	991.8
42.5°	874.0	884.3	915.0	935.5	952.1
45°	821.6	833.1	866.4	892.0	911.2
47.5°	769.1	784.5	816.5	851.0	867.6
50°	716.6	732.0	767.8	806.2	822.9
52.5°	662.9	678.2	719.2	758.9	776.8
55°	611.7	627.1	670.6	714.1	732.0
57.5°	558.0	574.6	623.2	668.0	685.9
60°	505.5	522.1	574.6	621.9	641.1
62.5°	454.3	472.2	527.2	577.1	596.3
65°	401.8	422.3	479.9	532.4	552.8
67.5°	350.6	373.7	433.8	488.8	510.6
70°	299.5	326.3	390.3	446.6	468.4
72.5°	249.5	279.0	346.8	403.1	414.6
75°	200.9	235.5	305.9	332.7	330.2
77.5°	154.8	193.2	259.8	264.9	272.6
80°	112.6	154.8	194.5	204.8	199.6
82.5°	74.2	116.5	139.5	134.4	133.1
85°	42.2	72.9	78.1	71.7	71.7
87.5°	17.9	29.4	25.6	19.2	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)