

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: P261134

Luminaire Tested: **24CZ-LD5-35-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261134  
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-LD5-35-S-UNV-L82765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3583.0 lumens  
Efficiency: N/A  
Efficacy: 146.5 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

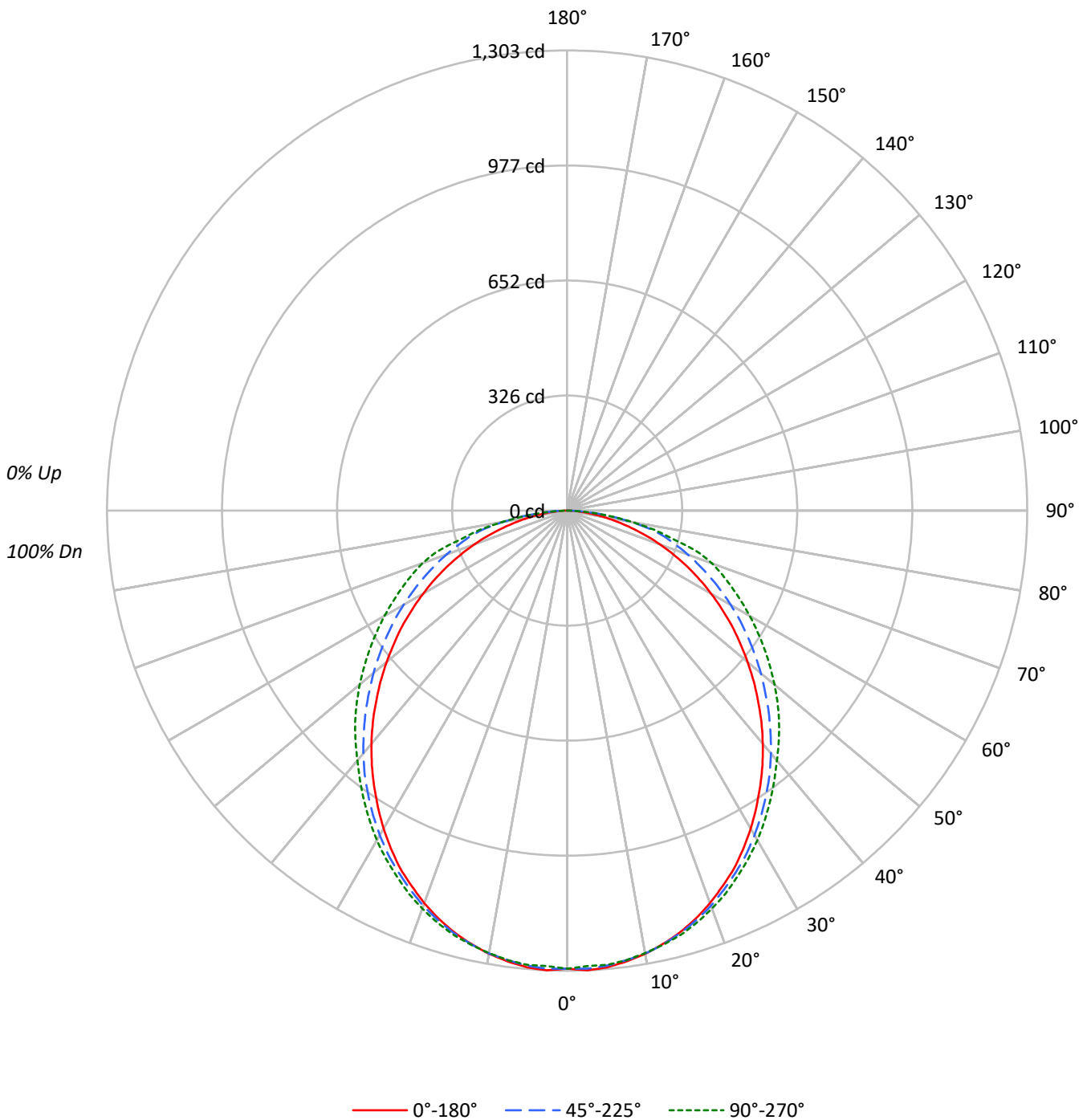
Input Watts (W): 24.459  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1745	1745	1745
5°	1754	1747	1744
10°	1741	1740	1738
15°	1722	1725	1732
20°	1693	1705	1717
25°	1660	1678	1696
30°	1615	1649	1674
35°	1565	1614	1647
40°	1514	1577	1623
45°	1456	1536	1615
50°	1397	1497	1605
55°	1337	1465	1600
60°	1267	1440	1607
65°	1192	1423	1640
70°	1098	1430	1716
75°	973	1481	1599
80°	813	1404	1441
85°	607	1122	1031



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	3.4
10°-20°	348.8	9.7
20°-30°	519.8	14.5
30°-40°	611.9	17.1
40°-50°	621.8	17.4
50°-60°	559.0	15.6
60°-70°	441.6	12.3
70°-80°	280.2	7.8
80°-90°	77.3	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°	991.2	27.7
0°-40°	1603.1	44.7
0°-60°	2783.8	77.7
0°-90°	3583.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3583.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1298	1288	1294	1291	1291	123
15°	1236	1230	1239	1242	1244	348
25°	1118	1117	1130	1137	1142	514
35°	953	958	982	993	1003	596
45°	765	776	807	831	849	591
55°	570	584	625	665	682	509
65°	374	393	447	496	515	371
75°	187	219	285	310	308	199
85°	39	68	73	67	67	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1297.1	1297.1	1297.1	1297.1	1297.1
2.5°	1303.1	1293.5	1298.3	1295.9	1291.2
5°	1298.3	1287.6	1293.5	1291.2	1291.2
7.5°	1287.6	1279.2	1284.0	1282.8	1284.0
10°	1274.5	1266.1	1273.3	1273.3	1272.1
12.5°	1256.6	1249.4	1257.8	1257.8	1259.0
15°	1236.3	1230.3	1238.7	1242.3	1243.5
17.5°	1211.3	1205.3	1216.0	1219.6	1223.2
20°	1182.7	1180.3	1191.0	1194.6	1199.4
22.5°	1150.5	1150.5	1161.2	1166.0	1173.1
25°	1118.3	1117.1	1130.2	1137.4	1142.1
27.5°	1080.1	1081.3	1098.0	1105.2	1111.1
30°	1039.6	1042.0	1061.1	1069.4	1077.7
32.5°	996.7	1001.4	1022.9	1032.4	1040.8
35°	952.6	958.5	982.4	993.1	1002.6
37.5°	908.5	916.8	941.8	952.6	963.3
40°	862.0	869.1	897.7	910.8	924.0
42.5°	814.3	823.8	852.4	871.5	887.0
45°	765.4	776.1	807.1	831.0	848.8
47.5°	716.5	730.8	760.6	792.8	808.3
50°	667.6	681.9	715.3	751.1	766.6
52.5°	617.6	631.9	670.0	707.0	723.7
55°	569.9	584.2	624.7	665.2	681.9
57.5°	519.8	535.3	580.6	622.3	639.0
60°	470.9	486.4	535.3	579.4	597.3
62.5°	423.2	439.9	491.2	537.7	555.6
65°	374.4	393.4	447.1	496.0	515.0
67.5°	326.7	348.1	404.2	455.4	475.7
70°	279.0	304.0	363.6	416.1	436.3
72.5°	232.5	259.9	323.1	375.5	386.3
75°	187.2	219.4	284.9	310.0	307.6
77.5°	144.3	180.0	242.0	246.8	253.9
80°	104.9	144.3	181.2	190.8	186.0
82.5°	69.1	108.5	129.9	125.2	124.0
85°	39.3	68.0	72.7	66.8	66.8
87.5°	16.7	27.4	23.8	17.9	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)