

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: P261142

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261142  
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-LD5-40-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4058.0 lumens  
Efficiency: N/A  
Efficacy: 143.1 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

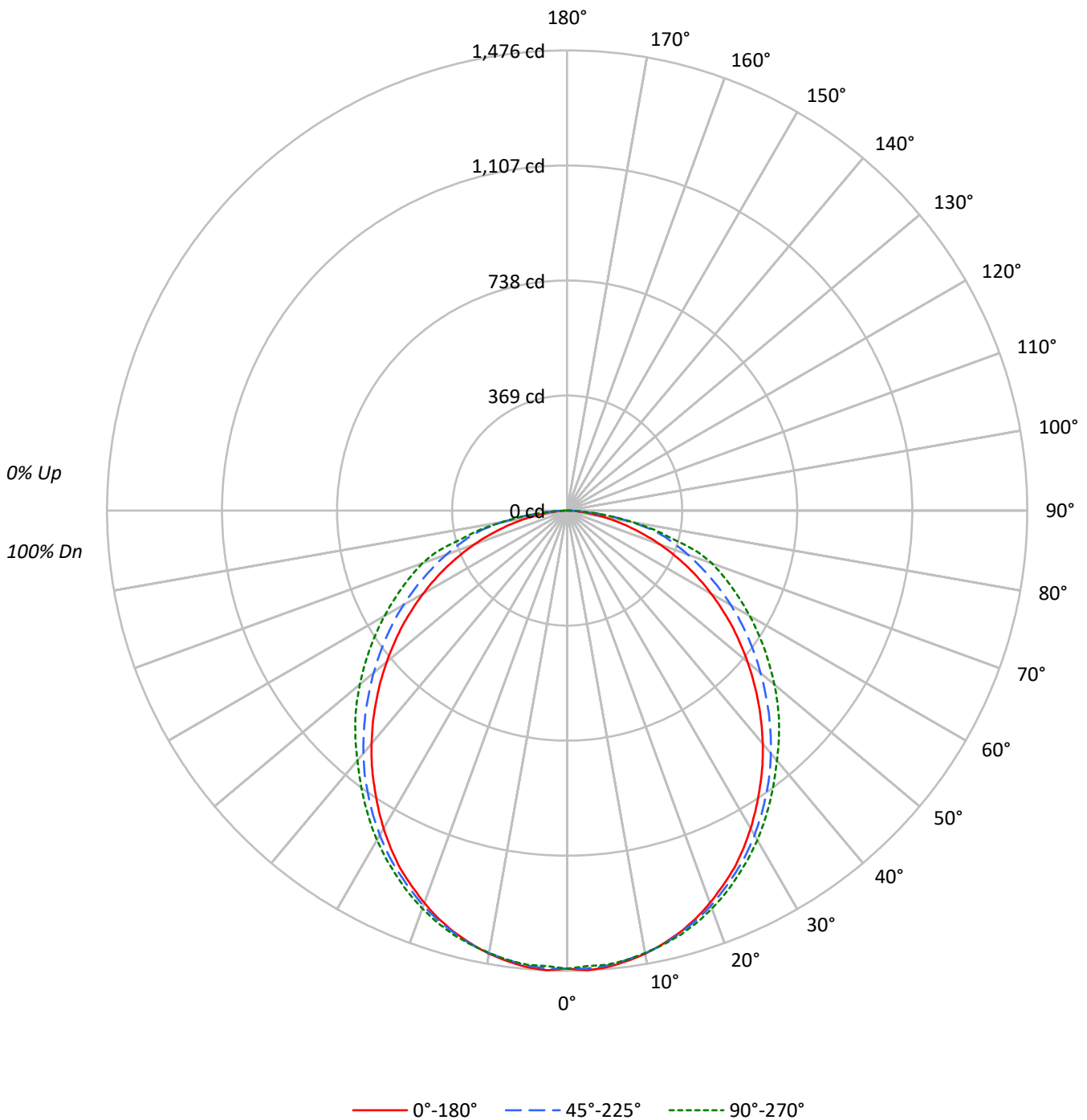
Input Watts (W): 28.365  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1977	1977	1977
5°	1986	1979	1975
10°	1972	1970	1968
15°	1950	1954	1962
20°	1918	1931	1945
25°	1880	1900	1920
30°	1829	1867	1896
35°	1772	1827	1865
40°	1715	1786	1838
45°	1650	1739	1829
50°	1583	1696	1817
55°	1514	1660	1812
60°	1435	1632	1820
65°	1350	1612	1857
70°	1243	1620	1944
75°	1102	1678	1811
80°	921	1590	1632
85°	689	1272	1167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.9	3.4
10°-20°	395.0	9.7
20°-30°	588.7	14.5
30°-40°	693.0	17.1
40°-50°	704.2	17.4
50°-60°	633.1	15.6
60°-70°	500.2	12.3
70°-80°	317.3	7.8
80°-90°	87.6	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°	1122.6	27.7
0°-40°	1815.6	44.7
0°-60°	3152.9	77.7
0°-90°	4058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4058.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1470	1458	1465	1462	1462	139
15°	1400	1394	1403	1407	1408	394
25°	1266	1265	1280	1288	1294	582
35°	1079	1086	1113	1125	1136	675
45°	867	879	914	941	961	669
55°	645	662	708	753	772	576
65°	424	446	506	562	583	420
75°	212	248	323	351	348	226
85°	45	77	82	76	76	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1469.1	1469.1	1469.1	1469.1	1469.1
2.5°	1475.8	1465.0	1470.4	1467.7	1462.3
5°	1470.4	1458.3	1465.0	1462.3	1462.3
7.5°	1458.3	1448.8	1454.2	1452.9	1454.2
10°	1443.4	1434.0	1442.1	1442.1	1440.7
12.5°	1423.2	1415.1	1424.5	1424.5	1425.9
15°	1400.2	1393.5	1402.9	1407.0	1408.3
17.5°	1371.9	1365.1	1377.3	1381.3	1385.4
20°	1339.4	1336.7	1348.9	1352.9	1358.4
22.5°	1303.0	1303.0	1315.1	1320.5	1328.6
25°	1266.5	1265.2	1280.0	1288.1	1293.5
27.5°	1223.3	1224.7	1243.6	1251.7	1258.4
30°	1177.4	1180.1	1201.7	1211.2	1220.6
32.5°	1128.8	1134.2	1158.5	1169.3	1178.8
35°	1078.8	1085.6	1112.6	1124.8	1135.6
37.5°	1028.9	1038.3	1066.7	1078.8	1091.0
40°	976.2	984.3	1016.7	1031.6	1046.4
42.5°	922.2	933.0	965.4	987.0	1004.6
45°	866.9	879.0	914.1	941.1	961.4
47.5°	811.5	827.7	861.5	897.9	915.5
50°	756.1	772.3	810.1	850.7	868.2
52.5°	699.4	715.6	758.8	800.7	819.6
55°	645.4	661.6	707.5	753.4	772.3
57.5°	588.7	606.3	657.6	704.8	723.7
60°	533.3	550.9	606.3	656.2	676.5
62.5°	479.3	498.2	556.3	609.0	629.2
65°	424.0	445.6	506.3	561.7	583.3
67.5°	370.0	394.3	457.7	515.8	538.7
70°	316.0	344.3	411.8	471.2	494.2
72.5°	263.3	294.4	365.9	425.3	437.5
75°	212.0	248.4	322.7	351.1	348.4
77.5°	163.4	203.9	274.1	279.5	287.6
80°	118.8	163.4	205.2	216.0	210.6
82.5°	78.3	122.9	147.2	141.8	140.4
85°	44.6	77.0	82.4	75.6	75.6
87.5°	18.9	31.1	27.0	20.3	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)