

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: P260727

Luminaire Tested: **24CZ-LD5-40-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260727  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-40-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4246.0 lumens  
Efficiency: N/A  
Efficacy: 145.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

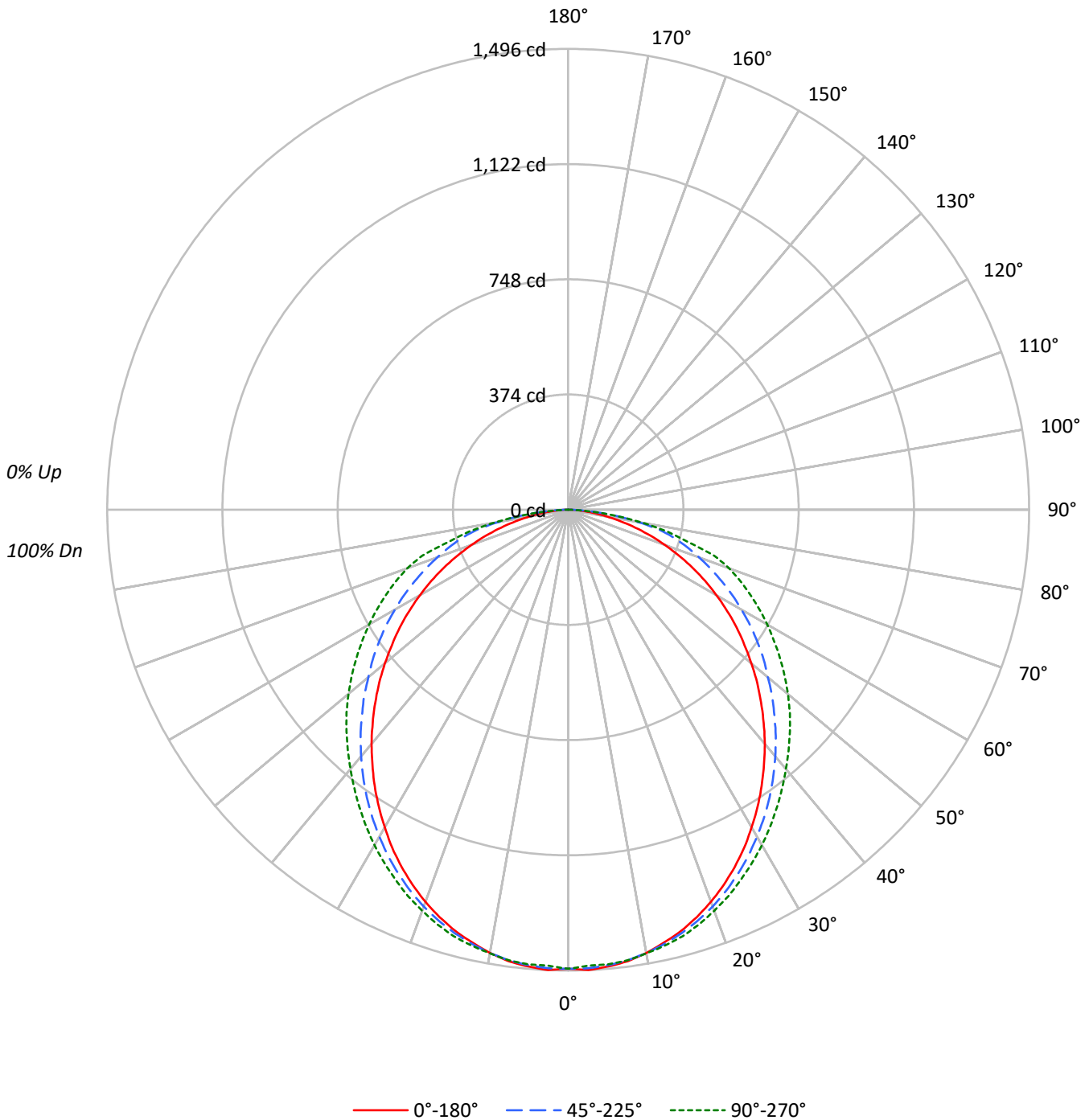
Input Watts (W): 29.109  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2005	2005	2005
5°	2011	2005	2001
10°	1996	1996	1998
15°	1972	1983	1997
20°	1940	1963	1984
25°	1899	1936	1968
30°	1850	1904	1954
35°	1798	1872	1939
40°	1744	1836	1930
45°	1685	1801	1936
50°	1625	1771	1948
55°	1565	1760	1968
60°	1494	1749	2007
65°	1416	1749	2074
70°	1310	1779	2185
75°	1171	1859	2078
80°	980	1780	1904
85°	741	1369	1301



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	3.3
10°-20°	400.8	9.4
20°-30°	599.1	14.1
30°-40°	710.8	16.7
40°-50°	731.6	17.2
50°-60°	671.1	15.8
60°-70°	542.6	12.8
70°-80°	352.2	8.3
80°-90°	97.1	2.3
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°	1140.7	26.9
0°-40°	1851.5	43.6
0°-60°	3254.1	76.6
0°-90°	4246.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4246.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1489	1478	1484	1483	1481	141
15°	1416	1410	1423	1429	1433	399
25°	1279	1281	1304	1316	1326	589
35°	1095	1103	1140	1164	1180	685
45°	885	900	946	992	1018	683
55°	667	688	750	811	839	596
65°	445	471	550	622	651	440
75°	225	268	358	400	400	240
85°	48	81	89	86	84	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1490.1	1490.1	1490.1	1490.1	1490.1
2.5°	1495.9	1484.3	1490.1	1488.7	1481.4
5°	1488.7	1478.5	1484.3	1482.9	1481.4
7.5°	1478.5	1468.3	1475.6	1474.1	1475.6
10°	1461.0	1452.3	1461.0	1462.5	1462.5
12.5°	1439.2	1432.0	1443.6	1446.5	1449.4
15°	1416.0	1410.2	1423.3	1429.1	1433.4
17.5°	1386.9	1382.5	1398.5	1405.8	1411.6
20°	1354.9	1353.5	1370.9	1378.2	1385.5
22.5°	1318.6	1318.6	1338.9	1347.7	1357.8
25°	1279.3	1280.8	1304.0	1315.7	1325.8
27.5°	1237.2	1238.6	1266.2	1280.8	1292.4
30°	1190.6	1196.5	1225.5	1244.4	1257.5
32.5°	1144.1	1151.4	1183.4	1205.2	1219.7
35°	1094.7	1103.4	1139.8	1164.5	1180.5
37.5°	1043.8	1054.0	1093.2	1120.9	1139.8
40°	992.9	1004.6	1045.3	1077.3	1099.1
42.5°	939.1	952.2	997.3	1035.1	1058.4
45°	885.4	899.9	946.4	991.5	1017.6
47.5°	831.6	849.0	898.4	947.9	975.5
50°	776.3	793.8	846.1	902.8	930.4
52.5°	721.1	741.4	799.6	857.7	885.4
55°	667.3	687.6	750.2	811.2	838.8
57.5°	612.0	632.4	700.7	764.7	792.3
60°	555.3	578.6	649.8	715.3	745.8
62.5°	500.1	524.8	600.4	670.2	699.3
65°	444.9	471.0	549.5	622.2	651.3
67.5°	388.2	418.7	500.1	574.2	604.8
70°	332.9	366.4	452.1	526.3	555.3
72.5°	279.1	315.5	404.2	479.7	497.2
75°	225.3	267.5	357.6	399.8	399.8
77.5°	174.5	221.0	305.3	321.3	330.0
80°	126.5	177.4	229.7	248.6	245.7
82.5°	84.3	135.2	164.3	164.3	159.9
85°	48.0	81.4	88.7	85.8	84.3
87.5°	20.4	30.5	27.6	21.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)