

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: P276158

Luminaire Tested: **24CZ2-40-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276158  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4002.5 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

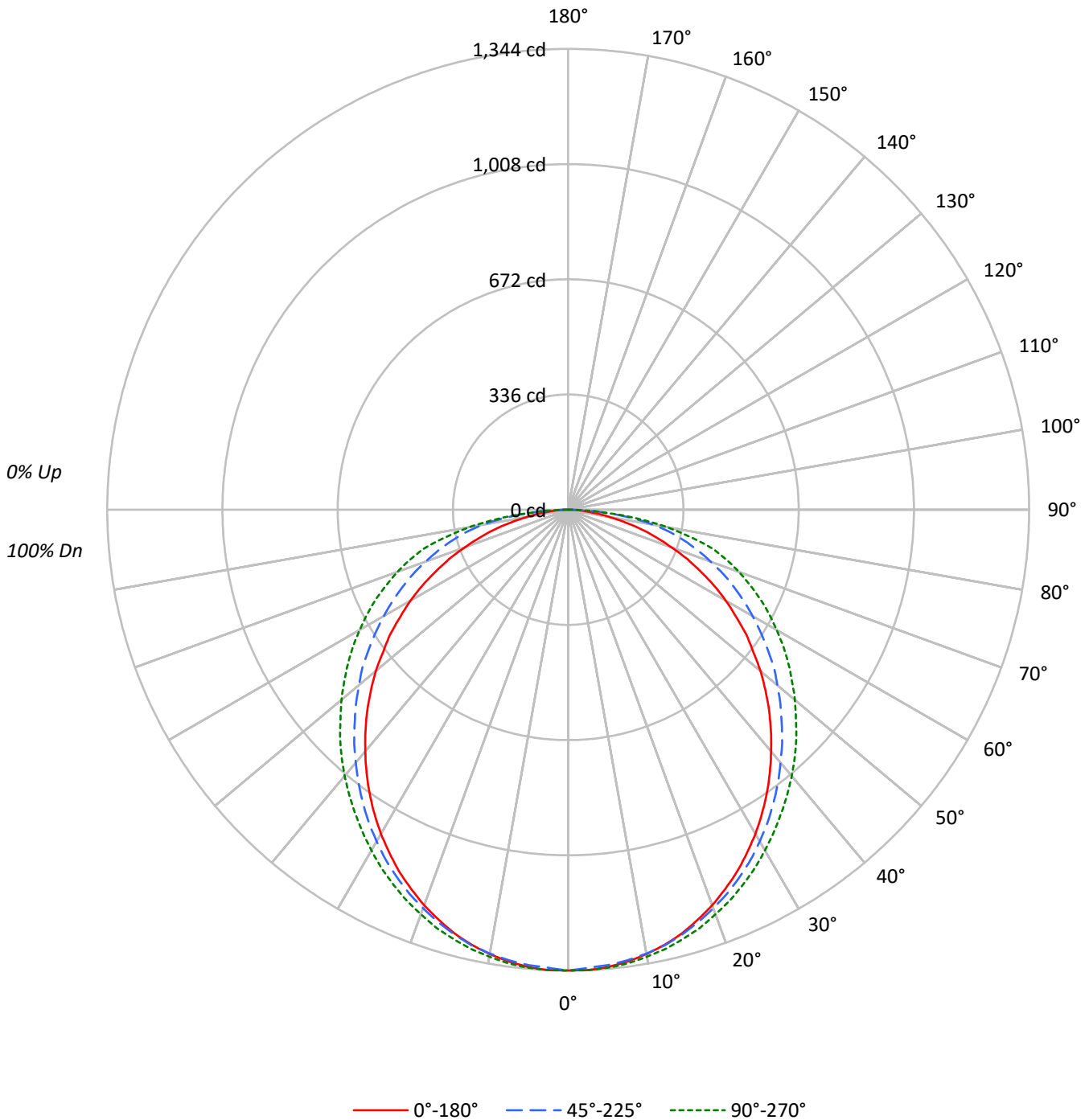
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	1808	1808	1808
5°	1808	1801	1811
10°	1798	1796	1809
15°	1783	1786	1805
20°	1758	1771	1798
25°	1729	1755	1791
30°	1696	1735	1783
35°	1659	1714	1777
40°	1617	1692	1781
45°	1576	1675	1789
50°	1532	1666	1806
55°	1485	1664	1839
60°	1427	1672	1887
65°	1352	1697	1969
70°	1256	1740	2081
75°	1146	1826	2257
80°	942	1967	2256
85°	722	1815	1939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.1	3.2
10°-20°	362.8	9.1
20°-30°	546.0	13.6
30°-40°	654.4	16.3
40°-50°	681.9	17.0
50°-60°	634.4	15.9
60°-70°	522.5	13.1
70°-80°	355.9	8.9
80°-90°	117.5	2.9
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°	1036.0	25.9
0°-40°	1690.3	42.2
0°-60°	3006.6	75.1
0°-90°	4002.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4002.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1338	1338	1333	1340	1341	127
15°	1280	1281	1282	1294	1296	361
25°	1165	1170	1182	1202	1206	536
35°	1010	1022	1043	1071	1082	631
45°	828	846	880	924	940	639
55°	633	655	709	765	784	564
65°	425	461	533	596	618	422
75°	220	270	351	414	434	232
85°	47	91	118	126	126	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.8	1343.8	1343.8	1343.8	1343.8
2.5°	1343.8	1343.8	1337.2	1343.8	1343.8
5°	1338.5	1338.5	1333.1	1339.8	1341.2
7.5°	1329.1	1330.5	1325.1	1333.1	1334.5
10°	1315.8	1317.1	1314.4	1322.5	1323.8
12.5°	1299.8	1301.1	1301.1	1310.4	1311.8
15°	1279.7	1281.1	1282.4	1294.4	1295.7
17.5°	1254.3	1258.3	1261.0	1275.7	1278.4
20°	1227.6	1231.6	1237.0	1253.0	1255.7
22.5°	1196.9	1202.2	1211.6	1229.0	1233.0
25°	1164.8	1170.2	1182.2	1202.2	1206.2
27.5°	1128.8	1136.8	1151.5	1172.8	1178.2
30°	1091.4	1099.4	1116.7	1139.5	1147.5
32.5°	1051.3	1062.0	1082.0	1107.4	1115.4
35°	1009.9	1021.9	1043.3	1071.3	1082.0
37.5°	965.8	979.2	1004.5	1035.3	1048.6
40°	920.4	936.4	963.1	999.2	1013.9
42.5°	875.0	889.7	923.1	961.8	977.8
45°	828.2	845.6	880.3	924.4	940.4
47.5°	780.1	797.5	838.9	885.6	900.3
50°	732.0	749.4	796.1	845.6	862.9
52.5°	679.9	702.6	756.1	805.5	822.9
55°	633.2	654.6	709.3	765.4	784.1
57.5°	579.7	605.1	665.2	724.0	744.1
60°	530.3	557.0	621.2	681.3	701.3
62.5°	479.6	508.9	577.1	638.5	661.2
65°	424.8	460.9	533.0	595.8	618.5
67.5°	375.4	412.8	488.9	553.0	573.1
70°	319.3	364.7	442.2	506.3	529.0
72.5°	271.2	316.6	398.1	460.9	483.6
75°	220.4	269.8	351.3	414.1	434.1
77.5°	169.6	224.4	305.9	354.0	360.7
80°	121.6	179.0	253.8	281.9	291.2
82.5°	85.5	137.6	187.0	205.7	211.1
85°	46.8	90.8	117.6	125.6	125.6
87.5°	20.0	38.7	46.8	48.1	49.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)