

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: P276306

Luminaire Tested: **24CZ2-50-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276306  
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: 24CZ2-50-UNV-L92765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4179.4 lumens  
Efficiency: N/A  
Efficacy: 104.0 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

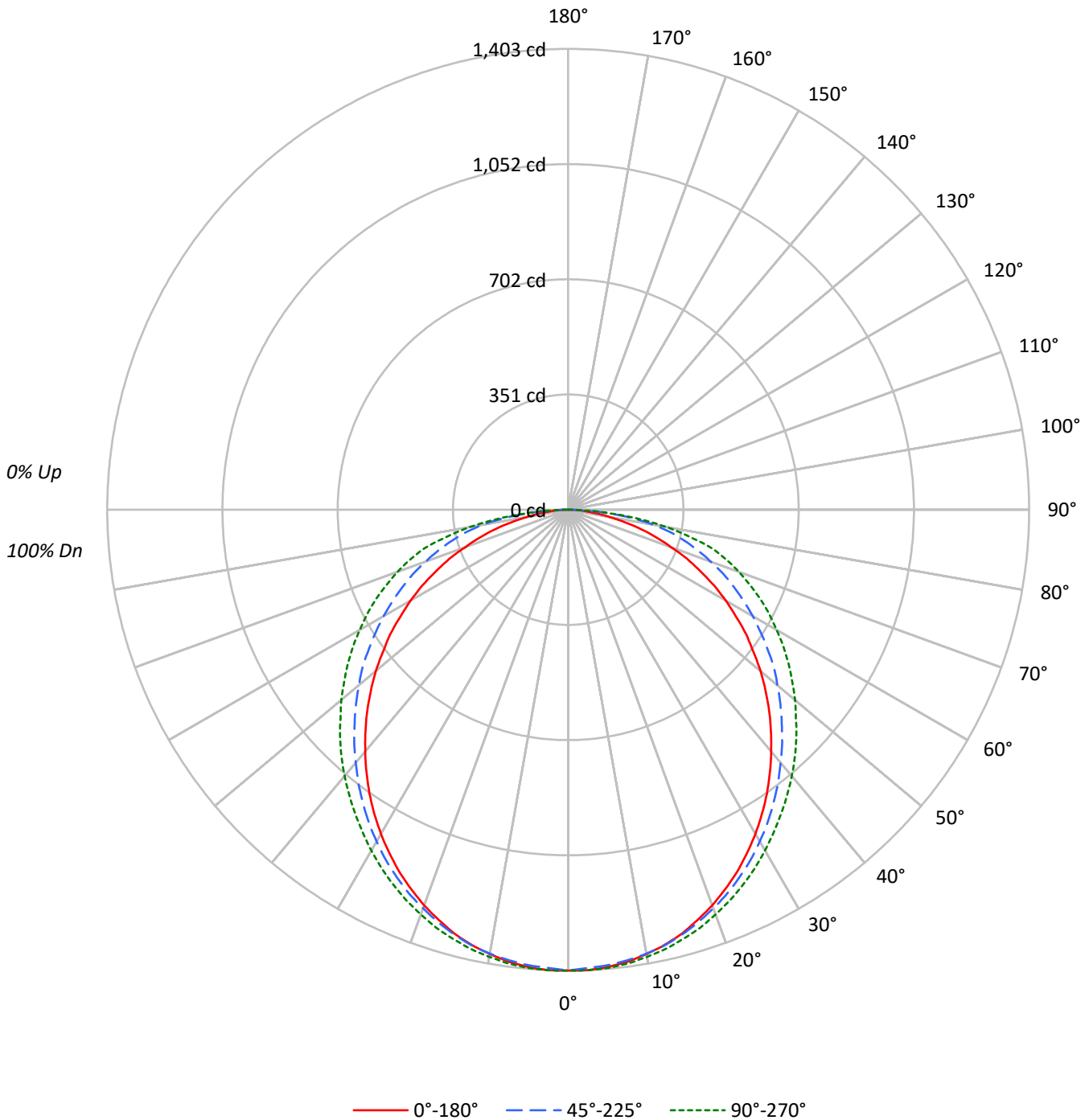
Input Watts (W): 40.176  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1888	1888	1888
5°	1888	1880	1891
10°	1877	1875	1889
15°	1861	1865	1885
20°	1835	1849	1877
25°	1806	1833	1870
30°	1771	1812	1862
35°	1732	1789	1856
40°	1688	1766	1860
45°	1646	1749	1869
50°	1600	1740	1886
55°	1551	1738	1921
60°	1490	1745	1971
65°	1412	1772	2056
70°	1312	1816	2173
75°	1197	1907	2357
80°	983	2053	2356
85°	753	1894	2024



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.7	3.2
10°-20°	378.9	9.1
20°-30°	570.2	13.6
30°-40°	683.3	16.3
40°-50°	712.0	17.0
50°-60°	662.5	15.9
60°-70°	545.6	13.1
70°-80°	371.6	8.9
80°-90°	122.7	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°	1081.8	25.9
0°-40°	1765.0	42.2
0°-60°	3139.5	75.1
0°-90°	4179.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4179.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1398	1398	1392	1399	1400	133
15°	1336	1338	1339	1352	1353	376
25°	1216	1222	1234	1255	1260	560
35°	1054	1067	1089	1119	1130	659
45°	865	883	919	965	982	667
55°	661	684	741	799	819	589
65°	444	481	556	622	646	440
75°	230	282	367	432	453	243
85°	49	95	123	131	131	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1403.2	1403.2	1403.2	1403.2	1403.2
2.5°	1403.2	1403.2	1396.3	1403.2	1403.2
5°	1397.6	1397.6	1392.1	1399.0	1400.4
7.5°	1387.9	1389.3	1383.7	1392.1	1393.5
10°	1373.9	1375.3	1372.5	1380.9	1382.3
12.5°	1357.2	1358.6	1358.6	1368.4	1369.8
15°	1336.3	1337.7	1339.1	1351.6	1353.0
17.5°	1309.8	1314.0	1316.7	1332.1	1334.9
20°	1281.9	1286.1	1291.6	1308.4	1311.2
22.5°	1249.8	1255.4	1265.1	1283.3	1287.5
25°	1216.3	1221.9	1234.5	1255.4	1259.6
27.5°	1178.7	1187.0	1202.4	1224.7	1230.3
30°	1139.6	1148.0	1166.1	1189.8	1198.2
32.5°	1097.8	1108.9	1129.8	1156.3	1164.7
35°	1054.5	1067.1	1089.4	1118.7	1129.8
37.5°	1008.5	1022.4	1048.9	1081.0	1095.0
40°	961.1	977.8	1005.7	1043.4	1058.7
42.5°	913.6	929.0	963.8	1004.3	1021.0
45°	864.8	882.9	919.2	965.2	982.0
47.5°	814.6	832.7	876.0	924.8	940.1
50°	764.4	782.5	831.3	882.9	901.1
52.5°	710.0	733.7	789.5	841.1	859.2
55°	661.2	683.5	740.7	799.3	818.8
57.5°	605.4	631.9	694.6	756.0	776.9
60°	553.8	581.7	648.6	711.4	732.3
62.5°	500.8	531.4	602.6	666.7	690.5
65°	443.6	481.2	556.5	622.1	645.8
67.5°	392.0	431.0	510.5	577.5	598.4
70°	333.4	380.8	461.7	528.7	552.4
72.5°	283.2	330.6	415.7	481.2	504.9
75°	230.2	281.8	366.8	432.4	453.3
77.5°	177.1	234.3	319.4	369.6	376.6
80°	126.9	186.9	265.0	294.3	304.1
82.5°	89.3	143.7	195.3	214.8	220.4
85°	48.8	94.9	122.7	131.1	131.1
87.5°	20.9	40.5	48.8	50.2	51.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)