

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: P276169

Luminaire Tested: **24CZ2-50-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276169  
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-L82765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4467.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

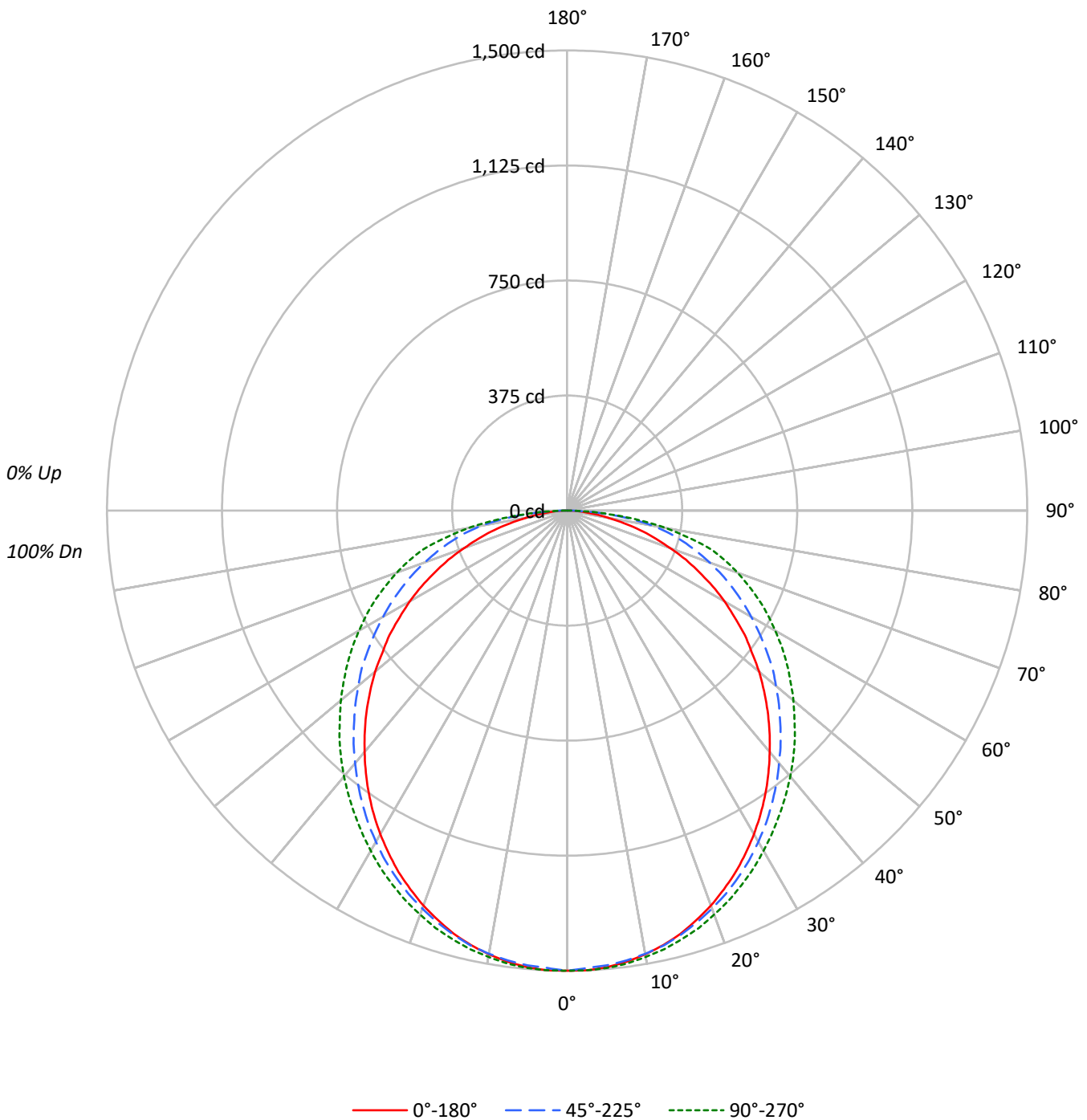
Input Watts (W): 39.432  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2018	2018	2018
5°	2018	2010	2022
10°	2006	2004	2018
15°	1989	1994	2014
20°	1962	1977	2007
25°	1930	1959	1999
30°	1892	1936	1990
35°	1851	1912	1984
40°	1804	1888	1987
45°	1759	1870	1997
50°	1710	1860	2016
55°	1658	1857	2053
60°	1593	1865	2106
65°	1509	1894	2198
70°	1402	1941	2323
75°	1279	2038	2519
80°	1051	2195	2518
85°	806	2025	2163



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.8	3.2
10°-20°	405.0	9.1
20°-30°	609.4	13.6
30°-40°	730.3	16.3
40°-50°	761.0	17.0
50°-60°	708.0	15.9
60°-70°	583.2	13.1
70°-80°	397.2	8.9
80°-90°	131.1	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°	1156.2	25.9
0°-40°	1886.5	42.2
0°-60°	3355.6	75.1
0°-90°	4467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4467.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1500	1500	1500	1500	1500	
5°	1494	1494	1488	1495	1497	142
15°	1428	1430	1431	1445	1446	402
25°	1300	1306	1319	1342	1346	598
35°	1127	1140	1164	1196	1208	705
45°	924	944	982	1032	1050	713
55°	707	730	792	854	875	630
65°	474	514	595	665	690	471
75°	246	301	392	462	484	259
85°	52	101	131	140	140	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1499.8	1499.8	1499.8	1499.8	1499.8
2.5°	1499.8	1499.8	1492.3	1499.8	1499.8
5°	1493.8	1493.8	1487.9	1495.3	1496.8
7.5°	1483.4	1484.9	1478.9	1487.9	1489.3
10°	1468.5	1470.0	1467.0	1475.9	1477.4
12.5°	1450.6	1452.1	1452.1	1462.5	1464.0
15°	1428.2	1429.7	1431.2	1444.6	1446.1
17.5°	1399.9	1404.4	1407.4	1423.8	1426.7
20°	1370.1	1374.6	1380.5	1398.4	1401.4
22.5°	1335.8	1341.8	1352.2	1371.6	1376.0
25°	1300.0	1306.0	1319.4	1341.8	1346.2
27.5°	1259.8	1268.7	1285.1	1309.0	1314.9
30°	1218.0	1227.0	1246.3	1271.7	1280.6
32.5°	1173.3	1185.2	1207.6	1235.9	1244.9
35°	1127.1	1140.5	1164.3	1195.7	1207.6
37.5°	1077.9	1092.8	1121.1	1155.4	1170.3
40°	1027.2	1045.1	1074.9	1115.1	1131.5
42.5°	976.5	992.9	1030.2	1073.4	1091.3
45°	924.3	943.7	982.5	1031.7	1049.6
47.5°	870.6	890.0	936.2	988.4	1004.8
50°	817.0	836.4	888.5	943.7	963.1
52.5°	758.8	784.2	843.8	899.0	918.4
55°	706.7	730.5	791.6	854.3	875.1
57.5°	647.0	675.3	742.4	808.0	830.4
60°	591.9	621.7	693.2	760.3	782.7
62.5°	535.2	568.0	644.0	712.6	738.0
65°	474.1	514.3	594.8	664.9	690.3
67.5°	418.9	460.7	545.6	617.2	639.6
70°	356.3	407.0	493.5	565.0	590.4
72.5°	302.6	353.3	444.3	514.3	539.7
75°	246.0	301.1	392.1	462.2	484.5
77.5°	189.3	250.5	341.4	395.1	402.5
80°	135.7	199.8	283.3	314.6	325.0
82.5°	95.4	153.6	208.7	229.6	235.6
85°	52.2	101.4	131.2	140.1	140.1
87.5°	22.4	43.2	52.2	53.7	55.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)