

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: P276700

Luminaire Tested: **24CZ2-35-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276700  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35-S-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3203.7 lumens  
Efficiency: N/A  
Efficacy: 120.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

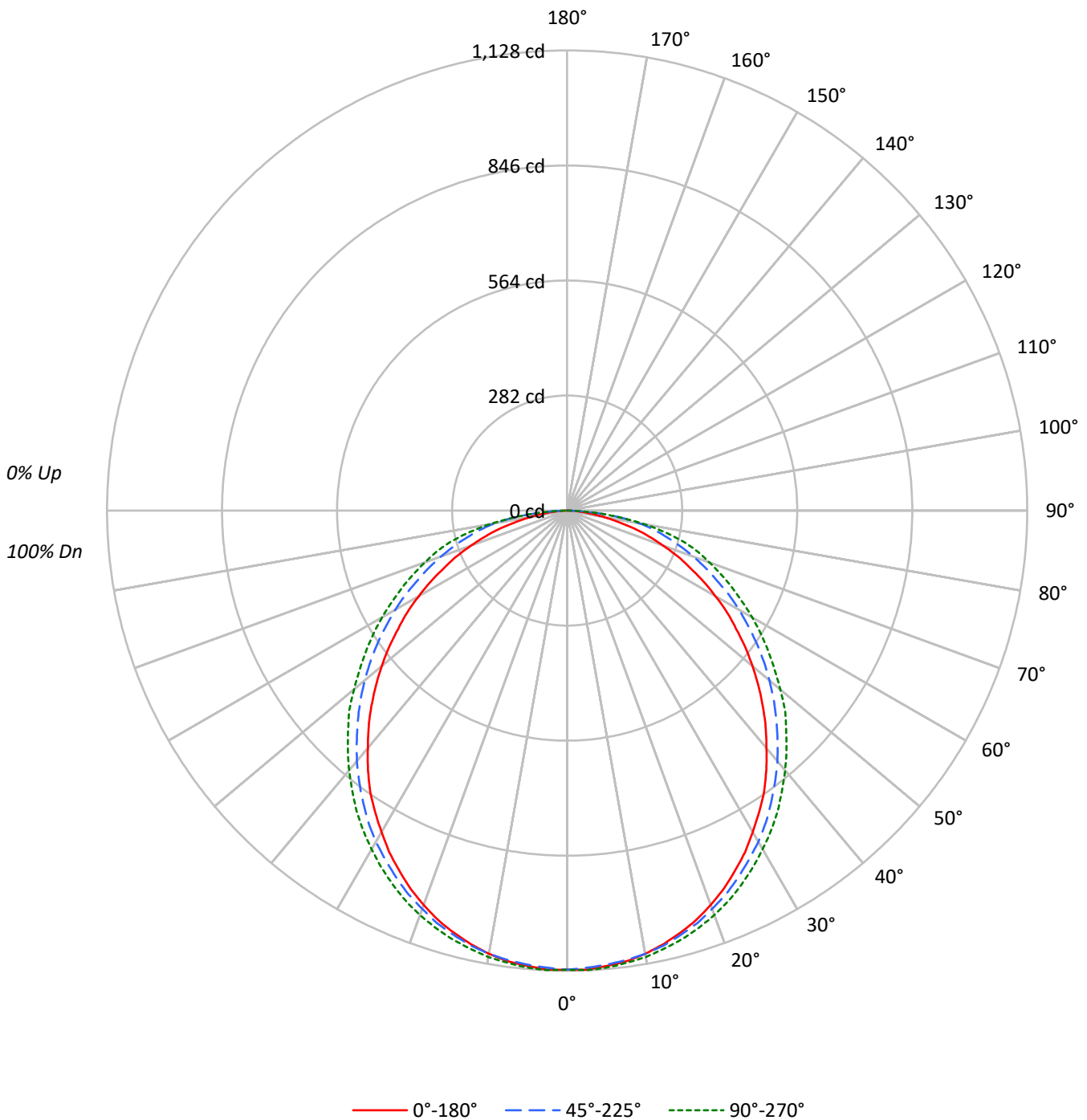
Input Watts (W): 26.505  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	1514	1514	1514
5°	1513	1509	1519
10°	1507	1507	1518
15°	1493	1500	1515
20°	1473	1488	1511
25°	1446	1473	1502
30°	1413	1456	1489
35°	1382	1432	1478
40°	1335	1408	1460
45°	1291	1380	1444
50°	1242	1355	1427
55°	1186	1330	1413
60°	1131	1309	1410
65°	1060	1286	1419
70°	981	1293	1457
75°	878	1317	1539
80°	710	1395	1506
85°	534	1226	1193



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.5	3.3
10°-20°	304.4	9.5
20°-30°	457.7	14.3
30°-40°	545.1	17.0
40°-50°	557.9	17.4
50°-60°	502.3	15.7
60°-70°	394.5	12.3
70°-80°	256.0	8.0
80°-90°	79.2	2.5
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°	868.6	27.1
0°-40°	1413.8	44.1
0°-60°	2474.0	77.2
0°-90°	3203.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1120	1122	1117	1123	1124	106
15°	1072	1075	1077	1086	1088	302
25°	974	982	992	1008	1012	449
35°	842	852	872	893	900	525
45°	679	695	726	753	759	523
55°	506	528	567	596	602	453
65°	333	358	404	438	446	331
75°	169	202	253	288	296	179
85°	35	64	79	77	77	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1125.5	1125.5	1125.5	1125.5	1125.5
2.5°	1126.5	1126.5	1121.4	1126.5	1127.5
5°	1120.4	1122.4	1117.3	1123.4	1124.4
7.5°	1114.3	1114.3	1111.2	1117.3	1118.3
10°	1103.1	1104.1	1103.1	1110.2	1111.2
12.5°	1088.8	1090.9	1091.9	1099.0	1100.0
15°	1071.5	1074.6	1076.6	1085.8	1087.8
17.5°	1052.2	1055.2	1060.3	1070.5	1072.5
20°	1028.8	1032.9	1039.0	1052.2	1055.2
22.5°	1003.3	1007.4	1017.6	1029.8	1034.9
25°	973.8	982.0	992.2	1008.4	1011.5
27.5°	944.3	951.5	964.7	982.0	986.1
30°	909.7	920.9	937.2	954.5	958.6
32.5°	876.2	887.3	906.7	925.0	930.1
35°	841.6	851.7	872.1	893.4	899.6
37.5°	801.9	815.1	837.5	858.9	865.0
40°	760.1	776.4	801.9	824.3	831.4
42.5°	720.5	737.8	763.2	787.6	795.8
45°	678.7	695.0	725.5	753.0	759.1
47.5°	636.0	654.3	686.9	714.4	724.5
50°	593.3	612.6	647.2	675.7	681.8
52.5°	550.5	570.9	607.5	638.0	641.1
55°	505.7	528.1	566.8	596.3	602.4
57.5°	465.0	484.4	526.1	556.6	563.7
60°	420.3	441.6	486.4	514.9	524.1
62.5°	377.5	399.9	446.7	475.2	483.4
65°	332.8	358.2	404.0	437.6	445.7
67.5°	294.1	318.5	367.4	399.9	408.1
70°	249.3	276.8	328.7	362.3	370.4
72.5°	210.6	239.1	291.0	323.6	335.8
75°	168.9	201.5	253.4	288.0	296.1
77.5°	128.2	165.9	218.8	245.2	245.2
80°	91.6	131.3	180.1	192.3	194.4
82.5°	60.0	98.7	133.3	132.3	132.3
85°	34.6	64.1	79.4	77.3	77.3
87.5°	13.2	26.5	28.5	28.5	27.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)