

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: P277013

Luminaire Tested: **24CZ2-50-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277013  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-RDP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3276.7 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

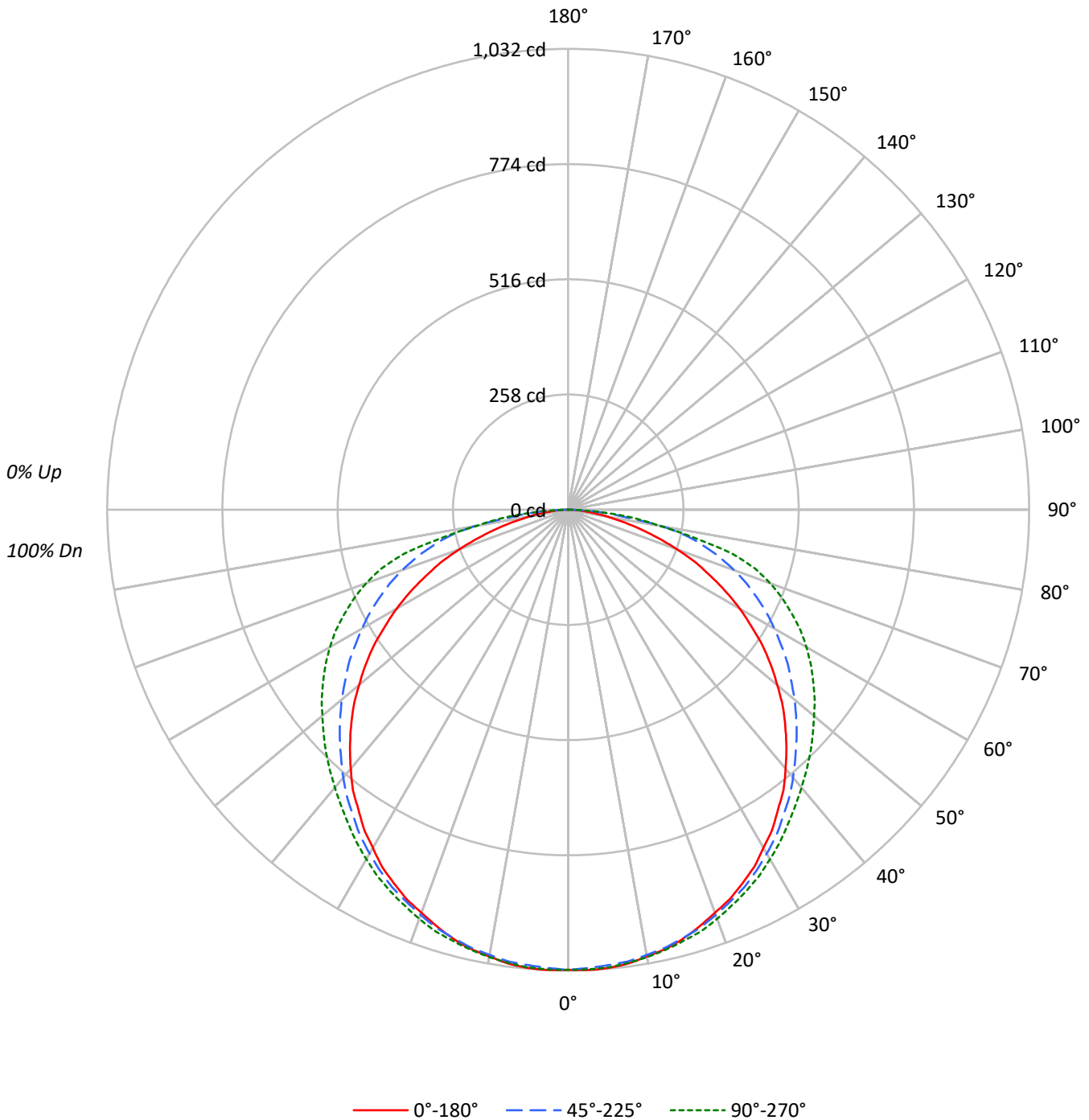
Input Watts (W): 40.641  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1386	1386	1386
5°	1392	1383	1390
10°	1388	1383	1390
15°	1386	1383	1392
20°	1375	1382	1396
25°	1370	1385	1400
30°	1359	1381	1404
35°	1345	1377	1409
40°	1330	1376	1427
45°	1308	1376	1460
50°	1279	1385	1504
55°	1247	1407	1571
60°	1194	1435	1658
65°	1118	1485	1759
70°	1017	1554	1893
75°	862	1639	1977
80°	680	1650	1599
85°	502	1255	1405



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.7	3.0
10°-20°	281.3	8.6
20°-30°	430.2	13.1
30°-40°	525.9	16.0
40°-50°	560.5	17.1
50°-60°	535.9	16.4
60°-70°	454.0	13.9
70°-80°	305.1	9.3
80°-90°	86.1	2.6
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°	809.2	24.7
0°-40°	1335.1	40.7
0°-60°	2431.5	74.2
0°-90°	3276.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3276.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1030	1030	1030	1030	1030	
5°	1030	1029	1024	1029	1029	98
15°	995	995	993	1001	1000	280
25°	923	926	933	941	943	425
35°	819	826	839	855	858	513
45°	688	699	723	754	767	530
55°	532	551	600	647	670	473
65°	351	387	466	528	553	349
75°	166	226	315	369	380	178
85°	32	67	81	88	91	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1030.4	1030.4	1030.4	1030.4	1030.4
2.5°	1032.0	1032.0	1027.2	1030.4	1030.4
5°	1030.4	1028.8	1023.9	1028.8	1028.8
7.5°	1025.5	1023.9	1020.7	1025.5	1023.9
10°	1015.8	1015.8	1012.5	1017.4	1017.4
12.5°	1007.7	1006.0	1004.4	1010.9	1009.3
15°	994.7	994.7	993.0	1001.2	999.5
17.5°	978.4	980.0	981.7	988.2	989.8
20°	960.5	963.8	965.4	975.2	975.2
22.5°	944.3	945.9	949.2	958.9	958.9
25°	923.1	926.4	932.9	941.0	942.7
27.5°	902.0	903.6	911.8	923.1	924.8
30°	874.4	879.3	889.0	902.0	903.6
32.5°	850.0	854.9	866.3	879.3	882.5
35°	819.1	825.6	838.6	854.9	858.1
37.5°	791.5	796.4	812.6	830.5	835.4
40°	757.4	767.1	783.4	804.5	812.6
42.5°	723.2	733.0	752.5	780.1	789.9
45°	687.5	698.9	723.2	754.1	767.1
47.5°	651.7	664.7	692.4	728.1	742.7
50°	611.1	627.4	661.5	702.1	718.4
52.5°	572.1	591.6	629.0	674.5	695.6
55°	531.5	551.0	599.7	646.9	669.6
57.5°	486.0	512.0	565.6	619.2	643.6
60°	443.7	468.1	533.1	591.6	616.0
62.5°	398.2	430.7	500.6	562.3	586.7
65°	351.1	386.8	466.5	528.2	552.6
67.5°	308.8	347.8	432.3	494.1	518.5
70°	258.4	307.2	394.9	456.7	481.1
72.5°	211.3	264.9	355.9	416.1	438.8
75°	165.8	225.9	315.3	368.9	380.3
77.5°	123.5	186.9	273.0	295.8	287.7
80°	87.8	149.5	212.9	201.5	206.4
82.5°	56.9	113.8	131.6	149.5	154.4
85°	32.5	66.6	81.3	87.8	91.0
87.5°	14.6	24.4	32.5	32.5	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)