

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: P276995

Luminaire Tested: **24CZ2-40-RDP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276995  
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: 24CZ2-40-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: 2651.8 lumens  
Efficiency: N/A  
Efficacy: 85.1 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

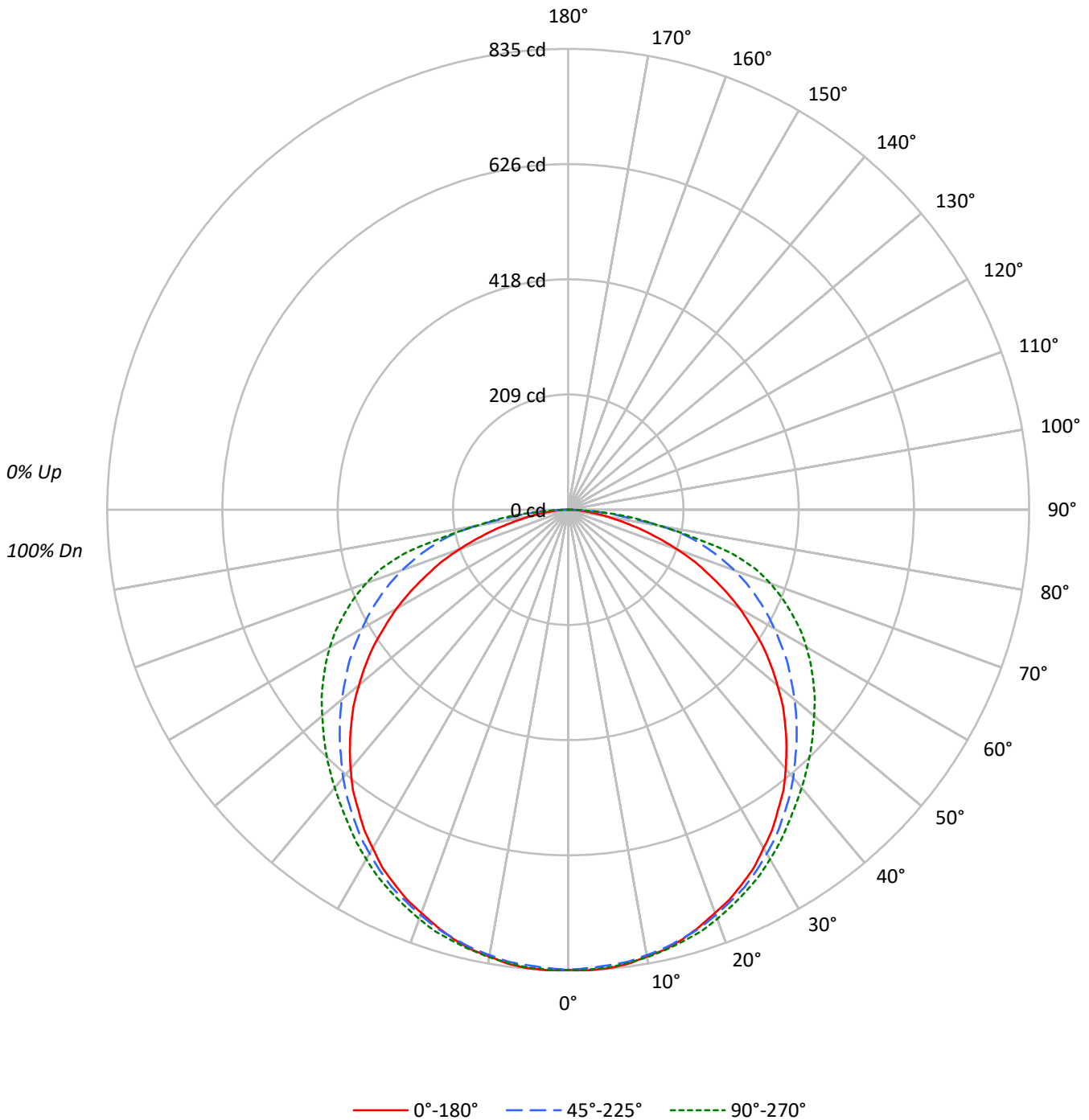
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1122	1122	1122
5°	1126	1119	1125
10°	1123	1120	1125
15°	1121	1120	1127
20°	1113	1119	1130
25°	1109	1121	1133
30°	1100	1118	1136
35°	1089	1115	1141
40°	1077	1114	1155
45°	1059	1114	1181
50°	1035	1121	1217
55°	1009	1139	1271
60°	966	1161	1341
65°	904	1202	1424
70°	823	1257	1531
75°	698	1327	1600
80°	550	1335	1295
85°	406	1016	1138



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	3.0
10°-20°	227.7	8.6
20°-30°	348.2	13.1
30°-40°	425.6	16.0
40°-50°	453.6	17.1
50°-60°	433.7	16.4
60°-70°	367.4	13.9
70°-80°	246.9	9.3
80°-90°	69.6	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°	654.9	24.7
0°-40°	1080.5	40.7
0°-60°	1967.9	74.2
0°-90°	2651.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2651.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	834	833	829	833	833	79
15°	805	805	804	810	809	227
25°	747	750	755	762	763	344
35°	663	668	679	692	694	415
45°	556	566	585	610	621	429
55°	430	446	485	524	542	383
65°	284	313	378	428	447	282
75°	134	183	255	299	308	144
85°	26	54	66	71	74	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	833.9	833.9	833.9	833.9	833.9
2.5°	835.3	835.3	831.3	833.9	833.9
5°	833.9	832.6	828.7	832.6	832.6
7.5°	830.0	828.7	826.0	830.0	828.7
10°	822.1	822.1	819.5	823.4	823.4
12.5°	815.5	814.2	812.9	818.2	816.8
15°	805.0	805.0	803.7	810.3	808.9
17.5°	791.8	793.2	794.5	799.7	801.1
20°	777.4	780.0	781.3	789.2	789.2
22.5°	764.2	765.5	768.2	776.1	776.1
25°	747.1	749.8	755.0	761.6	762.9
27.5°	730.0	731.3	737.9	747.1	748.4
30°	707.7	711.6	719.5	730.0	731.3
32.5°	687.9	691.9	701.1	711.6	714.2
35°	662.9	668.2	678.7	691.9	694.5
37.5°	640.6	644.5	657.7	672.1	676.1
40°	613.0	620.8	634.0	651.1	657.7
42.5°	585.3	593.2	609.0	631.4	639.3
45°	556.4	565.6	585.3	610.3	620.8
47.5°	527.5	538.0	560.3	589.3	601.1
50°	494.6	507.7	535.4	568.2	581.4
52.5°	463.0	478.8	509.0	545.9	563.0
55°	430.1	445.9	485.4	523.5	541.9
57.5°	393.3	414.3	457.7	501.2	520.9
60°	359.1	378.8	431.4	478.8	498.5
62.5°	322.3	348.6	405.1	455.1	474.8
65°	284.1	313.1	377.5	427.5	447.2
67.5°	249.9	281.5	349.9	399.9	419.6
70°	209.1	248.6	319.6	369.6	389.3
72.5°	171.0	214.4	288.1	336.7	355.1
75°	134.2	182.8	255.2	298.6	307.8
77.5°	100.0	151.3	221.0	239.4	232.8
80°	71.0	121.0	172.3	163.1	167.1
82.5°	46.0	92.1	106.5	121.0	125.0
85°	26.3	53.9	65.8	71.0	73.7
87.5°	11.8	19.7	26.3	26.3	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)