

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: P276999

Luminaire Tested: **24CZ2-45-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276999  
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: 24CZ2-45-RDP-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2646.1 lumens  
Efficiency: N/A  
Efficacy: 75.7 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

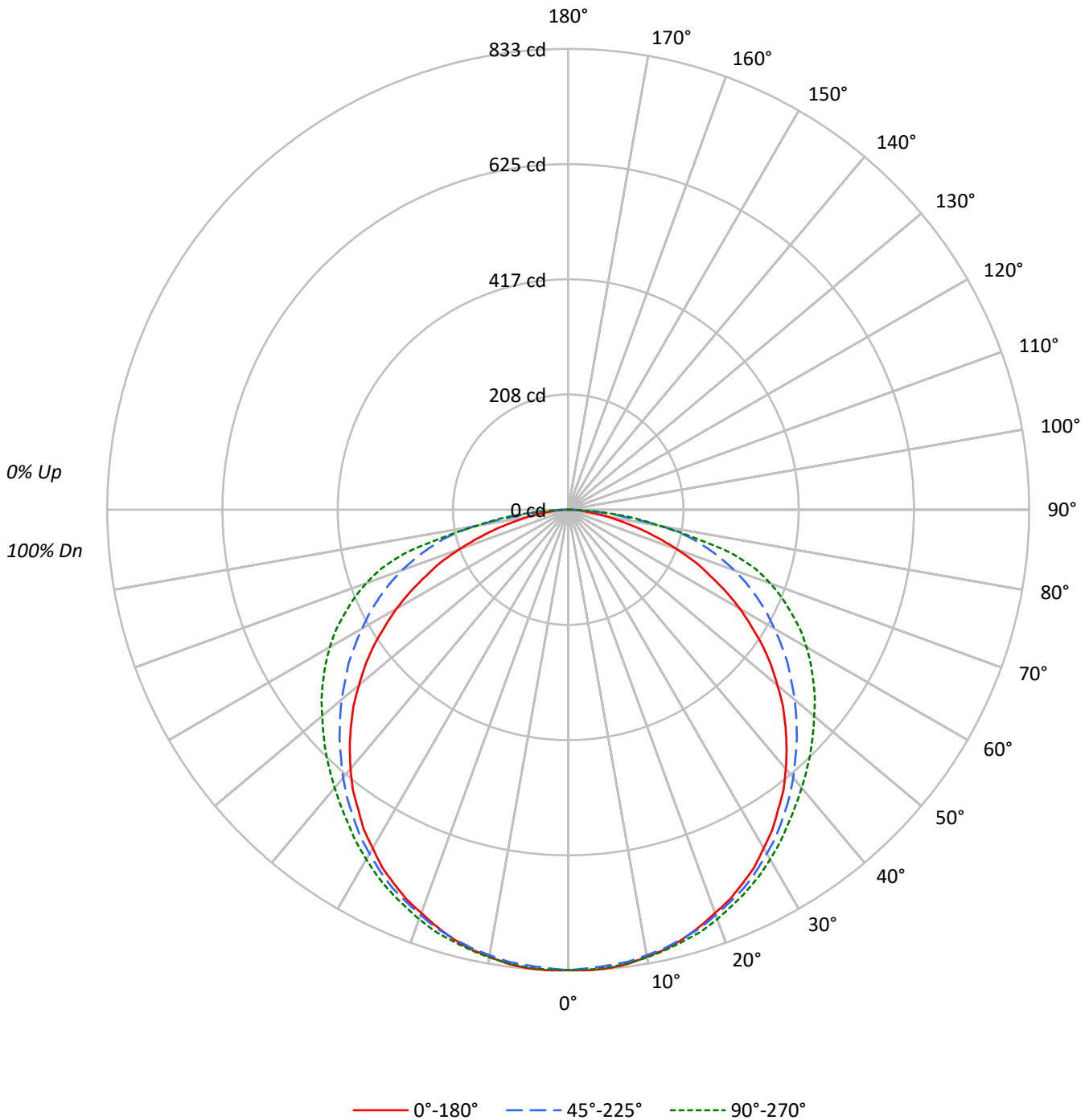
Input Watts (W): 34.968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1120	1120	1120
5°	1124	1117	1122
10°	1121	1117	1123
15°	1119	1117	1124
20°	1111	1116	1128
25°	1107	1118	1130
30°	1097	1115	1134
35°	1087	1112	1138
40°	1074	1111	1153
45°	1056	1111	1179
50°	1033	1118	1214
55°	1007	1136	1269
60°	964	1158	1338
65°	903	1199	1421
70°	821	1255	1528
75°	696	1324	1596
80°	549	1332	1292
85°	406	1013	1135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	3.0
10°-20°	227.2	8.6
20°-30°	347.4	13.1
30°-40°	424.7	16.0
40°-50°	452.6	17.1
50°-60°	432.8	16.4
60°-70°	366.6	13.9
70°-80°	246.4	9.3
80°-90°	69.5	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°	653.5	24.7
0°-40°	1078.2	40.7
0°-60°	1963.6	74.2
0°-90°	2646.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2646.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	832	831	827	831	831	79
15°	803	803	802	808	807	226
25°	746	748	753	760	761	344
35°	662	667	677	690	693	414
45°	555	564	584	609	620	428
55°	429	445	484	522	541	382
65°	284	312	377	427	446	281
75°	134	182	255	298	307	143
85°	26	54	66	71	74	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	832.1	832.1	832.1	832.1	832.1
2.5°	833.4	833.4	829.5	832.1	832.1
5°	832.1	830.8	826.9	830.8	830.8
7.5°	828.2	826.9	824.3	828.2	826.9
10°	820.3	820.3	817.7	821.6	821.6
12.5°	813.8	812.4	811.1	816.4	815.1
15°	803.3	803.3	801.9	808.5	807.2
17.5°	790.1	791.4	792.8	798.0	799.3
20°	775.7	778.3	779.6	787.5	787.5
22.5°	762.6	763.9	766.5	774.4	774.4
25°	745.5	748.1	753.4	759.9	761.3
27.5°	728.4	729.8	736.3	745.5	746.8
30°	706.1	710.1	717.9	728.4	729.8
32.5°	686.4	690.4	699.6	710.1	712.7
35°	661.5	666.8	677.3	690.4	693.0
37.5°	639.2	643.1	656.3	670.7	674.6
40°	611.6	619.5	632.6	649.7	656.3
42.5°	584.1	591.9	607.7	630.0	637.9
45°	555.2	564.4	584.1	609.0	619.5
47.5°	526.3	536.8	559.1	588.0	599.8
50°	493.5	506.6	534.2	567.0	580.1
52.5°	462.0	477.8	507.9	544.7	561.8
55°	429.2	444.9	484.3	522.4	540.8
57.5°	392.4	413.4	456.8	500.1	519.8
60°	358.3	378.0	430.5	477.8	497.4
62.5°	321.6	347.8	404.3	454.1	473.8
65°	283.5	312.4	376.7	426.6	446.3
67.5°	249.4	280.9	349.1	399.0	418.7
70°	208.7	248.1	318.9	368.8	388.5
72.5°	170.6	213.9	287.4	336.0	354.4
75°	133.9	182.4	254.6	297.9	307.1
77.5°	99.8	150.9	220.5	238.9	232.3
80°	70.9	120.8	171.9	162.8	166.7
82.5°	45.9	91.9	106.3	120.8	124.7
85°	26.3	53.8	65.6	70.9	73.5
87.5°	11.8	19.7	26.3	26.3	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)