

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: P276874

Luminaire Tested: **24CZ2-45-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276874  
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-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2647.0 lumens  
Efficiency: N/A  
Efficacy: 73.8 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

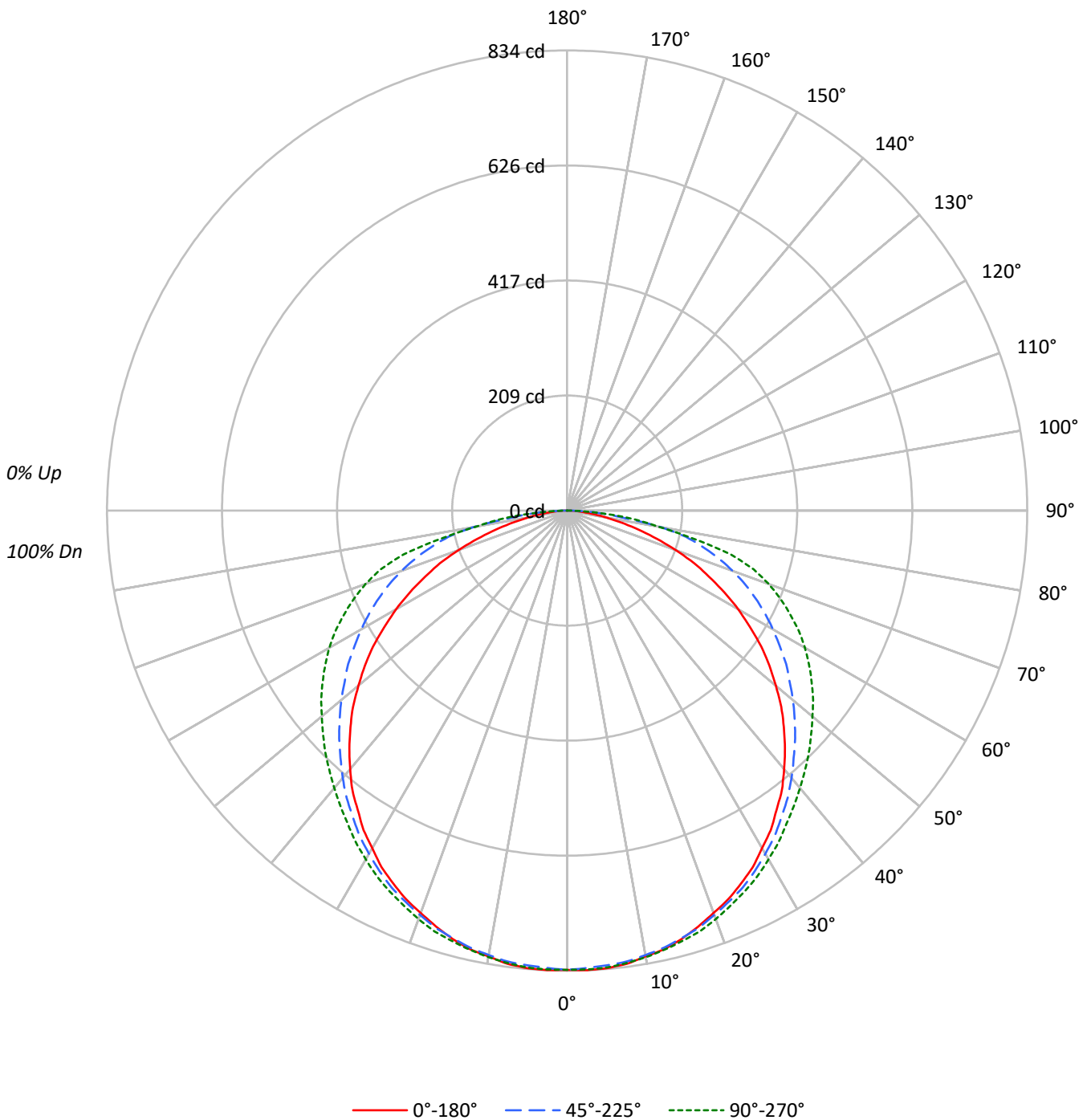
Input Watts (W): 35.877168  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	68	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	1123
10°	1121	1118	1123
15°	1119	1117	1125
20°	1111	1117	1128
25°	1107	1119	1131
30°	1097	1116	1134
35°	1087	1113	1139
40°	1075	1111	1153
45°	1057	1112	1179
50°	1033	1119	1215
55°	1007	1137	1269
60°	964	1159	1339
65°	903	1200	1421
70°	821	1255	1529
75°	696	1324	1597
80°	549	1333	1292
85°	406	1013	1135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	3.0
10°-20°	227.3	8.6
20°-30°	347.5	13.1
30°-40°	424.8	16.0
40°-50°	452.8	17.1
50°-60°	432.9	16.4
60°-70°	366.7	13.9
70°-80°	246.5	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°	653.7	24.7
0°-40°	1078.6	40.7
0°-60°	1964.3	74.2
0°-90°	2647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2647.0	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°	804	804	802	809	808	227
25°	746	748	754	760	762	344
35°	662	667	678	691	693	415
45°	555	565	584	609	620	428
55°	429	445	484	523	541	382
65°	284	312	377	427	446	282
75°	134	182	255	298	307	143
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°	832.4	832.4	832.4	832.4	832.4
2.5°	833.7	833.7	829.8	832.4	832.4
5°	832.4	831.1	827.2	831.1	831.1
7.5°	828.5	827.2	824.5	828.5	827.2
10°	820.6	820.6	818.0	821.9	821.9
12.5°	814.0	812.7	811.4	816.7	815.3
15°	803.5	803.5	802.2	808.8	807.5
17.5°	790.4	791.7	793.0	798.3	799.6
20°	776.0	778.6	779.9	787.8	787.8
22.5°	762.8	764.1	766.8	774.6	774.6
25°	745.8	748.4	753.6	760.2	761.5
27.5°	728.7	730.0	736.6	745.8	747.1
30°	706.4	710.3	718.2	728.7	730.0
32.5°	686.7	690.6	699.8	710.3	712.9
35°	661.7	667.0	677.5	690.6	693.2
37.5°	639.4	643.3	656.5	670.9	674.9
40°	611.8	619.7	632.8	649.9	656.5
42.5°	584.3	592.1	607.9	630.2	638.1
45°	555.4	564.6	584.3	609.2	619.7
47.5°	526.5	537.0	559.3	588.2	600.0
50°	493.7	506.8	534.4	567.2	580.3
52.5°	462.2	477.9	508.1	544.9	561.9
55°	429.3	445.1	484.5	522.6	540.9
57.5°	392.6	413.6	456.9	500.2	519.9
60°	358.4	378.1	430.6	477.9	497.6
62.5°	321.7	347.9	404.4	454.3	474.0
65°	283.6	312.5	376.8	426.7	446.4
67.5°	249.5	281.0	349.2	399.1	418.8
70°	208.8	248.1	319.0	368.9	388.6
72.5°	170.7	214.0	287.5	336.1	354.5
75°	133.9	182.5	254.7	298.0	307.2
77.5°	99.8	151.0	220.6	239.0	232.4
80°	70.9	120.8	172.0	162.8	166.7
82.5°	46.0	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)