

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: P276871

Luminaire Tested: **24CZ2-40-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276871  
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-L93050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2405.6 lumens  
Efficiency: N/A  
Efficacy: 75.9 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

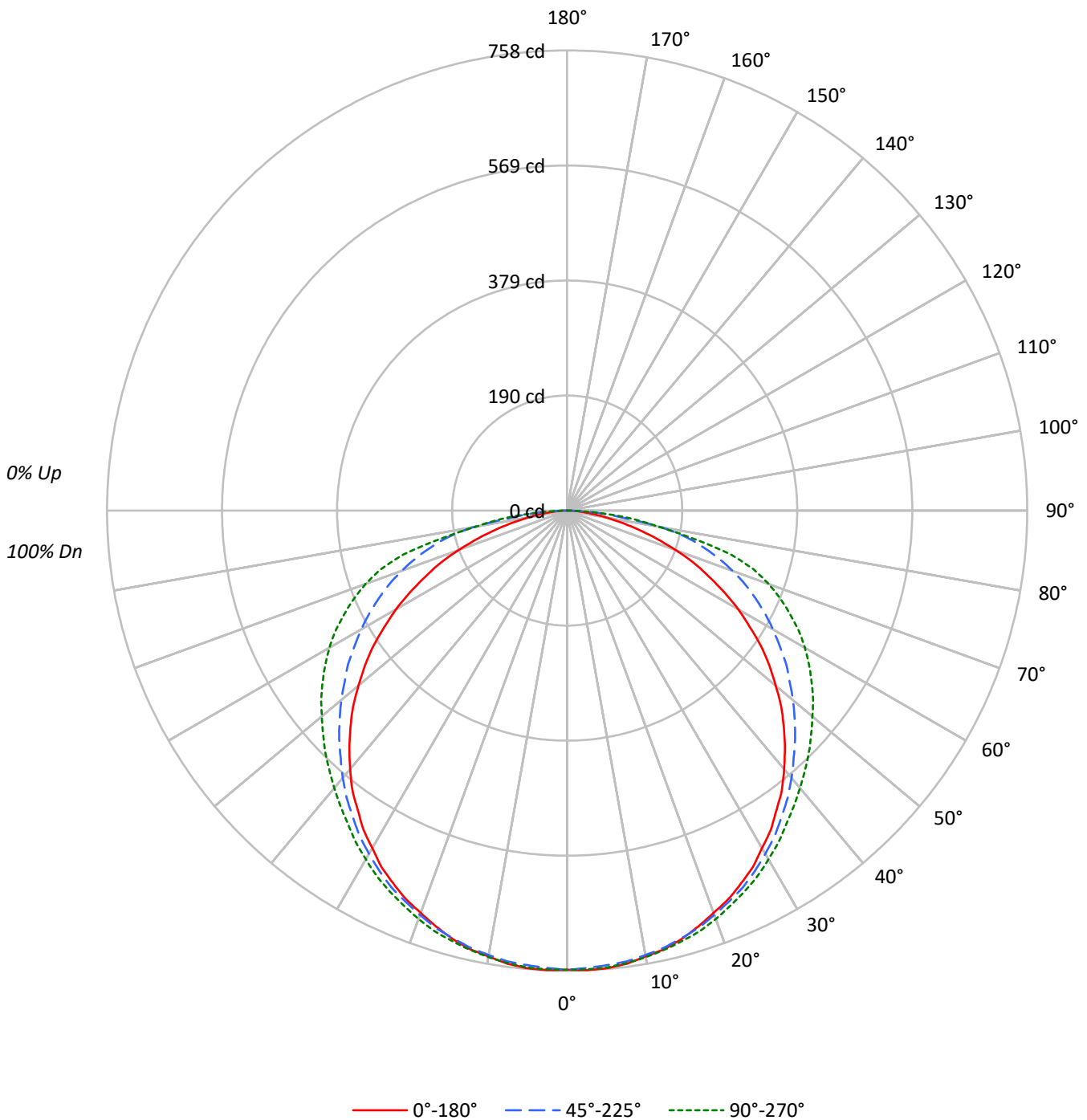
Input Watts (W): 31.688262  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1018	1018	1018
5°	1022	1015	1020
10°	1019	1016	1020
15°	1017	1015	1022
20°	1010	1015	1025
25°	1006	1017	1027
30°	997	1014	1031
35°	988	1011	1035
40°	977	1010	1048
45°	960	1010	1072
50°	939	1016	1104
55°	915	1033	1153
60°	876	1053	1217
65°	820	1090	1292
70°	746	1140	1389
75°	633	1203	1451
80°	499	1211	1174
85°	369	922	1031



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.8	3.0
10°-20°	206.5	8.6
20°-30°	315.8	13.1
30°-40°	386.1	16.0
40°-50°	411.5	17.1
50°-60°	393.4	16.4
60°-70°	333.3	13.9
70°-80°	224.0	9.3
80°-90°	63.2	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°	594.1	24.7
0°-40°	980.2	40.7
0°-60°	1785.1	74.2
0°-90°	2405.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2405.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	756	755	752	755	755	72
15°	730	730	729	735	734	206
25°	678	680	685	691	692	312
35°	601	606	616	628	630	377
45°	505	513	531	554	563	389
55°	390	404	440	475	492	348
65°	258	284	342	388	406	256
75°	122	166	232	271	279	130
85°	24	49	60	64	67	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	756.5	756.5	756.5	756.5	756.5
2.5°	757.7	757.7	754.1	756.5	756.5
5°	756.5	755.3	751.7	755.3	755.3
7.5°	752.9	751.7	749.3	752.9	751.7
10°	745.7	745.7	743.3	746.9	746.9
12.5°	739.8	738.6	737.4	742.2	741.0
15°	730.2	730.2	729.0	735.0	733.8
17.5°	718.3	719.5	720.7	725.4	726.6
20°	705.2	707.6	708.7	715.9	715.9
22.5°	693.2	694.4	696.8	704.0	704.0
25°	677.7	680.1	684.9	690.8	692.0
27.5°	662.2	663.4	669.4	677.7	678.9
30°	641.9	645.5	652.7	662.2	663.4
32.5°	624.0	627.6	636.0	645.5	647.9
35°	601.4	606.1	615.7	627.6	630.0
37.5°	581.1	584.7	596.6	609.7	613.3
40°	556.0	563.2	575.1	590.6	596.6
42.5°	531.0	538.1	552.4	572.7	579.9
45°	504.7	513.1	531.0	553.6	563.2
47.5°	478.5	488.0	508.3	534.5	545.3
50°	448.6	460.6	485.6	515.5	527.4
52.5°	420.0	434.3	461.8	495.2	510.7
55°	390.2	404.5	440.3	474.9	491.6
57.5°	356.8	375.8	415.2	454.6	472.5
60°	325.7	343.6	391.4	434.3	452.2
62.5°	292.3	316.2	367.5	412.8	430.7
65°	257.7	284.0	342.4	387.8	405.7
67.5°	226.7	255.3	317.4	362.7	380.6
70°	189.7	225.5	289.9	335.3	353.2
72.5°	155.1	194.5	261.3	305.5	322.2
75°	121.7	165.9	231.5	270.9	279.2
77.5°	90.7	137.2	200.5	217.2	211.2
80°	64.4	109.8	156.3	148.0	151.5
82.5°	41.8	83.5	96.6	109.8	113.4
85°	23.9	48.9	59.7	64.4	66.8
87.5°	10.7	17.9	23.9	23.9	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)