

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: P276857

Luminaire Tested: **24CZ2-30-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276857  
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: 24CZ2-30-RDP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1501.3 lumens  
Efficiency: N/A  
Efficacy: 67.4 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

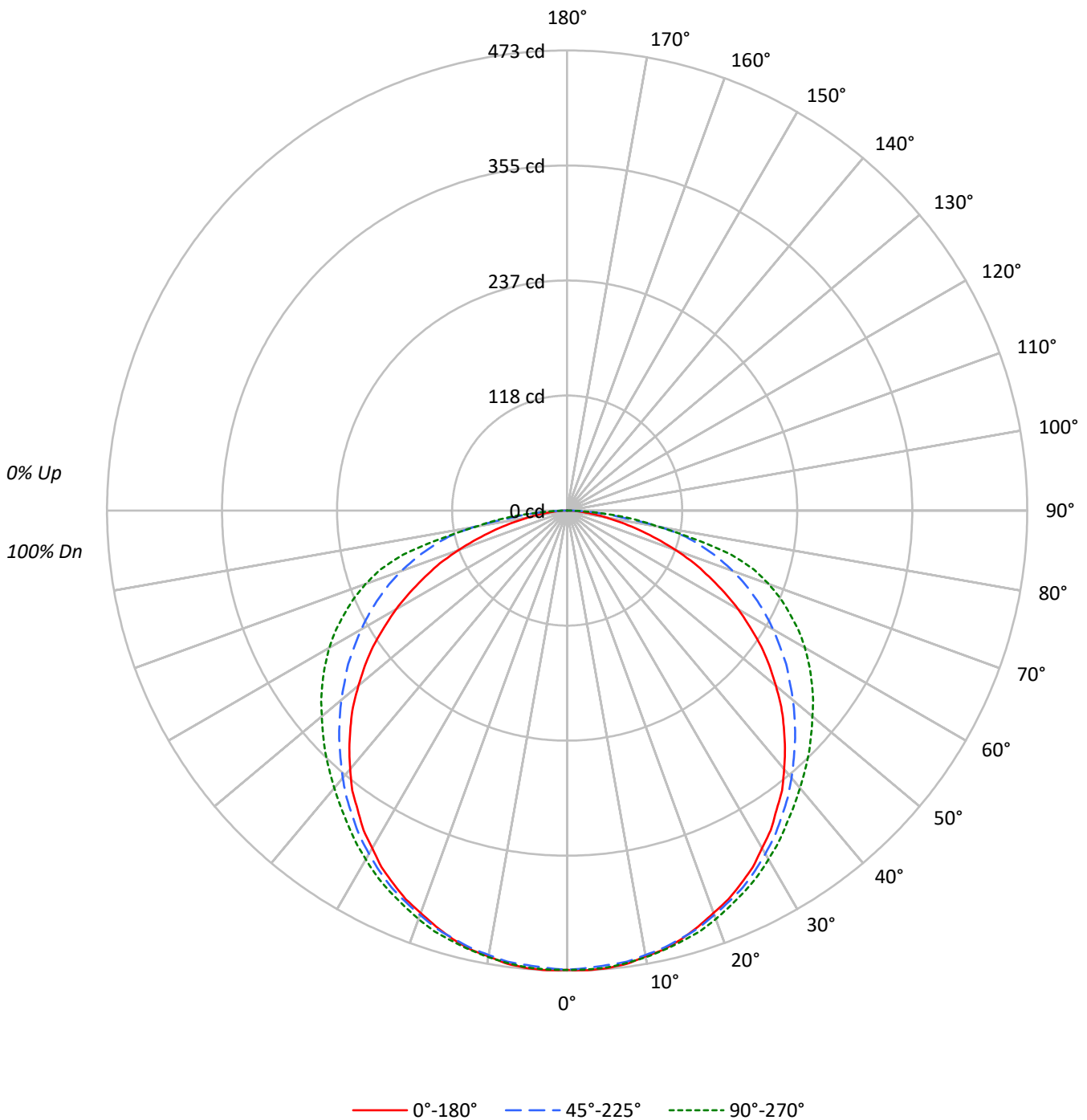
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	635	635	635
5°	638	634	637
10°	636	634	637
15°	635	634	638
20°	630	633	640
25°	628	635	641
30°	622	633	643
35°	616	631	646
40°	609	630	654
45°	599	631	669
50°	586	634	689
55°	571	645	720
60°	547	657	759
65°	512	680	806
70°	466	712	867
75°	395	751	906
80°	311	756	733
85°	230	574	644



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.8	3.0
10°-20°	128.9	8.6
20°-30°	197.1	13.1
30°-40°	241.0	16.0
40°-50°	256.8	17.1
50°-60°	245.5	16.4
60°-70°	208.0	13.9
70°-80°	139.8	9.3
80°-90°	39.4	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°	370.8	24.7
0°-40°	611.7	40.7
0°-60°	1114.1	74.2
0°-90°	1501.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1501.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	472	472	472	472	472	
5°	472	471	469	471	471	45
15°	456	456	455	459	458	128
25°	423	424	427	431	432	195
35°	375	378	384	392	393	235
45°	315	320	331	346	352	243
55°	244	252	275	296	307	217
65°	161	177	214	242	253	160
75°	76	104	144	169	174	81
85°	15	30	37	40	42	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	472.1	472.1	472.1	472.1	472.1
2.5°	472.9	472.9	470.6	472.1	472.1
5°	472.1	471.4	469.1	471.4	471.4
7.5°	469.9	469.1	467.7	469.9	469.1
10°	465.4	465.4	463.9	466.2	466.2
12.5°	461.7	461.0	460.2	463.2	462.4
15°	455.7	455.7	455.0	458.7	458.0
17.5°	448.3	449.0	449.8	452.8	453.5
20°	440.1	441.6	442.3	446.8	446.8
22.5°	432.7	433.4	434.9	439.4	439.4
25°	423.0	424.5	427.4	431.2	431.9
27.5°	413.3	414.0	417.8	423.0	423.7
30°	400.6	402.9	407.3	413.3	414.0
32.5°	389.5	391.7	396.9	402.9	404.4
35°	375.3	378.3	384.3	391.7	393.2
37.5°	362.7	364.9	372.3	380.5	382.8
40°	347.0	351.5	358.9	368.6	372.3
42.5°	331.4	335.8	344.8	357.4	361.9
45°	315.0	320.2	331.4	345.5	351.5
47.5°	298.6	304.6	317.2	333.6	340.3
50°	280.0	287.4	303.1	321.7	329.1
52.5°	262.1	271.1	288.2	309.0	318.7
55°	243.5	252.4	274.8	296.4	306.8
57.5°	222.7	234.6	259.1	283.7	294.9
60°	203.3	214.5	244.3	271.1	282.2
62.5°	182.4	197.3	229.4	257.7	268.8
65°	160.9	177.2	213.7	242.0	253.2
67.5°	141.5	159.4	198.1	226.4	237.6
70°	118.4	140.7	181.0	209.3	220.4
72.5°	96.8	121.4	163.1	190.6	201.1
75°	76.0	103.5	144.5	169.0	174.3
77.5°	56.6	85.6	125.1	135.5	131.8
80°	40.2	68.5	97.6	92.3	94.6
82.5°	26.1	52.1	60.3	68.5	70.7
85°	14.9	30.5	37.2	40.2	41.7
87.5°	6.7	11.2	14.9	14.9	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)