

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: P276813

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276813  
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: 24CZ2-35HE-RDP-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.1 lumens  
Efficiency: N/A  
Efficacy: 77.2 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

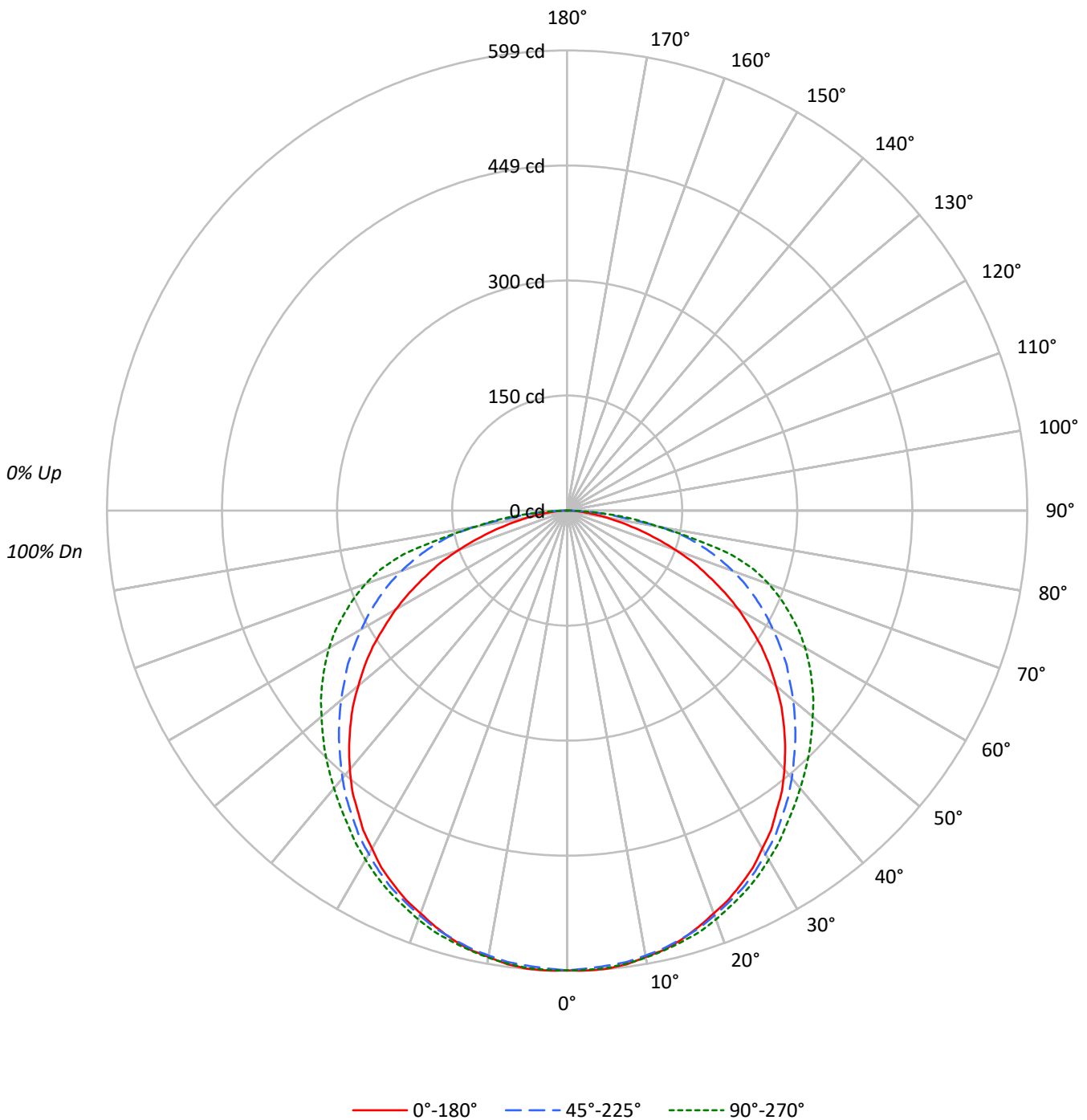
Input Watts (W): 24.63942  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	805	805	805
5°	808	803	807
10°	806	803	807
15°	805	803	809
20°	799	803	811
25°	796	804	813
30°	789	802	815
35°	782	800	819
40°	773	799	829
45°	760	799	848
50°	743	804	873
55°	724	817	912
60°	693	833	963
65°	649	862	1022
70°	590	902	1099
75°	501	952	1148
80°	395	958	929
85°	292	729	817



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.8	3.0
10°-20°	163.4	8.6
20°-30°	249.9	13.1
30°-40°	305.4	16.0
40°-50°	325.5	17.1
50°-60°	311.2	16.4
60°-70°	263.7	13.9
70°-80°	177.2	9.3
80°-90°	50.0	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°	470.0	24.7
0°-40°	775.4	40.7
0°-60°	1412.2	74.2
0°-90°	1903.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	598	595	598	598	57
15°	578	578	577	582	580	163
25°	536	538	542	547	548	247
35°	476	480	487	496	498	298
45°	399	406	420	438	446	308
55°	309	320	348	376	389	275
65°	204	225	271	307	321	202
75°	96	131	183	214	221	103
85°	19	39	47	51	53	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	598.5	598.5	598.5	598.5	598.5
2.5°	599.4	599.4	596.6	598.5	598.5
5°	598.5	597.5	594.7	597.5	597.5
7.5°	595.6	594.7	592.8	595.6	594.7
10°	590.0	590.0	588.1	590.9	590.9
12.5°	585.3	584.3	583.4	587.1	586.2
15°	577.7	577.7	576.8	581.5	580.5
17.5°	568.3	569.2	570.2	573.9	574.9
20°	557.9	559.8	560.7	566.4	566.4
22.5°	548.4	549.4	551.3	556.9	556.9
25°	536.2	538.1	541.8	546.6	547.5
27.5°	523.9	524.8	529.6	536.2	537.1
30°	507.9	510.7	516.3	523.9	524.8
32.5°	493.7	496.5	503.1	510.7	512.6
35°	475.8	479.5	487.1	496.5	498.4
37.5°	459.7	462.5	472.0	482.4	485.2
40°	439.9	445.5	455.0	467.3	472.0
42.5°	420.1	425.7	437.1	453.1	458.8
45°	399.3	405.9	420.1	438.0	445.5
47.5°	378.5	386.1	402.1	422.9	431.4
50°	354.9	364.4	384.2	407.8	417.2
52.5°	332.3	343.6	365.3	391.7	404.0
55°	308.7	320.0	348.3	375.7	388.9
57.5°	282.2	297.3	328.5	359.6	373.8
60°	257.7	271.9	309.6	343.6	357.8
62.5°	231.3	250.1	290.7	326.6	340.8
65°	203.9	224.7	270.9	306.8	320.9
67.5°	179.4	202.0	251.1	287.0	301.1
70°	150.1	178.4	229.4	265.3	279.4
72.5°	122.7	153.9	206.7	241.7	254.9
75°	96.3	131.2	183.1	214.3	220.9
77.5°	71.7	108.6	158.6	171.8	167.1
80°	51.0	86.8	123.7	117.1	119.9
82.5°	33.0	66.1	76.5	86.8	89.7
85°	18.9	38.7	47.2	51.0	52.9
87.5°	8.5	14.2	18.9	18.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)