

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: P277033

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277033  
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-L92765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2110.4 lumens  
Efficiency: N/A  
Efficacy: 84.7 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

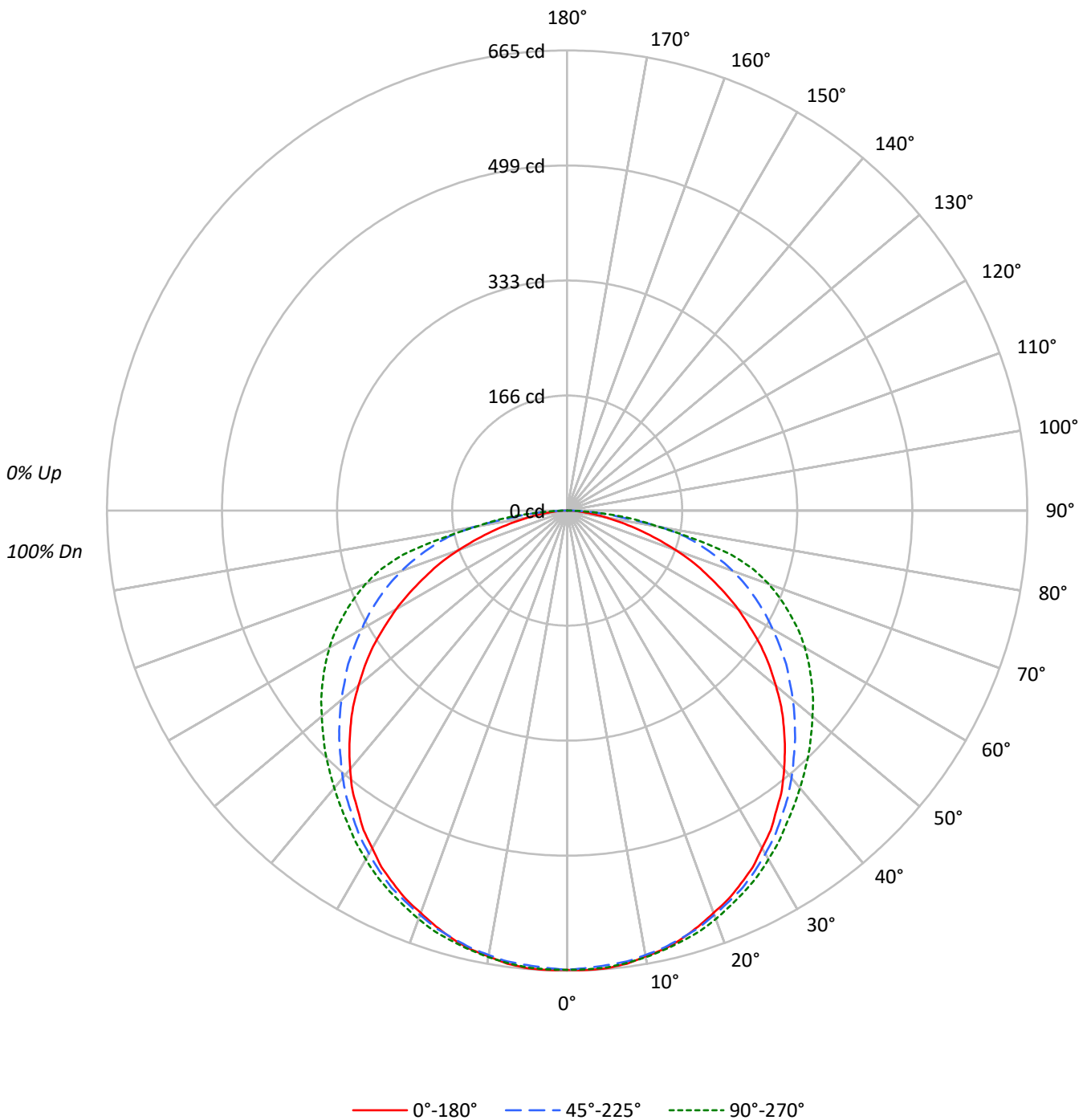
Input Watts (W): 24.924  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	893	893	893
5°	896	891	895
10°	894	891	895
15°	892	891	897
20°	886	890	899
25°	883	892	901
30°	875	890	904
35°	867	887	908
40°	857	886	919
45°	843	886	940
50°	824	892	969
55°	803	906	1012
60°	769	924	1068
65°	720	956	1133
70°	655	1001	1219
75°	555	1056	1273
80°	438	1062	1030
85°	323	807	905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	3.0
10°-20°	181.2	8.6
20°-30°	277.1	13.1
30°-40°	338.7	16.0
40°-50°	361.0	17.1
50°-60°	345.2	16.4
60°-70°	292.4	13.9
70°-80°	196.5	9.3
80°-90°	55.4	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°	521.2	24.7
0°-40°	859.9	40.7
0°-60°	1566.1	74.2
0°-90°	2110.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2110.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	664	664	664	664	664	
5°	664	663	660	663	663	63
15°	641	641	640	645	644	181
25°	595	597	601	606	607	274
35°	528	532	540	551	553	331
45°	443	450	466	486	494	342
55°	342	355	386	417	431	305
65°	226	249	300	340	356	224
75°	107	146	203	238	245	114
85°	21	43	52	56	59	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	663.7	663.7	663.7	663.7	663.7
2.5°	664.7	664.7	661.6	663.7	663.7
5°	663.7	662.6	659.5	662.6	662.6
7.5°	660.5	659.5	657.4	660.5	659.5
10°	654.2	654.2	652.2	655.3	655.3
12.5°	649.0	648.0	646.9	651.1	650.1
15°	640.6	640.6	639.6	644.8	643.8
17.5°	630.2	631.2	632.3	636.5	637.5
20°	618.7	620.7	621.8	628.1	628.1
22.5°	608.2	609.2	611.3	617.6	617.6
25°	594.6	596.7	600.9	606.1	607.1
27.5°	581.0	582.0	587.3	594.6	595.6
30°	563.2	566.3	572.6	581.0	582.0
32.5°	547.5	550.6	557.9	566.3	568.4
35°	527.6	531.8	540.1	550.6	552.7
37.5°	509.8	512.9	523.4	534.9	538.1
40°	487.8	494.1	504.6	518.2	523.4
42.5°	465.8	472.1	484.7	502.5	508.7
45°	442.8	450.1	465.8	485.7	494.1
47.5°	419.8	428.1	445.9	469.0	478.4
50°	393.6	404.1	426.0	452.2	462.7
52.5°	368.5	381.0	405.1	434.4	448.0
55°	342.3	354.9	386.3	416.6	431.3
57.5°	313.0	329.7	364.3	398.8	414.5
60°	285.8	301.5	343.3	381.0	396.7
62.5°	256.5	277.4	322.4	362.2	377.9
65°	226.1	249.1	300.4	340.2	355.9
67.5°	198.9	224.0	278.4	318.2	333.9
70°	166.4	197.8	254.4	294.1	309.9
72.5°	136.1	170.6	229.2	268.0	282.6
75°	106.8	145.5	203.1	237.6	244.9
77.5°	79.6	120.4	175.9	190.5	185.3
80°	56.5	96.3	137.1	129.8	132.9
82.5°	36.6	73.3	84.8	96.3	99.4
85°	20.9	42.9	52.3	56.5	58.6
87.5°	9.4	15.7	20.9	20.9	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)