

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: P276891

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276891  
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-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2054.4 lumens  
Efficiency: N/A  
Efficacy: 85.0 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

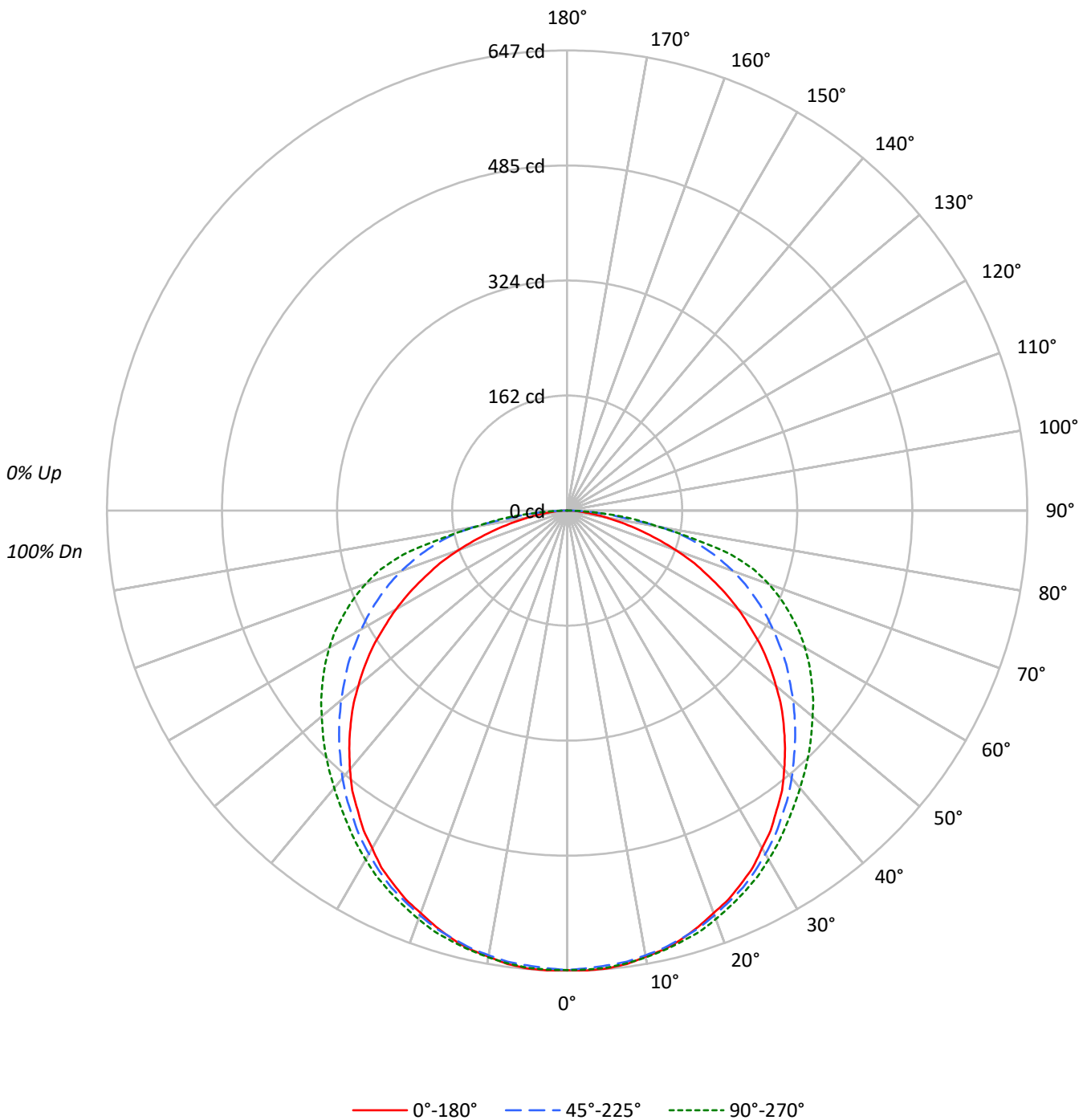
Input Watts (W): 24.18  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	869	869	869
5°	873	867	871
10°	870	867	872
15°	869	867	873
20°	862	867	875
25°	859	868	877
30°	852	866	880
35°	844	864	884
40°	834	863	895
45°	820	863	915
50°	802	868	943
55°	782	882	985
60°	749	899	1039
65°	701	931	1103
70°	637	974	1186
75°	540	1028	1240
80°	426	1034	1003
85°	315	787	881



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.3	3.0
10°-20°	176.4	8.6
20°-30°	269.7	13.1
30°-40°	329.7	16.0
40°-50°	351.4	17.1
50°-60°	336.0	16.4
60°-70°	284.6	13.9
70°-80°	191.3	9.3
80°-90°	54.0	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°	507.4	24.7
0°-40°	837.1	40.7
0°-60°	1524.5	74.2
0°-90°	2054.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2054.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	646	645	642	645	645	61
15°	624	624	623	628	627	176
25°	579	581	585	590	591	267
35°	514	518	526	536	538	322
45°	431	438	454	473	481	332
55°	333	345	376	406	420	297
65°	220	242	292	331	346	219
75°	104	142	198	231	238	111
85°	20	42	51	55	57	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	646.1	646.1	646.1	646.1	646.1
2.5°	647.1	647.1	644.0	646.1	646.1
5°	646.1	645.0	642.0	645.0	645.0
7.5°	643.0	642.0	639.9	643.0	642.0
10°	636.9	636.9	634.9	637.9	637.9
12.5°	631.8	630.8	629.8	633.8	632.8
15°	623.6	623.6	622.6	627.7	626.7
17.5°	613.5	614.5	615.5	619.6	620.6
20°	602.2	604.3	605.3	611.4	611.4
22.5°	592.1	593.1	595.1	601.2	601.2
25°	578.8	580.8	584.9	590.0	591.0
27.5°	565.6	566.6	571.7	578.8	579.8
30°	548.2	551.3	557.4	565.6	566.6
32.5°	532.9	536.0	543.1	551.3	553.3
35°	513.6	517.7	525.8	536.0	538.0
37.5°	496.3	499.3	509.5	520.7	523.8
40°	474.9	481.0	491.2	504.4	509.5
42.5°	453.5	459.6	471.8	489.1	495.2
45°	431.0	438.2	453.5	472.8	481.0
47.5°	408.6	416.8	434.1	456.5	465.7
50°	383.2	393.3	414.7	440.2	450.4
52.5°	358.7	370.9	394.4	422.9	436.1
55°	333.2	345.4	376.0	405.6	419.8
57.5°	304.7	321.0	354.6	388.2	403.5
60°	278.2	293.5	334.2	370.9	386.2
62.5°	249.7	270.0	313.9	352.6	367.9
65°	220.1	242.5	292.5	331.2	346.5
67.5°	193.6	218.1	271.1	309.8	325.1
70°	162.0	192.6	247.6	286.3	301.6
72.5°	132.5	166.1	223.2	260.9	275.1
75°	103.9	141.6	197.7	231.3	238.5
77.5°	77.4	117.2	171.2	185.5	180.4
80°	55.0	93.8	133.5	126.4	129.4
82.5°	35.7	71.3	82.5	93.8	96.8
85°	20.4	41.8	51.0	55.0	57.1
87.5°	9.2	15.3	20.4	20.4	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)