

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: P276894

Luminaire Tested: **24CZ2-35HE-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276894  
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-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2235.1 lumens  
Efficiency: N/A  
Efficacy: 91.4 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

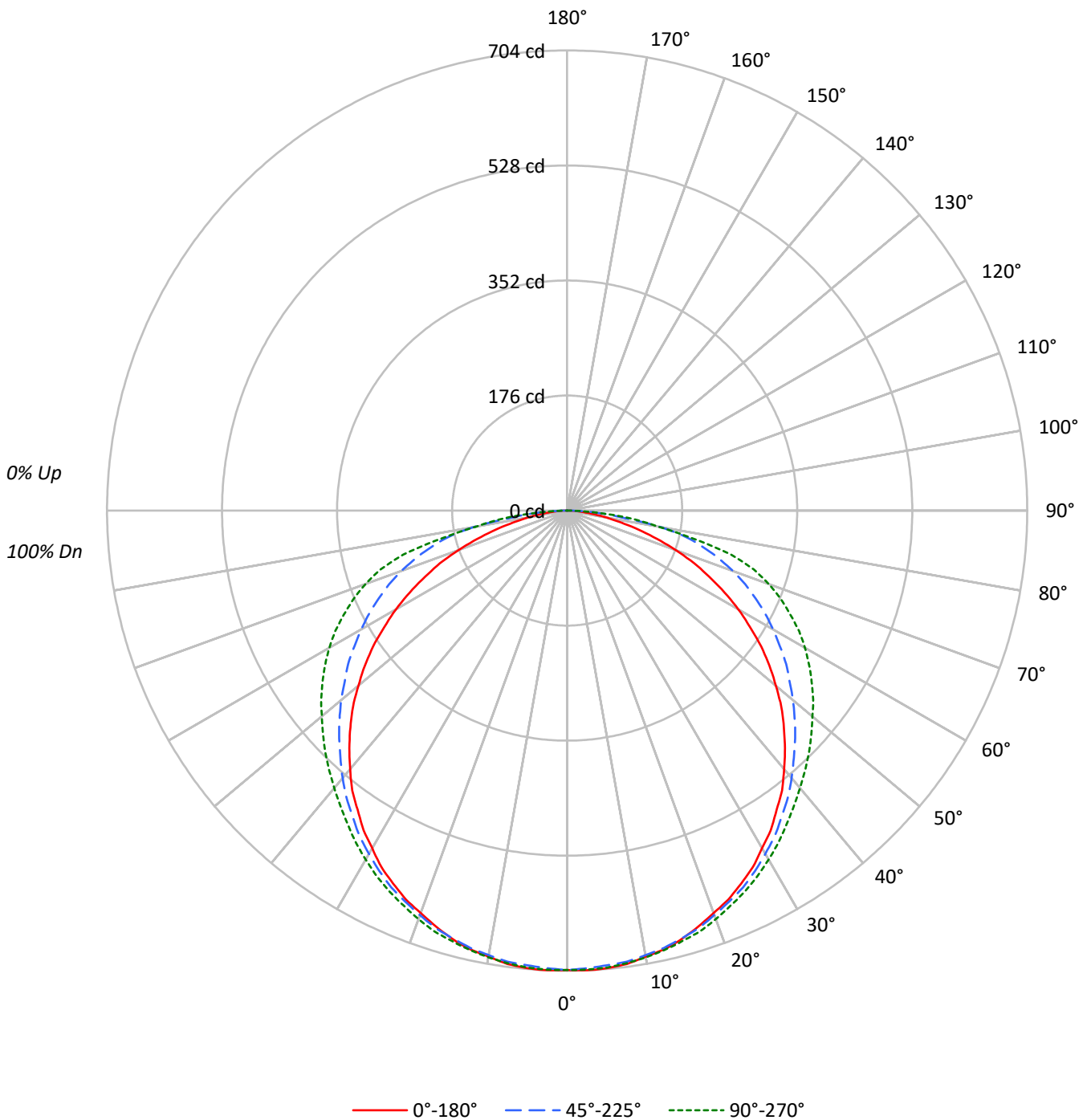
Input Watts (W): 24.459  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	946	946	946
5°	949	943	948
10°	947	944	948
15°	945	944	950
20°	938	943	952
25°	935	945	955
30°	927	942	958
35°	918	940	962
40°	907	939	974
45°	892	939	996
50°	873	944	1026
55°	850	960	1072
60°	815	978	1131
65°	762	1013	1200
70°	694	1060	1291
75°	588	1118	1349
80°	464	1125	1091
85°	343	855	959



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.7	3.0
10°-20°	191.9	8.6
20°-30°	293.4	13.1
30°-40°	358.7	16.0
40°-50°	382.3	17.1
50°-60°	365.5	16.4
60°-70°	309.7	13.9
70°-80°	208.1	9.3
80°-90°	58.7	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°	552.0	24.7
0°-40°	910.7	40.7
0°-60°	1658.6	74.2
0°-90°	2235.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2235.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	703	702	698	702	702	67
15°	678	678	677	683	682	191
25°	630	632	636	642	643	290
35°	559	563	572	583	585	350
45°	469	477	493	514	523	362
55°	362	376	409	441	457	323
65°	240	264	318	360	377	238
75°	113	154	215	252	259	121
85°	22	46	55	60	62	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.9	702.9	702.9	702.9	702.9
2.5°	704.0	704.0	700.7	702.9	702.9
5°	702.9	701.8	698.4	701.8	701.8
7.5°	699.6	698.4	696.2	699.6	698.4
10°	692.9	692.9	690.7	694.0	694.0
12.5°	687.4	686.3	685.1	689.6	688.5
15°	678.5	678.5	677.4	682.9	681.8
17.5°	667.4	668.5	669.6	674.1	675.2
20°	655.2	657.4	658.5	665.2	665.2
22.5°	644.1	645.2	647.5	654.1	654.1
25°	629.7	631.9	636.4	641.9	643.0
27.5°	615.3	616.4	622.0	629.7	630.8
30°	596.5	599.8	606.4	615.3	616.4
32.5°	579.8	583.1	590.9	599.8	602.0
35°	558.8	563.2	572.1	583.1	585.4
37.5°	539.9	543.2	554.3	566.5	569.8
40°	516.6	523.3	534.4	548.8	554.3
42.5°	493.3	500.0	513.3	532.2	538.8
45°	469.0	476.7	493.3	514.4	523.3
47.5°	444.6	453.4	472.3	496.7	506.7
50°	416.9	427.9	451.2	478.9	490.0
52.5°	390.2	403.5	429.0	460.1	474.5
55°	362.5	375.8	409.1	441.2	456.8
57.5°	331.5	349.2	385.8	422.4	439.0
60°	302.7	319.3	363.6	403.5	420.2
62.5°	271.6	293.8	341.5	383.6	400.2
65°	239.5	263.9	318.2	360.3	376.9
67.5°	210.6	237.3	294.9	337.0	353.7
70°	176.3	209.5	269.4	311.5	328.2
72.5°	144.1	180.7	242.8	283.8	299.3
75°	113.1	154.1	215.1	251.7	259.4
77.5°	84.3	127.5	186.3	201.8	196.2
80°	59.9	102.0	145.2	137.5	140.8
82.5°	38.8	77.6	89.8	102.0	105.3
85°	22.2	45.5	55.4	59.9	62.1
87.5°	10.0	16.6	22.2	22.2	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)