

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: P391294

Luminaire Tested: **24CZ2-35VHE-RDP-UNV-L930-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P391294  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-35VHE-RDP-UNV-L930-CD1-SWPD1-U  
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1932.4 lumens  
Efficiency: N/A  
Efficacy: 84.8 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

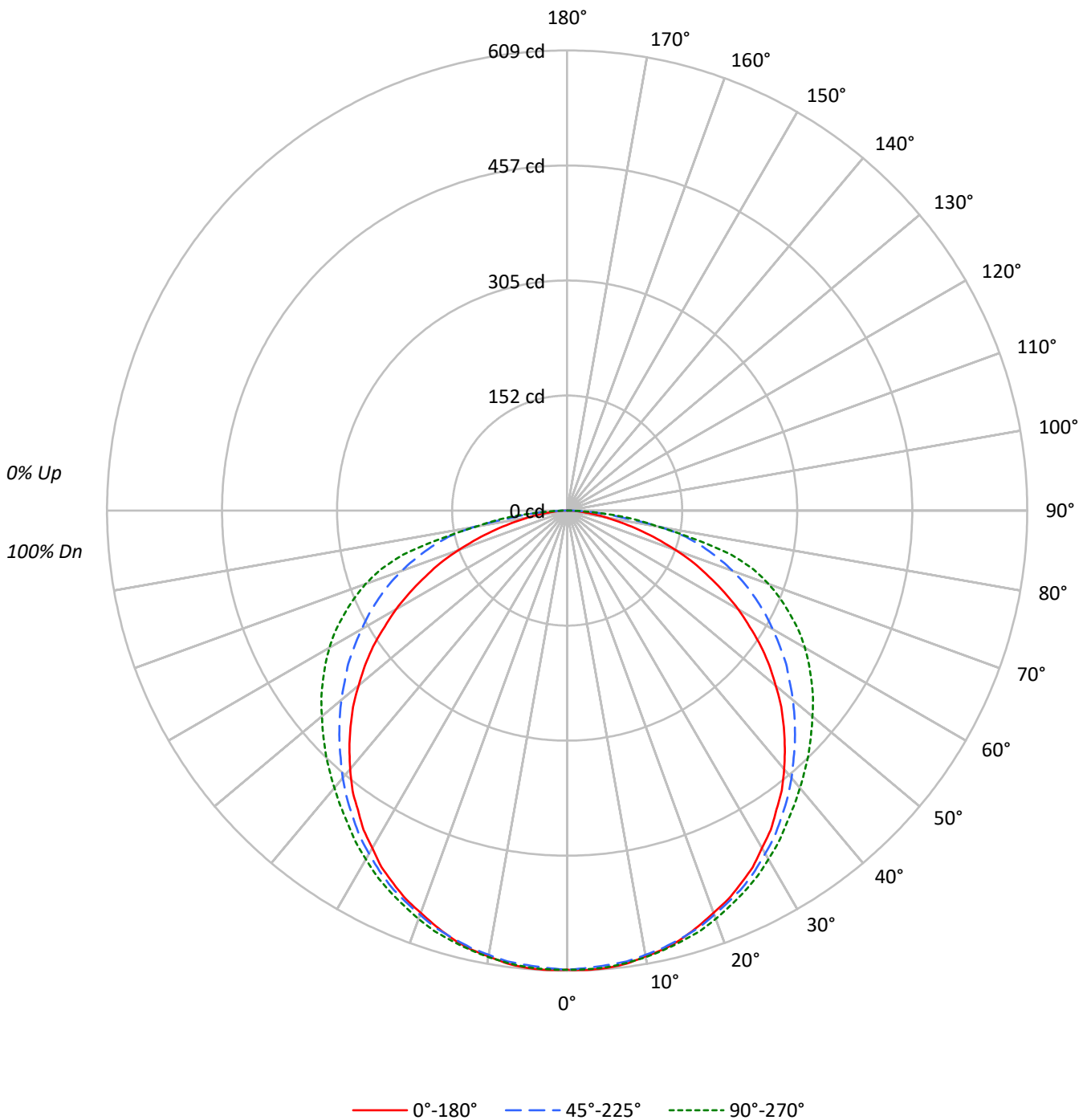
Input Watts (W): 22.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	818	818	818
5°	821	816	819
10°	819	816	820
15°	817	816	821
20°	811	815	823
25°	808	817	825
30°	801	815	828
35°	794	812	831
40°	785	811	842
45°	771	812	861
50°	754	817	887
55°	735	830	926
60°	704	846	978
65°	659	876	1038
70°	600	916	1116
75°	508	966	1166
80°	401	973	943
85°	296	739	829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.6	3.0
10°-20°	165.9	8.6
20°-30°	253.7	13.1
30°-40°	310.1	16.0
40°-50°	330.5	17.1
50°-60°	316.1	16.4
60°-70°	267.7	13.9
70°-80°	179.9	9.3
80°-90°	50.8	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
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0°-30°	477.2	24.7
0°-40°	787.4	40.7
0°-60°	1434.0	74.2
0°-90°	1932.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	608	607	604	607	607	58
15°	587	587	586	590	590	165
25°	544	546	550	555	556	251
35°	483	487	495	504	506	303
45°	405	412	426	445	452	313
55°	313	325	354	382	395	279
65°	207	228	275	312	326	206
75°	98	133	186	218	224	105
85°	19	39	48	52	54	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	607.7	607.7	607.7	607.7	607.7
2.5°	608.6	608.6	605.8	607.7	607.7
5°	607.7	606.7	603.9	606.7	606.7
7.5°	604.8	603.9	601.9	604.8	603.9
10°	599.1	599.1	597.1	600.0	600.0
12.5°	594.3	593.3	592.3	596.2	595.2
15°	586.6	586.6	585.6	590.4	589.5
17.5°	577.0	578.0	578.9	582.8	583.7
20°	566.5	568.4	569.3	575.1	575.1
22.5°	556.9	557.8	559.8	565.5	565.5
25°	544.4	546.3	550.2	555.0	555.9
27.5°	532.0	532.9	537.7	544.4	545.4
30°	515.7	518.5	524.3	532.0	532.9
32.5°	501.3	504.2	510.9	518.5	520.5
35°	483.1	486.9	494.6	504.2	506.1
37.5°	466.8	469.7	479.2	489.8	492.7
40°	446.7	452.4	462.0	474.5	479.2
42.5°	426.5	432.3	443.8	460.1	465.8
45°	405.4	412.2	426.5	444.7	452.4
47.5°	384.4	392.0	408.3	429.4	438.0
50°	360.4	370.0	390.1	414.1	423.7
52.5°	337.4	348.9	370.9	397.8	410.2
55°	313.4	324.9	353.7	381.5	394.9
57.5°	286.6	301.9	333.6	365.2	379.6
60°	261.7	276.0	314.4	348.9	363.3
62.5°	234.8	254.0	295.2	331.6	346.0
65°	207.0	228.1	275.1	311.5	325.9
67.5°	182.1	205.1	255.0	291.4	305.8
70°	152.4	181.2	232.9	269.3	283.7
72.5°	124.6	156.2	209.9	245.4	258.8
75°	97.8	133.2	185.9	217.6	224.3
77.5°	72.8	110.2	161.0	174.4	169.7
80°	51.8	88.2	125.6	118.9	121.7
82.5°	33.5	67.1	77.6	88.2	91.1
85°	19.2	39.3	47.9	51.8	53.7
87.5°	8.6	14.4	19.2	19.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)