

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: P391248

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L935-CD1-SDWPD1-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: P391248  
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: 24CZ2-30VHE-RDP-UNV-L935-CD1-SDWPD1-U  
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1670.5 lumens  
Efficiency: N/A  
Efficacy: 81.9 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

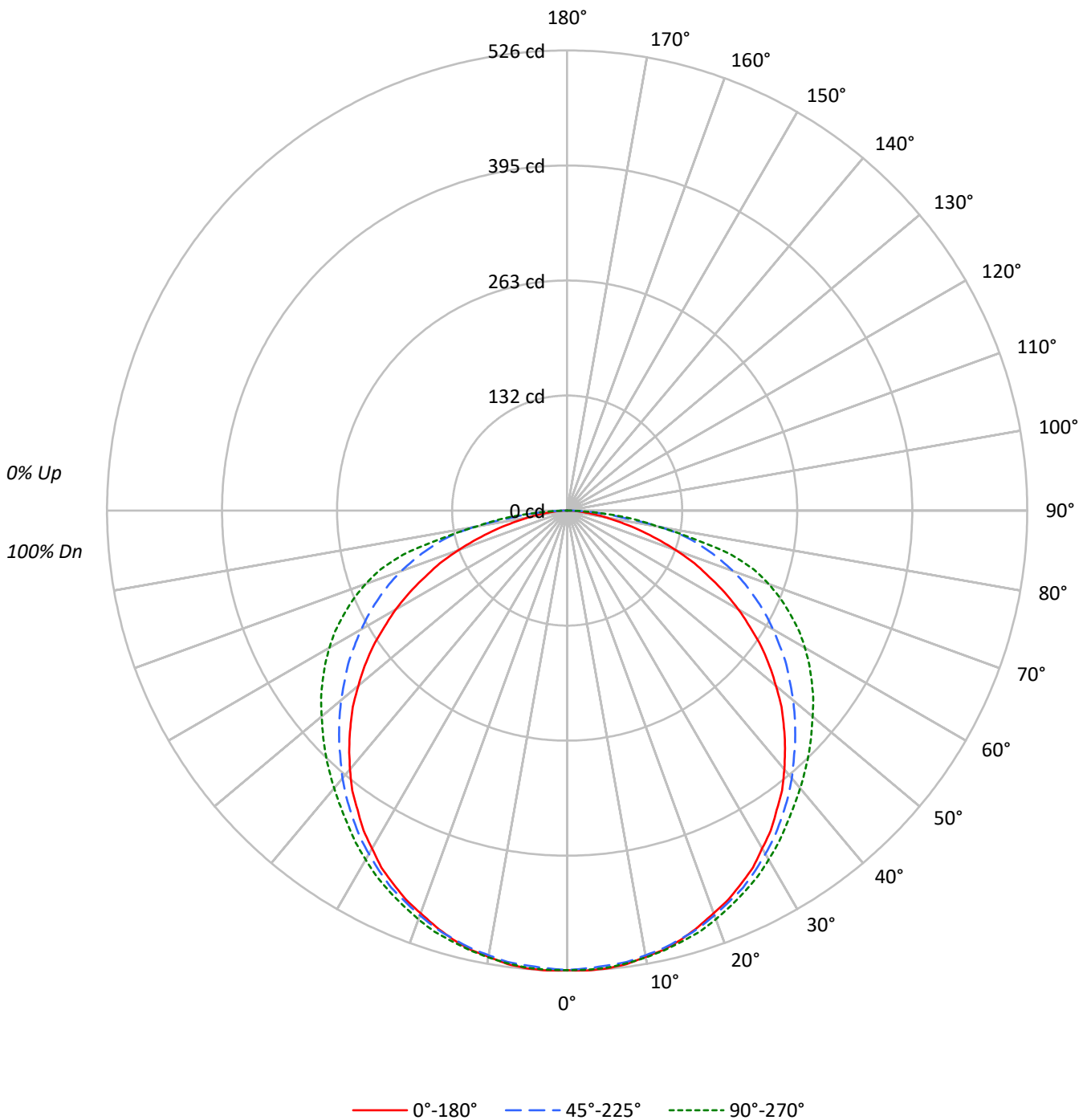
Input Watts (W): 20.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	707	707	707
5°	709	705	708
10°	708	705	709
15°	706	705	710
20°	701	705	712
25°	699	706	713
30°	693	704	716
35°	686	702	719
40°	678	702	728
45°	667	702	744
50°	652	706	767
55°	635	717	801
60°	609	731	845
65°	570	757	897
70°	518	792	965
75°	439	835	1008
80°	346	841	815
85°	256	639	716



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.8	3.0
10°-20°	143.4	8.6
20°-30°	219.3	13.1
30°-40°	268.1	16.0
40°-50°	285.7	17.1
50°-60°	273.2	16.4
60°-70°	231.4	13.9
70°-80°	155.5	9.3
80°-90°	43.9	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°	412.6	24.7
0°-40°	680.7	40.7
0°-60°	1239.6	74.2
0°-90°	1670.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1670.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	525	524	522	524	524	50
15°	507	507	506	510	510	143
25°	471	472	476	480	481	217
35°	418	421	428	436	438	262
45°	350	356	369	384	391	270
55°	271	281	306	330	341	241
65°	179	197	238	269	282	178
75°	84	115	161	188	194	90
85°	17	34	41	45	46	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	525.3	525.3	525.3	525.3	525.3
2.5°	526.2	526.2	523.7	525.3	525.3
5°	525.3	524.5	522.0	524.5	524.5
7.5°	522.8	522.0	520.4	522.8	522.0
10°	517.9	517.9	516.2	518.7	518.7
12.5°	513.7	512.9	512.1	515.4	514.6
15°	507.1	507.1	506.3	510.4	509.6
17.5°	498.8	499.6	500.5	503.8	504.6
20°	489.7	491.4	492.2	497.2	497.2
22.5°	481.4	482.2	483.9	488.9	488.9
25°	470.6	472.3	475.6	479.8	480.6
27.5°	459.9	460.7	464.8	470.6	471.5
30°	445.8	448.3	453.2	459.9	460.7
32.5°	433.4	435.8	441.6	448.3	449.9
35°	417.6	420.9	427.6	435.8	437.5
37.5°	403.5	406.0	414.3	423.4	425.9
40°	386.1	391.1	399.4	410.2	414.3
42.5°	368.7	373.7	383.6	397.7	402.7
45°	350.5	356.3	368.7	384.5	391.1
47.5°	332.3	338.9	353.0	371.2	378.7
50°	311.5	319.8	337.2	357.9	366.2
52.5°	291.7	301.6	320.7	343.9	354.6
55°	270.9	280.9	305.7	329.8	341.4
57.5°	247.7	261.0	288.3	315.7	328.1
60°	226.2	238.6	271.8	301.6	314.0
62.5°	203.0	219.6	255.2	286.7	299.1
65°	179.0	197.2	237.8	269.3	281.7
67.5°	157.4	177.3	220.4	251.9	264.3
70°	131.7	156.6	201.3	232.8	245.3
72.5°	107.7	135.1	181.5	212.1	223.7
75°	84.5	115.2	160.7	188.1	193.9
77.5°	63.0	95.3	139.2	150.8	146.7
80°	44.7	76.2	108.5	102.7	105.2
82.5°	29.0	58.0	67.1	76.2	78.7
85°	16.6	34.0	41.4	44.7	46.4
87.5°	7.5	12.4	16.6	16.6	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)