

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: P391247

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L930-CD1-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: P391247
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-L930-CD1-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: 1670.8 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

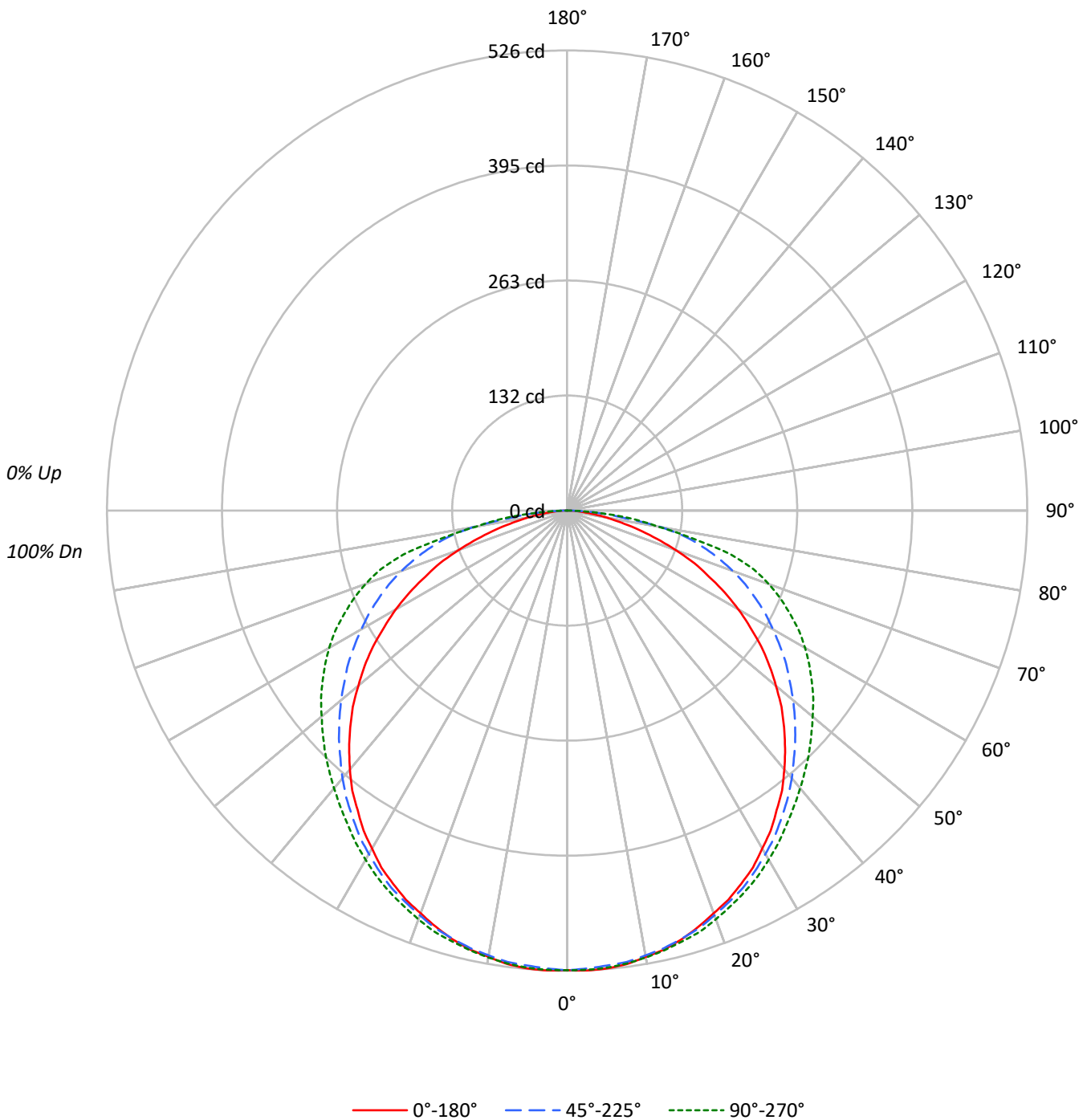
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82	82	
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67	67	
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56	56	
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47	47	
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40	40	
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35	35	
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31	31	
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27	27	
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24	24	
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22	22	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	707	707	707
5°	710	705	709
10°	708	705	709
15°	707	705	710
20°	701	705	712
25°	699	706	714
30°	693	704	716
35°	686	702	719
40°	678	702	728
45°	667	702	744
50°	652	706	767
55°	636	717	801
60°	609	731	845
65°	570	757	897
70°	518	792	965
75°	439	836	1008
80°	347	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°	219.4	13.1
30°-40°	268.2	16.0
40°-50°	285.8	17.1
50°-60°	273.3	16.4
60°-70°	231.5	13.9
70°-80°	155.6	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°	680.8	40.7
0°-60°	1239.9	74.2
0°-90°	1670.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1670.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	525	525	522	525	525	50
15°	507	507	506	510	510	143
25°	471	472	476	480	481	217
35°	418	421	428	436	438	262
45°	351	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	91
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°	525.4	525.4	525.4	525.4	525.4
2.5°	526.2	526.2	523.8	525.4	525.4
5°	525.4	524.6	522.1	524.6	524.6
7.5°	522.9	522.1	520.4	522.9	522.1
10°	518.0	518.0	516.3	518.8	518.8
12.5°	513.8	513.0	512.2	515.5	514.6
15°	507.2	507.2	506.4	510.5	509.7
17.5°	498.9	499.7	500.6	503.9	504.7
20°	489.8	491.4	492.3	497.2	497.2
22.5°	481.5	482.3	484.0	489.0	489.0
25°	470.7	472.4	475.7	479.8	480.7
27.5°	459.9	460.8	464.9	470.7	471.6
30°	445.9	448.3	453.3	459.9	460.8
32.5°	433.4	435.9	441.7	448.3	450.0
35°	417.7	421.0	427.6	435.9	437.6
37.5°	403.6	406.1	414.4	423.5	426.0
40°	386.2	391.2	399.5	410.2	414.4
42.5°	368.8	373.8	383.7	397.8	402.8
45°	350.6	356.4	368.8	384.5	391.2
47.5°	332.3	339.0	353.0	371.3	378.7
50°	311.6	319.9	337.3	358.0	366.3
52.5°	291.7	301.7	320.7	343.9	354.7
55°	271.0	280.9	305.8	329.8	341.4
57.5°	247.8	261.1	288.4	315.7	328.2
60°	226.2	238.7	271.8	301.7	314.1
62.5°	203.0	219.6	255.3	286.7	299.2
65°	179.0	197.2	237.8	269.3	281.8
67.5°	157.5	177.3	220.4	251.9	264.4
70°	131.8	156.6	201.4	232.9	245.3
72.5°	107.7	135.1	181.5	212.2	223.8
75°	84.5	115.2	160.8	188.1	193.9
77.5°	63.0	95.3	139.2	150.8	146.7
80°	44.8	76.2	108.6	102.8	105.2
82.5°	29.0	58.0	67.1	76.2	78.7
85°	16.6	34.0	41.4	44.8	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)