

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: P391222

Luminaire Tested: **24CZ2-30VHE-HRP-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: P391222
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-HRP-UNV-L930-CD1-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2082.6 lumens
Efficiency: N/A
Efficacy: 102.1 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

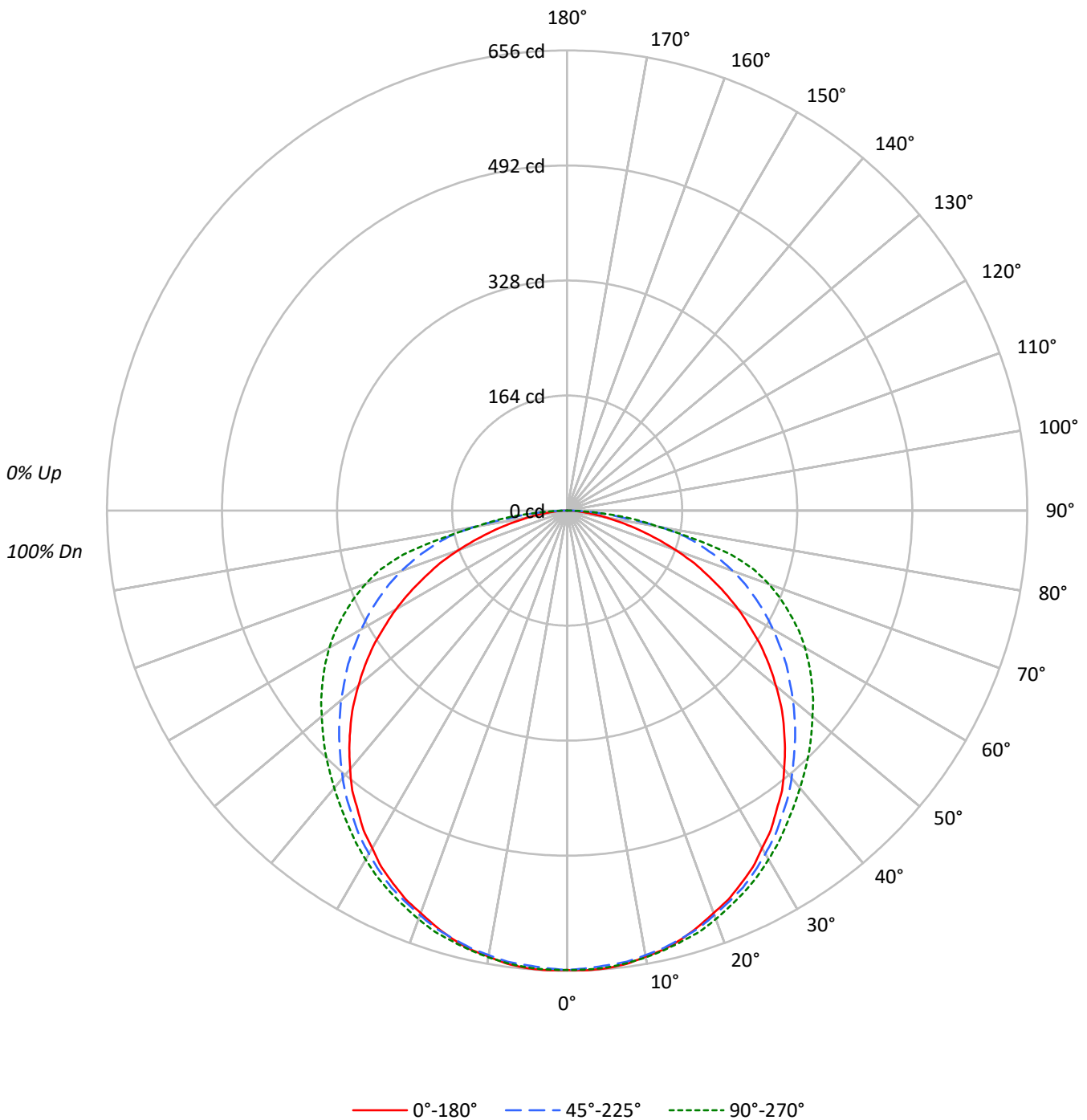
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	881	881	881
5°	885	879	883
10°	882	879	884
15°	881	879	885
20°	874	879	887
25°	871	880	889
30°	864	878	892
35°	855	875	896
40°	846	875	907
45°	832	875	928
50°	813	880	956
55°	792	894	998
60°	759	912	1054
65°	710	944	1118
70°	646	987	1203
75°	548	1042	1256
80°	432	1048	1017
85°	320	797	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	3.0
10°-20°	178.8	8.6
20°-30°	273.4	13.1
30°-40°	334.3	16.0
40°-50°	356.2	17.1
50°-60°	340.6	16.4
60°-70°	288.5	13.9
70°-80°	193.9	9.3
80°-90°	54.7	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°	514.3	24.7
0°-40°	848.6	40.7
0°-60°	1545.4	74.2
0°-90°	2082.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	655	654	651	654	654	62
15°	632	632	631	636	635	178
25°	587	589	593	598	599	270
35°	521	525	533	543	545	326
45°	437	444	460	479	488	337
55°	338	350	381	411	426	301
65°	223	246	296	336	351	222
75°	105	144	200	234	242	113
85°	21	42	52	56	58	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.9	654.9	654.9	654.9	654.9
2.5°	656.0	656.0	652.9	654.9	654.9
5°	654.9	653.9	650.8	653.9	653.9
7.5°	651.8	650.8	648.7	651.8	650.8
10°	645.6	645.6	643.6	646.7	646.7
12.5°	640.5	639.4	638.4	642.5	641.5
15°	632.2	632.2	631.2	636.3	635.3
17.5°	621.9	622.9	623.9	628.1	629.1
20°	610.5	612.6	613.6	619.8	619.8
22.5°	600.2	601.2	603.3	609.5	609.5
25°	586.7	588.8	592.9	598.1	599.1
27.5°	573.3	574.3	579.5	586.7	587.8
30°	555.8	558.8	565.0	573.3	574.3
32.5°	540.3	543.4	550.6	558.8	560.9
35°	520.6	524.8	533.0	543.4	545.4
37.5°	503.1	506.2	516.5	527.9	531.0
40°	481.4	487.6	497.9	511.3	516.5
42.5°	459.7	465.9	478.3	495.8	502.0
45°	437.0	444.2	459.7	479.3	487.6
47.5°	414.2	422.5	440.1	462.8	472.1
50°	388.4	398.7	420.4	446.3	456.6
52.5°	363.6	376.0	399.8	428.7	442.1
55°	337.8	350.2	381.2	411.1	425.6
57.5°	308.9	325.4	359.5	393.6	409.1
60°	282.0	297.5	338.8	376.0	391.5
62.5°	253.1	273.7	318.2	357.4	372.9
65°	223.1	245.9	296.5	335.7	351.2
67.5°	196.3	221.1	274.8	314.0	329.5
70°	164.2	195.2	251.0	290.3	305.8
72.5°	134.3	168.4	226.2	264.4	278.9
75°	105.4	143.6	200.4	234.5	241.7
77.5°	78.5	118.8	173.5	188.0	182.8
80°	55.8	95.0	135.3	128.1	131.2
82.5°	36.2	72.3	83.7	95.0	98.1
85°	20.7	42.4	51.6	55.8	57.8
87.5°	9.3	15.5	20.7	20.7	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)