

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: P389598

Luminaire Tested: **24CZ2-130VHE-S-UNV-L950-CD2-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: P389598
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-S-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12335.9 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

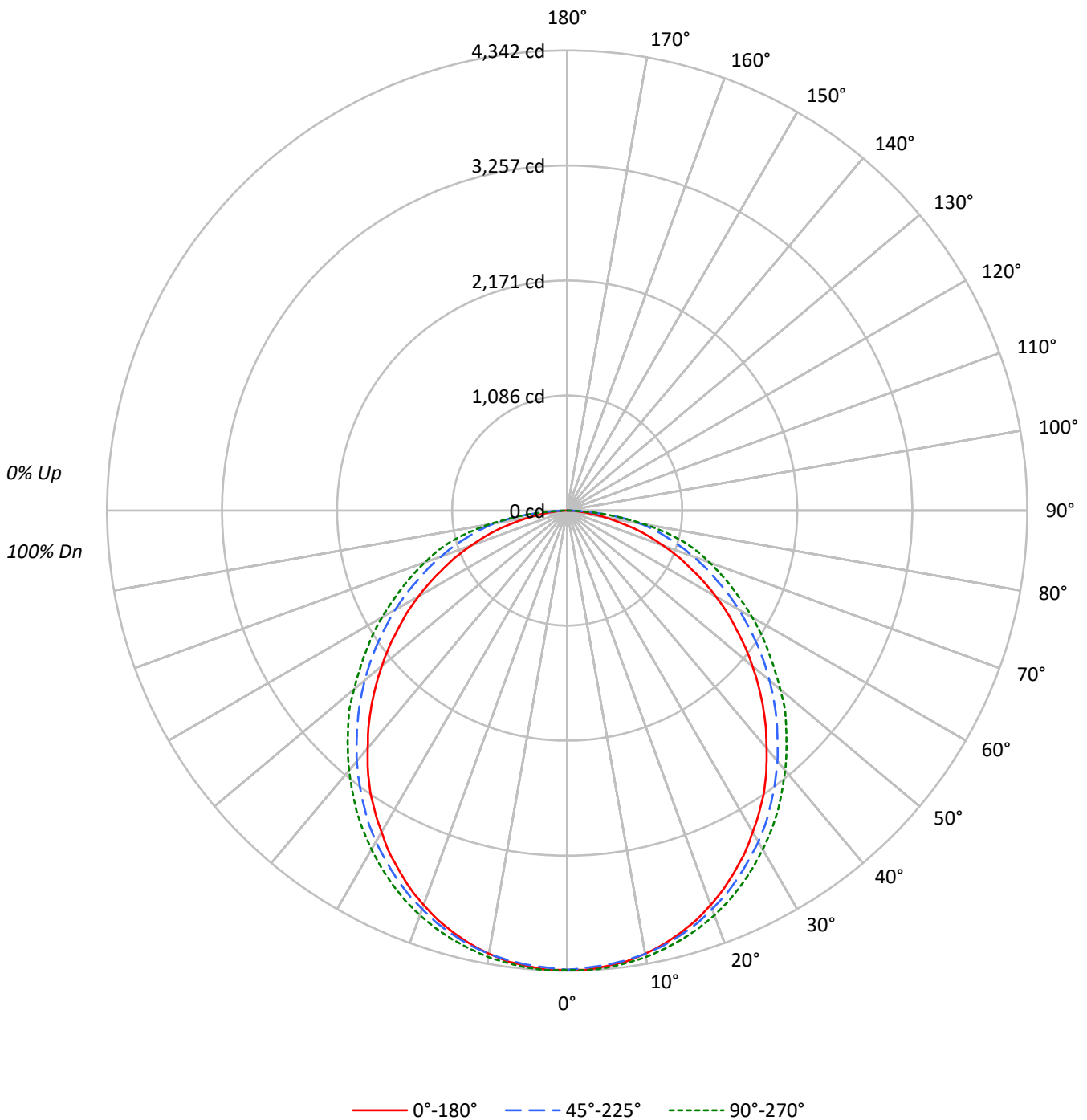
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5831	5831	5831
5°	5827	5811	5848
10°	5803	5803	5846
15°	5747	5775	5835
20°	5672	5728	5818
25°	5567	5672	5782
30°	5442	5607	5735
35°	5323	5516	5689
40°	5141	5423	5623
45°	4973	5316	5562
50°	4782	5216	5495
55°	4568	5120	5442
60°	4355	5040	5430
65°	4079	4953	5464
70°	3777	4979	5611
75°	3381	5072	5927
80°	2733	5373	5799
85°	2056	4718	4597



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.3	3.3
10°-20°	1172.3	9.5
20°-30°	1762.2	14.3
30°-40°	2099.1	17.0
40°-50°	2148.3	17.4
50°-60°	1934.1	15.7
60°-70°	1518.9	12.3
70°-80°	985.8	8.0
80°-90°	304.9	2.5
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°	3344.8	27.1
0°-40°	5443.9	44.1
0°-60°	9526.3	77.2
0°-90°	12335.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12335.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4334	4334	4334	4334	4334	
5°	4314	4322	4302	4326	4330	410
15°	4126	4138	4146	4181	4189	1163
25°	3750	3781	3820	3883	3895	1727
35°	3240	3280	3358	3440	3464	2022
45°	2614	2676	2794	2900	2923	2015
55°	1947	2034	2182	2296	2320	1746
65°	1281	1379	1556	1685	1716	1276
75°	650	776	976	1109	1140	688
85°	133	247	306	298	298	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4333.7	4333.7	4333.7	4333.7	4333.7
2.5°	4337.6	4337.6	4318.0	4337.6	4341.5
5°	4314.1	4321.9	4302.3	4325.8	4329.8
7.5°	4290.6	4290.6	4278.8	4302.3	4306.3
10°	4247.5	4251.4	4247.5	4274.9	4278.8
12.5°	4192.6	4200.5	4204.4	4231.8	4235.7
15°	4126.0	4137.8	4145.6	4180.9	4188.7
17.5°	4051.6	4063.3	4082.9	4122.1	4129.9
20°	3961.4	3977.1	4000.6	4051.6	4063.3
22.5°	3863.5	3879.2	3918.3	3965.4	3985.0
25°	3749.8	3781.2	3820.4	3883.1	3894.8
27.5°	3636.2	3663.6	3714.6	3781.2	3796.9
30°	3503.0	3546.1	3608.8	3675.4	3691.1
32.5°	3373.7	3416.8	3491.2	3561.8	3581.4
35°	3240.5	3279.6	3358.0	3440.3	3463.8
37.5°	3087.7	3138.6	3224.8	3307.1	3330.6
40°	2927.0	2989.7	3087.7	3173.9	3201.3
42.5°	2774.2	2840.8	2938.8	3032.8	3064.1
45°	2613.5	2676.2	2793.8	2899.6	2923.1
47.5°	2449.0	2519.5	2644.9	2750.7	2789.9
50°	2284.4	2358.8	2492.1	2601.8	2625.3
52.5°	2119.8	2198.2	2339.2	2456.8	2468.6
55°	1947.4	2033.6	2182.5	2296.1	2319.7
57.5°	1790.7	1865.1	2025.8	2143.3	2170.8
60°	1618.3	1700.6	1873.0	1982.7	2017.9
62.5°	1453.7	1539.9	1720.2	1829.9	1861.2
65°	1281.3	1379.3	1555.6	1684.9	1716.2
67.5°	1132.4	1226.4	1414.5	1539.9	1571.3
70°	960.0	1065.8	1265.6	1394.9	1426.3
72.5°	811.1	920.8	1120.6	1246.0	1293.1
75°	650.4	775.8	975.7	1108.9	1140.2
77.5°	493.7	638.7	842.4	944.3	944.3
80°	352.7	505.5	693.5	740.6	748.4
82.5°	231.2	380.1	513.3	509.4	509.4
85°	133.2	246.9	305.6	297.8	297.8
87.5°	50.9	101.9	109.7	109.7	105.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)