

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: P388663

Luminaire Tested: **24CZ2-130VHE-UNV-L950-CD2-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: P388663
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-UNV-L950-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11883.6 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

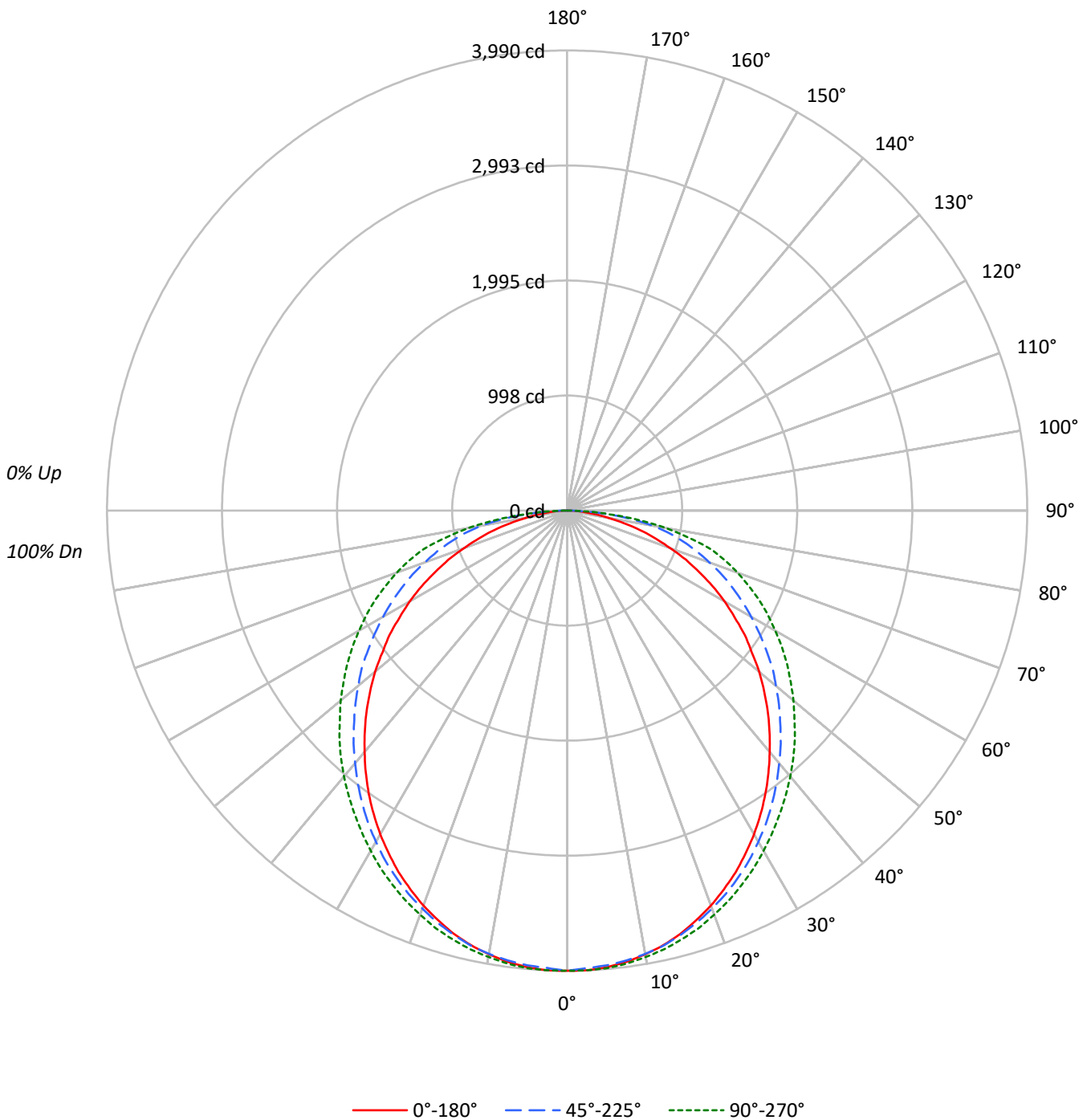
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5368	5368	5368
5°	5367	5346	5378
10°	5337	5332	5370
15°	5293	5304	5359
20°	5219	5259	5338
25°	5134	5211	5317
30°	5034	5151	5293
35°	4925	5088	5277
40°	4800	5022	5287
45°	4679	4973	5313
50°	4549	4948	5363
55°	4410	4940	5461
60°	4237	4963	5603
65°	4015	5038	5846
70°	3729	5164	6179
75°	3402	5423	6701
80°	2796	5839	6699
85°	2143	5388	5755



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.3	3.2
10°-20°	1077.3	9.1
20°-30°	1621.2	13.6
30°-40°	1942.8	16.3
40°-50°	2024.6	17.0
50°-60°	1883.6	15.9
60°-70°	1551.4	13.1
70°-80°	1056.6	8.9
80°-90°	348.8	2.9
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°	3075.8	25.9
0°-40°	5018.6	42.2
0°-60°	8926.8	75.1
0°-90°	11883.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11883.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3990	3990	3990	3990	3990	
5°	3974	3974	3958	3978	3982	377
15°	3800	3804	3807	3843	3847	1070
25°	3458	3474	3510	3570	3581	1592
35°	2998	3034	3098	3181	3212	1874
45°	2459	2510	2614	2744	2792	1897
55°	1880	1943	2106	2273	2328	1676
65°	1261	1368	1582	1769	1836	1252
75°	654	801	1043	1230	1289	690
85°	139	270	349	373	373	172
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3989.9	3989.9	3989.9	3989.9	3989.9
2.5°	3989.9	3989.9	3970.0	3989.9	3989.9
5°	3974.0	3974.0	3958.1	3978.0	3981.9
7.5°	3946.3	3950.2	3934.4	3958.1	3962.1
10°	3906.6	3910.6	3902.6	3926.4	3930.4
12.5°	3859.0	3863.0	3863.0	3890.7	3894.7
15°	3799.5	3803.5	3807.4	3843.1	3847.1
17.5°	3724.1	3736.0	3744.0	3787.6	3795.5
20°	3644.8	3656.7	3672.6	3720.2	3728.1
22.5°	3553.6	3569.5	3597.2	3648.8	3660.7
25°	3458.4	3474.3	3510.0	3569.5	3581.4
27.5°	3351.3	3375.1	3418.8	3482.2	3498.1
30°	3240.3	3264.1	3315.6	3383.1	3406.9
32.5°	3121.3	3153.0	3212.5	3287.9	3311.7
35°	2998.4	3034.1	3097.5	3180.8	3212.5
37.5°	2867.5	2907.1	2982.5	3073.7	3113.4
40°	2732.6	2780.2	2859.5	2966.6	3010.3
42.5°	2597.8	2641.4	2740.6	2855.6	2903.2
45°	2459.0	2510.5	2613.6	2744.5	2792.1
47.5°	2316.2	2367.8	2490.7	2629.5	2673.1
50°	2173.4	2225.0	2363.8	2510.5	2562.1
52.5°	2018.7	2086.2	2244.8	2391.5	2443.1
55°	1879.9	1943.4	2106.0	2272.6	2328.1
57.5°	1721.3	1796.6	1975.1	2149.6	2209.1
60°	1574.5	1653.9	1844.2	2022.7	2082.2
62.5°	1423.8	1511.1	1713.3	1895.8	1963.2
65°	1261.2	1368.3	1582.5	1768.9	1836.3
67.5°	1114.5	1225.5	1451.6	1642.0	1701.4
70°	947.9	1082.7	1312.8	1503.1	1570.6
72.5°	805.1	940.0	1181.9	1368.3	1435.7
75°	654.4	801.1	1043.1	1229.5	1289.0
77.5°	503.7	666.3	908.2	1051.0	1070.8
80°	360.9	531.5	753.6	836.8	864.6
82.5°	253.8	408.5	555.3	610.8	626.6
85°	138.8	269.7	349.0	372.8	372.8
87.5°	59.5	115.0	138.8	142.8	146.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)