

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: P388656

Luminaire Tested: **24CZ2-130VHE-UNV-L935-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: P388656
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-L935-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10947.5 lumens
Efficiency: N/A
Efficacy: 120.7 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

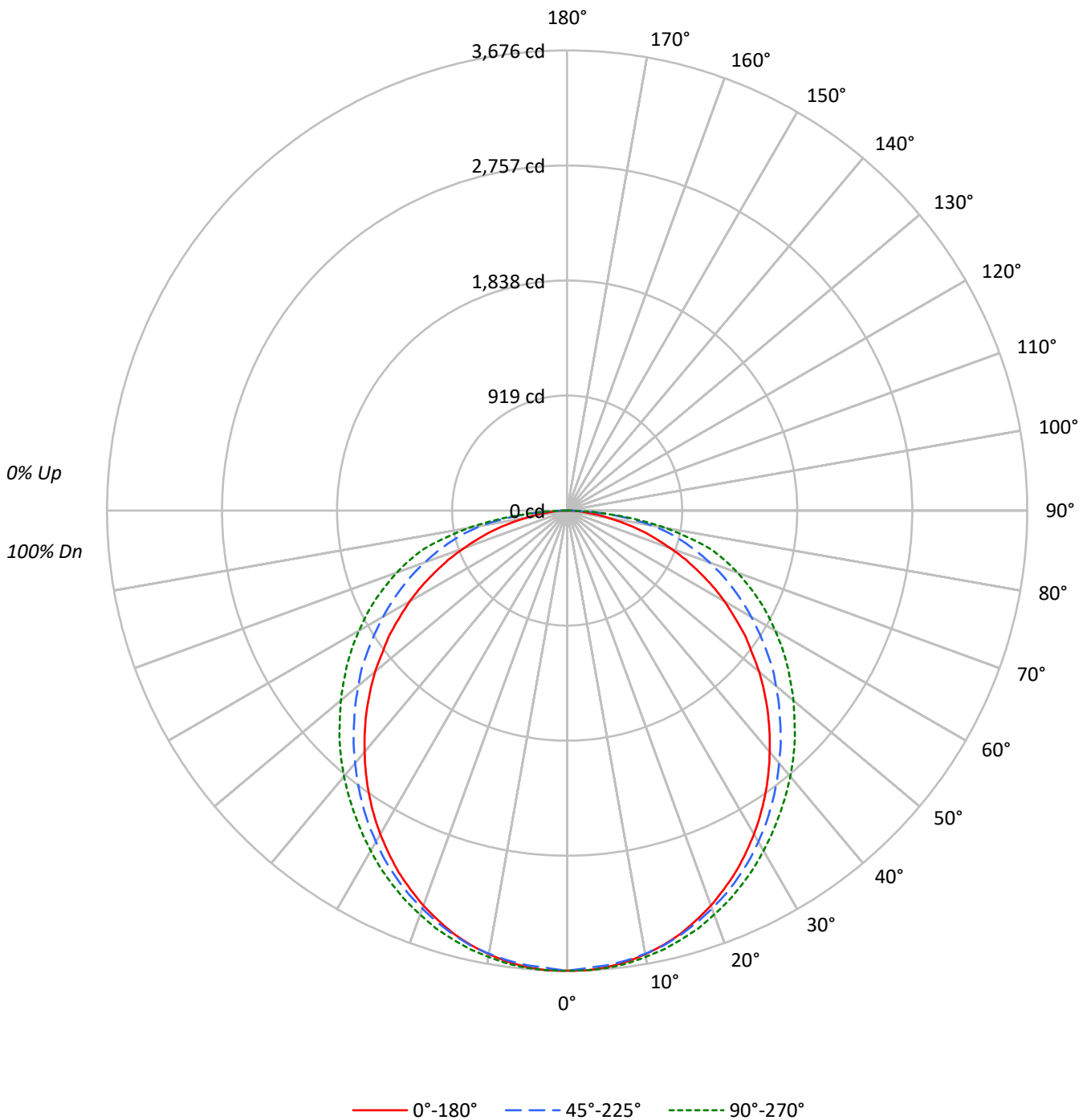
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4945	4945	4945
5°	4945	4925	4955
10°	4917	4912	4947
15°	4876	4886	4937
20°	4808	4844	4918
25°	4730	4800	4898
30°	4638	4746	4876
35°	4537	4687	4861
40°	4422	4627	4871
45°	4310	4582	4894
50°	4191	4558	4941
55°	4062	4551	5031
60°	3903	4572	5162
65°	3699	4641	5386
70°	3435	4758	5692
75°	3134	4995	6173
80°	2576	5379	6172
85°	1974	4963	5301



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.6	3.2
10°-20°	992.4	9.1
20°-30°	1493.5	13.6
30°-40°	1789.7	16.3
40°-50°	1865.1	17.0
50°-60°	1735.3	15.9
60°-70°	1429.2	13.1
70°-80°	973.3	8.9
80°-90°	321.3	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°	2833.5	25.9
0°-40°	4623.3	42.2
0°-60°	8223.6	75.1
0°-90°	10947.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10947.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3676	3676	3676	3676	3676	
5°	3661	3661	3646	3665	3668	347
15°	3500	3504	3508	3540	3544	986
25°	3186	3201	3234	3288	3299	1467
35°	2762	2795	2854	2930	2960	1727
45°	2265	2313	2408	2528	2572	1747
55°	1732	1790	1940	2094	2145	1544
65°	1162	1260	1458	1630	1692	1153
75°	603	738	961	1133	1187	636
85°	128	248	322	343	343	158
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3675.6	3675.6	3675.6	3675.6	3675.6
2.5°	3675.6	3675.6	3657.3	3675.6	3675.6
5°	3661.0	3661.0	3646.4	3664.6	3668.3
7.5°	3635.4	3639.0	3624.4	3646.4	3650.0
10°	3598.9	3602.5	3595.2	3617.1	3620.8
12.5°	3555.0	3558.7	3558.7	3584.2	3587.9
15°	3500.2	3503.9	3507.5	3540.4	3544.1
17.5°	3430.8	3441.8	3449.1	3489.2	3496.6
20°	3357.7	3368.7	3383.3	3427.1	3434.4
22.5°	3273.7	3288.3	3313.9	3361.4	3372.3
25°	3186.0	3200.6	3233.5	3288.3	3299.3
27.5°	3087.3	3109.3	3149.5	3207.9	3222.5
30°	2985.0	3007.0	3054.5	3116.6	3138.5
32.5°	2875.4	2904.7	2959.5	3028.9	3050.8
35°	2762.2	2795.1	2853.5	2930.2	2959.5
37.5°	2641.6	2678.1	2747.6	2831.6	2868.1
40°	2517.4	2561.2	2634.3	2732.9	2773.1
42.5°	2393.1	2433.3	2524.7	2630.6	2674.5
45°	2265.3	2312.8	2407.8	2528.3	2572.2
47.5°	2133.7	2181.2	2294.5	2422.4	2462.6
50°	2002.2	2049.7	2177.6	2312.8	2360.3
52.5°	1859.7	1921.8	2068.0	2203.2	2250.7
55°	1731.8	1790.3	1940.1	2093.5	2144.7
57.5°	1585.7	1655.1	1819.5	1980.3	2035.1
60°	1450.5	1523.6	1699.0	1863.4	1918.2
62.5°	1311.7	1392.0	1578.4	1746.5	1808.6
65°	1161.9	1260.5	1457.8	1629.5	1691.6
67.5°	1026.7	1129.0	1337.2	1512.6	1567.4
70°	873.2	997.4	1209.4	1384.7	1446.9
72.5°	741.7	865.9	1088.8	1260.5	1322.6
75°	602.9	738.0	960.9	1132.6	1187.4
77.5°	464.0	613.8	836.7	968.2	986.5
80°	332.5	489.6	694.2	770.9	796.5
82.5°	233.8	376.3	511.5	562.7	577.3
85°	127.9	248.4	321.5	343.4	343.4
87.5°	54.8	106.0	127.9	131.5	135.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)