

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: P388655

Luminaire Tested: **24CZ2-130VHE-UNV-L930-CD2-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: P388655
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-L930-CD2-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

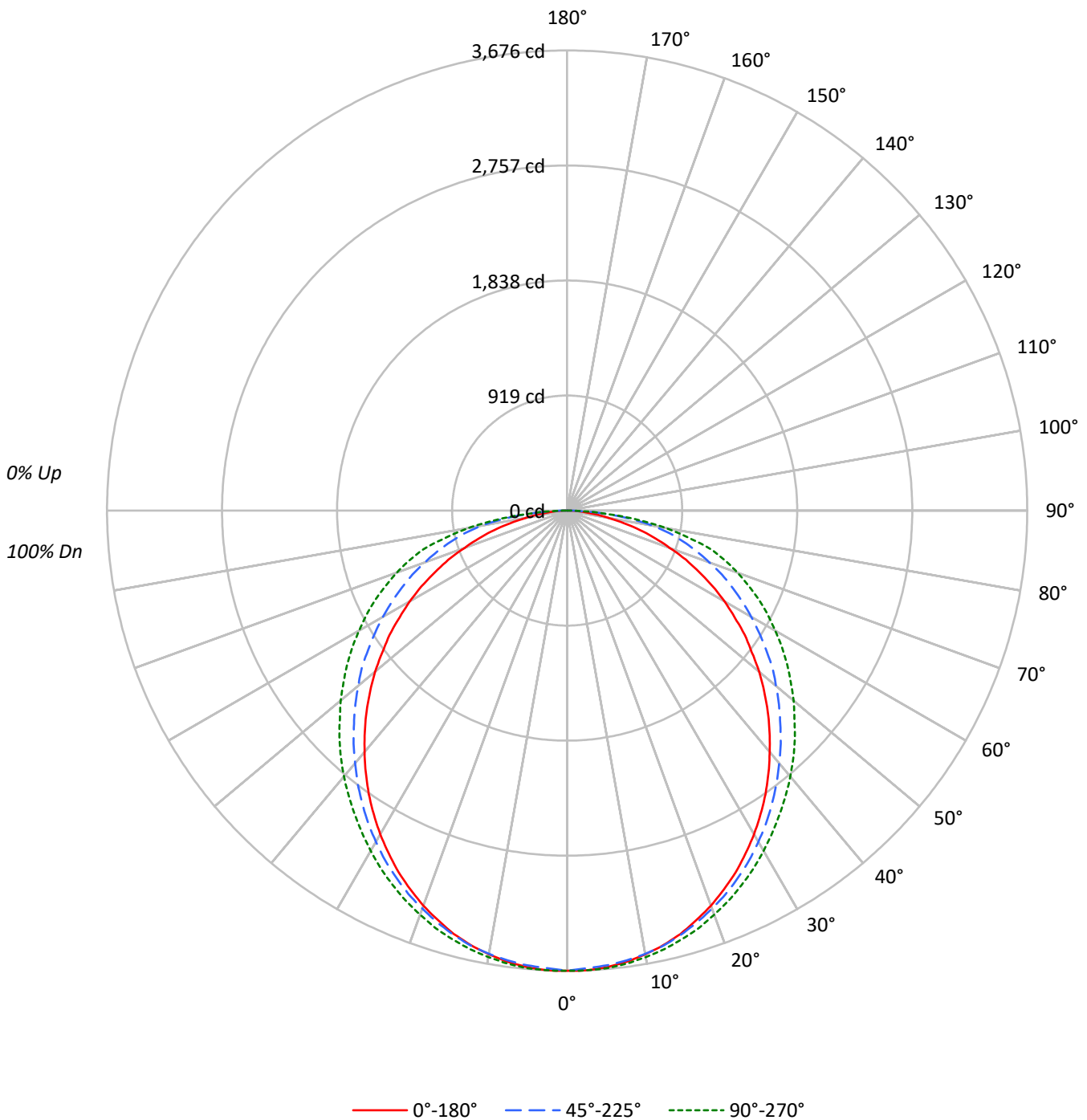
Lumens per Lamp: N/A
Luminaire Lumens: 10949.5 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	4946	4946	4946
5°	4945	4926	4955
10°	4918	4913	4948
15°	4876	4887	4938
20°	4809	4845	4919
25°	4731	4801	4899
30°	4639	4746	4877
35°	4538	4688	4862
40°	4422	4628	4872
45°	4311	4582	4895
50°	4192	4559	4941
55°	4063	4552	5032
60°	3904	4573	5163
65°	3700	4642	5387
70°	3436	4759	5693
75°	3135	4996	6174
80°	2576	5380	6172
85°	1974	4965	5303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.7	3.2
10°-20°	992.6	9.1
20°-30°	1493.7	13.6
30°-40°	1790.1	16.3
40°-50°	1865.4	17.0
50°-60°	1735.6	15.9
60°-70°	1429.5	13.1
70°-80°	973.5	8.9
80°-90°	321.4	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°	2834.0	25.9
0°-40°	4624.1	42.2
0°-60°	8225.1	75.1
0°-90°	10949.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10949.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3676	3676	3676	3676	3676	
5°	3662	3662	3647	3665	3669	348
15°	3501	3504	3508	3541	3545	986
25°	3187	3201	3234	3289	3300	1467
35°	2763	2796	2854	2931	2960	1727
45°	2266	2313	2408	2529	2573	1747
55°	1732	1791	1940	2094	2145	1544
65°	1162	1261	1458	1630	1692	1154
75°	603	738	961	1133	1188	636
85°	128	248	322	344	344	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3676.3	3676.3	3676.3	3676.3	3676.3
2.5°	3676.3	3676.3	3658.0	3676.3	3676.3
5°	3661.6	3661.6	3647.0	3665.3	3668.9
7.5°	3636.1	3639.7	3625.1	3647.0	3650.7
10°	3599.5	3603.2	3595.9	3617.8	3621.4
12.5°	3555.7	3559.3	3559.3	3584.9	3588.6
15°	3500.8	3504.5	3508.2	3541.0	3544.7
17.5°	3431.4	3442.4	3449.7	3489.9	3497.2
20°	3358.3	3369.3	3383.9	3427.8	3435.1
22.5°	3274.3	3288.9	3314.5	3362.0	3372.9
25°	3186.6	3201.2	3234.1	3288.9	3299.9
27.5°	3087.9	3109.8	3150.0	3208.5	3223.1
30°	2985.6	3007.5	3055.0	3117.1	3139.1
32.5°	2876.0	2905.2	2960.0	3029.4	3051.4
35°	2762.7	2795.6	2854.0	2930.8	2960.0
37.5°	2642.1	2678.6	2748.1	2832.1	2868.6
40°	2517.8	2561.7	2634.8	2733.4	2773.6
42.5°	2393.6	2433.8	2525.1	2631.1	2675.0
45°	2265.7	2313.2	2408.2	2528.8	2572.6
47.5°	2134.1	2181.6	2294.9	2422.8	2463.0
50°	2002.6	2050.1	2178.0	2313.2	2360.7
52.5°	1860.1	1922.2	2068.4	2203.6	2251.1
55°	1732.2	1790.6	1940.4	2093.9	2145.1
57.5°	1586.0	1655.4	1819.9	1980.6	2035.5
60°	1450.8	1523.9	1699.3	1863.7	1918.5
62.5°	1311.9	1392.3	1578.7	1746.8	1808.9
65°	1162.1	1260.7	1458.1	1629.8	1692.0
67.5°	1026.9	1129.2	1337.5	1512.9	1567.7
70°	873.4	997.6	1209.6	1385.0	1447.1
72.5°	741.8	866.1	1089.0	1260.7	1322.9
75°	603.0	738.2	961.1	1132.8	1187.7
77.5°	464.1	613.9	836.8	968.4	986.7
80°	332.5	489.7	694.3	771.1	796.6
82.5°	233.9	376.4	511.6	562.8	577.4
85°	127.9	248.5	321.6	343.5	343.5
87.5°	54.8	106.0	127.9	131.6	135.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)