

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: P388664

Luminaire Tested: **24CZ2-130VHE-UNV-L950-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: P388664
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-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

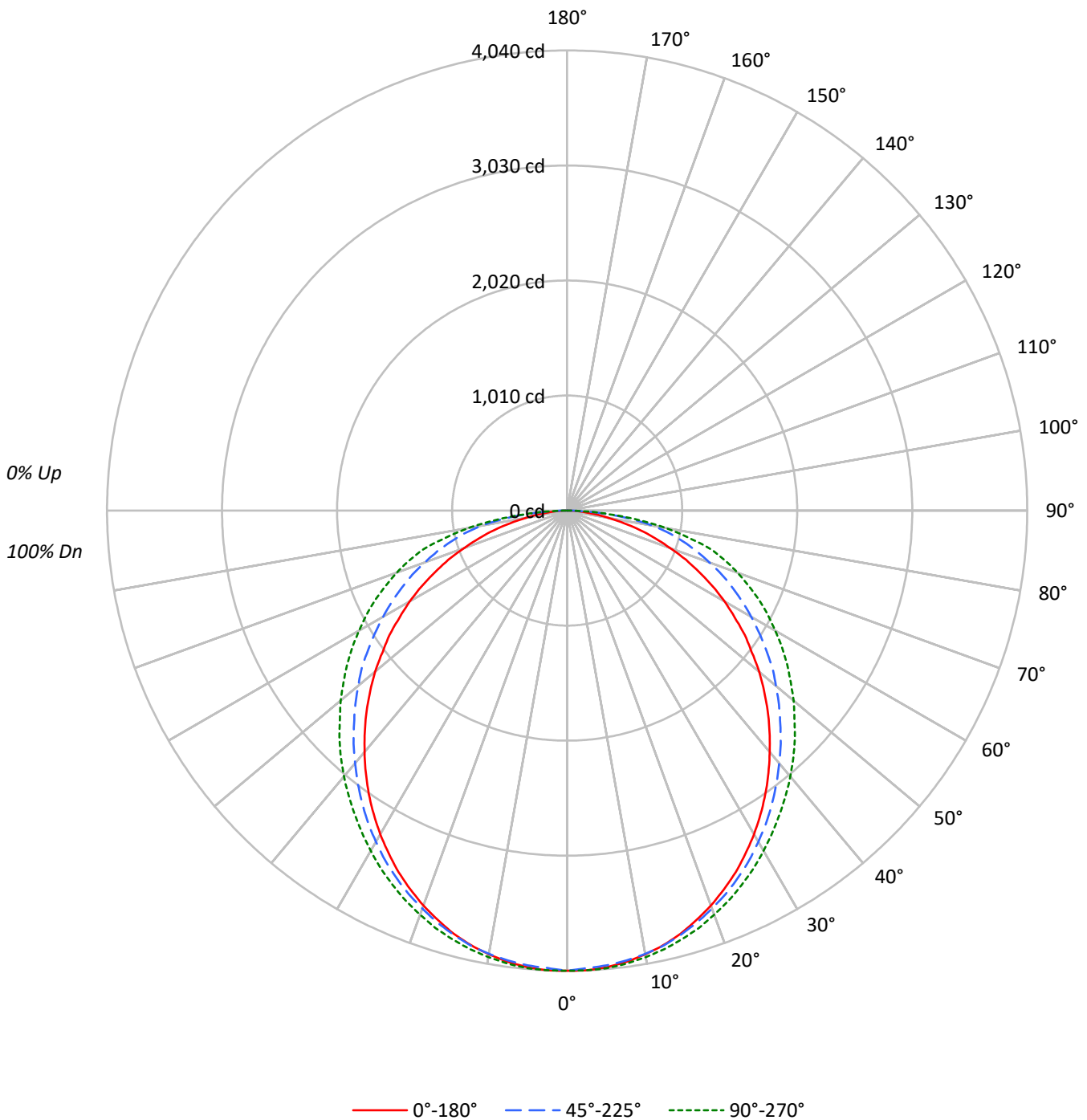
Lumens per Lamp: N/A
Luminaire Lumens: 12032.9 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	5436	5436	5436
5°	5435	5413	5446
10°	5404	5399	5437
15°	5359	5370	5426
20°	5284	5325	5405
25°	5199	5276	5384
30°	5097	5216	5360
35°	4987	5152	5343
40°	4860	5086	5354
45°	4738	5036	5380
50°	4607	5010	5430
55°	4465	5002	5530
60°	4290	5025	5674
65°	4066	5101	5920
70°	3776	5229	6256
75°	3445	5491	6785
80°	2831	5912	6784
85°	2171	5456	5828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.1	3.2
10°-20°	1090.8	9.1
20°-30°	1641.5	13.6
30°-40°	1967.2	16.3
40°-50°	2050.0	17.0
50°-60°	1907.3	15.9
60°-70°	1570.9	13.1
70°-80°	1069.8	8.9
80°-90°	353.2	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°	3114.4	25.9
0°-40°	5081.6	42.2
0°-60°	9038.9	75.1
0°-90°	12032.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12032.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4040	4040	4040	4040	4040	
5°	4024	4024	4008	4028	4032	382
15°	3847	3851	3855	3891	3895	1084
25°	3502	3518	3554	3614	3626	1612
35°	3036	3072	3136	3221	3253	1898
45°	2490	2542	2646	2779	2827	1920
55°	1904	1968	2132	2301	2357	1697
65°	1277	1386	1602	1791	1859	1268
75°	663	811	1056	1245	1305	699
85°	141	273	353	378	378	174
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4040.0	4040.0	4040.0	4040.0	4040.0
2.5°	4040.0	4040.0	4019.9	4040.0	4040.0
5°	4023.9	4023.9	4007.9	4028.0	4032.0
7.5°	3995.8	3999.8	3983.8	4007.9	4011.9
10°	3955.7	3959.7	3951.7	3975.7	3979.8
12.5°	3907.5	3911.5	3911.5	3939.6	3943.6
15°	3847.2	3851.3	3855.3	3891.4	3895.4
17.5°	3770.9	3783.0	3791.0	3835.2	3843.2
20°	3690.6	3702.7	3718.7	3766.9	3775.0
22.5°	3598.3	3614.3	3642.4	3694.6	3706.7
25°	3501.9	3517.9	3554.1	3614.3	3626.4
27.5°	3393.4	3417.5	3461.7	3526.0	3542.0
30°	3281.0	3305.1	3357.3	3425.6	3449.7
32.5°	3160.5	3192.6	3252.9	3329.2	3353.3
35°	3036.0	3072.2	3136.4	3220.8	3252.9
37.5°	2903.5	2943.7	3020.0	3112.3	3152.5
40°	2767.0	2815.2	2895.5	3003.9	3048.1
42.5°	2630.4	2674.6	2775.0	2891.5	2939.6
45°	2489.9	2542.1	2646.5	2779.0	2827.2
47.5°	2345.3	2397.5	2522.0	2662.5	2706.7
50°	2200.7	2252.9	2393.5	2542.1	2594.3
52.5°	2044.1	2112.4	2273.0	2421.6	2473.8
55°	1903.5	1967.8	2132.4	2301.1	2357.3
57.5°	1742.9	1819.2	1999.9	2176.6	2236.9
60°	1594.3	1674.6	1867.4	2048.1	2108.4
62.5°	1441.7	1530.1	1734.9	1919.6	1987.9
65°	1277.1	1385.5	1602.3	1791.1	1859.4
67.5°	1128.5	1240.9	1469.8	1662.6	1722.8
70°	959.8	1096.3	1329.3	1522.0	1590.3
72.5°	815.2	951.8	1196.7	1385.5	1453.8
75°	662.6	811.2	1056.2	1244.9	1305.2
77.5°	510.0	674.7	919.6	1064.2	1084.3
80°	365.4	538.1	763.0	847.4	875.5
82.5°	257.0	413.6	562.2	618.4	634.5
85°	140.6	273.1	353.4	377.5	377.5
87.5°	60.2	116.5	140.6	144.6	148.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)