

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: P389600

Luminaire Tested: **24CZ2-130VHE-S-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: P389600
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-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: 12643.4 lumens
Efficiency: N/A
Efficacy: 139.4 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

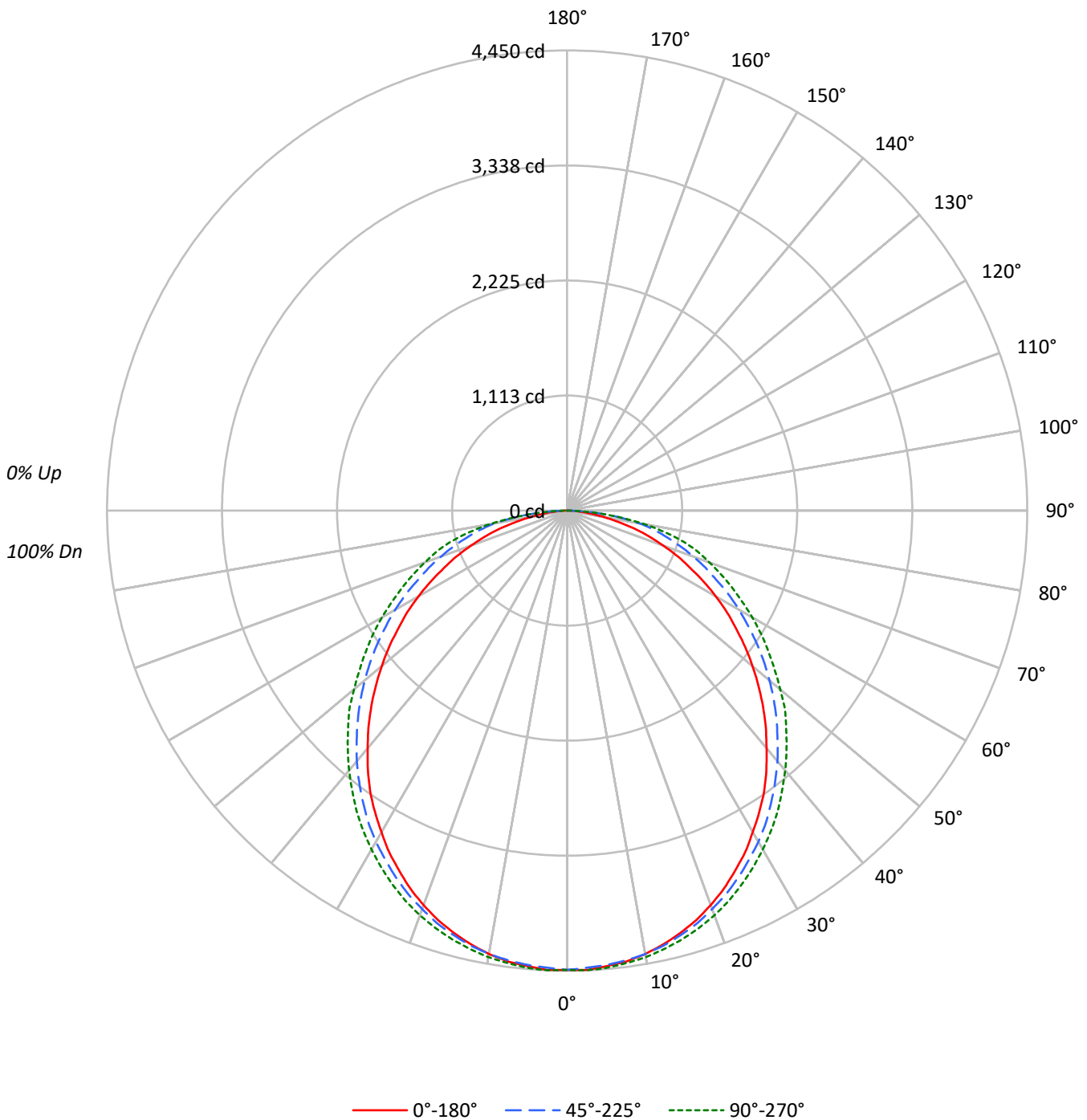
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5976	5976	5976
5°	5972	5956	5994
10°	5948	5948	5992
15°	5891	5919	5980
20°	5814	5871	5963
25°	5706	5813	5926
30°	5578	5746	5878
35°	5455	5653	5831
40°	5269	5558	5763
45°	5097	5449	5701
50°	4901	5346	5632
55°	4682	5247	5577
60°	4463	5166	5565
65°	4181	5076	5600
70°	3871	5103	5751
75°	3466	5199	6076
80°	2800	5508	5944
85°	2107	4835	4712



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.5	3.3
10°-20°	1201.5	9.5
20°-30°	1806.2	14.3
30°-40°	2151.4	17.0
40°-50°	2201.9	17.4
50°-60°	1982.3	15.7
60°-70°	1556.8	12.3
70°-80°	1010.4	8.0
80°-90°	312.5	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°	3428.2	27.1
0°-40°	5579.6	44.1
0°-60°	9763.8	77.2
0°-90°	12643.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12643.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4442	4442	4442	4442	4442	
5°	4422	4430	4410	4434	4438	420
15°	4229	4241	4249	4285	4293	1192
25°	3843	3876	3916	3980	3992	1771
35°	3321	3361	3442	3526	3550	2072
45°	2679	2743	2863	2972	2996	2065
55°	1996	2084	2237	2353	2378	1789
65°	1313	1414	1594	1727	1759	1307
75°	667	795	1000	1136	1169	705
85°	136	253	313	305	305	165
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4441.7	4441.7	4441.7	4441.7	4441.7
2.5°	4445.7	4445.7	4425.6	4445.7	4449.7
5°	4421.6	4429.7	4409.6	4433.7	4437.7
7.5°	4397.5	4397.5	4385.5	4409.6	4413.6
10°	4353.4	4357.4	4353.4	4381.5	4385.5
12.5°	4297.1	4305.2	4309.2	4337.3	4341.3
15°	4228.9	4240.9	4248.9	4285.1	4293.1
17.5°	4152.6	4164.6	4184.7	4224.8	4232.9
20°	4060.2	4076.3	4100.3	4152.6	4164.6
22.5°	3959.8	3975.9	4016.0	4064.2	4084.3
25°	3843.3	3875.5	3915.6	3979.9	3991.9
27.5°	3726.9	3755.0	3807.2	3875.5	3891.5
30°	3590.3	3634.5	3698.7	3767.0	3783.1
32.5°	3457.8	3502.0	3578.3	3650.6	3670.6
35°	3321.2	3361.4	3441.7	3526.1	3550.2
37.5°	3164.6	3216.8	3305.2	3389.5	3413.6
40°	3000.0	3064.2	3164.6	3253.0	3281.1
42.5°	2843.3	2911.6	3012.0	3108.4	3140.5
45°	2678.7	2742.9	2863.4	2971.8	2995.9
47.5°	2510.0	2582.3	2710.8	2819.2	2859.4
50°	2341.3	2417.6	2554.2	2666.6	2690.7
52.5°	2172.7	2253.0	2397.6	2518.0	2530.1
55°	1996.0	2084.3	2236.9	2353.4	2377.5
57.5°	1835.3	1911.6	2076.3	2196.8	2224.9
60°	1658.6	1742.9	1919.7	2032.1	2068.2
62.5°	1489.9	1578.3	1763.0	1875.5	1907.6
65°	1313.2	1413.6	1594.4	1726.9	1759.0
67.5°	1160.6	1257.0	1449.8	1578.3	1610.4
70°	983.9	1092.4	1297.2	1429.7	1461.8
72.5°	831.3	943.8	1148.6	1277.1	1325.3
75°	666.7	795.2	1000.0	1136.5	1168.7
77.5°	506.0	654.6	863.4	967.9	967.9
80°	361.4	518.1	710.8	759.0	767.1
82.5°	236.9	389.6	526.1	522.1	522.1
85°	136.5	253.0	313.2	305.2	305.2
87.5°	52.2	104.4	112.4	112.4	108.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)