

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: P388662

Luminaire Tested: **24CZ2-130VHE-UNV-L950-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: P388662
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-SDWPD1-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: 11740.3 lumens
Efficiency: N/A
Efficacy: 129.4 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

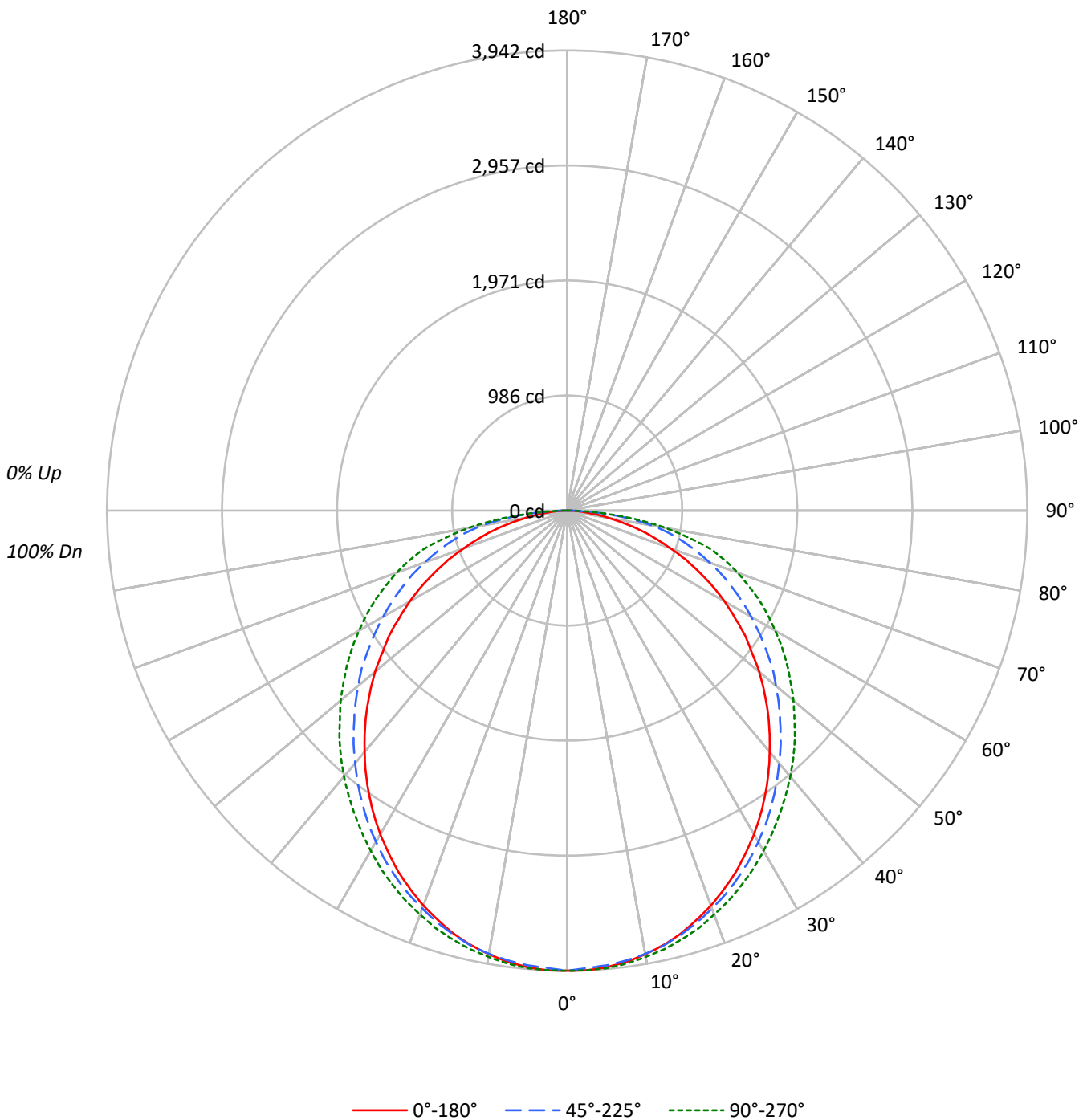
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5304	5304	5304
5°	5303	5281	5313
10°	5273	5268	5305
15°	5229	5240	5294
20°	5156	5195	5274
25°	5072	5148	5253
30°	4974	5089	5229
35°	4866	5026	5213
40°	4742	4962	5224
45°	4622	4913	5249
50°	4495	4888	5298
55°	4357	4881	5395
60°	4186	4903	5536
65°	3967	4977	5776
70°	3684	5102	6104
75°	3361	5357	6620
80°	2763	5769	6619
85°	2117	5323	5686



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.8	3.2
10°-20°	1064.3	9.1
20°-30°	1601.6	13.6
30°-40°	1919.4	16.3
40°-50°	2000.2	17.0
50°-60°	1860.9	15.9
60°-70°	1532.7	13.1
70°-80°	1043.8	8.9
80°-90°	344.6	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°	3038.7	25.9
0°-40°	4958.1	42.2
0°-60°	8819.1	75.1
0°-90°	11740.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11740.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3942	3942	3942	3942	3942	
5°	3926	3926	3910	3930	3934	373
15°	3754	3758	3762	3797	3801	1057
25°	3417	3432	3468	3526	3538	1573
35°	2962	2998	3060	3142	3174	1852
45°	2429	2480	2582	2711	2758	1874
55°	1857	1920	2081	2245	2300	1655
65°	1246	1352	1563	1748	1814	1237
75°	646	792	1030	1215	1273	682
85°	137	266	345	368	368	170
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3941.8	3941.8	3941.8	3941.8	3941.8
2.5°	3941.8	3941.8	3922.2	3941.8	3941.8
5°	3926.1	3926.1	3910.4	3930.0	3933.9
7.5°	3898.7	3902.6	3886.9	3910.4	3914.3
10°	3859.5	3863.4	3855.6	3879.1	3883.0
12.5°	3812.5	3816.4	3816.4	3843.8	3847.7
15°	3753.7	3757.6	3761.5	3796.8	3800.7
17.5°	3679.2	3691.0	3698.8	3741.9	3749.8
20°	3600.9	3612.6	3628.3	3675.3	3683.2
22.5°	3510.8	3526.4	3553.9	3604.8	3616.5
25°	3416.7	3432.4	3467.7	3526.4	3538.2
27.5°	3310.9	3334.4	3377.5	3440.2	3455.9
30°	3201.2	3224.7	3275.7	3342.3	3365.8
32.5°	3083.7	3115.0	3173.8	3248.2	3271.7
35°	2962.2	2997.5	3060.2	3142.4	3173.8
37.5°	2832.9	2872.1	2946.5	3036.6	3075.8
40°	2699.7	2746.7	2825.1	2930.9	2974.0
42.5°	2566.5	2609.6	2707.5	2821.1	2868.2
45°	2429.3	2480.3	2582.1	2711.4	2758.5
47.5°	2288.3	2339.2	2460.7	2597.8	2640.9
50°	2147.2	2198.1	2335.3	2480.3	2531.2
52.5°	1994.4	2061.0	2217.7	2362.7	2413.6
55°	1857.3	1919.9	2080.6	2245.2	2300.0
57.5°	1700.5	1775.0	1951.3	2123.7	2182.5
60°	1555.5	1633.9	1822.0	1998.3	2057.1
62.5°	1406.7	1492.9	1692.7	1872.9	1939.5
65°	1246.0	1351.8	1563.4	1747.5	1814.2
67.5°	1101.0	1210.7	1434.1	1622.2	1680.9
70°	936.5	1069.7	1296.9	1485.0	1551.6
72.5°	795.4	928.6	1167.6	1351.8	1418.4
75°	646.5	791.5	1030.5	1214.7	1273.4
77.5°	497.6	658.3	897.3	1038.3	1057.9
80°	356.6	525.0	744.5	826.8	854.2
82.5°	250.8	403.6	548.6	603.4	619.1
85°	137.1	266.4	344.8	368.3	368.3
87.5°	58.8	113.6	137.1	141.1	145.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)