

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: P391057

Luminaire Tested: **24CZ2-130VHE-RDP-UNV-L935-CD2-SWPD1-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: P391057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-RDP-UNV-L935-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7452.8 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

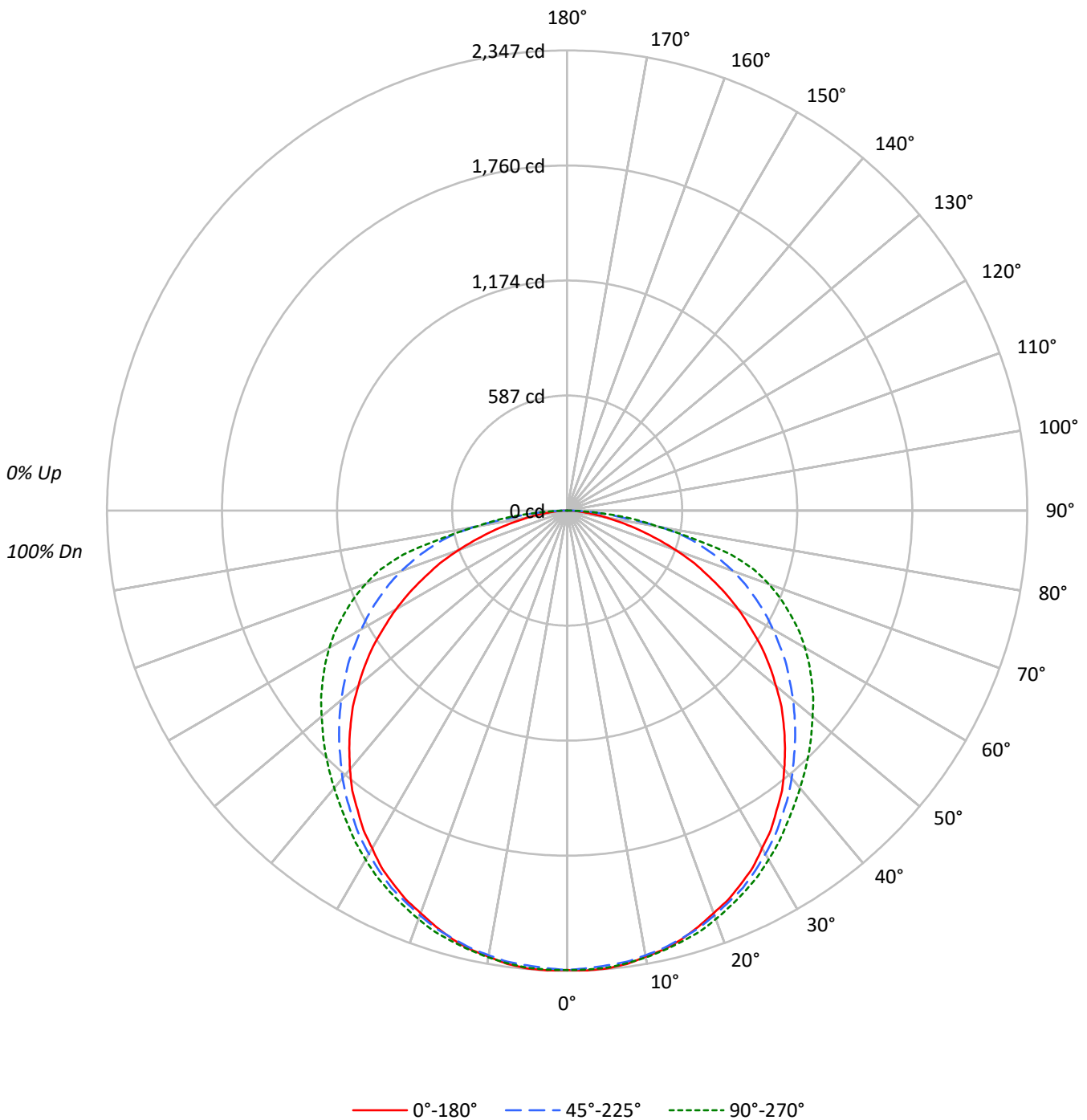
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3153	3153	3153
5°	3165	3145	3160
10°	3157	3146	3162
15°	3151	3146	3167
20°	3128	3144	3176
25°	3117	3150	3183
30°	3090	3142	3193
35°	3060	3133	3206
40°	3026	3130	3246
45°	2975	3130	3320
50°	2910	3149	3420
55°	2836	3200	3573
60°	2716	3263	3770
65°	2542	3378	4002
70°	2312	3534	4305
75°	1960	3728	4497
80°	1547	3753	3638
85°	1141	2853	3196



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.3	3.0
10°-20°	639.8	8.6
20°-30°	978.5	13.1
30°-40°	1196.1	16.0
40°-50°	1274.8	17.1
50°-60°	1218.9	16.4
60°-70°	1032.6	13.9
70°-80°	694.0	9.3
80°-90°	195.8	2.6
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°	1840.6	24.7
0°-40°	3036.8	40.7
0°-60°	5530.5	74.2
0°-90°	7452.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7452.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2344	2344	2344	2344	2344	
5°	2344	2340	2329	2340	2340	223
15°	2262	2262	2259	2277	2274	638
25°	2100	2107	2122	2140	2144	968
35°	1863	1878	1908	1944	1952	1167
45°	1564	1590	1645	1715	1745	1206
55°	1209	1253	1364	1471	1523	1077
65°	798	880	1061	1201	1257	793
75°	377	514	717	839	865	404
85°	74	152	185	200	207	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2343.7	2343.7	2343.7	2343.7	2343.7
2.5°	2347.4	2347.4	2336.3	2343.7	2343.7
5°	2343.7	2340.0	2328.9	2340.0	2340.0
7.5°	2332.6	2328.9	2321.5	2332.6	2328.9
10°	2310.4	2310.4	2303.0	2314.1	2314.1
12.5°	2291.9	2288.2	2284.5	2299.3	2295.6
15°	2262.4	2262.4	2258.7	2277.2	2273.5
17.5°	2225.4	2229.1	2232.8	2247.6	2251.3
20°	2184.7	2192.1	2195.8	2218.0	2218.0
22.5°	2147.8	2151.5	2158.9	2181.0	2181.0
25°	2099.7	2107.1	2121.9	2140.4	2144.1
27.5°	2051.7	2055.4	2073.8	2099.7	2103.4
30°	1988.8	1999.9	2022.1	2051.7	2055.4
32.5°	1933.4	1944.5	1970.3	1999.9	2007.3
35°	1863.1	1877.9	1907.5	1944.5	1951.8
37.5°	1800.3	1811.4	1848.3	1889.0	1900.1
40°	1722.7	1744.8	1781.8	1829.9	1848.3
42.5°	1645.0	1667.2	1711.6	1774.4	1796.6
45°	1563.7	1589.6	1645.0	1715.3	1744.8
47.5°	1482.4	1511.9	1574.8	1656.1	1689.4
50°	1390.0	1426.9	1504.5	1597.0	1633.9
52.5°	1301.2	1345.6	1430.6	1534.1	1582.2
55°	1208.8	1253.2	1364.1	1471.3	1523.0
57.5°	1105.3	1164.5	1286.4	1408.4	1463.9
60°	1009.2	1064.6	1212.5	1345.6	1401.0
62.5°	905.7	979.6	1138.6	1279.0	1334.5
65°	798.5	879.8	1060.9	1201.4	1256.9
67.5°	702.4	791.1	983.3	1123.8	1179.2
70°	587.8	698.7	898.3	1038.8	1094.2
72.5°	480.6	602.6	809.6	946.3	998.1
75°	377.1	513.8	717.2	839.1	865.0
77.5°	280.9	425.1	621.0	672.8	654.3
80°	199.6	340.1	484.3	458.4	469.5
82.5°	129.4	258.8	299.4	340.1	351.2
85°	73.9	151.6	184.8	199.6	207.0
87.5°	33.3	55.5	73.9	73.9	70.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)