

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: P391060

Luminaire Tested: **24CZ2-130VHE-RDP-UNV-L940-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: P391060
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-L940-CD2-SWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7529.9 lumens
Efficiency: N/A
Efficacy: 83.0 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

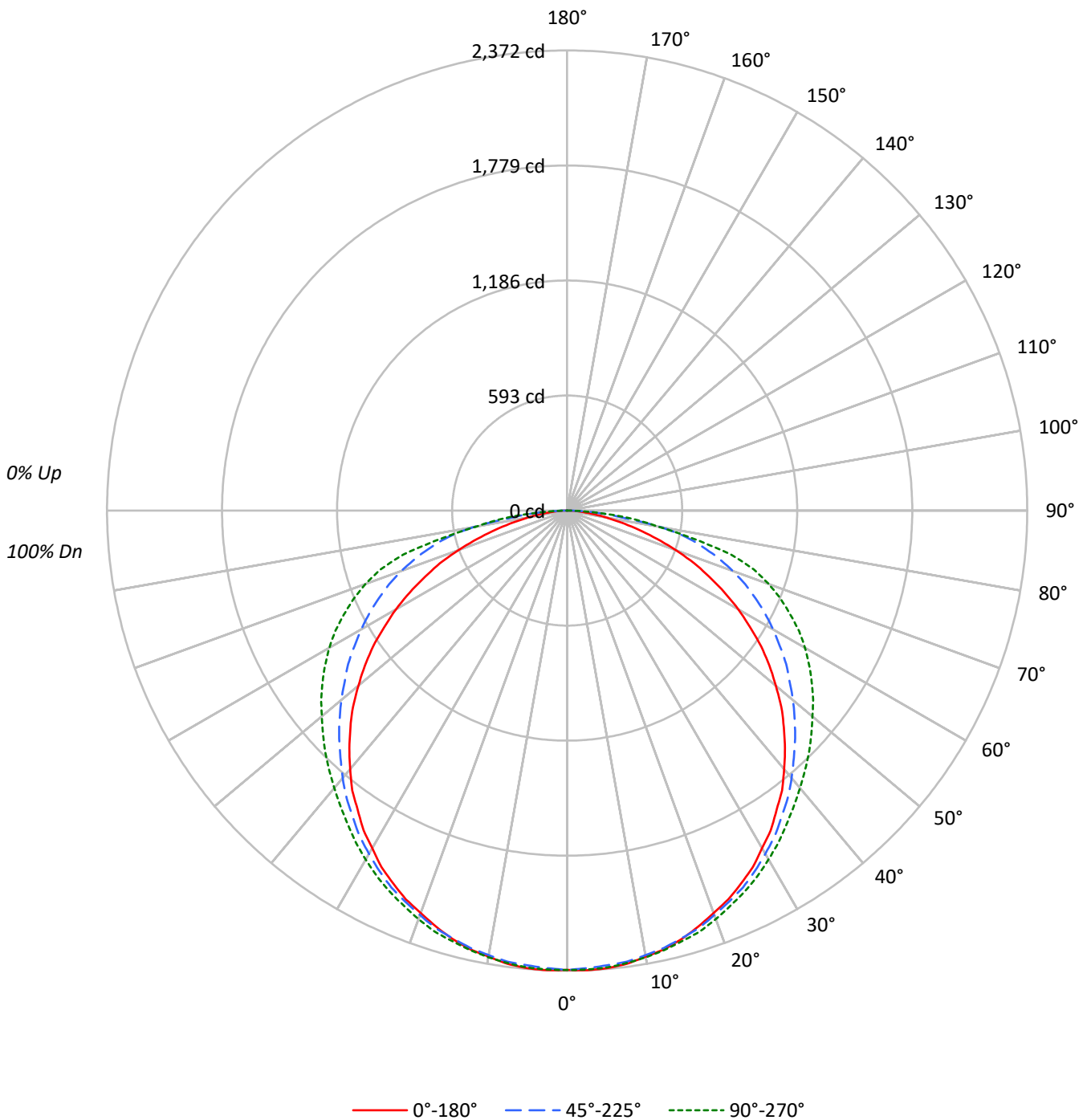
Input Watts (W): 90.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3186	3186	3186
5°	3198	3178	3193
10°	3189	3179	3194
15°	3184	3179	3200
20°	3161	3177	3209
25°	3149	3183	3216
30°	3122	3174	3226
35°	3092	3166	3239
40°	3057	3162	3280
45°	3006	3162	3354
50°	2939	3182	3455
55°	2865	3233	3610
60°	2744	3297	3809
65°	2568	3413	4043
70°	2336	3570	4349
75°	1981	3767	4544
80°	1563	3791	3675
85°	1153	2882	3230



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	3.0
10°-20°	646.5	8.6
20°-30°	988.6	13.1
30°-40°	1208.5	16.0
40°-50°	1288.0	17.1
50°-60°	1231.5	16.4
60°-70°	1043.3	13.9
70°-80°	701.2	9.3
80°-90°	197.8	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°	1859.6	24.7
0°-40°	3068.2	40.7
0°-60°	5587.7	74.2
0°-90°	7529.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7529.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2368	2368	2368	2368	2368	
5°	2368	2364	2353	2364	2364	225
15°	2286	2286	2282	2301	2297	644
25°	2121	2129	2144	2162	2166	978
35°	1882	1897	1927	1965	1972	1179
45°	1580	1606	1662	1733	1763	1219
55°	1221	1266	1378	1486	1539	1088
65°	807	889	1072	1214	1270	801
75°	381	519	725	848	874	408
85°	75	153	187	202	209	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2367.9	2367.9	2367.9	2367.9	2367.9
2.5°	2371.7	2371.7	2360.5	2367.9	2367.9
5°	2367.9	2364.2	2353.0	2364.2	2364.2
7.5°	2356.7	2353.0	2345.5	2356.7	2353.0
10°	2334.3	2334.3	2326.9	2338.1	2338.1
12.5°	2315.6	2311.9	2308.2	2323.1	2319.4
15°	2285.8	2285.8	2282.0	2300.7	2297.0
17.5°	2248.4	2252.2	2255.9	2270.8	2274.6
20°	2207.3	2214.8	2218.5	2241.0	2241.0
22.5°	2170.0	2173.7	2181.2	2203.6	2203.6
25°	2121.4	2128.9	2143.8	2162.5	2166.3
27.5°	2072.9	2076.6	2095.3	2121.4	2125.2
30°	2009.4	2020.6	2043.0	2072.9	2076.6
32.5°	1953.4	1964.6	1990.7	2020.6	2028.1
35°	1882.4	1897.3	1927.2	1964.6	1972.0
37.5°	1818.9	1830.1	1867.5	1908.5	1919.7
40°	1740.5	1762.9	1800.2	1848.8	1867.5
42.5°	1662.0	1684.4	1729.3	1792.8	1815.2
45°	1579.9	1606.0	1662.0	1733.0	1762.9
47.5°	1497.7	1527.6	1591.1	1673.2	1706.9
50°	1404.3	1441.7	1520.1	1613.5	1650.8
52.5°	1314.7	1359.5	1445.4	1550.0	1598.5
55°	1221.3	1266.1	1378.2	1486.5	1538.8
57.5°	1116.7	1176.5	1299.8	1423.0	1479.0
60°	1019.6	1075.7	1225.1	1359.5	1415.5
62.5°	915.1	989.8	1150.4	1292.3	1348.3
65°	806.7	888.9	1071.9	1213.8	1269.9
67.5°	709.6	799.3	993.5	1135.4	1191.4
70°	593.9	705.9	907.6	1049.5	1105.5
72.5°	485.5	608.8	817.9	956.1	1008.4
75°	381.0	519.2	724.6	847.8	874.0
77.5°	283.9	429.5	627.5	679.8	661.1
80°	201.7	343.6	489.3	463.1	474.3
82.5°	130.7	261.4	302.5	343.6	354.8
85°	74.7	153.1	186.7	201.7	209.2
87.5°	33.6	56.0	74.7	74.7	71.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)