

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: P391869

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L930-CD1-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: P391869
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: 24CZ2-95VHE-RDP-UNV-L930-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5154.9 lumens
Efficiency: N/A
Efficacy: 78.6 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

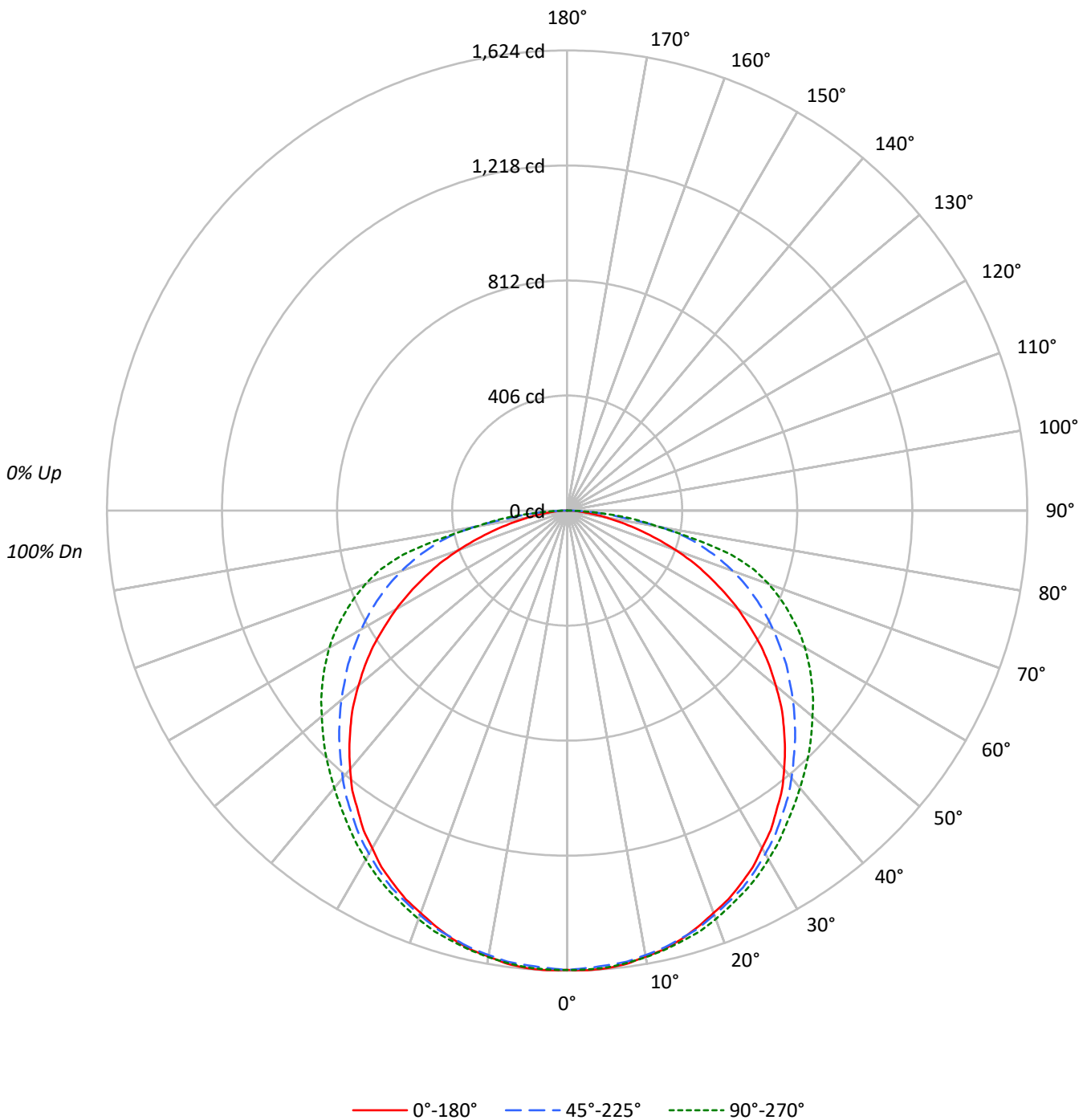
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2181	2181	2181
5°	2190	2176	2186
10°	2183	2176	2187
15°	2180	2176	2190
20°	2164	2175	2197
25°	2156	2179	2202
30°	2137	2173	2209
35°	2117	2167	2217
40°	2093	2165	2245
45°	2058	2165	2297
50°	2012	2178	2366
55°	1961	2213	2471
60°	1878	2257	2608
65°	1758	2336	2768
70°	1599	2444	2977
75°	1356	2578	3110
80°	1070	2596	2516
85°	789	1973	2211



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	3.0
10°-20°	442.6	8.6
20°-30°	676.8	13.1
30°-40°	827.3	16.0
40°-50°	881.8	17.1
50°-60°	843.1	16.4
60°-70°	714.2	13.9
70°-80°	480.0	9.3
80°-90°	135.4	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°	1273.1	24.7
0°-40°	2100.4	40.7
0°-60°	3825.3	74.2
0°-90°	5154.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5154.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1621	1621	1621	1621	1621	
5°	1621	1618	1611	1618	1618	154
15°	1565	1565	1562	1575	1572	441
25°	1452	1457	1468	1480	1483	669
35°	1289	1299	1319	1345	1350	807
45°	1082	1100	1138	1186	1207	834
55°	836	867	944	1018	1053	745
65°	552	608	734	831	869	548
75°	261	355	496	580	598	279
85°	51	105	128	138	143	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1621.1	1621.1	1621.1	1621.1	1621.1
2.5°	1623.6	1623.6	1616.0	1621.1	1621.1
5°	1621.1	1618.5	1610.8	1618.5	1618.5
7.5°	1613.4	1610.8	1605.7	1613.4	1610.8
10°	1598.1	1598.1	1592.9	1600.6	1600.6
12.5°	1585.3	1582.7	1580.2	1590.4	1587.8
15°	1564.8	1564.8	1562.3	1575.0	1572.5
17.5°	1539.2	1541.8	1544.4	1554.6	1557.1
20°	1511.1	1516.2	1518.8	1534.1	1534.1
22.5°	1485.6	1488.1	1493.2	1508.6	1508.6
25°	1452.3	1457.4	1467.7	1480.4	1483.0
27.5°	1419.1	1421.6	1434.4	1452.3	1454.9
30°	1375.6	1383.3	1398.6	1419.1	1421.6
32.5°	1337.3	1344.9	1362.8	1383.3	1388.4
35°	1288.7	1298.9	1319.4	1344.9	1350.0
37.5°	1245.2	1252.9	1278.4	1306.6	1314.2
40°	1191.5	1206.9	1232.4	1265.7	1278.4
42.5°	1137.8	1153.2	1183.8	1227.3	1242.6
45°	1081.6	1099.5	1137.8	1186.4	1206.9
47.5°	1025.3	1045.8	1089.2	1145.5	1168.5
50°	961.4	987.0	1040.7	1104.6	1130.1
52.5°	900.0	930.7	989.5	1061.1	1094.3
55°	836.1	866.8	943.5	1017.6	1053.4
57.5°	764.5	805.4	889.8	974.2	1012.5
60°	698.0	736.4	838.7	930.7	969.1
62.5°	626.4	677.6	787.5	884.7	923.0
65°	552.3	608.5	733.8	831.0	869.3
67.5°	485.8	547.2	680.1	777.3	815.6
70°	406.5	483.3	621.3	718.5	756.8
72.5°	332.4	416.8	560.0	654.6	690.4
75°	260.8	355.4	496.0	580.4	598.3
77.5°	194.3	294.0	429.6	465.4	452.6
80°	138.1	235.2	335.0	317.1	324.7
82.5°	89.5	179.0	207.1	235.2	242.9
85°	51.1	104.8	127.8	138.1	143.2
87.5°	23.0	38.4	51.1	51.1	48.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)