

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: P391873

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L935-CD1-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: P391873
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-L935-CD1-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: 5346.8 lumens
Efficiency: N/A
Efficacy: 81.5 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

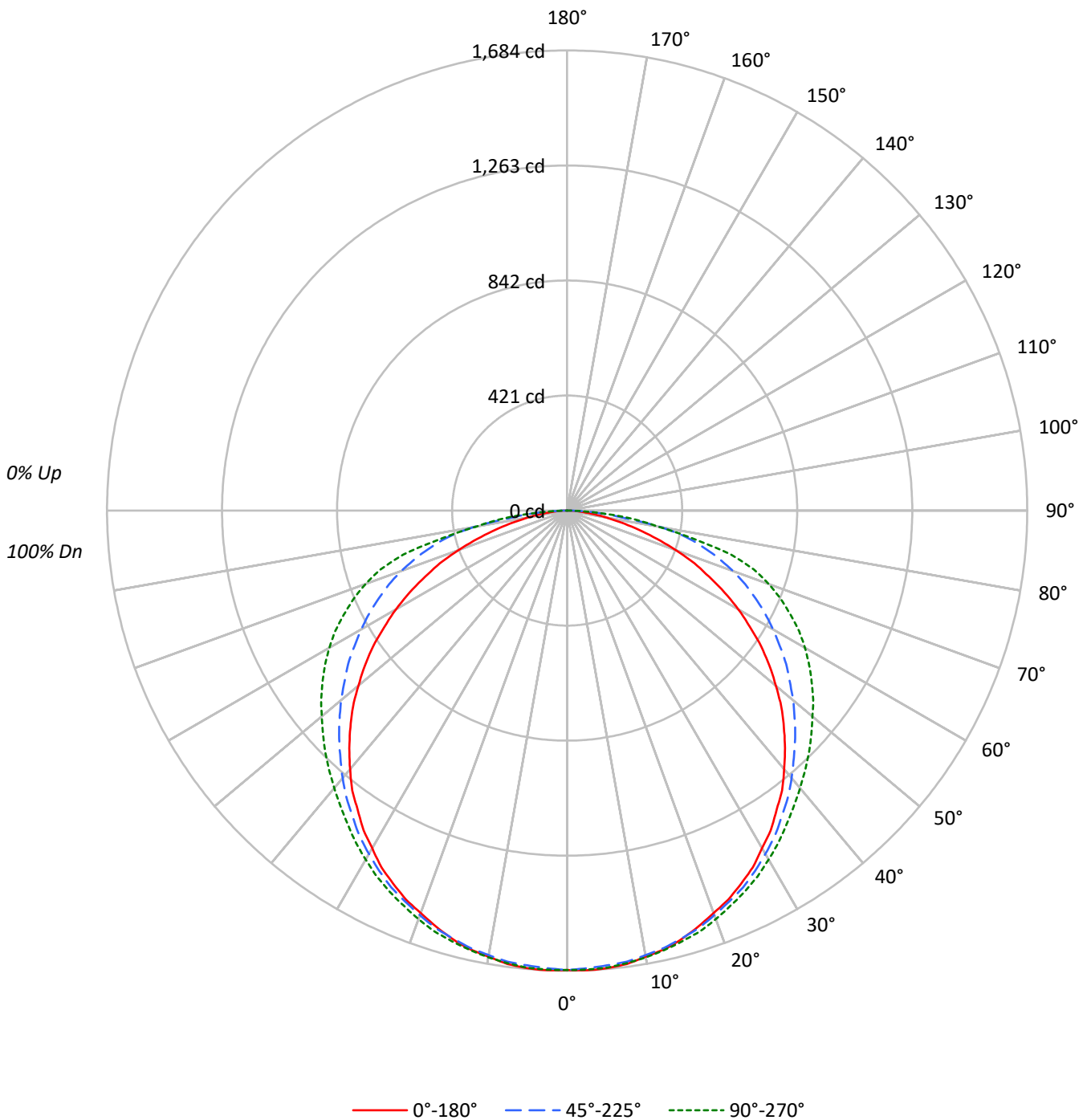
Input Watts (W): 65.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	68	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°	2262	2262	2262
5°	2271	2257	2267
10°	2265	2257	2268
15°	2261	2257	2272
20°	2244	2256	2278
25°	2236	2260	2284
30°	2217	2254	2291
35°	2195	2248	2300
40°	2171	2245	2329
45°	2135	2246	2382
50°	2087	2259	2454
55°	2034	2296	2563
60°	1948	2341	2705
65°	1824	2423	2871
70°	1659	2535	3088
75°	1406	2675	3226
80°	1110	2692	2610
85°	818	2047	2293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	3.0
10°-20°	459.0	8.6
20°-30°	702.0	13.1
30°-40°	858.1	16.0
40°-50°	914.6	17.1
50°-60°	874.5	16.4
60°-70°	740.8	13.9
70°-80°	497.9	9.3
80°-90°	140.4	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°	1320.5	24.7
0°-40°	2178.6	40.7
0°-60°	3967.7	74.2
0°-90°	5346.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5346.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1681	1679	1671	1679	1679	160
15°	1623	1623	1620	1634	1631	458
25°	1506	1512	1522	1536	1538	694
35°	1337	1347	1368	1395	1400	837
45°	1122	1140	1180	1231	1252	865
55°	867	899	979	1056	1093	772
65°	573	631	761	862	902	569
75°	270	369	514	602	621	290
85°	53	109	133	143	148	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.4	1681.4	1681.4	1681.4	1681.4
2.5°	1684.1	1684.1	1676.1	1681.4	1681.4
5°	1681.4	1678.8	1670.8	1678.8	1678.8
7.5°	1673.5	1670.8	1665.5	1673.5	1670.8
10°	1657.5	1657.5	1652.2	1660.2	1660.2
12.5°	1644.3	1641.6	1639.0	1649.6	1646.9
15°	1623.1	1623.1	1620.4	1633.7	1631.0
17.5°	1596.5	1599.2	1601.9	1612.5	1615.1
20°	1567.4	1572.7	1575.3	1591.2	1591.2
22.5°	1540.9	1543.5	1548.8	1564.7	1564.7
25°	1506.4	1511.7	1522.3	1535.6	1538.2
27.5°	1471.9	1474.6	1487.8	1506.4	1509.0
30°	1426.8	1434.8	1450.7	1471.9	1474.6
32.5°	1387.0	1395.0	1413.6	1434.8	1440.1
35°	1336.6	1347.3	1368.5	1395.0	1400.3
37.5°	1291.6	1299.5	1326.0	1355.2	1363.2
40°	1235.9	1251.8	1278.3	1312.8	1326.0
42.5°	1180.2	1196.1	1227.9	1273.0	1288.9
45°	1121.8	1140.4	1180.2	1230.6	1251.8
47.5°	1063.5	1084.7	1129.8	1188.1	1212.0
50°	997.2	1023.7	1079.4	1145.7	1172.2
52.5°	933.5	965.4	1026.4	1100.6	1135.1
55°	867.2	899.1	978.6	1055.5	1092.7
57.5°	793.0	835.4	922.9	1010.4	1050.2
60°	724.0	763.8	869.9	965.4	1005.1
62.5°	649.8	702.8	816.8	917.6	957.4
65°	572.8	631.2	761.1	861.9	901.7
67.5°	503.9	567.5	705.5	806.2	846.0
70°	421.7	501.2	644.5	745.2	785.0
72.5°	344.8	432.3	580.8	678.9	716.1
75°	270.5	368.6	514.5	602.0	620.6
77.5°	201.6	305.0	445.5	482.7	469.4
80°	143.2	244.0	347.4	328.9	336.8
82.5°	92.8	185.6	214.8	244.0	251.9
85°	53.0	108.7	132.6	143.2	148.5
87.5°	23.9	39.8	53.0	53.0	50.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)