

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: P276170

Luminaire Tested: **24CZ2-50-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-UNV-L82765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4621.2 lumens
Efficiency: N/A
Efficacy: 115.8 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

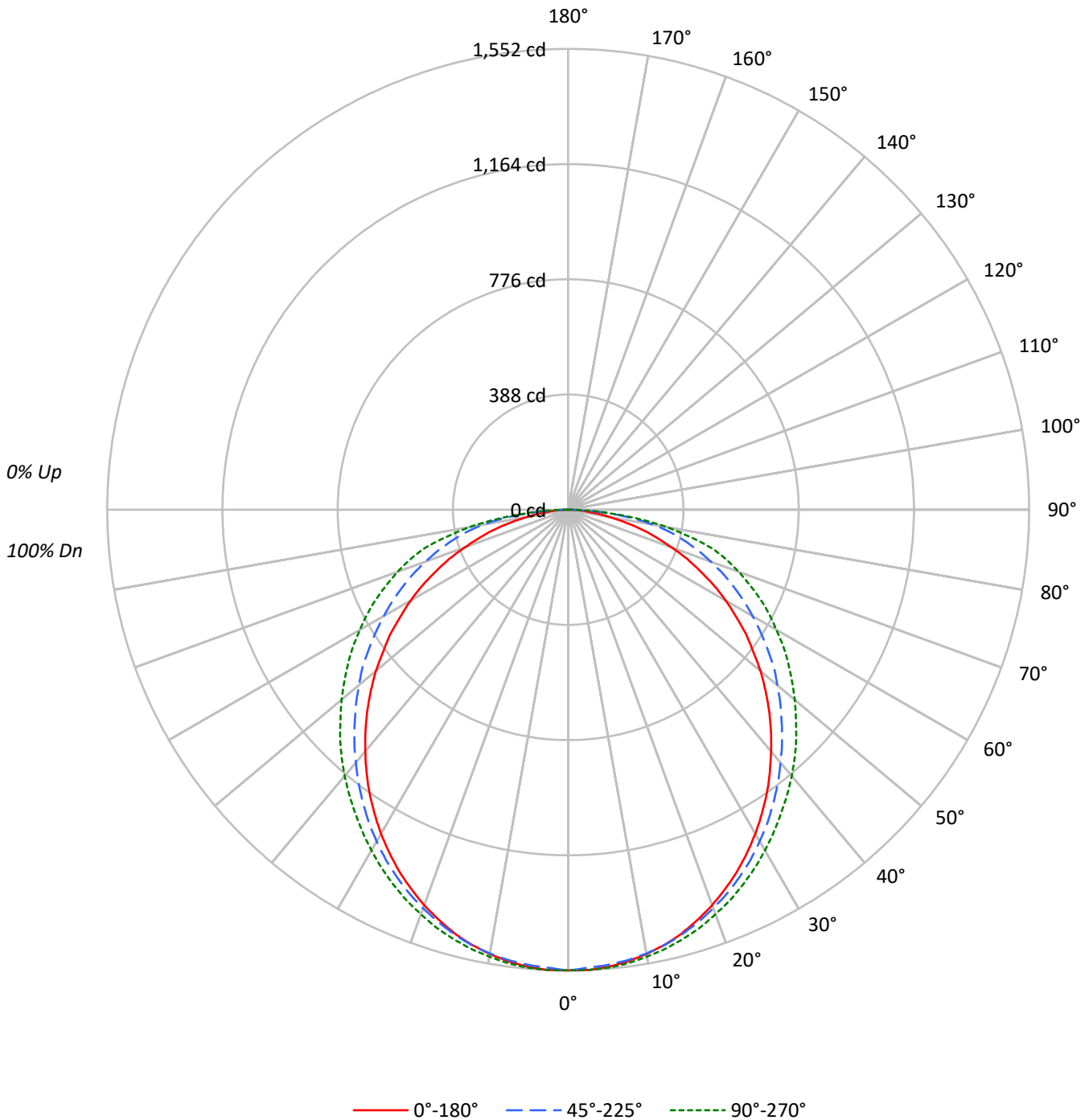
Input Watts (W): 39.897
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2088	2088	2088
5°	2087	2079	2091
10°	2076	2073	2088
15°	2058	2062	2084
20°	2029	2045	2076
25°	1997	2026	2068
30°	1958	2003	2058
35°	1915	1978	2052
40°	1866	1953	2056
45°	1819	1934	2066
50°	1769	1924	2085
55°	1715	1921	2124
60°	1648	1930	2179
65°	1562	1959	2273
70°	1450	2008	2403
75°	1323	2109	2606
80°	1087	2270	2605
85°	834	2095	2238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.7	3.2
10°-20°	418.9	9.1
20°-30°	630.4	13.6
30°-40°	755.5	16.3
40°-50°	787.3	17.0
50°-60°	732.5	15.9
60°-70°	603.3	13.1
70°-80°	410.9	8.9
80°-90°	135.6	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°	1196.1	25.9
0°-40°	1951.6	42.2
0°-60°	3471.4	75.1
0°-90°	4621.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4621.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1545	1545	1539	1547	1548	147
15°	1478	1479	1481	1494	1496	416
25°	1345	1351	1365	1388	1393	619
35°	1166	1180	1204	1237	1249	729
45°	956	976	1016	1067	1086	737
55°	731	756	819	884	905	652
65°	490	532	615	688	714	487
75°	254	312	406	478	501	268
85°	54	105	136	145	145	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.6	1551.6	1551.6	1551.6	1551.6
2.5°	1551.6	1551.6	1543.8	1551.6	1551.6
5°	1545.4	1545.4	1539.2	1546.9	1548.5
7.5°	1534.6	1536.1	1530.0	1539.2	1540.8
10°	1519.2	1520.7	1517.6	1526.9	1528.4
12.5°	1500.7	1502.2	1502.2	1513.0	1514.5
15°	1477.5	1479.1	1480.6	1494.5	1496.0
17.5°	1448.2	1452.8	1455.9	1472.9	1476.0
20°	1417.4	1422.0	1428.2	1446.7	1449.8
22.5°	1381.9	1388.1	1398.9	1418.9	1423.5
25°	1344.9	1351.1	1364.9	1388.1	1392.7
27.5°	1303.2	1312.5	1329.5	1354.1	1360.3
30°	1260.1	1269.3	1289.4	1315.6	1324.8
32.5°	1213.8	1226.1	1249.3	1278.6	1287.8
35°	1166.0	1179.9	1204.5	1236.9	1249.3
37.5°	1115.1	1130.5	1159.8	1195.3	1210.7
40°	1062.6	1081.2	1112.0	1153.6	1170.6
42.5°	1010.2	1027.2	1065.7	1110.5	1129.0
45°	956.2	976.3	1016.4	1067.3	1085.8
47.5°	900.7	920.8	968.6	1022.5	1039.5
50°	845.2	865.2	919.2	976.3	996.3
52.5°	785.0	811.3	872.9	930.0	950.1
55°	731.1	755.7	819.0	883.7	905.3
57.5°	669.4	698.7	768.1	835.9	859.1
60°	612.3	643.1	717.2	786.6	809.7
62.5°	553.7	587.6	666.3	737.2	763.4
65°	490.5	532.1	615.4	687.9	714.1
67.5°	433.4	476.6	564.5	638.5	661.6
70°	368.6	421.0	510.5	584.5	610.8
72.5°	313.1	365.5	459.6	532.1	558.3
75°	254.5	311.5	405.6	478.1	501.2
77.5°	195.9	259.1	353.2	408.7	416.4
80°	140.3	206.7	293.0	325.4	336.2
82.5°	98.7	158.9	215.9	237.5	243.7
85°	54.0	104.9	135.7	145.0	145.0
87.5°	23.1	44.7	54.0	55.5	57.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)