

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: P276588

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-S-UNV-L82765-W2A1-U-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4562.4 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

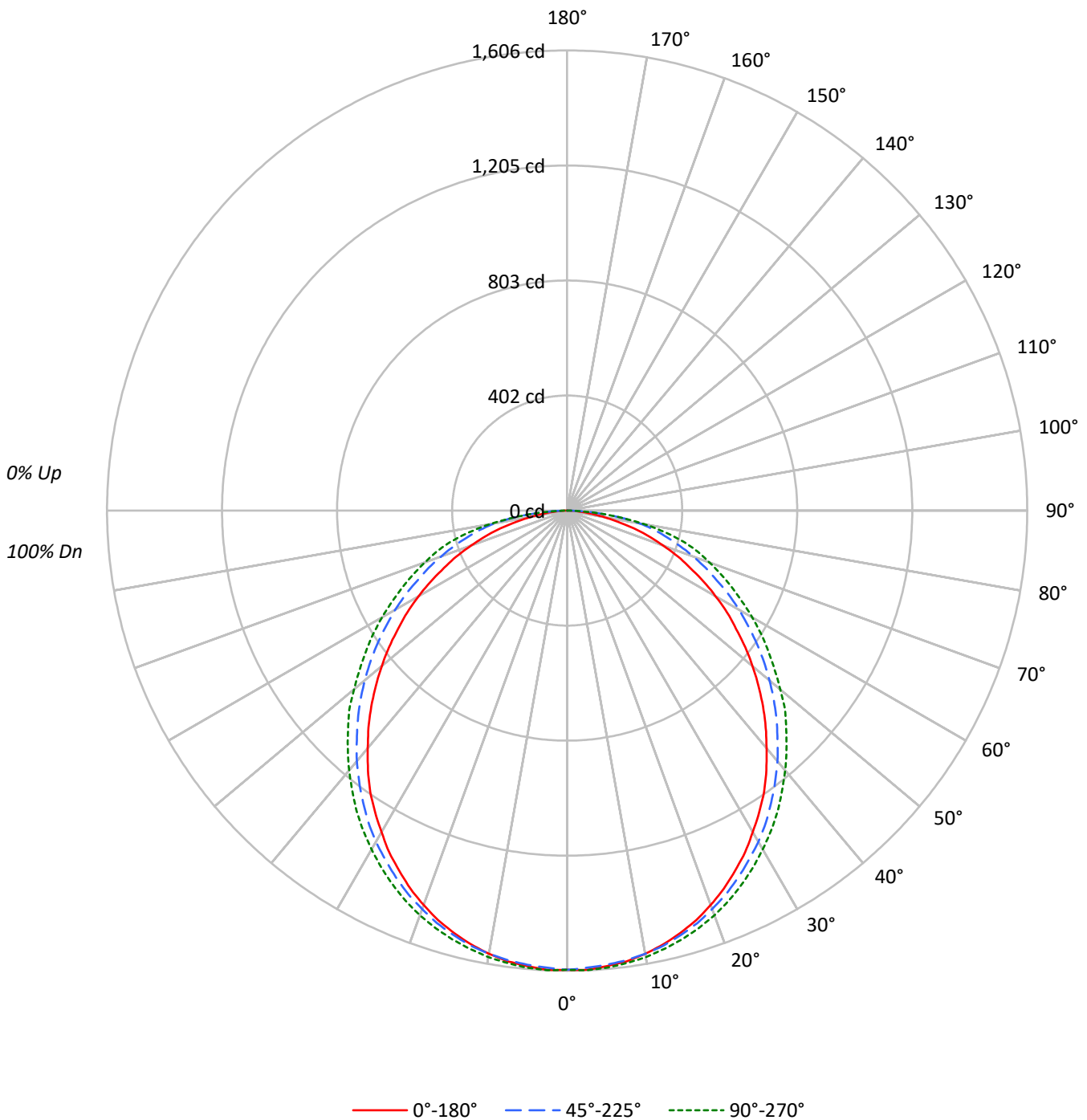
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2157	2157	2157
5°	2155	2149	2163
10°	2146	2146	2162
15°	2126	2136	2158
20°	2098	2119	2152
25°	2059	2098	2139
30°	2013	2074	2121
35°	1969	2040	2104
40°	1901	2006	2080
45°	1839	1966	2057
50°	1769	1929	2033
55°	1690	1894	2012
60°	1611	1864	2008
65°	1509	1832	2021
70°	1397	1841	2075
75°	1251	1876	2192
80°	1010	1987	2145
85°	761	1744	1700



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.7	3.3
10°-20°	433.6	9.5
20°-30°	651.8	14.3
30°-40°	776.4	17.0
40°-50°	794.6	17.4
50°-60°	715.3	15.7
60°-70°	561.8	12.3
70°-80°	364.6	8.0
80°-90°	112.8	2.5
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°	1237.1	27.1
0°-40°	2013.4	44.1
0°-60°	3523.3	77.2
0°-90°	4562.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4562.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1596	1598	1591	1600	1601	152
15°	1526	1530	1533	1546	1549	430
25°	1387	1398	1413	1436	1440	639
35°	1198	1213	1242	1272	1281	748
45°	967	990	1033	1072	1081	745
55°	720	752	807	849	858	646
65°	474	510	575	623	635	472
75°	241	287	361	410	422	255
85°	49	91	113	110	110	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1602.8	1602.8	1602.8	1602.8	1602.8
2.5°	1604.3	1604.3	1597.0	1604.3	1605.7
5°	1595.6	1598.5	1591.2	1599.9	1601.4
7.5°	1586.9	1586.9	1582.5	1591.2	1592.7
10°	1570.9	1572.4	1570.9	1581.1	1582.5
12.5°	1550.6	1553.5	1555.0	1565.1	1566.6
15°	1526.0	1530.4	1533.3	1546.3	1549.2
17.5°	1498.5	1502.8	1510.1	1524.6	1527.5
20°	1465.1	1470.9	1479.6	1498.5	1502.8
22.5°	1428.9	1434.7	1449.2	1466.6	1473.8
25°	1386.9	1398.5	1413.0	1436.2	1440.5
27.5°	1344.9	1355.0	1373.8	1398.5	1404.3
30°	1295.6	1311.5	1334.7	1359.3	1365.1
32.5°	1247.8	1263.7	1291.2	1317.3	1324.6
35°	1198.5	1213.0	1242.0	1272.4	1281.1
37.5°	1142.0	1160.8	1192.7	1223.1	1231.8
40°	1082.6	1105.7	1142.0	1173.9	1184.0
42.5°	1026.0	1050.7	1086.9	1121.7	1133.3
45°	966.6	989.8	1033.3	1072.4	1081.1
47.5°	905.7	931.8	978.2	1017.3	1031.8
50°	844.9	872.4	921.7	962.3	971.0
52.5°	784.0	813.0	865.2	908.6	913.0
55°	720.3	752.1	807.2	849.2	857.9
57.5°	662.3	689.8	749.2	792.7	802.9
60°	598.5	629.0	692.7	733.3	746.3
62.5°	537.7	569.5	636.2	676.8	688.4
65°	473.9	510.1	575.3	623.2	634.7
67.5°	418.8	453.6	523.2	569.5	581.1
70°	355.1	394.2	468.1	515.9	527.5
72.5°	300.0	340.6	414.5	460.8	478.2
75°	240.6	286.9	360.9	410.1	421.7
77.5°	182.6	236.2	311.6	349.3	349.3
80°	130.4	186.9	256.5	273.9	276.8
82.5°	85.5	140.6	189.8	188.4	188.4
85°	49.3	91.3	113.0	110.1	110.1
87.5°	18.8	37.7	40.6	40.6	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)