

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: P260988

Luminaire Tested: **24CZ-LD5-45-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4575.0 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

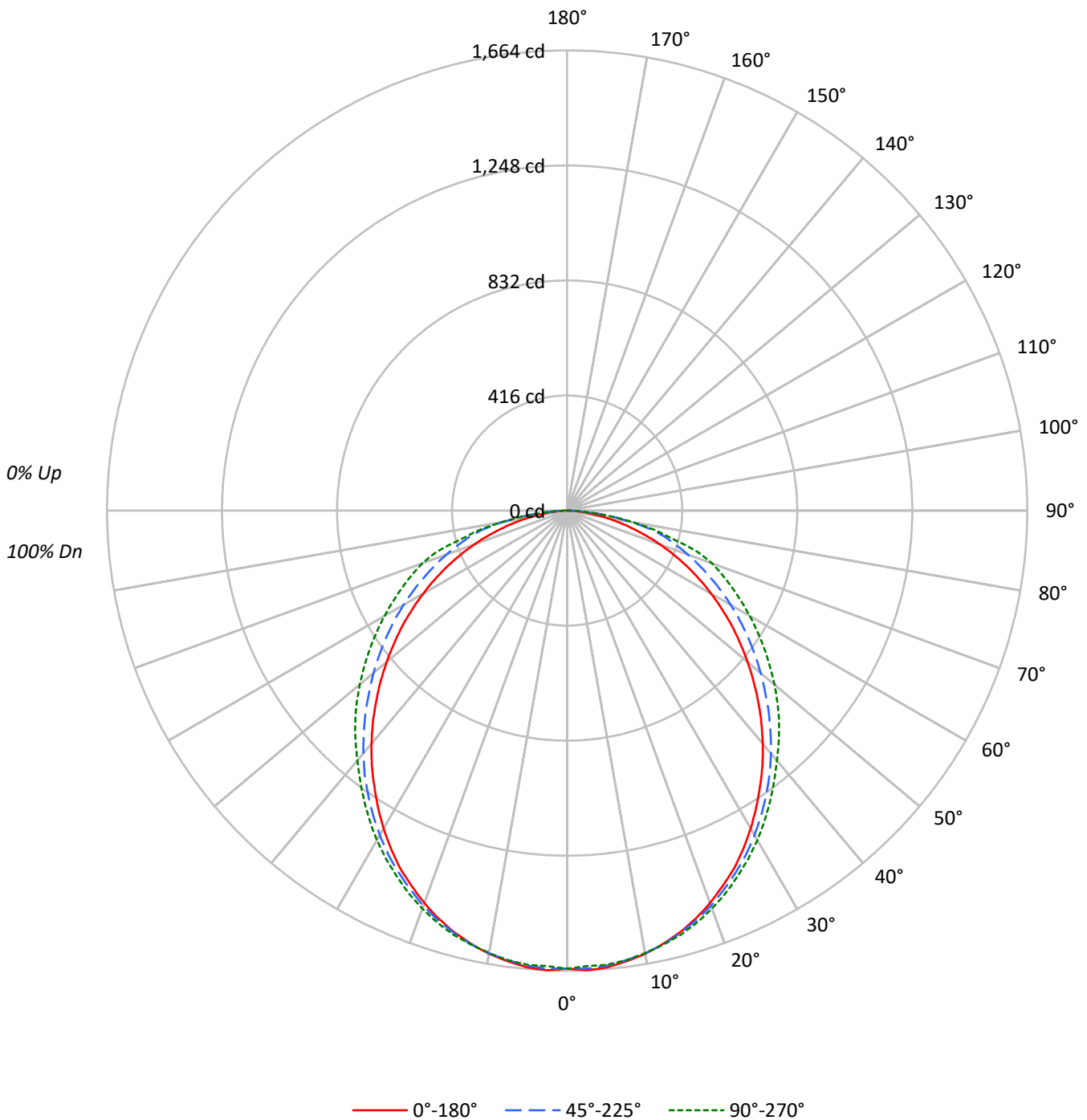
Input Watts (W): 31.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2228	2228	2228
5°	2239	2231	2227
10°	2223	2221	2219
15°	2199	2203	2212
20°	2162	2178	2193
25°	2120	2142	2165
30°	2062	2105	2138
35°	1998	2060	2103
40°	1933	2013	2072
45°	1860	1961	2062
50°	1784	1912	2049
55°	1707	1871	2042
60°	1618	1839	2052
65°	1522	1818	2094
70°	1401	1827	2192
75°	1242	1891	2041
80°	1038	1793	1840
85°	775	1434	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	3.4
10°-20°	445.3	9.7
20°-30°	663.7	14.5
30°-40°	781.3	17.1
40°-50°	793.9	17.4
50°-60°	713.8	15.6
60°-70°	563.9	12.3
70°-80°	357.8	7.8
80°-90°	98.7	2.2
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°	1265.6	27.7
0°-40°	2046.9	44.7
0°-60°	3554.6	77.7
0°-90°	4575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1658	1644	1652	1649	1649	157
15°	1579	1571	1582	1586	1588	445
25°	1428	1426	1443	1452	1458	657
35°	1216	1224	1254	1268	1280	761
45°	977	991	1031	1061	1084	754
55°	728	746	798	849	871	650
65°	478	502	571	633	658	473
75°	239	280	364	396	393	254
85°	50	87	93	85	85	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1656.2	1656.2	1656.2	1656.2	1656.2
2.5°	1663.8	1651.7	1657.8	1654.7	1648.6
5°	1657.8	1644.1	1651.7	1648.6	1648.6
7.5°	1644.1	1633.4	1639.5	1638.0	1639.5
10°	1627.3	1616.7	1625.8	1625.8	1624.3
12.5°	1604.5	1595.3	1606.0	1606.0	1607.5
15°	1578.6	1571.0	1581.6	1586.2	1587.7
17.5°	1546.6	1539.0	1552.7	1557.3	1561.9
20°	1510.1	1507.1	1520.8	1525.3	1531.4
22.5°	1469.0	1469.0	1482.7	1488.8	1497.9
25°	1427.9	1426.4	1443.1	1452.2	1458.3
27.5°	1379.2	1380.7	1402.0	1411.1	1418.8
30°	1327.4	1330.5	1354.8	1365.5	1376.1
32.5°	1272.6	1278.7	1306.1	1318.3	1328.9
35°	1216.3	1223.9	1254.4	1268.1	1280.2
37.5°	1160.0	1170.6	1202.6	1216.3	1230.0
40°	1100.6	1109.7	1146.3	1163.0	1179.8
42.5°	1039.7	1051.9	1088.4	1112.8	1132.6
45°	977.3	991.0	1030.6	1061.0	1083.9
47.5°	914.9	933.2	971.2	1012.3	1032.1
50°	852.5	870.7	913.4	959.0	978.8
52.5°	788.5	806.8	855.5	902.7	924.0
55°	727.6	745.9	797.7	849.4	870.7
57.5°	663.7	683.5	741.3	794.6	815.9
60°	601.3	621.1	683.5	739.8	762.7
62.5°	540.4	561.7	627.2	686.5	709.4
65°	478.0	502.4	570.9	633.3	657.6
67.5°	417.1	444.5	516.1	581.5	607.4
70°	356.2	388.2	464.3	531.3	557.2
72.5°	296.8	331.9	412.5	479.5	493.2
75°	239.0	280.1	363.8	395.8	392.7
77.5°	184.2	229.9	309.0	315.1	324.2
80°	134.0	184.2	231.4	243.6	237.5
82.5°	88.3	138.5	165.9	159.8	158.3
85°	50.2	86.8	92.9	85.2	85.2
87.5°	21.3	35.0	30.4	22.8	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)