

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: P230084

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230084
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-LD5-50SE-S-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4297.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

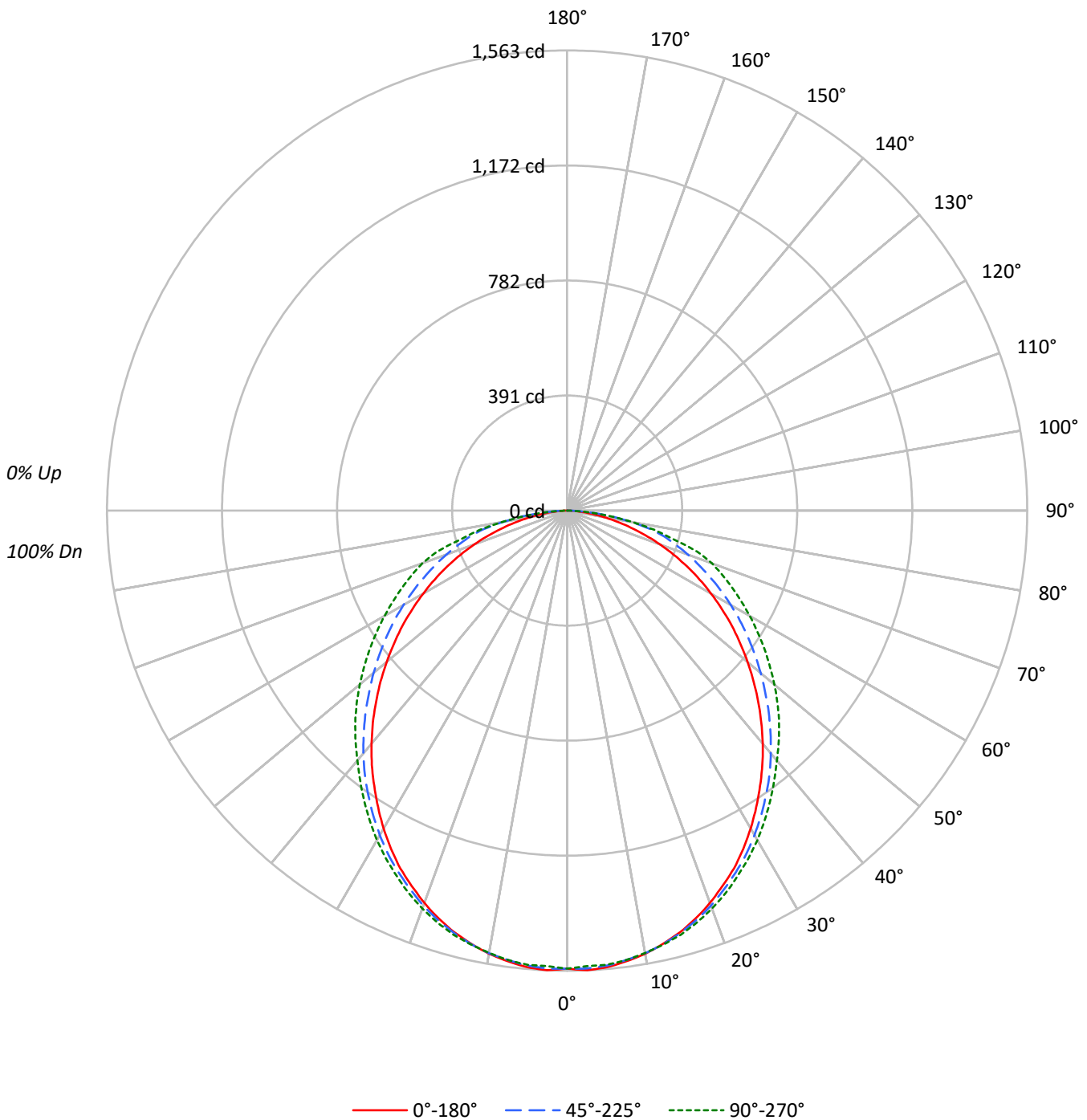
Input Watts (W): 46.56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2093	2093	2093
5°	2103	2095	2091
10°	2088	2086	2084
15°	2065	2069	2077
20°	2031	2045	2060
25°	1991	2012	2033
30°	1937	1977	2008
35°	1876	1935	1975
40°	1816	1891	1946
45°	1747	1842	1937
50°	1676	1796	1924
55°	1603	1757	1918
60°	1520	1728	1928
65°	1429	1707	1967
70°	1316	1716	2059
75°	1167	1776	1918
80°	975	1684	1728
85°	729	1346	1237



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.4
10°-20°	418.3	9.7
20°-30°	623.3	14.5
30°-40°	733.8	17.1
40°-50°	745.7	17.4
50°-60°	670.4	15.6
60°-70°	529.7	12.3
70°-80°	336.0	7.8
80°-90°	92.7	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°	1188.7	27.7
0°-40°	1922.5	44.7
0°-60°	3338.6	77.7
0°-90°	4297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1556	1556	1556	1556	1556	
5°	1557	1544	1551	1548	1548	148
15°	1483	1476	1486	1490	1491	418
25°	1341	1340	1355	1364	1370	617
35°	1142	1150	1178	1191	1202	715
45°	918	931	968	997	1018	708
55°	683	701	749	798	818	610
65°	449	472	536	595	618	445
75°	224	263	342	372	369	239
85°	47	82	87	80	80	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1555.6	1555.6	1555.6	1555.6	1555.6
2.5°	1562.7	1551.3	1557.0	1554.2	1548.4
5°	1557.0	1544.2	1551.3	1548.4	1548.4
7.5°	1544.2	1534.1	1539.9	1538.4	1539.9
10°	1528.4	1518.4	1527.0	1527.0	1525.6
12.5°	1507.0	1498.4	1508.4	1508.4	1509.8
15°	1482.7	1475.5	1485.5	1489.8	1491.3
17.5°	1452.6	1445.5	1458.4	1462.7	1466.9
20°	1418.3	1415.5	1428.3	1432.6	1438.4
22.5°	1379.7	1379.7	1392.6	1398.3	1406.9
25°	1341.1	1339.7	1355.4	1364.0	1369.7
27.5°	1295.4	1296.8	1316.8	1325.4	1332.5
30°	1246.8	1249.6	1272.5	1282.5	1292.5
32.5°	1195.3	1201.0	1226.7	1238.2	1248.2
35°	1142.4	1149.5	1178.1	1191.0	1202.4
37.5°	1089.5	1099.5	1129.5	1142.4	1155.3
40°	1033.7	1042.3	1076.6	1092.3	1108.1
42.5°	976.5	988.0	1022.3	1045.2	1063.8
45°	917.9	930.8	968.0	996.6	1018.0
47.5°	859.3	876.5	912.2	950.8	969.4
50°	800.7	817.8	857.9	900.8	919.3
52.5°	740.6	757.8	803.5	847.9	867.9
55°	683.4	700.6	749.2	797.8	817.8
57.5°	623.4	642.0	696.3	746.3	766.4
60°	564.8	583.3	642.0	694.9	716.3
62.5°	507.6	527.6	589.1	644.8	666.3
65°	448.9	471.8	536.2	594.8	617.7
67.5°	391.8	417.5	484.7	546.2	570.5
70°	334.6	364.6	436.1	499.0	523.3
72.5°	278.8	311.7	387.5	450.4	463.2
75°	224.5	263.1	341.7	371.7	368.9
77.5°	173.0	215.9	290.2	296.0	304.5
80°	125.8	173.0	217.3	228.8	223.0
82.5°	82.9	130.1	155.8	150.1	148.7
85°	47.2	81.5	87.2	80.1	80.1
87.5°	20.0	32.9	28.6	21.4	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)