

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: P276574

Luminaire Tested: **24CZ2-40-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276574
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: 24CZ2-40-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4087.3 lumens
Efficiency: N/A
Efficacy: 132.0 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

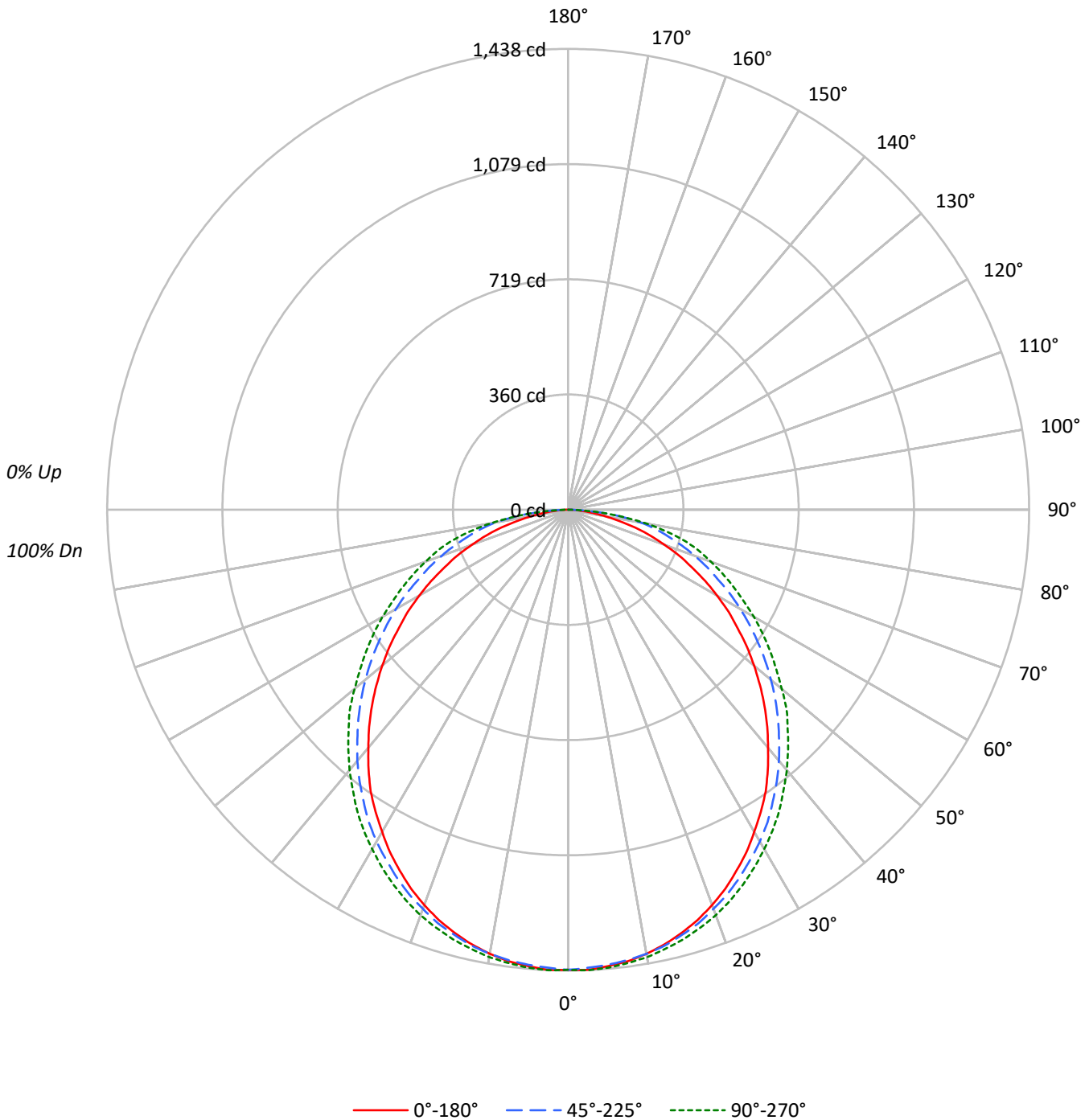
Input Watts (W): 30.969
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1932	1932	1932
5°	1931	1925	1938
10°	1923	1923	1937
15°	1904	1913	1933
20°	1879	1898	1928
25°	1845	1879	1916
30°	1803	1858	1900
35°	1764	1827	1885
40°	1703	1797	1863
45°	1648	1761	1843
50°	1584	1728	1821
55°	1514	1696	1803
60°	1443	1670	1799
65°	1351	1641	1810
70°	1251	1650	1859
75°	1120	1681	1964
80°	905	1781	1922
85°	681	1564	1524



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.9	3.3
10°-20°	388.4	9.5
20°-30°	583.9	14.3
30°-40°	695.5	17.0
40°-50°	711.8	17.4
50°-60°	640.8	15.7
60°-70°	503.3	12.3
70°-80°	326.6	8.0
80°-90°	101.0	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°	1108.2	27.1
0°-40°	1803.7	44.1
0°-60°	3156.4	77.2
0°-90°	4087.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1436	1436	1436	1436	1436	
5°	1429	1432	1426	1433	1435	136
15°	1367	1371	1374	1385	1388	385
25°	1242	1253	1266	1287	1290	572
35°	1074	1087	1113	1140	1148	670
45°	866	887	926	961	968	668
55°	645	674	723	761	769	578
65°	424	457	515	558	569	423
75°	216	257	323	367	378	228
85°	44	82	101	99	99	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1435.9	1435.9	1435.9	1435.9	1435.9
2.5°	1437.2	1437.2	1430.7	1437.2	1438.5
5°	1429.4	1432.0	1425.5	1433.3	1434.6
7.5°	1421.6	1421.6	1417.7	1425.5	1426.8
10°	1407.3	1408.6	1407.3	1416.4	1417.7
12.5°	1389.2	1391.8	1393.1	1402.1	1403.4
15°	1367.1	1371.0	1373.6	1385.3	1387.9
17.5°	1342.4	1346.3	1352.8	1365.8	1368.4
20°	1312.6	1317.8	1325.5	1342.4	1346.3
22.5°	1280.1	1285.3	1298.3	1313.9	1320.4
25°	1242.5	1252.8	1265.8	1286.6	1290.5
27.5°	1204.8	1213.9	1230.8	1252.8	1258.0
30°	1160.7	1174.9	1195.7	1217.8	1223.0
32.5°	1117.8	1132.1	1156.8	1180.1	1186.6
35°	1073.7	1086.7	1112.6	1139.9	1147.7
37.5°	1023.0	1039.9	1068.5	1095.7	1103.5
40°	969.8	990.6	1023.0	1051.6	1060.7
42.5°	919.2	941.3	973.7	1004.9	1015.3
45°	866.0	886.7	925.7	960.7	968.5
47.5°	811.4	834.8	876.3	911.4	924.4
50°	756.9	781.6	825.7	862.1	869.8
52.5°	702.4	728.3	775.1	814.0	817.9
55°	645.2	673.8	723.1	760.8	768.6
57.5°	593.3	618.0	671.2	710.2	719.2
60°	536.2	563.5	620.6	656.9	668.6
62.5°	481.7	510.2	569.9	606.3	616.7
65°	424.5	457.0	515.4	558.3	568.6
67.5°	375.2	406.4	468.7	510.2	520.6
70°	318.1	353.1	419.3	462.2	472.6
72.5°	268.7	305.1	371.3	412.9	428.4
75°	215.5	257.1	323.3	367.4	377.8
77.5°	163.6	211.6	279.1	312.9	312.9
80°	116.8	167.5	229.8	245.4	248.0
82.5°	76.6	125.9	170.1	168.8	168.8
85°	44.1	81.8	101.3	98.7	98.7
87.5°	16.9	33.8	36.4	36.4	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)