

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: P276571

Luminaire Tested: **24CZ2-40-S-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276571
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-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3799.0 lumens
Efficiency: N/A
Efficacy: 125.7 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

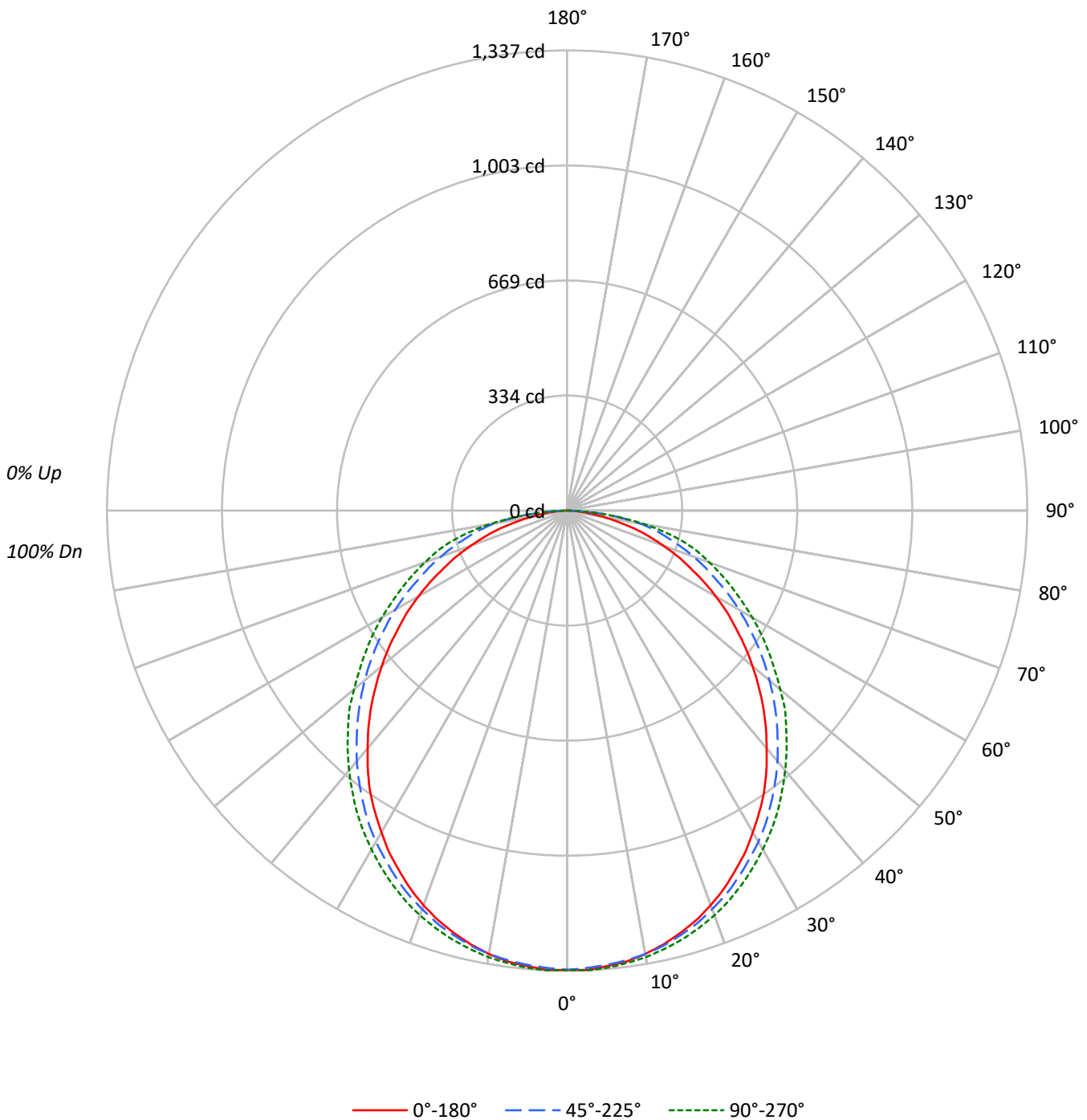
Input Watts (W): 30.225
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276571

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P276571

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-3000K

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°	1796	1796	1796
5°	1794	1790	1801
10°	1787	1787	1800
15°	1770	1778	1797
20°	1747	1764	1792
25°	1714	1747	1781
30°	1676	1727	1766
35°	1639	1699	1752
40°	1583	1670	1732
45°	1532	1637	1713
50°	1473	1607	1692
55°	1407	1577	1676
60°	1341	1552	1672
65°	1256	1525	1683
70°	1163	1533	1728
75°	1041	1562	1826
80°	841	1655	1786
85°	633	1453	1416



TEST NUMBER: P276571

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	3.3
10°-20°	361.0	9.5
20°-30°	542.7	14.3
30°-40°	646.5	17.0
40°-50°	661.6	17.4
50°-60°	595.6	15.7
60°-70°	467.8	12.3
70°-80°	303.6	8.0
80°-90°	93.9	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°	1030.1	27.1
0°-40°	1676.5	44.1
0°-60°	2933.8	77.2
0°-90°	3799.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3799.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1335	1335	1335	1335	1335	
5°	1329	1331	1325	1332	1333	126
15°	1271	1274	1277	1288	1290	358
25°	1155	1164	1176	1196	1200	532
35°	998	1010	1034	1060	1067	623
45°	805	824	860	893	900	621
55°	600	626	672	707	714	538
65°	395	425	479	519	528	393
75°	200	239	300	342	351	212
85°	41	76	94	92	92	50
90°	0	0	0	0	0	



TEST NUMBER: P276571

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1334.6	1334.6	1334.6	1334.6	1334.6
2.5°	1335.8	1335.8	1329.8	1335.8	1337.0
5°	1328.6	1331.0	1325.0	1332.2	1333.4
7.5°	1321.4	1321.4	1317.7	1325.0	1326.2
10°	1308.1	1309.3	1308.1	1316.5	1317.7
12.5°	1291.2	1293.6	1294.8	1303.3	1304.5
15°	1270.7	1274.3	1276.7	1287.6	1290.0
17.5°	1247.7	1251.4	1257.4	1269.5	1271.9
20°	1220.0	1224.8	1232.1	1247.7	1251.4
22.5°	1189.8	1194.7	1206.7	1221.2	1227.2
25°	1154.8	1164.5	1176.5	1195.9	1199.5
27.5°	1119.8	1128.3	1144.0	1164.5	1169.3
30°	1078.8	1092.1	1111.4	1131.9	1136.7
32.5°	1039.0	1052.3	1075.2	1096.9	1102.9
35°	998.0	1010.0	1034.2	1059.5	1066.7
37.5°	950.9	966.6	993.1	1018.5	1025.7
40°	901.4	920.7	950.9	977.4	985.9
42.5°	854.4	874.9	905.0	934.0	943.7
45°	804.9	824.2	860.4	893.0	900.2
47.5°	754.2	775.9	814.5	847.1	859.2
50°	703.5	726.4	767.5	801.3	808.5
52.5°	652.8	677.0	720.4	756.6	760.2
55°	599.7	626.3	672.1	707.1	714.4
57.5°	551.5	574.4	623.9	660.1	668.5
60°	498.4	523.7	576.8	610.6	621.5
62.5°	447.7	474.2	529.7	563.5	573.2
65°	394.6	424.8	479.1	518.9	528.5
67.5°	348.7	377.7	435.6	474.2	483.9
70°	295.6	328.2	389.8	429.6	439.2
72.5°	249.8	283.6	345.1	383.7	398.2
75°	200.3	238.9	300.5	341.5	351.2
77.5°	152.0	196.7	259.4	290.8	290.8
80°	108.6	155.7	213.6	228.1	230.5
82.5°	71.2	117.1	158.1	156.9	156.9
85°	41.0	76.0	94.1	91.7	91.7
87.5°	15.7	31.4	33.8	33.8	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)