

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: P276152

Luminaire Tested: **24CZ2-40-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276152
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-UNV-L82765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3740.5 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

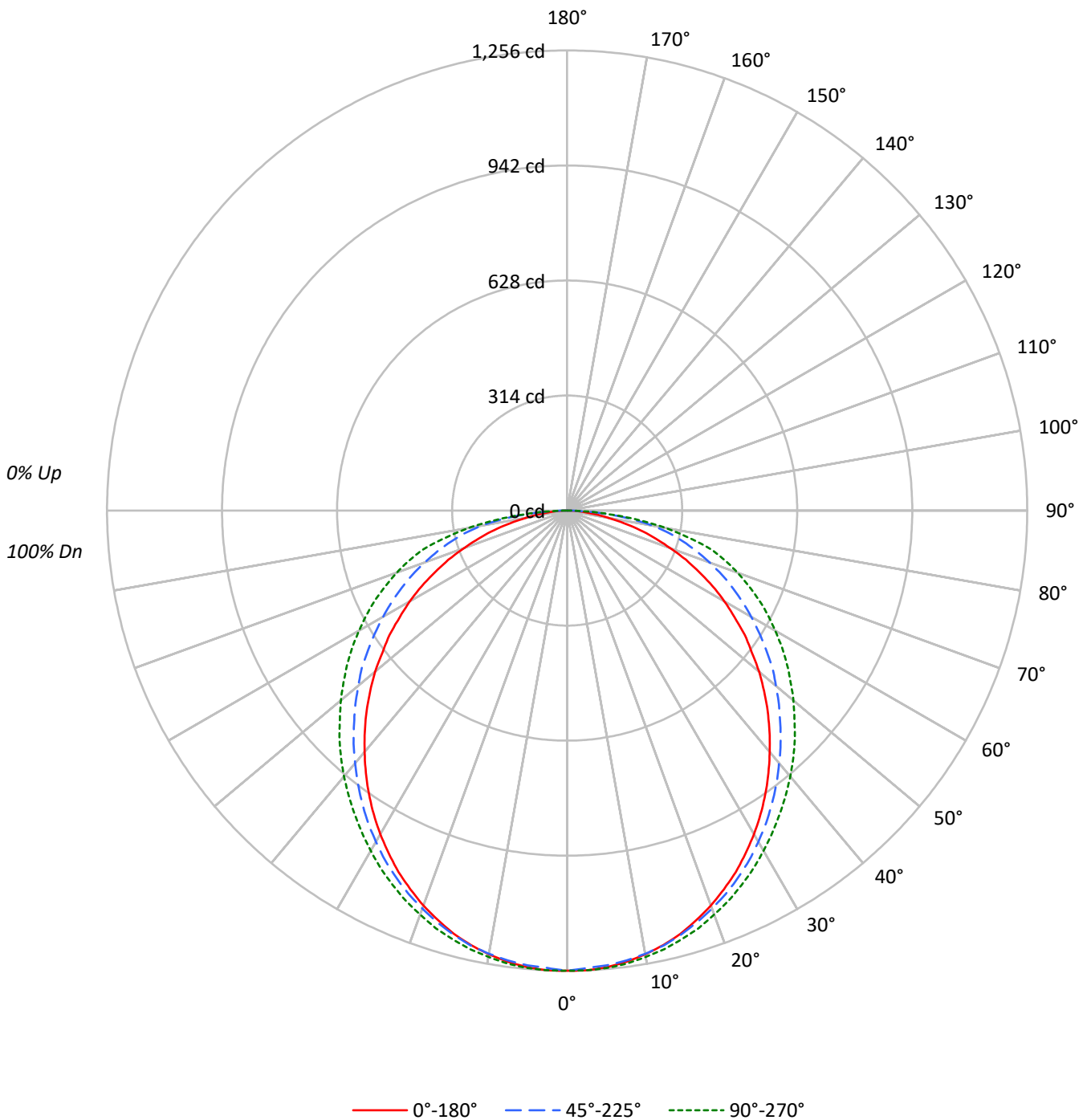
Input Watts (W): 30.597
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276152

CATALOG NUMBER: 24CZ2-40-UNV-L82765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P276152

CATALOG NUMBER: 24CZ2-40-UNV-L82765-W2A1-U-3500K

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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1690	1690	1690
5°	1690	1683	1693
10°	1680	1678	1690
15°	1666	1669	1687
20°	1643	1655	1680
25°	1616	1640	1674
30°	1585	1621	1666
35°	1550	1601	1661
40°	1511	1581	1664
45°	1473	1565	1672
50°	1432	1557	1688
55°	1388	1555	1719
60°	1334	1562	1764
65°	1264	1586	1840
70°	1174	1626	1945
75°	1071	1707	2109
80°	880	1838	2108
85°	675	1697	1811



TEST NUMBER: P276152

CATALOG NUMBER: 24CZ2-40-UNV-L82765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	3.2
10°-20°	339.1	9.1
20°-30°	510.3	13.6
30°-40°	611.5	16.3
40°-50°	637.3	17.0
50°-60°	592.9	15.9
60°-70°	488.3	13.1
70°-80°	332.6	8.9
80°-90°	109.8	2.9
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°	968.1	25.9
0°-40°	1579.7	42.2
0°-60°	2809.8	75.1
0°-90°	3740.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3740.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1256	1256	1256	1256	1256	
5°	1251	1251	1246	1252	1253	119
15°	1196	1197	1198	1210	1211	337
25°	1089	1094	1105	1124	1127	501
35°	944	955	975	1001	1011	590
45°	774	790	823	864	879	597
55°	592	612	663	715	733	527
65°	397	431	498	557	578	394
75°	206	252	328	387	406	217
85°	44	85	110	117	117	54
90°	0	0	0	0	0	



TEST NUMBER: P276152

CATALOG NUMBER: 24CZ2-40-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1255.9	1255.9	1255.9	1255.9	1255.9
2.5°	1255.9	1255.9	1249.6	1255.9	1255.9
5°	1250.9	1250.9	1245.9	1252.1	1253.4
7.5°	1242.1	1243.4	1238.4	1245.9	1247.1
10°	1229.6	1230.9	1228.4	1235.9	1237.1
12.5°	1214.7	1215.9	1215.9	1224.6	1225.9
15°	1195.9	1197.2	1198.4	1209.7	1210.9
17.5°	1172.2	1176.0	1178.5	1192.2	1194.7
20°	1147.2	1151.0	1156.0	1171.0	1173.5
22.5°	1118.5	1123.5	1132.3	1148.5	1152.2
25°	1088.6	1093.6	1104.8	1123.5	1127.3
27.5°	1054.9	1062.4	1076.1	1096.1	1101.1
30°	1019.9	1027.4	1043.6	1064.9	1072.3
32.5°	982.5	992.4	1011.2	1034.9	1042.4
35°	943.8	955.0	975.0	1001.2	1011.2
37.5°	902.6	915.1	938.8	967.5	980.0
40°	860.1	875.1	900.1	933.8	947.5
42.5°	817.7	831.4	862.6	898.8	913.8
45°	774.0	790.2	822.7	863.9	878.8
47.5°	729.0	745.3	784.0	827.7	841.4
50°	684.1	700.3	744.0	790.2	806.4
52.5°	635.4	656.6	706.6	752.8	769.0
55°	591.7	611.7	662.9	715.3	732.8
57.5°	541.8	565.5	621.7	676.6	695.3
60°	495.6	520.6	580.5	636.7	655.4
62.5°	448.2	475.6	539.3	596.7	617.9
65°	397.0	430.7	498.1	556.8	578.0
67.5°	350.8	385.7	456.9	516.8	535.5
70°	298.4	340.8	413.2	473.1	494.4
72.5°	253.4	295.9	372.0	430.7	451.9
75°	206.0	252.2	328.3	387.0	405.7
77.5°	158.5	209.7	285.9	330.8	337.1
80°	113.6	167.3	237.2	263.4	272.1
82.5°	79.9	128.6	174.8	192.2	197.2
85°	43.7	84.9	109.9	117.3	117.3
87.5°	18.7	36.2	43.7	44.9	46.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)