

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: P276578

Luminaire Tested: **24CZ2-40-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276578
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-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4205.6 lumens
Efficiency: N/A
Efficacy: 132.2 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

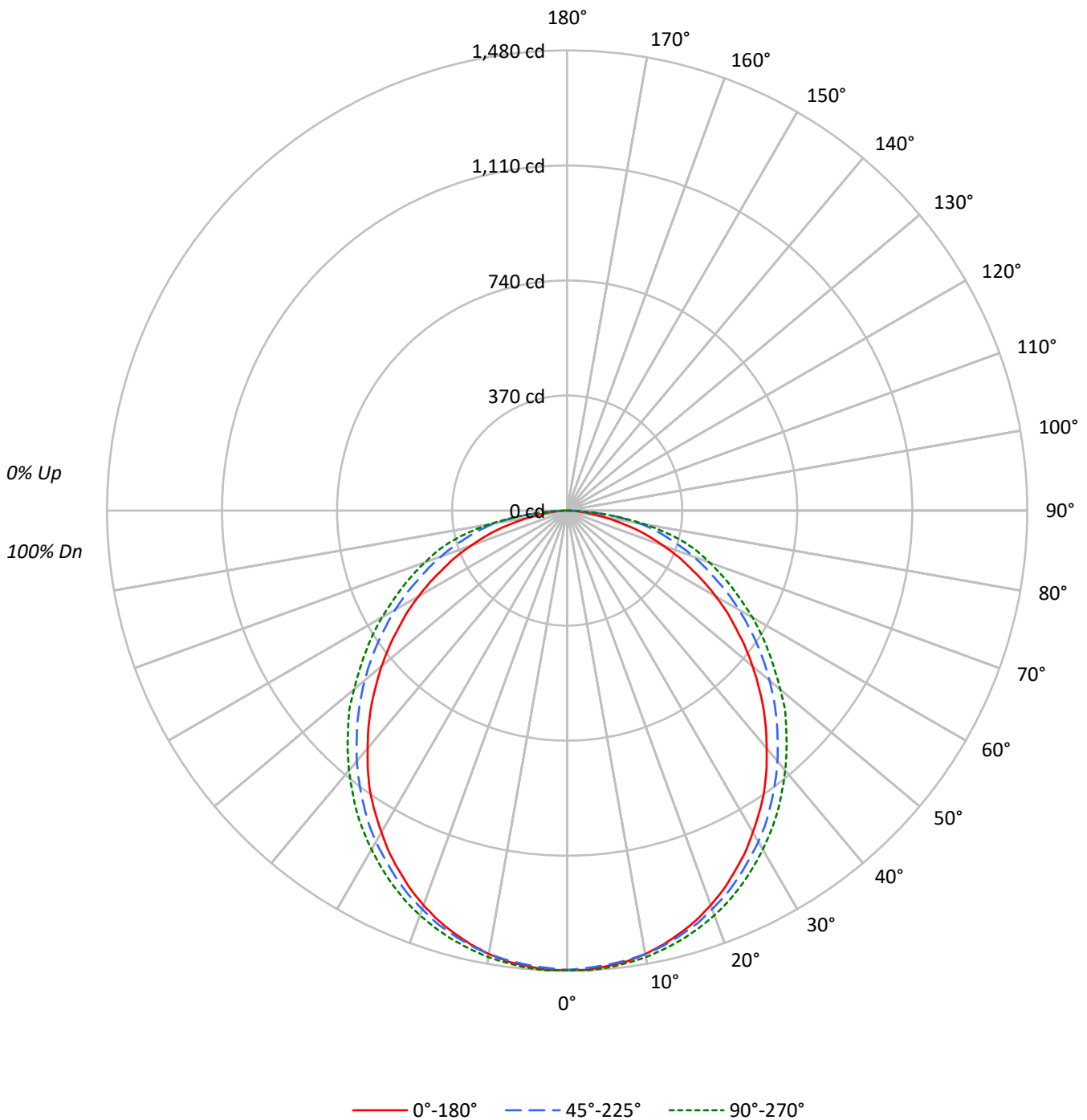
Input Watts (W): 31.806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276578

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P276578

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-6500K

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°	1988	1988	1988
5°	1987	1981	1994
10°	1978	1978	1993
15°	1959	1969	1989
20°	1934	1953	1984
25°	1898	1934	1971
30°	1856	1911	1955
35°	1815	1880	1940
40°	1753	1849	1917
45°	1695	1812	1896
50°	1630	1778	1873
55°	1557	1746	1855
60°	1485	1718	1851
65°	1391	1688	1863
70°	1288	1697	1913
75°	1153	1729	2021
80°	931	1832	1977
85°	701	1609	1567



TEST NUMBER: P276578

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.9	3.3
10°-20°	399.7	9.5
20°-30°	600.8	14.3
30°-40°	715.6	17.0
40°-50°	732.4	17.4
50°-60°	659.4	15.7
60°-70°	517.8	12.3
70°-80°	336.1	8.0
80°-90°	103.9	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°	1140.3	27.1
0°-40°	1856.0	44.1
0°-60°	3247.8	77.2
0°-90°	4205.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4205.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1471	1473	1467	1475	1476	140
15°	1407	1411	1413	1425	1428	397
25°	1278	1289	1302	1324	1328	589
35°	1105	1118	1145	1173	1181	689
45°	891	912	952	988	996	687
55°	664	693	744	783	791	595
65°	437	470	530	574	585	435
75°	222	264	333	378	389	235
85°	45	84	104	102	102	55
90°	0	0	0	0	0	



TEST NUMBER: P276578

CATALOG NUMBER: 24CZ2-40-S-UNV-L82765-W2A1-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1477.5	1477.5	1477.5	1477.5	1477.5
2.5°	1478.8	1478.8	1472.1	1478.8	1480.1
5°	1470.8	1473.4	1466.8	1474.8	1476.1
7.5°	1462.8	1462.8	1458.7	1466.8	1468.1
10°	1448.1	1449.4	1448.1	1457.4	1458.7
12.5°	1429.4	1432.0	1433.4	1442.7	1444.1
15°	1406.7	1410.7	1413.3	1425.4	1428.0
17.5°	1381.3	1385.3	1392.0	1405.3	1408.0
20°	1350.5	1355.9	1363.9	1381.3	1385.3
22.5°	1317.1	1322.5	1335.9	1351.9	1358.6
25°	1278.4	1289.1	1302.5	1323.8	1327.8
27.5°	1239.7	1249.0	1266.4	1289.1	1294.4
30°	1194.3	1208.9	1230.3	1253.0	1258.4
32.5°	1150.2	1164.9	1190.2	1214.3	1221.0
35°	1104.7	1118.1	1144.8	1172.9	1180.9
37.5°	1052.7	1070.0	1099.4	1127.5	1135.5
40°	997.9	1019.3	1052.7	1082.0	1091.4
42.5°	945.8	968.5	1001.9	1033.9	1044.6
45°	891.0	912.4	952.5	988.5	996.5
47.5°	834.9	859.0	901.7	937.8	951.1
50°	778.8	804.2	849.6	887.0	895.0
52.5°	722.7	749.4	797.5	837.6	841.6
55°	663.9	693.3	744.1	782.8	790.8
57.5°	610.5	635.9	690.6	730.7	740.1
60°	551.7	579.8	638.5	675.9	688.0
62.5°	495.6	525.0	586.4	623.8	634.5
65°	436.8	470.2	530.3	574.4	585.1
67.5°	386.1	418.1	482.2	525.0	535.7
70°	327.3	363.4	431.5	475.6	486.2
72.5°	276.5	313.9	382.1	424.8	440.8
75°	221.8	264.5	332.6	378.0	388.7
77.5°	168.3	217.7	287.2	321.9	321.9
80°	120.2	172.3	236.4	252.5	255.1
82.5°	78.8	129.6	175.0	173.7	173.7
85°	45.4	84.2	104.2	101.5	101.5
87.5°	17.4	34.7	37.4	37.4	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)