

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: P276197

Luminaire Tested: **24CZ2-40HE-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276197
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: 24CZ2-40HE-UNV-L92765-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3296.8 lumens
Efficiency: N/A
Efficacy: 116.2 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

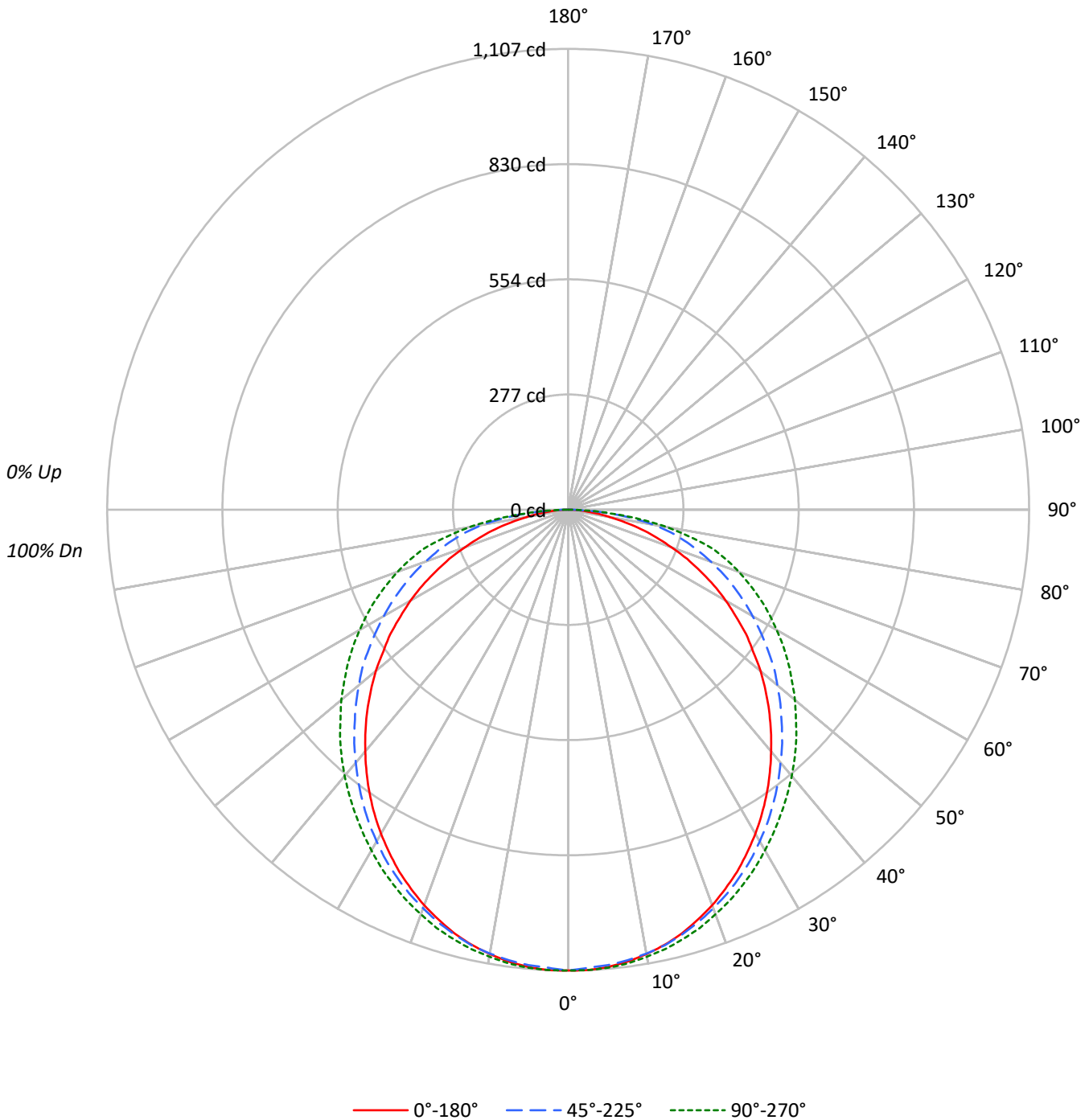
Input Watts (W): 28.365
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1489	1489	1489
5°	1489	1483	1492
10°	1481	1479	1490
15°	1468	1471	1487
20°	1448	1459	1481
25°	1424	1446	1475
30°	1397	1429	1468
35°	1366	1411	1464
40°	1332	1393	1467
45°	1298	1380	1474
50°	1262	1373	1488
55°	1223	1371	1515
60°	1175	1377	1555
65°	1114	1398	1622
70°	1035	1433	1714
75°	944	1504	1859
80°	776	1620	1859
85°	594	1494	1596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	3.2
10°-20°	298.9	9.1
20°-30°	449.8	13.6
30°-40°	539.0	16.3
40°-50°	561.7	17.0
50°-60°	522.6	15.9
60°-70°	430.4	13.1
70°-80°	293.1	8.9
80°-90°	96.8	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°	853.3	25.9
0°-40°	1392.3	42.2
0°-60°	2476.5	75.1
0°-90°	3296.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3296.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1107	1107	1107	1107	1107	
5°	1102	1102	1098	1104	1105	105
15°	1054	1055	1056	1066	1067	297
25°	960	964	974	990	994	442
35°	832	842	859	882	891	520
45°	682	696	725	761	775	526
55°	522	539	584	630	646	465
65°	350	380	439	491	509	347
75°	182	222	289	341	358	191
85°	38	75	97	103	103	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1106.9	1106.9	1106.9	1106.9	1106.9
2.5°	1106.9	1106.9	1101.4	1106.9	1106.9
5°	1102.5	1102.5	1098.1	1103.6	1104.7
7.5°	1094.8	1095.9	1091.5	1098.1	1099.2
10°	1083.8	1084.9	1082.7	1089.3	1090.4
12.5°	1070.6	1071.7	1071.7	1079.4	1080.5
15°	1054.1	1055.2	1056.3	1066.2	1067.3
17.5°	1033.2	1036.5	1038.7	1050.8	1053.0
20°	1011.2	1014.5	1018.9	1032.1	1034.3
22.5°	985.9	990.3	998.0	1012.3	1015.6
25°	959.5	963.9	973.8	990.3	993.6
27.5°	929.7	936.3	948.5	966.1	970.5
30°	898.9	905.5	919.8	938.5	945.1
32.5°	865.9	874.7	891.2	912.1	918.7
35°	831.8	841.7	859.3	882.4	891.2
37.5°	795.5	806.5	827.4	852.7	863.7
40°	758.1	771.3	793.3	823.0	835.1
42.5°	720.7	732.8	760.3	792.2	805.4
45°	682.2	696.5	725.1	761.4	774.6
47.5°	642.6	656.9	691.0	729.5	741.6
50°	603.0	617.3	655.8	696.5	710.8
52.5°	560.0	578.8	622.8	663.5	677.8
55°	521.5	539.1	584.3	630.5	645.9
57.5°	477.5	498.4	547.9	596.4	612.9
60°	436.8	458.8	511.6	561.1	577.7
62.5°	395.0	419.2	475.3	525.9	544.6
65°	349.9	379.6	439.0	490.7	509.4
67.5°	309.2	340.0	402.7	455.5	472.0
70°	263.0	300.4	364.2	417.0	435.7
72.5°	223.4	260.8	327.9	379.6	398.3
75°	181.5	222.3	289.4	341.1	357.6
77.5°	139.7	184.8	252.0	291.6	297.1
80°	100.1	147.4	209.1	232.2	239.9
82.5°	70.4	113.3	154.0	169.4	173.8
85°	38.5	74.8	96.8	103.4	103.4
87.5°	16.5	31.9	38.5	39.6	40.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)