

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: P276572

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276572
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3930.3 lumens
Efficiency: N/A
Efficacy: 128.5 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

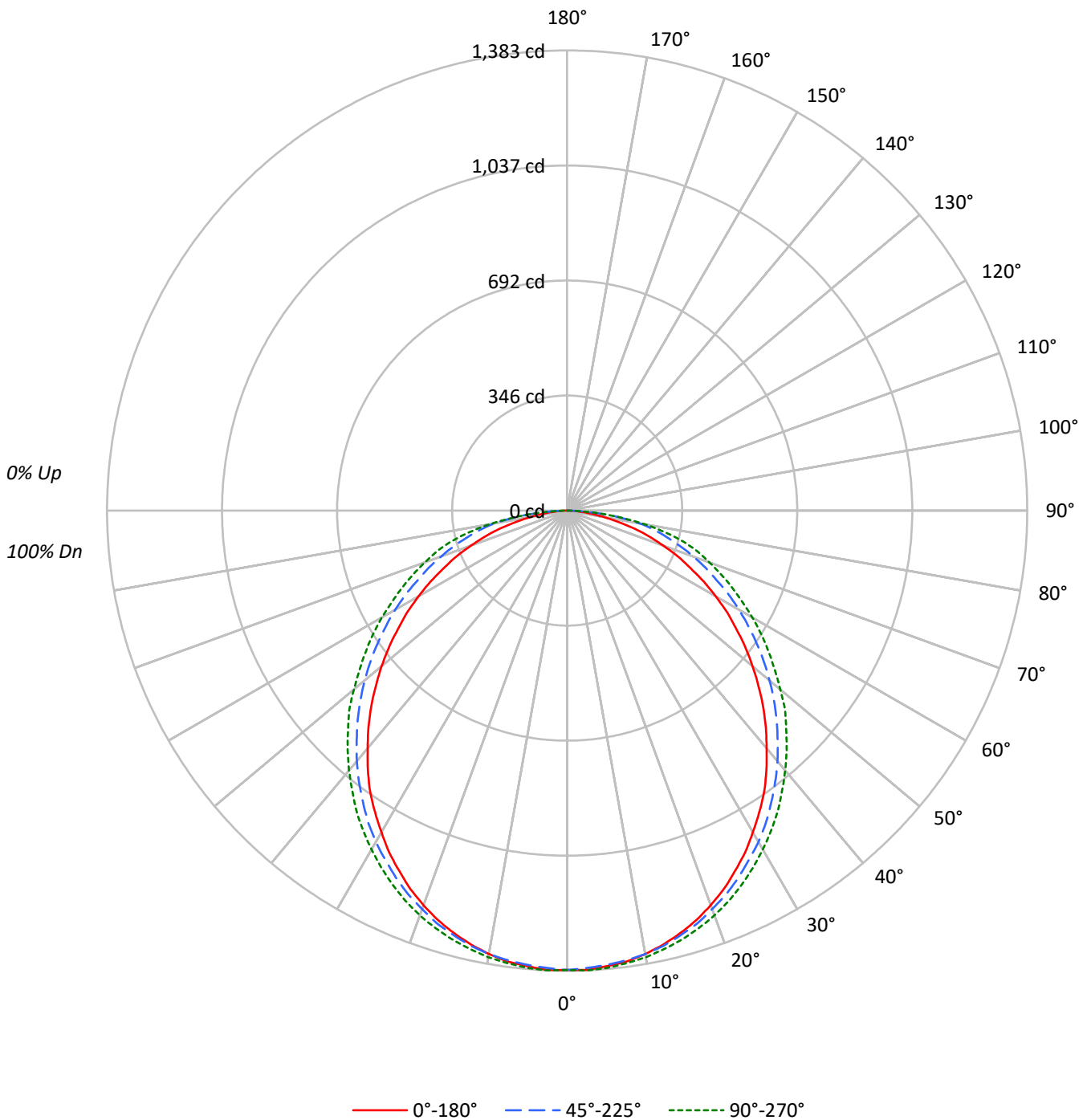
Input Watts (W): 30.597
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1858	1858	1858
5°	1856	1851	1863
10°	1849	1849	1862
15°	1831	1840	1859
20°	1807	1825	1854
25°	1774	1807	1842
30°	1734	1786	1827
35°	1696	1757	1813
40°	1638	1728	1791
45°	1584	1694	1772
50°	1523	1662	1751
55°	1456	1631	1734
60°	1387	1606	1730
65°	1300	1578	1741
70°	1203	1586	1788
75°	1077	1616	1889
80°	871	1712	1847
85°	655	1504	1465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	3.3
10°-20°	373.5	9.5
20°-30°	561.4	14.3
30°-40°	668.8	17.0
40°-50°	684.5	17.4
50°-60°	616.2	15.7
60°-70°	483.9	12.3
70°-80°	314.1	8.0
80°-90°	97.1	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°	1065.7	27.1
0°-40°	1734.4	44.1
0°-60°	3035.1	77.2
0°-90°	3930.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3930.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1374	1377	1371	1378	1380	131
15°	1315	1318	1321	1332	1334	371
25°	1195	1205	1217	1237	1241	550
35°	1032	1045	1070	1096	1104	644
45°	833	853	890	924	931	642
55°	620	648	695	732	739	556
65°	408	439	496	537	547	406
75°	207	247	311	353	363	219
85°	42	79	97	95	95	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1380.7	1380.7	1380.7	1380.7	1380.7
2.5°	1382.0	1382.0	1375.7	1382.0	1383.2
5°	1374.5	1377.0	1370.7	1378.2	1379.5
7.5°	1367.0	1367.0	1363.2	1370.7	1372.0
10°	1353.3	1354.5	1353.3	1362.0	1363.2
12.5°	1335.8	1338.3	1339.5	1348.3	1349.5
15°	1314.6	1318.3	1320.8	1332.0	1334.5
17.5°	1290.8	1294.6	1300.8	1313.3	1315.8
20°	1262.1	1267.1	1274.6	1290.8	1294.6
22.5°	1230.9	1235.9	1248.4	1263.4	1269.6
25°	1194.7	1204.7	1217.2	1237.2	1240.9
27.5°	1158.5	1167.2	1183.5	1204.7	1209.7
30°	1116.1	1129.8	1149.8	1171.0	1176.0
32.5°	1074.9	1088.6	1112.3	1134.8	1141.0
35°	1032.4	1044.9	1069.9	1096.1	1103.6
37.5°	983.7	1000.0	1027.4	1053.6	1061.1
40°	932.6	952.5	983.7	1011.2	1019.9
42.5°	883.9	905.1	936.3	966.3	976.2
45°	832.7	852.7	890.1	923.8	931.3
47.5°	780.2	802.7	842.7	876.4	888.9
50°	727.8	751.5	794.0	828.9	836.4
52.5°	675.4	700.3	745.3	782.7	786.5
55°	620.5	647.9	695.4	731.6	739.0
57.5°	570.5	594.2	645.4	682.9	691.6
60°	515.6	541.8	596.7	631.7	642.9
62.5°	463.2	490.6	548.0	583.0	593.0
65°	408.2	439.4	495.6	536.8	546.8
67.5°	360.8	390.7	450.7	490.6	500.6
70°	305.9	339.6	403.2	444.4	454.4
72.5°	258.4	293.4	357.0	397.0	412.0
75°	207.2	247.2	310.9	353.3	363.3
77.5°	157.3	203.5	268.4	300.9	300.9
80°	112.4	161.0	221.0	235.9	238.4
82.5°	73.7	121.1	163.5	162.3	162.3
85°	42.4	78.6	97.4	94.9	94.9
87.5°	16.2	32.5	35.0	35.0	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)