

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: P276570

Luminaire Tested: **24CZ2-40-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276570
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-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3691.7 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

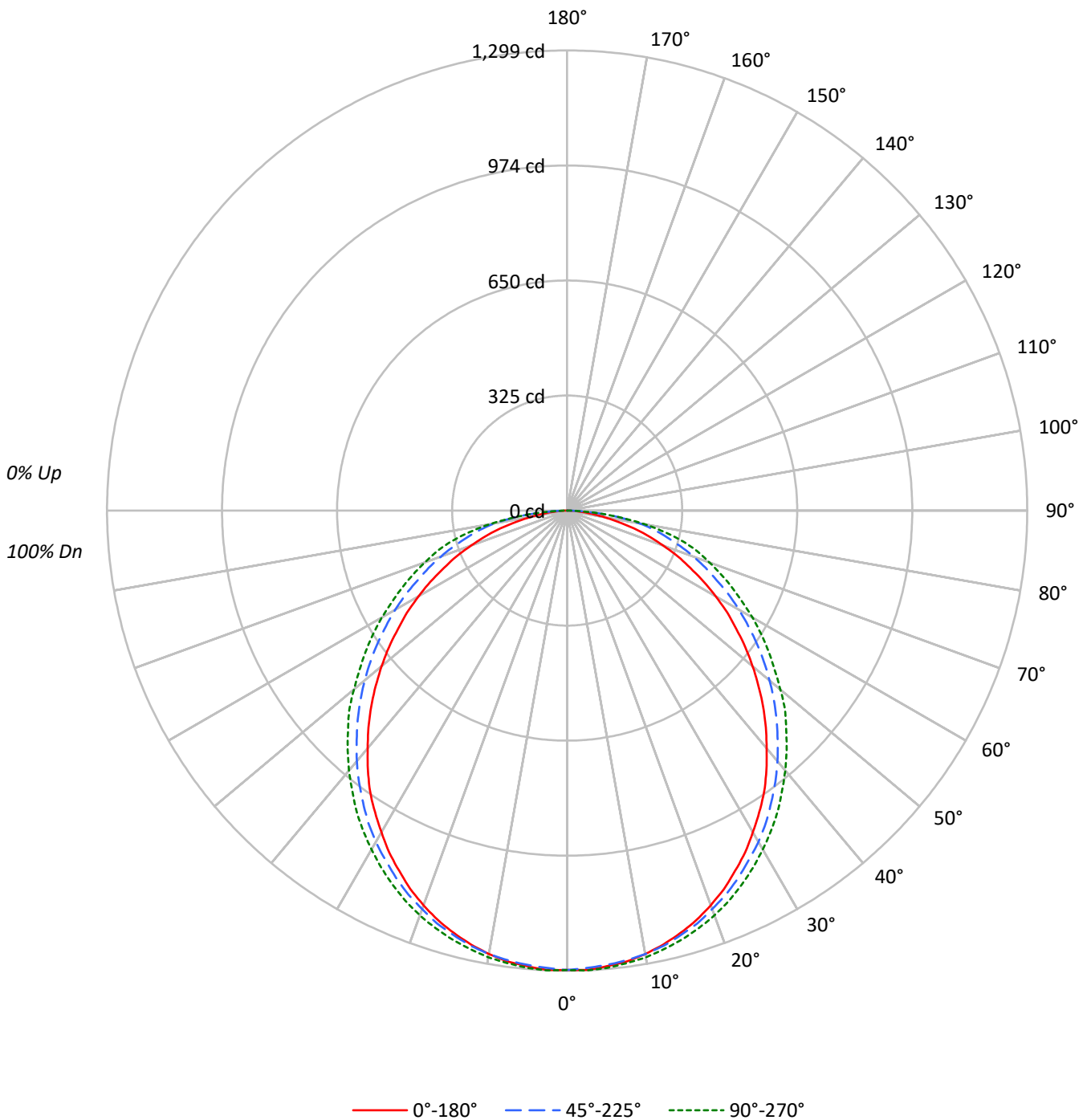
Input Watts (W): 30.411
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1745	1745	1745
5°	1744	1739	1750
10°	1737	1737	1749
15°	1720	1728	1746
20°	1697	1714	1741
25°	1666	1697	1730
30°	1629	1678	1716
35°	1593	1651	1703
40°	1538	1623	1683
45°	1488	1591	1665
50°	1431	1561	1645
55°	1367	1532	1628
60°	1303	1508	1625
65°	1221	1482	1635
70°	1130	1490	1679
75°	1012	1518	1774
80°	817	1609	1736
85°	616	1413	1376



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.8	3.3
10°-20°	350.8	9.5
20°-30°	527.4	14.3
30°-40°	628.2	17.0
40°-50°	642.9	17.4
50°-60°	578.8	15.7
60°-70°	454.5	12.3
70°-80°	295.0	8.0
80°-90°	91.2	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°	1001.0	27.1
0°-40°	1629.2	44.1
0°-60°	2850.9	77.2
0°-90°	3691.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3691.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1291	1293	1288	1295	1296	123
15°	1235	1238	1241	1251	1254	348
25°	1122	1132	1143	1162	1166	517
35°	970	982	1005	1030	1037	605
45°	782	801	836	868	875	603
55°	583	609	653	687	694	522
65°	383	413	466	504	514	382
75°	195	232	292	332	341	206
85°	40	74	92	89	89	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.9	1296.9	1296.9	1296.9	1296.9
2.5°	1298.1	1298.1	1292.2	1298.1	1299.3
5°	1291.1	1293.4	1287.5	1294.6	1295.7
7.5°	1284.0	1284.0	1280.5	1287.5	1288.7
10°	1271.1	1272.3	1271.1	1279.3	1280.5
12.5°	1254.7	1257.0	1258.2	1266.4	1267.6
15°	1234.8	1238.3	1240.6	1251.2	1253.5
17.5°	1212.5	1216.0	1221.9	1233.6	1235.9
20°	1185.5	1190.2	1197.2	1212.5	1216.0
22.5°	1156.2	1160.9	1172.6	1186.7	1192.6
25°	1122.2	1131.6	1143.3	1162.1	1165.6
27.5°	1088.2	1096.4	1111.6	1131.6	1136.3
30°	1048.3	1061.2	1080.0	1099.9	1104.6
32.5°	1009.6	1022.5	1044.8	1065.9	1071.8
35°	969.8	981.5	1004.9	1029.6	1036.6
37.5°	924.0	939.3	965.1	989.7	996.7
40°	875.9	894.7	924.0	949.8	958.0
42.5°	830.2	850.1	879.5	907.6	917.0
45°	782.1	800.9	836.1	867.7	874.8
47.5°	732.9	754.0	791.5	823.2	834.9
50°	683.6	705.9	745.8	778.6	785.7
52.5°	634.4	657.8	700.1	735.2	738.7
55°	582.8	608.6	653.1	687.2	694.2
57.5°	535.9	558.2	606.2	641.4	649.6
60°	484.3	508.9	560.5	593.3	603.9
62.5°	435.0	460.8	514.8	547.6	557.0
65°	383.4	412.8	465.5	504.2	513.6
67.5°	338.9	367.0	423.3	460.8	470.2
70°	287.3	319.0	378.8	417.5	426.8
72.5°	242.7	275.6	335.4	372.9	387.0
75°	194.7	232.2	292.0	331.9	341.2
77.5°	147.7	191.1	252.1	282.6	282.6
80°	105.5	151.3	207.6	221.6	224.0
82.5°	69.2	113.7	153.6	152.4	152.4
85°	39.9	73.9	91.5	89.1	89.1
87.5°	15.2	30.5	32.8	32.8	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)