

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: P276480

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276480
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: 24CZ2-40HE-S-UNV-L82765-W2A1-U-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3714.5 lumens
Efficiency: N/A
Efficacy: 131.4 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

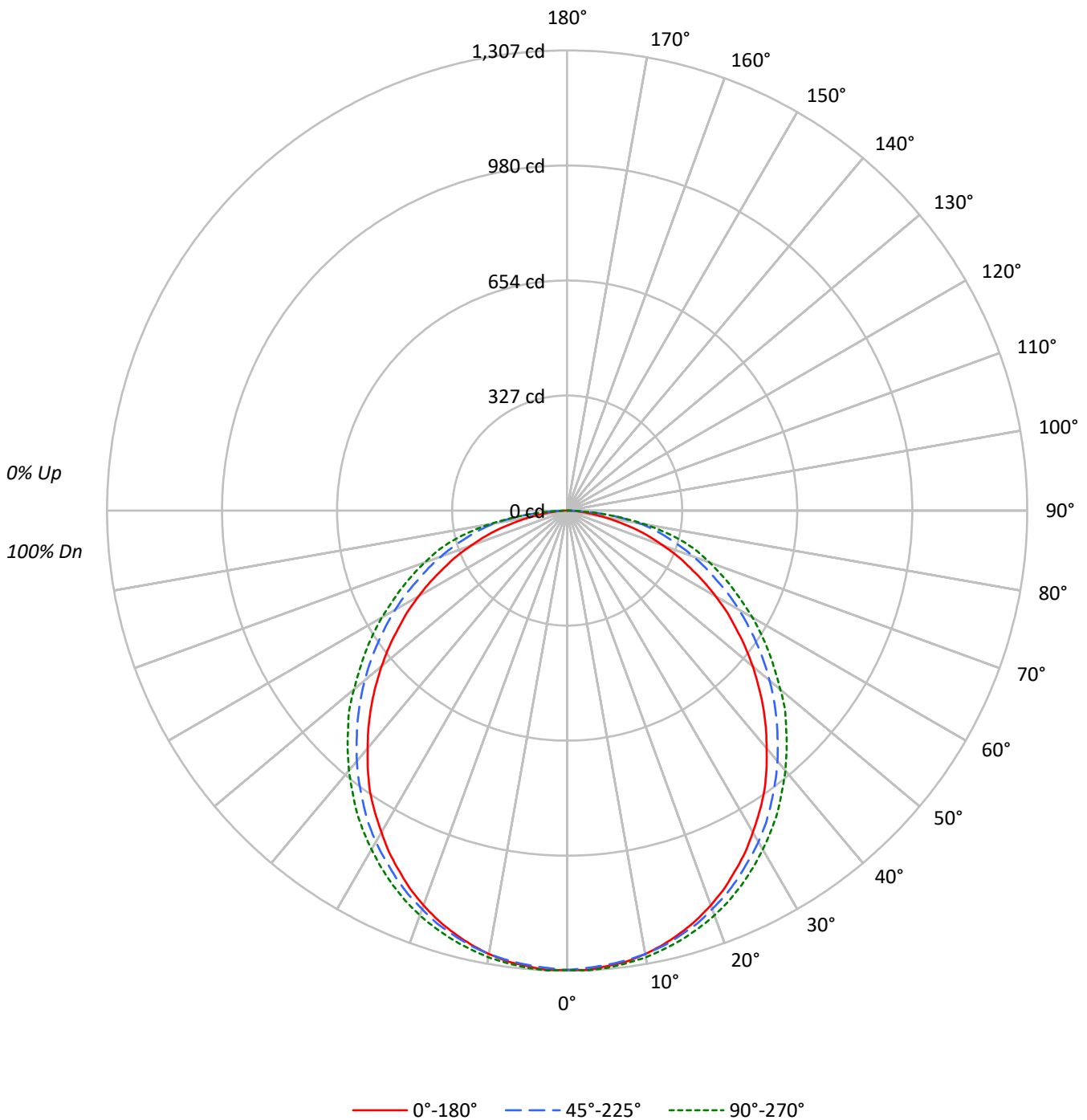
Input Watts (W): 28.272
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1756	1756	1756
5°	1754	1750	1761
10°	1747	1747	1760
15°	1731	1739	1757
20°	1708	1725	1752
25°	1676	1708	1741
30°	1639	1688	1727
35°	1603	1661	1713
40°	1548	1633	1693
45°	1498	1601	1675
50°	1440	1571	1655
55°	1376	1542	1639
60°	1311	1518	1635
65°	1228	1491	1645
70°	1137	1499	1690
75°	1018	1527	1785
80°	823	1618	1746
85°	619	1420	1385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	3.3
10°-20°	353.0	9.5
20°-30°	530.6	14.3
30°-40°	632.1	17.0
40°-50°	646.9	17.4
50°-60°	582.4	15.7
60°-70°	457.4	12.3
70°-80°	296.8	8.0
80°-90°	91.8	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°	1007.2	27.1
0°-40°	1639.2	44.1
0°-60°	2868.5	77.2
0°-90°	3714.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3714.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1299	1301	1296	1303	1304	123
15°	1242	1246	1248	1259	1261	350
25°	1129	1139	1150	1169	1173	520
35°	976	988	1011	1036	1043	609
45°	787	806	841	873	880	607
55°	586	612	657	691	698	526
65°	386	415	468	507	517	384
75°	196	234	294	334	343	207
85°	40	74	92	90	90	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.9	1304.9	1304.9	1304.9	1304.9
2.5°	1306.1	1306.1	1300.2	1306.1	1307.3
5°	1299.0	1301.4	1295.5	1302.6	1303.8
7.5°	1292.0	1292.0	1288.4	1295.5	1296.7
10°	1279.0	1280.2	1279.0	1287.2	1288.4
12.5°	1262.5	1264.8	1266.0	1274.3	1275.5
15°	1242.4	1246.0	1248.3	1258.9	1261.3
17.5°	1220.0	1223.5	1229.4	1241.2	1243.6
20°	1192.9	1197.6	1204.7	1220.0	1223.5
22.5°	1163.4	1168.1	1179.9	1194.0	1199.9
25°	1129.1	1138.6	1150.4	1169.3	1172.8
27.5°	1094.9	1103.2	1118.5	1138.6	1143.3
30°	1054.8	1067.8	1086.7	1106.7	1111.4
32.5°	1015.9	1028.9	1051.3	1072.5	1078.4
35°	975.8	987.6	1011.2	1035.9	1043.0
37.5°	929.7	945.1	971.0	995.8	1002.9
40°	881.4	900.2	929.7	955.7	964.0
42.5°	835.4	855.4	884.9	913.2	922.7
45°	787.0	805.9	841.3	873.1	880.2
47.5°	737.4	758.7	796.4	828.3	840.1
50°	687.9	710.3	750.4	783.4	790.5
52.5°	638.3	661.9	704.4	739.8	743.3
55°	586.4	612.4	657.2	691.4	698.5
57.5°	539.2	561.6	610.0	645.4	653.7
60°	487.3	512.1	564.0	597.0	607.6
62.5°	437.7	463.7	518.0	551.0	560.4
65°	385.8	415.3	468.4	507.3	516.8
67.5°	341.0	369.3	425.9	463.7	473.1
70°	289.1	320.9	381.1	420.0	429.5
72.5°	244.2	277.3	337.4	375.2	389.4
75°	195.9	233.6	293.8	333.9	343.3
77.5°	148.7	192.3	253.7	284.4	284.4
80°	106.2	152.2	208.8	223.0	225.4
82.5°	69.6	114.4	154.6	153.4	153.4
85°	40.1	74.3	92.0	89.7	89.7
87.5°	15.3	30.7	33.0	33.0	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)