

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: P276374

Luminaire Tested: **24CZ2-40-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276374
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-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4225.0 lumens
Efficiency: N/A
Efficacy: 135.8 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

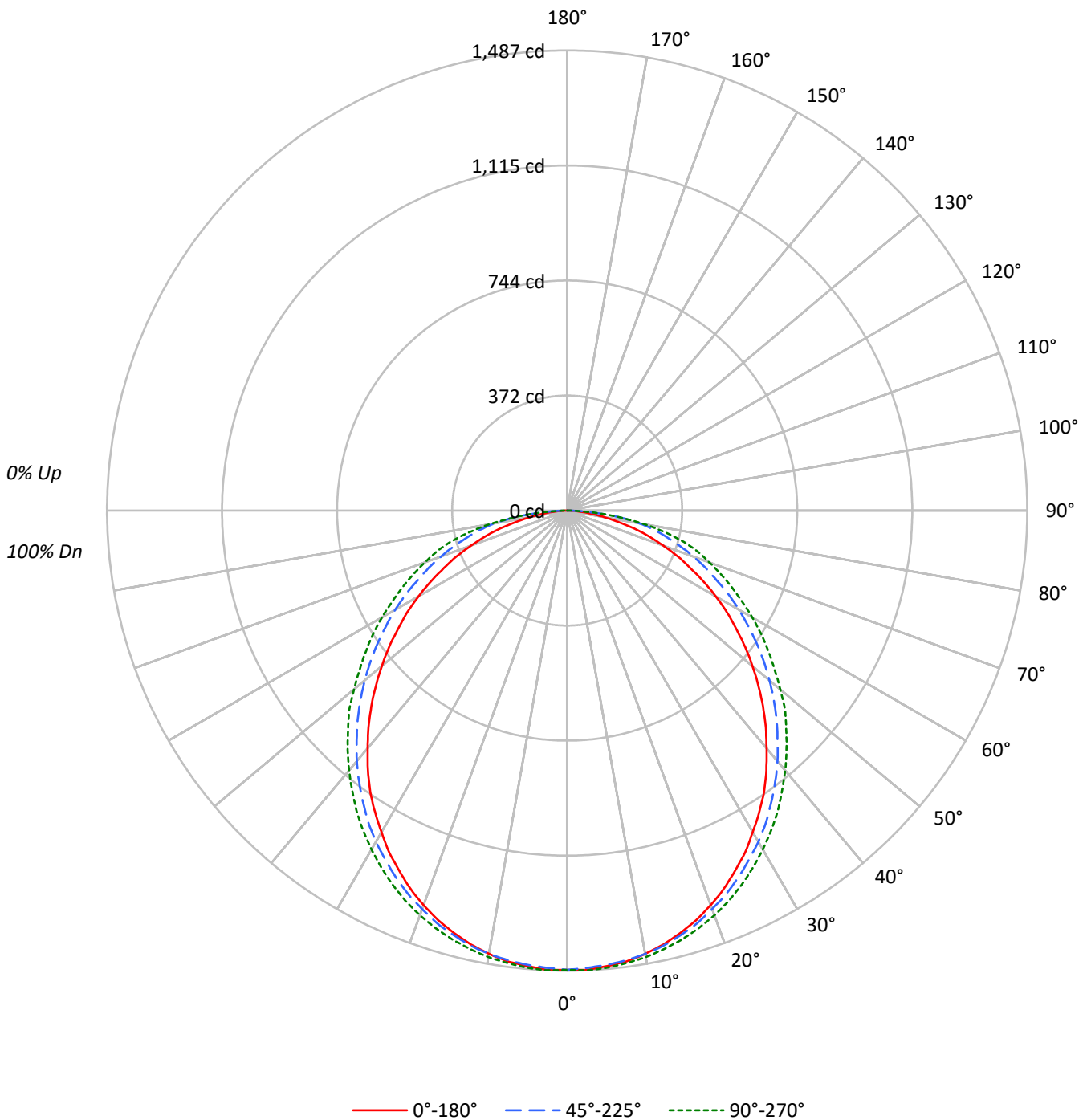
Input Watts (W): 31.110453
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1997	1997	1997
5°	1996	1990	2003
10°	1987	1987	2002
15°	1968	1978	1998
20°	1943	1962	1993
25°	1907	1943	1980
30°	1864	1920	1964
35°	1823	1889	1949
40°	1761	1857	1926
45°	1703	1821	1905
50°	1638	1787	1882
55°	1565	1753	1864
60°	1492	1726	1860
65°	1397	1696	1871
70°	1293	1705	1922
75°	1158	1737	2030
80°	936	1840	1986
85°	704	1616	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.5	3.3
10°-20°	401.5	9.5
20°-30°	603.5	14.3
30°-40°	718.9	17.0
40°-50°	735.8	17.4
50°-60°	662.4	15.7
60°-70°	520.2	12.3
70°-80°	337.6	8.0
80°-90°	104.4	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°	1145.6	27.1
0°-40°	1864.5	44.1
0°-60°	3262.7	77.2
0°-90°	4225.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4225.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1478	1480	1474	1482	1483	140
15°	1413	1417	1420	1432	1435	398
25°	1284	1295	1308	1330	1334	592
35°	1110	1123	1150	1178	1186	692
45°	895	917	957	993	1001	690
55°	667	696	748	786	794	598
65°	439	472	533	577	588	437
75°	223	266	334	380	390	236
85°	46	84	105	102	102	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.3	1484.3	1484.3	1484.3	1484.3
2.5°	1485.6	1485.6	1478.9	1485.6	1487.0
5°	1477.6	1480.2	1473.5	1481.6	1482.9
7.5°	1469.5	1469.5	1465.5	1473.5	1474.9
10°	1454.7	1456.1	1454.7	1464.1	1465.5
12.5°	1436.0	1438.6	1440.0	1449.4	1450.7
15°	1413.1	1417.2	1419.9	1431.9	1434.6
17.5°	1387.6	1391.7	1398.4	1411.8	1414.5
20°	1356.8	1362.1	1370.2	1387.6	1391.7
22.5°	1323.2	1328.6	1342.0	1358.1	1364.8
25°	1284.3	1295.0	1308.5	1329.9	1334.0
27.5°	1245.4	1254.8	1272.2	1295.0	1300.4
30°	1199.8	1214.5	1236.0	1258.8	1264.2
32.5°	1155.5	1170.2	1195.7	1219.9	1226.6
35°	1109.8	1123.3	1150.1	1178.3	1186.3
37.5°	1057.5	1075.0	1104.5	1132.7	1140.7
40°	1002.5	1024.0	1057.5	1087.0	1096.4
42.5°	950.1	973.0	1006.5	1038.7	1049.5
45°	895.1	916.6	956.9	993.1	1001.1
47.5°	838.8	862.9	905.9	942.1	955.5
50°	782.4	807.9	853.5	891.1	899.2
52.5°	726.0	752.9	801.2	841.4	845.5
55°	667.0	696.5	747.5	786.4	794.5
57.5°	613.3	638.8	693.8	734.1	743.5
60°	554.3	582.4	641.5	679.1	691.1
62.5°	497.9	527.4	589.1	626.7	637.5
65°	438.8	472.4	532.8	577.1	587.8
67.5°	387.8	420.1	484.5	527.4	538.1
70°	328.8	365.0	433.5	477.8	488.5
72.5°	277.8	315.4	383.8	426.8	442.9
75°	222.8	265.7	334.2	379.8	390.5
77.5°	169.1	218.7	288.5	323.4	323.4
80°	120.8	173.1	237.5	253.6	256.3
82.5°	79.2	130.2	175.8	174.5	174.5
85°	45.6	84.5	104.7	102.0	102.0
87.5°	17.4	34.9	37.6	37.6	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)