

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: P272074

Luminaire Tested: **24CZ2-40-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P272074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40-UNV-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

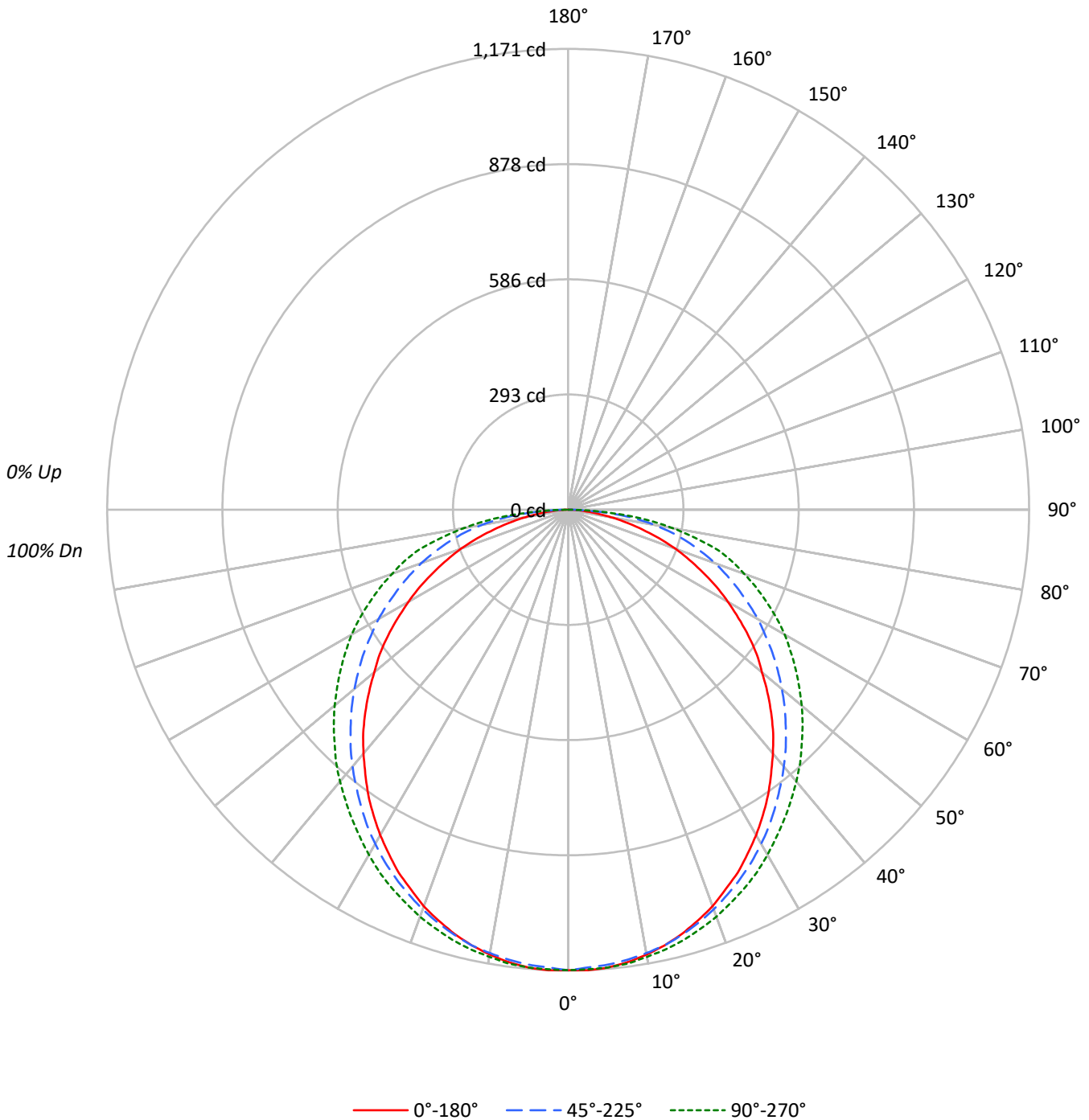
Lumens per Lamp: N/A
Luminaire Lumens: 3548.0 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.2
Input Voltage (V): NR
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	92	89	92	89	87	88	86	84	82
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	64	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1574	1574	1574
5°	1577	1568	1577
10°	1568	1563	1576
15°	1555	1558	1577
20°	1536	1547	1576
25°	1512	1536	1575
30°	1483	1523	1573
35°	1454	1508	1574
40°	1420	1497	1584
45°	1387	1487	1597
50°	1345	1483	1621
55°	1312	1486	1654
60°	1261	1498	1711
65°	1203	1514	1773
70°	1139	1561	1871
75°	1016	1628	2044
80°	866	1724	2089
85°	618	1709	1999



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	3.1
10°-20°	316.6	8.9
20°-30°	478.2	13.5
30°-40°	576.4	16.2
40°-50°	605.1	17.1
50°-60°	566.1	16.0
60°-70°	467.5	13.2
70°-80°	318.6	9.0
80°-90°	108.6	3.1
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°	905.6	25.5
0°-40°	1482.0	41.8
0°-60°	2653.3	74.8
0°-90°	3548.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3548.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1168	1167	1161	1168	1168	111
15°	1116	1117	1118	1130	1132	315
25°	1018	1023	1035	1055	1061	468
35°	885	895	918	949	958	553
45°	729	744	782	824	839	562
55°	559	582	633	685	705	499
65°	378	410	476	536	557	375
75°	195	240	313	372	393	208
85°	40	79	111	125	130	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.1	1170.1	1170.1	1170.1	1170.1
2.5°	1171.3	1170.1	1164.2	1170.1	1168.9
5°	1167.7	1166.6	1160.7	1167.7	1167.7
7.5°	1159.5	1159.5	1153.6	1161.9	1163.0
10°	1147.7	1147.7	1144.2	1153.6	1153.6
12.5°	1133.6	1133.6	1133.6	1143.0	1144.2
15°	1116.0	1117.1	1118.3	1130.1	1132.4
17.5°	1094.8	1097.1	1100.6	1114.8	1117.1
20°	1072.4	1074.7	1080.6	1097.1	1100.6
22.5°	1044.1	1050.0	1058.3	1077.1	1080.6
25°	1018.2	1023.0	1034.7	1054.7	1060.6
27.5°	986.5	993.5	1008.8	1030.0	1038.3
30°	954.7	961.7	980.6	1005.3	1012.4
32.5°	920.5	931.1	951.1	977.0	985.3
35°	885.2	894.6	918.2	948.8	958.2
37.5°	846.4	859.3	885.2	918.2	930.0
40°	808.7	822.8	852.3	887.6	901.7
42.5°	771.0	785.2	818.1	858.2	872.3
45°	728.7	744.0	781.6	824.0	839.3
47.5°	686.3	705.1	746.3	791.1	807.5
50°	642.7	663.9	708.7	755.7	774.6
52.5°	603.9	623.9	671.0	721.6	739.3
55°	559.2	581.5	633.3	685.1	705.1
57.5°	513.2	538.0	593.3	649.8	669.8
60°	468.5	495.6	556.8	613.3	635.7
62.5°	425.0	452.0	515.6	574.5	596.8
65°	377.9	409.7	475.6	535.6	556.8
67.5°	333.1	367.3	436.7	495.6	516.8
70°	289.6	322.5	396.7	454.4	475.6
72.5°	242.5	280.2	354.3	414.4	436.7
75°	195.4	240.1	313.1	372.0	393.2
77.5°	151.9	197.8	270.7	319.0	329.6
80°	111.8	158.9	222.5	256.6	269.6
82.5°	71.8	118.9	169.5	194.2	204.8
85°	40.0	78.9	110.7	124.8	129.5
87.5°	16.5	34.1	44.7	50.6	50.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)