

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: P272069

Luminaire Tested: **24CZ2-40HE-UNV-L930-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: P272069
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-UNV-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3325.0 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

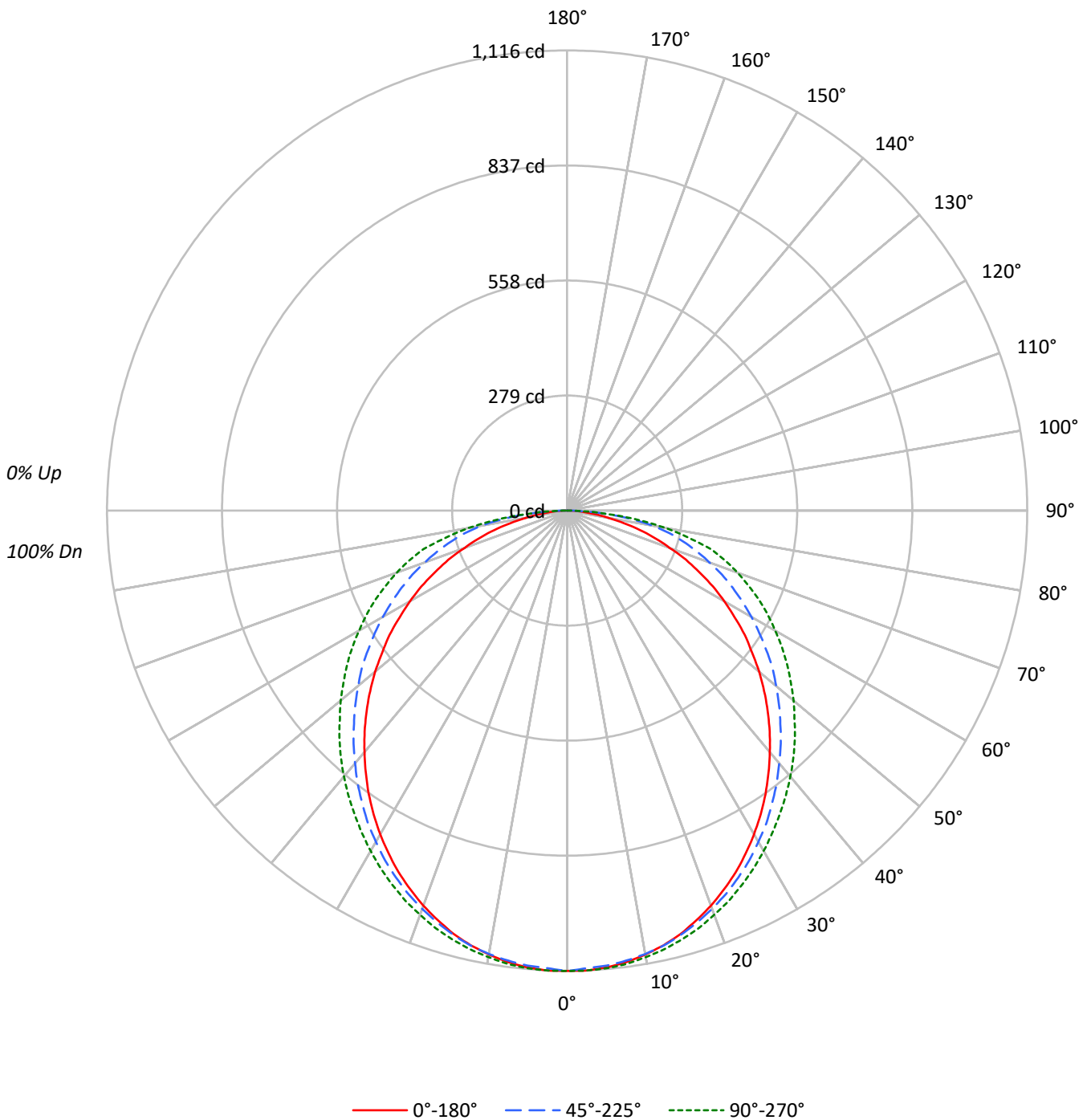
Input Watts (W): 30.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1502	1502	1502
5°	1502	1496	1505
10°	1493	1492	1502
15°	1481	1484	1499
20°	1460	1471	1494
25°	1437	1458	1488
30°	1409	1441	1481
35°	1378	1424	1476
40°	1343	1405	1479
45°	1309	1392	1486
50°	1273	1384	1501
55°	1234	1382	1528
60°	1186	1389	1568
65°	1124	1410	1636
70°	1043	1445	1729
75°	952	1517	1875
80°	783	1633	1874
85°	599	1508	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.2
10°-20°	301.4	9.1
20°-30°	453.6	13.6
30°-40°	543.6	16.3
40°-50°	566.5	17.0
50°-60°	527.0	15.9
60°-70°	434.1	13.1
70°-80°	295.6	8.9
80°-90°	97.6	2.9
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°	860.6	25.9
0°-40°	1404.2	42.2
0°-60°	2497.7	75.1
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1112	1112	1108	1113	1114	106
15°	1063	1064	1065	1075	1076	299
25°	968	972	982	999	1002	445
35°	839	849	867	890	899	524
45°	688	702	731	768	781	531
55°	526	544	589	636	651	469
65°	353	383	443	495	514	350
75°	183	224	292	344	361	193
85°	39	76	98	104	104	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1116.4	1116.4	1110.8	1116.4	1116.4
5°	1111.9	1111.9	1107.5	1113.0	1114.1
7.5°	1104.2	1105.3	1100.8	1107.5	1108.6
10°	1093.1	1094.2	1091.9	1098.6	1099.7
12.5°	1079.7	1080.8	1080.8	1088.6	1089.7
15°	1063.1	1064.2	1065.3	1075.3	1076.4
17.5°	1042.0	1045.3	1047.6	1059.8	1062.0
20°	1019.8	1023.1	1027.6	1040.9	1043.1
22.5°	994.3	998.7	1006.5	1020.9	1024.3
25°	967.7	972.1	982.1	998.7	1002.1
27.5°	937.7	944.4	956.6	974.3	978.8
30°	906.6	913.3	927.7	946.6	953.2
32.5°	873.3	882.2	898.9	919.9	926.6
35°	838.9	848.9	866.7	890.0	898.9
37.5°	802.3	813.4	834.5	860.0	871.1
40°	764.6	777.9	800.1	830.1	842.3
42.5°	726.9	739.1	766.8	799.0	812.3
45°	688.0	702.4	731.3	767.9	781.2
47.5°	648.1	662.5	696.9	735.7	747.9
50°	608.1	622.5	661.4	702.4	716.9
52.5°	564.8	583.7	628.1	669.1	683.6
55°	526.0	543.8	589.3	635.9	651.4
57.5°	481.6	502.7	552.6	601.5	618.1
60°	440.6	462.7	516.0	565.9	582.6
62.5°	398.4	422.8	479.4	530.4	549.3
65°	352.9	382.8	442.8	494.9	513.8
67.5°	311.8	342.9	406.1	459.4	476.1
70°	265.2	302.9	367.3	420.6	439.4
72.5°	225.3	263.0	330.7	382.8	401.7
75°	183.1	224.2	291.9	344.0	360.7
77.5°	140.9	186.4	254.1	294.1	299.6
80°	101.0	148.7	210.8	234.1	241.9
82.5°	71.0	114.3	155.4	170.9	175.3
85°	38.8	75.5	97.7	104.3	104.3
87.5°	16.6	32.2	38.8	39.9	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)