

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: P271926

Luminaire Tested: **14CZ2-60HE-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: P271926
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-60HE-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5091.0 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

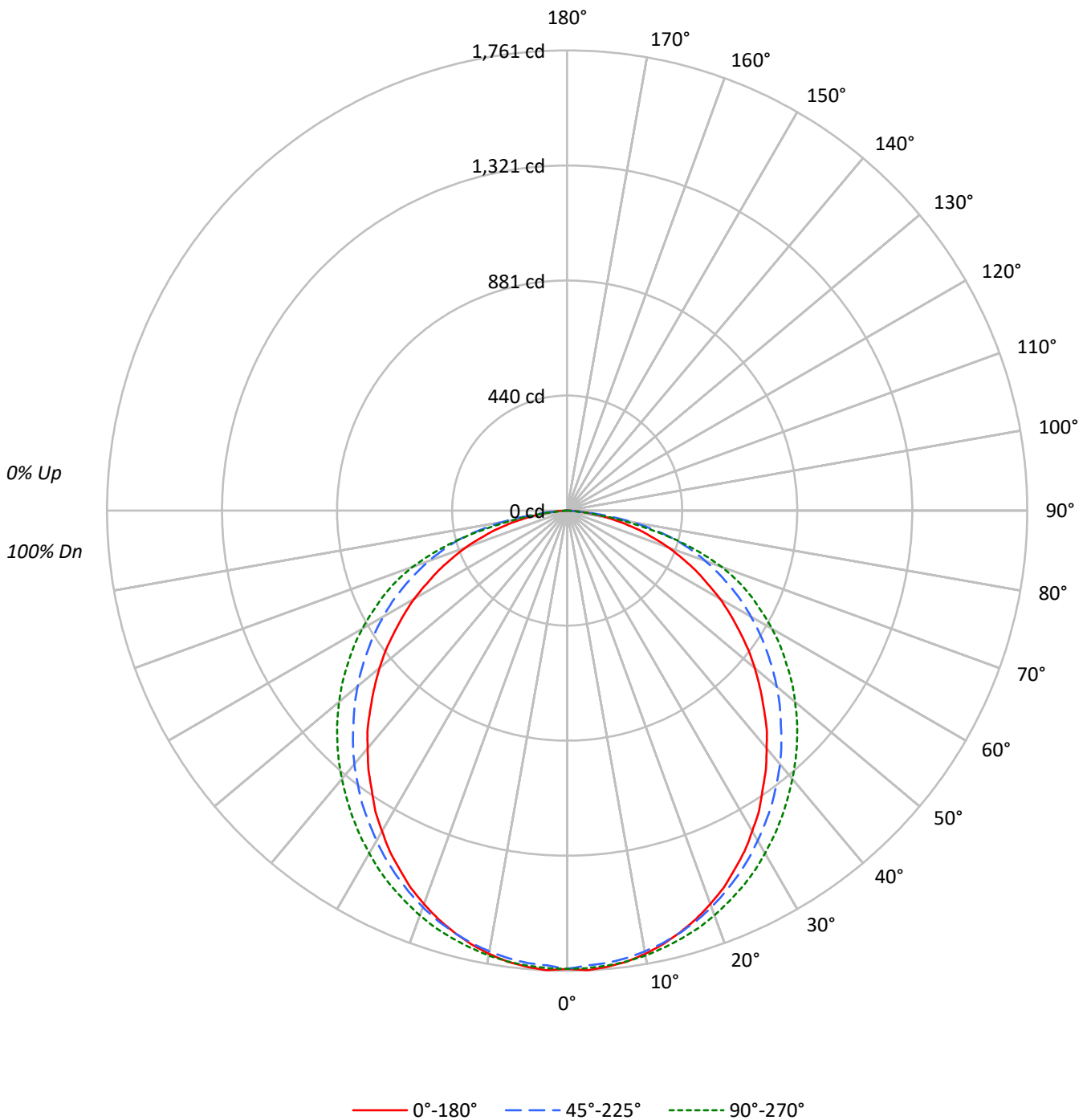
Input Watts (W): 48.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	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	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4720	4720	4720
5°	4734	4695	4722
10°	4706	4681	4724
15°	4655	4658	4722
20°	4587	4626	4720
25°	4500	4581	4715
30°	4402	4533	4705
35°	4285	4494	4703
40°	4171	4450	4710
45°	4043	4402	4735
50°	3926	4382	4767
55°	3776	4367	4809
60°	3641	4374	4876
65°	3455	4388	4951
70°	3242	4421	4948
75°	2939	4461	4473
80°	2410	3852	3185
85°	1788	1822	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.0	3.3
10°-20°	474.1	9.3
20°-30°	714.2	14.0
30°-40°	857.0	16.8
40°-50°	893.2	17.5
50°-60°	826.9	16.2
60°-70°	668.1	13.1
70°-80°	407.4	8.0
80°-90°	84.1	1.7
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°	1354.2	26.6
0°-40°	2211.2	43.4
0°-60°	3931.4	77.2
0°-90°	5091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5091.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1754	1754	1754	1754	1754	
5°	1753	1748	1738	1750	1748	166
15°	1671	1672	1672	1695	1695	471
25°	1516	1525	1543	1581	1588	699
35°	1304	1325	1368	1418	1432	817
45°	1062	1094	1157	1222	1244	821
55°	805	847	931	1004	1025	721
65°	543	596	689	758	778	537
75°	283	345	429	436	430	297
85°	58	86	59	33	24	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1753.9	1753.9	1753.9	1753.9	1753.9
2.5°	1760.7	1755.0	1742.5	1755.0	1752.7
5°	1752.7	1748.2	1738.0	1750.5	1748.2
7.5°	1741.4	1736.8	1727.8	1742.5	1740.2
10°	1722.1	1719.8	1713.0	1730.0	1728.9
12.5°	1699.4	1698.2	1694.8	1714.1	1713.0
15°	1671.0	1672.1	1672.1	1694.8	1694.8
17.5°	1639.2	1641.5	1646.0	1671.0	1674.4
20°	1601.8	1606.3	1615.4	1643.8	1648.3
22.5°	1563.2	1566.6	1580.2	1614.2	1618.8
25°	1515.5	1524.6	1542.7	1581.3	1588.1
27.5°	1470.1	1478.0	1503.0	1542.7	1554.1
30°	1416.7	1429.2	1458.7	1501.9	1514.3
32.5°	1365.6	1379.3	1413.3	1463.3	1474.6
35°	1304.3	1324.8	1367.9	1417.9	1431.5
37.5°	1248.7	1268.0	1316.8	1371.3	1387.2
40°	1187.4	1211.2	1266.9	1324.8	1340.7
42.5°	1130.6	1153.4	1213.5	1272.5	1294.1
45°	1062.5	1094.3	1156.8	1221.5	1244.2
47.5°	1000.1	1031.9	1103.4	1172.6	1193.1
50°	937.7	971.7	1046.6	1118.2	1138.6
52.5°	873.0	909.3	989.9	1061.4	1085.2
55°	804.8	846.9	930.9	1003.5	1025.1
57.5°	740.1	783.3	873.0	946.7	968.3
60°	676.6	720.8	812.8	883.2	905.9
62.5°	606.2	658.4	753.8	823.0	840.0
65°	542.6	596.0	689.1	758.3	777.6
67.5°	475.6	533.5	626.6	690.2	708.4
70°	412.1	472.2	561.9	620.9	628.9
72.5°	344.0	405.3	496.1	533.5	533.5
75°	282.7	345.1	429.1	435.9	430.2
77.5°	215.7	284.9	339.4	325.8	312.2
80°	155.5	223.6	248.6	223.6	205.5
82.5°	104.4	162.3	149.8	119.2	105.6
85°	57.9	86.3	59.0	32.9	23.8
87.5°	21.6	19.3	5.7	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)