

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: P475349

Luminaire Tested: **14CZ2-60HE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475349
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-60HE-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5760.8 lumens
Efficiency: N/A
Efficacy: 129.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

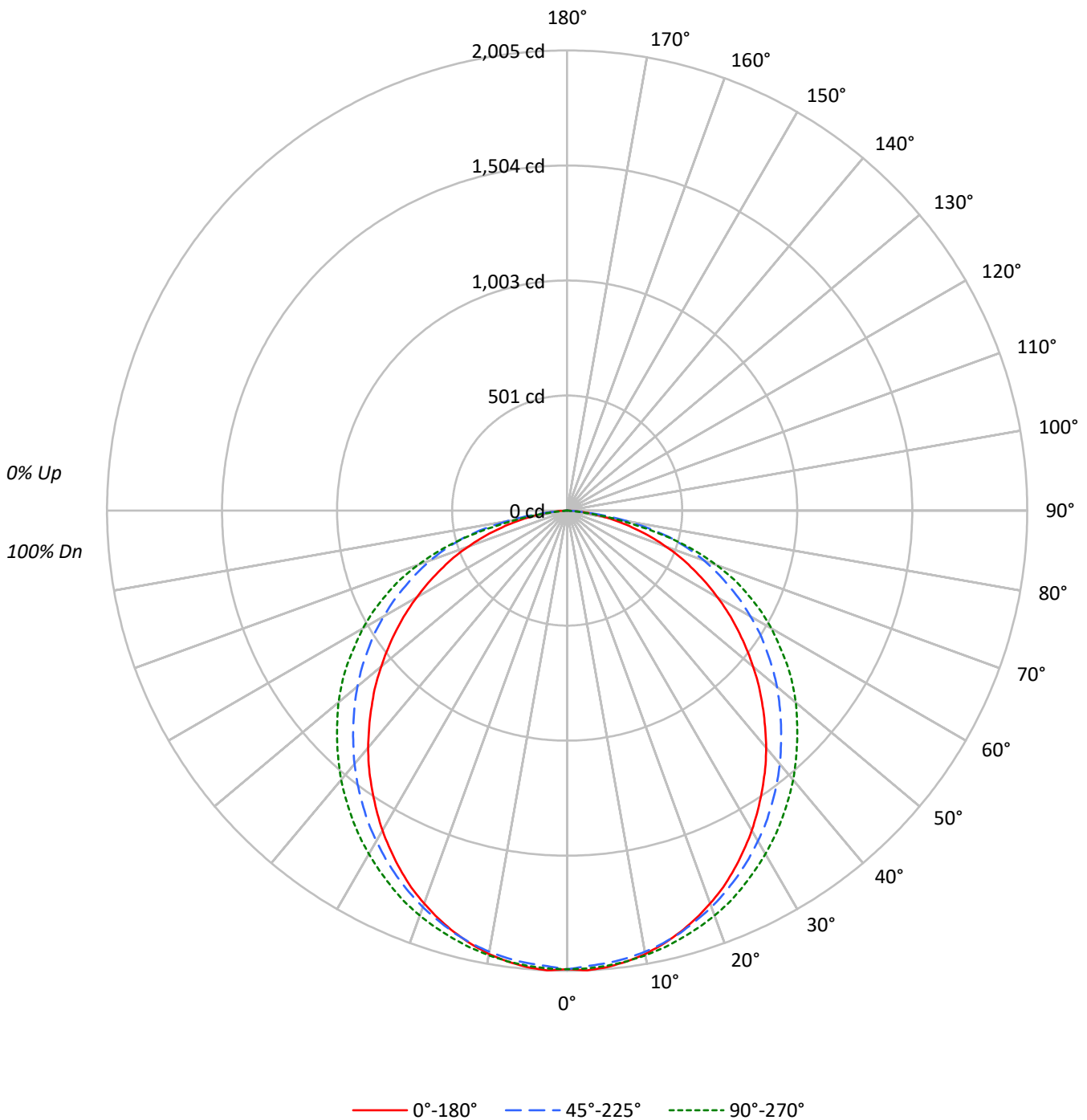
Input Watts (W): 44.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	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	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5378	5378	5378
5°	5393	5346	5378
10°	5361	5334	5376
15°	5299	5307	5374
20°	5217	5267	5378
25°	5117	5218	5372
30°	5001	5166	5370
35°	4869	5113	5370
40°	4739	5064	5383
45°	4583	5017	5395
50°	4428	4993	5446
55°	4260	4971	5491
60°	4072	4965	5531
65°	3865	4953	5542
70°	3599	4980	5436
75°	3191	4917	4876
80°	2676	4113	3319
85°	1877	1609	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	3.3
10°-20°	539.7	9.4
20°-30°	813.2	14.1
30°-40°	976.1	16.9
40°-50°	1016.1	17.6
50°-60°	939.0	16.3
60°-70°	752.0	13.1
70°-80°	450.0	7.8
80°-90°	85.8	1.5
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°	1541.9	26.8
0°-40°	2518.0	43.7
0°-60°	4473.0	77.6
0°-90°	5760.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5760.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1998	1998	1998	1998	1998	
5°	1997	1992	1979	1994	1991	189
15°	1902	1902	1905	1929	1929	536
25°	1724	1733	1757	1802	1809	794
35°	1482	1504	1556	1618	1635	928
45°	1204	1240	1318	1396	1418	930
55°	908	957	1060	1142	1170	812
65°	607	670	778	854	870	602
75°	307	384	473	480	469	328
85°	61	89	52	21	12	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1998.5	1998.5	1998.5	1998.5	1998.5
2.5°	2005.3	1999.5	1986.9	1999.5	1996.6
5°	1996.6	1991.8	1979.2	1993.7	1990.8
7.5°	1982.1	1978.3	1968.6	1984.0	1981.1
10°	1961.8	1959.0	1952.2	1969.6	1967.6
12.5°	1933.9	1934.8	1931.0	1952.2	1950.3
15°	1902.0	1902.0	1904.9	1929.0	1929.0
17.5°	1864.4	1866.3	1872.1	1903.9	1904.9
20°	1821.9	1826.7	1839.3	1872.1	1877.9
22.5°	1776.6	1782.4	1799.7	1838.3	1847.0
25°	1723.5	1733.1	1757.3	1801.7	1809.4
27.5°	1667.5	1682.0	1711.9	1760.2	1769.8
30°	1609.6	1625.1	1662.7	1714.8	1728.3
32.5°	1546.9	1567.2	1612.5	1667.5	1683.0
35°	1482.2	1504.4	1556.5	1618.3	1634.7
37.5°	1417.6	1441.7	1500.6	1567.2	1583.6
40°	1349.1	1377.1	1441.7	1510.2	1532.4
42.5°	1276.7	1307.6	1379.0	1454.3	1475.5
45°	1204.3	1240.0	1318.2	1396.4	1417.6
47.5°	1133.9	1170.5	1255.5	1336.5	1358.7
50°	1057.6	1100.1	1192.7	1272.8	1300.8
52.5°	983.3	1030.6	1128.1	1209.1	1237.1
55°	908.1	957.3	1059.6	1141.6	1170.5
57.5°	834.7	886.8	994.9	1076.0	1096.2
60°	756.6	813.5	922.5	1004.6	1027.7
62.5°	683.2	742.1	852.1	931.2	953.4
65°	607.0	669.7	777.8	854.0	870.4
67.5°	535.6	598.3	707.3	773.0	789.4
70°	457.4	526.9	633.0	689.0	690.9
72.5°	383.1	453.6	556.8	592.5	587.7
75°	306.9	384.1	472.9	479.6	469.0
77.5°	238.4	315.6	376.4	355.1	333.9
80°	172.7	248.0	265.4	232.6	214.2
82.5°	113.9	173.7	160.2	114.8	98.4
85°	60.8	88.8	52.1	21.2	12.5
87.5°	23.2	15.4	5.8	4.8	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)