

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: P271928

Luminaire Tested: **14CZ2-60HE-UNV-L950-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: P271928  
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-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (196) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5459.0 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

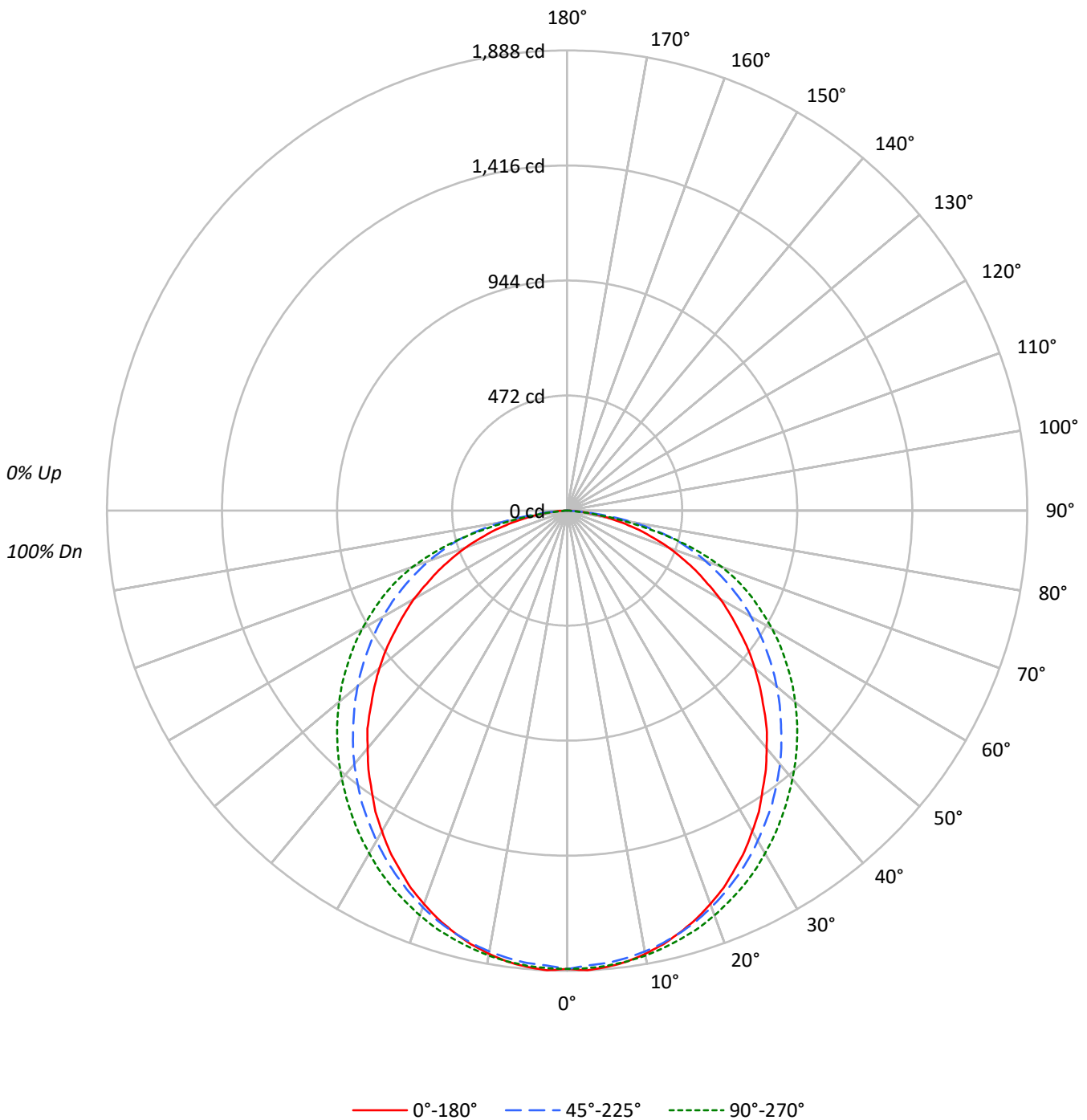
Input Watts (W): 48.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5061	5061	5061
5°	5077	5034	5064
10°	5046	5019	5066
15°	4992	4995	5063
20°	4918	4960	5061
25°	4825	4912	5056
30°	4720	4860	5046
35°	4595	4819	5042
40°	4473	4772	5050
45°	4336	4720	5077
50°	4209	4698	5111
55°	4049	4683	5157
60°	3905	4690	5228
65°	3705	4705	5309
70°	3477	4740	5306
75°	3151	4784	4796
80°	2585	4131	3414
85°	1917	1954	790



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.0	3.3
10°-20°	508.3	9.3
20°-30°	765.8	14.0
30°-40°	919.0	16.8
40°-50°	957.8	17.5
50°-60°	886.7	16.2
60°-70°	716.4	13.1
70°-80°	436.8	8.0
80°-90°	90.2	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°	1452.1	26.6
0°-40°	2371.0	43.4
0°-60°	4215.6	77.2
0°-90°	5459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5459.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1881	1881	1881	1881	1881	
5°	1879	1875	1864	1877	1875	178
15°	1792	1793	1793	1817	1817	505
25°	1625	1635	1654	1696	1703	749
35°	1399	1420	1467	1520	1535	876
45°	1139	1173	1240	1310	1334	881
55°	863	908	998	1076	1099	773
65°	582	639	739	813	834	575
75°	303	370	460	467	461	318
85°	62	92	63	35	26	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1880.6	1880.6	1880.6	1880.6	1880.6
2.5°	1887.9	1881.9	1868.5	1881.9	1879.4
5°	1879.4	1874.6	1863.6	1877.0	1874.6
7.5°	1867.3	1862.4	1852.6	1868.5	1866.0
10°	1846.6	1844.1	1836.8	1855.1	1853.9
12.5°	1822.2	1821.0	1817.3	1838.0	1836.8
15°	1791.8	1793.0	1793.0	1817.3	1817.3
17.5°	1757.7	1760.1	1765.0	1791.8	1795.4
20°	1717.5	1722.4	1732.1	1762.6	1767.4
22.5°	1676.1	1679.8	1694.4	1730.9	1735.8
25°	1625.0	1634.8	1654.2	1695.6	1702.9
27.5°	1576.3	1584.9	1611.6	1654.2	1666.4
30°	1519.1	1532.5	1564.2	1610.4	1623.8
32.5°	1464.3	1479.0	1515.5	1569.0	1581.2
35°	1398.6	1420.5	1466.8	1520.3	1534.9
37.5°	1339.0	1359.7	1412.0	1470.4	1487.5
40°	1273.2	1298.8	1358.4	1420.5	1437.6
42.5°	1212.4	1236.7	1301.2	1364.5	1387.7
45°	1139.3	1173.4	1240.4	1309.8	1334.1
47.5°	1072.4	1106.5	1183.2	1257.4	1279.3
50°	1005.4	1042.0	1122.3	1199.0	1220.9
52.5°	936.1	975.0	1061.4	1138.1	1163.7
55°	863.0	908.1	998.1	1076.0	1099.2
57.5°	793.6	839.9	936.1	1015.2	1038.3
60°	725.5	773.0	871.5	947.0	971.4
62.5°	650.0	706.0	808.3	882.5	900.8
65°	581.8	639.1	738.9	813.1	833.8
67.5°	510.0	572.1	671.9	740.1	759.6
70°	441.9	506.4	602.5	665.8	674.4
72.5°	368.8	434.6	531.9	572.1	572.1
75°	303.1	370.0	460.1	467.4	461.3
77.5°	231.3	305.5	364.0	349.3	334.7
80°	166.8	239.8	266.6	239.8	220.3
82.5°	112.0	174.1	160.7	127.8	113.2
85°	62.1	92.5	63.3	35.3	25.6
87.5°	23.1	20.7	6.1	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)