

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: P271924

Luminaire Tested: **14CZ2-48HE-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: P271924  
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: 14CZ2-48HE-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: 4373.0 lumens  
Efficiency: N/A  
Efficacy: 118.5 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

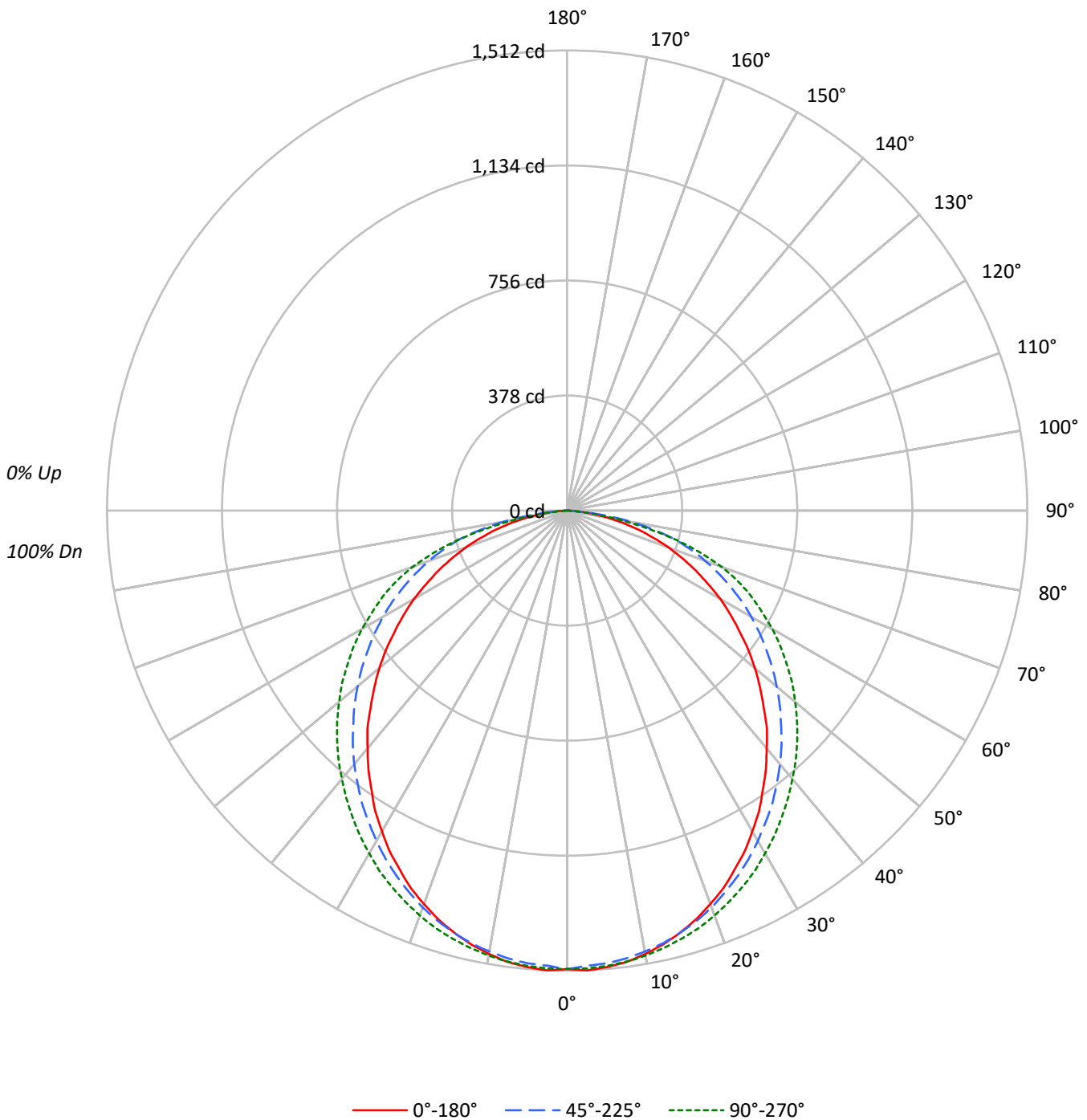
Input Watts (W): 36.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4054	4054	4054
5°	4067	4033	4056
10°	4042	4021	4058
15°	3999	4001	4056
20°	3940	3974	4054
25°	3865	3934	4050
30°	3781	3893	4042
35°	3681	3860	4039
40°	3583	3823	4045
45°	3473	3781	4067
50°	3372	3764	4094
55°	3243	3751	4131
60°	3128	3758	4188
65°	2968	3769	4253
70°	2785	3798	4250
75°	2524	3832	3843
80°	2070	3309	2735
85°	1535	1565	633



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.6	3.3
10°-20°	407.2	9.3
20°-30°	613.4	14.0
30°-40°	736.1	16.8
40°-50°	767.3	17.5
50°-60°	710.3	16.2
60°-70°	573.9	13.1
70°-80°	349.9	8.0
80°-90°	72.2	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°	1163.2	26.6
0°-40°	1899.4	43.4
0°-60°	3376.9	77.2
0°-90°	4373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4373.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1506	1502	1493	1504	1502	143
15°	1435	1436	1436	1456	1456	405
25°	1302	1310	1325	1358	1364	600
35°	1120	1138	1175	1218	1230	702
45°	913	940	994	1049	1069	705
55°	691	727	800	862	880	619
65°	466	512	592	651	668	461
75°	243	296	369	374	370	255
85°	50	74	51	28	20	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1506.5	1506.5	1506.5	1506.5	1506.5
2.5°	1512.4	1507.5	1496.8	1507.5	1505.5
5°	1505.5	1501.6	1492.9	1503.6	1501.6
7.5°	1495.8	1491.9	1484.1	1496.8	1494.8
10°	1479.2	1477.3	1471.4	1486.0	1485.1
12.5°	1459.7	1458.7	1455.8	1472.4	1471.4
15°	1435.3	1436.3	1436.3	1455.8	1455.8
17.5°	1408.0	1410.0	1413.9	1435.3	1438.3
20°	1375.9	1379.8	1387.6	1411.9	1415.8
22.5°	1342.7	1345.6	1357.3	1386.6	1390.5
25°	1301.7	1309.5	1325.1	1358.3	1364.1
27.5°	1262.7	1269.6	1291.0	1325.1	1334.9
30°	1216.9	1227.6	1253.0	1290.0	1300.8
32.5°	1173.0	1184.7	1214.0	1256.9	1266.6
35°	1120.4	1137.9	1175.0	1217.9	1229.6
37.5°	1072.6	1089.2	1131.1	1177.9	1191.6
40°	1019.9	1040.4	1088.2	1137.9	1151.6
42.5°	971.2	990.7	1042.4	1093.1	1111.6
45°	912.7	940.0	993.6	1049.2	1068.7
47.5°	859.1	886.4	947.8	1007.3	1024.8
50°	805.4	834.7	899.0	960.5	978.0
52.5°	749.8	781.0	850.3	911.7	932.2
55°	691.3	727.4	799.6	862.0	880.5
57.5°	635.8	672.8	749.8	813.2	831.8
60°	581.2	619.2	698.2	758.6	778.1
62.5°	520.7	565.6	647.5	706.9	721.6
65°	466.1	511.9	591.9	651.4	667.9
67.5°	408.6	458.3	538.2	592.9	608.5
70°	354.0	405.6	482.7	533.4	540.2
72.5°	295.5	348.1	426.1	458.3	458.3
75°	242.8	296.4	368.6	374.4	369.6
77.5°	185.3	244.7	291.6	279.9	268.1
80°	133.6	192.1	213.5	192.1	176.5
82.5°	89.7	139.4	128.7	102.4	90.7
85°	49.7	74.1	50.7	28.3	20.5
87.5°	18.5	16.6	4.9	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)