

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: P274722

Luminaire Tested: **14CZ2-39HE-RDP-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: P274722  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39HE-RDP-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 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: 2307.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

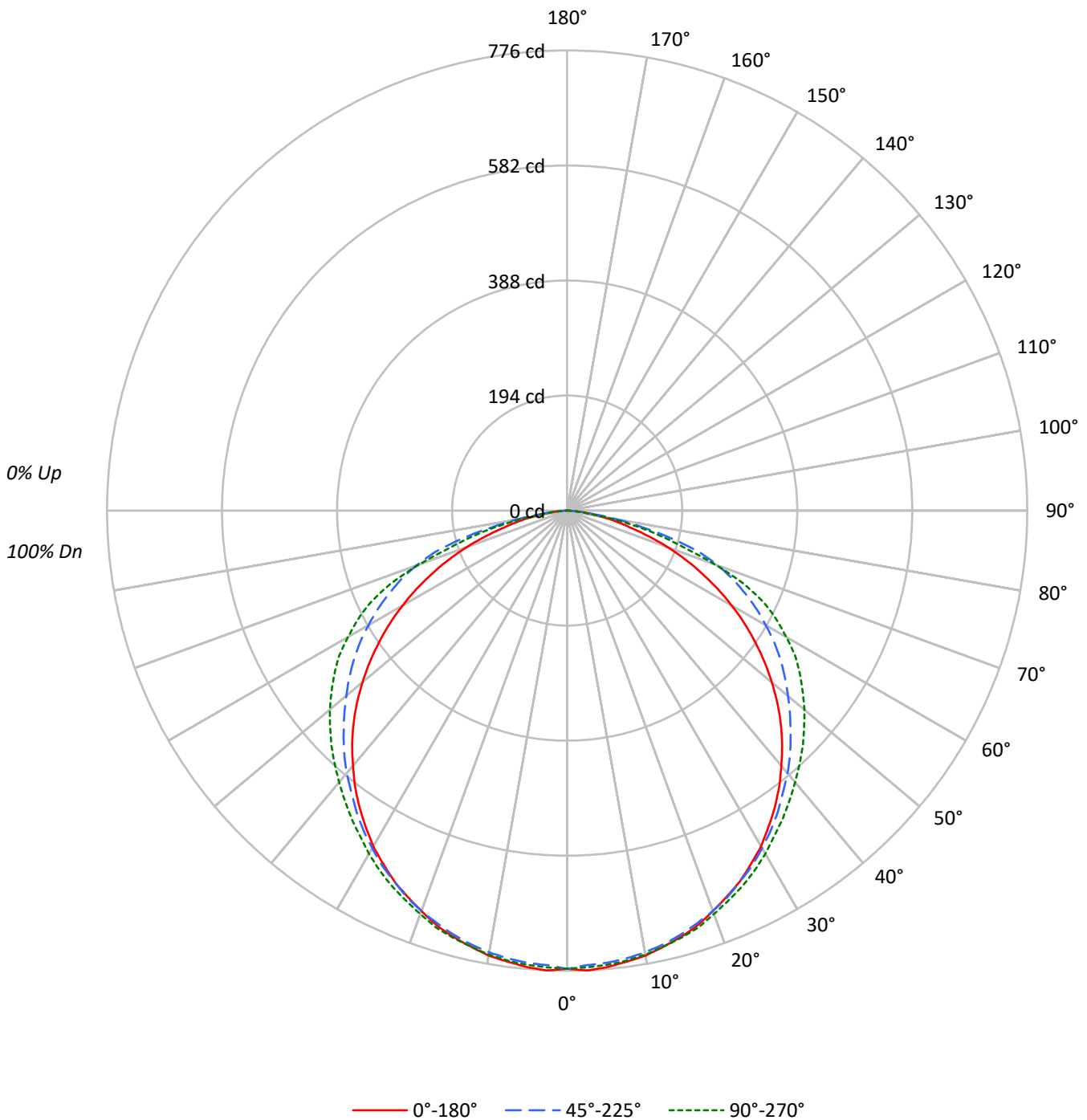
Input Watts (W): 29.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P274722

CATALOG NUMBER: 14CZ2-39HE-RDP-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P274722

CATALOG NUMBER: 14CZ2-39HE-RDP-UNV-L950-CD1-U

**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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
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	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2079	2079	2079
5°	2087	2068	2078
10°	2082	2067	2077
15°	2072	2062	2077
20°	2058	2058	2073
25°	2048	2048	2075
30°	2032	2043	2076
35°	2006	2035	2083
40°	1974	2031	2101
45°	1940	2029	2138
50°	1885	2036	2187
55°	1817	2062	2248
60°	1725	2084	2298
65°	1594	2110	2328
70°	1417	2126	2083
75°	1143	1910	1667
80°	893	1340	1088
85°	611	389	278



TEST NUMBER: P274722

CATALOG NUMBER: 14CZ2-39HE-RDP-UNV-L950-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.1	3.2
10°-20°	209.8	9.1
20°-30°	319.5	13.8
30°-40°	389.2	16.9
40°-50°	412.9	17.9
50°-60°	389.7	16.9
60°-70°	314.6	13.6
70°-80°	170.7	7.4
80°-90°	27.6	1.2
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°	602.5	26.1
0°-40°	991.6	43.0
0°-60°	1794.1	77.8
0°-90°	2307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2307.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	773	771	766	771	769	73
15°	744	742	740	746	746	210
25°	690	688	690	697	699	318
35°	611	614	620	632	634	382
45°	510	517	533	553	562	393
55°	387	403	440	468	479	346
65°	250	281	331	358	366	248
75°	110	160	184	166	160	120
85°	20	22	13	11	9	25
90°	0	0	0	0	0	



TEST NUMBER: P274722

CATALOG NUMBER: 14CZ2-39HE-RDP-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772.7	772.7	772.7	772.7	772.7
2.5°	776.3	772.7	767.3	772.7	770.9
5°	772.7	770.9	765.5	770.9	769.1
7.5°	767.3	767.3	761.9	765.5	765.5
10°	761.9	760.1	756.5	761.9	760.1
12.5°	752.9	751.1	749.3	754.7	752.9
15°	743.9	742.1	740.3	745.7	745.7
17.5°	733.0	731.2	729.4	736.7	736.7
20°	718.6	718.6	718.6	725.8	724.0
22.5°	704.2	704.2	706.0	713.2	711.4
25°	689.8	688.0	689.8	697.0	698.8
27.5°	671.8	673.6	675.4	682.6	684.4
30°	653.8	655.6	657.4	666.4	668.2
32.5°	632.2	635.8	639.4	650.2	650.2
35°	610.6	614.2	619.6	632.2	634.0
37.5°	587.2	590.8	598.0	612.4	616.0
40°	561.9	567.3	578.2	592.6	598.0
42.5°	536.7	543.9	556.5	572.8	580.0
45°	509.7	516.9	533.1	552.9	561.9
47.5°	480.9	489.9	509.7	534.9	542.1
50°	450.3	462.9	486.3	513.3	522.3
52.5°	419.7	434.1	462.9	491.7	500.7
55°	387.2	403.4	439.5	468.3	479.1
57.5°	354.8	372.8	414.3	444.9	455.7
60°	320.6	342.2	387.2	417.9	426.9
62.5°	286.4	311.6	360.2	390.8	398.0
65°	250.4	281.0	331.4	358.4	365.6
67.5°	216.1	252.2	302.6	322.4	322.4
70°	180.1	219.7	270.2	275.6	264.8
72.5°	144.1	189.1	234.1	214.3	205.3
75°	109.9	160.3	183.7	165.7	160.3
77.5°	82.9	129.7	129.7	118.9	115.3
80°	57.6	99.1	86.5	75.6	70.2
82.5°	37.8	55.8	45.0	36.0	30.6
85°	19.8	21.6	12.6	10.8	9.0
87.5°	7.2	3.6	1.8	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)