

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: P294850

Luminaire Tested: **22CZ2-34HE-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

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: P294850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-22)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34HE-HRP-UNV-L950-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
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: 2471.7 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

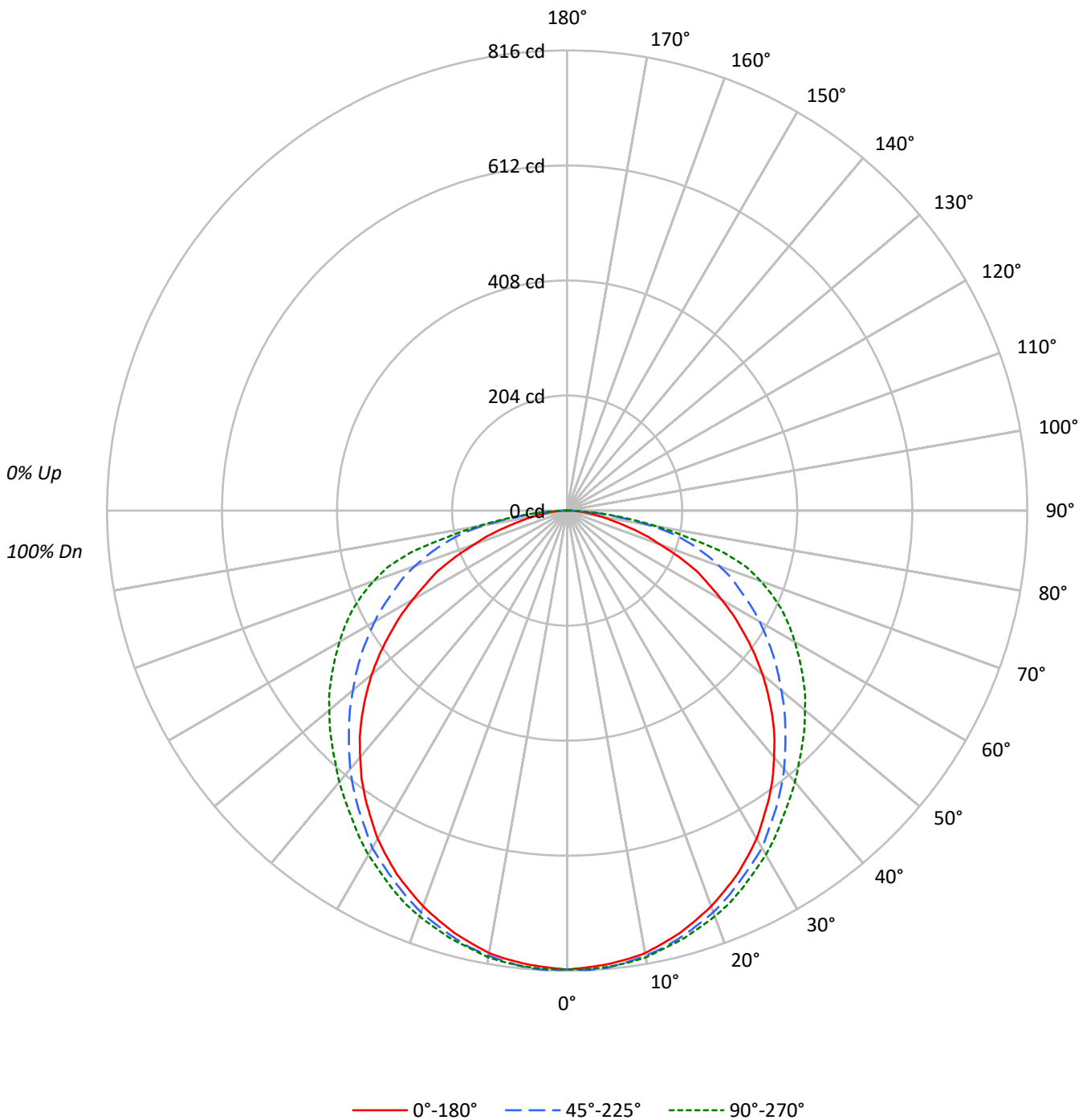
Input Watts (W): 25.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P294850

CATALOG NUMBER: 22CZ2-34HE-HRP-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P294850

CATALOG NUMBER: 22CZ2-34HE-HRP-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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73	80	75	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

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

	0°	45°	90°
0°	2190	2190	2190
5°	2182	2199	2195
10°	2177	2190	2199
15°	2159	2181	2194
20°	2139	2170	2192
25°	2116	2153	2190
30°	2088	2146	2190
35°	2049	2121	2187
40°	2005	2103	2207
45°	1958	2083	2243
50°	1893	2076	2304
55°	1807	2092	2392
60°	1703	2123	2509
65°	1608	2164	2681
70°	1374	2257	2871
75°	1151	2351	2983
80°	942	2272	2489
85°	818	1686	1831



TEST NUMBER: P294850

CATALOG NUMBER: 22CZ2-34HE-HRP-UNV-L950-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.1	3.1
10°-20°	220.7	8.9
20°-30°	334.4	13.5
30°-40°	403.8	16.3
40°-50°	424.3	17.2
50°-60°	399.2	16.2
60°-70°	332.9	13.5
70°-80°	220.6	8.9
80°-90°	58.8	2.4
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°	632.2	25.6
0°-40°	1036.0	41.9
0°-60°	1859.5	75.2
0°-90°	2471.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2471.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	808	809	814	814	812	77
15°	775	778	783	786	787	219
25°	713	717	725	734	738	328
35°	624	630	646	660	666	390
45°	514	522	547	575	589	396
55°	385	402	446	491	510	345
65°	253	274	340	396	421	246
75°	111	154	226	273	287	120
85°	26	40	55	59	59	31
90°	0	0	0	0	0	



TEST NUMBER: P294850

CATALOG NUMBER: 22CZ2-34HE-HRP-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	813.9	813.9	813.9	813.9	813.9
2.5°	810.8	812.4	815.5	815.5	813.9
5°	807.7	809.2	813.9	813.9	812.4
7.5°	803.0	804.6	807.7	810.8	809.2
10°	796.8	798.3	801.4	804.6	804.6
12.5°	785.8	787.4	793.6	795.2	795.2
15°	774.9	778.1	782.7	785.8	787.4
17.5°	760.9	764.0	770.3	776.5	776.5
20°	746.9	750.0	757.8	764.0	765.6
22.5°	729.7	734.4	742.2	750.0	753.1
25°	712.6	717.2	725.0	734.4	737.5
27.5°	692.3	697.0	707.9	718.8	720.4
30°	672.0	676.7	690.7	700.1	704.8
32.5°	647.1	653.3	667.3	681.4	686.1
35°	623.7	629.9	645.5	659.5	665.8
37.5°	598.7	605.0	622.1	639.3	647.1
40°	570.7	578.5	598.7	617.5	628.4
42.5°	544.2	552.0	572.2	597.2	608.1
45°	514.5	522.3	547.3	575.4	589.4
47.5°	483.4	492.7	522.3	556.6	570.7
50°	452.2	463.1	495.8	534.8	550.4
52.5°	419.4	433.5	470.9	513.0	531.7
55°	385.1	402.3	445.9	491.2	509.9
57.5°	352.4	368.0	419.4	467.8	488.0
60°	316.5	336.8	394.5	444.4	466.2
62.5°	282.2	304.0	368.0	421.0	444.4
65°	252.6	274.4	339.9	396.0	421.0
67.5°	213.6	243.2	316.5	369.5	394.5
70°	174.6	215.2	286.9	341.5	364.9
72.5°	145.0	184.0	257.3	311.8	333.7
75°	110.7	154.4	226.1	272.9	286.9
77.5°	82.6	127.9	193.3	216.7	218.3
80°	60.8	98.2	146.6	154.4	160.6
82.5°	42.1	68.6	95.1	104.5	107.6
85°	26.5	40.5	54.6	59.3	59.3
87.5°	14.0	15.6	18.7	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)