

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: P271991

Luminaire Tested: **22CZ2-34HE-UNV-L940-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: P271991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-UNV-L940-CD1-U
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2892.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

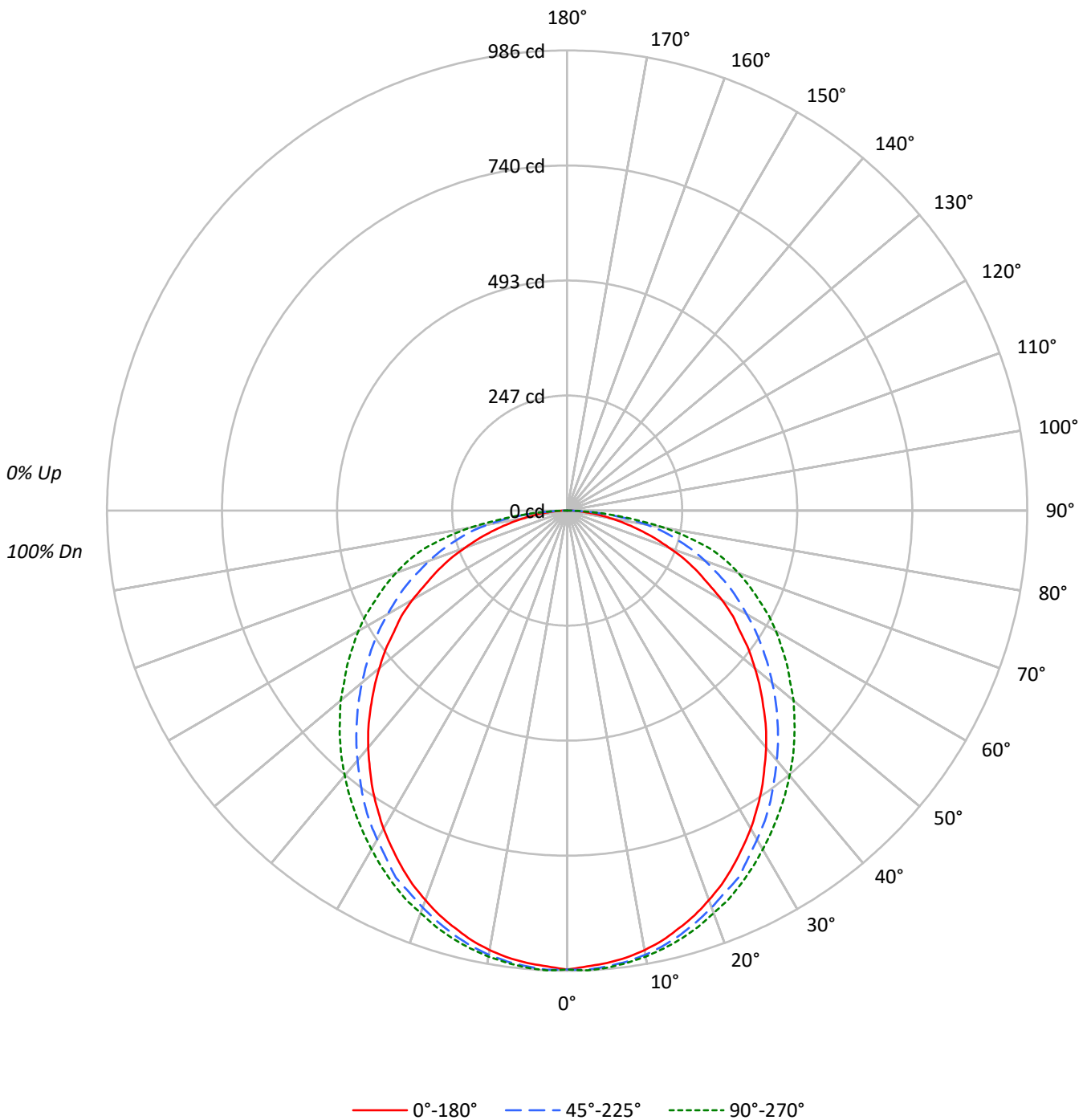
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2646	2646	2646
5°	2629	2649	2656
10°	2613	2640	2652
15°	2581	2620	2644
20°	2543	2592	2629
25°	2497	2578	2620
30°	2445	2529	2605
35°	2389	2496	2599
40°	2329	2454	2604
45°	2264	2426	2621
50°	2198	2401	2651
55°	2123	2390	2697
60°	2060	2390	2780
65°	1957	2429	2881
70°	1825	2474	3068
75°	1672	2560	3315
80°	1455	2669	3264
85°	1275	2371	2594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	3.2
10°-20°	264.9	9.2
20°-30°	397.6	13.7
30°-40°	475.1	16.4
40°-50°	494.1	17.1
50°-60°	457.9	15.8
60°-70°	375.6	13.0
70°-80°	253.9	8.8
80°-90°	79.8	2.8
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°	755.5	26.1
0°-40°	1230.7	42.6
0°-60°	2182.7	75.5
0°-90°	2892.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	973	975	980	982	983	92
15°	926	931	941	946	949	261
25°	841	848	868	878	882	387
35°	727	737	760	783	791	455
45°	595	606	638	674	689	459
55°	452	467	510	555	575	407
65°	307	324	381	431	452	304
75°	161	188	246	296	319	171
85°	41	57	77	85	84	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	983.3	983.3	983.3	983.3	983.3
2.5°	977.6	980.5	984.8	986.2	986.2
5°	973.4	974.8	980.5	981.9	983.3
7.5°	966.3	969.1	974.8	976.2	977.6
10°	956.3	959.1	966.3	969.1	970.5
12.5°	943.5	946.3	954.9	959.1	960.6
15°	926.4	930.7	940.6	946.3	949.2
17.5°	909.3	913.6	923.6	932.1	934.9
20°	888.0	897.9	905.1	916.4	917.9
22.5°	866.6	872.3	885.1	896.5	902.2
25°	841.0	848.1	868.1	878.0	882.3
27.5°	814.0	824.0	839.6	855.3	861.0
30°	787.0	794.1	814.0	832.5	838.2
32.5°	757.1	767.0	788.4	806.9	815.4
35°	727.2	737.1	759.9	782.7	791.2
37.5°	694.5	705.8	728.6	755.6	767.0
40°	663.1	671.7	698.7	731.5	741.4
42.5°	630.4	640.4	668.8	704.4	715.8
45°	594.8	606.2	637.5	674.5	688.8
47.5°	560.7	572.1	606.2	643.2	660.3
50°	525.1	539.3	573.5	616.2	633.3
52.5°	491.0	503.8	542.2	586.3	602.0
55°	452.5	466.8	509.5	555.0	574.9
57.5°	421.2	431.2	478.1	525.1	545.0
60°	382.8	395.6	444.0	493.8	516.6
62.5°	341.5	362.9	412.7	463.9	486.7
65°	307.4	324.5	381.4	431.2	452.5
67.5°	271.8	290.3	345.8	398.5	422.6
70°	232.0	256.2	314.5	367.1	389.9
72.5°	196.4	222.0	281.8	333.0	357.2
75°	160.8	187.8	246.2	296.0	318.8
77.5°	126.7	156.5	213.5	251.9	266.1
80°	93.9	122.4	172.2	199.2	210.6
82.5°	65.5	89.7	126.7	140.9	143.7
85°	41.3	56.9	76.8	85.4	84.0
87.5°	18.5	22.8	28.5	31.3	29.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)