

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: P272036

Luminaire Tested: **22CZ2-34HE-S-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: P272036
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L950-CD1-U
Description: 2'X2' TROFFER LED MODULE,SMOOTH 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: 3238.0 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

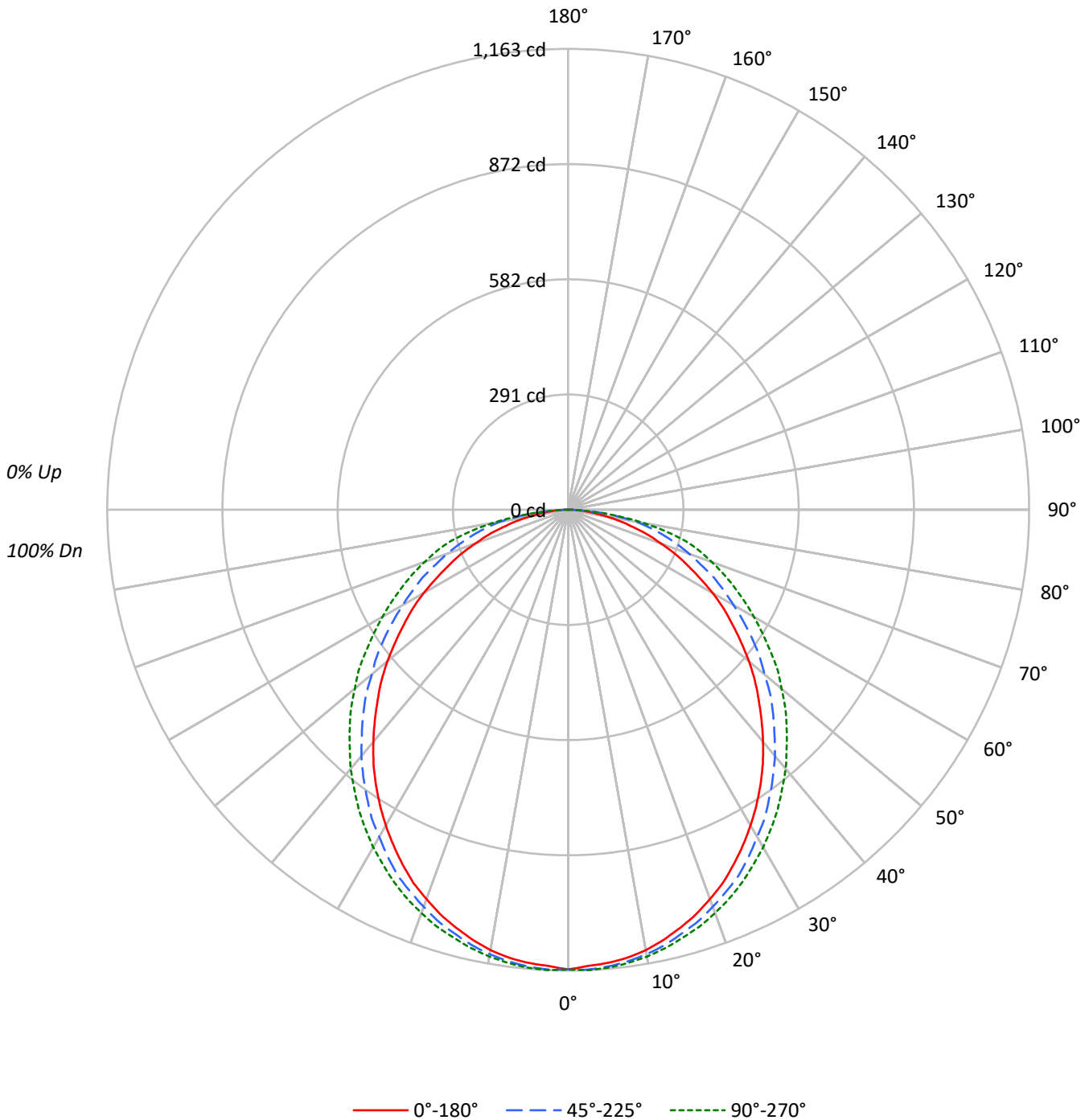
Input Watts (W): 25.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3122	3122	3122
5°	3102	3126	3134
10°	3084	3113	3129
15°	3043	3085	3115
20°	2994	3054	3102
25°	2934	3024	3082
30°	2859	2962	3056
35°	2779	2908	3028
40°	2686	2850	2999
45°	2587	2783	2967
50°	2492	2707	2941
55°	2374	2658	2920
60°	2268	2594	2911
65°	2117	2578	2944
70°	1950	2555	3031
75°	1759	2592	3189
80°	1522	2669	2997
85°	1260	2238	2238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	3.4
10°-20°	312.3	9.6
20°-30°	467.2	14.4
30°-40°	553.3	17.1
40°-50°	563.9	17.4
50°-60°	505.4	15.6
60°-70°	395.7	12.2
70°-80°	255.1	7.9
80°-90°	75.4	2.3
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°	889.2	27.5
0°-40°	1442.5	44.5
0°-60°	2511.8	77.6
0°-90°	3238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1148	1151	1157	1159	1160	109
15°	1092	1098	1107	1116	1118	308
25°	988	997	1018	1032	1038	455
35°	846	857	885	912	922	529
45°	680	695	731	769	780	525
55°	506	523	566	606	622	454
65°	332	352	405	444	462	330
75°	169	195	249	292	307	181
85°	41	56	72	72	72	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.3	1160.3	1160.3	1160.3	1160.3
2.5°	1152.7	1155.7	1161.8	1163.3	1163.3
5°	1148.2	1151.2	1157.3	1158.8	1160.3
7.5°	1140.6	1142.1	1149.7	1152.7	1154.2
10°	1128.6	1131.6	1139.1	1143.7	1145.2
12.5°	1111.9	1116.5	1125.5	1131.6	1133.1
15°	1092.3	1098.3	1107.4	1116.5	1118.0
17.5°	1071.1	1077.2	1089.3	1099.8	1102.9
20°	1045.5	1053.0	1066.6	1078.7	1083.2
22.5°	1019.8	1025.8	1042.4	1057.5	1062.1
25°	988.0	997.1	1018.3	1031.9	1037.9
27.5°	954.8	965.4	986.5	1004.7	1010.7
30°	920.1	930.6	953.3	976.0	983.5
32.5°	883.8	895.9	923.1	945.7	953.3
35°	846.0	856.6	885.3	912.5	921.6
37.5°	806.8	815.8	849.1	877.8	886.8
40°	764.5	776.5	811.3	844.5	853.6
42.5°	722.2	735.7	770.5	806.8	815.8
45°	679.8	695.0	731.2	769.0	779.6
47.5°	639.1	651.1	691.9	728.2	743.3
50°	595.2	607.3	646.6	687.4	702.5
52.5°	549.9	566.5	608.8	648.1	666.3
55°	506.1	522.7	566.5	605.8	622.4
57.5°	465.3	478.9	524.2	565.0	581.6
60°	421.5	433.6	481.9	525.8	540.9
62.5°	374.7	392.8	442.7	483.4	501.6
65°	332.4	352.0	404.9	444.2	462.3
67.5°	293.1	311.2	362.6	404.9	424.5
70°	247.8	271.9	324.8	367.1	385.2
72.5°	211.5	232.7	287.0	329.3	349.0
75°	169.2	194.9	249.3	291.6	306.7
77.5°	134.5	160.1	211.5	244.7	252.3
80°	98.2	123.9	172.2	188.8	193.4
82.5°	66.5	90.6	123.9	128.4	129.9
85°	40.8	55.9	72.5	72.5	72.5
87.5°	19.6	22.7	25.7	24.2	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)