

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: P271918

Luminaire Tested: **14CZ2-39HE-UNV-L935-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: P271918
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: 14CZ2-39HE-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 90CRI
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3352.0 lumens
Efficiency: N/A
Efficacy: 114.4 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

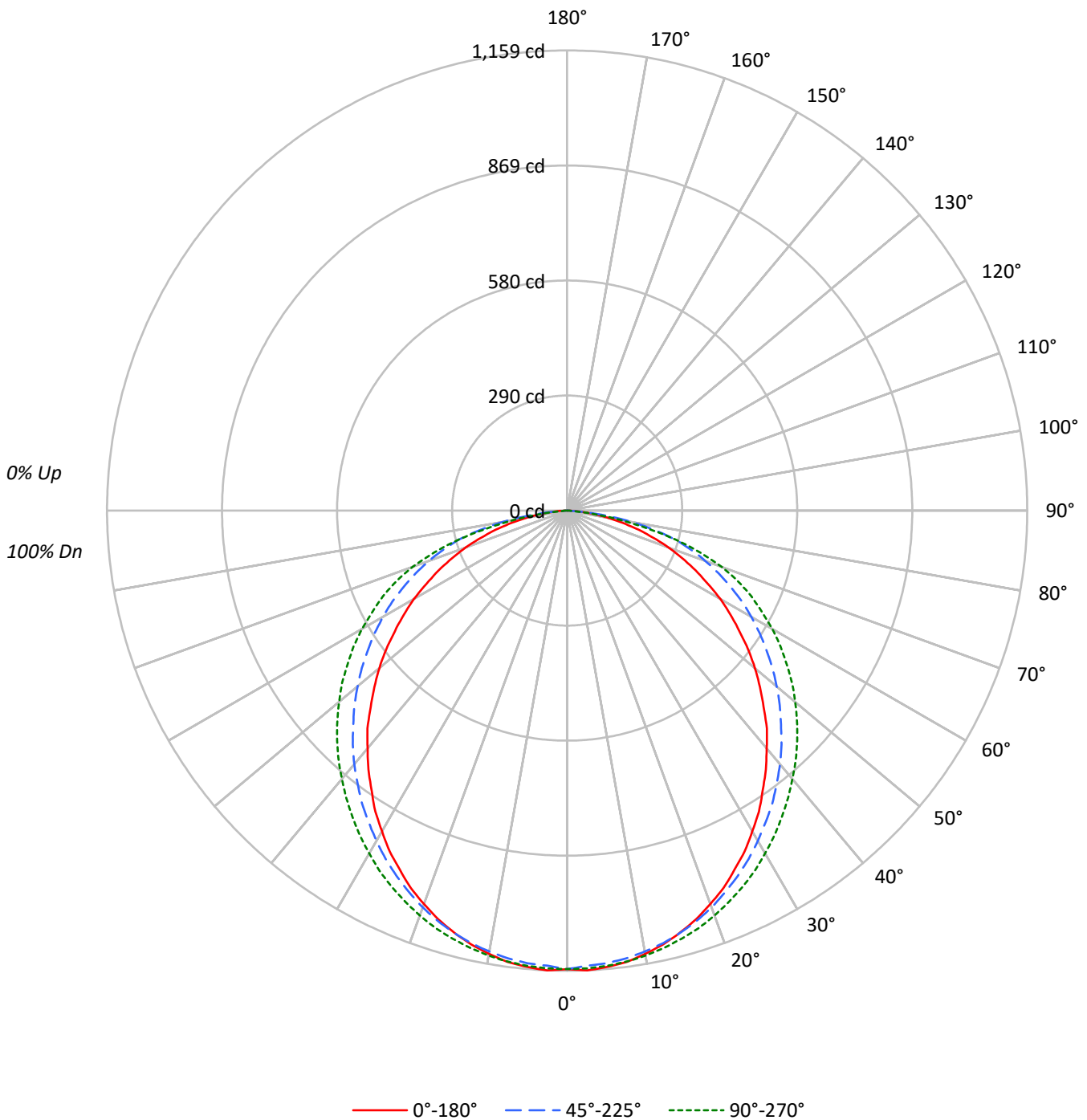
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3108	3108	3108
5°	3117	3091	3109
10°	3098	3082	3110
15°	3065	3067	3109
20°	3020	3046	3108
25°	2963	3016	3105
30°	2898	2984	3098
35°	2821	2959	3096
40°	2746	2930	3101
45°	2662	2898	3118
50°	2585	2885	3139
55°	2486	2875	3166
60°	2398	2880	3210
65°	2275	2889	3260
70°	2135	2911	3258
75°	1935	2937	2946
80°	1587	2537	2097
85°	1176	1201	485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	3.3
10°-20°	312.1	9.3
20°-30°	470.2	14.0
30°-40°	564.3	16.8
40°-50°	588.1	17.5
50°-60°	544.5	16.2
60°-70°	439.9	13.1
70°-80°	268.2	8.0
80°-90°	55.4	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°	891.6	26.6
0°-40°	1455.9	43.4
0°-60°	2588.5	77.2
0°-90°	3352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1155	1155	1155	1155	1155	
5°	1154	1151	1144	1152	1151	110
15°	1100	1101	1101	1116	1116	310
25°	998	1004	1016	1041	1046	460
35°	859	872	901	934	942	538
45°	700	720	762	804	819	541
55°	530	558	613	661	675	475
65°	357	392	454	499	512	353
75°	186	227	282	287	283	195
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1154.8	1154.8	1154.8	1154.8	1154.8
2.5°	1159.3	1155.5	1147.3	1155.5	1154.0
5°	1154.0	1151.0	1144.3	1152.5	1151.0
7.5°	1146.6	1143.6	1137.6	1147.3	1145.8
10°	1133.8	1132.4	1127.9	1139.1	1138.3
12.5°	1118.9	1118.2	1115.9	1128.6	1127.9
15°	1100.2	1101.0	1101.0	1115.9	1115.9
17.5°	1079.3	1080.8	1083.8	1100.2	1102.5
20°	1054.6	1057.6	1063.6	1082.3	1085.3
22.5°	1029.2	1031.4	1040.4	1062.8	1065.8
25°	997.8	1003.8	1015.8	1041.2	1045.7
27.5°	967.9	973.2	989.6	1015.8	1023.2
30°	932.8	941.0	960.4	988.8	997.1
32.5°	899.2	908.1	930.5	963.4	970.9
35°	858.8	872.2	900.6	933.5	942.5
37.5°	822.2	834.9	867.0	902.9	913.4
40°	781.8	797.5	834.1	872.2	882.7
42.5°	744.4	759.4	799.0	837.9	852.1
45°	699.6	720.5	761.6	804.2	819.2
47.5°	658.5	679.4	726.5	772.1	785.5
50°	617.4	639.8	689.1	736.2	749.7
52.5°	574.8	598.7	651.8	698.8	714.5
55°	529.9	557.6	612.9	660.7	674.9
57.5°	487.3	515.7	574.8	623.4	637.6
60°	445.5	474.6	535.2	581.5	596.4
62.5°	399.1	433.5	496.3	541.9	553.1
65°	357.3	392.4	453.7	499.3	512.0
67.5°	313.2	351.3	412.6	454.4	466.4
70°	271.3	310.9	370.0	408.8	414.1
72.5°	226.5	266.8	326.6	351.3	351.3
75°	186.1	227.2	282.5	287.0	283.3
77.5°	142.0	187.6	223.5	214.5	205.5
80°	102.4	147.2	163.7	147.2	135.3
82.5°	68.8	106.9	98.7	78.5	69.5
85°	38.1	56.8	38.9	21.7	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)