

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: P475455

Luminaire Tested: **14CZ2-39HE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475455
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-HRP-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3060.7 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

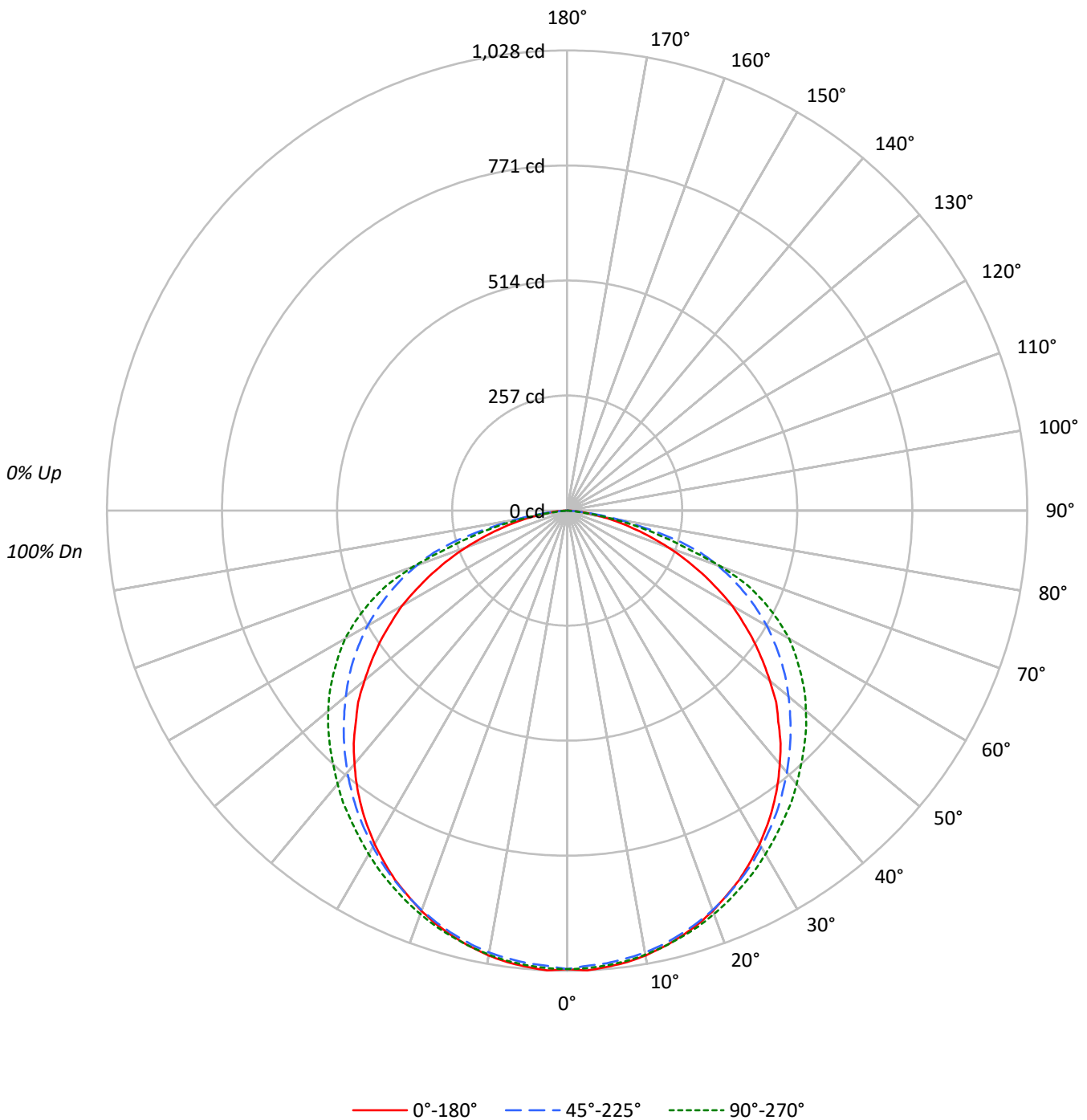
Input Watts (W): 28.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	70	64	87	77	69	63	74	68	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	39	51	44	39	50	43	39	37
7	64	50	41	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	41	33	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°	2757	2757	2757
5°	2765	2742	2754
10°	2758	2740	2753
15°	2743	2730	2749
20°	2725	2720	2747
25°	2702	2708	2747
30°	2672	2696	2754
35°	2639	2689	2769
40°	2596	2682	2802
45°	2539	2686	2849
50°	2472	2702	2916
55°	2390	2736	2993
60°	2294	2772	3082
65°	2118	2798	3099
70°	1888	2810	2870
75°	1581	2603	2230
80°	1201	1830	1464
85°	846	642	204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.9	3.2
10°-20°	277.8	9.1
20°-30°	422.3	13.8
30°-40°	514.2	16.8
40°-50°	546.2	17.8
50°-60°	516.7	16.9
60°-70°	418.6	13.7
70°-80°	229.5	7.5
80°-90°	38.3	1.3
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°	797.1	26.0
0°-40°	1311.3	42.8
0°-60°	2374.2	77.6
0°-90°	3060.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3060.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1024	1022	1015	1022	1020	97
15°	985	983	980	988	987	278
25°	910	910	912	924	925	419
35°	803	806	818	838	843	502
45°	667	678	706	738	748	516
55°	509	532	583	626	638	455
65°	333	370	439	478	487	329
75°	152	210	250	221	214	163
85°	27	36	21	10	7	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.4	1024.4	1024.4	1024.4	1024.4
2.5°	1028.2	1024.4	1017.8	1024.4	1023.5
5°	1023.5	1021.6	1015.0	1021.6	1019.7
7.5°	1017.8	1015.9	1009.3	1016.8	1015.0
10°	1009.3	1007.4	1002.7	1009.3	1007.4
12.5°	997.9	997.0	992.3	999.8	997.9
15°	984.7	982.8	980.0	987.6	986.6
17.5°	969.6	967.7	965.8	975.3	974.3
20°	951.6	950.7	949.8	960.1	959.2
22.5°	930.9	930.9	931.8	943.1	943.1
25°	910.1	910.1	912.0	924.2	925.2
27.5°	885.5	887.4	891.2	904.4	907.2
30°	860.0	861.9	867.5	882.7	886.4
32.5°	832.6	835.4	843.0	860.9	864.7
35°	803.3	806.1	818.4	838.2	843.0
37.5°	772.1	776.8	791.0	813.7	822.2
40°	739.0	746.6	763.6	788.2	797.6
42.5°	705.9	712.6	735.2	763.6	773.0
45°	667.2	677.6	705.9	738.1	748.5
47.5°	633.2	642.6	675.7	711.6	723.9
50°	590.6	604.8	645.5	685.1	696.5
52.5°	550.0	568.9	615.2	655.8	669.1
55°	509.4	532.1	583.1	625.6	637.9
57.5°	466.8	491.4	549.1	592.5	605.8
60°	426.2	452.7	515.0	559.5	572.7
62.5°	378.0	411.1	478.2	520.7	532.1
65°	332.6	370.5	439.4	478.2	486.7
67.5°	286.3	330.8	399.7	433.8	436.6
70°	240.0	290.1	357.2	378.0	364.8
72.5°	194.7	250.4	311.9	294.8	279.7
75°	152.1	209.8	250.4	221.1	214.5
77.5°	112.5	172.0	174.8	160.7	155.9
80°	77.5	133.2	118.1	102.1	94.5
82.5°	50.1	82.2	65.2	48.2	43.5
85°	27.4	35.9	20.8	10.4	6.6
87.5°	10.4	6.6	2.8	2.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)