

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: P475464

Luminaire Tested: **14CZ2-39HE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475464
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-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3171.7 lumens
Efficiency: N/A
Efficacy: 111.7 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

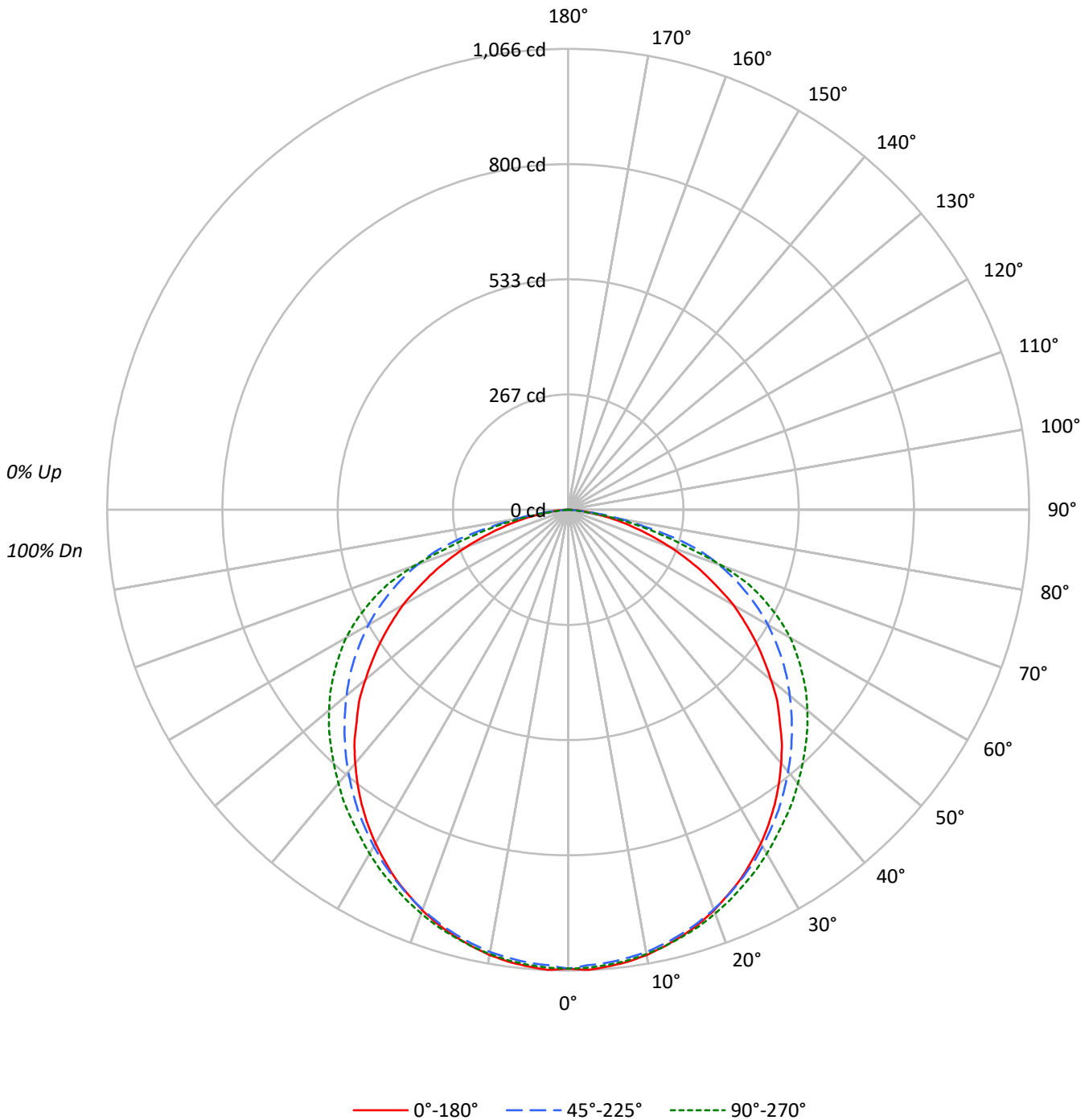
Input Watts (W): 28.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475464

CATALOG NUMBER: 14CZ2-39HE-HRP-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475464

CATALOG NUMBER: 14CZ2-39HE-HRP-UNV-L835-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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37					37			
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	41	33	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2857	2857	2857
5°	2865	2841	2854
10°	2858	2839	2852
15°	2843	2829	2848
20°	2824	2818	2846
25°	2800	2806	2847
30°	2769	2793	2854
35°	2734	2786	2870
40°	2690	2780	2903
45°	2631	2784	2952
50°	2563	2800	3021
55°	2476	2835	3101
60°	2377	2872	3194
65°	2195	2900	3211
70°	1957	2913	2974
75°	1640	2698	2311
80°	1244	1897	1517
85°	877	664	213



TEST NUMBER: P475464

CATALOG NUMBER: 14CZ2-39HE-HRP-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	3.2
10°-20°	287.9	9.1
20°-30°	437.6	13.8
30°-40°	532.8	16.8
40°-50°	566.0	17.8
50°-60°	535.4	16.9
60°-70°	433.8	13.7
70°-80°	237.8	7.5
80°-90°	39.7	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°	826.0	26.0
0°-40°	1358.8	42.8
0°-60°	2460.3	77.6
0°-90°	3171.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3171.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1061	1059	1052	1059	1057	101
15°	1020	1018	1016	1023	1022	288
25°	943	943	945	958	959	434
35°	832	835	848	869	874	520
45°	691	702	732	765	776	534
55°	528	551	604	648	661	471
65°	345	384	455	496	504	341
75°	158	217	260	229	222	169
85°	28	37	22	11	7	36
90°	0	0	0	0	0	



TEST NUMBER: P475464

CATALOG NUMBER: 14CZ2-39HE-HRP-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1061.6	1061.6	1061.6	1061.6	1061.6
2.5°	1065.5	1061.6	1054.7	1061.6	1060.6
5°	1060.6	1058.6	1051.8	1058.6	1056.7
7.5°	1054.7	1052.7	1045.9	1053.7	1051.8
10°	1045.9	1043.9	1039.0	1045.9	1043.9
12.5°	1034.1	1033.2	1028.3	1036.1	1034.1
15°	1020.4	1018.5	1015.5	1023.4	1022.4
17.5°	1004.8	1002.8	1000.8	1010.6	1009.7
20°	986.2	985.2	984.2	995.0	994.0
22.5°	964.6	964.6	965.6	977.3	977.3
25°	943.1	943.1	945.0	957.8	958.7
27.5°	917.6	919.6	923.5	937.2	940.1
30°	891.2	893.1	899.0	914.7	918.6
32.5°	862.8	865.7	873.5	892.1	896.1
35°	832.4	835.3	848.1	868.6	873.5
37.5°	800.1	805.0	819.7	843.2	852.0
40°	765.8	773.6	791.3	816.7	826.5
42.5°	731.5	738.4	761.9	791.3	801.1
45°	691.4	702.2	731.5	764.8	775.6
47.5°	656.1	665.9	700.2	737.4	750.1
50°	612.1	626.8	668.9	710.0	721.7
52.5°	570.0	589.5	637.5	679.6	693.3
55°	527.8	551.3	604.2	648.3	661.0
57.5°	483.8	509.2	569.0	614.0	627.7
60°	441.7	469.1	533.7	579.7	593.5
62.5°	391.7	426.0	495.5	539.6	551.3
65°	344.7	383.9	455.4	495.5	504.3
67.5°	296.7	342.8	414.2	449.5	452.4
70°	248.7	300.6	370.2	391.7	378.0
72.5°	201.7	259.5	323.2	305.5	289.9
75°	157.7	217.4	259.5	229.2	222.3
77.5°	116.5	178.2	181.2	166.5	161.6
80°	80.3	138.1	122.4	105.8	97.9
82.5°	51.9	85.2	67.6	49.9	45.0
85°	28.4	37.2	21.5	10.8	6.9
87.5°	10.8	6.9	2.9	2.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)