

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: P475462

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475462
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-HRP-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

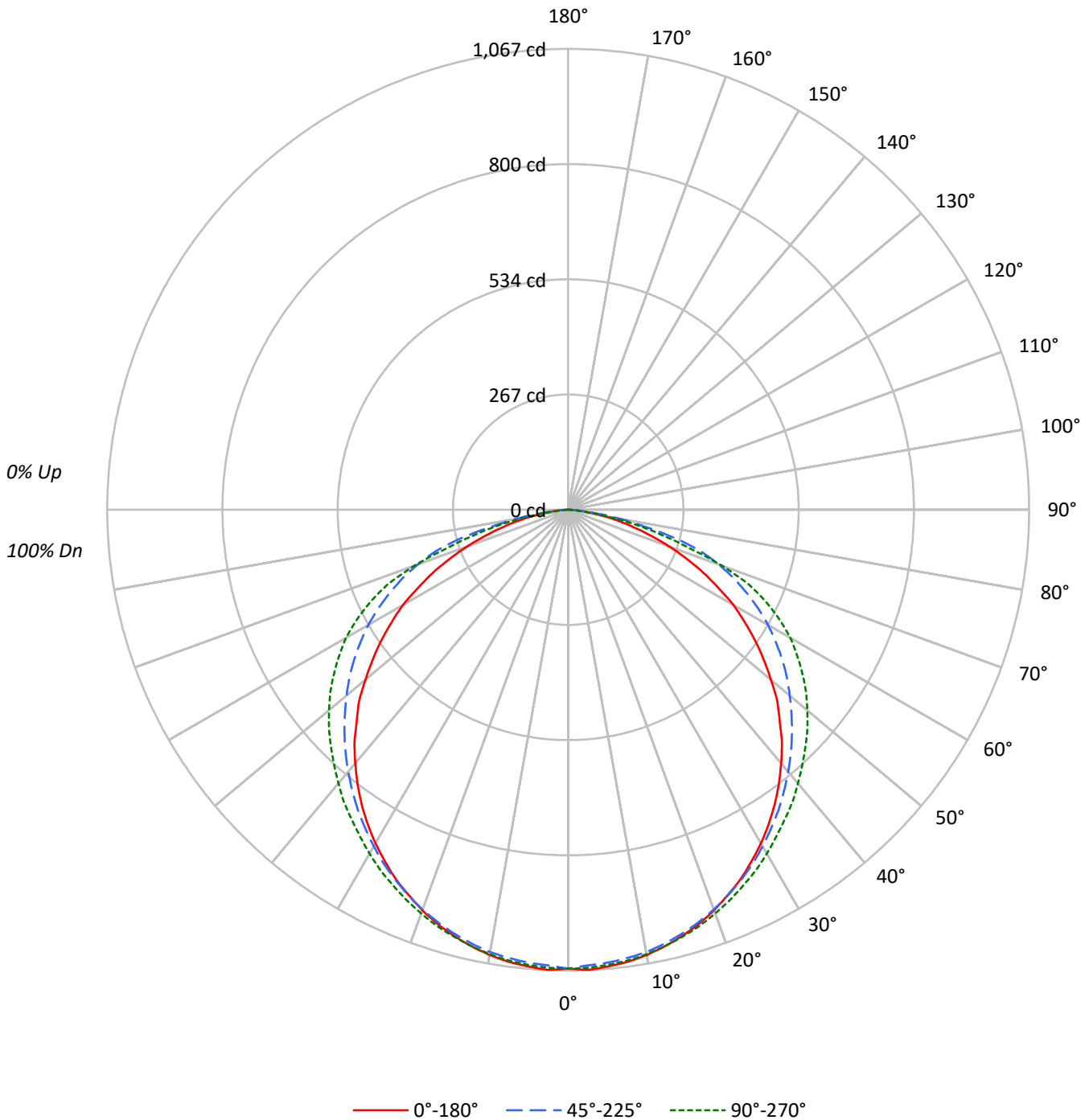
Lumens per Lamp: N/A
Luminaire Lumens: 3174.9 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 29.8
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°	2859	2859	2859
5°	2868	2844	2857
10°	2861	2842	2855
15°	2846	2832	2851
20°	2827	2821	2849
25°	2803	2809	2850
30°	2772	2796	2857
35°	2737	2789	2872
40°	2693	2783	2907
45°	2634	2787	2955
50°	2565	2803	3025
55°	2479	2837	3104
60°	2379	2876	3197
65°	2197	2902	3215
70°	1959	2916	2977
75°	1641	2701	2313
80°	1246	1898	1519
85°	877	667	213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	3.2
10°-20°	288.2	9.1
20°-30°	438.1	13.8
30°-40°	533.4	16.8
40°-50°	566.6	17.8
50°-60°	536.0	16.9
60°-70°	434.3	13.7
70°-80°	238.1	7.5
80°-90°	39.8	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°	826.8	26.0
0°-40°	1360.2	42.8
0°-60°	2462.8	77.6
0°-90°	3174.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1063	1063	1063	1063	1063	
5°	1062	1060	1053	1060	1058	101
15°	1022	1020	1017	1024	1023	288
25°	944	944	946	959	960	435
35°	833	836	849	870	874	521
45°	692	703	732	766	776	535
55°	528	552	605	649	662	472
65°	345	384	456	496	505	341
75°	158	218	260	229	222	169
85°	28	37	22	11	7	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1062.6	1062.6	1062.6	1062.6	1062.6
2.5°	1066.6	1062.6	1055.8	1062.6	1061.7
5°	1061.7	1059.7	1052.8	1059.7	1057.7
7.5°	1055.8	1053.8	1047.0	1054.8	1052.8
10°	1047.0	1045.0	1040.1	1047.0	1045.0
12.5°	1035.2	1034.2	1029.3	1037.2	1035.2
15°	1021.5	1019.5	1016.6	1024.4	1023.4
17.5°	1005.8	1003.8	1001.9	1011.7	1010.7
20°	987.2	986.2	985.2	996.0	995.0
22.5°	965.6	965.6	966.6	978.3	978.3
25°	944.0	944.0	946.0	958.7	959.7
27.5°	918.5	920.5	924.4	938.1	941.1
30°	892.1	894.0	899.9	915.6	919.5
32.5°	863.6	866.6	874.4	893.1	897.0
35°	833.3	836.2	848.9	869.5	874.4
37.5°	800.9	805.8	820.5	844.0	852.9
40°	766.6	774.4	792.1	817.6	827.4
42.5°	732.3	739.1	762.7	792.1	801.9
45°	692.1	702.9	732.3	765.6	776.4
47.5°	656.8	666.6	700.9	738.2	750.9
50°	612.7	627.4	669.5	710.7	722.5
52.5°	570.5	590.1	638.2	680.3	694.1
55°	528.4	551.9	604.8	649.0	661.7
57.5°	484.3	509.8	569.6	614.6	628.4
60°	442.1	469.6	534.3	580.3	594.1
62.5°	392.1	426.4	496.0	540.1	551.9
65°	345.1	384.3	455.8	496.0	504.9
67.5°	297.0	343.1	414.7	450.0	452.9
70°	249.0	301.0	370.6	392.1	378.4
72.5°	201.9	259.8	323.5	305.9	290.2
75°	157.8	217.6	259.8	229.4	222.5
77.5°	116.7	178.4	181.4	166.7	161.7
80°	80.4	138.2	122.5	105.9	98.0
82.5°	52.0	85.3	67.6	50.0	45.1
85°	28.4	37.3	21.6	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)