

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: P475452

Luminaire Tested: **14CZ2-35-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475452
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-35-HRP-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

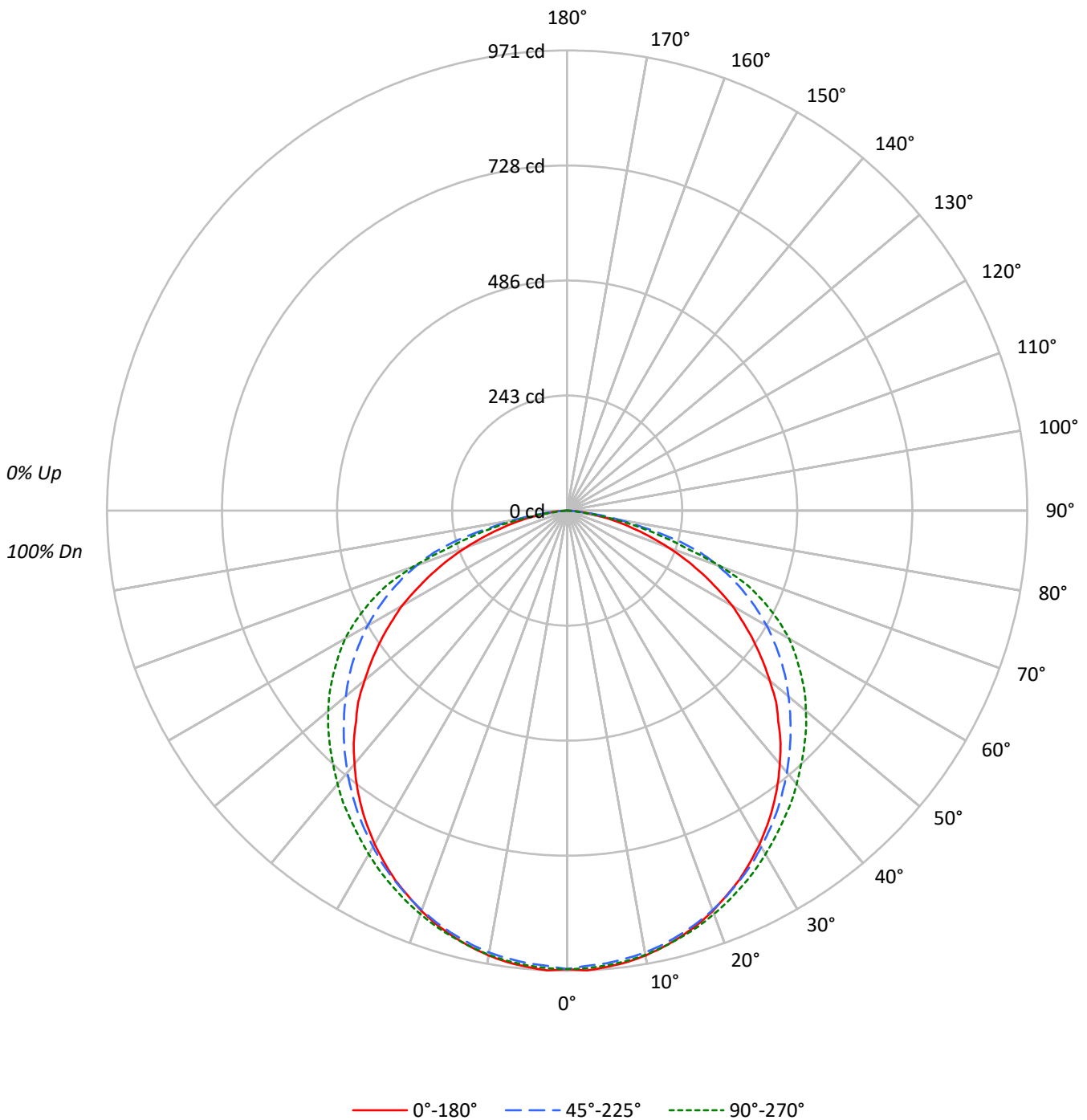
Lumens per Lamp: N/A
Luminaire Lumens: 2891.1 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.5
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°	2604	2604	2604
5°	2611	2590	2602
10°	2605	2588	2600
15°	2591	2579	2596
20°	2574	2569	2594
25°	2552	2558	2595
30°	2524	2546	2602
35°	2493	2539	2616
40°	2452	2534	2647
45°	2398	2538	2691
50°	2336	2552	2754
55°	2257	2584	2827
60°	2167	2618	2912
65°	2001	2643	2927
70°	1784	2655	2711
75°	1494	2460	2106
80°	1134	1729	1384
85°	800	605	191



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	3.2
10°-20°	262.4	9.1
20°-30°	398.9	13.8
30°-40°	485.7	16.8
40°-50°	516.0	17.8
50°-60°	488.1	16.9
60°-70°	395.4	13.7
70°-80°	216.8	7.5
80°-90°	36.2	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°	752.9	26.0
0°-40°	1238.6	42.8
0°-60°	2242.6	77.6
0°-90°	2891.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2891.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	967	965	959	965	963	92
15°	930	928	926	933	932	262
25°	860	860	861	873	874	396
35°	759	761	773	792	796	474
45°	630	640	667	697	707	487
55°	481	503	551	591	602	430
65°	314	350	415	452	460	311
75°	144	198	237	209	203	154
85°	26	34	20	10	6	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.6	967.6	967.6	967.6	967.6
2.5°	971.2	967.6	961.4	967.6	966.7
5°	966.7	965.0	958.7	965.0	963.2
7.5°	961.4	959.6	953.4	960.5	958.7
10°	953.4	951.6	947.1	953.4	951.6
12.5°	942.6	941.8	937.3	944.4	942.6
15°	930.2	928.4	925.7	932.8	931.9
17.5°	915.9	914.1	912.3	921.2	920.3
20°	898.9	898.0	897.1	906.9	906.0
22.5°	879.3	879.3	880.2	890.9	890.9
25°	859.6	859.6	861.4	873.0	873.9
27.5°	836.4	838.2	841.8	854.3	857.0
30°	812.3	814.1	819.5	833.7	837.3
32.5°	786.4	789.1	796.3	813.2	816.8
35°	758.8	761.4	773.0	791.8	796.3
37.5°	729.3	733.8	747.2	768.6	776.6
40°	698.1	705.2	721.3	744.5	753.4
42.5°	666.8	673.1	694.5	721.3	730.2
45°	630.2	640.0	666.8	697.2	707.0
47.5°	598.1	607.0	638.3	672.2	683.8
50°	557.9	571.3	609.7	647.2	657.9
52.5°	519.5	537.4	581.1	619.5	632.0
55°	481.1	502.6	550.8	590.9	602.5
57.5°	441.0	464.2	518.6	559.7	572.2
60°	402.6	427.6	486.5	528.5	541.0
62.5°	357.1	388.3	451.7	491.9	502.6
65°	314.2	349.9	415.1	451.7	459.7
67.5°	270.5	312.4	377.6	409.7	412.4
70°	226.7	274.0	337.4	357.1	344.6
72.5°	183.9	236.6	294.6	278.5	264.2
75°	143.7	198.2	236.6	208.9	202.6
77.5°	106.2	162.5	165.1	151.8	147.3
80°	73.2	125.9	111.6	96.4	89.3
82.5°	47.3	77.7	61.6	45.5	41.1
85°	25.9	33.9	19.6	9.8	6.2
87.5°	9.8	6.2	2.7	2.7	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)