

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: P474569

Luminaire Tested: **24CZ2-30HE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474569
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2842.1 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

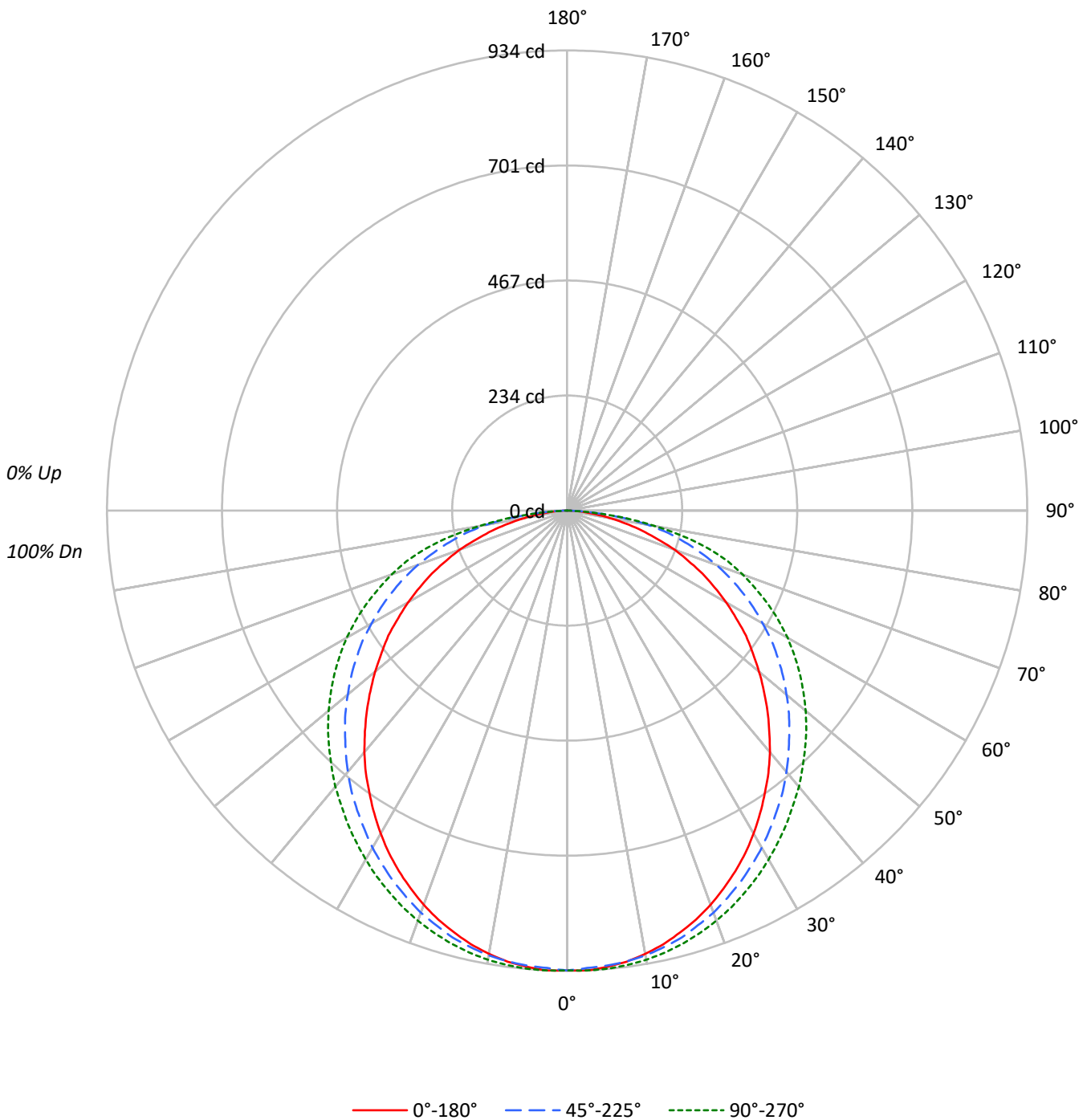
Input Watts (W): 22.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2512	2512	2512
5°	2512	2505	2522
10°	2496	2505	2530
15°	2469	2500	2534
20°	2438	2487	2537
25°	2398	2470	2537
30°	2352	2455	2541
35°	2299	2440	2551
40°	2249	2432	2571
45°	2187	2426	2599
50°	2129	2433	2646
55°	2079	2450	2705
60°	2009	2468	2781
65°	1929	2498	2865
70°	1829	2533	2980
75°	1639	2568	3078
80°	1379	2576	2794
85°	1022	1948	1837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	3.1
10°-20°	253.5	8.9
20°-30°	383.8	13.5
30°-40°	464.3	16.3
40°-50°	490.1	17.2
50°-60°	462.2	16.3
60°-70°	381.0	13.4
70°-80°	250.0	8.8
80°-90°	68.7	2.4
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°	725.8	25.5
0°-40°	1190.1	41.9
0°-60°	2142.4	75.4
0°-90°	2842.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2842.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	930	930	927	934	934	88
15°	886	891	897	908	910	250
25°	808	818	832	849	854	372
35°	700	718	743	768	776	438
45°	575	601	638	672	683	444
55°	443	474	522	561	577	395
65°	303	339	392	434	450	299
75°	158	198	247	286	296	167
85°	33	57	63	61	60	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	933.5	933.5	933.5	933.5	933.5
2.5°	934.4	933.5	929.4	934.9	934.4
5°	929.9	929.9	927.2	933.5	933.5
7.5°	923.5	924.0	923.1	930.4	930.4
10°	913.6	915.4	916.7	924.9	925.8
12.5°	901.8	904.9	907.7	917.6	918.6
15°	886.3	891.3	897.2	907.7	909.5
17.5°	870.4	876.3	882.7	896.3	898.6
20°	851.4	858.2	868.6	882.2	885.9
22.5°	830.0	839.5	850.4	866.8	871.3
25°	807.8	817.8	831.8	849.1	854.5
27.5°	783.7	795.5	811.4	831.4	837.3
30°	756.9	770.5	790.1	811.4	817.8
32.5°	728.8	744.6	766.4	790.1	797.3
35°	699.7	717.9	742.8	768.3	776.4
37.5°	671.1	689.3	718.8	745.6	753.3
40°	640.2	660.2	692.4	721.0	731.9
42.5°	607.5	631.1	665.2	697.0	707.4
45°	574.8	600.7	637.5	671.5	682.9
47.5°	541.7	570.3	610.7	645.2	658.4
50°	508.5	539.0	581.2	618.4	632.0
52.5°	474.9	506.7	552.6	592.1	604.3
55°	443.2	474.5	522.2	561.2	576.6
57.5°	406.4	441.8	492.2	531.7	546.7
60°	373.2	407.7	458.6	500.4	516.7
62.5°	337.4	372.8	426.4	468.1	484.0
65°	302.9	339.2	392.3	434.1	450.0
67.5°	265.6	303.8	358.2	398.7	414.1
70°	232.5	268.3	321.9	363.2	378.7
72.5°	192.1	232.9	284.2	325.1	341.9
75°	157.6	198.0	247.0	286.1	296.0
77.5°	121.2	161.6	210.2	235.7	242.5
80°	89.0	127.1	166.2	179.8	180.3
82.5°	59.9	93.5	115.8	122.6	121.7
85°	33.1	57.2	63.1	61.3	59.5
87.5°	13.6	19.1	15.4	10.9	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)