

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: P475117

Luminaire Tested: **22CZ2-34HE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475117
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-HRP-UNV-L830-CD1-U
Description: 2'X2' 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: 2678.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

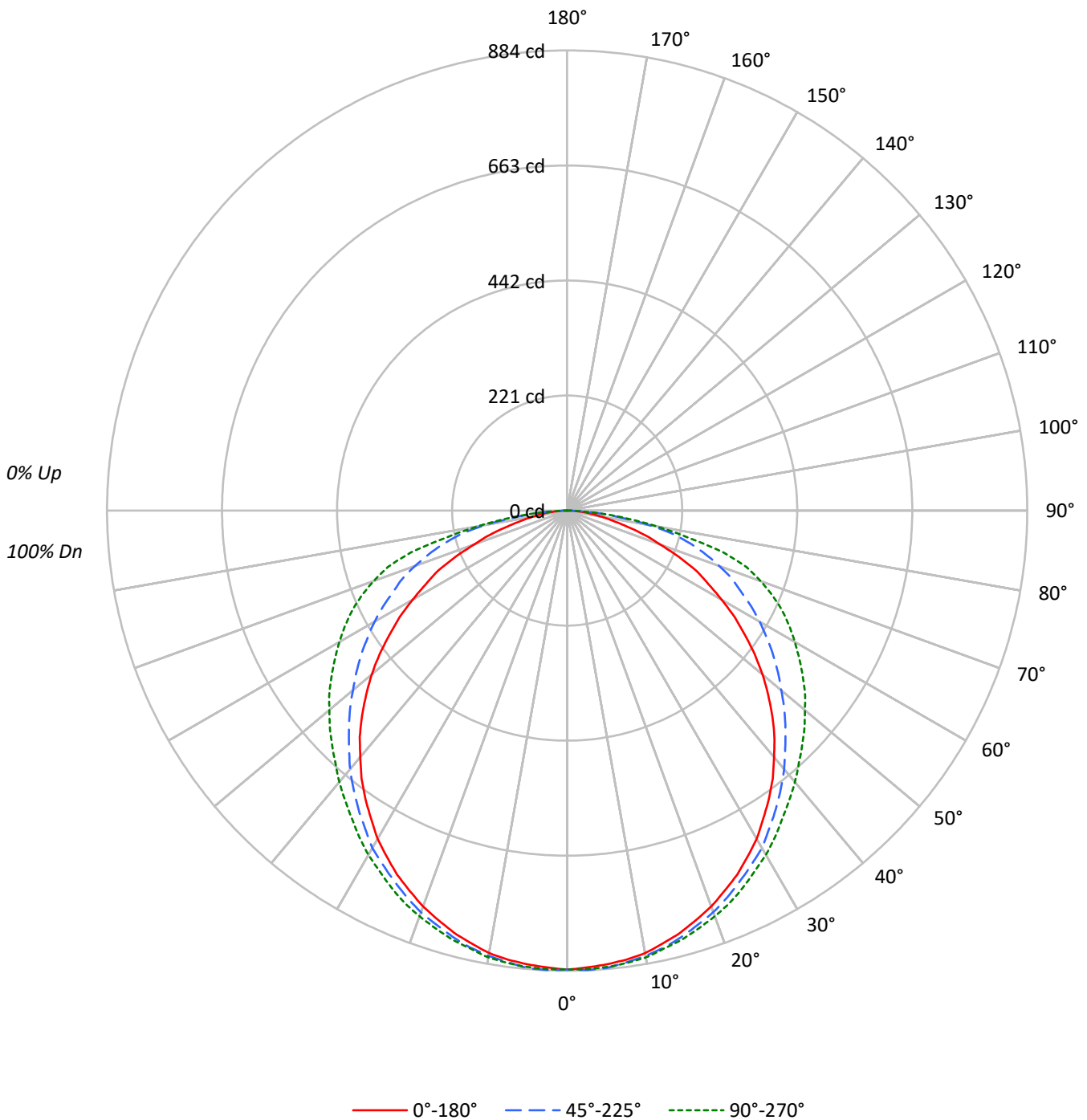
Input Watts (W): 24.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80	75	84	78	73	80	75	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	52	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°	2373	2373	2373
5°	2364	2382	2377
10°	2359	2373	2382
15°	2339	2363	2377
20°	2318	2351	2375
25°	2292	2332	2373
30°	2262	2325	2373
35°	2220	2298	2370
40°	2172	2279	2392
45°	2122	2257	2430
50°	2051	2249	2496
55°	1957	2267	2592
60°	1845	2300	2718
65°	1743	2345	2905
70°	1489	2445	3110
75°	1248	2547	3231
80°	1023	2461	2696
85°	883	1825	1982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	3.1
10°-20°	239.1	8.9
20°-30°	362.3	13.5
30°-40°	437.5	16.3
40°-50°	459.7	17.2
50°-60°	432.5	16.2
60°-70°	360.6	13.5
70°-80°	239.0	8.9
80°-90°	63.7	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°	685.0	25.6
0°-40°	1122.5	41.9
0°-60°	2014.7	75.2
0°-90°	2678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	875	877	882	882	880	83
15°	840	843	848	852	853	237
25°	772	777	786	796	799	355
35°	676	683	699	715	721	423
45°	558	566	593	623	638	429
55°	417	436	483	532	552	373
65°	274	297	368	429	456	266
75°	120	167	245	296	311	130
85°	29	44	59	64	64	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.8	881.8	881.8	881.8	881.8
2.5°	878.5	880.1	883.6	883.6	881.8
5°	875.1	876.7	881.8	881.8	880.1
7.5°	870.0	871.8	875.1	878.5	876.7
10°	863.3	864.9	868.4	871.8	871.8
12.5°	851.5	853.1	859.9	861.7	861.7
15°	839.6	843.0	848.1	851.5	853.1
17.5°	824.5	827.8	834.5	841.4	841.4
20°	809.3	812.5	821.1	827.8	829.4
22.5°	790.6	795.7	804.2	812.5	816.0
25°	772.1	777.2	785.5	795.7	799.1
27.5°	750.0	755.1	767.0	778.8	780.5
30°	728.1	733.2	748.4	758.5	763.6
32.5°	701.1	707.8	723.0	738.2	743.3
35°	675.7	682.6	699.4	714.7	721.4
37.5°	648.7	655.4	674.1	692.7	701.1
40°	618.2	626.8	648.7	669.0	680.8
42.5°	589.6	598.1	620.0	647.1	658.8
45°	557.5	565.9	593.0	623.3	638.5
47.5°	523.6	533.8	565.9	603.2	618.2
50°	489.9	501.7	537.2	579.5	596.3
52.5°	454.4	469.6	510.2	555.9	576.0
55°	417.2	435.9	483.2	532.1	552.4
57.5°	381.7	398.7	454.4	506.8	528.7
60°	342.9	364.9	427.4	481.4	505.1
62.5°	305.8	329.5	398.7	456.2	481.4
65°	273.7	297.3	368.3	429.0	456.2
67.5°	231.5	263.5	342.9	400.4	427.4
70°	189.2	233.1	310.8	369.9	395.3
72.5°	157.1	199.4	278.8	337.9	361.6
75°	120.0	167.3	245.0	295.6	310.8
77.5°	89.5	138.5	209.5	234.9	236.5
80°	66.0	106.4	158.8	167.3	174.0
82.5°	45.7	74.3	103.1	113.1	116.5
85°	28.6	43.9	59.1	64.2	64.2
87.5°	15.2	16.9	20.3	20.3	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)