

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: P474182

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474182
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1961.7 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

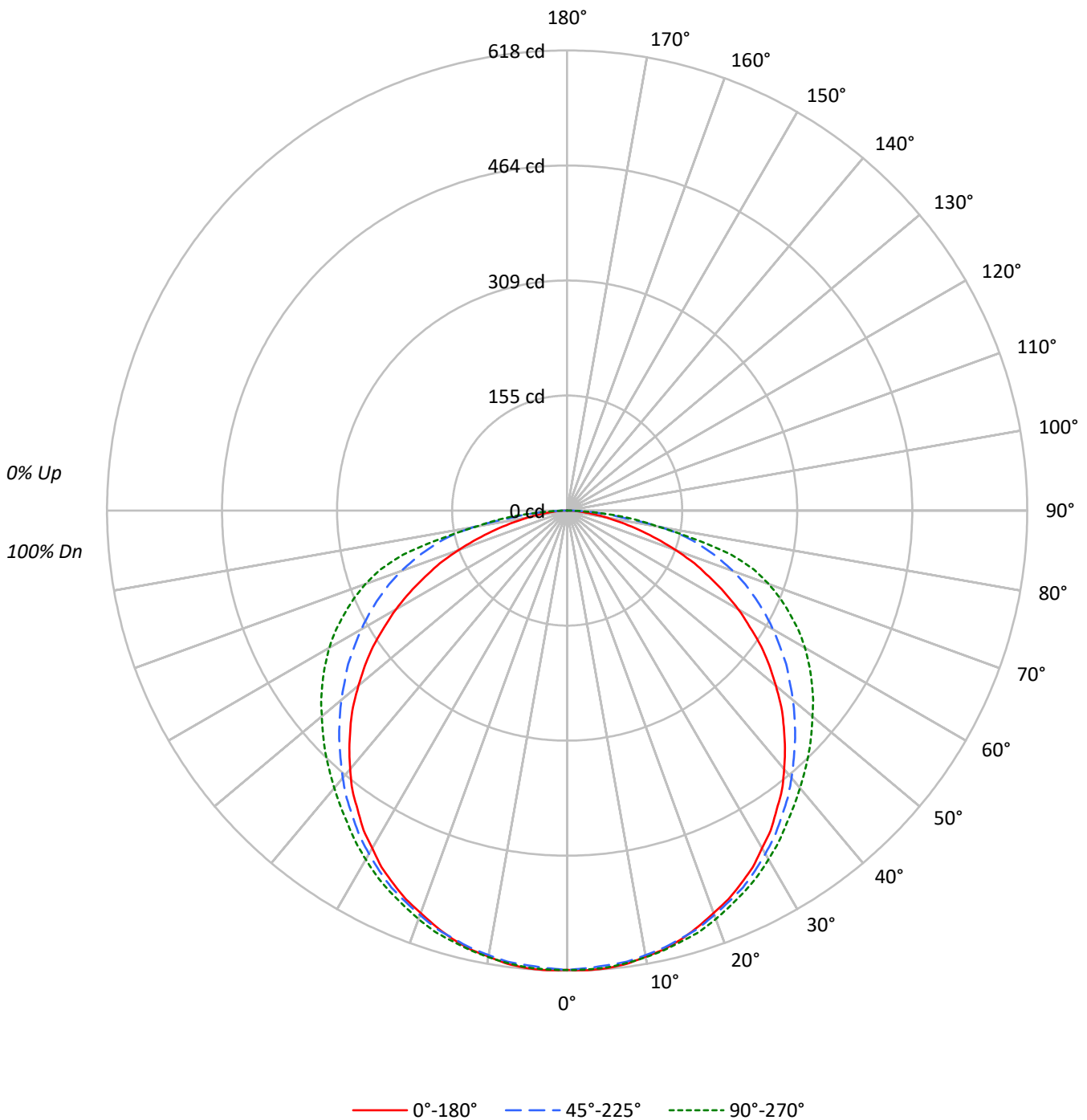
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	830	830	830
5°	833	828	832
10°	831	828	832
15°	830	828	834
20°	823	828	836
25°	821	829	838
30°	813	827	841
35°	806	825	844
40°	797	824	854
45°	783	824	874
50°	766	829	900
55°	746	842	940
60°	715	859	992
65°	669	889	1053
70°	609	930	1133
75°	516	981	1184
80°	408	987	957
85°	301	752	841



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	3.0
10°-20°	168.4	8.6
20°-30°	257.5	13.1
30°-40°	314.8	16.0
40°-50°	335.6	17.1
50°-60°	320.8	16.4
60°-70°	271.8	13.9
70°-80°	182.7	9.3
80°-90°	51.6	2.6
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°	484.5	24.7
0°-40°	799.3	40.7
0°-60°	1455.7	74.2
0°-90°	1961.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	617	617	617	617	617	
5°	617	616	613	616	616	59
15°	596	596	594	599	598	168
25°	553	555	558	563	564	255
35°	490	494	502	512	514	307
45°	412	418	433	452	459	317
55°	318	330	359	387	401	283
65°	210	232	279	316	331	209
75°	99	135	189	221	228	106
85°	20	40	49	53	54	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.9	616.9	616.9	616.9	616.9
2.5°	617.9	617.9	615.0	616.9	616.9
5°	616.9	615.9	613.0	615.9	615.9
7.5°	614.0	613.0	611.1	614.0	613.0
10°	608.2	608.2	606.2	609.1	609.1
12.5°	603.3	602.3	601.3	605.2	604.3
15°	595.5	595.5	594.5	599.4	598.4
17.5°	585.8	586.7	587.7	591.6	592.6
20°	575.1	577.0	578.0	583.8	583.8
22.5°	565.3	566.3	568.2	574.1	574.1
25°	552.7	554.6	558.5	563.4	564.3
27.5°	540.0	541.0	545.8	552.7	553.6
30°	523.5	526.4	532.2	540.0	541.0
32.5°	508.9	511.8	518.6	526.4	528.3
35°	490.4	494.3	502.0	511.8	513.7
37.5°	473.8	476.7	486.5	497.2	500.1
40°	453.5	459.2	468.9	481.6	486.5
42.5°	433.0	438.9	450.5	467.0	472.8
45°	411.6	418.4	433.0	451.5	459.2
47.5°	390.2	398.0	414.5	435.9	444.7
50°	365.8	375.6	396.0	420.4	430.1
52.5°	342.5	354.2	376.6	403.8	416.5
55°	318.1	329.8	359.0	387.3	400.9
57.5°	290.9	306.5	338.6	370.7	385.3
60°	265.7	280.2	319.1	354.2	368.8
62.5°	238.4	257.9	299.6	336.6	351.2
65°	210.2	231.6	279.2	316.2	330.8
67.5°	184.9	208.2	258.9	295.8	310.4
70°	154.7	183.9	236.5	273.4	288.0
72.5°	126.5	158.6	213.1	249.1	262.8
75°	99.2	135.2	188.8	220.9	227.7
77.5°	74.0	111.9	163.5	177.1	172.2
80°	52.6	89.6	127.4	120.6	123.5
82.5°	34.1	68.1	78.9	89.6	92.4
85°	19.5	39.9	48.7	52.6	54.5
87.5°	8.8	14.6	19.5	19.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)