

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: P474169

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474169
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30HE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, 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: 2004.3 lumens
Efficiency: N/A
Efficacy: 89.9 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

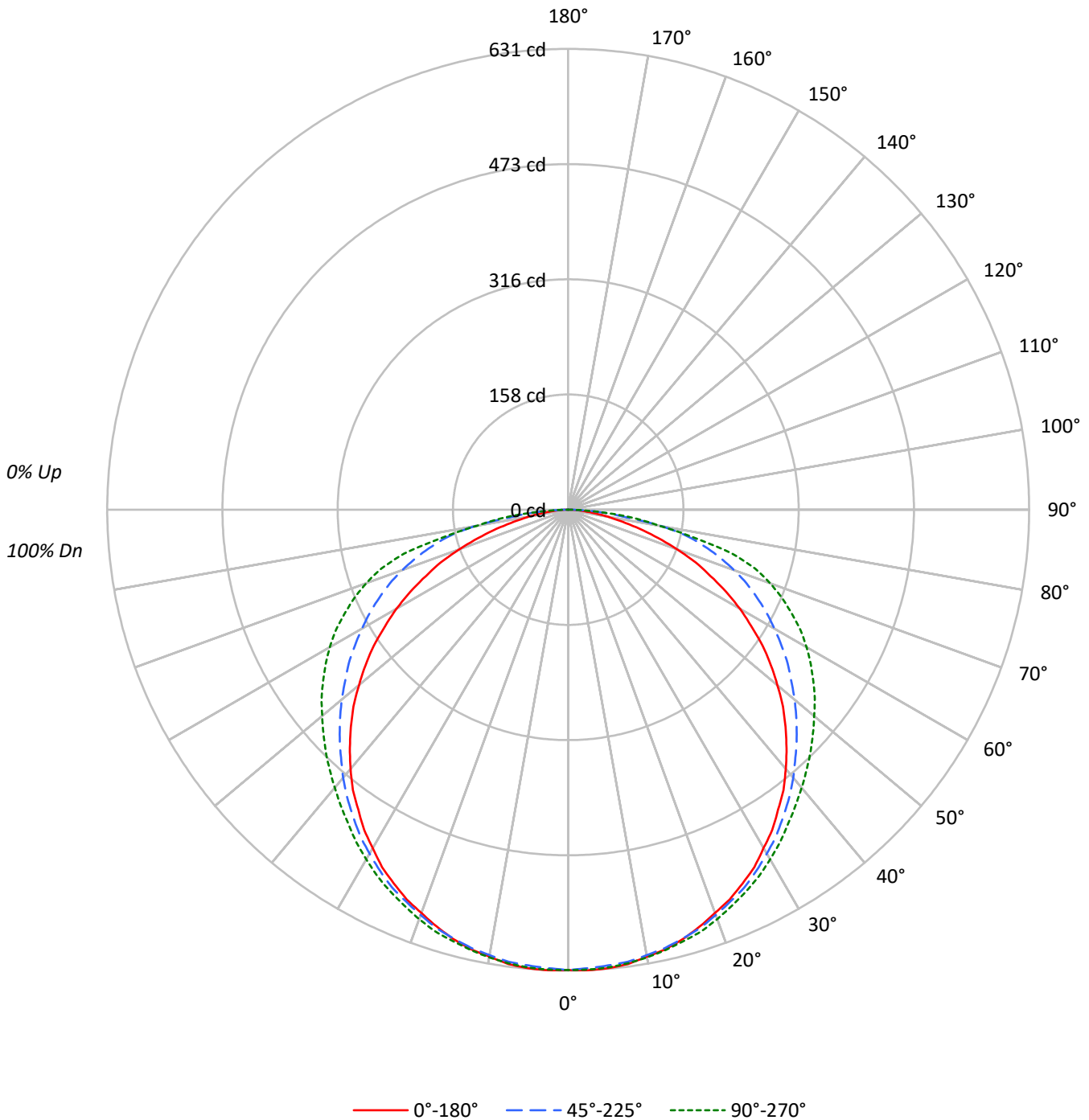
Input Watts (W): 22.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474169

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474169

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L830-CD1-U

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	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°	848	848	848
5°	851	846	850
10°	849	846	850
15°	848	846	852
20°	841	846	854
25°	838	847	856
30°	831	845	859
35°	823	843	862
40°	814	841	873
45°	800	842	893
50°	782	847	920
55°	763	860	961
60°	731	878	1014
65°	684	908	1076
70°	622	950	1157
75°	527	1003	1210
80°	416	1009	978
85°	307	767	860



TEST NUMBER: P474169

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	3.0
10°-20°	172.1	8.6
20°-30°	263.1	13.1
30°-40°	321.7	16.0
40°-50°	342.9	17.1
50°-60°	327.8	16.4
60°-70°	277.7	13.9
70°-80°	186.6	9.3
80°-90°	52.7	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°	495.0	24.7
0°-40°	816.7	40.7
0°-60°	1487.3	74.2
0°-90°	2004.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	630	629	626	629	629	60
15°	608	608	608	612	611	172
25°	565	567	571	576	577	260
35°	501	505	513	523	525	314
45°	421	428	442	461	469	324
55°	325	337	367	396	410	290
65°	215	237	285	323	338	213
75°	101	138	193	226	233	109
85°	20	41	50	54	56	25
90°	0	0	0	0	0	



TEST NUMBER: P474169

CATALOG NUMBER: 24CZ2-30HE-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	630.3	630.3	630.3	630.3	630.3
2.5°	631.3	631.3	628.3	630.3	630.3
5°	630.3	629.3	626.4	629.3	629.3
7.5°	627.4	626.4	624.4	627.4	626.4
10°	621.4	621.4	619.4	622.4	622.4
12.5°	616.4	615.4	614.4	618.4	617.4
15°	608.5	608.5	607.5	612.4	611.4
17.5°	598.5	599.5	600.5	604.5	605.5
20°	587.6	589.6	590.5	596.5	596.5
22.5°	577.6	578.6	580.6	586.6	586.6
25°	564.7	566.7	570.7	575.6	576.6
27.5°	551.8	552.8	557.7	564.7	565.7
30°	534.8	537.8	543.8	551.8	552.8
32.5°	519.9	522.9	529.9	537.8	539.8
35°	501.0	505.0	513.0	522.9	524.9
37.5°	484.1	487.1	497.0	508.0	511.0
40°	463.3	469.2	479.1	492.1	497.0
42.5°	442.4	448.4	460.3	477.2	483.1
45°	420.6	427.5	442.4	461.3	469.2
47.5°	398.7	406.6	423.5	445.4	454.4
50°	373.8	383.8	404.6	429.5	439.5
52.5°	349.9	361.9	384.7	412.6	425.5
55°	325.1	337.0	366.8	395.7	409.6
57.5°	297.2	313.1	346.0	378.8	393.7
60°	271.5	286.3	326.1	361.9	376.8
62.5°	243.6	263.5	306.2	344.0	358.9
65°	214.8	236.6	285.3	323.1	338.0
67.5°	188.9	212.8	264.5	302.2	317.1
70°	158.1	187.9	241.6	279.3	294.2
72.5°	129.2	162.0	217.7	254.5	268.5
75°	101.4	138.2	192.9	225.7	232.7
77.5°	75.6	114.3	167.0	180.9	176.0
80°	53.7	91.5	130.2	123.2	126.2
82.5°	34.8	69.6	80.6	91.5	94.4
85°	19.9	40.8	49.7	53.7	55.7
87.5°	9.0	14.9	19.9	19.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)