

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: P474161

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

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474161  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30-RDP-UNV-L830-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

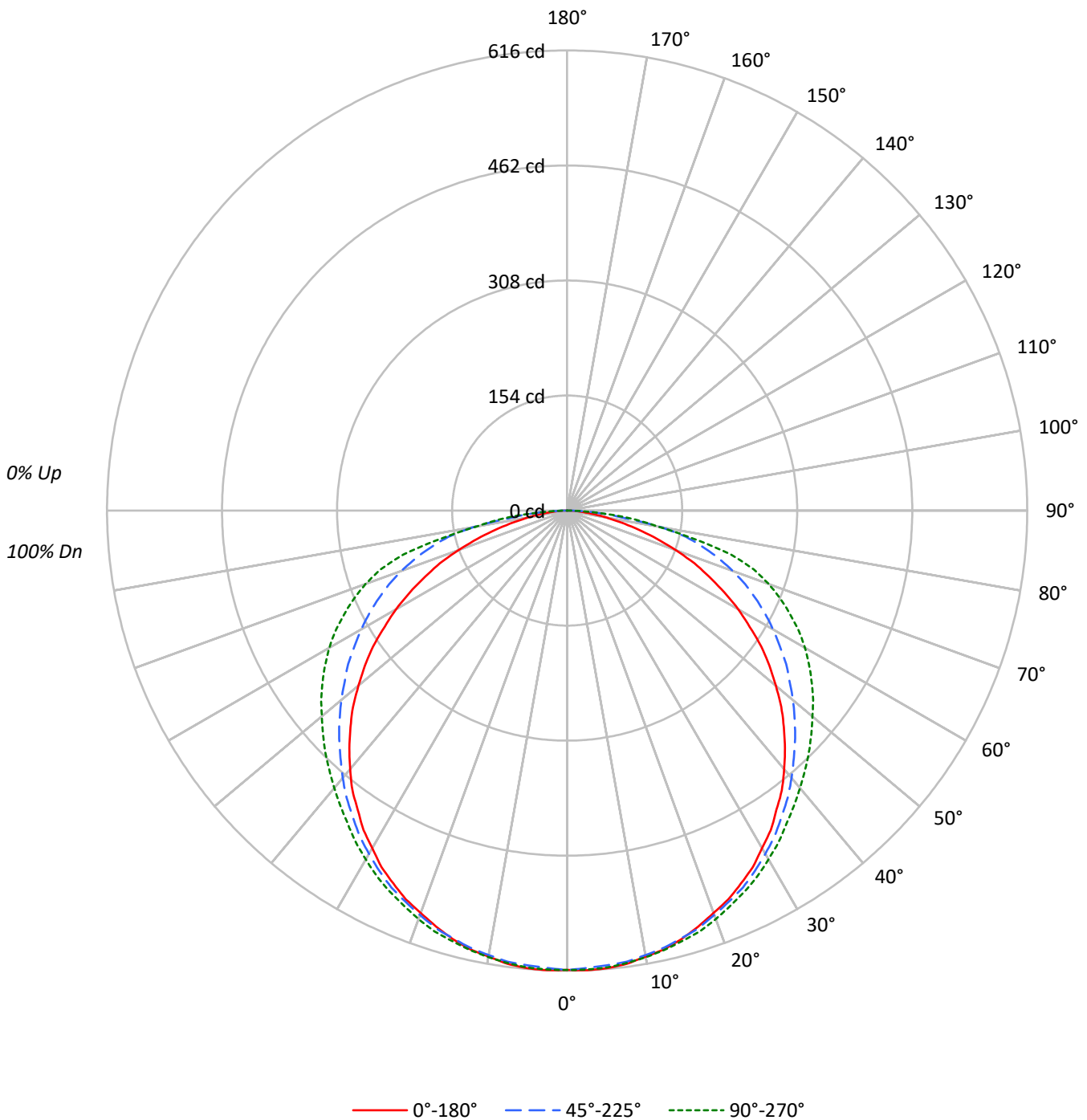
Lumens per Lamp: N/A  
Luminaire Lumens: 1955.2 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.6  
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: P474161  
CATALOG NUMBER: 24CZ2-30-RDP-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P474161

CATALOG NUMBER: 24CZ2-30-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°	827	827	827
5°	831	825	829
10°	828	825	829
15°	827	825	831
20°	821	825	833
25°	818	826	835
30°	811	824	838
35°	803	822	841
40°	794	821	852
45°	781	821	871
50°	763	826	897
55°	744	839	937
60°	713	856	989
65°	667	886	1050
70°	607	927	1129
75°	514	978	1180
80°	406	984	954
85°	299	749	838



TEST NUMBER: P474161

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	3.0
10°-20°	167.9	8.6
20°-30°	256.7	13.1
30°-40°	313.8	16.0
40°-50°	334.5	17.1
50°-60°	319.8	16.4
60°-70°	270.9	13.9
70°-80°	182.1	9.3
80°-90°	51.4	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°	482.9	24.7
0°-40°	796.7	40.7
0°-60°	1450.9	74.2
0°-90°	1955.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1955.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	615	615	615	615	615	
5°	615	614	611	614	614	58
15°	594	594	593	597	596	167
25°	551	553	557	562	562	254
35°	489	493	500	510	512	306
45°	410	417	432	450	458	316
55°	317	329	358	386	400	282
65°	210	231	278	315	330	208
75°	99	135	188	220	227	106
85°	19	40	48	52	54	24
90°	0	0	0	0	0	



TEST NUMBER: P474161

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	614.9	614.9	614.9	614.9	614.9
2.5°	615.9	615.9	612.9	614.9	614.9
5°	614.9	613.9	611.0	613.9	613.9
7.5°	612.0	611.0	609.1	612.0	611.0
10°	606.2	606.2	604.2	607.1	607.1
12.5°	601.3	600.3	599.4	603.2	602.3
15°	593.5	593.5	592.6	597.4	596.4
17.5°	583.8	584.8	585.8	589.7	590.6
20°	573.2	575.1	576.1	581.9	581.9
22.5°	563.5	564.4	566.4	572.2	572.2
25°	550.8	552.8	556.7	561.5	562.5
27.5°	538.2	539.2	544.1	550.8	551.8
30°	521.7	524.6	530.5	538.2	539.2
32.5°	507.2	510.1	516.9	524.6	526.6
35°	488.7	492.6	500.4	510.1	512.0
37.5°	472.2	475.2	484.9	495.5	498.4
40°	452.0	457.7	467.4	480.0	484.9
42.5°	431.6	437.4	449.1	465.5	471.3
45°	410.2	417.0	431.6	450.0	457.7
47.5°	388.9	396.7	413.2	434.5	443.2
50°	364.6	374.3	394.7	419.0	428.7
52.5°	341.4	353.0	375.3	402.5	415.1
55°	317.1	328.7	357.8	386.0	399.6
57.5°	289.9	305.5	337.5	369.5	384.0
60°	264.8	279.3	318.1	353.0	367.6
62.5°	237.6	257.0	298.7	335.5	350.1
65°	209.5	230.8	278.3	315.2	329.7
67.5°	184.3	207.5	258.0	294.8	309.3
70°	154.2	183.3	235.7	272.5	287.0
72.5°	126.0	158.1	212.4	248.3	261.9
75°	98.9	134.8	188.1	220.2	227.0
77.5°	73.7	111.5	162.9	176.5	171.6
80°	52.4	89.3	127.0	120.2	123.1
82.5°	34.0	67.9	78.6	89.3	92.1
85°	19.4	39.8	48.5	52.4	54.3
87.5°	8.7	14.6	19.4	19.4	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)