

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: P474996

Luminaire Tested: **22CZ2-39-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474996  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39-RDP-UNV-L830-CD1-U  
Description: 2'X2' 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: 2549.4 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

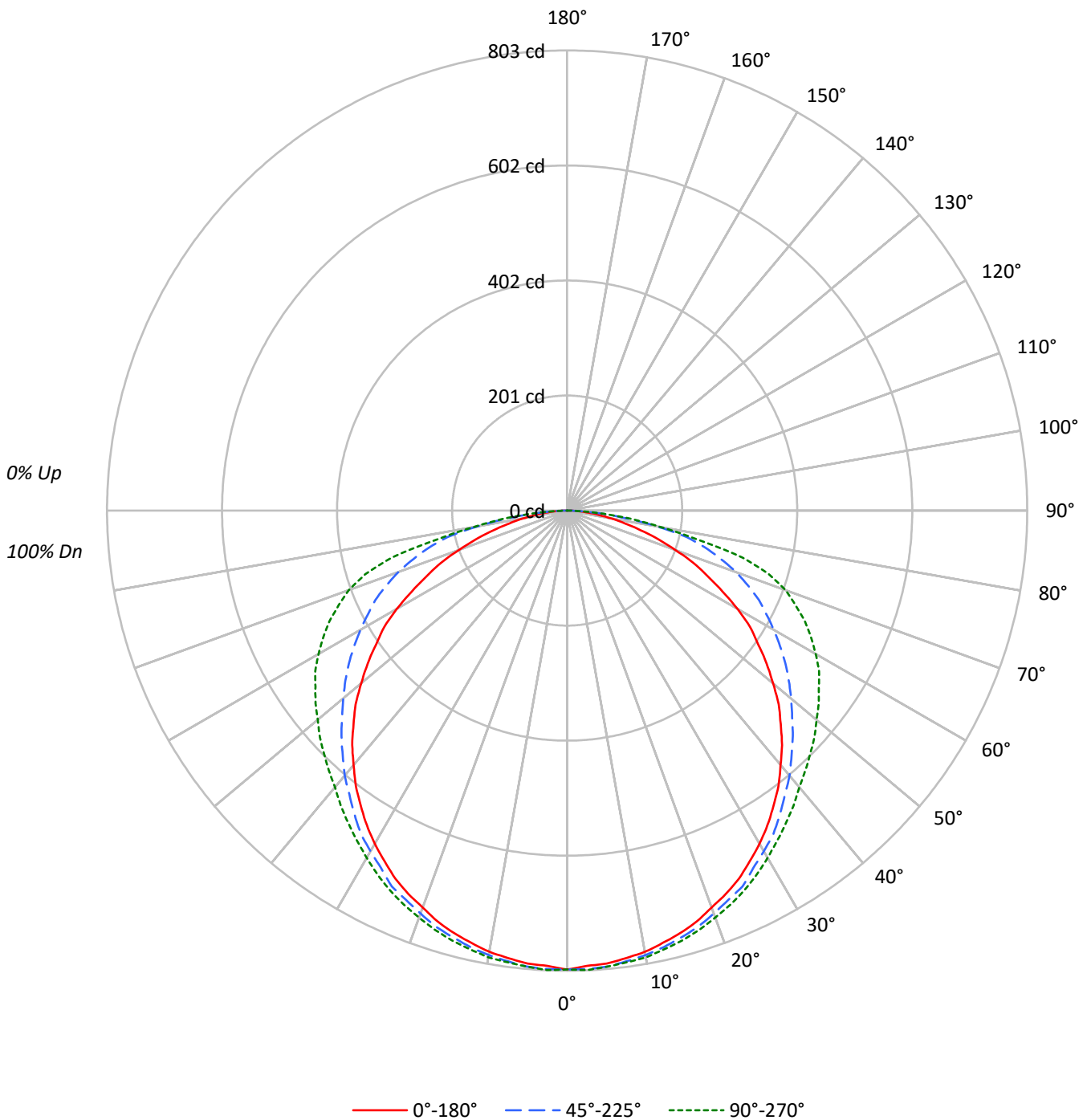
Input Watts (W): 29.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P474996

CATALOG NUMBER: 22CZ2-39-RDP-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P474996

CATALOG NUMBER: 22CZ2-39-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	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	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°	2155	2155	2155
5°	2143	2158	2158
10°	2137	2152	2163
15°	2126	2147	2163
20°	2111	2143	2165
25°	2105	2150	2172
30°	2086	2133	2174
35°	2064	2125	2187
40°	2036	2121	2213
45°	2006	2120	2284
50°	1963	2135	2379
55°	1909	2182	2516
60°	1848	2241	2695
65°	1719	2353	2914
70°	1579	2465	3187
75°	1385	2592	3296
80°	1193	2469	2588
85°	1041	1794	1967



TEST NUMBER: P474996

CATALOG NUMBER: 22CZ2-39-RDP-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.8	3.0
10°-20°	217.5	8.5
20°-30°	331.8	13.0
30°-40°	405.2	15.9
40°-50°	433.2	17.0
50°-60°	418.1	16.4
60°-70°	360.0	14.1
70°-80°	243.5	9.6
80°-90°	64.3	2.5
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°	625.1	24.5
0°-40°	1030.2	40.4
0°-60°	1881.6	73.8
0°-90°	2549.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2549.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	793	795	799	799	799	75
15°	763	765	771	774	776	215
25°	709	713	724	728	731	326
35°	628	634	647	660	666	393
45°	527	536	557	585	600	407
55°	407	420	465	512	536	365
65°	270	296	370	428	458	269
75°	133	176	249	300	317	143
85°	34	47	58	60	64	38
90°	0	0	0	0	0	



TEST NUMBER: P474996

CATALOG NUMBER: 22CZ2-39-RDP-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.8	800.8	800.8	800.8	800.8
2.5°	795.2	797.0	800.8	800.8	802.6
5°	793.3	795.2	798.9	798.9	798.9
7.5°	787.7	789.6	793.3	795.2	795.2
10°	781.9	784.0	787.7	789.6	791.5
12.5°	772.6	774.5	780.1	784.0	784.0
15°	763.3	765.2	770.8	774.5	776.4
17.5°	751.9	755.9	761.4	765.2	767.0
20°	737.0	740.8	748.2	754.0	755.9
22.5°	724.0	727.7	735.2	740.8	744.5
25°	708.9	712.6	724.0	727.7	731.4
27.5°	690.1	694.0	703.3	710.8	716.4
30°	671.4	675.2	686.3	695.9	699.6
32.5°	650.8	656.3	669.6	677.0	682.6
35°	628.2	633.8	647.0	660.1	665.8
37.5°	605.8	611.4	624.5	641.4	648.9
40°	579.6	587.0	603.8	626.3	630.1
42.5°	555.2	564.5	579.6	605.8	615.2
45°	527.0	536.3	557.0	585.2	600.1
47.5°	500.7	510.1	532.6	566.3	585.2
50°	468.9	481.9	510.1	549.6	568.2
52.5°	438.9	450.0	487.7	530.7	553.3
55°	407.0	420.0	465.1	511.9	536.3
57.5°	378.9	390.0	440.7	493.3	521.4
60°	343.3	358.2	416.3	472.6	500.7
62.5°	305.6	328.2	391.9	450.0	480.1
65°	270.0	296.3	369.5	427.5	457.7
67.5°	238.2	266.3	341.4	403.3	431.4
70°	200.7	236.3	313.3	373.3	405.1
72.5°	167.0	206.3	281.4	341.4	369.5
75°	133.2	176.3	249.3	300.0	317.0
77.5°	103.1	144.4	213.8	228.8	230.7
80°	77.0	114.4	159.3	161.2	167.0
82.5°	52.6	80.7	103.1	112.6	114.4
85°	33.7	47.0	58.1	60.0	63.7
87.5°	15.1	17.0	20.7	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)