

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: P475055

Luminaire Tested: **22CZ2-44-RDP-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475055  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44-RDP-UNV-L840-CD1-U  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

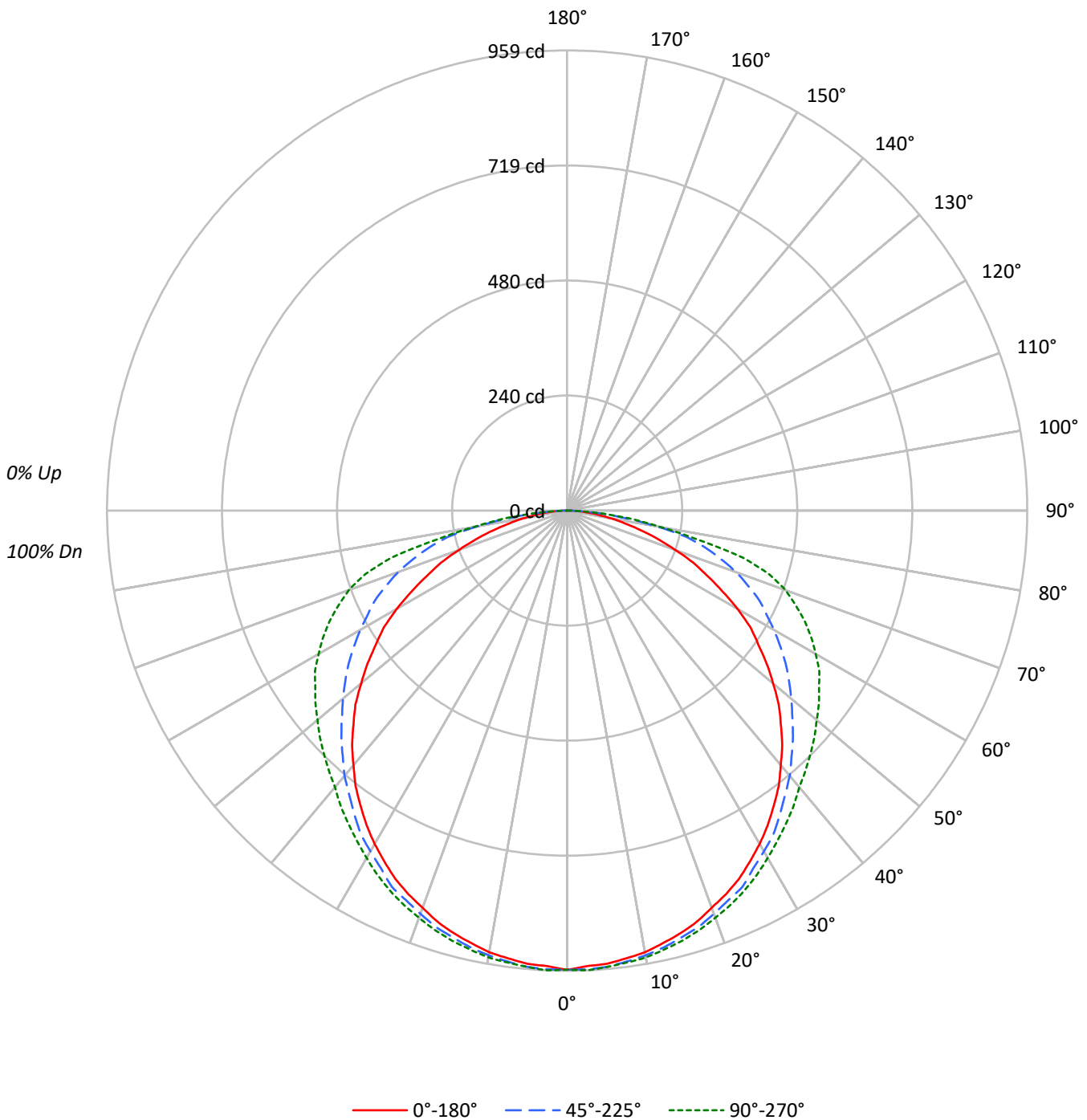
Lumens per Lamp: N/A  
Luminaire Lumens: 3046.4 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.2  
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: P475055  
CATALOG NUMBER: 22CZ2-44-RDP-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475055

CATALOG NUMBER: 22CZ2-44-RDP-UNV-L840-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°	2575	2575	2575
5°	2561	2579	2579
10°	2553	2572	2584
15°	2541	2566	2584
20°	2522	2560	2586
25°	2515	2569	2595
30°	2493	2549	2598
35°	2466	2540	2614
40°	2433	2535	2645
45°	2397	2533	2729
50°	2346	2552	2843
55°	2282	2608	3007
60°	2208	2678	3221
65°	2055	2812	3482
70°	1887	2945	3809
75°	1655	3098	3938
80°	1426	2951	3092
85°	1244	2146	2353



TEST NUMBER: P475055

CATALOG NUMBER: 22CZ2-44-RDP-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.5	3.0
10°-20°	259.9	8.5
20°-30°	396.5	13.0
30°-40°	484.2	15.9
40°-50°	517.7	17.0
50°-60°	499.7	16.4
60°-70°	430.1	14.1
70°-80°	291.0	9.6
80°-90°	76.8	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°	746.9	24.5
0°-40°	1231.1	40.4
0°-60°	2248.4	73.8
0°-90°	3046.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3046.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	957	957	957	957	957	
5°	948	950	955	955	955	90
15°	912	914	921	926	928	257
25°	847	852	865	870	874	390
35°	751	757	773	789	796	470
45°	630	641	666	699	717	486
55°	486	502	556	612	641	436
65°	323	354	442	511	547	321
75°	159	211	298	358	379	171
85°	40	56	70	72	76	45
90°	0	0	0	0	0	



TEST NUMBER: P475055

CATALOG NUMBER: 22CZ2-44-RDP-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	956.9	956.9	956.9	956.9	956.9
2.5°	950.2	952.4	956.9	956.9	959.1
5°	948.0	950.2	954.7	954.7	954.7
7.5°	941.3	943.5	948.0	950.2	950.2
10°	934.4	936.8	941.3	943.5	945.7
12.5°	923.3	925.5	932.2	936.8	936.8
15°	912.1	914.3	921.0	925.5	927.7
17.5°	898.5	903.2	909.9	914.3	916.6
20°	880.7	885.2	894.1	901.0	903.2
22.5°	865.1	869.6	878.5	885.2	889.6
25°	847.1	851.6	865.1	869.6	874.0
27.5°	824.6	829.3	840.4	849.3	856.0
30°	802.3	806.8	820.2	831.5	836.0
32.5°	777.6	784.3	800.1	809.0	815.7
35°	750.7	757.4	773.2	788.8	795.7
37.5°	724.0	730.6	746.2	766.5	775.4
40°	692.6	701.5	721.5	748.4	752.9
42.5°	663.4	674.5	692.6	724.0	735.1
45°	629.8	640.9	665.6	699.2	717.0
47.5°	598.4	609.5	636.4	676.7	699.2
50°	560.3	575.9	609.5	656.7	679.0
52.5°	524.4	537.8	582.8	634.2	661.2
55°	486.3	501.9	555.8	611.7	640.9
57.5°	452.7	466.1	526.7	589.4	623.1
60°	410.2	428.0	497.5	564.7	598.4
62.5°	365.2	392.1	468.3	537.8	573.6
65°	322.7	354.1	441.6	510.8	546.9
67.5°	284.6	318.2	408.0	481.9	515.5
70°	239.8	282.4	374.3	446.0	484.1
72.5°	199.5	246.5	336.3	408.0	441.6
75°	159.2	210.7	298.0	358.5	378.8
77.5°	123.1	172.6	255.4	273.5	275.7
80°	92.0	136.7	190.4	192.6	199.5
82.5°	62.8	96.4	123.1	134.5	136.7
85°	40.3	56.1	69.5	71.7	76.2
87.5°	18.0	20.3	24.7	22.5	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)