

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: P474300

Luminaire Tested: **24CZ2-130VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474300  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-130VHE-RDP-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8885.2 lumens  
Efficiency: N/A  
Efficacy: 96.4 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

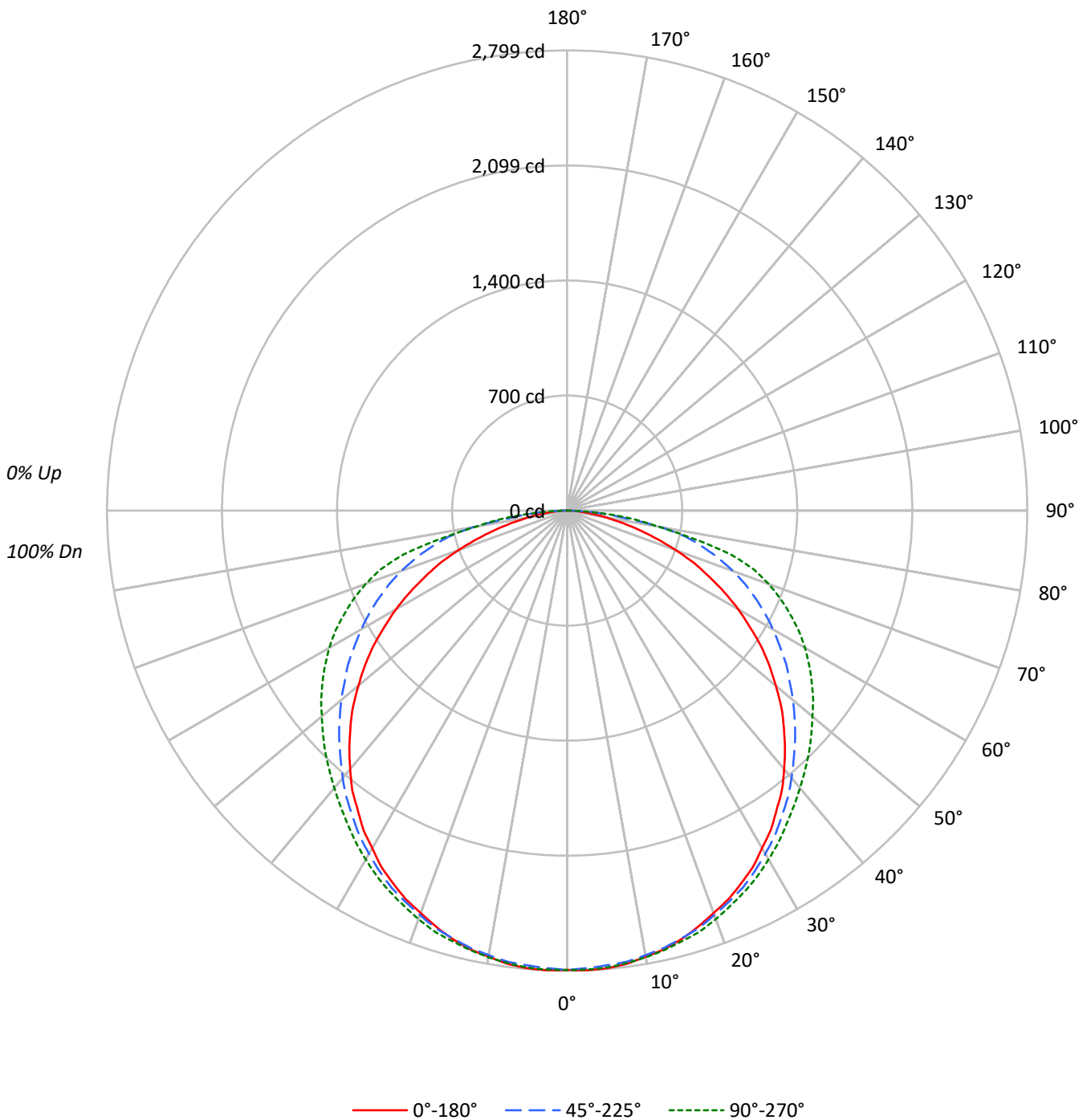
Input Watts (W): 92.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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°	3760	3760	3760
5°	3774	3750	3768
10°	3763	3751	3769
15°	3757	3751	3776
20°	3730	3748	3786
25°	3716	3756	3795
30°	3684	3745	3807
35°	3648	3735	3822
40°	3607	3731	3870
45°	3547	3732	3958
50°	3469	3755	4078
55°	3380	3815	4259
60°	3238	3890	4495
65°	3031	4026	4770
70°	2757	4214	5131
75°	2336	4445	5362
80°	1845	4472	4336
85°	1362	3404	3812



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	265.1	3.0
10°-20°	762.8	8.6
20°-30°	1166.5	13.1
30°-40°	1425.9	16.0
40°-50°	1519.9	17.1
50°-60°	1453.2	16.4
60°-70°	1231.0	13.9
70°-80°	827.3	9.3
80°-90°	233.5	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°	2194.4	24.7
0°-40°	3620.3	40.7
0°-60°	6593.4	74.2
0°-90°	8885.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8885.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2794	2794	2794	2794	2794	
5°	2794	2790	2777	2790	2790	265
15°	2697	2697	2693	2715	2710	761
25°	2503	2512	2530	2552	2556	1154
35°	2221	2239	2274	2318	2327	1391
45°	1864	1895	1961	2045	2080	1438
55°	1441	1494	1626	1754	1816	1283
65°	952	1049	1265	1432	1498	945
75°	449	612	855	1000	1031	481
85°	88	181	220	238	247	109
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2794.3	2794.3	2794.3	2794.3	2794.3
2.5°	2798.7	2798.7	2785.5	2794.3	2794.3
5°	2794.3	2789.9	2776.6	2789.9	2789.9
7.5°	2781.0	2776.6	2767.8	2781.0	2776.6
10°	2754.6	2754.6	2745.8	2759.0	2759.0
12.5°	2732.5	2728.1	2723.7	2741.4	2736.9
15°	2697.3	2697.3	2692.9	2714.9	2710.5
17.5°	2653.2	2657.6	2662.0	2679.6	2684.0
20°	2604.7	2613.5	2617.9	2644.3	2644.3
22.5°	2560.6	2565.0	2573.8	2600.3	2600.3
25°	2503.2	2512.1	2529.7	2551.8	2556.2
27.5°	2445.9	2450.3	2472.4	2503.2	2507.7
30°	2371.0	2384.2	2410.6	2445.9	2450.3
32.5°	2304.8	2318.0	2348.9	2384.2	2393.0
35°	2221.0	2238.7	2274.0	2318.0	2326.9
37.5°	2146.1	2159.3	2203.4	2251.9	2265.1
40°	2053.9	2079.9	2124.0	2181.4	2203.4
42.5°	1961.3	1987.8	2040.7	2115.2	2141.7
45°	1864.3	1895.2	1961.3	2045.1	2079.9
47.5°	1767.3	1802.6	1877.5	1974.6	2014.2
50°	1657.1	1701.2	1793.8	1904.0	1948.1
52.5°	1551.2	1604.2	1705.6	1829.0	1886.4
55°	1441.0	1493.9	1626.2	1754.1	1815.8
57.5°	1317.5	1388.1	1533.6	1679.1	1745.3
60°	1203.3	1269.0	1445.4	1604.2	1670.3
62.5°	1079.9	1168.1	1357.2	1524.8	1590.9
65°	952.0	1049.0	1264.6	1432.2	1498.3
67.5°	837.4	943.2	1172.5	1339.6	1405.7
70°	700.7	832.9	1071.1	1238.2	1304.3
72.5°	572.8	718.3	965.2	1128.4	1190.1
75°	449.3	612.5	855.0	1000.5	1031.4
77.5°	335.1	506.6	740.3	802.1	780.0
80°	238.1	405.7	577.2	546.3	559.6
82.5°	154.3	308.7	357.2	405.7	418.5
85°	88.2	180.8	220.5	238.1	246.9
87.5°	39.7	66.1	88.2	88.2	83.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)