

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: P474241

Luminaire Tested: **24CZ2-85VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474241
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-85VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5689.7 lumens
Efficiency: N/A
Efficacy: 95.3 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

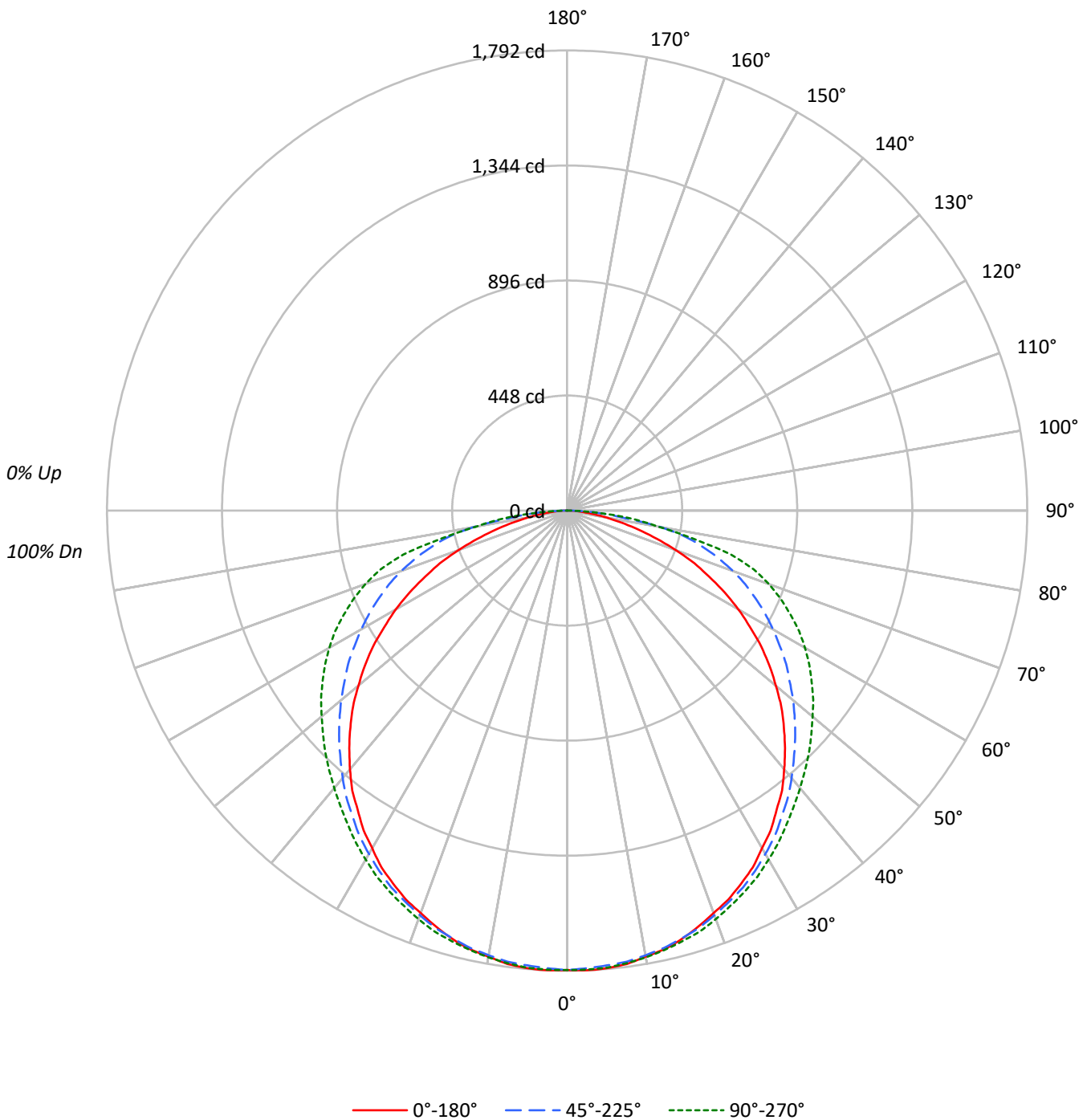
Input Watts (W): 59.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2407	2407	2407
5°	2417	2401	2413
10°	2410	2402	2414
15°	2406	2402	2418
20°	2388	2400	2425
25°	2380	2405	2430
30°	2359	2398	2438
35°	2336	2392	2447
40°	2310	2389	2478
45°	2272	2390	2534
50°	2221	2404	2611
55°	2165	2443	2728
60°	2074	2491	2878
65°	1941	2578	3055
70°	1765	2698	3286
75°	1496	2846	3434
80°	1182	2864	2776
85°	872	2180	2441



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.7	3.0
10°-20°	488.5	8.6
20°-30°	747.0	13.1
30°-40°	913.1	16.0
40°-50°	973.3	17.1
50°-60°	930.5	16.4
60°-70°	788.3	13.9
70°-80°	529.8	9.3
80°-90°	149.5	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°	1405.2	24.7
0°-40°	2318.3	40.7
0°-60°	4222.1	74.2
0°-90°	5689.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5689.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1789	1789	1789	1789	1789	
5°	1789	1786	1778	1786	1786	170
15°	1727	1727	1724	1738	1736	487
25°	1603	1609	1620	1634	1637	739
35°	1422	1434	1456	1484	1490	891
45°	1194	1214	1256	1310	1332	921
55°	923	957	1041	1123	1163	822
65°	610	672	810	917	960	605
75°	288	392	548	641	660	308
85°	56	116	141	152	158	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1789.3	1789.3	1789.3	1789.3	1789.3
2.5°	1792.2	1792.2	1783.7	1789.3	1789.3
5°	1789.3	1786.5	1778.0	1786.5	1786.5
7.5°	1780.9	1778.0	1772.4	1780.9	1778.0
10°	1763.9	1763.9	1758.3	1766.8	1766.8
12.5°	1749.8	1747.0	1744.2	1755.5	1752.6
15°	1727.2	1727.2	1724.4	1738.5	1735.7
17.5°	1699.0	1701.8	1704.6	1715.9	1718.8
20°	1667.9	1673.6	1676.4	1693.3	1693.3
22.5°	1639.7	1642.5	1648.2	1665.1	1665.1
25°	1603.0	1608.6	1619.9	1634.0	1636.9
27.5°	1566.3	1569.1	1583.2	1603.0	1605.8
30°	1518.3	1526.7	1543.7	1566.3	1569.1
32.5°	1475.9	1484.4	1504.2	1526.7	1532.4
35°	1422.3	1433.6	1456.2	1484.4	1490.0
37.5°	1374.3	1382.7	1411.0	1442.0	1450.5
40°	1315.3	1331.9	1360.1	1396.9	1411.0
42.5°	1256.0	1272.9	1306.8	1354.5	1371.4
45°	1193.8	1213.6	1256.0	1309.6	1331.9
47.5°	1131.7	1154.3	1202.3	1264.4	1289.8
50°	1061.1	1089.4	1148.7	1219.2	1247.5
52.5°	993.4	1027.2	1092.2	1171.2	1208.0
55°	922.8	956.7	1041.4	1123.2	1162.8
57.5°	843.7	888.9	982.1	1075.2	1117.6
60°	770.6	812.6	925.6	1027.2	1069.6
62.5°	691.5	748.0	869.1	976.4	1018.8
65°	609.6	671.7	809.8	917.1	959.5
67.5°	536.2	604.0	750.8	857.8	900.2
70°	448.7	533.4	685.9	792.9	835.2
72.5°	366.8	460.0	618.1	722.6	762.1
75°	287.7	392.2	547.5	640.7	660.5
77.5°	214.6	324.4	474.1	513.6	499.5
80°	152.5	259.8	369.6	349.8	358.3
82.5°	98.8	197.7	228.7	259.8	268.0
85°	56.5	115.8	141.2	152.5	158.1
87.5°	25.4	42.4	56.5	56.5	53.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)