

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: P474223

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474223
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50HE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, 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: 3459.9 lumens
Efficiency: N/A
Efficacy: 89.6 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

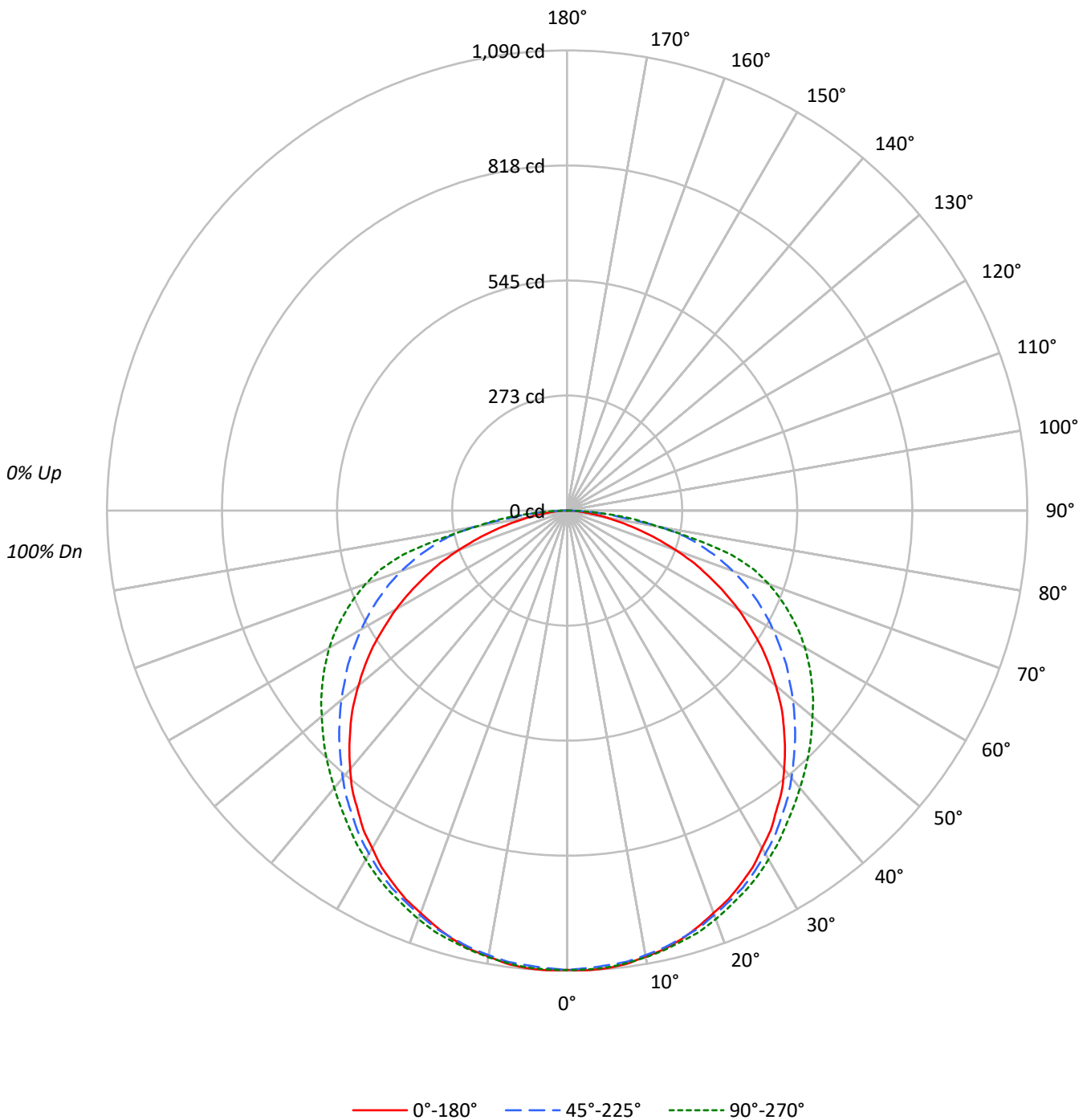
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1464	1464	1464
5°	1470	1460	1467
10°	1465	1461	1468
15°	1463	1461	1470
20°	1452	1460	1474
25°	1447	1462	1478
30°	1434	1458	1482
35°	1421	1454	1488
40°	1405	1453	1507
45°	1381	1453	1541
50°	1351	1462	1588
55°	1316	1486	1659
60°	1261	1515	1750
65°	1180	1568	1858
70°	1073	1641	1998
75°	910	1731	2088
80°	718	1742	1688
85°	530	1326	1485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	3.0
10°-20°	297.1	8.6
20°-30°	454.2	13.1
30°-40°	555.3	16.0
40°-50°	591.9	17.1
50°-60°	565.9	16.4
60°-70°	479.4	13.9
70°-80°	322.2	9.3
80°-90°	90.9	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°	854.5	24.7
0°-40°	1409.8	40.7
0°-60°	2567.5	74.2
0°-90°	3459.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3459.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1088	1086	1081	1086	1086	103
15°	1050	1050	1049	1057	1056	296
25°	975	978	985	994	995	449
35°	865	872	886	903	906	542
45°	726	738	764	796	810	560
55°	561	582	633	683	707	500
65°	371	408	492	558	584	368
75°	175	238	333	390	402	187
85°	34	70	86	93	96	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.1	1088.1	1088.1	1088.1	1088.1
2.5°	1089.8	1089.8	1084.7	1088.1	1088.1
5°	1088.1	1086.4	1081.2	1086.4	1086.4
7.5°	1083.0	1081.2	1077.8	1083.0	1081.2
10°	1072.6	1072.6	1069.2	1074.4	1074.4
12.5°	1064.1	1062.3	1060.6	1067.5	1065.8
15°	1050.3	1050.3	1048.6	1057.2	1055.5
17.5°	1033.2	1034.9	1036.6	1043.5	1045.2
20°	1014.3	1017.7	1019.4	1029.7	1029.7
22.5°	997.1	998.8	1002.2	1012.6	1012.6
25°	974.8	978.2	985.1	993.7	995.4
27.5°	952.5	954.2	962.8	974.8	976.5
30°	923.3	928.4	938.7	952.5	954.2
32.5°	897.5	902.7	914.7	928.4	931.8
35°	864.9	871.8	885.5	902.7	906.1
37.5°	835.7	840.8	858.0	876.9	882.1
40°	799.8	809.9	827.1	849.4	858.0
42.5°	763.7	774.1	794.7	823.7	834.0
45°	726.0	738.0	763.7	796.4	809.9
47.5°	688.2	701.9	731.1	768.9	784.4
50°	645.3	662.4	698.5	741.4	758.6
52.5°	604.1	624.7	664.2	712.2	734.6
55°	561.1	581.7	633.3	683.0	707.1
57.5°	513.1	540.5	597.2	653.9	679.6
60°	468.6	494.2	562.9	624.7	650.4
62.5°	420.5	454.8	528.5	593.8	619.5
65°	370.7	408.5	492.5	557.7	583.5
67.5°	326.1	367.3	456.6	521.6	547.4
70°	272.8	324.4	417.1	482.2	507.9
72.5°	223.0	279.7	375.9	439.4	463.4
75°	175.0	238.5	332.9	389.6	401.6
77.5°	130.5	197.3	288.3	312.3	303.7
80°	92.7	158.0	224.8	212.7	217.9
82.5°	60.1	120.2	139.1	158.0	162.9
85°	34.3	70.4	85.9	92.7	96.2
87.5°	15.5	25.8	34.3	34.3	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)