

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: P474273

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474273
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-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, 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: 3525.7 lumens
Efficiency: N/A
Efficacy: 91.3 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

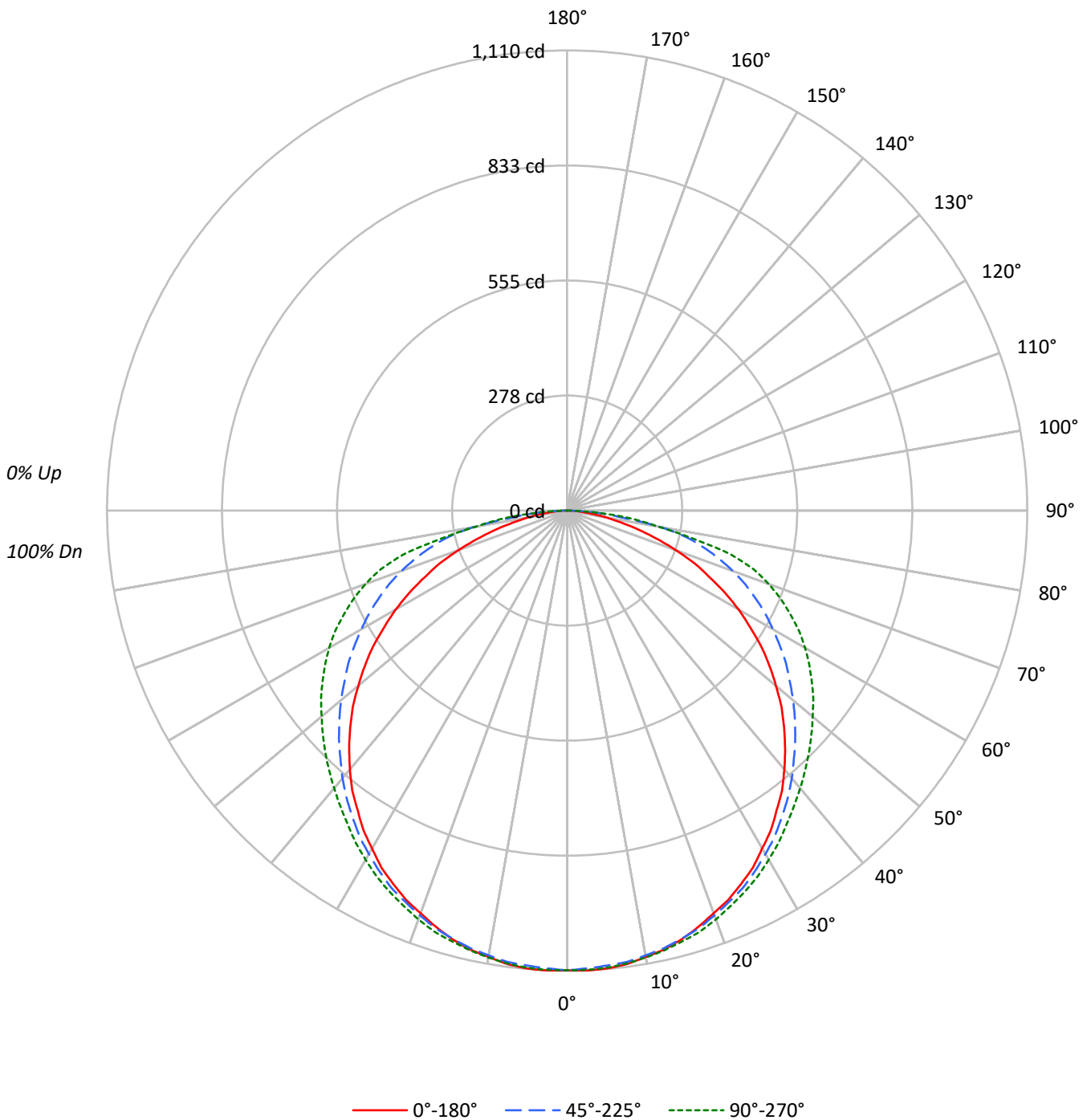
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1492	1492	1492
5°	1498	1488	1495
10°	1493	1489	1496
15°	1491	1488	1498
20°	1480	1487	1502
25°	1475	1490	1506
30°	1462	1486	1511
35°	1448	1482	1517
40°	1431	1480	1536
45°	1408	1481	1570
50°	1376	1490	1618
55°	1341	1514	1690
60°	1285	1543	1784
65°	1203	1598	1893
70°	1094	1672	2036
75°	927	1764	2128
80°	732	1774	1720
85°	540	1351	1513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	3.0
10°-20°	302.7	8.6
20°-30°	462.9	13.1
30°-40°	565.8	16.0
40°-50°	603.1	17.1
50°-60°	576.6	16.4
60°-70°	488.5	13.9
70°-80°	328.3	9.3
80°-90°	92.6	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°	870.7	24.7
0°-40°	1436.6	40.7
0°-60°	2616.3	74.2
0°-90°	3525.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3525.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1109	1109	1109	1109	1109	
5°	1109	1107	1102	1107	1107	105
15°	1070	1070	1068	1077	1076	302
25°	993	997	1004	1012	1014	458
35°	881	888	902	920	923	552
45°	740	752	778	812	825	571
55°	572	593	645	696	720	509
65°	378	416	502	568	594	375
75°	178	243	339	397	409	191
85°	35	72	88	94	98	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1108.8	1108.8	1108.8	1108.8	1108.8
2.5°	1110.5	1110.5	1105.3	1108.8	1108.8
5°	1108.8	1107.0	1101.8	1107.0	1107.0
7.5°	1103.5	1101.8	1098.3	1103.5	1101.8
10°	1093.0	1093.0	1089.5	1094.8	1094.8
12.5°	1084.3	1082.5	1080.8	1087.8	1086.0
15°	1070.3	1070.3	1068.5	1077.3	1075.5
17.5°	1052.8	1054.5	1056.3	1063.3	1065.0
20°	1033.5	1037.0	1038.8	1049.3	1049.3
22.5°	1016.0	1017.8	1021.3	1031.8	1031.8
25°	993.3	996.8	1003.8	1012.5	1014.3
27.5°	970.6	972.3	981.0	993.3	995.0
30°	940.8	946.1	956.6	970.6	972.3
32.5°	914.6	919.8	932.1	946.1	949.6
35°	881.3	888.3	902.3	919.8	923.3
37.5°	851.6	856.8	874.3	893.6	898.8
40°	815.0	825.3	842.8	865.6	874.3
42.5°	778.3	788.8	809.8	839.3	849.8
45°	739.8	752.0	778.3	811.5	825.3
47.5°	701.3	715.3	745.0	783.5	799.3
50°	657.5	675.0	711.8	755.5	773.0
52.5°	615.5	636.5	676.8	725.8	748.5
55°	571.8	592.8	645.3	696.0	720.5
57.5°	522.8	550.8	608.5	666.3	692.5
60°	477.5	503.6	573.5	636.5	662.8
62.5°	428.5	463.5	538.6	605.0	631.3
65°	377.8	416.3	501.8	568.3	594.5
67.5°	332.3	374.3	465.2	531.6	557.8
70°	278.0	330.5	425.0	491.3	517.6
72.5°	227.3	285.0	383.0	447.7	472.2
75°	178.3	243.0	339.3	397.0	409.3
77.5°	133.0	201.0	293.8	318.3	309.5
80°	94.5	161.0	229.0	216.8	222.0
82.5°	61.2	122.5	141.7	161.0	166.0
85°	35.0	71.7	87.5	94.5	98.0
87.5°	15.7	26.2	35.0	35.0	33.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)