

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: P474173

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474173
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-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3338.8 lumens
Efficiency: N/A
Efficacy: 86.5 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

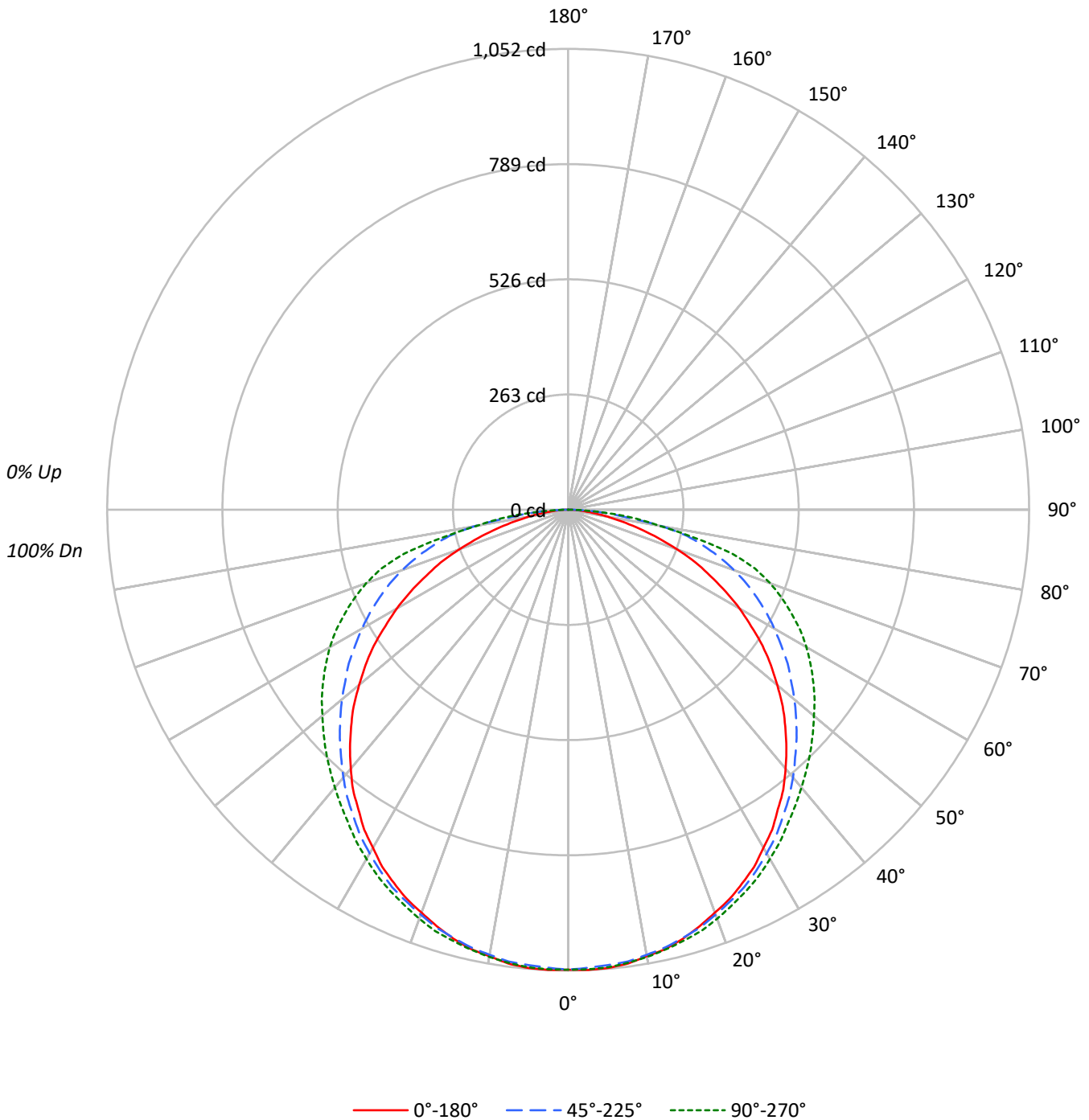
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1413	1413	1413
5°	1418	1409	1416
10°	1414	1410	1417
15°	1412	1410	1419
20°	1401	1409	1423
25°	1397	1411	1426
30°	1384	1407	1431
35°	1371	1404	1436
40°	1356	1402	1454
45°	1333	1402	1487
50°	1303	1411	1532
55°	1270	1434	1601
60°	1217	1462	1689
65°	1139	1513	1792
70°	1036	1583	1928
75°	878	1670	2015
80°	693	1681	1629
85°	511	1278	1433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	3.0
10°-20°	286.7	8.6
20°-30°	438.3	13.1
30°-40°	535.8	16.0
40°-50°	571.1	17.1
50°-60°	546.1	16.4
60°-70°	462.6	13.9
70°-80°	310.9	9.3
80°-90°	87.7	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°	824.6	24.7
0°-40°	1360.4	40.7
0°-60°	2477.6	74.2
0°-90°	3338.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3338.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1050	1048	1043	1048	1048	100
15°	1014	1014	1012	1020	1018	286
25°	941	944	951	959	960	434
35°	835	841	854	871	874	523
45°	701	712	737	768	782	540
55°	542	561	611	659	682	482
65°	358	394	475	538	563	355
75°	169	230	321	376	388	181
85°	33	68	83	90	93	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.0	1050.0	1050.0	1050.0	1050.0
2.5°	1051.7	1051.7	1046.7	1050.0	1050.0
5°	1050.0	1048.4	1043.4	1048.4	1048.4
7.5°	1045.0	1043.4	1040.1	1045.0	1043.4
10°	1035.1	1035.1	1031.8	1036.8	1036.8
12.5°	1026.8	1025.2	1023.5	1030.1	1028.5
15°	1013.6	1013.6	1011.9	1020.2	1018.5
17.5°	997.0	998.7	1000.3	1006.9	1008.6
20°	978.8	982.1	983.7	993.7	993.7
22.5°	962.2	963.9	967.2	977.1	977.1
25°	940.7	944.0	950.6	958.9	960.5
27.5°	919.1	920.8	929.1	940.7	942.3
30°	891.0	895.9	905.9	919.1	920.8
32.5°	866.1	871.1	882.7	895.9	899.2
35°	834.6	841.2	854.5	871.1	874.4
37.5°	806.4	811.4	828.0	846.2	851.2
40°	771.8	781.6	798.2	819.7	828.0
42.5°	737.0	747.0	766.8	794.8	804.8
45°	700.6	712.2	737.0	768.5	781.6
47.5°	664.1	677.4	705.5	742.0	756.9
50°	622.7	639.3	674.1	715.5	732.0
52.5°	582.9	602.8	640.9	687.3	708.8
55°	541.5	561.4	611.1	659.1	682.3
57.5°	495.1	521.6	576.3	631.0	655.8
60°	452.2	476.9	543.2	602.8	627.7
62.5°	405.8	438.9	510.0	573.0	597.8
65°	357.7	394.2	475.2	538.2	563.0
67.5°	314.7	354.4	440.6	503.4	528.2
70°	263.3	313.0	402.5	465.3	490.1
72.5°	215.2	269.9	362.7	424.0	447.2
75°	168.8	230.2	321.3	376.0	387.6
77.5°	125.9	190.4	278.2	301.4	293.1
80°	89.5	152.4	216.9	205.3	210.3
82.5°	58.0	116.0	134.2	152.4	157.2
85°	33.1	67.9	82.8	89.5	92.8
87.5°	14.9	24.9	33.1	33.1	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)