

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: P225649

Luminaire Tested: **24AC-LD5-31-UNV-L840-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P225649
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35753)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24AC-LD5-31-UNV-L840-CD1-U
Description: METALUX Accord 2X4 LED TROFFER
Light Source: (168)4000K CCT, 85 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3218.0 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

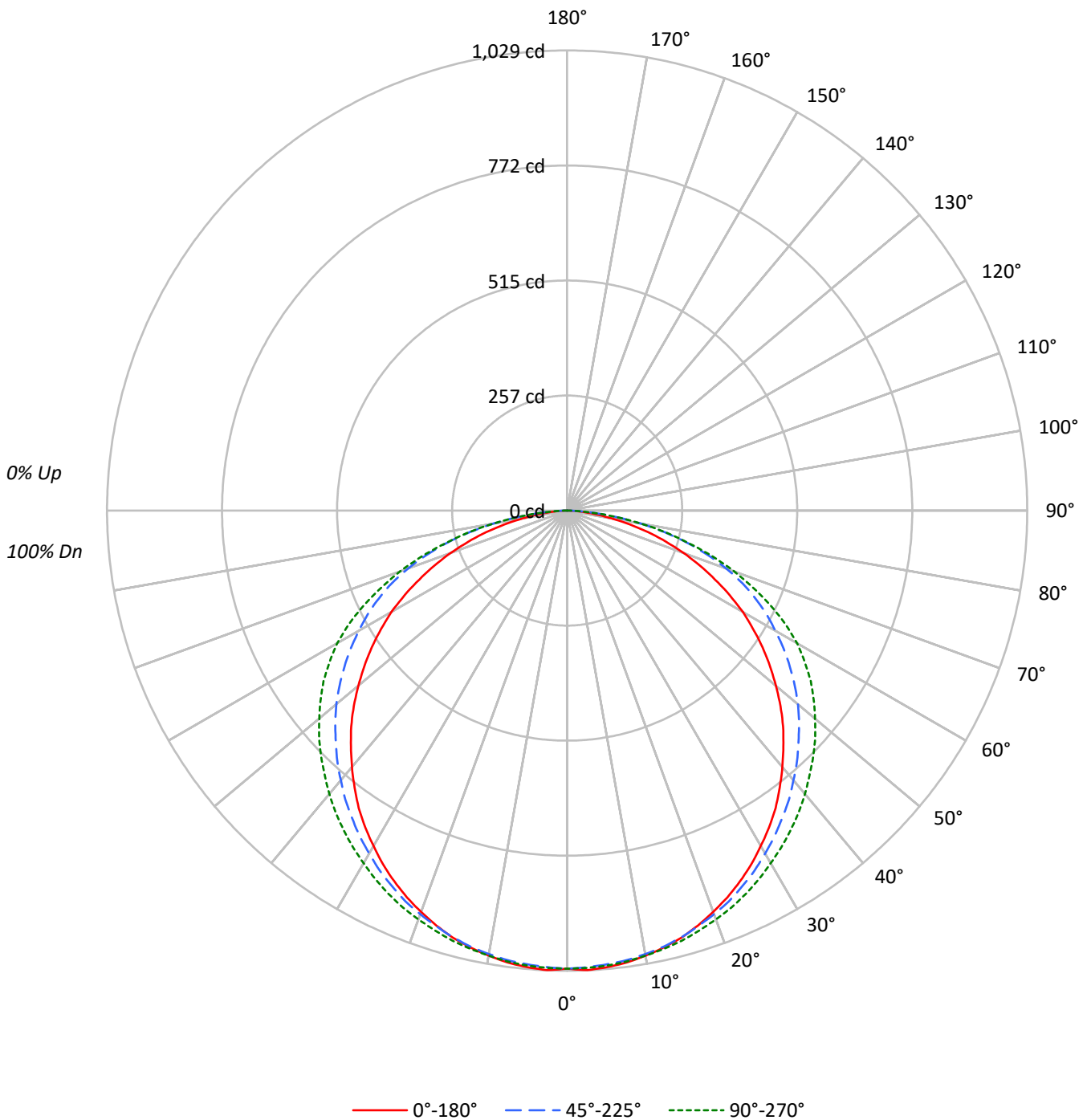
Input Watts (W): 25.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1378	1378	1378
5°	1384	1376	1380
10°	1381	1376	1381
15°	1377	1376	1386
20°	1367	1375	1393
25°	1358	1376	1404
30°	1346	1376	1415
35°	1334	1378	1432
40°	1315	1383	1453
45°	1299	1392	1481
50°	1275	1410	1515
55°	1251	1426	1560
60°	1221	1447	1599
65°	1162	1479	1598
70°	1090	1487	1563
75°	975	1444	1462
80°	782	1292	1298
85°	553	939	885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.0
10°-20°	279.1	8.7
20°-30°	427.6	13.3
30°-40°	525.6	16.3
40°-50°	563.8	17.5
50°-60°	539.2	16.8
60°-70°	443.5	13.8
70°-80°	272.7	8.5
80°-90°	69.6	2.2
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°	803.7	25.0
0°-40°	1329.3	41.3
0°-60°	2432.2	75.6
0°-90°	3218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1025	1021	1019	1017	1021	97
15°	988	985	988	989	995	279
25°	915	915	927	937	946	422
35°	812	817	839	860	872	508
45°	683	696	732	764	778	526
55°	533	559	608	648	665	476
65°	365	406	465	492	502	362
75°	188	243	278	283	281	198
85°	36	59	61	59	57	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.3	1024.3	1024.3	1024.3	1024.3
2.5°	1028.6	1023.6	1022.2	1020.0	1023.6
5°	1025.0	1020.7	1018.6	1017.1	1021.4
7.5°	1019.3	1015.0	1014.3	1012.9	1017.1
10°	1010.7	1007.1	1007.1	1006.4	1010.7
12.5°	1000.7	996.4	998.5	999.3	1003.5
15°	988.5	984.9	987.8	989.2	995.0
17.5°	972.8	969.9	974.2	978.5	984.2
20°	954.9	954.2	960.6	966.3	972.8
22.5°	936.3	936.3	945.6	952.0	960.6
25°	914.8	914.8	927.0	937.0	945.6
27.5°	891.9	893.3	907.6	919.8	929.1
30°	866.1	870.4	885.4	900.5	910.5
32.5°	840.3	843.9	863.3	882.6	891.9
35°	812.4	817.4	838.9	860.4	871.8
37.5°	780.9	788.1	814.6	838.2	850.4
40°	748.7	758.0	787.4	814.6	827.5
42.5°	715.8	728.7	760.9	788.8	802.4
45°	682.9	695.8	731.5	763.8	778.1
47.5°	647.1	662.8	703.6	736.6	752.3
50°	609.1	627.8	673.6	707.9	723.7
52.5°	571.9	593.4	641.4	680.0	695.0
55°	533.3	559.0	607.7	648.5	665.0
57.5°	493.2	522.5	574.1	615.6	629.9
60°	453.8	483.2	537.6	579.8	594.1
62.5°	409.4	445.2	503.2	542.6	550.4
65°	365.1	405.9	464.6	492.5	501.8
67.5°	321.4	365.8	424.5	444.5	450.2
70°	277.0	322.8	377.9	394.4	397.3
72.5°	231.9	283.5	330.0	339.3	340.7
75°	187.5	243.4	277.7	282.7	281.3
77.5°	143.9	199.0	223.3	225.5	226.2
80°	100.9	152.5	166.8	167.5	167.5
82.5°	65.1	105.9	113.1	111.7	113.1
85°	35.8	58.7	60.8	58.7	57.3
87.5°	11.5	17.2	18.6	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)