

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: P229381

Luminaire Tested: **24ALNG-LD5-45-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ALNG-LD5-45-UNV-L840-CD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (252)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4505.0 lumens
Efficiency: N/A
Efficacy: 139.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

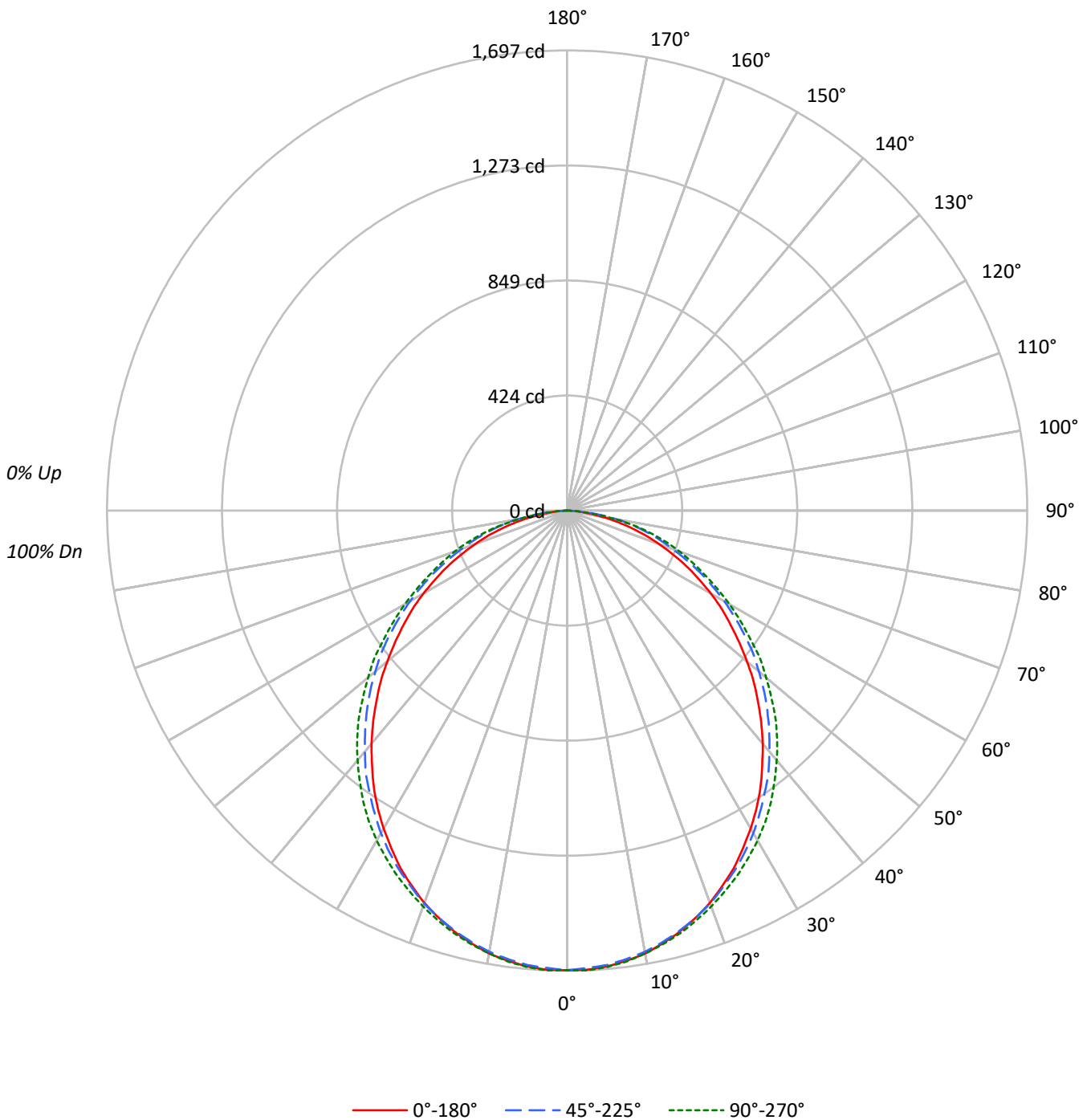
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	54		65	59	54		63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47		58	52	47		56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33		44	38	33		43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2596	2596	2596
5°	2594	2586	2598
10°	2579	2570	2579
15°	2548	2543	2558
20°	2510	2514	2532
25°	2459	2473	2509
30°	2394	2429	2485
35°	2326	2375	2452
40°	2245	2320	2404
45°	2156	2261	2356
50°	2062	2199	2282
55°	1967	2131	2201
60°	1874	2051	2115
65°	1761	1960	2028
70°	1616	1857	1974
75°	1419	1781	1877
80°	1146	1664	1575
85°	812	1097	879



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	3.6
10°-20°	453.4	10.1
20°-30°	675.6	15.0
30°-40°	797.1	17.7
40°-50°	804.7	17.9
50°-60°	706.8	15.7
60°-70°	527.1	11.7
70°-80°	307.0	6.8
80°-90°	73.3	1.6
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°	1289.0	28.6
0°-40°	2086.1	46.3
0°-60°	3597.6	79.9
0°-90°	4505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1695	1695	1695	1695	1695	
5°	1687	1686	1682	1687	1690	160
15°	1607	1606	1604	1611	1614	453
25°	1455	1456	1464	1480	1485	669
35°	1244	1251	1270	1300	1311	777
45°	995	1010	1044	1075	1088	768
55°	737	759	798	823	824	660
65°	486	506	541	557	560	480
75°	240	268	301	316	317	256
85°	46	67	62	52	50	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1694.7	1694.7	1694.7	1694.7	1694.7
2.5°	1694.7	1693.4	1688.4	1693.4	1697.2
5°	1687.2	1685.9	1682.2	1687.2	1689.7
7.5°	1674.7	1673.4	1668.4	1675.9	1677.2
10°	1658.4	1655.9	1652.2	1657.2	1658.4
12.5°	1634.7	1633.5	1629.7	1636.0	1637.2
15°	1607.2	1606.0	1603.5	1611.0	1613.5
17.5°	1574.8	1576.0	1574.8	1583.5	1584.8
20°	1539.8	1541.0	1542.3	1552.3	1553.5
22.5°	1497.3	1498.6	1502.3	1516.1	1519.8
25°	1454.9	1456.1	1463.6	1479.9	1484.9
27.5°	1403.7	1408.7	1419.9	1439.9	1444.9
30°	1353.7	1358.7	1373.7	1397.4	1404.9
32.5°	1300.0	1305.0	1322.5	1348.7	1360.0
35°	1243.8	1251.3	1270.1	1300.0	1311.3
37.5°	1181.4	1195.1	1220.1	1248.8	1256.3
40°	1122.7	1132.7	1160.2	1195.1	1202.6
42.5°	1059.0	1072.7	1102.7	1137.7	1146.4
45°	995.3	1010.3	1044.0	1075.2	1087.7
47.5°	932.9	949.1	985.3	1017.8	1021.5
50°	865.4	885.4	922.9	954.1	957.8
52.5°	800.5	824.2	864.2	889.2	897.9
55°	736.8	759.3	798.0	823.0	824.2
57.5°	676.9	695.6	733.1	754.3	758.0
60°	611.9	630.7	669.4	686.9	690.6
62.5°	547.0	567.0	604.4	621.9	624.4
65°	485.8	505.8	540.7	557.0	559.5
67.5°	420.9	445.8	475.8	497.0	499.5
70°	360.9	385.9	414.6	435.8	440.8
72.5°	301.0	329.7	358.4	374.6	380.9
75°	239.8	268.5	301.0	316.0	317.2
77.5°	183.6	211.1	244.8	253.5	249.8
80°	129.9	159.8	188.6	187.3	178.6
82.5°	82.4	111.1	122.4	114.9	109.9
85°	46.2	67.4	62.4	52.5	50.0
87.5°	18.7	20.0	15.0	10.0	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)