

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: P182385

Luminaire Tested: **24FR-50-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26767)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-50-UNV-L830-CD1-U
Description: METALUX 2X4 FR TROFFER LED FIXTURE

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5077.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

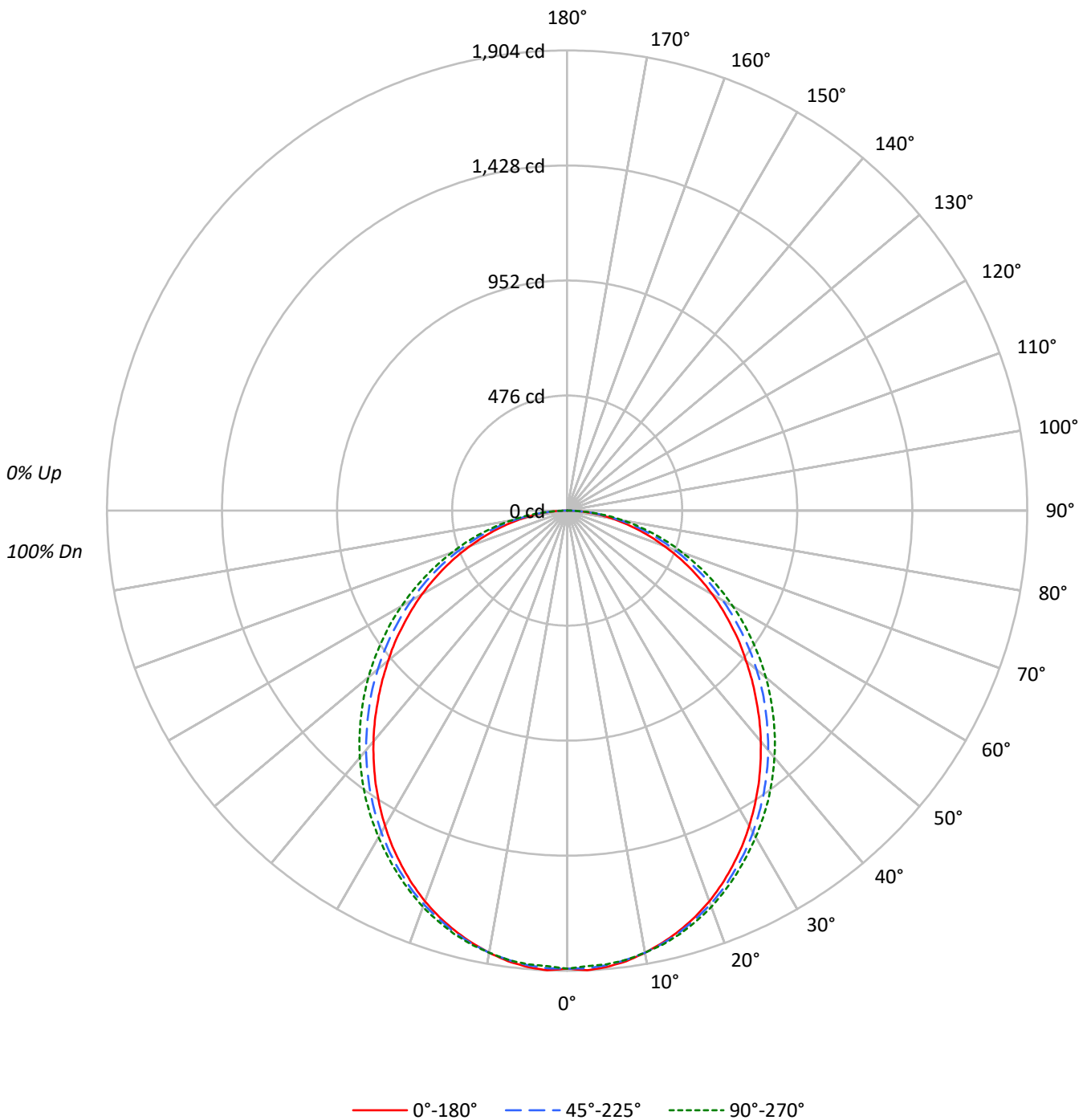
Input Watts (W): 45.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	97	94	91		93	91	88		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	74		79	75	72	70
3	90	80	71	65	88	78	70	64	75	69	63		72	67	62		70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	53	50
5	76	63	54	48	74	62	54	47	60	52	47		58	51	46		56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40	34	29	27
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°	2550	2550	2550
5°	2560	2550	2545
10°	2538	2538	2538
15°	2506	2514	2524
20°	2464	2483	2499
25°	2406	2438	2462
30°	2341	2389	2425
35°	2269	2333	2387
40°	2190	2273	2344
45°	2105	2207	2296
50°	2022	2142	2247
55°	1945	2071	2189
60°	1866	2001	2129
65°	1781	1932	2068
70°	1677	1854	1994
75°	1574	1771	1923
80°	1457	1665	1836
85°	1301	1545	1678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	3.5
10°-20°	508.1	10.0
20°-30°	754.4	14.9
30°-40°	885.3	17.4
40°-50°	893.1	17.6
50°-60°	789.0	15.5
60°-70°	599.5	11.8
70°-80°	358.7	7.1
80°-90°	109.9	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°	1441.5	28.4
0°-40°	2326.8	45.8
0°-60°	4008.9	79.0
0°-90°	5077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1895	1895	1895	1895	1895	
5°	1895	1881	1888	1886	1884	180
15°	1799	1790	1805	1810	1812	507
25°	1620	1618	1642	1651	1658	746
35°	1381	1386	1420	1440	1453	863
45°	1106	1119	1160	1194	1206	854
55°	829	843	883	921	933	743
65°	559	573	607	637	650	554
75°	303	318	341	360	370	321
85°	84	92	100	106	109	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1895.2	1895.2	1895.2	1895.2	1895.2
2.5°	1903.8	1889.1	1895.2	1892.8	1886.7
5°	1895.2	1880.6	1887.9	1885.5	1884.2
7.5°	1880.6	1867.1	1874.5	1874.5	1874.5
10°	1857.4	1846.4	1857.4	1857.4	1857.4
12.5°	1830.5	1820.7	1834.2	1835.4	1837.8
15°	1798.8	1790.2	1804.9	1809.8	1812.2
17.5°	1762.1	1754.8	1770.7	1778.0	1780.4
20°	1720.6	1713.3	1734.0	1738.9	1745.0
22.5°	1673.0	1669.3	1691.3	1696.2	1703.5
25°	1620.5	1618.0	1642.5	1651.0	1658.3
27.5°	1566.7	1565.5	1592.4	1603.4	1610.7
30°	1506.9	1508.1	1537.4	1550.9	1560.6
32.5°	1444.6	1448.3	1480.0	1495.9	1508.1
35°	1381.1	1386.0	1420.2	1439.7	1453.2
37.5°	1314.0	1321.3	1357.9	1381.1	1394.6
40°	1246.8	1255.3	1294.4	1318.8	1334.7
42.5°	1177.2	1188.2	1227.3	1259.0	1272.4
45°	1106.4	1118.6	1160.1	1194.3	1206.5
47.5°	1036.8	1052.6	1092.9	1127.1	1140.6
50°	965.9	980.6	1023.3	1058.7	1073.4
52.5°	900.0	913.4	953.7	990.4	1003.8
55°	829.2	842.6	882.9	920.8	933.0
57.5°	762.0	774.2	813.3	851.1	863.4
60°	693.6	705.8	743.7	777.9	791.3
62.5°	626.5	638.7	676.5	708.3	720.5
65°	559.3	572.7	606.9	637.4	649.7
67.5°	493.3	506.8	538.5	567.8	577.6
70°	426.2	440.8	471.4	498.2	506.8
72.5°	363.9	378.6	405.4	428.6	439.6
75°	302.8	317.5	340.7	360.2	370.0
77.5°	244.2	258.9	277.2	293.1	301.6
80°	188.1	201.5	214.9	230.8	236.9
82.5°	134.3	145.3	156.3	168.5	173.4
85°	84.3	91.6	100.1	106.2	108.7
87.5°	36.6	41.5	42.7	44.0	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)