

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: P238941

Luminaire Tested: **24ENA-LD2-58-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ENA-LD2-58-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5521.4 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

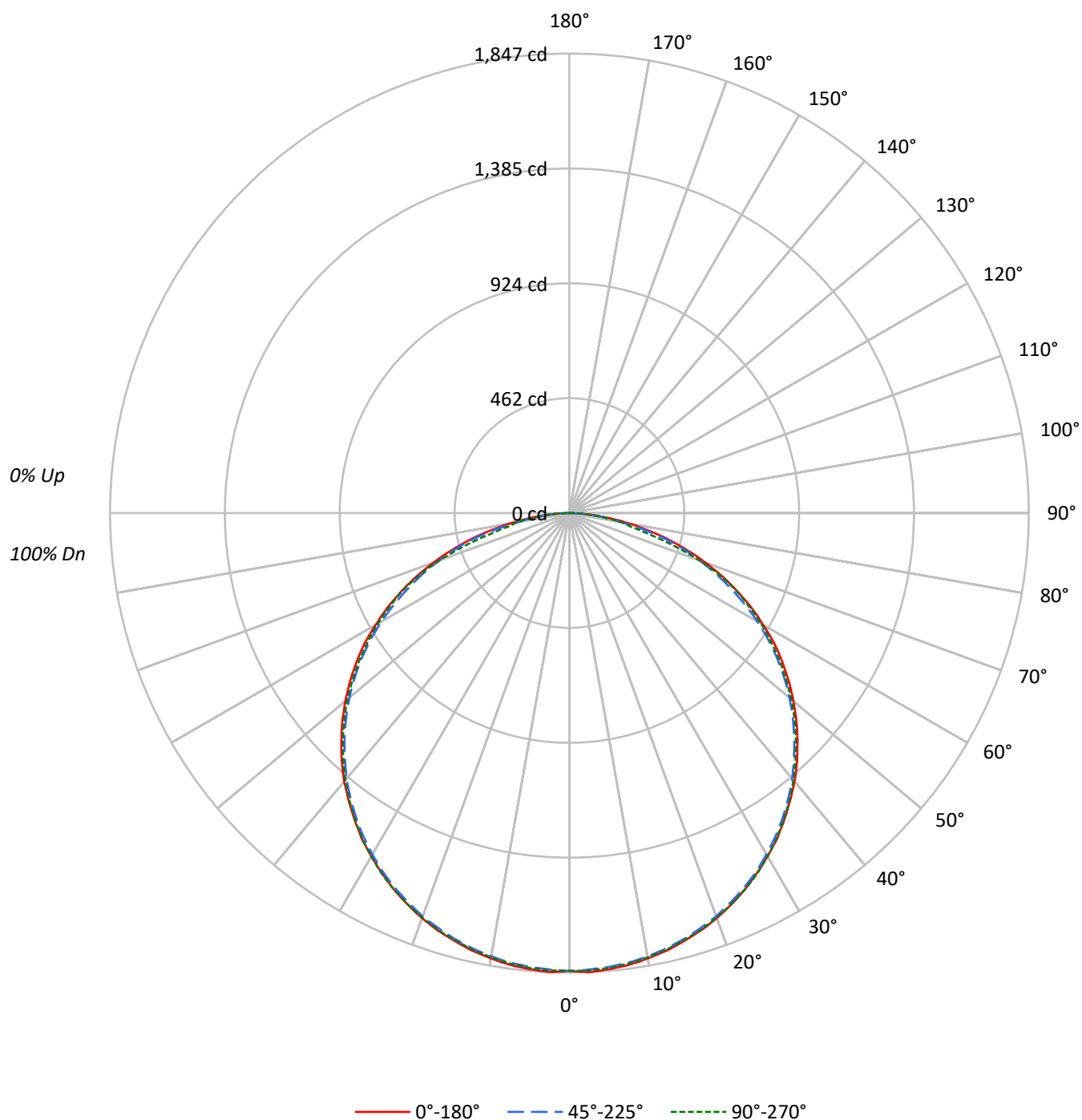
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238941

CATALOG NUMBER: 24ENA-LD2-58-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238941

CATALOG NUMBER: 24ENA-LD2-58-UNV-L830-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3100	3100	3100
5°	3112	3096	3104
10°	3110	3095	3102
15°	3107	3093	3101
20°	3107	3092	3103
25°	3103	3088	3103
30°	3099	3082	3099
35°	3096	3075	3092
40°	3098	3065	3083
45°	3090	3046	3068
50°	3081	3027	3054
55°	3070	2995	3026
60°	3032	2939	3001
65°	2971	2847	2952
70°	2864	2745	2739
75°	2696	2576	2178
80°	2373	2015	2070
85°	1873	1761	1628



TEST NUMBER: P238941

CATALOG NUMBER: 24ENA-LD2-58-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.3	3.2
10°-20°	501.2	9.1
20°-30°	767.0	13.9
30°-40°	937.5	17.0
40°-50°	990.7	17.9
50°-60°	917.9	16.6
60°-70°	719.1	13.0
70°-80°	406.6	7.4
80°-90°	107.1	1.9
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°	1442.5	26.1
0°-40°	2380.1	43.1
0°-60°	4288.7	77.7
0°-90°	5521.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5521.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1840	1834	1831	1830	1835	175
15°	1781	1774	1773	1772	1778	503
25°	1669	1662	1661	1661	1669	770
35°	1506	1499	1495	1495	1503	943
45°	1297	1288	1278	1278	1288	1001
55°	1045	1034	1020	1022	1030	933
65°	745	731	714	723	741	737
75°	414	403	396	353	335	436
85°	97	91	91	86	84	114
90°	0	0	0	0	0	



TEST NUMBER: P238941

CATALOG NUMBER: 24ENA-LD2-58-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1847.0	1838.9	1836.6	1834.3	1840.1
5°	1840.1	1834.3	1830.8	1829.7	1835.4
7.5°	1832.0	1825.1	1822.8	1820.5	1826.2
10°	1818.1	1811.2	1808.9	1807.8	1813.5
12.5°	1802.0	1793.9	1792.8	1791.6	1797.4
15°	1781.2	1774.3	1773.2	1772.0	1777.8
17.5°	1759.3	1752.4	1750.1	1748.9	1757.0
20°	1732.8	1725.9	1724.7	1723.5	1730.5
22.5°	1702.8	1695.9	1693.6	1694.7	1701.6
25°	1669.3	1662.4	1661.2	1661.2	1669.3
27.5°	1632.4	1625.5	1625.5	1625.5	1634.7
30°	1593.2	1587.4	1584.0	1585.1	1593.2
32.5°	1552.8	1543.6	1541.3	1542.4	1550.5
35°	1505.5	1498.6	1495.1	1495.1	1503.2
37.5°	1457.1	1450.1	1445.5	1445.5	1453.6
40°	1408.6	1398.2	1393.6	1391.3	1401.7
42.5°	1354.4	1346.3	1335.9	1335.9	1345.2
45°	1296.7	1287.5	1278.2	1278.2	1287.5
47.5°	1237.9	1228.6	1218.2	1218.2	1227.5
50°	1175.6	1166.3	1154.8	1154.8	1165.2
52.5°	1112.1	1101.7	1089.0	1087.9	1098.3
55°	1045.2	1033.7	1019.8	1022.1	1030.2
57.5°	977.1	962.1	948.3	948.3	961.0
60°	899.8	887.2	872.2	874.5	890.6
62.5°	826.0	809.9	794.9	800.6	814.5
65°	745.3	731.4	714.1	723.3	740.6
67.5°	665.7	650.7	636.8	648.3	656.4
70°	581.4	567.6	557.2	557.2	556.1
72.5°	497.2	484.5	482.2	460.3	446.5
75°	414.2	402.6	395.7	353.0	334.6
77.5°	327.6	324.2	302.3	257.3	251.5
80°	244.6	246.9	207.7	208.8	213.4
82.5°	168.4	165.0	155.7	148.8	146.5
85°	96.9	91.1	91.1	86.5	84.2
87.5°	32.3	35.8	35.8	35.8	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)