

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: P238903

Luminaire Tested: **24EN-LD2-58-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238903
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: 24EN-LD2-58-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5955.0 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

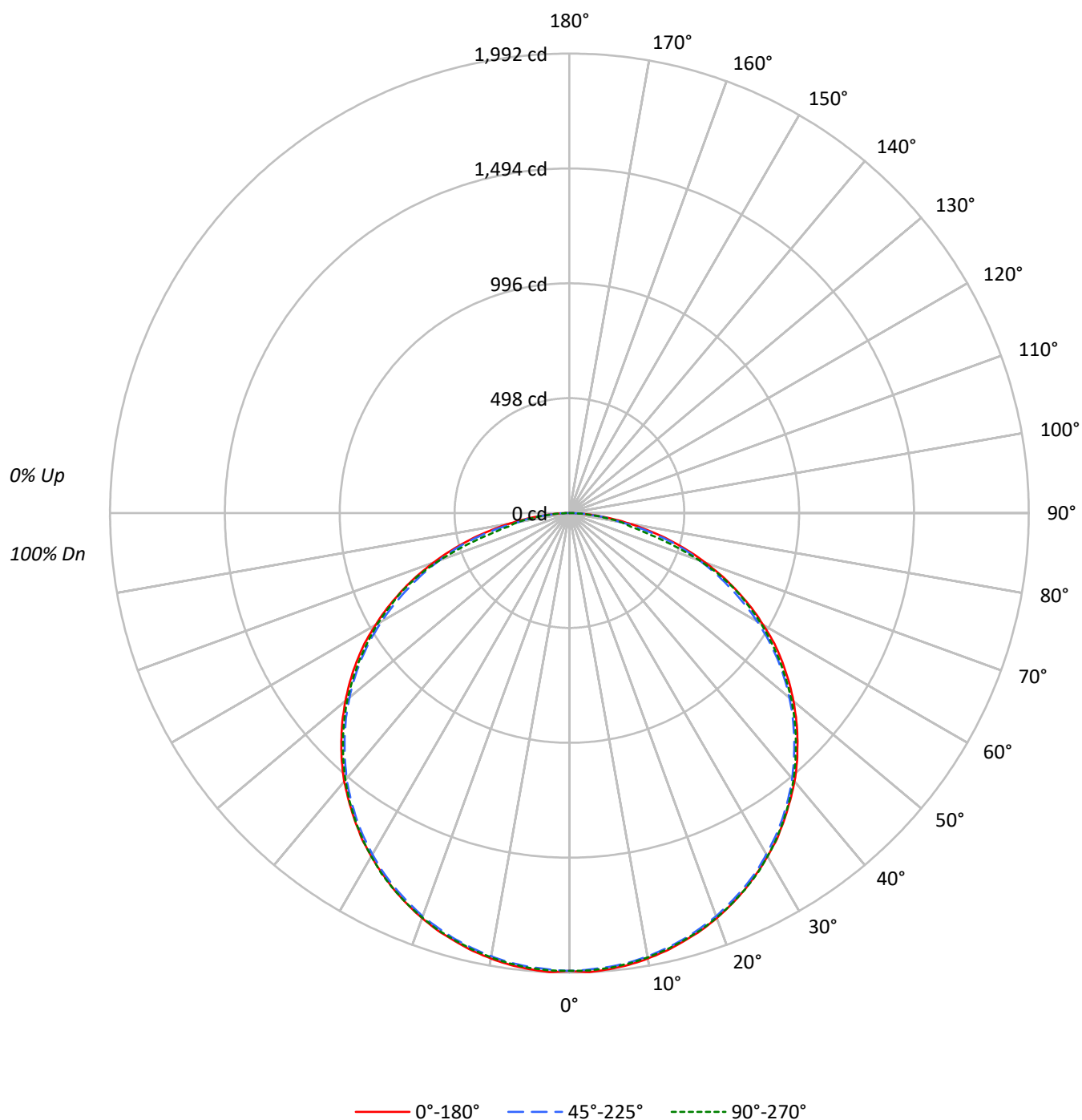
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3040	3040	3040
5°	3051	3036	3044
10°	3050	3034	3042
15°	3046	3032	3040
20°	3046	3032	3042
25°	3043	3028	3043
30°	3039	3021	3039
35°	3036	3015	3031
40°	3037	3005	3022
45°	3029	2986	3008
50°	3021	2968	2994
55°	3010	2937	2967
60°	2973	2881	2943
65°	2913	2791	2895
70°	2808	2691	2686
75°	2643	2526	2135
80°	2327	1976	2030
85°	1836	1727	1596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.0	3.2
10°-20°	540.6	9.1
20°-30°	827.2	13.9
30°-40°	1011.1	17.0
40°-50°	1068.5	17.9
50°-60°	990.0	16.6
60°-70°	775.6	13.0
70°-80°	438.5	7.4
80°-90°	115.5	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°	1555.8	26.1
0°-40°	2566.9	43.1
0°-60°	4625.4	77.7
0°-90°	5955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5955.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1985	1985	1985	1985	1985	
5°	1985	1978	1975	1973	1980	189
15°	1921	1914	1912	1911	1917	543
25°	1800	1793	1792	1792	1800	830
35°	1624	1616	1612	1612	1621	1017
45°	1398	1389	1379	1379	1389	1079
55°	1127	1115	1100	1102	1111	1007
65°	804	789	770	780	799	795
75°	447	434	427	381	361	470
85°	104	98	98	93	91	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1984.6	1984.6	1984.6	1984.6	1984.6
2.5°	1992.0	1983.3	1980.8	1978.3	1984.6
5°	1984.6	1978.3	1974.6	1973.4	1979.6
7.5°	1975.8	1968.4	1965.9	1963.4	1969.6
10°	1960.9	1953.5	1951.0	1949.7	1955.9
12.5°	1943.5	1934.8	1933.5	1932.3	1938.5
15°	1921.1	1913.6	1912.4	1911.1	1917.4
17.5°	1897.5	1890.0	1887.5	1886.3	1895.0
20°	1868.8	1861.4	1860.1	1858.9	1866.4
22.5°	1836.5	1829.0	1826.5	1827.8	1835.2
25°	1800.4	1792.9	1791.7	1791.7	1800.4
27.5°	1760.6	1753.1	1753.1	1753.1	1763.1
30°	1718.3	1712.1	1708.3	1709.6	1718.3
32.5°	1674.7	1664.8	1662.3	1663.5	1672.3
35°	1623.7	1616.3	1612.5	1612.5	1621.2
37.5°	1571.5	1564.0	1559.0	1559.0	1567.7
40°	1519.2	1508.0	1503.0	1500.5	1511.7
42.5°	1460.7	1452.0	1440.8	1440.8	1450.8
45°	1398.5	1388.6	1378.6	1378.6	1388.6
47.5°	1335.1	1325.1	1313.9	1313.9	1323.9
50°	1267.9	1257.9	1245.5	1245.5	1256.7
52.5°	1199.4	1188.2	1174.6	1173.3	1184.5
55°	1127.3	1114.8	1099.9	1102.4	1111.1
57.5°	1053.9	1037.7	1022.8	1022.8	1036.4
60°	970.5	956.8	940.6	943.1	960.6
62.5°	890.9	873.5	857.3	863.5	878.4
65°	803.8	788.8	770.2	780.1	798.8
67.5°	717.9	701.7	686.8	699.3	708.0
70°	627.1	612.2	601.0	601.0	599.7
72.5°	536.3	522.6	520.1	496.5	481.5
75°	446.7	434.2	426.8	380.7	360.8
77.5°	353.4	349.6	326.0	277.5	271.2
80°	263.8	266.3	224.0	225.2	230.2
82.5°	181.7	177.9	168.0	160.5	158.0
85°	104.5	98.3	98.3	93.3	90.8
87.5°	34.8	38.6	38.6	38.6	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)