

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: P238940

Luminaire Tested: **24ENA-LD2-54-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238940
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-LD2-54-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5854.9 lumens
Efficiency: N/A
Efficacy: 136.2 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

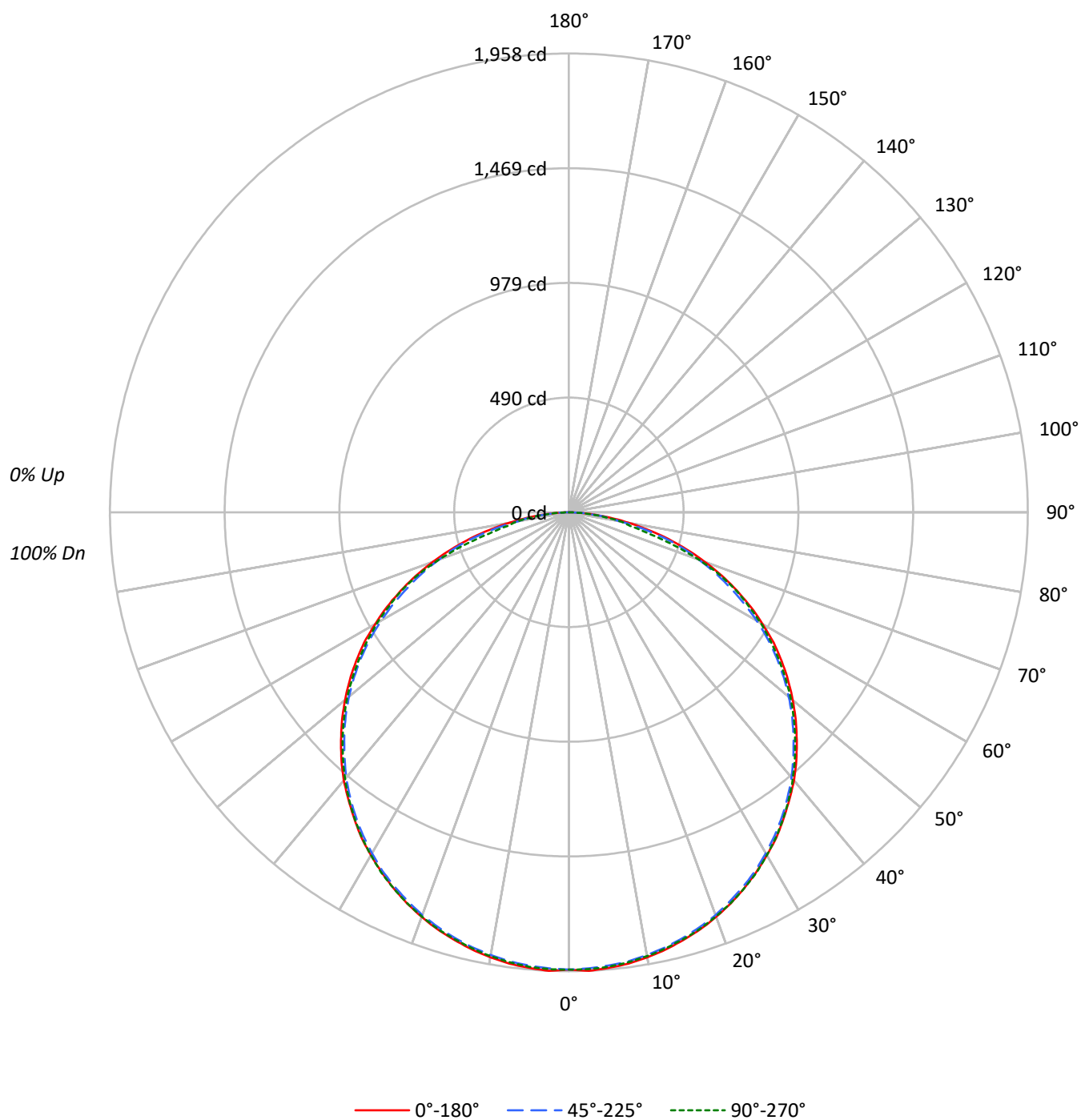
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3287	3287	3287
5°	3300	3283	3292
10°	3298	3282	3290
15°	3294	3279	3288
20°	3294	3279	3290
25°	3291	3275	3291
30°	3287	3268	3287
35°	3283	3261	3278
40°	3285	3250	3269
45°	3276	3229	3253
50°	3267	3209	3238
55°	3255	3176	3209
60°	3215	3116	3182
65°	3151	3019	3131
70°	3037	2911	2904
75°	2859	2731	2310
80°	2516	2136	2196
85°	1987	1867	1726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	3.2
10°-20°	531.5	9.1
20°-30°	813.3	13.9
30°-40°	994.1	17.0
40°-50°	1050.5	17.9
50°-60°	973.3	16.6
60°-70°	762.6	13.0
70°-80°	431.1	7.4
80°-90°	113.5	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°	1529.7	26.1
0°-40°	2523.8	43.1
0°-60°	4547.7	77.7
0°-90°	5854.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5854.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1951	1945	1941	1940	1946	186
15°	1889	1882	1880	1879	1885	534
25°	1770	1763	1762	1762	1770	816
35°	1596	1589	1585	1585	1594	999
45°	1375	1365	1355	1355	1365	1061
55°	1108	1096	1081	1084	1092	990
65°	790	776	757	767	785	781
75°	439	427	420	374	355	462
85°	103	97	97	92	89	121
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1951.2	1951.2	1951.2	1951.2	1951.2
2.5°	1958.5	1950.0	1947.5	1945.1	1951.2
5°	1951.2	1945.1	1941.4	1940.2	1946.3
7.5°	1942.6	1935.3	1932.8	1930.4	1936.5
10°	1927.9	1920.6	1918.2	1916.9	1923.1
12.5°	1910.8	1902.3	1901.0	1899.8	1905.9
15°	1888.8	1881.5	1880.2	1879.0	1885.1
17.5°	1865.6	1858.2	1855.8	1854.5	1863.1
20°	1837.4	1830.1	1828.9	1827.6	1835.0
22.5°	1805.6	1798.3	1795.8	1797.1	1804.4
25°	1770.1	1762.8	1761.6	1761.6	1770.1
27.5°	1731.0	1723.7	1723.7	1723.7	1733.4
30°	1689.4	1683.3	1679.6	1680.8	1689.4
32.5°	1646.6	1636.8	1634.4	1635.6	1644.1
35°	1596.4	1589.1	1585.4	1585.4	1594.0
37.5°	1545.0	1537.7	1532.8	1532.8	1541.4
40°	1493.7	1482.7	1477.8	1475.3	1486.3
42.5°	1436.2	1427.6	1416.6	1416.6	1426.4
45°	1375.0	1365.2	1355.4	1355.4	1365.2
47.5°	1312.6	1302.8	1291.8	1291.8	1301.6
50°	1246.6	1236.8	1224.5	1224.5	1235.5
52.5°	1179.3	1168.3	1154.8	1153.6	1164.6
55°	1108.3	1096.1	1081.4	1083.9	1092.4
57.5°	1036.1	1020.2	1005.6	1005.6	1019.0
60°	954.2	940.7	924.8	927.3	944.4
62.5°	875.9	858.8	842.9	849.0	863.7
65°	790.3	775.6	757.2	767.0	785.4
67.5°	705.9	690.0	675.3	687.5	696.1
70°	616.6	601.9	590.9	590.9	589.6
72.5°	527.2	513.8	511.3	488.1	473.4
75°	439.2	426.9	419.6	374.3	354.8
77.5°	347.4	343.8	320.5	272.8	266.7
80°	259.3	261.8	220.2	221.4	226.3
82.5°	178.6	174.9	165.1	157.8	155.4
85°	102.8	96.6	96.6	91.7	89.3
87.5°	34.3	37.9	37.9	37.9	39.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)