

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: P238995

Luminaire Tested: **24EN-LD2-74-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238995
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-LD2-74-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6740.8 lumens
Efficiency: N/A
Efficacy: 106.0 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

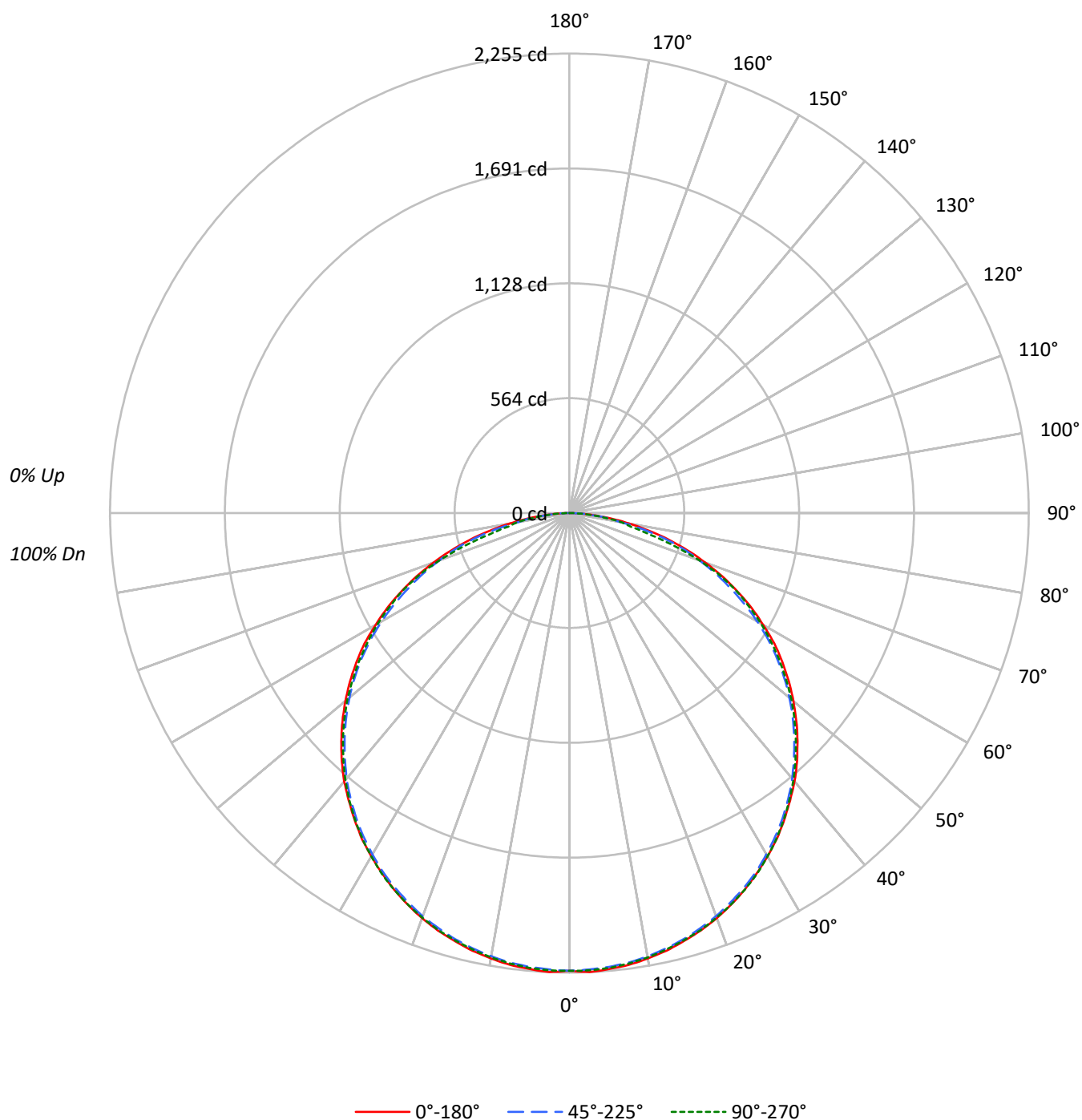
Input Watts (W): 63.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3441	3441	3441
5°	3454	3437	3445
10°	3452	3435	3443
15°	3448	3433	3442
20°	3448	3432	3443
25°	3444	3427	3444
30°	3440	3420	3440
35°	3437	3413	3431
40°	3438	3402	3421
45°	3429	3380	3405
50°	3420	3359	3390
55°	3407	3325	3358
60°	3365	3262	3331
65°	3297	3160	3277
70°	3179	3046	3040
75°	2992	2859	2417
80°	2634	2236	2299
85°	2079	1956	1807



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.8	3.2
10°-20°	611.9	9.1
20°-30°	936.4	13.9
30°-40°	1144.6	17.0
40°-50°	1209.5	17.9
50°-60°	1120.6	16.6
60°-70°	878.0	13.0
70°-80°	496.4	7.4
80°-90°	130.7	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°	1761.1	26.1
0°-40°	2905.7	43.1
0°-60°	5235.8	77.7
0°-90°	6740.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6740.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2246	2246	2246	2246	2246	
5°	2246	2239	2235	2234	2241	214
15°	2175	2166	2165	2163	2170	614
25°	2038	2030	2028	2028	2038	940
35°	1838	1830	1825	1825	1835	1151
45°	1583	1572	1560	1560	1572	1222
55°	1276	1262	1245	1248	1258	1140
65°	910	893	872	883	904	900
75°	506	492	483	431	408	532
85°	118	111	111	106	103	139
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2246.4	2246.4	2246.4	2246.4	2246.4
2.5°	2254.9	2245.0	2242.2	2239.4	2246.4
5°	2246.4	2239.4	2235.2	2233.8	2240.8
7.5°	2236.6	2228.1	2225.3	2222.5	2229.5
10°	2219.7	2211.2	2208.4	2207.0	2214.0
12.5°	2200.0	2190.1	2188.7	2187.3	2194.3
15°	2174.6	2166.2	2164.8	2163.3	2170.4
17.5°	2147.8	2139.4	2136.6	2135.2	2145.0
20°	2115.5	2107.0	2105.6	2104.2	2112.6
22.5°	2078.8	2070.4	2067.6	2069.0	2077.4
25°	2038.0	2029.5	2028.1	2028.1	2038.0
27.5°	1992.9	1984.5	1984.5	1984.5	1995.7
30°	1945.0	1938.0	1933.8	1935.2	1945.0
32.5°	1895.7	1884.5	1881.7	1883.1	1892.9
35°	1838.0	1829.5	1825.3	1825.3	1835.2
37.5°	1778.8	1770.4	1764.8	1764.8	1774.6
40°	1719.7	1707.0	1701.4	1698.6	1711.2
42.5°	1653.5	1643.6	1631.0	1631.0	1642.2
45°	1583.1	1571.8	1560.5	1560.5	1571.8
47.5°	1511.2	1500.0	1487.3	1487.3	1498.6
50°	1435.2	1423.9	1409.8	1409.8	1422.5
52.5°	1357.7	1345.0	1329.6	1328.1	1340.8
55°	1276.0	1261.9	1245.0	1247.9	1257.7
57.5°	1192.9	1174.6	1157.7	1157.7	1173.2
60°	1098.6	1083.1	1064.8	1067.6	1087.3
62.5°	1008.4	988.7	970.4	977.4	994.3
65°	909.8	892.9	871.8	883.1	904.2
67.5°	812.7	794.4	777.5	791.5	801.4
70°	709.8	692.9	680.3	680.3	678.9
72.5°	607.0	591.5	588.7	562.0	545.1
75°	505.6	491.5	483.1	431.0	408.4
77.5°	400.0	395.8	369.0	314.1	307.0
80°	298.6	301.4	253.5	254.9	260.6
82.5°	205.6	201.4	190.1	181.7	178.9
85°	118.3	111.3	111.3	105.6	102.8
87.5°	39.4	43.7	43.7	43.7	45.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)