

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: P238886

Luminaire Tested: **24EN-LD2-40-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238886
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-LD2-40-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4204.5 lumens
Efficiency: N/A
Efficacy: 124.0 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

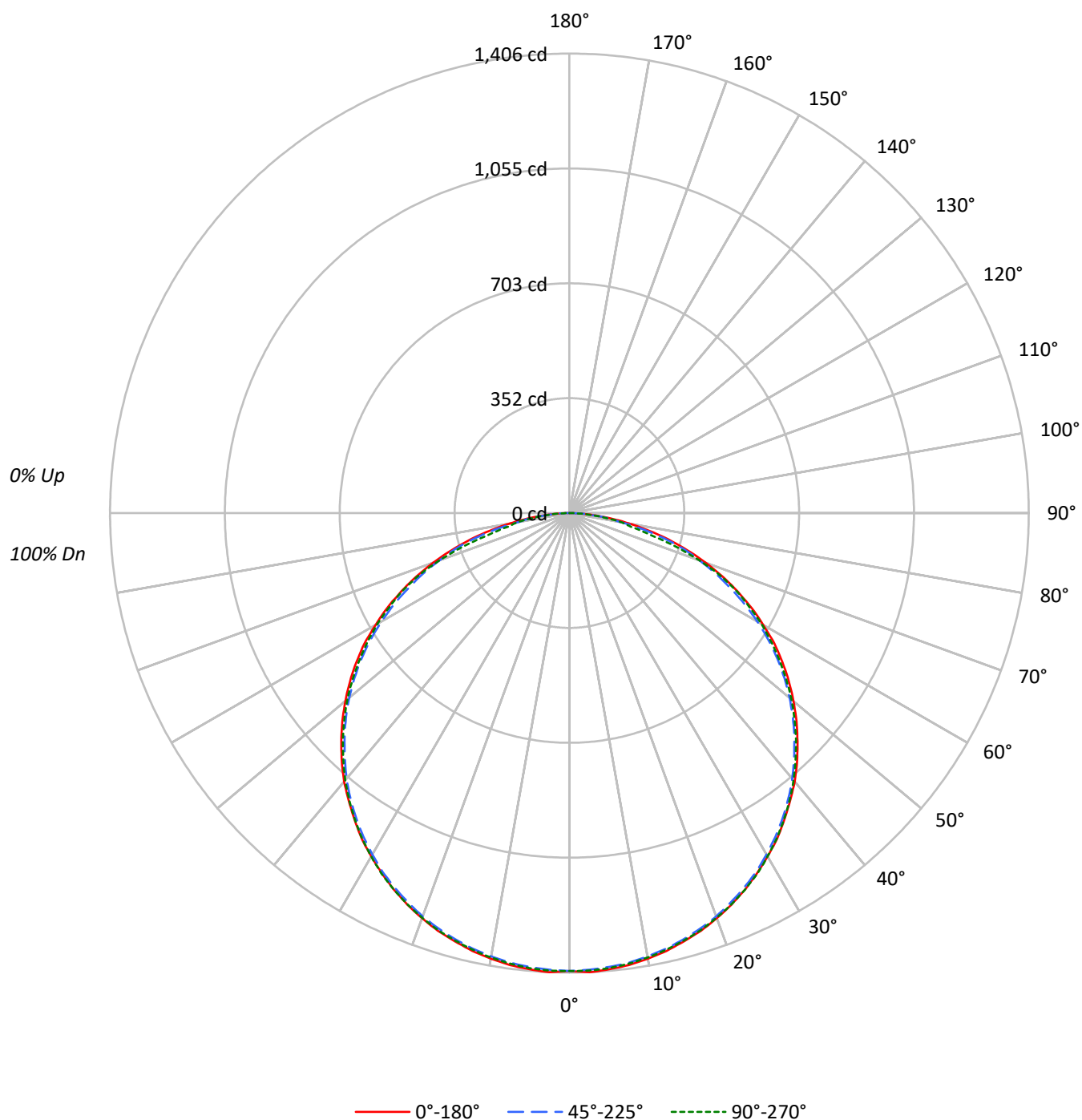
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2146	2146	2146
5°	2154	2143	2149
10°	2153	2142	2148
15°	2151	2141	2147
20°	2151	2141	2148
25°	2148	2138	2148
30°	2146	2133	2146
35°	2144	2129	2140
40°	2145	2122	2134
45°	2139	2108	2124
50°	2133	2095	2114
55°	2125	2074	2095
60°	2099	2034	2077
65°	2057	1971	2044
70°	1983	1900	1896
75°	1866	1783	1508
80°	1642	1394	1433
85°	1297	1220	1126



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.7	3.2
10°-20°	381.7	9.1
20°-30°	584.1	13.9
30°-40°	713.9	17.0
40°-50°	754.4	17.9
50°-60°	699.0	16.6
60°-70°	547.6	13.0
70°-80°	309.6	7.4
80°-90°	81.5	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°	1098.5	26.1
0°-40°	1812.4	43.1
0°-60°	3265.7	77.7
0°-90°	4204.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4204.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1401	1401	1401	1401	1401	
5°	1401	1397	1394	1393	1398	133
15°	1356	1351	1350	1349	1354	383
25°	1271	1266	1265	1265	1271	586
35°	1146	1141	1138	1138	1145	718
45°	987	980	973	973	980	762
55°	796	787	777	778	784	711
65°	568	557	544	551	564	561
75°	315	307	301	269	255	332
85°	74	69	69	66	64	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1401.2	1401.2	1401.2	1401.2	1401.2
2.5°	1406.4	1400.3	1398.5	1396.8	1401.2
5°	1401.2	1396.8	1394.1	1393.3	1397.7
7.5°	1395.0	1389.8	1388.0	1386.2	1390.6
10°	1384.5	1379.2	1377.5	1376.6	1381.0
12.5°	1372.2	1366.0	1365.2	1364.3	1368.7
15°	1356.4	1351.1	1350.2	1349.3	1353.7
17.5°	1339.7	1334.4	1332.7	1331.8	1337.9
20°	1319.5	1314.2	1313.3	1312.4	1317.7
22.5°	1296.6	1291.4	1289.6	1290.5	1295.8
25°	1271.2	1265.9	1265.0	1265.0	1271.2
27.5°	1243.0	1237.8	1237.8	1237.8	1244.8
30°	1213.2	1208.8	1206.2	1207.0	1213.2
32.5°	1182.4	1175.4	1173.6	1174.5	1180.7
35°	1146.4	1141.1	1138.5	1138.5	1144.7
37.5°	1109.5	1104.2	1100.7	1100.7	1106.9
40°	1072.6	1064.7	1061.2	1059.4	1067.4
42.5°	1031.3	1025.2	1017.3	1017.3	1024.3
45°	987.4	980.4	973.4	973.4	980.4
47.5°	942.6	935.6	927.7	927.7	934.7
50°	895.2	888.1	879.4	879.4	887.3
52.5°	846.9	838.9	829.3	828.4	836.3
55°	795.9	787.1	776.6	778.3	784.5
57.5°	744.1	732.7	722.1	722.1	731.8
60°	685.2	675.6	664.1	665.9	678.2
62.5°	629.0	616.7	605.3	609.7	620.2
65°	567.5	557.0	543.8	550.8	564.0
67.5°	506.9	495.5	484.9	493.7	499.9
70°	442.8	432.2	424.3	424.3	423.4
72.5°	378.6	369.0	367.2	350.5	340.0
75°	315.4	306.6	301.3	268.8	254.8
77.5°	249.5	246.9	230.2	195.9	191.5
80°	186.2	188.0	158.1	159.0	162.5
82.5°	128.3	125.6	118.6	113.3	111.6
85°	73.8	69.4	69.4	65.9	64.1
87.5°	24.6	27.2	27.2	27.2	28.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)