

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: P238707

Luminaire Tested: **14EN-LD2-43-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-43-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3904.3 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

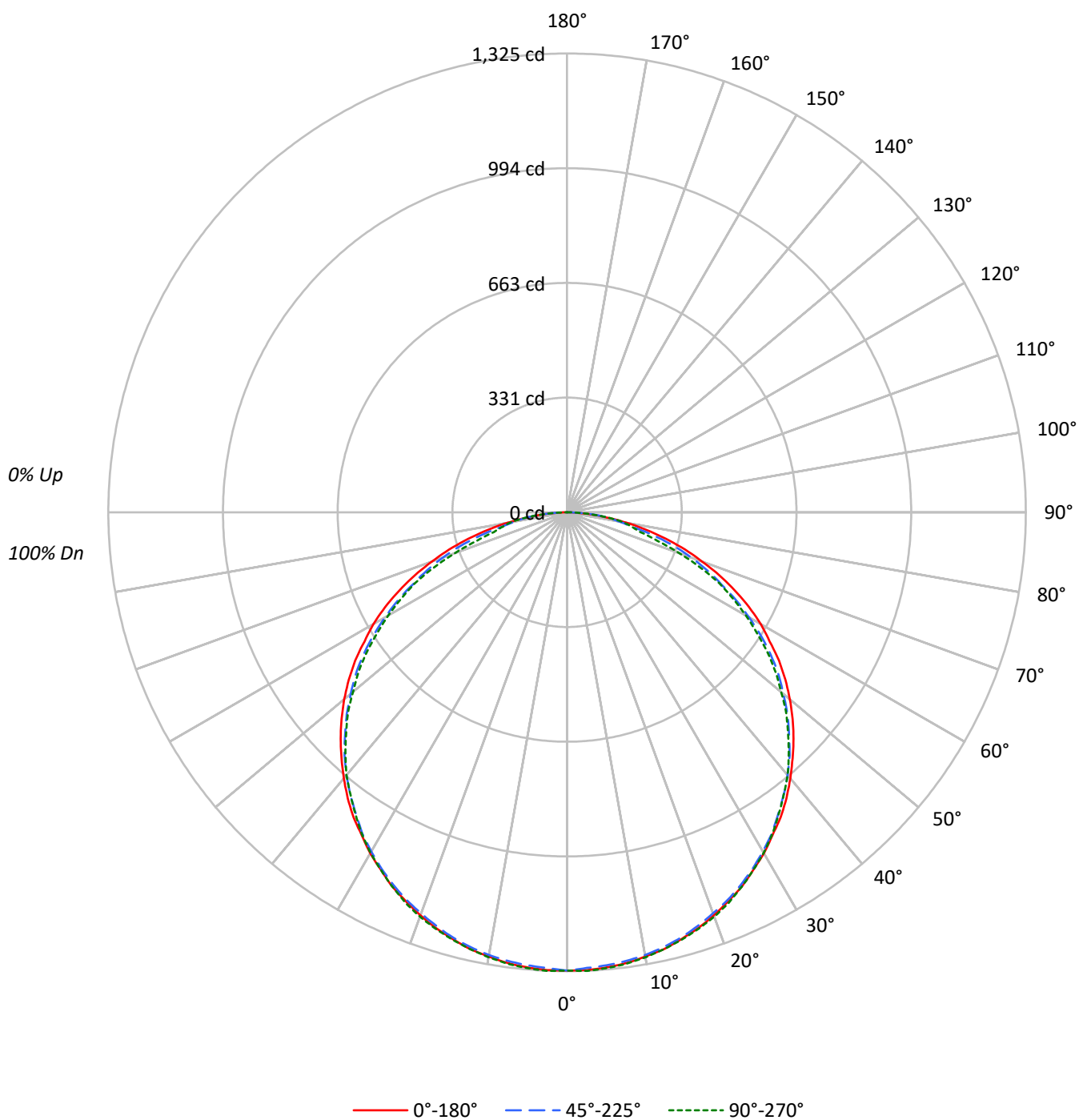
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	46	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		40	33	28		26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3716	3716	3716
5°	3718	3701	3724
10°	3714	3702	3720
15°	3709	3697	3715
20°	3701	3683	3713
25°	3697	3678	3697
30°	3688	3668	3681
35°	3687	3644	3651
40°	3677	3632	3632
45°	3672	3599	3582
50°	3670	3562	3526
55°	3658	3517	3466
60°	3628	3408	3350
65°	3552	3264	3223
70°	3406	3135	2830
75°	3203	2822	2374
80°	2838	2437	2670
85°	2194	2526	2394



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	3.2
10°-20°	359.9	9.2
20°-30°	548.5	14.0
30°-40°	668.0	17.1
40°-50°	702.3	18.0
50°-60°	644.7	16.5
60°-70°	495.3	12.7
70°-80°	276.4	7.1
80°-90°	83.9	2.1
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°	1033.7	26.5
0°-40°	1701.7	43.6
0°-60°	3048.7	78.1
0°-90°	3904.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3904.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1319	1319	1313	1319	1321	125
15°	1276	1276	1272	1276	1278	360
25°	1193	1189	1187	1191	1193	550
35°	1076	1071	1063	1065	1065	672
45°	925	919	906	902	902	713
55°	747	741	718	706	708	666
65°	535	520	491	485	485	528
75°	295	281	260	225	219	312
85°	68	70	78	76	74	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.2	1323.2	1323.2	1323.2	1323.2
2.5°	1323.2	1323.2	1317.0	1323.2	1325.3
5°	1319.1	1319.1	1312.9	1319.1	1321.1
7.5°	1312.9	1312.9	1306.7	1310.8	1314.9
10°	1302.6	1302.6	1298.4	1302.6	1304.6
12.5°	1292.2	1290.2	1286.0	1290.2	1292.2
15°	1275.7	1275.7	1271.6	1275.7	1277.8
17.5°	1259.2	1257.1	1253.0	1259.2	1261.3
20°	1238.6	1236.5	1232.4	1238.6	1242.7
22.5°	1215.9	1213.8	1211.7	1217.9	1220.0
25°	1193.2	1189.0	1187.0	1191.1	1193.2
27.5°	1164.3	1162.2	1160.1	1162.2	1164.3
30°	1137.4	1133.3	1131.2	1131.2	1135.4
32.5°	1104.4	1102.3	1100.3	1102.3	1102.3
35°	1075.5	1071.4	1063.1	1065.2	1065.2
37.5°	1040.4	1034.2	1028.0	1028.0	1028.0
40°	1003.2	999.1	990.9	988.8	990.9
42.5°	964.0	959.9	951.6	945.4	947.5
45°	924.8	918.6	906.2	902.1	902.1
47.5°	883.5	877.3	862.9	856.7	858.7
50°	840.2	831.9	815.4	807.1	807.1
52.5°	794.7	786.5	770.0	759.7	759.7
55°	747.3	741.1	718.4	706.0	708.0
57.5°	693.6	687.4	664.7	650.2	650.2
60°	646.1	633.7	606.9	596.6	596.6
62.5°	592.4	578.0	551.2	538.8	540.8
65°	534.6	520.2	491.3	485.1	485.1
67.5°	476.8	464.5	437.6	427.3	417.0
70°	414.9	402.5	381.9	357.1	344.7
72.5°	357.1	342.7	324.1	286.9	274.5
75°	295.2	280.7	260.1	225.0	218.8
77.5°	235.3	222.9	194.0	185.8	189.9
80°	175.5	171.3	150.7	158.9	165.1
82.5°	117.7	115.6	119.7	123.9	123.9
85°	68.1	70.2	78.4	76.4	74.3
87.5°	28.9	35.1	33.0	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)