

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: P183141

Luminaire Tested: **12EN-LD2-23-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183141
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34480)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-23-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2442.9 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.92' x L: 1.92' x H: 0')
CIE Type: Direct

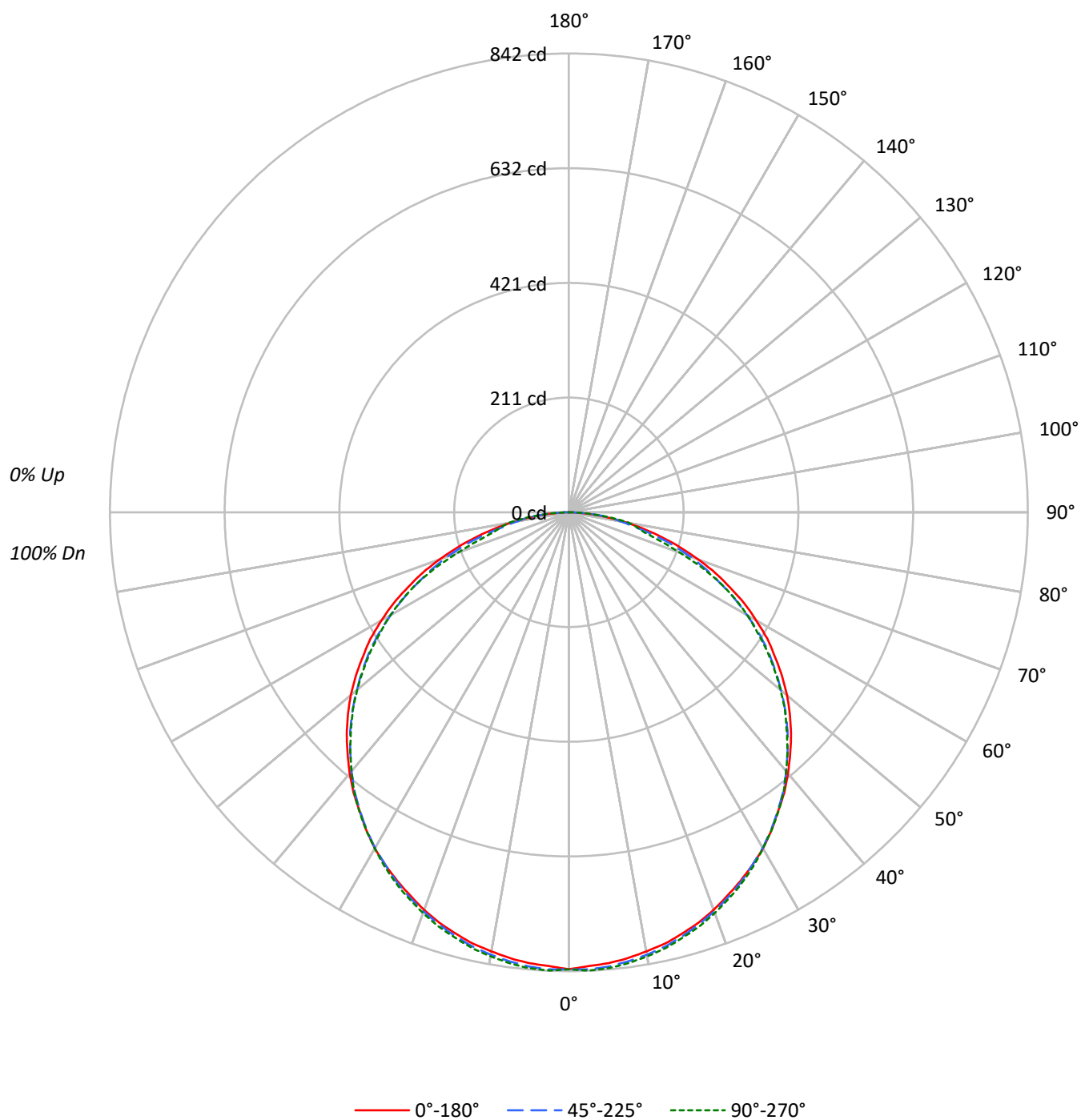
Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	69	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	52	46		57	50	45		43
6	70	56	47	40	68	55	47	40	53	46	40		52	45	40		37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		33
8	60	46	38	32	58	46	37	32	44	37	31		43	36	31		29
9	56	42	34	29	55	42	34	28	41	33	28		40	33	28		26
10	52	39	31	26	51	39	31	26	38	31	26		37	30	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5137	5137	5137
5°	5107	5144	5163
10°	5089	5128	5147
15°	5079	5105	5124
20°	5061	5081	5101
25°	5041	5055	5075
30°	5037	5030	5037
35°	5005	4998	5012
40°	5001	4960	4960
45°	4994	4914	4896
50°	4978	4842	4832
55°	4925	4772	4740
60°	4862	4624	4638
65°	4717	4421	4436
70°	4514	4240	3875
75°	4178	3816	3404
80°	3743	3383	3959
85°	3009	3367	3367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	3.2
10°-20°	227.1	9.3
20°-30°	344.7	14.1
30°-40°	418.6	17.1
40°-50°	438.8	18.0
50°-60°	401.4	16.4
60°-70°	307.3	12.6
70°-80°	172.5	7.1
80°-90°	53.1	2.2
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°	651.2	26.7
0°-40°	1069.8	43.8
0°-60°	1909.9	78.2
0°-90°	2442.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2442.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	830	832	836	838	840	79
15°	801	802	805	807	808	226
25°	746	746	748	749	751	344
35°	669	669	668	668	670	420
45°	576	573	567	565	565	444
55°	461	458	447	442	444	413
65°	325	318	305	307	306	323
75°	176	170	161	146	144	187
85°	43	44	48	48	48	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	838.5	838.5	838.5	838.5	838.5
2.5°	833.4	835.5	839.6	841.6	841.6
5°	830.4	832.4	836.5	838.5	839.6
7.5°	825.3	827.3	831.4	834.5	834.5
10°	818.1	820.2	824.3	827.3	827.3
12.5°	811.0	812.0	816.1	818.1	819.2
15°	800.8	801.8	804.9	806.9	807.9
17.5°	789.6	789.6	792.6	794.7	796.7
20°	776.3	777.3	779.4	781.4	782.4
22.5°	761.0	762.0	764.1	766.1	767.1
25°	745.7	745.7	747.8	748.8	750.8
27.5°	729.4	729.4	729.4	730.4	732.4
30°	712.0	711.0	711.0	710.0	712.0
32.5°	691.6	691.6	690.6	689.6	691.6
35°	669.2	669.2	668.2	668.2	670.2
37.5°	648.8	647.8	645.7	643.7	646.8
40°	625.3	624.3	620.2	618.2	620.2
42.5°	600.9	598.8	593.7	591.7	593.7
45°	576.4	573.3	567.2	565.1	565.1
47.5°	549.8	546.8	538.6	535.6	537.6
50°	522.3	518.2	508.0	506.0	507.0
52.5°	492.7	487.6	477.4	475.4	475.4
55°	461.1	458.0	446.8	441.7	443.8
57.5°	431.5	425.4	413.2	407.0	410.1
60°	396.8	389.7	377.4	374.4	378.5
62.5°	363.2	355.0	342.8	340.7	343.8
65°	325.4	318.3	305.0	307.1	306.0
67.5°	290.7	282.6	271.4	266.3	263.2
70°	252.0	244.8	236.7	222.4	216.3
72.5°	214.2	208.1	199.9	180.6	176.5
75°	176.5	170.4	161.2	145.9	143.8
77.5°	140.8	136.7	123.4	123.4	128.5
80°	106.1	104.1	95.9	107.1	112.2
82.5°	71.4	69.4	77.5	81.6	80.6
85°	42.8	43.9	47.9	47.9	47.9
87.5°	18.4	20.4	21.4	21.4	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)