

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: P192399

Luminaire Tested: **4WSL-LD2-30-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P192399  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28104)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-30-UNV-L840-CD1-U  
Description: 4FT Linear Wavestream System, L840  
Light Source: (238) 4000K CCT, 80 CRI LEDS  
EL236N0119D840  
Ballast/Driver: OSRAM  
OT30W

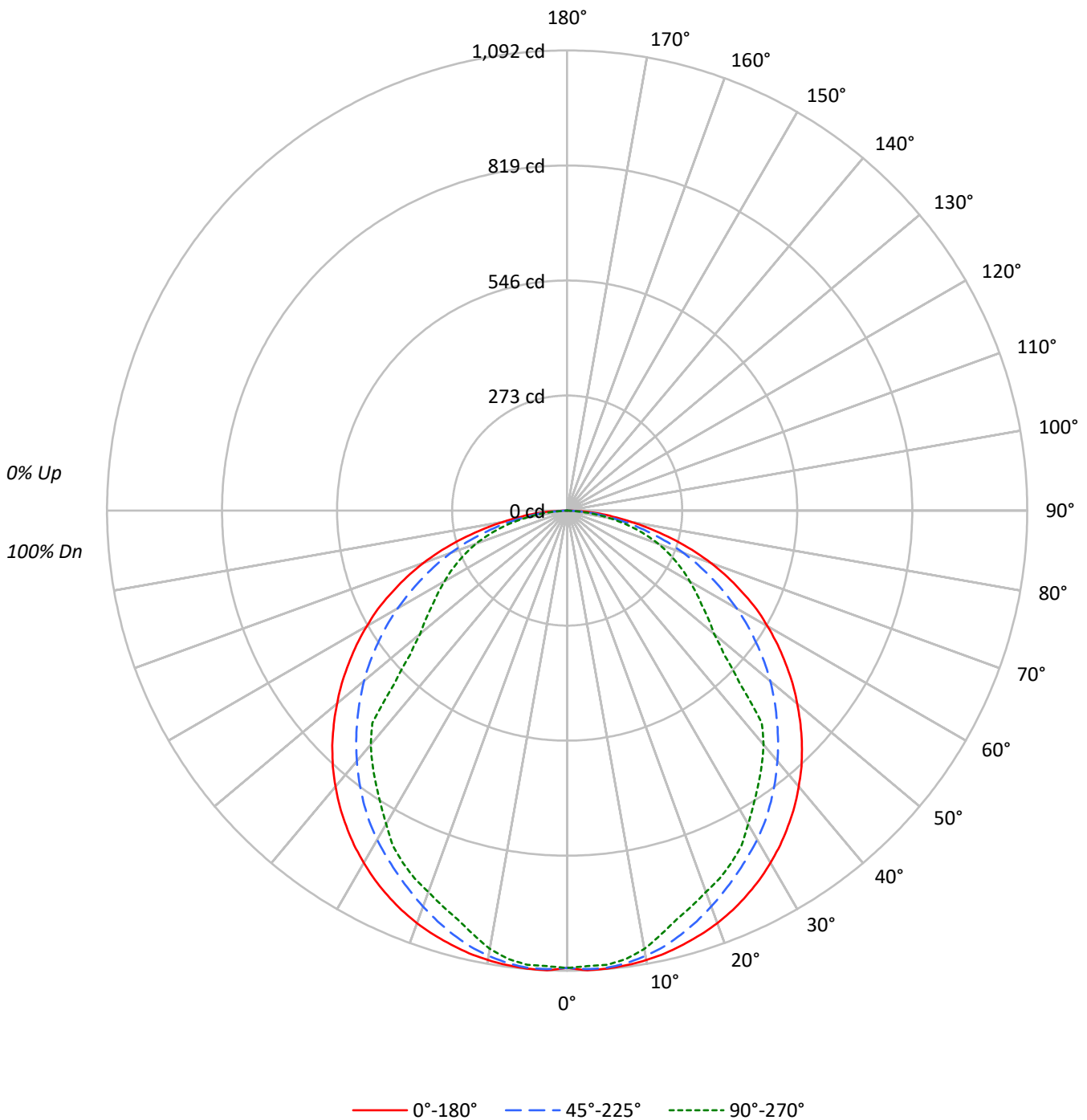
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3023.0 lumens  
Efficiency: N/A  
Efficacy: 121.4 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35  
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24.9  
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				10	0		
RW	70	50	30	10	70	50	30	10	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		102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63		72	67	62		70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		51	45	40	38
7	65	51	43	36	63	51	42	36	49	42	36		48	41	36		46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32		44	37	32		42	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26		37	31	26		36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6147	6147	6147
5°	6205	6194	6154
10°	6231	6173	6075
15°	6253	6112	5889
20°	6283	6029	5806
25°	6302	5951	5764
30°	6313	5901	5620
35°	6322	5831	5471
40°	6324	5740	5362
45°	6314	5641	4640
50°	6285	5545	4019
55°	6253	5414	3852
60°	6222	5257	3807
65°	6140	5067	3807
70°	6013	4870	3810
75°	5625	4487	3699
80°	5024	3882	3295
85°	4615	2990	2405



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	3.4
10°-20°	292.5	9.7
20°-30°	441.0	14.6
30°-40°	529.5	17.5
40°-50°	539.3	17.8
50°-60°	473.3	15.7
60°-70°	368.1	12.2
70°-80°	218.9	7.2
80°-90°	57.3	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°	836.6	27.7
0°-40°	1366.1	45.2
0°-60°	2378.7	78.7
0°-90°	3023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3023.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1091	1081	1089	1085	1082	104
15°	1066	1051	1042	1016	1004	301
25°	1008	985	952	927	922	465
35°	914	885	843	803	791	572
45°	788	762	704	650	579	608
55°	633	614	548	439	390	566
65°	458	440	378	298	284	454
75°	257	244	205	166	169	272
85°	71	63	46	37	37	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1085.1	1085.1	1085.1	1085.1	1085.1
2.5°	1092.1	1081.1	1089.1	1087.1	1082.1
5°	1091.1	1081.1	1089.1	1085.1	1082.1
7.5°	1088.1	1078.1	1083.1	1077.1	1073.1
10°	1083.1	1072.1	1073.1	1063.1	1056.1
12.5°	1076.1	1063.1	1060.1	1040.1	1030.1
15°	1066.1	1051.1	1042.1	1016.1	1004.1
17.5°	1055.1	1038.1	1022.1	993.1	984.1
20°	1042.1	1022.1	1000.1	970.1	963.1
22.5°	1026.1	1005.1	976.1	949.1	945.1
25°	1008.1	985.1	952.1	927.1	922.1
27.5°	988.1	961.1	927.1	902.1	896.1
30°	965.1	937.1	902.1	873.1	859.1
32.5°	941.1	912.1	874.1	837.1	824.1
35°	914.1	885.1	843.1	803.1	791.1
37.5°	886.1	856.1	811.1	769.1	759.1
40°	855.1	826.1	776.1	735.1	725.1
42.5°	823.1	795.1	741.1	700.1	684.1
45°	788.1	762.1	704.1	650.1	579.1
47.5°	751.1	727.1	667.1	587.1	505.0
50°	713.1	691.1	629.1	531.1	456.0
52.5°	674.1	654.1	590.1	482.0	422.0
55°	633.1	614.1	548.1	439.0	390.0
57.5°	592.1	573.1	508.0	400.0	363.0
60°	549.1	531.1	464.0	364.0	336.0
62.5°	507.0	487.0	421.0	331.0	311.0
65°	458.0	440.0	378.0	298.0	284.0
67.5°	412.0	393.0	336.0	266.0	258.0
70°	363.0	344.0	294.0	233.0	230.0
72.5°	311.0	296.0	250.0	201.0	199.0
75°	257.0	244.0	205.0	166.0	169.0
77.5°	204.0	196.0	162.0	133.0	135.0
80°	154.0	148.0	119.0	99.0	101.0
82.5°	110.0	105.0	81.0	66.0	66.0
85°	71.0	63.0	46.0	37.0	37.0
87.5°	28.0	23.0	14.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)