

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: P197403

Luminaire Tested: **8WSL-LD2-160-UNV-L840-CD2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P197403  
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: 8WSL-LD2-160-UNV-L840-CD2-U  
Description: 8FT. Linear Wavestream System, L840  
Light Source: (476) 4000K CCT, 80 CRI LEDS  
EL236N0119D840  
Ballast/Driver: OSRAM  
OT85W1202772A0DIML

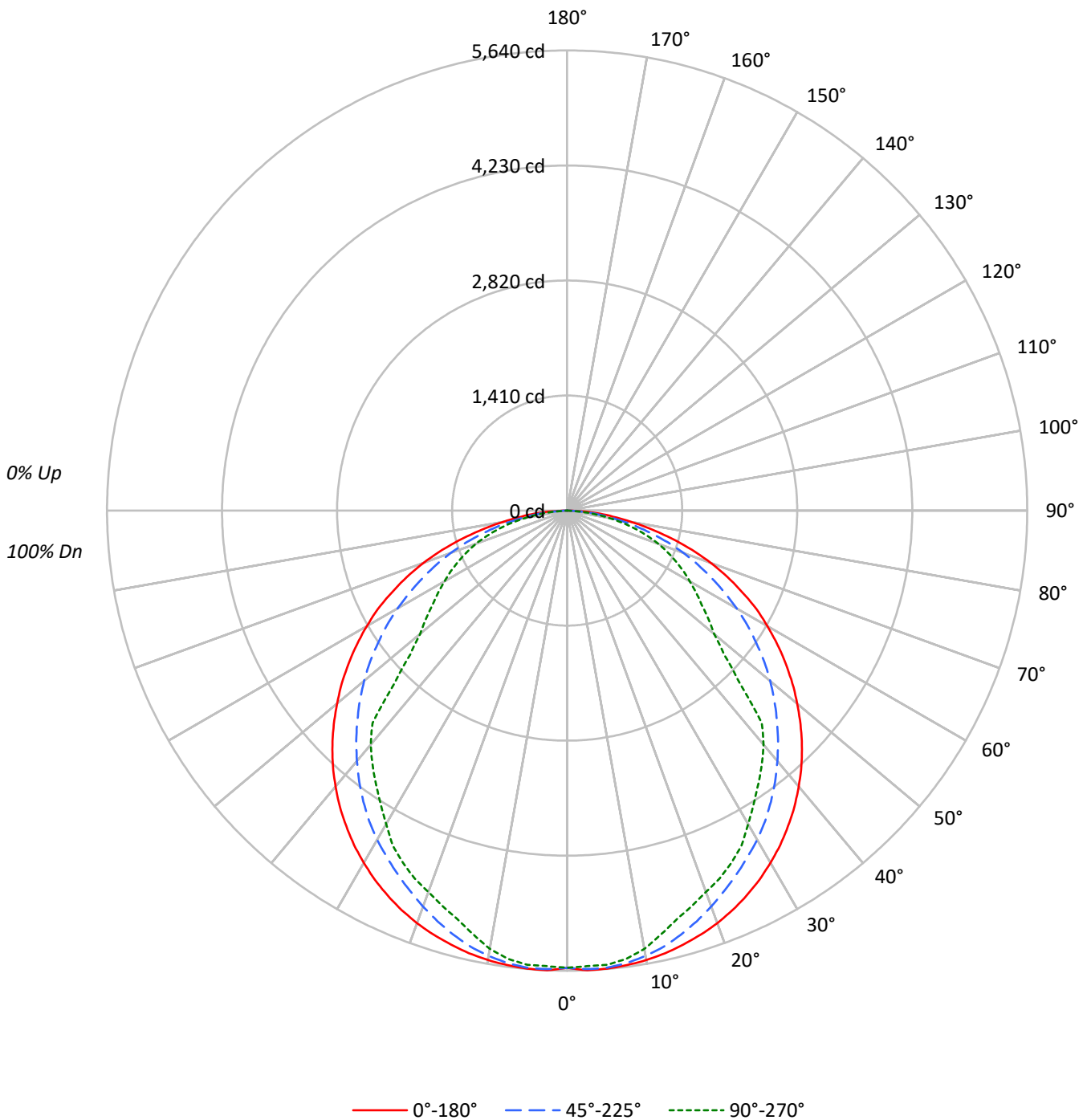
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15612.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35  
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 152.9  
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°	15874	15874	15874
5°	16022	15993	15890
10°	16089	15940	15688
15°	16146	15782	15207
20°	16223	15569	14993
25°	16272	15368	14883
30°	16302	15238	14512
35°	16324	15056	14127
40°	16329	14820	13846
45°	16304	14566	11980
50°	16228	14316	10379
55°	16146	13978	9948
60°	16064	13577	9831
65°	15855	13085	9831
70°	15528	12576	9838
75°	14528	11588	9553
80°	12975	10026	8510
85°	11918	7722	6211



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	532.4	3.4
10°-20°	1510.8	9.7
20°-30°	2277.5	14.6
30°-40°	2734.4	17.5
40°-50°	2785.0	17.8
50°-60°	2444.1	15.7
60°-70°	1901.2	12.2
70°-80°	1130.7	7.2
80°-90°	295.9	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°	4320.6	27.7
0°-40°	7055.1	45.2
0°-60°	12284.2	78.7
0°-90°	15612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15612.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5604	5604	5604	5604	5604	
5°	5635	5583	5625	5604	5588	536
15°	5506	5428	5382	5248	5186	1556
25°	5206	5087	4917	4788	4762	2401
35°	4721	4571	4354	4147	4085	2955
45°	4070	3936	3636	3357	2990	3138
55°	3269	3171	2830	2267	2014	2924
65°	2366	2273	1952	1539	1467	2343
75°	1327	1260	1059	857	873	1403
85°	367	325	238	191	191	402
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5603.9	5603.9	5603.9	5603.9	5603.9
2.5°	5640.1	5583.3	5624.6	5614.3	5588.4
5°	5634.9	5583.3	5624.6	5603.9	5588.4
7.5°	5619.4	5567.8	5593.6	5562.6	5541.9
10°	5593.6	5536.8	5541.9	5490.3	5454.1
12.5°	5557.4	5490.3	5474.8	5371.5	5319.9
15°	5505.8	5428.3	5381.8	5247.5	5185.6
17.5°	5449.0	5361.2	5278.5	5128.8	5082.3
20°	5381.8	5278.5	5164.9	5010.0	4973.8
22.5°	5299.2	5190.7	5040.9	4901.5	4880.8
25°	5206.2	5087.4	4917.0	4787.9	4762.0
27.5°	5102.9	4963.5	4787.9	4658.7	4627.8
30°	4984.1	4839.5	4658.7	4509.0	4436.7
32.5°	4860.2	4710.4	4514.1	4323.0	4255.9
35°	4720.7	4570.9	4354.0	4147.4	4085.4
37.5°	4576.1	4421.2	4188.7	3971.8	3920.2
40°	4416.0	4266.2	4008.0	3796.2	3744.6
42.5°	4250.7	4106.1	3827.2	3615.4	3532.8
45°	4069.9	3935.7	3636.1	3357.2	2990.5
47.5°	3878.8	3754.9	3445.0	3031.8	2608.3
50°	3682.6	3568.9	3248.7	2742.6	2355.2
52.5°	3481.1	3377.8	3047.3	2489.5	2179.6
55°	3269.4	3171.3	2830.4	2267.4	2014.3
57.5°	3057.6	2959.5	2623.8	2066.0	1874.9
60°	2835.5	2742.6	2396.5	1880.0	1735.4
62.5°	2618.6	2515.3	2174.4	1709.6	1606.3
65°	2365.5	2272.6	1952.3	1539.1	1466.8
67.5°	2127.9	2029.8	1735.4	1373.9	1332.5
70°	1874.9	1776.7	1518.5	1203.4	1187.9
72.5°	1606.3	1528.8	1291.2	1038.1	1027.8
75°	1327.4	1260.2	1058.8	857.4	872.9
77.5°	1053.6	1012.3	836.7	686.9	697.3
80°	795.4	764.4	614.6	511.3	521.7
82.5°	568.1	542.3	418.4	340.9	340.9
85°	366.7	325.4	237.6	191.1	191.1
87.5°	144.6	118.8	72.3	20.7	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)