

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: P192427

Luminaire Tested: **4WSL-LD2-65-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P192427
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-LD2-65-UNV-L840-CD1-U
Description: 4FT Linear Wavestream System, L840
Light Source: (238) 4000K CCT, 80 CRI LEDS
EL236N0119D840
Ballast/Driver: OSRAM
OT85W1202772A0DIML

Summary

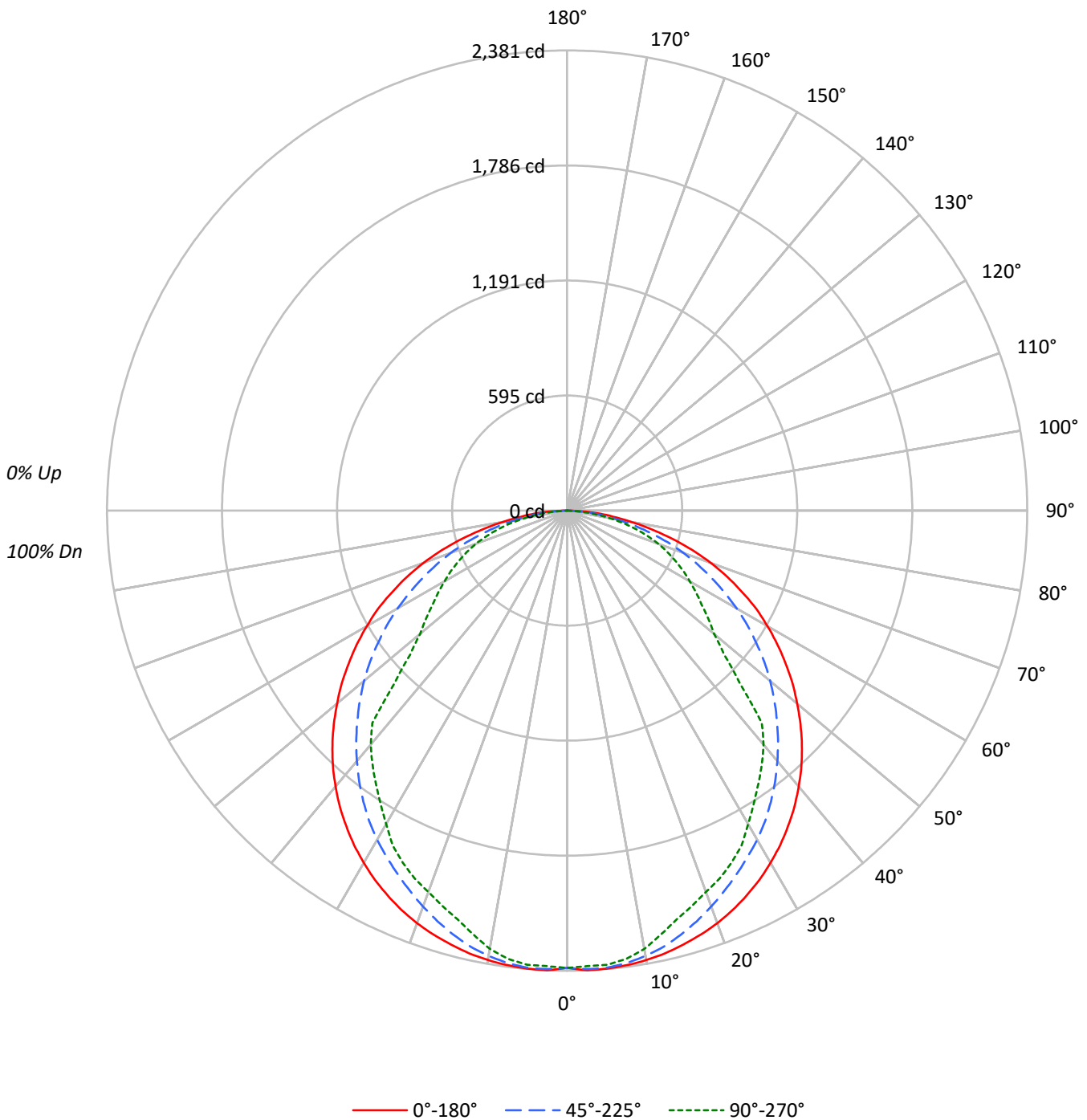
Lumens per Lamp: N/A
Luminaire Lumens: 6591.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.18 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')
CIE Type: Direct

Input Watts (W): 61.9
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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	35	33					33			
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13403	13403	13403
5°	13528	13504	13417
10°	13585	13459	13246
15°	13633	13326	12840
20°	13698	13146	12659
25°	13739	12976	12567
30°	13765	12866	12252
35°	13783	12713	11929
40°	13787	12514	11691
45°	13766	12299	10115
50°	13702	12088	8763
55°	13633	11802	8399
60°	13564	11463	8301
65°	13388	11048	8302
70°	13110	10619	8307
75°	12266	9784	8066
80°	10955	8466	7184
85°	10062	6520	5246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.7	3.4
10°-20°	637.8	9.7
20°-30°	961.5	14.6
30°-40°	1154.4	17.5
40°-50°	1175.7	17.8
50°-60°	1031.8	15.7
60°-70°	802.6	12.2
70°-80°	477.4	7.2
80°-90°	124.9	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°	1824.1	27.7
0°-40°	2978.5	45.2
0°-60°	5186.1	78.7
0°-90°	6591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2366	2366	2366	2366	2366	
5°	2379	2357	2375	2366	2359	226
15°	2324	2292	2272	2215	2189	657
25°	2198	2148	2076	2021	2010	1013
35°	1993	1930	1838	1751	1725	1247
45°	1718	1662	1535	1417	1262	1325
55°	1380	1339	1195	957	850	1234
65°	999	959	824	650	619	989
75°	560	532	447	362	368	592
85°	155	137	100	81	81	170
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2365.8	2365.8	2365.8	2365.8	2365.8
2.5°	2381.1	2357.1	2374.6	2370.2	2359.3
5°	2378.9	2357.1	2374.6	2365.8	2359.3
7.5°	2372.4	2350.6	2361.5	2348.4	2339.7
10°	2361.5	2337.5	2339.7	2317.9	2302.6
12.5°	2346.2	2317.9	2311.3	2267.7	2245.9
15°	2324.4	2291.7	2272.1	2215.4	2189.2
17.5°	2300.4	2263.4	2228.5	2165.2	2145.6
20°	2272.1	2228.5	2180.5	2115.1	2099.8
22.5°	2237.2	2191.4	2128.2	2069.3	2060.6
25°	2197.9	2147.8	2075.8	2021.3	2010.4
27.5°	2154.3	2095.5	2021.3	1966.8	1953.7
30°	2104.2	2043.1	1966.8	1903.6	1873.0
32.5°	2051.8	1988.6	1905.8	1825.1	1796.7
35°	1993.0	1929.7	1838.2	1750.9	1724.8
37.5°	1931.9	1866.5	1768.4	1676.8	1655.0
40°	1864.3	1801.1	1692.1	1602.7	1580.9
42.5°	1794.5	1733.5	1615.7	1526.3	1491.5
45°	1718.2	1661.5	1535.1	1417.3	1262.5
47.5°	1637.6	1585.2	1454.4	1280.0	1101.2
50°	1554.7	1506.7	1371.5	1157.8	994.3
52.5°	1469.7	1426.0	1286.5	1051.0	920.2
55°	1380.3	1338.8	1194.9	957.2	850.4
57.5°	1290.9	1249.4	1107.7	872.2	791.5
60°	1197.1	1157.8	1011.7	793.7	732.6
62.5°	1105.5	1061.9	918.0	721.7	678.1
65°	998.7	959.4	824.2	649.8	619.3
67.5°	898.4	856.9	732.6	580.0	562.6
70°	791.5	750.1	641.1	508.1	501.5
72.5°	678.1	645.4	545.1	438.3	433.9
75°	560.4	532.0	447.0	362.0	368.5
77.5°	444.8	427.4	353.2	290.0	294.4
80°	335.8	322.7	259.5	215.9	220.2
82.5°	239.9	229.0	176.6	143.9	143.9
85°	154.8	137.4	100.3	80.7	80.7
87.5°	61.1	50.2	30.5	8.7	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)