

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: P234493

Luminaire Tested: **4WSNLED-LD4-28SL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSNLED-LD4-28SL-F-UNV-L835-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

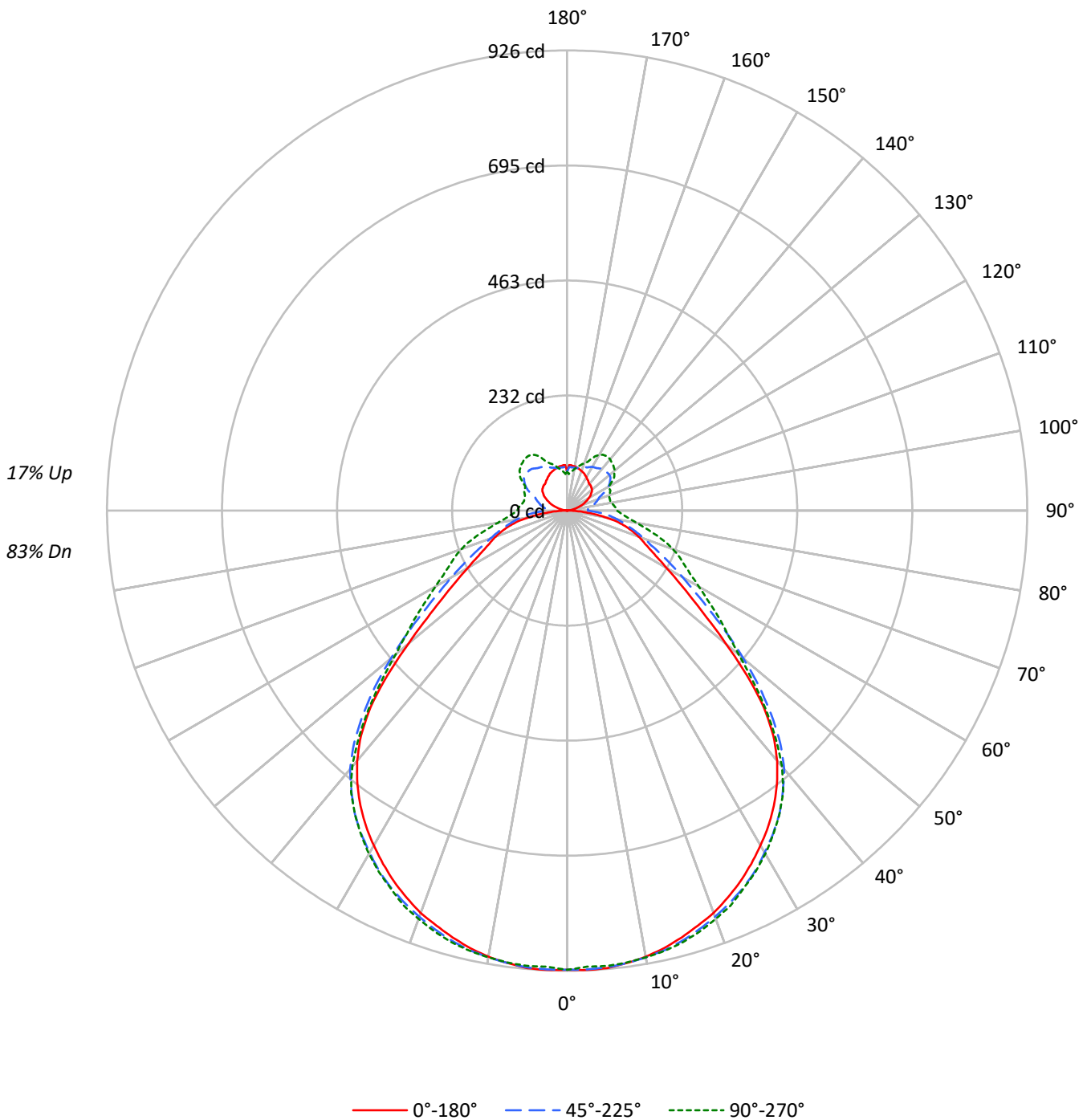
Lumens per Lamp: N/A
Luminaire Lumens: 2870.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 24.8
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				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2487	2487	2487
5°	2489	2469	2458
10°	2477	2447	2441
15°	2457	2425	2424
20°	2440	2395	2394
25°	2411	2366	2355
30°	2375	2322	2312
35°	2332	2271	2250
40°	2250	2184	2138
45°	2067	1991	1913
50°	1683	1712	1640
55°	1367	1419	1477
60°	1178	1212	1352
65°	1094	1073	1312
70°	1108	990	1327
75°	1126	961	1290
80°	1043	979	1285
85°	760	1023	1466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	3.1
10°-20°	252.5	8.8
20°-30°	384.1	13.4
30°-40°	460.6	16.0
40°-50°	438.5	15.3
50°-60°	312.2	10.9
60°-70°	212.3	7.4
70°-80°	143.2	5.0
80°-90°	82.1	2.9
90°-100°	53.0	1.8
100°-110°	59.7	2.1
110°-120°	74.2	2.6
120°-130°	85.1	3.0
130°-140°	80.9	2.8
140°-150°	65.5	2.3
150°-160°	45.1	1.6
160°-170°	25.4	0.9
170°-180°	8.1	0.3
0°-30°	724.2	25.2
0°-40°	1184.8	41.3
0°-60°	1935.5	67.4
0°-90°	2373.1	82.7
90°-120°	186.9	6.5
90°-150°	418.3	14.6
90°-180°	497.0	17.3
0°-180°	2870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	924	918	923	921	920	88
15°	889	888	896	900	899	251
25°	824	825	838	841	839	379
35°	725	730	745	745	745	452
45°	560	574	581	581	566	424
55°	304	335	350	353	371	278
65°	183	196	208	221	261	185
75°	121	101	131	156	182	126
85°	33	47	75	104	115	37
90°	0	21	42	79	100	2
95°	3	20	43	81	96	4
105°	20	29	58	81	89	21
115°	40	64	79	89	96	40
125°	58	78	106	114	115	52
135°	68	82	111	128	131	53
145°	74	82	104	128	135	46
155°	82	83	96	111	114	38
165°	88	88	89	90	93	25
175°	92	92	88	76	78	9
180°	78	78	78	78	78	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	924.1	924.1	924.1	924.1	924.1
2.5°	925.5	921.3	924.1	924.1	918.5
5°	924.1	918.5	922.7	921.3	919.9
7.5°	918.5	914.4	918.5	919.9	917.1
10°	911.6	907.4	913.0	914.4	913.0
12.5°	901.9	899.1	906.0	908.8	907.4
15°	889.4	888.0	896.3	900.5	899.1
17.5°	875.5	874.1	883.8	889.4	888.0
20°	861.6	860.2	869.9	874.1	874.1
22.5°	843.5	843.5	854.6	858.8	860.2
25°	824.0	825.4	837.9	840.7	839.3
27.5°	801.8	803.2	818.5	819.9	819.9
30°	778.2	781.0	794.9	796.2	797.6
32.5°	753.2	755.9	771.2	771.2	772.6
35°	725.4	729.5	744.8	744.8	744.8
37.5°	693.4	699.0	712.9	712.9	714.3
40°	657.3	665.6	679.5	678.1	672.6
42.5°	614.2	625.3	635.1	633.7	621.2
45°	560.0	573.9	580.9	580.9	565.6
47.5°	490.5	511.4	523.9	518.3	505.8
50°	416.9	447.5	462.7	460.0	450.2
52.5°	354.4	389.1	404.4	403.0	405.8
55°	304.3	334.9	350.2	353.0	371.0
57.5°	264.0	291.8	304.3	312.7	334.9
60°	230.7	255.7	268.2	276.5	305.7
62.5°	204.3	223.7	236.2	246.0	280.7
65°	183.4	195.9	208.4	220.9	261.2
67.5°	166.8	169.5	183.4	201.5	244.6
70°	152.9	143.1	164.0	184.8	226.5
72.5°	137.6	120.9	147.3	168.1	205.7
75°	120.9	101.4	130.6	155.6	182.0
77.5°	102.8	84.8	116.7	141.7	159.8
80°	79.2	72.3	102.8	129.2	141.7
82.5°	55.6	59.8	88.9	118.1	126.5
85°	33.4	47.2	75.0	104.2	115.3
87.5°	15.3	34.7	57.0	90.3	107.0
90°	0.0	20.8	41.7	79.2	100.1
92.5°	1.4	20.8	41.7	80.6	98.7
95°	2.8	19.5	43.1	80.6	95.9
97.5°	5.6	19.5	47.2	79.2	93.1
100°	9.7	20.8	51.4	79.2	90.3
102.5°	13.9	22.2	55.6	80.6	88.9
105°	19.5	29.2	58.4	80.6	88.9
107.5°	25.0	38.9	62.5	82.0	88.9
110°	30.6	50.0	66.7	83.4	90.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.1	58.4	69.5	87.5	93.1
115°	40.3	63.9	79.2	88.9	95.9
117.5°	45.9	68.1	88.9	90.3	95.9
120°	50.0	72.3	95.9	95.9	97.3
122.5°	55.6	75.0	101.4	107.0	105.6
125°	58.4	77.8	105.6	113.9	115.3
127.5°	62.5	79.2	109.8	118.1	119.5
130°	65.3	80.6	111.2	122.3	125.1
132.5°	66.7	80.6	111.2	125.1	127.8
135°	68.1	82.0	111.2	127.8	130.6
137.5°	69.5	80.6	111.2	129.2	132.0
140°	69.5	80.6	109.8	129.2	134.8
142.5°	70.9	80.6	107.0	129.2	134.8
145°	73.6	82.0	104.2	127.8	134.8
147.5°	75.0	82.0	102.8	125.1	133.4
150°	77.8	82.0	101.4	120.9	129.2
152.5°	79.2	82.0	98.7	116.7	123.7
155°	82.0	83.4	95.9	111.2	113.9
157.5°	83.4	83.4	94.5	105.6	105.6
160°	84.8	84.8	91.7	100.1	101.4
162.5°	86.2	86.2	90.3	94.5	97.3
165°	87.5	87.5	88.9	90.3	93.1
167.5°	88.9	88.9	87.5	84.8	88.9
170°	90.3	90.3	87.5	80.6	84.8
172.5°	90.3	91.7	87.5	77.8	80.6
175°	91.7	91.7	87.5	76.4	77.8
177.5°	91.7	91.7	87.5	73.6	73.6
180°	77.8	77.8	77.8	77.8	77.8

(END OF REPORT)