

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: P234494

Luminaire Tested: **4WSNLED-LD4-28SL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234494
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-L840-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

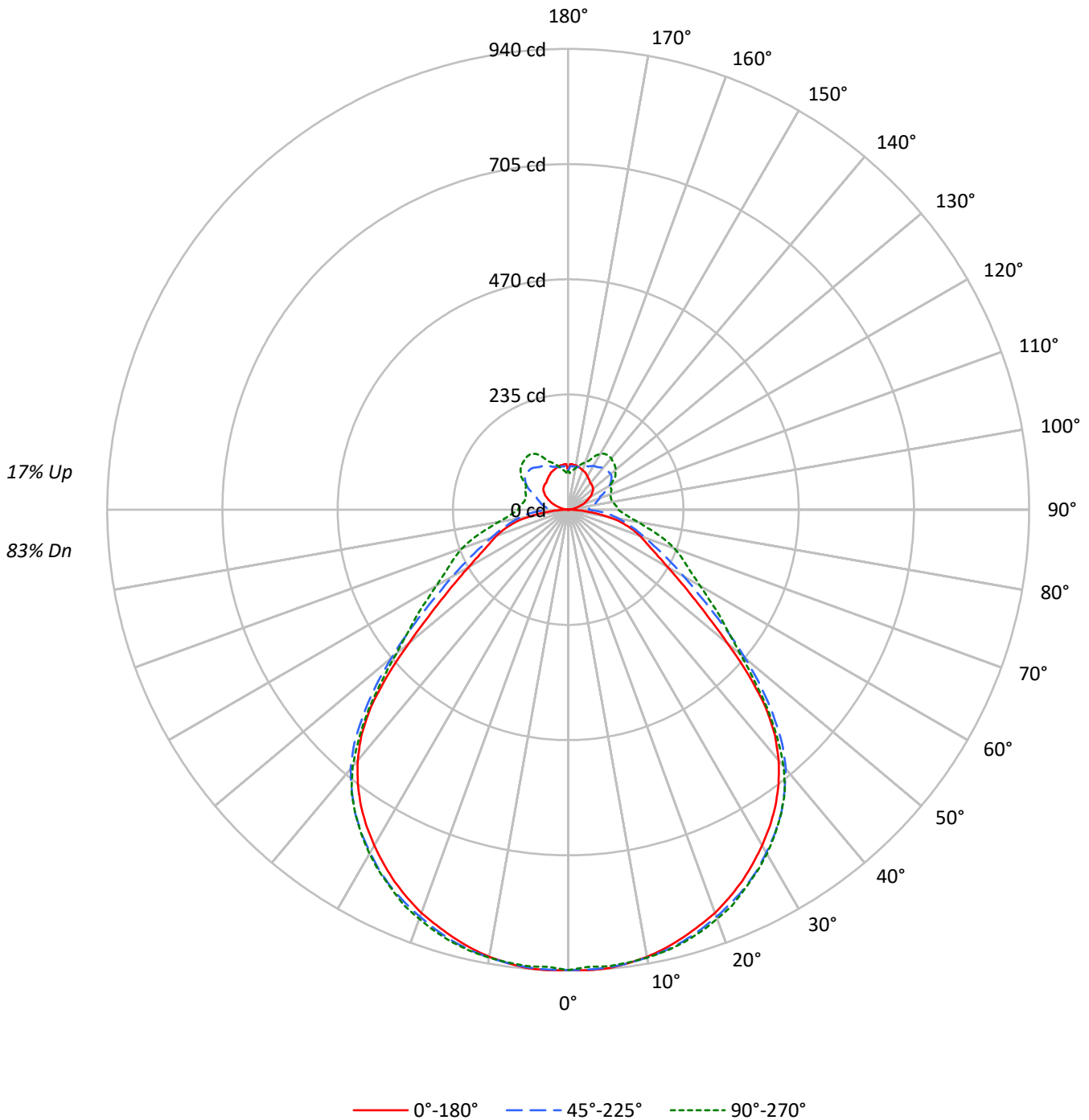
Lumens per Lamp: N/A
Luminaire Lumens: 2916.0 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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				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	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°	2527	2527	2527
5°	2529	2508	2498
10°	2517	2486	2480
15°	2496	2464	2462
20°	2479	2433	2433
25°	2450	2404	2393
30°	2413	2359	2349
35°	2369	2308	2286
40°	2286	2219	2173
45°	2100	2023	1944
50°	1710	1739	1667
55°	1389	1442	1501
60°	1197	1231	1374
65°	1112	1090	1333
70°	1125	1006	1348
75°	1143	977	1312
80°	1060	996	1306
85°	771	1040	1490



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	3.1
10°-20°	256.5	8.8
20°-30°	390.2	13.4
30°-40°	468.0	16.0
40°-50°	445.5	15.3
50°-60°	317.2	10.9
60°-70°	215.7	7.4
70°-80°	145.5	5.0
80°-90°	83.4	2.9
90°-100°	53.9	1.8
100°-110°	60.6	2.1
110°-120°	75.4	2.6
120°-130°	86.4	3.0
130°-140°	82.2	2.8
140°-150°	66.5	2.3
150°-160°	45.8	1.6
160°-170°	25.8	0.9
170°-180°	8.3	0.3
0°-30°	735.8	25.2
0°-40°	1203.8	41.3
0°-60°	1966.5	67.4
0°-90°	2411.1	82.7
90°-120°	189.9	6.5
90°-150°	425.0	14.6
90°-180°	505.0	17.3
0°-180°	2916.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	939	939	939	939	939	
5°	939	933	938	936	935	89
15°	904	902	911	915	914	255
25°	837	839	851	854	853	386
35°	737	741	757	757	757	460
45°	569	583	590	590	575	431
55°	309	340	356	359	377	282
65°	186	199	212	224	265	188
75°	123	103	133	158	185	128
85°	34	48	76	106	117	38
90°	0	21	42	80	102	2
95°	3	20	44	82	97	4
105°	20	30	59	82	90	21
115°	41	65	80	90	97	41
125°	59	79	107	116	117	53
135°	69	83	113	130	133	53
145°	75	83	106	130	137	47
155°	83	85	97	113	116	38
165°	89	89	90	92	95	25
175°	93	93	89	78	79	9
180°	79	79	79	79	79	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.9	938.9	938.9	938.9	938.9
2.5°	940.3	936.1	938.9	938.9	933.3
5°	938.9	933.3	937.5	936.1	934.7
7.5°	933.3	929.0	933.3	934.7	931.8
10°	926.2	922.0	927.6	929.0	927.6
12.5°	916.3	913.5	920.5	923.4	922.0
15°	903.6	902.2	910.7	914.9	913.5
17.5°	889.5	888.1	898.0	903.6	902.2
20°	875.4	874.0	883.8	888.1	888.1
22.5°	857.0	857.0	868.3	872.5	874.0
25°	837.2	838.7	851.4	854.2	852.8
27.5°	814.7	816.1	831.6	833.0	833.0
30°	790.7	793.5	807.6	809.0	810.4
32.5°	765.2	768.1	783.6	783.6	785.0
35°	737.0	741.2	756.8	756.8	756.8
37.5°	704.5	710.2	724.3	724.3	725.7
40°	667.8	676.3	690.4	689.0	683.4
42.5°	624.1	635.3	645.2	643.8	631.1
45°	569.0	583.1	590.2	590.2	574.6
47.5°	498.4	519.6	532.3	526.6	513.9
50°	423.6	454.6	470.2	467.3	457.4
52.5°	360.0	395.3	410.9	409.4	412.3
55°	309.2	340.3	355.8	358.6	377.0
57.5°	268.3	296.5	309.2	317.7	340.3
60°	234.4	259.8	272.5	281.0	310.6
62.5°	207.5	227.3	240.0	249.9	285.2
65°	186.4	199.1	211.8	224.5	265.4
67.5°	169.4	172.2	186.4	204.7	248.5
70°	155.3	145.4	166.6	187.8	230.1
72.5°	139.8	122.8	149.7	170.8	209.0
75°	122.8	103.1	132.7	158.1	185.0
77.5°	104.5	86.1	118.6	144.0	162.4
80°	80.5	73.4	104.5	131.3	144.0
82.5°	56.5	60.7	90.4	120.0	128.5
85°	33.9	48.0	76.2	105.9	117.2
87.5°	15.5	35.3	57.9	91.8	108.7
90°	0.0	21.2	42.4	80.5	101.7
92.5°	1.4	21.2	42.4	81.9	100.2
95°	2.8	19.8	43.8	81.9	97.4
97.5°	5.6	19.8	48.0	80.5	94.6
100°	9.9	21.2	52.2	80.5	91.8
102.5°	14.1	22.6	56.5	81.9	90.4
105°	19.8	29.6	59.3	81.9	90.4
107.5°	25.4	39.5	63.5	83.3	90.4
110°	31.1	50.8	67.8	84.7	91.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	36.7	59.3	70.6	88.9	94.6
115°	40.9	64.9	80.5	90.4	97.4
117.5°	46.6	69.2	90.4	91.8	97.4
120°	50.8	73.4	97.4	97.4	98.8
122.5°	56.5	76.2	103.1	108.7	107.3
125°	59.3	79.1	107.3	115.8	117.2
127.5°	63.5	80.5	111.5	120.0	121.4
130°	66.4	81.9	113.0	124.2	127.1
132.5°	67.8	81.9	113.0	127.1	129.9
135°	69.2	83.3	113.0	129.9	132.7
137.5°	70.6	81.9	113.0	131.3	134.1
140°	70.6	81.9	111.5	131.3	137.0
142.5°	72.0	81.9	108.7	131.3	137.0
145°	74.8	83.3	105.9	129.9	137.0
147.5°	76.2	83.3	104.5	127.1	135.5
150°	79.1	83.3	103.1	122.8	131.3
152.5°	80.5	83.3	100.2	118.6	125.7
155°	83.3	84.7	97.4	113.0	115.8
157.5°	84.7	84.7	96.0	107.3	107.3
160°	86.1	86.1	93.2	101.7	103.1
162.5°	87.5	87.5	91.8	96.0	98.8
165°	88.9	88.9	90.4	91.8	94.6
167.5°	90.4	90.4	88.9	86.1	90.4
170°	91.8	91.8	88.9	81.9	86.1
172.5°	91.8	93.2	88.9	79.1	81.9
175°	93.2	93.2	88.9	77.7	79.1
177.5°	93.2	93.2	88.9	74.8	74.8
180°	79.1	79.1	79.1	79.1	79.1

(END OF REPORT)