

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: P234490

Luminaire Tested: **4WSNLED-LD4-24SL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P234490
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-LD4-24SL-F-UNV-L840-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

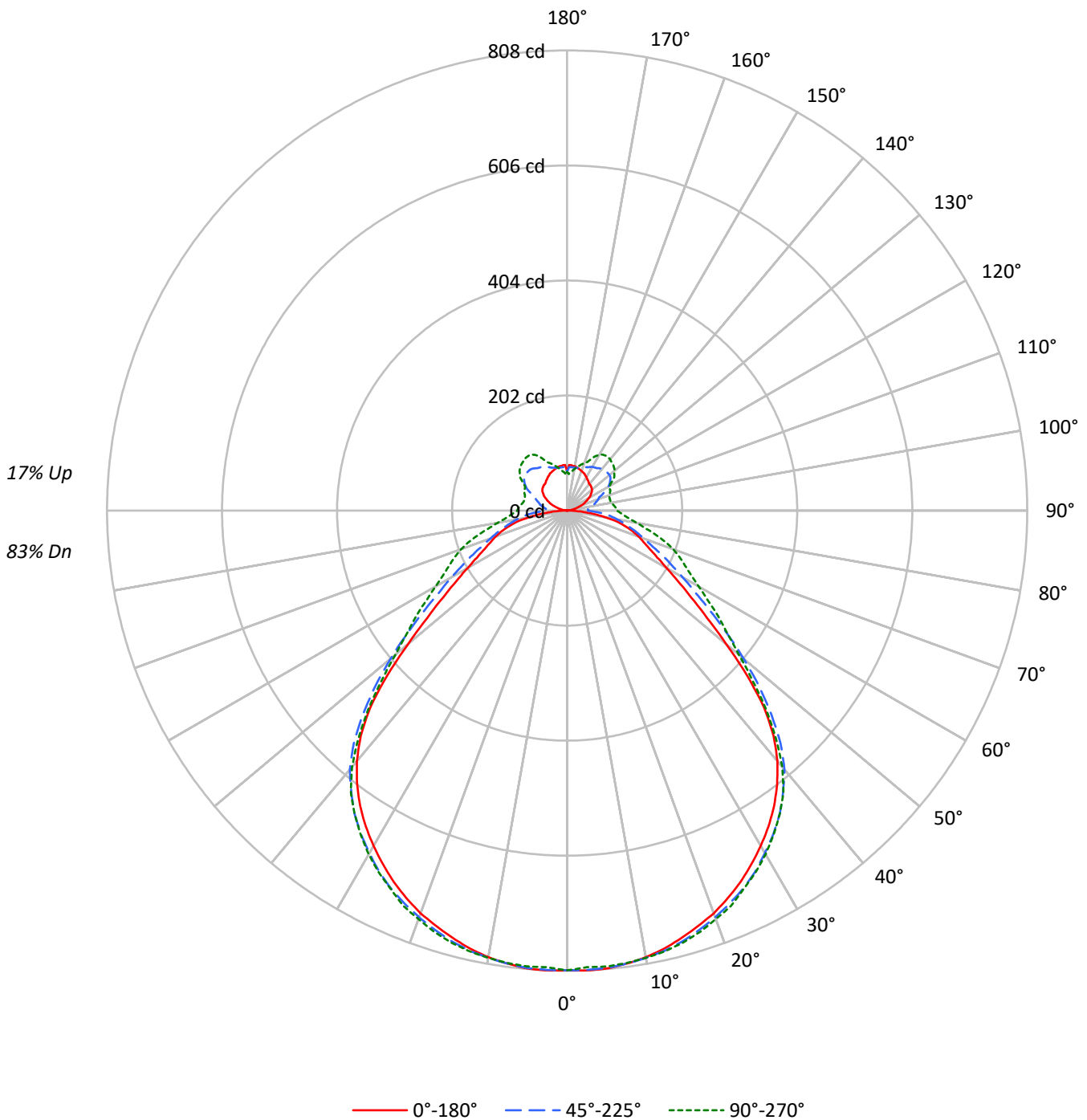
Lumens per Lamp: N/A
Luminaire Lumens: 2507.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 21.3
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	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2172	2172	2172
5°	2175	2156	2147
10°	2164	2138	2132
15°	2146	2118	2117
20°	2131	2092	2091
25°	2107	2067	2057
30°	2075	2028	2019
35°	2037	1984	1965
40°	1966	1908	1868
45°	1805	1739	1671
50°	1470	1495	1433
55°	1194	1240	1290
60°	1029	1058	1181
65°	956	937	1146
70°	967	864	1159
75°	983	840	1127
80°	911	856	1123
85°	662	894	1280



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	3.1
10°-20°	220.5	8.8
20°-30°	335.5	13.4
30°-40°	402.4	16.0
40°-50°	383.0	15.3
50°-60°	272.7	10.9
60°-70°	185.4	7.4
70°-80°	125.1	5.0
80°-90°	71.7	2.9
90°-100°	46.3	1.8
100°-110°	52.1	2.1
110°-120°	64.8	2.6
120°-130°	74.3	3.0
130°-140°	70.6	2.8
140°-150°	57.2	2.3
150°-160°	39.4	1.6
160°-170°	22.2	0.9
170°-180°	7.1	0.3
0°-30°	632.6	25.2
0°-40°	1034.9	41.3
0°-60°	1690.7	67.4
0°-90°	2072.9	82.7
90°-120°	163.2	6.5
90°-150°	365.4	14.6
90°-180°	434.0	17.3
0°-180°	2507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	807	802	806	805	804	77
15°	777	776	783	787	785	219
25°	720	721	732	734	733	331
35°	634	637	651	651	651	395
45°	489	501	507	507	494	370
55°	266	292	306	308	324	243
65°	160	171	182	193	228	161
75°	106	89	114	136	159	110
85°	29	41	66	91	101	32
90°	0	18	36	69	87	2
95°	2	17	38	70	84	3
105°	17	26	51	70	78	18
115°	35	56	69	78	84	35
125°	51	68	92	100	101	46
135°	60	72	97	112	114	46
145°	64	72	91	112	118	40
155°	72	73	84	97	100	33
165°	76	76	78	79	81	22
175°	80	80	76	67	68	8
180°	68	68	68	68	68	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	807.2	807.2	807.2	807.2	807.2
2.5°	808.4	804.8	807.2	807.2	802.4
5°	807.2	802.4	806.0	804.8	803.6
7.5°	802.4	798.7	802.4	803.6	801.1
10°	796.3	792.6	797.5	798.7	797.5
12.5°	787.8	785.4	791.4	793.9	792.6
15°	776.9	775.7	782.9	786.6	785.4
17.5°	764.7	763.5	772.0	776.9	775.7
20°	752.6	751.4	759.9	763.5	763.5
22.5°	736.8	736.8	746.5	750.2	751.4
25°	719.8	721.0	732.0	734.4	733.2
27.5°	700.4	701.6	715.0	716.2	716.2
30°	679.8	682.2	694.3	695.5	696.8
32.5°	657.9	660.3	673.7	673.7	674.9
35°	633.6	637.3	650.6	650.6	650.6
37.5°	605.7	610.6	622.7	622.7	623.9
40°	574.2	581.4	593.6	592.4	587.5
42.5°	536.5	546.2	554.7	553.5	542.6
45°	489.2	501.3	507.4	507.4	494.0
47.5°	428.5	446.7	457.6	452.8	441.8
50°	364.2	390.9	404.2	401.8	393.3
52.5°	309.5	339.9	353.2	352.0	354.4
55°	265.8	292.5	305.9	308.3	324.1
57.5°	230.6	254.9	265.8	273.1	292.5
60°	201.5	223.3	234.3	241.6	267.0
62.5°	178.4	195.4	206.4	214.9	245.2
65°	160.2	171.2	182.1	193.0	228.2
67.5°	145.7	148.1	160.2	176.0	213.6
70°	133.5	125.0	143.2	161.4	197.9
72.5°	120.2	105.6	128.7	146.9	179.6
75°	105.6	88.6	114.1	136.0	159.0
77.5°	89.8	74.0	102.0	123.8	139.6
80°	69.2	63.1	89.8	112.9	123.8
82.5°	48.6	52.2	77.7	103.2	110.5
85°	29.1	41.3	65.5	91.0	100.7
87.5°	13.4	30.3	49.8	78.9	93.5
90°	0.0	18.2	36.4	69.2	87.4
92.5°	1.2	18.2	36.4	70.4	86.2
95°	2.4	17.0	37.6	70.4	83.8
97.5°	4.9	17.0	41.3	69.2	81.3
100°	8.5	18.2	44.9	69.2	78.9
102.5°	12.1	19.4	48.6	70.4	77.7
105°	17.0	25.5	51.0	70.4	77.7
107.5°	21.8	34.0	54.6	71.6	77.7
110°	26.7	43.7	58.3	72.8	78.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	31.6	51.0	60.7	76.5	81.3
115°	35.2	55.8	69.2	77.7	83.8
117.5°	40.1	59.5	77.7	78.9	83.8
120°	43.7	63.1	83.8	83.8	85.0
122.5°	48.6	65.5	88.6	93.5	92.3
125°	51.0	68.0	92.3	99.5	100.7
127.5°	54.6	69.2	95.9	103.2	104.4
130°	57.1	70.4	97.1	106.8	109.2
132.5°	58.3	70.4	97.1	109.2	111.7
135°	59.5	71.6	97.1	111.7	114.1
137.5°	60.7	70.4	97.1	112.9	115.3
140°	60.7	70.4	95.9	112.9	117.7
142.5°	61.9	70.4	93.5	112.9	117.7
145°	64.3	71.6	91.0	111.7	117.7
147.5°	65.5	71.6	89.8	109.2	116.5
150°	68.0	71.6	88.6	105.6	112.9
152.5°	69.2	71.6	86.2	102.0	108.0
155°	71.6	72.8	83.8	97.1	99.5
157.5°	72.8	72.8	82.5	92.3	92.3
160°	74.0	74.0	80.1	87.4	88.6
162.5°	75.3	75.3	78.9	82.5	85.0
165°	76.5	76.5	77.7	78.9	81.3
167.5°	77.7	77.7	76.5	74.0	77.7
170°	78.9	78.9	76.5	70.4	74.0
172.5°	78.9	80.1	76.5	68.0	70.4
175°	80.1	80.1	76.5	66.8	68.0
177.5°	80.1	80.1	76.5	64.3	64.3
180°	68.0	68.0	68.0	68.0	68.0

(END OF REPORT)