

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: P#

Luminaire Tested: **HBLED-LD5-30SE-W-A-UNV-L850-ED3-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23761)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-30SE-W-A-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

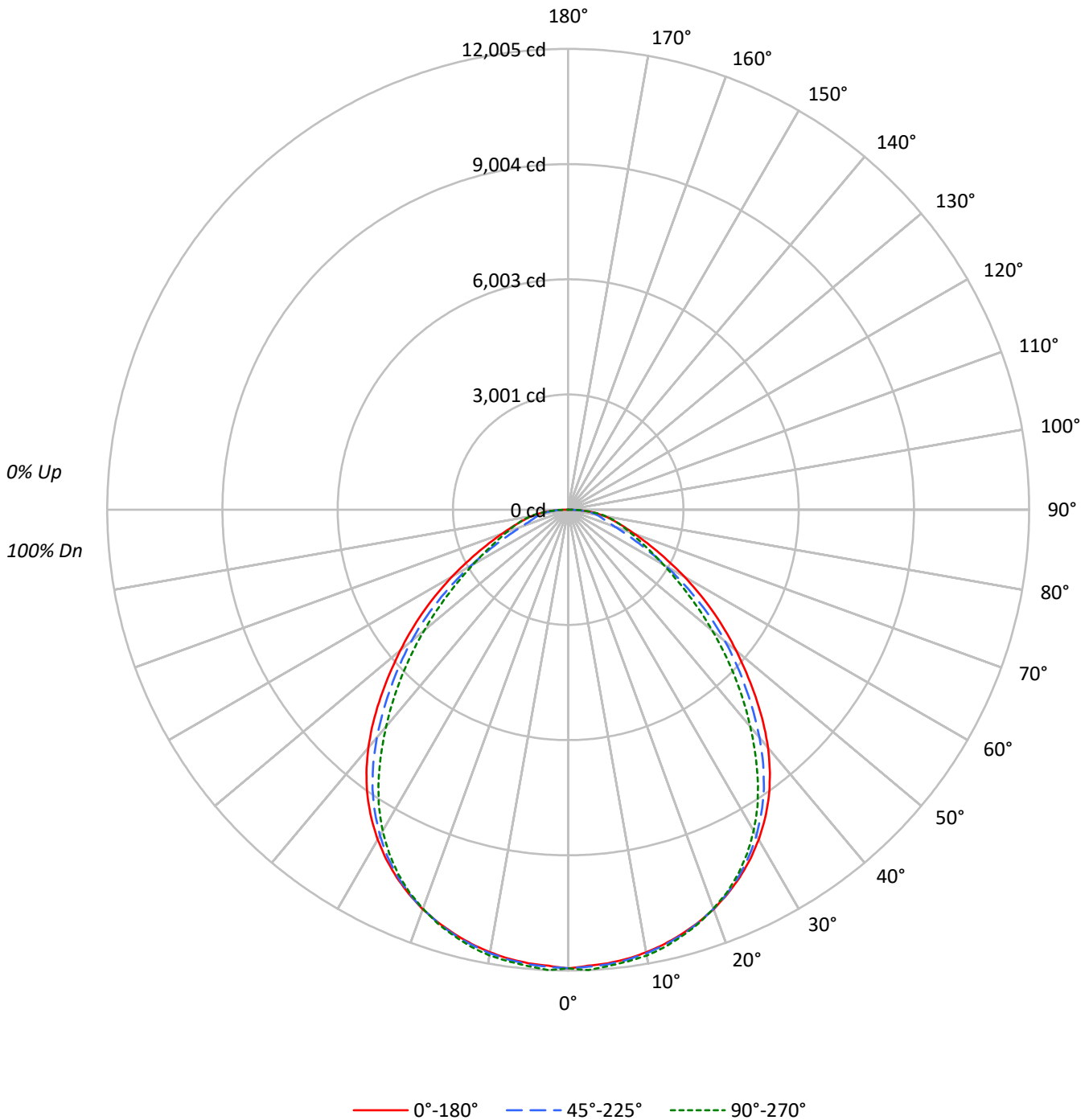
Lumens per Lamp: N/A  
Luminaire Lumens: 27444.0 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 193  
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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-30SE-W-A-UNV-L850-ED3-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-A-UNV-L850-ED3-U

**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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16074	16074	16074
5°	16018	16054	16119
10°	15995	16032	16112
15°	15941	15973	16011
20°	15858	15846	15835
25°	15686	15632	15544
30°	15415	15229	15007
35°	14967	14591	14141
40°	14223	13612	12959
45°	13139	12406	11655
50°	11944	11171	10252
55°	10740	9671	8862
60°	9398	7904	7690
65°	8103	6216	6940
70°	7224	5072	6689
75°	6920	4952	6990
80°	7485	5857	7788
85°	8403	7050	8486



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-A-UNV-L850-ED3-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1132.3	4.1
10°-20°	3240.5	11.8
20°-30°	4847.4	17.7
30°-40°	5530.5	20.2
40°-50°	5034.3	18.3
50°-60°	3696.6	13.5
60°-70°	2182.7	8.0
70°-80°	1250.9	4.6
80°-90°	528.9	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°	9220.1	33.6
0°-40°	14750.6	53.7
0°-60°	23481.5	85.6
0°-90°	27444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	27444.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11947	11947	11947	11947	11947	
5°	11859	11933	11886	11933	11935	###
15°	11444	11508	11467	11508	11494	3229
25°	10566	10604	10529	10525	10470	4864
35°	9112	9068	8883	8731	8610	5677
45°	6905	6865	6520	6227	6125	5321
55°	4578	4367	4123	3824	3778	4094
65°	2545	2222	1952	2088	2180	2561
75°	1331	1141	953	1242	1345	1435
85°	544	503	457	539	550	569
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-A-UNV-L850-ED3-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11946.8	11946.8	11946.8	11946.8	<i>11946.8</i>
2.5°	<i>11891.6</i>	<i>11960.3</i>	<i>11917.2</i>	<i>11964.4</i>	<i>12004.8</i>
5°	11859.3	11933.4	11886.2	11933.4	<i>11934.7</i>
7.5°	11800.0	11868.7	11822.9	11874.1	<i>11868.7</i>
10°	11707.0	11775.7	11734.0	11789.2	<i>11793.2</i>
12.5°	11588.4	11654.5	11611.3	11674.7	<i>11663.9</i>
15°	11444.3	11507.6	11467.2	11507.6	<i>11494.1</i>
17.5°	11274.5	11332.5	11279.9	11324.4	<i>11301.5</i>
20°	11075.1	11123.6	11067.0	11108.8	<i>11058.9</i>
22.5°	10836.6	10879.7	10820.5	10843.4	<i>10792.2</i>
25°	10565.8	10603.5	10529.4	10525.4	<i>10470.2</i>
27.5°	10264.0	10284.2	10189.9	10157.6	<i>10094.2</i>
30°	9921.8	9927.2	9801.9	9741.2	<i>9659.1</i>
32.5°	9537.8	9524.3	9364.0	9273.7	<i>9172.7</i>
35°	9112.0	9067.6	8883.0	8730.7	<i>8609.5</i>
37.5°	8631.0	8561.0	8340.0	8115.0	<i>7999.1</i>
40°	8097.5	8015.3	7749.9	7471.0	<i>7378.0</i>
42.5°	7516.8	7446.7	7134.1	6843.1	<i>6751.5</i>
45°	6905.1	6864.7	6519.8	6227.4	<i>6125.0</i>
47.5°	6293.4	6263.8	5926.9	5629.2	<i>5505.2</i>
50°	5706.0	5641.3	5336.8	5010.7	<i>4897.6</i>
52.5°	5136.0	5004.0	4735.9	4401.7	<i>4318.2</i>
55°	4578.3	4366.7	4122.9	3823.7	<i>3777.9</i>
57.5°	4025.8	3752.3	3515.2	3291.5	<i>3290.2</i>
60°	3492.3	3179.7	2937.2	2820.0	<i>2857.7</i>
62.5°	2992.4	2671.8	2409.0	2417.1	<i>2485.8</i>
65°	2545.1	2221.8	1952.3	2088.4	<i>2180.0</i>
67.5°	2161.1	1852.6	1579.1	1832.4	<i>1920.0</i>
70°	1836.4	1557.5	1289.4	1606.0	<i>1700.3</i>
72.5°	1562.9	1328.5	1087.3	1417.4	<i>1513.1</i>
75°	1331.2	1141.2	952.6	1242.2	<i>1344.6</i>
77.5°	1142.5	974.1	854.2	1075.2	<i>1181.6</i>
80°	966.0	817.8	755.9	913.5	<i>1005.1</i>
82.5°	765.3	662.9	626.5	742.4	<i>789.5</i>
85°	544.3	502.6	456.7	538.9	<i>549.7</i>
87.5°	299.1	309.9	256.0	309.9	<i>311.2</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)