

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-LD5-24SE-W-A-UNV-L840-ED2-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-LD5-24SE-W-A-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

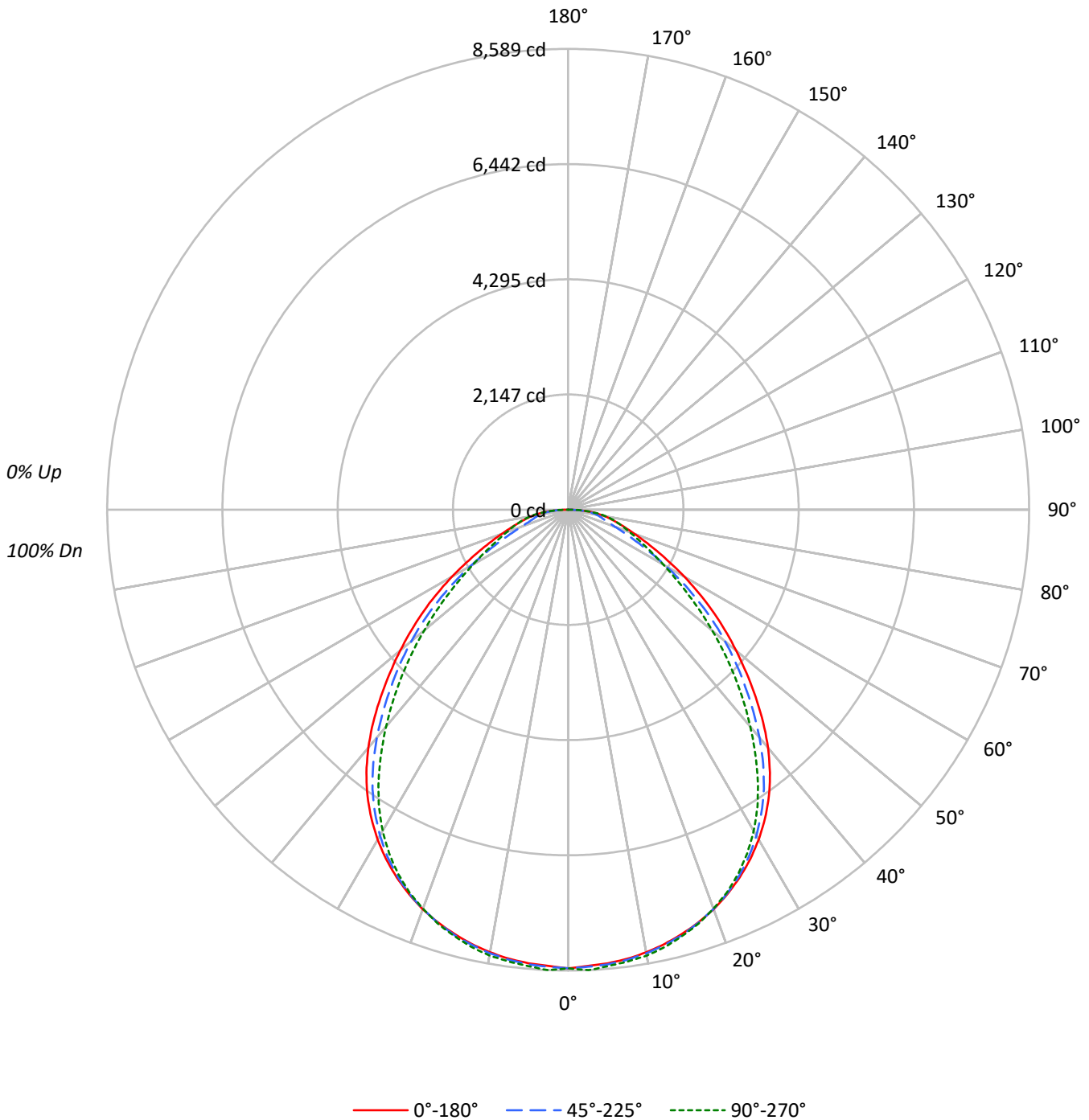
Lumens per Lamp: N/A  
Luminaire Lumens: 19636.0 lumens  
Efficiency: N/A  
Efficacy: 127.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 154  
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63					63			
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43					43			
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35					35			
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	11501	11501	11501
5°	11460	11486	11533
10°	11444	11470	11528
15°	11406	11429	11456
20°	11346	11338	11330
25°	11223	11184	11121
30°	11029	10896	10737
35°	10709	10439	10118
40°	10176	9739	9272
45°	9401	8876	8339
50°	8546	7993	7335
55°	7684	6920	6341
60°	6724	5655	5502
65°	5798	4447	4966
70°	5169	3629	4786
75°	4951	3543	5002
80°	5356	4190	5573
85°	6013	5045	6072



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	810.1	4.1
10°-20°	2318.5	11.8
20°-30°	3468.3	17.7
30°-40°	3957.0	20.2
40°-50°	3602.0	18.3
50°-60°	2644.9	13.5
60°-70°	1561.7	8.0
70°-80°	895.0	4.6
80°-90°	378.4	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°	6597.0	33.6
0°-40°	10554.0	53.7
0°-60°	16800.9	85.6
0°-90°	19636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19636.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8548	8548	8548	8548	8548	
5°	8485	8538	8504	8538	8539	807
15°	8188	8234	8205	8234	8224	2311
25°	7560	7587	7534	7531	7491	3480
35°	6520	6488	6356	6247	6160	4062
45°	4941	4912	4665	4456	4382	3807
55°	3276	3124	2950	2736	2703	2929
65°	1821	1590	1397	1494	1560	1832
75°	952	816	682	889	962	1027
85°	390	360	327	386	393	407
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8547.9	8547.9	8547.9	8547.9	8547.9
2.5°	8508.4	8557.5	8526.7	8560.4	8589.3
5°	8485.2	8538.2	8504.5	8538.2	8539.2
7.5°	8442.8	8492.0	8459.2	8495.8	8492.0
10°	8376.3	8425.5	8395.6	8435.1	8438.0
12.5°	8291.5	8338.7	8307.8	8353.2	8345.4
15°	8188.3	8233.6	8204.7	8233.6	8224.0
17.5°	8066.8	8108.3	8070.7	8102.5	8086.1
20°	7924.2	7958.9	7918.4	7948.3	7912.6
22.5°	7753.5	7784.4	7742.0	7758.4	7721.7
25°	7559.8	7586.8	7533.7	7530.9	7491.3
27.5°	7343.8	7358.3	7290.8	7267.7	7222.4
30°	7099.0	7102.8	7013.2	6969.8	6911.0
32.5°	6824.2	6814.6	6699.9	6635.3	6563.0
35°	6519.6	6487.8	6355.7	6246.8	6160.0
37.5°	6175.5	6125.3	5967.2	5806.2	5723.3
40°	5793.7	5734.9	5545.0	5345.4	5278.9
42.5°	5378.2	5328.1	5104.4	4896.2	4830.7
45°	4940.6	4911.6	4664.8	4455.7	4382.4
47.5°	4502.9	4481.7	4240.7	4027.6	3938.9
50°	4082.6	4036.3	3818.4	3585.2	3504.2
52.5°	3674.8	3580.3	3388.5	3149.4	3089.7
55°	3275.7	3124.4	2949.9	2735.9	2703.1
57.5°	2880.5	2684.8	2515.1	2355.1	2354.1
60°	2498.7	2275.1	2101.5	2017.7	2044.7
62.5°	2141.1	1911.6	1723.7	1729.4	1778.6
65°	1821.0	1589.7	1396.9	1494.2	1559.8
67.5°	1546.3	1325.5	1129.8	1311.1	1373.7
70°	1313.9	1114.4	922.6	1149.1	1216.6
72.5°	1118.3	950.5	778.0	1014.1	1082.6
75°	952.4	816.5	681.6	888.8	962.1
77.5°	817.5	697.0	611.2	769.3	845.4
80°	691.2	585.2	540.8	653.6	719.2
82.5°	547.6	474.3	448.3	531.2	564.9
85°	389.5	359.6	326.8	385.6	393.3
87.5°	214.0	221.7	183.2	221.7	222.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)