

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-N-CLI-UNV-L850-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 (P23769)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24SE-N-CLI-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

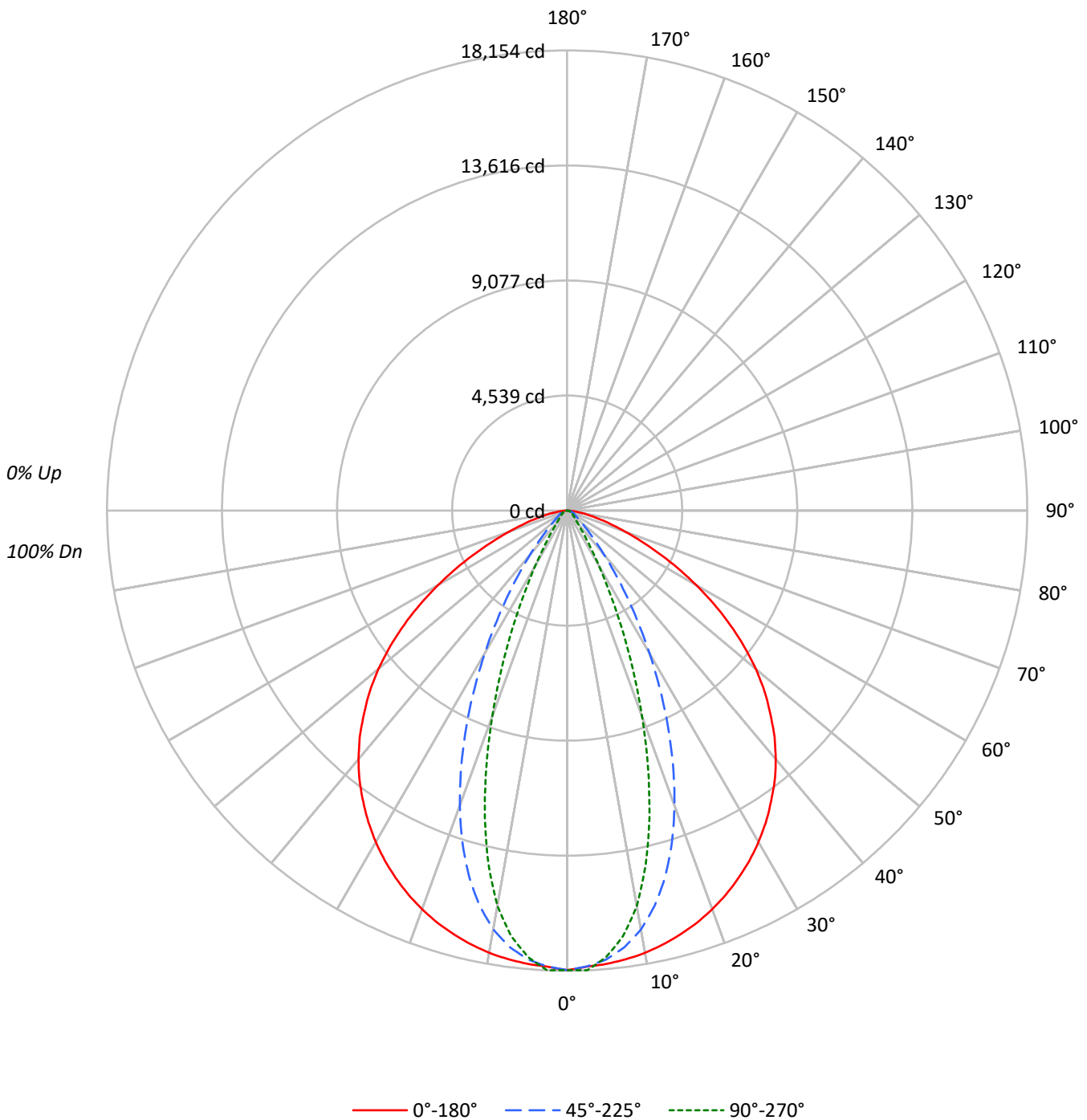
Lumens per Lamp: N/A  
Luminaire Lumens: 19848.0 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65					65			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60					60			
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40					40			

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

	0°	45°	90°
0°	24393	24393	24393
5°	24247	24005	23879
10°	24206	22918	21627
15°	24109	20832	17466
20°	23964	17727	12379
25°	23749	13978	7479
30°	23461	10088	3844
35°	23038	6595	1920
40°	22491	3962	1120
45°	21557	2366	838
50°	20332	1547	704
55°	18402	1174	614
60°	15813	1000	560
65°	12720	912	529
70°	9583	977	526
75°	7049	928	541
80°	5157	925	592
85°	3863	1121	767



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1669.6	8.4
10°-20°	4153.7	20.9
20°-30°	4600.9	23.2
30°-40°	3686.1	18.6
40°-50°	2631.4	13.3
50°-60°	1690.2	8.5
60°-70°	916.0	4.6
70°-80°	391.5	2.0
80°-90°	108.6	0.5
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°	10424.2	52.5
0°-40°	14110.4	71.1
0°-60°	18432.0	92.9
0°-90°	19848.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19848.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	18130	18130	18130	18130	18130	
5°	17952	18019	17774	17717	17680	###
15°	17308	16766	14956	13217	12539	4883
25°	15997	14106	9415	6134	5038	7370
35°	14026	10145	4015	1620	1169	8769
45°	11329	5856	1243	529	440	8732
55°	7844	2618	500	308	262	6991
65°	3995	1075	286	198	166	4001
75°	1356	393	179	124	104	1507
85°	250	104	73	60	50	306
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18129.7	18129.7	18129.7	18129.7	18129.7
2.5°	18010.4	18123.0	18001.8	18077.2	18154.5
5°	17952.1	18018.9	17773.5	17717.2	17680.0
7.5°	17850.9	17831.8	17370.6	17071.7	16927.5
10°	17717.2	17562.5	16774.7	16117.7	15829.4
12.5°	17526.2	17207.3	15967.8	14814.3	14325.4
15°	17307.5	16766.1	14955.6	13216.8	12538.8
17.5°	17045.9	16250.5	13745.8	11503.7	10608.9
20°	16736.5	15627.9	12380.3	9683.6	8645.7
22.5°	16390.8	14909.8	10918.3	7869.3	6755.9
25°	15997.4	14105.8	9415.3	6134.3	5038.0
27.5°	15572.5	13212.9	7920.9	4583.5	3583.7
30°	15100.8	12246.6	6493.3	3304.9	2474.1
32.5°	14586.1	11219.1	5167.0	2324.2	1692.1
35°	14025.6	10144.8	4015.4	1619.5	1168.8
37.5°	13451.7	9048.6	3032.8	1144.9	838.4
40°	12805.2	7956.2	2255.5	838.4	637.9
42.5°	12111.0	6884.8	1669.2	645.5	516.6
45°	11328.9	5856.4	1243.3	529.0	440.2
47.5°	10570.7	4897.7	944.4	450.7	382.9
50°	9713.2	4032.5	739.1	393.4	336.1
52.5°	8803.2	3271.5	599.7	346.6	296.0
55°	7844.5	2618.3	500.4	307.5	261.6
57.5°	6873.4	2074.0	427.8	274.1	233.0
60°	5876.4	1658.7	371.5	245.4	208.2
62.5°	4903.4	1326.4	324.7	220.6	186.2
65°	3995.3	1075.2	286.5	197.7	166.2
67.5°	3155.9	849.9	267.4	177.6	149.9
70°	2435.9	661.7	248.3	158.5	133.7
72.5°	1845.8	508.0	219.6	141.3	118.4
75°	1356.0	393.4	178.6	124.1	104.1
77.5°	970.2	302.7	145.1	107.9	89.8
80°	665.6	225.4	119.4	92.6	76.4
82.5°	432.6	159.5	96.4	76.4	63.0
85°	250.2	104.1	72.6	60.2	49.7
87.5°	107.9	57.3	49.7	44.9	38.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)