

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-LD5-24HE-N-CLWG-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 (P33344)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-CLWG-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
NARROW DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

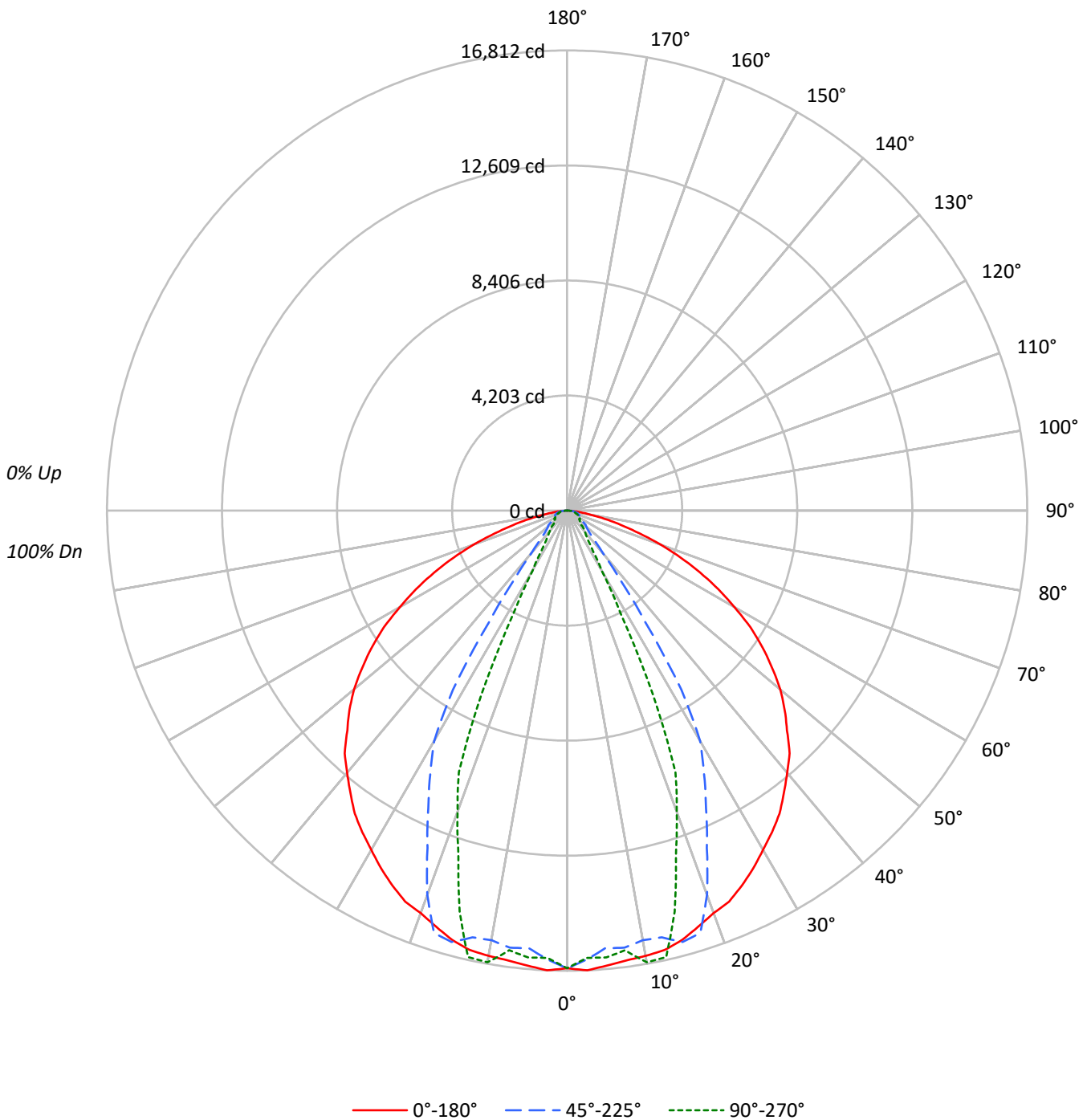
Lumens per Lamp: N/A
Luminaire Lumens: 22478.0 lumens
Efficiency: N/A
Efficacy: 153.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22497	22497	22497
5°	22534	21676	22132
10°	22567	21780	22898
15°	22617	22735	21131
20°	22403	21383	16772
25°	22435	17827	10956
30°	22234	15102	3936
35°	22211	8181	2214
40°	21959	3567	1734
45°	21620	2204	1359
50°	21283	1920	1283
55°	20446	1665	1256
60°	18970	1492	1350
65°	17052	1686	1474
70°	14301	1813	1520
75°	10691	2068	1646
80°	6715	2401	1877
85°	4471	3009	2748



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1549.7	6.9
10°-20°	4376.1	19.5
20°-30°	5358.7	23.8
30°-40°	4208.2	18.7
40°-50°	3120.6	13.9
50°-60°	1899.8	8.5
60°-70°	1138.0	5.1
70°-80°	624.4	2.8
80°-90°	202.5	0.9
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°	11284.5	50.2
0°-40°	15492.7	68.9
0°-60°	20513.1	91.3
0°-90°	22478.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22478.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16720	16720	16720	16720	16720	
5°	16684	16230	16049	16226	16387	###
15°	16237	15792	16321	15662	15170	4572
25°	15112	15160	12008	9418	7380	6957
35°	13522	12301	4981	1667	1348	8438
45°	11362	8158	1158	878	714	8786
55°	8716	2248	710	601	535	7757
65°	5356	663	530	498	463	5292
75°	2056	418	398	346	317	2227
85°	290	228	195	179	178	353
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16720.3	16720.3	16720.3	16720.3	16720.3
2.5°	16811.5	16585.0	16411.5	16314.6	16354.0
5°	16684.2	16230.1	16048.7	16225.6	16386.7
7.5°	16573.8	15898.8	16103.9	16119.6	16204.2
10°	16517.4	15867.2	15941.6	16292.1	16759.7
12.5°	16443.1	15940.5	15966.4	16444.2	16707.9
15°	16236.8	15791.7	16321.4	15662.1	15169.7
17.5°	15936.0	15444.7	16172.6	13875.0	13205.6
20°	15646.4	15067.2	14934.2	12359.3	11713.6
22.5°	15459.3	15009.7	13340.8	11012.7	10345.6
25°	15112.2	15159.6	12007.8	9418.2	7379.8
27.5°	14730.2	14806.9	10829.1	6281.1	4228.0
30°	14311.0	14398.9	9720.2	3711.9	2533.2
32.5°	13931.3	13435.5	7762.9	2315.7	1761.3
35°	13522.3	12300.7	4980.7	1666.6	1347.7
37.5°	13007.3	11108.5	3152.9	1318.4	1131.4
40°	12502.4	10038.0	2030.6	1125.7	987.1
42.5°	12030.3	9155.7	1477.3	983.7	891.3
45°	11362.1	8158.4	1158.4	877.8	714.4
47.5°	10784.0	6988.7	1013.0	742.6	616.4
50°	10167.6	5343.5	917.3	660.3	613.0
52.5°	9436.3	3495.5	847.4	632.2	572.4
55°	8716.2	2248.1	709.9	600.6	535.3
57.5°	7938.7	1425.5	626.5	582.6	558.9
60°	7049.6	961.2	554.4	552.2	501.5
62.5°	6227.0	789.9	535.3	529.6	474.4
65°	5355.9	662.6	529.6	498.1	463.1
67.5°	4486.0	567.9	478.9	455.2	424.8
70°	3635.2	519.5	460.9	450.7	386.5
72.5°	2760.8	428.2	409.0	382.0	321.2
75°	2056.5	418.1	397.8	345.9	316.6
77.5°	1391.7	385.4	361.7	309.9	286.2
80°	866.6	353.8	309.9	271.6	242.3
82.5°	515.0	295.2	254.7	224.2	205.1
85°	289.6	227.6	194.9	179.2	178.0
87.5°	62.0	82.3	65.4	62.0	43.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)