

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-CL-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 (P23762)
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-CL-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

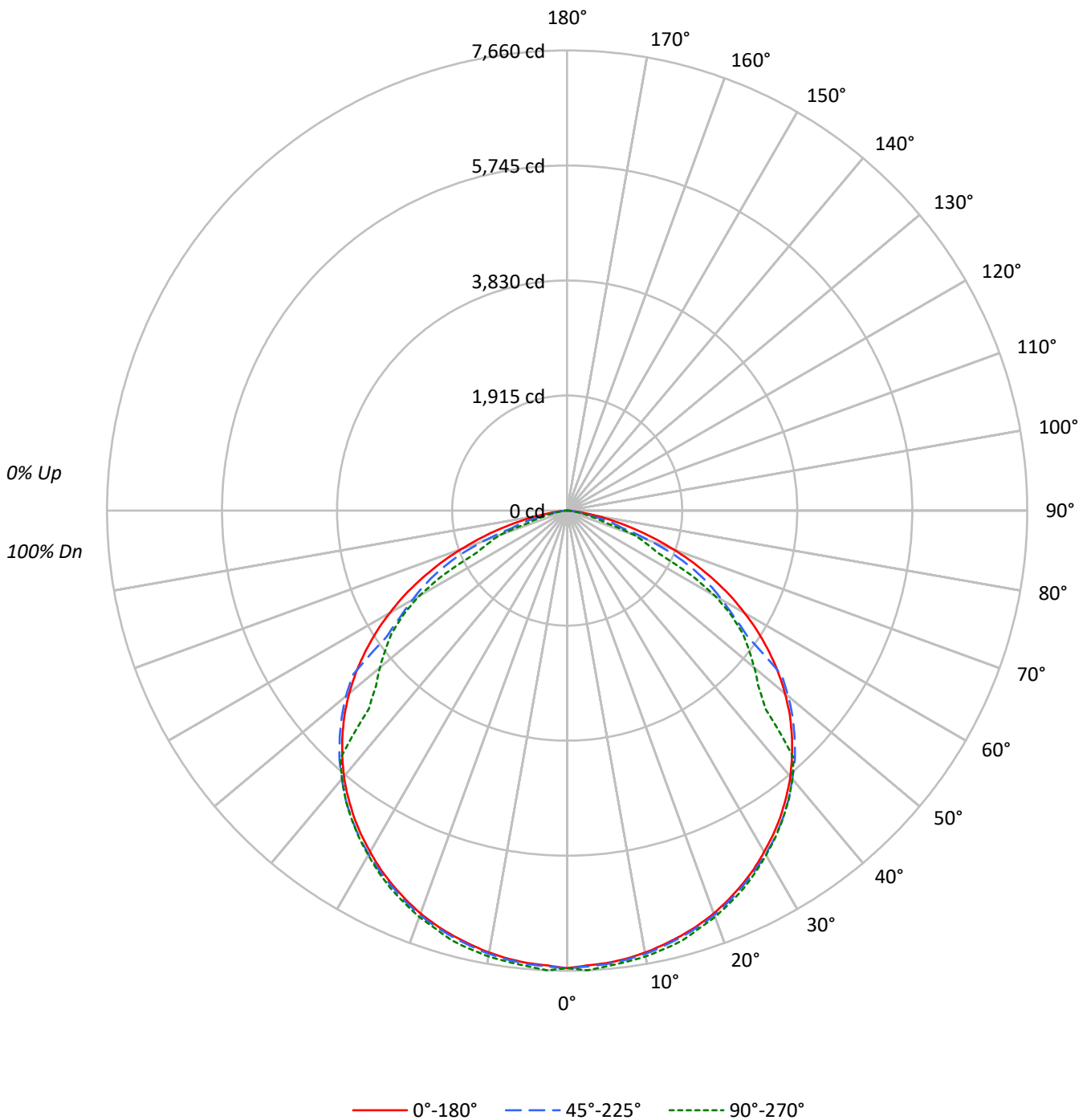
Lumens per Lamp: N/A
Luminaire Lumens: 20588.0 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75					73				
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64					62				
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55					53				
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48					46				
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42					40				
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38					36				
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34					32				
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30					29				
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28					26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10246	10246	10246
5°	10209	10232	10282
10°	10208	10237	10297
15°	10208	10238	10321
20°	10220	10259	10307
25°	10209	10247	10309
30°	10189	10264	10287
35°	10185	10277	10285
40°	10153	10242	10242
45°	10066	10187	8876
50°	9910	10060	8517
55°	9629	8611	8366
60°	9177	8005	7643
65°	8487	7430	5293
70°	7390	5782	4716
75°	5837	3880	2535
80°	3757	1853	1581
85°	1545	1132	1246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	722.4	3.5
10°-20°	2082.2	10.1
20°-30°	3192.3	15.5
30°-40°	3912.7	19.0
40°-50°	4022.5	19.5
50°-60°	3433.0	16.7
60°-70°	2269.6	11.0
70°-80°	840.9	4.1
80°-90°	112.4	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°	5996.9	29.1
0°-40°	9909.5	48.1
0°-60°	17365.0	84.3
0°-90°	20588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7615	7615	7615	7615	7615	
5°	7559	7612	7576	7605	7613	719
15°	7328	7372	7350	7406	7410	2070
25°	6876	6913	6902	6964	6944	3171
35°	6200	6243	6257	6296	6262	3878
45°	5290	5343	5354	5346	4665	4077
55°	4105	4180	3671	3564	3566	3663
65°	2666	2688	2334	1919	1662	2629
75°	1123	984	746	502	488	1205
85°	100	71	73	80	81	166
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7615.4	7615.4	7615.4	7615.4	7615.4
2.5°	7578.3	7625.6	7597.8	7633.0	7659.9
5°	7558.9	7611.7	7575.6	7605.2	7612.6
7.5°	7525.5	7574.6	7541.2	7580.2	7574.6
10°	7471.7	7516.2	7493.0	7533.8	7536.6
12.5°	7403.1	7447.6	7426.3	7476.3	7475.4
15°	7328.0	7372.5	7350.2	7405.9	7409.6
17.5°	7239.9	7280.7	7264.0	7315.0	7294.6
20°	7137.9	7173.1	7164.8	7213.0	7198.2
22.5°	7012.7	7048.9	7040.5	7096.2	7073.9
25°	6876.4	6912.6	6902.4	6964.5	6944.1
27.5°	6729.0	6763.3	6762.4	6820.8	6789.3
30°	6558.4	6603.8	6606.6	6658.5	6621.4
32.5°	6389.6	6432.3	6444.3	6482.3	6450.8
35°	6200.5	6243.1	6257.0	6296.0	6261.7
37.5°	5996.5	6032.6	6057.7	6086.4	6059.5
40°	5780.4	5812.9	5831.4	5866.6	5831.4
42.5°	5539.3	5585.7	5611.7	5636.7	5579.2
45°	5289.9	5342.8	5353.9	5345.5	4664.9
47.5°	5025.6	5083.1	5089.6	4438.7	4313.5
50°	4734.5	4806.8	4805.9	4102.1	4068.7
52.5°	4431.3	4500.8	4498.0	3838.8	3816.5
55°	4104.9	4180.0	3670.9	3564.3	3566.2
57.5°	3772.0	3825.8	3293.6	3298.2	3237.0
60°	3410.4	3461.4	2974.6	2945.8	2840.1
62.5°	3047.8	3069.2	2665.8	2525.8	2324.6
65°	2665.8	2688.1	2333.9	1919.4	1662.5
67.5°	2273.6	2295.8	1937.0	1427.9	1408.5
70°	1878.6	1696.8	1469.7	1189.6	1198.9
72.5°	1489.1	1303.7	960.6	921.7	665.8
75°	1122.9	983.8	746.4	501.6	487.7
77.5°	781.7	677.8	399.6	342.2	319.9
80°	484.9	340.3	239.2	212.3	204.0
82.5°	245.7	195.6	129.8	129.8	129.8
85°	100.1	71.4	73.3	79.7	80.7
87.5°	21.3	28.7	35.2	36.2	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)