

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-CLI-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 (P23769)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-CLI-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

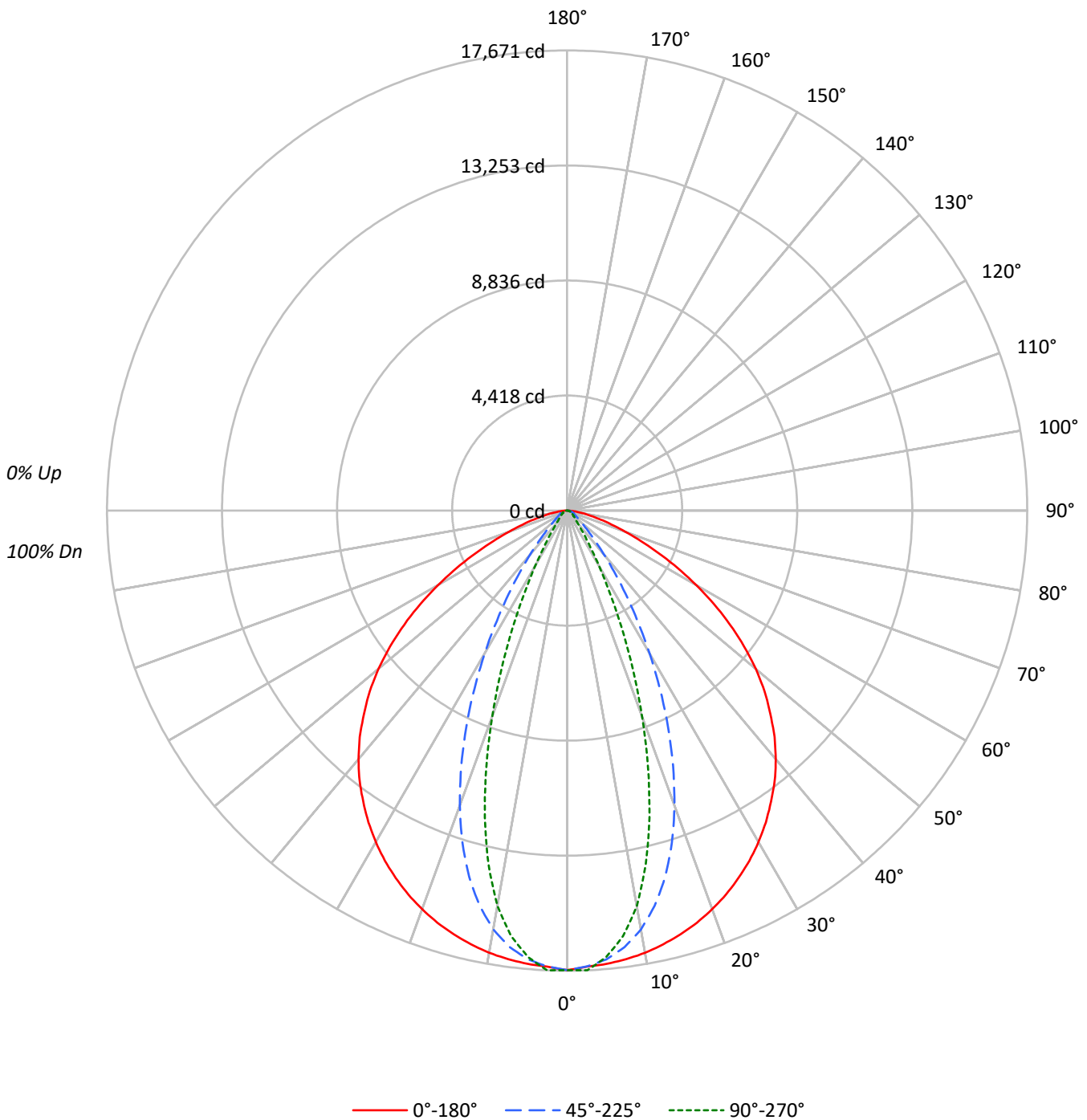
Lumens per Lamp: N/A
Luminaire Lumens: 19319.0 lumens
Efficiency: N/A
Efficacy: 132.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	23743	23743	23743
5°	23600	23366	23243
10°	23561	22308	21050
15°	23466	20277	17000
20°	23325	17254	12049
25°	23117	13605	7280
30°	22836	9819	3741
35°	22423	6420	1869
40°	21892	3856	1091
45°	20982	2303	815
50°	19790	1506	685
55°	17911	1142	597
60°	15392	973	545
65°	12381	888	515
70°	9327	951	512
75°	6861	904	527
80°	5019	900	576
85°	3759	1090	746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1625.1	8.4
10°-20°	4043.0	20.9
20°-30°	4478.2	23.2
30°-40°	3587.9	18.6
40°-50°	2561.3	13.3
50°-60°	1645.2	8.5
60°-70°	891.6	4.6
70°-80°	381.1	2.0
80°-90°	105.7	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°	10146.4	52.5
0°-40°	13734.3	71.1
0°-60°	17940.7	92.9
0°-90°	19319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17646	17646	17646	17646	17646	
5°	17474	17539	17300	17245	17209	###
15°	16846	16319	14557	12864	12205	4753
25°	15571	13730	9164	5971	4904	7173
35°	13652	9874	3908	1576	1138	8536
45°	11027	5700	1210	515	428	8499
55°	7635	2548	487	299	255	6805
65°	3889	1047	279	192	162	3894
75°	1320	383	174	121	101	1466
85°	244	101	71	59	48	297
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17646.5	17646.5	17646.5	17646.5	17646.5
2.5°	17530.3	17640.0	17522.0	17595.4	17670.7
5°	17473.6	17538.7	17299.8	17245.0	17208.7
7.5°	17375.1	17356.5	16907.6	16616.7	16476.3
10°	17245.0	17094.4	16327.6	15688.2	15407.5
12.5°	17059.1	16748.7	15542.2	14419.5	13943.6
15°	16846.3	16319.3	14557.0	12864.5	12204.6
17.5°	16591.6	15817.4	13379.4	11197.1	10326.2
20°	16290.4	15211.4	12050.3	9425.5	8415.2
22.5°	15954.0	14512.4	10627.3	7659.6	6575.8
25°	15571.1	13729.8	9164.4	5970.8	4903.8
27.5°	15157.4	12860.8	7709.8	4461.4	3488.2
30°	14698.3	11920.2	6320.3	3216.8	2408.2
32.5°	14197.3	10920.1	5029.2	2262.3	1647.0
35°	13651.7	9874.5	3908.3	1576.3	1137.6
37.5°	13093.1	8807.5	2951.9	1114.4	816.1
40°	12463.9	7744.2	2195.4	816.1	620.9
42.5°	11788.2	6701.3	1624.7	628.3	502.8
45°	11027.0	5700.3	1210.1	514.9	428.5
47.5°	10289.0	4767.1	919.2	438.7	372.7
50°	9454.4	3925.1	719.4	382.9	327.2
52.5°	8568.6	3184.3	583.7	337.4	288.1
55°	7635.4	2548.5	487.0	299.3	254.7
57.5°	6690.2	2018.8	416.4	266.8	226.8
60°	5719.8	1614.5	361.6	238.9	202.6
62.5°	4772.7	1291.0	316.0	214.7	181.2
65°	3888.8	1046.6	278.8	192.4	161.7
67.5°	3071.8	827.2	260.2	172.9	145.9
70°	2371.0	644.1	241.7	154.3	130.1
72.5°	1796.6	494.5	213.8	137.6	115.3
75°	1319.8	382.9	173.8	120.8	101.3
77.5°	944.3	294.6	141.3	105.0	87.4
80°	647.8	219.3	116.2	90.2	74.4
82.5°	421.0	155.2	93.9	74.4	61.3
85°	243.5	101.3	70.6	58.6	48.3
87.5°	105.0	55.8	48.3	43.7	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)