

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: P730746

Luminaire Tested: **HBLED-LD5-24SE-N-CLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730746
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23769)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24SE-N-CLI-UNV-L840
Description: 24000 LUMEN, SE HBLED WITH NARROW DISTRIBUTION AND CLEAR ACRYLIC LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21765.0 lumens
Efficiency: N/A
Efficacy: 145.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

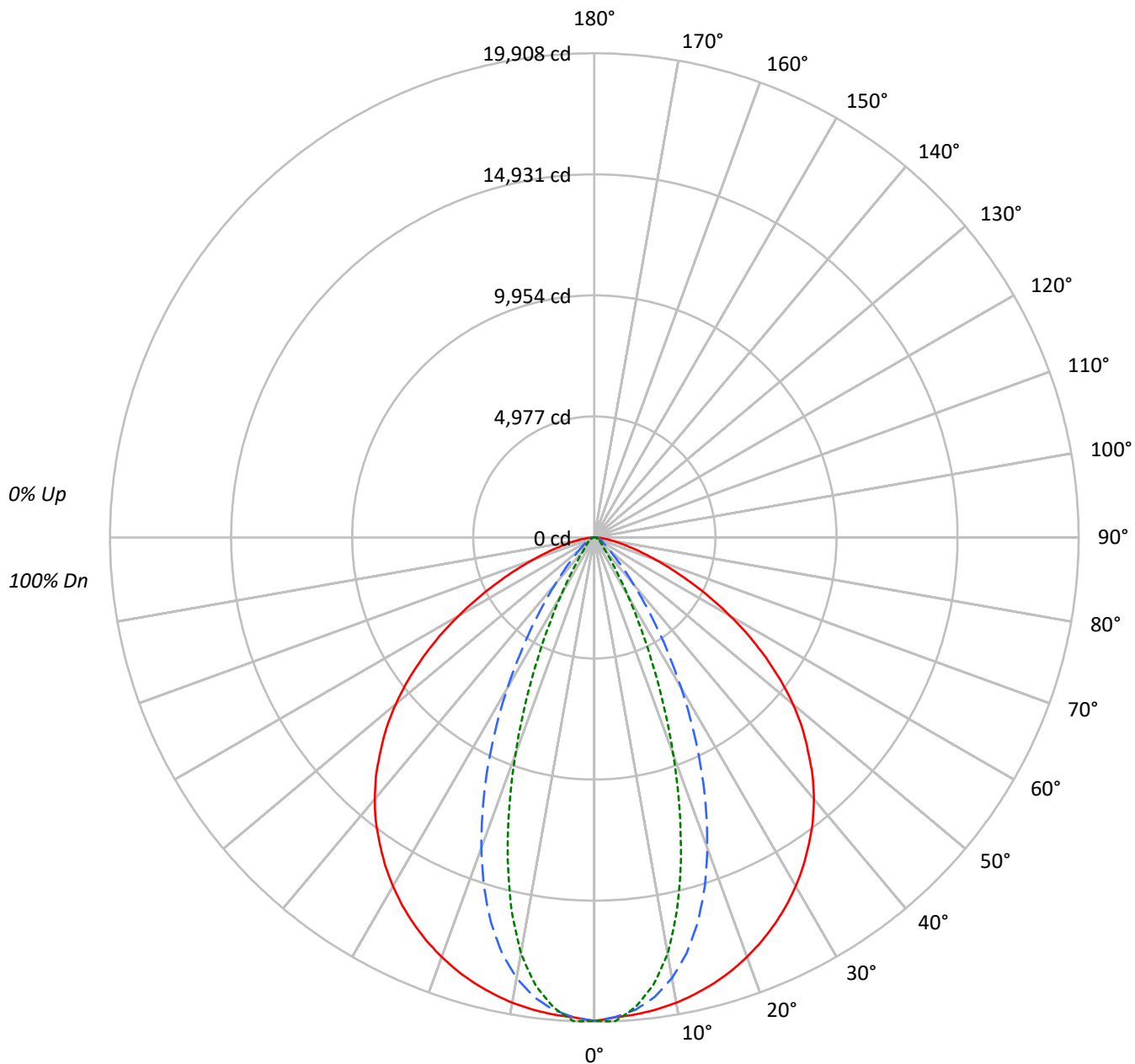
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81		
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72		
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65		
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60		
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55		
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50		
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46		
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43		
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32099	32099	32099
5°	31906	31589	31423
10°	31853	30158	28459
15°	31725	27413	22983
20°	31534	23326	16290
25°	31252	18393	9842
30°	30872	13275	5058
35°	30315	8679	2526
40°	29596	5213	1474
45°	28367	3113	1102
50°	26755	2036	926
55°	24214	1544	808
60°	20809	1315	737
65°	16738	1200	696
70°	12610	1285	692
75°	9276	1221	712
80°	6786	1217	779
85°	5083	1475	1008



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1830.9	8.4
10°-20°	4554.9	20.9
20°-30°	5045.2	23.2
30°-40°	4042.1	18.6
40°-50°	2885.6	13.3
50°-60°	1853.4	8.5
60°-70°	1004.4	4.6
70°-80°	429.3	2.0
80°-90°	119.1	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°	11431.0	52.5
0°-40°	15473.2	71.1
0°-60°	20212.2	92.9
0°-90°	21765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21765.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19881	19881	19881	19881	19881	
5°	19686	19759	19490	19428	19388	###
15°	18979	18386	16400	14493	13750	5355
25°	17542	15468	10325	6727	5525	8082
35°	15380	11125	4403	1776	1282	9616
45°	12423	6422	1363	580	483	9576
55°	8602	2871	549	337	287	7666
65°	4381	1179	314	217	182	4387
75°	1487	431	196	136	114	1652
85°	274	114	80	66	54	335
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19880.7	19880.7	19880.7	19880.7	19880.7
2.5°	19749.9	19873.4	19740.4	19823.1	19907.9
5°	19686.0	19759.3	19490.1	19428.3	19387.6
7.5°	19574.9	19554.0	19048.3	18720.5	18562.4
10°	19428.3	19258.7	18394.8	17674.5	17358.2
12.5°	19219.0	18869.2	17510.0	16245.1	15709.0
15°	18979.2	18385.5	16400.1	14493.3	13749.8
17.5°	18692.2	17820.0	15073.4	12614.8	11633.6
20°	18353.0	17137.3	13576.0	10618.9	9480.7
22.5°	17974.0	16349.8	11972.8	8629.3	7408.5
25°	17542.5	15468.1	10324.7	6726.8	5524.6
27.5°	17076.6	14489.1	8686.0	5026.2	3929.8
30°	16559.2	13429.4	7120.4	3624.2	2713.1
32.5°	15994.8	12302.7	5666.1	2548.7	1855.5
35°	15380.2	11124.7	4403.1	1775.9	1281.7
37.5°	14750.8	9922.6	3325.7	1255.5	919.4
40°	14041.9	8724.6	2473.3	919.4	699.4
42.5°	13280.7	7549.8	1830.4	707.8	566.5
45°	12423.1	6422.0	1363.4	580.1	482.8
47.5°	11591.7	5370.8	1035.6	494.2	419.9
50°	10651.4	4422.1	810.5	431.4	368.6
52.5°	9653.5	3587.5	657.6	380.1	324.6
55°	8602.1	2871.2	548.6	337.2	286.9
57.5°	7537.2	2274.3	469.1	300.5	255.5
60°	6444.0	1818.9	407.3	269.1	228.2
62.5°	5377.0	1454.5	356.0	241.9	204.2
65°	4381.2	1179.0	314.1	216.8	182.2
67.5°	3460.7	932.0	293.2	194.7	164.4
70°	2671.2	725.6	272.3	173.8	146.6
72.5°	2024.1	557.1	240.9	155.0	129.9
75°	1486.9	431.4	195.8	136.1	114.1
77.5°	1063.9	332.0	159.2	118.3	98.5
80°	729.8	247.2	130.9	101.6	83.8
82.5°	474.4	174.9	105.7	83.8	69.1
85°	274.4	114.1	79.6	66.0	54.4
87.5°	118.3	62.8	54.4	49.2	41.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







(END OF REPORT)