

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: P730680

Luminaire Tested: **HBLED-LD5-24HE-N-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P730680
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23767)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-UNV-L840
Description: 24000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23665.0 lumens
Efficiency: N/A
Efficacy: 165.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

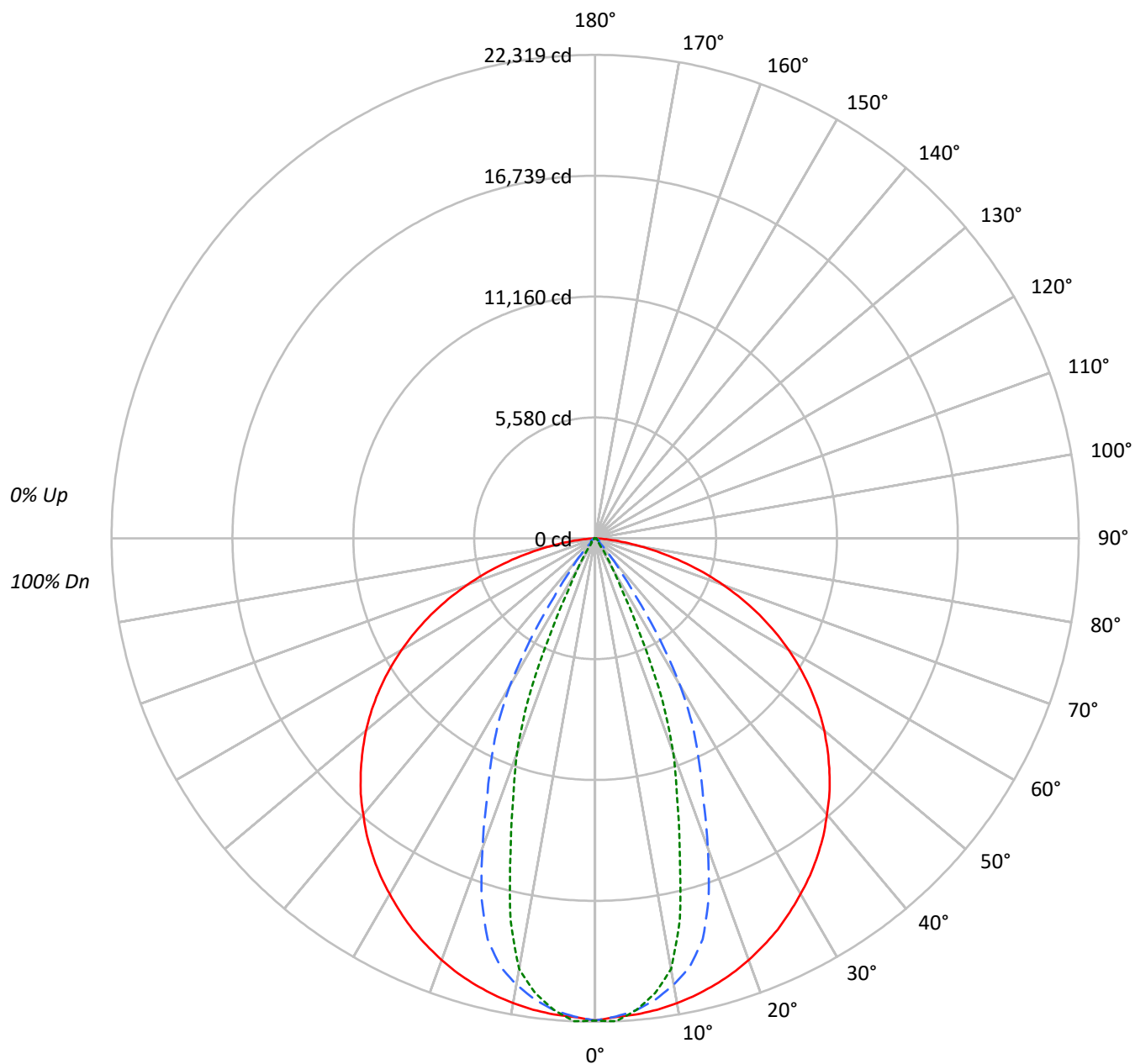
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35949	35949	35949
5°	35757	35441	35425
10°	35734	34305	33102
15°	35684	32049	25192
20°	35601	26126	18134
25°	35510	20201	8933
30°	35353	14682	2897
35°	35270	6514	745
40°	35085	2645	502
45°	34928	743	535
50°	34656	527	593
55°	34157	626	254
60°	33313	698	154
65°	31943	445	182
70°	29675	395	225
75°	25961	298	310
80°	19411	364	444
85°	9615	471	587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2066.2	8.7
10°-20°	5166.6	21.8
20°-30°	5596.2	23.6
30°-40°	4144.3	17.5
40°-50°	2984.9	12.6
50°-60°	1848.2	7.8
60°-70°	1136.6	4.8
70°-80°	599.2	2.5
80°-90°	122.7	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°	12829.1	54.2
0°-40°	16973.3	71.7
0°-60°	21806.5	92.1
0°-90°	23665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23665.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	22265	22265	22265	22265	22265	
5°	22062	22143	21867	21883	21857	###
15°	21348	20852	19173	16305	15071	6026
25°	19933	18258	11340	7134	5014	9184
35°	17894	12615	3305	777	378	11195
45°	15297	7107	325	235	234	11797
55°	12134	1464	222	201	90	10832
65°	8361	155	116	74	48	8250
75°	4162	36	48	62	50	4395
85°	519	14	25	38	32	784
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	22265.1	22265.1	22265.1	22265.1	22265.1
2.5°	22122.1	22263.0	22096.7	22220.7	22319.1
5°	22061.7	22143.3	21866.9	21882.7	21857.3
7.5°	21955.8	21936.8	21471.8	21268.4	21179.5
10°	21795.9	21669.8	20924.2	20499.5	20190.2
12.5°	21589.4	21307.6	20241.1	18890.6	18051.7
15°	21347.8	20852.2	19173.4	16305.1	15071.1
17.5°	21059.7	20357.5	17427.8	13665.6	12564.1
20°	20719.7	19805.7	15205.6	11626.7	10553.8
22.5°	20340.5	19134.2	13047.1	9662.9	8132.4
25°	19932.8	18258.3	11339.6	7133.6	5014.2
27.5°	19461.5	17132.3	9738.2	4201.8	2559.0
30°	18962.6	15776.5	7875.0	2260.3	1553.9
32.5°	18459.5	14239.6	5572.4	1411.9	881.2
35°	17893.9	12614.9	3304.6	777.4	378.2
37.5°	17303.9	11125.7	1953.1	353.8	242.6
40°	16646.2	9764.7	1255.1	235.1	238.3
42.5°	16010.7	8495.7	706.5	231.9	236.2
45°	15296.7	7107.1	325.2	235.1	234.1
47.5°	14558.5	5667.7	210.7	237.2	237.2
50°	13797.0	4052.5	209.7	242.6	236.2
52.5°	12993.0	2528.3	218.2	241.5	193.8
55°	12134.0	1463.8	222.4	201.2	90.1
57.5°	11244.3	863.2	224.6	115.4	50.9
60°	10316.4	477.7	216.1	85.8	47.7
62.5°	9360.0	227.7	170.5	80.5	46.6
65°	8361.2	154.6	116.5	74.1	47.7
67.5°	7324.3	119.6	92.1	69.9	48.7
70°	6286.2	88.9	83.7	69.9	47.7
72.5°	5231.3	60.4	69.9	70.9	47.7
75°	4161.5	36.0	47.7	62.5	49.7
77.5°	3101.3	22.2	37.1	64.6	60.4
80°	2087.6	19.0	39.2	60.4	47.7
82.5°	1225.5	17.0	38.2	46.6	38.2
85°	519.0	13.8	25.4	38.2	31.7
87.5°	97.4	11.7	20.2	30.7	27.5
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)