

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: P731136

Luminaire Tested: **HBLED-LD5-60HE-N-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731136
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-LD5-60HE-N-UNV-L840
Description: 60000 LUMEN, HE HBLED WITH NARROW DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59897.0 lumens
Efficiency: N/A
Efficacy: 168.7 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

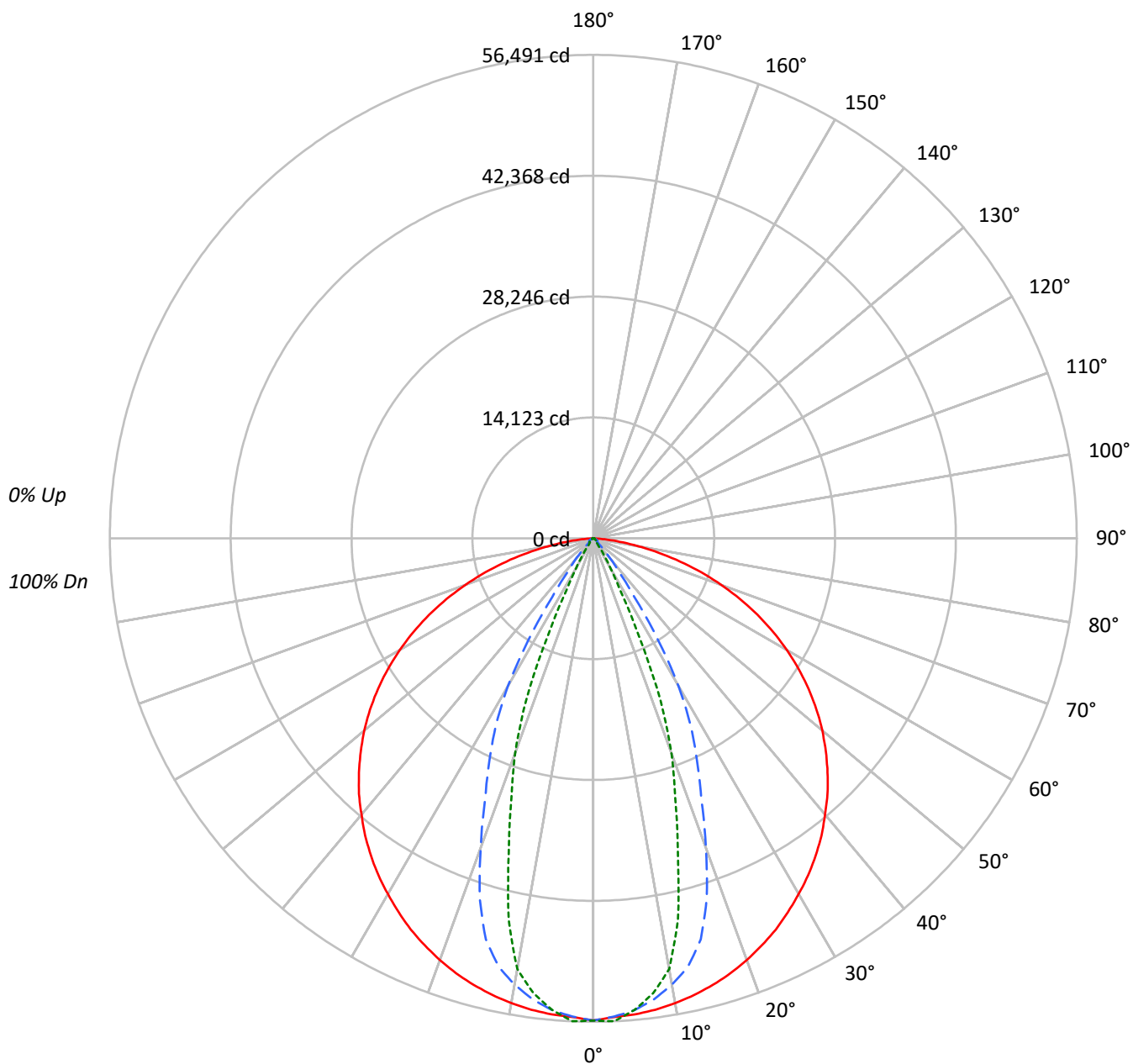
Input Watts (W): 355
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	76	81	77	74	73		
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66		
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60		
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55		
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51		
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47		
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44		
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	90988	90988	90988
5°	90501	89702	89663
10°	90445	86828	83782
15°	90317	81118	63762
20°	90107	66127	45897
25°	89878	51131	22609
30°	89480	37160	7332
35°	89269	16486	1887
40°	88802	6696	1271
45°	88404	1879	1353
50°	87716	1333	1502
55°	86452	1585	642
60°	84318	1766	390
65°	80850	1126	461
70°	75110	1000	570
75°	65707	753	785
80°	49129	922	1122
85°	24335	1189	1488



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5229.7	8.7
10°-20°	13076.9	21.8
20°-30°	14164.3	23.6
30°-40°	10489.3	17.5
40°-50°	7555.0	12.6
50°-60°	4678.0	7.8
60°-70°	2876.9	4.8
70°-80°	1516.6	2.5
80°-90°	310.4	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°	32470.9	54.2
0°-40°	42960.1	71.7
0°-60°	55193.1	92.1
0°-90°	59897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	59897.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	56354	56354	56354	56354	56354	
5°	55839	56046	55346	55386	55322	###
15°	54032	52778	48528	41269	38146	15253
25°	50451	46212	28701	18055	12691	23246
35°	45290	31929	8364	1968	957	28334
45°	38716	17988	823	595	592	29858
55°	30712	3705	563	509	228	27416
65°	21162	391	295	188	121	20880
75°	10533	91	121	158	126	11125
85°	1314	35	64	97	80	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	56353.8	56353.8	56353.8	56353.8	56353.8
2.5°	55991.9	56348.6	55927.7	56241.4	56490.6
5°	55839.1	56045.5	55345.8	55386.0	55321.7
7.5°	55570.9	55522.8	54345.9	53831.2	53606.1
10°	55166.3	54847.2	52960.0	51885.0	51102.1
12.5°	54643.6	53930.4	51230.9	47812.7	45689.6
15°	54032.2	52777.6	48528.5	41268.9	38145.6
17.5°	53303.0	51525.7	44110.4	34588.1	31800.2
20°	52442.4	50128.9	38486.0	29427.6	26712.0
22.5°	51482.7	48429.3	33022.6	24457.2	20583.4
25°	50450.6	46212.3	28700.9	18055.4	12691.0
27.5°	49257.7	43362.5	24647.6	10635.0	6477.0
30°	47995.1	39930.9	19931.9	5720.8	3932.9
32.5°	46721.6	36041.1	14103.9	3573.6	2230.4
35°	45290.1	31928.7	8364.1	1967.7	957.2
37.5°	43796.7	28159.5	4943.4	895.5	613.9
40°	42132.1	24714.7	3176.7	595.0	603.1
42.5°	40523.6	21503.0	1788.2	587.0	597.9
45°	38716.5	17988.3	823.0	595.0	592.4
47.5°	36848.0	14345.0	533.4	600.5	600.5
50°	34920.7	10257.0	530.8	613.9	597.9
52.5°	32885.9	6399.3	552.3	611.4	490.6
55°	30711.7	3704.9	562.9	509.3	228.0
57.5°	28459.8	2184.8	568.4	292.2	128.7
60°	26111.2	1209.0	546.9	217.1	120.7
62.5°	23690.4	576.4	431.6	203.9	117.9
65°	21162.4	391.4	294.8	187.6	120.7
67.5°	18538.0	302.8	233.1	176.9	123.3
70°	15910.7	225.1	211.9	176.9	120.7
72.5°	13240.7	152.8	176.9	179.5	120.7
75°	10532.9	91.2	120.7	158.3	125.9
77.5°	7849.4	56.2	93.8	163.5	152.8
80°	5283.8	48.2	99.2	152.8	120.7
82.5°	3101.8	43.0	96.6	117.9	96.6
85°	1313.6	35.0	64.2	96.6	80.3
87.5°	246.6	29.5	51.0	77.7	69.7
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)