

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-LD5-60HE-N-CLI-UNV-L840-ED4-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-LD5-60HE-N-CLI-UNV-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

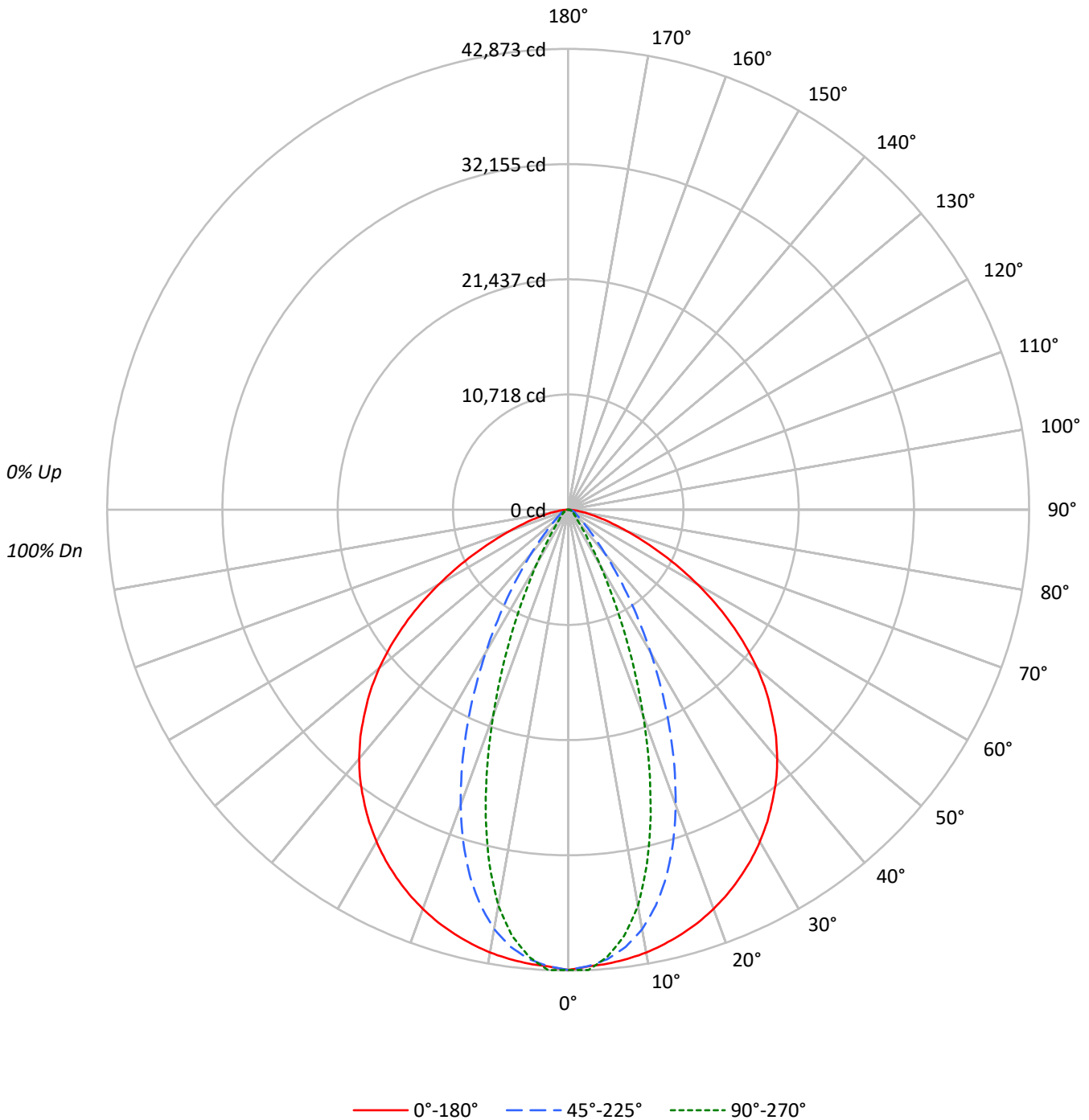
Lumens per Lamp: N/A
Luminaire Lumens: 46872.0 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 369
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



TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-UNV-L840-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-UNV-L840-ED4-U

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°	57606	57606	57606
5°	57260	56690	56392
10°	57164	54123	51073
15°	56934	49197	41247
20°	56592	41862	29234
25°	56086	33009	17663
30°	55405	23824	9078
35°	54404	15575	4534
40°	53114	9355	2646
45°	50907	5587	1978
50°	48015	3653	1662
55°	43456	2772	1449
60°	37344	2361	1323
65°	30039	2154	1249
70°	22630	2306	1242
75°	16647	2192	1278
80°	12179	2184	1398
85°	9121	2646	1811



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-UNV-L840-ED4-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3942.9	8.4
10°-20°	9809.2	20.9
20°-30°	10865.2	23.2
30°-40°	8704.9	18.6
40°-50°	6214.2	13.3
50°-60°	3991.5	8.5
60°-70°	2163.1	4.6
70°-80°	924.6	2.0
80°-90°	256.4	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°	24617.3	52.5
0°-40°	33322.3	71.1
0°-60°	43528.0	92.9
0°-90°	46872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	46872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	42814	42814	42814	42814	42814	
5°	42395	42553	41973	41840	41752	###
15°	40873	39594	35318	31212	29611	11532
25°	37779	33311	22235	14486	11898	17404
35°	33122	23958	9482	3824	2760	20709
45°	26754	13830	2936	1249	1040	20621
55°	18525	6183	1182	726	618	16509
65°	9435	2539	676	467	392	9448
75°	3202	929	422	293	246	3558
85°	591	246	171	142	117	722
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-UNV-L840-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	42814.2	42814.2	42814.2	42814.2	42814.2
2.5°	42532.3	42798.4	42512.0	42690.2	42872.8
5°	42394.7	42552.6	41973.1	41840.0	41752.1
7.5°	42155.7	42110.6	41021.4	40315.6	39975.1
10°	41840.0	41474.7	39614.3	38062.8	37381.8
12.5°	41389.0	40635.8	37708.8	34984.7	33830.1
15°	40872.6	39594.0	35318.4	31212.0	29610.9
17.5°	40254.7	38376.3	32461.3	27166.5	25053.5
20°	39524.1	36906.0	29236.6	22868.4	20417.1
22.5°	38707.8	35210.2	25784.1	18583.8	15954.4
25°	37778.7	33311.4	22234.7	14486.4	11897.6
27.5°	36775.2	31203.0	18705.6	10824.2	8463.2
30°	35661.2	28920.9	15334.3	7804.7	5842.8
32.5°	34445.7	26494.5	12202.0	5488.8	3995.9
35°	33122.0	23957.5	9482.4	3824.5	2760.2
37.5°	31766.7	21368.8	7162.0	2703.8	1979.9
40°	30240.1	18789.0	5326.4	1979.9	1506.4
42.5°	28600.7	16258.8	3941.8	1524.4	1220.0
45°	26753.8	13830.2	2936.1	1249.3	1039.6
47.5°	24963.3	11566.1	2230.2	1064.4	904.3
50°	22938.3	9523.0	1745.4	929.1	793.8
52.5°	20789.2	7725.8	1416.2	818.6	699.1
55°	18525.2	6183.3	1181.6	726.1	617.9
57.5°	16231.8	4897.9	1010.3	647.2	550.2
60°	13877.5	3917.0	877.2	579.5	491.6
62.5°	11579.6	3132.3	766.7	520.9	439.7
65°	9435.1	2539.2	676.5	466.8	392.4
67.5°	7452.9	2007.0	631.4	419.4	354.0
70°	5752.6	1562.7	586.3	374.3	315.7
72.5°	4359.0	1199.7	518.7	333.7	279.6
75°	3202.2	929.1	421.7	293.2	245.8
77.5°	2291.1	714.8	342.8	254.8	212.0
80°	1571.8	532.2	281.9	218.7	180.4
82.5°	1021.5	376.6	227.8	180.4	148.8
85°	590.8	245.8	171.4	142.1	117.3
87.5°	254.8	135.3	117.3	106.0	90.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)