

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-L835-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-L835-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

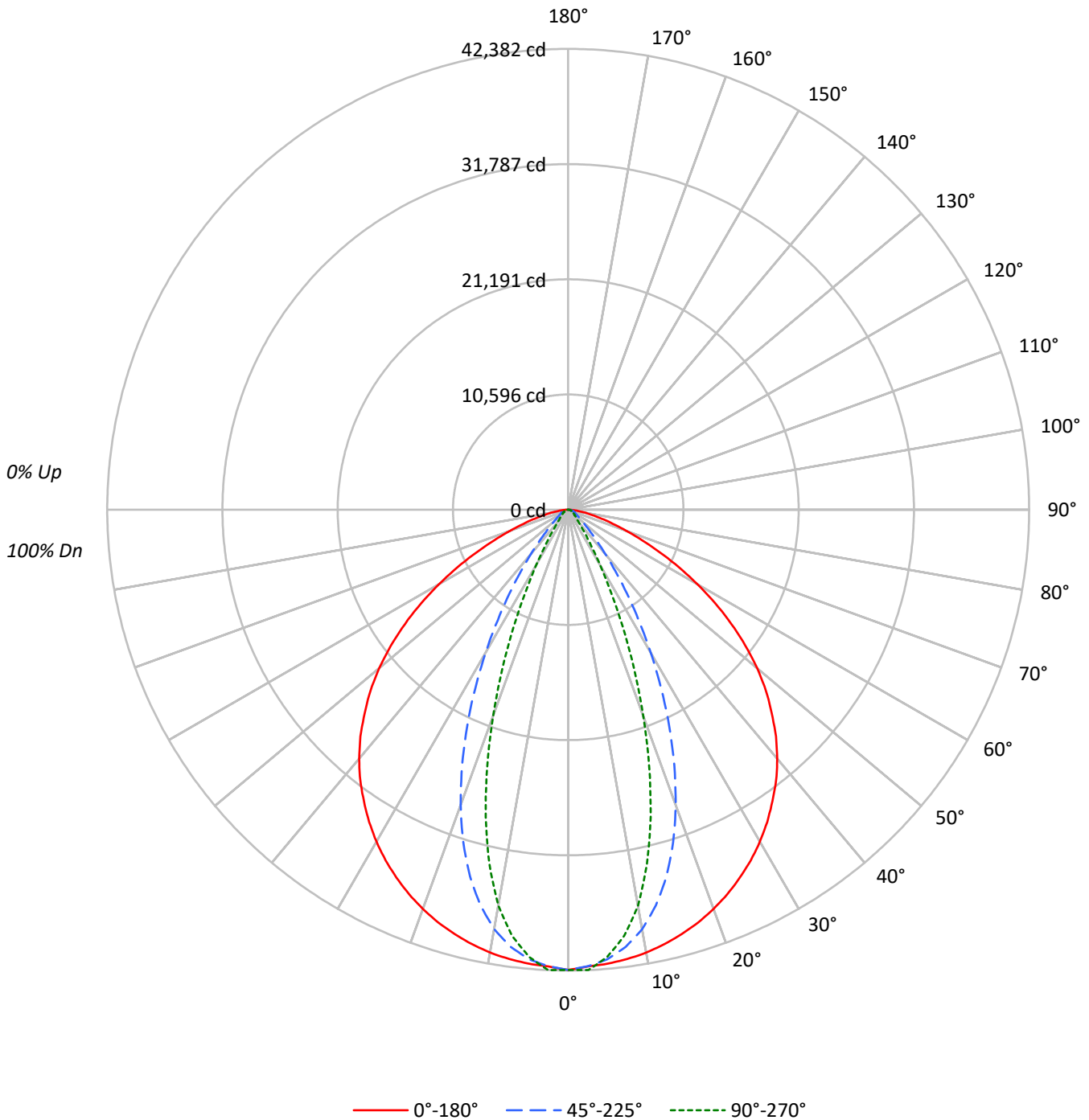
Lumens per Lamp: N/A
Luminaire Lumens: 46336.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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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°	56947	56947	56947
5°	56605	56042	55747
10°	56510	53504	50489
15°	56283	48634	40775
20°	55945	41383	28900
25°	55444	32632	17461
30°	54771	23551	8974
35°	53782	15397	4482
40°	52507	9248	2615
45°	50325	5523	1956
50°	47466	3612	1643
55°	42959	2740	1433
60°	36917	2334	1308
65°	29695	2129	1235
70°	22372	2280	1228
75°	16456	2167	1263
80°	12039	2159	1382
85°	9017	2615	1789



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3897.8	8.4
10°-20°	9697.1	20.9
20°-30°	10740.9	23.2
30°-40°	8605.4	18.6
40°-50°	6143.1	13.3
50°-60°	3945.8	8.5
60°-70°	2138.4	4.6
70°-80°	914.0	2.0
80°-90°	253.5	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°	24335.8	52.5
0°-40°	32941.2	71.1
0°-60°	43030.2	92.9
0°-90°	46336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	46336.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	42325	42325	42325	42325	42325	
5°	41910	42066	41493	41362	41275	###
15°	40405	39141	34915	30855	29272	11400
25°	37347	32930	21980	14321	11762	17205
35°	32743	23684	9374	3781	2729	20473
45°	26448	13672	2902	1235	1028	20386
55°	18313	6113	1168	718	611	16321
65°	9327	2510	669	462	388	9340
75°	3166	918	417	290	243	3517
85°	584	243	169	140	116	713
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	42324.6	42324.6	42324.6	42324.6	42324.6
2.5°	42045.9	42309.0	42025.9	42202.0	42382.5
5°	41909.9	42066.0	41493.1	41361.6	41274.6
7.5°	41673.6	41629.1	40552.3	39854.6	39518.0
10°	41361.6	41000.4	39161.3	37627.6	36954.3
12.5°	40915.7	40171.1	37277.6	34584.6	33443.2
15°	40405.2	39141.2	34914.6	30855.1	29272.3
17.5°	39794.4	37937.4	32090.1	26855.8	24767.0
20°	39072.1	36483.9	28902.3	22606.8	20183.7
22.5°	38265.1	34807.5	25489.3	18371.3	15772.0
25°	37346.7	32930.5	21980.4	14320.7	11761.5
27.5°	36354.6	30846.2	18491.6	10700.4	8366.4
30°	35253.4	28590.2	15158.9	7715.4	5776.0
32.5°	34051.8	26191.5	12062.5	5426.0	3950.2
35°	32743.3	23683.6	9374.0	3780.8	2728.6
37.5°	31403.5	21124.4	7080.1	2672.9	1957.3
40°	29894.3	18574.1	5265.5	1957.3	1489.1
42.5°	28273.6	16072.9	3896.7	1507.0	1206.0
45°	26447.9	13672.0	2902.5	1235.0	1027.7
47.5°	24677.8	11433.8	2204.7	1052.2	893.9
50°	22676.0	9414.1	1725.4	918.5	784.7
52.5°	20551.5	7637.4	1400.0	809.2	691.1
55°	18313.3	6112.6	1168.1	717.8	610.8
57.5°	16046.2	4841.9	998.7	639.8	543.9
60°	13718.8	3872.2	867.2	572.9	486.0
62.5°	11447.2	3096.4	757.9	515.0	434.7
65°	9327.2	2510.1	668.8	461.5	387.9
67.5°	7367.7	1984.0	624.2	414.6	350.0
70°	5686.8	1544.9	579.6	370.1	312.1
72.5°	4309.1	1186.0	512.7	329.9	276.4
75°	3165.5	918.5	416.9	289.8	243.0
77.5°	2264.9	706.7	338.8	251.9	209.5
80°	1553.8	526.1	278.7	216.2	178.3
82.5°	1009.9	372.3	225.2	178.3	147.1
85°	584.1	243.0	169.4	140.4	115.9
87.5°	251.9	133.8	115.9	104.8	89.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)