

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-LD5-36HE-N-CLI-UNV-L840-ED3-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-LD5-36HE-N-CLI-UNV-L840-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

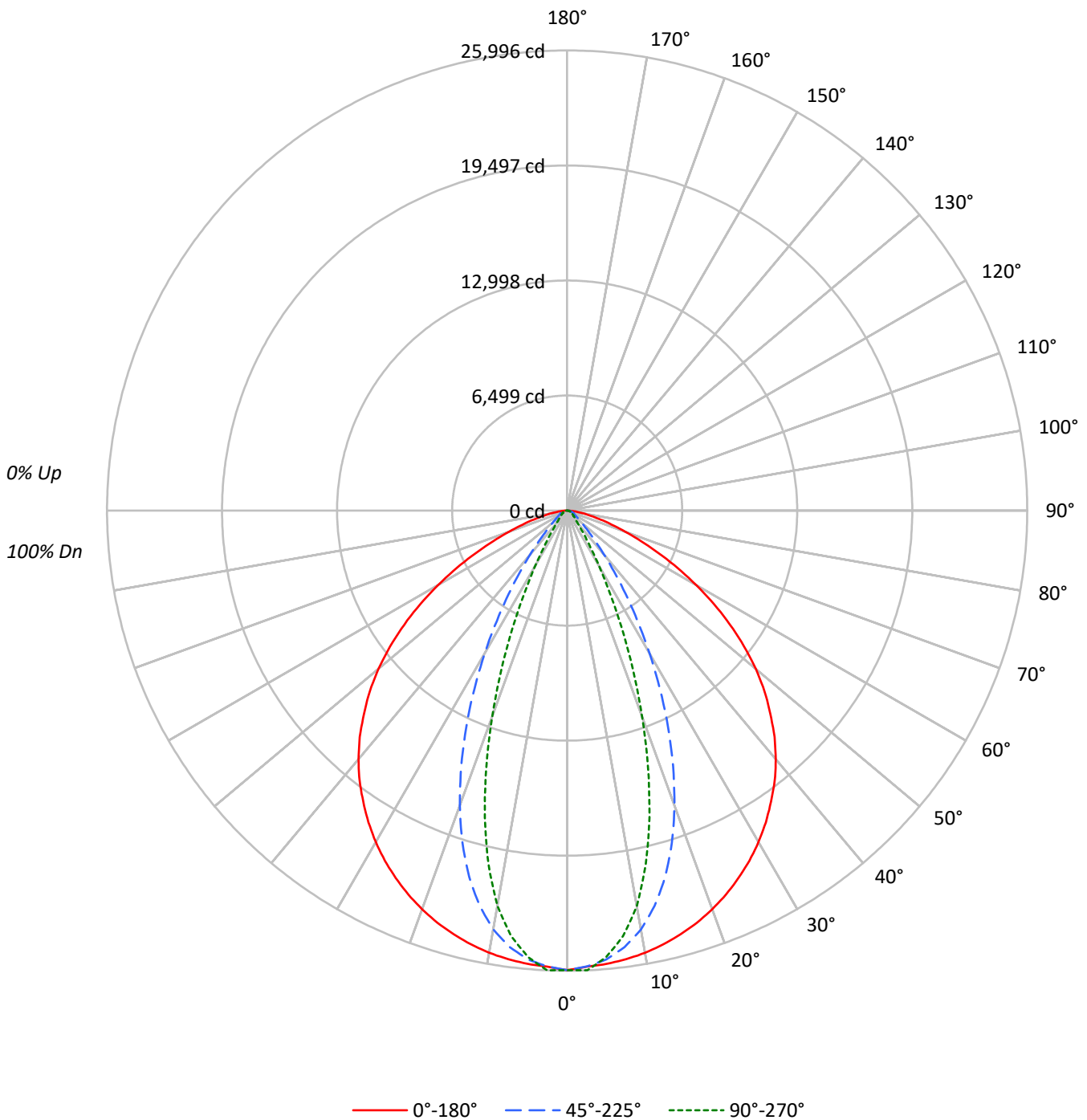
Lumens per Lamp: N/A
Luminaire Lumens: 28421.0 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 211.3
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°	34930	34930	34930
5°	34720	34374	34193
10°	34661	32818	30968
15°	34522	29831	25010
20°	34315	25383	17726
25°	34008	20015	10710
30°	33595	14446	5504
35°	32988	9444	2749
40°	32206	5673	1604
45°	30868	3388	1199
50°	29114	2215	1007
55°	26350	1681	879
60°	22644	1431	802
65°	18214	1306	757
70°	13722	1399	753
75°	10094	1329	775
80°	7384	1324	848
85°	5530	1604	1098



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2390.8	8.4
10°-20°	5947.9	20.9
20°-30°	6588.1	23.2
30°-40°	5278.3	18.6
40°-50°	3768.0	13.3
50°-60°	2420.2	8.5
60°-70°	1311.6	4.6
70°-80°	560.6	2.0
80°-90°	155.5	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°	14926.8	52.5
0°-40°	20205.1	71.1
0°-60°	26393.3	92.9
0°-90°	28421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	25960	25960	25960	25960	25960	
5°	25706	25802	25450	25370	25316	###
15°	24783	24008	21416	18926	17955	6993
25°	22907	20198	13482	8784	7214	10553
35°	20084	14527	5750	2319	1674	12557
45°	16222	8386	1780	758	630	12504
55°	11233	3749	716	440	375	10011
65°	5721	1540	410	283	238	5729
75°	1942	563	256	178	149	2157
85°	358	149	104	86	71	438
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	25960.5	25960.5	25960.5	25960.5	25960.5
2.5°	25789.6	25951.0	25777.3	25885.3	25996.1
5°	25706.2	25801.9	25450.5	25369.8	25316.5
7.5°	25561.3	25533.9	24873.5	24445.5	24239.0
10°	25369.8	25148.3	24020.3	23079.5	22666.6
12.5°	25096.4	24639.7	22864.8	21213.1	20513.0
15°	24783.2	24008.0	21415.5	18925.5	17954.7
17.5°	24408.6	23269.6	19683.0	16472.5	15191.3
20°	23965.6	22378.1	17727.7	13866.3	12380.0
22.5°	23470.6	21349.8	15634.3	11268.3	9674.0
25°	22907.2	20198.5	13482.1	8783.9	7214.1
27.5°	22298.8	18920.0	11342.2	6563.3	5131.7
30°	21623.3	17536.3	9298.0	4732.4	3542.8
32.5°	20886.3	16065.0	7398.7	3328.1	2422.9
35°	20083.7	14526.7	5749.7	2319.0	1673.6
37.5°	19261.9	12957.0	4342.7	1639.5	1200.5
40°	18336.2	11392.8	3229.7	1200.5	913.4
42.5°	17342.1	9858.6	2390.1	924.3	739.7
45°	16222.3	8386.0	1780.3	757.5	630.3
47.5°	15136.6	7013.1	1352.3	645.4	548.3
50°	13908.7	5774.3	1058.3	563.3	481.3
52.5°	12605.6	4684.5	858.7	496.3	423.9
55°	11232.8	3749.3	716.5	440.3	374.7
57.5°	9842.2	2969.9	612.6	392.4	333.6
60°	8414.7	2375.1	531.9	351.4	298.1
62.5°	7021.3	1899.3	464.9	315.9	266.6
65°	5721.0	1539.6	410.2	283.0	237.9
67.5°	4519.1	1216.9	382.9	254.3	214.7
70°	3488.1	947.6	355.5	227.0	191.4
72.5°	2643.1	727.4	314.5	202.4	169.6
75°	1941.6	563.3	255.7	177.8	149.0
77.5°	1389.2	433.5	207.8	154.5	128.5
80°	953.0	322.7	170.9	132.6	109.4
82.5°	619.4	228.3	138.1	109.4	90.2
85°	358.2	149.0	103.9	86.1	71.1
87.5°	154.5	82.0	71.1	64.3	54.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)