

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-LD5-24HE-N-UNV-L740-ED2-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24HE-N-UNV-L740-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

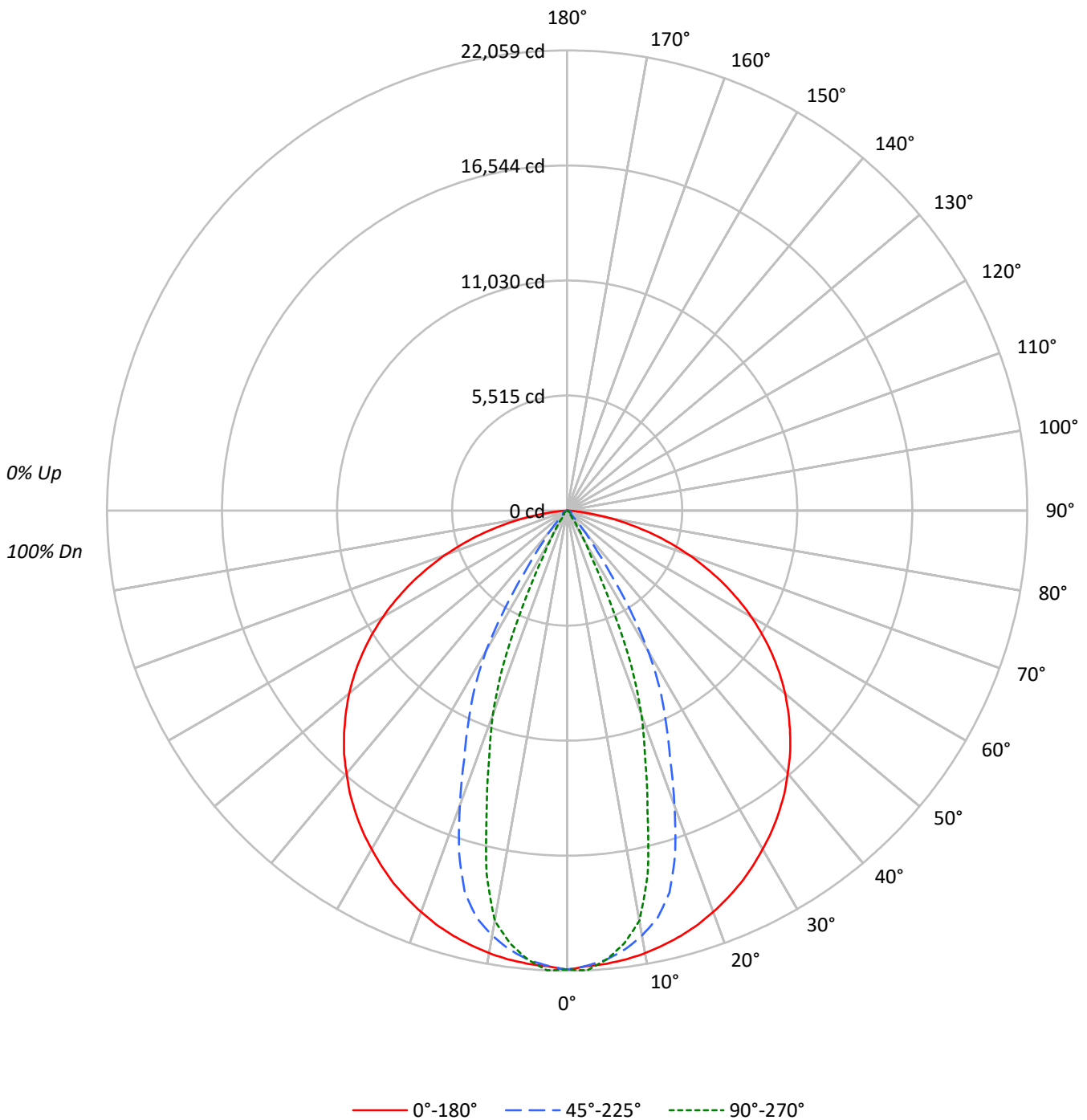
Lumens per Lamp: N/A  
Luminaire Lumens: 23389.0 lumens  
Efficiency: N/A  
Efficacy: 159.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 146.3  
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	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	29608	29608	29608
5°	29450	29190	29177
10°	29431	28254	27263
15°	29390	26396	20749
20°	29321	21518	14935
25°	29247	16638	7357
30°	29117	12092	2386
35°	29049	5365	614
40°	28896	2179	414
45°	28767	612	440
50°	28543	434	489
55°	28132	516	209
60°	27437	575	127
65°	26309	367	150
70°	24441	325	185
75°	21382	245	256
80°	15987	300	365
85°	7918	387	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2042.1	8.7
10°-20°	5106.4	21.8
20°-30°	5531.0	23.6
30°-40°	4095.9	17.5
40°-50°	2950.1	12.6
50°-60°	1826.7	7.8
60°-70°	1123.4	4.8
70°-80°	592.2	2.5
80°-90°	121.2	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°	12679.5	54.2
0°-40°	16775.4	71.7
0°-60°	21552.2	92.1
0°-90°	23389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23389.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	22005	22005	22005	22005	22005	
5°	21804	21885	21612	21628	21602	###
15°	21099	20609	18950	16115	14895	5956
25°	19700	18045	11207	7050	4956	9077
35°	17685	12468	3266	768	374	11064
45°	15118	7024	321	232	231	11659
55°	11992	1447	220	199	89	10706
65°	8264	153	115	73	47	8153
75°	4113	36	47	62	49	4344
85°	513	14	25	38	31	775
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	22005.4	22005.4	22005.4	22005.4	22005.4
2.5°	21864.1	22003.3	21839.0	21961.5	22058.8
5°	21804.4	21885.0	21611.8	21627.5	21602.4
7.5°	21699.8	21680.9	21221.4	21020.4	20932.4
10°	21541.7	21417.1	20680.1	20260.4	19954.7
12.5°	21337.6	21059.1	20004.9	18670.2	17841.1
15°	21098.9	20609.0	18949.7	16114.9	14895.4
17.5°	20814.1	20120.1	17224.6	13506.2	12417.5
20°	20478.1	19574.7	15028.3	11491.1	10430.6
22.5°	20103.3	18911.0	12894.9	9550.2	8037.6
25°	19700.3	18045.3	11207.4	7050.4	4955.7
27.5°	19234.5	16932.5	9624.6	4152.8	2529.1
30°	18741.4	15592.5	7783.2	2233.9	1535.7
32.5°	18244.2	14073.6	5507.4	1395.4	871.0
35°	17685.2	12467.8	3266.1	768.4	373.7
37.5°	17102.1	10995.9	1930.4	349.6	239.7
40°	16452.0	9650.7	1240.5	232.4	235.5
42.5°	15823.9	8396.6	698.2	229.3	233.4
45°	15118.3	7024.2	321.4	232.4	231.3
47.5°	14388.7	5601.6	208.3	234.5	234.5
50°	13636.0	4005.2	207.3	239.7	233.4
52.5°	12841.5	2498.8	215.6	238.7	191.6
55°	11992.5	1446.7	219.8	198.9	89.0
57.5°	11113.2	853.2	221.9	114.1	50.2
60°	10196.1	472.1	213.6	84.8	47.1
62.5°	9250.8	225.1	168.5	79.6	46.1
65°	8263.7	152.8	115.2	73.3	47.1
67.5°	7238.8	118.3	91.1	69.1	48.2
70°	6212.9	87.9	82.7	69.1	47.1
72.5°	5170.3	59.7	69.1	70.1	47.1
75°	4113.0	35.6	47.1	61.8	49.2
77.5°	3065.1	22.0	36.6	63.9	59.7
80°	2063.3	18.8	38.7	59.7	47.1
82.5°	1211.2	16.7	37.7	46.1	37.7
85°	512.9	13.6	25.1	37.7	31.4
87.5°	96.3	11.5	19.9	30.4	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)