

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-LD5-24SE-W-CLI-UNV-L840-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 (P23766)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24SE-W-CLI-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

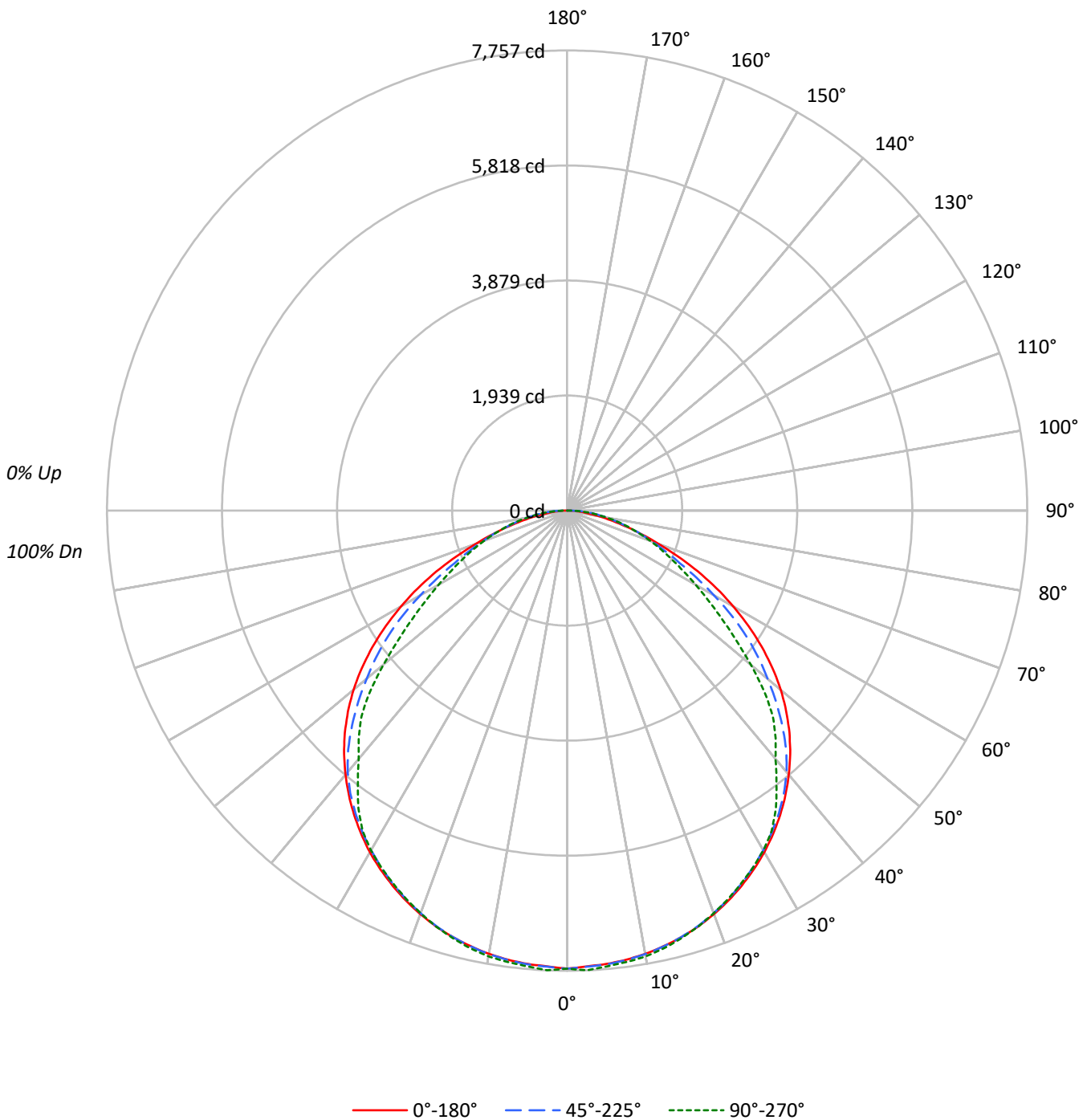
Lumens per Lamp: N/A  
Luminaire Lumens: 20745.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 154  
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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65		74	68	64		71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48		59	53	48		58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30		41	35	30		40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	28		38	32	27	26

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

	0°	45°	90°
0°	10389	10389	10389
5°	10361	10369	10415
10°	10367	10372	10427
15°	10368	10367	10391
20°	10366	10342	10344
25°	10350	10311	10299
30°	10333	10271	10277
35°	10285	10221	10076
40°	10211	10107	9598
45°	10082	9759	9332
50°	9839	9240	8452
55°	9391	8641	7473
60°	8715	7710	6740
65°	7747	6675	6197
70°	6429	5966	5842
75°	5200	5460	5527
80°	4130	5222	5200
85°	3234	5610	5352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	732.3	3.5
10°-20°	2106.3	10.2
20°-30°	3211.7	15.5
30°-40°	3885.7	18.7
40°-50°	3935.8	19.0
50°-60°	3253.1	15.7
60°-70°	2148.6	10.4
70°-80°	1120.4	5.4
80°-90°	351.2	1.7
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°	6050.2	29.2
0°-40°	9935.9	47.9
0°-60°	17124.8	82.5
0°-90°	20745.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20745.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7721	7721	7721	7721	7721	
5°	7671	7718	7677	7710	7711	730
15°	7443	7481	7442	7466	7460	2102
25°	6972	6999	6946	6963	6937	3215
35°	6262	6270	6222	6214	6134	3916
45°	5298	5284	5129	4969	4904	4080
55°	4004	3944	3684	3326	3186	3568
65°	2433	2363	2097	1960	1947	2403
75°	1000	1018	1050	1064	1063	1090
85°	210	270	363	361	347	254
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7721.4	7721.4	7721.4	7721.4	7721.4
2.5°	7689.0	7734.4	7696.4	7729.7	7756.6
5°	7671.4	7717.7	7676.9	7710.3	7711.2
7.5°	7637.1	7683.4	7641.7	7675.1	7674.1
10°	7587.9	7631.5	7591.6	7631.5	7631.5
12.5°	7521.2	7563.8	7524.9	7562.0	7556.4
15°	7443.3	7481.3	7442.4	7465.6	7460.0
17.5°	7351.6	7385.9	7342.3	7361.8	7350.6
20°	7239.4	7270.9	7222.7	7247.7	7224.6
22.5°	7113.3	7143.0	7093.9	7112.4	7086.5
25°	6971.5	6999.3	6945.6	6963.2	6937.2
27.5°	6818.6	6843.6	6783.3	6804.7	6784.3
30°	6650.8	6662.8	6610.9	6638.7	6614.6
32.5°	6463.5	6471.0	6425.5	6450.6	6409.8
35°	6261.5	6269.8	6222.5	6214.2	6134.5
37.5°	6045.5	6049.2	6004.7	5929.6	5798.0
40°	5813.8	5811.9	5754.4	5581.1	5464.3
42.5°	5566.3	5565.3	5464.3	5266.9	5200.1
45°	5298.4	5284.5	5128.8	4969.3	4904.4
47.5°	5011.0	4996.2	4778.4	4651.4	4504.0
50°	4700.5	4674.6	4414.1	4240.7	4037.7
52.5°	4365.9	4326.0	4060.9	3781.0	3589.1
55°	4003.5	3944.1	3683.7	3325.9	3185.9
57.5°	3626.2	3538.1	3285.1	2936.5	2822.5
60°	3238.7	3140.5	2865.2	2578.7	2504.6
62.5°	2840.1	2742.8	2462.0	2246.0	2205.2
65°	2433.2	2362.8	2096.7	1960.5	1946.6
67.5°	2016.1	1991.1	1788.1	1718.5	1713.0
70°	1634.2	1629.6	1516.5	1481.2	1485.0
72.5°	1306.1	1300.5	1283.8	1266.2	1267.1
75°	1000.2	1017.8	1050.2	1064.1	1063.2
77.5°	746.2	782.3	850.9	878.7	874.1
80°	533.0	586.8	673.9	699.8	671.1
82.5°	355.0	411.6	514.5	518.2	495.0
85°	209.5	269.7	363.4	360.6	346.7
87.5°	103.8	162.2	217.8	208.6	199.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)