

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-LD5-48SE-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-LD5-48SE-N-CLI-UNV-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

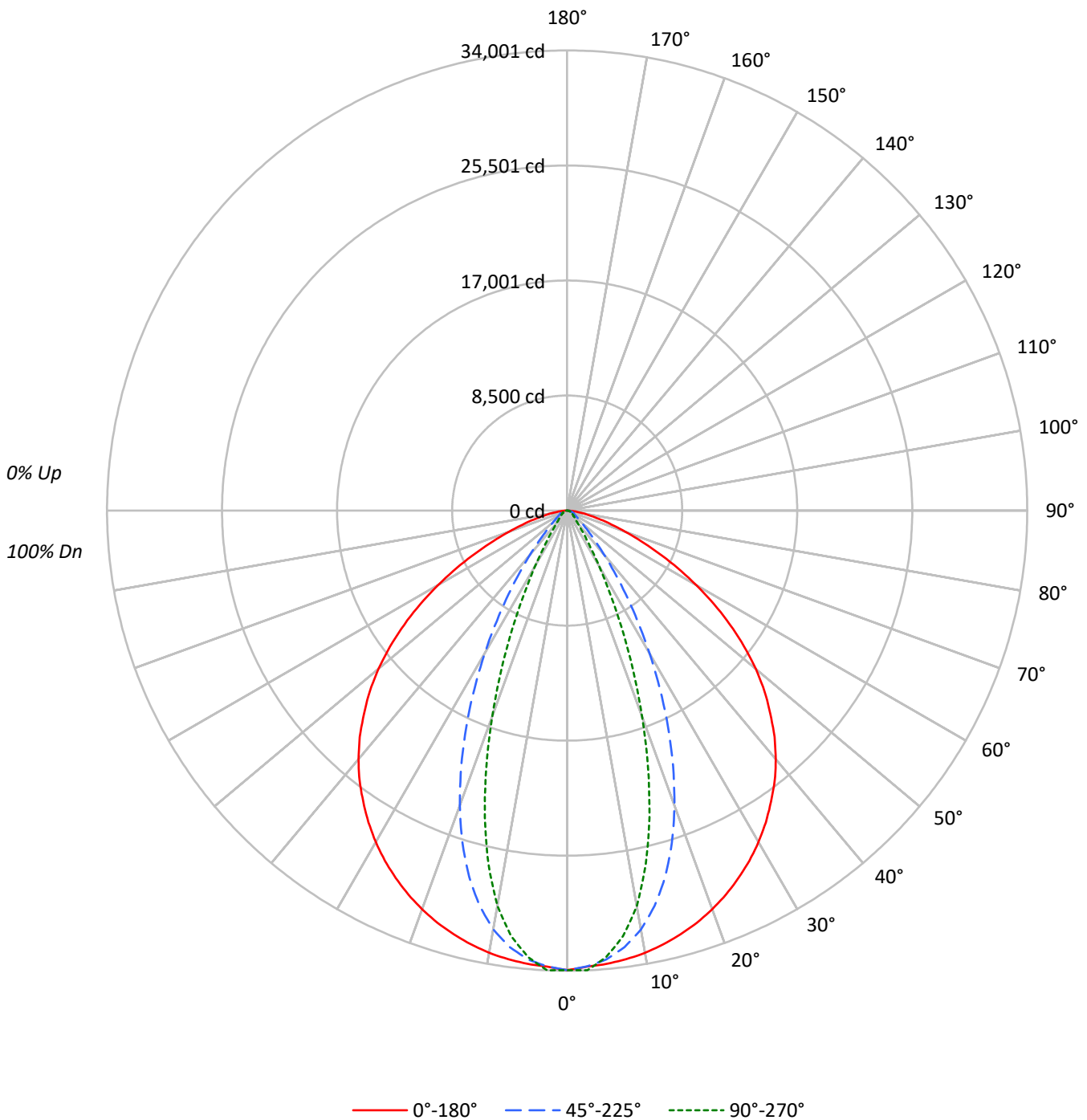
Lumens per Lamp: N/A  
Luminaire Lumens: 37173.0 lumens  
Efficiency: N/A  
Efficacy: 124.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 299.1  
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°	45686	45686	45686
5°	45411	44959	44723
10°	45335	42923	40505
15°	45153	39017	32712
20°	44882	33200	23185
25°	44480	26179	14008
30°	43940	18894	7199
35°	43147	12352	3596
40°	42123	7419	2098
45°	40373	4431	1569
50°	38079	2897	1318
55°	34464	2198	1149
60°	29617	1872	1049
65°	23823	1708	991
70°	17947	1829	985
75°	13202	1738	1013
80°	9658	1733	1109
85°	7234	2098	1436



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3127.0	8.4
10°-20°	7779.5	20.9
20°-30°	8616.9	23.2
30°-40°	6903.7	18.6
40°-50°	4928.3	13.3
50°-60°	3165.5	8.5
60°-70°	1715.5	4.6
70°-80°	733.2	2.0
80°-90°	203.4	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°	19523.4	52.5
0°-40°	26427.1	71.1
0°-60°	34520.9	92.9
0°-90°	37173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	37173.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	33955	33955	33955	33955	33955	
5°	33622	33747	33288	33182	33112	###
15°	32415	31401	28010	24754	23484	9146
25°	29961	26418	17634	11489	9436	13803
35°	26268	19000	7520	3033	2189	16424
45°	21218	10968	2328	991	824	16354
55°	14692	4904	937	576	490	13093
65°	7483	2014	536	370	311	7493
75°	2540	737	334	232	195	2822
85°	469	195	136	113	93	572
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	33954.8	33954.8	33954.8	33954.8	33954.8
2.5°	33731.3	33942.3	33715.2	33856.5	34001.3
5°	33622.2	33747.4	33287.8	33182.3	33112.5
7.5°	33432.6	33396.9	32533.1	31973.3	31703.2
10°	33182.3	32892.5	31417.1	30186.7	29646.6
12.5°	32824.6	32227.2	29905.9	27745.5	26829.8
15°	32415.0	31401.0	28010.2	24753.5	23483.7
17.5°	31925.0	30435.2	25744.2	21545.0	19869.3
20°	31345.6	29269.2	23186.8	18136.3	16192.3
22.5°	30698.1	27924.3	20448.7	14738.3	12653.0
25°	29961.3	26418.5	17633.8	11488.8	9435.7
27.5°	29165.5	24746.3	14834.9	8584.4	6711.9
30°	28282.0	22936.4	12161.2	6189.7	4633.8
32.5°	27318.0	21012.1	9677.1	4353.0	3169.1
35°	26268.2	19000.1	7520.3	3033.2	2189.0
37.5°	25193.4	16947.0	5680.0	2144.3	1570.2
40°	23982.6	14901.1	4224.2	1570.2	1194.7
42.5°	22682.5	12894.5	3126.1	1209.0	967.5
45°	21217.8	10968.3	2328.5	990.8	824.5
47.5°	19797.8	9172.8	1768.7	844.1	717.2
50°	18191.8	7552.5	1384.2	736.8	629.5
52.5°	16487.4	6127.1	1123.1	649.2	554.4
55°	14691.8	4903.8	937.1	575.9	490.0
57.5°	12873.0	3884.4	801.2	513.3	436.4
60°	11005.9	3106.5	695.7	459.6	389.9
62.5°	9183.5	2484.1	608.1	413.1	348.7
65°	7482.7	2013.8	536.5	370.2	311.2
67.5°	5910.7	1591.7	500.8	332.6	280.8
70°	4562.2	1239.4	465.0	296.9	250.4
72.5°	3457.0	951.4	411.3	264.7	221.8
75°	2539.5	736.8	334.4	232.5	194.9
77.5°	1817.0	566.9	271.8	202.1	168.1
80°	1246.5	422.1	223.6	173.5	143.1
82.5°	810.2	298.7	180.6	143.1	118.0
85°	468.6	194.9	135.9	112.7	93.0
87.5°	202.1	107.3	93.0	84.1	71.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)