

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: P199285

Luminaire Tested: **XHB-LD1-85-M-V2-L850-MM-BLK**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P199285  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27924)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: XHB-LD1-85-M-V2-L850-MM-BLK  
Description: EXTREME HIGH BAY SERIES LUMINAIRE  
80 CRI, 5000K LEDS, 675 WATTS NOMINAL, MEDIUM BEAM PATTERN  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

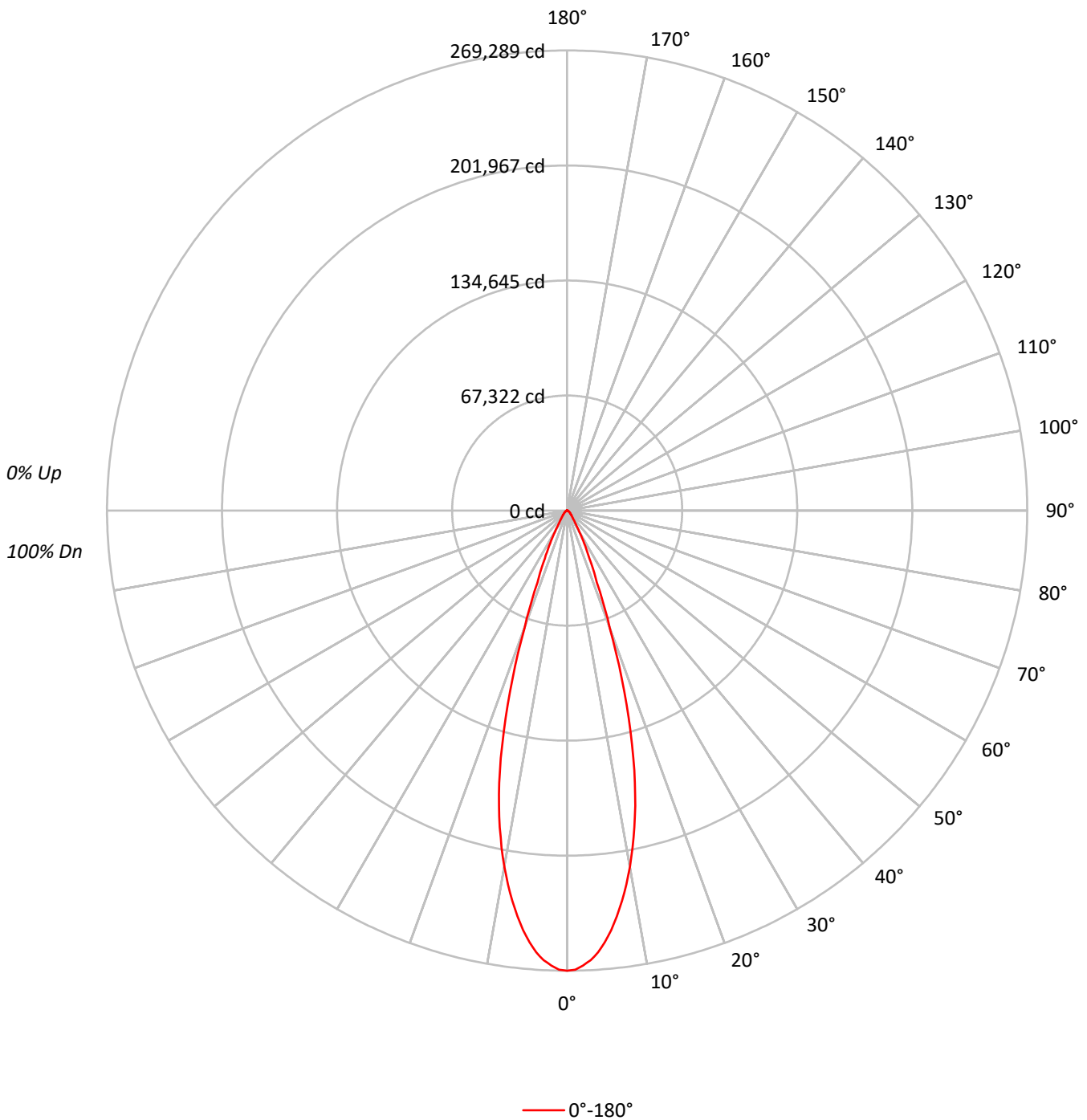
Lumens per Lamp: N/A  
Luminaire Lumens: 88516.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Spacing Criteria (0/90/45): 0.54 / 0.54 / 0.5  
Luminous Opening: Vertical Cylinder (Dia: 1.83' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 678  
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	114	112	110	108	112	110	108	106	105	104	103		102	101	99		98	97	96	95
2	110	105	102	99	107	104	101	98	101	98	96		98	96	94		95	93	92	90
3	105	100	96	93	104	99	95	92	96	93	90		94	91	89		91	89	88	86
4	102	95	91	87	100	94	90	87	92	89	86		90	87	85		88	86	84	82
5	98	91	86	83	96	90	86	82	88	85	82		87	84	81		85	83	80	79
6	94	87	82	79	93	87	82	79	85	81	78		84	80	78		83	79	77	76
7	91	84	79	76	90	83	79	75	82	78	75		81	77	75		80	77	74	73
8	88	81	76	73	87	80	76	73	79	75	72		78	75	72		77	74	72	71
9	85	78	73	70	84	77	73	70	77	72	70		76	72	69		75	72	69	68
10	83	75	71	68	82	75	70	67	74	70	67		73	70	67		73	69	67	66

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

	0°
0°	1102037
5°	1035160
10°	868579
15°	623455
20°	309863
25°	135189
30°	63584
35°	31787
40°	22291
45°	16604
50°	12794
55°	10392
60°	8874
65°	7648
70°	6702
75°	5843
80°	4901
85°	5200



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22840.1	25.8
10°-20°	39540.3	44.7
20°-30°	15604.0	17.6
30°-40°	4674.1	5.3
40°-50°	2417.8	2.7
50°-60°	1459.4	1.6
60°-70°	908.2	1.0
70°-80°	484.8	0.5
80°-90°	227.7	0.3
90°-100°	110.7	0.1
100°-110°	73.8	0.1
110°-120°	41.7	0.0
120°-130°	26.4	0.0
130°-140°	16.7	0.0
140°-150°	19.5	0.0
150°-160°	28.2	0.0
160°-170°	30.1	0.0
170°-180°	12.7	0.0
0°-30°	77984.4	88.1
0°-40°	82658.4	93.4
0°-60°	86535.6	97.8
0°-90°	88156.3	99.6
90°-120°	226.2	0.3
90°-150°	288.7	0.3
90°-180°	360.0	0.4
0°-180°	88516.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	269289	
5°	253518	###
15°	149897	39540
25°	30910	15604
35°	6672	4674
45°	3068	2418
55°	1601	1459
65°	908	908
75°	466	485
85°	199	186
90°	126	74
95°	94	78
105°	70	74
115°	42	42
125°	36	26
135°	15	17
145°	25	19
155°	60	28
165°	118	30
175°	138	13
180°	138	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	269288.7
1°	268699.5
2°	266448.3
3°	263436.6
4°	259146.1
5°	253518.1
6°	246831.4
7°	239174.3
8°	230682.5
9°	221493.2
10°	211581.8
11°	200943.3
12°	189489.6
13°	177257.0
14°	164055.0
15°	149896.8
17.5°	111092.9
20°	72952.2
22.5°	45543.3
25°	30910.5
27.5°	21336.8
30°	13996.0
32.5°	9250.2
35°	6672.5
37.5°	5327.9
40°	4416.2
42.5°	3683.1
45°	3068.5
47.5°	2562.5
50°	2176.2
52.5°	1850.7
55°	1601.2
57.5°	1395.3
60°	1214.8
62.5°	1048.5
65°	907.6
67.5°	776.8
70°	667.2
72.5°	537.4
75°	465.5
77.5°	356.9
80°	290.0
82.5°	248.4
85°	198.8
87.5°	180.5



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**CANDELA DISTRIBUTION (continued):**

	0°
90°	125.7
92.5°	110.5
95°	94.3
97.5°	96.3
100°	83.2
102.5°	83.2
105°	70.0
107.5°	57.8
110°	51.7
112.5°	44.6
115°	41.6
117.5°	39.5
120°	32.4
122.5°	37.5
125°	36.5
127.5°	17.2
130°	18.3
132.5°	30.4
135°	15.2
137.5°	21.3
140°	19.3
142.5°	25.4
145°	25.4
147.5°	40.6
150°	50.7
152.5°	47.7
155°	59.8
157.5°	74.0
160°	84.2
162.5°	94.3
165°	117.6
167.5°	117.6
170°	122.7
172.5°	132.8
175°	137.9
177.5°	136.9
180°	137.9

(END OF REPORT)