

Scaled data based on original data using  
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or  
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number: 18999

Luminaire Tested: **6002A-MH100PAR38-FL-15DEGREETILT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: 18999  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 6002A-MH100PAR38-FL-15DEGREETILT  
Description: WITH PAR 38 FLOOD LAMP AND TWO CLEAR GLASS LENS  
  
Light Source: ONE SYLVANIA 100 W MH LAMP  
  
MP100PAR38/U/FL35. LUMEN RATING = 5800 LMS.  
  
Ballast/Driver: -

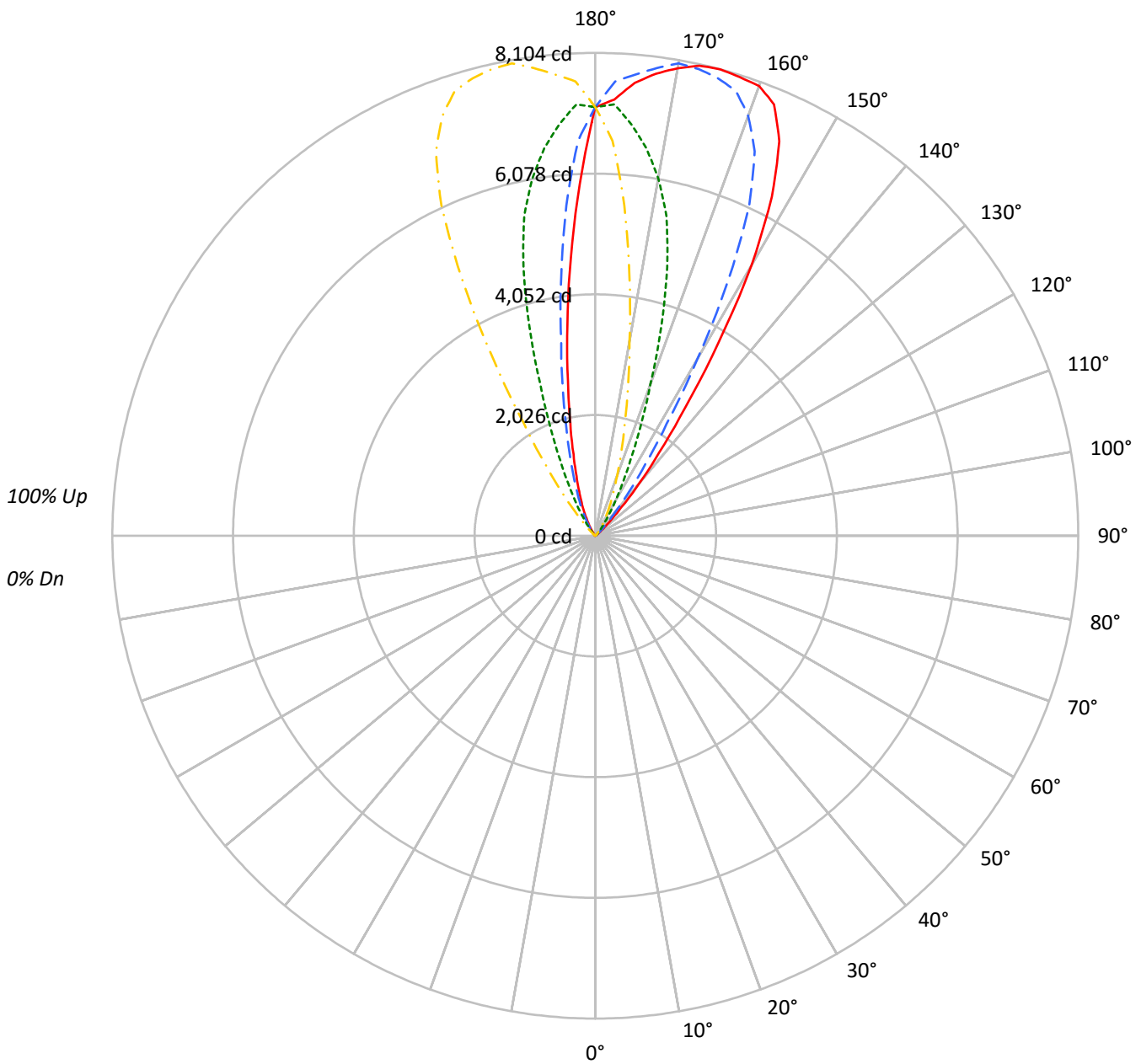
**Summary**

Lumens per Lamp: 5800 (1 lamp)  
Luminaire Lumens: 3970.1 lumens  
Efficiency: 68.5%  
Efficacy: -  
N/A  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Indirect  
  
Input Watts (W): 0  
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



— 0°-180°    - - 45°-225°    - - - 90°-270°    - - - 135°-315°



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20													
RC	80				70				50				30				10													
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10										
RCR																														
0	65	65	65	65	56	56	56	56	38	38	38	22	22	22	7	7	7	0												
1	59	57	54	52	51	48	46	45	33	32	31	19	18	18	6	6	6	0												
2	54	49	45	42	46	42	39	37	29	27	25	17	16	15	5	5	5	0												
3	49	43	39	35	42	37	33	30	25	23	21	15	14	13	5	4	4	0												
4	45	38	33	29	38	33	29	26	22	20	18	13	12	11	4	4	3	0												
5	41	34	29	25	35	29	25	22	20	17	15	12	10	9	4	3	3	0												
6	38	30	25	21	32	26	22	19	18	15	13	10	9	8	3	3	3	0												
7	35	27	22	18	29	23	19	16	16	13	11	9	8	7	3	3	2	0												
8	32	24	19	16	27	21	17	14	14	12	10	8	7	6	3	2	2	0												
9	29	22	17	14	25	19	15	12	13	10	9	8	6	5	2	2	2	0												
10	27	20	15	12	23	17	13	11	12	9	8	7	6	5	2	2	2	0												

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

	0°	90°	180°	270°
95°	Luminaire represents a point source (luminous area is zero).			
100°	No luminance values can be calculated.			
105°				
110°				
115°				
120°				
125°				
130°				
135°				
140°				
145°				
150°				
155°				
160°				
165°				
170°				
175°				



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.0	0.0	0.0
20°-30°	0.0	0.0	0.0
30°-40°	0.0	0.0	0.0
40°-50°	0.0	0.0	0.0
50°-60°	0.0	0.0	0.0
60°-70°	0.0	0.0	0.0
70°-80°	0.0	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	0.5	0.0	0.0
100°-110°	0.8	0.0	0.0
110°-120°	2.4	0.1	0.0
120°-130°	13.3	0.3	0.2
130°-140°	103.7	2.6	1.8
140°-150°	564.7	14.2	9.7
150°-160°	1328.9	33.5	22.9
160°-170°	1351.5	34.0	23.3
170°-180°	604.2	15.2	10.4
0°-30°	0.0	0.0	0.0
0°-40°	0.0	0.0	0.0
0°-60°	0.0	0.0	0.0
0°-90°	0.0	0.0	0.0
90°-120°	3.8	0.1	0.1
90°-150°	685.4	17.3	11.8
90°-180°	3970.0	100.0	68.4
0°-180°	3970.1	100.0	68.5

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
90°	0	0	0	0	0	
95°	0	0	0	0	0	1
105°	0	0	0	0	0	1
115°	8	0	0	0	8	8
125°	32	10	8	10	32	37
135°	353	50	20	50	353	346
145°	2619	292	86	292	2619	1743
155°	7304	1391	444	1391	7304	3224
165°	8104	4660	1413	4660	8104	2286
175°	7632	6932	4692	6932	7632	737
180°	7192	7192	7192	7192	7192	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
92.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
102.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
105°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
107.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
110°	7.8	7.8	0.5	0.5	0.5	0.5	0.5	0.5	7.8	0.5	0.5
112.5°	7.8	7.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115°	7.8	7.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
117.5°	7.8	7.8	7.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120°	12.7	7.8	7.8	7.8	0.5	0.5	0.5	0.5	7.8	0.5	0.5
122.5°	20.1	12.7	7.8	7.8	4.2	7.8	0.5	0.5	7.8	0.5	0.5
125°	32.3	25.0	20.1	7.8	10.3	7.8	7.8	7.8	7.8	7.8	7.8
127.5°	54.3	44.6	32.3	12.7	14.0	12.7	7.8	7.8	7.8	7.8	7.8
130°	108.2	78.8	49.5	25.0	26.2	25.0	12.7	7.8	7.8	7.8	12.7
132.5°	211.0	174.3	86.2	37.2	34.8	32.3	25.0	20.1	12.7	20.1	25.0
135°	353.0	306.4	162.0	66.6	49.5	44.6	32.3	25.0	20.1	25.0	32.3
137.5°	641.8	568.3	277.1	108.2	70.3	61.7	44.6	37.2	32.3	37.2	44.6
140°	1160.7	1101.9	526.7	186.5	113.1	91.1	61.7	49.5	44.6	49.5	61.7
142.5°	1753.0	1757.9	933.0	311.3	180.4	140.0	86.2	66.6	61.7	66.6	86.2
145°	2619.4	2536.2	1466.6	556.1	291.8	215.9	140.0	96.0	86.2	96.0	140.0
147.5°	3843.2	3755.1	2230.3	903.7	446.0	318.7	203.7	149.8	127.8	149.8	203.7
150°	5243.3	5331.4	3424.7	1380.9	673.6	468.0	306.4	235.5	203.7	235.5	306.4
152.5°	6413.2	6557.6	4829.6	2051.6	966.1	641.8	438.6	343.2	299.1	343.2	438.6
155°	7304.1	7436.3	6109.7	3001.3	1390.7	844.9	600.2	492.5	443.5	492.5	600.2
157.5°	7835.3	7938.1	6986.0	4207.9	1964.7	1123.9	796.0	646.7	600.2	646.7	796.0
160°	8033.5	8146.1	7499.9	5426.8	2696.5	1508.2	1060.3	849.8	791.1	849.8	1060.3
162.5°	8067.8	8195.1	7830.4	6525.8	3680.5	2002.6	1422.6	1136.2	1048.1	1136.2	1422.6
165°	8104.5	8302.8	7947.9	7250.3	4659.5	2595.0	1877.8	1537.6	1412.8	1537.6	1877.8
167.5°	8080.0	8337.0	8021.3	7639.5	5502.7	3383.1	2511.7	2105.4	1936.6	2105.4	2511.7
170°	7967.4	8212.2	8050.7	7673.7	6087.7	4303.4	3307.2	2810.3	2643.9	2810.3	3307.2
172.5°	7823.0	8001.7	7918.5	7632.1	6556.4	5326.5	4376.8	3801.6	3574.0	3801.6	4376.8
175°	7632.1	7805.9	7769.2	7595.4	6932.1	6227.2	5563.9	5032.8	4692.5	5032.8	5563.9
177.5°	7328.6	7561.1	7632.1	7585.6	7246.6	6956.6	6633.5	6281.0	5916.3	6281.0	6633.5
180°	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.5	0.5	0.5	0.5	0.5	0.5
92.5°	0.5	0.5	0.5	0.5	0.5	0.5
95°	0.5	0.5	0.5	0.5	0.5	0.5
97.5°	0.5	0.5	0.5	0.5	0.5	0.5
100°	0.5	0.5	0.5	0.5	0.5	0.5
102.5°	0.5	0.5	0.5	0.5	0.5	0.5
105°	0.5	0.5	0.5	0.5	0.5	0.5
107.5°	0.5	0.5	0.5	0.5	0.5	0.5
110°	0.5	0.5	0.5	0.5	7.8	7.8
112.5°	0.5	0.5	0.5	0.5	7.8	7.8
115°	0.5	0.5	0.5	0.5	7.8	7.8
117.5°	0.5	0.5	0.5	7.8	7.8	7.8
120°	0.5	0.5	7.8	7.8	7.8	12.7
122.5°	7.8	4.2	7.8	7.8	12.7	20.1
125°	7.8	10.3	7.8	20.1	25.0	32.3
127.5°	12.7	14.0	12.7	32.3	44.6	54.3
130°	25.0	26.2	25.0	49.5	78.8	108.2
132.5°	32.3	34.8	37.2	86.2	174.3	211.0
135°	44.6	49.5	66.6	162.0	306.4	353.0
137.5°	61.7	70.3	108.2	277.1	568.3	641.8
140°	91.1	113.1	186.5	526.7	1101.9	1160.7
142.5°	140.0	180.4	311.3	933.0	1757.9	1753.0
145°	215.9	291.8	556.1	1466.6	2536.2	2619.4
147.5°	318.7	446.0	903.7	2230.3	3755.1	3843.2
150°	468.0	673.6	1380.9	3424.7	5331.4	5243.3
152.5°	641.8	966.1	2051.6	4829.6	6557.6	6413.2
155°	844.9	1390.7	3001.3	6109.7	7436.3	7304.1
157.5°	1123.9	1964.7	4207.9	6986.0	7938.1	7835.3
160°	1508.2	2696.5	5426.8	7499.9	8146.1	8033.5
162.5°	2002.6	3680.5	6525.8	7830.4	8195.1	8067.8
165°	2595.0	4659.5	7250.3	7947.9	8302.8	8104.5
167.5°	3383.1	5502.7	7639.5	8021.3	8337.0	8080.0
170°	4303.4	6087.7	7673.7	8050.7	8212.2	7967.4
172.5°	5326.5	6556.4	7632.1	7918.5	8001.7	7823.0
175°	6227.2	6932.1	7595.4	7769.2	7805.9	7632.1
177.5°	6956.6	7246.6	7585.6	7632.1	7561.1	7328.6
180°	7192.0	7192.0	7192.0	7192.0	7192.0	7192.0

(END OF REPORT)