

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: 18997

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 18997
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 6002A-MH100PAR38-WFL-15DEGREETILT
Description: WITH PAR 38 WIDE FLOOD LAMP AND TWO CLEAR GLASS LENS

Light Source: ONE SYLVANIA 100 W MH LAMP

MP100PAR38/U/VWFL65. LUMEN RATING = 5800 LMS.

Ballast/Driver: -

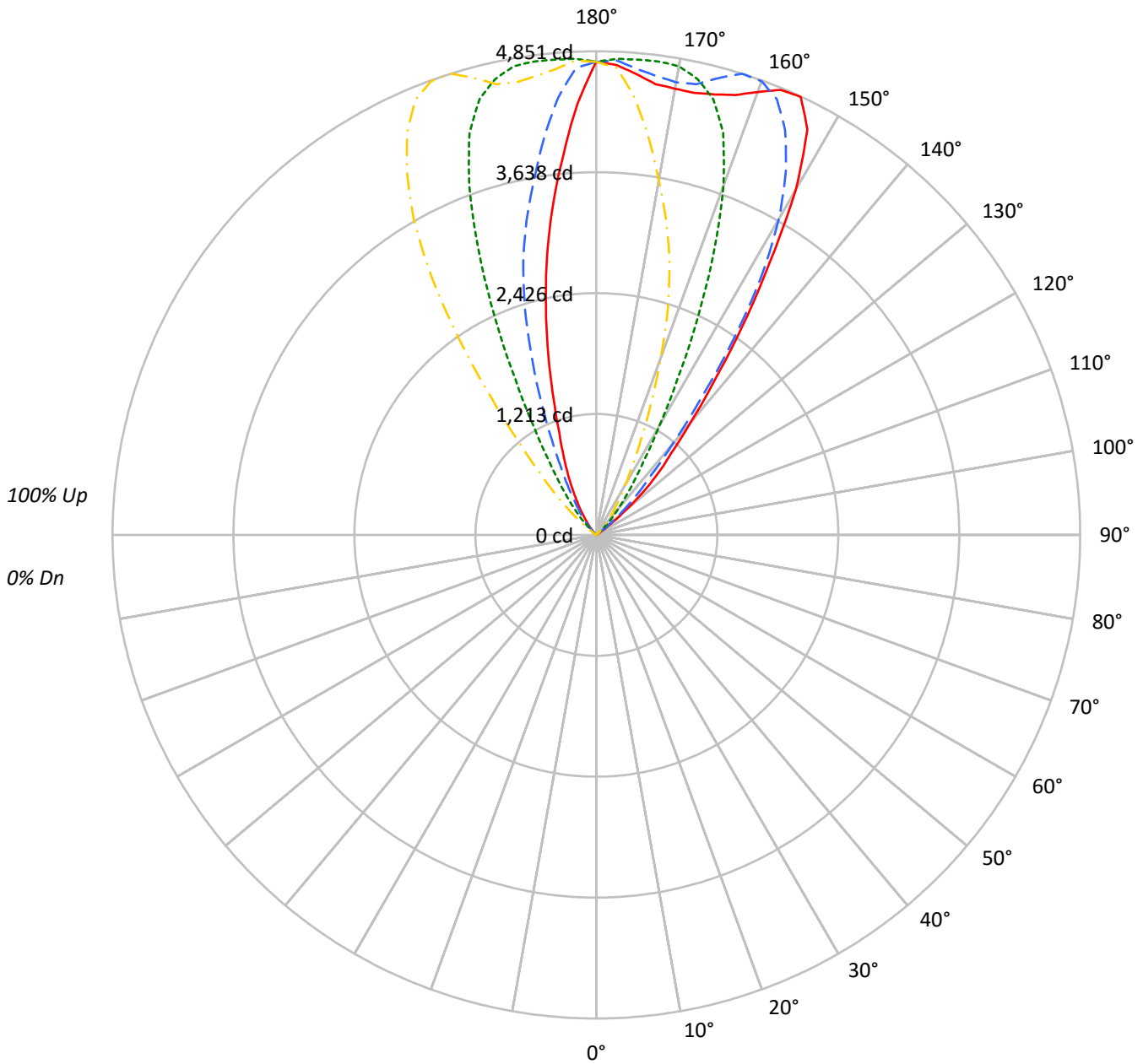
Summary

Lumens per Lamp: 5800 (1 lamp)
Luminaire Lumens: 3659.3 lumens
Efficiency: 63.1%
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	60	60	60	60	51	51	51	51	35	35	35	20	20	20	6	6	6	0
1	55	52	50	48	47	45	43	41	30	29	28	18	17	17	6	5	5	0
2	50	45	42	39	42	39	36	34	27	25	23	15	15	14	5	5	4	0
3	45	40	36	32	38	34	31	28	23	21	20	14	12	12	4	4	4	0
4	41	35	31	27	35	30	26	24	21	18	17	12	11	10	4	4	3	0
5	38	31	26	23	32	27	23	20	18	16	14	11	9	8	3	3	3	0
6	35	28	23	20	29	24	20	17	16	14	12	10	8	7	3	3	2	0
7	32	25	20	17	27	21	17	15	15	12	10	9	7	6	3	2	2	0
8	29	22	18	15	25	19	15	13	13	11	9	8	6	5	2	2	2	0
9	27	20	16	13	23	17	14	11	12	10	8	7	6	5	2	2	2	0
10	25	18	14	11	21	16	12	10	11	9	7	6	5	4	2	2	1	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°	0.9	0.0	0.0
100°-110°	4.4	0.1	0.1
110°-120°	9.2	0.3	0.2
120°-130°	31.6	0.9	0.5
130°-140°	241.1	6.6	4.2
140°-150°	705.8	19.3	12.2
150°-160°	1182.3	32.3	20.4
160°-170°	1062.9	29.0	18.3
170°-180°	421.1	11.5	7.3
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°	14.5	0.4	0.2
90°-150°	992.9	27.1	17.1
90°-180°	3659.0	100.0	63.1
0°-180°	3659.3	100.0	63.1

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
90°	0	0	0	0	0	
95°	0	0	2	0	0	1
105°	2	2	10	2	2	4
115°	13	9	10	9	13	13
125°	62	16	13	16	62	100
135°	881	132	36	132	881	675
145°	2542	659	197	659	2542	1605
155°	4847	2405	674	2405	4847	2146
165°	4574	4526	1852	4526	4574	1305
175°	4637	4784	3820	4784	4637	439
180°	4746	4746	4746	4746	4746	



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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	2.1	0.5	0.5
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.1	4.6	2.1	0.5
100°	2.1	0.5	0.5	0.5	0.5	2.1	2.1	4.6	6.2	4.6	2.1
102.5°	2.1	0.5	0.5	0.5	1.3	4.6	4.6	6.2	8.6	6.2	4.6
105°	2.1	2.1	2.1	2.1	2.1	4.6	6.2	8.6	10.2	8.6	6.2
107.5°	6.2	4.6	2.1	2.1	3.3	4.6	6.2	10.2	10.2	10.2	6.2
110°	10.2	10.2	4.6	2.1	4.6	4.6	6.2	10.2	12.7	10.2	6.2
112.5°	12.7	12.7	8.6	4.6	6.6	6.2	6.2	8.6	10.2	8.6	6.2
115°	12.7	12.7	10.2	8.6	9.4	8.6	8.6	8.6	10.2	8.6	8.6
117.5°	14.3	12.7	10.2	8.6	9.4	10.2	10.2	10.2	10.2	10.2	10.2
120°	15.9	14.3	10.2	8.6	11.5	10.2	10.2	10.2	10.2	10.2	10.2
122.5°	26.5	20.0	14.3	10.2	13.5	10.2	10.2	12.7	12.7	12.7	10.2
125°	62.2	41.9	28.1	14.3	16.3	14.3	12.7	12.7	12.7	12.7	12.7
127.5°	175.1	123.1	76.0	24.0	24.9	20.0	15.9	14.3	14.3	14.3	15.9
130°	373.2	293.6	194.6	55.7	42.3	32.2	22.4	18.4	18.4	18.4	22.4
132.5°	634.7	549.4	383.0	117.4	72.0	54.1	33.8	26.5	26.5	26.5	33.8
135°	880.7	789.8	583.5	246.5	132.4	93.9	55.7	40.3	36.2	40.3	55.7
137.5°	1108.9	1030.9	817.4	413.0	225.4	171.0	93.9	58.2	55.7	58.2	93.9
140°	1461.3	1389.8	1182.0	581.1	335.4	249.8	162.9	89.8	83.3	89.8	162.9
142.5°	1923.3	1897.3	1717.1	767.8	475.9	335.0	234.4	147.5	129.6	147.5	234.4
145°	2542.1	2542.1	2400.8	997.6	659.4	464.2	313.9	228.7	197.0	228.7	313.9
147.5°	3224.1	3152.7	3089.3	1264.8	896.5	637.1	417.1	307.4	283.9	307.4	417.1
150°	3998.8	3795.0	3661.8	1673.2	1253.4	898.6	577.0	422.7	383.0	422.7	577.0
152.5°	4581.8	4423.5	4115.7	2212.4	1757.7	1311.1	773.5	565.7	512.1	565.7	773.5
155°	4847.3	4778.3	4478.7	2817.3	2404.8	1963.1	1061.0	755.7	674.5	755.7	1061.0
157.5°	4831.9	4825.4	4728.8	3402.0	3084.1	2672.8	1439.4	949.7	857.2	949.7	1439.4
160°	4726.3	4738.5	4841.6	3923.3	3729.2	3275.3	1887.6	1217.7	1084.5	1217.7	1887.6
162.5°	4625.7	4629.7	4851.4	4373.9	4227.8	3711.3	2379.7	1608.3	1414.2	1608.3	2379.7
165°	4573.7	4565.6	4744.2	4686.6	4526.2	3916.0	2831.1	2059.7	1851.9	2059.7	2831.1
167.5°	4540.4	4601.3	4629.7	4833.5	4684.1	4074.3	3233.9	2567.2	2337.4	2567.2	3233.9
170°	4544.5	4609.4	4609.4	4814.0	4773.0	4231.0	3604.2	3049.6	2843.3	3049.6	3604.2
172.5°	4559.9	4627.3	4641.1	4758.0	4789.7	4470.6	4015.0	3553.0	3337.0	3553.0	4015.0
175°	4637.0	4672.7	4690.6	4744.2	4784.0	4663.0	4401.5	4048.3	3820.1	4048.3	4401.5
177.5°	4716.6	4749.9	4762.1	4774.2	4780.3	4771.8	4686.6	4484.4	4331.7	4484.4	4686.6
180°	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0



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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°	2.1	0.5	0.5	0.5	0.5	2.1
102.5°	4.6	1.3	0.5	0.5	0.5	2.1
105°	4.6	2.1	2.1	2.1	2.1	2.1
107.5°	4.6	3.3	2.1	2.1	4.6	6.2
110°	4.6	4.6	2.1	4.6	10.2	10.2
112.5°	6.2	6.6	4.6	8.6	12.7	12.7
115°	8.6	9.4	8.6	10.2	12.7	12.7
117.5°	10.2	9.4	8.6	10.2	12.7	14.3
120°	10.2	11.5	8.6	10.2	14.3	15.9
122.5°	10.2	13.5	10.2	14.3	20.0	26.5
125°	14.3	16.3	14.3	28.1	41.9	62.2
127.5°	20.0	24.9	24.0	76.0	123.1	175.1
130°	32.2	42.3	55.7	194.6	293.6	373.2
132.5°	54.1	72.0	117.4	383.0	549.4	634.7
135°	93.9	132.4	246.5	583.5	789.8	880.7
137.5°	171.0	225.4	413.0	817.4	1030.9	1108.9
140°	249.8	335.4	581.1	1182.0	1389.8	1461.3
142.5°	335.0	475.9	767.8	1717.1	1897.3	1923.3
145°	464.2	659.4	997.6	2400.8	2542.1	2542.1
147.5°	637.1	896.5	1264.8	3089.3	3152.7	3224.1
150°	898.6	1253.4	1673.2	3661.8	3795.0	3998.8
152.5°	1311.1	1757.7	2212.4	4115.7	4423.5	4581.8
155°	1963.1	2404.8	2817.3	4478.7	4778.3	4847.3
157.5°	2672.8	3084.1	3402.0	4728.8	4825.4	4831.9
160°	3275.3	3729.2	3923.3	4841.6	4738.5	4726.3
162.5°	3711.3	4227.8	4373.9	4851.4	4629.7	4625.7
165°	3916.0	4526.2	4686.6	4744.2	4565.6	4573.7
167.5°	4074.3	4684.1	4833.5	4629.7	4601.3	4540.4
170°	4231.0	4773.0	4814.0	4609.4	4609.4	4544.5
172.5°	4470.6	4789.7	4758.0	4641.1	4627.3	4559.9
175°	4663.0	4784.0	4744.2	4690.6	4672.7	4637.0
177.5°	4771.8	4780.3	4774.2	4762.1	4749.9	4716.6
180°	4746.0	4746.0	4746.0	4746.0	4746.0	4746.0

(END OF REPORT)