

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: 19073

Luminaire Tested: **6000A-MH100-MFL4-15DEGREETILT**

Issue Date: 3/3/2020

**Test Information**

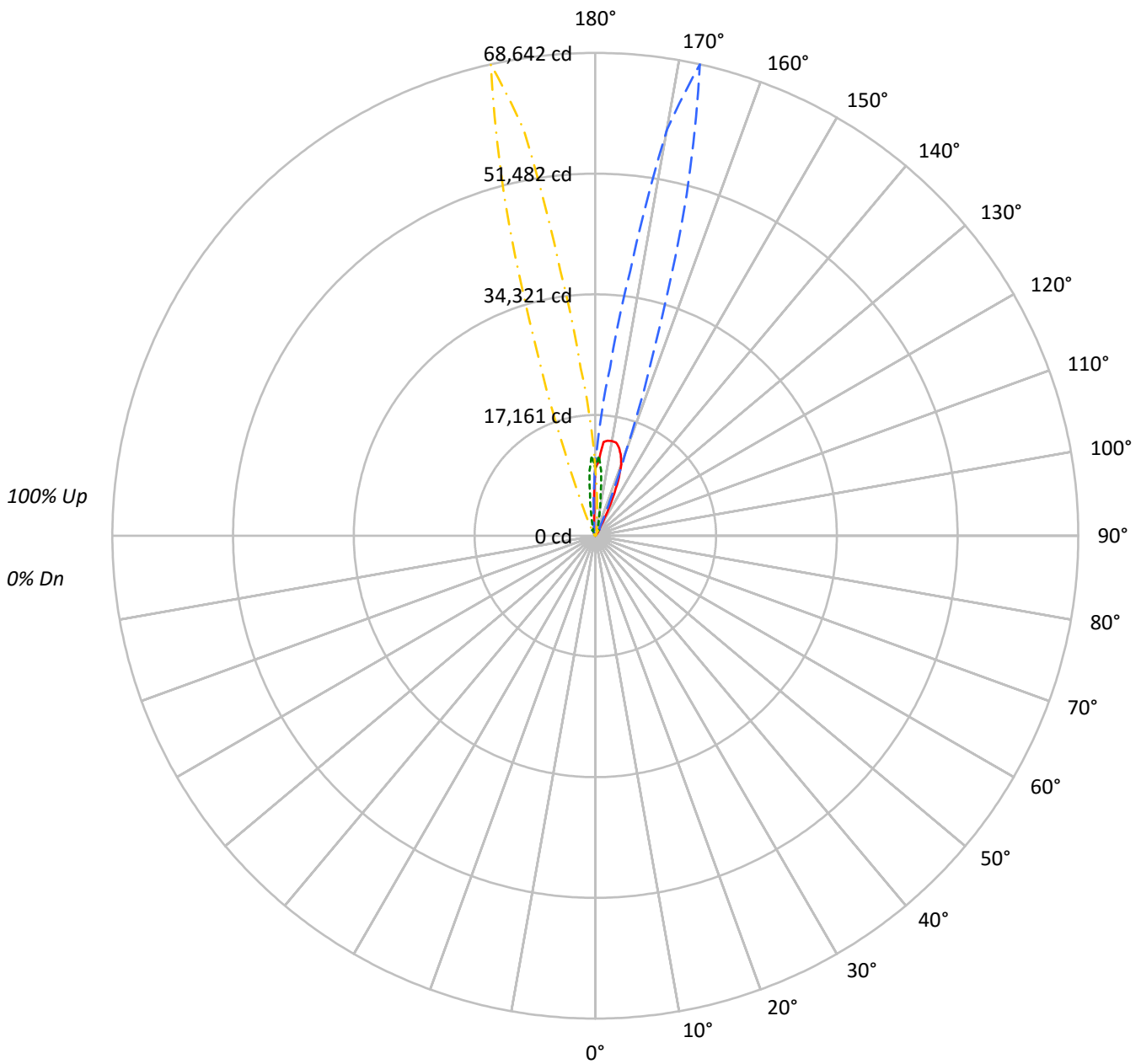
Test Method: LM-46-04  
Report Number: 19073  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 6000A-MH100-MFL4-15DEGREETILT  
Description: WITH SEMI-SPECULAR SPUN REFLECTOR AND TWO CLEAR GLASS LENS  
  
Light Source: ONE PHILIPS 100 WATT CMH LAMP  
  
MHC100/U/M/4K. LUMEN RATING = 9000 LMS.  
  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 9000 (1 lamp)  
Luminaire Lumens: 5813.5 lumens  
Efficiency: 64.6%  
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

TEST NUMBER: 19073  
CATALOG NUMBER: 6000A-MH100-MFL4-15DEGREETILT

### Luminous Intensity Polar Plot



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



TEST NUMBER: 19073

CATALOG NUMBER: 6000A-MH100-MFL4-15DEGREETILT

**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			
RCR																				
0	62	62	62	62	53	53	53	53	36	36	36	21	21	21	7	7	7	0		
1	56	53	51	49	48	46	44	42	31	30	29	18	17	17	6	6	5	0		
2	51	47	43	40	43	40	37	34	27	26	24	16	15	14	5	5	5	0		
3	46	41	36	33	39	35	31	29	24	22	20	14	13	12	4	4	4	0		
4	42	36	31	28	36	31	27	24	21	19	17	12	11	10	4	4	3	0		
5	39	32	27	23	33	27	23	20	19	16	14	11	10	9	4	3	3	0		
6	35	28	24	20	30	24	20	18	17	14	12	10	8	7	3	3	2	0		
7	33	25	21	17	28	22	18	15	15	13	11	9	7	6	3	2	2	0		
8	30	23	18	15	26	20	16	13	14	11	9	8	7	6	3	2	2	0		
9	28	21	16	13	24	18	14	12	12	10	8	7	6	5	2	2	2	0		
10	26	19	14	12	22	16	13	10	11	9	7	7	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°				



TEST NUMBER: 19073

CATALOG NUMBER: 6000A-MH100-MFL4-15DEGREETILT

**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°	0.5	0.0	0.0
110°-120°	2.0	0.0	0.0
120°-130°	11.3	0.2	0.1
130°-140°	52.5	0.9	0.6
140°-150°	247.5	4.3	2.8
150°-160°	1060.9	18.2	11.8
160°-170°	3235.3	55.7	35.9
170°-180°	1202.9	20.7	13.4
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°	3.1	0.1	0.0
90°-150°	314.4	5.4	3.5
90°-180°	5814.0	100.0	64.6
0°-180°	5813.5	100.0	64.6

**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°	16	0	0	0	16	10
125°	39	16	0	16	39	29
135°	117	47	16	47	117	107
145°	854	198	94	198	854	493
155°	5584	729	698	729	5584	2502
165°	12966	1590	737	1590	12966	3557
175°	13400	9314	1854	9314	13400	1247
180°	9604	9604	9604	9604	9604	



TEST NUMBER: 19073

CATALOG NUMBER: 6000A-MH100-MFL4-15DEGREETILT

**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°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
112.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115°	16.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
117.5°	16.0	16.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120°	16.0	16.0	16.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
122.5°	16.0	16.0	16.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125°	39.3	16.0	16.0	16.0	16.0	16.0	0.5	0.5	0.5	0.5	0.5
127.5°	39.3	39.3	16.0	16.0	16.0	16.0	0.5	0.5	16.0	0.5	0.5
130°	54.8	54.8	39.3	39.3	27.6	16.0	16.0	0.5	16.0	0.5	16.0
132.5°	78.0	93.6	39.3	39.3	27.6	16.0	16.0	16.0	16.0	16.0	16.0
135°	116.8	155.6	78.0	54.8	47.0	16.0	39.3	39.3	16.0	39.3	39.3
137.5°	171.1	225.4	116.8	78.0	54.8	39.3	39.3	39.3	54.8	39.3	39.3
140°	341.7	396.0	209.9	132.3	78.0	54.8	54.8	78.0	78.0	78.0	54.8
142.5°	419.2	512.3	380.5	186.6	116.8	78.0	78.0	78.0	78.0	78.0	78.0
145°	853.5	1000.8	760.4	419.2	198.2	116.8	93.6	93.6	93.6	93.6	93.6
147.5°	1117.1	1155.9	1132.6	814.7	380.5	209.9	155.6	132.3	132.3	132.3	155.6
150°	1342.0	1458.3	1062.9	1024.1	768.2	380.5	248.6	209.9	209.9	209.9	248.6
152.5°	2730.0	2970.4	1380.8	962.0	919.4	737.2	489.0	419.2	380.5	419.2	489.0
155°	5583.7	6622.8	2629.2	1210.2	729.4	869.0	830.2	721.7	698.4	721.7	830.2
157.5°	8445.0	12229.2	5242.5	1931.3	775.9	644.1	775.9	907.8	931.0	907.8	775.9
160°	10771.4	17719.3	12516.1	3521.0	919.4	682.9	659.6	698.4	721.7	698.4	659.6
162.5°	12019.8	23907.3	27699.2	6894.2	1152.0	799.2	698.4	682.9	682.9	682.9	698.4
165°	12965.9	31940.9	50148.2	11019.5	1590.2	907.8	814.7	737.2	737.2	737.2	814.7
167.5°	13594.0	33507.3	68642.4	15540.3	2311.3	1155.9	946.5	869.0	869.0	869.0	946.5
170°	13671.5	29537.0	58592.7	20278.3	3552.0	1512.6	1194.7	1039.6	1039.6	1039.6	1194.7
172.5°	13632.7	22829.5	37942.8	24155.5	5851.2	2233.8	1628.9	1404.0	1303.2	1404.0	1628.9
175°	13400.1	17603.0	23946.1	22852.7	9313.5	4017.3	2652.5	2063.2	1853.8	2063.2	2652.5
177.5°	10492.2	13609.5	16129.7	16695.7	11387.8	7266.4	5374.3	4032.8	3311.6	4032.8	5374.3
180°	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5



TEST NUMBER: 19073

CATALOG NUMBER: 6000A-MH100-MFL4-15DEGREETILT

**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	0.5	0.5
112.5°	0.5	0.5	0.5	0.5	0.5	0.5
115°	0.5	0.5	0.5	0.5	0.5	16.0
117.5°	0.5	0.5	0.5	0.5	16.0	16.0
120°	0.5	0.5	0.5	16.0	16.0	16.0
122.5°	0.5	0.5	0.5	16.0	16.0	16.0
125°	16.0	16.0	16.0	16.0	16.0	39.3
127.5°	16.0	16.0	16.0	16.0	39.3	39.3
130°	16.0	27.6	39.3	39.3	54.8	54.8
132.5°	16.0	27.6	39.3	39.3	93.6	78.0
135°	16.0	47.0	54.8	78.0	155.6	116.8
137.5°	39.3	54.8	78.0	116.8	225.4	171.1
140°	54.8	78.0	132.3	209.9	396.0	341.7
142.5°	78.0	116.8	186.6	380.5	512.3	419.2
145°	116.8	198.2	419.2	760.4	1000.8	853.5
147.5°	209.9	380.5	814.7	1132.6	1155.9	1117.1
150°	380.5	768.2	1024.1	1062.9	1458.3	1342.0
152.5°	737.2	919.4	962.0	1380.8	2970.4	2730.0
155°	869.0	729.4	1210.2	2629.2	6622.8	5583.7
157.5°	644.1	775.9	1931.3	5242.5	12229.2	8445.0
160°	682.9	919.4	3521.0	12516.1	17719.3	10771.4
162.5°	799.2	1152.0	6894.2	27699.2	23907.3	12019.8
165°	907.8	1590.2	11019.5	50148.2	31940.9	12965.9
167.5°	1155.9	2311.3	15540.3	68642.4	33507.3	13594.0
170°	1512.6	3552.0	20278.3	58592.7	29537.0	13671.5
172.5°	2233.8	5851.2	24155.5	37942.8	22829.5	13632.7
175°	4017.3	9313.5	22852.7	23946.1	17603.0	13400.1
177.5°	7266.4	11387.8	16695.7	16129.7	13609.5	10492.2
180°	9603.5	9603.5	9603.5	9603.5	9603.5	9603.5

(END OF REPORT)