

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: 19059

Luminaire Tested: **6000A-MH70T4-MFL4-15DEGREETILT**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 19059
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 6000A-MH70T4-MFL4-15DEGREETILT
Description: WITH DIFFUSE SPUN REFLECTOR AND TWO CLEAR GLASS LENS
Light Source: ONE PHILIPS 70 WATT CMH LAMP

CDM70/TC/830. LUMEN RATING = 6400 LMS.

Ballast/Driver: -

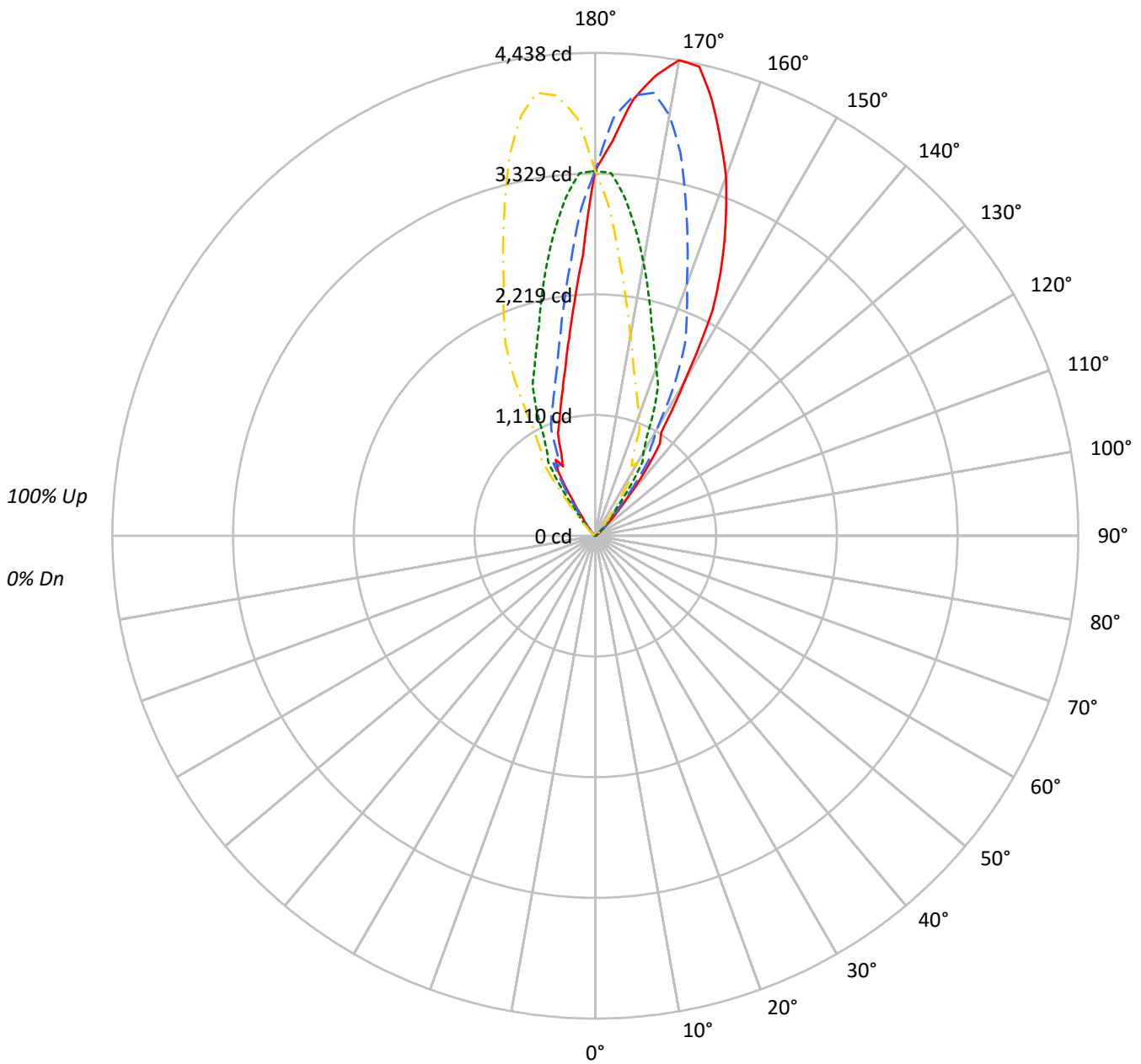
Summary

Lumens per Lamp: 6400 (1 lamp)
Luminaire Lumens: 2068.4 lumens
Efficiency: 32.3%
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	20		
RCR																				
0	31	31	31	31	26	26	26	26	18	18	18	10	10	10	3	3	3	0		
1	28	27	26	24	24	23	22	21	16	15	15	9	9	8	3	3	3	0		
2	25	23	21	20	22	20	18	17	14	13	12	8	7	7	3	2	2	0		
3	23	20	18	17	20	17	16	14	12	11	10	7	6	6	2	2	2	0		
4	21	18	16	14	18	15	14	12	11	9	8	6	6	5	2	2	2	0		
5	19	16	14	12	16	14	12	10	9	8	7	5	5	4	2	2	1	0		
6	18	14	12	10	15	12	10	9	8	7	6	5	4	4	2	1	1	0		
7	16	13	10	9	14	11	9	8	8	6	5	4	4	3	1	1	1	0		
8	15	11	9	8	13	10	8	7	7	6	5	4	3	3	1	1	1	0		
9	14	10	8	7	12	9	7	6	6	5	4	4	3	2	1	1	1	0		
10	13	9	7	6	11	8	6	5	6	4	4	3	3	2	1	1	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°	1.2	0.1	0.0
100°-110°	6.0	0.3	0.1
110°-120°	9.1	0.4	0.1
120°-130°	18.6	0.9	0.3
130°-140°	78.7	3.8	1.2
140°-150°	355.6	17.2	5.6
150°-160°	653.0	31.6	10.2
160°-170°	651.0	31.5	10.2
170°-180°	295.3	14.3	4.6
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°	16.3	0.8	0.3
90°-150°	469.2	22.7	7.3
90°-180°	2068.0	100.0	32.3
0°-180°	2068.4	100.0	32.3

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
90°	0	0	0	0	0	
95°	0	0	3	0	0	1
105°	3	6	8	6	3	3
115°	4	10	11	10	4	6
125°	31	19	11	19	31	31
135°	188	87	39	87	188	166
145°	1035	567	207	567	1035	614
155°	2750	1278	703	1278	2750	1225
165°	4143	1998	1227	1998	4143	1144
175°	4028	3118	2164	3118	4028	395
180°	3352	3352	3352	3352	3352	



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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	2.8	0.5	0.5
97.5°	0.5	0.5	0.5	0.5	1.7	2.8	2.8	2.8	2.8	2.8	2.8
100°	0.5	0.5	0.5	2.8	1.7	4.4	2.8	4.4	4.4	4.4	2.8
102.5°	2.8	2.8	2.8	2.8	3.6	6.8	4.4	6.8	6.8	6.8	4.4
105°	2.8	2.8	4.4	4.4	5.6	8.3	8.3	8.3	8.3	8.3	8.3
107.5°	2.8	4.4	4.4	6.8	6.8	8.3	10.7	10.7	8.3	10.7	10.7
110°	2.8	4.4	6.8	6.8	8.3	10.7	10.7	10.7	10.7	10.7	10.7
112.5°	4.4	4.4	6.8	8.3	8.3	10.7	12.2	12.2	10.7	12.2	12.2
115°	4.4	4.4	6.8	8.3	9.5	10.7	12.2	12.2	10.7	12.2	12.2
117.5°	6.8	6.8	8.3	8.3	9.5	10.7	10.7	12.2	12.2	12.2	10.7
120°	12.2	10.7	10.7	10.7	10.7	8.3	10.7	12.2	12.2	12.2	10.7
122.5°	21.6	17.7	16.1	14.6	13.4	12.2	10.7	10.7	10.7	10.7	10.7
125°	31.0	27.9	23.9	17.7	19.3	16.1	12.2	12.2	10.7	12.2	12.2
127.5°	46.6	38.8	33.3	25.5	27.5	23.9	17.7	16.1	14.6	16.1	17.7
130°	71.6	58.3	45.0	34.9	39.2	33.3	25.5	21.6	21.6	21.6	25.5
132.5°	113.0	92.7	67.7	50.5	56.0	48.2	37.2	29.4	27.9	29.4	37.2
135°	188.0	155.2	115.4	82.6	86.8	69.3	50.5	41.1	38.8	41.1	50.5
137.5°	302.1	246.7	188.0	134.1	121.2	102.1	73.2	58.3	54.4	58.3	73.2
140°	485.8	414.7	332.6	225.6	198.6	159.1	113.0	90.4	79.4	90.4	113.0
142.5°	758.5	695.2	590.5	403.7	316.2	254.5	176.3	140.4	127.1	140.4	176.3
145°	1035.1	950.7	868.7	695.2	567.4	414.7	310.0	227.9	206.8	227.9	310.0
147.5°	1126.6	1023.4	932.0	897.6	803.0	712.4	531.1	437.3	386.5	437.3	531.1
150°	1643.1	1445.4	1132.0	912.4	884.3	806.2	769.4	712.4	681.9	712.4	769.4
152.5°	2332.3	2090.1	1586.0	1109.4	1014.8	807.7	724.1	748.3	786.6	748.3	724.1
155°	2749.6	2425.3	1952.5	1504.0	1278.2	1101.5	815.5	708.5	703.0	708.5	815.5
157.5°	3129.4	2790.2	2196.3	1710.3	1504.0	1286.8	1059.4	888.2	810.1	888.2	1059.4
160°	3511.5	3184.9	2459.7	1901.0	1634.1	1400.8	1179.7	1052.3	1004.7	1052.3	1179.7
162.5°	3820.2	3633.4	2814.5	2124.5	1797.0	1538.4	1288.3	1153.1	1096.1	1153.1	1288.3
165°	4142.9	3980.4	3200.5	2374.5	1998.3	1694.7	1428.2	1281.3	1227.4	1281.3	1428.2
167.5°	4415.6	4279.7	3606.8	2705.8	2266.7	1918.2	1611.0	1448.5	1383.6	1448.5	1611.0
170°	4438.3	4440.6	3923.3	3045.8	2547.6	2190.9	1857.2	1664.2	1572.8	1664.2	1857.2
172.5°	4266.4	4426.6	4106.2	3334.1	2838.7	2519.1	2173.7	1958.0	1837.7	1958.0	2173.7
175°	4028.0	4243.7	4060.9	3543.5	3118.1	2876.2	2544.1	2312.8	2164.3	2312.8	2544.1
177.5°	3629.5	3849.1	3845.2	3613.9	3336.5	3224.7	3007.5	2773.0	2587.8	2773.0	3007.5
180°	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4



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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°	2.8	1.7	0.5	0.5	0.5	0.5
100°	4.4	1.7	2.8	0.5	0.5	0.5
102.5°	6.8	3.6	2.8	2.8	2.8	2.8
105°	8.3	5.6	4.4	4.4	2.8	2.8
107.5°	8.3	6.8	6.8	4.4	4.4	2.8
110°	10.7	8.3	6.8	6.8	4.4	2.8
112.5°	10.7	8.3	8.3	6.8	4.4	4.4
115°	10.7	9.5	8.3	6.8	4.4	4.4
117.5°	10.7	9.5	8.3	8.3	6.8	6.8
120°	8.3	10.7	10.7	10.7	10.7	12.2
122.5°	12.2	13.4	14.6	16.1	17.7	21.6
125°	16.1	19.3	17.7	23.9	27.9	31.0
127.5°	23.9	27.5	25.5	33.3	38.8	46.6
130°	33.3	39.2	34.9	45.0	58.3	71.6
132.5°	48.2	56.0	50.5	67.7	92.7	113.0
135°	69.3	86.8	82.6	115.4	155.2	188.0
137.5°	102.1	121.2	134.1	188.0	246.7	302.1
140°	159.1	198.6	225.6	332.6	414.7	485.8
142.5°	254.5	316.2	403.7	590.5	695.2	758.5
145°	414.7	567.4	695.2	868.7	950.7	1035.1
147.5°	712.4	803.0	897.6	932.0	1023.4	1126.6
150°	806.2	884.3	912.4	1132.0	1445.4	1643.1
152.5°	807.7	1014.8	1109.4	1586.0	2090.1	2332.3
155°	1101.5	1278.2	1504.0	1952.5	2425.3	2749.6
157.5°	1286.8	1504.0	1710.3	2196.3	2790.2	3129.4
160°	1400.8	1634.1	1901.0	2459.7	3184.9	3511.5
162.5°	1538.4	1797.0	2124.5	2814.5	3633.4	3820.2
165°	1694.7	1998.3	2374.5	3200.5	3980.4	4142.9
167.5°	1918.2	2266.7	2705.8	3606.8	4279.7	4415.6
170°	2190.9	2547.6	3045.8	3923.3	4440.6	4438.3
172.5°	2519.1	2838.7	3334.1	4106.2	4426.6	4266.4
175°	2876.2	3118.1	3543.5	4060.9	4243.7	4028.0
177.5°	3224.7	3336.5	3613.9	3845.2	3849.1	3629.5
180°	3352.4	3352.4	3352.4	3352.4	3352.4	3352.4

(END OF REPORT)