

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:

Luminaire Tested: **612-50PAR20-120-FL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number:  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 612-50PAR20-120-FL  
Description:  
Light Source: 50PAR/HIR/25°  
BARE LAMP DATA FOR 612  
Ballast/Driver: -

**Summary**

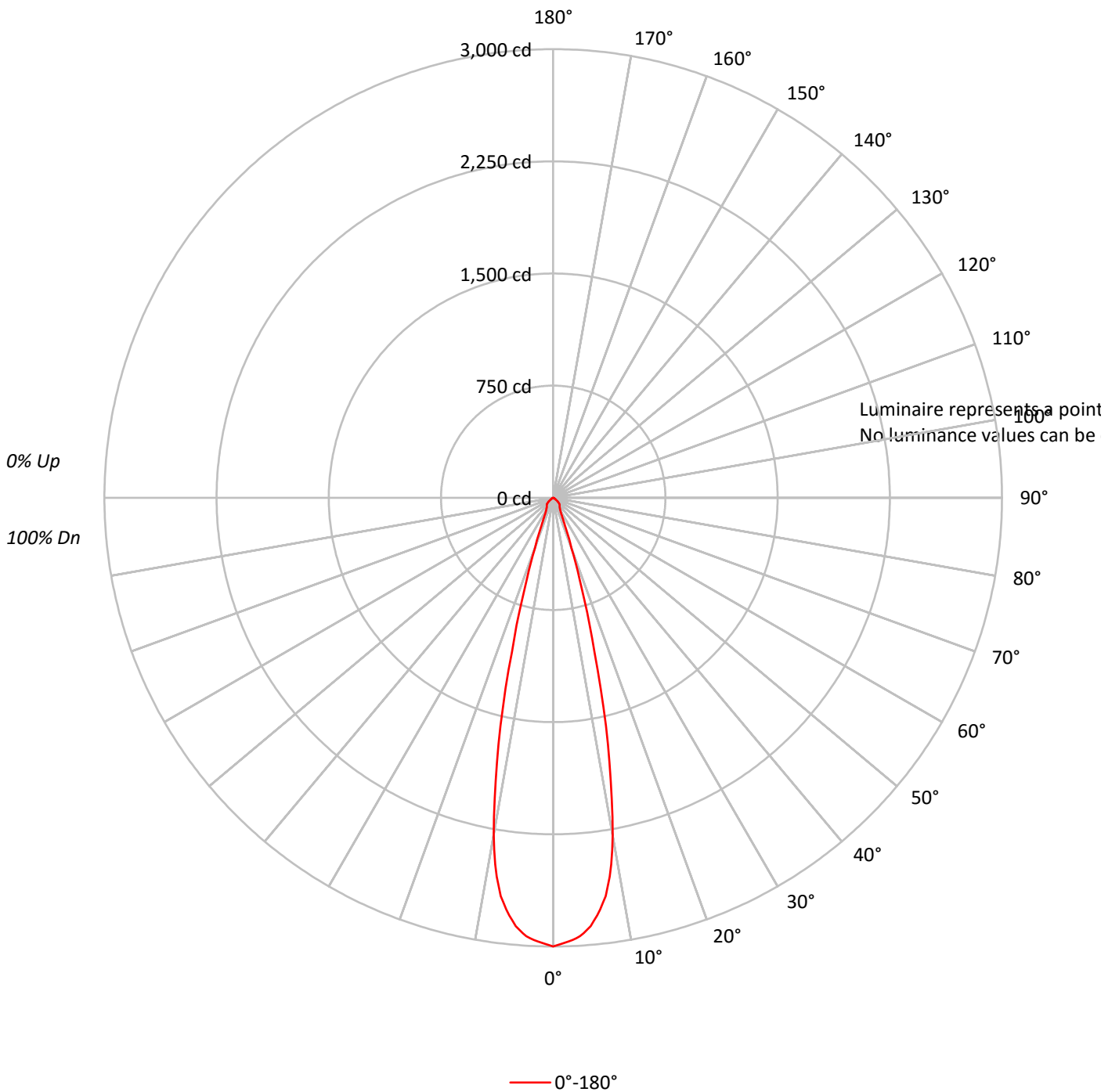
Lumens per Lamp: 850 (1 lamp)  
Luminaire Lumens: 761.0 lumens  
Efficiency: 89.5%  
Efficacy: -  
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.41  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

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





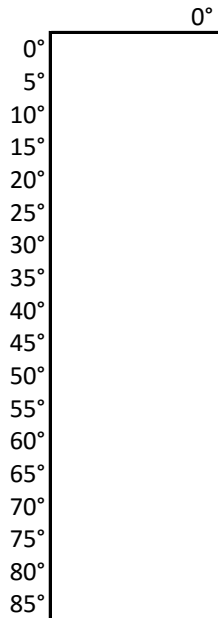
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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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	107	107	107	107	104	104	104	104	99	99	99		95	95	95		91	91	91	90
1	102	100	98	97	100	98	97	95	95	93	92		92	90	90		88	88	87	85
2	98	95	92	89	97	93	91	88	90	88	86		88	86	85		85	84	83	81
3	95	90	86	83	93	89	85	83	87	84	81		84	82	80		83	81	79	78
4	91	86	82	79	90	85	81	78	83	80	77		81	79	77		80	78	76	75
5	88	82	78	75	87	81	78	75	80	77	74		79	76	73		77	75	73	72
6	85	79	75	72	84	78	74	71	77	74	71		76	73	71		75	72	70	69
7	82	76	72	69	81	75	72	69	74	71	68		73	70	68		73	70	68	67
8	80	73	69	66	79	73	69	66	72	69	66		71	68	66		70	68	66	65
9	78	71	67	64	77	71	67	64	70	66	64		69	66	64		69	66	64	63
10	75	69	65	62	75	69	65	62	68	64	62		67	64	62		67	64	62	61

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	257.4	33.8	30.3
10°-20°	303.8	39.9	35.7
20°-30°	76.9	10.1	9.0
30°-40°	48.0	6.3	5.6
40°-50°	43.3	5.7	5.1
50°-60°	20.9	2.7	2.5
60°-70°	6.7	0.9	0.8
70°-80°	3.2	0.4	0.4
80°-90°	0.8	0.1	0.1
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	638.1	83.9	75.1
0°-40°	686.1	90.2	80.7
0°-60°	750.3	98.6	88.3
0°-90°	761.0	100.0	89.5
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	761.0	100.0	89.5

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3000	
5°	2875	257
15°	1066	304
25°	144	77
35°	74	48
45°	59	43
55°	22	21
65°	6	7
75°	3	3
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3000
1.25°	2980
2.5°	2960
3.75°	2930
5°	2875
6.25°	2790
7.5°	2686
8.75°	2529
10°	2290
12.5°	1690
15°	1066
17.5°	619
20°	356
22.5°	215
25°	144
27.5°	110
30°	92
35°	74
40°	67
45°	59
50°	40
55°	22
60°	10
65°	6
70°	5
75°	3
80°	1
85°	1
90°	0

(END OF REPORT)