

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: Test Report: SOMK990310050 LAB: CCSL

Luminaire Tested: **912-50PAR20-120-NFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: Test Report: SOMK990310050 LAB: CCSL  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 912-50PAR20-120-NFL  
Description:  
Light Source: 50PAR20/HAL/NFL30  
Bare lamp data for 912  
Ballast/Driver: -

**Summary**

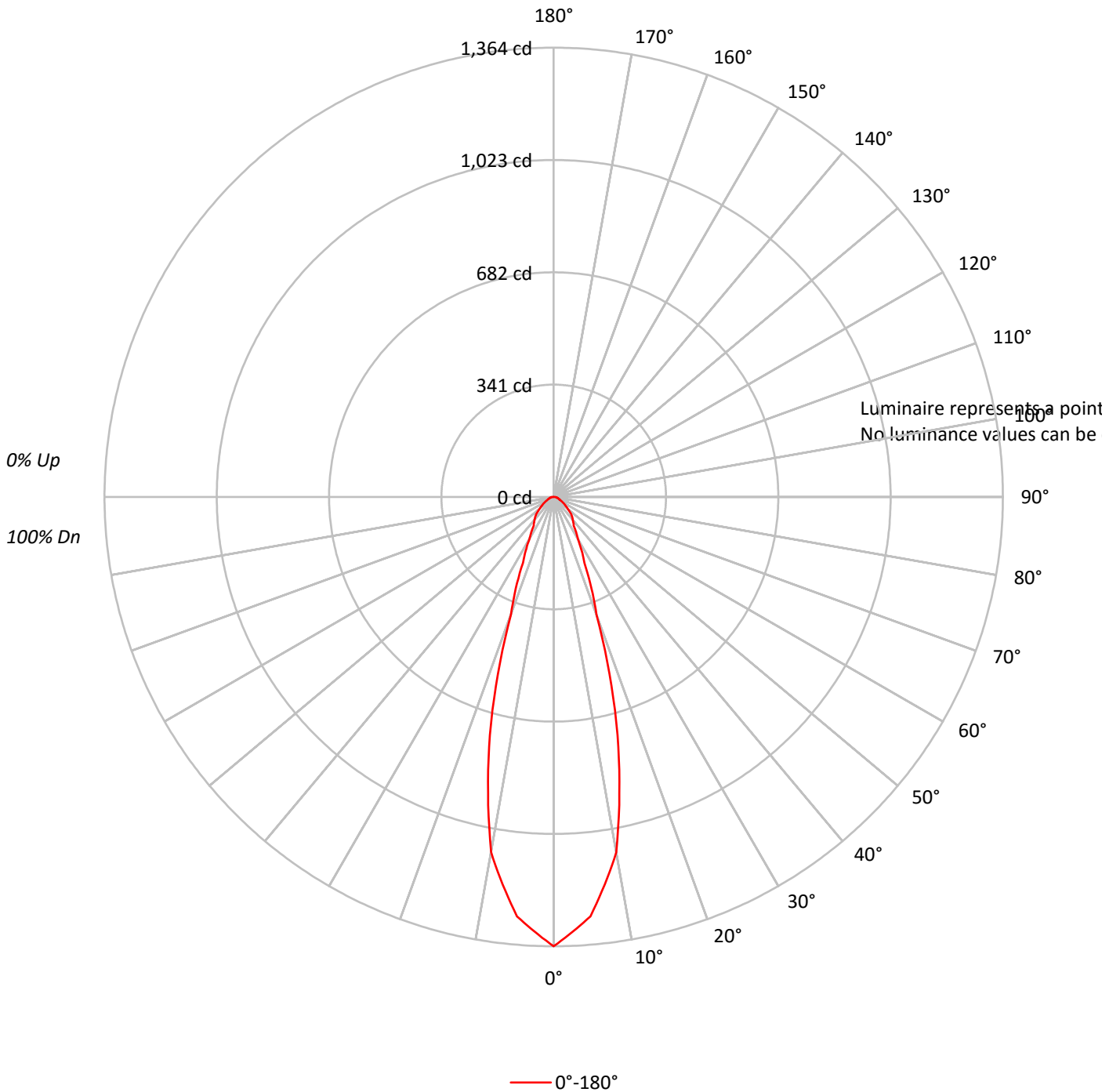
Lumens per Lamp: 550 (1 lamp)  
Luminaire Lumens: 634.9 lumens  
Efficiency: 115.4%  
Efficacy: 12.7 lumens/watt  
Spacing Criteria (0/90/45): 0.53 / 0.53 / 0.5  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

Input Watts (W): 50  
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	137	137	137	137	134	134	134	134	128	128	128		123	123	123		118	118	118	115
1	130	126	123	120	127	124	121	118	119	117	114		115	113	111		111	109	108	106
2	123	116	111	107	120	114	110	106	111	107	103		107	104	101		104	101	99	97
3	116	108	102	97	114	107	101	96	103	99	95		101	97	93		98	95	92	90
4	110	101	94	89	108	100	93	88	97	92	87		95	90	86		93	89	85	84
5	105	95	88	83	103	94	87	82	92	86	81		90	85	81		88	84	80	78
6	100	89	82	77	98	89	82	77	87	81	76		85	80	76		84	79	75	74
7	96	85	78	73	94	84	77	72	82	76	72		81	76	72		80	75	71	70
8	91	80	74	69	90	80	73	69	79	73	68		77	72	68		76	71	68	66
9	88	77	70	65	86	76	70	65	75	69	65		74	69	65		73	68	65	63
10	84	73	67	62	83	73	66	62	72	66	62		71	66	62		70	65	62	60

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	116.5	18.3	21.2
10°-20°	202.3	31.9	36.8
20°-30°	109.6	17.3	19.9
30°-40°	70.0	11.0	12.7
40°-50°	57.2	9.0	10.4
50°-60°	37.3	5.9	6.8
60°-70°	21.8	3.4	4.0
70°-80°	12.9	2.0	2.4
80°-90°	7.4	1.2	1.3
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°	428.4	67.5	77.9
0°-40°	498.3	78.5	90.6
0°-60°	592.8	93.4	107.8
0°-90°	634.9	100.0	115.4
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°	634.9	100.0	115.4

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1364	
5°	1278	116
15°	748	202
25°	221	110
35°	106	70
45°	76	57
55°	41	37
65°	21	22
75°	12	13
85°	7	7
90°	4	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1364
5°	1278
10°	1095
15°	748
20°	380
25°	221
30°	147
35°	106
40°	90
45°	76
50°	55
55°	41
60°	30
65°	21
70°	16
75°	12
80°	9
85°	7
90°	4

(END OF REPORT)