

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: **904-50MR16-12-NFL**

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: 904-50MR16-12-NFL  
Description:  
Light Source: Q50MR16/C/NFL30°-EXK  
BARE LAMP DATA FOR 904  
Ballast/Driver: -

**Summary**

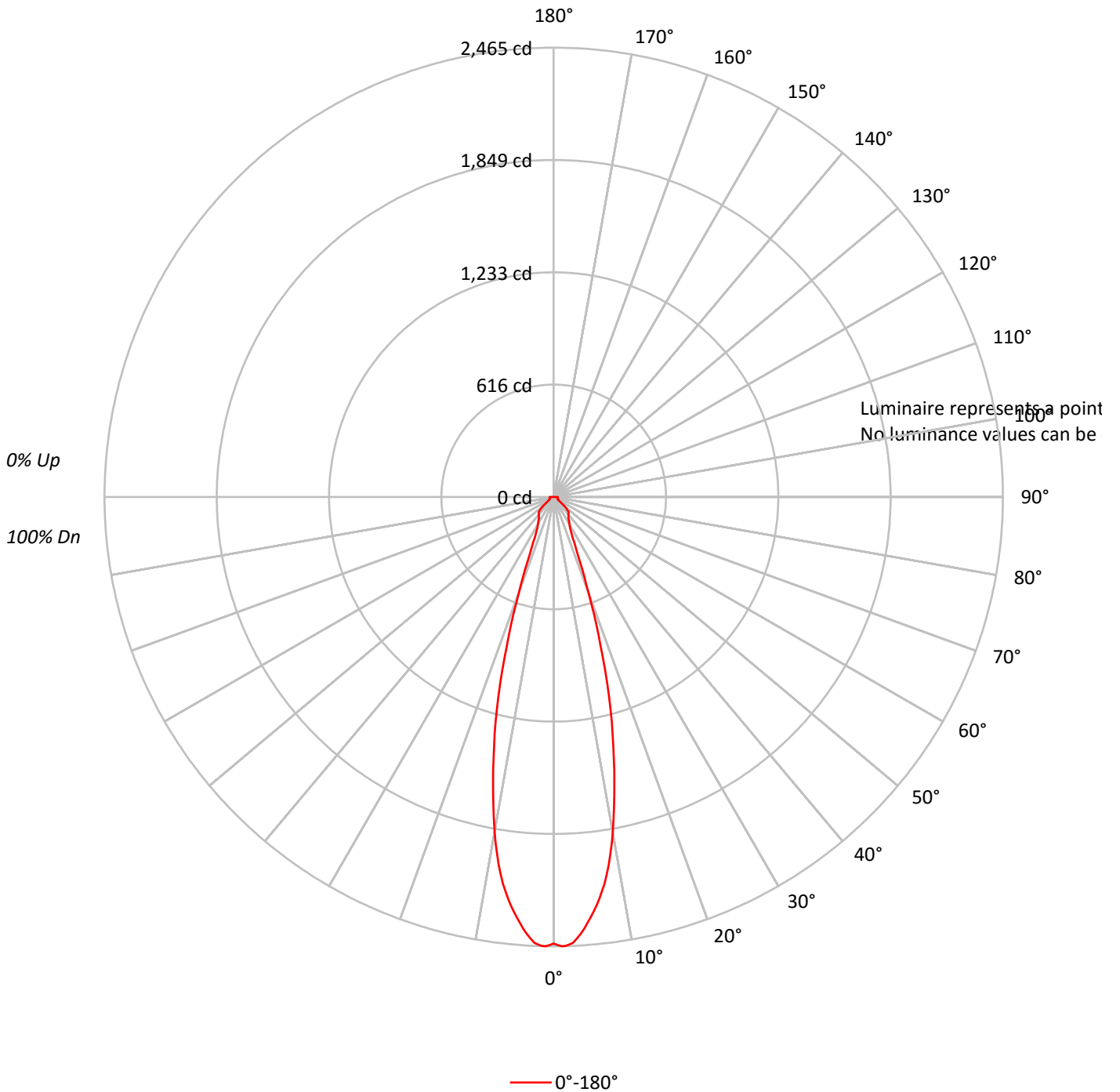
Lumens per Lamp: 955 (1 lamp)  
Luminaire Lumens: 939.1 lumens  
Efficiency: 98.3%  
Efficacy: -  
Spacing Criteria (0/90/45): 0.5 / 0.5 / 0.48  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

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	117	117	117	117	114	114	114	114	109	109	109	105	105	105	100	100	100	98
1	110	107	104	102	108	105	102	100	101	99	97	97	95	94	94	92	91	89
2	105	99	95	91	102	98	93	90	94	91	88	91	89	86	89	86	84	83
3	99	93	87	83	97	91	86	83	89	85	81	86	83	80	84	81	79	77
4	95	87	81	77	93	86	81	77	84	79	76	82	78	75	80	77	74	72
5	91	82	76	72	89	81	76	72	80	75	71	78	74	71	76	73	70	68
6	87	78	72	68	85	77	72	68	76	71	67	74	70	67	73	69	66	65
7	83	74	68	64	82	74	68	64	72	67	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	65	61	69	64	61	68	64	61	67	63	60	59
9	77	68	62	59	76	67	62	59	66	62	58	66	61	58	65	61	58	57
10	74	65	60	56	73	65	60	56	64	59	56	63	59	56	62	59	56	54

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	207.5	22.1	21.7
10°-20°	321.2	34.2	33.6
20°-30°	128.2	13.7	13.4
30°-40°	90.6	9.7	9.5
40°-50°	82.4	8.8	8.6
50°-60°	37.8	4.0	4.0
60°-70°	23.8	2.5	2.5
70°-80°	23.0	2.4	2.4
80°-90°	24.6	2.6	2.6
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°	656.9	69.9	68.8
0°-40°	747.5	79.6	78.3
0°-60°	867.8	92.4	90.9
0°-90°	939.1	100.0	98.3
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°	939.1	100.0	98.3

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2450	
5°	2317	208
15°	1206	321
25°	247	128
35°	141	91
45°	115	82
55°	35	38
65°	23	24
75°	22	23
85°	23	25
90°	23	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2450
1.25°	2469
2.5°	2448
3.75°	2392
5°	2317
6.25°	2236
7.5°	2140
8.75°	2016
10°	1867
12.5°	1533
15°	1206
17.5°	855
20°	552
22.5°	346
25°	247
27.5°	194
30°	172
35°	141
40°	126
45°	115
50°	72
55°	35
60°	28
65°	23
70°	22
75°	22
80°	21
85°	23
90°	23

(END OF REPORT)