

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: LVE02192 LAB: "EHV"

Luminaire Tested: **710-MH39PAR20-SP**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-46-04  
Report Number: Test Report: LVE02192 LAB: "EHV"  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMIERE  
Catalog Number: 710-MH39PAR20-SP  
Description:  
Light Source: CDM-R PAR20 SP/830/35W  
BARE LAMP DATA FOR 710  
Ballast/Driver: -

**Summary**

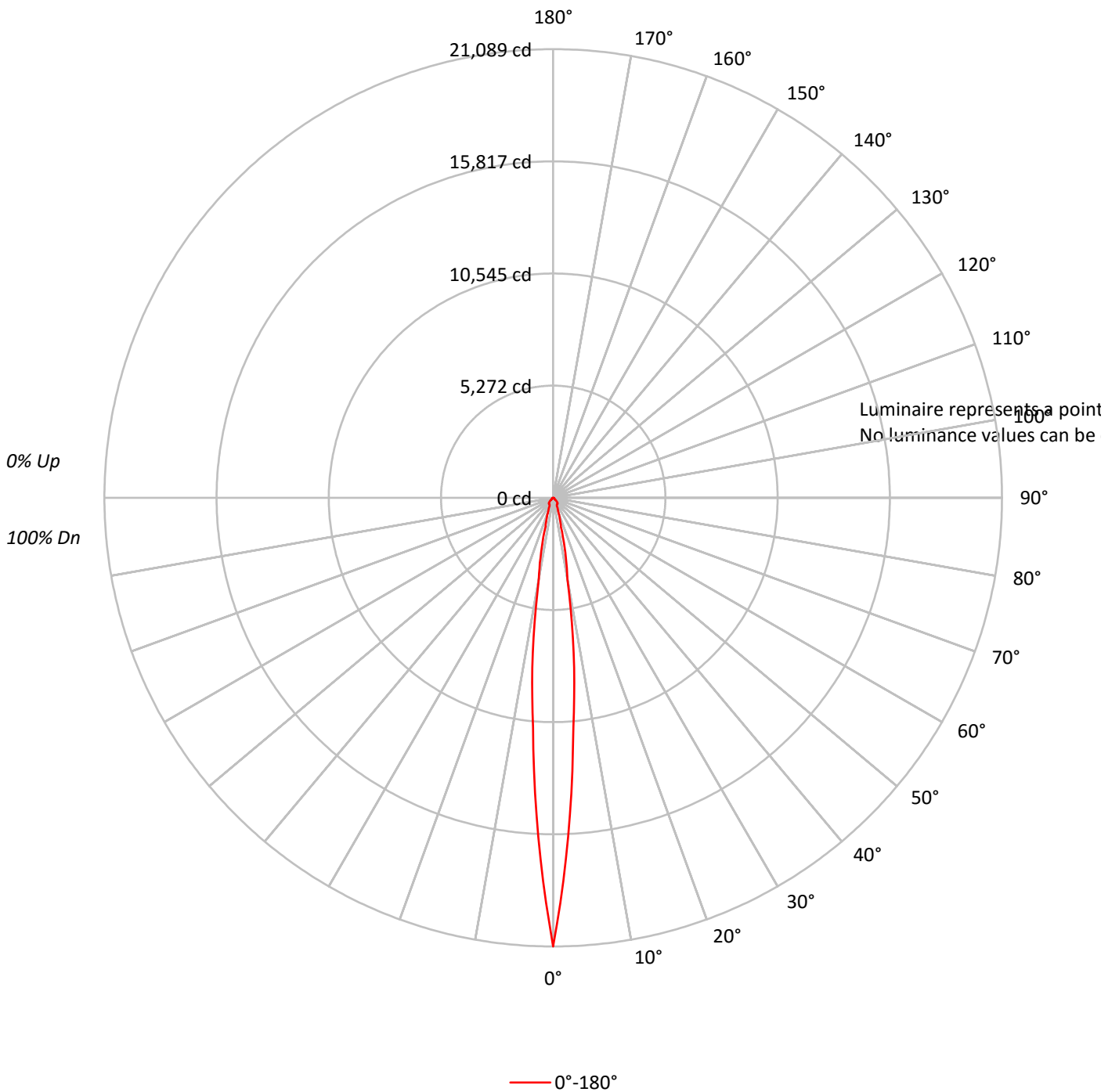
Lumens per Lamp: 2000 (1 lamp)  
Luminaire Lumens: 2123.4 lumens  
Efficiency: 106.2%  
Efficacy: 47.2 lumens/watt  
Spacing Criteria (0/90/45): 0.18 / 0.18 / 0.22  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

Input Watts (W): 45  
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



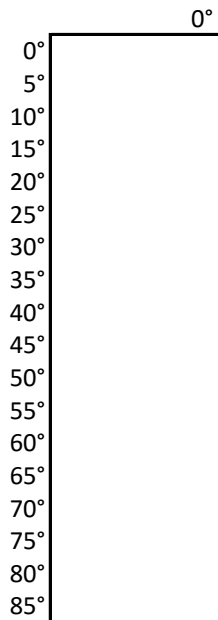


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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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	126	126	126	126	123	123	123	123	118	118	118		113	113	113		108	108	108	106
1	121	118	116	114	118	116	114	112	112	110	108		108	106	105		104	103	102	100
2	116	111	107	104	114	109	106	103	106	103	101		103	101	99		100	98	96	95
3	111	105	100	97	109	104	99	96	101	97	95		98	96	93		96	94	92	90
4	107	100	95	91	105	99	94	91	97	93	90		95	91	89		93	90	88	86
5	103	96	90	87	101	95	90	86	93	89	85		91	88	85		90	86	84	83
6	100	92	86	83	98	91	86	82	89	85	82		88	84	81		87	83	81	80
7	96	88	83	80	95	88	83	79	86	82	79		85	81	79		84	81	78	77
8	93	85	80	77	92	85	80	77	84	79	76		83	79	76		82	78	76	75
9	91	83	78	74	90	82	78	74	81	77	74		81	77	74		80	76	74	73
10	88	80	76	72	88	80	75	72	79	75	72		79	75	72		78	74	72	71

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	907.3	42.7	45.4
10°-20°	486.2	22.9	24.3
20°-30°	208.4	9.8	10.4
30°-40°	216.5	10.2	10.8
40°-50°	157.9	7.4	7.9
50°-60°	62.6	2.9	3.1
60°-70°	48.0	2.3	2.4
70°-80°	29.0	1.4	1.5
80°-90°	7.3	0.3	0.4
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°	1601.9	75.4	80.1
0°-40°	1818.5	85.6	90.9
0°-60°	2039.0	96.0	101.9
0°-90°	2123.4	100.0	106.2
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°	2123.4	100.0	106.2

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	21089	
5°	10830	907
15°	1406	486
25°	393	208
35°	351	217
45°	204	158
55°	64	63
65°	46	48
75°	28	29
85°	6	7
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	21089
5°	10830
10°	3866
15°	1406
20°	699
25°	393
30°	349
35°	351
40°	329
45°	204
50°	89
55°	64
60°	63
65°	46
70°	39
75°	28
80°	15
85°	6
90°	0

(END OF REPORT)