

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: HALO

Report Number: H32023

Luminaire Tested: **M200-123P**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H32023
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: M200-123P
Description: HALO 13" SQ. RECESSED HID
SPECULAR REFLECTOR REGRESSED FRESNEL
Light Source: LU100/D/MED 100 WATTS 8800 LUMENS
ED-17 DIFFUSED HPS
Ballast/Driver: -

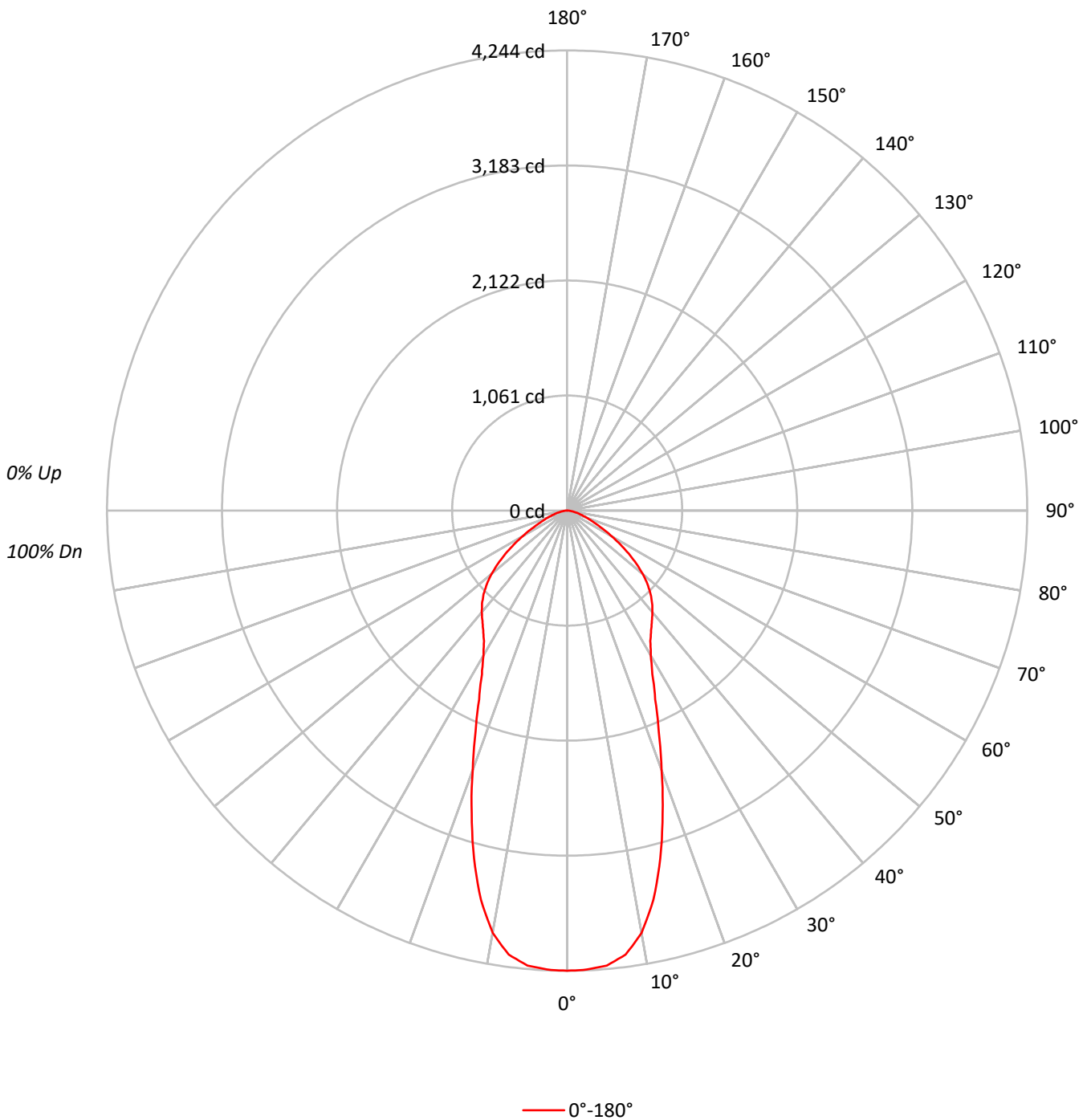
Summary

Lumens per Lamp: 8800 (1 lamp)
Luminaire Lumens: 4967.5 lumens
Efficiency: 56.4%
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.79
Luminous Opening: Rectangular (W 0.8' x L: 0.8' x H: 0')
CIE Type: Direct

Input Watts (W): 115
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	67	67	67	67	66	66	66	66	63	63	63	60	60	60	58	58	58	56
1	63	61	59	57	61	59	58	56	57	56	54	55	54	53	53	52	51	50
2	58	55	51	49	57	54	51	48	52	49	47	50	48	46	48	47	45	44
3	54	49	45	42	53	48	45	42	47	44	41	45	43	41	44	42	40	39
4	50	45	41	37	49	44	40	37	43	39	37	41	39	36	40	38	36	35
5	47	41	37	33	46	40	36	33	39	36	33	38	35	33	37	34	32	31
6	44	38	33	30	43	37	33	30	36	32	30	35	32	30	34	32	29	28
7	41	35	30	27	40	34	30	27	33	30	27	33	29	27	32	29	27	26
8	39	32	28	25	38	32	28	25	31	27	25	30	27	25	30	27	25	24
9	37	30	26	23	36	30	26	23	29	25	23	28	25	23	28	25	23	22
10	35	28	24	21	34	28	24	21	27	24	21	27	24	21	26	23	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	71378
5°	71111
10°	67544
15°	57808
20°	45604
25°	35649
30°	29927
35°	27697
40°	26873
45°	25902
50°	23836
55°	20291
60°	15978
65°	12018
70°	9196
75°	7278
80°	5811
85°	4824



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	394.2	7.9	4.5
10°-20°	913.2	18.4	10.4
20°-30°	897.7	18.1	10.2
30°-40°	851.2	17.1	9.7
40°-50°	833.6	16.8	9.5
50°-60°	617.7	12.4	7.0
60°-70°	309.4	6.2	3.5
70°-80°	122.6	2.5	1.4
80°-90°	28.0	0.6	0.3
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°	2205.0	44.4	25.1
0°-40°	3056.2	61.5	34.7
0°-60°	4507.5	90.7	51.2
0°-90°	4967.5	100.0	56.4
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°	4967.5	100.0	56.4

CANDELA DISTRIBUTION:

	0°	Flux
0°	4244	
5°	4212	394
15°	3320	913
25°	1921	898
35°	1349	851
45°	1089	834
55°	692	618
65°	302	309
75°	112	123
85°	25	27
90°	0	1
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



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CANDELA DISTRIBUTION (FULL):

0°	
0°	4244
2.5°	4237
5°	4212
7.5°	4130
10°	3955
12.5°	3677
15°	3320
17.5°	2931
20°	2548
22.5°	2207
25°	1921
27.5°	1703
30°	1541
32.5°	1428
35°	1349
37.5°	1284
40°	1224
42.5°	1161
45°	1089
47.5°	1005
50°	911
52.5°	804
55°	692
57.5°	582
60°	475
62.5°	381
65°	302
67.5°	240
70°	187
72.5°	146
75°	112
77.5°	84
80°	60
82.5°	40
85°	25
87.5°	8
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	0
115°	0
117.5°	0
120°	0
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)