

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: H32020

Luminaire Tested: **M200-25**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: H32020  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: M200-25  
Description: HALO 13" SQ RECESSED HID  
SPECULAR REFLECTOR ALL GLAS LENS  
Light Source: LU100/D/MED 100 WATTS 8800 LUMENS  
ED-17 DIFFUSED HPS  
Ballast/Driver: -

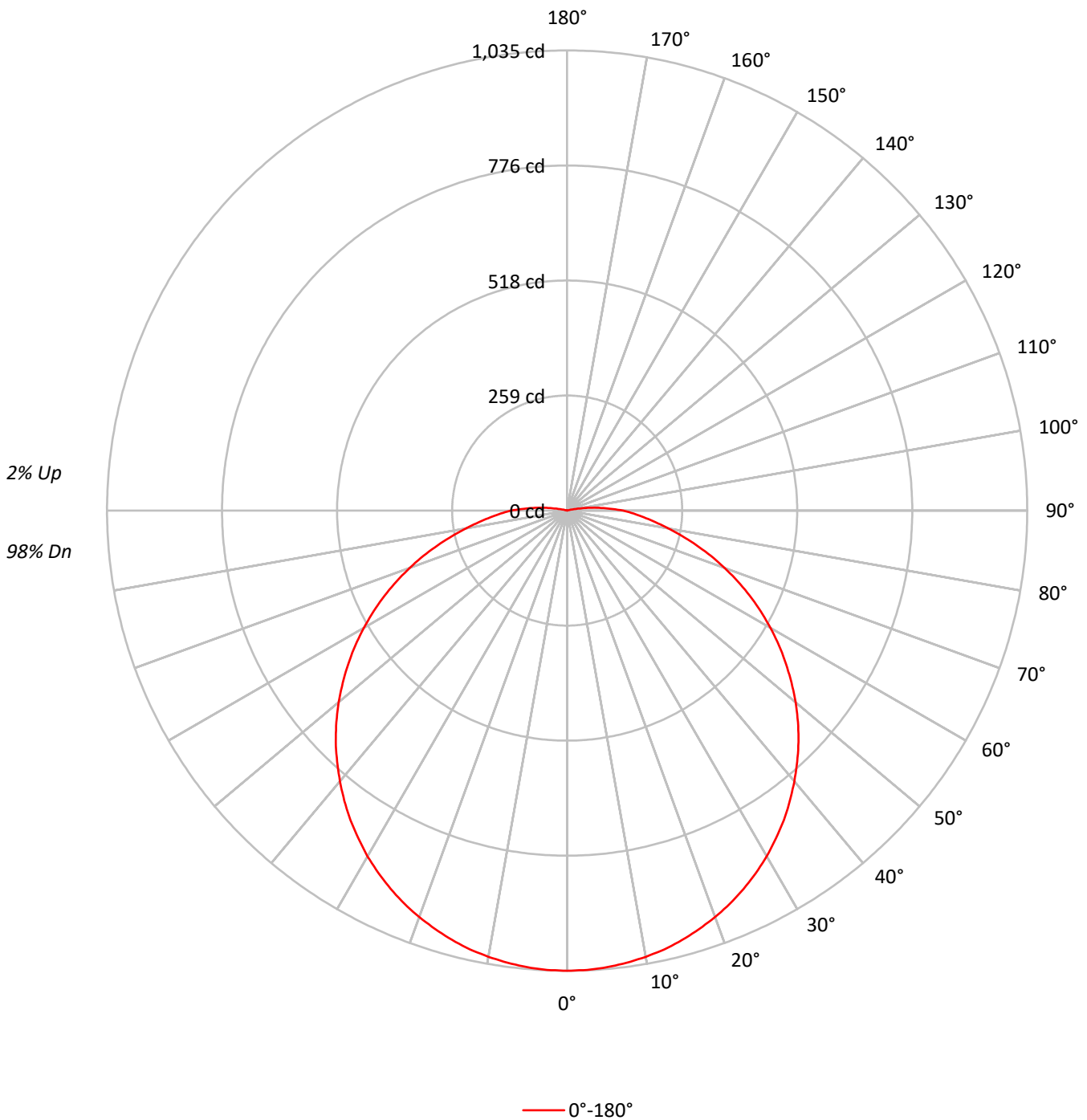
**Summary**

Lumens per Lamp: 8800 (1 lamp)  
Luminaire Lumens: 3495.9 lumens  
Efficiency: 39.7%  
Efficacy: 30.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.98' x L: 0.98' x H: 0.2')  
CIE Type: Direct

Input Watts (W): 115  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	47	47	47	47	46	46	46	46	44	44	44	42	42	42	40	40	40	39
1	42	40	38	36	41	39	37	35	37	36	34	35	34	33	34	33	32	31
2	38	34	31	29	37	34	31	28	32	30	28	30	29	27	29	28	26	25
3	35	30	26	24	33	29	26	23	28	25	23	27	24	22	25	23	22	21
4	32	26	23	20	30	26	22	20	25	22	19	24	21	19	23	20	19	18
5	29	24	20	17	28	23	19	17	22	19	17	21	18	16	20	18	16	15
6	27	21	17	15	26	21	17	15	20	17	14	19	16	14	18	16	14	13
7	25	19	15	13	24	19	15	13	18	15	13	17	15	13	17	14	12	12
8	23	17	14	11	22	17	14	11	16	13	11	16	13	11	15	13	11	10
9	21	16	13	10	21	16	12	10	15	12	10	15	12	10	14	12	10	9
10	20	15	11	9	20	14	11	9	14	11	9	14	11	9	13	11	9	8

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

	0°
0°	11600
5°	11396
10°	11194
15°	11002
20°	10803
25°	10603
30°	10397
35°	10176
40°	9931
45°	9688
50°	9411
55°	9093
60°	8744
65°	8356
70°	7895
75°	7399
80°	6911
85°	6675



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	98.0	2.8	1.1
10°-20°	282.4	8.1	3.2
20°-30°	433.0	12.4	4.9
30°-40°	531.7	15.2	6.0
40°-50°	567.7	16.2	6.5
50°-60°	537.4	15.4	6.1
60°-70°	448.4	12.8	5.1
70°-80°	319.1	9.1	3.6
80°-90°	190.9	5.5	2.2
90°-100°	79.6	2.3	0.9
100°-110°	7.6	0.2	0.1
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°	813.4	23.3	9.2
0°-40°	1345.1	38.5	15.3
0°-60°	2450.2	70.1	27.8
0°-90°	3408.6	97.5	38.7
90°-120°	87.3	2.5	1.0
90°-150°	87.3	2.5	1.0
90°-180°	87.0	2.5	1.0
0°-180°	3495.9	100.0	39.7

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1035	
5°	1031	98
15°	1000	282
25°	939	433
35°	850	532
45°	736	568
55°	601	537
65°	453	448
75°	301	319
85°	173	153
90°	126	68
95°	72	49
105°	5	8
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°	1035
2.5°	1034
5°	1031
7.5°	1026
10°	1019
12.5°	1011
15°	1000
17.5°	987
20°	973
22.5°	957
25°	939
27.5°	919
30°	898
32.5°	874
35°	850
37.5°	823
40°	795
42.5°	766
45°	736
47.5°	704
50°	671
52.5°	636
55°	601
57.5°	565
60°	528
62.5°	491
65°	453
67.5°	415
70°	376
72.5°	339
75°	301
77.5°	265
80°	231
82.5°	200
85°	173
87.5°	149
90°	126
92.5°	97
95°	72
97.5°	47
100°	25
102.5°	11
105°	5
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)