

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: H32027

Luminaire Tested: **M200-25**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H32027
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: LU50/D/MED 50 WATTS 3800 LUMENS
ED-17 DIFFUSED HPS
Ballast/Driver: -

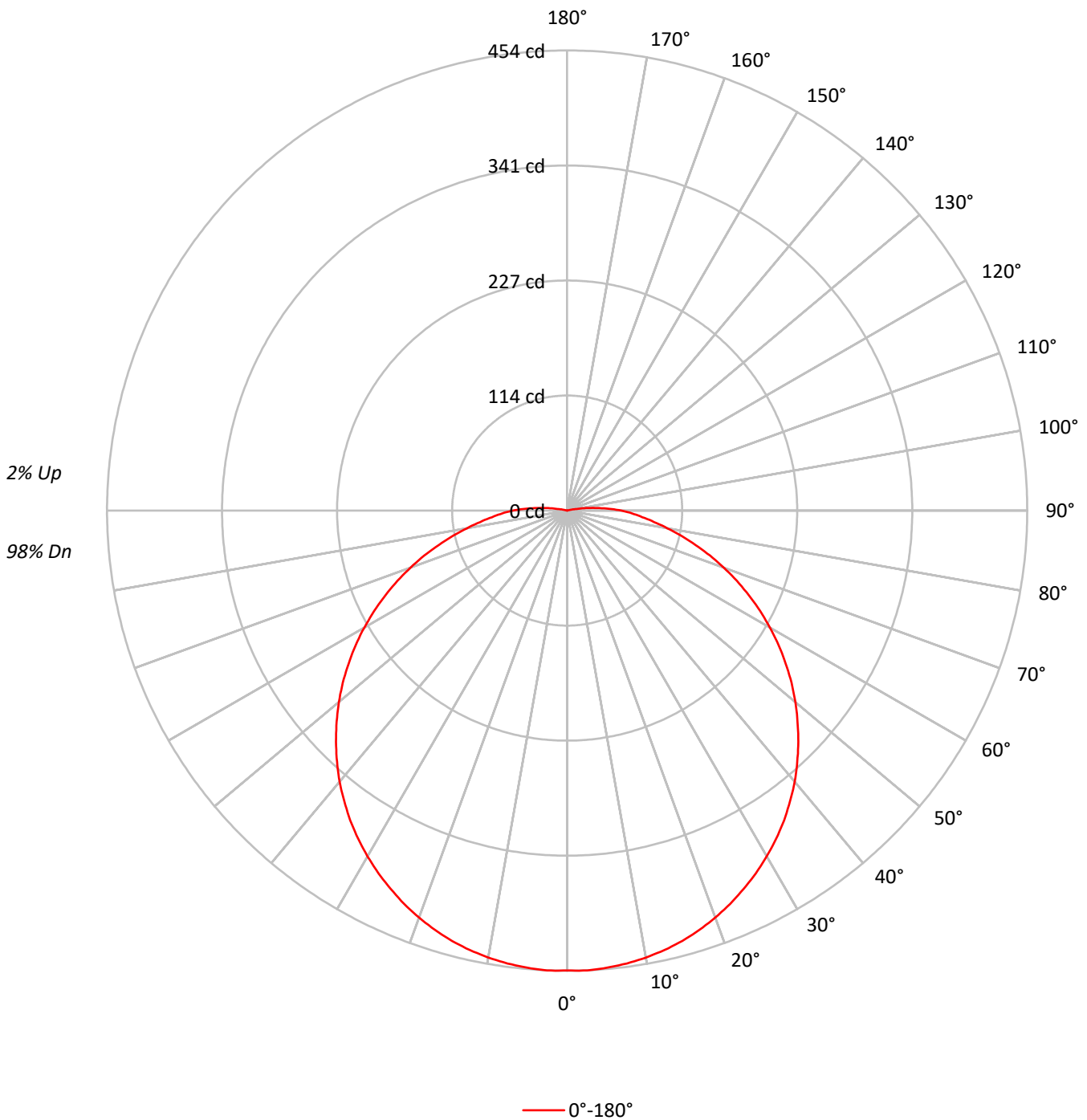
Summary

Lumens per Lamp: 3800 (1 lamp)
Luminaire Lumens: 1527.9 lumens
Efficiency: 40.2%
Efficacy: 25.5 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): 60
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	48	48	48	48	46	46	46	46	44	44	44	42	42	42	40	40	40	39
1	43	40	38	37	42	39	38	36	38	36	35	36	35	33	34	33	32	31
2	39	35	32	29	37	34	31	29	32	30	28	31	29	27	30	28	26	25
3	35	30	27	24	34	30	26	24	28	25	23	27	25	23	26	24	22	21
4	32	27	23	20	31	26	23	20	25	22	20	24	21	19	23	21	19	18
5	29	24	20	17	28	23	20	17	22	19	17	21	19	17	21	18	16	15
6	27	21	18	15	26	21	17	15	20	17	15	19	17	14	19	16	14	13
7	25	19	16	13	24	19	16	13	18	15	13	18	15	13	17	14	13	12
8	23	18	14	12	23	17	14	12	17	14	11	16	13	11	16	13	11	10
9	22	16	13	10	21	16	13	10	15	12	10	15	12	10	14	12	10	9
10	20	15	12	9	20	15	12	9	14	11	9	14	11	9	13	11	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5086
5°	5004
10°	4919
15°	4835
20°	4744
25°	4651
30°	4560
35°	4467
40°	4363
45°	4247
50°	4123
55°	3984
60°	3829
65°	3651
70°	3452
75°	3223
80°	3001
85°	2875



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	43.1	2.8	1.1
10°-20°	124.1	8.1	3.3
20°-30°	190.0	12.4	5.0
30°-40°	233.4	15.3	6.1
40°-50°	248.9	16.3	6.6
50°-60°	235.5	15.4	6.2
60°-70°	196.0	12.8	5.2
70°-80°	139.0	9.1	3.7
80°-90°	82.3	5.4	2.2
90°-100°	33.1	2.2	0.9
100°-110°	2.4	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°	357.2	23.4	9.4
0°-40°	590.6	38.7	15.5
0°-60°	1075.0	70.4	28.3
0°-90°	1492.4	97.7	39.3
90°-120°	35.5	2.3	0.9
90°-150°	35.5	2.3	0.9
90°-180°	36.0	2.4	0.9
0°-180°	1527.9	100.0	40.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	454	
5°	453	43
15°	440	124
25°	412	190
35°	373	233
45°	323	249
55°	263	236
65°	198	196
75°	131	139
85°	74	66
90°	54	29
95°	30	20
105°	1	2
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°	453.8
2.5°	454.2
5°	452.7
7.5°	450.7
10°	447.8
12.5°	444.1
15°	439.5
17.5°	433.9
20°	427.3
22.5°	420.1
25°	411.9
27.5°	403.4
30°	393.9
32.5°	383.8
35°	373.1
37.5°	361.3
40°	349.3
42.5°	336.1
45°	322.6
47.5°	308.4
50°	294.0
52.5°	279.0
55°	263.3
57.5°	247.6
60°	231.2
62.5°	214.7
65°	197.9
67.5°	181.1
70°	164.4
72.5°	147.8
75°	131.1
77.5°	115.4
80°	100.3
82.5°	86.6
85°	74.5
87.5°	64.0
90°	53.6
92.5°	41.2
95°	29.7
97.5°	18.9
100°	9.4
102.5°	3.5
105°	0.7
107.5°	0.0
110°	0.0



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

(END OF REPORT)