

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: H32030

Luminaire Tested: **M200-123P**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H32030
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 LENS
Light Source: LU50/D/MED 50 WATTS 3800 LUMENS
ED-17 DIFFUSED HPS
Ballast/Driver: -

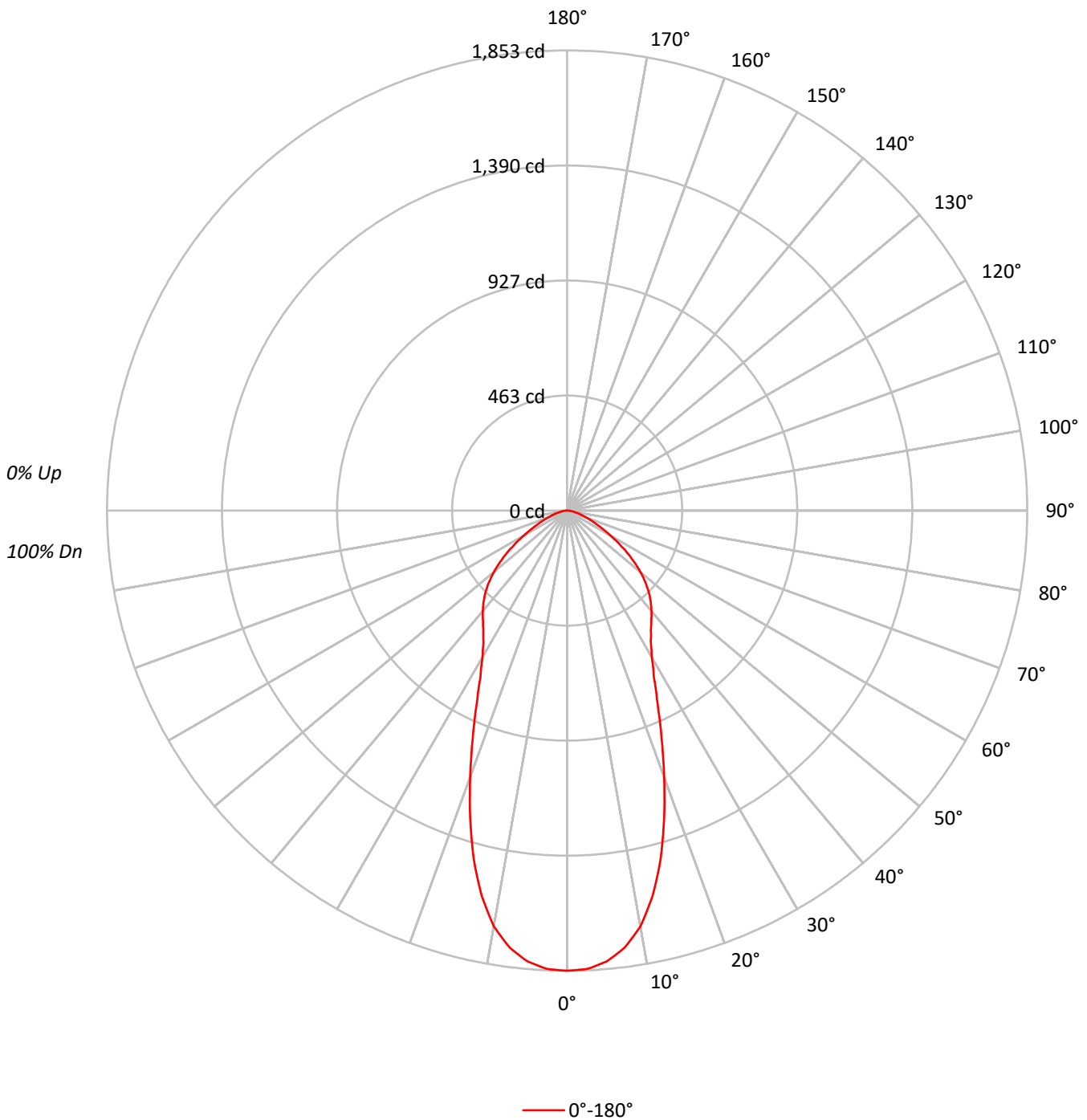
Summary

Lumens per Lamp: 3800 (1 lamp)
Luminaire Lumens: 2161.6 lumens
Efficiency: 56.9%
Efficacy: 36.0 lumens/watt
Spacing Criteria (0/90/45): 0.74 / 0.74 / 0.8
Luminous Opening: Rectangular (W 0.8' x L: 0.8' x H: 0')
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	68	68	68	68	66	66	66	66	63	63	63	61	61	61	58	58	58	57
1	63	61	59	58	62	60	58	57	58	56	55	55	54	53	53	52	52	51
2	59	55	52	49	57	54	51	49	52	50	48	50	48	47	49	47	46	44
3	55	50	46	43	53	49	45	43	47	44	42	46	43	41	44	42	40	39
4	51	45	41	38	50	44	41	38	43	40	37	42	39	37	41	38	36	35
5	47	41	37	34	46	41	37	34	40	36	33	38	35	33	38	35	33	32
6	44	38	34	30	43	37	33	30	36	33	30	36	32	30	35	32	30	29
7	42	35	31	28	41	35	30	28	34	30	27	33	30	27	32	29	27	26
8	39	32	28	25	38	32	28	25	31	28	25	31	27	25	30	27	25	24
9	37	30	26	23	36	30	26	23	29	26	23	29	26	23	28	25	23	22
10	35	28	24	22	34	28	24	22	28	24	22	27	24	22	27	24	21	21

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	31165
5°	30777
10°	29033
15°	25317
20°	20422
25°	15996
30°	13225
35°	12073
40°	11592
45°	11060
50°	10100
55°	8591
60°	6828
65°	5253
70°	4081
75°	3184
80°	2518
85°	2123



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	170.1	7.9	4.5
10°-20°	400.2	18.5	10.5
20°-30°	401.4	18.6	10.6
30°-40°	371.4	17.2	9.8
40°-50°	356.1	16.5	9.4
50°-60°	262.1	12.1	6.9
60°-70°	134.5	6.2	3.5
70°-80°	53.9	2.5	1.4
80°-90°	12.0	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°	971.7	45.0	25.6
0°-40°	1343.1	62.1	35.3
0°-60°	1961.3	90.7	51.6
0°-90°	2161.6	100.0	56.9
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°	2161.6	100.0	56.9

CANDELA DISTRIBUTION:

	0°	Flux
0°	1853	
5°	1823	170
15°	1454	400
25°	862	401
35°	588	371
45°	465	356
55°	293	262
65°	132	134
75°	49	54
85°	11	12
90°	0	0
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°	1853
2.5°	1848
5°	1823
7.5°	1775
10°	1700
12.5°	1590
15°	1454
17.5°	1299
20°	1141
22.5°	993
25°	862
27.5°	757
30°	681
32.5°	627
35°	588
37.5°	557
40°	528
42.5°	498
45°	465
47.5°	427
50°	386
52.5°	341
55°	293
57.5°	247
60°	203
62.5°	164
65°	132
67.5°	106
70°	83
72.5°	64
75°	49
77.5°	37
80°	26
82.5°	17
85°	11
87.5°	3
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)