

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: H32018

Luminaire Tested: **M200-20P**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H32018
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: M200-20P
Description: HALO 13" SQ. RECESSED HID
SPECULAR REFLECTOR ALBALITE TRIM
Light Source: LU100/D/MAD 100 WATTS 8800 LUMENS
ED-17 DIFFUSED HPS
Ballast/Driver: -

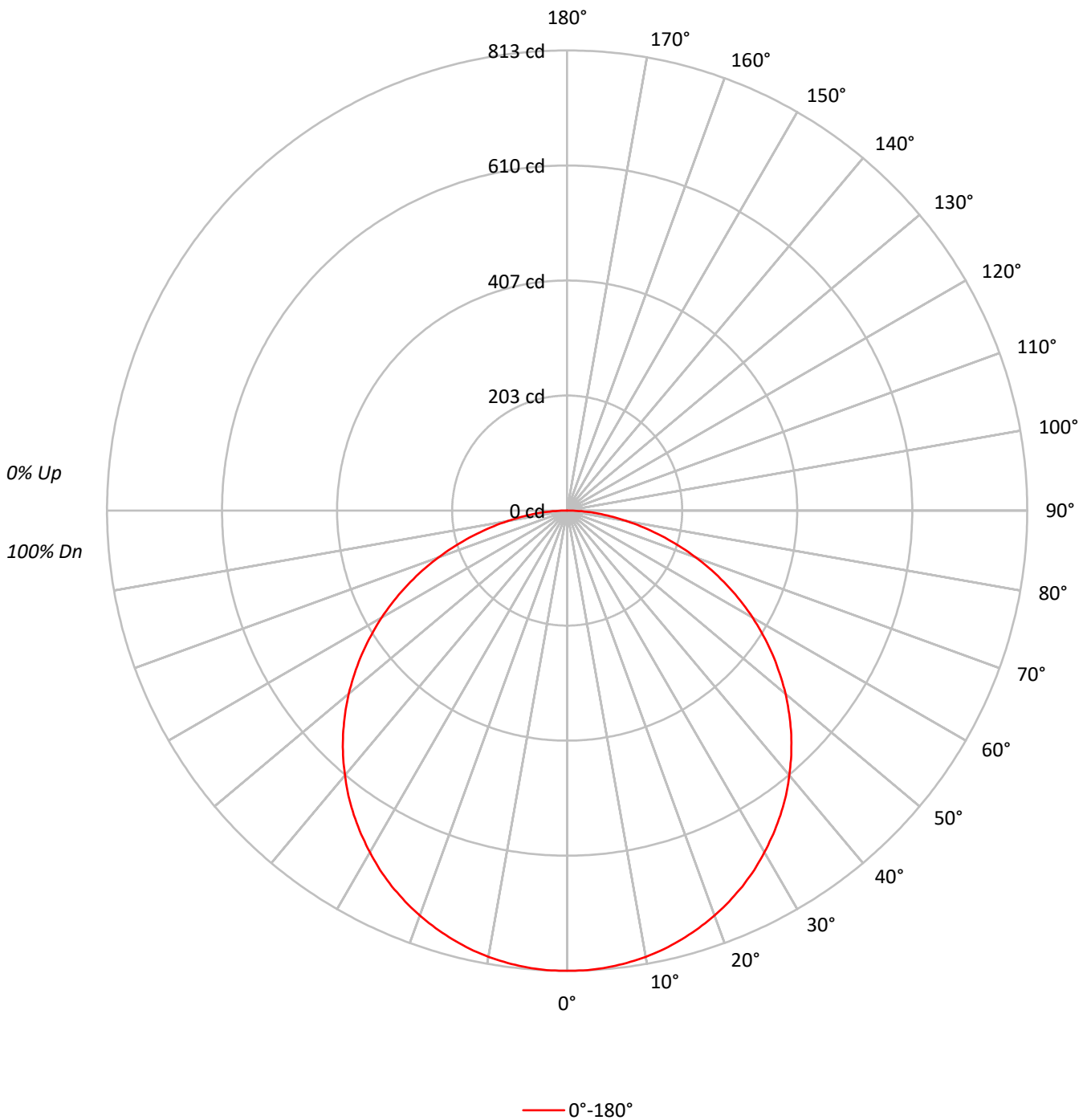
Summary

Lumens per Lamp: 8800 (1 lamp)
Luminaire Lumens: 2421.0 lumens
Efficiency: 27.5%
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Rectangular (W 0.72' x L: 0.72' 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	33	33	33	33	32	32	32	32	31	31	31	29	29	29	28	28	28	28
1	30	28	27	26	29	28	27	26	27	26	25	26	25	24	25	24	23	23
2	27	25	23	21	26	24	22	21	23	22	20	22	21	20	21	20	19	19
3	25	22	19	17	24	21	19	17	20	19	17	20	18	17	19	18	16	16
4	22	19	17	15	22	19	16	15	18	16	14	17	16	14	17	15	14	13
5	21	17	15	13	20	17	14	13	16	14	12	16	14	12	15	13	12	12
6	19	15	13	11	19	15	13	11	15	12	11	14	12	11	14	12	11	10
7	18	14	11	10	17	14	11	10	13	11	10	13	11	10	12	11	9	9
8	16	13	10	9	16	12	10	9	12	10	9	12	10	9	11	10	8	8
9	15	12	9	8	15	11	9	8	11	9	8	11	9	8	11	9	8	7
10	14	11	8	7	14	11	8	7	10	8	7	10	8	7	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16881
5°	16891
10°	16878
15°	16855
20°	16824
25°	16784
30°	16714
35°	16651
40°	16556
45°	16447
50°	16277
55°	16033
60°	15722
65°	15295
70°	14679
75°	13807
80°	12806
85°	12174



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	77.0	3.2	0.9
10°-20°	221.4	9.1	2.5
20°-30°	337.6	13.9	3.8
30°-40°	410.9	17.0	4.7
40°-50°	431.7	17.8	4.9
50°-60°	395.6	16.3	4.5
60°-70°	307.8	12.7	3.5
70°-80°	182.6	7.5	2.1
80°-90°	56.3	2.3	0.6
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°	636.0	26.3	7.2
0°-40°	1047.0	43.2	11.9
0°-60°	1874.3	77.4	21.3
0°-90°	2421.0	100.0	27.5
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°	2421.0	100.0	27.5

CANDELA DISTRIBUTION:

	0°	Flux
0°	813	
5°	810	77
15°	784	221
25°	733	338
35°	657	411
45°	560	432
55°	443	396
65°	311	308
75°	172	183
85°	51	53
90°	0	4
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°	813.0
2.5°	812.9
5°	810.4
7.5°	806.3
10°	800.5
12.5°	793.3
15°	784.1
17.5°	773.4
20°	761.4
22.5°	747.6
25°	732.6
27.5°	715.8
30°	697.1
32.5°	677.6
35°	656.9
37.5°	634.9
40°	610.8
42.5°	586.1
45°	560.1
47.5°	532.2
50°	503.9
52.5°	473.3
55°	442.9
57.5°	411.1
60°	378.6
62.5°	345.4
65°	311.3
67.5°	276.9
70°	241.8
72.5°	207.0
75°	172.1
77.5°	138.8
80°	107.1
82.5°	76.6
85°	51.1
87.5°	25.7
90°	0.0
92.5°	0.0
95°	0.0
97.5°	0.0
100°	0.0
102.5°	0.0
105°	0.0
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)