

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: H20095

Luminaire Tested: **L1768P**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H20095
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L1768P
Description: HALO 5 IN SCOOP WALL WASHER
IN VERTICAL POSITION
Light Source: 65BR30/FL55 65 WATTS 635 LUMENS
Ballast/Driver: -

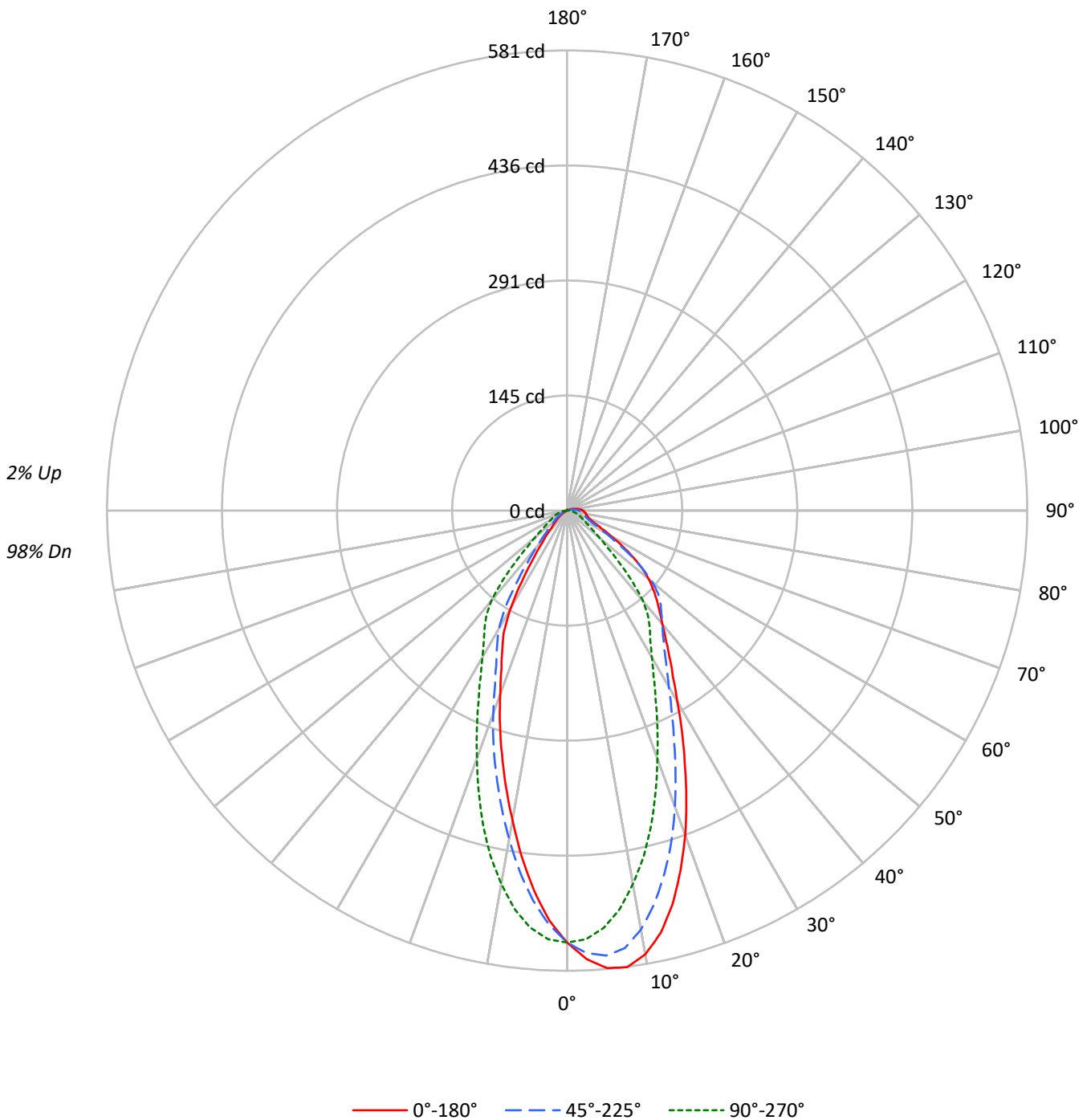
Summary

Lumens per Lamp: 635 (1 lamp)
Luminaire Lumens: 562.2 lumens
Efficiency: 88.5%
Efficacy: 8.1 lumens/watt
Spacing Criteria (0/90/45): 0.75 / 0.74 / 0.83
Luminous Opening: (L: 0 ' x W: -0.42 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 69
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	105	105	105	105	102	102	102	102	97	97	97		93	93	93		89	89	89	87
1	98	95	92	89	96	93	90	88	89	87	85		85	84	82		82	81	79	77
2	92	86	82	78	90	85	80	77	81	78	75		78	75	73		75	73	71	69
3	86	79	73	69	84	77	72	68	75	70	67		72	68	65		70	67	64	62
4	80	72	66	61	79	71	65	61	69	64	60		67	62	59		65	61	58	57
5	75	66	60	55	74	65	60	55	64	58	54		62	57	54		60	56	53	52
6	71	61	55	51	69	61	55	50	59	54	50		57	53	49		56	52	49	47
7	67	57	51	46	65	56	50	46	55	50	46		54	49	45		52	48	45	44
8	63	53	47	43	62	53	47	43	51	46	42		50	46	42		49	45	42	40
9	60	50	44	40	59	49	44	40	48	43	39		47	43	39		46	42	39	37
10	57	47	41	37	56	46	41	37	45	40	37		45	40	37		44	39	36	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	48.9	8.7	7.7
10°-20°	114.2	20.3	18.0
20°-30°	123.3	21.9	19.4
30°-40°	103.5	18.4	16.3
40°-50°	75.2	13.4	11.8
50°-60°	44.2	7.9	7.0
60°-70°	20.1	3.6	3.2
70°-80°	12.6	2.2	2.0
80°-90°	9.1	1.6	1.4
90°-100°	5.7	1.0	0.9
100°-110°	2.6	0.5	0.4
110°-120°	0.8	0.1	0.1
120°-130°	0.4	0.1	0.1
130°-140°	0.4	0.1	0.1
140°-150°	0.4	0.1	0.1
150°-160°	0.3	0.1	0.1
160°-170°	0.2	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-30°	286.5	51.0	45.1
0°-40°	390.0	69.4	61.4
0°-60°	509.4	90.6	80.2
0°-90°	551.2	98.0	86.8
90°-120°	9.1	1.6	1.4
90°-150°	10.3	1.8	1.6
90°-180°	11.0	2.0	1.7
0°-180°	562.2	100.0	88.5

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	545	545	545	545	545	
5°	580	564	529	494	481	55
15°	514	474	410	345	318	143
25°	351	319	265	211	194	162
35°	225	214	182	112	76	142
45°	160	167	93	34	22	124
55°	100	96	33	16	9	89
65°	40	33	19	5	0	42
75°	26	23	11	0	0	28
85°	22	18	4	0	0	18
90°	20	15	1	0	0	11
95°	17	11	0	0	0	13
105°	9	4	0	0	0	10
115°	2	0	0	0	0	3
125°	0	0	0	0	0	0
135°	0	1	0	0	0	0
145°	0	1	1	1	1	0
155°	1	1	1	1	1	0
165°	1	1	1	1	1	0
175°	1	1	1	1	1	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3	545.3
2.5°	566.9	564.9	559.2	551.2	541.8	532.7	523.1	519.3	517.8
5°	579.8	575.7	564.0	547.7	528.9	510.2	494.2	484.6	481.1
7.5°	581.3	574.1	557.1	532.9	507.4	481.2	459.3	443.2	440.0
10°	568.8	559.3	537.0	509.7	478.4	448.2	421.4	403.6	397.1
12.5°	545.9	534.0	508.4	480.2	446.7	413.2	383.5	363.4	356.8
15°	514.2	500.2	474.5	446.1	410.4	375.1	345.1	325.0	318.2
17.5°	476.1	461.6	437.9	407.9	371.6	337.6	309.4	289.7	282.3
20°	435.9	422.3	397.5	367.4	333.0	300.9	272.7	253.0	246.7
22.5°	393.0	381.3	357.5	327.7	297.6	266.8	238.1	221.7	216.6
25°	351.2	340.6	319.3	292.6	264.7	235.9	211.2	198.2	193.9
27.5°	313.4	304.2	285.5	261.6	236.7	210.7	191.6	178.2	173.0
30°	277.9	272.3	256.8	235.6	213.5	192.4	172.5	152.0	143.2
32.5°	248.7	244.9	233.3	214.8	195.6	175.9	145.6	117.4	107.4
35°	225.1	223.1	213.8	198.1	181.8	154.4	111.6	84.6	76.0
37.5°	204.5	203.7	198.6	185.0	167.8	123.9	81.2	59.6	53.1
40°	187.2	187.8	186.4	174.6	149.0	94.0	58.9	44.2	39.9
42.5°	172.4	175.1	176.2	164.6	122.0	68.9	45.0	32.6	28.6
45°	160.3	163.6	166.6	150.5	93.4	52.5	33.6	24.8	22.5
47.5°	147.4	152.1	155.8	128.4	69.0	40.7	26.1	20.1	18.3
50°	134.5	138.8	140.5	101.2	53.3	31.9	21.7	16.7	15.1
52.5°	118.9	121.9	119.7	74.5	41.9	26.3	18.4	13.7	12.2
55°	100.0	101.7	95.9	55.3	33.4	22.6	15.6	10.8	9.2
57.5°	80.9	81.2	72.2	43.2	27.8	19.7	13.0	8.0	6.3
60°	63.3	62.7	53.1	34.5	24.0	17.0	10.2	4.9	3.1
62.5°	49.0	48.7	41.1	28.7	21.3	14.5	7.4	1.9	0.5
65°	40.0	39.2	33.2	25.2	19.0	12.0	4.7	0.4	0.4
67.5°	33.8	32.9	28.6	23.1	16.9	9.5	2.2	0.4	0.4
70°	29.9	29.2	25.9	21.2	14.8	7.0	0.6	0.4	0.4
72.5°	27.8	27.0	24.3	19.5	12.9	5.0	0.4	0.4	0.4
75°	26.4	25.6	22.8	18.0	11.0	3.1	0.4	0.4	0.4
77.5°	25.1	24.3	21.5	16.4	9.1	1.5	0.4	0.4	0.4
80°	24.1	23.3	20.3	14.8	7.3	0.5	0.4	0.4	0.4
82.5°	23.1	22.2	19.1	13.3	5.6	0.4	0.4	0.4	0.4
85°	22.1	21.1	17.7	11.6	4.1	0.4	0.4	0.4	0.4
87.5°	21.0	20.0	16.3	9.9	2.4	0.4	0.4	0.4	0.4
90°	19.8	18.6	14.7	8.2	0.9	0.4	0.4	0.4	0.4
92.5°	18.4	17.1	13.0	6.6	0.5	0.4	0.4	0.4	0.4
95°	16.7	15.4	11.2	5.0	0.5	0.4	0.4	0.4	0.4
97.5°	14.9	13.6	9.5	3.5	0.5	0.4	0.4	0.5	0.4
100°	13.0	11.6	7.6	1.8	0.5	0.5	0.4	0.5	0.4
102.5°	11.0	9.6	5.8	0.5	0.5	0.5	0.5	0.5	0.4
105°	8.9	7.7	4.3	0.5	0.5	0.5	0.5	0.5	0.4
107.5°	7.1	5.9	2.7	0.5	0.5	0.5	0.5	0.5	0.5
110°	5.4	4.4	1.1	0.5	0.5	0.5	0.5	0.5	0.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	3.9	2.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115°	2.3	1.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
117.5°	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
122.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
127.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
130°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
132.5°	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5
135°	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
137.5°	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
140°	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
142.5°	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145°	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
147.5°	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
150°	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
152.5°	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
157.5°	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7
160°	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
167.5°	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
170°	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
172.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
175°	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
177.5°	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)