

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P303266

Luminaire Tested: **HHA19089BLE40A 4000K**

Test Date: 06/14/2019



Test Information

Test Method: LM-41-14
Report Number: P303266
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-359-1)
Test Lab: INNOVATION CENTER(G1)
Test Date: 06/14/2019
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HHA19089BLE40A 4000K
Description: HALO A19 BLE COLOR TUNING BULB
Light Source: 90 CRI LEDs
Ballast/Driver: ELECTRICAL DRIVER

Summary

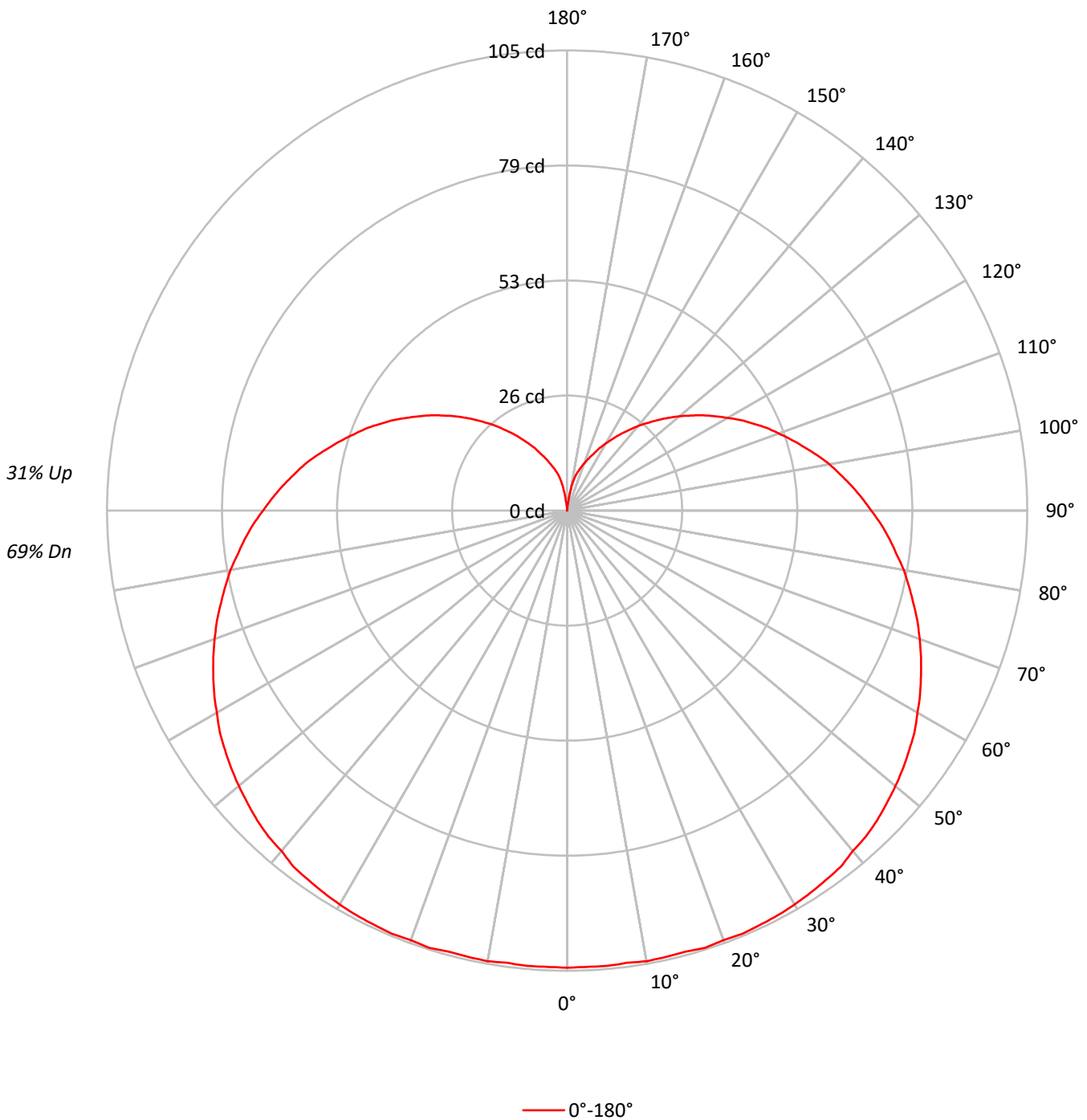
Lumens per Lamp: N/A
Luminaire Lumens: 827.2 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.68
Luminous Opening: Vertical Cylinder (Dia: 0.19' x H: 0.15')
CIE Type: Semi-Direct

Input Watts (W): 9.4
Input Voltage (V): 120
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	112	112	112	112	105	105	105	105	94	94	94		83	83	83		74	74	74	69
1	97	91	85	80	91	85	80	76	75	71	67		66	63	60		58	55	53	48
2	87	77	68	62	81	72	65	58	63	57	52		55	51	46		48	44	41	37
3	78	66	57	49	73	62	54	47	55	48	42		48	42	37		41	37	33	29
4	71	58	48	40	66	54	45	38	48	40	35		42	36	31		36	31	27	24
5	65	51	41	34	60	48	39	32	42	35	29		37	31	26		32	27	23	20
6	59	45	36	29	55	43	34	28	38	30	25		33	27	22		29	24	20	17
7	55	41	31	25	51	38	30	24	34	27	22		30	24	19		26	21	17	15
8	51	37	28	22	47	35	27	21	31	24	19		27	21	17		24	19	15	13
9	47	33	25	19	44	32	24	19	28	21	17		25	19	15		22	17	13	11
10	44	31	23	17	41	29	22	16	26	19	15		23	17	14		20	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	40660
5°	37561
10°	35183
15°	33235
20°	31805
25°	30690
30°	29728
35°	28918
40°	28183
45°	27700
50°	27205
55°	26828
60°	26503
65°	26311
70°	26222
75°	26237
80°	26466
85°	26795



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.9	1.2
10°-20°	29.6	3.6
20°-30°	48.2	5.8
30°-40°	64.6	7.8
40°-50°	77.3	9.3
50°-60°	85.4	10.3
60°-70°	88.4	10.7
70°-80°	86.5	10.5
80°-90°	80.5	9.7
90°-100°	71.0	8.6
100°-110°	59.3	7.2
110°-120°	46.6	5.6
120°-130°	34.0	4.1
130°-140°	22.7	2.7
140°-150°	13.5	1.6
150°-160°	6.8	0.8
160°-170°	2.6	0.3
170°-180°	0.2	0.0
0°-30°	87.8	10.6
0°-40°	152.4	18.4
0°-60°	315.0	38.1
0°-90°	570.4	69.0
90°-120°	177.0	21.4
90°-150°	247.3	29.9
90°-180°	257.0	31.1
0°-180°	827.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	104	
5°	104	10
15°	104	30
25°	104	48
35°	103	65
45°	100	77
55°	95	85
65°	89	88
75°	82	87
85°	74	61
90°	69	38
95°	65	52
105°	56	59
115°	47	47
125°	38	34
135°	29	23
145°	21	13
155°	14	7
165°	9	3
175°	0	0
180°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	104.3
2.5°	104.2
5°	104.3
7.5°	104.1
10°	104.4
12.5°	104.3
15°	104.2
17.5°	104.6
20°	104.3
22.5°	104.5
25°	104.3
27.5°	104.1
30°	103.8
32.5°	103.4
35°	102.9
37.5°	102.5
40°	101.4
42.5°	100.9
45°	100.0
47.5°	98.9
50°	97.8
52.5°	96.6
55°	95.3
57.5°	94.0
60°	92.3
62.5°	90.8
65°	89.1
67.5°	87.4
70°	85.6
72.5°	83.8
75°	81.8
77.5°	79.9
80°	78.0
82.5°	75.8
85°	73.8
87.5°	71.7
90°	69.4
92.5°	67.3
95°	65.1
97.5°	62.9
100°	60.8
102.5°	58.4
105°	56.0
107.5°	53.7
110°	51.4



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	49.3
115°	46.9
117.5°	44.7
120°	42.3
122.5°	40.0
125°	37.9
127.5°	35.6
130°	33.5
132.5°	31.3
135°	29.2
137.5°	27.1
140°	25.2
142.5°	23.1
145°	21.3
147.5°	19.4
150°	17.7
152.5°	16.1
155°	14.3
157.5°	12.9
160°	11.5
162.5°	10.2
165°	9.0
167.5°	7.6
170°	5.3
172.5°	2.3
175°	0.0
177.5°	0.0
180°	0.0

(END OF REPORT)