

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: P123695

Luminaire Tested: **EL406935-TL402HS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123695  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13982)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: EL406935-TL402HS  
Description: HALO 4-INCH RECESSED LED DOWNLIGHT  
HAZE REFLECTOR, SOLITE® LENS AND WHITE TRIM RING  
Light Source: (1)SURFACE MOUNT LED, 3500K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

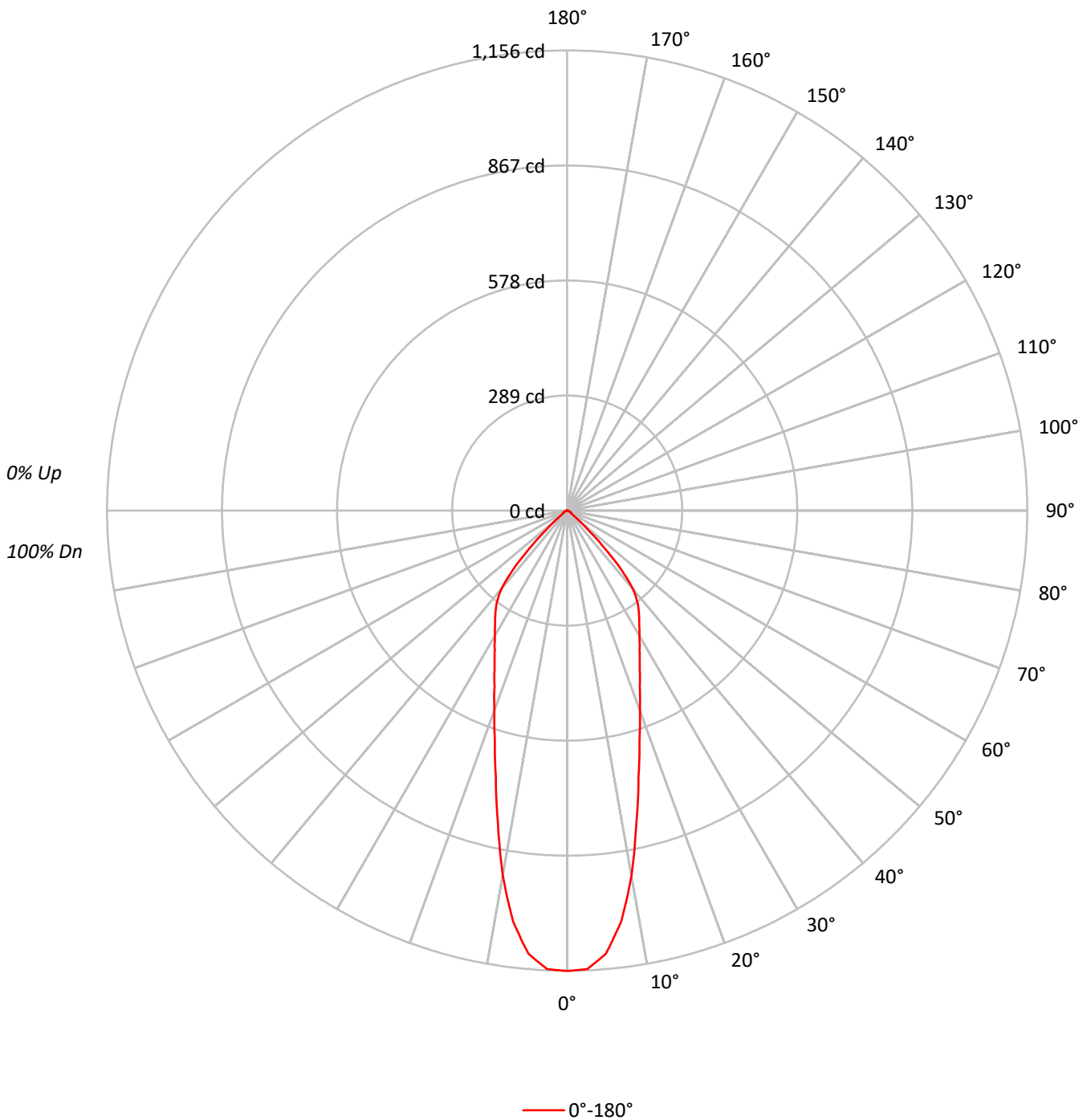
Lumens per Lamp: N/A  
Luminaire Lumens: 820.0 lumens  
Efficiency: N/A  
Efficacy: 63.1 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.71  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	100		100	99	97		97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91		94	91	89		91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83		88	85	82		86	83	80	79
4	96	88	82	77	94	87	81	77	84	80	76		82	78	75		80	77	74	73
5	91	82	76	71	89	81	75	71	79	74	70		77	73	69		76	72	69	67
6	86	76	70	65	84	76	70	65	74	69	65		73	68	64		71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60		68	63	60		67	63	60	58
8	77	67	61	57	76	67	61	56	65	60	56		64	59	56		63	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53		61	56	52		60	55	52	51
10	70	60	54	50	69	59	53	49	58	53	49		58	53	49		57	52	49	48

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	253576
5°	245982
10°	207233
15°	157118
20°	124728
25°	104232
30°	91862
35°	84109
40°	73853
45°	40190
50°	11803
55°	4970
60°	4254
65°	4462
70°	2052
75°	932
80°	0
85°	2768



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	12.3
10°-20°	195.0	23.8
20°-30°	200.3	24.4
30°-40°	195.4	23.8
40°-50°	103.8	12.7
50°-60°	14.0	1.7
60°-70°	8.3	1.0
70°-80°	2.1	0.3
80°-90°	0.6	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	495.9	60.5
0°-40°	691.3	84.3
0°-60°	809.1	98.7
0°-90°	820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	820.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1156	
5°	1118	101
15°	692	195
25°	431	200
35°	314	195
45°	130	104
55°	13	14
65°	9	8
75°	1	2
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1156.4
2.5°	1153.1
5°	1117.5
7.5°	1040.8
10°	930.7
12.5°	803.3
15°	692.1
17.5°	604.6
20°	534.5
22.5°	477.2
25°	430.8
27.5°	394.1
30°	362.8
32.5°	336.9
35°	314.2
37.5°	290.4
40°	258.0
42.5°	201.9
45°	129.6
47.5°	71.3
50°	34.6
52.5°	17.3
55°	13.0
57.5°	10.8
60°	9.7
62.5°	10.8
65°	8.6
67.5°	7.6
70°	3.2
72.5°	5.4
75°	1.1
77.5°	0.0
80°	0.0
82.5°	1.1
85°	1.1
87.5°	0.0
90°	0.0

(END OF REPORT)