

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: P123671

Luminaire Tested: **EL406935-TL410SC**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P123671  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13976)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: EL406935-TL410SC  
Description: HALO 4-INCH RECESSED LED DOWNLIGHT  
SPECULAR REFLECTOR, DIFFUSE DROP LENS AND WHITE TRIM RING  
Light Source: (1)SURFACE MOUNT LED, 3500K CCT, 90CRI  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

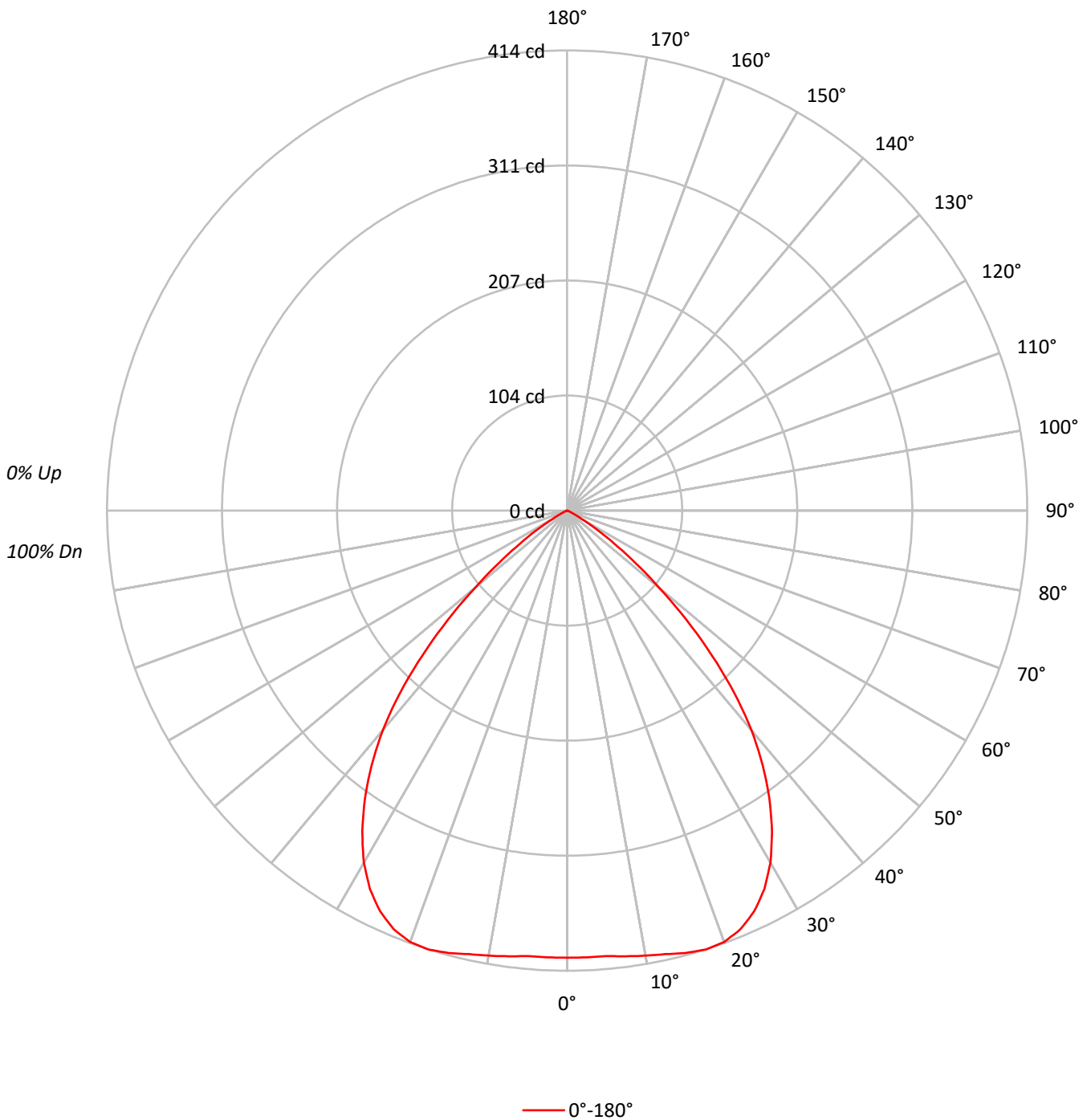
Lumens per Lamp: N/A  
Luminaire Lumens: 730.0 lumens  
Efficiency: N/A  
Efficacy: 56.2 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.25  
Luminous Opening: Circular (Dia: 0.29' x H: 0')  
CIE Type: Direct

Input Watts (W): 13  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	100	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	59	55	51	49
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

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

	0°
0°	64812
5°	65060
10°	66515
15°	68716
20°	70806
25°	70748
30°	68030
35°	62404
40°	54280
45°	41899
50°	27219
55°	14493
60°	4865
65°	1639
70°	518
75°	685
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	5.3
10°-20°	116.7	16.0
20°-30°	182.1	24.9
30°-40°	196.8	27.0
40°-50°	140.7	19.3
50°-60°	49.0	6.7
60°-70°	5.4	0.7
70°-80°	0.7	0.1
80°-90°	0.0	0.0
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°	337.3	46.2
0°-40°	534.1	73.2
0°-60°	723.9	99.2
0°-90°	730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	402	
5°	402	39
15°	412	117
25°	398	182
35°	317	197
45°	184	141
55°	52	49
65°	4	5
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	402.3
2.5°	402.3
5°	402.3
7.5°	404.4
10°	406.6
12.5°	408.7
15°	412.0
17.5°	414.1
20°	413.0
22.5°	407.7
25°	398.0
27.5°	384.0
30°	365.7
32.5°	343.1
35°	317.3
37.5°	289.3
40°	258.1
42.5°	222.7
45°	183.9
47.5°	145.2
50°	108.6
52.5°	77.4
55°	51.6
57.5°	31.2
60°	15.1
62.5°	7.5
65°	4.3
67.5°	2.2
70°	1.1
72.5°	1.1
75°	1.1
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)