

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: P123666

Luminaire Tested: **EL406930-TL410SBK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P123666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13975)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: EL406930-TL410SBK
Description: HALO 4-INCH RECESSED LED DOWNLIGHT
SPECULAR BLACK REFLECTOR, DIFFUSE DROP LENS AND WHITE TRIM RING
Light Source: (1)SURFACE MOUNT LED, 3000K CCT, 90CRI
Ballast/Driver: ELECTRONIC DRIVER

Summary

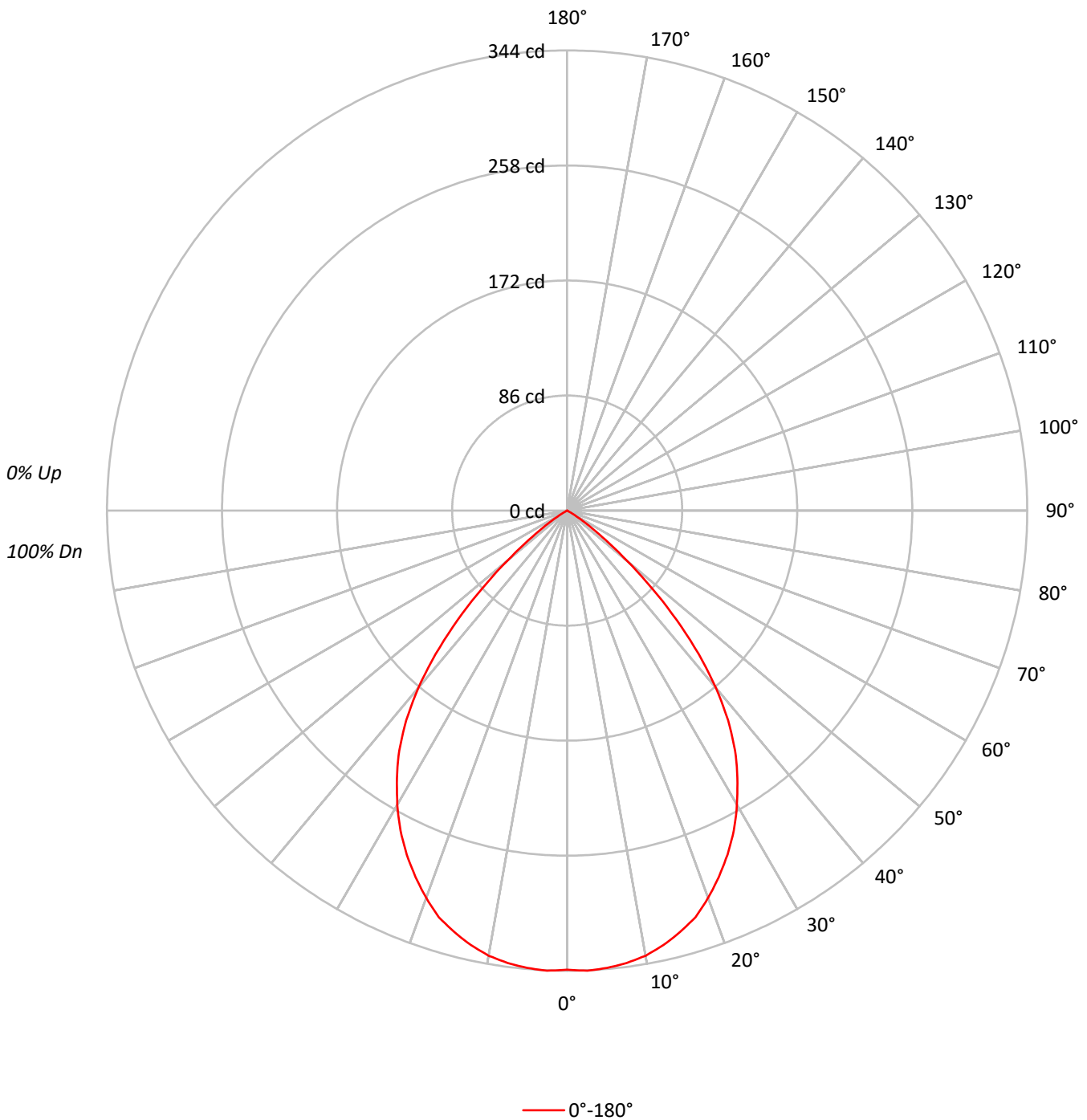
Lumens per Lamp: N/A
Luminaire Lumens: 500.0 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.15
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100		100	98	97		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		92	90	87		90	87	85	84
3	100	92	87	82	98	91	86	81	88	84	80		86	82	79		83	80	77	76
4	93	85	78	74	92	84	78	73	81	76	72		79	75	71		77	74	70	69
5	88	78	71	66	86	77	71	66	75	70	65		73	69	65		72	68	64	62
6	82	72	65	60	81	71	65	60	70	64	59		68	63	59		67	62	59	57
7	77	67	60	55	76	66	59	55	64	59	54		63	58	54		62	57	54	52
8	73	62	55	50	71	61	55	50	60	54	50		59	54	50		58	53	49	48
9	69	57	51	46	67	57	50	46	56	50	46		55	50	46		54	49	46	44
10	65	54	47	43	64	53	47	43	52	46	42		51	46	42		51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	55291
5°	55502
10°	55277
15°	54406
20°	52822
25°	50430
30°	47232
35°	43051
40°	36425
45°	26383
50°	14637
55°	5674
60°	1031
65°	0
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	6.5
10°-20°	91.8	18.4
20°-30°	130.1	26.0
30°-40°	135.2	27.0
40°-50°	88.5	17.7
50°-60°	21.2	4.2
60°-70°	0.7	0.1
70°-80°	0.0	0.0
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°	254.5	50.9
0°-40°	389.7	77.9
0°-60°	499.4	99.9
0°-90°	500.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	343	
5°	343	33
15°	326	92
25°	284	130
35°	219	135
45°	116	88
55°	20	21
65°	0	1
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	343.2
2.5°	344.3
5°	343.2
7.5°	341.1
10°	337.9
12.5°	332.6
15°	326.2
17.5°	318.8
20°	308.1
22.5°	296.4
25°	283.7
27.5°	269.9
30°	253.9
32.5°	236.9
35°	218.9
37.5°	197.6
40°	173.2
42.5°	145.6
45°	115.8
47.5°	86.1
50°	58.4
52.5°	36.1
55°	20.2
57.5°	9.6
60°	3.2
62.5°	1.1
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)