

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: P30087

Luminaire Tested: **ML706827-493SNS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P30087  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML706827-493SNS06  
Description: HALO RECESSED LED RETROFIT MODULE WITH TRIM THAT INCLUDES SPECULAR UPPER REFLECTOR, SATIN NICKLE LOWER REFLECTOR AND SOFT FOCUS LENS IN BETWEEN REFLECTORS  
Light Source: HIGH OUPUT LED PACKAGE  
LED 14 WATTS  
Ballast/Driver: 120V ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 505 (1 lamp)  
Luminaire Lumens: 506.1 lumens  
Efficiency: 100.2%  
Efficacy: 36.7 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 0.71 / 0.94  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

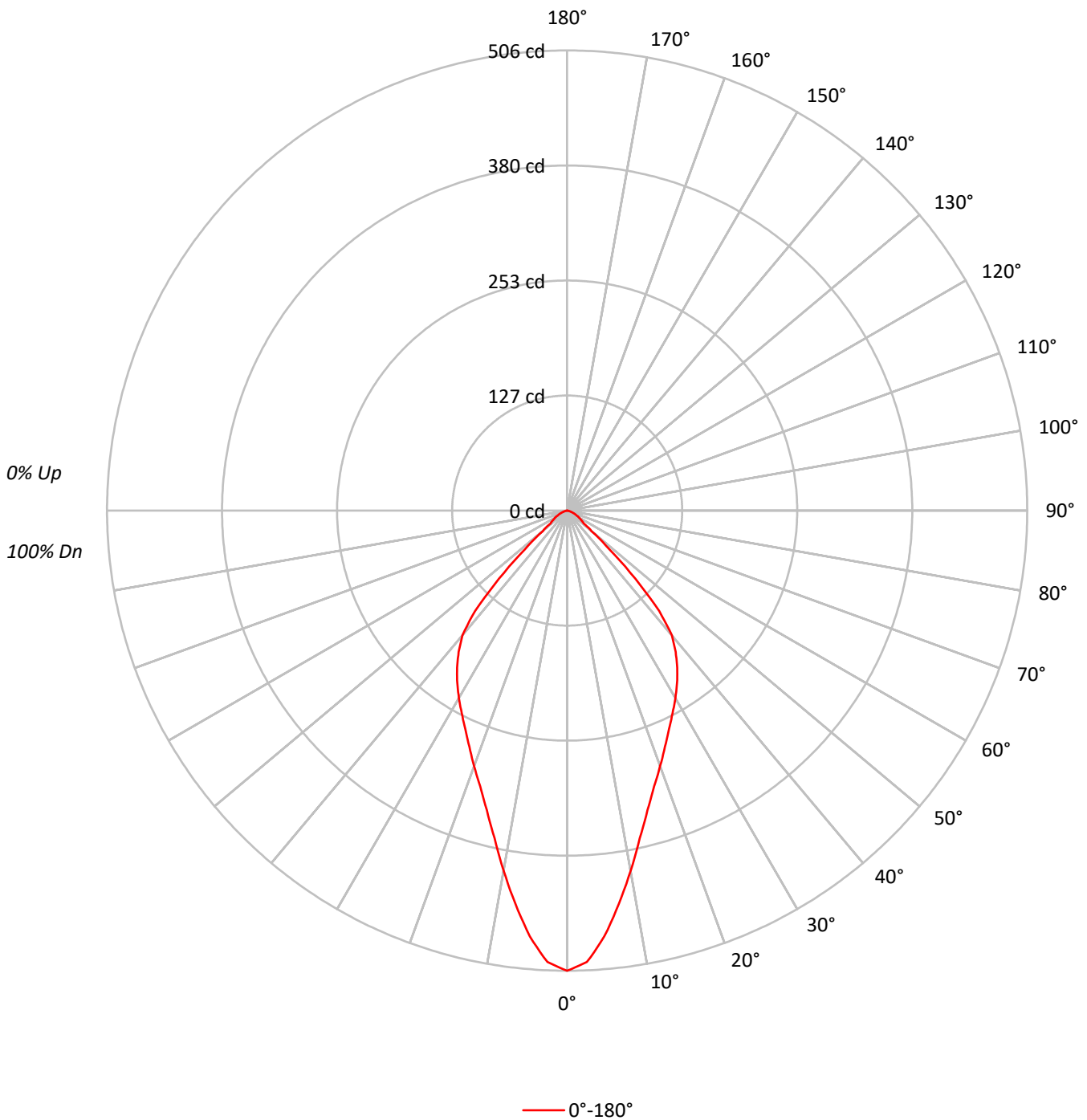
Input Watts (W): 13.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	117	117	117	117	111	111	111	107	107	107	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	100	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77	75
4	93	85	78	73	92	84	78	73	81	76	72	79	75	71	77	73	70	69
5	88	78	71	66	86	77	71	66	75	70	65	73	69	65	72	68	64	63
6	83	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	63	58	54	53
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	58	54	50	49
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	47	43	52	47	43	52	47	43	42

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

	0°
0°	39944
5°	37244
10°	32224
15°	27868
20°	25118
25°	23082
30°	21694
35°	20334
40°	18446
45°	11834
50°	4298
55°	2753
60°	2368
65°	1868
70°	1385
75°	915
80°	455
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	42.7	8.4	8.4
10°-20°	96.2	19.0	19.1
20°-30°	122.5	24.2	24.3
30°-40°	131.3	25.9	26.0
40°-50°	80.8	16.0	16.0
50°-60°	18.9	3.7	3.7
60°-70°	10.0	2.0	2.0
70°-80°	3.3	0.6	0.7
80°-90°	0.4	0.1	0.1
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	261.3	51.6	51.8
0°-40°	392.6	77.6	77.7
0°-60°	492.4	97.3	97.5
0°-90°	506.1	100.0	100.2
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	506.1	100.0	100.2

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	506	
5°	470	43
15°	341	96
25°	265	122
35°	211	131
45°	106	81
55°	20	19
65°	10	10
75°	3	3
85°	0	0
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	506
2.5°	497
5°	470
7.5°	436
10°	402
12.5°	369
15°	341
17.5°	318
20°	299
22.5°	281
25°	265
27.5°	251
30°	238
32.5°	225
35°	211
37.5°	196
40°	179
42.5°	150
45°	106
47.5°	63
50°	35
52.5°	23
55°	20
57.5°	17
60°	15
62.5°	12
65°	10
67.5°	8
70°	6
72.5°	4
75°	3
77.5°	2
80°	1
82.5°	1
85°	0
87.5°	0
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	0
115°	0
117.5°	0
120°	0
122.5°	0
125°	0
127.5°	0
130°	0
132.5°	0
135°	0
137.5°	0
140°	0
142.5°	0
145°	0
147.5°	0
150°	0
152.5°	0
155°	0
157.5°	0
160°	0
162.5°	0
165°	0
167.5°	0
170°	0
172.5°	0
175°	0
177.5°	0
180°	0

(END OF REPORT)