

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: P85546

Luminaire Tested: **ML709830ICAT120D-493PS06-H750ICAT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P85546  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21271)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML709830ICAT120D-493PS06-H750ICAT  
Description: HALO 6 INCH LED DOWNLIGHT WITH 900 Lmn MODULE, SOLITE LENS AND WHITE REFLECTOR---ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING A 500 WATT, NIST TRACEABLE, OMNI-DIRECTIONAL LAB LUMEN STANDARD IN THE GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET---  
Light Source: (1)SMT LED 3000K  
(1)CL-L241-C26L2-A 14.3 WATTS  
Ballast/Driver: (1)ELECTRONIC DRIVER  
(1)RHPS311BL-CLO

**Summary**

Lumens per Lamp: 708 (1 lamp)  
Luminaire Lumens: 711.6 lumens  
Efficiency: 100.5%  
Efficacy: 50.8 lumens/watt  
Spacing Criteria (0/90/45): 0.75 / 0.75 / 0.96  
Luminous Opening: Vertical Cylinder (Dia: 0.48' x H: 0.1')  
CIE Type: Direct

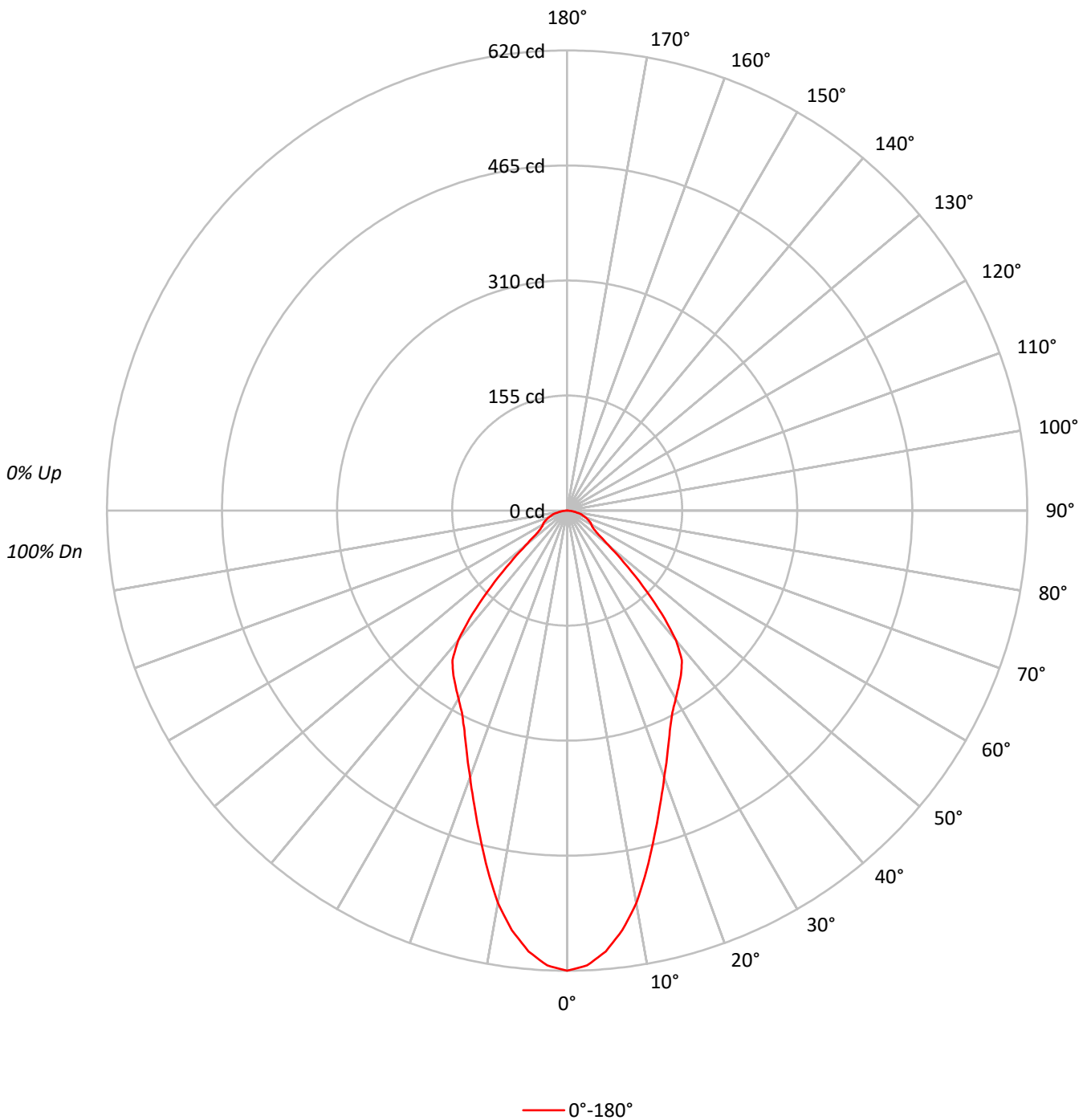
Input Watts (W): 14  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 0.12072  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	120	120	120	120	117	117	117	117	112	112	112	107	107	107	103	103	103	101
1	112	108	105	102	110	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	98	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65
5	85	75	68	62	84	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	67	60	56	65	60	55	64	59	55	53
7	75	64	57	51	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	50	44	40	49	44	40	38

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

	0°
0°	37002
5°	34912
10°	31080
15°	26168
20°	22143
25°	19174
30°	17491
35°	16453
40°	14521
45°	9651
50°	5106
55°	3342
60°	3090
65°	2915
70°	2613
75°	2246
80°	1481
85°	543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	55.0	7.7	7.8
10°-20°	127.0	17.9	17.9
20°-30°	152.0	21.4	21.5
30°-40°	166.0	23.3	23.4
40°-50°	112.0	15.7	15.8
50°-60°	42.9	6.0	6.1
60°-70°	31.9	4.5	4.5
70°-80°	19.9	2.8	2.8
80°-90°	4.7	0.7	0.7
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°	334.1	47.0	47.2
0°-40°	500.1	70.3	70.6
0°-60°	655.0	92.0	92.5
0°-90°	711.6	100.0	100.5
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°	711.6	100.0	100.5

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	620	
5°	596	55
15°	454	127
25°	327	152
35°	268	166
45°	145	112
55°	44	43
65°	32	32
75°	19	20
85°	3	5
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	619.9
2.5°	613.4
5°	596.2
7.5°	570.2
10°	536.8
12.5°	495.7
15°	453.6
17.5°	415.8
20°	382.3
22.5°	353.2
25°	327.2
27.5°	306.7
30°	292.7
32.5°	279.7
35°	267.8
37.5°	253.8
40°	227.9
42.5°	189.0
45°	144.7
47.5°	103.7
50°	72.4
52.5°	52.9
55°	44.3
57.5°	40.0
60°	37.8
62.5°	35.6
65°	32.4
67.5°	29.2
70°	25.9
72.5°	22.7
75°	19.4
77.5°	15.1
80°	10.8
82.5°	7.6
85°	3.2
87.5°	1.1
90°	0.0

(END OF REPORT)