

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: P20251

Luminaire Tested: **ML709835ICAT120D-493SCS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20251
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-493SCS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH SPECULAR CLEAR LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND SOLITE GLASS LENS
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

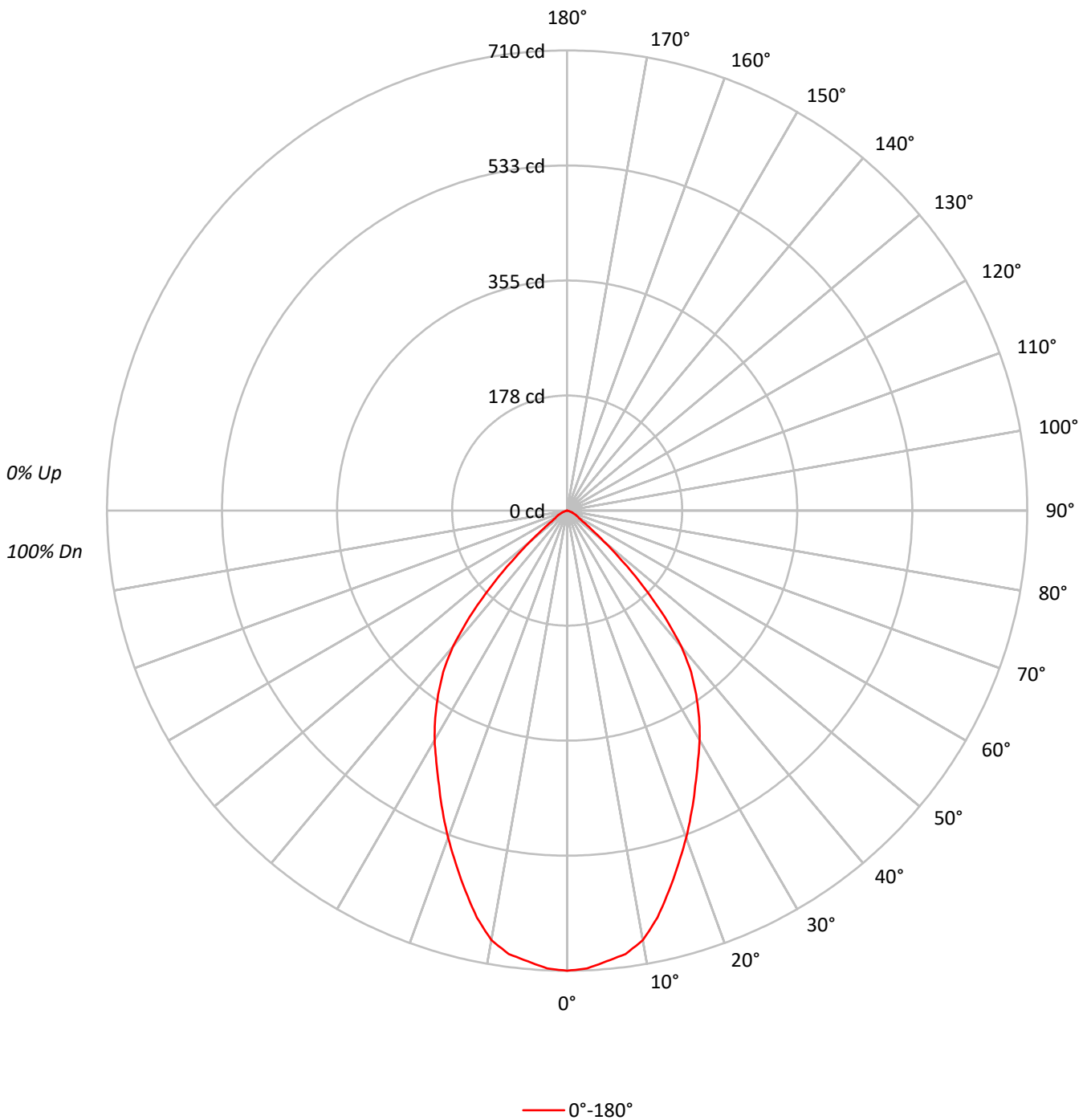
Lumens per Lamp: 842 (1 lamp)
Luminaire Lumens: 843.0 lumens
Efficiency: 100.1%
Efficacy: 59.8 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 1.03
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): 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	107	107	107	102	102	102	100
1	113	110	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	68	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	51	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	38922
5°	38411
10°	37463
15°	34450
20°	31328
25°	28308
30°	25890
35°	23222
40°	19608
45°	13025
50°	6311
55°	2772
60°	2083
65°	1557
70°	1122
75°	212
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	66.0	7.8	7.8
10°-20°	169.9	20.2	20.2
20°-30°	215.8	25.6	25.6
30°-40°	215.3	25.5	25.6
40°-50°	129.7	15.4	15.4
50°-60°	31.5	3.7	3.7
60°-70°	12.3	1.5	1.5
70°-80°	2.5	0.3	0.3
80°-90°	0.0	0.0	0.0
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°	451.7	53.6	53.6
0°-40°	667.0	79.1	79.2
0°-60°	828.2	98.2	98.4
0°-90°	843.0	100.0	100.1
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°	843.0	100.0	100.1

CANDELA DISTRIBUTION:

	0°	Flux
0°	710	
5°	698	66
15°	607	170
25°	468	216
35°	347	215
45°	168	130
55°	29	32
65°	12	12
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	710
2.5°	707
5°	698
7.5°	690
10°	673
12.5°	643
15°	607
17.5°	571
20°	537
22.5°	502
25°	468
27.5°	437
30°	409
32.5°	379
35°	347
37.5°	314
40°	274
42.5°	223
45°	168
47.5°	116
50°	74
52.5°	45
55°	29
57.5°	22
60°	19
62.5°	16
65°	12
67.5°	9
70°	7
72.5°	4
75°	1
77.5°	1
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)