

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: P20250

Luminaire Tested: **ML709835ICAT120D-493WBS06**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P20250
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: ML709835ICAT120D-493WBS06
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE BAFFLED DESIGN
LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND
SOLITE GLASS LENS WITH MODULE (TYPICAL LUMEN
VALUE MODULE)
Light Source: HIGH OUTPUT LED
LED 14 WATTS
Ballast/Driver: ELECTRONIC DRIVER

Summary

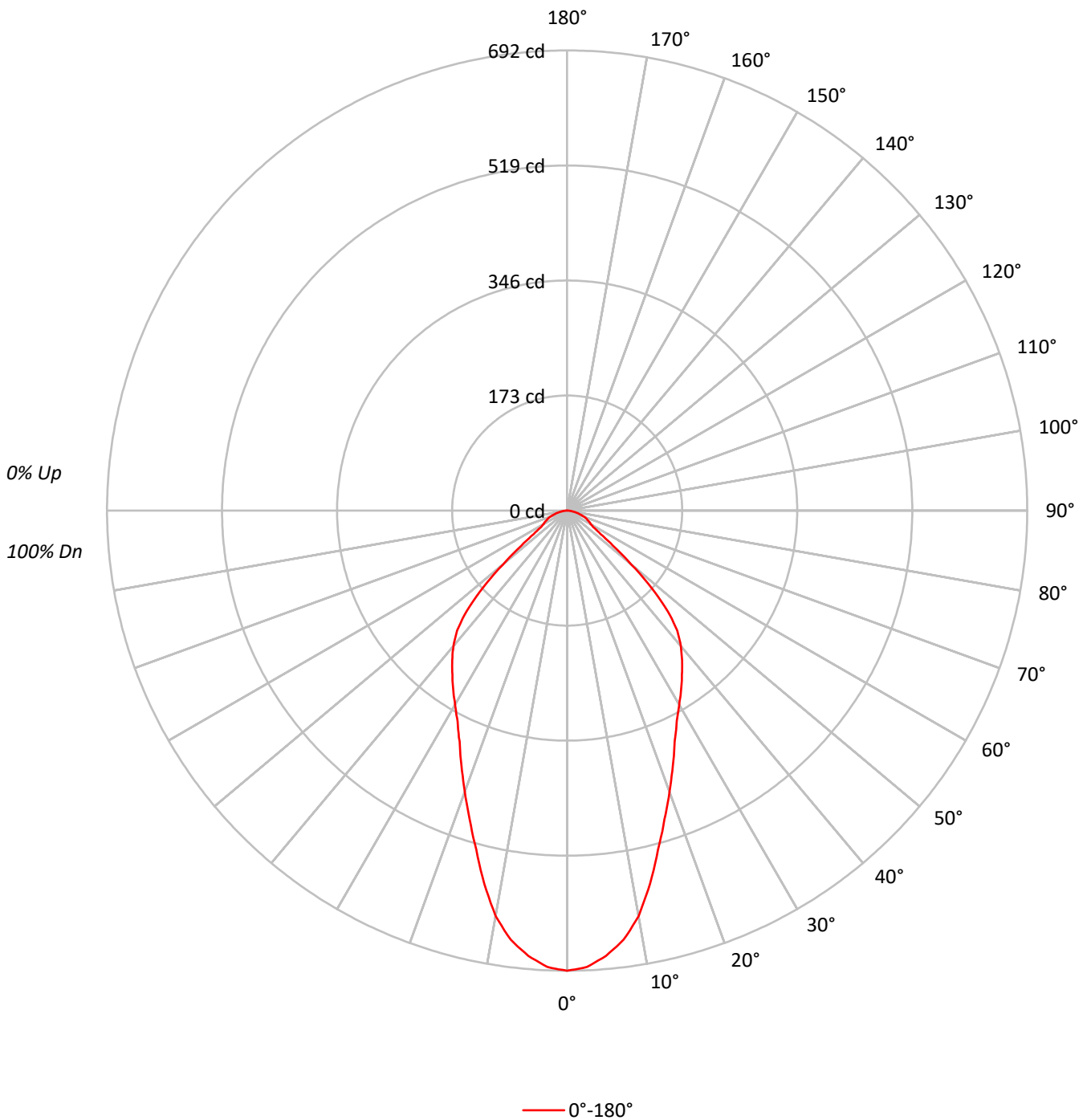
Lumens per Lamp: 853 (1 lamp)
Luminaire Lumens: 855.0 lumens
Efficiency: 100.2%
Efficacy: 60.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.96
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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	117	117	117	117	111	111	111		107	107	107		102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97		98	96	94		95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85		90	86	84		87	84	82	80
3	97	89	83	77	95	88	82	77	85	80	76		82	78	74		80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	67		75	71	67		73	69	66	64
5	85	74	67	62	83	73	66	61	71	65	61		70	64	60		68	63	60	58
6	79	68	61	56	78	67	60	55	66	60	55		64	59	55		63	58	54	52
7	75	63	56	51	73	62	55	50	61	55	50		60	54	50		58	53	49	48
8	70	59	51	46	69	58	51	46	57	50	46		56	50	46		54	49	45	44
9	66	54	47	43	65	54	47	42	53	47	42		52	46	42		51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39		49	43	39		48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	37936
5°	36980
10°	34457
15°	29966
20°	26252
25°	23167
30°	21332
35°	20144
40°	19036
45°	16591
50°	10746
55°	5830
60°	4495
65°	4410
70°	4328
75°	3813
80°	3157
85°	2516



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	62.5	7.3	7.3
10°-20°	148.1	17.3	17.4
20°-30°	177.6	20.8	20.8
30°-40°	188.5	22.0	22.1
40°-50°	158.6	18.6	18.6
50°-60°	61.7	7.2	7.2
60°-70°	33.9	4.0	4.0
70°-80°	19.1	2.2	2.2
80°-90°	4.9	0.6	0.6
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°	388.2	45.4	45.5
0°-40°	576.7	67.5	67.6
0°-60°	797.1	93.2	93.4
0°-90°	855.0	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°	855.0	100.0	100.2

CANDELA DISTRIBUTION:

	0°	Flux
0°	692	
5°	672	63
15°	528	148
25°	383	178
35°	301	188
45°	214	159
55°	61	62
65°	34	34
75°	18	19
85°	4	5
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	692
2.5°	687
5°	672
7.5°	651
10°	619
12.5°	575
15°	528
17.5°	487
20°	450
22.5°	415
25°	383
27.5°	357
30°	337
32.5°	319
35°	301
37.5°	284
40°	266
42.5°	245
45°	214
47.5°	172
50°	126
52.5°	87
55°	61
57.5°	47
60°	41
62.5°	38
65°	34
67.5°	31
70°	27
72.5°	22
75°	18
77.5°	14
80°	10
82.5°	7
85°	4
87.5°	2
90°	0

(END OF REPORT)