

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: P20141

Luminaire Tested: **ML712830TUNVD010-494P06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20141  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712830TUNVD010-494P06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH WHITE PAINTED TRIM  
REFLECTOR WITH MODULE ML712830TUNVD010  
Light Source: (1)SURFACE MOUNT LED ON HEAT SINK MODULE  
(1)24 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 1356 (1 lamp)  
Luminaire Lumens: 1356.2 lumens  
Efficiency: 100.0%  
Efficacy: 52.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.37  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

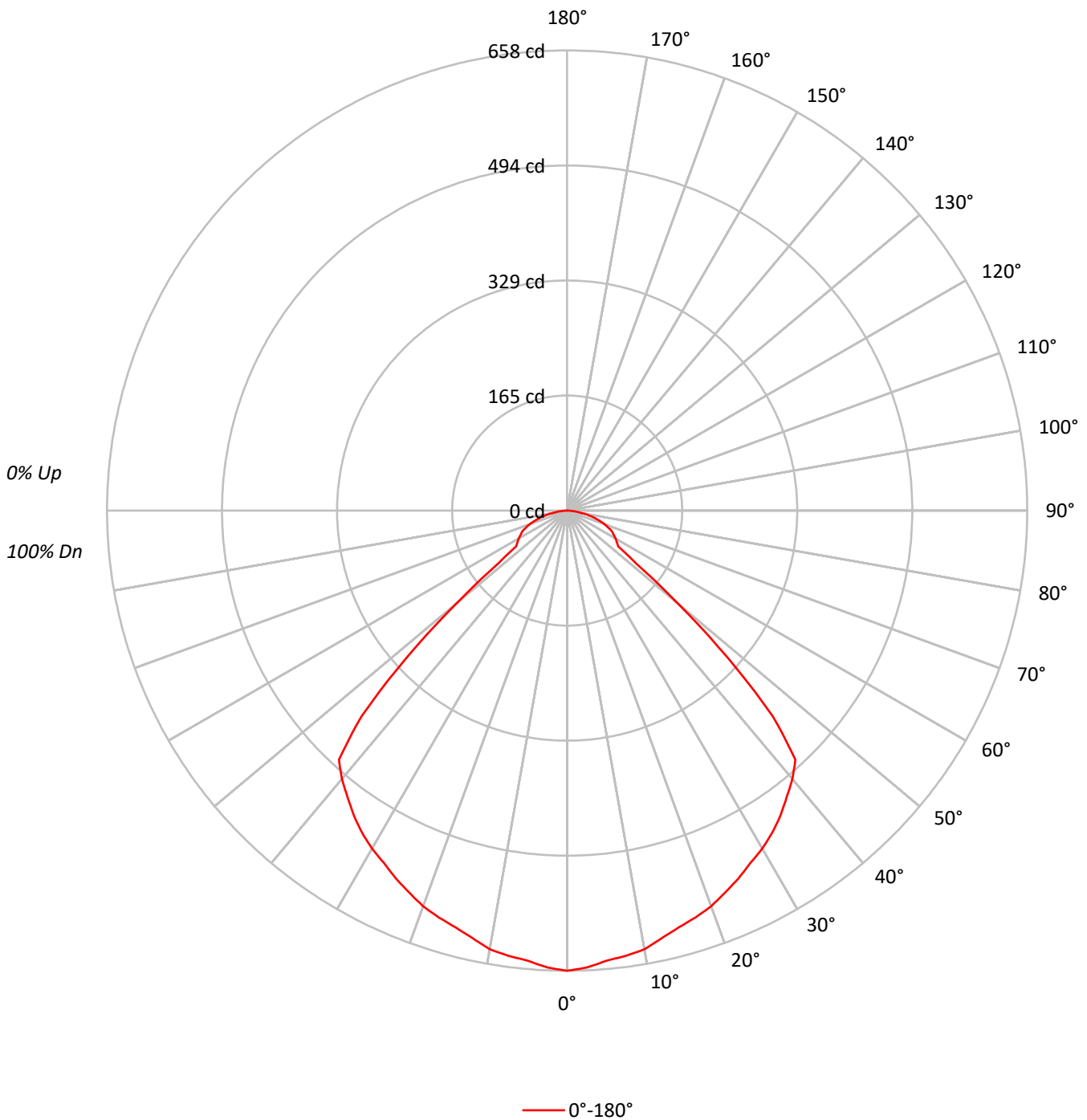
Input Watts (W): 26.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	80	74	93	85	79	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56		66	60	56		64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		50	45	41	39
9	62	50	43	38	61	50	42	37	48	42	37		47	41	37		46	41	37	35
10	59	46	39	34	57	46	39	34	45	39	34		44	38	34		43	38	34	32

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

	0°
0°	36072
5°	35549
10°	35459
15°	35017
20°	35120
25°	35083
30°	35322
35°	35603
40°	35853
45°	32251
50°	17654
55°	8506
60°	8771
65°	9210
70°	9136
75°	8472
80°	7261
85°	5661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	61.5	4.5	4.5
10°-20°	174.7	12.9	12.9
20°-30°	267.7	19.7	19.7
30°-40°	332.8	24.5	24.5
40°-50°	299.5	22.1	22.1
50°-60°	97.9	7.2	7.2
60°-70°	69.0	5.1	5.1
70°-80°	42.4	3.1	3.1
80°-90°	10.7	0.8	0.8
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°	503.9	37.2	37.2
0°-40°	836.7	61.7	61.7
0°-60°	1234.1	91.0	91.0
0°-90°	1356.2	100.0	100.0
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°	1356.2	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	658	
5°	646	61
15°	617	175
25°	580	268
35°	532	333
45°	416	300
55°	89	98
65°	71	69
75°	40	42
85°	9	11
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	658
2.5°	654
5°	646
7.5°	642
10°	637
12.5°	626
15°	617
17.5°	610
20°	602
22.5°	591
25°	580
27.5°	568
30°	558
32.5°	546
35°	532
37.5°	516
40°	501
42.5°	483
45°	416
47.5°	311
50°	207
52.5°	124
55°	89
57.5°	84
60°	80
62.5°	75
65°	71
67.5°	64
70°	57
72.5°	49
75°	40
77.5°	32
80°	23
82.5°	16
85°	9
87.5°	3
90°	0

(END OF REPORT)