

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: P20143

Luminaire Tested: **ML712830TUNVD010-494H06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20143  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712830TUNVD010-494H06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH HAZE FINISH 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: 1375 (1 lamp)  
Luminaire Lumens: 1375.3 lumens  
Efficiency: 100.0%  
Efficacy: 51.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.33  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

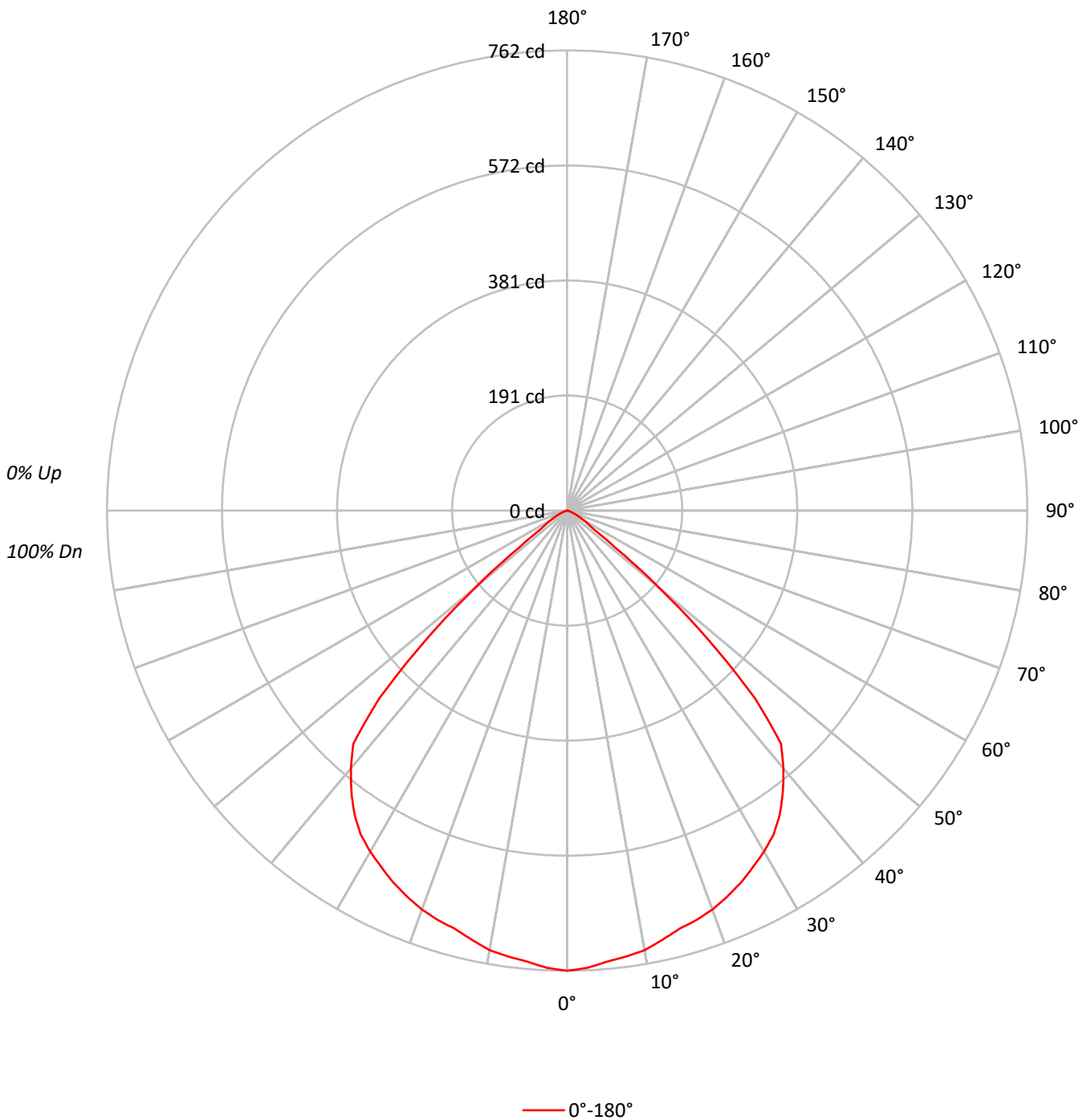
Input Watts (W): 26.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	102	103	101	99		99	97	96		95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88	86	83	82
3	98	90	84	79	96	89	83	79	86	81	77		84	80	76		81	78	75	73
4	92	82	76	70	90	81	75	70	79	73	69		77	72	68		75	71	67	66
5	85	75	68	63	84	74	67	62	72	66	62		70	65	61		69	64	61	59
6	80	69	62	56	78	68	61	56	66	60	56		65	59	55		63	59	55	53
7	75	63	56	51	73	63	56	51	61	55	50		60	54	50		59	54	50	48
8	70	58	51	46	68	58	51	46	56	50	46		55	50	46		54	49	45	44
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50	45	41	40
10	62	50	43	38	60	50	43	38	49	42	38		48	42	38		47	42	38	36

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

	0°
0°	41773
5°	41272
10°	41137
15°	40693
20°	41012
25°	41131
30°	41272
35°	41091
40°	39860
45°	34112
50°	16886
55°	4970
60°	3289
65°	2075
70°	1122
75°	635
80°	316
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	71.3	5.2	5.2
10°-20°	203.4	14.8	14.8
20°-30°	313.5	22.8	22.8
30°-40°	382.3	27.8	27.8
40°-50°	317.3	23.1	23.1
50°-60°	67.1	4.9	4.9
60°-70°	16.9	1.2	1.2
70°-80°	3.2	0.2	0.2
80°-90°	0.4	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°	588.2	42.8	42.8
0°-40°	970.5	70.6	70.6
0°-60°	1354.9	98.5	98.5
0°-90°	1375.3	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°	1375.3	100.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	762	
5°	750	71
15°	717	203
25°	680	314
35°	614	382
45°	440	317
55°	52	67
65°	16	17
75°	3	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	762
2.5°	758
5°	750
7.5°	745
10°	739
12.5°	728
15°	717
17.5°	711
20°	703
22.5°	692
25°	680
27.5°	666
30°	652
32.5°	636
35°	614
37.5°	587
40°	557
42.5°	524
45°	440
47.5°	318
50°	198
52.5°	99
55°	52
57.5°	40
60°	30
62.5°	23
65°	16
67.5°	11
70°	7
72.5°	4
75°	3
77.5°	1
80°	1
82.5°	1
85°	0
87.5°	0
90°	0

(END OF REPORT)