

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: P20157

Luminaire Tested: **ML712827TUNVD010-493BBS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20157  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712827TUNVD010-493BBS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH BLACK BAFFLED DESIGN  
LOWER TRIM REFLECTOR, SPECULAR UPPER TRIM REFLECTOR AND  
SOLITE GLASS LENS WITH MODULE ML712827TUNVD010  
Light Source: (1) SURFACE MOUNT LED ON HEAT SINK MODULE  
(1) 24 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

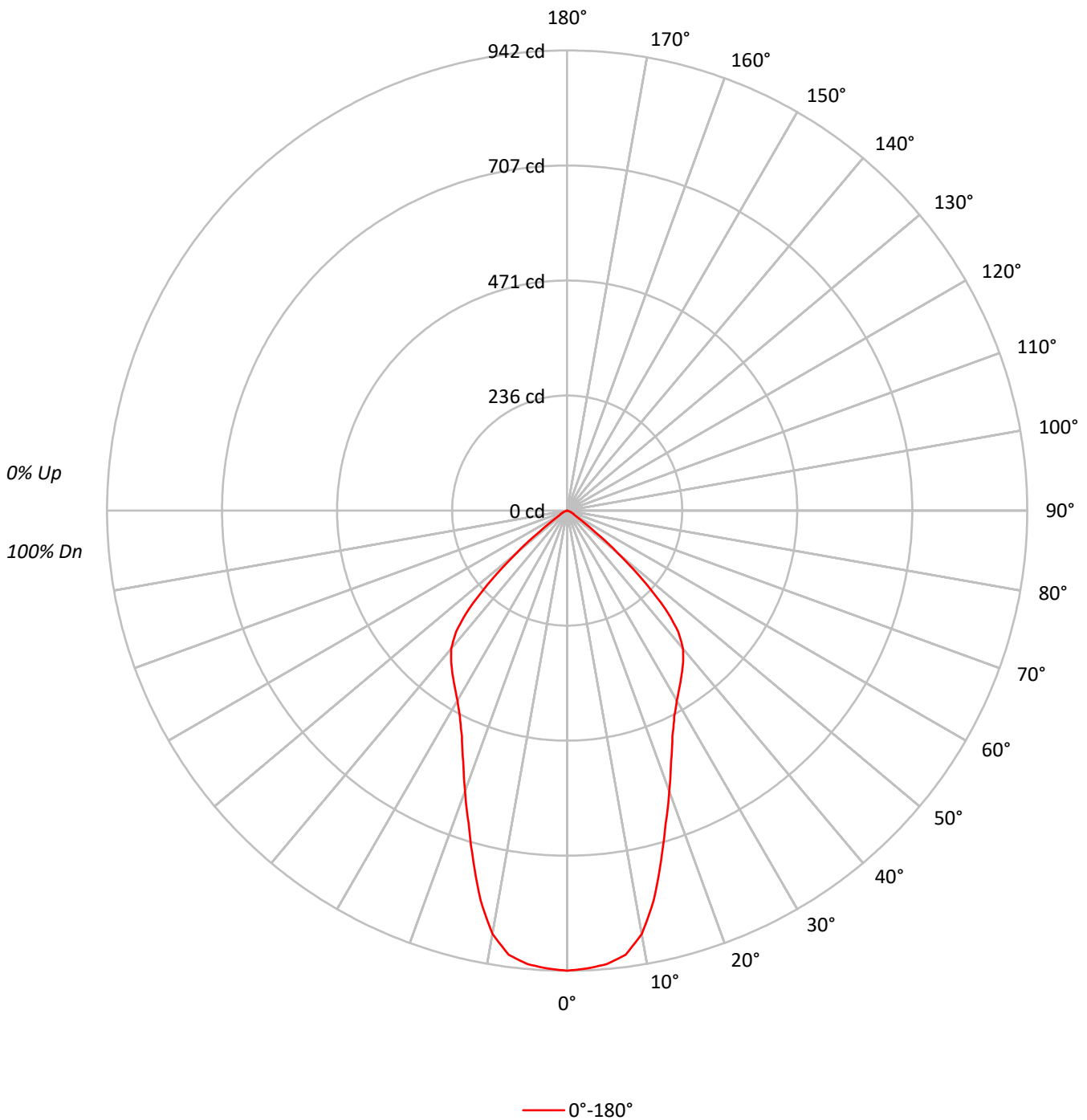
Lumens per Lamp: 1051 (1 lamp)  
Luminaire Lumens: 1051.9 lumens  
Efficiency: 100.1%  
Efficacy: 39.5 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.78 / 0.96  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 26.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	113	110	107	104	110	107	105	103	103	101	99		100	98	97		96	95	94	92
2	106	101	96	92	104	99	95	91	95	92	89		92	90	87		90	87	85	83
3	100	92	86	82	97	91	85	81	88	84	80		86	82	79		83	80	77	76
4	93	85	78	73	92	84	78	73	81	76	72		79	75	71		77	73	70	69
5	88	78	71	66	86	77	71	66	75	70	65		73	69	65		72	68	64	63
6	82	72	65	60	81	71	65	60	70	64	60		68	63	59		67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55		63	58	54		62	58	54	52
8	73	62	55	51	72	62	55	50	60	54	50		59	54	50		58	53	50	48
9	69	58	51	47	68	57	51	47	56	51	46		55	50	46		55	50	46	45
10	65	54	48	43	64	54	47	43	53	47	43		52	47	43		51	46	43	41

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

	0°
0°	51641
5°	51288
10°	48986
15°	42111
20°	35645
25°	30849
30°	28422
35°	27372
40°	26407
45°	22018
50°	11513
55°	3441
60°	1754
65°	1427
70°	641
75°	0
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	87.4	8.3	8.3
10°-20°	206.9	19.7	19.7
20°-30°	237.5	22.6	22.6
30°-40°	256.0	24.3	24.4
40°-50°	207.1	19.7	19.7
50°-60°	45.3	4.3	4.3
60°-70°	10.6	1.0	1.0
70°-80°	1.0	0.1	0.1
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°	531.8	50.6	50.6
0°-40°	787.8	74.9	75.0
0°-60°	1040.2	98.9	99.0
0°-90°	1051.9	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°	1051.9	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	942	
5°	932	87
15°	742	207
25°	510	237
35°	409	256
45°	284	207
55°	36	45
65°	11	11
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	942
2.5°	938
5°	932
7.5°	917
10°	880
12.5°	818
15°	742
17.5°	671
20°	611
22.5°	556
25°	510
27.5°	475
30°	449
32.5°	428
35°	409
37.5°	390
40°	369
42.5°	337
45°	284
47.5°	210
50°	135
52.5°	74
55°	36
57.5°	21
60°	16
62.5°	14
65°	11
67.5°	8
70°	4
72.5°	2
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)