

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: P20145

Luminaire Tested: **ML712835TUNVD010-493TBZS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20145  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712835TUNVD010-493TBZS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH TUSCAN BRONZE TRIM AND SOLITE GLASS LENS WITH MODULE ML712835TUNVD010  
Light Source: (1)SURFACE MOUNT LED ON HEAT SINK MODULE  
(1)24 WATTS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: 1105 (1 lamp)  
Luminaire Lumens: 1106.4 lumens  
Efficiency: 100.1%  
Efficacy: 41.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.95  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

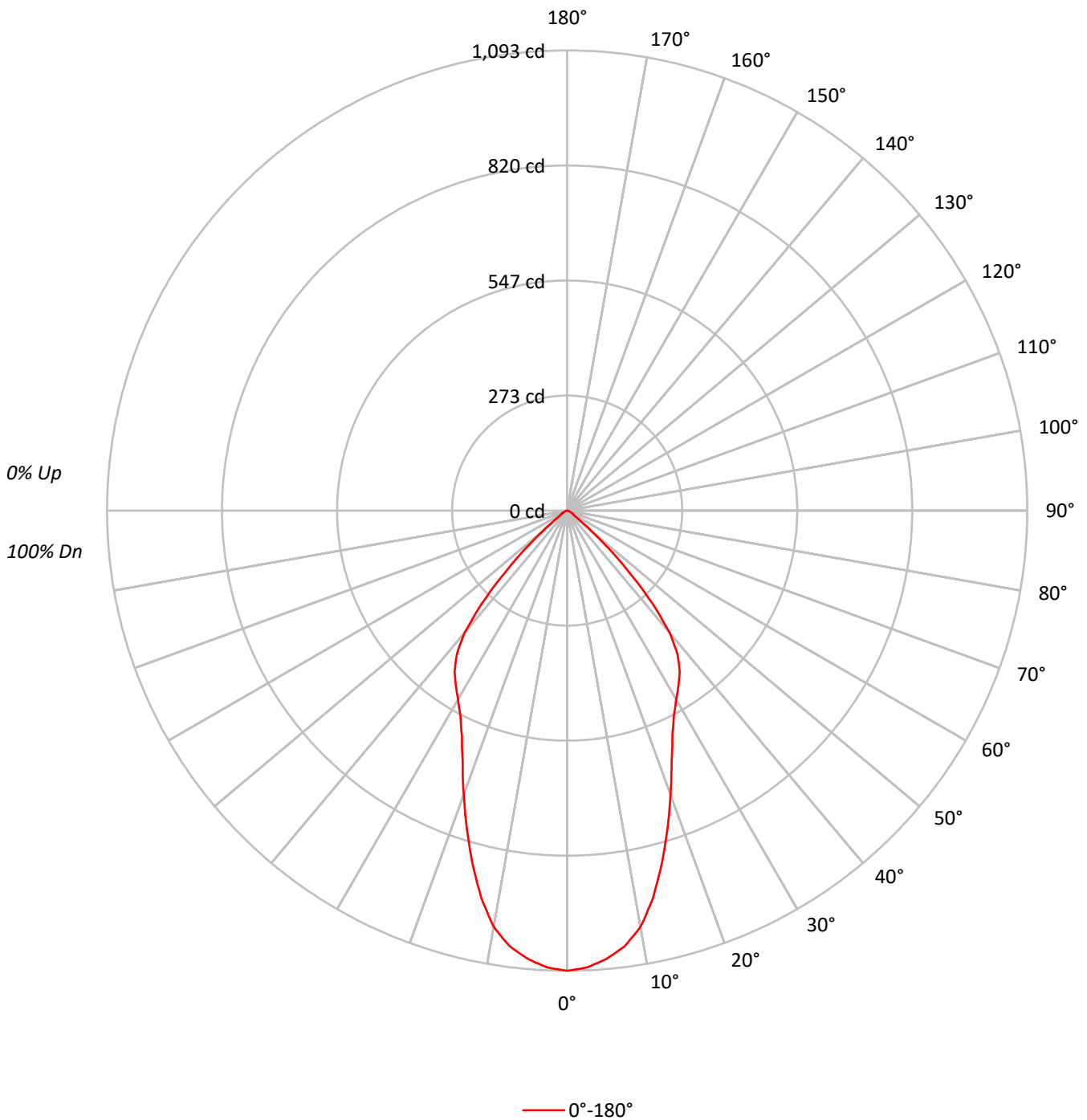
Input Watts (W): 27  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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		107	107	107		102	102	102	100
1	113	110	107	105	111	108	106	103	104	102	100		100	99	97		97	95	94	92
2	107	101	97	93	105	100	96	92	96	93	90		93	91	88		91	88	86	85
3	101	94	88	84	99	92	87	83	89	85	82		87	83	80		85	82	79	77
4	95	86	80	76	93	85	80	75	83	78	74		81	77	73		79	75	73	71
5	89	80	74	69	88	79	73	69	77	72	68		76	71	67		74	70	67	65
6	84	74	68	63	83	74	67	63	72	66	62		70	66	62		69	65	61	60
7	79	69	63	58	78	69	62	58	67	62	57		66	61	57		65	60	57	55
8	75	65	58	54	74	64	58	53	63	57	53		62	57	53		61	56	53	51
9	71	60	54	50	70	60	54	50	59	53	49		58	53	49		57	52	49	48
10	67	57	50	46	66	56	50	46	55	50	46		55	50	46		54	49	46	44

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

	0°
0°	59918
5°	58827
10°	55889
15°	49262
20°	41887
25°	35748
30°	32790
35°	31186
40°	27051
45°	16513
50°	6311
55°	2103
60°	1645
65°	1167
70°	641
75°	212
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	100.1	9.0	9.1
10°-20°	241.2	21.8	21.8
20°-30°	275.7	24.9	25.0
30°-40°	286.9	25.9	26.0
40°-50°	165.9	15.0	15.0
50°-60°	26.6	2.4	2.4
60°-70°	9.0	0.8	0.8
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°	617.0	55.8	55.8
0°-40°	903.9	81.7	81.8
0°-60°	1096.3	99.1	99.2
0°-90°	1106.4	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°	1106.4	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1093	
5°	1069	100
15°	868	241
25°	591	276
35°	466	287
45°	213	166
55°	22	27
65°	9	9
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1093
2.5°	1086
5°	1069
7.5°	1044
10°	1004
12.5°	942
15°	868
17.5°	792
20°	718
22.5°	648
25°	591
27.5°	549
30°	518
32.5°	492
35°	466
37.5°	431
40°	378
42.5°	300
45°	213
47.5°	135
50°	74
52.5°	37
55°	22
57.5°	17
60°	15
62.5°	12
65°	9
67.5°	6
70°	4
72.5°	1
75°	1
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)