

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: P20150

Luminaire Tested: **ML712835TUNVD010-493HS06**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P20150  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: ML712835TUNVD010-493HS06  
Description: HALO 6" RECESSED LED DOWNLIGHT WITH HAZE LOWER TRIM  
REFLECTOR, SPECULAR UPPER TRIM REFLECTOR 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**

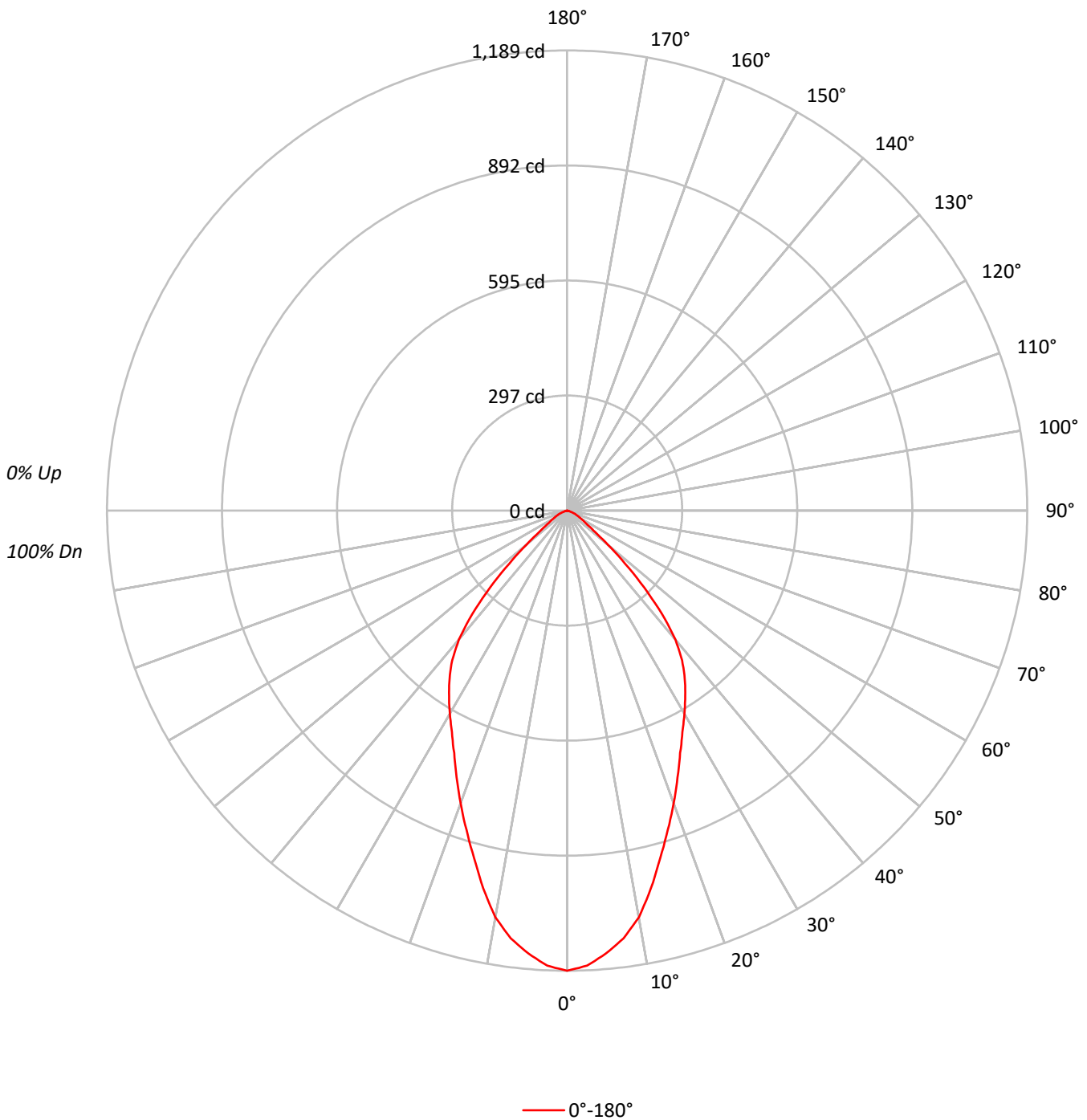
Lumens per Lamp: 1329 (1 lamp)  
Luminaire Lumens: 1330.1 lumens  
Efficiency: 100.1%  
Efficacy: 50.4 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.98  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 26.4  
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



TEST NUMBER: P20150  
CATALOG NUMBER: ML712835TUNVD010-493HS06

### Luminous Intensity Polar Plot





TEST NUMBER: P20150

CATALOG NUMBER: ML712835TUNVD010-493HS06

**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	109	107	104	110	107	105	102	103	101	99		99	98	96		96	95	93	92
2	106	100	96	92	104	98	94	91	95	92	89		92	89	87		89	87	85	83
3	99	92	86	81	97	90	85	81	88	83	79		85	81	78		83	80	77	75
4	93	84	78	73	91	83	77	73	81	76	72		79	74	71		77	73	70	68
5	88	78	71	66	86	77	70	66	75	69	65		73	68	64		72	67	64	62
6	82	72	65	60	81	71	65	60	70	64	59		68	63	59		67	62	59	57
7	77	67	60	55	76	66	59	55	65	59	54		63	58	54		62	57	54	52
8	73	62	55	51	72	61	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°	65181
5°	63229
10°	59395
15°	52724
20°	46962
25°	41797
30°	38360
35°	35469
40°	31130
45°	21863
50°	11684
55°	6117
60°	4495
65°	3373
70°	2244
75°	847
80°	316
85°	0



TEST NUMBER: P20150

CATALOG NUMBER: ML712835TUNVD010-493HS06

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	107.2	8.1	8.1
10°-20°	260.5	19.6	19.6
20°-30°	319.8	24.0	24.1
30°-40°	328.8	24.7	24.7
40°-50°	216.3	16.3	16.3
50°-60°	65.2	4.9	4.9
60°-70°	26.3	2.0	2.0
70°-80°	5.6	0.4	0.4
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°	687.6	51.7	51.7
0°-40°	1016.3	76.4	76.5
0°-60°	1297.8	97.6	97.7
0°-90°	1330.1	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°	1330.1	100.0	100.1

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1189	
5°	1149	107
15°	929	261
25°	691	320
35°	530	329
45°	282	216
55°	64	65
65°	26	26
75°	4	6
85°	0	0
90°	0	



TEST NUMBER: P20150

CATALOG NUMBER: ML712835TUNVD010-493HS06

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1189
2.5°	1177
5°	1149
7.5°	1115
10°	1067
12.5°	1000
15°	929
17.5°	865
20°	805
22.5°	746
25°	691
27.5°	645
30°	606
32.5°	568
35°	530
37.5°	488
40°	435
42.5°	363
45°	282
47.5°	203
50°	137
52.5°	91
55°	64
57.5°	50
60°	41
62.5°	33
65°	26
67.5°	20
70°	14
72.5°	8
75°	4
77.5°	2
80°	1
82.5°	1
85°	0
87.5°	0
90°	0

(END OF REPORT)