

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P210305

Luminaire Tested: **PR830D010 - PR8M34WDMW - 3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210305  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29051)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR830D010 - PR8M34WDMW - 3500K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE WHITE FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3610.4 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.39  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

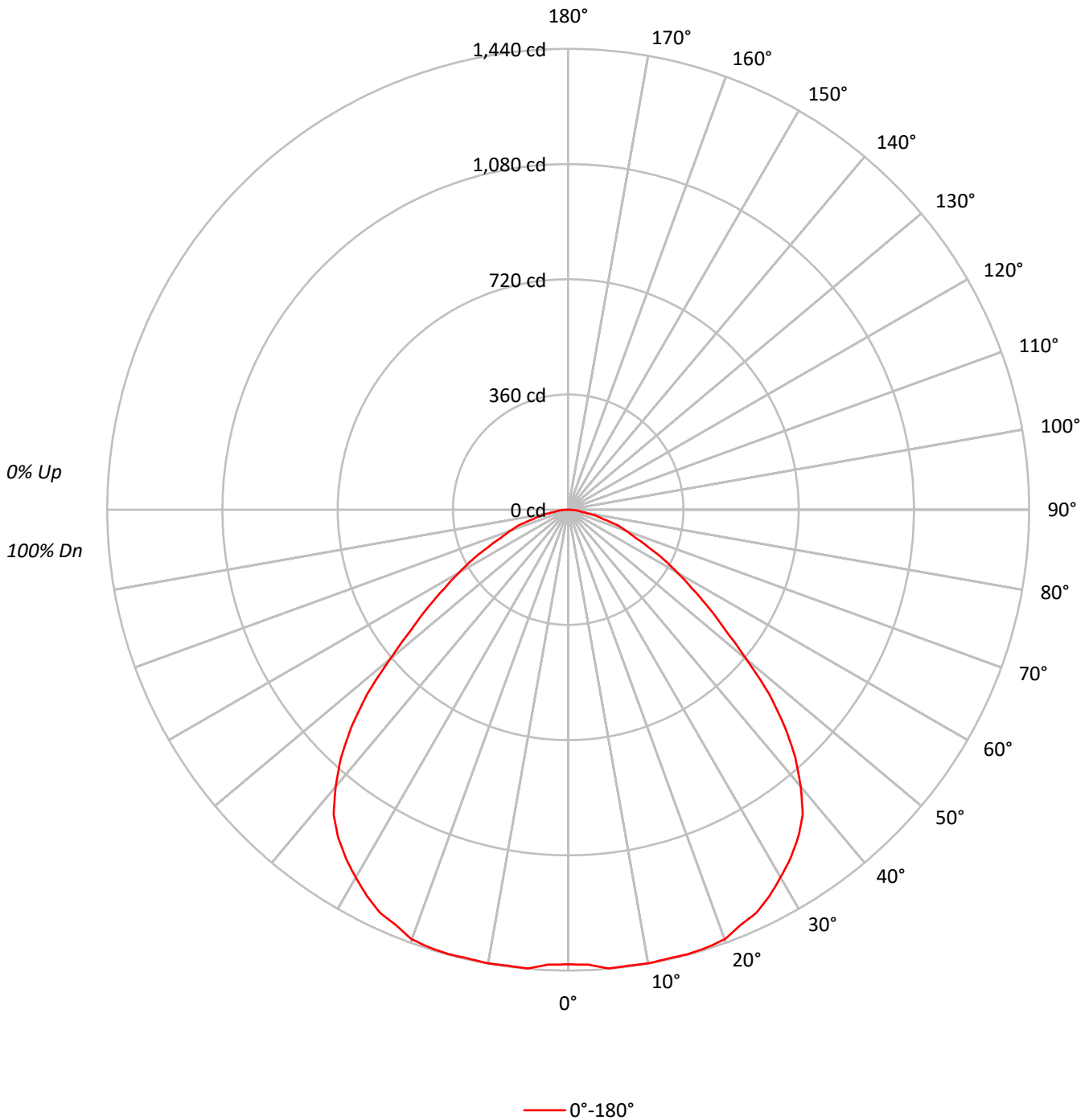
Input Watts (W): 28.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210305

CATALOG NUMBER: PR830D010 - PR8M34WDMW - 3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P210305

CATALOG NUMBER: PR830D010 - PR8M34WDMW - 3500K

**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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56
5	80	68	59	53	78	67	59	53	64	58	52	63	57	52	61	56	51	49
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46	44
7	68	56	48	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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

	0°
0°	43803
5°	44540
10°	45077
15°	45910
20°	46880
25°	47307
30°	47236
35°	47119
40°	45479
45°	41651
50°	34795
55°	28929
60°	24311
65°	20087
70°	17275
75°	13558
80°	9394
85°	9871



TEST NUMBER: P210305

CATALOG NUMBER: PR830D010 - PR8M34WDMW - 3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	3.8
10°-20°	407.0	11.3
20°-30°	639.1	17.7
30°-40°	779.0	21.6
40°-50°	728.1	20.2
50°-60°	485.6	13.5
60°-70°	279.4	7.7
70°-80°	128.9	3.6
80°-90°	26.2	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1183.1	32.8
0°-40°	1962.2	54.3
0°-60°	3175.9	88.0
0°-90°	3610.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3610.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1420	
5°	1439	137
15°	1438	407
25°	1390	639
35°	1252	779
45°	955	728
55°	538	486
65°	275	279
75°	114	129
85°	28	26
90°	0	



TEST NUMBER: P210305

CATALOG NUMBER: PR830D010 - PR8M34WDMW - 3500K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1420.5
2.5°	1422.7
5°	1438.9
7.5°	1437.4
10°	1439.6
12.5°	1436.7
15°	1438.1
17.5°	1435.2
20°	1428.6
22.5°	1405.1
25°	1390.4
27.5°	1361.1
30°	1326.6
32.5°	1292.1
35°	1251.7
37.5°	1203.2
40°	1129.8
42.5°	1049.8
45°	955.1
47.5°	850.1
50°	725.3
52.5°	619.6
55°	538.1
57.5°	460.3
60°	394.2
62.5°	337.0
65°	275.3
67.5°	226.1
70°	191.6
72.5°	163.0
75°	113.8
77.5°	90.3
80°	52.9
82.5°	33.8
85°	27.9
87.5°	8.1
90°	0.0

(END OF REPORT)