

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: P210401

Luminaire Tested: **PR8R20D010 - PR8M12WDMMS - 4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210401  
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: PR8R20D010 - PR8M12WDMMS - 4000K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE METALLIC SILVER FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2214.9 lumens  
Efficiency: N/A  
Efficacy: 100.7 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

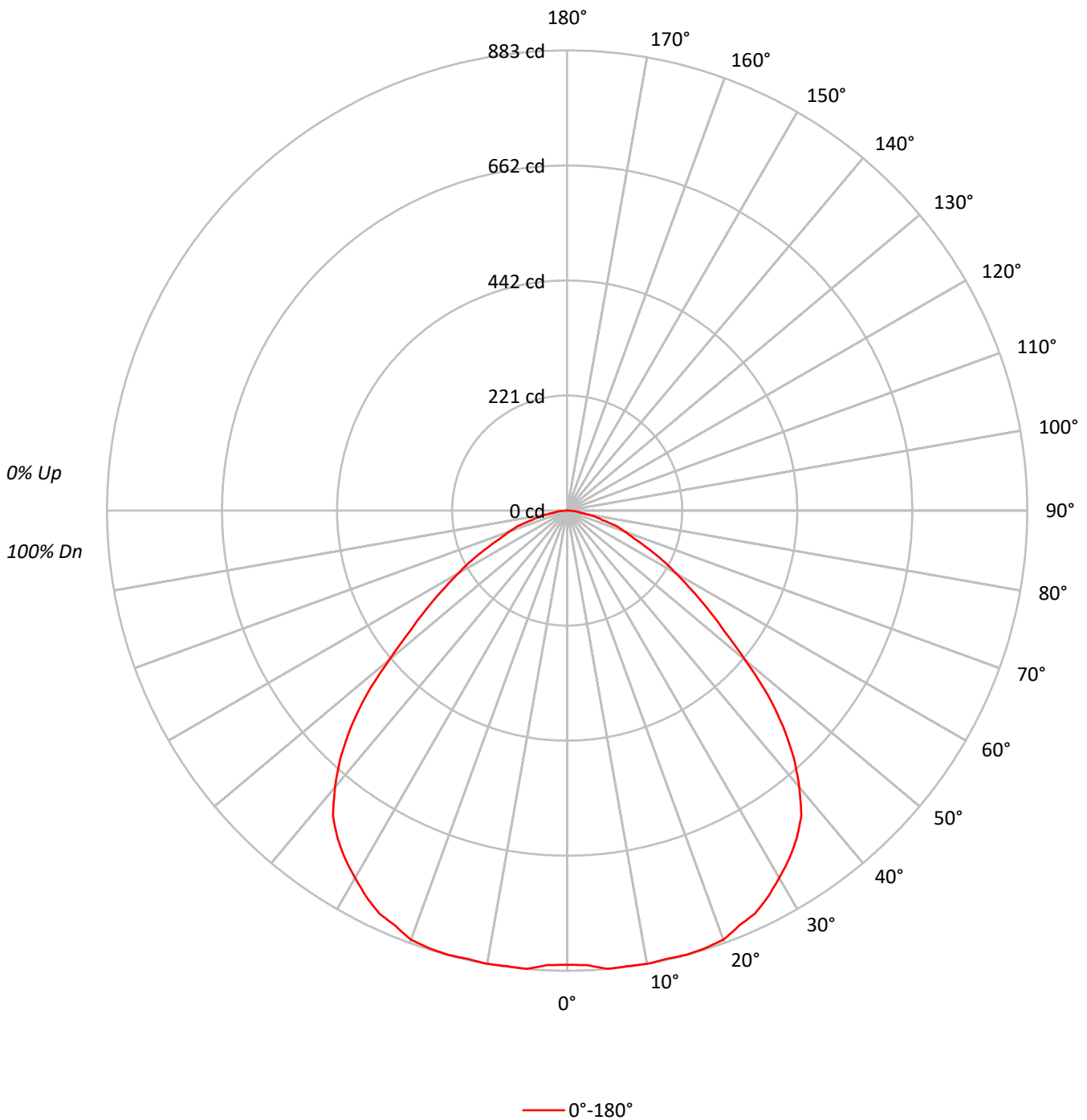
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210401

CATALOG NUMBER: PR8R20D010 - PR8M12WDMMS - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P210401

CATALOG NUMBER: PR8R20D010 - PR8M12WDMMS - 4000K

**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°	26874
5°	27323
10°	27655
15°	28167
20°	28759
25°	29023
30°	28977
35°	28907
40°	27900
45°	25551
50°	21348
55°	17747
60°	14919
65°	12324
70°	10594
75°	8316
80°	5754
85°	6050



TEST NUMBER: P210401

CATALOG NUMBER: PR8R20D010 - PR8M12WDMMS - 4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.1	3.8
10°-20°	249.7	11.3
20°-30°	392.1	17.7
30°-40°	477.9	21.6
40°-50°	446.7	20.2
50°-60°	297.9	13.5
60°-70°	171.4	7.7
70°-80°	79.0	3.6
80°-90°	16.1	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°	725.8	32.8
0°-40°	1203.8	54.3
0°-60°	1948.4	88.0
0°-90°	2214.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2214.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	872	
5°	883	84
15°	882	250
25°	853	392
35°	768	478
45°	586	447
55°	330	298
65°	169	171
75°	70	79
85°	17	16
90°	0	



TEST NUMBER: P210401

CATALOG NUMBER: PR8R20D010 - PR8M12WDMMS - 4000K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	871.5
2.5°	872.8
5°	882.7
7.5°	881.8
10°	883.2
12.5°	881.4
15°	882.3
17.5°	880.5
20°	876.4
22.5°	862.0
25°	853.0
27.5°	835.0
30°	813.8
32.5°	792.7
35°	767.9
37.5°	738.2
40°	693.1
42.5°	644.0
45°	585.9
47.5°	521.5
50°	445.0
52.5°	380.1
55°	330.1
57.5°	282.4
60°	241.9
62.5°	206.7
65°	168.9
67.5°	138.7
70°	117.5
72.5°	100.0
75°	69.8
77.5°	55.4
80°	32.4
82.5°	20.7
85°	17.1
87.5°	5.0
90°	0.0

(END OF REPORT)