

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: P210280

Luminaire Tested: **PR820D010 - PR8M12MDMW - 3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210280  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29044)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR820D010 - PR8M12MDMW - 3500K  
Description: HALO 8" ROUND DOWNLIGHT, MEDIUM 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: 2464.6 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.13  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

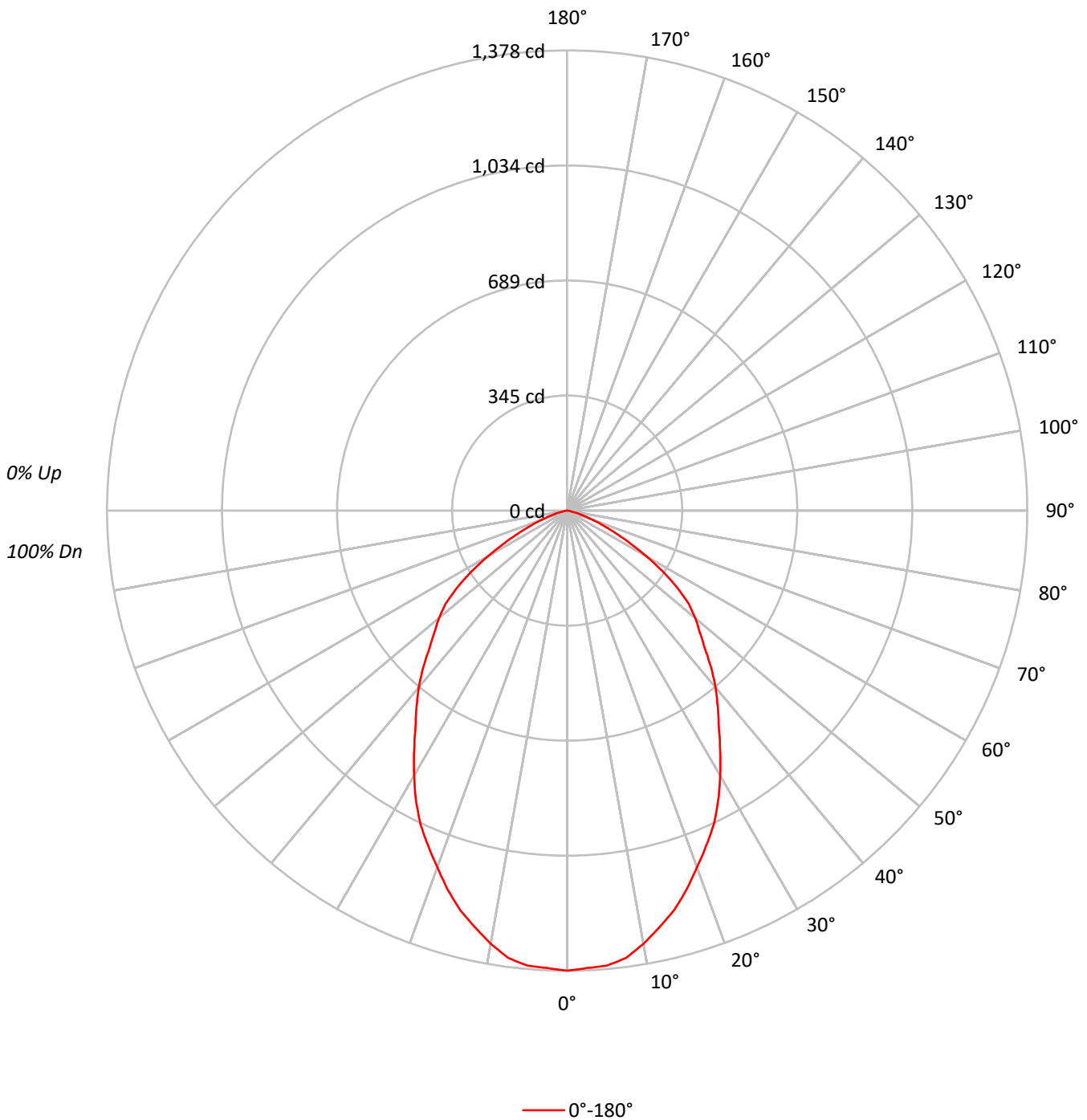
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210280

CATALOG NUMBER: PR820D010 - PR8M12MDMW - 3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P210280

CATALOG NUMBER: PR820D010 - PR8M12MDMW - 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	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94	92	91	89
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	64	86	76	69	64	74	68	63		72	67	62		70	65	61	60
5	82	70	62	57	80	69	62	56	67	61	56		65	60	55		64	59	55	53
6	76	64	56	50	74	63	56	50	61	55	50		60	54	49		58	53	49	47
7	71	59	51	45	69	58	50	45	56	50	45		55	49	44		54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	41		51	45	40		50	44	40	38
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

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

	0°
0°	42486
5°	42342
10°	41238
15°	39538
20°	37301
25°	35327
30°	32641
35°	29803
40°	27820
45°	25411
50°	24030
55°	21639
60°	16911
65°	11777
70°	7474
75°	4218
80°	1172
85°	0



TEST NUMBER: P210280

CATALOG NUMBER: PR820D010 - PR8M12MDMW - 3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.0	5.2
10°-20°	347.0	14.1
20°-30°	475.2	19.3
30°-40°	498.1	20.2
40°-50°	453.9	18.4
50°-60°	354.3	14.4
60°-70°	164.9	6.7
70°-80°	41.1	1.7
80°-90°	1.2	0.0
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°	951.1	38.6
0°-40°	1449.2	58.8
0°-60°	2257.4	91.6
0°-90°	2464.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2464.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1378	
5°	1368	129
15°	1238	347
25°	1038	475
35°	792	498
45°	583	454
55°	402	354
65°	161	165
75°	35	41
85°	0	1
90°	0	



TEST NUMBER: P210280

CATALOG NUMBER: PR820D010 - PR8M12MDMW - 3500K

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1377.8
2.5°	1371.2
5°	1367.9
7.5°	1351.3
10°	1317.0
12.5°	1277.2
15°	1238.5
17.5°	1189.8
20°	1136.7
22.5°	1087.0
25°	1038.3
27.5°	979.7
30°	916.7
32.5°	852.6
35°	791.7
37.5°	740.9
40°	691.1
42.5°	638.0
45°	582.7
47.5°	538.5
50°	500.9
52.5°	458.9
55°	402.5
57.5°	339.5
60°	274.2
62.5°	212.3
65°	161.4
67.5°	117.2
70°	82.9
72.5°	56.4
75°	35.4
77.5°	19.9
80°	6.6
82.5°	1.1
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)