

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: P256307

Luminaire Tested: **HC4R30D010-HM434840-42RMDC**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P256307  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-779-41)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC4R30D010-HM434840-42RMDC  
Description: HALO COMMERCIAL 4" ROUND, RETROFIT FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

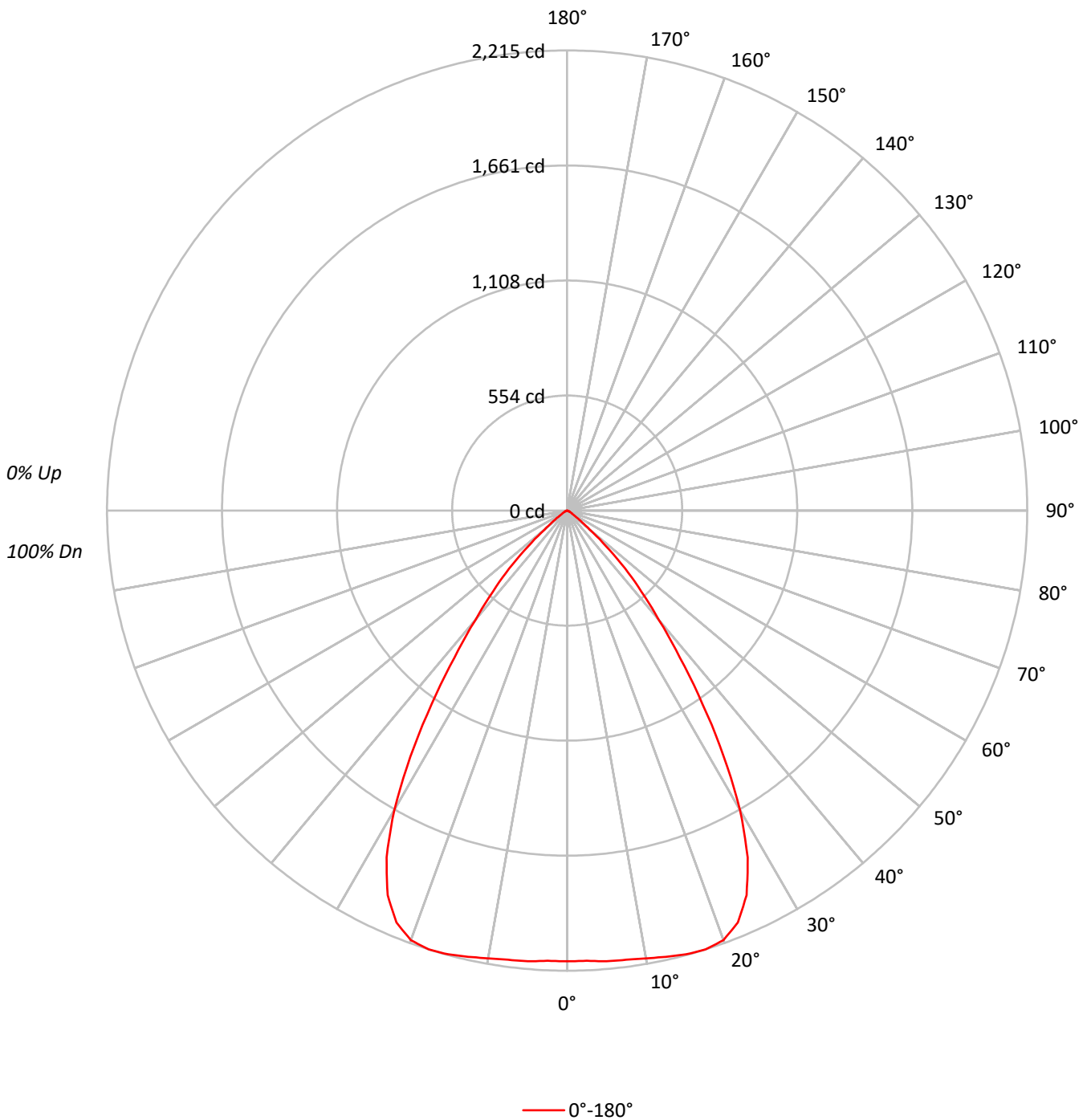
Lumens per Lamp: N/A  
Luminaire Lumens: 2835.9 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.03  
Luminous Opening: Circular (Dia: 0.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 26  
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		106	106	106		102	102	102	100
1	113	110	108	105	111	108	106	103	104	102	100		100	99	97		97	96	94	93
2	107	102	97	94	105	100	96	93	97	94	91		94	91	89		91	89	87	85
3	101	94	89	84	99	93	88	84	90	86	82		88	84	81		85	82	80	78
4	95	87	81	77	93	86	80	76	84	79	75		82	78	74		80	76	74	72
5	90	81	75	70	88	80	74	70	78	73	69		76	72	68		75	71	68	66
6	85	75	69	64	83	74	68	64	73	67	63		71	67	63		70	66	63	61
7	80	70	64	59	79	69	63	59	68	63	59		67	62	58		66	61	58	56
8	76	66	59	55	75	65	59	55	64	58	54		63	58	54		62	57	54	52
9	72	61	55	51	71	61	55	51	60	54	50		59	54	50		58	53	50	49
10	68	58	51	47	67	57	51	47	56	51	47		55	50	47		55	50	47	45

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

	0°
0°	211416
5°	212977
10°	216577
15°	223121
20°	228158
25°	219701
30°	187292
35°	135191
40°	87618
45°	54317
50°	21469
55°	7799
60°	4483
65°	2652
70°	2194
75°	1431
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.1	7.3
10°-20°	625.4	22.1
20°-30°	919.0	32.4
30°-40°	711.6	25.1
40°-50°	302.0	10.6
50°-60°	52.7	1.9
60°-70°	13.2	0.5
70°-80°	4.0	0.1
80°-90°	0.0	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°	1752.4	61.8
0°-40°	2464.0	86.9
0°-60°	2818.7	99.4
0°-90°	2835.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2835.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2169	
5°	2177	208
15°	2211	625
25°	2043	919
35°	1136	712
45°	394	302
55°	46	53
65°	12	13
75°	4	4
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2169.3
2.5°	2169.3
5°	2177.0
7.5°	2180.8
10°	2188.5
12.5°	2199.9
15°	2211.4
17.5°	2215.2
20°	2199.9
22.5°	2146.4
25°	2043.1
27.5°	1882.4
30°	1664.3
32.5°	1404.1
35°	1136.3
37.5°	891.5
40°	688.7
42.5°	528.0
45°	394.1
47.5°	252.5
50°	141.6
52.5°	80.3
55°	45.9
57.5°	30.6
60°	23.0
62.5°	15.3
65°	11.5
67.5°	11.5
70°	7.7
72.5°	3.8
75°	3.8
77.5°	3.8
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)