

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: P256287

Luminaire Tested: **HC4R10D010-HM412940-42RMDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P256287
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: HC4R10D010-HM412940-42RMDC
Description: HALO COMMERCIAL 4" ROUND, RETROFIT FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 881.6 lumens
Efficiency: N/A
Efficacy: 88.2 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

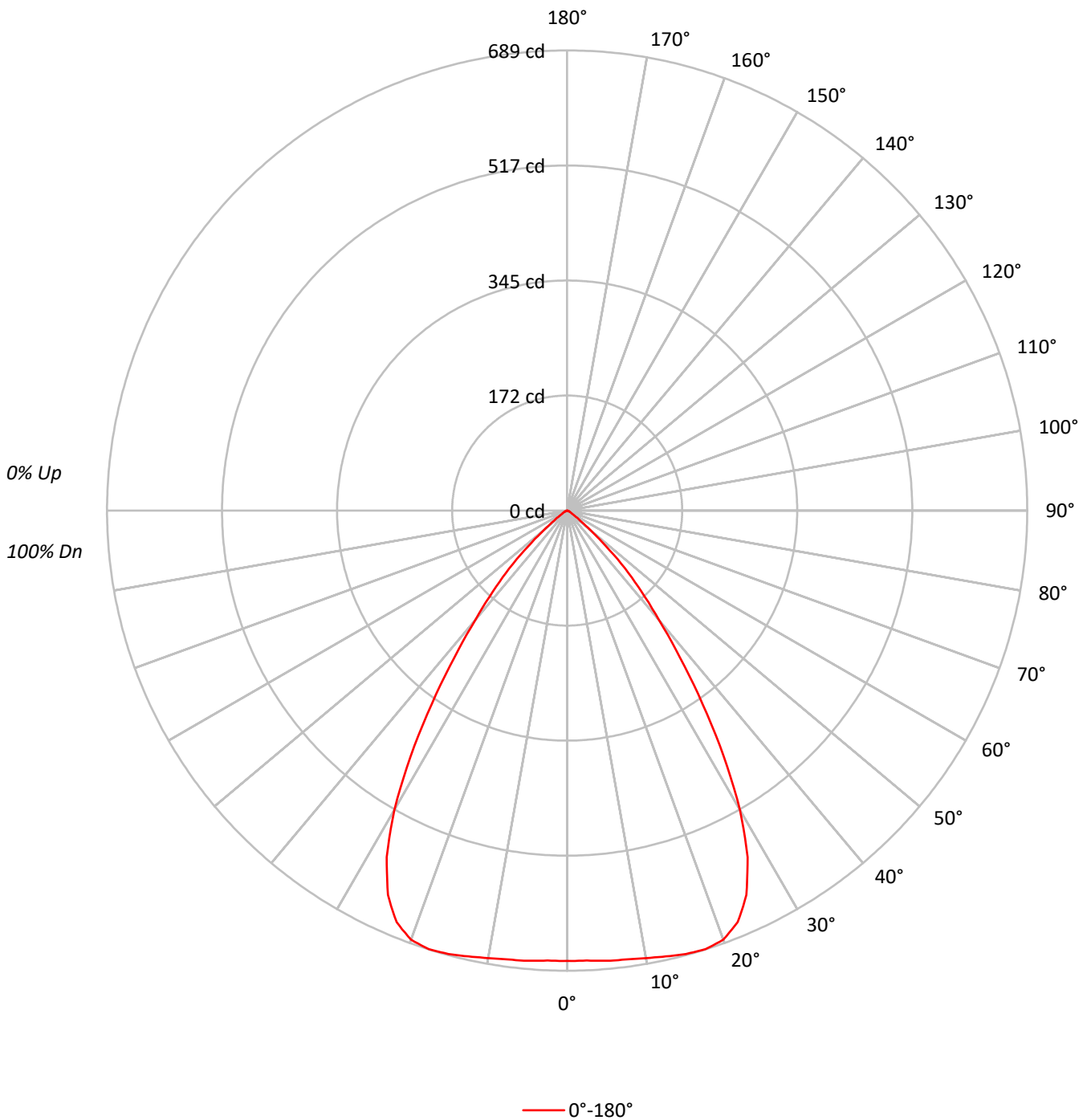
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	65716
5°	66202
10°	67324
15°	69356
20°	70919
25°	68294
30°	58214
35°	42022
40°	27238
45°	16884
50°	6671
55°	2430
60°	1384
65°	830
70°	684
75°	452
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	7.3
10°-20°	194.4	22.1
20°-30°	285.7	32.4
30°-40°	221.2	25.1
40°-50°	93.9	10.6
50°-60°	16.4	1.9
60°-70°	4.1	0.5
70°-80°	1.3	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°	544.7	61.8
0°-40°	765.9	86.9
0°-60°	876.2	99.4
0°-90°	881.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	674	
5°	677	65
15°	687	194
25°	635	286
35°	353	221
45°	122	94
55°	14	16
65°	4	4
75°	1	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	674.3
2.5°	674.3
5°	676.7
7.5°	677.9
10°	680.3
12.5°	683.8
15°	687.4
17.5°	688.6
20°	683.8
22.5°	667.2
25°	635.1
27.5°	585.1
30°	517.3
32.5°	436.5
35°	353.2
37.5°	277.1
40°	214.1
42.5°	164.1
45°	122.5
47.5°	78.5
50°	44.0
52.5°	25.0
55°	14.3
57.5°	9.5
60°	7.1
62.5°	4.8
65°	3.6
67.5°	3.6
70°	2.4
72.5°	1.2
75°	1.2
77.5°	1.2
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)