

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

Report Number: P22439

Luminaire Tested: **HU20P830**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P22439  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HU20P830  
Description: HALO LED UNDERCABINET  
Light Source: 3000K LED  
  
Ballast/Driver: LED DRIVER  
HU20C45

**Summary**

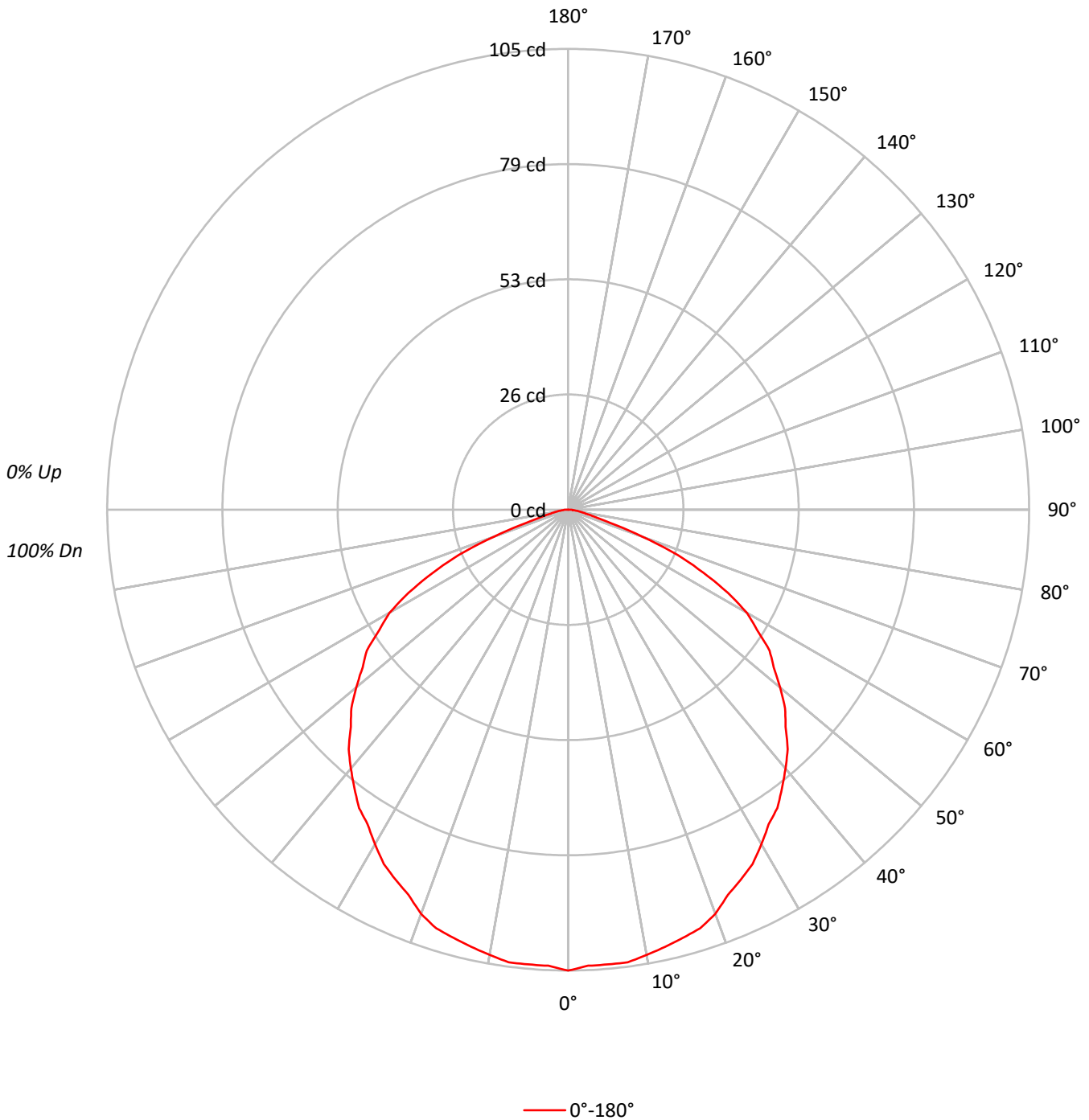
Lumens per Lamp: N/A  
Luminaire Lumens: 279.5 lumens  
Efficiency: N/A  
Efficacy: 40.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.38  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 6.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 3 HR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P22439  
CATALOG NUMBER: HU20P830

### Luminous Intensity Polar Plot





TEST NUMBER: P22439  
 CATALOG NUMBER: HU20P830

**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	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79		84	80	77		81	78	75	73
3	92	82	74	68	90	80	73	68	77	71	66		75	70	65		72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57		67	61	56		65	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	54	49		58	53	48	46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48	42	37	36
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	30		41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28		39	32	28		38	32	27	26

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

	0°
0°	51805
5°	51507
10°	51602
15°	51589
20°	51454
25°	50628
30°	50134
35°	49991
40°	49593
45°	48842
50°	48356
55°	48170
60°	46378
65°	39693
70°	25966
75°	11438
80°	8524
85°	5661



TEST NUMBER: P22439  
 CATALOG NUMBER: HU20P830

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	9.9	3.5
10°-20°	28.5	10.2
20°-30°	42.9	15.4
30°-40°	51.8	18.5
40°-50°	54.3	19.4
50°-60°	49.4	17.7
60°-70°	33.2	11.9
70°-80°	8.0	2.9
80°-90°	1.5	0.5
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°	81.4	29.1
0°-40°	133.1	47.6
0°-60°	236.8	84.7
0°-90°	279.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	279.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	105	
5°	104	10
15°	101	29
25°	93	43
35°	83	52
45°	70	54
55°	56	49
65°	34	33
75°	6	8
85°	1	1
90°	0	



TEST NUMBER: P22439  
CATALOG NUMBER: HU20P830

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	105
2.5°	104
5°	104
7.5°	104
10°	103
12.5°	102
15°	101
17.5°	100
20°	98
22.5°	95
25°	93
27.5°	91
30°	88
32.5°	85
35°	83
37.5°	80
40°	77
42.5°	74
45°	70
47.5°	67
50°	63
52.5°	59
55°	56
57.5°	51
60°	47
62.5°	41
65°	34
67.5°	27
70°	18
72.5°	10
75°	6
77.5°	4
80°	3
82.5°	2
85°	1
87.5°	1
90°	0

(END OF REPORT)