

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: P231780

Luminaire Tested: **HU30SCT09P**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231780  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1709-269-1-R2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: HU30SCT09P  
Description: HALO UNDERCAB COLOR TUNABLE 9"  
Light Source: (48) 2700K CCT, 95 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

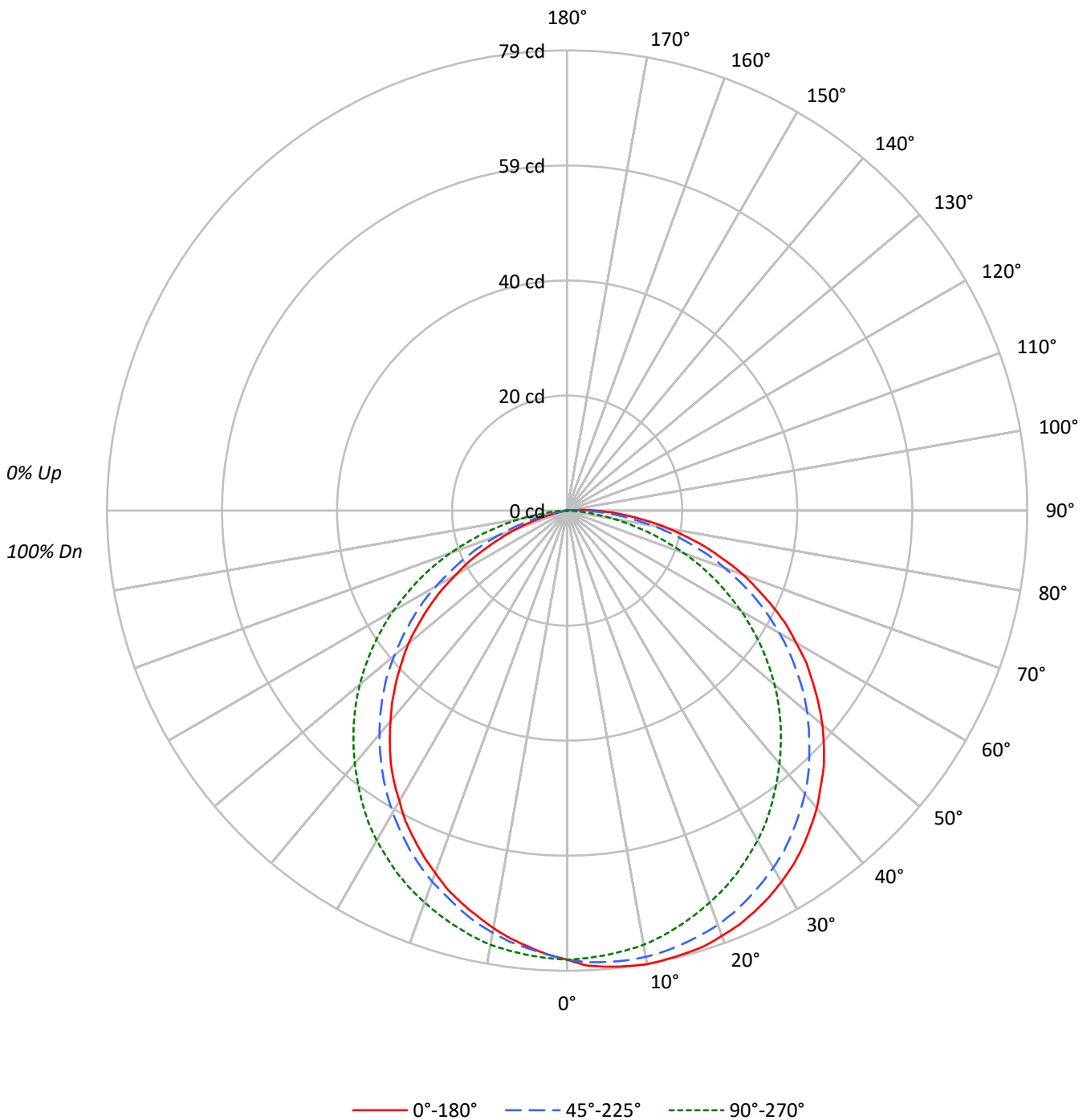
Lumens per Lamp: N/A  
Luminaire Lumens: 221.9 lumens  
Efficiency: N/A  
Efficacy: 60.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 0.66' x L: 0.09' x H: 0.01')  
CIE Type: Direct

Input Watts (W): 3.7  
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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	90°	180°
0°	14283	14283	14283
5°	14467	14224	13841
10°	14577	14200	13416
15°	14632	14113	12977
20°	14688	14034	12515
25°	14726	13959	12052
30°	14742	13862	11537
35°	14730	13710	11032
40°	14680	13531	10388
45°	14603	13358	9728
50°	14458	13152	8998
55°	14240	12853	8019
60°	13973	12440	6802
65°	13616	11869	5425
70°	13180	11055	3848
75°	12384	9730	1890
80°	11326	7927	320
85°	9699	4857	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.3	3.3
10°-20°	20.9	9.4
20°-30°	31.7	14.3
30°-40°	38.4	17.3
40°-50°	39.9	18.0
50°-60°	36.1	16.3
60°-70°	27.2	12.3
70°-80°	15.2	6.9
80°-90°	4.7	2.1
90°-100°	0.4	0.2
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°	59.9	27.0
0°-40°	98.3	44.3
0°-60°	174.3	78.5
0°-90°	221.5	99.8
90°-120°	0.4	0.2
90°-150°	0.4	0.2
90°-180°	0.0	0.0
0°-180°	221.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	77	77	77	77	77	
5°	79	78	77	76	75	8
15°	79	77	74	71	70	22
25°	76	74	69	64	62	35
35°	70	67	61	55	53	44
45°	62	59	52	45	42	48
55°	52	48	41	32	29	46
65°	39	36	28	19	16	39
75°	25	22	14	6	4	26
85°	11	8	3	0	0	10
90°	5	3	0	0	0	3
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
2.5°	78.2	77.5	77.6	77.3	76.9	76.8	76.3	76.4	76.3
5°	78.6	77.9	77.8	77.4	76.6	76.2	75.5	75.4	75.2
7.5°	78.9	78.0	77.9	77.2	76.2	75.5	74.7	74.4	74.1
10°	79.1	78.2	77.8	77.0	75.7	74.6	73.6	73.2	72.8
12.5°	78.9	78.1	77.5	76.5	74.9	73.6	72.4	71.9	71.3
15°	78.7	77.8	77.0	75.6	73.9	72.4	70.9	70.3	69.8
17.5°	78.4	77.3	76.4	74.8	72.8	71.0	69.3	68.5	68.2
20°	77.7	76.7	75.7	73.9	71.6	69.6	67.8	66.8	66.2
22.5°	77.0	75.9	74.7	72.8	70.3	68.2	66.0	64.9	64.3
25°	76.0	74.9	73.5	71.4	68.8	66.3	64.1	63.0	62.2
27.5°	74.9	73.7	72.2	69.9	67.1	64.4	62.0	60.7	60.1
30°	73.6	72.4	70.8	68.3	65.4	62.5	59.9	58.4	57.6
32.5°	72.2	70.9	69.3	66.6	63.5	60.4	57.6	56.1	55.3
35°	70.5	69.1	67.4	64.7	61.3	58.0	55.2	53.4	52.8
37.5°	68.6	67.3	65.5	62.6	59.0	55.6	52.7	50.9	50.0
40°	66.7	65.5	63.5	60.4	56.7	53.3	50.1	48.1	47.2
42.5°	64.4	63.3	61.3	58.0	54.3	50.6	47.5	45.3	44.4
45°	62.3	61.2	58.8	55.6	51.8	48.0	44.7	42.5	41.5
47.5°	59.8	58.5	56.3	53.2	49.2	45.4	41.9	39.5	38.5
50°	57.2	55.9	53.8	50.3	46.5	42.5	38.7	36.3	35.6
52.5°	54.4	53.3	51.1	47.6	43.6	39.6	35.6	33.1	32.3
55°	51.5	50.4	48.1	44.6	40.7	36.5	32.5	29.9	29.0
57.5°	48.7	47.4	45.2	41.7	37.6	33.4	29.4	26.6	25.7
60°	45.4	44.5	42.1	38.6	34.5	30.1	26.0	23.3	22.1
62.5°	42.4	41.3	38.9	35.4	31.2	26.9	22.5	19.9	19.0
65°	38.9	38.0	35.7	32.2	28.0	23.6	19.4	16.5	15.5
67.5°	35.4	34.6	32.2	28.7	24.7	20.2	16.1	13.3	12.3
70°	32.2	31.1	28.8	25.4	21.3	16.8	12.8	10.3	9.4
72.5°	28.4	27.5	25.4	21.9	17.8	13.4	9.6	7.2	6.5
75°	24.9	23.9	21.7	18.3	14.4	10.1	6.5	4.5	3.8
77.5°	21.2	20.4	18.4	15.0	11.1	7.2	4.1	2.4	2.0
80°	17.7	16.8	14.9	11.7	8.1	4.5	2.0	0.9	0.5
82.5°	14.0	13.3	11.4	8.5	5.0	2.1	0.5	0.0	0.0
85°	10.7	9.9	8.2	5.5	2.7	0.6	0.0	0.0	0.0
87.5°	7.6	6.8	5.3	3.0	0.8	0.0	0.1	0.0	0.0
90°	4.8	4.2	2.9	1.2	0.0	0.0	0.0	0.0	0.0
92.5°	2.7	2.2	1.0	0.0	0.0	0.0	0.1	0.0	0.0
95°	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
110°	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0
115°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
120°	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0
122.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)