

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: P231776

Luminaire Tested: **HU30BSC18P**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1709-269-2-R2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU30BSC18P
Description: HALO UNDERCAB COLOR TUNABLE 18"
Light Source: (96) 2700K CCT, 95 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

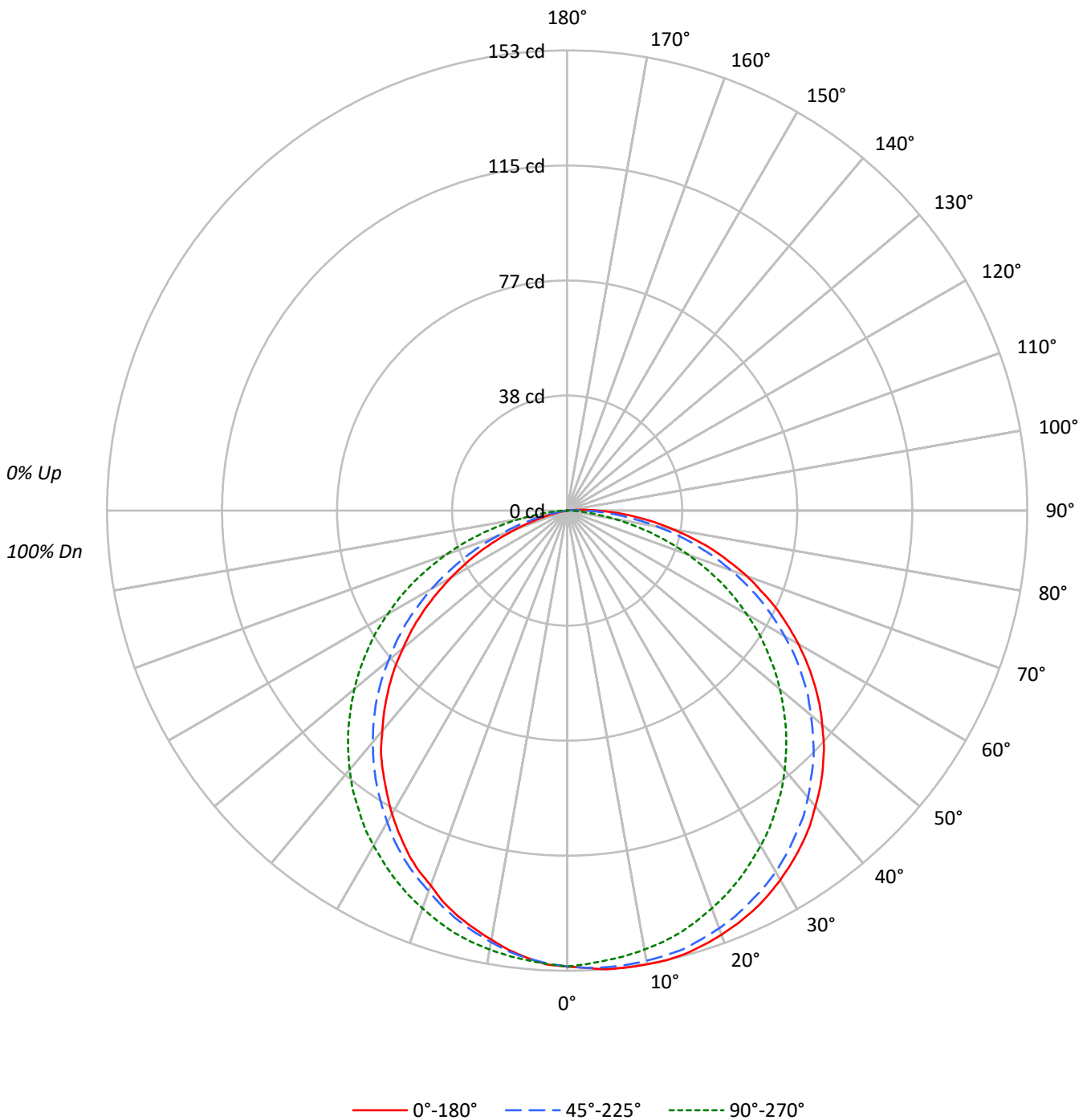
Lumens per Lamp: N/A
Luminaire Lumens: 440.0 lumens
Efficiency: N/A
Efficacy: 53.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.27' x L: 0.09' x H: 0.01')
CIE Type: Direct

Input Watts (W): 8.2
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	90	88	89	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	62	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	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°	14502	14502	14502
5°	14552	14403	14200
10°	14579	14375	13789
15°	14641	14358	13412
20°	14653	14281	12944
25°	14679	14226	12558
30°	14667	14149	12050
35°	14652	14050	11501
40°	14593	13953	10865
45°	14562	13808	10168
50°	14449	13618	9293
55°	14322	13369	8325
60°	14113	12997	7088
65°	13845	12523	5676
70°	13443	11707	3847
75°	12867	10472	1901
80°	11796	8475	264
85°	10439	5319	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.3	3.3
10°-20°	41.1	9.3
20°-30°	62.6	14.2
30°-40°	75.9	17.2
40°-50°	79.1	18.0
50°-60°	71.7	16.3
60°-70°	54.3	12.3
70°-80°	30.5	6.9
80°-90°	9.7	2.2
90°-100°	0.8	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°	118.0	26.8
0°-40°	193.9	44.1
0°-60°	344.7	78.3
0°-90°	439.2	99.8
90°-120°	0.8	0.2
90°-150°	0.8	0.2
90°-180°	1.0	0.2
0°-180°	440.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	152	152	152	152	152	
5°	153	152	150	150	149	15
15°	152	151	145	141	140	43
25°	147	144	135	128	126	68
35°	136	132	121	111	107	85
45°	120	116	103	90	84	93
55°	100	95	81	65	58	90
65°	77	71	56	38	31	76
75°	50	44	29	13	7	53
85°	22	17	5	0	0	21
90°	10	6	0	0	0	6
95°	1	0	0	0	0	1
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°	151.6	151.6	151.6	151.6	151.6	151.6	151.6	151.6	151.6
2.5°	152.2	152.1	152.2	152.1	150.9	151.4	150.7	150.1	151.1
5°	153.1	152.6	152.4	152.0	150.1	150.5	149.5	148.3	149.4
7.5°	153.2	153.0	152.3	151.8	149.3	149.2	147.9	146.4	147.4
10°	153.2	152.7	152.0	150.7	148.2	147.5	145.7	143.9	144.9
12.5°	153.1	152.6	151.5	150.1	146.9	145.8	143.4	141.5	142.4
15°	152.5	152.0	150.8	149.0	145.3	143.7	140.9	139.1	139.7
17.5°	151.4	150.8	149.3	147.2	143.1	141.1	138.0	136.0	136.6
20°	150.1	149.2	147.8	145.0	140.7	138.2	134.6	132.3	132.6
22.5°	148.5	147.9	146.0	142.9	138.2	135.6	131.5	128.9	129.4
25°	146.7	145.9	143.7	140.4	135.3	132.0	128.0	125.1	125.5
27.5°	144.4	143.5	141.4	137.7	132.0	128.5	124.1	120.8	121.0
30°	141.8	140.8	138.7	134.4	128.7	124.8	119.6	116.5	116.5
32.5°	138.9	137.9	135.6	131.1	125.2	120.5	115.2	111.7	111.5
35°	135.8	134.8	132.1	127.5	121.0	116.3	110.6	106.9	106.6
37.5°	132.4	131.4	128.8	123.6	117.1	111.7	105.7	101.5	101.7
40°	128.4	127.3	124.6	119.5	112.5	107.0	100.5	96.2	95.6
42.5°	124.6	123.2	120.1	114.8	107.8	101.6	95.3	90.4	89.9
45°	120.3	119.0	115.9	110.2	102.9	96.8	89.7	84.9	84.0
47.5°	115.8	114.3	110.9	105.2	97.6	91.2	83.8	78.8	77.9
50°	110.7	109.6	105.7	100.2	92.4	85.6	77.6	72.5	71.2
52.5°	105.8	104.2	100.9	94.9	86.9	79.6	71.5	66.4	65.1
55°	100.3	98.9	95.3	89.0	81.1	73.6	65.4	59.7	58.3
57.5°	94.7	93.2	89.7	83.2	75.4	67.2	58.6	53.1	51.4
60°	88.8	87.3	83.5	76.9	68.9	60.8	52.0	46.2	44.6
62.5°	82.7	81.2	77.4	71.1	62.8	54.1	45.1	39.5	37.9
65°	76.6	75.2	71.2	64.4	56.3	47.4	38.5	32.8	31.4
67.5°	69.8	68.5	64.6	58.0	49.5	40.7	31.7	26.1	24.6
70°	63.6	62.1	58.0	51.2	42.8	33.5	24.9	19.6	18.2
72.5°	56.5	55.4	51.2	44.2	36.1	27.0	18.7	13.7	12.3
75°	50.1	48.3	44.2	37.4	29.2	20.4	12.8	8.4	7.4
77.5°	42.7	41.4	37.3	30.6	22.2	13.9	7.5	4.1	3.4
80°	35.7	34.3	30.3	23.9	16.1	8.6	3.3	1.2	0.8
82.5°	29.1	27.4	23.4	17.4	10.2	3.9	0.8	0.0	0.0
85°	22.3	20.7	16.9	11.4	5.3	0.9	0.0	0.0	0.0
87.5°	15.9	14.5	11.1	6.2	1.5	0.0	0.0	0.0	0.0
90°	9.9	9.0	6.1	2.3	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	4.7	2.6	0.1	0.1	0.0	0.0	0.0	0.0
95°	1.3	0.6	0.1	0.0	0.1	0.0	0.0	0.0	0.1
97.5°	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
117.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0
125°	0.0	0.1	0.0	0.0	0.0	0.1	0.1	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)