

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: P231779

Luminaire Tested: **HU30BSC48P**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-269-2-R2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HU30BSC48P
Description: HALO UNDERCAB COLOR TUNABLE 48"
Light Source: (288) 2700K CCT, 95 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

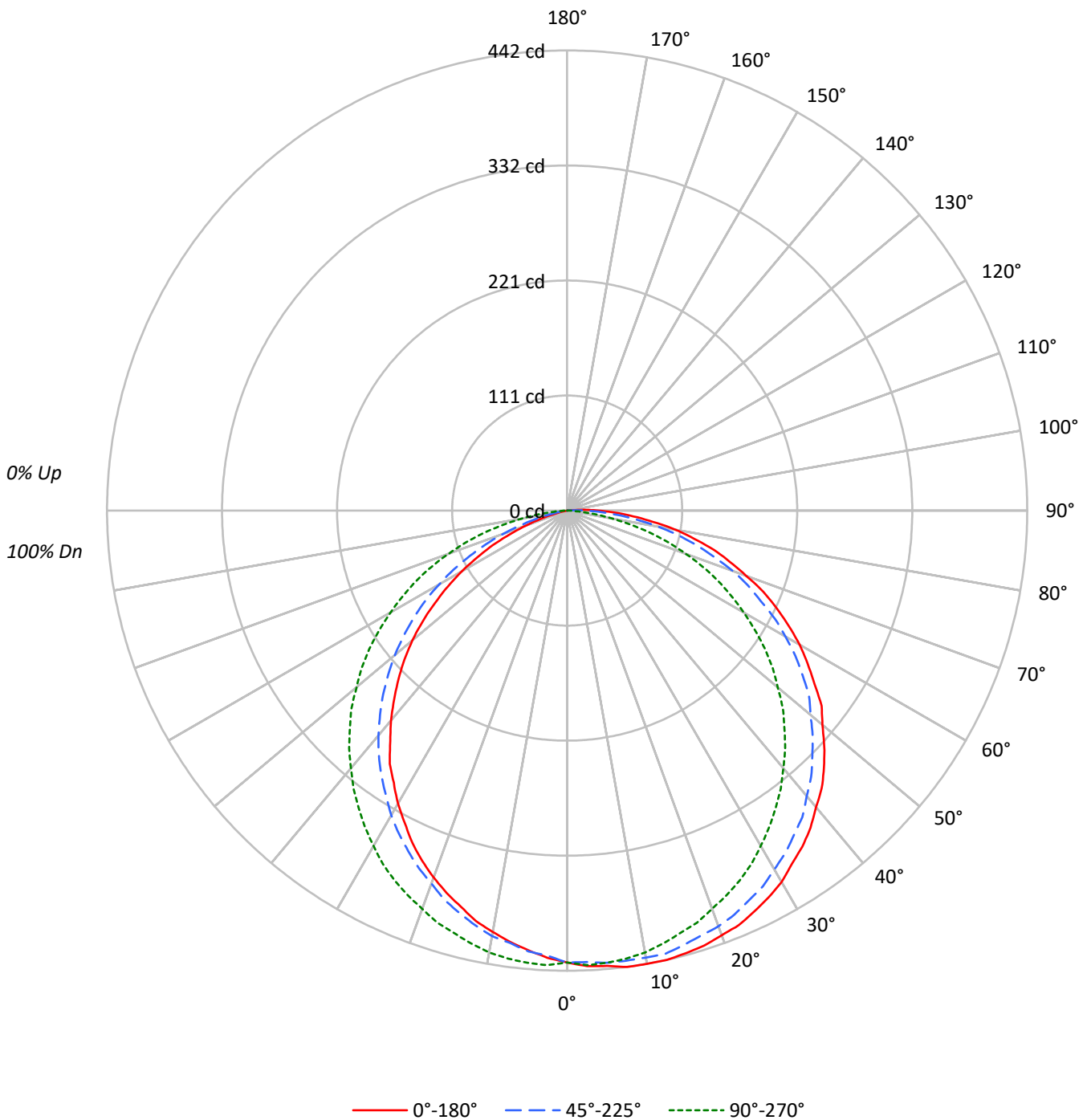
Lumens per Lamp: N/A
Luminaire Lumens: 1252.9 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.27 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 3.82' x L: 0.09' x H: 0.01')
CIE Type: Direct

Input Watts (W): 21.4
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83				83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58				58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50				50
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43				43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37				37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33				33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29				29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26				26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13801	13801	13801
5°	13874	13914	13397
10°	13985	13911	13002
15°	14046	13817	12575
20°	14084	13760	12169
25°	14137	13737	11708
30°	14166	13638	11175
35°	14131	13523	10652
40°	14055	13378	9937
45°	14043	13231	9214
50°	13884	13018	8417
55°	13765	12813	7357
60°	13631	12407	6182
65°	13339	11969	4747
70°	12858	11167	2951
75°	12465	10095	1195
80°	11643	7935	0
85°	9959	4600	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	3.3
10°-20°	118.0	9.4
20°-30°	179.4	14.3
30°-40°	216.8	17.3
40°-50°	225.3	18.0
50°-60°	203.6	16.2
60°-70°	153.2	12.2
70°-80°	85.4	6.8
80°-90°	27.6	2.2
90°-100°	2.4	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°	338.5	27.0
0°-40°	555.3	44.3
0°-60°	984.2	78.6
0°-90°	1250.5	99.8
90°-120°	2.4	0.2
90°-150°	2.4	0.2
90°-180°	2.0	0.2
0°-180°	1252.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	434	434	434	434	434	
5°	439	436	436	425	424	42
15°	440	432	420	400	394	124
25°	425	413	392	361	352	196
35°	394	380	349	311	297	246
45°	349	333	295	250	229	269
55°	290	276	232	180	155	260
65°	222	205	160	103	79	220
75°	146	129	83	30	14	153
85°	64	49	13	0	0	61
90°	30	18	0	0	0	17
95°	5	0	0	0	0	4
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°	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0	434.0
2.5°	438.0	439.1	434.0	436.0	437.0	433.0	428.0	431.0	430.0
5°	439.1	440.1	436.0	438.0	436.0	431.0	425.0	426.0	424.0
7.5°	442.1	441.1	436.0	436.0	434.0	426.0	419.0	420.0	418.0
10°	442.1	441.1	436.0	435.0	431.0	422.0	415.0	413.0	411.0
12.5°	442.1	441.1	436.0	432.0	426.0	417.0	408.0	407.0	404.0
15°	440.1	440.1	432.0	428.0	420.0	410.0	400.0	397.0	394.0
17.5°	438.0	436.0	428.0	423.0	415.0	403.0	392.0	388.0	385.0
20°	434.0	433.0	425.0	417.0	407.0	395.0	381.0	378.0	375.0
22.5°	431.0	429.0	420.0	411.0	400.0	386.0	372.0	368.0	364.0
25°	425.0	423.0	413.0	404.0	392.0	377.0	361.0	355.0	352.0
27.5°	419.0	417.0	407.0	396.0	383.0	365.0	350.0	342.0	338.0
30°	412.0	409.0	398.0	387.0	372.0	355.0	338.0	329.0	325.0
32.5°	402.0	400.0	390.0	378.0	361.0	342.0	324.0	315.0	310.0
35°	394.0	391.0	380.0	366.0	349.0	329.0	311.0	301.0	297.0
37.5°	384.0	380.0	371.0	356.0	337.0	316.0	297.0	285.0	279.0
40°	372.0	370.0	358.0	343.0	323.0	302.0	282.0	269.0	263.0
42.5°	362.0	358.0	347.0	330.0	310.0	288.0	266.0	253.0	246.0
45°	349.0	346.0	333.0	317.0	295.0	272.0	250.0	235.0	229.0
47.5°	335.0	333.0	320.0	304.0	281.0	256.0	233.0	217.0	212.0
50°	320.0	318.0	305.0	288.0	264.0	240.0	216.0	199.0	194.0
52.5°	308.0	303.0	293.0	273.0	249.0	224.0	198.0	181.0	175.0
55°	290.0	287.0	276.0	257.0	232.0	207.0	180.0	162.0	155.0
57.5°	274.0	271.0	260.0	241.0	214.0	188.0	162.0	143.0	136.0
60°	258.0	254.0	242.0	223.0	196.0	169.0	142.0	123.0	117.0
62.5°	240.0	237.0	225.0	205.0	178.0	151.0	123.0	105.0	97.0
65°	222.0	218.0	205.0	186.0	160.0	131.0	103.0	85.0	79.0
67.5°	204.0	200.0	188.0	168.0	141.0	111.0	84.0	65.0	59.0
70°	183.0	180.0	169.0	147.0	121.0	91.0	65.0	49.0	42.0
72.5°	164.0	161.0	148.0	128.0	102.0	72.0	47.0	33.0	27.0
75°	146.0	141.0	129.0	108.0	83.0	54.0	30.0	18.0	14.0
77.5°	125.0	120.0	109.0	88.0	62.0	36.0	16.0	8.0	6.0
80°	106.0	100.0	89.0	68.0	44.0	21.0	7.0	1.0	0.0
82.5°	83.0	80.0	68.0	51.0	27.0	9.0	0.0	0.0	0.0
85°	64.0	60.0	49.0	34.0	13.0	2.0	0.0	0.0	0.0
87.5°	46.0	43.0	33.0	18.0	3.0	0.0	0.0	0.0	0.0
90°	30.0	27.0	18.0	7.0	0.0	0.0	0.0	0.0	0.0
92.5°	18.0	15.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	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°	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	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)