

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P600893

Luminaire Tested: LTB4069FS351EWHDMR

Issue Date: 7/27/2022

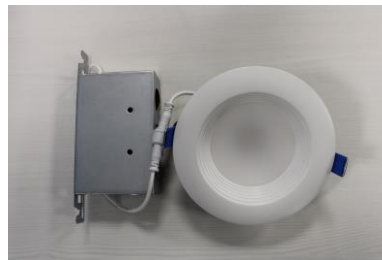
Test Information

Test Method: LM-79-2019
Report Number: P600893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ()
Test Lab: INNOVATION CENTER
Issue Date: 7/27/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LTB4069FS351EWHDMR
Description: 4' Fixture at 4000K
Light Source: -
Ballast/Driver: -

Summary

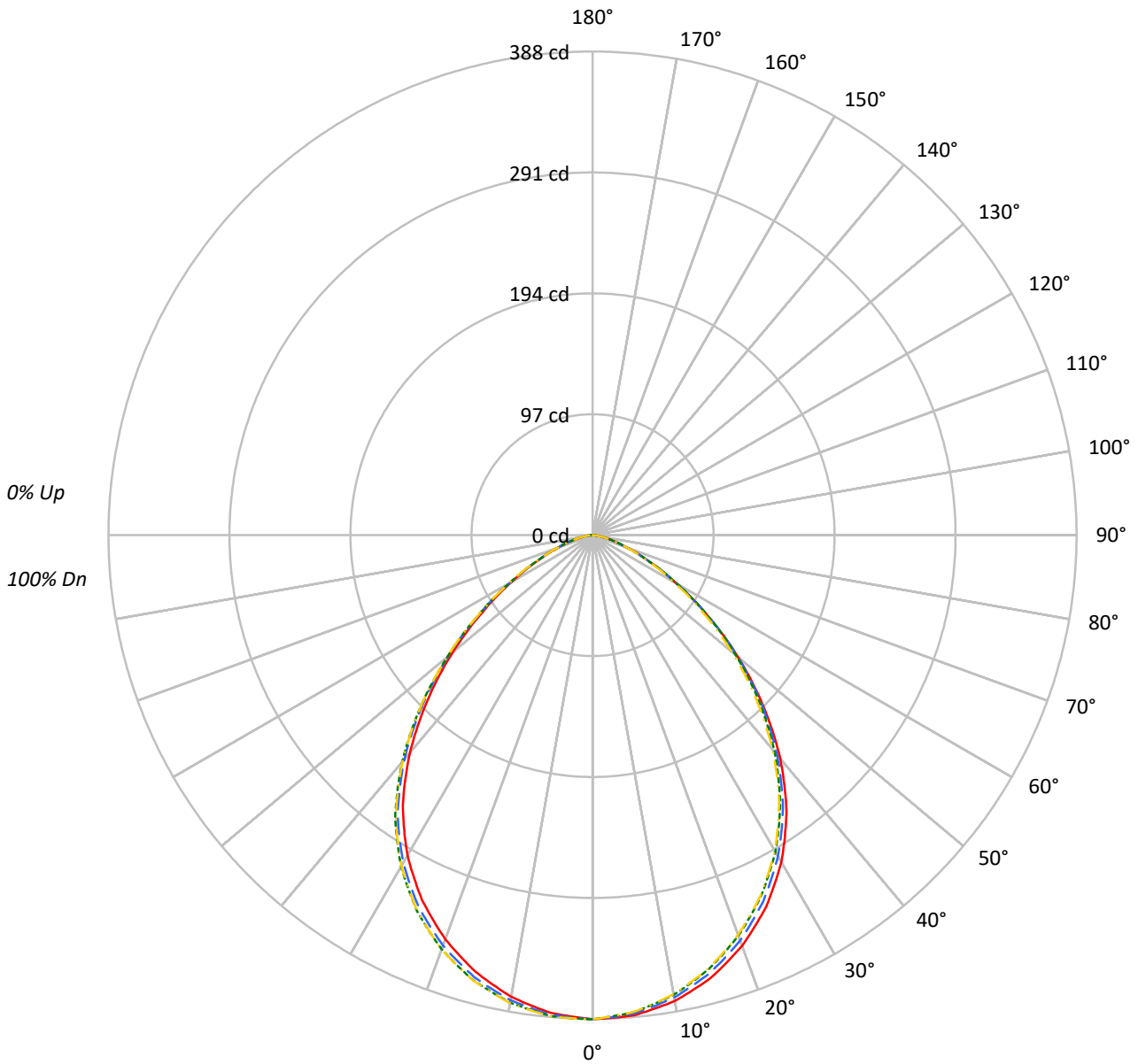
Lumens per Lamp: 623.78 (1 lamp)
Luminaire Lumens: 776.6 lumens
Efficiency: 124.5%
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: 24 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	148	148	148	148	145	145	145	145	138	138	138	132	132	132	127	127	127	124				
1	138	133	129	125	135	130	127	123	125	122	119	121	118	116	116	114	112	110				
2	128	119	112	106	125	117	110	105	113	107	102	109	104	100	105	101	98	96				
3	118	107	98	91	115	105	97	90	101	94	89	98	92	87	95	90	86	83				
4	109	96	87	79	106	95	86	79	92	84	78	89	82	77	86	80	76	73				
5	101	87	77	70	99	86	76	69	83	75	69	81	74	68	79	72	67	65				
6	94	79	69	62	92	78	69	62	76	67	61	74	66	61	72	65	60	58				
7	88	72	62	55	86	71	62	55	70	61	55	68	60	55	66	59	54	52				
8	82	66	57	50	80	66	56	50	64	56	50	63	55	49	61	54	49	47				
9	77	61	52	46	75	61	52	45	59	51	45	58	50	45	57	50	45	43				
10	72	57	48	42	71	56	47	42	55	47	41	54	46	41	53	46	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	48880	48880	48880	48880
5°	48839	48511	48599	48915
10°	48497	47858	48050	48663
15°	47881	46943	47243	48155
20°	46955	45789	46205	47356
25°	45699	44366	44866	46199
30°	43988	42607	43116	44598
35°	41650	40298	40728	42357
40°	38459	37276	37408	39018
45°	34439	33585	33264	34670
50°	29838	29368	28605	29740
55°	24728	24662	23587	24421
60°	19658	19733	18676	19255
65°	14860	14919	14294	14592
70°	11039	10818	10708	10965
75°	8266	7974	8169	8412
80°	5653	5291	5653	6015
85°	3610	2744	3610	4332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 292.5°
 Vertical Angle: 45°
 Luminance: 34937 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.6	4.7	5.9
10°-20°	102.8	13.2	16.5
20°-30°	149.9	19.3	24.0
30°-40°	167.1	21.5	26.8
40°-50°	147.2	18.9	23.6
50°-60°	100.1	12.9	16.1
60°-70°	50.6	6.5	8.1
70°-80°	18.8	2.4	3.0
80°-90°	3.5	0.4	0.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	289.3	37.3	46.4
0°-40°	456.4	58.8	73.2
0°-60°	703.7	90.6	112.8
0°-90°	776.6	100.0	124.5
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	776.6	100.0	124.5

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	388	388	388	388	388	
5°	387	384	385	387	387	37
15°	368	360	363	370	368	103
25°	329	320	323	333	329	151
35°	271	262	265	276	271	169
45°	194	189	187	195	194	149
55°	113	112	108	111	113	102
65°	50	50	48	49	50	51
75°	17	16	17	17	17	19
85°	2	2	2	3	2	3
90°	0	0	0	0	0	0
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°	202.5°	225°
0°	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4
5°	386.6	386.1	385.2	384.5	384.0	383.6	383.8	384.0	384.7	385.3	386.1
10°	379.5	378.5	376.7	375.6	374.5	373.6	374.0	374.5	376.0	377.1	378.8
15°	367.5	366.1	363.6	361.8	360.3	359.1	359.7	360.4	362.6	364.5	366.9
20°	350.6	349.1	346.0	343.8	341.9	340.5	341.2	342.2	345.0	347.4	350.4
25°	329.1	327.3	323.9	321.7	319.5	317.9	318.7	319.8	323.1	325.8	329.4
30°	302.7	301.0	297.4	295.3	293.2	291.3	292.1	293.1	296.7	299.4	303.5
35°	271.1	269.6	266.1	264.3	262.3	260.1	260.8	261.3	265.1	268.0	272.4
40°	234.1	233.3	230.2	228.6	226.9	224.2	224.4	224.0	227.7	230.3	234.5
45°	193.5	193.8	191.4	190.3	188.7	185.7	185.1	183.8	186.9	189.0	192.8
50°	152.4	153.4	151.7	151.2	150.0	147.0	145.5	143.4	146.1	147.7	150.7
55°	112.7	114.3	113.1	113.1	112.4	109.4	107.8	105.6	107.5	108.4	110.8
60°	78.1	79.5	78.6	78.8	78.4	76.0	74.9	73.1	74.2	74.6	76.4
65°	49.9	50.9	50.0	50.3	50.1	48.4	48.4	47.2	48.0	47.7	49.2
70°	30.0	30.1	29.5	29.3	29.4	28.9	29.0	28.8	29.1	29.2	29.7
75°	17.0	17.0	16.3	16.3	16.4	16.2	16.4	16.3	16.8	16.8	17.4
80°	7.8	7.7	7.3	7.2	7.3	7.2	7.4	7.4	7.8	7.9	8.3
85°	2.5	2.3	2.1	1.8	1.9	2.0	2.0	2.2	2.5	2.7	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	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	0.0	0.0
105°	0.0	0.0	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	0.0	0.0
115°	0.0	0.0	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	0.0	0.0
125°	0.0	0.0	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	0.0	0.0
135°	0.0	0.0	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	0.0	0.0
145°	0.0	0.0	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	0.0	0.0
155°	0.0	0.0	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	0.0	0.0
165°	0.0	0.0	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	0.0	0.0
175°	0.0	0.0	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	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	388.4	388.4	388.4	388.4	388.4	388.4
5°	386.8	387.2	387.6	387.4	387.3	386.6
10°	379.9	380.8	381.5	381.1	380.8	379.5
15°	368.3	369.6	370.4	369.8	369.2	367.5
20°	352.1	353.6	354.6	353.6	353.0	350.6
25°	331.2	332.7	333.9	332.6	331.7	329.1
30°	305.5	306.9	308.1	306.4	305.6	302.7
35°	274.3	275.7	277.0	274.9	274.3	271.1
40°	236.2	237.5	238.8	236.9	236.7	234.1
45°	193.8	194.8	196.3	194.8	195.4	193.5
50°	151.3	151.9	153.4	152.2	153.4	152.4
55°	111.1	111.3	112.7	111.7	113.1	112.7
60°	76.5	76.5	77.7	76.9	78.1	78.1
65°	49.1	49.0	50.0	49.4	50.4	49.9
70°	29.9	29.8	30.2	30.0	30.3	30.0
75°	17.5	17.3	17.7	17.4	17.5	17.0
80°	8.4	8.3	8.4	8.2	8.2	7.8
85°	3.1	3.0	3.1	3.0	2.9	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0
95°	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
105°	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
115°	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
125°	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
135°	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
145°	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
155°	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
165°	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
175°	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



Report Generated By 670255532 / DESKTOP-KHEM71S

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°







(END OF REPORT)