

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: P600891

Luminaire Tested: LTB3059FS351EWHDMR

Issue Date: 7/27/2022

Test Information

Test Method: LM-79-2019
Report Number: P600891
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: LTB3059FS351EWHDMR
Description: 3' Fixture at 5000K
Light Source: -
Ballast/Driver: -

Summary

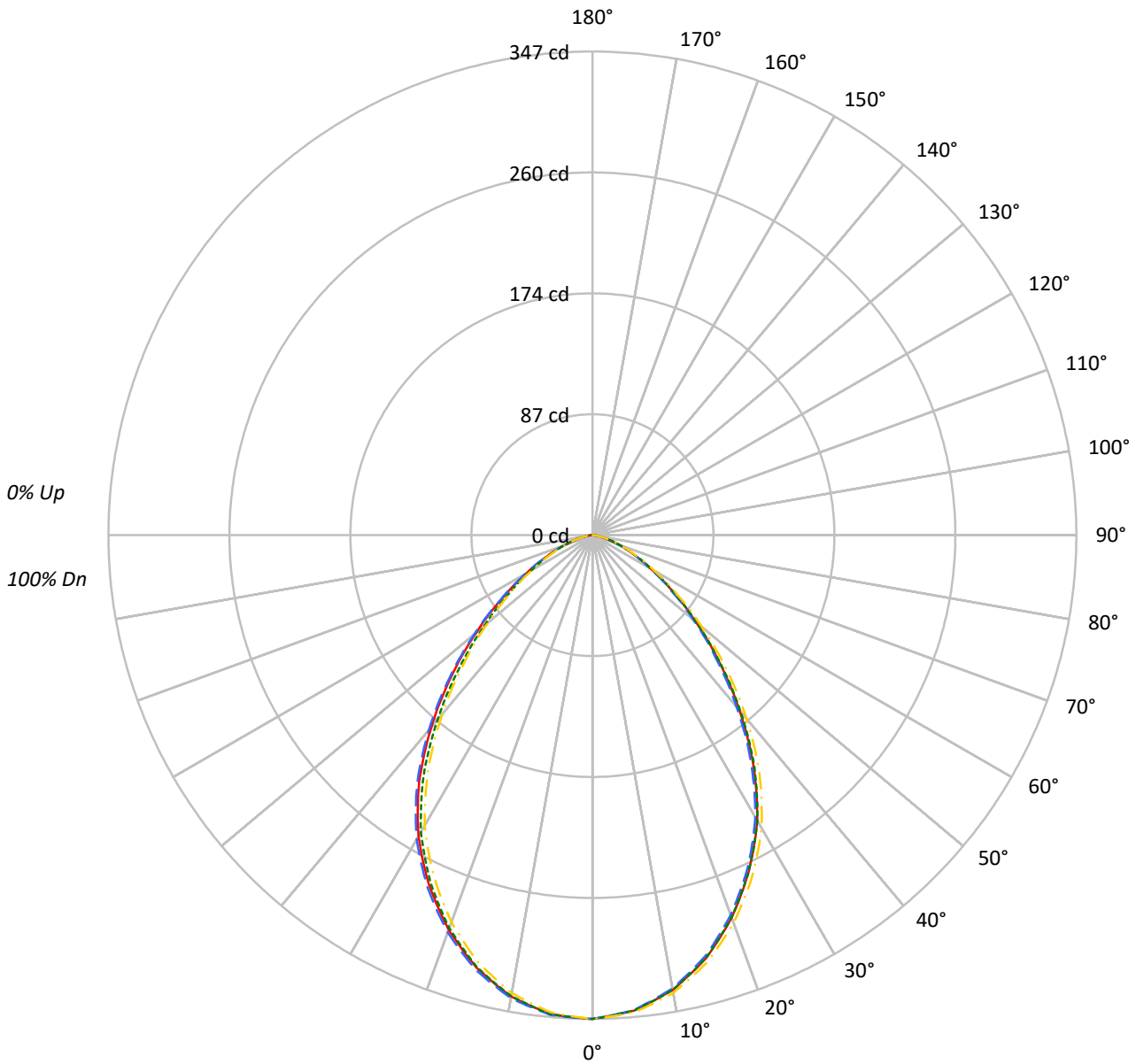
Lumens per Lamp: 532.81 (1 lamp)
Luminaire Lumens: 596.4 lumens
Efficiency: 111.9%
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.07 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 6.6
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									
RC	80									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	50	30	10	0													
RCR																																					
0	133	133	133	133	130	130	130	130	124	124	124	119	119	119	114	114	114	112						112													
1	124	120	117	113	122	118	114	111	113	110	108	109	107	105	105	103	102	99						99													
2	115	108	102	97	113	106	100	96	102	97	93	99	95	91	95	92	89	87						87													
3	107	97	90	84	105	96	89	83	92	87	82	90	85	80	87	83	79	77						77													
4	99	88	80	73	97	87	79	73	84	77	72	82	76	71	79	74	70	68						68													
5	92	80	71	65	90	79	71	65	77	70	64	75	68	63	73	67	63	61						61													
6	86	73	64	58	84	72	64	58	70	63	58	69	62	57	67	61	57	55						55													
7	81	67	59	53	79	66	58	52	65	57	52	63	57	52	62	56	51	49						49													
8	75	62	54	48	74	61	53	48	60	53	47	59	52	47	57	51	47	45						45													
9	71	57	49	44	69	57	49	43	56	48	43	54	48	43	53	47	43	41						41													
10	67	53	45	40	65	53	45	40	52	45	40	51	44	40	50	44	40	38						38													

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	76112	76112	76112	76112
5°	75369	75369	75919	75941
10°	73768	73768	74837	74770
15°	71351	71306	72918	72781
20°	68139	68093	70309	69983
25°	64262	64238	67020	66464
30°	59857	59857	63149	62263
35°	53860	54154	57982	56510
40°	46916	47260	51411	49435
45°	39818	40066	44253	41865
50°	32988	33193	36980	34523
55°	26761	26952	30087	27908
60°	21402	21665	23945	22323
65°	16915	17071	18575	17641
70°	13079	13336	14169	13656
75°	9404	9913	10421	9913
80°	7198	7577	7956	7450
85°	4529	5032	5284	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 225°
 Vertical Angle: 45°
 Luminance: 44935 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	32.5	5.4	6.1
10°-20°	89.2	15.0	16.7
20°-30°	124.3	20.8	23.3
30°-40°	129.4	21.7	24.3
40°-50°	103.9	17.4	19.5
50°-60°	66.6	11.2	12.5
60°-70°	34.5	5.8	6.5
70°-80°	13.3	2.2	2.5
80°-90°	2.7	0.5	0.5
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°	246.0	41.3	46.2
0°-40°	375.4	62.9	70.5
0°-60°	545.8	91.5	102.4
0°-90°	596.4	100.0	111.9
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°	596.4	100.0	111.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	347	347	347	347	347	
5°	342	342	345	345	342	32
15°	314	314	321	321	314	88
25°	266	266	277	275	266	122
35°	201	202	217	211	201	125
45°	128	129	143	135	128	100
55°	70	70	79	73	70	64
65°	33	33	36	34	33	33
75°	11	12	12	12	11	13
85°	2	2	2	2	2	2
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



TEST NUMBER: P600891
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	347.1	347.1	347.1	347.1	347.1	347.1	347.1	347.1	347.1	347.1	347.1
5°	342.4	342.2	341.9	342.0	342.4	342.7	343.6	344.2	344.9	345.2	345.5
10°	331.3	331.0	330.2	330.5	331.3	331.8	333.5	334.6	336.1	336.6	337.2
15°	314.3	313.7	312.7	313.0	314.1	314.9	317.3	318.9	321.2	322.0	322.9
20°	292.0	291.4	289.9	290.5	291.8	292.9	296.0	298.2	301.3	302.2	303.3
25°	265.6	264.9	263.3	263.9	265.5	267.0	270.8	273.3	277.0	278.1	279.3
30°	236.4	235.5	233.6	234.5	236.4	238.3	242.5	245.4	249.4	250.7	252.0
35°	201.2	200.1	198.1	199.6	202.3	204.3	208.9	212.0	216.6	218.0	219.4
40°	163.9	162.8	160.9	162.3	165.1	167.2	172.0	175.0	179.6	181.0	182.2
45°	128.4	127.5	125.7	126.9	129.2	131.2	135.7	138.4	142.7	143.9	144.9
50°	96.7	96.2	94.5	95.4	97.3	98.8	102.5	104.8	108.4	109.4	110.2
55°	70.0	69.8	68.5	69.1	70.5	71.5	74.2	75.9	78.7	79.3	79.9
60°	48.8	49.0	47.9	48.5	49.4	49.7	51.6	52.6	54.6	54.9	55.2
65°	32.6	32.5	32.1	32.3	32.9	33.2	34.1	34.8	35.8	36.0	35.9
70°	20.4	20.3	20.0	20.3	20.8	20.9	21.3	21.6	22.1	22.1	22.2
75°	11.1	11.2	11.0	11.3	11.7	11.6	11.9	11.9	12.3	12.2	12.4
80°	5.7	5.8	5.7	5.8	6.0	6.0	6.1	6.1	6.3	6.2	6.3
85°	1.8	1.8	1.8	1.8	2.0	2.0	2.0	2.1	2.1	2.1	2.2
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°	347.1	347.1	347.1	347.1	347.1	347.1
5°	345.2	345.0	344.6	343.7	343.2	342.4
10°	336.6	335.8	335.0	333.5	332.7	331.3
15°	321.9	320.6	319.3	317.1	316.0	314.3
20°	301.9	299.9	298.2	295.4	294.1	292.0
25°	277.4	274.7	272.5	269.4	268.1	265.6
30°	249.6	245.9	243.3	240.3	239.1	236.4
35°	216.0	211.1	208.1	205.2	204.5	201.2
40°	178.6	172.7	169.3	167.1	166.9	163.9
45°	141.1	135.0	132.1	130.4	130.9	128.4
50°	106.5	101.2	99.0	97.8	98.6	96.7
55°	76.8	73.0	71.7	70.6	71.3	70.0
60°	53.1	50.9	50.3	49.4	49.8	48.8
65°	35.1	34.0	33.7	33.1	33.0	32.6
70°	21.9	21.3	21.2	20.8	20.7	20.4
75°	12.1	11.7	11.8	11.5	11.5	11.1
80°	6.2	5.9	6.0	5.8	5.9	5.7
85°	2.1	1.9	1.9	1.9	1.9	1.8
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





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









(END OF REPORT)