

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: P600890

Luminaire Tested: LTB3059FS351EWHDMR

Issue Date: 7/27/2022

Test Information

Test Method: LM-79-2019
Report Number: P600890
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 4000K
Light Source: -
Ballast/Driver: -

Summary

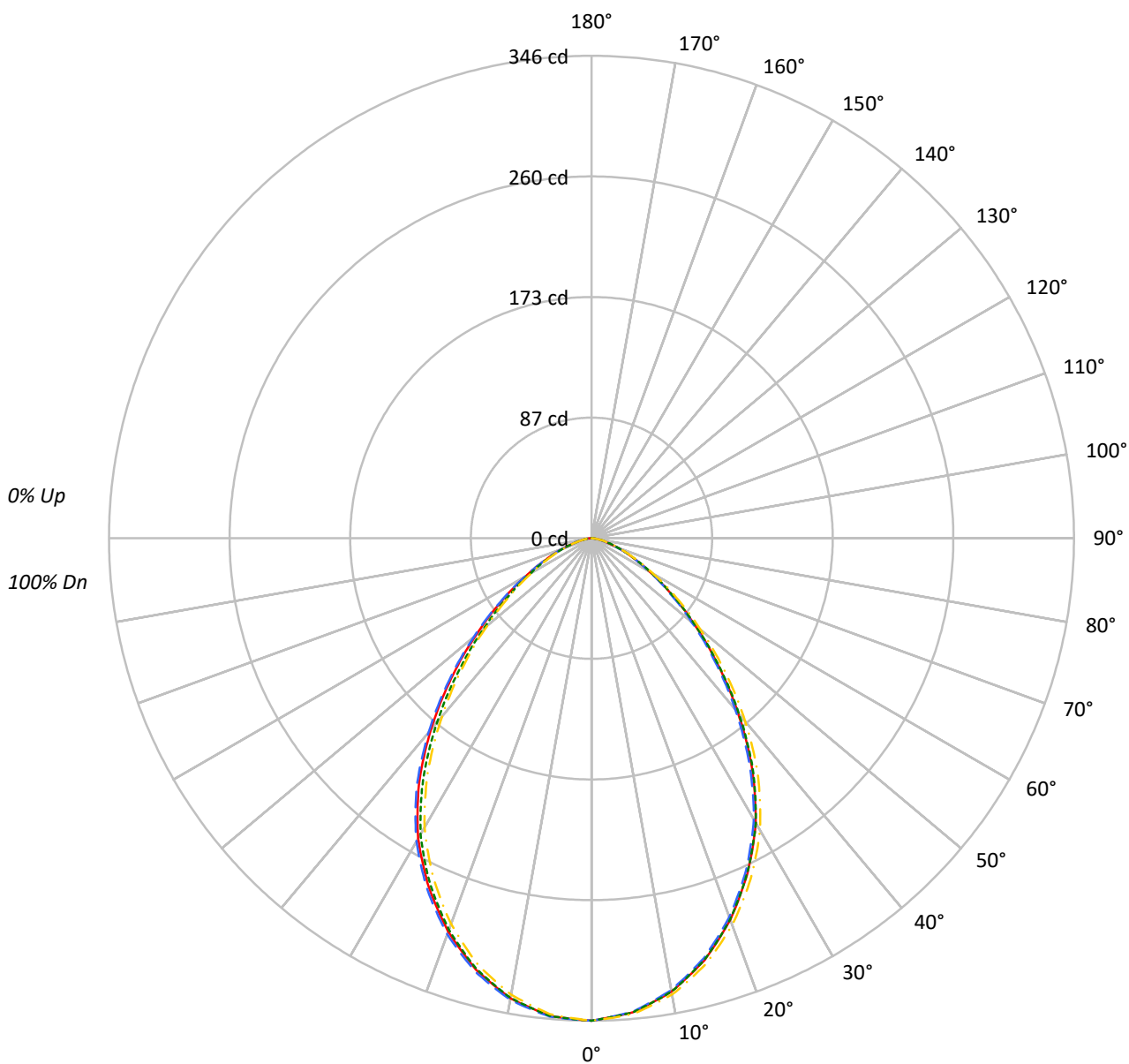
Lumens per Lamp: 532.81 (1 lamp)
Luminaire Lumens: 594.4 lumens
Efficiency: 111.6%
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.07 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 6.4
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: 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	116	113	121	117	114	111	113	110	107	109	106	104	105	103	101	99					99														
2	115	108	102	96	112	106	100	95	102	97	93	98	94	91	95	92	89	87					87														
3	107	97	89	83	104	95	88	83	92	86	81	89	84	80	87	82	79	77					77														
4	99	88	80	73	97	86	79	73	84	77	72	81	76	71	79	74	70	68					68														
5	92	80	71	65	90	79	71	65	76	69	64	74	68	63	72	67	63	61					61														
6	86	73	64	58	84	72	64	58	70	63	57	68	62	57	67	61	56	54					54														
7	80	67	58	52	79	66	58	52	65	57	52	63	56	51	62	56	51	49					49														
8	75	62	53	48	74	61	53	47	60	52	47	58	52	47	57	51	47	45					45														
9	71	57	49	43	69	57	49	43	55	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	39	38					38														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	75871	75871	75871	75871
5°	75126	75126	75677	75677
10°	73523	73523	74592	74525
15°	71101	71056	72691	72532
20°	67929	67859	70076	69749
25°	64068	64020	66802	66246
30°	59655	59655	62946	62060
35°	53672	53967	57768	56322
40°	46745	47088	51239	49292
45°	39694	39942	44098	41741
50°	32886	33091	36843	34421
55°	26685	26876	29973	27832
60°	21358	21621	23858	22235
65°	16863	17019	18523	17589
70°	13015	13271	14169	13592
75°	9404	9828	10336	9913
80°	7198	7577	7956	7450
85°	4529	5032	5284	4780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 225°
 Vertical Angle: 45°
 Luminance: 44811 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	32.4	5.4	6.1
10°-20°	88.9	15.0	16.7
20°-30°	123.9	20.8	23.3
30°-40°	128.9	21.7	24.2
40°-50°	103.5	17.4	19.4
50°-60°	66.4	11.2	12.5
60°-70°	34.4	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°	245.2	41.3	46.0
0°-40°	374.1	62.9	70.2
0°-60°	544.0	91.5	102.1
0°-90°	594.4	100.0	111.6
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°	594.4	100.0	111.6

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	346	346	346	346	346	
5°	341	341	344	344	341	32
15°	313	313	320	320	313	88
25°	265	265	276	274	265	122
35°	200	202	216	210	200	125
45°	128	129	142	135	128	99
55°	70	70	78	73	70	64
65°	32	33	36	34	32	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0	346.0
5°	341.3	341.1	340.8	340.9	341.3	341.6	342.5	343.1	343.8	344.1	344.4
10°	330.2	329.9	329.1	329.4	330.2	330.7	332.4	333.5	335.0	335.5	336.1
15°	313.2	312.7	311.6	312.0	313.0	313.9	316.3	317.9	320.2	320.9	321.8
20°	291.1	290.5	289.0	289.5	290.8	291.9	295.1	297.2	300.3	301.2	302.3
25°	264.8	264.0	262.4	263.0	264.6	266.1	269.9	272.4	276.1	277.1	278.3
30°	235.6	234.7	232.8	233.8	235.6	237.5	241.7	244.6	248.6	249.8	251.1
35°	200.5	199.4	197.5	198.9	201.6	203.6	208.2	211.3	215.8	217.3	218.7
40°	163.3	162.3	160.4	161.8	164.5	166.7	171.5	174.4	179.0	180.4	181.6
45°	128.0	127.1	125.3	126.5	128.8	130.8	135.3	138.0	142.2	143.4	144.5
50°	96.4	95.9	94.2	95.0	97.0	98.5	102.2	104.5	108.0	109.0	109.9
55°	69.8	69.6	68.3	68.9	70.3	71.2	74.0	75.7	78.4	79.1	79.6
60°	48.7	48.8	47.8	48.3	49.3	49.5	51.4	52.4	54.4	54.7	55.0
65°	32.5	32.4	32.0	32.2	32.8	33.1	34.0	34.7	35.7	35.9	35.8
70°	20.3	20.3	19.9	20.3	20.7	20.8	21.3	21.5	22.1	22.0	22.1
75°	11.1	11.2	11.0	11.2	11.6	11.6	11.9	11.9	12.2	12.2	12.4
80°	5.7	5.8	5.6	5.8	6.0	5.9	6.1	6.0	6.3	6.2	6.3
85°	1.8	1.8	1.7	1.8	2.0	2.0	2.0	2.0	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°	346.0	346.0	346.0	346.0	346.0	346.0
5°	344.1	343.8	343.4	342.6	342.1	341.3
10°	335.4	334.7	333.9	332.4	331.6	330.2
15°	320.8	319.5	318.3	316.1	315.0	313.2
20°	300.9	298.9	297.2	294.4	293.2	291.1
25°	276.5	273.8	271.6	268.5	267.2	264.8
30°	248.8	245.1	242.5	239.5	238.4	235.6
35°	215.3	210.4	207.4	204.5	203.8	200.5
40°	178.0	172.2	168.8	166.5	166.3	163.3
45°	140.6	134.6	131.6	130.0	130.5	128.0
50°	106.1	100.9	98.7	97.5	98.2	96.4
55°	76.5	72.8	71.5	70.4	71.0	69.8
60°	52.9	50.7	50.2	49.2	49.7	48.7
65°	35.0	33.9	33.5	33.0	32.9	32.5
70°	21.8	21.2	21.1	20.7	20.6	20.3
75°	12.1	11.7	11.7	11.4	11.4	11.1
80°	6.2	5.9	6.0	5.8	5.9	5.7
85°	2.1	1.9	1.9	1.9	1.8	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)