

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: P600892

Luminaire Tested: LTB4069FS351EWHDMR

Issue Date: 7/27/2022

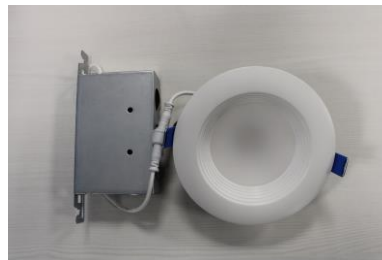
Test Information

Test Method: LM-79-2019
Report Number: P600892
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 3000K
Light Source: -
Ballast/Driver: -

Summary

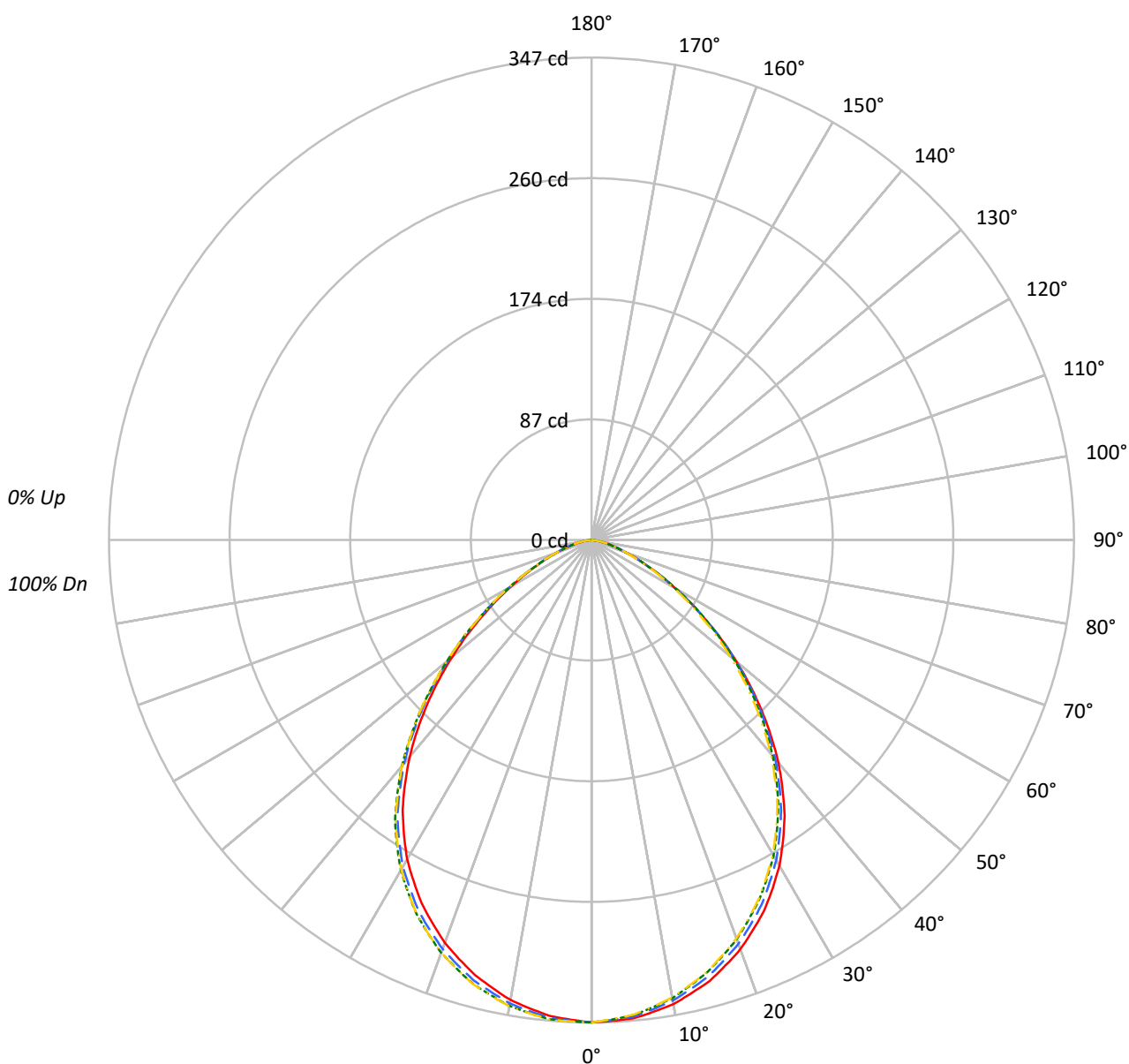
Lumens per Lamp: 623.78 (1 lamp)
Luminaire Lumens: 693.7 lumens
Efficiency: 111.2%
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.9
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	132	132	132	132	129	129	129	129	124	124	124	118	118	118	113	113	113	111				111
1	123	119	115	112	120	117	113	110	112	109	106	108	105	103	104	102	100				98	
2	114	106	100	95	111	104	99	94	101	96	91	97	93	89	94	90	88				85	
3	105	95	88	81	103	94	86	81	90	84	79	88	82	78	85	80	77				75	
4	97	86	77	71	95	84	76	70	82	75	69	79	73	69	77	72	68				65	
5	90	78	69	62	88	77	68	62	74	67	61	72	66	61	70	65	60				58	
6	84	71	62	55	82	70	61	55	68	60	55	66	59	54	64	58	54				52	
7	78	65	56	50	76	64	55	49	62	55	49	61	54	49	59	53	48				46	
8	73	59	51	45	72	59	50	45	57	50	44	56	49	44	55	49	44				42	
9	69	55	46	41	67	54	46	41	53	46	40	52	45	40	51	45	40				38	
10	65	51	43	37	63	50	42	37	49	42	37	48	42	37	47	41	37				35	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	43670	43670	43670	43670
5°	43635	43344	43407	43710
10°	43321	42759	42925	43475
15°	42774	41927	42201	43022
20°	41946	40915	41290	42307
25°	40825	39631	40075	41269
30°	39294	38059	38524	39846
35°	37210	35996	36381	37840
40°	34352	33301	33416	34845
45°	30772	30007	29722	30968
50°	26666	26236	25550	26568
55°	22095	22029	21064	21832
60°	17543	17619	16688	17191
65°	13281	13341	12775	13013
70°	9861	9641	9567	9788
75°	7391	7099	7294	7537
80°	5001	4711	5073	5363
85°	3177	2455	3177	3899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 292.5°
 Vertical Angle: 45°
 Luminance: 31217 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	32.7	4.7	5.2
10°-20°	91.8	13.2	14.7
20°-30°	133.9	19.3	21.5
30°-40°	149.3	21.5	23.9
40°-50°	131.5	19.0	21.1
50°-60°	89.5	12.9	14.3
60°-70°	45.2	6.5	7.2
70°-80°	16.7	2.4	2.7
80°-90°	3.1	0.4	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°	258.4	37.3	41.4
0°-40°	407.7	58.8	65.4
0°-60°	628.7	90.6	100.8
0°-90°	693.7	100.0	111.2
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°	693.7	100.0	111.2

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	347	347	347	347	347	
5°	345	343	344	346	345	33
15°	328	322	324	330	328	92
25°	294	285	289	297	294	135
35°	242	234	237	246	242	151
45°	173	169	167	174	173	133
55°	101	100	96	100	101	91
65°	45	45	43	44	45	46
75°	15	15	15	16	15	17
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



TEST NUMBER: P600892
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	347.0	347.0	347.0	347.0	347.0	347.0	347.0	347.0	347.0	347.0	347.0
5°	345.4	344.9	344.1	343.5	343.1	342.7	342.8	343.1	343.6	344.2	345.0
10°	339.0	338.1	336.5	335.6	334.6	333.8	334.1	334.6	335.9	336.9	338.4
15°	328.3	327.0	324.8	323.2	321.8	320.8	321.4	322.0	323.9	325.6	327.7
20°	313.2	311.9	309.1	307.2	305.5	304.2	304.8	305.7	308.3	310.3	313.0
25°	294.0	292.4	289.4	287.4	285.4	284.0	284.7	285.7	288.6	291.1	294.3
30°	270.4	268.9	265.7	263.8	261.9	260.3	260.9	261.8	265.1	267.5	271.1
35°	242.2	240.9	237.8	236.1	234.3	232.4	233.0	233.4	236.8	239.4	243.3
40°	209.1	208.4	205.7	204.3	202.7	200.3	200.5	200.1	203.4	205.8	209.5
45°	172.9	173.1	171.0	170.0	168.6	165.9	165.4	164.2	167.0	168.8	172.2
50°	136.2	137.1	135.6	135.0	134.0	131.3	130.0	128.1	130.5	131.9	134.6
55°	100.7	102.1	101.1	101.0	100.4	97.8	96.3	94.3	96.0	96.9	99.0
60°	69.7	71.0	70.2	70.4	70.0	67.9	66.9	65.3	66.3	66.6	68.2
65°	44.6	45.5	44.7	44.9	44.8	43.3	43.2	42.2	42.9	42.6	44.0
70°	26.8	26.9	26.4	26.2	26.2	25.8	25.9	25.7	26.0	26.0	26.6
75°	15.2	15.1	14.6	14.6	14.6	14.5	14.7	14.6	15.0	15.0	15.5
80°	6.9	6.9	6.5	6.5	6.5	6.4	6.6	6.6	7.0	7.1	7.4
85°	2.2	2.1	1.9	1.6	1.7	1.8	1.8	2.0	2.2	2.4	2.7
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°	347.0	347.0	347.0	347.0	347.0	347.0
5°	345.6	346.0	346.3	346.1	346.0	345.4
10°	339.4	340.2	340.8	340.5	340.2	339.0
15°	329.0	330.2	330.9	330.4	329.9	328.3
20°	314.5	315.9	316.8	315.9	315.3	313.2
25°	295.9	297.2	298.3	297.1	296.3	294.0
30°	272.9	274.2	275.2	273.7	273.0	270.4
35°	245.0	246.3	247.4	245.6	245.0	242.2
40°	211.0	212.1	213.4	211.6	211.4	209.1
45°	173.2	174.0	175.4	174.0	174.6	172.9
50°	135.2	135.7	137.0	136.0	137.0	136.2
55°	99.3	99.5	100.7	99.7	101.0	100.7
60°	68.4	68.3	69.4	68.7	69.8	69.7
65°	43.9	43.7	44.7	44.1	45.0	44.6
70°	26.7	26.6	27.0	26.8	27.0	26.8
75°	15.6	15.5	15.8	15.5	15.6	15.2
80°	7.5	7.4	7.5	7.3	7.3	6.9
85°	2.8	2.7	2.8	2.6	2.6	2.2
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)