

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: P855592

Luminaire Tested: **HLS6099FS1EWH-5000K**

Issue Date: 7/16/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P855592
 Test Lab:
 Issue Date: 7/16/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: HLS6099FS1EWH-5000K
 Description: 6IN 900LM, 90CRI, DIMMING TO 10%, DAMP LOCATION
 Light Source: SELECTABLE CCT 90CRI / 5000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: 925.48 (1 lamp)
 Luminaire Lumens: 945.0 lumens
 Efficiency: 102.1%
 Efficacy: 88.3 lumens/watt
 Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
 Luminous Opening: Circular (Dia: 0.5' x H: 0')
 CIE Type: Direct

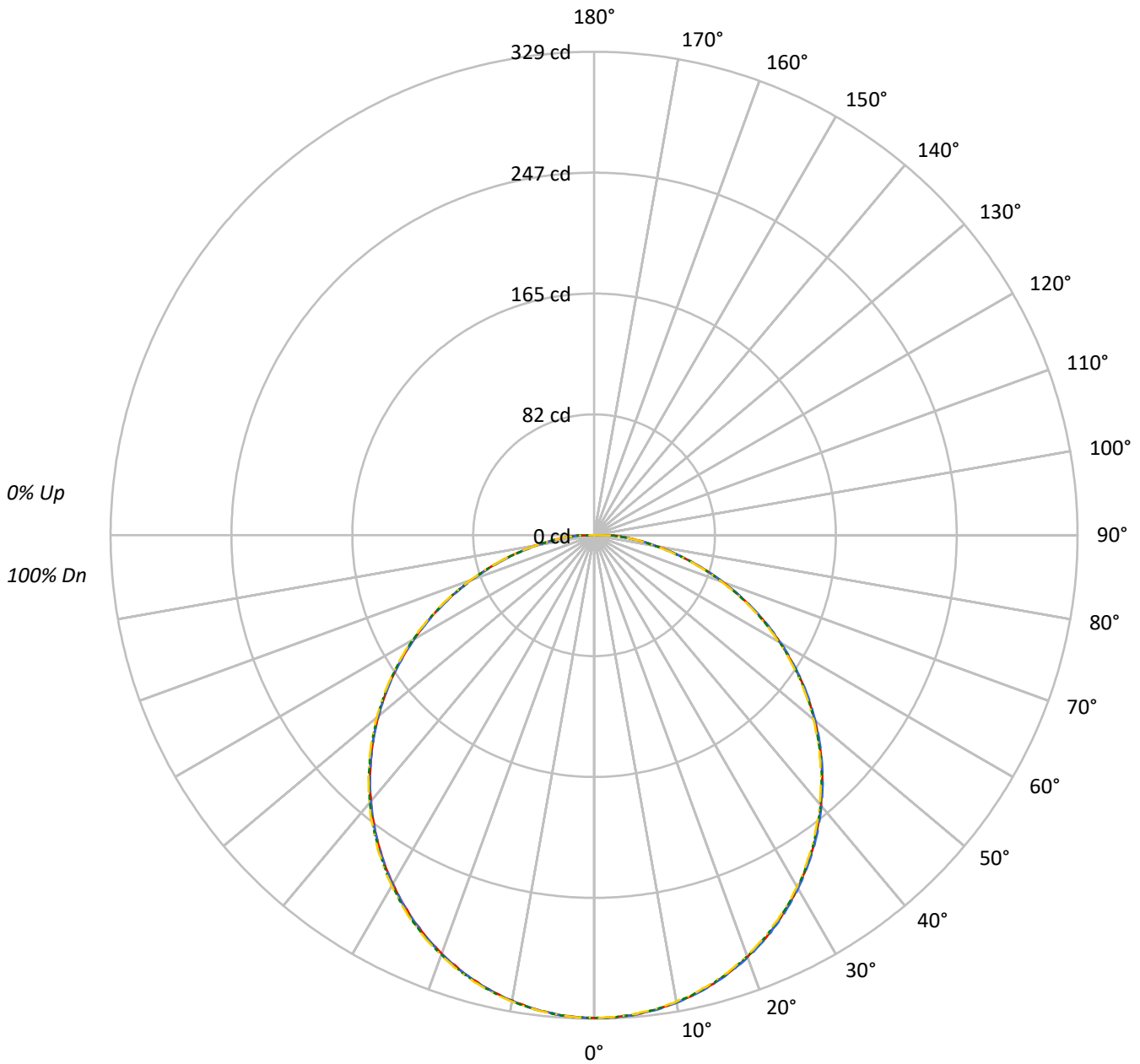
Input Watts (W): 10.7
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



Meas		Calibration Due Date	
Instrument	Identificatio		
Photometer	GONIO 1 11111111	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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Luminous Intensity Polar Plot



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

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	122	122	122	122	119	119	119	119	113	113	113	109	109	109	104	104	104	104	104	104	102	
1	111	106	101	97	108	103	99	95	99	95	92	95	92	89	91	89	87	87	87	87	85	
2	100	92	85	79	98	90	83	78	86	81	76	83	78	74	80	76	72	72	72	72	70	
3	91	80	72	65	89	79	71	65	76	69	63	73	67	62	70	65	61	61	61	61	59	
4	84	71	62	55	81	70	61	55	67	60	54	65	58	53	63	57	52	52	52	52	50	
5	77	64	54	47	75	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	43	
6	71	57	48	41	69	56	48	41	54	47	41	53	46	40	51	45	40	40	40	40	38	
7	66	52	43	36	64	51	42	36	49	42	36	48	41	36	47	40	36	36	36	36	33	
8	61	47	39	33	60	47	38	32	45	38	32	44	37	32	43	36	32	32	32	32	30	
9	57	43	35	29	56	43	35	29	42	34	29	41	34	29	39	33	29	29	29	29	27	
10	54	40	32	27	52	40	32	26	39	31	26	38	31	26	37	30	26	26	26	26	24	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	18008	18008	18008	18008
5°	18011	17995	17967	17989
10°	17969	17958	17897	17913
15°	17917	17900	17804	17849
20°	17817	17776	17682	17717
25°	17687	17662	17529	17596
30°	17553	17503	17338	17408
35°	17380	17346	17139	17199
40°	17204	17139	16903	16975
45°	16979	16932	16637	16730
50°	16724	16656	16324	16417
55°	16420	16382	15961	16057
60°	16040	15986	15503	15624
65°	15553	15501	14943	15021
70°	14954	14858	14249	14249
75°	14276	14170	13408	13323
80°	13796	13512	12754	12407
85°	15473	14593	13712	13083

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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	31.1	3.3	3.4
10°-20°	88.8	9.4	9.6
20°-30°	134.2	14.2	14.5
30°-40°	161.4	17.1	17.4
40°-50°	167.3	17.7	18.1
50°-60°	151.4	16.0	16.4
60°-70°	116.3	12.3	12.6
70°-80°	69.0	7.3	7.5
80°-90°	25.4	2.7	2.7
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°	254.1	26.9	27.5
0°-40°	415.5	44.0	44.9
0°-60°	734.3	77.7	79.3
0°-90°	945.0	100.0	102.1
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°	945.0	100.0	102.1

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	328	328	328	328	328	
5°	327	327	326	327	327	31
15°	316	315	314	314	316	89
25°	292	292	290	291	292	135
35°	260	259	256	257	260	162
45°	219	218	215	216	219	169
55°	172	171	167	168	172	153
65°	120	120	115	116	120	119
75°	67	67	63	63	67	72
85°	25	23	22	21	25	28
90°	0	0	0	0	0	

TEST NUMBER: P855592
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	328.5	328.5	328.5	328.5	328.5	328.5	328.5	328.5	328.5	328.5	328.5
0.5°	328.5	328.6	328.6	328.8	328.4	328.6	328.6	328.5	328.4	328.3	328.3
1°	328.5	328.3	328.7	329.0	328.5	328.8	328.4	328.5	328.3	328.4	328.5
1.5°	328.5	328.2	328.4	328.7	328.4	328.6	328.0	328.3	328.2	328.0	328.3
2°	328.3	328.3	328.4	328.4	328.3	328.3	328.2	328.4	328.2	327.9	328.1
2.5°	328.4	328.2	328.3	328.6	328.4	328.5	328.1	328.2	327.9	328.1	328.0
3°	328.0	328.1	328.2	328.4	327.9	328.3	327.9	328.2	327.6	327.7	327.7
3.5°	327.8	328.0	328.0	328.2	327.7	327.9	327.7	327.6	327.6	327.5	327.5
4°	327.8	327.6	327.9	328.3	327.7	327.9	327.4	327.5	327.4	327.3	327.4
4.5°	327.6	327.3	327.6	327.7	327.4	327.6	327.0	327.6	327.1	326.6	327.0
5°	327.3	327.2	327.5	327.5	327.0	327.2	327.1	327.1	326.5	326.4	326.5
5.5°	327.1	327.0	327.1	327.5	326.9	327.1	326.4	326.6	326.1	326.4	326.4
6°	326.5	326.6	326.6	326.7	326.4	326.4	326.0	326.5	325.8	325.7	325.8
6.5°	326.1	326.2	326.2	326.4	325.9	326.2	325.8	325.7	325.7	325.4	325.4
7°	325.8	325.8	326.0	326.4	325.7	325.9	325.3	325.7	325.0	324.9	325.0
7.5°	325.6	325.4	325.7	325.6	325.2	325.2	324.8	325.2	324.5	324.1	324.6
8°	325.0	325.0	325.3	325.1	324.6	324.8	324.6	324.7	324.1	323.7	324.0
8.5°	324.3	324.5	324.8	324.8	324.3	324.5	323.9	324.2	323.3	323.5	323.7
9°	324.0	324.0	324.0	324.2	323.7	323.7	323.3	323.6	322.8	322.9	323.0
9.5°	323.3	323.5	323.6	323.5	322.9	323.4	323.1	322.7	322.5	322.3	322.3
10°	322.8	322.8	323.2	323.4	322.6	322.6	322.3	322.7	321.5	321.4	321.7
10.5°	322.3	322.3	322.6	322.3	322.1	322.0	321.4	321.7	321.1	320.8	321.2
11°	321.5	321.6	321.8	321.7	321.2	321.5	321.2	321.1	320.6	320.3	320.4
11.5°	320.9	321.0	321.2	321.3	320.8	320.8	320.4	320.4	319.4	319.4	319.7
12°	320.5	320.5	320.4	320.6	320.1	320.0	319.6	319.7	318.7	318.8	319.0
12.5°	319.3	319.8	319.8	319.7	319.0	319.6	318.9	319.0	318.3	318.1	318.2
13°	318.7	318.8	319.1	319.3	318.5	318.3	318.1	318.1	317.2	317.0	317.4
13.5°	318.1	318.1	318.3	318.3	317.8	317.6	317.0	317.5	316.4	316.5	316.6
14°	317.3	317.7	317.5	317.4	316.7	316.9	316.6	316.6	315.9	315.4	315.6
14.5°	316.4	316.4	316.7	316.8	316.0	316.1	315.6	315.5	314.5	314.5	314.8
15°	315.7	315.8	315.6	315.9	315.4	315.2	314.8	315.0	313.7	314.0	314.0
15.5°	314.4	314.9	314.7	314.8	314.1	314.1	313.7	313.8	313.1	312.8	312.9
16°	313.6	313.8	314.0	314.1	313.3	313.2	312.8	312.9	311.8	311.6	311.9
16.5°	312.8	312.9	313.1	313.0	312.5	312.6	311.7	312.0	310.9	311.0	311.0
17°	311.8	312.3	312.0	311.9	311.3	311.3	311.2	310.9	310.0	309.9	309.7
17.5°	310.7	310.8	311.2	311.3	310.5	310.6	310.0	310.0	308.6	308.6	308.8
18°	309.6	310.1	310.1	310.1	309.2	309.3	308.8	308.9	307.3	307.8	307.9
18.5°	308.6	309.0	308.9	308.9	308.0	308.1	307.7	307.8	306.7	306.4	306.6
19°	307.5	307.8	308.0	308.0	307.3	307.2	306.6	306.8	305.5	305.2	305.4
19.5°	306.4	306.5	306.9	306.8	306.0	306.0	305.6	305.5	304.2	304.3	304.3
20°	305.4	305.8	305.6	305.6	304.7	305.0	304.4	304.3	303.1	303.1	303.4
20.5°	304.1	304.4	304.5	304.6	303.8	303.9	303.1	303.3	301.8	301.6	302.0
21°	303.0	303.3	303.4	303.3	302.4	302.3	302.0	301.9	300.4	300.8	300.7
21.5°	301.8	302.1	301.9	302.1	301.2	301.2	300.8	300.9	299.4	299.2	299.5
22°	300.4	300.8	300.8	301.0	300.2	300.2	299.4	299.3	298.1	297.8	298.1

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	299.1	299.3	299.6	299.4	298.6	298.7	298.2	298.1	296.6	296.9	296.8
23°	298.1	298.5	298.3	298.2	297.4	297.3	296.8	297.0	295.4	295.5	295.7
23.5°	296.6	297.1	297.1	297.1	296.1	296.1	295.6	295.4	294.0	293.9	294.2
24°	295.3	295.6	295.8	295.7	294.7	294.6	294.4	294.2	292.3	292.6	292.5
24.5°	294.0	294.3	294.0	294.4	293.2	293.5	292.6	292.7	291.1	291.0	291.4
25°	292.4	293.0	292.9	292.9	292.0	291.8	291.2	291.1	289.8	289.6	289.8
25.5°	291.0	291.2	291.6	291.2	290.5	290.5	290.1	289.9	288.3	288.6	288.3
26°	289.7	289.9	289.9	290.0	289.1	289.3	288.4	288.5	286.8	286.8	286.9
26.5°	288.1	288.6	288.8	288.6	287.5	287.4	286.9	287.0	285.0	285.1	285.3
27°	286.6	286.9	287.1	286.9	286.0	285.9	285.7	285.4	283.5	283.8	283.8
27.5°	285.1	285.6	285.4	285.7	284.6	284.7	283.9	283.7	282.1	282.2	282.5
28°	283.7	284.2	284.1	284.0	283.0	282.8	282.3	282.5	280.5	280.4	280.7
28.5°	281.9	282.1	282.5	282.1	281.4	281.4	281.0	280.8	278.9	279.1	278.9
29°	280.7	280.8	281.0	280.9	280.0	279.8	279.2	279.0	277.3	277.2	277.5
29.5°	278.9	279.3	279.5	279.3	278.1	278.0	277.6	277.6	275.4	275.7	275.9
30°	277.3	277.5	277.6	277.5	276.5	276.5	276.3	275.7	273.9	274.1	274.1
30.5°	275.5	275.9	275.9	276.0	274.9	275.1	274.2	274.1	272.2	272.2	272.4
31°	273.9	274.4	274.4	274.1	273.5	273.1	272.6	272.6	270.4	270.3	270.7
31.5°	272.0	272.3	272.7	272.4	271.6	271.6	271.1	270.6	268.8	269.0	268.8
32°	270.5	270.7	270.8	271.0	270.0	269.7	269.2	269.0	267.2	267.0	267.2
32.5°	268.8	269.2	269.2	269.1	268.0	267.8	267.4	267.4	265.2	265.3	265.5
33°	267.0	267.2	267.4	267.3	266.3	266.0	265.8	265.4	263.3	263.4	263.5
33.5°	265.2	265.3	265.7	265.7	264.7	264.5	263.8	263.9	261.7	261.6	261.8
34°	263.4	264.0	264.0	263.8	262.8	262.6	262.1	261.9	259.7	259.7	260.1
34.5°	261.5	261.7	262.1	261.9	260.9	260.7	260.2	260.0	258.0	258.1	257.9
35°	259.7	260.0	260.1	260.1	259.2	258.6	258.3	258.2	256.1	255.9	256.0
35.5°	258.0	258.3	258.4	258.2	257.3	257.1	256.5	256.2	254.2	254.2	254.4
36°	256.0	256.4	256.4	256.5	255.3	255.1	254.7	254.5	252.2	252.4	252.3
36.5°	254.1	254.3	254.6	254.5	253.4	253.2	252.6	252.5	250.4	250.3	250.4
37°	252.3	252.6	252.8	252.5	251.4	251.6	250.8	250.5	248.3	248.2	248.5
37.5°	250.1	250.3	250.7	250.7	249.7	249.4	248.9	248.7	246.3	246.4	246.3
38°	248.2	248.5	248.7	248.7	247.6	247.2	247.0	246.4	244.4	244.4	244.4
38.5°	246.3	246.7	246.8	246.8	245.5	245.5	244.9	244.6	242.5	242.4	242.5
39°	244.3	244.6	244.7	244.9	243.7	243.4	242.9	242.9	240.3	240.4	240.3
39.5°	242.2	242.4	242.8	242.6	241.7	241.3	240.7	240.5	238.3	238.2	238.3
40°	240.4	240.7	240.8	240.7	239.5	239.4	238.9	238.5	236.2	236.0	236.4
40.5°	238.0	238.4	238.5	238.8	237.7	237.3	236.8	236.4	234.0	234.2	234.1
41°	236.0	236.3	236.7	236.4	235.4	235.1	234.7	234.2	232.1	231.9	231.9
41.5°	234.0	234.3	234.4	234.6	233.3	233.3	232.6	232.4	230.1	229.9	230.1
42°	231.9	232.3	232.3	232.6	231.3	231.0	230.5	230.2	227.8	227.9	227.9
42.5°	229.8	230.1	230.4	230.1	229.1	228.7	228.3	228.2	225.6	225.5	225.7
43°	227.8	228.1	228.2	228.2	226.9	226.8	226.3	225.9	223.5	223.3	223.6
43.5°	225.5	225.7	225.8	226.1	225.1	224.5	224.1	223.7	221.2	221.3	221.2
44°	223.3	223.4	223.9	223.7	222.7	222.2	221.8	221.7	219.0	219.0	218.9
44.5°	221.0	221.4	221.5	221.6	220.4	220.2	219.7	219.3	216.9	216.7	217.0

TEST NUMBER: P855592
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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	219.0	219.4	219.3	219.5	218.4	218.0	217.7	217.2	214.6	214.6	214.6
45.5°	216.6	216.9	217.3	217.1	216.1	215.8	215.2	215.1	212.3	212.3	212.3
46°	214.5	214.8	214.8	215.2	213.8	213.5	213.2	212.5	210.3	209.8	210.1
46.5°	212.2	212.5	212.8	212.8	211.6	211.2	210.9	210.6	208.0	207.9	207.8
47°	209.9	210.1	210.6	210.5	209.2	208.9	208.6	208.3	205.5	205.5	205.5
47.5°	207.6	208.0	208.2	208.3	207.0	206.9	206.3	205.9	203.3	203.2	203.3
48°	205.5	205.7	206.0	206.0	204.8	204.4	204.1	203.7	201.1	200.9	200.9
48.5°	203.0	203.3	203.6	203.5	202.3	202.1	201.5	201.2	198.6	198.6	198.5
49°	200.8	201.1	201.3	201.4	200.1	199.7	199.4	199.0	196.3	196.0	196.3
49.5°	198.6	198.8	199.1	199.0	197.7	197.4	197.1	196.7	194.0	193.9	193.7
50°	196.1	196.2	196.6	196.7	195.3	195.1	194.7	194.3	191.4	191.3	191.3
50.5°	193.6	193.9	194.1	194.1	193.1	192.8	192.3	191.9	189.1	189.0	189.0
51°	191.3	191.6	191.8	191.7	190.8	190.3	190.0	189.4	186.9	186.7	186.7
51.5°	188.9	189.1	189.5	189.5	188.2	188.0	187.3	187.1	184.3	184.2	184.3
52°	186.6	186.8	187.0	187.1	186.1	185.5	185.1	184.7	181.8	181.6	181.8
52.5°	184.2	184.3	184.8	184.7	183.5	183.0	182.7	182.2	179.5	179.4	179.3
53°	181.6	181.8	182.2	182.4	180.9	180.7	180.3	179.9	177.0	176.8	176.8
53.5°	179.2	179.4	179.7	179.7	178.7	178.2	177.8	177.3	174.6	174.4	174.4
54°	176.8	177.0	177.3	177.3	176.0	175.7	175.5	174.8	172.1	171.9	171.9
54.5°	174.4	174.5	174.7	175.0	173.8	173.4	172.7	172.5	169.6	169.3	169.4
55°	171.8	172.1	172.3	172.4	171.4	170.7	170.6	169.9	167.0	166.8	166.9
55.5°	169.4	169.5	169.9	169.9	168.5	168.3	168.0	167.5	164.5	164.5	164.4
56°	166.7	166.9	167.2	167.5	166.0	165.9	165.4	164.9	162.2	161.8	161.7
56.5°	164.3	164.5	164.8	164.8	163.7	163.3	162.9	162.4	159.4	159.3	159.2
57°	161.8	162.0	162.4	162.3	161.1	160.8	160.4	159.9	156.9	156.8	156.5
57.5°	159.2	159.4	159.7	160.0	158.7	158.3	157.7	157.4	154.5	154.1	154.1
58°	156.5	156.9	157.2	157.3	155.9	155.6	155.4	154.8	151.8	151.6	151.6
58.5°	154.1	154.2	154.7	154.7	153.4	153.1	152.9	152.3	149.1	149.1	148.8
59°	151.4	151.6	152.0	152.3	151.0	150.6	150.2	149.6	146.6	146.4	146.1
59.5°	148.8	149.1	149.5	149.6	148.4	148.0	147.7	147.2	144.0	143.8	143.7
60°	146.3	146.5	146.9	146.9	145.8	145.4	145.0	144.5	141.4	141.2	141.1
60.5°	143.7	143.9	144.2	144.4	143.2	142.8	142.4	141.8	138.9	138.5	138.5
61°	141.1	141.3	141.6	141.7	140.5	140.2	139.9	139.3	136.3	136.0	135.9
61.5°	138.6	138.6	139.0	139.2	138.0	137.7	137.2	136.6	133.6	133.5	133.2
62°	135.8	136.1	136.4	136.6	135.4	135.1	134.6	134.0	131.0	130.7	130.5
62.5°	133.2	133.5	133.8	133.9	132.7	132.3	131.9	131.5	128.4	128.0	128.1
63°	130.5	130.8	131.2	131.3	130.1	129.7	129.3	128.8	125.8	125.5	125.3
63.5°	128.1	128.2	128.5	128.7	127.4	127.1	126.6	126.2	123.1	122.8	122.5
64°	125.4	125.6	125.9	126.0	124.7	124.4	124.1	123.5	120.5	120.1	120.0
64.5°	122.6	122.9	123.1	123.4	122.0	121.8	121.3	120.9	117.7	117.5	117.3
65°	119.9	120.1	120.5	120.8	119.5	119.1	118.8	118.3	115.2	114.8	114.5
65.5°	117.3	117.5	118.0	118.1	116.8	116.5	116.2	115.7	112.6	112.2	112.0
66°	114.6	114.9	115.2	115.3	114.2	113.9	113.5	112.9	109.8	109.5	109.2
66.5°	112.0	112.2	112.5	112.7	111.4	111.1	110.8	110.3	107.2	106.8	106.5
67°	109.3	109.5	109.9	110.0	108.7	108.5	108.2	107.6	104.7	104.2	104.0

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	106.6	106.8	107.1	107.3	106.2	105.9	105.4	105.0	101.9	101.6	101.3
68°	104.0	104.2	104.5	104.7	103.5	103.0	102.8	102.3	99.3	99.0	98.6
68.5°	101.4	101.6	102.0	102.0	100.7	100.5	100.2	99.7	96.7	96.3	95.9
69°	98.6	98.9	99.3	99.3	98.1	97.8	97.4	97.1	94.0	93.6	93.2
69.5°	96.1	96.2	96.6	96.7	95.4	95.1	94.8	94.4	91.4	91.0	90.5
70°	93.3	93.4	93.9	94.0	92.7	92.6	92.3	91.8	88.9	88.4	88.0
70.5°	90.7	90.8	91.3	91.4	90.2	89.9	89.6	89.3	86.2	85.8	85.4
71°	88.0	88.2	88.5	88.6	87.6	87.3	87.0	86.7	83.6	83.2	82.8
71.5°	85.3	85.6	85.9	85.9	84.9	84.7	84.5	84.1	81.0	80.6	80.2
72°	82.8	83.0	83.3	83.4	82.3	82.1	81.9	81.5	78.4	78.0	77.7
72.5°	80.2	80.4	80.6	80.8	79.7	79.5	79.3	78.8	75.8	75.4	74.9
73°	77.6	77.8	78.1	78.1	77.1	76.9	76.7	76.2	73.4	72.9	72.4
73.5°	75.0	75.2	75.5	75.6	74.6	74.3	73.9	73.7	70.7	70.4	69.9
74°	72.5	72.6	72.9	73.0	71.9	71.8	71.5	71.2	68.2	67.9	67.4
74.5°	69.9	70.2	70.4	70.4	69.4	69.1	68.9	68.6	65.8	65.3	64.8
75°	67.4	67.6	67.8	67.9	66.9	66.5	66.4	66.1	63.3	62.9	62.3
75.5°	65.0	65.1	65.3	65.3	64.2	64.1	63.9	63.7	60.9	60.4	59.8
76°	62.4	62.6	62.9	62.8	61.7	61.5	61.4	61.2	58.5	57.9	57.4
76.5°	60.0	60.1	60.3	60.3	59.2	59.1	58.9	58.8	56.0	55.6	55.1
77°	57.6	57.8	57.8	57.9	56.8	56.6	56.6	56.4	53.7	53.2	52.6
77.5°	55.2	55.4	55.5	55.4	54.4	54.2	54.1	54.0	51.4	50.8	50.2
78°	52.8	53.0	53.1	53.1	51.9	51.9	51.8	51.7	49.1	48.5	48.0
78.5°	50.6	50.6	50.7	50.7	49.5	49.5	49.4	49.3	46.7	46.3	45.6
79°	48.2	48.4	48.5	48.4	47.3	47.2	47.1	47.1	44.6	44.1	43.4
79.5°	46.0	46.1	46.1	46.1	45.1	45.0	44.8	44.8	42.3	41.8	41.2
80°	43.7	43.9	43.9	43.8	42.8	42.8	42.8	42.7	40.4	39.7	39.1
80.5°	41.6	41.6	41.6	41.6	40.6	40.6	40.6	40.6	38.2	37.6	37.0
81°	39.4	39.5	39.6	39.4	38.4	38.5	38.5	38.5	36.2	35.7	34.9
81.5°	37.4	37.4	37.5	37.3	36.3	36.3	36.3	36.4	34.2	33.6	33.0
82°	35.6	35.6	35.6	35.4	34.3	34.2	34.3	34.4	32.3	31.7	31.0
82.5°	33.7	33.7	33.6	33.5	32.2	32.2	32.3	32.3	30.3	29.8	29.1
83°	31.8	31.8	31.7	31.5	30.2	30.3	30.5	30.6	28.6	28.0	27.3
83.5°	29.8	29.9	29.7	29.5	28.4	28.5	28.6	28.7	26.8	26.3	25.6
84°	28.0	28.0	27.8	27.5	26.6	26.7	26.8	26.9	25.0	24.6	23.9
84.5°	26.3	26.2	26.1	25.9	24.8	24.9	25.0	25.2	23.5	22.9	22.2
85°	24.6	24.6	24.4	24.1	23.2	23.2	23.4	23.6	21.8	21.4	20.6
85.5°	22.9	22.9	22.6	22.4	21.5	21.6	21.7	21.9	20.2	19.8	19.2
86°	21.4	21.4	21.1	20.8	19.8	20.0	20.2	20.4	18.9	18.4	17.7
86.5°	19.9	19.8	19.6	19.2	18.4	18.5	18.8	19.0	17.4	17.0	16.4
87°	18.5	18.5	18.0	17.7	16.9	17.1	17.3	17.5	16.1	15.6	15.1
87.5°	17.1	17.0	16.7	16.4	15.5	15.7	16.0	16.2	14.8	14.4	13.9
88°	15.9	15.7	15.3	15.0	14.3	14.4	14.7	14.9	13.6	13.1	12.7
88.5°	14.5	14.4	14.1	13.8	13.0	13.1	13.5	13.7	12.4	12.0	11.6
89°	13.3	13.1	12.9	12.5	11.9	12.0	12.3	12.5	11.3	11.0	10.5
89.5°	12.1	12.1	11.8	11.4	10.7	10.8	11.2	11.4	10.1	10.0	9.7

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



TEST NUMBER: P855592
CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	328.5	328.5	328.5	328.5	328.5	328.5
0.5°	328.6	328.5	328.6	328.3	328.4	328.5
1°	328.5	328.4	328.4	328.4	328.6	328.5
1.5°	328.5	328.2	328.7	328.1	328.4	328.5
2°	328.3	328.2	328.4	328.3	328.3	328.3
2.5°	328.2	328.0	328.1	328.0	328.3	328.4
3°	328.1	327.6	328.2	327.9	328.1	328.0
3.5°	327.6	327.6	327.8	327.6	327.8	327.8
4°	327.4	327.4	327.5	327.6	327.7	327.8
4.5°	327.3	327.1	327.6	327.0	327.2	327.6
5°	326.9	326.9	327.0	327.0	326.9	327.3
5.5°	326.6	326.1	326.7	326.5	326.7	327.1
6°	326.4	325.9	326.2	326.1	326.4	326.5
6.5°	325.5	325.7	325.9	325.8	325.8	326.1
7°	325.2	325.2	325.7	325.3	325.7	325.8
7.5°	324.8	324.8	325.0	324.8	324.9	325.6
8°	324.1	324.2	324.7	324.6	324.5	325.0
8.5°	323.8	323.5	324.2	323.8	324.0	324.3
9°	323.3	323.3	323.4	323.5	323.4	324.0
9.5°	322.5	322.6	323.1	322.9	322.9	323.3
10°	321.8	321.8	322.4	322.1	322.3	322.8
10.5°	321.3	321.4	321.6	321.5	321.3	322.3
11°	320.6	320.7	321.4	321.0	321.1	321.5
11.5°	320.1	319.8	320.2	320.3	320.5	320.9
12°	319.0	319.4	319.4	319.8	319.7	320.5
12.5°	318.3	318.5	319.1	318.7	319.0	319.3
13°	317.9	317.6	318.0	317.9	318.1	318.7
13.5°	316.8	317.0	317.3	317.3	317.2	318.1
14°	315.8	316.0	316.6	316.4	316.6	317.3
14.5°	315.3	315.1	315.4	315.4	315.6	316.4
15°	314.0	314.5	314.7	314.8	314.7	315.7
15.5°	313.2	313.3	313.8	313.6	314.0	314.4
16°	312.4	312.3	312.9	312.7	312.8	313.6
16.5°	311.1	311.6	311.9	311.8	311.7	312.8
17°	310.1	310.4	310.7	310.7	311.0	311.8
17.5°	309.3	309.2	309.6	309.7	309.9	310.7
18°	308.0	308.5	308.9	308.9	308.8	309.6
18.5°	306.7	307.2	307.7	307.5	307.8	308.6
19°	305.9	306.0	306.5	306.4	306.4	307.5
19.5°	304.6	305.0	305.4	305.5	305.4	306.4
20°	303.3	303.7	303.9	304.1	304.3	305.4
20.5°	302.1	302.6	303.0	302.9	303.0	304.1
21°	300.8	301.5	301.7	302.0	302.0	303.0
21.5°	299.7	300.0	300.5	300.5	300.6	301.8
22°	298.3	298.8	299.4	299.2	299.1	300.4

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	296.9	297.4	297.8	298.1	298.1	299.1
23°	295.9	296.1	296.3	296.6	296.6	298.1
23.5°	294.2	294.8	295.5	295.3	295.4	296.6
24°	292.9	293.4	293.7	294.0	294.0	295.3
24.5°	291.5	292.0	292.3	292.3	292.2	294.0
25°	290.0	290.9	291.0	291.0	291.1	292.4
25.5°	288.7	288.8	289.4	289.7	289.7	291.0
26°	287.0	287.5	288.1	288.2	288.0	289.7
26.5°	285.3	286.2	286.4	286.5	286.7	288.1
27°	284.2	284.7	285.0	285.0	285.1	286.6
27.5°	282.3	282.9	283.6	283.5	283.5	285.1
28°	280.8	281.7	281.7	282.0	282.2	283.7
28.5°	279.4	279.8	280.2	280.3	280.4	281.9
29°	277.5	278.1	278.7	278.7	278.8	280.7
29.5°	275.7	276.6	276.9	277.2	277.2	278.9
30°	274.4	275.0	275.3	275.4	275.3	277.3
30.5°	272.4	273.2	273.7	273.7	273.8	275.5
31°	270.8	271.7	271.8	272.1	272.2	273.9
31.5°	269.1	270.0	270.3	270.4	270.3	272.0
32°	267.1	268.0	268.3	268.6	268.8	270.5
32.5°	265.4	266.2	266.5	267.0	266.9	268.8
33°	263.9	264.5	265.0	265.0	265.0	267.0
33.5°	261.9	262.7	262.9	263.0	263.3	265.2
34°	260.1	260.9	261.0	261.4	261.4	263.4
34.5°	258.2	259.2	259.5	259.7	259.6	261.5
35°	256.4	257.0	257.4	257.6	257.9	259.7
35.5°	254.5	255.1	255.4	255.9	255.6	258.0
36°	252.6	253.4	253.6	253.8	253.7	256.0
36.5°	250.6	251.4	251.6	251.8	252.2	254.1
37°	248.8	249.4	249.7	250.1	250.0	252.3
37.5°	246.5	247.6	247.8	247.9	248.1	250.1
38°	244.7	245.4	245.6	245.9	246.1	248.2
38.5°	242.8	243.4	243.7	244.3	243.9	246.3
39°	240.6	241.4	241.7	242.0	242.0	244.3
39.5°	238.6	239.4	239.6	239.8	240.1	242.2
40°	236.5	237.2	237.6	238.0	237.8	240.4
40.5°	234.2	235.4	235.4	235.8	235.8	238.0
41°	232.3	233.0	233.3	233.6	233.8	236.0
41.5°	230.3	230.8	231.3	231.6	231.5	234.0
42°	227.9	229.0	228.9	229.3	229.5	231.9
42.5°	225.9	226.7	226.8	227.1	227.5	229.8
43°	223.5	224.4	224.9	225.2	225.1	227.8
43.5°	221.2	222.5	222.6	222.9	223.1	225.5
44°	219.3	220.1	220.4	220.8	220.8	223.3
44.5°	217.0	217.9	218.2	218.6	218.6	221.0

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	214.6	215.8	215.8	216.2	216.4	219.0
45.5°	212.5	213.4	213.6	214.0	214.0	216.6
46°	210.1	211.3	211.4	211.8	211.8	214.5
46.5°	208.0	209.1	209.1	209.5	209.6	212.2
47°	205.6	206.6	207.0	207.2	207.2	209.9
47.5°	203.3	204.3	204.4	204.7	205.0	207.6
48°	201.0	202.0	202.1	202.5	202.6	205.5
48.5°	198.6	199.7	199.8	200.3	200.3	203.0
49°	196.2	197.3	197.5	197.8	198.1	200.8
49.5°	194.0	194.9	195.1	195.4	195.5	198.6
50°	191.4	192.5	192.7	193.1	193.4	196.1
50.5°	189.1	190.2	190.2	190.6	191.0	193.6
51°	186.8	187.8	188.0	188.2	188.5	191.3
51.5°	184.2	185.3	185.4	186.0	186.2	188.9
52°	181.8	182.9	183.1	183.3	183.7	186.6
52.5°	179.5	180.4	180.7	181.1	181.2	184.2
53°	176.8	177.9	178.1	178.7	178.8	181.6
53.5°	174.5	175.5	175.6	175.9	176.3	179.2
54°	172.0	173.0	173.3	173.5	173.8	176.8
54.5°	169.4	170.5	170.7	171.1	171.2	174.4
55°	167.0	168.0	168.3	168.5	168.7	171.8
55.5°	164.5	165.5	165.7	166.0	166.2	169.4
56°	161.8	162.9	163.1	163.6	163.7	166.7
56.5°	159.4	160.4	160.6	160.8	161.1	164.3
57°	156.6	157.9	158.1	158.4	158.7	161.8
57.5°	154.1	155.3	155.5	155.8	155.9	159.2
58°	151.6	152.7	152.9	153.2	153.5	156.5
58.5°	149.0	150.2	150.4	150.6	151.0	154.1
59°	146.3	147.6	147.7	148.1	148.2	151.4
59.5°	143.9	145.0	145.1	145.4	145.8	148.8
60°	141.1	142.5	142.6	142.9	143.2	146.3
60.5°	138.5	139.6	139.9	140.2	140.4	143.7
61°	136.0	137.0	137.2	137.7	137.9	141.1
61.5°	133.3	134.4	134.5	135.0	135.4	138.6
62°	130.6	131.7	131.9	132.2	132.6	135.8
62.5°	127.9	129.0	129.3	129.5	129.9	133.2
63°	125.2	126.6	126.7	127.0	127.4	130.5
63.5°	122.6	123.8	123.9	124.2	124.6	128.1
64°	119.9	121.1	121.3	121.7	122.0	125.4
64.5°	117.2	118.4	118.6	119.0	119.3	122.6
65°	114.6	115.8	116.0	116.3	116.7	119.9
65.5°	111.9	113.1	113.2	113.6	114.0	117.3
66°	109.2	110.4	110.5	111.0	111.4	114.6
66.5°	106.6	107.6	107.9	108.2	108.6	112.0
67°	103.8	104.9	105.2	105.6	106.0	109.3

TEST NUMBER: P855592
 CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	101.2	102.3	102.5	102.8	103.4	106.6
68°	98.6	99.6	100.0	100.1	100.6	104.0
68.5°	95.7	97.0	97.2	97.6	97.9	101.4
69°	93.0	94.3	94.6	94.9	95.3	98.6
69.5°	90.5	91.6	91.8	92.2	92.6	96.1
70°	87.9	88.9	89.2	89.6	90.1	93.3
70.5°	85.3	86.2	86.5	86.9	87.3	90.7
71°	82.6	83.5	83.9	84.3	84.8	88.0
71.5°	80.0	80.8	81.2	81.7	82.1	85.3
72°	77.4	78.3	78.6	79.1	79.5	82.8
72.5°	74.7	75.7	75.9	76.3	77.0	80.2
73°	72.2	73.1	73.3	73.8	74.4	77.6
73.5°	69.6	70.4	70.7	71.1	71.8	75.0
74°	67.0	67.8	68.2	68.6	69.3	72.5
74.5°	64.5	65.4	65.7	66.1	66.7	69.9
75°	61.9	62.9	63.1	63.6	64.2	67.4
75.5°	59.4	60.3	60.7	61.1	61.7	65.0
76°	56.9	57.9	58.2	58.7	59.3	62.4
76.5°	54.5	55.4	55.7	56.2	56.8	60.0
77°	52.1	53.0	53.4	53.8	54.5	57.6
77.5°	49.7	50.6	51.0	51.5	52.1	55.2
78°	47.6	48.3	48.6	49.2	49.7	52.8
78.5°	45.2	46.0	46.3	46.9	47.6	50.6
79°	43.0	43.7	44.0	44.6	45.3	48.2
79.5°	40.7	41.5	41.8	42.3	43.1	46.0
80°	38.6	39.3	39.6	40.3	40.9	43.7
80.5°	36.5	37.2	37.5	38.2	38.8	41.6
81°	34.5	35.4	35.6	36.2	36.6	39.4
81.5°	32.4	33.4	33.6	34.3	34.7	37.4
82°	30.6	31.4	31.7	32.3	32.9	35.6
82.5°	28.6	29.4	29.7	30.5	31.0	33.7
83°	26.8	27.4	27.8	28.5	29.1	31.8
83.5°	25.1	25.8	26.1	26.6	27.3	29.8
84°	23.4	24.0	24.3	24.9	25.7	28.0
84.5°	21.7	22.4	22.6	23.3	24.0	26.3
85°	20.2	20.8	21.1	21.7	22.3	24.6
85.5°	18.7	19.3	19.5	20.1	20.8	22.9
86°	17.3	17.8	18.0	18.7	19.3	21.4
86.5°	16.0	16.5	16.7	17.2	17.8	19.9
87°	14.7	15.1	15.3	15.9	16.5	18.5
87.5°	13.5	13.9	14.1	14.6	15.2	17.1
88°	12.3	12.7	12.9	13.3	14.0	15.9
88.5°	11.2	11.6	11.8	12.2	12.8	14.5
89°	10.1	10.5	10.6	11.2	11.7	13.3
89.5°	9.3	9.5	9.7	10.1	10.6	12.1

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



TEST NUMBER: P855592
CATALOG NUMBER: HLS6099FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)