

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: P855602

Luminaire Tested: **HLSMS9129FS1EWH-5000K**

Issue Date: 7/16/2024

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P855602
 Test Lab:
 Issue Date: 7/16/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: HALO
 Catalog Number: HLSMS9129FS1EWH-5000K
 Description: 9IN 1200LM, 90CRI, DIMMING TO 10%, DAMP LOCATION, WITH MOTION SENSOR
 Light Source: SELECTABLE CCT 90CRI / 5000K CCT
 Ballast/Driver: -

Summary

Lumens per Lamp: 1294.2 (1 lamp)
 Luminaire Lumens: 1280.0 lumens
 Efficiency: 98.9%
 Efficacy: 81.0 lumens/watt
 Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
 Luminous Opening: Circular (Dia: 0.75' x H: 0')
 CIE Type: Direct

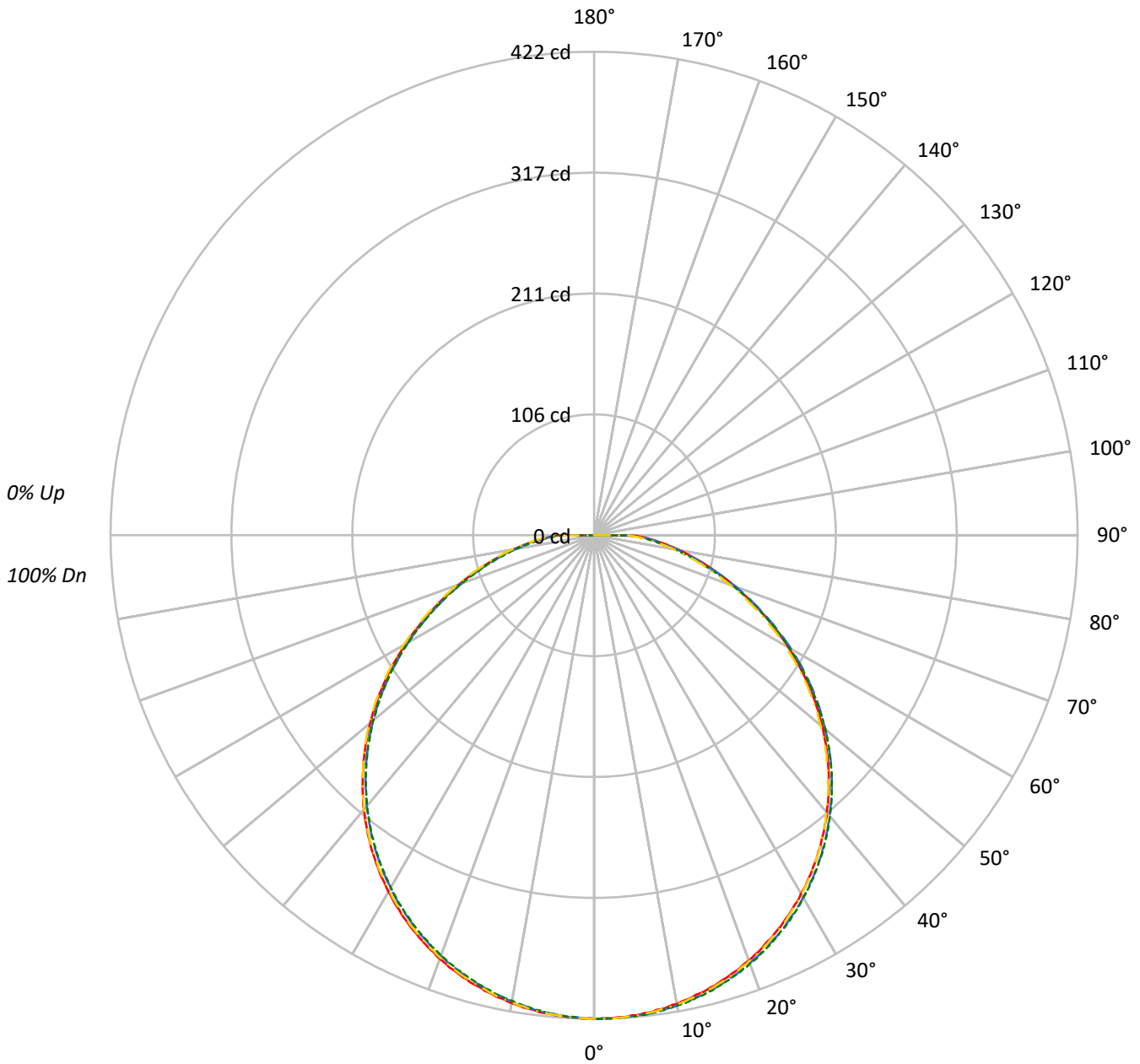
Input Watts (W): 15.8
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



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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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	40.0	3.1	3.1
10°-20°	114.7	9.0	8.9
20°-30°	174.6	13.6	13.5
30°-40°	211.8	16.5	16.4
40°-50°	221.3	17.3	17.1
50°-60°	201.7	15.8	15.6
60°-70°	157.9	12.3	12.2
70°-80°	103.9	8.1	8.0
80°-90°	54.2	4.2	4.2
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°	329.2	25.7	25.4
0°-40°	541.0	42.3	41.8
0°-60°	964.0	75.3	74.5
0°-90°	1280.0	100.0	98.9
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°	1280.0	100.0	98.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	422	422	422	422	422	
5°	421	421	420	419	421	40
15°	407	409	406	403	407	115
25°	380	383	378	374	380	175
35°	340	344	337	333	340	213
45°	289	293	285	281	289	223
55°	229	231	223	220	229	204
65°	163	163	157	155	163	162
75°	102	98	97	94	102	108
85°	54	49	50	47	54	58
90°	0	0	0	0	0	

TEST NUMBER: P855602
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	422.1	422.1	422.1	422.1	422.1	422.1	422.1	422.1	422.1	422.1	422.1
0.5°	422.3	422.4	422.0	422.5	422.0	421.8	421.9	422.4	421.5	422.2	421.7
1°	421.8	422.5	421.7	422.3	422.1	422.3	422.3	422.1	421.9	422.2	421.7
1.5°	421.8	422.1	422.3	422.3	421.9	421.6	421.9	421.9	422.0	421.7	421.9
2°	422.2	422.0	422.1	422.6	422.2	422.1	421.9	422.4	421.4	421.8	420.9
2.5°	421.5	422.3	421.7	422.3	422.2	421.8	421.9	421.8	421.3	421.6	421.2
3°	421.2	422.0	422.0	422.0	421.5	421.6	421.7	421.4	421.4	421.3	421.1
3.5°	421.5	421.6	421.8	422.4	422.2	421.7	421.7	421.8	420.8	421.0	420.4
4°	421.2	421.6	421.3	422.3	421.4	421.5	421.1	421.3	420.5	420.8	420.0
4.5°	420.4	421.7	421.6	421.7	421.4	421.4	420.9	420.6	420.6	420.5	420.2
5°	420.6	420.8	421.3	421.4	421.4	421.4	421.0	420.7	420.0	419.9	419.1
5.5°	420.2	420.4	420.7	421.7	420.8	420.5	420.3	420.2	419.3	419.4	418.9
6°	419.5	420.4	420.9	421.1	420.8	420.7	420.2	419.7	419.4	419.2	418.7
6.5°	419.3	420.2	420.5	420.6	420.3	420.4	419.5	419.7	419.0	419.0	417.8
7°	419.1	419.4	419.6	420.6	420.1	419.6	419.2	418.9	418.2	417.9	417.1
7.5°	417.8	419.2	419.5	420.4	419.6	419.5	418.8	418.0	417.5	417.5	417.1
8°	417.8	418.8	419.3	419.3	419.0	419.0	418.1	418.2	417.2	417.2	416.1
8.5°	417.4	417.8	418.6	418.9	419.0	418.0	417.8	417.4	416.8	416.5	415.1
9°	416.5	417.1	417.7	418.8	417.9	418.2	416.8	416.5	415.9	415.2	414.8
9.5°	415.6	416.9	417.6	417.9	417.7	417.2	416.6	416.2	415.3	414.8	414.3
10°	415.7	416.4	416.8	417.3	417.1	416.9	416.0	415.6	414.8	414.5	413.0
10.5°	414.5	415.7	415.9	417.0	416.2	416.2	415.1	414.5	414.0	413.6	412.4
11°	413.7	414.6	415.6	416.2	416.0	415.3	414.6	414.1	412.6	412.3	411.7
11.5°	413.2	414.3	415.2	415.2	415.1	415.0	413.5	413.4	412.3	411.9	410.3
12°	412.3	413.5	413.9	414.8	414.6	414.0	413.0	412.3	411.7	410.9	409.7
12.5°	410.9	412.4	413.1	414.3	413.3	413.4	412.0	411.4	410.4	409.9	409.2
13°	410.5	411.5	412.7	413.2	413.0	412.5	411.1	410.9	409.5	408.9	407.7
13.5°	409.8	411.0	411.7	412.3	412.2	411.5	410.6	409.4	409.0	408.3	406.7
14°	408.7	409.8	410.5	411.7	410.8	411.0	409.0	408.7	407.4	407.2	406.1
14.5°	407.5	408.7	410.0	410.7	410.6	410.0	408.7	407.8	406.5	405.9	404.7
15°	406.9	408.2	409.1	409.7	409.1	409.1	407.6	406.7	405.7	404.8	403.5
15.5°	405.7	407.2	407.7	408.6	408.2	408.3	406.4	405.5	404.9	404.1	402.8
16°	404.3	405.6	406.9	407.9	407.5	406.7	405.4	404.9	403.1	402.7	401.4
16.5°	403.5	404.6	406.2	406.6	406.3	406.0	404.0	403.1	402.6	401.4	400.0
17°	402.4	404.1	404.6	405.5	405.4	405.1	403.3	402.3	401.3	400.2	399.1
17.5°	401.0	402.6	403.4	404.6	404.0	403.6	401.9	401.3	399.7	399.1	397.7
18°	400.1	401.1	402.7	403.5	402.9	402.9	400.8	400.0	398.6	397.7	395.9
18.5°	399.0	400.3	401.3	402.0	402.0	401.4	399.6	398.3	397.9	396.5	395.1
19°	397.3	398.8	400.0	400.8	400.3	400.2	398.1	397.7	396.0	395.3	393.7
19.5°	396.1	397.3	399.0	400.0	399.5	399.1	397.3	395.9	394.7	393.5	391.9
20°	395.0	396.5	397.7	398.6	397.8	397.6	395.6	394.5	393.6	392.0	390.8
20.5°	393.7	395.0	396.0	397.1	396.7	396.6	394.4	393.2	392.2	391.0	389.3
21°	392.1	393.2	394.9	395.9	395.7	395.0	392.9	392.0	390.1	389.3	387.4
21.5°	391.0	392.3	393.6	394.5	393.9	393.4	391.4	390.0	389.0	387.6	386.4
22°	389.4	390.9	391.9	392.7	392.8	392.6	390.1	388.9	387.7	386.4	384.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	387.7	389.1	390.6	391.8	390.9	390.7	388.4	387.6	385.8	384.9	382.7
23°	385.8	387.6	389.3	390.3	389.6	389.4	387.2	385.6	384.3	382.8	381.5
23.5°	384.7	386.5	387.5	388.3	388.4	387.7	385.3	384.0	382.8	381.6	380.0
24°	383.2	384.6	386.0	387.1	386.5	386.1	383.7	382.8	380.9	380.1	377.7
24.5°	381.3	382.8	384.7	385.9	385.3	384.9	382.4	380.7	379.4	377.9	376.3
25°	379.6	381.5	382.9	383.7	383.1	382.9	380.3	379.3	377.9	376.2	374.9
25.5°	378.4	380.1	381.1	382.1	381.8	381.4	379.0	377.7	375.9	375.0	372.7
26°	376.2	377.8	379.9	380.8	380.4	379.9	376.9	375.5	374.1	372.7	370.9
26.5°	374.4	376.4	378.0	379.0	378.3	377.5	375.4	373.9	372.7	370.8	369.4
27°	372.9	374.8	375.9	377.0	376.8	376.4	373.4	372.5	370.7	369.3	367.3
27.5°	371.2	372.7	374.4	375.7	374.6	374.5	371.8	369.9	368.4	367.6	365.1
28°	369.0	370.8	372.7	373.8	373.1	372.6	369.7	368.2	367.0	365.2	363.8
28.5°	367.2	369.4	370.7	371.3	371.3	370.9	367.8	366.5	365.1	363.5	361.6
29°	365.6	367.2	369.0	369.8	369.3	368.8	366.2	364.2	362.9	361.8	359.3
29.5°	363.6	365.1	367.2	368.2	367.4	367.1	364.0	362.4	360.9	359.4	357.5
30°	361.3	363.5	364.9	366.0	365.3	364.8	362.2	360.7	359.2	357.1	355.7
30.5°	359.5	361.6	363.2	364.0	363.5	363.2	360.0	358.2	357.0	355.5	353.0
31°	357.7	359.2	361.2	362.3	361.4	361.0	357.9	356.2	354.7	353.3	351.3
31.5°	355.4	357.6	359.0	359.9	359.6	358.8	355.9	354.5	352.7	351.1	349.2
32°	353.1	355.5	356.9	357.8	357.2	357.1	353.7	352.2	350.9	349.0	347.0
32.5°	351.5	353.0	355.3	356.0	355.4	354.6	352.0	349.6	348.5	347.0	344.6
33°	349.2	350.9	352.7	354.0	353.3	352.7	349.1	347.9	346.2	344.6	342.9
33.5°	346.7	349.0	350.8	351.4	351.0	350.3	347.4	345.8	344.2	342.1	340.3
34°	344.7	346.6	348.5	349.5	349.0	348.2	345.1	343.0	341.7	340.1	337.9
34.5°	342.7	344.3	346.2	347.4	346.4	346.2	342.5	341.0	339.3	338.1	335.7
35°	340.2	342.5	344.0	344.9	344.4	343.7	340.5	339.1	337.2	335.6	333.7
35.5°	337.8	339.9	342.0	342.4	342.2	341.7	338.2	336.1	335.1	333.1	330.9
36°	335.9	337.4	339.3	340.4	339.8	339.1	335.7	334.0	332.4	330.8	328.7
36.5°	333.4	335.4	337.0	338.1	337.6	336.6	333.5	331.8	329.9	328.4	326.5
37°	330.7	333.1	334.8	335.5	334.8	334.7	330.7	329.1	327.9	325.7	323.8
37.5°	328.6	330.5	332.5	333.3	332.8	331.7	328.7	326.6	325.2	323.3	321.1
38°	326.3	328.4	329.8	331.0	330.3	329.7	325.7	324.5	322.5	321.3	318.9
38.5°	323.4	325.7	327.7	328.3	327.8	326.9	323.6	321.7	320.2	318.4	316.5
39°	321.3	323.0	324.8	325.6	325.4	324.5	321.1	318.9	317.9	315.7	313.6
39.5°	318.9	320.8	322.4	323.6	322.6	322.1	318.1	316.8	315.0	313.3	311.2
40°	316.1	318.4	320.0	321.0	320.2	319.5	315.9	314.1	312.4	310.8	308.7
40.5°	313.4	315.5	317.3	318.3	317.5	317.0	313.0	311.2	310.1	307.8	305.8
41°	311.2	313.0	314.5	315.8	315.1	314.0	310.4	308.9	307.1	305.3	303.3
41.5°	308.3	310.8	312.4	313.0	312.4	311.7	307.9	306.3	304.3	302.8	300.8
42°	305.7	307.7	309.5	310.1	309.6	309.1	305.1	303.0	301.8	299.9	298.0
42.5°	303.3	305.0	306.6	307.6	307.1	306.1	302.5	300.6	299.1	297.2	295.1
43°	300.6	302.6	304.4	305.2	304.2	303.7	299.6	298.0	296.0	294.7	292.6
43.5°	297.4	299.8	301.5	302.2	301.5	300.6	296.8	294.9	293.5	291.6	289.7
44°	294.9	296.8	298.5	299.4	298.9	298.2	294.2	292.1	290.7	288.8	286.7
44.5°	292.3	294.4	296.0	296.7	295.8	295.1	291.0	289.6	287.6	286.3	284.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	289.4	291.7	293.2	293.7	293.3	292.5	288.4	286.3	284.8	283.3	281.6
45.5°	286.4	288.5	290.2	290.9	290.1	289.5	285.3	283.6	282.3	280.2	278.2
46°	283.8	285.4	287.5	288.3	287.4	286.4	282.3	280.8	279.0	277.5	275.4
46.5°	280.8	283.1	284.7	285.1	284.3	283.9	279.7	277.6	276.1	274.6	272.7
47°	277.8	280.1	281.5	282.3	281.4	280.7	276.4	274.8	273.3	271.4	269.6
47.5°	274.9	277.1	278.6	279.5	278.5	277.8	273.6	272.0	270.3	268.6	266.4
48°	272.2	274.0	275.8	276.4	275.7	274.8	270.4	268.6	267.0	265.8	263.8
48.5°	268.9	271.4	272.6	273.2	272.4	271.6	267.5	265.8	264.3	262.5	260.8
49°	266.0	268.0	269.6	270.4	269.5	268.9	264.6	262.9	261.3	259.5	257.6
49.5°	263.3	265.1	266.7	267.4	266.2	265.9	261.2	259.6	258.3	256.5	254.6
50°	260.2	262.1	263.7	264.3	263.4	262.8	258.3	256.5	254.9	253.6	251.7
50.5°	256.8	259.3	260.4	261.1	260.0	259.3	254.9	253.6	252.1	250.2	248.4
51°	253.9	255.8	257.7	258.0	257.1	256.4	251.9	250.2	249.0	247.2	245.4
51.5°	250.9	253.0	254.3	254.7	253.7	253.5	249.0	247.2	245.8	244.1	242.4
52°	247.9	249.9	251.0	251.7	250.5	249.9	245.6	244.1	242.3	241.0	239.2
52.5°	244.5	246.8	248.1	248.6	247.5	247.0	242.5	240.8	239.3	237.7	235.8
53°	241.6	243.2	245.0	245.2	244.2	243.5	238.9	237.6	236.3	234.7	232.8
53.5°	238.5	240.4	241.5	242.0	241.1	240.5	235.9	234.5	233.0	231.5	229.7
54°	235.0	237.2	238.4	238.9	237.6	237.2	232.8	231.0	229.6	228.2	226.2
54.5°	231.8	234.0	235.3	235.5	234.4	234.0	229.3	227.8	226.6	224.7	223.3
55°	228.9	230.5	231.8	232.1	231.2	230.5	226.1	224.7	223.3	221.9	220.1
55.5°	225.7	227.5	228.6	229.1	227.6	226.9	222.7	221.4	219.8	218.6	216.8
56°	222.1	224.2	225.5	225.6	224.5	224.1	219.4	218.0	216.6	215.1	213.5
56.5°	219.2	220.8	221.9	222.2	221.0	220.4	216.2	214.7	213.6	211.9	210.4
57°	215.7	217.7	218.7	219.1	217.6	217.2	212.7	211.2	209.9	208.7	206.9
57.5°	212.4	214.4	215.4	215.6	214.3	213.8	209.4	208.1	206.7	205.3	203.7
58°	209.1	210.8	212.0	212.0	210.9	210.2	206.0	204.8	203.5	202.0	200.6
58.5°	206.1	207.8	208.5	208.8	207.4	207.2	202.5	201.4	200.2	198.7	197.2
59°	202.7	204.5	205.4	205.5	204.0	203.8	199.5	197.9	196.6	195.6	193.9
59.5°	199.3	201.1	201.9	202.0	200.5	200.4	195.7	194.8	193.3	191.9	190.7
60°	196.1	197.6	198.4	198.5	197.2	196.8	192.5	191.2	190.2	188.8	187.1
60.5°	192.8	194.5	195.3	195.3	193.7	193.3	189.0	188.0	186.7	185.5	184.0
61°	189.4	190.9	191.6	191.5	190.3	190.1	185.7	184.6	183.3	182.2	180.8
61.5°	186.0	187.5	188.3	188.3	186.7	186.4	182.3	181.2	180.1	178.7	177.4
62°	182.9	184.4	185.0	184.9	183.3	183.1	178.8	177.8	176.8	175.6	174.1
62.5°	179.6	181.0	181.5	181.2	180.0	179.5	175.4	174.6	173.3	172.2	171.0
63°	176.0	177.5	178.1	177.9	176.6	176.0	172.0	171.1	170.0	168.8	167.5
63.5°	172.9	174.3	174.8	174.6	172.9	172.9	168.5	167.8	166.8	165.7	164.2
64°	169.6	171.1	171.3	171.0	169.5	169.3	165.4	164.4	163.4	162.4	161.1
64.5°	166.3	167.5	167.9	167.5	166.0	166.0	161.8	161.1	160.1	159.1	157.7
65°	162.8	164.1	164.7	164.2	162.6	162.4	158.5	157.8	156.9	155.8	154.6
65.5°	159.8	161.2	161.2	160.8	159.1	159.3	155.2	154.6	153.6	152.5	151.4
66°	156.5	157.7	157.8	157.3	155.8	155.9	151.8	151.0	150.3	149.4	148.0
66.5°	153.3	154.4	154.7	154.1	152.3	152.4	148.6	148.0	147.3	146.1	144.7
67°	150.1	151.0	151.1	150.6	148.9	149.1	145.3	144.8	144.1	143.0	141.9

TEST NUMBER: P855602
 CATALOG NUMBER: HLSMS9129FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	146.9	148.0	147.9	147.0	145.7	145.7	142.1	141.5	140.7	139.8	138.6
68°	143.5	144.6	144.6	144.0	142.3	142.4	138.7	138.3	137.6	136.6	135.2
68.5°	140.4	141.6	141.3	140.6	138.8	139.1	135.5	135.1	134.5	133.3	132.2
69°	137.4	138.3	138.1	137.2	135.8	135.8	132.4	131.9	131.4	130.4	129.1
69.5°	134.3	135.0	134.9	134.1	132.3	132.4	129.0	128.8	128.2	127.3	126.0
70°	131.1	131.9	131.6	130.8	129.1	129.2	126.1	125.9	125.2	124.2	122.9
70.5°	128.1	128.8	128.4	127.4	125.9	126.2	122.9	122.7	122.3	121.2	120.0
71°	125.1	125.8	125.4	124.4	122.7	122.8	119.8	119.8	119.3	118.2	116.9
71.5°	122.0	122.7	122.2	121.2	119.6	119.9	116.8	116.8	116.2	115.3	114.0
72°	119.0	119.7	119.1	118.1	116.4	116.6	113.8	113.7	113.4	112.2	111.1
72.5°	116.1	116.7	116.1	115.0	113.4	113.7	110.8	110.7	110.5	109.4	108.1
73°	113.2	113.7	113.1	112.0	110.1	110.6	107.8	108.0	107.6	106.6	105.1
73.5°	110.2	110.7	110.0	108.9	107.3	107.7	105.0	105.2	104.8	103.8	102.6
74°	107.5	107.9	107.2	105.9	104.3	104.7	102.2	102.3	102.2	101.1	99.8
74.5°	104.7	105.0	104.2	103.2	101.3	101.9	99.3	99.6	99.4	98.3	97.0
75°	101.9	102.2	101.4	100.2	98.5	99.0	96.6	96.8	96.6	95.7	94.3
75.5°	99.1	99.4	98.5	97.4	95.7	96.2	93.8	94.1	94.0	92.9	91.7
76°	96.6	96.8	95.9	94.6	92.9	93.3	91.1	91.5	91.5	90.4	88.9
76.5°	93.7	94.0	92.9	91.9	90.2	90.7	88.5	88.9	88.8	87.8	86.5
77°	91.1	91.3	90.4	88.9	87.4	87.8	85.9	86.4	86.4	85.4	84.1
77.5°	88.6	88.7	87.7	86.4	84.9	85.2	83.3	83.9	83.9	82.9	81.6
78°	86.1	86.1	85.0	83.9	82.2	82.6	80.8	81.4	81.4	80.4	79.1
78.5°	83.4	83.5	82.5	81.2	79.6	80.0	78.3	78.9	79.0	78.0	76.6
79°	81.0	80.9	80.0	78.6	77.0	77.3	75.7	76.3	76.5	75.5	74.1
79.5°	78.6	78.5	77.2	76.1	74.5	74.9	73.2	73.9	74.1	73.2	71.6
80°	76.1	75.8	74.9	73.5	72.0	72.5	70.7	71.5	71.7	70.9	69.4
80.5°	73.8	73.6	72.5	71.0	69.6	70.0	68.3	69.2	69.3	68.5	67.1
81°	71.3	71.1	70.0	68.8	67.2	67.7	65.9	66.8	67.1	66.1	64.7
81.5°	68.9	68.7	67.7	66.3	64.8	65.3	63.7	64.5	64.8	64.0	62.6
82°	66.7	66.3	65.3	63.9	62.5	62.8	61.3	62.3	62.6	61.7	60.3
82.5°	64.4	64.1	62.9	61.7	60.1	60.5	59.1	59.9	60.3	59.5	58.0
83°	62.1	61.8	60.7	59.4	58.0	58.3	56.9	57.8	58.2	57.4	56.0
83.5°	59.8	59.5	58.4	57.1	55.7	56.1	54.6	55.7	56.1	55.4	53.8
84°	57.7	57.3	56.2	55.0	53.5	53.8	52.5	53.5	53.9	53.2	51.8
84.5°	55.6	55.2	54.0	52.8	51.4	51.6	50.4	51.4	51.9	51.2	49.8
85°	53.5	52.9	52.0	50.7	49.3	49.5	48.2	49.4	50.0	49.3	47.7
85.5°	51.3	50.9	49.9	48.6	47.2	47.4	46.3	47.3	47.8	47.2	45.7
86°	49.3	48.8	47.7	46.6	45.2	45.4	44.3	45.4	45.9	45.3	43.9
86.5°	47.2	46.7	45.8	44.6	43.2	43.5	42.3	43.4	44.1	43.4	41.9
87°	45.3	44.7	43.8	42.6	41.2	41.3	40.3	41.5	42.1	41.5	40.1
87.5°	43.4	42.8	41.8	40.7	39.3	39.5	38.5	39.7	40.2	39.7	38.3
88°	41.4	40.8	40.0	38.8	37.6	37.7	36.6	37.8	38.4	38.0	36.5
88.5°	39.5	39.0	38.1	36.9	35.6	35.7	34.8	36.0	36.6	36.1	34.7
89°	37.7	37.1	36.2	35.3	33.8	34.0	33.1	34.2	34.9	34.4	33.1
89.5°	35.7	35.4	34.6	33.6	32.2	32.2	31.3	32.5	33.2	32.8	31.3

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



TEST NUMBER: P855602
CATALOG NUMBER: HLSMS9129FS1EWH-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: P855602
 CATALOG NUMBER: HLSMS9129FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	422.1	422.1	422.1	422.1	422.1	422.1
0.5°	422.0	421.9	421.8	422.0	421.9	422.3
1°	422.0	421.4	421.4	421.5	422.4	421.8
1.5°	422.0	421.9	421.2	421.9	421.9	421.8
2°	421.5	421.2	421.5	421.5	421.7	422.2
2.5°	421.0	420.9	420.6	421.2	421.8	421.5
3°	420.9	420.9	420.6	421.2	421.6	421.2
3.5°	420.9	420.5	420.6	420.6	421.0	421.5
4°	420.3	420.0	419.6	420.7	421.1	421.2
4.5°	419.6	419.9	419.7	420.1	420.5	420.4
5°	419.6	418.9	419.2	420.0	420.2	420.6
5.5°	419.1	419.0	418.3	419.5	420.1	420.2
6°	418.1	418.3	418.1	418.7	419.5	419.5
6.5°	417.6	417.4	417.5	418.6	418.9	419.3
7°	417.4	417.3	416.7	418.0	418.8	419.1
7.5°	416.8	416.5	416.6	417.2	418.0	417.8
8°	415.8	415.8	415.6	417.0	417.1	417.8
8.5°	415.3	415.3	415.1	415.8	416.9	417.4
9°	414.7	414.4	414.6	415.6	416.2	416.5
9.5°	413.8	413.9	413.5	414.7	415.4	415.6
10°	412.7	412.5	412.9	414.2	414.9	415.7
10.5°	412.3	412.2	411.9	413.4	414.2	414.5
11°	411.4	411.3	410.8	412.3	413.0	413.7
11.5°	410.2	410.2	410.5	411.6	412.4	413.2
12°	409.4	409.8	409.1	410.9	411.9	412.3
12.5°	408.8	408.6	408.5	409.9	410.7	410.9
13°	407.4	407.4	407.8	409.1	409.6	410.5
13.5°	406.4	406.8	406.1	407.6	409.1	409.8
14°	405.3	405.4	405.3	407.3	407.8	408.7
14.5°	404.6	404.5	404.5	405.6	406.8	407.5
15°	403.0	403.1	403.0	405.0	405.8	406.9
15.5°	402.1	402.0	402.2	403.8	404.6	405.7
16°	401.0	400.9	401.0	402.5	403.7	404.3
16.5°	399.6	399.7	399.3	401.6	402.7	403.5
17°	398.1	398.3	398.4	400.5	400.9	402.4
17.5°	397.2	397.5	397.0	399.1	400.1	401.0
18°	395.9	395.6	395.6	397.9	399.0	400.1
18.5°	394.2	394.7	394.5	396.3	397.5	399.0
19°	393.0	393.2	392.8	395.3	396.4	397.3
19.5°	391.8	391.8	391.6	393.6	395.0	396.1
20°	390.0	390.4	390.3	392.5	393.4	395.0
20.5°	388.5	388.7	388.6	391.2	392.1	393.7
21°	387.3	387.2	387.5	389.1	390.9	392.1
21.5°	385.8	386.1	385.7	388.1	388.9	391.0
22°	383.7	384.0	383.8	386.7	387.8	389.4

TEST NUMBER: P855602
 CATALOG NUMBER: HLSMS9129FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	382.3	382.7	382.8	384.9	386.4	387.7
23°	380.9	380.9	380.7	383.3	384.5	385.8
23.5°	379.0	379.3	379.3	381.6	382.7	384.7
24°	377.1	377.8	377.6	380.2	381.6	383.2
24.5°	375.7	375.9	375.7	378.2	379.8	381.3
25°	374.0	374.3	373.9	376.8	378.0	379.6
25.5°	371.8	372.4	372.6	375.1	376.4	378.4
26°	370.2	370.3	370.2	372.9	374.4	376.2
26.5°	368.6	369.0	368.8	371.6	372.7	374.4
27°	366.3	366.9	366.7	369.7	371.3	372.9
27.5°	364.4	364.8	364.8	367.8	369.2	371.2
28°	362.6	363.2	363.0	365.9	367.2	369.0
28.5°	360.9	360.9	361.0	363.8	365.4	367.2
29°	358.4	359.1	359.1	362.2	363.4	365.6
29.5°	356.8	357.0	357.0	359.8	361.4	363.6
30°	354.7	355.1	354.7	358.3	359.7	361.3
30.5°	352.3	352.9	353.1	356.0	357.5	359.5
31°	349.9	350.7	350.6	353.7	355.4	357.7
31.5°	348.5	348.8	348.7	352.1	353.6	355.4
32°	345.9	346.2	346.5	349.7	351.2	353.1
32.5°	343.8	344.4	344.2	347.6	349.0	351.5
33°	341.6	342.1	342.3	345.6	347.1	349.2
33.5°	339.4	339.7	339.8	343.0	344.8	346.7
34°	336.6	337.5	337.6	341.1	342.6	344.7
34.5°	334.8	335.4	335.4	338.7	340.4	342.7
35°	332.6	332.9	332.9	336.7	337.9	340.2
35.5°	330.1	330.7	330.6	333.8	335.9	337.8
36°	327.5	328.0	328.2	331.8	333.5	335.9
36.5°	325.4	325.9	325.7	329.6	330.8	333.4
37°	322.6	323.4	323.5	326.9	329.0	330.7
37.5°	320.1	321.0	320.9	324.7	326.3	328.6
38°	317.7	318.4	318.4	322.2	323.7	326.3
38.5°	315.5	315.7	316.2	319.6	321.6	323.4
39°	312.5	313.3	313.1	317.2	318.9	321.3
39.5°	310.3	310.8	311.0	314.7	316.2	318.9
40°	307.6	308.2	308.2	312.3	314.0	316.1
40.5°	304.7	305.7	305.5	309.4	311.3	313.4
41°	302.1	302.7	303.0	306.9	308.4	311.2
41.5°	299.7	300.3	300.4	304.4	306.1	308.3
42°	296.7	297.7	297.7	301.4	303.5	305.7
42.5°	294.1	294.9	295.1	299.2	300.4	303.3
43°	291.4	292.3	292.0	296.2	298.2	300.6
43.5°	288.6	289.2	289.7	293.4	295.4	297.4
44°	285.6	286.7	286.8	290.8	292.3	294.9
44.5°	283.1	283.7	284.1	287.9	289.8	292.3

TEST NUMBER: P855602
 CATALOG NUMBER: HLSMS9129FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	280.3	280.9	281.1	285.4	287.1	289.4
45.5°	277.3	278.2	278.2	282.3	284.0	286.4
46°	274.3	275.2	275.3	279.4	281.4	283.8
46.5°	271.7	272.4	272.6	276.8	278.7	280.8
47°	268.6	269.6	269.4	273.7	275.3	277.8
47.5°	265.6	266.4	266.8	271.1	272.7	274.9
48°	262.6	263.6	263.6	267.9	269.9	272.2
48.5°	259.9	260.3	260.5	264.8	266.8	268.9
49°	256.6	257.6	258.0	262.2	263.8	266.0
49.5°	253.7	254.4	254.6	258.9	261.1	263.3
50°	250.5	251.6	251.7	256.1	257.8	260.2
50.5°	247.4	248.3	248.6	252.9	254.7	256.8
51°	244.3	245.1	245.6	249.8	251.8	253.9
51.5°	241.6	242.4	242.5	247.0	248.8	250.9
52°	238.1	239.1	239.1	243.8	245.4	247.9
52.5°	235.0	236.2	236.4	240.8	242.7	244.5
53°	232.0	232.8	233.1	237.4	239.4	241.6
53.5°	228.8	229.7	229.9	234.3	236.1	238.5
54°	225.5	226.4	227.0	231.2	233.1	235.0
54.5°	222.6	223.3	223.6	227.9	230.0	231.8
55°	219.2	220.1	220.4	225.0	226.5	228.9
55.5°	215.8	216.8	217.2	221.4	223.7	225.7
56°	212.8	213.7	213.9	218.3	220.3	222.1
56.5°	209.4	210.3	210.8	215.1	217.0	219.2
57°	206.0	207.1	207.4	211.9	213.9	215.7
57.5°	202.9	203.9	204.1	208.6	210.6	212.4
58°	199.8	200.5	200.9	205.2	207.1	209.1
58.5°	196.2	197.4	197.4	202.1	204.1	206.1
59°	193.0	194.0	194.4	198.6	200.9	202.7
59.5°	189.9	190.8	191.0	195.5	197.4	199.3
60°	186.4	187.3	187.8	192.3	194.2	196.1
60.5°	183.2	184.2	184.5	188.8	191.0	192.8
61°	180.0	180.8	180.9	185.6	187.4	189.4
61.5°	176.7	177.5	177.9	182.4	184.2	186.0
62°	173.2	174.3	174.5	178.8	181.0	182.9
62.5°	170.0	170.9	171.4	175.6	177.8	179.6
63°	166.8	167.7	168.0	172.3	174.1	176.0
63.5°	163.3	164.3	164.6	169.1	171.2	172.9
64°	160.2	161.1	161.3	165.7	167.7	169.6
64.5°	157.0	157.7	158.0	162.5	164.4	166.3
65°	153.7	154.7	154.7	159.3	161.3	162.8
65.5°	150.3	151.4	151.6	155.9	158.1	159.8
66°	147.3	148.2	148.3	152.7	154.5	156.5
66.5°	144.2	145.0	145.0	149.6	151.6	153.3
67°	140.8	141.7	141.9	146.2	148.4	150.1

TEST NUMBER: P855602

CATALOG NUMBER: HLSMS9129FS1EWH-5000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	137.7	138.6	138.6	143.2	145.1	146.9
68°	134.5	135.4	135.6	140.0	141.9	143.5
68.5°	131.5	132.3	132.5	136.8	139.0	140.4
69°	128.3	129.1	129.3	133.7	135.6	137.4
69.5°	125.4	126.0	126.3	130.6	132.6	134.3
70°	122.3	123.1	123.2	127.6	129.6	131.1
70.5°	119.3	119.9	120.2	124.4	126.6	128.1
71°	116.2	117.0	117.1	121.5	123.4	125.1
71.5°	113.4	114.1	114.2	118.5	120.6	122.0
72°	110.3	111.0	111.3	115.4	117.5	119.0
72.5°	107.5	108.2	108.4	112.7	114.6	116.1
73°	104.5	105.3	105.5	109.6	111.7	113.2
73.5°	101.9	102.6	102.7	106.9	108.9	110.2
74°	99.0	99.6	100.0	104.0	106.0	107.5
74.5°	96.3	97.0	97.3	101.3	103.4	104.7
75°	93.6	94.3	94.5	98.5	100.5	101.9
75.5°	90.9	91.6	92.0	95.8	97.9	99.1
76°	88.3	89.0	89.2	93.3	95.2	96.6
76.5°	85.8	86.4	86.7	90.7	92.5	93.7
77°	83.2	83.9	84.3	88.0	90.0	91.1
77.5°	80.7	81.2	81.6	85.6	87.5	88.6
78°	78.2	78.8	79.3	82.9	84.9	86.1
78.5°	75.7	76.3	76.7	80.5	82.3	83.4
79°	73.3	73.9	74.3	78.1	79.9	81.0
79.5°	70.8	71.4	71.9	75.6	77.4	78.6
80°	68.4	69.1	69.5	73.3	75.1	76.1
80.5°	66.1	66.9	67.3	70.8	72.7	73.8
81°	63.9	64.5	64.9	68.6	70.4	71.3
81.5°	61.6	62.1	62.8	66.3	68.0	68.9
82°	59.3	59.9	60.5	64.0	65.7	66.7
82.5°	57.1	57.8	58.3	61.9	63.5	64.4
83°	55.0	55.6	56.2	59.6	61.4	62.1
83.5°	52.8	53.4	54.0	57.6	59.1	59.8
84°	50.8	51.4	52.1	55.4	57.0	57.7
84.5°	48.6	49.4	50.1	53.3	55.0	55.6
85°	46.7	47.3	48.0	51.4	52.8	53.5
85.5°	44.7	45.3	46.1	49.3	50.8	51.3
86°	42.7	43.4	44.2	47.4	48.8	49.3
86.5°	40.8	41.4	42.2	45.4	46.8	47.2
87°	39.0	39.6	40.4	43.6	44.9	45.3
87.5°	37.2	37.8	38.6	41.6	43.0	43.4
88°	35.4	35.8	36.8	39.8	41.1	41.4
88.5°	33.6	34.2	35.2	38.1	39.3	39.5
89°	32.0	32.6	33.6	36.3	37.4	37.7
89.5°	30.2	30.9	32.0	34.7	36.2	35.7

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


NVLAP Lab Code: 200050-0



TEST NUMBER: P855602
CATALOG NUMBER: HLSMS9129FS1EWH-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)