

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: P710068

Luminaire Tested: RA4LS9FSD2W1EWH-900lm-3000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710068
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2304449A001)
Test Lab: EVERFINE
Issue Date: 10/6/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RA4LS9FSD2W1EWH-900lm-3000K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 3000K CCT
Ballast/Driver: -

Summary

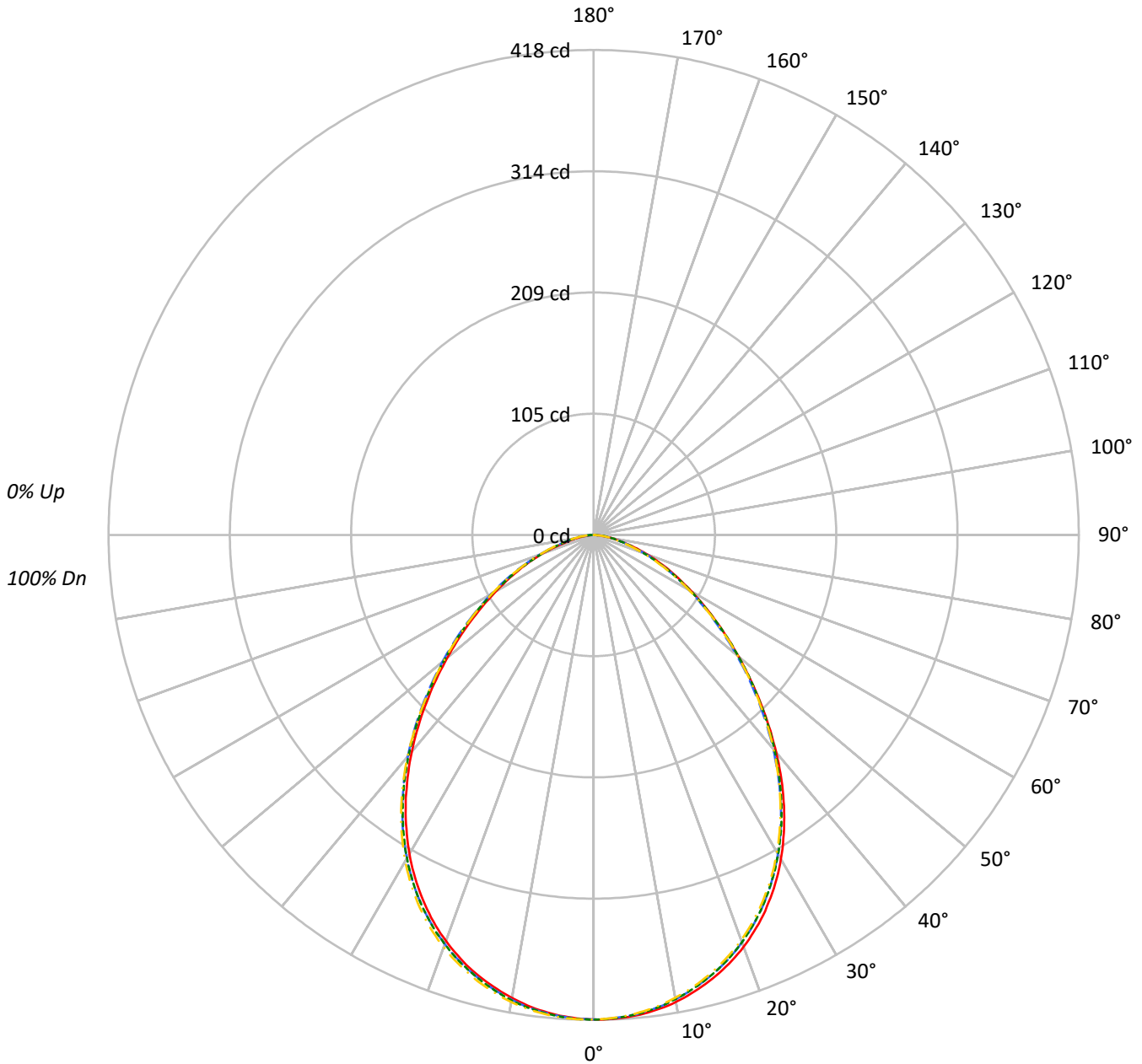
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 870.0 lumens
Efficiency: 94.5%
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.7
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: 24 FT



TEST NUMBER: P710068
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

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	112	112	112	112	110	110	110	110	105	105	105	101	101	101	96	96	96	94								
1	104	100	97	94	102	98	95	92	94	92	89	91	89	87	87	86	84	82								
2	96	89	84	79	94	88	82	78	84	80	76	81	78	75	78	76	73	71								
3	89	80	73	67	86	78	72	67	76	70	66	73	68	65	71	67	63	62								
4	82	72	64	58	80	70	63	58	68	62	57	66	61	56	64	59	56	54								
5	76	65	57	51	74	64	56	51	62	55	50	60	54	50	58	53	49	47								
6	70	59	51	45	69	58	51	45	56	50	45	55	49	44	53	48	44	42								
7	65	54	46	41	64	53	46	40	51	45	40	50	44	40	49	44	40	38								
8	61	49	42	37	60	49	41	36	47	41	36	46	40	36	45	40	36	34								
9	57	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31								
10	54	42	35	30	53	42	35	30	41	34	30	40	34	30	39	34	30	28								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	52567	52567	52567	52567
5°	52528	52415	52326	52452
10°	52228	51922	51781	52062
15°	51569	51165	51008	51295
20°	50584	50022	49874	50276
25°	49059	48407	48282	48809
30°	46894	46182	46139	46764
35°	43924	43325	43386	44078
40°	40201	39872	40036	40726
45°	36041	35934	36219	36931
50°	31894	31894	32227	32912
55°	28019	27953	28282	29094
60°	24541	24213	24490	25220
65°	21351	20577	20934	21411
70°	18104	17037	17184	17515
75°	14393	13664	12205	13955
80°	11306	11523	9349	11741
85°	6642	8953	2744	9963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 37429 cd/sqm



TEST NUMBER: P710068
 CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.4	4.5	4.3
10°-20°	110.8	12.7	12.0
20°-30°	160.9	18.5	17.5
30°-40°	177.3	20.4	19.3
40°-50°	157.4	18.1	17.1
50°-60°	116.1	13.3	12.6
60°-70°	70.6	8.1	7.7
70°-80°	31.0	3.6	3.4
80°-90°	6.7	0.8	0.7
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°	311.0	35.7	33.8
0°-40°	488.3	56.1	53.0
0°-60°	761.7	87.6	82.7
0°-90°	870.0	100.0	94.5
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°	870.0	100.0	94.5

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	418	418	418	418	418	
5°	416	415	414	415	416	39
15°	396	393	392	394	396	111
25°	353	349	348	352	353	162
35°	286	282	282	287	286	178
45°	202	202	204	208	202	156
55°	128	127	129	133	128	115
65°	72	69	70	72	72	71
75°	30	28	25	29	30	32
85°	5	6	2	7	5	6
90°	0	0	0	0	0	



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
0.5°	417.7	417.5	417.4	417.7	417.6	417.6	417.6	417.5	417.4	417.8	417.8
1°	417.7	417.5	417.3	417.6	417.4	417.5	417.3	417.4	417.4	417.6	417.8
1.5°	417.6	417.4	417.1	417.4	417.2	417.2	417.2	417.3	417.3	417.6	417.7
2°	417.6	417.3	416.9	417.3	416.8	416.9	417.0	417.1	417.1	417.4	417.7
2.5°	417.4	417.0	416.6	417.0	416.6	416.6	416.6	416.8	416.9	417.2	417.5
3°	417.2	416.8	416.3	416.7	416.2	416.2	416.2	416.5	416.7	417.0	417.3
3.5°	416.9	416.4	415.8	416.3	415.7	415.8	415.8	416.1	416.3	416.6	417.1
4°	416.6	416.2	415.4	415.9	415.2	415.3	415.4	415.7	416.0	416.2	416.7
4.5°	416.3	415.7	414.9	415.4	414.7	414.8	414.8	415.2	415.5	415.8	416.4
5°	415.8	415.2	414.5	414.9	414.1	414.2	414.2	414.7	415.1	415.2	416.0
5.5°	415.4	414.7	413.8	414.3	413.4	413.5	413.6	414.2	414.5	414.7	415.5
6°	414.9	414.1	413.1	413.7	412.7	412.8	412.9	413.5	414.0	414.1	415.0
6.5°	414.3	413.5	412.4	413.0	412.0	412.1	412.2	412.9	413.3	413.4	414.5
7°	413.6	412.8	411.6	412.3	411.1	411.3	411.4	412.1	412.7	412.7	413.8
7.5°	413.0	412.0	410.7	411.5	410.2	410.4	410.6	411.3	411.9	412.0	413.1
8°	412.2	411.2	409.9	410.5	409.1	409.5	409.6	410.5	411.2	411.2	412.4
8.5°	411.5	410.3	408.9	409.6	408.2	408.5	408.6	409.6	410.2	410.3	411.6
9°	410.6	409.2	407.9	408.4	407.1	407.5	407.5	408.6	409.3	409.5	410.8
9.5°	409.8	408.3	406.8	407.3	406.0	406.4	406.4	407.5	408.4	408.4	409.8
10°	408.7	407.2	405.8	406.3	404.7	405.3	405.2	406.4	407.4	407.4	408.9
10.5°	407.7	406.0	404.5	405.1	403.5	404.0	404.1	405.2	406.1	406.2	407.9
11°	406.5	404.8	403.3	403.9	402.3	402.8	402.8	404.1	405.1	405.0	406.8
11.5°	405.3	403.6	402.0	402.6	401.1	401.5	401.6	402.8	403.8	403.8	405.6
12°	404.1	402.3	400.7	401.4	399.7	400.2	400.3	401.5	402.7	402.6	404.4
12.5°	402.9	401.1	399.3	400.0	398.4	398.8	398.8	400.1	401.3	401.0	403.2
13°	401.5	399.6	398.0	398.7	396.9	397.5	397.5	398.7	399.9	399.8	401.8
13.5°	400.2	398.3	396.5	397.2	395.4	395.9	396.1	397.3	398.5	398.2	400.4
14°	398.9	396.7	395.0	395.8	393.9	394.5	394.6	395.9	397.0	396.9	399.2
14.5°	397.4	395.3	393.4	394.1	392.3	392.9	393.0	394.4	395.5	395.3	397.6
15°	395.8	393.7	391.9	392.7	390.6	391.3	391.5	392.9	394.0	393.7	396.2
15.5°	394.3	392.2	390.2	391.0	388.9	389.5	389.8	391.3	392.4	392.1	394.4
16°	392.7	390.3	388.5	389.3	387.1	387.9	388.1	389.6	390.8	390.6	392.9
16.5°	391.1	388.7	386.7	387.5	385.3	386.1	386.4	387.8	389.1	388.7	391.1
17°	389.2	386.9	384.8	385.7	383.5	384.2	384.6	386.2	387.5	387.1	389.5
17.5°	387.6	385.1	382.9	383.8	381.5	382.3	382.6	384.3	385.6	385.3	387.7
18°	385.7	383.1	380.9	381.9	379.5	380.5	380.6	382.6	383.8	383.4	386.0
18.5°	383.8	381.2	378.9	379.9	377.5	378.4	378.7	380.7	381.9	381.4	384.1
19°	381.8	379.1	376.9	377.8	375.4	376.4	376.7	378.7	380.0	379.5	382.3
19.5°	379.9	377.2	374.6	375.7	373.3	374.3	374.6	376.6	378.1	377.4	380.2
20°	377.7	374.8	372.4	373.5	371.0	372.0	372.4	374.5	375.9	375.4	378.2
20.5°	375.6	372.8	370.2	371.3	368.8	369.8	370.1	372.4	373.8	373.1	376.2
21°	373.4	370.4	368.0	368.9	366.5	367.6	367.9	370.3	371.6	371.0	374.1



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	366.4	363.3	360.6	361.9	359.1	360.3	360.7	363.1	364.8	364.1	367.3
23°	364.0	360.7	358.1	359.2	356.5	357.8	358.3	360.8	362.4	361.8	365.0
23.5°	361.4	358.2	355.4	356.7	353.8	355.3	355.7	358.3	360.0	359.2	362.6
24°	358.9	355.5	352.9	354.0	351.2	352.6	353.1	355.7	357.5	356.7	360.2
24.5°	356.3	352.7	350.1	351.3	348.4	349.9	350.4	353.1	354.8	354.1	357.5
25°	353.3	350.0	347.3	348.6	345.6	347.2	347.7	350.5	352.3	351.5	355.0
25.5°	350.6	347.1	344.4	345.7	342.8	344.3	344.9	347.8	349.6	348.7	352.2
26°	347.8	344.2	341.5	342.8	339.9	341.4	342.1	345.1	346.8	346.0	349.6
26.5°	344.9	341.3	338.5	339.8	337.1	338.6	339.2	342.1	344.1	343.1	346.6
27°	341.9	338.2	335.5	336.9	334.0	335.6	336.2	339.3	341.2	340.2	344.0
27.5°	338.9	335.2	332.4	333.9	331.0	332.5	333.2	336.4	338.3	337.3	341.0
28°	335.8	332.1	329.3	330.8	327.8	329.5	330.2	333.5	335.4	334.3	338.1
28.5°	332.6	328.9	326.1	327.7	324.8	326.5	327.1	330.3	332.4	331.2	334.9
29°	329.4	325.6	322.9	324.4	321.5	323.3	324.0	327.3	329.4	328.2	331.9
29.5°	326.1	322.3	319.5	321.1	318.3	319.9	320.8	324.2	326.3	325.0	328.9
30°	322.7	318.9	316.2	317.8	314.9	316.7	317.5	320.9	323.0	321.8	325.6
30.5°	319.3	315.4	312.7	314.5	311.4	313.5	314.2	317.6	319.8	318.5	322.4
31°	315.8	311.9	309.3	311.1	308.0	310.2	310.8	314.4	316.6	315.3	319.1
31.5°	312.3	308.4	305.7	307.6	304.6	306.7	307.5	311.0	313.3	311.9	315.7
32°	308.5	304.8	302.2	304.1	300.9	303.4	304.0	307.7	309.8	308.4	312.2
32.5°	304.8	301.1	298.5	300.6	297.4	299.8	300.3	304.1	306.4	304.8	308.7
33°	301.2	297.3	294.8	296.9	293.8	296.2	297.0	300.8	303.0	301.5	305.3
33.5°	297.5	293.6	291.2	293.3	290.2	292.6	293.3	297.2	299.4	297.8	301.7
34°	293.7	289.8	287.5	289.5	286.4	289.1	289.8	293.6	295.8	294.3	298.1
34.5°	289.7	286.0	283.5	285.8	282.8	285.4	286.0	290.0	292.2	290.5	294.3
35°	285.9	282.1	279.7	282.0	279.0	281.7	282.4	286.4	288.6	286.9	290.6
35.5°	281.9	278.1	275.8	278.3	275.3	277.8	278.7	282.8	285.0	283.1	286.9
36°	277.9	274.1	271.9	274.3	271.3	274.1	274.9	278.9	281.1	279.2	283.1
36.5°	273.9	270.2	267.9	270.4	267.6	270.2	270.9	275.2	277.4	275.5	279.3
37°	269.8	266.2	264.0	266.6	263.5	266.4	267.3	271.4	273.6	271.7	275.3
37.5°	265.7	262.0	260.1	262.7	259.7	262.5	263.4	267.6	269.7	267.8	271.6
38°	261.5	257.9	255.9	258.7	255.7	258.6	259.4	263.9	265.9	264.0	267.6
38.5°	257.3	253.8	252.0	254.7	251.8	254.7	255.5	259.8	261.9	259.9	263.5
39°	253.2	249.5	247.9	250.6	247.6	250.7	251.7	256.0	258.1	256.0	259.6
39.5°	249.0	245.5	243.9	246.6	243.7	246.7	247.7	252.1	254.2	251.9	255.5
40°	244.7	241.4	239.8	242.7	239.6	242.8	243.7	248.1	250.0	247.9	251.5
40.5°	240.5	237.2	235.7	238.7	235.6	238.8	239.7	244.2	246.1	244.0	247.4
41°	236.1	233.0	231.5	234.5	231.5	234.8	235.8	240.2	242.2	239.9	243.2
41.5°	231.9	228.8	227.5	230.4	227.4	230.7	231.8	236.1	238.3	235.8	239.2
42°	227.7	224.6	223.3	226.3	223.4	226.6	227.8	232.1	234.1	231.8	235.0
42.5°	223.4	220.5	219.2	222.1	219.4	222.5	223.7	228.1	230.1	227.7	230.9
43°	219.1	216.3	215.1	218.1	215.2	218.5	219.7	224.1	226.1	223.7	226.7
43.5°	215.0	212.2	211.1	214.0	211.1	214.5	215.6	220.1	222.1	219.5	222.7



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	202.5	199.7	199.0	201.9	199.0	202.5	203.5	208.1	210.0	207.5	210.3
45.5°	198.3	195.7	194.9	197.9	195.1	198.3	199.5	204.1	206.1	203.4	206.3
46°	194.2	191.6	191.0	193.8	190.9	194.4	195.7	200.0	201.9	199.4	202.2
46.5°	190.2	187.6	187.1	189.9	187.0	190.5	191.7	196.1	197.9	195.4	198.2
47°	186.1	183.5	183.2	186.0	183.1	186.6	187.7	192.2	194.0	191.5	194.1
47.5°	182.2	179.7	179.3	182.1	179.2	182.6	183.8	188.3	190.1	187.5	190.1
48°	178.3	175.7	175.6	178.2	175.2	178.9	180.0	184.4	186.2	183.5	186.2
48.5°	174.4	171.8	171.8	174.4	171.3	175.1	176.1	180.6	182.3	179.6	182.3
49°	170.6	167.8	168.0	170.5	167.5	171.3	172.2	176.8	178.4	175.7	178.5
49.5°	166.8	164.1	164.2	166.7	163.6	167.5	168.4	173.0	174.5	171.9	174.6
50°	162.9	160.3	160.4	162.9	160.1	163.7	164.6	169.3	170.7	168.1	170.8
50.5°	159.1	156.7	156.6	159.1	156.3	159.9	160.8	165.5	166.9	164.4	166.9
51°	155.5	153.0	153.0	155.5	152.6	156.1	157.2	161.8	163.2	160.7	163.1
51.5°	151.9	149.3	149.3	151.9	149.0	152.4	153.6	158.1	159.6	157.0	159.2
52°	148.2	145.7	145.8	148.3	145.4	148.8	150.0	154.4	155.9	153.3	155.9
52.5°	144.7	142.2	142.2	144.6	141.8	145.1	146.4	150.9	152.3	149.8	152.2
53°	141.2	138.7	138.8	141.2	138.1	141.5	142.8	147.2	148.7	146.2	148.7
53.5°	137.8	135.3	135.4	137.7	134.7	138.0	139.2	143.6	145.2	142.8	145.2
54°	134.3	131.9	132.0	134.3	131.3	134.6	135.7	140.3	141.7	139.3	141.6
54.5°	131.0	128.5	128.6	130.8	128.0	131.2	132.4	136.7	138.1	135.9	138.1
55°	127.7	125.3	125.3	127.4	124.4	127.8	128.9	133.3	134.7	132.6	134.7
55.5°	124.5	122.0	122.1	124.1	121.2	124.4	125.5	129.9	131.2	129.2	131.4
56°	121.3	118.8	118.8	120.8	117.9	121.1	122.2	126.6	128.0	125.8	128.0
56.5°	118.2	115.7	115.6	117.6	114.7	117.8	119.0	123.3	124.7	122.6	124.8
57°	115.0	112.5	112.5	114.5	111.6	114.7	115.7	120.0	121.5	119.3	121.5
57.5°	112.0	109.5	109.4	111.3	108.5	111.5	112.6	116.9	118.3	116.2	118.3
58°	109.0	106.5	106.4	108.2	105.4	108.3	109.4	113.7	115.1	112.8	115.0
58.5°	106.0	103.5	103.4	105.1	102.2	105.2	106.3	110.6	111.9	109.6	111.8
59°	103.1	100.6	100.5	102.1	99.3	102.1	103.3	107.5	108.9	106.4	108.6
59.5°	100.3	97.7	97.6	99.2	96.3	99.1	100.3	104.4	105.9	103.3	105.5
60°	97.5	94.9	94.6	96.2	93.3	96.2	97.3	101.4	102.9	100.2	102.4
60.5°	94.7	92.1	91.8	93.3	90.5	93.2	94.2	98.4	99.8	97.0	99.3
61°	91.9	89.4	89.0	90.5	87.6	90.4	91.4	95.6	96.8	94.0	96.3
61.5°	89.2	86.9	86.2	87.7	85.0	87.5	88.6	92.7	93.8	90.9	93.2
62°	86.6	84.4	83.6	84.9	82.5	84.7	85.9	89.8	90.9	88.1	90.3
62.5°	84.1	81.9	80.9	82.1	79.9	81.9	83.3	87.0	87.9	85.4	87.4
63°	81.5	79.4	78.3	79.5	77.3	79.2	80.7	84.3	85.2	82.7	84.6
63.5°	79.0	76.9	75.7	76.9	74.7	76.5	78.1	81.6	82.5	80.0	81.8
64°	76.5	74.4	73.2	74.3	72.1	73.8	75.4	78.9	79.8	77.2	79.0
64.5°	74.1	71.9	70.7	71.7	69.5	71.2	72.8	76.3	77.2	74.6	76.2
65°	71.7	69.5	68.2	69.1	67.1	68.6	70.3	73.6	74.4	71.9	73.5
65.5°	69.3	67.2	65.8	66.7	64.5	66.1	67.7	71.0	71.7	69.2	70.9
66°	67.0	64.8	63.4	64.2	62.1	63.7	65.2	68.5	69.0	66.6	68.4



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	60.1	58.1	56.5	57.2	55.1	56.5	58.0	60.9	61.3	59.1	60.8
68°	57.8	55.9	53.9	54.9	52.8	54.2	55.6	58.4	58.8	56.6	58.4
68.5°	55.6	53.8	52.0	52.7	50.6	51.9	53.3	56.0	56.3	54.3	56.1
69°	53.5	51.7	50.0	50.5	48.4	49.6	51.1	53.6	53.9	52.1	53.8
69.5°	51.3	49.6	47.9	48.3	46.3	47.5	48.9	51.2	51.6	49.7	51.5
70°	49.2	47.6	45.9	46.3	44.3	45.4	46.7	48.9	49.3	47.6	49.3
70.5°	47.2	45.5	43.9	44.2	42.2	43.3	44.3	46.7	47.0	45.4	47.2
71°	45.1	43.6	42.0	42.2	40.3	41.2	41.8	44.4	44.8	43.3	45.0
71.5°	43.1	41.6	40.1	40.2	38.3	39.3	39.5	42.3	42.7	41.3	43.0
72°	41.2	39.8	38.2	38.4	36.4	37.3	37.2	40.1	40.6	39.3	41.0
72.5°	39.2	37.9	36.4	36.5	34.6	35.3	34.9	38.1	38.6	37.4	39.1
73°	37.2	36.1	34.6	34.7	32.9	33.5	32.7	36.1	36.6	35.5	37.2
73.5°	35.2	34.3	32.8	33.0	31.2	31.6	30.7	34.2	34.8	33.7	35.4
74°	33.2	32.6	31.1	31.3	29.6	29.8	28.7	32.2	32.9	32.0	33.6
74.5°	31.4	30.9	29.5	29.7	27.9	28.1	26.8	30.3	31.2	30.3	32.0
75°	29.6	29.2	28.0	28.1	26.5	26.4	25.1	28.4	29.5	28.7	30.4
75.5°	27.9	27.6	26.4	26.6	25.1	24.8	23.4	26.5	27.8	27.2	28.8
76°	26.2	26.1	24.9	25.2	23.7	23.3	21.9	24.8	26.3	25.8	27.3
76.5°	24.7	24.7	23.5	23.8	22.3	21.9	20.5	23.2	24.8	24.4	25.9
77°	23.1	23.3	22.1	22.5	21.0	20.5	19.2	21.6	23.4	23.0	24.5
77.5°	21.7	21.9	20.7	21.2	19.7	19.1	18.0	20.1	22.0	21.7	23.1
78°	20.3	20.5	19.5	20.0	18.6	17.9	17.0	18.8	20.8	20.5	21.9
78.5°	19.0	19.2	18.3	18.8	17.5	16.7	16.0	17.5	19.5	19.3	20.6
79°	17.8	17.9	17.2	17.8	16.6	15.6	15.1	16.4	18.4	18.2	19.4
79.5°	16.6	16.7	16.2	16.8	15.8	14.6	14.0	15.3	17.3	17.2	18.3
80°	15.6	15.5	15.3	15.9	14.9	13.7	12.9	14.3	16.3	16.2	17.3
80.5°	14.6	14.4	14.5	15.0	14.1	12.8	11.8	13.3	15.4	15.3	16.3
81°	13.6	13.4	13.7	14.2	13.1	11.8	10.6	12.2	14.5	14.5	15.3
81.5°	12.5	12.5	12.8	13.2	12.1	10.8	9.4	11.1	13.6	13.7	14.5
82°	11.4	11.5	11.8	12.2	11.1	9.7	8.2	10.0	12.7	12.7	13.6
82.5°	10.3	10.5	10.8	11.2	10.2	8.7	7.1	8.8	11.7	11.7	12.7
83°	9.1	9.5	9.9	10.2	9.1	7.7	5.9	7.7	10.7	10.8	11.7
83.5°	7.9	8.5	9.0	9.2	8.1	6.7	4.7	6.6	9.7	9.8	10.6
84°	6.9	7.7	7.9	8.2	7.1	5.7	3.7	5.5	8.7	8.9	9.7
84.5°	5.8	6.7	7.0	7.1	6.1	5.0	2.7	4.4	7.6	7.9	8.7
85°	4.6	5.8	6.1	6.2	5.1	4.1	1.9	3.4	6.6	6.9	7.7
85.5°	3.6	4.9	5.2	5.2	4.0	3.3	1.5	2.5	5.7	6.0	6.7
86°	2.8	4.2	4.2	4.1	3.1	2.5	1.1	1.8	4.9	5.0	5.9
86.5°	1.9	3.5	3.3	3.2	2.3	1.8	0.8	1.4	3.9	4.1	5.0
87°	1.4	2.7	2.4	2.3	1.4	1.1	0.6	1.0	3.0	3.1	4.0
87.5°	1.1	2.1	1.7	1.4	0.8	0.5	0.4	0.6	2.2	2.2	3.1
88°	0.9	1.5	0.9	0.8	0.7	0.3	0.2	0.3	1.5	1.4	2.3
88.5°	0.7	0.8	0.6	0.7	0.5	0.2	0.1	0.2	0.7	0.6	1.5



TEST NUMBER: P710068
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	417.7	417.7
0.5°	417.8	417.7
1°	417.7	417.7
1.5°	417.7	417.6
2°	417.7	417.6
2.5°	417.4	417.4
3°	417.3	417.2
3.5°	417.0	416.9
4°	416.6	416.6
4.5°	416.3	416.3
5°	416.0	415.8
5.5°	415.4	415.4
6°	414.9	414.9
6.5°	414.4	414.3
7°	413.7	413.6
7.5°	413.1	413.0
8°	412.4	412.2
8.5°	411.6	411.5
9°	410.7	410.6
9.5°	409.8	409.8
10°	408.8	408.7
10.5°	407.8	407.7
11°	406.7	406.5
11.5°	405.6	405.3
12°	404.3	404.1
12.5°	403.1	402.9
13°	401.7	401.5
13.5°	400.3	400.2
14°	398.8	398.9
14.5°	397.5	397.4
15°	396.0	395.8
15.5°	394.4	394.3
16°	392.7	392.7
16.5°	391.1	391.1
17°	389.3	389.2
17.5°	387.6	387.6
18°	385.7	385.7
18.5°	383.9	383.8
19°	382.0	381.8
19.5°	380.0	379.9
20°	377.8	377.7
20.5°	375.9	375.6
21°	373.7	373.4



TEST NUMBER: P710068
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	366.8	366.4
23°	364.3	364.0
23.5°	361.8	361.4
24°	359.2	358.9
24.5°	356.7	356.3
25°	353.9	353.3
25.5°	351.3	350.6
26°	348.4	347.8
26.5°	345.6	344.9
27°	342.7	341.9
27.5°	339.6	338.9
28°	336.6	335.8
28.5°	333.6	332.6
29°	330.3	329.4
29.5°	327.0	326.1
30°	323.7	322.7
30.5°	320.4	319.3
31°	317.1	315.8
31.5°	313.5	312.3
32°	310.0	308.5
32.5°	306.5	304.8
33°	302.8	301.2
33.5°	299.1	297.5
34°	295.4	293.7
34.5°	291.6	289.7
35°	287.8	285.9
35.5°	283.8	281.9
36°	279.9	277.9
36.5°	276.0	273.9
37°	272.0	269.8
37.5°	268.0	265.7
38°	263.9	261.5
38.5°	259.8	257.3
39°	255.8	253.2
39.5°	251.5	249.0
40°	247.4	244.7
40.5°	243.3	240.5
41°	239.0	236.1
41.5°	234.9	231.9
42°	230.6	227.7
42.5°	226.5	223.4
43°	222.1	219.1
43.5°	218.0	215.0



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	205.6	202.5
45.5°	201.4	198.3
46°	197.2	194.2
46.5°	193.2	190.2
47°	189.2	186.1
47.5°	185.1	182.2
48°	181.2	178.3
48.5°	177.3	174.4
49°	173.2	170.6
49.5°	169.4	166.8
50°	165.6	162.9
50.5°	161.9	159.1
51°	158.1	155.5
51.5°	154.3	151.9
52°	150.8	148.2
52.5°	147.1	144.7
53°	143.6	141.2
53.5°	140.1	137.8
54°	136.8	134.3
54.5°	133.3	131.0
55°	129.9	127.7
55.5°	126.6	124.5
56°	123.4	121.3
56.5°	120.2	118.2
57°	117.0	115.0
57.5°	113.9	112.0
58°	110.8	109.0
58.5°	107.7	106.0
59°	104.8	103.1
59.5°	101.9	100.3
60°	99.1	97.5
60.5°	96.3	94.7
61°	93.4	91.9
61.5°	90.7	89.2
62°	88.0	86.6
62.5°	85.5	84.1
63°	83.0	81.5
63.5°	80.4	79.0
64°	77.9	76.5
64.5°	75.3	74.1
65°	72.7	71.7
65.5°	70.2	69.3
66°	67.7	67.0



TEST NUMBER: P710068

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	60.5	60.1
68°	58.1	57.8
68.5°	55.9	55.6
69°	53.7	53.5
69.5°	51.5	51.3
70°	49.3	49.2
70.5°	47.3	47.2
71°	45.2	45.1
71.5°	43.2	43.1
72°	41.2	41.2
72.5°	39.4	39.2
73°	37.5	37.2
73.5°	35.7	35.2
74°	34.0	33.2
74.5°	32.2	31.4
75°	30.5	29.6
75.5°	28.8	27.9
76°	27.1	26.2
76.5°	25.5	24.7
77°	24.0	23.1
77.5°	22.5	21.7
78°	21.1	20.3
78.5°	19.8	19.0
79°	18.6	17.8
79.5°	17.4	16.6
80°	16.3	15.6
80.5°	15.2	14.6
81°	14.2	13.6
81.5°	13.2	12.5
82°	12.1	11.4
82.5°	11.1	10.3
83°	10.0	9.1
83.5°	8.9	7.9
84°	7.8	6.9
84.5°	6.8	5.8
85°	5.7	4.6
85.5°	4.6	3.6
86°	3.7	2.8
86.5°	2.7	1.9
87°	2.1	1.4
87.5°	1.6	1.1
88°	1.2	0.9
88.5°	0.8	0.7



TEST NUMBER: P710068
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.2	0.2



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report





21.5°	371.0	368.1	365.6	366.6	364.1	365.2	365.6	367.9	369.4	368.9	371.8
22°	368.7	365.7	363.1	364.3	361.7	362.8	363.3	365.6	367.1	366.4	369.7



44°	210.8	208.0	207.1	210.0	207.1	210.5	211.7	216.1	218.0	215.5	218.7
44.5°	206.5	203.9	203.0	206.0	203.0	206.5	207.6	212.1	213.9	211.5	214.4



66.5°	64.7	62.6	61.1	61.9	59.7	61.3	62.7	65.9	66.4	64.1	65.8
67°	62.4	60.3	58.8	59.5	57.4	58.8	60.4	63.4	63.8	61.6	63.2



89°	0.4	0.3	0.5	0.6	0.3	0.1	0.1	0.1	0.2	0.2	0.7
89.5°	0.2	0.3	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2

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

Scaled Data Report





21.5°	371.4	371.0
22°	369.1	368.7

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

Scaled Data Report



44°	213.9	210.8
44.5°	209.7	206.5

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

Scaled Data Report



66.5°	65.3	64.7
67°	62.9	62.4



89°	0.5	0.4
89.5°	0.2	0.2

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

Scaled Data Report



(END OF REPORT)