

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: P710064

Luminaire Tested: RA4LS9FSD2W1EWH-600lm-3500K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710064
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-600lm-3500K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 3500K CCT
Ballast/Driver: -

Summary

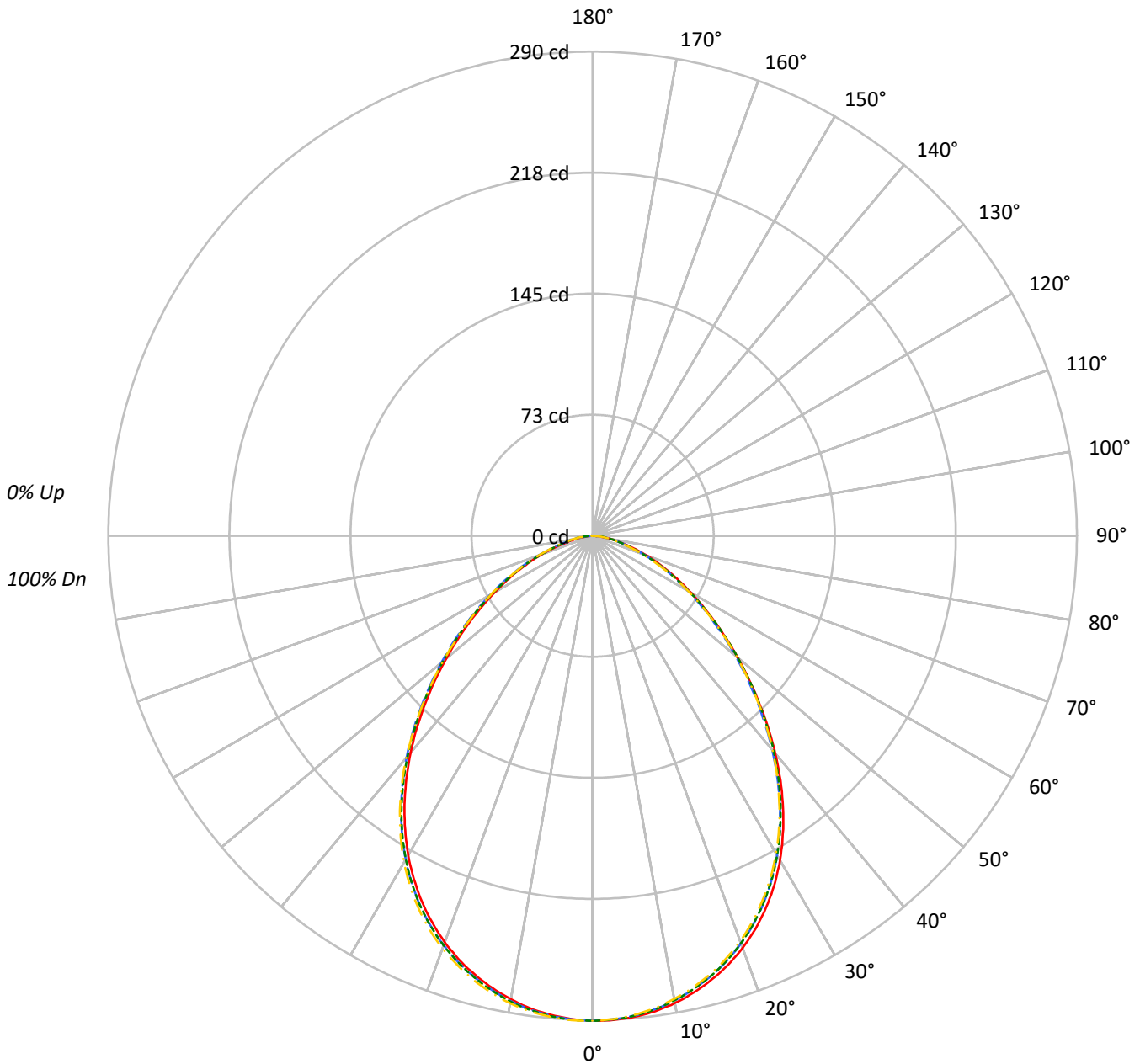
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 605.0 lumens
Efficiency: 65.7%
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 5.6
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: P710064
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

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	0																
RCR																																					
0	78	78	78	78	76	76	76	76	73	73	73	70	70	70	67	67	67	66																			
1	73	70	67	65	71	68	66	64	66	64	62	63	62	60	61	60	59	57																			
2	67	62	58	55	65	61	57	54	59	56	53	57	54	52	55	53	51	49																			
3	62	55	51	47	60	54	50	46	53	49	46	51	48	45	49	46	44	43																			
4	57	50	45	41	55	49	44	40	47	43	40	46	42	39	44	41	39	37																			
5	53	45	40	36	51	44	39	35	43	38	35	42	38	35	40	37	34	33																			
6	49	41	35	32	48	40	35	31	39	35	31	38	34	31	37	33	31	29																			
7	46	37	32	28	44	37	32	28	36	31	28	35	31	28	34	30	28	26																			
8	43	34	29	25	42	34	29	25	33	28	25	32	28	25	31	28	25	24																			
9	40	32	27	23	39	31	26	23	30	26	23	30	26	23	29	25	23	22																			
10	37	29	24	21	37	29	24	21	28	24	21	28	24	21	27	23	21	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	36559	36559	36559	36559
5°	36522	36446	36383	36484
10°	36318	36101	36012	36203
15°	35856	35582	35465	35673
20°	35183	34781	34687	34955
25°	34118	33660	33576	33937
30°	32610	32115	32086	32522
35°	30542	30128	30174	30650
40°	27961	27731	27846	28323
45°	25059	24988	25184	25682
50°	22183	22183	22418	22888
55°	19484	19440	19681	20230
60°	17065	16839	17040	17543
65°	14830	14324	14562	14889
70°	12584	11848	11959	12179
75°	10017	9530	8509	9725
80°	7827	7972	6523	8190
85°	4621	6209	1877	6931

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 26038 cd/sqm



TEST NUMBER: P710064
 CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	27.4	4.5	3.0
10°-20°	77.0	12.7	8.4
20°-30°	111.9	18.5	12.2
30°-40°	123.3	20.4	13.4
40°-50°	109.5	18.1	11.9
50°-60°	80.7	13.3	8.8
60°-70°	49.1	8.1	5.3
70°-80°	21.5	3.6	2.3
80°-90°	4.6	0.8	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°	216.3	35.7	23.5
0°-40°	339.5	56.1	36.9
0°-60°	529.7	87.6	57.5
0°-90°	605.0	100.0	65.7
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°	605.0	100.0	65.7

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	290	290	290	290	290	
5°	289	288	288	289	289	27
15°	275	273	272	274	275	78
25°	246	242	242	244	246	113
35°	199	196	196	200	199	124
45°	141	140	142	144	141	109
55°	89	89	90	92	89	80
65°	50	48	49	50	50	50
75°	21	20	18	20	21	22
85°	3	4	1	5	3	4
90°	0	0	0	0	0	



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
0.5°	290.5	290.3	290.2	290.5	290.4	290.4	290.4	290.3	290.2	290.5	290.5
1°	290.5	290.3	290.2	290.4	290.3	290.3	290.2	290.3	290.3	290.4	290.5
1.5°	290.4	290.3	290.1	290.3	290.1	290.2	290.1	290.2	290.2	290.4	290.5
2°	290.4	290.2	289.9	290.2	289.9	289.9	290.0	290.0	290.1	290.3	290.5
2.5°	290.2	290.0	289.7	290.0	289.7	289.7	289.7	289.9	289.9	290.1	290.4
3°	290.1	289.9	289.5	289.8	289.4	289.5	289.4	289.6	289.8	290.0	290.2
3.5°	289.9	289.6	289.2	289.5	289.1	289.2	289.1	289.4	289.5	289.7	290.0
4°	289.7	289.4	288.9	289.2	288.8	288.8	288.8	289.1	289.3	289.4	289.8
4.5°	289.5	289.1	288.5	288.9	288.4	288.5	288.5	288.7	288.9	289.1	289.5
5°	289.1	288.7	288.2	288.5	288.0	288.0	288.0	288.4	288.7	288.8	289.3
5.5°	288.9	288.4	287.8	288.1	287.5	287.6	287.6	288.0	288.2	288.4	288.9
6°	288.5	287.9	287.3	287.7	287.0	287.1	287.1	287.6	287.9	288.0	288.6
6.5°	288.1	287.5	286.8	287.2	286.5	286.6	286.7	287.1	287.4	287.5	288.2
7°	287.6	287.0	286.2	286.7	285.9	286.0	286.1	286.6	287.0	287.0	287.7
7.5°	287.2	286.5	285.6	286.1	285.2	285.4	285.5	286.0	286.4	286.5	287.3
8°	286.6	285.9	285.0	285.5	284.5	284.8	284.8	285.5	285.9	286.0	286.8
8.5°	286.1	285.3	284.3	284.8	283.8	284.1	284.2	284.8	285.3	285.3	286.3
9°	285.5	284.6	283.6	284.0	283.1	283.3	283.4	284.2	284.7	284.8	285.6
9.5°	285.0	283.9	282.9	283.3	282.3	282.6	282.6	283.4	284.0	284.0	285.0
10°	284.2	283.1	282.2	282.5	281.4	281.8	281.8	282.6	283.3	283.3	284.4
10.5°	283.5	282.3	281.3	281.7	280.6	281.0	281.0	281.8	282.4	282.5	283.6
11°	282.7	281.5	280.5	280.9	279.8	280.1	280.1	281.0	281.7	281.6	282.9
11.5°	281.9	280.7	279.6	280.0	278.9	279.2	279.3	280.1	280.8	280.8	282.1
12°	281.0	279.7	278.7	279.1	278.0	278.3	278.4	279.2	280.0	279.9	281.2
12.5°	280.2	278.9	277.7	278.2	277.0	277.3	277.4	278.3	279.0	278.9	280.4
13°	279.2	277.9	276.7	277.3	276.0	276.4	276.5	277.3	278.1	278.0	279.4
13.5°	278.3	277.0	275.7	276.2	275.0	275.3	275.4	276.3	277.1	276.9	278.5
14°	277.4	275.9	274.7	275.2	273.9	274.3	274.4	275.3	276.1	276.0	277.6
14.5°	276.3	274.9	273.6	274.1	272.8	273.2	273.3	274.3	275.0	274.9	276.5
15°	275.2	273.8	272.5	273.1	271.6	272.1	272.2	273.3	274.0	273.8	275.5
15.5°	274.2	272.7	271.4	271.9	270.5	270.9	271.0	272.1	272.9	272.7	274.3
16°	273.1	271.4	270.1	270.7	269.2	269.7	269.9	271.0	271.8	271.6	273.3
16.5°	271.9	270.3	268.9	269.5	268.0	268.5	268.7	269.7	270.6	270.3	272.0
17°	270.7	269.1	267.6	268.2	266.7	267.2	267.4	268.5	269.4	269.2	270.9
17.5°	269.5	267.8	266.3	266.9	265.3	265.9	266.1	267.3	268.1	267.9	269.6
18°	268.2	266.4	264.9	265.6	263.9	264.6	264.7	266.0	266.9	266.6	268.4
18.5°	266.9	265.1	263.5	264.2	262.5	263.2	263.3	264.7	265.6	265.2	267.1
19°	265.5	263.6	262.1	262.7	261.0	261.7	261.9	263.3	264.3	263.9	265.9
19.5°	264.2	262.3	260.5	261.2	259.6	260.3	260.5	261.9	262.9	262.5	264.4
20°	262.7	260.7	259.0	259.7	258.0	258.7	259.0	260.4	261.4	261.0	263.0
20.5°	261.2	259.2	257.4	258.2	256.5	257.2	257.4	258.9	259.9	259.5	261.6
21°	259.7	257.6	255.9	256.6	254.9	255.6	255.8	257.5	258.4	258.0	260.2



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	254.8	252.6	250.8	251.7	249.7	250.5	250.8	252.5	253.7	253.2	255.4
23°	253.1	250.8	249.0	249.8	247.9	248.8	249.2	250.9	252.0	251.6	253.8
23.5°	251.3	249.1	247.1	248.0	246.0	247.1	247.4	249.1	250.3	249.8	252.1
24°	249.5	247.2	245.4	246.1	244.2	245.2	245.6	247.4	248.6	248.0	250.5
24.5°	247.7	245.3	243.5	244.3	242.3	243.3	243.7	245.5	246.7	246.2	248.6
25°	245.7	243.4	241.5	242.4	240.3	241.4	241.8	243.7	245.0	244.4	246.8
25.5°	243.8	241.4	239.5	240.4	238.4	239.4	239.9	241.9	243.1	242.5	244.9
26°	241.8	239.4	237.5	238.4	236.4	237.4	237.9	240.0	241.2	240.6	243.1
26.5°	239.9	237.3	235.4	236.3	234.4	235.5	235.9	237.9	239.3	238.6	241.1
27°	237.8	235.2	233.3	234.3	232.2	233.4	233.8	236.0	237.3	236.6	239.3
27.5°	235.7	233.1	231.1	232.2	230.2	231.2	231.7	233.9	235.3	234.6	237.1
28°	233.5	230.9	229.0	230.0	228.0	229.2	229.6	231.9	233.2	232.5	235.1
28.5°	231.3	228.7	226.7	227.9	225.8	227.0	227.5	229.7	231.2	230.3	232.9
29°	229.0	226.4	224.6	225.6	223.6	224.8	225.3	227.6	229.1	228.2	230.8
29.5°	226.8	224.2	222.2	223.3	221.4	222.5	223.1	225.4	226.9	226.0	228.7
30°	224.4	221.8	219.9	221.0	219.0	220.3	220.8	223.2	224.6	223.8	226.5
30.5°	222.0	219.3	217.5	218.7	216.5	218.0	218.5	220.9	222.4	221.5	224.2
31°	219.6	216.9	215.1	216.4	214.2	215.7	216.1	218.7	220.1	219.2	221.9
31.5°	217.2	214.5	212.6	213.9	211.9	213.3	213.8	216.3	217.9	216.9	219.5
32°	214.6	211.9	210.1	211.4	209.3	211.0	211.4	214.0	215.5	214.5	217.1
32.5°	212.0	209.4	207.6	209.0	206.8	208.5	208.9	211.5	213.1	212.0	214.7
33°	209.5	206.7	205.0	206.5	204.3	206.0	206.5	209.1	210.7	209.7	212.3
33.5°	206.9	204.2	202.5	203.9	201.8	203.5	204.0	206.7	208.2	207.1	209.8
34°	204.2	201.5	199.9	201.3	199.2	201.0	201.5	204.1	205.7	204.6	207.3
34.5°	201.5	198.9	197.2	198.7	196.6	198.4	198.9	201.7	203.2	202.0	204.7
35°	198.8	196.1	194.5	196.1	194.0	195.9	196.4	199.2	200.7	199.5	202.1
35.5°	196.0	193.4	191.8	193.5	191.4	193.2	193.8	196.6	198.2	196.8	199.5
36°	193.2	190.6	189.1	190.8	188.7	190.6	191.2	194.0	195.5	194.2	196.9
36.5°	190.5	187.9	186.3	188.1	186.1	187.9	188.4	191.4	192.9	191.6	194.2
37°	187.6	185.1	183.6	185.4	183.3	185.3	185.9	188.8	190.3	188.9	191.5
37.5°	184.8	182.2	180.8	182.7	180.6	182.5	183.2	186.1	187.6	186.2	188.8
38°	181.9	179.4	178.0	179.9	177.8	179.9	180.4	183.5	184.9	183.6	186.1
38.5°	178.9	176.5	175.2	177.1	175.1	177.1	177.7	180.7	182.1	180.7	183.3
39°	176.1	173.5	172.4	174.3	172.2	174.3	175.0	178.0	179.5	178.0	180.5
39.5°	173.1	170.7	169.6	171.5	169.5	171.6	172.3	175.3	176.7	175.2	177.7
40°	170.2	167.9	166.7	168.8	166.6	168.8	169.5	172.5	173.9	172.4	174.9
40.5°	167.3	165.0	163.9	166.0	163.9	166.0	166.7	169.8	171.2	169.7	172.0
41°	164.2	162.0	161.0	163.1	161.0	163.3	164.0	167.0	168.4	166.8	169.1
41.5°	161.3	159.1	158.2	160.2	158.1	160.4	161.2	164.2	165.7	164.0	166.3
42°	158.3	156.2	155.3	157.4	155.3	157.6	158.4	161.4	162.8	161.2	163.4
42.5°	155.3	153.3	152.4	154.5	152.6	154.7	155.5	158.6	160.0	158.3	160.6
43°	152.4	150.4	149.6	151.7	149.6	152.0	152.8	155.9	157.2	155.6	157.7
43.5°	149.5	147.6	146.8	148.8	146.8	149.1	149.9	153.1	154.5	152.7	154.8



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	140.8	138.9	138.4	140.4	138.4	140.8	141.5	144.7	146.1	144.3	146.3
45.5°	137.9	136.1	135.5	137.6	135.7	137.9	138.8	141.9	143.3	141.4	143.5
46°	135.1	133.2	132.8	134.8	132.8	135.2	136.1	139.1	140.4	138.7	140.6
46.5°	132.3	130.4	130.1	132.0	130.0	132.5	133.3	136.4	137.6	135.9	137.8
47°	129.4	127.6	127.4	129.4	127.3	129.8	130.6	133.7	134.9	133.2	135.0
47.5°	126.7	125.0	124.7	126.6	124.6	127.0	127.8	131.0	132.2	130.4	132.2
48°	124.0	122.2	122.1	123.9	121.8	124.4	125.2	128.2	129.5	127.6	129.5
48.5°	121.3	119.5	119.5	121.2	119.1	121.7	122.5	125.6	126.8	124.9	126.8
49°	118.6	116.7	116.8	118.6	116.5	119.1	119.8	122.9	124.1	122.2	124.1
49.5°	116.0	114.1	114.2	116.0	113.8	116.5	117.1	120.3	121.3	119.6	121.4
50°	113.3	111.5	111.6	113.3	111.3	113.8	114.5	117.7	118.7	116.9	118.8
50.5°	110.7	109.0	108.9	110.7	108.7	111.2	111.8	115.1	116.1	114.3	116.1
51°	108.1	106.4	106.4	108.2	106.1	108.6	109.3	112.5	113.5	111.8	113.4
51.5°	105.6	103.8	103.8	105.6	103.6	105.9	106.8	109.9	111.0	109.2	110.7
52°	103.1	101.3	101.4	103.1	101.1	103.5	104.3	107.4	108.4	106.6	108.4
52.5°	100.6	98.9	98.9	100.6	98.6	100.9	101.8	104.9	105.9	104.2	105.9
53°	98.2	96.5	96.5	98.2	96.1	98.4	99.3	102.4	103.4	101.7	103.4
53.5°	95.8	94.1	94.1	95.7	93.7	96.0	96.8	99.9	100.9	99.3	100.9
54°	93.4	91.7	91.8	93.4	91.3	93.6	94.4	97.5	98.5	96.9	98.5
54.5°	91.1	89.4	89.4	91.0	89.0	91.3	92.0	95.1	96.1	94.5	96.0
55°	88.8	87.1	87.1	88.6	86.5	88.9	89.7	92.7	93.7	92.2	93.7
55.5°	86.6	84.8	84.9	86.3	84.3	86.5	87.3	90.3	91.3	89.9	91.4
56°	84.4	82.6	82.6	84.0	82.0	84.2	85.0	88.0	89.0	87.5	89.0
56.5°	82.2	80.4	80.4	81.8	79.8	81.9	82.7	85.7	86.7	85.3	86.8
57°	80.0	78.3	78.2	79.6	77.6	79.7	80.4	83.5	84.5	83.0	84.5
57.5°	77.9	76.1	76.1	77.4	75.4	77.5	78.3	81.3	82.3	80.8	82.3
58°	75.8	74.0	74.0	75.2	73.3	75.3	76.1	79.1	80.0	78.5	79.9
58.5°	73.7	71.9	71.9	73.1	71.1	73.1	73.9	76.9	77.8	76.2	77.8
59°	71.7	70.0	69.9	71.0	69.0	71.0	71.8	74.7	75.7	74.0	75.5
59.5°	69.7	67.9	67.8	68.9	66.9	68.9	69.8	72.6	73.7	71.8	73.4
60°	67.8	66.0	65.8	66.9	64.9	66.9	67.7	70.5	71.6	69.7	71.2
60.5°	65.8	64.1	63.9	64.9	62.9	64.8	65.5	68.5	69.4	67.5	69.1
61°	63.9	62.1	61.9	62.9	60.9	62.8	63.6	66.5	67.3	65.4	66.9
61.5°	62.1	60.4	60.0	61.0	59.1	60.8	61.6	64.4	65.3	63.2	64.8
62°	60.2	58.7	58.1	59.0	57.3	58.9	59.8	62.4	63.2	61.3	62.8
62.5°	58.4	56.9	56.3	57.1	55.6	57.0	57.9	60.5	61.1	59.4	60.8
63°	56.7	55.2	54.4	55.3	53.7	55.1	56.1	58.6	59.2	57.5	58.8
63.5°	54.9	53.4	52.6	53.5	51.9	53.2	54.3	56.7	57.4	55.6	56.9
64°	53.2	51.7	50.9	51.6	50.1	51.4	52.5	54.9	55.5	53.7	54.9
64.5°	51.5	50.0	49.1	49.9	48.3	49.5	50.6	53.0	53.7	51.8	53.0
65°	49.8	48.3	47.4	48.1	46.6	47.7	48.9	51.2	51.7	50.0	51.1
65.5°	48.2	46.7	45.7	46.4	44.9	46.0	47.1	49.4	49.8	48.1	49.3
66°	46.6	45.1	44.1	44.7	43.2	44.3	45.3	47.6	48.0	46.3	47.5



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	41.8	40.4	39.3	39.8	38.3	39.3	40.3	42.3	42.6	41.1	42.3
68°	40.2	38.9	37.4	38.2	36.7	37.7	38.7	40.6	40.9	39.4	40.6
68.5°	38.7	37.4	36.1	36.6	35.2	36.1	37.1	38.9	39.2	37.8	39.0
69°	37.2	36.0	34.8	35.1	33.7	34.5	35.5	37.3	37.5	36.2	37.4
69.5°	35.7	34.5	33.3	33.6	32.2	33.0	34.0	35.6	35.9	34.6	35.8
70°	34.2	33.1	31.9	32.2	30.8	31.5	32.5	34.0	34.3	33.1	34.3
70.5°	32.8	31.7	30.5	30.7	29.4	30.1	30.8	32.5	32.7	31.6	32.8
71°	31.4	30.3	29.2	29.3	28.0	28.7	29.1	30.9	31.2	30.1	31.3
71.5°	30.0	29.0	27.9	28.0	26.6	27.3	27.5	29.4	29.7	28.7	29.9
72°	28.6	27.7	26.6	26.7	25.3	25.9	25.8	27.9	28.2	27.3	28.5
72.5°	27.2	26.4	25.3	25.4	24.1	24.6	24.3	26.5	26.8	26.0	27.2
73°	25.9	25.1	24.0	24.1	22.9	23.3	22.8	25.1	25.5	24.7	25.9
73.5°	24.5	23.9	22.8	22.9	21.7	22.0	21.4	23.8	24.2	23.4	24.6
74°	23.1	22.7	21.6	21.8	20.6	20.7	20.0	22.4	22.9	22.2	23.4
74.5°	21.8	21.5	20.5	20.6	19.4	19.5	18.7	21.0	21.7	21.1	22.2
75°	20.6	20.3	19.4	19.6	18.4	18.4	17.5	19.7	20.5	20.0	21.1
75.5°	19.4	19.2	18.3	18.5	17.4	17.3	16.3	18.5	19.3	18.9	20.0
76°	18.2	18.2	17.3	17.5	16.4	16.2	15.2	17.2	18.3	17.9	19.0
76.5°	17.2	17.2	16.3	16.6	15.5	15.2	14.3	16.1	17.3	16.9	18.0
77°	16.1	16.2	15.4	15.6	14.6	14.2	13.4	15.0	16.3	16.0	17.0
77.5°	15.1	15.2	14.4	14.7	13.7	13.3	12.5	14.0	15.3	15.1	16.1
78°	14.1	14.3	13.6	13.9	12.9	12.5	11.8	13.0	14.4	14.3	15.2
78.5°	13.2	13.3	12.7	13.1	12.2	11.6	11.1	12.2	13.6	13.4	14.3
79°	12.3	12.4	12.0	12.4	11.5	10.9	10.5	11.4	12.8	12.7	13.5
79.5°	11.6	11.6	11.3	11.7	11.0	10.2	9.7	10.7	12.0	11.9	12.7
80°	10.8	10.8	10.6	11.0	10.4	9.6	9.0	10.0	11.4	11.3	12.0
80.5°	10.1	10.0	10.1	10.4	9.8	8.9	8.2	9.2	10.7	10.6	11.3
81°	9.5	9.3	9.5	9.8	9.1	8.2	7.4	8.5	10.1	10.1	10.7
81.5°	8.7	8.7	8.9	9.2	8.4	7.5	6.5	7.7	9.5	9.5	10.1
82°	7.9	8.0	8.2	8.5	7.7	6.7	5.7	6.9	8.8	8.9	9.5
82.5°	7.1	7.3	7.5	7.8	7.1	6.1	5.0	6.1	8.1	8.2	8.8
83°	6.3	6.6	6.9	7.1	6.3	5.3	4.1	5.3	7.4	7.5	8.1
83.5°	5.5	5.9	6.2	6.4	5.6	4.6	3.3	4.6	6.7	6.8	7.4
84°	4.8	5.3	5.5	5.7	4.9	4.0	2.6	3.8	6.0	6.2	6.7
84.5°	4.0	4.6	4.8	4.9	4.3	3.4	1.9	3.0	5.3	5.5	6.1
85°	3.2	4.0	4.2	4.3	3.5	2.9	1.3	2.4	4.6	4.8	5.4
85.5°	2.5	3.4	3.6	3.6	2.8	2.3	1.0	1.7	4.0	4.1	4.7
86°	1.9	2.9	2.9	2.9	2.2	1.7	0.8	1.3	3.4	3.5	4.1
86.5°	1.3	2.4	2.3	2.2	1.6	1.3	0.6	1.0	2.7	2.8	3.5
87°	1.0	1.9	1.7	1.6	1.0	0.8	0.4	0.7	2.1	2.1	2.8
87.5°	0.8	1.4	1.2	1.0	0.5	0.3	0.3	0.4	1.5	1.6	2.2
88°	0.6	1.1	0.7	0.6	0.5	0.2	0.1	0.2	1.0	1.0	1.6
88.5°	0.5	0.6	0.4	0.5	0.4	0.2	0.1	0.1	0.5	0.4	1.1



TEST NUMBER: P710064
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	290.5	290.5
0.5°	290.5	290.5
1°	290.5	290.5
1.5°	290.5	290.4
2°	290.5	290.4
2.5°	290.3	290.2
3°	290.2	290.1
3.5°	290.0	289.9
4°	289.7	289.7
4.5°	289.5	289.5
5°	289.3	289.1
5.5°	288.9	288.9
6°	288.5	288.5
6.5°	288.2	288.1
7°	287.7	287.6
7.5°	287.3	287.2
8°	286.8	286.6
8.5°	286.2	286.1
9°	285.6	285.5
9.5°	285.0	285.0
10°	284.3	284.2
10.5°	283.6	283.5
11°	282.8	282.7
11.5°	282.0	281.9
12°	281.1	281.0
12.5°	280.3	280.2
13°	279.4	279.2
13.5°	278.4	278.3
14°	277.3	277.4
14.5°	276.4	276.3
15°	275.4	275.2
15.5°	274.3	274.2
16°	273.1	273.1
16.5°	272.0	271.9
17°	270.7	270.7
17.5°	269.5	269.5
18°	268.2	268.2
18.5°	267.0	266.9
19°	265.6	265.5
19.5°	264.3	264.2
20°	262.8	262.7
20.5°	261.4	261.2
21°	259.8	259.7



TEST NUMBER: P710064
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	255.1	254.8
23°	253.3	253.1
23.5°	251.6	251.3
24°	249.8	249.5
24.5°	248.1	247.7
25°	246.1	245.7
25.5°	244.3	243.8
26°	242.3	241.8
26.5°	240.4	239.9
27°	238.3	237.8
27.5°	236.2	235.7
28°	234.1	233.5
28.5°	232.0	231.3
29°	229.7	229.0
29.5°	227.4	226.8
30°	225.1	224.4
30.5°	222.8	222.0
31°	220.5	219.6
31.5°	218.0	217.2
32°	215.6	214.6
32.5°	213.1	212.0
33°	210.6	209.5
33.5°	208.0	206.9
34°	205.4	204.2
34.5°	202.8	201.5
35°	200.1	198.8
35.5°	197.4	196.0
36°	194.7	193.2
36.5°	191.9	190.5
37°	189.1	187.6
37.5°	186.3	184.8
38°	183.5	181.9
38.5°	180.6	178.9
39°	177.9	176.1
39.5°	174.9	173.1
40°	172.0	170.2
40.5°	169.2	167.3
41°	166.2	164.2
41.5°	163.3	161.3
42°	160.4	158.3
42.5°	157.5	155.3
43°	154.5	152.4
43.5°	151.6	149.5



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	143.0	140.8
45.5°	140.0	137.9
46°	137.2	135.1
46.5°	134.3	132.3
47°	131.5	129.4
47.5°	128.8	126.7
48°	126.0	124.0
48.5°	123.3	121.3
49°	120.5	118.6
49.5°	117.8	116.0
50°	115.2	113.3
50.5°	112.6	110.7
51°	109.9	108.1
51.5°	107.3	105.6
52°	104.9	103.1
52.5°	102.3	100.6
53°	99.9	98.2
53.5°	97.4	95.8
54°	95.1	93.4
54.5°	92.7	91.1
55°	90.3	88.8
55.5°	88.0	86.6
56°	85.8	84.4
56.5°	83.6	82.2
57°	81.4	80.0
57.5°	79.2	77.9
58°	77.1	75.8
58.5°	74.9	73.7
59°	72.9	71.7
59.5°	70.9	69.7
60°	68.9	67.8
60.5°	67.0	65.8
61°	64.9	63.9
61.5°	63.1	62.1
62°	61.2	60.2
62.5°	59.4	58.4
63°	57.7	56.7
63.5°	55.9	54.9
64°	54.2	53.2
64.5°	52.3	51.5
65°	50.6	49.8
65.5°	48.8	48.2
66°	47.1	46.6



TEST NUMBER: P710064

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	42.1	41.8
68°	40.4	40.2
68.5°	38.9	38.7
69°	37.3	37.2
69.5°	35.8	35.7
70°	34.3	34.2
70.5°	32.9	32.8
71°	31.4	31.4
71.5°	30.0	30.0
72°	28.7	28.6
72.5°	27.4	27.2
73°	26.1	25.9
73.5°	24.8	24.5
74°	23.6	23.1
74.5°	22.4	21.8
75°	21.2	20.6
75.5°	20.0	19.4
76°	18.9	18.2
76.5°	17.7	17.2
77°	16.7	16.1
77.5°	15.7	15.1
78°	14.7	14.1
78.5°	13.8	13.2
79°	12.9	12.3
79.5°	12.1	11.6
80°	11.3	10.8
80.5°	10.6	10.1
81°	9.9	9.5
81.5°	9.2	8.7
82°	8.4	7.9
82.5°	7.7	7.1
83°	7.0	6.3
83.5°	6.2	5.5
84°	5.4	4.8
84.5°	4.7	4.0
85°	3.9	3.2
85.5°	3.2	2.5
86°	2.6	1.9
86.5°	1.9	1.3
87°	1.4	1.0
87.5°	1.1	0.8
88°	0.8	0.6
88.5°	0.6	0.5



TEST NUMBER: P710064
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.1	0.1

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

Scaled Data Report



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°	258.0	256.0	254.2	255.0	253.2	254.0	254.2	255.8	256.9	256.5	258.6
22°	256.4	254.3	252.5	253.3	251.5	252.3	252.6	254.3	255.3	254.8	257.1



44°	146.6	144.6	144.0	146.0	144.0	146.4	147.2	150.3	151.6	149.8	152.1
44.5°	143.6	141.8	141.2	143.2	141.2	143.6	144.4	147.5	148.8	147.1	149.1



66.5°	45.0	43.5	42.5	43.0	41.5	42.6	43.6	45.8	46.2	44.6	45.8
67°	43.4	41.9	40.9	41.4	39.9	40.9	42.0	44.1	44.4	42.8	44.0



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

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°	258.3	258.0
22°	256.6	256.4



44°	148.7	146.6
44.5°	145.8	143.6

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

Scaled Data Report



66.5°	45.4	45.0
67°	43.7	43.4



89°	0.3	0.3
89.5°	0.2	0.1

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

Scaled Data Report



(END OF REPORT)