

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: P710069

Luminaire Tested: RA4LS9FSD2W1EWH-900lm-3500K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710069
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-3500K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 3500K CCT
Ballast/Driver: -

Summary

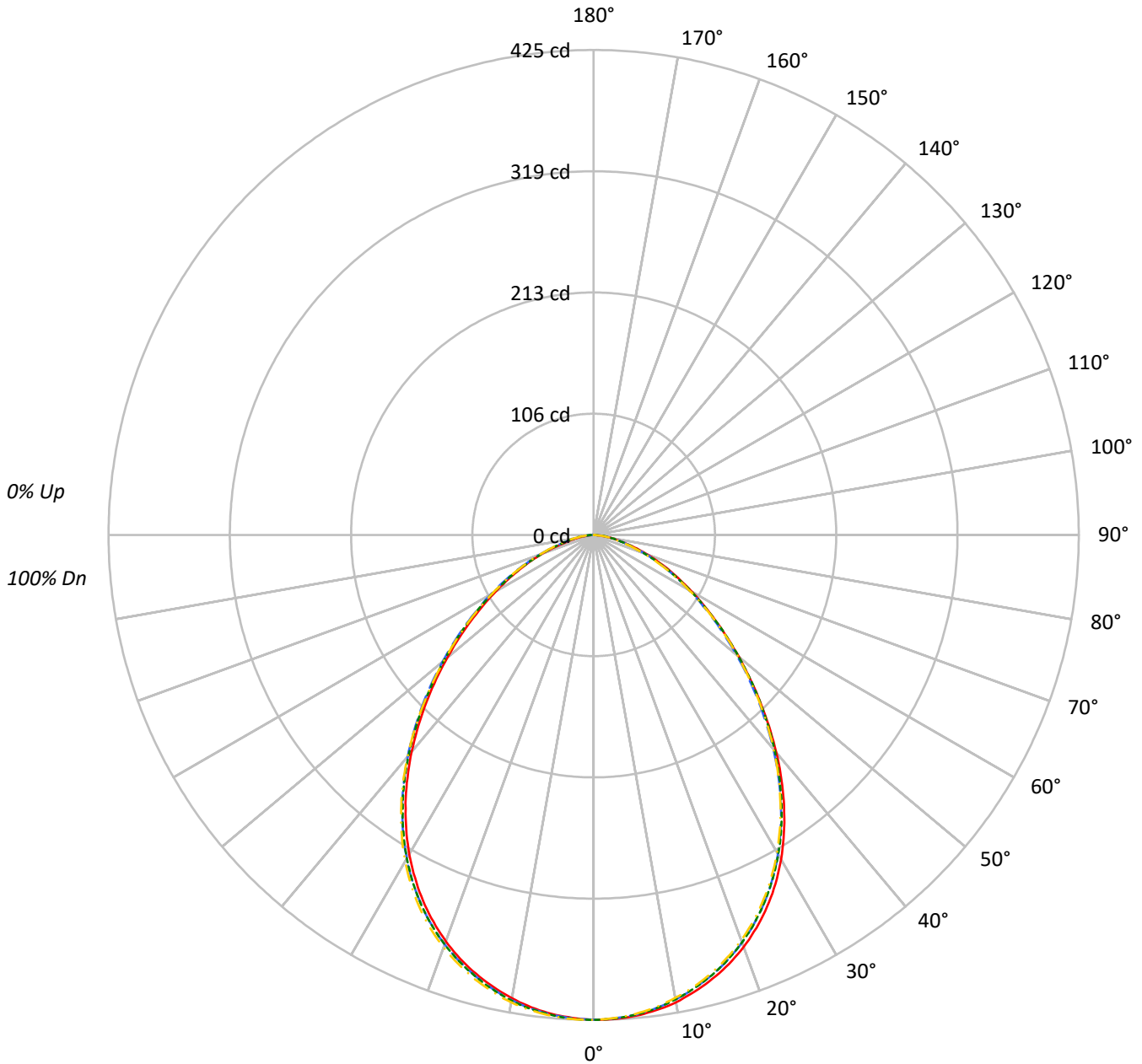
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 885.0 lumens
Efficiency: 96.1%
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	114	114	114	114	112	112	112	112	107	107	107	102	102	102	98	98	98	96		
1	106	102	99	96	104	100	97	94	96	93	91	92	90	88	89	87	86	84		
2	98	91	85	80	95	89	84	79	86	81	78	83	79	76	80	77	74	72		
3	90	81	74	69	88	80	73	68	77	71	67	74	70	66	72	68	65	63		
4	83	73	65	59	81	72	64	59	69	63	58	67	62	57	65	60	57	55		
5	77	66	58	52	75	65	57	52	63	56	51	61	55	51	59	54	50	48		
6	72	60	52	46	70	59	51	46	57	51	46	56	50	45	54	49	45	43		
7	67	55	47	41	65	54	46	41	52	46	41	51	45	41	50	44	40	39		
8	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	36	35		
9	58	46	39	34	57	46	39	34	45	38	34	44	38	33	43	37	33	32		
10	55	43	36	31	54	42	35	31	41	35	31	41	35	31	40	34	30	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	53474	53474	53474	53474
5°	53438	53311	53236	53362
10°	53136	52816	52676	52957
15°	52454	52051	51881	52181
20°	51455	50879	50731	51147
25°	49906	49240	49115	49656
30°	47708	46982	46938	47577
35°	44677	44078	44139	44830
40°	40891	40562	40726	41416
45°	36646	36557	36859	37553
50°	32462	32442	32794	33480
55°	28502	28436	28765	29577
60°	24943	24641	24918	25648
65°	21709	20934	21292	21768
70°	18435	17331	17478	17809
75°	14636	13907	12399	14198
80°	11451	11668	9494	11958
85°	6787	9097	2744	10108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 38070 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	40.0	4.5	4.3
10°-20°	112.7	12.7	12.2
20°-30°	163.7	18.5	17.8
30°-40°	180.3	20.4	19.6
40°-50°	160.1	18.1	17.4
50°-60°	118.1	13.3	12.8
60°-70°	71.8	8.1	7.8
70°-80°	31.5	3.6	3.4
80°-90°	6.8	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°	316.4	35.7	34.4
0°-40°	496.7	56.1	53.9
0°-60°	774.9	87.6	84.2
0°-90°	885.0	100.0	96.1
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°	885.0	100.0	96.1

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	425	425	425	425	425	
5°	423	422	421	422	423	40
15°	403	400	398	400	403	113
25°	359	355	354	358	359	165
35°	291	287	287	292	291	181
45°	206	205	207	211	206	159
55°	130	130	131	135	130	117
65°	73	70	72	73	73	73
75°	30	29	26	29	30	33
85°	5	6	2	7	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9	424.9
0.5°	424.9	424.7	424.6	424.9	424.8	424.8	424.8	424.7	424.6	425.0	425.0
1°	424.9	424.7	424.5	424.8	424.6	424.7	424.5	424.6	424.6	424.8	425.0
1.5°	424.8	424.6	424.3	424.6	424.4	424.4	424.4	424.5	424.5	424.8	424.9
2°	424.8	424.5	424.1	424.4	424.0	424.1	424.1	424.3	424.3	424.6	424.9
2.5°	424.6	424.2	423.8	424.2	423.8	423.8	423.8	424.0	424.1	424.4	424.7
3°	424.4	424.0	423.5	423.9	423.4	423.4	423.3	423.7	423.9	424.2	424.5
3.5°	424.1	423.6	423.0	423.5	422.9	423.0	422.9	423.3	423.5	423.8	424.3
4°	423.8	423.3	422.6	423.1	422.4	422.5	422.5	422.8	423.2	423.4	423.9
4.5°	423.5	422.8	422.1	422.6	421.9	422.0	422.0	422.4	422.7	422.9	423.5
5°	423.0	422.4	421.6	422.0	421.3	421.3	421.4	421.8	422.3	422.4	423.1
5.5°	422.6	421.8	420.9	421.4	420.6	420.6	420.7	421.3	421.6	421.8	422.7
6°	422.0	421.2	420.2	420.8	419.8	420.0	420.0	420.6	421.2	421.2	422.2
6.5°	421.4	420.6	419.5	420.1	419.1	419.2	419.3	420.0	420.4	420.6	421.6
7°	420.7	419.9	418.7	419.4	418.2	418.4	418.5	419.2	419.8	419.9	420.9
7.5°	420.1	419.1	417.8	418.6	417.3	417.5	417.7	418.4	419.0	419.1	420.2
8°	419.3	418.2	416.9	417.6	416.2	416.6	416.6	417.6	418.3	418.3	419.5
8.5°	418.6	417.4	415.9	416.6	415.2	415.6	415.7	416.6	417.3	417.4	418.7
9°	417.7	416.3	414.9	415.5	414.1	414.5	414.6	415.7	416.4	416.5	417.8
9.5°	416.9	415.3	413.8	414.4	413.0	413.4	413.4	414.6	415.4	415.4	416.9
10°	415.8	414.2	412.8	413.3	411.7	412.2	412.2	413.4	414.4	414.4	416.0
10.5°	414.8	413.0	411.5	412.1	410.5	411.0	411.0	412.2	413.1	413.2	414.9
11°	413.5	411.8	410.3	410.9	409.2	409.7	409.8	411.1	412.0	411.9	413.9
11.5°	412.3	410.6	408.9	409.6	408.0	408.4	408.5	409.8	410.7	410.7	412.6
12°	411.1	409.2	407.6	408.3	406.6	407.1	407.2	408.4	409.6	409.5	411.4
12.5°	409.8	408.0	406.2	406.9	405.2	405.7	405.7	407.0	408.2	408.0	410.1
13°	408.4	406.5	404.8	405.6	403.8	404.4	404.4	405.6	406.8	406.7	408.8
13.5°	407.1	405.2	403.3	404.1	402.2	402.8	402.9	404.2	405.4	405.1	407.3
14°	405.7	403.5	401.8	402.6	400.7	401.3	401.4	402.7	403.9	403.7	406.0
14.5°	404.2	402.1	400.2	400.9	399.1	399.7	399.8	401.2	402.3	402.1	404.4
15°	402.6	400.5	398.6	399.5	397.4	398.0	398.2	399.7	400.8	400.5	403.0
15.5°	401.1	398.9	396.9	397.8	395.6	396.3	396.5	398.0	399.2	398.9	401.2
16°	399.5	397.1	395.2	396.0	393.8	394.6	394.8	396.4	397.5	397.3	399.7
16.5°	397.8	395.4	393.3	394.2	392.0	392.8	393.0	394.5	395.8	395.4	397.9
17°	395.9	393.6	391.4	392.4	390.1	390.9	391.2	392.8	394.1	393.7	396.3
17.5°	394.3	391.8	389.5	390.4	388.1	388.9	389.2	391.0	392.2	391.9	394.4
18°	392.4	389.7	387.4	388.5	386.0	387.1	387.2	389.2	390.4	390.1	392.7
18.5°	390.4	387.8	385.4	386.5	384.0	385.0	385.2	387.2	388.5	387.9	390.8
19°	388.4	385.7	383.4	384.3	381.8	382.9	383.2	385.2	386.6	386.0	388.9
19.5°	386.4	383.7	381.1	382.2	379.7	380.7	381.1	383.1	384.6	383.9	386.8
20°	384.2	381.3	378.8	379.9	377.4	378.5	378.8	381.0	382.4	381.9	384.8
20.5°	382.1	379.2	376.6	377.7	375.2	376.2	376.5	378.8	380.2	379.6	382.7
21°	379.9	376.8	374.4	375.3	372.9	373.9	374.2	376.7	378.0	377.4	380.6



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	372.7	369.6	366.8	368.1	365.3	366.5	366.9	369.4	371.1	370.4	373.6
23°	370.3	366.9	364.3	365.4	362.7	363.9	364.5	367.1	368.7	368.0	371.3
23.5°	367.7	364.3	361.5	362.8	359.9	361.4	361.9	364.4	366.2	365.4	368.8
24°	365.0	361.6	358.9	360.1	357.2	358.7	359.2	361.9	363.6	362.8	366.4
24.5°	362.4	358.8	356.1	357.4	354.4	356.0	356.5	359.2	360.9	360.2	363.6
25°	359.4	356.0	353.2	354.6	351.5	353.2	353.7	356.5	358.4	357.6	361.1
25.5°	356.7	353.1	350.3	351.7	348.7	350.2	350.9	353.8	355.6	354.7	358.3
26°	353.8	350.2	347.4	348.7	345.8	347.3	348.0	351.0	352.8	352.0	355.6
26.5°	350.9	347.2	344.4	345.7	342.9	344.5	345.1	348.0	350.1	349.0	352.6
27°	347.8	344.0	341.3	342.7	339.7	341.4	342.0	345.2	347.1	346.1	350.0
27.5°	344.7	341.0	338.1	339.7	336.7	338.3	338.9	342.2	344.2	343.1	346.9
28°	341.6	337.8	335.0	336.5	333.5	335.2	335.9	339.3	341.2	340.1	343.9
28.5°	338.3	334.6	331.7	333.3	330.4	332.1	332.7	336.0	338.2	336.9	340.7
29°	335.0	331.2	328.5	330.0	327.1	328.9	329.6	333.0	335.1	333.8	337.7
29.5°	331.7	327.9	325.0	326.6	323.8	325.4	326.3	329.8	331.9	330.6	334.5
30°	328.3	324.4	321.7	323.3	320.3	322.2	323.0	326.4	328.6	327.4	331.3
30.5°	324.8	320.8	318.1	320.0	316.8	318.9	319.6	323.1	325.3	324.0	328.0
31°	321.2	317.3	314.6	316.5	313.3	315.5	316.1	319.9	322.0	320.7	324.6
31.5°	317.7	313.7	310.9	312.9	309.9	312.0	312.8	316.4	318.7	317.2	321.1
32°	313.8	310.0	307.4	309.3	306.1	308.6	309.3	313.0	315.2	313.7	317.6
32.5°	310.1	306.3	303.6	305.7	302.6	304.9	305.5	309.4	311.7	310.1	314.0
33°	306.4	302.4	299.9	302.0	298.9	301.3	302.1	305.9	308.2	306.7	310.6
33.5°	302.6	298.7	296.2	298.3	295.2	297.7	298.4	302.3	304.6	303.0	306.9
34°	298.7	294.8	292.4	294.5	291.4	294.0	294.8	298.6	300.9	299.4	303.2
34.5°	294.7	290.9	288.4	290.7	287.6	290.3	290.9	295.0	297.2	295.5	299.4
35°	290.8	286.9	284.5	286.9	283.8	286.5	287.3	291.4	293.6	291.8	295.6
35.5°	286.8	282.9	280.6	283.1	280.0	282.6	283.5	287.6	289.9	288.0	291.8
36°	282.7	278.8	276.6	279.1	276.0	278.8	279.6	283.7	286.0	284.0	288.0
36.5°	278.6	274.9	272.6	275.1	272.2	274.9	275.6	280.0	282.2	280.3	284.1
37°	274.4	270.8	268.5	271.2	268.1	271.0	271.9	276.1	278.3	276.4	280.1
37.5°	270.3	266.5	264.5	267.2	264.1	267.0	267.9	272.2	274.4	272.4	276.2
38°	266.1	262.4	260.4	263.1	260.1	263.1	263.9	268.4	270.4	268.5	272.2
38.5°	261.8	258.2	256.3	259.1	256.2	259.1	259.9	264.3	266.4	264.4	268.1
39°	257.5	253.8	252.2	254.9	251.9	255.0	256.0	260.4	262.5	260.4	264.0
39.5°	253.3	249.7	248.1	250.9	247.9	251.0	252.0	256.4	258.5	256.2	259.9
40°	248.9	245.6	243.9	246.9	243.7	247.0	247.9	252.4	254.3	252.1	255.8
40.5°	244.7	241.3	239.8	242.8	239.7	242.9	243.8	248.4	250.4	248.2	251.6
41°	240.2	237.0	235.5	238.5	235.5	238.9	239.9	244.3	246.3	244.0	247.4
41.5°	235.9	232.7	231.4	234.3	231.3	234.7	235.8	240.2	242.4	239.9	243.3
42°	231.6	228.4	227.1	230.2	227.2	230.5	231.7	236.1	238.2	235.8	239.0
42.5°	227.2	224.3	222.9	226.0	223.2	226.3	227.5	232.0	234.1	231.6	234.9
43°	222.9	220.0	218.9	221.8	218.9	222.3	223.5	228.0	230.0	227.6	230.6
43.5°	218.7	215.9	214.8	217.6	214.8	218.1	219.3	223.9	225.9	223.3	226.5



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	205.9	203.2	202.5	205.4	202.4	206.0	207.1	211.7	213.7	211.0	213.9
45.5°	201.7	199.0	198.3	201.3	198.5	201.8	203.0	207.6	209.6	206.9	209.9
46°	197.6	194.9	194.3	197.1	194.2	197.7	199.0	203.5	205.4	202.8	205.7
46.5°	193.5	190.8	190.3	193.1	190.2	193.8	195.0	199.5	201.3	198.7	201.6
47°	189.3	186.6	186.4	189.2	186.2	189.8	191.0	195.5	197.3	194.8	197.5
47.5°	185.3	182.8	182.3	185.2	182.3	185.8	187.0	191.6	193.4	190.8	193.4
48°	181.3	178.7	178.6	181.2	178.2	181.9	183.1	187.6	189.4	186.6	189.4
48.5°	177.4	174.7	174.8	177.4	174.3	178.1	179.2	183.7	185.4	182.7	185.5
49°	173.5	170.7	170.9	173.5	170.4	174.2	175.2	179.8	181.5	178.8	181.5
49.5°	169.6	166.9	167.0	169.6	166.4	170.4	171.3	176.0	177.5	174.9	177.6
50°	165.8	163.1	163.2	165.7	162.8	166.5	167.5	172.2	173.6	171.0	173.7
50.5°	161.9	159.4	159.3	161.9	159.0	162.7	163.6	168.4	169.8	167.3	169.8
51°	158.2	155.6	155.7	158.2	155.2	158.8	160.0	164.6	166.0	163.5	165.9
51.5°	154.5	151.9	151.9	154.5	151.5	155.0	156.2	160.8	162.3	159.7	162.0
52°	150.8	148.2	148.3	150.9	147.9	151.4	152.6	157.1	158.6	156.0	158.5
52.5°	147.2	144.7	144.7	147.1	144.2	147.6	148.9	153.5	154.9	152.4	154.9
53°	143.6	141.1	141.2	143.6	140.5	144.0	145.2	149.8	151.3	148.8	151.2
53.5°	140.2	137.6	137.7	140.1	137.1	140.4	141.6	146.1	147.7	145.2	147.7
54°	136.6	134.1	134.3	136.6	133.5	136.9	138.1	142.7	144.1	141.8	144.0
54.5°	133.2	130.7	130.8	133.1	130.2	133.5	134.6	139.1	140.5	138.3	140.5
55°	129.9	127.4	127.4	129.6	126.6	130.0	131.1	135.6	137.0	134.8	137.0
55.5°	126.6	124.1	124.2	126.2	123.3	126.6	127.7	132.1	133.5	131.4	133.7
56°	123.4	120.9	120.9	122.9	120.0	123.2	124.3	128.8	130.2	128.0	130.3
56.5°	120.2	117.7	117.6	119.6	116.7	119.9	121.0	125.4	126.8	124.7	126.9
57°	117.0	114.5	114.5	116.4	113.5	116.6	117.7	122.1	123.6	121.4	123.6
57.5°	113.9	111.4	111.3	113.2	110.4	113.4	114.5	118.9	120.3	118.2	120.3
58°	110.8	108.3	108.3	110.0	107.2	110.2	111.3	115.7	117.1	114.8	117.0
58.5°	107.8	105.2	105.2	106.9	104.0	107.0	108.2	112.5	113.9	111.5	113.7
59°	104.9	102.4	102.2	103.9	101.0	103.9	105.1	109.3	110.8	108.3	110.5
59.5°	102.0	99.4	99.2	100.9	97.9	100.9	102.0	106.2	107.7	105.0	107.3
60°	99.1	96.5	96.3	97.9	94.9	97.8	99.0	103.2	104.7	101.9	104.2
60.5°	96.3	93.7	93.4	94.9	92.1	94.8	95.8	100.1	101.6	98.7	101.1
61°	93.5	90.9	90.5	92.0	89.1	91.9	93.0	97.2	98.5	95.6	97.9
61.5°	90.8	88.4	87.7	89.2	86.5	89.0	90.1	94.3	95.5	92.5	94.8
62°	88.1	85.8	85.0	86.4	83.9	86.1	87.4	91.3	92.4	89.6	91.8
62.5°	85.5	83.3	82.3	83.5	81.3	83.3	84.7	88.5	89.4	86.8	88.9
63°	82.9	80.8	79.6	80.9	78.6	80.5	82.1	85.7	86.7	84.1	86.1
63.5°	80.3	78.2	77.0	78.2	76.0	77.8	79.4	83.0	83.9	81.3	83.2
64°	77.9	75.7	74.4	75.5	73.3	75.1	76.7	80.2	81.2	78.6	80.3
64.5°	75.4	73.2	71.9	72.9	70.7	72.5	74.1	77.6	78.5	75.8	77.5
65°	72.9	70.7	69.4	70.3	68.2	69.8	71.5	74.9	75.7	73.1	74.8
65.5°	70.5	68.3	66.9	67.8	65.6	67.2	68.9	72.3	72.9	70.4	72.1
66°	68.2	65.9	64.5	65.3	63.2	64.8	66.3	69.6	70.2	67.8	69.6



TEST NUMBER: P710069

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	61.1	59.1	57.5	58.2	56.0	57.4	59.0	61.9	62.3	60.2	61.9
68°	58.8	56.9	54.8	55.9	53.7	55.1	56.6	59.5	59.8	57.6	59.4
68.5°	56.6	54.7	52.9	53.6	51.5	52.8	54.3	56.9	57.3	55.2	57.0
69°	54.4	52.6	50.9	51.4	49.3	50.5	52.0	54.5	54.8	53.0	54.7
69.5°	52.2	50.5	48.8	49.2	47.1	48.3	49.7	52.1	52.4	50.6	52.4
70°	50.1	48.4	46.7	47.1	45.0	46.1	47.5	49.8	50.1	48.4	50.2
70.5°	48.0	46.3	44.6	45.0	43.0	44.0	45.1	47.5	47.9	46.2	48.0
71°	45.9	44.3	42.7	42.9	40.9	41.9	42.6	45.2	45.6	44.1	45.8
71.5°	43.9	42.4	40.7	40.9	39.0	39.9	40.2	43.0	43.4	42.0	43.8
72°	41.9	40.5	38.9	39.0	37.1	37.9	37.8	40.8	41.3	40.0	41.8
72.5°	39.8	38.6	37.0	37.1	35.2	35.9	35.5	38.8	39.2	38.0	39.8
73°	37.8	36.7	35.2	35.3	33.5	34.0	33.3	36.8	37.2	36.1	37.9
73.5°	35.8	34.9	33.4	33.6	31.7	32.2	31.2	34.7	35.4	34.3	36.0
74°	33.8	33.1	31.6	31.8	30.1	30.3	29.2	32.8	33.5	32.5	34.2
74.5°	31.9	31.4	30.0	30.2	28.4	28.5	27.3	30.8	31.7	30.8	32.5
75°	30.1	29.7	28.4	28.6	26.9	26.9	25.5	28.9	30.0	29.2	30.9
75.5°	28.4	28.1	26.8	27.1	25.5	25.3	23.8	27.0	28.3	27.7	29.3
76°	26.7	26.6	25.4	25.6	24.1	23.7	22.3	25.2	26.7	26.2	27.8
76.5°	25.1	25.1	23.9	24.3	22.7	22.3	20.8	23.5	25.3	24.8	26.3
77°	23.5	23.7	22.5	22.9	21.3	20.8	19.5	22.0	23.8	23.4	24.9
77.5°	22.0	22.3	21.1	21.6	20.1	19.5	18.3	20.5	22.4	22.1	23.5
78°	20.6	20.9	19.8	20.3	18.9	18.2	17.2	19.1	21.1	20.8	22.2
78.5°	19.3	19.5	18.6	19.1	17.8	17.0	16.2	17.8	19.9	19.7	21.0
79°	18.1	18.2	17.5	18.1	16.9	15.9	15.3	16.7	18.7	18.5	19.8
79.5°	16.9	17.0	16.5	17.1	16.0	14.9	14.3	15.6	17.6	17.5	18.6
80°	15.8	15.8	15.6	16.1	15.2	14.0	13.1	14.6	16.6	16.5	17.6
80.5°	14.8	14.6	14.7	15.3	14.3	13.0	12.0	13.5	15.6	15.6	16.6
81°	13.8	13.6	13.9	14.4	13.4	12.0	10.8	12.4	14.7	14.7	15.6
81.5°	12.7	12.7	13.0	13.4	12.3	10.9	9.5	11.3	13.9	13.9	14.7
82°	11.6	11.7	12.0	12.4	11.3	9.9	8.3	10.2	12.9	12.9	13.9
82.5°	10.4	10.7	11.0	11.4	10.3	8.9	7.2	9.0	11.9	11.9	12.9
83°	9.3	9.7	10.1	10.4	9.3	7.8	6.0	7.8	10.8	10.9	11.9
83.5°	8.1	8.7	9.1	9.4	8.2	6.8	4.8	6.7	9.8	10.0	10.8
84°	7.0	7.8	8.1	8.3	7.2	5.8	3.8	5.6	8.8	9.0	9.8
84.5°	5.9	6.8	7.1	7.2	6.2	5.0	2.8	4.5	7.8	8.0	8.9
85°	4.7	5.9	6.2	6.3	5.2	4.2	1.9	3.5	6.7	7.0	7.8
85.5°	3.7	5.0	5.3	5.3	4.1	3.3	1.5	2.6	5.8	6.1	6.9
86°	2.8	4.3	4.3	4.2	3.2	2.5	1.1	1.9	4.9	5.1	6.0
86.5°	2.0	3.5	3.3	3.2	2.3	1.8	0.9	1.4	4.0	4.1	5.1
87°	1.4	2.7	2.5	2.4	1.4	1.1	0.6	1.0	3.0	3.1	4.1
87.5°	1.1	2.1	1.7	1.5	0.8	0.5	0.4	0.6	2.2	2.3	3.2
88°	0.9	1.6	1.0	0.8	0.7	0.3	0.2	0.3	1.5	1.4	2.3
88.5°	0.7	0.9	0.6	0.7	0.5	0.2	0.1	0.2	0.8	0.6	1.5



TEST NUMBER: P710069
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

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: P710069

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	424.9	424.9
0.5°	425.0	424.9
1°	424.9	424.9
1.5°	424.9	424.8
2°	424.9	424.8
2.5°	424.6	424.6
3°	424.5	424.4
3.5°	424.2	424.1
4°	423.8	423.8
4.5°	423.5	423.5
5°	423.1	423.0
5.5°	422.6	422.6
6°	422.0	422.0
6.5°	421.6	421.4
7°	420.8	420.7
7.5°	420.2	420.1
8°	419.5	419.3
8.5°	418.7	418.6
9°	417.8	417.7
9.5°	416.9	416.9
10°	415.9	415.8
10.5°	414.8	414.8
11°	413.7	413.5
11.5°	412.6	412.3
12°	411.2	411.1
12.5°	410.1	409.8
13°	408.7	408.4
13.5°	407.2	407.1
14°	405.7	405.7
14.5°	404.3	404.2
15°	402.8	402.6
15.5°	401.2	401.1
16°	399.5	399.5
16.5°	397.9	397.8
17°	396.0	395.9
17.5°	394.3	394.3
18°	392.3	392.4
18.5°	390.5	390.4
19°	388.5	388.4
19.5°	386.6	386.4
20°	384.4	384.2
20.5°	382.4	382.1
21°	380.1	379.9



TEST NUMBER: P710069
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	373.1	372.7
23°	370.5	370.3
23.5°	368.1	367.7
24°	365.4	365.0
24.5°	362.9	362.4
25°	360.0	359.4
25.5°	357.3	356.7
26°	354.4	353.8
26.5°	351.6	350.9
27°	348.6	347.8
27.5°	345.5	344.7
28°	342.5	341.6
28.5°	339.3	338.3
29°	336.0	335.0
29.5°	332.7	331.7
30°	329.3	328.3
30.5°	325.9	324.8
31°	322.5	321.2
31.5°	318.9	317.7
32°	315.3	313.8
32.5°	311.7	310.1
33°	308.1	306.4
33.5°	304.3	302.6
34°	300.5	298.7
34.5°	296.6	294.7
35°	292.8	290.8
35.5°	288.7	286.8
36°	284.8	282.7
36.5°	280.8	278.6
37°	276.7	274.4
37.5°	272.6	270.3
38°	268.5	266.1
38.5°	264.2	261.8
39°	260.2	257.5
39.5°	255.9	253.3
40°	251.6	248.9
40.5°	247.5	244.7
41°	243.1	240.2
41.5°	238.9	235.9
42°	234.6	231.6
42.5°	230.4	227.2
43°	225.9	222.9
43.5°	221.8	218.7



TEST NUMBER: P710069
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	209.1	205.9
45.5°	204.9	201.7
46°	200.6	197.6
46.5°	196.5	193.5
47°	192.4	189.3
47.5°	188.3	185.3
48°	184.3	181.3
48.5°	180.3	177.4
49°	176.2	173.5
49.5°	172.3	169.6
50°	168.5	165.8
50.5°	164.7	161.9
51°	160.8	158.2
51.5°	157.0	154.5
52°	153.4	150.8
52.5°	149.7	147.2
53°	146.1	143.6
53.5°	142.5	140.2
54°	139.2	136.6
54.5°	135.6	133.2
55°	132.1	129.9
55.5°	128.8	126.6
56°	125.5	123.4
56.5°	122.3	120.2
57°	119.0	117.0
57.5°	115.9	113.9
58°	112.7	110.8
58.5°	109.6	107.8
59°	106.6	104.9
59.5°	103.7	102.0
60°	100.8	99.1
60.5°	97.9	96.3
61°	95.0	93.5
61.5°	92.3	90.8
62°	89.5	88.1
62.5°	87.0	85.5
63°	84.4	82.9
63.5°	81.8	80.3
64°	79.3	77.9
64.5°	76.6	75.4
65°	73.9	72.9
65.5°	71.4	70.5
66°	68.9	68.2



TEST NUMBER: P710069

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	61.6	61.1
68°	59.1	58.8
68.5°	56.9	56.6
69°	54.6	54.4
69.5°	52.4	52.2
70°	50.2	50.1
70.5°	48.1	48.0
71°	46.0	45.9
71.5°	43.9	43.9
72°	41.9	41.9
72.5°	40.0	39.8
73°	38.2	37.8
73.5°	36.3	35.8
74°	34.5	33.8
74.5°	32.8	31.9
75°	31.0	30.1
75.5°	29.3	28.4
76°	27.6	26.7
76.5°	26.0	25.1
77°	24.4	23.5
77.5°	22.9	22.0
78°	21.5	20.6
78.5°	20.2	19.3
79°	18.9	18.1
79.5°	17.7	16.9
80°	16.6	15.8
80.5°	15.5	14.8
81°	14.4	13.8
81.5°	13.4	12.7
82°	12.4	11.6
82.5°	11.3	10.4
83°	10.2	9.3
83.5°	9.0	8.1
84°	8.0	7.0
84.5°	6.9	5.9
85°	5.8	4.7
85.5°	4.7	3.7
86°	3.8	2.8
86.5°	2.8	2.0
87°	2.1	1.4
87.5°	1.6	1.1
88°	1.2	0.9
88.5°	0.8	0.7



TEST NUMBER: P710069
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-3500K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.2	0.2



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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



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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	377.4	374.5	371.9	373.0	370.4	371.5	371.9	374.2	375.7	375.2	378.2
22°	375.0	372.0	369.4	370.6	367.9	369.1	369.5	371.9	373.4	372.8	376.1



44°	214.4	211.6	210.6	213.6	210.7	214.1	215.3	219.8	221.8	219.2	222.4
44.5°	210.1	207.4	206.5	209.5	206.5	210.0	211.2	215.7	217.6	215.2	218.1



66.5°	65.8	63.7	62.1	63.0	60.8	62.3	63.8	67.1	67.6	65.2	66.9
67°	63.4	61.4	59.8	60.5	58.4	59.8	61.4	64.5	64.9	62.6	64.3



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

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	377.8	377.4
22°	375.4	375.0

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



44°	217.6	214.4
44.5°	213.3	210.1



66.5°	66.4	65.8
67°	64.0	63.4



89°	0.5	0.4
89.5°	0.2	0.2

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Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)