

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: P710071

Luminaire Tested: RA4LS9FSD2W1EWH-900lm-5000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710071
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-5000K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 5000K CCT
Ballast/Driver: -

Summary

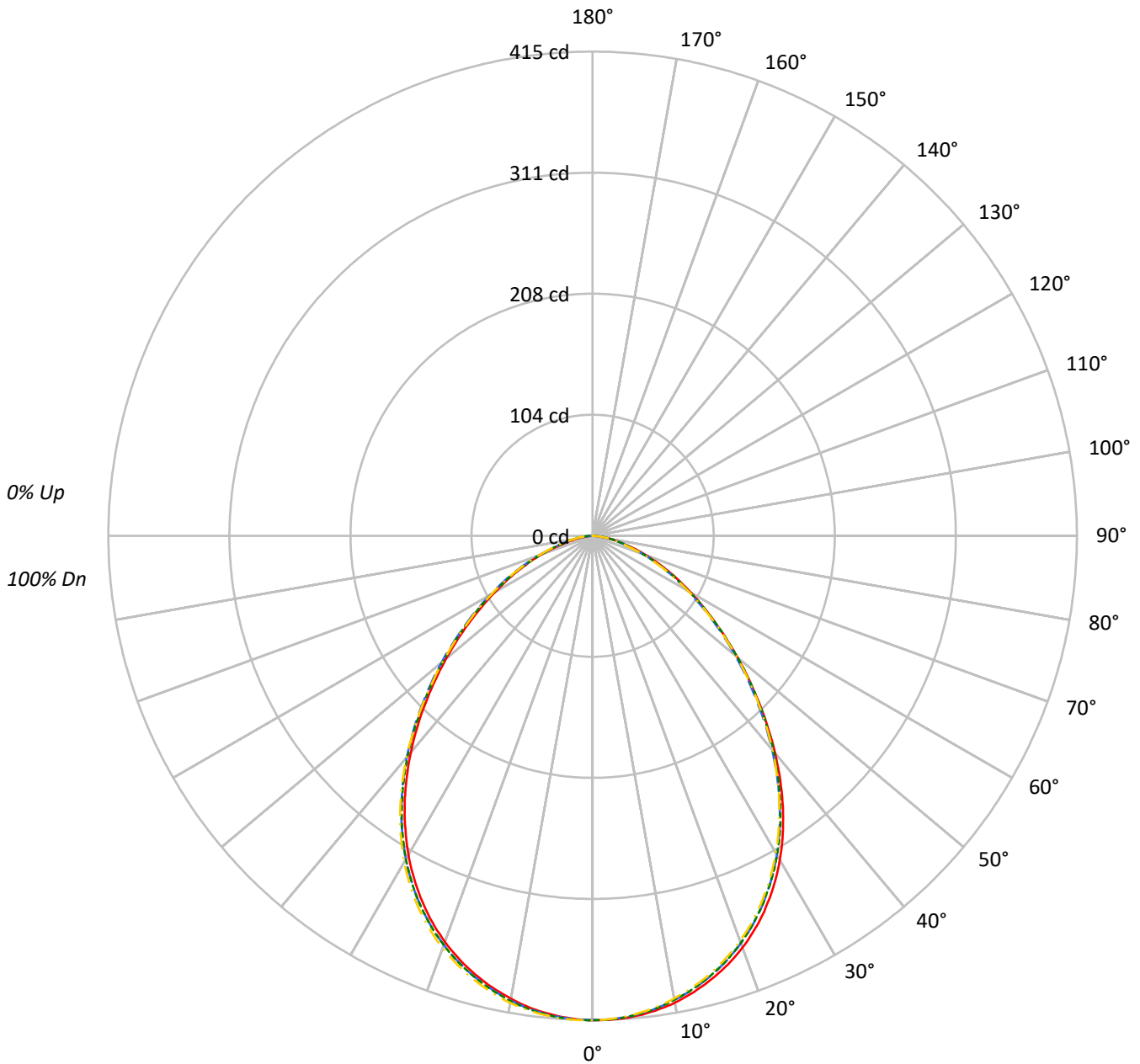
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 865.0 lumens
Efficiency: 93.9%
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.8
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



TEST NUMBER: P710071
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0		
RCR																										
0	112	112	112	112	109	109	109	109	104	104	104	100	100	100	96	96	96	94								
1	104	100	96	93	101	98	95	92	94	91	89	90	88	86	87	85	84	82								
2	96	89	83	78	93	87	82	78	84	80	76	81	77	74	78	75	72	71								
3	88	79	72	67	86	78	71	66	75	70	65	73	68	64	70	66	63	61								
4	81	71	64	58	79	70	63	58	68	62	57	66	60	56	64	59	55	54								
5	75	64	57	51	73	63	56	51	61	55	50	60	54	50	58	53	49	47								
6	70	58	51	45	68	58	50	45	56	49	45	54	49	44	53	48	44	42								
7	65	53	46	40	64	53	45	40	51	45	40	50	44	40	49	43	39	38								
8	61	49	42	36	59	48	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	36	32	31								
10	54	42	35	30	52	41	35	30	41	34	30	40	34	30	39	34	30	28								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	52265	52265	52265	52265
5°	52225	52111	52023	52162
10°	51934	51615	51487	51755
15°	51269	50865	50709	51008
20°	50303	49727	49593	49981
25°	48781	48129	48004	48532
30°	46633	45921	45877	46502
35°	43678	43079	43140	43816
40°	39971	39642	39806	40480
45°	35827	35738	36023	36717
50°	31718	31718	32050	32736
55°	27843	27800	28129	28919
60°	24390	24088	24339	25069
65°	21202	20488	20815	21262
70°	17993	16926	17073	17405
75°	14296	13615	12156	13907
80°	11233	11451	9277	11668
85°	6642	8808	2744	9819

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 37215 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.1	4.5	4.2
10°-20°	110.1	12.7	12.0
20°-30°	160.0	18.5	17.4
30°-40°	176.3	20.4	19.1
40°-50°	156.5	18.1	17.0
50°-60°	115.4	13.3	12.5
60°-70°	70.2	8.1	7.6
70°-80°	30.8	3.6	3.3
80°-90°	6.6	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°	309.2	35.7	33.6
0°-40°	485.5	56.1	52.7
0°-60°	757.4	87.6	82.3
0°-90°	865.0	100.0	93.9
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°	865.0	100.0	93.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	415	415	415	415	415	
5°	413	412	412	413	413	39
15°	394	390	389	392	394	111
25°	351	347	346	350	351	161
35°	284	280	281	285	284	177
45°	201	201	202	206	201	155
55°	127	127	128	132	127	114
65°	71	69	70	71	71	71
75°	29	28	25	29	29	32
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°	415.3	415.3	415.3	415.3	415.3	415.3	415.3	415.3	415.3	415.3	415.3
0.5°	415.3	415.1	415.0	415.3	415.2	415.2	415.2	415.1	415.0	415.4	415.4
1°	415.3	415.1	414.9	415.2	415.1	415.1	414.9	415.0	415.0	415.2	415.4
1.5°	415.2	415.0	414.7	415.0	414.8	414.8	414.8	414.9	414.9	415.2	415.3
2°	415.2	414.9	414.5	414.9	414.4	414.5	414.6	414.7	414.7	415.0	415.3
2.5°	415.0	414.6	414.2	414.6	414.2	414.2	414.2	414.4	414.5	414.8	415.1
3°	414.8	414.4	413.9	414.3	413.8	413.8	413.8	414.1	414.3	414.6	414.9
3.5°	414.5	414.0	413.4	413.9	413.4	413.4	413.4	413.7	413.9	414.2	414.7
4°	414.2	413.8	413.1	413.5	412.9	412.9	413.0	413.3	413.6	413.8	414.3
4.5°	413.9	413.3	412.6	413.0	412.4	412.4	412.4	412.8	413.1	413.4	414.0
5°	413.4	412.8	412.1	412.5	411.8	411.8	411.8	412.3	412.7	412.9	413.6
5.5°	413.0	412.3	411.4	411.9	411.1	411.1	411.2	411.8	412.1	412.3	413.1
6°	412.5	411.7	410.7	411.3	410.3	410.5	410.6	411.1	411.6	411.7	412.7
6.5°	411.9	411.1	410.0	410.6	409.6	409.8	409.8	410.5	410.9	411.1	412.1
7°	411.2	410.4	409.2	409.9	408.8	408.9	409.0	409.8	410.3	410.4	411.4
7.5°	410.6	409.6	408.4	409.1	407.8	408.1	408.2	409.0	409.5	409.6	410.7
8°	409.8	408.8	407.5	408.2	406.8	407.2	407.2	408.2	408.8	408.9	410.0
8.5°	409.1	407.9	406.5	407.2	405.8	406.2	406.3	407.2	407.9	407.9	409.3
9°	408.2	406.9	405.5	406.1	404.7	405.1	405.2	406.3	407.0	407.1	408.4
9.5°	407.4	405.9	404.4	405.0	403.6	404.0	404.1	405.2	406.0	406.0	407.5
10°	406.4	404.8	403.4	403.9	402.4	402.9	402.9	404.1	405.1	405.0	406.6
10.5°	405.4	403.7	402.2	402.8	401.2	401.7	401.7	402.9	403.8	403.9	405.5
11°	404.2	402.5	401.0	401.6	400.0	400.5	400.5	401.8	402.7	402.6	404.5
11.5°	403.0	401.3	399.7	400.3	398.8	399.2	399.3	400.5	401.4	401.4	403.3
12°	401.8	400.0	398.4	399.1	397.4	397.9	398.0	399.2	400.4	400.2	402.1
12.5°	400.6	398.8	397.0	397.7	396.1	396.5	396.6	397.8	399.0	398.7	400.8
13°	399.2	397.4	395.7	396.4	394.6	395.2	395.3	396.5	397.6	397.5	399.5
13.5°	397.9	396.0	394.2	394.9	393.1	393.7	393.8	395.0	396.2	396.0	398.1
14°	396.6	394.4	392.7	393.5	391.6	392.2	392.3	393.6	394.7	394.6	396.9
14.5°	395.1	393.0	391.1	391.9	390.1	390.7	390.7	392.1	393.2	393.0	395.3
15°	393.5	391.5	389.6	390.4	388.4	389.0	389.2	390.7	391.8	391.5	393.9
15.5°	392.1	389.9	388.0	388.8	386.7	387.3	387.5	389.0	390.2	389.9	392.2
16°	390.4	388.1	386.2	387.0	384.9	385.6	385.9	387.4	388.6	388.3	390.7
16.5°	388.8	386.5	384.4	385.3	383.1	383.9	384.2	385.6	386.9	386.5	388.9
17°	387.0	384.7	382.6	383.5	381.3	382.0	382.3	383.9	385.2	384.8	387.3
17.5°	385.4	382.9	380.7	381.6	379.3	380.1	380.4	382.1	383.3	383.1	385.5
18°	383.5	380.9	378.7	379.7	377.3	378.3	378.4	380.4	381.6	381.2	383.8
18.5°	381.6	379.0	376.7	377.7	375.3	376.3	376.5	378.5	379.7	379.2	381.9
19°	379.6	376.9	374.7	375.6	373.2	374.2	374.5	376.5	377.8	377.3	380.1
19.5°	377.7	375.0	372.5	373.5	371.1	372.1	372.5	374.5	375.9	375.2	378.1
20°	375.6	372.7	370.3	371.3	368.9	369.9	370.3	372.4	373.8	373.2	376.1
20.5°	373.5	370.6	368.1	369.2	366.7	367.7	368.0	370.2	371.7	371.0	374.1
21°	371.3	368.3	365.9	366.8	364.4	365.5	365.7	368.1	369.5	368.9	372.0



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	364.3	361.2	358.5	359.8	357.0	358.2	358.6	361.1	362.7	362.1	365.2
23°	361.9	358.6	356.1	357.1	354.5	355.7	356.3	358.8	360.3	359.7	362.9
23.5°	359.4	356.1	353.3	354.6	351.8	353.3	353.7	356.2	357.9	357.1	360.5
24°	356.8	353.4	350.8	351.9	349.1	350.6	351.1	353.7	355.4	354.6	358.1
24.5°	354.2	350.7	348.1	349.3	346.4	347.9	348.4	351.0	352.8	352.0	355.4
25°	351.3	348.0	345.3	346.6	343.6	345.2	345.7	348.5	350.3	349.5	352.9
25.5°	348.6	345.1	342.4	343.7	340.8	342.3	343.0	345.8	347.5	346.7	350.2
26°	345.8	342.2	339.6	340.8	337.9	339.5	340.1	343.1	344.8	344.0	347.6
26.5°	342.9	339.3	336.6	337.9	335.1	336.7	337.3	340.2	342.2	341.2	344.6
27°	339.9	336.2	333.5	335.0	332.0	333.6	334.3	337.4	339.3	338.3	342.1
27.5°	337.0	333.3	330.5	332.0	329.1	330.6	331.2	334.5	336.4	335.4	339.0
28°	333.9	330.2	327.4	328.9	325.9	327.6	328.3	331.6	333.4	332.4	336.1
28.5°	330.7	327.0	324.2	325.8	322.9	324.6	325.2	328.4	330.5	329.3	333.0
29°	327.5	323.7	321.1	322.6	319.7	321.4	322.2	325.4	327.5	326.3	330.0
29.5°	324.2	320.5	317.7	319.3	316.5	318.1	318.9	322.3	324.4	323.1	327.0
30°	320.9	317.1	314.4	316.0	313.1	314.9	315.7	319.1	321.2	320.0	323.8
30.5°	317.4	313.6	310.9	312.7	309.6	311.7	312.4	315.8	317.9	316.6	320.5
31°	314.0	310.1	307.5	309.3	306.2	308.4	309.0	312.6	314.8	313.5	317.3
31.5°	310.5	306.6	303.9	305.9	302.9	305.0	305.7	309.3	311.5	310.1	313.9
32°	306.8	303.0	300.4	302.3	299.2	301.6	302.3	305.9	308.1	306.6	310.4
32.5°	303.1	299.4	296.7	298.8	295.7	298.1	298.6	302.4	304.6	303.1	306.9
33°	299.5	295.6	293.1	295.2	292.1	294.5	295.3	299.0	301.2	299.8	303.6
33.5°	295.8	291.9	289.5	291.6	288.5	291.0	291.6	295.5	297.7	296.1	299.9
34°	292.0	288.1	285.8	287.8	284.8	287.4	288.1	291.9	294.1	292.6	296.4
34.5°	288.1	284.4	281.9	284.1	281.1	283.7	284.3	288.4	290.5	288.8	292.6
35°	284.3	280.4	278.1	280.4	277.4	280.0	280.8	284.8	287.0	285.2	288.9
35.5°	280.3	276.5	274.2	276.7	273.7	276.2	277.1	281.1	283.3	281.4	285.2
36°	276.3	272.5	270.4	272.8	269.8	272.5	273.3	277.3	279.5	277.6	281.5
36.5°	272.3	268.6	266.4	268.9	266.0	268.7	269.4	273.6	275.8	273.9	277.7
37°	268.2	264.6	262.5	265.1	262.0	264.9	265.8	269.9	272.0	270.1	273.8
37.5°	264.2	260.5	258.6	261.2	258.2	261.0	261.9	266.1	268.2	266.2	270.0
38°	260.0	256.4	254.5	257.2	254.3	257.1	257.9	262.3	264.3	262.4	266.1
38.5°	255.9	252.3	250.5	253.2	250.4	253.2	254.1	258.4	260.4	258.4	262.0
39°	251.7	248.1	246.5	249.2	246.2	249.3	250.2	254.5	256.6	254.5	258.1
39.5°	247.5	244.0	242.5	245.2	242.3	245.3	246.3	250.6	252.7	250.5	254.1
40°	243.3	240.0	238.4	241.3	238.2	241.4	242.3	246.7	248.6	246.4	250.0
40.5°	239.1	235.9	234.4	237.3	234.3	237.4	238.3	242.8	244.7	242.6	245.9
41°	234.8	231.6	230.2	233.2	230.2	233.5	234.4	238.8	240.8	238.5	241.8
41.5°	230.6	227.5	226.2	229.0	226.1	229.3	230.5	234.7	236.9	234.5	237.8
42°	226.4	223.3	222.0	225.0	222.1	225.3	226.5	230.8	232.8	230.5	233.6
42.5°	222.1	219.2	217.9	220.8	218.1	221.2	222.4	226.8	228.8	226.4	229.6
43°	217.9	215.0	213.9	216.8	214.0	217.3	218.5	222.9	224.8	222.4	225.4
43.5°	213.8	211.0	209.9	212.7	209.9	213.2	214.4	218.8	220.8	218.3	221.4



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	201.3	198.6	197.9	200.8	197.8	201.3	202.4	206.9	208.8	206.3	209.1
45.5°	197.1	194.6	193.8	196.8	194.0	197.2	198.4	202.9	204.9	202.2	205.1
46°	193.1	190.5	189.9	192.7	189.8	193.3	194.5	198.9	200.8	198.3	201.0
46.5°	189.1	186.5	186.0	188.8	185.9	189.4	190.6	195.0	196.8	194.2	197.0
47°	185.1	182.4	182.2	184.9	182.0	185.5	186.7	191.1	192.8	190.4	193.0
47.5°	181.2	178.7	178.2	181.0	178.1	181.6	182.8	187.3	189.0	186.5	189.1
48°	177.2	174.7	174.6	177.1	174.2	177.8	178.9	183.4	185.1	182.4	185.1
48.5°	173.4	170.8	170.8	173.4	170.3	174.1	175.1	179.5	181.2	178.5	181.3
49°	169.6	166.9	167.0	169.6	166.5	170.3	171.2	175.8	177.4	174.7	177.4
49.5°	165.8	163.2	163.3	165.8	162.7	166.5	167.4	172.0	173.5	171.0	173.6
50°	162.0	159.4	159.5	162.0	159.2	162.8	163.7	168.3	169.7	167.2	169.8
50.5°	158.2	155.8	155.7	158.2	155.4	159.0	159.9	164.6	166.0	163.5	166.0
51°	154.6	152.1	152.1	154.7	151.7	155.2	156.3	160.9	162.3	159.8	162.1
51.5°	151.0	148.5	148.5	151.0	148.1	151.5	152.7	157.1	158.6	156.1	158.3
52°	147.4	144.9	144.9	147.4	144.5	147.9	149.1	153.5	155.0	152.4	155.0
52.5°	143.9	141.4	141.4	143.8	141.0	144.3	145.5	150.0	151.4	148.9	151.4
53°	140.3	137.9	138.0	140.3	137.3	140.7	142.0	146.4	147.8	145.4	147.8
53.5°	137.0	134.5	134.6	136.9	134.0	137.3	138.4	142.8	144.3	141.9	144.3
54°	133.5	131.1	131.2	133.5	130.5	133.9	135.0	139.5	140.9	138.5	140.8
54.5°	130.2	127.8	127.9	130.1	127.2	130.5	131.6	136.0	137.3	135.1	137.3
55°	126.9	124.5	124.6	126.7	123.7	127.1	128.2	132.6	133.9	131.8	133.9
55.5°	123.8	121.3	121.4	123.4	120.5	123.7	124.8	129.1	130.5	128.5	130.6
56°	120.6	118.1	118.2	120.1	117.3	120.4	121.5	125.9	127.2	125.1	127.3
56.5°	117.5	115.0	115.0	116.9	114.1	117.2	118.3	122.6	123.9	121.9	124.1
57°	114.4	111.9	111.9	113.8	110.9	114.0	115.0	119.3	120.8	118.6	120.8
57.5°	111.3	108.8	108.8	110.7	107.9	110.8	111.9	116.2	117.6	115.5	117.6
58°	108.3	105.9	105.8	107.6	104.8	107.7	108.8	113.0	114.4	112.2	114.3
58.5°	105.4	102.9	102.8	104.5	101.6	104.6	105.7	109.9	111.3	108.9	111.2
59°	102.6	100.0	99.9	101.5	98.7	101.5	102.7	106.8	108.2	105.8	108.0
59.5°	99.7	97.1	97.0	98.6	95.7	98.6	99.7	103.8	105.3	102.7	104.9
60°	96.9	94.4	94.1	95.7	92.8	95.6	96.7	100.9	102.3	99.6	101.8
60.5°	94.1	91.6	91.3	92.8	90.0	92.7	93.6	97.9	99.3	96.5	98.8
61°	91.4	88.8	88.5	90.0	87.1	89.8	90.9	95.0	96.3	93.5	95.7
61.5°	88.7	86.4	85.7	87.2	84.5	87.0	88.0	92.1	93.3	90.4	92.7
62°	86.1	83.9	83.1	84.4	82.0	84.2	85.4	89.3	90.4	87.6	89.8
62.5°	83.6	81.4	80.5	81.7	79.4	81.4	82.8	86.5	87.4	84.9	86.9
63°	81.0	78.9	77.8	79.1	76.8	78.7	80.2	83.8	84.7	82.2	84.1
63.5°	78.5	76.4	75.2	76.4	74.2	76.0	77.6	81.1	82.0	79.5	81.3
64°	76.1	74.0	72.7	73.8	71.6	73.4	75.0	78.4	79.4	76.8	78.5
64.5°	73.7	71.5	70.2	71.3	69.1	70.8	72.4	75.8	76.7	74.1	75.8
65°	71.2	69.1	67.8	68.8	66.7	68.2	69.9	73.2	74.0	71.4	73.1
65.5°	68.9	66.8	65.4	66.3	64.1	65.7	67.3	70.6	71.3	68.8	70.5
66°	66.6	64.5	63.0	63.9	61.8	63.3	64.8	68.1	68.6	66.3	68.0



TEST NUMBER: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	59.7	57.8	56.2	56.9	54.7	56.1	57.6	60.5	60.9	58.8	60.5
68°	57.5	55.6	53.5	54.6	52.5	53.9	55.3	58.1	58.5	56.3	58.1
68.5°	55.3	53.5	51.7	52.3	50.3	51.6	53.0	55.6	56.0	54.0	55.7
69°	53.2	51.4	49.7	50.2	48.2	49.3	50.8	53.3	53.6	51.8	53.4
69.5°	51.0	49.3	47.7	48.1	46.1	47.2	48.6	50.9	51.3	49.4	51.2
70°	48.9	47.3	45.6	46.0	44.0	45.1	46.4	48.6	49.0	47.3	49.0
70.5°	46.9	45.3	43.6	43.9	42.0	43.0	44.0	46.4	46.8	45.2	46.9
71°	44.9	43.3	41.7	42.0	40.0	41.0	41.6	44.2	44.6	43.1	44.8
71.5°	42.9	41.4	39.8	40.0	38.1	39.0	39.3	42.0	42.5	41.0	42.8
72°	41.0	39.5	38.0	38.1	36.2	37.0	37.0	39.9	40.4	39.1	40.8
72.5°	38.9	37.7	36.2	36.3	34.4	35.1	34.7	37.9	38.4	37.2	38.9
73°	37.0	35.9	34.4	34.5	32.7	33.3	32.6	35.9	36.4	35.3	37.0
73.5°	35.0	34.1	32.6	32.8	31.0	31.4	30.5	34.0	34.6	33.5	35.2
74°	33.0	32.4	30.9	31.1	29.4	29.7	28.6	32.0	32.7	31.8	33.4
74.5°	31.2	30.7	29.3	29.5	27.8	27.9	26.7	30.1	31.0	30.1	31.8
75°	29.4	29.1	27.8	28.0	26.3	26.3	25.0	28.2	29.3	28.6	30.2
75.5°	27.7	27.5	26.2	26.5	24.9	24.7	23.3	26.4	27.6	27.1	28.6
76°	26.1	26.0	24.8	25.0	23.5	23.2	21.8	24.6	26.1	25.6	27.2
76.5°	24.5	24.5	23.3	23.7	22.2	21.7	20.4	23.0	24.7	24.2	25.7
77°	23.0	23.1	22.0	22.4	20.9	20.4	19.1	21.5	23.3	22.9	24.3
77.5°	21.5	21.8	20.6	21.1	19.6	19.0	17.9	20.0	21.9	21.6	23.0
78°	20.2	20.4	19.4	19.9	18.5	17.8	16.9	18.6	20.6	20.4	21.7
78.5°	18.9	19.1	18.2	18.7	17.4	16.6	15.9	17.4	19.4	19.2	20.5
79°	17.7	17.8	17.1	17.7	16.5	15.5	15.0	16.3	18.3	18.1	19.3
79.5°	16.5	16.6	16.1	16.7	15.7	14.6	13.9	15.2	17.2	17.1	18.2
80°	15.5	15.4	15.2	15.8	14.8	13.7	12.8	14.2	16.2	16.1	17.2
80.5°	14.5	14.3	14.4	14.9	14.0	12.7	11.7	13.2	15.3	15.2	16.2
81°	13.5	13.3	13.6	14.1	13.1	11.8	10.6	12.1	14.4	14.4	15.3
81.5°	12.4	12.4	12.7	13.1	12.0	10.7	9.3	11.1	13.6	13.6	14.4
82°	11.3	11.5	11.7	12.1	11.1	9.6	8.2	9.9	12.6	12.7	13.5
82.5°	10.2	10.5	10.7	11.1	10.1	8.7	7.1	8.8	11.6	11.7	12.6
83°	9.1	9.4	9.9	10.2	9.1	7.6	5.9	7.6	10.6	10.7	11.6
83.5°	7.9	8.5	8.9	9.2	8.0	6.6	4.7	6.6	9.6	9.8	10.6
84°	6.8	7.6	7.9	8.1	7.0	5.7	3.7	5.4	8.6	8.8	9.6
84.5°	5.7	6.6	6.9	7.1	6.1	4.9	2.7	4.3	7.6	7.8	8.7
85°	4.6	5.7	6.0	6.1	5.1	4.1	1.9	3.4	6.6	6.8	7.7
85.5°	3.6	4.9	5.1	5.2	4.0	3.2	1.5	2.5	5.7	5.9	6.7
86°	2.8	4.2	4.2	4.1	3.1	2.4	1.1	1.8	4.8	5.0	5.8
86.5°	1.9	3.4	3.3	3.2	2.3	1.8	0.8	1.4	3.9	4.0	4.9
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: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

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: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	415.3	415.3
0.5°	415.4	415.3
1°	415.3	415.3
1.5°	415.3	415.2
2°	415.3	415.2
2.5°	415.1	415.0
3°	414.9	414.8
3.5°	414.6	414.5
4°	414.2	414.2
4.5°	413.9	413.9
5°	413.6	413.4
5.5°	413.0	413.0
6°	412.5	412.5
6.5°	412.0	411.9
7°	411.3	411.2
7.5°	410.7	410.6
8°	410.0	409.8
8.5°	409.2	409.1
9°	408.4	408.2
9.5°	407.4	407.4
10°	406.5	406.4
10.5°	405.5	405.4
11°	404.3	404.2
11.5°	403.3	403.0
12°	402.0	401.8
12.5°	400.8	400.6
13°	399.4	399.2
13.5°	398.0	397.9
14°	396.5	396.6
14.5°	395.2	395.1
15°	393.7	393.5
15.5°	392.2	392.1
16°	390.5	390.4
16.5°	388.9	388.8
17°	387.1	387.0
17.5°	385.4	385.4
18°	383.4	383.5
18.5°	381.7	381.6
19°	379.8	379.6
19.5°	377.8	377.7
20°	375.7	375.6
20.5°	373.7	373.5
21°	371.5	371.3



TEST NUMBER: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	364.7	364.3
23°	362.2	361.9
23.5°	359.7	359.4
24°	357.1	356.8
24.5°	354.7	354.2
25°	351.9	351.3
25.5°	349.2	348.6
26°	346.4	345.8
26.5°	343.7	342.9
27°	340.7	339.9
27.5°	337.7	337.0
28°	334.7	333.9
28.5°	331.7	330.7
29°	328.4	327.5
29.5°	325.2	324.2
30°	321.9	320.9
30.5°	318.6	317.4
31°	315.2	314.0
31.5°	311.7	310.5
32°	308.2	306.8
32.5°	304.7	303.1
33°	301.1	299.5
33.5°	297.4	295.8
34°	293.7	292.0
34.5°	289.9	288.1
35°	286.2	284.3
35.5°	282.2	280.3
36°	278.3	276.3
36.5°	274.4	272.3
37°	270.4	268.2
37.5°	266.4	264.2
38°	262.4	260.0
38.5°	258.3	255.9
39°	254.3	251.7
39.5°	250.1	247.5
40°	246.0	243.3
40.5°	241.9	239.1
41°	237.7	234.8
41.5°	233.5	230.6
42°	229.3	226.4
42.5°	225.2	222.1
43°	220.8	217.9
43.5°	216.8	213.8



TEST NUMBER: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	204.4	201.3
45.5°	200.2	197.1
46°	196.1	193.1
46.5°	192.1	189.1
47°	188.1	185.1
47.5°	184.1	181.2
48°	180.1	177.2
48.5°	176.3	173.4
49°	172.2	169.6
49.5°	168.4	165.8
50°	164.7	162.0
50.5°	161.0	158.2
51°	157.1	154.6
51.5°	153.4	151.0
52°	149.9	147.4
52.5°	146.3	143.9
53°	142.8	140.3
53.5°	139.3	137.0
54°	136.0	133.5
54.5°	132.5	130.2
55°	129.2	126.9
55.5°	125.9	123.8
56°	122.7	120.6
56.5°	119.5	117.5
57°	116.4	114.4
57.5°	113.3	111.3
58°	110.2	108.3
58.5°	107.1	105.4
59°	104.2	102.6
59.5°	101.3	99.7
60°	98.5	96.9
60.5°	95.7	94.1
61°	92.8	91.4
61.5°	90.2	88.7
62°	87.5	86.1
62.5°	85.0	83.6
63°	82.5	81.0
63.5°	80.0	78.5
64°	77.5	76.1
64.5°	74.8	73.7
65°	72.3	71.2
65.5°	69.8	68.9
66°	67.3	66.6



TEST NUMBER: P710071

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	60.2	59.7
68°	57.8	57.5
68.5°	55.6	55.3
69°	53.4	53.2
69.5°	51.2	51.0
70°	49.1	48.9
70.5°	47.0	46.9
71°	45.0	44.9
71.5°	43.0	42.9
72°	41.0	41.0
72.5°	39.1	38.9
73°	37.3	37.0
73.5°	35.5	35.0
74°	33.8	33.0
74.5°	32.0	31.2
75°	30.3	29.4
75.5°	28.6	27.7
76°	27.0	26.1
76.5°	25.4	24.5
77°	23.9	23.0
77.5°	22.4	21.5
78°	21.0	20.2
78.5°	19.7	18.9
79°	18.5	17.7
79.5°	17.3	16.5
80°	16.2	15.5
80.5°	15.1	14.5
81°	14.1	13.5
81.5°	13.1	12.4
82°	12.1	11.3
82.5°	11.0	10.2
83°	9.9	9.1
83.5°	8.8	7.9
84°	7.8	6.8
84.5°	6.7	5.7
85°	5.6	4.6
85.5°	4.6	3.6
86°	3.7	2.8
86.5°	2.7	1.9
87°	2.0	1.4
87.5°	1.6	1.1
88°	1.2	0.9
88.5°	0.8	0.7

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

Scaled Data Report



TEST NUMBER: P710071
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.2	0.2

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



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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





21.5°	368.9	366.0	363.5	364.5	362.0	363.1	363.5	365.8	367.3	366.8	369.7
22°	366.6	363.6	361.0	362.2	359.6	360.7	361.2	363.5	365.0	364.3	367.6



44°	209.6	206.8	205.9	208.8	205.9	209.3	210.4	214.8	216.8	214.2	217.4
44.5°	205.3	202.7	201.8	204.8	201.9	205.3	206.4	210.9	212.7	210.3	213.2



66.5°	64.3	62.2	60.7	61.5	59.4	60.9	62.4	65.5	66.0	63.7	65.4
67°	62.0	60.0	58.4	59.2	57.1	58.5	60.0	63.0	63.5	61.2	62.9



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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Cooper Lighting Solutions Photometric Lab
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Scaled Data Report





21.5°	369.3	368.9
22°	366.9	366.6

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



44°	212.7	209.6
44.5°	208.5	205.3

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



66.5°	64.9	64.3
67°	62.5	62.0



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)