

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: P710070

Luminaire Tested: RA4LS9FSD2W1EWH-900lm-4000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710070
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-4000K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 4000K CCT
Ballast/Driver: -

Summary

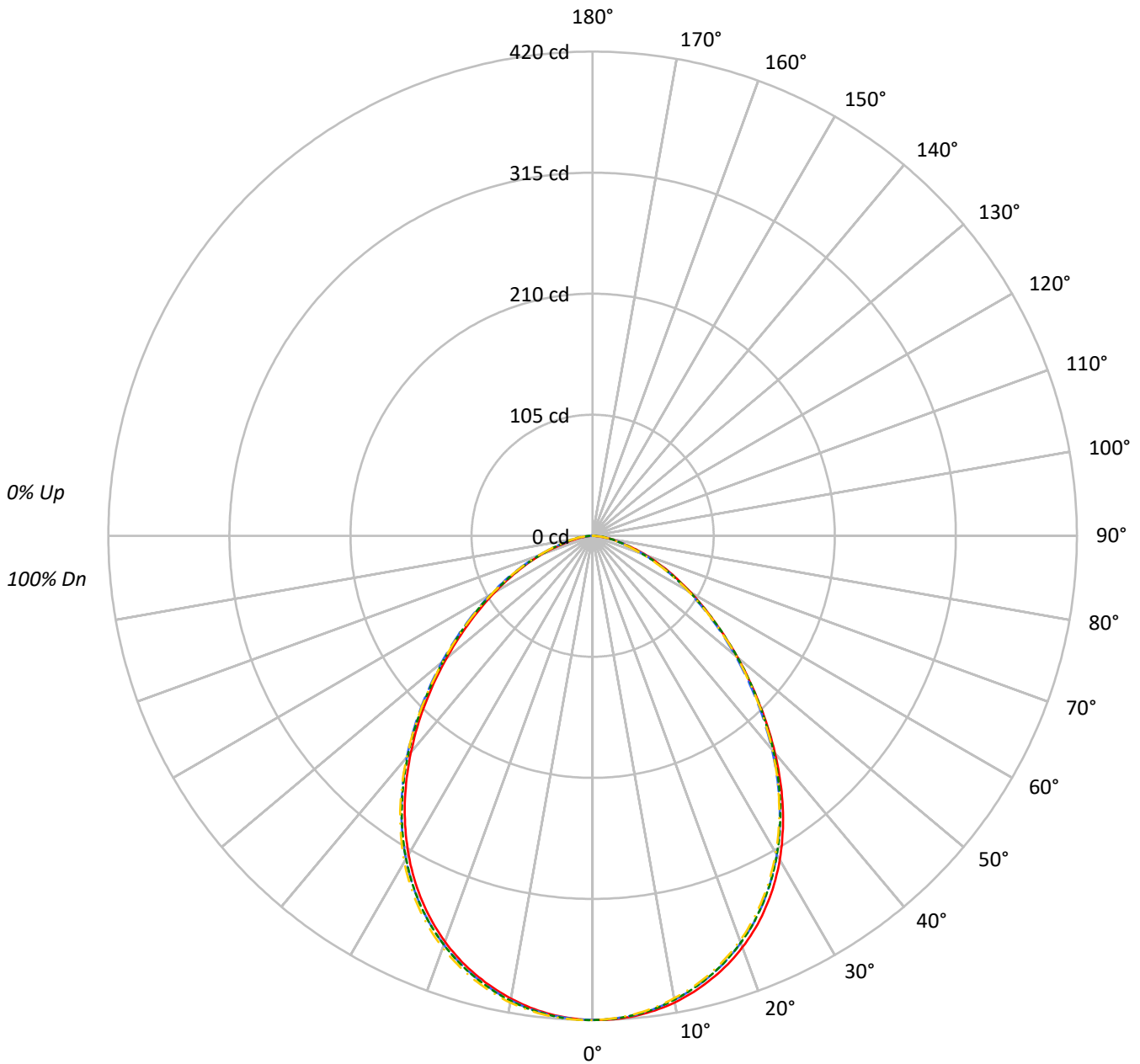
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 875.0 lumens
Efficiency: 95.0%
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.8
Input Voltage (V): NR
Input Current (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



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

Luminous Intensity Polar Plot





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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	113	113	113	113	111	111	111	111	106	106	106	101	101	101	97	97	97	95				
1	105	101	98	94	102	99	96	93	95	92	90	91	89	87	88	86	85	83				
2	97	90	84	79	94	88	83	78	85	80	77	82	78	75	79	76	73	71				
3	89	80	73	68	87	79	72	67	76	71	66	73	69	65	71	67	64	62				
4	82	72	64	59	80	71	64	58	68	62	58	66	61	57	64	60	56	54				
5	76	65	57	51	74	64	57	51	62	56	51	60	55	50	59	54	50	48				
6	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	48	44	42				
7	66	54	46	41	64	53	46	41	52	45	40	50	45	40	49	44	40	38				
8	62	50	42	37	60	49	42	37	48	41	36	47	41	36	45	40	36	34				
9	58	46	38	33	56	45	38	33	44	38	33	43	37	33	42	37	33	31				
10	54	42	35	31	53	42	35	30	41	35	30	40	34	30	39	34	30	29				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	52869	52869	52869	52869
5°	52831	52705	52629	52756
10°	52535	52215	52088	52356
15°	51868	51451	51295	51595
20°	50879	50303	50155	50557
25°	49351	48684	48559	49087
30°	47170	46444	46400	47040
35°	44185	43571	43632	44323
40°	40431	40102	40266	40956
45°	36236	36147	36432	37144
50°	32090	32090	32422	33108
55°	28173	28107	28458	29248
60°	24667	24365	24616	25346
65°	21470	20696	21053	21530
70°	18214	17110	17294	17625
75°	14442	13761	12302	14053
80°	11378	11596	9422	11813
85°	6787	8953	2744	9963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 37642 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	39.6	4.5	4.3
10°-20°	111.4	12.7	12.1
20°-30°	161.8	18.5	17.6
30°-40°	178.3	20.4	19.4
40°-50°	158.3	18.1	17.2
50°-60°	116.7	13.3	12.7
60°-70°	71.0	8.1	7.7
70°-80°	31.1	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°	312.8	35.7	34.0
0°-40°	491.1	56.1	53.3
0°-60°	766.1	87.6	83.2
0°-90°	875.0	100.0	95.0
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°	875.0	100.0	95.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	420	420	420	420	420	
5°	418	417	417	418	418	40
15°	398	395	394	396	398	112
25°	355	351	350	354	355	163
35°	288	284	284	288	288	179
45°	204	203	205	209	204	157
55°	128	128	130	133	128	115
65°	72	70	71	72	72	72
75°	30	28	25	29	30	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°	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1	420.1
0.5°	420.1	419.9	419.8	420.1	420.0	420.0	420.0	419.9	419.8	420.2	420.2
1°	420.1	419.9	419.7	420.0	419.8	419.9	419.7	419.8	419.8	420.0	420.2
1.5°	420.0	419.8	419.5	419.8	419.6	419.6	419.6	419.7	419.7	420.0	420.1
2°	420.0	419.7	419.3	419.6	419.2	419.3	419.4	419.5	419.5	419.8	420.1
2.5°	419.8	419.4	419.0	419.4	419.0	419.0	419.0	419.2	419.3	419.6	419.9
3°	419.6	419.2	418.7	419.1	418.6	418.6	418.6	418.9	419.1	419.4	419.7
3.5°	419.3	418.8	418.2	418.7	418.1	418.2	418.2	418.5	418.7	419.0	419.5
4°	419.0	418.6	417.8	418.3	417.6	417.7	417.8	418.1	418.4	418.6	419.1
4.5°	418.7	418.1	417.3	417.8	417.1	417.2	417.2	417.6	417.9	418.2	418.8
5°	418.2	417.6	416.9	417.2	416.5	416.6	416.6	417.1	417.5	417.6	418.4
5.5°	417.8	417.1	416.2	416.7	415.8	415.9	416.0	416.6	416.9	417.1	417.9
6°	417.2	416.4	415.5	416.1	415.1	415.2	415.3	415.9	416.4	416.5	417.4
6.5°	416.6	415.9	414.8	415.4	414.4	414.5	414.6	415.3	415.7	415.8	416.8
7°	415.9	415.1	414.0	414.6	413.5	413.6	413.7	414.5	415.1	415.1	416.1
7.5°	415.4	414.4	413.1	413.8	412.5	412.8	413.0	413.7	414.3	414.4	415.5
8°	414.5	413.5	412.2	412.9	411.5	411.9	411.9	412.9	413.5	413.6	414.8
8.5°	413.8	412.6	411.2	411.9	410.5	410.9	411.0	411.9	412.6	412.6	414.0
9°	413.0	411.6	410.2	410.8	409.4	409.8	409.9	411.0	411.7	411.8	413.1
9.5°	412.1	410.6	409.1	409.7	408.3	408.7	408.8	409.9	410.7	410.7	412.2
10°	411.1	409.5	408.1	408.6	407.0	407.6	407.6	408.7	409.7	409.7	411.3
10.5°	410.1	408.3	406.9	407.4	405.8	406.4	406.4	407.6	408.5	408.6	410.2
11°	408.8	407.1	405.6	406.3	404.6	405.1	405.1	406.5	407.4	407.3	409.2
11.5°	407.7	406.0	404.3	404.9	403.4	403.8	403.9	405.1	406.1	406.1	408.0
12°	406.5	404.6	403.0	403.7	402.0	402.5	402.6	403.8	405.0	404.9	406.7
12.5°	405.2	403.4	401.6	402.3	400.7	401.1	401.1	402.4	403.6	403.4	405.5
13°	403.8	401.9	400.3	401.0	399.2	399.8	399.8	401.0	402.2	402.1	404.1
13.5°	402.5	400.6	398.8	399.5	397.7	398.2	398.4	399.6	400.8	400.5	402.7
14°	401.1	399.0	397.2	398.1	396.2	396.7	396.8	398.2	399.3	399.2	401.4
14.5°	399.6	397.6	395.6	396.4	394.6	395.2	395.3	396.7	397.8	397.6	399.9
15°	398.1	396.0	394.1	394.9	392.9	393.5	393.7	395.2	396.3	396.0	398.5
15.5°	396.6	394.4	392.5	393.3	391.2	391.8	392.0	393.5	394.7	394.4	396.7
16°	395.0	392.6	390.7	391.5	389.3	390.1	390.4	391.9	393.0	392.8	395.2
16.5°	393.3	390.9	388.9	389.7	387.6	388.3	388.6	390.1	391.3	391.0	393.4
17°	391.5	389.1	387.0	387.9	385.7	386.4	386.8	388.4	389.7	389.3	391.8
17.5°	389.8	387.3	385.1	386.0	383.7	384.5	384.8	386.5	387.8	387.5	390.0
18°	388.0	385.3	383.1	384.1	381.7	382.7	382.8	384.8	386.0	385.6	388.2
18.5°	386.0	383.4	381.1	382.1	379.7	380.6	380.8	382.8	384.1	383.6	386.3
19°	384.0	381.3	379.1	380.0	377.5	378.6	378.9	380.9	382.2	381.6	384.5
19.5°	382.1	379.3	376.8	377.8	375.4	376.4	376.8	378.8	380.2	379.6	382.4
20°	379.9	377.0	374.6	375.6	373.2	374.2	374.5	376.7	378.1	377.5	380.4
20.5°	377.8	374.9	372.3	373.5	371.0	371.9	372.3	374.5	376.0	375.3	378.4
21°	375.6	372.5	370.1	371.1	368.7	369.7	370.0	372.4	373.8	373.1	376.3



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	368.5	365.4	362.7	364.0	361.1	362.4	362.8	365.2	366.9	366.2	369.4
23°	366.1	362.8	360.2	361.3	358.6	359.8	360.4	362.9	364.5	363.8	367.1
23.5°	363.5	360.2	357.4	358.7	355.8	357.3	357.8	360.3	362.0	361.2	364.6
24°	360.9	357.5	354.9	356.0	353.2	354.6	355.1	357.8	359.5	358.7	362.3
24.5°	358.3	354.7	352.1	353.3	350.4	351.9	352.5	355.1	356.9	356.1	359.5
25°	355.4	352.0	349.3	350.6	347.6	349.2	349.7	352.5	354.3	353.5	357.0
25.5°	352.6	349.1	346.4	347.7	344.8	346.3	346.9	349.8	351.6	350.7	354.2
26°	349.8	346.2	343.5	344.8	341.8	343.4	344.0	347.1	348.8	348.0	351.6
26.5°	346.9	343.2	340.5	341.8	339.0	340.6	341.2	344.1	346.1	345.1	348.6
27°	343.9	340.1	337.4	338.8	335.9	337.5	338.2	341.3	343.2	342.2	346.0
27.5°	340.8	337.2	334.3	335.8	332.9	334.4	335.1	338.3	340.3	339.3	343.0
28°	337.8	334.0	331.2	332.7	329.7	331.4	332.1	335.4	337.3	336.2	340.0
28.5°	334.5	330.8	327.9	329.6	326.6	328.3	329.0	332.2	334.3	333.1	336.9
29°	331.3	327.5	324.8	326.3	323.4	325.1	325.9	329.2	331.3	330.0	333.9
29.5°	328.0	324.2	321.3	323.0	320.1	321.8	322.6	326.0	328.2	326.9	330.7
30°	324.6	320.7	318.0	319.6	316.7	318.6	319.3	322.8	324.9	323.7	327.5
30.5°	321.1	317.2	314.5	316.3	313.2	315.3	316.0	319.5	321.6	320.3	324.3
31°	317.6	313.7	311.0	312.9	309.7	312.0	312.5	316.2	318.4	317.1	320.9
31.5°	314.1	310.2	307.4	309.4	306.4	308.5	309.3	312.8	315.1	313.6	317.5
32°	310.3	306.5	303.9	305.8	302.7	305.1	305.8	309.5	311.6	310.2	314.0
32.5°	306.6	302.9	300.2	302.3	299.1	301.5	302.1	305.9	308.1	306.6	310.5
33°	303.0	299.0	296.5	298.6	295.5	297.9	298.7	302.5	304.7	303.2	307.1
33.5°	299.2	295.3	292.8	294.9	291.9	294.3	295.0	298.9	301.1	299.5	303.4
34°	295.4	291.4	289.1	291.2	288.1	290.7	291.5	295.2	297.5	296.0	299.8
34.5°	291.4	287.6	285.2	287.4	284.4	287.0	287.6	291.7	293.9	292.2	296.0
35°	287.6	283.7	281.3	283.6	280.6	283.3	284.0	288.1	290.3	288.5	292.3
35.5°	283.5	279.7	277.4	279.9	276.9	279.4	280.3	284.4	286.6	284.7	288.5
36°	279.5	275.7	273.5	275.9	272.9	275.7	276.5	280.5	282.7	280.8	284.7
36.5°	275.5	271.7	269.5	272.0	269.1	271.8	272.5	276.8	279.0	277.1	280.9
37°	271.3	267.7	265.5	268.1	265.1	267.9	268.8	273.0	275.2	273.2	276.9
37.5°	267.2	263.5	261.5	264.2	261.2	264.0	264.9	269.2	271.3	269.3	273.1
38°	263.0	259.4	257.4	260.2	257.2	260.1	260.9	265.4	267.4	265.5	269.1
38.5°	258.8	255.3	253.4	256.2	253.3	256.1	257.0	261.3	263.4	261.4	265.0
39°	254.6	251.0	249.3	252.1	249.1	252.2	253.1	257.5	259.6	257.5	261.0
39.5°	250.4	246.9	245.3	248.1	245.1	248.1	249.1	253.5	255.6	253.3	257.0
40°	246.1	242.8	241.1	244.1	241.0	244.2	245.1	249.5	251.5	249.3	252.9
40.5°	241.9	238.6	237.1	240.0	237.0	240.1	241.0	245.6	247.6	245.4	248.8
41°	237.5	234.3	232.8	235.9	232.9	236.2	237.1	241.6	243.6	241.2	244.6
41.5°	233.2	230.1	228.8	231.7	228.7	232.0	233.1	237.5	239.6	237.2	240.6
42°	229.0	225.9	224.5	227.6	224.7	227.9	229.1	233.4	235.5	233.1	236.3
42.5°	224.7	221.7	220.4	223.4	220.6	223.7	224.9	229.4	231.4	229.0	232.2
43°	220.4	217.5	216.4	219.3	216.4	219.8	221.0	225.4	227.4	225.0	228.0
43.5°	216.2	213.5	212.3	215.2	212.4	215.7	216.9	221.4	223.4	220.8	224.0



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CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	203.6	200.9	200.2	203.1	200.1	203.7	204.7	209.3	211.3	208.7	211.5
45.5°	199.4	196.8	196.0	199.1	196.2	199.5	200.7	205.2	207.2	204.6	207.5
46°	195.3	192.7	192.1	194.9	192.0	195.5	196.8	201.2	203.1	200.5	203.4
46.5°	191.3	188.7	188.2	191.0	188.1	191.6	192.8	197.2	199.0	196.5	199.3
47°	187.2	184.5	184.3	187.1	184.1	187.7	188.8	193.3	195.1	192.6	195.2
47.5°	183.2	180.8	180.3	183.1	180.2	183.7	184.9	189.4	191.2	188.6	191.2
48°	179.3	176.7	176.6	179.2	176.2	179.9	181.0	185.5	187.2	184.5	187.3
48.5°	175.4	172.8	172.8	175.4	172.3	176.1	177.1	181.6	183.3	180.6	183.4
49°	171.6	168.8	169.0	171.5	168.4	172.3	173.2	177.8	179.4	176.7	179.5
49.5°	167.7	165.1	165.2	167.7	164.5	168.5	169.4	174.0	175.5	172.9	175.6
50°	163.9	161.2	161.3	163.9	161.0	164.6	165.6	170.3	171.7	169.1	171.7
50.5°	160.0	157.6	157.5	160.0	157.2	160.8	161.7	166.5	167.9	165.4	167.9
51°	156.4	153.8	153.9	156.4	153.4	157.0	158.1	162.7	164.1	161.6	164.0
51.5°	152.8	150.2	150.2	152.8	149.8	153.2	154.5	159.0	160.5	157.9	160.1
52°	149.1	146.6	146.6	149.1	146.2	149.6	150.9	155.3	156.8	154.2	156.8
52.5°	145.5	143.1	143.1	145.5	142.6	146.0	147.2	151.8	153.2	150.6	153.1
53°	142.0	139.5	139.6	142.0	138.9	142.3	143.6	148.1	149.5	147.1	149.5
53.5°	138.6	136.1	136.1	138.5	135.5	138.8	140.0	144.5	146.0	143.6	146.0
54°	135.1	132.6	132.7	135.0	132.0	135.4	136.5	141.1	142.5	140.1	142.4
54.5°	131.7	129.3	129.3	131.6	128.7	132.0	133.1	137.5	138.9	136.7	138.9
55°	128.4	126.0	126.0	128.1	125.1	128.5	129.7	134.1	135.5	133.3	135.5
55.5°	125.2	122.7	122.8	124.8	121.9	125.1	126.2	130.6	132.0	130.0	132.1
56°	122.0	119.5	119.5	121.5	118.6	121.8	122.9	127.3	128.7	126.5	128.8
56.5°	118.9	116.3	116.3	118.3	115.4	118.5	119.6	124.0	125.4	123.3	125.5
57°	115.7	113.2	113.2	115.1	112.2	115.3	116.3	120.7	122.2	120.0	122.2
57.5°	112.6	110.1	110.1	111.9	109.1	112.1	113.2	117.5	119.0	116.8	119.0
58°	109.6	107.1	107.0	108.8	106.0	108.9	110.0	114.3	115.8	113.5	115.6
58.5°	106.6	104.1	104.0	105.7	102.8	105.8	106.9	111.2	112.6	110.2	112.5
59°	103.7	101.2	101.0	102.7	99.8	102.7	103.9	108.1	109.5	107.0	109.3
59.5°	100.9	98.2	98.1	99.7	96.8	99.7	100.9	105.0	106.5	103.9	106.1
60°	98.0	95.4	95.2	96.8	93.9	96.7	97.8	102.0	103.5	100.7	103.0
60.5°	95.2	92.6	92.4	93.8	91.0	93.8	94.7	99.0	100.4	97.6	99.9
61°	92.5	89.9	89.5	91.0	88.1	90.9	91.9	96.1	97.4	94.6	96.8
61.5°	89.8	87.4	86.7	88.2	85.5	88.0	89.1	93.2	94.4	91.5	93.7
62°	87.1	84.8	84.0	85.4	82.9	85.2	86.4	90.3	91.4	88.6	90.8
62.5°	84.5	82.3	81.4	82.6	80.4	82.4	83.8	87.5	88.4	85.9	87.9
63°	82.0	79.8	78.7	80.0	77.7	79.6	81.2	84.8	85.7	83.1	85.1
63.5°	79.4	77.3	76.1	77.3	75.1	76.9	78.5	82.0	83.0	80.4	82.2
64°	77.0	74.8	73.6	74.7	72.5	74.3	75.9	79.3	80.3	77.7	79.4
64.5°	74.5	72.4	71.1	72.1	69.9	71.6	73.2	76.7	77.6	75.0	76.6
65°	72.1	69.9	68.6	69.5	67.4	69.0	70.7	74.0	74.8	72.3	73.9
65.5°	69.7	67.6	66.2	67.1	64.9	66.5	68.1	71.4	72.1	69.6	71.3
66°	67.4	65.2	63.7	64.6	62.5	64.0	65.6	68.8	69.4	67.0	68.8



TEST NUMBER: P710070

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	60.4	58.4	56.8	57.5	55.4	56.8	58.3	61.2	61.6	59.5	61.2
68°	58.2	56.3	54.2	55.3	53.1	54.5	56.0	58.8	59.1	57.0	58.8
68.5°	55.9	54.1	52.3	53.0	50.9	52.2	53.6	56.3	56.6	54.6	56.4
69°	53.8	52.0	50.3	50.8	48.7	49.9	51.4	53.9	54.2	52.4	54.1
69.5°	51.6	49.9	48.2	48.6	46.6	47.8	49.2	51.5	51.9	50.0	51.8
70°	49.5	47.8	46.1	46.5	44.5	45.6	47.0	49.2	49.5	47.9	49.6
70.5°	47.4	45.8	44.1	44.4	42.5	43.5	44.6	47.0	47.3	45.7	47.4
71°	45.4	43.8	42.2	42.4	40.5	41.5	42.1	44.7	45.1	43.6	45.3
71.5°	43.4	41.9	40.3	40.5	38.5	39.5	39.8	42.5	43.0	41.5	43.3
72°	41.4	40.0	38.5	38.6	36.6	37.5	37.4	40.4	40.8	39.6	41.3
72.5°	39.4	38.1	36.6	36.7	34.8	35.5	35.1	38.3	38.8	37.6	39.3
73°	37.4	36.3	34.8	34.9	33.1	33.6	32.9	36.3	36.8	35.7	37.4
73.5°	35.4	34.5	33.0	33.2	31.4	31.8	30.9	34.4	35.0	33.9	35.6
74°	33.4	32.8	31.3	31.5	29.7	30.0	28.9	32.4	33.1	32.1	33.8
74.5°	31.6	31.1	29.7	29.9	28.1	28.2	27.0	30.4	31.3	30.5	32.2
75°	29.7	29.4	28.1	28.3	26.6	26.6	25.3	28.5	29.6	28.9	30.5
75.5°	28.1	27.8	26.5	26.8	25.2	25.0	23.6	26.7	28.0	27.4	29.0
76°	26.4	26.3	25.1	25.3	23.8	23.4	22.0	24.9	26.4	25.9	27.5
76.5°	24.8	24.8	23.6	24.0	22.4	22.0	20.6	23.3	25.0	24.5	26.0
77°	23.3	23.4	22.2	22.6	21.1	20.6	19.3	21.7	23.5	23.1	24.6
77.5°	21.8	22.0	20.9	21.3	19.9	19.2	18.1	20.2	22.2	21.8	23.3
78°	20.4	20.6	19.6	20.1	18.7	18.0	17.0	18.9	20.9	20.6	22.0
78.5°	19.1	19.3	18.4	18.9	17.6	16.8	16.1	17.6	19.6	19.4	20.7
79°	17.9	18.0	17.3	17.9	16.7	15.7	15.1	16.5	18.5	18.3	19.5
79.5°	16.7	16.8	16.3	16.9	15.8	14.7	14.1	15.4	17.4	17.3	18.4
80°	15.7	15.6	15.4	16.0	15.0	13.8	13.0	14.4	16.4	16.3	17.4
80.5°	14.7	14.5	14.6	15.1	14.2	12.9	11.9	13.3	15.5	15.4	16.4
81°	13.7	13.4	13.8	14.2	13.2	11.9	10.7	12.3	14.6	14.5	15.4
81.5°	12.6	12.5	12.9	13.3	12.2	10.8	9.4	11.2	13.7	13.7	14.6
82°	11.4	11.6	11.9	12.3	11.2	9.8	8.2	10.0	12.8	12.8	13.7
82.5°	10.3	10.6	10.9	11.3	10.2	8.8	7.2	8.9	11.8	11.8	12.7
83°	9.2	9.6	10.0	10.3	9.2	7.7	5.9	7.7	10.7	10.8	11.7
83.5°	8.0	8.6	9.0	9.3	8.1	6.7	4.7	6.6	9.7	9.9	10.7
84°	6.9	7.7	8.0	8.2	7.1	5.8	3.7	5.5	8.7	8.9	9.7
84.5°	5.8	6.7	7.0	7.2	6.2	5.0	2.7	4.4	7.7	7.9	8.8
85°	4.7	5.8	6.1	6.2	5.1	4.1	1.9	3.5	6.7	6.9	7.8
85.5°	3.7	5.0	5.2	5.2	4.1	3.3	1.5	2.5	5.7	6.0	6.8
86°	2.8	4.3	4.2	4.2	3.1	2.5	1.1	1.9	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	2.5	2.4	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	2.3	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	0.8	0.6	1.5



TEST NUMBER: P710070
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

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: P710070

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	420.1	420.1
0.5°	420.2	420.1
1°	420.1	420.1
1.5°	420.1	420.0
2°	420.1	420.0
2.5°	419.8	419.8
3°	419.7	419.6
3.5°	419.4	419.3
4°	419.0	419.0
4.5°	418.7	418.7
5°	418.3	418.2
5.5°	417.8	417.8
6°	417.3	417.2
6.5°	416.8	416.6
7°	416.1	415.9
7.5°	415.5	415.4
8°	414.7	414.5
8.5°	413.9	413.8
9°	413.1	413.0
9.5°	412.1	412.1
10°	411.2	411.1
10.5°	410.2	410.1
11°	409.0	408.8
11.5°	407.9	407.7
12°	406.6	406.5
12.5°	405.4	405.2
13°	404.0	403.8
13.5°	402.6	402.5
14°	401.1	401.1
14.5°	399.8	399.6
15°	398.3	398.1
15.5°	396.7	396.6
16°	395.0	395.0
16.5°	393.4	393.3
17°	391.5	391.5
17.5°	389.8	389.8
18°	387.9	388.0
18.5°	386.1	386.0
19°	384.2	384.0
19.5°	382.2	382.1
20°	380.0	379.9
20.5°	378.1	377.8
21°	375.8	375.6



TEST NUMBER: P710070
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	368.9	368.5
23°	366.3	366.1
23.5°	363.9	363.5
24°	361.3	360.9
24.5°	358.8	358.3
25°	356.0	355.4
25.5°	353.3	352.6
26°	350.4	349.8
26.5°	347.6	346.9
27°	344.6	343.9
27.5°	341.6	340.8
28°	338.6	337.8
28.5°	335.5	334.5
29°	332.2	331.3
29.5°	328.9	328.0
30°	325.6	324.6
30.5°	322.3	321.1
31°	318.9	317.6
31.5°	315.3	314.1
32°	311.8	310.3
32.5°	308.2	306.6
33°	304.6	303.0
33.5°	300.8	299.2
34°	297.1	295.4
34.5°	293.3	291.4
35°	289.5	287.6
35.5°	285.5	283.5
36°	281.5	279.5
36.5°	277.6	275.5
37°	273.5	271.3
37.5°	269.5	267.2
38°	265.4	263.0
38.5°	261.3	258.8
39°	257.2	254.6
39.5°	253.0	250.4
40°	248.8	246.1
40.5°	244.7	241.9
41°	240.4	237.5
41.5°	236.2	233.2
42°	232.0	229.0
42.5°	227.8	224.7
43°	223.4	220.4
43.5°	219.3	216.2



TEST NUMBER: P710070
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	206.8	203.6
45.5°	202.5	199.4
46°	198.4	195.3
46.5°	194.3	191.3
47°	190.2	187.2
47.5°	186.2	183.2
48°	182.2	179.3
48.5°	178.3	175.4
49°	174.2	171.6
49.5°	170.4	167.7
50°	166.6	163.9
50.5°	162.8	160.0
51°	159.0	156.4
51.5°	155.2	152.8
52°	151.6	149.1
52.5°	148.0	145.5
53°	144.4	142.0
53.5°	140.9	138.6
54°	137.6	135.1
54.5°	134.1	131.7
55°	130.7	128.4
55.5°	127.3	125.2
56°	124.1	122.0
56.5°	120.9	118.9
57°	117.7	115.7
57.5°	114.6	112.6
58°	111.5	109.6
58.5°	108.4	106.6
59°	105.4	103.7
59.5°	102.5	100.9
60°	99.7	98.0
60.5°	96.8	95.2
61°	93.9	92.5
61.5°	91.2	89.8
62°	88.5	87.1
62.5°	86.0	84.5
63°	83.4	82.0
63.5°	80.9	79.4
64°	78.4	77.0
64.5°	75.7	74.5
65°	73.1	72.1
65.5°	70.6	69.7
66°	68.1	67.4



TEST NUMBER: P710070

CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	60.9	60.4
68°	58.5	58.2
68.5°	56.2	55.9
69°	54.0	53.8
69.5°	51.8	51.6
70°	49.6	49.5
70.5°	47.5	47.4
71°	45.5	45.4
71.5°	43.5	43.4
72°	41.5	41.4
72.5°	39.6	39.4
73°	37.7	37.4
73.5°	35.9	35.4
74°	34.2	33.4
74.5°	32.4	31.6
75°	30.7	29.7
75.5°	28.9	28.1
76°	27.3	26.4
76.5°	25.7	24.8
77°	24.1	23.3
77.5°	22.7	21.8
78°	21.3	20.4
78.5°	19.9	19.1
79°	18.7	17.9
79.5°	17.5	16.7
80°	16.4	15.7
80.5°	15.3	14.7
81°	14.3	13.7
81.5°	13.3	12.6
82°	12.2	11.4
82.5°	11.2	10.3
83°	10.1	9.2
83.5°	8.9	8.0
84°	7.9	6.9
84.5°	6.8	5.8
85°	5.7	4.7
85.5°	4.7	3.7
86°	3.7	2.8
86.5°	2.8	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: P710070
CATALOG NUMBER: RA4LS9FSD2W1EWH-900lm-4000K

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



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

Scaled Data Report





21.5°	373.2	370.2	367.7	368.7	366.2	367.3	367.7	370.0	371.5	371.0	373.9
22°	370.8	367.8	365.2	366.4	363.7	364.9	365.4	367.7	369.2	368.5	371.8



44°	212.0	209.2	208.3	211.2	208.3	211.7	212.9	217.3	219.3	216.7	219.9
44.5°	207.7	205.1	204.2	207.1	204.2	207.7	208.8	213.3	215.1	212.7	215.6



66.5°	65.0	62.9	61.4	62.3	60.1	61.6	63.1	66.3	66.8	64.5	66.2
67°	62.7	60.7	59.1	59.8	57.7	59.1	60.7	63.7	64.2	61.9	63.6



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°	373.5	373.2
22°	371.2	370.8



44°	215.1	212.0
44.5°	210.9	207.7

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

Scaled Data Report



66.5°	65.7	65.0
67°	63.3	62.7



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)