

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: P710090

Luminaire Tested: RA56LS9FSD2W1EWH-900lm-4000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2304449B001)
Test Lab: EVERFINE
Issue Date: 10/6/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RA56LS9FSD2W1EWH-900lm-4000K
Description: 5/6IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 4000K CCT
Ballast/Driver: -

Summary

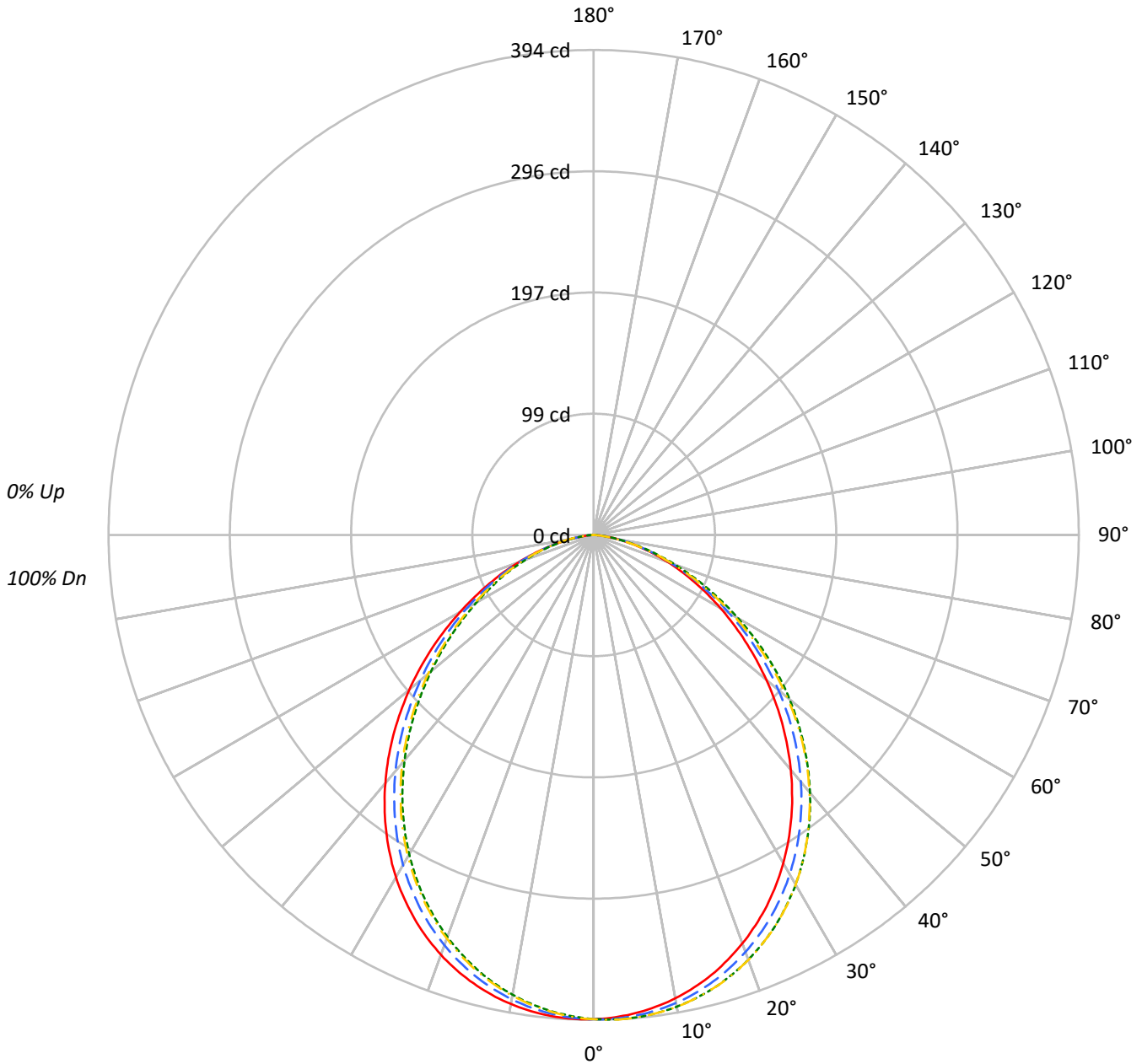
Lumens per Lamp: 930.22 (1 lamp)
Luminaire Lumens: 930.0 lumens
Efficiency: 100.0%
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.28
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P710090
CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	66	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	67	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	42	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21566	21566	21566	21566
5°	21462	21654	21594	21384
10°	21281	21660	21537	21114
15°	20999	21589	21402	20749
20°	20605	21416	21171	20273
25°	20118	21152	20820	19683
30°	19490	20763	20326	18965
35°	18732	20231	19662	18109
40°	17833	19565	18835	17096
45°	16785	18723	17831	15947
50°	15607	17714	16648	14695
55°	14346	16439	15302	13381
60°	13036	14867	13749	12049
65°	11648	13127	12077	10805
70°	10178	11252	10386	9441
75°	8451	9065	8345	7837
80°	6219	6282	5746	5683
85°	3397	3271	2579	3397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 120°
 Vertical Angle: 45°
 Luminance: 18738 cd/sqm



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	37.1	4.0	4.0
10°-20°	105.2	11.3	11.3
20°-30°	155.5	16.7	16.7
30°-40°	179.1	19.3	19.3
40°-50°	172.4	18.5	18.5
50°-60°	139.2	15.0	15.0
60°-70°	91.4	9.8	9.8
70°-80°	42.7	4.6	4.6
80°-90°	7.3	0.8	0.8
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°	297.9	32.0	32.0
0°-40°	477.1	51.3	51.3
0°-60°	788.6	84.8	84.8
0°-90°	930.0	100.0	100.0
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°	930.0	100.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	393	393	393	393	393	
5°	390	394	392	389	390	37
15°	370	380	377	366	370	104
25°	333	350	344	325	333	153
35°	280	302	294	271	280	175
45°	216	242	230	206	216	167
55°	150	172	160	140	150	134
65°	90	101	93	83	90	89
75°	40	43	39	37	40	43
85°	5	5	4	5	5	8
90°	0	0	0	0	0	



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4
0.5°	393.2	393.5	393.8	393.5	393.9	393.7	393.5	393.5	393.6	393.0	393.4
1°	393.1	393.5	393.9	393.7	394.0	393.9	393.6	393.4	393.3	392.7	393.1
1.5°	392.9	393.2	394.0	393.8	394.2	394.0	393.6	393.3	393.1	392.3	392.7
2°	392.6	393.2	393.9	394.0	394.2	394.0	393.6	393.2	392.7	391.9	392.3
2.5°	392.3	392.9	393.9	394.0	394.3	394.0	393.5	392.9	392.5	391.5	391.9
3°	391.9	392.7	393.8	394.0	394.3	394.1	393.4	392.7	392.0	391.0	391.3
3.5°	391.4	392.4	393.7	394.0	394.2	394.0	393.2	392.4	391.6	390.4	390.9
4°	391.1	392.1	393.4	393.8	394.1	393.8	393.0	392.1	391.1	389.9	390.3
4.5°	390.5	391.7	393.2	393.7	394.1	393.7	392.7	391.6	390.6	389.2	389.6
5°	390.0	391.3	392.8	393.5	393.8	393.5	392.4	391.2	390.0	388.6	389.0
5.5°	389.4	390.8	392.6	393.3	393.6	393.2	392.1	390.7	389.5	387.8	388.3
6°	388.8	390.3	392.1	393.0	393.3	392.9	391.7	390.3	388.8	387.1	387.6
6.5°	388.1	389.7	391.7	392.6	393.0	392.5	391.3	389.7	388.1	386.2	386.8
7°	387.4	389.1	391.2	392.3	392.6	392.2	390.7	389.1	387.3	385.4	386.0
7.5°	386.6	388.4	390.8	391.9	392.2	391.7	390.2	388.4	386.5	384.4	385.1
8°	385.9	387.8	390.2	391.4	391.7	391.2	389.7	387.7	385.7	383.6	384.1
8.5°	385.0	387.0	389.6	390.9	391.3	390.7	389.1	386.9	384.7	382.5	383.2
9°	384.2	386.3	388.9	390.4	390.7	390.2	388.4	386.2	383.8	381.5	382.1
9.5°	383.2	385.5	388.2	389.8	390.3	389.6	387.7	385.4	382.9	380.4	381.1
10°	382.3	384.6	387.5	389.1	389.6	388.9	386.9	384.5	381.7	379.3	379.9
10.5°	381.3	383.7	386.8	388.5	388.9	388.3	386.3	383.6	380.7	378.0	378.8
11°	380.2	382.7	385.9	387.7	388.2	387.6	385.4	382.6	379.5	376.9	377.6
11.5°	379.0	381.7	385.1	387.0	387.5	386.7	384.6	381.5	378.5	375.6	376.3
12°	377.9	380.6	384.1	386.2	386.6	386.0	383.7	380.5	377.2	374.3	375.0
12.5°	376.6	379.5	383.2	385.4	385.8	385.1	382.7	379.4	376.0	372.9	373.7
13°	375.4	378.4	382.1	384.4	384.9	384.2	381.6	378.3	374.7	371.6	372.2
13.5°	374.0	377.1	381.1	383.5	383.9	383.3	380.7	377.1	373.4	370.1	370.9
14°	372.8	375.9	380.0	382.5	383.0	382.3	379.5	375.9	371.8	368.7	369.4
14.5°	371.4	374.6	378.9	381.5	382.0	381.2	378.4	374.6	370.5	367.1	368.0
15°	370.0	373.3	377.6	380.4	380.9	380.1	377.1	373.3	369.0	365.6	366.3
15.5°	368.5	372.0	376.4	379.4	379.9	379.1	376.0	371.9	367.5	363.9	364.7
16°	367.0	370.6	375.2	378.1	378.7	377.9	374.6	370.5	365.9	362.3	363.1
16.5°	365.3	369.1	373.9	376.9	377.5	376.7	373.4	369.0	364.3	360.5	361.4
17°	363.7	367.6	372.5	375.6	376.2	375.4	372.0	367.5	362.6	358.8	359.7
17.5°	362.0	365.9	371.1	374.4	375.0	374.2	370.6	366.0	360.9	357.0	357.9
18°	360.4	364.5	369.7	373.0	373.7	372.7	369.1	364.4	359.2	355.2	356.0
18.5°	358.6	362.9	368.1	371.7	372.3	371.5	367.7	362.7	357.3	353.3	354.2
19°	356.9	361.2	366.6	370.2	370.8	369.9	366.1	361.1	355.5	351.4	352.3
19.5°	355.0	359.4	365.0	368.8	369.4	368.5	364.6	359.3	353.7	349.5	350.4
20°	353.2	357.7	363.4	367.1	367.9	366.9	362.9	357.6	351.8	347.5	348.3
20.5°	351.3	355.9	361.8	365.7	366.2	365.4	361.1	355.8	349.9	345.4	346.3
21°	349.4	354.0	360.0	364.0	364.6	363.7	359.4	354.0	347.8	343.4	344.4



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	343.3	348.4	354.7	359.1	359.5	358.8	354.0	348.0	341.6	336.9	337.9
23°	341.3	346.4	352.8	357.2	357.8	356.9	352.2	346.1	339.5	334.7	335.7
23.5°	339.1	344.2	350.9	355.4	356.0	355.1	350.3	343.9	337.4	332.3	333.5
24°	337.0	342.2	349.0	353.5	354.2	353.1	348.2	342.0	335.0	330.2	331.2
24.5°	334.8	340.2	346.9	351.7	352.3	351.4	346.2	339.7	332.8	327.8	328.9
25°	332.6	338.0	344.9	349.7	350.4	349.3	344.2	337.7	330.5	325.4	326.5
25.5°	330.1	335.8	342.8	347.8	348.4	347.3	342.0	335.4	328.2	323.0	324.1
26°	327.8	333.6	340.7	345.7	346.4	345.3	339.9	333.1	325.7	320.6	321.7
26.5°	325.4	331.3	338.6	343.6	344.3	343.3	337.6	330.8	323.4	317.9	319.3
27°	323.1	329.1	336.4	341.4	342.1	341.0	335.4	328.5	320.9	315.5	316.7
27.5°	320.6	326.6	334.2	339.4	340.1	338.9	333.1	326.1	318.4	312.9	314.2
28°	318.1	324.3	331.9	337.1	337.9	336.6	330.8	323.7	315.9	310.3	311.6
28.5°	315.7	321.9	329.5	334.9	335.7	334.4	328.5	321.3	313.3	307.6	308.9
29°	313.1	319.5	327.3	332.6	333.5	332.0	326.1	318.8	310.7	305.0	306.3
29.5°	310.5	316.9	324.8	330.4	331.2	329.8	323.7	316.2	308.1	302.3	303.6
30°	307.9	314.4	322.4	328.0	328.8	327.3	321.1	313.7	305.4	299.6	300.9
30.5°	305.3	311.8	320.0	325.6	326.2	324.9	318.5	311.0	302.7	296.7	298.2
31°	302.6	309.2	317.4	323.1	323.9	322.4	315.9	308.3	299.9	293.9	295.3
31.5°	299.8	306.7	314.9	320.8	321.4	320.0	313.4	305.7	297.1	291.1	292.6
32°	297.1	303.9	312.3	318.1	318.9	317.3	310.6	302.9	294.3	288.3	289.6
32.5°	294.3	301.3	309.7	315.6	316.3	314.7	307.9	300.2	291.4	285.4	286.9
33°	291.5	298.5	307.0	313.0	313.8	312.1	305.1	297.4	288.6	282.5	284.0
33.5°	288.7	295.7	304.3	310.4	311.1	309.5	302.4	294.6	285.7	279.4	281.0
34°	285.8	292.9	301.6	307.6	308.4	306.6	299.6	291.7	282.7	276.5	278.1
34.5°	282.9	290.2	298.9	305.0	305.7	303.8	296.7	288.8	279.8	273.5	275.1
35°	279.9	287.2	296.1	302.3	303.1	301.1	293.8	286.0	276.8	270.6	272.0
35.5°	276.9	284.4	293.2	299.5	300.3	298.3	291.0	283.0	273.8	267.4	268.9
36°	274.0	281.4	290.4	296.7	297.5	295.4	288.0	280.1	270.7	264.3	265.9
36.5°	271.0	278.5	287.6	294.0	294.6	292.5	285.0	277.0	267.6	261.2	262.8
37°	267.9	275.4	284.6	291.1	291.8	289.5	281.9	274.0	264.5	258.1	259.7
37.5°	264.7	272.5	281.7	288.3	288.9	286.6	278.8	270.9	261.4	254.9	256.6
38°	261.7	269.3	278.7	285.5	285.9	283.6	275.8	267.8	258.3	251.7	253.4
38.5°	258.6	266.4	275.7	282.5	282.9	280.6	272.8	264.7	255.0	248.5	250.3
39°	255.5	263.2	272.7	279.4	280.0	277.5	269.6	261.5	251.9	245.3	247.1
39.5°	252.3	260.2	269.7	276.3	276.8	274.4	266.5	258.4	248.8	242.1	243.9
40°	249.2	257.0	266.6	273.4	273.9	271.2	263.2	255.3	245.5	238.9	240.7
40.5°	246.0	253.9	263.5	270.3	270.8	268.1	260.0	252.1	242.2	235.6	237.4
41°	242.7	250.6	260.3	267.2	267.7	264.9	256.8	248.9	239.0	232.3	234.1
41.5°	239.4	247.5	257.3	264.0	264.4	261.7	253.6	245.5	235.6	229.0	230.9
42°	236.2	244.2	253.9	260.9	261.4	258.5	250.2	242.3	232.5	225.7	227.6
42.5°	232.9	241.0	250.8	257.7	258.1	255.3	246.9	239.0	229.2	222.4	224.3
43°	229.7	237.7	247.6	254.5	255.0	251.9	243.5	235.7	225.8	219.2	220.9
43.5°	226.3	234.4	244.4	251.4	251.6	248.6	240.2	232.4	222.5	215.8	217.7

TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	216.5	224.6	234.5	241.5	241.7	238.6	230.0	222.4	212.4	205.7	207.7
45.5°	213.1	221.2	231.2	238.3	238.3	235.3	226.6	219.0	209.1	202.3	204.3
46°	209.8	217.9	227.9	234.9	234.8	231.8	223.1	215.6	205.8	199.1	201.0
46.5°	206.5	214.6	224.6	231.5	231.3	228.3	219.6	212.2	202.3	195.7	197.7
47°	203.1	211.2	221.1	228.3	227.9	224.9	216.1	208.9	198.9	192.3	194.4
47.5°	199.7	207.9	217.7	224.9	224.3	221.5	212.8	205.6	195.6	189.1	191.1
48°	196.3	204.4	214.3	221.5	220.8	218.0	209.3	202.2	192.3	185.7	187.7
48.5°	193.1	201.0	210.9	218.0	217.2	214.5	205.7	198.8	188.8	182.3	184.5
49°	189.7	197.7	207.3	214.7	213.6	210.9	202.2	195.4	185.4	178.8	181.2
49.5°	186.3	194.3	203.8	211.3	209.9	207.4	198.7	192.0	182.1	175.7	177.9
50°	183.0	190.9	200.4	207.7	206.2	203.9	195.2	188.6	178.8	172.3	174.6
50.5°	179.6	187.5	196.9	204.4	202.5	200.2	191.8	185.3	175.4	169.1	171.3
51°	176.3	184.1	193.4	201.0	198.9	196.5	188.3	181.9	172.1	165.8	168.0
51.5°	172.9	180.7	189.8	197.3	195.3	192.9	184.8	178.6	168.7	162.4	164.7
52°	169.6	177.3	186.4	193.7	191.7	189.1	181.3	175.2	165.5	159.3	161.5
52.5°	166.5	174.0	182.8	190.2	187.8	185.5	177.8	171.8	162.2	156.0	158.2
53°	163.3	170.6	179.3	186.5	184.0	181.8	174.1	168.5	158.9	152.8	155.0
53.5°	159.9	167.3	175.7	182.9	180.3	178.2	170.6	165.1	155.6	149.5	151.9
54°	156.6	163.9	172.2	179.3	176.6	174.5	167.1	161.9	152.4	146.3	148.6
54.5°	153.3	160.4	168.6	175.7	172.8	170.8	163.6	158.5	149.2	143.2	145.4
55°	150.1	157.0	165.1	172.0	169.0	167.2	160.1	155.2	145.9	140.0	142.2
55.5°	146.9	153.8	161.6	168.4	165.2	163.4	156.5	151.8	142.7	137.0	139.1
56°	143.7	150.4	158.0	164.8	161.5	159.8	153.0	148.6	139.6	133.8	136.0
56.5°	140.4	147.1	154.4	161.1	157.7	156.1	149.5	145.3	136.4	130.6	132.9
57°	137.3	143.8	150.9	157.4	153.9	152.5	146.0	142.0	133.3	127.7	129.8
57.5°	134.2	140.5	147.4	153.7	150.3	148.8	142.5	138.7	130.2	124.7	126.8
58°	131.0	137.2	143.8	150.1	146.7	145.2	139.0	135.4	127.1	121.6	123.7
58.5°	128.0	133.9	140.3	146.4	143.0	141.5	135.5	132.2	124.1	118.7	120.7
59°	124.9	130.6	136.8	142.8	139.4	137.9	132.1	129.0	121.1	115.7	117.7
59.5°	121.9	127.5	133.4	139.1	135.7	134.4	128.7	125.8	118.1	112.8	114.9
60°	118.9	124.2	130.0	135.6	132.2	130.9	125.4	122.6	115.1	109.9	111.9
60.5°	115.9	121.0	126.6	132.0	128.5	127.3	122.0	119.4	112.2	107.1	109.0
61°	112.8	117.8	123.2	128.5	125.0	123.9	118.7	116.3	109.3	104.2	106.2
61.5°	109.8	114.7	119.9	125.0	121.5	120.4	115.4	113.2	106.4	101.4	103.3
62°	106.9	111.6	116.5	121.5	118.0	117.0	112.0	110.1	103.5	98.6	100.5
62.5°	104.1	108.5	113.2	118.0	114.6	113.6	108.9	107.1	100.7	95.9	97.8
63°	101.2	105.4	109.9	114.6	111.2	110.3	105.7	104.0	97.9	93.2	95.1
63.5°	98.3	102.4	106.7	111.2	107.9	106.9	102.5	101.0	95.2	90.8	92.4
64°	95.5	99.3	103.5	107.9	104.5	103.7	99.3	98.0	92.5	88.3	89.7
64.5°	92.6	96.3	100.3	104.5	101.2	100.4	96.2	95.1	90.0	85.8	87.0
65°	89.8	93.4	97.2	101.2	98.0	97.2	93.1	92.1	87.5	83.3	84.5
65.5°	87.1	90.7	94.2	97.9	94.7	94.0	90.3	89.2	85.0	80.7	81.9
66°	84.4	88.0	91.1	94.7	91.7	90.8	87.5	86.4	82.3	78.2	79.4



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	76.4	79.7	82.1	85.2	82.7	81.6	78.8	77.8	74.5	70.7	71.9
68°	73.8	76.9	79.2	82.2	79.7	78.6	76.0	75.1	72.0	68.3	69.5
68.5°	71.2	74.1	76.3	79.0	76.7	75.6	73.1	72.3	69.5	65.9	67.0
69°	68.6	71.4	73.5	76.1	73.7	72.7	70.2	69.5	66.9	63.6	64.7
69.5°	66.1	68.7	70.7	73.2	70.8	69.9	67.5	66.9	64.5	61.2	62.4
70°	63.5	66.0	67.9	70.2	68.0	67.0	64.8	64.2	62.0	58.9	60.1
70.5°	61.0	63.4	65.1	67.3	65.1	64.2	62.1	61.6	59.6	56.6	57.7
71°	58.6	60.8	62.4	64.4	62.2	61.4	59.4	58.9	57.1	54.4	55.5
71.5°	56.2	58.2	59.7	61.6	59.4	58.7	56.8	56.4	54.7	52.1	53.3
72°	53.7	55.7	57.1	58.8	56.7	56.0	54.2	53.8	52.4	49.9	51.1
72.5°	51.4	53.1	54.5	56.0	54.0	53.3	51.6	51.3	50.0	47.7	48.9
73°	49.0	50.7	51.9	53.3	51.3	50.7	49.1	48.8	47.7	45.5	46.8
73.5°	46.7	48.3	49.4	50.6	48.7	48.2	46.6	46.4	45.5	43.4	44.7
74°	44.4	45.8	46.8	48.0	46.1	45.6	44.2	44.0	43.2	41.2	42.6
74.5°	42.1	43.4	44.4	45.4	43.6	43.1	41.8	41.6	40.9	39.1	40.6
75°	39.9	41.1	42.0	42.8	41.1	40.6	39.4	39.3	38.7	37.0	38.6
75.5°	37.7	38.9	39.6	40.2	38.6	38.2	37.1	36.9	36.5	35.0	36.6
76°	35.5	36.6	37.3	37.8	36.2	35.8	34.8	34.6	34.4	32.9	34.6
76.5°	33.4	34.4	35.0	35.4	33.8	33.6	32.5	32.5	32.2	30.9	32.7
77°	31.3	32.2	32.7	33.0	31.5	31.3	30.3	30.3	30.2	28.9	30.8
77.5°	29.2	30.0	30.5	30.6	29.2	29.0	28.2	28.1	28.1	27.0	28.9
78°	27.3	28.0	28.3	28.4	27.0	26.8	26.1	26.0	26.1	25.1	27.1
78.5°	25.3	25.9	26.2	26.2	24.9	24.7	24.0	24.0	24.1	23.2	25.2
79°	23.4	23.9	24.1	24.0	22.7	22.6	22.0	22.0	22.1	21.4	23.4
79.5°	21.5	22.0	22.2	21.9	20.7	20.6	20.1	20.1	20.2	19.7	21.7
80°	19.7	20.1	20.2	19.9	18.7	18.7	18.2	18.3	18.3	18.0	19.9
80.5°	17.9	18.3	18.3	17.9	16.8	16.8	16.4	16.5	16.5	16.3	18.2
81°	16.3	16.5	16.3	16.1	15.1	15.1	14.7	14.8	14.8	14.7	16.5
81.5°	14.7	14.8	14.5	14.3	13.3	13.4	13.0	13.2	13.2	13.2	14.9
82°	13.1	13.3	12.9	12.6	11.7	11.8	11.2	11.7	11.7	11.8	13.4
82.5°	11.7	11.8	11.3	11.0	10.2	10.3	9.4	10.3	10.4	10.5	11.9
83°	10.3	10.4	9.9	9.6	8.9	8.9	7.9	8.9	9.1	9.2	10.6
83.5°	9.0	9.1	8.6	8.3	7.7	7.6	6.6	7.7	8.0	8.1	9.4
84°	7.6	7.8	7.5	7.1	6.6	6.5	5.6	6.5	6.9	7.1	8.2
84.5°	6.4	6.7	6.4	6.1	5.6	5.4	4.8	5.5	6.0	6.2	7.3
85°	5.4	5.7	5.5	5.2	4.8	4.6	4.1	4.7	5.3	5.4	6.4
85.5°	4.7	4.9	4.7	4.5	4.1	3.8	3.2	3.9	4.5	4.6	5.5
86°	3.9	4.1	4.0	3.8	3.5	3.1	2.4	3.2	3.8	3.9	4.7
86.5°	3.1	3.4	3.4	3.2	2.9	2.4	1.5	2.5	3.2	3.3	4.1
87°	2.2	2.7	2.8	2.5	2.2	1.8	1.0	1.8	2.5	2.6	3.3
87.5°	1.9	2.0	2.2	1.8	1.5	1.3	0.7	1.0	1.9	2.3	2.7
88°	1.5	1.5	1.6	1.2	0.9	0.7	0.5	0.6	1.5	2.1	2.5
88.5°	0.9	1.1	1.0	0.6	0.3	0.3	0.3	0.4	1.1	1.7	2.1



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	393.4	393.4
0.5°	393.2	393.2
1°	393.0	393.1
1.5°	392.7	392.9
2°	392.3	392.6
2.5°	391.9	392.3
3°	391.4	391.9
3.5°	390.9	391.4
4°	390.3	391.1
4.5°	389.8	390.5
5°	389.2	390.0
5.5°	388.5	389.4
6°	387.8	388.8
6.5°	387.0	388.1
7°	386.1	387.4
7.5°	385.3	386.6
8°	384.4	385.9
8.5°	383.4	385.0
9°	382.5	384.2
9.5°	381.5	383.2
10°	380.4	382.3
10.5°	379.3	381.3
11°	378.1	380.2
11.5°	376.8	379.0
12°	375.6	377.9
12.5°	374.3	376.6
13°	372.9	375.4
13.5°	371.5	374.0
14°	370.1	372.8
14.5°	368.6	371.4
15°	367.1	370.0
15.5°	365.4	368.5
16°	363.9	367.0
16.5°	362.2	365.3
17°	360.5	363.7
17.5°	358.7	362.0
18°	357.0	360.4
18.5°	355.1	358.6
19°	353.3	356.9
19.5°	351.3	355.0
20°	349.4	353.2
20.5°	347.5	351.3
21°	345.5	349.4



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	339.1	343.3
23°	336.9	341.3
23.5°	334.6	339.1
24°	332.5	337.0
24.5°	330.1	334.8
25°	327.8	332.6
25.5°	325.5	330.1
26°	323.1	327.8
26.5°	320.6	325.4
27°	318.2	323.1
27.5°	315.6	320.6
28°	313.0	318.1
28.5°	310.4	315.7
29°	307.8	313.1
29.5°	305.1	310.5
30°	302.5	307.9
30.5°	299.7	305.3
31°	297.0	302.6
31.5°	294.2	299.8
32°	291.4	297.1
32.5°	288.5	294.3
33°	285.7	291.5
33.5°	282.7	288.7
34°	279.8	285.8
34.5°	276.8	282.9
35°	273.9	279.9
35.5°	270.8	276.9
36°	267.7	274.0
36.5°	264.7	271.0
37°	261.7	267.9
37.5°	258.6	264.7
38°	255.4	261.7
38.5°	252.2	258.6
39°	249.1	255.5
39.5°	245.8	252.3
40°	242.7	249.2
40.5°	239.4	246.0
41°	236.2	242.7
41.5°	232.9	239.4
42°	229.6	236.2
42.5°	226.3	232.9
43°	223.1	229.7
43.5°	219.7	226.3



TEST NUMBER: P710090
CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	209.8	216.5
45.5°	206.4	213.1
46°	203.1	209.8
46.5°	199.8	206.5
47°	196.5	203.1
47.5°	193.1	199.7
48°	189.7	196.3
48.5°	186.4	193.1
49°	183.1	189.7
49.5°	179.7	186.3
50°	176.5	183.0
50.5°	173.1	179.6
51°	169.8	176.3
51.5°	166.4	172.9
52°	163.2	169.6
52.5°	159.9	166.5
53°	156.6	163.3
53.5°	153.4	159.9
54°	150.2	156.6
54.5°	147.0	153.3
55°	143.8	150.1
55.5°	140.5	146.9
56°	137.4	143.7
56.5°	134.3	140.4
57°	131.2	137.3
57.5°	128.1	134.2
58°	125.1	131.0
58.5°	121.9	128.0
59°	119.0	124.9
59.5°	116.0	121.9
60°	113.1	118.9
60.5°	110.2	115.9
61°	107.3	112.8
61.5°	104.4	109.8
62°	101.6	106.9
62.5°	98.8	104.1
63°	96.0	101.2
63.5°	93.4	98.3
64°	90.9	95.5
64.5°	88.4	92.6
65°	85.9	89.8
65.5°	83.4	87.1
66°	80.8	84.4



TEST NUMBER: P710090

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	73.2	76.4
68°	70.7	73.8
68.5°	68.2	71.2
69°	65.9	68.6
69.5°	63.5	66.1
70°	61.1	63.5
70.5°	58.7	61.0
71°	56.4	58.6
71.5°	54.1	56.2
72°	51.8	53.7
72.5°	49.6	51.4
73°	47.3	49.0
73.5°	45.1	46.7
74°	42.9	44.4
74.5°	40.8	42.1
75°	38.7	39.9
75.5°	36.6	37.7
76°	34.5	35.5
76.5°	32.5	33.4
77°	30.5	31.3
77.5°	28.5	29.2
78°	26.6	27.3
78.5°	24.7	25.3
79°	22.8	23.4
79.5°	21.0	21.5
80°	19.3	19.7
80.5°	17.6	17.9
81°	16.0	16.3
81.5°	14.4	14.7
82°	12.9	13.1
82.5°	11.5	11.7
83°	10.2	10.3
83.5°	9.0	9.0
84°	7.8	7.6
84.5°	6.8	6.4
85°	5.9	5.4
85.5°	5.1	4.7
86°	4.3	3.9
86.5°	3.6	3.1
87°	3.0	2.2
87.5°	2.1	1.9
88°	1.5	1.5
88.5°	1.3	0.9



TEST NUMBER: P710090
CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.4	0.3

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°	347.3	352.2	358.3	362.4	363.0	362.1	357.7	352.0	345.8	341.2	342.2
22°	345.3	350.3	356.5	360.7	361.3	360.4	355.9	350.1	343.7	339.1	340.0



44°	223.1	231.2	241.1	248.0	248.3	245.3	236.8	229.1	219.2	212.5	214.5
44.5°	219.7	227.8	237.9	244.9	245.0	242.0	233.4	225.8	215.8	209.1	211.0



66.5°	81.7	85.2	88.1	91.6	88.7	87.8	84.6	83.5	79.7	75.7	76.9
67°	79.1	82.4	85.1	88.3	85.7	84.6	81.7	80.7	77.2	73.2	74.3



89°	0.6	0.8	0.5	0.2	0.2	0.2	0.2	0.3	0.7	1.2	1.6
89.5°	0.4	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.6	0.9

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

Scaled Data Report





21.5°	343.4	347.3
22°	341.2	345.3

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

Scaled Data Report



44°	216.5	223.1
44.5°	213.1	219.7



66.5°	78.3	81.7
67°	75.7	79.1

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

Scaled Data Report



89°	1.0	0.6
89.5°	0.7	0.4

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

Scaled Data Report



(END OF REPORT)