

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: P710091

Luminaire Tested: RA56LS9FSD2W1EWH-900lm-5000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710091
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-5000K
Description: 5/6IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 5000K CCT
Ballast/Driver: -

Summary

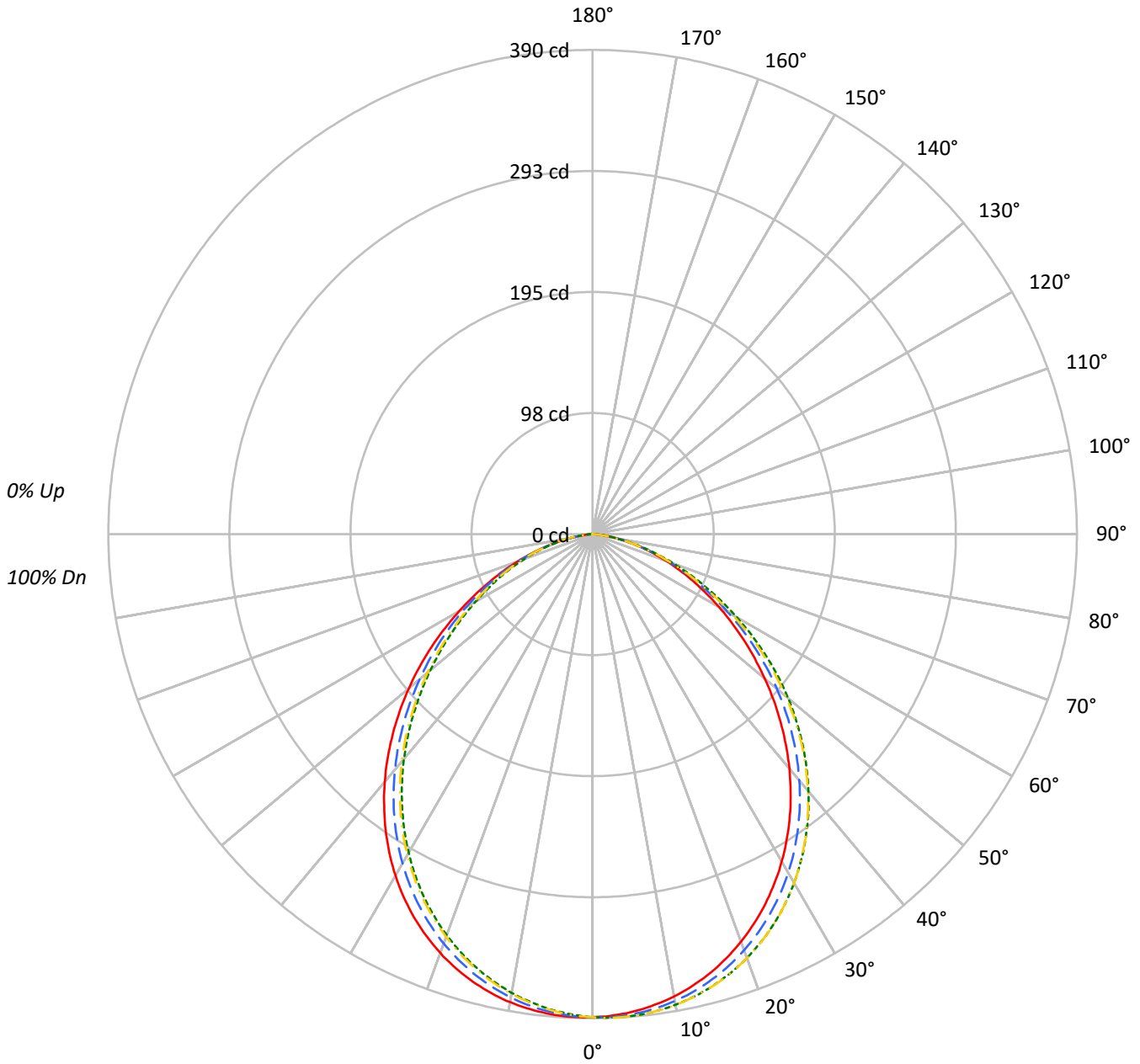
Lumens per Lamp: 930.22 (1 lamp)
Luminaire Lumens: 920.0 lumens
Efficiency: 98.9%
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.28
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 8.8
Input Voltage (V): NR
Input Current (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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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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101				99	
1	109	104	101	97	106	102	99	96	98	95	93	94	92	90	91	89	87				85	
2	100	92	86	81	97	90	85	80	87	82	78	84	80	76	81	77	75				72	
3	91	82	74	68	89	80	73	68	77	71	66	75	69	65	72	68	64				62	
4	84	73	65	58	82	72	64	58	69	63	57	67	61	57	65	60	56				54	
5	78	65	57	51	76	64	56	51	62	55	50	60	54	50	59	53	49				47	
6	72	59	51	45	70	58	50	45	57	49	44	55	49	44	53	48	43				41	
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39				37	
8	62	49	41	36	61	49	41	36	47	40	35	46	40	35	45	39	35				33	
9	58	45	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32				30	
10	55	42	34	29	53	42	34	29	41	34	29	40	33	29	39	33	29				27	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	21331	21331	21331	21331
5°	21230	21423	21362	21153
10°	21053	21431	21309	20886
15°	20772	21357	21175	20522
20°	20383	21189	20943	20051
25°	19900	20923	20596	19471
30°	19281	20535	20104	18756
35°	18531	20017	19455	17915
40°	17640	19351	18635	16917
45°	16599	18521	17637	15777
50°	15437	17526	16469	14541
55°	14193	16267	15130	13237
60°	12894	14703	13595	11929
65°	11532	12985	11947	10689
70°	10082	11140	10274	9345
75°	8345	8960	8261	7752
80°	6156	6219	5683	5619
85°	3397	3271	2516	3397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 120°
 Vertical Angle: 45°
 Luminance: 18537 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	36.7	4.0	3.9
10°-20°	104.1	11.3	11.2
20°-30°	153.9	16.7	16.5
30°-40°	177.2	19.3	19.1
40°-50°	170.5	18.5	18.3
50°-60°	137.7	15.0	14.8
60°-70°	90.4	9.8	9.7
70°-80°	42.2	4.6	4.5
80°-90°	7.2	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°	294.7	32.0	31.7
0°-40°	471.9	51.3	50.7
0°-60°	780.1	84.8	83.9
0°-90°	920.0	100.0	98.9
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°	920.0	100.0	98.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	389	389	389	389	389	
5°	386	389	388	384	386	37
15°	366	376	373	362	366	103
25°	329	346	340	322	329	151
35°	277	299	291	268	277	173
45°	214	239	228	204	214	165
55°	148	170	158	138	148	133
65°	89	100	92	82	89	88
75°	39	42	39	37	39	42
85°	5	5	4	5	5	8
90°	0	0	0	0	0	



TEST NUMBER: P710091

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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1	389.1
0.5°	389.0	389.3	389.6	389.2	389.6	389.5	389.3	389.2	389.3	388.8	389.2
1°	388.8	389.2	389.6	389.4	389.8	389.7	389.4	389.2	389.0	388.5	388.8
1.5°	388.7	389.0	389.7	389.6	389.9	389.8	389.3	389.0	388.9	388.1	388.5
2°	388.4	388.9	389.7	389.8	390.0	389.8	389.3	389.0	388.5	387.7	388.1
2.5°	388.0	388.7	389.6	389.7	390.1	389.8	389.2	388.7	388.2	387.2	387.7
3°	387.7	388.5	389.5	389.8	390.1	389.8	389.1	388.5	387.8	386.8	387.1
3.5°	387.2	388.2	389.4	389.7	390.0	389.7	389.0	388.1	387.4	386.2	386.7
4°	386.9	387.9	389.2	389.6	389.9	389.5	388.7	387.9	386.9	385.7	386.1
4.5°	386.3	387.5	389.0	389.4	389.8	389.4	388.5	387.4	386.4	385.0	385.4
5°	385.8	387.1	388.6	389.3	389.6	389.2	388.2	387.0	385.8	384.4	384.8
5.5°	385.2	386.6	388.4	389.1	389.4	389.0	387.9	386.5	385.3	383.6	384.1
6°	384.6	386.1	387.9	388.8	389.1	388.7	387.4	386.1	384.6	382.9	383.4
6.5°	384.0	385.5	387.5	388.4	388.7	388.3	387.0	385.5	384.0	382.1	382.6
7°	383.3	384.9	387.0	388.0	388.4	387.9	386.5	384.9	383.2	381.2	381.8
7.5°	382.4	384.3	386.6	387.7	388.0	387.5	386.0	384.3	382.4	380.3	380.9
8°	381.7	383.6	386.0	387.2	387.5	387.0	385.5	383.6	381.5	379.4	379.9
8.5°	380.9	382.9	385.4	386.7	387.1	386.5	384.9	382.8	380.6	378.4	379.0
9°	380.1	382.1	384.7	386.2	386.5	386.0	384.2	382.1	379.7	377.4	378.0
9.5°	379.1	381.4	384.0	385.6	386.1	385.4	383.5	381.3	378.7	376.3	377.0
10°	378.2	380.5	383.3	385.0	385.4	384.7	382.8	380.3	377.6	375.2	375.8
10.5°	377.2	379.5	382.6	384.3	384.7	384.1	382.2	379.5	376.6	374.0	374.7
11°	376.1	378.5	381.7	383.6	384.0	383.4	381.3	378.5	375.4	372.8	373.5
11.5°	374.9	377.6	381.0	382.8	383.3	382.6	380.4	377.4	374.4	371.6	372.3
12°	373.9	376.5	380.0	382.0	382.4	381.8	379.6	376.4	373.1	370.3	371.0
12.5°	372.6	375.5	379.1	381.2	381.7	381.0	378.6	375.3	372.0	368.9	369.7
13°	371.3	374.3	378.0	380.3	380.8	380.1	377.5	374.2	370.7	367.6	368.2
13.5°	370.0	373.1	377.0	379.3	379.8	379.1	376.6	373.0	369.3	366.1	366.9
14°	368.8	371.9	375.9	378.4	378.9	378.2	375.4	371.8	367.8	364.7	365.4
14.5°	367.4	370.6	374.8	377.4	377.9	377.1	374.4	370.5	366.5	363.1	364.0
15°	366.0	369.3	373.6	376.3	376.9	376.1	373.1	369.3	365.0	361.6	362.4
15.5°	364.5	368.0	372.4	375.3	375.8	375.0	371.9	367.9	363.5	360.0	360.8
16°	363.0	366.6	371.1	374.1	374.6	373.8	370.6	366.5	362.0	358.4	359.2
16.5°	361.4	365.2	369.9	372.8	373.4	372.7	369.4	365.0	360.4	356.6	357.6
17°	359.8	363.6	368.5	371.6	372.1	371.4	368.0	363.5	358.7	354.9	355.8
17.5°	358.2	362.0	367.2	370.4	370.9	370.1	366.6	362.0	357.0	353.1	354.1
18°	356.6	360.6	365.7	369.0	369.7	368.7	365.1	360.5	355.3	351.4	352.2
18.5°	354.8	359.0	364.2	367.7	368.2	367.5	363.7	358.8	353.5	349.5	350.4
19°	353.1	357.3	362.7	366.2	366.9	365.9	362.2	357.2	351.7	347.6	348.5
19.5°	351.2	355.5	361.1	364.8	365.4	364.5	360.7	355.5	349.9	345.7	346.6
20°	349.4	353.9	359.4	363.2	363.9	362.9	359.0	353.7	348.1	343.7	344.6
20.5°	347.5	352.1	357.9	361.8	362.3	361.5	357.3	352.0	346.1	341.7	342.6
21°	345.6	350.2	356.1	360.1	360.7	359.8	355.5	350.1	344.1	339.7	340.7



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	339.6	344.6	350.9	355.2	355.7	354.9	350.2	344.3	337.9	333.2	334.3
23°	337.7	342.6	349.0	353.3	354.0	353.0	348.4	342.4	335.9	331.1	332.1
23.5°	335.4	340.5	347.1	351.6	352.1	351.2	346.5	340.2	333.7	328.8	329.9
24°	333.4	338.5	345.2	349.7	350.4	349.3	344.4	338.3	331.4	326.6	327.6
24.5°	331.2	336.5	343.2	347.9	348.5	347.6	342.5	336.1	329.2	324.3	325.4
25°	329.0	334.4	341.2	345.9	346.6	345.5	340.5	334.0	327.0	321.9	322.9
25.5°	326.6	332.2	339.1	344.1	344.6	343.6	338.4	331.8	324.7	319.5	320.6
26°	324.3	330.0	337.1	342.0	342.7	341.5	336.2	329.5	322.2	317.1	318.2
26.5°	321.9	327.7	335.0	340.0	340.6	339.6	334.0	327.2	319.9	314.5	315.8
27°	319.6	325.5	332.8	337.8	338.5	337.3	331.8	325.0	317.4	312.1	313.3
27.5°	317.1	323.1	330.6	335.7	336.4	335.2	329.5	322.6	315.0	309.5	310.8
28°	314.7	320.8	328.3	333.5	334.3	333.0	327.2	320.2	312.5	307.0	308.2
28.5°	312.3	318.4	326.0	331.3	332.1	330.8	325.0	317.8	309.9	304.3	305.6
29°	309.8	316.0	323.7	329.0	329.9	328.4	322.6	315.4	307.3	301.7	303.0
29.5°	307.1	313.5	321.3	326.8	327.6	326.2	320.2	312.8	304.8	299.0	300.3
30°	304.6	311.0	318.9	324.4	325.3	323.8	317.6	310.3	302.1	296.3	297.6
30.5°	302.0	308.5	316.6	322.1	322.7	321.4	315.1	307.6	299.4	293.6	295.0
31°	299.3	305.9	314.0	319.7	320.4	319.0	312.5	305.0	296.7	290.8	292.2
31.5°	296.6	303.4	311.5	317.3	317.9	316.6	310.0	302.4	293.9	288.0	289.4
32°	293.9	300.6	308.9	314.7	315.5	313.9	307.3	299.7	291.2	285.2	286.5
32.5°	291.1	298.0	306.4	312.2	312.9	311.3	304.6	297.0	288.3	282.3	283.8
33°	288.4	295.3	303.7	309.7	310.5	308.7	301.9	294.2	285.5	279.4	280.9
33.5°	285.6	292.5	301.1	307.1	307.8	306.1	299.1	291.5	282.6	276.4	278.0
34°	282.7	289.7	298.4	304.3	305.1	303.3	296.3	288.6	279.7	273.5	275.1
34.5°	279.9	287.1	295.7	301.7	302.4	300.5	293.5	285.7	276.8	270.5	272.2
35°	276.9	284.1	292.9	299.1	299.9	297.9	290.7	282.9	273.8	267.7	269.1
35.5°	274.0	281.3	290.1	296.3	297.0	295.1	287.8	280.0	270.9	264.5	266.0
36°	271.1	278.3	287.2	293.5	294.3	292.2	284.9	277.1	267.7	261.4	263.0
36.5°	268.1	275.5	284.5	290.8	291.4	289.4	281.9	274.0	264.7	258.4	260.0
37°	265.0	272.5	281.5	287.9	288.7	286.4	278.9	271.0	261.7	255.3	256.9
37.5°	261.8	269.5	278.7	285.2	285.7	283.5	275.8	268.0	258.6	252.2	253.8
38°	258.9	266.4	275.7	282.4	282.8	280.5	272.9	264.9	255.5	249.0	250.7
38.5°	255.8	263.5	272.7	279.4	279.9	277.5	269.8	261.8	252.3	245.8	247.6
39°	252.7	260.4	269.7	276.4	277.0	274.5	266.7	258.7	249.2	242.7	244.4
39.5°	249.5	257.4	266.8	273.4	273.9	271.4	263.6	255.6	246.1	239.5	241.2
40°	246.5	254.2	263.7	270.4	271.0	268.3	260.4	252.5	242.8	236.4	238.1
40.5°	243.3	251.1	260.6	267.4	267.9	265.2	257.2	249.3	239.6	233.1	234.9
41°	240.1	247.9	257.5	264.3	264.8	262.1	254.0	246.2	236.4	229.8	231.6
41.5°	236.9	244.8	254.5	261.2	261.6	258.9	250.9	242.8	233.1	226.6	228.4
42°	233.6	241.6	251.2	258.1	258.6	255.7	247.5	239.7	230.0	223.3	225.1
42.5°	230.4	238.4	248.1	255.0	255.3	252.6	244.2	236.4	226.7	220.0	221.9
43°	227.2	235.1	244.9	251.8	252.2	249.2	240.9	233.2	223.4	216.8	218.6
43.5°	223.9	231.9	241.8	248.7	248.9	246.0	237.6	229.9	220.1	213.5	215.4



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CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	214.1	222.2	231.9	238.9	239.1	236.0	227.5	220.0	210.1	203.5	205.4
45.5°	210.8	218.9	228.7	235.7	235.7	232.7	224.2	216.6	206.9	200.1	202.1
46°	207.5	215.5	225.5	232.4	232.3	229.3	220.7	213.3	203.6	196.9	198.8
46.5°	204.3	212.3	222.2	229.0	228.8	225.9	217.3	210.0	200.1	193.6	195.6
47°	200.9	209.0	218.7	225.8	225.5	222.5	213.8	206.7	196.8	190.2	192.3
47.5°	197.6	205.6	215.3	222.5	221.9	219.2	210.5	203.4	193.5	187.0	189.0
48°	194.2	202.2	212.0	219.1	218.4	215.7	207.1	200.0	190.2	183.7	185.7
48.5°	191.0	198.9	208.7	215.7	214.8	212.2	203.5	196.6	186.8	180.3	182.6
49°	187.7	195.5	205.1	212.4	211.3	208.6	200.0	193.3	183.4	176.9	179.3
49.5°	184.3	192.2	201.6	209.0	207.6	205.2	196.6	189.9	180.1	173.8	176.0
50°	181.0	188.9	198.2	205.5	203.9	201.7	193.1	186.6	176.9	170.5	172.8
50.5°	177.7	185.5	194.8	202.2	200.3	198.0	189.7	183.3	173.6	167.2	169.5
51°	174.4	182.1	191.3	198.8	196.8	194.3	186.3	180.0	170.2	164.0	166.2
51.5°	171.0	178.8	187.8	195.2	193.2	190.8	182.8	176.7	166.9	160.7	162.9
52°	167.7	175.4	184.4	191.7	189.6	187.1	179.3	173.3	163.8	157.6	159.7
52.5°	164.7	172.1	180.9	188.1	185.8	183.5	175.8	170.0	160.5	154.3	156.5
53°	161.5	168.7	177.3	184.5	182.0	179.9	172.3	166.7	157.2	151.2	153.4
53.5°	158.2	165.5	173.8	180.9	178.4	176.3	168.8	163.3	153.9	147.9	150.3
54°	154.9	162.1	170.3	177.4	174.7	172.6	165.3	160.1	150.7	144.7	147.0
54.5°	151.7	158.7	166.8	173.8	170.9	169.0	161.8	156.8	147.6	141.6	143.8
55°	148.5	155.3	163.3	170.2	167.2	165.4	158.3	153.5	144.3	138.5	140.7
55.5°	145.3	152.1	159.8	166.6	163.5	161.6	154.8	150.2	141.2	135.5	137.6
56°	142.1	148.8	156.3	163.0	159.7	158.1	151.4	147.0	138.1	132.3	134.5
56.5°	138.9	145.5	152.7	159.3	156.0	154.4	147.9	143.7	134.9	129.2	131.5
57°	135.8	142.3	149.3	155.7	152.3	150.9	144.4	140.4	131.8	126.3	128.5
57.5°	132.7	139.0	145.8	152.1	148.7	147.2	140.9	137.2	128.8	123.4	125.4
58°	129.6	135.7	142.3	148.5	145.1	143.6	137.6	134.0	125.7	120.3	122.4
58.5°	126.7	132.4	138.8	144.8	141.5	140.0	134.0	130.8	122.7	117.4	119.4
59°	123.6	129.2	135.3	141.2	137.9	136.5	130.7	127.6	119.8	114.5	116.5
59.5°	120.6	126.1	132.0	137.6	134.3	132.9	127.3	124.4	116.9	111.6	113.6
60°	117.6	122.8	128.6	134.1	130.8	129.5	124.0	121.3	113.9	108.8	110.7
60.5°	114.6	119.7	125.2	130.6	127.1	125.9	120.7	118.1	111.0	105.9	107.9
61°	111.6	116.5	121.9	127.1	123.7	122.5	117.4	115.1	108.1	103.1	105.0
61.5°	108.7	113.4	118.6	123.6	120.2	119.1	114.1	112.0	105.3	100.3	102.2
62°	105.8	110.4	115.2	120.2	116.7	115.8	110.8	108.9	102.4	97.5	99.4
62.5°	102.9	107.3	112.0	116.8	113.3	112.4	107.7	105.9	99.7	94.9	96.8
63°	100.1	104.3	108.8	113.3	110.0	109.1	104.5	102.9	96.9	92.2	94.1
63.5°	97.2	101.3	105.6	110.0	106.7	105.8	101.4	100.0	94.2	89.8	91.4
64°	94.4	98.3	102.4	106.7	103.3	102.6	98.2	97.0	91.5	87.3	88.8
64.5°	91.7	95.3	99.3	103.4	100.2	99.3	95.2	94.0	89.1	84.9	86.1
65°	88.9	92.4	96.2	100.1	96.9	96.1	92.1	91.1	86.5	82.4	83.6
65.5°	86.2	89.7	93.2	96.9	93.6	93.0	89.3	88.2	84.1	79.8	81.0
66°	83.5	87.0	90.2	93.7	90.7	89.8	86.5	85.4	81.4	77.4	78.5



TEST NUMBER: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	75.6	78.8	81.2	84.3	81.9	80.8	77.9	77.0	73.7	70.0	71.1
68°	73.0	76.0	78.4	81.3	78.9	77.8	75.1	74.3	71.2	67.5	68.7
68.5°	70.4	73.3	75.5	78.2	75.9	74.8	72.3	71.5	68.7	65.2	66.3
69°	67.9	70.6	72.7	75.3	72.9	71.9	69.5	68.8	66.2	62.9	64.0
69.5°	65.4	68.0	69.9	72.4	70.1	69.1	66.8	66.1	63.8	60.6	61.7
70°	62.9	65.3	67.2	69.5	67.3	66.3	64.1	63.5	61.4	58.3	59.4
70.5°	60.4	62.7	64.4	66.6	64.4	63.5	61.5	60.9	59.0	56.0	57.1
71°	58.0	60.1	61.7	63.7	61.6	60.8	58.8	58.3	56.5	53.8	54.9
71.5°	55.6	57.6	59.1	60.9	58.8	58.0	56.2	55.8	54.1	51.6	52.7
72°	53.2	55.1	56.4	58.1	56.1	55.4	53.6	53.2	51.8	49.4	50.6
72.5°	50.8	52.5	53.9	55.4	53.4	52.8	51.1	50.8	49.5	47.1	48.4
73°	48.5	50.2	51.3	52.7	50.7	50.2	48.6	48.3	47.2	45.0	46.3
73.5°	46.2	47.7	48.9	50.1	48.2	47.7	46.1	45.9	45.0	42.9	44.2
74°	43.9	45.3	46.3	47.5	45.6	45.1	43.7	43.5	42.7	40.8	42.2
74.5°	41.7	43.0	43.9	44.9	43.1	42.6	41.3	41.1	40.5	38.7	40.2
75°	39.4	40.7	41.6	42.3	40.6	40.2	39.0	38.8	38.3	36.6	38.2
75.5°	37.3	38.4	39.2	39.8	38.2	37.8	36.7	36.5	36.1	34.6	36.2
76°	35.1	36.2	36.9	37.4	35.8	35.4	34.4	34.3	34.0	32.6	34.2
76.5°	33.0	34.0	34.6	35.0	33.4	33.2	32.2	32.1	31.9	30.6	32.3
77°	30.9	31.8	32.3	32.7	31.1	30.9	30.0	30.0	29.8	28.6	30.4
77.5°	28.9	29.7	30.1	30.3	28.9	28.7	27.9	27.8	27.8	26.7	28.6
78°	27.0	27.7	28.0	28.1	26.7	26.5	25.8	25.8	25.8	24.8	26.8
78.5°	25.0	25.6	25.9	25.9	24.6	24.4	23.8	23.7	23.9	23.0	25.0
79°	23.1	23.6	23.9	23.7	22.5	22.4	21.8	21.8	21.9	21.2	23.2
79.5°	21.3	21.7	21.9	21.6	20.5	20.4	19.9	19.9	20.0	19.4	21.5
80°	19.5	19.9	20.0	19.7	18.5	18.5	18.0	18.1	18.1	17.8	19.7
80.5°	17.7	18.1	18.1	17.7	16.7	16.7	16.3	16.3	16.3	16.1	18.0
81°	16.1	16.3	16.2	15.9	14.9	14.9	14.6	14.6	14.6	14.6	16.3
81.5°	14.5	14.7	14.4	14.1	13.2	13.2	12.9	13.1	13.1	13.1	14.8
82°	13.0	13.1	12.7	12.5	11.6	11.7	11.1	11.5	11.6	11.7	13.3
82.5°	11.6	11.7	11.2	10.9	10.1	10.2	9.3	10.2	10.3	10.3	11.8
83°	10.2	10.2	9.8	9.5	8.8	8.8	7.8	8.8	9.0	9.1	10.5
83.5°	8.9	9.0	8.5	8.2	7.6	7.5	6.5	7.6	7.9	8.0	9.3
84°	7.5	7.8	7.4	7.1	6.5	6.4	5.5	6.5	6.9	7.0	8.1
84.5°	6.3	6.7	6.4	6.0	5.6	5.4	4.7	5.4	6.0	6.2	7.2
85°	5.4	5.7	5.4	5.2	4.8	4.5	4.0	4.6	5.2	5.4	6.3
85.5°	4.6	4.8	4.6	4.4	4.1	3.7	3.2	3.9	4.5	4.6	5.5
86°	3.8	4.1	3.9	3.7	3.5	3.0	2.4	3.2	3.7	3.9	4.7
86.5°	3.0	3.4	3.4	3.2	2.9	2.4	1.5	2.4	3.1	3.3	4.0
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°	1.8	2.0	2.1	1.8	1.5	1.3	0.7	1.0	1.8	2.2	2.7
88°	1.4	1.5	1.6	1.2	0.9	0.7	0.5	0.6	1.5	2.0	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: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

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: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	389.1	389.1
0.5°	389.0	389.0
1°	388.8	388.8
1.5°	388.5	388.7
2°	388.1	388.4
2.5°	387.7	388.0
3°	387.2	387.7
3.5°	386.7	387.2
4°	386.1	386.9
4.5°	385.6	386.3
5°	385.0	385.8
5.5°	384.3	385.2
6°	383.6	384.6
6.5°	382.9	384.0
7°	382.0	383.3
7.5°	381.1	382.4
8°	380.3	381.7
8.5°	379.3	380.9
9°	378.4	380.1
9.5°	377.4	379.1
10°	376.3	378.2
10.5°	375.2	377.2
11°	374.0	376.1
11.5°	372.7	374.9
12°	371.6	373.9
12.5°	370.2	372.6
13°	368.9	371.3
13.5°	367.5	370.0
14°	366.1	368.8
14.5°	364.6	367.4
15°	363.1	366.0
15.5°	361.5	364.5
16°	360.0	363.0
16.5°	358.3	361.4
17°	356.6	359.8
17.5°	354.8	358.2
18°	353.1	356.6
18.5°	351.3	354.8
19°	349.5	353.1
19.5°	347.5	351.2
20°	345.7	349.4
20.5°	343.7	347.5
21°	341.8	345.6



TEST NUMBER: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	335.5	339.6
23°	333.3	337.7
23.5°	331.0	335.4
24°	328.9	333.4
24.5°	326.6	331.2
25°	324.3	329.0
25.5°	322.0	326.6
26°	319.7	324.3
26.5°	317.1	321.9
27°	314.8	319.6
27.5°	312.2	317.1
28°	309.7	314.7
28.5°	307.1	312.3
29°	304.5	309.8
29.5°	301.8	307.1
30°	299.3	304.6
30.5°	296.5	302.0
31°	293.8	299.3
31.5°	291.0	296.6
32°	288.3	293.9
32.5°	285.4	291.1
33°	282.6	288.4
33.5°	279.7	285.6
34°	276.8	282.7
34.5°	273.9	279.9
35°	271.0	276.9
35.5°	267.9	274.0
36°	264.8	271.1
36.5°	261.9	268.1
37°	258.8	265.0
37.5°	255.8	261.8
38°	252.6	258.9
38.5°	249.5	255.8
39°	246.4	252.7
39.5°	243.2	249.5
40°	240.0	246.5
40.5°	236.8	243.3
41°	233.6	240.1
41.5°	230.4	236.9
42°	227.2	233.6
42.5°	223.9	230.4
43°	220.7	227.2
43.5°	217.3	223.9



TEST NUMBER: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	207.5	214.1
45.5°	204.2	210.8
46°	200.9	207.5
46.5°	197.6	204.3
47°	194.4	200.9
47.5°	191.1	197.6
48°	187.7	194.2
48.5°	184.4	191.0
49°	181.1	187.7
49.5°	177.7	184.3
50°	174.6	181.0
50.5°	171.2	177.7
51°	168.0	174.4
51.5°	164.6	171.0
52°	161.4	167.7
52.5°	158.2	164.7
53°	154.9	161.5
53.5°	151.8	158.2
54°	148.6	154.9
54.5°	145.4	151.7
55°	142.2	148.5
55.5°	139.0	145.3
56°	135.9	142.1
56.5°	132.8	138.9
57°	129.8	135.8
57.5°	126.8	132.7
58°	123.7	129.6
58.5°	120.6	126.7
59°	117.7	123.6
59.5°	114.8	120.6
60°	111.8	117.6
60.5°	109.0	114.6
61°	106.2	111.6
61.5°	103.3	108.7
62°	100.5	105.8
62.5°	97.7	102.9
63°	95.0	100.1
63.5°	92.4	97.2
64°	89.9	94.4
64.5°	87.5	91.7
65°	85.0	88.9
65.5°	82.5	86.2
66°	80.0	83.5



TEST NUMBER: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	72.4	75.6
68°	70.0	73.0
68.5°	67.5	70.4
69°	65.2	67.9
69.5°	62.8	65.4
70°	60.4	62.9
70.5°	58.1	60.4
71°	55.8	58.0
71.5°	53.5	55.6
72°	51.3	53.2
72.5°	49.0	50.8
73°	46.8	48.5
73.5°	44.7	46.2
74°	42.5	43.9
74.5°	40.4	41.7
75°	38.3	39.4
75.5°	36.2	37.3
76°	34.2	35.1
76.5°	32.1	33.0
77°	30.1	30.9
77.5°	28.2	28.9
78°	26.3	27.0
78.5°	24.4	25.0
79°	22.6	23.1
79.5°	20.8	21.3
80°	19.0	19.5
80.5°	17.4	17.7
81°	15.8	16.1
81.5°	14.2	14.5
82°	12.8	13.0
82.5°	11.4	11.6
83°	10.1	10.2
83.5°	8.9	8.9
84°	7.8	7.5
84.5°	6.8	6.3
85°	5.9	5.4
85.5°	5.1	4.6
86°	4.2	3.8
86.5°	3.5	3.0
87°	2.9	2.2
87.5°	2.1	1.8
88°	1.5	1.4
88.5°	1.3	0.9



TEST NUMBER: P710091

CATALOG NUMBER: RA56LS9FSD2W1EWH-900lm-5000K

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



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

Scaled Data Report





21.5°	343.6	348.4	354.4	358.5	359.1	358.2	353.8	348.2	342.1	337.6	338.5
22°	341.6	346.5	352.6	356.8	357.5	356.5	352.0	346.3	340.0	335.5	336.3



44°	220.7	228.7	238.5	245.4	245.7	242.6	234.3	226.6	216.8	210.2	212.2
44.5°	217.3	225.4	235.3	242.2	242.4	239.4	230.9	223.4	213.5	206.8	208.8



66.5°	80.9	84.3	87.2	90.6	87.7	86.8	83.7	82.6	78.9	74.9	76.1
67°	78.2	81.5	84.2	87.4	84.8	83.7	80.9	79.8	76.3	72.4	73.5



89°	0.6	0.8	0.5	0.2	0.2	0.2	0.2	0.3	0.7	1.2	1.5
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°	339.7	343.6
22°	337.6	341.6



44°	214.1	220.7
44.5°	210.9	217.3

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

Scaled Data Report



66.5°	77.4	80.9
67°	74.9	78.2

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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

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

Scaled Data Report



(END OF REPORT)