

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: P710065

Luminaire Tested: RA4LS9FSD2W1EWH-600lm-4000K

Issue Date: 10/6/2023

Test Information

Test Method: LM-79-2019
Report Number: P710065
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-600lm-4000K
Description: 4IN RETROFIT SELECTABLE LUMENS
Light Source: SELECTABLE LUMEN/CCT LEDs 90CRI / 4000K CCT
Ballast/Driver: -

Summary

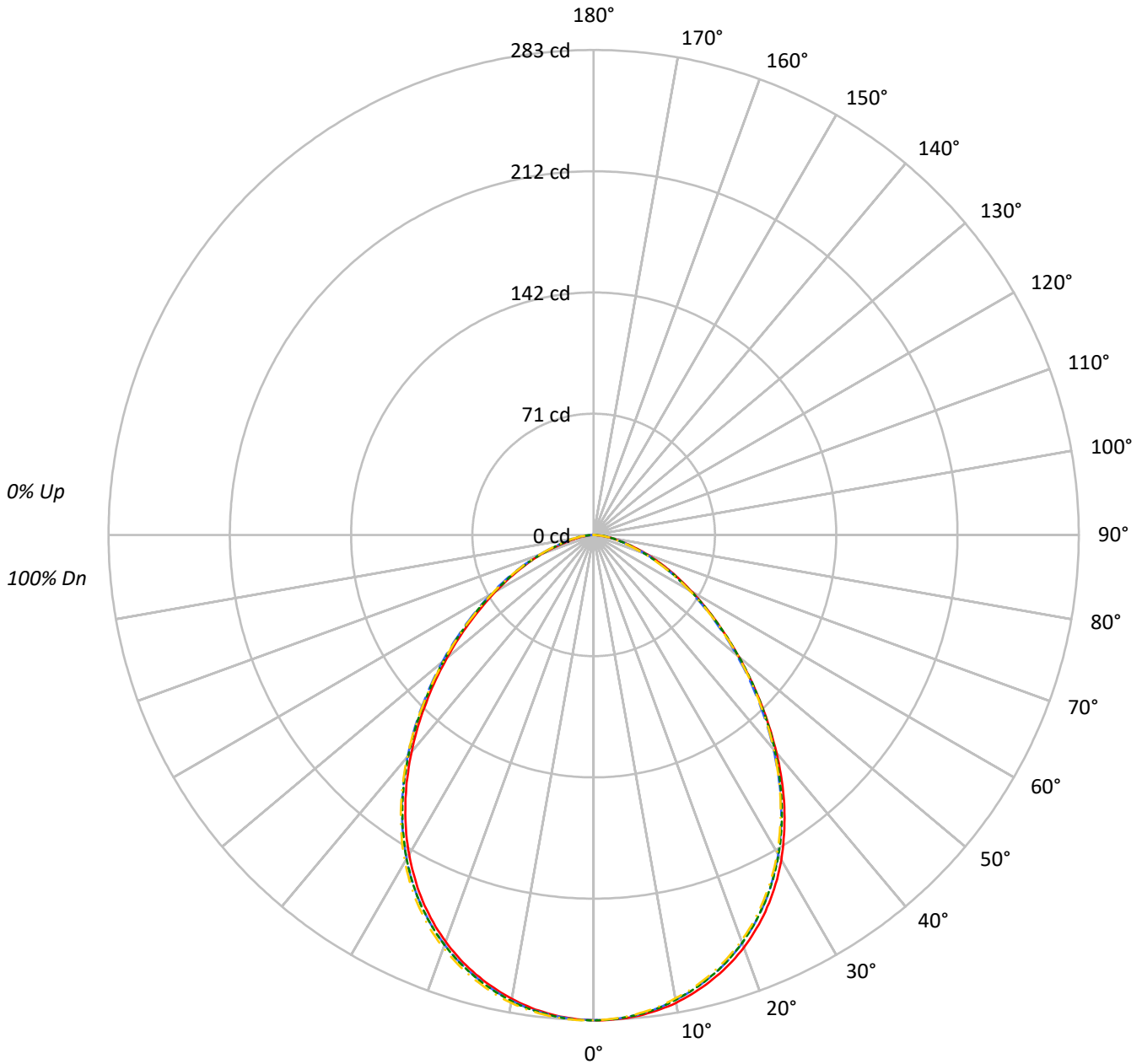
Lumens per Lamp: 920.71 (1 lamp)
Luminaire Lumens: 590.0 lumens
Efficiency: 64.1%
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.22
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 5.7
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: P710065
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

Luminous Intensity Polar Plot





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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	76	76	76	76	75	75	75	75	71	71	71	68	68	68	65	65	65	64																			
1	71	68	66	64	69	67	65	63	64	62	61	62	60	59	59	58	57	56																			
2	65	61	57	54	64	59	56	53	57	54	52	55	53	51	53	51	49	48																			
3	60	54	49	46	59	53	49	45	51	48	45	50	46	44	48	45	43	42																			
4	55	49	43	40	54	48	43	39	46	42	39	45	41	38	43	40	38	37																			
5	51	44	39	35	50	43	38	35	42	37	34	41	37	34	39	36	33	32																			
6	48	40	35	31	47	39	34	31	38	34	30	37	33	30	36	33	30	29																			
7	44	36	31	28	43	36	31	27	35	30	27	34	30	27	33	30	27	26																			
8	42	33	28	25	41	33	28	25	32	28	25	31	27	24	31	27	24	23																			
9	39	31	26	23	38	30	26	22	30	25	22	29	25	22	28	25	22	21																			
10	37	29	24	21	36	28	24	21	28	23	20	27	23	20	26	23	20	19																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	35653	35653	35653	35653
5°	35625	35537	35486	35575
10°	35424	35206	35117	35309
15°	34970	34696	34592	34787
20°	34312	33924	33830	34098
25°	33271	32826	32743	33104
30°	31810	31316	31287	31709
35°	29790	29390	29421	29897
40°	27271	27041	27156	27616
45°	24436	24383	24561	25042
50°	21635	21635	21850	22320
55°	19001	18957	19177	19725
60°	16637	16411	16612	17090
65°	14472	13966	14204	14502
70°	12290	11554	11664	11885
75°	9774	9287	8266	9482
80°	7682	7827	6305	7972
85°	4621	6065	1877	6787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 300°
 Vertical Angle: 45°
 Luminance: 25380 cd/sqm



TEST NUMBER: P710065
 CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	26.7	4.5	2.9
10°-20°	75.1	12.7	8.2
20°-30°	109.1	18.5	11.8
30°-40°	120.2	20.4	13.1
40°-50°	106.7	18.1	11.6
50°-60°	78.7	13.3	8.5
60°-70°	47.9	8.1	5.2
70°-80°	21.0	3.6	2.3
80°-90°	4.5	0.8	0.5
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°	210.9	35.7	22.9
0°-40°	331.1	56.1	36.0
0°-60°	516.6	87.6	56.1
0°-90°	590.0	100.0	64.1
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°	590.0	100.0	64.1

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	283	283	283	283	283	
5°	282	281	281	282	282	27
15°	268	266	266	267	268	76
25°	240	236	236	238	240	110
35°	194	191	192	195	194	121
45°	137	137	138	141	137	106
55°	87	86	87	90	87	78
65°	49	47	48	49	49	48
75°	20	19	17	20	20	22
85°	3	4	1	5	3	4
90°	0	0	0	0	0	



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	283.3	283.3	283.3	283.3	283.3	283.3	283.3	283.3	283.3	283.3	283.3
0.5°	283.3	283.1	283.0	283.3	283.2	283.2	283.2	283.1	283.1	283.3	283.3
1°	283.3	283.1	283.0	283.2	283.1	283.1	283.0	283.1	283.1	283.2	283.3
1.5°	283.2	283.1	282.9	283.1	282.9	283.0	282.9	283.0	283.0	283.2	283.3
2°	283.2	283.0	282.7	283.0	282.7	282.7	282.8	282.8	282.9	283.1	283.3
2.5°	283.0	282.8	282.5	282.8	282.5	282.5	282.5	282.7	282.7	282.9	283.2
3°	282.9	282.7	282.3	282.6	282.2	282.3	282.2	282.4	282.6	282.8	283.0
3.5°	282.7	282.4	282.0	282.3	281.9	282.0	282.0	282.2	282.3	282.5	282.8
4°	282.5	282.2	281.7	282.0	281.6	281.7	281.7	281.9	282.1	282.3	282.6
4.5°	282.3	281.9	281.4	281.7	281.3	281.3	281.3	281.6	281.8	282.0	282.4
5°	282.0	281.6	281.1	281.3	280.9	280.9	280.9	281.2	281.5	281.6	282.1
5.5°	281.7	281.2	280.6	281.0	280.4	280.4	280.5	280.9	281.1	281.2	281.8
6°	281.3	280.8	280.2	280.6	279.9	280.0	280.0	280.4	280.8	280.8	281.5
6.5°	280.9	280.4	279.7	280.1	279.4	279.5	279.5	280.0	280.3	280.4	281.1
7°	280.5	279.9	279.1	279.6	278.8	278.9	279.0	279.5	279.9	279.9	280.6
7.5°	280.1	279.4	278.5	279.0	278.2	278.3	278.5	279.0	279.3	279.4	280.1
8°	279.5	278.8	278.0	278.4	277.5	277.7	277.7	278.4	278.8	278.9	279.7
8.5°	279.0	278.2	277.3	277.7	276.8	277.0	277.1	277.8	278.2	278.2	279.2
9°	278.5	277.5	276.6	277.0	276.1	276.3	276.4	277.1	277.6	277.7	278.6
9.5°	277.9	276.9	275.9	276.2	275.3	275.6	275.6	276.4	276.9	277.0	277.9
10°	277.2	276.1	275.2	275.5	274.4	274.8	274.8	275.6	276.3	276.3	277.3
10.5°	276.5	275.3	274.3	274.7	273.6	274.0	274.0	274.8	275.4	275.5	276.6
11°	275.7	274.5	273.5	273.9	272.8	273.2	273.2	274.1	274.7	274.6	275.9
11.5°	274.9	273.7	272.6	273.1	272.0	272.3	272.4	273.2	273.8	273.8	275.1
12°	274.1	272.8	271.7	272.2	271.1	271.4	271.5	272.3	273.1	273.0	274.3
12.5°	273.2	272.0	270.8	271.3	270.2	270.4	270.5	271.4	272.1	272.0	273.4
13°	272.3	271.0	269.9	270.4	269.2	269.6	269.6	270.4	271.2	271.1	272.5
13.5°	271.4	270.1	268.9	269.4	268.2	268.5	268.6	269.4	270.2	270.1	271.6
14°	270.5	269.0	267.9	268.4	267.1	267.5	267.6	268.5	269.3	269.2	270.7
14.5°	269.5	268.1	266.8	267.3	266.1	266.5	266.5	267.5	268.2	268.1	269.6
15°	268.4	267.0	265.7	266.3	264.9	265.4	265.5	266.5	267.2	267.0	268.7
15.5°	267.4	266.0	264.6	265.2	263.8	264.2	264.3	265.3	266.1	265.9	267.5
16°	266.3	264.7	263.4	264.0	262.5	263.0	263.2	264.2	265.0	264.9	266.5
16.5°	265.2	263.6	262.2	262.8	261.3	261.8	262.0	263.0	263.9	263.6	265.2
17°	264.0	262.4	261.0	261.6	260.0	260.6	260.8	261.9	262.8	262.5	264.2
17.5°	262.8	261.2	259.7	260.3	258.7	259.3	259.5	260.6	261.5	261.3	262.9
18°	261.6	259.8	258.3	259.0	257.4	258.0	258.1	259.5	260.3	260.0	261.8
18.5°	260.3	258.5	257.0	257.6	256.0	256.6	256.8	258.1	259.0	258.6	260.5
19°	258.9	257.1	255.6	256.2	254.6	255.3	255.5	256.8	257.7	257.3	259.3
19.5°	257.6	255.8	254.1	254.8	253.1	253.8	254.1	255.4	256.4	255.9	257.9
20°	256.2	254.2	252.6	253.3	251.6	252.3	252.6	254.0	254.9	254.6	256.5
20.5°	254.7	252.8	251.1	251.8	250.1	250.8	251.0	252.5	253.5	253.1	255.1
21°	253.2	251.2	249.6	250.2	248.6	249.3	249.5	251.1	252.0	251.6	253.7



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
22.5°	248.4	246.4	244.6	245.4	243.5	244.3	244.6	246.3	247.4	246.9	249.1
23°	246.8	244.6	242.9	243.6	241.8	242.6	243.0	244.7	245.8	245.3	247.5
23.5°	245.1	242.9	241.0	241.9	239.9	241.0	241.2	243.0	244.1	243.6	245.9
24°	243.4	241.1	239.3	240.0	238.1	239.1	239.5	241.2	242.4	241.9	244.3
24.5°	241.6	239.2	237.4	238.2	236.3	237.3	237.7	239.4	240.6	240.1	242.4
25°	239.6	237.3	235.5	236.4	234.4	235.4	235.8	237.7	238.9	238.4	240.7
25.5°	237.8	235.4	233.6	234.5	232.5	233.5	233.9	235.9	237.1	236.5	238.9
26°	235.8	233.4	231.6	232.5	230.5	231.5	232.0	234.0	235.2	234.7	237.1
26.5°	233.9	231.4	229.6	230.5	228.6	229.6	230.1	232.0	233.4	232.7	235.1
27°	231.9	229.3	227.5	228.5	226.5	227.6	228.0	230.1	231.4	230.7	233.3
27.5°	229.8	227.3	225.4	226.5	224.5	225.5	225.9	228.1	229.4	228.8	231.3
28°	227.8	225.2	223.3	224.3	222.3	223.5	223.9	226.2	227.4	226.7	229.3
28.5°	225.5	223.0	221.1	222.2	220.2	221.4	221.8	224.0	225.4	224.6	227.1
29°	223.4	220.8	219.0	220.0	218.1	219.2	219.7	222.0	223.4	222.5	225.1
29.5°	221.2	218.6	216.7	217.8	215.9	217.0	217.5	219.8	221.3	220.4	223.0
30°	218.9	216.3	214.5	215.5	213.5	214.8	215.3	217.6	219.1	218.2	220.8
30.5°	216.5	213.9	212.1	213.3	211.2	212.6	213.1	215.4	216.9	216.0	218.6
31°	214.2	211.5	209.7	211.0	208.8	210.3	210.7	213.2	214.7	213.8	216.4
31.5°	211.8	209.1	207.3	208.6	206.6	208.0	208.5	210.9	212.5	211.5	214.1
32°	209.2	206.7	204.9	206.2	204.1	205.7	206.2	208.7	210.1	209.1	211.8
32.5°	206.7	204.2	202.4	203.8	201.7	203.3	203.7	206.2	207.8	206.7	209.3
33°	204.3	201.6	199.9	201.4	199.2	200.9	201.4	204.0	205.5	204.5	207.1
33.5°	201.7	199.1	197.4	198.9	196.8	198.5	198.9	201.6	203.1	202.0	204.6
34°	199.2	196.5	194.9	196.3	194.3	196.0	196.5	199.1	200.6	199.6	202.1
34.5°	196.5	194.0	192.3	193.8	191.8	193.5	193.9	196.7	198.2	197.0	199.6
35°	193.9	191.3	189.7	191.3	189.2	191.0	191.5	194.2	195.7	194.6	197.1
35.5°	191.2	188.6	187.1	188.7	186.7	188.4	189.0	191.8	193.2	192.0	194.5
36°	188.5	185.9	184.4	186.0	184.0	185.9	186.4	189.2	190.6	189.4	192.0
36.5°	185.8	183.2	181.7	183.4	181.5	183.3	183.7	186.6	188.1	186.8	189.4
37°	183.0	180.5	179.0	180.8	178.7	180.7	181.3	184.1	185.5	184.2	186.7
37.5°	180.2	177.7	176.4	178.2	176.1	178.0	178.6	181.5	182.9	181.6	184.2
38°	177.4	174.9	173.6	175.4	173.4	175.4	175.9	178.9	180.3	179.0	181.5
38.5°	174.5	172.1	170.9	172.7	170.8	172.7	173.3	176.2	177.6	176.2	178.7
39°	171.7	169.2	168.1	170.0	167.9	170.0	170.7	173.6	175.0	173.6	176.0
39.5°	168.8	166.5	165.4	167.3	165.3	167.3	168.0	170.9	172.4	170.8	173.3
40°	166.0	163.7	162.6	164.6	162.5	164.7	165.3	168.2	169.6	168.1	170.5
40.5°	163.1	160.9	159.9	161.8	159.8	161.9	162.5	165.6	166.9	165.5	167.7
41°	160.1	158.0	157.0	159.0	157.0	159.3	159.9	162.9	164.2	162.7	164.9
41.5°	157.3	155.2	154.3	156.2	154.2	156.4	157.2	160.1	161.6	159.9	162.2
42°	154.4	152.3	151.4	153.5	151.5	153.7	154.5	157.4	158.8	157.2	159.4
42.5°	151.5	149.5	148.6	150.6	148.8	150.9	151.7	154.7	156.0	154.4	156.6
43°	148.6	146.7	145.9	147.9	145.9	148.2	149.0	152.0	153.3	151.7	153.8
43.5°	145.8	143.9	143.2	145.1	143.2	145.4	146.2	149.3	150.6	148.9	151.0



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	137.3	135.5	135.0	137.0	134.9	137.3	138.0	141.1	142.4	140.7	142.6
45.5°	134.5	132.7	132.2	134.2	132.3	134.5	135.3	138.4	139.7	137.9	139.9
46°	131.7	129.9	129.5	131.4	129.5	131.8	132.7	135.6	136.9	135.2	137.1
46.5°	129.0	127.2	126.9	128.8	126.8	129.2	130.0	133.0	134.2	132.5	134.4
47°	126.2	124.4	124.2	126.2	124.1	126.6	127.3	130.3	131.5	129.9	131.6
47.5°	123.6	121.9	121.6	123.5	121.5	123.8	124.7	127.7	128.9	127.2	129.0
48°	120.9	119.2	119.1	120.8	118.8	121.3	122.1	125.1	126.3	124.4	126.3
48.5°	118.3	116.5	116.5	118.2	116.2	118.7	119.4	122.5	123.6	121.8	123.6
49°	115.7	113.8	113.9	115.7	113.6	116.2	116.8	119.9	121.0	119.2	121.0
49.5°	113.1	111.3	111.4	113.1	111.0	113.6	114.2	117.3	118.3	116.6	118.4
50°	110.5	108.7	108.8	110.5	108.6	111.0	111.6	114.8	115.7	114.0	115.8
50.5°	107.9	106.3	106.2	107.9	106.0	108.5	109.0	112.3	113.2	111.5	113.2
51°	105.5	103.7	103.8	105.5	103.5	105.9	106.6	109.7	110.7	109.0	110.6
51.5°	103.0	101.3	101.3	103.0	101.0	103.3	104.2	107.2	108.2	106.5	108.0
52°	100.5	98.8	98.9	100.6	98.6	100.9	101.7	104.7	105.7	104.0	105.7
52.5°	98.1	96.5	96.5	98.1	96.1	98.4	99.3	102.3	103.3	101.6	103.2
53°	95.7	94.1	94.1	95.7	93.7	96.0	96.8	99.8	100.8	99.2	100.8
53.5°	93.4	91.8	91.8	93.4	91.4	93.6	94.4	97.4	98.4	96.8	98.4
54°	91.1	89.4	89.5	91.0	89.0	91.3	92.1	95.1	96.1	94.5	96.0
54.5°	88.8	87.2	87.2	88.7	86.8	89.0	89.8	92.7	93.7	92.2	93.7
55°	86.6	85.0	85.0	86.4	84.4	86.7	87.4	90.4	91.4	89.9	91.4
55.5°	84.4	82.7	82.8	84.1	82.2	84.4	85.1	88.1	89.0	87.6	89.1
56°	82.3	80.6	80.6	81.9	80.0	82.1	82.9	85.9	86.8	85.3	86.8
56.5°	80.1	78.4	78.4	79.7	77.8	79.9	80.7	83.6	84.5	83.1	84.6
57°	78.0	76.3	76.3	77.6	75.7	77.8	78.4	81.4	82.4	80.9	82.4
57.5°	75.9	74.2	74.2	75.5	73.6	75.6	76.3	79.3	80.2	78.8	80.2
58°	73.9	72.2	72.2	73.4	71.5	73.4	74.2	77.1	78.1	76.5	78.0
58.5°	71.9	70.2	70.1	71.3	69.3	71.3	72.1	75.0	75.9	74.3	75.8
59°	70.0	68.2	68.1	69.2	67.3	69.3	70.0	72.9	73.8	72.2	73.7
59.5°	68.0	66.2	66.2	67.2	65.3	67.2	68.0	70.8	71.8	70.0	71.5
60°	66.1	64.4	64.2	65.2	63.3	65.2	66.0	68.8	69.8	67.9	69.4
60.5°	64.2	62.5	62.3	63.3	61.4	63.2	63.9	66.8	67.7	65.8	67.4
61°	62.4	60.6	60.4	61.4	59.4	61.3	62.0	64.8	65.7	63.8	65.3
61.5°	60.5	58.9	58.5	59.5	57.7	59.3	60.1	62.9	63.6	61.7	63.2
62°	58.7	57.2	56.7	57.6	55.9	57.4	58.3	60.9	61.6	59.7	61.2
62.5°	57.0	55.5	54.9	55.7	54.2	55.5	56.5	59.0	59.6	57.9	59.3
63°	55.3	53.8	53.1	53.9	52.4	53.7	54.7	57.1	57.8	56.1	57.4
63.5°	53.6	52.1	51.3	52.1	50.6	51.9	52.9	55.3	56.0	54.2	55.4
64°	51.9	50.5	49.6	50.4	48.9	50.1	51.1	53.5	54.1	52.4	53.6
64.5°	50.2	48.8	47.9	48.6	47.2	48.3	49.4	51.7	52.3	50.6	51.7
65°	48.6	47.1	46.2	46.9	45.5	46.5	47.7	49.9	50.5	48.7	49.9
65.5°	47.0	45.6	44.6	45.2	43.7	44.8	45.9	48.2	48.6	46.9	48.1
66°	45.4	44.0	43.0	43.6	42.1	43.2	44.2	46.4	46.8	45.2	46.4



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
67.5°	40.7	39.4	38.3	38.8	37.3	38.3	39.3	41.3	41.6	40.1	41.2
68°	39.2	37.9	36.5	37.3	35.8	36.8	37.7	39.6	39.9	38.4	39.6
68.5°	37.7	36.5	35.3	35.7	34.3	35.2	36.2	37.9	38.2	36.8	38.0
69°	36.3	35.1	33.9	34.2	32.8	33.7	34.6	36.3	36.6	35.3	36.5
69.5°	34.8	33.6	32.5	32.8	31.4	32.2	33.1	34.8	35.0	33.7	34.9
70°	33.4	32.3	31.1	31.4	30.0	30.8	31.7	33.2	33.4	32.3	33.5
70.5°	32.0	30.9	29.8	30.0	28.6	29.3	30.0	31.7	31.9	30.8	32.0
71°	30.6	29.6	28.5	28.6	27.3	28.0	28.4	30.1	30.4	29.4	30.5
71.5°	29.3	28.2	27.2	27.3	26.0	26.6	26.8	28.7	29.0	28.0	29.2
72°	27.9	27.0	25.9	26.0	24.7	25.3	25.2	27.2	27.5	26.7	27.8
72.5°	26.6	25.7	24.7	24.7	23.5	24.0	23.7	25.8	26.2	25.4	26.5
73°	25.2	24.5	23.4	23.5	22.3	22.7	22.2	24.5	24.8	24.1	25.2
73.5°	23.9	23.3	22.3	22.4	21.2	21.4	20.8	23.2	23.6	22.9	24.0
74°	22.5	22.1	21.1	21.2	20.1	20.2	19.5	21.8	22.3	21.7	22.8
74.5°	21.3	21.0	20.0	20.1	18.9	19.0	18.2	20.5	21.1	20.6	21.7
75°	20.1	19.8	19.0	19.1	18.0	17.9	17.0	19.2	20.0	19.5	20.6
75.5°	18.9	18.8	17.9	18.0	17.0	16.8	15.9	18.0	18.9	18.5	19.5
76°	17.8	17.7	16.9	17.1	16.0	15.8	14.8	16.8	17.8	17.5	18.5
76.5°	16.7	16.7	15.9	16.2	15.1	14.8	13.9	15.7	16.8	16.5	17.5
77°	15.7	15.8	15.0	15.3	14.2	13.9	13.0	14.6	15.9	15.6	16.6
77.5°	14.7	14.8	14.1	14.4	13.4	13.0	12.2	13.6	14.9	14.7	15.7
78°	13.7	13.9	13.2	13.6	12.6	12.1	11.5	12.7	14.1	13.9	14.8
78.5°	12.9	13.0	12.4	12.8	11.9	11.3	10.8	11.9	13.2	13.1	14.0
79°	12.0	12.1	11.7	12.1	11.3	10.6	10.2	11.1	12.5	12.3	13.2
79.5°	11.3	11.3	11.0	11.4	10.7	9.9	9.5	10.4	11.7	11.6	12.4
80°	10.6	10.5	10.4	10.8	10.1	9.3	8.7	9.7	11.1	11.0	11.7
80.5°	9.9	9.8	9.8	10.2	9.6	8.7	8.0	9.0	10.4	10.4	11.0
81°	9.2	9.1	9.3	9.6	8.9	8.0	7.2	8.3	9.8	9.8	10.4
81.5°	8.5	8.4	8.7	9.0	8.2	7.3	6.4	7.5	9.2	9.3	9.8
82°	7.7	7.8	8.0	8.3	7.5	6.6	5.6	6.8	8.6	8.6	9.2
82.5°	7.0	7.1	7.3	7.6	6.9	5.9	4.8	6.0	7.9	8.0	8.6
83°	6.2	6.4	6.7	6.9	6.2	5.2	4.0	5.2	7.2	7.3	7.9
83.5°	5.4	5.8	6.1	6.2	5.5	4.5	3.2	4.5	6.6	6.7	7.2
84°	4.6	5.2	5.4	5.5	4.8	3.9	2.5	3.7	5.9	6.0	6.6
84.5°	3.9	4.5	4.7	4.8	4.2	3.4	1.9	3.0	5.2	5.3	5.9
85°	3.2	3.9	4.1	4.2	3.4	2.8	1.3	2.3	4.5	4.7	5.2
85.5°	2.5	3.4	3.5	3.5	2.7	2.2	1.0	1.7	3.9	4.0	4.6
86°	1.9	2.9	2.8	2.8	2.1	1.7	0.7	1.2	3.3	3.4	4.0
86.5°	1.3	2.3	2.2	2.2	1.6	1.2	0.6	0.9	2.6	2.7	3.4
87°	1.0	1.8	1.7	1.6	1.0	0.8	0.4	0.7	2.0	2.1	2.7
87.5°	0.8	1.4	1.1	1.0	0.5	0.3	0.2	0.4	1.5	1.5	2.1
88°	0.6	1.0	0.6	0.5	0.5	0.2	0.1	0.2	1.0	1.0	1.6
88.5°	0.5	0.6	0.4	0.5	0.4	0.2	0.1	0.1	0.5	0.4	1.0



TEST NUMBER: P710065
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	283.3	283.3
0.5°	283.3	283.3
1°	283.3	283.3
1.5°	283.3	283.2
2°	283.3	283.2
2.5°	283.1	283.0
3°	283.0	282.9
3.5°	282.8	282.7
4°	282.5	282.5
4.5°	282.3	282.3
5°	282.1	282.0
5.5°	281.7	281.7
6°	281.4	281.3
6.5°	281.0	280.9
7°	280.5	280.5
7.5°	280.1	280.1
8°	279.7	279.5
8.5°	279.1	279.0
9°	278.5	278.5
9.5°	277.9	277.9
10°	277.3	277.2
10.5°	276.6	276.5
11°	275.8	275.7
11.5°	275.1	274.9
12°	274.2	274.1
12.5°	273.4	273.2
13°	272.4	272.3
13.5°	271.5	271.4
14°	270.5	270.5
14.5°	269.6	269.5
15°	268.5	268.4
15.5°	267.5	267.4
16°	266.3	266.3
16.5°	265.3	265.2
17°	264.0	264.0
17.5°	262.9	262.8
18°	261.5	261.6
18.5°	260.4	260.3
19°	259.0	258.9
19.5°	257.7	257.6
20°	256.2	256.2
20.5°	254.9	254.7
21°	253.4	253.2



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
22.5°	248.8	248.4
23°	247.0	246.8
23.5°	245.4	245.1
24°	243.6	243.4
24.5°	241.9	241.6
25°	240.0	239.6
25.5°	238.2	237.8
26°	236.3	235.8
26.5°	234.4	233.9
27°	232.4	231.9
27.5°	230.3	229.8
28°	228.3	227.8
28.5°	226.2	225.5
29°	224.0	223.4
29.5°	221.8	221.2
30°	219.5	218.9
30.5°	217.3	216.5
31°	215.0	214.2
31.5°	212.6	211.8
32°	210.2	209.2
32.5°	207.8	206.7
33°	205.4	204.3
33.5°	202.8	201.7
34°	200.3	199.2
34.5°	197.7	196.5
35°	195.2	193.9
35.5°	192.5	191.2
36°	189.8	188.5
36.5°	187.2	185.8
37°	184.4	183.0
37.5°	181.7	180.2
38°	179.0	177.4
38.5°	176.2	174.5
39°	173.5	171.7
39.5°	170.6	168.8
40°	167.8	166.0
40.5°	165.0	163.1
41°	162.1	160.1
41.5°	159.3	157.3
42°	156.4	154.4
42.5°	153.6	151.5
43°	150.6	148.6
43.5°	147.9	145.8



TEST NUMBER: P710065
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	139.4	137.3
45.5°	136.6	134.5
46°	133.8	131.7
46.5°	131.0	129.0
47°	128.3	126.2
47.5°	125.6	123.6
48°	122.9	120.9
48.5°	120.2	118.3
49°	117.5	115.7
49.5°	114.9	113.1
50°	112.3	110.5
50.5°	109.8	107.9
51°	107.2	105.5
51.5°	104.7	103.0
52°	102.3	100.5
52.5°	99.8	98.1
53°	97.4	95.7
53.5°	95.0	93.4
54°	92.8	91.1
54.5°	90.4	88.8
55°	88.1	86.6
55.5°	85.8	84.4
56°	83.7	82.3
56.5°	81.5	80.1
57°	79.4	78.0
57.5°	77.3	75.9
58°	75.2	73.9
58.5°	73.1	71.9
59°	71.1	70.0
59.5°	69.1	68.0
60°	67.2	66.1
60.5°	65.3	64.2
61°	63.3	62.4
61.5°	61.5	60.5
62°	59.7	58.7
62.5°	58.0	57.0
63°	56.3	55.3
63.5°	54.5	53.6
64°	52.8	51.9
64.5°	51.0	50.2
65°	49.3	48.6
65.5°	47.6	47.0
66°	45.9	45.4



TEST NUMBER: P710065

CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
67.5°	41.0	40.7
68°	39.4	39.2
68.5°	37.9	37.7
69°	36.4	36.3
69.5°	34.9	34.8
70°	33.5	33.4
70.5°	32.0	32.0
71°	30.7	30.6
71.5°	29.3	29.3
72°	28.0	27.9
72.5°	26.7	26.6
73°	25.4	25.2
73.5°	24.2	23.9
74°	23.0	22.5
74.5°	21.8	21.3
75°	20.7	20.1
75.5°	19.5	18.9
76°	18.4	17.8
76.5°	17.3	16.7
77°	16.3	15.7
77.5°	15.3	14.7
78°	14.3	13.7
78.5°	13.4	12.9
79°	12.6	12.0
79.5°	11.8	11.3
80°	11.0	10.6
80.5°	10.3	9.9
81°	9.6	9.2
81.5°	8.9	8.5
82°	8.2	7.7
82.5°	7.5	7.0
83°	6.8	6.2
83.5°	6.0	5.4
84°	5.3	4.6
84.5°	4.6	3.9
85°	3.8	3.2
85.5°	3.1	2.5
86°	2.5	1.9
86.5°	1.9	1.3
87°	1.4	1.0
87.5°	1.1	0.8
88°	0.8	0.6
88.5°	0.5	0.5



TEST NUMBER: P710065
CATALOG NUMBER: RA4LS9FSD2W1EWH-600lm-4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.1	0.1

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°	251.6	249.6	247.9	248.6	246.9	247.7	247.9	249.5	250.5	250.2	252.1
22°	250.0	248.0	246.3	247.0	245.3	246.1	246.4	248.0	249.0	248.5	250.7



44°	142.9	141.0	140.4	142.4	140.5	142.7	143.5	146.5	147.9	146.1	148.3
44.5°	140.0	138.3	137.7	139.7	137.7	140.0	140.8	143.8	145.1	143.5	145.4



66.5°	43.9	42.4	41.4	42.0	40.5	41.5	42.5	44.7	45.0	43.5	44.6
67°	42.3	40.9	39.9	40.3	38.9	39.9	40.9	43.0	43.3	41.8	42.9



89°	0.3	0.2	0.4	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.5
89.5°	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

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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°	251.9	251.6
22°	250.3	250.0



44°	145.1	142.9
44.5°	142.2	140.0

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Peachtree City, GA 30269

Scaled Data Report



66.5°	44.3	43.9
67°	42.7	42.3

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



89°	0.3	0.3
89.5°	0.2	0.1

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1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)