

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: P869798

Luminaire Tested: HLBSL609FS5-3000K

Issue Date: 9/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P869798
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2402870-01B001)
Test Lab:
Issue Date: 9/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: HLBSL609FS5-3000K
Description: 6IN 900LM, 90CRI, DIMMING TO 10%
Light Source: SELECTABLE CCT 90CRI / 3000K CCT
Ballast/Driver: -

Summary

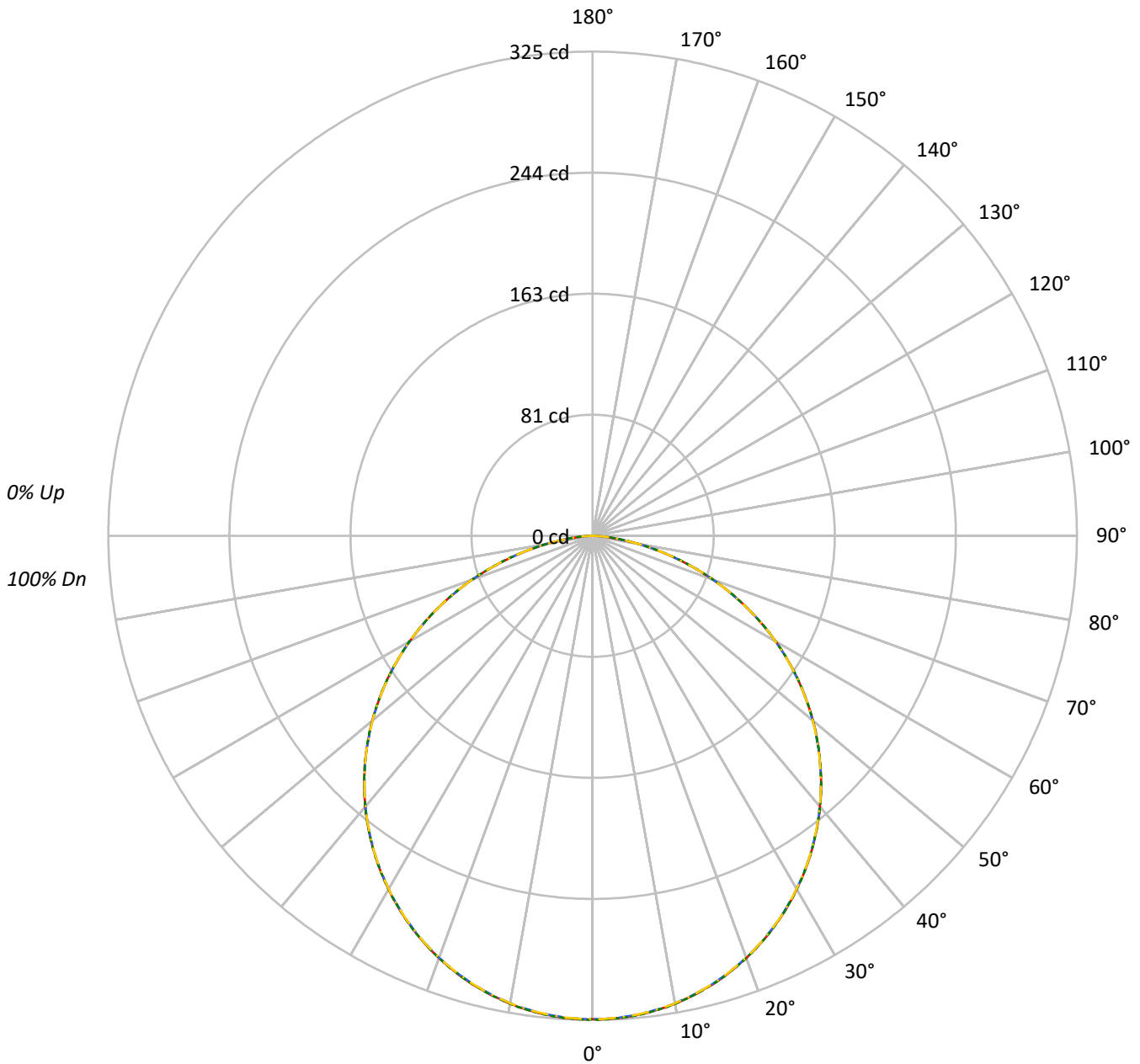
Lumens per Lamp: N/A
Luminaire Lumens: 915.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

Input Watts (W): 10.1
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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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84								
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70								
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59								
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50								
5	76	63	54	47	74	62	53	47	60	52	47	58	51	46	56	50	46	43								
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38								
7	65	51	43	36	63	51	42	36	49	42	36	48	41	36	46	40	36	34								
8	60	47	38	33	59	46	38	32	45	37	32	44	37	32	42	36	32	30								
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27								
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17789	17789	17789	17789
5°	17791	17802	17791	17802
10°	17752	17757	17752	17757
15°	17690	17685	17690	17685
20°	17601	17595	17601	17595
25°	17481	17487	17481	17487
30°	17344	17344	17344	17344
35°	17179	17186	17179	17186
40°	16989	16989	16989	16989
45°	16754	16761	16754	16761
50°	16451	16460	16451	16460
55°	16076	16085	16076	16085
60°	15558	15569	15558	15569
65°	14814	14839	14814	14839
70°	13752	13784	13752	13784
75°	12137	12221	12137	12221
80°	9629	9881	9629	9881
85°	5598	6856	5598	6856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 16761 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.7	3.4
10°-20°	87.9	9.6
20°-30°	133.1	14.5
30°-40°	160.4	17.5
40°-50°	166.5	18.2
50°-60°	150.1	16.4
60°-70°	112.8	12.3
70°-80°	60.8	6.6
80°-90°	12.8	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	251.6	27.5
0°-40°	412.1	45.0
0°-60°	728.6	79.6
0°-90°	915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	324	324	324	324	324	
5°	323	324	323	324	323	31
15°	312	312	312	312	312	88
25°	289	289	289	289	289	133
35°	257	257	257	257	257	161
45°	216	216	216	216	216	167
55°	168	168	168	168	168	150
65°	114	114	114	114	114	113
75°	57	58	57	58	57	61
85°	9	11	9	11	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5
0.5°	324.7	324.5	324.4	324.1	324.9	324.1	324.4	324.5	324.7	324.5	324.4
1°	324.7	324.4	324.4	324.1	324.8	324.1	324.4	324.4	324.7	324.4	324.4
1.5°	324.6	324.4	324.3	324.0	324.7	324.0	324.3	324.4	324.6	324.4	324.3
2°	324.5	324.3	324.1	323.9	324.6	323.9	324.1	324.3	324.5	324.3	324.1
2.5°	324.3	324.1	324.0	323.8	324.4	323.8	324.0	324.1	324.3	324.1	324.0
3°	324.2	324.0	323.9	323.7	324.3	323.7	323.9	324.0	324.2	324.0	323.9
3.5°	324.1	323.8	323.7	323.4	324.1	323.4	323.7	323.8	324.1	323.8	323.7
4°	323.8	323.7	323.5	323.2	324.0	323.2	323.5	323.7	323.8	323.7	323.5
4.5°	323.6	323.4	323.2	322.9	323.7	322.9	323.2	323.4	323.6	323.4	323.2
5°	323.3	323.1	323.0	322.7	323.5	322.7	323.0	323.1	323.3	323.1	323.0
5.5°	322.9	322.8	322.6	322.4	323.2	322.4	322.6	322.8	322.9	322.8	322.6
6°	322.7	322.4	322.3	322.1	322.8	322.1	322.3	322.4	322.7	322.4	322.3
6.5°	322.3	322.0	321.9	321.7	322.4	321.7	321.9	322.0	322.3	322.0	321.9
7°	321.9	321.6	321.6	321.3	322.0	321.3	321.6	321.6	321.9	321.6	321.6
7.5°	321.4	321.2	321.0	320.8	321.5	320.8	321.0	321.2	321.4	321.2	321.0
8°	321.0	320.8	320.6	320.4	321.1	320.4	320.6	320.8	321.0	320.8	320.6
8.5°	320.5	320.4	320.2	320.0	320.6	320.0	320.2	320.4	320.5	320.4	320.2
9°	320.2	319.8	319.7	319.4	320.2	319.4	319.7	319.8	320.2	319.8	319.7
9.5°	319.5	319.2	319.2	318.9	319.6	318.9	319.2	319.2	319.5	319.2	319.2
10°	318.9	318.7	318.6	318.3	319.0	318.3	318.6	318.7	318.9	318.7	318.6
10.5°	318.3	318.1	317.9	317.6	318.3	317.6	317.9	318.1	318.3	318.1	317.9
11°	317.7	317.4	317.3	317.0	317.6	317.0	317.3	317.4	317.7	317.4	317.3
11.5°	316.9	316.8	316.7	316.4	317.0	316.4	316.7	316.8	316.9	316.8	316.7
12°	316.4	316.2	316.0	315.7	316.4	315.7	316.0	316.2	316.4	316.2	316.0
12.5°	315.7	315.4	315.3	314.9	315.7	314.9	315.3	315.4	315.7	315.4	315.3
13°	314.9	314.7	314.5	314.2	314.9	314.2	314.5	314.7	314.9	314.7	314.5
13.5°	314.0	313.9	313.7	313.4	314.1	313.4	313.7	313.9	314.0	313.9	313.7
14°	313.2	313.1	313.0	312.7	313.3	312.7	313.0	313.1	313.2	313.1	313.0
14.5°	312.5	312.3	312.1	311.8	312.4	311.8	312.1	312.3	312.5	312.3	312.1
15°	311.7	311.5	311.3	311.0	311.6	311.0	311.3	311.5	311.7	311.5	311.3
15.5°	310.8	310.6	310.4	310.1	310.7	310.1	310.4	310.6	310.8	310.6	310.4
16°	309.8	309.6	309.4	309.2	309.8	309.2	309.4	309.6	309.8	309.6	309.4
16.5°	308.9	308.7	308.5	308.3	308.9	308.3	308.5	308.7	308.9	308.7	308.5
17°	308.0	307.8	307.6	307.3	307.9	307.3	307.6	307.8	308.0	307.8	307.6
17.5°	306.9	306.8	306.6	306.3	306.9	306.3	306.6	306.8	306.9	306.8	306.6
18°	305.9	305.7	305.5	305.3	306.0	305.3	305.5	305.7	305.9	305.7	305.5
18.5°	304.9	304.8	304.6	304.2	305.0	304.2	304.6	304.8	304.9	304.8	304.6
19°	303.8	303.6	303.5	303.2	303.8	303.2	303.5	303.6	303.8	303.6	303.5
19.5°	302.7	302.5	302.4	302.0	302.7	302.0	302.4	302.5	302.7	302.5	302.4
20°	301.7	301.4	301.4	301.0	301.6	301.0	301.4	301.4	301.7	301.4	301.4
20.5°	300.4	300.3	300.2	299.9	300.5	299.9	300.2	300.3	300.4	300.3	300.2
21°	299.2	299.1	299.0	298.7	299.4	298.7	299.0	299.1	299.2	299.1	299.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	295.6	295.5	295.3	295.0	295.6	295.0	295.3	295.5	295.6	295.5	295.3
23°	294.4	294.3	294.1	293.8	294.4	293.8	294.1	294.3	294.4	294.3	294.1
23.5°	293.0	292.9	292.7	292.5	293.1	292.5	292.7	292.9	293.0	292.9	292.7
24°	291.7	291.5	291.4	291.2	291.8	291.2	291.4	291.5	291.7	291.5	291.4
24.5°	290.4	290.3	290.2	289.9	290.5	289.9	290.2	290.3	290.4	290.3	290.2
25°	289.0	288.9	288.7	288.4	289.1	288.4	288.7	288.9	289.0	288.9	288.7
25.5°	287.6	287.4	287.3	287.0	287.7	287.0	287.3	287.4	287.6	287.4	287.3
26°	286.3	286.1	285.9	285.6	286.2	285.6	285.9	286.1	286.3	286.1	285.9
26.5°	284.8	284.6	284.5	284.2	284.7	284.2	284.5	284.6	284.8	284.6	284.5
27°	283.3	283.2	283.1	282.8	283.3	282.8	283.1	283.2	283.3	283.2	283.1
27.5°	281.9	281.6	281.5	281.3	281.8	281.3	281.5	281.6	281.9	281.6	281.5
28°	280.3	280.1	279.9	279.7	280.3	279.7	279.9	280.1	280.3	280.1	279.9
28.5°	278.8	278.7	278.5	278.2	278.8	278.2	278.5	278.7	278.8	278.7	278.5
29°	277.2	277.0	276.9	276.6	277.2	276.6	276.9	277.0	277.2	277.0	276.9
29.5°	275.6	275.5	275.4	275.1	275.6	275.1	275.4	275.5	275.6	275.5	275.4
30°	274.0	273.8	273.7	273.5	274.0	273.5	273.7	273.8	274.0	273.8	273.7
30.5°	272.3	272.2	272.1	271.9	272.4	271.9	272.1	272.2	272.3	272.2	272.1
31°	270.7	270.5	270.4	270.2	270.8	270.2	270.4	270.5	270.7	270.5	270.4
31.5°	269.0	268.9	268.7	268.5	269.1	268.5	268.7	268.9	269.0	268.9	268.7
32°	267.4	267.2	267.1	266.8	267.4	266.8	267.1	267.2	267.4	267.2	267.1
32.5°	265.6	265.5	265.3	265.1	265.6	265.1	265.3	265.5	265.6	265.5	265.3
33°	263.9	263.8	263.7	263.4	264.0	263.4	263.7	263.8	263.9	263.8	263.7
33.5°	262.2	261.9	261.9	261.6	262.1	261.6	261.9	261.9	262.2	261.9	261.9
34°	260.4	260.2	260.1	259.9	260.4	259.9	260.1	260.2	260.4	260.2	260.1
34.5°	258.5	258.4	258.3	258.0	258.5	258.0	258.3	258.4	258.5	258.4	258.3
35°	256.7	256.6	256.5	256.2	256.8	256.2	256.5	256.6	256.7	256.6	256.5
35.5°	254.8	254.8	254.6	254.4	255.0	254.4	254.6	254.8	254.8	254.8	254.6
36°	253.0	252.9	252.8	252.6	253.1	252.6	252.8	252.9	253.0	252.9	252.8
36.5°	251.1	251.0	250.9	250.6	251.1	250.6	250.9	251.0	251.1	251.0	250.9
37°	249.3	249.1	249.0	248.8	249.3	248.8	249.0	249.1	249.3	249.1	249.0
37.5°	247.3	247.1	247.0	246.8	247.3	246.8	247.0	247.1	247.3	247.1	247.0
38°	245.3	245.3	245.1	245.0	245.4	245.0	245.1	245.3	245.3	245.3	245.1
38.5°	243.3	243.3	243.1	242.9	243.4	242.9	243.1	243.3	243.3	243.3	243.1
39°	241.5	241.3	241.2	240.9	241.5	240.9	241.2	241.3	241.5	241.3	241.2
39.5°	239.4	239.2	239.1	238.9	239.4	238.9	239.1	239.2	239.4	239.2	239.1
40°	237.4	237.3	237.1	236.9	237.4	236.9	237.1	237.3	237.4	237.3	237.1
40.5°	235.2	235.2	235.1	235.0	235.3	235.0	235.1	235.2	235.2	235.2	235.1
41°	233.3	233.1	233.1	232.9	233.3	232.9	233.1	233.1	233.3	233.1	233.1
41.5°	231.2	231.1	231.0	230.8	231.2	230.8	231.0	231.1	231.2	231.1	231.0
42°	229.0	229.0	228.8	228.6	229.1	228.6	228.8	229.0	229.0	229.0	228.8
42.5°	226.9	226.9	226.7	226.5	227.0	226.5	226.7	226.9	226.9	226.9	226.7
43°	224.8	224.7	224.5	224.4	224.9	224.4	224.5	224.7	224.8	224.7	224.5
43.5°	222.6	222.5	222.4	222.2	222.7	222.2	222.4	222.5	222.6	222.5	222.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	216.1	216.0	215.8	215.7	216.2	215.7	215.8	216.0	216.1	216.0	215.8
45.5°	213.7	213.6	213.6	213.4	213.9	213.4	213.6	213.6	213.7	213.6	213.6
46°	211.6	211.5	211.4	211.2	211.7	211.2	211.4	211.5	211.6	211.5	211.4
46.5°	209.3	209.2	209.2	209.0	209.3	209.0	209.2	209.2	209.3	209.2	209.2
47°	207.0	206.9	206.8	206.6	207.1	206.6	206.8	206.9	207.0	206.9	206.8
47.5°	204.7	204.6	204.5	204.4	204.8	204.4	204.5	204.6	204.7	204.6	204.5
48°	202.4	202.2	202.1	202.0	202.4	202.0	202.1	202.2	202.4	202.2	202.1
48.5°	200.0	200.0	199.9	199.7	200.2	199.7	199.9	200.0	200.0	200.0	199.9
49°	197.7	197.6	197.5	197.4	197.8	197.4	197.5	197.6	197.7	197.6	197.5
49.5°	195.3	195.2	195.1	194.9	195.3	194.9	195.1	195.2	195.3	195.2	195.1
50°	192.9	192.9	192.7	192.6	193.0	192.6	192.7	192.9	192.9	192.9	192.7
50.5°	190.6	190.5	190.3	190.2	190.6	190.2	190.3	190.5	190.6	190.5	190.3
51°	188.1	188.0	187.9	187.8	188.1	187.8	187.9	188.0	188.1	188.0	187.9
51.5°	185.7	185.6	185.5	185.4	185.8	185.4	185.5	185.6	185.7	185.6	185.5
52°	183.2	183.2	183.1	183.0	183.3	183.0	183.1	183.2	183.2	183.2	183.1
52.5°	180.7	180.7	180.6	180.4	180.8	180.4	180.6	180.7	180.7	180.7	180.6
53°	178.3	178.2	178.1	178.0	178.4	178.0	178.1	178.2	178.3	178.2	178.1
53.5°	175.8	175.7	175.6	175.5	175.9	175.5	175.6	175.7	175.8	175.7	175.6
54°	173.2	173.1	173.0	172.9	173.3	172.9	173.0	173.1	173.2	173.1	173.0
54.5°	170.7	170.6	170.5	170.4	170.8	170.4	170.5	170.6	170.7	170.6	170.5
55°	168.2	168.1	168.1	167.9	168.3	167.9	168.1	168.1	168.2	168.1	168.1
55.5°	165.6	165.5	165.4	165.3	165.7	165.3	165.4	165.5	165.6	165.5	165.4
56°	163.0	162.9	162.9	162.8	163.1	162.8	162.9	162.9	163.0	162.9	162.9
56.5°	160.5	160.4	160.3	160.2	160.5	160.2	160.3	160.4	160.5	160.4	160.3
57°	157.7	157.7	157.6	157.5	157.8	157.5	157.6	157.7	157.7	157.7	157.6
57.5°	155.1	155.1	155.0	154.9	155.3	154.9	155.0	155.1	155.1	155.1	155.0
58°	152.5	152.5	152.5	152.3	152.6	152.3	152.5	152.5	152.5	152.5	152.5
58.5°	149.9	149.9	149.8	149.7	150.0	149.7	149.8	149.9	149.9	149.9	149.8
59°	147.2	147.1	147.1	146.9	147.3	146.9	147.1	147.1	147.2	147.1	147.1
59.5°	144.5	144.5	144.4	144.3	144.6	144.3	144.4	144.5	144.5	144.5	144.4
60°	141.9	141.8	141.7	141.6	142.0	141.6	141.7	141.8	141.9	141.8	141.7
60.5°	139.1	139.0	139.0	138.9	139.2	138.9	139.0	139.0	139.1	139.0	139.0
61°	136.4	136.3	136.3	136.2	136.5	136.2	136.3	136.3	136.4	136.3	136.3
61.5°	133.7	133.6	133.6	133.5	133.8	133.5	133.6	133.6	133.7	133.6	133.6
62°	131.0	130.9	130.9	130.8	131.1	130.8	130.9	130.9	131.0	130.9	130.9
62.5°	128.1	128.1	128.1	128.0	128.3	128.0	128.1	128.1	128.1	128.1	128.1
63°	125.4	125.3	125.3	125.2	125.5	125.2	125.3	125.3	125.4	125.3	125.3
63.5°	122.6	122.6	122.5	122.5	122.8	122.5	122.5	122.6	122.6	122.6	122.5
64°	119.9	119.8	119.8	119.8	120.0	119.8	119.8	119.8	119.9	119.8	119.8
64.5°	117.0	117.0	116.9	116.9	117.2	116.9	116.9	117.0	117.0	117.0	116.9
65°	114.2	114.2	114.2	114.1	114.4	114.1	114.2	114.2	114.2	114.2	114.2
65.5°	111.4	111.4	111.4	111.4	111.6	111.4	111.4	111.4	111.4	111.4	111.4
66°	108.6	108.6	108.6	108.5	108.8	108.5	108.6	108.6	108.6	108.6	108.6



TEST NUMBER: P869798
 CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	100.1	100.1	100.1	100.0	100.3	100.0	100.1	100.1	100.1	100.1	100.1
68°	97.2	97.2	97.2	97.2	97.4	97.2	97.2	97.2	97.2	97.2	97.2
68.5°	94.4	94.4	94.4	94.4	94.5	94.4	94.4	94.4	94.4	94.4	94.4
69°	91.5	91.4	91.4	91.4	91.7	91.4	91.4	91.4	91.5	91.4	91.4
69.5°	88.6	88.6	88.6	88.6	88.9	88.6	88.6	88.6	88.6	88.6	88.6
70°	85.8	85.7	85.8	85.8	86.0	85.8	85.8	85.7	85.8	85.7	85.8
70.5°	82.9	82.9	83.0	83.0	83.2	83.0	83.0	82.9	82.9	82.9	83.0
71°	79.9	80.0	80.0	80.1	80.3	80.1	80.0	80.0	79.9	80.0	80.0
71.5°	77.1	77.2	77.2	77.3	77.5	77.3	77.2	77.2	77.1	77.2	77.2
72°	74.3	74.3	74.4	74.4	74.6	74.4	74.4	74.3	74.3	74.3	74.4
72.5°	71.5	71.5	71.5	71.6	71.8	71.6	71.5	71.5	71.5	71.5	71.5
73°	68.5	68.6	68.6	68.7	68.9	68.7	68.6	68.6	68.5	68.6	68.6
73.5°	65.7	65.7	65.8	65.9	66.1	65.9	65.8	65.7	65.7	65.7	65.8
74°	62.9	62.9	63.0	63.1	63.3	63.1	63.0	62.9	62.9	62.9	63.0
74.5°	60.1	60.1	60.2	60.3	60.6	60.3	60.2	60.1	60.1	60.1	60.2
75°	57.3	57.3	57.4	57.4	57.7	57.4	57.4	57.3	57.3	57.3	57.4
75.5°	54.4	54.5	54.5	54.7	54.9	54.7	54.5	54.5	54.4	54.5	54.5
76°	51.6	51.7	51.8	51.9	52.2	51.9	51.8	51.7	51.6	51.7	51.8
76.5°	48.8	48.9	49.0	49.2	49.5	49.2	49.0	48.9	48.8	48.9	49.0
77°	46.1	46.2	46.3	46.5	46.8	46.5	46.3	46.2	46.1	46.2	46.3
77.5°	43.4	43.4	43.6	43.8	44.2	43.8	43.6	43.4	43.4	43.4	43.6
78°	40.7	40.8	41.0	41.2	41.5	41.2	41.0	40.8	40.7	40.8	41.0
78.5°	38.1	38.2	38.4	38.6	38.9	38.6	38.4	38.2	38.1	38.2	38.4
79°	35.5	35.5	35.7	35.9	36.3	35.9	35.7	35.5	35.5	35.5	35.7
79.5°	33.0	33.0	33.2	33.4	33.7	33.4	33.2	33.0	33.0	33.0	33.2
80°	30.5	30.5	30.7	30.9	31.3	30.9	30.7	30.5	30.5	30.5	30.7
80.5°	27.9	28.0	28.2	28.5	28.8	28.5	28.2	28.0	27.9	28.0	28.2
81°	25.5	25.6	25.8	26.1	26.5	26.1	25.8	25.6	25.5	25.6	25.8
81.5°	23.1	23.3	23.5	23.9	24.1	23.9	23.5	23.3	23.1	23.3	23.5
82°	20.7	20.9	21.2	21.6	21.9	21.6	21.2	20.9	20.7	20.9	21.2
82.5°	18.5	18.7	19.1	19.6	19.8	19.6	19.1	18.7	18.5	18.7	19.1
83°	16.4	16.6	17.0	17.5	17.7	17.5	17.0	16.6	16.4	16.6	17.0
83.5°	14.3	14.5	15.1	15.5	15.8	15.5	15.1	14.5	14.3	14.5	15.1
84°	12.4	12.7	13.1	13.6	13.9	13.6	13.1	12.7	12.4	12.7	13.1
84.5°	10.5	10.8	11.3	11.9	12.4	11.9	11.3	10.8	10.5	10.8	11.3
85°	8.9	9.1	9.6	10.3	10.9	10.3	9.6	9.1	8.9	9.1	9.6
85.5°	7.3	7.5	8.1	8.8	9.4	8.8	8.1	7.5	7.3	7.5	8.1
86°	5.9	6.1	6.7	7.4	8.0	7.4	6.7	6.1	5.9	6.1	6.7
86.5°	4.7	4.9	5.5	6.0	6.6	6.0	5.5	4.9	4.7	4.9	5.5
87°	3.5	3.7	4.4	5.1	5.6	5.1	4.4	3.7	3.5	3.7	4.4
87.5°	2.5	2.7	3.4	4.2	4.8	4.2	3.4	2.7	2.5	2.7	3.4
88°	1.7	1.9	2.6	3.4	4.0	3.4	2.6	1.9	1.7	1.9	2.6
88.5°	0.9	1.4	1.9	2.6	3.1	2.6	1.9	1.4	0.9	1.4	1.9



TEST NUMBER: P869798
CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P869798

CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	324.5	324.5	324.5	324.5	324.5	324.5
0.5°	324.1	324.9	324.1	324.4	324.5	324.7
1°	324.1	324.8	324.1	324.4	324.4	324.7
1.5°	324.0	324.7	324.0	324.3	324.4	324.6
2°	323.9	324.6	323.9	324.1	324.3	324.5
2.5°	323.8	324.4	323.8	324.0	324.1	324.3
3°	323.7	324.3	323.7	323.9	324.0	324.2
3.5°	323.4	324.1	323.4	323.7	323.8	324.1
4°	323.2	324.0	323.2	323.5	323.7	323.8
4.5°	322.9	323.7	322.9	323.2	323.4	323.6
5°	322.7	323.5	322.7	323.0	323.1	323.3
5.5°	322.4	323.2	322.4	322.6	322.8	322.9
6°	322.1	322.8	322.1	322.3	322.4	322.7
6.5°	321.7	322.4	321.7	321.9	322.0	322.3
7°	321.3	322.0	321.3	321.6	321.6	321.9
7.5°	320.8	321.5	320.8	321.0	321.2	321.4
8°	320.4	321.1	320.4	320.6	320.8	321.0
8.5°	320.0	320.6	320.0	320.2	320.4	320.5
9°	319.4	320.2	319.4	319.7	319.8	320.2
9.5°	318.9	319.6	318.9	319.2	319.2	319.5
10°	318.3	319.0	318.3	318.6	318.7	318.9
10.5°	317.6	318.3	317.6	317.9	318.1	318.3
11°	317.0	317.6	317.0	317.3	317.4	317.7
11.5°	316.4	317.0	316.4	316.7	316.8	316.9
12°	315.7	316.4	315.7	316.0	316.2	316.4
12.5°	314.9	315.7	314.9	315.3	315.4	315.7
13°	314.2	314.9	314.2	314.5	314.7	314.9
13.5°	313.4	314.1	313.4	313.7	313.9	314.0
14°	312.7	313.3	312.7	313.0	313.1	313.2
14.5°	311.8	312.4	311.8	312.1	312.3	312.5
15°	311.0	311.6	311.0	311.3	311.5	311.7
15.5°	310.1	310.7	310.1	310.4	310.6	310.8
16°	309.2	309.8	309.2	309.4	309.6	309.8
16.5°	308.3	308.9	308.3	308.5	308.7	308.9
17°	307.3	307.9	307.3	307.6	307.8	308.0
17.5°	306.3	306.9	306.3	306.6	306.8	306.9
18°	305.3	306.0	305.3	305.5	305.7	305.9
18.5°	304.2	305.0	304.2	304.6	304.8	304.9
19°	303.2	303.8	303.2	303.5	303.6	303.8
19.5°	302.0	302.7	302.0	302.4	302.5	302.7
20°	301.0	301.6	301.0	301.4	301.4	301.7
20.5°	299.9	300.5	299.9	300.2	300.3	300.4
21°	298.7	299.4	298.7	299.0	299.1	299.2



TEST NUMBER: P869798
 CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	295.0	295.6	295.0	295.3	295.5	295.6
23°	293.8	294.4	293.8	294.1	294.3	294.4
23.5°	292.5	293.1	292.5	292.7	292.9	293.0
24°	291.2	291.8	291.2	291.4	291.5	291.7
24.5°	289.9	290.5	289.9	290.2	290.3	290.4
25°	288.4	289.1	288.4	288.7	288.9	289.0
25.5°	287.0	287.7	287.0	287.3	287.4	287.6
26°	285.6	286.2	285.6	285.9	286.1	286.3
26.5°	284.2	284.7	284.2	284.5	284.6	284.8
27°	282.8	283.3	282.8	283.1	283.2	283.3
27.5°	281.3	281.8	281.3	281.5	281.6	281.9
28°	279.7	280.3	279.7	279.9	280.1	280.3
28.5°	278.2	278.8	278.2	278.5	278.7	278.8
29°	276.6	277.2	276.6	276.9	277.0	277.2
29.5°	275.1	275.6	275.1	275.4	275.5	275.6
30°	273.5	274.0	273.5	273.7	273.8	274.0
30.5°	271.9	272.4	271.9	272.1	272.2	272.3
31°	270.2	270.8	270.2	270.4	270.5	270.7
31.5°	268.5	269.1	268.5	268.7	268.9	269.0
32°	266.8	267.4	266.8	267.1	267.2	267.4
32.5°	265.1	265.6	265.1	265.3	265.5	265.6
33°	263.4	264.0	263.4	263.7	263.8	263.9
33.5°	261.6	262.1	261.6	261.9	261.9	262.2
34°	259.9	260.4	259.9	260.1	260.2	260.4
34.5°	258.0	258.5	258.0	258.3	258.4	258.5
35°	256.2	256.8	256.2	256.5	256.6	256.7
35.5°	254.4	255.0	254.4	254.6	254.8	254.8
36°	252.6	253.1	252.6	252.8	252.9	253.0
36.5°	250.6	251.1	250.6	250.9	251.0	251.1
37°	248.8	249.3	248.8	249.0	249.1	249.3
37.5°	246.8	247.3	246.8	247.0	247.1	247.3
38°	245.0	245.4	245.0	245.1	245.3	245.3
38.5°	242.9	243.4	242.9	243.1	243.3	243.3
39°	240.9	241.5	240.9	241.2	241.3	241.5
39.5°	238.9	239.4	238.9	239.1	239.2	239.4
40°	236.9	237.4	236.9	237.1	237.3	237.4
40.5°	235.0	235.3	235.0	235.1	235.2	235.2
41°	232.9	233.3	232.9	233.1	233.1	233.3
41.5°	230.8	231.2	230.8	231.0	231.1	231.2
42°	228.6	229.1	228.6	228.8	229.0	229.0
42.5°	226.5	227.0	226.5	226.7	226.9	226.9
43°	224.4	224.9	224.4	224.5	224.7	224.8
43.5°	222.2	222.7	222.2	222.4	222.5	222.6



TEST NUMBER: P869798
 CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	215.7	216.2	215.7	215.8	216.0	216.1
45.5°	213.4	213.9	213.4	213.6	213.6	213.7
46°	211.2	211.7	211.2	211.4	211.5	211.6
46.5°	209.0	209.3	209.0	209.2	209.2	209.3
47°	206.6	207.1	206.6	206.8	206.9	207.0
47.5°	204.4	204.8	204.4	204.5	204.6	204.7
48°	202.0	202.4	202.0	202.1	202.2	202.4
48.5°	199.7	200.2	199.7	199.9	200.0	200.0
49°	197.4	197.8	197.4	197.5	197.6	197.7
49.5°	194.9	195.3	194.9	195.1	195.2	195.3
50°	192.6	193.0	192.6	192.7	192.9	192.9
50.5°	190.2	190.6	190.2	190.3	190.5	190.6
51°	187.8	188.1	187.8	187.9	188.0	188.1
51.5°	185.4	185.8	185.4	185.5	185.6	185.7
52°	183.0	183.3	183.0	183.1	183.2	183.2
52.5°	180.4	180.8	180.4	180.6	180.7	180.7
53°	178.0	178.4	178.0	178.1	178.2	178.3
53.5°	175.5	175.9	175.5	175.6	175.7	175.8
54°	172.9	173.3	172.9	173.0	173.1	173.2
54.5°	170.4	170.8	170.4	170.5	170.6	170.7
55°	167.9	168.3	167.9	168.1	168.1	168.2
55.5°	165.3	165.7	165.3	165.4	165.5	165.6
56°	162.8	163.1	162.8	162.9	162.9	163.0
56.5°	160.2	160.5	160.2	160.3	160.4	160.5
57°	157.5	157.8	157.5	157.6	157.7	157.7
57.5°	154.9	155.3	154.9	155.0	155.1	155.1
58°	152.3	152.6	152.3	152.5	152.5	152.5
58.5°	149.7	150.0	149.7	149.8	149.9	149.9
59°	146.9	147.3	146.9	147.1	147.1	147.2
59.5°	144.3	144.6	144.3	144.4	144.5	144.5
60°	141.6	142.0	141.6	141.7	141.8	141.9
60.5°	138.9	139.2	138.9	139.0	139.0	139.1
61°	136.2	136.5	136.2	136.3	136.3	136.4
61.5°	133.5	133.8	133.5	133.6	133.6	133.7
62°	130.8	131.1	130.8	130.9	130.9	131.0
62.5°	128.0	128.3	128.0	128.1	128.1	128.1
63°	125.2	125.5	125.2	125.3	125.3	125.4
63.5°	122.5	122.8	122.5	122.5	122.6	122.6
64°	119.8	120.0	119.8	119.8	119.8	119.9
64.5°	116.9	117.2	116.9	116.9	117.0	117.0
65°	114.1	114.4	114.1	114.2	114.2	114.2
65.5°	111.4	111.6	111.4	111.4	111.4	111.4
66°	108.5	108.8	108.5	108.6	108.6	108.6



TEST NUMBER: P869798
 CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	100.0	100.3	100.0	100.1	100.1	100.1
68°	97.2	97.4	97.2	97.2	97.2	97.2
68.5°	94.4	94.5	94.4	94.4	94.4	94.4
69°	91.4	91.7	91.4	91.4	91.4	91.5
69.5°	88.6	88.9	88.6	88.6	88.6	88.6
70°	85.8	86.0	85.8	85.8	85.7	85.8
70.5°	83.0	83.2	83.0	83.0	82.9	82.9
71°	80.1	80.3	80.1	80.0	80.0	79.9
71.5°	77.3	77.5	77.3	77.2	77.2	77.1
72°	74.4	74.6	74.4	74.4	74.3	74.3
72.5°	71.6	71.8	71.6	71.5	71.5	71.5
73°	68.7	68.9	68.7	68.6	68.6	68.5
73.5°	65.9	66.1	65.9	65.8	65.7	65.7
74°	63.1	63.3	63.1	63.0	62.9	62.9
74.5°	60.3	60.6	60.3	60.2	60.1	60.1
75°	57.4	57.7	57.4	57.4	57.3	57.3
75.5°	54.7	54.9	54.7	54.5	54.5	54.4
76°	51.9	52.2	51.9	51.8	51.7	51.6
76.5°	49.2	49.5	49.2	49.0	48.9	48.8
77°	46.5	46.8	46.5	46.3	46.2	46.1
77.5°	43.8	44.2	43.8	43.6	43.4	43.4
78°	41.2	41.5	41.2	41.0	40.8	40.7
78.5°	38.6	38.9	38.6	38.4	38.2	38.1
79°	35.9	36.3	35.9	35.7	35.5	35.5
79.5°	33.4	33.7	33.4	33.2	33.0	33.0
80°	30.9	31.3	30.9	30.7	30.5	30.5
80.5°	28.5	28.8	28.5	28.2	28.0	27.9
81°	26.1	26.5	26.1	25.8	25.6	25.5
81.5°	23.9	24.1	23.9	23.5	23.3	23.1
82°	21.6	21.9	21.6	21.2	20.9	20.7
82.5°	19.6	19.8	19.6	19.1	18.7	18.5
83°	17.5	17.7	17.5	17.0	16.6	16.4
83.5°	15.5	15.8	15.5	15.1	14.5	14.3
84°	13.6	13.9	13.6	13.1	12.7	12.4
84.5°	11.9	12.4	11.9	11.3	10.8	10.5
85°	10.3	10.9	10.3	9.6	9.1	8.9
85.5°	8.8	9.4	8.8	8.1	7.5	7.3
86°	7.4	8.0	7.4	6.7	6.1	5.9
86.5°	6.0	6.6	6.0	5.5	4.9	4.7
87°	5.1	5.6	5.1	4.4	3.7	3.5
87.5°	4.2	4.8	4.2	3.4	2.7	2.5
88°	3.4	4.0	3.4	2.6	1.9	1.7
88.5°	2.6	3.1	2.6	1.9	1.4	0.9



TEST NUMBER: P869798
CATALOG NUMBER: HLBSL609FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0

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

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°

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21.5°	298.1	297.9	297.8	297.6	298.1	297.6	297.8	297.9	298.1	297.9	297.8
22°	296.9	296.7	296.5	296.3	296.9	296.3	296.5	296.7	296.9	296.7	296.5



44°	220.4	220.4	220.3	220.1	220.4	220.1	220.3	220.4	220.4	220.4	220.3
44.5°	218.3	218.1	218.0	217.9	218.3	217.9	218.0	218.1	218.3	218.1	218.0



66.5°	105.7	105.7	105.7	105.7	105.9	105.7	105.7	105.7	105.7	105.7	105.7
67°	102.8	102.8	102.8	102.8	103.0	102.8	102.8	102.8	102.8	102.8	102.8



89°	0.5	0.8	1.5	1.9	2.3	1.9	1.5	0.8	0.5	0.8	1.5
89.5°	0.2	0.4	1.0	1.5	1.8	1.5	1.0	0.4	0.2	0.4	1.0

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21.5°	297.6	298.1	297.6	297.8	297.9	298.1
22°	296.3	296.9	296.3	296.5	296.7	296.9



44°	220.1	220.4	220.1	220.3	220.4	220.4
44.5°	217.9	218.3	217.9	218.0	218.1	218.3

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66.5°	105.7	105.9	105.7	105.7	105.7	105.7
67°	102.8	103.0	102.8	102.8	102.8	102.8



89°	1.9	2.3	1.9	1.5	0.8	0.5
89.5°	1.5	1.8	1.5	1.0	0.4	0.2

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(END OF REPORT)