

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: P869796

Luminaire Tested: HLBSL406FS5-5000K

Issue Date: 9/3/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P869796  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2402870-01A001)  
Test Lab:  
Issue Date: 9/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: HLBSL406F55-5000K  
Description: 4IN 750LM, 90CRI, DIMMING TO 10%  
Light Source: SELECTABLE CCT 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

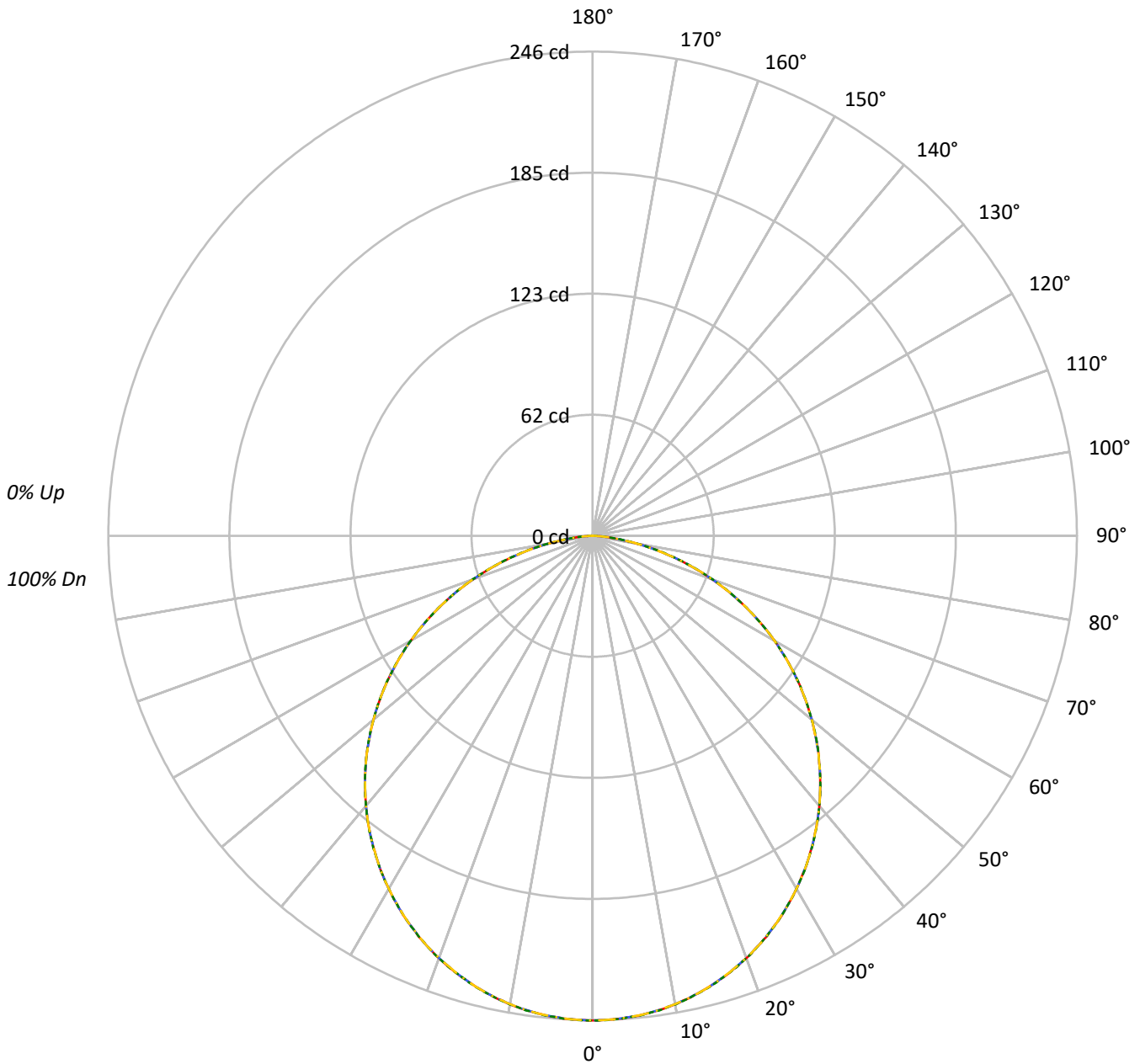
Lumens per Lamp: N/A  
Luminaire Lumens: 690.0 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 8.3  
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	78	85	80	76	82	78	74	79	76	72	70								
3	90	80	72	65	88	78	71	65	75	69	63	73	67	62	70	65	61	59								
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50								
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44								
6	70	57	48	41	68	56	47	41	54	47	41	52	46	41	51	45	40	38								
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34								
8	61	47	38	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30								
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27								
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	30984	30984	30984	30984
5°	30964	30976	30964	30976
10°	30887	30900	30887	30900
15°	30748	30761	30748	30761
20°	30589	30589	30589	30589
25°	30355	30369	30355	30369
30°	30096	30096	30096	30096
35°	29790	29805	29790	29805
40°	29423	29440	29423	29440
45°	28975	28993	28975	28993
50°	28448	28468	28448	28468
55°	27756	27800	27756	27800
60°	26831	26882	26831	26882
65°	25580	25639	25580	25639
70°	23733	23807	23733	23807
75°	20957	21006	20957	21006
80°	16524	16669	16524	16669
85°	9675	9963	9675	9963

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 28993 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	3.4
10°-20°	66.6	9.7
20°-30°	100.7	14.6
30°-40°	121.3	17.6
40°-50°	125.6	18.2
50°-60°	113.0	16.4
60°-70°	84.9	12.3
70°-80°	45.7	6.6
80°-90°	9.0	1.3
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°	190.6	27.6
0°-40°	311.9	45.2
0°-60°	550.4	79.8
0°-90°	690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	246	246	246	246	246	
5°	245	245	245	245	245	23
15°	236	236	236	236	236	67
25°	219	219	219	219	219	101
35°	194	194	194	194	194	121
45°	163	163	163	163	163	126
55°	126	127	126	127	126	113
65°	86	86	86	86	86	85
75°	43	43	43	43	43	46
85°	7	7	7	7	7	9
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°	246.2	246.2	246.2	246.2	246.2	246.2	246.2	246.2	246.2	246.2	246.2
0.5°	246.3	246.3	246.2	246.1	246.3	246.1	246.2	246.3	246.3	246.3	246.2
1°	246.2	246.2	246.2	246.1	246.3	246.1	246.2	246.2	246.2	246.2	246.2
1.5°	246.1	246.1	246.1	246.0	246.2	246.0	246.1	246.1	246.1	246.1	246.1
2°	246.0	246.0	246.0	245.9	246.1	245.9	246.0	246.0	246.0	246.0	246.0
2.5°	245.9	245.9	245.9	245.8	246.0	245.8	245.9	245.9	245.9	245.9	245.9
3°	245.8	245.8	245.8	245.7	245.9	245.7	245.8	245.8	245.8	245.8	245.8
3.5°	245.7	245.6	245.6	245.5	245.8	245.5	245.6	245.6	245.7	245.6	245.6
4°	245.4	245.5	245.4	245.3	245.5	245.3	245.4	245.5	245.4	245.5	245.4
4.5°	245.2	245.3	245.2	245.2	245.3	245.2	245.2	245.3	245.2	245.3	245.2
5°	245.1	245.1	245.0	245.0	245.2	245.0	245.0	245.1	245.1	245.1	245.0
5.5°	244.9	244.9	244.8	244.8	245.0	244.8	244.8	244.9	244.9	244.9	244.8
6°	244.6	244.6	244.6	244.5	244.7	244.5	244.6	244.6	244.6	244.6	244.6
6.5°	244.3	244.2	244.3	244.2	244.4	244.2	244.3	244.2	244.3	244.2	244.3
7°	244.0	243.9	243.9	243.8	244.0	243.8	243.9	243.9	244.0	243.9	243.9
7.5°	243.7	243.7	243.6	243.5	243.7	243.5	243.6	243.7	243.7	243.7	243.6
8°	243.3	243.3	243.3	243.2	243.5	243.2	243.3	243.3	243.3	243.3	243.3
8.5°	243.0	242.9	242.9	242.8	243.0	242.8	242.9	242.9	243.0	242.9	242.9
9°	242.6	242.5	242.4	242.4	242.5	242.4	242.4	242.5	242.6	242.5	242.4
9.5°	242.2	242.1	242.1	242.0	242.1	242.0	242.1	242.1	242.2	242.1	242.1
10°	241.7	241.7	241.6	241.5	241.8	241.5	241.6	241.7	241.7	241.7	241.6
10.5°	241.2	241.2	241.1	241.0	241.3	241.0	241.1	241.2	241.2	241.2	241.1
11°	240.6	240.7	240.6	240.6	240.8	240.6	240.6	240.7	240.6	240.7	240.6
11.5°	240.2	240.2	240.2	240.1	240.3	240.1	240.2	240.2	240.2	240.2	240.2
12°	239.7	239.6	239.6	239.5	239.7	239.5	239.6	239.6	239.7	239.6	239.6
12.5°	239.1	239.1	239.1	239.0	239.1	239.0	239.1	239.1	239.1	239.1	239.1
13°	238.6	238.5	238.5	238.4	238.6	238.4	238.5	238.5	238.6	238.5	238.5
13.5°	237.9	238.0	237.9	237.8	238.0	237.8	237.9	238.0	237.9	238.0	237.9
14°	237.3	237.4	237.3	237.2	237.4	237.2	237.3	237.4	237.3	237.4	237.3
14.5°	236.7	236.7	236.7	236.5	236.8	236.5	236.7	236.7	236.7	236.7	236.7
15°	236.0	236.0	236.0	236.0	236.1	236.0	236.0	236.0	236.0	236.0	236.0
15.5°	235.3	235.3	235.3	235.2	235.5	235.2	235.3	235.3	235.3	235.3	235.3
16°	234.6	234.6	234.6	234.5	234.6	234.5	234.6	234.6	234.6	234.6	234.6
16.5°	234.0	234.0	233.9	233.8	233.9	233.8	233.9	234.0	234.0	234.0	233.9
17°	233.2	233.2	233.1	233.0	233.1	233.0	233.1	233.2	233.2	233.2	233.1
17.5°	232.5	232.5	232.4	232.3	232.5	232.3	232.4	232.5	232.5	232.5	232.4
18°	231.6	231.6	231.5	231.5	231.7	231.5	231.5	231.6	231.6	231.6	231.5
18.5°	230.9	230.8	230.7	230.7	230.9	230.7	230.7	230.8	230.9	230.8	230.7
19°	230.0	230.0	229.9	229.9	230.0	229.9	229.9	230.0	230.0	230.0	229.9
19.5°	229.2	229.2	229.1	229.0	229.2	229.0	229.1	229.2	229.2	229.2	229.1
20°	228.4	228.4	228.3	228.2	228.4	228.2	228.3	228.4	228.4	228.4	228.3
20.5°	227.5	227.4	227.4	227.3	227.5	227.3	227.4	227.4	227.5	227.4	227.4
21°	226.6	226.6	226.5	226.5	226.7	226.5	226.5	226.6	226.6	226.6	226.5



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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°	223.8	223.7	223.8	223.6	223.8	223.6	223.8	223.7	223.8	223.7	223.8
23°	222.8	222.7	222.7	222.6	222.7	222.6	222.7	222.7	222.8	222.7	222.7
23.5°	221.9	221.8	221.7	221.6	221.8	221.6	221.7	221.8	221.9	221.8	221.7
24°	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7
24.5°	219.6	219.6	219.6	219.6	219.7	219.6	219.6	219.6	219.6	219.6	219.6
25°	218.6	218.6	218.6	218.5	218.7	218.5	218.6	218.6	218.6	218.6	218.6
25.5°	217.6	217.6	217.6	217.5	217.7	217.5	217.6	217.6	217.6	217.6	217.6
26°	216.5	216.5	216.4	216.4	216.5	216.4	216.4	216.5	216.5	216.5	216.4
26.5°	215.5	215.4	215.3	215.3	215.4	215.3	215.3	215.4	215.5	215.4	215.3
27°	214.3	214.3	214.2	214.2	214.3	214.2	214.2	214.3	214.3	214.3	214.2
27.5°	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1	213.1
28°	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9	211.9
28.5°	210.8	210.7	210.7	210.7	210.8	210.7	210.7	210.7	210.8	210.7	210.7
29°	209.6	209.5	209.5	209.5	209.6	209.5	209.5	209.5	209.6	209.5	209.5
29.5°	208.4	208.4	208.3	208.3	208.4	208.3	208.3	208.4	208.4	208.4	208.3
30°	207.1	207.1	207.0	207.0	207.1	207.0	207.0	207.1	207.1	207.1	207.0
30.5°	205.9	205.8	205.8	205.8	205.9	205.8	205.8	205.8	205.9	205.8	205.8
31°	204.6	204.5	204.6	204.5	204.6	204.5	204.6	204.5	204.6	204.5	204.6
31.5°	203.3	203.3	203.3	203.2	203.4	203.2	203.3	203.3	203.3	203.3	203.3
32°	202.0	202.0	202.0	202.0	202.1	202.0	202.0	202.0	202.0	202.0	202.0
32.5°	200.8	200.7	200.7	200.7	200.9	200.7	200.7	200.7	200.8	200.7	200.7
33°	199.4	199.4	199.4	199.4	199.4	199.4	199.4	199.4	199.4	199.4	199.4
33.5°	198.0	197.9	198.0	197.9	198.1	197.9	198.0	197.9	198.0	197.9	198.0
34°	196.6	196.6	196.6	196.6	196.7	196.6	196.6	196.6	196.6	196.6	196.6
34.5°	195.2	195.2	195.2	195.2	195.4	195.2	195.2	195.2	195.2	195.2	195.2
35°	193.9	193.8	193.8	193.8	194.0	193.8	193.8	193.8	193.9	193.8	193.8
35.5°	192.5	192.4	192.4	192.4	192.6	192.4	192.4	192.4	192.5	192.4	192.4
36°	191.1	191.0	191.0	191.0	191.1	191.0	191.0	191.0	191.1	191.0	191.0
36.5°	189.6	189.6	189.6	189.6	189.7	189.6	189.6	189.6	189.6	189.6	189.6
37°	188.1	188.1	188.1	188.1	188.3	188.1	188.1	188.1	188.1	188.1	188.1
37.5°	186.7	186.6	186.7	186.6	186.8	186.6	186.7	186.6	186.7	186.6	186.7
38°	185.2	185.2	185.2	185.1	185.3	185.1	185.2	185.2	185.2	185.2	185.2
38.5°	183.8	183.7	183.7	183.6	183.8	183.6	183.7	183.7	183.8	183.7	183.7
39°	182.2	182.2	182.2	182.1	182.3	182.1	182.2	182.2	182.2	182.2	182.2
39.5°	180.6	180.7	180.7	180.6	180.7	180.6	180.7	180.7	180.6	180.7	180.7
40°	179.1	179.1	179.1	179.1	179.2	179.1	179.1	179.1	179.1	179.1	179.1
40.5°	177.5	177.5	177.5	177.5	177.6	177.5	177.5	177.5	177.5	177.5	177.5
41°	176.0	175.9	175.9	175.9	176.1	175.9	175.9	175.9	176.0	175.9	175.9
41.5°	174.4	174.4	174.3	174.3	174.5	174.3	174.3	174.4	174.4	174.4	174.3
42°	172.8	172.8	172.7	172.7	172.9	172.7	172.7	172.8	172.8	172.8	172.7
42.5°	171.1	171.1	171.1	171.1	171.3	171.1	171.1	171.1	171.1	171.1	171.1
43°	169.5	169.5	169.5	169.4	169.6	169.4	169.5	169.5	169.5	169.5	169.5
43.5°	167.9	167.8	167.8	167.8	167.9	167.8	167.8	167.8	167.9	167.8	167.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	162.8	162.7	162.8	162.8	162.9	162.8	162.8	162.7	162.8	162.7	162.8
45.5°	161.2	161.1	161.2	161.2	161.2	161.2	161.2	161.1	161.2	161.1	161.2
46°	159.6	159.4	159.5	159.4	159.6	159.4	159.5	159.4	159.6	159.4	159.5
46.5°	157.8	157.7	157.7	157.7	157.9	157.7	157.7	157.7	157.8	157.7	157.7
47°	156.0	156.0	155.9	155.9	156.1	155.9	155.9	156.0	156.0	156.0	155.9
47.5°	154.2	154.2	154.2	154.2	154.3	154.2	154.2	154.2	154.2	154.2	154.2
48°	152.4	152.4	152.4	152.4	152.6	152.4	152.4	152.4	152.4	152.4	152.4
48.5°	150.6	150.6	150.6	150.6	150.8	150.6	150.6	150.6	150.6	150.6	150.6
49°	148.9	148.9	148.9	148.9	149.0	148.9	148.9	148.9	148.9	148.9	148.9
49.5°	147.1	147.1	147.1	147.1	147.2	147.1	147.1	147.1	147.1	147.1	147.1
50°	145.3	145.3	145.3	145.3	145.4	145.3	145.3	145.3	145.3	145.3	145.3
50.5°	143.4	143.4	143.4	143.4	143.5	143.4	143.4	143.4	143.4	143.4	143.4
51°	141.6	141.6	141.6	141.6	141.7	141.6	141.6	141.6	141.6	141.6	141.6
51.5°	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8
52°	138.0	138.0	138.0	137.9	138.1	137.9	138.0	138.0	138.0	138.0	138.0
52.5°	136.0	136.0	136.1	136.0	136.2	136.0	136.1	136.0	136.0	136.0	136.1
53°	134.2	134.1	134.1	134.1	134.2	134.1	134.1	134.1	134.2	134.1	134.1
53.5°	132.3	132.2	132.2	132.2	132.3	132.2	132.2	132.2	132.3	132.2	132.2
54°	130.5	130.4	130.4	130.4	130.5	130.4	130.4	130.4	130.5	130.4	130.4
54.5°	128.5	128.4	128.5	128.5	128.6	128.5	128.5	128.4	128.5	128.4	128.5
55°	126.5	126.5	126.5	126.5	126.7	126.5	126.5	126.5	126.5	126.5	126.5
55.5°	124.6	124.5	124.5	124.5	124.7	124.5	124.5	124.5	124.6	124.5	124.5
56°	122.6	122.6	122.7	122.6	122.8	122.6	122.7	122.6	122.6	122.6	122.7
56.5°	120.6	120.7	120.7	120.7	120.8	120.7	120.7	120.7	120.6	120.7	120.7
57°	118.7	118.7	118.6	118.6	118.8	118.6	118.6	118.7	118.7	118.7	118.6
57.5°	116.8	116.7	116.7	116.8	116.9	116.8	116.7	116.7	116.8	116.7	116.7
58°	114.7	114.7	114.7	114.7	114.9	114.7	114.7	114.7	114.7	114.7	114.7
58.5°	112.7	112.7	112.7	112.7	112.8	112.7	112.7	112.7	112.7	112.7	112.7
59°	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8
59.5°	108.7	108.7	108.7	108.7	108.8	108.7	108.7	108.7	108.7	108.7	108.7
60°	106.6	106.6	106.6	106.6	106.8	106.6	106.6	106.6	106.6	106.6	106.6
60.5°	104.6	104.6	104.6	104.6	104.7	104.6	104.6	104.6	104.6	104.6	104.6
61°	102.6	102.6	102.6	102.6	102.7	102.6	102.6	102.6	102.6	102.6	102.6
61.5°	100.5	100.5	100.5	100.5	100.6	100.5	100.5	100.5	100.5	100.5	100.5
62°	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
62.5°	96.4	96.4	96.4	96.4	96.5	96.4	96.4	96.4	96.4	96.4	96.4
63°	94.2	94.2	94.3	94.3	94.3	94.3	94.3	94.2	94.2	94.2	94.3
63.5°	92.2	92.2	92.2	92.3	92.3	92.3	92.2	92.2	92.2	92.2	92.2
64°	90.1	90.1	90.1	90.1	90.2	90.1	90.1	90.1	90.1	90.1	90.1
64.5°	88.0	88.0	88.0	88.0	88.1	88.0	88.0	88.0	88.0	88.0	88.0
65°	85.9	85.9	86.0	85.9	86.1	85.9	86.0	85.9	85.9	85.9	86.0
65.5°	83.7	83.7	83.8	83.8	83.9	83.8	83.8	83.7	83.7	83.7	83.8
66°	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.6	81.7	81.7





TEST NUMBER: P869796  
 CATALOG NUMBER: HLBSL406FS5-5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	75.3	75.3	75.3	75.4	75.5	75.4	75.3	75.3	75.3	75.3	75.3
68°	73.1	73.1	73.1	73.2	73.3	73.2	73.1	73.1	73.1	73.1	73.1
68.5°	71.0	71.0	71.0	71.0	71.1	71.0	71.0	71.0	71.0	71.0	71.0
69°	68.8	68.8	68.9	68.9	69.0	68.9	68.9	68.8	68.8	68.8	68.9
69.5°	66.6	66.6	66.7	66.7	66.8	66.7	66.7	66.6	66.6	66.6	66.7
70°	64.5	64.5	64.6	64.6	64.7	64.6	64.6	64.5	64.5	64.5	64.6
70.5°	62.3	62.3	62.4	62.4	62.5	62.4	62.4	62.3	62.3	62.3	62.4
71°	60.2	60.3	60.3	60.3	60.3	60.3	60.3	60.3	60.2	60.3	60.3
71.5°	58.0	58.0	58.1	58.1	58.2	58.1	58.1	58.0	58.0	58.0	58.1
72°	55.8	55.8	55.9	55.9	56.0	55.9	55.9	55.8	55.8	55.8	55.9
72.5°	53.7	53.7	53.8	53.8	53.9	53.8	53.8	53.7	53.7	53.7	53.8
73°	51.5	51.5	51.6	51.6	51.7	51.6	51.6	51.5	51.5	51.5	51.6
73.5°	49.4	49.5	49.5	49.6	49.6	49.6	49.5	49.5	49.4	49.5	49.5
74°	47.3	47.3	47.3	47.4	47.5	47.4	47.3	47.3	47.3	47.3	47.3
74.5°	45.1	45.2	45.2	45.2	45.3	45.2	45.2	45.2	45.1	45.2	45.2
75°	43.1	43.1	43.1	43.2	43.2	43.2	43.1	43.1	43.1	43.1	43.1
75.5°	40.9	40.9	41.0	41.0	41.1	41.0	41.0	40.9	40.9	40.9	41.0
76°	38.9	38.9	38.9	39.0	39.0	39.0	38.9	38.9	38.9	38.9	38.9
76.5°	36.7	36.7	36.8	36.9	37.2	36.9	36.8	36.7	36.7	36.7	36.8
77°	34.7	34.8	34.7	34.8	35.1	34.8	34.7	34.8	34.7	34.8	34.7
77.5°	32.7	32.8	32.8	32.8	33.0	32.8	32.8	32.8	32.7	32.8	32.8
78°	30.7	30.7	30.8	30.7	31.0	30.7	30.8	30.7	30.7	30.7	30.8
78.5°	28.7	28.7	28.7	28.7	28.8	28.7	28.7	28.7	28.7	28.7	28.7
79°	26.7	26.7	26.7	26.7	26.9	26.7	26.7	26.7	26.7	26.7	26.7
79.5°	24.8	24.8	24.8	24.9	25.0	24.9	24.8	24.8	24.8	24.8	24.8
80°	22.8	22.8	22.9	23.0	23.0	23.0	22.9	22.8	22.8	22.8	22.9
80.5°	21.0	21.0	21.0	21.1	21.1	21.1	21.0	21.0	21.0	21.0	21.0
81°	19.1	19.1	19.2	19.2	19.3	19.2	19.2	19.1	19.1	19.1	19.2
81.5°	17.4	17.4	17.5	17.5	17.6	17.5	17.5	17.4	17.4	17.4	17.5
82°	15.6	15.6	15.7	15.8	15.8	15.8	15.7	15.6	15.6	15.6	15.7
82.5°	14.0	14.0	14.0	14.1	14.1	14.1	14.0	14.0	14.0	14.0	14.0
83°	12.3	12.3	12.4	12.5	12.5	12.5	12.4	12.3	12.3	12.3	12.4
83.5°	10.7	10.8	10.9	10.9	11.0	10.9	10.9	10.8	10.7	10.8	10.9
84°	9.3	9.3	9.4	9.5	9.5	9.5	9.4	9.3	9.3	9.3	9.4
84.5°	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0	8.1
85°	6.7	6.7	6.8	6.8	6.9	6.8	6.8	6.7	6.7	6.7	6.8
85.5°	5.4	5.4	5.4	5.5	5.7	5.5	5.4	5.4	5.4	5.4	5.4
86°	4.2	4.3	4.4	4.5	4.7	4.5	4.4	4.3	4.2	4.3	4.4
86.5°	3.4	3.3	3.4	3.5	3.7	3.5	3.4	3.3	3.4	3.3	3.4
87°	2.5	2.4	2.5	2.5	2.7	2.5	2.5	2.4	2.5	2.4	2.5
87.5°	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8
88°	1.1	1.0	1.1	1.2	1.2	1.2	1.1	1.0	1.1	1.0	1.1
88.5°	0.6	0.6	0.7	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.7



TEST NUMBER: P869796  
CATALOG NUMBER: HLBSL406FS5-5000K

**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: P869796

CATALOG NUMBER: HLBSL406FS5-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	246.2	246.2	246.2	246.2	246.2	246.2
0.5°	246.1	246.3	246.1	246.2	246.3	246.3
1°	246.1	246.3	246.1	246.2	246.2	246.2
1.5°	246.0	246.2	246.0	246.1	246.1	246.1
2°	245.9	246.1	245.9	246.0	246.0	246.0
2.5°	245.8	246.0	245.8	245.9	245.9	245.9
3°	245.7	245.9	245.7	245.8	245.8	245.8
3.5°	245.5	245.8	245.5	245.6	245.6	245.7
4°	245.3	245.5	245.3	245.4	245.5	245.4
4.5°	245.2	245.3	245.2	245.2	245.3	245.2
5°	245.0	245.2	245.0	245.0	245.1	245.1
5.5°	244.8	245.0	244.8	244.8	244.9	244.9
6°	244.5	244.7	244.5	244.6	244.6	244.6
6.5°	244.2	244.4	244.2	244.3	244.2	244.3
7°	243.8	244.0	243.8	243.9	243.9	244.0
7.5°	243.5	243.7	243.5	243.6	243.7	243.7
8°	243.2	243.5	243.2	243.3	243.3	243.3
8.5°	242.8	243.0	242.8	242.9	242.9	243.0
9°	242.4	242.5	242.4	242.4	242.5	242.6
9.5°	242.0	242.1	242.0	242.1	242.1	242.2
10°	241.5	241.8	241.5	241.6	241.7	241.7
10.5°	241.0	241.3	241.0	241.1	241.2	241.2
11°	240.6	240.8	240.6	240.6	240.7	240.6
11.5°	240.1	240.3	240.1	240.2	240.2	240.2
12°	239.5	239.7	239.5	239.6	239.6	239.7
12.5°	239.0	239.1	239.0	239.1	239.1	239.1
13°	238.4	238.6	238.4	238.5	238.5	238.6
13.5°	237.8	238.0	237.8	237.9	238.0	237.9
14°	237.2	237.4	237.2	237.3	237.4	237.3
14.5°	236.5	236.8	236.5	236.7	236.7	236.7
15°	236.0	236.1	236.0	236.0	236.0	236.0
15.5°	235.2	235.5	235.2	235.3	235.3	235.3
16°	234.5	234.6	234.5	234.6	234.6	234.6
16.5°	233.8	233.9	233.8	233.9	234.0	234.0
17°	233.0	233.1	233.0	233.1	233.2	233.2
17.5°	232.3	232.5	232.3	232.4	232.5	232.5
18°	231.5	231.7	231.5	231.5	231.6	231.6
18.5°	230.7	230.9	230.7	230.7	230.8	230.9
19°	229.9	230.0	229.9	229.9	230.0	230.0
19.5°	229.0	229.2	229.0	229.1	229.2	229.2
20°	228.2	228.4	228.2	228.3	228.4	228.4
20.5°	227.3	227.5	227.3	227.4	227.4	227.5
21°	226.5	226.7	226.5	226.5	226.6	226.6



TEST NUMBER: P869796  
 CATALOG NUMBER: HLBSL406FS5-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	223.6	223.8	223.6	223.8	223.7	223.8
23°	222.6	222.7	222.6	222.7	222.7	222.8
23.5°	221.6	221.8	221.6	221.7	221.8	221.9
24°	220.7	220.7	220.7	220.7	220.7	220.7
24.5°	219.6	219.7	219.6	219.6	219.6	219.6
25°	218.5	218.7	218.5	218.6	218.6	218.6
25.5°	217.5	217.7	217.5	217.6	217.6	217.6
26°	216.4	216.5	216.4	216.4	216.5	216.5
26.5°	215.3	215.4	215.3	215.3	215.4	215.5
27°	214.2	214.3	214.2	214.2	214.3	214.3
27.5°	213.1	213.1	213.1	213.1	213.1	213.1
28°	211.9	211.9	211.9	211.9	211.9	211.9
28.5°	210.7	210.8	210.7	210.7	210.7	210.8
29°	209.5	209.6	209.5	209.5	209.5	209.6
29.5°	208.3	208.4	208.3	208.3	208.4	208.4
30°	207.0	207.1	207.0	207.0	207.1	207.1
30.5°	205.8	205.9	205.8	205.8	205.8	205.9
31°	204.5	204.6	204.5	204.6	204.5	204.6
31.5°	203.2	203.4	203.2	203.3	203.3	203.3
32°	202.0	202.1	202.0	202.0	202.0	202.0
32.5°	200.7	200.9	200.7	200.7	200.7	200.8
33°	199.4	199.4	199.4	199.4	199.4	199.4
33.5°	197.9	198.1	197.9	198.0	197.9	198.0
34°	196.6	196.7	196.6	196.6	196.6	196.6
34.5°	195.2	195.4	195.2	195.2	195.2	195.2
35°	193.8	194.0	193.8	193.8	193.8	193.9
35.5°	192.4	192.6	192.4	192.4	192.4	192.5
36°	191.0	191.1	191.0	191.0	191.0	191.1
36.5°	189.6	189.7	189.6	189.6	189.6	189.6
37°	188.1	188.3	188.1	188.1	188.1	188.1
37.5°	186.6	186.8	186.6	186.7	186.6	186.7
38°	185.1	185.3	185.1	185.2	185.2	185.2
38.5°	183.6	183.8	183.6	183.7	183.7	183.8
39°	182.1	182.3	182.1	182.2	182.2	182.2
39.5°	180.6	180.7	180.6	180.7	180.7	180.6
40°	179.1	179.2	179.1	179.1	179.1	179.1
40.5°	177.5	177.6	177.5	177.5	177.5	177.5
41°	175.9	176.1	175.9	175.9	175.9	176.0
41.5°	174.3	174.5	174.3	174.3	174.4	174.4
42°	172.7	172.9	172.7	172.7	172.8	172.8
42.5°	171.1	171.3	171.1	171.1	171.1	171.1
43°	169.4	169.6	169.4	169.5	169.5	169.5
43.5°	167.8	167.9	167.8	167.8	167.8	167.9



TEST NUMBER: P869796  
 CATALOG NUMBER: HLBSL406FS5-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	162.8	162.9	162.8	162.8	162.7	162.8
45.5°	161.2	161.2	161.2	161.2	161.1	161.2
46°	159.4	159.6	159.4	159.5	159.4	159.6
46.5°	157.7	157.9	157.7	157.7	157.7	157.8
47°	155.9	156.1	155.9	155.9	156.0	156.0
47.5°	154.2	154.3	154.2	154.2	154.2	154.2
48°	152.4	152.6	152.4	152.4	152.4	152.4
48.5°	150.6	150.8	150.6	150.6	150.6	150.6
49°	148.9	149.0	148.9	148.9	148.9	148.9
49.5°	147.1	147.2	147.1	147.1	147.1	147.1
50°	145.3	145.4	145.3	145.3	145.3	145.3
50.5°	143.4	143.5	143.4	143.4	143.4	143.4
51°	141.6	141.7	141.6	141.6	141.6	141.6
51.5°	139.8	139.8	139.8	139.8	139.8	139.8
52°	137.9	138.1	137.9	138.0	138.0	138.0
52.5°	136.0	136.2	136.0	136.1	136.0	136.0
53°	134.1	134.2	134.1	134.1	134.1	134.2
53.5°	132.2	132.3	132.2	132.2	132.2	132.3
54°	130.4	130.5	130.4	130.4	130.4	130.5
54.5°	128.5	128.6	128.5	128.5	128.4	128.5
55°	126.5	126.7	126.5	126.5	126.5	126.5
55.5°	124.5	124.7	124.5	124.5	124.5	124.6
56°	122.6	122.8	122.6	122.7	122.6	122.6
56.5°	120.7	120.8	120.7	120.7	120.7	120.6
57°	118.6	118.8	118.6	118.6	118.7	118.7
57.5°	116.8	116.9	116.8	116.7	116.7	116.8
58°	114.7	114.9	114.7	114.7	114.7	114.7
58.5°	112.7	112.8	112.7	112.7	112.7	112.7
59°	110.8	110.8	110.8	110.8	110.8	110.8
59.5°	108.7	108.8	108.7	108.7	108.7	108.7
60°	106.6	106.8	106.6	106.6	106.6	106.6
60.5°	104.6	104.7	104.6	104.6	104.6	104.6
61°	102.6	102.7	102.6	102.6	102.6	102.6
61.5°	100.5	100.6	100.5	100.5	100.5	100.5
62°	98.5	98.5	98.5	98.5	98.5	98.5
62.5°	96.4	96.5	96.4	96.4	96.4	96.4
63°	94.3	94.3	94.3	94.3	94.2	94.2
63.5°	92.3	92.3	92.3	92.2	92.2	92.2
64°	90.1	90.2	90.1	90.1	90.1	90.1
64.5°	88.0	88.1	88.0	88.0	88.0	88.0
65°	85.9	86.1	85.9	86.0	85.9	85.9
65.5°	83.8	83.9	83.8	83.8	83.7	83.7
66°	81.7	81.7	81.7	81.7	81.7	81.6



TEST NUMBER: P869796  
 CATALOG NUMBER: HLBSL406FS5-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	75.4	75.5	75.4	75.3	75.3	75.3
68°	73.2	73.3	73.2	73.1	73.1	73.1
68.5°	71.0	71.1	71.0	71.0	71.0	71.0
69°	68.9	69.0	68.9	68.9	68.8	68.8
69.5°	66.7	66.8	66.7	66.7	66.6	66.6
70°	64.6	64.7	64.6	64.6	64.5	64.5
70.5°	62.4	62.5	62.4	62.4	62.3	62.3
71°	60.3	60.3	60.3	60.3	60.3	60.2
71.5°	58.1	58.2	58.1	58.1	58.0	58.0
72°	55.9	56.0	55.9	55.9	55.8	55.8
72.5°	53.8	53.9	53.8	53.8	53.7	53.7
73°	51.6	51.7	51.6	51.6	51.5	51.5
73.5°	49.6	49.6	49.6	49.5	49.5	49.4
74°	47.4	47.5	47.4	47.3	47.3	47.3
74.5°	45.2	45.3	45.2	45.2	45.2	45.1
75°	43.2	43.2	43.2	43.1	43.1	43.1
75.5°	41.0	41.1	41.0	41.0	40.9	40.9
76°	39.0	39.0	39.0	38.9	38.9	38.9
76.5°	36.9	37.2	36.9	36.8	36.7	36.7
77°	34.8	35.1	34.8	34.7	34.8	34.7
77.5°	32.8	33.0	32.8	32.8	32.8	32.7
78°	30.7	31.0	30.7	30.8	30.7	30.7
78.5°	28.7	28.8	28.7	28.7	28.7	28.7
79°	26.7	26.9	26.7	26.7	26.7	26.7
79.5°	24.9	25.0	24.9	24.8	24.8	24.8
80°	23.0	23.0	23.0	22.9	22.8	22.8
80.5°	21.1	21.1	21.1	21.0	21.0	21.0
81°	19.2	19.3	19.2	19.2	19.1	19.1
81.5°	17.5	17.6	17.5	17.5	17.4	17.4
82°	15.8	15.8	15.8	15.7	15.6	15.6
82.5°	14.1	14.1	14.1	14.0	14.0	14.0
83°	12.5	12.5	12.5	12.4	12.3	12.3
83.5°	10.9	11.0	10.9	10.9	10.8	10.7
84°	9.5	9.5	9.5	9.4	9.3	9.3
84.5°	8.1	8.1	8.1	8.1	8.0	8.0
85°	6.8	6.9	6.8	6.8	6.7	6.7
85.5°	5.5	5.7	5.5	5.4	5.4	5.4
86°	4.5	4.7	4.5	4.4	4.3	4.2
86.5°	3.5	3.7	3.5	3.4	3.3	3.4
87°	2.5	2.7	2.5	2.5	2.4	2.5
87.5°	1.8	1.9	1.8	1.8	1.8	1.8
88°	1.2	1.2	1.2	1.1	1.0	1.1
88.5°	0.8	0.8	0.8	0.7	0.6	0.6



TEST NUMBER: P869796  
CATALOG NUMBER: HLBSL406FS5-5000K

**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

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



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

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21.5°	225.6	225.6	225.6	225.4	225.7	225.4	225.6	225.6	225.6	225.6	225.6
22°	224.7	224.7	224.7	224.6	224.7	224.6	224.7	224.7	224.7	224.7	224.7



44°	166.2	166.1	166.2	166.1	166.3	166.1	166.2	166.1	166.2	166.1	166.2
44.5°	164.5	164.4	164.5	164.4	164.6	164.4	164.5	164.4	164.5	164.4	164.5



66.5°	79.5	79.5	79.5	79.6	79.6	79.6	79.5	79.5	79.5	79.5	79.5
67°	77.3	77.3	77.4	77.4	77.5	77.4	77.4	77.3	77.3	77.3	77.4



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



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21.5°	225.4	225.7	225.4	225.6	225.6	225.6
22°	224.6	224.7	224.6	224.7	224.7	224.7



44°	166.1	166.3	166.1	166.2	166.1	166.2
44.5°	164.4	164.6	164.4	164.5	164.4	164.5

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66.5°	79.6	79.6	79.6	79.5	79.5	79.5
67°	77.4	77.5	77.4	77.4	77.3	77.3



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

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(END OF REPORT)