

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: P869795

Luminaire Tested: HLBSL406FS5-4000K

Issue Date: 9/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P869795
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: HLBSL406FS5-4000K
Description: 4IN 750LM, 90CRI, DIMMING TO 10%
Light Source: SELECTABLE CCT 90CRI / 4000K CCT
Ballast/Driver: -

Summary

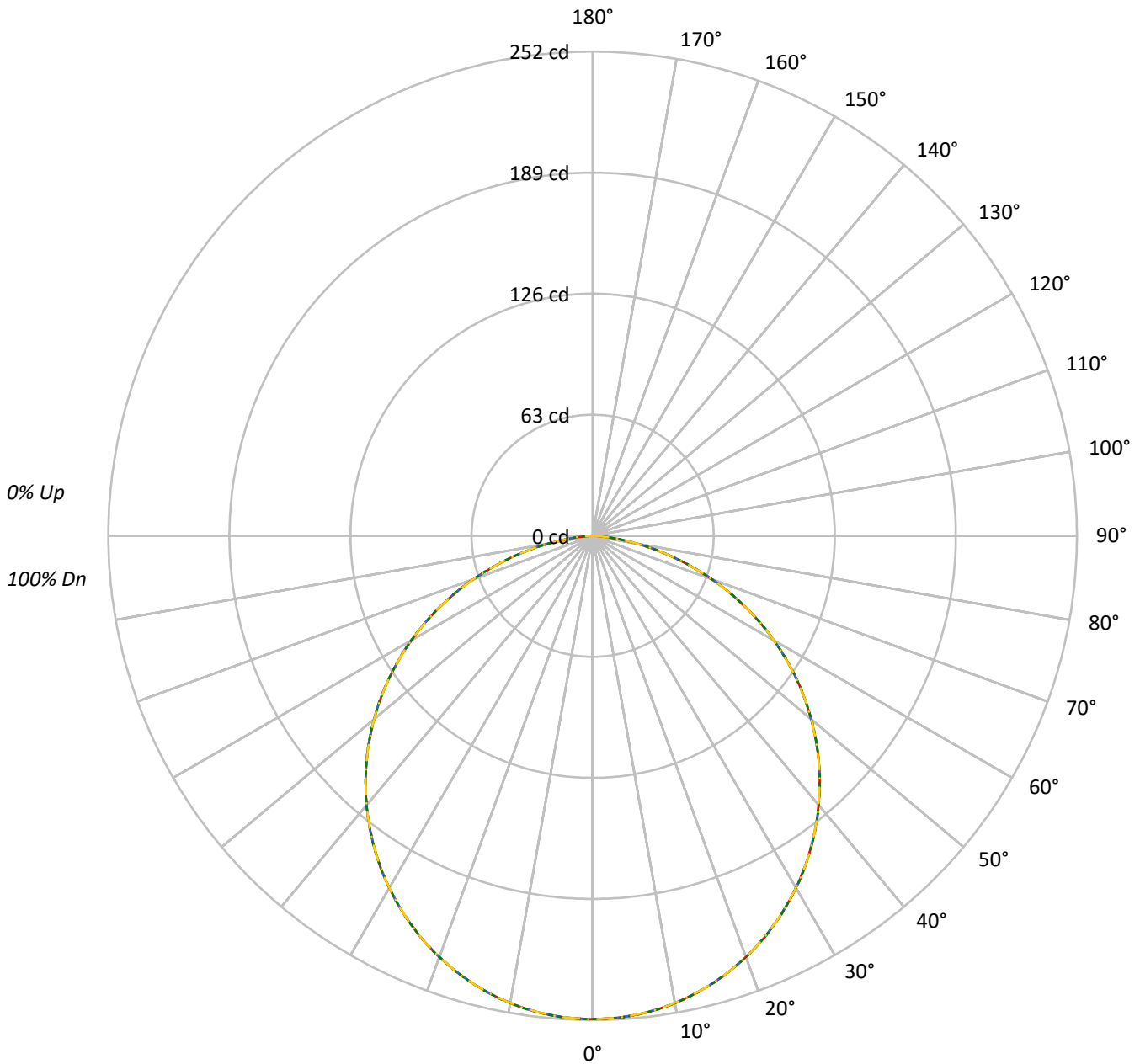
Lumens per Lamp: N/A
Luminaire Lumens: 705.0 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 8.5
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	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°	31651	31651	31651	31651
5°	31633	31658	31633	31658
10°	31552	31564	31552	31564
15°	31426	31439	31426	31439
20°	31245	31258	31245	31258
25°	31007	31021	31007	31021
30°	30749	30749	30749	30749
35°	30435	30450	30435	30450
40°	30064	30081	30064	30081
45°	29616	29633	29616	29633
50°	29055	29074	29055	29074
55°	28370	28414	28370	28414
60°	27410	27460	27410	27460
65°	26116	26175	26116	26175
70°	24249	24322	24249	24322
75°	21395	21443	21395	21443
80°	16886	17031	16886	17031
85°	9819	10108	9819	10108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 29633 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	3.4
10°-20°	68.0	9.7
20°-30°	102.9	14.6
30°-40°	123.9	17.6
40°-50°	128.3	18.2
50°-60°	115.5	16.4
60°-70°	86.7	12.3
70°-80°	46.6	6.6
80°-90°	9.2	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°	194.8	27.6
0°-40°	318.6	45.2
0°-60°	562.4	79.8
0°-90°	705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	705.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	252	252	252	252	252	
5°	250	251	250	251	250	24
15°	241	241	241	241	241	68
25°	223	223	223	223	223	103
35°	198	198	198	198	198	124
45°	166	166	166	166	166	128
55°	129	130	129	130	129	115
65°	88	88	88	88	88	87
75°	44	44	44	44	44	47
85°	7	7	7	7	7	9
90°	0	0	0	0	0	



TEST NUMBER: P869795

CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5	251.5
0.5°	251.6	251.6	251.5	251.4	251.6	251.4	251.5	251.6	251.6	251.6	251.5
1°	251.5	251.5	251.5	251.4	251.6	251.4	251.5	251.5	251.5	251.5	251.5
1.5°	251.4	251.4	251.4	251.3	251.5	251.3	251.4	251.4	251.4	251.4	251.4
2°	251.3	251.3	251.3	251.2	251.4	251.2	251.3	251.3	251.3	251.3	251.3
2.5°	251.2	251.2	251.2	251.2	251.3	251.2	251.2	251.2	251.2	251.2	251.2
3°	251.2	251.2	251.2	251.1	251.2	251.1	251.2	251.2	251.2	251.2	251.2
3.5°	251.1	251.0	251.0	250.9	251.2	250.9	251.0	251.0	251.1	251.0	251.0
4°	250.8	250.9	250.8	250.7	250.9	250.7	250.8	250.9	250.8	250.9	250.8
4.5°	250.6	250.7	250.6	250.5	250.7	250.5	250.6	250.7	250.6	250.7	250.6
5°	250.4	250.4	250.3	250.3	250.6	250.3	250.3	250.4	250.4	250.4	250.3
5.5°	250.2	250.2	250.1	250.1	250.3	250.1	250.1	250.2	250.2	250.2	250.1
6°	249.9	249.9	249.9	249.8	250.0	249.8	249.9	249.9	249.9	249.9	249.9
6.5°	249.6	249.5	249.6	249.5	249.7	249.5	249.6	249.5	249.6	249.5	249.6
7°	249.3	249.2	249.2	249.1	249.3	249.1	249.2	249.2	249.3	249.2	249.2
7.5°	248.9	248.9	248.9	248.8	249.0	248.8	248.9	248.9	248.9	248.9	248.9
8°	248.6	248.6	248.6	248.5	248.8	248.5	248.6	248.6	248.6	248.6	248.6
8.5°	248.3	248.2	248.2	248.1	248.3	248.1	248.2	248.2	248.3	248.2	248.2
9°	247.9	247.8	247.7	247.7	247.8	247.7	247.7	247.8	247.9	247.8	247.7
9.5°	247.5	247.3	247.3	247.2	247.4	247.2	247.3	247.3	247.5	247.3	247.3
10°	246.9	246.9	246.8	246.7	247.0	246.7	246.8	246.9	246.9	246.9	246.8
10.5°	246.5	246.5	246.4	246.3	246.5	246.3	246.4	246.5	246.5	246.5	246.4
11°	245.9	246.0	245.9	245.9	246.1	245.9	245.9	246.0	245.9	246.0	245.9
11.5°	245.4	245.4	245.4	245.3	245.5	245.3	245.4	245.4	245.4	245.4	245.4
12°	244.9	244.8	244.8	244.7	244.9	244.7	244.8	244.8	244.9	244.8	244.8
12.5°	244.3	244.2	244.2	244.2	244.3	244.2	244.2	244.2	244.3	244.2	244.2
13°	243.8	243.7	243.7	243.6	243.8	243.6	243.7	243.7	243.8	243.7	243.7
13.5°	243.1	243.2	243.1	243.0	243.2	243.0	243.1	243.2	243.1	243.2	243.1
14°	242.4	242.5	242.4	242.3	242.5	242.3	242.4	242.5	242.4	242.5	242.4
14.5°	241.9	241.9	241.9	241.7	241.9	241.7	241.9	241.9	241.9	241.9	241.9
15°	241.2	241.1	241.1	241.1	241.3	241.1	241.1	241.1	241.2	241.1	241.1
15.5°	240.4	240.4	240.4	240.3	240.6	240.3	240.4	240.4	240.4	240.4	240.4
16°	239.7	239.7	239.7	239.6	239.7	239.6	239.7	239.7	239.7	239.7	239.7
16.5°	239.1	239.1	239.0	238.9	239.0	238.9	239.0	239.1	239.1	239.1	239.0
17°	238.3	238.3	238.2	238.1	238.2	238.1	238.2	238.3	238.3	238.3	238.2
17.5°	237.5	237.5	237.4	237.3	237.5	237.3	237.4	237.5	237.5	237.5	237.4
18°	236.7	236.7	236.6	236.6	236.8	236.6	236.6	236.7	236.7	236.7	236.6
18.5°	235.9	235.8	235.7	235.7	235.9	235.7	235.7	235.8	235.9	235.8	235.7
19°	235.0	235.0	234.9	234.9	235.0	234.9	234.9	235.0	235.0	235.0	234.9
19.5°	234.2	234.2	234.1	234.0	234.2	234.0	234.1	234.2	234.2	234.2	234.1
20°	233.3	233.3	233.2	233.1	233.4	233.1	233.2	233.3	233.3	233.3	233.2
20.5°	232.5	232.4	232.4	232.3	232.5	232.3	232.4	232.4	232.5	232.4	232.4
21°	231.5	231.5	231.4	231.4	231.6	231.4	231.4	231.5	231.5	231.5	231.4



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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°	228.6	228.5	228.6	228.4	228.6	228.4	228.6	228.5	228.6	228.5	228.6
23°	227.7	227.6	227.6	227.5	227.6	227.5	227.6	227.6	227.7	227.6	227.6
23.5°	226.7	226.6	226.5	226.4	226.6	226.4	226.5	226.6	226.7	226.6	226.5
24°	225.5	225.5	225.5	225.5	225.5	225.5	225.5	225.5	225.5	225.5	225.5
24.5°	224.4	224.4	224.4	224.4	224.5	224.4	224.4	224.4	224.4	224.4	224.4
25°	223.3	223.3	223.3	223.2	223.4	223.2	223.3	223.3	223.3	223.3	223.3
25.5°	222.3	222.3	222.3	222.2	222.4	222.2	222.3	222.3	222.3	222.3	222.3
26°	221.2	221.2	221.1	221.1	221.2	221.1	221.1	221.2	221.2	221.2	221.1
26.5°	220.2	220.1	220.0	220.0	220.1	220.0	220.0	220.1	220.2	220.1	220.0
27°	218.9	218.9	218.8	218.8	218.9	218.8	218.8	218.9	218.9	218.9	218.8
27.5°	217.7	217.7	217.7	217.7	217.8	217.7	217.7	217.7	217.7	217.7	217.7
28°	216.5	216.5	216.5	216.5	216.5	216.5	216.5	216.5	216.5	216.5	216.5
28.5°	215.4	215.3	215.3	215.3	215.4	215.3	215.3	215.3	215.4	215.3	215.3
29°	214.1	214.0	214.0	214.0	214.1	214.0	214.0	214.0	214.1	214.0	214.0
29.5°	212.9	212.9	212.8	212.8	212.9	212.8	212.8	212.9	212.9	212.9	212.8
30°	211.6	211.6	211.5	211.5	211.6	211.5	211.5	211.6	211.6	211.6	211.5
30.5°	210.4	210.3	210.3	210.3	210.4	210.3	210.3	210.3	210.4	210.3	210.3
31°	209.1	209.0	209.1	209.0	209.1	209.0	209.1	209.0	209.1	209.0	209.1
31.5°	207.7	207.7	207.7	207.6	207.8	207.6	207.7	207.7	207.7	207.7	207.7
32°	206.4	206.4	206.4	206.4	206.5	206.4	206.4	206.4	206.4	206.4	206.4
32.5°	205.1	205.0	205.0	205.0	205.2	205.0	205.0	205.0	205.1	205.0	205.0
33°	203.8	203.7	203.7	203.7	203.8	203.7	203.7	203.7	203.8	203.7	203.7
33.5°	202.3	202.2	202.3	202.2	202.4	202.2	202.3	202.2	202.3	202.2	202.3
34°	200.9	200.9	200.9	200.9	201.0	200.9	200.9	200.9	200.9	200.9	200.9
34.5°	199.5	199.5	199.5	199.5	199.7	199.5	199.5	199.5	199.5	199.5	199.5
35°	198.1	198.0	198.0	198.0	198.2	198.0	198.0	198.0	198.1	198.0	198.0
35.5°	196.7	196.6	196.6	196.6	196.8	196.6	196.6	196.6	196.7	196.6	196.6
36°	195.2	195.1	195.1	195.1	195.2	195.1	195.1	195.1	195.2	195.1	195.1
36.5°	193.7	193.7	193.7	193.7	193.8	193.7	193.7	193.7	193.7	193.7	193.7
37°	192.2	192.2	192.2	192.2	192.4	192.2	192.2	192.2	192.2	192.2	192.2
37.5°	190.7	190.6	190.7	190.6	190.8	190.6	190.7	190.6	190.7	190.6	190.7
38°	189.2	189.2	189.2	189.1	189.3	189.1	189.2	189.2	189.2	189.2	189.2
38.5°	187.8	187.7	187.7	187.6	187.8	187.6	187.7	187.7	187.8	187.7	187.7
39°	186.1	186.1	186.1	186.0	186.2	186.0	186.1	186.1	186.1	186.1	186.1
39.5°	184.5	184.6	184.6	184.5	184.6	184.5	184.6	184.6	184.5	184.6	184.6
40°	183.0	183.0	183.0	183.0	183.1	183.0	183.0	183.0	183.0	183.0	183.0
40.5°	181.3	181.3	181.3	181.3	181.4	181.3	181.3	181.3	181.3	181.3	181.3
41°	179.8	179.7	179.7	179.7	179.9	179.7	179.7	179.7	179.8	179.7	179.7
41.5°	178.2	178.2	178.1	178.1	178.3	178.1	178.1	178.2	178.2	178.2	178.1
42°	176.5	176.5	176.4	176.4	176.6	176.4	176.4	176.5	176.5	176.5	176.4
42.5°	174.8	174.8	174.8	174.8	175.0	174.8	174.8	174.8	174.8	174.8	174.8
43°	173.2	173.2	173.2	173.1	173.3	173.1	173.2	173.2	173.2	173.2	173.2
43.5°	171.6	171.5	171.5	171.5	171.6	171.5	171.5	171.5	171.6	171.5	171.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	166.4	166.3	166.4	166.4	166.5	166.4	166.4	166.3	166.4	166.3	166.4
45.5°	164.7	164.6	164.7	164.7	164.8	164.7	164.7	164.6	164.7	164.6	164.7
46°	163.0	162.8	162.9	162.8	163.0	162.8	162.9	162.8	163.0	162.8	162.9
46.5°	161.2	161.1	161.1	161.1	161.3	161.1	161.1	161.1	161.2	161.1	161.1
47°	159.4	159.4	159.3	159.3	159.5	159.3	159.3	159.4	159.4	159.4	159.3
47.5°	157.6	157.6	157.6	157.6	157.7	157.6	157.6	157.6	157.6	157.6	157.6
48°	155.7	155.7	155.7	155.7	155.9	155.7	155.7	155.7	155.7	155.7	155.7
48.5°	153.9	153.9	153.9	153.9	154.1	153.9	153.9	153.9	153.9	153.9	153.9
49°	152.1	152.1	152.1	152.1	152.3	152.1	152.1	152.1	152.1	152.1	152.1
49.5°	150.3	150.3	150.3	150.3	150.4	150.3	150.3	150.3	150.3	150.3	150.3
50°	148.4	148.4	148.4	148.4	148.5	148.4	148.4	148.4	148.4	148.4	148.4
50.5°	146.5	146.5	146.5	146.5	146.6	146.5	146.5	146.5	146.5	146.5	146.5
51°	144.7	144.7	144.7	144.7	144.8	144.7	144.7	144.7	144.7	144.7	144.7
51.5°	142.8	142.8	142.8	142.8	142.9	142.8	142.8	142.8	142.8	142.8	142.8
52°	141.0	141.0	141.0	140.9	141.1	140.9	141.0	141.0	141.0	141.0	141.0
52.5°	139.0	139.0	139.0	139.0	139.1	139.0	139.0	139.0	139.0	139.0	139.0
53°	137.1	137.0	137.0	137.0	137.1	137.0	137.0	137.0	137.1	137.0	137.0
53.5°	135.2	135.1	135.1	135.1	135.2	135.1	135.1	135.1	135.2	135.1	135.1
54°	133.3	133.2	133.2	133.2	133.3	133.2	133.2	133.2	133.3	133.2	133.2
54.5°	131.3	131.2	131.3	131.3	131.4	131.3	131.3	131.2	131.3	131.2	131.3
55°	129.3	129.3	129.3	129.3	129.5	129.3	129.3	129.3	129.3	129.3	129.3
55.5°	127.4	127.3	127.3	127.3	127.4	127.3	127.3	127.3	127.4	127.3	127.3
56°	125.2	125.2	125.3	125.2	125.4	125.2	125.3	125.2	125.2	125.2	125.3
56.5°	123.2	123.3	123.3	123.3	123.4	123.3	123.3	123.3	123.2	123.3	123.3
57°	121.3	121.3	121.2	121.2	121.4	121.2	121.2	121.3	121.3	121.3	121.2
57.5°	119.3	119.2	119.2	119.3	119.4	119.3	119.2	119.2	119.3	119.2	119.2
58°	117.2	117.2	117.2	117.2	117.4	117.2	117.2	117.2	117.2	117.2	117.2
58.5°	115.2	115.2	115.2	115.2	115.3	115.2	115.2	115.2	115.2	115.2	115.2
59°	113.2	113.2	113.2	113.2	113.3	113.2	113.2	113.2	113.2	113.2	113.2
59.5°	111.0	111.0	111.0	111.0	111.1	111.0	111.0	111.0	111.0	111.0	111.0
60°	108.9	108.9	108.9	108.9	109.1	108.9	108.9	108.9	108.9	108.9	108.9
60.5°	106.9	106.8	106.9	106.9	107.0	106.9	106.9	106.8	106.9	106.8	106.9
61°	104.8	104.8	104.8	104.8	104.9	104.8	104.8	104.8	104.8	104.8	104.8
61.5°	102.7	102.7	102.7	102.7	102.8	102.7	102.7	102.7	102.7	102.7	102.7
62°	100.6	100.6	100.6	100.6	100.7	100.6	100.6	100.6	100.6	100.6	100.6
62.5°	98.5	98.5	98.5	98.5	98.6	98.5	98.5	98.5	98.5	98.5	98.5
63°	96.3	96.3	96.4	96.4	96.4	96.4	96.4	96.3	96.3	96.3	96.4
63.5°	94.2	94.2	94.2	94.3	94.3	94.3	94.2	94.2	94.2	94.2	94.2
64°	92.1	92.1	92.1	92.1	92.2	92.1	92.1	92.1	92.1	92.1	92.1
64.5°	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
65°	87.7	87.7	87.8	87.7	87.9	87.7	87.8	87.7	87.7	87.7	87.8
65.5°	85.5	85.5	85.6	85.6	85.7	85.6	85.6	85.5	85.5	85.5	85.6
66°	83.3	83.4	83.4	83.4	83.5	83.4	83.4	83.4	83.3	83.4	83.4



TEST NUMBER: P869795
 CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	76.9	76.9	76.9	77.0	77.1	77.0	76.9	76.9	76.9	76.9	76.9
68°	74.7	74.7	74.7	74.8	74.9	74.8	74.7	74.7	74.7	74.7	74.7
68.5°	72.5	72.5	72.6	72.6	72.7	72.6	72.6	72.5	72.5	72.5	72.6
69°	70.3	70.3	70.4	70.4	70.5	70.4	70.4	70.3	70.3	70.3	70.4
69.5°	68.1	68.1	68.2	68.2	68.3	68.2	68.2	68.1	68.1	68.1	68.2
70°	65.9	65.9	66.0	66.0	66.1	66.0	66.0	65.9	65.9	65.9	66.0
70.5°	63.7	63.7	63.8	63.8	63.9	63.8	63.8	63.7	63.7	63.7	63.8
71°	61.5	61.6	61.6	61.6	61.7	61.6	61.6	61.6	61.5	61.6	61.6
71.5°	59.3	59.3	59.4	59.4	59.5	59.4	59.4	59.3	59.3	59.3	59.4
72°	57.1	57.1	57.2	57.2	57.3	57.2	57.2	57.1	57.1	57.1	57.2
72.5°	54.9	54.9	54.9	54.9	55.0	54.9	54.9	54.9	54.9	54.9	54.9
73°	52.6	52.6	52.7	52.7	52.8	52.7	52.7	52.6	52.6	52.6	52.7
73.5°	50.4	50.5	50.5	50.6	50.6	50.6	50.5	50.5	50.4	50.5	50.5
74°	48.3	48.3	48.3	48.4	48.5	48.4	48.3	48.3	48.3	48.3	48.3
74.5°	46.1	46.2	46.2	46.2	46.3	46.2	46.2	46.2	46.1	46.2	46.2
75°	44.0	44.0	44.0	44.1	44.1	44.1	44.0	44.0	44.0	44.0	44.0
75.5°	41.8	41.8	41.9	41.9	42.0	41.9	41.9	41.8	41.8	41.8	41.9
76°	39.7	39.7	39.7	39.8	39.9	39.8	39.7	39.7	39.7	39.7	39.7
76.5°	37.5	37.5	37.6	37.7	38.0	37.7	37.6	37.5	37.5	37.5	37.6
77°	35.5	35.6	35.5	35.6	35.9	35.6	35.5	35.6	35.5	35.6	35.5
77.5°	33.4	33.5	33.5	33.5	33.8	33.5	33.5	33.5	33.4	33.5	33.5
78°	31.4	31.4	31.5	31.4	31.6	31.4	31.5	31.4	31.4	31.4	31.5
78.5°	29.3	29.3	29.3	29.3	29.4	29.3	29.3	29.3	29.3	29.3	29.3
79°	27.3	27.3	27.3	27.3	27.5	27.3	27.3	27.3	27.3	27.3	27.3
79.5°	25.3	25.3	25.3	25.4	25.5	25.4	25.3	25.3	25.3	25.3	25.3
80°	23.3	23.3	23.4	23.5	23.5	23.5	23.4	23.3	23.3	23.3	23.4
80.5°	21.5	21.5	21.5	21.6	21.6	21.6	21.5	21.5	21.5	21.5	21.5
81°	19.6	19.6	19.7	19.7	19.8	19.7	19.7	19.6	19.6	19.6	19.7
81.5°	17.7	17.7	17.8	17.8	17.9	17.8	17.8	17.7	17.7	17.7	17.8
82°	15.9	15.9	16.0	16.1	16.1	16.1	16.0	15.9	15.9	15.9	16.0
82.5°	14.3	14.3	14.3	14.4	14.4	14.4	14.3	14.3	14.3	14.3	14.3
83°	12.6	12.6	12.7	12.8	12.8	12.8	12.7	12.6	12.6	12.6	12.7
83.5°	10.9	11.0	11.1	11.1	11.2	11.1	11.1	11.0	10.9	11.0	11.1
84°	9.5	9.5	9.6	9.7	9.7	9.7	9.6	9.5	9.5	9.5	9.6
84.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
85°	6.8	6.8	6.9	6.9	7.0	6.9	6.9	6.8	6.8	6.8	6.9
85.5°	5.6	5.6	5.6	5.7	5.8	5.7	5.6	5.6	5.6	5.6	5.6
86°	4.3	4.4	4.5	4.6	4.8	4.6	4.5	4.4	4.3	4.4	4.5
86.5°	3.5	3.4	3.5	3.5	3.7	3.5	3.5	3.4	3.5	3.4	3.5
87°	2.6	2.5	2.6	2.6	2.8	2.6	2.6	2.5	2.6	2.5	2.6
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°	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.2
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: P869795
CATALOG NUMBER: HLBSL406FS5-4000K

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: P869795

CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	251.5	251.5	251.5	251.5	251.5	251.5
0.5°	251.4	251.6	251.4	251.5	251.6	251.6
1°	251.4	251.6	251.4	251.5	251.5	251.5
1.5°	251.3	251.5	251.3	251.4	251.4	251.4
2°	251.2	251.4	251.2	251.3	251.3	251.3
2.5°	251.2	251.3	251.2	251.2	251.2	251.2
3°	251.1	251.2	251.1	251.2	251.2	251.2
3.5°	250.9	251.2	250.9	251.0	251.0	251.1
4°	250.7	250.9	250.7	250.8	250.9	250.8
4.5°	250.5	250.7	250.5	250.6	250.7	250.6
5°	250.3	250.6	250.3	250.3	250.4	250.4
5.5°	250.1	250.3	250.1	250.1	250.2	250.2
6°	249.8	250.0	249.8	249.9	249.9	249.9
6.5°	249.5	249.7	249.5	249.6	249.5	249.6
7°	249.1	249.3	249.1	249.2	249.2	249.3
7.5°	248.8	249.0	248.8	248.9	248.9	248.9
8°	248.5	248.8	248.5	248.6	248.6	248.6
8.5°	248.1	248.3	248.1	248.2	248.2	248.3
9°	247.7	247.8	247.7	247.7	247.8	247.9
9.5°	247.2	247.4	247.2	247.3	247.3	247.5
10°	246.7	247.0	246.7	246.8	246.9	246.9
10.5°	246.3	246.5	246.3	246.4	246.5	246.5
11°	245.9	246.1	245.9	245.9	246.0	245.9
11.5°	245.3	245.5	245.3	245.4	245.4	245.4
12°	244.7	244.9	244.7	244.8	244.8	244.9
12.5°	244.2	244.3	244.2	244.2	244.2	244.3
13°	243.6	243.8	243.6	243.7	243.7	243.8
13.5°	243.0	243.2	243.0	243.1	243.2	243.1
14°	242.3	242.5	242.3	242.4	242.5	242.4
14.5°	241.7	241.9	241.7	241.9	241.9	241.9
15°	241.1	241.3	241.1	241.1	241.1	241.2
15.5°	240.3	240.6	240.3	240.4	240.4	240.4
16°	239.6	239.7	239.6	239.7	239.7	239.7
16.5°	238.9	239.0	238.9	239.0	239.1	239.1
17°	238.1	238.2	238.1	238.2	238.3	238.3
17.5°	237.3	237.5	237.3	237.4	237.5	237.5
18°	236.6	236.8	236.6	236.6	236.7	236.7
18.5°	235.7	235.9	235.7	235.7	235.8	235.9
19°	234.9	235.0	234.9	234.9	235.0	235.0
19.5°	234.0	234.2	234.0	234.1	234.2	234.2
20°	233.1	233.4	233.1	233.2	233.3	233.3
20.5°	232.3	232.5	232.3	232.4	232.4	232.5
21°	231.4	231.6	231.4	231.4	231.5	231.5



TEST NUMBER: P869795
 CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	228.4	228.6	228.4	228.6	228.5	228.6
23°	227.5	227.6	227.5	227.6	227.6	227.7
23.5°	226.4	226.6	226.4	226.5	226.6	226.7
24°	225.5	225.5	225.5	225.5	225.5	225.5
24.5°	224.4	224.5	224.4	224.4	224.4	224.4
25°	223.2	223.4	223.2	223.3	223.3	223.3
25.5°	222.2	222.4	222.2	222.3	222.3	222.3
26°	221.1	221.2	221.1	221.1	221.2	221.2
26.5°	220.0	220.1	220.0	220.0	220.1	220.2
27°	218.8	218.9	218.8	218.8	218.9	218.9
27.5°	217.7	217.8	217.7	217.7	217.7	217.7
28°	216.5	216.5	216.5	216.5	216.5	216.5
28.5°	215.3	215.4	215.3	215.3	215.3	215.4
29°	214.0	214.1	214.0	214.0	214.0	214.1
29.5°	212.8	212.9	212.8	212.8	212.9	212.9
30°	211.5	211.6	211.5	211.5	211.6	211.6
30.5°	210.3	210.4	210.3	210.3	210.3	210.4
31°	209.0	209.1	209.0	209.1	209.0	209.1
31.5°	207.6	207.8	207.6	207.7	207.7	207.7
32°	206.4	206.5	206.4	206.4	206.4	206.4
32.5°	205.0	205.2	205.0	205.0	205.0	205.1
33°	203.7	203.8	203.7	203.7	203.7	203.8
33.5°	202.2	202.4	202.2	202.3	202.2	202.3
34°	200.9	201.0	200.9	200.9	200.9	200.9
34.5°	199.5	199.7	199.5	199.5	199.5	199.5
35°	198.0	198.2	198.0	198.0	198.0	198.1
35.5°	196.6	196.8	196.6	196.6	196.6	196.7
36°	195.1	195.2	195.1	195.1	195.1	195.2
36.5°	193.7	193.8	193.7	193.7	193.7	193.7
37°	192.2	192.4	192.2	192.2	192.2	192.2
37.5°	190.6	190.8	190.6	190.7	190.6	190.7
38°	189.1	189.3	189.1	189.2	189.2	189.2
38.5°	187.6	187.8	187.6	187.7	187.7	187.8
39°	186.0	186.2	186.0	186.1	186.1	186.1
39.5°	184.5	184.6	184.5	184.6	184.6	184.5
40°	183.0	183.1	183.0	183.0	183.0	183.0
40.5°	181.3	181.4	181.3	181.3	181.3	181.3
41°	179.7	179.9	179.7	179.7	179.7	179.8
41.5°	178.1	178.3	178.1	178.1	178.2	178.2
42°	176.4	176.6	176.4	176.4	176.5	176.5
42.5°	174.8	175.0	174.8	174.8	174.8	174.8
43°	173.1	173.3	173.1	173.2	173.2	173.2
43.5°	171.5	171.6	171.5	171.5	171.5	171.6



TEST NUMBER: P869795
 CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	166.4	166.5	166.4	166.4	166.3	166.4
45.5°	164.7	164.8	164.7	164.7	164.6	164.7
46°	162.8	163.0	162.8	162.9	162.8	163.0
46.5°	161.1	161.3	161.1	161.1	161.1	161.2
47°	159.3	159.5	159.3	159.3	159.4	159.4
47.5°	157.6	157.7	157.6	157.6	157.6	157.6
48°	155.7	155.9	155.7	155.7	155.7	155.7
48.5°	153.9	154.1	153.9	153.9	153.9	153.9
49°	152.1	152.3	152.1	152.1	152.1	152.1
49.5°	150.3	150.4	150.3	150.3	150.3	150.3
50°	148.4	148.5	148.4	148.4	148.4	148.4
50.5°	146.5	146.6	146.5	146.5	146.5	146.5
51°	144.7	144.8	144.7	144.7	144.7	144.7
51.5°	142.8	142.9	142.8	142.8	142.8	142.8
52°	140.9	141.1	140.9	141.0	141.0	141.0
52.5°	139.0	139.1	139.0	139.0	139.0	139.0
53°	137.0	137.1	137.0	137.0	137.0	137.1
53.5°	135.1	135.2	135.1	135.1	135.1	135.2
54°	133.2	133.3	133.2	133.2	133.2	133.3
54.5°	131.3	131.4	131.3	131.3	131.2	131.3
55°	129.3	129.5	129.3	129.3	129.3	129.3
55.5°	127.3	127.4	127.3	127.3	127.3	127.4
56°	125.2	125.4	125.2	125.3	125.2	125.2
56.5°	123.3	123.4	123.3	123.3	123.3	123.2
57°	121.2	121.4	121.2	121.2	121.3	121.3
57.5°	119.3	119.4	119.3	119.2	119.2	119.3
58°	117.2	117.4	117.2	117.2	117.2	117.2
58.5°	115.2	115.3	115.2	115.2	115.2	115.2
59°	113.2	113.3	113.2	113.2	113.2	113.2
59.5°	111.0	111.1	111.0	111.0	111.0	111.0
60°	108.9	109.1	108.9	108.9	108.9	108.9
60.5°	106.9	107.0	106.9	106.9	106.8	106.9
61°	104.8	104.9	104.8	104.8	104.8	104.8
61.5°	102.7	102.8	102.7	102.7	102.7	102.7
62°	100.6	100.7	100.6	100.6	100.6	100.6
62.5°	98.5	98.6	98.5	98.5	98.5	98.5
63°	96.4	96.4	96.4	96.4	96.3	96.3
63.5°	94.3	94.3	94.3	94.2	94.2	94.2
64°	92.1	92.2	92.1	92.1	92.1	92.1
64.5°	90.0	90.0	90.0	90.0	90.0	90.0
65°	87.7	87.9	87.7	87.8	87.7	87.7
65.5°	85.6	85.7	85.6	85.6	85.5	85.5
66°	83.4	83.5	83.4	83.4	83.4	83.3



TEST NUMBER: P869795
 CATALOG NUMBER: HLBSL406FS5-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	77.0	77.1	77.0	76.9	76.9	76.9
68°	74.8	74.9	74.8	74.7	74.7	74.7
68.5°	72.6	72.7	72.6	72.6	72.5	72.5
69°	70.4	70.5	70.4	70.4	70.3	70.3
69.5°	68.2	68.3	68.2	68.2	68.1	68.1
70°	66.0	66.1	66.0	66.0	65.9	65.9
70.5°	63.8	63.9	63.8	63.8	63.7	63.7
71°	61.6	61.7	61.6	61.6	61.6	61.5
71.5°	59.4	59.5	59.4	59.4	59.3	59.3
72°	57.2	57.3	57.2	57.2	57.1	57.1
72.5°	54.9	55.0	54.9	54.9	54.9	54.9
73°	52.7	52.8	52.7	52.7	52.6	52.6
73.5°	50.6	50.6	50.6	50.5	50.5	50.4
74°	48.4	48.5	48.4	48.3	48.3	48.3
74.5°	46.2	46.3	46.2	46.2	46.2	46.1
75°	44.1	44.1	44.1	44.0	44.0	44.0
75.5°	41.9	42.0	41.9	41.9	41.8	41.8
76°	39.8	39.9	39.8	39.7	39.7	39.7
76.5°	37.7	38.0	37.7	37.6	37.5	37.5
77°	35.6	35.9	35.6	35.5	35.6	35.5
77.5°	33.5	33.8	33.5	33.5	33.5	33.4
78°	31.4	31.6	31.4	31.5	31.4	31.4
78.5°	29.3	29.4	29.3	29.3	29.3	29.3
79°	27.3	27.5	27.3	27.3	27.3	27.3
79.5°	25.4	25.5	25.4	25.3	25.3	25.3
80°	23.5	23.5	23.5	23.4	23.3	23.3
80.5°	21.6	21.6	21.6	21.5	21.5	21.5
81°	19.7	19.8	19.7	19.7	19.6	19.6
81.5°	17.8	17.9	17.8	17.8	17.7	17.7
82°	16.1	16.1	16.1	16.0	15.9	15.9
82.5°	14.4	14.4	14.4	14.3	14.3	14.3
83°	12.8	12.8	12.8	12.7	12.6	12.6
83.5°	11.1	11.2	11.1	11.1	11.0	10.9
84°	9.7	9.7	9.7	9.6	9.5	9.5
84.5°	8.2	8.2	8.2	8.2	8.2	8.2
85°	6.9	7.0	6.9	6.9	6.8	6.8
85.5°	5.7	5.8	5.7	5.6	5.6	5.6
86°	4.6	4.8	4.6	4.5	4.4	4.3
86.5°	3.5	3.7	3.5	3.5	3.4	3.5
87°	2.6	2.8	2.6	2.6	2.5	2.6
87.5°	1.8	1.9	1.8	1.8	1.8	1.8
88°	1.2	1.2	1.2	1.2	1.1	1.2
88.5°	0.8	0.8	0.8	0.7	0.6	0.6



TEST NUMBER: P869795
CATALOG NUMBER: HLBSL406FS5-4000K

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°	230.5	230.5	230.5	230.3	230.6	230.3	230.5	230.5	230.5	230.5	230.5
22°	229.6	229.6	229.6	229.5	229.6	229.5	229.6	229.6	229.6	229.6	229.6



44°	169.8	169.7	169.8	169.7	169.9	169.7	169.8	169.7	169.8	169.7	169.8
44.5°	168.1	168.0	168.1	168.0	168.2	168.0	168.1	168.0	168.1	168.0	168.1



66.5°	81.2	81.2	81.2	81.3	81.3	81.3	81.2	81.2	81.2	81.2	81.2
67°	79.0	79.0	79.1	79.1	79.2	79.1	79.1	79.0	79.0	79.0	79.1



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°	230.3	230.6	230.3	230.5	230.5	230.5
22°	229.5	229.6	229.5	229.6	229.6	229.6



44°	169.7	169.9	169.7	169.8	169.7	169.8
44.5°	168.0	168.2	168.0	168.1	168.0	168.1



66.5°	81.3	81.3	81.3	81.2	81.2	81.2
67°	79.1	79.2	79.1	79.1	79.0	79.0

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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)