

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: P869793

Luminaire Tested: HLBSL406FS5-3000K

Issue Date: 9/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P869793
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: HLBSL406F55-3000K
Description: 4IN 750LM, 90CRI, DIMMING TO 10%
Light Source: SELECTABLE CCT 90CRI / 3000K CCT
Ballast/Driver: -

Summary

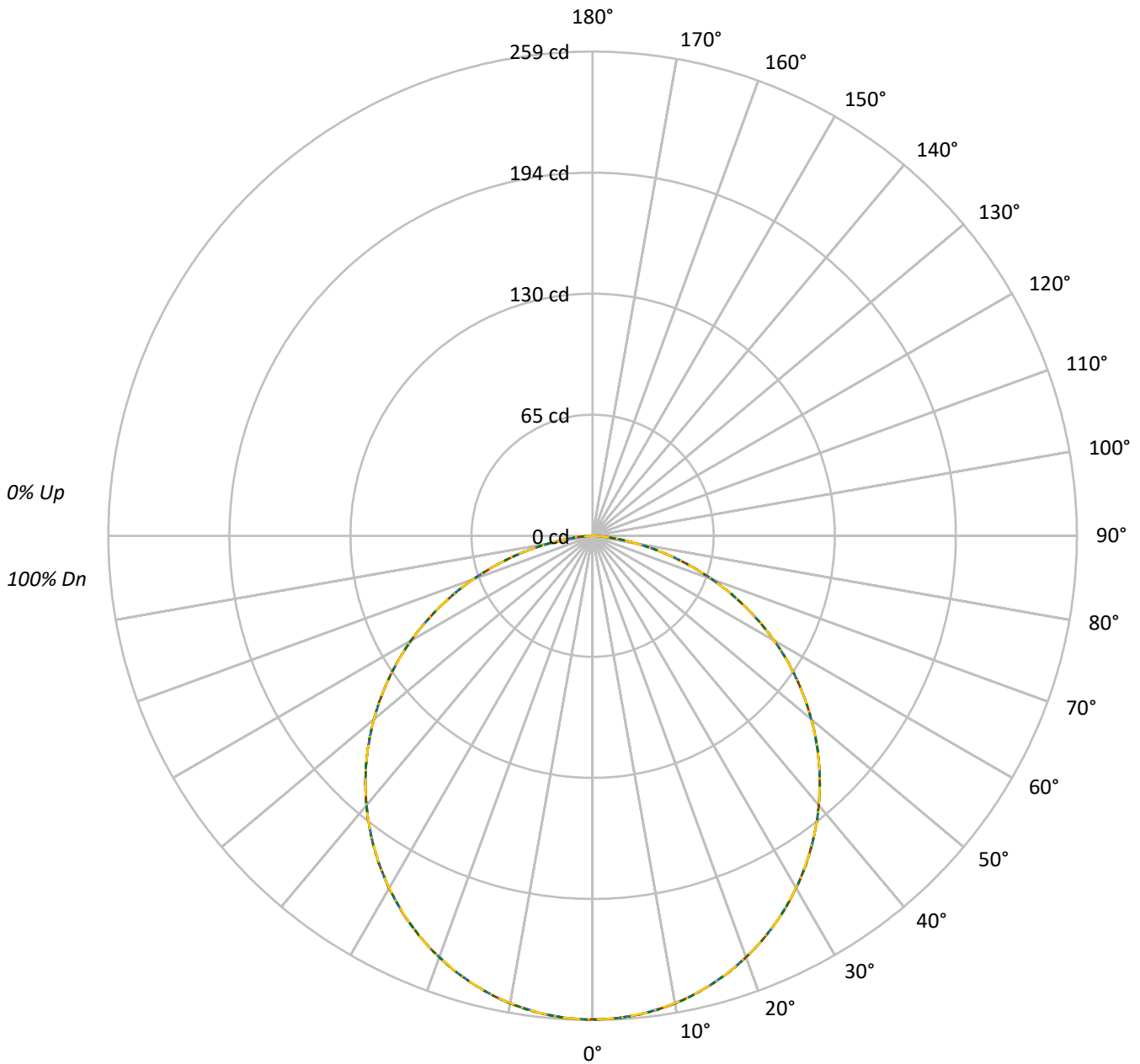
Lumens per Lamp: N/A
Luminaire Lumens: 725.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P869793
CATALOG NUMBER: HLBSL406FS5-3000K

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°	32557	32557	32557	32557
5°	32530	32555	32530	32555
10°	32446	32459	32446	32459
15°	32312	32325	32312	32325
20°	32129	32142	32129	32142
25°	31896	31910	31896	31910
30°	31621	31621	31621	31621
35°	31295	31311	31295	31311
40°	30918	30935	30918	30935
45°	30452	30470	30452	30470
50°	29897	29916	29897	29916
55°	29160	29204	29160	29204
60°	28190	28241	28190	28241
65°	26860	26920	26860	26920
70°	24911	24984	24911	24984
75°	22027	22076	22027	22076
80°	17394	17539	17394	17539
85°	10108	10397	10108	10397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 30470 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.5	3.4
10°-20°	70.0	9.7
20°-30°	105.8	14.6
30°-40°	127.4	17.6
40°-50°	131.9	18.2
50°-60°	118.7	16.4
60°-70°	89.2	12.3
70°-80°	48.0	6.6
80°-90°	9.5	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°	200.3	27.6
0°-40°	327.7	45.2
0°-60°	578.3	79.8
0°-90°	725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	725.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	259	259	259	259	259	
5°	258	258	258	258	258	24
15°	248	248	248	248	248	70
25°	230	230	230	230	230	106
35°	204	204	204	204	204	127
45°	171	171	171	171	171	132
55°	133	133	133	133	133	119
65°	90	90	90	90	90	89
75°	45	45	45	45	45	48
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°	258.7	258.7	258.7	258.7	258.7	258.7	258.7	258.7	258.7	258.7	258.7
0.5°	258.8	258.8	258.7	258.6	258.8	258.6	258.7	258.8	258.8	258.8	258.7
1°	258.7	258.7	258.7	258.6	258.8	258.6	258.7	258.7	258.7	258.7	258.7
1.5°	258.6	258.6	258.6	258.5	258.7	258.5	258.6	258.6	258.6	258.6	258.6
2°	258.5	258.5	258.5	258.4	258.6	258.4	258.5	258.5	258.5	258.5	258.5
2.5°	258.4	258.4	258.4	258.3	258.5	258.3	258.4	258.4	258.4	258.4	258.4
3°	258.3	258.3	258.3	258.2	258.4	258.2	258.3	258.3	258.3	258.3	258.3
3.5°	258.2	258.1	258.1	258.0	258.3	258.0	258.1	258.1	258.2	258.1	258.1
4°	257.9	258.0	257.9	257.8	258.0	257.8	257.9	258.0	257.9	258.0	257.9
4.5°	257.7	257.8	257.7	257.6	257.8	257.6	257.7	257.8	257.7	257.8	257.7
5°	257.5	257.5	257.4	257.4	257.7	257.4	257.4	257.5	257.5	257.5	257.4
5.5°	257.3	257.3	257.2	257.2	257.4	257.2	257.2	257.3	257.3	257.3	257.2
6°	257.0	257.0	257.0	256.9	257.1	256.9	257.0	257.0	257.0	257.0	257.0
6.5°	256.7	256.6	256.7	256.6	256.8	256.6	256.7	256.6	256.7	256.6	256.7
7°	256.4	256.3	256.3	256.2	256.4	256.2	256.3	256.3	256.4	256.3	256.3
7.5°	256.0	256.0	255.9	255.8	256.1	255.8	255.9	256.0	256.0	256.0	255.9
8°	255.6	255.6	255.6	255.5	255.8	255.5	255.6	255.6	255.6	255.6	255.6
8.5°	255.3	255.2	255.2	255.1	255.3	255.1	255.2	255.2	255.3	255.2	255.2
9°	254.9	254.8	254.7	254.7	254.8	254.7	254.7	254.8	254.9	254.8	254.7
9.5°	254.5	254.3	254.3	254.2	254.4	254.2	254.3	254.3	254.5	254.3	254.3
10°	253.9	253.9	253.8	253.7	254.0	253.7	253.8	253.9	253.9	253.9	253.8
10.5°	253.4	253.4	253.3	253.2	253.5	253.2	253.3	253.4	253.4	253.4	253.3
11°	252.9	253.0	252.9	252.9	253.1	252.9	252.9	253.0	252.9	253.0	252.9
11.5°	252.4	252.4	252.4	252.3	252.5	252.3	252.4	252.4	252.4	252.4	252.4
12°	251.9	251.8	251.8	251.7	251.9	251.7	251.8	251.8	251.9	251.8	251.8
12.5°	251.3	251.2	251.2	251.1	251.3	251.1	251.2	251.2	251.3	251.2	251.2
13°	250.7	250.6	250.6	250.5	250.7	250.5	250.6	250.6	250.7	250.6	250.6
13.5°	250.0	250.1	250.0	249.9	250.1	249.9	250.0	250.1	250.0	250.1	250.0
14°	249.3	249.4	249.3	249.2	249.4	249.2	249.3	249.4	249.3	249.4	249.3
14.5°	248.7	248.7	248.7	248.5	248.8	248.5	248.7	248.7	248.7	248.7	248.7
15°	248.0	247.9	247.9	247.9	248.1	247.9	247.9	247.9	248.0	247.9	247.9
15.5°	247.2	247.2	247.2	247.1	247.4	247.1	247.2	247.2	247.2	247.2	247.2
16°	246.5	246.5	246.5	246.4	246.5	246.4	246.5	246.5	246.5	246.5	246.5
16.5°	245.9	245.9	245.8	245.7	245.8	245.7	245.8	245.9	245.9	245.9	245.8
17°	245.1	245.1	245.0	244.9	245.0	244.9	245.0	245.1	245.1	245.1	245.0
17.5°	244.3	244.3	244.2	244.1	244.3	244.1	244.2	244.3	244.3	244.3	244.2
18°	243.4	243.4	243.3	243.3	243.5	243.3	243.3	243.4	243.4	243.4	243.3
18.5°	242.6	242.5	242.4	242.4	242.6	242.4	242.4	242.5	242.6	242.5	242.4
19°	241.7	241.7	241.6	241.5	241.7	241.5	241.6	241.7	241.7	241.7	241.6
19.5°	240.8	240.8	240.7	240.6	240.8	240.6	240.7	240.8	240.8	240.8	240.7
20°	239.9	239.9	239.8	239.7	240.0	239.7	239.8	239.9	239.9	239.9	239.8
20.5°	239.0	238.9	238.9	238.9	239.0	238.9	238.9	238.9	239.0	238.9	238.9
21°	238.1	238.1	238.0	238.0	238.2	238.0	238.0	238.1	238.1	238.1	238.0



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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°	235.1	235.0	235.1	234.9	235.1	234.9	235.1	235.0	235.1	235.0	235.1
23°	234.1	234.0	234.0	233.9	234.0	233.9	234.0	234.0	234.1	234.0	234.0
23.5°	233.1	233.0	232.9	232.8	233.0	232.8	232.9	233.0	233.1	233.0	232.9
24°	231.9	231.8	231.8	231.8	231.9	231.8	231.8	231.8	231.9	231.8	231.8
24.5°	230.8	230.8	230.8	230.8	230.9	230.8	230.8	230.8	230.8	230.8	230.8
25°	229.7	229.7	229.7	229.6	229.8	229.6	229.7	229.7	229.7	229.7	229.7
25.5°	228.6	228.6	228.6	228.5	228.7	228.5	228.6	228.6	228.6	228.6	228.6
26°	227.5	227.5	227.4	227.4	227.5	227.4	227.4	227.5	227.5	227.5	227.4
26.5°	226.4	226.3	226.2	226.2	226.3	226.2	226.2	226.3	226.4	226.3	226.2
27°	225.1	225.1	225.0	225.0	225.1	225.0	225.0	225.1	225.1	225.1	225.0
27.5°	223.9	223.9	223.9	223.9	224.0	223.9	223.9	223.9	223.9	223.9	223.9
28°	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7
28.5°	221.5	221.4	221.4	221.4	221.5	221.4	221.4	221.4	221.5	221.4	221.4
29°	220.2	220.1	220.1	220.1	220.2	220.1	220.1	220.1	220.2	220.1	220.1
29.5°	218.9	218.9	218.8	218.8	218.9	218.8	218.8	218.9	218.9	218.9	218.8
30°	217.6	217.6	217.5	217.5	217.6	217.5	217.5	217.6	217.6	217.6	217.5
30.5°	216.4	216.3	216.3	216.3	216.4	216.3	216.3	216.3	216.4	216.3	216.3
31°	215.0	214.9	215.0	214.9	215.0	214.9	215.0	214.9	215.0	214.9	215.0
31.5°	213.6	213.6	213.6	213.5	213.7	213.5	213.6	213.6	213.6	213.6	213.6
32°	212.2	212.2	212.2	212.2	212.3	212.2	212.2	212.2	212.2	212.2	212.2
32.5°	210.9	210.8	210.8	210.8	211.0	210.8	210.8	210.8	210.9	210.8	210.8
33°	209.6	209.5	209.5	209.5	209.6	209.5	209.5	209.5	209.6	209.5	209.5
33.5°	208.1	208.0	208.1	208.0	208.2	208.0	208.1	208.0	208.1	208.0	208.1
34°	206.6	206.6	206.6	206.6	206.7	206.6	206.6	206.6	206.6	206.6	206.6
34.5°	205.1	205.1	205.1	205.1	205.3	205.1	205.1	205.1	205.1	205.1	205.1
35°	203.7	203.6	203.6	203.6	203.8	203.6	203.6	203.6	203.7	203.6	203.6
35.5°	202.3	202.2	202.2	202.2	202.4	202.2	202.2	202.2	202.3	202.2	202.2
36°	200.8	200.7	200.7	200.7	200.8	200.7	200.7	200.7	200.8	200.7	200.7
36.5°	199.2	199.2	199.2	199.2	199.3	199.2	199.2	199.2	199.2	199.2	199.2
37°	197.6	197.6	197.6	197.6	197.8	197.6	197.6	197.6	197.6	197.6	197.6
37.5°	196.1	196.1	196.1	196.1	196.2	196.1	196.1	196.1	196.1	196.1	196.1
38°	194.6	194.6	194.6	194.5	194.7	194.5	194.6	194.6	194.6	194.6	194.6
38.5°	193.1	193.0	193.0	192.9	193.1	192.9	193.0	193.0	193.1	193.0	193.0
39°	191.4	191.4	191.4	191.3	191.5	191.3	191.4	191.4	191.4	191.4	191.4
39.5°	189.7	189.8	189.8	189.7	189.8	189.7	189.8	189.8	189.7	189.8	189.8
40°	188.2	188.2	188.2	188.2	188.3	188.2	188.2	188.2	188.2	188.2	188.2
40.5°	186.5	186.5	186.5	186.5	186.6	186.5	186.5	186.5	186.5	186.5	186.5
41°	184.9	184.8	184.8	184.8	185.0	184.8	184.8	184.8	184.9	184.8	184.8
41.5°	183.2	183.2	183.1	183.1	183.3	183.1	183.1	183.2	183.2	183.2	183.1
42°	181.6	181.6	181.5	181.5	181.7	181.5	181.5	181.6	181.6	181.6	181.5
42.5°	179.8	179.8	179.8	179.8	180.0	179.8	179.8	179.8	179.8	179.8	179.8
43°	178.1	178.1	178.1	178.0	178.2	178.0	178.1	178.1	178.1	178.1	178.1
43.5°	176.4	176.3	176.3	176.3	176.4	176.3	176.3	176.3	176.4	176.3	176.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	171.1	171.0	171.1	171.1	171.2	171.1	171.1	171.0	171.1	171.0	171.1
45.5°	169.3	169.2	169.3	169.3	169.4	169.3	169.3	169.2	169.3	169.2	169.3
46°	167.6	167.5	167.6	167.5	167.6	167.5	167.6	167.5	167.6	167.5	167.6
46.5°	165.8	165.7	165.7	165.7	165.9	165.7	165.7	165.7	165.8	165.7	165.7
47°	163.9	163.9	163.8	163.8	164.0	163.8	163.8	163.9	163.9	163.9	163.8
47.5°	162.0	162.0	162.0	162.0	162.1	162.0	162.0	162.0	162.0	162.0	162.0
48°	160.2	160.2	160.2	160.2	160.4	160.2	160.2	160.2	160.2	160.2	160.2
48.5°	158.3	158.3	158.3	158.3	158.5	158.3	158.3	158.3	158.3	158.3	158.3
49°	156.4	156.4	156.4	156.4	156.6	156.4	156.4	156.4	156.4	156.4	156.4
49.5°	154.5	154.5	154.5	154.5	154.6	154.5	154.5	154.5	154.5	154.5	154.5
50°	152.7	152.7	152.7	152.7	152.8	152.7	152.7	152.7	152.7	152.7	152.7
50.5°	150.7	150.7	150.7	150.7	150.8	150.7	150.7	150.7	150.7	150.7	150.7
51°	148.8	148.8	148.8	148.8	148.9	148.8	148.8	148.8	148.8	148.8	148.8
51.5°	146.8	146.8	146.8	146.8	146.9	146.8	146.8	146.8	146.8	146.8	146.8
52°	145.0	145.0	145.0	144.9	145.1	144.9	145.0	145.0	145.0	145.0	145.0
52.5°	142.9	142.9	143.0	142.9	143.1	142.9	143.0	142.9	142.9	142.9	143.0
53°	141.0	140.9	140.9	140.9	141.0	140.9	140.9	140.9	141.0	140.9	140.9
53.5°	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0	139.0
54°	137.1	137.0	137.0	137.0	137.1	137.0	137.0	137.0	137.1	137.0	137.0
54.5°	135.0	134.9	135.0	135.0	135.1	135.0	135.0	134.9	135.0	134.9	135.0
55°	132.9	132.9	132.9	132.9	133.1	132.9	132.9	132.9	132.9	132.9	132.9
55.5°	131.0	130.9	130.9	130.9	131.1	130.9	130.9	130.9	131.0	130.9	130.9
56°	128.8	128.8	128.9	128.8	129.0	128.8	128.9	128.8	128.8	128.8	128.9
56.5°	126.7	126.8	126.8	126.8	126.9	126.8	126.8	126.8	126.7	126.8	126.8
57°	124.8	124.8	124.7	124.7	124.8	124.7	124.7	124.8	124.8	124.8	124.7
57.5°	122.7	122.6	122.6	122.7	122.8	122.7	122.6	122.6	122.7	122.6	122.6
58°	120.5	120.5	120.5	120.5	120.7	120.5	120.5	120.5	120.5	120.5	120.5
58.5°	118.4	118.4	118.4	118.4	118.5	118.4	118.4	118.4	118.4	118.4	118.4
59°	116.4	116.4	116.4	116.4	116.5	116.4	116.4	116.4	116.4	116.4	116.4
59.5°	114.2	114.2	114.2	114.2	114.3	114.2	114.2	114.2	114.2	114.2	114.2
60°	112.0	112.0	112.0	112.0	112.2	112.0	112.0	112.0	112.0	112.0	112.0
60.5°	110.0	109.9	110.0	110.0	110.1	110.0	110.0	109.9	110.0	109.9	110.0
61°	107.8	107.8	107.8	107.8	107.9	107.8	107.8	107.8	107.8	107.8	107.8
61.5°	105.6	105.6	105.6	105.6	105.7	105.6	105.6	105.6	105.6	105.6	105.6
62°	103.4	103.4	103.4	103.4	103.5	103.4	103.4	103.4	103.4	103.4	103.4
62.5°	101.3	101.3	101.3	101.3	101.4	101.3	101.3	101.3	101.3	101.3	101.3
63°	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.0	99.0	99.0	99.1
63.5°	96.8	96.8	96.8	96.9	96.9	96.9	96.8	96.8	96.8	96.8	96.8
64°	94.7	94.7	94.7	94.7	94.8	94.7	94.7	94.7	94.7	94.7	94.7
64.5°	92.5	92.5	92.5	92.5	92.6	92.5	92.5	92.5	92.5	92.5	92.5
65°	90.2	90.2	90.3	90.2	90.4	90.2	90.3	90.2	90.2	90.2	90.3
65.5°	88.0	88.0	88.1	88.1	88.2	88.1	88.1	88.0	88.0	88.0	88.1
66°	85.7	85.8	85.8	85.8	85.9	85.8	85.8	85.8	85.7	85.8	85.8



TEST NUMBER: P869793
 CATALOG NUMBER: HLBSL406FS5-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	79.1	79.1	79.1	79.2	79.3	79.2	79.1	79.1	79.1	79.1	79.1
68°	76.8	76.8	76.8	76.9	77.0	76.9	76.8	76.8	76.8	76.8	76.8
68.5°	74.6	74.6	74.7	74.7	74.8	74.7	74.7	74.6	74.6	74.6	74.7
69°	72.3	72.3	72.4	72.4	72.5	72.4	72.4	72.3	72.3	72.3	72.4
69.5°	70.0	70.0	70.1	70.1	70.2	70.1	70.1	70.0	70.0	70.0	70.1
70°	67.7	67.7	67.8	67.8	67.9	67.8	67.8	67.7	67.7	67.7	67.8
70.5°	65.5	65.5	65.6	65.6	65.7	65.6	65.6	65.5	65.5	65.5	65.6
71°	63.2	63.3	63.3	63.3	63.4	63.3	63.3	63.3	63.2	63.3	63.3
71.5°	60.9	60.9	61.0	61.0	61.1	61.0	61.0	60.9	60.9	60.9	61.0
72°	58.7	58.7	58.8	58.8	58.9	58.8	58.8	58.7	58.7	58.7	58.8
72.5°	56.4	56.4	56.5	56.5	56.6	56.5	56.5	56.4	56.4	56.4	56.5
73°	54.1	54.1	54.2	54.2	54.3	54.2	54.2	54.1	54.1	54.1	54.2
73.5°	51.9	52.0	52.0	52.1	52.1	52.1	52.0	52.0	51.9	52.0	52.0
74°	49.7	49.7	49.7	49.8	49.9	49.8	49.7	49.7	49.7	49.7	49.7
74.5°	47.4	47.5	47.5	47.5	47.6	47.5	47.5	47.5	47.4	47.5	47.5
75°	45.3	45.3	45.3	45.4	45.4	45.4	45.3	45.3	45.3	45.3	45.3
75.5°	43.0	43.0	43.1	43.1	43.2	43.1	43.1	43.0	43.0	43.0	43.1
76°	40.8	40.8	40.8	40.9	41.0	40.9	40.8	40.8	40.8	40.8	40.8
76.5°	38.6	38.6	38.7	38.8	39.1	38.8	38.7	38.6	38.6	38.6	38.7
77°	36.5	36.6	36.5	36.6	36.9	36.6	36.5	36.6	36.5	36.6	36.5
77.5°	34.3	34.4	34.4	34.4	34.7	34.4	34.4	34.4	34.3	34.4	34.4
78°	32.2	32.2	32.3	32.2	32.5	32.2	32.3	32.2	32.2	32.2	32.3
78.5°	30.2	30.2	30.2	30.2	30.3	30.2	30.2	30.2	30.2	30.2	30.2
79°	28.1	28.1	28.1	28.1	28.3	28.1	28.1	28.1	28.1	28.1	28.1
79.5°	26.0	26.0	26.0	26.1	26.2	26.1	26.0	26.0	26.0	26.0	26.0
80°	24.0	24.0	24.1	24.2	24.2	24.2	24.1	24.0	24.0	24.0	24.1
80.5°	22.1	22.1	22.1	22.2	22.2	22.2	22.1	22.1	22.1	22.1	22.1
81°	20.1	20.1	20.2	20.2	20.3	20.2	20.2	20.1	20.1	20.1	20.2
81.5°	18.2	18.2	18.3	18.3	18.4	18.3	18.3	18.2	18.2	18.2	18.3
82°	16.4	16.4	16.5	16.6	16.6	16.6	16.5	16.4	16.4	16.4	16.5
82.5°	14.7	14.7	14.7	14.8	14.8	14.8	14.7	14.7	14.7	14.7	14.7
83°	12.9	12.9	13.0	13.1	13.1	13.1	13.0	12.9	12.9	12.9	13.0
83.5°	11.2	11.3	11.4	11.4	11.5	11.4	11.4	11.3	11.2	11.3	11.4
84°	9.8	9.8	9.9	10.0	10.0	10.0	9.9	9.8	9.8	9.8	9.9
84.5°	8.4	8.4	8.5	8.5	8.5	8.5	8.5	8.4	8.4	8.4	8.5
85°	7.0	7.0	7.1	7.1	7.2	7.1	7.1	7.0	7.0	7.0	7.1
85.5°	5.7	5.7	5.7	5.8	6.0	5.8	5.7	5.7	5.7	5.7	5.7
86°	4.4	4.5	4.6	4.7	4.9	4.7	4.6	4.5	4.4	4.5	4.6
86.5°	3.6	3.5	3.6	3.6	3.8	3.6	3.6	3.5	3.6	3.5	3.6
87°	2.7	2.6	2.7	2.7	2.9	2.7	2.7	2.6	2.7	2.6	2.7
87.5°	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9
88°	1.2	1.1	1.2	1.3	1.3	1.3	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: P869793
CATALOG NUMBER: HLBSL406FS5-3000K

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: P869793

CATALOG NUMBER: HLBSL406FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	258.7	258.7	258.7	258.7	258.7	258.7
0.5°	258.6	258.8	258.6	258.7	258.8	258.8
1°	258.6	258.8	258.6	258.7	258.7	258.7
1.5°	258.5	258.7	258.5	258.6	258.6	258.6
2°	258.4	258.6	258.4	258.5	258.5	258.5
2.5°	258.3	258.5	258.3	258.4	258.4	258.4
3°	258.2	258.4	258.2	258.3	258.3	258.3
3.5°	258.0	258.3	258.0	258.1	258.1	258.2
4°	257.8	258.0	257.8	257.9	258.0	257.9
4.5°	257.6	257.8	257.6	257.7	257.8	257.7
5°	257.4	257.7	257.4	257.4	257.5	257.5
5.5°	257.2	257.4	257.2	257.2	257.3	257.3
6°	256.9	257.1	256.9	257.0	257.0	257.0
6.5°	256.6	256.8	256.6	256.7	256.6	256.7
7°	256.2	256.4	256.2	256.3	256.3	256.4
7.5°	255.8	256.1	255.8	255.9	256.0	256.0
8°	255.5	255.8	255.5	255.6	255.6	255.6
8.5°	255.1	255.3	255.1	255.2	255.2	255.3
9°	254.7	254.8	254.7	254.7	254.8	254.9
9.5°	254.2	254.4	254.2	254.3	254.3	254.5
10°	253.7	254.0	253.7	253.8	253.9	253.9
10.5°	253.2	253.5	253.2	253.3	253.4	253.4
11°	252.9	253.1	252.9	252.9	253.0	252.9
11.5°	252.3	252.5	252.3	252.4	252.4	252.4
12°	251.7	251.9	251.7	251.8	251.8	251.9
12.5°	251.1	251.3	251.1	251.2	251.2	251.3
13°	250.5	250.7	250.5	250.6	250.6	250.7
13.5°	249.9	250.1	249.9	250.0	250.1	250.0
14°	249.2	249.4	249.2	249.3	249.4	249.3
14.5°	248.5	248.8	248.5	248.7	248.7	248.7
15°	247.9	248.1	247.9	247.9	247.9	248.0
15.5°	247.1	247.4	247.1	247.2	247.2	247.2
16°	246.4	246.5	246.4	246.5	246.5	246.5
16.5°	245.7	245.8	245.7	245.8	245.9	245.9
17°	244.9	245.0	244.9	245.0	245.1	245.1
17.5°	244.1	244.3	244.1	244.2	244.3	244.3
18°	243.3	243.5	243.3	243.3	243.4	243.4
18.5°	242.4	242.6	242.4	242.4	242.5	242.6
19°	241.5	241.7	241.5	241.6	241.7	241.7
19.5°	240.6	240.8	240.6	240.7	240.8	240.8
20°	239.7	240.0	239.7	239.8	239.9	239.9
20.5°	238.9	239.0	238.9	238.9	238.9	239.0
21°	238.0	238.2	238.0	238.0	238.1	238.1



TEST NUMBER: P869793
 CATALOG NUMBER: HLBSL406FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	234.9	235.1	234.9	235.1	235.0	235.1
23°	233.9	234.0	233.9	234.0	234.0	234.1
23.5°	232.8	233.0	232.8	232.9	233.0	233.1
24°	231.8	231.9	231.8	231.8	231.8	231.9
24.5°	230.8	230.9	230.8	230.8	230.8	230.8
25°	229.6	229.8	229.6	229.7	229.7	229.7
25.5°	228.5	228.7	228.5	228.6	228.6	228.6
26°	227.4	227.5	227.4	227.4	227.5	227.5
26.5°	226.2	226.3	226.2	226.2	226.3	226.4
27°	225.0	225.1	225.0	225.0	225.1	225.1
27.5°	223.9	224.0	223.9	223.9	223.9	223.9
28°	222.7	222.7	222.7	222.7	222.7	222.7
28.5°	221.4	221.5	221.4	221.4	221.4	221.5
29°	220.1	220.2	220.1	220.1	220.1	220.2
29.5°	218.8	218.9	218.8	218.8	218.9	218.9
30°	217.5	217.6	217.5	217.5	217.6	217.6
30.5°	216.3	216.4	216.3	216.3	216.3	216.4
31°	214.9	215.0	214.9	215.0	214.9	215.0
31.5°	213.5	213.7	213.5	213.6	213.6	213.6
32°	212.2	212.3	212.2	212.2	212.2	212.2
32.5°	210.8	211.0	210.8	210.8	210.8	210.9
33°	209.5	209.6	209.5	209.5	209.5	209.6
33.5°	208.0	208.2	208.0	208.1	208.0	208.1
34°	206.6	206.7	206.6	206.6	206.6	206.6
34.5°	205.1	205.3	205.1	205.1	205.1	205.1
35°	203.6	203.8	203.6	203.6	203.6	203.7
35.5°	202.2	202.4	202.2	202.2	202.2	202.3
36°	200.7	200.8	200.7	200.7	200.7	200.8
36.5°	199.2	199.3	199.2	199.2	199.2	199.2
37°	197.6	197.8	197.6	197.6	197.6	197.6
37.5°	196.1	196.2	196.1	196.1	196.1	196.1
38°	194.5	194.7	194.5	194.6	194.6	194.6
38.5°	192.9	193.1	192.9	193.0	193.0	193.1
39°	191.3	191.5	191.3	191.4	191.4	191.4
39.5°	189.7	189.8	189.7	189.8	189.8	189.7
40°	188.2	188.3	188.2	188.2	188.2	188.2
40.5°	186.5	186.6	186.5	186.5	186.5	186.5
41°	184.8	185.0	184.8	184.8	184.8	184.9
41.5°	183.1	183.3	183.1	183.1	183.2	183.2
42°	181.5	181.7	181.5	181.5	181.6	181.6
42.5°	179.8	180.0	179.8	179.8	179.8	179.8
43°	178.0	178.2	178.0	178.1	178.1	178.1
43.5°	176.3	176.4	176.3	176.3	176.3	176.4



TEST NUMBER: P869793
 CATALOG NUMBER: HLBSL406FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	171.1	171.2	171.1	171.1	171.0	171.1
45.5°	169.3	169.4	169.3	169.3	169.2	169.3
46°	167.5	167.6	167.5	167.6	167.5	167.6
46.5°	165.7	165.9	165.7	165.7	165.7	165.8
47°	163.8	164.0	163.8	163.8	163.9	163.9
47.5°	162.0	162.1	162.0	162.0	162.0	162.0
48°	160.2	160.4	160.2	160.2	160.2	160.2
48.5°	158.3	158.5	158.3	158.3	158.3	158.3
49°	156.4	156.6	156.4	156.4	156.4	156.4
49.5°	154.5	154.6	154.5	154.5	154.5	154.5
50°	152.7	152.8	152.7	152.7	152.7	152.7
50.5°	150.7	150.8	150.7	150.7	150.7	150.7
51°	148.8	148.9	148.8	148.8	148.8	148.8
51.5°	146.8	146.9	146.8	146.8	146.8	146.8
52°	144.9	145.1	144.9	145.0	145.0	145.0
52.5°	142.9	143.1	142.9	143.0	142.9	142.9
53°	140.9	141.0	140.9	140.9	140.9	141.0
53.5°	139.0	139.0	139.0	139.0	139.0	139.0
54°	137.0	137.1	137.0	137.0	137.0	137.1
54.5°	135.0	135.1	135.0	135.0	134.9	135.0
55°	132.9	133.1	132.9	132.9	132.9	132.9
55.5°	130.9	131.1	130.9	130.9	130.9	131.0
56°	128.8	129.0	128.8	128.9	128.8	128.8
56.5°	126.8	126.9	126.8	126.8	126.8	126.7
57°	124.7	124.8	124.7	124.7	124.8	124.8
57.5°	122.7	122.8	122.7	122.6	122.6	122.7
58°	120.5	120.7	120.5	120.5	120.5	120.5
58.5°	118.4	118.5	118.4	118.4	118.4	118.4
59°	116.4	116.5	116.4	116.4	116.4	116.4
59.5°	114.2	114.3	114.2	114.2	114.2	114.2
60°	112.0	112.2	112.0	112.0	112.0	112.0
60.5°	110.0	110.1	110.0	110.0	109.9	110.0
61°	107.8	107.9	107.8	107.8	107.8	107.8
61.5°	105.6	105.7	105.6	105.6	105.6	105.6
62°	103.4	103.5	103.4	103.4	103.4	103.4
62.5°	101.3	101.4	101.3	101.3	101.3	101.3
63°	99.1	99.1	99.1	99.1	99.0	99.0
63.5°	96.9	96.9	96.9	96.8	96.8	96.8
64°	94.7	94.8	94.7	94.7	94.7	94.7
64.5°	92.5	92.6	92.5	92.5	92.5	92.5
65°	90.2	90.4	90.2	90.3	90.2	90.2
65.5°	88.1	88.2	88.1	88.1	88.0	88.0
66°	85.8	85.9	85.8	85.8	85.8	85.7



TEST NUMBER: P869793
 CATALOG NUMBER: HLBSL406FS5-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	79.2	79.3	79.2	79.1	79.1	79.1
68°	76.9	77.0	76.9	76.8	76.8	76.8
68.5°	74.7	74.8	74.7	74.7	74.6	74.6
69°	72.4	72.5	72.4	72.4	72.3	72.3
69.5°	70.1	70.2	70.1	70.1	70.0	70.0
70°	67.8	67.9	67.8	67.8	67.7	67.7
70.5°	65.6	65.7	65.6	65.6	65.5	65.5
71°	63.3	63.4	63.3	63.3	63.3	63.2
71.5°	61.0	61.1	61.0	61.0	60.9	60.9
72°	58.8	58.9	58.8	58.8	58.7	58.7
72.5°	56.5	56.6	56.5	56.5	56.4	56.4
73°	54.2	54.3	54.2	54.2	54.1	54.1
73.5°	52.1	52.1	52.1	52.0	52.0	51.9
74°	49.8	49.9	49.8	49.7	49.7	49.7
74.5°	47.5	47.6	47.5	47.5	47.5	47.4
75°	45.4	45.4	45.4	45.3	45.3	45.3
75.5°	43.1	43.2	43.1	43.1	43.0	43.0
76°	40.9	41.0	40.9	40.8	40.8	40.8
76.5°	38.8	39.1	38.8	38.7	38.6	38.6
77°	36.6	36.9	36.6	36.5	36.6	36.5
77.5°	34.4	34.7	34.4	34.4	34.4	34.3
78°	32.2	32.5	32.2	32.3	32.2	32.2
78.5°	30.2	30.3	30.2	30.2	30.2	30.2
79°	28.1	28.3	28.1	28.1	28.1	28.1
79.5°	26.1	26.2	26.1	26.0	26.0	26.0
80°	24.2	24.2	24.2	24.1	24.0	24.0
80.5°	22.2	22.2	22.2	22.1	22.1	22.1
81°	20.2	20.3	20.2	20.2	20.1	20.1
81.5°	18.3	18.4	18.3	18.3	18.2	18.2
82°	16.6	16.6	16.6	16.5	16.4	16.4
82.5°	14.8	14.8	14.8	14.7	14.7	14.7
83°	13.1	13.1	13.1	13.0	12.9	12.9
83.5°	11.4	11.5	11.4	11.4	11.3	11.2
84°	10.0	10.0	10.0	9.9	9.8	9.8
84.5°	8.5	8.5	8.5	8.5	8.4	8.4
85°	7.1	7.2	7.1	7.1	7.0	7.0
85.5°	5.8	6.0	5.8	5.7	5.7	5.7
86°	4.7	4.9	4.7	4.6	4.5	4.4
86.5°	3.6	3.8	3.6	3.6	3.5	3.6
87°	2.7	2.9	2.7	2.7	2.6	2.7
87.5°	1.9	2.0	1.9	1.9	1.9	1.9
88°	1.3	1.3	1.3	1.2	1.1	1.2
88.5°	0.8	0.8	0.8	0.7	0.6	0.6



TEST NUMBER: P869793
CATALOG NUMBER: HLBSL406FS5-3000K

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°	237.1	237.1	236.9	237.2	236.9	237.1	237.1	237.1	237.1	237.1	237.1
22°	236.1	236.1	236.0	236.1	236.0	236.1	236.1	236.1	236.1	236.1	236.1



44°	174.7	174.6	174.7	174.6	174.7	174.6	174.7	174.6	174.7	174.6	174.7
44.5°	172.9	172.8	172.9	172.8	173.0	172.8	172.9	172.8	172.9	172.8	172.9



66.5°	83.5	83.5	83.5	83.6	83.6	83.6	83.5	83.5	83.5	83.5	83.5
67°	81.3	81.3	81.4	81.4	81.5	81.4	81.4	81.3	81.3	81.3	81.4



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°	236.9	237.2	236.9	237.1	237.1	237.1
22°	236.0	236.1	236.0	236.1	236.1	236.1



44°	174.6	174.7	174.6	174.7	174.6	174.7
44.5°	172.8	173.0	172.8	172.9	172.8	172.9

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66.5°	83.6	83.6	83.6	83.5	83.5	83.5
67°	81.4	81.5	81.4	81.4	81.3	81.3

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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)