

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: P851814

Luminaire Tested: RLFRC4FS-3500K

Issue Date: 7/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P851814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (UTC2404001E-A1)
Test Lab: INNOVATION CENTER
Issue Date: 7/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RLFRC4FS-3500K
Description: 4" Fire Rated Canless, 3500K CCT 900lms,WH
Light Source: -
Ballast/Driver:

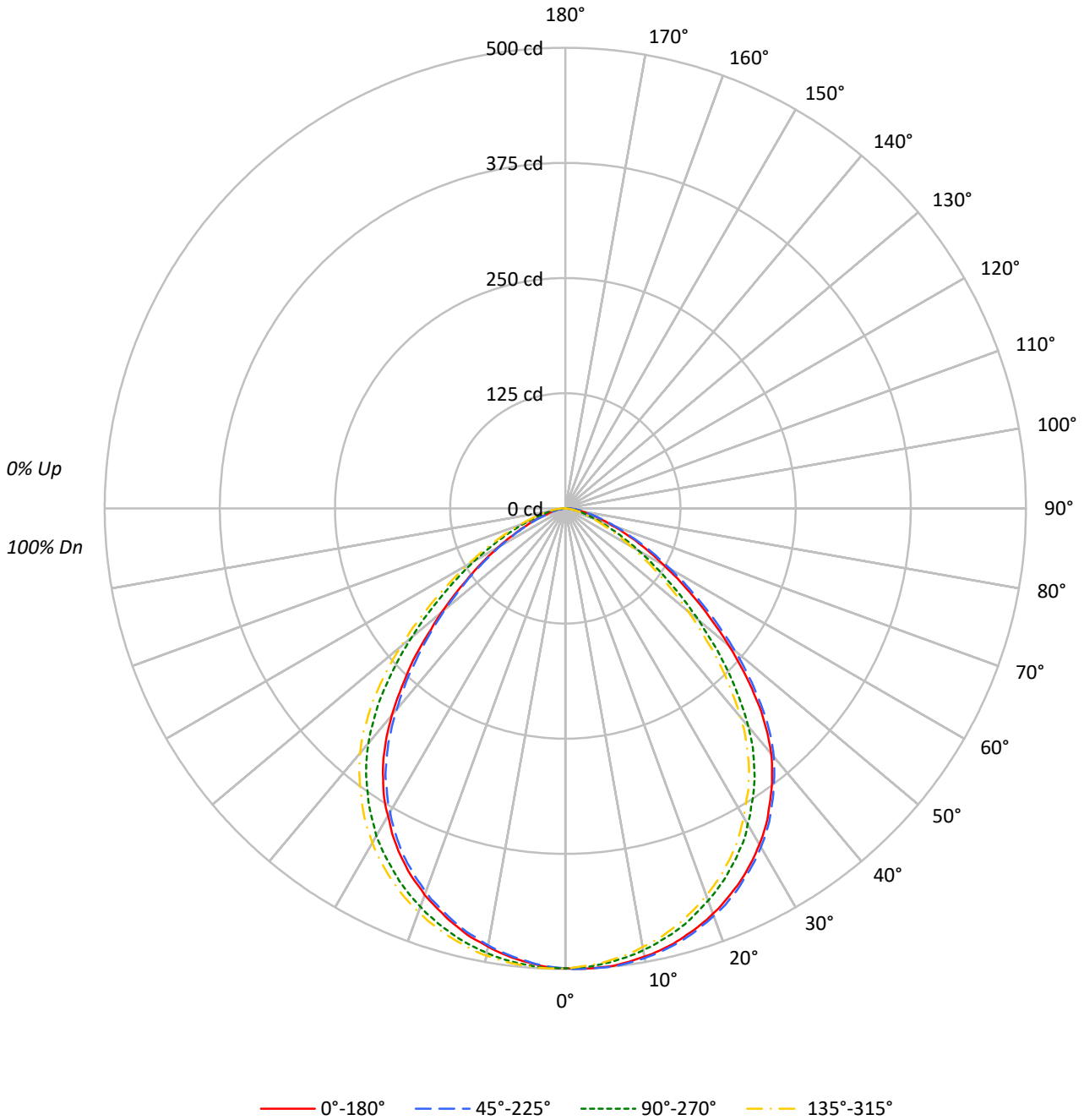
Summary

Lumens per Lamp: 1009.3 (1 lamp)
Luminaire Lumens: 1049.0 lumens
Efficiency: 103.9%
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.26
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
Input Voltage (V): 120
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: P851814
CATALOG NUMBER: RLFRC4FS-3500K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
RCR																		
0	124	124	124	124	121	121	121	121	115	115	115	111	111	111	106	106	106	104
1	115	111	107	104	112	109	105	102	104	102	99	100	98	96	97	95	93	91
2	106	99	93	88	104	97	92	87	94	89	85	90	87	83	87	84	81	79
3	98	89	81	76	96	87	80	75	84	78	74	81	77	72	79	75	71	69
4	91	80	72	66	89	78	71	65	76	69	64	74	68	64	72	67	63	61
5	84	72	64	58	82	71	63	57	69	62	57	67	61	56	65	60	56	54
6	78	66	57	51	76	65	57	51	63	56	50	61	55	50	60	54	50	48
7	73	60	52	46	71	59	51	46	58	50	45	56	50	45	55	49	45	43
8	68	55	47	41	66	54	47	41	53	46	41	52	45	41	51	45	40	39
9	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
10	60	47	39	34	59	46	39	34	45	39	34	45	38	34	44	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	62837	62837	62837	62837
5°	63102	62622	62407	62799
10°	63142	62234	61723	62630
15°	63060	61640	60845	62226
20°	62718	60696	59785	61620
25°	62195	59446	58224	60737
30°	61208	57546	55933	59610
35°	59549	55063	53019	57475
40°	57122	50813	48086	54608
45°	52183	44388	41594	49460
50°	45403	37082	34165	42643
55°	38200	29555	27119	35347
60°	31211	23408	20967	28643
65°	25580	17778	15783	22364
70°	20054	13615	11076	17294
75°	16289	10260	8558	13080
80°	13843	8552	6450	11451
85°	13140	4476	0	9675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 55832 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	47.2	4.5	4.7
10°-20°	134.0	12.8	13.3
20°-30°	199.3	19.0	19.7
30°-40°	228.0	21.7	22.6
40°-50°	202.4	19.3	20.1
50°-60°	134.5	12.8	13.3
60°-70°	69.4	6.6	6.9
70°-80°	27.5	2.6	2.7
80°-90°	6.7	0.6	0.7
90°-100°	0.1	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	380.4	36.3	37.7
0°-40°	608.4	58.0	60.3
0°-60°	945.4	90.1	93.7
0°-90°	1048.9	100.0	103.9
90°-120°	0.1	0.0	0.0
90°-150°	0.1	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	1049.0	100.0	103.9

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	499	499	499	499	499	
5°	500	496	494	497	500	48
15°	484	473	467	478	484	137
25°	448	428	419	437	448	206
35°	388	358	345	374	388	242
45°	293	249	234	278	293	225
55°	174	135	124	161	174	156
65°	86	60	53	75	86	86
75°	34	21	18	27	34	36
85°	9	3	0	7	9	10
90°	2	0	0	0	2	1
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P851814
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	499.3	499.3	499.3	499.3	499.3	499.3	499.3	499.3	499.3	499.3	499.3
1°	499.6	499.8	500.1	500.6	498.8	499.1	498.7	498.8	498.8	498.5	498.5
2°	500.1	499.8	500.2	501.1	498.4	498.2	497.5	498.0	498.4	497.8	497.7
3°	500.1	499.9	500.2	501.2	498.0	497.7	496.5	497.0	497.2	497.2	496.4
4°	499.7	499.7	500.0	501.4	497.0	496.4	495.6	495.7	495.6	496.0	495.0
5°	499.5	499.0	500.1	501.9	495.7	495.6	494.3	494.2	494.0	494.2	493.0
6°	499.2	498.9	499.7	501.2	494.6	493.9	492.4	493.3	492.4	492.7	491.2
7°	498.0	498.0	499.1	501.0	492.8	492.3	490.5	491.2	490.6	490.9	489.1
8°	496.9	496.8	498.2	500.4	491.3	490.2	488.5	489.6	488.3	488.7	486.7
9°	495.3	495.3	497.0	499.5	489.4	488.4	486.3	487.1	485.8	486.2	484.3
10°	494.1	493.6	495.6	498.2	487.0	486.0	483.4	484.4	483.0	484.2	481.7
11°	492.7	491.9	494.3	496.8	484.7	483.4	481.2	482.3	480.0	480.9	478.4
12°	490.9	490.3	492.4	495.2	482.0	480.7	478.4	479.2	477.8	477.8	475.2
13°	488.6	488.1	490.4	493.8	478.9	477.4	475.2	476.4	474.7	475.0	472.4
14°	486.7	485.8	488.4	491.5	476.3	474.0	471.8	472.7	470.7	471.5	468.5
15°	484.0	483.2	486.1	489.1	473.1	471.2	468.4	469.1	467.0	468.1	464.8
16°	481.0	480.5	483.5	487.3	469.8	467.1	464.7	465.3	463.4	464.1	460.7
17°	478.3	477.2	480.7	484.7	465.8	463.7	460.2	461.7	458.9	459.9	456.5
18°	475.1	474.3	477.3	481.7	461.5	459.1	456.3	457.7	454.9	456.0	452.0
19°	472.0	471.1	474.3	478.4	457.4	454.7	452.0	453.6	450.7	451.6	448.3
20°	468.3	467.2	470.8	475.6	453.2	449.9	447.2	449.1	446.4	446.7	442.7
21°	464.9	463.5	467.6	471.9	448.9	445.6	442.7	444.4	440.8	442.0	437.5
22°	460.6	459.6	463.9	468.6	443.8	440.9	437.5	439.1	436.3	437.0	432.6
23°	456.3	455.2	459.4	464.6	439.2	436.1	432.7	434.2	431.3	432.1	426.6
24°	452.0	451.0	455.3	460.1	433.7	430.5	426.3	428.5	425.3	426.8	421.4
25°	447.9	446.2	450.7	456.3	428.1	425.2	421.2	422.6	419.3	420.3	415.5
26°	442.9	441.1	445.2	451.7	422.7	418.8	415.1	416.9	413.3	415.4	409.0
27°	437.8	436.3	440.7	447.1	416.4	412.8	409.1	411.2	406.8	408.2	402.4
28°	432.6	430.9	435.7	442.0	411.0	406.3	402.0	403.7	400.1	401.0	395.1
29°	427.1	425.7	430.6	436.7	404.2	399.5	394.6	397.1	392.2	394.6	388.3
30°	421.2	420.0	424.5	431.5	396.0	391.4	387.2	389.8	384.9	386.8	380.3
31°	415.6	413.6	418.8	425.2	389.1	384.8	379.8	382.5	378.4	379.7	373.3
32°	409.1	406.7	412.6	419.7	381.0	376.7	371.4	374.8	370.8	372.6	365.0
33°	402.9	399.8	406.3	413.7	374.1	369.8	364.8	367.4	362.5	363.9	356.7
34°	395.0	392.7	398.7	407.2	366.3	361.4	356.1	360.2	353.7	356.3	349.1
35°	387.6	384.7	391.3	400.3	358.4	353.0	347.8	350.5	345.1	346.8	338.7
36°	380.4	377.0	384.0	392.4	349.2	343.8	338.4	341.9	335.8	338.0	329.0
37°	372.9	369.3	375.9	385.0	340.0	333.7	328.3	331.5	325.3	327.8	319.0
38°	364.3	361.8	368.4	377.4	330.7	324.4	318.3	321.8	315.0	316.8	307.7
39°	356.6	353.1	360.4	369.3	320.2	314.4	308.1	311.8	303.9	305.5	296.6
40°	347.7	344.4	352.2	361.2	309.3	302.8	295.7	300.6	292.7	294.5	284.4
41°	337.7	335.0	342.9	352.9	297.9	291.1	284.1	289.0	280.9	282.2	273.2
42°	327.9	323.7	333.1	344.4	285.9	278.4	271.6	276.5	268.4	270.6	261.4
43°	316.9	312.9	323.0	334.2	273.5	266.8	260.0	264.9	256.3	259.8	250.3
44°	306.1	301.6	311.9	324.2	261.5	253.7	247.4	252.6	245.2	247.1	237.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	293.2	290.0	300.0	313.7	249.4	242.8	235.5	240.6	233.7	235.8	225.4
46°	281.5	277.3	288.0	302.2	237.2	229.3	223.5	227.2	221.1	223.7	214.3
47°	269.5	265.9	276.6	289.4	225.5	217.3	209.3	215.4	208.9	211.3	202.4
48°	256.5	253.8	264.1	278.2	212.0	204.2	197.9	203.7	196.0	200.0	191.6
49°	244.4	242.0	252.4	266.3	199.7	191.9	185.6	191.6	185.7	189.3	180.4
50°	231.9	228.5	240.3	253.0	189.4	181.5	174.2	180.2	174.5	179.1	169.9
51°	220.2	216.8	228.6	241.4	177.2	170.0	163.4	168.8	163.9	167.4	158.5
52°	207.5	205.6	215.8	230.1	166.5	158.1	152.7	157.7	153.0	156.1	148.7
53°	195.7	194.7	205.2	217.7	155.8	147.9	141.9	147.1	143.1	147.2	138.5
54°	185.3	183.1	193.6	205.5	144.8	137.3	132.6	137.7	132.3	137.3	129.8
55°	174.1	172.0	182.2	194.1	134.7	128.1	122.3	127.2	123.6	128.3	120.6
56°	163.4	161.6	171.7	182.9	125.9	118.4	114.0	119.1	115.7	118.8	111.4
57°	152.8	150.8	160.6	172.4	116.2	109.8	105.4	110.4	106.8	109.8	103.4
58°	143.4	141.4	151.3	160.7	108.9	101.9	96.7	101.7	98.2	102.2	94.9
59°	132.9	132.1	140.8	150.5	100.4	93.6	89.2	93.4	90.8	94.0	88.2
60°	124.0	122.8	131.7	140.0	93.0	86.4	82.5	85.6	83.3	86.5	81.0
61°	116.0	114.8	122.8	131.2	84.9	79.3	75.2	79.2	76.8	79.7	73.8
62°	107.8	106.5	114.5	122.6	77.4	72.4	68.6	72.4	70.4	72.8	67.4
63°	100.2	99.2	106.9	114.0	71.2	65.8	63.0	66.1	62.6	66.1	61.5
64°	92.6	91.4	98.7	105.6	65.9	60.8	56.2	59.4	57.9	59.7	55.3
65°	85.9	84.0	91.3	97.1	59.7	55.2	52.3	54.3	53.0	54.6	50.2
66°	79.0	77.7	83.8	90.4	54.6	51.2	46.9	50.2	46.7	49.6	45.7
67°	71.7	72.1	76.9	83.2	49.8	44.8	42.2	44.5	42.4	44.1	40.8
68°	66.3	65.7	70.6	76.6	43.6	40.9	38.6	40.4	38.1	40.5	36.4
69°	60.8	59.6	65.3	69.7	40.3	37.1	34.4	36.2	33.7	35.6	32.2
70°	54.5	54.9	59.1	64.1	37.0	33.5	30.6	31.8	30.1	31.4	28.5
71°	50.7	50.1	54.2	58.4	32.6	29.8	27.5	28.8	26.6	28.0	25.0
72°	45.5	44.7	49.3	53.2	28.8	26.4	24.2	25.3	23.4	24.5	22.3
73°	41.3	40.2	44.1	48.3	26.0	23.6	21.8	22.7	20.7	22.0	19.8
74°	37.0	36.1	39.6	43.4	23.2	21.4	19.9	20.4	19.1	19.6	18.1
75°	33.5	32.9	35.8	39.0	21.1	19.3	17.7	18.8	17.6	17.8	16.2
76°	29.8	29.5	31.9	35.1	19.3	17.6	16.9	17.1	15.3	16.0	14.4
77°	26.3	25.8	28.6	31.4	17.7	16.0	14.8	14.6	14.0	13.5	13.3
78°	22.9	22.5	24.5	28.4	15.0	13.6	11.9	13.1	12.1	12.2	10.5
79°	20.6	20.9	22.1	25.0	13.6	12.2	10.8	11.1	10.2	10.7	9.3
80°	19.1	18.4	20.5	22.7	11.8	9.4	9.7	9.5	8.9	9.2	4.5
81°	17.3	17.2	18.6	20.1	10.0	8.6	7.5	7.9	6.6	7.8	5.6
82°	15.9	15.2	16.7	19.1	8.8	7.2	5.7	6.6	5.4	5.4	3.8
83°	13.6	14.2	15.3	16.4	6.4	5.7	3.5	5.2	3.9	3.7	2.1
84°	10.7	11.0	12.8	14.4	4.6	3.6	2.4	3.4	2.2	2.3	0.0
85°	9.1	9.7	11.5	12.9	3.1	1.9	1.2	2.2	0.0	1.1	0.0
86°	8.3	8.1	9.1	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	7.1	6.9	7.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	5.8	5.0	6.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89°	4.5	3.3	4.8	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	2.4	2.1	2.7	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	1.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851814
 CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851814
CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

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



TEST NUMBER: P851814
 CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	499.3	499.3	499.3	499.3	499.3	499.3
1°	498.5	499.1	499.8	499.6	499.8	499.6
2°	497.0	499.0	499.9	499.7	499.3	500.1
3°	495.8	499.0	499.7	499.5	499.1	500.1
4°	494.1	498.0	498.9	499.2	498.9	499.7
5°	492.1	497.1	498.5	498.4	498.4	499.5
6°	490.0	496.1	497.3	497.7	497.8	499.2
7°	487.4	495.0	496.3	496.9	496.4	498.0
8°	484.9	493.6	495.0	495.9	495.7	496.9
9°	482.2	492.1	493.5	494.3	493.9	495.3
10°	479.5	490.1	491.9	492.8	492.2	494.1
11°	476.3	487.9	490.2	491.5	490.6	492.7
12°	473.0	485.7	487.9	489.4	488.5	490.9
13°	469.7	483.4	485.8	486.6	486.2	488.6
14°	466.0	480.6	482.6	484.5	483.9	486.7
15°	461.9	477.6	480.0	481.9	481.2	484.0
16°	457.3	474.4	476.9	479.1	478.5	481.0
17°	452.9	471.3	474.3	476.0	475.2	478.3
18°	448.5	467.5	470.9	473.2	472.0	475.1
19°	443.7	464.4	467.2	469.7	468.6	472.0
20°	438.4	460.1	463.4	466.0	465.2	468.3
21°	433.5	455.9	459.5	462.6	461.0	464.9
22°	427.7	452.0	455.4	458.5	457.2	460.6
23°	422.3	447.3	451.2	454.6	452.8	456.3
24°	416.6	442.7	446.7	449.8	448.8	452.0
25°	409.8	437.4	442.2	445.3	444.2	447.9
26°	403.1	432.1	436.6	440.5	438.8	442.9
27°	395.7	427.1	431.6	435.2	434.3	437.8
28°	388.4	421.7	426.8	430.2	428.6	432.6
29°	380.9	416.0	421.1	425.1	422.9	427.1
30°	373.5	410.2	414.8	419.1	417.5	421.2
31°	366.1	402.9	409.1	412.6	411.3	415.6
32°	358.0	396.4	402.8	406.8	404.6	409.1
33°	348.5	389.4	395.2	400.3	397.6	402.9
34°	339.7	382.5	388.3	393.0	390.2	395.0
35°	329.8	374.1	380.9	385.4	382.9	387.6
36°	319.9	366.9	373.7	378.0	375.3	380.4
37°	309.0	359.3	365.3	370.9	367.5	372.9
38°	296.6	350.9	357.3	363.3	359.7	364.3
39°	286.2	342.0	349.8	355.0	351.9	356.6
40°	273.6	332.4	339.8	346.5	342.1	347.7
41°	263.0	322.8	330.6	337.3	332.1	337.7
42°	250.2	311.3	320.6	327.9	322.3	327.9
43°	237.9	300.9	310.5	316.2	311.2	316.9
44°	225.5	290.2	298.3	305.9	299.0	306.1



TEST NUMBER: P851814
 CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	213.2	277.9	287.4	294.9	287.8	293.2
46°	202.4	265.8	275.7	282.1	275.0	281.5
47°	191.6	254.0	264.0	270.3	262.8	269.5
48°	179.4	242.5	250.9	258.2	250.9	256.5
49°	168.8	229.4	239.0	246.2	238.6	244.4
50°	158.3	217.8	226.6	232.9	226.1	231.9
51°	147.7	205.9	213.7	220.8	213.6	220.2
52°	138.0	194.8	201.9	209.5	201.6	207.5
53°	128.6	182.9	190.7	196.4	189.8	195.7
54°	120.1	171.4	179.5	185.0	178.8	185.3
55°	111.6	161.1	167.5	173.6	167.2	174.1
56°	103.2	150.3	156.6	163.1	156.5	163.4
57°	94.6	140.3	146.9	151.5	146.6	152.8
58°	87.5	131.3	136.7	141.2	136.3	143.4
59°	80.6	122.3	127.3	132.3	127.4	132.9
60°	73.7	113.8	118.4	122.4	119.0	124.0
61°	67.1	105.3	109.9	113.8	110.5	116.0
62°	61.2	97.0	101.2	105.4	101.8	107.8
63°	54.7	88.9	93.6	98.3	94.2	100.2
64°	50.4	82.4	86.0	90.4	87.5	92.6
65°	45.1	75.1	78.6	82.8	80.6	85.9
66°	40.6	69.3	72.6	76.7	74.0	79.0
67°	36.0	62.6	66.4	70.5	67.7	71.7
68°	31.5	56.8	61.0	63.3	62.0	66.3
69°	28.9	51.8	54.9	58.3	56.2	60.8
70°	25.0	47.0	50.0	53.4	51.9	54.5
71°	22.2	42.6	45.3	48.5	45.9	50.7
72°	20.0	37.9	40.9	42.9	42.5	45.5
73°	18.0	34.0	36.4	39.0	38.0	41.3
74°	16.1	29.7	32.8	35.9	34.7	37.0
75°	14.1	26.9	29.2	31.5	31.1	33.5
76°	12.7	24.0	25.6	28.7	27.4	29.8
77°	10.4	20.9	22.5	25.4	25.0	26.3
78°	9.8	19.0	20.4	22.4	21.4	22.9
79°	7.7	17.1	18.4	20.3	19.6	20.6
80°	5.7	15.8	17.0	18.2	17.7	19.1
81°	3.5	13.5	15.1	16.4	16.0	17.3
82°	2.5	11.7	13.3	15.4	14.3	15.9
83°	1.0	9.7	11.6	12.1	12.4	13.6
84°	0.0	7.9	9.8	11.1	10.5	10.7
85°	0.0	6.7	7.5	9.5	9.4	9.1
86°	0.0	4.6	5.2	7.3	7.3	8.3
87°	0.0	2.8	4.7	6.6	5.4	7.1
88°	0.0	1.4	3.6	4.7	4.4	5.8
89°	0.0	0.0	1.8	3.5	3.0	4.5



TEST NUMBER: P851814
 CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	1.9	1.6	2.4
91°	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851814
 CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851814
CATALOG NUMBER: RLFRC4FS-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)