

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: P851817

Luminaire Tested: RLFRC4FSMBB-2700K

Issue Date: 7/3/2024

Test Information

Test Method: LM-79-2019
Report Number: P851817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (UTC2404001E-B1)
Test Lab: INNOVATION CENTER
Issue Date: 7/3/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: RLFRC4FSM BB-2700K
Description: 4" Fire Rated Canless, 2700K CCT 900lms,BLK
Light Source: -
Ballast/Driver:

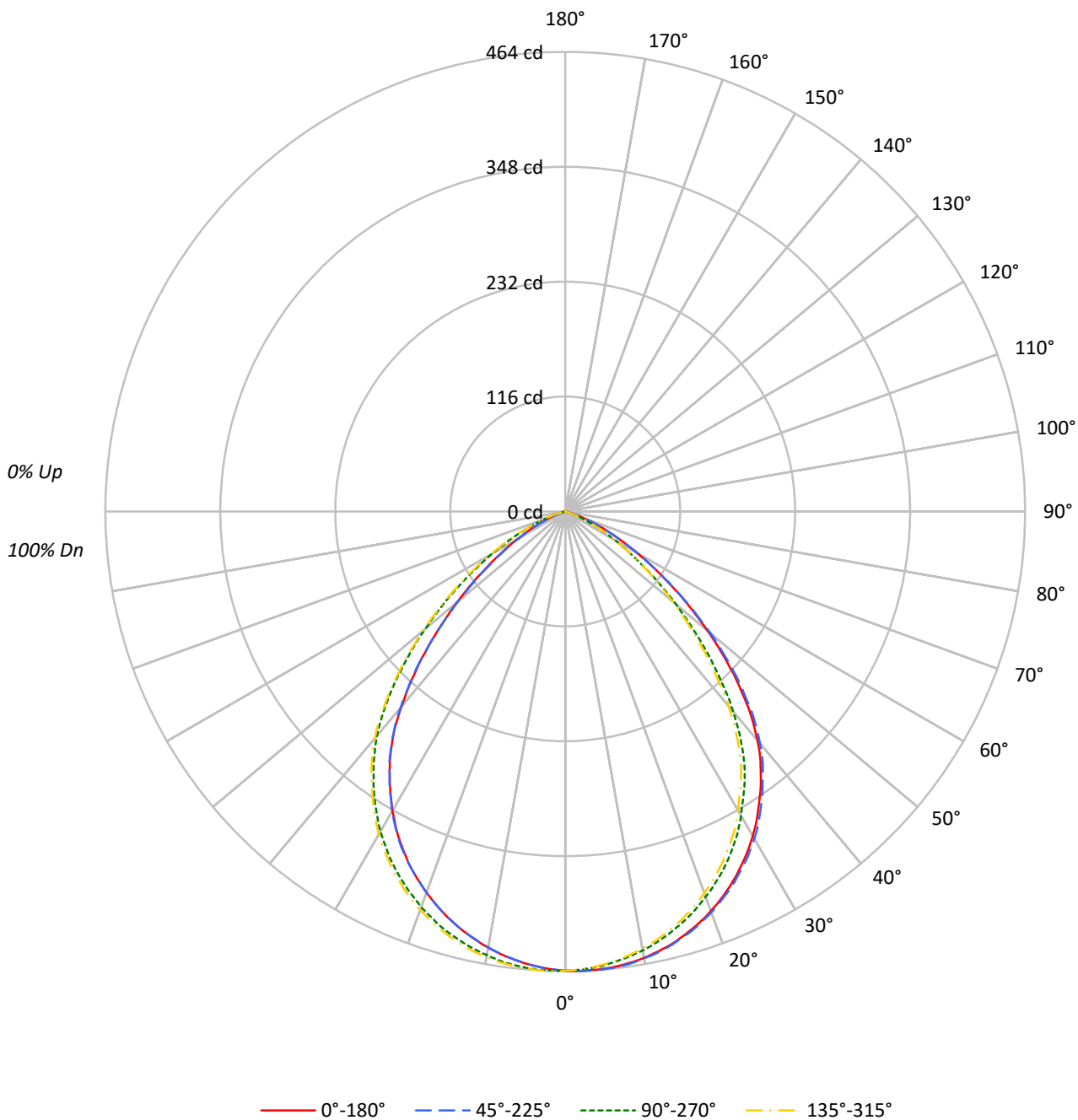
Summary

Lumens per Lamp: 907.9 (1 lamp)
Luminaire Lumens: 870.0 lumens
Efficiency: 95.8%
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.23
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P851817
CATALOG NUMBER: RLFRC4FSMBB-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	114	114	114	114	111	111	111	111	106	106	106	102	102	102	98	98	98
1	107	104	101	98	105	101	99	96	98	95	93	94	92	90	91	89	88
2	100	93	88	84	97	92	87	83	88	85	81	85	82	79	83	80	78
3	92	84	78	73	90	83	77	72	80	75	71	78	73	70	75	72	69
4	86	76	69	64	84	75	69	63	73	67	63	71	66	62	69	65	61
5	80	69	62	57	78	68	61	56	66	60	56	65	59	55	63	58	55
6	74	63	56	50	72	62	55	50	61	54	50	59	54	49	58	53	49
7	69	58	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44
8	65	53	46	41	63	53	46	41	51	45	41	50	45	40	49	44	40
9	61	49	42	37	59	49	42	37	48	41	37	47	41	37	46	41	37
10	57	46	39	34	56	45	39	34	44	38	34	43	38	34	43	37	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	58357	58357	58357	58357
5°	58504	58087	57872	58403
10°	58477	57506	57135	58132
15°	58148	56637	56168	57666
20°	57495	55459	54816	56919
25°	56516	53919	53086	55738
30°	55018	51588	50658	54175
35°	52758	48472	47396	51805
40°	49548	43322	42221	48513
45°	44067	36325	35258	43142
50°	36808	28585	27763	36025
55°	28743	21064	20427	28567
60°	21243	14498	13994	21294
65°	14145	8636	8308	14353
70°	7874	3606	3532	8132
75°	2383	292	292	2528
80°	362	72	0	290
85°	289	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°
 Vertical Angle: 45°
 Luminance: 46381 cd/sqm



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	43.7	5.0	4.8
10°-20°	123.6	14.2	13.6
20°-30°	181.5	20.9	20.0
30°-40°	202.8	23.3	22.3
40°-50°	171.3	19.7	18.9
50°-60°	102.0	11.7	11.2
60°-70°	39.4	4.5	4.3
70°-80°	5.0	0.6	0.6
80°-90°	0.1	0.0	0.0
90°-100°	0.0	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°	0.1	0.0	0.0
140°-150°	0.1	0.0	0.0
150°-160°	0.1	0.0	0.0
160°-170°	0.1	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	348.8	40.1	38.4
0°-40°	551.6	63.4	60.8
0°-60°	825.0	94.8	90.9
0°-90°	869.5	99.9	95.8
90°-120°	0.0	0.0	0.0
90°-150°	0.3	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	870.0	100.0	95.8

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	464	464	464	464	464	
5°	463	460	458	462	463	44
15°	446	435	431	443	446	126
25°	407	388	382	401	407	187
35°	343	316	308	337	343	214
45°	248	204	198	242	248	190
55°	131	96	93	130	131	118
65°	48	29	28	48	48	49
75°	5	1	1	5	5	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0
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: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	463.7	463.7	463.7	463.7	463.7	463.7	463.7	463.7	463.7	463.7	463.7
1°	464.1	464.1	464.1	464.3	463.3	463.3	463.3	463.2	463.0	463.0	463.0
2°	464.2	464.4	464.3	464.6	462.8	462.6	462.3	462.5	462.2	462.0	461.9
3°	463.9	464.5	464.3	464.8	461.9	461.7	461.4	461.6	460.9	460.8	461.0
4°	463.7	464.5	464.2	464.7	460.9	460.8	460.2	460.3	459.6	459.2	459.6
5°	463.1	464.1	463.8	464.4	459.8	459.7	458.7	459.1	458.1	457.5	457.9
6°	462.6	463.5	463.4	463.9	458.0	458.2	457.1	457.1	456.3	455.9	456.0
7°	461.8	462.9	462.4	463.3	456.3	456.4	455.2	455.5	454.4	453.7	454.2
8°	460.5	461.9	461.4	462.3	454.5	454.5	453.1	453.4	452.2	451.5	452.1
9°	459.3	460.7	460.0	461.1	452.2	452.1	450.7	451.3	449.9	448.8	449.5
10°	457.6	459.2	458.2	459.8	450.0	449.7	448.0	448.6	447.1	445.9	447.0
11°	455.8	457.6	456.7	458.2	447.5	447.3	445.3	446.0	444.5	443.1	444.1
12°	453.8	455.7	454.7	456.1	444.7	444.4	442.5	442.9	441.3	440.0	440.9
13°	451.6	453.5	452.5	454.1	441.7	441.5	439.0	440.0	438.0	436.7	437.9
14°	449.3	451.0	450.0	451.9	438.3	438.2	435.5	436.7	434.6	433.5	434.6
15°	446.3	448.5	447.1	449.4	434.7	434.7	431.7	433.0	431.1	429.5	430.7
16°	443.4	445.8	444.4	446.9	431.3	430.9	428.3	429.2	427.2	425.7	427.0
17°	440.2	442.6	441.5	443.8	427.4	427.1	423.9	425.5	422.8	421.5	423.0
18°	436.9	439.4	438.1	440.8	423.3	422.9	419.7	420.8	418.5	417.0	418.8
19°	433.4	436.0	434.5	437.4	418.7	418.4	415.1	416.3	413.9	412.3	414.0
20°	429.3	432.4	430.9	433.6	414.1	413.8	410.2	411.9	409.3	407.8	409.5
21°	425.4	428.2	427.0	429.8	409.6	409.0	405.4	407.2	404.4	402.7	404.2
22°	421.2	424.1	422.5	426.1	404.3	404.3	400.1	401.9	399.2	397.0	399.1
23°	416.4	420.0	418.3	421.5	399.4	399.1	394.5	396.4	393.9	391.5	394.1
24°	411.8	415.1	413.8	417.3	394.0	393.5	388.8	391.0	388.4	386.2	388.8
25°	407.0	410.5	408.8	412.6	388.3	387.5	382.7	385.0	382.3	380.0	382.9
26°	401.4	405.6	403.7	408.0	382.3	382.0	376.9	378.9	376.0	374.1	377.0
27°	396.2	400.6	398.7	403.0	375.7	375.5	370.4	373.0	369.8	367.6	370.7
28°	390.7	395.0	393.4	397.3	369.6	368.6	364.1	366.4	363.1	360.2	363.7
29°	384.5	389.5	387.4	392.0	362.3	362.1	356.2	359.4	355.6	352.6	356.7
30°	378.6	383.8	381.6	385.8	355.0	354.9	348.8	352.1	348.6	345.4	349.2
31°	372.0	377.5	375.4	379.9	346.6	346.7	340.5	344.1	340.4	338.3	341.1
32°	365.3	370.4	368.8	373.6	339.4	339.4	332.7	336.5	333.2	330.0	333.8
33°	357.7	363.6	361.2	366.9	331.8	330.8	325.1	328.5	324.9	322.0	325.6
34°	350.5	356.6	354.1	360.0	324.0	323.7	317.5	320.4	316.8	313.0	317.1
35°	343.4	348.7	346.8	352.1	315.5	315.4	308.8	311.9	308.5	305.1	309.4
36°	335.9	341.5	338.9	344.8	306.3	306.4	298.6	303.2	299.2	295.4	299.9
37°	327.8	334.1	331.4	337.3	296.2	296.5	289.0	294.2	289.9	286.7	291.1
38°	320.1	326.5	323.7	329.7	286.0	285.6	278.6	283.3	280.0	275.8	280.5
39°	311.7	317.8	315.6	321.1	274.5	275.3	267.3	273.1	268.6	264.7	270.3
40°	301.6	309.1	305.8	312.9	263.7	264.0	256.3	261.2	257.0	253.3	258.2
41°	291.9	299.8	296.2	303.0	252.5	253.0	244.2	250.4	245.3	240.9	246.6
42°	281.7	288.8	286.2	293.1	239.9	240.8	232.0	238.3	234.1	229.6	234.6
43°	271.0	278.4	275.6	282.8	227.4	228.5	219.4	225.7	221.5	218.4	223.3
44°	259.0	267.5	263.4	272.0	215.6	217.0	208.1	214.5	210.7	205.7	211.0



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	247.6	256.4	252.0	260.6	204.1	204.2	196.6	203.0	198.1	193.1	199.1
46°	236.1	243.9	240.5	248.0	191.6	193.7	185.5	191.8	187.0	180.6	186.6
47°	223.4	232.2	227.5	236.4	179.6	181.4	173.5	179.9	175.0	169.6	174.4
48°	211.5	220.4	215.5	224.7	168.1	170.3	163.1	168.3	163.2	157.5	163.4
49°	199.7	208.4	203.5	211.7	156.3	158.7	151.9	156.9	152.8	146.9	151.2
50°	188.0	195.0	191.4	199.7	146.0	147.4	141.2	147.1	141.8	135.4	141.1
51°	175.6	183.0	178.3	187.9	135.2	137.8	131.5	136.9	131.6	124.7	129.5
52°	164.2	171.3	166.7	176.2	125.1	127.0	121.9	127.1	121.3	114.6	119.0
53°	153.2	159.6	155.0	163.6	114.7	117.5	111.9	117.1	111.6	105.4	109.0
54°	142.5	147.3	142.8	152.2	105.6	107.5	103.3	107.5	101.6	95.6	100.2
55°	131.0	136.4	132.0	141.4	96.0	99.1	94.2	98.9	93.1	88.1	90.7
56°	121.1	125.9	121.7	130.8	86.8	89.9	86.7	90.0	85.1	79.5	83.0
57°	111.6	115.0	111.8	119.8	79.0	82.4	78.5	82.7	76.8	71.5	74.5
58°	101.6	105.5	101.5	110.2	71.5	75.0	71.6	74.5	69.1	64.1	67.4
59°	92.7	96.4	92.6	100.9	64.3	67.6	64.0	67.5	62.5	57.6	60.1
60°	84.4	86.8	84.0	91.3	57.6	60.1	57.1	60.3	55.6	51.0	53.2
61°	76.3	78.6	76.0	82.9	50.9	54.1	51.3	53.6	49.1	45.4	47.2
62°	68.8	70.8	67.5	75.0	44.6	47.7	45.2	47.9	43.7	39.5	41.6
63°	61.2	63.5	60.4	67.5	39.4	41.9	39.8	42.2	38.4	34.2	36.2
64°	54.4	56.1	53.9	59.8	34.3	36.7	34.6	36.9	33.2	29.3	30.9
65°	47.5	49.6	47.0	53.3	29.0	31.8	29.6	31.7	27.9	25.0	26.1
66°	41.7	43.6	41.1	47.2	24.3	26.8	24.7	26.8	23.6	20.7	22.1
67°	36.1	38.0	35.6	40.9	20.3	22.7	20.7	22.5	19.3	16.9	17.9
68°	31.0	32.7	30.6	35.5	16.2	18.4	16.6	18.4	16.1	13.6	14.6
69°	25.8	27.4	25.5	30.5	12.9	14.9	13.4	14.7	12.6	10.5	11.1
70°	21.4	23.0	21.3	25.8	9.8	11.6	10.3	11.4	9.6	7.5	8.2
71°	17.2	18.8	17.3	21.2	7.1	8.6	7.3	8.4	6.8	5.3	5.7
72°	13.7	14.7	13.8	17.3	4.7	6.0	4.9	6.0	4.5	3.2	3.8
73°	10.4	11.5	10.3	13.8	2.8	3.7	2.8	3.8	2.8	1.9	2.1
74°	7.3	8.5	7.6	10.6	1.3	2.2	1.5	2.0	1.4	0.7	1.0
75°	4.9	6.0	5.3	7.6	0.6	0.8	0.6	0.9	0.6	0.4	0.4
76°	3.0	3.8	3.3	5.4	0.4	0.5	0.4	0.4	0.2	0.2	0.3
77°	1.5	2.2	1.8	3.5	0.3	0.3	0.2	0.3	0.2	0.2	0.2
78°	0.8	1.1	0.8	1.8	0.3	0.3	0.2	0.2	0.2	0.2	0.2
79°	0.7	0.6	0.6	0.7	0.2	0.2	0.1	0.2	0.1	0.1	0.1
80°	0.5	0.5	0.5	0.5	0.1	0.0	0.1	0.1	0.0	0.1	0.0
81°	0.3	0.4	0.3	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0
82°	0.3	0.3	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83°	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.3	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

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
91°	0.0	0.0	0.0	0.0	0.0	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	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	0.1	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°	0.1	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	0.1
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
125°	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
126°	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.1
127°	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1
128°	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
129°	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.1
130°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.1	0.0	0.1
131°	0.1	0.1	0.0	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.1
132°	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
133°	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
134°	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2
136°	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1
137°	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
138°	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
139°	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
140°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
141°	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
142°	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
143°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
144°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145°	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2
146°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
147°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
148°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
149°	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3
150°	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2
151°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3
152°	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3
153°	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3
154°	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
155°	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3
156°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2
157°	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3
158°	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3
159°	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3
160°	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2
161°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3
162°	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2
163°	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
164°	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3
165°	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
166°	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3
167°	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3
168°	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
169°	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2
170°	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2
171°	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2
172°	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3
173°	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.2
174°	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3
175°	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
176°	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.2
177°	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2
178°	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2
179°	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3



TEST NUMBER: P851817
CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	463.7	463.7	463.7	463.7	463.7	463.7
1°	462.6	463.9	463.9	464.1	464.1	464.1
2°	461.5	463.8	463.7	464.1	464.1	464.2
3°	460.4	463.5	463.4	464.0	463.9	463.9
4°	458.8	463.0	462.8	463.6	463.6	463.7
5°	457.2	462.3	462.1	463.0	463.0	463.1
6°	455.3	461.2	461.1	462.2	462.2	462.6
7°	453.0	460.2	459.9	461.2	461.0	461.8
8°	450.5	458.8	458.6	460.0	459.7	460.5
9°	448.1	456.9	457.1	458.6	458.1	459.3
10°	445.1	454.9	455.1	457.0	456.4	457.6
11°	442.2	452.9	452.9	455.2	454.5	455.8
12°	438.9	450.7	450.5	453.0	452.4	453.8
13°	435.7	448.2	448.1	450.6	450.0	451.6
14°	431.7	445.4	445.2	448.1	447.4	449.3
15°	428.0	442.6	442.4	445.3	444.5	446.3
16°	423.9	439.6	439.3	442.0	441.5	443.4
17°	419.8	436.4	435.9	438.9	437.9	440.2
18°	415.7	432.4	432.0	435.5	434.4	436.9
19°	410.8	428.8	428.4	431.9	430.7	433.4
20°	405.9	425.0	424.3	427.8	426.7	429.3
21°	400.8	420.4	420.1	423.7	422.2	425.4
22°	395.5	416.1	415.1	419.5	418.1	421.2
23°	389.8	411.5	410.4	414.9	413.6	416.4
24°	384.4	406.7	405.7	409.7	408.8	411.8
25°	378.5	401.4	400.3	404.8	403.3	407.0
26°	371.6	396.3	395.1	399.8	398.2	401.4
27°	365.1	391.0	389.6	393.9	392.2	396.2
28°	357.8	384.7	383.8	388.3	386.6	390.7
29°	350.8	379.0	377.3	382.4	380.7	384.5
30°	342.9	372.8	371.0	376.3	374.4	378.6
31°	335.5	366.4	364.3	369.4	367.7	372.0
32°	327.6	358.9	356.6	362.5	360.2	365.3
33°	319.1	351.9	349.5	355.4	353.0	357.7
34°	310.6	344.6	342.1	347.3	345.1	350.5
35°	302.2	337.2	334.6	339.8	337.6	343.4
36°	292.7	328.8	327.1	332.3	330.2	335.9
37°	283.3	321.2	318.7	324.9	322.5	327.8
38°	272.4	312.7	310.7	316.4	313.8	320.1
39°	261.2	304.5	301.2	308.0	304.8	311.7
40°	249.2	295.3	291.7	298.8	295.4	301.6
41°	238.1	285.6	281.7	289.0	285.3	291.9
42°	225.9	275.5	271.4	278.7	274.8	281.7
43°	214.5	264.0	261.0	267.1	262.9	271.0
44°	202.2	253.3	249.2	256.4	251.8	259.0



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	189.9	242.4	238.3	244.3	240.6	247.6
46°	177.6	230.0	227.3	233.2	228.0	236.1
47°	166.8	218.7	216.1	222.1	216.5	223.4
48°	155.2	207.5	203.8	210.8	205.0	211.5
49°	144.5	196.3	192.8	198.5	193.7	199.7
50°	133.6	184.0	181.8	187.6	181.6	188.0
51°	123.3	173.0	169.9	176.6	170.5	175.6
52°	112.7	162.3	159.3	164.9	158.7	164.2
53°	103.6	151.6	148.8	154.4	149.2	153.2
54°	95.0	140.3	138.7	144.1	137.9	142.5
55°	86.7	130.2	127.9	134.2	127.9	131.0
56°	78.3	120.8	118.6	123.6	118.5	121.1
57°	70.3	110.3	108.4	114.3	108.3	111.6
58°	62.7	101.4	99.6	105.3	99.4	101.6
59°	56.3	92.8	91.1	96.6	90.9	92.7
60°	49.7	84.6	83.1	88.2	82.7	84.4
61°	43.9	76.2	74.8	79.6	74.2	76.3
62°	38.1	68.8	67.5	72.2	67.1	68.8
63°	32.6	61.7	60.6	65.0	60.1	61.2
64°	27.4	54.5	54.1	57.5	52.8	54.4
65°	23.1	48.2	47.8	51.1	46.7	47.5
66°	19.2	42.3	41.4	45.0	40.8	41.7
67°	15.2	37.0	36.0	39.3	35.3	36.1
68°	11.7	31.2	30.8	33.5	29.8	31.0
69°	8.6	26.4	25.5	28.4	25.0	25.8
70°	6.1	22.1	21.1	23.6	20.5	21.4
71°	3.9	18.0	17.1	19.0	16.2	17.2
72°	2.2	14.0	13.4	15.2	12.5	13.7
73°	1.1	10.8	9.9	11.6	9.3	10.4
74°	0.5	7.8	7.0	8.3	6.5	7.3
75°	0.4	5.2	4.6	5.6	4.0	4.9
76°	0.3	2.9	2.6	3.4	2.2	3.0
77°	0.3	1.4	1.2	1.7	1.1	1.5
78°	0.2	0.6	0.7	0.9	0.7	0.8
79°	0.1	0.5	0.5	0.6	0.5	0.7
80°	0.1	0.4	0.4	0.4	0.3	0.5
81°	0.0	0.2	0.3	0.4	0.4	0.3
82°	0.0	0.3	0.3	0.3	0.3	0.3
83°	0.0	0.2	0.2	0.2	0.2	0.2
84°	0.0	0.1	0.2	0.2	0.2	0.3
85°	0.0	0.0	0.1	0.2	0.1	0.2
86°	0.0	0.0	0.0	0.1	0.2	0.1
87°	0.0	0.0	0.0	0.1	0.1	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

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
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	0.1	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°	0.1	0.0	0.1	0.0	0.0	0.1
121°	0.0	0.1	0.1	0.0	0.0	0.0
122°	0.1	0.1	0.0	0.0	0.0	0.0
123°	0.0	0.1	0.0	0.0	0.1	0.0
124°	0.0	0.0	0.0	0.0	0.1	0.0
125°	0.0	0.1	0.0	0.0	0.0	0.0
126°	0.1	0.0	0.0	0.1	0.0	0.0
127°	0.2	0.1	0.1	0.0	0.1	0.0
128°	0.2	0.0	0.1	0.0	0.2	0.1
129°	0.2	0.1	0.2	0.1	0.1	0.0
130°	0.1	0.1	0.1	0.1	0.0	0.1
131°	0.1	0.1	0.2	0.2	0.0	0.1
132°	0.1	0.1	0.2	0.0	0.0	0.1
133°	0.2	0.1	0.1	0.1	0.2	0.1
134°	0.2	0.1	0.2	0.1	0.2	0.2



TEST NUMBER: P851817
 CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.2	0.2	0.2	0.2	0.1	0.2
136°	0.2	0.1	0.1	0.2	0.2	0.2
137°	0.2	0.1	0.2	0.2	0.1	0.2
138°	0.2	0.2	0.2	0.2	0.2	0.2
139°	0.2	0.2	0.2	0.2	0.1	0.1
140°	0.2	0.2	0.1	0.1	0.2	0.1
141°	0.2	0.2	0.2	0.2	0.2	0.2
142°	0.2	0.2	0.2	0.2	0.2	0.1
143°	0.2	0.2	0.2	0.1	0.2	0.2
144°	0.2	0.2	0.2	0.2	0.1	0.2
145°	0.2	0.2	0.2	0.2	0.2	0.2
146°	0.2	0.2	0.2	0.2	0.2	0.2
147°	0.3	0.2	0.2	0.2	0.2	0.2
148°	0.3	0.2	0.2	0.1	0.2	0.2
149°	0.2	0.2	0.2	0.2	0.2	0.2
150°	0.3	0.3	0.2	0.2	0.2	0.2
151°	0.3	0.2	0.2	0.2	0.1	0.2
152°	0.3	0.2	0.3	0.2	0.2	0.3
153°	0.3	0.2	0.2	0.2	0.2	0.2
154°	0.3	0.2	0.2	0.2	0.2	0.3
155°	0.3	0.2	0.2	0.2	0.2	0.2
156°	0.3	0.2	0.2	0.2	0.2	0.2
157°	0.3	0.2	0.2	0.3	0.2	0.3
158°	0.3	0.2	0.2	0.2	0.2	0.2
159°	0.3	0.2	0.2	0.2	0.2	0.2
160°	0.2	0.2	0.2	0.2	0.3	0.2
161°	0.3	0.3	0.2	0.2	0.2	0.2
162°	0.3	0.2	0.2	0.2	0.2	0.3
163°	0.2	0.3	0.3	0.2	0.2	0.3
164°	0.3	0.3	0.3	0.3	0.2	0.2
165°	0.3	0.3	0.2	0.2	0.3	0.2
166°	0.3	0.3	0.3	0.2	0.2	0.3
167°	0.3	0.3	0.3	0.2	0.2	0.3
168°	0.3	0.2	0.3	0.3	0.3	0.3
169°	0.3	0.2	0.3	0.3	0.2	0.3
170°	0.3	0.3	0.2	0.3	0.2	0.3
171°	0.3	0.2	0.2	0.3	0.2	0.3
172°	0.3	0.3	0.3	0.2	0.3	0.3
173°	0.2	0.3	0.3	0.3	0.2	0.3
174°	0.2	0.2	0.3	0.2	0.3	0.2
175°	0.2	0.3	0.3	0.2	0.3	0.2
176°	0.2	0.2	0.3	0.2	0.2	0.2
177°	0.2	0.3	0.2	0.2	0.3	0.3
178°	0.3	0.3	0.2	0.2	0.3	0.2
179°	0.3	0.2	0.2	0.3	0.2	0.3



TEST NUMBER: P851817
CATALOG NUMBER: RLFRC4FSMBB-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.3	0.3	0.3	0.3	0.3	0.3

(END OF REPORT)