

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: P640182

Luminaire Tested: LCR412RD9FSE020-14W-4000K

Issue Date: 2/13/2023

Test Information

Test Method: LM-79-2019
Report Number: P640182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2208055C001)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: LCR412RD9FSE020-14W-4000K
Description: LCR 4
Light Source: 4000K CCT, 93 CRI LEDS
Ballast/Driver: -

Summary

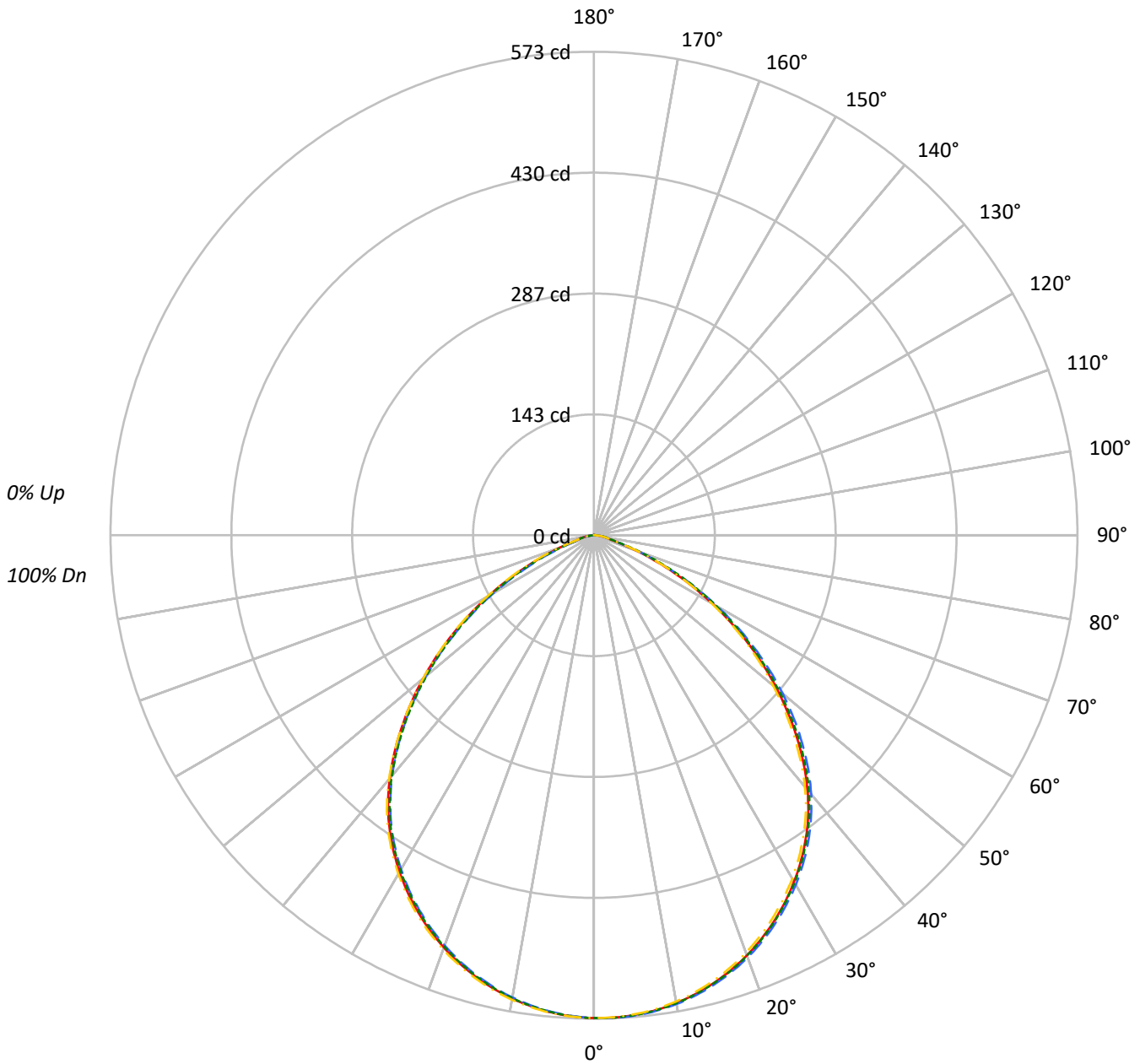
Lumens per Lamp: N/A
Luminaire Lumens: 1280.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.3
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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: P640182
CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

Luminous Intensity Polar Plot



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



TEST NUMBER: P640182
 CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50		
6	74	62	54	48	73	61	53	48	59	52	47	58	52	47	56	51	47	45		
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	64	52	44	38	63	51	44	38	50	43	38	49	42	38	47	42	38	36		
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32		
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	70578	70578	70578	70578
5°	70650	70662	70316	70291
10°	70502	70540	69851	69763
15°	70131	70182	69173	69058
20°	69542	69595	68256	68112
25°	68702	68797	67096	66878
30°	67539	67681	65630	65346
35°	65938	66164	63649	63273
40°	63392	63811	60639	59995
45°	59413	59954	56273	55384
50°	54229	54881	50717	49700
55°	47848	48665	43956	42966
60°	39989	41148	35721	34907
65°	30383	31988	25946	25217
70°	19186	21061	15219	14534
75°	10342	11295	9245	8912
80°	9163	9731	7956	7529
85°	8067	9057	5944	5236

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 60896 cd/sqm



TEST NUMBER: P640182
 CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	4.2
10°-20°	153.8	12.0
20°-30°	229.6	17.9
30°-40°	268.2	21.0
40°-50°	254.6	19.9
50°-60°	190.3	14.9
60°-70°	97.0	7.6
70°-80°	25.6	2.0
80°-90°	5.8	0.5
90°-100°	0.1	0.0
100°-110°	0.1	0.0
110°-120°	0.1	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	437.4	34.2
0°-40°	705.6	55.1
0°-60°	1150.5	89.9
0°-90°	1278.9	99.9
90°-120°	0.3	0.0
90°-150°	0.9	0.1
90°-180°	1.0	0.1
0°-180°	1280.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	572	572	572	572	572	
5°	571	571	568	568	571	54
15°	549	550	542	541	549	155
25°	505	506	493	491	505	232
35°	438	439	423	420	438	273
45°	341	344	323	318	341	262
55°	222	226	204	200	222	198
65°	104	110	89	86	104	104
75°	22	24	19	19	22	28
85°	6	6	4	4	6	6
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: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2
0.5°	572.3	572.3	572.4	572.4	572.3	572.2	572.2	572.1	572.0	572.0	571.9
1°	572.3	572.4	572.4	572.4	572.3	572.3	572.1	572.0	571.8	571.7	571.7
1.5°	572.4	572.5	572.6	572.5	572.4	572.3	572.1	571.7	571.5	571.3	571.3
2°	572.2	572.4	572.5	572.5	572.3	572.2	572.0	571.4	571.2	571.0	570.9
2.5°	572.1	572.4	572.4	572.4	572.2	572.0	571.7	571.1	570.8	570.4	570.4
3°	571.9	572.2	572.2	572.3	571.9	571.8	571.4	570.7	570.4	569.9	569.8
3.5°	571.6	572.1	572.1	572.0	571.7	571.5	571.1	570.3	569.9	569.4	569.2
4°	571.3	571.7	571.9	571.7	571.3	571.2	570.6	569.7	569.3	568.8	568.6
4.5°	571.0	571.4	571.6	571.5	571.1	570.7	570.1	569.0	568.7	568.1	567.9
5°	570.6	570.8	571.2	571.1	570.7	570.2	569.5	568.4	567.9	567.3	567.1
5.5°	570.1	570.5	570.9	570.7	570.2	569.7	569.0	567.6	567.3	566.5	566.4
6°	569.6	570.0	570.3	570.2	569.6	569.2	568.4	566.9	566.4	565.6	565.4
6.5°	568.9	569.4	569.8	569.7	569.0	568.5	567.7	566.1	565.5	564.8	564.5
7°	568.3	568.8	569.2	569.1	568.4	567.8	567.0	565.2	564.5	563.8	563.6
7.5°	567.5	568.0	568.4	568.4	567.7	567.0	566.1	564.3	563.5	562.7	562.5
8°	566.7	567.4	567.8	567.7	566.9	566.2	565.2	563.2	562.4	561.6	561.2
8.5°	565.8	566.6	567.0	566.9	566.0	565.3	564.2	562.1	561.3	560.5	560.0
9°	564.9	565.7	566.1	566.1	565.2	564.3	563.2	561.0	560.2	559.2	558.9
9.5°	563.9	564.7	565.2	565.1	564.2	563.4	562.2	559.8	558.9	558.1	557.5
10°	562.9	563.8	564.2	564.1	563.2	562.3	561.0	558.6	557.7	556.7	556.2
10.5°	561.8	562.6	563.2	563.1	562.0	561.1	559.9	557.3	556.3	555.4	554.9
11°	560.7	561.5	562.1	561.9	560.9	560.0	558.5	556.1	554.9	553.9	553.4
11.5°	559.4	560.4	560.9	560.8	559.7	558.7	557.3	554.5	553.5	552.4	551.9
12°	558.2	559.0	559.7	559.6	558.5	557.5	556.0	553.1	551.9	550.8	550.2
12.5°	556.8	557.8	558.4	558.2	557.0	556.1	554.5	551.6	550.3	549.1	548.5
13°	555.4	556.4	557.1	557.1	555.8	554.7	553.1	550.0	548.7	547.6	546.9
13.5°	554.1	555.1	555.7	555.6	554.4	553.3	551.5	548.3	547.0	545.7	545.0
14°	552.5	553.6	554.3	554.2	552.8	551.6	550.0	546.6	545.3	544.0	543.3
14.5°	550.9	552.0	552.8	552.7	551.3	550.1	548.3	544.9	543.4	542.3	541.4
15°	549.2	550.5	551.3	551.1	549.6	548.4	546.5	543.1	541.7	540.3	539.6
15.5°	547.5	548.8	549.7	549.5	548.0	546.6	544.9	541.2	539.7	538.3	537.6
16°	545.8	547.2	547.9	547.8	546.2	545.0	542.9	539.2	537.7	536.4	535.5
16.5°	544.0	545.4	546.2	546.1	544.5	543.1	541.2	537.3	535.7	534.3	533.4
17°	542.3	543.7	544.4	544.2	542.6	541.2	539.2	535.2	533.7	532.2	531.2
17.5°	540.4	541.8	542.6	542.4	540.8	539.3	537.2	533.0	531.5	530.0	529.1
18°	538.3	539.9	540.7	540.6	538.7	537.3	535.2	530.9	529.3	527.7	526.9
18.5°	536.2	538.0	538.8	538.5	536.7	535.2	533.1	528.7	527.1	525.4	524.5
19°	534.2	535.8	536.8	536.6	534.7	533.1	530.9	526.4	524.8	523.1	522.3
19.5°	532.1	533.7	534.6	534.5	532.6	530.9	528.7	524.2	522.5	520.7	519.8
20°	529.8	531.5	532.6	532.4	530.2	528.7	526.5	521.7	520.0	518.3	517.4
20.5°	527.6	529.4	530.3	530.2	528.0	526.5	524.2	519.4	517.7	515.8	514.8
21°	525.3	527.2	528.1	527.9	525.9	524.1	521.8	516.9	515.0	513.2	512.3
21.5°	522.9	524.8	525.7	525.6	523.5	521.7	519.4	514.4	512.5	510.6	509.8
22°	520.5	522.5	523.4	523.3	521.1	519.3	516.9	511.8	509.9	508.1	506.9

TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	518.0	520.0	521.0	520.8	518.6	516.8	514.3	509.1	507.2	505.3	504.3
23°	515.3	517.5	518.6	518.4	516.2	514.2	511.8	506.5	504.5	502.5	501.5
23.5°	512.8	515.0	516.0	515.9	513.6	511.5	509.0	503.8	501.7	499.7	498.6
24°	510.2	512.3	513.4	513.4	510.9	508.9	506.4	501.0	498.8	496.9	495.7
24.5°	507.6	509.7	510.9	510.7	508.2	506.2	503.5	498.2	496.0	494.0	492.8
25°	504.8	507.0	508.1	508.0	505.5	503.4	500.8	495.2	493.0	490.9	489.9
25.5°	501.9	504.3	505.3	505.2	502.7	500.6	498.0	492.3	490.1	488.0	486.8
26°	499.1	501.5	502.6	502.4	499.9	497.7	494.9	489.3	487.1	484.9	483.7
26.5°	496.2	498.5	499.7	499.6	497.0	494.8	492.0	486.2	483.9	481.7	480.6
27°	493.3	495.7	496.8	496.7	494.1	491.7	489.0	483.2	480.8	478.6	477.5
27.5°	490.3	492.7	493.9	493.8	491.1	488.8	486.0	480.0	477.6	475.4	474.3
28°	487.2	489.6	490.8	490.7	488.0	485.7	482.8	476.7	474.4	472.1	470.9
28.5°	484.0	486.5	487.8	487.7	484.9	482.6	479.6	473.5	471.0	468.7	467.6
29°	480.8	483.4	484.7	484.6	481.7	479.4	476.5	470.2	467.7	465.5	464.2
29.5°	477.6	480.1	481.5	481.4	478.6	476.2	473.2	466.7	464.3	462.1	460.6
30°	474.2	476.9	478.3	478.2	475.2	472.8	469.9	463.3	460.8	458.4	457.1
30.5°	471.0	473.7	475.0	475.0	471.9	469.5	466.4	459.8	457.2	454.9	453.6
31°	467.5	470.2	471.8	471.7	468.6	466.1	462.9	456.3	453.6	451.3	449.9
31.5°	464.0	466.8	468.3	468.2	465.2	462.6	459.4	452.8	450.0	447.6	446.2
32°	460.3	463.4	464.9	464.8	461.6	459.0	455.9	449.0	446.3	443.9	442.4
32.5°	456.7	459.8	461.4	461.2	458.1	455.5	452.2	445.2	442.6	440.0	438.6
33°	453.1	456.2	457.7	457.7	454.4	451.8	448.5	441.5	438.8	436.2	434.8
33.5°	449.5	452.5	454.2	454.1	450.7	448.1	444.7	437.7	434.8	432.4	430.9
34°	445.6	448.8	450.4	450.3	446.9	444.4	441.0	433.7	430.8	428.5	426.9
34.5°	441.8	445.0	446.8	446.5	443.2	440.5	437.1	429.8	426.9	424.3	422.9
35°	437.9	441.2	442.8	442.8	439.4	436.7	433.2	425.7	422.7	420.3	418.7
35.5°	433.9	437.3	438.9	438.9	435.5	432.6	429.1	421.6	418.6	416.1	414.4
36°	429.8	433.3	435.0	434.9	431.6	428.6	425.2	417.4	414.3	411.7	410.0
36.5°	425.8	429.3	431.1	430.9	427.6	424.7	421.0	413.0	409.9	407.3	405.4
37°	421.5	425.1	427.0	426.9	423.5	420.4	416.8	408.6	405.5	402.7	401.0
37.5°	417.1	420.8	422.7	422.9	419.1	416.1	412.3	404.0	400.9	398.2	396.3
38°	412.7	416.4	418.5	418.4	414.7	411.7	407.8	399.4	396.2	393.5	391.7
38.5°	408.0	412.0	414.0	413.9	410.2	407.2	403.1	394.6	391.5	388.6	386.9
39°	403.3	407.4	409.4	409.7	405.8	402.6	398.7	389.9	386.7	383.9	382.0
39.5°	398.7	402.8	405.1	405.1	401.2	397.8	393.8	384.9	381.7	379.0	377.1
40°	393.7	397.9	400.4	400.5	396.3	393.0	388.8	379.7	376.6	373.8	372.0
40.5°	388.8	393.2	395.7	395.5	391.4	387.9	383.6	374.6	371.5	368.8	366.9
41°	383.5	388.1	390.8	390.8	386.4	382.9	378.6	369.5	366.2	363.6	361.7
41.5°	378.5	383.2	385.8	385.9	381.4	377.7	373.2	364.1	361.1	358.4	356.3
42°	373.3	378.1	380.9	380.8	376.3	372.4	368.0	358.6	355.7	353.0	351.0
42.5°	368.1	373.0	375.8	375.7	370.9	367.1	362.6	353.2	350.3	347.7	345.7
43°	362.6	367.7	370.5	370.6	365.7	361.6	357.1	347.6	344.8	342.2	340.2
43.5°	357.2	362.5	365.3	365.2	360.2	356.1	351.5	342.1	339.4	336.8	334.6
44°	351.7	357.0	359.9	359.9	354.8	350.5	346.0	336.6	333.7	331.2	329.3
44.5°	346.2	351.7	354.6	354.5	349.3	345.0	340.3	330.9	328.2	325.7	323.6

TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	340.6	346.2	349.1	349.1	343.7	339.4	334.8	325.3	322.6	320.1	318.0
45.5°	334.9	340.7	343.7	343.5	338.0	333.7	329.2	319.5	316.7	314.4	312.3
46°	329.3	334.9	338.2	337.9	332.4	328.1	323.4	313.9	311.2	308.8	306.5
46.5°	323.6	329.4	332.6	332.3	326.7	322.2	317.7	308.0	305.3	302.9	300.7
47°	317.8	323.7	327.0	326.6	320.9	316.7	312.0	302.3	299.5	297.1	295.0
47.5°	312.0	318.0	321.2	321.0	315.0	310.8	306.3	296.5	293.8	291.4	289.1
48°	306.2	312.1	315.4	315.2	309.3	305.0	300.4	290.7	287.9	285.5	283.3
48.5°	300.3	306.3	309.7	309.4	303.6	299.4	294.6	284.8	282.1	279.7	277.3
49°	294.5	300.5	303.9	303.4	297.7	293.4	288.8	279.0	276.1	273.7	271.3
49.5°	288.6	294.7	298.0	297.7	291.8	287.5	283.0	273.1	270.2	267.7	265.5
50°	282.6	288.7	292.1	291.8	286.0	281.7	277.2	267.2	264.3	261.7	259.4
50.5°	276.7	282.8	286.1	285.7	279.9	275.9	271.2	261.3	258.2	255.7	253.4
51°	270.7	276.7	280.2	279.8	274.1	270.0	265.5	255.6	252.4	249.7	247.3
51.5°	264.8	270.6	274.2	273.9	268.1	264.1	259.6	249.6	246.4	243.6	241.3
52°	258.8	264.7	268.2	267.9	262.2	258.3	253.8	243.6	240.4	237.6	235.3
52.5°	252.7	258.6	262.0	261.7	256.1	252.3	247.9	237.8	234.4	231.5	229.1
53°	246.7	252.5	256.0	255.7	250.2	246.5	241.9	231.8	228.3	225.4	223.0
53.5°	240.6	246.3	249.8	249.6	244.3	240.5	236.0	226.0	222.3	219.3	216.9
54°	234.7	240.2	243.7	243.6	238.3	234.6	230.2	220.0	216.3	213.0	210.7
54.5°	228.5	234.0	237.5	237.5	232.2	228.7	224.3	214.1	210.4	207.1	204.7
55°	222.5	228.0	231.3	231.5	226.3	222.9	218.5	208.2	204.4	200.9	198.5
55.5°	216.5	221.7	225.2	225.2	220.3	217.0	212.6	202.4	198.2	194.8	192.3
56°	210.4	215.5	218.9	219.1	214.3	211.1	206.7	196.5	192.4	188.7	186.2
56.5°	204.4	209.4	212.7	213.0	208.4	205.2	201.0	190.6	186.3	182.5	180.0
57°	198.3	203.2	206.4	206.9	202.3	199.3	195.2	184.7	180.4	176.4	173.9
57.5°	192.1	196.8	200.1	200.6	196.3	193.5	189.3	178.9	174.5	170.3	167.9
58°	186.2	190.7	193.9	194.6	190.5	187.7	183.5	173.1	168.5	164.3	161.7
58.5°	180.2	184.6	187.7	188.6	184.6	181.9	177.9	167.4	162.4	158.4	155.6
59°	174.1	178.5	181.5	182.4	178.6	176.0	172.0	161.5	156.6	152.2	149.7
59.5°	168.0	172.2	175.2	176.2	172.7	170.3	166.3	155.6	150.7	146.1	143.4
60°	162.1	166.1	169.0	170.3	166.8	164.4	160.5	150.0	144.8	140.3	137.6
60.5°	156.2	160.0	162.8	164.3	160.9	158.8	154.8	144.3	138.9	134.5	131.6
61°	150.2	153.8	156.6	158.1	155.2	153.0	149.0	138.5	133.2	128.4	125.8
61.5°	144.4	147.8	150.5	152.1	149.2	147.3	143.5	132.9	127.5	122.6	120.0
62°	138.6	141.7	144.5	146.2	143.5	141.7	137.9	127.4	121.8	116.9	114.2
62.5°	132.6	135.8	138.4	140.3	137.8	136.1	132.3	121.7	116.1	111.1	108.3
63°	126.8	129.8	132.3	134.4	132.0	130.3	126.7	116.0	110.5	105.3	102.8
63.5°	121.1	123.9	126.3	128.4	126.3	124.7	121.2	110.6	104.9	99.8	97.2
64°	115.4	117.9	120.4	122.6	120.7	119.2	115.7	105.2	99.4	94.3	91.7
64.5°	109.6	112.1	114.6	116.8	115.1	113.9	110.3	99.8	94.1	89.1	86.6
65°	104.1	106.4	108.7	111.1	109.6	108.4	104.8	94.5	88.9	83.9	81.4
65.5°	98.6	100.8	103.1	105.6	104.1	103.0	99.6	89.3	83.8	78.8	76.3
66°	93.1	95.2	97.3	99.8	98.9	97.6	94.3	84.2	78.7	73.6	71.1
66.5°	87.7	89.6	91.9	94.3	93.2	92.4	89.1	79.2	73.6	68.5	66.0
67°	82.4	84.2	86.4	88.9	88.1	87.4	84.1	74.1	68.5	63.7	61.3



TEST NUMBER: P640182
 CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	77.2	78.9	81.0	83.6	83.0	82.4	79.1	69.0	63.5	58.9	56.7
68°	72.2	73.8	75.9	78.3	77.9	77.3	74.0	64.4	59.0	54.5	52.4
68.5°	67.3	68.7	70.8	73.3	72.8	72.3	69.0	59.8	54.5	50.3	48.2
69°	62.5	63.9	65.9	68.3	67.8	67.2	64.3	55.2	50.2	46.1	44.2
69.5°	57.7	59.2	61.1	63.4	62.9	62.6	59.7	50.8	46.1	42.3	40.5
70°	53.2	54.6	56.4	58.7	58.4	57.9	55.2	46.7	42.2	38.8	37.2
70.5°	48.9	50.3	52.1	54.3	53.8	53.5	50.7	42.8	38.6	35.5	34.0
71°	44.8	46.1	47.8	49.8	49.4	49.2	46.6	39.0	35.2	32.5	31.1
71.5°	40.8	42.2	43.9	45.7	45.2	45.1	42.6	35.5	32.1	29.7	28.5
72°	37.2	38.5	40.1	41.8	41.4	41.1	38.9	32.3	29.4	27.3	26.3
72.5°	33.7	35.2	36.6	38.2	37.6	37.4	35.4	29.4	26.9	25.2	24.3
73°	31.3	32.6	33.2	34.7	34.1	33.9	32.2	26.9	24.8	23.3	22.5
73.5°	28.9	30.1	30.8	32.3	31.0	30.8	29.2	24.7	22.9	21.7	21.1
74°	26.5	27.6	28.4	29.8	28.2	28.0	26.7	22.8	21.5	20.5	20.0
74.5°	24.1	25.1	26.0	27.4	25.8	25.6	24.5	21.4	20.3	19.5	19.1
75°	21.7	22.6	23.6	24.9	23.7	23.5	22.6	20.2	19.4	18.7	18.3
75.5°	20.4	21.1	21.9	22.5	21.9	21.8	21.1	19.3	18.5	17.9	17.4
76°	19.4	19.9	20.5	21.0	20.6	20.6	20.1	18.4	17.6	17.0	16.6
76.5°	18.6	19.0	19.4	19.9	19.6	19.6	19.1	17.5	16.8	16.2	15.8
77°	17.7	18.1	18.6	19.0	18.7	18.7	18.2	16.7	16.0	15.4	15.0
77.5°	16.9	17.3	17.8	18.1	17.9	17.8	17.4	15.8	15.1	14.6	14.2
78°	16.1	16.5	17.0	17.3	17.0	16.9	16.5	15.0	14.3	13.8	13.4
78.5°	15.3	15.7	16.2	16.5	16.2	16.1	15.7	14.2	13.5	13.0	12.6
79°	14.5	14.9	15.4	15.7	15.4	15.2	14.8	13.3	12.7	12.2	11.8
79.5°	13.7	14.2	14.6	14.9	14.5	14.4	14.0	12.6	11.9	11.4	11.1
80°	12.9	13.4	13.8	14.1	13.7	13.6	13.2	11.8	11.2	10.7	10.4
80.5°	12.1	12.6	13.0	13.3	13.0	12.8	12.4	11.0	10.4	10.0	9.6
81°	11.4	11.9	12.3	12.6	12.2	12.0	11.6	10.3	9.7	9.2	8.9
81.5°	10.6	11.1	11.6	11.8	11.4	11.2	10.9	9.5	9.0	8.5	8.2
82°	9.9	10.4	10.8	11.0	10.6	10.5	10.1	8.8	8.3	7.8	7.5
82.5°	9.2	9.7	10.1	10.3	9.9	9.8	9.4	8.1	7.6	7.1	6.8
83°	8.5	9.0	9.4	9.6	9.2	9.0	8.6	7.4	6.9	6.4	6.1
83.5°	7.8	8.2	8.7	8.8	8.5	8.3	7.9	6.7	6.2	5.7	5.4
84°	7.1	7.6	8.0	8.1	7.8	7.6	7.2	6.0	5.5	5.1	4.8
84.5°	6.4	6.9	7.3	7.4	7.1	6.9	6.5	5.3	4.8	4.4	4.1
85°	5.7	6.2	6.6	6.8	6.4	6.2	5.8	4.6	4.2	3.8	3.5
85.5°	5.1	5.5	5.9	6.1	5.7	5.5	5.1	4.0	3.6	3.2	2.9
86°	4.5	4.9	5.2	5.4	5.0	4.8	4.5	3.4	2.9	2.5	2.3
86.5°	3.8	4.2	4.6	4.8	4.4	4.2	3.8	2.8	2.3	1.9	1.7
87°	3.2	3.6	3.9	4.1	3.7	3.6	3.2	2.2	1.7	1.3	1.1
87.5°	2.6	3.0	3.3	3.5	3.1	2.9	2.6	1.5	1.1	0.8	0.6
88°	2.0	2.4	2.7	2.9	2.5	2.3	2.0	1.0	0.6	0.3	0.2
88.5°	1.4	1.8	2.1	2.3	1.9	1.7	1.4	0.4	0.2	0.1	0.1
89°	0.8	1.2	1.5	1.7	1.3	1.1	0.8	0.1	0.0	0.0	0.1
89.5°	0.3	0.6	0.9	1.0	0.7	0.6	0.3	0.0	0.0	0.0	0.1



TEST NUMBER: P640182
 CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.1	0.2	0.4	0.5	0.3	0.2	0.1	0.0	0.0	0.1	0.1
90.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
91°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
91.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
92°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
92.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
93°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
93.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
94°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
94.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
96°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
96.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
97°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
97.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
98°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
98.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
99°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
99.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
100°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
100.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
101°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
101.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
102°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
102.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
103°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
103.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
104°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
104.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
106°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
106.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
107°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
107.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
108°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
108.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
109°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
109.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
110°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
110.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
111°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
111.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
112°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P640182
 CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
113°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
113.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
114°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
114.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
116°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
116.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
117°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
117.5°	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
118°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
118.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
119°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
119.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
120°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
120.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
121°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
121.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
122°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2
122.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2
123°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
123.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
124°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
124.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
126°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
126.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
127°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
127.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
128°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
128.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
129°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
129.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
130°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
130.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
131°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
131.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
132°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
132.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
133°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
133.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
134°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
134.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
136°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
136.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
137°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3
137.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3
138°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3
138.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3
139°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3
139.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
140°	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
140.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
141°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
141.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
142°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
142.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
143°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
143.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
144°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
144.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
146°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
146.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
147°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
147.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
148°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
148.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
149°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
149.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
150.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
151°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
151.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
152°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
152.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
153°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
153.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
154°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
154.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
155.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
156°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
156.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
157°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
158°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
158.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
159°	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
159.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
161°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
161.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
162°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
162.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
163°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
163.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
164°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
164.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
166°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
166.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
167°	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
167.5°	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
168°	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
168.5°	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
169°	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
169.5°	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
170°	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
170.5°	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
171°	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
171.5°	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
172°	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
172.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
173°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
173.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
174°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
174.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
176°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
176.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
177°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
177.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
178°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
178.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
179°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
179.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P640182
CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	572.2	572.2	572.2	572.2	572.2	572.2
0.5°	572.0	572.0	572.1	572.2	572.3	572.3
1°	571.6	571.8	571.9	572.0	572.3	572.3
1.5°	571.3	571.5	571.7	571.8	572.2	572.4
2°	570.9	571.1	571.3	571.5	572.1	572.2
2.5°	570.4	570.7	570.9	571.1	571.9	572.1
3°	569.9	570.2	570.4	570.9	571.6	571.9
3.5°	569.2	569.7	569.9	570.3	571.2	571.6
4°	568.6	569.1	569.4	569.9	570.9	571.3
4.5°	567.8	568.3	568.7	569.3	570.5	571.0
5°	567.1	567.7	568.1	568.7	570.0	570.6
5.5°	566.2	566.8	567.3	568.0	569.5	570.1
6°	565.3	566.0	566.6	567.2	568.7	569.6
6.5°	564.4	565.2	565.7	566.3	568.0	568.9
7°	563.5	564.2	564.8	565.6	567.3	568.3
7.5°	562.4	563.2	563.8	564.6	566.5	567.5
8°	561.3	562.0	562.7	563.6	565.6	566.7
8.5°	560.0	560.9	561.6	562.6	564.8	565.8
9°	558.8	559.8	560.4	561.5	563.6	564.9
9.5°	557.4	558.5	559.2	560.3	562.7	563.9
10°	556.1	557.0	558.0	559.1	561.6	562.9
10.5°	554.8	555.7	556.6	557.8	560.4	561.8
11°	553.3	554.3	555.2	556.4	559.3	560.7
11.5°	551.8	552.8	553.7	555.0	558.0	559.4
12°	550.1	551.3	552.2	553.5	556.6	558.2
12.5°	548.5	549.7	550.7	552.1	555.2	556.8
13°	546.9	548.0	549.0	550.4	553.7	555.4
13.5°	545.1	546.2	547.3	548.8	552.3	554.1
14°	543.2	544.4	545.6	547.0	550.6	552.5
14.5°	541.3	542.7	543.8	545.3	549.0	550.9
15°	539.5	540.8	541.9	543.6	547.4	549.2
15.5°	537.4	538.8	540.0	541.6	545.6	547.5
16°	535.4	536.8	538.0	539.7	543.9	545.8
16.5°	533.3	534.7	536.0	537.8	542.0	544.0
17°	531.0	532.7	534.0	535.7	540.0	542.3
17.5°	528.9	530.4	531.8	533.6	538.1	540.4
18°	526.6	528.2	529.7	531.4	536.0	538.3
18.5°	524.3	525.9	527.4	529.3	534.0	536.2
19°	522.1	523.5	525.1	527.1	531.8	534.2
19.5°	519.7	521.3	522.7	524.8	529.6	532.1
20°	517.2	518.9	520.4	522.5	527.3	529.8
20.5°	514.6	516.4	517.8	520.0	525.1	527.6
21°	512.1	513.8	515.4	517.5	522.8	525.3
21.5°	509.3	511.1	512.7	515.0	520.1	522.9
22°	506.7	508.4	510.0	512.4	517.7	520.5

TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	504.0	505.7	507.4	509.7	515.2	518.0
23°	501.2	503.1	504.7	507.0	512.6	515.3
23.5°	498.3	500.3	501.9	504.3	510.0	512.8
24°	495.4	497.4	498.9	501.5	507.3	510.2
24.5°	492.5	494.5	496.1	498.5	504.5	507.6
25°	489.5	491.4	493.1	495.8	501.7	504.8
25.5°	486.4	488.3	490.1	492.8	498.9	501.9
26°	483.4	485.3	487.2	489.8	496.0	499.1
26.5°	480.2	482.1	484.0	486.7	493.1	496.2
27°	477.0	479.1	480.8	483.6	490.0	493.3
27.5°	473.7	475.8	477.6	480.3	486.9	490.3
28°	470.4	472.6	474.2	477.1	483.7	487.2
28.5°	467.1	469.1	470.9	473.8	480.4	484.0
29°	463.7	465.7	467.6	470.5	477.4	480.8
29.5°	460.2	462.3	464.1	467.0	473.9	477.6
30°	456.6	458.8	460.6	463.6	470.6	474.2
30.5°	453.0	455.1	457.0	460.0	467.2	471.0
31°	449.4	451.5	453.4	456.3	463.7	467.5
31.5°	445.7	447.8	449.6	452.7	460.2	464.0
32°	441.9	444.1	445.9	449.1	456.5	460.3
32.5°	438.0	440.2	442.2	445.3	452.9	456.7
33°	434.2	436.4	438.3	441.4	449.2	453.1
33.5°	430.1	432.5	434.3	437.5	445.4	449.5
34°	426.2	428.5	430.3	433.6	441.6	445.6
34.5°	422.1	424.4	426.2	429.6	437.6	441.8
35°	417.8	420.2	422.1	425.4	433.7	437.9
35.5°	413.6	416.1	417.8	421.1	429.7	433.9
36°	409.2	411.6	413.4	416.7	425.4	429.8
36.5°	404.6	407.0	408.8	412.4	421.4	425.8
37°	400.0	402.4	404.2	408.0	416.8	421.5
37.5°	395.5	397.7	399.6	403.1	412.4	417.1
38°	390.6	392.9	394.7	398.3	407.7	412.7
38.5°	385.7	388.0	389.8	393.4	403.1	408.0
39°	380.7	383.0	384.7	388.3	398.3	403.3
39.5°	375.7	377.9	379.5	383.2	393.4	398.7
40°	370.4	372.6	374.1	377.8	388.3	393.7
40.5°	365.3	367.5	368.9	372.6	383.2	388.8
41°	360.0	362.0	363.5	367.1	377.8	383.5
41.5°	354.7	356.6	357.9	361.8	372.6	378.5
42°	349.3	351.2	352.4	356.3	367.2	373.3
42.5°	343.9	345.7	346.9	350.7	361.9	368.1
43°	338.3	340.1	341.3	345.2	356.3	362.6
43.5°	332.9	334.5	335.7	339.6	350.8	357.2
44°	327.2	328.8	330.1	334.0	345.3	351.7
44.5°	321.6	323.2	324.4	328.2	339.7	346.2



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	316.0	317.5	318.6	322.5	334.1	340.6
45.5°	310.2	311.8	312.9	316.9	328.4	334.9
46°	304.5	306.0	307.2	311.1	322.7	329.3
46.5°	298.7	300.3	301.4	305.3	316.9	323.6
47°	292.7	294.4	295.5	299.4	311.1	317.8
47.5°	287.0	288.6	289.7	293.6	305.4	312.0
48°	281.2	282.7	284.0	287.8	299.6	306.2
48.5°	275.3	276.8	278.1	282.0	293.7	300.3
49°	269.3	271.0	272.2	276.2	287.8	294.5
49.5°	263.3	265.0	266.3	270.4	282.0	288.6
50°	257.3	259.0	260.4	264.3	276.1	282.6
50.5°	251.3	253.2	254.6	258.5	270.2	276.7
51°	245.3	247.3	248.6	252.6	264.3	270.7
51.5°	239.4	241.4	242.9	246.8	258.2	264.8
52°	233.3	235.3	236.9	240.9	252.4	258.8
52.5°	227.2	229.3	231.1	234.9	246.4	252.7
53°	221.2	223.6	225.1	229.1	240.5	246.7
53.5°	215.2	217.5	219.3	223.2	234.5	240.6
54°	209.0	211.5	213.3	217.3	228.6	234.7
54.5°	203.1	205.5	207.5	211.5	222.5	228.5
55°	197.1	199.8	201.7	205.6	216.7	222.5
55.5°	191.0	193.9	195.8	199.7	210.7	216.5
56°	184.9	188.0	189.9	193.9	204.8	210.4
56.5°	179.0	182.0	184.2	188.1	198.9	204.4
57°	172.9	176.2	178.2	182.1	193.0	198.3
57.5°	167.0	170.4	172.6	176.4	187.0	192.1
58°	161.2	164.7	166.9	170.7	181.1	186.2
58.5°	155.1	158.7	161.2	165.0	175.2	180.2
59°	149.2	152.9	155.3	159.1	169.4	174.1
59.5°	143.3	147.1	149.6	153.6	163.5	168.0
60°	137.4	141.5	144.0	147.7	157.7	162.1
60.5°	131.6	135.5	138.3	142.1	151.9	156.2
61°	125.9	130.0	132.7	136.4	146.2	150.2
61.5°	120.1	124.4	127.1	131.0	140.4	144.4
62°	114.4	118.8	121.6	125.3	134.7	138.6
62.5°	108.6	113.2	116.0	119.8	129.1	132.6
63°	103.2	107.7	110.6	114.4	123.5	126.8
63.5°	97.6	102.1	105.3	109.0	118.0	121.1
64°	92.3	96.8	99.8	103.5	112.4	115.4
64.5°	87.2	91.6	94.6	98.2	106.8	109.6
65°	82.0	86.4	89.4	93.0	101.5	104.1
65.5°	76.9	81.1	84.4	87.8	96.2	98.6
66°	71.7	76.0	79.2	82.6	90.8	93.1
66.5°	66.6	71.0	74.2	77.7	85.6	87.7
67°	61.9	66.3	69.4	72.6	80.5	82.4



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	57.2	61.6	64.6	67.8	75.4	77.2
68°	52.8	56.9	60.0	63.1	70.4	72.2
68.5°	48.6	52.5	55.5	58.4	65.6	67.3
69°	44.5	48.2	51.0	53.9	60.8	62.5
69.5°	40.7	44.2	46.8	49.5	56.2	57.7
70°	37.2	40.3	42.8	45.4	51.7	53.2
70.5°	34.0	36.7	38.9	41.4	47.5	48.9
71°	31.0	33.2	35.4	37.7	43.4	44.8
71.5°	28.4	30.7	32.8	34.3	39.4	40.8
72°	26.0	28.3	30.2	31.8	35.9	37.2
72.5°	24.0	25.8	27.6	29.3	33.2	33.7
73°	22.3	23.4	25.0	26.8	30.6	31.3
73.5°	21.0	21.8	22.5	24.3	27.9	28.9
74°	19.9	20.5	21.1	21.8	25.3	26.5
74.5°	19.0	19.6	20.0	20.5	22.6	24.1
75°	18.2	18.7	19.1	19.5	21.1	21.7
75.5°	17.3	17.8	18.2	18.7	20.0	20.4
76°	16.5	17.0	17.3	17.8	19.1	19.4
76.5°	15.7	16.1	16.5	16.9	18.2	18.6
77°	14.8	15.3	15.6	16.1	17.3	17.7
77.5°	14.0	14.5	14.8	15.2	16.5	16.9
78°	13.3	13.7	14.0	14.4	15.7	16.1
78.5°	12.5	12.9	13.2	13.6	14.8	15.3
79°	11.7	12.1	12.4	12.8	14.0	14.5
79.5°	10.9	11.3	11.6	12.0	13.2	13.7
80°	10.2	10.6	10.8	11.2	12.4	12.9
80.5°	9.5	9.9	10.1	10.5	11.7	12.1
81°	8.8	9.1	9.4	9.8	10.9	11.4
81.5°	8.1	8.4	8.6	9.0	10.2	10.6
82°	7.4	7.7	7.9	8.3	9.4	9.9
82.5°	6.7	7.0	7.2	7.6	8.7	9.2
83°	6.0	6.3	6.5	6.9	8.0	8.5
83.5°	5.3	5.7	5.9	6.2	7.3	7.8
84°	4.7	5.0	5.2	5.6	6.6	7.1
84.5°	4.0	4.3	4.5	4.9	6.0	6.4
85°	3.3	3.7	3.9	4.3	5.3	5.7
85.5°	2.8	3.1	3.3	3.6	4.7	5.1
86°	2.1	2.5	2.7	3.0	4.0	4.5
86.5°	1.6	1.9	2.1	2.4	3.4	3.8
87°	1.0	1.3	1.5	1.8	2.8	3.2
87.5°	0.4	0.7	0.9	1.2	2.2	2.6
88°	0.1	0.3	0.4	0.7	1.6	2.0
88.5°	0.1	0.1	0.1	0.2	1.0	1.4
89°	0.1	0.1	0.1	0.1	0.4	0.8
89.5°	0.1	0.1	0.1	0.1	0.1	0.3



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.1	0.1	0.1	0.1	0.1	0.1
90.5°	0.1	0.1	0.1	0.1	0.1	0.0
91°	0.1	0.1	0.1	0.1	0.1	0.0
91.5°	0.1	0.1	0.1	0.1	0.1	0.0
92°	0.1	0.1	0.1	0.1	0.1	0.0
92.5°	0.1	0.1	0.1	0.1	0.1	0.0
93°	0.1	0.1	0.1	0.1	0.1	0.1
93.5°	0.1	0.1	0.1	0.1	0.1	0.1
94°	0.1	0.1	0.1	0.1	0.1	0.1
94.5°	0.1	0.1	0.1	0.1	0.1	0.1
95°	0.1	0.1	0.1	0.1	0.1	0.1
95.5°	0.1	0.1	0.1	0.1	0.1	0.1
96°	0.1	0.1	0.1	0.1	0.1	0.1
96.5°	0.1	0.1	0.1	0.1	0.1	0.1
97°	0.1	0.1	0.1	0.1	0.1	0.1
97.5°	0.1	0.1	0.1	0.1	0.1	0.1
98°	0.1	0.1	0.1	0.1	0.1	0.1
98.5°	0.1	0.1	0.1	0.1	0.1	0.1
99°	0.1	0.1	0.1	0.1	0.1	0.1
99.5°	0.1	0.1	0.1	0.1	0.1	0.1
100°	0.1	0.1	0.1	0.1	0.1	0.1
100.5°	0.1	0.1	0.1	0.1	0.1	0.1
101°	0.1	0.1	0.1	0.1	0.1	0.1
101.5°	0.1	0.1	0.1	0.1	0.1	0.1
102°	0.1	0.1	0.1	0.1	0.1	0.1
102.5°	0.1	0.1	0.1	0.1	0.1	0.1
103°	0.1	0.1	0.1	0.1	0.1	0.1
103.5°	0.1	0.1	0.1	0.1	0.1	0.1
104°	0.1	0.1	0.1	0.1	0.1	0.1
104.5°	0.1	0.1	0.1	0.1	0.1	0.1
105°	0.1	0.1	0.1	0.1	0.1	0.1
105.5°	0.1	0.1	0.1	0.1	0.1	0.1
106°	0.1	0.1	0.1	0.1	0.1	0.1
106.5°	0.1	0.1	0.1	0.1	0.1	0.1
107°	0.1	0.1	0.1	0.1	0.1	0.1
107.5°	0.1	0.1	0.1	0.1	0.1	0.1
108°	0.1	0.1	0.1	0.1	0.1	0.1
108.5°	0.1	0.1	0.1	0.1	0.1	0.1
109°	0.1	0.1	0.1	0.1	0.1	0.1
109.5°	0.1	0.1	0.1	0.1	0.1	0.1
110°	0.1	0.1	0.1	0.1	0.1	0.1
110.5°	0.1	0.1	0.1	0.1	0.1	0.1
111°	0.1	0.1	0.1	0.1	0.1	0.1
111.5°	0.1	0.1	0.1	0.1	0.1	0.1
112°	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.1	0.1	0.1	0.1	0.1	0.1
113°	0.1	0.1	0.1	0.1	0.1	0.1
113.5°	0.1	0.2	0.2	0.1	0.1	0.1
114°	0.1	0.2	0.2	0.1	0.1	0.1
114.5°	0.1	0.2	0.2	0.2	0.1	0.1
115°	0.1	0.2	0.2	0.2	0.1	0.1
115.5°	0.1	0.2	0.2	0.2	0.1	0.1
116°	0.1	0.2	0.2	0.2	0.1	0.1
116.5°	0.1	0.2	0.2	0.2	0.1	0.1
117°	0.1	0.2	0.2	0.2	0.1	0.1
117.5°	0.1	0.2	0.2	0.2	0.2	0.2
118°	0.1	0.2	0.2	0.2	0.2	0.2
118.5°	0.1	0.2	0.2	0.2	0.2	0.2
119°	0.1	0.2	0.2	0.2	0.2	0.2
119.5°	0.1	0.2	0.2	0.2	0.2	0.2
120°	0.1	0.2	0.2	0.2	0.2	0.2
120.5°	0.1	0.2	0.2	0.2	0.2	0.2
121°	0.2	0.2	0.2	0.2	0.2	0.2
121.5°	0.2	0.2	0.2	0.2	0.2	0.2
122°	0.2	0.2	0.2	0.2	0.2	0.2
122.5°	0.2	0.2	0.2	0.2	0.2	0.2
123°	0.2	0.2	0.2	0.2	0.2	0.2
123.5°	0.2	0.2	0.2	0.2	0.2	0.2
124°	0.2	0.2	0.2	0.2	0.2	0.2
124.5°	0.2	0.2	0.2	0.2	0.2	0.2
125°	0.2	0.2	0.2	0.2	0.2	0.2
125.5°	0.2	0.2	0.2	0.2	0.2	0.2
126°	0.2	0.2	0.2	0.2	0.2	0.2
126.5°	0.2	0.2	0.2	0.2	0.2	0.2
127°	0.2	0.2	0.2	0.2	0.2	0.2
127.5°	0.2	0.2	0.2	0.2	0.2	0.2
128°	0.2	0.2	0.2	0.2	0.2	0.2
128.5°	0.2	0.2	0.2	0.2	0.2	0.2
129°	0.2	0.2	0.2	0.2	0.2	0.2
129.5°	0.2	0.2	0.2	0.2	0.2	0.2
130°	0.2	0.2	0.2	0.2	0.2	0.2
130.5°	0.2	0.2	0.2	0.2	0.2	0.2
131°	0.2	0.3	0.2	0.2	0.2	0.2
131.5°	0.2	0.3	0.2	0.2	0.2	0.2
132°	0.2	0.3	0.2	0.3	0.2	0.2
132.5°	0.2	0.3	0.3	0.3	0.2	0.2
133°	0.2	0.3	0.3	0.3	0.2	0.2
133.5°	0.2	0.3	0.3	0.3	0.2	0.2
134°	0.2	0.3	0.3	0.3	0.2	0.3
134.5°	0.2	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.2	0.3	0.3	0.3	0.3	0.3
135.5°	0.2	0.3	0.3	0.3	0.3	0.3
136°	0.2	0.3	0.3	0.3	0.3	0.3
136.5°	0.3	0.3	0.3	0.3	0.3	0.3
137°	0.3	0.3	0.3	0.3	0.3	0.3
137.5°	0.3	0.3	0.3	0.3	0.3	0.3
138°	0.3	0.3	0.3	0.3	0.3	0.3
138.5°	0.3	0.3	0.3	0.3	0.3	0.3
139°	0.3	0.3	0.3	0.3	0.3	0.3
139.5°	0.3	0.3	0.3	0.3	0.3	0.3
140°	0.3	0.3	0.3	0.3	0.3	0.3
140.5°	0.3	0.3	0.3	0.3	0.3	0.3
141°	0.3	0.3	0.3	0.3	0.3	0.3
141.5°	0.3	0.3	0.3	0.3	0.3	0.3
142°	0.3	0.3	0.3	0.3	0.3	0.3
142.5°	0.3	0.3	0.3	0.3	0.3	0.3
143°	0.3	0.3	0.3	0.3	0.3	0.3
143.5°	0.3	0.3	0.3	0.3	0.3	0.3
144°	0.3	0.3	0.3	0.3	0.3	0.3
144.5°	0.3	0.3	0.3	0.3	0.3	0.3
145°	0.3	0.3	0.3	0.3	0.3	0.3
145.5°	0.3	0.3	0.3	0.3	0.3	0.3
146°	0.3	0.3	0.3	0.3	0.3	0.3
146.5°	0.3	0.3	0.3	0.3	0.3	0.3
147°	0.3	0.3	0.3	0.3	0.3	0.3
147.5°	0.3	0.3	0.3	0.3	0.3	0.3
148°	0.3	0.3	0.3	0.3	0.3	0.3
148.5°	0.3	0.3	0.3	0.3	0.3	0.3
149°	0.3	0.3	0.3	0.3	0.3	0.3
149.5°	0.3	0.3	0.3	0.3	0.3	0.3
150°	0.3	0.3	0.3	0.3	0.3	0.3
150.5°	0.3	0.3	0.3	0.3	0.3	0.3
151°	0.3	0.3	0.3	0.3	0.3	0.3
151.5°	0.3	0.3	0.3	0.3	0.3	0.3
152°	0.3	0.3	0.3	0.3	0.3	0.3
152.5°	0.3	0.3	0.3	0.3	0.3	0.3
153°	0.3	0.3	0.3	0.3	0.3	0.3
153.5°	0.3	0.3	0.3	0.3	0.3	0.3
154°	0.3	0.3	0.3	0.3	0.3	0.3
154.5°	0.4	0.3	0.3	0.3	0.3	0.3
155°	0.4	0.3	0.3	0.3	0.3	0.3
155.5°	0.4	0.3	0.3	0.3	0.3	0.3
156°	0.4	0.3	0.3	0.3	0.3	0.3
156.5°	0.4	0.3	0.3	0.3	0.3	0.3
157°	0.4	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P640182

CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.4	0.3	0.3	0.3	0.3	0.3
158°	0.4	0.3	0.3	0.3	0.3	0.3
158.5°	0.4	0.3	0.3	0.3	0.3	0.3
159°	0.4	0.3	0.3	0.3	0.3	0.3
159.5°	0.4	0.3	0.3	0.3	0.3	0.3
160°	0.4	0.3	0.3	0.3	0.3	0.3
160.5°	0.4	0.3	0.3	0.3	0.3	0.3
161°	0.4	0.3	0.3	0.3	0.3	0.3
161.5°	0.4	0.3	0.3	0.3	0.3	0.3
162°	0.4	0.3	0.3	0.3	0.3	0.3
162.5°	0.4	0.3	0.3	0.3	0.3	0.3
163°	0.4	0.3	0.3	0.4	0.3	0.3
163.5°	0.4	0.3	0.3	0.4	0.3	0.3
164°	0.4	0.3	0.3	0.4	0.3	0.3
164.5°	0.4	0.3	0.3	0.4	0.3	0.3
165°	0.4	0.3	0.4	0.4	0.3	0.3
165.5°	0.4	0.3	0.4	0.4	0.3	0.3
166°	0.4	0.3	0.4	0.4	0.4	0.3
166.5°	0.4	0.3	0.4	0.4	0.4	0.3
167°	0.4	0.4	0.4	0.4	0.4	0.4
167.5°	0.4	0.4	0.4	0.4	0.4	0.4
168°	0.4	0.4	0.4	0.4	0.4	0.4
168.5°	0.4	0.4	0.4	0.4	0.4	0.4
169°	0.4	0.4	0.4	0.4	0.4	0.4
169.5°	0.4	0.4	0.4	0.4	0.4	0.4
170°	0.4	0.4	0.4	0.4	0.4	0.4
170.5°	0.4	0.4	0.4	0.4	0.4	0.4
171°	0.4	0.4	0.4	0.4	0.4	0.4
171.5°	0.4	0.4	0.4	0.4	0.4	0.4
172°	0.4	0.4	0.4	0.4	0.4	0.4
172.5°	0.4	0.4	0.4	0.4	0.4	0.4
173°	0.4	0.4	0.4	0.4	0.4	0.4
173.5°	0.4	0.4	0.4	0.4	0.4	0.4
174°	0.4	0.4	0.4	0.4	0.4	0.4
174.5°	0.4	0.4	0.4	0.4	0.4	0.4
175°	0.4	0.4	0.4	0.4	0.4	0.4
175.5°	0.4	0.4	0.4	0.4	0.4	0.4
176°	0.4	0.4	0.4	0.4	0.4	0.4
176.5°	0.4	0.4	0.4	0.4	0.4	0.4
177°	0.4	0.4	0.4	0.4	0.4	0.4
177.5°	0.4	0.4	0.4	0.4	0.4	0.4
178°	0.4	0.4	0.4	0.4	0.4	0.4
178.5°	0.4	0.4	0.4	0.4	0.4	0.4
179°	0.4	0.4	0.4	0.4	0.4	0.4
179.5°	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P640182
CATALOG NUMBER: LCR412RD9FSE020-14W-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
180°	0.4	0.4	0.4	0.4	0.4	0.4

(END OF REPORT)