

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P417431

Luminaire Tested: **SMD6R129SWHE - 5000K**

Issue Date: 11/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P417431  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2008665A001)  
Test Lab: EVERFINE  
Issue Date: 11/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: SMD6R129SWHE - 5000K  
Description: SMD SELECTABLE CCT 5000K  
Light Source: SELECTABLE CCT LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1370.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

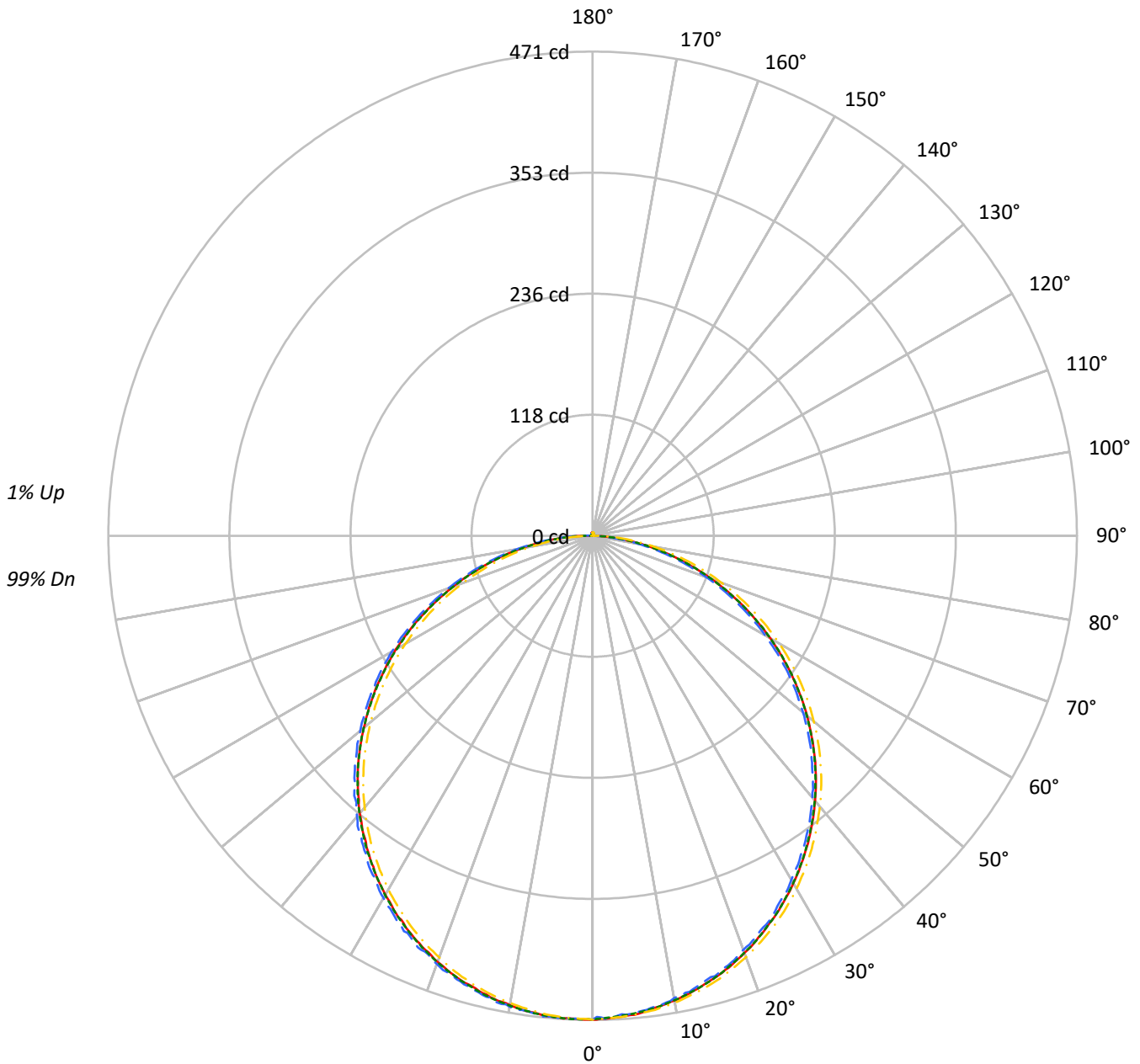
Input Watts (W): 14.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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CATALOG NUMBER: SMD6R129SWHE - 5000K

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99				99
1	108	103	99	95	106	101	97	93	97	93	90	93	90	87	89	87	85	83				83
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	78	74	71	68				68
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57				57
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	56	51	49				49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42				42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	35	31	29				29
9	56	42	34	29	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24				24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	25815	25815	25815	25815
5°	25737	25671	25831	25820
10°	25556	25539	25801	25829
15°	25380	25409	25755	25800
20°	25191	25179	25739	25745
25°	24969	24963	25641	25653
30°	24706	24694	25529	25542
35°	24434	24393	25371	25404
40°	24088	24059	25219	25240
45°	23700	23654	25049	25034
50°	23215	23189	24792	24767
55°	22604	22632	24525	24458
60°	21873	21906	24220	24077
65°	20936	20949	23712	23621
70°	19699	19731	23113	23065
75°	18173	18194	22515	22409
80°	15880	15974	22004	21846
85°	11888	12391	22895	22203



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.5	3.2
10°-20°	127.2	9.3
20°-30°	192.8	14.1
30°-40°	232.8	17.0
40°-50°	242.2	17.7
50°-60°	220.2	16.1
60°-70°	170.0	12.4
70°-80°	101.4	7.4
80°-90°	31.3	2.3
90°-100°	0.8	0.1
100°-110°	0.7	0.0
110°-120°	1.0	0.1
120°-130°	1.0	0.1
130°-140°	1.0	0.1
140°-150°	1.1	0.1
150°-160°	1.0	0.1
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	364.5	26.6
0°-40°	597.3	43.6
0°-60°	1059.6	77.3
0°-90°	1362.4	99.5
90°-120°	2.5	0.2
90°-150°	5.6	0.4
90°-180°	8.0	0.6
0°-180°	1370.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	471	471	471	471	471	
5°	468	466	469	469	468	44
15°	447	448	454	455	447	126
25°	413	413	424	424	413	190
35°	365	364	379	380	365	228
45°	306	305	323	323	306	236
55°	236	237	257	256	236	211
65°	161	162	183	182	161	160
75°	86	86	106	106	86	91
85°	19	20	36	35	19	22
90°	1	0	8	6	1	1
95°	1	0	0	0	1	0
105°	1	1	1	0	1	1
115°	1	1	1	1	1	1
125°	1	1	1	1	1	1
135°	1	1	2	1	1	1
145°	2	2	2	2	2	1
155°	2	2	2	2	2	1
165°	2	2	3	2	2	1
175°	2	3	3	2	2	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	470.9	470.9	470.9	470.9	470.9	470.9	470.9	470.9	470.9	470.9	470.9
0.5°	470.8	470.2	468.2	470.6	469.9	469.8	470.2	470.6	470.7	470.0	470.8
1°	469.7	469.9	468.7	469.9	469.7	469.9	470.1	470.3	470.7	470.0	470.1
1.5°	470.0	469.4	470.2	469.6	469.2	469.3	470.1	470.4	470.3	470.6	470.7
2°	469.8	468.8	468.5	470.9	469.0	469.2	469.8	470.1	470.3	470.8	469.9
2.5°	469.4	468.9	469.1	469.6	468.6	469.0	469.4	470.0	470.2	470.3	470.3
3°	469.0	468.1	467.5	469.3	468.3	468.5	469.1	469.7	469.9	470.1	469.8
3.5°	468.6	467.4	466.3	468.5	467.7	468.1	468.9	469.6	470.5	469.6	469.8
4°	468.3	466.8	467.2	468.3	467.5	467.8	468.5	469.2	469.6	470.1	470.3
4.5°	467.8	466.1	466.6	466.2	466.8	467.3	468.1	469.0	470.0	469.4	469.7
5°	467.7	466.3	466.6	466.9	466.5	467.2	467.7	468.5	469.4	469.3	469.6
5.5°	467.0	465.7	465.2	465.6	465.7	466.4	467.2	468.2	469.6	468.9	469.5
6°	466.2	464.7	464.6	464.8	465.4	465.6	466.5	467.8	468.8	468.7	470.3
6.5°	465.5	464.4	464.2	463.2	464.6	465.1	466.2	467.4	467.9	468.7	468.6
7°	463.9	463.8	462.9	462.4	463.9	464.4	465.6	466.7	467.5	468.2	468.2
7.5°	463.2	462.9	462.1	462.2	463.2	463.9	465.2	466.2	467.1	467.8	467.3
8°	462.5	461.7	461.3	462.6	462.5	463.0	464.3	465.4	466.8	467.3	466.5
8.5°	461.7	461.0	460.7	461.0	461.6	462.4	463.8	464.7	466.0	466.5	466.5
9°	460.8	460.2	459.5	460.9	460.6	461.2	462.7	464.1	465.4	465.2	467.0
9.5°	459.6	459.2	458.9	458.6	459.7	460.5	462.1	463.3	464.6	464.4	466.4
10°	459.1	458.0	456.8	457.3	458.8	459.4	461.1	462.6	463.5	464.2	465.1
10.5°	458.2	457.2	455.8	457.2	457.9	458.5	460.4	461.6	462.5	463.3	463.5
11°	456.8	456.1	455.4	456.5	456.8	457.5	459.1	460.9	462.0	462.7	464.1
11.5°	455.9	454.7	453.5	455.6	455.8	456.6	458.2	459.9	461.5	462.1	463.4
12°	455.0	453.8	453.5	454.3	454.5	455.5	457.1	459.0	460.6	461.8	462.8
12.5°	453.3	452.9	451.7	453.0	453.5	454.6	456.3	457.9	459.9	461.1	460.2
13°	452.4	451.8	450.4	450.4	452.3	453.6	455.1	456.9	458.1	459.2	460.3
13.5°	451.3	450.3	448.8	449.2	451.2	452.3	454.1	455.6	457.6	458.5	459.4
14°	449.6	449.1	447.4	448.7	449.9	451.2	452.9	454.7	456.6	458.1	457.8
14.5°	448.6	448.0	445.9	447.1	448.7	449.8	451.7	453.7	454.9	456.0	456.9
15°	447.2	446.4	444.5	445.6	447.7	448.6	450.6	452.6	453.8	455.3	456.1
15.5°	446.1	445.1	444.7	444.1	445.8	447.3	449.3	451.3	452.8	454.9	454.5
16°	444.8	443.2	443.0	443.3	444.6	446.0	448.1	450.2	452.4	453.8	453.9
16.5°	443.5	441.5	440.8	441.9	443.0	444.5	446.8	448.8	450.9	451.7	452.1
17°	441.5	440.3	439.2	440.5	441.4	443.1	445.2	447.6	449.7	450.0	451.5
17.5°	440.6	439.0	438.3	438.7	439.7	441.5	443.8	446.1	448.1	449.1	449.6
18°	438.7	437.6	436.6	437.3	438.3	440.3	442.3	444.9	447.1	448.0	449.0
18.5°	436.9	435.2	435.1	435.3	436.6	438.5	440.8	443.2	445.4	446.4	447.5
19°	435.2	433.5	432.8	432.2	435.0	436.8	439.2	441.8	443.8	445.2	446.8
19.5°	433.6	431.8	429.9	431.1	433.4	435.1	437.7	440.2	442.3	444.3	445.0
20°	431.8	430.4	428.7	430.2	431.6	433.6	436.2	438.7	441.2	442.9	443.3
20.5°	430.3	428.8	427.1	428.0	429.8	432.0	434.5	437.1	439.7	441.0	441.9
21°	428.6	427.2	425.9	426.0	428.3	430.4	432.8	435.6	437.4	439.0	439.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	422.5	421.1	419.7	419.8	422.6	424.7	427.6	430.4	433.0	435.1	435.9
23°	420.9	419.8	417.4	418.2	420.6	423.0	425.7	428.7	430.8	433.1	435.1
23.5°	418.7	417.7	415.6	416.3	418.6	420.9	423.8	426.9	429.5	431.5	432.6
24°	416.6	415.1	414.4	413.9	416.7	419.1	422.0	425.0	427.7	429.9	430.5
24.5°	414.6	412.7	412.6	411.9	414.6	417.0	420.1	423.1	425.7	428.5	428.2
25°	412.8	410.6	410.6	409.6	412.7	415.1	418.1	421.2	423.9	426.2	426.4
25.5°	410.8	408.3	408.4	407.9	410.6	412.9	416.3	419.4	422.1	424.7	426.2
26°	408.5	406.3	405.7	405.5	408.5	411.0	414.2	417.4	419.3	422.7	423.4
26.5°	406.6	404.1	402.8	403.9	406.1	408.7	412.0	415.0	417.3	419.7	421.8
27°	404.0	402.1	400.2	401.6	404.2	406.8	410.0	413.3	416.4	417.9	419.9
27.5°	402.0	399.7	398.3	399.1	401.7	404.4	407.7	411.1	414.2	416.1	417.1
28°	399.6	397.4	396.4	396.9	399.5	402.3	405.5	409.1	412.0	414.6	415.1
28.5°	397.6	395.1	394.6	393.9	397.1	399.8	403.3	406.9	409.6	412.3	412.9
29°	395.2	392.8	392.3	391.8	394.9	397.7	401.2	404.5	407.0	410.2	411.3
29.5°	392.8	390.4	389.4	389.3	392.5	395.2	398.8	402.2	405.4	407.9	409.0
30°	390.3	388.0	386.5	387.3	390.1	392.8	396.5	400.0	403.3	405.8	406.8
30.5°	388.0	385.6	384.0	385.0	387.7	390.3	394.1	397.7	401.0	403.1	405.0
31°	385.5	383.1	381.7	382.5	385.3	387.8	391.6	395.5	398.7	401.0	402.6
31.5°	383.3	380.7	379.2	379.9	382.7	385.3	389.2	393.0	396.6	398.3	399.7
32°	380.4	378.1	377.2	377.5	380.3	382.9	386.9	390.8	394.3	396.5	397.2
32.5°	378.0	375.7	374.6	375.2	377.8	380.4	384.3	388.2	391.8	393.6	394.4
33°	375.6	373.1	371.4	372.8	375.2	377.9	381.9	385.8	389.3	391.8	393.0
33.5°	372.9	370.6	368.8	369.6	372.5	375.4	379.3	383.2	386.2	388.9	390.8
34°	370.2	367.9	366.5	366.9	369.9	372.9	376.8	380.8	384.5	387.1	388.6
34.5°	367.7	365.2	364.1	364.1	367.1	370.2	374.1	378.1	381.8	384.3	385.9
35°	365.1	362.5	361.4	361.6	364.5	367.5	371.5	375.8	379.1	381.4	382.8
35.5°	362.4	359.9	358.3	358.7	361.7	364.9	368.7	373.3	376.5	379.1	379.8
36°	359.7	356.9	355.4	356.0	359.1	362.2	366.1	370.6	374.1	376.8	378.0
36.5°	356.8	354.2	353.1	353.2	356.1	359.4	363.5	368.0	370.8	374.6	375.0
37°	354.0	351.1	350.3	350.2	353.4	356.6	360.7	365.1	368.1	372.1	372.7
37.5°	351.2	348.2	347.4	347.2	350.5	353.8	357.9	362.6	366.2	368.9	369.6
38°	348.3	345.6	344.2	344.6	347.8	351.0	354.9	359.6	363.6	366.5	367.5
38.5°	345.4	343.0	341.4	341.8	344.8	348.1	352.3	356.8	360.3	362.7	365.5
39°	342.5	339.8	338.4	339.1	342.1	345.3	349.4	354.4	357.4	360.5	363.2
39.5°	339.5	336.7	336.6	336.1	339.1	342.3	346.6	351.2	354.8	357.6	359.6
40°	336.6	333.9	332.7	333.1	336.2	339.6	343.8	348.3	352.4	354.6	356.4
40.5°	333.5	330.9	329.0	330.4	333.2	336.4	341.0	345.5	349.6	352.2	353.7
41°	330.6	328.0	326.9	327.5	330.2	333.7	338.1	342.6	346.7	349.5	350.7
41.5°	327.6	324.9	323.2	324.1	327.0	330.6	335.1	339.4	343.2	346.6	346.7
42°	324.5	321.6	320.1	320.7	323.9	327.6	332.0	336.7	340.3	343.8	344.8
42.5°	321.5	318.6	316.8	317.6	320.9	324.5	329.1	333.7	337.8	340.5	343.2
43°	318.4	315.4	313.5	314.6	317.8	321.4	326.1	331.2	334.8	337.9	339.8
43.5°	315.1	312.0	310.3	311.2	314.7	318.3	323.0	327.8	331.5	334.9	336.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	305.7	302.1	300.9	301.3	305.1	308.9	313.5	318.5	323.1	325.9	327.3
45.5°	302.4	298.8	297.7	298.1	302.0	305.7	310.5	315.5	320.0	322.7	324.2
46°	299.1	295.7	294.4	295.3	298.7	302.5	307.4	312.3	316.7	319.9	321.4
46.5°	295.9	292.7	291.2	291.9	295.4	299.2	304.2	309.3	313.7	316.7	317.8
47°	292.5	289.3	287.6	287.7	292.0	295.9	300.7	306.1	310.0	313.7	314.5
47.5°	288.9	286.0	284.1	284.2	288.8	292.6	297.5	302.7	307.1	310.5	311.0
48°	285.8	282.4	280.8	281.2	285.3	289.2	294.2	299.6	303.6	307.2	308.5
48.5°	282.3	279.2	277.2	277.6	281.9	286.0	290.9	296.4	300.5	303.8	305.5
49°	279.0	275.7	273.9	274.6	278.5	282.5	287.7	292.8	297.5	300.8	301.6
49.5°	275.5	272.5	270.6	271.1	275.3	279.2	284.2	289.4	293.9	297.2	298.3
50°	272.2	268.9	267.1	267.6	271.9	275.8	280.8	286.4	290.7	293.8	295.1
50.5°	268.8	265.1	263.5	264.1	268.4	272.6	277.2	282.8	286.9	290.1	291.9
51°	265.3	261.7	259.6	260.4	265.0	269.0	274.0	279.4	283.9	286.6	288.7
51.5°	261.6	258.2	256.1	256.9	261.5	265.6	270.6	275.9	280.5	283.9	284.9
52°	258.1	254.7	252.8	253.7	258.1	262.1	267.2	272.7	277.1	280.3	281.9
52.5°	254.5	251.0	249.5	250.0	254.5	258.5	263.7	269.1	273.8	277.1	278.5
53°	250.8	247.4	245.9	246.5	251.0	255.2	260.1	265.6	270.6	273.7	274.9
53.5°	247.2	243.8	242.1	242.7	247.4	251.6	256.7	262.3	266.9	270.0	271.8
54°	243.7	240.1	238.4	239.4	244.0	248.0	253.2	258.5	263.3	266.5	267.9
54.5°	240.1	236.6	235.1	236.1	240.2	244.4	249.7	255.1	260.1	263.8	264.7
55°	236.5	233.0	231.7	232.4	236.8	240.9	246.2	251.7	256.6	260.3	261.3
55.5°	232.8	229.3	228.2	228.7	233.0	237.4	242.4	248.1	252.8	256.5	257.2
56°	229.3	225.7	223.9	224.9	229.5	233.8	239.0	244.9	249.3	253.1	254.3
56.5°	225.5	222.2	220.7	221.2	225.8	230.2	235.4	240.9	245.7	249.9	250.6
57°	221.8	218.2	216.6	217.2	222.1	226.6	232.0	237.6	242.4	245.9	247.2
57.5°	218.2	214.4	212.9	213.5	218.5	222.8	228.0	234.1	238.9	242.0	243.7
58°	214.4	210.9	209.2	209.7	214.8	219.2	224.5	230.3	235.5	238.1	240.0
58.5°	210.8	207.3	205.5	205.8	210.9	215.3	220.8	226.6	231.2	235.1	236.5
59°	206.9	203.4	201.4	202.1	207.3	211.6	217.3	223.0	227.8	231.5	232.5
59.5°	203.3	199.6	197.6	198.5	203.3	207.8	213.5	219.4	224.3	227.8	229.0
60°	199.5	195.7	193.8	194.5	199.8	204.2	209.8	215.6	220.9	224.0	225.1
60.5°	195.7	192.0	190.3	190.9	195.9	200.5	205.9	211.7	216.9	220.1	221.8
61°	191.8	188.2	186.4	187.2	192.1	196.6	202.2	208.1	213.0	216.2	217.8
61.5°	188.2	184.4	182.7	183.5	188.2	192.9	198.6	204.5	209.2	212.4	214.1
62°	184.2	180.5	178.7	179.6	184.5	189.1	194.7	200.5	205.7	208.8	210.7
62.5°	180.4	176.8	175.0	175.8	180.5	185.1	190.9	196.9	201.9	205.1	206.6
63°	176.6	172.9	171.2	171.9	176.8	181.3	187.1	193.1	198.1	201.2	202.7
63.5°	172.8	169.0	167.4	167.9	172.8	177.5	183.3	189.3	194.4	197.5	199.3
64°	169.0	165.4	163.5	164.4	169.1	173.6	179.4	185.5	190.5	193.6	195.4
64.5°	165.4	161.5	159.6	160.4	165.2	169.7	175.5	181.5	186.6	190.1	191.4
65°	161.4	157.7	155.8	156.6	161.5	166.0	171.6	177.6	182.8	186.1	187.5
65.5°	157.6	153.8	151.9	152.7	157.6	162.3	167.9	173.7	178.7	182.2	183.7
66°	153.6	149.9	148.1	148.8	153.5	158.3	164.1	169.7	175.0	178.0	179.9





TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	142.2	138.5	136.6	137.3	142.0	146.8	152.4	158.3	163.3	166.9	168.1
68°	138.3	134.6	132.7	133.3	138.3	143.0	148.6	154.4	159.6	162.8	164.5
68.5°	134.6	130.9	129.0	129.7	134.5	139.0	144.9	150.4	155.7	159.3	160.4
69°	130.6	126.9	125.5	126.0	130.8	135.2	141.1	146.7	152.0	155.1	156.7
69.5°	126.8	123.3	121.5	122.2	126.9	131.5	137.2	143.0	148.0	151.6	153.1
70°	122.9	119.4	117.7	118.3	123.1	127.8	133.3	139.0	144.2	147.7	149.0
70.5°	119.3	115.5	114.0	114.4	119.4	124.0	129.5	135.4	140.2	143.8	144.9
71°	115.4	111.6	110.2	110.7	115.6	120.2	125.9	131.9	136.4	140.0	141.4
71.5°	111.9	108.1	106.3	106.9	111.9	116.4	122.0	127.7	132.7	136.1	137.5
72°	107.9	104.3	102.5	103.3	108.0	112.7	118.2	124.0	129.0	132.2	134.1
72.5°	104.2	100.6	98.7	99.5	104.3	108.8	114.4	120.3	125.1	128.8	129.9
73°	100.3	96.8	95.1	95.8	100.6	105.0	110.6	116.5	121.1	125.0	126.2
73.5°	96.8	93.3	91.5	92.1	96.9	101.4	107.0	112.7	117.3	120.9	122.4
74°	93.1	89.6	87.7	88.4	93.3	97.5	103.1	109.0	113.6	117.2	118.4
74.5°	89.5	85.8	84.0	84.8	89.6	94.0	99.6	105.3	109.9	113.4	114.6
75°	85.8	82.1	80.2	81.1	85.9	90.4	95.8	101.4	106.3	109.7	110.9
75.5°	82.1	78.4	76.6	77.4	82.1	86.8	92.2	97.7	102.4	105.8	107.3
76°	78.3	74.8	73.1	73.6	78.6	83.1	88.5	94.1	98.7	102.0	103.6
76.5°	74.7	71.1	69.4	70.1	74.9	79.4	84.8	90.3	95.1	98.2	99.4
77°	71.1	67.6	65.9	66.5	71.3	75.9	81.3	86.7	91.5	94.8	95.9
77.5°	67.6	64.0	62.4	63.0	67.9	72.4	77.7	83.2	87.9	91.1	92.5
78°	64.1	60.5	59.0	59.6	64.4	68.8	74.2	79.5	84.1	87.5	88.7
78.5°	60.6	57.2	55.6	56.2	60.9	65.3	70.5	75.9	80.6	83.8	85.2
79°	57.2	53.7	52.0	52.8	57.6	61.8	67.1	72.2	77.0	80.1	81.3
79.5°	53.8	50.3	48.5	49.3	54.1	58.4	63.5	68.8	73.4	76.5	77.8
80°	50.3	47.0	45.4	45.9	50.6	55.0	59.9	65.2	69.7	72.8	74.3
80.5°	46.9	43.7	42.1	42.7	47.4	51.6	56.6	61.8	66.2	69.4	70.4
81°	43.6	40.5	38.8	39.5	44.2	48.4	53.3	58.5	62.8	65.9	67.1
81.5°	40.3	37.1	35.5	36.2	40.9	45.0	50.0	55.0	59.4	62.3	63.7
82°	37.2	34.0	32.5	32.9	37.8	41.8	46.7	51.6	56.0	58.9	60.1
82.5°	33.8	30.8	29.3	29.7	34.6	38.6	43.2	48.4	52.7	55.6	56.8
83°	30.7	27.7	26.2	26.7	31.4	35.5	40.5	45.1	49.3	52.2	53.5
83.5°	27.7	24.7	23.4	23.7	28.4	32.3	37.0	41.9	46.0	48.8	50.1
84°	24.6	21.8	20.3	20.9	25.4	29.2	33.9	38.6	42.7	45.5	46.7
84.5°	21.7	19.0	17.5	18.0	22.7	26.3	30.9	35.5	39.5	42.4	43.6
85°	18.9	16.2	14.7	15.1	19.7	23.4	27.8	32.4	36.4	39.3	40.3
85.5°	16.1	13.5	12.2	12.3	16.9	20.6	24.8	29.4	33.3	36.2	37.1
86°	13.3	10.8	9.6	10.0	14.0	17.8	22.0	26.3	30.2	33.0	33.9
86.5°	10.8	8.4	7.0	7.3	11.4	14.8	19.1	23.5	27.2	29.9	30.9
87°	8.4	6.1	4.6	5.0	8.8	12.1	16.3	20.6	24.2	27.0	28.0
87.5°	6.2	3.4	2.4	2.6	6.3	9.6	13.5	17.8	21.5	23.9	24.9
88°	3.4	1.4	0.8	1.1	3.8	7.0	10.9	15.0	18.7	21.2	22.2
88.5°	1.4	0.7	0.6	0.7	1.6	4.6	8.2	12.2	15.7	18.3	19.3



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.6	0.6	0.5	0.6	0.4	0.5	1.0	4.7	7.9	10.2	11.1
90.5°	0.6	0.6	0.5	0.6	0.3	0.5	0.5	2.0	5.3	7.5	8.4
91°	0.6	0.5	0.5	0.6	0.3	0.4	0.5	0.5	2.8	5.0	6.0
91.5°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.5	0.8	2.4	3.4
92°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.5	0.4	0.6	0.9
92.5°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.4	0.5	0.4	0.4
93°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.4	0.4	0.3	0.3
93.5°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.4	0.4	0.3	0.3
94°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.4	0.4	0.3	0.4
94.5°	0.6	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.5	0.3	0.4
95°	0.6	0.5	0.5	0.6	0.3	0.4	0.4	0.4	0.4	0.3	0.4
95.5°	0.6	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.4
96°	0.6	0.5	0.5	0.6	0.5	0.4	0.4	0.4	0.6	0.3	0.4
96.5°	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.4
97°	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.4
97.5°	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.4
98°	0.6	0.5	0.5	0.6	0.4	0.6	0.5	0.4	0.5	0.4	0.4
98.5°	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.4
99°	0.6	0.5	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.4	0.5
99.5°	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5
100°	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.5
100.5°	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.5
101°	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.4	0.5
101.5°	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.4	0.5
102°	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.4	0.5
102.5°	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5
103°	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6
103.5°	0.7	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
104°	0.7	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6
104.5°	0.6	0.6	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
105°	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
105.5°	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6
106°	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6
106.5°	0.7	0.6	0.7	0.8	0.6	0.7	0.6	0.6	0.7	0.6	0.6
107°	0.7	0.7	0.7	0.9	0.6	0.6	0.6	0.6	0.7	0.6	0.6
107.5°	0.7	0.8	0.8	1.0	0.6	0.6	0.8	0.6	0.8	0.6	0.6
108°	0.8	0.8	0.8	1.0	0.6	0.8	0.8	0.7	0.8	0.6	0.6
108.5°	0.8	0.8	0.8	1.1	0.6	0.8	0.8	0.7	0.7	0.6	0.6
109°	0.8	0.9	0.8	1.2	0.6	0.8	0.8	0.7	0.8	0.6	0.6
109.5°	0.8	1.0	0.9	1.2	0.8	0.8	0.8	0.7	0.8	0.6	0.6
110°	0.9	1.0	0.9	1.2	0.8	0.8	0.8	0.8	0.8	0.6	0.7
110.5°	0.9	1.0	0.9	1.2	0.7	0.8	0.8	0.8	0.8	0.6	0.7
111°	0.9	1.0	0.9	1.2	0.7	0.8	0.8	0.8	0.8	0.6	0.7



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	1.0	1.1	0.9	1.2	0.7	0.8	0.8	0.8	0.8	0.8	0.7
113°	1.0	1.1	1.0	1.3	0.8	0.9	0.9	0.8	0.8	0.8	0.7
113.5°	1.0	1.2	1.1	1.3	0.8	0.9	0.9	0.8	0.8	0.8	0.9
114°	1.0	1.2	1.1	1.3	0.8	0.9	1.0	0.8	0.9	0.8	0.9
114.5°	1.0	1.1	1.0	1.2	0.8	0.9	1.0	0.8	0.9	0.8	0.9
115°	1.0	1.1	1.0	1.2	0.9	0.9	1.0	0.9	1.0	0.9	1.0
115.5°	1.0	1.1	1.0	1.2	0.9	0.9	1.0	0.9	1.0	0.9	1.0
116°	1.0	1.1	1.0	1.2	0.9	1.0	1.0	0.9	1.0	1.0	1.0
116.5°	1.0	1.1	1.0	1.2	0.9	1.0	1.0	0.9	1.0	0.9	1.0
117°	1.0	1.1	1.0	1.2	1.0	1.0	1.0	0.9	1.0	0.9	1.0
117.5°	1.1	1.1	1.0	1.2	0.9	1.0	1.0	0.9	0.9	0.9	1.0
118°	1.1	1.1	1.0	1.2	0.9	1.0	1.0	1.0	1.0	0.9	1.0
118.5°	1.2	1.1	1.0	1.2	1.0	1.0	1.1	1.0	1.0	1.0	1.0
119°	1.2	1.1	1.0	1.2	1.0	1.0	1.1	1.0	1.0	0.9	1.0
119.5°	1.1	1.1	1.0	1.2	1.0	1.1	1.1	1.0	1.0	0.9	1.0
120°	1.1	1.1	1.0	1.2	1.0	1.0	1.2	1.0	1.0	1.0	1.0
120.5°	1.1	1.1	1.0	1.2	1.0	1.0	1.2	1.0	1.1	1.0	1.1
121°	1.1	1.1	1.0	1.2	1.0	1.0	1.2	1.0	1.1	1.0	1.1
121.5°	1.1	1.1	1.0	1.2	1.0	1.0	1.2	1.0	1.1	1.0	1.1
122°	1.1	1.1	1.0	1.2	1.2	1.0	1.2	1.0	1.2	1.0	1.2
122.5°	1.1	1.1	1.0	1.2	1.2	1.0	1.2	1.1	1.2	1.0	1.2
123°	1.1	1.1	1.0	1.2	1.2	1.0	1.2	1.1	1.2	1.0	1.2
123.5°	1.1	1.1	1.0	1.2	1.2	1.0	1.2	1.1	1.2	1.1	1.2
124°	1.1	1.1	1.0	1.2	1.2	1.0	1.3	1.1	1.2	1.0	1.2
124.5°	1.1	1.1	1.0	1.2	1.2	1.0	1.3	1.2	1.2	1.0	1.2
125°	1.1	1.1	1.0	1.2	1.1	1.0	1.3	1.2	1.2	1.0	1.2
125.5°	1.1	1.1	1.0	1.2	1.3	1.0	1.3	1.2	1.2	1.0	1.3
126°	1.1	1.1	1.0	1.2	1.3	1.0	1.4	1.2	1.2	1.0	1.3
126.5°	1.1	1.1	1.0	1.2	1.2	1.0	1.4	1.2	1.2	1.0	1.2
127°	1.1	1.1	1.0	1.2	1.2	1.1	1.4	1.2	1.2	1.0	1.2
127.5°	1.1	1.1	1.0	1.2	1.2	1.1	1.4	1.2	1.3	1.0	1.2
128°	1.1	1.1	1.0	1.2	1.3	1.1	1.4	1.2	1.3	1.0	1.2
128.5°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.2	1.3	1.1	1.3
129°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.2	1.3	1.1	1.3
129.5°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.2	1.4	1.1	1.3
130°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.3	1.4	1.1	1.4
130.5°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.3	1.3	1.2	1.4
131°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.3	1.3	1.2	1.3
131.5°	1.1	1.1	1.0	1.2	1.3	1.2	1.4	1.3	1.3	1.2	1.3
132°	1.1	1.1	1.0	1.2	1.4	1.2	1.4	1.2	1.3	1.3	1.5
132.5°	1.2	1.1	1.0	1.2	1.4	1.2	1.4	1.3	1.4	1.4	1.5
133°	1.2	1.1	1.0	1.2	1.4	1.2	1.4	1.3	1.4	1.3	1.4
133.5°	1.2	1.1	1.0	1.2	1.4	1.2	1.4	1.4	1.4	1.3	1.4



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	1.2	1.2	1.0	1.2	1.4	1.2	1.5	1.4	1.5	1.4	1.4
135.5°	1.2	1.2	1.0	1.2	1.5	1.3	1.5	1.4	1.5	1.4	1.4
136°	1.2	1.2	1.2	1.2	1.5	1.3	1.5	1.4	1.5	1.5	1.4
136.5°	1.2	1.2	1.2	1.2	1.5	1.3	1.5	1.4	1.5	1.4	1.5
137°	1.2	1.3	1.2	1.2	1.5	1.3	1.5	1.4	1.5	1.4	1.5
137.5°	1.2	1.3	1.2	1.2	1.5	1.3	1.5	1.4	1.5	1.4	1.5
138°	1.2	1.3	1.3	1.2	1.5	1.4	1.5	1.5	1.5	1.5	1.5
138.5°	1.2	1.4	1.3	1.2	1.5	1.4	1.5	1.5	1.5	1.5	1.5
139°	1.2	1.4	1.3	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5
139.5°	1.2	1.3	1.2	1.2	1.6	1.5	1.6	1.5	1.6	1.5	1.5
140°	1.2	1.4	1.3	1.2	1.6	1.5	1.6	1.5	1.6	1.5	1.6
140.5°	1.3	1.4	1.3	1.2	1.6	1.5	1.6	1.5	1.6	1.5	1.6
141°	1.3	1.5	1.3	1.3	1.7	1.5	1.7	1.5	1.6	1.5	1.6
141.5°	1.3	1.5	1.4	1.3	1.6	1.5	1.7	1.5	1.6	1.5	1.6
142°	1.3	1.7	1.4	1.3	1.7	1.5	1.6	1.5	1.7	1.5	1.7
142.5°	1.3	1.7	1.3	1.5	1.7	1.5	1.6	1.5	1.7	1.5	1.7
143°	1.4	1.9	1.4	1.5	1.7	1.5	1.6	1.6	1.7	1.5	1.7
143.5°	1.5	1.9	1.5	1.4	1.7	1.5	1.7	1.6	1.7	1.5	1.7
144°	1.5	2.0	1.5	1.4	1.7	1.5	1.7	1.6	1.7	1.7	1.7
144.5°	1.5	2.0	1.5	1.5	1.9	1.5	1.7	1.7	1.7	1.7	1.7
145°	1.5	2.0	1.7	1.5	1.9	1.6	1.7	1.7	1.8	1.7	1.7
145.5°	1.5	2.0	1.7	1.7	1.9	1.6	1.7	1.7	1.7	1.7	1.8
146°	1.6	2.1	1.9	1.7	1.9	1.6	1.7	1.7	1.7	1.7	1.8
146.5°	1.7	2.2	1.9	1.9	1.9	1.6	1.7	1.7	1.9	1.7	1.7
147°	1.7	2.2	2.1	2.0	1.9	1.7	1.7	1.8	1.8	1.9	1.9
147.5°	1.9	2.1	2.0	2.1	1.9	1.7	1.8	1.8	1.8	1.9	1.9
148°	1.9	2.1	2.0	2.1	2.0	1.8	1.8	1.7	2.0	1.9	1.9
148.5°	2.0	2.1	2.0	2.2	2.0	1.8	1.8	1.7	2.0	1.9	1.9
149°	2.0	2.1	2.1	2.2	2.0	1.8	1.8	1.7	2.0	2.0	1.9
149.5°	2.1	2.1	2.0	2.2	2.0	1.8	1.9	1.7	2.0	2.0	2.0
150°	2.1	2.1	2.0	2.2	2.0	1.9	1.8	1.9	2.0	2.0	2.0
150.5°	2.0	2.1	2.2	2.2	2.0	1.9	1.8	2.0	2.1	2.0	2.0
151°	2.0	2.1	2.2	2.2	2.0	1.9	1.9	2.0	2.0	2.0	2.0
151.5°	2.0	2.1	2.1	2.2	2.0	1.9	1.9	2.0	2.1	2.0	2.0
152°	2.0	2.1	2.1	2.2	2.0	1.9	1.9	2.0	2.2	2.2	2.0
152.5°	2.0	2.1	2.1	2.2	2.0	1.9	2.0	2.0	2.1	2.2	2.1
153°	2.0	2.1	2.1	2.2	2.1	1.9	2.0	2.1	2.2	2.1	2.1
153.5°	2.0	2.1	2.1	2.2	2.2	2.0	2.0	2.2	2.2	2.2	2.1
154°	2.0	2.1	2.1	2.2	2.1	2.0	2.0	2.2	2.3	2.2	2.1
154.5°	2.0	2.1	2.1	2.2	2.1	2.1	2.0	2.2	2.3	2.2	2.2
155°	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.3	2.3	2.2
155.5°	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.4	2.4	2.4	2.2
156°	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.4	2.4	2.3	2.3



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
157.5°	2.0	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.6	2.4	2.2
158°	2.0	2.2	2.2	2.3	2.3	2.4	2.4	2.6	2.6	2.4	2.2
158.5°	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.6	2.6	2.4	2.2
159°	2.2	2.2	2.2	2.4	2.3	2.4	2.4	2.6	2.6	2.4	2.2
159.5°	2.3	2.2	2.2	2.3	2.3	2.5	2.5	2.6	2.7	2.4	2.2
160°	2.3	2.4	2.4	2.3	2.3	2.5	2.5	2.6	2.7	2.4	2.2
160.5°	2.2	2.3	2.4	2.4	2.3	2.5	2.5	2.6	2.7	2.4	2.2
161°	2.2	2.3	2.4	2.4	2.3	2.6	2.5	2.6	2.7	2.4	2.2
161.5°	2.2	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.8	2.4	2.2
162°	2.2	2.4	2.4	2.4	2.3	2.5	2.6	2.7	2.8	2.4	2.2
162.5°	2.2	2.4	2.4	2.4	2.4	2.5	2.7	2.7	3.1	2.4	2.2
163°	2.2	2.5	2.4	2.4	2.4	2.5	2.7	2.7	2.6	2.4	2.3
163.5°	2.2	2.5	2.4	2.4	2.4	2.5	2.7	2.7	2.6	2.4	2.2
164°	2.2	2.6	2.5	2.4	2.4	2.5	2.7	2.7	2.7	2.4	2.2
164.5°	2.3	2.6	2.5	2.4	2.4	2.5	3.1	2.7	2.7	2.4	2.9
165°	2.3	2.5	2.4	2.4	2.4	2.5	2.7	2.7	2.7	2.4	2.6
165.5°	2.3	2.5	2.4	2.4	2.4	2.5	2.7	2.7	2.7	2.4	2.6
166°	2.3	2.6	2.4	2.4	2.4	2.5	2.7	2.7	2.7	2.4	2.5
166.5°	2.3	2.6	2.4	2.4	2.4	2.5	2.7	2.7	2.7	2.4	2.5
167°	2.3	2.7	2.4	2.4	2.5	2.5	2.8	2.7	2.7	2.4	2.5
167.5°	2.4	2.7	2.4	2.4	2.4	2.5	2.8	2.8	2.7	2.4	2.5
168°	2.4	2.8	2.4	2.4	2.4	2.5	2.7	2.9	2.7	2.4	2.5
168.5°	2.4	2.8	2.4	2.4	2.6	2.5	2.7	2.9	2.7	2.4	2.5
169°	2.4	2.9	2.4	2.4	2.5	2.5	2.8	2.9	2.7	2.4	2.5
169.5°	2.4	2.8	2.4	2.4	2.5	2.5	2.8	2.9	2.7	2.4	2.5
170°	2.4	2.8	2.4	2.4	2.5	2.5	2.8	3.0	2.7	2.4	2.5
170.5°	2.4	2.8	2.4	2.4	2.5	2.5	2.8	3.0	2.7	2.4	2.5
171°	2.4	2.8	2.4	2.4	2.6	2.5	2.8	3.0	2.7	2.4	2.5
171.5°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.0	2.7	2.4	2.5
172°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.0	2.7	2.4	2.5
172.5°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.0	2.7	2.4	2.5
173°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.0	2.7	2.4	2.5
173.5°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.0	2.7	2.4	2.5
174°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.1	2.7	2.4	2.5
174.5°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.1	2.7	2.4	2.5
175°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.1	2.7	2.4	2.5
175.5°	2.4	2.8	2.4	2.4	2.7	2.5	2.8	3.1	2.7	2.4	2.5
176°	2.4	2.7	2.4	2.4	2.7	2.5	2.9	3.1	2.7	2.4	2.5
176.5°	2.4	2.7	2.4	2.4	2.7	2.5	2.9	3.1	2.7	2.4	2.5
177°	2.4	2.5	2.4	2.4	2.7	2.5	2.9	3.1	2.7	2.4	2.5
177.5°	2.4	2.5	2.4	2.4	2.7	2.5	2.9	3.1	2.7	2.4	2.5
178°	2.4	2.6	2.4	2.4	2.8	2.5	2.9	3.1	2.7	2.4	2.5
178.5°	2.4	2.5	2.4	2.4	3.1	2.5	3.0	3.1	2.7	2.4	2.5



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	470.9	470.9	470.9	470.9	470.9	470.9
0.5°	471.4	470.3	470.0	470.2	470.2	470.8
1°	472.0	470.5	470.0	470.1	470.1	469.7
1.5°	470.0	470.5	470.1	470.0	470.1	470.0
2°	471.3	470.4	469.8	469.8	469.7	469.8
2.5°	470.5	470.5	469.7	469.6	469.3	469.4
3°	469.3	470.2	469.6	469.5	469.3	469.0
3.5°	470.8	470.2	469.4	469.0	469.1	468.6
4°	470.1	469.8	469.1	468.9	468.7	468.3
4.5°	468.5	469.7	468.7	468.5	468.2	467.8
5°	468.3	469.2	468.5	468.4	467.6	467.7
5.5°	469.4	469.1	468.1	467.8	467.2	467.0
6°	469.8	468.6	467.7	467.2	466.3	466.2
6.5°	467.2	468.3	467.2	466.7	465.8	465.5
7°	469.5	467.8	466.7	465.8	465.1	463.9
7.5°	469.9	467.2	466.1	465.1	464.6	463.2
8°	467.0	466.7	465.6	464.6	463.7	462.5
8.5°	466.7	466.2	465.0	464.0	463.1	461.7
9°	467.1	465.5	464.3	463.1	461.9	460.8
9.5°	465.9	464.9	463.6	462.3	461.3	459.6
10°	464.4	464.0	463.0	461.5	460.2	459.1
10.5°	463.9	463.3	461.7	460.8	459.7	458.2
11°	465.0	462.6	461.2	459.8	458.4	456.8
11.5°	463.2	461.9	460.1	458.9	457.4	455.9
12°	461.8	461.0	459.3	457.8	456.3	455.0
12.5°	461.6	460.0	458.2	456.8	455.3	453.3
13°	459.6	459.1	457.2	455.8	454.1	452.4
13.5°	459.1	458.1	455.9	454.7	452.9	451.3
14°	458.6	456.9	454.9	453.6	451.6	449.6
14.5°	458.4	455.8	453.8	452.7	450.6	448.6
15°	456.7	454.6	452.8	451.4	449.4	447.2
15.5°	454.7	453.4	451.6	450.0	448.1	446.1
16°	453.5	452.2	450.4	448.5	446.5	444.8
16.5°	452.9	451.2	449.1	447.4	445.1	443.5
17°	451.9	449.7	448.0	445.9	443.7	441.5
17.5°	451.0	448.6	446.5	444.5	442.3	440.6
18°	449.1	447.0	445.2	443.1	440.7	438.7
18.5°	447.6	445.9	443.5	441.5	439.2	436.9
19°	446.1	444.2	441.9	440.0	437.5	435.2
19.5°	444.8	443.0	440.6	438.5	436.0	433.6
20°	443.1	441.3	439.0	436.6	434.2	431.8
20.5°	442.1	439.9	437.2	434.9	432.4	430.3
21°	440.7	438.1	435.7	433.0	431.0	428.6



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	435.4	433.4	430.6	428.0	425.1	422.5
23°	434.0	431.3	429.0	426.3	423.2	420.9
23.5°	432.4	429.8	427.1	424.4	421.5	418.7
24°	431.5	427.9	425.5	422.5	419.5	416.6
24.5°	428.8	426.0	423.3	420.7	417.7	414.6
25°	426.8	424.1	421.5	418.8	415.5	412.8
25.5°	425.4	422.3	419.3	416.8	413.6	410.8
26°	423.7	420.2	417.7	414.6	411.4	408.5
26.5°	421.4	418.5	415.7	412.7	409.4	406.6
27°	419.2	416.3	413.6	410.3	407.3	404.0
27.5°	416.3	414.4	411.5	408.3	404.9	402.0
28°	413.8	412.2	409.4	406.1	402.7	399.6
28.5°	412.0	410.1	407.3	404.1	400.5	397.6
29°	410.7	407.9	405.0	401.7	398.3	395.2
29.5°	409.1	406.0	402.9	399.6	396.0	392.8
30°	407.6	403.5	400.8	397.1	393.6	390.3
30.5°	404.3	401.4	398.4	394.9	391.2	388.0
31°	402.1	398.8	396.1	392.3	388.9	385.5
31.5°	400.0	396.6	393.7	390.2	386.4	383.3
32°	396.6	394.2	391.3	387.6	383.9	380.4
32.5°	395.7	391.9	388.7	385.4	381.4	378.0
33°	392.9	389.4	386.4	382.6	379.0	375.6
33.5°	390.0	387.1	383.8	380.2	376.6	372.9
34°	387.8	384.4	381.6	377.7	374.0	370.2
34.5°	385.4	382.1	379.1	375.2	371.2	367.7
35°	383.0	379.6	376.4	372.5	368.8	365.1
35.5°	380.7	377.3	373.8	370.0	366.0	362.4
36°	378.8	374.6	371.3	367.4	363.2	359.7
36.5°	375.9	372.0	368.6	364.6	360.5	356.8
37°	372.4	369.3	365.9	361.8	357.8	354.0
37.5°	370.0	366.6	363.2	359.1	354.9	351.2
38°	366.9	363.7	360.6	356.3	352.0	348.3
38.5°	364.6	361.2	357.5	353.6	349.3	345.4
39°	361.3	358.3	354.9	350.8	346.4	342.5
39.5°	357.9	355.7	352.1	348.0	343.4	339.5
40°	355.9	352.7	349.3	345.0	340.7	336.6
40.5°	353.1	350.0	346.5	342.1	337.7	333.5
41°	349.4	347.2	343.5	339.3	334.8	330.6
41.5°	347.3	344.3	340.5	336.2	331.6	327.6
42°	344.5	341.2	337.7	333.2	328.6	324.5
42.5°	342.1	338.3	334.5	330.2	325.6	321.5
43°	339.2	335.1	331.6	327.2	322.5	318.4
43.5°	335.7	332.1	328.4	324.0	319.3	315.1





TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	326.6	322.9	319.0	314.9	309.9	305.7
45.5°	323.4	319.8	315.9	311.7	306.9	302.4
46°	320.0	316.7	312.7	308.3	303.5	299.1
46.5°	316.6	313.4	309.5	305.1	300.3	295.9
47°	314.0	310.2	306.6	301.8	297.1	292.5
47.5°	311.0	307.0	303.2	298.4	293.8	288.9
48°	308.3	303.8	299.9	295.1	290.4	285.8
48.5°	304.9	300.6	296.7	291.8	286.9	282.3
49°	301.5	297.2	293.4	288.4	283.5	279.0
49.5°	298.2	293.8	290.1	285.1	280.2	275.5
50°	295.1	290.4	286.7	281.6	276.8	272.2
50.5°	291.6	287.1	283.2	278.2	273.4	268.8
51°	288.0	283.7	279.8	274.7	269.8	265.3
51.5°	284.6	280.3	276.4	271.5	266.4	261.6
52°	281.2	276.9	273.0	268.0	262.9	258.1
52.5°	277.7	273.4	269.5	264.4	259.2	254.5
53°	274.6	270.0	266.0	260.9	255.8	250.8
53.5°	271.3	266.4	262.2	257.4	252.1	247.2
54°	267.6	263.0	258.8	253.9	248.5	243.7
54.5°	264.0	259.4	255.2	250.3	244.9	240.1
55°	261.0	255.9	251.8	246.6	241.3	236.5
55.5°	257.6	252.3	248.1	243.0	237.7	232.8
56°	253.8	248.7	244.5	239.4	234.1	229.3
56.5°	250.0	245.1	240.9	235.8	230.5	225.5
57°	246.3	241.5	237.5	232.2	226.8	221.8
57.5°	242.8	238.0	233.6	228.5	223.2	218.2
58°	239.0	234.3	230.4	225.0	219.5	214.4
58.5°	235.3	231.0	226.5	221.3	215.8	210.8
59°	231.6	227.2	222.9	217.5	212.1	206.9
59.5°	228.4	223.6	219.1	213.8	208.2	203.3
60°	224.8	219.6	215.4	210.0	204.6	199.5
60.5°	220.9	216.1	211.7	206.2	200.8	195.7
61°	217.3	212.3	207.9	202.7	197.1	191.8
61.5°	213.7	208.8	204.2	198.9	193.2	188.2
62°	210.0	204.8	200.4	195.0	189.5	184.2
62.5°	206.0	201.2	196.6	191.3	185.5	180.4
63°	202.0	197.3	192.9	187.4	181.8	176.6
63.5°	197.9	193.6	189.2	183.7	178.1	172.8
64°	194.3	189.9	185.3	179.9	174.1	169.0
64.5°	190.4	186.0	181.4	176.2	170.4	165.4
65°	186.5	182.1	177.7	172.2	166.7	161.4
65.5°	182.8	178.3	173.8	168.4	162.8	157.6
66°	178.9	174.4	169.9	164.6	159.0	153.6



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	167.3	163.1	158.7	153.2	147.5	142.2
68°	163.8	159.2	154.6	149.3	143.6	138.3
68.5°	160.0	155.3	150.8	145.4	139.7	134.6
69°	156.3	151.4	147.2	141.6	135.9	130.6
69.5°	152.2	147.5	143.2	137.6	132.1	126.8
70°	148.2	143.9	139.4	133.9	128.3	122.9
70.5°	145.0	140.0	135.6	130.1	124.6	119.3
71°	141.0	136.1	131.7	126.4	120.7	115.4
71.5°	136.8	132.3	128.1	122.5	117.0	111.9
72°	132.4	128.5	124.4	118.8	113.2	107.9
72.5°	129.0	124.6	120.4	115.0	109.3	104.2
73°	125.4	120.9	116.7	111.2	105.6	100.3
73.5°	121.7	117.2	112.8	107.4	101.7	96.8
74°	117.6	113.4	109.1	103.7	98.2	93.1
74.5°	113.7	109.6	105.4	100.1	94.5	89.5
75°	110.2	105.8	101.7	96.2	90.8	85.8
75.5°	106.5	102.2	97.9	92.6	87.2	82.1
76°	102.4	98.3	94.4	89.0	83.4	78.3
76.5°	98.8	94.8	90.7	85.4	79.8	74.7
77°	95.0	91.1	86.9	81.6	76.1	71.1
77.5°	91.7	87.4	83.2	77.9	72.5	67.6
78°	88.0	83.7	79.6	74.4	68.8	64.1
78.5°	84.2	80.1	75.9	70.7	65.4	60.6
79°	80.7	76.4	72.2	67.3	61.8	57.2
79.5°	77.0	72.7	68.9	63.8	58.3	53.8
80°	73.5	69.2	65.0	60.3	55.0	50.3
80.5°	69.9	65.5	61.7	56.8	51.6	46.9
81°	66.6	62.2	58.6	53.5	48.3	43.6
81.5°	62.8	58.9	55.1	50.1	45.0	40.3
82°	59.4	55.4	51.6	46.7	41.7	37.2
82.5°	56.1	52.0	47.9	43.3	38.3	33.8
83°	52.7	48.5	45.2	40.2	35.1	30.7
83.5°	49.4	45.2	41.2	36.8	31.8	27.7
84°	46.1	41.9	38.3	33.6	28.8	24.6
84.5°	42.8	38.6	35.1	30.3	25.6	21.7
85°	39.6	35.3	31.8	27.2	22.9	18.9
85.5°	36.5	32.3	28.7	24.3	19.9	16.1
86°	33.5	29.0	25.7	21.3	17.0	13.3
86.5°	30.3	25.9	22.6	18.5	14.2	10.8
87°	27.2	23.0	19.7	15.5	11.6	8.4
87.5°	24.2	20.1	16.8	12.8	9.1	6.2
88°	21.6	17.3	13.9	10.3	6.8	3.4
88.5°	18.7	14.4	11.4	7.7	4.3	1.4



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	10.3	6.4	3.2	1.0	0.7	0.6
90.5°	7.7	3.8	1.6	0.7	0.6	0.6
91°	5.2	1.7	0.7	0.6	0.6	0.6
91.5°	2.7	0.6	0.6	0.6	0.6	0.6
92°	0.7	0.6	0.3	0.6	0.6	0.6
92.5°	0.4	0.6	0.3	0.6	0.6	0.6
93°	0.4	0.6	0.4	0.6	0.6	0.6
93.5°	0.4	0.6	0.4	0.6	0.6	0.6
94°	0.4	0.5	0.4	0.6	0.6	0.6
94.5°	0.4	0.5	0.5	0.6	0.6	0.6
95°	0.4	0.5	0.4	0.6	0.6	0.6
95.5°	0.4	0.5	0.4	0.6	0.6	0.6
96°	0.4	0.5	0.4	0.6	0.6	0.6
96.5°	0.4	0.5	0.3	0.6	0.6	0.6
97°	0.4	0.5	0.4	0.6	0.6	0.6
97.5°	0.5	0.5	0.6	0.6	0.6	0.6
98°	0.5	0.5	0.4	0.6	0.6	0.6
98.5°	0.5	0.5	0.4	0.6	0.6	0.6
99°	0.6	0.5	0.7	0.6	0.6	0.6
99.5°	0.5	0.5	0.8	0.6	0.6	0.6
100°	0.5	0.5	0.7	0.6	0.6	0.6
100.5°	0.5	0.5	0.7	0.6	0.6	0.6
101°	0.5	0.5	0.7	0.6	0.6	0.6
101.5°	0.5	0.5	0.7	0.6	0.6	0.6
102°	0.5	0.5	0.7	0.6	0.6	0.6
102.5°	0.6	0.5	0.7	0.6	0.6	0.6
103°	0.6	0.5	0.8	0.6	0.6	0.6
103.5°	0.6	0.5	0.8	0.6	0.6	0.7
104°	0.6	0.5	0.2	0.6	0.6	0.7
104.5°	0.6	0.5	0.5	0.6	0.6	0.6
105°	0.6	0.5	0.5	0.6	0.6	0.6
105.5°	0.6	0.5	0.5	0.6	0.6	0.7
106°	0.6	0.5	0.8	0.6	0.6	0.7
106.5°	0.7	0.5	0.4	0.6	0.6	0.7
107°	0.6	0.5	0.6	0.6	0.6	0.7
107.5°	0.6	0.5	0.6	0.9	0.6	0.7
108°	0.7	0.5	1.0	1.0	0.6	0.8
108.5°	0.7	0.5	0.8	1.0	0.9	0.8
109°	0.8	0.6	0.9	1.1	1.0	0.8
109.5°	0.8	0.5	0.9	1.1	1.1	0.8
110°	0.7	0.5	0.9	1.2	1.1	0.9
110.5°	0.8	0.7	0.9	1.2	1.2	0.9
111°	0.7	0.8	0.9	1.2	1.2	0.9



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	0.8	0.8	0.9	1.2	1.2	1.0
113°	0.8	0.8	1.0	1.2	1.2	1.0
113.5°	0.9	0.8	1.0	1.2	1.2	1.0
114°	0.9	0.8	1.0	1.2	1.2	1.0
114.5°	0.9	0.8	1.0	1.2	1.2	1.0
115°	0.9	0.8	1.0	1.2	1.2	1.0
115.5°	1.0	0.8	1.0	1.2	1.2	1.0
116°	0.9	1.0	1.0	1.2	1.2	1.0
116.5°	0.9	1.0	1.0	1.2	1.2	1.0
117°	1.0	1.0	1.0	1.2	1.2	1.0
117.5°	1.0	1.0	1.1	1.2	1.2	1.1
118°	1.0	1.0	1.1	1.2	1.2	1.1
118.5°	1.1	1.0	1.0	1.2	1.2	1.2
119°	1.1	1.0	1.2	1.2	1.2	1.2
119.5°	1.0	1.0	1.2	1.2	1.2	1.1
120°	1.1	1.0	1.1	1.2	1.2	1.1
120.5°	1.1	1.0	1.1	1.2	1.2	1.1
121°	1.2	1.0	1.1	1.2	1.2	1.1
121.5°	1.2	1.0	1.1	1.2	1.2	1.1
122°	1.1	1.0	1.1	1.2	1.2	1.1
122.5°	1.2	1.0	1.1	1.2	1.2	1.1
123°	1.2	1.1	1.1	1.2	1.2	1.1
123.5°	1.2	1.1	1.1	1.2	1.2	1.1
124°	1.2	1.1	1.1	1.2	1.2	1.1
124.5°	1.2	1.1	1.1	1.2	1.2	1.1
125°	1.2	1.1	1.1	1.2	1.2	1.1
125.5°	1.2	1.2	1.1	1.2	1.2	1.1
126°	1.2	1.2	1.2	1.2	1.2	1.1
126.5°	1.2	1.2	1.2	1.2	1.2	1.1
127°	1.2	1.1	1.4	1.2	1.2	1.1
127.5°	1.2	1.1	1.4	1.2	1.2	1.1
128°	1.2	1.1	1.4	1.2	1.2	1.1
128.5°	1.2	1.1	1.4	1.2	1.2	1.1
129°	1.2	1.1	1.4	1.2	1.2	1.1
129.5°	1.3	1.1	1.4	1.2	1.2	1.1
130°	1.3	1.2	1.5	1.2	1.2	1.1
130.5°	1.3	1.2	1.4	1.2	1.2	1.1
131°	1.3	1.3	1.4	1.2	1.2	1.1
131.5°	1.4	1.4	1.4	1.2	1.2	1.1
132°	1.3	1.3	1.4	1.2	1.2	1.1
132.5°	1.3	1.3	1.3	1.2	1.2	1.2
133°	1.5	1.3	1.3	1.2	1.2	1.2
133.5°	1.5	1.3	1.3	1.2	1.2	1.2



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
135°	1.4	1.3	1.3	1.2	1.2	1.2
135.5°	1.5	1.3	1.3	1.2	1.2	1.2
136°	1.5	1.3	1.3	1.2	1.2	1.2
136.5°	1.5	1.5	1.3	1.2	1.2	1.2
137°	1.6	1.5	1.3	1.3	1.2	1.2
137.5°	1.6	1.5	1.3	1.3	1.2	1.2
138°	1.5	1.7	1.3	1.2	1.2	1.2
138.5°	1.5	1.7	1.3	1.2	1.2	1.2
139°	1.5	1.7	1.3	1.2	1.2	1.2
139.5°	1.6	1.7	1.3	1.2	1.2	1.2
140°	1.6	1.7	1.3	1.2	1.2	1.2
140.5°	1.5	1.7	1.3	1.2	1.4	1.3
141°	1.7	1.7	1.3	1.2	1.3	1.3
141.5°	1.7	1.7	1.3	1.2	1.4	1.3
142°	1.7	1.7	1.3	1.3	1.3	1.3
142.5°	1.7	1.7	1.3	1.3	1.5	1.3
143°	1.7	1.7	1.3	1.3	1.4	1.4
143.5°	1.7	1.8	1.5	1.4	1.5	1.5
144°	1.8	1.8	1.9	1.3	1.6	1.5
144.5°	1.8	1.7	1.9	1.6	1.6	1.5
145°	1.8	1.7	1.9	1.6	1.6	1.5
145.5°	1.8	1.7	1.9	1.8	1.8	1.5
146°	1.8	1.7	1.9	1.8	1.7	1.6
146.5°	1.9	1.7	1.9	1.8	1.8	1.7
147°	1.9	1.8	2.0	1.9	1.9	1.7
147.5°	1.8	1.8	2.1	2.0	2.1	1.9
148°	1.8	1.9	2.1	2.0	2.1	1.9
148.5°	1.9	1.9	2.1	2.2	2.1	2.0
149°	2.0	1.9	2.1	2.2	2.1	2.0
149.5°	2.0	1.9	2.1	2.1	2.2	2.1
150°	2.0	2.0	2.2	2.2	2.2	2.1
150.5°	1.9	2.1	2.1	2.2	2.2	2.0
151°	1.8	2.1	2.1	2.3	2.2	2.0
151.5°	1.8	2.0	2.1	2.3	2.2	2.0
152°	1.8	2.0	2.1	2.2	2.2	2.0
152.5°	1.9	2.0	2.1	2.2	2.2	2.0
153°	1.9	2.0	2.1	2.2	2.2	2.0
153.5°	2.0	2.0	2.1	2.2	2.2	2.0
154°	2.0	2.0	2.1	2.2	2.2	2.0
154.5°	2.1	2.0	2.1	2.2	2.2	2.0
155°	2.2	2.0	2.1	2.2	2.2	2.0
155.5°	2.2	2.0	2.1	2.2	2.2	2.0
156°	2.2	2.0	2.1	2.2	2.2	2.0



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	2.2	2.0	2.1	2.2	2.2	2.0
158°	2.3	2.0	2.1	2.2	2.2	2.0
158.5°	2.4	2.0	2.1	2.2	2.2	2.2
159°	2.4	2.0	2.1	2.2	2.2	2.2
159.5°	2.4	2.1	2.1	2.2	2.2	2.3
160°	2.4	2.1	2.1	2.2	2.2	2.3
160.5°	2.4	2.2	2.1	2.2	2.2	2.2
161°	2.4	2.2	2.1	2.2	2.2	2.2
161.5°	2.4	2.1	2.1	2.2	2.2	2.2
162°	2.4	2.2	2.1	2.2	2.2	2.2
162.5°	2.4	2.2	2.2	2.2	2.2	2.2
163°	2.4	2.2	2.2	2.2	2.2	2.2
163.5°	2.4	2.2	2.2	2.2	2.2	2.2
164°	2.4	2.2	2.2	2.2	2.2	2.2
164.5°	2.4	2.2	2.2	2.2	2.2	2.3
165°	2.4	2.2	2.2	2.2	2.2	2.3
165.5°	2.4	2.2	2.3	2.2	2.2	2.3
166°	2.4	2.2	2.2	2.2	2.2	2.3
166.5°	2.4	2.2	2.2	2.2	2.2	2.3
167°	2.4	2.2	2.2	2.2	2.2	2.3
167.5°	2.4	2.2	2.2	2.2	2.2	2.4
168°	2.4	2.2	2.2	2.2	2.2	2.4
168.5°	2.4	2.2	2.2	2.2	2.2	2.4
169°	2.4	2.2	2.2	2.2	2.2	2.4
169.5°	2.4	2.3	2.2	2.2	2.2	2.4
170°	2.4	2.3	2.2	2.2	2.2	2.4
170.5°	2.4	2.2	2.2	2.2	2.2	2.4
171°	2.4	2.2	2.2	2.2	2.2	2.4
171.5°	2.4	2.2	2.2	2.2	2.2	2.4
172°	2.4	2.2	2.2	2.2	2.2	2.4
172.5°	2.4	2.2	2.2	2.2	2.2	2.4
173°	2.4	2.2	2.2	2.2	2.2	2.4
173.5°	2.4	2.2	2.2	2.2	2.2	2.4
174°	2.4	2.2	2.2	2.2	2.2	2.4
174.5°	2.4	2.2	2.2	2.2	2.2	2.4
175°	2.4	2.2	2.2	2.2	2.2	2.4
175.5°	2.4	2.2	2.2	2.2	2.2	2.4
176°	2.4	2.2	2.2	2.2	2.2	2.4
176.5°	2.4	2.2	2.2	2.2	2.2	2.4
177°	2.4	2.2	2.2	2.2	2.2	2.4
177.5°	2.4	2.2	2.3	2.2	2.2	2.4
178°	2.4	2.3	2.4	2.2	2.2	2.4
178.5°	2.4	2.4	2.5	2.3	2.4	2.4



TEST NUMBER: P417431

CATALOG NUMBER: SMD6R129SWHE - 5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
180°	2.4	2.4	2.4	2.4	2.4	2.4



Report Generated By E9808895 / USPTCWHP6082093







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







21.5°	426.8	424.8	423.8	424.1	426.4	428.6	431.1	433.9	435.6	438.0	437.4
22°	424.7	422.9	421.9	422.0	424.7	426.8	429.2	432.2	434.4	437.1	436.1



44°	311.9	309.0	307.2	308.1	311.5	315.1	319.7	324.7	329.0	331.9	333.0
44.5°	308.9	305.8	303.9	304.8	308.4	312.0	316.7	321.5	325.8	328.9	330.5



66.5°	149.9	146.1	144.3	145.0	150.0	154.5	160.1	166.0	171.1	174.8	176.1
67°	145.9	142.2	140.4	141.1	146.0	150.7	156.2	162.2	167.2	170.6	172.0



89°	0.6	0.6	0.5	0.6	0.3	2.1	5.8	9.6	13.1	15.4	16.4
89.5°	0.6	0.6	0.5	0.6	0.3	0.6	3.4	7.0	10.4	12.6	13.7





111.5°	1.0	1.0	1.0	1.2	0.7	0.8	0.8	0.8	0.8	0.7	0.7
112°	1.0	1.0	0.9	1.2	0.7	0.8	0.9	0.8	0.8	0.6	0.7



134°	1.2	1.1	1.0	1.2	1.5	1.2	1.5	1.3	1.5	1.4	1.4
134.5°	1.2	1.2	1.0	1.2	1.4	1.2	1.5	1.3	1.5	1.4	1.4



156.5°	2.0	2.1	2.2	2.2	2.3	2.2	2.3	2.4	2.4	2.3	2.2
157°	2.1	2.1	2.2	2.2	2.4	2.4	2.3	2.4	2.6	2.4	2.2



179°	2.4	2.5	2.4	2.4	3.0	2.5	2.9	3.3	2.7	2.4	2.5
179.5°	2.4	2.5	2.4	2.4	3.1	2.5	2.8	3.1	2.7	2.4	2.5





21.5°	438.8	436.6	434.1	431.7	429.1	426.8
22°	436.4	434.8	432.3	429.9	427.1	424.7



44°	333.0	329.2	325.3	320.9	316.3	311.9
44.5°	329.6	326.2	322.1	318.0	313.1	308.9



66.5°	175.0	170.6	166.2	160.9	155.0	149.9
67°	170.9	166.8	162.4	157.0	151.3	145.9





89°	15.8	11.6	8.5	5.3	1.7	0.6
89.5°	13.0	8.8	5.9	2.4	0.7	0.6



111.5°	0.8	0.8	0.9	1.2	1.2	1.0
112°	0.8	0.8	0.9	1.2	1.2	1.0



134°	1.4	1.3	1.3	1.2	1.2	1.2
134.5°	1.4	1.3	1.3	1.2	1.2	1.2



156.5°	2.2	2.0	2.1	2.2	2.2	2.0
157°	2.2	2.0	2.1	2.2	2.2	2.1



179°	2.4	2.5	2.5	2.4	2.4	2.4
179.5°	2.4	2.5	2.6	2.8	2.5	2.4



(END OF REPORT)