

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: P1590513

Luminaire Tested: HCDLS510CSD4TRH-HI-3000K

Issue Date: 9/4/2026

Test Information

Test Method: LM-79-2019
Report Number: P1590513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2603928A002)
Test Lab: INNOVATION CENTER
Issue Date: 9/4/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO
Catalog Number: HCDLS510CSD4TRH-HI-3000K
Description: 4" Selectable Round Trim+ Haze (Semi-specular) 1000 Lumens 3000K

Light Source:
Ballast/Driver: -

Summary

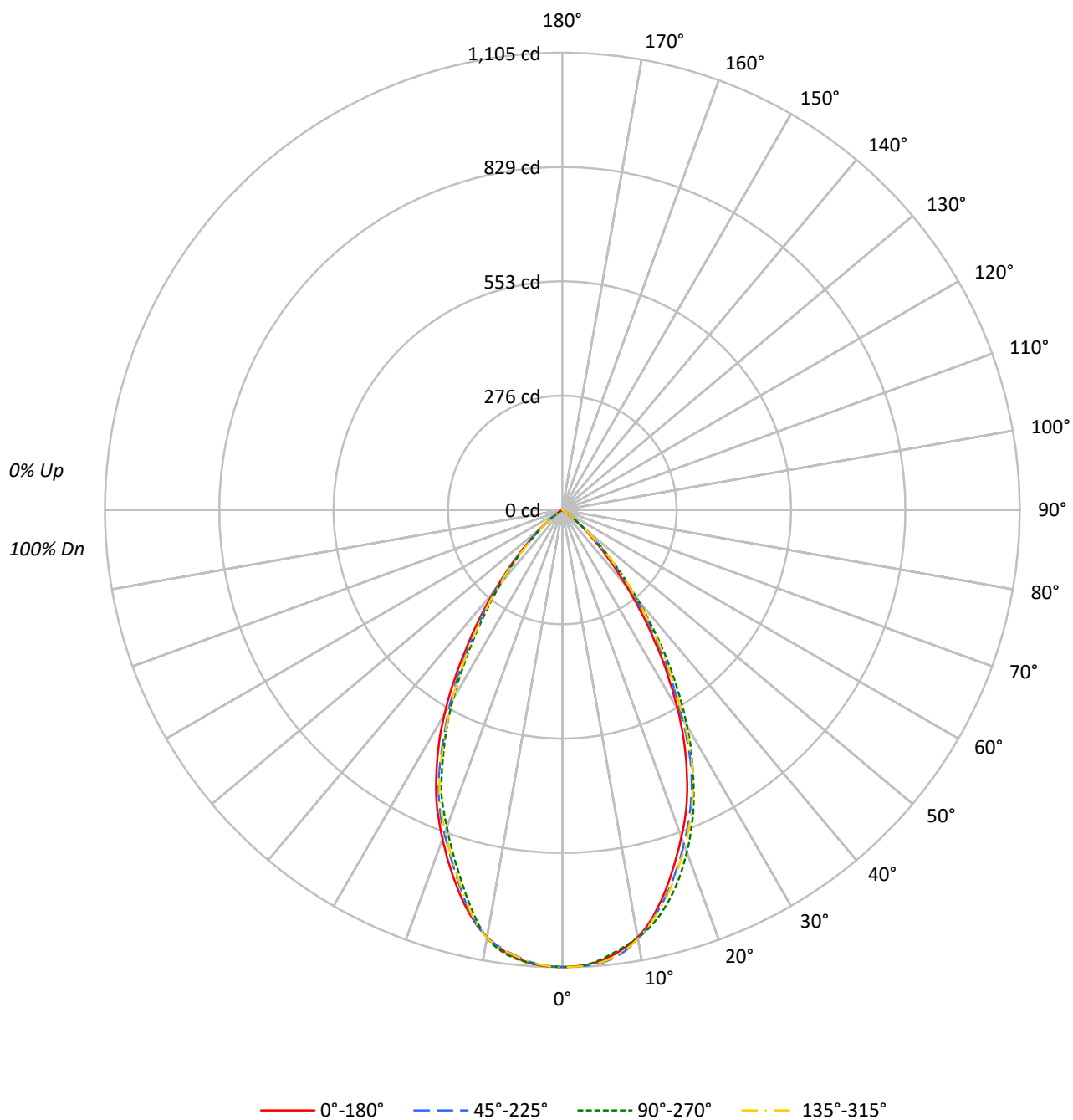
Lumens per Lamp: N/A
Luminaire Lumens: 1080.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.91 / 0.91
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 11.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): =20%
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	113	110	108	106	111	108	106	104	104	102	101		100	99	98		93
2	107	102	98	95	105	101	97	94	97	94	91		94	92	90		86
3	102	95	90	86	100	94	89	85	91	87	84		88	85	82		79
4	96	88	82	78	94	87	82	78	85	80	77		83	79	76		73
5	91	82	76	72	89	81	76	71	79	74	71		78	73	70		68
6	86	77	71	66	85	76	70	66	74	69	65		73	68	65		63
7	82	72	66	61	80	71	65	61	70	65	61		69	64	60		58
8	77	67	61	57	76	67	61	57	66	60	56		65	60	56		55
9	73	63	57	53	72	63	57	53	62	56	53		61	56	53		51
10	70	60	54	50	69	59	53	50	58	53	49		58	53	49		48

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	136223	136223	136223	136223
5°	135208	134911	135357	135542
10°	131323	131498	131298	131473
15°	122078	125513	122500	119345
20°	110404	115484	111126	107123
25°	97037	102127	98194	93526
30°	79389	85770	81112	75202
35°	58951	66359	60201	54660
40°	39320	45680	40898	36905
45°	23061	27666	24404	22555
50°	11283	12953	12089	11609
55°	3677	3914	3914	3978
60°	863	962	888	987
65°	409	496	438	496
70°	252	289	252	289
75°	143	191	143	191
80°	71	71	71	71
85°	0	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 27666 cd/sqm

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	9.5
10°-20°	267.4	24.8
20°-30°	326.7	30.3
30°-40°	248.9	23.0
40°-50°	111.0	10.3
50°-60°	20.1	1.9
60°-70°	1.7	0.2
70°-80°	0.4	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.1	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	697.2	64.6
0°-40°	946.1	87.6
0°-60°	1077.2	99.7
0°-90°	1079.3	99.9
90°-120°	0.0	0.0
90°-150°	0.3	0.0
90°-180°	1.0	0.1
0°-180°	1080.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1104	1104	1104	1104	1104	
5°	1092	1090	1093	1095	1092	103
15°	956	983	959	935	956	267
25°	713	750	722	687	713	324
35°	392	441	400	363	392	245
45°	132	159	140	129	132	105
55°	17	18	18	18	17	19
65°	1	2	2	2	1	2
75°	0	0	0	0	0	0
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	1	1	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4
0.5°	1104.6	1104.2	1104.3	1104.6	1104.2	1104.3	1104.8	1104.6	1104.6	1104.2	1104.2
1°	1104.1	1104.1	1104.3	1104.6	1104.2	1104.3	1104.5	1104.5	1104.2	1103.8	1103.8
1.5°	1103.5	1103.7	1104.1	1104.2	1103.8	1104.1	1104.2	1104.1	1103.8	1103.2	1103.2
2°	1102.7	1103.1	1103.8	1103.7	1103.1	1103.4	1103.8	1103.7	1103.0	1102.2	1102.3
2.5°	1101.8	1102.7	1103.3	1102.8	1102.2	1102.4	1103.4	1103.1	1102.1	1101.0	1101.2
3°	1100.7	1102.2	1102.6	1101.7	1100.7	1101.3	1102.4	1102.4	1101.0	1099.3	1099.5
3.5°	1098.9	1101.5	1101.9	1100.2	1098.8	1099.7	1101.4	1101.5	1099.7	1097.3	1097.5
4°	1097.0	1100.5	1101.1	1098.3	1096.1	1097.6	1100.3	1100.5	1097.9	1094.8	1095.1
4.5°	1094.6	1099.1	1099.8	1095.8	1093.0	1095.0	1098.7	1099.1	1095.8	1091.9	1092.4
5°	1092.0	1097.5	1097.9	1092.8	1089.6	1091.8	1096.6	1097.6	1093.2	1088.7	1089.3
5.5°	1089.0	1095.3	1095.7	1089.7	1086.0	1088.5	1094.2	1095.5	1090.5	1085.2	1086.2
6°	1085.9	1092.5	1093.1	1086.1	1082.1	1084.8	1091.5	1092.9	1087.2	1081.6	1082.9
6.5°	1082.3	1089.4	1090.1	1082.6	1078.1	1081.0	1088.3	1089.9	1083.5	1077.9	1079.5
7°	1078.5	1085.7	1086.3	1078.7	1074.2	1077.1	1084.6	1086.3	1079.6	1073.9	1076.0
7.5°	1074.3	1081.4	1082.1	1074.5	1070.3	1073.0	1080.5	1082.2	1075.6	1070.0	1072.2
8°	1070.1	1076.7	1077.2	1070.0	1066.4	1068.7	1075.9	1077.2	1070.8	1065.9	1068.3
8.5°	1065.3	1071.4	1071.9	1065.2	1062.4	1064.5	1070.6	1072.1	1065.8	1061.3	1064.0
9°	1060.2	1065.5	1065.9	1060.3	1058.3	1059.8	1064.8	1066.1	1060.4	1056.7	1059.4
9.5°	1054.4	1059.0	1059.5	1054.9	1054.2	1054.8	1058.7	1059.5	1054.8	1051.5	1054.3
10°	1048.5	1052.1	1052.5	1049.2	1049.9	1049.5	1052.0	1052.5	1048.3	1046.1	1048.6
10.5°	1041.9	1044.6	1045.0	1043.1	1045.1	1044.1	1045.0	1044.8	1041.4	1039.6	1041.8
11°	1034.6	1036.8	1037.2	1036.6	1039.9	1038.0	1037.6	1037.2	1034.3	1032.8	1034.4
11.5°	1026.5	1028.2	1029.2	1029.8	1034.3	1031.8	1029.9	1029.0	1026.5	1025.2	1026.0
12°	1017.5	1019.4	1020.9	1022.2	1028.3	1025.1	1022.1	1020.6	1018.3	1016.4	1016.3
12.5°	1008.2	1010.3	1012.0	1015.0	1021.6	1017.8	1014.0	1011.9	1008.9	1006.9	1005.5
13°	998.4	1001.1	1003.2	1007.0	1014.8	1010.5	1005.6	1002.5	1000.1	997.0	994.9
13.5°	988.2	991.3	994.2	999.1	1007.3	1003.0	996.9	993.5	990.3	986.5	983.7
14°	977.6	981.3	985.1	990.4	999.3	994.8	988.1	983.8	980.4	975.8	972.1
14.5°	967.0	971.2	975.8	981.9	991.2	986.4	978.8	974.2	969.8	964.6	960.4
15°	956.0	961.0	966.0	972.9	982.9	977.5	969.9	964.4	959.3	953.3	948.2
15.5°	944.7	950.4	956.3	963.5	974.1	968.5	960.1	954.2	948.6	941.9	936.1
16°	933.5	939.6	946.1	953.4	964.8	959.0	950.3	943.7	937.5	930.0	924.2
16.5°	922.3	929.0	935.9	943.7	955.3	949.2	939.9	933.0	926.4	918.4	912.4
17°	910.9	918.1	925.4	933.5	945.5	939.2	929.4	922.2	915.0	906.7	900.6
17.5°	899.1	907.1	914.5	923.1	935.3	928.8	919.0	910.9	903.6	895.1	888.8
18°	887.4	895.8	903.5	912.2	924.5	918.4	908.0	899.8	892.3	883.5	877.1
18.5°	875.8	884.3	892.6	901.3	913.8	907.5	897.1	888.9	880.9	871.9	865.7
19°	864.3	872.9	881.8	890.3	902.5	896.5	886.3	877.7	869.1	860.6	854.2
19.5°	852.8	861.5	870.7	879.1	891.5	885.3	875.4	866.2	857.7	849.3	843.9
20°	841.1	849.9	859.6	867.8	879.8	874.3	864.5	855.3	846.6	838.1	832.9
20.5°	829.6	838.8	848.3	856.5	868.3	863.0	853.3	844.5	834.8	826.8	821.9
21°	818.0	827.0	836.9	844.8	856.6	851.2	842.1	833.3	823.1	815.6	810.8
21.5°	806.4	815.5	825.6	833.0	844.1	839.0	831.0	822.0	811.4	804.3	799.8
22°	794.3	803.5	813.8	820.6	831.5	826.8	819.8	810.8	799.7	793.0	787.6

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	782.1	791.9	802.0	808.7	819.0	814.6	808.7	799.5	789.0	780.6	775.6
23°	768.9	779.3	790.1	795.4	806.5	802.5	797.5	787.1	776.2	767.3	763.1
23.5°	755.7	766.9	777.9	782.9	793.9	790.3	784.9	774.8	763.0	754.0	749.7
24°	741.8	754.0	765.1	769.0	779.3	776.6	772.5	762.2	749.4	740.4	735.3
24.5°	727.7	740.6	752.7	755.7	765.2	763.0	759.8	749.1	735.5	725.8	720.3
25°	713.0	726.7	739.5	741.2	750.4	748.9	746.6	735.9	721.5	711.1	704.7
25.5°	698.5	712.8	726.0	727.5	736.1	734.7	733.1	722.4	707.3	695.9	688.4
26°	683.8	698.3	712.0	712.9	721.6	720.4	719.3	708.4	693.0	680.7	671.3
26.5°	669.5	683.7	697.6	698.2	706.9	705.7	704.8	693.7	678.2	665.0	654.2
27°	654.1	668.8	682.0	683.5	692.2	690.9	689.8	678.8	663.6	649.1	637.3
27.5°	639.0	653.8	665.9	668.4	677.9	676.3	674.4	663.6	648.9	632.7	620.9
28°	623.2	638.5	649.2	653.1	663.3	661.5	657.8	647.9	633.6	616.7	604.6
28.5°	607.5	622.0	631.7	637.4	648.5	646.1	641.3	631.8	618.1	600.3	588.3
29°	590.9	606.3	614.2	621.7	633.5	631.0	624.1	615.1	602.2	584.3	572.8
29.5°	574.7	589.8	595.9	605.9	618.2	615.4	606.5	597.8	585.9	568.4	557.2
30°	557.4	572.7	578.2	589.4	602.2	599.5	588.2	580.1	569.5	552.5	541.6
30.5°	540.8	554.8	560.6	572.3	586.2	582.9	570.3	562.1	552.4	536.5	525.7
31°	524.1	537.6	543.5	555.4	570.0	566.5	552.9	544.2	535.7	520.9	509.6
31.5°	507.7	519.4	526.9	538.4	553.9	549.8	536.0	526.1	518.4	505.3	493.5
32°	491.0	501.7	510.8	521.1	537.6	532.8	519.7	508.8	502.0	489.8	477.1
32.5°	475.0	483.8	494.7	504.1	521.8	516.0	503.4	491.9	484.3	474.0	460.8
33°	458.8	467.3	479.2	487.2	505.9	498.8	488.1	475.3	467.0	458.6	444.3
33.5°	442.6	449.7	463.5	470.3	489.8	481.8	472.4	459.2	449.7	442.6	427.7
34°	426.6	433.8	448.0	454.4	473.4	465.3	457.1	443.4	433.1	426.7	412.2
34.5°	410.4	417.2	431.9	438.5	457.0	449.1	441.6	427.8	416.0	410.5	396.2
35°	391.5	401.3	416.0	423.1	440.7	433.2	426.1	412.7	399.8	394.1	381.4
35.5°	376.5	386.0	400.5	408.1	424.4	417.5	410.3	397.1	383.9	378.0	366.9
36°	361.5	370.7	385.4	393.7	407.7	402.2	394.8	381.4	368.8	362.2	352.8
36.5°	346.5	355.3	370.2	378.8	391.5	386.6	379.2	365.9	353.0	346.6	338.4
37°	331.5	340.0	355.0	363.8	375.2	371.6	363.8	350.5	338.0	331.4	324.8
37.5°	315.9	324.7	339.8	348.9	359.3	356.6	348.5	334.9	323.4	316.2	310.8
38°	300.7	310.8	324.6	333.9	343.7	341.9	334.3	320.1	309.0	301.9	297.0
38.5°	286.0	296.5	310.6	319.1	328.1	327.1	319.9	305.7	294.8	287.8	283.1
39°	271.9	283.0	297.1	304.9	313.0	313.2	306.3	291.5	281.1	274.1	269.7
39.5°	257.8	269.4	283.3	290.6	298.2	298.6	292.8	278.1	267.4	260.1	256.3
40°	244.2	256.4	269.8	276.6	283.7	284.8	279.4	265.2	254.0	246.7	243.2
40.5°	231.3	243.8	256.7	262.9	269.7	270.3	266.0	252.2	240.7	233.5	230.3
41°	218.7	231.2	243.5	249.6	255.8	256.8	252.9	239.7	227.8	220.7	217.9
41.5°	206.3	218.9	230.3	236.6	242.6	243.2	239.8	227.6	215.4	208.2	206.1
42°	194.7	207.4	218.0	224.1	229.6	230.2	226.9	215.9	203.4	195.8	194.7
42.5°	183.4	195.7	205.5	211.6	217.1	217.2	214.0	204.1	191.9	184.2	183.1
43°	172.4	184.4	193.5	198.9	204.7	204.7	201.5	192.8	180.8	172.9	171.9
43.5°	161.6	172.9	181.7	186.7	192.6	192.3	189.4	181.5	169.7	162.1	160.7
44°	151.6	162.1	170.9	174.8	180.7	180.7	177.8	170.7	159.5	151.8	150.4
44.5°	141.7	151.6	159.9	163.2	169.4	168.9	166.3	159.8	149.4	141.9	139.6

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	132.2	141.6	149.5	151.9	158.6	157.9	155.4	149.6	139.9	132.4	129.6
45.5°	123.1	131.7	139.5	140.7	147.7	146.7	144.9	139.5	130.6	123.2	119.8
46°	114.7	122.4	129.5	130.3	137.4	136.3	134.6	129.9	121.4	114.6	111.0
46.5°	106.3	113.2	119.8	120.1	127.2	125.9	124.9	120.3	113.0	107.0	103.1
47°	98.5	104.9	110.5	110.6	117.8	116.1	115.2	111.3	105.5	99.5	95.3
47.5°	90.8	96.5	101.4	101.3	109.2	107.6	106.7	103.3	98.0	91.9	87.4
48°	83.9	88.9	92.8	92.7	100.6	99.1	98.3	95.3	90.5	84.4	79.6
48.5°	77.0	81.2	84.5	84.5	92.0	90.6	89.8	87.4	83.0	76.8	73.2
49°	70.7	74.3	76.6	76.9	83.4	82.1	81.4	79.4	75.5	70.5	67.4
49.5°	64.7	67.7	69.1	69.7	74.9	73.6	73.0	71.5	69.1	64.5	62.0
50°	58.8	61.4	62.0	62.8	67.5	66.6	65.9	64.8	63.0	59.0	57.0
50.5°	53.2	55.1	55.6	56.3	60.4	59.8	59.2	58.5	57.2	53.7	52.2
51°	48.2	49.7	49.7	50.3	54.1	53.7	53.1	52.5	51.7	48.9	47.7
51.5°	43.3	44.4	44.1	44.7	48.0	47.9	47.5	47.0	46.5	44.3	43.5
52°	38.8	39.5	39.1	39.6	42.4	42.5	42.1	41.8	41.5	39.9	39.5
52.5°	34.8	35.5	35.2	35.5	37.3	37.5	37.2	37.0	36.8	35.7	35.5
53°	30.9	31.5	31.2	31.5	32.6	32.9	32.6	32.4	32.4	31.7	31.7
53.5°	27.0	27.6	27.2	27.4	28.2	28.5	28.4	28.3	28.4	27.9	28.2
54°	23.1	23.6	23.2	23.3	24.4	24.7	24.7	24.4	24.6	24.4	24.7
54.5°	19.9	19.6	19.3	19.3	21.0	21.3	21.3	21.0	21.2	21.2	21.6
55°	17.1	16.8	16.5	16.6	18.2	18.5	18.4	18.1	18.2	18.3	18.7
55.5°	14.6	14.2	14.0	13.9	15.5	15.8	15.8	15.5	15.6	15.7	16.1
56°	12.1	11.6	11.4	11.4	13.0	13.1	13.1	13.8	13.6	13.9	13.5
56.5°	9.8	9.4	9.2	9.2	11.5	11.6	11.6	12.1	11.7	12.2	11.8
57°	7.9	7.6	7.5	7.6	9.9	10.1	10.1	10.4	9.8	10.4	10.2
57.5°	6.5	6.3	6.2	6.3	8.4	8.6	8.6	8.7	7.9	8.7	8.6
58°	5.5	5.4	5.3	5.4	6.9	7.2	7.1	7.0	6.0	6.9	7.0
58.5°	4.8	4.6	4.6	4.7	5.4	5.7	5.6	5.4	5.2	5.2	5.4
59°	4.2	4.0	4.0	4.1	4.8	5.0	4.9	4.7	4.6	4.5	4.7
59.5°	3.8	3.7	3.7	3.8	4.3	4.5	4.4	4.2	4.0	4.0	4.1
60°	3.5	3.4	3.4	3.5	3.9	4.0	3.9	3.7	3.6	3.6	3.7
60.5°	3.1	3.0	3.0	3.1	3.5	3.6	3.6	3.4	3.2	3.2	3.3
61°	2.8	2.7	2.7	2.8	3.2	3.3	3.2	3.0	2.9	2.9	3.0
61.5°	2.5	2.5	2.5	2.6	2.9	3.0	3.0	2.8	2.7	2.6	2.7
62°	2.3	2.3	2.3	2.4	2.7	2.8	2.7	2.5	2.4	2.4	2.5
62.5°	2.1	2.1	2.1	2.2	2.4	2.5	2.5	2.3	2.2	2.2	2.3
63°	2.0	1.9	1.9	2.0	2.3	2.3	2.3	2.1	2.1	2.0	2.1
63.5°	1.8	1.8	1.8	1.8	2.1	2.2	2.1	2.0	1.9	1.9	1.9
64°	1.7	1.6	1.6	1.7	1.9	2.0	2.0	1.8	1.8	1.7	1.8
64.5°	1.5	1.5	1.5	1.6	1.8	1.9	1.8	1.7	1.6	1.6	1.7
65°	1.4	1.4	1.4	1.5	1.7	1.7	1.7	1.6	1.5	1.5	1.5
65.5°	1.3	1.3	1.3	1.4	1.5	1.6	1.6	1.5	1.4	1.4	1.4
66°	1.2	1.2	1.2	1.3	1.4	1.5	1.5	1.4	1.3	1.3	1.3
66.5°	1.1	1.1	1.1	1.2	1.3	1.4	1.4	1.3	1.2	1.2	1.2
67°	1.0	1.0	1.0	1.1	1.2	1.3	1.3	1.2	1.1	1.1	1.1

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.1	1.0	1.0	1.1
68°	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.0	1.0	1.0	1.0
68.5°	0.8	0.8	0.8	0.9	1.0	1.1	1.0	0.9	0.9	0.9	0.9
69°	0.8	0.8	0.8	0.8	0.9	1.0	1.0	0.9	0.8	0.8	0.9
69.5°	0.7	0.7	0.7	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.8
70°	0.7	0.7	0.7	0.7	0.8	0.9	0.8	0.8	0.7	0.7	0.7
70.5°	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7
71°	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
71.5°	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6
72°	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5
72.5°	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5
73°	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
73.5°	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4
74°	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
74.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4
75°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3
75.5°	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
76°	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
76.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3
77°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78°	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
78.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
79°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
79.5°	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	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
88.5°	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
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.5°	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
91.5°	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
92.5°	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
93.5°	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
94.5°	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
95.5°	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
96.5°	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
97.5°	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
98.5°	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
99.5°	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
100.5°	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
101.5°	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
102.5°	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
103.5°	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
104.5°	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
105.5°	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
106.5°	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
107.5°	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
108.5°	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
109.5°	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
110.5°	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
111.5°	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

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	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
113.5°	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
114.5°	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
115.5°	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
116.5°	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
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
126°	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
126.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
127°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
127.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
128°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
128.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
129°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
129.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
130°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
130.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
131°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
131.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
132°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
132.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
133°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
133.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
134°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
134.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
135°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
136°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
136.5°	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
137°	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
137.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
138°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
138.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
139°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
139.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
140°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
140.5°	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
141°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
141.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
142°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
142.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
143°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
143.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
144°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
144.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145.5°	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
146°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
146.5°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
147°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
147.5°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
148°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
148.5°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
149°	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
149.5°	0.3	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
150°	0.3	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
150.5°	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
151°	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.5
151.5°	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
152°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
152.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
153°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
153.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
154°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
154.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
156°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
156.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
157°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

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	0.5	0.5	0.5	0.5	0.5	0.5	0.5
158°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
158.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.6	0.6	0.6
159°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.6
159.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
160°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
160.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
161°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
161.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
162°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
162.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
163°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
163.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
164°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
164.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
165°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
165.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
166°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
166.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
167°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
167.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
168.5°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
169°	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
169.5°	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.6	0.6
170°	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.6
170.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.6	0.6	0.5	0.5
171°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
171.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
172°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
172.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
173°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
173.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
174°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
174.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
175°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
175.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
176°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
176.5°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
177°	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
177.5°	0.4	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
178°	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	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: P1590513
CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

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: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1104.4	1104.4	1104.4	1104.4	1104.4	1104.4
0.5°	1104.5	1103.7	1104.1	1104.5	1104.4	1104.6
1°	1104.2	1103.4	1103.8	1104.0	1103.9	1104.1
1.5°	1103.7	1102.9	1103.4	1103.3	1103.1	1103.5
2°	1103.1	1102.3	1102.5	1102.2	1102.1	1102.7
2.5°	1102.1	1101.7	1101.7	1101.0	1100.9	1101.8
3°	1101.1	1101.0	1100.7	1099.3	1098.9	1100.7
3.5°	1099.6	1099.8	1099.2	1097.4	1096.7	1098.9
4°	1098.0	1098.4	1097.6	1095.1	1094.3	1097.0
4.5°	1095.7	1096.7	1095.7	1092.5	1091.6	1094.6
5°	1093.4	1094.7	1093.5	1089.6	1088.5	1092.0
5.5°	1091.0	1092.5	1091.1	1086.7	1085.3	1089.0
6°	1088.2	1089.8	1088.5	1083.7	1081.8	1085.9
6.5°	1085.1	1087.0	1085.5	1080.6	1078.6	1082.3
7°	1081.8	1083.4	1082.3	1077.3	1074.9	1078.5
7.5°	1078.2	1079.6	1078.4	1074.0	1071.4	1074.3
8°	1074.1	1075.2	1074.2	1070.0	1067.5	1070.1
8.5°	1069.9	1070.1	1069.4	1066.0	1063.5	1065.3
9°	1064.7	1064.1	1063.9	1061.1	1058.9	1060.2
9.5°	1059.1	1057.5	1057.6	1055.9	1053.9	1054.4
10°	1052.5	1049.7	1050.4	1049.5	1048.3	1048.5
10.5°	1044.9	1041.0	1041.9	1042.7	1042.1	1041.9
11°	1036.5	1031.3	1032.6	1034.6	1035.0	1034.6
11.5°	1026.5	1020.3	1022.0	1025.3	1027.0	1026.5
12°	1015.9	1008.6	1010.8	1014.9	1017.6	1017.5
12.5°	1004.6	996.9	999.1	1004.1	1007.5	1008.2
13°	993.0	984.6	986.8	992.6	997.3	998.4
13.5°	981.1	972.7	974.6	980.7	986.4	988.2
14°	968.9	959.9	962.2	968.6	975.0	977.6
14.5°	956.5	947.4	949.7	956.7	963.5	967.0
15°	944.1	934.6	937.0	944.1	951.7	956.0
15.5°	931.9	922.3	924.7	932.3	939.7	944.7
16°	919.9	910.1	912.8	920.1	927.7	933.5
16.5°	907.8	898.5	900.9	908.3	916.4	922.3
17°	896.1	886.4	888.8	896.7	904.5	910.9
17.5°	884.6	874.6	877.5	884.8	893.0	899.1
18°	873.0	862.6	865.5	873.1	881.0	887.4
18.5°	861.2	850.9	853.7	861.7	869.4	875.8
19°	850.0	839.2	842.5	850.1	857.5	864.3
19.5°	839.1	827.3	831.1	838.8	846.0	852.8
20°	828.2	816.1	820.0	827.4	834.2	841.1
20.5°	817.3	804.5	808.6	816.4	822.8	829.6
21°	806.4	793.4	797.4	804.8	811.2	818.0
21.5°	795.5	781.9	786.1	793.4	799.4	806.4
22°	784.3	770.6	774.9	781.8	787.9	794.3

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	772.7	758.9	763.0	770.2	775.6	782.1
23°	760.1	746.4	750.3	757.7	762.7	768.9
23.5°	746.4	732.8	737.0	744.4	749.6	755.7
24°	732.5	718.2	722.8	730.2	735.5	741.8
24.5°	718.2	702.3	708.1	715.0	720.7	727.7
25°	703.1	687.2	692.7	699.3	705.1	713.0
25.5°	687.3	671.7	677.1	682.9	689.5	698.5
26°	671.5	656.5	661.3	666.1	673.5	683.8
26.5°	655.1	640.5	645.2	649.2	657.0	669.5
27°	638.2	625.4	629.0	632.0	639.8	654.1
27.5°	621.1	610.0	612.2	614.8	623.1	639.0
28°	603.5	594.1	595.4	597.9	607.1	623.2
28.5°	586.2	578.1	578.9	581.1	591.2	607.5
29°	569.5	561.8	562.4	564.8	575.5	590.9
29.5°	553.0	545.0	545.8	548.7	560.1	574.7
30°	536.5	528.0	528.8	532.9	545.0	557.4
30.5°	520.0	510.4	511.9	516.9	529.4	540.8
31°	504.0	493.6	495.0	500.9	513.8	524.1
31.5°	487.8	476.3	478.4	485.0	498.0	507.7
32°	472.0	459.5	462.0	469.0	481.6	491.0
32.5°	456.3	443.1	445.8	453.0	465.4	475.0
33°	440.5	426.9	430.0	436.9	448.9	458.8
33.5°	424.5	410.4	414.6	420.5	432.3	442.6
34°	408.9	392.2	400.1	404.9	415.6	426.6
34.5°	393.3	377.5	384.9	390.0	399.6	410.4
35°	378.2	363.0	369.8	375.2	384.4	391.5
35.5°	363.0	348.4	354.7	360.3	369.2	376.5
36°	348.6	333.8	339.5	345.5	354.1	361.5
36.5°	333.9	319.6	324.4	330.6	338.9	346.5
37°	319.6	305.7	310.0	316.7	323.7	331.5
37.5°	305.4	292.1	295.9	302.8	309.7	315.9
38°	291.6	279.2	281.9	289.5	295.7	300.7
38.5°	278.2	266.4	268.3	275.9	281.6	286.0
39°	265.1	254.0	256.0	262.8	268.1	271.9
39.5°	252.2	241.5	243.5	249.4	254.5	257.8
40°	239.3	229.2	231.2	236.5	240.9	244.2
40.5°	227.1	217.7	219.4	223.7	227.3	231.3
41°	215.1	206.5	208.1	211.3	214.6	218.7
41.5°	203.5	195.6	197.0	199.4	201.8	206.3
42°	192.2	185.2	186.2	187.8	189.9	194.7
42.5°	181.1	175.1	175.7	176.2	178.0	183.4
43°	170.5	165.4	165.5	165.7	167.0	172.4
43.5°	160.3	155.9	155.7	154.8	156.2	161.6
44°	150.6	146.7	146.3	144.5	145.8	151.6
44.5°	141.2	137.8	137.3	134.4	135.7	141.7

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	132.0	129.3	128.5	124.9	126.0	132.2
45.5°	123.3	121.1	120.2	115.7	117.0	123.1
46°	115.0	113.3	112.2	107.0	108.3	114.7
46.5°	107.1	105.6	104.6	98.8	99.9	106.3
47°	99.9	98.2	97.2	91.2	92.0	98.5
47.5°	92.7	91.2	90.1	84.1	84.8	90.8
48°	85.5	84.4	83.3	77.5	78.1	83.9
48.5°	78.3	78.1	76.9	71.4	71.8	77.0
49°	72.0	72.0	70.8	65.8	65.8	70.7
49.5°	66.0	66.1	65.0	60.7	60.6	64.7
50°	60.5	60.5	59.4	55.8	55.6	58.8
50.5°	55.2	55.1	54.2	51.1	50.9	53.2
51°	50.2	50.0	49.3	46.8	46.3	48.2
51.5°	45.6	45.1	44.6	42.6	42.2	43.3
52°	41.2	40.6	40.1	38.5	38.6	38.8
52.5°	36.9	36.7	36.4	34.9	34.8	34.8
53°	32.9	32.9	32.7	31.3	31.1	30.9
53.5°	29.2	29.1	28.9	27.8	27.4	27.0
54°	25.6	25.2	25.2	24.2	23.7	23.1
54.5°	22.2	21.4	21.5	21.1	20.5	19.9
55°	19.3	18.5	18.6	18.3	17.7	17.1
55.5°	16.7	15.9	16.1	15.8	15.3	14.6
56°	14.1	13.3	13.5	13.3	12.8	12.1
56.5°	12.4	11.0	11.2	10.9	10.4	9.8
57°	10.7	9.0	9.2	8.9	8.5	7.9
57.5°	9.1	7.5	7.7	7.4	7.0	6.5
58°	7.4	6.4	6.6	6.3	5.9	5.5
58.5°	5.7	5.5	5.7	5.5	5.1	4.8
59°	5.0	4.9	5.0	4.8	4.5	4.2
59.5°	4.4	4.3	4.5	4.3	4.0	3.8
60°	3.9	4.0	4.0	4.0	3.7	3.5
60.5°	3.5	3.7	3.7	3.7	3.3	3.1
61°	3.2	3.4	3.4	3.3	3.0	2.8
61.5°	2.9	3.1	3.1	3.0	2.7	2.5
62°	2.7	2.7	2.8	2.7	2.5	2.3
62.5°	2.4	2.5	2.6	2.5	2.3	2.1
63°	2.2	2.3	2.4	2.3	2.1	2.0
63.5°	2.1	2.2	2.2	2.1	1.9	1.8
64°	1.9	2.0	2.1	2.0	1.8	1.7
64.5°	1.8	1.8	1.9	1.8	1.6	1.5
65°	1.6	1.7	1.8	1.7	1.5	1.4
65.5°	1.5	1.6	1.7	1.6	1.4	1.3
66°	1.4	1.5	1.5	1.5	1.3	1.2
66.5°	1.3	1.4	1.4	1.4	1.2	1.1
67°	1.2	1.3	1.3	1.3	1.1	1.0

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	1.1	1.2	1.2	1.2	1.0	1.0
68°	1.1	1.1	1.2	1.1	1.0	0.9
68.5°	1.0	1.0	1.1	1.0	0.9	0.8
69°	0.9	1.0	1.0	0.9	0.8	0.8
69.5°	0.9	0.9	0.9	0.9	0.8	0.7
70°	0.8	0.8	0.9	0.8	0.7	0.7
70.5°	0.7	0.8	0.8	0.8	0.7	0.6
71°	0.7	0.7	0.7	0.7	0.6	0.6
71.5°	0.6	0.7	0.7	0.6	0.6	0.5
72°	0.6	0.6	0.6	0.6	0.5	0.5
72.5°	0.5	0.6	0.6	0.6	0.5	0.4
73°	0.5	0.5	0.5	0.5	0.5	0.4
73.5°	0.5	0.5	0.5	0.5	0.4	0.4
74°	0.4	0.4	0.5	0.4	0.4	0.3
74.5°	0.4	0.4	0.4	0.4	0.3	0.3
75°	0.4	0.4	0.4	0.4	0.3	0.3
75.5°	0.3	0.3	0.4	0.3	0.3	0.3
76°	0.3	0.3	0.3	0.3	0.3	0.2
76.5°	0.3	0.3	0.3	0.3	0.2	0.2
77°	0.2	0.3	0.3	0.3	0.2	0.2
77.5°	0.2	0.2	0.2	0.2	0.2	0.2
78°	0.2	0.2	0.2	0.2	0.2	0.2
78.5°	0.2	0.2	0.2	0.2	0.2	0.1
79°	0.2	0.2	0.2	0.2	0.1	0.1
79.5°	0.1	0.1	0.2	0.1	0.1	0.1
80°	0.1	0.1	0.1	0.1	0.1	0.1
80.5°	0.1	0.1	0.1	0.1	0.1	0.1
81°	0.1	0.1	0.1	0.1	0.1	0.1
81.5°	0.1	0.1	0.1	0.1	0.1	0.0
82°	0.1	0.1	0.1	0.1	0.0	0.0
82.5°	0.0	0.1	0.1	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0	0.0
83.5°	0.0	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0	0.0
84.5°	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0
85.5°	0.0	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0	0.0
86.5°	0.0	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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
88.5°	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
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	0.0	0.0	0.0
90.5°	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
91.5°	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
92.5°	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
93.5°	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
94.5°	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
95.5°	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
96.5°	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
97.5°	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
98.5°	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
99.5°	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
100.5°	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
101.5°	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
102.5°	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
103.5°	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
104.5°	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
105.5°	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
106.5°	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
107.5°	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
108.5°	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
109.5°	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
110.5°	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
111.5°	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

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	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
113.5°	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
114.5°	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
115.5°	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
116.5°	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
117.5°	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
118.5°	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
119.5°	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0
120.5°	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
121.5°	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0
123.5°	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.1	0.1	0.0	0.0	0.0
124.5°	0.0	0.1	0.1	0.1	0.0	0.0
125°	0.0	0.1	0.1	0.1	0.1	0.1
125.5°	0.1	0.1	0.1	0.1	0.1	0.1
126°	0.1	0.1	0.1	0.1	0.1	0.1
126.5°	0.1	0.1	0.1	0.1	0.1	0.1
127°	0.1	0.1	0.1	0.1	0.1	0.1
127.5°	0.1	0.1	0.1	0.1	0.1	0.1
128°	0.1	0.1	0.1	0.1	0.1	0.1
128.5°	0.1	0.1	0.1	0.1	0.1	0.1
129°	0.1	0.1	0.1	0.1	0.1	0.1
129.5°	0.1	0.1	0.1	0.1	0.1	0.1
130°	0.1	0.1	0.1	0.1	0.1	0.1
130.5°	0.1	0.1	0.1	0.1	0.1	0.1
131°	0.1	0.1	0.1	0.1	0.1	0.1
131.5°	0.1	0.1	0.1	0.1	0.1	0.1
132°	0.1	0.1	0.1	0.1	0.1	0.1
132.5°	0.1	0.1	0.1	0.1	0.1	0.1
133°	0.1	0.1	0.1	0.1	0.1	0.1
133.5°	0.2	0.1	0.1	0.1	0.1	0.1
134°	0.2	0.1	0.1	0.1	0.1	0.1
134.5°	0.2	0.1	0.1	0.1	0.1	0.1

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
135°	0.2	0.1	0.1	0.1	0.1	0.1
135.5°	0.2	0.1	0.1	0.1	0.1	0.1
136°	0.2	0.1	0.1	0.1	0.1	0.1
136.5°	0.2	0.2	0.2	0.2	0.1	0.1
137°	0.2	0.2	0.2	0.2	0.2	0.2
137.5°	0.2	0.2	0.2	0.2	0.2	0.2
138°	0.2	0.2	0.2	0.2	0.2	0.2
138.5°	0.2	0.2	0.2	0.2	0.2	0.2
139°	0.2	0.2	0.2	0.2	0.2	0.2
139.5°	0.2	0.2	0.2	0.2	0.2	0.2
140°	0.3	0.2	0.2	0.2	0.2	0.2
140.5°	0.3	0.2	0.2	0.2	0.2	0.2
141°	0.3	0.2	0.2	0.2	0.2	0.2
141.5°	0.3	0.2	0.2	0.2	0.2	0.2
142°	0.3	0.2	0.2	0.2	0.2	0.2
142.5°	0.3	0.2	0.2	0.2	0.2	0.2
143°	0.3	0.2	0.2	0.2	0.2	0.2
143.5°	0.3	0.2	0.2	0.2	0.2	0.2
144°	0.3	0.2	0.2	0.2	0.2	0.2
144.5°	0.3	0.2	0.2	0.2	0.2	0.2
145°	0.3	0.2	0.2	0.2	0.2	0.2
145.5°	0.4	0.2	0.2	0.2	0.2	0.2
146°	0.4	0.2	0.2	0.2	0.2	0.2
146.5°	0.4	0.2	0.2	0.2	0.2	0.2
147°	0.4	0.2	0.2	0.2	0.2	0.2
147.5°	0.4	0.2	0.2	0.2	0.2	0.2
148°	0.4	0.2	0.2	0.2	0.2	0.2
148.5°	0.4	0.2	0.2	0.2	0.2	0.2
149°	0.4	0.2	0.2	0.3	0.2	0.2
149.5°	0.4	0.3	0.3	0.3	0.3	0.3
150°	0.4	0.3	0.3	0.3	0.3	0.3
150.5°	0.4	0.3	0.3	0.3	0.3	0.3
151°	0.5	0.3	0.3	0.3	0.3	0.3
151.5°	0.5	0.3	0.3	0.3	0.3	0.3
152°	0.5	0.3	0.3	0.3	0.3	0.3
152.5°	0.5	0.3	0.3	0.3	0.3	0.3
153°	0.5	0.3	0.3	0.3	0.3	0.3
153.5°	0.5	0.3	0.3	0.3	0.3	0.3
154°	0.5	0.3	0.3	0.3	0.3	0.3
154.5°	0.5	0.3	0.3	0.3	0.3	0.3
155°	0.5	0.3	0.3	0.3	0.3	0.3
155.5°	0.5	0.3	0.3	0.3	0.3	0.3
156°	0.5	0.3	0.3	0.3	0.3	0.3
156.5°	0.5	0.3	0.3	0.3	0.3	0.3
157°	0.5	0.3	0.3	0.3	0.3	0.3

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
157.5°	0.5	0.3	0.3	0.3	0.3	0.3
158°	0.5	0.3	0.3	0.3	0.3	0.3
158.5°	0.5	0.3	0.3	0.3	0.3	0.3
159°	0.6	0.3	0.3	0.3	0.3	0.3
159.5°	0.6	0.3	0.3	0.3	0.3	0.3
160°	0.6	0.3	0.3	0.3	0.3	0.3
160.5°	0.6	0.3	0.3	0.3	0.3	0.3
161°	0.6	0.3	0.3	0.3	0.3	0.3
161.5°	0.6	0.3	0.3	0.3	0.3	0.3
162°	0.6	0.3	0.3	0.3	0.3	0.3
162.5°	0.6	0.3	0.3	0.3	0.3	0.3
163°	0.6	0.3	0.3	0.3	0.3	0.3
163.5°	0.6	0.3	0.3	0.3	0.3	0.3
164°	0.6	0.3	0.3	0.3	0.3	0.3
164.5°	0.6	0.3	0.3	0.3	0.3	0.3
165°	0.6	0.3	0.3	0.3	0.3	0.3
165.5°	0.6	0.3	0.3	0.3	0.3	0.3
166°	0.6	0.3	0.3	0.3	0.3	0.3
166.5°	0.6	0.3	0.3	0.3	0.3	0.3
167°	0.6	0.3	0.3	0.3	0.3	0.3
167.5°	0.6	0.3	0.3	0.3	0.3	0.3
168°	0.6	0.3	0.3	0.3	0.3	0.3
168.5°	0.6	0.3	0.3	0.3	0.3	0.3
169°	0.6	0.3	0.3	0.3	0.3	0.3
169.5°	0.6	0.3	0.3	0.3	0.3	0.3
170°	0.6	0.3	0.3	0.3	0.3	0.3
170.5°	0.5	0.3	0.3	0.3	0.3	0.3
171°	0.5	0.3	0.3	0.3	0.3	0.3
171.5°	0.5	0.3	0.3	0.3	0.3	0.3
172°	0.5	0.3	0.3	0.3	0.3	0.3
172.5°	0.5	0.3	0.3	0.3	0.3	0.3
173°	0.5	0.3	0.3	0.3	0.3	0.3
173.5°	0.5	0.3	0.3	0.3	0.3	0.3
174°	0.5	0.3	0.3	0.3	0.3	0.3
174.5°	0.5	0.3	0.3	0.3	0.3	0.3
175°	0.5	0.3	0.3	0.3	0.3	0.3
175.5°	0.5	0.3	0.3	0.3	0.3	0.3
176°	0.5	0.3	0.3	0.3	0.3	0.3
176.5°	0.5	0.3	0.3	0.3	0.3	0.3
177°	0.5	0.3	0.3	0.4	0.3	0.3
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: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

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

TEST NUMBER: P1590513

CATALOG NUMBER: HCDLS510CSD4TRH-HI-3000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	2.6	3.6	2.9	3.9	4.2	3.6	4.6	3.9	4.9	5.2
	3H	2.5	3.4	2.9	3.7	4.1	3.5	4.4	3.9	4.8	5.1
	4H	2.4	3.3	2.8	3.6	4.0	3.4	4.3	3.8	4.6	5.0
	6H	2.3	3.1	2.7	3.5	3.9	3.3	4.1	3.8	4.5	4.9
	8H	2.3	3.0	2.7	3.4	3.8	3.3	4.0	3.7	4.4	4.8
	12H	2.2	2.9	2.7	3.3	3.7	3.2	3.9	3.7	4.3	4.7
4H	2H	2.4	3.2	2.8	3.6	4.0	3.4	4.2	3.8	4.6	5.0
	3H	2.3	3.0	2.8	3.4	3.8	3.3	4.0	3.7	4.4	4.8
	4H	2.3	2.9	2.7	3.3	3.7	3.2	3.8	3.7	4.3	4.7
	6H	2.2	2.7	2.6	3.1	3.6	3.1	3.7	3.6	4.1	4.6
	8H	2.1	2.6	2.6	3.0	3.5	3.1	3.6	3.6	4.0	4.5
	12H	2.0	2.5	2.5	2.9	3.4	3.0	3.4	3.5	3.9	4.4
8H	4H	2.1	2.6	2.6	3.0	3.5	3.1	3.6	3.6	4.0	4.5
	6H	2.0	2.4	2.5	2.9	3.4	3.0	3.4	3.5	3.9	4.3
	8H	1.9	2.3	2.5	2.8	3.3	2.9	3.2	3.4	3.8	4.3
	12H	1.9	2.2	2.4	2.7	3.2	2.8	3.1	3.4	3.6	4.2
12H	4H	2.0	2.5	2.5	2.9	3.4	3.0	3.4	3.5	3.9	4.4
	6H	1.9	2.3	2.5	2.7	3.3	2.9	3.2	3.4	3.7	4.3
	8H	1.9	2.2	2.4	2.7	3.2	2.8	3.1	3.4	3.6	4.2

(END OF REPORT)