

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: METALUX

Report Number: P1214046

Luminaire Tested: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214046
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U
Description: 2FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

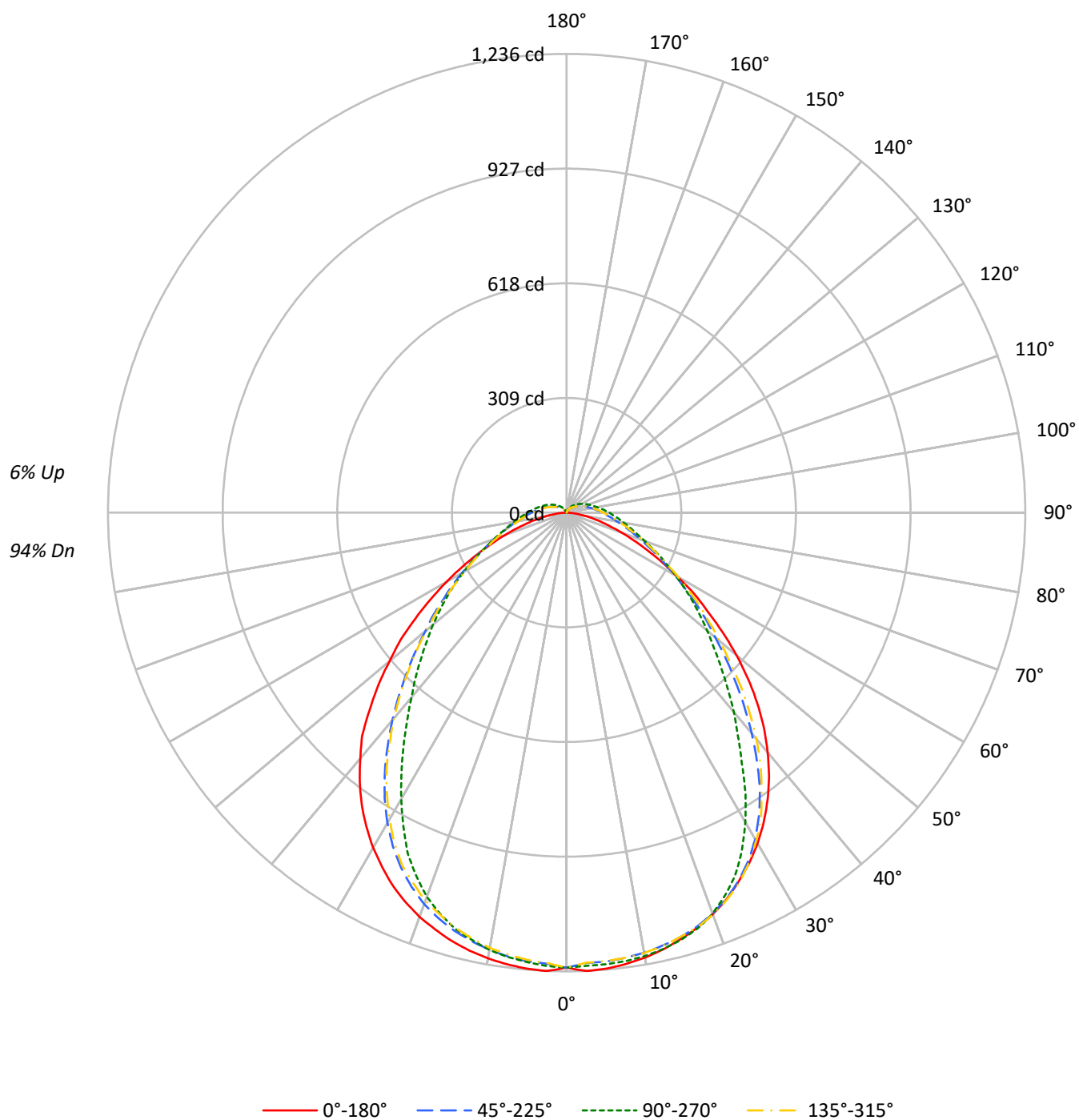
Lumens per Lamp: N/A
Luminaire Lumens: 3103.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.12')
CIE Type: Direct

Input Watts (W): 27
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: 24 FT

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	19816	19816	19816	19816
5°	19903	19186	19903	19101
10°	19761	18676	19794	18416
15°	19578	18117	19667	17646
20°	19371	17400	19486	16666
25°	19002	16336	19213	15374
30°	18538	14772	18781	13676
35°	17848	12855	18192	11971
40°	16887	11242	17332	10432
45°	15639	9773	16147	9213
50°	13968	8589	14583	8154
55°	12003	7583	12875	7200
60°	10013	6658	10917	6276
65°	8120	5888	8940	5458
70°	6364	5225	7126	4832
75°	4881	4825	5499	4437
80°	3381	4655	3986	4254
85°	1893	4679	2553	4301

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 16147 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.2	3.7
10°-20°	333.3	10.7
20°-30°	494.0	15.9
30°-40°	548.8	17.7
40°-50°	497.5	16.0
50°-60°	385.5	12.4
60°-70°	261.8	8.4
70°-80°	166.5	5.4
80°-90°	106.5	3.4
90°-100°	71.8	2.3
100°-110°	49.2	1.6
110°-120°	32.8	1.1
120°-130°	20.4	0.7
130°-140°	11.3	0.4
140°-150°	5.3	0.2
150°-160°	1.9	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	943.6	30.4
0°-40°	1492.4	48.1
0°-60°	2375.4	76.6
0°-90°	2910.2	93.8
90°-120°	153.8	5.0
90°-150°	190.7	6.1
90°-180°	193.0	6.2
0°-180°	3103.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1226	1226	1226	1226	1226	
5°	1234	1221	1234	1216	1234	117
15°	1190	1192	1195	1161	1190	336
25°	1097	1076	1109	1013	1097	505
35°	944	823	962	766	944	589
45°	727	588	751	554	727	558
55°	464	413	498	392	464	418
65°	241	278	265	258	241	241
75°	96	186	109	171	96	104
85°	18	134	24	123	18	21
90°	0	115	1	105	0	1
95°	1	98	0	92	1	1
105°	1	72	0	68	1	1
115°	1	55	0	51	1	1
125°	1	40	1	36	1	1
135°	1	28	1	23	1	1
145°	1	18	1	13	1	0
155°	1	10	1	5	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1236.2	1234.9	1233.5	1231.5	1233.5	1238.9	1235.6	1228.1	1226.8	1214.7	1220.1
5°	1233.5	1231.5	1230.2	1228.1	1230.8	1237.6	1234.2	1227.5	1225.5	1214.0	1220.1
7.5°	1226.8	1225.5	1223.4	1223.4	1226.1	1232.9	1230.2	1222.8	1221.4	1209.9	1216.7
10°	1217.4	1216.7	1215.3	1215.3	1218.0	1226.1	1222.8	1216.0	1214.7	1203.9	1211.3
12.5°	1205.2	1205.9	1203.9	1203.9	1207.9	1216.0	1213.3	1205.9	1204.5	1195.1	1202.5
15°	1189.7	1190.4	1189.0	1189.7	1193.8	1203.2	1199.8	1193.1	1191.7	1184.3	1190.4
17.5°	1172.2	1172.8	1172.8	1172.2	1176.9	1186.3	1183.6	1177.6	1175.5	1169.5	1176.9
20°	1151.9	1151.9	1151.9	1151.9	1157.3	1166.8	1163.4	1158.7	1154.6	1149.9	1156.0
22.5°	1127.0	1126.3	1127.0	1129.0	1134.4	1141.8	1139.8	1134.4	1128.3	1125.6	1130.4
25°	1096.6	1098.7	1099.3	1101.4	1108.1	1114.2	1112.1	1106.7	1097.3	1095.3	1096.6
27.5°	1064.9	1066.3	1068.3	1067.6	1077.1	1083.1	1079.1	1074.4	1060.9	1058.9	1057.5
30°	1029.2	1031.2	1032.6	1031.9	1039.3	1046.1	1042.0	1035.9	1017.7	1016.4	1005.6
32.5°	988.7	990.7	992.1	992.1	1002.9	1005.6	998.2	989.4	969.8	965.1	955.7
35°	944.2	946.2	946.9	946.9	957.7	957.0	947.6	935.4	913.9	907.8	891.6
37.5°	896.3	897.7	898.3	902.4	907.1	903.1	890.9	875.4	859.2	842.4	824.8
40°	842.4	844.4	845.7	848.4	853.2	848.4	830.9	812.0	794.5	775.6	758.1
42.5°	787.1	793.1	791.8	791.1	793.8	781.0	767.5	745.9	728.4	708.8	691.3
45°	727.0	726.4	729.7	731.1	730.4	719.6	700.7	681.2	663.6	643.4	628.6
47.5°	663.6	663.0	665.7	667.0	663.0	651.5	636.7	614.4	599.6	582.0	570.6
50°	596.9	596.9	600.9	596.9	594.9	583.4	571.2	549.0	537.5	522.0	515.3
52.5°	530.1	536.2	532.1	530.8	528.8	517.3	507.9	489.6	480.2	473.5	465.4
55°	464.0	470.8	468.1	466.0	465.4	455.9	447.2	433.7	427.6	422.9	418.2
57.5°	408.0	407.4	406.0	404.0	404.7	397.2	388.5	381.1	378.4	376.3	377.7
60°	343.3	348.7	346.7	347.3	348.0	346.7	339.2	334.5	335.2	335.9	337.9
62.5°	290.0	294.7	298.1	295.4	296.8	298.8	294.7	293.4	296.1	298.8	301.5
65°	240.8	245.5	248.9	248.2	252.2	256.3	255.6	257.0	263.0	266.4	269.8
67.5°	196.3	201.0	205.7	206.4	212.4	218.5	221.2	225.9	232.7	237.4	241.4
70°	157.8	161.9	167.3	170.6	178.7	186.8	191.5	201.0	205.0	211.8	214.5
72.5°	123.4	126.8	134.2	142.3	149.1	159.2	168.6	176.7	182.8	190.2	193.6
75°	96.4	97.8	105.9	115.3	124.8	136.2	146.4	155.1	163.2	170.6	176.0
77.5°	70.8	72.8	80.3	93.1	103.9	116.0	127.5	136.9	145.7	153.1	160.5
80°	49.2	53.3	61.4	74.2	86.3	99.8	110.6	121.4	130.8	138.3	145.7
82.5°	31.7	35.1	46.5	59.4	72.2	85.7	97.1	107.9	118.0	126.1	132.9
85°	17.5	22.3	33.7	47.2	60.0	73.5	85.7	96.4	106.6	114.0	120.7
87.5°	6.7	13.5	24.3	37.1	49.9	62.7	75.5	85.7	95.8	103.9	109.9
90°	0.0	8.1	18.2	31.0	43.8	56.7	68.8	79.6	89.0	96.4	103.2
92.5°	0.7	5.4	14.2	25.0	37.1	49.2	60.7	71.5	80.9	88.4	94.4
95°	0.7	4.0	11.5	21.6	32.4	43.8	54.6	64.7	73.5	80.9	87.0
97.5°	0.7	2.7	9.4	18.9	28.3	39.8	49.9	59.4	67.4	74.9	79.6
100°	0.7	2.7	8.1	16.2	25.6	35.7	45.2	54.6	62.0	68.1	73.5
102.5°	0.7	2.0	6.7	14.2	22.9	31.7	41.1	49.9	56.7	62.7	68.1
105°	0.7	2.0	6.1	12.1	20.2	29.0	37.1	45.2	52.6	58.0	62.7
107.5°	0.7	1.3	5.4	10.1	17.5	26.3	34.4	41.1	47.9	53.3	58.0
110°	0.7	1.3	4.7	9.4	15.5	23.6	31.0	37.8	43.8	49.2	53.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.7	1.3	4.0	8.8	14.2	20.9	28.3	34.4	40.5	45.2	49.2
115°	0.7	1.3	4.0	8.1	12.8	18.2	25.0	31.7	36.4	41.8	45.2
117.5°	0.7	1.3	3.4	6.7	12.1	16.9	22.9	28.3	33.7	38.4	41.8
120°	0.7	1.3	3.4	6.1	10.8	15.5	20.2	25.6	31.0	34.4	37.8
122.5°	0.7	1.3	2.7	6.1	9.4	14.2	18.2	22.9	27.7	31.7	35.1
125°	0.7	1.3	2.7	5.4	8.8	12.8	16.9	20.2	25.0	28.3	31.7
127.5°	0.7	1.3	2.7	4.7	8.1	11.5	15.5	18.9	22.3	25.6	28.3
130°	0.7	1.3	2.0	4.0	7.4	10.1	13.5	17.5	20.2	22.9	25.6
132.5°	0.7	1.3	2.0	4.0	6.1	8.8	12.1	15.5	18.2	20.9	22.9
135°	0.7	1.3	2.0	3.4	5.4	8.1	10.1	13.5	16.2	18.9	20.9
137.5°	0.7	1.3	2.0	3.4	4.7	6.7	8.8	11.5	14.2	16.2	18.9
140°	0.7	1.3	2.0	2.7	4.0	6.1	8.1	9.4	12.1	14.2	16.2
142.5°	0.7	1.3	2.0	2.7	4.0	5.4	6.7	8.1	10.1	12.1	14.2
145°	0.7	1.3	2.0	2.7	3.4	4.7	6.1	7.4	8.1	10.1	11.5
147.5°	0.7	1.3	2.0	2.7	2.7	4.0	5.4	6.1	7.4	8.1	9.4
150°	0.7	1.3	2.0	2.0	2.7	3.4	4.7	5.4	6.1	7.4	8.1
152.5°	0.7	1.3	2.0	2.0	2.7	3.4	4.0	4.7	5.4	6.1	6.7
155°	0.7	1.3	2.0	2.0	2.0	2.7	3.4	4.0	4.7	5.4	6.1
157.5°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	3.4	4.0	4.0	4.7
160°	1.3	1.3	1.3	2.0	2.0	2.0	2.7	2.7	3.4	3.4	4.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1218.7	1220.7	1226.8	1226.8	1225.5	1224.1	1224.1	1222.1	1223.4	1226.1	1224.8
5°	1218.7	1220.7	1226.8	1226.8	1225.5	1224.1	1223.4	1221.4	1223.4	1226.1	1224.8
7.5°	1214.7	1217.4	1223.4	1223.4	1222.1	1221.4	1220.1	1218.7	1220.7	1223.4	1222.1
10°	1209.3	1212.0	1218.0	1218.0	1216.7	1216.7	1214.7	1213.3	1216.0	1218.0	1217.4
12.5°	1201.2	1204.5	1209.9	1209.3	1207.9	1208.6	1206.6	1203.9	1206.6	1208.6	1209.3
15°	1189.7	1193.8	1199.1	1197.8	1195.8	1197.1	1193.8	1191.7	1193.8	1197.8	1197.1
17.5°	1174.9	1177.6	1181.6	1181.6	1179.6	1178.2	1176.9	1174.9	1176.2	1178.9	1179.6
20°	1154.0	1157.3	1159.4	1157.3	1156.7	1154.6	1151.9	1149.9	1152.6	1156.7	1157.3
22.5°	1126.3	1127.0	1131.7	1127.0	1123.6	1122.9	1120.2	1116.2	1120.2	1123.6	1124.3
25°	1091.9	1095.3	1093.3	1085.2	1085.2	1079.8	1078.4	1076.4	1077.1	1083.1	1085.8
27.5°	1048.1	1049.4	1044.0	1037.3	1031.2	1027.8	1023.1	1023.8	1023.8	1031.9	1034.6
30°	1000.2	992.8	988.0	977.3	972.5	964.4	963.1	963.1	961.7	965.8	977.9
32.5°	942.9	932.7	925.3	915.2	907.1	899.0	895.0	897.0	896.3	906.4	910.5
35°	880.1	874.1	858.6	845.7	841.0	828.9	828.9	822.8	826.9	838.3	843.0
37.5°	814.0	804.6	791.8	777.6	774.3	764.8	761.4	758.1	766.8	768.9	773.6
40°	746.6	737.8	725.7	712.2	712.2	700.7	700.7	700.7	701.4	705.5	714.2
42.5°	682.5	673.1	662.3	652.9	651.5	642.7	642.7	642.1	643.4	646.8	654.9
45°	620.5	613.1	601.6	596.9	597.6	588.1	590.1	588.1	590.8	594.2	596.9
47.5°	563.2	558.4	553.7	547.0	544.9	544.3	540.9	538.2	542.9	542.9	547.0
50°	509.9	507.2	504.5	500.4	501.1	498.4	494.4	494.4	497.7	498.4	501.1
52.5°	463.3	460.0	456.6	457.3	457.9	456.6	454.6	452.5	454.6	455.9	459.3
55°	416.8	414.1	417.5	416.1	417.5	416.1	414.8	413.4	416.8	414.8	418.2
57.5°	375.0	377.7	379.0	376.3	378.4	377.0	377.7	375.7	378.4	379.7	379.0
60°	336.5	340.6	338.6	339.2	341.9	340.6	337.9	339.9	342.6	343.3	342.6
62.5°	301.5	306.2	308.2	306.9	307.5	306.2	308.2	305.5	308.9	310.2	308.2
65°	269.8	275.2	276.5	276.5	276.5	275.2	277.2	277.9	279.2	279.2	277.9
67.5°	242.8	247.5	248.9	250.2	248.9	247.5	247.5	248.2	250.9	252.2	250.9
70°	218.5	223.2	223.9	223.9	224.6	225.9	223.2	224.6	226.6	227.3	226.6
72.5°	197.6	202.3	203.7	203.0	203.7	204.4	204.4	203.0	205.0	206.4	206.4
75°	180.7	183.4	184.8	184.8	185.5	186.1	186.1	185.5	186.8	187.5	188.2
77.5°	165.2	167.3	169.3	169.3	170.0	169.3	170.6	170.6	171.3	172.0	172.7
80°	149.7	152.4	153.8	154.4	155.8	156.5	156.5	156.5	157.1	157.8	157.8
82.5°	137.6	139.6	141.6	143.7	143.7	144.3	144.3	144.3	145.0	145.0	145.7
85°	125.4	128.1	130.2	131.5	132.2	132.9	132.9	133.5	133.5	133.5	134.2
87.5°	114.7	118.0	119.4	120.7	121.4	122.7	122.7	122.7	123.4	123.4	123.4
90°	107.2	110.6	112.0	113.3	114.0	114.7	114.7	115.3	115.3	116.0	116.0
92.5°	98.5	101.8	104.5	104.5	105.2	106.6	105.9	105.9	106.6	107.2	107.2
95°	91.7	94.4	96.4	97.1	97.8	97.8	97.8	98.5	97.8	98.5	98.5
97.5°	83.6	86.3	88.4	89.7	90.4	90.4	90.4	91.0	90.4	91.0	91.0
100°	76.9	79.6	81.6	82.3	83.6	83.6	83.6	83.6	83.6	83.6	84.3
102.5°	71.5	74.2	75.5	76.2	76.9	77.6	77.6	77.6	77.6	78.2	78.2
105°	66.1	68.8	70.1	70.8	71.5	72.2	72.2	72.2	72.8	72.8	72.2
107.5°	61.4	63.4	64.7	66.1	66.8	66.8	67.4	67.4	67.4	67.4	67.4
110°	56.7	58.7	60.7	62.0	62.0	62.7	62.7	63.4	63.4	62.7	63.4



TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	51.9	54.6	56.0	57.3	58.0	58.7	58.7	58.7	58.7	58.7	58.7
115°	47.9	50.6	51.9	53.3	54.0	54.6	54.6	54.6	54.6	54.6	54.6
117.5°	44.5	47.2	48.6	49.2	49.9	50.6	51.3	51.3	51.3	51.3	50.6
120°	41.1	43.2	44.5	45.9	46.5	47.2	47.2	47.2	47.2	47.2	47.2
122.5°	37.8	39.8	41.1	42.5	43.2	43.8	43.8	43.8	43.8	43.8	43.8
125°	34.4	36.4	37.8	39.1	39.8	40.5	40.5	40.5	40.5	40.5	40.5
127.5°	31.0	33.0	35.1	35.7	36.4	37.1	37.1	37.1	37.8	37.1	37.1
130°	27.7	29.7	31.7	32.4	33.0	33.7	34.4	34.4	34.4	34.4	33.7
132.5°	25.0	27.0	28.3	29.0	30.3	30.3	31.0	31.0	31.0	31.0	30.3
135°	22.9	24.3	25.6	26.3	27.7	27.7	27.7	28.3	28.3	27.7	27.0
137.5°	20.2	21.6	22.9	23.6	24.3	25.0	25.0	25.6	25.0	25.0	25.0
140°	18.9	19.6	20.9	21.6	22.3	22.3	22.3	22.9	22.9	22.3	22.3
142.5°	16.2	17.5	18.9	19.6	20.2	20.2	20.2	20.2	20.2	20.2	20.2
145°	13.5	15.5	16.2	17.5	17.5	18.2	18.2	18.2	18.2	18.2	17.5
147.5°	11.5	12.8	14.8	15.5	15.5	16.2	16.2	16.2	16.2	16.2	15.5
150°	8.8	10.1	12.1	13.5	13.5	14.2	14.2	14.2	14.2	13.5	13.5
152.5°	7.4	8.8	9.4	10.8	11.5	11.5	11.5	12.1	11.5	11.5	11.5
155°	6.7	7.4	8.1	8.8	9.4	10.1	10.1	10.1	10.1	9.4	9.4
157.5°	5.4	6.1	6.7	7.4	8.1	8.8	8.8	8.8	8.8	8.8	8.1
160°	4.0	4.7	5.4	5.4	6.1	6.7	7.4	6.7	6.7	6.7	6.7
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1223.4	1222.8	1224.8	1221.4	1211.3	1214.0	1212.6	1218.7	1220.1	1221.4	1227.5
5°	1223.4	1222.8	1224.1	1221.4	1210.6	1212.6	1211.3	1217.4	1218.7	1219.4	1225.5
7.5°	1220.7	1220.1	1222.1	1218.7	1207.2	1209.9	1207.9	1214.0	1214.7	1215.3	1220.7
10°	1215.3	1214.7	1216.0	1213.3	1201.8	1204.5	1201.8	1207.9	1207.9	1209.3	1213.3
12.5°	1207.2	1205.9	1208.6	1205.2	1192.4	1195.8	1194.4	1198.5	1199.1	1199.8	1203.9
15°	1195.8	1194.4	1196.4	1194.4	1183.0	1183.6	1181.6	1187.7	1188.4	1187.0	1191.1
17.5°	1178.9	1177.6	1181.6	1180.3	1168.8	1171.5	1170.8	1172.2	1174.2	1170.8	1176.2
20°	1158.0	1159.4	1160.7	1161.4	1152.6	1152.6	1151.9	1154.6	1156.7	1154.0	1158.0
22.5°	1127.0	1130.4	1134.4	1135.8	1129.7	1129.0	1133.1	1131.7	1133.7	1132.4	1135.1
25°	1087.9	1094.6	1098.7	1102.7	1099.3	1100.7	1106.7	1108.1	1108.1	1107.4	1110.1
27.5°	1039.3	1048.1	1055.5	1064.3	1060.9	1063.6	1073.7	1075.1	1077.7	1075.1	1080.4
30°	981.3	989.4	1003.6	1016.4	1017.7	1021.8	1035.9	1037.3	1044.7	1042.0	1044.0
32.5°	923.3	927.3	943.5	956.4	964.4	974.6	990.1	992.8	1002.9	1004.9	1004.9
35°	850.5	861.9	876.8	895.0	905.1	915.9	936.8	940.8	955.7	960.4	965.8
37.5°	789.1	799.9	809.3	828.2	846.4	858.6	875.4	885.5	901.0	909.8	916.6
40°	723.7	732.4	742.6	761.4	777.0	795.2	812.0	824.2	843.7	853.8	862.6
42.5°	661.6	668.4	679.2	692.6	708.8	729.1	745.3	759.4	780.3	794.5	804.6
45°	606.3	610.4	619.8	629.9	644.1	665.0	680.5	698.7	715.6	730.4	742.6
47.5°	554.4	559.8	564.5	571.2	584.1	596.9	615.1	632.6	649.5	665.7	677.8
50°	506.5	506.5	513.9	518.6	527.4	538.9	553.0	565.2	586.1	597.6	613.1
52.5°	460.0	462.7	466.7	469.4	476.2	483.6	495.0	505.2	522.7	533.5	548.3
55°	418.8	421.5	423.5	424.9	428.9	437.7	441.8	449.8	462.0	470.8	483.6
57.5°	379.7	381.1	383.1	383.8	384.4	389.8	393.2	395.2	407.4	416.1	426.9
60°	344.0	344.0	346.0	345.3	344.6	347.3	346.7	348.7	356.1	361.5	366.2
62.5°	310.2	310.2	310.9	309.6	308.9	308.9	306.2	308.2	310.2	310.9	314.3
65°	279.2	282.6	279.9	280.6	276.5	275.2	273.8	269.8	269.1	266.4	267.8
67.5°	251.6	254.3	251.6	251.6	248.2	245.5	242.1	235.4	233.4	228.0	226.6
70°	229.3	227.3	228.6	226.6	222.6	219.2	214.5	209.1	202.3	195.6	190.9
72.5°	207.7	207.7	206.4	204.4	202.3	195.6	190.2	184.1	176.0	167.3	160.5
75°	186.8	187.5	187.5	185.5	182.1	176.0	170.0	161.2	152.4	142.3	133.5
77.5°	172.0	172.0	172.0	168.6	165.2	159.8	152.4	143.0	133.5	121.4	111.3
80°	157.8	157.1	157.1	153.1	149.7	143.7	136.2	126.8	116.7	103.9	92.4
82.5°	146.4	145.7	144.3	141.0	136.2	130.2	122.7	112.6	101.8	90.4	76.2
85°	134.2	133.5	132.2	128.8	124.1	118.7	110.6	100.5	89.7	76.9	63.4
87.5°	123.4	122.7	120.7	118.7	113.3	107.2	99.1	89.7	78.2	66.1	52.6
90°	116.0	114.7	113.3	110.6	105.9	99.1	91.0	80.9	69.5	57.3	43.8
92.5°	107.2	106.6	104.5	101.8	97.8	91.0	83.0	73.5	62.0	50.6	37.8
95°	98.5	97.8	96.4	93.7	89.7	83.6	76.2	66.8	56.0	44.5	33.0
97.5°	90.4	90.4	88.4	86.3	81.6	76.9	69.5	60.7	50.6	40.5	29.7
100°	83.6	83.6	81.6	78.9	75.5	70.8	63.4	55.3	45.9	36.4	25.6
102.5°	77.6	76.9	75.5	72.8	69.5	64.7	58.0	50.6	41.8	32.4	22.9
105°	72.2	71.5	70.1	67.4	64.7	59.4	54.0	46.5	37.8	29.0	20.2
107.5°	66.8	66.1	65.4	62.7	59.4	54.6	49.2	41.8	34.4	26.3	18.2
110°	62.0	61.4	60.0	57.3	54.0	49.9	44.5	38.4	31.0	23.6	16.2



TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	58.0	57.3	56.0	53.3	50.6	45.9	41.1	34.4	28.3	21.6	14.2
115°	54.0	53.3	51.9	49.2	45.9	41.8	37.1	31.7	25.0	18.9	12.8
117.5°	49.9	49.2	47.9	45.9	42.5	38.4	33.7	28.3	22.3	17.5	11.5
120°	46.5	45.2	43.8	41.8	38.4	35.1	30.3	25.6	20.2	15.5	10.1
122.5°	43.2	41.8	40.5	38.4	35.1	31.7	27.0	22.9	18.9	14.2	9.4
125°	39.1	38.4	37.1	35.1	31.7	28.3	25.0	20.9	16.9	12.8	8.1
127.5°	35.7	35.1	33.7	31.0	28.3	25.6	22.3	18.9	14.8	10.8	7.4
130°	33.0	31.7	30.3	28.3	26.3	23.6	20.2	16.9	13.5	9.4	6.7
132.5°	29.7	28.3	27.0	25.6	23.6	20.9	18.2	14.8	12.1	8.8	6.1
135°	27.0	25.6	24.3	22.9	20.9	18.9	16.2	13.5	10.8	8.1	5.4
137.5°	23.6	22.9	22.3	20.9	18.9	16.9	14.8	11.5	9.4	7.4	4.7
140°	21.6	20.9	20.2	18.2	16.9	14.8	12.8	10.1	8.1	6.1	4.0
142.5°	19.6	18.9	17.5	16.2	14.8	13.5	10.8	9.4	7.4	5.4	4.0
145°	16.9	16.2	15.5	14.2	12.8	10.8	9.4	8.1	6.7	4.7	3.4
147.5°	15.5	14.8	13.5	12.1	10.8	9.4	8.8	7.4	5.4	4.0	2.7
150°	12.8	12.1	11.5	10.1	9.4	8.8	7.4	6.1	4.7	3.4	2.7
152.5°	10.8	10.1	9.4	9.4	8.1	7.4	6.1	5.4	4.0	3.4	2.0
155°	9.4	9.4	8.8	8.1	6.7	6.1	5.4	4.0	3.4	2.7	2.0
157.5°	8.1	7.4	6.7	6.7	6.1	5.4	4.0	3.4	2.7	2.7	2.0
160°	6.7	6.1	6.1	5.4	4.7	4.0	3.4	3.4	2.7	2.0	2.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1228.1	1220.7	1227.5	1236.2	1236.2	1234.9	1233.5	1236.2	1243.0	1240.3	1232.2
5°	1226.1	1218.7	1224.8	1233.5	1233.5	1231.5	1230.2	1232.2	1239.6	1236.2	1228.8
7.5°	1222.1	1215.3	1219.4	1227.5	1227.5	1225.5	1224.1	1226.8	1232.9	1229.5	1221.4
10°	1214.7	1207.2	1212.0	1219.4	1218.7	1217.4	1215.3	1218.7	1224.1	1219.4	1209.9
12.5°	1205.2	1197.8	1201.8	1208.6	1207.9	1205.2	1203.9	1205.9	1210.6	1207.9	1197.8
15°	1192.4	1185.0	1188.4	1195.1	1193.1	1191.1	1188.4	1189.0	1195.1	1190.4	1179.6
17.5°	1176.9	1168.8	1171.5	1177.6	1175.5	1173.5	1170.1	1170.8	1177.6	1170.8	1159.4
20°	1158.0	1149.2	1151.3	1158.7	1155.3	1151.9	1148.6	1148.6	1155.3	1147.9	1135.1
22.5°	1137.8	1129.0	1130.4	1135.8	1133.1	1127.0	1123.6	1125.6	1129.0	1119.6	1106.1
25°	1112.8	1101.4	1103.4	1108.8	1106.7	1098.7	1095.3	1096.6	1095.3	1087.9	1073.7
27.5°	1083.8	1071.7	1073.0	1076.4	1073.7	1066.3	1062.2	1062.9	1060.2	1050.8	1034.6
30°	1047.4	1041.3	1040.7	1042.7	1038.6	1031.2	1026.5	1025.1	1024.5	1011.0	991.4
32.5°	1010.3	1004.9	1001.5	1004.2	999.5	992.1	984.0	984.0	977.3	964.4	947.6
35°	972.5	963.8	960.4	962.4	957.0	947.6	940.8	937.5	927.3	911.2	893.0
37.5°	924.0	917.9	913.9	915.9	909.8	903.1	890.3	886.9	876.1	853.8	830.9
40°	871.4	866.7	862.6	864.6	857.9	847.8	836.3	830.9	818.8	793.8	775.6
42.5°	814.7	812.7	808.0	815.4	801.9	791.8	780.3	771.6	759.4	732.4	711.5
45°	754.7	759.4	748.6	750.6	741.9	733.1	721.0	708.2	696.0	670.4	646.8
47.5°	691.3	694.7	687.3	688.6	679.2	671.1	660.3	644.1	630.6	608.3	587.4
50°	625.9	624.5	624.5	623.2	615.8	605.6	594.9	580.0	566.5	546.3	528.8
52.5°	556.4	559.1	560.5	563.8	554.4	548.3	531.5	518.6	508.5	487.6	472.8
55°	489.6	499.1	496.4	497.7	486.9	482.2	468.7	458.6	443.8	431.6	422.2
57.5°	428.9	431.0	432.3	434.3	429.6	420.2	409.4	401.3	389.8	379.7	373.0
60°	370.3	370.3	370.9	374.3	369.6	361.5	353.4	347.3	339.2	333.2	329.1
62.5°	315.0	319.7	320.4	317.7	311.6	307.5	302.1	298.8	293.4	291.4	290.0
65°	263.7	263.7	263.7	265.1	261.7	259.0	255.6	254.9	257.0	254.3	255.6
67.5°	220.5	218.5	217.2	217.8	216.5	215.1	214.5	216.5	220.5	220.5	223.9
70°	183.4	179.4	176.7	176.7	176.7	177.4	179.4	183.4	190.2	192.9	197.6
72.5°	153.1	144.3	140.3	140.3	141.0	143.7	149.7	157.1	163.2	168.6	174.7
75°	124.1	115.3	109.3	108.6	109.9	114.0	122.7	129.5	139.6	147.0	154.4
77.5°	100.5	89.7	82.3	81.6	83.6	89.7	100.5	109.3	120.7	128.8	136.9
80°	80.3	68.1	62.0	58.0	61.4	68.8	80.9	91.7	102.5	113.3	123.4
82.5°	64.1	52.6	43.2	39.1	43.2	53.3	64.7	77.6	88.4	99.8	109.9
85°	50.6	38.4	27.7	23.6	28.3	39.1	51.9	64.7	76.9	88.4	98.5
87.5°	39.8	27.7	16.9	11.5	17.5	29.0	41.1	54.0	66.8	78.2	88.4
90°	31.0	19.6	9.4	1.3	10.1	20.9	33.0	45.2	58.0	69.5	79.6
92.5°	26.3	14.8	5.4	0.0	6.1	15.5	27.0	39.1	50.6	62.0	72.2
95°	22.3	12.1	4.0	0.0	4.0	12.1	22.3	33.0	44.5	56.0	66.1
97.5°	18.9	9.4	2.7	0.0	2.7	9.4	18.2	29.0	39.1	49.9	59.4
100°	16.2	8.1	2.0	0.0	2.0	7.4	15.5	25.0	35.1	45.2	54.0
102.5°	14.2	6.7	1.3	0.0	1.3	6.1	12.8	21.6	30.3	39.8	48.6
105°	12.1	5.4	1.3	0.0	0.7	4.7	10.8	18.9	27.0	35.7	43.8
107.5°	10.8	4.7	1.3	0.0	0.7	4.0	9.4	16.2	24.3	31.7	39.1
110°	9.4	4.0	1.3	0.0	0.7	2.7	8.1	14.2	20.9	28.3	35.7

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	8.1	3.4	0.7	0.0	0.0	2.0	6.7	12.1	18.2	25.6	31.7
115°	7.4	3.4	0.7	0.0	0.0	1.3	5.4	10.8	16.2	22.9	28.3
117.5°	6.7	2.7	0.7	0.0	0.7	1.3	4.7	9.4	14.2	19.6	25.6
120°	6.1	2.7	0.7	0.0	0.7	0.7	3.4	8.1	12.1	17.5	22.3
122.5°	5.4	2.7	0.7	0.0	0.7	0.7	2.7	6.7	10.8	15.5	19.6
125°	4.7	2.0	1.3	0.7	0.7	0.7	2.0	5.4	9.4	12.8	17.5
127.5°	4.7	2.0	1.3	0.7	0.7	0.7	1.3	4.7	7.4	11.5	15.5
130°	4.0	2.0	1.3	0.7	0.7	0.7	0.7	3.4	6.7	9.4	12.8
132.5°	3.4	2.0	1.3	0.7	0.7	0.7	0.7	2.0	4.7	8.1	10.8
135°	3.4	2.0	1.3	0.7	0.7	0.7	0.7	1.3	3.4	6.1	8.8
137.5°	2.7	1.3	1.3	0.7	0.7	0.7	0.7	0.7	2.7	4.7	6.7
140°	2.7	1.3	1.3	0.7	0.7	0.7	0.7	0.7	2.0	3.4	5.4
142.5°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	1.3	2.7	4.0
145°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.7
147.5°	2.0	2.0	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	2.0
150°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
152.5°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
155°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3
157.5°	2.0	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3
160°	2.0	1.3	1.3	0.7	1.3	0.7	1.3	1.3	1.3	1.3	1.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1229.5	1216.7	1223.4	1221.4	1224.1	1229.5	1228.8	1227.5	1227.5	1225.5	1222.8
5°	1225.5	1213.3	1219.4	1216.0	1219.4	1224.1	1223.4	1221.4	1222.8	1219.4	1216.0
7.5°	1217.4	1206.6	1212.0	1209.3	1212.0	1216.7	1214.7	1214.0	1215.3	1209.9	1207.9
10°	1207.9	1195.8	1201.8	1198.5	1201.8	1205.2	1203.9	1201.2	1203.9	1198.5	1196.4
12.5°	1193.1	1183.0	1187.0	1185.7	1187.7	1191.1	1188.4	1186.3	1187.7	1183.0	1178.9
15°	1176.9	1166.8	1170.1	1168.1	1169.5	1173.5	1168.8	1168.1	1166.8	1162.1	1160.7
17.5°	1156.0	1146.5	1149.9	1146.5	1148.6	1147.2	1146.5	1143.2	1143.2	1137.8	1133.7
20°	1130.4	1122.3	1120.2	1117.5	1120.2	1117.5	1113.5	1110.8	1110.1	1104.7	1101.4
22.5°	1100.7	1091.2	1092.6	1085.2	1085.8	1081.8	1075.1	1072.4	1069.7	1063.6	1058.9
25°	1064.9	1055.5	1048.7	1044.0	1038.0	1037.3	1028.5	1021.8	1021.1	1013.7	1013.0
27.5°	1024.5	1013.7	1008.3	996.8	989.4	983.3	975.9	969.2	965.8	957.7	952.3
30°	977.9	965.8	952.3	944.2	932.7	928.0	915.2	907.1	904.4	895.7	891.6
32.5°	925.3	912.5	901.7	886.2	873.4	866.7	853.8	845.7	842.4	832.9	827.5
35°	868.0	853.8	841.0	826.2	816.1	804.6	789.1	781.0	773.6	770.2	766.2
37.5°	808.0	792.5	777.6	762.8	754.0	740.5	727.0	721.6	712.9	709.5	705.5
40°	745.9	730.4	716.3	702.1	692.0	679.8	667.7	665.7	656.2	652.9	650.2
42.5°	684.6	668.4	652.2	642.1	634.6	622.5	614.4	612.4	604.3	602.3	602.3
45°	629.2	609.0	595.5	586.8	580.7	570.6	563.8	562.5	555.7	554.4	554.4
47.5°	569.9	551.0	540.9	535.5	530.1	522.7	518.6	518.6	511.9	510.5	509.9
50°	514.6	497.1	489.6	484.2	483.6	478.2	474.8	473.5	473.5	468.7	469.4
52.5°	462.0	453.2	447.2	443.8	439.7	436.4	433.7	433.7	431.6	428.3	429.6
55°	413.4	403.3	404.0	401.3	399.3	397.2	397.9	393.9	393.2	390.5	392.5
57.5°	364.9	364.9	363.5	361.5	358.1	359.5	359.5	359.5	356.1	354.1	356.1
60°	323.7	325.8	322.4	324.4	323.1	323.7	322.4	322.4	320.4	319.7	320.4
62.5°	287.3	290.7	289.3	292.0	290.7	291.4	292.7	290.0	288.7	287.3	288.7
65°	254.9	259.0	258.3	260.3	261.0	261.7	262.4	261.0	259.7	258.3	257.6
67.5°	226.6	230.7	233.4	234.0	234.7	236.7	236.1	234.7	233.4	231.3	230.7
70°	201.0	206.4	209.7	211.1	213.8	212.4	212.4	211.8	210.4	208.4	207.7
72.5°	179.4	185.5	188.8	190.2	192.9	192.9	192.2	191.5	190.2	188.2	187.5
75°	160.5	165.9	170.6	173.3	175.4	175.4	174.7	174.0	172.7	171.3	170.6
77.5°	145.7	150.4	154.4	157.8	159.2	159.8	159.2	157.8	157.8	157.1	156.5
80°	130.8	136.2	140.3	143.7	145.7	145.7	145.0	145.7	144.3	143.7	143.0
82.5°	118.0	124.1	128.8	132.2	133.5	134.2	133.5	134.2	132.9	132.9	132.9
85°	106.6	112.6	118.0	120.7	122.7	123.4	123.4	123.4	122.7	122.7	122.7
87.5°	97.1	103.2	108.6	111.3	113.3	114.0	114.0	114.7	113.3	113.3	113.3
90°	88.4	94.4	99.8	102.5	104.5	105.9	105.9	106.6	105.9	105.2	105.2
92.5°	80.3	87.0	92.4	95.1	97.1	99.1	99.1	99.8	98.5	98.5	98.5
95°	73.5	80.3	85.0	88.4	90.4	91.7	92.4	92.4	91.7	91.7	91.7
97.5°	67.4	73.5	78.2	81.6	83.6	84.3	85.0	85.7	85.0	85.0	85.0
100°	61.4	67.4	72.2	74.9	77.6	78.2	78.9	79.6	79.6	78.9	78.9
102.5°	56.0	62.0	66.1	69.5	71.5	72.8	73.5	73.5	73.5	73.5	73.5
105°	50.6	56.7	60.7	64.1	66.1	67.4	68.1	68.8	68.8	68.1	68.1
107.5°	45.9	51.3	56.0	58.7	61.4	62.7	63.4	63.4	64.1	63.4	63.4
110°	41.1	47.2	51.3	54.0	56.7	58.0	58.7	59.4	59.4	59.4	59.4



TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	37.8	42.5	46.5	49.2	51.9	53.3	54.0	54.6	55.3	54.6	54.6
115°	33.7	38.4	42.5	45.2	47.2	48.6	49.9	50.6	50.6	51.3	50.6
117.5°	30.3	34.4	38.4	41.1	43.2	45.2	45.9	46.5	47.2	46.5	46.5
120°	27.0	31.0	34.4	37.1	39.1	41.1	41.8	42.5	43.2	42.5	42.5
122.5°	24.3	27.7	31.0	33.7	35.7	37.1	38.4	38.4	39.1	39.1	39.1
125°	21.6	25.0	27.7	30.3	32.4	33.7	34.4	35.1	35.1	35.7	35.7
127.5°	18.9	21.6	25.0	27.0	29.0	30.3	31.0	31.7	31.7	32.4	32.4
130°	16.2	18.9	21.6	23.6	25.6	27.0	27.7	28.3	29.0	29.0	29.0
132.5°	14.2	16.9	18.9	20.9	22.3	23.6	25.0	25.6	25.6	25.6	25.6
135°	11.5	14.2	16.2	18.2	19.6	20.9	21.6	22.9	22.9	22.9	22.9
137.5°	9.4	12.1	14.2	15.5	16.9	18.2	18.9	19.6	20.2	20.2	20.2
140°	7.4	9.4	11.5	13.5	14.8	15.5	16.9	16.9	17.5	17.5	17.5
142.5°	5.4	7.4	8.8	10.8	12.1	13.5	14.2	14.8	14.8	14.8	14.8
145°	4.0	5.4	6.7	8.1	10.1	10.8	11.5	12.1	12.8	12.8	12.8
147.5°	2.7	4.0	4.7	6.1	7.4	8.8	9.4	10.1	10.8	10.8	10.8
150°	2.0	2.7	4.0	4.7	5.4	6.7	8.1	8.1	8.8	8.8	8.1
152.5°	1.3	2.0	2.7	3.4	4.0	4.7	6.1	6.1	6.7	6.7	6.7
155°	1.3	1.3	1.3	2.0	2.7	3.4	4.0	4.7	4.7	4.7	4.7
157.5°	1.3	1.3	1.3	1.3	1.3	2.0	2.7	3.4	3.4	3.4	3.4
160°	1.3	1.3	0.7	0.7	1.3	1.3	1.3	1.3	2.0	2.0	2.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1224.8	1226.1	1226.1	1224.8	1224.1	1226.8	1223.4	1210.6	1214.7	1216.0	1220.1
5°	1218.7	1220.1	1220.1	1220.1	1218.7	1221.4	1218.0	1205.2	1209.9	1212.0	1214.7
7.5°	1209.9	1210.6	1212.0	1211.3	1209.9	1214.0	1210.6	1197.8	1201.2	1204.5	1207.9
10°	1198.5	1198.5	1199.1	1200.5	1199.1	1202.5	1199.1	1187.7	1191.1	1193.1	1197.1
12.5°	1183.0	1184.3	1185.0	1184.3	1183.6	1186.3	1185.0	1174.2	1175.5	1179.6	1183.6
15°	1162.1	1162.1	1165.4	1164.1	1164.1	1166.8	1168.1	1156.0	1158.0	1164.1	1168.1
17.5°	1136.4	1137.1	1139.8	1141.1	1140.5	1145.2	1145.9	1136.4	1135.8	1143.2	1147.2
20°	1103.4	1104.7	1108.1	1110.8	1110.8	1116.2	1118.2	1112.1	1112.8	1120.9	1122.3
22.5°	1062.9	1062.9	1069.0	1073.0	1076.4	1079.8	1085.8	1080.4	1080.4	1091.2	1097.3
25°	1013.0	1017.7	1019.7	1027.8	1032.6	1042.0	1047.4	1048.1	1048.7	1058.9	1062.9
27.5°	957.7	959.0	965.1	974.6	980.0	988.7	998.8	1000.9	1004.2	1017.7	1023.8
30°	895.0	899.0	901.7	915.2	922.6	934.1	946.9	951.6	954.3	972.5	980.0
32.5°	830.9	832.3	843.7	851.1	859.9	872.0	886.9	895.7	901.0	919.9	930.7
35°	766.8	769.5	779.0	788.4	797.2	809.3	824.8	837.0	846.4	863.3	877.4
37.5°	708.2	714.9	716.9	726.4	733.1	745.3	756.0	773.6	783.0	800.6	818.8
40°	655.6	657.6	658.9	668.4	673.1	684.6	700.1	711.5	724.3	737.2	758.7
42.5°	603.6	605.0	607.0	612.4	617.8	625.9	637.3	648.8	662.3	681.2	695.3
45°	555.7	557.1	558.4	561.8	566.5	573.9	581.4	589.5	602.9	619.1	634.0
47.5°	511.2	513.9	513.9	514.6	518.0	524.0	529.4	539.5	547.0	555.7	572.6
50°	468.7	470.8	471.4	471.4	473.5	477.5	478.8	485.6	492.3	500.4	512.6
52.5°	428.9	428.9	428.3	431.0	431.0	433.7	434.3	438.4	443.1	451.9	457.3
55°	391.2	391.2	393.2	391.8	391.8	393.2	392.5	393.2	397.2	402.6	407.4
57.5°	354.8	354.1	356.1	354.8	354.1	355.4	356.8	354.1	354.8	360.1	360.1
60°	318.3	319.0	321.0	319.7	319.7	319.7	318.3	317.0	315.6	319.0	320.4
62.5°	289.3	287.3	289.3	287.3	288.7	288.0	286.6	283.9	284.6	283.3	281.9
65°	259.0	259.0	259.7	257.6	259.0	259.0	257.0	256.3	252.2	250.9	247.5
67.5°	232.7	232.7	233.4	232.0	232.0	232.7	230.7	228.6	224.6	222.6	217.8
70°	209.7	209.7	209.7	209.1	209.1	209.1	207.7	205.0	201.0	197.6	191.5
72.5°	188.8	189.5	188.8	188.8	190.9	188.8	186.8	184.1	180.7	174.0	168.6
75°	172.0	172.7	172.0	172.0	172.0	171.3	170.6	166.6	162.5	157.1	149.1
77.5°	157.1	157.1	157.8	157.1	157.1	156.5	154.4	151.1	146.4	141.6	132.2
80°	143.0	143.7	144.3	145.0	143.7	143.0	141.0	138.3	132.2	126.8	117.4
82.5°	132.9	132.2	132.9	133.5	132.2	131.5	129.5	126.1	121.4	114.0	104.5
85°	122.7	122.1	122.1	122.7	122.1	120.7	118.7	115.3	110.6	103.2	93.7
87.5°	112.6	113.3	114.0	113.3	112.6	111.3	109.3	105.9	100.5	94.4	84.3
90°	105.2	105.2	105.2	105.2	104.5	103.2	101.2	97.1	92.4	85.0	76.2
92.5°	98.5	98.5	98.5	98.5	97.8	95.8	93.7	90.4	85.0	77.6	69.5
95°	91.7	92.4	91.7	91.7	90.4	89.7	86.3	83.0	78.2	70.8	62.0
97.5°	84.3	85.0	84.3	84.3	83.6	82.3	80.3	76.2	71.5	64.7	56.7
100°	78.9	78.9	78.2	78.2	77.6	76.2	73.5	70.1	65.4	58.7	50.6
102.5°	72.8	73.5	72.8	72.8	71.5	70.1	68.1	64.7	60.0	53.3	45.9
105°	68.1	68.1	67.4	67.4	66.1	64.7	62.7	58.7	54.6	48.6	41.1
107.5°	63.4	63.4	62.7	62.7	61.4	60.0	57.3	54.0	49.9	43.8	37.1
110°	58.7	58.7	58.7	58.0	56.7	54.6	52.6	49.2	45.2	39.8	33.0



TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	55.3	54.6	54.0	53.3	51.9	50.6	47.9	44.5	40.5	35.7	29.7
115°	50.6	50.6	49.9	49.2	47.9	45.9	43.8	41.1	37.1	31.7	26.3
117.5°	46.5	46.5	45.9	45.2	43.8	41.8	39.8	37.1	33.0	28.3	23.6
120°	42.5	42.5	41.8	41.1	39.8	37.8	36.4	33.0	29.7	25.0	20.9
122.5°	39.1	38.4	38.4	37.1	36.4	34.4	32.4	29.7	26.3	22.3	18.2
125°	35.1	35.1	34.4	33.7	33.0	31.0	29.0	26.3	22.9	19.6	16.2
127.5°	31.7	31.7	31.0	30.3	29.7	27.7	25.6	23.6	20.2	16.9	13.5
130°	28.3	28.3	27.7	27.0	26.3	24.3	22.9	20.2	17.5	14.8	11.5
132.5°	25.6	25.6	25.0	24.3	22.9	21.6	20.2	17.5	15.5	12.8	10.1
135°	22.9	22.3	22.3	21.6	20.2	18.9	17.5	15.5	12.8	10.8	8.1
137.5°	20.2	19.6	18.9	18.2	17.5	16.2	14.8	13.5	11.5	8.8	6.7
140°	17.5	16.9	16.9	16.2	14.8	14.2	12.8	10.8	9.4	7.4	5.4
142.5°	14.8	14.8	14.2	13.5	12.8	12.1	10.8	9.4	7.4	6.1	4.0
145°	12.8	12.1	12.1	11.5	10.8	9.4	8.8	7.4	6.1	4.7	3.4
147.5°	10.1	10.1	10.1	9.4	8.8	8.1	7.4	6.1	4.7	3.4	2.0
150°	8.1	8.1	8.1	7.4	6.7	6.1	5.4	4.7	3.4	2.0	1.3
152.5°	6.7	6.7	6.1	6.1	5.4	4.7	4.0	3.4	2.0	1.3	1.3
155°	4.7	4.7	4.7	4.0	4.0	3.4	2.7	2.0	1.3	1.3	1.3
157.5°	3.4	3.4	3.4	2.7	2.7	2.0	2.0	1.3	1.3	1.3	1.3
160°	2.0	2.0	2.0	2.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1218.0	1217.4	1222.8	1222.8	1216.7	1226.1	1236.2
5°	1214.0	1213.3	1218.7	1218.7	1213.3	1222.8	1233.5
7.5°	1205.9	1206.6	1212.0	1213.3	1206.6	1215.3	1226.8
10°	1197.1	1196.4	1202.5	1203.9	1198.5	1206.6	1217.4
12.5°	1183.0	1183.0	1189.0	1191.1	1185.7	1195.1	1205.2
15°	1168.1	1168.1	1172.2	1175.5	1170.8	1179.6	1189.7
17.5°	1149.2	1148.6	1152.6	1156.7	1151.9	1161.4	1172.2
20°	1125.0	1125.0	1129.7	1134.4	1131.0	1139.8	1151.9
22.5°	1099.3	1096.6	1104.7	1108.1	1106.1	1114.8	1127.0
25°	1067.0	1066.3	1074.4	1079.1	1076.4	1085.8	1096.6
27.5°	1031.9	1031.2	1039.3	1045.4	1044.0	1052.8	1064.9
30°	989.4	992.8	1000.2	1010.3	1006.9	1016.4	1029.2
32.5°	944.9	948.3	957.0	967.8	968.5	975.9	988.7
35°	891.6	900.4	906.4	920.6	923.3	930.7	944.2
37.5°	835.6	845.7	858.6	869.3	874.7	880.8	896.3
40°	772.9	787.7	801.9	814.7	821.5	827.5	842.4
42.5°	716.3	727.7	741.2	754.0	766.2	771.6	787.1
45°	652.2	665.7	677.8	693.3	705.5	711.5	727.0
47.5°	589.5	602.9	619.1	629.9	642.7	648.8	663.6
50°	529.4	541.6	555.1	567.9	578.7	584.1	596.9
52.5°	470.1	482.9	495.7	503.8	515.3	519.3	530.1
55°	417.5	426.2	437.7	442.4	453.9	456.6	464.0
57.5°	366.9	373.0	377.0	385.1	393.2	399.3	408.0
60°	321.0	323.7	326.4	331.1	337.9	339.9	343.3
62.5°	279.9	279.2	284.6	286.0	286.6	293.4	290.0
65°	243.5	244.1	239.4	237.4	240.1	242.1	240.8
67.5°	213.1	209.1	205.0	200.3	196.3	198.3	196.3
70°	183.4	180.1	173.3	166.6	163.9	159.8	157.8
72.5°	159.8	151.7	145.0	136.2	131.5	126.8	123.4
75°	141.6	130.2	120.7	111.3	104.5	97.8	96.4
77.5°	122.7	112.0	101.2	91.0	80.9	73.5	70.8
80°	107.9	97.8	85.0	72.8	62.0	52.6	49.2
82.5°	94.4	83.6	70.8	58.0	45.9	35.7	31.7
85°	83.0	71.5	58.7	45.9	33.7	22.9	17.5
87.5°	74.2	61.4	48.6	36.4	23.6	12.8	6.7
90°	66.1	54.0	41.8	29.0	16.9	6.7	0.0
92.5°	58.7	47.2	35.1	23.6	12.8	4.0	0.7
95°	51.9	41.8	29.7	18.9	9.4	2.7	0.7
97.5°	46.5	36.4	25.6	15.5	7.4	2.0	0.7
100°	41.8	31.7	22.3	12.8	6.1	1.3	0.7
102.5°	37.1	28.3	18.9	10.8	4.7	0.7	0.7
105°	33.0	25.0	16.2	9.4	4.0	0.7	0.7
107.5°	29.7	22.3	14.2	8.1	2.7	0.7	0.7
110°	26.3	18.9	12.1	6.7	2.0	0.7	0.7

TEST NUMBER: P1214046

CATALOG NUMBER: 2SNLED-LD5-32HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	23.6	16.9	10.8	5.4	1.3	0.7	0.7
115°	20.9	14.8	9.4	4.7	1.3	0.7	0.7
117.5°	18.2	12.8	8.1	3.4	0.7	0.7	0.7
120°	16.2	11.5	6.7	2.7	0.7	0.7	0.7
122.5°	14.2	9.4	5.4	2.0	0.7	0.7	0.7
125°	12.1	8.1	4.7	1.3	0.7	0.7	0.7
127.5°	10.1	6.7	3.4	1.3	0.7	0.7	0.7
130°	8.8	5.4	2.7	0.7	0.7	0.7	0.7
132.5°	7.4	4.0	2.0	0.7	0.7	0.7	0.7
135°	6.1	3.4	1.3	0.7	0.7	0.7	0.7
137.5°	4.7	2.7	1.3	0.7	0.7	0.7	0.7
140°	3.4	2.0	0.7	0.7	0.7	0.7	0.7
142.5°	2.7	1.3	0.7	0.7	0.7	0.7	0.7
145°	2.0	1.3	0.7	0.7	0.7	0.7	0.7
147.5°	1.3	1.3	1.3	1.3	0.7	0.7	0.7
150°	1.3	1.3	0.7	0.7	1.3	0.7	0.7
152.5°	1.3	0.7	0.7	0.7	1.3	0.7	0.7
155°	1.3	1.3	1.3	1.3	1.3	1.3	0.7
157.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
160°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)