

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: P1213820

Luminaire Tested: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213820
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

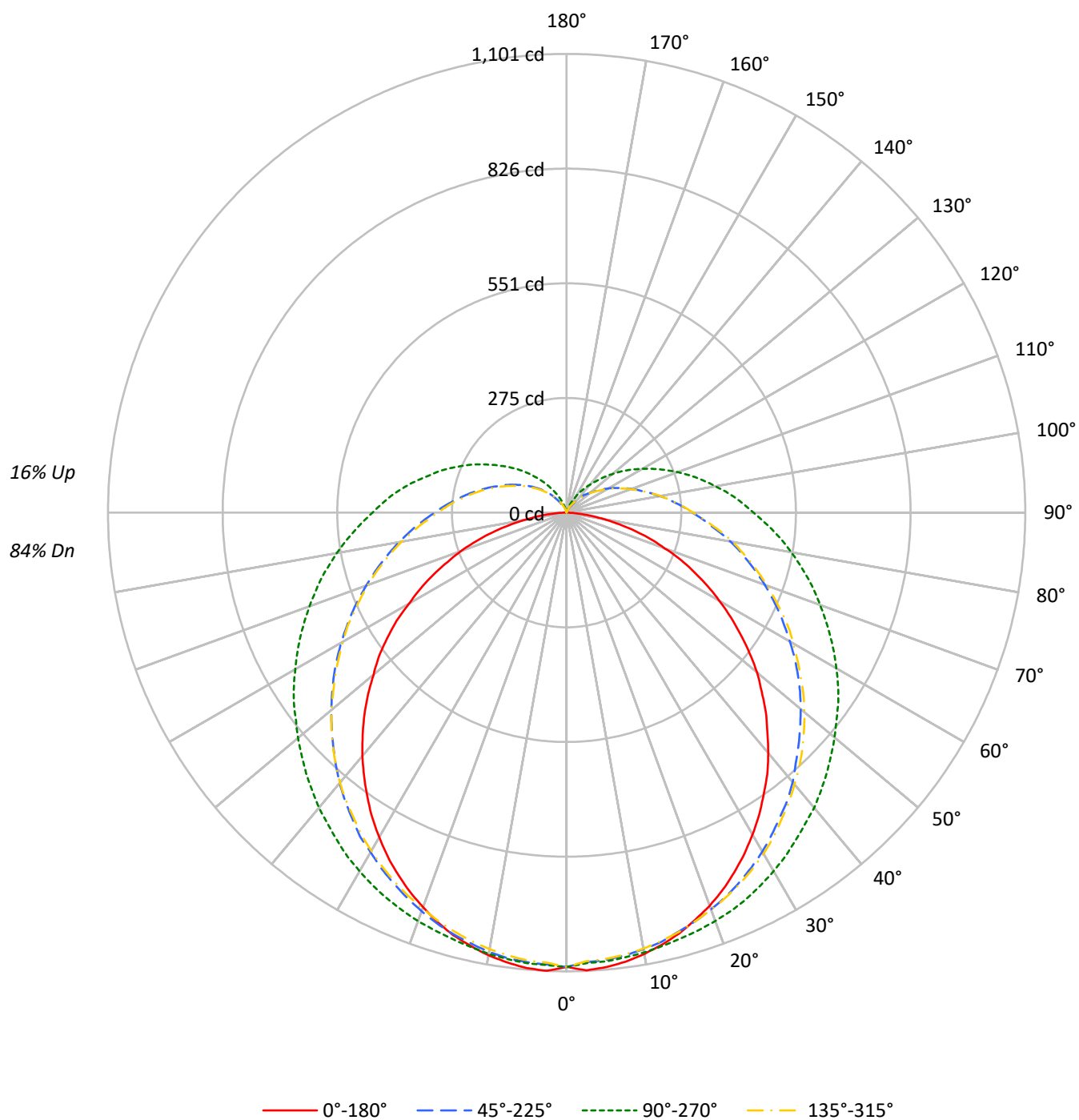
Lumens per Lamp: N/A
Luminaire Lumens: 4737.1 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 48
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

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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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84		
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64		
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51		
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42		
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35		
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30		
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26		
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23		
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20		
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18		
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8811	8811	8811	8811
5°	8857	8491	8876	8527
10°	8776	8250	8804	8277
15°	8674	8043	8712	8052
20°	8538	7893	8567	7893
25°	8369	7759	8420	7750
30°	8180	7621	8244	7621
35°	7961	7493	8049	7502
40°	7744	7418	7838	7418
45°	7495	7340	7609	7349
50°	7235	7293	7333	7313
55°	6872	7300	7089	7331
60°	6489	7322	6700	7367
65°	6059	7395	6328	7468
70°	5455	7531	5881	7638
75°	4759	7778	5209	7928
80°	3684	8143	4182	8331
85°	2200	8728	2753	8970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 10028 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	2.2
10°-20°	296.8	6.3
20°-30°	455.1	9.6
30°-40°	561.5	11.9
40°-50°	609.2	12.9
50°-60°	600.4	12.7
60°-70°	542.8	11.5
70°-80°	452.2	9.5
80°-90°	350.3	7.4
90°-100°	265.6	5.6
100°-110°	196.6	4.2
110°-120°	136.8	2.9
120°-130°	87.3	1.8
130°-140°	49.0	1.0
140°-150°	22.4	0.5
150°-160°	6.9	0.1
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	855.3	18.1
0°-40°	1416.7	29.9
0°-60°	2626.3	55.4
0°-90°	3971.7	83.8
90°-120°	599.0	12.6
90°-150°	757.6	16.0
90°-180°	765.0	16.1
0°-180°	4737.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1090	1090	1090	1090	1090	
5°	1095	1081	1097	1086	1095	104
15°	1046	1058	1050	1059	1046	295
25°	952	1022	958	1021	952	439
35°	825	959	834	960	825	516
45°	676	883	687	884	676	521
55°	510	796	526	799	510	456
65°	338	698	353	705	338	335
75°	170	598	186	610	170	180
85°	32	498	40	512	32	39
90°	1	448	2	466	1	2
95°	1	407	1	427	1	1
105°	1	323	1	343	1	1
115°	1	246	1	268	1	1
125°	1	177	1	197	1	1
135°	1	115	1	136	1	1
145°	1	67	1	82	1	1
155°	1	28	1	38	1	1
165°	1	5	1	7	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1099.5	1099.5	1098.4	1096.1	1097.2	1100.7	1098.4	1092.6	1089.2	1080.0	1082.3
5°	1094.9	1094.9	1093.8	1091.5	1092.6	1097.2	1094.9	1090.3	1085.7	1077.7	1081.1
7.5°	1086.9	1086.9	1085.7	1083.4	1085.7	1090.3	1088.0	1083.4	1080.0	1071.9	1075.4
10°	1075.4	1076.5	1075.4	1071.9	1076.5	1081.1	1080.0	1074.2	1070.8	1063.9	1067.3
12.5°	1061.6	1062.7	1061.6	1060.4	1062.7	1069.6	1067.3	1062.7	1060.4	1054.7	1058.1
15°	1045.5	1046.6	1044.3	1044.3	1046.6	1053.5	1053.5	1048.9	1046.6	1040.9	1047.8
17.5°	1024.8	1025.9	1024.8	1024.8	1027.1	1034.0	1035.1	1032.8	1030.5	1028.2	1035.1
20°	1004.1	1002.9	1002.9	1001.8	1006.4	1016.7	1015.6	1015.6	1013.3	1013.3	1021.3
22.5°	979.9	979.9	978.8	978.8	984.5	993.7	993.7	996.0	993.7	998.3	1005.2
25°	952.3	953.5	952.3	954.6	959.2	969.6	970.7	974.2	975.3	979.9	988.0
27.5°	923.6	924.7	923.6	925.9	933.9	942.0	947.7	952.3	953.5	960.4	970.7
30°	892.5	892.5	893.6	895.9	905.1	917.8	922.4	928.2	928.2	939.7	950.0
32.5°	860.3	860.3	860.3	864.9	875.2	890.2	895.9	902.8	905.1	916.6	928.2
35°	824.6	825.8	825.8	829.2	843.0	858.0	866.0	874.1	878.7	892.5	904.0
37.5°	791.3	793.6	790.1	794.7	814.3	826.9	836.1	844.2	852.2	870.6	879.8
40°	753.3	755.6	754.5	763.7	779.8	795.9	806.2	814.3	825.8	844.2	854.5
42.5°	713.1	715.4	717.7	728.0	745.3	761.4	774.0	784.4	798.2	814.3	831.5
45°	676.3	676.3	679.7	692.4	710.8	728.0	743.0	754.5	770.6	787.8	805.1
47.5°	634.9	636.0	640.6	655.6	675.1	695.8	709.6	724.6	741.8	760.2	779.8
50°	596.9	596.9	603.8	619.9	638.3	661.3	676.3	693.5	711.9	733.8	753.3
52.5°	553.2	555.5	565.9	580.8	605.0	625.7	642.9	661.3	683.2	706.2	728.0
55°	509.5	514.1	522.2	542.9	568.2	587.7	608.4	631.4	652.1	677.4	702.7
57.5°	467.0	470.4	483.1	503.8	530.2	554.4	576.2	598.1	623.4	648.7	675.1
60°	423.2	427.8	442.8	463.5	492.3	517.6	542.9	565.9	592.3	618.8	646.4
62.5°	381.8	385.3	402.5	426.7	455.4	483.1	508.4	536.0	564.7	590.0	617.6
65°	338.1	343.9	363.4	385.3	418.6	446.2	475.0	504.9	534.8	562.4	588.9
67.5°	297.9	301.3	322.0	347.3	380.7	411.7	441.6	473.9	504.9	533.7	560.1
70°	250.7	262.2	282.9	309.4	345.0	377.2	409.4	442.8	476.2	506.1	531.4
72.5°	211.6	220.8	243.8	272.6	307.1	345.0	378.4	414.0	447.4	478.5	504.9
75°	170.2	179.4	205.9	238.1	273.7	314.0	348.5	385.3	419.8	450.8	478.5
77.5°	130.0	141.5	170.2	203.6	242.7	284.1	319.7	356.5	392.2	425.5	453.1
80°	93.2	105.8	136.9	174.8	212.8	254.2	293.3	330.1	365.7	399.1	427.8
82.5°	59.8	73.6	107.0	144.9	185.2	226.6	266.8	303.6	339.3	372.6	402.5
85°	32.2	47.2	81.7	119.6	159.9	201.3	241.5	280.6	315.1	346.2	378.4
87.5°	9.2	27.6	61.0	98.9	140.3	178.3	217.4	256.5	291.0	324.3	353.1
90°	1.2	16.1	46.0	81.7	121.9	158.7	197.8	234.6	269.1	302.5	331.2
92.5°	1.2	10.4	35.7	67.9	104.7	142.6	181.7	217.4	249.6	282.9	311.7
95°	1.2	8.1	28.8	57.5	92.0	127.7	164.5	199.0	232.3	263.4	292.1
97.5°	1.2	5.8	23.0	49.5	80.5	113.9	149.5	184.0	216.2	246.1	272.6
100°	1.2	4.6	18.4	42.6	70.2	102.4	134.6	167.9	199.0	227.7	255.3
102.5°	1.2	3.5	16.1	35.7	62.1	90.9	121.9	153.0	182.9	210.5	238.1
105°	1.2	3.5	13.8	31.1	55.2	81.7	110.4	140.3	167.9	194.4	219.7
107.5°	1.2	2.3	11.5	26.5	48.3	73.6	100.1	128.8	154.1	179.4	203.6
110°	1.2	2.3	9.2	24.2	42.6	65.6	90.9	117.3	141.5	165.6	188.6

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.2	2.3	8.1	20.7	36.8	58.7	81.7	105.8	128.8	153.0	173.7
115°	1.2	2.3	6.9	18.4	34.5	50.6	73.6	95.5	118.5	140.3	159.9
117.5°	1.2	2.3	5.8	15.0	29.9	46.0	64.4	86.3	107.0	127.7	146.1
120°	1.2	2.3	4.6	13.8	26.5	41.4	57.5	77.1	96.6	116.2	135.7
122.5°	1.2	1.2	4.6	11.5	23.0	36.8	52.9	67.9	86.3	104.7	121.9
125°	1.2	1.2	4.6	10.4	19.6	33.4	47.2	61.0	77.1	93.2	108.1
127.5°	1.2	1.2	3.5	8.1	17.3	28.8	41.4	56.4	67.9	82.8	97.8
130°	1.2	1.2	3.5	6.9	15.0	24.2	36.8	49.5	63.3	73.6	86.3
132.5°	1.2	1.2	3.5	5.8	11.5	19.6	31.1	42.6	55.2	66.7	77.1
135°	1.2	1.2	2.3	4.6	9.2	16.1	25.3	35.7	48.3	59.8	70.2
137.5°	1.2	1.2	2.3	4.6	6.9	13.8	19.6	28.8	40.3	50.6	61.0
140°	1.2	1.2	2.3	3.5	5.8	10.4	16.1	23.0	32.2	41.4	52.9
142.5°	1.2	1.2	1.2	3.5	4.6	8.1	12.7	18.4	25.3	33.4	42.6
145°	1.2	1.2	1.2	3.5	4.6	5.8	10.4	15.0	19.6	25.3	33.4
147.5°	1.2	1.2	1.2	2.3	3.5	4.6	8.1	11.5	15.0	19.6	24.2
150°	1.2	1.2	1.2	2.3	3.5	4.6	5.8	8.1	11.5	16.1	19.6
152.5°	1.2	1.2	1.2	2.3	2.3	3.5	4.6	5.8	8.1	11.5	13.8
155°	1.2	1.2	1.2	1.2	2.3	3.5	4.6	4.6	5.8	8.1	10.4
157.5°	1.2	1.2	1.2	1.2	2.3	2.3	3.5	3.5	4.6	4.6	6.9
160°	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	3.5	3.5	3.5
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3	3.5	3.5
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	2.3
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°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1082.3	1083.4	1086.9	1086.9	1084.6	1084.6	1083.4	1082.3	1083.4	1085.7	1085.7
5°	1080.0	1081.1	1084.6	1085.7	1083.4	1082.3	1082.3	1081.1	1082.3	1084.6	1084.6
7.5°	1075.4	1076.5	1080.0	1081.1	1078.8	1078.8	1077.7	1076.5	1078.8	1080.0	1080.0
10°	1068.5	1069.6	1074.2	1075.4	1074.2	1073.1	1073.1	1071.9	1073.1	1075.4	1075.4
12.5°	1059.3	1061.6	1067.3	1067.3	1067.3	1066.2	1066.2	1065.0	1066.2	1068.5	1067.3
15°	1048.9	1053.5	1058.1	1060.4	1060.4	1060.4	1059.3	1058.1	1060.4	1061.6	1060.4
17.5°	1037.4	1043.2	1050.1	1052.4	1052.4	1053.5	1052.4	1051.2	1053.5	1053.5	1052.4
20°	1025.9	1031.7	1038.6	1040.9	1043.2	1044.3	1044.3	1043.2	1044.3	1045.5	1044.3
22.5°	1011.0	1017.9	1025.9	1029.4	1031.7	1034.0	1034.0	1034.0	1035.1	1036.3	1034.0
25°	994.9	1002.9	1012.1	1015.6	1020.2	1021.3	1022.5	1022.5	1023.6	1024.8	1021.3
27.5°	977.6	986.8	996.0	1001.8	1005.2	1007.5	1007.5	1008.7	1009.8	1011.0	1007.5
30°	956.9	970.7	978.8	983.4	988.0	991.4	992.6	993.7	994.9	996.0	992.6
32.5°	938.5	950.0	960.4	966.1	971.9	976.5	977.6	977.6	979.9	979.9	976.5
35°	916.6	930.5	940.8	946.6	953.5	956.9	959.2	959.2	961.5	961.5	958.1
37.5°	894.8	908.6	920.1	927.0	935.1	939.7	940.8	940.8	943.1	943.1	938.5
40°	871.8	886.7	899.4	907.4	914.3	920.1	921.3	924.7	924.7	923.6	918.9
42.5°	848.8	862.6	876.4	885.6	894.8	900.5	902.8	904.0	904.0	902.8	899.4
45°	823.5	839.6	852.2	863.7	872.9	878.7	882.1	883.3	883.3	881.0	877.5
47.5°	799.3	815.4	828.1	840.7	849.9	856.8	860.3	861.4	860.3	859.1	855.7
50°	774.0	792.4	805.1	817.7	826.9	832.7	838.4	839.6	838.4	837.3	830.4
52.5°	747.6	767.1	780.9	793.6	803.9	810.8	815.4	816.6	816.6	814.3	809.7
55°	721.1	738.4	755.6	769.4	780.9	787.8	793.6	795.9	793.6	791.3	785.5
57.5°	697.0	713.1	730.3	745.3	756.8	766.0	770.6	772.9	770.6	767.1	761.4
60°	668.2	685.5	705.0	718.8	731.5	740.7	743.0	747.6	745.3	741.8	736.1
62.5°	640.6	661.3	678.6	695.8	706.2	716.5	721.1	723.4	721.1	717.7	711.9
65°	611.9	634.9	652.1	669.4	680.9	691.2	697.0	698.1	695.8	692.4	686.6
67.5°	585.4	607.3	625.7	644.1	654.4	664.8	670.5	672.8	670.5	665.9	660.2
70°	559.0	580.8	602.7	616.5	629.1	640.6	644.1	647.5	645.2	640.6	633.7
72.5°	532.5	555.5	577.4	591.2	605.0	615.3	619.9	623.4	621.1	616.5	608.4
75°	504.9	529.1	550.9	565.9	579.7	590.0	594.6	598.1	595.8	591.2	582.0
77.5°	479.6	503.8	524.5	540.6	554.4	563.6	571.6	572.8	570.5	565.9	556.7
80°	453.1	477.3	499.2	515.3	529.1	538.3	544.0	547.5	545.2	540.6	531.4
82.5°	430.1	452.0	473.9	490.0	503.8	515.3	519.9	523.3	522.2	515.3	508.4
85°	404.8	430.1	447.4	464.7	478.5	490.0	493.4	498.0	496.9	491.1	481.9
87.5°	379.5	404.8	425.5	442.8	455.4	464.7	470.4	472.7	471.6	465.8	455.4
90°	358.8	381.8	402.5	420.9	431.3	441.6	447.4	448.5	448.5	441.6	433.6
92.5°	339.3	361.1	381.8	399.1	411.7	420.9	425.5	427.8	426.7	420.9	411.7
95°	317.4	341.6	361.1	378.4	391.0	400.2	404.8	407.1	406.0	400.2	391.0
97.5°	299.0	320.9	340.4	356.5	369.2	378.4	383.0	385.3	385.3	379.5	370.3
100°	280.6	302.5	320.9	337.0	348.5	357.7	362.3	363.4	362.3	357.7	348.5
102.5°	262.2	282.9	301.3	316.3	328.9	337.0	341.6	342.7	342.7	337.0	327.8
105°	243.8	264.5	281.8	297.9	308.2	316.3	319.7	323.2	322.0	317.4	308.2
107.5°	226.6	247.3	263.4	278.3	288.7	296.7	300.2	303.6	302.5	297.9	288.7
110°	210.5	230.0	245.0	259.9	269.1	277.2	282.9	284.1	281.8	277.2	269.1



TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	195.5	212.8	227.7	241.5	251.9	257.6	262.2	264.5	262.2	257.6	251.9
115°	179.4	196.7	211.6	224.3	233.5	240.4	243.8	246.1	243.8	239.2	233.5
117.5°	164.5	180.6	195.5	208.2	216.2	222.0	225.4	227.7	225.4	222.0	216.2
120°	151.8	165.6	179.4	190.9	200.1	204.7	208.2	210.5	209.3	204.7	199.0
122.5°	136.9	151.8	164.5	176.0	184.0	188.6	190.9	193.2	192.1	188.6	182.9
125°	124.2	136.9	149.5	159.9	167.9	172.5	174.8	177.1	176.0	172.5	165.6
127.5°	110.4	124.2	134.6	144.9	150.7	157.6	158.7	161.0	159.9	156.4	150.7
130°	100.1	110.4	120.8	130.0	136.9	141.5	143.8	144.9	142.6	140.3	134.6
132.5°	87.4	98.9	108.1	116.2	120.8	125.4	127.7	128.8	128.8	125.4	120.8
135°	78.2	86.3	94.3	102.4	107.0	111.6	113.9	115.0	113.9	111.6	107.0
137.5°	70.2	77.1	82.8	89.7	95.5	97.8	100.1	100.1	98.9	97.8	94.3
140°	61.0	69.0	74.8	79.4	84.0	85.1	87.4	87.4	86.3	85.1	82.8
142.5°	51.8	58.7	64.4	70.2	73.6	75.9	77.1	78.2	77.1	75.9	72.5
145°	41.4	49.5	55.2	58.7	63.3	64.4	65.6	66.7	65.6	64.4	61.0
147.5°	32.2	39.1	44.9	49.5	52.9	54.1	55.2	56.4	55.2	52.9	51.8
150°	23.0	28.8	35.7	40.3	42.6	44.9	44.9	44.9	46.0	43.7	41.4
152.5°	18.4	20.7	25.3	29.9	33.4	34.5	35.7	35.7	34.5	34.5	32.2
155°	12.7	15.0	18.4	21.9	25.3	26.5	27.6	27.6	26.5	26.5	25.3
157.5°	8.1	10.4	12.7	15.0	18.4	19.6	20.7	20.7	20.7	19.6	18.4
160°	4.6	5.8	6.9	9.2	11.5	12.7	13.8	13.8	13.8	13.8	12.7
162.5°	3.5	3.5	3.5	4.6	5.8	6.9	8.1	8.1	8.1	8.1	6.9
165°	2.3	2.3	2.3	2.3	2.3	3.5	4.6	4.6	4.6	4.6	4.6
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: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1084.6	1084.6	1085.7	1083.4	1076.5	1077.7	1077.7	1082.3	1084.6	1085.7	1091.5
5°	1082.3	1082.3	1084.6	1081.1	1075.4	1075.4	1075.4	1080.0	1081.1	1083.4	1088.0
7.5°	1078.8	1078.8	1080.0	1076.5	1069.6	1069.6	1068.5	1073.1	1075.4	1076.5	1081.1
10°	1073.1	1073.1	1074.2	1070.8	1062.7	1062.7	1061.6	1065.0	1066.2	1068.5	1071.9
12.5°	1065.0	1065.0	1065.0	1061.6	1053.5	1052.4	1051.2	1054.7	1054.7	1055.8	1059.3
15°	1058.1	1055.8	1055.8	1052.4	1044.3	1042.0	1039.7	1040.9	1043.2	1042.0	1044.3
17.5°	1050.1	1047.8	1045.5	1042.0	1031.7	1028.2	1025.9	1027.1	1025.9	1024.8	1027.1
20°	1040.9	1037.4	1036.3	1030.5	1020.2	1014.4	1009.8	1007.5	1008.7	1005.2	1006.4
22.5°	1030.5	1025.9	1023.6	1016.7	1006.4	999.5	993.7	989.1	988.0	983.4	984.5
25°	1017.9	1012.1	1008.7	1002.9	991.4	983.4	976.5	969.6	966.1	960.4	959.2
27.5°	1002.9	997.2	992.6	986.8	975.3	965.0	956.9	947.7	943.1	936.2	932.8
30°	988.0	981.1	974.2	969.6	956.9	945.4	932.8	924.7	917.8	909.7	904.0
32.5°	969.6	962.7	955.8	948.9	937.4	923.6	913.2	900.5	892.5	883.3	876.4
35°	951.2	942.0	935.1	925.9	915.5	899.4	886.7	874.1	863.7	853.4	845.3
37.5°	930.5	923.6	913.2	905.1	892.5	876.4	862.6	846.5	837.3	823.5	813.1
40°	910.9	902.8	892.5	882.1	869.5	851.1	836.1	817.7	807.4	791.3	780.9
42.5°	891.3	879.8	869.5	858.0	844.2	826.9	808.5	790.1	776.3	761.4	746.4
45°	869.5	856.8	844.2	831.5	817.7	800.5	780.9	761.4	744.1	730.3	711.9
47.5°	846.5	833.8	818.9	805.1	790.1	772.9	752.2	731.5	713.1	697.0	677.4
50°	823.5	810.8	794.7	779.8	762.5	745.3	723.4	699.3	679.7	659.0	641.8
52.5°	799.3	786.7	771.7	752.2	733.8	716.5	693.5	668.2	646.4	629.1	607.3
55°	775.2	762.5	745.3	725.7	707.3	685.5	663.6	638.3	614.2	593.5	571.6
57.5°	749.9	738.4	718.8	702.7	679.7	656.7	633.7	609.6	583.1	559.0	533.7
60°	724.6	711.9	693.5	674.0	651.0	628.0	603.8	577.4	549.8	523.3	500.3
62.5°	701.6	685.5	668.2	647.5	623.4	601.5	573.9	545.2	517.6	490.0	462.4
65°	675.1	657.9	641.8	621.1	595.8	570.5	542.9	514.1	484.2	454.3	426.7
67.5°	648.7	631.4	614.2	593.5	567.0	540.6	511.8	483.1	449.7	420.9	388.7
70°	622.2	608.4	586.6	564.7	540.6	511.8	483.1	452.0	417.5	386.4	353.1
72.5°	595.8	582.0	560.1	537.1	514.1	484.2	453.1	422.1	389.9	354.2	318.6
75°	570.5	553.2	533.7	511.8	487.7	456.6	425.5	393.3	355.4	322.0	285.2
77.5°	546.3	530.2	510.7	486.5	460.0	430.1	397.9	364.6	326.6	291.0	250.7
80°	519.9	503.8	484.2	460.0	433.6	404.8	370.3	335.8	299.0	259.9	218.5
82.5°	494.6	479.6	457.7	435.9	407.1	378.4	343.9	309.4	270.3	232.3	192.1
85°	468.1	453.1	432.4	409.4	381.8	350.8	318.6	284.1	245.0	205.9	165.6
87.5°	445.1	427.8	407.1	384.1	356.5	326.6	295.6	258.8	220.8	182.9	141.5
90°	420.9	404.8	384.1	361.1	333.5	303.6	271.4	236.9	200.1	161.0	121.9
92.5°	400.2	383.0	363.4	340.4	312.8	284.1	251.9	217.4	181.7	143.8	105.8
95°	379.5	362.3	343.9	320.9	293.3	264.5	232.3	199.0	164.5	127.7	92.0
97.5°	356.5	341.6	323.2	301.3	273.7	246.1	215.1	182.9	149.5	113.9	80.5
100°	338.1	320.9	303.6	280.6	255.3	228.9	197.8	166.8	134.6	101.2	70.2
102.5°	317.4	301.3	284.1	262.2	236.9	210.5	181.7	151.8	121.9	90.9	61.0
105°	297.9	282.9	264.5	243.8	219.7	194.4	166.8	139.2	110.4	80.5	54.1
107.5°	278.3	263.4	246.1	226.6	203.6	178.3	153.0	125.4	98.9	72.5	48.3
110°	258.8	245.0	228.9	209.3	187.5	164.5	140.3	115.0	88.6	64.4	42.6

TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	241.5	227.7	211.6	193.2	172.5	150.7	127.7	103.5	79.4	57.5	36.8
115°	224.3	211.6	195.5	179.4	158.7	138.0	116.2	93.2	71.3	51.8	32.2
117.5°	207.0	194.4	179.4	163.3	144.9	125.4	104.7	82.8	64.4	46.0	28.8
120°	189.8	178.3	164.5	149.5	133.4	113.9	93.2	74.8	57.5	40.3	25.3
122.5°	173.7	163.3	150.7	136.9	119.6	101.2	84.0	67.9	51.8	35.7	20.7
125°	158.7	148.4	136.9	123.1	107.0	90.9	75.9	61.0	44.9	31.1	17.3
127.5°	143.8	133.4	121.9	109.3	96.6	81.7	67.9	54.1	40.3	27.6	15.0
130°	128.8	119.6	109.3	98.9	86.3	72.5	61.0	47.2	34.5	21.9	12.7
132.5°	113.9	107.0	97.8	87.4	75.9	65.6	52.9	41.4	29.9	19.6	11.5
135°	101.2	94.3	86.3	77.1	67.9	57.5	46.0	35.7	25.3	16.1	9.2
137.5°	89.7	84.0	75.9	67.9	59.8	49.5	40.3	29.9	20.7	13.8	6.9
140°	79.4	73.6	66.7	58.7	51.8	42.6	33.4	24.2	18.4	11.5	5.8
142.5°	69.0	63.3	57.5	50.6	43.7	35.7	27.6	20.7	15.0	9.2	5.8
145°	58.7	54.1	48.3	42.6	35.7	28.8	23.0	17.3	11.5	6.9	4.6
147.5°	48.3	44.9	39.1	34.5	28.8	23.0	18.4	13.8	9.2	5.8	3.5
150°	39.1	35.7	31.1	26.5	23.0	18.4	15.0	10.4	6.9	5.8	3.5
152.5°	29.9	27.6	24.2	21.9	18.4	13.8	10.4	8.1	5.8	4.6	2.3
155°	24.2	21.9	19.6	16.1	13.8	10.4	8.1	5.8	4.6	3.5	2.3
157.5°	17.3	16.1	13.8	11.5	9.2	6.9	5.8	5.8	3.5	2.3	1.2
160°	11.5	10.4	9.2	6.9	5.8	5.8	4.6	3.5	2.3	2.3	1.2
162.5°	6.9	5.8	5.8	5.8	4.6	4.6	3.5	2.3	2.3	1.2	1.2
165°	4.6	4.6	4.6	3.5	3.5	3.5	2.3	1.2	1.2	1.2	1.2
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: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1091.5	1088.0	1092.6	1100.7	1101.8	1100.7	1098.4	1101.8	1106.4	1105.3	1097.2
5°	1089.2	1084.6	1089.2	1097.2	1097.2	1096.1	1094.9	1098.4	1103.0	1101.8	1094.9
7.5°	1082.3	1077.7	1082.3	1089.2	1090.3	1088.0	1088.0	1091.5	1096.1	1094.9	1089.2
10°	1073.1	1068.5	1070.8	1078.8	1081.1	1078.8	1078.8	1082.3	1088.0	1086.9	1080.0
12.5°	1059.3	1055.8	1058.1	1065.0	1067.3	1066.2	1065.0	1069.6	1075.4	1075.4	1068.5
15°	1044.3	1039.7	1042.0	1050.1	1051.2	1048.9	1050.1	1053.5	1060.4	1060.4	1054.7
17.5°	1027.1	1021.3	1024.8	1030.5	1031.7	1031.7	1031.7	1036.3	1044.3	1043.2	1038.6
20°	1007.5	999.5	1001.8	1007.5	1009.8	1009.8	1009.8	1017.9	1023.6	1023.6	1019.0
22.5°	984.5	978.8	978.8	984.5	988.0	986.8	986.8	993.7	1001.8	1000.6	1000.6
25°	958.1	953.5	951.2	958.1	959.2	960.4	962.7	969.6	978.8	978.8	979.9
27.5°	930.5	925.9	924.7	930.5	931.6	932.8	935.1	943.1	952.3	953.5	955.8
30°	904.0	897.1	894.8	899.4	901.7	902.8	902.8	915.5	923.6	927.0	931.6
32.5°	872.9	866.0	860.3	868.3	869.5	871.8	872.9	885.6	894.8	900.5	907.4
35°	841.9	830.4	828.1	833.8	836.1	837.3	839.6	853.4	866.0	870.6	879.8
37.5°	807.4	799.3	792.4	798.2	800.5	801.6	808.5	821.2	833.8	840.7	849.9
40°	775.2	764.8	759.1	762.5	764.8	766.0	774.0	787.8	802.8	810.8	822.3
42.5°	739.5	725.7	721.1	724.6	725.7	729.2	736.1	754.5	769.4	780.9	790.1
45°	703.9	693.5	683.2	686.6	687.8	690.1	700.4	720.0	736.1	749.9	760.2
47.5°	667.1	654.4	644.1	646.4	651.0	652.1	663.6	686.6	701.6	716.5	730.3
50°	630.3	613.0	605.0	605.0	607.3	613.0	628.0	651.0	667.1	684.3	699.3
52.5°	592.3	576.2	567.0	568.2	570.5	577.4	591.2	614.2	632.6	651.0	669.4
55°	554.4	537.1	527.9	525.6	527.9	537.1	553.2	577.4	595.8	617.6	637.2
57.5°	516.4	495.7	487.7	484.2	486.5	498.0	514.1	539.4	562.4	583.1	606.1
60°	475.0	458.9	445.1	437.0	442.8	457.7	475.0	501.5	525.6	548.6	573.9
62.5°	439.3	418.6	403.7	395.6	401.4	414.0	438.2	463.5	490.0	516.4	541.7
65°	399.1	378.4	361.1	353.1	358.8	373.8	397.9	425.5	454.3	480.8	510.7
67.5°	360.0	338.1	317.4	309.4	316.3	332.4	358.8	389.9	420.9	448.5	480.8
70°	322.0	297.9	276.0	270.3	274.9	296.7	322.0	353.1	385.3	417.5	450.8
72.5°	287.5	257.6	234.6	227.7	233.5	257.6	286.4	318.6	353.1	387.6	423.2
75°	247.3	219.7	194.4	186.3	193.2	215.1	250.7	285.2	322.0	358.8	392.2
77.5°	215.1	182.9	156.4	143.8	155.3	182.9	217.4	254.2	292.1	330.1	368.0
80°	181.7	148.4	119.6	105.8	118.5	148.4	182.9	223.1	265.7	303.6	338.1
82.5°	151.8	116.2	86.3	71.3	85.1	118.5	156.4	196.7	238.1	276.0	316.3
85°	124.2	87.4	56.4	40.3	59.8	89.7	130.0	171.4	213.9	253.0	292.1
87.5°	101.2	65.6	34.5	17.3	36.8	70.2	108.1	149.5	192.1	231.2	268.0
90°	82.8	47.2	18.4	2.3	21.9	52.9	89.7	130.0	170.2	210.5	247.3
92.5°	67.9	35.7	10.4	1.2	13.8	42.6	77.1	115.0	154.1	193.2	228.9
95°	56.4	27.6	6.9	1.2	10.4	33.4	65.6	102.4	139.2	177.1	212.8
97.5°	48.3	23.0	5.8	1.2	8.1	28.8	56.4	90.9	126.5	162.2	196.7
100°	41.4	18.4	4.6	1.2	6.9	24.2	49.5	80.5	113.9	148.4	181.7
102.5°	35.7	15.0	3.5	1.2	5.8	20.7	43.7	72.5	102.4	135.7	167.9
105°	31.1	12.7	3.5	1.2	4.6	18.4	39.1	64.4	94.3	124.2	155.3
107.5°	26.5	10.4	2.3	1.2	3.5	15.0	34.5	58.7	85.1	113.9	142.6
110°	23.0	9.2	2.3	1.2	3.5	13.8	29.9	52.9	77.1	103.5	131.1

TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	19.6	6.9	2.3	1.2	2.3	11.5	26.5	47.2	70.2	94.3	120.8
115°	17.3	5.8	1.2	1.2	2.3	10.4	24.2	42.6	63.3	86.3	110.4
117.5°	13.8	4.6	1.2	1.2	1.2	8.1	20.7	38.0	57.5	79.4	101.2
120°	11.5	4.6	1.2	1.2	1.2	6.9	18.4	33.4	51.8	71.3	92.0
122.5°	10.4	3.5	1.2	1.2	1.2	5.8	16.1	29.9	46.0	64.4	84.0
125°	9.2	3.5	1.2	1.2	1.2	4.6	13.8	26.5	41.4	57.5	75.9
127.5°	6.9	3.5	1.2	1.2	1.2	3.5	12.7	23.0	36.8	51.8	67.9
130°	5.8	2.3	1.2	1.2	1.2	3.5	10.4	20.7	32.2	46.0	61.0
132.5°	4.6	2.3	1.2	1.2	1.2	2.3	8.1	16.1	27.6	40.3	54.1
135°	4.6	2.3	1.2	1.2	1.2	2.3	5.8	13.8	23.0	34.5	46.0
137.5°	4.6	1.2	1.2	1.2	1.2	2.3	4.6	10.4	18.4	27.6	38.0
140°	3.5	1.2	1.2	1.2	1.2	1.2	3.5	8.1	15.0	23.0	32.2
142.5°	3.5	1.2	1.2	1.2	1.2	1.2	3.5	5.8	11.5	18.4	25.3
145°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	4.6	9.2	13.8	20.7
147.5°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	3.5	6.9	11.5	16.1
150°	2.3	1.2	1.2	1.2	1.2	1.2	2.3	3.5	4.6	8.1	12.7
152.5°	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	5.8	8.1
155°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	3.5	4.6	5.8
157.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5	4.6
160°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3	3.5
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1093.8	1085.7	1088.0	1086.9	1089.2	1092.6	1092.6	1091.5	1091.5	1089.2	1086.9
5°	1091.5	1083.4	1086.9	1085.7	1088.0	1091.5	1091.5	1090.3	1090.3	1086.9	1085.7
7.5°	1084.6	1078.8	1081.1	1081.1	1083.4	1086.9	1086.9	1085.7	1085.7	1082.3	1081.1
10°	1077.7	1070.8	1074.2	1074.2	1076.5	1081.1	1081.1	1080.0	1080.0	1076.5	1075.4
12.5°	1066.2	1059.3	1065.0	1066.2	1068.5	1073.1	1071.9	1071.9	1071.9	1068.5	1067.3
15°	1052.4	1047.8	1053.5	1054.7	1058.1	1063.9	1063.9	1063.9	1063.9	1060.4	1059.3
17.5°	1037.4	1034.0	1039.7	1042.0	1046.6	1052.4	1052.4	1053.5	1054.7	1052.4	1051.2
20°	1020.2	1017.9	1023.6	1028.2	1035.1	1040.9	1043.2	1044.3	1046.6	1044.3	1043.2
22.5°	1000.6	1000.6	1008.7	1013.3	1021.3	1027.1	1030.5	1034.0	1036.3	1034.0	1032.8
25°	978.8	982.2	990.3	998.3	1007.5	1013.3	1016.7	1021.3	1023.6	1022.5	1021.3
27.5°	958.1	962.7	973.0	981.1	989.1	998.3	1001.8	1007.5	1009.8	1009.8	1008.7
30°	933.9	940.8	952.3	961.5	971.9	981.1	985.7	991.4	994.9	992.6	993.7
32.5°	910.9	922.4	931.6	942.0	953.5	962.7	968.4	975.3	978.8	977.6	978.8
35°	885.6	897.1	909.7	920.1	933.9	943.1	951.2	956.9	961.5	960.4	960.4
37.5°	858.0	872.9	885.6	899.4	912.0	922.4	930.5	937.4	942.0	942.0	942.0
40°	831.5	847.6	860.3	876.4	892.5	901.7	910.9	917.8	922.4	923.6	924.7
42.5°	802.8	820.0	835.0	852.2	868.3	879.8	890.2	898.2	902.8	905.1	904.0
45°	776.3	792.4	809.7	829.2	844.2	855.7	868.3	877.5	882.1	883.3	884.4
47.5°	746.4	764.8	784.4	803.9	818.9	833.8	845.3	854.5	859.1	862.6	862.6
50°	717.7	737.2	759.1	779.8	795.9	810.8	822.3	832.7	838.4	840.7	841.9
52.5°	691.2	709.6	732.6	753.3	769.4	784.4	799.3	810.8	816.6	818.9	818.9
55°	659.0	682.0	707.3	726.9	744.1	761.4	776.3	787.8	793.6	797.0	799.3
57.5°	629.1	653.3	679.7	700.4	721.1	737.2	751.0	766.0	770.6	775.2	776.3
60°	600.4	624.5	649.8	672.8	693.5	710.8	726.9	739.5	747.6	749.9	752.2
62.5°	570.5	595.8	622.2	645.2	667.1	687.8	702.7	714.2	723.4	726.9	729.2
65°	541.7	568.2	594.6	618.8	641.8	662.5	677.4	688.9	698.1	703.9	705.0
67.5°	510.7	539.4	567.0	592.3	615.3	637.2	652.1	663.6	672.8	679.7	680.9
70°	481.9	511.8	539.4	567.0	590.0	611.9	628.0	639.5	649.8	654.4	656.7
72.5°	454.3	485.4	514.1	541.7	564.7	586.6	603.8	615.3	625.7	631.4	632.6
75°	427.8	458.9	490.0	516.4	540.6	562.4	579.7	592.3	601.5	607.3	609.6
77.5°	401.4	433.6	464.7	491.1	516.4	538.3	553.2	568.2	577.4	584.3	584.3
80°	374.9	408.3	440.5	467.0	492.3	511.8	529.1	544.0	553.2	560.1	560.1
82.5°	351.9	384.1	415.2	441.6	467.0	488.8	506.1	519.9	530.2	534.8	536.0
85°	325.5	361.1	389.9	418.6	442.8	463.5	480.8	495.7	504.9	509.5	511.8
87.5°	303.6	338.1	369.2	394.5	418.6	439.3	458.9	471.6	480.8	486.5	488.8
90°	282.9	316.3	347.3	372.6	397.9	417.5	435.9	448.5	458.9	463.5	465.8
92.5°	264.5	297.9	327.8	353.1	377.2	399.1	416.3	429.0	438.2	442.8	446.2
95°	247.3	279.5	308.2	335.8	358.8	378.4	396.8	409.4	419.8	423.2	426.7
97.5°	230.0	261.1	289.8	316.3	340.4	358.8	376.1	388.7	396.8	402.5	406.0
100°	215.1	245.0	272.6	297.9	320.9	338.1	356.5	368.0	376.1	380.7	385.3
102.5°	199.0	228.9	255.3	279.5	303.6	319.7	337.0	348.5	355.4	363.4	363.4
105°	185.2	212.8	239.2	262.2	282.9	302.5	317.4	328.9	337.0	342.7	342.7
107.5°	170.2	197.8	223.1	247.3	266.8	285.2	299.0	309.4	318.6	322.0	325.5
110°	158.7	182.9	208.2	231.2	249.6	266.8	280.6	292.1	300.2	303.6	305.9

TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	144.9	170.2	193.2	215.1	233.5	249.6	263.4	272.6	280.6	285.2	286.4
115°	133.4	157.6	178.3	199.0	218.5	232.3	245.0	254.2	262.2	265.7	268.0
117.5°	123.1	144.9	165.6	182.9	201.3	216.2	228.9	236.9	243.8	248.4	250.7
120°	112.7	133.4	151.8	169.1	186.3	200.1	211.6	219.7	227.7	231.2	231.2
122.5°	102.4	121.9	139.2	155.3	171.4	184.0	196.7	203.6	210.5	213.9	213.9
125°	93.2	111.6	127.7	142.6	157.6	169.1	179.4	187.5	194.4	196.7	196.7
127.5°	84.0	101.2	116.2	130.0	142.6	154.1	164.5	172.5	178.3	180.6	180.6
130°	75.9	90.9	104.7	118.5	131.1	140.3	150.7	157.6	161.0	164.5	165.6
132.5°	67.9	81.7	94.3	105.8	118.5	127.7	135.7	142.6	146.1	149.5	150.7
135°	59.8	72.5	84.0	95.5	105.8	115.0	121.9	127.7	132.3	134.6	135.7
137.5°	50.6	64.4	74.8	84.0	95.5	102.4	110.4	113.9	118.5	120.8	120.8
140°	42.6	52.9	64.4	73.6	82.8	89.7	96.6	102.4	105.8	107.0	107.0
142.5°	34.5	43.7	52.9	64.4	72.5	78.2	85.1	89.7	92.0	93.2	94.3
145°	27.6	34.5	42.6	52.9	62.1	69.0	72.5	77.1	79.4	80.5	81.7
147.5°	20.7	27.6	34.5	41.4	50.6	57.5	61.0	65.6	67.9	69.0	69.0
150°	16.1	20.7	25.3	32.2	39.1	47.2	51.8	55.2	56.4	57.5	57.5
152.5°	11.5	16.1	19.6	24.2	28.8	35.7	42.6	44.9	46.0	47.2	47.2
155°	8.1	11.5	13.8	17.3	20.7	26.5	32.2	35.7	36.8	38.0	38.0
157.5°	5.8	8.1	9.2	12.7	15.0	17.3	21.9	27.6	28.8	28.8	28.8
160°	3.5	4.6	5.8	8.1	9.2	11.5	13.8	17.3	20.7	20.7	20.7
162.5°	2.3	3.5	3.5	4.6	4.6	6.9	8.1	9.2	12.7	13.8	13.8
165°	1.2	2.3	2.3	2.3	2.3	2.3	3.5	3.5	5.8	6.9	6.9
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: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1088.0	1090.3	1089.2	1089.2	1089.2	1091.5	1089.2	1078.8	1081.1	1083.4	1085.7
5°	1086.9	1088.0	1088.0	1086.9	1086.9	1089.2	1086.9	1076.5	1078.8	1081.1	1082.3
7.5°	1082.3	1083.4	1083.4	1083.4	1082.3	1084.6	1081.1	1071.9	1071.9	1074.2	1075.4
10°	1076.5	1078.8	1077.7	1076.5	1076.5	1076.5	1074.2	1063.9	1063.9	1065.0	1066.2
12.5°	1069.6	1069.6	1069.6	1068.5	1067.3	1067.3	1065.0	1054.7	1053.5	1055.8	1054.7
15°	1060.4	1062.7	1060.4	1059.3	1057.0	1057.0	1053.5	1043.2	1040.9	1042.0	1040.9
17.5°	1052.4	1053.5	1051.2	1048.9	1046.6	1045.5	1042.0	1030.5	1027.1	1028.2	1025.9
20°	1044.3	1044.3	1042.0	1039.7	1036.3	1032.8	1028.2	1016.7	1011.0	1011.0	1006.4
22.5°	1034.0	1034.0	1031.7	1028.2	1024.8	1020.2	1015.6	1004.1	994.9	992.6	989.1
25°	1022.5	1021.3	1020.2	1016.7	1009.8	1005.2	1000.6	988.0	977.6	973.0	967.3
27.5°	1008.7	1008.7	1005.2	1001.8	994.9	989.1	983.4	971.9	958.1	952.3	944.3
30°	993.7	993.7	990.3	985.7	978.8	971.9	965.0	951.2	937.4	929.3	920.1
32.5°	978.8	977.6	974.2	969.6	962.7	952.3	946.6	932.8	916.6	907.4	894.8
35°	960.4	959.2	955.8	950.0	940.8	932.8	923.6	910.9	892.5	881.0	867.2
37.5°	942.0	940.8	938.5	930.5	921.3	912.0	900.5	887.9	870.6	855.7	841.9
40°	923.6	922.4	917.8	912.0	900.5	889.0	877.5	864.9	846.5	829.2	814.3
42.5°	904.0	902.8	897.1	890.2	877.5	866.0	852.2	838.4	820.0	799.3	784.4
45°	884.4	882.1	876.4	868.3	854.5	841.9	828.1	812.0	793.6	774.0	754.5
47.5°	863.7	860.3	854.5	843.0	831.5	817.7	801.6	784.4	766.0	744.1	723.4
50°	840.7	838.4	831.5	821.2	807.4	793.6	775.2	757.9	736.1	715.4	690.1
52.5°	818.9	814.3	808.5	797.0	783.2	768.3	748.7	728.0	706.2	686.6	660.2
55°	795.9	793.6	785.5	776.3	759.1	741.8	723.4	701.6	677.4	654.4	629.1
57.5°	774.0	769.4	762.5	749.9	734.9	717.7	698.1	675.1	648.7	624.5	596.9
60°	752.2	745.3	737.2	725.7	709.6	691.2	670.5	646.4	619.9	593.5	564.7
62.5°	728.0	722.3	713.1	701.6	685.5	665.9	644.1	618.8	593.5	565.9	534.8
65°	703.9	698.1	688.9	677.4	661.3	639.5	616.5	591.2	562.4	536.0	502.6
67.5°	679.7	674.0	663.6	651.0	634.9	614.2	590.0	563.6	534.8	506.1	471.6
70°	655.6	648.7	639.5	625.7	609.6	587.7	563.6	536.0	507.2	476.2	441.6
72.5°	631.4	625.7	614.2	601.5	584.3	562.4	538.3	510.7	480.8	448.5	414.0
75°	607.3	600.4	592.3	577.4	559.0	538.3	513.0	485.4	453.1	422.1	386.4
77.5°	583.1	577.4	567.0	552.1	534.8	513.0	487.7	460.0	427.8	395.6	357.7
80°	559.0	552.1	544.0	530.2	510.7	488.8	462.4	434.7	402.5	369.2	331.2
82.5°	534.8	527.9	518.7	504.9	486.5	464.7	439.3	409.4	377.2	342.7	307.1
85°	510.7	504.9	494.6	480.8	461.2	439.3	414.0	387.6	353.1	318.6	282.9
87.5°	486.5	480.8	470.4	456.6	438.2	416.3	391.0	363.4	330.1	297.9	258.8
90°	463.5	458.9	448.5	434.7	416.3	394.5	371.5	341.6	309.4	277.2	240.4
92.5°	442.8	438.2	429.0	415.2	399.1	374.9	351.9	323.2	291.0	257.6	222.0
95°	424.4	418.6	409.4	396.8	377.2	356.5	333.5	304.8	273.7	240.4	205.9
97.5°	403.7	397.9	388.7	374.9	358.8	337.0	314.0	286.4	255.3	224.3	189.8
100°	383.0	377.2	366.9	355.4	339.3	317.4	295.6	268.0	239.2	209.3	176.0
102.5°	362.3	356.5	347.3	335.8	319.7	300.2	278.3	251.9	223.1	193.2	162.2
105°	342.7	337.0	327.8	316.3	301.3	281.8	258.8	235.8	208.2	179.4	149.5
107.5°	323.2	317.4	309.4	297.9	282.9	264.5	242.7	218.5	193.2	165.6	136.9
110°	303.6	299.0	289.8	279.5	264.5	246.1	226.6	203.6	178.3	153.0	125.4

TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	285.2	280.6	271.4	259.9	247.3	230.0	210.5	188.6	164.5	140.3	113.9
115°	266.8	261.1	253.0	242.7	230.0	213.9	195.5	176.0	151.8	128.8	104.7
117.5°	248.4	243.8	235.8	225.4	213.9	197.8	180.6	162.2	139.2	117.3	95.5
120°	230.0	226.6	218.5	209.3	197.8	182.9	166.8	148.4	127.7	107.0	86.3
122.5°	212.8	209.3	201.3	193.2	181.7	167.9	153.0	135.7	117.3	97.8	79.4
125°	196.7	192.1	185.2	177.1	166.8	154.1	139.2	123.1	105.8	88.6	71.3
127.5°	179.4	176.0	171.4	162.2	151.8	140.3	126.5	112.7	96.6	80.5	64.4
130°	165.6	161.0	155.3	148.4	139.2	127.7	115.0	101.2	87.4	72.5	56.4
132.5°	149.5	144.9	140.3	133.4	125.4	115.0	103.5	90.9	78.2	64.4	50.6
135°	134.6	131.1	126.5	119.6	111.6	103.5	92.0	80.5	69.0	56.4	44.9
137.5°	120.8	117.3	112.7	108.1	100.1	92.0	81.7	71.3	61.0	49.5	39.1
140°	107.0	104.7	100.1	95.5	88.6	80.5	71.3	62.1	52.9	42.6	33.4
142.5°	93.2	90.9	87.4	82.8	77.1	70.2	62.1	54.1	44.9	36.8	28.8
145°	80.5	79.4	75.9	71.3	66.7	59.8	52.9	46.0	38.0	31.1	23.0
147.5°	67.9	66.7	64.4	61.0	56.4	50.6	44.9	38.0	32.2	25.3	18.4
150°	56.4	55.2	54.1	49.5	47.2	41.4	36.8	31.1	26.5	19.6	15.0
152.5°	46.0	46.0	43.7	40.3	38.0	33.4	29.9	25.3	20.7	16.1	11.5
155°	36.8	35.7	34.5	32.2	29.9	26.5	23.0	19.6	16.1	11.5	8.1
157.5°	28.8	27.6	26.5	24.2	21.9	20.7	17.3	13.8	10.4	8.1	5.8
160°	20.7	19.6	18.4	17.3	16.1	13.8	11.5	9.2	6.9	4.6	3.5
162.5°	13.8	12.7	12.7	11.5	10.4	8.1	6.9	5.8	4.6	3.5	2.3
165°	6.9	6.9	5.8	5.8	4.6	3.5	3.5	3.5	2.3	2.3	1.2
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: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3	1090.3
2.5°	1084.6	1084.6	1089.2	1088.0	1084.6	1091.5	1099.5
5°	1081.1	1081.1	1084.6	1084.6	1081.1	1088.0	1094.9
7.5°	1075.4	1074.2	1077.7	1077.7	1073.1	1078.8	1086.9
10°	1065.0	1063.9	1067.3	1067.3	1062.7	1068.5	1075.4
12.5°	1053.5	1051.2	1054.7	1053.5	1048.9	1054.7	1061.6
15°	1038.6	1037.4	1039.7	1037.4	1032.8	1038.6	1045.5
17.5°	1023.6	1020.2	1021.3	1021.3	1013.3	1019.0	1024.8
20°	1004.1	999.5	1000.6	999.5	993.7	997.2	1004.1
22.5°	984.5	977.6	977.6	976.5	969.6	974.2	979.9
25°	960.4	952.3	952.3	951.2	943.1	946.6	952.3
27.5°	936.2	928.2	924.7	923.6	915.5	915.5	923.6
30°	910.9	899.4	897.1	893.6	885.6	885.6	892.5
32.5°	886.7	870.6	866.0	861.4	853.4	852.2	860.3
35°	854.5	841.9	833.8	829.2	820.0	817.7	824.6
37.5°	828.1	812.0	800.5	794.7	785.5	782.1	791.3
40°	799.3	782.1	767.1	763.7	749.9	745.3	753.3
42.5°	767.1	748.7	733.8	726.9	716.5	711.9	713.1
45°	734.9	715.4	699.3	690.1	679.7	671.7	676.3
47.5°	701.6	684.3	664.8	651.0	638.3	632.6	634.9
50°	668.2	647.5	629.1	614.2	599.2	592.3	596.9
52.5°	634.9	613.0	592.3	576.2	559.0	552.1	553.2
55°	602.7	579.7	555.5	538.3	522.2	511.8	509.5
57.5°	570.5	545.2	519.9	500.3	479.6	470.4	467.0
60°	536.0	509.5	483.1	460.0	438.2	427.8	423.2
62.5°	503.8	475.0	445.1	420.9	399.1	385.3	381.8
65°	472.7	439.3	409.4	381.8	357.7	342.7	338.1
67.5°	439.3	404.8	372.6	342.7	319.7	300.2	297.9
70°	408.3	371.5	335.8	304.8	279.5	259.9	250.7
72.5°	377.2	339.3	302.5	269.1	236.9	218.5	211.6
75°	347.3	308.2	269.1	234.6	199.0	177.1	170.2
77.5°	319.7	279.5	238.1	200.1	166.8	139.2	130.0
80°	293.3	251.9	208.2	169.1	133.4	103.5	93.2
82.5°	265.7	226.6	181.7	140.3	103.5	72.5	59.8
85°	241.5	202.4	157.6	116.2	79.4	46.0	32.2
87.5°	222.0	179.4	139.2	97.8	59.8	26.5	9.2
90°	202.4	161.0	120.8	80.5	44.9	15.0	1.2
92.5°	185.2	146.1	105.8	69.0	34.5	10.4	1.2
95°	169.1	131.1	93.2	57.5	27.6	6.9	1.2
97.5°	154.1	118.5	82.8	49.5	23.0	5.8	1.2
100°	141.5	107.0	73.6	43.7	19.6	4.6	1.2
102.5°	128.8	96.6	65.6	38.0	17.3	3.5	1.2
105°	118.5	87.4	58.7	34.5	15.0	3.5	1.2
107.5°	108.1	79.4	52.9	29.9	12.7	2.3	1.2
110°	97.8	72.5	47.2	26.5	11.5	2.3	1.2



TEST NUMBER: P1213820

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	89.7	65.6	42.6	24.2	9.2	2.3	1.2
115°	81.7	58.7	38.0	20.7	8.1	1.2	1.2
117.5°	73.6	52.9	33.4	18.4	6.9	1.2	1.2
120°	66.7	47.2	29.9	16.1	5.8	1.2	1.2
122.5°	59.8	42.6	26.5	13.8	4.6	1.2	1.2
125°	54.1	38.0	23.0	11.5	3.5	1.2	1.2
127.5°	48.3	33.4	20.7	10.4	3.5	1.2	1.2
130°	42.6	29.9	17.3	8.1	2.3	1.2	1.2
132.5°	38.0	25.3	15.0	6.9	2.3	1.2	1.2
135°	33.4	21.9	12.7	4.6	2.3	1.2	1.2
137.5°	28.8	18.4	10.4	3.5	1.2	1.2	1.2
140°	24.2	16.1	8.1	3.5	1.2	1.2	1.2
142.5°	20.7	12.7	5.8	2.3	1.2	1.2	1.2
145°	16.1	10.4	4.6	2.3	1.2	1.2	1.2
147.5°	12.7	8.1	3.5	2.3	1.2	1.2	1.2
150°	9.2	5.8	3.5	1.2	1.2	1.2	1.2
152.5°	6.9	4.6	2.3	1.2	1.2	1.2	1.2
155°	4.6	3.5	2.3	1.2	1.2	1.2	1.2
157.5°	3.5	2.3	1.2	1.2	1.2	1.2	1.2
160°	2.3	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
165°	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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)