

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: P1213469

Luminaire Tested: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213469
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-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

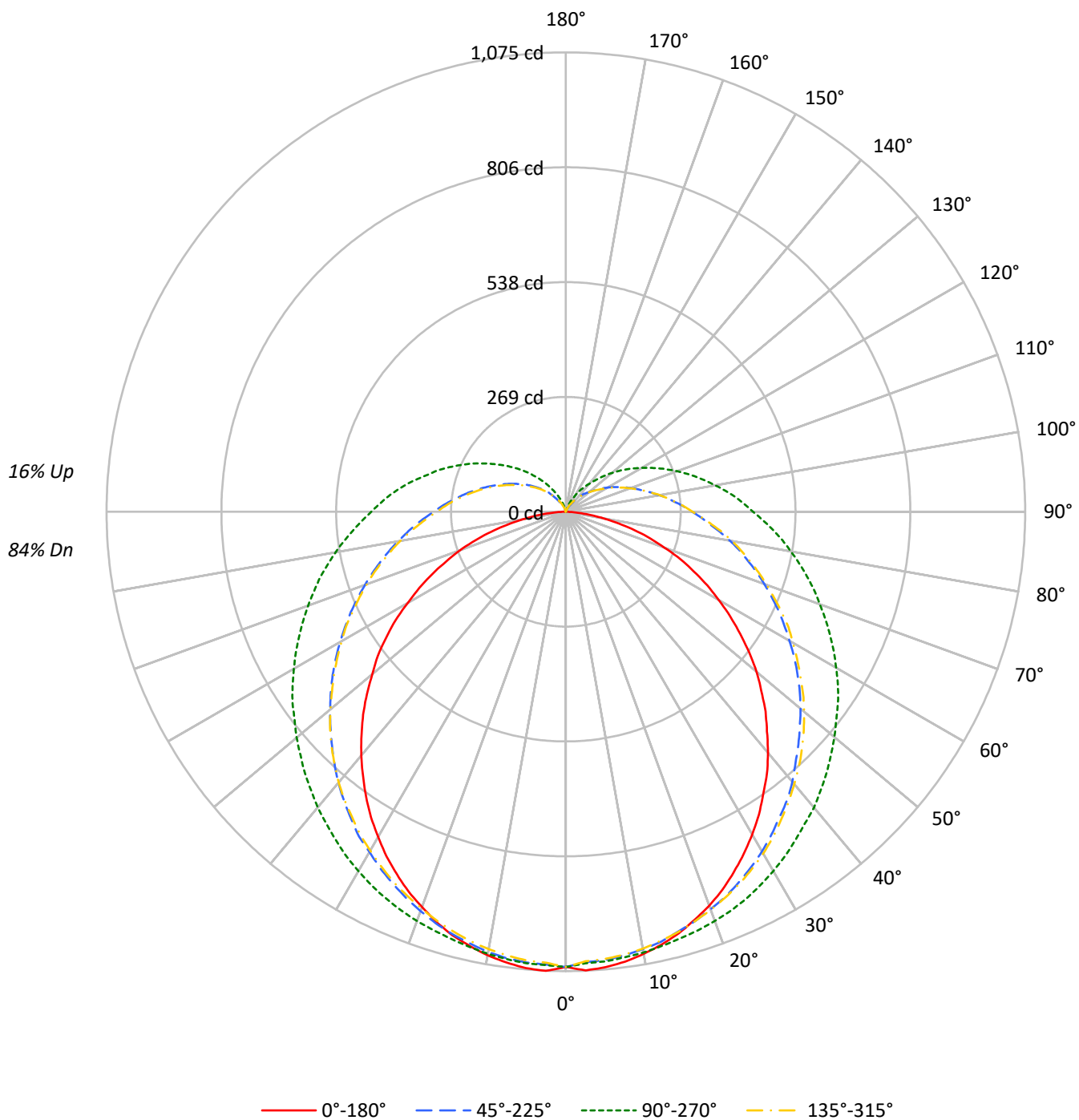
Lumens per Lamp: N/A
Luminaire Lumens: 4628.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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°	8608	8608	8608	8608
5°	8654	8295	8672	8331
10°	8574	8060	8601	8086
15°	8474	7858	8511	7867
20°	8341	7711	8369	7711
25°	8177	7580	8226	7571
30°	7993	7445	8054	7445
35°	7778	7320	7865	7330
40°	7566	7247	7658	7247
45°	7322	7171	7434	7180
50°	7069	7125	7163	7144
55°	6714	7132	6926	7162
60°	6340	7154	6547	7198
65°	5921	7226	6183	7297
70°	5331	7358	5747	7463
75°	4650	7599	5089	7744
80°	3597	7956	4087	8139
85°	2152	8526	2685	8763

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 270°

Vertical Angle: 90°

Luminance: 9797 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	2.2
10°-20°	290.0	6.3
20°-30°	444.7	9.6
30°-40°	548.6	11.9
40°-50°	595.1	12.9
50°-60°	586.6	12.7
60°-70°	530.4	11.5
70°-80°	441.8	9.5
80°-90°	342.2	7.4
90°-100°	259.5	5.6
100°-110°	192.1	4.1
110°-120°	133.6	2.9
120°-130°	85.2	1.8
130°-140°	47.8	1.0
140°-150°	21.8	0.5
150°-160°	6.8	0.1
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	835.6	18.1
0°-40°	1384.1	29.9
0°-60°	2565.9	55.4
0°-90°	3880.3	83.8
90°-120°	585.2	12.6
90°-150°	740.1	16.0
90°-180°	748.0	16.2
0°-180°	4628.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1065	1065	1065	1065	1065	
5°	1070	1056	1072	1061	1070	101
15°	1021	1034	1026	1035	1021	288
25°	930	999	936	998	930	429
35°	806	937	815	938	806	505
45°	661	863	671	864	661	509
55°	498	778	514	781	498	446
65°	330	682	345	689	330	327
75°	166	584	182	596	166	176
85°	32	486	39	500	32	38
90°	1	438	2	455	1	2
95°	1	398	1	417	1	1
105°	1	316	1	335	1	1
115°	1	240	1	262	1	1
125°	1	173	1	192	1	1
135°	1	112	1	133	1	1
145°	1	65	1	80	1	1
155°	1	27	1	37	1	1
165°	1	4	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°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1074.2	1074.2	1073.1	1070.8	1072.0	1075.3	1073.1	1067.5	1064.1	1055.1	1057.4
5°	1069.7	1069.7	1068.6	1066.4	1067.5	1072.0	1069.7	1065.2	1060.7	1052.9	1056.2
7.5°	1061.9	1061.9	1060.7	1058.5	1060.7	1065.2	1063.0	1058.5	1055.1	1047.3	1050.6
10°	1050.6	1051.7	1050.6	1047.3	1051.7	1056.2	1055.1	1049.5	1046.1	1039.4	1042.8
12.5°	1037.1	1038.3	1037.1	1036.0	1038.3	1045.0	1042.8	1038.3	1036.0	1030.4	1033.8
15°	1021.4	1022.5	1020.3	1020.3	1022.5	1029.3	1029.3	1024.8	1022.5	1016.9	1023.7
17.5°	1001.2	1002.3	1001.2	1001.2	1003.4	1010.2	1011.3	1009.0	1006.8	1004.6	1011.3
20°	981.0	979.8	979.8	978.7	983.2	993.3	992.2	992.2	989.9	989.9	997.8
22.5°	957.4	957.4	956.2	956.2	961.9	970.8	970.8	973.1	970.8	975.3	982.1
25°	930.4	931.5	930.4	932.6	937.1	947.2	948.4	951.7	952.9	957.4	965.2
27.5°	902.3	903.4	902.3	904.5	912.4	920.3	925.9	930.4	931.5	938.3	948.4
30°	872.0	872.0	873.1	875.3	884.3	896.7	901.2	906.8	906.8	918.0	928.1
32.5°	840.5	840.5	840.5	845.0	855.1	869.7	875.3	882.1	884.3	895.6	906.8
35°	805.7	806.8	806.8	810.2	823.6	838.3	846.1	854.0	858.5	872.0	883.2
37.5°	773.1	775.3	772.0	776.4	795.6	807.9	816.9	824.8	832.6	850.6	859.6
40°	736.0	738.2	737.1	746.1	761.8	777.6	787.7	795.6	806.8	824.8	834.9
42.5°	696.7	698.9	701.2	711.3	728.1	743.9	756.2	766.3	779.8	795.6	812.4
45°	660.7	660.7	664.1	676.4	694.4	711.3	725.9	737.1	752.9	769.7	786.6
47.5°	620.3	621.4	625.9	640.5	659.6	679.8	693.3	707.9	724.8	742.7	761.8
50°	583.2	583.2	589.9	605.7	623.6	646.1	660.7	677.6	695.5	716.9	736.0
52.5°	540.5	542.7	552.8	567.4	591.0	611.3	628.1	646.1	667.5	689.9	711.3
55°	497.8	502.3	510.1	530.4	555.1	574.2	594.4	616.9	637.1	661.8	686.6
57.5°	456.2	459.6	471.9	492.2	518.0	541.6	563.0	584.3	609.0	633.7	659.6
60°	413.5	418.0	432.6	452.8	480.9	505.6	530.4	552.8	578.7	604.5	631.5
62.5°	373.1	376.4	393.3	416.9	445.0	471.9	496.7	523.6	551.7	576.4	603.4
65°	330.4	336.0	355.1	376.4	409.0	436.0	464.1	493.3	522.5	549.5	575.3
67.5°	291.0	294.4	314.6	339.3	371.9	402.3	431.5	462.9	493.3	521.4	547.2
70°	245.0	256.2	276.4	302.3	337.1	368.6	400.0	432.6	465.2	494.4	519.1
72.5°	206.8	215.7	238.2	266.3	300.0	337.1	369.7	404.5	437.1	467.4	493.3
75°	166.3	175.3	201.1	232.6	267.4	306.8	340.5	376.4	410.1	440.5	467.4
77.5°	127.0	138.2	166.3	198.9	237.1	277.5	312.4	348.3	383.2	415.8	442.7
80°	91.0	103.4	133.7	170.8	207.9	248.3	286.5	322.5	357.3	389.9	418.0
82.5°	58.4	71.9	104.5	141.6	180.9	221.4	260.7	296.6	331.5	364.1	393.3
85°	31.5	46.1	79.8	116.9	156.2	196.6	236.0	274.2	307.9	338.2	369.7
87.5°	9.0	27.0	59.6	96.6	137.1	174.2	212.4	250.6	284.3	316.9	345.0
90°	1.1	15.7	44.9	79.8	119.1	155.1	193.3	229.2	262.9	295.5	323.6
92.5°	1.1	10.1	34.8	66.3	102.3	139.3	177.5	212.4	243.8	276.4	304.5
95°	1.1	7.9	28.1	56.2	89.9	124.7	160.7	194.4	227.0	257.3	285.4
97.5°	1.1	5.6	22.5	48.3	78.7	111.2	146.1	179.8	211.2	240.5	266.3
100°	1.1	4.5	18.0	41.6	68.5	100.0	131.5	164.1	194.4	222.5	249.5
102.5°	1.1	3.4	15.7	34.8	60.7	88.8	119.1	149.4	178.7	205.6	232.6
105°	1.1	3.4	13.5	30.3	53.9	79.8	107.9	137.1	164.1	189.9	214.6
107.5°	1.1	2.2	11.2	25.8	47.2	71.9	97.8	125.8	150.6	175.3	198.9
110°	1.1	2.2	9.0	23.6	41.6	64.0	88.8	114.6	138.2	161.8	184.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.2	7.9	20.2	36.0	57.3	79.8	103.4	125.8	149.4	169.7
115°	1.1	2.2	6.7	18.0	33.7	49.4	71.9	93.3	115.7	137.1	156.2
117.5°	1.1	2.2	5.6	14.6	29.2	44.9	62.9	84.3	104.5	124.7	142.7
120°	1.1	2.2	4.5	13.5	25.8	40.5	56.2	75.3	94.4	113.5	132.6
122.5°	1.1	1.1	4.5	11.2	22.5	36.0	51.7	66.3	84.3	102.3	119.1
125°	1.1	1.1	4.5	10.1	19.1	32.6	46.1	59.6	75.3	91.0	105.6
127.5°	1.1	1.1	3.4	7.9	16.9	28.1	40.5	55.1	66.3	80.9	95.5
130°	1.1	1.1	3.4	6.7	14.6	23.6	36.0	48.3	61.8	71.9	84.3
132.5°	1.1	1.1	3.4	5.6	11.2	19.1	30.3	41.6	53.9	65.2	75.3
135°	1.1	1.1	2.2	4.5	9.0	15.7	24.7	34.8	47.2	58.4	68.5
137.5°	1.1	1.1	2.2	4.5	6.7	13.5	19.1	28.1	39.3	49.4	59.6
140°	1.1	1.1	2.2	3.4	5.6	10.1	15.7	22.5	31.5	40.5	51.7
142.5°	1.1	1.1	1.1	3.4	4.5	7.9	12.4	18.0	24.7	32.6	41.6
145°	1.1	1.1	1.1	3.4	4.5	5.6	10.1	14.6	19.1	24.7	32.6
147.5°	1.1	1.1	1.1	2.2	3.4	4.5	7.9	11.2	14.6	19.1	23.6
150°	1.1	1.1	1.1	2.2	3.4	4.5	5.6	7.9	11.2	15.7	19.1
152.5°	1.1	1.1	1.1	2.2	2.2	3.4	4.5	5.6	7.9	11.2	13.5
155°	1.1	1.1	1.1	1.1	2.2	3.4	4.5	4.5	5.6	7.9	10.1
157.5°	1.1	1.1	1.1	1.1	2.2	2.2	3.4	3.4	4.5	4.5	6.7
160°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.4	3.4	3.4	3.4
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	3.4	3.4
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1057.4	1058.5	1061.9	1061.9	1059.6	1059.6	1058.5	1057.4	1058.5	1060.7	1060.7
5°	1055.1	1056.2	1059.6	1060.7	1058.5	1057.4	1057.4	1056.2	1057.4	1059.6	1059.6
7.5°	1050.6	1051.7	1055.1	1056.2	1054.0	1054.0	1052.9	1051.7	1054.0	1055.1	1055.1
10°	1043.9	1045.0	1049.5	1050.6	1049.5	1048.4	1048.4	1047.3	1048.4	1050.6	1050.6
12.5°	1034.9	1037.1	1042.8	1042.8	1042.8	1041.6	1041.6	1040.5	1041.6	1043.9	1042.8
15°	1024.8	1029.3	1033.8	1036.0	1036.0	1036.0	1034.9	1033.8	1036.0	1037.1	1036.0
17.5°	1013.5	1019.2	1025.9	1028.1	1028.1	1029.3	1028.1	1027.0	1029.3	1029.3	1028.1
20°	1002.3	1007.9	1014.7	1016.9	1019.2	1020.3	1020.3	1019.2	1020.3	1021.4	1020.3
22.5°	987.7	994.4	1002.3	1005.7	1007.9	1010.2	1010.2	1010.2	1011.3	1012.4	1010.2
25°	972.0	979.8	988.8	992.2	996.7	997.8	998.9	998.9	1000.1	1001.2	997.8
27.5°	955.1	964.1	973.1	978.7	982.1	984.3	984.3	985.4	986.6	987.7	984.3
30°	934.9	948.4	956.2	960.7	965.2	968.6	969.7	970.8	972.0	973.1	969.7
32.5°	916.9	928.1	938.3	943.9	949.5	954.0	955.1	955.1	957.4	957.4	954.0
35°	895.6	909.0	919.2	924.8	931.5	934.9	937.1	937.1	939.4	939.4	936.0
37.5°	874.2	887.7	898.9	905.7	913.5	918.0	919.2	919.2	921.4	921.4	916.9
40°	851.7	866.3	878.7	886.6	893.3	898.9	900.1	903.4	903.4	902.3	897.8
42.5°	829.3	842.7	856.2	865.2	874.2	879.8	882.1	883.2	883.2	882.1	878.7
45°	804.5	820.3	832.6	843.9	852.9	858.5	861.8	863.0	863.0	860.7	857.4
47.5°	780.9	796.7	809.0	821.4	830.4	837.1	840.5	841.6	840.5	839.4	836.0
50°	756.2	774.2	786.6	798.9	807.9	813.5	819.1	820.3	819.1	818.0	811.3
52.5°	730.4	749.5	763.0	775.3	785.4	792.2	796.7	797.8	797.8	795.6	791.1
55°	704.5	721.4	738.2	751.7	763.0	769.7	775.3	777.6	775.3	773.1	767.5
57.5°	680.9	696.7	713.5	728.1	739.4	748.4	752.9	755.1	752.9	749.5	743.9
60°	652.8	669.7	688.8	702.3	714.6	723.6	725.9	730.4	728.1	724.8	719.1
62.5°	625.9	646.1	663.0	679.8	689.9	700.0	704.5	706.8	704.5	701.2	695.5
65°	597.8	620.3	637.1	654.0	665.2	675.3	680.9	682.1	679.8	676.4	670.8
67.5°	571.9	593.3	611.3	629.2	639.4	649.5	655.1	657.3	655.1	650.6	645.0
70°	546.1	567.4	588.8	602.3	614.6	625.9	629.2	632.6	630.4	625.9	619.1
72.5°	520.3	542.7	564.1	577.6	591.0	601.2	605.7	609.0	606.8	602.3	594.4
75°	493.3	516.9	538.2	552.8	566.3	576.4	580.9	584.3	582.1	577.6	568.6
77.5°	468.6	492.2	512.4	528.1	541.6	550.6	558.5	559.6	557.3	552.8	543.9
80°	442.7	466.3	487.7	503.4	516.9	525.9	531.5	534.9	532.6	528.1	519.1
82.5°	420.2	441.6	462.9	478.7	492.2	503.4	507.9	511.3	510.1	503.4	496.7
85°	395.5	420.2	437.1	454.0	467.4	478.7	482.1	486.5	485.4	479.8	470.8
87.5°	370.8	395.5	415.8	432.6	445.0	454.0	459.6	461.8	460.7	455.1	445.0
90°	350.6	373.1	393.3	411.3	421.4	431.5	437.1	438.2	438.2	431.5	423.6
92.5°	331.5	352.8	373.1	389.9	402.3	411.3	415.8	418.0	416.9	411.3	402.3
95°	310.1	333.7	352.8	369.7	382.0	391.0	395.5	397.8	396.7	391.0	382.0
97.5°	292.2	313.5	332.6	348.3	360.7	369.7	374.2	376.4	376.4	370.8	361.8
100°	274.2	295.5	313.5	329.2	340.5	349.5	354.0	355.1	354.0	349.5	340.5
102.5°	256.2	276.4	294.4	309.0	321.4	329.2	333.7	334.9	334.9	329.2	320.2
105°	238.2	258.4	275.3	291.0	301.1	309.0	312.4	315.7	314.6	310.1	301.1
107.5°	221.4	241.6	257.3	271.9	282.0	289.9	293.3	296.6	295.5	291.0	282.0
110°	205.6	224.7	239.3	253.9	262.9	270.8	276.4	277.5	275.3	270.8	262.9

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	191.0	207.9	222.5	236.0	246.1	251.7	256.2	258.4	256.2	251.7	246.1
115°	175.3	192.1	206.8	219.1	228.1	234.8	238.2	240.5	238.2	233.7	228.1
117.5°	160.7	176.4	191.0	203.4	211.2	216.9	220.2	222.5	220.2	216.9	211.2
120°	148.3	161.8	175.3	186.5	195.5	200.0	203.4	205.6	204.5	200.0	194.4
122.5°	133.7	148.3	160.7	171.9	179.8	184.3	186.5	188.8	187.7	184.3	178.7
125°	121.4	133.7	146.1	156.2	164.1	168.5	170.8	173.0	171.9	168.5	161.8
127.5°	107.9	121.4	131.5	141.6	147.2	153.9	155.1	157.3	156.2	152.8	147.2
130°	97.8	107.9	118.0	127.0	133.7	138.2	140.5	141.6	139.3	137.1	131.5
132.5°	85.4	96.6	105.6	113.5	118.0	122.5	124.7	125.8	125.8	122.5	118.0
135°	76.4	84.3	92.1	100.0	104.5	109.0	111.2	112.4	111.2	109.0	104.5
137.5°	68.5	75.3	80.9	87.6	93.3	95.5	97.8	97.8	96.6	95.5	92.1
140°	59.6	67.4	73.0	77.5	82.0	83.2	85.4	85.4	84.3	83.2	80.9
142.5°	50.6	57.3	62.9	68.5	71.9	74.2	75.3	76.4	75.3	74.2	70.8
145°	40.5	48.3	53.9	57.3	61.8	62.9	64.0	65.2	64.0	62.9	59.6
147.5°	31.5	38.2	43.8	48.3	51.7	52.8	53.9	55.1	53.9	51.7	50.6
150°	22.5	28.1	34.8	39.3	41.6	43.8	43.8	43.8	44.9	42.7	40.5
152.5°	18.0	20.2	24.7	29.2	32.6	33.7	34.8	34.8	33.7	33.7	31.5
155°	12.4	14.6	18.0	21.3	24.7	25.8	27.0	27.0	25.8	25.8	24.7
157.5°	7.9	10.1	12.4	14.6	18.0	19.1	20.2	20.2	20.2	19.1	18.0
160°	4.5	5.6	6.7	9.0	11.2	12.4	13.5	13.5	13.5	13.5	12.4
162.5°	3.4	3.4	3.4	4.5	5.6	6.7	7.9	7.9	7.9	7.9	6.7
165°	2.2	2.2	2.2	2.2	2.2	3.4	4.5	4.5	4.5	4.5	4.5
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: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1059.6	1059.6	1060.7	1058.5	1051.7	1052.9	1052.9	1057.4	1059.6	1060.7	1066.4
5°	1057.4	1057.4	1059.6	1056.2	1050.6	1050.6	1050.6	1055.1	1056.2	1058.5	1063.0
7.5°	1054.0	1054.0	1055.1	1051.7	1045.0	1045.0	1043.9	1048.4	1050.6	1051.7	1056.2
10°	1048.4	1048.4	1049.5	1046.1	1038.3	1038.3	1037.1	1040.5	1041.6	1043.9	1047.3
12.5°	1040.5	1040.5	1040.5	1037.1	1029.3	1028.1	1027.0	1030.4	1030.4	1031.5	1034.9
15°	1033.8	1031.5	1031.5	1028.1	1020.3	1018.0	1015.8	1016.9	1019.2	1018.0	1020.3
17.5°	1025.9	1023.7	1021.4	1018.0	1007.9	1004.6	1002.3	1003.4	1002.3	1001.2	1003.4
20°	1016.9	1013.5	1012.4	1006.8	996.7	991.1	986.6	984.3	985.4	982.1	983.2
22.5°	1006.8	1002.3	1000.1	993.3	983.2	976.5	970.8	966.3	965.2	960.7	961.9
25°	994.4	988.8	985.4	979.8	968.6	960.7	954.0	947.2	943.9	938.3	937.1
27.5°	979.8	974.2	969.7	964.1	952.9	942.8	934.9	925.9	921.4	914.7	911.3
30°	965.2	958.5	951.7	947.2	934.9	923.6	911.3	903.4	896.7	888.8	883.2
32.5°	947.2	940.5	933.8	927.0	915.8	902.3	892.2	879.8	872.0	863.0	856.2
35°	929.3	920.3	913.5	904.5	894.4	878.7	866.3	854.0	843.9	833.8	825.9
37.5°	909.0	902.3	892.2	884.3	872.0	856.2	842.7	827.0	818.0	804.5	794.4
40°	889.9	882.1	872.0	861.8	849.5	831.5	816.9	798.9	788.8	773.1	763.0
42.5°	870.8	859.6	849.5	838.3	824.8	807.9	789.9	772.0	758.5	743.9	729.3
45°	849.5	837.1	824.8	812.4	798.9	782.1	763.0	743.9	727.0	713.5	695.5
47.5°	827.0	814.7	800.0	786.6	772.0	755.1	734.9	714.6	696.7	680.9	661.8
50°	804.5	792.2	776.4	761.8	745.0	728.1	706.8	683.2	664.1	643.9	627.0
52.5°	780.9	768.6	754.0	734.9	716.9	700.0	677.6	652.8	631.5	614.6	593.3
55°	757.3	745.0	728.1	709.0	691.1	669.7	648.4	623.6	600.0	579.8	558.5
57.5°	732.6	721.4	702.3	686.6	664.1	641.6	619.1	595.5	569.7	546.1	521.4
60°	707.9	695.5	677.6	658.5	636.0	613.5	589.9	564.1	537.1	511.3	488.8
62.5°	685.4	669.7	652.8	632.6	609.0	587.7	560.7	532.6	505.6	478.7	451.7
65°	659.6	642.7	627.0	606.8	582.1	557.3	530.4	502.3	473.1	443.8	416.9
67.5°	633.7	616.9	600.0	579.8	554.0	528.1	500.0	471.9	439.4	411.3	379.8
70°	607.9	594.4	573.1	551.7	528.1	500.0	471.9	441.6	407.9	377.5	345.0
72.5°	582.1	568.6	547.2	524.7	502.3	473.1	442.7	412.4	380.9	346.1	311.3
75°	557.3	540.5	521.4	500.0	476.4	446.1	415.8	384.3	347.2	314.6	278.7
77.5°	533.7	518.0	498.9	475.3	449.5	420.2	388.8	356.2	319.1	284.3	245.0
80°	507.9	492.2	473.1	449.5	423.6	395.5	361.8	328.1	292.2	253.9	213.5
82.5°	483.2	468.6	447.2	425.9	397.8	369.7	336.0	302.3	264.1	227.0	187.7
85°	457.3	442.7	422.5	400.0	373.1	342.7	311.3	277.5	239.3	201.1	161.8
87.5°	434.9	418.0	397.8	375.3	348.3	319.1	288.8	252.8	215.7	178.7	138.2
90°	411.3	395.5	375.3	352.8	325.9	296.6	265.2	231.5	195.5	157.3	119.1
92.5°	391.0	374.2	355.1	332.6	305.6	277.5	246.1	212.4	177.5	140.5	103.4
95°	370.8	354.0	336.0	313.5	286.5	258.4	227.0	194.4	160.7	124.7	89.9
97.5°	348.3	333.7	315.7	294.4	267.4	240.5	210.1	178.7	146.1	111.2	78.7
100°	330.4	313.5	296.6	274.2	249.5	223.6	193.3	162.9	131.5	98.9	68.5
102.5°	310.1	294.4	277.5	256.2	231.5	205.6	177.5	148.3	119.1	88.8	59.6
105°	291.0	276.4	258.4	238.2	214.6	189.9	162.9	136.0	107.9	78.7	52.8
107.5°	271.9	257.3	240.5	221.4	198.9	174.2	149.4	122.5	96.6	70.8	47.2
110°	252.8	239.3	223.6	204.5	183.2	160.7	137.1	112.4	86.5	62.9	41.6

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	236.0	222.5	206.8	188.8	168.5	147.2	124.7	101.1	77.5	56.2	36.0
115°	219.1	206.8	191.0	175.3	155.1	134.8	113.5	91.0	69.7	50.6	31.5
117.5°	202.3	189.9	175.3	159.6	141.6	122.5	102.3	80.9	62.9	44.9	28.1
120°	185.4	174.2	160.7	146.1	130.3	111.2	91.0	73.0	56.2	39.3	24.7
122.5°	169.7	159.6	147.2	133.7	116.9	98.9	82.0	66.3	50.6	34.8	20.2
125°	155.1	145.0	133.7	120.2	104.5	88.8	74.2	59.6	43.8	30.3	16.9
127.5°	140.5	130.3	119.1	106.7	94.4	79.8	66.3	52.8	39.3	27.0	14.6
130°	125.8	116.9	106.7	96.6	84.3	70.8	59.6	46.1	33.7	21.3	12.4
132.5°	111.2	104.5	95.5	85.4	74.2	64.0	51.7	40.5	29.2	19.1	11.2
135°	98.9	92.1	84.3	75.3	66.3	56.2	44.9	34.8	24.7	15.7	9.0
137.5°	87.6	82.0	74.2	66.3	58.4	48.3	39.3	29.2	20.2	13.5	6.7
140°	77.5	71.9	65.2	57.3	50.6	41.6	32.6	23.6	18.0	11.2	5.6
142.5°	67.4	61.8	56.2	49.4	42.7	34.8	27.0	20.2	14.6	9.0	5.6
145°	57.3	52.8	47.2	41.6	34.8	28.1	22.5	16.9	11.2	6.7	4.5
147.5°	47.2	43.8	38.2	33.7	28.1	22.5	18.0	13.5	9.0	5.6	3.4
150°	38.2	34.8	30.3	25.8	22.5	18.0	14.6	10.1	6.7	5.6	3.4
152.5°	29.2	27.0	23.6	21.3	18.0	13.5	10.1	7.9	5.6	4.5	2.2
155°	23.6	21.3	19.1	15.7	13.5	10.1	7.9	5.6	4.5	3.4	2.2
157.5°	16.9	15.7	13.5	11.2	9.0	6.7	5.6	5.6	3.4	2.2	1.1
160°	11.2	10.1	9.0	6.7	5.6	5.6	4.5	3.4	2.2	2.2	1.1
162.5°	6.7	5.6	5.6	5.6	4.5	4.5	3.4	2.2	2.2	1.1	1.1
165°	4.5	4.5	4.5	3.4	3.4	3.4	2.2	1.1	1.1	1.1	1.1
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: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1066.4	1063.0	1067.5	1075.3	1076.5	1075.3	1073.1	1076.5	1081.0	1079.8	1072.0
5°	1064.1	1059.6	1064.1	1072.0	1072.0	1070.8	1069.7	1073.1	1077.6	1076.5	1069.7
7.5°	1057.4	1052.9	1057.4	1064.1	1065.2	1063.0	1063.0	1066.4	1070.8	1069.7	1064.1
10°	1048.4	1043.9	1046.1	1054.0	1056.2	1054.0	1054.0	1057.4	1063.0	1061.9	1055.1
12.5°	1034.9	1031.5	1033.8	1040.5	1042.8	1041.6	1040.5	1045.0	1050.6	1050.6	1043.9
15°	1020.3	1015.8	1018.0	1025.9	1027.0	1024.8	1025.9	1029.3	1036.0	1036.0	1030.4
17.5°	1003.4	997.8	1001.2	1006.8	1007.9	1007.9	1007.9	1012.4	1020.3	1019.2	1014.7
20°	984.3	976.5	978.7	984.3	986.6	986.6	986.6	994.4	1000.1	1000.1	995.6
22.5°	961.9	956.2	956.2	961.9	965.2	964.1	964.1	970.8	978.7	977.6	977.6
25°	936.0	931.5	929.3	936.0	937.1	938.3	940.5	947.2	956.2	956.2	957.4
27.5°	909.0	904.5	903.4	909.0	910.2	911.3	913.5	921.4	930.4	931.5	933.8
30°	883.2	876.5	874.2	878.7	880.9	882.1	882.1	894.4	902.3	905.7	910.2
32.5°	852.9	846.1	840.5	848.4	849.5	851.7	852.9	865.2	874.2	879.8	886.6
35°	822.5	811.3	809.0	814.7	816.9	818.0	820.3	833.8	846.1	850.6	859.6
37.5°	788.8	780.9	774.2	779.8	782.1	783.2	789.9	802.3	814.7	821.4	830.4
40°	757.3	747.2	741.6	745.0	747.2	748.4	756.2	769.7	784.3	792.2	803.4
42.5°	722.5	709.0	704.5	707.9	709.0	712.4	719.1	737.1	751.7	763.0	772.0
45°	687.7	677.6	667.5	670.8	671.9	674.2	684.3	703.4	719.1	732.6	742.7
47.5°	651.7	639.4	629.2	631.5	636.0	637.1	648.4	670.8	685.4	700.0	713.5
50°	615.8	598.9	591.0	591.0	593.3	598.9	613.5	636.0	651.7	668.6	683.2
52.5°	578.7	563.0	554.0	555.1	557.3	564.1	577.6	600.0	618.0	636.0	654.0
55°	541.6	524.7	515.8	513.5	515.8	524.7	540.5	564.1	582.1	603.4	622.5
57.5°	504.5	484.3	476.4	473.1	475.3	486.5	502.3	527.0	549.5	569.7	592.2
60°	464.1	448.3	434.9	427.0	432.6	447.2	464.1	489.9	513.5	536.0	560.7
62.5°	429.2	409.0	394.4	386.5	392.2	404.5	428.1	452.8	478.7	504.5	529.2
65°	389.9	369.7	352.8	345.0	350.6	365.2	388.8	415.8	443.8	469.7	498.9
67.5°	351.7	330.4	310.1	302.3	309.0	324.7	350.6	380.9	411.3	438.2	469.7
70°	314.6	291.0	269.7	264.1	268.6	289.9	314.6	345.0	376.4	407.9	440.5
72.5°	280.9	251.7	229.2	222.5	228.1	251.7	279.8	311.3	345.0	378.7	413.5
75°	241.6	214.6	189.9	182.0	188.8	210.1	245.0	278.7	314.6	350.6	383.2
77.5°	210.1	178.7	152.8	140.5	151.7	178.7	212.4	248.3	285.4	322.5	359.6
80°	177.5	145.0	116.9	103.4	115.7	145.0	178.7	218.0	259.6	296.6	330.4
82.5°	148.3	113.5	84.3	69.7	83.2	115.7	152.8	192.1	232.6	269.7	309.0
85°	121.4	85.4	55.1	39.3	58.4	87.6	127.0	167.4	209.0	247.2	285.4
87.5°	98.9	64.0	33.7	16.9	36.0	68.5	105.6	146.1	187.7	225.9	261.8
90°	80.9	46.1	18.0	2.2	21.3	51.7	87.6	127.0	166.3	205.6	241.6
92.5°	66.3	34.8	10.1	1.1	13.5	41.6	75.3	112.4	150.6	188.8	223.6
95°	55.1	27.0	6.7	1.1	10.1	32.6	64.0	100.0	136.0	173.0	207.9
97.5°	47.2	22.5	5.6	1.1	7.9	28.1	55.1	88.8	123.6	158.4	192.1
100°	40.5	18.0	4.5	1.1	6.7	23.6	48.3	78.7	111.2	145.0	177.5
102.5°	34.8	14.6	3.4	1.1	5.6	20.2	42.7	70.8	100.0	132.6	164.1
105°	30.3	12.4	3.4	1.1	4.5	18.0	38.2	62.9	92.1	121.4	151.7
107.5°	25.8	10.1	2.2	1.1	3.4	14.6	33.7	57.3	83.2	111.2	139.3
110°	22.5	9.0	2.2	1.1	3.4	13.5	29.2	51.7	75.3	101.1	128.1

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	19.1	6.7	2.2	1.1	2.2	11.2	25.8	46.1	68.5	92.1	118.0
115°	16.9	5.6	1.1	1.1	2.2	10.1	23.6	41.6	61.8	84.3	107.9
117.5°	13.5	4.5	1.1	1.1	1.1	7.9	20.2	37.1	56.2	77.5	98.9
120°	11.2	4.5	1.1	1.1	1.1	6.7	18.0	32.6	50.6	69.7	89.9
122.5°	10.1	3.4	1.1	1.1	1.1	5.6	15.7	29.2	44.9	62.9	82.0
125°	9.0	3.4	1.1	1.1	1.1	4.5	13.5	25.8	40.5	56.2	74.2
127.5°	6.7	3.4	1.1	1.1	1.1	3.4	12.4	22.5	36.0	50.6	66.3
130°	5.6	2.2	1.1	1.1	1.1	3.4	10.1	20.2	31.5	44.9	59.6
132.5°	4.5	2.2	1.1	1.1	1.1	2.2	7.9	15.7	27.0	39.3	52.8
135°	4.5	2.2	1.1	1.1	1.1	2.2	5.6	13.5	22.5	33.7	44.9
137.5°	4.5	1.1	1.1	1.1	1.1	2.2	4.5	10.1	18.0	27.0	37.1
140°	3.4	1.1	1.1	1.1	1.1	1.1	3.4	7.9	14.6	22.5	31.5
142.5°	3.4	1.1	1.1	1.1	1.1	1.1	3.4	5.6	11.2	18.0	24.7
145°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	4.5	9.0	13.5	20.2
147.5°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.4	6.7	11.2	15.7
150°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.4	4.5	7.9	12.4
152.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.4	5.6	7.9
155°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.4	4.5	5.6
157.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.4	4.5
160°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.4
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1068.6	1060.7	1063.0	1061.9	1064.1	1067.5	1067.5	1066.4	1066.4	1064.1	1061.9
5°	1066.4	1058.5	1061.9	1060.7	1063.0	1066.4	1066.4	1065.2	1065.2	1061.9	1060.7
7.5°	1059.6	1054.0	1056.2	1056.2	1058.5	1061.9	1061.9	1060.7	1060.7	1057.4	1056.2
10°	1052.9	1046.1	1049.5	1049.5	1051.7	1056.2	1056.2	1055.1	1055.1	1051.7	1050.6
12.5°	1041.6	1034.9	1040.5	1041.6	1043.9	1048.4	1047.3	1047.3	1047.3	1043.9	1042.8
15°	1028.1	1023.7	1029.3	1030.4	1033.8	1039.4	1039.4	1039.4	1039.4	1036.0	1034.9
17.5°	1013.5	1010.2	1015.8	1018.0	1022.5	1028.1	1028.1	1029.3	1030.4	1028.1	1027.0
20°	996.7	994.4	1000.1	1004.6	1011.3	1016.9	1019.2	1020.3	1022.5	1020.3	1019.2
22.5°	977.6	977.6	985.4	989.9	997.8	1003.4	1006.8	1010.2	1012.4	1010.2	1009.0
25°	956.2	959.6	967.5	975.3	984.3	989.9	993.3	997.8	1000.1	998.9	997.8
27.5°	936.0	940.5	950.6	958.5	966.3	975.3	978.7	984.3	986.6	986.6	985.4
30°	912.4	919.2	930.4	939.4	949.5	958.5	963.0	968.6	972.0	969.7	970.8
32.5°	889.9	901.2	910.2	920.3	931.5	940.5	946.1	952.9	956.2	955.1	956.2
35°	865.2	876.5	888.8	898.9	912.4	921.4	929.3	934.9	939.4	938.3	938.3
37.5°	838.3	852.9	865.2	878.7	891.1	901.2	909.0	915.8	920.3	920.3	920.3
40°	812.4	828.1	840.5	856.2	872.0	880.9	889.9	896.7	901.2	902.3	903.4
42.5°	784.3	801.2	815.8	832.6	848.4	859.6	869.7	877.6	882.1	884.3	883.2
45°	758.5	774.2	791.1	810.2	824.8	836.0	848.4	857.4	861.8	863.0	864.1
47.5°	729.3	747.2	766.3	785.4	800.0	814.7	825.9	834.9	839.4	842.7	842.7
50°	701.2	720.3	741.6	761.8	777.6	792.2	803.4	813.5	819.1	821.4	822.5
52.5°	675.3	693.3	715.8	736.0	751.7	766.3	780.9	792.2	797.8	800.0	800.0
55°	643.9	666.3	691.1	710.2	727.0	743.9	758.5	769.7	775.3	778.7	780.9
57.5°	614.6	638.2	664.1	684.3	704.5	720.3	733.8	748.4	752.9	757.3	758.5
60°	586.6	610.1	634.9	657.3	677.6	694.4	710.2	722.5	730.4	732.6	734.9
62.5°	557.3	582.1	607.9	630.4	651.7	671.9	686.6	697.8	706.8	710.2	712.4
65°	529.2	555.1	580.9	604.5	627.0	647.2	661.8	673.1	682.1	687.7	688.8
67.5°	498.9	527.0	554.0	578.7	601.2	622.5	637.1	648.4	657.3	664.1	665.2
70°	470.8	500.0	527.0	554.0	576.4	597.8	613.5	624.8	634.9	639.4	641.6
72.5°	443.8	474.2	502.3	529.2	551.7	573.1	589.9	601.2	611.3	616.9	618.0
75°	418.0	448.3	478.7	504.5	528.1	549.5	566.3	578.7	587.7	593.3	595.5
77.5°	392.2	423.6	454.0	479.8	504.5	525.9	540.5	555.1	564.1	570.8	570.8
80°	366.3	398.9	430.4	456.2	480.9	500.0	516.9	531.5	540.5	547.2	547.2
82.5°	343.8	375.3	405.6	431.5	456.2	477.6	494.4	507.9	518.0	522.5	523.6
85°	318.0	352.8	380.9	409.0	432.6	452.8	469.7	484.3	493.3	497.8	500.0
87.5°	296.6	330.4	360.7	385.4	409.0	429.2	448.3	460.7	469.7	475.3	477.6
90°	276.4	309.0	339.3	364.1	388.8	407.9	425.9	438.2	448.3	452.8	455.1
92.5°	258.4	291.0	320.2	345.0	368.6	389.9	406.8	419.1	428.1	432.6	436.0
95°	241.6	273.0	301.1	328.1	350.6	369.7	387.7	400.0	410.1	413.5	416.9
97.5°	224.7	255.1	283.2	309.0	332.6	350.6	367.4	379.8	387.7	393.3	396.7
100°	210.1	239.3	266.3	291.0	313.5	330.4	348.3	359.6	367.4	371.9	376.4
102.5°	194.4	223.6	249.5	273.0	296.6	312.4	329.2	340.5	347.2	355.1	355.1
105°	180.9	207.9	233.7	256.2	276.4	295.5	310.1	321.4	329.2	334.9	334.9
107.5°	166.3	193.3	218.0	241.6	260.7	278.7	292.2	302.3	311.3	314.6	318.0
110°	155.1	178.7	203.4	225.9	243.8	260.7	274.2	285.4	293.3	296.6	298.9

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	141.6	166.3	188.8	210.1	228.1	243.8	257.3	266.3	274.2	278.7	279.8
115°	130.3	153.9	174.2	194.4	213.5	227.0	239.3	248.3	256.2	259.6	261.8
117.5°	120.2	141.6	161.8	178.7	196.6	211.2	223.6	231.5	238.2	242.7	245.0
120°	110.1	130.3	148.3	165.2	182.0	195.5	206.8	214.6	222.5	225.9	225.9
122.5°	100.0	119.1	136.0	151.7	167.4	179.8	192.1	198.9	205.6	209.0	209.0
125°	91.0	109.0	124.7	139.3	153.9	165.2	175.3	183.2	189.9	192.1	192.1
127.5°	82.0	98.9	113.5	127.0	139.3	150.6	160.7	168.5	174.2	176.4	176.4
130°	74.2	88.8	102.3	115.7	128.1	137.1	147.2	153.9	157.3	160.7	161.8
132.5°	66.3	79.8	92.1	103.4	115.7	124.7	132.6	139.3	142.7	146.1	147.2
135°	58.4	70.8	82.0	93.3	103.4	112.4	119.1	124.7	129.2	131.5	132.6
137.5°	49.4	62.9	73.0	82.0	93.3	100.0	107.9	111.2	115.7	118.0	118.0
140°	41.6	51.7	62.9	71.9	80.9	87.6	94.4	100.0	103.4	104.5	104.5
142.5°	33.7	42.7	51.7	62.9	70.8	76.4	83.2	87.6	89.9	91.0	92.1
145°	27.0	33.7	41.6	51.7	60.7	67.4	70.8	75.3	77.5	78.7	79.8
147.5°	20.2	27.0	33.7	40.5	49.4	56.2	59.6	64.0	66.3	67.4	67.4
150°	15.7	20.2	24.7	31.5	38.2	46.1	50.6	53.9	55.1	56.2	56.2
152.5°	11.2	15.7	19.1	23.6	28.1	34.8	41.6	43.8	44.9	46.1	46.1
155°	7.9	11.2	13.5	16.9	20.2	25.8	31.5	34.8	36.0	37.1	37.1
157.5°	5.6	7.9	9.0	12.4	14.6	16.9	21.3	27.0	28.1	28.1	28.1
160°	3.4	4.5	5.6	7.9	9.0	11.2	13.5	16.9	20.2	20.2	20.2
162.5°	2.2	3.4	3.4	4.5	4.5	6.7	7.9	9.0	12.4	13.5	13.5
165°	1.1	2.2	2.2	2.2	2.2	2.2	3.4	3.4	5.6	6.7	6.7
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: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1063.0	1065.2	1064.1	1064.1	1064.1	1066.4	1064.1	1054.0	1056.2	1058.5	1060.7
5°	1061.9	1063.0	1063.0	1061.9	1061.9	1064.1	1061.9	1051.7	1054.0	1056.2	1057.4
7.5°	1057.4	1058.5	1058.5	1058.5	1057.4	1059.6	1056.2	1047.3	1047.3	1049.5	1050.6
10°	1051.7	1054.0	1052.9	1051.7	1051.7	1051.7	1049.5	1039.4	1039.4	1040.5	1041.6
12.5°	1045.0	1045.0	1045.0	1043.9	1042.8	1042.8	1040.5	1030.4	1029.3	1031.5	1030.4
15°	1036.0	1038.3	1036.0	1034.9	1032.6	1032.6	1029.3	1019.2	1016.9	1018.0	1016.9
17.5°	1028.1	1029.3	1027.0	1024.8	1022.5	1021.4	1018.0	1006.8	1003.4	1004.6	1002.3
20°	1020.3	1020.3	1018.0	1015.8	1012.4	1009.0	1004.6	993.3	987.7	987.7	983.2
22.5°	1010.2	1010.2	1007.9	1004.6	1001.2	996.7	992.2	981.0	972.0	969.7	966.3
25°	998.9	997.8	996.7	993.3	986.6	982.1	977.6	965.2	955.1	950.6	945.0
27.5°	985.4	985.4	982.1	978.7	972.0	966.3	960.7	949.5	936.0	930.4	922.5
30°	970.8	970.8	967.5	963.0	956.2	949.5	942.8	929.3	915.8	907.9	898.9
32.5°	956.2	955.1	951.7	947.2	940.5	930.4	924.8	911.3	895.6	886.6	874.2
35°	938.3	937.1	933.8	928.1	919.2	911.3	902.3	889.9	872.0	860.7	847.2
37.5°	920.3	919.2	916.9	909.0	900.1	891.1	879.8	867.5	850.6	836.0	822.5
40°	902.3	901.2	896.7	891.1	879.8	868.6	857.4	845.0	827.0	810.2	795.6
42.5°	883.2	882.1	876.5	869.7	857.4	846.1	832.6	819.1	801.2	780.9	766.3
45°	864.1	861.8	856.2	848.4	834.9	822.5	809.0	793.3	775.3	756.2	737.1
47.5°	843.9	840.5	834.9	823.6	812.4	798.9	783.2	766.3	748.4	727.0	706.8
50°	821.4	819.1	812.4	802.3	788.8	775.3	757.3	740.5	719.1	698.9	674.2
52.5°	800.0	795.6	789.9	778.7	765.2	750.6	731.5	711.3	689.9	670.8	645.0
55°	777.6	775.3	767.5	758.5	741.6	724.8	706.8	685.4	661.8	639.4	614.6
57.5°	756.2	751.7	745.0	732.6	718.0	701.2	682.1	659.6	633.7	610.1	583.2
60°	734.9	728.1	720.3	709.0	693.3	675.3	655.1	631.5	605.7	579.8	551.7
62.5°	711.3	705.7	696.7	685.4	669.7	650.6	629.2	604.5	579.8	552.8	522.5
65°	687.7	682.1	673.1	661.8	646.1	624.8	602.3	577.6	549.5	523.6	491.0
67.5°	664.1	658.5	648.4	636.0	620.3	600.0	576.4	550.6	522.5	494.4	460.7
70°	640.5	633.7	624.8	611.3	595.5	574.2	550.6	523.6	495.5	465.2	431.5
72.5°	616.9	611.3	600.0	587.7	570.8	549.5	525.9	498.9	469.7	438.2	404.5
75°	593.3	586.6	578.7	564.1	546.1	525.9	501.2	474.2	442.7	412.4	377.5
77.5°	569.7	564.1	554.0	539.4	522.5	501.2	476.4	449.5	418.0	386.5	349.5
80°	546.1	539.4	531.5	518.0	498.9	477.6	451.7	424.7	393.3	360.7	323.6
82.5°	522.5	515.8	506.8	493.3	475.3	454.0	429.2	400.0	368.6	334.9	300.0
85°	498.9	493.3	483.2	469.7	450.6	429.2	404.5	378.7	345.0	311.3	276.4
87.5°	475.3	469.7	459.6	446.1	428.1	406.8	382.0	355.1	322.5	291.0	252.8
90°	452.8	448.3	438.2	424.7	406.8	385.4	362.9	333.7	302.3	270.8	234.8
92.5°	432.6	428.1	419.1	405.6	389.9	366.3	343.8	315.7	284.3	251.7	216.9
95°	414.6	409.0	400.0	387.7	368.6	348.3	325.9	297.8	267.4	234.8	201.1
97.5°	394.4	388.8	379.8	366.3	350.6	329.2	306.8	279.8	249.5	219.1	185.4
100°	374.2	368.6	358.4	347.2	331.5	310.1	288.8	261.8	233.7	204.5	171.9
102.5°	354.0	348.3	339.3	328.1	312.4	293.3	271.9	246.1	218.0	188.8	158.4
105°	334.9	329.2	320.2	309.0	294.4	275.3	252.8	230.4	203.4	175.3	146.1
107.5°	315.7	310.1	302.3	291.0	276.4	258.4	237.1	213.5	188.8	161.8	133.7
110°	296.6	292.2	283.2	273.0	258.4	240.5	221.4	198.9	174.2	149.4	122.5

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	278.7	274.2	265.2	253.9	241.6	224.7	205.6	184.3	160.7	137.1	111.2
115°	260.7	255.1	247.2	237.1	224.7	209.0	191.0	171.9	148.3	125.8	102.3
117.5°	242.7	238.2	230.4	220.2	209.0	193.3	176.4	158.4	136.0	114.6	93.3
120°	224.7	221.4	213.5	204.5	193.3	178.7	162.9	145.0	124.7	104.5	84.3
122.5°	207.9	204.5	196.6	188.8	177.5	164.1	149.4	132.6	114.6	95.5	77.5
125°	192.1	187.7	180.9	173.0	162.9	150.6	136.0	120.2	103.4	86.5	69.7
127.5°	175.3	171.9	167.4	158.4	148.3	137.1	123.6	110.1	94.4	78.7	62.9
130°	161.8	157.3	151.7	145.0	136.0	124.7	112.4	98.9	85.4	70.8	55.1
132.5°	146.1	141.6	137.1	130.3	122.5	112.4	101.1	88.8	76.4	62.9	49.4
135°	131.5	128.1	123.6	116.9	109.0	101.1	89.9	78.7	67.4	55.1	43.8
137.5°	118.0	114.6	110.1	105.6	97.8	89.9	79.8	69.7	59.6	48.3	38.2
140°	104.5	102.3	97.8	93.3	86.5	78.7	69.7	60.7	51.7	41.6	32.6
142.5°	91.0	88.8	85.4	80.9	75.3	68.5	60.7	52.8	43.8	36.0	28.1
145°	78.7	77.5	74.2	69.7	65.2	58.4	51.7	44.9	37.1	30.3	22.5
147.5°	66.3	65.2	62.9	59.6	55.1	49.4	43.8	37.1	31.5	24.7	18.0
150°	55.1	53.9	52.8	48.3	46.1	40.5	36.0	30.3	25.8	19.1	14.6
152.5°	44.9	44.9	42.7	39.3	37.1	32.6	29.2	24.7	20.2	15.7	11.2
155°	36.0	34.8	33.7	31.5	29.2	25.8	22.5	19.1	15.7	11.2	7.9
157.5°	28.1	27.0	25.8	23.6	21.3	20.2	16.9	13.5	10.1	7.9	5.6
160°	20.2	19.1	18.0	16.9	15.7	13.5	11.2	9.0	6.7	4.5	3.4
162.5°	13.5	12.4	12.4	11.2	10.1	7.9	6.7	5.6	4.5	3.4	2.2
165°	6.7	6.7	5.6	5.6	4.5	3.4	3.4	3.4	2.2	2.2	1.1
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: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2	1065.2
2.5°	1059.6	1059.6	1064.1	1063.0	1059.6	1066.4	1074.2
5°	1056.2	1056.2	1059.6	1059.6	1056.2	1063.0	1069.7
7.5°	1050.6	1049.5	1052.9	1052.9	1048.4	1054.0	1061.9
10°	1040.5	1039.4	1042.8	1042.8	1038.3	1043.9	1050.6
12.5°	1029.3	1027.0	1030.4	1029.3	1024.8	1030.4	1037.1
15°	1014.7	1013.5	1015.8	1013.5	1009.0	1014.7	1021.4
17.5°	1000.1	996.7	997.8	997.8	989.9	995.6	1001.2
20°	981.0	976.5	977.6	976.5	970.8	974.2	981.0
22.5°	961.9	955.1	955.1	954.0	947.2	951.7	957.4
25°	938.3	930.4	930.4	929.3	921.4	924.8	930.4
27.5°	914.7	906.8	903.4	902.3	894.4	894.4	902.3
30°	889.9	878.7	876.5	873.1	865.2	865.2	872.0
32.5°	866.3	850.6	846.1	841.6	833.8	832.6	840.5
35°	834.9	822.5	814.7	810.2	801.2	798.9	805.7
37.5°	809.0	793.3	782.1	776.4	767.5	764.1	773.1
40°	780.9	764.1	749.5	746.1	732.6	728.1	736.0
42.5°	749.5	731.5	716.9	710.2	700.0	695.5	696.7
45°	718.0	698.9	683.2	674.2	664.1	656.2	660.7
47.5°	685.4	668.6	649.5	636.0	623.6	618.0	620.3
50°	652.8	632.6	614.6	600.0	585.4	578.7	583.2
52.5°	620.3	598.9	578.7	563.0	546.1	539.4	540.5
55°	588.8	566.3	542.7	525.9	510.1	500.0	497.8
57.5°	557.3	532.6	507.9	488.8	468.6	459.6	456.2
60°	523.6	497.8	471.9	449.5	428.1	418.0	413.5
62.5°	492.2	464.1	434.9	411.3	389.9	376.4	373.1
65°	461.8	429.2	400.0	373.1	349.5	334.9	330.4
67.5°	429.2	395.5	364.1	334.9	312.4	293.3	291.0
70°	398.9	362.9	328.1	297.8	273.0	253.9	245.0
72.5°	368.6	331.5	295.5	262.9	231.5	213.5	206.8
75°	339.3	301.1	262.9	229.2	194.4	173.0	166.3
77.5°	312.4	273.0	232.6	195.5	162.9	136.0	127.0
80°	286.5	246.1	203.4	165.2	130.3	101.1	91.0
82.5°	259.6	221.4	177.5	137.1	101.1	70.8	58.4
85°	236.0	197.8	153.9	113.5	77.5	44.9	31.5
87.5°	216.9	175.3	136.0	95.5	58.4	25.8	9.0
90°	197.8	157.3	118.0	78.7	43.8	14.6	1.1
92.5°	180.9	142.7	103.4	67.4	33.7	10.1	1.1
95°	165.2	128.1	91.0	56.2	27.0	6.7	1.1
97.5°	150.6	115.7	80.9	48.3	22.5	5.6	1.1
100°	138.2	104.5	71.9	42.7	19.1	4.5	1.1
102.5°	125.8	94.4	64.0	37.1	16.9	3.4	1.1
105°	115.7	85.4	57.3	33.7	14.6	3.4	1.1
107.5°	105.6	77.5	51.7	29.2	12.4	2.2	1.1
110°	95.5	70.8	46.1	25.8	11.2	2.2	1.1

TEST NUMBER: P1213469

CATALOG NUMBER: 4SNLED-LD5-55HL-LW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	87.6	64.0	41.6	23.6	9.0	2.2	1.1
115°	79.8	57.3	37.1	20.2	7.9	1.1	1.1
117.5°	71.9	51.7	32.6	18.0	6.7	1.1	1.1
120°	65.2	46.1	29.2	15.7	5.6	1.1	1.1
122.5°	58.4	41.6	25.8	13.5	4.5	1.1	1.1
125°	52.8	37.1	22.5	11.2	3.4	1.1	1.1
127.5°	47.2	32.6	20.2	10.1	3.4	1.1	1.1
130°	41.6	29.2	16.9	7.9	2.2	1.1	1.1
132.5°	37.1	24.7	14.6	6.7	2.2	1.1	1.1
135°	32.6	21.3	12.4	4.5	2.2	1.1	1.1
137.5°	28.1	18.0	10.1	3.4	1.1	1.1	1.1
140°	23.6	15.7	7.9	3.4	1.1	1.1	1.1
142.5°	20.2	12.4	5.6	2.2	1.1	1.1	1.1
145°	15.7	10.1	4.5	2.2	1.1	1.1	1.1
147.5°	12.4	7.9	3.4	2.2	1.1	1.1	1.1
150°	9.0	5.6	3.4	1.1	1.1	1.1	1.1
152.5°	6.7	4.5	2.2	1.1	1.1	1.1	1.1
155°	4.5	3.4	2.2	1.1	1.1	1.1	1.1
157.5°	3.4	2.2	1.1	1.1	1.1	1.1	1.1
160°	2.2	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)