

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: P1214228

Luminaire Tested: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

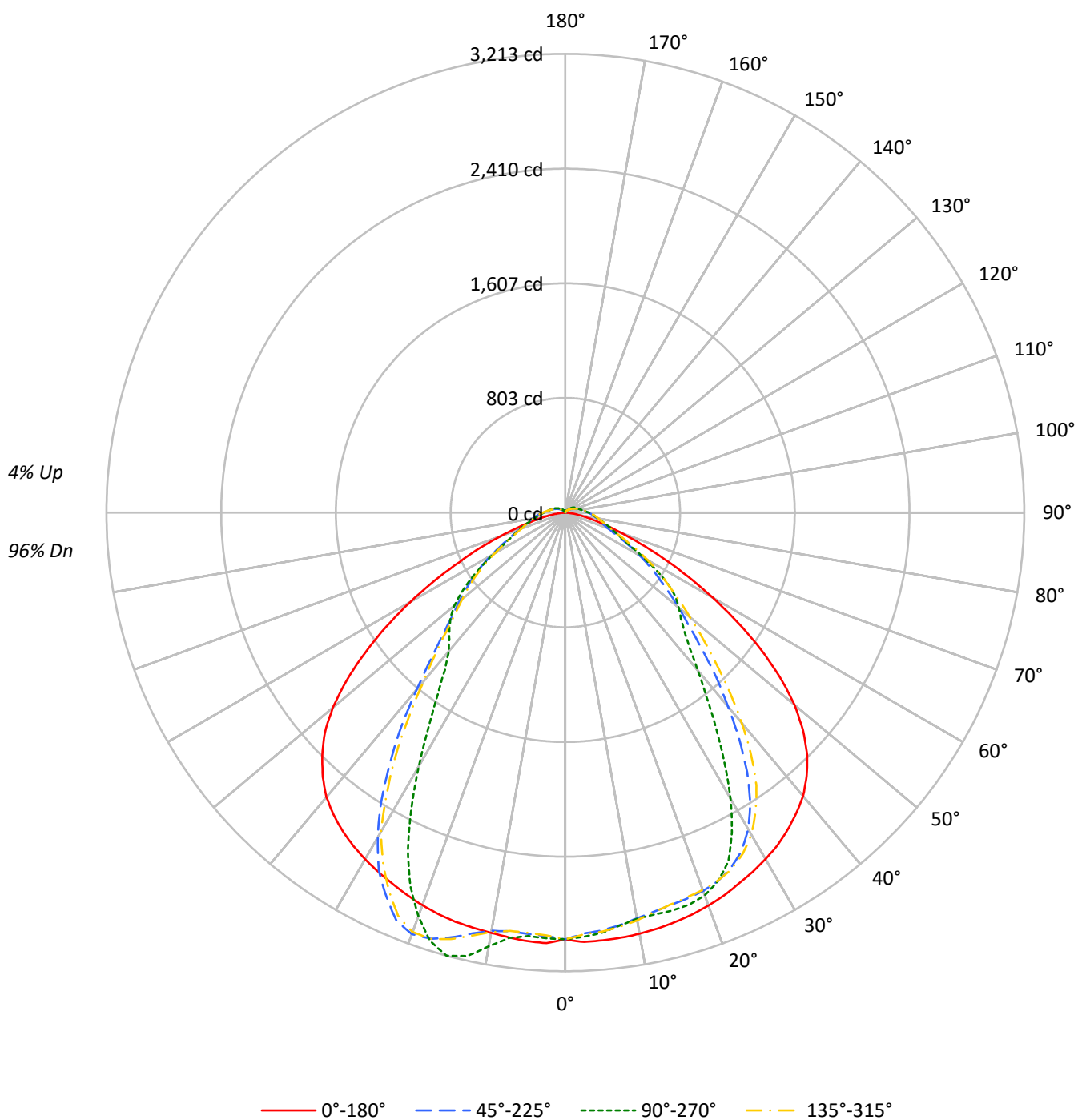
Lumens per Lamp: N/A
Luminaire Lumens: 7126.0 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 62
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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	24156	24156	24156	24156
5°	24332	23198	24382	23380
10°	24445	22233	24394	23742
15°	24633	21936	24621	24424
20°	24905	21588	24879	22756
25°	25211	20480	25198	19788
30°	25686	17749	25700	15725
35°	26189	14353	26263	12146
40°	26632	11556	26743	10182
45°	26538	9789	26675	9532
50°	25395	9013	25750	8811
55°	22531	8101	23094	7364
60°	18276	6200	19246	5686
65°	13585	4744	14637	4498
70°	9239	4094	10414	3915
75°	6045	3695	7038	3494
80°	3906	3445	4578	3170
85°	2002	3437	2637	3139

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 26675 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.9	4.0
10°-20°	844.8	11.9
20°-30°	1284.3	18.0
30°-40°	1377.8	19.3
40°-50°	1195.8	16.8
50°-60°	886.2	12.4
60°-70°	507.8	7.1
70°-80°	281.2	3.9
80°-90°	171.2	2.4
90°-100°	111.3	1.6
100°-110°	74.6	1.0
110°-120°	50.4	0.7
120°-130°	30.9	0.4
130°-140°	16.2	0.2
140°-150°	7.4	0.1
150°-160°	2.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2413.1	33.9
0°-40°	3790.9	53.2
0°-60°	5872.9	82.4
0°-90°	6833.0	95.9
90°-120°	236.3	3.3
90°-150°	290.8	4.1
90°-180°	293.0	4.1
0°-180°	7126.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2989	2989	2989	2989	2989	
5°	3008	2954	3014	2977	3008	287
15°	2969	2886	2968	3213	2969	840
25°	2869	2699	2867	2608	2869	1326
35°	2713	1837	2720	1555	2713	1698
45°	2395	1178	2407	1147	2395	1833
55°	1671	883	1712	803	1671	1481
65°	758	448	817	425	758	764
75°	216	284	252	269	216	247
85°	29	196	39	179	29	39
90°	0	164	3	151	0	1
95°	2	134	0	128	2	1
105°	2	100	2	96	2	2
115°	2	82	2	74	2	1
125°	2	62	2	51	2	1
135°	2	39	2	32	2	1
145°	2	23	3	18	2	1
155°	3	11	3	9	3	1
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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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	3010.8	3003.1	3000.0	2993.8	2998.4	3017.0	3004.6	2984.5	2986.1	2950.6	2969.1
5°	3007.7	2998.4	2993.8	2987.6	2990.7	3007.7	2995.4	2975.3	2973.7	2938.2	2955.2
7.5°	3003.1	2993.8	2986.1	2981.5	2983.0	2996.9	2981.5	2958.3	2953.7	2915.1	2930.5
10°	2995.4	2989.2	2978.4	2970.6	2969.1	2984.5	2959.8	2936.7	2925.9	2885.7	2901.2
12.5°	2984.5	2975.3	2964.5	2950.6	2949.0	2958.3	2938.2	2905.8	2895.0	2862.6	2879.6
15°	2969.1	2958.3	2945.9	2930.5	2922.8	2929.0	2904.3	2874.9	2873.4	2845.6	2868.7
17.5°	2952.1	2936.7	2922.8	2901.2	2890.4	2895.0	2874.9	2848.7	2851.8	2834.8	2861.0
20°	2929.0	2912.0	2890.4	2868.7	2853.3	2861.0	2847.1	2827.1	2831.7	2819.3	2842.5
22.5°	2902.7	2879.6	2853.3	2828.6	2816.2	2827.1	2816.2	2799.3	2800.8	2793.1	2807.0
25°	2868.7	2842.5	2811.6	2780.7	2774.6	2782.3	2776.1	2762.2	2756.0	2743.7	2749.9
27.5°	2837.9	2808.5	2769.9	2737.5	2726.7	2742.1	2728.2	2705.1	2688.1	2671.1	2658.8
30°	2802.4	2766.8	2723.6	2686.6	2677.3	2683.5	2663.4	2627.9	2583.1	2561.5	2527.5
32.5°	2763.8	2717.4	2663.4	2621.7	2615.5	2610.9	2573.8	2522.9	2453.4	2410.2	2357.7
35°	2712.8	2661.8	2597.0	2546.0	2536.8	2510.5	2450.3	2382.4	2292.8	2218.7	2129.2
37.5°	2655.7	2595.5	2527.5	2459.6	2433.3	2380.8	2295.9	2224.9	2089.0	1999.5	1891.4
40°	2590.8	2518.3	2434.9	2353.0	2309.8	2224.9	2127.6	2022.6	1891.4	1771.0	1679.9
42.5°	2501.3	2424.1	2325.3	2234.2	2160.1	2047.3	1933.1	1784.9	1664.4	1562.5	1469.9
45°	2394.7	2302.1	2187.8	2078.2	1984.0	1849.7	1715.4	1567.2	1466.8	1347.9	1284.6
47.5°	2257.3	2157.0	2035.0	1913.0	1789.5	1641.3	1500.8	1358.7	1258.4	1173.4	1127.1
50°	2095.2	2002.6	1868.2	1723.1	1587.2	1432.8	1292.3	1185.8	1088.5	1036.0	1000.5
52.5°	1894.5	1808.0	1670.6	1513.1	1381.9	1230.6	1102.4	1015.9	946.5	907.9	895.5
55°	1670.6	1594.9	1459.1	1312.4	1178.1	1039.1	941.8	866.2	821.4	798.2	799.8
57.5°	1431.3	1372.6	1244.5	1113.2	986.6	881.6	793.6	733.4	699.4	697.9	702.5
60°	1192.0	1148.7	1037.6	924.9	813.7	728.8	663.9	622.2	600.6	602.2	600.6
62.5°	963.5	923.3	843.0	750.4	662.4	605.2	546.6	529.6	511.1	509.5	509.5
65°	758.1	727.2	662.4	596.0	529.6	492.5	463.2	443.1	429.2	426.1	427.7
67.5°	569.7	557.4	512.6	467.8	426.1	403.0	378.3	373.6	362.8	362.8	365.9
70°	424.6	415.3	390.6	364.4	347.4	332.0	319.6	319.6	318.1	316.5	324.2
72.5°	307.3	308.8	301.1	281.0	279.5	276.4	273.3	277.9	279.5	284.1	293.4
75°	216.2	220.8	220.8	217.7	223.9	231.6	236.2	244.0	253.2	259.4	270.2
77.5°	152.9	152.9	160.6	169.8	182.2	196.1	208.4	219.2	231.6	239.3	248.6
80°	98.8	103.4	115.8	132.8	149.8	168.3	185.3	199.2	211.5	223.9	230.1
82.5°	58.7	66.4	81.8	103.4	125.1	148.2	165.2	182.2	196.1	208.4	213.1
85°	29.3	40.1	58.7	81.8	105.0	129.7	151.3	166.8	182.2	193.0	199.2
87.5°	9.3	21.6	41.7	63.3	88.0	112.7	135.9	152.9	166.8	176.0	182.2
90°	0.0	10.8	29.3	52.5	75.7	100.4	122.0	140.5	154.4	162.1	166.8
92.5°	0.0	6.2	23.2	43.2	64.8	89.6	111.2	128.2	140.5	148.2	151.3
95°	1.5	4.6	17.0	35.5	57.1	80.3	100.4	115.8	128.2	135.9	137.4
97.5°	1.5	3.1	13.9	29.3	49.4	71.0	91.1	106.5	115.8	123.5	125.1
100°	1.5	3.1	10.8	26.2	43.2	63.3	81.8	95.7	106.5	112.7	114.3
102.5°	1.5	1.5	9.3	21.6	38.6	55.6	72.6	86.5	95.7	101.9	105.0
105°	1.5	1.5	7.7	18.5	34.0	49.4	64.8	78.7	86.5	92.6	95.7
107.5°	1.5	1.5	6.2	15.4	29.3	43.2	58.7	69.5	78.7	84.9	88.0
110°	1.5	1.5	4.6	13.9	24.7	38.6	51.0	61.8	71.0	77.2	80.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.5	1.5	4.6	12.4	21.6	34.0	44.8	55.6	63.3	69.5	74.1
115°	1.5	1.5	4.6	10.8	20.1	29.3	40.1	49.4	57.1	63.3	67.9
117.5°	1.5	1.5	4.6	9.3	17.0	26.2	35.5	44.8	51.0	57.1	61.8
120°	1.5	1.5	3.1	7.7	15.4	23.2	30.9	38.6	46.3	52.5	57.1
122.5°	1.5	1.5	3.1	7.7	12.4	20.1	27.8	34.0	41.7	46.3	51.0
125°	1.5	1.5	3.1	6.2	10.8	18.5	24.7	30.9	35.5	41.7	46.3
127.5°	1.5	1.5	3.1	6.2	9.3	15.4	21.6	27.8	32.4	37.1	40.1
130°	1.5	1.5	3.1	4.6	7.7	12.4	18.5	23.2	29.3	32.4	35.5
132.5°	1.5	1.5	1.5	4.6	6.2	9.3	13.9	20.1	24.7	29.3	30.9
135°	1.5	1.5	1.5	3.1	6.2	7.7	10.8	15.4	20.1	24.7	27.8
137.5°	1.5	1.5	1.5	3.1	4.6	7.7	9.3	12.4	17.0	20.1	24.7
140°	1.5	1.5	1.5	3.1	4.6	6.2	7.7	10.8	13.9	17.0	20.1
142.5°	1.5	1.5	1.5	3.1	3.1	4.6	6.2	9.3	10.8	13.9	17.0
145°	1.5	1.5	1.5	3.1	3.1	4.6	6.2	7.7	9.3	10.8	13.9
147.5°	1.5	1.5	1.5	3.1	3.1	3.1	4.6	6.2	7.7	9.3	10.8
150°	3.1	3.1	3.1	3.1	3.1	3.1	4.6	4.6	6.2	7.7	9.3
152.5°	3.1	3.1	3.1	3.1	3.1	3.1	4.6	4.6	4.6	6.2	7.7
155°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.6	4.6	6.2	6.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	2962.9	2966.0	2984.5	2983.0	2979.9	2976.8	2976.8	2973.7	2976.8	2984.5	2981.5
5°	2947.5	2952.1	2966.0	2964.5	2961.4	2959.8	2958.3	2953.7	2956.8	2967.6	2964.5
7.5°	2919.7	2924.3	2936.7	2930.5	2925.9	2929.0	2921.2	2916.6	2922.8	2933.6	2932.0
10°	2890.4	2893.4	2908.9	2905.8	2898.1	2899.6	2891.9	2888.8	2896.5	2902.7	2904.3
12.5°	2870.3	2881.1	2895.0	2893.4	2891.9	2893.4	2885.7	2882.6	2887.3	2893.4	2891.9
15°	2865.7	2879.6	2895.0	2895.0	2896.5	2898.1	2890.4	2885.7	2890.4	2895.0	2893.4
17.5°	2861.0	2878.0	2891.9	2890.4	2891.9	2895.0	2882.6	2879.6	2885.7	2891.9	2888.8
20°	2845.6	2861.0	2870.3	2867.2	2867.2	2868.7	2853.3	2853.3	2862.6	2867.2	2868.7
22.5°	2802.4	2820.9	2820.9	2813.2	2813.2	2807.0	2802.4	2793.1	2803.9	2811.6	2817.8
25°	2737.5	2745.2	2736.0	2719.0	2709.7	2702.0	2680.4	2698.9	2698.9	2722.1	2729.8
27.5°	2646.4	2629.4	2603.2	2567.7	2559.9	2535.2	2521.3	2526.0	2533.7	2566.1	2590.8
30°	2496.6	2445.7	2400.9	2385.5	2351.5	2326.8	2302.1	2314.4	2328.3	2346.9	2397.8
32.5°	2299.0	2249.6	2177.0	2150.8	2115.3	2084.4	2055.1	2073.6	2098.3	2110.6	2166.2
35°	2072.0	2013.4	1947.0	1902.2	1865.1	1848.2	1811.1	1837.4	1863.6	1872.9	1920.7
37.5°	1831.2	1771.0	1712.3	1673.7	1638.2	1627.4	1602.7	1621.2	1641.3	1655.2	1695.3
40°	1602.7	1547.1	1502.3	1476.1	1451.4	1442.1	1432.8	1440.5	1456.0	1466.8	1497.7
42.5°	1406.6	1361.8	1330.9	1315.5	1298.5	1286.1	1287.7	1290.8	1298.5	1321.7	1335.6
45°	1235.2	1208.9	1188.9	1185.8	1175.0	1173.4	1171.9	1178.1	1182.7	1196.6	1207.4
47.5°	1097.8	1087.0	1082.3	1088.5	1093.1	1087.0	1090.1	1097.8	1107.0	1107.0	1105.5
50°	989.7	992.8	999.0	1012.9	1022.1	1025.2	1028.3	1037.6	1039.1	1042.2	1037.6
52.5°	901.7	904.8	921.8	943.4	954.2	958.8	965.0	974.3	974.3	977.3	971.2
55°	812.1	816.8	833.8	855.4	864.6	870.8	877.0	883.2	887.8	894.0	889.3
57.5°	713.3	727.2	738.0	744.2	750.4	755.0	759.6	761.2	770.5	772.0	779.7
60°	608.3	611.4	622.2	620.7	616.1	628.4	622.2	633.0	643.8	657.7	659.3
62.5°	508.0	509.5	517.2	514.2	520.3	518.8	523.4	523.4	531.1	537.3	545.0
65°	429.2	430.8	437.0	437.0	435.4	440.0	444.7	447.8	447.8	452.4	458.6
67.5°	370.6	375.2	381.4	384.5	387.5	387.5	392.2	393.7	396.8	398.4	401.4
70°	330.4	336.6	342.8	345.9	347.4	350.5	352.0	352.0	355.1	356.7	359.8
72.5°	301.1	307.3	311.9	311.9	315.0	316.5	316.5	318.1	319.6	322.7	325.8
75°	276.4	281.0	284.1	282.6	282.6	282.6	284.1	284.1	287.2	290.3	293.4
77.5°	253.2	257.8	257.8	254.8	254.8	254.8	254.8	256.3	257.8	260.9	264.0
80°	236.2	236.2	234.7	234.7	231.6	230.1	230.1	231.6	231.6	234.7	239.3
82.5°	217.7	217.7	216.2	214.6	213.1	211.5	211.5	213.1	214.6	216.2	219.2
85°	200.7	200.7	197.6	197.6	196.1	196.1	196.1	196.1	197.6	199.2	202.3
87.5°	183.7	182.2	180.6	179.1	179.1	179.1	179.1	179.1	180.6	183.7	185.3
90°	166.8	165.2	163.7	163.7	162.1	162.1	163.7	163.7	165.2	166.8	168.3
92.5°	151.3	149.8	148.2	148.2	146.7	146.7	148.2	146.7	149.8	149.8	151.3
95°	137.4	135.9	134.3	134.3	134.3	134.3	134.3	134.3	135.9	135.9	137.4
97.5°	125.1	123.5	122.0	122.0	123.5	122.0	123.5	123.5	123.5	125.1	126.6
100°	114.3	112.7	112.7	114.3	112.7	112.7	114.3	114.3	114.3	114.3	115.8
102.5°	105.0	105.0	105.0	105.0	105.0	105.0	106.5	106.5	106.5	106.5	108.1
105°	95.7	97.3	97.3	97.3	98.8	98.8	98.8	100.4	100.4	100.4	100.4
107.5°	89.6	91.1	91.1	92.6	92.6	94.2	94.2	94.2	94.2	95.7	95.7
110°	83.4	84.9	86.5	88.0	88.0	89.6	89.6	89.6	89.6	89.6	89.6

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	77.2	78.7	80.3	83.4	84.9	84.9	84.9	84.9	86.5	86.5	84.9
115°	71.0	74.1	75.7	78.7	80.3	80.3	81.8	81.8	81.8	81.8	80.3
117.5°	64.8	69.5	71.0	74.1	75.7	75.7	77.2	77.2	77.2	77.2	75.7
120°	60.2	63.3	66.4	67.9	69.5	71.0	71.0	72.6	72.6	72.6	71.0
122.5°	55.6	58.7	61.8	63.3	64.8	66.4	66.4	66.4	66.4	66.4	66.4
125°	49.4	52.5	55.6	57.1	58.7	60.2	60.2	61.8	61.8	61.8	60.2
127.5°	44.8	47.9	49.4	52.5	54.0	54.0	55.6	55.6	55.6	55.6	54.0
130°	38.6	41.7	44.8	46.3	47.9	47.9	49.4	49.4	49.4	49.4	49.4
132.5°	34.0	37.1	38.6	41.7	41.7	43.2	43.2	44.8	44.8	44.8	43.2
135°	30.9	32.4	34.0	37.1	37.1	38.6	38.6	38.6	38.6	38.6	38.6
137.5°	27.8	29.3	30.9	32.4	32.4	34.0	34.0	34.0	34.0	35.5	34.0
140°	23.2	26.2	27.8	27.8	29.3	29.3	29.3	30.9	30.9	30.9	29.3
142.5°	20.1	21.6	23.2	24.7	26.2	26.2	26.2	26.2	27.8	26.2	26.2
145°	15.4	18.5	20.1	21.6	23.2	23.2	23.2	23.2	23.2	23.2	23.2
147.5°	12.4	13.9	17.0	18.5	18.5	20.1	20.1	20.1	20.1	20.1	20.1
150°	10.8	10.8	13.9	15.4	17.0	17.0	17.0	17.0	17.0	17.0	17.0
152.5°	7.7	9.3	10.8	12.4	13.9	13.9	13.9	13.9	13.9	13.9	13.9
155°	7.7	7.7	9.3	9.3	10.8	10.8	10.8	10.8	12.4	10.8	10.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	2976.8	2975.3	2981.5	2975.3	2944.4	2956.8	2952.1	2969.1	2970.6	2975.3	2990.7
5°	2961.4	2961.4	2969.1	2962.9	2933.6	2945.9	2944.4	2961.4	2964.5	2967.6	2984.5
7.5°	2930.5	2932.0	2942.9	2938.2	2907.3	2925.9	2924.3	2944.4	2950.6	2956.8	2972.2
10°	2901.2	2899.6	2912.0	2907.3	2878.0	2899.6	2898.1	2918.2	2927.4	2938.2	2956.8
12.5°	2885.7	2881.1	2885.7	2881.1	2848.7	2865.7	2867.2	2890.4	2901.2	2915.1	2936.7
15°	2885.7	2878.0	2878.0	2868.7	2831.7	2842.5	2844.0	2859.5	2873.4	2887.3	2913.5
17.5°	2882.6	2874.9	2873.4	2865.7	2825.5	2825.5	2824.0	2834.8	2842.5	2856.4	2884.2
20°	2865.7	2862.6	2861.0	2856.4	2819.3	2813.2	2810.1	2810.1	2814.7	2819.3	2847.1
22.5°	2820.9	2824.0	2827.1	2830.1	2800.8	2790.0	2791.5	2788.5	2783.8	2783.8	2807.0
25°	2737.5	2752.9	2765.3	2779.2	2762.2	2754.5	2763.8	2759.1	2751.4	2745.2	2765.3
27.5°	2604.7	2637.1	2663.4	2697.4	2698.9	2692.7	2717.4	2714.3	2712.8	2703.5	2719.0
30°	2421.0	2471.9	2507.4	2556.9	2598.5	2604.7	2646.4	2652.6	2658.8	2654.1	2669.6
32.5°	2198.7	2268.1	2328.3	2405.5	2445.7	2481.2	2539.9	2564.6	2589.3	2597.0	2614.0
35°	1956.2	2035.0	2106.0	2190.9	2254.2	2331.4	2402.5	2439.5	2495.1	2516.7	2541.4
37.5°	1726.2	1800.3	1869.8	1954.7	2056.6	2136.9	2224.9	2308.3	2383.9	2414.8	2451.9
40°	1522.4	1582.6	1649.0	1723.1	1815.7	1920.7	2016.5	2132.3	2221.8	2283.6	2337.6
42.5°	1368.0	1397.3	1454.4	1520.8	1594.9	1701.5	1798.8	1928.5	2036.5	2124.5	2214.1
45°	1230.6	1244.5	1286.1	1321.7	1397.3	1491.5	1594.9	1721.6	1834.3	1947.0	2055.1
47.5°	1113.2	1130.2	1150.3	1171.9	1225.9	1304.7	1394.2	1508.5	1621.2	1752.4	1876.0
50°	1034.5	1039.1	1042.2	1051.5	1083.9	1137.9	1210.5	1307.8	1415.8	1556.3	1687.6
52.5°	965.0	965.0	955.7	951.1	963.5	997.4	1039.1	1108.6	1219.8	1349.5	1488.4
55°	890.9	877.0	873.9	858.5	861.5	877.0	897.1	951.1	1042.2	1153.4	1287.7
57.5°	787.4	781.3	781.3	775.1	762.7	770.5	775.1	813.7	878.5	974.3	1091.6
60°	668.6	665.5	673.2	674.7	663.9	668.6	667.0	690.2	736.5	813.7	911.0
62.5°	549.7	563.6	565.1	571.3	565.1	563.6	571.3	591.4	614.5	673.2	748.8
65°	461.7	469.4	470.9	478.6	475.6	475.6	481.7	497.2	511.1	551.2	609.9
67.5°	404.5	401.4	403.0	407.6	403.0	401.4	406.1	415.3	426.1	450.8	492.5
70°	359.8	356.7	356.7	356.7	350.5	345.9	347.4	350.5	355.1	369.0	395.3
72.5°	325.8	325.8	321.2	316.5	311.9	308.8	305.7	302.6	301.1	305.7	319.6
75°	294.9	296.4	294.9	290.3	284.1	277.9	271.7	265.6	257.8	254.8	256.3
77.5°	267.1	268.7	270.2	268.7	262.5	254.8	245.5	236.2	225.4	214.6	208.4
80°	242.4	245.5	247.0	245.5	240.9	234.7	223.9	213.1	197.6	183.7	168.3
82.5°	220.8	225.4	227.0	227.0	223.9	217.7	205.4	193.0	176.0	157.5	137.4
85°	203.8	206.9	210.0	210.0	208.4	202.3	189.9	176.0	159.0	137.4	115.8
87.5°	186.8	188.4	191.5	194.5	191.5	185.3	174.5	159.0	142.0	120.4	95.7
90°	169.8	171.4	174.5	177.6	176.0	169.8	160.6	146.7	128.2	105.0	80.3
92.5°	152.9	155.9	157.5	159.0	160.6	155.9	148.2	134.3	115.8	92.6	69.5
95°	140.5	140.5	143.6	145.1	146.7	142.0	135.9	122.0	105.0	83.4	60.2
97.5°	128.2	128.2	131.2	131.2	132.8	129.7	123.5	111.2	94.2	74.1	51.0
100°	115.8	117.3	118.9	120.4	120.4	118.9	112.7	100.4	84.9	66.4	44.8
102.5°	108.1	108.1	109.6	109.6	111.2	108.1	101.9	91.1	75.7	58.7	38.6
105°	100.4	100.4	101.9	101.9	100.4	97.3	91.1	81.8	67.9	51.0	34.0
107.5°	94.2	94.2	94.2	94.2	92.6	89.6	83.4	72.6	60.2	46.3	30.9
110°	89.6	88.0	88.0	86.5	84.9	80.3	74.1	64.8	54.0	40.1	26.2

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	84.9	83.4	81.8	80.3	77.2	72.6	66.4	58.7	47.9	35.5	23.2
115°	80.3	78.7	77.2	74.1	71.0	66.4	60.2	52.5	41.7	30.9	20.1
117.5°	75.7	74.1	71.0	67.9	64.8	60.2	54.0	46.3	37.1	27.8	18.5
120°	69.5	67.9	66.4	63.3	60.2	54.0	47.9	41.7	32.4	24.7	15.4
122.5°	64.8	63.3	60.2	58.7	54.0	49.4	43.2	37.1	29.3	21.6	13.9
125°	58.7	57.1	55.6	52.5	49.4	43.2	38.6	32.4	26.2	18.5	10.8
127.5°	54.0	52.5	49.4	46.3	43.2	38.6	34.0	29.3	23.2	15.4	10.8
130°	47.9	46.3	44.8	41.7	38.6	34.0	30.9	24.7	20.1	13.9	9.3
132.5°	41.7	41.7	40.1	37.1	34.0	30.9	26.2	21.6	17.0	12.4	7.7
135°	38.6	37.1	35.5	32.4	30.9	26.2	23.2	18.5	13.9	10.8	6.2
137.5°	34.0	32.4	30.9	29.3	26.2	23.2	20.1	15.4	12.4	9.3	6.2
140°	29.3	27.8	27.8	24.7	23.2	20.1	17.0	13.9	10.8	7.7	4.6
142.5°	26.2	24.7	23.2	21.6	20.1	17.0	13.9	10.8	9.3	6.2	4.6
145°	23.2	21.6	20.1	18.5	17.0	13.9	12.4	9.3	7.7	6.2	4.6
147.5°	18.5	18.5	17.0	15.4	13.9	12.4	10.8	9.3	6.2	4.6	3.1
150°	15.4	15.4	13.9	12.4	12.4	10.8	9.3	7.7	6.2	4.6	3.1
152.5°	13.9	12.4	12.4	10.8	10.8	9.3	7.7	6.2	4.6	4.6	3.1
155°	10.8	10.8	10.8	9.3	9.3	7.7	6.2	6.2	4.6	3.1	3.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	2993.8	2975.3	2990.7	3018.5	3015.4	3012.3	3009.2	3015.4	3035.5	3024.7	3007.7
5°	2989.2	2970.6	2987.6	3013.9	3012.3	3007.7	3004.6	3010.8	3030.9	3020.1	3001.5
7.5°	2979.9	2962.9	2975.3	3001.5	3001.5	2998.4	2995.4	3001.5	3020.1	3010.8	2992.3
10°	2964.5	2952.1	2964.5	2989.2	2990.7	2984.5	2981.5	2989.2	3007.7	3003.1	2987.6
12.5°	2952.1	2939.8	2953.7	2978.4	2979.9	2973.7	2969.1	2978.4	3003.1	3006.2	3001.5
15°	2935.1	2924.3	2941.3	2967.6	2967.6	2962.9	2962.9	2975.3	3009.2	3023.1	3030.9
17.5°	2910.4	2902.7	2922.8	2949.0	2950.6	2947.5	2949.0	2973.7	3018.5	3052.5	3074.1
20°	2879.6	2876.5	2898.1	2925.9	2930.5	2932.0	2939.8	2976.8	3038.6	3084.9	3106.5
22.5°	2842.5	2844.0	2868.7	2898.1	2904.3	2908.9	2924.3	2976.8	3054.0	3103.4	3112.7
25°	2800.8	2805.4	2831.7	2867.2	2874.9	2884.2	2910.4	2978.4	3058.7	3091.1	3075.6
27.5°	2756.0	2765.3	2799.3	2836.3	2845.6	2861.0	2895.0	2969.1	3037.0	3038.6	2981.5
30°	2709.7	2720.5	2760.7	2803.9	2819.3	2834.8	2876.5	2947.5	2984.5	2935.1	2834.8
32.5°	2657.2	2672.7	2712.8	2765.3	2783.8	2803.9	2845.6	2905.8	2891.9	2785.4	2641.8
35°	2590.8	2612.4	2658.8	2720.5	2737.5	2763.8	2793.1	2807.0	2745.2	2593.9	2431.8
37.5°	2509.0	2541.4	2595.5	2666.5	2685.0	2702.0	2709.7	2671.1	2547.6	2383.9	2215.6
40°	2414.8	2464.2	2522.9	2601.6	2620.2	2620.2	2592.4	2510.5	2354.6	2140.0	1953.2
42.5°	2300.6	2360.8	2434.9	2513.6	2532.2	2510.5	2444.1	2300.6	2123.0	1883.7	1686.0
45°	2161.6	2241.9	2325.3	2407.1	2416.4	2368.5	2249.6	2067.4	1848.2	1625.8	1437.5
47.5°	1996.4	2101.4	2192.5	2285.1	2272.8	2192.5	2033.4	1826.5	1594.9	1385.0	1233.7
50°	1811.1	1934.6	2036.5	2124.5	2098.3	1987.1	1800.3	1584.1	1354.1	1175.0	1049.9
52.5°	1613.5	1755.5	1857.4	1928.5	1892.9	1760.2	1554.8	1347.9	1159.5	995.9	912.5
55°	1408.1	1551.7	1656.7	1712.3	1666.0	1522.4	1320.1	1131.7	954.2	847.7	798.2
57.5°	1208.9	1343.3	1442.1	1486.9	1428.2	1284.6	1097.8	938.7	810.6	721.0	696.3
60°	1017.5	1127.1	1221.3	1255.3	1192.0	1059.2	898.6	772.0	677.8	616.1	603.7
62.5°	839.9	929.5	1003.6	1029.8	968.1	864.6	725.7	631.5	565.1	534.2	518.8
65°	693.3	745.8	821.4	816.8	779.7	684.0	582.1	515.7	472.5	452.4	443.1
67.5°	545.0	592.9	640.8	646.9	600.6	534.2	467.8	420.0	396.8	386.0	381.4
70°	421.5	457.0	486.4	478.6	453.9	412.2	370.6	344.3	335.0	330.4	330.4
72.5°	327.3	345.9	359.8	350.5	335.0	313.4	293.4	282.6	284.1	287.2	290.3
75°	253.2	257.8	260.9	251.7	248.6	234.7	233.1	234.7	244.0	253.2	257.8
77.5°	194.5	188.4	183.7	174.5	176.0	174.5	182.2	194.5	208.4	222.3	234.7
80°	149.8	135.9	125.1	115.8	120.4	128.2	143.6	162.1	180.6	196.1	211.5
82.5°	115.8	95.7	80.3	71.0	80.3	92.6	112.7	135.9	157.5	174.5	191.5
85°	89.6	66.4	47.9	38.6	47.9	66.4	88.0	114.3	137.4	155.9	172.9
87.5°	69.5	47.9	26.2	15.4	26.2	46.3	71.0	95.7	118.9	140.5	157.5
90°	55.6	32.4	12.4	3.1	13.9	32.4	55.6	80.3	103.4	126.6	143.6
92.5°	44.8	23.2	6.2	0.0	7.7	24.7	46.3	69.5	92.6	114.3	131.2
95°	37.1	18.5	4.6	0.0	6.2	18.5	37.1	60.2	81.8	103.4	117.3
97.5°	30.9	13.9	3.1	0.0	3.1	15.4	30.9	51.0	72.6	92.6	106.5
100°	26.2	12.4	3.1	0.0	3.1	12.4	26.2	44.8	63.3	81.8	95.7
102.5°	21.6	9.3	1.5	1.5	1.5	9.3	23.2	38.6	55.6	72.6	86.5
105°	20.1	7.7	1.5	1.5	1.5	7.7	20.1	34.0	49.4	64.8	77.2
107.5°	17.0	6.2	1.5	1.5	1.5	6.2	17.0	29.3	44.8	58.7	69.5
110°	13.9	6.2	1.5	1.5	1.5	6.2	13.9	26.2	38.6	51.0	61.8

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	12.4	4.6	1.5	1.5	1.5	4.6	12.4	23.2	34.0	46.3	55.6
115°	10.8	4.6	1.5	1.5	1.5	4.6	10.8	20.1	29.3	40.1	49.4
117.5°	9.3	4.6	1.5	1.5	1.5	3.1	9.3	17.0	26.2	35.5	44.8
120°	7.7	3.1	1.5	1.5	1.5	3.1	7.7	15.4	23.2	30.9	38.6
122.5°	7.7	3.1	1.5	1.5	1.5	3.1	6.2	12.4	20.1	26.2	34.0
125°	6.2	3.1	1.5	1.5	1.5	1.5	6.2	10.8	17.0	23.2	29.3
127.5°	6.2	3.1	1.5	1.5	1.5	1.5	4.6	9.3	13.9	20.1	26.2
130°	4.6	3.1	1.5	1.5	1.5	1.5	3.1	7.7	12.4	17.0	21.6
132.5°	4.6	3.1	1.5	1.5	1.5	1.5	3.1	6.2	9.3	13.9	18.5
135°	4.6	1.5	1.5	1.5	1.5	1.5	1.5	4.6	7.7	10.8	13.9
137.5°	3.1	1.5	1.5	1.5	1.5	1.5	1.5	3.1	6.2	7.7	12.4
140°	3.1	1.5	1.5	1.5	1.5	1.5	1.5	3.1	4.6	6.2	9.3
142.5°	3.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	4.6	7.7
145°	3.1	1.5	1.5	3.1	3.1	1.5	1.5	3.1	3.1	4.6	6.2
147.5°	3.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	3.1	4.6
150°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.6
152.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
155°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	3004.6	2969.1	2987.6	2981.5	2987.6	3003.1	3001.5	2996.9	3000.0	2992.3	2984.5
5°	2998.4	2962.9	2981.5	2973.7	2981.5	2996.9	2993.8	2989.2	2993.8	2984.5	2976.8
7.5°	2990.7	2958.3	2979.9	2978.4	2992.3	3012.3	3013.9	3013.9	3024.7	3010.8	3004.6
10°	2990.7	2973.7	3003.1	3013.9	3049.4	3075.6	3078.7	3084.9	3103.4	3100.3	3084.9
12.5°	3023.1	3020.1	3063.3	3089.5	3122.0	3159.0	3179.1	3185.3	3197.6	3188.4	3182.2
15°	3064.8	3080.3	3128.1	3157.5	3193.0	3220.8	3225.4	3228.5	3237.8	3223.9	3213.1
17.5°	3120.4	3129.7	3168.3	3180.6	3203.8	3208.4	3202.2	3186.8	3186.8	3155.9	3146.7
20°	3146.7	3142.0	3157.5	3137.4	3128.1	3100.3	3074.1	3044.8	3043.2	3010.8	3007.7
22.5°	3123.5	3092.6	3060.2	3010.8	2989.2	2949.0	2913.5	2896.5	2885.7	2844.0	2833.2
25°	3041.7	2966.0	2918.2	2859.5	2807.0	2760.7	2726.7	2691.2	2657.2	2623.2	2607.8
27.5°	2899.6	2828.6	2751.4	2669.6	2597.0	2526.0	2468.8	2433.3	2400.9	2356.1	2333.0
30°	2725.2	2626.3	2541.4	2462.7	2343.8	2257.3	2209.5	2138.4	2113.7	2093.7	2050.4
32.5°	2519.8	2400.9	2285.1	2178.6	2056.6	1976.3	1913.0	1860.5	1845.1	1792.6	1780.2
35°	2292.8	2136.9	2005.7	1900.7	1812.7	1715.4	1662.9	1627.4	1596.5	1561.0	1554.8
37.5°	2025.7	1885.2	1737.0	1644.4	1574.9	1491.5	1451.4	1426.7	1412.8	1386.5	1381.9
40°	1757.1	1616.6	1514.7	1422.0	1378.8	1334.0	1304.7	1293.9	1287.7	1278.4	1269.2
42.5°	1513.1	1389.6	1317.0	1255.3	1236.7	1215.1	1207.4	1213.6	1207.4	1204.3	1202.8
45°	1306.2	1212.0	1161.1	1142.6	1137.9	1131.7	1137.9	1148.7	1150.3	1147.2	1147.2
47.5°	1117.9	1073.1	1051.5	1054.5	1062.3	1066.9	1077.7	1091.6	1094.7	1087.0	1090.1
50°	994.3	968.1	963.5	975.8	992.8	999.0	1011.3	1022.1	1020.6	1017.5	1014.4
52.5°	878.5	870.8	883.2	895.5	914.0	917.1	921.8	926.4	924.9	918.7	915.6
55°	781.3	787.4	798.2	802.9	816.8	815.2	816.8	816.8	810.6	807.5	802.9
57.5°	693.3	694.8	701.0	702.5	710.2	707.2	705.6	702.5	693.3	691.7	687.1
60°	603.7	600.6	614.5	603.7	609.9	603.7	602.2	594.4	585.2	583.6	580.5
62.5°	518.8	512.6	521.9	517.2	520.3	514.2	511.1	501.8	494.1	492.5	491.0
65°	443.1	440.0	449.3	447.8	450.8	443.1	440.0	433.9	427.7	426.1	424.6
67.5°	379.8	387.5	392.2	392.2	395.3	393.7	386.0	384.5	382.9	376.7	376.7
70°	333.5	338.1	347.4	348.9	347.4	350.5	344.3	342.8	341.2	338.1	336.6
72.5°	296.4	302.6	311.9	313.4	311.9	311.9	308.8	307.3	307.3	302.6	302.6
75°	267.1	274.8	282.6	282.6	282.6	279.5	276.4	276.4	273.3	271.7	268.7
77.5°	242.4	251.7	257.8	256.3	254.8	251.7	251.7	247.0	242.4	242.4	239.3
80°	223.9	230.1	234.7	233.1	231.6	227.0	225.4	220.8	217.7	213.1	213.1
82.5°	203.8	211.5	214.6	213.1	210.0	205.4	203.8	200.7	197.6	196.1	193.0
85°	186.8	194.5	196.1	193.0	189.9	186.8	185.3	183.7	182.2	179.1	179.1
87.5°	169.8	177.6	177.6	176.0	172.9	171.4	169.8	168.3	166.8	165.2	163.7
90°	155.9	162.1	162.1	160.6	159.0	157.5	155.9	154.4	152.9	151.3	151.3
92.5°	142.0	148.2	148.2	146.7	145.1	143.6	143.6	142.0	140.5	139.0	137.4
95°	129.7	135.9	135.9	135.9	134.3	132.8	132.8	131.2	129.7	129.7	128.2
97.5°	117.3	123.5	123.5	123.5	122.0	120.4	120.4	118.9	118.9	118.9	117.3
100°	106.5	111.2	112.7	112.7	111.2	111.2	111.2	109.6	109.6	109.6	108.1
102.5°	95.7	100.4	103.4	103.4	103.4	101.9	101.9	101.9	101.9	101.9	100.4
105°	86.5	91.1	94.2	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
107.5°	78.7	83.4	86.5	88.0	89.6	89.6	91.1	91.1	91.1	91.1	91.1
110°	71.0	75.7	80.3	81.8	83.4	84.9	84.9	86.5	84.9	84.9	84.9

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	63.3	69.5	72.6	75.7	77.2	78.7	80.3	80.3	80.3	80.3	80.3
115°	57.1	63.3	66.4	69.5	72.6	74.1	74.1	75.7	75.7	75.7	74.1
117.5°	51.0	57.1	60.2	63.3	64.8	67.9	69.5	69.5	69.5	69.5	67.9
120°	46.3	51.0	54.0	57.1	60.2	61.8	63.3	63.3	63.3	63.3	63.3
122.5°	40.1	44.8	49.4	52.5	54.0	55.6	57.1	57.1	57.1	57.1	57.1
125°	35.5	40.1	43.2	46.3	47.9	51.0	51.0	51.0	51.0	51.0	51.0
127.5°	30.9	35.5	38.6	41.7	43.2	44.8	46.3	46.3	46.3	46.3	46.3
130°	26.2	30.9	34.0	37.1	38.6	40.1	40.1	41.7	41.7	41.7	41.7
132.5°	23.2	26.2	29.3	32.4	34.0	35.5	35.5	37.1	37.1	37.1	37.1
135°	18.5	23.2	24.7	27.8	29.3	30.9	30.9	32.4	32.4	32.4	32.4
137.5°	15.4	18.5	21.6	24.7	26.2	26.2	27.8	27.8	29.3	29.3	29.3
140°	12.4	13.9	18.5	20.1	21.6	23.2	24.7	24.7	24.7	24.7	24.7
142.5°	9.3	12.4	13.9	17.0	18.5	20.1	21.6	21.6	21.6	21.6	21.6
145°	7.7	9.3	10.8	13.9	15.4	17.0	18.5	18.5	18.5	18.5	18.5
147.5°	6.2	7.7	9.3	10.8	12.4	13.9	15.4	15.4	15.4	15.4	15.4
150°	4.6	6.2	7.7	7.7	9.3	10.8	12.4	13.9	13.9	13.9	13.9
152.5°	4.6	4.6	6.2	6.2	7.7	9.3	10.8	10.8	10.8	10.8	10.8
155°	3.1	4.6	4.6	4.6	6.2	6.2	7.7	9.3	9.3	9.3	9.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	2989.2	2995.4	2992.3	2987.6	2986.1	2993.8	2986.1	2950.6	2964.5	2966.0	2976.8
5°	2984.5	2989.2	2986.1	2983.0	2978.4	2987.6	2978.4	2941.3	2955.2	2956.8	2967.6
7.5°	3015.4	3017.0	3017.0	3009.2	2996.9	3001.5	2989.2	2947.5	2955.2	2955.2	2962.9
10°	3092.6	3095.7	3100.3	3080.3	3064.8	3052.5	3035.5	2984.5	2983.0	2970.6	2970.6
12.5°	3193.0	3185.3	3177.5	3168.3	3155.9	3140.5	3115.8	3055.6	3035.5	3015.4	2995.4
15°	3222.3	3219.2	3217.7	3213.1	3205.3	3200.7	3182.2	3122.0	3092.6	3067.9	3032.4
17.5°	3145.1	3151.3	3171.4	3172.9	3182.2	3200.7	3197.6	3155.9	3129.7	3118.9	3075.6
20°	3006.2	3007.7	3032.4	3043.2	3083.4	3114.2	3137.4	3132.8	3126.6	3138.9	3106.5
22.5°	2839.4	2850.2	2876.5	2893.4	2932.0	2967.6	3004.6	3024.7	3057.1	3108.1	3101.9
25°	2612.4	2626.3	2663.4	2691.2	2745.2	2799.3	2848.7	2884.2	2922.8	3020.1	3052.5
27.5°	2340.7	2362.3	2410.2	2438.0	2513.6	2569.2	2640.2	2709.7	2763.8	2874.9	2941.3
30°	2055.1	2073.6	2124.5	2163.1	2228.0	2303.6	2393.2	2492.0	2581.6	2694.3	2777.6
32.5°	1787.9	1808.0	1849.7	1883.7	1956.2	2019.5	2118.4	2240.3	2323.7	2479.7	2590.8
35°	1554.8	1573.3	1602.7	1632.0	1692.2	1757.1	1842.0	1960.9	2067.4	2229.5	2370.0
37.5°	1391.1	1394.2	1411.2	1428.2	1473.0	1522.4	1588.8	1693.8	1792.6	1967.1	2121.5
40°	1273.8	1273.8	1283.1	1287.7	1307.8	1337.1	1378.8	1460.6	1542.5	1675.2	1863.6
42.5°	1201.2	1198.1	1198.1	1199.7	1198.1	1212.0	1236.7	1275.3	1347.9	1457.5	1604.2
45°	1147.2	1141.0	1136.4	1125.6	1119.4	1119.4	1120.9	1134.8	1176.5	1247.5	1366.4
47.5°	1087.0	1085.4	1077.7	1065.4	1054.5	1046.8	1034.5	1029.8	1042.2	1082.3	1162.6
50°	1017.5	1009.8	1002.1	992.8	980.4	972.7	949.6	951.1	940.3	958.8	1000.5
52.5°	915.6	909.4	906.3	898.6	894.0	890.9	872.4	853.8	849.2	852.3	867.7
55°	802.9	806.0	793.6	799.8	798.2	784.3	776.6	762.7	758.1	756.6	764.3
57.5°	685.5	688.6	680.9	687.1	687.1	679.4	674.7	674.7	663.9	654.7	665.5
60°	579.0	572.8	577.5	585.2	585.2	580.5	577.5	577.5	569.7	566.6	574.4
62.5°	492.5	486.4	491.0	498.7	500.3	497.2	494.1	494.1	484.8	484.8	491.0
65°	426.1	427.7	426.1	432.3	432.3	433.9	430.8	427.7	416.9	421.5	420.0
67.5°	378.3	376.7	376.7	382.9	381.4	384.5	381.4	376.7	369.0	362.8	361.3
70°	338.1	336.6	336.6	339.7	341.2	341.2	339.7	336.6	325.8	319.6	315.0
72.5°	302.6	301.1	302.6	304.2	305.7	307.3	305.7	302.6	293.4	285.6	277.9
75°	270.2	268.7	273.3	273.3	274.8	274.8	276.4	274.8	267.1	257.8	248.6
77.5°	237.8	239.3	244.0	245.5	248.6	250.1	251.7	251.7	244.0	236.2	223.9
80°	211.5	214.6	217.7	219.2	222.3	227.0	228.5	230.1	223.9	216.2	202.3
82.5°	193.0	194.5	197.6	199.2	203.8	205.4	206.9	210.0	206.9	199.2	183.7
85°	177.6	179.1	182.2	182.2	185.3	188.4	189.9	191.5	189.9	182.2	166.8
87.5°	163.7	165.2	166.8	168.3	169.8	171.4	172.9	174.5	172.9	165.2	151.3
90°	151.3	151.3	152.9	152.9	154.4	155.9	159.0	159.0	157.5	151.3	137.4
92.5°	137.4	139.0	139.0	140.5	142.0	143.6	145.1	145.1	143.6	137.4	125.1
95°	128.2	128.2	129.7	129.7	131.2	131.2	132.8	132.8	131.2	125.1	112.7
97.5°	117.3	117.3	117.3	117.3	118.9	118.9	120.4	120.4	118.9	112.7	101.9
100°	108.1	108.1	108.1	108.1	108.1	109.6	109.6	109.6	108.1	101.9	91.1
102.5°	100.4	100.4	100.4	100.4	100.4	100.4	100.4	100.4	97.3	92.6	81.8
105°	95.7	95.7	95.7	94.2	94.2	94.2	92.6	92.6	88.0	83.4	74.1
107.5°	89.6	89.6	89.6	88.0	88.0	86.5	84.9	84.9	80.3	75.7	66.4
110°	84.9	84.9	84.9	83.4	81.8	80.3	78.7	77.2	72.6	66.4	58.7

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	80.3	80.3	78.7	78.7	77.2	75.7	72.6	71.0	66.4	60.2	52.5
115°	74.1	74.1	74.1	72.6	71.0	69.5	67.9	64.8	60.2	54.0	46.3
117.5°	67.9	67.9	67.9	66.4	64.8	63.3	61.8	58.7	54.0	47.9	41.7
120°	61.8	61.8	61.8	60.2	58.7	57.1	55.6	52.5	47.9	43.2	35.5
122.5°	57.1	57.1	55.6	54.0	52.5	51.0	49.4	46.3	43.2	37.1	30.9
125°	51.0	51.0	49.4	49.4	47.9	46.3	44.8	41.7	37.1	32.4	27.8
127.5°	46.3	44.8	44.8	44.8	43.2	41.7	38.6	37.1	32.4	27.8	23.2
130°	40.1	40.1	40.1	38.6	38.6	37.1	34.0	30.9	27.8	24.7	20.1
132.5°	35.5	35.5	35.5	35.5	34.0	32.4	29.3	27.8	24.7	20.1	17.0
135°	32.4	32.4	30.9	30.9	29.3	27.8	26.2	23.2	20.1	17.0	13.9
137.5°	27.8	27.8	27.8	26.2	26.2	24.7	21.6	20.1	18.5	15.4	12.4
140°	24.7	24.7	23.2	23.2	21.6	21.6	20.1	17.0	15.4	12.4	10.8
142.5°	21.6	21.6	20.1	20.1	18.5	18.5	17.0	15.4	12.4	10.8	7.7
145°	18.5	18.5	17.0	17.0	17.0	15.4	13.9	12.4	10.8	9.3	7.7
147.5°	15.4	15.4	15.4	13.9	13.9	12.4	12.4	10.8	9.3	7.7	6.2
150°	13.9	13.9	12.4	12.4	12.4	10.8	9.3	9.3	7.7	6.2	4.6
152.5°	10.8	10.8	10.8	10.8	9.3	9.3	7.7	7.7	6.2	4.6	4.6
155°	9.3	9.3	9.3	7.7	7.7	7.7	6.2	6.2	4.6	4.6	3.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2	2989.2
2.5°	2972.2	2970.6	2984.5	2983.0	2964.5	2992.3	3010.8
5°	2964.5	2962.9	2975.3	2978.4	2958.3	2987.6	3007.7
7.5°	2958.3	2956.8	2970.6	2975.3	2955.2	2981.5	3003.1
10°	2959.8	2952.1	2964.5	2967.6	2949.0	2976.8	2995.4
12.5°	2970.6	2952.1	2956.8	2956.8	2939.8	2964.5	2984.5
15°	2996.9	2958.3	2952.1	2947.5	2925.9	2949.0	2969.1
17.5°	3026.2	2973.7	2952.1	2936.7	2910.4	2930.5	2952.1
20°	3055.6	2990.7	2955.2	2930.5	2895.0	2913.5	2929.0
22.5°	3069.5	3006.2	2958.3	2921.2	2876.5	2885.7	2902.7
25°	3050.9	3000.0	2952.1	2907.3	2853.3	2854.8	2868.7
27.5°	2983.0	2969.1	2938.2	2893.4	2834.8	2827.1	2837.9
30°	2867.2	2905.8	2907.3	2874.9	2813.2	2797.7	2802.4
32.5°	2705.1	2791.5	2842.5	2836.3	2782.3	2760.7	2763.8
35°	2518.3	2626.3	2737.5	2774.6	2736.0	2719.0	2712.8
37.5°	2294.4	2439.5	2587.7	2678.8	2672.7	2661.8	2655.7
40°	2047.3	2221.8	2397.8	2543.0	2587.7	2587.7	2590.8
42.5°	1783.3	1987.1	2180.1	2363.9	2468.8	2492.0	2501.3
45°	1528.6	1733.9	1943.9	2155.4	2295.9	2368.5	2394.7
47.5°	1297.0	1503.9	1703.0	1934.6	2121.5	2215.6	2257.3
50°	1099.3	1253.7	1463.7	1693.8	1897.6	2013.4	2095.2
52.5°	935.7	1056.1	1239.8	1454.4	1659.8	1818.8	1894.5
55°	798.2	880.1	1036.0	1221.3	1417.4	1582.6	1670.6
57.5°	682.4	747.3	853.8	1008.2	1173.4	1337.1	1431.3
60°	580.5	625.3	697.9	819.9	960.4	1100.9	1192.0
62.5°	492.5	521.9	569.7	659.3	768.9	878.5	963.5
65°	424.6	437.0	463.2	518.8	602.2	685.5	758.1
67.5°	358.2	365.9	386.0	420.0	461.7	521.9	569.7
70°	308.8	308.8	310.3	330.4	352.0	390.6	424.6
72.5°	268.7	264.0	254.8	259.4	264.0	285.6	307.3
75°	236.2	225.4	210.0	203.8	200.7	203.8	216.2
77.5°	208.4	193.0	174.5	159.0	146.7	142.0	152.9
80°	185.3	166.8	145.1	125.1	105.0	94.2	98.8
82.5°	166.8	143.6	120.4	97.3	74.1	58.7	58.7
85°	146.7	125.1	100.4	75.7	52.5	32.4	29.3
87.5°	132.8	109.6	83.4	60.2	37.1	17.0	9.3
90°	118.9	95.7	71.0	47.9	26.2	7.7	0.0
92.5°	106.5	84.9	61.8	38.6	18.5	4.6	0.0
95°	95.7	75.7	52.5	32.4	15.4	3.1	1.5
97.5°	84.9	66.4	46.3	26.2	10.8	3.1	1.5
100°	77.2	58.7	40.1	21.6	9.3	1.5	1.5
102.5°	67.9	52.5	34.0	18.5	7.7	1.5	1.5
105°	60.2	46.3	29.3	15.4	6.2	1.5	1.5
107.5°	54.0	40.1	26.2	13.9	6.2	1.5	1.5
110°	47.9	35.5	23.2	12.4	4.6	1.5	1.5

TEST NUMBER: P1214228

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	43.2	30.9	20.1	10.8	3.1	1.5	1.5
115°	37.1	27.8	17.0	9.3	3.1	1.5	1.5
117.5°	32.4	23.2	15.4	7.7	3.1	1.5	1.5
120°	27.8	20.1	12.4	6.2	1.5	1.5	1.5
122.5°	24.7	17.0	10.8	6.2	1.5	1.5	1.5
125°	21.6	15.4	9.3	4.6	1.5	1.5	1.5
127.5°	18.5	12.4	7.7	3.1	1.5	1.5	1.5
130°	15.4	10.8	6.2	3.1	1.5	1.5	1.5
132.5°	12.4	9.3	6.2	3.1	1.5	1.5	1.5
135°	10.8	7.7	4.6	3.1	1.5	1.5	1.5
137.5°	9.3	6.2	3.1	3.1	3.1	1.5	1.5
140°	7.7	4.6	3.1	3.1	3.1	3.1	1.5
142.5°	6.2	4.6	3.1	3.1	3.1	3.1	1.5
145°	4.6	3.1	3.1	3.1	3.1	3.1	1.5
147.5°	4.6	3.1	3.1	3.1	3.1	3.1	1.5
150°	3.1	3.1	3.1	3.1	3.1	3.1	3.1
152.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1
155°	3.1	3.1	3.1	3.1	3.1	3.1	3.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)