

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: P1213877

Luminaire Tested: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213877
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

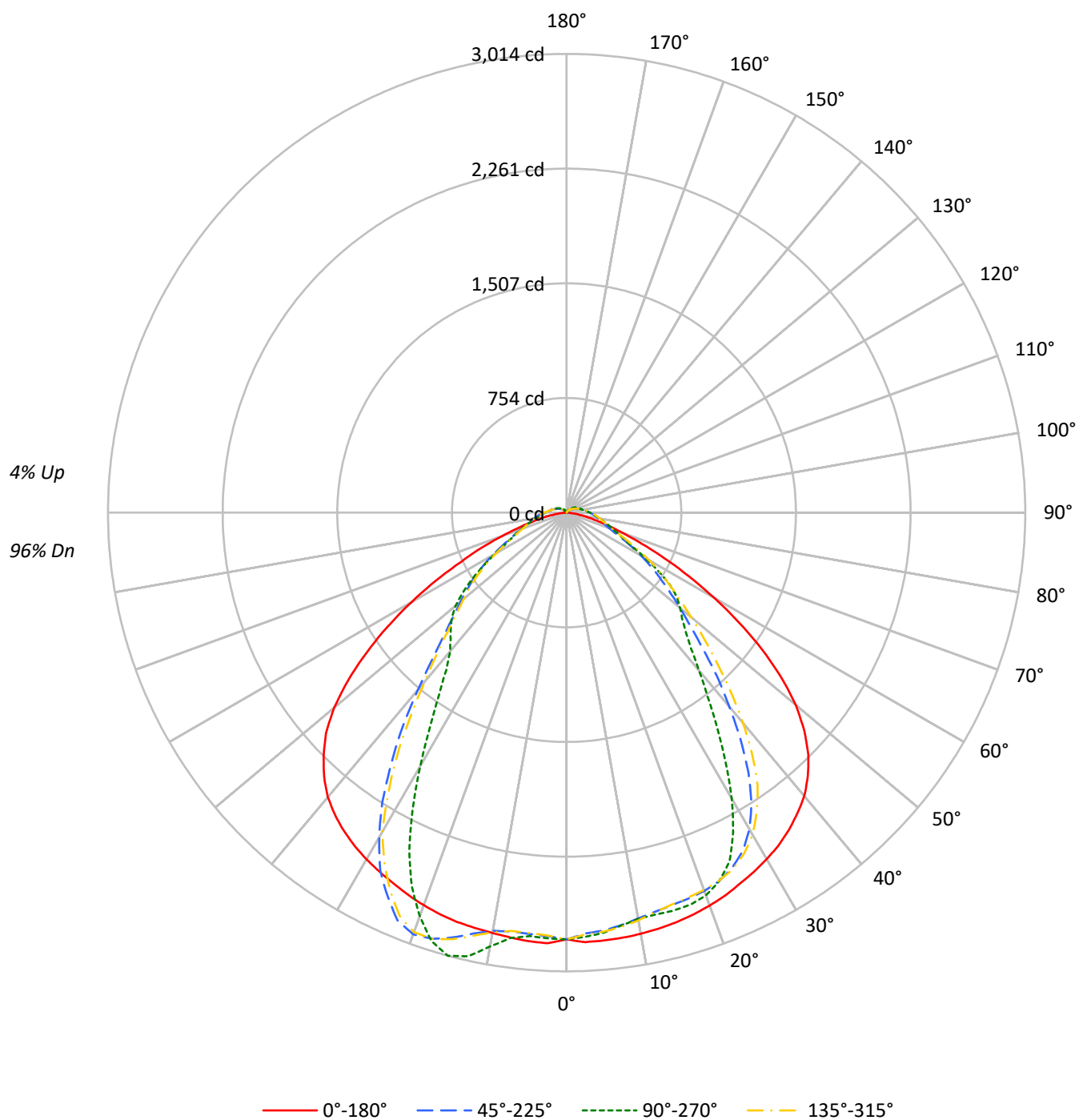
Lumens per Lamp: N/A
Luminaire Lumens: 6685.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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					0
RW	70	50	30	10	70	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
1	109	104	100	97	106	102	98	95		97	94	91		92	90	88		88	86	84
2	100	93	86	81	97	90	85	80		86	82	77		82	79	75		79	76	73
3	92	83	75	69	89	81	74	68		77	71	67		74	69	65		71	67	63
4	85	74	66	60	83	73	65	59		70	63	58		67	61	57		64	60	56
5	79	67	59	52	76	66	58	52		63	56	51		61	55	50		59	53	49
6	73	61	52	46	71	60	52	46		57	51	45		55	49	45		54	48	44
7	68	55	47	42	66	54	47	41		53	46	41		51	45	40		49	44	40
8	64	51	43	37	62	50	42	37		48	42	37		47	41	36		45	40	36
9	60	47	39	34	58	46	39	34		45	38	33		43	37	33		42	37	33
10	56	43	36	31	54	43	36	31		42	35	30		40	34	30		39	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	22661	22661	22661	22661
5°	22826	21763	22873	21933
10°	22932	20857	22884	22273
15°	23109	20578	23097	22912
20°	23363	20252	23339	21348
25°	23651	19213	23639	18564
30°	24096	16651	24110	14751
35°	24568	13464	24639	11394
40°	24984	10841	25088	9551
45°	24896	9183	25024	8942
50°	23823	8455	24157	8266
55°	21137	7599	21664	6908
60°	17144	5817	18055	5334
65°	12745	4449	13731	4219
70°	8667	3841	9770	3673
75°	5671	3466	6602	3277
80°	3665	3232	4293	2973
85°	1879	3225	2473	2944

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 25024 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.4	4.0
10°-20°	792.5	11.9
20°-30°	1204.9	18.0
30°-40°	1292.5	19.3
40°-50°	1121.8	16.8
50°-60°	831.3	12.4
60°-70°	476.3	7.1
70°-80°	263.8	3.9
80°-90°	160.6	2.4
90°-100°	104.4	1.6
100°-110°	69.9	1.0
110°-120°	47.2	0.7
120°-130°	29.0	0.4
130°-140°	15.2	0.2
140°-150°	6.9	0.1
150°-160°	2.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2263.8	33.9
0°-40°	3556.3	53.2
0°-60°	5509.4	82.4
0°-90°	6410.1	95.9
90°-120°	221.6	3.3
90°-150°	272.8	4.1
90°-180°	275.0	4.1
0°-180°	6685.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2804	2804	2804	2804	2804	
5°	2822	2771	2827	2793	2822	269
15°	2785	2707	2784	3014	2785	788
25°	2691	2532	2690	2446	2691	1244
35°	2545	1724	2552	1459	2545	1593
45°	2246	1105	2258	1076	2246	1720
55°	1567	828	1606	753	1567	1390
65°	711	420	766	398	711	717
75°	203	266	236	252	203	232
85°	28	184	36	168	28	36
90°	0	154	3	142	0	1
95°	1	126	0	120	1	1
105°	1	94	1	90	1	1
115°	1	77	1	70	1	1
125°	1	58	1	48	1	1
135°	1	36	1	30	1	1
145°	1	22	3	17	1	1
155°	3	10	3	9	3	1
165°	0	0	0	0	0	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°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2824.5	2817.2	2814.3	2808.5	2812.9	2830.3	2818.7	2799.8	2801.3	2768.0	2785.4
5°	2821.6	2812.9	2808.5	2802.7	2805.6	2821.6	2810.0	2791.2	2789.7	2756.4	2772.3
7.5°	2817.2	2808.5	2801.3	2796.9	2798.4	2811.4	2796.9	2775.2	2770.9	2734.7	2749.1
10°	2810.0	2804.2	2794.0	2786.8	2785.4	2799.8	2776.7	2754.9	2744.8	2707.1	2721.6
12.5°	2799.8	2791.2	2781.0	2768.0	2766.5	2775.2	2756.4	2726.0	2715.8	2685.4	2701.3
15°	2785.4	2775.2	2763.6	2749.1	2741.9	2747.7	2724.5	2697.0	2695.6	2669.5	2691.2
17.5°	2769.4	2754.9	2741.9	2721.6	2711.5	2715.8	2697.0	2672.4	2675.3	2659.3	2684.0
20°	2747.7	2731.8	2711.5	2691.2	2676.7	2684.0	2670.9	2652.1	2656.4	2644.9	2666.6
22.5°	2723.1	2701.3	2676.7	2653.5	2642.0	2652.1	2642.0	2626.0	2627.5	2620.2	2633.3
25°	2691.2	2666.6	2637.6	2608.6	2602.9	2610.1	2604.3	2591.3	2585.5	2573.9	2579.7
27.5°	2662.2	2634.7	2598.5	2568.1	2558.0	2572.4	2559.4	2537.7	2521.7	2505.8	2494.2
30°	2628.9	2595.6	2555.1	2520.3	2511.6	2517.4	2498.6	2465.3	2423.2	2403.0	2371.1
32.5°	2592.7	2549.3	2498.6	2459.5	2453.7	2449.3	2414.6	2366.8	2301.6	2261.0	2211.8
35°	2544.9	2497.1	2436.3	2388.5	2379.8	2355.2	2298.7	2234.9	2150.9	2081.4	1997.4
37.5°	2491.3	2434.8	2371.1	2307.4	2282.7	2233.5	2153.8	2087.2	1959.7	1875.7	1774.3
40°	2430.5	2362.4	2284.2	2207.4	2166.9	2087.2	1996.0	1897.5	1774.3	1661.4	1575.9
42.5°	2346.5	2274.1	2181.4	2095.9	2026.4	1920.6	1813.5	1674.4	1561.4	1465.8	1378.9
45°	2246.5	2159.6	2052.4	1949.6	1861.3	1735.2	1609.2	1470.2	1376.0	1264.5	1205.1
47.5°	2117.6	2023.5	1909.0	1794.6	1678.7	1539.7	1407.9	1274.6	1180.5	1100.8	1057.4
50°	1965.5	1878.6	1752.6	1616.5	1489.0	1344.2	1212.3	1112.4	1021.2	971.9	938.6
52.5°	1777.2	1696.1	1567.2	1419.5	1296.4	1154.4	1034.2	953.1	887.9	851.7	840.1
55°	1567.2	1496.2	1368.8	1231.2	1105.2	974.8	883.6	812.6	770.6	748.8	750.3
57.5°	1342.7	1287.7	1167.4	1044.3	925.6	827.1	744.5	688.0	656.1	654.7	659.0
60°	1118.2	1077.6	973.4	867.6	763.3	683.7	622.8	583.7	563.4	564.9	563.4
62.5°	903.8	866.2	790.9	703.9	621.4	567.8	512.7	496.8	479.4	478.0	478.0
65°	711.2	682.2	621.4	559.1	496.8	462.1	434.5	415.7	402.7	399.8	401.2
67.5°	534.5	522.9	480.9	438.9	399.8	378.0	354.9	350.5	340.4	340.4	343.3
70°	398.3	389.6	366.5	341.8	325.9	311.4	299.8	299.8	298.4	296.9	304.2
72.5°	288.2	289.7	282.4	263.6	262.2	259.3	256.4	260.7	262.2	266.5	275.2
75°	202.8	207.1	207.1	204.2	210.0	217.3	221.6	228.9	237.5	243.3	253.5
77.5°	143.4	143.4	150.6	159.3	170.9	184.0	195.5	205.7	217.3	224.5	233.2
80°	92.7	97.0	108.6	124.6	140.5	157.9	173.8	186.8	198.4	210.0	215.8
82.5°	55.0	62.3	76.8	97.0	117.3	139.1	155.0	170.9	184.0	195.5	199.9
85°	27.5	37.7	55.0	76.8	98.5	121.7	141.9	156.4	170.9	181.1	186.8
87.5°	8.7	20.3	39.1	59.4	82.6	105.7	127.5	143.4	156.4	165.1	170.9
90°	0.0	10.1	27.5	49.2	71.0	94.1	114.4	131.8	144.8	152.1	156.4
92.5°	0.0	5.8	21.7	40.6	60.8	84.0	104.3	120.2	131.8	139.1	141.9
95°	1.4	4.3	15.9	33.3	53.6	75.3	94.1	108.6	120.2	127.5	128.9
97.5°	1.4	2.9	13.0	27.5	46.4	66.6	85.5	99.9	108.6	115.9	117.3
100°	1.4	2.9	10.1	24.6	40.6	59.4	76.8	89.8	99.9	105.7	107.2
102.5°	1.4	1.4	8.7	20.3	36.2	52.1	68.1	81.1	89.8	95.6	98.5
105°	1.4	1.4	7.2	17.4	31.9	46.4	60.8	73.9	81.1	86.9	89.8
107.5°	1.4	1.4	5.8	14.5	27.5	40.6	55.0	65.2	73.9	79.7	82.6
110°	1.4	1.4	4.3	13.0	23.2	36.2	47.8	57.9	66.6	72.4	75.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.4	1.4	4.3	11.6	20.3	31.9	42.0	52.1	59.4	65.2	69.5
115°	1.4	1.4	4.3	10.1	18.8	27.5	37.7	46.4	53.6	59.4	63.7
117.5°	1.4	1.4	4.3	8.7	15.9	24.6	33.3	42.0	47.8	53.6	57.9
120°	1.4	1.4	2.9	7.2	14.5	21.7	29.0	36.2	43.5	49.2	53.6
122.5°	1.4	1.4	2.9	7.2	11.6	18.8	26.1	31.9	39.1	43.5	47.8
125°	1.4	1.4	2.9	5.8	10.1	17.4	23.2	29.0	33.3	39.1	43.5
127.5°	1.4	1.4	2.9	5.8	8.7	14.5	20.3	26.1	30.4	34.8	37.7
130°	1.4	1.4	2.9	4.3	7.2	11.6	17.4	21.7	27.5	30.4	33.3
132.5°	1.4	1.4	1.4	4.3	5.8	8.7	13.0	18.8	23.2	27.5	29.0
135°	1.4	1.4	1.4	2.9	5.8	7.2	10.1	14.5	18.8	23.2	26.1
137.5°	1.4	1.4	1.4	2.9	4.3	7.2	8.7	11.6	15.9	18.8	23.2
140°	1.4	1.4	1.4	2.9	4.3	5.8	7.2	10.1	13.0	15.9	18.8
142.5°	1.4	1.4	1.4	2.9	2.9	4.3	5.8	8.7	10.1	13.0	15.9
145°	1.4	1.4	1.4	2.9	2.9	4.3	5.8	7.2	8.7	10.1	13.0
147.5°	1.4	1.4	1.4	2.9	2.9	2.9	4.3	5.8	7.2	8.7	10.1
150°	2.9	2.9	2.9	2.9	2.9	2.9	4.3	4.3	5.8	7.2	8.7
152.5°	2.9	2.9	2.9	2.9	2.9	2.9	4.3	4.3	4.3	5.8	7.2
155°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.3	4.3	5.8	5.8
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2779.6	2782.5	2799.8	2798.4	2795.5	2792.6	2792.6	2789.7	2792.6	2799.8	2796.9
5°	2765.1	2769.4	2782.5	2781.0	2778.1	2776.7	2775.2	2770.9	2773.8	2783.9	2781.0
7.5°	2739.0	2743.4	2754.9	2749.1	2744.8	2747.7	2740.5	2736.1	2741.9	2752.0	2750.6
10°	2711.5	2714.4	2728.9	2726.0	2718.7	2720.2	2712.9	2710.0	2717.3	2723.1	2724.5
12.5°	2692.7	2702.8	2715.8	2714.4	2712.9	2714.4	2707.1	2704.2	2708.6	2714.4	2712.9
15°	2688.3	2701.3	2715.8	2715.8	2717.3	2718.7	2711.5	2707.1	2711.5	2715.8	2714.4
17.5°	2684.0	2699.9	2712.9	2711.5	2712.9	2715.8	2704.2	2701.3	2707.1	2712.9	2710.0
20°	2669.5	2684.0	2692.7	2689.8	2689.8	2691.2	2676.7	2676.7	2685.4	2689.8	2691.2
22.5°	2628.9	2646.3	2646.3	2639.1	2639.1	2633.3	2628.9	2620.2	2630.4	2637.6	2643.4
25°	2568.1	2575.3	2566.6	2550.7	2542.0	2534.8	2514.5	2531.9	2531.9	2553.6	2560.8
27.5°	2482.6	2466.7	2442.1	2408.8	2401.5	2378.3	2365.3	2369.7	2376.9	2407.3	2430.5
30°	2342.1	2294.3	2252.3	2237.8	2206.0	2182.8	2159.6	2171.2	2184.3	2201.6	2249.4
32.5°	2156.7	2110.4	2042.3	2017.7	1984.4	1955.4	1927.9	1945.3	1968.4	1980.0	2032.2
35°	1943.8	1888.8	1826.5	1784.5	1749.7	1733.8	1699.0	1723.6	1748.3	1757.0	1801.9
37.5°	1717.9	1661.4	1606.3	1570.1	1536.8	1526.7	1503.5	1520.9	1539.7	1552.7	1590.4
40°	1503.5	1451.3	1409.3	1384.7	1361.5	1352.8	1344.2	1351.4	1365.9	1376.0	1405.0
42.5°	1319.5	1277.5	1248.6	1234.1	1218.1	1206.6	1208.0	1210.9	1218.1	1239.9	1252.9
45°	1158.8	1134.1	1115.3	1112.4	1102.3	1100.8	1099.4	1105.2	1109.5	1122.5	1132.7
47.5°	1029.8	1019.7	1015.4	1021.2	1025.5	1019.7	1022.6	1029.8	1038.5	1038.5	1037.1
50°	928.5	931.3	937.1	950.2	958.9	961.8	964.7	973.4	974.8	977.7	973.4
52.5°	845.9	848.8	864.7	885.0	895.1	899.5	905.3	914.0	914.0	916.9	911.1
55°	761.9	766.2	782.2	802.4	811.1	816.9	822.7	828.5	832.9	838.6	834.3
57.5°	669.2	682.2	692.4	698.2	703.9	708.3	712.6	714.1	722.8	724.2	731.5
60°	570.7	573.6	583.7	582.3	577.9	589.5	583.7	593.9	604.0	617.0	618.5
62.5°	476.5	478.0	485.2	482.3	488.1	486.7	491.0	491.0	498.3	504.1	511.3
65°	402.7	404.1	409.9	409.9	408.5	412.8	417.2	420.0	420.0	424.4	430.2
67.5°	347.6	352.0	357.8	360.7	363.6	363.6	367.9	369.4	372.3	373.7	376.6
70°	310.0	315.8	321.6	324.5	325.9	328.8	330.2	330.2	333.1	334.6	337.5
72.5°	282.4	288.2	292.6	292.6	295.5	296.9	296.9	298.4	299.8	302.7	305.6
75°	259.3	263.6	266.5	265.1	265.1	265.1	266.5	266.5	269.4	272.3	275.2
77.5°	237.5	241.9	241.9	239.0	239.0	239.0	239.0	240.4	241.9	244.8	247.7
80°	221.6	221.6	220.2	220.2	217.3	215.8	215.8	217.3	217.3	220.2	224.5
82.5°	204.2	204.2	202.8	201.3	199.9	198.4	198.4	199.9	201.3	202.8	205.7
85°	188.3	188.3	185.4	185.4	184.0	184.0	184.0	184.0	185.4	186.8	189.7
87.5°	172.4	170.9	169.5	168.0	168.0	168.0	168.0	168.0	169.5	172.4	173.8
90°	156.4	155.0	153.5	153.5	152.1	152.1	153.5	153.5	155.0	156.4	157.9
92.5°	141.9	140.5	139.1	139.1	137.6	137.6	139.1	137.6	140.5	140.5	141.9
95°	128.9	127.5	126.0	126.0	126.0	126.0	126.0	126.0	127.5	127.5	128.9
97.5°	117.3	115.9	114.4	114.4	115.9	114.4	115.9	115.9	115.9	117.3	118.8
100°	107.2	105.7	105.7	107.2	105.7	105.7	107.2	107.2	107.2	107.2	108.6
102.5°	98.5	98.5	98.5	98.5	98.5	98.5	99.9	99.9	99.9	99.9	101.4
105°	89.8	91.3	91.3	91.3	92.7	92.7	92.7	94.1	94.1	94.1	94.1
107.5°	84.0	85.5	85.5	86.9	86.9	88.4	88.4	88.4	88.4	89.8	89.8
110°	78.2	79.7	81.1	82.6	82.6	84.0	84.0	84.0	84.0	84.0	84.0

TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	72.4	73.9	75.3	78.2	79.7	79.7	79.7	79.7	81.1	81.1	79.7
115°	66.6	69.5	71.0	73.9	75.3	75.3	76.8	76.8	76.8	76.8	75.3
117.5°	60.8	65.2	66.6	69.5	71.0	71.0	72.4	72.4	72.4	72.4	71.0
120°	56.5	59.4	62.3	63.7	65.2	66.6	66.6	68.1	68.1	68.1	66.6
122.5°	52.1	55.0	57.9	59.4	60.8	62.3	62.3	62.3	62.3	62.3	62.3
125°	46.4	49.2	52.1	53.6	55.0	56.5	56.5	57.9	57.9	57.9	56.5
127.5°	42.0	44.9	46.4	49.2	50.7	50.7	52.1	52.1	52.1	52.1	50.7
130°	36.2	39.1	42.0	43.5	44.9	44.9	46.4	46.4	46.4	46.4	46.4
132.5°	31.9	34.8	36.2	39.1	39.1	40.6	40.6	42.0	42.0	42.0	40.6
135°	29.0	30.4	31.9	34.8	34.8	36.2	36.2	36.2	36.2	36.2	36.2
137.5°	26.1	27.5	29.0	30.4	30.4	31.9	31.9	31.9	31.9	33.3	31.9
140°	21.7	24.6	26.1	26.1	27.5	27.5	27.5	29.0	29.0	29.0	27.5
142.5°	18.8	20.3	21.7	23.2	24.6	24.6	24.6	24.6	26.1	24.6	24.6
145°	14.5	17.4	18.8	20.3	21.7	21.7	21.7	21.7	21.7	21.7	21.7
147.5°	11.6	13.0	15.9	17.4	17.4	18.8	18.8	18.8	18.8	18.8	18.8
150°	10.1	10.1	13.0	14.5	15.9	15.9	15.9	15.9	15.9	15.9	15.9
152.5°	7.2	8.7	10.1	11.6	13.0	13.0	13.0	13.0	13.0	13.0	13.0
155°	7.2	7.2	8.7	8.7	10.1	10.1	10.1	10.1	11.6	10.1	10.1
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: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2792.6	2791.2	2796.9	2791.2	2762.2	2773.8	2769.4	2785.4	2786.8	2791.2	2805.6
5°	2778.1	2778.1	2785.4	2779.6	2752.0	2763.6	2762.2	2778.1	2781.0	2783.9	2799.8
7.5°	2749.1	2750.6	2760.7	2756.4	2727.4	2744.8	2743.4	2762.2	2768.0	2773.8	2788.3
10°	2721.6	2720.2	2731.8	2727.4	2699.9	2720.2	2718.7	2737.6	2746.3	2756.4	2773.8
12.5°	2707.1	2702.8	2707.1	2702.8	2672.4	2688.3	2689.8	2711.5	2721.6	2734.7	2754.9
15°	2707.1	2699.9	2699.9	2691.2	2656.4	2666.6	2668.0	2682.5	2695.6	2708.6	2733.2
17.5°	2704.2	2697.0	2695.6	2688.3	2650.7	2650.7	2649.2	2659.3	2666.6	2679.6	2705.7
20°	2688.3	2685.4	2684.0	2679.6	2644.9	2639.1	2636.2	2636.2	2640.5	2644.9	2670.9
22.5°	2646.3	2649.2	2652.1	2655.0	2627.5	2617.3	2618.8	2615.9	2611.5	2611.5	2633.3
25°	2568.1	2582.6	2594.2	2607.2	2591.3	2584.0	2592.7	2588.4	2581.1	2575.3	2594.2
27.5°	2443.5	2473.9	2498.6	2530.4	2531.9	2526.1	2549.3	2546.4	2544.9	2536.2	2550.7
30°	2271.2	2319.0	2352.3	2398.6	2437.7	2443.5	2482.6	2488.4	2494.2	2489.9	2504.4
32.5°	2062.6	2127.8	2184.3	2256.7	2294.3	2327.6	2382.7	2405.9	2429.0	2436.3	2452.2
35°	1835.2	1909.0	1975.7	2055.3	2114.7	2187.2	2253.8	2288.5	2340.7	2361.0	2384.1
37.5°	1619.4	1688.9	1754.1	1833.7	1929.3	2004.6	2087.2	2165.4	2236.4	2265.4	2300.1
40°	1428.2	1484.7	1546.9	1616.5	1703.4	1801.9	1891.7	2000.3	2084.3	2142.2	2192.9
42.5°	1283.3	1310.8	1364.4	1426.7	1496.2	1596.2	1687.4	1809.1	1910.5	1993.1	2077.1
45°	1154.4	1167.4	1206.6	1239.9	1310.8	1399.2	1496.2	1615.0	1720.8	1826.5	1927.9
47.5°	1044.3	1060.3	1079.1	1099.4	1150.1	1223.9	1307.9	1415.1	1520.9	1644.0	1759.9
50°	970.5	974.8	977.7	986.4	1016.8	1067.5	1135.6	1226.8	1328.2	1460.0	1583.1
52.5°	905.3	905.3	896.6	892.2	903.8	935.7	974.8	1040.0	1144.3	1265.9	1396.3
55°	835.8	822.7	819.8	805.3	808.2	822.7	841.5	892.2	977.7	1082.0	1208.0
57.5°	738.7	732.9	732.9	727.1	715.5	722.8	727.1	763.3	824.2	914.0	1024.1
60°	627.2	624.3	631.5	633.0	622.8	627.2	625.7	647.5	690.9	763.3	854.6
62.5°	515.6	528.7	530.1	535.9	530.1	528.7	535.9	554.8	576.5	631.5	702.5
65°	433.1	440.3	441.8	449.0	446.1	446.1	451.9	466.4	479.4	517.1	572.1
67.5°	379.5	376.6	378.0	382.4	378.0	376.6	380.9	389.6	399.8	422.9	462.1
70°	337.5	334.6	334.6	334.6	328.8	324.5	325.9	328.8	333.1	346.2	370.8
72.5°	305.6	305.6	301.3	296.9	292.6	289.7	286.8	283.9	282.4	286.8	299.8
75°	276.7	278.1	276.7	272.3	266.5	260.7	254.9	249.1	241.9	239.0	240.4
77.5°	250.6	252.0	253.5	252.0	246.2	239.0	230.3	221.6	211.5	201.3	195.5
80°	227.4	230.3	231.8	230.3	226.0	220.2	210.0	199.9	185.4	172.4	157.9
82.5°	207.1	211.5	212.9	212.9	210.0	204.2	192.6	181.1	165.1	147.7	128.9
85°	191.2	194.1	197.0	197.0	195.5	189.7	178.2	165.1	149.2	128.9	108.6
87.5°	175.3	176.7	179.6	182.5	179.6	173.8	163.7	149.2	133.3	113.0	89.8
90°	159.3	160.8	163.7	166.6	165.1	159.3	150.6	137.6	120.2	98.5	75.3
92.5°	143.4	146.3	147.7	149.2	150.6	146.3	139.1	126.0	108.6	86.9	65.2
95°	131.8	131.8	134.7	136.2	137.6	133.3	127.5	114.4	98.5	78.2	56.5
97.5°	120.2	120.2	123.1	123.1	124.6	121.7	115.9	104.3	88.4	69.5	47.8
100°	108.6	110.1	111.5	113.0	113.0	111.5	105.7	94.1	79.7	62.3	42.0
102.5°	101.4	101.4	102.8	102.8	104.3	101.4	95.6	85.5	71.0	55.0	36.2
105°	94.1	94.1	95.6	95.6	94.1	91.3	85.5	76.8	63.7	47.8	31.9
107.5°	88.4	88.4	88.4	88.4	86.9	84.0	78.2	68.1	56.5	43.5	29.0
110°	84.0	82.6	82.6	81.1	79.7	75.3	69.5	60.8	50.7	37.7	24.6

TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	79.7	78.2	76.8	75.3	72.4	68.1	62.3	55.0	44.9	33.3	21.7
115°	75.3	73.9	72.4	69.5	66.6	62.3	56.5	49.2	39.1	29.0	18.8
117.5°	71.0	69.5	66.6	63.7	60.8	56.5	50.7	43.5	34.8	26.1	17.4
120°	65.2	63.7	62.3	59.4	56.5	50.7	44.9	39.1	30.4	23.2	14.5
122.5°	60.8	59.4	56.5	55.0	50.7	46.4	40.6	34.8	27.5	20.3	13.0
125°	55.0	53.6	52.1	49.2	46.4	40.6	36.2	30.4	24.6	17.4	10.1
127.5°	50.7	49.2	46.4	43.5	40.6	36.2	31.9	27.5	21.7	14.5	10.1
130°	44.9	43.5	42.0	39.1	36.2	31.9	29.0	23.2	18.8	13.0	8.7
132.5°	39.1	39.1	37.7	34.8	31.9	29.0	24.6	20.3	15.9	11.6	7.2
135°	36.2	34.8	33.3	30.4	29.0	24.6	21.7	17.4	13.0	10.1	5.8
137.5°	31.9	30.4	29.0	27.5	24.6	21.7	18.8	14.5	11.6	8.7	5.8
140°	27.5	26.1	26.1	23.2	21.7	18.8	15.9	13.0	10.1	7.2	4.3
142.5°	24.6	23.2	21.7	20.3	18.8	15.9	13.0	10.1	8.7	5.8	4.3
145°	21.7	20.3	18.8	17.4	15.9	13.0	11.6	8.7	7.2	5.8	4.3
147.5°	17.4	17.4	15.9	14.5	13.0	11.6	10.1	8.7	5.8	4.3	2.9
150°	14.5	14.5	13.0	11.6	11.6	10.1	8.7	7.2	5.8	4.3	2.9
152.5°	13.0	11.6	11.6	10.1	10.1	8.7	7.2	5.8	4.3	4.3	2.9
155°	10.1	10.1	10.1	8.7	8.7	7.2	5.8	5.8	4.3	2.9	2.9
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: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2808.5	2791.2	2805.6	2831.7	2828.8	2825.9	2823.0	2828.8	2847.6	2837.5	2821.6
5°	2804.2	2786.8	2802.7	2827.4	2825.9	2821.6	2818.7	2824.5	2843.3	2833.2	2815.8
7.5°	2795.5	2779.6	2791.2	2815.8	2815.8	2812.9	2810.0	2815.8	2833.2	2824.5	2807.1
10°	2781.0	2769.4	2781.0	2804.2	2805.6	2799.8	2796.9	2804.2	2821.6	2817.2	2802.7
12.5°	2769.4	2757.8	2770.9	2794.0	2795.5	2789.7	2785.4	2794.0	2817.2	2820.1	2815.8
15°	2753.5	2743.4	2759.3	2783.9	2783.9	2779.6	2779.6	2791.2	2823.0	2836.1	2843.3
17.5°	2730.3	2723.1	2741.9	2766.5	2768.0	2765.1	2766.5	2789.7	2831.7	2863.6	2883.9
20°	2701.3	2698.5	2718.7	2744.8	2749.1	2750.6	2757.8	2792.6	2850.5	2894.0	2914.3
22.5°	2666.6	2668.0	2691.2	2718.7	2724.5	2728.9	2743.4	2792.6	2865.0	2911.4	2920.1
25°	2627.5	2631.8	2656.4	2689.8	2697.0	2705.7	2730.3	2794.0	2869.4	2899.8	2885.3
27.5°	2585.5	2594.2	2626.0	2660.8	2669.5	2684.0	2715.8	2785.4	2849.1	2850.5	2796.9
30°	2542.0	2552.2	2589.8	2630.4	2644.9	2659.3	2698.5	2765.1	2799.8	2753.5	2659.3
32.5°	2492.8	2507.3	2544.9	2594.2	2611.5	2630.4	2669.5	2726.0	2712.9	2613.0	2478.3
35°	2430.5	2450.8	2494.2	2552.2	2568.1	2592.7	2620.2	2633.3	2575.3	2433.4	2281.3
37.5°	2353.7	2384.1	2434.8	2501.5	2518.8	2534.8	2542.0	2505.8	2389.9	2236.4	2078.5
40°	2265.4	2311.7	2366.8	2440.6	2458.0	2458.0	2431.9	2355.2	2208.9	2007.5	1832.3
42.5°	2158.2	2214.7	2284.2	2358.1	2375.4	2355.2	2292.9	2158.2	1991.6	1767.1	1581.7
45°	2027.8	2103.1	2181.4	2258.1	2266.8	2221.9	2110.4	1939.5	1733.8	1525.2	1348.5
47.5°	1872.8	1971.3	2056.8	2143.7	2132.1	2056.8	1907.6	1713.5	1496.2	1299.3	1157.3
50°	1699.0	1814.9	1910.5	1993.1	1968.4	1864.1	1688.9	1486.1	1270.3	1102.3	984.9
52.5°	1513.6	1646.9	1742.5	1809.1	1775.8	1651.2	1458.6	1264.5	1087.8	934.2	856.0
55°	1321.0	1455.7	1554.2	1606.3	1562.9	1428.2	1238.4	1061.7	895.1	795.2	748.8
57.5°	1134.1	1260.1	1352.8	1394.9	1339.8	1205.1	1029.8	880.7	760.4	676.4	653.2
60°	954.5	1057.4	1145.7	1177.6	1118.2	993.6	843.0	724.2	635.9	577.9	566.3
62.5°	788.0	872.0	941.5	966.1	908.2	811.1	680.8	592.4	530.1	501.2	486.7
65°	650.4	699.6	770.6	766.2	731.5	641.7	546.1	483.8	443.2	424.4	415.7
67.5°	511.3	556.2	601.1	606.9	563.4	501.2	438.9	394.0	372.3	362.1	357.8
70°	395.4	428.7	456.3	449.0	425.8	386.7	347.6	323.0	314.3	310.0	310.0
72.5°	307.1	324.5	337.5	328.8	314.3	294.0	275.2	265.1	266.5	269.4	272.3
75°	237.5	241.9	244.8	236.1	233.2	220.2	218.7	220.2	228.9	237.5	241.9
77.5°	182.5	176.7	172.4	163.7	165.1	163.7	170.9	182.5	195.5	208.6	220.2
80°	140.5	127.5	117.3	108.6	113.0	120.2	134.7	152.1	169.5	184.0	198.4
82.5°	108.6	89.8	75.3	66.6	75.3	86.9	105.7	127.5	147.7	163.7	179.6
85°	84.0	62.3	44.9	36.2	44.9	62.3	82.6	107.2	128.9	146.3	162.2
87.5°	65.2	44.9	24.6	14.5	24.6	43.5	66.6	89.8	111.5	131.8	147.7
90°	52.1	30.4	11.6	2.9	13.0	30.4	52.1	75.3	97.0	118.8	134.7
92.5°	42.0	21.7	5.8	0.0	7.2	23.2	43.5	65.2	86.9	107.2	123.1
95°	34.8	17.4	4.3	0.0	5.8	17.4	34.8	56.5	76.8	97.0	110.1
97.5°	29.0	13.0	2.9	0.0	2.9	14.5	29.0	47.8	68.1	86.9	99.9
100°	24.6	11.6	2.9	0.0	2.9	11.6	24.6	42.0	59.4	76.8	89.8
102.5°	20.3	8.7	1.4	1.4	1.4	8.7	21.7	36.2	52.1	68.1	81.1
105°	18.8	7.2	1.4	1.4	1.4	7.2	18.8	31.9	46.4	60.8	72.4
107.5°	15.9	5.8	1.4	1.4	1.4	5.8	15.9	27.5	42.0	55.0	65.2
110°	13.0	5.8	1.4	1.4	1.4	5.8	13.0	24.6	36.2	47.8	57.9



TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	11.6	4.3	1.4	1.4	1.4	4.3	11.6	21.7	31.9	43.5	52.1
115°	10.1	4.3	1.4	1.4	1.4	4.3	10.1	18.8	27.5	37.7	46.4
117.5°	8.7	4.3	1.4	1.4	1.4	2.9	8.7	15.9	24.6	33.3	42.0
120°	7.2	2.9	1.4	1.4	1.4	2.9	7.2	14.5	21.7	29.0	36.2
122.5°	7.2	2.9	1.4	1.4	1.4	2.9	5.8	11.6	18.8	24.6	31.9
125°	5.8	2.9	1.4	1.4	1.4	1.4	5.8	10.1	15.9	21.7	27.5
127.5°	5.8	2.9	1.4	1.4	1.4	1.4	4.3	8.7	13.0	18.8	24.6
130°	4.3	2.9	1.4	1.4	1.4	1.4	2.9	7.2	11.6	15.9	20.3
132.5°	4.3	2.9	1.4	1.4	1.4	1.4	2.9	5.8	8.7	13.0	17.4
135°	4.3	1.4	1.4	1.4	1.4	1.4	1.4	4.3	7.2	10.1	13.0
137.5°	2.9	1.4	1.4	1.4	1.4	1.4	1.4	2.9	5.8	7.2	11.6
140°	2.9	1.4	1.4	1.4	1.4	1.4	1.4	2.9	4.3	5.8	8.7
142.5°	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.9	4.3	7.2
145°	2.9	1.4	1.4	2.9	2.9	1.4	1.4	2.9	2.9	4.3	5.8
147.5°	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.9	2.9	4.3
150°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	4.3
152.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
155°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2818.7	2785.4	2802.7	2796.9	2802.7	2817.2	2815.8	2811.4	2814.3	2807.1	2799.8
5°	2812.9	2779.6	2796.9	2789.7	2796.9	2811.4	2808.5	2804.2	2808.5	2799.8	2792.6
7.5°	2805.6	2775.2	2795.5	2794.0	2807.1	2825.9	2827.4	2827.4	2837.5	2824.5	2818.7
10°	2805.6	2789.7	2817.2	2827.4	2860.7	2885.3	2888.2	2894.0	2911.4	2908.5	2894.0
12.5°	2836.1	2833.2	2873.7	2898.3	2928.8	2963.5	2982.3	2988.1	2999.7	2991.0	2985.2
15°	2875.2	2889.6	2934.5	2962.1	2995.4	3021.5	3025.8	3028.7	3037.4	3024.4	3014.2
17.5°	2927.3	2936.0	2972.2	2983.8	3005.5	3009.9	3004.1	2989.6	2989.6	2960.6	2951.9
20°	2951.9	2947.6	2962.1	2943.2	2934.5	2908.5	2883.9	2856.3	2854.9	2824.5	2821.6
22.5°	2930.2	2901.2	2870.8	2824.5	2804.2	2766.5	2733.2	2717.3	2707.1	2668.0	2657.9
25°	2853.4	2782.5	2737.6	2682.5	2633.3	2589.8	2558.0	2524.6	2492.8	2460.9	2446.4
27.5°	2720.2	2653.5	2581.1	2504.4	2436.3	2369.7	2316.1	2282.7	2252.3	2210.3	2188.6
30°	2556.5	2463.8	2384.1	2310.3	2198.7	2117.6	2072.7	2006.1	1982.9	1964.1	1923.5
32.5°	2363.9	2252.3	2143.7	2043.8	1929.3	1854.0	1794.6	1745.4	1730.9	1681.6	1670.1
35°	2150.9	2004.6	1881.5	1783.0	1700.5	1609.2	1560.0	1526.7	1497.7	1464.4	1458.6
37.5°	1900.4	1768.6	1629.5	1542.6	1477.4	1399.2	1361.5	1338.4	1325.3	1300.7	1296.4
40°	1648.3	1516.5	1420.9	1334.0	1293.5	1251.5	1223.9	1213.8	1208.0	1199.3	1190.6
42.5°	1419.5	1303.6	1235.5	1177.6	1160.2	1139.9	1132.7	1138.5	1132.7	1129.8	1128.3
45°	1225.4	1137.0	1089.2	1071.8	1067.5	1061.7	1067.5	1077.6	1079.1	1076.2	1076.2
47.5°	1048.7	1006.7	986.4	989.3	996.5	1000.9	1011.0	1024.1	1026.9	1019.7	1022.6
50°	932.8	908.2	903.8	915.4	931.3	937.1	948.7	958.9	957.4	954.5	951.6
52.5°	824.2	816.9	828.5	840.1	857.5	860.4	864.7	869.1	867.6	861.8	858.9
55°	732.9	738.7	748.8	753.2	766.2	764.8	766.2	766.2	760.4	757.5	753.2
57.5°	650.4	651.8	657.6	659.0	666.3	663.4	661.9	659.0	650.4	648.9	644.6
60°	566.3	563.4	576.5	566.3	572.1	566.3	564.9	557.7	549.0	547.5	544.6
62.5°	486.7	480.9	489.6	485.2	488.1	482.3	479.4	470.7	463.5	462.1	460.6
65°	415.7	412.8	421.5	420.0	422.9	415.7	412.8	407.0	401.2	399.8	398.3
67.5°	356.3	363.6	367.9	367.9	370.8	369.4	362.1	360.7	359.2	353.4	353.4
70°	312.9	317.2	325.9	327.3	325.9	328.8	323.0	321.6	320.1	317.2	315.8
72.5°	278.1	283.9	292.6	294.0	292.6	292.6	289.7	288.2	288.2	283.9	283.9
75°	250.6	257.8	265.1	265.1	265.1	262.2	259.3	259.3	256.4	254.9	252.0
77.5°	227.4	236.1	241.9	240.4	239.0	236.1	236.1	231.8	227.4	227.4	224.5
80°	210.0	215.8	220.2	218.7	217.3	212.9	211.5	207.1	204.2	199.9	199.9
82.5°	191.2	198.4	201.3	199.9	197.0	192.6	191.2	188.3	185.4	184.0	181.1
85°	175.3	182.5	184.0	181.1	178.2	175.3	173.8	172.4	170.9	168.0	168.0
87.5°	159.3	166.6	166.6	165.1	162.2	160.8	159.3	157.9	156.4	155.0	153.5
90°	146.3	152.1	152.1	150.6	149.2	147.7	146.3	144.8	143.4	141.9	141.9
92.5°	133.3	139.1	139.1	137.6	136.2	134.7	134.7	133.3	131.8	130.4	128.9
95°	121.7	127.5	127.5	127.5	126.0	124.6	124.6	123.1	121.7	121.7	120.2
97.5°	110.1	115.9	115.9	115.9	114.4	113.0	113.0	111.5	111.5	111.5	110.1
100°	99.9	104.3	105.7	105.7	104.3	104.3	104.3	102.8	102.8	102.8	101.4
102.5°	89.8	94.1	97.0	97.0	97.0	95.6	95.6	95.6	95.6	95.6	94.1
105°	81.1	85.5	88.4	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8
107.5°	73.9	78.2	81.1	82.6	84.0	84.0	85.5	85.5	85.5	85.5	85.5
110°	66.6	71.0	75.3	76.8	78.2	79.7	79.7	81.1	79.7	79.7	79.7

TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	59.4	65.2	68.1	71.0	72.4	73.9	75.3	75.3	75.3	75.3	75.3
115°	53.6	59.4	62.3	65.2	68.1	69.5	69.5	71.0	71.0	71.0	69.5
117.5°	47.8	53.6	56.5	59.4	60.8	63.7	65.2	65.2	65.2	65.2	63.7
120°	43.5	47.8	50.7	53.6	56.5	57.9	59.4	59.4	59.4	59.4	59.4
122.5°	37.7	42.0	46.4	49.2	50.7	52.1	53.6	53.6	53.6	53.6	53.6
125°	33.3	37.7	40.6	43.5	44.9	47.8	47.8	47.8	47.8	47.8	47.8
127.5°	29.0	33.3	36.2	39.1	40.6	42.0	43.5	43.5	43.5	43.5	43.5
130°	24.6	29.0	31.9	34.8	36.2	37.7	37.7	39.1	39.1	39.1	39.1
132.5°	21.7	24.6	27.5	30.4	31.9	33.3	33.3	34.8	34.8	34.8	34.8
135°	17.4	21.7	23.2	26.1	27.5	29.0	29.0	30.4	30.4	30.4	30.4
137.5°	14.5	17.4	20.3	23.2	24.6	24.6	26.1	26.1	27.5	27.5	27.5
140°	11.6	13.0	17.4	18.8	20.3	21.7	23.2	23.2	23.2	23.2	23.2
142.5°	8.7	11.6	13.0	15.9	17.4	18.8	20.3	20.3	20.3	20.3	20.3
145°	7.2	8.7	10.1	13.0	14.5	15.9	17.4	17.4	17.4	17.4	17.4
147.5°	5.8	7.2	8.7	10.1	11.6	13.0	14.5	14.5	14.5	14.5	14.5
150°	4.3	5.8	7.2	7.2	8.7	10.1	11.6	13.0	13.0	13.0	13.0
152.5°	4.3	4.3	5.8	5.8	7.2	8.7	10.1	10.1	10.1	10.1	10.1
155°	2.9	4.3	4.3	4.3	5.8	5.8	7.2	8.7	8.7	8.7	8.7
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: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2804.2	2810.0	2807.1	2802.7	2801.3	2808.5	2801.3	2768.0	2781.0	2782.5	2792.6
5°	2799.8	2804.2	2801.3	2798.4	2794.0	2802.7	2794.0	2759.3	2772.3	2773.8	2783.9
7.5°	2828.8	2830.3	2830.3	2823.0	2811.4	2815.8	2804.2	2765.1	2772.3	2772.3	2779.6
10°	2901.2	2904.1	2908.5	2889.6	2875.2	2863.6	2847.6	2799.8	2798.4	2786.8	2786.8
12.5°	2995.4	2988.1	2980.9	2972.2	2960.6	2946.1	2923.0	2866.5	2847.6	2828.8	2810.0
15°	3022.9	3020.0	3018.6	3014.2	3007.0	3002.6	2985.2	2928.8	2901.2	2878.1	2844.7
17.5°	2950.5	2956.3	2975.1	2976.6	2985.2	3002.6	2999.7	2960.6	2936.0	2925.9	2885.3
20°	2820.1	2821.6	2844.7	2854.9	2892.5	2921.5	2943.2	2938.9	2933.1	2944.7	2914.3
22.5°	2663.7	2673.8	2698.5	2714.4	2750.6	2783.9	2818.7	2837.5	2867.9	2915.7	2909.9
25°	2450.8	2463.8	2498.6	2524.6	2575.3	2626.0	2672.4	2705.7	2741.9	2833.2	2863.6
27.5°	2195.8	2216.1	2261.0	2287.1	2358.1	2410.2	2476.8	2542.0	2592.7	2697.0	2759.3
30°	1927.9	1945.3	1993.1	2029.3	2090.1	2161.1	2245.1	2337.8	2421.8	2527.5	2605.8
32.5°	1677.3	1696.1	1735.2	1767.1	1835.2	1894.6	1987.3	2101.7	2179.9	2326.2	2430.5
35°	1458.6	1476.0	1503.5	1531.0	1587.5	1648.3	1728.0	1839.5	1939.5	2091.6	2223.4
37.5°	1305.0	1307.9	1323.9	1339.8	1381.8	1428.2	1490.4	1588.9	1681.6	1845.3	1990.2
40°	1195.0	1195.0	1203.7	1208.0	1226.8	1254.4	1293.5	1370.2	1447.0	1571.6	1748.3
42.5°	1126.9	1124.0	1124.0	1125.4	1124.0	1137.0	1160.2	1196.4	1264.5	1367.3	1504.9
45°	1076.2	1070.4	1066.1	1055.9	1050.1	1050.1	1051.6	1064.6	1103.7	1170.3	1281.9
47.5°	1019.7	1018.3	1011.0	999.4	989.3	982.0	970.5	966.1	977.7	1015.4	1090.7
50°	954.5	947.3	940.0	931.3	919.8	912.5	890.8	892.2	882.1	899.5	938.6
52.5°	858.9	853.1	850.2	843.0	838.6	835.8	818.4	801.0	796.6	799.5	814.0
55°	753.2	756.1	744.5	750.3	748.8	735.8	728.6	715.5	711.2	709.7	717.0
57.5°	643.1	646.0	638.8	644.6	644.6	637.3	633.0	633.0	622.8	614.1	624.3
60°	543.2	537.4	541.7	549.0	549.0	544.6	541.7	541.7	534.5	531.6	538.8
62.5°	462.1	456.3	460.6	467.8	469.3	466.4	463.5	463.5	454.8	454.8	460.6
65°	399.8	401.2	399.8	405.6	405.6	407.0	404.1	401.2	391.1	395.4	394.0
67.5°	354.9	353.4	353.4	359.2	357.8	360.7	357.8	353.4	346.2	340.4	338.9
70°	317.2	315.8	315.8	318.7	320.1	320.1	318.7	315.8	305.6	299.8	295.5
72.5°	283.9	282.4	283.9	285.3	286.8	288.2	286.8	283.9	275.2	268.0	260.7
75°	253.5	252.0	256.4	256.4	257.8	257.8	259.3	257.8	250.6	241.9	233.2
77.5°	223.1	224.5	228.9	230.3	233.2	234.6	236.1	236.1	228.9	221.6	210.0
80°	198.4	201.3	204.2	205.7	208.6	212.9	214.4	215.8	210.0	202.8	189.7
82.5°	181.1	182.5	185.4	186.8	191.2	192.6	194.1	197.0	194.1	186.8	172.4
85°	166.6	168.0	170.9	170.9	173.8	176.7	178.2	179.6	178.2	170.9	156.4
87.5°	153.5	155.0	156.4	157.9	159.3	160.8	162.2	163.7	162.2	155.0	141.9
90°	141.9	141.9	143.4	143.4	144.8	146.3	149.2	149.2	147.7	141.9	128.9
92.5°	128.9	130.4	130.4	131.8	133.3	134.7	136.2	136.2	134.7	128.9	117.3
95°	120.2	120.2	121.7	121.7	123.1	123.1	124.6	124.6	123.1	117.3	105.7
97.5°	110.1	110.1	110.1	110.1	111.5	111.5	113.0	113.0	111.5	105.7	95.6
100°	101.4	101.4	101.4	101.4	101.4	102.8	102.8	102.8	101.4	95.6	85.5
102.5°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	91.3	86.9	76.8
105°	89.8	89.8	89.8	88.4	88.4	88.4	86.9	86.9	82.6	78.2	69.5
107.5°	84.0	84.0	84.0	82.6	82.6	81.1	79.7	79.7	75.3	71.0	62.3
110°	79.7	79.7	79.7	78.2	76.8	75.3	73.9	72.4	68.1	62.3	55.0

TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	75.3	75.3	73.9	73.9	72.4	71.0	68.1	66.6	62.3	56.5	49.2
115°	69.5	69.5	69.5	68.1	66.6	65.2	63.7	60.8	56.5	50.7	43.5
117.5°	63.7	63.7	63.7	62.3	60.8	59.4	57.9	55.0	50.7	44.9	39.1
120°	57.9	57.9	57.9	56.5	55.0	53.6	52.1	49.2	44.9	40.6	33.3
122.5°	53.6	53.6	52.1	50.7	49.2	47.8	46.4	43.5	40.6	34.8	29.0
125°	47.8	47.8	46.4	46.4	44.9	43.5	42.0	39.1	34.8	30.4	26.1
127.5°	43.5	42.0	42.0	42.0	40.6	39.1	36.2	34.8	30.4	26.1	21.7
130°	37.7	37.7	37.7	36.2	36.2	34.8	31.9	29.0	26.1	23.2	18.8
132.5°	33.3	33.3	33.3	33.3	31.9	30.4	27.5	26.1	23.2	18.8	15.9
135°	30.4	30.4	29.0	29.0	27.5	26.1	24.6	21.7	18.8	15.9	13.0
137.5°	26.1	26.1	26.1	24.6	24.6	23.2	20.3	18.8	17.4	14.5	11.6
140°	23.2	23.2	21.7	21.7	20.3	20.3	18.8	15.9	14.5	11.6	10.1
142.5°	20.3	20.3	18.8	18.8	17.4	17.4	15.9	14.5	11.6	10.1	7.2
145°	17.4	17.4	15.9	15.9	15.9	14.5	13.0	11.6	10.1	8.7	7.2
147.5°	14.5	14.5	14.5	13.0	13.0	11.6	11.6	10.1	8.7	7.2	5.8
150°	13.0	13.0	11.6	11.6	11.6	10.1	8.7	8.7	7.2	5.8	4.3
152.5°	10.1	10.1	10.1	10.1	8.7	8.7	7.2	7.2	5.8	4.3	4.3
155°	8.7	8.7	8.7	7.2	7.2	7.2	5.8	5.8	4.3	4.3	2.9
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: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2	2804.2
2.5°	2788.3	2786.8	2799.8	2798.4	2781.0	2807.1	2824.5
5°	2781.0	2779.6	2791.2	2794.0	2775.2	2802.7	2821.6
7.5°	2775.2	2773.8	2786.8	2791.2	2772.3	2796.9	2817.2
10°	2776.7	2769.4	2781.0	2783.9	2766.5	2792.6	2810.0
12.5°	2786.8	2769.4	2773.8	2773.8	2757.8	2781.0	2799.8
15°	2811.4	2775.2	2769.4	2765.1	2744.8	2766.5	2785.4
17.5°	2839.0	2789.7	2769.4	2754.9	2730.3	2749.1	2769.4
20°	2866.5	2805.6	2772.3	2749.1	2715.8	2733.2	2747.7
22.5°	2879.5	2820.1	2775.2	2740.5	2698.5	2707.1	2723.1
25°	2862.1	2814.3	2769.4	2727.4	2676.7	2678.2	2691.2
27.5°	2798.4	2785.4	2756.4	2714.4	2659.3	2652.1	2662.2
30°	2689.8	2726.0	2727.4	2697.0	2639.1	2624.6	2628.9
32.5°	2537.7	2618.8	2666.6	2660.8	2610.1	2589.8	2592.7
35°	2362.4	2463.8	2568.1	2602.9	2566.6	2550.7	2544.9
37.5°	2152.4	2288.5	2427.6	2513.1	2507.3	2497.1	2491.3
40°	1920.6	2084.3	2249.4	2385.6	2427.6	2427.6	2430.5
42.5°	1673.0	1864.1	2045.2	2217.6	2316.1	2337.8	2346.5
45°	1434.0	1626.6	1823.6	2022.0	2153.8	2221.9	2246.5
47.5°	1216.7	1410.8	1597.6	1814.9	1990.2	2078.5	2117.6
50°	1031.3	1176.1	1373.1	1588.9	1780.1	1888.8	1965.5
52.5°	877.8	990.7	1163.1	1364.4	1557.1	1706.3	1777.2
55°	748.8	825.6	971.9	1145.7	1329.7	1484.7	1567.2
57.5°	640.2	701.0	801.0	945.8	1100.8	1254.4	1342.7
60°	544.6	586.6	654.7	769.1	900.9	1032.7	1118.2
62.5°	462.1	489.6	534.5	618.5	721.3	824.2	903.8
65°	398.3	409.9	434.5	486.7	564.9	643.1	711.2
67.5°	336.0	343.3	362.1	394.0	433.1	489.6	534.5
70°	289.7	289.7	291.1	310.0	330.2	366.5	398.3
72.5°	252.0	247.7	239.0	243.3	247.7	268.0	288.2
75°	221.6	211.5	197.0	191.2	188.3	191.2	202.8
77.5°	195.5	181.1	163.7	149.2	137.6	133.3	143.4
80°	173.8	156.4	136.2	117.3	98.5	88.4	92.7
82.5°	156.4	134.7	113.0	91.3	69.5	55.0	55.0
85°	137.6	117.3	94.1	71.0	49.2	30.4	27.5
87.5°	124.6	102.8	78.2	56.5	34.8	15.9	8.7
90°	111.5	89.8	66.6	44.9	24.6	7.2	0.0
92.5°	99.9	79.7	57.9	36.2	17.4	4.3	0.0
95°	89.8	71.0	49.2	30.4	14.5	2.9	1.4
97.5°	79.7	62.3	43.5	24.6	10.1	2.9	1.4
100°	72.4	55.0	37.7	20.3	8.7	1.4	1.4
102.5°	63.7	49.2	31.9	17.4	7.2	1.4	1.4
105°	56.5	43.5	27.5	14.5	5.8	1.4	1.4
107.5°	50.7	37.7	24.6	13.0	5.8	1.4	1.4
110°	44.9	33.3	21.7	11.6	4.3	1.4	1.4



TEST NUMBER: P1213877

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	40.6	29.0	18.8	10.1	2.9	1.4	1.4
115°	34.8	26.1	15.9	8.7	2.9	1.4	1.4
117.5°	30.4	21.7	14.5	7.2	2.9	1.4	1.4
120°	26.1	18.8	11.6	5.8	1.4	1.4	1.4
122.5°	23.2	15.9	10.1	5.8	1.4	1.4	1.4
125°	20.3	14.5	8.7	4.3	1.4	1.4	1.4
127.5°	17.4	11.6	7.2	2.9	1.4	1.4	1.4
130°	14.5	10.1	5.8	2.9	1.4	1.4	1.4
132.5°	11.6	8.7	5.8	2.9	1.4	1.4	1.4
135°	10.1	7.2	4.3	2.9	1.4	1.4	1.4
137.5°	8.7	5.8	2.9	2.9	2.9	1.4	1.4
140°	7.2	4.3	2.9	2.9	2.9	2.9	1.4
142.5°	5.8	4.3	2.9	2.9	2.9	2.9	1.4
145°	4.3	2.9	2.9	2.9	2.9	2.9	1.4
147.5°	4.3	2.9	2.9	2.9	2.9	2.9	1.4
150°	2.9	2.9	2.9	2.9	2.9	2.9	2.9
152.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9
155°	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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)