

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: P1213171

Luminaire Tested: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213171
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-LD5-73SL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

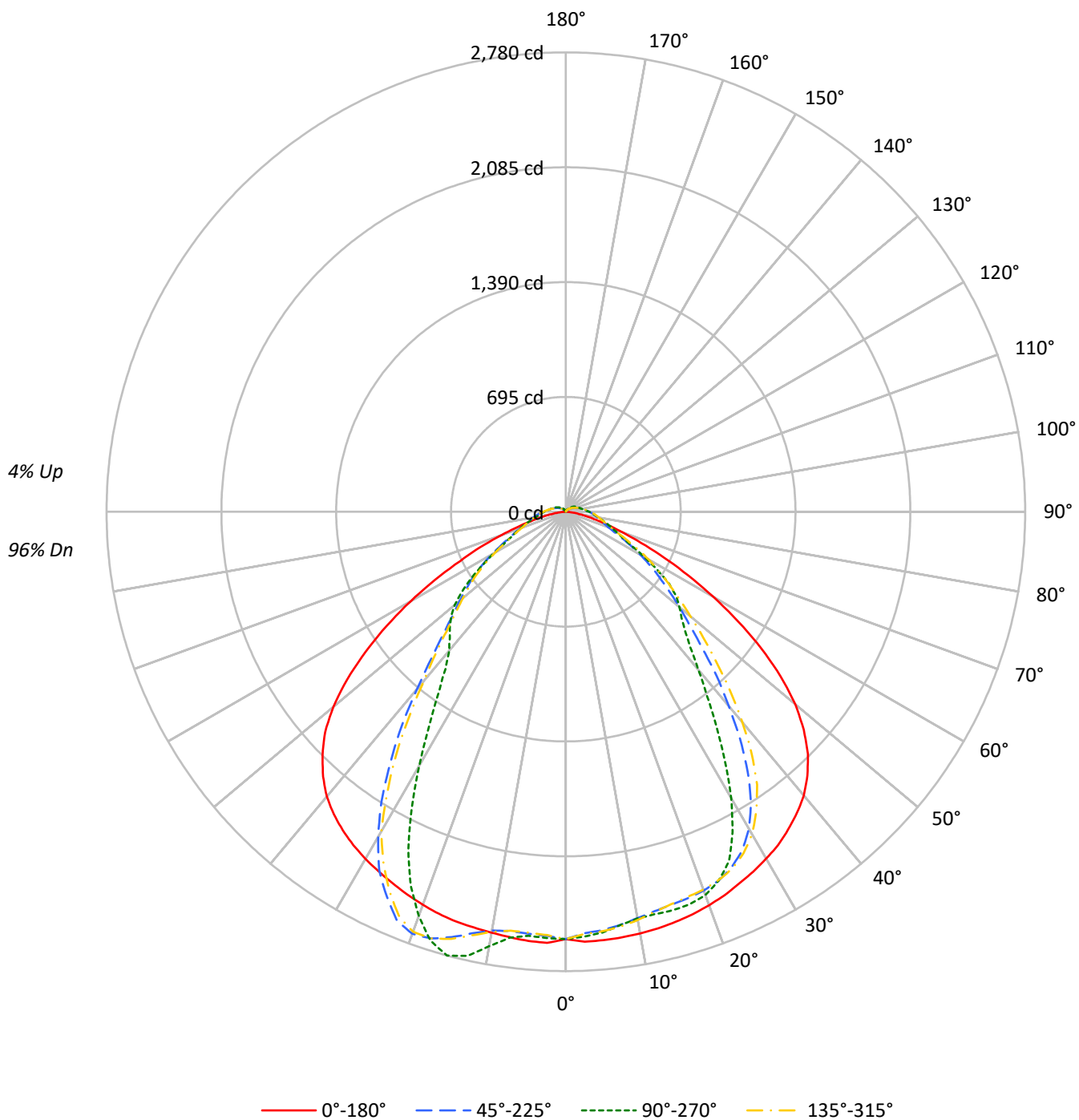
Lumens per Lamp: N/A
Luminaire Lumens: 6165.0 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	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°	20898	20898	20898	20898
5°	21050	20069	21093	20227
10°	21148	19235	21104	20541
15°	21312	18978	21301	21130
20°	21546	18677	21523	19687
25°	21812	17718	21800	17120
30°	22222	15356	22234	13604
35°	22658	12418	22721	10508
40°	23040	9998	23137	8808
45°	22960	8469	23078	8247
50°	21970	7797	22277	7623
55°	19493	7008	19980	6371
60°	15811	5364	16651	4920
65°	11754	4104	12663	3891
70°	7992	3543	9010	3387
75°	5229	3196	6087	3022
80°	3380	2981	3961	2741
85°	1735	2972	2282	2715

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 23078 cd/sqm

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.6	4.0
10°-20°	730.9	11.9
20°-30°	1111.1	18.0
30°-40°	1192.0	19.3
40°-50°	1034.5	16.8
50°-60°	766.7	12.4
60°-70°	439.3	7.1
70°-80°	243.3	3.9
80°-90°	148.1	2.4
90°-100°	96.3	1.6
100°-110°	64.5	1.0
110°-120°	43.6	0.7
120°-130°	26.7	0.4
130°-140°	14.1	0.2
140°-150°	6.4	0.1
150°-160°	1.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2087.7	33.9
0°-40°	3279.7	53.2
0°-60°	5080.9	82.4
0°-90°	5911.5	95.9
90°-120°	204.4	3.3
90°-150°	251.6	4.1
90°-180°	253.0	4.1
0°-180°	6165.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2586	2586	2586	2586	2586	
5°	2602	2555	2607	2575	2602	248
15°	2569	2497	2567	2780	2569	727
25°	2482	2335	2480	2256	2482	1147
35°	2347	1590	2354	1345	2347	1469
45°	2072	1019	2082	992	2072	1586
55°	1445	764	1481	695	1445	1282
65°	656	387	707	367	656	661
75°	187	246	218	232	187	214
85°	25	170	33	155	25	33
90°	0	142	3	131	0	1
95°	1	116	0	111	1	1
105°	1	87	1	83	1	1
115°	1	71	1	64	1	1
125°	1	53	1	44	1	1
135°	1	33	1	28	1	1
145°	1	20	3	16	1	1
155°	3	9	3	8	3	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2604.8	2598.1	2595.4	2590.1	2594.1	2610.1	2599.4	2582.1	2583.4	2552.7	2568.7
5°	2602.1	2594.1	2590.1	2584.7	2587.4	2602.1	2591.4	2574.0	2572.7	2542.0	2556.7
7.5°	2598.1	2590.1	2583.4	2579.4	2580.7	2592.7	2579.4	2559.3	2555.3	2521.9	2535.3
10°	2591.4	2586.1	2576.7	2570.0	2568.7	2582.1	2560.7	2540.6	2531.3	2496.6	2509.9
12.5°	2582.1	2574.0	2564.7	2552.7	2551.3	2559.3	2542.0	2513.9	2504.6	2476.5	2491.2
15°	2568.7	2559.3	2548.7	2535.3	2528.6	2534.0	2512.6	2487.2	2485.9	2461.8	2481.9
17.5°	2554.0	2540.6	2528.6	2509.9	2500.6	2504.6	2487.2	2464.5	2467.2	2452.5	2475.2
20°	2534.0	2519.3	2500.6	2481.9	2468.5	2475.2	2463.2	2445.8	2449.8	2439.1	2459.2
22.5°	2511.3	2491.2	2468.5	2447.1	2436.5	2445.8	2436.5	2421.8	2423.1	2416.4	2428.4
25°	2481.9	2459.2	2432.4	2405.7	2400.4	2407.1	2401.7	2389.7	2384.4	2373.7	2379.0
27.5°	2455.2	2429.8	2396.4	2368.3	2359.0	2372.3	2360.3	2340.3	2325.6	2310.9	2300.2
30°	2424.4	2393.7	2356.3	2324.2	2316.2	2321.6	2304.2	2273.5	2234.8	2216.1	2186.7
32.5°	2391.0	2351.0	2304.2	2268.1	2262.8	2258.8	2226.7	2182.7	2122.5	2085.1	2039.7
35°	2347.0	2302.9	2246.8	2202.7	2194.7	2172.0	2119.9	2061.1	1983.6	1919.5	1842.0
37.5°	2297.5	2245.4	2186.7	2127.9	2105.2	2059.8	1986.3	1924.9	1807.3	1729.8	1636.3
40°	2241.4	2178.6	2106.5	2035.7	1998.3	1924.9	1840.7	1749.9	1636.3	1532.1	1453.3
42.5°	2164.0	2097.2	2011.7	1932.9	1868.7	1771.2	1672.4	1544.2	1440.0	1351.8	1271.7
45°	2071.8	1991.6	1892.8	1798.0	1716.5	1600.3	1484.0	1355.8	1269.0	1166.1	1111.4
47.5°	1952.9	1866.1	1760.6	1655.0	1548.2	1419.9	1298.4	1175.5	1088.7	1015.2	975.1
50°	1812.6	1732.5	1616.3	1490.7	1373.2	1239.6	1118.0	1025.9	941.7	896.3	865.6
52.5°	1639.0	1564.2	1445.3	1309.1	1195.5	1064.6	953.7	878.9	818.8	785.4	774.7
55°	1445.3	1379.9	1262.3	1135.4	1019.2	899.0	814.8	749.4	710.6	690.6	691.9
57.5°	1238.3	1187.5	1076.6	963.1	853.6	762.7	686.6	634.5	605.1	603.8	607.8
60°	1031.2	993.8	897.6	800.1	704.0	630.5	574.4	538.3	519.6	521.0	519.6
62.5°	833.5	798.8	729.3	649.2	573.0	523.6	472.9	458.2	442.1	440.8	440.8
65°	655.9	629.2	573.0	515.6	458.2	426.1	400.7	383.4	371.3	368.7	370.0
67.5°	492.9	482.2	443.5	404.7	368.7	348.6	327.3	323.3	313.9	313.9	316.6
70°	367.3	359.3	338.0	315.2	300.5	287.2	276.5	276.5	275.2	273.8	280.5
72.5°	265.8	267.2	260.5	243.1	241.8	239.1	236.4	240.4	241.8	245.8	253.8
75°	187.0	191.0	191.0	188.3	193.7	200.4	204.4	211.1	219.1	224.4	233.8
77.5°	132.2	132.2	138.9	146.9	157.6	169.6	180.3	189.7	200.4	207.0	215.1
80°	85.5	89.5	100.2	114.9	129.6	145.6	160.3	172.3	183.0	193.7	199.0
82.5°	50.8	57.4	70.8	89.5	108.2	128.2	142.9	157.6	169.6	180.3	184.3
85°	25.4	34.7	50.8	70.8	90.8	112.2	130.9	144.3	157.6	167.0	172.3
87.5°	8.0	18.7	36.1	54.8	76.1	97.5	117.5	132.2	144.3	152.3	157.6
90°	0.0	9.4	25.4	45.4	65.5	86.8	105.5	121.6	133.6	140.3	144.3
92.5°	0.0	5.3	20.0	37.4	56.1	77.5	96.2	110.9	121.6	128.2	130.9
95°	1.3	4.0	14.7	30.7	49.4	69.5	86.8	100.2	110.9	117.5	118.9
97.5°	1.3	2.7	12.0	25.4	42.7	61.4	78.8	92.2	100.2	106.9	108.2
100°	1.3	2.7	9.4	22.7	37.4	54.8	70.8	82.8	92.2	97.5	98.8
102.5°	1.3	1.3	8.0	18.7	33.4	48.1	62.8	74.8	82.8	88.2	90.8
105°	1.3	1.3	6.7	16.0	29.4	42.7	56.1	68.1	74.8	80.1	82.8
107.5°	1.3	1.3	5.3	13.4	25.4	37.4	50.8	60.1	68.1	73.5	76.1
110°	1.3	1.3	4.0	12.0	21.4	33.4	44.1	53.4	61.4	66.8	69.5

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.3	1.3	4.0	10.7	18.7	29.4	38.7	48.1	54.8	60.1	64.1
115°	1.3	1.3	4.0	9.4	17.4	25.4	34.7	42.7	49.4	54.8	58.8
117.5°	1.3	1.3	4.0	8.0	14.7	22.7	30.7	38.7	44.1	49.4	53.4
120°	1.3	1.3	2.7	6.7	13.4	20.0	26.7	33.4	40.1	45.4	49.4
122.5°	1.3	1.3	2.7	6.7	10.7	17.4	24.0	29.4	36.1	40.1	44.1
125°	1.3	1.3	2.7	5.3	9.4	16.0	21.4	26.7	30.7	36.1	40.1
127.5°	1.3	1.3	2.7	5.3	8.0	13.4	18.7	24.0	28.1	32.1	34.7
130°	1.3	1.3	2.7	4.0	6.7	10.7	16.0	20.0	25.4	28.1	30.7
132.5°	1.3	1.3	1.3	4.0	5.3	8.0	12.0	17.4	21.4	25.4	26.7
135°	1.3	1.3	1.3	2.7	5.3	6.7	9.4	13.4	17.4	21.4	24.0
137.5°	1.3	1.3	1.3	2.7	4.0	6.7	8.0	10.7	14.7	17.4	21.4
140°	1.3	1.3	1.3	2.7	4.0	5.3	6.7	9.4	12.0	14.7	17.4
142.5°	1.3	1.3	1.3	2.7	2.7	4.0	5.3	8.0	9.4	12.0	14.7
145°	1.3	1.3	1.3	2.7	2.7	4.0	5.3	6.7	8.0	9.4	12.0
147.5°	1.3	1.3	1.3	2.7	2.7	2.7	4.0	5.3	6.7	8.0	9.4
150°	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	5.3	6.7	8.0
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	4.0	5.3	6.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	5.3	5.3
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2563.4	2566.0	2582.1	2580.7	2578.0	2575.4	2575.4	2572.7	2575.4	2582.1	2579.4
5°	2550.0	2554.0	2566.0	2564.7	2562.0	2560.7	2559.3	2555.3	2558.0	2567.4	2564.7
7.5°	2526.0	2530.0	2540.6	2535.3	2531.3	2534.0	2527.3	2523.3	2528.6	2538.0	2536.6
10°	2500.6	2503.2	2516.6	2513.9	2507.3	2508.6	2501.9	2499.2	2505.9	2511.3	2512.6
12.5°	2483.2	2492.6	2504.6	2503.2	2501.9	2503.2	2496.6	2493.9	2497.9	2503.2	2501.9
15°	2479.2	2491.2	2504.6	2504.6	2505.9	2507.3	2500.6	2496.6	2500.6	2504.6	2503.2
17.5°	2475.2	2489.9	2501.9	2500.6	2501.9	2504.6	2493.9	2491.2	2496.6	2501.9	2499.2
20°	2461.8	2475.2	2483.2	2480.5	2480.5	2481.9	2468.5	2468.5	2476.5	2480.5	2481.9
22.5°	2424.4	2440.5	2440.5	2433.8	2433.8	2428.4	2424.4	2416.4	2425.8	2432.4	2437.8
25°	2368.3	2375.0	2367.0	2352.3	2344.3	2337.6	2318.9	2334.9	2334.9	2355.0	2361.7
27.5°	2289.5	2274.8	2252.1	2221.4	2214.7	2193.3	2181.3	2185.3	2192.0	2220.1	2241.4
30°	2159.9	2115.9	2077.1	2063.8	2034.4	2013.0	1991.6	2002.3	2014.3	2030.4	2074.5
32.5°	1989.0	1946.2	1883.4	1860.7	1830.0	1803.3	1777.9	1793.9	1815.3	1826.0	1874.1
35°	1792.6	1741.9	1684.4	1645.7	1613.6	1598.9	1566.9	1589.6	1612.3	1620.3	1661.7
37.5°	1584.2	1532.1	1481.4	1448.0	1417.3	1407.9	1386.5	1402.6	1419.9	1432.0	1466.7
40°	1386.5	1338.4	1299.7	1277.0	1255.6	1247.6	1239.6	1246.3	1259.6	1269.0	1295.7
42.5°	1216.9	1178.2	1151.4	1138.1	1123.4	1112.7	1114.0	1116.7	1123.4	1143.4	1155.4
45°	1068.6	1045.9	1028.5	1025.9	1016.5	1015.2	1013.9	1019.2	1023.2	1035.2	1044.6
47.5°	949.7	940.4	936.4	941.7	945.7	940.4	943.1	949.7	957.8	957.8	956.4
50°	856.2	858.9	864.2	876.3	884.3	887.0	889.6	897.6	899.0	901.6	897.6
52.5°	780.1	782.8	797.5	816.2	825.5	829.5	834.9	842.9	842.9	845.5	840.2
55°	702.6	706.6	721.3	740.0	748.0	753.4	758.7	764.1	768.1	773.4	769.4
57.5°	617.1	629.2	638.5	643.8	649.2	653.2	657.2	658.5	666.6	667.9	674.6
60°	526.3	529.0	538.3	537.0	533.0	543.7	538.3	547.7	557.0	569.0	570.4
62.5°	439.5	440.8	447.5	444.8	450.2	448.8	452.8	452.8	459.5	464.8	471.5
65°	371.3	372.7	378.0	378.0	376.7	380.7	384.7	387.4	387.4	391.4	396.7
67.5°	320.6	324.6	329.9	332.6	335.3	335.3	339.3	340.6	343.3	344.6	347.3
70°	285.9	291.2	296.5	299.2	300.5	303.2	304.6	304.6	307.2	308.6	311.2
72.5°	260.5	265.8	269.8	269.8	272.5	273.8	273.8	275.2	276.5	279.2	281.8
75°	239.1	243.1	245.8	244.4	244.4	244.4	245.8	245.8	248.5	251.1	253.8
77.5°	219.1	223.1	223.1	220.4	220.4	220.4	220.4	221.7	223.1	225.7	228.4
80°	204.4	204.4	203.0	203.0	200.4	199.0	199.0	200.4	200.4	203.0	207.0
82.5°	188.3	188.3	187.0	185.7	184.3	183.0	183.0	184.3	185.7	187.0	189.7
85°	173.7	173.7	171.0	171.0	169.6	169.6	169.6	169.6	171.0	172.3	175.0
87.5°	159.0	157.6	156.3	154.9	154.9	154.9	154.9	154.9	156.3	159.0	160.3
90°	144.3	142.9	141.6	141.6	140.3	140.3	141.6	141.6	142.9	144.3	145.6
92.5°	130.9	129.6	128.2	128.2	126.9	126.9	128.2	126.9	129.6	129.6	130.9
95°	118.9	117.5	116.2	116.2	116.2	116.2	116.2	116.2	117.5	117.5	118.9
97.5°	108.2	106.9	105.5	105.5	106.9	105.5	106.9	106.9	106.9	108.2	109.5
100°	98.8	97.5	97.5	98.8	97.5	97.5	98.8	98.8	98.8	98.8	100.2
102.5°	90.8	90.8	90.8	90.8	90.8	90.8	92.2	92.2	92.2	92.2	93.5
105°	82.8	84.2	84.2	84.2	85.5	85.5	85.5	86.8	86.8	86.8	86.8
107.5°	77.5	78.8	78.8	80.1	80.1	81.5	81.5	81.5	81.5	82.8	82.8
110°	72.1	73.5	74.8	76.1	76.1	77.5	77.5	77.5	77.5	77.5	77.5

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	66.8	68.1	69.5	72.1	73.5	73.5	73.5	73.5	74.8	74.8	73.5
115°	61.4	64.1	65.5	68.1	69.5	69.5	70.8	70.8	70.8	70.8	69.5
117.5°	56.1	60.1	61.4	64.1	65.5	65.5	66.8	66.8	66.8	66.8	65.5
120°	52.1	54.8	57.4	58.8	60.1	61.4	61.4	62.8	62.8	62.8	61.4
122.5°	48.1	50.8	53.4	54.8	56.1	57.4	57.4	57.4	57.4	57.4	57.4
125°	42.7	45.4	48.1	49.4	50.8	52.1	52.1	53.4	53.4	53.4	52.1
127.5°	38.7	41.4	42.7	45.4	46.8	46.8	48.1	48.1	48.1	48.1	46.8
130°	33.4	36.1	38.7	40.1	41.4	41.4	42.7	42.7	42.7	42.7	42.7
132.5°	29.4	32.1	33.4	36.1	36.1	37.4	37.4	38.7	38.7	38.7	37.4
135°	26.7	28.1	29.4	32.1	32.1	33.4	33.4	33.4	33.4	33.4	33.4
137.5°	24.0	25.4	26.7	28.1	28.1	29.4	29.4	29.4	29.4	30.7	29.4
140°	20.0	22.7	24.0	24.0	25.4	25.4	25.4	26.7	26.7	26.7	25.4
142.5°	17.4	18.7	20.0	21.4	22.7	22.7	22.7	22.7	24.0	22.7	22.7
145°	13.4	16.0	17.4	18.7	20.0	20.0	20.0	20.0	20.0	20.0	20.0
147.5°	10.7	12.0	14.7	16.0	16.0	17.4	17.4	17.4	17.4	17.4	17.4
150°	9.4	9.4	12.0	13.4	14.7	14.7	14.7	14.7	14.7	14.7	14.7
152.5°	6.7	8.0	9.4	10.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0
155°	6.7	6.7	8.0	8.0	9.4	9.4	9.4	9.4	10.7	9.4	9.4
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2575.4	2574.0	2579.4	2574.0	2547.3	2558.0	2554.0	2568.7	2570.0	2574.0	2587.4
5°	2562.0	2562.0	2568.7	2563.4	2538.0	2548.7	2547.3	2562.0	2564.7	2567.4	2582.1
7.5°	2535.3	2536.6	2546.0	2542.0	2515.3	2531.3	2530.0	2547.3	2552.7	2558.0	2571.4
10°	2509.9	2508.6	2519.3	2515.3	2489.9	2508.6	2507.3	2524.6	2532.6	2542.0	2558.0
12.5°	2496.6	2492.6	2496.6	2492.6	2464.5	2479.2	2480.5	2500.6	2509.9	2521.9	2540.6
15°	2496.6	2489.9	2489.9	2481.9	2449.8	2459.2	2460.5	2473.9	2485.9	2497.9	2520.6
17.5°	2493.9	2487.2	2485.9	2479.2	2444.5	2444.5	2443.1	2452.5	2459.2	2471.2	2495.2
20°	2479.2	2476.5	2475.2	2471.2	2439.1	2433.8	2431.1	2431.1	2435.1	2439.1	2463.2
22.5°	2440.5	2443.1	2445.8	2448.5	2423.1	2413.7	2415.1	2412.4	2408.4	2408.4	2428.4
25°	2368.3	2381.7	2392.4	2404.4	2389.7	2383.0	2391.0	2387.0	2380.4	2375.0	2392.4
27.5°	2253.5	2281.5	2304.2	2333.6	2334.9	2329.6	2351.0	2348.3	2347.0	2338.9	2352.3
30°	2094.5	2138.6	2169.3	2212.0	2248.1	2253.5	2289.5	2294.9	2300.2	2296.2	2309.6
32.5°	1902.1	1962.3	2014.3	2081.1	2115.9	2146.6	2197.4	2218.7	2240.1	2246.8	2261.5
35°	1692.4	1760.6	1822.0	1895.5	1950.2	2017.0	2078.5	2110.5	2158.6	2177.3	2198.7
37.5°	1493.4	1557.5	1617.6	1691.1	1779.3	1848.7	1924.9	1997.0	2062.4	2089.2	2121.2
40°	1317.1	1369.2	1426.6	1490.7	1570.9	1661.7	1744.5	1844.7	1922.2	1975.6	2022.4
42.5°	1183.5	1208.9	1258.3	1315.7	1379.9	1472.0	1556.2	1668.4	1761.9	1838.0	1915.5
45°	1064.6	1076.6	1112.7	1143.4	1208.9	1290.4	1379.9	1489.4	1586.9	1684.4	1777.9
47.5°	963.1	977.8	995.2	1013.9	1060.6	1128.7	1206.2	1305.1	1402.6	1516.1	1623.0
50°	895.0	899.0	901.6	909.7	937.7	984.5	1047.2	1131.4	1224.9	1346.5	1460.0
52.5°	834.9	834.9	826.8	822.8	833.5	862.9	899.0	959.1	1055.3	1167.5	1287.7
55°	770.7	758.7	756.0	742.7	745.4	758.7	776.1	822.8	901.6	997.8	1114.0
57.5°	681.2	675.9	675.9	670.6	659.9	666.6	670.6	704.0	760.1	842.9	944.4
60°	578.4	575.7	582.4	583.7	574.4	578.4	577.1	597.1	637.2	704.0	788.1
62.5°	475.5	487.6	488.9	494.2	488.9	487.6	494.2	511.6	531.6	582.4	647.9
65°	399.4	406.1	407.4	414.1	411.4	411.4	416.8	430.1	442.1	476.9	527.6
67.5°	350.0	347.3	348.6	352.6	348.6	347.3	351.3	359.3	368.7	390.0	426.1
70°	311.2	308.6	308.6	308.6	303.2	299.2	300.5	303.2	307.2	319.3	342.0
72.5°	281.8	281.8	277.8	273.8	269.8	267.2	264.5	261.8	260.5	264.5	276.5
75°	255.1	256.5	255.1	251.1	245.8	240.4	235.1	229.8	223.1	220.4	221.7
77.5°	231.1	232.4	233.8	232.4	227.1	220.4	212.4	204.4	195.0	185.7	180.3
80°	209.7	212.4	213.7	212.4	208.4	203.0	193.7	184.3	171.0	159.0	145.6
82.5°	191.0	195.0	196.4	196.4	193.7	188.3	177.7	167.0	152.3	136.2	118.9
85°	176.3	179.0	181.7	181.7	180.3	175.0	164.3	152.3	137.6	118.9	100.2
87.5°	161.6	163.0	165.6	168.3	165.6	160.3	150.9	137.6	122.9	104.2	82.8
90°	146.9	148.3	150.9	153.6	152.3	146.9	138.9	126.9	110.9	90.8	69.5
92.5°	132.2	134.9	136.2	137.6	138.9	134.9	128.2	116.2	100.2	80.1	60.1
95°	121.6	121.6	124.2	125.6	126.9	122.9	117.5	105.5	90.8	72.1	52.1
97.5°	110.9	110.9	113.5	113.5	114.9	112.2	106.9	96.2	81.5	64.1	44.1
100°	100.2	101.5	102.9	104.2	104.2	102.9	97.5	86.8	73.5	57.4	38.7
102.5°	93.5	93.5	94.8	94.8	96.2	93.5	88.2	78.8	65.5	50.8	33.4
105°	86.8	86.8	88.2	88.2	86.8	84.2	78.8	70.8	58.8	44.1	29.4
107.5°	81.5	81.5	81.5	81.5	80.1	77.5	72.1	62.8	52.1	40.1	26.7
110°	77.5	76.1	76.1	74.8	73.5	69.5	64.1	56.1	46.8	34.7	22.7

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	73.5	72.1	70.8	69.5	66.8	62.8	57.4	50.8	41.4	30.7	20.0
115°	69.5	68.1	66.8	64.1	61.4	57.4	52.1	45.4	36.1	26.7	17.4
117.5°	65.5	64.1	61.4	58.8	56.1	52.1	46.8	40.1	32.1	24.0	16.0
120°	60.1	58.8	57.4	54.8	52.1	46.8	41.4	36.1	28.1	21.4	13.4
122.5°	56.1	54.8	52.1	50.8	46.8	42.7	37.4	32.1	25.4	18.7	12.0
125°	50.8	49.4	48.1	45.4	42.7	37.4	33.4	28.1	22.7	16.0	9.4
127.5°	46.8	45.4	42.7	40.1	37.4	33.4	29.4	25.4	20.0	13.4	9.4
130°	41.4	40.1	38.7	36.1	33.4	29.4	26.7	21.4	17.4	12.0	8.0
132.5°	36.1	36.1	34.7	32.1	29.4	26.7	22.7	18.7	14.7	10.7	6.7
135°	33.4	32.1	30.7	28.1	26.7	22.7	20.0	16.0	12.0	9.4	5.3
137.5°	29.4	28.1	26.7	25.4	22.7	20.0	17.4	13.4	10.7	8.0	5.3
140°	25.4	24.0	24.0	21.4	20.0	17.4	14.7	12.0	9.4	6.7	4.0
142.5°	22.7	21.4	20.0	18.7	17.4	14.7	12.0	9.4	8.0	5.3	4.0
145°	20.0	18.7	17.4	16.0	14.7	12.0	10.7	8.0	6.7	5.3	4.0
147.5°	16.0	16.0	14.7	13.4	12.0	10.7	9.4	8.0	5.3	4.0	2.7
150°	13.4	13.4	12.0	10.7	10.7	9.4	8.0	6.7	5.3	4.0	2.7
152.5°	12.0	10.7	10.7	9.4	9.4	8.0	6.7	5.3	4.0	4.0	2.7
155°	9.4	9.4	9.4	8.0	8.0	6.7	5.3	5.3	4.0	2.7	2.7
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2590.1	2574.0	2587.4	2611.4	2608.8	2606.1	2603.4	2608.8	2626.1	2616.8	2602.1
5°	2586.1	2570.0	2584.7	2607.4	2606.1	2602.1	2599.4	2604.8	2622.1	2612.8	2596.7
7.5°	2578.0	2563.4	2574.0	2596.7	2596.7	2594.1	2591.4	2596.7	2612.8	2604.8	2588.7
10°	2564.7	2554.0	2564.7	2586.1	2587.4	2582.1	2579.4	2586.1	2602.1	2598.1	2584.7
12.5°	2554.0	2543.3	2555.3	2576.7	2578.0	2572.7	2568.7	2576.7	2598.1	2600.8	2596.7
15°	2539.3	2530.0	2544.7	2567.4	2567.4	2563.4	2563.4	2574.0	2603.4	2615.4	2622.1
17.5°	2517.9	2511.3	2528.6	2551.3	2552.7	2550.0	2551.3	2572.7	2611.4	2640.8	2659.5
20°	2491.2	2488.5	2507.3	2531.3	2535.3	2536.6	2543.3	2575.4	2628.8	2668.9	2687.6
22.5°	2459.2	2460.5	2481.9	2507.3	2512.6	2516.6	2530.0	2575.4	2642.2	2684.9	2692.9
25°	2423.1	2427.1	2449.8	2480.5	2487.2	2495.2	2517.9	2576.7	2646.2	2674.2	2660.9
27.5°	2384.4	2392.4	2421.8	2453.8	2461.8	2475.2	2504.6	2568.7	2627.5	2628.8	2579.4
30°	2344.3	2353.6	2388.4	2425.8	2439.1	2452.5	2488.5	2550.0	2582.1	2539.3	2452.5
32.5°	2298.9	2312.2	2347.0	2392.4	2408.4	2425.8	2461.8	2513.9	2501.9	2409.7	2285.5
35°	2241.4	2260.1	2300.2	2353.6	2368.3	2391.0	2416.4	2428.4	2375.0	2244.1	2103.8
37.5°	2170.6	2198.7	2245.4	2306.9	2322.9	2337.6	2344.3	2310.9	2204.0	2062.4	1916.8
40°	2089.2	2131.9	2182.7	2250.8	2266.8	2266.8	2242.8	2172.0	2037.1	1851.4	1689.8
42.5°	1990.3	2042.4	2106.5	2174.6	2190.7	2172.0	2114.5	1990.3	1836.7	1629.6	1458.7
45°	1870.1	1939.5	2011.7	2082.5	2090.5	2049.1	1946.2	1788.6	1598.9	1406.6	1243.6
47.5°	1727.2	1818.0	1896.8	1976.9	1966.3	1896.8	1759.2	1580.2	1379.9	1198.2	1067.3
50°	1566.9	1673.7	1761.9	1838.0	1815.3	1719.1	1557.5	1370.5	1171.5	1016.5	908.3
52.5°	1395.9	1518.8	1606.9	1668.4	1637.7	1522.8	1345.1	1166.1	1003.2	861.6	789.4
55°	1218.2	1342.5	1433.3	1481.4	1441.3	1317.1	1142.1	979.1	825.5	733.3	690.6
57.5°	1045.9	1162.1	1247.6	1286.4	1235.6	1111.4	949.7	812.2	701.3	623.8	602.4
60°	880.3	975.1	1056.6	1086.0	1031.2	916.3	777.4	667.9	586.4	533.0	522.3
62.5°	726.7	804.1	868.3	891.0	837.5	748.0	627.8	546.3	488.9	462.2	448.8
65°	599.8	645.2	710.6	706.6	674.6	591.7	503.6	446.1	408.7	391.4	383.4
67.5°	471.5	512.9	554.3	559.7	519.6	462.2	404.7	363.3	343.3	333.9	329.9
70°	364.7	395.4	420.8	414.1	392.7	356.7	320.6	297.9	289.9	285.9	285.9
72.5°	283.2	299.2	311.2	303.2	289.9	271.2	253.8	244.4	245.8	248.5	251.1
75°	219.1	223.1	225.7	217.7	215.1	203.0	201.7	203.0	211.1	219.1	223.1
77.5°	168.3	163.0	159.0	150.9	152.3	150.9	157.6	168.3	180.3	192.4	203.0
80°	129.6	117.5	108.2	100.2	104.2	110.9	124.2	140.3	156.3	169.6	183.0
82.5°	100.2	82.8	69.5	61.4	69.5	80.1	97.5	117.5	136.2	150.9	165.6
85°	77.5	57.4	41.4	33.4	41.4	57.4	76.1	98.8	118.9	134.9	149.6
87.5°	60.1	41.4	22.7	13.4	22.7	40.1	61.4	82.8	102.9	121.6	136.2
90°	48.1	28.1	10.7	2.7	12.0	28.1	48.1	69.5	89.5	109.5	124.2
92.5°	38.7	20.0	5.3	0.0	6.7	21.4	40.1	60.1	80.1	98.8	113.5
95°	32.1	16.0	4.0	0.0	5.3	16.0	32.1	52.1	70.8	89.5	101.5
97.5°	26.7	12.0	2.7	0.0	2.7	13.4	26.7	44.1	62.8	80.1	92.2
100°	22.7	10.7	2.7	0.0	2.7	10.7	22.7	38.7	54.8	70.8	82.8
102.5°	18.7	8.0	1.3	1.3	1.3	8.0	20.0	33.4	48.1	62.8	74.8
105°	17.4	6.7	1.3	1.3	1.3	6.7	17.4	29.4	42.7	56.1	66.8
107.5°	14.7	5.3	1.3	1.3	1.3	5.3	14.7	25.4	38.7	50.8	60.1
110°	12.0	5.3	1.3	1.3	1.3	5.3	12.0	22.7	33.4	44.1	53.4

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	10.7	4.0	1.3	1.3	1.3	4.0	10.7	20.0	29.4	40.1	48.1
115°	9.4	4.0	1.3	1.3	1.3	4.0	9.4	17.4	25.4	34.7	42.7
117.5°	8.0	4.0	1.3	1.3	1.3	2.7	8.0	14.7	22.7	30.7	38.7
120°	6.7	2.7	1.3	1.3	1.3	2.7	6.7	13.4	20.0	26.7	33.4
122.5°	6.7	2.7	1.3	1.3	1.3	2.7	5.3	10.7	17.4	22.7	29.4
125°	5.3	2.7	1.3	1.3	1.3	1.3	5.3	9.4	14.7	20.0	25.4
127.5°	5.3	2.7	1.3	1.3	1.3	1.3	4.0	8.0	12.0	17.4	22.7
130°	4.0	2.7	1.3	1.3	1.3	1.3	2.7	6.7	10.7	14.7	18.7
132.5°	4.0	2.7	1.3	1.3	1.3	1.3	2.7	5.3	8.0	12.0	16.0
135°	4.0	1.3	1.3	1.3	1.3	1.3	1.3	4.0	6.7	9.4	12.0
137.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	2.7	5.3	6.7	10.7
140°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	2.7	4.0	5.3	8.0
142.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	4.0	6.7
145°	2.7	1.3	1.3	2.7	2.7	1.3	1.3	2.7	2.7	4.0	5.3
147.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0
150°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.0
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2599.4	2568.7	2584.7	2579.4	2584.7	2598.1	2596.7	2592.7	2595.4	2588.7	2582.1
5°	2594.1	2563.4	2579.4	2572.7	2579.4	2592.7	2590.1	2586.1	2590.1	2582.1	2575.4
7.5°	2587.4	2559.3	2578.0	2576.7	2588.7	2606.1	2607.4	2607.4	2616.8	2604.8	2599.4
10°	2587.4	2572.7	2598.1	2607.4	2638.2	2660.9	2663.5	2668.9	2684.9	2682.2	2668.9
12.5°	2615.4	2612.8	2650.2	2672.9	2700.9	2733.0	2750.4	2755.7	2766.4	2758.4	2753.0
15°	2651.5	2664.9	2706.3	2731.7	2762.4	2786.4	2790.4	2793.1	2801.1	2789.1	2779.7
17.5°	2699.6	2707.6	2741.0	2751.7	2771.7	2775.7	2770.4	2757.0	2757.0	2730.3	2722.3
20°	2722.3	2718.3	2731.7	2714.3	2706.3	2682.2	2659.5	2634.1	2632.8	2604.8	2602.1
22.5°	2702.3	2675.6	2647.5	2604.8	2586.1	2551.3	2520.6	2505.9	2496.6	2460.5	2451.1
25°	2631.5	2566.0	2524.6	2473.9	2428.4	2388.4	2359.0	2328.3	2298.9	2269.5	2256.1
27.5°	2508.6	2447.1	2380.4	2309.6	2246.8	2185.3	2135.9	2105.2	2077.1	2038.4	2018.4
30°	2357.6	2272.2	2198.7	2130.6	2027.7	1952.9	1911.5	1850.0	1828.7	1811.3	1773.9
32.5°	2180.0	2077.1	1976.9	1884.8	1779.3	1709.8	1655.0	1609.6	1596.3	1550.8	1540.1
35°	1983.6	1848.7	1735.2	1644.3	1568.2	1484.0	1438.6	1407.9	1381.2	1350.5	1345.1
37.5°	1752.5	1631.0	1502.7	1422.6	1362.5	1290.4	1255.6	1234.3	1222.2	1199.5	1195.5
40°	1520.1	1398.6	1310.4	1230.2	1192.8	1154.1	1128.7	1119.4	1114.0	1106.0	1098.0
42.5°	1309.1	1202.2	1139.4	1086.0	1070.0	1051.3	1044.6	1049.9	1044.6	1041.9	1040.6
45°	1130.1	1048.6	1004.5	988.5	984.5	979.1	984.5	993.8	995.2	992.5	992.5
47.5°	967.1	928.4	909.7	912.3	919.0	923.0	932.4	944.4	947.1	940.4	943.1
50°	860.2	837.5	833.5	844.2	858.9	864.2	874.9	884.3	882.9	880.3	877.6
52.5°	760.1	753.4	764.1	774.7	790.8	793.5	797.5	801.5	800.1	794.8	792.1
55°	675.9	681.2	690.6	694.6	706.6	705.3	706.6	706.6	701.3	698.6	694.6
57.5°	599.8	601.1	606.4	607.8	614.5	611.8	610.4	607.8	599.8	598.4	594.4
60°	522.3	519.6	531.6	522.3	527.6	522.3	521.0	514.3	506.3	504.9	502.3
62.5°	448.8	443.5	451.5	447.5	450.2	444.8	442.1	434.1	427.4	426.1	424.8
65°	383.4	380.7	388.7	387.4	390.0	383.4	380.7	375.4	370.0	368.7	367.3
67.5°	328.6	335.3	339.3	339.3	342.0	340.6	333.9	332.6	331.3	325.9	325.9
70°	288.5	292.5	300.5	301.9	300.5	303.2	297.9	296.5	295.2	292.5	291.2
72.5°	256.5	261.8	269.8	271.2	269.8	269.8	267.2	265.8	265.8	261.8	261.8
75°	231.1	237.8	244.4	244.4	244.4	241.8	239.1	239.1	236.4	235.1	232.4
77.5°	209.7	217.7	223.1	221.7	220.4	217.7	217.7	213.7	209.7	209.7	207.0
80°	193.7	199.0	203.0	201.7	200.4	196.4	195.0	191.0	188.3	184.3	184.3
82.5°	176.3	183.0	185.7	184.3	181.7	177.7	176.3	173.7	171.0	169.6	167.0
85°	161.6	168.3	169.6	167.0	164.3	161.6	160.3	159.0	157.6	154.9	154.9
87.5°	146.9	153.6	153.6	152.3	149.6	148.3	146.9	145.6	144.3	142.9	141.6
90°	134.9	140.3	140.3	138.9	137.6	136.2	134.9	133.6	132.2	130.9	130.9
92.5°	122.9	128.2	128.2	126.9	125.6	124.2	124.2	122.9	121.6	120.2	118.9
95°	112.2	117.5	117.5	117.5	116.2	114.9	114.9	113.5	112.2	112.2	110.9
97.5°	101.5	106.9	106.9	106.9	105.5	104.2	104.2	102.9	102.9	102.9	101.5
100°	92.2	96.2	97.5	97.5	96.2	96.2	96.2	94.8	94.8	94.8	93.5
102.5°	82.8	86.8	89.5	89.5	89.5	88.2	88.2	88.2	88.2	88.2	86.8
105°	74.8	78.8	81.5	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
107.5°	68.1	72.1	74.8	76.1	77.5	77.5	78.8	78.8	78.8	78.8	78.8
110°	61.4	65.5	69.5	70.8	72.1	73.5	73.5	74.8	73.5	73.5	73.5

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	54.8	60.1	62.8	65.5	66.8	68.1	69.5	69.5	69.5	69.5	69.5
115°	49.4	54.8	57.4	60.1	62.8	64.1	64.1	65.5	65.5	65.5	64.1
117.5°	44.1	49.4	52.1	54.8	56.1	58.8	60.1	60.1	60.1	60.1	58.8
120°	40.1	44.1	46.8	49.4	52.1	53.4	54.8	54.8	54.8	54.8	54.8
122.5°	34.7	38.7	42.7	45.4	46.8	48.1	49.4	49.4	49.4	49.4	49.4
125°	30.7	34.7	37.4	40.1	41.4	44.1	44.1	44.1	44.1	44.1	44.1
127.5°	26.7	30.7	33.4	36.1	37.4	38.7	40.1	40.1	40.1	40.1	40.1
130°	22.7	26.7	29.4	32.1	33.4	34.7	34.7	36.1	36.1	36.1	36.1
132.5°	20.0	22.7	25.4	28.1	29.4	30.7	30.7	32.1	32.1	32.1	32.1
135°	16.0	20.0	21.4	24.0	25.4	26.7	26.7	28.1	28.1	28.1	28.1
137.5°	13.4	16.0	18.7	21.4	22.7	22.7	24.0	24.0	25.4	25.4	25.4
140°	10.7	12.0	16.0	17.4	18.7	20.0	21.4	21.4	21.4	21.4	21.4
142.5°	8.0	10.7	12.0	14.7	16.0	17.4	18.7	18.7	18.7	18.7	18.7
145°	6.7	8.0	9.4	12.0	13.4	14.7	16.0	16.0	16.0	16.0	16.0
147.5°	5.3	6.7	8.0	9.4	10.7	12.0	13.4	13.4	13.4	13.4	13.4
150°	4.0	5.3	6.7	6.7	8.0	9.4	10.7	12.0	12.0	12.0	12.0
152.5°	4.0	4.0	5.3	5.3	6.7	8.0	9.4	9.4	9.4	9.4	9.4
155°	2.7	4.0	4.0	4.0	5.3	5.3	6.7	8.0	8.0	8.0	8.0
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2586.1	2591.4	2588.7	2584.7	2583.4	2590.1	2583.4	2552.7	2564.7	2566.0	2575.4
5°	2582.1	2586.1	2583.4	2580.7	2576.7	2584.7	2576.7	2544.7	2556.7	2558.0	2567.4
7.5°	2608.8	2610.1	2610.1	2603.4	2592.7	2596.7	2586.1	2550.0	2556.7	2556.7	2563.4
10°	2675.6	2678.2	2682.2	2664.9	2651.5	2640.8	2626.1	2582.1	2580.7	2570.0	2570.0
12.5°	2762.4	2755.7	2749.0	2741.0	2730.3	2717.0	2695.6	2643.5	2626.1	2608.8	2591.4
15°	2787.8	2785.1	2783.8	2779.7	2773.1	2769.1	2753.0	2700.9	2675.6	2654.2	2623.5
17.5°	2721.0	2726.3	2743.7	2745.0	2753.0	2769.1	2766.4	2730.3	2707.6	2698.3	2660.9
20°	2600.8	2602.1	2623.5	2632.8	2667.5	2694.3	2714.3	2710.3	2704.9	2715.6	2687.6
22.5°	2456.5	2465.8	2488.5	2503.2	2536.6	2567.4	2599.4	2616.8	2644.8	2688.9	2683.6
25°	2260.1	2272.2	2304.2	2328.3	2375.0	2421.8	2464.5	2495.2	2528.6	2612.8	2640.8
27.5°	2025.0	2043.7	2085.1	2109.2	2174.6	2222.7	2284.2	2344.3	2391.0	2487.2	2544.7
30°	1777.9	1793.9	1838.0	1871.4	1927.5	1993.0	2070.5	2155.9	2233.4	2330.9	2403.1
32.5°	1546.8	1564.2	1600.3	1629.6	1692.4	1747.2	1832.7	1938.2	2010.3	2145.3	2241.4
35°	1345.1	1361.2	1386.5	1411.9	1464.0	1520.1	1593.6	1696.4	1788.6	1928.9	2050.4
37.5°	1203.5	1206.2	1220.9	1235.6	1274.3	1317.1	1374.5	1465.3	1550.8	1701.8	1835.4
40°	1102.0	1102.0	1110.0	1114.0	1131.4	1156.8	1192.8	1263.6	1334.4	1449.3	1612.3
42.5°	1039.2	1036.6	1036.6	1037.9	1036.6	1048.6	1070.0	1103.4	1166.1	1261.0	1387.9
45°	992.5	987.1	983.1	973.8	968.4	968.4	969.8	981.8	1017.9	1079.3	1182.2
47.5°	940.4	939.1	932.4	921.7	912.3	905.7	895.0	891.0	901.6	936.4	1005.8
50°	880.3	873.6	866.9	858.9	848.2	841.5	821.5	822.8	813.5	829.5	865.6
52.5°	792.1	786.8	784.1	777.4	773.4	770.7	754.7	738.7	734.7	737.3	750.7
55°	694.6	697.3	686.6	691.9	690.6	678.6	671.9	659.9	655.9	654.5	661.2
57.5°	593.1	595.8	589.1	594.4	594.4	587.7	583.7	583.7	574.4	566.4	575.7
60°	500.9	495.6	499.6	506.3	506.3	502.3	499.6	499.6	492.9	490.2	496.9
62.5°	426.1	420.8	424.8	431.5	432.8	430.1	427.4	427.4	419.4	419.4	424.8
65°	368.7	370.0	368.7	374.0	374.0	375.4	372.7	370.0	360.7	364.7	363.3
67.5°	327.3	325.9	325.9	331.3	329.9	332.6	329.9	325.9	319.3	313.9	312.6
70°	292.5	291.2	291.2	293.9	295.2	295.2	293.9	291.2	281.8	276.5	272.5
72.5°	261.8	260.5	261.8	263.1	264.5	265.8	264.5	261.8	253.8	247.1	240.4
75°	233.8	232.4	236.4	236.4	237.8	237.8	239.1	237.8	231.1	223.1	215.1
77.5°	205.7	207.0	211.1	212.4	215.1	216.4	217.7	217.7	211.1	204.4	193.7
80°	183.0	185.7	188.3	189.7	192.4	196.4	197.7	199.0	193.7	187.0	175.0
82.5°	167.0	168.3	171.0	172.3	176.3	177.7	179.0	181.7	179.0	172.3	159.0
85°	153.6	154.9	157.6	157.6	160.3	163.0	164.3	165.6	164.3	157.6	144.3
87.5°	141.6	142.9	144.3	145.6	146.9	148.3	149.6	150.9	149.6	142.9	130.9
90°	130.9	130.9	132.2	132.2	133.6	134.9	137.6	137.6	136.2	130.9	118.9
92.5°	118.9	120.2	120.2	121.6	122.9	124.2	125.6	125.6	124.2	118.9	108.2
95°	110.9	110.9	112.2	112.2	113.5	113.5	114.9	114.9	113.5	108.2	97.5
97.5°	101.5	101.5	101.5	101.5	102.9	102.9	104.2	104.2	102.9	97.5	88.2
100°	93.5	93.5	93.5	93.5	93.5	94.8	94.8	94.8	93.5	88.2	78.8
102.5°	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	84.2	80.1	70.8
105°	82.8	82.8	82.8	81.5	81.5	81.5	80.1	80.1	76.1	72.1	64.1
107.5°	77.5	77.5	77.5	76.1	76.1	74.8	73.5	73.5	69.5	65.5	57.4
110°	73.5	73.5	73.5	72.1	70.8	69.5	68.1	66.8	62.8	57.4	50.8

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	69.5	69.5	68.1	68.1	66.8	65.5	62.8	61.4	57.4	52.1	45.4
115°	64.1	64.1	64.1	62.8	61.4	60.1	58.8	56.1	52.1	46.8	40.1
117.5°	58.8	58.8	58.8	57.4	56.1	54.8	53.4	50.8	46.8	41.4	36.1
120°	53.4	53.4	53.4	52.1	50.8	49.4	48.1	45.4	41.4	37.4	30.7
122.5°	49.4	49.4	48.1	46.8	45.4	44.1	42.7	40.1	37.4	32.1	26.7
125°	44.1	44.1	42.7	42.7	41.4	40.1	38.7	36.1	32.1	28.1	24.0
127.5°	40.1	38.7	38.7	38.7	37.4	36.1	33.4	32.1	28.1	24.0	20.0
130°	34.7	34.7	34.7	33.4	33.4	32.1	29.4	26.7	24.0	21.4	17.4
132.5°	30.7	30.7	30.7	30.7	29.4	28.1	25.4	24.0	21.4	17.4	14.7
135°	28.1	28.1	26.7	26.7	25.4	24.0	22.7	20.0	17.4	14.7	12.0
137.5°	24.0	24.0	24.0	22.7	22.7	21.4	18.7	17.4	16.0	13.4	10.7
140°	21.4	21.4	20.0	20.0	18.7	18.7	17.4	14.7	13.4	10.7	9.4
142.5°	18.7	18.7	17.4	17.4	16.0	16.0	14.7	13.4	10.7	9.4	6.7
145°	16.0	16.0	14.7	14.7	14.7	13.4	12.0	10.7	9.4	8.0	6.7
147.5°	13.4	13.4	13.4	12.0	12.0	10.7	10.7	9.4	8.0	6.7	5.3
150°	12.0	12.0	10.7	10.7	10.7	9.4	8.0	8.0	6.7	5.3	4.0
152.5°	9.4	9.4	9.4	9.4	8.0	8.0	6.7	6.7	5.3	4.0	4.0
155°	8.0	8.0	8.0	6.7	6.7	6.7	5.3	5.3	4.0	4.0	2.7
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: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2571.4	2570.0	2582.1	2580.7	2564.7	2588.7	2604.8
5°	2564.7	2563.4	2574.0	2576.7	2559.3	2584.7	2602.1
7.5°	2559.3	2558.0	2570.0	2574.0	2556.7	2579.4	2598.1
10°	2560.7	2554.0	2564.7	2567.4	2551.3	2575.4	2591.4
12.5°	2570.0	2554.0	2558.0	2558.0	2543.3	2564.7	2582.1
15°	2592.7	2559.3	2554.0	2550.0	2531.3	2551.3	2568.7
17.5°	2618.1	2572.7	2554.0	2540.6	2517.9	2535.3	2554.0
20°	2643.5	2587.4	2556.7	2535.3	2504.6	2520.6	2534.0
22.5°	2655.5	2600.8	2559.3	2527.3	2488.5	2496.6	2511.3
25°	2639.5	2595.4	2554.0	2515.3	2468.5	2469.8	2481.9
27.5°	2580.7	2568.7	2542.0	2503.2	2452.5	2445.8	2455.2
30°	2480.5	2513.9	2515.3	2487.2	2433.8	2420.4	2424.4
32.5°	2340.3	2415.1	2459.2	2453.8	2407.1	2388.4	2391.0
35°	2178.6	2272.2	2368.3	2400.4	2367.0	2352.3	2347.0
37.5°	1985.0	2110.5	2238.8	2317.6	2312.2	2302.9	2297.5
40°	1771.2	1922.2	2074.5	2200.0	2238.8	2238.8	2241.4
42.5°	1542.8	1719.1	1886.1	2045.1	2135.9	2155.9	2164.0
45°	1322.4	1500.1	1681.7	1864.7	1986.3	2049.1	2071.8
47.5°	1122.1	1301.0	1473.4	1673.7	1835.4	1916.8	1952.9
50°	951.1	1084.6	1266.3	1465.3	1641.7	1741.9	1812.6
52.5°	809.5	913.7	1072.6	1258.3	1436.0	1573.5	1639.0
55°	690.6	761.4	896.3	1056.6	1226.2	1369.2	1445.3
57.5°	590.4	646.5	738.7	872.3	1015.2	1156.8	1238.3
60°	502.3	541.0	603.8	709.3	830.9	952.4	1031.2
62.5°	426.1	451.5	492.9	570.4	665.2	760.1	833.5
65°	367.3	378.0	400.7	448.8	521.0	593.1	655.9
67.5°	309.9	316.6	333.9	363.3	399.4	451.5	492.9
70°	267.2	267.2	268.5	285.9	304.6	338.0	367.3
72.5°	232.4	228.4	220.4	224.4	228.4	247.1	265.8
75°	204.4	195.0	181.7	176.3	173.7	176.3	187.0
77.5°	180.3	167.0	150.9	137.6	126.9	122.9	132.2
80°	160.3	144.3	125.6	108.2	90.8	81.5	85.5
82.5°	144.3	124.2	104.2	84.2	64.1	50.8	50.8
85°	126.9	108.2	86.8	65.5	45.4	28.1	25.4
87.5°	114.9	94.8	72.1	52.1	32.1	14.7	8.0
90°	102.9	82.8	61.4	41.4	22.7	6.7	0.0
92.5°	92.2	73.5	53.4	33.4	16.0	4.0	0.0
95°	82.8	65.5	45.4	28.1	13.4	2.7	1.3
97.5°	73.5	57.4	40.1	22.7	9.4	2.7	1.3
100°	66.8	50.8	34.7	18.7	8.0	1.3	1.3
102.5°	58.8	45.4	29.4	16.0	6.7	1.3	1.3
105°	52.1	40.1	25.4	13.4	5.3	1.3	1.3
107.5°	46.8	34.7	22.7	12.0	5.3	1.3	1.3
110°	41.4	30.7	20.0	10.7	4.0	1.3	1.3

TEST NUMBER: P1213171

CATALOG NUMBER: 4SNLED-LD5-73SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	37.4	26.7	17.4	9.4	2.7	1.3	1.3
115°	32.1	24.0	14.7	8.0	2.7	1.3	1.3
117.5°	28.1	20.0	13.4	6.7	2.7	1.3	1.3
120°	24.0	17.4	10.7	5.3	1.3	1.3	1.3
122.5°	21.4	14.7	9.4	5.3	1.3	1.3	1.3
125°	18.7	13.4	8.0	4.0	1.3	1.3	1.3
127.5°	16.0	10.7	6.7	2.7	1.3	1.3	1.3
130°	13.4	9.4	5.3	2.7	1.3	1.3	1.3
132.5°	10.7	8.0	5.3	2.7	1.3	1.3	1.3
135°	9.4	6.7	4.0	2.7	1.3	1.3	1.3
137.5°	8.0	5.3	2.7	2.7	2.7	1.3	1.3
140°	6.7	4.0	2.7	2.7	2.7	2.7	1.3
142.5°	5.3	4.0	2.7	2.7	2.7	2.7	1.3
145°	4.0	2.7	2.7	2.7	2.7	2.7	1.3
147.5°	4.0	2.7	2.7	2.7	2.7	2.7	1.3
150°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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)