

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: P1213870

Luminaire Tested: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

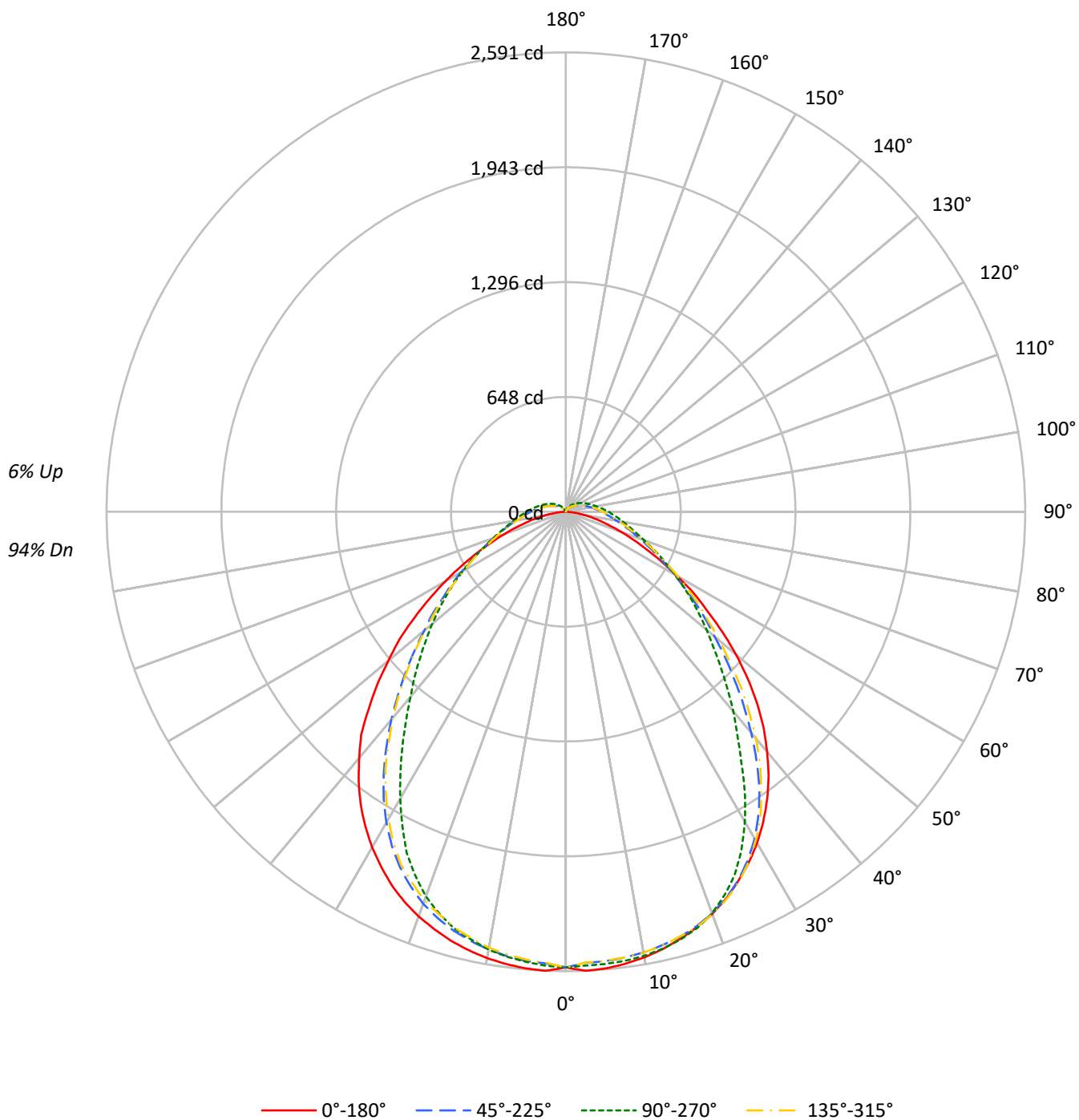
Lumens per Lamp: N/A
Luminaire Lumens: 6504.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

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	114	114	114	114	108	108	108	102	102	102	96	96	96	94		
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81	79		
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69	67		
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60	57		
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52	50		
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46	44		
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41	39		
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37	35		
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31		
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30	28		
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	20768	20768	20768	20768
5°	20917	20107	20917	20018
10°	20823	19572	20858	19301
15°	20689	18988	20783	18494
20°	20530	18236	20650	17466
25°	20201	17120	20424	16112
30°	19772	15482	20032	14332
35°	19106	13472	19475	12545
40°	18149	11783	18629	10933
45°	16888	10243	17436	9655
50°	15164	9001	15832	8546
55°	13117	7948	14071	7546
60°	11031	6978	12030	6577
65°	9044	6170	9957	5721
70°	7198	5475	8060	5064
75°	5654	5056	6364	4652
80°	4080	4878	4807	4458
85°	2514	4905	3382	4509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 17436 cd/sqm

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.7	3.7
10°-20°	698.6	10.7
20°-30°	1035.4	15.9
30°-40°	1150.3	17.7
40°-50°	1042.8	16.0
50°-60°	808.0	12.4
60°-70°	548.7	8.4
70°-80°	349.1	5.4
80°-90°	223.2	3.4
90°-100°	150.5	2.3
100°-110°	103.1	1.6
110°-120°	68.8	1.1
120°-130°	42.8	0.7
130°-140°	23.7	0.4
140°-150°	11.1	0.2
150°-160°	4.1	0.1
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	1977.7	30.4
0°-40°	3128.1	48.1
0°-60°	4978.9	76.6
0°-90°	6099.9	93.8
90°-120°	322.3	5.0
90°-150°	399.8	6.1
90°-180°	404.0	6.2
0°-180°	6504.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2570	2570	2570	2570	2570	
5°	2586	2560	2586	2549	2586	246
15°	2494	2498	2505	2433	2494	704
25°	2299	2256	2324	2123	2299	1059
35°	1979	1725	2017	1606	1979	1235
45°	1524	1233	1573	1162	1524	1170
55°	973	867	1043	823	973	876
65°	505	582	556	540	505	506
75°	202	389	228	358	202	218
85°	37	280	50	257	37	44
90°	0	242	3	220	0	2
95°	1	206	0	192	1	1
105°	1	151	0	143	1	1
115°	1	114	0	106	1	1
125°	1	85	1	75	1	1
135°	1	59	1	48	1	1
145°	1	38	1	27	1	1
155°	1	21	1	10	1	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2591.2	2588.4	2585.6	2581.3	2585.6	2596.9	2589.8	2574.2	2571.4	2546.0	2557.3
5°	2585.6	2581.3	2578.5	2574.2	2579.9	2594.0	2587.0	2572.8	2568.6	2544.6	2557.3
7.5°	2571.4	2568.6	2564.3	2564.3	2570.0	2584.1	2578.5	2562.9	2560.1	2536.1	2550.2
10°	2551.6	2550.2	2547.4	2547.4	2553.0	2570.0	2562.9	2548.8	2546.0	2523.4	2538.9
12.5°	2526.2	2527.6	2523.4	2523.4	2531.8	2548.8	2543.1	2527.6	2524.8	2505.0	2520.5
15°	2493.7	2495.1	2492.3	2493.7	2502.1	2521.9	2514.9	2500.7	2497.9	2482.4	2495.1
17.5°	2456.9	2458.3	2458.3	2456.9	2466.8	2486.6	2480.9	2468.2	2464.0	2451.3	2466.8
20°	2414.5	2414.5	2414.5	2414.5	2425.8	2445.6	2438.5	2428.6	2420.2	2410.3	2423.0
22.5°	2362.2	2360.8	2362.2	2366.4	2377.7	2393.3	2389.1	2377.7	2365.0	2359.4	2369.3
25°	2298.6	2302.8	2304.2	2308.5	2322.6	2335.3	2331.1	2319.8	2300.0	2295.8	2298.6
27.5°	2232.1	2235.0	2239.2	2237.8	2257.6	2270.3	2261.8	2251.9	2223.7	2219.4	2216.6
30°	2157.2	2161.5	2164.3	2162.9	2178.4	2192.6	2184.1	2171.4	2133.2	2130.4	2107.7
32.5°	2072.4	2076.6	2079.5	2079.5	2102.1	2107.7	2092.2	2073.8	2032.8	2022.9	2003.1
35°	1979.1	1983.3	1984.8	1984.8	2007.4	2006.0	1986.2	1960.7	1915.5	1902.8	1868.8
37.5°	1878.7	1881.6	1883.0	1891.5	1901.3	1892.9	1867.4	1834.9	1801.0	1765.6	1728.9
40°	1765.6	1769.9	1772.7	1778.4	1788.3	1778.4	1741.6	1702.0	1665.3	1625.7	1588.9
42.5°	1649.7	1662.4	1659.6	1658.2	1663.9	1637.0	1608.7	1563.5	1526.7	1485.7	1449.0
45°	1523.9	1522.5	1529.6	1532.4	1531.0	1508.4	1468.8	1427.8	1391.0	1348.6	1317.5
47.5°	1391.0	1389.6	1395.3	1398.1	1389.6	1365.6	1334.5	1287.8	1256.7	1220.0	1195.9
50°	1251.1	1251.1	1259.6	1251.1	1246.8	1222.8	1197.4	1150.7	1126.7	1094.2	1080.0
52.5°	1111.1	1123.8	1115.4	1112.5	1108.3	1084.3	1064.5	1026.3	1006.5	992.4	975.4
55°	972.6	986.7	981.1	976.8	975.4	955.6	937.2	909.0	896.2	886.4	876.5
57.5°	855.3	853.8	851.0	846.8	848.2	832.6	814.3	798.7	793.1	788.8	791.6
60°	719.5	730.9	726.6	728.0	729.4	726.6	711.1	701.2	702.6	704.0	708.2
62.5°	607.9	617.8	624.8	619.2	622.0	626.2	617.8	614.9	620.6	626.2	631.9
65°	504.7	514.6	521.6	520.2	528.7	537.2	535.8	538.6	551.3	558.4	565.5
67.5°	411.4	421.3	431.2	432.6	445.3	458.0	463.7	473.6	487.7	497.6	506.1
70°	330.8	339.3	350.6	357.7	374.6	391.6	401.5	421.3	429.7	443.9	449.5
72.5°	258.7	265.8	281.3	298.3	312.4	333.6	353.4	370.4	383.1	398.6	405.7
75°	202.2	205.0	221.9	241.7	261.5	285.6	306.8	325.1	342.1	357.7	369.0
77.5°	148.4	152.7	168.2	195.1	217.7	243.1	267.2	287.0	305.3	320.9	336.4
80°	103.2	111.7	128.6	155.5	180.9	209.2	231.8	254.5	274.2	289.8	305.3
82.5°	66.4	73.5	97.5	124.4	151.3	179.5	203.6	226.2	247.4	264.4	278.5
85°	36.8	46.7	70.7	99.0	125.8	154.1	179.5	202.2	223.4	238.9	253.0
87.5°	14.1	28.3	50.9	77.8	104.6	131.5	158.3	179.5	200.7	217.7	230.4
90°	0.0	17.0	38.2	65.0	91.9	118.7	144.2	166.8	186.6	202.2	216.3
92.5°	1.4	11.3	29.7	52.3	77.8	103.2	127.2	149.8	169.6	185.2	197.9
95°	1.4	8.5	24.0	45.2	67.9	91.9	114.5	135.7	154.1	169.6	182.4
97.5°	1.4	5.7	19.8	39.6	59.4	83.4	104.6	124.4	141.4	156.9	166.8
100°	1.4	5.7	17.0	33.9	53.7	74.9	94.7	114.5	130.1	142.8	154.1
102.5°	1.4	4.2	14.1	29.7	48.1	66.4	86.2	104.6	118.7	131.5	142.8
105°	1.4	4.2	12.7	25.4	42.4	60.8	77.8	94.7	110.3	121.6	131.5
107.5°	1.4	2.8	11.3	21.2	36.8	55.1	72.1	86.2	100.4	111.7	121.6
110°	1.4	2.8	9.9	19.8	32.5	49.5	65.0	79.2	91.9	103.2	111.7

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.4	2.8	8.5	18.4	29.7	43.8	59.4	72.1	84.8	94.7	103.2
115°	1.4	2.8	8.5	17.0	26.9	38.2	52.3	66.4	76.3	87.6	94.7
117.5°	1.4	2.8	7.1	14.1	25.4	35.3	48.1	59.4	70.7	80.6	87.6
120°	1.4	2.8	7.1	12.7	22.6	32.5	42.4	53.7	65.0	72.1	79.2
122.5°	1.4	2.8	5.7	12.7	19.8	29.7	38.2	48.1	58.0	66.4	73.5
125°	1.4	2.8	5.7	11.3	18.4	26.9	35.3	42.4	52.3	59.4	66.4
127.5°	1.4	2.8	5.7	9.9	17.0	24.0	32.5	39.6	46.7	53.7	59.4
130°	1.4	2.8	4.2	8.5	15.6	21.2	28.3	36.8	42.4	48.1	53.7
132.5°	1.4	2.8	4.2	8.5	12.7	18.4	25.4	32.5	38.2	43.8	48.1
135°	1.4	2.8	4.2	7.1	11.3	17.0	21.2	28.3	33.9	39.6	43.8
137.5°	1.4	2.8	4.2	7.1	9.9	14.1	18.4	24.0	29.7	33.9	39.6
140°	1.4	2.8	4.2	5.7	8.5	12.7	17.0	19.8	25.4	29.7	33.9
142.5°	1.4	2.8	4.2	5.7	8.5	11.3	14.1	17.0	21.2	25.4	29.7
145°	1.4	2.8	4.2	5.7	7.1	9.9	12.7	15.6	17.0	21.2	24.0
147.5°	1.4	2.8	4.2	5.7	5.7	8.5	11.3	12.7	15.6	17.0	19.8
150°	1.4	2.8	4.2	4.2	5.7	7.1	9.9	11.3	12.7	15.6	17.0
152.5°	1.4	2.8	4.2	4.2	5.7	7.1	8.5	9.9	11.3	12.7	14.1
155°	1.4	2.8	4.2	4.2	4.2	5.7	7.1	8.5	9.9	11.3	12.7
157.5°	2.8	2.8	2.8	4.2	4.2	5.7	5.7	7.1	8.5	8.5	9.9
160°	2.8	2.8	2.8	4.2	4.2	4.2	5.7	5.7	7.1	7.1	8.5
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2554.5	2558.7	2571.4	2571.4	2568.6	2565.8	2565.8	2561.5	2564.3	2570.0	2567.2
5°	2554.5	2558.7	2571.4	2571.4	2568.6	2565.8	2564.3	2560.1	2564.3	2570.0	2567.2
7.5°	2546.0	2551.6	2564.3	2564.3	2561.5	2560.1	2557.3	2554.5	2558.7	2564.3	2561.5
10°	2534.7	2540.3	2553.0	2553.0	2550.2	2550.2	2546.0	2543.1	2548.8	2553.0	2551.6
12.5°	2517.7	2524.8	2536.1	2534.7	2531.8	2533.2	2529.0	2523.4	2529.0	2533.2	2534.7
15°	2493.7	2502.1	2513.5	2510.6	2506.4	2509.2	2502.1	2497.9	2502.1	2510.6	2509.2
17.5°	2462.6	2468.2	2476.7	2476.7	2472.5	2469.6	2466.8	2462.6	2465.4	2471.0	2472.5
20°	2418.7	2425.8	2430.1	2425.8	2424.4	2420.2	2414.5	2410.3	2415.9	2424.4	2425.8
22.5°	2360.8	2362.2	2372.1	2362.2	2355.1	2353.7	2348.1	2339.6	2348.1	2355.1	2356.5
25°	2288.7	2295.8	2291.5	2274.6	2274.6	2263.2	2260.4	2256.2	2257.6	2270.3	2276.0
27.5°	2196.8	2199.6	2188.3	2174.2	2161.5	2154.4	2144.5	2145.9	2145.9	2162.9	2168.5
30°	2096.4	2080.9	2071.0	2048.4	2038.5	2021.5	2018.7	2018.7	2015.9	2024.3	2049.8
32.5°	1976.3	1955.1	1939.5	1918.3	1901.3	1884.4	1875.9	1880.1	1878.7	1899.9	1908.4
35°	1844.8	1832.1	1799.6	1772.7	1762.8	1737.4	1737.4	1724.6	1733.1	1757.2	1767.1
37.5°	1706.3	1686.5	1659.6	1629.9	1622.9	1603.1	1596.0	1588.9	1607.3	1611.6	1621.4
40°	1564.9	1546.5	1521.1	1492.8	1492.8	1468.8	1468.8	1468.8	1470.2	1478.7	1497.0
42.5°	1430.6	1410.8	1388.2	1368.4	1365.6	1347.2	1347.2	1345.8	1348.6	1355.7	1372.6
45°	1300.6	1285.0	1261.0	1251.1	1252.5	1232.7	1236.9	1232.7	1238.4	1245.4	1251.1
47.5°	1180.4	1170.5	1160.6	1146.5	1142.2	1140.8	1133.7	1128.1	1138.0	1138.0	1146.5
50°	1068.7	1063.1	1057.4	1048.9	1050.3	1044.7	1036.2	1036.2	1043.3	1044.7	1050.3
52.5°	971.2	964.1	957.0	958.4	959.9	957.0	952.8	948.6	952.8	955.6	962.7
55°	873.6	868.0	875.0	872.2	875.0	872.2	869.4	866.6	873.6	869.4	876.5
57.5°	786.0	791.6	794.5	788.8	793.1	790.2	791.6	787.4	793.1	795.9	794.5
60°	705.4	713.9	709.6	711.1	716.7	713.9	708.2	712.5	718.1	719.5	718.1
62.5°	631.9	641.8	646.0	643.2	644.6	641.8	646.0	640.4	647.4	650.3	646.0
65°	565.5	576.8	579.6	579.6	579.6	576.8	581.0	582.4	585.2	585.2	582.4
67.5°	508.9	518.8	521.6	524.5	521.6	518.8	518.8	520.2	525.9	528.7	525.9
70°	458.0	467.9	469.3	469.3	470.7	473.6	467.9	470.7	475.0	476.4	475.0
72.5°	414.2	424.1	426.9	425.5	426.9	428.3	428.3	425.5	429.7	432.6	432.6
75°	378.9	384.5	387.3	387.3	388.8	390.2	390.2	388.8	391.6	393.0	394.4
77.5°	346.3	350.6	354.8	354.8	356.2	354.8	357.7	357.7	359.1	360.5	361.9
80°	313.8	319.5	322.3	323.7	326.6	328.0	328.0	328.0	329.4	330.8	330.8
82.5°	288.4	292.6	296.9	301.1	301.1	302.5	302.5	302.5	303.9	303.9	305.3
85°	262.9	268.6	272.8	275.7	277.1	278.5	278.5	279.9	279.9	279.9	281.3
87.5°	240.3	247.4	250.2	253.0	254.5	257.3	257.3	257.3	258.7	258.7	258.7
90°	224.8	231.8	234.7	237.5	238.9	240.3	240.3	241.7	241.7	243.1	243.1
92.5°	206.4	213.5	219.1	219.1	220.5	223.4	221.9	221.9	223.4	224.8	224.8
95°	192.3	197.9	202.2	203.6	205.0	205.0	205.0	206.4	205.0	206.4	206.4
97.5°	175.3	180.9	185.2	188.0	189.4	189.4	189.4	190.8	189.4	190.8	190.8
100°	161.2	166.8	171.1	172.5	175.3	175.3	175.3	175.3	175.3	175.3	176.7
102.5°	149.8	155.5	158.3	159.7	161.2	162.6	162.6	162.6	162.6	164.0	164.0
105°	138.5	144.2	147.0	148.4	149.8	151.3	151.3	151.3	152.7	152.7	151.3
107.5°	128.6	132.9	135.7	138.5	140.0	140.0	141.4	141.4	141.4	141.4	141.4
110°	118.7	123.0	127.2	130.1	130.1	131.5	131.5	132.9	132.9	131.5	132.9

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	108.9	114.5	117.3	120.2	121.6	123.0	123.0	123.0	123.0	123.0	123.0
115°	100.4	106.0	108.9	111.7	113.1	114.5	114.5	114.5	114.5	114.5	114.5
117.5°	93.3	99.0	101.8	103.2	104.6	106.0	107.4	107.4	107.4	107.4	106.0
120°	86.2	90.5	93.3	96.1	97.5	99.0	99.0	99.0	99.0	99.0	99.0
122.5°	79.2	83.4	86.2	89.1	90.5	91.9	91.9	91.9	91.9	91.9	91.9
125°	72.1	76.3	79.2	82.0	83.4	84.8	84.8	84.8	84.8	84.8	84.8
127.5°	65.0	69.3	73.5	74.9	76.3	77.8	77.8	77.8	79.2	77.8	77.8
130°	58.0	62.2	66.4	67.9	69.3	70.7	72.1	72.1	72.1	72.1	70.7
132.5°	52.3	56.5	59.4	60.8	63.6	63.6	65.0	65.0	65.0	65.0	63.6
135°	48.1	50.9	53.7	55.1	58.0	58.0	58.0	59.4	59.4	58.0	56.5
137.5°	42.4	45.2	48.1	49.5	50.9	52.3	52.3	53.7	52.3	52.3	52.3
140°	39.6	41.0	43.8	45.2	46.7	46.7	46.7	48.1	48.1	46.7	46.7
142.5°	33.9	36.8	39.6	41.0	42.4	42.4	42.4	42.4	42.4	42.4	42.4
145°	28.3	32.5	33.9	36.8	36.8	38.2	38.2	38.2	38.2	38.2	36.8
147.5°	24.0	26.9	31.1	32.5	32.5	33.9	33.9	33.9	33.9	33.9	32.5
150°	18.4	21.2	25.4	28.3	28.3	29.7	29.7	29.7	29.7	28.3	28.3
152.5°	15.6	18.4	19.8	22.6	24.0	24.0	24.0	25.4	24.0	24.0	24.0
155°	14.1	15.6	17.0	18.4	19.8	21.2	21.2	21.2	21.2	19.8	19.8
157.5°	11.3	12.7	14.1	15.6	17.0	18.4	18.4	18.4	18.4	18.4	17.0
160°	8.5	9.9	11.3	11.3	12.7	14.1	15.6	14.1	14.1	14.1	14.1
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2564.3	2562.9	2567.2	2560.1	2538.9	2544.6	2541.7	2554.5	2557.3	2560.1	2572.8
5°	2564.3	2562.9	2565.8	2560.1	2537.5	2541.7	2538.9	2551.6	2554.5	2555.9	2568.6
7.5°	2558.7	2557.3	2561.5	2554.5	2530.4	2536.1	2531.8	2544.6	2546.0	2547.4	2558.7
10°	2547.4	2546.0	2548.8	2543.1	2519.1	2524.8	2519.1	2531.8	2531.8	2534.7	2543.1
12.5°	2530.4	2527.6	2533.2	2526.2	2499.3	2506.4	2503.6	2512.0	2513.5	2514.9	2523.4
15°	2506.4	2503.6	2507.8	2503.6	2479.5	2480.9	2476.7	2489.4	2490.8	2488.0	2496.5
17.5°	2471.0	2468.2	2476.7	2473.9	2449.8	2455.5	2454.1	2456.9	2461.2	2454.1	2465.4
20°	2427.2	2430.1	2432.9	2434.3	2415.9	2415.9	2414.5	2420.2	2424.4	2418.7	2427.2
22.5°	2362.2	2369.3	2377.7	2380.6	2367.9	2366.4	2374.9	2372.1	2376.3	2373.5	2379.2
25°	2280.2	2294.3	2302.8	2311.3	2304.2	2307.1	2319.8	2322.6	2322.6	2321.2	2326.9
27.5°	2178.4	2196.8	2212.4	2230.7	2223.7	2229.3	2250.5	2253.3	2259.0	2253.3	2264.7
30°	2056.9	2073.8	2103.5	2130.4	2133.2	2141.7	2171.4	2174.2	2189.7	2184.1	2188.3
32.5°	1935.3	1943.8	1977.7	2004.5	2021.5	2042.7	2075.2	2080.9	2102.1	2106.3	2106.3
35°	1782.6	1806.6	1837.7	1875.9	1897.1	1919.7	1963.5	1972.0	2003.1	2013.0	2024.3
37.5°	1654.0	1676.6	1696.4	1736.0	1774.1	1799.6	1834.9	1856.1	1888.6	1907.0	1921.1
40°	1516.8	1535.2	1556.4	1596.0	1628.5	1666.7	1702.0	1727.5	1768.5	1789.7	1808.0
42.5°	1386.8	1400.9	1423.5	1451.8	1485.7	1528.1	1562.1	1591.8	1635.6	1665.3	1686.5
45°	1270.9	1279.3	1299.1	1320.3	1350.0	1393.9	1426.4	1464.5	1499.9	1531.0	1556.4
47.5°	1162.0	1173.3	1183.2	1197.4	1224.2	1251.1	1289.2	1326.0	1361.3	1395.3	1420.7
50°	1061.6	1061.6	1077.2	1087.1	1105.5	1129.5	1159.2	1184.6	1228.5	1252.5	1285.0
52.5°	964.1	969.8	978.2	983.9	998.0	1013.6	1037.6	1058.8	1095.6	1118.2	1149.3
55°	877.9	883.5	887.8	890.6	899.1	917.5	925.9	942.9	968.3	986.7	1013.6
57.5°	795.9	798.7	802.9	804.4	805.8	817.1	824.2	828.4	853.8	872.2	894.8
60°	721.0	721.0	725.2	723.8	722.4	728.0	726.6	730.9	746.4	757.7	767.6
62.5°	650.3	650.3	651.7	648.9	647.4	647.4	641.8	646.0	650.3	651.7	658.8
65°	585.2	592.3	586.7	588.1	579.6	576.8	573.9	565.5	564.0	558.4	561.2
67.5°	527.3	532.9	527.3	527.3	520.2	514.6	507.5	493.4	489.1	477.8	475.0
70°	480.6	476.4	479.2	475.0	466.5	459.4	449.5	438.2	424.1	410.0	400.1
72.5°	435.4	435.4	432.6	428.3	424.1	410.0	398.6	385.9	369.0	350.6	336.4
75°	391.6	393.0	393.0	388.8	381.7	369.0	356.2	337.9	319.5	298.3	279.9
77.5°	360.5	360.5	360.5	353.4	346.3	335.0	319.5	299.7	279.9	254.5	233.3
80°	330.8	329.4	329.4	320.9	313.8	301.1	285.6	265.8	244.6	217.7	193.7
82.5°	306.8	305.3	302.5	295.5	285.6	272.8	257.3	236.1	213.5	189.4	159.7
85°	281.3	279.9	277.1	270.0	260.1	248.8	231.8	210.6	188.0	161.2	132.9
87.5°	258.7	257.3	253.0	248.8	237.5	224.8	207.8	188.0	164.0	138.5	110.3
90°	243.1	240.3	237.5	231.8	221.9	207.8	190.8	169.6	145.6	120.2	91.9
92.5°	224.8	223.4	219.1	213.5	205.0	190.8	173.9	154.1	130.1	106.0	79.2
95°	206.4	205.0	202.2	196.5	188.0	175.3	159.7	140.0	117.3	93.3	69.3
97.5°	189.4	189.4	185.2	180.9	171.1	161.2	145.6	127.2	106.0	84.8	62.2
100°	175.3	175.3	171.1	165.4	158.3	148.4	132.9	115.9	96.1	76.3	53.7
102.5°	162.6	161.2	158.3	152.7	145.6	135.7	121.6	106.0	87.6	67.9	48.1
105°	151.3	149.8	147.0	141.4	135.7	124.4	113.1	97.5	79.2	60.8	42.4
107.5°	140.0	138.5	137.1	131.5	124.4	114.5	103.2	87.6	72.1	55.1	38.2
110°	130.1	128.6	125.8	120.2	113.1	104.6	93.3	80.6	65.0	49.5	33.9

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	121.6	120.2	117.3	111.7	106.0	96.1	86.2	72.1	59.4	45.2	29.7
115°	113.1	111.7	108.9	103.2	96.1	87.6	77.8	66.4	52.3	39.6	26.9
117.5°	104.6	103.2	100.4	96.1	89.1	80.6	70.7	59.4	46.7	36.8	24.0
120°	97.5	94.7	91.9	87.6	80.6	73.5	63.6	53.7	42.4	32.5	21.2
122.5°	90.5	87.6	84.8	80.6	73.5	66.4	56.5	48.1	39.6	29.7	19.8
125°	82.0	80.6	77.8	73.5	66.4	59.4	52.3	43.8	35.3	26.9	17.0
127.5°	74.9	73.5	70.7	65.0	59.4	53.7	46.7	39.6	31.1	22.6	15.6
130°	69.3	66.4	63.6	59.4	55.1	49.5	42.4	35.3	28.3	19.8	14.1
132.5°	62.2	59.4	56.5	53.7	49.5	43.8	38.2	31.1	25.4	18.4	12.7
135°	56.5	53.7	50.9	48.1	43.8	39.6	33.9	28.3	22.6	17.0	11.3
137.5°	49.5	48.1	46.7	43.8	39.6	35.3	31.1	24.0	19.8	15.6	9.9
140°	45.2	43.8	42.4	38.2	35.3	31.1	26.9	21.2	17.0	12.7	8.5
142.5°	41.0	39.6	36.8	33.9	31.1	28.3	22.6	19.8	15.6	11.3	8.5
145°	35.3	33.9	32.5	29.7	26.9	22.6	19.8	17.0	14.1	9.9	7.1
147.5°	32.5	31.1	28.3	25.4	22.6	19.8	18.4	15.6	11.3	8.5	5.7
150°	26.9	25.4	24.0	21.2	19.8	18.4	15.6	12.7	9.9	7.1	5.7
152.5°	22.6	21.2	19.8	19.8	17.0	15.6	12.7	11.3	8.5	7.1	4.2
155°	19.8	19.8	18.4	17.0	14.1	12.7	11.3	8.5	7.1	5.7	4.2
157.5°	17.0	15.6	14.1	14.1	12.7	11.3	8.5	7.1	5.7	5.7	4.2
160°	14.1	12.7	12.7	11.3	9.9	8.5	7.1	7.1	5.7	4.2	4.2
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2574.2	2558.7	2572.8	2591.2	2591.2	2588.4	2585.6	2591.2	2605.3	2599.7	2582.7
5°	2570.0	2554.5	2567.2	2585.6	2585.6	2581.3	2578.5	2582.7	2598.3	2591.2	2575.7
7.5°	2561.5	2547.4	2555.9	2572.8	2572.8	2568.6	2565.8	2571.4	2584.1	2577.1	2560.1
10°	2546.0	2530.4	2540.3	2555.9	2554.5	2551.6	2547.4	2554.5	2565.8	2555.9	2536.1
12.5°	2526.2	2510.6	2519.1	2533.2	2531.8	2526.2	2523.4	2527.6	2537.5	2531.8	2510.6
15°	2499.3	2483.8	2490.8	2505.0	2500.7	2496.5	2490.8	2492.3	2505.0	2495.1	2472.5
17.5°	2466.8	2449.8	2455.5	2468.2	2464.0	2459.7	2452.7	2454.1	2468.2	2454.1	2430.1
20°	2427.2	2408.8	2413.1	2428.6	2421.6	2414.5	2407.4	2407.4	2421.6	2406.0	2379.2
22.5°	2384.8	2366.4	2369.3	2380.6	2374.9	2362.2	2355.1	2359.4	2366.4	2346.6	2318.4
25°	2332.5	2308.5	2312.7	2324.0	2319.8	2302.8	2295.8	2298.6	2295.8	2280.2	2250.5
27.5°	2271.7	2246.3	2249.1	2256.2	2250.5	2235.0	2226.5	2227.9	2222.2	2202.5	2168.5
30°	2195.4	2182.7	2181.3	2185.5	2177.0	2161.5	2151.6	2148.7	2147.3	2119.1	2078.1
32.5°	2117.6	2106.3	2099.3	2104.9	2095.0	2079.5	2062.5	2062.5	2048.4	2021.5	1986.2
35°	2038.5	2020.1	2013.0	2017.3	2006.0	1986.2	1972.0	1965.0	1943.8	1909.8	1871.7
37.5°	1936.7	1924.0	1915.5	1919.7	1907.0	1892.9	1866.0	1858.9	1836.3	1789.7	1741.6
40°	1826.4	1816.5	1808.0	1812.3	1798.2	1776.9	1752.9	1741.6	1716.2	1663.9	1625.7
42.5°	1707.7	1703.4	1693.5	1709.1	1680.8	1659.6	1635.6	1617.2	1591.8	1535.2	1491.4
45°	1581.9	1591.8	1569.1	1573.4	1555.0	1536.6	1511.2	1484.3	1458.9	1405.2	1355.7
47.5°	1449.0	1456.1	1440.5	1443.3	1423.5	1406.6	1384.0	1350.0	1321.8	1275.1	1231.3
50°	1311.9	1309.0	1309.0	1306.2	1290.7	1269.5	1246.8	1215.7	1187.5	1145.1	1108.3
52.5°	1166.3	1171.9	1174.7	1181.8	1162.0	1149.3	1114.0	1087.1	1065.9	1022.1	991.0
55°	1026.3	1046.1	1040.4	1043.3	1020.7	1010.8	982.5	961.3	930.2	904.7	884.9
57.5°	899.1	903.3	906.1	910.4	900.5	880.7	858.1	841.1	817.1	795.9	781.7
60°	776.1	776.1	777.5	784.6	774.7	757.7	740.7	728.0	711.1	698.3	689.9
62.5°	660.2	670.1	671.5	665.8	653.1	644.6	633.3	626.2	614.9	610.7	607.9
65°	552.7	552.7	552.7	555.6	548.5	542.8	535.8	534.4	538.6	532.9	535.8
67.5°	462.3	458.0	455.2	456.6	453.8	451.0	449.5	453.8	462.3	462.3	469.3
70°	384.5	376.0	370.4	370.4	370.4	371.8	376.0	384.5	398.6	404.3	414.2
72.5°	320.9	302.5	294.0	294.0	295.5	301.1	313.8	329.4	342.1	353.4	366.1
75°	260.1	241.7	229.0	227.6	230.4	238.9	257.3	271.4	292.6	308.2	323.7
77.5°	210.6	188.0	172.5	171.1	175.3	188.0	210.6	229.0	253.0	270.0	287.0
80°	168.2	142.8	130.1	121.6	128.6	144.2	169.6	192.3	214.9	237.5	258.7
82.5°	134.3	110.3	90.5	82.0	90.5	111.7	135.7	162.6	185.2	209.2	230.4
85°	106.0	80.6	58.0	49.5	59.4	82.0	108.9	135.7	161.2	185.2	206.4
87.5°	83.4	58.0	35.3	24.0	36.8	60.8	86.2	113.1	140.0	164.0	185.2
90°	65.0	41.0	19.8	2.8	21.2	43.8	69.3	94.7	121.6	145.6	166.8
92.5°	55.1	31.1	11.3	0.0	12.7	32.5	56.5	82.0	106.0	130.1	151.3
95°	46.7	25.4	8.5	0.0	8.5	25.4	46.7	69.3	93.3	117.3	138.5
97.5°	39.6	19.8	5.7	0.0	5.7	19.8	38.2	60.8	82.0	104.6	124.4
100°	33.9	17.0	4.2	0.0	4.2	15.6	32.5	52.3	73.5	94.7	113.1
102.5°	29.7	14.1	2.8	0.0	2.8	12.7	26.9	45.2	63.6	83.4	101.8
105°	25.4	11.3	2.8	0.0	1.4	9.9	22.6	39.6	56.5	74.9	91.9
107.5°	22.6	9.9	2.8	0.0	1.4	8.5	19.8	33.9	50.9	66.4	82.0
110°	19.8	8.5	2.8	0.0	1.4	5.7	17.0	29.7	43.8	59.4	74.9

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	17.0	7.1	1.4	0.0	0.0	4.2	14.1	25.4	38.2	53.7	66.4
115°	15.6	7.1	1.4	0.0	0.0	2.8	11.3	22.6	33.9	48.1	59.4
117.5°	14.1	5.7	1.4	0.0	1.4	2.8	9.9	19.8	29.7	41.0	53.7
120°	12.7	5.7	1.4	0.0	1.4	1.4	7.1	17.0	25.4	36.8	46.7
122.5°	11.3	5.7	1.4	0.0	1.4	1.4	5.7	14.1	22.6	32.5	41.0
125°	9.9	4.2	2.8	1.4	1.4	1.4	4.2	11.3	19.8	26.9	36.8
127.5°	9.9	4.2	2.8	1.4	1.4	1.4	2.8	9.9	15.6	24.0	32.5
130°	8.5	4.2	2.8	1.4	1.4	1.4	1.4	7.1	14.1	19.8	26.9
132.5°	7.1	4.2	2.8	1.4	1.4	1.4	1.4	4.2	9.9	17.0	22.6
135°	7.1	4.2	2.8	1.4	1.4	1.4	1.4	2.8	7.1	12.7	18.4
137.5°	5.7	2.8	2.8	1.4	1.4	1.4	1.4	1.4	5.7	9.9	14.1
140°	5.7	2.8	2.8	1.4	1.4	1.4	1.4	1.4	4.2	7.1	11.3
142.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	2.8	5.7	8.5
145°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	5.7
147.5°	4.2	4.2	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.2
150°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
152.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
155°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8
157.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
160°	4.2	2.8	2.8	1.4	2.8	1.4	2.8	2.8	2.8	2.8	2.8
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2577.1	2550.2	2564.3	2560.1	2565.8	2577.1	2575.7	2572.8	2572.8	2568.6	2562.9
5°	2568.6	2543.1	2555.9	2548.8	2555.9	2565.8	2564.3	2560.1	2562.9	2555.9	2548.8
7.5°	2551.6	2529.0	2540.3	2534.7	2540.3	2550.2	2546.0	2544.6	2547.4	2536.1	2531.8
10°	2531.8	2506.4	2519.1	2512.0	2519.1	2526.2	2523.4	2517.7	2523.4	2512.0	2507.8
12.5°	2500.7	2479.5	2488.0	2485.2	2489.4	2496.5	2490.8	2486.6	2489.4	2479.5	2471.0
15°	2466.8	2445.6	2452.7	2448.4	2451.3	2459.7	2449.8	2448.4	2445.6	2435.7	2432.9
17.5°	2423.0	2403.2	2410.3	2403.2	2407.4	2404.6	2403.2	2396.1	2396.1	2384.8	2376.3
20°	2369.3	2352.3	2348.1	2342.4	2348.1	2342.4	2333.9	2328.3	2326.9	2315.5	2308.5
22.5°	2307.1	2287.3	2290.1	2274.6	2276.0	2267.5	2253.3	2247.7	2242.0	2229.3	2219.4
25°	2232.1	2212.4	2198.2	2188.3	2175.6	2174.2	2155.8	2141.7	2140.3	2124.7	2123.3
27.5°	2147.3	2124.7	2113.4	2089.4	2073.8	2061.1	2045.5	2031.4	2024.3	2007.4	1996.1
30°	2049.8	2024.3	1996.1	1979.1	1955.1	1945.2	1918.3	1901.3	1895.7	1877.3	1868.8
32.5°	1939.5	1912.7	1890.0	1857.5	1830.7	1816.5	1789.7	1772.7	1765.6	1745.8	1734.5
35°	1819.4	1789.7	1762.8	1731.7	1710.5	1686.5	1654.0	1637.0	1621.4	1614.4	1605.9
37.5°	1693.5	1661.0	1629.9	1598.8	1580.5	1552.2	1523.9	1512.6	1494.2	1487.2	1478.7
40°	1563.5	1531.0	1501.3	1471.6	1450.4	1425.0	1399.5	1395.3	1375.5	1368.4	1362.8
42.5°	1434.8	1400.9	1367.0	1345.8	1330.2	1304.8	1287.8	1283.6	1266.6	1262.4	1262.4
45°	1318.9	1276.5	1248.2	1229.9	1217.1	1195.9	1181.8	1179.0	1164.8	1162.0	1162.0
47.5°	1194.5	1154.9	1133.7	1122.4	1111.1	1095.6	1087.1	1087.1	1073.0	1070.1	1068.7
50°	1078.6	1041.9	1026.3	1015.0	1013.6	1002.3	995.2	992.4	992.4	982.5	983.9
52.5°	968.3	950.0	937.2	930.2	921.7	914.6	909.0	909.0	904.7	897.7	900.5
55°	866.6	845.4	846.8	841.1	836.9	832.6	834.0	825.6	824.2	818.5	822.7
57.5°	764.8	764.8	762.0	757.7	750.6	753.5	753.5	753.5	746.4	742.2	746.4
60°	678.5	682.8	675.7	680.0	677.1	678.5	675.7	675.7	671.5	670.1	671.5
62.5°	602.2	609.3	606.5	612.1	609.3	610.7	613.5	607.9	605.0	602.2	605.0
65°	534.4	542.8	541.4	545.7	547.1	548.5	549.9	547.1	544.3	541.4	540.0
67.5°	475.0	483.5	489.1	490.5	491.9	496.2	494.8	491.9	489.1	484.9	483.5
70°	421.3	432.6	439.6	442.5	448.1	445.3	445.3	443.9	441.1	436.8	435.4
72.5°	376.0	388.8	395.8	398.6	404.3	404.3	402.9	401.5	398.6	394.4	393.0
75°	336.4	347.8	357.7	363.3	367.5	367.5	366.1	364.7	361.9	359.1	357.7
77.5°	305.3	315.2	323.7	330.8	333.6	335.0	333.6	330.8	330.8	329.4	328.0
80°	274.2	285.6	294.0	301.1	305.3	305.3	303.9	305.3	302.5	301.1	299.7
82.5°	247.4	260.1	270.0	277.1	279.9	281.3	279.9	281.3	278.5	278.5	278.5
85°	223.4	236.1	247.4	253.0	257.3	258.7	258.7	258.7	257.3	257.3	257.3
87.5°	203.6	216.3	227.6	233.3	237.5	238.9	238.9	240.3	237.5	237.5	237.5
90°	185.2	197.9	209.2	214.9	219.1	221.9	221.9	223.4	221.9	220.5	220.5
92.5°	168.2	182.4	193.7	199.3	203.6	207.8	207.8	209.2	206.4	206.4	206.4
95°	154.1	168.2	178.1	185.2	189.4	192.3	193.7	193.7	192.3	192.3	192.3
97.5°	141.4	154.1	164.0	171.1	175.3	176.7	178.1	179.5	178.1	178.1	178.1
100°	128.6	141.4	151.3	156.9	162.6	164.0	165.4	166.8	166.8	165.4	165.4
102.5°	117.3	130.1	138.5	145.6	149.8	152.7	154.1	154.1	154.1	154.1	154.1
105°	106.0	118.7	127.2	134.3	138.5	141.4	142.8	144.2	144.2	142.8	142.8
107.5°	96.1	107.4	117.3	123.0	128.6	131.5	132.9	132.9	134.3	132.9	132.9
110°	86.2	99.0	107.4	113.1	118.7	121.6	123.0	124.4	124.4	124.4	124.4



TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	79.2	89.1	97.5	103.2	108.9	111.7	113.1	114.5	115.9	114.5	114.5
115°	70.7	80.6	89.1	94.7	99.0	101.8	104.6	106.0	106.0	107.4	106.0
117.5°	63.6	72.1	80.6	86.2	90.5	94.7	96.1	97.5	99.0	97.5	97.5
120°	56.5	65.0	72.1	77.8	82.0	86.2	87.6	89.1	90.5	89.1	89.1
122.5°	50.9	58.0	65.0	70.7	74.9	77.8	80.6	80.6	82.0	82.0	82.0
125°	45.2	52.3	58.0	63.6	67.9	70.7	72.1	73.5	73.5	74.9	74.9
127.5°	39.6	45.2	52.3	56.5	60.8	63.6	65.0	66.4	66.4	67.9	67.9
130°	33.9	39.6	45.2	49.5	53.7	56.5	58.0	59.4	60.8	60.8	60.8
132.5°	29.7	35.3	39.6	43.8	46.7	49.5	52.3	53.7	53.7	53.7	53.7
135°	24.0	29.7	33.9	38.2	41.0	43.8	45.2	48.1	48.1	48.1	48.1
137.5°	19.8	25.4	29.7	32.5	35.3	38.2	39.6	41.0	42.4	42.4	42.4
140°	15.6	19.8	24.0	28.3	31.1	32.5	35.3	35.3	36.8	36.8	36.8
142.5°	11.3	15.6	18.4	22.6	25.4	28.3	29.7	31.1	31.1	31.1	31.1
145°	8.5	11.3	14.1	17.0	21.2	22.6	24.0	25.4	26.9	26.9	26.9
147.5°	5.7	8.5	9.9	12.7	15.6	18.4	19.8	21.2	22.6	22.6	22.6
150°	4.2	5.7	8.5	9.9	11.3	14.1	17.0	17.0	18.4	18.4	17.0
152.5°	2.8	4.2	5.7	7.1	8.5	9.9	12.7	12.7	14.1	14.1	14.1
155°	2.8	2.8	2.8	4.2	5.7	7.1	8.5	9.9	9.9	9.9	9.9
157.5°	2.8	2.8	2.8	2.8	2.8	4.2	5.7	7.1	7.1	7.1	7.1
160°	2.8	2.8	1.4	1.4	2.8	2.8	2.8	2.8	4.2	4.2	4.2
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2567.2	2570.0	2570.0	2567.2	2565.8	2571.4	2564.3	2537.5	2546.0	2548.8	2557.3
5°	2554.5	2557.3	2557.3	2557.3	2554.5	2560.1	2553.0	2526.2	2536.1	2540.3	2546.0
7.5°	2536.1	2537.5	2540.3	2538.9	2536.1	2544.6	2537.5	2510.6	2517.7	2524.8	2531.8
10°	2512.0	2512.0	2513.5	2516.3	2513.5	2520.5	2513.5	2489.4	2496.5	2500.7	2509.2
12.5°	2479.5	2482.4	2483.8	2482.4	2480.9	2486.6	2483.8	2461.2	2464.0	2472.5	2480.9
15°	2435.7	2435.7	2442.8	2439.9	2439.9	2445.6	2448.4	2423.0	2427.2	2439.9	2448.4
17.5°	2382.0	2383.4	2389.1	2391.9	2390.5	2400.4	2401.8	2382.0	2380.6	2396.1	2404.6
20°	2312.7	2315.5	2322.6	2328.3	2328.3	2339.6	2343.8	2331.1	2332.5	2349.5	2352.3
22.5°	2227.9	2227.9	2240.6	2249.1	2256.2	2263.2	2276.0	2264.7	2264.7	2287.3	2300.0
25°	2123.3	2133.2	2137.4	2154.4	2164.3	2184.1	2195.4	2196.8	2198.2	2219.4	2227.9
27.5°	2007.4	2010.2	2022.9	2042.7	2054.0	2072.4	2093.6	2097.8	2104.9	2133.2	2145.9
30°	1875.9	1884.4	1890.0	1918.3	1933.9	1957.9	1984.8	1994.6	2000.3	2038.5	2054.0
32.5°	1741.6	1744.4	1768.5	1784.0	1802.4	1827.8	1858.9	1877.3	1888.6	1928.2	1950.8
35°	1607.3	1613.0	1632.8	1652.5	1670.9	1696.4	1728.9	1754.3	1774.1	1809.5	1839.1
37.5°	1484.3	1498.5	1502.7	1522.5	1536.6	1562.1	1584.7	1621.4	1641.2	1678.0	1716.2
40°	1374.1	1378.3	1381.1	1400.9	1410.8	1434.8	1467.4	1491.4	1518.3	1545.1	1590.3
42.5°	1265.2	1268.0	1272.3	1283.6	1294.9	1311.9	1335.9	1359.9	1388.2	1427.8	1457.5
45°	1164.8	1167.7	1170.5	1177.6	1187.5	1203.0	1218.6	1235.5	1263.8	1297.7	1328.8
47.5°	1071.5	1077.2	1077.2	1078.6	1085.7	1098.4	1109.7	1130.9	1146.5	1164.8	1200.2
50°	982.5	986.7	988.1	988.1	992.4	1000.9	1003.7	1017.8	1032.0	1048.9	1074.4
52.5°	899.1	899.1	897.7	903.3	903.3	909.0	910.4	918.9	928.8	947.1	958.4
55°	819.9	819.9	824.2	821.3	821.3	824.2	822.7	824.2	832.6	843.9	853.8
57.5°	743.6	742.2	746.4	743.6	742.2	745.0	747.8	742.2	743.6	754.9	754.9
60°	667.2	668.7	672.9	670.1	670.1	670.1	667.2	664.4	661.6	668.7	671.5
62.5°	606.5	602.2	606.5	602.2	605.0	603.6	600.8	595.1	596.6	593.7	590.9
65°	542.8	542.8	544.3	540.0	542.8	542.8	538.6	537.2	528.7	525.9	518.8
67.5°	487.7	487.7	489.1	486.3	486.3	487.7	483.5	479.2	470.7	466.5	456.6
70°	439.6	439.6	439.6	438.2	438.2	438.2	435.4	429.7	421.3	414.2	401.5
72.5°	395.8	397.2	395.8	395.8	400.1	395.8	391.6	385.9	378.9	364.7	353.4
75°	360.5	361.9	360.5	360.5	360.5	359.1	357.7	349.2	340.7	329.4	312.4
77.5°	329.4	329.4	330.8	329.4	329.4	328.0	323.7	316.7	306.8	296.9	277.1
80°	299.7	301.1	302.5	303.9	301.1	299.7	295.5	289.8	277.1	265.8	246.0
82.5°	278.5	277.1	278.5	279.9	277.1	275.7	271.4	264.4	254.5	238.9	219.1
85°	257.3	255.9	255.9	257.3	255.9	253.0	248.8	241.7	231.8	216.3	196.5
87.5°	236.1	237.5	238.9	237.5	236.1	233.3	229.0	221.9	210.6	197.9	176.7
90°	220.5	220.5	220.5	220.5	219.1	216.3	212.0	203.6	193.7	178.1	159.7
92.5°	206.4	206.4	206.4	206.4	205.0	200.7	196.5	189.4	178.1	162.6	145.6
95°	192.3	193.7	192.3	192.3	189.4	188.0	180.9	173.9	164.0	148.4	130.1
97.5°	176.7	178.1	176.7	176.7	175.3	172.5	168.2	159.7	149.8	135.7	118.7
100°	165.4	165.4	164.0	164.0	162.6	159.7	154.1	147.0	137.1	123.0	106.0
102.5°	152.7	154.1	152.7	152.7	149.8	147.0	142.8	135.7	125.8	111.7	96.1
105°	142.8	142.8	141.4	141.4	138.5	135.7	131.5	123.0	114.5	101.8	86.2
107.5°	132.9	132.9	131.5	131.5	128.6	125.8	120.2	113.1	104.6	91.9	77.8
110°	123.0	123.0	123.0	121.6	118.7	114.5	110.3	103.2	94.7	83.4	69.3

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	115.9	114.5	113.1	111.7	108.9	106.0	100.4	93.3	84.8	74.9	62.2
115°	106.0	106.0	104.6	103.2	100.4	96.1	91.9	86.2	77.8	66.4	55.1
117.5°	97.5	97.5	96.1	94.7	91.9	87.6	83.4	77.8	69.3	59.4	49.5
120°	89.1	89.1	87.6	86.2	83.4	79.2	76.3	69.3	62.2	52.3	43.8
122.5°	82.0	80.6	80.6	77.8	76.3	72.1	67.9	62.2	55.1	46.7	38.2
125°	73.5	73.5	72.1	70.7	69.3	65.0	60.8	55.1	48.1	41.0	33.9
127.5°	66.4	66.4	65.0	63.6	62.2	58.0	53.7	49.5	42.4	35.3	28.3
130°	59.4	59.4	58.0	56.5	55.1	50.9	48.1	42.4	36.8	31.1	24.0
132.5°	53.7	53.7	52.3	50.9	48.1	45.2	42.4	36.8	32.5	26.9	21.2
135°	48.1	46.7	46.7	45.2	42.4	39.6	36.8	32.5	26.9	22.6	17.0
137.5°	42.4	41.0	39.6	38.2	36.8	33.9	31.1	28.3	24.0	18.4	14.1
140°	36.8	35.3	35.3	33.9	31.1	29.7	26.9	22.6	19.8	15.6	11.3
142.5°	31.1	31.1	29.7	28.3	26.9	25.4	22.6	19.8	15.6	12.7	8.5
145°	26.9	25.4	25.4	24.0	22.6	19.8	18.4	15.6	12.7	9.9	7.1
147.5°	21.2	21.2	21.2	19.8	18.4	17.0	15.6	12.7	9.9	7.1	4.2
150°	17.0	17.0	17.0	15.6	14.1	12.7	11.3	9.9	7.1	4.2	2.8
152.5°	14.1	14.1	12.7	12.7	11.3	9.9	8.5	7.1	4.2	2.8	2.8
155°	9.9	9.9	9.9	8.5	8.5	7.1	5.7	4.2	2.8	2.8	2.8
157.5°	7.1	7.1	7.1	5.7	5.7	4.2	4.2	2.8	2.8	2.8	2.8
160°	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2553.0	2551.6	2562.9	2562.9	2550.2	2570.0	2591.2
5°	2544.6	2543.1	2554.5	2554.5	2543.1	2562.9	2585.6
7.5°	2527.6	2529.0	2540.3	2543.1	2529.0	2547.4	2571.4
10°	2509.2	2507.8	2520.5	2523.4	2512.0	2529.0	2551.6
12.5°	2479.5	2479.5	2492.3	2496.5	2485.2	2505.0	2526.2
15°	2448.4	2448.4	2456.9	2464.0	2454.1	2472.5	2493.7
17.5°	2408.8	2407.4	2415.9	2424.4	2414.5	2434.3	2456.9
20°	2358.0	2358.0	2367.9	2377.7	2370.7	2389.1	2414.5
22.5°	2304.2	2298.6	2315.5	2322.6	2318.4	2336.8	2362.2
25°	2236.4	2235.0	2251.9	2261.8	2256.2	2276.0	2298.6
27.5°	2162.9	2161.5	2178.4	2191.1	2188.3	2206.7	2232.1
30°	2073.8	2080.9	2096.4	2117.6	2110.6	2130.4	2157.2
32.5°	1980.5	1987.6	2006.0	2028.6	2030.0	2045.5	2072.4
35°	1868.8	1887.2	1899.9	1929.6	1935.3	1950.8	1979.1
37.5°	1751.5	1772.7	1799.6	1822.2	1833.5	1846.2	1878.7
40°	1620.0	1651.1	1680.8	1707.7	1721.8	1734.5	1765.6
42.5°	1501.3	1525.3	1553.6	1580.5	1605.9	1617.2	1649.7
45°	1367.0	1395.3	1420.7	1453.2	1478.7	1491.4	1523.9
47.5°	1235.5	1263.8	1297.7	1320.3	1347.2	1359.9	1391.0
50°	1109.7	1135.2	1163.4	1190.3	1212.9	1224.2	1251.1
52.5°	985.3	1012.2	1039.0	1056.0	1080.0	1088.5	1111.1
55°	875.0	893.4	917.5	927.3	951.4	957.0	972.6
57.5°	769.0	781.7	790.2	807.2	824.2	836.9	855.3
60°	672.9	678.5	684.2	694.1	708.2	712.5	719.5
62.5°	586.7	585.2	596.6	599.4	600.8	614.9	607.9
65°	510.3	511.7	501.8	497.6	503.3	507.5	504.7
67.5°	446.7	438.2	429.7	419.9	411.4	415.6	411.4
70°	384.5	377.4	363.3	349.2	343.5	335.0	330.8
72.5°	335.0	318.1	303.9	285.6	275.7	265.8	258.7
75°	296.9	272.8	253.0	233.3	219.1	205.0	202.2
77.5°	257.3	234.7	212.0	190.8	169.6	154.1	148.4
80°	226.2	205.0	178.1	152.7	130.1	110.3	103.2
82.5°	197.9	175.3	148.4	121.6	96.1	74.9	66.4
85°	173.9	149.8	123.0	96.1	70.7	48.1	36.8
87.5°	155.5	128.6	101.8	76.3	49.5	26.9	14.1
90°	138.5	113.1	87.6	60.8	35.3	14.1	0.0
92.5°	123.0	99.0	73.5	49.5	26.9	8.5	1.4
95°	108.9	87.6	62.2	39.6	19.8	5.7	1.4
97.5°	97.5	76.3	53.7	32.5	15.6	4.2	1.4
100°	87.6	66.4	46.7	26.9	12.7	2.8	1.4
102.5°	77.8	59.4	39.6	22.6	9.9	1.4	1.4
105°	69.3	52.3	33.9	19.8	8.5	1.4	1.4
107.5°	62.2	46.7	29.7	17.0	5.7	1.4	1.4
110°	55.1	39.6	25.4	14.1	4.2	1.4	1.4

TEST NUMBER: P1213870

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	49.5	35.3	22.6	11.3	2.8	1.4	1.4
115°	43.8	31.1	19.8	9.9	2.8	1.4	1.4
117.5°	38.2	26.9	17.0	7.1	1.4	1.4	1.4
120°	33.9	24.0	14.1	5.7	1.4	1.4	1.4
122.5°	29.7	19.8	11.3	4.2	1.4	1.4	1.4
125°	25.4	17.0	9.9	2.8	1.4	1.4	1.4
127.5°	21.2	14.1	7.1	2.8	1.4	1.4	1.4
130°	18.4	11.3	5.7	1.4	1.4	1.4	1.4
132.5°	15.6	8.5	4.2	1.4	1.4	1.4	1.4
135°	12.7	7.1	2.8	1.4	1.4	1.4	1.4
137.5°	9.9	5.7	2.8	1.4	1.4	1.4	1.4
140°	7.1	4.2	1.4	1.4	1.4	1.4	1.4
142.5°	5.7	2.8	1.4	1.4	1.4	1.4	1.4
145°	4.2	2.8	1.4	1.4	1.4	1.4	1.4
147.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4
150°	2.8	2.8	1.4	1.4	2.8	1.4	1.4
152.5°	2.8	1.4	1.4	1.4	2.8	1.4	1.4
155°	2.8	2.8	2.8	2.8	2.8	2.8	1.4
157.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8
160°	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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)