

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: P1214221

Luminaire Tested: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1214221
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-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

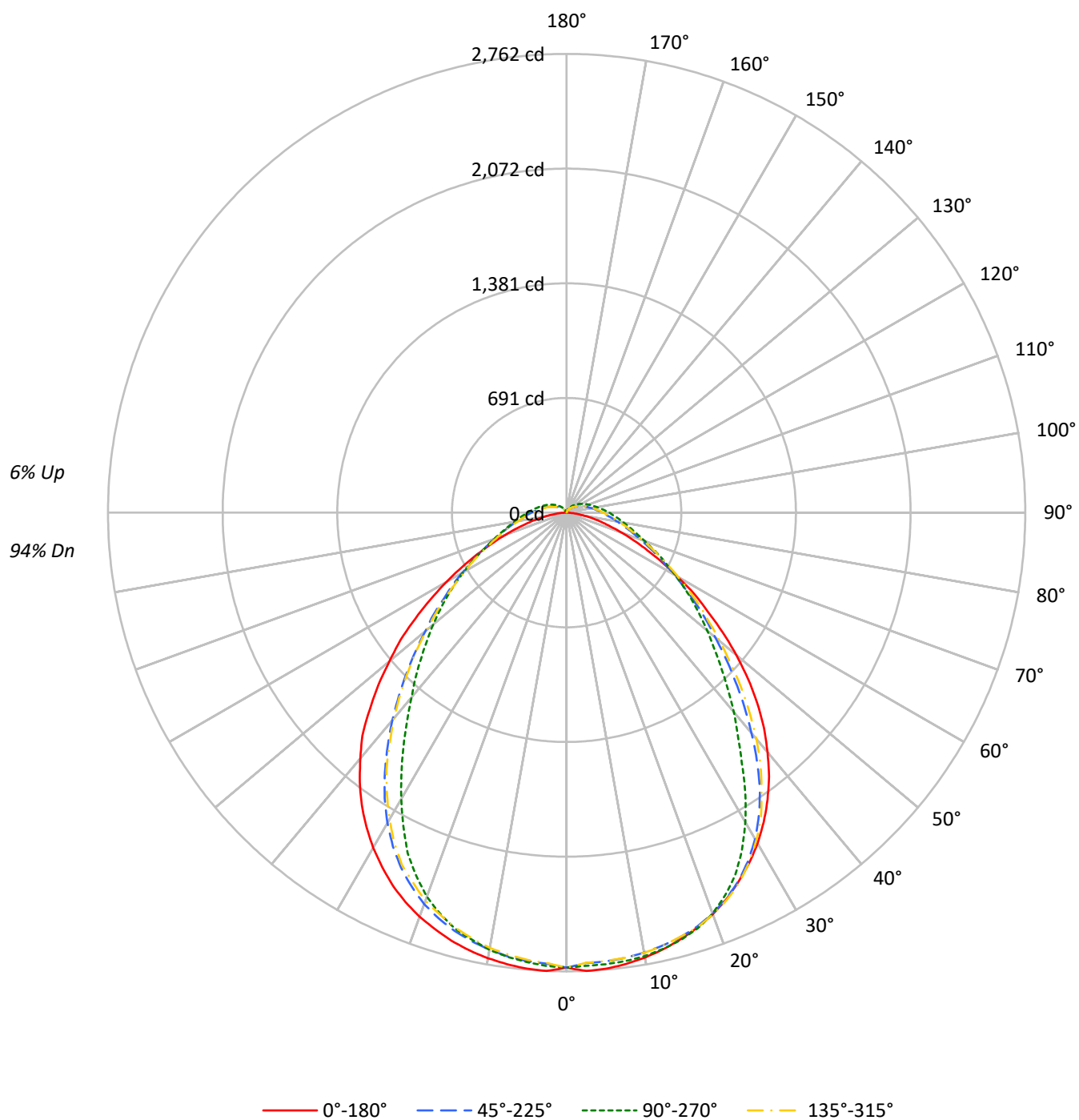
Lumens per Lamp: N/A
Luminaire Lumens: 6933.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	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
1	107	103	98	95	104	100	96	92	94	91	88	89	87	85	85	83	81
2	98	90	84	78	95	88	82	77	83	78	74	79	75	72	75	72	69
3	90	80	72	66	87	78	71	65	74	68	63	71	66	61	67	63	60
4	83	72	63	57	80	70	62	56	67	60	55	64	58	53	61	56	52
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	55	50	46
6	71	58	50	44	69	57	49	43	55	48	42	52	46	42	50	45	41
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	46	41	37
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33
9	58	45	37	32	56	44	37	31	42	36	31	41	35	30	40	34	30
10	54	42	34	29	53	41	34	29	39	33	28	38	32	28	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	22138	22138	22138	22138
5°	22296	21433	22296	21338
10°	22196	20864	22233	20574
15°	22053	20241	22154	19714
20°	21885	19438	22012	18618
25°	21533	18250	21771	17174
30°	21077	16502	21353	15278
35°	20366	14361	20759	13372
40°	19347	12560	19858	11653
45°	18002	10918	18587	10293
50°	16164	9594	16876	9110
55°	13982	8472	14999	8044
60°	11760	7439	12822	7011
65°	9641	6576	10612	6098
70°	7672	5837	8590	5398
75°	6026	5389	6783	4957
80°	4348	5200	5123	4752
85°	2678	5230	3600	4807

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 18587 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.7	3.7
10°-20°	744.7	10.7
20°-30°	1103.7	15.9
30°-40°	1226.2	17.7
40°-50°	1111.5	16.0
50°-60°	861.3	12.4
60°-70°	584.9	8.4
70°-80°	372.1	5.4
80°-90°	237.9	3.4
90°-100°	160.4	2.3
100°-110°	109.9	1.6
110°-120°	73.3	1.1
120°-130°	45.6	0.7
130°-140°	25.2	0.4
140°-150°	11.8	0.2
150°-160°	4.3	0.1
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-30°	2108.2	30.4
0°-40°	3334.4	48.1
0°-60°	5307.3	76.6
0°-90°	6502.2	93.8
90°-120°	343.6	5.0
90°-150°	426.2	6.1
90°-180°	431.0	6.2
0°-180°	6933.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2740	2740	2740	2740	2740	
5°	2756	2729	2756	2717	2756	262
15°	2658	2663	2670	2593	2658	750
25°	2450	2405	2477	2263	2450	1128
35°	2110	1838	2150	1712	2110	1316
45°	1624	1314	1677	1239	1624	1248
55°	1037	924	1112	877	1037	933
65°	538	621	592	576	538	539
75°	216	414	243	381	216	232
85°	39	298	53	274	39	47
90°	0	258	3	235	0	2
95°	2	220	0	205	2	1
105°	2	161	0	152	2	2
115°	2	122	0	113	2	1
125°	2	90	2	80	2	1
135°	2	63	2	51	2	1
145°	2	41	2	29	2	1
155°	2	23	2	10	2	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°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2762.1	2759.1	2756.1	2751.6	2756.1	2768.1	2760.6	2744.0	2741.0	2713.9	2726.0
5°	2756.1	2751.6	2748.6	2744.0	2750.1	2765.1	2757.6	2742.5	2738.0	2712.4	2726.0
7.5°	2741.0	2738.0	2733.5	2733.5	2739.5	2754.6	2748.6	2732.0	2729.0	2703.4	2718.4
10°	2719.9	2718.4	2715.4	2715.4	2721.4	2739.5	2732.0	2716.9	2713.9	2689.8	2706.4
12.5°	2692.8	2694.3	2689.8	2689.8	2698.8	2716.9	2710.9	2694.3	2691.3	2670.2	2686.8
15°	2658.1	2659.7	2656.6	2658.1	2667.2	2688.3	2680.7	2665.7	2662.7	2646.1	2659.7
17.5°	2619.0	2620.5	2620.5	2619.0	2629.5	2650.6	2644.6	2631.0	2626.5	2612.9	2629.5
20°	2573.8	2573.8	2573.8	2573.8	2585.8	2606.9	2599.4	2588.8	2579.8	2569.2	2582.8
22.5°	2518.0	2516.5	2518.0	2522.5	2534.6	2551.2	2546.6	2534.6	2521.0	2515.0	2525.5
25°	2450.2	2454.7	2456.2	2460.7	2475.8	2489.4	2484.9	2472.8	2451.7	2447.2	2450.2
27.5°	2379.4	2382.4	2386.9	2385.4	2406.5	2420.1	2411.0	2400.5	2370.3	2365.8	2362.8
30°	2299.5	2304.0	2307.0	2305.5	2322.1	2337.2	2328.1	2314.6	2273.9	2270.9	2246.8
32.5°	2209.1	2213.6	2216.6	2216.6	2240.7	2246.8	2230.2	2210.6	2166.9	2156.4	2135.3
35°	2109.6	2114.2	2115.7	2115.7	2139.8	2138.3	2117.2	2090.1	2041.8	2028.3	1992.1
37.5°	2002.7	2005.7	2007.2	2016.2	2026.8	2017.7	1990.6	1955.9	1919.8	1882.1	1842.9
40°	1882.1	1886.6	1889.6	1895.7	1906.2	1895.7	1856.5	1814.3	1775.1	1732.9	1693.7
42.5°	1758.5	1772.1	1769.1	1767.6	1773.6	1745.0	1714.8	1666.6	1627.4	1583.7	1544.6
45°	1624.4	1622.9	1630.5	1633.5	1632.0	1607.8	1565.7	1522.0	1482.8	1437.6	1404.4
47.5°	1482.8	1481.3	1487.3	1490.3	1481.3	1455.7	1422.5	1372.8	1339.6	1300.4	1274.8
50°	1333.6	1333.6	1342.6	1333.6	1329.1	1303.5	1276.3	1226.6	1201.0	1166.3	1151.3
52.5°	1184.4	1198.0	1188.9	1185.9	1181.4	1155.8	1134.7	1094.0	1072.9	1057.8	1039.8
55°	1036.7	1051.8	1045.8	1041.3	1039.8	1018.7	999.1	968.9	955.4	944.8	934.3
57.5°	911.7	910.2	907.1	902.6	904.1	887.6	868.0	851.4	845.4	840.8	843.9
60°	767.0	779.1	774.5	776.0	777.6	774.5	758.0	747.4	748.9	750.4	754.9
62.5°	648.0	658.5	666.0	660.0	663.0	667.6	658.5	655.5	661.5	667.6	673.6
65°	538.0	548.5	556.0	554.5	563.6	572.6	571.1	574.1	587.7	595.2	602.8
67.5°	438.5	449.1	459.6	461.1	474.7	488.2	494.3	504.8	519.9	530.4	539.5
70°	352.6	361.7	373.7	381.2	399.3	417.4	428.0	449.1	458.1	473.2	479.2
72.5°	275.8	283.3	299.9	318.0	333.0	355.6	376.7	394.8	408.4	424.9	432.5
75°	215.5	218.5	236.6	257.7	278.8	304.4	327.0	346.6	364.7	381.2	393.3
77.5°	158.2	162.7	179.3	208.0	232.1	259.2	284.8	305.9	325.5	342.1	358.6
80°	110.0	119.0	137.1	165.8	192.9	223.0	247.1	271.2	292.3	308.9	325.5
82.5°	70.8	78.4	104.0	132.6	161.2	191.4	217.0	241.1	263.7	281.8	296.9
85°	39.2	49.7	75.3	105.5	134.1	164.3	191.4	215.5	238.1	254.7	269.7
87.5°	15.1	30.1	54.2	82.9	111.5	140.1	168.8	191.4	214.0	232.1	245.6
90°	0.0	18.1	40.7	69.3	97.9	126.6	153.7	177.8	198.9	215.5	230.6
92.5°	1.5	12.1	31.6	55.8	82.9	110.0	135.6	159.7	180.8	197.4	211.0
95°	1.5	9.0	25.6	48.2	72.3	97.9	122.1	144.7	164.3	180.8	194.4
97.5°	1.5	6.0	21.1	42.2	63.3	88.9	111.5	132.6	150.7	167.3	177.8
100°	1.5	6.0	18.1	36.2	57.3	79.9	101.0	122.1	138.6	152.2	164.3
102.5°	1.5	4.5	15.1	31.6	51.2	70.8	91.9	111.5	126.6	140.1	152.2
105°	1.5	4.5	13.6	27.1	45.2	64.8	82.9	101.0	117.5	129.6	140.1
107.5°	1.5	3.0	12.1	22.6	39.2	58.8	76.9	91.9	107.0	119.0	129.6
110°	1.5	3.0	10.5	21.1	34.7	52.7	69.3	84.4	97.9	110.0	119.0

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.5	3.0	9.0	19.6	31.6	46.7	63.3	76.9	90.4	101.0	110.0
115°	1.5	3.0	9.0	18.1	28.6	40.7	55.8	70.8	81.4	93.4	101.0
117.5°	1.5	3.0	7.5	15.1	27.1	37.7	51.2	63.3	75.3	85.9	93.4
120°	1.5	3.0	7.5	13.6	24.1	34.7	45.2	57.3	69.3	76.9	84.4
122.5°	1.5	3.0	6.0	13.6	21.1	31.6	40.7	51.2	61.8	70.8	78.4
125°	1.5	3.0	6.0	12.1	19.6	28.6	37.7	45.2	55.8	63.3	70.8
127.5°	1.5	3.0	6.0	10.5	18.1	25.6	34.7	42.2	49.7	57.3	63.3
130°	1.5	3.0	4.5	9.0	16.6	22.6	30.1	39.2	45.2	51.2	57.3
132.5°	1.5	3.0	4.5	9.0	13.6	19.6	27.1	34.7	40.7	46.7	51.2
135°	1.5	3.0	4.5	7.5	12.1	18.1	22.6	30.1	36.2	42.2	46.7
137.5°	1.5	3.0	4.5	7.5	10.5	15.1	19.6	25.6	31.6	36.2	42.2
140°	1.5	3.0	4.5	6.0	9.0	13.6	18.1	21.1	27.1	31.6	36.2
142.5°	1.5	3.0	4.5	6.0	9.0	12.1	15.1	18.1	22.6	27.1	31.6
145°	1.5	3.0	4.5	6.0	7.5	10.5	13.6	16.6	18.1	22.6	25.6
147.5°	1.5	3.0	4.5	6.0	6.0	9.0	12.1	13.6	16.6	18.1	21.1
150°	1.5	3.0	4.5	4.5	6.0	7.5	10.5	12.1	13.6	16.6	18.1
152.5°	1.5	3.0	4.5	4.5	6.0	7.5	9.0	10.5	12.1	13.6	15.1
155°	1.5	3.0	4.5	4.5	4.5	6.0	7.5	9.0	10.5	12.1	13.6
157.5°	3.0	3.0	3.0	4.5	4.5	6.0	6.0	7.5	9.0	9.0	10.5
160°	3.0	3.0	3.0	4.5	4.5	4.5	6.0	6.0	7.5	7.5	9.0
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°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2722.9	2727.5	2741.0	2741.0	2738.0	2735.0	2735.0	2730.5	2733.5	2739.5	2736.5
5°	2722.9	2727.5	2741.0	2741.0	2738.0	2735.0	2733.5	2729.0	2733.5	2739.5	2736.5
7.5°	2713.9	2719.9	2733.5	2733.5	2730.5	2729.0	2726.0	2722.9	2727.5	2733.5	2730.5
10°	2701.8	2707.9	2721.4	2721.4	2718.4	2718.4	2713.9	2710.9	2716.9	2721.4	2719.9
12.5°	2683.8	2691.3	2703.4	2701.8	2698.8	2700.3	2695.8	2689.8	2695.8	2700.3	2701.8
15°	2658.1	2667.2	2679.2	2676.2	2671.7	2674.7	2667.2	2662.7	2667.2	2676.2	2674.7
17.5°	2625.0	2631.0	2640.1	2640.1	2635.5	2632.5	2629.5	2625.0	2628.0	2634.0	2635.5
20°	2578.3	2585.8	2590.3	2585.8	2584.3	2579.8	2573.8	2569.2	2575.3	2584.3	2585.8
22.5°	2516.5	2518.0	2528.6	2518.0	2510.5	2509.0	2502.9	2493.9	2502.9	2510.5	2512.0
25°	2439.6	2447.2	2442.7	2424.6	2424.6	2412.5	2409.5	2405.0	2406.5	2420.1	2426.1
27.5°	2341.7	2344.7	2332.7	2317.6	2304.0	2296.5	2285.9	2287.5	2287.5	2305.5	2311.6
30°	2234.7	2218.1	2207.6	2183.5	2172.9	2154.8	2151.8	2151.8	2148.8	2157.9	2185.0
32.5°	2106.6	2084.0	2067.4	2044.8	2026.8	2008.7	1999.6	2004.2	2002.7	2025.3	2034.3
35°	1966.5	1952.9	1918.3	1889.6	1879.1	1852.0	1852.0	1838.4	1847.4	1873.1	1883.6
37.5°	1818.8	1797.7	1769.1	1737.4	1729.9	1708.8	1701.3	1693.7	1713.3	1717.8	1728.4
40°	1668.1	1648.5	1621.4	1591.3	1591.3	1565.7	1565.7	1565.7	1567.2	1576.2	1595.8
42.5°	1525.0	1503.9	1479.8	1458.7	1455.7	1436.1	1436.1	1434.6	1437.6	1445.1	1463.2
45°	1386.3	1369.8	1344.1	1333.6	1335.1	1314.0	1318.5	1314.0	1320.0	1327.6	1333.6
47.5°	1258.2	1247.7	1237.2	1222.1	1217.6	1216.1	1208.5	1202.5	1213.0	1213.0	1222.1
50°	1139.2	1133.2	1127.2	1118.1	1119.6	1113.6	1104.5	1104.5	1112.1	1113.6	1119.6
52.5°	1035.2	1027.7	1020.2	1021.7	1023.2	1020.2	1015.6	1011.1	1015.6	1018.7	1026.2
55°	931.3	925.2	932.8	929.7	932.8	929.7	926.7	923.7	931.3	926.7	934.3
57.5°	837.8	843.9	846.9	840.8	845.4	842.3	843.9	839.3	845.4	848.4	846.9
60°	751.9	761.0	756.5	758.0	764.0	761.0	754.9	759.5	765.5	767.0	765.5
62.5°	673.6	684.1	688.6	685.6	687.1	684.1	688.6	682.6	690.2	693.2	688.6
65°	602.8	614.8	617.8	617.8	617.8	614.8	619.3	620.8	623.9	623.9	620.8
67.5°	542.5	553.0	556.0	559.1	556.0	553.0	553.0	554.5	560.6	563.6	560.6
70°	488.2	498.8	500.3	500.3	501.8	504.8	498.8	501.8	506.3	507.8	506.3
72.5°	441.5	452.1	455.1	453.6	455.1	456.6	456.6	453.6	458.1	461.1	461.1
75°	403.8	409.9	412.9	412.9	414.4	415.9	415.9	414.4	417.4	418.9	420.4
77.5°	369.2	373.7	378.2	378.2	379.7	378.2	381.2	381.2	382.7	384.3	385.8
80°	334.5	340.6	343.6	345.1	348.1	349.6	349.6	349.6	351.1	352.6	352.6
82.5°	307.4	311.9	316.4	321.0	321.0	322.5	322.5	322.5	324.0	324.0	325.5
85°	280.3	286.3	290.8	293.8	295.3	296.9	296.9	298.4	298.4	298.4	299.9
87.5°	256.2	263.7	266.7	269.7	271.2	274.3	274.3	274.3	275.8	275.8	275.8
90°	239.6	247.1	250.1	253.2	254.7	256.2	256.2	257.7	257.7	259.2	259.2
92.5°	220.0	227.5	233.6	233.6	235.1	238.1	236.6	236.6	238.1	239.6	239.6
95°	204.9	211.0	215.5	217.0	218.5	218.5	218.5	220.0	218.5	220.0	220.0
97.5°	186.9	192.9	197.4	200.4	201.9	201.9	201.9	203.4	201.9	203.4	203.4
100°	171.8	177.8	182.3	183.8	186.9	186.9	186.9	186.9	186.9	186.9	188.4
102.5°	159.7	165.8	168.8	170.3	171.8	173.3	173.3	173.3	173.3	174.8	174.8
105°	147.7	153.7	156.7	158.2	159.7	161.2	161.2	161.2	162.7	162.7	161.2
107.5°	137.1	141.6	144.7	147.7	149.2	149.2	150.7	150.7	150.7	150.7	150.7
110°	126.6	131.1	135.6	138.6	138.6	140.1	140.1	141.6	141.6	140.1	141.6

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	116.0	122.1	125.1	128.1	129.6	131.1	131.1	131.1	131.1	131.1	131.1
115°	107.0	113.0	116.0	119.0	120.6	122.1	122.1	122.1	122.1	122.1	122.1
117.5°	99.5	105.5	108.5	110.0	111.5	113.0	114.5	114.5	114.5	114.5	113.0
120°	91.9	96.4	99.5	102.5	104.0	105.5	105.5	105.5	105.5	105.5	105.5
122.5°	84.4	88.9	91.9	94.9	96.4	97.9	97.9	97.9	97.9	97.9	97.9
125°	76.9	81.4	84.4	87.4	88.9	90.4	90.4	90.4	90.4	90.4	90.4
127.5°	69.3	73.8	78.4	79.9	81.4	82.9	82.9	82.9	84.4	82.9	82.9
130°	61.8	66.3	70.8	72.3	73.8	75.3	76.9	76.9	76.9	76.9	75.3
132.5°	55.8	60.3	63.3	64.8	67.8	67.8	69.3	69.3	69.3	69.3	67.8
135°	51.2	54.2	57.3	58.8	61.8	61.8	61.8	63.3	63.3	61.8	60.3
137.5°	45.2	48.2	51.2	52.7	54.2	55.8	55.8	57.3	55.8	55.8	55.8
140°	42.2	43.7	46.7	48.2	49.7	49.7	49.7	51.2	51.2	49.7	49.7
142.5°	36.2	39.2	42.2	43.7	45.2	45.2	45.2	45.2	45.2	45.2	45.2
145°	30.1	34.7	36.2	39.2	39.2	40.7	40.7	40.7	40.7	40.7	39.2
147.5°	25.6	28.6	33.2	34.7	34.7	36.2	36.2	36.2	36.2	36.2	34.7
150°	19.6	22.6	27.1	30.1	30.1	31.6	31.6	31.6	31.6	30.1	30.1
152.5°	16.6	19.6	21.1	24.1	25.6	25.6	25.6	27.1	25.6	25.6	25.6
155°	15.1	16.6	18.1	19.6	21.1	22.6	22.6	22.6	22.6	21.1	21.1
157.5°	12.1	13.6	15.1	16.6	18.1	19.6	19.6	19.6	19.6	19.6	18.1
160°	9.0	10.5	12.1	12.1	13.6	15.1	16.6	15.1	15.1	15.1	15.1
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: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2733.5	2732.0	2736.5	2729.0	2706.4	2712.4	2709.4	2722.9	2726.0	2729.0	2742.5
5°	2733.5	2732.0	2735.0	2729.0	2704.9	2709.4	2706.4	2719.9	2722.9	2724.4	2738.0
7.5°	2727.5	2726.0	2730.5	2722.9	2697.3	2703.4	2698.8	2712.4	2713.9	2715.4	2727.5
10°	2715.4	2713.9	2716.9	2710.9	2685.3	2691.3	2685.3	2698.8	2698.8	2701.8	2710.9
12.5°	2697.3	2694.3	2700.3	2692.8	2664.2	2671.7	2668.7	2677.7	2679.2	2680.7	2689.8
15°	2671.7	2668.7	2673.2	2668.7	2643.1	2644.6	2640.1	2653.6	2655.1	2652.1	2661.2
17.5°	2634.0	2631.0	2640.1	2637.0	2611.4	2617.5	2616.0	2619.0	2623.5	2616.0	2628.0
20°	2587.3	2590.3	2593.4	2594.9	2575.3	2575.3	2573.8	2579.8	2584.3	2578.3	2587.3
22.5°	2518.0	2525.5	2534.6	2537.6	2524.0	2522.5	2531.6	2528.6	2533.1	2530.1	2536.1
25°	2430.6	2445.7	2454.7	2463.8	2456.2	2459.2	2472.8	2475.8	2475.8	2474.3	2480.3
27.5°	2322.1	2341.7	2358.3	2377.9	2370.3	2376.4	2399.0	2402.0	2408.0	2402.0	2414.0
30°	2192.5	2210.6	2242.2	2270.9	2273.9	2282.9	2314.6	2317.6	2334.2	2328.1	2332.7
32.5°	2062.9	2072.0	2108.1	2136.8	2154.8	2177.4	2212.1	2218.1	2240.7	2245.3	2245.3
35°	1900.2	1925.8	1959.0	1999.6	2022.2	2046.4	2093.1	2102.1	2135.3	2145.8	2157.9
37.5°	1763.1	1787.2	1808.3	1850.5	1891.1	1918.3	1955.9	1978.5	2013.2	2032.8	2047.9
40°	1616.9	1636.5	1659.1	1701.3	1735.9	1776.6	1814.3	1841.4	1885.1	1907.7	1927.3
42.5°	1478.3	1493.3	1517.4	1547.6	1583.7	1628.9	1665.1	1696.8	1743.5	1775.1	1797.7
45°	1354.7	1363.7	1384.8	1407.4	1439.1	1485.8	1520.4	1561.1	1598.8	1632.0	1659.1
47.5°	1238.7	1250.7	1261.3	1276.3	1305.0	1333.6	1374.3	1413.5	1451.1	1487.3	1514.4
50°	1131.7	1131.7	1148.2	1158.8	1178.4	1204.0	1235.6	1262.8	1309.5	1335.1	1369.8
52.5°	1027.7	1033.7	1042.8	1048.8	1063.9	1080.4	1106.1	1128.7	1167.8	1191.9	1225.1
55°	935.8	941.8	946.3	949.3	958.4	978.0	987.0	1005.1	1032.2	1051.8	1080.4
57.5°	848.4	851.4	855.9	857.4	858.9	871.0	878.5	883.0	910.2	929.7	953.9
60°	768.5	768.5	773.0	771.5	770.0	776.0	774.5	779.1	795.6	807.7	818.2
62.5°	693.2	693.2	694.7	691.7	690.2	690.2	684.1	688.6	693.2	694.7	702.2
65°	623.9	631.4	625.4	626.9	617.8	614.8	611.8	602.8	601.2	595.2	598.2
67.5°	562.1	568.1	562.1	562.1	554.5	548.5	541.0	525.9	521.4	509.3	506.3
70°	512.3	507.8	510.8	506.3	497.3	489.7	479.2	467.1	452.1	437.0	426.4
72.5°	464.1	464.1	461.1	456.6	452.1	437.0	424.9	411.4	393.3	373.7	358.6
75°	417.4	418.9	418.9	414.4	406.9	393.3	379.7	360.1	340.6	318.0	298.4
77.5°	384.3	384.3	384.3	376.7	369.2	357.1	340.6	319.5	298.4	271.2	248.6
80°	352.6	351.1	351.1	342.1	334.5	321.0	304.4	283.3	260.7	232.1	206.4
82.5°	327.0	325.5	322.5	314.9	304.4	290.8	274.3	251.6	227.5	201.9	170.3
85°	299.9	298.4	295.3	287.8	277.3	265.2	247.1	224.5	200.4	171.8	141.6
87.5°	275.8	274.3	269.7	265.2	253.2	239.6	221.5	200.4	174.8	147.7	117.5
90°	259.2	256.2	253.2	247.1	236.6	221.5	203.4	180.8	155.2	128.1	97.9
92.5°	239.6	238.1	233.6	227.5	218.5	203.4	185.3	164.3	138.6	113.0	84.4
95°	220.0	218.5	215.5	209.5	200.4	186.9	170.3	149.2	125.1	99.5	73.8
97.5°	201.9	201.9	197.4	192.9	182.3	171.8	155.2	135.6	113.0	90.4	66.3
100°	186.9	186.9	182.3	176.3	168.8	158.2	141.6	123.6	102.5	81.4	57.3
102.5°	173.3	171.8	168.8	162.7	155.2	144.7	129.6	113.0	93.4	72.3	51.2
105°	161.2	159.7	156.7	150.7	144.7	132.6	120.6	104.0	84.4	64.8	45.2
107.5°	149.2	147.7	146.2	140.1	132.6	122.1	110.0	93.4	76.9	58.8	40.7
110°	138.6	137.1	134.1	128.1	120.6	111.5	99.5	85.9	69.3	52.7	36.2

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	129.6	128.1	125.1	119.0	113.0	102.5	91.9	76.9	63.3	48.2	31.6
115°	120.6	119.0	116.0	110.0	102.5	93.4	82.9	70.8	55.8	42.2	28.6
117.5°	111.5	110.0	107.0	102.5	94.9	85.9	75.3	63.3	49.7	39.2	25.6
120°	104.0	101.0	97.9	93.4	85.9	78.4	67.8	57.3	45.2	34.7	22.6
122.5°	96.4	93.4	90.4	85.9	78.4	70.8	60.3	51.2	42.2	31.6	21.1
125°	87.4	85.9	82.9	78.4	70.8	63.3	55.8	46.7	37.7	28.6	18.1
127.5°	79.9	78.4	75.3	69.3	63.3	57.3	49.7	42.2	33.2	24.1	16.6
130°	73.8	70.8	67.8	63.3	58.8	52.7	45.2	37.7	30.1	21.1	15.1
132.5°	66.3	63.3	60.3	57.3	52.7	46.7	40.7	33.2	27.1	19.6	13.6
135°	60.3	57.3	54.2	51.2	46.7	42.2	36.2	30.1	24.1	18.1	12.1
137.5°	52.7	51.2	49.7	46.7	42.2	37.7	33.2	25.6	21.1	16.6	10.5
140°	48.2	46.7	45.2	40.7	37.7	33.2	28.6	22.6	18.1	13.6	9.0
142.5°	43.7	42.2	39.2	36.2	33.2	30.1	24.1	21.1	16.6	12.1	9.0
145°	37.7	36.2	34.7	31.6	28.6	24.1	21.1	18.1	15.1	10.5	7.5
147.5°	34.7	33.2	30.1	27.1	24.1	21.1	19.6	16.6	12.1	9.0	6.0
150°	28.6	27.1	25.6	22.6	21.1	19.6	16.6	13.6	10.5	7.5	6.0
152.5°	24.1	22.6	21.1	21.1	18.1	16.6	13.6	12.1	9.0	7.5	4.5
155°	21.1	21.1	19.6	18.1	15.1	13.6	12.1	9.0	7.5	6.0	4.5
157.5°	18.1	16.6	15.1	15.1	13.6	12.1	9.0	7.5	6.0	6.0	4.5
160°	15.1	13.6	13.6	12.1	10.5	9.0	7.5	7.5	6.0	4.5	4.5
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: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2744.0	2727.5	2742.5	2762.1	2762.1	2759.1	2756.1	2762.1	2777.2	2771.2	2753.1
5°	2739.5	2722.9	2736.5	2756.1	2756.1	2751.6	2748.6	2753.1	2769.7	2762.1	2745.5
7.5°	2730.5	2715.4	2724.4	2742.5	2742.5	2738.0	2735.0	2741.0	2754.6	2747.1	2729.0
10°	2713.9	2697.3	2707.9	2724.4	2722.9	2719.9	2715.4	2722.9	2735.0	2724.4	2703.4
12.5°	2692.8	2676.2	2685.3	2700.3	2698.8	2692.8	2689.8	2694.3	2704.9	2698.8	2676.2
15°	2664.2	2647.6	2655.1	2670.2	2665.7	2661.2	2655.1	2656.6	2670.2	2659.7	2635.5
17.5°	2629.5	2611.4	2617.5	2631.0	2626.5	2622.0	2614.4	2616.0	2631.0	2616.0	2590.3
20°	2587.3	2567.7	2572.3	2588.8	2581.3	2573.8	2566.2	2566.2	2581.3	2564.7	2536.1
22.5°	2542.1	2522.5	2525.5	2537.6	2531.6	2518.0	2510.5	2515.0	2522.5	2501.4	2471.3
25°	2486.4	2460.7	2465.3	2477.3	2472.8	2454.7	2447.2	2450.2	2447.2	2430.6	2399.0
27.5°	2421.6	2394.4	2397.5	2405.0	2399.0	2382.4	2373.3	2374.9	2368.8	2347.7	2311.6
30°	2340.2	2326.6	2325.1	2329.6	2320.6	2304.0	2293.5	2290.5	2289.0	2258.8	2215.1
32.5°	2257.3	2245.3	2237.7	2243.8	2233.2	2216.6	2198.5	2198.5	2183.5	2154.8	2117.2
35°	2172.9	2153.3	2145.8	2150.3	2138.3	2117.2	2102.1	2094.6	2072.0	2035.8	1995.1
37.5°	2064.4	2050.9	2041.8	2046.4	2032.8	2017.7	1989.1	1981.6	1957.4	1907.7	1856.5
40°	1946.9	1936.3	1927.3	1931.8	1916.8	1894.2	1868.5	1856.5	1829.4	1773.6	1732.9
42.5°	1820.3	1815.8	1805.2	1821.8	1791.7	1769.1	1743.5	1723.9	1696.8	1636.5	1589.8
45°	1686.2	1696.8	1672.6	1677.2	1657.6	1638.0	1610.9	1582.2	1555.1	1497.8	1445.1
47.5°	1544.6	1552.1	1535.5	1538.5	1517.4	1499.4	1475.2	1439.1	1408.9	1359.2	1312.5
50°	1398.4	1395.4	1395.4	1392.4	1375.8	1353.2	1329.1	1295.9	1265.8	1220.6	1181.4
52.5°	1243.2	1249.2	1252.2	1259.8	1238.7	1225.1	1187.4	1158.8	1136.2	1089.5	1056.3
55°	1094.0	1115.1	1109.1	1112.1	1088.0	1077.4	1047.3	1024.7	991.5	964.4	943.3
57.5°	958.4	962.9	965.9	970.4	959.9	938.8	914.7	896.6	871.0	848.4	833.3
60°	827.3	827.3	828.8	836.3	825.8	807.7	789.6	776.0	758.0	744.4	735.4
62.5°	703.7	714.3	715.8	709.7	696.2	687.1	675.1	667.6	655.5	651.0	648.0
65°	589.2	589.2	589.2	592.2	584.7	578.6	571.1	569.6	574.1	568.1	571.1
67.5°	492.8	488.2	485.2	486.7	483.7	480.7	479.2	483.7	492.8	492.8	500.3
70°	409.9	400.8	394.8	394.8	394.8	396.3	400.8	409.9	424.9	431.0	441.5
72.5°	342.1	322.5	313.4	313.4	314.9	321.0	334.5	351.1	364.7	376.7	390.3
75°	277.3	257.7	244.1	242.6	245.6	254.7	274.3	289.3	311.9	328.5	345.1
77.5°	224.5	200.4	183.8	182.3	186.9	200.4	224.5	244.1	269.7	287.8	305.9
80°	179.3	152.2	138.6	129.6	137.1	153.7	180.8	204.9	229.0	253.2	275.8
82.5°	143.2	117.5	96.4	87.4	96.4	119.0	144.7	173.3	197.4	223.0	245.6
85°	113.0	85.9	61.8	52.7	63.3	87.4	116.0	144.7	171.8	197.4	220.0
87.5°	88.9	61.8	37.7	25.6	39.2	64.8	91.9	120.6	149.2	174.8	197.4
90°	69.3	43.7	21.1	3.0	22.6	46.7	73.8	101.0	129.6	155.2	177.8
92.5°	58.8	33.2	12.1	0.0	13.6	34.7	60.3	87.4	113.0	138.6	161.2
95°	49.7	27.1	9.0	0.0	9.0	27.1	49.7	73.8	99.5	125.1	147.7
97.5°	42.2	21.1	6.0	0.0	6.0	21.1	40.7	64.8	87.4	111.5	132.6
100°	36.2	18.1	4.5	0.0	4.5	16.6	34.7	55.8	78.4	101.0	120.6
102.5°	31.6	15.1	3.0	0.0	3.0	13.6	28.6	48.2	67.8	88.9	108.5
105°	27.1	12.1	3.0	0.0	1.5	10.5	24.1	42.2	60.3	79.9	97.9
107.5°	24.1	10.5	3.0	0.0	1.5	9.0	21.1	36.2	54.2	70.8	87.4
110°	21.1	9.0	3.0	0.0	1.5	6.0	18.1	31.6	46.7	63.3	79.9

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	18.1	7.5	1.5	0.0	0.0	4.5	15.1	27.1	40.7	57.3	70.8
115°	16.6	7.5	1.5	0.0	0.0	3.0	12.1	24.1	36.2	51.2	63.3
117.5°	15.1	6.0	1.5	0.0	1.5	3.0	10.5	21.1	31.6	43.7	57.3
120°	13.6	6.0	1.5	0.0	1.5	1.5	7.5	18.1	27.1	39.2	49.7
122.5°	12.1	6.0	1.5	0.0	1.5	1.5	6.0	15.1	24.1	34.7	43.7
125°	10.5	4.5	3.0	1.5	1.5	1.5	4.5	12.1	21.1	28.6	39.2
127.5°	10.5	4.5	3.0	1.5	1.5	1.5	3.0	10.5	16.6	25.6	34.7
130°	9.0	4.5	3.0	1.5	1.5	1.5	1.5	7.5	15.1	21.1	28.6
132.5°	7.5	4.5	3.0	1.5	1.5	1.5	1.5	4.5	10.5	18.1	24.1
135°	7.5	4.5	3.0	1.5	1.5	1.5	1.5	3.0	7.5	13.6	19.6
137.5°	6.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	6.0	10.5	15.1
140°	6.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	4.5	7.5	12.1
142.5°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	3.0	6.0	9.0
145°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0	6.0
147.5°	4.5	4.5	3.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0	4.5
150°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
152.5°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
155°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0
157.5°	4.5	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
160°	4.5	3.0	3.0	1.5	3.0	1.5	3.0	3.0	3.0	3.0	3.0
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: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2747.1	2718.4	2733.5	2729.0	2735.0	2747.1	2745.5	2742.5	2742.5	2738.0	2732.0
5°	2738.0	2710.9	2724.4	2716.9	2724.4	2735.0	2733.5	2729.0	2732.0	2724.4	2716.9
7.5°	2719.9	2695.8	2707.9	2701.8	2707.9	2718.4	2713.9	2712.4	2715.4	2703.4	2698.8
10°	2698.8	2671.7	2685.3	2677.7	2685.3	2692.8	2689.8	2683.8	2689.8	2677.7	2673.2
12.5°	2665.7	2643.1	2652.1	2649.1	2653.6	2661.2	2655.1	2650.6	2653.6	2643.1	2634.0
15°	2629.5	2606.9	2614.4	2609.9	2612.9	2622.0	2611.4	2609.9	2606.9	2596.4	2593.4
17.5°	2582.8	2561.7	2569.2	2561.7	2566.2	2563.2	2561.7	2554.2	2554.2	2542.1	2533.1
20°	2525.5	2507.5	2502.9	2496.9	2502.9	2496.9	2487.9	2481.8	2480.3	2468.3	2460.7
22.5°	2459.2	2438.1	2441.2	2424.6	2426.1	2417.0	2402.0	2395.9	2389.9	2376.4	2365.8
25°	2379.4	2358.3	2343.2	2332.7	2319.1	2317.6	2298.0	2282.9	2281.4	2264.8	2263.3
27.5°	2289.0	2264.8	2252.8	2227.2	2210.6	2197.0	2180.5	2165.4	2157.9	2139.8	2127.7
30°	2185.0	2157.9	2127.7	2109.6	2084.0	2073.5	2044.8	2026.8	2020.7	2001.1	1992.1
32.5°	2067.4	2038.8	2014.7	1980.0	1951.4	1936.3	1907.7	1889.6	1882.1	1861.0	1848.9
35°	1939.4	1907.7	1879.1	1845.9	1823.3	1797.7	1763.1	1745.0	1728.4	1720.9	1711.8
37.5°	1805.2	1770.6	1737.4	1704.3	1684.7	1654.6	1624.4	1612.4	1592.8	1585.2	1576.2
40°	1666.6	1632.0	1600.3	1568.7	1546.1	1518.9	1491.8	1487.3	1466.2	1458.7	1452.6
42.5°	1529.5	1493.3	1457.2	1434.6	1418.0	1390.9	1372.8	1368.3	1350.2	1345.6	1345.6
45°	1405.9	1360.7	1330.6	1311.0	1297.4	1274.8	1259.8	1256.7	1241.7	1238.7	1238.7
47.5°	1273.3	1231.1	1208.5	1196.5	1184.4	1167.8	1158.8	1158.8	1143.7	1140.7	1139.2
50°	1149.8	1110.6	1094.0	1081.9	1080.4	1068.4	1060.8	1057.8	1057.8	1047.3	1048.8
52.5°	1032.2	1012.6	999.1	991.5	982.5	975.0	968.9	968.9	964.4	956.9	959.9
55°	923.7	901.1	902.6	896.6	892.1	887.6	889.1	880.0	878.5	872.5	877.0
57.5°	815.2	815.2	812.2	807.7	800.2	803.2	803.2	803.2	795.6	791.1	795.6
60°	723.3	727.8	720.3	724.8	721.8	723.3	720.3	720.3	715.8	714.3	715.8
62.5°	641.9	649.5	646.5	652.5	649.5	651.0	654.0	648.0	644.9	641.9	644.9
65°	569.6	578.6	577.1	581.7	583.2	584.7	586.2	583.2	580.2	577.1	575.6
67.5°	506.3	515.4	521.4	522.9	524.4	528.9	527.4	524.4	521.4	516.9	515.4
70°	449.1	461.1	468.6	471.7	477.7	474.7	474.7	473.2	470.1	465.6	464.1
72.5°	400.8	414.4	421.9	424.9	431.0	431.0	429.5	428.0	424.9	420.4	418.9
75°	358.6	370.7	381.2	387.3	391.8	391.8	390.3	388.8	385.8	382.7	381.2
77.5°	325.5	336.0	345.1	352.6	355.6	357.1	355.6	352.6	352.6	351.1	349.6
80°	292.3	304.4	313.4	321.0	325.5	325.5	324.0	325.5	322.5	321.0	319.5
82.5°	263.7	277.3	287.8	295.3	298.4	299.9	298.4	299.9	296.9	296.9	296.9
85°	238.1	251.6	263.7	269.7	274.3	275.8	275.8	275.8	274.3	274.3	274.3
87.5°	217.0	230.6	242.6	248.6	253.2	254.7	254.7	256.2	253.2	253.2	253.2
90°	197.4	211.0	223.0	229.0	233.6	236.6	236.6	238.1	236.6	235.1	235.1
92.5°	179.3	194.4	206.4	212.5	217.0	221.5	221.5	223.0	220.0	220.0	220.0
95°	164.3	179.3	189.9	197.4	201.9	204.9	206.4	206.4	204.9	204.9	204.9
97.5°	150.7	164.3	174.8	182.3	186.9	188.4	189.9	191.4	189.9	189.9	189.9
100°	137.1	150.7	161.2	167.3	173.3	174.8	176.3	177.8	177.8	176.3	176.3
102.5°	125.1	138.6	147.7	155.2	159.7	162.7	164.3	164.3	164.3	164.3	164.3
105°	113.0	126.6	135.6	143.2	147.7	150.7	152.2	153.7	153.7	152.2	152.2
107.5°	102.5	114.5	125.1	131.1	137.1	140.1	141.6	141.6	143.2	141.6	141.6
110°	91.9	105.5	114.5	120.6	126.6	129.6	131.1	132.6	132.6	132.6	132.6

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	84.4	94.9	104.0	110.0	116.0	119.0	120.6	122.1	123.6	122.1	122.1
115°	75.3	85.9	94.9	101.0	105.5	108.5	111.5	113.0	113.0	114.5	113.0
117.5°	67.8	76.9	85.9	91.9	96.4	101.0	102.5	104.0	105.5	104.0	104.0
120°	60.3	69.3	76.9	82.9	87.4	91.9	93.4	94.9	96.4	94.9	94.9
122.5°	54.2	61.8	69.3	75.3	79.9	82.9	85.9	85.9	87.4	87.4	87.4
125°	48.2	55.8	61.8	67.8	72.3	75.3	76.9	78.4	78.4	79.9	79.9
127.5°	42.2	48.2	55.8	60.3	64.8	67.8	69.3	70.8	70.8	72.3	72.3
130°	36.2	42.2	48.2	52.7	57.3	60.3	61.8	63.3	64.8	64.8	64.8
132.5°	31.6	37.7	42.2	46.7	49.7	52.7	55.8	57.3	57.3	57.3	57.3
135°	25.6	31.6	36.2	40.7	43.7	46.7	48.2	51.2	51.2	51.2	51.2
137.5°	21.1	27.1	31.6	34.7	37.7	40.7	42.2	43.7	45.2	45.2	45.2
140°	16.6	21.1	25.6	30.1	33.2	34.7	37.7	37.7	39.2	39.2	39.2
142.5°	12.1	16.6	19.6	24.1	27.1	30.1	31.6	33.2	33.2	33.2	33.2
145°	9.0	12.1	15.1	18.1	22.6	24.1	25.6	27.1	28.6	28.6	28.6
147.5°	6.0	9.0	10.5	13.6	16.6	19.6	21.1	22.6	24.1	24.1	24.1
150°	4.5	6.0	9.0	10.5	12.1	15.1	18.1	18.1	19.6	19.6	18.1
152.5°	3.0	4.5	6.0	7.5	9.0	10.5	13.6	13.6	15.1	15.1	15.1
155°	3.0	3.0	3.0	4.5	6.0	7.5	9.0	10.5	10.5	10.5	10.5
157.5°	3.0	3.0	3.0	3.0	3.0	4.5	6.0	7.5	7.5	7.5	7.5
160°	3.0	3.0	1.5	1.5	3.0	3.0	3.0	3.0	4.5	4.5	4.5
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: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2736.5	2739.5	2739.5	2736.5	2735.0	2741.0	2733.5	2704.9	2713.9	2716.9	2726.0
5°	2722.9	2726.0	2726.0	2726.0	2722.9	2729.0	2721.4	2692.8	2703.4	2707.9	2713.9
7.5°	2703.4	2704.9	2707.9	2706.4	2703.4	2712.4	2704.9	2676.2	2683.8	2691.3	2698.8
10°	2677.7	2677.7	2679.2	2682.3	2679.2	2686.8	2679.2	2653.6	2661.2	2665.7	2674.7
12.5°	2643.1	2646.1	2647.6	2646.1	2644.6	2650.6	2647.6	2623.5	2626.5	2635.5	2644.6
15°	2596.4	2596.4	2603.9	2600.9	2600.9	2606.9	2609.9	2582.8	2587.3	2600.9	2609.9
17.5°	2539.1	2540.6	2546.6	2549.7	2548.1	2558.7	2560.2	2539.1	2537.6	2554.2	2563.2
20°	2465.3	2468.3	2475.8	2481.8	2481.8	2493.9	2498.4	2484.9	2486.4	2504.4	2507.5
22.5°	2374.9	2374.9	2388.4	2397.5	2405.0	2412.5	2426.1	2414.0	2414.0	2438.1	2451.7
25°	2263.3	2273.9	2278.4	2296.5	2307.0	2328.1	2340.2	2341.7	2343.2	2365.8	2374.9
27.5°	2139.8	2142.8	2156.4	2177.4	2189.5	2209.1	2231.7	2236.2	2243.8	2273.9	2287.5
30°	1999.6	2008.7	2014.7	2044.8	2061.4	2087.0	2115.7	2126.2	2132.2	2172.9	2189.5
32.5°	1856.5	1859.5	1885.1	1901.7	1921.3	1948.4	1981.6	2001.1	2013.2	2055.4	2079.5
35°	1713.3	1719.4	1740.5	1761.5	1781.1	1808.3	1842.9	1870.0	1891.1	1928.8	1960.5
37.5°	1582.2	1597.3	1601.8	1622.9	1638.0	1665.1	1689.2	1728.4	1749.5	1788.7	1829.4
40°	1464.7	1469.2	1472.2	1493.3	1503.9	1529.5	1564.1	1589.8	1618.4	1647.0	1695.2
42.5°	1348.7	1351.7	1356.2	1368.3	1380.3	1398.4	1424.0	1449.6	1479.8	1522.0	1553.6
45°	1241.7	1244.7	1247.7	1255.2	1265.8	1282.4	1298.9	1317.0	1347.2	1383.3	1416.5
47.5°	1142.2	1148.2	1148.2	1149.8	1157.3	1170.9	1182.9	1205.5	1222.1	1241.7	1279.3
50°	1047.3	1051.8	1053.3	1053.3	1057.8	1066.9	1069.9	1085.0	1100.0	1118.1	1145.2
52.5°	958.4	958.4	956.9	962.9	962.9	968.9	970.4	979.5	990.0	1009.6	1021.7
55°	874.0	874.0	878.5	875.5	875.5	878.5	877.0	878.5	887.6	899.6	910.2
57.5°	792.6	791.1	795.6	792.6	791.1	794.1	797.1	791.1	792.6	804.7	804.7
60°	711.3	712.8	717.3	714.3	714.3	714.3	711.3	708.2	705.2	712.8	715.8
62.5°	646.5	641.9	646.5	641.9	644.9	643.4	640.4	634.4	635.9	632.9	629.9
65°	578.6	578.6	580.2	575.6	578.6	578.6	574.1	572.6	563.6	560.6	553.0
67.5°	519.9	519.9	521.4	518.4	518.4	519.9	515.4	510.8	501.8	497.3	486.7
70°	468.6	468.6	468.6	467.1	467.1	467.1	464.1	458.1	449.1	441.5	428.0
72.5°	421.9	423.4	421.9	421.9	426.4	421.9	417.4	411.4	403.8	388.8	376.7
75°	384.3	385.8	384.3	384.3	384.3	382.7	381.2	372.2	363.2	351.1	333.0
77.5°	351.1	351.1	352.6	351.1	351.1	349.6	345.1	337.5	327.0	316.4	295.3
80°	319.5	321.0	322.5	324.0	321.0	319.5	314.9	308.9	295.3	283.3	262.2
82.5°	296.9	295.3	296.9	298.4	295.3	293.8	289.3	281.8	271.2	254.7	233.6
85°	274.3	272.7	272.7	274.3	272.7	269.7	265.2	257.7	247.1	230.6	209.5
87.5°	251.6	253.2	254.7	253.2	251.6	248.6	244.1	236.6	224.5	211.0	188.4
90°	235.1	235.1	235.1	235.1	233.6	230.6	226.0	217.0	206.4	189.9	170.3
92.5°	220.0	220.0	220.0	220.0	218.5	214.0	209.5	201.9	189.9	173.3	155.2
95°	204.9	206.4	204.9	204.9	201.9	200.4	192.9	185.3	174.8	158.2	138.6
97.5°	188.4	189.9	188.4	188.4	186.9	183.8	179.3	170.3	159.7	144.7	126.6
100°	176.3	176.3	174.8	174.8	173.3	170.3	164.3	156.7	146.2	131.1	113.0
102.5°	162.7	164.3	162.7	162.7	159.7	156.7	152.2	144.7	134.1	119.0	102.5
105°	152.2	152.2	150.7	150.7	147.7	144.7	140.1	131.1	122.1	108.5	91.9
107.5°	141.6	141.6	140.1	140.1	137.1	134.1	128.1	120.6	111.5	97.9	82.9
110°	131.1	131.1	131.1	129.6	126.6	122.1	117.5	110.0	101.0	88.9	73.8

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	123.6	122.1	120.6	119.0	116.0	113.0	107.0	99.5	90.4	79.9	66.3
115°	113.0	113.0	111.5	110.0	107.0	102.5	97.9	91.9	82.9	70.8	58.8
117.5°	104.0	104.0	102.5	101.0	97.9	93.4	88.9	82.9	73.8	63.3	52.7
120°	94.9	94.9	93.4	91.9	88.9	84.4	81.4	73.8	66.3	55.8	46.7
122.5°	87.4	85.9	85.9	82.9	81.4	76.9	72.3	66.3	58.8	49.7	40.7
125°	78.4	78.4	76.9	75.3	73.8	69.3	64.8	58.8	51.2	43.7	36.2
127.5°	70.8	70.8	69.3	67.8	66.3	61.8	57.3	52.7	45.2	37.7	30.1
130°	63.3	63.3	61.8	60.3	58.8	54.2	51.2	45.2	39.2	33.2	25.6
132.5°	57.3	57.3	55.8	54.2	51.2	48.2	45.2	39.2	34.7	28.6	22.6
135°	51.2	49.7	49.7	48.2	45.2	42.2	39.2	34.7	28.6	24.1	18.1
137.5°	45.2	43.7	42.2	40.7	39.2	36.2	33.2	30.1	25.6	19.6	15.1
140°	39.2	37.7	37.7	36.2	33.2	31.6	28.6	24.1	21.1	16.6	12.1
142.5°	33.2	33.2	31.6	30.1	28.6	27.1	24.1	21.1	16.6	13.6	9.0
145°	28.6	27.1	27.1	25.6	24.1	21.1	19.6	16.6	13.6	10.5	7.5
147.5°	22.6	22.6	22.6	21.1	19.6	18.1	16.6	13.6	10.5	7.5	4.5
150°	18.1	18.1	18.1	16.6	15.1	13.6	12.1	10.5	7.5	4.5	3.0
152.5°	15.1	15.1	13.6	13.6	12.1	10.5	9.0	7.5	4.5	3.0	3.0
155°	10.5	10.5	10.5	9.0	9.0	7.5	6.0	4.5	3.0	3.0	3.0
157.5°	7.5	7.5	7.5	6.0	6.0	4.5	4.5	3.0	3.0	3.0	3.0
160°	4.5	4.5	4.5	4.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5	2739.5
2.5°	2721.4	2719.9	2732.0	2732.0	2718.4	2739.5	2762.1
5°	2712.4	2710.9	2722.9	2722.9	2710.9	2732.0	2756.1
7.5°	2694.3	2695.8	2707.9	2710.9	2695.8	2715.4	2741.0
10°	2674.7	2673.2	2686.8	2689.8	2677.7	2695.8	2719.9
12.5°	2643.1	2643.1	2656.6	2661.2	2649.1	2670.2	2692.8
15°	2609.9	2609.9	2619.0	2626.5	2616.0	2635.5	2658.1
17.5°	2567.7	2566.2	2575.3	2584.3	2573.8	2594.9	2619.0
20°	2513.5	2513.5	2524.0	2534.6	2527.0	2546.6	2573.8
22.5°	2456.2	2450.2	2468.3	2475.8	2471.3	2490.9	2518.0
25°	2383.9	2382.4	2400.5	2411.0	2405.0	2426.1	2450.2
27.5°	2305.5	2304.0	2322.1	2335.7	2332.7	2352.2	2379.4
30°	2210.6	2218.1	2234.7	2257.3	2249.8	2270.9	2299.5
32.5°	2111.1	2118.7	2138.3	2162.4	2163.9	2180.5	2209.1
35°	1992.1	2011.7	2025.3	2056.9	2062.9	2079.5	2109.6
37.5°	1867.0	1889.6	1918.3	1942.4	1954.4	1968.0	2002.7
40°	1726.9	1760.0	1791.7	1820.3	1835.4	1848.9	1882.1
42.5°	1600.3	1625.9	1656.1	1684.7	1711.8	1723.9	1758.5
45°	1457.2	1487.3	1514.4	1549.1	1576.2	1589.8	1624.4
47.5°	1317.0	1347.2	1383.3	1407.4	1436.1	1449.6	1482.8
50°	1182.9	1210.0	1240.2	1268.8	1292.9	1305.0	1333.6
52.5°	1050.3	1078.9	1107.6	1125.6	1151.3	1160.3	1184.4
55°	932.8	952.4	978.0	988.5	1014.1	1020.2	1036.7
57.5°	819.7	833.3	842.3	860.4	878.5	892.1	911.7
60°	717.3	723.3	729.3	739.9	754.9	759.5	767.0
62.5°	625.4	623.9	635.9	638.9	640.4	655.5	648.0
65°	544.0	545.5	534.9	530.4	536.5	541.0	538.0
67.5°	476.2	467.1	458.1	447.5	438.5	443.0	438.5
70°	409.9	402.3	387.3	372.2	366.2	357.1	352.6
72.5°	357.1	339.0	324.0	304.4	293.8	283.3	275.8
75°	316.4	290.8	269.7	248.6	233.6	218.5	215.5
77.5°	274.3	250.1	226.0	203.4	180.8	164.3	158.2
80°	241.1	218.5	189.9	162.7	138.6	117.5	110.0
82.5°	211.0	186.9	158.2	129.6	102.5	79.9	70.8
85°	185.3	159.7	131.1	102.5	75.3	51.2	39.2
87.5°	165.8	137.1	108.5	81.4	52.7	28.6	15.1
90°	147.7	120.6	93.4	64.8	37.7	15.1	0.0
92.5°	131.1	105.5	78.4	52.7	28.6	9.0	1.5
95°	116.0	93.4	66.3	42.2	21.1	6.0	1.5
97.5°	104.0	81.4	57.3	34.7	16.6	4.5	1.5
100°	93.4	70.8	49.7	28.6	13.6	3.0	1.5
102.5°	82.9	63.3	42.2	24.1	10.5	1.5	1.5
105°	73.8	55.8	36.2	21.1	9.0	1.5	1.5
107.5°	66.3	49.7	31.6	18.1	6.0	1.5	1.5
110°	58.8	42.2	27.1	15.1	4.5	1.5	1.5

TEST NUMBER: P1214221

CATALOG NUMBER: 4SNLED-LD5-71SL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	52.7	37.7	24.1	12.1	3.0	1.5	1.5
115°	46.7	33.2	21.1	10.5	3.0	1.5	1.5
117.5°	40.7	28.6	18.1	7.5	1.5	1.5	1.5
120°	36.2	25.6	15.1	6.0	1.5	1.5	1.5
122.5°	31.6	21.1	12.1	4.5	1.5	1.5	1.5
125°	27.1	18.1	10.5	3.0	1.5	1.5	1.5
127.5°	22.6	15.1	7.5	3.0	1.5	1.5	1.5
130°	19.6	12.1	6.0	1.5	1.5	1.5	1.5
132.5°	16.6	9.0	4.5	1.5	1.5	1.5	1.5
135°	13.6	7.5	3.0	1.5	1.5	1.5	1.5
137.5°	10.5	6.0	3.0	1.5	1.5	1.5	1.5
140°	7.5	4.5	1.5	1.5	1.5	1.5	1.5
142.5°	6.0	3.0	1.5	1.5	1.5	1.5	1.5
145°	4.5	3.0	1.5	1.5	1.5	1.5	1.5
147.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5
150°	3.0	3.0	1.5	1.5	3.0	1.5	1.5
152.5°	3.0	1.5	1.5	1.5	3.0	1.5	1.5
155°	3.0	3.0	3.0	3.0	3.0	3.0	1.5
157.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0
160°	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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)