

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-74HL-LN-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33519)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

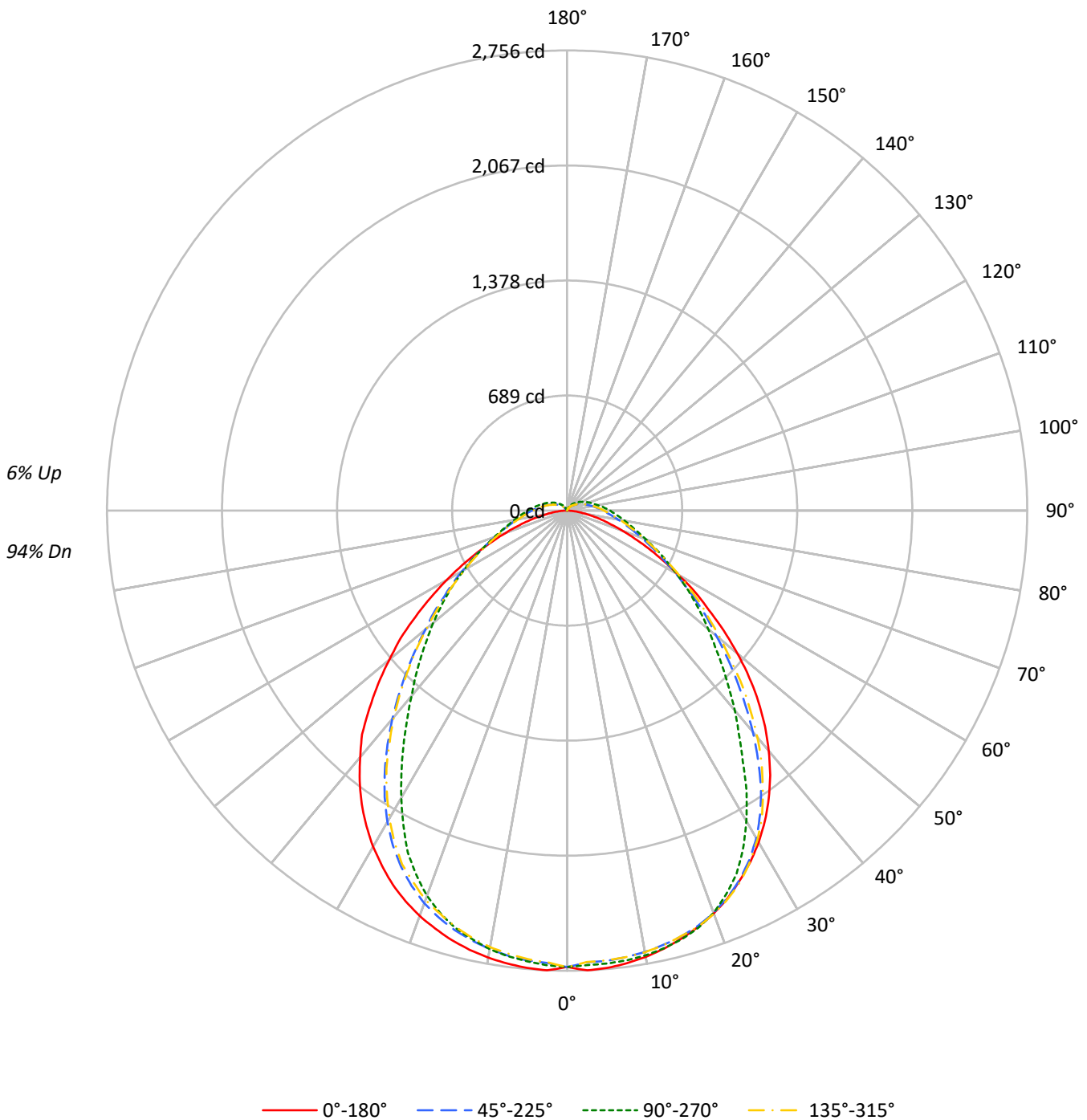
Lumens per Lamp: N/A
Luminaire Lumens: 6918.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.14 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
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°	22090	22090	22090	22090
5°	22248	21387	22248	21292
10°	22148	20818	22186	20529
15°	22006	20196	22105	19670
20°	21837	19397	21965	18577
25°	21487	18210	21725	17137
30°	21031	16467	21307	15245
35°	20322	14330	20714	13343
40°	19305	12533	19815	11628
45°	17963	10895	18546	10270
50°	16129	9574	16839	9090
55°	13952	8454	14966	8026
60°	11734	7422	12795	6995
65°	9620	6563	10589	6085
70°	7655	5824	8571	5387
75°	6012	5377	6770	4947
80°	4340	5188	5111	4742
85°	2671	5217	3593	4797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	3.7
10°-20°	743.1	10.7
20°-30°	1101.3	15.9
30°-40°	1223.6	17.7
40°-50°	1109.1	16.0
50°-60°	859.5	12.4
60°-70°	583.6	8.4
70°-80°	371.3	5.4
80°-90°	237.4	3.4
90°-100°	160.1	2.3
100°-110°	109.6	1.6
110°-120°	73.1	1.1
120°-130°	45.5	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°	2103.6	30.4
0°-40°	3327.2	48.1
0°-60°	5295.8	76.6
0°-90°	6488.1	93.8
90°-120°	342.8	5.0
90°-150°	425.3	6.1
90°-180°	430.0	6.2
0°-180°	6918.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2734	2734	2734	2734	2734	
5°	2750	2723	2750	2711	2750	261
15°	2652	2657	2664	2588	2652	749
25°	2445	2400	2472	2258	2445	1126
35°	2105	1834	2146	1708	2105	1313
45°	1621	1311	1674	1236	1621	1245
55°	1034	922	1110	875	1034	931
65°	537	620	591	574	537	538
75°	215	414	242	380	215	232
85°	39	298	53	274	39	47
90°	0	257	3	235	0	2
95°	2	220	0	204	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°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2756.1	2753.1	2750.1	2745.6	2750.1	2762.2	2754.6	2738.1	2735.1	2708.0	2720.1
5°	2750.1	2745.6	2742.6	2738.1	2744.1	2759.2	2751.6	2736.6	2732.1	2706.5	2720.1
7.5°	2735.1	2732.1	2727.6	2727.6	2733.6	2748.6	2742.6	2726.1	2723.1	2697.5	2712.5
10°	2714.0	2712.5	2709.5	2709.5	2715.5	2733.6	2726.1	2711.0	2708.0	2684.0	2700.5
12.5°	2687.0	2688.5	2684.0	2684.0	2693.0	2711.0	2705.0	2688.5	2685.5	2664.4	2681.0
15°	2652.4	2653.9	2650.9	2652.4	2661.4	2682.5	2674.9	2659.9	2656.9	2640.4	2653.9
17.5°	2613.3	2614.8	2614.8	2613.3	2623.8	2644.9	2638.9	2625.3	2620.8	2607.3	2623.8
20°	2568.2	2568.2	2568.2	2568.2	2580.2	2601.3	2593.8	2583.2	2574.2	2563.7	2577.2
22.5°	2512.6	2511.1	2512.6	2517.1	2529.1	2545.6	2541.1	2529.1	2515.6	2509.6	2520.1
25°	2444.9	2449.4	2450.9	2455.4	2470.5	2484.0	2479.5	2467.4	2446.4	2441.9	2444.9
27.5°	2374.2	2377.2	2381.7	2380.2	2401.3	2414.8	2405.8	2395.3	2365.2	2360.7	2357.7
30°	2294.5	2299.0	2302.1	2300.5	2317.1	2332.1	2323.1	2309.6	2269.0	2266.0	2241.9
32.5°	2204.3	2208.8	2211.8	2211.8	2235.9	2241.9	2225.4	2205.8	2162.2	2151.7	2130.6
35°	2105.1	2109.6	2111.1	2111.1	2135.1	2133.6	2112.6	2085.5	2037.4	2023.9	1987.8
37.5°	1998.3	2001.3	2002.8	2011.9	2022.4	2013.4	1986.3	1951.7	1915.6	1878.0	1838.9
40°	1878.0	1882.5	1885.5	1891.6	1902.1	1891.6	1852.5	1810.4	1771.3	1729.2	1690.1
42.5°	1754.7	1768.3	1765.3	1763.8	1769.8	1741.2	1711.1	1663.0	1623.9	1580.3	1541.2
45°	1620.9	1619.4	1626.9	1629.9	1628.4	1604.4	1562.3	1518.7	1479.6	1434.5	1401.4
47.5°	1479.6	1478.1	1484.1	1487.1	1478.1	1452.5	1419.4	1369.8	1336.7	1297.6	1272.1
50°	1330.7	1330.7	1339.7	1330.7	1326.2	1300.6	1273.6	1224.0	1198.4	1163.8	1148.8
52.5°	1181.8	1195.4	1186.4	1183.4	1178.8	1153.3	1132.2	1091.6	1070.6	1055.5	1037.5
55°	1034.5	1049.5	1043.5	1039.0	1037.5	1016.5	996.9	966.8	953.3	942.8	932.2
57.5°	909.7	908.2	905.2	900.7	902.2	885.6	866.1	849.5	843.5	839.0	842.0
60°	765.3	777.4	772.9	774.4	775.9	772.9	756.3	745.8	747.3	748.8	753.3
62.5°	646.6	657.1	664.6	658.6	661.6	666.1	657.1	654.1	660.1	666.1	672.1
65°	536.8	547.3	554.8	553.3	562.4	571.4	569.9	572.9	586.4	593.9	601.5
67.5°	437.6	448.1	458.6	460.1	473.6	487.2	493.2	503.7	518.8	529.3	538.3
70°	351.8	360.9	372.9	380.4	398.5	416.5	427.0	448.1	457.1	472.1	478.2
72.5°	275.2	282.7	299.2	317.3	332.3	354.9	375.9	393.9	407.5	424.0	431.5
75°	215.0	218.0	236.1	257.1	278.2	303.7	326.3	345.8	363.9	380.4	392.4
77.5°	157.9	162.4	178.9	207.5	231.6	258.6	284.2	305.2	324.8	341.3	357.9
80°	109.8	118.8	136.8	165.4	192.5	222.5	246.6	270.7	291.7	308.2	324.8
82.5°	70.7	78.2	103.8	132.3	160.9	191.0	216.5	240.6	263.1	281.2	296.2
85°	39.1	49.6	75.2	105.3	133.8	163.9	191.0	215.0	237.6	254.1	269.1
87.5°	15.0	30.1	54.1	82.7	111.3	139.8	168.4	191.0	213.5	231.6	245.1
90°	0.0	18.0	40.6	69.2	97.7	126.3	153.4	177.4	198.5	215.0	230.1
92.5°	1.5	12.0	31.6	55.6	82.7	109.8	135.3	159.4	180.4	197.0	210.5
95°	1.5	9.0	25.6	48.1	72.2	97.7	121.8	144.3	163.9	180.4	194.0
97.5°	1.5	6.0	21.1	42.1	63.2	88.7	111.3	132.3	150.4	166.9	177.4
100°	1.5	6.0	18.0	36.1	57.1	79.7	100.7	121.8	138.3	151.9	163.9
102.5°	1.5	4.5	15.0	31.6	51.1	70.7	91.7	111.3	126.3	139.8	151.9
105°	1.5	4.5	13.5	27.1	45.1	64.7	82.7	100.7	117.3	129.3	139.8
107.5°	1.5	3.0	12.0	22.6	39.1	58.6	76.7	91.7	106.8	118.8	129.3
110°	1.5	3.0	10.5	21.1	34.6	52.6	69.2	84.2	97.7	109.8	118.8



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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	19.5	31.6	46.6	63.2	76.7	90.2	100.7	109.8
115°	1.5	3.0	9.0	18.0	28.6	40.6	55.6	70.7	81.2	93.2	100.7
117.5°	1.5	3.0	7.5	15.0	27.1	37.6	51.1	63.2	75.2	85.7	93.2
120°	1.5	3.0	7.5	13.5	24.1	34.6	45.1	57.1	69.2	76.7	84.2
122.5°	1.5	3.0	6.0	13.5	21.1	31.6	40.6	51.1	61.6	70.7	78.2
125°	1.5	3.0	6.0	12.0	19.5	28.6	37.6	45.1	55.6	63.2	70.7
127.5°	1.5	3.0	6.0	10.5	18.0	25.6	34.6	42.1	49.6	57.1	63.2
130°	1.5	3.0	4.5	9.0	16.5	22.6	30.1	39.1	45.1	51.1	57.1
132.5°	1.5	3.0	4.5	9.0	13.5	19.5	27.1	34.6	40.6	46.6	51.1
135°	1.5	3.0	4.5	7.5	12.0	18.0	22.6	30.1	36.1	42.1	46.6
137.5°	1.5	3.0	4.5	7.5	10.5	15.0	19.5	25.6	31.6	36.1	42.1
140°	1.5	3.0	4.5	6.0	9.0	13.5	18.0	21.1	27.1	31.6	36.1
142.5°	1.5	3.0	4.5	6.0	9.0	12.0	15.0	18.0	22.6	27.1	31.6
145°	1.5	3.0	4.5	6.0	7.5	10.5	13.5	16.5	18.0	22.6	25.6
147.5°	1.5	3.0	4.5	6.0	6.0	9.0	12.0	13.5	16.5	18.0	21.1
150°	1.5	3.0	4.5	4.5	6.0	7.5	10.5	12.0	13.5	16.5	18.0
152.5°	1.5	3.0	4.5	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0
155°	1.5	3.0	4.5	4.5	4.5	6.0	7.5	9.0	10.5	12.0	13.5
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°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2717.1	2721.6	2735.1	2735.1	2732.1	2729.1	2729.1	2724.6	2727.6	2733.6	2730.6
5°	2717.1	2721.6	2735.1	2735.1	2732.1	2729.1	2727.6	2723.1	2727.6	2733.6	2730.6
7.5°	2708.0	2714.0	2727.6	2727.6	2724.6	2723.1	2720.1	2717.1	2721.6	2727.6	2724.6
10°	2696.0	2702.0	2715.5	2715.5	2712.5	2712.5	2708.0	2705.0	2711.0	2715.5	2714.0
12.5°	2678.0	2685.5	2697.5	2696.0	2693.0	2694.5	2690.0	2684.0	2690.0	2694.5	2696.0
15°	2652.4	2661.4	2673.4	2670.4	2665.9	2668.9	2661.4	2656.9	2661.4	2670.4	2668.9
17.5°	2619.3	2625.3	2634.4	2634.4	2629.8	2626.8	2623.8	2619.3	2622.3	2628.3	2629.8
20°	2572.7	2580.2	2584.7	2580.2	2578.7	2574.2	2568.2	2563.7	2569.7	2578.7	2580.2
22.5°	2511.1	2512.6	2523.1	2512.6	2505.0	2503.5	2497.5	2488.5	2497.5	2505.0	2506.5
25°	2434.4	2441.9	2437.4	2419.3	2419.3	2407.3	2404.3	2399.8	2401.3	2414.8	2420.8
27.5°	2336.6	2339.6	2327.6	2312.6	2299.0	2291.5	2281.0	2282.5	2282.5	2300.5	2306.6
30°	2229.9	2213.3	2202.8	2178.8	2168.2	2150.2	2147.2	2147.2	2144.2	2153.2	2180.3
32.5°	2102.1	2079.5	2063.0	2040.4	2022.4	2004.3	1995.3	1999.8	1998.3	2020.9	2029.9
35°	1962.2	1948.7	1914.1	1885.5	1875.0	1848.0	1848.0	1834.4	1843.4	1869.0	1879.5
37.5°	1814.9	1793.8	1765.3	1733.7	1726.2	1705.1	1697.6	1690.1	1709.6	1714.1	1724.7
40°	1664.5	1645.0	1617.9	1587.8	1587.8	1562.3	1562.3	1562.3	1563.8	1572.8	1592.3
42.5°	1521.7	1500.6	1476.6	1455.5	1452.5	1433.0	1433.0	1431.5	1434.5	1442.0	1460.0
45°	1383.3	1366.8	1341.2	1330.7	1332.2	1311.2	1315.7	1311.2	1317.2	1324.7	1330.7
47.5°	1255.5	1245.0	1234.5	1219.4	1214.9	1213.4	1205.9	1199.9	1210.4	1210.4	1219.4
50°	1136.7	1130.7	1124.7	1115.7	1117.2	1111.2	1102.2	1102.2	1109.7	1111.2	1117.2
52.5°	1033.0	1025.5	1018.0	1019.5	1021.0	1018.0	1013.4	1008.9	1013.4	1016.5	1024.0
55°	929.2	923.2	930.7	927.7	930.7	927.7	924.7	921.7	929.2	924.7	932.2
57.5°	836.0	842.0	845.0	839.0	843.5	840.5	842.0	837.5	843.5	846.5	845.0
60°	750.3	759.3	754.8	756.3	762.3	759.3	753.3	757.8	763.8	765.3	763.8
62.5°	672.1	682.6	687.2	684.1	685.7	682.6	687.2	681.1	688.7	691.7	687.2
65°	601.5	613.5	616.5	616.5	616.5	613.5	618.0	619.5	622.5	622.5	619.5
67.5°	541.3	551.8	554.8	557.8	554.8	551.8	551.8	553.3	559.3	562.4	559.3
70°	487.2	497.7	499.2	499.2	500.7	503.7	497.7	500.7	505.2	506.7	505.2
72.5°	440.6	451.1	454.1	452.6	454.1	455.6	455.6	452.6	457.1	460.1	460.1
75°	403.0	409.0	412.0	412.0	413.5	415.0	415.0	413.5	416.5	418.0	419.5
77.5°	368.4	372.9	377.4	377.4	378.9	377.4	380.4	380.4	381.9	383.4	384.9
80°	333.8	339.8	342.8	344.3	347.3	348.8	348.8	348.8	350.3	351.8	351.8
82.5°	306.7	311.3	315.8	320.3	320.3	321.8	321.8	321.8	323.3	323.3	324.8
85°	279.7	285.7	290.2	293.2	294.7	296.2	296.2	297.7	297.7	297.7	299.2
87.5°	255.6	263.1	266.1	269.1	270.7	273.7	273.7	273.7	275.2	275.2	275.2
90°	239.1	246.6	249.6	252.6	254.1	255.6	255.6	257.1	257.1	258.6	258.6
92.5°	219.5	227.0	233.1	233.1	234.6	237.6	236.1	236.1	237.6	239.1	239.1
95°	204.5	210.5	215.0	216.5	218.0	218.0	218.0	219.5	218.0	219.5	219.5
97.5°	186.4	192.5	197.0	200.0	201.5	201.5	201.5	203.0	201.5	203.0	203.0
100°	171.4	177.4	181.9	183.4	186.4	186.4	186.4	186.4	186.4	186.4	188.0
102.5°	159.4	165.4	168.4	169.9	171.4	172.9	172.9	172.9	172.9	174.4	174.4
105°	147.4	153.4	156.4	157.9	159.4	160.9	160.9	160.9	162.4	162.4	160.9
107.5°	136.8	141.3	144.3	147.4	148.9	148.9	150.4	150.4	150.4	150.4	150.4
110°	126.3	130.8	135.3	138.3	138.3	139.8	139.8	141.3	141.3	139.8	141.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	115.8	121.8	124.8	127.8	129.3	130.8	130.8	130.8	130.8	130.8	130.8
115°	106.8	112.8	115.8	118.8	120.3	121.8	121.8	121.8	121.8	121.8	121.8
117.5°	99.2	105.3	108.3	109.8	111.3	112.8	114.3	114.3	114.3	114.3	112.8
120°	91.7	96.2	99.2	102.2	103.8	105.3	105.3	105.3	105.3	105.3	105.3
122.5°	84.2	88.7	91.7	94.7	96.2	97.7	97.7	97.7	97.7	97.7	97.7
125°	76.7	81.2	84.2	87.2	88.7	90.2	90.2	90.2	90.2	90.2	90.2
127.5°	69.2	73.7	78.2	79.7	81.2	82.7	82.7	82.7	84.2	82.7	82.7
130°	61.6	66.2	70.7	72.2	73.7	75.2	76.7	76.7	76.7	76.7	75.2
132.5°	55.6	60.1	63.2	64.7	67.7	67.7	69.2	69.2	69.2	69.2	67.7
135°	51.1	54.1	57.1	58.6	61.6	61.6	61.6	63.2	63.2	61.6	60.1
137.5°	45.1	48.1	51.1	52.6	54.1	55.6	55.6	57.1	55.6	55.6	55.6
140°	42.1	43.6	46.6	48.1	49.6	49.6	49.6	51.1	51.1	49.6	49.6
142.5°	36.1	39.1	42.1	43.6	45.1	45.1	45.1	45.1	45.1	45.1	45.1
145°	30.1	34.6	36.1	39.1	39.1	40.6	40.6	40.6	40.6	40.6	39.1
147.5°	25.6	28.6	33.1	34.6	34.6	36.1	36.1	36.1	36.1	36.1	34.6
150°	19.5	22.6	27.1	30.1	30.1	31.6	31.6	31.6	31.6	30.1	30.1
152.5°	16.5	19.5	21.1	24.1	25.6	25.6	25.6	27.1	25.6	25.6	25.6
155°	15.0	16.5	18.0	19.5	21.1	22.6	22.6	22.6	22.6	21.1	21.1
157.5°	12.0	13.5	15.0	16.5	18.0	19.5	19.5	19.5	19.5	19.5	18.0
160°	9.0	10.5	12.0	12.0	13.5	15.0	16.5	15.0	15.0	15.0	15.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2727.6	2726.1	2730.6	2723.1	2700.5	2706.5	2703.5	2717.1	2720.1	2723.1	2736.6
5°	2727.6	2726.1	2729.1	2723.1	2699.0	2703.5	2700.5	2714.0	2717.1	2718.6	2732.1
7.5°	2721.6	2720.1	2724.6	2717.1	2691.5	2697.5	2693.0	2706.5	2708.0	2709.5	2721.6
10°	2709.5	2708.0	2711.0	2705.0	2679.5	2685.5	2679.5	2693.0	2693.0	2696.0	2705.0
12.5°	2691.5	2688.5	2694.5	2687.0	2658.4	2665.9	2662.9	2671.9	2673.4	2674.9	2684.0
15°	2665.9	2662.9	2667.4	2662.9	2637.4	2638.9	2634.4	2647.9	2649.4	2646.4	2655.4
17.5°	2628.3	2625.3	2634.4	2631.3	2605.8	2611.8	2610.3	2613.3	2617.8	2610.3	2622.3
20°	2581.7	2584.7	2587.7	2589.2	2569.7	2569.7	2568.2	2574.2	2578.7	2572.7	2581.7
22.5°	2512.6	2520.1	2529.1	2532.1	2518.6	2517.1	2526.1	2523.1	2527.6	2524.6	2530.6
25°	2425.3	2440.4	2449.4	2458.4	2450.9	2453.9	2467.4	2470.5	2470.5	2469.0	2475.0
27.5°	2317.1	2336.6	2353.2	2372.7	2365.2	2371.2	2393.8	2396.8	2402.8	2396.8	2408.8
30°	2187.8	2205.8	2237.4	2266.0	2269.0	2278.0	2309.6	2312.6	2329.1	2323.1	2327.6
32.5°	2058.5	2067.5	2103.6	2132.1	2150.2	2172.7	2207.3	2213.3	2235.9	2240.4	2240.4
35°	1896.1	1921.6	1954.7	1995.3	2017.9	2041.9	2088.5	2097.6	2130.6	2141.2	2153.2
37.5°	1759.2	1783.3	1804.4	1846.5	1887.0	1914.1	1951.7	1974.3	2008.8	2028.4	2043.4
40°	1613.4	1632.9	1655.5	1697.6	1732.2	1772.8	1810.4	1837.4	1881.0	1903.6	1923.1
42.5°	1475.1	1490.1	1514.2	1544.2	1580.3	1625.4	1661.5	1693.1	1739.7	1771.3	1793.8
45°	1351.8	1360.8	1381.8	1404.4	1436.0	1482.6	1517.2	1557.8	1595.3	1628.4	1655.5
47.5°	1236.0	1248.0	1258.5	1273.6	1302.1	1330.7	1371.3	1410.4	1448.0	1484.1	1511.1
50°	1129.2	1129.2	1145.8	1156.3	1175.8	1201.4	1233.0	1260.0	1306.7	1332.2	1366.8
52.5°	1025.5	1031.5	1040.5	1046.5	1061.6	1078.1	1103.7	1126.2	1165.3	1189.4	1222.4
55°	933.8	939.8	944.3	947.3	956.3	975.9	984.9	1002.9	1030.0	1049.5	1078.1
57.5°	846.5	849.5	854.1	855.6	857.1	869.1	876.6	881.1	908.2	927.7	951.8
60°	766.8	766.8	771.4	769.9	768.4	774.4	772.9	777.4	793.9	805.9	816.5
62.5°	691.7	691.7	693.2	690.2	688.7	688.7	682.6	687.2	691.7	693.2	700.7
65°	622.5	630.0	624.0	625.5	616.5	613.5	610.5	601.5	599.9	593.9	596.9
67.5°	560.9	566.9	560.9	560.9	553.3	547.3	539.8	524.8	520.3	508.2	505.2
70°	511.2	506.7	509.7	505.2	496.2	488.7	478.2	466.1	451.1	436.1	425.5
72.5°	463.1	463.1	460.1	455.6	451.1	436.1	424.0	410.5	392.4	372.9	357.9
75°	416.5	418.0	418.0	413.5	406.0	392.4	378.9	359.4	339.8	317.3	297.7
77.5°	383.4	383.4	383.4	375.9	368.4	356.4	339.8	318.8	297.7	270.7	248.1
80°	351.8	350.3	350.3	341.3	333.8	320.3	303.7	282.7	260.1	231.6	206.0
82.5°	326.3	324.8	321.8	314.3	303.7	290.2	273.7	251.1	227.0	201.5	169.9
85°	299.2	297.7	294.7	287.2	276.7	264.6	246.6	224.0	200.0	171.4	141.3
87.5°	275.2	273.7	269.1	264.6	252.6	239.1	221.0	200.0	174.4	147.4	117.3
90°	258.6	255.6	252.6	246.6	236.1	221.0	203.0	180.4	154.9	127.8	97.7
92.5°	239.1	237.6	233.1	227.0	218.0	203.0	184.9	163.9	138.3	112.8	84.2
95°	219.5	218.0	215.0	209.0	200.0	186.4	169.9	148.9	124.8	99.2	73.7
97.5°	201.5	201.5	197.0	192.5	181.9	171.4	154.9	135.3	112.8	90.2	66.2
100°	186.4	186.4	181.9	175.9	168.4	157.9	141.3	123.3	102.2	81.2	57.1
102.5°	172.9	171.4	168.4	162.4	154.9	144.3	129.3	112.8	93.2	72.2	51.1
105°	160.9	159.4	156.4	150.4	144.3	132.3	120.3	103.8	84.2	64.7	45.1
107.5°	148.9	147.4	145.9	139.8	132.3	121.8	109.8	93.2	76.7	58.6	40.6
110°	138.3	136.8	133.8	127.8	120.3	111.3	99.2	85.7	69.2	52.6	36.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	129.3	127.8	124.8	118.8	112.8	102.2	91.7	76.7	63.2	48.1	31.6
115°	120.3	118.8	115.8	109.8	102.2	93.2	82.7	70.7	55.6	42.1	28.6
117.5°	111.3	109.8	106.8	102.2	94.7	85.7	75.2	63.2	49.6	39.1	25.6
120°	103.8	100.7	97.7	93.2	85.7	78.2	67.7	57.1	45.1	34.6	22.6
122.5°	96.2	93.2	90.2	85.7	78.2	70.7	60.1	51.1	42.1	31.6	21.1
125°	87.2	85.7	82.7	78.2	70.7	63.2	55.6	46.6	37.6	28.6	18.0
127.5°	79.7	78.2	75.2	69.2	63.2	57.1	49.6	42.1	33.1	24.1	16.5
130°	73.7	70.7	67.7	63.2	58.6	52.6	45.1	37.6	30.1	21.1	15.0
132.5°	66.2	63.2	60.1	57.1	52.6	46.6	40.6	33.1	27.1	19.5	13.5
135°	60.1	57.1	54.1	51.1	46.6	42.1	36.1	30.1	24.1	18.0	12.0
137.5°	52.6	51.1	49.6	46.6	42.1	37.6	33.1	25.6	21.1	16.5	10.5
140°	48.1	46.6	45.1	40.6	37.6	33.1	28.6	22.6	18.0	13.5	9.0
142.5°	43.6	42.1	39.1	36.1	33.1	30.1	24.1	21.1	16.5	12.0	9.0
145°	37.6	36.1	34.6	31.6	28.6	24.1	21.1	18.0	15.0	10.5	7.5
147.5°	34.6	33.1	30.1	27.1	24.1	21.1	19.5	16.5	12.0	9.0	6.0
150°	28.6	27.1	25.6	22.6	21.1	19.5	16.5	13.5	10.5	7.5	6.0
152.5°	24.1	22.6	21.1	21.1	18.0	16.5	13.5	12.0	9.0	7.5	4.5
155°	21.1	21.1	19.5	18.0	15.0	13.5	12.0	9.0	7.5	6.0	4.5
157.5°	18.0	16.5	15.0	15.0	13.5	12.0	9.0	7.5	6.0	6.0	4.5
160°	15.0	13.5	13.5	12.0	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: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2738.1	2721.6	2736.6	2756.1	2756.1	2753.1	2750.1	2756.1	2771.2	2765.2	2747.1
5°	2733.6	2717.1	2730.6	2750.1	2750.1	2745.6	2742.6	2747.1	2763.7	2756.1	2739.6
7.5°	2724.6	2709.5	2718.6	2736.6	2736.6	2732.1	2729.1	2735.1	2748.6	2741.1	2723.1
10°	2708.0	2691.5	2702.0	2718.6	2717.1	2714.0	2709.5	2717.1	2729.1	2718.6	2697.5
12.5°	2687.0	2670.4	2679.5	2694.5	2693.0	2687.0	2684.0	2688.5	2699.0	2693.0	2670.4
15°	2658.4	2641.9	2649.4	2664.4	2659.9	2655.4	2649.4	2650.9	2664.4	2653.9	2629.8
17.5°	2623.8	2605.8	2611.8	2625.3	2620.8	2616.3	2608.8	2610.3	2625.3	2610.3	2584.7
20°	2581.7	2562.2	2566.7	2583.2	2575.7	2568.2	2560.7	2560.7	2575.7	2559.2	2530.6
22.5°	2536.6	2517.1	2520.1	2532.1	2526.1	2512.6	2505.0	2509.6	2517.1	2496.0	2465.9
25°	2481.0	2455.4	2459.9	2472.0	2467.4	2449.4	2441.9	2444.9	2441.9	2425.3	2393.8
27.5°	2416.3	2389.3	2392.3	2399.8	2393.8	2377.2	2368.2	2369.7	2363.7	2342.6	2306.6
30°	2335.1	2321.6	2320.1	2324.6	2315.6	2299.0	2288.5	2285.5	2284.0	2253.9	2210.3
32.5°	2252.4	2240.4	2232.9	2238.9	2228.4	2211.8	2193.8	2193.8	2178.8	2150.2	2112.6
35°	2168.2	2148.7	2141.2	2145.7	2133.6	2112.6	2097.6	2090.0	2067.5	2031.4	1990.8
37.5°	2060.0	2046.4	2037.4	2041.9	2028.4	2013.4	1984.8	1977.3	1953.2	1903.6	1852.5
40°	1942.7	1932.2	1923.1	1927.6	1912.6	1890.1	1864.5	1852.5	1825.4	1769.8	1729.2
42.5°	1816.4	1811.9	1801.3	1817.9	1787.8	1765.3	1739.7	1720.1	1693.1	1632.9	1586.3
45°	1682.6	1693.1	1669.0	1673.5	1654.0	1634.4	1607.4	1578.8	1551.7	1494.6	1442.0
47.5°	1541.2	1548.7	1532.2	1535.2	1514.2	1496.1	1472.0	1436.0	1405.9	1356.3	1309.7
50°	1395.4	1392.4	1392.4	1389.3	1372.8	1350.3	1326.2	1293.1	1263.0	1217.9	1178.8
52.5°	1240.5	1246.5	1249.5	1257.0	1236.0	1222.4	1184.9	1156.3	1133.7	1087.1	1054.0
55°	1091.6	1112.7	1106.7	1109.7	1085.6	1075.1	1045.0	1022.5	989.4	962.3	941.3
57.5°	956.3	960.8	963.8	968.3	957.8	936.8	912.7	894.7	869.1	846.5	831.5
60°	825.5	825.5	827.0	834.5	824.0	805.9	787.9	774.4	756.3	742.8	733.8
62.5°	702.2	712.7	714.2	708.2	694.7	685.7	673.6	666.1	654.1	649.6	646.6
65°	587.9	587.9	587.9	590.9	583.4	577.4	569.9	568.4	572.9	566.9	569.9
67.5°	491.7	487.2	484.2	485.7	482.7	479.7	478.2	482.7	491.7	491.7	499.2
70°	409.0	400.0	393.9	393.9	393.9	395.5	400.0	409.0	424.0	430.0	440.6
72.5°	341.3	321.8	312.8	312.8	314.3	320.3	333.8	350.3	363.9	375.9	389.4
75°	276.7	257.1	243.6	242.1	245.1	254.1	273.7	288.7	311.3	327.8	344.3
77.5°	224.0	200.0	183.4	181.9	186.4	200.0	224.0	243.6	269.1	287.2	305.2
80°	178.9	151.9	138.3	129.3	136.8	153.4	180.4	204.5	228.6	252.6	275.2
82.5°	142.8	117.3	96.2	87.2	96.2	118.8	144.3	172.9	197.0	222.5	245.1
85°	112.8	85.7	61.6	52.6	63.2	87.2	115.8	144.3	171.4	197.0	219.5
87.5°	88.7	61.6	37.6	25.6	39.1	64.7	91.7	120.3	148.9	174.4	197.0
90°	69.2	43.6	21.1	3.0	22.6	46.6	73.7	100.7	129.3	154.9	177.4
92.5°	58.6	33.1	12.0	0.0	13.5	34.6	60.1	87.2	112.8	138.3	160.9
95°	49.6	27.1	9.0	0.0	9.0	27.1	49.6	73.7	99.2	124.8	147.4
97.5°	42.1	21.1	6.0	0.0	6.0	21.1	40.6	64.7	87.2	111.3	132.3
100°	36.1	18.0	4.5	0.0	4.5	16.5	34.6	55.6	78.2	100.7	120.3
102.5°	31.6	15.0	3.0	0.0	3.0	13.5	28.6	48.1	67.7	88.7	108.3
105°	27.1	12.0	3.0	0.0	1.5	10.5	24.1	42.1	60.1	79.7	97.7
107.5°	24.1	10.5	3.0	0.0	1.5	9.0	21.1	36.1	54.1	70.7	87.2
110°	21.1	9.0	3.0	0.0	1.5	6.0	18.0	31.6	46.6	63.2	79.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	18.0	7.5	1.5	0.0	0.0	4.5	15.0	27.1	40.6	57.1	70.7
115°	16.5	7.5	1.5	0.0	0.0	3.0	12.0	24.1	36.1	51.1	63.2
117.5°	15.0	6.0	1.5	0.0	1.5	3.0	10.5	21.1	31.6	43.6	57.1
120°	13.5	6.0	1.5	0.0	1.5	1.5	7.5	18.0	27.1	39.1	49.6
122.5°	12.0	6.0	1.5	0.0	1.5	1.5	6.0	15.0	24.1	34.6	43.6
125°	10.5	4.5	3.0	1.5	1.5	1.5	4.5	12.0	21.1	28.6	39.1
127.5°	10.5	4.5	3.0	1.5	1.5	1.5	3.0	10.5	16.5	25.6	34.6
130°	9.0	4.5	3.0	1.5	1.5	1.5	1.5	7.5	15.0	21.1	28.6
132.5°	7.5	4.5	3.0	1.5	1.5	1.5	1.5	4.5	10.5	18.0	24.1
135°	7.5	4.5	3.0	1.5	1.5	1.5	1.5	3.0	7.5	13.5	19.5
137.5°	6.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	6.0	10.5	15.0
140°	6.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	4.5	7.5	12.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2741.1	2712.5	2727.6	2723.1	2729.1	2741.1	2739.6	2736.6	2736.6	2732.1	2726.1
5°	2732.1	2705.0	2718.6	2711.0	2718.6	2729.1	2727.6	2723.1	2726.1	2718.6	2711.0
7.5°	2714.0	2690.0	2702.0	2696.0	2702.0	2712.5	2708.0	2706.5	2709.5	2697.5	2693.0
10°	2693.0	2665.9	2679.5	2671.9	2679.5	2687.0	2684.0	2678.0	2684.0	2671.9	2667.4
12.5°	2659.9	2637.4	2646.4	2643.4	2647.9	2655.4	2649.4	2644.9	2647.9	2637.4	2628.3
15°	2623.8	2601.3	2608.8	2604.3	2607.3	2616.3	2605.8	2604.3	2601.3	2590.7	2587.7
17.5°	2577.2	2556.2	2563.7	2556.2	2560.7	2557.7	2556.2	2548.6	2548.6	2536.6	2527.6
20°	2520.1	2502.0	2497.5	2491.5	2497.5	2491.5	2482.5	2476.5	2475.0	2462.9	2455.4
22.5°	2453.9	2432.9	2435.9	2419.3	2420.8	2411.8	2396.8	2390.8	2384.7	2371.2	2360.7
25°	2374.2	2353.2	2338.1	2327.6	2314.1	2312.6	2293.0	2278.0	2276.5	2259.9	2258.4
27.5°	2284.0	2259.9	2247.9	2222.4	2205.8	2192.3	2175.7	2160.7	2153.2	2135.1	2123.1
30°	2180.3	2153.2	2123.1	2105.1	2079.5	2069.0	2040.4	2022.4	2016.4	1996.8	1987.8
32.5°	2063.0	2034.4	2010.3	1975.8	1947.2	1932.2	1903.6	1885.5	1878.0	1857.0	1844.9
35°	1935.2	1903.6	1875.0	1841.9	1819.4	1793.8	1759.2	1741.2	1724.7	1717.1	1708.1
37.5°	1801.3	1766.8	1733.7	1700.6	1681.1	1651.0	1620.9	1608.9	1589.3	1581.8	1572.8
40°	1663.0	1628.4	1596.9	1565.3	1542.7	1515.7	1488.6	1484.1	1463.0	1455.5	1449.5
42.5°	1526.2	1490.1	1454.0	1431.5	1414.9	1387.8	1369.8	1365.3	1347.2	1342.7	1342.7
45°	1402.9	1357.8	1327.7	1308.2	1294.6	1272.1	1257.0	1254.0	1239.0	1236.0	1236.0
47.5°	1270.6	1228.5	1205.9	1193.9	1181.8	1165.3	1156.3	1156.3	1141.3	1138.2	1136.7
50°	1147.3	1108.2	1091.6	1079.6	1078.1	1066.1	1058.6	1055.5	1055.5	1045.0	1046.5
52.5°	1030.0	1010.4	996.9	989.4	980.4	972.8	966.8	966.8	962.3	954.8	957.8
55°	921.7	899.2	900.7	894.7	890.1	885.6	887.1	878.1	876.6	870.6	875.1
57.5°	813.5	813.5	810.5	805.9	798.4	801.4	801.4	801.4	793.9	789.4	793.9
60°	721.7	726.3	718.7	723.2	720.2	721.7	718.7	718.7	714.2	712.7	714.2
62.5°	640.5	648.1	645.1	651.1	648.1	649.6	652.6	646.6	643.6	640.5	643.6
65°	568.4	577.4	575.9	580.4	581.9	583.4	584.9	581.9	578.9	575.9	574.4
67.5°	505.2	514.2	520.3	521.8	523.3	527.8	526.3	523.3	520.3	515.7	514.2
70°	448.1	460.1	467.6	470.6	476.6	473.6	473.6	472.1	469.1	464.6	463.1
72.5°	400.0	413.5	421.0	424.0	430.0	430.0	428.5	427.0	424.0	419.5	418.0
75°	357.9	369.9	380.4	386.4	390.9	390.9	389.4	387.9	384.9	381.9	380.4
77.5°	324.8	335.3	344.3	351.8	354.9	356.4	354.9	351.8	351.8	350.3	348.8
80°	291.7	303.7	312.8	320.3	324.8	324.8	323.3	324.8	321.8	320.3	318.8
82.5°	263.1	276.7	287.2	294.7	297.7	299.2	297.7	299.2	296.2	296.2	296.2
85°	237.6	251.1	263.1	269.1	273.7	275.2	275.2	275.2	273.7	273.7	273.7
87.5°	216.5	230.1	242.1	248.1	252.6	254.1	254.1	255.6	252.6	252.6	252.6
90°	197.0	210.5	222.5	228.6	233.1	236.1	236.1	237.6	236.1	234.6	234.6
92.5°	178.9	194.0	206.0	212.0	216.5	221.0	221.0	222.5	219.5	219.5	219.5
95°	163.9	178.9	189.5	197.0	201.5	204.5	206.0	206.0	204.5	204.5	204.5
97.5°	150.4	163.9	174.4	181.9	186.4	188.0	189.5	191.0	189.5	189.5	189.5
100°	136.8	150.4	160.9	166.9	172.9	174.4	175.9	177.4	177.4	175.9	175.9
102.5°	124.8	138.3	147.4	154.9	159.4	162.4	163.9	163.9	163.9	163.9	163.9
105°	112.8	126.3	135.3	142.8	147.4	150.4	151.9	153.4	153.4	151.9	151.9
107.5°	102.2	114.3	124.8	130.8	136.8	139.8	141.3	141.3	142.8	141.3	141.3
110°	91.7	105.3	114.3	120.3	126.3	129.3	130.8	132.3	132.3	132.3	132.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	84.2	94.7	103.8	109.8	115.8	118.8	120.3	121.8	123.3	121.8	121.8
115°	75.2	85.7	94.7	100.7	105.3	108.3	111.3	112.8	112.8	114.3	112.8
117.5°	67.7	76.7	85.7	91.7	96.2	100.7	102.2	103.8	105.3	103.8	103.8
120°	60.1	69.2	76.7	82.7	87.2	91.7	93.2	94.7	96.2	94.7	94.7
122.5°	54.1	61.6	69.2	75.2	79.7	82.7	85.7	85.7	87.2	87.2	87.2
125°	48.1	55.6	61.6	67.7	72.2	75.2	76.7	78.2	78.2	79.7	79.7
127.5°	42.1	48.1	55.6	60.1	64.7	67.7	69.2	70.7	70.7	72.2	72.2
130°	36.1	42.1	48.1	52.6	57.1	60.1	61.6	63.2	64.7	64.7	64.7
132.5°	31.6	37.6	42.1	46.6	49.6	52.6	55.6	57.1	57.1	57.1	57.1
135°	25.6	31.6	36.1	40.6	43.6	46.6	48.1	51.1	51.1	51.1	51.1
137.5°	21.1	27.1	31.6	34.6	37.6	40.6	42.1	43.6	45.1	45.1	45.1
140°	16.5	21.1	25.6	30.1	33.1	34.6	37.6	37.6	39.1	39.1	39.1
142.5°	12.0	16.5	19.5	24.1	27.1	30.1	31.6	33.1	33.1	33.1	33.1
145°	9.0	12.0	15.0	18.0	22.6	24.1	25.6	27.1	28.6	28.6	28.6
147.5°	6.0	9.0	10.5	13.5	16.5	19.5	21.1	22.6	24.1	24.1	24.1
150°	4.5	6.0	9.0	10.5	12.0	15.0	18.0	18.0	19.5	19.5	18.0
152.5°	3.0	4.5	6.0	7.5	9.0	10.5	13.5	13.5	15.0	15.0	15.0
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: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2730.6	2733.6	2733.6	2730.6	2729.1	2735.1	2727.6	2699.0	2708.0	2711.0	2720.1
5°	2717.1	2720.1	2720.1	2720.1	2717.1	2723.1	2715.5	2687.0	2697.5	2702.0	2708.0
7.5°	2697.5	2699.0	2702.0	2700.5	2697.5	2706.5	2699.0	2670.4	2678.0	2685.5	2693.0
10°	2671.9	2671.9	2673.4	2676.5	2673.4	2681.0	2673.4	2647.9	2655.4	2659.9	2668.9
12.5°	2637.4	2640.4	2641.9	2640.4	2638.9	2644.9	2641.9	2617.8	2620.8	2629.8	2638.9
15°	2590.7	2590.7	2598.3	2595.3	2595.3	2601.3	2604.3	2577.2	2581.7	2595.3	2604.3
17.5°	2533.6	2535.1	2541.1	2544.1	2542.6	2553.2	2554.7	2533.6	2532.1	2548.6	2557.7
20°	2459.9	2462.9	2470.5	2476.5	2476.5	2488.5	2493.0	2479.5	2481.0	2499.0	2502.0
22.5°	2369.7	2369.7	2383.2	2392.3	2399.8	2407.3	2420.8	2408.8	2408.8	2432.9	2446.4
25°	2258.4	2269.0	2273.5	2291.5	2302.1	2323.1	2335.1	2336.6	2338.1	2360.7	2369.7
27.5°	2135.1	2138.2	2151.7	2172.7	2184.8	2204.3	2226.9	2231.4	2238.9	2269.0	2282.5
30°	1995.3	2004.3	2010.3	2040.4	2057.0	2082.5	2111.1	2121.6	2127.6	2168.2	2184.8
32.5°	1852.5	1855.5	1881.0	1897.6	1917.1	1944.2	1977.3	1996.8	2008.8	2050.9	2075.0
35°	1709.6	1715.6	1736.7	1757.7	1777.3	1804.4	1838.9	1866.0	1887.0	1924.6	1956.2
37.5°	1578.8	1593.8	1598.4	1619.4	1634.4	1661.5	1685.6	1724.7	1745.7	1784.8	1825.4
40°	1461.5	1466.0	1469.0	1490.1	1500.6	1526.2	1560.8	1586.3	1614.9	1643.5	1691.6
42.5°	1345.7	1348.8	1353.3	1365.3	1377.3	1395.4	1420.9	1446.5	1476.6	1518.7	1550.2
45°	1239.0	1242.0	1245.0	1252.5	1263.0	1279.6	1296.1	1314.2	1344.2	1380.3	1413.4
47.5°	1139.7	1145.8	1145.8	1147.3	1154.8	1168.3	1180.3	1202.9	1219.4	1239.0	1276.6
50°	1045.0	1049.5	1051.0	1051.0	1055.5	1064.6	1067.6	1082.6	1097.6	1115.7	1142.8
52.5°	956.3	956.3	954.8	960.8	960.8	966.8	968.3	977.4	987.9	1007.4	1019.5
55°	872.1	872.1	876.6	873.6	873.6	876.6	875.1	876.6	885.6	897.7	908.2
57.5°	790.9	789.4	793.9	790.9	789.4	792.4	795.4	789.4	790.9	802.9	802.9
60°	709.7	711.2	715.7	712.7	712.7	712.7	709.7	706.7	703.7	711.2	714.2
62.5°	645.1	640.5	645.1	640.5	643.6	642.0	639.0	633.0	634.5	631.5	628.5
65°	577.4	577.4	578.9	574.4	577.4	577.4	572.9	571.4	562.4	559.3	551.8
67.5°	518.8	518.8	520.3	517.2	517.2	518.8	514.2	509.7	500.7	496.2	485.7
70°	467.6	467.6	467.6	466.1	466.1	466.1	463.1	457.1	448.1	440.6	427.0
72.5°	421.0	422.5	421.0	421.0	425.5	421.0	416.5	410.5	403.0	387.9	375.9
75°	383.4	384.9	383.4	383.4	383.4	381.9	380.4	371.4	362.4	350.3	332.3
77.5°	350.3	350.3	351.8	350.3	350.3	348.8	344.3	336.8	326.3	315.8	294.7
80°	318.8	320.3	321.8	323.3	320.3	318.8	314.3	308.2	294.7	282.7	261.6
82.5°	296.2	294.7	296.2	297.7	294.7	293.2	288.7	281.2	270.7	254.1	233.1
85°	273.7	272.2	272.2	273.7	272.2	269.1	264.6	257.1	246.6	230.1	209.0
87.5°	251.1	252.6	254.1	252.6	251.1	248.1	243.6	236.1	224.0	210.5	188.0
90°	234.6	234.6	234.6	234.6	233.1	230.1	225.5	216.5	206.0	189.5	169.9
92.5°	219.5	219.5	219.5	219.5	218.0	213.5	209.0	201.5	189.5	172.9	154.9
95°	204.5	206.0	204.5	204.5	201.5	200.0	192.5	184.9	174.4	157.9	138.3
97.5°	188.0	189.5	188.0	188.0	186.4	183.4	178.9	169.9	159.4	144.3	126.3
100°	175.9	175.9	174.4	174.4	172.9	169.9	163.9	156.4	145.9	130.8	112.8
102.5°	162.4	163.9	162.4	162.4	159.4	156.4	151.9	144.3	133.8	118.8	102.2
105°	151.9	151.9	150.4	150.4	147.4	144.3	139.8	130.8	121.8	108.3	91.7
107.5°	141.3	141.3	139.8	139.8	136.8	133.8	127.8	120.3	111.3	97.7	82.7
110°	130.8	130.8	130.8	129.3	126.3	121.8	117.3	109.8	100.7	88.7	73.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	123.3	121.8	120.3	118.8	115.8	112.8	106.8	99.2	90.2	79.7	66.2
115°	112.8	112.8	111.3	109.8	106.8	102.2	97.7	91.7	82.7	70.7	58.6
117.5°	103.8	103.8	102.2	100.7	97.7	93.2	88.7	82.7	73.7	63.2	52.6
120°	94.7	94.7	93.2	91.7	88.7	84.2	81.2	73.7	66.2	55.6	46.6
122.5°	87.2	85.7	85.7	82.7	81.2	76.7	72.2	66.2	58.6	49.6	40.6
125°	78.2	78.2	76.7	75.2	73.7	69.2	64.7	58.6	51.1	43.6	36.1
127.5°	70.7	70.7	69.2	67.7	66.2	61.6	57.1	52.6	45.1	37.6	30.1
130°	63.2	63.2	61.6	60.1	58.6	54.1	51.1	45.1	39.1	33.1	25.6
132.5°	57.1	57.1	55.6	54.1	51.1	48.1	45.1	39.1	34.6	28.6	22.6
135°	51.1	49.6	49.6	48.1	45.1	42.1	39.1	34.6	28.6	24.1	18.0
137.5°	45.1	43.6	42.1	40.6	39.1	36.1	33.1	30.1	25.6	19.5	15.0
140°	39.1	37.6	37.6	36.1	33.1	31.6	28.6	24.1	21.1	16.5	12.0
142.5°	33.1	33.1	31.6	30.1	28.6	27.1	24.1	21.1	16.5	13.5	9.0
145°	28.6	27.1	27.1	25.6	24.1	21.1	19.5	16.5	13.5	10.5	7.5
147.5°	22.6	22.6	22.6	21.1	19.5	18.0	16.5	13.5	10.5	7.5	4.5
150°	18.0	18.0	18.0	16.5	15.0	13.5	12.0	10.5	7.5	4.5	3.0
152.5°	15.0	15.0	13.5	13.5	12.0	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: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6	2733.6
2.5°	2715.5	2714.0	2726.1	2726.1	2712.5	2733.6	2756.1
5°	2706.5	2705.0	2717.1	2717.1	2705.0	2726.1	2750.1
7.5°	2688.5	2690.0	2702.0	2705.0	2690.0	2709.5	2735.1
10°	2668.9	2667.4	2681.0	2684.0	2671.9	2690.0	2714.0
12.5°	2637.4	2637.4	2650.9	2655.4	2643.4	2664.4	2687.0
15°	2604.3	2604.3	2613.3	2620.8	2610.3	2629.8	2652.4
17.5°	2562.2	2560.7	2569.7	2578.7	2568.2	2589.2	2613.3
20°	2508.0	2508.0	2518.6	2529.1	2521.6	2541.1	2568.2
22.5°	2450.9	2444.9	2462.9	2470.5	2465.9	2485.5	2512.6
25°	2378.7	2377.2	2395.3	2405.8	2399.8	2420.8	2444.9
27.5°	2300.5	2299.0	2317.1	2330.6	2327.6	2347.2	2374.2
30°	2205.8	2213.3	2229.9	2252.4	2244.9	2266.0	2294.5
32.5°	2106.6	2114.1	2133.6	2157.7	2159.2	2175.7	2204.3
35°	1987.8	2007.3	2020.9	2052.4	2058.5	2075.0	2105.1
37.5°	1863.0	1885.5	1914.1	1938.2	1950.2	1963.7	1998.3
40°	1723.2	1756.2	1787.8	1816.4	1831.4	1844.9	1878.0
42.5°	1596.9	1622.4	1652.5	1681.1	1708.1	1720.1	1754.7
45°	1454.0	1484.1	1511.1	1545.7	1572.8	1586.3	1620.9
47.5°	1314.2	1344.2	1380.3	1404.4	1433.0	1446.5	1479.6
50°	1180.3	1207.4	1237.5	1266.1	1290.1	1302.1	1330.7
52.5°	1048.0	1076.6	1105.2	1123.2	1148.8	1157.8	1181.8
55°	930.7	950.3	975.9	986.4	1011.9	1018.0	1034.5
57.5°	818.0	831.5	840.5	858.6	876.6	890.1	909.7
60°	715.7	721.7	727.8	738.3	753.3	757.8	765.3
62.5°	624.0	622.5	634.5	637.5	639.0	654.1	646.6
65°	542.8	544.3	533.8	529.3	535.3	539.8	536.8
67.5°	475.1	466.1	457.1	446.6	437.6	442.1	437.6
70°	409.0	401.5	386.4	371.4	365.4	356.4	351.8
72.5°	356.4	338.3	323.3	303.7	293.2	282.7	275.2
75°	315.8	290.2	269.1	248.1	233.1	218.0	215.0
77.5°	273.7	249.6	225.5	203.0	180.4	163.9	157.9
80°	240.6	218.0	189.5	162.4	138.3	117.3	109.8
82.5°	210.5	186.4	157.9	129.3	102.2	79.7	70.7
85°	184.9	159.4	130.8	102.2	75.2	51.1	39.1
87.5°	165.4	136.8	108.3	81.2	52.6	28.6	15.0
90°	147.4	120.3	93.2	64.7	37.6	15.0	0.0
92.5°	130.8	105.3	78.2	52.6	28.6	9.0	1.5
95°	115.8	93.2	66.2	42.1	21.1	6.0	1.5
97.5°	103.8	81.2	57.1	34.6	16.5	4.5	1.5
100°	93.2	70.7	49.6	28.6	13.5	3.0	1.5
102.5°	82.7	63.2	42.1	24.1	10.5	1.5	1.5
105°	73.7	55.6	36.1	21.1	9.0	1.5	1.5
107.5°	66.2	49.6	31.6	18.0	6.0	1.5	1.5
110°	58.6	42.1	27.1	15.0	4.5	1.5	1.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-74HL-LN-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	52.6	37.6	24.1	12.0	3.0	1.5	1.5
115°	46.6	33.1	21.1	10.5	3.0	1.5	1.5
117.5°	40.6	28.6	18.0	7.5	1.5	1.5	1.5
120°	36.1	25.6	15.0	6.0	1.5	1.5	1.5
122.5°	31.6	21.1	12.0	4.5	1.5	1.5	1.5
125°	27.1	18.0	10.5	3.0	1.5	1.5	1.5
127.5°	22.6	15.0	7.5	3.0	1.5	1.5	1.5
130°	19.5	12.0	6.0	1.5	1.5	1.5	1.5
132.5°	16.5	9.0	4.5	1.5	1.5	1.5	1.5
135°	13.5	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)