

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: **8SNLED-LD5-200HL-LW-UNV-L930-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 (P33520)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

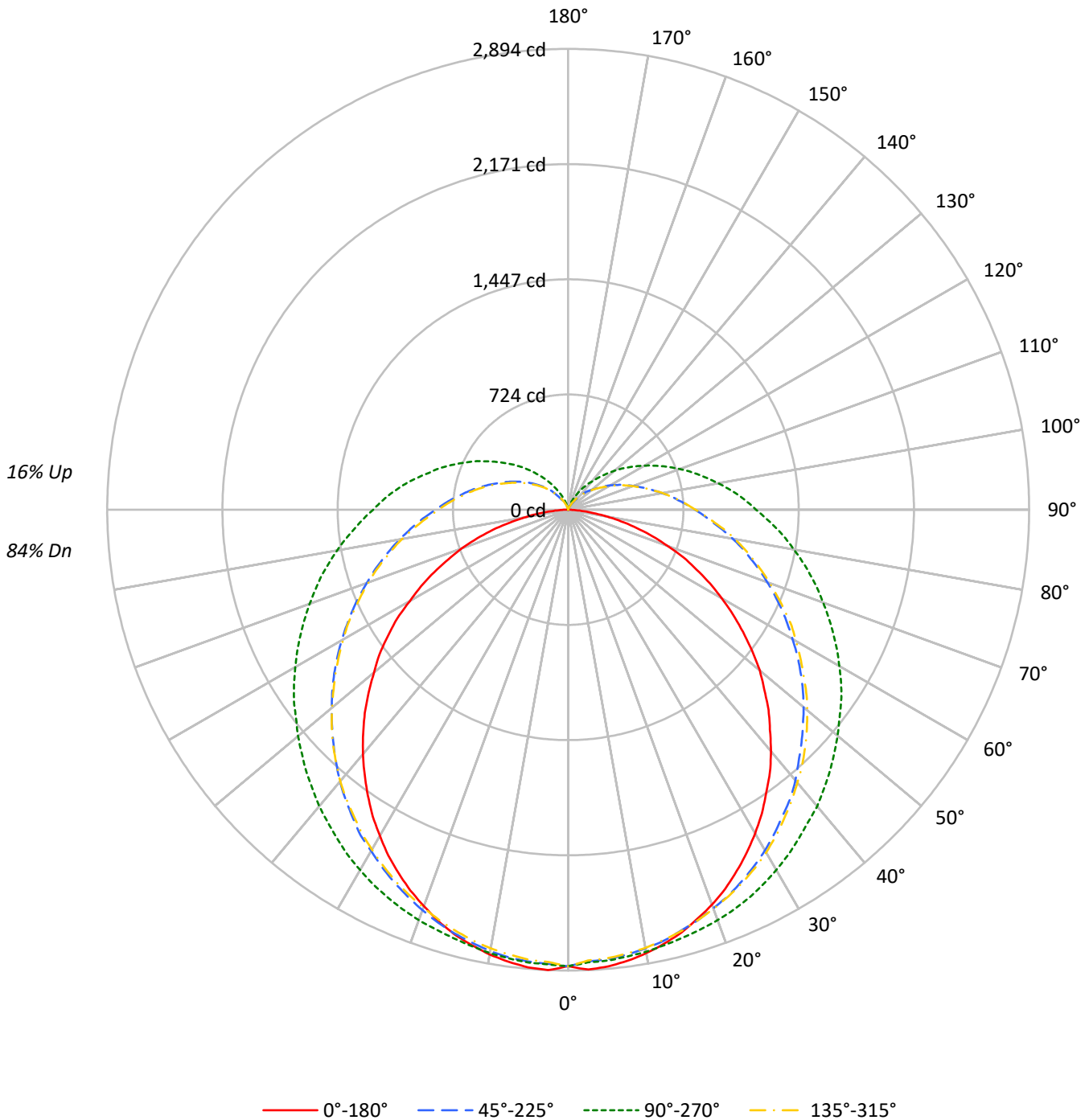
Lumens per Lamp: N/A
Luminaire Lumens: 12455.0 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 158
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



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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		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84		
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64		
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51		
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42		
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35		
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30		
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26		
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23		
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20		
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18		
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11583	11583	11583	11583
5°	11661	11163	11685	11210
10°	11569	10846	11606	10881
15°	11450	10574	11501	10585
20°	11287	10376	11326	10376
25°	11082	10200	11149	10188
30°	10850	10019	10935	10019
35°	10579	9851	10697	9863
40°	10312	9752	10438	9752
45°	10004	9649	10157	9662
50°	9685	9587	9816	9614
55°	9231	9597	9523	9638
60°	8756	9626	9041	9685
65°	8225	9723	8588	9819
70°	7467	9901	8049	10042
75°	6603	10225	7227	10421
80°	5235	10704	5946	10952
85°	3332	11474	4162	11792



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.6	2.2
10°-20°	780.5	6.3
20°-30°	1196.7	9.6
30°-40°	1476.3	11.9
40°-50°	1601.7	12.9
50°-60°	1578.7	12.7
60°-70°	1427.3	11.5
70°-80°	1189.1	9.5
80°-90°	921.0	7.4
90°-100°	698.5	5.6
100°-110°	516.9	4.1
110°-120°	359.5	2.9
120°-130°	229.4	1.8
130°-140°	128.7	1.0
140°-150°	58.8	0.5
150°-160°	18.2	0.1
160°-170°	2.3	0.0
170°-180°	0.0	0.0
0°-30°	2248.7	18.1
0°-40°	3725.0	29.9
0°-60°	6905.4	55.4
0°-90°	10442.7	83.8
90°-120°	1574.9	12.6
90°-150°	1991.8	16.0
90°-180°	2012.0	16.2
0°-180°	12455.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2867	2867	2867	2867	2867	
5°	2879	2843	2885	2855	2879	273
15°	2749	2782	2761	2785	2749	775
25°	2504	2688	2519	2685	2504	1153
35°	2168	2522	2192	2525	2168	1358
45°	1778	2322	1805	2326	1778	1370
55°	1340	2093	1382	2102	1340	1199
65°	889	1836	928	1854	889	881
75°	448	1572	490	1603	448	474
85°	85	1309	106	1346	85	102
90°	3	1179	6	1225	3	5
95°	3	1070	3	1122	3	2
105°	3	850	3	901	3	3
115°	3	647	3	705	3	3
125°	3	466	3	517	3	3
135°	3	302	3	357	3	2
145°	3	175	3	215	3	2
155°	3	73	3	100	3	1
165°	3	12	3	18	3	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2891.0	2891.0	2887.9	2881.9	2884.9	2894.0	2887.9	2872.8	2863.8	2839.6	2845.6
5°	2878.9	2878.9	2875.8	2869.8	2872.8	2884.9	2878.9	2866.8	2854.7	2833.5	2842.6
7.5°	2857.7	2857.7	2854.7	2848.6	2854.7	2866.8	2860.7	2848.6	2839.6	2818.4	2827.5
10°	2827.5	2830.5	2827.5	2818.4	2830.5	2842.6	2839.6	2824.4	2815.4	2797.2	2806.3
12.5°	2791.2	2794.2	2791.2	2788.2	2794.2	2812.3	2806.3	2794.2	2788.2	2773.0	2782.1
15°	2748.8	2751.9	2745.8	2745.8	2751.9	2770.0	2770.0	2757.9	2751.9	2736.7	2754.9
17.5°	2694.4	2697.4	2694.4	2694.4	2700.5	2718.6	2721.6	2715.6	2709.5	2703.5	2721.6
20°	2640.0	2636.9	2636.9	2633.9	2646.0	2673.2	2670.2	2670.2	2664.2	2664.2	2685.3
22.5°	2576.5	2576.5	2573.4	2573.4	2588.6	2612.8	2612.8	2618.8	2612.8	2624.9	2643.0
25°	2503.9	2506.9	2503.9	2509.9	2522.0	2549.3	2552.3	2561.3	2564.4	2576.5	2597.6
27.5°	2428.3	2431.3	2428.3	2434.3	2455.5	2476.7	2491.8	2503.9	2506.9	2525.1	2552.3
30°	2346.6	2346.6	2349.7	2355.7	2379.9	2413.2	2425.3	2440.4	2440.4	2470.6	2497.8
32.5°	2262.0	2262.0	2262.0	2274.1	2301.3	2340.6	2355.7	2373.9	2379.9	2410.1	2440.4
35°	2168.2	2171.2	2171.2	2180.3	2216.6	2255.9	2277.1	2298.3	2310.4	2346.6	2376.9
37.5°	2080.5	2086.6	2077.5	2089.6	2141.0	2174.3	2198.5	2219.6	2240.8	2289.2	2313.4
40°	1980.7	1986.8	1983.8	2008.0	2050.3	2092.6	2119.8	2141.0	2171.2	2219.6	2246.9
42.5°	1874.9	1880.9	1887.0	1914.2	1959.6	2001.9	2035.2	2062.4	2098.7	2141.0	2186.4
45°	1778.1	1778.1	1787.2	1820.5	1868.8	1914.2	1953.5	1983.8	2026.1	2071.5	2116.8
47.5°	1669.3	1672.3	1684.4	1723.7	1775.1	1829.5	1865.8	1905.1	1950.5	1998.9	2050.3
50°	1569.5	1569.5	1587.6	1629.9	1678.3	1738.8	1778.1	1823.5	1871.9	1929.3	1980.7
52.5°	1454.6	1460.6	1487.8	1527.1	1590.6	1645.1	1690.4	1738.8	1796.3	1856.8	1914.2
55°	1339.6	1351.7	1372.9	1427.3	1493.9	1545.3	1599.7	1660.2	1714.6	1781.2	1847.7
57.5°	1227.8	1236.8	1270.1	1324.5	1394.1	1457.6	1515.0	1572.5	1639.0	1705.6	1775.1
60°	1112.8	1124.9	1164.2	1218.7	1294.3	1360.8	1427.3	1487.8	1557.4	1626.9	1699.5
62.5°	1004.0	1013.0	1058.4	1121.9	1197.5	1270.1	1336.6	1409.2	1484.8	1551.3	1623.9
65°	889.1	904.2	955.6	1013.0	1100.7	1173.3	1248.9	1327.5	1406.2	1478.7	1548.3
67.5°	783.2	792.3	846.7	913.3	1001.0	1082.6	1161.2	1245.9	1327.5	1403.1	1472.7
70°	659.2	689.5	743.9	813.5	907.2	991.9	1076.6	1164.2	1251.9	1330.6	1397.1
72.5°	556.4	580.6	641.1	716.7	807.4	907.2	994.9	1088.6	1176.3	1258.0	1327.5
75°	447.6	471.7	541.3	626.0	719.7	825.6	916.3	1013.0	1103.8	1185.4	1258.0
77.5°	341.7	372.0	447.6	535.3	638.1	746.9	840.7	937.4	1031.2	1118.9	1191.5
80°	244.9	278.2	359.9	459.7	559.4	668.3	771.1	867.9	961.6	1049.3	1124.9
82.5°	157.2	193.5	281.2	381.0	486.9	595.7	701.6	798.3	892.1	979.8	1058.4
85°	84.7	124.0	214.7	314.5	420.3	529.2	635.0	737.9	828.6	910.2	994.9
87.5°	24.2	72.6	160.3	260.1	368.9	468.7	571.5	674.4	765.1	852.8	928.4
90°	3.0	42.3	121.0	214.7	320.5	417.3	520.1	616.9	707.6	795.3	870.9
92.5°	3.0	27.2	93.7	178.4	275.2	375.0	477.8	571.5	656.2	743.9	819.5
95°	3.0	21.2	75.6	151.2	241.9	335.7	432.4	523.2	610.9	692.5	768.1
97.5°	3.0	15.1	60.5	130.0	211.7	299.4	393.1	483.8	568.5	647.1	716.7
100°	3.0	12.1	48.4	111.9	184.5	269.1	353.8	441.5	523.2	598.8	671.3
102.5°	3.0	9.1	42.3	93.7	163.3	238.9	320.5	402.2	480.8	553.4	626.0
105°	3.0	9.1	36.3	81.6	145.2	214.7	290.3	368.9	441.5	511.1	577.6
107.5°	3.0	6.0	30.2	69.6	127.0	193.5	263.1	338.7	405.2	471.7	535.3
110°	3.0	6.0	24.2	63.5	111.9	172.4	238.9	308.5	372.0	435.5	495.9



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CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	3.0	6.0	21.2	54.4	96.8	154.2	214.7	278.2	338.7	402.2	456.6
115°	3.0	6.0	18.1	48.4	90.7	133.1	193.5	251.0	311.5	368.9	420.3
117.5°	3.0	6.0	15.1	39.3	78.6	121.0	169.3	226.8	281.2	335.7	384.1
120°	3.0	6.0	12.1	36.3	69.6	108.9	151.2	202.6	254.0	305.4	356.8
122.5°	3.0	3.0	12.1	30.2	60.5	96.8	139.1	178.4	226.8	275.2	320.5
125°	3.0	3.0	12.1	27.2	51.4	87.7	124.0	160.3	202.6	244.9	284.3
127.5°	3.0	3.0	9.1	21.2	45.4	75.6	108.9	148.2	178.4	217.7	257.0
130°	3.0	3.0	9.1	18.1	39.3	63.5	96.8	130.0	166.3	193.5	226.8
132.5°	3.0	3.0	9.1	15.1	30.2	51.4	81.6	111.9	145.2	175.4	202.6
135°	3.0	3.0	6.0	12.1	24.2	42.3	66.5	93.7	127.0	157.2	184.5
137.5°	3.0	3.0	6.0	12.1	18.1	36.3	51.4	75.6	105.8	133.1	160.3
140°	3.0	3.0	6.0	9.1	15.1	27.2	42.3	60.5	84.7	108.9	139.1
142.5°	3.0	3.0	3.0	9.1	12.1	21.2	33.3	48.4	66.5	87.7	111.9
145°	3.0	3.0	3.0	9.1	12.1	15.1	27.2	39.3	51.4	66.5	87.7
147.5°	3.0	3.0	3.0	6.0	9.1	12.1	21.2	30.2	39.3	51.4	63.5
150°	3.0	3.0	3.0	6.0	9.1	12.1	15.1	21.2	30.2	42.3	51.4
152.5°	3.0	3.0	3.0	6.0	6.0	9.1	12.1	15.1	21.2	30.2	36.3
155°	3.0	3.0	3.0	3.0	6.0	9.1	12.1	12.1	15.1	21.2	27.2
157.5°	3.0	3.0	3.0	3.0	6.0	6.0	9.1	9.1	12.1	12.1	18.1
160°	3.0	3.0	3.0	3.0	3.0	6.0	6.0	9.1	9.1	9.1	9.1
162.5°	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	9.1	9.1
165°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0
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°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2845.6	2848.6	2857.7	2857.7	2851.7	2851.7	2848.6	2845.6	2848.6	2854.7	2854.7
5°	2839.6	2842.6	2851.7	2854.7	2848.6	2845.6	2845.6	2842.6	2845.6	2851.7	2851.7
7.5°	2827.5	2830.5	2839.6	2842.6	2836.5	2836.5	2833.5	2830.5	2836.5	2839.6	2839.6
10°	2809.3	2812.3	2824.4	2827.5	2824.4	2821.4	2821.4	2818.4	2821.4	2827.5	2827.5
12.5°	2785.1	2791.2	2806.3	2806.3	2806.3	2803.3	2803.3	2800.2	2803.3	2809.3	2806.3
15°	2757.9	2770.0	2782.1	2788.2	2788.2	2788.2	2785.1	2782.1	2788.2	2791.2	2788.2
17.5°	2727.7	2742.8	2760.9	2767.0	2767.0	2770.0	2767.0	2764.0	2770.0	2770.0	2767.0
20°	2697.4	2712.6	2730.7	2736.7	2742.8	2745.8	2745.8	2742.8	2745.8	2748.8	2745.8
22.5°	2658.1	2676.3	2697.4	2706.5	2712.6	2718.6	2718.6	2718.6	2721.6	2724.6	2718.6
25°	2615.8	2636.9	2661.1	2670.2	2682.3	2685.3	2688.4	2688.4	2691.4	2694.4	2685.3
27.5°	2570.4	2594.6	2618.8	2633.9	2643.0	2649.0	2649.0	2652.1	2655.1	2658.1	2649.0
30°	2516.0	2552.3	2573.4	2585.5	2597.6	2606.7	2609.7	2612.8	2615.8	2618.8	2609.7
32.5°	2467.6	2497.8	2525.1	2540.2	2555.3	2567.4	2570.4	2570.4	2576.5	2576.5	2567.4
35°	2410.1	2446.4	2473.7	2488.8	2506.9	2516.0	2522.0	2522.0	2528.1	2528.1	2519.0
37.5°	2352.7	2389.0	2419.2	2437.4	2458.5	2470.6	2473.7	2473.7	2479.7	2479.7	2467.6
40°	2292.2	2331.5	2364.8	2386.0	2404.1	2419.2	2422.2	2431.3	2431.3	2428.3	2416.2
42.5°	2231.7	2268.0	2304.3	2328.5	2352.7	2367.8	2373.9	2376.9	2376.9	2373.9	2364.8
45°	2165.2	2207.5	2240.8	2271.0	2295.2	2310.4	2319.4	2322.5	2322.5	2316.4	2307.3
47.5°	2101.7	2144.0	2177.3	2210.6	2234.8	2252.9	2262.0	2265.0	2262.0	2258.9	2249.9
50°	2035.2	2083.6	2116.8	2150.1	2174.3	2189.4	2204.5	2207.5	2204.5	2201.5	2183.3
52.5°	1965.6	2017.0	2053.3	2086.6	2113.8	2131.9	2144.0	2147.1	2147.1	2141.0	2128.9
55°	1896.1	1941.4	1986.8	2023.1	2053.3	2071.5	2086.6	2092.6	2086.6	2080.5	2065.4
57.5°	1832.6	1874.9	1920.3	1959.6	1989.8	2014.0	2026.1	2032.1	2026.1	2017.0	2001.9
60°	1757.0	1802.3	1853.7	1890.0	1923.3	1947.5	1953.5	1965.6	1959.6	1950.5	1935.4
62.5°	1684.4	1738.8	1784.2	1829.5	1856.8	1884.0	1896.1	1902.1	1896.1	1887.0	1871.9
65°	1608.8	1669.3	1714.6	1760.0	1790.2	1817.4	1832.6	1835.6	1829.5	1820.5	1805.3
67.5°	1539.2	1596.7	1645.1	1693.5	1720.7	1747.9	1763.0	1769.1	1763.0	1750.9	1735.8
70°	1469.7	1527.1	1584.6	1620.9	1654.1	1684.4	1693.5	1702.5	1696.5	1684.4	1666.2
72.5°	1400.1	1460.6	1518.1	1554.3	1590.6	1617.9	1629.9	1639.0	1633.0	1620.9	1599.7
75°	1327.5	1391.1	1448.5	1487.8	1524.1	1551.3	1563.4	1572.5	1566.4	1554.3	1530.2
77.5°	1261.0	1324.5	1379.0	1421.3	1457.6	1481.8	1502.9	1506.0	1499.9	1487.8	1463.6
80°	1191.5	1255.0	1312.4	1354.8	1391.1	1415.2	1430.4	1439.4	1433.4	1421.3	1397.1
82.5°	1131.0	1188.4	1245.9	1288.2	1324.5	1354.8	1366.9	1375.9	1372.9	1354.8	1336.6
85°	1064.5	1131.0	1176.3	1221.7	1258.0	1288.2	1297.3	1309.4	1306.4	1291.3	1267.1
87.5°	997.9	1064.5	1118.9	1164.2	1197.5	1221.7	1236.8	1242.9	1239.9	1224.7	1197.5
90°	943.5	1004.0	1058.4	1106.8	1134.0	1161.2	1176.3	1179.4	1179.4	1161.2	1140.1
92.5°	892.1	949.5	1004.0	1049.3	1082.6	1106.8	1118.9	1124.9	1121.9	1106.8	1082.6
95°	834.6	898.1	949.5	994.9	1028.2	1052.4	1064.5	1070.5	1067.5	1052.4	1028.2
97.5°	786.2	843.7	895.1	937.4	970.7	994.9	1007.0	1013.0	1013.0	997.9	973.7
100°	737.9	795.3	843.7	886.0	916.3	940.5	952.6	955.6	952.6	940.5	916.3
102.5°	689.5	743.9	792.3	831.6	864.9	886.0	898.1	901.2	901.2	886.0	861.8
105°	641.1	695.5	740.9	783.2	810.4	831.6	840.7	849.8	846.7	834.6	810.4
107.5°	595.7	650.2	692.5	731.8	759.0	780.2	789.3	798.3	795.3	783.2	759.0
110°	553.4	604.8	644.1	683.4	707.6	728.8	743.9	746.9	740.9	728.8	707.6



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	514.1	559.4	598.8	635.0	662.3	677.4	689.5	695.5	689.5	677.4	662.3
115°	471.7	517.1	556.4	589.7	613.9	632.0	641.1	647.1	641.1	629.0	613.9
117.5°	432.4	474.8	514.1	547.3	568.5	583.6	592.7	598.8	592.7	583.6	568.5
120°	399.2	435.5	471.7	502.0	526.2	538.3	547.3	553.4	550.4	538.3	523.2
122.5°	359.9	399.2	432.4	462.7	483.8	495.9	502.0	508.0	505.0	495.9	480.8
125°	326.6	359.9	393.1	420.3	441.5	453.6	459.7	465.7	462.7	453.6	435.5
127.5°	290.3	326.6	353.8	381.0	396.1	414.3	417.3	423.4	420.3	411.3	396.1
130°	263.1	290.3	317.5	341.7	359.9	372.0	378.0	381.0	375.0	368.9	353.8
132.5°	229.8	260.1	284.3	305.4	317.5	329.6	335.7	338.7	338.7	329.6	317.5
135°	205.6	226.8	248.0	269.1	281.2	293.3	299.4	302.4	299.4	293.3	281.2
137.5°	184.5	202.6	217.7	235.9	251.0	257.0	263.1	263.1	260.1	257.0	248.0
140°	160.3	181.4	196.6	208.7	220.8	223.8	229.8	229.8	226.8	223.8	217.7
142.5°	136.1	154.2	169.3	184.5	193.5	199.6	202.6	205.6	202.6	199.6	190.5
145°	108.9	130.0	145.2	154.2	166.3	169.3	172.4	175.4	172.4	169.3	160.3
147.5°	84.7	102.8	117.9	130.0	139.1	142.1	145.2	148.2	145.2	139.1	136.1
150°	60.5	75.6	93.7	105.8	111.9	117.9	117.9	117.9	121.0	114.9	108.9
152.5°	48.4	54.4	66.5	78.6	87.7	90.7	93.7	93.7	90.7	90.7	84.7
155°	33.3	39.3	48.4	57.5	66.5	69.6	72.6	72.6	69.6	69.6	66.5
157.5°	21.2	27.2	33.3	39.3	48.4	51.4	54.4	54.4	54.4	51.4	48.4
160°	12.1	15.1	18.1	24.2	30.2	33.3	36.3	36.3	36.3	36.3	33.3
162.5°	9.1	9.1	9.1	12.1	15.1	18.1	21.2	21.2	21.2	21.2	18.1
165°	6.0	6.0	6.0	6.0	6.0	9.1	12.1	12.1	12.1	12.1	12.1
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: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2851.7	2851.7	2854.7	2848.6	2830.5	2833.5	2833.5	2845.6	2851.7	2854.7	2869.8
5°	2845.6	2845.6	2851.7	2842.6	2827.5	2827.5	2827.5	2839.6	2842.6	2848.6	2860.7
7.5°	2836.5	2836.5	2839.6	2830.5	2812.3	2812.3	2809.3	2821.4	2827.5	2830.5	2842.6
10°	2821.4	2821.4	2824.4	2815.4	2794.2	2794.2	2791.2	2800.2	2803.3	2809.3	2818.4
12.5°	2800.2	2800.2	2800.2	2791.2	2770.0	2767.0	2764.0	2773.0	2773.0	2776.1	2785.1
15°	2782.1	2776.1	2776.1	2767.0	2745.8	2739.8	2733.7	2736.7	2742.8	2739.8	2745.8
17.5°	2760.9	2754.9	2748.8	2739.8	2712.6	2703.5	2697.4	2700.5	2697.4	2694.4	2700.5
20°	2736.7	2727.7	2724.6	2709.5	2682.3	2667.2	2655.1	2649.0	2652.1	2643.0	2646.0
22.5°	2709.5	2697.4	2691.4	2673.2	2646.0	2627.9	2612.8	2600.7	2597.6	2585.5	2588.6
25°	2676.3	2661.1	2652.1	2636.9	2606.7	2585.5	2567.4	2549.3	2540.2	2525.1	2522.0
27.5°	2636.9	2621.8	2609.7	2594.6	2564.4	2537.2	2516.0	2491.8	2479.7	2461.6	2452.5
30°	2597.6	2579.5	2561.3	2549.3	2516.0	2485.7	2452.5	2431.3	2413.2	2392.0	2376.9
32.5°	2549.3	2531.1	2513.0	2494.8	2464.6	2428.3	2401.1	2367.8	2346.6	2322.5	2304.3
35°	2500.9	2476.7	2458.5	2434.3	2407.1	2364.8	2331.5	2298.3	2271.0	2243.8	2222.7
37.5°	2446.4	2428.3	2401.1	2379.9	2346.6	2304.3	2268.0	2225.7	2201.5	2165.2	2138.0
40°	2395.0	2373.9	2346.6	2319.4	2286.2	2237.8	2198.5	2150.1	2122.9	2080.5	2053.3
42.5°	2343.6	2313.4	2286.2	2255.9	2219.6	2174.3	2125.9	2077.5	2041.2	2001.9	1962.6
45°	2286.2	2252.9	2219.6	2186.4	2150.1	2104.7	2053.3	2001.9	1956.5	1920.3	1871.9
47.5°	2225.7	2192.4	2153.1	2116.8	2077.5	2032.1	1977.7	1923.3	1874.9	1832.6	1781.2
50°	2165.2	2131.9	2089.6	2050.3	2004.9	1959.6	1902.1	1838.6	1787.2	1732.8	1687.4
52.5°	2101.7	2068.4	2029.1	1977.7	1929.3	1884.0	1823.5	1757.0	1699.5	1654.1	1596.7
55°	2038.2	2004.9	1959.6	1908.2	1859.8	1802.3	1744.9	1678.3	1614.8	1560.4	1502.9
57.5°	1971.7	1941.4	1890.0	1847.7	1787.2	1726.7	1666.2	1602.7	1533.2	1469.7	1403.1
60°	1905.1	1871.9	1823.5	1772.1	1711.6	1651.1	1587.6	1518.1	1445.5	1375.9	1315.5
62.5°	1844.7	1802.3	1757.0	1702.5	1639.0	1581.6	1509.0	1433.4	1360.8	1288.2	1215.7
65°	1775.1	1729.7	1687.4	1633.0	1566.4	1499.9	1427.3	1351.7	1273.1	1194.5	1121.9
67.5°	1705.6	1660.2	1614.8	1560.4	1490.8	1421.3	1345.7	1270.1	1182.4	1106.8	1022.1
70°	1636.0	1599.7	1542.3	1484.8	1421.3	1345.7	1270.1	1188.4	1097.7	1016.1	928.4
72.5°	1566.4	1530.2	1472.7	1412.2	1351.7	1273.1	1191.5	1109.8	1025.1	931.4	837.7
75°	1499.9	1454.6	1403.1	1345.7	1282.2	1200.5	1118.9	1034.2	934.4	846.7	750.0
77.5°	1436.4	1394.1	1342.7	1279.2	1209.6	1131.0	1046.3	958.6	858.8	765.1	659.2
80°	1366.9	1324.5	1273.1	1209.6	1140.1	1064.5	973.7	883.0	786.2	683.4	574.6
82.5°	1300.3	1261.0	1203.6	1146.1	1070.5	994.9	904.2	813.5	710.6	610.9	505.0
85°	1230.8	1191.5	1137.0	1076.6	1004.0	922.3	837.7	746.9	644.1	541.3	435.5
87.5°	1170.3	1124.9	1070.5	1010.0	937.4	858.8	777.2	680.4	580.6	480.8	372.0
90°	1106.8	1064.5	1010.0	949.5	877.0	798.3	713.7	622.9	526.2	423.4	320.5
92.5°	1052.4	1007.0	955.6	895.1	822.5	746.9	662.3	571.5	477.8	378.0	278.2
95°	997.9	952.6	904.2	843.7	771.1	695.5	610.9	523.2	432.4	335.7	241.9
97.5°	937.4	898.1	849.8	792.3	719.7	647.1	565.5	480.8	393.1	299.4	211.7
100°	889.1	843.7	798.3	737.9	671.3	601.8	520.1	438.5	353.8	266.1	184.5
102.5°	834.6	792.3	746.9	689.5	622.9	553.4	477.8	399.2	320.5	238.9	160.3
105°	783.2	743.9	695.5	641.1	577.6	511.1	438.5	365.9	290.3	211.7	142.1
107.5°	731.8	692.5	647.1	595.7	535.3	468.7	402.2	329.6	260.1	190.5	127.0
110°	680.4	644.1	601.8	550.4	492.9	432.4	368.9	302.4	232.8	169.3	111.9



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	635.0	598.8	556.4	508.0	453.6	396.1	335.7	272.2	208.7	151.2	96.8
115°	589.7	556.4	514.1	471.7	417.3	362.9	305.4	244.9	187.5	136.1	84.7
117.5°	544.3	511.1	471.7	429.4	381.0	329.6	275.2	217.7	169.3	121.0	75.6
120°	499.0	468.7	432.4	393.1	350.8	299.4	244.9	196.6	151.2	105.8	66.5
122.5°	456.6	429.4	396.1	359.9	314.5	266.1	220.8	178.4	136.1	93.7	54.4
125°	417.3	390.1	359.9	323.6	281.2	238.9	199.6	160.3	117.9	81.6	45.4
127.5°	378.0	350.8	320.5	287.3	254.0	214.7	178.4	142.1	105.8	72.6	39.3
130°	338.7	314.5	287.3	260.1	226.8	190.5	160.3	124.0	90.7	57.5	33.3
132.5°	299.4	281.2	257.0	229.8	199.6	172.4	139.1	108.9	78.6	51.4	30.2
135°	266.1	248.0	226.8	202.6	178.4	151.2	121.0	93.7	66.5	42.3	24.2
137.5°	235.9	220.8	199.6	178.4	157.2	130.0	105.8	78.6	54.4	36.3	18.1
140°	208.7	193.5	175.4	154.2	136.1	111.9	87.7	63.5	48.4	30.2	15.1
142.5°	181.4	166.3	151.2	133.1	114.9	93.7	72.6	54.4	39.3	24.2	15.1
145°	154.2	142.1	127.0	111.9	93.7	75.6	60.5	45.4	30.2	18.1	12.1
147.5°	127.0	117.9	102.8	90.7	75.6	60.5	48.4	36.3	24.2	15.1	9.1
150°	102.8	93.7	81.6	69.6	60.5	48.4	39.3	27.2	18.1	15.1	9.1
152.5°	78.6	72.6	63.5	57.5	48.4	36.3	27.2	21.2	15.1	12.1	6.0
155°	63.5	57.5	51.4	42.3	36.3	27.2	21.2	15.1	12.1	9.1	6.0
157.5°	45.4	42.3	36.3	30.2	24.2	18.1	15.1	15.1	9.1	6.0	3.0
160°	30.2	27.2	24.2	18.1	15.1	15.1	12.1	9.1	6.0	6.0	3.0
162.5°	18.1	15.1	15.1	15.1	12.1	12.1	9.1	6.0	6.0	3.0	3.0
165°	12.1	12.1	12.1	9.1	9.1	9.1	6.0	3.0	3.0	3.0	3.0
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: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2869.8	2860.7	2872.8	2894.0	2897.0	2894.0	2887.9	2897.0	2909.1	2906.1	2884.9
5°	2863.8	2851.7	2863.8	2884.9	2884.9	2881.9	2878.9	2887.9	2900.0	2897.0	2878.9
7.5°	2845.6	2833.5	2845.6	2863.8	2866.8	2860.7	2860.7	2869.8	2881.9	2878.9	2863.8
10°	2821.4	2809.3	2815.4	2836.5	2842.6	2836.5	2836.5	2845.6	2860.7	2857.7	2839.6
12.5°	2785.1	2776.1	2782.1	2800.2	2806.3	2803.3	2800.2	2812.3	2827.5	2827.5	2809.3
15°	2745.8	2733.7	2739.8	2760.9	2764.0	2757.9	2760.9	2770.0	2788.2	2788.2	2773.0
17.5°	2700.5	2685.3	2694.4	2709.5	2712.6	2712.6	2712.6	2724.6	2745.8	2742.8	2730.7
20°	2649.0	2627.9	2633.9	2649.0	2655.1	2655.1	2655.1	2676.3	2691.4	2691.4	2679.3
22.5°	2588.6	2573.4	2573.4	2588.6	2597.6	2594.6	2594.6	2612.8	2633.9	2630.9	2630.9
25°	2519.0	2506.9	2500.9	2519.0	2522.0	2525.1	2531.1	2549.3	2573.4	2573.4	2576.5
27.5°	2446.4	2434.3	2431.3	2446.4	2449.5	2452.5	2458.5	2479.7	2503.9	2506.9	2513.0
30°	2376.9	2358.7	2352.7	2364.8	2370.8	2373.9	2373.9	2407.1	2428.3	2437.4	2449.5
32.5°	2295.2	2277.1	2262.0	2283.1	2286.2	2292.2	2295.2	2328.5	2352.7	2367.8	2386.0
35°	2213.6	2183.3	2177.3	2192.4	2198.5	2201.5	2207.5	2243.8	2277.1	2289.2	2313.4
37.5°	2122.9	2101.7	2083.6	2098.7	2104.7	2107.7	2125.9	2159.2	2192.4	2210.6	2234.8
40°	2038.2	2011.0	1995.9	2004.9	2011.0	2014.0	2035.2	2071.5	2110.8	2131.9	2162.2
42.5°	1944.4	1908.2	1896.1	1905.1	1908.2	1917.2	1935.4	1983.8	2023.1	2053.3	2077.5
45°	1850.7	1823.5	1796.3	1805.3	1808.4	1814.4	1841.6	1893.0	1935.4	1971.7	1998.9
47.5°	1753.9	1720.7	1693.5	1699.5	1711.6	1714.6	1744.9	1805.3	1844.7	1884.0	1920.3
50°	1657.2	1611.8	1590.6	1590.6	1596.7	1611.8	1651.1	1711.6	1753.9	1799.3	1838.6
52.5°	1557.4	1515.0	1490.8	1493.9	1499.9	1518.1	1554.3	1614.8	1663.2	1711.6	1760.0
55°	1457.6	1412.2	1388.0	1382.0	1388.0	1412.2	1454.6	1518.1	1566.4	1623.9	1675.3
57.5°	1357.8	1303.4	1282.2	1273.1	1279.2	1309.4	1351.7	1418.3	1478.7	1533.2	1593.7
60°	1248.9	1206.6	1170.3	1149.1	1164.2	1203.6	1248.9	1318.5	1382.0	1442.5	1509.0
62.5°	1155.2	1100.7	1061.4	1040.3	1055.4	1088.6	1152.2	1218.7	1288.2	1357.8	1424.3
65°	1049.3	994.9	949.5	928.4	943.5	982.8	1046.3	1118.9	1194.5	1264.0	1342.7
67.5°	946.5	889.1	834.6	813.5	831.6	873.9	943.5	1025.1	1106.8	1179.4	1264.0
70°	846.7	783.2	725.8	710.6	722.7	780.2	846.7	928.4	1013.0	1097.7	1185.4
72.5°	756.0	677.4	616.9	598.8	613.9	677.4	753.0	837.7	928.4	1019.1	1112.8
75°	650.2	577.6	511.1	489.9	508.0	565.5	659.2	750.0	846.7	943.5	1031.2
77.5°	565.5	480.8	411.3	378.0	408.2	480.8	571.5	668.3	768.1	867.9	967.7
80°	477.8	390.1	314.5	278.2	311.5	390.1	480.8	586.7	698.5	798.3	889.1
82.5°	399.2	305.4	226.8	187.5	223.8	311.5	411.3	517.1	626.0	725.8	831.6
85°	326.6	229.8	148.2	105.8	157.2	235.9	341.7	450.6	562.5	665.3	768.1
87.5°	266.1	172.4	90.7	45.4	96.8	184.5	284.3	393.1	505.0	607.8	704.6
90°	217.7	124.0	48.4	6.0	57.5	139.1	235.9	341.7	447.6	553.4	650.2
92.5°	178.4	93.7	27.2	3.0	36.3	111.9	202.6	302.4	405.2	508.0	601.8
95°	148.2	72.6	18.1	3.0	27.2	87.7	172.4	269.1	365.9	465.7	559.4
97.5°	127.0	60.5	15.1	3.0	21.2	75.6	148.2	238.9	332.6	426.4	517.1
100°	108.9	48.4	12.1	3.0	18.1	63.5	130.0	211.7	299.4	390.1	477.8
102.5°	93.7	39.3	9.1	3.0	15.1	54.4	114.9	190.5	269.1	356.8	441.5
105°	81.6	33.3	9.1	3.0	12.1	48.4	102.8	169.3	248.0	326.6	408.2
107.5°	69.6	27.2	6.0	3.0	9.1	39.3	90.7	154.2	223.8	299.4	375.0
110°	60.5	24.2	6.0	3.0	9.1	36.3	78.6	139.1	202.6	272.2	344.7



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	51.4	18.1	6.0	3.0	6.0	30.2	69.6	124.0	184.5	248.0	317.5
115°	45.4	15.1	3.0	3.0	6.0	27.2	63.5	111.9	166.3	226.8	290.3
117.5°	36.3	12.1	3.0	3.0	3.0	21.2	54.4	99.8	151.2	208.7	266.1
120°	30.2	12.1	3.0	3.0	3.0	18.1	48.4	87.7	136.1	187.5	241.9
122.5°	27.2	9.1	3.0	3.0	3.0	15.1	42.3	78.6	121.0	169.3	220.8
125°	24.2	9.1	3.0	3.0	3.0	12.1	36.3	69.6	108.9	151.2	199.6
127.5°	18.1	9.1	3.0	3.0	3.0	9.1	33.3	60.5	96.8	136.1	178.4
130°	15.1	6.0	3.0	3.0	3.0	9.1	27.2	54.4	84.7	121.0	160.3
132.5°	12.1	6.0	3.0	3.0	3.0	6.0	21.2	42.3	72.6	105.8	142.1
135°	12.1	6.0	3.0	3.0	3.0	6.0	15.1	36.3	60.5	90.7	121.0
137.5°	12.1	3.0	3.0	3.0	3.0	6.0	12.1	27.2	48.4	72.6	99.8
140°	9.1	3.0	3.0	3.0	3.0	3.0	9.1	21.2	39.3	60.5	84.7
142.5°	9.1	3.0	3.0	3.0	3.0	3.0	9.1	15.1	30.2	48.4	66.5
145°	6.0	3.0	3.0	3.0	3.0	3.0	6.0	12.1	24.2	36.3	54.4
147.5°	6.0	3.0	3.0	3.0	3.0	3.0	6.0	9.1	18.1	30.2	42.3
150°	6.0	3.0	3.0	3.0	3.0	3.0	6.0	9.1	12.1	21.2	33.3
152.5°	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	9.1	15.1	21.2
155°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	9.1	12.1	15.1
157.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	9.1	12.1
160°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	9.1
162.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0
165°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2875.8	2854.7	2860.7	2857.7	2863.8	2872.8	2872.8	2869.8	2869.8	2863.8	2857.7
5°	2869.8	2848.6	2857.7	2854.7	2860.7	2869.8	2869.8	2866.8	2866.8	2857.7	2854.7
7.5°	2851.7	2836.5	2842.6	2842.6	2848.6	2857.7	2857.7	2854.7	2854.7	2845.6	2842.6
10°	2833.5	2815.4	2824.4	2824.4	2830.5	2842.6	2842.6	2839.6	2839.6	2830.5	2827.5
12.5°	2803.3	2785.1	2800.2	2803.3	2809.3	2821.4	2818.4	2818.4	2818.4	2809.3	2806.3
15°	2767.0	2754.9	2770.0	2773.0	2782.1	2797.2	2797.2	2797.2	2797.2	2788.2	2785.1
17.5°	2727.7	2718.6	2733.7	2739.8	2751.9	2767.0	2767.0	2770.0	2773.0	2767.0	2764.0
20°	2682.3	2676.3	2691.4	2703.5	2721.6	2736.7	2742.8	2745.8	2751.9	2745.8	2742.8
22.5°	2630.9	2630.9	2652.1	2664.2	2685.3	2700.5	2709.5	2718.6	2724.6	2718.6	2715.6
25°	2573.4	2582.5	2603.7	2624.9	2649.0	2664.2	2673.2	2685.3	2691.4	2688.4	2685.3
27.5°	2519.0	2531.1	2558.3	2579.5	2600.7	2624.9	2633.9	2649.0	2655.1	2655.1	2652.1
30°	2455.5	2473.7	2503.9	2528.1	2555.3	2579.5	2591.6	2606.7	2615.8	2609.7	2612.8
32.5°	2395.0	2425.3	2449.5	2476.7	2506.9	2531.1	2546.2	2564.4	2573.4	2570.4	2573.4
35°	2328.5	2358.7	2392.0	2419.2	2455.5	2479.7	2500.9	2516.0	2528.1	2525.1	2525.1
37.5°	2255.9	2295.2	2328.5	2364.8	2398.1	2425.3	2446.4	2464.6	2476.7	2476.7	2476.7
40°	2186.4	2228.7	2262.0	2304.3	2346.6	2370.8	2395.0	2413.2	2425.3	2428.3	2431.3
42.5°	2110.8	2156.1	2195.4	2240.8	2283.1	2313.4	2340.6	2361.8	2373.9	2379.9	2376.9
45°	2041.2	2083.6	2128.9	2180.3	2219.6	2249.9	2283.1	2307.3	2319.4	2322.5	2325.5
47.5°	1962.6	2011.0	2062.4	2113.8	2153.1	2192.4	2222.7	2246.9	2258.9	2268.0	2268.0
50°	1887.0	1938.4	1995.9	2050.3	2092.6	2131.9	2162.2	2189.4	2204.5	2210.6	2213.6
52.5°	1817.4	1865.8	1926.3	1980.7	2023.1	2062.4	2101.7	2131.9	2147.1	2153.1	2153.1
55°	1732.8	1793.2	1859.8	1911.2	1956.5	2001.9	2041.2	2071.5	2086.6	2095.6	2101.7
57.5°	1654.1	1717.6	1787.2	1841.6	1896.1	1938.4	1974.7	2014.0	2026.1	2038.2	2041.2
60°	1578.5	1642.0	1708.6	1769.1	1823.5	1868.8	1911.2	1944.4	1965.6	1971.7	1977.7
62.5°	1499.9	1566.4	1636.0	1696.5	1753.9	1808.4	1847.7	1877.9	1902.1	1911.2	1917.2
65°	1424.3	1493.9	1563.4	1626.9	1687.4	1741.8	1781.2	1811.4	1835.6	1850.7	1853.7
67.5°	1342.7	1418.3	1490.8	1557.4	1617.9	1675.3	1714.6	1744.9	1769.1	1787.2	1790.2
70°	1267.1	1345.7	1418.3	1490.8	1551.3	1608.8	1651.1	1681.4	1708.6	1720.7	1726.7
72.5°	1194.5	1276.1	1351.7	1424.3	1484.8	1542.3	1587.6	1617.9	1645.1	1660.2	1663.2
75°	1124.9	1206.6	1288.2	1357.8	1421.3	1478.7	1524.1	1557.4	1581.6	1596.7	1602.7
77.5°	1055.4	1140.1	1221.7	1291.3	1357.8	1415.2	1454.6	1493.9	1518.1	1536.2	1536.2
80°	985.8	1073.5	1158.2	1227.8	1294.3	1345.7	1391.1	1430.4	1454.6	1472.7	1472.7
82.5°	925.4	1010.0	1091.7	1161.2	1227.8	1285.2	1330.6	1366.9	1394.1	1406.2	1409.2
85°	855.8	949.5	1025.1	1100.7	1164.2	1218.7	1264.0	1303.4	1327.5	1339.6	1345.7
87.5°	798.3	889.1	970.7	1037.2	1100.7	1155.2	1206.6	1239.9	1264.0	1279.2	1285.2
90°	743.9	831.6	913.3	979.8	1046.3	1097.7	1146.1	1179.4	1206.6	1218.7	1224.7
92.5°	695.5	783.2	861.8	928.4	991.9	1049.3	1094.7	1128.0	1152.2	1164.2	1173.3
95°	650.2	734.8	810.4	883.0	943.5	994.9	1043.3	1076.6	1103.8	1112.8	1121.9
97.5°	604.8	686.5	762.1	831.6	895.1	943.5	988.9	1022.1	1043.3	1058.4	1067.5
100°	565.5	644.1	716.7	783.2	843.7	889.1	937.4	967.7	988.9	1001.0	1013.0
102.5°	523.2	601.8	671.3	734.8	798.3	840.7	886.0	916.3	934.4	955.6	955.6
105°	486.9	559.4	629.0	689.5	743.9	795.3	834.6	864.9	886.0	901.2	901.2
107.5°	447.6	520.1	586.7	650.2	701.6	750.0	786.2	813.5	837.7	846.7	855.8
110°	417.3	480.8	547.3	607.8	656.2	701.6	737.9	768.1	789.3	798.3	804.4



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	381.0	447.6	508.0	565.5	613.9	656.2	692.5	716.7	737.9	750.0	753.0
115°	350.8	414.3	468.7	523.2	574.6	610.9	644.1	668.3	689.5	698.5	704.6
117.5°	323.6	381.0	435.5	480.8	529.2	568.5	601.8	622.9	641.1	653.2	659.2
120°	296.4	350.8	399.2	444.5	489.9	526.2	556.4	577.6	598.8	607.8	607.8
122.5°	269.1	320.5	365.9	408.2	450.6	483.8	517.1	535.3	553.4	562.5	562.5
125°	244.9	293.3	335.7	375.0	414.3	444.5	471.7	492.9	511.1	517.1	517.1
127.5°	220.8	266.1	305.4	341.7	375.0	405.2	432.4	453.6	468.7	474.8	474.8
130°	199.6	238.9	275.2	311.5	344.7	368.9	396.1	414.3	423.4	432.4	435.5
132.5°	178.4	214.7	248.0	278.2	311.5	335.7	356.8	375.0	384.1	393.1	396.1
135°	157.2	190.5	220.8	251.0	278.2	302.4	320.5	335.7	347.8	353.8	356.8
137.5°	133.1	169.3	196.6	220.8	251.0	269.1	290.3	299.4	311.5	317.5	317.5
140°	111.9	139.1	169.3	193.5	217.7	235.9	254.0	269.1	278.2	281.2	281.2
142.5°	90.7	114.9	139.1	169.3	190.5	205.6	223.8	235.9	241.9	244.9	248.0
145°	72.6	90.7	111.9	139.1	163.3	181.4	190.5	202.6	208.7	211.7	214.7
147.5°	54.4	72.6	90.7	108.9	133.1	151.2	160.3	172.4	178.4	181.4	181.4
150°	42.3	54.4	66.5	84.7	102.8	124.0	136.1	145.2	148.2	151.2	151.2
152.5°	30.2	42.3	51.4	63.5	75.6	93.7	111.9	117.9	121.0	124.0	124.0
155°	21.2	30.2	36.3	45.4	54.4	69.6	84.7	93.7	96.8	99.8	99.8
157.5°	15.1	21.2	24.2	33.3	39.3	45.4	57.5	72.6	75.6	75.6	75.6
160°	9.1	12.1	15.1	21.2	24.2	30.2	36.3	45.4	54.4	54.4	54.4
162.5°	6.0	9.1	9.1	12.1	12.1	18.1	21.2	24.2	33.3	36.3	36.3
165°	3.0	6.0	6.0	6.0	6.0	6.0	9.1	9.1	15.1	18.1	18.1
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: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2860.7	2866.8	2863.8	2863.8	2863.8	2869.8	2863.8	2836.5	2842.6	2848.6	2854.7
5°	2857.7	2860.7	2860.7	2857.7	2857.7	2863.8	2857.7	2830.5	2836.5	2842.6	2845.6
7.5°	2845.6	2848.6	2848.6	2848.6	2845.6	2851.7	2842.6	2818.4	2818.4	2824.4	2827.5
10°	2830.5	2836.5	2833.5	2830.5	2830.5	2830.5	2824.4	2797.2	2797.2	2800.2	2803.3
12.5°	2812.3	2812.3	2812.3	2809.3	2806.3	2806.3	2800.2	2773.0	2770.0	2776.1	2773.0
15°	2788.2	2794.2	2788.2	2785.1	2779.1	2779.1	2770.0	2742.8	2736.7	2739.8	2736.7
17.5°	2767.0	2770.0	2764.0	2757.9	2751.9	2748.8	2739.8	2709.5	2700.5	2703.5	2697.4
20°	2745.8	2745.8	2739.8	2733.7	2724.6	2715.6	2703.5	2673.2	2658.1	2658.1	2646.0
22.5°	2718.6	2718.6	2712.6	2703.5	2694.4	2682.3	2670.2	2640.0	2615.8	2609.7	2600.7
25°	2688.4	2685.3	2682.3	2673.2	2655.1	2643.0	2630.9	2597.6	2570.4	2558.3	2543.2
27.5°	2652.1	2652.1	2643.0	2633.9	2615.8	2600.7	2585.5	2555.3	2519.0	2503.9	2482.7
30°	2612.8	2612.8	2603.7	2591.6	2573.4	2555.3	2537.2	2500.9	2464.6	2443.4	2419.2
32.5°	2573.4	2570.4	2561.3	2549.3	2531.1	2503.9	2488.8	2452.5	2410.1	2386.0	2352.7
35°	2525.1	2522.0	2513.0	2497.8	2473.7	2452.5	2428.3	2395.0	2346.6	2316.4	2280.1
37.5°	2476.7	2473.7	2467.6	2446.4	2422.2	2398.1	2367.8	2334.5	2289.2	2249.9	2213.6
40°	2428.3	2425.3	2413.2	2398.1	2367.8	2337.6	2307.3	2274.1	2225.7	2180.3	2141.0
42.5°	2376.9	2373.9	2358.7	2340.6	2307.3	2277.1	2240.8	2204.5	2156.1	2101.7	2062.4
45°	2325.5	2319.4	2304.3	2283.1	2246.9	2213.6	2177.3	2135.0	2086.6	2035.2	1983.8
47.5°	2271.0	2262.0	2246.9	2216.6	2186.4	2150.1	2107.7	2062.4	2014.0	1956.5	1902.1
50°	2210.6	2204.5	2186.4	2159.2	2122.9	2086.6	2038.2	1992.8	1935.4	1880.9	1814.4
52.5°	2153.1	2141.0	2125.9	2095.6	2059.4	2020.0	1968.6	1914.2	1856.8	1805.3	1735.8
55°	2092.6	2086.6	2065.4	2041.2	1995.9	1950.5	1902.1	1844.7	1781.2	1720.7	1654.1
57.5°	2035.2	2023.1	2004.9	1971.7	1932.4	1887.0	1835.6	1775.1	1705.6	1642.0	1569.5
60°	1977.7	1959.6	1938.4	1908.2	1865.8	1817.4	1763.0	1699.5	1629.9	1560.4	1484.8
62.5°	1914.2	1899.1	1874.9	1844.7	1802.3	1750.9	1693.5	1626.9	1560.4	1487.8	1406.2
65°	1850.7	1835.6	1811.4	1781.2	1738.8	1681.4	1620.9	1554.3	1478.7	1409.2	1321.5
67.5°	1787.2	1772.1	1744.9	1711.6	1669.3	1614.8	1551.3	1481.8	1406.2	1330.6	1239.9
70°	1723.7	1705.6	1681.4	1645.1	1602.7	1545.3	1481.8	1409.2	1333.6	1251.9	1161.2
72.5°	1660.2	1645.1	1614.8	1581.6	1536.2	1478.7	1415.2	1342.7	1264.0	1179.4	1088.6
75°	1596.7	1578.5	1557.4	1518.1	1469.7	1415.2	1348.7	1276.1	1191.5	1109.8	1016.1
77.5°	1533.2	1518.1	1490.8	1451.5	1406.2	1348.7	1282.2	1209.6	1124.9	1040.3	940.5
80°	1469.7	1451.5	1430.4	1394.1	1342.7	1285.2	1215.7	1143.1	1058.4	970.7	870.9
82.5°	1406.2	1388.0	1363.8	1327.5	1279.2	1221.7	1155.2	1076.6	991.9	901.2	807.4
85°	1342.7	1327.5	1300.3	1264.0	1212.6	1155.2	1088.6	1019.1	928.4	837.7	743.9
87.5°	1279.2	1264.0	1236.8	1200.5	1152.2	1094.7	1028.2	955.6	867.9	783.2	680.4
90°	1218.7	1206.6	1179.4	1143.1	1094.7	1037.2	976.8	898.1	813.5	728.8	632.0
92.5°	1164.2	1152.2	1128.0	1091.7	1049.3	985.8	925.4	849.8	765.1	677.4	583.6
95°	1115.9	1100.7	1076.6	1043.3	991.9	937.4	877.0	801.4	719.7	632.0	541.3
97.5°	1061.4	1046.3	1022.1	985.8	943.5	886.0	825.6	753.0	671.3	589.7	499.0
100°	1007.0	991.9	964.7	934.4	892.1	834.6	777.2	704.6	629.0	550.4	462.7
102.5°	952.6	937.4	913.3	883.0	840.7	789.3	731.8	662.3	586.7	508.0	426.4
105°	901.2	886.0	861.8	831.6	792.3	740.9	680.4	619.9	547.3	471.7	393.1
107.5°	849.8	834.6	813.5	783.2	743.9	695.5	638.1	574.6	508.0	435.5	359.9
110°	798.3	786.2	762.1	734.8	695.5	647.1	595.7	535.3	468.7	402.2	329.6



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	750.0	737.9	713.7	683.4	650.2	604.8	553.4	495.9	432.4	368.9	299.4
115°	701.6	686.5	665.3	638.1	604.8	562.5	514.1	462.7	399.2	338.7	275.2
117.5°	653.2	641.1	619.9	592.7	562.5	520.1	474.8	426.4	365.9	308.5	251.0
120°	604.8	595.7	574.6	550.4	520.1	480.8	438.5	390.1	335.7	281.2	226.8
122.5°	559.4	550.4	529.2	508.0	477.8	441.5	402.2	356.8	308.5	257.0	208.7
125°	517.1	505.0	486.9	465.7	438.5	405.2	365.9	323.6	278.2	232.8	187.5
127.5°	471.7	462.7	450.6	426.4	399.2	368.9	332.6	296.4	254.0	211.7	169.3
130°	435.5	423.4	408.2	390.1	365.9	335.7	302.4	266.1	229.8	190.5	148.2
132.5°	393.1	381.0	368.9	350.8	329.6	302.4	272.2	238.9	205.6	169.3	133.1
135°	353.8	344.7	332.6	314.5	293.3	272.2	241.9	211.7	181.4	148.2	117.9
137.5°	317.5	308.5	296.4	284.3	263.1	241.9	214.7	187.5	160.3	130.0	102.8
140°	281.2	275.2	263.1	251.0	232.8	211.7	187.5	163.3	139.1	111.9	87.7
142.5°	244.9	238.9	229.8	217.7	202.6	184.5	163.3	142.1	117.9	96.8	75.6
145°	211.7	208.7	199.6	187.5	175.4	157.2	139.1	121.0	99.8	81.6	60.5
147.5°	178.4	175.4	169.3	160.3	148.2	133.1	117.9	99.8	84.7	66.5	48.4
150°	148.2	145.2	142.1	130.0	124.0	108.9	96.8	81.6	69.6	51.4	39.3
152.5°	121.0	121.0	114.9	105.8	99.8	87.7	78.6	66.5	54.4	42.3	30.2
155°	96.8	93.7	90.7	84.7	78.6	69.6	60.5	51.4	42.3	30.2	21.2
157.5°	75.6	72.6	69.6	63.5	57.5	54.4	45.4	36.3	27.2	21.2	15.1
160°	54.4	51.4	48.4	45.4	42.3	36.3	30.2	24.2	18.1	12.1	9.1
162.5°	36.3	33.3	33.3	30.2	27.2	21.2	18.1	15.1	12.1	9.1	6.0
165°	18.1	18.1	15.1	15.1	12.1	9.1	9.1	9.1	6.0	6.0	3.0
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: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8	2866.8
2.5°	2851.7	2851.7	2863.8	2860.7	2851.7	2869.8	2891.0
5°	2842.6	2842.6	2851.7	2851.7	2842.6	2860.7	2878.9
7.5°	2827.5	2824.4	2833.5	2833.5	2821.4	2836.5	2857.7
10°	2800.2	2797.2	2806.3	2806.3	2794.2	2809.3	2827.5
12.5°	2770.0	2764.0	2773.0	2770.0	2757.9	2773.0	2791.2
15°	2730.7	2727.7	2733.7	2727.7	2715.6	2730.7	2748.8
17.5°	2691.4	2682.3	2685.3	2685.3	2664.2	2679.3	2694.4
20°	2640.0	2627.9	2630.9	2627.9	2612.8	2621.8	2640.0
22.5°	2588.6	2570.4	2570.4	2567.4	2549.3	2561.3	2576.5
25°	2525.1	2503.9	2503.9	2500.9	2479.7	2488.8	2503.9
27.5°	2461.6	2440.4	2431.3	2428.3	2407.1	2407.1	2428.3
30°	2395.0	2364.8	2358.7	2349.7	2328.5	2328.5	2346.6
32.5°	2331.5	2289.2	2277.1	2265.0	2243.8	2240.8	2262.0
35°	2246.9	2213.6	2192.4	2180.3	2156.1	2150.1	2168.2
37.5°	2177.3	2135.0	2104.7	2089.6	2065.4	2056.3	2080.5
40°	2101.7	2056.3	2017.0	2008.0	1971.7	1959.6	1980.7
42.5°	2017.0	1968.6	1929.3	1911.2	1884.0	1871.9	1874.9
45°	1932.4	1880.9	1838.6	1814.4	1787.2	1766.0	1778.1
47.5°	1844.7	1799.3	1747.9	1711.6	1678.3	1663.2	1669.3
50°	1757.0	1702.5	1654.1	1614.8	1575.5	1557.4	1569.5
52.5°	1669.3	1611.8	1557.4	1515.0	1469.7	1451.5	1454.6
55°	1584.6	1524.1	1460.6	1415.2	1372.9	1345.7	1339.6
57.5°	1499.9	1433.4	1366.9	1315.5	1261.0	1236.8	1227.8
60°	1409.2	1339.6	1270.1	1209.6	1152.2	1124.9	1112.8
62.5°	1324.5	1248.9	1170.3	1106.8	1049.3	1013.0	1004.0
65°	1242.9	1155.2	1076.6	1004.0	940.5	901.2	889.1
67.5°	1155.2	1064.5	979.8	901.2	840.7	789.3	783.2
70°	1073.5	976.8	883.0	801.4	734.8	683.4	659.2
72.5°	991.9	892.1	795.3	707.6	622.9	574.6	556.4
75°	913.3	810.4	707.6	616.9	523.2	465.7	447.6
77.5°	840.7	734.8	626.0	526.2	438.5	365.9	341.7
80°	771.1	662.3	547.3	444.5	350.8	272.2	244.9
82.5°	698.5	595.7	477.8	368.9	272.2	190.5	157.2
85°	635.0	532.2	414.3	305.4	208.7	121.0	84.7
87.5°	583.6	471.7	365.9	257.0	157.2	69.6	24.2
90°	532.2	423.4	317.5	211.7	117.9	39.3	3.0
92.5°	486.9	384.1	278.2	181.4	90.7	27.2	3.0
95°	444.5	344.7	244.9	151.2	72.6	18.1	3.0
97.5°	405.2	311.5	217.7	130.0	60.5	15.1	3.0
100°	372.0	281.2	193.5	114.9	51.4	12.1	3.0
102.5°	338.7	254.0	172.4	99.8	45.4	9.1	3.0
105°	311.5	229.8	154.2	90.7	39.3	9.1	3.0
107.5°	284.3	208.7	139.1	78.6	33.3	6.0	3.0
110°	257.0	190.5	124.0	69.6	30.2	6.0	3.0



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-200HL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	235.9	172.4	111.9	63.5	24.2	6.0	3.0
115°	214.7	154.2	99.8	54.4	21.2	3.0	3.0
117.5°	193.5	139.1	87.7	48.4	18.1	3.0	3.0
120°	175.4	124.0	78.6	42.3	15.1	3.0	3.0
122.5°	157.2	111.9	69.6	36.3	12.1	3.0	3.0
125°	142.1	99.8	60.5	30.2	9.1	3.0	3.0
127.5°	127.0	87.7	54.4	27.2	9.1	3.0	3.0
130°	111.9	78.6	45.4	21.2	6.0	3.0	3.0
132.5°	99.8	66.5	39.3	18.1	6.0	3.0	3.0
135°	87.7	57.5	33.3	12.1	6.0	3.0	3.0
137.5°	75.6	48.4	27.2	9.1	3.0	3.0	3.0
140°	63.5	42.3	21.2	9.1	3.0	3.0	3.0
142.5°	54.4	33.3	15.1	6.0	3.0	3.0	3.0
145°	42.3	27.2	12.1	6.0	3.0	3.0	3.0
147.5°	33.3	21.2	9.1	6.0	3.0	3.0	3.0
150°	24.2	15.1	9.1	3.0	3.0	3.0	3.0
152.5°	18.1	12.1	6.0	3.0	3.0	3.0	3.0
155°	12.1	9.1	6.0	3.0	3.0	3.0	3.0
157.5°	9.1	6.0	3.0	3.0	3.0	3.0	3.0
160°	6.0	3.0	3.0	3.0	3.0	3.0	3.0
162.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0
165°	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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)