

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-LD5-76HL-LC-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 (P33518)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

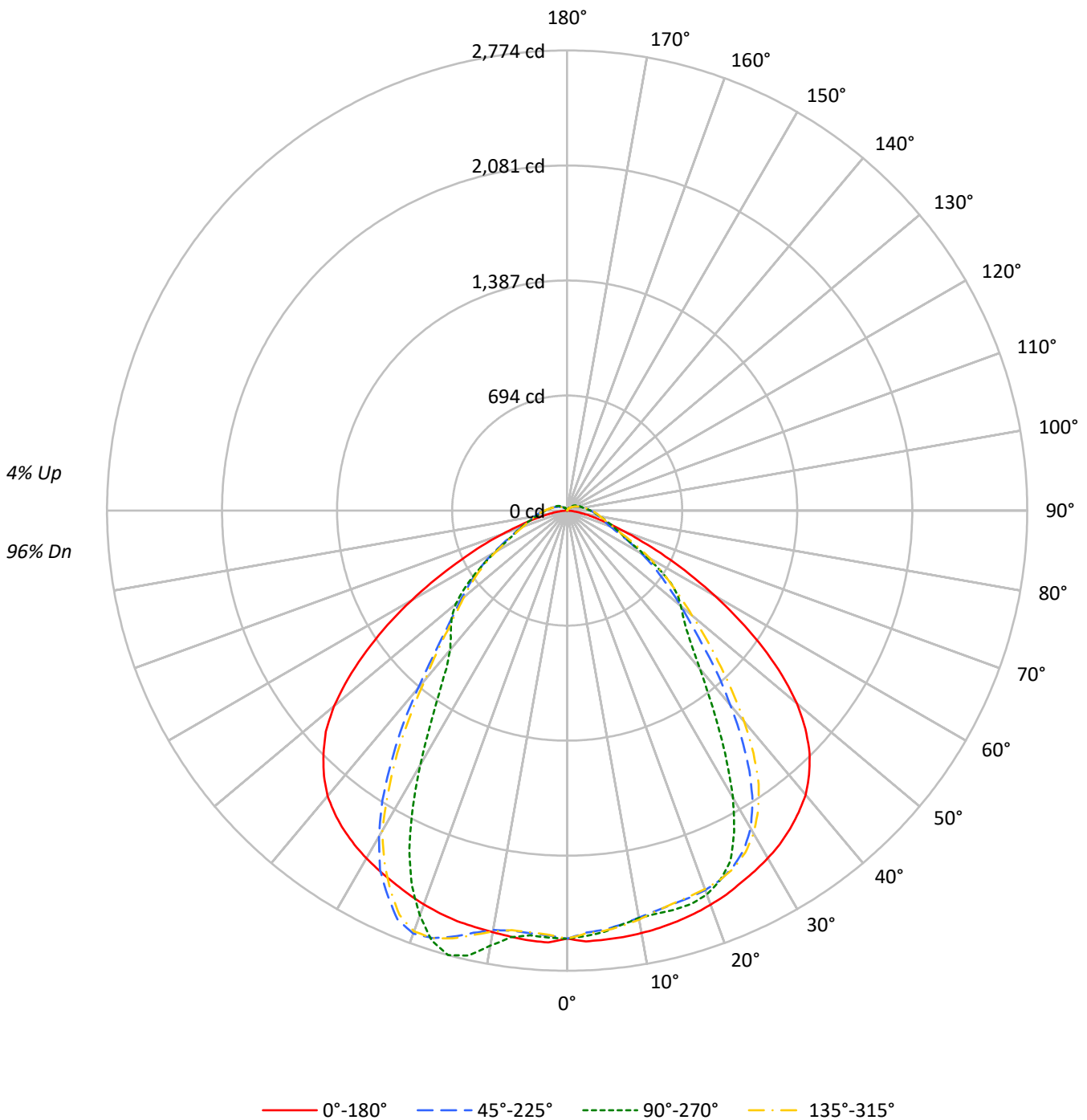
Lumens per Lamp: N/A
Luminaire Lumens: 6152.0 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 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-LD5-76HL-LC-UNV-L930-CD1-U

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	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	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	82				
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	71				
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	61				
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	54				
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	47				
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	42				
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	38				
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	34				
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	31				
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	28				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	20854	20854	20854	20854
5°	21006	20027	21049	20184
10°	21103	19195	21060	20497
15°	21267	18938	21255	21086
20°	21500	18637	21478	19646
25°	21765	17680	21754	17084
30°	22175	15324	22188	13576
35°	22609	12391	22674	10486
40°	22992	9977	23088	8790
45°	22911	8450	23029	8229
50°	21923	7780	22231	7607
55°	19452	6994	19938	6357
60°	15777	5353	16615	4909
65°	11729	4095	12636	3884
70°	7977	3535	8991	3380
75°	5218	3190	6076	3016
80°	3372	2973	3953	2735
85°	1728	2967	2275	2709



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.1	4.0
10°-20°	729.3	11.9
20°-30°	1108.8	18.0
30°-40°	1189.5	19.3
40°-50°	1032.3	16.8
50°-60°	765.1	12.4
60°-70°	438.4	7.1
70°-80°	242.7	3.9
80°-90°	147.8	2.4
90°-100°	96.1	1.6
100°-110°	64.4	1.0
110°-120°	43.5	0.7
120°-130°	26.7	0.4
130°-140°	14.0	0.2
140°-150°	6.4	0.1
150°-160°	1.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2083.3	33.9
0°-40°	3272.7	53.2
0°-60°	5070.1	82.4
0°-90°	5899.1	95.9
90°-120°	204.0	3.3
90°-150°	251.1	4.1
90°-180°	253.0	4.1
0°-180°	6152.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2581	2581	2581	2581	2581	
5°	2597	2550	2602	2570	2597	247
15°	2563	2491	2562	2774	2563	725
25°	2477	2330	2475	2251	2477	1145
35°	2342	1586	2349	1342	2342	1466
45°	2067	1017	2078	990	2067	1583
55°	1442	762	1478	693	1442	1279
65°	654	387	705	367	654	660
75°	187	245	217	232	187	213
85°	25	169	33	155	25	33
90°	0	141	3	131	0	1
95°	1	116	0	111	1	1
105°	1	87	1	83	1	1
115°	1	71	1	64	1	1
125°	1	53	1	44	1	1
135°	1	33	1	28	1	1
145°	1	20	3	16	1	1
155°	3	9	3	8	3	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2599.3	2592.6	2589.9	2584.6	2588.6	2604.6	2593.9	2576.6	2577.9	2547.3	2563.3
5°	2596.6	2588.6	2584.6	2579.3	2581.9	2596.6	2585.9	2568.6	2567.3	2536.6	2551.3
7.5°	2592.6	2584.6	2577.9	2573.9	2575.3	2587.3	2573.9	2553.9	2549.9	2516.6	2530.0
10°	2585.9	2580.6	2571.3	2564.6	2563.3	2576.6	2555.3	2535.3	2526.0	2491.3	2504.6
12.5°	2576.6	2568.6	2559.3	2547.3	2546.0	2553.9	2536.6	2508.6	2499.3	2471.3	2486.0
15°	2563.3	2553.9	2543.3	2530.0	2523.3	2528.6	2507.3	2482.0	2480.6	2456.6	2476.6
17.5°	2548.6	2535.3	2523.3	2504.6	2495.3	2499.3	2482.0	2459.3	2462.0	2447.3	2470.0
20°	2528.6	2514.0	2495.3	2476.6	2463.3	2470.0	2458.0	2440.6	2444.6	2434.0	2454.0
22.5°	2506.0	2486.0	2463.3	2442.0	2431.3	2440.6	2431.3	2416.7	2418.0	2411.3	2423.3
25°	2476.6	2454.0	2427.3	2400.7	2395.3	2402.0	2396.7	2384.7	2379.3	2368.7	2374.0
27.5°	2450.0	2424.7	2391.3	2363.3	2354.0	2367.3	2355.3	2335.3	2320.7	2306.0	2295.4
30°	2419.3	2388.7	2351.3	2319.3	2311.4	2316.7	2299.4	2268.7	2230.0	2211.4	2182.1
32.5°	2386.0	2346.0	2299.4	2263.4	2258.0	2254.0	2222.0	2178.1	2118.1	2080.7	2035.4
35°	2342.0	2298.0	2242.0	2198.0	2190.1	2167.4	2115.4	2056.8	1979.4	1915.5	1838.1
37.5°	2292.7	2240.7	2182.1	2123.4	2100.7	2055.4	1982.1	1920.8	1803.5	1726.2	1632.9
40°	2236.7	2174.1	2102.1	2031.4	1994.1	1920.8	1836.8	1746.2	1632.9	1528.9	1450.3
42.5°	2159.4	2092.7	2007.4	1928.8	1864.8	1767.5	1668.9	1540.9	1436.9	1349.0	1269.0
45°	2067.4	1987.4	1888.8	1794.2	1712.9	1596.9	1480.9	1353.0	1266.3	1163.7	1109.0
47.5°	1948.8	1862.1	1756.8	1651.5	1544.9	1416.9	1295.6	1173.0	1086.4	1013.0	973.1
50°	1808.8	1728.8	1612.9	1487.6	1370.3	1237.0	1115.7	1023.7	939.7	894.4	863.8
52.5°	1635.5	1560.9	1442.3	1306.3	1193.0	1062.4	951.7	877.1	817.1	783.8	773.1
55°	1442.3	1376.9	1259.6	1133.0	1017.0	897.1	813.1	747.8	709.1	689.1	690.5
57.5°	1235.7	1185.0	1074.4	961.1	851.8	761.1	685.1	633.2	603.8	602.5	606.5
60°	1029.0	991.7	895.7	798.4	702.5	629.2	573.2	537.2	518.5	519.9	518.5
62.5°	831.8	797.1	727.8	647.8	571.8	522.5	471.9	457.2	441.2	439.9	439.9
65°	654.5	627.8	571.8	514.5	457.2	425.2	399.9	382.6	370.6	367.9	369.2
67.5°	491.9	481.2	442.5	403.9	367.9	347.9	326.6	322.6	313.2	313.2	315.9
70°	366.6	358.6	337.2	314.6	299.9	286.6	275.9	275.9	274.6	273.3	279.9
72.5°	265.3	266.6	259.9	242.6	241.3	238.6	235.9	239.9	241.3	245.3	253.3
75°	186.6	190.6	190.6	187.9	193.3	199.9	203.9	210.6	218.6	223.9	233.3
77.5°	132.0	132.0	138.6	146.6	157.3	169.3	179.9	189.3	199.9	206.6	214.6
80°	85.3	89.3	100.0	114.6	129.3	145.3	160.0	172.0	182.6	193.3	198.6
82.5°	50.7	57.3	70.6	89.3	108.0	128.0	142.6	157.3	169.3	179.9	183.9
85°	25.3	34.7	50.7	70.6	90.6	112.0	130.6	144.0	157.3	166.6	172.0
87.5°	8.0	18.7	36.0	54.7	76.0	97.3	117.3	132.0	144.0	152.0	157.3
90°	0.0	9.3	25.3	45.3	65.3	86.6	105.3	121.3	133.3	140.0	144.0
92.5°	0.0	5.3	20.0	37.3	56.0	77.3	96.0	110.6	121.3	128.0	130.6
95°	1.3	4.0	14.7	30.7	49.3	69.3	86.6	100.0	110.6	117.3	118.6
97.5°	1.3	2.7	12.0	25.3	42.7	61.3	78.6	92.0	100.0	106.6	108.0
100°	1.3	2.7	9.3	22.7	37.3	54.7	70.6	82.6	92.0	97.3	98.6
102.5°	1.3	1.3	8.0	18.7	33.3	48.0	62.6	74.6	82.6	88.0	90.6
105°	1.3	1.3	6.7	16.0	29.3	42.7	56.0	68.0	74.6	80.0	82.6
107.5°	1.3	1.3	5.3	13.3	25.3	37.3	50.7	60.0	68.0	73.3	76.0
110°	1.3	1.3	4.0	12.0	21.3	33.3	44.0	53.3	61.3	66.6	69.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.3	1.3	4.0	10.7	18.7	29.3	38.7	48.0	54.7	60.0	64.0
115°	1.3	1.3	4.0	9.3	17.3	25.3	34.7	42.7	49.3	54.7	58.7
117.5°	1.3	1.3	4.0	8.0	14.7	22.7	30.7	38.7	44.0	49.3	53.3
120°	1.3	1.3	2.7	6.7	13.3	20.0	26.7	33.3	40.0	45.3	49.3
122.5°	1.3	1.3	2.7	6.7	10.7	17.3	24.0	29.3	36.0	40.0	44.0
125°	1.3	1.3	2.7	5.3	9.3	16.0	21.3	26.7	30.7	36.0	40.0
127.5°	1.3	1.3	2.7	5.3	8.0	13.3	18.7	24.0	28.0	32.0	34.7
130°	1.3	1.3	2.7	4.0	6.7	10.7	16.0	20.0	25.3	28.0	30.7
132.5°	1.3	1.3	1.3	4.0	5.3	8.0	12.0	17.3	21.3	25.3	26.7
135°	1.3	1.3	1.3	2.7	5.3	6.7	9.3	13.3	17.3	21.3	24.0
137.5°	1.3	1.3	1.3	2.7	4.0	6.7	8.0	10.7	14.7	17.3	21.3
140°	1.3	1.3	1.3	2.7	4.0	5.3	6.7	9.3	12.0	14.7	17.3
142.5°	1.3	1.3	1.3	2.7	2.7	4.0	5.3	8.0	9.3	12.0	14.7
145°	1.3	1.3	1.3	2.7	2.7	4.0	5.3	6.7	8.0	9.3	12.0
147.5°	1.3	1.3	1.3	2.7	2.7	2.7	4.0	5.3	6.7	8.0	9.3
150°	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	5.3	6.7	8.0
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	4.0	5.3	6.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.0	4.0	5.3	5.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2557.9	2560.6	2576.6	2575.3	2572.6	2569.9	2569.9	2567.3	2569.9	2576.6	2573.9
5°	2544.6	2548.6	2560.6	2559.3	2556.6	2555.3	2553.9	2549.9	2552.6	2561.9	2559.3
7.5°	2520.6	2524.6	2535.3	2530.0	2526.0	2528.6	2522.0	2518.0	2523.3	2532.6	2531.3
10°	2495.3	2498.0	2511.3	2508.6	2502.0	2503.3	2496.6	2494.0	2500.6	2506.0	2507.3
12.5°	2478.0	2487.3	2499.3	2498.0	2496.6	2498.0	2491.3	2488.6	2492.6	2498.0	2496.6
15°	2474.0	2486.0	2499.3	2499.3	2500.6	2502.0	2495.3	2491.3	2495.3	2499.3	2498.0
17.5°	2470.0	2484.6	2496.6	2495.3	2496.6	2499.3	2488.6	2486.0	2491.3	2496.6	2494.0
20°	2456.6	2470.0	2478.0	2475.3	2475.3	2476.6	2463.3	2463.3	2471.3	2475.3	2476.6
22.5°	2419.3	2435.3	2435.3	2428.7	2428.7	2423.3	2419.3	2411.3	2420.7	2427.3	2432.6
25°	2363.3	2370.0	2362.0	2347.3	2339.3	2332.7	2314.0	2330.0	2330.0	2350.0	2356.7
27.5°	2284.7	2270.0	2247.4	2216.7	2210.0	2188.7	2176.7	2180.7	2187.4	2215.4	2236.7
30°	2155.4	2111.4	2072.8	2059.4	2030.1	2008.8	1987.4	1998.1	2010.1	2026.1	2070.1
32.5°	1984.8	1942.1	1879.5	1856.8	1826.2	1799.5	1774.2	1790.2	1811.5	1822.2	1870.1
35°	1788.8	1738.2	1680.9	1642.2	1610.2	1595.6	1563.6	1586.2	1608.9	1616.9	1658.2
37.5°	1580.9	1528.9	1478.3	1444.9	1414.3	1404.9	1383.6	1399.6	1416.9	1428.9	1463.6
40°	1383.6	1335.6	1297.0	1274.3	1253.0	1245.0	1237.0	1243.7	1257.0	1266.3	1293.0
42.5°	1214.3	1175.7	1149.0	1135.7	1121.0	1110.4	1111.7	1114.4	1121.0	1141.0	1153.0
45°	1066.4	1043.7	1026.4	1023.7	1014.4	1013.0	1011.7	1017.0	1021.0	1033.0	1042.4
47.5°	947.7	938.4	934.4	939.7	943.7	938.4	941.1	947.7	955.7	955.7	954.4
50°	854.4	857.1	862.4	874.4	882.4	885.1	887.8	895.7	897.1	899.7	895.7
52.5°	778.4	781.1	795.8	814.4	823.8	827.8	833.1	841.1	841.1	843.8	838.4
55°	701.1	705.1	719.8	738.5	746.5	751.8	757.1	762.5	766.5	771.8	767.8
57.5°	615.8	627.8	637.2	642.5	647.8	651.8	655.8	657.1	665.1	666.5	673.1
60°	525.2	527.9	537.2	535.8	531.9	542.5	537.2	546.5	555.8	567.8	569.2
62.5°	438.5	439.9	446.5	443.9	449.2	447.9	451.9	451.9	458.5	463.9	470.5
65°	370.6	371.9	377.2	377.2	375.9	379.9	383.9	386.6	386.6	390.6	395.9
67.5°	319.9	323.9	329.2	331.9	334.6	334.6	338.6	339.9	342.6	343.9	346.6
70°	285.3	290.6	295.9	298.6	299.9	302.6	303.9	303.9	306.6	307.9	310.6
72.5°	259.9	265.3	269.3	269.3	271.9	273.3	273.3	274.6	275.9	278.6	281.3
75°	238.6	242.6	245.3	243.9	243.9	243.9	245.3	245.3	247.9	250.6	253.3
77.5°	218.6	222.6	222.6	219.9	219.9	219.9	219.9	221.3	222.6	225.3	227.9
80°	203.9	203.9	202.6	202.6	199.9	198.6	198.6	199.9	199.9	202.6	206.6
82.5°	187.9	187.9	186.6	185.3	183.9	182.6	182.6	183.9	185.3	186.6	189.3
85°	173.3	173.3	170.6	170.6	169.3	169.3	169.3	169.3	170.6	172.0	174.6
87.5°	158.6	157.3	156.0	154.6	154.6	154.6	154.6	154.6	156.0	158.6	160.0
90°	144.0	142.6	141.3	141.3	140.0	140.0	141.3	141.3	142.6	144.0	145.3
92.5°	130.6	129.3	128.0	128.0	126.6	126.6	128.0	126.6	129.3	129.3	130.6
95°	118.6	117.3	116.0	116.0	116.0	116.0	116.0	116.0	117.3	117.3	118.6
97.5°	108.0	106.6	105.3	105.3	106.6	105.3	106.6	106.6	106.6	108.0	109.3
100°	98.6	97.3	97.3	98.6	97.3	97.3	98.6	98.6	98.6	98.6	100.0
102.5°	90.6	90.6	90.6	90.6	90.6	90.6	92.0	92.0	92.0	92.0	93.3
105°	82.6	84.0	84.0	84.0	85.3	85.3	85.3	86.6	86.6	86.6	86.6
107.5°	77.3	78.6	78.6	80.0	80.0	81.3	81.3	81.3	81.3	82.6	82.6
110°	72.0	73.3	74.6	76.0	76.0	77.3	77.3	77.3	77.3	77.3	77.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	66.6	68.0	69.3	72.0	73.3	73.3	73.3	73.3	74.6	74.6	73.3
115°	61.3	64.0	65.3	68.0	69.3	69.3	70.6	70.6	70.6	70.6	69.3
117.5°	56.0	60.0	61.3	64.0	65.3	65.3	66.6	66.6	66.6	66.6	65.3
120°	52.0	54.7	57.3	58.7	60.0	61.3	61.3	62.6	62.6	62.6	61.3
122.5°	48.0	50.7	53.3	54.7	56.0	57.3	57.3	57.3	57.3	57.3	57.3
125°	42.7	45.3	48.0	49.3	50.7	52.0	52.0	53.3	53.3	53.3	52.0
127.5°	38.7	41.3	42.7	45.3	46.7	46.7	48.0	48.0	48.0	48.0	46.7
130°	33.3	36.0	38.7	40.0	41.3	41.3	42.7	42.7	42.7	42.7	42.7
132.5°	29.3	32.0	33.3	36.0	36.0	37.3	37.3	38.7	38.7	38.7	37.3
135°	26.7	28.0	29.3	32.0	32.0	33.3	33.3	33.3	33.3	33.3	33.3
137.5°	24.0	25.3	26.7	28.0	28.0	29.3	29.3	29.3	29.3	30.7	29.3
140°	20.0	22.7	24.0	24.0	25.3	25.3	25.3	26.7	26.7	26.7	25.3
142.5°	17.3	18.7	20.0	21.3	22.7	22.7	22.7	22.7	24.0	22.7	22.7
145°	13.3	16.0	17.3	18.7	20.0	20.0	20.0	20.0	20.0	20.0	20.0
147.5°	10.7	12.0	14.7	16.0	16.0	17.3	17.3	17.3	17.3	17.3	17.3
150°	9.3	9.3	12.0	13.3	14.7	14.7	14.7	14.7	14.7	14.7	14.7
152.5°	6.7	8.0	9.3	10.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0
155°	6.7	6.7	8.0	8.0	9.3	9.3	9.3	9.3	10.7	9.3	9.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2569.9	2568.6	2573.9	2568.6	2542.0	2552.6	2548.6	2563.3	2564.6	2568.6	2581.9
5°	2556.6	2556.6	2563.3	2557.9	2532.6	2543.3	2542.0	2556.6	2559.3	2561.9	2576.6
7.5°	2530.0	2531.3	2540.6	2536.6	2510.0	2526.0	2524.6	2542.0	2547.3	2552.6	2565.9
10°	2504.6	2503.3	2514.0	2510.0	2484.6	2503.3	2502.0	2519.3	2527.3	2536.6	2552.6
12.5°	2491.3	2487.3	2491.3	2487.3	2459.3	2474.0	2475.3	2495.3	2504.6	2516.6	2535.3
15°	2491.3	2484.6	2484.6	2476.6	2444.6	2454.0	2455.3	2468.6	2480.6	2492.6	2515.3
17.5°	2488.6	2482.0	2480.6	2474.0	2439.3	2439.3	2438.0	2447.3	2454.0	2466.0	2490.0
20°	2474.0	2471.3	2470.0	2466.0	2434.0	2428.7	2426.0	2426.0	2430.0	2434.0	2458.0
22.5°	2435.3	2438.0	2440.6	2443.3	2418.0	2408.7	2410.0	2407.3	2403.3	2403.3	2423.3
25°	2363.3	2376.7	2387.3	2399.3	2384.7	2378.0	2386.0	2382.0	2375.3	2370.0	2387.3
27.5°	2248.7	2276.7	2299.4	2328.7	2330.0	2324.7	2346.0	2343.3	2342.0	2334.0	2347.3
30°	2090.1	2134.1	2164.7	2207.4	2243.4	2248.7	2284.7	2290.0	2295.4	2291.4	2304.7
32.5°	1898.1	1958.1	2010.1	2076.7	2111.4	2142.1	2192.7	2214.0	2235.4	2242.0	2256.7
35°	1688.9	1756.8	1818.2	1891.5	1946.1	2012.8	2074.1	2106.1	2154.1	2172.7	2194.0
37.5°	1490.2	1554.2	1614.2	1687.5	1775.5	1844.8	1920.8	1992.8	2058.1	2084.7	2116.7
40°	1314.3	1366.3	1423.6	1487.6	1567.6	1658.2	1740.8	1840.8	1918.1	1971.4	2018.1
42.5°	1181.0	1206.3	1255.6	1313.0	1376.9	1468.9	1552.9	1664.9	1758.2	1834.2	1911.5
45°	1062.4	1074.4	1110.4	1141.0	1206.3	1287.6	1376.9	1486.2	1583.6	1680.9	1774.2
47.5°	961.1	975.7	993.1	1011.7	1058.4	1126.4	1203.7	1302.3	1399.6	1512.9	1619.5
50°	893.1	897.1	899.7	907.7	935.7	982.4	1045.0	1129.0	1222.3	1343.6	1456.9
52.5°	833.1	833.1	825.1	821.1	831.8	861.1	897.1	957.1	1053.0	1165.0	1285.0
55°	769.1	757.1	754.5	741.1	743.8	757.1	774.4	821.1	899.7	995.7	1111.7
57.5°	679.8	674.5	674.5	669.1	658.5	665.1	669.1	702.5	758.5	841.1	942.4
60°	577.2	574.5	581.2	582.5	573.2	577.2	575.8	595.8	635.8	702.5	786.4
62.5°	474.5	486.5	487.9	493.2	487.9	486.5	493.2	510.5	530.5	581.2	646.5
65°	398.6	405.2	406.6	413.2	410.6	410.6	415.9	429.2	441.2	475.9	526.5
67.5°	349.2	346.6	347.9	351.9	347.9	346.6	350.6	358.6	367.9	389.2	425.2
70°	310.6	307.9	307.9	307.9	302.6	298.6	299.9	302.6	306.6	318.6	341.2
72.5°	281.3	281.3	277.3	273.3	269.3	266.6	263.9	261.3	259.9	263.9	275.9
75°	254.6	255.9	254.6	250.6	245.3	239.9	234.6	229.3	222.6	219.9	221.3
77.5°	230.6	231.9	233.3	231.9	226.6	219.9	211.9	203.9	194.6	185.3	179.9
80°	209.3	211.9	213.3	211.9	207.9	202.6	193.3	183.9	170.6	158.6	145.3
82.5°	190.6	194.6	195.9	195.9	193.3	187.9	177.3	166.6	152.0	136.0	118.6
85°	176.0	178.6	181.3	181.3	179.9	174.6	164.0	152.0	137.3	118.6	100.0
87.5°	161.3	162.6	165.3	168.0	165.3	160.0	150.6	137.3	122.6	104.0	82.6
90°	146.6	148.0	150.6	153.3	152.0	146.6	138.6	126.6	110.6	90.6	69.3
92.5°	132.0	134.6	136.0	137.3	138.6	134.6	128.0	116.0	100.0	80.0	60.0
95°	121.3	121.3	124.0	125.3	126.6	122.6	117.3	105.3	90.6	72.0	52.0
97.5°	110.6	110.6	113.3	113.3	114.6	112.0	106.6	96.0	81.3	64.0	44.0
100°	100.0	101.3	102.6	104.0	104.0	102.6	97.3	86.6	73.3	57.3	38.7
102.5°	93.3	93.3	94.6	94.6	96.0	93.3	88.0	78.6	65.3	50.7	33.3
105°	86.6	86.6	88.0	88.0	86.6	84.0	78.6	70.6	58.7	44.0	29.3
107.5°	81.3	81.3	81.3	81.3	80.0	77.3	72.0	62.6	52.0	40.0	26.7
110°	77.3	76.0	76.0	74.6	73.3	69.3	64.0	56.0	46.7	34.7	22.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	73.3	72.0	70.6	69.3	66.6	62.6	57.3	50.7	41.3	30.7	20.0
115°	69.3	68.0	66.6	64.0	61.3	57.3	52.0	45.3	36.0	26.7	17.3
117.5°	65.3	64.0	61.3	58.7	56.0	52.0	46.7	40.0	32.0	24.0	16.0
120°	60.0	58.7	57.3	54.7	52.0	46.7	41.3	36.0	28.0	21.3	13.3
122.5°	56.0	54.7	52.0	50.7	46.7	42.7	37.3	32.0	25.3	18.7	12.0
125°	50.7	49.3	48.0	45.3	42.7	37.3	33.3	28.0	22.7	16.0	9.3
127.5°	46.7	45.3	42.7	40.0	37.3	33.3	29.3	25.3	20.0	13.3	9.3
130°	41.3	40.0	38.7	36.0	33.3	29.3	26.7	21.3	17.3	12.0	8.0
132.5°	36.0	36.0	34.7	32.0	29.3	26.7	22.7	18.7	14.7	10.7	6.7
135°	33.3	32.0	30.7	28.0	26.7	22.7	20.0	16.0	12.0	9.3	5.3
137.5°	29.3	28.0	26.7	25.3	22.7	20.0	17.3	13.3	10.7	8.0	5.3
140°	25.3	24.0	24.0	21.3	20.0	17.3	14.7	12.0	9.3	6.7	4.0
142.5°	22.7	21.3	20.0	18.7	17.3	14.7	12.0	9.3	8.0	5.3	4.0
145°	20.0	18.7	17.3	16.0	14.7	12.0	10.7	8.0	6.7	5.3	4.0
147.5°	16.0	16.0	14.7	13.3	12.0	10.7	9.3	8.0	5.3	4.0	2.7
150°	13.3	13.3	12.0	10.7	10.7	9.3	8.0	6.7	5.3	4.0	2.7
152.5°	12.0	10.7	10.7	9.3	9.3	8.0	6.7	5.3	4.0	4.0	2.7
155°	9.3	9.3	9.3	8.0	8.0	6.7	5.3	5.3	4.0	2.7	2.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2584.6	2568.6	2581.9	2605.9	2603.3	2600.6	2597.9	2603.3	2620.6	2611.3	2596.6
5°	2580.6	2564.6	2579.3	2601.9	2600.6	2596.6	2593.9	2599.3	2616.6	2607.3	2591.3
7.5°	2572.6	2557.9	2568.6	2591.3	2591.3	2588.6	2585.9	2591.3	2607.3	2599.3	2583.3
10°	2559.3	2548.6	2559.3	2580.6	2581.9	2576.6	2573.9	2580.6	2596.6	2592.6	2579.3
12.5°	2548.6	2538.0	2549.9	2571.3	2572.6	2567.3	2563.3	2571.3	2592.6	2595.3	2591.3
15°	2534.0	2524.6	2539.3	2561.9	2561.9	2557.9	2557.9	2568.6	2597.9	2609.9	2616.6
17.5°	2512.6	2506.0	2523.3	2546.0	2547.3	2544.6	2546.0	2567.3	2605.9	2635.3	2653.9
20°	2486.0	2483.3	2502.0	2526.0	2530.0	2531.3	2538.0	2569.9	2623.3	2663.3	2681.9
22.5°	2454.0	2455.3	2476.6	2502.0	2507.3	2511.3	2524.6	2569.9	2636.6	2679.2	2687.2
25°	2418.0	2422.0	2444.6	2475.3	2482.0	2490.0	2512.6	2571.3	2640.6	2668.6	2655.3
27.5°	2379.3	2387.3	2416.7	2448.6	2456.6	2470.0	2499.3	2563.3	2621.9	2623.3	2573.9
30°	2339.3	2348.7	2383.3	2420.7	2434.0	2447.3	2483.3	2544.6	2576.6	2534.0	2447.3
32.5°	2294.0	2307.4	2342.0	2387.3	2403.3	2420.7	2456.6	2508.6	2496.6	2404.7	2280.7
35°	2236.7	2255.4	2295.4	2348.7	2363.3	2386.0	2411.3	2423.3	2370.0	2239.4	2099.4
37.5°	2166.1	2194.0	2240.7	2302.0	2318.0	2332.7	2339.3	2306.0	2199.4	2058.1	1912.8
40°	2084.7	2127.4	2178.1	2246.0	2262.0	2262.0	2238.0	2167.4	2032.8	1847.5	1686.2
42.5°	1986.1	2038.1	2102.1	2170.1	2186.1	2167.4	2110.1	1986.1	1832.8	1626.2	1455.6
45°	1866.1	1935.5	2007.4	2078.1	2086.1	2044.8	1942.1	1784.8	1595.6	1403.6	1241.0
47.5°	1723.5	1814.2	1892.8	1972.8	1962.1	1892.8	1755.5	1576.9	1376.9	1195.7	1065.0
50°	1563.6	1670.2	1758.2	1834.2	1811.5	1715.5	1554.2	1367.6	1169.0	1014.4	906.4
52.5°	1392.9	1515.6	1603.5	1664.9	1634.2	1519.6	1342.3	1163.7	1001.1	859.8	787.8
55°	1215.7	1339.6	1430.3	1478.3	1438.3	1314.3	1139.7	977.1	823.8	731.8	689.1
57.5°	1043.7	1159.7	1245.0	1283.6	1233.0	1109.0	947.7	810.4	699.8	622.5	601.2
60°	878.4	973.1	1054.4	1083.7	1029.0	914.4	775.8	666.5	585.2	531.9	521.2
62.5°	725.1	802.4	866.4	889.1	835.8	746.5	626.5	545.2	487.9	461.2	447.9
65°	598.5	643.8	709.1	705.1	673.1	590.5	502.5	445.2	407.9	390.6	382.6
67.5°	470.5	511.9	553.2	558.5	518.5	461.2	403.9	362.6	342.6	333.2	329.2
70°	363.9	394.6	419.9	413.2	391.9	355.9	319.9	297.2	289.3	285.3	285.3
72.5°	282.6	298.6	310.6	302.6	289.3	270.6	253.3	243.9	245.3	247.9	250.6
75°	218.6	222.6	225.3	217.3	214.6	202.6	201.3	202.6	210.6	218.6	222.6
77.5°	168.0	162.6	158.6	150.6	152.0	150.6	157.3	168.0	179.9	191.9	202.6
80°	129.3	117.3	108.0	100.0	104.0	110.6	124.0	140.0	156.0	169.3	182.6
82.5°	100.0	82.6	69.3	61.3	69.3	80.0	97.3	117.3	136.0	150.6	165.3
85°	77.3	57.3	41.3	33.3	41.3	57.3	76.0	98.6	118.6	134.6	149.3
87.5°	60.0	41.3	22.7	13.3	22.7	40.0	61.3	82.6	102.6	121.3	136.0
90°	48.0	28.0	10.7	2.7	12.0	28.0	48.0	69.3	89.3	109.3	124.0
92.5°	38.7	20.0	5.3	0.0	6.7	21.3	40.0	60.0	80.0	98.6	113.3
95°	32.0	16.0	4.0	0.0	5.3	16.0	32.0	52.0	70.6	89.3	101.3
97.5°	26.7	12.0	2.7	0.0	2.7	13.3	26.7	44.0	62.6	80.0	92.0
100°	22.7	10.7	2.7	0.0	2.7	10.7	22.7	38.7	54.7	70.6	82.6
102.5°	18.7	8.0	1.3	1.3	1.3	8.0	20.0	33.3	48.0	62.6	74.6
105°	17.3	6.7	1.3	1.3	1.3	6.7	17.3	29.3	42.7	56.0	66.6
107.5°	14.7	5.3	1.3	1.3	1.3	5.3	14.7	25.3	38.7	50.7	60.0
110°	12.0	5.3	1.3	1.3	1.3	5.3	12.0	22.7	33.3	44.0	53.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	10.7	4.0	1.3	1.3	1.3	4.0	10.7	20.0	29.3	40.0	48.0
115°	9.3	4.0	1.3	1.3	1.3	4.0	9.3	17.3	25.3	34.7	42.7
117.5°	8.0	4.0	1.3	1.3	1.3	2.7	8.0	14.7	22.7	30.7	38.7
120°	6.7	2.7	1.3	1.3	1.3	2.7	6.7	13.3	20.0	26.7	33.3
122.5°	6.7	2.7	1.3	1.3	1.3	2.7	5.3	10.7	17.3	22.7	29.3
125°	5.3	2.7	1.3	1.3	1.3	1.3	5.3	9.3	14.7	20.0	25.3
127.5°	5.3	2.7	1.3	1.3	1.3	1.3	4.0	8.0	12.0	17.3	22.7
130°	4.0	2.7	1.3	1.3	1.3	1.3	2.7	6.7	10.7	14.7	18.7
132.5°	4.0	2.7	1.3	1.3	1.3	1.3	2.7	5.3	8.0	12.0	16.0
135°	4.0	1.3	1.3	1.3	1.3	1.3	1.3	4.0	6.7	9.3	12.0
137.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	2.7	5.3	6.7	10.7
140°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	2.7	4.0	5.3	8.0
142.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	4.0	6.7
145°	2.7	1.3	1.3	2.7	2.7	1.3	1.3	2.7	2.7	4.0	5.3
147.5°	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0
150°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	4.0
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2593.9	2563.3	2579.3	2573.9	2579.3	2592.6	2591.3	2587.3	2589.9	2583.3	2576.6
5°	2588.6	2557.9	2573.9	2567.3	2573.9	2587.3	2584.6	2580.6	2584.6	2576.6	2569.9
7.5°	2581.9	2553.9	2572.6	2571.3	2583.3	2600.6	2601.9	2601.9	2611.3	2599.3	2593.9
10°	2581.9	2567.3	2592.6	2601.9	2632.6	2655.3	2657.9	2663.3	2679.2	2676.6	2663.3
12.5°	2609.9	2607.3	2644.6	2667.3	2695.2	2727.2	2744.6	2749.9	2760.6	2752.6	2747.2
15°	2645.9	2659.3	2700.6	2725.9	2756.6	2780.6	2784.6	2787.2	2795.2	2783.2	2773.9
17.5°	2693.9	2701.9	2735.2	2745.9	2765.9	2769.9	2764.6	2751.2	2751.2	2724.6	2716.6
20°	2716.6	2712.6	2725.9	2708.6	2700.6	2676.6	2653.9	2628.6	2627.3	2599.3	2596.6
22.5°	2696.6	2669.9	2641.9	2599.3	2580.6	2546.0	2515.3	2500.6	2491.3	2455.3	2446.0
25°	2625.9	2560.6	2519.3	2468.6	2423.3	2383.3	2354.0	2323.3	2294.0	2264.7	2251.4
27.5°	2503.3	2442.0	2375.3	2304.7	2242.0	2180.7	2131.4	2100.7	2072.8	2034.1	2014.1
30°	2352.7	2267.4	2194.0	2126.1	2023.4	1948.8	1907.5	1846.1	1824.8	1807.5	1770.2
32.5°	2175.4	2072.8	1972.8	1880.8	1775.5	1706.2	1651.5	1606.2	1592.9	1547.6	1536.9
35°	1979.4	1844.8	1731.5	1640.9	1564.9	1480.9	1435.6	1404.9	1378.3	1347.6	1342.3
37.5°	1748.8	1627.5	1499.6	1419.6	1359.6	1287.6	1253.0	1231.7	1219.7	1197.0	1193.0
40°	1516.9	1395.6	1307.6	1227.7	1190.3	1151.7	1126.4	1117.0	1111.7	1103.7	1095.7
42.5°	1306.3	1199.7	1137.0	1083.7	1067.7	1049.0	1042.4	1047.7	1042.4	1039.7	1038.4
45°	1127.7	1046.4	1002.4	986.4	982.4	977.1	982.4	991.7	993.1	990.4	990.4
47.5°	965.1	926.4	907.7	910.4	917.1	921.1	930.4	942.4	945.1	938.4	941.1
50°	858.4	835.8	831.8	842.4	857.1	862.4	873.1	882.4	881.1	878.4	875.8
52.5°	758.5	751.8	762.5	773.1	789.1	791.8	795.8	799.8	798.4	793.1	790.4
55°	674.5	679.8	689.1	693.1	705.1	703.8	705.1	705.1	699.8	697.1	693.1
57.5°	598.5	599.8	605.2	606.5	613.2	610.5	609.2	606.5	598.5	597.2	593.2
60°	521.2	518.5	530.5	521.2	526.5	521.2	519.9	513.2	505.2	503.9	501.2
62.5°	447.9	442.5	450.5	446.5	449.2	443.9	441.2	433.2	426.5	425.2	423.9
65°	382.6	379.9	387.9	386.6	389.2	382.6	379.9	374.6	369.2	367.9	366.6
67.5°	327.9	334.6	338.6	338.6	341.2	339.9	333.2	331.9	330.6	325.2	325.2
70°	287.9	291.9	299.9	301.2	299.9	302.6	297.2	295.9	294.6	291.9	290.6
72.5°	255.9	261.3	269.3	270.6	269.3	269.3	266.6	265.3	265.3	261.3	261.3
75°	230.6	237.3	243.9	243.9	243.9	241.3	238.6	238.6	235.9	234.6	231.9
77.5°	209.3	217.3	222.6	221.3	219.9	217.3	217.3	213.3	209.3	209.3	206.6
80°	193.3	198.6	202.6	201.3	199.9	195.9	194.6	190.6	187.9	183.9	183.9
82.5°	176.0	182.6	185.3	183.9	181.3	177.3	176.0	173.3	170.6	169.3	166.6
85°	161.3	168.0	169.3	166.6	164.0	161.3	160.0	158.6	157.3	154.6	154.6
87.5°	146.6	153.3	153.3	152.0	149.3	148.0	146.6	145.3	144.0	142.6	141.3
90°	134.6	140.0	140.0	138.6	137.3	136.0	134.6	133.3	132.0	130.6	130.6
92.5°	122.6	128.0	128.0	126.6	125.3	124.0	124.0	122.6	121.3	120.0	118.6
95°	112.0	117.3	117.3	117.3	116.0	114.6	114.6	113.3	112.0	112.0	110.6
97.5°	101.3	106.6	106.6	106.6	105.3	104.0	104.0	102.6	102.6	102.6	101.3
100°	92.0	96.0	97.3	97.3	96.0	96.0	96.0	94.6	94.6	94.6	93.3
102.5°	82.6	86.6	89.3	89.3	89.3	88.0	88.0	88.0	88.0	88.0	86.6
105°	74.6	78.6	81.3	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
107.5°	68.0	72.0	74.6	76.0	77.3	77.3	78.6	78.6	78.6	78.6	78.6
110°	61.3	65.3	69.3	70.6	72.0	73.3	73.3	74.6	73.3	73.3	73.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	54.7	60.0	62.6	65.3	66.6	68.0	69.3	69.3	69.3	69.3	69.3
115°	49.3	54.7	57.3	60.0	62.6	64.0	64.0	65.3	65.3	65.3	64.0
117.5°	44.0	49.3	52.0	54.7	56.0	58.7	60.0	60.0	60.0	60.0	58.7
120°	40.0	44.0	46.7	49.3	52.0	53.3	54.7	54.7	54.7	54.7	54.7
122.5°	34.7	38.7	42.7	45.3	46.7	48.0	49.3	49.3	49.3	49.3	49.3
125°	30.7	34.7	37.3	40.0	41.3	44.0	44.0	44.0	44.0	44.0	44.0
127.5°	26.7	30.7	33.3	36.0	37.3	38.7	40.0	40.0	40.0	40.0	40.0
130°	22.7	26.7	29.3	32.0	33.3	34.7	34.7	36.0	36.0	36.0	36.0
132.5°	20.0	22.7	25.3	28.0	29.3	30.7	30.7	32.0	32.0	32.0	32.0
135°	16.0	20.0	21.3	24.0	25.3	26.7	26.7	28.0	28.0	28.0	28.0
137.5°	13.3	16.0	18.7	21.3	22.7	22.7	24.0	24.0	25.3	25.3	25.3
140°	10.7	12.0	16.0	17.3	18.7	20.0	21.3	21.3	21.3	21.3	21.3
142.5°	8.0	10.7	12.0	14.7	16.0	17.3	18.7	18.7	18.7	18.7	18.7
145°	6.7	8.0	9.3	12.0	13.3	14.7	16.0	16.0	16.0	16.0	16.0
147.5°	5.3	6.7	8.0	9.3	10.7	12.0	13.3	13.3	13.3	13.3	13.3
150°	4.0	5.3	6.7	6.7	8.0	9.3	10.7	12.0	12.0	12.0	12.0
152.5°	4.0	4.0	5.3	5.3	6.7	8.0	9.3	9.3	9.3	9.3	9.3
155°	2.7	4.0	4.0	4.0	5.3	5.3	6.7	8.0	8.0	8.0	8.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2580.6	2585.9	2583.3	2579.3	2577.9	2584.6	2577.9	2547.3	2559.3	2560.6	2569.9
5°	2576.6	2580.6	2577.9	2575.3	2571.3	2579.3	2571.3	2539.3	2551.3	2552.6	2561.9
7.5°	2603.3	2604.6	2604.6	2597.9	2587.3	2591.3	2580.6	2544.6	2551.3	2551.3	2557.9
10°	2669.9	2672.6	2676.6	2659.3	2645.9	2635.3	2620.6	2576.6	2575.3	2564.6	2564.6
12.5°	2756.6	2749.9	2743.2	2735.2	2724.6	2711.2	2689.9	2637.9	2620.6	2603.3	2585.9
15°	2781.9	2779.2	2777.9	2773.9	2767.2	2763.2	2747.2	2695.2	2669.9	2648.6	2617.9
17.5°	2715.2	2720.6	2737.9	2739.2	2747.2	2763.2	2760.6	2724.6	2701.9	2692.6	2655.3
20°	2595.3	2596.6	2617.9	2627.3	2661.9	2688.6	2708.6	2704.6	2699.2	2709.9	2681.9
22.5°	2451.3	2460.6	2483.3	2498.0	2531.3	2561.9	2593.9	2611.3	2639.3	2683.2	2677.9
25°	2255.4	2267.4	2299.4	2323.3	2370.0	2416.7	2459.3	2490.0	2523.3	2607.3	2635.3
27.5°	2020.8	2039.4	2080.7	2104.7	2170.1	2218.0	2279.4	2339.3	2386.0	2482.0	2539.3
30°	1774.2	1790.2	1834.2	1867.5	1923.5	1988.8	2066.1	2151.4	2228.7	2326.0	2398.0
32.5°	1543.6	1560.9	1596.9	1626.2	1688.9	1743.5	1828.8	1934.1	2006.1	2140.7	2236.7
35°	1342.3	1358.3	1383.6	1408.9	1460.9	1516.9	1590.2	1692.9	1784.8	1924.8	2046.1
37.5°	1201.0	1203.7	1218.3	1233.0	1271.6	1314.3	1371.6	1462.3	1547.6	1698.2	1831.5
40°	1099.7	1099.7	1107.7	1111.7	1129.0	1154.3	1190.3	1261.0	1331.6	1446.3	1608.9
42.5°	1037.0	1034.4	1034.4	1035.7	1034.4	1046.4	1067.7	1101.0	1163.7	1258.3	1384.9
45°	990.4	985.1	981.1	971.7	966.4	966.4	967.7	979.7	1015.7	1077.0	1179.7
47.5°	938.4	937.1	930.4	919.7	910.4	903.7	893.1	889.1	899.7	934.4	1003.7
50°	878.4	871.8	865.1	857.1	846.4	839.8	819.8	821.1	811.8	827.8	863.8
52.5°	790.4	785.1	782.4	775.8	771.8	769.1	753.1	737.1	733.1	735.8	749.1
55°	693.1	695.8	685.1	690.5	689.1	677.1	670.5	658.5	654.5	653.1	659.8
57.5°	591.8	594.5	587.8	593.2	593.2	586.5	582.5	582.5	573.2	565.2	574.5
60°	499.9	494.5	498.5	505.2	505.2	501.2	498.5	498.5	491.9	489.2	495.9
62.5°	425.2	419.9	423.9	430.5	431.9	429.2	426.5	426.5	418.5	418.5	423.9
65°	367.9	369.2	367.9	373.2	373.2	374.6	371.9	369.2	359.9	363.9	362.6
67.5°	326.6	325.2	325.2	330.6	329.2	331.9	329.2	325.2	318.6	313.2	311.9
70°	291.9	290.6	290.6	293.3	294.6	294.6	293.3	290.6	281.3	275.9	271.9
72.5°	261.3	259.9	261.3	262.6	263.9	265.3	263.9	261.3	253.3	246.6	239.9
75°	233.3	231.9	235.9	235.9	237.3	237.3	238.6	237.3	230.6	222.6	214.6
77.5°	205.3	206.6	210.6	211.9	214.6	215.9	217.3	217.3	210.6	203.9	193.3
80°	182.6	185.3	187.9	189.3	191.9	195.9	197.3	198.6	193.3	186.6	174.6
82.5°	166.6	168.0	170.6	172.0	176.0	177.3	178.6	181.3	178.6	172.0	158.6
85°	153.3	154.6	157.3	157.3	160.0	162.6	164.0	165.3	164.0	157.3	144.0
87.5°	141.3	142.6	144.0	145.3	146.6	148.0	149.3	150.6	149.3	142.6	130.6
90°	130.6	130.6	132.0	132.0	133.3	134.6	137.3	137.3	136.0	130.6	118.6
92.5°	118.6	120.0	120.0	121.3	122.6	124.0	125.3	125.3	124.0	118.6	108.0
95°	110.6	110.6	112.0	112.0	113.3	113.3	114.6	114.6	113.3	108.0	97.3
97.5°	101.3	101.3	101.3	101.3	102.6	102.6	104.0	104.0	102.6	97.3	88.0
100°	93.3	93.3	93.3	93.3	93.3	94.6	94.6	94.6	93.3	88.0	78.6
102.5°	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	84.0	80.0	70.6
105°	82.6	82.6	82.6	81.3	81.3	81.3	80.0	80.0	76.0	72.0	64.0
107.5°	77.3	77.3	77.3	76.0	76.0	74.6	73.3	73.3	69.3	65.3	57.3
110°	73.3	73.3	73.3	72.0	70.6	69.3	68.0	66.6	62.6	57.3	50.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	69.3	69.3	68.0	68.0	66.6	65.3	62.6	61.3	57.3	52.0	45.3
115°	64.0	64.0	64.0	62.6	61.3	60.0	58.7	56.0	52.0	46.7	40.0
117.5°	58.7	58.7	58.7	57.3	56.0	54.7	53.3	50.7	46.7	41.3	36.0
120°	53.3	53.3	53.3	52.0	50.7	49.3	48.0	45.3	41.3	37.3	30.7
122.5°	49.3	49.3	48.0	46.7	45.3	44.0	42.7	40.0	37.3	32.0	26.7
125°	44.0	44.0	42.7	42.7	41.3	40.0	38.7	36.0	32.0	28.0	24.0
127.5°	40.0	38.7	38.7	38.7	37.3	36.0	33.3	32.0	28.0	24.0	20.0
130°	34.7	34.7	34.7	33.3	33.3	32.0	29.3	26.7	24.0	21.3	17.3
132.5°	30.7	30.7	30.7	30.7	29.3	28.0	25.3	24.0	21.3	17.3	14.7
135°	28.0	28.0	26.7	26.7	25.3	24.0	22.7	20.0	17.3	14.7	12.0
137.5°	24.0	24.0	24.0	22.7	22.7	21.3	18.7	17.3	16.0	13.3	10.7
140°	21.3	21.3	20.0	20.0	18.7	18.7	17.3	14.7	13.3	10.7	9.3
142.5°	18.7	18.7	17.3	17.3	16.0	16.0	14.7	13.3	10.7	9.3	6.7
145°	16.0	16.0	14.7	14.7	14.7	13.3	12.0	10.7	9.3	8.0	6.7
147.5°	13.3	13.3	13.3	12.0	12.0	10.7	10.7	9.3	8.0	6.7	5.3
150°	12.0	12.0	10.7	10.7	10.7	9.3	8.0	8.0	6.7	5.3	4.0
152.5°	9.3	9.3	9.3	9.3	8.0	8.0	6.7	6.7	5.3	4.0	4.0
155°	8.0	8.0	8.0	6.7	6.7	6.7	5.3	5.3	4.0	4.0	2.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6	2580.6
2.5°	2565.9	2564.6	2576.6	2575.3	2559.3	2583.3	2599.3
5°	2559.3	2557.9	2568.6	2571.3	2553.9	2579.3	2596.6
7.5°	2553.9	2552.6	2564.6	2568.6	2551.3	2573.9	2592.6
10°	2555.3	2548.6	2559.3	2561.9	2546.0	2569.9	2585.9
12.5°	2564.6	2548.6	2552.6	2552.6	2538.0	2559.3	2576.6
15°	2587.3	2553.9	2548.6	2544.6	2526.0	2546.0	2563.3
17.5°	2612.6	2567.3	2548.6	2535.3	2512.6	2530.0	2548.6
20°	2637.9	2581.9	2551.3	2530.0	2499.3	2515.3	2528.6
22.5°	2649.9	2595.3	2553.9	2522.0	2483.3	2491.3	2506.0
25°	2633.9	2589.9	2548.6	2510.0	2463.3	2464.6	2476.6
27.5°	2575.3	2563.3	2536.6	2498.0	2447.3	2440.6	2450.0
30°	2475.3	2508.6	2510.0	2482.0	2428.7	2415.3	2419.3
32.5°	2335.3	2410.0	2454.0	2448.6	2402.0	2383.3	2386.0
35°	2174.1	2267.4	2363.3	2395.3	2362.0	2347.3	2342.0
37.5°	1980.8	2106.1	2234.0	2312.7	2307.4	2298.0	2292.7
40°	1767.5	1918.1	2070.1	2195.4	2234.0	2234.0	2236.7
42.5°	1539.6	1715.5	1882.1	2040.8	2131.4	2151.4	2159.4
45°	1319.6	1496.9	1678.2	1860.8	1982.1	2044.8	2067.4
47.5°	1119.7	1298.3	1470.3	1670.2	1831.5	1912.8	1948.8
50°	949.1	1082.4	1263.6	1462.3	1638.2	1738.2	1808.8
52.5°	807.8	911.7	1070.4	1255.6	1432.9	1570.2	1635.5
55°	689.1	759.8	894.4	1054.4	1223.7	1366.3	1442.3
57.5°	589.2	645.2	737.1	870.4	1013.0	1154.3	1235.7
60°	501.2	539.8	602.5	707.8	829.1	950.4	1029.0
62.5°	425.2	450.5	491.9	569.2	663.8	758.5	831.8
65°	366.6	377.2	399.9	447.9	519.9	591.8	654.5
67.5°	309.2	315.9	333.2	362.6	398.6	450.5	491.9
70°	266.6	266.6	267.9	285.3	303.9	337.2	366.6
72.5°	231.9	227.9	219.9	223.9	227.9	246.6	265.3
75°	203.9	194.6	181.3	176.0	173.3	176.0	186.6
77.5°	179.9	166.6	150.6	137.3	126.6	122.6	132.0
80°	160.0	144.0	125.3	108.0	90.6	81.3	85.3
82.5°	144.0	124.0	104.0	84.0	64.0	50.7	50.7
85°	126.6	108.0	86.6	65.3	45.3	28.0	25.3
87.5°	114.6	94.6	72.0	52.0	32.0	14.7	8.0
90°	102.6	82.6	61.3	41.3	22.7	6.7	0.0
92.5°	92.0	73.3	53.3	33.3	16.0	4.0	0.0
95°	82.6	65.3	45.3	28.0	13.3	2.7	1.3
97.5°	73.3	57.3	40.0	22.7	9.3	2.7	1.3
100°	66.6	50.7	34.7	18.7	8.0	1.3	1.3
102.5°	58.7	45.3	29.3	16.0	6.7	1.3	1.3
105°	52.0	40.0	25.3	13.3	5.3	1.3	1.3
107.5°	46.7	34.7	22.7	12.0	5.3	1.3	1.3
110°	41.3	30.7	20.0	10.7	4.0	1.3	1.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-76HL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	37.3	26.7	17.3	9.3	2.7	1.3	1.3
115°	32.0	24.0	14.7	8.0	2.7	1.3	1.3
117.5°	28.0	20.0	13.3	6.7	2.7	1.3	1.3
120°	24.0	17.3	10.7	5.3	1.3	1.3	1.3
122.5°	21.3	14.7	9.3	5.3	1.3	1.3	1.3
125°	18.7	13.3	8.0	4.0	1.3	1.3	1.3
127.5°	16.0	10.7	6.7	2.7	1.3	1.3	1.3
130°	13.3	9.3	5.3	2.7	1.3	1.3	1.3
132.5°	10.7	8.0	5.3	2.7	1.3	1.3	1.3
135°	9.3	6.7	4.0	2.7	1.3	1.3	1.3
137.5°	8.0	5.3	2.7	2.7	2.7	1.3	1.3
140°	6.7	4.0	2.7	2.7	2.7	2.7	1.3
142.5°	5.3	4.0	2.7	2.7	2.7	2.7	1.3
145°	4.0	2.7	2.7	2.7	2.7	2.7	1.3
147.5°	4.0	2.7	2.7	2.7	2.7	2.7	1.3
150°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
152.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
155°	2.7	2.7	2.7	2.7	2.7	2.7	2.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)