

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-LD5-98SL-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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U
Description: 8FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

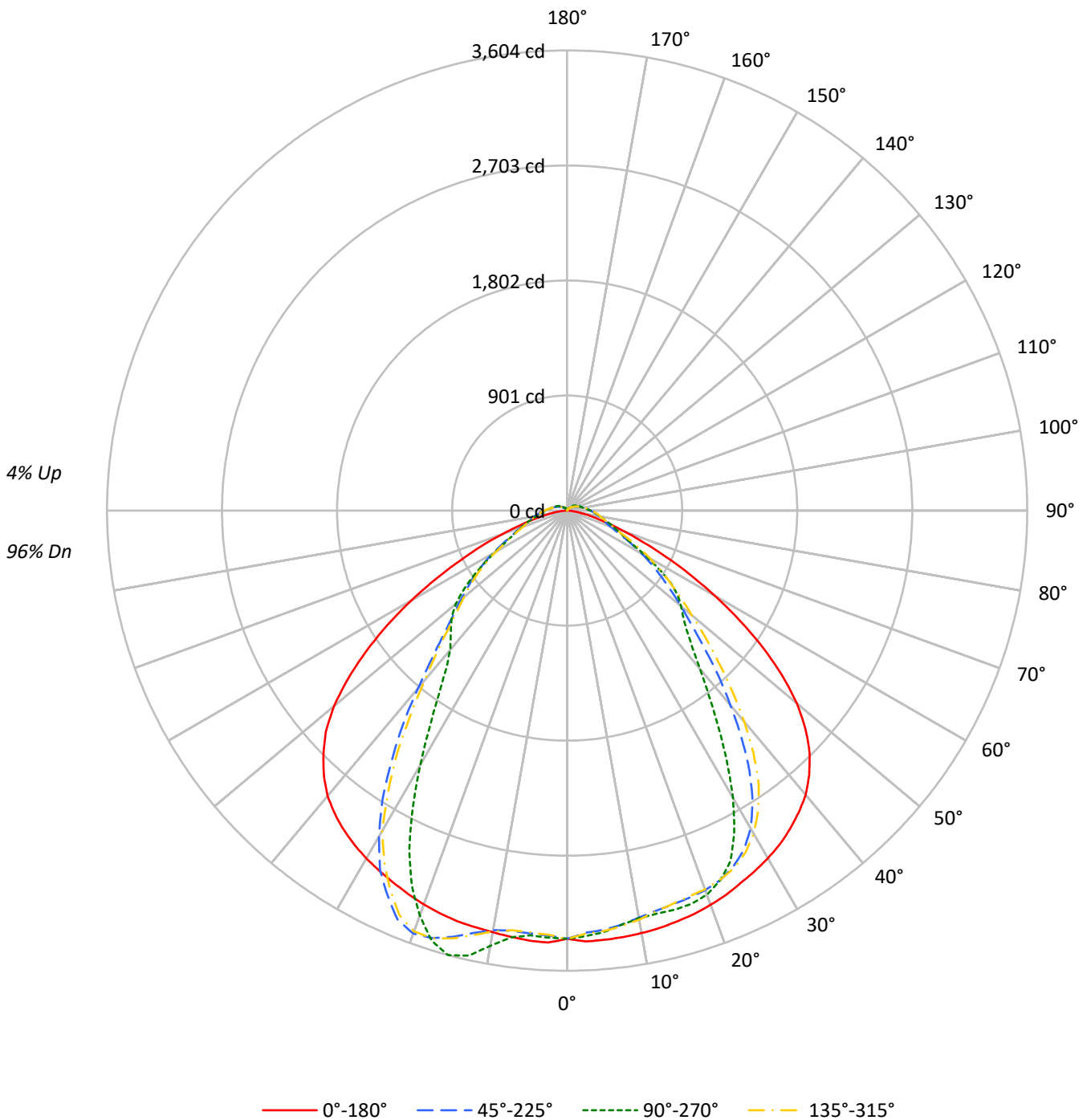
Lumens per Lamp: N/A
Luminaire Lumens: 7994.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 8' x H: 0.12')
CIE Type: Direct

Input Watts (W): 75
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	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°	13549	13549	13549	13549
5°	13666	13012	13694	13114
10°	13748	12471	13720	13317
15°	13875	12304	13867	13699
20°	14048	12109	14033	12764
25°	14244	11487	14236	11100
30°	14536	9956	14544	8820
35°	14848	8051	14891	6813
40°	15131	6482	15194	5711
45°	15114	5491	15193	5347
50°	14504	5055	14707	4942
55°	12914	4543	13236	4131
60°	10521	3477	11080	3189
65°	7867	2661	8476	2523
70°	5395	2297	6082	2196
75°	3577	2072	4164	1960
80°	2370	1932	2777	1777
85°	1294	1928	1703	1760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.5	4.0
10°-20°	947.7	11.9
20°-30°	1440.8	18.0
30°-40°	1545.6	19.3
40°-50°	1341.4	16.8
50°-60°	994.1	12.4
60°-70°	569.6	7.1
70°-80°	315.4	3.9
80°-90°	192.1	2.4
90°-100°	124.9	1.6
100°-110°	83.6	1.0
110°-120°	56.5	0.7
120°-130°	34.7	0.4
130°-140°	18.2	0.2
140°-150°	8.3	0.1
150°-160°	2.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2707.0	33.9
0°-40°	4252.7	53.2
0°-60°	6588.2	82.4
0°-90°	7665.3	95.9
90°-120°	265.0	3.3
90°-150°	326.2	4.1
90°-180°	329.0	4.1
0°-180°	7994.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3353	3353	3353	3353	3353	
5°	3374	3313	3381	3339	3374	322
15°	3331	3237	3329	3604	3331	942
25°	3218	3028	3216	2926	3218	1488
35°	3043	2061	3052	1744	3043	1905
45°	2686	1322	2700	1287	2686	2057
55°	1874	991	1921	901	1874	1662
65°	850	502	916	476	850	857
75°	242	319	282	301	242	277
85°	33	220	43	201	33	43
90°	0	184	4	170	0	1
95°	2	151	0	144	2	1
105°	2	113	2	107	2	2
115°	2	92	2	83	2	2
125°	2	69	2	57	2	2
135°	2	43	2	36	2	1
145°	2	26	4	21	2	1
155°	4	12	4	10	4	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°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3377.5	3368.9	3365.4	3358.5	3363.7	3384.5	3370.6	3348.1	3349.8	3310.0	3330.8
5°	3374.1	3363.7	3358.5	3351.5	3355.0	3374.1	3360.2	3337.7	3336.0	3296.1	3315.2
7.5°	3368.9	3358.5	3349.8	3344.6	3346.4	3361.9	3344.6	3318.6	3313.4	3270.1	3287.5
10°	3360.2	3353.3	3341.2	3332.5	3330.8	3348.1	3320.4	3294.4	3282.3	3237.2	3254.6
12.5°	3348.1	3337.7	3325.6	3310.0	3308.2	3318.6	3296.1	3259.7	3247.6	3211.3	3230.3
15°	3330.8	3318.6	3304.8	3287.5	3278.8	3285.7	3258.0	3225.1	3223.4	3192.2	3218.2
17.5°	3311.7	3294.4	3278.8	3254.6	3242.4	3247.6	3225.1	3195.7	3199.1	3180.1	3209.5
20°	3285.7	3266.7	3242.4	3218.2	3200.9	3209.5	3193.9	3171.4	3176.6	3162.8	3188.7
22.5°	3256.3	3230.3	3200.9	3173.1	3159.3	3171.4	3159.3	3140.2	3142.0	3133.3	3148.9
25°	3218.2	3188.7	3154.1	3119.5	3112.5	3121.2	3114.3	3098.7	3091.7	3077.9	3084.8
27.5°	3183.5	3150.6	3107.3	3071.0	3058.8	3076.1	3060.6	3034.6	3015.5	2996.5	2982.6
30°	3143.7	3103.9	3055.4	3013.8	3003.4	3010.3	2987.8	2948.0	2897.7	2873.5	2835.4
32.5°	3100.4	3048.4	2987.8	2941.0	2934.1	2928.9	2887.4	2830.2	2752.3	2703.8	2644.9
35°	3043.2	2986.1	2913.3	2856.2	2845.8	2816.3	2748.8	2672.6	2572.1	2489.0	2388.5
37.5°	2979.2	2911.6	2835.4	2759.2	2729.7	2670.8	2575.6	2495.9	2343.5	2243.0	2121.8
40°	2906.4	2825.0	2731.5	2639.7	2591.2	2495.9	2386.8	2269.0	2121.8	1986.7	1884.5
42.5°	2805.9	2719.3	2608.5	2506.3	2423.2	2296.7	2168.5	2002.3	1867.2	1752.9	1648.9
45°	2686.4	2582.5	2454.3	2331.4	2225.7	2075.0	1924.3	1758.0	1645.5	1512.1	1441.1
47.5°	2532.3	2419.7	2282.9	2146.0	2007.5	1841.2	1683.6	1524.2	1411.6	1316.4	1264.4
50°	2350.4	2246.5	2095.8	1933.0	1780.6	1607.4	1449.7	1330.2	1221.1	1162.2	1122.4
52.5°	2125.2	2028.2	1874.1	1697.4	1550.2	1380.5	1236.7	1139.7	1061.8	1018.5	1004.6
55°	1874.1	1789.2	1636.8	1472.3	1321.6	1165.7	1056.6	971.7	921.5	895.5	897.2
57.5°	1605.6	1539.8	1396.0	1248.8	1106.8	989.0	890.3	822.7	784.6	782.9	788.1
60°	1337.2	1288.7	1163.9	1037.5	912.8	817.5	744.8	698.0	673.8	675.5	673.8
62.5°	1080.8	1035.8	945.7	841.8	743.1	679.0	613.2	594.1	573.3	571.6	571.6
65°	850.4	815.8	743.1	668.6	594.1	552.5	519.6	497.1	481.5	478.1	479.8
67.5°	639.1	625.3	575.0	524.8	478.1	452.1	424.4	419.2	407.0	407.0	410.5
70°	476.3	465.9	438.2	408.8	389.7	372.4	358.5	358.5	356.8	355.1	363.7
72.5°	344.7	346.4	337.8	315.2	313.5	310.0	306.6	311.8	313.5	318.7	329.1
75°	242.5	247.7	247.7	244.2	251.1	259.8	265.0	273.7	284.1	291.0	303.1
77.5°	171.5	171.5	180.1	190.5	204.4	220.0	233.8	246.0	259.8	268.5	278.9
80°	110.9	116.0	129.9	149.0	168.0	188.8	207.8	223.4	237.3	251.1	258.1
82.5°	65.8	74.5	91.8	116.0	140.3	166.3	185.3	204.4	220.0	233.8	239.0
85°	32.9	45.0	65.8	91.8	117.8	145.5	169.7	187.1	204.4	216.5	223.4
87.5°	10.4	24.2	46.8	71.0	98.7	126.4	152.4	171.5	187.1	197.5	204.4
90°	0.0	12.1	32.9	58.9	84.9	112.6	136.8	157.6	173.2	181.9	187.1
92.5°	0.0	6.9	26.0	48.5	72.7	100.5	124.7	143.8	157.6	166.3	169.7
95°	1.7	5.2	19.1	39.8	64.1	90.1	112.6	129.9	143.8	152.4	154.2
97.5°	1.7	3.5	15.6	32.9	55.4	79.7	102.2	119.5	129.9	138.6	140.3
100°	1.7	3.5	12.1	29.4	48.5	71.0	91.8	107.4	119.5	126.4	128.2
102.5°	1.7	1.7	10.4	24.2	43.3	62.4	81.4	97.0	107.4	114.3	117.8
105°	1.7	1.7	8.7	20.8	38.1	55.4	72.7	88.3	97.0	103.9	107.4
107.5°	1.7	1.7	6.9	17.3	32.9	48.5	65.8	77.9	88.3	95.3	98.7
110°	1.7	1.7	5.2	15.6	27.7	43.3	57.2	69.3	79.7	86.6	90.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.7	1.7	5.2	13.9	24.2	38.1	50.2	62.4	71.0	77.9	83.1
115°	1.7	1.7	5.2	12.1	22.5	32.9	45.0	55.4	64.1	71.0	76.2
117.5°	1.7	1.7	5.2	10.4	19.1	29.4	39.8	50.2	57.2	64.1	69.3
120°	1.7	1.7	3.5	8.7	17.3	26.0	34.6	43.3	52.0	58.9	64.1
122.5°	1.7	1.7	3.5	8.7	13.9	22.5	31.2	38.1	46.8	52.0	57.2
125°	1.7	1.7	3.5	6.9	12.1	20.8	27.7	34.6	39.8	46.8	52.0
127.5°	1.7	1.7	3.5	6.9	10.4	17.3	24.2	31.2	36.4	41.6	45.0
130°	1.7	1.7	3.5	5.2	8.7	13.9	20.8	26.0	32.9	36.4	39.8
132.5°	1.7	1.7	1.7	5.2	6.9	10.4	15.6	22.5	27.7	32.9	34.6
135°	1.7	1.7	1.7	3.5	6.9	8.7	12.1	17.3	22.5	27.7	31.2
137.5°	1.7	1.7	1.7	3.5	5.2	8.7	10.4	13.9	19.1	22.5	27.7
140°	1.7	1.7	1.7	3.5	5.2	6.9	8.7	12.1	15.6	19.1	22.5
142.5°	1.7	1.7	1.7	3.5	3.5	5.2	6.9	10.4	12.1	15.6	19.1
145°	1.7	1.7	1.7	3.5	3.5	5.2	6.9	8.7	10.4	12.1	15.6
147.5°	1.7	1.7	1.7	3.5	3.5	3.5	5.2	6.9	8.7	10.4	12.1
150°	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2	6.9	8.7	10.4
152.5°	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2	5.2	6.9	8.7
155°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2	6.9	6.9
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°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3323.8	3327.3	3348.1	3346.4	3342.9	3339.4	3339.4	3336.0	3339.4	3348.1	3344.6
5°	3306.5	3311.7	3327.3	3325.6	3322.1	3320.4	3318.6	3313.4	3316.9	3329.0	3325.6
7.5°	3275.3	3280.5	3294.4	3287.5	3282.3	3285.7	3277.1	3271.9	3278.8	3290.9	3289.2
10°	3242.4	3245.9	3263.2	3259.7	3251.1	3252.8	3244.2	3240.7	3249.4	3256.3	3258.0
12.5°	3219.9	3232.0	3247.6	3245.9	3244.2	3245.9	3237.2	3233.8	3239.0	3245.9	3244.2
15°	3214.7	3230.3	3247.6	3247.6	3249.4	3251.1	3242.4	3237.2	3242.4	3247.6	3245.9
17.5°	3209.5	3228.6	3244.2	3242.4	3244.2	3247.6	3233.8	3230.3	3237.2	3244.2	3240.7
20°	3192.2	3209.5	3219.9	3216.4	3216.4	3218.2	3200.9	3200.9	3211.3	3216.4	3218.2
22.5°	3143.7	3164.5	3164.5	3155.8	3155.8	3148.9	3143.7	3133.3	3145.4	3154.1	3161.0
25°	3071.0	3079.6	3069.2	3050.2	3039.8	3031.1	3006.9	3027.7	3027.7	3053.6	3062.3
27.5°	2968.8	2949.7	2920.3	2880.4	2871.8	2844.1	2828.5	2833.7	2842.3	2878.7	2906.4
30°	2800.8	2743.6	2693.4	2676.0	2637.9	2610.2	2582.5	2596.4	2612.0	2632.7	2689.9
32.5°	2579.0	2523.6	2442.2	2412.8	2372.9	2338.3	2305.4	2326.2	2353.9	2367.7	2430.1
35°	2324.4	2258.6	2184.1	2133.9	2092.3	2073.3	2031.7	2061.2	2090.6	2101.0	2154.7
37.5°	2054.2	1986.7	1920.9	1877.6	1837.7	1825.6	1797.9	1818.7	1841.2	1856.8	1901.8
40°	1797.9	1735.5	1685.3	1655.9	1628.1	1617.7	1607.4	1616.0	1633.3	1645.5	1680.1
42.5°	1577.9	1527.7	1493.0	1475.7	1456.7	1442.8	1444.5	1448.0	1456.7	1482.6	1498.2
45°	1385.7	1356.2	1333.7	1330.2	1318.1	1316.4	1314.6	1321.6	1326.8	1342.4	1354.5
47.5°	1231.5	1219.4	1214.2	1221.1	1226.3	1219.4	1222.8	1231.5	1241.9	1241.9	1240.2
50°	1110.3	1113.7	1120.6	1136.2	1146.6	1150.1	1153.6	1163.9	1165.7	1169.1	1163.9
52.5°	1011.5	1015.0	1034.0	1058.3	1070.4	1075.6	1082.5	1092.9	1092.9	1096.4	1089.5
55°	911.1	916.3	935.3	959.6	970.0	976.9	983.8	990.7	995.9	1002.9	997.7
57.5°	800.2	815.8	827.9	834.9	841.8	847.0	852.2	853.9	864.3	866.0	874.7
60°	682.4	685.9	698.0	696.3	691.1	705.0	698.0	710.1	722.3	737.9	739.6
62.5°	569.8	571.6	580.2	576.8	583.7	582.0	587.2	587.2	595.8	602.8	611.4
65°	481.5	483.2	490.2	490.2	488.4	493.6	498.8	502.3	502.3	507.5	514.4
67.5°	415.7	420.9	427.8	431.3	434.7	434.7	439.9	441.7	445.1	446.9	450.3
70°	370.7	377.6	384.5	388.0	389.7	393.2	394.9	394.9	398.4	400.1	403.6
72.5°	337.8	344.7	349.9	349.9	353.3	355.1	355.1	356.8	358.5	362.0	365.5
75°	310.0	315.2	318.7	317.0	317.0	317.0	318.7	318.7	322.2	325.6	329.1
77.5°	284.1	289.3	289.3	285.8	285.8	285.8	285.8	287.5	289.3	292.7	296.2
80°	265.0	265.0	263.3	263.3	259.8	258.1	258.1	259.8	259.8	263.3	268.5
82.5°	244.2	244.2	242.5	240.8	239.0	237.3	237.3	239.0	240.8	242.5	246.0
85°	225.2	225.2	221.7	221.7	220.0	220.0	220.0	220.0	221.7	223.4	226.9
87.5°	206.1	204.4	202.7	200.9	200.9	200.9	200.9	200.9	202.7	206.1	207.8
90°	187.1	185.3	183.6	183.6	181.9	181.9	183.6	183.6	185.3	187.1	188.8
92.5°	169.7	168.0	166.3	166.3	164.5	164.5	166.3	164.5	168.0	168.0	169.7
95°	154.2	152.4	150.7	150.7	150.7	150.7	150.7	150.7	152.4	152.4	154.2
97.5°	140.3	138.6	136.8	136.8	138.6	136.8	138.6	138.6	138.6	140.3	142.0
100°	128.2	126.4	126.4	128.2	126.4	126.4	128.2	128.2	128.2	128.2	129.9
102.5°	117.8	117.8	117.8	117.8	117.8	117.8	119.5	119.5	119.5	119.5	121.2
105°	107.4	109.1	109.1	109.1	110.9	110.9	110.9	112.6	112.6	112.6	112.6
107.5°	100.5	102.2	102.2	103.9	103.9	105.7	105.7	105.7	105.7	107.4	107.4
110°	93.5	95.3	97.0	98.7	98.7	100.5	100.5	100.5	100.5	100.5	100.5



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	86.6	88.3	90.1	93.5	95.3	95.3	95.3	95.3	97.0	97.0	95.3
115°	79.7	83.1	84.9	88.3	90.1	90.1	91.8	91.8	91.8	91.8	90.1
117.5°	72.7	77.9	79.7	83.1	84.9	84.9	86.6	86.6	86.6	86.6	84.9
120°	67.6	71.0	74.5	76.2	77.9	79.7	79.7	81.4	81.4	81.4	79.7
122.5°	62.4	65.8	69.3	71.0	72.7	74.5	74.5	74.5	74.5	74.5	74.5
125°	55.4	58.9	62.4	64.1	65.8	67.6	67.6	69.3	69.3	69.3	67.6
127.5°	50.2	53.7	55.4	58.9	60.6	60.6	62.4	62.4	62.4	62.4	60.6
130°	43.3	46.8	50.2	52.0	53.7	53.7	55.4	55.4	55.4	55.4	55.4
132.5°	38.1	41.6	43.3	46.8	46.8	48.5	48.5	50.2	50.2	50.2	48.5
135°	34.6	36.4	38.1	41.6	41.6	43.3	43.3	43.3	43.3	43.3	43.3
137.5°	31.2	32.9	34.6	36.4	36.4	38.1	38.1	38.1	38.1	39.8	38.1
140°	26.0	29.4	31.2	31.2	32.9	32.9	32.9	34.6	34.6	34.6	32.9
142.5°	22.5	24.2	26.0	27.7	29.4	29.4	29.4	29.4	31.2	29.4	29.4
145°	17.3	20.8	22.5	24.2	26.0	26.0	26.0	26.0	26.0	26.0	26.0
147.5°	13.9	15.6	19.1	20.8	20.8	22.5	22.5	22.5	22.5	22.5	22.5
150°	12.1	12.1	15.6	17.3	19.1	19.1	19.1	19.1	19.1	19.1	19.1
152.5°	8.7	10.4	12.1	13.9	15.6	15.6	15.6	15.6	15.6	15.6	15.6
155°	8.7	8.7	10.4	10.4	12.1	12.1	12.1	12.1	13.9	12.1	12.1
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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3339.4	3337.7	3344.6	3337.7	3303.1	3316.9	3311.7	3330.8	3332.5	3337.7	3355.0
5°	3322.1	3322.1	3330.8	3323.8	3290.9	3304.8	3303.1	3322.1	3325.6	3329.0	3348.1
7.5°	3287.5	3289.2	3301.3	3296.1	3261.5	3282.3	3280.5	3303.1	3310.0	3316.9	3334.2
10°	3254.6	3252.8	3266.7	3261.5	3228.6	3252.8	3251.1	3273.6	3284.0	3296.1	3316.9
12.5°	3237.2	3232.0	3237.2	3232.0	3195.7	3214.7	3216.4	3242.4	3254.6	3270.1	3294.4
15°	3237.2	3228.6	3228.6	3218.2	3176.6	3188.7	3190.5	3207.8	3223.4	3239.0	3268.4
17.5°	3233.8	3225.1	3223.4	3214.7	3169.7	3169.7	3167.9	3180.1	3188.7	3204.3	3235.5
20°	3214.7	3211.3	3209.5	3204.3	3162.8	3155.8	3152.4	3152.4	3157.6	3162.8	3193.9
22.5°	3164.5	3167.9	3171.4	3174.9	3142.0	3129.8	3131.6	3128.1	3122.9	3122.9	3148.9
25°	3071.0	3088.3	3102.1	3117.7	3098.7	3090.0	3100.4	3095.2	3086.5	3079.6	3102.1
27.5°	2922.0	2958.4	2987.8	3025.9	3027.7	3020.7	3048.4	3045.0	3043.2	3032.8	3050.2
30°	2715.9	2773.0	2812.9	2868.3	2915.1	2922.0	2968.8	2975.7	2982.6	2977.4	2994.7
32.5°	2466.5	2544.4	2612.0	2698.6	2743.6	2783.4	2849.2	2877.0	2904.7	2913.3	2932.4
35°	2194.5	2282.9	2362.5	2457.8	2528.8	2615.4	2695.1	2736.7	2799.0	2823.3	2851.0
37.5°	1936.5	2019.6	2097.5	2192.8	2307.1	2397.2	2495.9	2589.4	2674.3	2709.0	2750.5
40°	1707.8	1775.4	1849.8	1933.0	2036.9	2154.7	2262.1	2392.0	2492.4	2561.7	2622.3
42.5°	1534.6	1567.5	1631.6	1706.1	1789.2	1908.7	2017.9	2163.4	2284.6	2383.3	2483.8
45°	1380.5	1396.0	1442.8	1482.6	1567.5	1673.2	1789.2	1931.3	2057.7	2184.1	2305.4
47.5°	1248.8	1267.9	1290.4	1314.6	1375.3	1463.6	1564.1	1692.2	1818.7	1965.9	2104.5
50°	1160.5	1165.7	1169.1	1179.5	1215.9	1276.5	1357.9	1467.1	1588.3	1745.9	1893.1
52.5°	1082.5	1082.5	1072.1	1067.0	1080.8	1118.9	1165.7	1243.6	1368.3	1513.8	1669.7
55°	999.4	983.8	980.3	963.0	966.5	983.8	1006.3	1067.0	1169.1	1293.9	1444.5
57.5°	883.4	876.4	876.4	869.5	855.6	864.3	869.5	912.8	985.5	1092.9	1224.6
60°	750.0	746.5	755.2	756.9	744.8	750.0	748.3	774.2	826.2	912.8	1021.9
62.5°	616.6	632.2	633.9	640.9	633.9	632.2	640.9	663.4	689.4	755.2	840.1
65°	517.9	526.5	528.3	536.9	533.5	533.5	540.4	557.7	573.3	618.3	684.2
67.5°	453.8	450.3	452.1	457.3	452.1	450.3	455.5	465.9	478.1	505.8	552.5
70°	403.6	400.1	400.1	400.1	393.2	388.0	389.7	393.2	398.4	414.0	443.4
72.5°	365.5	365.5	360.3	355.1	349.9	346.4	342.9	339.5	337.8	342.9	358.5
75°	330.8	332.6	330.8	325.6	318.7	311.8	304.8	297.9	289.3	285.8	287.5
77.5°	299.6	301.4	303.1	301.4	294.5	285.8	275.4	265.0	252.9	240.8	233.8
80°	271.9	275.4	277.1	275.4	270.2	263.3	251.1	239.0	221.7	206.1	188.8
82.5°	247.7	252.9	254.6	254.6	251.1	244.2	230.4	216.5	197.5	176.7	154.2
85°	228.6	232.1	235.6	235.6	233.8	226.9	213.0	197.5	178.4	154.2	129.9
87.5°	209.6	211.3	214.8	218.2	214.8	207.8	195.7	178.4	159.4	135.1	107.4
90°	190.5	192.3	195.7	199.2	197.5	190.5	180.1	164.5	143.8	117.8	90.1
92.5°	171.5	174.9	176.7	178.4	180.1	174.9	166.3	150.7	129.9	103.9	77.9
95°	157.6	157.6	161.1	162.8	164.5	159.4	152.4	136.8	117.8	93.5	67.6
97.5°	143.8	143.8	147.2	147.2	149.0	145.5	138.6	124.7	105.7	83.1	57.2
100°	129.9	131.6	133.4	135.1	135.1	133.4	126.4	112.6	95.3	74.5	50.2
102.5°	121.2	121.2	123.0	123.0	124.7	121.2	114.3	102.2	84.9	65.8	43.3
105°	112.6	112.6	114.3	114.3	112.6	109.1	102.2	91.8	76.2	57.2	38.1
107.5°	105.7	105.7	105.7	105.7	103.9	100.5	93.5	81.4	67.6	52.0	34.6
110°	100.5	98.7	98.7	97.0	95.3	90.1	83.1	72.7	60.6	45.0	29.4



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	95.3	93.5	91.8	90.1	86.6	81.4	74.5	65.8	53.7	39.8	26.0
115°	90.1	88.3	86.6	83.1	79.7	74.5	67.6	58.9	46.8	34.6	22.5
117.5°	84.9	83.1	79.7	76.2	72.7	67.6	60.6	52.0	41.6	31.2	20.8
120°	77.9	76.2	74.5	71.0	67.6	60.6	53.7	46.8	36.4	27.7	17.3
122.5°	72.7	71.0	67.6	65.8	60.6	55.4	48.5	41.6	32.9	24.2	15.6
125°	65.8	64.1	62.4	58.9	55.4	48.5	43.3	36.4	29.4	20.8	12.1
127.5°	60.6	58.9	55.4	52.0	48.5	43.3	38.1	32.9	26.0	17.3	12.1
130°	53.7	52.0	50.2	46.8	43.3	38.1	34.6	27.7	22.5	15.6	10.4
132.5°	46.8	46.8	45.0	41.6	38.1	34.6	29.4	24.2	19.1	13.9	8.7
135°	43.3	41.6	39.8	36.4	34.6	29.4	26.0	20.8	15.6	12.1	6.9
137.5°	38.1	36.4	34.6	32.9	29.4	26.0	22.5	17.3	13.9	10.4	6.9
140°	32.9	31.2	31.2	27.7	26.0	22.5	19.1	15.6	12.1	8.7	5.2
142.5°	29.4	27.7	26.0	24.2	22.5	19.1	15.6	12.1	10.4	6.9	5.2
145°	26.0	24.2	22.5	20.8	19.1	15.6	13.9	10.4	8.7	6.9	5.2
147.5°	20.8	20.8	19.1	17.3	15.6	13.9	12.1	10.4	6.9	5.2	3.5
150°	17.3	17.3	15.6	13.9	13.9	12.1	10.4	8.7	6.9	5.2	3.5
152.5°	15.6	13.9	13.9	12.1	12.1	10.4	8.7	6.9	5.2	5.2	3.5
155°	12.1	12.1	12.1	10.4	10.4	8.7	6.9	6.9	5.2	3.5	3.5
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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3358.5	3337.7	3355.0	3386.2	3382.7	3379.3	3375.8	3382.7	3405.2	3393.1	3374.1
5°	3353.3	3332.5	3351.5	3381.0	3379.3	3374.1	3370.6	3377.5	3400.0	3387.9	3367.1
7.5°	3342.9	3323.8	3337.7	3367.1	3367.1	3363.7	3360.2	3367.1	3387.9	3377.5	3356.7
10°	3325.6	3311.7	3325.6	3353.3	3355.0	3348.1	3344.6	3353.3	3374.1	3368.9	3351.5
12.5°	3311.7	3297.9	3313.4	3341.2	3342.9	3336.0	3330.8	3341.2	3368.9	3372.3	3367.1
15°	3292.7	3280.5	3299.6	3329.0	3329.0	3323.8	3323.8	3337.7	3375.8	3391.4	3400.0
17.5°	3264.9	3256.3	3278.8	3308.2	3310.0	3306.5	3308.2	3336.0	3386.2	3424.3	3448.5
20°	3230.3	3226.8	3251.1	3282.3	3287.5	3289.2	3297.9	3339.4	3408.7	3460.7	3484.9
22.5°	3188.7	3190.5	3218.2	3251.1	3258.0	3263.2	3280.5	3339.4	3426.0	3481.5	3491.8
25°	3142.0	3147.2	3176.6	3216.4	3225.1	3235.5	3264.9	3341.2	3431.2	3467.6	3450.3
27.5°	3091.7	3102.1	3140.2	3181.8	3192.2	3209.5	3247.6	3330.8	3407.0	3408.7	3344.6
30°	3039.8	3051.9	3096.9	3145.4	3162.8	3180.1	3226.8	3306.5	3348.1	3292.7	3180.1
32.5°	2980.9	2998.2	3043.2	3102.1	3122.9	3145.4	3192.2	3259.7	3244.2	3124.6	2963.6
35°	2906.4	2930.7	2982.6	3051.9	3071.0	3100.4	3133.3	3148.9	3079.6	2909.9	2728.0
37.5°	2814.6	2851.0	2911.6	2991.3	3012.1	3031.1	3039.8	2996.5	2857.9	2674.3	2485.5
40°	2709.0	2764.4	2830.2	2918.5	2939.3	2939.3	2908.1	2816.3	2641.4	2400.6	2191.1
42.5°	2580.8	2648.3	2731.5	2819.8	2840.6	2816.3	2741.9	2580.8	2381.6	2113.1	1891.4
45°	2424.9	2515.0	2608.5	2700.3	2710.7	2657.0	2523.6	2319.2	2073.3	1823.9	1612.6
47.5°	2239.6	2357.3	2459.5	2563.5	2549.6	2459.5	2281.1	2049.0	1789.2	1553.7	1383.9
50°	2031.7	2170.3	2284.6	2383.3	2353.9	2229.2	2019.6	1777.1	1519.0	1318.1	1177.8
52.5°	1810.0	1969.4	2083.7	2163.4	2123.5	1974.6	1744.2	1512.1	1300.8	1117.2	1023.7
55°	1579.6	1740.7	1858.5	1920.9	1868.9	1707.8	1480.9	1269.6	1070.4	950.9	895.5
57.5°	1356.2	1506.9	1617.7	1668.0	1602.2	1441.1	1231.5	1053.1	909.3	808.9	781.2
60°	1141.4	1264.4	1370.1	1408.2	1337.2	1188.2	1008.1	866.0	760.4	691.1	677.2
62.5°	942.2	1042.7	1125.8	1155.3	1086.0	970.0	814.1	708.4	633.9	599.3	582.0
65°	777.7	836.6	921.5	916.3	874.7	767.3	653.0	578.5	530.0	507.5	497.1
67.5°	611.4	665.1	718.8	725.7	673.8	599.3	524.8	471.1	445.1	433.0	427.8
70°	472.9	512.7	545.6	536.9	509.2	462.5	415.7	386.3	375.9	370.7	370.7
72.5°	367.2	388.0	403.6	393.2	375.9	351.6	329.1	317.0	318.7	322.2	325.6
75°	284.1	289.3	292.7	282.3	278.9	263.3	261.5	263.3	273.7	284.1	289.3
77.5°	218.2	211.3	206.1	195.7	197.5	195.7	204.4	218.2	233.8	249.4	263.3
80°	168.0	152.4	140.3	129.9	135.1	143.8	161.1	181.9	202.7	220.0	237.3
82.5°	129.9	107.4	90.1	79.7	90.1	103.9	126.4	152.4	176.7	195.7	214.8
85°	100.5	74.5	53.7	43.3	53.7	74.5	98.7	128.2	154.2	174.9	194.0
87.5°	77.9	53.7	29.4	17.3	29.4	52.0	79.7	107.4	133.4	157.6	176.7
90°	62.4	36.4	13.9	3.5	15.6	36.4	62.4	90.1	116.0	142.0	161.1
92.5°	50.2	26.0	6.9	0.0	8.7	27.7	52.0	77.9	103.9	128.2	147.2
95°	41.6	20.8	5.2	0.0	6.9	20.8	41.6	67.6	91.8	116.0	131.6
97.5°	34.6	15.6	3.5	0.0	3.5	17.3	34.6	57.2	81.4	103.9	119.5
100°	29.4	13.9	3.5	0.0	3.5	13.9	29.4	50.2	71.0	91.8	107.4
102.5°	24.2	10.4	1.7	1.7	1.7	10.4	26.0	43.3	62.4	81.4	97.0
105°	22.5	8.7	1.7	1.7	1.7	8.7	22.5	38.1	55.4	72.7	86.6
107.5°	19.1	6.9	1.7	1.7	1.7	6.9	19.1	32.9	50.2	65.8	77.9
110°	15.6	6.9	1.7	1.7	1.7	6.9	15.6	29.4	43.3	57.2	69.3



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.9	5.2	1.7	1.7	1.7	5.2	13.9	26.0	38.1	52.0	62.4
115°	12.1	5.2	1.7	1.7	1.7	5.2	12.1	22.5	32.9	45.0	55.4
117.5°	10.4	5.2	1.7	1.7	1.7	3.5	10.4	19.1	29.4	39.8	50.2
120°	8.7	3.5	1.7	1.7	1.7	3.5	8.7	17.3	26.0	34.6	43.3
122.5°	8.7	3.5	1.7	1.7	1.7	3.5	6.9	13.9	22.5	29.4	38.1
125°	6.9	3.5	1.7	1.7	1.7	1.7	6.9	12.1	19.1	26.0	32.9
127.5°	6.9	3.5	1.7	1.7	1.7	1.7	5.2	10.4	15.6	22.5	29.4
130°	5.2	3.5	1.7	1.7	1.7	1.7	3.5	8.7	13.9	19.1	24.2
132.5°	5.2	3.5	1.7	1.7	1.7	1.7	3.5	6.9	10.4	15.6	20.8
135°	5.2	1.7	1.7	1.7	1.7	1.7	1.7	5.2	8.7	12.1	15.6
137.5°	3.5	1.7	1.7	1.7	1.7	1.7	1.7	3.5	6.9	8.7	13.9
140°	3.5	1.7	1.7	1.7	1.7	1.7	1.7	3.5	5.2	6.9	10.4
142.5°	3.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.5	5.2	8.7
145°	3.5	1.7	1.7	3.5	3.5	1.7	1.7	3.5	3.5	5.2	6.9
147.5°	3.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.5	3.5	5.2
150°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.2
152.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
155°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3370.6	3330.8	3351.5	3344.6	3351.5	3368.9	3367.1	3361.9	3365.4	3356.7	3348.1
5°	3363.7	3323.8	3344.6	3336.0	3344.6	3361.9	3358.5	3353.3	3358.5	3348.1	3339.4
7.5°	3355.0	3318.6	3342.9	3341.2	3356.7	3379.3	3381.0	3381.0	3393.1	3377.5	3370.6
10°	3355.0	3336.0	3368.9	3381.0	3420.8	3450.3	3453.7	3460.7	3481.5	3478.0	3460.7
12.5°	3391.4	3387.9	3436.4	3465.9	3502.2	3543.8	3566.3	3573.3	3587.1	3576.7	3569.8
15°	3438.2	3455.5	3509.2	3542.1	3581.9	3613.1	3618.3	3621.8	3632.1	3616.6	3604.4
17.5°	3500.5	3510.9	3554.2	3568.1	3594.0	3599.2	3592.3	3575.0	3575.0	3540.3	3530.0
20°	3530.0	3524.8	3542.1	3519.6	3509.2	3478.0	3448.5	3415.6	3413.9	3377.5	3374.1
22.5°	3504.0	3469.3	3433.0	3377.5	3353.3	3308.2	3268.4	3249.4	3237.2	3190.5	3178.3
25°	3412.2	3327.3	3273.6	3207.8	3148.9	3096.9	3058.8	3019.0	2980.9	2942.8	2925.5
27.5°	3252.8	3173.1	3086.5	2994.7	2913.3	2833.7	2769.6	2729.7	2693.4	2643.1	2617.2
30°	3057.1	2946.2	2851.0	2762.6	2629.3	2532.3	2478.6	2398.9	2371.2	2348.7	2300.2
32.5°	2826.7	2693.4	2563.5	2443.9	2307.1	2217.0	2146.0	2087.1	2069.8	2010.9	1997.1
35°	2572.1	2397.2	2250.0	2132.2	2033.4	1924.3	1865.4	1825.6	1791.0	1751.1	1744.2
37.5°	2272.5	2114.9	1948.6	1844.7	1766.7	1673.2	1628.1	1600.4	1584.8	1555.4	1550.2
40°	1971.1	1813.5	1699.2	1595.2	1546.7	1496.5	1463.6	1451.5	1444.5	1434.2	1423.8
42.5°	1697.4	1558.9	1477.5	1408.2	1387.4	1363.1	1354.5	1361.4	1354.5	1351.0	1349.3
45°	1465.3	1359.7	1302.5	1281.7	1276.5	1269.6	1276.5	1288.7	1290.4	1286.9	1286.9
47.5°	1254.0	1203.8	1179.5	1183.0	1191.7	1196.9	1209.0	1224.6	1228.0	1219.4	1222.8
50°	1115.5	1086.0	1080.8	1094.7	1113.7	1120.6	1134.5	1146.6	1144.9	1141.4	1138.0
52.5°	985.5	976.9	990.7	1004.6	1025.4	1028.8	1034.0	1039.2	1037.5	1030.6	1027.1
55°	876.4	883.4	895.5	900.7	916.3	914.5	916.3	916.3	909.3	905.9	900.7
57.5°	777.7	779.4	786.4	788.1	796.8	793.3	791.6	788.1	777.7	776.0	770.8
60°	677.2	673.8	689.4	677.2	684.2	677.2	675.5	666.8	656.5	654.7	651.3
62.5°	582.0	575.0	585.4	580.2	583.7	576.8	573.3	562.9	554.3	552.5	550.8
65°	497.1	493.6	504.0	502.3	505.8	497.1	493.6	486.7	479.8	478.1	476.3
67.5°	426.1	434.7	439.9	439.9	443.4	441.7	433.0	431.3	429.6	422.6	422.6
70°	374.1	379.3	389.7	391.4	389.7	393.2	386.3	384.5	382.8	379.3	377.6
72.5°	332.6	339.5	349.9	351.6	349.9	349.9	346.4	344.7	344.7	339.5	339.5
75°	299.6	308.3	317.0	317.0	317.0	313.5	310.0	310.0	306.6	304.8	301.4
77.5°	271.9	282.3	289.3	287.5	285.8	282.3	282.3	277.1	271.9	271.9	268.5
80°	251.1	258.1	263.3	261.5	259.8	254.6	252.9	247.7	244.2	239.0	239.0
82.5°	228.6	237.3	240.8	239.0	235.6	230.4	228.6	225.2	221.7	220.0	216.5
85°	209.6	218.2	220.0	216.5	213.0	209.6	207.8	206.1	204.4	200.9	200.9
87.5°	190.5	199.2	199.2	197.5	194.0	192.3	190.5	188.8	187.1	185.3	183.6
90°	174.9	181.9	181.9	180.1	178.4	176.7	174.9	173.2	171.5	169.7	169.7
92.5°	159.4	166.3	166.3	164.5	162.8	161.1	161.1	159.4	157.6	155.9	154.2
95°	145.5	152.4	152.4	152.4	150.7	149.0	149.0	147.2	145.5	145.5	143.8
97.5°	131.6	138.6	138.6	138.6	136.8	135.1	135.1	133.4	133.4	133.4	131.6
100°	119.5	124.7	126.4	126.4	124.7	124.7	124.7	123.0	123.0	123.0	121.2
102.5°	107.4	112.6	116.0	116.0	116.0	114.3	114.3	114.3	114.3	114.3	112.6
105°	97.0	102.2	105.7	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4
107.5°	88.3	93.5	97.0	98.7	100.5	100.5	102.2	102.2	102.2	102.2	102.2
110°	79.7	84.9	90.1	91.8	93.5	95.3	95.3	97.0	95.3	95.3	95.3



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	71.0	77.9	81.4	84.9	86.6	88.3	90.1	90.1	90.1	90.1	90.1
115°	64.1	71.0	74.5	77.9	81.4	83.1	83.1	84.9	84.9	84.9	83.1
117.5°	57.2	64.1	67.6	71.0	72.7	76.2	77.9	77.9	77.9	77.9	76.2
120°	52.0	57.2	60.6	64.1	67.6	69.3	71.0	71.0	71.0	71.0	71.0
122.5°	45.0	50.2	55.4	58.9	60.6	62.4	64.1	64.1	64.1	64.1	64.1
125°	39.8	45.0	48.5	52.0	53.7	57.2	57.2	57.2	57.2	57.2	57.2
127.5°	34.6	39.8	43.3	46.8	48.5	50.2	52.0	52.0	52.0	52.0	52.0
130°	29.4	34.6	38.1	41.6	43.3	45.0	45.0	46.8	46.8	46.8	46.8
132.5°	26.0	29.4	32.9	36.4	38.1	39.8	39.8	41.6	41.6	41.6	41.6
135°	20.8	26.0	27.7	31.2	32.9	34.6	34.6	36.4	36.4	36.4	36.4
137.5°	17.3	20.8	24.2	27.7	29.4	29.4	31.2	31.2	32.9	32.9	32.9
140°	13.9	15.6	20.8	22.5	24.2	26.0	27.7	27.7	27.7	27.7	27.7
142.5°	10.4	13.9	15.6	19.1	20.8	22.5	24.2	24.2	24.2	24.2	24.2
145°	8.7	10.4	12.1	15.6	17.3	19.1	20.8	20.8	20.8	20.8	20.8
147.5°	6.9	8.7	10.4	12.1	13.9	15.6	17.3	17.3	17.3	17.3	17.3
150°	5.2	6.9	8.7	8.7	10.4	12.1	13.9	15.6	15.6	15.6	15.6
152.5°	5.2	5.2	6.9	6.9	8.7	10.4	12.1	12.1	12.1	12.1	12.1
155°	3.5	5.2	5.2	5.2	6.9	6.9	8.7	10.4	10.4	10.4	10.4
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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3353.3	3360.2	3356.7	3351.5	3349.8	3358.5	3349.8	3310.0	3325.6	3327.3	3339.4
5°	3348.1	3353.3	3349.8	3346.4	3341.2	3351.5	3341.2	3299.6	3315.2	3316.9	3329.0
7.5°	3382.7	3384.5	3384.5	3375.8	3361.9	3367.1	3353.3	3306.5	3315.2	3315.2	3323.8
10°	3469.3	3472.8	3478.0	3455.5	3438.2	3424.3	3405.2	3348.1	3346.4	3332.5	3332.5
12.5°	3581.9	3573.3	3564.6	3554.2	3540.3	3523.0	3495.3	3427.8	3405.2	3382.7	3360.2
15°	3614.8	3611.4	3609.6	3604.4	3595.8	3590.6	3569.8	3502.2	3469.3	3441.6	3401.8
17.5°	3528.2	3535.1	3557.7	3559.4	3569.8	3590.6	3587.1	3540.3	3510.9	3498.8	3450.3
20°	3372.3	3374.1	3401.8	3413.9	3458.9	3493.6	3519.6	3514.4	3507.4	3521.3	3484.9
22.5°	3185.3	3197.4	3226.8	3245.9	3289.2	3329.0	3370.6	3393.1	3429.5	3486.6	3479.7
25°	2930.7	2946.2	2987.8	3019.0	3079.6	3140.2	3195.7	3235.5	3278.8	3387.9	3424.3
27.5°	2625.8	2650.1	2703.8	2734.9	2819.8	2882.2	2961.8	3039.8	3100.4	3225.1	3299.6
30°	2305.4	2326.2	2383.3	2426.6	2499.4	2584.2	2684.7	2795.6	2896.0	3022.5	3116.0
32.5°	2005.7	2028.2	2075.0	2113.1	2194.5	2265.5	2376.4	2513.2	2606.8	2781.7	2906.4
35°	1744.2	1765.0	1797.9	1830.8	1898.3	1971.1	2066.4	2199.7	2319.2	2501.1	2658.7
37.5°	1560.6	1564.1	1583.1	1602.2	1652.4	1707.8	1782.3	1900.1	2010.9	2206.7	2379.9
40°	1429.0	1429.0	1439.3	1444.5	1467.1	1500.0	1546.7	1638.5	1730.3	1879.3	2090.6
42.5°	1347.5	1344.1	1344.1	1345.8	1344.1	1359.7	1387.4	1430.7	1512.1	1635.1	1799.6
45°	1286.9	1280.0	1274.8	1262.7	1255.7	1255.7	1257.5	1273.1	1319.8	1399.5	1532.9
47.5°	1219.4	1217.6	1209.0	1195.1	1183.0	1174.3	1160.5	1155.3	1169.1	1214.2	1304.2
50°	1141.4	1132.8	1124.1	1113.7	1099.9	1091.2	1065.2	1067.0	1054.8	1075.6	1122.4
52.5°	1027.1	1020.2	1016.7	1008.1	1002.9	999.4	978.6	957.8	952.6	956.1	973.4
55°	900.7	904.1	890.3	897.2	895.5	879.9	871.2	855.6	850.4	848.7	857.4
57.5°	769.0	772.5	763.8	770.8	770.8	762.1	756.9	756.9	744.8	734.4	746.5
60°	649.5	642.6	647.8	656.5	656.5	651.3	647.8	647.8	639.1	635.7	644.3
62.5°	552.5	545.6	550.8	559.5	561.2	557.7	554.3	554.3	543.9	543.9	550.8
65°	478.1	479.8	478.1	485.0	485.0	486.7	483.2	479.8	467.7	472.9	471.1
67.5°	424.4	422.6	422.6	429.6	427.8	431.3	427.8	422.6	414.0	407.0	405.3
70°	379.3	377.6	377.6	381.1	382.8	382.8	381.1	377.6	365.5	358.5	353.3
72.5°	339.5	337.8	339.5	341.2	342.9	344.7	342.9	339.5	329.1	320.4	311.8
75°	303.1	301.4	306.6	306.6	308.3	308.3	310.0	308.3	299.6	289.3	278.9
77.5°	266.7	268.5	273.7	275.4	278.9	280.6	282.3	282.3	273.7	265.0	251.1
80°	237.3	240.8	244.2	246.0	249.4	254.6	256.3	258.1	251.1	242.5	226.9
82.5°	216.5	218.2	221.7	223.4	228.6	230.4	232.1	235.6	232.1	223.4	206.1
85°	199.2	200.9	204.4	204.4	207.8	211.3	213.0	214.8	213.0	204.4	187.1
87.5°	183.6	185.3	187.1	188.8	190.5	192.3	194.0	195.7	194.0	185.3	169.7
90°	169.7	169.7	171.5	171.5	173.2	174.9	178.4	178.4	176.7	169.7	154.2
92.5°	154.2	155.9	155.9	157.6	159.4	161.1	162.8	162.8	161.1	154.2	140.3
95°	143.8	143.8	145.5	145.5	147.2	147.2	149.0	149.0	147.2	140.3	126.4
97.5°	131.6	131.6	131.6	131.6	133.4	133.4	135.1	135.1	133.4	126.4	114.3
100°	121.2	121.2	121.2	121.2	121.2	123.0	123.0	123.0	121.2	114.3	102.2
102.5°	112.6	112.6	112.6	112.6	112.6	112.6	112.6	112.6	109.1	103.9	91.8
105°	107.4	107.4	107.4	105.7	105.7	105.7	103.9	103.9	98.7	93.5	83.1
107.5°	100.5	100.5	100.5	98.7	98.7	97.0	95.3	95.3	90.1	84.9	74.5
110°	95.3	95.3	95.3	93.5	91.8	90.1	88.3	86.6	81.4	74.5	65.8



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	90.1	90.1	88.3	88.3	86.6	84.9	81.4	79.7	74.5	67.6	58.9
115°	83.1	83.1	83.1	81.4	79.7	77.9	76.2	72.7	67.6	60.6	52.0
117.5°	76.2	76.2	76.2	74.5	72.7	71.0	69.3	65.8	60.6	53.7	46.8
120°	69.3	69.3	69.3	67.6	65.8	64.1	62.4	58.9	53.7	48.5	39.8
122.5°	64.1	64.1	62.4	60.6	58.9	57.2	55.4	52.0	48.5	41.6	34.6
125°	57.2	57.2	55.4	55.4	53.7	52.0	50.2	46.8	41.6	36.4	31.2
127.5°	52.0	50.2	50.2	50.2	48.5	46.8	43.3	41.6	36.4	31.2	26.0
130°	45.0	45.0	45.0	43.3	43.3	41.6	38.1	34.6	31.2	27.7	22.5
132.5°	39.8	39.8	39.8	39.8	38.1	36.4	32.9	31.2	27.7	22.5	19.1
135°	36.4	36.4	34.6	34.6	32.9	31.2	29.4	26.0	22.5	19.1	15.6
137.5°	31.2	31.2	31.2	29.4	29.4	27.7	24.2	22.5	20.8	17.3	13.9
140°	27.7	27.7	26.0	26.0	24.2	24.2	22.5	19.1	17.3	13.9	12.1
142.5°	24.2	24.2	22.5	22.5	20.8	20.8	19.1	17.3	13.9	12.1	8.7
145°	20.8	20.8	19.1	19.1	19.1	17.3	15.6	13.9	12.1	10.4	8.7
147.5°	17.3	17.3	17.3	15.6	15.6	13.9	13.9	12.1	10.4	8.7	6.9
150°	15.6	15.6	13.9	13.9	13.9	12.1	10.4	10.4	8.7	6.9	5.2
152.5°	12.1	12.1	12.1	12.1	10.4	10.4	8.7	8.7	6.9	5.2	5.2
155°	10.4	10.4	10.4	8.7	8.7	8.7	6.9	6.9	5.2	5.2	3.5
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: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3	3353.3
2.5°	3334.2	3332.5	3348.1	3346.4	3325.6	3356.7	3377.5
5°	3325.6	3323.8	3337.7	3341.2	3318.6	3351.5	3374.1
7.5°	3318.6	3316.9	3332.5	3337.7	3315.2	3344.6	3368.9
10°	3320.4	3311.7	3325.6	3329.0	3308.2	3339.4	3360.2
12.5°	3332.5	3311.7	3316.9	3316.9	3297.9	3325.6	3348.1
15°	3361.9	3318.6	3311.7	3306.5	3282.3	3308.2	3330.8
17.5°	3394.8	3336.0	3311.7	3294.4	3264.9	3287.5	3311.7
20°	3427.8	3355.0	3315.2	3287.5	3247.6	3268.4	3285.7
22.5°	3443.3	3372.3	3318.6	3277.1	3226.8	3237.2	3256.3
25°	3422.6	3365.4	3311.7	3261.5	3200.9	3202.6	3218.2
27.5°	3346.4	3330.8	3296.1	3245.9	3180.1	3171.4	3183.5
30°	3216.4	3259.7	3261.5	3225.1	3155.8	3138.5	3143.7
32.5°	3034.6	3131.6	3188.7	3181.8	3121.2	3096.9	3100.4
35°	2825.0	2946.2	3071.0	3112.5	3069.2	3050.2	3043.2
37.5°	2573.9	2736.7	2902.9	3005.1	2998.2	2986.1	2979.2
40°	2296.7	2492.4	2689.9	2852.7	2902.9	2902.9	2906.4
42.5°	2000.5	2229.2	2445.7	2651.8	2769.6	2795.6	2805.9
45°	1714.7	1945.1	2180.7	2418.0	2575.6	2657.0	2686.4
47.5°	1454.9	1687.0	1910.5	2170.3	2379.9	2485.5	2532.3
50°	1233.2	1406.4	1642.0	1900.1	2128.7	2258.6	2350.4
52.5°	1049.6	1184.7	1390.8	1631.6	1862.0	2040.4	2125.2
55°	895.5	987.3	1162.2	1370.1	1590.0	1775.4	1874.1
57.5°	765.6	838.3	957.8	1131.0	1316.4	1500.0	1605.6
60°	651.3	701.5	782.9	919.7	1077.3	1235.0	1337.2
62.5°	552.5	585.4	639.1	739.6	862.6	985.5	1080.8
65°	476.3	490.2	519.6	582.0	675.5	769.0	850.4
67.5°	401.8	410.5	433.0	471.1	517.9	585.4	639.1
70°	346.4	346.4	348.1	370.7	394.9	438.2	476.3
72.5°	301.4	296.2	285.8	291.0	296.2	320.4	344.7
75°	265.0	252.9	235.6	228.6	225.2	228.6	242.5
77.5°	233.8	216.5	195.7	178.4	164.5	159.4	171.5
80°	207.8	187.1	162.8	140.3	117.8	105.7	110.9
82.5°	187.1	161.1	135.1	109.1	83.1	65.8	65.8
85°	164.5	140.3	112.6	84.9	58.9	36.4	32.9
87.5°	149.0	123.0	93.5	67.6	41.6	19.1	10.4
90°	133.4	107.4	79.7	53.7	29.4	8.7	0.0
92.5°	119.5	95.3	69.3	43.3	20.8	5.2	0.0
95°	107.4	84.9	58.9	36.4	17.3	3.5	1.7
97.5°	95.3	74.5	52.0	29.4	12.1	3.5	1.7
100°	86.6	65.8	45.0	24.2	10.4	1.7	1.7
102.5°	76.2	58.9	38.1	20.8	8.7	1.7	1.7
105°	67.6	52.0	32.9	17.3	6.9	1.7	1.7
107.5°	60.6	45.0	29.4	15.6	6.9	1.7	1.7
110°	53.7	39.8	26.0	13.9	5.2	1.7	1.7



TEST NUMBER: P#

CATALOG NUMBER: 8SNLED-LD5-98SL-LC-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	48.5	34.6	22.5	12.1	3.5	1.7	1.7
115°	41.6	31.2	19.1	10.4	3.5	1.7	1.7
117.5°	36.4	26.0	17.3	8.7	3.5	1.7	1.7
120°	31.2	22.5	13.9	6.9	1.7	1.7	1.7
122.5°	27.7	19.1	12.1	6.9	1.7	1.7	1.7
125°	24.2	17.3	10.4	5.2	1.7	1.7	1.7
127.5°	20.8	13.9	8.7	3.5	1.7	1.7	1.7
130°	17.3	12.1	6.9	3.5	1.7	1.7	1.7
132.5°	13.9	10.4	6.9	3.5	1.7	1.7	1.7
135°	12.1	8.7	5.2	3.5	1.7	1.7	1.7
137.5°	10.4	6.9	3.5	3.5	3.5	1.7	1.7
140°	8.7	5.2	3.5	3.5	3.5	3.5	1.7
142.5°	6.9	5.2	3.5	3.5	3.5	3.5	1.7
145°	5.2	3.5	3.5	3.5	3.5	3.5	1.7
147.5°	5.2	3.5	3.5	3.5	3.5	3.5	1.7
150°	3.5	3.5	3.5	3.5	3.5	3.5	3.5
152.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5
155°	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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)