

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213891

Luminaire Tested: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

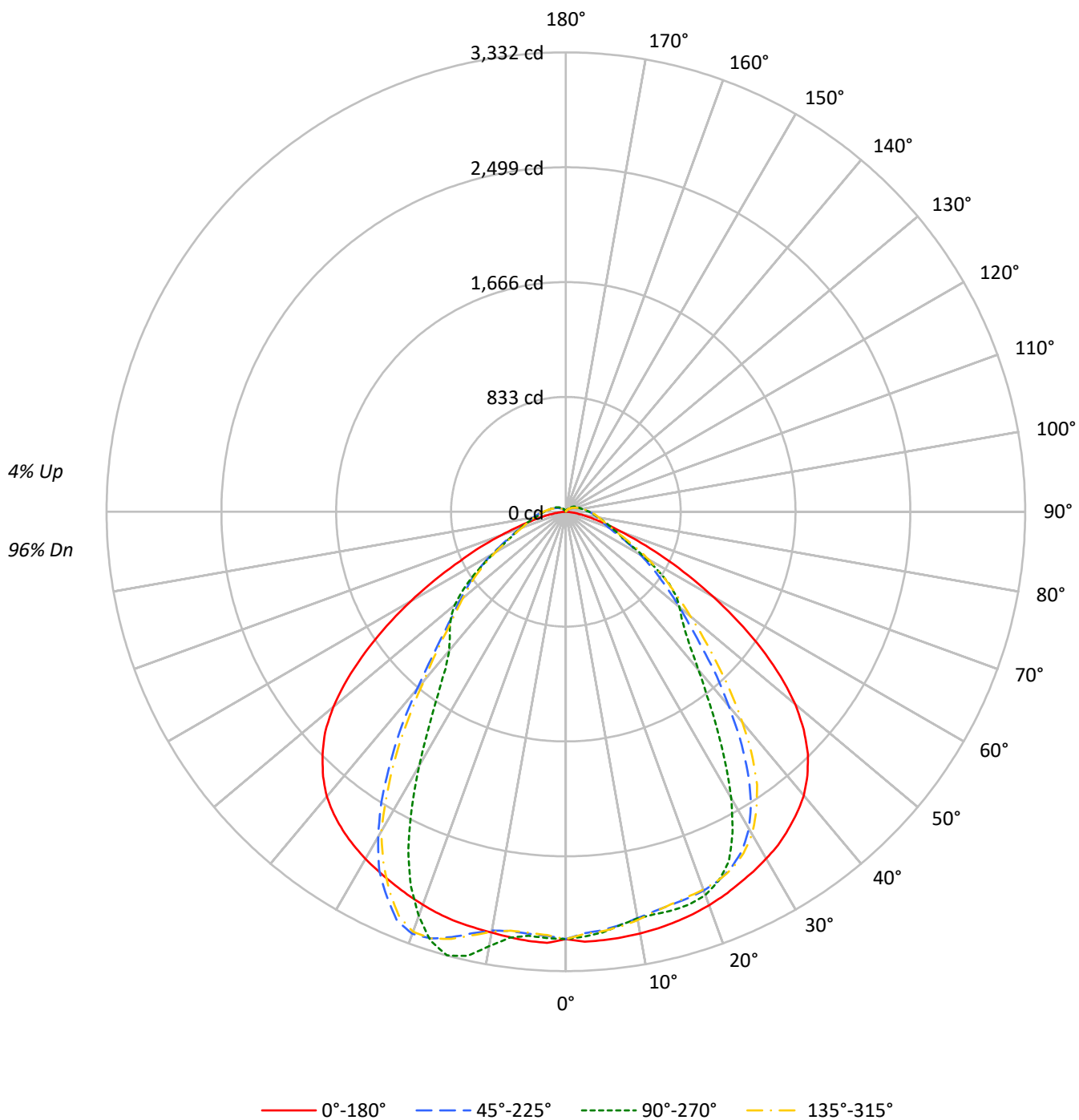
Lumens per Lamp: N/A
Luminaire Lumens: 7389.0 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	98	98	96
1	109	104	100	97	106	102	98	95	97	94	91	92	90	88	88	86	84	84	84	82
2	100	93	86	81	97	90	85	80	86	82	77	82	79	75	79	76	73	73	73	71
3	92	83	75	69	89	81	74	68	77	71	67	74	69	65	71	67	63	63	63	61
4	85	74	66	60	83	73	65	59	70	63	58	67	61	57	64	60	56	56	56	54
5	79	67	59	52	76	66	58	52	63	56	51	61	55	50	59	53	49	49	49	47
6	73	61	52	46	71	60	52	46	57	51	45	55	49	45	54	48	44	44	44	42
7	68	55	47	42	66	54	47	41	53	46	41	51	45	40	49	44	40	40	40	38
8	64	51	43	37	62	50	42	37	48	42	37	47	41	36	45	40	36	36	36	34
9	60	47	39	34	58	46	39	34	45	38	33	43	37	33	42	37	33	33	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	30	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	25047	25047	25047	25047
5°	25230	24054	25281	24243
10°	25346	23053	25294	24619
15°	25543	22745	25530	25325
20°	25824	22385	25797	23596
25°	26142	21236	26128	20519
30°	26634	18405	26649	16305
35°	27155	14883	27233	12594
40°	27615	11983	27731	10557
45°	27518	10150	27659	9884
50°	26332	9345	26700	9136
55°	23363	8400	23946	7636
60°	18951	6429	19956	5896
65°	14087	4919	15177	4664
70°	9581	4245	10799	4059
75°	6266	3831	7298	3623
80°	4052	3571	4748	3286
85°	2077	3563	2733	3254

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 27659 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.4	4.0
10°-20°	876.0	11.9
20°-30°	1331.7	18.0
30°-40°	1428.6	19.3
40°-50°	1239.9	16.8
50°-60°	918.9	12.4
60°-70°	526.5	7.1
70°-80°	291.6	3.9
80°-90°	177.5	2.4
90°-100°	115.5	1.6
100°-110°	77.3	1.0
110°-120°	52.2	0.7
120°-130°	32.0	0.4
130°-140°	16.8	0.2
140°-150°	7.7	0.1
150°-160°	2.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2502.2	33.9
0°-40°	3930.8	53.2
0°-60°	6089.6	82.4
0°-90°	7085.2	95.9
90°-120°	245.0	3.3
90°-150°	301.5	4.1
90°-180°	304.0	4.1
0°-180°	7389.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3100	3100	3100	3100	3100	
5°	3119	3063	3125	3087	3119	297
15°	3079	2992	3077	3332	3079	871
25°	2975	2798	2973	2704	2975	1375
35°	2813	1905	2821	1612	2813	1761
45°	2483	1222	2496	1190	2483	1901
55°	1732	916	1776	832	1732	1536
65°	786	464	847	440	786	792
75°	224	295	261	279	224	256
85°	30	203	40	186	30	40
90°	0	170	3	157	0	1
95°	2	139	0	133	2	1
105°	2	104	2	99	2	2
115°	2	85	2	77	2	2
125°	2	64	2	53	2	1
135°	2	40	2	34	2	1
145°	2	24	3	19	2	1
155°	3	11	3	10	3	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°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3121.9	3113.9	3110.7	3104.3	3109.1	3128.3	3115.5	3094.7	3096.3	3059.5	3078.7
5°	3118.7	3109.1	3104.3	3097.9	3101.1	3118.7	3105.9	3085.1	3083.5	3046.7	3064.3
7.5°	3113.9	3104.3	3096.3	3091.5	3093.1	3107.5	3091.5	3067.5	3062.7	3022.7	3038.7
10°	3105.9	3099.5	3088.3	3080.3	3078.7	3094.7	3069.1	3045.1	3033.9	2992.2	3008.2
12.5°	3094.7	3085.1	3073.9	3059.5	3057.9	3067.5	3046.7	3013.0	3001.8	2968.2	2985.8
15°	3078.7	3067.5	3054.7	3038.7	3030.7	3037.1	3011.4	2981.0	2979.4	2950.6	2974.6
17.5°	3061.1	3045.1	3030.7	3008.2	2997.0	3001.8	2981.0	2953.8	2957.0	2939.4	2966.6
20°	3037.1	3019.4	2997.0	2974.6	2958.6	2966.6	2952.2	2931.4	2936.2	2923.4	2947.4
22.5°	3009.8	2985.8	2958.6	2933.0	2920.2	2931.4	2920.2	2902.6	2904.2	2896.2	2910.6
25°	2974.6	2947.4	2915.4	2883.4	2877.0	2885.0	2878.6	2864.2	2857.8	2844.9	2851.3
27.5°	2942.6	2912.2	2872.2	2838.5	2827.3	2843.3	2828.9	2804.9	2787.3	2769.7	2756.9
30°	2905.8	2869.0	2824.1	2785.7	2776.1	2782.5	2761.7	2724.9	2678.4	2656.0	2620.8
32.5°	2865.8	2817.7	2761.7	2718.5	2712.1	2707.3	2668.8	2616.0	2544.0	2499.1	2444.7
35°	2812.9	2760.1	2692.8	2640.0	2630.4	2603.2	2540.8	2470.3	2377.5	2300.6	2207.8
37.5°	2753.7	2691.2	2620.8	2550.4	2523.1	2468.7	2380.7	2307.0	2166.1	2073.3	1961.2
40°	2686.4	2611.2	2524.7	2439.9	2395.1	2307.0	2206.2	2097.3	1961.2	1836.3	1741.9
42.5°	2593.6	2513.5	2411.1	2316.6	2239.8	2122.9	2004.4	1850.7	1725.9	1620.2	1524.1
45°	2483.1	2387.1	2268.6	2154.9	2057.3	1918.0	1778.7	1625.0	1520.9	1397.7	1332.0
47.5°	2340.6	2236.6	2110.1	1983.6	1855.5	1701.8	1556.2	1408.9	1304.8	1216.7	1168.7
50°	2172.5	2076.5	1937.2	1786.7	1645.8	1485.7	1340.0	1229.6	1128.7	1074.3	1037.4
52.5°	1964.4	1874.7	1732.3	1569.0	1432.9	1276.0	1143.1	1053.4	981.4	941.4	928.6
55°	1732.3	1653.8	1512.9	1360.8	1221.5	1077.5	976.6	898.2	851.7	827.7	829.3
57.5°	1484.1	1423.3	1290.4	1154.3	1023.0	914.2	822.9	760.5	725.2	723.6	728.4
60°	1236.0	1191.1	1075.9	959.0	843.7	755.7	688.4	645.2	622.8	624.4	622.8
62.5°	999.0	957.4	874.1	778.1	686.8	627.6	566.7	549.1	529.9	528.3	528.3
65°	786.1	754.1	686.8	618.0	549.1	510.7	480.3	459.5	445.1	441.9	443.5
67.5°	590.8	578.0	531.5	485.1	441.9	417.9	392.2	387.4	376.2	376.2	379.4
70°	440.3	430.7	405.0	377.8	360.2	344.2	331.4	331.4	329.8	328.2	336.2
72.5°	318.6	320.2	312.2	291.4	289.8	286.6	283.4	288.2	289.8	294.6	304.2
75°	224.1	228.9	228.9	225.7	232.1	240.1	245.0	253.0	262.6	269.0	280.2
77.5°	158.5	158.5	166.5	176.1	188.9	203.3	216.1	227.3	240.1	248.2	257.8
80°	102.5	107.3	120.1	137.7	155.3	174.5	192.1	206.5	219.3	232.1	238.5
82.5°	60.8	68.8	84.9	107.3	129.7	153.7	171.3	188.9	203.3	216.1	220.9
85°	30.4	41.6	60.8	84.9	108.9	134.5	156.9	172.9	188.9	200.1	206.5
87.5°	9.6	22.4	43.2	65.6	91.3	116.9	140.9	158.5	172.9	182.5	188.9
90°	0.0	11.2	30.4	54.4	78.4	104.1	126.5	145.7	160.1	168.1	172.9
92.5°	0.0	6.4	24.0	44.8	67.2	92.9	115.3	132.9	145.7	153.7	156.9
95°	1.6	4.8	17.6	36.8	59.2	83.3	104.1	120.1	132.9	140.9	142.5
97.5°	1.6	3.2	14.4	30.4	51.2	73.6	94.5	110.5	120.1	128.1	129.7
100°	1.6	3.2	11.2	27.2	44.8	65.6	84.9	99.3	110.5	116.9	118.5
102.5°	1.6	1.6	9.6	22.4	40.0	57.6	75.2	89.7	99.3	105.7	108.9
105°	1.6	1.6	8.0	19.2	35.2	51.2	67.2	81.7	89.7	96.1	99.3
107.5°	1.6	1.6	6.4	16.0	30.4	44.8	60.8	72.0	81.7	88.1	91.3
110°	1.6	1.6	4.8	14.4	25.6	40.0	52.8	64.0	73.6	80.0	83.3

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.6	1.6	4.8	12.8	22.4	35.2	46.4	57.6	65.6	72.0	76.8
115°	1.6	1.6	4.8	11.2	20.8	30.4	41.6	51.2	59.2	65.6	70.4
117.5°	1.6	1.6	4.8	9.6	17.6	27.2	36.8	46.4	52.8	59.2	64.0
120°	1.6	1.6	3.2	8.0	16.0	24.0	32.0	40.0	48.0	54.4	59.2
122.5°	1.6	1.6	3.2	8.0	12.8	20.8	28.8	35.2	43.2	48.0	52.8
125°	1.6	1.6	3.2	6.4	11.2	19.2	25.6	32.0	36.8	43.2	48.0
127.5°	1.6	1.6	3.2	6.4	9.6	16.0	22.4	28.8	33.6	38.4	41.6
130°	1.6	1.6	3.2	4.8	8.0	12.8	19.2	24.0	30.4	33.6	36.8
132.5°	1.6	1.6	1.6	4.8	6.4	9.6	14.4	20.8	25.6	30.4	32.0
135°	1.6	1.6	1.6	3.2	6.4	8.0	11.2	16.0	20.8	25.6	28.8
137.5°	1.6	1.6	1.6	3.2	4.8	8.0	9.6	12.8	17.6	20.8	25.6
140°	1.6	1.6	1.6	3.2	4.8	6.4	8.0	11.2	14.4	17.6	20.8
142.5°	1.6	1.6	1.6	3.2	3.2	4.8	6.4	9.6	11.2	14.4	17.6
145°	1.6	1.6	1.6	3.2	3.2	4.8	6.4	8.0	9.6	11.2	14.4
147.5°	1.6	1.6	1.6	3.2	3.2	3.2	4.8	6.4	8.0	9.6	11.2
150°	3.2	3.2	3.2	3.2	3.2	3.2	4.8	4.8	6.4	8.0	9.6
152.5°	3.2	3.2	3.2	3.2	3.2	3.2	4.8	4.8	4.8	6.4	8.0
155°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.8	4.8	6.4	6.4
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

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3072.3	3075.5	3094.7	3093.1	3089.9	3086.7	3086.7	3083.5	3086.7	3094.7	3091.5
5°	3056.3	3061.1	3075.5	3073.9	3070.7	3069.1	3067.5	3062.7	3065.9	3077.1	3073.9
7.5°	3027.5	3032.3	3045.1	3038.7	3033.9	3037.1	3029.1	3024.3	3030.7	3041.9	3040.3
10°	2997.0	3000.2	3016.2	3013.0	3005.0	3006.6	2998.6	2995.4	3003.4	3009.8	3011.4
12.5°	2976.2	2987.4	3001.8	3000.2	2998.6	3000.2	2992.2	2989.0	2993.8	3000.2	2998.6
15°	2971.4	2985.8	3001.8	3001.8	3003.4	3005.0	2997.0	2992.2	2997.0	3001.8	3000.2
17.5°	2966.6	2984.2	2998.6	2997.0	2998.6	3001.8	2989.0	2985.8	2992.2	2998.6	2995.4
20°	2950.6	2966.6	2976.2	2973.0	2973.0	2974.6	2958.6	2958.6	2968.2	2973.0	2974.6
22.5°	2905.8	2925.0	2925.0	2917.0	2917.0	2910.6	2905.8	2896.2	2907.4	2915.4	2921.8
25°	2838.5	2846.5	2836.9	2819.3	2809.7	2801.7	2779.3	2798.5	2798.5	2822.5	2830.5
27.5°	2744.1	2726.5	2699.3	2662.4	2654.4	2628.8	2614.4	2619.2	2627.2	2660.8	2686.4
30°	2588.8	2536.0	2489.5	2473.5	2438.3	2412.7	2387.1	2399.9	2414.3	2433.5	2486.3
32.5°	2383.9	2332.6	2257.4	2230.2	2193.3	2161.3	2130.9	2150.1	2175.7	2188.5	2246.2
35°	2148.5	2087.7	2018.8	1972.4	1934.0	1916.4	1878.0	1905.2	1932.4	1942.0	1991.6
37.5°	1898.8	1836.3	1775.5	1735.5	1698.6	1687.4	1661.8	1681.0	1701.8	1716.3	1757.9
40°	1661.8	1604.2	1557.8	1530.5	1504.9	1495.3	1485.7	1493.7	1509.7	1520.9	1553.0
42.5°	1458.5	1412.1	1380.0	1364.0	1346.4	1333.6	1335.2	1338.4	1346.4	1370.4	1384.8
45°	1280.8	1253.6	1232.8	1229.6	1218.3	1216.7	1215.1	1221.5	1226.4	1240.8	1252.0
47.5°	1138.3	1127.1	1122.3	1128.7	1133.5	1127.1	1130.3	1138.3	1147.9	1147.9	1146.3
50°	1026.2	1029.4	1035.8	1050.2	1059.8	1063.1	1066.3	1075.9	1077.5	1080.7	1075.9
52.5°	935.0	938.2	955.8	978.2	989.4	994.2	1000.6	1010.2	1010.2	1013.4	1007.0
55°	842.1	846.9	864.5	886.9	896.5	903.0	909.4	915.8	920.6	927.0	922.2
57.5°	739.7	754.1	765.3	771.7	778.1	782.9	787.7	789.3	798.9	800.5	808.5
60°	630.8	634.0	645.2	643.6	638.8	651.6	645.2	656.4	667.6	682.0	683.6
62.5°	526.7	528.3	536.3	533.1	539.5	537.9	542.7	542.7	550.7	557.1	565.1
65°	445.1	446.7	453.1	453.1	451.5	456.3	461.1	464.3	464.3	469.1	475.5
67.5°	384.2	389.0	395.4	398.6	401.8	401.8	406.6	408.3	411.5	413.1	416.3
70°	342.6	349.0	355.4	358.6	360.2	363.4	365.0	365.0	368.2	369.8	373.0
72.5°	312.2	318.6	323.4	323.4	326.6	328.2	328.2	329.8	331.4	334.6	337.8
75°	286.6	291.4	294.6	293.0	293.0	293.0	294.6	294.6	297.8	301.0	304.2
77.5°	262.6	267.4	267.4	264.2	264.2	264.2	264.2	265.8	267.4	270.6	273.8
80°	245.0	245.0	243.3	243.3	240.1	238.5	238.5	240.1	240.1	243.3	248.2
82.5°	225.7	225.7	224.1	222.5	220.9	219.3	219.3	220.9	222.5	224.1	227.3
85°	208.1	208.1	204.9	204.9	203.3	203.3	203.3	203.3	204.9	206.5	209.7
87.5°	190.5	188.9	187.3	185.7	185.7	185.7	185.7	185.7	187.3	190.5	192.1
90°	172.9	171.3	169.7	169.7	168.1	168.1	169.7	169.7	171.3	172.9	174.5
92.5°	156.9	155.3	153.7	153.7	152.1	152.1	153.7	152.1	155.3	155.3	156.9
95°	142.5	140.9	139.3	139.3	139.3	139.3	139.3	139.3	140.9	140.9	142.5
97.5°	129.7	128.1	126.5	126.5	128.1	126.5	128.1	128.1	128.1	129.7	131.3
100°	118.5	116.9	116.9	118.5	116.9	116.9	118.5	118.5	118.5	118.5	120.1
102.5°	108.9	108.9	108.9	108.9	108.9	108.9	110.5	110.5	110.5	110.5	112.1
105°	99.3	100.9	100.9	100.9	102.5	102.5	102.5	104.1	104.1	104.1	104.1
107.5°	92.9	94.5	94.5	96.1	96.1	97.7	97.7	97.7	97.7	99.3	99.3
110°	86.5	88.1	89.7	91.3	91.3	92.9	92.9	92.9	92.9	92.9	92.9

TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	80.0	81.7	83.3	86.5	88.1	88.1	88.1	88.1	89.7	89.7	88.1
115°	73.6	76.8	78.4	81.7	83.3	83.3	84.9	84.9	84.9	84.9	83.3
117.5°	67.2	72.0	73.6	76.8	78.4	78.4	80.0	80.0	80.0	80.0	78.4
120°	62.4	65.6	68.8	70.4	72.0	73.6	73.6	75.2	75.2	75.2	73.6
122.5°	57.6	60.8	64.0	65.6	67.2	68.8	68.8	68.8	68.8	68.8	68.8
125°	51.2	54.4	57.6	59.2	60.8	62.4	62.4	64.0	64.0	64.0	62.4
127.5°	46.4	49.6	51.2	54.4	56.0	56.0	57.6	57.6	57.6	57.6	56.0
130°	40.0	43.2	46.4	48.0	49.6	49.6	51.2	51.2	51.2	51.2	51.2
132.5°	35.2	38.4	40.0	43.2	43.2	44.8	44.8	46.4	46.4	46.4	44.8
135°	32.0	33.6	35.2	38.4	38.4	40.0	40.0	40.0	40.0	40.0	40.0
137.5°	28.8	30.4	32.0	33.6	33.6	35.2	35.2	35.2	35.2	36.8	35.2
140°	24.0	27.2	28.8	28.8	30.4	30.4	30.4	32.0	32.0	32.0	30.4
142.5°	20.8	22.4	24.0	25.6	27.2	27.2	27.2	27.2	28.8	27.2	27.2
145°	16.0	19.2	20.8	22.4	24.0	24.0	24.0	24.0	24.0	24.0	24.0
147.5°	12.8	14.4	17.6	19.2	19.2	20.8	20.8	20.8	20.8	20.8	20.8
150°	11.2	11.2	14.4	16.0	17.6	17.6	17.6	17.6	17.6	17.6	17.6
152.5°	8.0	9.6	11.2	12.8	14.4	14.4	14.4	14.4	14.4	14.4	14.4
155°	8.0	8.0	9.6	9.6	11.2	11.2	11.2	11.2	12.8	11.2	11.2
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: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3086.7	3085.1	3091.5	3085.1	3053.1	3065.9	3061.1	3078.7	3080.3	3085.1	3101.1
5°	3070.7	3070.7	3078.7	3072.3	3041.9	3054.7	3053.1	3070.7	3073.9	3077.1	3094.7
7.5°	3038.7	3040.3	3051.5	3046.7	3014.6	3033.9	3032.3	3053.1	3059.5	3065.9	3081.9
10°	3008.2	3006.6	3019.4	3014.6	2984.2	3006.6	3005.0	3025.9	3035.5	3046.7	3065.9
12.5°	2992.2	2987.4	2992.2	2987.4	2953.8	2971.4	2973.0	2997.0	3008.2	3022.7	3045.1
15°	2992.2	2984.2	2984.2	2974.6	2936.2	2947.4	2949.0	2965.0	2979.4	2993.8	3021.1
17.5°	2989.0	2981.0	2979.4	2971.4	2929.8	2929.8	2928.2	2939.4	2947.4	2961.8	2990.6
20°	2971.4	2968.2	2966.6	2961.8	2923.4	2917.0	2913.8	2913.8	2918.6	2923.4	2952.2
22.5°	2925.0	2928.2	2931.4	2934.6	2904.2	2893.0	2894.6	2891.4	2886.6	2886.6	2910.6
25°	2838.5	2854.5	2867.4	2881.8	2864.2	2856.1	2865.8	2861.0	2852.9	2846.5	2867.4
27.5°	2700.9	2734.5	2761.7	2796.9	2798.5	2792.1	2817.7	2814.5	2812.9	2803.3	2819.3
30°	2510.3	2563.2	2600.0	2651.2	2694.5	2700.9	2744.1	2750.5	2756.9	2752.1	2768.1
32.5°	2279.8	2351.8	2414.3	2494.3	2536.0	2572.8	2633.6	2659.2	2684.8	2692.8	2710.5
35°	2028.4	2110.1	2183.7	2271.8	2337.4	2417.5	2491.1	2529.5	2587.2	2609.6	2635.2
37.5°	1789.9	1866.7	1938.8	2026.8	2132.5	2215.8	2307.0	2393.5	2471.9	2503.9	2542.4
40°	1578.6	1641.0	1709.8	1786.7	1882.8	1991.6	2090.9	2211.0	2303.8	2367.9	2423.9
42.5°	1418.5	1448.9	1508.1	1577.0	1653.8	1764.3	1865.1	1999.6	2111.7	2202.9	2295.8
45°	1276.0	1290.4	1333.6	1370.4	1448.9	1546.5	1653.8	1785.1	1902.0	2018.8	2130.9
47.5°	1154.3	1171.9	1192.7	1215.1	1271.2	1352.8	1445.7	1564.2	1681.0	1817.1	1945.2
50°	1072.7	1077.5	1080.7	1090.3	1123.9	1179.9	1255.2	1356.0	1468.1	1613.8	1749.9
52.5°	1000.6	1000.6	991.0	986.2	999.0	1034.2	1077.5	1149.5	1264.8	1399.3	1543.3
55°	923.8	909.4	906.2	890.1	893.3	909.4	930.2	986.2	1080.7	1195.9	1335.2
57.5°	816.5	810.1	810.1	803.7	790.9	798.9	803.7	843.7	911.0	1010.2	1131.9
60°	693.2	690.0	698.0	699.6	688.4	693.2	691.6	715.6	763.7	843.7	944.6
62.5°	569.9	584.4	586.0	592.4	586.0	584.4	592.4	613.2	637.2	698.0	776.5
65°	478.7	486.7	488.3	496.3	493.1	493.1	499.5	515.5	529.9	571.6	632.4
67.5°	419.5	416.3	417.9	422.7	417.9	416.3	421.1	430.7	441.9	467.5	510.7
70°	373.0	369.8	369.8	369.8	363.4	358.6	360.2	363.4	368.2	382.6	409.9
72.5°	337.8	337.8	333.0	328.2	323.4	320.2	317.0	313.8	312.2	317.0	331.4
75°	305.8	307.4	305.8	301.0	294.6	288.2	281.8	275.4	267.4	264.2	265.8
77.5°	277.0	278.6	280.2	278.6	272.2	264.2	254.6	245.0	233.7	222.5	216.1
80°	251.4	254.6	256.2	254.6	249.8	243.3	232.1	220.9	204.9	190.5	174.5
82.5°	228.9	233.7	235.3	235.3	232.1	225.7	212.9	200.1	182.5	163.3	142.5
85°	211.3	214.5	217.7	217.7	216.1	209.7	196.9	182.5	164.9	142.5	120.1
87.5°	193.7	195.3	198.5	201.7	198.5	192.1	180.9	164.9	147.3	124.9	99.3
90°	176.1	177.7	180.9	184.1	182.5	176.1	166.5	152.1	132.9	108.9	83.3
92.5°	158.5	161.7	163.3	164.9	166.5	161.7	153.7	139.3	120.1	96.1	72.0
95°	145.7	145.7	148.9	150.5	152.1	147.3	140.9	126.5	108.9	86.5	62.4
97.5°	132.9	132.9	136.1	136.1	137.7	134.5	128.1	115.3	97.7	76.8	52.8
100°	120.1	121.7	123.3	124.9	124.9	123.3	116.9	104.1	88.1	68.8	46.4
102.5°	112.1	112.1	113.7	113.7	115.3	112.1	105.7	94.5	78.4	60.8	40.0
105°	104.1	104.1	105.7	105.7	104.1	100.9	94.5	84.9	70.4	52.8	35.2
107.5°	97.7	97.7	97.7	97.7	96.1	92.9	86.5	75.2	62.4	48.0	32.0
110°	92.9	91.3	91.3	89.7	88.1	83.3	76.8	67.2	56.0	41.6	27.2

TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	88.1	86.5	84.9	83.3	80.0	75.2	68.8	60.8	49.6	36.8	24.0
115°	83.3	81.7	80.0	76.8	73.6	68.8	62.4	54.4	43.2	32.0	20.8
117.5°	78.4	76.8	73.6	70.4	67.2	62.4	56.0	48.0	38.4	28.8	19.2
120°	72.0	70.4	68.8	65.6	62.4	56.0	49.6	43.2	33.6	25.6	16.0
122.5°	67.2	65.6	62.4	60.8	56.0	51.2	44.8	38.4	30.4	22.4	14.4
125°	60.8	59.2	57.6	54.4	51.2	44.8	40.0	33.6	27.2	19.2	11.2
127.5°	56.0	54.4	51.2	48.0	44.8	40.0	35.2	30.4	24.0	16.0	11.2
130°	49.6	48.0	46.4	43.2	40.0	35.2	32.0	25.6	20.8	14.4	9.6
132.5°	43.2	43.2	41.6	38.4	35.2	32.0	27.2	22.4	17.6	12.8	8.0
135°	40.0	38.4	36.8	33.6	32.0	27.2	24.0	19.2	14.4	11.2	6.4
137.5°	35.2	33.6	32.0	30.4	27.2	24.0	20.8	16.0	12.8	9.6	6.4
140°	30.4	28.8	28.8	25.6	24.0	20.8	17.6	14.4	11.2	8.0	4.8
142.5°	27.2	25.6	24.0	22.4	20.8	17.6	14.4	11.2	9.6	6.4	4.8
145°	24.0	22.4	20.8	19.2	17.6	14.4	12.8	9.6	8.0	6.4	4.8
147.5°	19.2	19.2	17.6	16.0	14.4	12.8	11.2	9.6	6.4	4.8	3.2
150°	16.0	16.0	14.4	12.8	12.8	11.2	9.6	8.0	6.4	4.8	3.2
152.5°	14.4	12.8	12.8	11.2	11.2	9.6	8.0	6.4	4.8	4.8	3.2
155°	11.2	11.2	11.2	9.6	9.6	8.0	6.4	6.4	4.8	3.2	3.2
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: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3104.3	3085.1	3101.1	3129.9	3126.7	3123.5	3120.3	3126.7	3147.5	3136.3	3118.7
5°	3099.5	3080.3	3097.9	3125.1	3123.5	3118.7	3115.5	3121.9	3142.7	3131.5	3112.3
7.5°	3089.9	3072.3	3085.1	3112.3	3112.3	3109.1	3105.9	3112.3	3131.5	3121.9	3102.7
10°	3073.9	3061.1	3073.9	3099.5	3101.1	3094.7	3091.5	3099.5	3118.7	3113.9	3097.9
12.5°	3061.1	3048.3	3062.7	3088.3	3089.9	3083.5	3078.7	3088.3	3113.9	3117.1	3112.3
15°	3043.5	3032.3	3049.9	3077.1	3077.1	3072.3	3072.3	3085.1	3120.3	3134.7	3142.7
17.5°	3017.8	3009.8	3030.7	3057.9	3059.5	3056.3	3057.9	3083.5	3129.9	3165.1	3187.6
20°	2985.8	2982.6	3005.0	3033.9	3038.7	3040.3	3048.3	3086.7	3150.7	3198.8	3221.2
22.5°	2947.4	2949.0	2974.6	3005.0	3011.4	3016.2	3032.3	3086.7	3166.7	3218.0	3227.6
25°	2904.2	2909.0	2936.2	2973.0	2981.0	2990.6	3017.8	3088.3	3171.5	3205.2	3189.2
27.5°	2857.8	2867.4	2902.6	2941.0	2950.6	2966.6	3001.8	3078.7	3149.1	3150.7	3091.5
30°	2809.7	2820.9	2862.6	2907.4	2923.4	2939.4	2982.6	3056.3	3094.7	3043.5	2939.4
32.5°	2755.3	2771.3	2812.9	2867.4	2886.6	2907.4	2950.6	3013.0	2998.6	2888.2	2739.3
35°	2686.4	2708.9	2756.9	2820.9	2838.5	2865.8	2896.2	2910.6	2846.5	2689.6	2521.5
37.5°	2601.6	2635.2	2691.2	2764.9	2784.1	2801.7	2809.7	2769.7	2641.6	2471.9	2297.4
40°	2503.9	2555.2	2616.0	2697.7	2716.9	2716.9	2688.0	2603.2	2441.5	2219.0	2025.2
42.5°	2385.5	2447.9	2524.7	2606.4	2625.6	2603.2	2534.4	2385.5	2201.3	1953.2	1748.3
45°	2241.4	2324.6	2411.1	2495.9	2505.5	2455.9	2332.6	2143.7	1916.4	1685.8	1490.5
47.5°	2070.1	2178.9	2273.4	2369.5	2356.6	2273.4	2108.5	1894.0	1653.8	1436.1	1279.2
50°	1878.0	2006.0	2111.7	2202.9	2175.7	2060.5	1866.7	1642.6	1404.1	1218.3	1088.7
52.5°	1673.0	1820.3	1926.0	1999.6	1962.8	1825.1	1612.2	1397.7	1202.3	1032.6	946.2
55°	1460.1	1609.0	1717.9	1775.5	1727.5	1578.6	1368.8	1173.5	989.4	878.9	827.7
57.5°	1253.6	1392.9	1495.3	1541.7	1480.9	1332.0	1138.3	973.4	840.5	747.7	722.0
60°	1055.0	1168.7	1266.4	1301.6	1236.0	1098.3	931.8	800.5	702.8	638.8	626.0
62.5°	870.9	963.8	1040.6	1067.9	1003.8	896.5	752.5	654.8	586.0	553.9	537.9
65°	718.8	773.3	851.7	846.9	808.5	709.2	603.6	534.7	489.9	469.1	459.5
67.5°	565.1	614.8	664.4	670.8	622.8	553.9	485.1	435.5	411.5	400.2	395.4
70°	437.1	473.9	504.3	496.3	470.7	427.5	384.2	357.0	347.4	342.6	342.6
72.5°	339.4	358.6	373.0	363.4	347.4	325.0	304.2	293.0	294.6	297.8	301.0
75°	262.6	267.4	270.6	261.0	257.8	243.3	241.7	243.3	253.0	262.6	267.4
77.5°	201.7	195.3	190.5	180.9	182.5	180.9	188.9	201.7	216.1	230.5	243.3
80°	155.3	140.9	129.7	120.1	124.9	132.9	148.9	168.1	187.3	203.3	219.3
82.5°	120.1	99.3	83.3	73.6	83.3	96.1	116.9	140.9	163.3	180.9	198.5
85°	92.9	68.8	49.6	40.0	49.6	68.8	91.3	118.5	142.5	161.7	179.3
87.5°	72.0	49.6	27.2	16.0	27.2	48.0	73.6	99.3	123.3	145.7	163.3
90°	57.6	33.6	12.8	3.2	14.4	33.6	57.6	83.3	107.3	131.3	148.9
92.5°	46.4	24.0	6.4	0.0	8.0	25.6	48.0	72.0	96.1	118.5	136.1
95°	38.4	19.2	4.8	0.0	6.4	19.2	38.4	62.4	84.9	107.3	121.7
97.5°	32.0	14.4	3.2	0.0	3.2	16.0	32.0	52.8	75.2	96.1	110.5
100°	27.2	12.8	3.2	0.0	3.2	12.8	27.2	46.4	65.6	84.9	99.3
102.5°	22.4	9.6	1.6	1.6	1.6	9.6	24.0	40.0	57.6	75.2	89.7
105°	20.8	8.0	1.6	1.6	1.6	8.0	20.8	35.2	51.2	67.2	80.0
107.5°	17.6	6.4	1.6	1.6	1.6	6.4	17.6	30.4	46.4	60.8	72.0
110°	14.4	6.4	1.6	1.6	1.6	6.4	14.4	27.2	40.0	52.8	64.0



TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	12.8	4.8	1.6	1.6	1.6	4.8	12.8	24.0	35.2	48.0	57.6
115°	11.2	4.8	1.6	1.6	1.6	4.8	11.2	20.8	30.4	41.6	51.2
117.5°	9.6	4.8	1.6	1.6	1.6	3.2	9.6	17.6	27.2	36.8	46.4
120°	8.0	3.2	1.6	1.6	1.6	3.2	8.0	16.0	24.0	32.0	40.0
122.5°	8.0	3.2	1.6	1.6	1.6	3.2	6.4	12.8	20.8	27.2	35.2
125°	6.4	3.2	1.6	1.6	1.6	1.6	6.4	11.2	17.6	24.0	30.4
127.5°	6.4	3.2	1.6	1.6	1.6	1.6	4.8	9.6	14.4	20.8	27.2
130°	4.8	3.2	1.6	1.6	1.6	1.6	3.2	8.0	12.8	17.6	22.4
132.5°	4.8	3.2	1.6	1.6	1.6	1.6	3.2	6.4	9.6	14.4	19.2
135°	4.8	1.6	1.6	1.6	1.6	1.6	1.6	4.8	8.0	11.2	14.4
137.5°	3.2	1.6	1.6	1.6	1.6	1.6	1.6	3.2	6.4	8.0	12.8
140°	3.2	1.6	1.6	1.6	1.6	1.6	1.6	3.2	4.8	6.4	9.6
142.5°	3.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	4.8	8.0
145°	3.2	1.6	1.6	3.2	3.2	1.6	1.6	3.2	3.2	4.8	6.4
147.5°	3.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.8
150°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.8
152.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
155°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3115.5	3078.7	3097.9	3091.5	3097.9	3113.9	3112.3	3107.5	3110.7	3102.7	3094.7
5°	3109.1	3072.3	3091.5	3083.5	3091.5	3107.5	3104.3	3099.5	3104.3	3094.7	3086.7
7.5°	3101.1	3067.5	3089.9	3088.3	3102.7	3123.5	3125.1	3125.1	3136.3	3121.9	3115.5
10°	3101.1	3083.5	3113.9	3125.1	3161.9	3189.2	3192.4	3198.8	3218.0	3214.8	3198.8
12.5°	3134.7	3131.5	3176.3	3203.6	3237.2	3275.6	3296.4	3302.8	3315.6	3306.0	3299.6
15°	3177.9	3194.0	3243.6	3274.0	3310.8	3339.6	3344.4	3347.7	3357.3	3342.8	3331.6
17.5°	3235.6	3245.2	3285.2	3298.0	3322.0	3326.8	3320.4	3304.4	3304.4	3272.4	3262.8
20°	3262.8	3258.0	3274.0	3253.2	3243.6	3214.8	3187.6	3157.1	3155.5	3121.9	3118.7
22.5°	3238.8	3206.8	3173.1	3121.9	3099.5	3057.9	3021.1	3003.4	2992.2	2949.0	2937.8
25°	3153.9	3075.5	3025.9	2965.0	2910.6	2862.6	2827.3	2790.5	2755.3	2720.1	2704.1
27.5°	3006.6	2933.0	2852.9	2768.1	2692.8	2619.2	2560.0	2523.1	2489.5	2443.1	2419.1
30°	2825.7	2723.3	2635.2	2553.6	2430.3	2340.6	2291.0	2217.4	2191.7	2170.9	2126.1
32.5°	2612.8	2489.5	2369.5	2259.0	2132.5	2049.3	1983.6	1929.2	1913.2	1858.7	1845.9
35°	2377.5	2215.8	2079.7	1970.8	1879.6	1778.7	1724.3	1687.4	1655.4	1618.6	1612.2
37.5°	2100.5	1954.8	1801.1	1705.0	1633.0	1546.5	1504.9	1479.3	1464.9	1437.7	1432.9
40°	1821.9	1676.2	1570.6	1474.5	1429.7	1383.2	1352.8	1341.6	1335.2	1325.6	1316.0
42.5°	1569.0	1440.9	1365.6	1301.6	1282.4	1260.0	1252.0	1258.4	1252.0	1248.8	1247.2
45°	1354.4	1256.8	1203.9	1184.7	1179.9	1173.5	1179.9	1191.1	1192.7	1189.5	1189.5
47.5°	1159.1	1112.7	1090.3	1093.5	1101.5	1106.3	1117.5	1131.9	1135.1	1127.1	1130.3
50°	1031.0	1003.8	999.0	1011.8	1029.4	1035.8	1048.6	1059.8	1058.2	1055.0	1051.8
52.5°	911.0	903.0	915.8	928.6	947.8	951.0	955.8	960.6	959.0	952.6	949.4
55°	810.1	816.5	827.7	832.5	846.9	845.3	846.9	846.9	840.5	837.3	832.5
57.5°	718.8	720.4	726.8	728.4	736.5	733.2	731.6	728.4	718.8	717.2	712.4
60°	626.0	622.8	637.2	626.0	632.4	626.0	624.4	616.4	606.8	605.2	602.0
62.5°	537.9	531.5	541.1	536.3	539.5	533.1	529.9	520.3	512.3	510.7	509.1
65°	459.5	456.3	465.9	464.3	467.5	459.5	456.3	449.9	443.5	441.9	440.3
67.5°	393.8	401.8	406.6	406.6	409.9	408.3	400.2	398.6	397.0	390.6	390.6
70°	345.8	350.6	360.2	361.8	360.2	363.4	357.0	355.4	353.8	350.6	349.0
72.5°	307.4	313.8	323.4	325.0	323.4	323.4	320.2	318.6	318.6	313.8	313.8
75°	277.0	285.0	293.0	293.0	293.0	289.8	286.6	286.6	283.4	281.8	278.6
77.5°	251.4	261.0	267.4	265.8	264.2	261.0	261.0	256.2	251.4	251.4	248.2
80°	232.1	238.5	243.3	241.7	240.1	235.3	233.7	228.9	225.7	220.9	220.9
82.5°	211.3	219.3	222.5	220.9	217.7	212.9	211.3	208.1	204.9	203.3	200.1
85°	193.7	201.7	203.3	200.1	196.9	193.7	192.1	190.5	188.9	185.7	185.7
87.5°	176.1	184.1	184.1	182.5	179.3	177.7	176.1	174.5	172.9	171.3	169.7
90°	161.7	168.1	168.1	166.5	164.9	163.3	161.7	160.1	158.5	156.9	156.9
92.5°	147.3	153.7	153.7	152.1	150.5	148.9	148.9	147.3	145.7	144.1	142.5
95°	134.5	140.9	140.9	140.9	139.3	137.7	137.7	136.1	134.5	134.5	132.9
97.5°	121.7	128.1	128.1	128.1	126.5	124.9	124.9	123.3	123.3	123.3	121.7
100°	110.5	115.3	116.9	116.9	115.3	115.3	115.3	113.7	113.7	113.7	112.1
102.5°	99.3	104.1	107.3	107.3	107.3	105.7	105.7	105.7	105.7	105.7	104.1
105°	89.7	94.5	97.7	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
107.5°	81.7	86.5	89.7	91.3	92.9	92.9	94.5	94.5	94.5	94.5	94.5
110°	73.6	78.4	83.3	84.9	86.5	88.1	88.1	89.7	88.1	88.1	88.1

TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	65.6	72.0	75.2	78.4	80.0	81.7	83.3	83.3	83.3	83.3	83.3
115°	59.2	65.6	68.8	72.0	75.2	76.8	76.8	78.4	78.4	78.4	76.8
117.5°	52.8	59.2	62.4	65.6	67.2	70.4	72.0	72.0	72.0	72.0	70.4
120°	48.0	52.8	56.0	59.2	62.4	64.0	65.6	65.6	65.6	65.6	65.6
122.5°	41.6	46.4	51.2	54.4	56.0	57.6	59.2	59.2	59.2	59.2	59.2
125°	36.8	41.6	44.8	48.0	49.6	52.8	52.8	52.8	52.8	52.8	52.8
127.5°	32.0	36.8	40.0	43.2	44.8	46.4	48.0	48.0	48.0	48.0	48.0
130°	27.2	32.0	35.2	38.4	40.0	41.6	41.6	43.2	43.2	43.2	43.2
132.5°	24.0	27.2	30.4	33.6	35.2	36.8	36.8	38.4	38.4	38.4	38.4
135°	19.2	24.0	25.6	28.8	30.4	32.0	32.0	33.6	33.6	33.6	33.6
137.5°	16.0	19.2	22.4	25.6	27.2	27.2	28.8	28.8	30.4	30.4	30.4
140°	12.8	14.4	19.2	20.8	22.4	24.0	25.6	25.6	25.6	25.6	25.6
142.5°	9.6	12.8	14.4	17.6	19.2	20.8	22.4	22.4	22.4	22.4	22.4
145°	8.0	9.6	11.2	14.4	16.0	17.6	19.2	19.2	19.2	19.2	19.2
147.5°	6.4	8.0	9.6	11.2	12.8	14.4	16.0	16.0	16.0	16.0	16.0
150°	4.8	6.4	8.0	8.0	9.6	11.2	12.8	14.4	14.4	14.4	14.4
152.5°	4.8	4.8	6.4	6.4	8.0	9.6	11.2	11.2	11.2	11.2	11.2
155°	3.2	4.8	4.8	4.8	6.4	6.4	8.0	9.6	9.6	9.6	9.6
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: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3099.5	3105.9	3102.7	3097.9	3096.3	3104.3	3096.3	3059.5	3073.9	3075.5	3086.7
5°	3094.7	3099.5	3096.3	3093.1	3088.3	3097.9	3088.3	3049.9	3064.3	3065.9	3077.1
7.5°	3126.7	3128.3	3128.3	3120.3	3107.5	3112.3	3099.5	3056.3	3064.3	3064.3	3072.3
10°	3206.8	3210.0	3214.8	3194.0	3177.9	3165.1	3147.5	3094.7	3093.1	3080.3	3080.3
12.5°	3310.8	3302.8	3294.8	3285.2	3272.4	3256.4	3230.8	3168.3	3147.5	3126.7	3105.9
15°	3341.2	3338.0	3336.4	3331.6	3323.6	3318.8	3299.6	3237.2	3206.8	3181.1	3144.3
17.5°	3261.2	3267.6	3288.4	3290.0	3299.6	3318.8	3315.6	3272.4	3245.2	3234.0	3189.2
20°	3117.1	3118.7	3144.3	3155.5	3197.2	3229.2	3253.2	3248.4	3242.0	3254.8	3221.2
22.5°	2944.2	2955.4	2982.6	3000.2	3040.3	3077.1	3115.5	3136.3	3169.9	3222.8	3216.4
25°	2708.9	2723.3	2761.7	2790.5	2846.5	2902.6	2953.8	2990.6	3030.7	3131.5	3165.1
27.5°	2427.1	2449.5	2499.1	2527.9	2606.4	2664.0	2737.7	2809.7	2865.8	2981.0	3049.9
30°	2130.9	2150.1	2202.9	2243.0	2310.2	2388.7	2481.5	2584.0	2676.8	2793.7	2880.2
32.5°	1853.9	1874.7	1918.0	1953.2	2028.4	2094.1	2196.5	2323.0	2409.5	2571.2	2686.4
35°	1612.2	1631.4	1661.8	1692.2	1754.7	1821.9	1910.0	2033.2	2143.7	2311.8	2457.5
37.5°	1442.5	1445.7	1463.3	1480.9	1527.3	1578.6	1647.4	1756.3	1858.7	2039.6	2199.7
40°	1320.8	1320.8	1330.4	1335.2	1356.0	1386.4	1429.7	1514.5	1599.4	1737.1	1932.4
42.5°	1245.6	1242.4	1242.4	1244.0	1242.4	1256.8	1282.4	1322.4	1397.7	1511.3	1663.4
45°	1189.5	1183.1	1178.3	1167.1	1160.7	1160.7	1162.3	1176.7	1219.9	1293.6	1416.9
47.5°	1127.1	1125.5	1117.5	1104.7	1093.5	1085.5	1072.7	1067.9	1080.7	1122.3	1205.5
50°	1055.0	1047.0	1039.0	1029.4	1016.6	1008.6	984.6	986.2	975.0	994.2	1037.4
52.5°	949.4	943.0	939.8	931.8	927.0	923.8	904.6	885.3	880.5	883.7	899.8
55°	832.5	835.7	822.9	829.3	827.7	813.3	805.3	790.9	786.1	784.5	792.5
57.5°	710.8	714.0	706.0	712.4	712.4	704.4	699.6	699.6	688.4	678.8	690.0
60°	600.4	594.0	598.8	606.8	606.8	602.0	598.8	598.8	590.8	587.6	595.6
62.5°	510.7	504.3	509.1	517.1	518.7	515.5	512.3	512.3	502.7	502.7	509.1
65°	441.9	443.5	441.9	448.3	448.3	449.9	446.7	443.5	432.3	437.1	435.5
67.5°	392.2	390.6	390.6	397.0	395.4	398.6	395.4	390.6	382.6	376.2	374.6
70°	350.6	349.0	349.0	352.2	353.8	353.8	352.2	349.0	337.8	331.4	326.6
72.5°	313.8	312.2	313.8	315.4	317.0	318.6	317.0	313.8	304.2	296.2	288.2
75°	280.2	278.6	283.4	283.4	285.0	285.0	286.6	285.0	277.0	267.4	257.8
77.5°	246.6	248.2	253.0	254.6	257.8	259.4	261.0	261.0	253.0	245.0	232.1
80°	219.3	222.5	225.7	227.3	230.5	235.3	236.9	238.5	232.1	224.1	209.7
82.5°	200.1	201.7	204.9	206.5	211.3	212.9	214.5	217.7	214.5	206.5	190.5
85°	184.1	185.7	188.9	188.9	192.1	195.3	196.9	198.5	196.9	188.9	172.9
87.5°	169.7	171.3	172.9	174.5	176.1	177.7	179.3	180.9	179.3	171.3	156.9
90°	156.9	156.9	158.5	158.5	160.1	161.7	164.9	164.9	163.3	156.9	142.5
92.5°	142.5	144.1	144.1	145.7	147.3	148.9	150.5	150.5	148.9	142.5	129.7
95°	132.9	132.9	134.5	134.5	136.1	136.1	137.7	137.7	136.1	129.7	116.9
97.5°	121.7	121.7	121.7	121.7	123.3	123.3	124.9	124.9	123.3	116.9	105.7
100°	112.1	112.1	112.1	112.1	112.1	113.7	113.7	113.7	112.1	105.7	94.5
102.5°	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	100.9	96.1	84.9
105°	99.3	99.3	99.3	97.7	97.7	97.7	96.1	96.1	91.3	86.5	76.8
107.5°	92.9	92.9	92.9	91.3	91.3	89.7	88.1	88.1	83.3	78.4	68.8
110°	88.1	88.1	88.1	86.5	84.9	83.3	81.7	80.0	75.2	68.8	60.8

TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	83.3	83.3	81.7	81.7	80.0	78.4	75.2	73.6	68.8	62.4	54.4
115°	76.8	76.8	76.8	75.2	73.6	72.0	70.4	67.2	62.4	56.0	48.0
117.5°	70.4	70.4	70.4	68.8	67.2	65.6	64.0	60.8	56.0	49.6	43.2
120°	64.0	64.0	64.0	62.4	60.8	59.2	57.6	54.4	49.6	44.8	36.8
122.5°	59.2	59.2	57.6	56.0	54.4	52.8	51.2	48.0	44.8	38.4	32.0
125°	52.8	52.8	51.2	51.2	49.6	48.0	46.4	43.2	38.4	33.6	28.8
127.5°	48.0	46.4	46.4	46.4	44.8	43.2	40.0	38.4	33.6	28.8	24.0
130°	41.6	41.6	41.6	40.0	40.0	38.4	35.2	32.0	28.8	25.6	20.8
132.5°	36.8	36.8	36.8	36.8	35.2	33.6	30.4	28.8	25.6	20.8	17.6
135°	33.6	33.6	32.0	32.0	30.4	28.8	27.2	24.0	20.8	17.6	14.4
137.5°	28.8	28.8	28.8	27.2	27.2	25.6	22.4	20.8	19.2	16.0	12.8
140°	25.6	25.6	24.0	24.0	22.4	22.4	20.8	17.6	16.0	12.8	11.2
142.5°	22.4	22.4	20.8	20.8	19.2	19.2	17.6	16.0	12.8	11.2	8.0
145°	19.2	19.2	17.6	17.6	17.6	16.0	14.4	12.8	11.2	9.6	8.0
147.5°	16.0	16.0	16.0	14.4	14.4	12.8	12.8	11.2	9.6	8.0	6.4
150°	14.4	14.4	12.8	12.8	12.8	11.2	9.6	9.6	8.0	6.4	4.8
152.5°	11.2	11.2	11.2	11.2	9.6	9.6	8.0	8.0	6.4	4.8	4.8
155°	9.6	9.6	9.6	8.0	8.0	8.0	6.4	6.4	4.8	4.8	3.2
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: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5	3099.5
2.5°	3081.9	3080.3	3094.7	3093.1	3073.9	3102.7	3121.9
5°	3073.9	3072.3	3085.1	3088.3	3067.5	3097.9	3118.7
7.5°	3067.5	3065.9	3080.3	3085.1	3064.3	3091.5	3113.9
10°	3069.1	3061.1	3073.9	3077.1	3057.9	3086.7	3105.9
12.5°	3080.3	3061.1	3065.9	3065.9	3048.3	3073.9	3094.7
15°	3107.5	3067.5	3061.1	3056.3	3033.9	3057.9	3078.7
17.5°	3137.9	3083.5	3061.1	3045.1	3017.8	3038.7	3061.1
20°	3168.3	3101.1	3064.3	3038.7	3001.8	3021.1	3037.1
22.5°	3182.7	3117.1	3067.5	3029.1	2982.6	2992.2	3009.8
25°	3163.5	3110.7	3061.1	3014.6	2958.6	2960.2	2974.6
27.5°	3093.1	3078.7	3046.7	3000.2	2939.4	2931.4	2942.6
30°	2973.0	3013.0	3014.6	2981.0	2917.0	2901.0	2905.8
32.5°	2804.9	2894.6	2947.4	2941.0	2885.0	2862.6	2865.8
35°	2611.2	2723.3	2838.5	2877.0	2836.9	2819.3	2812.9
37.5°	2379.1	2529.5	2683.2	2777.7	2771.3	2760.1	2753.7
40°	2122.9	2303.8	2486.3	2636.8	2683.2	2683.2	2686.4
42.5°	1849.1	2060.5	2260.6	2451.1	2560.0	2584.0	2593.6
45°	1585.0	1797.9	2015.6	2235.0	2380.7	2455.9	2483.1
47.5°	1344.8	1559.4	1765.9	2006.0	2199.7	2297.4	2340.6
50°	1139.9	1300.0	1517.7	1756.3	1967.6	2087.7	2172.5
52.5°	970.2	1095.1	1285.6	1508.1	1721.1	1886.0	1964.4
55°	827.7	912.6	1074.3	1266.4	1469.7	1641.0	1732.3
57.5°	707.6	774.9	885.3	1045.4	1216.7	1386.4	1484.1
60°	602.0	648.4	723.6	850.1	995.8	1141.5	1236.0
62.5°	510.7	541.1	590.8	683.6	797.3	911.0	999.0
65°	440.3	453.1	480.3	537.9	624.4	710.8	786.1
67.5°	371.4	379.4	400.2	435.5	478.7	541.1	590.8
70°	320.2	320.2	321.8	342.6	365.0	405.0	440.3
72.5°	278.6	273.8	264.2	269.0	273.8	296.2	318.6
75°	245.0	233.7	217.7	211.3	208.1	211.3	224.1
77.5°	216.1	200.1	180.9	164.9	152.1	147.3	158.5
80°	192.1	172.9	150.5	129.7	108.9	97.7	102.5
82.5°	172.9	148.9	124.9	100.9	76.8	60.8	60.8
85°	152.1	129.7	104.1	78.4	54.4	33.6	30.4
87.5°	137.7	113.7	86.5	62.4	38.4	17.6	9.6
90°	123.3	99.3	73.6	49.6	27.2	8.0	0.0
92.5°	110.5	88.1	64.0	40.0	19.2	4.8	0.0
95°	99.3	78.4	54.4	33.6	16.0	3.2	1.6
97.5°	88.1	68.8	48.0	27.2	11.2	3.2	1.6
100°	80.0	60.8	41.6	22.4	9.6	1.6	1.6
102.5°	70.4	54.4	35.2	19.2	8.0	1.6	1.6
105°	62.4	48.0	30.4	16.0	6.4	1.6	1.6
107.5°	56.0	41.6	27.2	14.4	6.4	1.6	1.6
110°	49.6	36.8	24.0	12.8	4.8	1.6	1.6



TEST NUMBER: P1213891

CATALOG NUMBER: 4SNLED-LD5-85SL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	44.8	32.0	20.8	11.2	3.2	1.6	1.6
115°	38.4	28.8	17.6	9.6	3.2	1.6	1.6
117.5°	33.6	24.0	16.0	8.0	3.2	1.6	1.6
120°	28.8	20.8	12.8	6.4	1.6	1.6	1.6
122.5°	25.6	17.6	11.2	6.4	1.6	1.6	1.6
125°	22.4	16.0	9.6	4.8	1.6	1.6	1.6
127.5°	19.2	12.8	8.0	3.2	1.6	1.6	1.6
130°	16.0	11.2	6.4	3.2	1.6	1.6	1.6
132.5°	12.8	9.6	6.4	3.2	1.6	1.6	1.6
135°	11.2	8.0	4.8	3.2	1.6	1.6	1.6
137.5°	9.6	6.4	3.2	3.2	3.2	1.6	1.6
140°	8.0	4.8	3.2	3.2	3.2	3.2	1.6
142.5°	6.4	4.8	3.2	3.2	3.2	3.2	1.6
145°	4.8	3.2	3.2	3.2	3.2	3.2	1.6
147.5°	4.8	3.2	3.2	3.2	3.2	3.2	1.6
150°	3.2	3.2	3.2	3.2	3.2	3.2	3.2
152.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2
155°	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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)