

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: P1213897

Luminaire Tested: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213897
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-LD5-92HL-LC-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

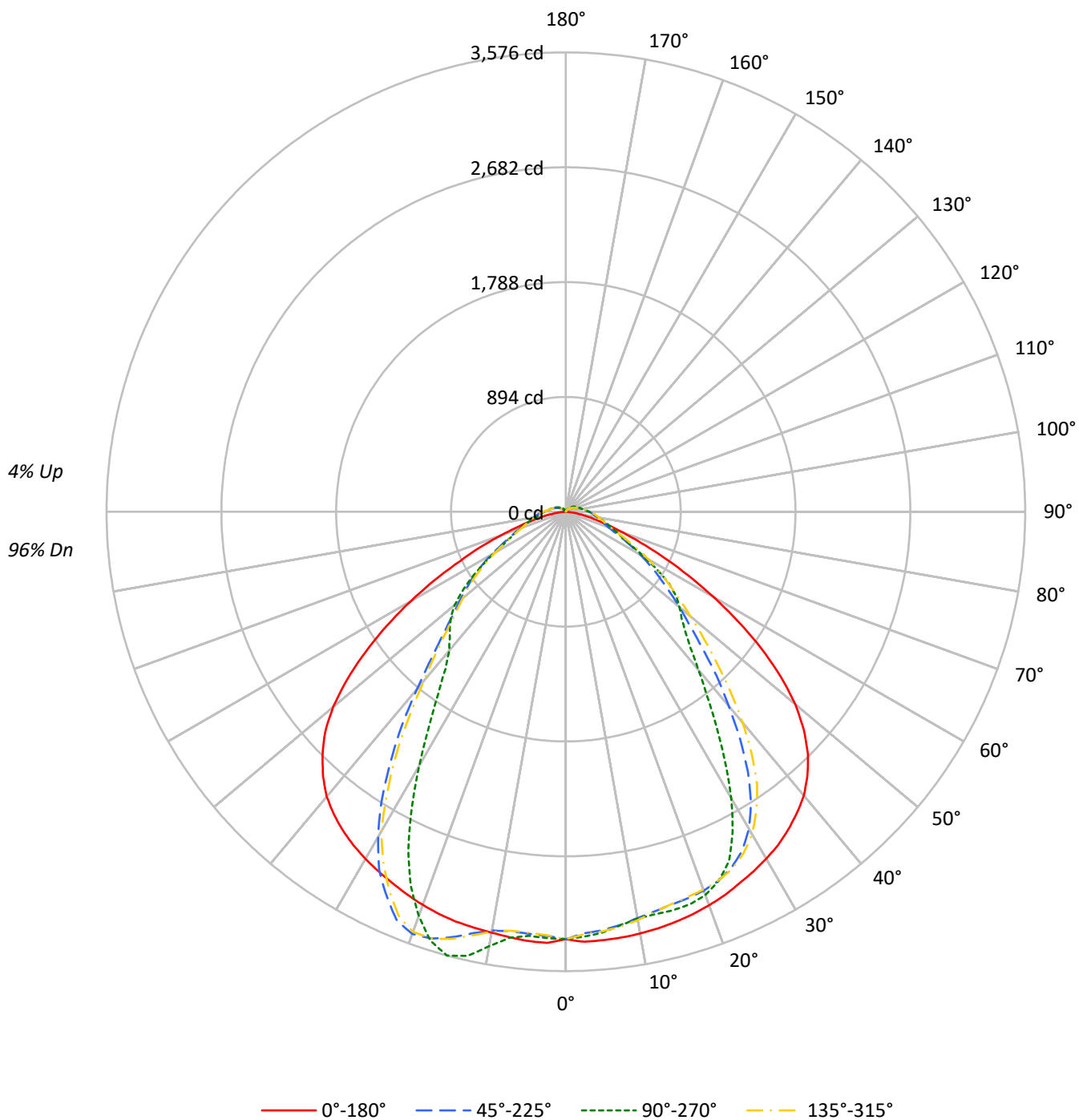
Lumens per Lamp: N/A
Luminaire Lumens: 7931.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 79
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°	26885	26885	26885	26885
5°	27080	25818	27136	26021
10°	27205	24745	27150	26424
15°	27416	24414	27402	27183
20°	27718	24026	27689	25327
25°	28059	22793	28045	22024
30°	28587	19755	28603	17502
35°	29148	15974	29230	13518
40°	29641	12862	29764	11331
45°	29537	10895	29689	10609
50°	28264	10031	28659	9807
55°	25076	9015	25702	8196
60°	20340	6901	21421	6328
65°	15119	5279	16290	5007
70°	10283	4557	11591	4357
75°	6728	4112	7832	3888
80°	4348	3834	5096	3526
85°	2227	3824	2938	3493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 180°

Vertical Angle: 45°

Luminance: 29689 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.0	4.0
10°-20°	940.2	11.9
20°-30°	1429.4	18.0
30°-40°	1533.4	19.3
40°-50°	1330.9	16.8
50°-60°	986.3	12.4
60°-70°	565.1	7.1
70°-80°	312.9	3.9
80°-90°	190.6	2.4
90°-100°	123.9	1.6
100°-110°	83.0	1.0
110°-120°	56.0	0.7
120°-130°	34.4	0.4
130°-140°	18.1	0.2
140°-150°	8.2	0.1
150°-160°	2.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2685.7	33.9
0°-40°	4219.1	53.2
0°-60°	6536.3	82.4
0°-90°	7604.9	95.9
90°-120°	262.9	3.3
90°-150°	323.6	4.1
90°-180°	326.0	4.1
0°-180°	7931.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3327	3327	3327	3327	3327	
5°	3348	3287	3354	3313	3348	319
15°	3304	3212	3303	3576	3304	935
25°	3193	3004	3191	2902	3193	1476
35°	3019	2045	3028	1730	3019	1890
45°	2665	1311	2679	1277	2665	2041
55°	1859	983	1906	894	1859	1649
65°	844	498	909	473	844	851
75°	241	316	280	299	241	275
85°	33	218	43	199	33	43
90°	0	182	3	168	0	1
95°	2	150	0	143	2	1
105°	2	112	2	106	2	2
115°	2	91	2	82	2	2
125°	2	69	2	57	2	2
135°	2	43	2	36	2	1
145°	2	26	3	21	2	1
155°	3	12	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°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3350.9	3342.3	3338.9	3332.0	3337.2	3357.8	3344.0	3321.7	3323.4	3283.9	3304.5
5°	3347.5	3337.2	3332.0	3325.1	3328.6	3347.5	3333.7	3311.4	3309.7	3270.1	3289.0
7.5°	3342.3	3332.0	3323.4	3318.3	3320.0	3335.4	3318.3	3292.5	3287.3	3244.4	3261.6
10°	3333.7	3326.9	3314.8	3306.2	3304.5	3321.7	3294.2	3268.4	3256.4	3211.7	3228.9
12.5°	3321.7	3311.4	3299.4	3283.9	3282.2	3292.5	3270.1	3234.1	3222.0	3185.9	3204.8
15°	3304.5	3292.5	3278.7	3261.6	3253.0	3259.8	3232.3	3199.7	3198.0	3167.0	3192.8
17.5°	3285.6	3268.4	3253.0	3228.9	3216.9	3222.0	3199.7	3170.5	3173.9	3155.0	3184.2
20°	3259.8	3240.9	3216.9	3192.8	3175.6	3184.2	3168.8	3146.4	3151.6	3137.8	3163.6
22.5°	3230.6	3204.8	3175.6	3148.1	3134.4	3146.4	3134.4	3115.5	3117.2	3108.6	3124.1
25°	3192.8	3163.6	3129.2	3094.9	3088.0	3096.6	3089.7	3074.2	3067.4	3053.6	3060.5
27.5°	3158.4	3125.8	3082.8	3046.8	3034.7	3051.9	3036.4	3010.7	2991.8	2972.9	2959.1
30°	3118.9	3079.4	3031.3	2990.0	2979.7	2986.6	2964.3	2924.7	2874.9	2850.9	2813.0
32.5°	3076.0	3024.4	2964.3	2917.9	2911.0	2905.8	2864.6	2807.9	2730.6	2682.4	2624.0
35°	3019.3	2962.5	2890.4	2833.7	2823.4	2794.1	2727.1	2651.5	2551.8	2469.4	2369.7
37.5°	2955.7	2888.7	2813.0	2737.4	2708.2	2649.8	2555.3	2476.2	2325.0	2225.3	2105.1
40°	2883.5	2802.7	2709.9	2618.9	2570.8	2476.2	2368.0	2251.1	2105.1	1971.0	1869.6
42.5°	2783.8	2697.9	2587.9	2486.5	2404.1	2278.6	2151.5	1986.5	1852.5	1739.0	1635.9
45°	2665.3	2562.2	2435.0	2313.0	2208.2	2058.7	1909.2	1744.2	1632.5	1500.2	1429.7
47.5°	2512.3	2400.6	2264.9	2129.1	1991.6	1826.7	1670.3	1512.2	1400.5	1306.0	1254.4
50°	2331.9	2228.8	2079.3	1917.8	1766.5	1594.7	1438.3	1319.7	1211.5	1153.1	1113.5
52.5°	2108.5	2012.3	1859.3	1684.0	1538.0	1369.6	1226.9	1130.7	1053.4	1010.4	996.7
55°	1859.3	1775.1	1623.9	1460.7	1311.2	1156.5	1048.2	964.0	914.2	888.4	890.1
57.5°	1593.0	1527.7	1385.0	1239.0	1098.1	981.2	883.3	816.2	778.4	776.7	781.9
60°	1326.6	1278.5	1154.8	1029.3	905.6	811.1	738.9	692.5	668.5	670.2	668.5
62.5°	1072.3	1027.6	938.3	835.2	737.2	673.6	608.3	589.4	568.8	567.1	567.1
65°	843.7	809.4	737.2	663.3	589.4	548.2	515.5	493.2	477.7	474.3	476.0
67.5°	634.1	620.3	570.5	520.7	474.3	448.5	421.0	415.9	403.8	403.8	407.3
70°	472.6	462.3	434.8	405.5	386.6	369.5	355.7	355.7	354.0	352.3	360.9
72.5°	342.0	343.7	335.1	312.8	311.0	307.6	304.2	309.3	311.0	316.2	326.5
75°	240.6	245.7	245.7	242.3	249.2	257.8	262.9	271.5	281.8	288.7	300.7
77.5°	170.1	170.1	178.7	189.0	202.8	218.2	232.0	244.0	257.8	266.4	276.7
80°	110.0	115.1	128.9	147.8	166.7	187.3	206.2	221.7	235.4	249.2	256.0
82.5°	65.3	73.9	91.1	115.1	139.2	165.0	183.9	202.8	218.2	232.0	237.1
85°	32.6	44.7	65.3	91.1	116.9	144.3	168.4	185.6	202.8	214.8	221.7
87.5°	10.3	24.1	46.4	70.5	97.9	125.4	151.2	170.1	185.6	195.9	202.8
90°	0.0	12.0	32.6	58.4	84.2	111.7	135.8	156.4	171.8	180.4	185.6
92.5°	0.0	6.9	25.8	48.1	72.2	99.7	123.7	142.6	156.4	165.0	168.4
95°	1.7	5.2	18.9	39.5	63.6	89.4	111.7	128.9	142.6	151.2	152.9
97.5°	1.7	3.4	15.5	32.6	55.0	79.0	101.4	118.6	128.9	137.5	139.2
100°	1.7	3.4	12.0	29.2	48.1	70.5	91.1	106.5	118.6	125.4	127.2
102.5°	1.7	1.7	10.3	24.1	43.0	61.9	80.8	96.2	106.5	113.4	116.9
105°	1.7	1.7	8.6	20.6	37.8	55.0	72.2	87.6	96.2	103.1	106.5
107.5°	1.7	1.7	6.9	17.2	32.6	48.1	65.3	77.3	87.6	94.5	97.9
110°	1.7	1.7	5.2	15.5	27.5	43.0	56.7	68.7	79.0	85.9	89.4

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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	13.7	24.1	37.8	49.8	61.9	70.5	77.3	82.5
115°	1.7	1.7	5.2	12.0	22.3	32.6	44.7	55.0	63.6	70.5	75.6
117.5°	1.7	1.7	5.2	10.3	18.9	29.2	39.5	49.8	56.7	63.6	68.7
120°	1.7	1.7	3.4	8.6	17.2	25.8	34.4	43.0	51.6	58.4	63.6
122.5°	1.7	1.7	3.4	8.6	13.7	22.3	30.9	37.8	46.4	51.6	56.7
125°	1.7	1.7	3.4	6.9	12.0	20.6	27.5	34.4	39.5	46.4	51.6
127.5°	1.7	1.7	3.4	6.9	10.3	17.2	24.1	30.9	36.1	41.2	44.7
130°	1.7	1.7	3.4	5.2	8.6	13.7	20.6	25.8	32.6	36.1	39.5
132.5°	1.7	1.7	1.7	5.2	6.9	10.3	15.5	22.3	27.5	32.6	34.4
135°	1.7	1.7	1.7	3.4	6.9	8.6	12.0	17.2	22.3	27.5	30.9
137.5°	1.7	1.7	1.7	3.4	5.2	8.6	10.3	13.7	18.9	22.3	27.5
140°	1.7	1.7	1.7	3.4	5.2	6.9	8.6	12.0	15.5	18.9	22.3
142.5°	1.7	1.7	1.7	3.4	3.4	5.2	6.9	10.3	12.0	15.5	18.9
145°	1.7	1.7	1.7	3.4	3.4	5.2	6.9	8.6	10.3	12.0	15.5
147.5°	1.7	1.7	1.7	3.4	3.4	3.4	5.2	6.9	8.6	10.3	12.0
150°	3.4	3.4	3.4	3.4	3.4	3.4	5.2	5.2	6.9	8.6	10.3
152.5°	3.4	3.4	3.4	3.4	3.4	3.4	5.2	5.2	5.2	6.9	8.6
155°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	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°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3297.6	3301.1	3321.7	3320.0	3316.5	3313.1	3313.1	3309.7	3313.1	3321.7	3318.3
5°	3280.5	3285.6	3301.1	3299.4	3295.9	3294.2	3292.5	3287.3	3290.8	3302.8	3299.4
7.5°	3249.5	3254.7	3268.4	3261.6	3256.4	3259.8	3251.2	3246.1	3253.0	3265.0	3263.3
10°	3216.9	3220.3	3237.5	3234.1	3225.5	3227.2	3218.6	3215.2	3223.7	3230.6	3232.3
12.5°	3194.5	3206.6	3222.0	3220.3	3218.6	3220.3	3211.7	3208.3	3213.4	3220.3	3218.6
15°	3189.4	3204.8	3222.0	3222.0	3223.7	3225.5	3216.9	3211.7	3216.9	3222.0	3220.3
17.5°	3184.2	3203.1	3218.6	3216.9	3218.6	3222.0	3208.3	3204.8	3211.7	3218.6	3215.2
20°	3167.0	3184.2	3194.5	3191.1	3191.1	3192.8	3175.6	3175.6	3185.9	3191.1	3192.8
22.5°	3118.9	3139.5	3139.5	3131.0	3131.0	3124.1	3118.9	3108.6	3120.6	3129.2	3136.1
25°	3046.8	3055.3	3045.0	3026.1	3015.8	3007.2	2983.2	3003.8	3003.8	3029.6	3038.2
27.5°	2945.4	2926.5	2897.2	2857.7	2849.1	2821.6	2806.2	2811.3	2819.9	2856.0	2883.5
30°	2778.7	2722.0	2672.1	2655.0	2617.1	2589.7	2562.2	2575.9	2591.4	2612.0	2668.7
32.5°	2558.7	2503.7	2423.0	2393.8	2354.2	2319.9	2287.2	2307.8	2335.3	2349.1	2410.9
35°	2306.1	2240.8	2166.9	2117.1	2075.8	2056.9	2015.7	2044.9	2074.1	2084.4	2137.7
37.5°	2038.0	1971.0	1905.7	1862.8	1823.2	1811.2	1783.7	1804.3	1826.7	1842.1	1886.8
40°	1783.7	1721.9	1672.0	1642.8	1615.3	1605.0	1594.7	1603.3	1620.5	1632.5	1666.9
42.5°	1565.5	1515.6	1481.3	1464.1	1445.2	1431.4	1433.2	1436.6	1445.2	1471.0	1486.4
45°	1374.7	1345.5	1323.2	1319.7	1307.7	1306.0	1304.3	1311.2	1316.3	1331.8	1343.8
47.5°	1221.8	1209.8	1204.6	1211.5	1216.6	1209.8	1213.2	1221.8	1232.1	1232.1	1230.4
50°	1101.5	1104.9	1111.8	1127.3	1137.6	1141.0	1144.5	1154.8	1156.5	1159.9	1154.8
52.5°	1003.6	1007.0	1025.9	1050.0	1062.0	1067.1	1074.0	1084.3	1084.3	1087.8	1080.9
55°	903.9	909.0	927.9	952.0	962.3	969.2	976.1	982.9	988.1	995.0	989.8
57.5°	793.9	809.4	821.4	828.3	835.2	840.3	845.5	847.2	857.5	859.2	867.8
60°	677.1	680.5	692.5	690.8	685.6	699.4	692.5	704.6	716.6	732.0	733.8
62.5°	565.4	567.1	575.7	572.2	579.1	577.4	582.5	582.5	591.1	598.0	606.6
65°	477.7	479.4	486.3	486.3	484.6	489.7	494.9	498.3	498.3	503.5	510.4
67.5°	412.4	417.6	424.4	427.9	431.3	431.3	436.5	438.2	441.6	443.4	446.8
70°	367.7	374.6	381.5	384.9	386.6	390.1	391.8	391.8	395.2	397.0	400.4
72.5°	335.1	342.0	347.1	347.1	350.6	352.3	352.3	354.0	355.7	359.1	362.6
75°	307.6	312.8	316.2	314.5	314.5	314.5	316.2	316.2	319.6	323.1	326.5
77.5°	281.8	287.0	287.0	283.5	283.5	283.5	283.5	285.3	287.0	290.4	293.8
80°	262.9	262.9	261.2	261.2	257.8	256.0	256.0	257.8	257.8	261.2	266.4
82.5°	242.3	242.3	240.6	238.9	237.1	235.4	235.4	237.1	238.9	240.6	244.0
85°	223.4	223.4	220.0	220.0	218.2	218.2	218.2	218.2	220.0	221.7	225.1
87.5°	204.5	202.8	201.1	199.3	199.3	199.3	199.3	199.3	201.1	204.5	206.2
90°	185.6	183.9	182.2	182.2	180.4	180.4	182.2	182.2	183.9	185.6	187.3
92.5°	168.4	166.7	165.0	165.0	163.2	163.2	165.0	163.2	166.7	166.7	168.4
95°	152.9	151.2	149.5	149.5	149.5	149.5	149.5	149.5	151.2	151.2	152.9
97.5°	139.2	137.5	135.8	135.8	137.5	135.8	137.5	137.5	137.5	139.2	140.9
100°	127.2	125.4	125.4	127.2	125.4	125.4	127.2	127.2	127.2	127.2	128.9
102.5°	116.9	116.9	116.9	116.9	116.9	116.9	118.6	118.6	118.6	118.6	120.3
105°	106.5	108.3	108.3	108.3	110.0	110.0	110.0	111.7	111.7	111.7	111.7
107.5°	99.7	101.4	101.4	103.1	103.1	104.8	104.8	104.8	104.8	106.5	106.5
110°	92.8	94.5	96.2	97.9	97.9	99.7	99.7	99.7	99.7	99.7	99.7

TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	85.9	87.6	89.4	92.8	94.5	94.5	94.5	94.5	96.2	96.2	94.5
115°	79.0	82.5	84.2	87.6	89.4	89.4	91.1	91.1	91.1	91.1	89.4
117.5°	72.2	77.3	79.0	82.5	84.2	84.2	85.9	85.9	85.9	85.9	84.2
120°	67.0	70.5	73.9	75.6	77.3	79.0	79.0	80.8	80.8	80.8	79.0
122.5°	61.9	65.3	68.7	70.5	72.2	73.9	73.9	73.9	73.9	73.9	73.9
125°	55.0	58.4	61.9	63.6	65.3	67.0	67.0	68.7	68.7	68.7	67.0
127.5°	49.8	53.3	55.0	58.4	60.1	60.1	61.9	61.9	61.9	61.9	60.1
130°	43.0	46.4	49.8	51.6	53.3	53.3	55.0	55.0	55.0	55.0	55.0
132.5°	37.8	41.2	43.0	46.4	46.4	48.1	48.1	49.8	49.8	49.8	48.1
135°	34.4	36.1	37.8	41.2	41.2	43.0	43.0	43.0	43.0	43.0	43.0
137.5°	30.9	32.6	34.4	36.1	36.1	37.8	37.8	37.8	37.8	39.5	37.8
140°	25.8	29.2	30.9	30.9	32.6	32.6	32.6	34.4	34.4	34.4	32.6
142.5°	22.3	24.1	25.8	27.5	29.2	29.2	29.2	29.2	30.9	29.2	29.2
145°	17.2	20.6	22.3	24.1	25.8	25.8	25.8	25.8	25.8	25.8	25.8
147.5°	13.7	15.5	18.9	20.6	20.6	22.3	22.3	22.3	22.3	22.3	22.3
150°	12.0	12.0	15.5	17.2	18.9	18.9	18.9	18.9	18.9	18.9	18.9
152.5°	8.6	10.3	12.0	13.7	15.5	15.5	15.5	15.5	15.5	15.5	15.5
155°	8.6	8.6	10.3	10.3	12.0	12.0	12.0	12.0	13.7	12.0	12.0
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: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3313.1	3311.4	3318.3	3311.4	3277.0	3290.8	3285.6	3304.5	3306.2	3311.4	3328.6
5°	3295.9	3295.9	3304.5	3297.6	3265.0	3278.7	3277.0	3295.9	3299.4	3302.8	3321.7
7.5°	3261.6	3263.3	3275.3	3270.1	3235.8	3256.4	3254.7	3277.0	3283.9	3290.8	3308.0
10°	3228.9	3227.2	3240.9	3235.8	3203.1	3227.2	3225.5	3247.8	3258.1	3270.1	3290.8
12.5°	3211.7	3206.6	3211.7	3206.6	3170.5	3189.4	3191.1	3216.9	3228.9	3244.4	3268.4
15°	3211.7	3203.1	3203.1	3192.8	3151.6	3163.6	3165.3	3182.5	3198.0	3213.4	3242.7
17.5°	3208.3	3199.7	3198.0	3189.4	3144.7	3144.7	3143.0	3155.0	3163.6	3179.1	3210.0
20°	3189.4	3185.9	3184.2	3179.1	3137.8	3131.0	3127.5	3127.5	3132.7	3137.8	3168.8
22.5°	3139.5	3143.0	3146.4	3149.9	3117.2	3105.2	3106.9	3103.5	3098.3	3098.3	3124.1
25°	3046.8	3063.9	3077.7	3093.1	3074.2	3065.7	3076.0	3070.8	3062.2	3055.3	3077.7
27.5°	2899.0	2935.1	2964.3	3002.1	3003.8	2996.9	3024.4	3021.0	3019.3	3008.9	3026.1
30°	2694.5	2751.2	2790.7	2845.7	2892.1	2899.0	2945.4	2952.2	2959.1	2954.0	2971.1
32.5°	2447.0	2524.4	2591.4	2677.3	2722.0	2761.5	2826.8	2854.3	2881.8	2890.4	2909.3
35°	2177.2	2264.9	2343.9	2438.4	2508.9	2594.8	2673.9	2715.1	2777.0	2801.0	2828.5
37.5°	1921.2	2003.7	2081.0	2175.5	2288.9	2378.3	2476.2	2569.0	2653.2	2687.6	2728.8
40°	1694.4	1761.4	1835.3	1917.8	2020.9	2137.7	2244.3	2373.1	2472.8	2541.5	2601.7
42.5°	1522.5	1555.2	1618.7	1692.6	1775.1	1893.7	2002.0	2146.3	2266.6	2364.5	2464.2
45°	1369.6	1385.0	1431.4	1471.0	1555.2	1660.0	1775.1	1916.0	2041.5	2166.9	2287.2
47.5°	1239.0	1257.9	1280.2	1304.3	1364.4	1452.1	1551.7	1678.9	1804.3	1950.4	2087.9
50°	1151.3	1156.5	1159.9	1170.2	1206.3	1266.5	1347.2	1455.5	1575.8	1732.2	1878.2
52.5°	1074.0	1074.0	1063.7	1058.5	1072.3	1110.1	1156.5	1233.8	1357.5	1501.9	1656.6
55°	991.5	976.1	972.6	955.4	958.9	976.1	998.4	1058.5	1159.9	1283.7	1433.2
57.5°	876.4	869.5	869.5	862.6	848.9	857.5	862.6	905.6	977.8	1084.3	1214.9
60°	744.1	740.6	749.2	750.9	738.9	744.1	742.4	768.1	819.7	905.6	1013.9
62.5°	611.8	627.2	628.9	635.8	628.9	627.2	635.8	658.2	683.9	749.2	833.4
65°	513.8	522.4	524.1	532.7	529.3	529.3	536.1	553.3	568.8	613.5	678.8
67.5°	450.2	446.8	448.5	453.7	448.5	446.8	451.9	462.3	474.3	501.8	548.2
70°	400.4	397.0	397.0	397.0	390.1	384.9	386.6	390.1	395.2	410.7	439.9
72.5°	362.6	362.6	357.4	352.3	347.1	343.7	340.2	336.8	335.1	340.2	355.7
75°	328.2	329.9	328.2	323.1	316.2	309.3	302.4	295.6	287.0	283.5	285.3
77.5°	297.3	299.0	300.7	299.0	292.1	283.5	273.2	262.9	250.9	238.9	232.0
80°	269.8	273.2	274.9	273.2	268.1	261.2	249.2	237.1	220.0	204.5	187.3
82.5°	245.7	250.9	252.6	252.6	249.2	242.3	228.5	214.8	195.9	175.3	152.9
85°	226.8	230.3	233.7	233.7	232.0	225.1	211.4	195.9	177.0	152.9	128.9
87.5°	207.9	209.6	213.1	216.5	213.1	206.2	194.2	177.0	158.1	134.0	106.5
90°	189.0	190.7	194.2	197.6	195.9	189.0	178.7	163.2	142.6	116.9	89.4
92.5°	170.1	173.6	175.3	177.0	178.7	173.6	165.0	149.5	128.9	103.1	77.3
95°	156.4	156.4	159.8	161.5	163.2	158.1	151.2	135.8	116.9	92.8	67.0
97.5°	142.6	142.6	146.1	146.1	147.8	144.3	137.5	123.7	104.8	82.5	56.7
100°	128.9	130.6	132.3	134.0	134.0	132.3	125.4	111.7	94.5	73.9	49.8
102.5°	120.3	120.3	122.0	122.0	123.7	120.3	113.4	101.4	84.2	65.3	43.0
105°	111.7	111.7	113.4	113.4	111.7	108.3	101.4	91.1	75.6	56.7	37.8
107.5°	104.8	104.8	104.8	104.8	103.1	99.7	92.8	80.8	67.0	51.6	34.4
110°	99.7	97.9	97.9	96.2	94.5	89.4	82.5	72.2	60.1	44.7	29.2

TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	94.5	92.8	91.1	89.4	85.9	80.8	73.9	65.3	53.3	39.5	25.8
115°	89.4	87.6	85.9	82.5	79.0	73.9	67.0	58.4	46.4	34.4	22.3
117.5°	84.2	82.5	79.0	75.6	72.2	67.0	60.1	51.6	41.2	30.9	20.6
120°	77.3	75.6	73.9	70.5	67.0	60.1	53.3	46.4	36.1	27.5	17.2
122.5°	72.2	70.5	67.0	65.3	60.1	55.0	48.1	41.2	32.6	24.1	15.5
125°	65.3	63.6	61.9	58.4	55.0	48.1	43.0	36.1	29.2	20.6	12.0
127.5°	60.1	58.4	55.0	51.6	48.1	43.0	37.8	32.6	25.8	17.2	12.0
130°	53.3	51.6	49.8	46.4	43.0	37.8	34.4	27.5	22.3	15.5	10.3
132.5°	46.4	46.4	44.7	41.2	37.8	34.4	29.2	24.1	18.9	13.7	8.6
135°	43.0	41.2	39.5	36.1	34.4	29.2	25.8	20.6	15.5	12.0	6.9
137.5°	37.8	36.1	34.4	32.6	29.2	25.8	22.3	17.2	13.7	10.3	6.9
140°	32.6	30.9	30.9	27.5	25.8	22.3	18.9	15.5	12.0	8.6	5.2
142.5°	29.2	27.5	25.8	24.1	22.3	18.9	15.5	12.0	10.3	6.9	5.2
145°	25.8	24.1	22.3	20.6	18.9	15.5	13.7	10.3	8.6	6.9	5.2
147.5°	20.6	20.6	18.9	17.2	15.5	13.7	12.0	10.3	6.9	5.2	3.4
150°	17.2	17.2	15.5	13.7	13.7	12.0	10.3	8.6	6.9	5.2	3.4
152.5°	15.5	13.7	13.7	12.0	12.0	10.3	8.6	6.9	5.2	5.2	3.4
155°	12.0	12.0	12.0	10.3	10.3	8.6	6.9	6.9	5.2	3.4	3.4
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: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3332.0	3311.4	3328.6	3359.5	3356.1	3352.6	3349.2	3356.1	3378.4	3366.4	3347.5
5°	3326.9	3306.2	3325.1	3354.3	3352.6	3347.5	3344.0	3350.9	3373.3	3361.2	3340.6
7.5°	3316.5	3297.6	3311.4	3340.6	3340.6	3337.2	3333.7	3340.6	3361.2	3350.9	3330.3
10°	3299.4	3285.6	3299.4	3326.9	3328.6	3321.7	3318.3	3326.9	3347.5	3342.3	3325.1
12.5°	3285.6	3271.9	3287.3	3314.8	3316.5	3309.7	3304.5	3314.8	3342.3	3345.8	3340.6
15°	3266.7	3254.7	3273.6	3302.8	3302.8	3297.6	3297.6	3311.4	3349.2	3364.7	3373.3
17.5°	3239.2	3230.6	3253.0	3282.2	3283.9	3280.5	3282.2	3309.7	3359.5	3397.3	3421.4
20°	3204.8	3201.4	3225.5	3256.4	3261.6	3263.3	3271.9	3313.1	3381.8	3433.4	3457.5
22.5°	3163.6	3165.3	3192.8	3225.5	3232.3	3237.5	3254.7	3313.1	3399.0	3454.0	3464.3
25°	3117.2	3122.4	3151.6	3191.1	3199.7	3210.0	3239.2	3314.8	3404.2	3440.3	3423.1
27.5°	3067.4	3077.7	3115.5	3156.7	3167.0	3184.2	3222.0	3304.5	3380.1	3381.8	3318.3
30°	3015.8	3027.8	3072.5	3120.6	3137.8	3155.0	3201.4	3280.5	3321.7	3266.7	3155.0
32.5°	2957.4	2974.6	3019.3	3077.7	3098.3	3120.6	3167.0	3234.1	3218.6	3100.0	2940.2
35°	2883.5	2907.6	2959.1	3027.8	3046.8	3076.0	3108.6	3124.1	3055.3	2886.9	2706.5
37.5°	2792.4	2828.5	2888.7	2967.7	2988.3	3007.2	3015.8	2972.9	2835.4	2653.2	2465.9
40°	2687.6	2742.6	2807.9	2895.5	2916.2	2916.2	2885.2	2794.1	2620.6	2381.7	2173.8
42.5°	2560.4	2627.5	2709.9	2797.6	2818.2	2794.1	2720.3	2560.4	2362.8	2096.5	1876.5
45°	2405.8	2495.1	2587.9	2679.0	2689.3	2636.1	2503.7	2301.0	2056.9	1809.5	1599.8
47.5°	2221.9	2338.8	2440.2	2543.3	2529.5	2440.2	2263.2	2032.9	1775.1	1541.4	1373.0
50°	2015.7	2153.2	2266.6	2364.5	2335.3	2211.6	2003.7	1763.1	1507.1	1307.7	1168.5
52.5°	1795.7	1953.8	2067.3	2146.3	2106.8	1959.0	1730.4	1500.2	1290.5	1108.4	1015.6
55°	1567.2	1727.0	1843.9	1905.7	1854.2	1694.4	1469.2	1259.6	1062.0	943.4	888.4
57.5°	1345.5	1495.0	1605.0	1654.8	1589.5	1429.7	1221.8	1044.8	902.2	802.5	775.0
60°	1132.4	1254.4	1359.3	1397.1	1326.6	1178.8	1000.1	859.2	754.4	685.6	671.9
62.5°	934.8	1034.5	1117.0	1146.2	1077.4	962.3	807.7	702.8	628.9	594.6	577.4
65°	771.6	830.0	914.2	909.0	867.8	761.3	647.8	574.0	525.8	503.5	493.2
67.5°	606.6	659.9	713.1	720.0	668.5	594.6	520.7	467.4	441.6	429.6	424.4
70°	469.1	508.7	541.3	532.7	505.2	458.8	412.4	383.2	372.9	367.7	367.7
72.5°	364.3	384.9	400.4	390.1	372.9	348.8	326.5	314.5	316.2	319.6	323.1
75°	281.8	287.0	290.4	280.1	276.7	261.2	259.5	261.2	271.5	281.8	287.0
77.5°	216.5	209.6	204.5	194.2	195.9	194.2	202.8	216.5	232.0	247.5	261.2
80°	166.7	151.2	139.2	128.9	134.0	142.6	159.8	180.4	201.1	218.2	235.4
82.5°	128.9	106.5	89.4	79.0	89.4	103.1	125.4	151.2	175.3	194.2	213.1
85°	99.7	73.9	53.3	43.0	53.3	73.9	97.9	127.2	152.9	173.6	192.5
87.5°	77.3	53.3	29.2	17.2	29.2	51.6	79.0	106.5	132.3	156.4	175.3
90°	61.9	36.1	13.7	3.4	15.5	36.1	61.9	89.4	115.1	140.9	159.8
92.5°	49.8	25.8	6.9	0.0	8.6	27.5	51.6	77.3	103.1	127.2	146.1
95°	41.2	20.6	5.2	0.0	6.9	20.6	41.2	67.0	91.1	115.1	130.6
97.5°	34.4	15.5	3.4	0.0	3.4	17.2	34.4	56.7	80.8	103.1	118.6
100°	29.2	13.7	3.4	0.0	3.4	13.7	29.2	49.8	70.5	91.1	106.5
102.5°	24.1	10.3	1.7	1.7	1.7	10.3	25.8	43.0	61.9	80.8	96.2
105°	22.3	8.6	1.7	1.7	1.7	8.6	22.3	37.8	55.0	72.2	85.9
107.5°	18.9	6.9	1.7	1.7	1.7	6.9	18.9	32.6	49.8	65.3	77.3
110°	15.5	6.9	1.7	1.7	1.7	6.9	15.5	29.2	43.0	56.7	68.7

TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	13.7	5.2	1.7	1.7	1.7	5.2	13.7	25.8	37.8	51.6	61.9
115°	12.0	5.2	1.7	1.7	1.7	5.2	12.0	22.3	32.6	44.7	55.0
117.5°	10.3	5.2	1.7	1.7	1.7	3.4	10.3	18.9	29.2	39.5	49.8
120°	8.6	3.4	1.7	1.7	1.7	3.4	8.6	17.2	25.8	34.4	43.0
122.5°	8.6	3.4	1.7	1.7	1.7	3.4	6.9	13.7	22.3	29.2	37.8
125°	6.9	3.4	1.7	1.7	1.7	1.7	6.9	12.0	18.9	25.8	32.6
127.5°	6.9	3.4	1.7	1.7	1.7	1.7	5.2	10.3	15.5	22.3	29.2
130°	5.2	3.4	1.7	1.7	1.7	1.7	3.4	8.6	13.7	18.9	24.1
132.5°	5.2	3.4	1.7	1.7	1.7	1.7	3.4	6.9	10.3	15.5	20.6
135°	5.2	1.7	1.7	1.7	1.7	1.7	1.7	5.2	8.6	12.0	15.5
137.5°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	3.4	6.9	8.6	13.7
140°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	3.4	5.2	6.9	10.3
142.5°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4	5.2	8.6
145°	3.4	1.7	1.7	3.4	3.4	1.7	1.7	3.4	3.4	5.2	6.9
147.5°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4	3.4	5.2
150°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	5.2
152.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
155°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3344.0	3304.5	3325.1	3318.3	3325.1	3342.3	3340.6	3335.4	3338.9	3330.3	3321.7
5°	3337.2	3297.6	3318.3	3309.7	3318.3	3335.4	3332.0	3326.9	3332.0	3321.7	3313.1
7.5°	3328.6	3292.5	3316.5	3314.8	3330.3	3352.6	3354.3	3354.3	3366.4	3350.9	3344.0
10°	3328.6	3309.7	3342.3	3354.3	3393.9	3423.1	3426.5	3433.4	3454.0	3450.6	3433.4
12.5°	3364.7	3361.2	3409.3	3438.6	3474.6	3515.9	3538.2	3545.1	3558.8	3548.5	3541.7
15°	3411.1	3428.2	3481.5	3514.2	3553.7	3584.6	3589.8	3593.2	3603.5	3588.1	3576.0
17.5°	3472.9	3483.2	3526.2	3539.9	3565.7	3570.9	3564.0	3546.8	3546.8	3512.4	3502.1
20°	3502.1	3497.0	3514.2	3491.8	3481.5	3450.6	3421.4	3388.7	3387.0	3350.9	3347.5
22.5°	3476.4	3442.0	3405.9	3350.9	3326.9	3282.2	3242.7	3223.7	3211.7	3165.3	3153.3
25°	3385.3	3301.1	3247.8	3182.5	3124.1	3072.5	3034.7	2995.2	2957.4	2919.6	2902.4
27.5°	3227.2	3148.1	3062.2	2971.1	2890.4	2811.3	2747.7	2708.2	2672.1	2622.3	2596.5
30°	3033.0	2923.0	2828.5	2740.9	2608.6	2512.3	2459.1	2380.0	2352.5	2330.2	2282.1
32.5°	2804.5	2672.1	2543.3	2424.7	2288.9	2199.6	2129.1	2070.7	2053.5	1995.1	1981.3
35°	2551.8	2378.3	2232.2	2115.4	2017.4	1909.2	1850.7	1811.2	1776.8	1737.3	1730.4
37.5°	2254.6	2098.2	1933.2	1830.1	1752.8	1660.0	1615.3	1587.8	1572.4	1543.1	1538.0
40°	1955.6	1799.2	1685.8	1582.7	1534.5	1484.7	1452.1	1440.0	1433.2	1422.8	1412.5
42.5°	1684.0	1546.6	1465.8	1397.1	1376.5	1352.4	1343.8	1350.7	1343.8	1340.4	1338.6
45°	1453.8	1349.0	1292.2	1271.6	1266.5	1259.6	1266.5	1278.5	1280.2	1276.8	1276.8
47.5°	1244.1	1194.3	1170.2	1173.7	1182.3	1187.4	1199.5	1214.9	1218.4	1209.8	1213.2
50°	1106.7	1077.4	1072.3	1086.0	1104.9	1111.8	1125.6	1137.6	1135.9	1132.4	1129.0
52.5°	977.8	969.2	982.9	996.7	1017.3	1020.7	1025.9	1031.0	1029.3	1022.5	1019.0
55°	869.5	876.4	888.4	893.6	909.0	907.3	909.0	909.0	902.2	898.7	893.6
57.5°	771.6	773.3	780.2	781.9	790.5	787.0	785.3	781.9	771.6	769.9	764.7
60°	671.9	668.5	683.9	671.9	678.8	671.9	670.2	661.6	651.3	649.6	646.1
62.5°	577.4	570.5	580.8	575.7	579.1	572.2	568.8	558.5	549.9	548.2	546.5
65°	493.2	489.7	500.1	498.3	501.8	493.2	489.7	482.9	476.0	474.3	472.6
67.5°	422.7	431.3	436.5	436.5	439.9	438.2	429.6	427.9	426.2	419.3	419.3
70°	371.2	376.3	386.6	388.4	386.6	390.1	383.2	381.5	379.8	376.3	374.6
72.5°	329.9	336.8	347.1	348.8	347.1	347.1	343.7	342.0	342.0	336.8	336.8
75°	297.3	305.9	314.5	314.5	314.5	311.0	307.6	307.6	304.2	302.4	299.0
77.5°	269.8	280.1	287.0	285.3	283.5	280.1	280.1	274.9	269.8	269.8	266.4
80°	249.2	256.0	261.2	259.5	257.8	252.6	250.9	245.7	242.3	237.1	237.1
82.5°	226.8	235.4	238.9	237.1	233.7	228.5	226.8	223.4	220.0	218.2	214.8
85°	207.9	216.5	218.2	214.8	211.4	207.9	206.2	204.5	202.8	199.3	199.3
87.5°	189.0	197.6	197.6	195.9	192.5	190.7	189.0	187.3	185.6	183.9	182.2
90°	173.6	180.4	180.4	178.7	177.0	175.3	173.6	171.8	170.1	168.4	168.4
92.5°	158.1	165.0	165.0	163.2	161.5	159.8	159.8	158.1	156.4	154.7	152.9
95°	144.3	151.2	151.2	151.2	149.5	147.8	147.8	146.1	144.3	144.3	142.6
97.5°	130.6	137.5	137.5	137.5	135.8	134.0	134.0	132.3	132.3	132.3	130.6
100°	118.6	123.7	125.4	125.4	123.7	123.7	123.7	122.0	122.0	122.0	120.3
102.5°	106.5	111.7	115.1	115.1	115.1	113.4	113.4	113.4	113.4	113.4	111.7
105°	96.2	101.4	104.8	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5
107.5°	87.6	92.8	96.2	97.9	99.7	99.7	101.4	101.4	101.4	101.4	101.4
110°	79.0	84.2	89.4	91.1	92.8	94.5	94.5	96.2	94.5	94.5	94.5

TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	70.5	77.3	80.8	84.2	85.9	87.6	89.4	89.4	89.4	89.4	89.4
115°	63.6	70.5	73.9	77.3	80.8	82.5	82.5	84.2	84.2	84.2	82.5
117.5°	56.7	63.6	67.0	70.5	72.2	75.6	77.3	77.3	77.3	77.3	75.6
120°	51.6	56.7	60.1	63.6	67.0	68.7	70.5	70.5	70.5	70.5	70.5
122.5°	44.7	49.8	55.0	58.4	60.1	61.9	63.6	63.6	63.6	63.6	63.6
125°	39.5	44.7	48.1	51.6	53.3	56.7	56.7	56.7	56.7	56.7	56.7
127.5°	34.4	39.5	43.0	46.4	48.1	49.8	51.6	51.6	51.6	51.6	51.6
130°	29.2	34.4	37.8	41.2	43.0	44.7	44.7	46.4	46.4	46.4	46.4
132.5°	25.8	29.2	32.6	36.1	37.8	39.5	39.5	41.2	41.2	41.2	41.2
135°	20.6	25.8	27.5	30.9	32.6	34.4	34.4	36.1	36.1	36.1	36.1
137.5°	17.2	20.6	24.1	27.5	29.2	29.2	30.9	30.9	32.6	32.6	32.6
140°	13.7	15.5	20.6	22.3	24.1	25.8	27.5	27.5	27.5	27.5	27.5
142.5°	10.3	13.7	15.5	18.9	20.6	22.3	24.1	24.1	24.1	24.1	24.1
145°	8.6	10.3	12.0	15.5	17.2	18.9	20.6	20.6	20.6	20.6	20.6
147.5°	6.9	8.6	10.3	12.0	13.7	15.5	17.2	17.2	17.2	17.2	17.2
150°	5.2	6.9	8.6	8.6	10.3	12.0	13.7	15.5	15.5	15.5	15.5
152.5°	5.2	5.2	6.9	6.9	8.6	10.3	12.0	12.0	12.0	12.0	12.0
155°	3.4	5.2	5.2	5.2	6.9	6.9	8.6	10.3	10.3	10.3	10.3
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: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3326.9	3333.7	3330.3	3325.1	3323.4	3332.0	3323.4	3283.9	3299.4	3301.1	3313.1
5°	3321.7	3326.9	3323.4	3320.0	3314.8	3325.1	3314.8	3273.6	3289.0	3290.8	3302.8
7.5°	3356.1	3357.8	3357.8	3349.2	3335.4	3340.6	3326.9	3280.5	3289.0	3289.0	3297.6
10°	3442.0	3445.4	3450.6	3428.2	3411.1	3397.3	3378.4	3321.7	3320.0	3306.2	3306.2
12.5°	3553.7	3545.1	3536.5	3526.2	3512.4	3495.3	3467.8	3400.7	3378.4	3356.1	3333.7
15°	3586.3	3582.9	3581.2	3576.0	3567.4	3562.3	3541.7	3474.6	3442.0	3414.5	3375.0
17.5°	3500.4	3507.3	3529.6	3531.3	3541.7	3562.3	3558.8	3512.4	3483.2	3471.2	3423.1
20°	3345.8	3347.5	3375.0	3387.0	3431.7	3466.0	3491.8	3486.7	3479.8	3493.5	3457.5
22.5°	3160.2	3172.2	3201.4	3220.3	3263.3	3302.8	3344.0	3366.4	3402.5	3459.2	3452.3
25°	2907.6	2923.0	2964.3	2995.2	3055.3	3115.5	3170.5	3210.0	3253.0	3361.2	3397.3
27.5°	2605.1	2629.2	2682.4	2713.4	2797.6	2859.4	2938.5	3015.8	3076.0	3199.7	3273.6
30°	2287.2	2307.8	2364.5	2407.5	2479.7	2563.9	2663.5	2773.5	2873.2	2998.6	3091.4
32.5°	1989.9	2012.3	2058.7	2096.5	2177.2	2247.7	2357.7	2493.4	2586.2	2759.8	2883.5
35°	1730.4	1751.1	1783.7	1816.4	1883.4	1955.6	2050.1	2182.4	2301.0	2481.4	2637.8
37.5°	1548.3	1551.7	1570.6	1589.5	1639.4	1694.4	1768.3	1885.1	1995.1	2189.3	2361.1
40°	1417.7	1417.7	1428.0	1433.2	1455.5	1488.1	1534.5	1625.6	1716.7	1864.5	2074.1
42.5°	1336.9	1333.5	1333.5	1335.2	1333.5	1349.0	1376.5	1419.4	1500.2	1622.2	1785.4
45°	1276.8	1269.9	1264.8	1252.7	1245.9	1245.9	1247.6	1263.0	1309.4	1388.5	1520.8
47.5°	1209.8	1208.0	1199.5	1185.7	1173.7	1165.1	1151.3	1146.2	1159.9	1204.6	1294.0
50°	1132.4	1123.8	1115.3	1104.9	1091.2	1082.6	1056.8	1058.5	1046.5	1067.1	1113.5
52.5°	1019.0	1012.1	1008.7	1000.1	995.0	991.5	970.9	950.3	945.1	948.6	965.7
55°	893.6	897.0	883.3	890.1	888.4	873.0	864.4	848.9	843.7	842.0	850.6
57.5°	763.0	766.4	757.8	764.7	764.7	756.1	750.9	750.9	738.9	728.6	740.6
60°	644.4	637.5	642.7	651.3	651.3	646.1	642.7	642.7	634.1	630.7	639.3
62.5°	548.2	541.3	546.5	555.0	556.8	553.3	549.9	549.9	539.6	539.6	546.5
65°	474.3	476.0	474.3	481.2	481.2	482.9	479.4	476.0	464.0	469.1	467.4
67.5°	421.0	419.3	419.3	426.2	424.4	427.9	424.4	419.3	410.7	403.8	402.1
70°	376.3	374.6	374.6	378.1	379.8	379.8	378.1	374.6	362.6	355.7	350.6
72.5°	336.8	335.1	336.8	338.5	340.2	342.0	340.2	336.8	326.5	317.9	309.3
75°	300.7	299.0	304.2	304.2	305.9	305.9	307.6	305.9	297.3	287.0	276.7
77.5°	264.6	266.4	271.5	273.2	276.7	278.4	280.1	280.1	271.5	262.9	249.2
80°	235.4	238.9	242.3	244.0	247.5	252.6	254.3	256.0	249.2	240.6	225.1
82.5°	214.8	216.5	220.0	221.7	226.8	228.5	230.3	233.7	230.3	221.7	204.5
85°	197.6	199.3	202.8	202.8	206.2	209.6	211.4	213.1	211.4	202.8	185.6
87.5°	182.2	183.9	185.6	187.3	189.0	190.7	192.5	194.2	192.5	183.9	168.4
90°	168.4	168.4	170.1	170.1	171.8	173.6	177.0	177.0	175.3	168.4	152.9
92.5°	152.9	154.7	154.7	156.4	158.1	159.8	161.5	161.5	159.8	152.9	139.2
95°	142.6	142.6	144.3	144.3	146.1	146.1	147.8	147.8	146.1	139.2	125.4
97.5°	130.6	130.6	130.6	130.6	132.3	132.3	134.0	134.0	132.3	125.4	113.4
100°	120.3	120.3	120.3	120.3	120.3	122.0	122.0	122.0	120.3	113.4	101.4
102.5°	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	108.3	103.1	91.1
105°	106.5	106.5	106.5	104.8	104.8	104.8	103.1	103.1	97.9	92.8	82.5
107.5°	99.7	99.7	99.7	97.9	97.9	96.2	94.5	94.5	89.4	84.2	73.9
110°	94.5	94.5	94.5	92.8	91.1	89.4	87.6	85.9	80.8	73.9	65.3

TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	89.4	89.4	87.6	87.6	85.9	84.2	80.8	79.0	73.9	67.0	58.4
115°	82.5	82.5	82.5	80.8	79.0	77.3	75.6	72.2	67.0	60.1	51.6
117.5°	75.6	75.6	75.6	73.9	72.2	70.5	68.7	65.3	60.1	53.3	46.4
120°	68.7	68.7	68.7	67.0	65.3	63.6	61.9	58.4	53.3	48.1	39.5
122.5°	63.6	63.6	61.9	60.1	58.4	56.7	55.0	51.6	48.1	41.2	34.4
125°	56.7	56.7	55.0	55.0	53.3	51.6	49.8	46.4	41.2	36.1	30.9
127.5°	51.6	49.8	49.8	49.8	48.1	46.4	43.0	41.2	36.1	30.9	25.8
130°	44.7	44.7	44.7	43.0	43.0	41.2	37.8	34.4	30.9	27.5	22.3
132.5°	39.5	39.5	39.5	39.5	37.8	36.1	32.6	30.9	27.5	22.3	18.9
135°	36.1	36.1	34.4	34.4	32.6	30.9	29.2	25.8	22.3	18.9	15.5
137.5°	30.9	30.9	30.9	29.2	29.2	27.5	24.1	22.3	20.6	17.2	13.7
140°	27.5	27.5	25.8	25.8	24.1	24.1	22.3	18.9	17.2	13.7	12.0
142.5°	24.1	24.1	22.3	22.3	20.6	20.6	18.9	17.2	13.7	12.0	8.6
145°	20.6	20.6	18.9	18.9	18.9	17.2	15.5	13.7	12.0	10.3	8.6
147.5°	17.2	17.2	17.2	15.5	15.5	13.7	13.7	12.0	10.3	8.6	6.9
150°	15.5	15.5	13.7	13.7	13.7	12.0	10.3	10.3	8.6	6.9	5.2
152.5°	12.0	12.0	12.0	12.0	10.3	10.3	8.6	8.6	6.9	5.2	5.2
155°	10.3	10.3	10.3	8.6	8.6	8.6	6.9	6.9	5.2	5.2	3.4
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: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9	3326.9
2.5°	3308.0	3306.2	3321.7	3320.0	3299.4	3330.3	3350.9
5°	3299.4	3297.6	3311.4	3314.8	3292.5	3325.1	3347.5
7.5°	3292.5	3290.8	3306.2	3311.4	3289.0	3318.3	3342.3
10°	3294.2	3285.6	3299.4	3302.8	3282.2	3313.1	3333.7
12.5°	3306.2	3285.6	3290.8	3290.8	3271.9	3299.4	3321.7
15°	3335.4	3292.5	3285.6	3280.5	3256.4	3282.2	3304.5
17.5°	3368.1	3309.7	3285.6	3268.4	3239.2	3261.6	3285.6
20°	3400.7	3328.6	3289.0	3261.6	3222.0	3242.7	3259.8
22.5°	3416.2	3345.8	3292.5	3251.2	3201.4	3211.7	3230.6
25°	3395.6	3338.9	3285.6	3235.8	3175.6	3177.4	3192.8
27.5°	3320.0	3304.5	3270.1	3220.3	3155.0	3146.4	3158.4
30°	3191.1	3234.1	3235.8	3199.7	3131.0	3113.8	3118.9
32.5°	3010.7	3106.9	3163.6	3156.7	3096.6	3072.5	3076.0
35°	2802.7	2923.0	3046.8	3088.0	3045.0	3026.1	3019.3
37.5°	2553.6	2715.1	2880.1	2981.5	2974.6	2962.5	2955.7
40°	2278.6	2472.8	2668.7	2830.2	2880.1	2880.1	2883.5
42.5°	1984.8	2211.6	2426.4	2630.9	2747.7	2773.5	2783.8
45°	1701.2	1929.8	2163.5	2398.9	2555.3	2636.1	2665.3
47.5°	1443.5	1673.7	1895.4	2153.2	2361.1	2465.9	2512.3
50°	1223.5	1395.4	1629.1	1885.1	2111.9	2240.8	2331.9
52.5°	1041.4	1175.4	1379.9	1618.7	1847.3	2024.3	2108.5
55°	888.4	979.5	1153.1	1359.3	1577.5	1761.4	1859.3
57.5°	759.5	831.7	950.3	1122.1	1306.0	1488.1	1593.0
60°	646.1	696.0	776.7	912.5	1068.9	1225.2	1326.6
62.5°	548.2	580.8	634.1	733.8	855.8	977.8	1072.3
65°	472.6	486.3	515.5	577.4	670.2	763.0	843.7
67.5°	398.7	407.3	429.6	467.4	513.8	580.8	634.1
70°	343.7	343.7	345.4	367.7	391.8	434.8	472.6
72.5°	299.0	293.8	283.5	288.7	293.8	317.9	342.0
75°	262.9	250.9	233.7	226.8	223.4	226.8	240.6
77.5°	232.0	214.8	194.2	177.0	163.2	158.1	170.1
80°	206.2	185.6	161.5	139.2	116.9	104.8	110.0
82.5°	185.6	159.8	134.0	108.3	82.5	65.3	65.3
85°	163.2	139.2	111.7	84.2	58.4	36.1	32.6
87.5°	147.8	122.0	92.8	67.0	41.2	18.9	10.3
90°	132.3	106.5	79.0	53.3	29.2	8.6	0.0
92.5°	118.6	94.5	68.7	43.0	20.6	5.2	0.0
95°	106.5	84.2	58.4	36.1	17.2	3.4	1.7
97.5°	94.5	73.9	51.6	29.2	12.0	3.4	1.7
100°	85.9	65.3	44.7	24.1	10.3	1.7	1.7
102.5°	75.6	58.4	37.8	20.6	8.6	1.7	1.7
105°	67.0	51.6	32.6	17.2	6.9	1.7	1.7
107.5°	60.1	44.7	29.2	15.5	6.9	1.7	1.7
110°	53.3	39.5	25.8	13.7	5.2	1.7	1.7



TEST NUMBER: P1213897

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	48.1	34.4	22.3	12.0	3.4	1.7	1.7
115°	41.2	30.9	18.9	10.3	3.4	1.7	1.7
117.5°	36.1	25.8	17.2	8.6	3.4	1.7	1.7
120°	30.9	22.3	13.7	6.9	1.7	1.7	1.7
122.5°	27.5	18.9	12.0	6.9	1.7	1.7	1.7
125°	24.1	17.2	10.3	5.2	1.7	1.7	1.7
127.5°	20.6	13.7	8.6	3.4	1.7	1.7	1.7
130°	17.2	12.0	6.9	3.4	1.7	1.7	1.7
132.5°	13.7	10.3	6.9	3.4	1.7	1.7	1.7
135°	12.0	8.6	5.2	3.4	1.7	1.7	1.7
137.5°	10.3	6.9	3.4	3.4	3.4	1.7	1.7
140°	8.6	5.2	3.4	3.4	3.4	3.4	1.7
142.5°	6.9	5.2	3.4	3.4	3.4	3.4	1.7
145°	5.2	3.4	3.4	3.4	3.4	3.4	1.7
147.5°	5.2	3.4	3.4	3.4	3.4	3.4	1.7
150°	3.4	3.4	3.4	3.4	3.4	3.4	3.4
152.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4
155°	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)