

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-92HL-LC-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33518)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
CLEAR LENSED
Light Source: -
Ballast/Driver: -

Summary

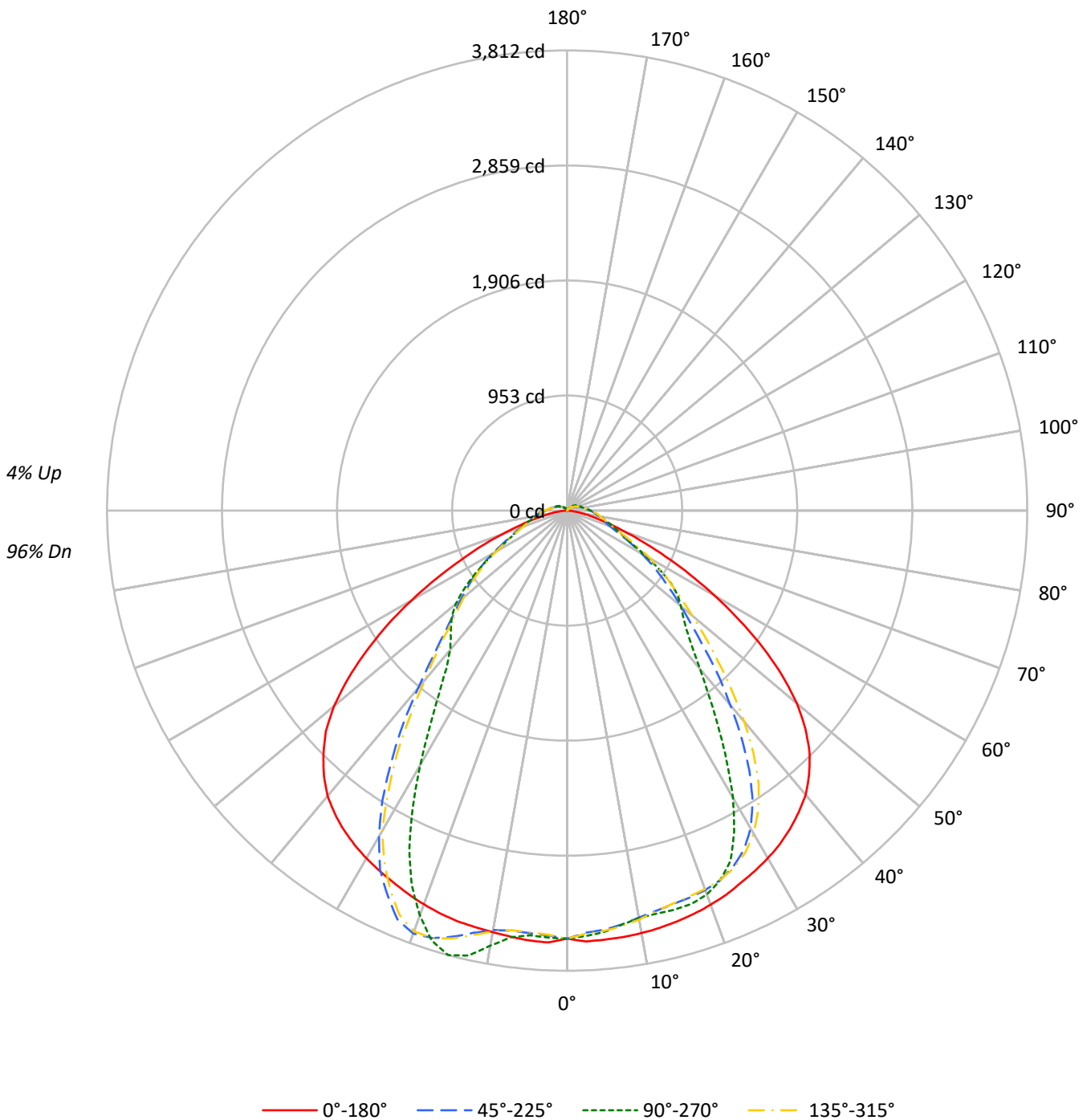
Lumens per Lamp: N/A
Luminaire Lumens: 8454.0 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 1.4 / 1.12 / 1.19
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 79
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
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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°	28657	28657	28657	28657
5°	28866	27521	28925	27737
10°	29000	26377	28940	28167
15°	29224	26024	29209	28975
20°	29546	25611	29515	26997
25°	29910	24297	29894	23476
30°	30473	21058	30489	18655
35°	31070	17028	31158	14410
40°	31596	13710	31728	12079
45°	31484	11613	31647	11309
50°	30128	10692	30550	10453
55°	26730	9610	27397	8736
60°	21681	7355	22833	6745
65°	16118	5627	17365	5336
70°	10960	4857	12355	4644
75°	7169	4383	8349	4145
80°	4633	4087	5432	3760
85°	2377	4076	3129	3724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.9	4.0
10°-20°	1002.2	11.9
20°-30°	1523.7	18.0
30°-40°	1634.6	19.3
40°-50°	1418.6	16.8
50°-60°	1051.3	12.4
60°-70°	602.4	7.1
70°-80°	333.6	3.9
80°-90°	203.1	2.4
90°-100°	132.1	1.6
100°-110°	88.5	1.0
110°-120°	59.7	0.7
120°-130°	36.6	0.4
130°-140°	19.3	0.2
140°-150°	8.8	0.1
150°-160°	2.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2862.8	33.9
0°-40°	4497.4	53.2
0°-60°	6967.3	82.4
0°-90°	8106.4	95.9
90°-120°	280.3	3.3
90°-150°	345.0	4.1
90°-180°	348.0	4.1
0°-180°	8454.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3546	3546	3546	3546	3546	
5°	3568	3504	3576	3532	3568	340
15°	3522	3424	3521	3812	3522	997
25°	3403	3202	3402	3094	3403	1573
35°	3218	2180	3228	1845	3218	2015
45°	2841	1398	2856	1361	2841	2175
55°	1982	1048	2031	952	1982	1758
65°	899	531	969	504	899	907
75°	256	337	299	319	256	293
85°	35	233	46	212	35	46
90°	0	194	4	180	0	2
95°	2	159	0	152	2	1
105°	2	119	2	114	2	2
115°	2	97	2	88	2	2
125°	2	73	2	60	2	2
135°	2	46	2	38	2	1
145°	2	28	4	22	2	1
155°	4	13	4	11	4	1
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3571.9	3562.7	3559.1	3551.7	3557.2	3579.2	3564.6	3540.7	3542.6	3500.4	3522.4
5°	3568.2	3557.2	3551.7	3544.4	3548.1	3568.2	3553.6	3529.8	3527.9	3485.8	3505.9
7.5°	3562.7	3551.7	3542.6	3537.1	3538.9	3555.4	3537.1	3509.6	3504.1	3458.3	3476.6
10°	3553.6	3546.2	3533.4	3524.3	3522.4	3540.7	3511.4	3484.0	3471.1	3423.5	3441.8
12.5°	3540.7	3529.8	3516.9	3500.4	3498.6	3509.6	3485.8	3447.3	3434.5	3396.0	3416.2
15°	3522.4	3509.6	3494.9	3476.6	3467.5	3474.8	3445.5	3410.7	3408.9	3375.9	3403.4
17.5°	3502.3	3484.0	3467.5	3441.8	3429.0	3434.5	3410.7	3379.6	3383.2	3363.1	3394.2
20°	3474.8	3454.7	3429.0	3403.4	3385.0	3394.2	3377.7	3353.9	3359.4	3344.7	3372.2
22.5°	3443.7	3416.2	3385.0	3355.7	3341.1	3353.9	3341.1	3320.9	3322.8	3313.6	3330.1
25°	3403.4	3372.2	3335.6	3299.0	3291.6	3300.8	3293.5	3277.0	3269.6	3255.0	3262.3
27.5°	3366.7	3331.9	3286.1	3247.7	3234.8	3253.2	3236.7	3209.2	3189.1	3168.9	3154.2
30°	3324.6	3282.5	3231.2	3187.2	3176.2	3183.6	3159.7	3117.6	3064.5	3038.8	2998.5
32.5°	3278.8	3223.9	3159.7	3110.3	3103.0	3097.5	3053.5	2993.1	2910.6	2859.3	2797.1
35°	3218.4	3157.9	3081.0	3020.5	3009.5	2978.4	2907.0	2826.4	2720.1	2632.2	2526.0
37.5°	3150.6	3079.1	2998.5	2918.0	2886.8	2824.5	2723.8	2639.5	2478.3	2372.1	2243.9
40°	3073.7	2987.6	2888.6	2791.6	2740.3	2639.5	2524.1	2399.6	2243.9	2101.0	1992.9
42.5°	2967.4	2875.8	2758.6	2650.5	2562.6	2428.9	2293.3	2117.5	1974.6	1853.7	1743.8
45°	2841.0	2731.1	2595.6	2465.5	2353.8	2194.4	2035.1	1859.2	1740.1	1599.1	1524.0
47.5°	2678.0	2558.9	2414.2	2269.5	2123.0	1947.1	1780.4	1611.9	1492.9	1392.1	1337.2
50°	2485.7	2375.8	2216.4	2044.2	1883.0	1699.8	1533.2	1406.8	1291.4	1229.1	1187.0
52.5°	2247.5	2145.0	1981.9	1795.1	1639.4	1459.9	1307.9	1205.3	1122.9	1077.1	1062.4
55°	1981.9	1892.2	1731.0	1557.0	1397.6	1232.8	1117.4	1027.6	974.5	947.0	948.8
57.5°	1698.0	1628.4	1476.4	1320.7	1170.5	1045.9	941.5	870.1	829.8	827.9	833.4
60°	1414.1	1362.8	1230.9	1097.2	965.3	864.6	787.6	738.2	712.5	714.4	712.5
62.5°	1143.0	1095.4	1000.1	890.2	785.8	718.0	648.4	628.3	606.3	604.5	604.5
65°	899.4	862.7	785.8	707.0	628.3	584.3	549.5	525.7	509.2	505.6	507.4
67.5°	675.9	661.3	608.1	555.0	505.6	478.1	448.8	443.3	430.5	430.5	434.1
70°	503.7	492.7	463.4	432.3	412.1	393.8	379.2	379.2	377.3	375.5	384.7
72.5°	364.5	366.3	357.2	333.4	331.5	327.9	324.2	329.7	331.5	337.0	348.0
75°	256.4	261.9	261.9	258.3	265.6	274.8	280.3	289.4	300.4	307.7	320.6
77.5°	181.3	181.3	190.5	201.5	216.1	232.6	247.3	260.1	274.8	283.9	294.9
80°	117.2	122.7	137.4	157.5	177.7	199.7	219.8	236.3	250.9	265.6	272.9
82.5°	69.6	78.8	97.1	122.7	148.4	175.8	196.0	216.1	232.6	247.3	252.8
85°	34.8	47.6	69.6	97.1	124.6	153.9	179.5	197.8	216.1	229.0	236.3
87.5°	11.0	25.6	49.5	75.1	104.4	133.7	161.2	181.3	197.8	208.8	216.1
90°	0.0	12.8	34.8	62.3	89.8	119.1	144.7	166.7	183.2	192.3	197.8
92.5°	0.0	7.3	27.5	51.3	76.9	106.2	131.9	152.0	166.7	175.8	179.5
95°	1.8	5.5	20.1	42.1	67.8	95.3	119.1	137.4	152.0	161.2	163.0
97.5°	1.8	3.7	16.5	34.8	58.6	84.3	108.1	126.4	137.4	146.5	148.4
100°	1.8	3.7	12.8	31.1	51.3	75.1	97.1	113.6	126.4	133.7	135.5
102.5°	1.8	1.8	11.0	25.6	45.8	65.9	86.1	102.6	113.6	120.9	124.6
105°	1.8	1.8	9.2	22.0	40.3	58.6	76.9	93.4	102.6	109.9	113.6
107.5°	1.8	1.8	7.3	18.3	34.8	51.3	69.6	82.4	93.4	100.7	104.4
110°	1.8	1.8	5.5	16.5	29.3	45.8	60.4	73.3	84.3	91.6	95.3



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CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.8	1.8	5.5	14.7	25.6	40.3	53.1	65.9	75.1	82.4	87.9
115°	1.8	1.8	5.5	12.8	23.8	34.8	47.6	58.6	67.8	75.1	80.6
117.5°	1.8	1.8	5.5	11.0	20.1	31.1	42.1	53.1	60.4	67.8	73.3
120°	1.8	1.8	3.7	9.2	18.3	27.5	36.6	45.8	55.0	62.3	67.8
122.5°	1.8	1.8	3.7	9.2	14.7	23.8	33.0	40.3	49.5	55.0	60.4
125°	1.8	1.8	3.7	7.3	12.8	22.0	29.3	36.6	42.1	49.5	55.0
127.5°	1.8	1.8	3.7	7.3	11.0	18.3	25.6	33.0	38.5	44.0	47.6
130°	1.8	1.8	3.7	5.5	9.2	14.7	22.0	27.5	34.8	38.5	42.1
132.5°	1.8	1.8	1.8	5.5	7.3	11.0	16.5	23.8	29.3	34.8	36.6
135°	1.8	1.8	1.8	3.7	7.3	9.2	12.8	18.3	23.8	29.3	33.0
137.5°	1.8	1.8	1.8	3.7	5.5	9.2	11.0	14.7	20.1	23.8	29.3
140°	1.8	1.8	1.8	3.7	5.5	7.3	9.2	12.8	16.5	20.1	23.8
142.5°	1.8	1.8	1.8	3.7	3.7	5.5	7.3	11.0	12.8	16.5	20.1
145°	1.8	1.8	1.8	3.7	3.7	5.5	7.3	9.2	11.0	12.8	16.5
147.5°	1.8	1.8	1.8	3.7	3.7	3.7	5.5	7.3	9.2	11.0	12.8
150°	3.7	3.7	3.7	3.7	3.7	3.7	5.5	5.5	7.3	9.2	11.0
152.5°	3.7	3.7	3.7	3.7	3.7	3.7	5.5	5.5	5.5	7.3	9.2
155°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5	5.5	7.3	7.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3515.1	3518.8	3540.7	3538.9	3535.2	3531.6	3531.6	3527.9	3531.6	3540.7	3537.1
5°	3496.8	3502.3	3518.8	3516.9	3513.3	3511.4	3509.6	3504.1	3507.8	3520.6	3516.9
7.5°	3463.8	3469.3	3484.0	3476.6	3471.1	3474.8	3465.6	3460.1	3467.5	3480.3	3478.5
10°	3429.0	3432.7	3451.0	3447.3	3438.2	3440.0	3430.8	3427.2	3436.3	3443.7	3445.5
12.5°	3405.2	3418.0	3434.5	3432.7	3430.8	3432.7	3423.5	3419.8	3425.3	3432.7	3430.8
15°	3399.7	3416.2	3434.5	3434.5	3436.3	3438.2	3429.0	3423.5	3429.0	3434.5	3432.7
17.5°	3394.2	3414.4	3430.8	3429.0	3430.8	3434.5	3419.8	3416.2	3423.5	3430.8	3427.2
20°	3375.9	3394.2	3405.2	3401.5	3401.5	3403.4	3385.0	3385.0	3396.0	3401.5	3403.4
22.5°	3324.6	3346.6	3346.6	3337.4	3337.4	3330.1	3324.6	3313.6	3326.4	3335.6	3342.9
25°	3247.7	3256.8	3245.8	3225.7	3214.7	3205.5	3179.9	3201.9	3201.9	3229.3	3238.5
27.5°	3139.6	3119.4	3088.3	3046.2	3037.0	3007.7	2991.2	2996.7	3005.9	3044.3	3073.7
30°	2961.9	2901.5	2848.3	2830.0	2789.7	2760.4	2731.1	2745.8	2762.3	2784.2	2844.7
32.5°	2727.5	2668.8	2582.7	2551.6	2509.5	2472.8	2438.0	2460.0	2489.3	2504.0	2569.9
35°	2458.2	2388.6	2309.8	2256.7	2212.7	2192.6	2148.6	2179.8	2210.9	2221.9	2278.7
37.5°	2172.4	2101.0	2031.4	1985.6	1943.5	1930.6	1901.3	1923.3	1947.1	1963.6	2011.2
40°	1901.3	1835.4	1782.3	1751.1	1721.8	1710.8	1699.8	1709.0	1727.3	1740.1	1776.8
42.5°	1668.7	1615.6	1579.0	1560.6	1540.5	1525.8	1527.7	1531.3	1540.5	1568.0	1584.5
45°	1465.4	1434.2	1410.4	1406.8	1394.0	1392.1	1390.3	1397.6	1403.1	1419.6	1432.4
47.5°	1302.4	1289.5	1284.0	1291.4	1296.9	1289.5	1293.2	1302.4	1313.4	1313.4	1311.5
50°	1174.1	1177.8	1185.1	1201.6	1212.6	1216.3	1219.9	1230.9	1232.8	1236.4	1230.9
52.5°	1069.7	1073.4	1093.5	1119.2	1132.0	1137.5	1144.8	1155.8	1155.8	1159.5	1152.2
55°	963.5	969.0	989.1	1014.8	1025.8	1033.1	1040.4	1047.8	1053.2	1060.6	1055.1
57.5°	846.3	862.7	875.6	882.9	890.2	895.7	901.2	903.0	914.0	915.9	925.0
60°	721.7	725.4	738.2	736.4	730.9	745.5	738.2	751.0	763.8	780.3	782.2
62.5°	602.6	604.5	613.6	610.0	617.3	615.5	621.0	621.0	630.1	637.4	646.6
65°	509.2	511.1	518.4	518.4	516.5	522.0	527.5	531.2	531.2	536.7	544.0
67.5°	439.6	445.1	452.4	456.1	459.8	459.8	465.3	467.1	470.8	472.6	476.3
70°	392.0	399.3	406.6	410.3	412.1	415.8	417.6	417.6	421.3	423.1	426.8
72.5°	357.2	364.5	370.0	370.0	373.7	375.5	375.5	377.3	379.2	382.8	386.5
75°	327.9	333.4	337.0	335.2	335.2	335.2	337.0	337.0	340.7	344.4	348.0
77.5°	300.4	305.9	305.9	302.2	302.2	302.2	302.2	304.1	305.9	309.6	313.2
80°	280.3	280.3	278.4	278.4	274.8	272.9	272.9	274.8	274.8	278.4	283.9
82.5°	258.3	258.3	256.4	254.6	252.8	250.9	250.9	252.8	254.6	256.4	260.1
85°	238.1	238.1	234.5	234.5	232.6	232.6	232.6	232.6	234.5	236.3	240.0
87.5°	218.0	216.1	214.3	212.5	212.5	212.5	212.5	212.5	214.3	218.0	219.8
90°	197.8	196.0	194.2	194.2	192.3	192.3	194.2	194.2	196.0	197.8	199.7
92.5°	179.5	177.7	175.8	175.8	174.0	174.0	175.8	174.0	177.7	177.7	179.5
95°	163.0	161.2	159.4	159.4	159.4	159.4	159.4	159.4	161.2	161.2	163.0
97.5°	148.4	146.5	144.7	144.7	146.5	144.7	146.5	146.5	146.5	148.4	150.2
100°	135.5	133.7	133.7	135.5	133.7	133.7	135.5	135.5	135.5	135.5	137.4
102.5°	124.6	124.6	124.6	124.6	124.6	124.6	126.4	126.4	126.4	126.4	128.2
105°	113.6	115.4	115.4	115.4	117.2	117.2	117.2	119.1	119.1	119.1	119.1
107.5°	106.2	108.1	108.1	109.9	109.9	111.7	111.7	111.7	111.7	113.6	113.6
110°	98.9	100.7	102.6	104.4	104.4	106.2	106.2	106.2	106.2	106.2	106.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	91.6	93.4	95.3	98.9	100.7	100.7	100.7	100.7	102.6	102.6	100.7
115°	84.3	87.9	89.8	93.4	95.3	95.3	97.1	97.1	97.1	97.1	95.3
117.5°	76.9	82.4	84.3	87.9	89.8	89.8	91.6	91.6	91.6	91.6	89.8
120°	71.4	75.1	78.8	80.6	82.4	84.3	84.3	86.1	86.1	86.1	84.3
122.5°	65.9	69.6	73.3	75.1	76.9	78.8	78.8	78.8	78.8	78.8	78.8
125°	58.6	62.3	65.9	67.8	69.6	71.4	71.4	73.3	73.3	73.3	71.4
127.5°	53.1	56.8	58.6	62.3	64.1	64.1	65.9	65.9	65.9	65.9	64.1
130°	45.8	49.5	53.1	55.0	56.8	56.8	58.6	58.6	58.6	58.6	58.6
132.5°	40.3	44.0	45.8	49.5	49.5	51.3	51.3	53.1	53.1	53.1	51.3
135°	36.6	38.5	40.3	44.0	44.0	45.8	45.8	45.8	45.8	45.8	45.8
137.5°	33.0	34.8	36.6	38.5	38.5	40.3	40.3	40.3	40.3	42.1	40.3
140°	27.5	31.1	33.0	33.0	34.8	34.8	34.8	36.6	36.6	36.6	34.8
142.5°	23.8	25.6	27.5	29.3	31.1	31.1	31.1	31.1	33.0	31.1	31.1
145°	18.3	22.0	23.8	25.6	27.5	27.5	27.5	27.5	27.5	27.5	27.5
147.5°	14.7	16.5	20.1	22.0	22.0	23.8	23.8	23.8	23.8	23.8	23.8
150°	12.8	12.8	16.5	18.3	20.1	20.1	20.1	20.1	20.1	20.1	20.1
152.5°	9.2	11.0	12.8	14.7	16.5	16.5	16.5	16.5	16.5	16.5	16.5
155°	9.2	9.2	11.0	11.0	12.8	12.8	12.8	12.8	14.7	12.8	12.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3531.6	3529.8	3537.1	3529.8	3493.1	3507.8	3502.3	3522.4	3524.3	3529.8	3548.1
5°	3513.3	3513.3	3522.4	3515.1	3480.3	3494.9	3493.1	3513.3	3516.9	3520.6	3540.7
7.5°	3476.6	3478.5	3491.3	3485.8	3449.2	3471.1	3469.3	3493.1	3500.4	3507.8	3526.1
10°	3441.8	3440.0	3454.7	3449.2	3414.4	3440.0	3438.2	3462.0	3473.0	3485.8	3507.8
12.5°	3423.5	3418.0	3423.5	3418.0	3379.6	3399.7	3401.5	3429.0	3441.8	3458.3	3484.0
15°	3423.5	3414.4	3414.4	3403.4	3359.4	3372.2	3374.1	3392.4	3408.9	3425.3	3456.5
17.5°	3419.8	3410.7	3408.9	3399.7	3352.1	3352.1	3350.2	3363.1	3372.2	3388.7	3421.7
20°	3399.7	3396.0	3394.2	3388.7	3344.7	3337.4	3333.8	3333.8	3339.3	3344.7	3377.7
22.5°	3346.6	3350.2	3353.9	3357.6	3322.8	3309.9	3311.8	3308.1	3302.6	3302.6	3330.1
25°	3247.7	3266.0	3280.6	3297.1	3277.0	3267.8	3278.8	3273.3	3264.2	3256.8	3280.6
27.5°	3090.1	3128.6	3159.7	3200.0	3201.9	3194.5	3223.9	3220.2	3218.4	3207.4	3225.7
30°	2872.2	2932.6	2974.7	3033.4	3082.8	3090.1	3139.6	3146.9	3154.2	3148.8	3167.1
32.5°	2608.4	2690.8	2762.3	2853.8	2901.5	2943.6	3013.2	3042.5	3071.8	3081.0	3101.1
35°	2320.8	2414.2	2498.5	2599.2	2674.3	2765.9	2850.2	2894.1	2960.1	2985.7	3015.0
37.5°	2047.9	2135.8	2218.2	2319.0	2439.9	2535.1	2639.5	2738.4	2828.2	2864.8	2908.8
40°	1806.1	1877.5	1956.3	2044.2	2154.1	2278.7	2392.2	2529.6	2635.9	2709.1	2773.2
42.5°	1622.9	1657.7	1725.5	1804.3	1892.2	2018.6	2134.0	2287.8	2416.1	2520.5	2626.7
45°	1459.9	1476.4	1525.8	1568.0	1657.7	1769.5	1892.2	2042.4	2176.1	2309.8	2438.0
47.5°	1320.7	1340.8	1364.6	1390.3	1454.4	1547.8	1654.1	1789.6	1923.3	2079.0	2225.6
50°	1227.3	1232.8	1236.4	1247.4	1285.9	1350.0	1436.1	1551.5	1679.7	1846.4	2002.1
52.5°	1144.8	1144.8	1133.8	1128.3	1143.0	1183.3	1232.8	1315.2	1447.1	1600.9	1765.8
55°	1056.9	1040.4	1036.8	1018.4	1022.1	1040.4	1064.2	1128.3	1236.4	1368.3	1527.7
57.5°	934.2	926.9	926.9	919.5	904.9	914.0	919.5	965.3	1042.3	1155.8	1295.0
60°	793.1	789.5	798.6	800.5	787.6	793.1	791.3	818.8	873.7	965.3	1080.7
62.5°	652.1	668.6	670.4	677.7	670.4	668.6	677.7	701.6	729.0	798.6	888.4
65°	547.7	556.8	558.7	567.8	564.2	564.2	571.5	589.8	606.3	653.9	723.5
67.5°	479.9	476.3	478.1	483.6	478.1	476.3	481.7	492.7	505.6	534.9	584.3
70°	426.8	423.1	423.1	423.1	415.8	410.3	412.1	415.8	421.3	437.8	468.9
72.5°	386.5	386.5	381.0	375.5	370.0	366.3	362.7	359.0	357.2	362.7	379.2
75°	349.9	351.7	349.9	344.4	337.0	329.7	322.4	315.1	305.9	302.2	304.1
77.5°	316.9	318.7	320.6	318.7	311.4	302.2	291.2	280.3	267.4	254.6	247.3
80°	287.6	291.2	293.1	291.2	285.8	278.4	265.6	252.8	234.5	218.0	199.7
82.5°	261.9	267.4	269.3	269.3	265.6	258.3	243.6	229.0	208.8	186.8	163.0
85°	241.8	245.5	249.1	249.1	247.3	240.0	225.3	208.8	188.7	163.0	137.4
87.5°	221.6	223.5	227.1	230.8	227.1	219.8	207.0	188.7	168.5	142.9	113.6
90°	201.5	203.3	207.0	210.6	208.8	201.5	190.5	174.0	152.0	124.6	95.3
92.5°	181.3	185.0	186.8	188.7	190.5	185.0	175.8	159.4	137.4	109.9	82.4
95°	166.7	166.7	170.4	172.2	174.0	168.5	161.2	144.7	124.6	98.9	71.4
97.5°	152.0	152.0	155.7	155.7	157.5	153.9	146.5	131.9	111.7	87.9	60.4
100°	137.4	139.2	141.0	142.9	142.9	141.0	133.7	119.1	100.7	78.8	53.1
102.5°	128.2	128.2	130.1	130.1	131.9	128.2	120.9	108.1	89.8	69.6	45.8
105°	119.1	119.1	120.9	120.9	119.1	115.4	108.1	97.1	80.6	60.4	40.3
107.5°	111.7	111.7	111.7	111.7	109.9	106.2	98.9	86.1	71.4	55.0	36.6
110°	106.2	104.4	104.4	102.6	100.7	95.3	87.9	76.9	64.1	47.6	31.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	100.7	98.9	97.1	95.3	91.6	86.1	78.8	69.6	56.8	42.1	27.5
115°	95.3	93.4	91.6	87.9	84.3	78.8	71.4	62.3	49.5	36.6	23.8
117.5°	89.8	87.9	84.3	80.6	76.9	71.4	64.1	55.0	44.0	33.0	22.0
120°	82.4	80.6	78.8	75.1	71.4	64.1	56.8	49.5	38.5	29.3	18.3
122.5°	76.9	75.1	71.4	69.6	64.1	58.6	51.3	44.0	34.8	25.6	16.5
125°	69.6	67.8	65.9	62.3	58.6	51.3	45.8	38.5	31.1	22.0	12.8
127.5°	64.1	62.3	58.6	55.0	51.3	45.8	40.3	34.8	27.5	18.3	12.8
130°	56.8	55.0	53.1	49.5	45.8	40.3	36.6	29.3	23.8	16.5	11.0
132.5°	49.5	49.5	47.6	44.0	40.3	36.6	31.1	25.6	20.1	14.7	9.2
135°	45.8	44.0	42.1	38.5	36.6	31.1	27.5	22.0	16.5	12.8	7.3
137.5°	40.3	38.5	36.6	34.8	31.1	27.5	23.8	18.3	14.7	11.0	7.3
140°	34.8	33.0	33.0	29.3	27.5	23.8	20.1	16.5	12.8	9.2	5.5
142.5°	31.1	29.3	27.5	25.6	23.8	20.1	16.5	12.8	11.0	7.3	5.5
145°	27.5	25.6	23.8	22.0	20.1	16.5	14.7	11.0	9.2	7.3	5.5
147.5°	22.0	22.0	20.1	18.3	16.5	14.7	12.8	11.0	7.3	5.5	3.7
150°	18.3	18.3	16.5	14.7	14.7	12.8	11.0	9.2	7.3	5.5	3.7
152.5°	16.5	14.7	14.7	12.8	12.8	11.0	9.2	7.3	5.5	5.5	3.7
155°	12.8	12.8	12.8	11.0	11.0	9.2	7.3	7.3	5.5	3.7	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3551.7	3529.8	3548.1	3581.0	3577.4	3573.7	3570.1	3577.4	3601.2	3588.4	3568.2
5°	3546.2	3524.3	3544.4	3575.5	3573.7	3568.2	3564.6	3571.9	3595.7	3582.9	3560.9
7.5°	3535.2	3515.1	3529.8	3560.9	3560.9	3557.2	3553.6	3560.9	3582.9	3571.9	3549.9
10°	3516.9	3502.3	3516.9	3546.2	3548.1	3540.7	3537.1	3546.2	3568.2	3562.7	3544.4
12.5°	3502.3	3487.6	3504.1	3533.4	3535.2	3527.9	3522.4	3533.4	3562.7	3566.4	3560.9
15°	3482.1	3469.3	3489.5	3520.6	3520.6	3515.1	3515.1	3529.8	3570.1	3586.5	3595.7
17.5°	3452.8	3443.7	3467.5	3498.6	3500.4	3496.8	3498.6	3527.9	3581.0	3621.3	3647.0
20°	3416.2	3412.5	3438.2	3471.1	3476.6	3478.5	3487.6	3531.6	3604.9	3659.8	3685.5
22.5°	3372.2	3374.1	3403.4	3438.2	3445.5	3451.0	3469.3	3531.6	3623.2	3681.8	3692.8
25°	3322.8	3328.3	3359.4	3401.5	3410.7	3421.7	3452.8	3533.4	3628.7	3667.1	3648.8
27.5°	3269.6	3280.6	3320.9	3364.9	3375.9	3394.2	3434.5	3522.4	3603.0	3604.9	3537.1
30°	3214.7	3227.5	3275.1	3326.4	3344.7	3363.1	3412.5	3496.8	3540.7	3482.1	3363.1
32.5°	3152.4	3170.7	3218.4	3280.6	3302.6	3326.4	3375.9	3447.3	3430.8	3304.4	3134.1
35°	3073.7	3099.3	3154.2	3227.5	3247.7	3278.8	3313.6	3330.1	3256.8	3077.3	2885.0
37.5°	2976.6	3015.0	3079.1	3163.4	3185.4	3205.5	3214.7	3168.9	3022.4	2828.2	2628.5
40°	2864.8	2923.4	2993.1	3086.5	3108.5	3108.5	3075.5	2978.4	2793.4	2538.8	2317.1
42.5°	2729.3	2800.7	2888.6	2982.1	3004.0	2978.4	2899.6	2729.3	2518.6	2234.7	2000.3
45°	2564.4	2659.7	2758.6	2855.7	2866.7	2809.9	2668.8	2452.7	2192.6	1928.8	1705.3
47.5°	2368.4	2493.0	2601.1	2711.0	2696.3	2601.1	2412.4	2166.9	1892.2	1643.1	1463.6
50°	2148.6	2295.2	2416.1	2520.5	2489.3	2357.4	2135.8	1879.4	1606.4	1394.0	1245.6
52.5°	1914.2	2082.7	2203.6	2287.8	2245.7	2088.2	1844.6	1599.1	1375.6	1181.5	1082.6
55°	1670.5	1840.9	1965.5	2031.4	1976.4	1806.1	1566.1	1342.7	1132.0	1005.6	947.0
57.5°	1434.2	1593.6	1710.8	1764.0	1694.4	1524.0	1302.4	1113.7	961.7	855.4	826.1
60°	1207.1	1337.2	1448.9	1489.2	1414.1	1256.6	1066.1	915.9	804.1	730.9	716.2
62.5°	996.5	1102.7	1190.6	1221.8	1148.5	1025.8	860.9	749.2	670.4	633.8	615.5
65°	822.4	884.7	974.5	969.0	925.0	811.5	690.6	611.8	560.5	536.7	525.7
67.5°	646.6	703.4	760.2	767.5	712.5	633.8	555.0	498.2	470.8	457.9	452.4
70°	500.1	542.2	577.0	567.8	538.5	489.1	439.6	408.5	397.5	392.0	392.0
72.5°	388.3	410.3	426.8	415.8	397.5	371.8	348.0	335.2	337.0	340.7	344.4
75°	300.4	305.9	309.6	298.6	294.9	278.4	276.6	278.4	289.4	300.4	305.9
77.5°	230.8	223.5	218.0	207.0	208.8	207.0	216.1	230.8	247.3	263.8	278.4
80°	177.7	161.2	148.4	137.4	142.9	152.0	170.4	192.3	214.3	232.6	250.9
82.5°	137.4	113.6	95.3	84.3	95.3	109.9	133.7	161.2	186.8	207.0	227.1
85°	106.2	78.8	56.8	45.8	56.8	78.8	104.4	135.5	163.0	185.0	205.2
87.5°	82.4	56.8	31.1	18.3	31.1	55.0	84.3	113.6	141.0	166.7	186.8
90°	65.9	38.5	14.7	3.7	16.5	38.5	65.9	95.3	122.7	150.2	170.4
92.5°	53.1	27.5	7.3	0.0	9.2	29.3	55.0	82.4	109.9	135.5	155.7
95°	44.0	22.0	5.5	0.0	7.3	22.0	44.0	71.4	97.1	122.7	139.2
97.5°	36.6	16.5	3.7	0.0	3.7	18.3	36.6	60.4	86.1	109.9	126.4
100°	31.1	14.7	3.7	0.0	3.7	14.7	31.1	53.1	75.1	97.1	113.6
102.5°	25.6	11.0	1.8	1.8	1.8	11.0	27.5	45.8	65.9	86.1	102.6
105°	23.8	9.2	1.8	1.8	1.8	9.2	23.8	40.3	58.6	76.9	91.6
107.5°	20.1	7.3	1.8	1.8	1.8	7.3	20.1	34.8	53.1	69.6	82.4
110°	16.5	7.3	1.8	1.8	1.8	7.3	16.5	31.1	45.8	60.4	73.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	14.7	5.5	1.8	1.8	1.8	5.5	14.7	27.5	40.3	55.0	65.9
115°	12.8	5.5	1.8	1.8	1.8	5.5	12.8	23.8	34.8	47.6	58.6
117.5°	11.0	5.5	1.8	1.8	1.8	3.7	11.0	20.1	31.1	42.1	53.1
120°	9.2	3.7	1.8	1.8	1.8	3.7	9.2	18.3	27.5	36.6	45.8
122.5°	9.2	3.7	1.8	1.8	1.8	3.7	7.3	14.7	23.8	31.1	40.3
125°	7.3	3.7	1.8	1.8	1.8	1.8	7.3	12.8	20.1	27.5	34.8
127.5°	7.3	3.7	1.8	1.8	1.8	1.8	5.5	11.0	16.5	23.8	31.1
130°	5.5	3.7	1.8	1.8	1.8	1.8	3.7	9.2	14.7	20.1	25.6
132.5°	5.5	3.7	1.8	1.8	1.8	1.8	3.7	7.3	11.0	16.5	22.0
135°	5.5	1.8	1.8	1.8	1.8	1.8	1.8	5.5	9.2	12.8	16.5
137.5°	3.7	1.8	1.8	1.8	1.8	1.8	1.8	3.7	7.3	9.2	14.7
140°	3.7	1.8	1.8	1.8	1.8	1.8	1.8	3.7	5.5	7.3	11.0
142.5°	3.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	5.5	9.2
145°	3.7	1.8	1.8	3.7	3.7	1.8	1.8	3.7	3.7	5.5	7.3
147.5°	3.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	3.7	5.5
150°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5
152.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
155°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3564.6	3522.4	3544.4	3537.1	3544.4	3562.7	3560.9	3555.4	3559.1	3549.9	3540.7
5°	3557.2	3515.1	3537.1	3527.9	3537.1	3555.4	3551.7	3546.2	3551.7	3540.7	3531.6
7.5°	3548.1	3509.6	3535.2	3533.4	3549.9	3573.7	3575.5	3575.5	3588.4	3571.9	3564.6
10°	3548.1	3527.9	3562.7	3575.5	3617.7	3648.8	3652.5	3659.8	3681.8	3678.1	3659.8
12.5°	3586.5	3582.9	3634.2	3665.3	3703.8	3747.7	3771.5	3778.9	3793.5	3782.5	3775.2
15°	3636.0	3654.3	3711.1	3745.9	3788.0	3821.0	3826.5	3830.2	3841.1	3824.7	3811.8
17.5°	3701.9	3712.9	3758.7	3773.4	3800.8	3806.3	3799.0	3780.7	3780.7	3744.1	3733.1
20°	3733.1	3727.6	3745.9	3722.1	3711.1	3678.1	3647.0	3612.2	3610.3	3571.9	3568.2
22.5°	3705.6	3669.0	3630.5	3571.9	3546.2	3498.6	3456.5	3436.3	3423.5	3374.1	3361.2
25°	3608.5	3518.8	3462.0	3392.4	3330.1	3275.1	3234.8	3192.7	3152.4	3112.1	3093.8
27.5°	3440.0	3355.7	3264.2	3167.1	3081.0	2996.7	2928.9	2886.8	2848.3	2795.2	2767.8
30°	3233.0	3115.8	3015.0	2921.6	2780.6	2678.0	2621.2	2537.0	2507.6	2483.8	2432.5
32.5°	2989.4	2848.3	2711.0	2584.6	2439.9	2344.6	2269.5	2207.2	2188.9	2126.6	2112.0
35°	2720.1	2535.1	2379.4	2254.9	2150.5	2035.1	1972.8	1930.6	1894.0	1851.9	1844.6
37.5°	2403.2	2236.5	2060.7	1950.8	1868.4	1769.5	1721.8	1692.5	1676.0	1644.9	1639.4
40°	2084.5	1917.8	1796.9	1687.0	1635.7	1582.6	1547.8	1535.0	1527.7	1516.7	1505.7
42.5°	1795.1	1648.6	1562.5	1489.2	1467.2	1441.6	1432.4	1439.7	1432.4	1428.8	1426.9
45°	1549.6	1437.9	1377.5	1355.5	1350.0	1342.7	1350.0	1362.8	1364.6	1361.0	1361.0
47.5°	1326.2	1273.1	1247.4	1251.1	1260.2	1265.7	1278.6	1295.0	1298.7	1289.5	1293.2
50°	1179.6	1148.5	1143.0	1157.7	1177.8	1185.1	1199.8	1212.6	1210.8	1207.1	1203.4
52.5°	1042.3	1033.1	1047.8	1062.4	1084.4	1088.1	1093.5	1099.0	1097.2	1089.9	1086.2
55°	926.9	934.2	947.0	952.5	969.0	967.2	969.0	969.0	961.7	958.0	952.5
57.5°	822.4	824.3	831.6	833.4	842.6	838.9	837.1	833.4	822.4	820.6	815.1
60°	716.2	712.5	729.0	716.2	723.5	716.2	714.4	705.2	694.2	692.4	688.7
62.5°	615.5	608.1	619.1	613.6	617.3	610.0	606.3	595.3	586.2	584.3	582.5
65°	525.7	522.0	533.0	531.2	534.9	525.7	522.0	514.7	507.4	505.6	503.7
67.5°	450.6	459.8	465.3	465.3	468.9	467.1	457.9	456.1	454.3	446.9	446.9
70°	395.7	401.1	412.1	414.0	412.1	415.8	408.5	406.6	404.8	401.1	399.3
72.5°	351.7	359.0	370.0	371.8	370.0	370.0	366.3	364.5	364.5	359.0	359.0
75°	316.9	326.0	335.2	335.2	335.2	331.5	327.9	327.9	324.2	322.4	318.7
77.5°	287.6	298.6	305.9	304.1	302.2	298.6	298.6	293.1	287.6	287.6	283.9
80°	265.6	272.9	278.4	276.6	274.8	269.3	267.4	261.9	258.3	252.8	252.8
82.5°	241.8	250.9	254.6	252.8	249.1	243.6	241.8	238.1	234.5	232.6	229.0
85°	221.6	230.8	232.6	229.0	225.3	221.6	219.8	218.0	216.1	212.5	212.5
87.5°	201.5	210.6	210.6	208.8	205.2	203.3	201.5	199.7	197.8	196.0	194.2
90°	185.0	192.3	192.3	190.5	188.7	186.8	185.0	183.2	181.3	179.5	179.5
92.5°	168.5	175.8	175.8	174.0	172.2	170.4	170.4	168.5	166.7	164.9	163.0
95°	153.9	161.2	161.2	161.2	159.4	157.5	157.5	155.7	153.9	153.9	152.0
97.5°	139.2	146.5	146.5	146.5	144.7	142.9	142.9	141.0	141.0	141.0	139.2
100°	126.4	131.9	133.7	133.7	131.9	131.9	131.9	130.1	130.1	130.1	128.2
102.5°	113.6	119.1	122.7	122.7	122.7	120.9	120.9	120.9	120.9	120.9	119.1
105°	102.6	108.1	111.7	113.6	113.6	113.6	113.6	113.6	113.6	113.6	113.6
107.5°	93.4	98.9	102.6	104.4	106.2	106.2	108.1	108.1	108.1	108.1	108.1
110°	84.3	89.8	95.3	97.1	98.9	100.7	100.7	102.6	100.7	100.7	100.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	75.1	82.4	86.1	89.8	91.6	93.4	95.3	95.3	95.3	95.3	95.3
115°	67.8	75.1	78.8	82.4	86.1	87.9	87.9	89.8	89.8	89.8	87.9
117.5°	60.4	67.8	71.4	75.1	76.9	80.6	82.4	82.4	82.4	82.4	80.6
120°	55.0	60.4	64.1	67.8	71.4	73.3	75.1	75.1	75.1	75.1	75.1
122.5°	47.6	53.1	58.6	62.3	64.1	65.9	67.8	67.8	67.8	67.8	67.8
125°	42.1	47.6	51.3	55.0	56.8	60.4	60.4	60.4	60.4	60.4	60.4
127.5°	36.6	42.1	45.8	49.5	51.3	53.1	55.0	55.0	55.0	55.0	55.0
130°	31.1	36.6	40.3	44.0	45.8	47.6	47.6	49.5	49.5	49.5	49.5
132.5°	27.5	31.1	34.8	38.5	40.3	42.1	42.1	44.0	44.0	44.0	44.0
135°	22.0	27.5	29.3	33.0	34.8	36.6	36.6	38.5	38.5	38.5	38.5
137.5°	18.3	22.0	25.6	29.3	31.1	31.1	33.0	33.0	34.8	34.8	34.8
140°	14.7	16.5	22.0	23.8	25.6	27.5	29.3	29.3	29.3	29.3	29.3
142.5°	11.0	14.7	16.5	20.1	22.0	23.8	25.6	25.6	25.6	25.6	25.6
145°	9.2	11.0	12.8	16.5	18.3	20.1	22.0	22.0	22.0	22.0	22.0
147.5°	7.3	9.2	11.0	12.8	14.7	16.5	18.3	18.3	18.3	18.3	18.3
150°	5.5	7.3	9.2	9.2	11.0	12.8	14.7	16.5	16.5	16.5	16.5
152.5°	5.5	5.5	7.3	7.3	9.2	11.0	12.8	12.8	12.8	12.8	12.8
155°	3.7	5.5	5.5	5.5	7.3	7.3	9.2	11.0	11.0	11.0	11.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3546.2	3553.6	3549.9	3544.4	3542.6	3551.7	3542.6	3500.4	3516.9	3518.8	3531.6
5°	3540.7	3546.2	3542.6	3538.9	3533.4	3544.4	3533.4	3489.5	3505.9	3507.8	3520.6
7.5°	3577.4	3579.2	3579.2	3570.1	3555.4	3560.9	3546.2	3496.8	3505.9	3505.9	3515.1
10°	3669.0	3672.6	3678.1	3654.3	3636.0	3621.3	3601.2	3540.7	3538.9	3524.3	3524.3
12.5°	3788.0	3778.9	3769.7	3758.7	3744.1	3725.7	3696.4	3625.0	3601.2	3577.4	3553.6
15°	3822.8	3819.2	3817.3	3811.8	3802.7	3797.2	3775.2	3703.8	3669.0	3639.7	3597.5
17.5°	3731.2	3738.6	3762.4	3764.2	3775.2	3797.2	3793.5	3744.1	3712.9	3700.1	3648.8
20°	3566.4	3568.2	3597.5	3610.3	3658.0	3694.6	3722.1	3716.6	3709.3	3723.9	3685.5
22.5°	3368.6	3381.4	3412.5	3432.7	3478.5	3520.6	3564.6	3588.4	3626.8	3687.3	3680.0
25°	3099.3	3115.8	3159.7	3192.7	3256.8	3320.9	3379.6	3421.7	3467.5	3582.9	3621.3
27.5°	2776.9	2802.6	2859.3	2892.3	2982.1	3048.0	3132.3	3214.7	3278.8	3410.7	3489.5
30°	2438.0	2460.0	2520.5	2566.3	2643.2	2732.9	2839.2	2956.4	3062.7	3196.4	3295.3
32.5°	2121.1	2145.0	2194.4	2234.7	2320.8	2395.9	2513.1	2657.8	2756.8	2941.8	3073.7
35°	1844.6	1866.5	1901.3	1936.1	2007.6	2084.5	2185.3	2326.3	2452.7	2645.0	2811.7
37.5°	1650.4	1654.1	1674.2	1694.4	1747.5	1806.1	1884.9	2009.4	2126.6	2333.6	2516.8
40°	1511.2	1511.2	1522.2	1527.7	1551.5	1586.3	1635.7	1732.8	1829.9	1987.4	2210.9
42.5°	1425.1	1421.4	1421.4	1423.3	1421.4	1437.9	1467.2	1513.0	1599.1	1729.2	1903.2
45°	1361.0	1353.7	1348.2	1335.3	1328.0	1328.0	1329.8	1346.3	1395.8	1480.0	1621.1
47.5°	1289.5	1287.7	1278.6	1263.9	1251.1	1241.9	1227.3	1221.8	1236.4	1284.0	1379.3
50°	1207.1	1198.0	1188.8	1177.8	1163.2	1154.0	1126.5	1128.3	1115.5	1137.5	1187.0
52.5°	1086.2	1078.9	1075.2	1066.1	1060.6	1056.9	1034.9	1012.9	1007.5	1011.1	1029.4
55°	952.5	956.2	941.5	948.8	947.0	930.5	921.4	904.9	899.4	897.6	906.7
57.5°	813.3	817.0	807.8	815.1	815.1	806.0	800.5	800.5	787.6	776.7	789.5
60°	686.9	679.6	685.1	694.2	694.2	688.7	685.1	685.1	675.9	672.2	681.4
62.5°	584.3	577.0	582.5	591.7	593.5	589.8	586.2	586.2	575.2	575.2	582.5
65°	505.6	507.4	505.6	512.9	512.9	514.7	511.1	507.4	494.6	500.1	498.2
67.5°	448.8	446.9	446.9	454.3	452.4	456.1	452.4	446.9	437.8	430.5	428.6
70°	401.1	399.3	399.3	403.0	404.8	404.8	403.0	399.3	386.5	379.2	373.7
72.5°	359.0	357.2	359.0	360.9	362.7	364.5	362.7	359.0	348.0	338.9	329.7
75°	320.6	318.7	324.2	324.2	326.0	326.0	327.9	326.0	316.9	305.9	294.9
77.5°	282.1	283.9	289.4	291.2	294.9	296.7	298.6	298.6	289.4	280.3	265.6
80°	250.9	254.6	258.3	260.1	263.8	269.3	271.1	272.9	265.6	256.4	240.0
82.5°	229.0	230.8	234.5	236.3	241.8	243.6	245.5	249.1	245.5	236.3	218.0
85°	210.6	212.5	216.1	216.1	219.8	223.5	225.3	227.1	225.3	216.1	197.8
87.5°	194.2	196.0	197.8	199.7	201.5	203.3	205.2	207.0	205.2	196.0	179.5
90°	179.5	179.5	181.3	181.3	183.2	185.0	188.7	188.7	186.8	179.5	163.0
92.5°	163.0	164.9	164.9	166.7	168.5	170.4	172.2	172.2	170.4	163.0	148.4
95°	152.0	152.0	153.9	153.9	155.7	155.7	157.5	157.5	155.7	148.4	133.7
97.5°	139.2	139.2	139.2	139.2	141.0	141.0	142.9	142.9	141.0	133.7	120.9
100°	128.2	128.2	128.2	128.2	128.2	130.1	130.1	130.1	128.2	120.9	108.1
102.5°	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	115.4	109.9	97.1
105°	113.6	113.6	113.6	111.7	111.7	111.7	109.9	109.9	104.4	98.9	87.9
107.5°	106.2	106.2	106.2	104.4	104.4	102.6	100.7	100.7	95.3	89.8	78.8
110°	100.7	100.7	100.7	98.9	97.1	95.3	93.4	91.6	86.1	78.8	69.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	95.3	95.3	93.4	93.4	91.6	89.8	86.1	84.3	78.8	71.4	62.3
115°	87.9	87.9	87.9	86.1	84.3	82.4	80.6	76.9	71.4	64.1	55.0
117.5°	80.6	80.6	80.6	78.8	76.9	75.1	73.3	69.6	64.1	56.8	49.5
120°	73.3	73.3	73.3	71.4	69.6	67.8	65.9	62.3	56.8	51.3	42.1
122.5°	67.8	67.8	65.9	64.1	62.3	60.4	58.6	55.0	51.3	44.0	36.6
125°	60.4	60.4	58.6	58.6	56.8	55.0	53.1	49.5	44.0	38.5	33.0
127.5°	55.0	53.1	53.1	53.1	51.3	49.5	45.8	44.0	38.5	33.0	27.5
130°	47.6	47.6	47.6	45.8	45.8	44.0	40.3	36.6	33.0	29.3	23.8
132.5°	42.1	42.1	42.1	42.1	40.3	38.5	34.8	33.0	29.3	23.8	20.1
135°	38.5	38.5	36.6	36.6	34.8	33.0	31.1	27.5	23.8	20.1	16.5
137.5°	33.0	33.0	33.0	31.1	31.1	29.3	25.6	23.8	22.0	18.3	14.7
140°	29.3	29.3	27.5	27.5	25.6	25.6	23.8	20.1	18.3	14.7	12.8
142.5°	25.6	25.6	23.8	23.8	22.0	22.0	20.1	18.3	14.7	12.8	9.2
145°	22.0	22.0	20.1	20.1	20.1	18.3	16.5	14.7	12.8	11.0	9.2
147.5°	18.3	18.3	18.3	16.5	16.5	14.7	14.7	12.8	11.0	9.2	7.3
150°	16.5	16.5	14.7	14.7	14.7	12.8	11.0	11.0	9.2	7.3	5.5
152.5°	12.8	12.8	12.8	12.8	11.0	11.0	9.2	9.2	7.3	5.5	5.5
155°	11.0	11.0	11.0	9.2	9.2	9.2	7.3	7.3	5.5	5.5	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2	3546.2
2.5°	3526.1	3524.3	3540.7	3538.9	3516.9	3549.9	3571.9
5°	3516.9	3515.1	3529.8	3533.4	3509.6	3544.4	3568.2
7.5°	3509.6	3507.8	3524.3	3529.8	3505.9	3537.1	3562.7
10°	3511.4	3502.3	3516.9	3520.6	3498.6	3531.6	3553.6
12.5°	3524.3	3502.3	3507.8	3507.8	3487.6	3516.9	3540.7
15°	3555.4	3509.6	3502.3	3496.8	3471.1	3498.6	3522.4
17.5°	3590.2	3527.9	3502.3	3484.0	3452.8	3476.6	3502.3
20°	3625.0	3548.1	3505.9	3476.6	3434.5	3456.5	3474.8
22.5°	3641.5	3566.4	3509.6	3465.6	3412.5	3423.5	3443.7
25°	3619.5	3559.1	3502.3	3449.2	3385.0	3386.9	3403.4
27.5°	3538.9	3522.4	3485.8	3432.7	3363.1	3353.9	3366.7
30°	3401.5	3447.3	3449.2	3410.7	3337.4	3319.1	3324.6
32.5°	3209.2	3311.8	3372.2	3364.9	3300.8	3275.1	3278.8
35°	2987.6	3115.8	3247.7	3291.6	3245.8	3225.7	3218.4
37.5°	2722.0	2894.1	3070.0	3178.1	3170.7	3157.9	3150.6
40°	2428.9	2635.9	2844.7	3016.9	3070.0	3070.0	3073.7
42.5°	2115.7	2357.4	2586.4	2804.4	2928.9	2956.4	2967.4
45°	1813.4	2057.0	2306.2	2557.1	2723.8	2809.9	2841.0
47.5°	1538.7	1784.1	2020.4	2295.2	2516.8	2628.5	2678.0
50°	1304.2	1487.4	1736.5	2009.4	2251.2	2388.6	2485.7
52.5°	1110.0	1252.9	1470.9	1725.5	1969.1	2157.8	2247.5
55°	947.0	1044.1	1229.1	1448.9	1681.5	1877.5	1981.9
57.5°	809.6	886.6	1012.9	1196.1	1392.1	1586.3	1698.0
60°	688.7	741.9	827.9	972.7	1139.3	1306.0	1414.1
62.5°	584.3	619.1	675.9	782.2	912.2	1042.3	1143.0
65°	503.7	518.4	549.5	615.5	714.4	813.3	899.4
67.5°	425.0	434.1	457.9	498.2	547.7	619.1	675.9
70°	366.3	366.3	368.2	392.0	417.6	463.4	503.7
72.5°	318.7	313.2	302.2	307.7	313.2	338.9	364.5
75°	280.3	267.4	249.1	241.8	238.1	241.8	256.4
77.5°	247.3	229.0	207.0	188.7	174.0	168.5	181.3
80°	219.8	197.8	172.2	148.4	124.6	111.7	117.2
82.5°	197.8	170.4	142.9	115.4	87.9	69.6	69.6
85°	174.0	148.4	119.1	89.8	62.3	38.5	34.8
87.5°	157.5	130.1	98.9	71.4	44.0	20.1	11.0
90°	141.0	113.6	84.3	56.8	31.1	9.2	0.0
92.5°	126.4	100.7	73.3	45.8	22.0	5.5	0.0
95°	113.6	89.8	62.3	38.5	18.3	3.7	1.8
97.5°	100.7	78.8	55.0	31.1	12.8	3.7	1.8
100°	91.6	69.6	47.6	25.6	11.0	1.8	1.8
102.5°	80.6	62.3	40.3	22.0	9.2	1.8	1.8
105°	71.4	55.0	34.8	18.3	7.3	1.8	1.8
107.5°	64.1	47.6	31.1	16.5	7.3	1.8	1.8
110°	56.8	42.1	27.5	14.7	5.5	1.8	1.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-92HL-LC-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	51.3	36.6	23.8	12.8	3.7	1.8	1.8
115°	44.0	33.0	20.1	11.0	3.7	1.8	1.8
117.5°	38.5	27.5	18.3	9.2	3.7	1.8	1.8
120°	33.0	23.8	14.7	7.3	1.8	1.8	1.8
122.5°	29.3	20.1	12.8	7.3	1.8	1.8	1.8
125°	25.6	18.3	11.0	5.5	1.8	1.8	1.8
127.5°	22.0	14.7	9.2	3.7	1.8	1.8	1.8
130°	18.3	12.8	7.3	3.7	1.8	1.8	1.8
132.5°	14.7	11.0	7.3	3.7	1.8	1.8	1.8
135°	12.8	9.2	5.5	3.7	1.8	1.8	1.8
137.5°	11.0	7.3	3.7	3.7	3.7	1.8	1.8
140°	9.2	5.5	3.7	3.7	3.7	3.7	1.8
142.5°	7.3	5.5	3.7	3.7	3.7	3.7	1.8
145°	5.5	3.7	3.7	3.7	3.7	3.7	1.8
147.5°	5.5	3.7	3.7	3.7	3.7	3.7	1.8
150°	3.7	3.7	3.7	3.7	3.7	3.7	3.7
152.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7
155°	3.7	3.7	3.7	3.7	3.7	3.7	3.7
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)