

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: P1213013

Luminaire Tested: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213013
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33525)
Test Lab: INNOVATIONS CENTER-P3
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

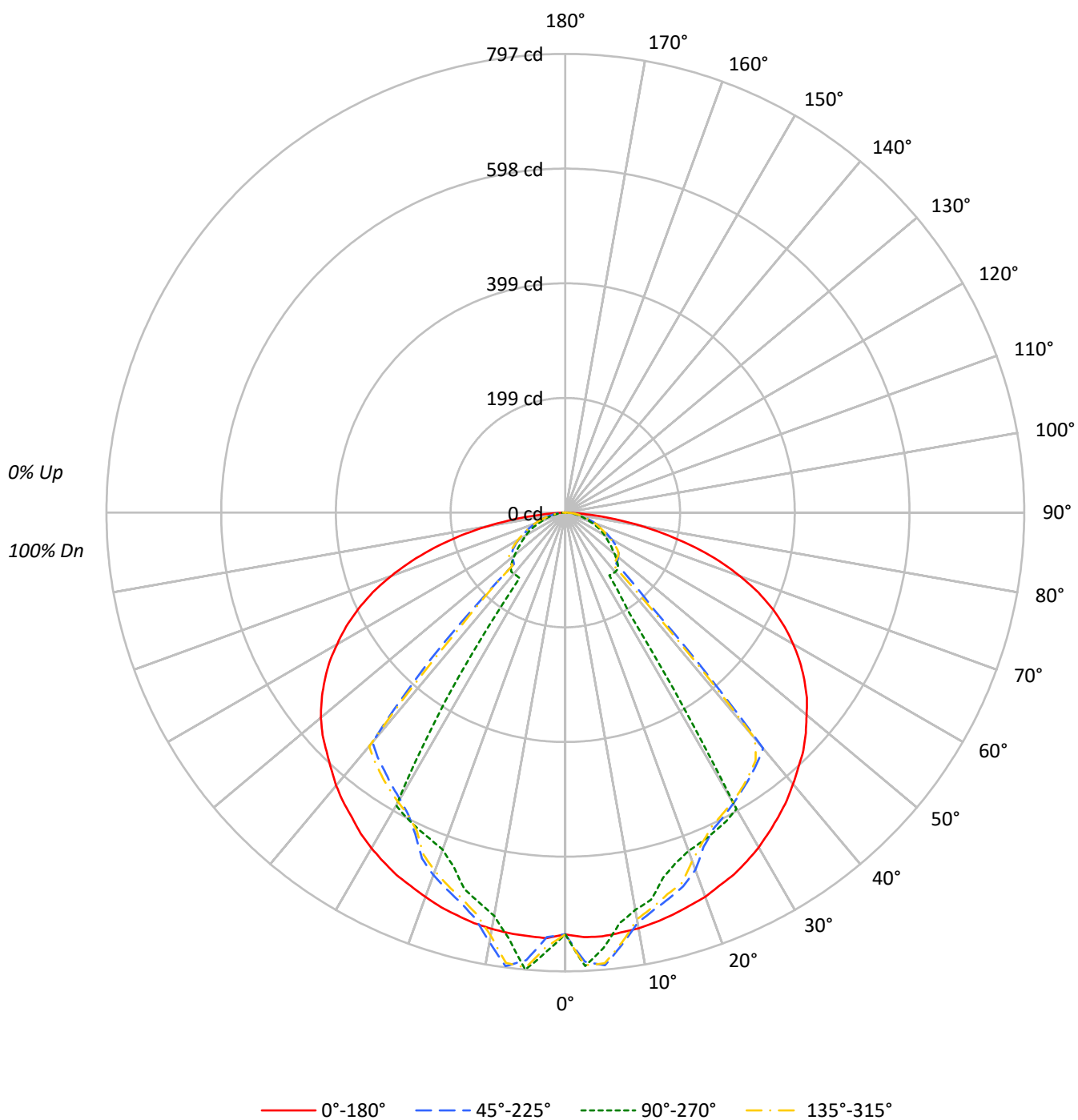
Lumens per Lamp: N/A
Luminaire Lumens: 1467.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 13
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5920	5920	5920	5920
5°	5978	5964	5975	6260
10°	5984	5393	5992	5475
15°	5997	4990	6011	5148
20°	6040	4732	6040	4714
25°	6093	4642	6102	4598
30°	6155	4560	6170	4506
35°	6227	1039	6239	1084
40°	6326	1080	6364	1115
45°	6477	1074	6500	1113
50°	6629	971	6718	997
55°	6832	862	6888	874
60°	7005	766	7021	776
65°	7131	668	7111	658
70°	7028	539	7006	520
75°	6523	415	6571	398
80°	5297	294	5507	269
85°	2869	177	3026	135

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 7179 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	4.9
10°-20°	198.2	13.5
20°-30°	293.5	20.0
30°-40°	295.8	20.2
40°-50°	231.0	15.7
50°-60°	178.5	12.2
60°-70°	119.8	8.2
70°-80°	61.1	4.2
80°-90°	17.0	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	563.8	38.4
0°-40°	859.6	58.6
0°-60°	1269.1	86.5
0°-90°	1467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	733	733	733	733	733	
5°	739	759	739	797	739	70
15°	723	656	724	677	723	204
25°	693	612	694	606	693	320
35°	645	133	646	139	645	404
45°	584	129	586	134	584	451
55°	507	94	511	95	507	452
65°	398	63	397	62	398	391
75°	233	32	235	31	233	244
85°	42	10	44	8	42	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	738.3	741.0	743.0	744.3	745.0	745.0	745.3	745.7	750.0	752.1	753.4
5°	739.0	741.6	745.7	751.0	755.7	759.8	763.1	767.8	772.5	777.6	779.2
7.5°	735.9	739.3	747.4	757.1	766.2	772.5	776.9	779.9	782.3	782.6	784.3
10°	733.3	739.3	750.4	763.1	774.5	782.3	782.3	780.6	782.9	773.9	764.8
12.5°	728.6	735.3	750.4	767.2	777.9	780.9	779.6	772.9	759.1	748.0	743.0
15°	722.8	731.9	750.7	769.5	778.6	779.6	766.8	749.7	739.3	732.6	724.2
17.5°	716.5	728.6	751.0	769.8	773.2	768.5	744.3	733.6	722.8	707.1	695.7
20°	710.4	722.2	748.4	765.1	767.2	746.0	727.2	715.8	697.7	683.9	678.9
22.5°	701.0	714.8	746.0	758.8	751.0	726.5	708.4	690.3	673.8	669.8	663.8
25°	693.3	707.7	740.6	751.0	730.6	708.7	687.6	666.4	658.7	653.0	647.6
27.5°	682.9	700.7	733.6	736.9	708.7	689.6	658.7	649.3	642.3	635.9	633.5
30°	671.5	693.3	723.9	717.5	690.6	662.4	639.6	630.9	625.8	619.1	616.4
32.5°	658.4	682.2	713.1	695.0	671.1	635.9	621.1	614.4	607.7	602.7	585.9
35°	645.0	672.5	700.4	673.5	647.6	615.7	602.7	596.6	590.2	571.8	554.3
37.5°	631.2	661.7	684.9	650.3	616.4	594.9	583.8	577.1	562.7	539.2	530.5
40°	615.4	648.6	665.1	626.5	589.2	573.8	563.4	556.7	524.1	513.7	511.0
42.5°	599.6	635.9	640.9	603.3	566.7	551.3	542.6	520.4	498.2	492.9	493.9
45°	584.5	622.1	614.4	570.4	543.2	530.5	515.7	485.1	473.4	476.1	476.7
47.5°	566.4	605.7	586.5	537.5	519.1	506.3	473.4	454.9	453.2	456.9	459.0
50°	546.9	587.2	557.0	507.6	492.9	477.8	440.5	431.1	433.1	436.8	439.1
52.5°	528.8	566.4	526.4	479.8	467.0	432.4	407.3	408.9	412.3	416.7	418.0
55°	506.6	541.2	493.9	451.6	439.5	394.2	382.7	386.8	390.1	393.8	396.5
57.5°	483.5	512.3	455.3	420.0	400.5	360.2	361.3	363.9	366.3	370.7	153.1
60°	456.9	479.4	413.0	390.8	352.2	333.4	334.4	339.1	341.4	190.7	105.4
62.5°	429.4	441.2	374.7	357.6	307.9	306.5	311.2	313.2	213.2	100.7	98.7
65°	397.9	395.5	337.1	309.9	277.7	279.0	284.0	274.0	94.3	94.3	93.7
67.5°	362.9	348.8	300.5	256.5	248.4	251.5	256.8	89.6	87.3	88.0	85.6
70°	323.0	303.2	262.5	217.2	219.9	222.9	86.6	81.2	80.2	78.6	73.9
72.5°	280.7	253.5	214.9	188.7	190.4	119.5	75.9	73.2	69.8	66.5	61.4
75°	233.3	198.1	157.8	157.8	160.1	68.2	66.1	61.8	58.1	53.7	50.7
77.5°	183.0	152.4	122.5	127.2	62.1	57.1	53.4	48.7	45.7	43.0	41.3
80°	134.0	106.4	92.3	82.6	48.3	43.3	39.6	36.9	35.6	33.9	31.9
82.5°	88.0	64.1	64.1	38.9	33.9	29.9	28.9	26.9	25.5	24.5	23.5
85°	42.0	37.3	28.2	23.8	21.2	19.1	18.5	17.5	17.5	17.1	16.8
87.5°	15.4	16.8	12.4	12.1	11.4	11.1	11.4	11.4	11.8	11.4	11.1
90°	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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	756.8	759.4	761.5	764.8	769.2	772.9	776.2	780.9	788.3	790.3	792.0
5°	779.2	780.3	782.6	785.3	786.0	787.6	787.3	789.3	790.3	792.7	787.6
7.5°	780.6	775.2	768.8	763.1	759.1	755.4	753.1	756.8	758.8	760.4	755.4
10°	752.4	746.0	742.3	739.0	734.9	729.2	721.5	723.2	722.5	722.5	720.8
12.5°	734.6	725.5	716.1	707.7	704.0	703.7	704.0	707.7	707.7	707.4	705.4
15°	706.7	698.0	693.3	691.3	691.3	690.3	690.3	694.3	693.3	693.3	692.3
17.5°	688.3	682.2	678.9	676.5	675.5	677.2	679.2	680.9	681.2	679.9	674.5
20°	673.2	667.4	663.4	664.1	663.8	664.8	665.8	660.1	653.0	643.6	639.2
22.5°	657.4	653.0	650.0	650.0	646.0	639.6	630.2	628.2	627.2	622.8	619.1
25°	642.3	637.2	632.9	619.4	611.0	612.1	610.4	607.0	606.7	606.3	607.7
27.5°	627.2	614.1	597.3	595.3	591.9	591.6	593.6	595.3	595.3	596.6	598.3
30°	595.9	580.8	577.8	574.1	575.5	580.2	581.2	583.5	584.2	586.5	587.9
32.5°	567.4	560.7	558.0	559.7	564.0	568.1	570.4	571.4	573.1	575.1	576.8
35°	544.2	542.2	544.6	548.3	552.6	556.0	558.0	560.0	561.7	563.4	564.7
37.5°	527.1	528.5	531.8	536.5	540.9	543.6	545.2	547.6	549.9	552.0	543.9
40°	511.0	514.4	518.0	523.1	526.8	529.5	531.1	534.2	514.0	232.7	127.6
42.5°	496.9	500.6	503.3	507.3	511.3	513.3	498.6	222.6	125.9	125.2	126.9
45°	479.8	482.8	487.2	490.2	493.9	324.3	123.9	125.2	123.2	124.6	125.2
47.5°	462.3	467.0	469.4	447.9	133.3	123.2	121.9	123.2	121.9	123.6	122.5
50°	442.5	448.2	319.0	120.5	119.5	118.9	120.2	119.5	120.5	121.9	119.2
52.5°	422.4	261.5	116.8	116.2	116.8	116.2	118.5	116.8	117.2	115.8	112.5
55°	143.0	113.1	112.1	111.8	113.8	113.8	113.8	111.1	109.5	106.1	103.7
57.5°	109.5	109.5	109.1	109.5	108.8	108.1	105.1	102.7	100.4	95.7	94.3
60°	103.7	103.7	103.7	103.7	100.7	99.4	94.7	92.7	88.6	86.3	84.9
62.5°	99.0	98.4	95.3	94.3	91.0	87.3	84.6	82.6	78.6	77.2	76.2
65°	92.3	90.0	86.3	82.3	80.6	76.5	75.2	72.2	70.2	69.2	68.5
67.5°	81.2	77.9	74.9	72.2	69.2	67.8	66.1	63.8	62.4	61.8	61.1
70°	69.5	67.1	64.1	62.4	60.4	59.4	57.1	56.4	55.4	54.4	53.4
72.5°	58.1	56.7	55.4	53.0	52.4	51.7	49.4	48.0	46.7	45.3	44.7
75°	48.7	47.7	47.0	45.0	44.0	42.0	40.3	39.3	38.3	37.3	36.6
77.5°	40.0	39.3	37.3	35.9	35.3	33.6	32.9	33.2	32.6	31.2	30.6
80°	31.2	30.6	28.9	28.9	28.2	27.5	26.9	26.2	25.5	24.5	23.8
82.5°	23.8	23.2	22.5	21.8	21.2	20.8	20.5	19.8	19.1	18.5	18.1
85°	16.8	16.5	16.1	15.8	15.4	15.1	14.8	14.1	13.4	13.1	12.8
87.5°	11.4	11.1	10.7	10.4	10.1	9.7	9.4	9.1	8.4	8.1	7.7
90°	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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	792.0	793.7	792.0	788.3	786.0	785.0	787.0	787.0	788.3	790.0	790.3
5°	779.6	775.6	770.9	766.2	763.8	762.5	758.8	759.4	760.4	761.1	761.8
7.5°	748.7	743.3	736.9	730.9	728.6	726.5	722.2	722.2	722.2	722.5	724.5
10°	717.1	714.8	712.1	708.1	705.1	704.0	700.4	701.4	700.7	701.7	704.0
12.5°	702.4	699.7	697.3	693.3	689.9	688.6	686.9	687.9	687.6	689.3	691.3
15°	688.9	687.6	684.9	681.9	678.9	676.2	670.1	668.1	666.8	665.1	667.4
17.5°	666.8	657.4	651.0	646.3	642.9	640.6	638.9	638.9	639.9	640.9	642.9
20°	636.6	633.9	630.9	625.8	622.5	621.1	620.1	620.1	621.8	623.1	626.8
22.5°	615.7	615.4	614.4	612.1	610.4	610.4	610.7	611.4	613.7	615.7	619.4
25°	606.0	607.4	606.7	605.3	604.3	604.7	604.0	604.7	607.0	609.0	612.1
27.5°	598.3	600.3	599.6	597.6	595.9	596.6	597.6	596.9	599.0	601.3	603.7
30°	587.9	588.2	589.6	587.2	586.5	587.5	587.9	588.6	590.6	592.2	594.3
32.5°	576.1	578.8	578.5	576.1	576.1	577.1	577.5	555.0	513.0	441.8	422.4
35°	564.7	567.7	562.7	474.4	328.4	175.3	135.3	130.6	131.6	132.3	133.0
37.5°	417.7	198.1	126.2	127.2	128.3	129.3	130.3	131.3	132.3	133.3	133.6
40°	125.6	125.2	126.2	127.6	128.6	129.3	130.6	131.6	132.6	133.6	134.0
42.5°	124.2	124.9	125.9	127.2	128.6	129.9	130.9	132.3	133.0	133.6	134.0
45°	123.6	124.9	126.2	127.2	128.3	128.9	129.6	129.9	129.6	129.6	130.3
47.5°	122.5	123.9	124.2	123.9	124.2	123.9	123.9	123.9	122.9	122.5	122.5
50°	118.9	118.9	118.2	116.8	116.5	116.2	115.5	115.2	113.8	113.5	113.5
52.5°	111.1	110.8	109.8	108.1	107.4	106.8	106.4	106.1	104.8	104.1	104.4
55°	102.1	101.4	100.4	98.4	98.0	97.4	97.0	96.7	95.3	96.0	95.0
57.5°	93.7	92.3	91.0	90.6	89.3	89.0	88.6	88.3	87.3	87.6	87.0
60°	83.6	83.3	82.6	81.2	81.2	80.9	80.9	80.2	79.6	79.2	79.2
62.5°	76.2	75.2	74.5	74.5	73.5	73.5	73.5	72.9	72.2	72.5	72.2
65°	68.2	67.8	67.5	66.8	66.8	66.5	66.5	65.8	64.8	65.1	64.5
67.5°	61.4	60.8	60.1	59.8	58.4	57.7	57.4	57.1	55.7	56.1	55.4
70°	53.0	52.0	51.4	50.7	49.7	49.0	49.0	48.3	47.3	47.7	47.0
72.5°	44.3	43.6	43.0	42.6	41.6	41.3	41.0	40.6	39.6	40.0	39.6
75°	36.9	36.9	36.6	36.3	35.3	34.2	33.6	33.2	32.6	32.9	32.2
77.5°	30.6	29.9	29.2	29.2	28.2	27.5	26.9	26.9	26.9	26.5	26.2
80°	23.8	23.2	23.2	22.8	22.2	21.5	21.2	21.2	20.8	20.8	20.5
82.5°	18.1	17.5	17.1	17.1	16.5	16.1	15.8	15.4	15.4	15.4	15.1
85°	12.8	12.1	11.8	11.8	11.1	10.7	10.7	10.4	10.4	10.1	10.1
87.5°	7.7	7.4	7.1	7.1	6.4	6.0	6.0	6.0	5.7	5.7	5.4
90°	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):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	790.3	790.3	788.0	788.7	787.6	789.0	787.3	787.3	789.3	789.3	790.7
5°	762.1	760.4	760.1	759.4	756.1	757.4	755.7	754.1	756.4	756.4	759.4
7.5°	723.5	720.5	721.8	719.8	717.8	714.8	715.8	714.5	716.1	718.5	721.5
10°	703.7	701.0	702.7	700.7	701.7	697.3	697.7	698.0	699.7	700.4	703.0
12.5°	691.0	690.3	689.6	688.9	689.6	687.3	685.9	686.3	686.9	687.3	689.3
15°	664.1	659.7	661.1	656.4	656.7	657.0	654.4	657.0	656.7	661.1	665.1
17.5°	642.3	642.3	639.9	637.9	636.6	636.2	634.2	635.6	634.2	636.9	637.9
20°	627.2	626.8	626.5	625.5	622.1	622.5	623.5	620.4	620.1	619.8	621.8
22.5°	620.1	620.4	619.1	619.1	616.1	616.8	617.1	613.7	614.1	613.1	614.1
25°	612.7	613.4	611.7	611.7	611.0	610.7	609.0	609.7	607.7	606.0	607.7
27.5°	604.0	605.3	604.0	604.7	603.3	602.7	601.6	601.0	599.0	598.6	599.6
30°	595.9	596.6	596.3	594.6	594.3	592.2	593.3	591.2	589.2	589.6	590.2
32.5°	305.5	291.8	224.9	203.1	201.1	208.5	247.1	300.8	389.8	476.1	538.2
35°	133.3	133.3	133.3	133.0	133.0	132.6	132.3	131.9	131.6	131.3	130.9
37.5°	134.0	134.0	134.0	134.0	133.6	133.3	133.3	132.6	132.3	131.9	131.6
40°	134.3	134.6	134.6	134.6	134.3	134.3	134.0	133.3	133.0	132.3	131.6
42.5°	134.0	134.3	134.3	134.0	134.0	133.6	133.6	133.3	133.0	132.6	132.3
45°	129.6	129.9	129.3	129.3	128.9	128.9	128.9	128.9	128.9	129.3	129.3
47.5°	121.9	121.9	121.5	121.2	121.2	120.9	121.2	120.9	121.5	121.9	122.5
50°	112.8	112.8	112.1	111.8	111.8	111.8	111.8	112.1	112.5	113.1	113.8
52.5°	103.4	103.4	103.1	102.7	102.4	102.4	103.4	103.1	103.4	103.7	104.8
55°	94.3	94.7	94.0	94.0	93.7	93.7	93.7	94.0	94.3	94.7	95.7
57.5°	86.6	86.6	85.9	85.9	85.9	85.6	86.6	85.9	86.3	86.6	87.3
60°	78.9	78.6	78.6	78.2	78.2	78.2	78.9	78.6	78.6	78.9	79.6
62.5°	71.8	71.8	71.5	71.5	71.2	71.2	71.8	71.5	71.5	71.8	72.2
65°	63.8	63.8	63.5	63.1	64.1	63.1	64.1	63.5	64.1	64.5	65.1
67.5°	54.7	54.7	54.7	54.4	54.4	55.1	55.4	54.7	55.1	55.7	56.1
70°	46.7	46.7	46.3	46.3	46.3	47.0	47.3	46.7	47.0	47.3	48.0
72.5°	39.6	38.9	38.9	38.6	39.3	39.3	39.6	39.3	39.6	39.6	40.3
75°	32.6	31.9	31.9	31.9	32.6	32.2	32.6	32.2	32.6	32.6	32.9
77.5°	26.2	25.9	25.5	25.5	26.2	26.2	26.2	25.9	26.2	26.5	26.9
80°	20.5	20.1	19.8	19.8	20.5	20.5	20.5	20.8	20.5	20.8	21.2
82.5°	15.1	14.8	14.4	15.1	15.1	15.1	15.1	15.4	15.1	15.4	15.8
85°	10.1	9.7	9.4	10.1	10.1	10.1	10.1	10.4	10.1	10.4	10.7
87.5°	5.4	5.0	5.0	5.4	5.4	5.4	5.7	5.7	5.7	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	792.7	793.7	793.4	791.3	789.3	787.0	785.3	785.6	789.0	790.0	787.0
5°	759.4	765.8	765.8	770.2	767.8	765.8	767.2	774.5	778.2	784.0	786.0
7.5°	725.2	728.2	727.9	732.2	731.6	731.6	732.6	742.3	747.0	751.7	753.1
10°	706.1	709.1	708.7	709.1	708.1	705.7	705.7	710.1	714.1	716.5	717.1
12.5°	692.3	694.0	693.6	693.6	693.0	691.0	690.6	694.3	698.7	701.7	702.0
15°	671.8	676.5	677.5	681.9	680.9	678.2	678.9	681.9	684.6	687.3	686.3
17.5°	641.3	643.6	643.9	645.6	645.0	645.0	649.0	660.1	667.4	673.8	674.5
20°	623.8	625.5	624.8	628.5	626.8	626.5	627.5	632.2	635.6	638.6	643.9
22.5°	615.4	616.8	615.7	616.1	613.1	610.4	609.7	613.4	617.1	621.1	621.1
25°	608.4	609.4	609.0	608.4	606.0	602.3	601.6	602.3	603.7	604.0	601.6
27.5°	600.0	600.6	600.6	601.0	598.0	594.6	593.9	593.3	594.6	594.3	590.6
30°	591.2	590.2	590.6	590.9	588.2	585.2	583.8	583.5	584.9	584.5	580.8
32.5°	570.4	578.1	578.8	579.5	577.1	574.4	573.1	572.1	572.8	572.4	569.1
35°	130.6	133.0	162.8	368.6	500.6	554.3	560.0	558.7	559.0	559.0	556.3
37.5°	130.9	130.6	130.3	129.3	128.3	127.6	220.6	470.4	544.9	545.2	542.9
40°	130.9	130.6	130.3	129.6	128.3	127.2	125.6	124.2	127.2	280.0	512.3
42.5°	131.6	130.9	130.3	129.6	128.3	126.9	125.6	123.9	124.9	124.2	122.5
45°	129.6	129.3	129.3	128.9	128.3	126.9	125.2	123.2	122.2	123.2	121.5
47.5°	123.2	123.6	124.6	124.9	124.9	125.2	124.2	122.9	121.2	122.2	120.2
50°	114.5	115.2	115.5	117.2	117.8	119.2	119.5	119.5	119.2	120.5	119.2
52.5°	105.1	105.8	107.4	108.1	108.8	110.8	111.5	112.5	113.1	115.2	116.5
55°	96.0	96.4	97.0	98.4	99.4	101.1	102.1	103.1	104.8	105.8	109.8
57.5°	87.6	88.0	89.3	89.6	90.3	91.7	92.7	94.0	95.3	96.0	100.7
60°	79.6	79.9	80.9	81.2	81.6	82.9	83.9	84.9	85.9	86.6	90.0
62.5°	72.5	72.5	73.5	73.5	73.9	74.9	75.5	76.2	77.2	77.6	79.2
65°	65.5	65.8	66.5	66.5	66.8	67.5	67.8	68.2	69.2	69.2	70.5
67.5°	56.7	57.1	58.1	58.8	59.1	60.4	60.8	61.1	61.8	62.1	62.8
70°	48.3	48.7	49.7	50.0	50.4	51.4	52.0	53.0	54.1	55.1	55.7
72.5°	40.6	41.0	42.0	42.0	43.0	43.3	44.0	44.3	45.3	46.0	47.0
75°	33.2	33.6	34.6	34.6	35.6	35.9	36.3	36.6	37.3	37.9	38.6
77.5°	27.2	27.2	28.5	29.2	29.9	29.9	30.2	30.2	30.2	30.6	31.2
80°	21.5	21.5	22.5	23.2	23.8	23.8	24.2	24.5	24.8	24.8	25.2
82.5°	16.1	16.1	17.1	17.5	18.1	18.1	18.1	18.5	18.8	18.5	19.1
85°	11.1	11.1	11.8	12.1	12.8	12.8	12.8	13.1	13.4	13.1	13.4
87.5°	6.4	6.7	7.1	7.4	7.7	8.1	8.1	8.1	8.4	8.4	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	783.6	779.6	779.2	774.5	773.2	773.5	769.8	768.5	762.5	761.1	754.7
5°	786.6	788.7	787.6	787.3	788.3	787.6	785.0	783.6	782.6	779.9	774.5
7.5°	753.4	754.7	755.7	760.1	763.8	770.2	776.9	781.3	784.6	785.3	780.9
10°	719.5	725.9	730.2	736.9	742.3	746.0	750.0	753.7	763.5	773.2	778.9
12.5°	702.0	703.7	703.4	707.1	710.8	720.5	729.9	735.3	742.7	747.0	757.4
15°	687.3	687.6	688.6	691.3	693.3	696.7	701.0	709.1	723.9	730.6	736.3
17.5°	673.8	673.8	674.5	676.8	679.5	682.6	685.2	688.6	696.0	707.1	721.2
20°	652.3	661.7	662.7	662.4	663.8	669.5	670.1	676.2	679.9	684.2	698.0
22.5°	620.4	626.2	634.2	646.6	651.3	654.0	656.0	658.7	664.4	669.5	675.2
25°	603.0	606.7	609.0	612.7	622.5	638.2	641.3	644.3	648.0	651.7	658.7
27.5°	587.5	587.2	588.9	592.2	594.9	603.3	618.1	629.8	630.5	635.9	641.9
30°	576.5	574.4	572.1	571.4	575.1	579.5	583.8	602.3	615.1	617.8	624.1
32.5°	566.1	562.7	559.3	556.7	554.3	558.0	560.7	568.7	585.2	600.6	604.0
35°	553.3	549.9	545.9	542.9	539.2	538.9	538.5	546.2	551.6	570.1	586.2
37.5°	540.2	536.5	533.2	529.8	526.1	523.4	521.7	523.8	528.8	536.8	563.7
40°	526.4	522.1	518.7	516.0	511.0	509.0	505.6	504.3	504.6	511.7	525.8
42.5°	314.6	501.6	503.3	500.3	495.9	493.2	489.5	487.8	484.5	487.8	495.9
45°	121.2	122.5	367.0	484.8	479.4	476.1	472.7	471.0	467.3	464.7	472.0
47.5°	118.9	120.2	117.5	166.5	457.6	458.6	454.6	452.9	449.2	447.2	445.2
50°	117.2	118.2	116.2	116.8	114.5	419.3	436.1	434.1	430.1	427.7	423.7
52.5°	115.5	115.5	114.2	112.5	111.8	112.1	352.9	415.0	410.3	407.9	402.6
55°	110.1	110.8	112.1	109.5	108.8	108.4	107.4	336.1	388.4	385.8	381.1
57.5°	102.1	103.4	107.1	106.4	106.4	103.7	103.1	103.1	311.9	363.3	358.6
60°	92.7	94.0	98.0	99.4	100.4	99.7	99.0	98.7	97.4	328.7	334.7
62.5°	82.9	84.3	85.6	90.0	91.3	93.0	95.0	94.0	92.7	92.7	309.6
65°	72.5	74.5	75.2	79.2	80.9	83.9	85.6	88.0	87.3	87.0	88.6
67.5°	63.5	65.8	66.1	67.8	70.8	72.2	74.2	78.6	80.6	81.2	81.9
70°	55.7	57.1	58.1	58.8	60.8	61.1	64.8	67.8	70.8	74.2	75.2
72.5°	48.0	49.0	51.0	50.4	51.0	52.4	54.4	56.4	59.4	64.1	67.1
75°	39.3	40.0	41.3	42.0	43.3	44.3	45.7	47.3	50.0	52.4	56.4
77.5°	31.6	31.9	32.9	33.2	34.6	35.6	37.9	38.9	40.6	42.3	44.7
80°	25.5	25.5	25.9	25.9	26.9	27.9	29.5	30.6	32.6	33.9	33.9
82.5°	19.5	19.5	20.5	20.5	21.2	21.2	22.2	22.2	23.2	23.8	24.5
85°	13.8	14.1	14.8	14.4	15.1	14.8	15.4	16.1	16.5	16.1	15.8
87.5°	9.1	9.1	9.7	9.4	9.7	9.7	10.4	10.4	10.7	10.7	10.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	752.4	747.4	744.3	740.6	739.6	738.6	740.0	740.0	738.0	736.3	733.3
5°	769.8	764.5	758.8	752.7	747.0	741.0	738.6	738.3	734.6	732.6	731.6
7.5°	778.9	776.2	769.8	761.5	752.7	742.0	737.3	734.6	730.9	730.2	730.2
10°	779.9	776.9	773.5	767.5	757.4	743.3	734.3	728.9	725.5	727.9	732.2
12.5°	770.2	775.9	772.9	768.8	760.8	743.7	730.6	722.5	721.5	727.5	739.0
15°	745.3	762.1	770.5	766.5	760.1	743.0	724.5	715.1	715.1	727.5	742.3
17.5°	726.5	739.6	760.1	763.5	756.1	741.6	718.8	707.7	710.8	728.9	744.7
20°	711.1	719.2	739.0	757.8	750.7	738.6	710.4	699.0	705.1	726.9	748.0
22.5°	686.9	703.0	715.1	743.0	745.3	732.9	702.0	688.3	700.4	726.9	746.3
25°	663.4	682.9	695.7	722.8	737.3	725.9	694.3	676.8	695.3	725.9	745.0
27.5°	647.0	656.0	679.2	698.7	725.2	716.5	683.9	664.4	688.9	720.5	737.3
30°	629.5	635.6	658.4	676.8	709.1	705.7	673.2	650.7	680.9	715.5	717.1
32.5°	610.4	617.1	628.8	655.7	686.6	695.7	661.1	636.9	672.1	707.7	693.6
35°	590.9	595.9	605.3	634.2	660.4	680.5	646.3	621.1	666.1	696.0	671.1
37.5°	571.4	576.8	584.9	609.0	632.9	666.4	633.5	605.3	655.0	675.2	647.6
40°	553.0	556.0	564.4	579.5	610.0	652.0	619.1	588.9	643.6	648.6	615.7
42.5°	519.1	534.2	541.9	554.0	584.2	632.2	602.3	571.4	630.9	622.1	583.8
45°	482.5	515.4	518.7	530.8	561.4	611.0	586.5	554.3	618.8	599.3	553.6
47.5°	452.6	476.4	495.9	506.0	534.2	586.2	571.8	539.9	600.6	570.4	524.1
50°	426.1	438.8	474.1	481.4	501.6	556.3	554.3	523.1	575.5	534.2	495.2
52.5°	400.2	409.3	441.2	456.9	473.4	524.1	533.5	506.6	547.9	497.9	466.0
55°	377.7	380.7	398.2	431.4	446.2	491.5	510.7	487.5	513.0	463.3	437.8
57.5°	354.5	351.9	364.6	407.3	418.0	458.3	486.5	468.0	484.8	428.1	408.6
60°	330.4	326.7	332.0	360.2	388.1	425.4	457.9	446.5	450.6	393.2	376.0
62.5°	305.2	301.5	299.8	317.6	358.9	391.5	429.1	422.7	408.6	361.3	335.7
65°	279.0	275.3	272.6	279.7	326.7	347.5	396.8	395.2	362.6	327.7	282.7
67.5°	84.9	250.5	244.8	244.4	275.3	307.5	361.9	359.2	316.3	291.8	243.4
70°	76.5	203.1	215.9	212.9	226.3	266.9	322.0	320.0	271.3	234.0	215.2
72.5°	70.2	71.8	190.7	187.3	190.4	227.0	280.3	275.0	230.0	184.7	186.0
75°	60.1	63.1	65.8	158.1	154.1	188.0	235.0	226.6	189.7	152.4	155.4
77.5°	49.0	52.7	54.7	115.2	124.6	134.0	187.7	176.6	130.6	121.9	58.1
80°	36.6	39.6	43.0	46.0	94.7	93.7	139.3	128.3	91.0	75.9	45.3
82.5°	26.9	27.9	29.9	33.2	37.6	62.8	89.6	78.9	63.1	34.6	31.2
85°	16.8	18.1	19.1	20.1	22.8	37.6	44.3	35.3	26.5	21.2	19.8
87.5°	10.7	10.7	10.4	10.7	11.1	13.4	15.1	14.4	11.4	10.7	10.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	729.9	725.2	725.2	723.9	724.9	724.9	724.5	724.9	727.2	728.6	730.9
5°	729.6	728.2	731.2	734.9	739.3	744.7	746.0	750.7	755.1	760.8	766.8
7.5°	733.9	738.6	744.3	750.4	759.1	765.5	771.2	776.9	780.9	786.3	789.7
10°	740.3	749.7	759.4	767.2	776.6	781.9	785.6	786.3	780.6	771.5	764.1
12.5°	749.4	760.4	769.5	776.9	781.3	779.2	768.5	757.4	751.0	741.6	728.6
15°	757.1	767.2	776.6	773.5	761.8	750.7	742.3	729.2	716.5	707.7	702.0
17.5°	760.4	770.2	766.8	751.0	740.0	727.2	710.1	700.0	691.6	684.9	681.5
20°	762.5	760.8	742.7	731.2	709.8	698.0	686.9	677.5	671.1	667.8	667.1
22.5°	757.1	736.6	721.2	700.7	684.9	675.2	666.4	658.7	654.4	651.7	650.0
25°	739.3	715.5	692.6	676.5	663.1	654.7	648.0	641.6	636.2	634.9	631.5
27.5°	714.5	695.0	664.8	652.3	640.6	636.6	629.2	622.8	618.1	614.1	603.3
30°	694.0	663.1	641.3	629.8	622.8	618.1	609.7	603.0	594.9	580.2	574.1
32.5°	668.8	638.2	617.4	611.0	602.3	598.3	588.9	574.1	561.7	555.6	555.3
35°	636.2	611.0	595.9	590.2	583.2	576.5	557.0	543.6	537.5	538.2	543.2
37.5°	609.0	586.5	576.8	568.7	560.7	543.6	527.1	520.7	522.4	525.8	528.1
40°	581.5	564.4	553.3	546.9	528.8	512.0	503.3	505.6	508.6	511.0	514.0
42.5°	554.6	542.6	531.5	519.1	494.2	485.1	487.2	490.2	492.9	496.2	499.2
45°	529.1	518.4	505.6	477.4	465.0	467.3	470.4	472.7	476.7	479.1	482.1
47.5°	505.0	493.5	471.0	446.2	444.9	449.6	452.2	455.3	458.3	452.2	249.5
50°	477.8	466.0	431.8	422.4	425.4	429.7	433.1	436.1	388.4	154.4	118.9
52.5°	450.9	421.0	399.2	401.9	404.9	409.9	412.3	306.2	121.9	116.2	116.5
55°	421.0	382.7	376.4	379.7	382.4	387.4	256.8	112.5	111.8	111.5	114.2
57.5°	374.0	350.8	353.5	356.9	359.6	253.8	109.5	108.8	109.1	109.5	109.8
60°	332.0	327.0	330.0	333.1	235.7	105.8	103.7	104.1	105.4	104.4	101.7
62.5°	298.8	302.8	305.9	267.9	100.4	99.4	100.4	99.4	97.0	95.3	92.0
65°	273.3	277.3	279.7	94.3	94.0	95.3	94.3	91.0	87.3	82.6	81.6
67.5°	246.4	250.5	89.6	87.3	88.6	87.0	82.9	78.9	76.2	72.2	70.5
70°	218.6	93.7	81.2	80.9	78.6	75.9	71.5	67.5	64.1	62.4	60.8
72.5°	157.8	74.2	73.2	70.5	66.5	62.8	59.1	56.7	55.1	54.1	53.0
75°	65.8	64.5	61.4	56.7	52.7	51.0	48.3	46.7	46.0	44.0	43.3
77.5°	55.1	52.4	48.0	44.7	42.3	41.3	39.3	37.3	36.3	35.9	34.6
80°	42.3	38.6	36.6	34.9	34.2	31.9	29.5	28.5	27.9	27.5	26.5
82.5°	28.9	27.5	26.2	23.8	23.8	22.8	21.8	21.2	20.5	20.5	19.8
85°	18.8	17.8	17.5	16.5	16.5	15.8	15.4	15.1	14.8	14.4	14.1
87.5°	10.7	10.7	11.1	10.7	10.7	10.4	10.1	9.7	9.4	9.4	8.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	733.9	737.3	738.0	749.4	755.7	755.4	753.4	759.4	755.7	753.7	755.7
5°	772.9	776.9	780.3	792.7	797.0	799.1	798.7	802.1	799.4	797.0	797.0
7.5°	792.0	793.4	794.7	791.7	789.7	786.3	781.3	773.9	770.2	766.2	761.1
10°	760.4	756.1	757.8	751.7	746.7	743.0	738.3	732.2	727.2	723.5	717.8
12.5°	721.8	721.5	722.2	723.2	718.1	715.1	711.4	707.1	703.4	699.3	694.6
15°	698.3	698.7	701.4	700.4	698.7	697.0	693.0	691.6	688.3	683.9	681.2
17.5°	681.5	683.2	685.9	684.6	681.9	680.2	677.2	674.2	671.1	667.8	663.8
20°	666.8	668.5	670.1	668.5	663.4	661.1	657.0	647.6	640.9	634.2	628.2
22.5°	650.7	651.7	650.3	645.0	632.2	626.2	621.5	618.8	613.1	609.4	605.7
25°	630.5	624.8	616.1	610.0	605.0	602.3	600.3	600.0	599.3	598.6	596.9
27.5°	597.6	595.6	590.9	588.6	588.9	589.9	590.2	591.2	590.2	588.9	587.5
30°	573.1	574.1	574.4	575.1	576.8	577.8	578.1	579.5	578.8	577.8	577.1
32.5°	557.7	560.0	561.4	563.4	564.4	566.1	566.1	568.1	566.1	565.7	565.0
35°	544.9	546.9	547.6	550.6	551.6	553.3	553.3	555.0	553.3	536.2	423.4
37.5°	532.1	534.2	535.5	538.2	538.5	539.5	497.9	364.3	235.0	182.0	139.0
40°	517.0	519.4	520.7	521.7	366.6	232.7	160.1	130.3	130.3	131.3	132.3
42.5°	500.9	502.6	350.2	203.8	126.9	126.6	127.6	128.6	129.6	130.9	132.3
45°	393.8	198.8	126.2	123.2	124.2	125.6	126.9	128.3	129.9	131.3	131.9
47.5°	129.3	121.2	122.9	121.5	123.2	124.9	126.2	127.6	127.9	128.3	127.9
50°	119.5	119.5	120.5	120.5	121.9	122.5	122.5	122.5	121.2	120.9	119.9
52.5°	115.5	118.2	116.8	117.5	116.8	115.8	114.8	113.8	111.8	111.1	109.8
55°	113.5	114.5	111.1	110.1	108.8	106.1	104.8	103.4	101.7	101.1	99.4
57.5°	108.8	106.4	102.7	101.1	98.7	96.0	94.7	93.7	92.0	91.3	90.3
60°	100.1	95.3	93.0	91.0	88.3	85.9	84.9	84.3	82.9	82.6	81.6
62.5°	89.3	85.3	83.3	80.6	78.6	77.2	76.2	75.9	74.5	74.5	73.9
65°	77.6	75.5	73.9	71.2	70.2	68.8	68.5	68.2	67.5	67.1	66.5
67.5°	68.2	66.8	64.5	63.1	62.4	61.4	60.8	60.1	58.8	58.1	57.1
70°	59.8	58.8	56.4	55.4	54.1	52.4	51.4	50.7	49.7	49.0	48.0
72.5°	51.7	48.7	47.0	46.0	45.0	43.3	43.0	42.3	41.3	41.0	40.0
75°	41.6	39.3	38.3	37.6	36.6	35.6	35.6	35.6	34.6	34.2	33.9
77.5°	33.2	31.9	31.2	30.6	30.2	29.5	28.5	28.2	27.2	27.2	26.9
80°	25.5	24.8	24.2	23.8	23.5	22.8	22.2	21.8	20.8	20.8	20.5
82.5°	18.8	18.5	18.1	17.8	17.5	17.1	16.1	15.8	15.1	15.1	14.8
85°	13.4	13.1	12.4	12.1	12.1	11.8	10.7	10.4	9.7	9.7	9.7
87.5°	8.4	8.1	7.7	7.4	7.1	6.7	6.0	5.7	5.7	5.0	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	751.7	757.4	756.8	760.8	761.8	763.8	764.5	764.8	759.8	763.8	764.1
5°	796.0	797.0	797.7	799.4	801.1	801.4	799.7	797.7	798.4	797.0	793.7
7.5°	760.4	755.4	754.4	753.1	752.4	751.7	748.7	751.4	748.4	747.0	742.3
10°	716.8	712.1	711.8	711.8	712.8	712.4	711.8	710.4	713.1	711.4	710.4
12.5°	694.0	692.3	693.3	692.6	695.3	696.0	695.3	695.3	694.6	693.3	694.0
15°	680.2	678.9	679.9	678.9	680.9	681.2	679.5	680.5	678.9	677.2	676.5
17.5°	662.1	659.1	656.7	653.3	653.7	653.0	651.0	651.0	649.3	645.0	645.3
20°	627.2	624.1	622.8	622.8	624.5	625.1	624.8	625.5	623.8	623.1	620.4
22.5°	605.3	605.0	605.7	607.4	610.0	613.7	614.1	614.1	614.1	613.7	610.4
25°	597.6	597.6	598.3	600.6	602.7	605.3	606.0	606.7	606.0	606.0	603.0
27.5°	588.9	588.2	589.6	591.9	594.3	596.3	598.0	598.3	597.3	597.3	598.3
30°	578.1	577.8	579.5	581.8	583.8	585.9	587.5	588.9	587.5	587.5	586.5
32.5°	567.1	567.1	567.7	553.6	513.3	462.3	463.3	433.8	413.3	387.4	421.7
35°	353.9	257.5	221.3	187.3	163.5	148.1	147.7	142.7	140.3	138.7	138.3
37.5°	133.6	134.3	135.6	136.3	137.3	138.0	138.3	138.3	138.3	138.3	138.0
40°	133.3	134.6	135.6	136.6	137.7	138.3	138.3	138.7	139.0	139.0	139.0
42.5°	133.6	135.0	136.3	137.3	138.0	138.3	138.7	139.0	139.0	139.0	139.0
45°	133.3	134.0	134.0	134.3	134.3	134.3	134.6	134.6	134.3	134.0	134.6
47.5°	128.3	128.3	127.2	126.9	126.6	125.9	126.2	125.9	125.6	125.2	125.9
50°	119.5	118.2	117.5	116.8	116.5	115.8	116.2	115.8	115.5	114.8	115.8
52.5°	109.1	108.8	107.4	106.8	106.4	106.8	106.1	105.8	105.4	105.1	105.4
55°	99.0	97.7	97.4	96.7	96.4	96.7	96.4	96.0	95.7	95.3	95.7
57.5°	90.0	89.0	88.6	88.0	88.0	88.0	88.0	87.6	87.3	87.0	87.3
60°	81.2	80.6	80.2	80.2	79.9	79.9	79.9	79.6	79.2	79.2	79.6
62.5°	73.9	73.9	72.9	72.5	72.5	72.9	72.5	72.2	71.8	71.5	72.2
65°	66.1	64.8	64.5	63.8	63.1	63.5	63.1	62.8	62.4	62.1	62.8
67.5°	56.7	56.4	55.1	54.4	54.1	54.4	54.1	53.7	53.4	53.0	53.7
70°	47.7	47.7	46.3	46.0	45.7	45.7	45.3	45.3	45.0	44.7	45.3
72.5°	39.6	39.6	39.3	38.6	38.3	37.9	37.6	37.3	37.3	37.6	37.6
75°	32.9	32.2	30.9	31.2	30.9	30.6	30.6	30.2	29.9	30.6	30.2
77.5°	25.9	25.5	24.5	24.8	24.5	24.2	24.2	23.8	23.5	23.8	23.8
80°	19.5	19.5	19.1	18.8	18.8	18.5	18.1	18.1	17.8	18.1	18.1
82.5°	14.1	14.1	13.8	13.4	13.1	13.1	12.8	12.8	12.8	12.8	12.8
85°	9.1	8.7	8.7	8.1	8.1	8.1	7.7	7.7	7.7	7.7	7.7
87.5°	4.4	4.4	4.0	4.0	3.7	3.4	3.4	3.0	3.0	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	758.1	762.5	758.8	760.4	760.8	766.5	766.2	767.5	765.1	762.5	758.8
5°	796.7	794.7	792.0	798.4	795.0	799.1	800.4	803.1	803.1	802.8	799.7
7.5°	747.4	743.0	746.3	748.7	749.7	747.0	752.4	758.4	763.5	766.5	766.8
10°	708.7	710.1	709.8	710.8	713.1	712.8	716.1	719.5	720.8	722.8	723.5
12.5°	690.6	690.3	691.0	693.3	694.6	694.3	697.7	699.7	700.4	700.7	700.4
15°	676.2	673.8	675.5	675.8	676.8	676.8	680.9	683.9	685.2	685.9	685.2
17.5°	649.0	643.3	648.6	648.6	652.3	651.7	658.0	663.1	665.8	667.8	667.8
20°	622.1	619.4	621.5	620.8	623.5	623.1	627.2	630.5	632.9	634.5	636.6
22.5°	611.4	612.1	609.0	609.4	609.4	609.0	611.0	612.7	613.4	614.4	613.7
25°	604.3	605.0	604.0	602.3	601.6	602.3	603.3	605.3	605.7	605.0	602.7
27.5°	597.3	595.3	596.9	593.9	593.3	594.6	595.9	596.3	596.6	596.6	594.6
30°	586.5	584.9	586.5	585.2	583.8	585.2	586.2	586.2	586.9	587.2	584.9
32.5°	409.9	413.3	467.7	500.6	546.9	570.4	574.8	574.8	575.5	575.5	573.4
35°	139.7	140.0	151.4	164.2	191.4	224.9	268.9	291.8	369.0	461.3	550.6
37.5°	138.0	137.7	137.3	137.0	136.6	136.3	135.6	135.3	137.3	162.8	220.9
40°	138.7	138.3	137.7	137.3	137.0	136.3	136.0	135.3	134.6	134.0	133.3
42.5°	138.7	138.3	138.0	137.7	137.3	137.0	136.3	135.6	135.0	134.0	133.0
45°	134.0	134.0	134.3	134.3	134.6	134.6	134.6	134.3	134.3	134.0	132.6
47.5°	125.2	125.2	126.2	126.2	126.9	127.6	127.6	128.3	129.3	129.9	130.3
50°	115.2	115.2	116.2	116.5	117.2	118.2	119.2	119.5	120.5	121.9	123.2
52.5°	105.1	105.1	106.1	106.1	106.8	107.8	108.8	109.1	110.5	111.8	113.5
55°	95.7	95.7	96.4	96.7	97.0	97.7	98.7	98.7	100.1	101.1	102.7
57.5°	87.3	88.0	88.0	88.0	88.3	89.0	89.6	89.6	90.6	91.7	93.0
60°	79.2	79.9	79.9	79.9	80.2	80.6	81.2	81.2	81.9	82.6	83.9
62.5°	71.8	72.5	72.5	72.9	72.9	73.2	73.9	73.5	74.2	74.5	75.5
65°	62.4	63.1	63.5	63.8	64.1	64.8	65.8	65.5	66.5	67.1	68.2
67.5°	53.4	54.1	54.1	54.4	54.7	55.4	56.1	56.1	57.1	57.7	59.1
70°	45.0	45.7	45.7	46.0	46.3	47.0	47.7	47.3	48.3	49.0	50.0
72.5°	37.3	37.9	37.9	38.3	38.3	38.9	39.6	40.3	40.3	41.0	41.6
75°	30.2	30.6	30.9	30.9	31.2	31.6	32.2	32.9	33.2	33.6	34.2
77.5°	23.8	24.2	24.5	24.5	24.8	25.2	25.5	26.9	27.5	27.9	27.9
80°	18.1	18.5	18.5	18.5	18.8	19.1	19.8	19.8	21.2	21.2	21.5
82.5°	12.8	13.1	13.1	13.1	13.4	14.1	14.4	14.8	15.4	15.8	15.8
85°	7.7	8.1	8.1	8.1	8.4	8.7	9.4	9.7	10.1	10.1	10.4
87.5°	3.0	3.4	3.7	3.7	4.0	4.4	4.7	5.0	5.4	5.4	5.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	754.7	757.1	754.7	756.1	757.8	754.7	747.7	745.0	744.0	740.0	737.3
5°	796.7	796.7	795.7	798.4	798.1	793.4	786.0	782.6	779.2	774.9	771.5
7.5°	766.8	769.5	771.2	781.6	788.3	789.0	793.7	794.7	796.0	794.7	792.7
10°	723.9	722.8	727.5	737.3	743.0	746.0	755.1	759.4	763.1	770.5	778.2
12.5°	699.7	701.0	703.0	710.1	715.5	714.1	717.8	720.8	725.2	732.6	743.7
15°	683.6	684.9	686.9	692.3	695.7	694.0	696.0	698.0	701.0	704.7	711.4
17.5°	666.1	668.5	670.8	676.5	679.5	679.2	680.9	681.5	682.6	684.9	689.6
20°	638.9	646.3	651.0	658.7	663.1	662.4	665.4	666.4	667.8	670.1	672.1
22.5°	614.1	616.1	618.4	626.8	634.2	643.3	645.3	648.0	651.3	653.7	655.7
25°	600.0	598.6	599.6	605.3	609.4	610.0	613.1	621.8	630.9	634.9	639.6
27.5°	591.6	590.2	589.9	592.6	593.3	591.6	590.9	593.6	600.3	607.0	621.1
30°	582.5	580.8	579.5	581.8	582.8	580.5	576.1	573.8	577.8	579.5	585.2
32.5°	571.8	570.1	569.4	570.8	571.4	569.4	564.7	562.0	561.4	560.0	561.4
35°	559.7	558.0	557.0	557.3	558.7	557.0	553.0	549.6	547.9	544.2	541.5
37.5°	288.4	408.6	530.5	543.2	544.6	544.2	540.2	536.5	534.8	530.5	529.1
40°	131.9	147.4	221.3	289.1	417.0	529.8	526.1	522.4	519.4	518.0	513.0
42.5°	131.6	131.9	132.3	130.6	161.8	275.6	406.9	508.0	506.0	502.6	498.9
45°	131.6	129.9	131.3	129.3	129.9	129.6	161.5	260.5	463.7	484.5	482.8
47.5°	130.3	129.3	130.6	128.9	126.9	127.9	126.6	128.3	200.1	339.4	465.0
50°	124.2	124.9	127.2	126.9	125.2	126.6	124.2	126.2	124.6	136.6	263.2
52.5°	115.2	116.5	118.9	120.9	121.5	123.2	122.5	123.2	121.9	122.2	122.5
55°	104.4	106.1	108.1	111.1	112.5	115.2	117.2	118.2	119.9	119.5	116.8
57.5°	94.3	96.0	97.7	100.7	103.7	105.1	108.8	110.8	115.2	114.2	113.5
60°	84.9	86.3	88.0	88.6	92.3	94.7	98.0	100.1	105.8	107.1	109.1
62.5°	76.5	77.2	78.6	79.6	81.9	84.3	85.9	89.3	92.3	96.7	99.7
65°	68.8	69.5	70.5	71.2	71.5	74.9	75.9	79.6	80.6	85.3	88.0
67.5°	60.1	61.4	62.8	63.5	64.1	66.1	66.8	68.5	70.8	72.9	76.2
70°	51.0	52.0	53.4	54.4	55.7	57.1	59.1	60.1	61.8	63.1	65.8
72.5°	42.6	43.6	44.3	45.3	46.3	47.3	49.0	51.4	52.7	55.1	55.7
75°	34.6	35.6	36.3	36.9	37.9	38.6	39.3	41.6	43.0	45.0	47.0
77.5°	28.5	28.5	29.2	31.2	30.9	30.9	31.6	32.9	33.9	35.3	37.3
80°	22.2	22.5	22.8	24.5	24.8	25.2	24.8	25.9	26.9	27.2	28.5
82.5°	16.5	16.8	16.8	17.8	18.8	18.8	18.8	19.1	20.1	20.5	21.2
85°	11.1	11.4	11.8	12.1	12.8	13.1	13.4	13.4	14.1	14.4	14.8
87.5°	6.0	6.7	7.1	7.4	7.7	8.1	8.4	8.7	9.1	9.4	9.7
90°	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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CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6	732.6
2.5°	736.3	734.6	733.6	730.9	730.2	725.9	726.5	725.9	725.9	726.9	730.2
5°	767.8	759.8	757.8	752.1	747.4	739.3	734.3	731.6	727.5	725.9	728.2
7.5°	789.3	783.3	778.2	773.2	766.5	757.1	750.0	742.0	735.3	728.9	727.2
10°	785.6	792.3	792.3	789.3	782.9	773.5	765.1	755.1	743.3	733.3	727.2
12.5°	754.4	766.2	775.6	782.6	789.0	782.6	774.2	766.2	753.1	738.3	727.2
15°	720.2	732.2	744.0	758.8	774.2	780.6	780.3	770.9	759.1	743.7	728.2
17.5°	696.0	704.4	710.8	726.9	745.7	762.1	773.2	773.9	762.5	748.7	728.6
20°	677.9	683.9	689.3	698.3	714.8	734.9	755.4	766.8	764.8	749.7	729.6
22.5°	661.4	665.8	670.1	676.8	689.9	703.0	726.9	750.4	760.4	748.0	728.6
25°	645.0	649.7	653.0	657.7	668.1	678.9	695.7	724.9	747.4	746.7	726.5
27.5°	625.5	631.9	635.9	642.3	649.3	657.4	668.8	696.3	728.6	740.0	721.2
30°	602.0	611.4	617.4	624.5	630.5	637.6	646.6	663.4	703.4	726.9	715.5
32.5°	568.1	584.9	598.3	605.0	611.7	617.8	625.8	639.9	672.5	709.1	709.1
35°	543.9	551.6	563.7	583.2	591.6	597.6	605.0	616.1	636.9	687.9	698.7
37.5°	525.1	528.1	534.2	553.3	569.1	578.8	586.2	593.3	613.7	659.1	685.2
40°	511.0	510.0	509.3	518.4	540.9	556.3	564.7	571.8	587.5	624.5	667.4
42.5°	494.5	493.5	490.2	492.5	503.6	529.5	542.2	549.9	563.0	588.2	648.0
45°	477.4	475.7	474.4	472.0	476.1	490.5	516.7	528.1	535.5	558.0	623.5
47.5°	460.0	457.6	455.9	453.9	451.6	458.3	483.1	503.6	516.4	530.5	593.9
50°	435.1	438.1	436.1	433.8	431.8	430.4	440.8	474.4	490.2	501.6	558.0
52.5°	205.1	398.9	415.6	413.3	410.6	408.3	410.6	436.1	464.7	473.7	514.7
55°	116.8	177.6	369.6	390.8	388.4	385.1	383.1	391.8	434.4	446.5	475.1
57.5°	112.5	112.8	163.2	352.2	365.3	362.3	359.9	361.9	398.2	418.7	440.5
60°	108.8	108.8	108.8	155.8	336.7	337.8	334.7	331.4	347.2	387.4	405.6
62.5°	100.7	102.7	103.7	103.7	153.8	311.9	308.9	307.9	308.5	349.8	370.7
65°	90.3	95.0	97.0	98.4	98.4	161.5	282.4	280.7	278.3	294.1	335.4
67.5°	78.9	83.6	88.0	90.6	91.0	94.0	168.5	252.8	249.5	249.8	297.8
70°	67.1	71.2	75.9	79.9	83.6	85.3	88.0	209.8	220.9	216.2	255.2
72.5°	58.1	59.8	63.1	67.1	71.5	75.5	77.9	83.6	191.7	186.7	194.1
75°	48.3	49.7	52.0	54.7	58.1	62.8	66.8	70.8	101.7	156.5	155.4
77.5°	37.6	40.0	42.6	44.3	46.0	49.4	54.7	58.8	62.8	105.8	124.6
80°	28.9	30.6	31.9	33.6	35.6	37.9	40.0	44.7	49.4	53.0	95.3
82.5°	21.5	22.5	23.5	24.2	24.8	26.2	29.9	31.6	34.6	37.9	45.0
85°	15.1	15.8	16.5	16.8	17.1	17.5	18.8	19.1	22.2	22.8	27.2
87.5°	9.7	10.1	10.7	11.1	11.1	11.4	11.8	11.8	11.8	11.1	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1213013

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	732.6	732.6
2.5°	732.9	738.3
5°	731.9	739.0
7.5°	729.2	735.9
10°	725.2	733.3
12.5°	720.8	728.6
15°	717.1	722.8
17.5°	713.1	716.5
20°	707.7	710.4
22.5°	702.4	701.0
25°	696.3	693.3
27.5°	688.6	682.9
30°	681.5	671.5
32.5°	674.8	658.4
35°	665.8	645.0
37.5°	656.4	631.2
40°	645.3	615.4
42.5°	633.5	599.6
45°	618.8	584.5
47.5°	605.7	566.4
50°	587.5	546.9
52.5°	565.4	528.8
55°	539.2	506.6
57.5°	511.0	483.5
60°	480.8	456.9
62.5°	444.2	429.4
65°	401.2	397.9
67.5°	345.1	362.9
70°	283.0	323.0
72.5°	236.7	280.7
75°	194.1	233.3
77.5°	153.8	183.0
80°	96.0	134.0
82.5°	64.5	88.0
85°	38.9	42.0
87.5°	15.1	15.4
90°	0.0	0.0

(END OF REPORT)