

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: P1213715

Luminaire Tested: 4SNLED-LD5-18SL-RW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213715
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-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

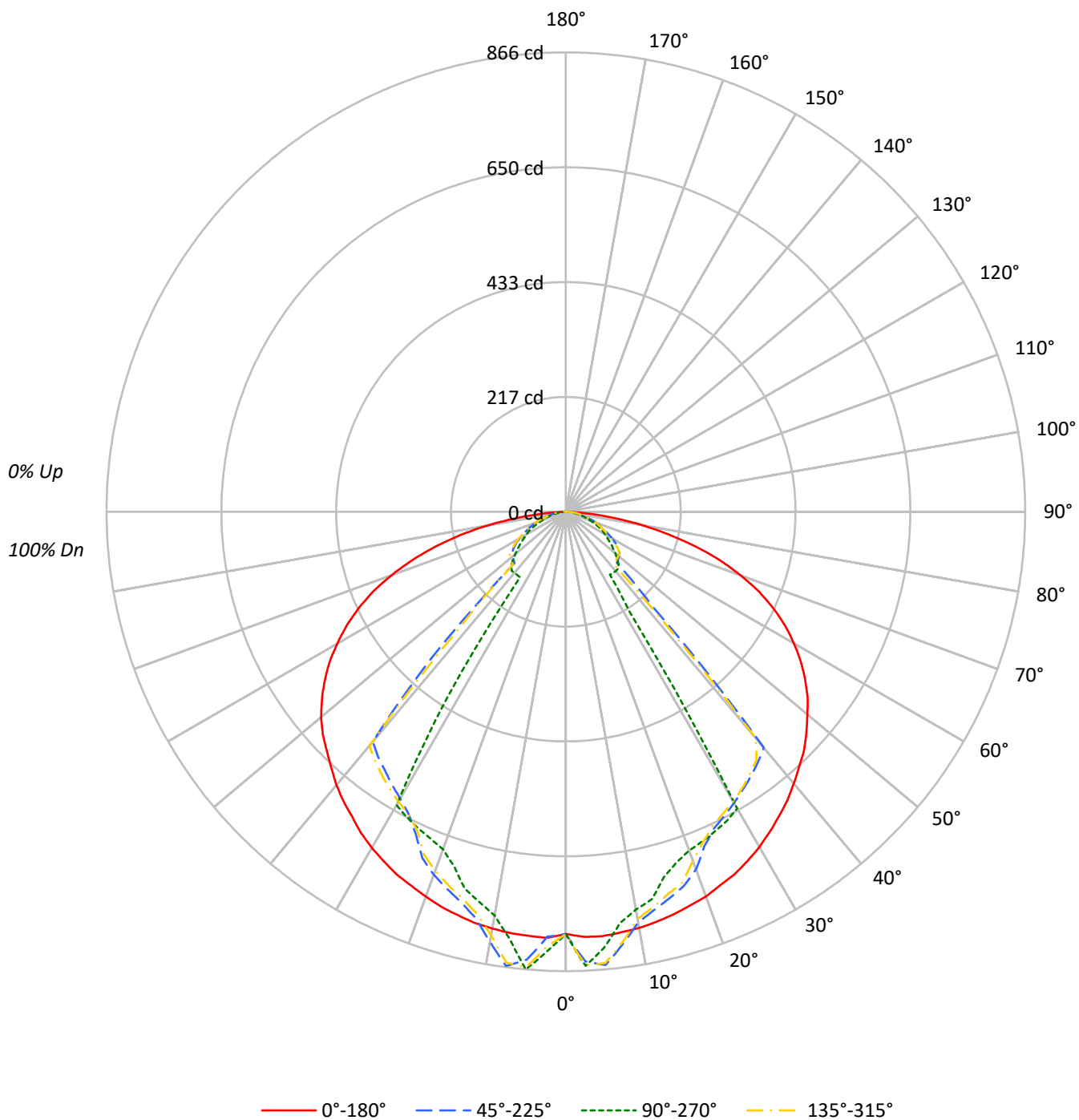
Lumens per Lamp: N/A
Luminaire Lumens: 1594.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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			0
RW	70	50	30	10	70	50	30	10	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	100		
1	110	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87		
2	102	94	88	83	99	93	87	82	89	85	81	86	82	79	83	80	77	75		
3	94	84	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65		
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57		
5	81	69	61	55	79	68	60	55	66	59	54	64	58	53	62	57	53	51		
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	47	46		
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41		
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37		
9	62	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34		
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6432	6432	6432	6432
5°	6495	6481	6493	6802
10°	6502	5859	6511	5949
15°	6516	5421	6531	5593
20°	6563	5142	6563	5123
25°	6620	5044	6630	4997
30°	6687	4955	6704	4896
35°	6765	1129	6779	1177
40°	6874	1174	6915	1211
45°	7038	1167	7063	1210
50°	7203	1055	7300	1084
55°	7425	936	7484	950
60°	7612	833	7629	843
65°	7747	727	7727	715
70°	7635	585	7611	564
75°	7088	451	7141	432
80°	5756	320	5985	293
85°	3115	191	3293	147

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 7800 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	4.9
10°-20°	215.3	13.5
20°-30°	319.0	20.0
30°-40°	321.4	20.2
40°-50°	251.0	15.7
50°-60°	193.9	12.2
60°-70°	130.2	8.2
70°-80°	66.4	4.2
80°-90°	18.5	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°	612.6	38.4
0°-40°	934.0	58.6
0°-60°	1378.9	86.5
0°-90°	1594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1594.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	796	796	796	796	796	
5°	803	825	803	866	803	76
15°	785	713	787	736	785	222
25°	753	665	754	658	753	347
35°	701	144	702	151	701	439
45°	635	140	637	146	635	490
55°	550	102	555	104	550	492
65°	432	69	431	68	432	425
75°	254	35	255	33	254	265
85°	46	11	48	8	46	63
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°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	802.2	805.1	807.3	808.8	809.5	809.5	809.9	810.2	815.0	817.2	818.6
5°	802.9	805.9	810.2	816.1	821.2	825.6	829.2	834.3	839.4	844.9	846.7
7.5°	799.7	803.3	812.1	822.6	832.5	839.4	844.2	847.4	850.0	850.4	852.2
10°	796.7	803.3	815.3	829.2	841.6	850.0	850.0	848.2	850.7	840.9	831.0
12.5°	791.6	798.9	815.3	833.6	845.3	848.5	847.1	839.8	824.8	812.8	807.3
15°	785.4	795.3	815.7	836.1	846.0	847.1	833.2	814.6	803.3	796.0	786.9
17.5°	778.5	791.6	816.1	836.5	840.1	835.0	808.8	797.1	785.4	768.3	755.9
20°	771.9	784.7	813.1	831.4	833.6	810.6	790.2	777.8	758.1	743.1	737.6
22.5°	761.7	776.7	810.6	824.5	816.1	789.4	769.7	750.0	732.2	727.8	721.2
25°	753.3	769.0	804.8	816.1	793.8	770.1	747.1	724.1	715.7	709.5	703.7
27.5°	742.0	761.3	797.1	800.7	770.1	749.3	715.7	705.5	697.9	690.9	688.4
30°	729.6	753.3	786.5	779.6	750.4	719.8	695.0	685.5	680.0	672.7	669.8
32.5°	715.4	741.3	774.8	755.1	729.2	690.9	674.9	667.6	660.3	654.8	636.6
35°	700.8	730.7	761.0	731.8	703.7	669.1	654.8	648.3	641.3	621.3	602.3
37.5°	685.8	719.0	744.2	706.6	669.8	646.4	634.4	627.1	611.4	585.9	576.4
40°	668.7	704.8	722.7	680.7	640.2	623.5	612.1	604.8	569.5	558.2	555.2
42.5°	651.5	690.9	696.4	655.6	615.8	599.0	589.5	565.4	541.4	535.5	536.6
45°	635.1	676.0	667.6	619.8	590.3	576.4	560.3	527.1	514.4	517.3	518.0
47.5°	615.4	658.1	637.3	584.1	564.0	550.1	514.4	494.3	492.5	496.5	498.7
50°	594.3	638.0	605.2	551.6	535.5	519.1	478.6	468.4	470.6	474.6	477.2
52.5°	574.6	615.4	572.0	521.3	507.4	469.9	442.5	444.3	448.0	452.7	454.2
55°	550.5	588.1	536.6	490.7	477.5	428.3	415.9	420.3	423.9	427.9	430.8
57.5°	525.3	556.7	494.7	456.4	435.2	391.4	392.5	395.4	398.0	402.7	166.4
60°	496.5	520.9	448.7	424.6	382.7	362.3	363.3	368.5	371.0	207.2	114.5
62.5°	466.6	479.4	407.1	388.5	334.5	333.1	338.2	340.4	231.7	109.4	107.3
65°	432.3	429.7	366.3	336.7	301.7	303.2	308.6	297.7	102.5	102.5	101.8
67.5°	394.4	379.0	326.5	278.7	270.0	273.2	279.1	97.4	94.8	95.6	93.0
70°	350.9	329.4	285.3	236.0	238.9	242.2	94.1	88.3	87.2	85.4	80.3
72.5°	305.0	275.4	233.5	205.0	206.8	129.9	82.4	79.5	75.9	72.2	66.8
75°	253.5	215.2	171.5	171.5	174.0	74.1	71.9	67.1	63.1	58.4	55.1
77.5°	198.8	165.6	133.2	138.3	67.5	62.0	58.0	52.9	49.6	46.7	44.9
80°	145.6	115.6	100.3	89.7	52.5	47.1	43.0	40.1	38.7	36.8	34.7
82.5°	95.6	69.7	69.7	42.3	36.8	32.5	31.4	29.2	27.7	26.6	25.5
85°	45.6	40.5	30.6	25.9	23.0	20.8	20.1	19.0	19.0	18.6	18.2
87.5°	16.8	18.2	13.5	13.1	12.4	12.0	12.4	12.4	12.8	12.4	12.0
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°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	822.3	825.2	827.4	831.0	835.8	839.8	843.4	848.5	856.6	858.7	860.6
5°	846.7	847.8	850.4	853.3	854.0	855.8	855.5	857.7	858.7	861.3	855.8
7.5°	848.2	842.3	835.4	829.2	824.8	820.8	818.3	822.3	824.5	826.3	820.8
10°	817.5	810.6	806.6	802.9	798.6	792.4	784.0	785.8	785.1	785.1	783.2
12.5°	798.2	788.3	778.1	769.0	765.0	764.6	765.0	769.0	769.0	768.6	766.5
15°	767.9	758.4	753.3	751.1	751.1	750.0	750.0	754.4	753.3	753.3	752.2
17.5°	747.8	741.3	737.6	735.1	734.0	735.8	738.0	739.8	740.2	738.7	732.9
20°	731.4	725.2	720.9	721.6	721.2	722.3	723.4	717.2	709.5	699.3	694.6
22.5°	714.3	709.5	706.3	706.3	701.9	695.0	684.7	682.5	681.5	676.7	672.7
25°	697.9	692.4	687.7	673.1	663.9	665.0	663.2	659.6	659.2	658.8	660.3
27.5°	681.5	667.2	649.0	646.8	643.1	642.8	645.0	646.8	646.8	648.3	650.1
30°	647.5	631.1	627.8	623.8	625.3	630.4	631.5	634.0	634.8	637.3	638.8
32.5°	616.5	609.2	606.3	608.1	612.9	617.2	619.8	620.9	622.7	624.9	626.7
35°	591.3	589.2	591.7	595.7	600.5	604.1	606.3	608.5	610.3	612.1	613.6
37.5°	572.7	574.2	577.8	583.0	587.7	590.6	592.4	595.0	597.5	599.7	591.0
40°	555.2	558.9	562.9	568.4	572.4	575.3	577.1	580.4	558.5	252.8	138.6
42.5°	539.9	543.9	546.8	551.2	555.6	557.8	541.7	241.9	136.8	136.1	137.9
45°	521.3	524.6	529.3	532.6	536.6	352.4	134.6	136.1	133.9	135.3	136.1
47.5°	502.3	507.4	510.0	486.6	144.8	133.9	132.4	133.9	132.4	134.2	133.2
50°	480.8	487.0	346.6	131.0	129.9	129.1	130.6	129.9	131.0	132.4	129.5
52.5°	458.9	284.2	127.0	126.2	127.0	126.2	128.8	127.0	127.3	125.9	122.2
55°	155.4	122.9	121.8	121.5	123.7	123.7	123.7	120.8	118.9	115.3	112.7
57.5°	118.9	118.9	118.6	118.9	118.2	117.5	114.2	111.6	109.1	104.0	102.5
60°	112.7	112.7	112.7	112.7	109.4	108.0	102.9	100.7	96.3	93.8	92.3
62.5°	107.6	106.9	103.6	102.5	98.9	94.8	91.9	89.7	85.4	83.9	82.8
65°	100.3	97.8	93.8	89.4	87.6	83.2	81.7	78.4	76.2	75.1	74.4
67.5°	88.3	84.6	81.4	78.4	75.1	73.7	71.9	69.3	67.9	67.1	66.4
70°	75.5	73.0	69.7	67.9	65.7	64.6	62.0	61.3	60.2	59.1	58.0
72.5°	63.1	61.7	60.2	57.6	56.9	56.2	53.6	52.2	50.7	49.2	48.5
75°	52.9	51.8	51.1	48.9	47.8	45.6	43.8	42.7	41.6	40.5	39.8
77.5°	43.4	42.7	40.5	39.0	38.3	36.5	35.8	36.1	35.4	33.9	33.2
80°	33.9	33.2	31.4	31.4	30.6	29.9	29.2	28.5	27.7	26.6	25.9
82.5°	25.9	25.2	24.4	23.7	23.0	22.6	22.3	21.5	20.8	20.1	19.7
85°	18.2	17.9	17.5	17.1	16.8	16.4	16.1	15.3	14.6	14.2	13.9
87.5°	12.4	12.0	11.7	11.3	10.9	10.6	10.2	9.8	9.1	8.8	8.4
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	860.6	862.4	860.6	856.6	854.0	852.9	855.1	855.1	856.6	858.4	858.7
5°	847.1	842.7	837.6	832.5	829.9	828.5	824.5	825.2	826.3	827.0	827.7
7.5°	813.5	807.7	800.7	794.2	791.6	789.4	784.7	784.7	784.7	785.1	787.2
10°	779.2	776.7	773.7	769.4	766.1	765.0	761.0	762.1	761.3	762.4	765.0
12.5°	763.2	760.3	757.7	753.3	749.7	748.2	746.4	747.5	747.1	748.9	751.1
15°	748.6	747.1	744.2	740.9	737.6	734.7	728.1	726.0	724.5	722.7	725.2
17.5°	724.5	714.3	707.4	702.2	698.6	696.0	694.2	694.2	695.3	696.4	698.6
20°	691.7	688.8	685.5	680.0	676.3	674.9	673.8	673.8	675.6	677.1	681.1
22.5°	669.1	668.7	667.6	665.0	663.2	663.2	663.6	664.3	666.9	669.1	673.1
25°	658.5	659.9	659.2	657.7	656.6	657.0	656.3	657.0	659.6	661.8	665.0
27.5°	650.1	652.3	651.5	649.4	647.5	648.3	649.4	648.6	650.8	653.4	655.9
30°	638.8	639.1	640.6	638.0	637.3	638.4	638.8	639.5	641.7	643.5	645.7
32.5°	626.0	628.9	628.6	626.0	626.0	627.1	627.5	603.0	557.4	480.1	458.9
35°	613.6	616.9	611.4	515.5	356.8	190.4	147.0	141.9	143.0	143.7	144.5
37.5°	453.8	215.2	137.2	138.3	139.4	140.4	141.5	142.6	143.7	144.8	145.2
40°	136.4	136.1	137.2	138.6	139.7	140.4	141.9	143.0	144.1	145.2	145.6
42.5°	135.0	135.7	136.8	138.3	139.7	141.2	142.3	143.7	144.5	145.2	145.6
45°	134.2	135.7	137.2	138.3	139.4	140.1	140.8	141.2	140.8	140.8	141.5
47.5°	133.2	134.6	135.0	134.6	135.0	134.6	134.6	134.6	133.5	133.2	133.2
50°	129.1	129.1	128.4	127.0	126.6	126.2	125.5	125.1	123.7	123.3	123.3
52.5°	120.8	120.4	119.3	117.5	116.7	116.0	115.6	115.3	113.8	113.1	113.5
55°	110.9	110.2	109.1	106.9	106.5	105.8	105.4	105.1	103.6	104.3	103.2
57.5°	101.8	100.3	98.9	98.5	97.0	96.7	96.3	95.9	94.8	95.2	94.5
60°	90.8	90.5	89.7	88.3	88.3	87.9	87.9	87.2	86.5	86.1	86.1
62.5°	82.8	81.7	81.0	81.0	79.9	79.9	79.9	79.2	78.4	78.8	78.4
65°	74.1	73.7	73.3	72.6	72.6	72.2	72.2	71.5	70.4	70.8	70.0
67.5°	66.8	66.0	65.3	64.9	63.5	62.7	62.4	62.0	60.6	60.9	60.2
70°	57.6	56.5	55.8	55.1	54.0	53.3	53.3	52.5	51.4	51.8	51.1
72.5°	48.2	47.4	46.7	46.3	45.2	44.9	44.5	44.1	43.0	43.4	43.0
75°	40.1	40.1	39.8	39.4	38.3	37.2	36.5	36.1	35.4	35.8	35.0
77.5°	33.2	32.5	31.7	31.7	30.6	29.9	29.2	29.2	29.2	28.8	28.5
80°	25.9	25.2	25.2	24.8	24.1	23.3	23.0	23.0	22.6	22.6	22.3
82.5°	19.7	19.0	18.6	18.6	17.9	17.5	17.1	16.8	16.8	16.8	16.4
85°	13.9	13.1	12.8	12.8	12.0	11.7	11.7	11.3	11.3	10.9	10.9
87.5°	8.4	8.0	7.7	7.7	6.9	6.6	6.6	6.6	6.2	6.2	5.8
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°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	858.7	858.7	856.2	856.9	855.8	857.3	855.5	855.5	857.7	857.7	859.1
5°	828.1	826.3	825.9	825.2	821.5	823.0	821.2	819.4	821.9	821.9	825.2
7.5°	786.2	782.9	784.3	782.1	780.0	776.7	777.8	776.3	778.1	780.7	784.0
10°	764.6	761.7	763.5	761.3	762.4	757.7	758.1	758.4	760.3	761.0	763.9
12.5°	750.8	750.0	749.3	748.6	749.3	746.8	745.3	745.7	746.4	746.8	748.9
15°	721.6	716.8	718.3	713.2	713.6	713.9	711.0	713.9	713.6	718.3	722.7
17.5°	697.9	697.9	695.3	693.1	691.7	691.3	689.1	690.6	689.1	692.0	693.1
20°	681.5	681.1	680.7	679.6	676.0	676.3	677.4	674.2	673.8	673.4	675.6
22.5°	673.8	674.2	672.7	672.7	669.4	670.1	670.5	666.9	667.2	666.1	667.2
25°	665.8	666.5	664.7	664.7	663.9	663.6	661.8	662.5	660.3	658.5	660.3
27.5°	656.3	657.7	656.3	657.0	655.6	654.8	653.7	653.0	650.8	650.4	651.5
30°	647.5	648.3	647.9	646.1	645.7	643.5	644.6	642.4	640.2	640.6	641.3
32.5°	332.0	317.0	244.4	220.7	218.5	226.5	268.5	326.9	423.5	517.3	584.8
35°	144.8	144.8	144.8	144.5	144.5	144.1	143.7	143.4	143.0	142.6	142.3
37.5°	145.6	145.6	145.6	145.6	145.2	144.8	144.8	144.1	143.7	143.4	143.0
40°	145.9	146.3	146.3	146.3	145.9	145.9	145.6	144.8	144.5	143.7	143.0
42.5°	145.6	145.9	145.9	145.6	145.6	145.2	145.2	144.8	144.5	144.1	143.7
45°	140.8	141.2	140.4	140.4	140.1	140.1	140.1	140.1	140.1	140.4	140.4
47.5°	132.4	132.4	132.1	131.7	131.7	131.3	131.7	131.3	132.1	132.4	133.2
50°	122.6	122.6	121.8	121.5	121.5	121.5	121.5	121.8	122.2	122.9	123.7
52.5°	112.4	112.4	112.0	111.6	111.3	111.3	112.4	112.0	112.4	112.7	113.8
55°	102.5	102.9	102.1	102.1	101.8	101.8	101.8	102.1	102.5	102.9	104.0
57.5°	94.1	94.1	93.4	93.4	93.4	93.0	94.1	93.4	93.8	94.1	94.8
60°	85.7	85.4	85.4	85.0	85.0	85.0	85.7	85.4	85.4	85.7	86.5
62.5°	78.1	78.1	77.7	77.7	77.3	77.3	78.1	77.7	77.7	78.1	78.4
65°	69.3	69.3	68.9	68.6	69.7	68.6	69.7	68.9	69.7	70.0	70.8
67.5°	59.5	59.5	59.5	59.1	59.1	59.8	60.2	59.5	59.8	60.6	60.9
70°	50.7	50.7	50.3	50.3	50.3	51.1	51.4	50.7	51.1	51.4	52.2
72.5°	43.0	42.3	42.3	42.0	42.7	42.7	43.0	42.7	43.0	43.0	43.8
75°	35.4	34.7	34.7	34.7	35.4	35.0	35.4	35.0	35.4	35.4	35.8
77.5°	28.5	28.1	27.7	27.7	28.5	28.5	28.5	28.1	28.5	28.8	29.2
80°	22.3	21.9	21.5	21.5	22.3	22.3	22.3	22.6	22.3	22.6	23.0
82.5°	16.4	16.1	15.7	16.4	16.4	16.4	16.4	16.8	16.4	16.8	17.1
85°	10.9	10.6	10.2	10.9	10.9	10.9	10.9	11.3	10.9	11.3	11.7
87.5°	5.8	5.5	5.5	5.8	5.8	5.8	6.2	6.2	6.2	6.6	6.6
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):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	132.5°	135°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	861.3	862.4	862.0	859.8	857.7	855.1	853.3	853.6	857.3	858.4	855.1
5°	825.2	832.1	832.1	836.9	834.3	832.1	833.6	841.6	845.6	851.8	854.0
7.5°	788.0	791.3	790.9	795.6	794.9	794.9	796.0	806.6	811.7	816.8	818.3
10°	767.2	770.5	770.1	770.5	769.4	766.8	766.8	771.6	775.9	778.5	779.2
12.5°	752.2	754.1	753.7	753.7	753.0	750.8	750.4	754.4	759.2	762.4	762.8
15°	730.0	735.1	736.2	740.9	739.8	736.9	737.6	740.9	743.8	746.8	745.7
17.5°	696.8	699.3	699.7	701.5	700.8	700.8	705.2	717.2	725.2	732.2	732.9
20°	677.8	679.6	678.9	682.9	681.1	680.7	681.8	686.9	690.6	693.9	699.7
22.5°	668.7	670.1	669.1	669.4	666.1	663.2	662.5	666.5	670.5	674.9	674.9
25°	661.0	662.1	661.8	661.0	658.5	654.5	653.7	654.5	655.9	656.3	653.7
27.5°	651.9	652.6	652.6	653.0	649.7	646.1	645.3	644.6	646.1	645.7	641.7
30°	642.4	641.3	641.7	642.1	639.1	635.9	634.4	634.0	635.5	635.1	631.1
32.5°	619.8	628.2	628.9	629.7	627.1	624.2	622.7	621.6	622.4	622.0	618.3
35°	141.9	144.5	176.9	400.6	543.9	602.3	608.5	607.0	607.4	607.4	604.5
37.5°	142.3	141.9	141.5	140.4	139.4	138.6	239.7	511.1	592.1	592.4	589.9
40°	142.3	141.9	141.5	140.8	139.4	138.3	136.4	135.0	138.3	304.2	556.7
42.5°	143.0	142.3	141.5	140.8	139.4	137.9	136.4	134.6	135.7	135.0	133.2
45°	140.8	140.4	140.4	140.1	139.4	137.9	136.1	133.9	132.8	133.9	132.1
47.5°	133.9	134.2	135.3	135.7	135.7	136.1	135.0	133.5	131.7	132.8	130.6
50°	124.4	125.1	125.5	127.3	128.0	129.5	129.9	129.9	129.5	131.0	129.5
52.5°	114.2	114.9	116.7	117.5	118.2	120.4	121.1	122.2	122.9	125.1	126.6
55°	104.3	104.7	105.4	106.9	108.0	109.8	110.9	112.0	113.8	114.9	119.3
57.5°	95.2	95.6	97.0	97.4	98.1	99.6	100.7	102.1	103.6	104.3	109.4
60°	86.5	86.8	87.9	88.3	88.6	90.1	91.2	92.3	93.4	94.1	97.8
62.5°	78.8	78.8	79.9	79.9	80.3	81.4	82.1	82.8	83.9	84.3	86.1
65°	71.1	71.5	72.2	72.2	72.6	73.3	73.7	74.1	75.1	75.1	76.6
67.5°	61.7	62.0	63.1	63.8	64.2	65.7	66.0	66.4	67.1	67.5	68.2
70°	52.5	52.9	54.0	54.4	54.7	55.8	56.5	57.6	58.7	59.8	60.6
72.5°	44.1	44.5	45.6	45.6	46.7	47.1	47.8	48.2	49.2	50.0	51.1
75°	36.1	36.5	37.6	37.6	38.7	39.0	39.4	39.8	40.5	41.2	42.0
77.5°	29.5	29.5	31.0	31.7	32.5	32.5	32.8	32.8	32.8	33.2	33.9
80°	23.3	23.3	24.4	25.2	25.9	25.9	26.3	26.6	27.0	27.0	27.4
82.5°	17.5	17.5	18.6	19.0	19.7	19.7	19.7	20.1	20.4	20.1	20.8
85°	12.0	12.0	12.8	13.1	13.9	13.9	13.9	14.2	14.6	14.2	14.6
87.5°	6.9	7.3	7.7	8.0	8.4	8.8	8.8	8.8	9.1	9.1	9.5
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):

	137.5°	140°	142.5°	145°	147.5°	150°	152.5°	155°	157.5°	160°	162.5°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	851.5	847.1	846.7	841.6	840.1	840.5	836.5	835.0	828.5	827.0	820.1
5°	854.7	856.9	855.8	855.5	856.6	855.8	852.9	851.5	850.4	847.4	841.6
7.5°	818.6	820.1	821.2	825.9	829.9	836.9	844.2	848.9	852.5	853.3	848.5
10°	781.8	788.7	793.4	800.7	806.6	810.6	815.0	819.0	829.6	840.1	846.3
12.5°	762.8	764.6	764.3	768.3	772.3	782.9	793.1	798.9	806.9	811.7	823.0
15°	746.8	747.1	748.2	751.1	753.3	757.0	761.7	770.5	786.5	793.8	800.0
17.5°	732.2	732.2	732.9	735.4	738.4	741.6	744.6	748.2	756.2	768.3	783.6
20°	708.8	719.0	720.1	719.8	721.2	727.4	728.1	734.7	738.7	743.5	758.4
22.5°	674.2	680.4	689.1	702.6	707.7	710.6	712.8	715.7	721.9	727.4	733.6
25°	655.2	659.2	661.8	665.8	676.3	693.5	696.8	700.1	704.1	708.1	715.7
27.5°	638.4	638.0	639.9	643.5	646.4	655.6	671.6	684.4	685.1	690.9	697.5
30°	626.4	624.2	621.6	620.9	624.9	629.7	634.4	654.5	668.3	671.2	678.2
32.5°	615.1	611.4	607.8	604.8	602.3	606.3	609.2	618.0	635.9	652.6	656.3
35°	601.2	597.5	593.2	589.9	585.9	585.5	585.1	593.5	599.4	619.4	636.9
37.5°	587.0	583.0	579.3	575.7	571.6	568.7	566.9	569.1	574.6	583.3	612.5
40°	572.0	567.3	563.6	560.7	555.2	553.0	549.4	547.9	548.3	556.0	571.3
42.5°	341.8	545.0	546.8	543.6	538.8	535.9	531.9	530.1	526.4	530.1	538.8
45°	131.7	133.2	398.7	526.8	520.9	517.3	513.6	511.8	507.8	504.9	512.9
47.5°	129.1	130.6	127.7	180.9	497.2	498.3	493.9	492.1	488.1	485.9	483.7
50°	127.3	128.4	126.2	127.0	124.4	455.6	473.9	471.7	467.3	464.8	460.4
52.5°	125.5	125.5	124.0	122.2	121.5	121.8	383.4	450.9	445.8	443.2	437.4
55°	119.7	120.4	121.8	118.9	118.2	117.8	116.7	365.2	422.1	419.2	414.1
57.5°	110.9	112.4	116.4	115.6	115.6	112.7	112.0	112.0	338.9	394.7	389.6
60°	100.7	102.1	106.5	108.0	109.1	108.3	107.6	107.3	105.8	357.1	363.7
62.5°	90.1	91.6	93.0	97.8	99.2	101.1	103.2	102.1	100.7	100.7	336.3
65°	78.8	81.0	81.7	86.1	87.9	91.2	93.0	95.6	94.8	94.5	96.3
67.5°	68.9	71.5	71.9	73.7	77.0	78.4	80.6	85.4	87.6	88.3	89.0
70°	60.6	62.0	63.1	63.8	66.0	66.4	70.4	73.7	77.0	80.6	81.7
72.5°	52.2	53.3	55.5	54.7	55.5	56.9	59.1	61.3	64.6	69.7	73.0
75°	42.7	43.4	44.9	45.6	47.1	48.2	49.6	51.4	54.4	56.9	61.3
77.5°	34.3	34.7	35.8	36.1	37.6	38.7	41.2	42.3	44.1	46.0	48.5
80°	27.7	27.7	28.1	28.1	29.2	30.3	32.1	33.2	35.4	36.8	36.8
82.5°	21.2	21.2	22.3	22.3	23.0	23.0	24.1	24.1	25.2	25.9	26.6
85°	15.0	15.3	16.1	15.7	16.4	16.1	16.8	17.5	17.9	17.5	17.1
87.5°	9.8	9.8	10.6	10.2	10.6	10.6	11.3	11.3	11.7	11.7	11.3
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: P1213715

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CANDELA DISTRIBUTION (continued):

	165°	167.5°	170°	172.5°	175°	177.5°	180°	182.5°	185°	187.5°	190°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	817.5	812.1	808.8	804.8	803.7	802.6	804.0	804.0	801.8	800.0	796.7
5°	836.5	830.7	824.5	817.9	811.7	805.1	802.6	802.2	798.2	796.0	794.9
7.5°	846.3	843.4	836.5	827.4	817.9	806.2	801.1	798.2	794.2	793.4	793.4
10°	847.4	844.2	840.5	833.9	823.0	807.7	797.8	792.0	788.3	790.9	795.6
12.5°	836.9	843.1	839.8	835.4	826.6	808.0	793.8	785.1	784.0	790.5	802.9
15°	809.9	828.1	837.2	832.8	825.9	807.3	787.2	777.0	777.0	790.5	806.6
17.5°	789.4	803.7	825.9	829.6	821.5	805.9	781.0	769.0	772.3	792.0	809.1
20°	772.7	781.4	802.9	823.4	815.7	802.6	771.9	759.5	766.1	789.8	812.8
22.5°	746.4	763.9	777.0	807.3	809.9	796.4	762.8	747.8	761.0	789.8	811.0
25°	720.9	742.0	755.9	785.4	801.1	788.7	754.4	735.4	755.5	788.7	809.5
27.5°	703.0	712.8	738.0	759.2	788.0	778.5	743.1	721.9	748.6	782.9	801.1
30°	684.0	690.6	715.4	735.4	770.5	766.8	731.4	707.0	739.8	777.4	779.2
32.5°	663.2	670.5	683.3	712.5	746.0	755.9	718.3	692.0	730.3	769.0	753.7
35°	642.1	647.5	657.7	689.1	717.6	739.5	702.2	674.9	723.8	756.2	729.2
37.5°	620.9	626.7	635.5	661.8	687.7	724.1	688.4	657.7	711.7	733.6	703.7
40°	600.8	604.1	613.2	629.7	662.8	708.4	672.7	639.9	699.3	704.8	669.1
42.5°	564.0	580.4	588.8	601.9	634.8	686.9	654.5	620.9	685.5	676.0	634.4
45°	524.2	560.0	563.6	576.8	610.0	663.9	637.3	602.3	672.3	651.2	601.6
47.5°	491.8	517.7	538.8	549.8	580.4	636.9	621.3	586.6	652.6	619.8	569.5
50°	462.9	476.8	515.1	523.1	545.0	604.5	602.3	568.4	625.3	580.4	538.1
52.5°	434.8	444.7	479.4	496.5	514.4	569.5	579.7	550.5	595.4	541.0	506.3
55°	410.4	413.7	432.7	468.8	484.8	534.1	554.9	529.7	557.4	503.4	475.7
57.5°	385.2	382.3	396.2	442.5	454.2	498.0	528.6	508.5	526.8	465.1	444.0
60°	359.0	355.0	360.8	391.4	421.7	462.2	497.6	485.2	489.6	427.2	408.6
62.5°	331.6	327.6	325.8	345.1	390.0	425.4	466.2	459.3	444.0	392.5	364.8
65°	303.2	299.1	296.2	303.9	355.0	377.6	431.2	429.4	394.0	356.0	307.2
67.5°	92.3	272.1	265.9	265.6	299.1	334.2	393.3	390.3	343.6	317.0	264.5
70°	83.2	220.7	234.6	231.3	245.9	290.0	349.8	347.7	294.8	254.3	233.8
72.5°	76.2	78.1	207.2	203.6	206.8	246.6	304.6	298.8	249.9	200.6	202.1
75°	65.3	68.6	71.5	171.8	167.4	204.3	255.4	246.2	206.1	165.6	168.9
77.5°	53.3	57.3	59.5	125.1	135.3	145.6	203.9	191.9	141.9	132.4	63.1
80°	39.8	43.0	46.7	50.0	102.9	101.8	151.4	139.4	98.9	82.4	49.2
82.5°	29.2	30.3	32.5	36.1	40.9	68.2	97.4	85.7	68.6	37.6	33.9
85°	18.2	19.7	20.8	21.9	24.8	40.9	48.2	38.3	28.8	23.0	21.5
87.5°	11.7	11.7	11.3	11.7	12.0	14.6	16.4	15.7	12.4	11.7	11.7
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):

	192.5°	195°	197.5°	200°	202.5°	205°	207.5°	210°	212.5°	215°	217.5°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	793.1	788.0	788.0	786.5	787.6	787.6	787.2	787.6	790.2	791.6	794.2
5°	792.7	791.3	794.5	798.6	803.3	809.1	810.6	815.7	820.4	826.6	833.2
7.5°	797.5	802.6	808.8	815.3	824.8	831.8	838.0	844.2	848.5	854.4	858.0
10°	804.4	814.6	825.2	833.6	843.8	849.6	853.6	854.4	848.2	838.3	830.3
12.5°	814.2	826.3	836.1	844.2	848.9	846.7	835.0	823.0	816.1	805.9	791.6
15°	822.6	833.6	843.8	840.5	827.7	815.7	806.6	792.4	778.5	769.0	762.8
17.5°	826.3	836.9	833.2	816.1	804.0	790.2	771.6	760.6	751.5	744.2	740.6
20°	828.5	826.6	806.9	794.5	771.2	758.4	746.4	736.2	729.2	725.6	724.9
22.5°	822.6	800.4	783.6	761.3	744.2	733.6	724.1	715.7	711.0	708.1	706.3
25°	803.3	777.4	752.6	735.1	720.5	711.4	704.1	697.1	691.3	689.8	686.2
27.5°	776.3	755.1	722.3	708.8	696.0	691.7	683.6	676.7	671.6	667.2	655.6
30°	754.1	720.5	696.8	684.4	676.7	671.6	662.5	655.2	646.4	630.4	623.8
32.5°	726.7	693.5	670.9	663.9	654.5	650.1	639.9	623.8	610.3	603.8	603.4
35°	691.3	663.9	647.5	641.3	633.7	626.4	605.2	590.6	584.1	584.8	590.3
37.5°	661.8	637.3	626.7	618.0	609.2	590.6	572.7	565.8	567.6	571.3	573.8
40°	631.8	613.2	601.2	594.3	574.6	556.3	546.8	549.4	552.7	555.2	558.5
42.5°	602.7	589.5	577.5	564.0	537.0	527.1	529.3	532.6	535.5	539.2	542.5
45°	574.9	563.3	549.4	518.8	505.3	507.8	511.1	513.6	518.0	520.6	523.9
47.5°	548.7	536.3	511.8	484.8	483.4	488.5	491.4	494.7	498.0	491.4	271.0
50°	519.1	506.3	469.1	458.9	462.2	466.9	470.6	473.9	422.1	167.8	129.1
52.5°	489.9	457.5	433.8	436.7	440.0	445.4	448.0	332.7	132.4	126.2	126.6
55°	457.5	415.9	408.9	412.6	415.5	421.0	279.1	122.2	121.5	121.1	124.0
57.5°	406.4	381.2	384.1	387.8	390.7	275.8	118.9	118.2	118.6	118.9	119.3
60°	360.8	355.3	358.6	361.9	256.1	114.9	112.7	113.1	114.5	113.5	110.5
62.5°	324.7	329.1	332.3	291.1	109.1	108.0	109.1	108.0	105.4	103.6	100.0
65°	297.0	301.3	303.9	102.5	102.1	103.6	102.5	98.9	94.8	89.7	88.6
67.5°	267.8	272.1	97.4	94.8	96.3	94.5	90.1	85.7	82.8	78.4	76.6
70°	237.5	101.8	88.3	87.9	85.4	82.4	77.7	73.3	69.7	67.9	66.0
72.5°	171.5	80.6	79.5	76.6	72.2	68.2	64.2	61.7	59.8	58.7	57.6
75°	71.5	70.0	66.8	61.7	57.3	55.5	52.5	50.7	50.0	47.8	47.1
77.5°	59.8	56.9	52.2	48.5	46.0	44.9	42.7	40.5	39.4	39.0	37.6
80°	46.0	42.0	39.8	37.9	37.2	34.7	32.1	31.0	30.3	29.9	28.8
82.5°	31.4	29.9	28.5	25.9	25.9	24.8	23.7	23.0	22.3	22.3	21.5
85°	20.4	19.3	19.0	17.9	17.9	17.1	16.8	16.4	16.1	15.7	15.3
87.5°	11.7	11.7	12.0	11.7	11.7	11.3	10.9	10.6	10.2	10.2	9.5
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: P1213715

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	222.5°	225°	227.5°	230°	232.5°	235°	237.5°	240°	242.5°	245°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	797.5	801.1	801.8	814.2	821.2	820.8	818.6	825.2	821.2	819.0	821.2
5°	839.8	844.2	847.8	861.3	866.0	868.2	867.9	871.5	868.6	866.0	866.0
7.5°	860.6	862.0	863.5	860.2	858.0	854.4	848.9	840.9	836.9	832.5	827.0
10°	826.3	821.5	823.4	816.8	811.3	807.3	802.2	795.6	790.2	786.2	780.0
12.5°	784.3	784.0	784.7	785.8	780.3	777.0	773.0	768.3	764.3	759.9	754.8
15°	758.8	759.2	762.1	761.0	759.2	757.3	753.0	751.5	747.8	743.1	740.2
17.5°	740.6	742.4	745.3	743.8	740.9	739.1	735.8	732.5	729.2	725.6	721.2
20°	724.5	726.3	728.1	726.3	720.9	718.3	713.9	703.7	696.4	689.1	682.5
22.5°	707.0	708.1	706.6	700.8	686.9	680.4	675.3	672.3	666.1	662.1	658.1
25°	685.1	678.9	669.4	662.8	657.4	654.5	652.3	651.9	651.2	650.4	648.6
27.5°	649.4	647.2	642.1	639.5	639.9	641.0	641.3	642.4	641.3	639.9	638.4
30°	622.7	623.8	624.2	624.9	626.7	627.8	628.2	629.7	628.9	627.8	627.1
32.5°	605.9	608.5	610.0	612.1	613.2	615.1	615.1	617.2	615.1	614.7	614.0
35°	592.1	594.3	595.0	598.3	599.4	601.2	601.2	603.0	601.2	582.6	460.0
37.5°	578.2	580.4	581.9	584.8	585.1	586.2	541.0	395.8	255.4	197.7	151.0
40°	561.8	564.4	565.8	566.9	398.4	252.8	174.0	141.5	141.5	142.6	143.7
42.5°	544.3	546.1	380.5	221.4	137.9	137.5	138.6	139.7	140.8	142.3	143.7
45°	427.9	216.0	137.2	133.9	135.0	136.4	137.9	139.4	141.2	142.6	143.4
47.5°	140.4	131.7	133.5	132.1	133.9	135.7	137.2	138.6	139.0	139.4	139.0
50°	129.9	129.9	131.0	131.0	132.4	133.2	133.2	133.2	131.7	131.3	130.2
52.5°	125.5	128.4	127.0	127.7	127.0	125.9	124.8	123.7	121.5	120.8	119.3
55°	123.3	124.4	120.8	119.7	118.2	115.3	113.8	112.4	110.5	109.8	108.0
57.5°	118.2	115.6	111.6	109.8	107.3	104.3	102.9	101.8	100.0	99.2	98.1
60°	108.7	103.6	101.1	98.9	95.9	93.4	92.3	91.6	90.1	89.7	88.6
62.5°	97.0	92.7	90.5	87.6	85.4	83.9	82.8	82.4	81.0	81.0	80.3
65°	84.3	82.1	80.3	77.3	76.2	74.8	74.4	74.1	73.3	73.0	72.2
67.5°	74.1	72.6	70.0	68.6	67.9	66.8	66.0	65.3	63.8	63.1	62.0
70°	64.9	63.8	61.3	60.2	58.7	56.9	55.8	55.1	54.0	53.3	52.2
72.5°	56.2	52.9	51.1	50.0	48.9	47.1	46.7	46.0	44.9	44.5	43.4
75°	45.2	42.7	41.6	40.9	39.8	38.7	38.7	38.7	37.6	37.2	36.8
77.5°	36.1	34.7	33.9	33.2	32.8	32.1	31.0	30.6	29.5	29.5	29.2
80°	27.7	27.0	26.3	25.9	25.5	24.8	24.1	23.7	22.6	22.6	22.3
82.5°	20.4	20.1	19.7	19.3	19.0	18.6	17.5	17.1	16.4	16.4	16.1
85°	14.6	14.2	13.5	13.1	13.1	12.8	11.7	11.3	10.6	10.6	10.6
87.5°	9.1	8.8	8.4	8.0	7.7	7.3	6.6	6.2	6.2	5.5	5.1
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: P1213715

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	247.5°	250°	252.5°	255°	257.5°	260°	262.5°	265°	267.5°	270°	272.5°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	816.8	823.0	822.3	826.6	827.7	829.9	830.7	831.0	825.6	829.9	830.3
5°	865.0	866.0	866.8	868.6	870.4	870.8	869.0	866.8	867.5	866.0	862.4
7.5°	826.3	820.8	819.7	818.3	817.5	816.8	813.5	816.4	813.1	811.7	806.6
10°	778.9	773.7	773.4	773.4	774.5	774.1	773.4	771.9	774.8	773.0	771.9
12.5°	754.1	752.2	753.3	752.6	755.5	756.2	755.5	755.5	754.8	753.3	754.1
15°	739.1	737.6	738.7	737.6	739.8	740.2	738.4	739.5	737.6	735.8	735.1
17.5°	719.4	716.1	713.6	709.9	710.3	709.5	707.4	707.4	705.5	700.8	701.2
20°	681.5	678.2	676.7	676.7	678.5	679.3	678.9	679.6	677.8	677.1	674.2
22.5°	657.7	657.4	658.1	659.9	662.8	666.9	667.2	667.2	667.2	666.9	663.2
25°	649.4	649.4	650.1	652.6	654.8	657.7	658.5	659.2	658.5	658.5	655.2
27.5°	639.9	639.1	640.6	643.1	645.7	647.9	649.7	650.1	649.0	649.0	650.1
30°	628.2	627.8	629.7	632.2	634.4	636.6	638.4	639.9	638.4	638.4	637.3
32.5°	616.2	616.2	616.9	601.6	557.8	502.3	503.4	471.3	449.1	421.0	458.2
35°	384.5	279.8	240.4	203.6	177.7	160.9	160.5	155.0	152.5	150.7	150.3
37.5°	145.2	145.9	147.4	148.1	149.2	149.9	150.3	150.3	150.3	150.3	149.9
40°	144.8	146.3	147.4	148.5	149.6	150.3	150.3	150.7	151.0	151.0	151.0
42.5°	145.2	146.7	148.1	149.2	149.9	150.3	150.7	151.0	151.0	151.0	151.0
45°	144.8	145.6	145.6	145.9	145.9	145.9	146.3	146.3	145.9	145.6	146.3
47.5°	139.4	139.4	138.3	137.9	137.5	136.8	137.2	136.8	136.4	136.1	136.8
50°	129.9	128.4	127.7	127.0	126.6	125.9	126.2	125.9	125.5	124.8	125.9
52.5°	118.6	118.2	116.7	116.0	115.6	116.0	115.3	114.9	114.5	114.2	114.5
55°	107.6	106.2	105.8	105.1	104.7	105.1	104.7	104.3	104.0	103.6	104.0
57.5°	97.8	96.7	96.3	95.6	95.6	95.6	95.6	95.2	94.8	94.5	94.8
60°	88.3	87.6	87.2	87.2	86.8	86.8	86.8	86.5	86.1	86.1	86.5
62.5°	80.3	80.3	79.2	78.8	78.8	79.2	78.8	78.4	78.1	77.7	78.4
65°	71.9	70.4	70.0	69.3	68.6	68.9	68.6	68.2	67.9	67.5	68.2
67.5°	61.7	61.3	59.8	59.1	58.7	59.1	58.7	58.4	58.0	57.6	58.4
70°	51.8	51.8	50.3	50.0	49.6	49.6	49.2	49.2	48.9	48.5	49.2
72.5°	43.0	43.0	42.7	42.0	41.6	41.2	40.9	40.5	40.5	40.9	40.9
75°	35.8	35.0	33.6	33.9	33.6	33.2	33.2	32.8	32.5	33.2	32.8
77.5°	28.1	27.7	26.6	27.0	26.6	26.3	26.3	25.9	25.5	25.9	25.9
80°	21.2	21.2	20.8	20.4	20.4	20.1	19.7	19.7	19.3	19.7	19.7
82.5°	15.3	15.3	15.0	14.6	14.2	14.2	13.9	13.9	13.9	13.9	13.9
85°	9.8	9.5	9.5	8.8	8.8	8.8	8.4	8.4	8.4	8.4	8.4
87.5°	4.7	4.7	4.4	4.4	4.0	3.6	3.6	3.3	3.3	3.6	3.6
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: P1213715

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	277.5°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	823.7	828.5	824.5	826.3	826.6	832.8	832.5	833.9	831.4	828.5	824.5
5°	865.7	863.5	860.6	867.5	863.9	868.2	869.7	872.6	872.6	872.2	869.0
7.5°	812.1	807.3	811.0	813.5	814.6	811.7	817.5	824.1	829.6	832.8	833.2
10°	770.1	771.6	771.2	772.3	774.8	774.5	778.1	781.8	783.2	785.4	786.2
12.5°	750.4	750.0	750.8	753.3	754.8	754.4	758.1	760.3	761.0	761.3	761.0
15°	734.7	732.2	734.0	734.4	735.4	735.4	739.8	743.1	744.6	745.3	744.6
17.5°	705.2	699.0	704.8	704.8	708.8	708.1	715.0	720.5	723.4	725.6	725.6
20°	676.0	673.1	675.3	674.5	677.4	677.1	681.5	685.1	687.7	689.5	691.7
22.5°	664.3	665.0	661.8	662.1	662.1	661.8	663.9	665.8	666.5	667.6	666.9
25°	656.6	657.4	656.3	654.5	653.7	654.5	655.6	657.7	658.1	657.4	654.8
27.5°	649.0	646.8	648.6	645.3	644.6	646.1	647.5	647.9	648.3	648.3	646.1
30°	637.3	635.5	637.3	635.9	634.4	635.9	636.9	636.9	637.7	638.0	635.5
32.5°	445.4	449.1	508.2	543.9	594.3	619.8	624.5	624.5	625.3	625.3	623.1
35°	151.8	152.1	164.5	178.4	207.9	244.4	292.2	317.0	400.9	501.2	598.3
37.5°	149.9	149.6	149.2	148.8	148.5	148.1	147.4	147.0	149.2	176.9	240.0
40°	150.7	150.3	149.6	149.2	148.8	148.1	147.7	147.0	146.3	145.6	144.8
42.5°	150.7	150.3	149.9	149.6	149.2	148.8	148.1	147.4	146.7	145.6	144.5
45°	145.6	145.6	145.9	145.9	146.3	146.3	146.3	145.9	145.9	145.6	144.1
47.5°	136.1	136.1	137.2	137.2	137.9	138.6	138.6	139.4	140.4	141.2	141.5
50°	125.1	125.1	126.2	126.6	127.3	128.4	129.5	129.9	131.0	132.4	133.9
52.5°	114.2	114.2	115.3	115.3	116.0	117.1	118.2	118.6	120.0	121.5	123.3
55°	104.0	104.0	104.7	105.1	105.4	106.2	107.3	107.3	108.7	109.8	111.6
57.5°	94.8	95.6	95.6	95.6	95.9	96.7	97.4	97.4	98.5	99.6	101.1
60°	86.1	86.8	86.8	86.8	87.2	87.6	88.3	88.3	89.0	89.7	91.2
62.5°	78.1	78.8	78.8	79.2	79.2	79.5	80.3	79.9	80.6	81.0	82.1
65°	67.9	68.6	68.9	69.3	69.7	70.4	71.5	71.1	72.2	73.0	74.1
67.5°	58.0	58.7	58.7	59.1	59.5	60.2	60.9	60.9	62.0	62.7	64.2
70°	48.9	49.6	49.6	50.0	50.3	51.1	51.8	51.4	52.5	53.3	54.4
72.5°	40.5	41.2	41.2	41.6	41.6	42.3	43.0	43.8	43.8	44.5	45.2
75°	32.8	33.2	33.6	33.6	33.9	34.3	35.0	35.8	36.1	36.5	37.2
77.5°	25.9	26.3	26.6	26.6	27.0	27.4	27.7	29.2	29.9	30.3	30.3
80°	19.7	20.1	20.1	20.1	20.4	20.8	21.5	21.5	23.0	23.0	23.3
82.5°	13.9	14.2	14.2	14.2	14.6	15.3	15.7	16.1	16.8	17.1	17.1
85°	8.4	8.8	8.8	8.8	9.1	9.5	10.2	10.6	10.9	10.9	11.3
87.5°	3.3	3.6	4.0	4.0	4.4	4.7	5.1	5.5	5.8	5.8	6.2
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: P1213715

CATALOG NUMBER: 4SNLED-LD5-18SL-RW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	302.5°	305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	327.5°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	820.1	822.6	820.1	821.5	823.4	820.1	812.4	809.5	808.4	804.0	801.1
5°	865.7	865.7	864.6	867.5	867.1	862.0	854.0	850.4	846.7	842.0	838.3
7.5°	833.2	836.1	838.0	849.3	856.6	857.3	862.4	863.5	865.0	863.5	861.3
10°	786.5	785.4	790.5	801.1	807.3	810.6	820.4	825.2	829.2	837.2	845.6
12.5°	760.3	761.7	763.9	771.6	777.4	775.9	780.0	783.2	788.0	796.0	808.0
15°	742.7	744.2	746.4	752.2	755.9	754.1	756.2	758.4	761.7	765.7	773.0
17.5°	723.8	726.3	728.9	735.1	738.4	738.0	739.8	740.6	741.6	744.2	749.3
20°	694.2	702.2	707.4	715.7	720.5	719.8	723.0	724.1	725.6	728.1	730.3
22.5°	667.2	669.4	672.0	681.1	689.1	699.0	701.2	704.1	707.7	710.3	712.5
25°	651.9	650.4	651.5	657.7	662.1	662.8	666.1	675.6	685.5	689.8	695.0
27.5°	642.8	641.3	641.0	643.9	644.6	642.8	642.1	645.0	652.3	659.6	674.9
30°	632.9	631.1	629.7	632.2	633.3	630.7	626.0	623.5	627.8	629.7	635.9
32.5°	621.3	619.4	618.7	620.2	620.9	618.7	613.6	610.7	610.0	608.5	610.0
35°	608.1	606.3	605.2	605.6	607.0	605.2	600.8	597.2	595.4	591.3	588.4
37.5°	313.4	444.0	576.4	590.3	591.7	591.3	587.0	583.0	581.1	576.4	574.9
40°	143.4	160.1	240.4	314.1	453.1	575.7	571.6	567.6	564.4	562.9	557.4
42.5°	143.0	143.4	143.7	141.9	175.8	299.5	442.1	551.9	549.8	546.1	542.1
45°	143.0	141.2	142.6	140.4	141.2	140.8	175.5	283.1	503.8	526.4	524.6
47.5°	141.5	140.4	141.9	140.1	137.9	139.0	137.5	139.4	217.4	368.8	505.3
50°	135.0	135.7	138.3	137.9	136.1	137.5	135.0	137.2	135.3	148.5	286.0
52.5°	125.1	126.6	129.1	131.3	132.1	133.9	133.2	133.9	132.4	132.8	133.2
55°	113.5	115.3	117.5	120.8	122.2	125.1	127.3	128.4	130.2	129.9	127.0
57.5°	102.5	104.3	106.2	109.4	112.7	114.2	118.2	120.4	125.1	124.0	123.3
60°	92.3	93.8	95.6	96.3	100.3	102.9	106.5	108.7	114.9	116.4	118.6
62.5°	83.2	83.9	85.4	86.5	89.0	91.6	93.4	97.0	100.3	105.1	108.3
65°	74.8	75.5	76.6	77.3	77.7	81.4	82.4	86.5	87.6	92.7	95.6
67.5°	65.3	66.8	68.2	68.9	69.7	71.9	72.6	74.4	77.0	79.2	82.8
70°	55.5	56.5	58.0	59.1	60.6	62.0	64.2	65.3	67.1	68.6	71.5
72.5°	46.3	47.4	48.2	49.2	50.3	51.4	53.3	55.8	57.3	59.8	60.6
75°	37.6	38.7	39.4	40.1	41.2	42.0	42.7	45.2	46.7	48.9	51.1
77.5°	31.0	31.0	31.7	33.9	33.6	33.6	34.3	35.8	36.8	38.3	40.5
80°	24.1	24.4	24.8	26.6	27.0	27.4	27.0	28.1	29.2	29.5	31.0
82.5°	17.9	18.2	18.2	19.3	20.4	20.4	20.4	20.8	21.9	22.3	23.0
85°	12.0	12.4	12.8	13.1	13.9	14.2	14.6	14.6	15.3	15.7	16.1
87.5°	6.6	7.3	7.7	8.0	8.4	8.8	9.1	9.5	9.8	10.2	10.6
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0
2.5°	800.0	798.2	797.1	794.2	793.4	788.7	789.4	788.7	788.7	789.8	793.4
5°	834.3	825.6	823.4	817.2	812.1	803.3	797.8	794.9	790.5	788.7	791.3
7.5°	857.7	851.1	845.6	840.1	832.8	822.6	815.0	806.2	798.9	792.0	790.2
10°	853.6	860.9	860.9	857.7	850.7	840.5	831.4	820.4	807.7	796.7	790.2
12.5°	819.7	832.5	842.7	850.4	857.3	850.4	841.2	832.5	818.3	802.2	790.2
15°	782.5	795.6	808.4	824.5	841.2	848.2	847.8	837.6	824.8	808.0	791.3
17.5°	756.2	765.4	772.3	789.8	810.2	828.1	840.1	840.9	828.5	813.5	791.6
20°	736.5	743.1	748.9	758.8	776.7	798.6	820.8	833.2	831.0	814.6	792.7
22.5°	718.7	723.4	728.1	735.4	749.7	763.9	789.8	815.3	826.3	812.8	791.6
25°	700.8	705.9	709.5	714.7	726.0	737.6	755.9	787.6	812.1	811.3	789.4
27.5°	679.6	686.6	690.9	697.9	705.5	714.3	726.7	756.6	791.6	804.0	783.6
30°	654.1	664.3	670.9	678.5	685.1	692.8	702.6	720.9	764.3	789.8	777.4
32.5°	617.2	635.5	650.1	657.4	664.7	671.2	680.0	695.3	730.7	770.5	770.5
35°	591.0	599.4	612.5	633.7	642.8	649.4	657.4	669.4	692.0	747.5	759.2
37.5°	570.6	573.8	580.4	601.2	618.3	628.9	636.9	644.6	666.9	716.1	744.6
40°	555.2	554.1	553.4	563.3	587.7	604.5	613.6	621.3	638.4	678.5	725.2
42.5°	537.4	536.3	532.6	535.2	547.2	575.3	589.2	597.5	611.8	639.1	704.1
45°	518.8	516.9	515.5	512.9	517.3	533.0	561.4	573.8	581.9	606.3	677.4
47.5°	499.8	497.2	495.4	493.2	490.7	498.0	525.0	547.2	561.1	576.4	645.3
50°	472.8	476.1	473.9	471.3	469.1	467.7	479.0	515.5	532.6	545.0	606.3
52.5°	222.9	433.4	451.6	449.1	446.2	443.6	446.2	473.9	504.9	514.7	559.2
55°	127.0	193.0	401.6	424.6	422.1	418.4	416.2	425.7	472.1	485.2	516.2
57.5°	122.2	122.6	177.3	382.7	396.9	393.6	391.1	393.3	432.7	454.9	478.6
60°	118.2	118.2	118.2	169.3	365.9	367.0	363.7	360.1	377.2	421.0	440.7
62.5°	109.4	111.6	112.7	112.7	167.1	338.9	335.6	334.5	335.3	380.1	402.7
65°	98.1	103.2	105.4	106.9	106.9	175.5	306.8	305.0	302.4	319.6	364.4
67.5°	85.7	90.8	95.6	98.5	98.9	102.1	183.1	274.7	271.0	271.4	323.6
70°	73.0	77.3	82.4	86.8	90.8	92.7	95.6	228.0	240.0	234.9	277.3
72.5°	63.1	64.9	68.6	73.0	77.7	82.1	84.6	90.8	208.3	202.8	210.9
75°	52.5	54.0	56.5	59.5	63.1	68.2	72.6	77.0	110.5	170.0	168.9
77.5°	40.9	43.4	46.3	48.2	50.0	53.6	59.5	63.8	68.2	114.9	135.3
80°	31.4	33.2	34.7	36.5	38.7	41.2	43.4	48.5	53.6	57.6	103.6
82.5°	23.3	24.4	25.5	26.3	27.0	28.5	32.5	34.3	37.6	41.2	48.9
85°	16.4	17.1	17.9	18.2	18.6	19.0	20.4	20.8	24.1	24.8	29.5
87.5°	10.6	10.9	11.7	12.0	12.0	12.4	12.8	12.8	12.8	12.0	14.6
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):

	357.5°	360°
0°	796.0	796.0
2.5°	796.4	802.2
5°	795.3	802.9
7.5°	792.4	799.7
10°	788.0	796.7
12.5°	783.2	791.6
15°	779.2	785.4
17.5°	774.8	778.5
20°	769.0	771.9
22.5°	763.2	761.7
25°	756.6	753.3
27.5°	748.2	742.0
30°	740.6	729.6
32.5°	733.3	715.4
35°	723.4	700.8
37.5°	713.2	685.8
40°	701.2	668.7
42.5°	688.4	651.5
45°	672.3	635.1
47.5°	658.1	615.4
50°	638.4	594.3
52.5°	614.3	574.6
55°	585.9	550.5
57.5°	555.2	525.3
60°	522.4	496.5
62.5°	482.6	466.6
65°	435.9	432.3
67.5°	375.0	394.4
70°	307.5	350.9
72.5°	257.2	305.0
75°	210.9	253.5
77.5°	167.1	198.8
80°	104.3	145.6
82.5°	70.0	95.6
85°	42.3	45.6
87.5°	16.4	16.8
90°	0.0	0.0

(END OF REPORT)