

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: P1213020

Luminaire Tested: 4SNLED-LD5-21SL-RW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213020
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-LD5-21SL-RW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WHITE REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

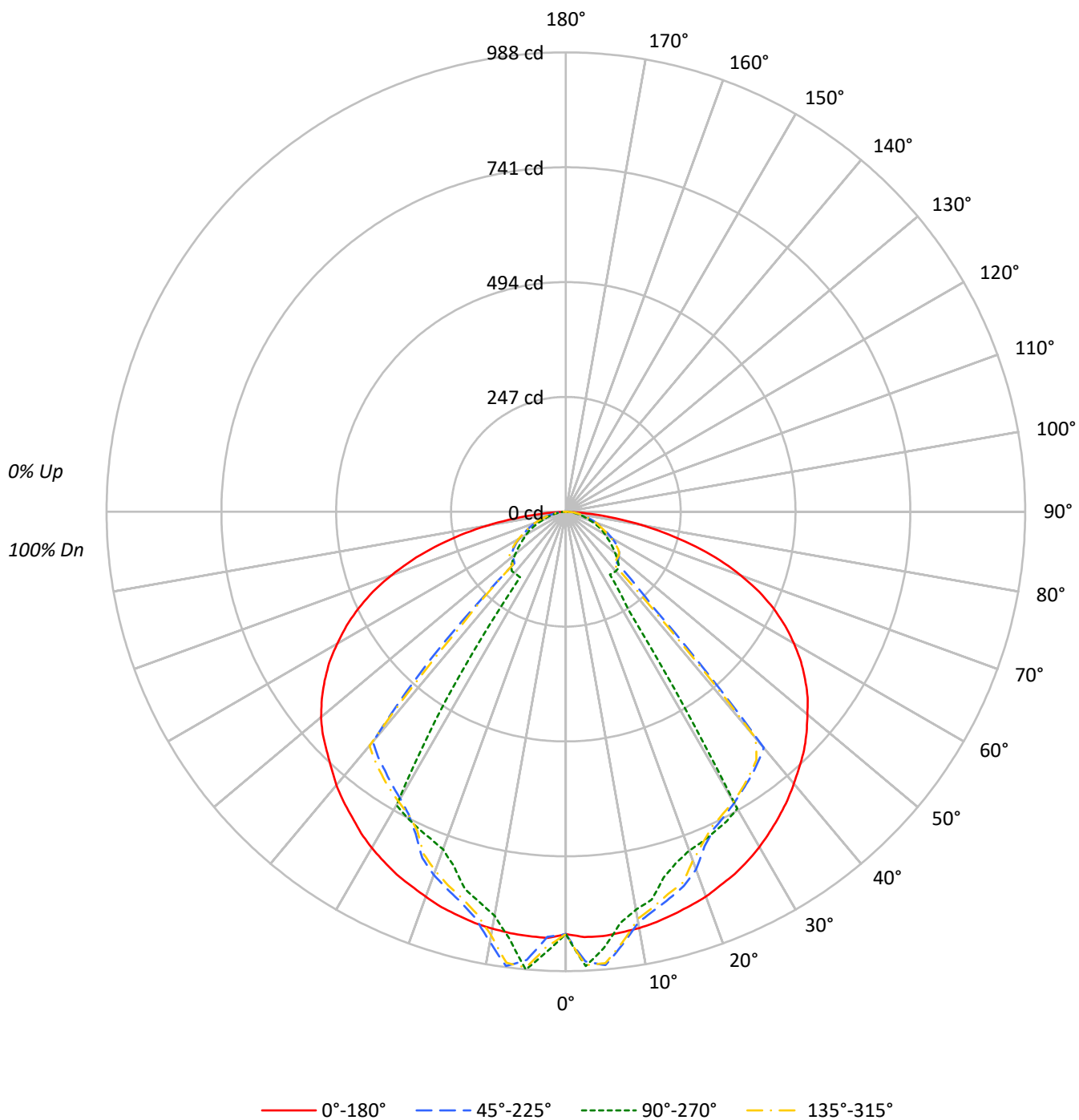
Lumens per Lamp: N/A
Luminaire Lumens: 1819.0 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.16 / 1.2
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 16
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°	7341	7341	7341	7341
5°	7413	7396	7409	7762
10°	7420	6687	7430	6789
15°	7436	6187	7454	6383
20°	7490	5868	7490	5845
25°	7555	5756	7566	5702
30°	7631	5654	7651	5587
35°	7720	1288	7737	1343
40°	7844	1339	7892	1382
45°	8032	1332	8060	1380
50°	8219	1204	8330	1237
55°	8472	1069	8540	1084
60°	8687	950	8706	962
65°	8840	829	8819	816
70°	8715	668	8686	644
75°	8089	514	8148	493
80°	6566	366	6831	335
85°	3552	219	3757	168

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 357.5°

Vertical Angle: 60°

Luminance: 8900 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.4	4.9
10°-20°	245.7	13.5
20°-30°	364.0	20.0
30°-40°	366.7	20.2
40°-50°	286.5	15.7
50°-60°	221.3	12.2
60°-70°	148.6	8.2
70°-80°	75.8	4.2
80°-90°	21.1	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°	699.1	38.4
0°-40°	1065.8	58.6
0°-60°	1573.6	86.5
0°-90°	1819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1819.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	908	908	908	908	908	
5°	916	942	916	988	916	87
15°	896	814	898	840	896	254
25°	860	758	861	751	860	397
35°	800	165	801	172	800	501
45°	725	160	727	166	725	559
55°	628	117	633	118	628	561
65°	493	78	492	77	493	485
75°	289	40	291	38	289	303
85°	52	12	55	10	52	72
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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	915.4	918.8	921.3	922.9	923.8	923.8	924.2	924.6	930.0	932.5	934.2
5°	916.3	919.6	924.6	931.3	937.1	942.1	946.2	952.1	957.9	964.1	966.2
7.5°	912.5	916.7	926.7	938.8	950.0	957.9	963.3	967.1	970.0	970.4	972.5
10°	909.2	916.7	930.4	946.2	960.4	970.0	970.0	967.9	970.8	959.6	948.3
12.5°	903.4	911.7	930.4	951.2	964.6	968.3	966.6	958.3	941.2	927.5	921.3
15°	896.3	907.5	930.8	954.2	965.4	966.6	950.8	929.6	916.7	908.4	898.0
17.5°	888.4	903.4	931.3	954.6	958.7	952.9	922.9	909.6	896.3	876.7	862.6
20°	880.9	895.5	927.9	948.7	951.2	925.0	901.7	887.5	865.1	848.0	841.8
22.5°	869.2	886.3	925.0	940.8	931.3	900.9	878.4	855.9	835.5	830.5	823.0
25°	859.7	877.6	918.4	931.3	905.9	878.8	852.6	826.4	816.8	809.7	803.0
27.5°	846.7	868.8	909.6	913.8	878.8	855.1	816.8	805.1	796.4	788.5	785.6
30°	832.6	859.7	897.5	889.6	856.3	821.4	793.0	782.2	776.0	767.7	764.3
32.5°	816.4	845.9	884.2	861.7	832.2	788.5	770.2	761.8	753.5	747.3	726.4
35°	799.7	833.8	868.4	835.1	803.0	763.5	747.3	739.8	731.9	709.0	687.3
37.5°	782.6	820.5	849.2	806.4	764.3	737.7	723.9	715.6	697.7	668.6	657.8
40°	763.1	804.3	824.7	776.8	730.6	711.5	698.5	690.2	649.8	636.9	633.6
42.5°	743.5	788.5	794.7	748.1	702.7	683.6	672.7	645.3	617.8	611.1	612.4
45°	724.8	771.4	761.8	707.3	673.6	657.8	639.4	601.6	587.0	590.3	591.1
47.5°	702.3	751.0	727.3	666.5	643.6	627.8	587.0	564.1	562.0	566.6	569.1
50°	678.1	728.1	690.6	629.4	611.1	592.4	546.2	534.5	537.0	541.6	544.5
52.5°	655.7	702.3	652.8	594.9	579.1	536.2	505.0	507.1	511.2	516.6	518.3
55°	628.2	671.1	612.4	559.9	544.9	488.7	474.6	479.6	483.7	488.3	491.6
57.5°	599.5	635.3	564.5	520.8	496.6	446.7	447.9	451.3	454.2	459.6	189.8
60°	566.6	594.5	512.0	484.6	436.7	413.4	414.6	420.5	423.4	236.5	130.7
62.5°	532.4	547.0	464.6	443.4	381.7	380.1	385.9	388.4	264.3	124.9	122.4
65°	493.3	490.4	418.0	384.2	344.3	345.9	352.2	339.7	117.0	117.0	116.1
67.5°	450.0	432.5	372.6	318.1	308.1	311.8	318.5	111.2	108.2	109.1	106.2
70°	400.5	375.9	325.5	269.3	272.7	276.4	107.4	100.7	99.5	97.4	91.6
72.5°	348.0	314.3	266.4	234.0	236.0	148.2	94.1	90.8	86.6	82.4	76.2
75°	289.3	245.6	195.7	195.7	198.6	84.5	82.0	76.6	72.0	66.6	62.9
77.5°	226.9	189.0	151.9	157.8	77.0	70.8	66.2	60.4	56.6	53.3	51.2
80°	166.1	132.0	114.5	102.4	59.9	53.7	49.1	45.8	44.1	42.0	39.5
82.5°	109.1	79.5	79.5	48.3	42.0	37.1	35.8	33.3	31.6	30.4	29.1
85°	52.0	46.2	35.0	29.6	26.2	23.7	22.9	21.6	21.6	21.2	20.8
87.5°	19.1	20.8	15.4	15.0	14.2	13.7	14.2	14.2	14.6	14.2	13.7
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):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
0°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	938.3	941.7	944.2	948.3	953.7	958.3	962.5	968.3	977.5	980.0	982.0
5°	966.2	967.5	970.4	973.7	974.6	976.6	976.2	978.7	980.0	982.9	976.6
7.5°	967.9	961.2	953.3	946.2	941.2	936.7	933.8	938.3	940.8	942.9	936.7
10°	932.9	925.0	920.4	916.3	911.3	904.2	894.6	896.7	895.9	895.9	893.8
12.5°	910.9	899.6	888.0	877.6	873.0	872.6	873.0	877.6	877.6	877.1	874.6
15°	876.3	865.5	859.7	857.2	857.2	855.9	855.9	860.9	859.7	859.7	858.4
17.5°	853.4	845.9	841.8	838.8	837.6	839.7	842.2	844.3	844.7	843.0	836.3
20°	834.7	827.6	822.6	823.4	823.0	824.3	825.5	818.4	809.7	798.0	792.6
22.5°	815.1	809.7	806.0	806.0	801.0	793.0	781.4	778.9	777.6	772.2	767.7
25°	796.4	790.1	784.7	768.1	757.7	758.9	756.8	752.7	752.3	751.8	753.5
27.5°	777.6	761.4	740.6	738.1	733.9	733.5	736.0	738.1	738.1	739.8	741.8
30°	738.9	720.2	716.4	711.9	713.5	719.4	720.6	723.5	724.4	727.3	728.9
32.5°	703.5	695.2	691.9	694.0	699.4	704.4	707.3	708.5	710.6	713.1	715.2
35°	674.8	672.3	675.2	679.8	685.2	689.4	691.9	694.4	696.5	698.5	700.2
37.5°	653.6	655.3	659.4	665.2	670.7	674.0	676.1	679.0	681.9	684.4	674.4
40°	633.6	637.8	642.3	648.6	653.2	656.5	658.6	662.3	637.4	288.5	158.2
42.5°	616.1	620.7	624.0	629.0	634.0	636.5	618.2	276.0	156.1	155.3	157.4
45°	594.9	598.6	604.0	607.8	612.4	402.1	153.6	155.3	152.8	154.4	155.3
47.5°	573.2	579.1	582.0	555.3	165.3	152.8	151.1	152.8	151.1	153.2	151.9
50°	548.7	555.8	395.5	149.5	148.2	147.4	149.0	148.2	149.5	151.1	147.8
52.5°	523.7	324.3	144.9	144.0	144.9	144.0	147.0	144.9	145.3	143.6	139.5
55°	177.3	140.3	139.0	138.6	141.1	141.1	141.1	137.8	135.7	131.6	128.6
57.5°	135.7	135.7	135.3	135.7	134.9	134.0	130.3	127.4	124.5	118.6	117.0
60°	128.6	128.6	128.6	128.6	124.9	123.2	117.4	114.9	109.9	107.0	105.3
62.5°	122.8	122.0	118.2	117.0	112.8	108.2	104.9	102.4	97.4	95.7	94.5
65°	114.5	111.6	107.0	102.0	99.9	94.9	93.3	89.5	87.0	85.8	84.9
67.5°	100.7	96.6	92.8	89.5	85.8	84.1	82.0	79.1	77.4	76.6	75.8
70°	86.2	83.3	79.5	77.4	74.9	73.7	70.8	69.9	68.7	67.4	66.2
72.5°	72.0	70.4	68.7	65.8	64.9	64.1	61.2	59.5	57.9	56.2	55.4
75°	60.4	59.1	58.3	55.8	54.5	52.0	50.0	48.7	47.5	46.2	45.4
77.5°	49.5	48.7	46.2	44.5	43.7	41.6	40.8	41.2	40.4	38.7	37.9
80°	38.7	37.9	35.8	35.8	35.0	34.1	33.3	32.5	31.6	30.4	29.6
82.5°	29.6	28.7	27.9	27.1	26.2	25.8	25.4	24.6	23.7	22.9	22.5
85°	20.8	20.4	20.0	19.6	19.1	18.7	18.3	17.5	16.7	16.2	15.8
87.5°	14.2	13.7	13.3	12.9	12.5	12.1	11.7	11.2	10.4	10.0	9.6
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):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
0°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	982.0	984.1	982.0	977.5	974.6	973.3	975.8	975.8	977.5	979.5	980.0
5°	966.6	961.6	955.8	950.0	947.1	945.4	940.8	941.7	942.9	943.7	944.6
7.5°	928.3	921.7	913.8	906.3	903.4	900.9	895.5	895.5	895.5	895.9	898.4
10°	889.2	886.3	883.0	878.0	874.2	873.0	868.4	869.6	868.8	870.1	873.0
12.5°	870.9	867.6	864.7	859.7	855.5	853.8	851.7	853.0	852.6	854.7	857.2
15°	854.2	852.6	849.2	845.5	841.8	838.4	830.9	828.4	826.8	824.7	827.6
17.5°	826.8	815.1	807.2	801.4	797.2	794.3	792.2	792.2	793.5	794.7	797.2
20°	789.3	786.0	782.2	776.0	771.8	770.2	768.9	768.9	771.0	772.6	777.2
22.5°	763.5	763.1	761.8	758.9	756.8	756.8	757.2	758.1	761.0	763.5	768.1
25°	751.4	753.1	752.3	750.6	749.3	749.8	748.9	749.8	752.7	755.2	758.9
27.5°	741.8	744.3	743.5	741.0	738.9	739.8	741.0	740.2	742.7	745.6	748.5
30°	728.9	729.4	731.0	728.1	727.3	728.5	728.9	729.8	732.3	734.3	736.8
32.5°	714.4	717.7	717.3	714.4	714.4	715.6	716.0	688.1	636.1	547.8	523.7
35°	700.2	704.0	697.7	588.2	407.1	217.3	167.8	161.9	163.2	164.0	164.9
37.5°	517.9	245.6	156.5	157.8	159.0	160.3	161.5	162.8	164.0	165.3	165.7
40°	155.7	155.3	156.5	158.2	159.4	160.3	161.9	163.2	164.4	165.7	166.1
42.5°	154.0	154.9	156.1	157.8	159.4	161.1	162.4	164.0	164.9	165.7	166.1
45°	153.2	154.9	156.5	157.8	159.0	159.9	160.7	161.1	160.7	160.7	161.5
47.5°	151.9	153.6	154.0	153.6	154.0	153.6	153.6	153.6	152.4	151.9	151.9
50°	147.4	147.4	146.5	144.9	144.5	144.0	143.2	142.8	141.1	140.7	140.7
52.5°	137.8	137.4	136.1	134.0	133.2	132.4	132.0	131.6	129.9	129.1	129.5
55°	126.6	125.7	124.5	122.0	121.6	120.7	120.3	119.9	118.2	119.1	117.8
57.5°	116.1	114.5	112.8	112.4	110.7	110.3	109.9	109.5	108.2	108.7	107.8
60°	103.7	103.2	102.4	100.7	100.7	100.3	100.3	99.5	98.7	98.2	98.2
62.5°	94.5	93.3	92.4	92.4	91.2	91.2	91.2	90.3	89.5	89.9	89.5
65°	84.5	84.1	83.7	82.8	82.8	82.4	82.4	81.6	80.3	80.8	79.9
67.5°	76.2	75.3	74.5	74.1	72.4	71.6	71.2	70.8	69.1	69.5	68.7
70°	65.8	64.5	63.7	62.9	61.6	60.8	60.8	59.9	58.7	59.1	58.3
72.5°	55.0	54.1	53.3	52.9	51.6	51.2	50.8	50.4	49.1	49.5	49.1
75°	45.8	45.8	45.4	45.0	43.7	42.5	41.6	41.2	40.4	40.8	40.0
77.5°	37.9	37.1	36.2	36.2	35.0	34.1	33.3	33.3	33.3	32.9	32.5
80°	29.6	28.7	28.7	28.3	27.5	26.6	26.2	26.2	25.8	25.8	25.4
82.5°	22.5	21.6	21.2	21.2	20.4	20.0	19.6	19.1	19.1	19.1	18.7
85°	15.8	15.0	14.6	14.6	13.7	13.3	13.3	12.9	12.9	12.5	12.5
87.5°	9.6	9.2	8.7	8.7	7.9	7.5	7.5	7.5	7.1	7.1	6.7
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):

	82.5°	85°	87.5°	90°	92.5°	95°	97.5°	100°	102.5°	105°	107.5°
0°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	980.0	980.0	977.1	977.9	976.6	978.3	976.2	976.2	978.7	978.7	980.4
5°	945.0	942.9	942.5	941.7	937.5	939.2	937.1	935.0	937.9	937.9	941.7
7.5°	897.1	893.4	895.0	892.5	890.0	886.3	887.5	885.9	888.0	890.9	894.6
10°	872.6	869.2	871.3	868.8	870.1	864.7	865.1	865.5	867.6	868.4	871.7
12.5°	856.7	855.9	855.1	854.2	855.1	852.2	850.5	850.9	851.7	852.2	854.7
15°	823.4	818.0	819.7	813.9	814.3	814.7	811.4	814.7	814.3	819.7	824.7
17.5°	796.4	796.4	793.5	791.0	789.3	788.9	786.4	788.1	786.4	789.7	791.0
20°	777.6	777.2	776.8	775.6	771.4	771.8	773.1	769.3	768.9	768.5	771.0
22.5°	768.9	769.3	767.7	767.7	763.9	764.7	765.2	761.0	761.4	760.2	761.4
25°	759.7	760.6	758.5	758.5	757.7	757.2	755.2	756.0	753.5	751.4	753.5
27.5°	748.9	750.6	748.9	749.8	748.1	747.3	746.0	745.2	742.7	742.3	743.5
30°	738.9	739.8	739.3	737.3	736.8	734.3	735.6	733.1	730.6	731.0	731.9
32.5°	378.8	361.8	278.9	251.9	249.4	258.5	306.4	373.0	483.3	590.3	667.3
35°	165.3	165.3	165.3	164.9	164.9	164.4	164.0	163.6	163.2	162.8	162.4
37.5°	166.1	166.1	166.1	166.1	165.7	165.3	165.3	164.4	164.0	163.6	163.2
40°	166.5	166.9	166.9	166.9	166.5	166.5	166.1	165.3	164.9	164.0	163.2
42.5°	166.1	166.5	166.5	166.1	166.1	165.7	165.7	165.3	164.9	164.4	164.0
45°	160.7	161.1	160.3	160.3	159.9	159.9	159.9	159.9	159.9	160.3	160.3
47.5°	151.1	151.1	150.7	150.3	150.3	149.9	150.3	149.9	150.7	151.1	151.9
50°	139.9	139.9	139.0	138.6	138.6	138.6	138.6	139.0	139.5	140.3	141.1
52.5°	128.2	128.2	127.8	127.4	127.0	127.0	128.2	127.8	128.2	128.6	129.9
55°	117.0	117.4	116.6	116.6	116.1	116.1	116.1	116.6	117.0	117.4	118.6
57.5°	107.4	107.4	106.6	106.6	106.6	106.2	107.4	106.6	107.0	107.4	108.2
60°	97.8	97.4	97.4	97.0	97.0	97.0	97.8	97.4	97.4	97.8	98.7
62.5°	89.1	89.1	88.7	88.7	88.3	88.3	89.1	88.7	88.7	89.1	89.5
65°	79.1	79.1	78.7	78.3	79.5	78.3	79.5	78.7	79.5	79.9	80.8
67.5°	67.9	67.9	67.9	67.4	67.4	68.3	68.7	67.9	68.3	69.1	69.5
70°	57.9	57.9	57.4	57.4	57.4	58.3	58.7	57.9	58.3	58.7	59.5
72.5°	49.1	48.3	48.3	47.9	48.7	48.7	49.1	48.7	49.1	49.1	50.0
75°	40.4	39.5	39.5	39.5	40.4	40.0	40.4	40.0	40.4	40.4	40.8
77.5°	32.5	32.1	31.6	31.6	32.5	32.5	32.5	32.1	32.5	32.9	33.3
80°	25.4	25.0	24.6	24.6	25.4	25.4	25.4	25.8	25.4	25.8	26.2
82.5°	18.7	18.3	17.9	18.7	18.7	18.7	18.7	19.1	18.7	19.1	19.6
85°	12.5	12.1	11.7	12.5	12.5	12.5	12.5	12.9	12.5	12.9	13.3
87.5°	6.7	6.2	6.2	6.7	6.7	6.7	7.1	7.1	7.1	7.5	7.5
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	982.9	984.1	983.7	981.2	978.7	975.8	973.7	974.1	978.3	979.5	975.8
5°	941.7	949.6	949.6	955.0	952.1	949.6	951.2	960.4	965.0	972.1	974.6
7.5°	899.2	902.9	902.5	907.9	907.1	907.1	908.4	920.4	926.3	932.1	933.8
10°	875.5	879.2	878.8	879.2	878.0	875.1	875.1	880.5	885.5	888.4	889.2
12.5°	858.4	860.5	860.1	860.1	859.2	856.7	856.3	860.9	866.3	870.1	870.5
15°	833.0	838.8	840.1	845.5	844.3	840.9	841.8	845.5	848.8	852.2	850.9
17.5°	795.1	798.0	798.5	800.5	799.7	799.7	804.7	818.4	827.6	835.5	836.3
20°	773.5	775.6	774.7	779.3	777.2	776.8	778.1	783.9	788.1	791.8	798.5
22.5°	763.1	764.7	763.5	763.9	760.2	756.8	756.0	760.6	765.2	770.2	770.2
25°	754.3	755.6	755.2	754.3	751.4	746.8	746.0	746.8	748.5	748.9	746.0
27.5°	743.9	744.8	744.8	745.2	741.4	737.3	736.4	735.6	737.3	736.8	732.3
30°	733.1	731.9	732.3	732.7	729.4	725.6	723.9	723.5	725.2	724.8	720.2
32.5°	707.3	716.9	717.7	718.5	715.6	712.3	710.6	709.4	710.2	709.8	705.6
35°	161.9	164.9	201.9	457.1	620.7	687.3	694.4	692.7	693.1	693.1	689.8
37.5°	162.4	161.9	161.5	160.3	159.0	158.2	273.5	583.2	675.7	676.1	673.2
40°	162.4	161.9	161.5	160.7	159.0	157.8	155.7	154.0	157.8	347.2	635.3
42.5°	163.2	162.4	161.5	160.7	159.0	157.4	155.7	153.6	154.9	154.0	151.9
45°	160.7	160.3	160.3	159.9	159.0	157.4	155.3	152.8	151.5	152.8	150.7
47.5°	152.8	153.2	154.4	154.9	154.9	155.3	154.0	152.4	150.3	151.5	149.0
50°	142.0	142.8	143.2	145.3	146.1	147.8	148.2	148.2	147.8	149.5	147.8
52.5°	130.3	131.1	133.2	134.0	134.9	137.4	138.2	139.5	140.3	142.8	144.5
55°	119.1	119.5	120.3	122.0	123.2	125.3	126.6	127.8	129.9	131.1	136.1
57.5°	108.7	109.1	110.7	111.2	112.0	113.6	114.9	116.6	118.2	119.1	124.9
60°	98.7	99.1	100.3	100.7	101.2	102.8	104.1	105.3	106.6	107.4	111.6
62.5°	89.9	89.9	91.2	91.2	91.6	92.8	93.7	94.5	95.7	96.2	98.2
65°	81.2	81.6	82.4	82.4	82.8	83.7	84.1	84.5	85.8	85.8	87.4
67.5°	70.4	70.8	72.0	72.9	73.3	74.9	75.3	75.8	76.6	77.0	77.8
70°	59.9	60.4	61.6	62.0	62.4	63.7	64.5	65.8	67.0	68.3	69.1
72.5°	50.4	50.8	52.0	52.0	53.3	53.7	54.5	55.0	56.2	57.0	58.3
75°	41.2	41.6	42.9	42.9	44.1	44.5	45.0	45.4	46.2	47.0	47.9
77.5°	33.7	33.7	35.4	36.2	37.1	37.1	37.5	37.5	37.5	37.9	38.7
80°	26.6	26.6	27.9	28.7	29.6	29.6	30.0	30.4	30.8	30.8	31.2
82.5°	20.0	20.0	21.2	21.6	22.5	22.5	22.5	22.9	23.3	22.9	23.7
85°	13.7	13.7	14.6	15.0	15.8	15.8	15.8	16.2	16.7	16.2	16.7
87.5°	7.9	8.3	8.7	9.2	9.6	10.0	10.0	10.0	10.4	10.4	10.8
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	971.6	966.6	966.2	960.4	958.7	959.2	954.6	952.9	945.4	943.7	935.8
5°	975.4	977.9	976.6	976.2	977.5	976.6	973.3	971.6	970.4	967.1	960.4
7.5°	934.2	935.8	937.1	942.5	947.1	955.0	963.3	968.7	972.9	973.7	968.3
10°	892.1	900.0	905.4	913.8	920.4	925.0	930.0	934.6	946.7	958.7	965.8
12.5°	870.5	872.6	872.1	876.7	881.3	893.4	905.0	911.7	920.9	926.3	939.2
15°	852.2	852.6	853.8	857.2	859.7	863.8	869.2	879.2	897.5	905.9	912.9
17.5°	835.5	835.5	836.3	839.3	842.6	846.3	849.7	853.8	863.0	876.7	894.2
20°	808.9	820.5	821.8	821.4	823.0	830.1	830.9	838.4	843.0	848.4	865.5
22.5°	769.3	776.4	786.4	801.8	807.6	810.9	813.4	816.8	823.9	830.1	837.2
25°	747.7	752.3	755.2	759.7	771.8	791.4	795.1	798.9	803.5	808.0	816.8
27.5°	728.5	728.1	730.2	734.3	737.7	748.1	766.4	781.0	781.8	788.5	796.0
30°	714.8	712.3	709.4	708.5	713.1	718.5	723.9	746.8	762.7	766.0	773.9
32.5°	701.9	697.7	693.6	690.2	687.3	691.9	695.2	705.2	725.6	744.8	748.9
35°	686.1	681.9	676.9	673.2	668.6	668.2	667.7	677.3	684.0	706.9	726.9
37.5°	669.8	665.2	661.1	656.9	652.3	649.0	646.9	649.4	655.7	665.7	699.0
40°	652.8	647.3	643.2	639.8	633.6	631.1	626.9	625.3	625.7	634.4	651.9
42.5°	390.1	621.9	624.0	620.3	614.9	611.5	607.0	604.9	600.7	604.9	614.9
45°	150.3	151.9	455.0	601.1	594.5	590.3	586.1	584.1	579.5	576.2	585.3
47.5°	147.4	149.0	145.7	206.5	567.4	568.7	563.7	561.6	557.0	554.5	552.0
50°	145.3	146.5	144.0	144.9	142.0	520.0	540.8	538.3	533.3	530.4	525.4
52.5°	143.2	143.2	141.5	139.5	138.6	139.0	437.5	514.5	508.7	505.8	499.1
55°	136.5	137.4	139.0	135.7	134.9	134.5	133.2	416.7	481.7	478.3	472.5
57.5°	126.6	128.2	132.8	132.0	132.0	128.6	127.8	127.8	386.7	450.4	444.6
60°	114.9	116.6	121.6	123.2	124.5	123.6	122.8	122.4	120.7	407.6	415.0
62.5°	102.8	104.5	106.2	111.6	113.2	115.3	117.8	116.6	114.9	114.9	383.8
65°	89.9	92.4	93.3	98.2	100.3	104.1	106.2	109.1	108.2	107.8	109.9
67.5°	78.7	81.6	82.0	84.1	87.8	89.5	92.0	97.4	99.9	100.7	101.6
70°	69.1	70.8	72.0	72.9	75.3	75.8	80.3	84.1	87.8	92.0	93.3
72.5°	59.5	60.8	63.3	62.4	63.3	64.9	67.4	69.9	73.7	79.5	83.3
75°	48.7	49.5	51.2	52.0	53.7	55.0	56.6	58.7	62.0	64.9	69.9
77.5°	39.1	39.5	40.8	41.2	42.9	44.1	47.0	48.3	50.4	52.5	55.4
80°	31.6	31.6	32.1	32.1	33.3	34.6	36.6	37.9	40.4	42.0	42.0
82.5°	24.1	24.1	25.4	25.4	26.2	26.2	27.5	27.5	28.7	29.6	30.4
85°	17.1	17.5	18.3	17.9	18.7	18.3	19.1	20.0	20.4	20.0	19.6
87.5°	11.2	11.2	12.1	11.7	12.1	12.1	12.9	12.9	13.3	13.3	12.9
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	932.9	926.7	922.9	918.4	917.1	915.9	917.5	917.5	915.0	912.9	909.2
5°	954.6	947.9	940.8	933.3	926.3	918.8	915.9	915.4	910.9	908.4	907.1
7.5°	965.8	962.5	954.6	944.2	933.3	920.0	914.2	910.9	906.3	905.4	905.4
10°	967.1	963.3	959.2	951.7	939.2	921.7	910.4	903.8	899.6	902.5	907.9
12.5°	955.0	962.1	958.3	953.3	943.3	922.1	905.9	895.9	894.6	902.1	916.3
15°	924.2	945.0	955.4	950.4	942.5	921.3	898.4	886.7	886.7	902.1	920.4
17.5°	900.9	917.1	942.5	946.7	937.5	919.6	891.3	877.6	881.3	903.8	923.3
20°	881.7	891.7	916.3	939.6	930.8	915.9	880.9	866.7	874.2	901.3	927.5
22.5°	851.7	871.7	886.7	921.3	924.2	908.8	870.5	853.4	868.4	901.3	925.4
25°	822.6	846.7	862.6	896.3	914.2	900.0	860.9	839.3	862.2	900.0	923.8
27.5°	802.2	813.4	842.2	866.3	899.2	888.4	848.0	823.9	854.2	893.4	914.2
30°	780.6	788.1	816.4	839.3	879.2	875.1	834.7	806.8	844.3	887.1	889.2
32.5°	756.8	765.2	779.7	813.0	851.3	862.6	819.7	789.7	833.4	877.6	860.1
35°	732.7	738.9	750.6	786.4	818.9	843.8	801.4	770.2	825.9	863.0	832.2
37.5°	708.5	715.2	725.2	755.2	784.7	826.4	785.6	750.6	812.2	837.2	803.0
40°	685.6	689.4	699.8	718.5	756.4	808.5	767.7	730.2	798.0	804.3	763.5
42.5°	643.6	662.3	671.9	686.9	724.4	783.9	746.8	708.5	782.2	771.4	723.9
45°	598.2	639.0	643.2	658.2	696.0	757.7	727.3	687.3	767.2	743.1	686.5
47.5°	561.2	590.7	614.9	627.4	662.3	726.9	709.0	669.4	744.8	707.3	649.8
50°	528.3	544.1	587.8	597.0	621.9	689.8	687.3	648.6	713.5	662.3	614.0
52.5°	496.2	507.5	547.0	566.6	587.0	649.8	661.5	628.2	679.4	617.4	577.8
55°	468.3	472.1	493.7	534.9	553.3	609.5	633.2	604.5	636.1	574.5	542.9
57.5°	439.6	436.3	452.1	505.0	518.3	568.2	603.2	580.3	601.1	530.8	506.6
60°	409.6	405.1	411.7	446.7	481.2	527.4	567.8	553.7	558.7	487.5	466.3
62.5°	378.4	373.8	371.8	393.8	445.0	485.4	532.0	524.1	506.6	447.9	416.3
65°	345.9	341.4	338.0	346.8	405.1	430.9	492.1	490.0	449.6	406.3	350.5
67.5°	105.3	310.6	303.5	303.1	341.4	381.3	448.8	445.4	392.2	361.8	301.8
70°	94.9	251.9	267.7	263.9	280.6	331.0	399.2	396.7	336.4	290.2	266.8
72.5°	87.0	89.1	236.5	232.3	236.0	281.4	347.6	340.9	285.2	229.0	230.6
75°	74.5	78.3	81.6	196.1	191.1	233.1	291.4	281.0	235.2	189.0	192.7
77.5°	60.8	65.4	67.9	142.8	154.4	166.1	232.7	219.0	161.9	151.1	72.0
80°	45.4	49.1	53.3	57.0	117.4	116.1	172.8	159.0	112.8	94.1	56.2
82.5°	33.3	34.6	37.1	41.2	46.6	77.8	111.2	97.8	78.3	42.9	38.7
85°	20.8	22.5	23.7	25.0	28.3	46.6	55.0	43.7	32.9	26.2	24.6
87.5°	13.3	13.3	12.9	13.3	13.7	16.7	18.7	17.9	14.2	13.3	13.3
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	905.0	899.2	899.2	897.5	898.8	898.8	898.4	898.8	901.7	903.4	906.3
5°	904.6	902.9	906.7	911.3	916.7	923.3	925.0	930.8	936.3	943.3	950.8
7.5°	910.0	915.9	922.9	930.4	941.2	949.2	956.2	963.3	968.3	975.0	979.1
10°	917.9	929.6	941.7	951.2	962.9	969.6	974.1	975.0	967.9	956.7	947.5
12.5°	929.2	942.9	954.2	963.3	968.7	966.2	952.9	939.2	931.3	919.6	903.4
15°	938.8	951.2	962.9	959.2	944.6	930.8	920.4	904.2	888.4	877.6	870.5
17.5°	942.9	955.0	950.8	931.3	917.5	901.7	880.5	868.0	857.6	849.2	845.1
20°	945.4	943.3	920.9	906.7	880.1	865.5	851.7	840.1	832.2	828.0	827.2
22.5°	938.8	913.4	894.2	868.8	849.2	837.2	826.4	816.8	811.4	808.0	806.0
25°	916.7	887.1	858.8	838.8	822.2	811.8	803.5	795.5	788.9	787.2	783.1
27.5°	885.9	861.7	824.3	808.9	794.3	789.3	780.1	772.2	766.4	761.4	748.1
30°	860.5	822.2	795.1	781.0	772.2	766.4	756.0	747.7	737.7	719.4	711.9
32.5°	829.3	791.4	765.6	757.7	746.8	741.8	730.2	711.9	696.5	689.0	688.6
35°	788.9	757.7	738.9	731.9	723.1	714.8	690.6	674.0	666.5	667.3	673.6
37.5°	755.2	727.3	715.2	705.2	695.2	674.0	653.6	645.7	647.8	651.9	654.8
40°	721.0	699.8	686.1	678.1	655.7	634.9	624.0	626.9	630.7	633.6	637.4
42.5°	687.7	672.7	659.0	643.6	612.8	601.6	604.0	607.8	611.1	615.3	619.0
45°	656.1	642.8	626.9	592.0	576.6	579.5	583.2	586.1	591.1	594.1	597.8
47.5°	626.1	612.0	584.1	553.3	551.6	557.4	560.8	564.5	568.2	560.8	309.3
50°	592.4	577.8	535.4	523.7	527.4	532.9	537.0	540.8	481.7	191.5	147.4
52.5°	559.1	522.0	495.0	498.3	502.1	508.3	511.2	379.7	151.1	144.0	144.5
55°	522.0	474.6	466.7	470.8	474.2	480.4	318.5	139.5	138.6	138.2	141.5
57.5°	463.8	435.0	438.4	442.5	445.9	314.7	135.7	134.9	135.3	135.7	136.1
60°	411.7	405.5	409.2	413.0	292.2	131.1	128.6	129.1	130.7	129.5	126.1
62.5°	370.5	375.5	379.2	332.2	124.5	123.2	124.5	123.2	120.3	118.2	114.1
65°	338.9	343.9	346.8	117.0	116.6	118.2	117.0	112.8	108.2	102.4	101.2
67.5°	305.6	310.6	111.2	108.2	109.9	107.8	102.8	97.8	94.5	89.5	87.4
70°	271.0	116.1	100.7	100.3	97.4	94.1	88.7	83.7	79.5	77.4	75.3
72.5°	195.7	92.0	90.8	87.4	82.4	77.8	73.3	70.4	68.3	67.0	65.8
75°	81.6	79.9	76.2	70.4	65.4	63.3	59.9	57.9	57.0	54.5	53.7
77.5°	68.3	64.9	59.5	55.4	52.5	51.2	48.7	46.2	45.0	44.5	42.9
80°	52.5	47.9	45.4	43.3	42.5	39.5	36.6	35.4	34.6	34.1	32.9
82.5°	35.8	34.1	32.5	29.6	29.6	28.3	27.1	26.2	25.4	25.4	24.6
85°	23.3	22.1	21.6	20.4	20.4	19.6	19.1	18.7	18.3	17.9	17.5
87.5°	13.3	13.3	13.7	13.3	13.3	12.9	12.5	12.1	11.7	11.7	10.8
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	910.0	914.2	915.0	929.2	937.1	936.7	934.2	941.7	937.1	934.6	937.1
5°	958.3	963.3	967.5	982.9	988.3	990.8	990.4	994.5	991.2	988.3	988.3
7.5°	982.0	983.7	985.4	981.6	979.1	975.0	968.7	959.6	955.0	950.0	943.7
10°	942.9	937.5	939.6	932.1	925.8	921.3	915.4	907.9	901.7	897.1	890.0
12.5°	895.0	894.6	895.5	896.7	890.5	886.7	882.1	876.7	872.1	867.1	861.3
15°	865.9	866.3	869.6	868.4	866.3	864.2	859.2	857.6	853.4	848.0	844.7
17.5°	845.1	847.2	850.5	848.8	845.5	843.4	839.7	835.9	832.2	828.0	823.0
20°	826.8	828.8	830.9	828.8	822.6	819.7	814.7	803.0	794.7	786.4	778.9
22.5°	806.8	808.0	806.4	799.7	783.9	776.4	770.6	767.2	760.2	755.6	751.0
25°	781.8	774.7	763.9	756.4	750.2	746.8	744.3	743.9	743.1	742.3	740.2
27.5°	741.0	738.5	732.7	729.8	730.2	731.4	731.9	733.1	731.9	730.2	728.5
30°	710.6	711.9	712.3	713.1	715.2	716.4	716.9	718.5	717.7	716.4	715.6
32.5°	691.5	694.4	696.0	698.5	699.8	701.9	701.9	704.4	701.9	701.5	700.6
35°	675.7	678.1	679.0	682.7	684.0	686.1	686.1	688.1	686.1	664.8	525.0
37.5°	659.8	662.3	664.0	667.3	667.7	669.0	617.4	451.7	291.4	225.6	172.3
40°	641.1	644.0	645.7	646.9	454.6	288.5	198.6	161.5	161.5	162.8	164.0
42.5°	621.1	623.2	434.2	252.7	157.4	156.9	158.2	159.4	160.7	162.4	164.0
45°	488.3	246.4	156.5	152.8	154.0	155.7	157.4	159.0	161.1	162.8	163.6
47.5°	160.3	150.3	152.4	150.7	152.8	154.9	156.5	158.2	158.6	159.0	158.6
50°	148.2	148.2	149.5	149.5	151.1	151.9	151.9	151.9	150.3	149.9	148.6
52.5°	143.2	146.5	144.9	145.7	144.9	143.6	142.4	141.1	138.6	137.8	136.1
55°	140.7	142.0	137.8	136.5	134.9	131.6	129.9	128.2	126.1	125.3	123.2
57.5°	134.9	132.0	127.4	125.3	122.4	119.1	117.4	116.1	114.1	113.2	112.0
60°	124.1	118.2	115.3	112.8	109.5	106.6	105.3	104.5	102.8	102.4	101.2
62.5°	110.7	105.7	103.2	99.9	97.4	95.7	94.5	94.1	92.4	92.4	91.6
65°	96.2	93.7	91.6	88.3	87.0	85.3	84.9	84.5	83.7	83.3	82.4
67.5°	84.5	82.8	79.9	78.3	77.4	76.2	75.3	74.5	72.9	72.0	70.8
70°	74.1	72.9	69.9	68.7	67.0	64.9	63.7	62.9	61.6	60.8	59.5
72.5°	64.1	60.4	58.3	57.0	55.8	53.7	53.3	52.5	51.2	50.8	49.5
75°	51.6	48.7	47.5	46.6	45.4	44.1	44.1	44.1	42.9	42.5	42.0
77.5°	41.2	39.5	38.7	37.9	37.5	36.6	35.4	35.0	33.7	33.7	33.3
80°	31.6	30.8	30.0	29.6	29.1	28.3	27.5	27.1	25.8	25.8	25.4
82.5°	23.3	22.9	22.5	22.1	21.6	21.2	20.0	19.6	18.7	18.7	18.3
85°	16.7	16.2	15.4	15.0	15.0	14.6	13.3	12.9	12.1	12.1	12.1
87.5°	10.4	10.0	9.6	9.2	8.7	8.3	7.5	7.1	7.1	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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CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	932.1	939.2	938.3	943.3	944.6	947.1	947.9	948.3	942.1	947.1	947.5
5°	987.0	988.3	989.1	991.2	993.3	993.7	991.6	989.1	990.0	988.3	984.1
7.5°	942.9	936.7	935.4	933.8	932.9	932.1	928.3	931.7	927.9	926.3	920.4
10°	888.8	883.0	882.6	882.6	883.8	883.4	882.6	880.9	884.2	882.1	880.9
12.5°	860.5	858.4	859.7	858.8	862.2	863.0	862.2	862.2	861.3	859.7	860.5
15°	843.4	841.8	843.0	841.8	844.3	844.7	842.6	843.8	841.8	839.7	838.8
17.5°	820.9	817.2	814.3	810.1	810.5	809.7	807.2	807.2	805.1	799.7	800.1
20°	777.6	773.9	772.2	772.2	774.3	775.1	774.7	775.6	773.5	772.6	769.3
22.5°	750.6	750.2	751.0	753.1	756.4	761.0	761.4	761.4	761.4	761.0	756.8
25°	741.0	741.0	741.8	744.8	747.3	750.6	751.4	752.3	751.4	751.4	747.7
27.5°	730.2	729.4	731.0	733.9	736.8	739.3	741.4	741.8	740.6	740.6	741.8
30°	716.9	716.4	718.5	721.4	723.9	726.4	728.5	730.2	728.5	728.5	727.3
32.5°	703.1	703.1	704.0	686.5	636.5	573.2	574.5	537.9	512.5	480.4	522.9
35°	438.8	319.3	274.3	232.3	202.7	183.6	183.2	176.9	174.0	171.9	171.5
37.5°	165.7	166.5	168.2	169.0	170.3	171.1	171.5	171.5	171.5	171.5	171.1
40°	165.3	166.9	168.2	169.4	170.7	171.5	171.5	171.9	172.3	172.3	172.3
42.5°	165.7	167.4	169.0	170.3	171.1	171.5	171.9	172.3	172.3	172.3	172.3
45°	165.3	166.1	166.1	166.5	166.5	166.5	166.9	166.9	166.5	166.1	166.9
47.5°	159.0	159.0	157.8	157.4	156.9	156.1	156.5	156.1	155.7	155.3	156.1
50°	148.2	146.5	145.7	144.9	144.5	143.6	144.0	143.6	143.2	142.4	143.6
52.5°	135.3	134.9	133.2	132.4	132.0	132.4	131.6	131.1	130.7	130.3	130.7
55°	122.8	121.1	120.7	119.9	119.5	119.9	119.5	119.1	118.6	118.2	118.6
57.5°	111.6	110.3	109.9	109.1	109.1	109.1	109.1	108.7	108.2	107.8	108.2
60°	100.7	99.9	99.5	99.5	99.1	99.1	99.1	98.7	98.2	98.2	98.7
62.5°	91.6	91.6	90.3	89.9	89.9	90.3	89.9	89.5	89.1	88.7	89.5
65°	82.0	80.3	79.9	79.1	78.3	78.7	78.3	77.8	77.4	77.0	77.8
67.5°	70.4	69.9	68.3	67.4	67.0	67.4	67.0	66.6	66.2	65.8	66.6
70°	59.1	59.1	57.4	57.0	56.6	56.6	56.2	56.2	55.8	55.4	56.2
72.5°	49.1	49.1	48.7	47.9	47.5	47.0	46.6	46.2	46.2	46.6	46.6
75°	40.8	40.0	38.3	38.7	38.3	37.9	37.9	37.5	37.1	37.9	37.5
77.5°	32.1	31.6	30.4	30.8	30.4	30.0	30.0	29.6	29.1	29.6	29.6
80°	24.1	24.1	23.7	23.3	23.3	22.9	22.5	22.5	22.1	22.5	22.5
82.5°	17.5	17.5	17.1	16.7	16.2	16.2	15.8	15.8	15.8	15.8	15.8
85°	11.2	10.8	10.8	10.0	10.0	10.0	9.6	9.6	9.6	9.6	9.6
87.5°	5.4	5.4	5.0	5.0	4.6	4.2	4.2	3.7	3.7	4.2	4.2
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	940.0	945.4	940.8	942.9	943.3	950.4	950.0	951.7	948.7	945.4	940.8
5°	987.9	985.4	982.0	990.0	985.8	990.8	992.5	995.8	995.8	995.4	991.6
7.5°	926.7	921.3	925.4	928.3	929.6	926.3	932.9	940.4	946.7	950.4	950.8
10°	878.8	880.5	880.1	881.3	884.2	883.8	888.0	892.1	893.8	896.3	897.1
12.5°	856.3	855.9	856.7	859.7	861.3	860.9	865.1	867.6	868.4	868.8	868.4
15°	838.4	835.5	837.6	838.0	839.3	839.3	844.3	848.0	849.7	850.5	849.7
17.5°	804.7	797.6	804.3	804.3	808.9	808.0	815.9	822.2	825.5	828.0	828.0
20°	771.4	768.1	770.6	769.7	773.1	772.6	777.6	781.8	784.7	786.8	789.3
22.5°	758.1	758.9	755.2	755.6	755.6	755.2	757.7	759.7	760.6	761.8	761.0
25°	749.3	750.2	748.9	746.8	746.0	746.8	748.1	750.6	751.0	750.2	747.3
27.5°	740.6	738.1	740.2	736.4	735.6	737.3	738.9	739.3	739.8	739.8	737.3
30°	727.3	725.2	727.3	725.6	723.9	725.6	726.9	726.9	727.7	728.1	725.2
32.5°	508.3	512.5	579.9	620.7	678.1	707.3	712.7	712.7	713.5	713.5	711.0
35°	173.2	173.6	187.8	203.6	237.3	278.9	333.5	361.8	457.5	572.0	682.7
37.5°	171.1	170.7	170.3	169.8	169.4	169.0	168.2	167.8	170.3	201.9	273.9
40°	171.9	171.5	170.7	170.3	169.8	169.0	168.6	167.8	166.9	166.1	165.3
42.5°	171.9	171.5	171.1	170.7	170.3	169.8	169.0	168.2	167.4	166.1	164.9
45°	166.1	166.1	166.5	166.5	166.9	166.9	166.9	166.5	166.5	166.1	164.4
47.5°	155.3	155.3	156.5	156.5	157.4	158.2	158.2	159.0	160.3	161.1	161.5
50°	142.8	142.8	144.0	144.5	145.3	146.5	147.8	148.2	149.5	151.1	152.8
52.5°	130.3	130.3	131.6	131.6	132.4	133.6	134.9	135.3	137.0	138.6	140.7
55°	118.6	118.6	119.5	119.9	120.3	121.1	122.4	122.4	124.1	125.3	127.4
57.5°	108.2	109.1	109.1	109.1	109.5	110.3	111.2	111.2	112.4	113.6	115.3
60°	98.2	99.1	99.1	99.1	99.5	99.9	100.7	100.7	101.6	102.4	104.1
62.5°	89.1	89.9	89.9	90.3	90.3	90.8	91.6	91.2	92.0	92.4	93.7
65°	77.4	78.3	78.7	79.1	79.5	80.3	81.6	81.2	82.4	83.3	84.5
67.5°	66.2	67.0	67.0	67.4	67.9	68.7	69.5	69.5	70.8	71.6	73.3
70°	55.8	56.6	56.6	57.0	57.4	58.3	59.1	58.7	59.9	60.8	62.0
72.5°	46.2	47.0	47.0	47.5	47.5	48.3	49.1	50.0	50.0	50.8	51.6
75°	37.5	37.9	38.3	38.3	38.7	39.1	40.0	40.8	41.2	41.6	42.5
77.5°	29.6	30.0	30.4	30.4	30.8	31.2	31.6	33.3	34.1	34.6	34.6
80°	22.5	22.9	22.9	22.9	23.3	23.7	24.6	24.6	26.2	26.2	26.6
82.5°	15.8	16.2	16.2	16.2	16.7	17.5	17.9	18.3	19.1	19.6	19.6
85°	9.6	10.0	10.0	10.0	10.4	10.8	11.7	12.1	12.5	12.5	12.9
87.5°	3.7	4.2	4.6	4.6	5.0	5.4	5.8	6.2	6.7	6.7	7.1
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-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°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	935.8	938.8	935.8	937.5	939.6	935.8	927.1	923.8	922.5	917.5	914.2
5°	987.9	987.9	986.6	990.0	989.5	983.7	974.6	970.4	966.2	960.8	956.7
7.5°	950.8	954.2	956.2	969.1	977.5	978.3	984.1	985.4	987.0	985.4	982.9
10°	897.5	896.3	902.1	914.2	921.3	925.0	936.3	941.7	946.2	955.4	965.0
12.5°	867.6	869.2	871.7	880.5	887.1	885.5	890.0	893.8	899.2	908.4	922.1
15°	847.6	849.2	851.7	858.4	862.6	860.5	863.0	865.5	869.2	873.8	882.1
17.5°	825.9	828.8	831.8	838.8	842.6	842.2	844.3	845.1	846.3	849.2	855.1
20°	792.2	801.4	807.2	816.8	822.2	821.4	825.1	826.4	828.0	830.9	833.4
22.5°	761.4	763.9	766.8	777.2	786.4	797.6	800.1	803.5	807.6	810.5	813.0
25°	743.9	742.3	743.5	750.6	755.6	756.4	760.2	771.0	782.2	787.2	793.0
27.5°	733.5	731.9	731.4	734.8	735.6	733.5	732.7	736.0	744.3	752.7	770.2
30°	722.3	720.2	718.5	721.4	722.7	719.8	714.4	711.5	716.4	718.5	725.6
32.5°	709.0	706.9	706.0	707.7	708.5	706.0	700.2	696.9	696.0	694.4	696.0
35°	694.0	691.9	690.6	691.1	692.7	690.6	685.6	681.5	679.4	674.8	671.5
37.5°	357.6	506.6	657.8	673.6	675.2	674.8	669.8	665.2	663.2	657.8	656.1
40°	163.6	182.8	274.3	358.4	517.0	656.9	652.3	647.8	644.0	642.3	636.1
42.5°	163.2	163.6	164.0	161.9	200.7	341.8	504.6	629.9	627.4	623.2	618.6
45°	163.2	161.1	162.8	160.3	161.1	160.7	200.2	323.0	574.9	600.7	598.6
47.5°	161.5	160.3	161.9	159.9	157.4	158.6	156.9	159.0	248.1	420.9	576.6
50°	154.0	154.9	157.8	157.4	155.3	156.9	154.0	156.5	154.4	169.4	326.4
52.5°	142.8	144.5	147.4	149.9	150.7	152.8	151.9	152.8	151.1	151.5	151.9
55°	129.5	131.6	134.0	137.8	139.5	142.8	145.3	146.5	148.6	148.2	144.9
57.5°	117.0	119.1	121.1	124.9	128.6	130.3	134.9	137.4	142.8	141.5	140.7
60°	105.3	107.0	109.1	109.9	114.5	117.4	121.6	124.1	131.1	132.8	135.3
62.5°	94.9	95.7	97.4	98.7	101.6	104.5	106.6	110.7	114.5	119.9	123.6
65°	85.3	86.2	87.4	88.3	88.7	92.8	94.1	98.7	99.9	105.7	109.1
67.5°	74.5	76.2	77.8	78.7	79.5	82.0	82.8	84.9	87.8	90.3	94.5
70°	63.3	64.5	66.2	67.4	69.1	70.8	73.3	74.5	76.6	78.3	81.6
72.5°	52.9	54.1	55.0	56.2	57.4	58.7	60.8	63.7	65.4	68.3	69.1
75°	42.9	44.1	45.0	45.8	47.0	47.9	48.7	51.6	53.3	55.8	58.3
77.5°	35.4	35.4	36.2	38.7	38.3	38.3	39.1	40.8	42.0	43.7	46.2
80°	27.5	27.9	28.3	30.4	30.8	31.2	30.8	32.1	33.3	33.7	35.4
82.5°	20.4	20.8	20.8	22.1	23.3	23.3	23.3	23.7	25.0	25.4	26.2
85°	13.7	14.2	14.6	15.0	15.8	16.2	16.7	16.7	17.5	17.9	18.3
87.5°	7.5	8.3	8.7	9.2	9.6	10.0	10.4	10.8	11.2	11.7	12.1
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):

	330°	332.5°	335°	337.5°	340°	342.5°	345°	347.5°	350°	352.5°	355°
0°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4
2.5°	912.9	910.9	909.6	906.3	905.4	900.0	900.9	900.0	900.0	901.3	905.4
5°	952.1	942.1	939.6	932.5	926.7	916.7	910.4	907.1	902.1	900.0	902.9
7.5°	978.7	971.2	965.0	958.7	950.4	938.8	930.0	920.0	911.7	903.8	901.7
10°	974.1	982.5	982.5	978.7	970.8	959.2	948.7	936.3	921.7	909.2	901.7
12.5°	935.4	950.0	961.6	970.4	978.3	970.4	960.0	950.0	933.8	915.4	901.7
15°	893.0	907.9	922.5	940.8	960.0	967.9	967.5	955.8	941.2	922.1	902.9
17.5°	863.0	873.4	881.3	901.3	924.6	945.0	958.7	959.6	945.4	928.3	903.4
20°	840.5	848.0	854.7	865.9	886.3	911.3	936.7	950.8	948.3	929.6	904.6
22.5°	820.1	825.5	830.9	839.3	855.5	871.7	901.3	930.4	942.9	927.5	903.4
25°	799.7	805.5	809.7	815.5	828.4	841.8	862.6	898.8	926.7	925.8	900.9
27.5°	775.6	783.5	788.5	796.4	805.1	815.1	829.3	863.4	903.4	917.5	894.2
30°	746.4	758.1	765.6	774.3	781.8	790.5	801.8	822.6	872.1	901.3	887.1
32.5°	704.4	725.2	741.8	750.2	758.5	766.0	776.0	793.5	833.8	879.2	879.2
35°	674.4	684.0	699.0	723.1	733.5	741.0	750.2	763.9	789.7	853.0	866.3
37.5°	651.1	654.8	662.3	686.1	705.6	717.7	726.9	735.6	761.0	817.2	849.7
40°	633.6	632.4	631.5	642.8	670.7	689.8	700.2	709.0	728.5	774.3	827.6
42.5°	613.2	612.0	607.8	610.7	624.4	656.5	672.3	681.9	698.1	729.4	803.5
45°	592.0	589.9	588.2	585.3	590.3	608.2	640.7	654.8	664.0	691.9	773.1
47.5°	570.3	567.4	565.3	562.8	559.9	568.2	599.1	624.4	640.3	657.8	736.4
50°	539.5	543.3	540.8	537.9	535.4	533.7	546.6	588.2	607.8	621.9	691.9
52.5°	254.4	494.6	515.4	512.5	509.1	506.2	509.1	540.8	576.2	587.4	638.2
55°	144.9	220.2	458.3	484.6	481.7	477.5	475.0	485.8	538.7	553.7	589.1
57.5°	139.5	139.9	202.3	436.7	452.9	449.2	446.3	448.8	493.7	519.1	546.2
60°	134.9	134.9	134.9	193.2	417.5	418.8	415.0	410.9	430.5	480.4	502.9
62.5°	124.9	127.4	128.6	128.6	190.7	386.7	383.0	381.7	382.6	433.8	459.6
65°	112.0	117.8	120.3	122.0	122.0	200.2	350.1	348.0	345.1	364.7	415.9
67.5°	97.8	103.7	109.1	112.4	112.8	116.6	209.0	313.5	309.3	309.7	369.3
70°	83.3	88.3	94.1	99.1	103.7	105.7	109.1	260.2	273.9	268.1	316.4
72.5°	72.0	74.1	78.3	83.3	88.7	93.7	96.6	103.7	237.7	231.5	240.6
75°	59.9	61.6	64.5	67.9	72.0	77.8	82.8	87.8	126.1	194.0	192.7
77.5°	46.6	49.5	52.9	55.0	57.0	61.2	67.9	72.9	77.8	131.1	154.4
80°	35.8	37.9	39.5	41.6	44.1	47.0	49.5	55.4	61.2	65.8	118.2
82.5°	26.6	27.9	29.1	30.0	30.8	32.5	37.1	39.1	42.9	47.0	55.8
85°	18.7	19.6	20.4	20.8	21.2	21.6	23.3	23.7	27.5	28.3	33.7
87.5°	12.1	12.5	13.3	13.7	13.7	14.2	14.6	14.6	14.6	13.7	16.7
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: P1213020

CATALOG NUMBER: 4SNLED-LD5-21SL-RW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	357.5°	360°
0°	908.4	908.4
2.5°	908.8	915.4
5°	907.5	916.3
7.5°	904.2	912.5
10°	899.2	909.2
12.5°	893.8	903.4
15°	889.2	896.3
17.5°	884.2	888.4
20°	877.6	880.9
22.5°	870.9	869.2
25°	863.4	859.7
27.5°	853.8	846.7
30°	845.1	832.6
32.5°	836.8	816.4
35°	825.5	799.7
37.5°	813.9	782.6
40°	800.1	763.1
42.5°	785.6	743.5
45°	767.2	724.8
47.5°	751.0	702.3
50°	728.5	678.1
52.5°	701.0	655.7
55°	668.6	628.2
57.5°	633.6	599.5
60°	596.1	566.6
62.5°	550.8	532.4
65°	497.5	493.3
67.5°	428.0	450.0
70°	350.9	400.5
72.5°	293.5	348.0
75°	240.6	289.3
77.5°	190.7	226.9
80°	119.1	166.1
82.5°	79.9	109.1
85°	48.3	52.0
87.5°	18.7	19.1
90°	0.0	0.0

(END OF REPORT)