

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

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **4SNLED-LD5-44HL-LW-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33520)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

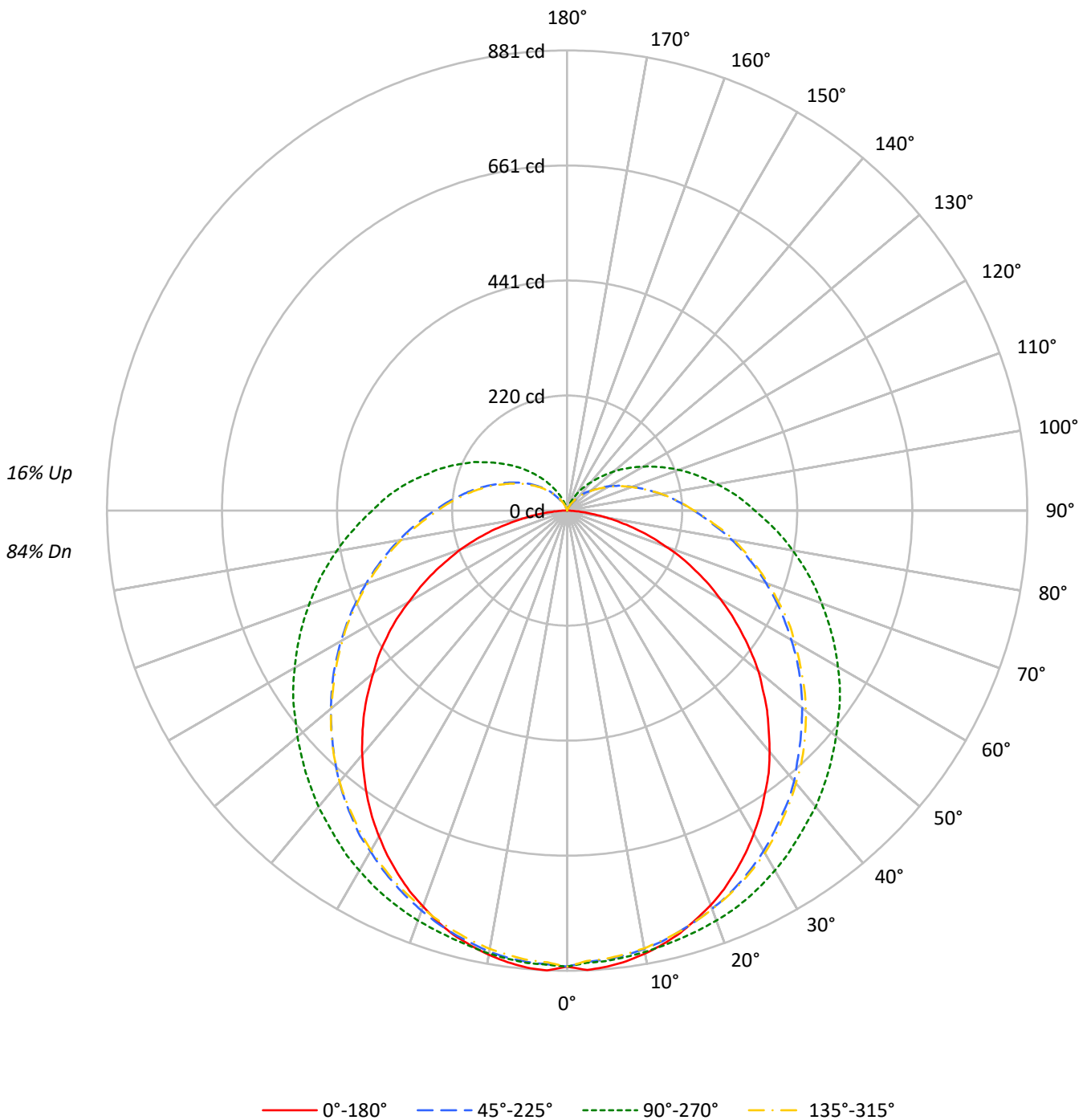
Lumens per Lamp: N/A
Luminaire Lumens: 3793.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 37
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
RCR																		
0	115	115	115	115	111	111	111	111	102	102	102	94	94	94	87	87	87	84
1	102	96	91	86	98	92	87	83	85	81	77	78	75	72	72	70	67	64
2	92	82	74	68	87	79	72	66	73	67	62	67	62	58	62	58	54	51
3	83	71	62	55	79	69	60	54	63	56	51	58	52	48	54	49	45	42
4	76	63	53	46	72	60	52	45	56	48	42	51	45	40	47	42	38	35
5	69	56	46	39	66	54	45	38	50	42	36	46	39	34	42	37	33	30
6	64	50	41	34	61	48	39	33	45	37	31	41	35	30	38	33	28	26
7	59	45	36	30	56	43	35	29	40	33	28	38	31	26	35	29	25	23
8	55	41	32	26	52	40	31	26	37	30	24	34	28	23	32	26	22	20
9	51	37	29	23	49	36	28	23	34	27	22	32	25	21	30	24	20	18
10	48	34	26	21	46	33	26	21	31	24	20	29	23	19	27	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7055	7055	7055	7055
5°	7092	6799	7108	6828
10°	7027	6606	7049	6627
15°	6945	6441	6976	6448
20°	6836	6320	6859	6320
25°	6701	6212	6742	6206
30°	6550	6102	6601	6102
35°	6374	6000	6446	6007
40°	6201	5940	6277	5940
45°	6001	5877	6093	5885
50°	5794	5840	5871	5855
55°	5503	5845	5677	5870
60°	5196	5863	5366	5899
65°	4853	5922	5066	5980
70°	4369	6031	4709	6116
75°	3811	6228	4172	6347
80°	2949	6520	3348	6671
85°	1763	6989	2200	7182



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	2.2
10°-20°	237.7	6.3
20°-30°	364.4	9.6
30°-40°	449.6	11.9
40°-50°	487.8	12.9
50°-60°	480.8	12.7
60°-70°	434.7	11.5
70°-80°	362.1	9.5
80°-90°	280.5	7.4
90°-100°	212.7	5.6
100°-110°	157.4	4.2
110°-120°	109.5	2.9
120°-130°	69.9	1.8
130°-140°	39.2	1.0
140°-150°	17.9	0.5
150°-160°	5.5	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	684.8	18.1
0°-40°	1134.4	29.9
0°-60°	2102.9	55.4
0°-90°	3180.2	83.8
90°-120°	479.6	12.6
90°-150°	606.6	16.0
90°-180°	613.0	16.2
0°-180°	3793.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	873	873	873	873	873	
5°	877	866	879	869	877	83
15°	837	847	841	848	837	236
25°	762	819	767	818	762	351
35°	660	768	668	769	660	414
45°	542	707	550	708	542	417
55°	408	637	421	640	408	365
65°	271	559	283	564	271	268
75°	136	479	149	488	136	144
85°	26	399	32	410	26	31
90°	1	359	2	373	1	1
95°	1	326	1	342	1	1
105°	1	259	1	274	1	1
115°	1	197	1	215	1	1
125°	1	142	1	158	1	1
135°	1	92	1	109	1	1
145°	1	53	1	65	1	1
155°	1	22	1	30	1	0
165°	1	4	1	6	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	880.4	880.4	879.5	877.6	878.6	881.3	879.5	874.9	872.1	864.7	866.6
5°	876.7	876.7	875.8	874.0	874.9	878.6	876.7	873.0	869.4	862.9	865.7
7.5°	870.3	870.3	869.4	867.5	869.4	873.0	871.2	867.5	864.7	858.3	861.1
10°	861.1	862.0	861.1	858.3	862.0	865.7	864.7	860.1	857.4	851.9	854.6
12.5°	850.0	850.9	850.0	849.1	850.9	856.5	854.6	850.9	849.1	844.5	847.3
15°	837.1	838.0	836.2	836.2	838.0	843.6	843.6	839.9	838.0	833.4	839.0
17.5°	820.5	821.5	820.5	820.5	822.4	827.9	828.8	827.0	825.1	823.3	828.8
20°	804.0	803.0	803.0	802.1	805.8	814.1	813.2	813.2	811.3	811.3	817.8
22.5°	784.6	784.6	783.7	783.7	788.3	795.7	795.7	797.5	795.7	799.4	804.9
25°	762.5	763.4	762.5	764.4	768.1	776.3	777.3	780.0	780.9	784.6	791.1
27.5°	739.5	740.4	739.5	741.3	747.8	754.2	758.8	762.5	763.4	769.0	777.3
30°	714.6	714.6	715.6	717.4	724.8	734.9	738.6	743.2	743.2	752.4	760.7
32.5°	688.9	688.9	688.9	692.5	700.8	712.8	717.4	722.9	724.8	734.0	743.2
35°	660.3	661.2	661.2	664.0	675.0	687.0	693.5	699.9	703.6	714.6	723.8
37.5°	633.6	635.4	632.7	636.4	652.0	662.1	669.5	676.0	682.4	697.1	704.5
40°	603.2	605.0	604.1	611.5	624.4	637.3	645.6	652.0	661.2	676.0	684.2
42.5°	571.0	572.8	574.7	582.9	596.8	609.7	619.8	628.1	639.1	652.0	665.8
45°	541.5	541.5	544.3	554.4	569.1	582.9	594.9	604.1	617.0	630.8	644.6
47.5°	508.4	509.3	513.0	524.9	540.6	557.2	568.2	580.2	594.0	608.7	624.4
50°	478.0	478.0	483.5	496.4	511.1	529.5	541.5	555.3	570.1	587.6	603.2
52.5°	443.0	444.8	453.1	465.1	484.4	501.0	514.8	529.5	547.0	565.4	582.9
55°	408.0	411.7	418.1	434.7	454.9	470.6	487.2	505.6	522.2	542.4	562.7
57.5°	373.9	376.7	386.8	403.4	424.5	443.9	461.4	478.9	499.1	519.4	540.6
60°	338.9	342.6	354.6	371.1	394.2	414.4	434.7	453.1	474.3	495.5	517.6
62.5°	305.7	308.5	322.3	341.7	364.7	386.8	407.0	429.2	452.2	472.4	494.5
65°	270.8	275.4	291.0	308.5	335.2	357.3	380.3	404.3	428.2	450.3	471.5
67.5°	238.5	241.3	257.9	278.1	304.8	329.7	353.6	379.4	404.3	427.3	448.5
70°	200.8	210.0	226.5	247.7	276.3	302.1	327.8	354.6	381.3	405.2	425.5
72.5°	169.5	176.8	195.2	218.3	245.9	276.3	303.0	331.5	358.2	383.1	404.3
75°	136.3	143.7	164.8	190.6	219.2	251.4	279.0	308.5	336.1	361.0	383.1
77.5°	104.1	113.3	136.3	163.0	194.3	227.5	256.0	285.5	314.0	340.7	362.8
80°	74.6	84.7	109.6	140.0	170.4	203.5	234.8	264.3	292.9	319.6	342.6
82.5°	47.9	58.9	85.6	116.0	148.3	181.4	213.7	243.1	271.7	298.4	322.3
85°	25.8	37.8	65.4	95.8	128.0	161.2	193.4	224.7	252.3	277.2	303.0
87.5°	7.4	22.1	48.8	79.2	112.4	142.7	174.1	205.4	233.0	259.7	282.7
90°	0.9	12.9	36.8	65.4	97.6	127.1	158.4	187.9	215.5	242.2	265.2
92.5°	0.9	8.3	28.5	54.3	83.8	114.2	145.5	174.1	199.8	226.5	249.6
95°	0.9	6.4	23.0	46.0	73.7	102.2	131.7	159.3	186.0	210.9	233.9
97.5°	0.9	4.6	18.4	39.6	64.5	91.2	119.7	147.3	173.1	197.1	218.3
100°	0.9	3.7	14.7	34.1	56.2	82.0	107.7	134.5	159.3	182.3	204.4
102.5°	0.9	2.8	12.9	28.5	49.7	72.8	97.6	122.5	146.4	168.5	190.6
105°	0.9	2.8	11.1	24.9	44.2	65.4	88.4	112.4	134.5	155.6	175.9
107.5°	0.9	1.8	9.2	21.2	38.7	58.9	80.1	103.1	123.4	143.7	163.0
110°	0.9	1.8	7.4	19.3	34.1	52.5	72.8	93.9	113.3	132.6	151.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.9	1.8	6.4	16.6	29.5	47.0	65.4	84.7	103.1	122.5	139.1
115°	0.9	1.8	5.5	14.7	27.6	40.5	58.9	76.4	94.9	112.4	128.0
117.5°	0.9	1.8	4.6	12.0	23.9	36.8	51.6	69.1	85.6	102.2	117.0
120°	0.9	1.8	3.7	11.1	21.2	33.2	46.0	61.7	77.4	93.0	108.7
122.5°	0.9	0.9	3.7	9.2	18.4	29.5	42.4	54.3	69.1	83.8	97.6
125°	0.9	0.9	3.7	8.3	15.7	26.7	37.8	48.8	61.7	74.6	86.6
127.5°	0.9	0.9	2.8	6.4	13.8	23.0	33.2	45.1	54.3	66.3	78.3
130°	0.9	0.9	2.8	5.5	12.0	19.3	29.5	39.6	50.7	58.9	69.1
132.5°	0.9	0.9	2.8	4.6	9.2	15.7	24.9	34.1	44.2	53.4	61.7
135°	0.9	0.9	1.8	3.7	7.4	12.9	20.3	28.5	38.7	47.9	56.2
137.5°	0.9	0.9	1.8	3.7	5.5	11.1	15.7	23.0	32.2	40.5	48.8
140°	0.9	0.9	1.8	2.8	4.6	8.3	12.9	18.4	25.8	33.2	42.4
142.5°	0.9	0.9	0.9	2.8	3.7	6.4	10.1	14.7	20.3	26.7	34.1
145°	0.9	0.9	0.9	2.8	3.7	4.6	8.3	12.0	15.7	20.3	26.7
147.5°	0.9	0.9	0.9	1.8	2.8	3.7	6.4	9.2	12.0	15.7	19.3
150°	0.9	0.9	0.9	1.8	2.8	3.7	4.6	6.4	9.2	12.9	15.7
152.5°	0.9	0.9	0.9	1.8	1.8	2.8	3.7	4.6	6.4	9.2	11.1
155°	0.9	0.9	0.9	0.9	1.8	2.8	3.7	3.7	4.6	6.4	8.3
157.5°	0.9	0.9	0.9	0.9	1.8	1.8	2.8	2.8	3.7	3.7	5.5
160°	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.8	2.8	2.8	2.8
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	2.8	2.8
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	866.6	867.5	870.3	870.3	868.4	868.4	867.5	866.6	867.5	869.4	869.4
5°	864.7	865.7	868.4	869.4	867.5	866.6	866.6	865.7	866.6	868.4	868.4
7.5°	861.1	862.0	864.7	865.7	863.8	863.8	862.9	862.0	863.8	864.7	864.7
10°	855.5	856.5	860.1	861.1	860.1	859.2	859.2	858.3	859.2	861.1	861.1
12.5°	848.2	850.0	854.6	854.6	854.6	853.7	853.7	852.8	853.7	855.5	854.6
15°	839.9	843.6	847.3	849.1	849.1	849.1	848.2	847.3	849.1	850.0	849.1
17.5°	830.7	835.3	840.8	842.6	842.6	843.6	842.6	841.7	843.6	843.6	842.6
20°	821.5	826.1	831.6	833.4	835.3	836.2	836.2	835.3	836.2	837.1	836.2
22.5°	809.5	815.0	821.5	824.2	826.1	827.9	827.9	827.9	828.8	829.8	827.9
25°	796.6	803.0	810.4	813.2	816.9	817.8	818.7	818.7	819.6	820.5	817.8
27.5°	782.8	790.2	797.5	802.1	804.9	806.7	806.7	807.7	808.6	809.5	806.7
30°	766.2	777.3	783.7	787.4	791.1	793.8	794.8	795.7	796.6	797.5	794.8
32.5°	751.5	760.7	769.0	773.6	778.2	781.9	782.8	782.8	784.6	784.6	781.9
35°	734.0	745.0	753.3	757.9	763.4	766.2	768.1	768.1	769.9	769.9	767.1
37.5°	716.5	727.5	736.7	742.3	748.7	752.4	753.3	753.3	755.2	755.2	751.5
40°	698.1	710.0	720.2	726.6	732.1	736.7	737.7	740.4	740.4	739.5	735.8
42.5°	679.6	690.7	701.7	709.1	716.5	721.1	722.9	723.8	723.8	722.9	720.2
45°	659.4	672.3	682.4	691.6	699.0	703.6	706.3	707.3	707.3	705.4	702.7
47.5°	640.0	652.9	663.1	673.2	680.6	686.1	688.9	689.8	688.9	687.9	685.2
50°	619.8	634.5	644.6	654.8	662.1	666.8	671.4	672.3	671.4	670.4	664.9
52.5°	598.6	614.3	625.3	635.4	643.7	649.3	652.9	653.9	653.9	652.0	648.3
55°	577.4	591.2	605.0	616.1	625.3	630.8	635.4	637.3	635.4	633.6	629.0
57.5°	558.1	571.0	584.8	596.8	606.0	613.3	617.0	618.9	617.0	614.3	609.7
60°	535.1	548.9	564.5	575.6	585.7	593.1	594.9	598.6	596.8	594.0	589.4
62.5°	513.0	529.5	543.3	557.2	565.4	573.7	577.4	579.3	577.4	574.7	570.1
65°	489.9	508.4	522.2	536.0	545.2	553.5	558.1	559.0	557.2	554.4	549.8
67.5°	468.8	486.2	501.0	515.7	524.0	532.3	536.9	538.7	536.9	533.2	528.6
70°	447.6	465.1	482.6	493.6	503.7	513.0	515.7	518.5	516.6	513.0	507.4
72.5°	426.4	444.8	462.3	473.4	484.4	492.7	496.4	499.1	497.3	493.6	487.2
75°	404.3	423.6	441.1	453.1	464.1	472.4	476.1	478.9	477.0	473.4	466.0
77.5°	384.0	403.4	419.9	432.8	443.9	451.3	457.7	458.6	456.8	453.1	445.7
80°	362.8	382.2	399.7	412.6	423.6	431.0	435.6	438.4	436.5	432.8	425.5
82.5°	344.4	361.9	379.4	392.3	403.4	412.6	416.3	419.0	418.1	412.6	407.0
85°	324.2	344.4	358.2	372.1	383.1	392.3	395.1	398.8	397.8	393.2	385.9
87.5°	303.9	324.2	340.7	354.6	364.7	372.1	376.7	378.5	377.6	373.0	364.7
90°	287.3	305.7	322.3	337.1	345.3	353.6	358.2	359.2	359.2	353.6	347.2
92.5°	271.7	289.2	305.7	319.6	329.7	337.1	340.7	342.6	341.7	337.1	329.7
95°	254.2	273.5	289.2	303.0	313.1	320.5	324.2	326.0	325.1	320.5	313.1
97.5°	239.4	256.9	272.6	285.5	295.6	303.0	306.7	308.5	308.5	303.9	296.5
100°	224.7	242.2	256.9	269.8	279.0	286.4	290.1	291.0	290.1	286.4	279.0
102.5°	210.0	226.5	241.3	253.3	263.4	269.8	273.5	274.4	274.4	269.8	262.5
105°	195.2	211.8	225.6	238.5	246.8	253.3	256.0	258.8	257.9	254.2	246.8
107.5°	181.4	198.0	210.9	222.9	231.2	237.6	240.4	243.1	242.2	238.5	231.2
110°	168.5	184.2	196.2	208.1	215.5	221.9	226.5	227.5	225.6	221.9	215.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	156.6	170.4	182.3	193.4	201.7	206.3	210.0	211.8	210.0	206.3	201.7
115°	143.7	157.5	169.5	179.6	186.9	192.5	195.2	197.1	195.2	191.6	186.9
117.5°	131.7	144.6	156.6	166.7	173.1	177.7	180.5	182.3	180.5	177.7	173.1
120°	121.6	132.6	143.7	152.9	160.2	163.9	166.7	168.5	167.6	163.9	159.3
122.5°	109.6	121.6	131.7	140.9	147.3	151.0	152.9	154.7	153.8	151.0	146.4
125°	99.5	109.6	119.7	128.0	134.5	138.1	140.0	141.8	140.9	138.1	132.6
127.5°	88.4	99.5	107.7	116.0	120.6	126.2	127.1	128.9	128.0	125.2	120.6
130°	80.1	88.4	96.7	104.1	109.6	113.3	115.1	116.0	114.2	112.4	107.7
132.5°	70.0	79.2	86.6	93.0	96.7	100.4	102.2	103.1	103.1	100.4	96.7
135°	62.6	69.1	75.5	82.0	85.6	89.3	91.2	92.1	91.2	89.3	85.6
137.5°	56.2	61.7	66.3	71.8	76.4	78.3	80.1	80.1	79.2	78.3	75.5
140°	48.8	55.3	59.9	63.5	67.2	68.1	70.0	70.0	69.1	68.1	66.3
142.5°	41.4	47.0	51.6	56.2	58.9	60.8	61.7	62.6	61.7	60.8	58.0
145°	33.2	39.6	44.2	47.0	50.7	51.6	52.5	53.4	52.5	51.6	48.8
147.5°	25.8	31.3	35.9	39.6	42.4	43.3	44.2	45.1	44.2	42.4	41.4
150°	18.4	23.0	28.5	32.2	34.1	35.9	35.9	35.9	36.8	35.0	33.2
152.5°	14.7	16.6	20.3	23.9	26.7	27.6	28.5	28.5	27.6	27.6	25.8
155°	10.1	12.0	14.7	17.5	20.3	21.2	22.1	22.1	21.2	21.2	20.3
157.5°	6.4	8.3	10.1	12.0	14.7	15.7	16.6	16.6	16.6	15.7	14.7
160°	3.7	4.6	5.5	7.4	9.2	10.1	11.1	11.1	11.1	11.1	10.1
162.5°	2.8	2.8	2.8	3.7	4.6	5.5	6.4	6.4	6.4	6.4	5.5
165°	1.8	1.8	1.8	1.8	1.8	2.8	3.7	3.7	3.7	3.7	3.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	868.4	868.4	869.4	867.5	862.0	862.9	862.9	866.6	868.4	869.4	874.0
5°	866.6	866.6	868.4	865.7	861.1	861.1	861.1	864.7	865.7	867.5	871.2
7.5°	863.8	863.8	864.7	862.0	856.5	856.5	855.5	859.2	861.1	862.0	865.7
10°	859.2	859.2	860.1	857.4	850.9	850.9	850.0	852.8	853.7	855.5	858.3
12.5°	852.8	852.8	852.8	850.0	843.6	842.6	841.7	844.5	844.5	845.4	848.2
15°	847.3	845.4	845.4	842.6	836.2	834.4	832.5	833.4	835.3	834.4	836.2
17.5°	840.8	839.0	837.1	834.4	826.1	823.3	821.5	822.4	821.5	820.5	822.4
20°	833.4	830.7	829.8	825.1	816.9	812.3	808.6	806.7	807.7	804.9	805.8
22.5°	825.1	821.5	819.6	814.1	805.8	800.3	795.7	792.0	791.1	787.4	788.3
25°	815.0	810.4	807.7	803.0	793.8	787.4	781.9	776.3	773.6	769.0	768.1
27.5°	803.0	798.4	794.8	790.2	780.9	772.7	766.2	758.8	755.2	749.6	746.9
30°	791.1	785.5	780.0	776.3	766.2	757.0	746.9	740.4	734.9	728.5	723.8
32.5°	776.3	770.8	765.3	759.8	750.6	739.5	731.2	721.1	714.6	707.3	701.7
35°	761.6	754.2	748.7	741.3	733.1	720.2	710.0	699.9	691.6	683.3	676.9
37.5°	745.0	739.5	731.2	724.8	714.6	701.7	690.7	677.8	670.4	659.4	651.1
40°	729.4	722.9	714.6	706.3	696.2	681.5	669.5	654.8	646.5	633.6	625.3
42.5°	713.7	704.5	696.2	687.0	676.0	662.1	647.4	632.7	621.6	609.7	597.7
45°	696.2	686.1	676.0	665.8	654.8	641.0	625.3	609.7	595.8	584.8	570.1
47.5°	677.8	667.7	655.7	644.6	632.7	618.9	602.3	585.7	571.0	558.1	542.4
50°	659.4	649.3	636.4	624.4	610.6	596.8	579.3	559.9	544.3	527.7	513.9
52.5°	640.0	629.9	617.9	602.3	587.6	573.7	555.3	535.1	517.6	503.7	486.2
55°	620.7	610.6	596.8	581.1	566.4	548.9	531.4	511.1	491.8	475.2	457.7
57.5°	600.4	591.2	575.6	562.7	544.3	525.8	507.4	488.1	466.9	447.6	427.3
60°	580.2	570.1	555.3	539.7	521.2	502.8	483.5	462.3	440.2	419.0	400.6
62.5°	561.8	548.9	535.1	518.5	499.1	481.6	459.5	436.5	414.4	392.3	370.2
65°	540.6	526.8	513.9	497.3	477.0	456.8	434.7	411.7	387.7	363.8	341.7
67.5°	519.4	505.6	491.8	475.2	454.0	432.8	409.8	386.8	360.1	337.1	311.3
70°	498.2	487.2	469.7	452.2	432.8	409.8	386.8	361.9	334.3	309.4	282.7
72.5°	477.0	466.0	448.5	430.1	411.7	387.7	362.8	338.0	312.2	283.6	255.1
75°	456.8	443.0	427.3	409.8	390.5	365.6	340.7	315.0	284.6	257.9	228.4
77.5°	437.4	424.5	408.9	389.6	368.4	344.4	318.6	291.9	261.5	233.0	200.8
80°	416.3	403.4	387.7	368.4	347.2	324.2	296.5	268.9	239.4	208.1	175.0
82.5°	396.0	384.0	366.5	349.0	326.0	303.0	275.4	247.7	216.4	186.0	153.8
85°	374.8	362.8	346.3	327.8	305.7	280.9	255.1	227.5	196.2	164.8	132.6
87.5°	356.4	342.6	326.0	307.6	285.5	261.5	236.7	207.2	176.8	146.4	113.3
90°	337.1	324.2	307.6	289.2	267.1	243.1	217.3	189.7	160.2	128.9	97.6
92.5°	320.5	306.7	291.0	272.6	250.5	227.5	201.7	174.1	145.5	115.1	84.7
95°	303.9	290.1	275.4	256.9	234.8	211.8	186.0	159.3	131.7	102.2	73.7
97.5°	285.5	273.5	258.8	241.3	219.2	197.1	172.2	146.4	119.7	91.2	64.5
100°	270.8	256.9	243.1	224.7	204.4	183.3	158.4	133.5	107.7	81.0	56.2
102.5°	254.2	241.3	227.5	210.0	189.7	168.5	145.5	121.6	97.6	72.8	48.8
105°	238.5	226.5	211.8	195.2	175.9	155.6	133.5	111.4	88.4	64.5	43.3
107.5°	222.9	210.9	197.1	181.4	163.0	142.7	122.5	100.4	79.2	58.0	38.7
110°	207.2	196.2	183.3	167.6	150.1	131.7	112.4	92.1	70.9	51.6	34.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	193.4	182.3	169.5	154.7	138.1	120.6	102.2	82.9	63.5	46.0	29.5
115°	179.6	169.5	156.6	143.7	127.1	110.5	93.0	74.6	57.1	41.4	25.8
117.5°	165.8	155.6	143.7	130.8	116.0	100.4	83.8	66.3	51.6	36.8	23.0
120°	152.0	142.7	131.7	119.7	106.8	91.2	74.6	59.9	46.0	32.2	20.3
122.5°	139.1	130.8	120.6	109.6	95.8	81.0	67.2	54.3	41.4	28.5	16.6
125°	127.1	118.8	109.6	98.5	85.6	72.8	60.8	48.8	35.9	24.9	13.8
127.5°	115.1	106.8	97.6	87.5	77.4	65.4	54.3	43.3	32.2	22.1	12.0
130°	103.1	95.8	87.5	79.2	69.1	58.0	48.8	37.8	27.6	17.5	10.1
132.5°	91.2	85.6	78.3	70.0	60.8	52.5	42.4	33.2	23.9	15.7	9.2
135°	81.0	75.5	69.1	61.7	54.3	46.0	36.8	28.5	20.3	12.9	7.4
137.5°	71.8	67.2	60.8	54.3	47.9	39.6	32.2	23.9	16.6	11.1	5.5
140°	63.5	58.9	53.4	47.0	41.4	34.1	26.7	19.3	14.7	9.2	4.6
142.5°	55.3	50.7	46.0	40.5	35.0	28.5	22.1	16.6	12.0	7.4	4.6
145°	47.0	43.3	38.7	34.1	28.5	23.0	18.4	13.8	9.2	5.5	3.7
147.5°	38.7	35.9	31.3	27.6	23.0	18.4	14.7	11.1	7.4	4.6	2.8
150°	31.3	28.5	24.9	21.2	18.4	14.7	12.0	8.3	5.5	4.6	2.8
152.5°	23.9	22.1	19.3	17.5	14.7	11.1	8.3	6.4	4.6	3.7	1.8
155°	19.3	17.5	15.7	12.9	11.1	8.3	6.4	4.6	3.7	2.8	1.8
157.5°	13.8	12.9	11.1	9.2	7.4	5.5	4.6	4.6	2.8	1.8	0.9
160°	9.2	8.3	7.4	5.5	4.6	4.6	3.7	2.8	1.8	1.8	0.9
162.5°	5.5	4.6	4.6	4.6	3.7	3.7	2.8	1.8	1.8	0.9	0.9
165°	3.7	3.7	3.7	2.8	2.8	2.8	1.8	0.9	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	874.0	871.2	874.9	881.3	882.2	881.3	879.5	882.2	885.9	885.0	878.6
5°	872.1	868.4	872.1	878.6	878.6	877.6	876.7	879.5	883.2	882.2	876.7
7.5°	866.6	862.9	866.6	872.1	873.0	871.2	871.2	874.0	877.6	876.7	872.1
10°	859.2	855.5	857.4	863.8	865.7	863.8	863.8	866.6	871.2	870.3	864.7
12.5°	848.2	845.4	847.3	852.8	854.6	853.7	852.8	856.5	861.1	861.1	855.5
15°	836.2	832.5	834.4	840.8	841.7	839.9	840.8	843.6	849.1	849.1	844.5
17.5°	822.4	817.8	820.5	825.1	826.1	826.1	826.1	829.8	836.2	835.3	831.6
20°	806.7	800.3	802.1	806.7	808.6	808.6	808.6	815.0	819.6	819.6	815.9
22.5°	788.3	783.7	783.7	788.3	791.1	790.2	790.2	795.7	802.1	801.2	801.2
25°	767.1	763.4	761.6	767.1	768.1	769.0	770.8	776.3	783.7	783.7	784.6
27.5°	745.0	741.3	740.4	745.0	745.9	746.9	748.7	755.2	762.5	763.4	765.3
30°	723.8	718.3	716.5	720.2	722.0	722.9	722.9	733.1	739.5	742.3	745.9
32.5°	699.0	693.5	688.9	695.3	696.2	698.1	699.0	709.1	716.5	721.1	726.6
35°	674.1	664.9	663.1	667.7	669.5	670.4	672.3	683.3	693.5	697.1	704.5
37.5°	646.5	640.0	634.5	639.1	641.0	641.9	647.4	657.5	667.7	673.2	680.6
40°	620.7	612.4	607.8	610.6	612.4	613.3	619.8	630.8	642.8	649.3	658.5
42.5°	592.2	581.1	577.4	580.2	581.1	583.9	589.4	604.1	616.1	625.3	632.7
45°	563.6	555.3	547.0	549.8	550.7	552.6	560.8	576.5	589.4	600.4	608.7
47.5°	534.1	524.0	515.7	517.6	521.2	522.2	531.4	549.8	561.8	573.7	584.8
50°	504.7	490.9	484.4	484.4	486.2	490.9	502.8	521.2	534.1	548.0	559.9
52.5°	474.3	461.4	454.0	454.9	456.8	462.3	473.4	491.8	506.5	521.2	536.0
55°	443.9	430.1	422.7	420.9	422.7	430.1	443.0	462.3	477.0	494.5	510.2
57.5°	413.5	396.9	390.5	387.7	389.6	398.8	411.7	431.9	450.3	466.9	485.3
60°	380.3	367.4	356.4	350.0	354.6	366.5	380.3	401.5	420.9	439.3	459.5
62.5°	351.8	335.2	323.2	316.8	321.4	331.5	350.9	371.1	392.3	413.5	433.8
65°	319.6	303.0	289.2	282.7	287.3	299.3	318.6	340.7	363.8	384.9	408.9
67.5°	288.2	270.8	254.2	247.7	253.3	266.1	287.3	312.2	337.1	359.2	384.9
70°	257.9	238.5	221.0	216.4	220.1	237.6	257.9	282.7	308.5	334.3	361.0
72.5°	230.2	206.3	187.9	182.3	186.9	206.3	229.3	255.1	282.7	310.4	338.9
75°	198.0	175.9	155.6	149.2	154.7	172.2	200.8	228.4	257.9	287.3	314.0
77.5°	172.2	146.4	125.2	115.1	124.3	146.4	174.1	203.5	233.9	264.3	294.7
80°	145.5	118.8	95.8	84.7	94.9	118.8	146.4	178.7	212.7	243.1	270.8
82.5°	121.6	93.0	69.1	57.1	68.1	94.9	125.2	157.5	190.6	221.0	253.3
85°	99.5	70.0	45.1	32.2	47.9	71.8	104.1	137.2	171.3	202.6	233.9
87.5°	81.0	52.5	27.6	13.8	29.5	56.2	86.6	119.7	153.8	185.1	214.6
90°	66.3	37.8	14.7	1.8	17.5	42.4	71.8	104.1	136.3	168.5	198.0
92.5°	54.3	28.5	8.3	0.9	11.1	34.1	61.7	92.1	123.4	154.7	183.3
95°	45.1	22.1	5.5	0.9	8.3	26.7	52.5	82.0	111.4	141.8	170.4
97.5°	38.7	18.4	4.6	0.9	6.4	23.0	45.1	72.8	101.3	129.9	157.5
100°	33.2	14.7	3.7	0.9	5.5	19.3	39.6	64.5	91.2	118.8	145.5
102.5°	28.5	12.0	2.8	0.9	4.6	16.6	35.0	58.0	82.0	108.7	134.5
105°	24.9	10.1	2.8	0.9	3.7	14.7	31.3	51.6	75.5	99.5	124.3
107.5°	21.2	8.3	1.8	0.9	2.8	12.0	27.6	47.0	68.1	91.2	114.2
110°	18.4	7.4	1.8	0.9	2.8	11.1	23.9	42.4	61.7	82.9	105.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	15.7	5.5	1.8	0.9	1.8	9.2	21.2	37.8	56.2	75.5	96.7
115°	13.8	4.6	0.9	0.9	1.8	8.3	19.3	34.1	50.7	69.1	88.4
117.5°	11.1	3.7	0.9	0.9	0.9	6.4	16.6	30.4	46.0	63.5	81.0
120°	9.2	3.7	0.9	0.9	0.9	5.5	14.7	26.7	41.4	57.1	73.7
122.5°	8.3	2.8	0.9	0.9	0.9	4.6	12.9	23.9	36.8	51.6	67.2
125°	7.4	2.8	0.9	0.9	0.9	3.7	11.1	21.2	33.2	46.0	60.8
127.5°	5.5	2.8	0.9	0.9	0.9	2.8	10.1	18.4	29.5	41.4	54.3
130°	4.6	1.8	0.9	0.9	0.9	2.8	8.3	16.6	25.8	36.8	48.8
132.5°	3.7	1.8	0.9	0.9	0.9	1.8	6.4	12.9	22.1	32.2	43.3
135°	3.7	1.8	0.9	0.9	0.9	1.8	4.6	11.1	18.4	27.6	36.8
137.5°	3.7	0.9	0.9	0.9	0.9	1.8	3.7	8.3	14.7	22.1	30.4
140°	2.8	0.9	0.9	0.9	0.9	0.9	2.8	6.4	12.0	18.4	25.8
142.5°	2.8	0.9	0.9	0.9	0.9	0.9	2.8	4.6	9.2	14.7	20.3
145°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	3.7	7.4	11.1	16.6
147.5°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	2.8	5.5	9.2	12.9
150°	1.8	0.9	0.9	0.9	0.9	0.9	1.8	2.8	3.7	6.4	10.1
152.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.8	4.6	6.4
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.8	3.7	4.6
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.8	3.7
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8	2.8
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	875.8	869.4	871.2	870.3	872.1	874.9	874.9	874.0	874.0	872.1	870.3
5°	874.0	867.5	870.3	869.4	871.2	874.0	874.0	873.0	873.0	870.3	869.4
7.5°	868.4	863.8	865.7	865.7	867.5	870.3	870.3	869.4	869.4	866.6	865.7
10°	862.9	857.4	860.1	860.1	862.0	865.7	865.7	864.7	864.7	862.0	861.1
12.5°	853.7	848.2	852.8	853.7	855.5	859.2	858.3	858.3	858.3	855.5	854.6
15°	842.6	839.0	843.6	844.5	847.3	851.9	851.9	851.9	851.9	849.1	848.2
17.5°	830.7	827.9	832.5	834.4	838.0	842.6	842.6	843.6	844.5	842.6	841.7
20°	816.9	815.0	819.6	823.3	828.8	833.4	835.3	836.2	838.0	836.2	835.3
22.5°	801.2	801.2	807.7	811.3	817.8	822.4	825.1	827.9	829.8	827.9	827.0
25°	783.7	786.5	792.9	799.4	806.7	811.3	814.1	817.8	819.6	818.7	817.8
27.5°	767.1	770.8	779.1	785.5	792.0	799.4	802.1	806.7	808.6	808.6	807.7
30°	747.8	753.3	762.5	769.9	778.2	785.5	789.2	793.8	796.6	794.8	795.7
32.5°	729.4	738.6	745.9	754.2	763.4	770.8	775.4	780.9	783.7	782.8	783.7
35°	709.1	718.3	728.5	736.7	747.8	755.2	761.6	766.2	769.9	769.0	769.0
37.5°	687.0	699.0	709.1	720.2	730.3	738.6	745.0	750.6	754.2	754.2	754.2
40°	665.8	678.7	688.9	701.7	714.6	722.0	729.4	734.9	738.6	739.5	740.4
42.5°	642.8	656.6	668.6	682.4	695.3	704.5	712.8	719.2	722.9	724.8	723.8
45°	621.6	634.5	648.3	664.0	676.0	685.2	695.3	702.7	706.3	707.3	708.2
47.5°	597.7	612.4	628.1	643.7	655.7	667.7	676.9	684.2	687.9	690.7	690.7
50°	574.7	590.3	607.8	624.4	637.3	649.3	658.5	666.8	671.4	673.2	674.1
52.5°	553.5	568.2	586.6	603.2	616.1	628.1	640.0	649.3	653.9	655.7	655.7
55°	527.7	546.1	566.4	582.0	595.8	609.7	621.6	630.8	635.4	638.2	640.0
57.5°	503.7	523.1	544.3	560.8	577.4	590.3	601.4	613.3	617.0	620.7	621.6
60°	480.7	500.1	520.3	538.7	555.3	569.1	582.0	592.2	598.6	600.4	602.3
62.5°	456.8	477.0	498.2	516.6	534.1	550.7	562.7	571.9	579.3	582.0	583.9
65°	433.8	454.9	476.1	495.5	513.9	530.5	542.4	551.6	559.0	563.6	564.5
67.5°	408.9	431.9	454.0	474.3	492.7	510.2	522.2	531.4	538.7	544.3	545.2
70°	385.9	409.8	431.9	454.0	472.4	489.9	502.8	512.0	520.3	524.0	525.8
72.5°	363.8	388.6	411.7	433.8	452.2	469.7	483.5	492.7	501.0	505.6	506.5
75°	342.6	367.4	392.3	413.5	432.8	450.3	464.1	474.3	481.6	486.2	488.1
77.5°	321.4	347.2	372.1	393.2	413.5	431.0	443.0	454.9	462.3	467.8	467.8
80°	300.2	326.9	352.7	373.9	394.2	409.8	423.6	435.6	443.0	448.5	448.5
82.5°	281.8	307.6	332.5	353.6	373.9	391.4	405.2	416.3	424.5	428.2	429.2
85°	260.6	289.2	312.2	335.2	354.6	371.1	384.9	396.9	404.3	408.0	409.8
87.5°	243.1	270.8	295.6	315.9	335.2	351.8	367.4	377.6	384.9	389.6	391.4
90°	226.5	253.3	278.1	298.4	318.6	334.3	349.0	359.2	367.4	371.1	373.0
92.5°	211.8	238.5	262.5	282.7	302.1	319.6	333.4	343.5	350.9	354.6	357.3
95°	198.0	223.8	246.8	268.9	287.3	303.0	317.7	327.8	336.1	338.9	341.7
97.5°	184.2	209.1	232.1	253.3	272.6	287.3	301.1	311.3	317.7	322.3	325.1
100°	172.2	196.2	218.3	238.5	256.9	270.8	285.5	294.7	301.1	304.8	308.5
102.5°	159.3	183.3	204.4	223.8	243.1	256.0	269.8	279.0	284.6	291.0	291.0
105°	148.3	170.4	191.6	210.0	226.5	242.2	254.2	263.4	269.8	274.4	274.4
107.5°	136.3	158.4	178.7	198.0	213.7	228.4	239.4	247.7	255.1	257.9	260.6
110°	127.1	146.4	166.7	185.1	199.8	213.7	224.7	233.9	240.4	243.1	245.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	116.0	136.3	154.7	172.2	186.9	199.8	210.9	218.3	224.7	228.4	229.3
115°	106.8	126.2	142.7	159.3	175.0	186.0	196.2	203.5	210.0	212.7	214.6
117.5°	98.5	116.0	132.6	146.4	161.2	173.1	183.3	189.7	195.2	198.9	200.8
120°	90.3	106.8	121.6	135.4	149.2	160.2	169.5	175.9	182.3	185.1	185.1
122.5°	82.0	97.6	111.4	124.3	137.2	147.3	157.5	163.0	168.5	171.3	171.3
125°	74.6	89.3	102.2	114.2	126.2	135.4	143.7	150.1	155.6	157.5	157.5
127.5°	67.2	81.0	93.0	104.1	114.2	123.4	131.7	138.1	142.7	144.6	144.6
130°	60.8	72.8	83.8	94.9	105.0	112.4	120.6	126.2	128.9	131.7	132.6
132.5°	54.3	65.4	75.5	84.7	94.9	102.2	108.7	114.2	117.0	119.7	120.6
135°	47.9	58.0	67.2	76.4	84.7	92.1	97.6	102.2	105.9	107.7	108.7
137.5°	40.5	51.6	59.9	67.2	76.4	82.0	88.4	91.2	94.9	96.7	96.7
140°	34.1	42.4	51.6	58.9	66.3	71.8	77.4	82.0	84.7	85.6	85.6
142.5°	27.6	35.0	42.4	51.6	58.0	62.6	68.1	71.8	73.7	74.6	75.5
145°	22.1	27.6	34.1	42.4	49.7	55.3	58.0	61.7	63.5	64.5	65.4
147.5°	16.6	22.1	27.6	33.2	40.5	46.0	48.8	52.5	54.3	55.3	55.3
150°	12.9	16.6	20.3	25.8	31.3	37.8	41.4	44.2	45.1	46.0	46.0
152.5°	9.2	12.9	15.7	19.3	23.0	28.5	34.1	35.9	36.8	37.8	37.8
155°	6.4	9.2	11.1	13.8	16.6	21.2	25.8	28.5	29.5	30.4	30.4
157.5°	4.6	6.4	7.4	10.1	12.0	13.8	17.5	22.1	23.0	23.0	23.0
160°	2.8	3.7	4.6	6.4	7.4	9.2	11.1	13.8	16.6	16.6	16.6
162.5°	1.8	2.8	2.8	3.7	3.7	5.5	6.4	7.4	10.1	11.1	11.1
165°	0.9	1.8	1.8	1.8	1.8	1.8	2.8	2.8	4.6	5.5	5.5
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	871.2	873.0	872.1	872.1	872.1	874.0	872.1	863.8	865.7	867.5	869.4
5°	870.3	871.2	871.2	870.3	870.3	872.1	870.3	862.0	863.8	865.7	866.6
7.5°	866.6	867.5	867.5	867.5	866.6	868.4	865.7	858.3	858.3	860.1	861.1
10°	862.0	863.8	862.9	862.0	862.0	862.0	860.1	851.9	851.9	852.8	853.7
12.5°	856.5	856.5	856.5	855.5	854.6	854.6	852.8	844.5	843.6	845.4	844.5
15°	849.1	850.9	849.1	848.2	846.3	846.3	843.6	835.3	833.4	834.4	833.4
17.5°	842.6	843.6	841.7	839.9	838.0	837.1	834.4	825.1	822.4	823.3	821.5
20°	836.2	836.2	834.4	832.5	829.8	827.0	823.3	814.1	809.5	809.5	805.8
22.5°	827.9	827.9	826.1	823.3	820.5	816.9	813.2	804.0	796.6	794.8	792.0
25°	818.7	817.8	816.9	814.1	808.6	804.9	801.2	791.1	782.8	779.1	774.5
27.5°	807.7	807.7	804.9	802.1	796.6	792.0	787.4	778.2	767.1	762.5	756.1
30°	795.7	795.7	792.9	789.2	783.7	778.2	772.7	761.6	750.6	744.1	736.7
32.5°	783.7	782.8	780.0	776.3	770.8	762.5	757.9	746.9	734.0	726.6	716.5
35°	769.0	768.1	765.3	760.7	753.3	746.9	739.5	729.4	714.6	705.4	694.4
37.5°	754.2	753.3	751.5	745.0	737.7	730.3	721.1	711.0	697.1	685.2	674.1
40°	739.5	738.6	734.9	730.3	721.1	711.9	702.7	692.5	677.8	664.0	652.0
42.5°	723.8	722.9	718.3	712.8	702.7	693.5	682.4	671.4	656.6	640.0	628.1
45°	708.2	706.3	701.7	695.3	684.2	674.1	663.1	650.2	635.4	619.8	604.1
47.5°	691.6	688.9	684.2	675.0	665.8	654.8	641.9	628.1	613.3	595.8	579.3
50°	673.2	671.4	665.8	657.5	646.5	635.4	620.7	606.9	589.4	572.8	552.6
52.5°	655.7	652.0	647.4	638.2	627.2	615.2	599.5	582.9	565.4	549.8	528.6
55°	637.3	635.4	629.0	621.6	607.8	594.0	579.3	561.8	542.4	524.0	503.7
57.5°	619.8	616.1	610.6	600.4	588.5	574.7	559.0	540.6	519.4	500.1	478.0
60°	602.3	596.8	590.3	581.1	568.2	553.5	536.9	517.6	496.4	475.2	452.2
62.5°	582.9	578.3	571.0	561.8	548.9	533.2	515.7	495.5	475.2	453.1	428.2
65°	563.6	559.0	551.6	542.4	529.5	512.0	493.6	473.4	450.3	429.2	402.4
67.5°	544.3	539.7	531.4	521.2	508.4	491.8	472.4	451.3	428.2	405.2	377.6
70°	524.9	519.4	512.0	501.0	488.1	470.6	451.3	429.2	406.1	381.3	353.6
72.5°	505.6	501.0	491.8	481.6	467.8	450.3	431.0	408.9	384.9	359.2	331.5
75°	486.2	480.7	474.3	462.3	447.6	431.0	410.7	388.6	362.8	338.0	309.4
77.5°	466.9	462.3	454.0	442.0	428.2	410.7	390.5	368.4	342.6	316.8	286.4
80°	447.6	442.0	435.6	424.5	408.9	391.4	370.2	348.1	322.3	295.6	265.2
82.5°	428.2	422.7	415.3	404.3	389.6	372.1	351.8	327.8	302.1	274.4	245.9
85°	408.9	404.3	396.0	384.9	369.3	351.8	331.5	310.4	282.7	255.1	226.5
87.5°	389.6	384.9	376.7	365.6	350.9	333.4	313.1	291.0	264.3	238.5	207.2
90°	371.1	367.4	359.2	348.1	333.4	315.9	297.5	273.5	247.7	221.9	192.5
92.5°	354.6	350.9	343.5	332.5	319.6	300.2	281.8	258.8	233.0	206.3	177.7
95°	339.8	335.2	327.8	317.7	302.1	285.5	267.1	244.0	219.2	192.5	164.8
97.5°	323.2	318.6	311.3	300.2	287.3	269.8	251.4	229.3	204.4	179.6	152.0
100°	306.7	302.1	293.8	284.6	271.7	254.2	236.7	214.6	191.6	167.6	140.9
102.5°	290.1	285.5	278.1	268.9	256.0	240.4	222.9	201.7	178.7	154.7	129.9
105°	274.4	269.8	262.5	253.3	241.3	225.6	207.2	188.8	166.7	143.7	119.7
107.5°	258.8	254.2	247.7	238.5	226.5	211.8	194.3	175.0	154.7	132.6	109.6
110°	243.1	239.4	232.1	223.8	211.8	197.1	181.4	163.0	142.7	122.5	100.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	228.4	224.7	217.3	208.1	198.0	184.2	168.5	151.0	131.7	112.4	91.2
115°	213.7	209.1	202.6	194.3	184.2	171.3	156.6	140.9	121.6	103.1	83.8
117.5°	198.9	195.2	188.8	180.5	171.3	158.4	144.6	129.9	111.4	93.9	76.4
120°	184.2	181.4	175.0	167.6	158.4	146.4	133.5	118.8	102.2	85.6	69.1
122.5°	170.4	167.6	161.2	154.7	145.5	134.5	122.5	108.7	93.9	78.3	63.5
125°	157.5	153.8	148.3	141.8	133.5	123.4	111.4	98.5	84.7	70.9	57.1
127.5°	143.7	140.9	137.2	129.9	121.6	112.4	101.3	90.3	77.4	64.5	51.6
130°	132.6	128.9	124.3	118.8	111.4	102.2	92.1	81.0	70.0	58.0	45.1
132.5°	119.7	116.0	112.4	106.8	100.4	92.1	82.9	72.8	62.6	51.6	40.5
135°	107.7	105.0	101.3	95.8	89.3	82.9	73.7	64.5	55.3	45.1	35.9
137.5°	96.7	93.9	90.3	86.6	80.1	73.7	65.4	57.1	48.8	39.6	31.3
140°	85.6	83.8	80.1	76.4	70.9	64.5	57.1	49.7	42.4	34.1	26.7
142.5°	74.6	72.8	70.0	66.3	61.7	56.2	49.7	43.3	35.9	29.5	23.0
145°	64.5	63.5	60.8	57.1	53.4	47.9	42.4	36.8	30.4	24.9	18.4
147.5°	54.3	53.4	51.6	48.8	45.1	40.5	35.9	30.4	25.8	20.3	14.7
150°	45.1	44.2	43.3	39.6	37.8	33.2	29.5	24.9	21.2	15.7	12.0
152.5°	36.8	36.8	35.0	32.2	30.4	26.7	23.9	20.3	16.6	12.9	9.2
155°	29.5	28.5	27.6	25.8	23.9	21.2	18.4	15.7	12.9	9.2	6.4
157.5°	23.0	22.1	21.2	19.3	17.5	16.6	13.8	11.1	8.3	6.4	4.6
160°	16.6	15.7	14.7	13.8	12.9	11.1	9.2	7.4	5.5	3.7	2.8
162.5°	11.1	10.1	10.1	9.2	8.3	6.4	5.5	4.6	3.7	2.8	1.8
165°	5.5	5.5	4.6	4.6	3.7	2.8	2.8	2.8	1.8	1.8	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	873.0	873.0	873.0	873.0	873.0	873.0	873.0
2.5°	868.4	868.4	872.1	871.2	868.4	874.0	880.4
5°	865.7	865.7	868.4	868.4	865.7	871.2	876.7
7.5°	861.1	860.1	862.9	862.9	859.2	863.8	870.3
10°	852.8	851.9	854.6	854.6	850.9	855.5	861.1
12.5°	843.6	841.7	844.5	843.6	839.9	844.5	850.0
15°	831.6	830.7	832.5	830.7	827.0	831.6	837.1
17.5°	819.6	816.9	817.8	817.8	811.3	815.9	820.5
20°	804.0	800.3	801.2	800.3	795.7	798.4	804.0
22.5°	788.3	782.8	782.8	781.9	776.3	780.0	784.6
25°	769.0	762.5	762.5	761.6	755.2	757.9	762.5
27.5°	749.6	743.2	740.4	739.5	733.1	733.1	739.5
30°	729.4	720.2	718.3	715.6	709.1	709.1	714.6
32.5°	710.0	697.1	693.5	689.8	683.3	682.4	688.9
35°	684.2	674.1	667.7	664.0	656.6	654.8	660.3
37.5°	663.1	650.2	641.0	636.4	629.0	626.2	633.6
40°	640.0	626.2	614.3	611.5	600.4	596.8	603.2
42.5°	614.3	599.5	587.6	582.0	573.7	570.1	571.0
45°	588.5	572.8	559.9	552.6	544.3	537.8	541.5
47.5°	561.8	548.0	532.3	521.2	511.1	506.5	508.4
50°	535.1	518.5	503.7	491.8	479.8	474.3	478.0
52.5°	508.4	490.9	474.3	461.4	447.6	442.0	443.0
55°	482.6	464.1	444.8	431.0	418.1	409.8	408.0
57.5°	456.8	436.5	416.3	400.6	384.0	376.7	373.9
60°	429.2	408.0	386.8	368.4	350.9	342.6	338.9
62.5°	403.4	380.3	356.4	337.1	319.6	308.5	305.7
65°	378.5	351.8	327.8	305.7	286.4	274.4	270.8
67.5°	351.8	324.2	298.4	274.4	256.0	240.4	238.5
70°	326.9	297.5	268.9	244.0	223.8	208.1	200.8
72.5°	302.1	271.7	242.2	215.5	189.7	175.0	169.5
75°	278.1	246.8	215.5	187.9	159.3	141.8	136.3
77.5°	256.0	223.8	190.6	160.2	133.5	111.4	104.1
80°	234.8	201.7	166.7	135.4	106.8	82.9	74.6
82.5°	212.7	181.4	145.5	112.4	82.9	58.0	47.9
85°	193.4	162.1	126.2	93.0	63.5	36.8	25.8
87.5°	177.7	143.7	111.4	78.3	47.9	21.2	7.4
90°	162.1	128.9	96.7	64.5	35.9	12.0	0.9
92.5°	148.3	117.0	84.7	55.3	27.6	8.3	0.9
95°	135.4	105.0	74.6	46.0	22.1	5.5	0.9
97.5°	123.4	94.9	66.3	39.6	18.4	4.6	0.9
100°	113.3	85.6	58.9	35.0	15.7	3.7	0.9
102.5°	103.1	77.4	52.5	30.4	13.8	2.8	0.9
105°	94.9	70.0	47.0	27.6	12.0	2.8	0.9
107.5°	86.6	63.5	42.4	23.9	10.1	1.8	0.9
110°	78.3	58.0	37.8	21.2	9.2	1.8	0.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-44HL-LW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	71.8	52.5	34.1	19.3	7.4	1.8	0.9
115°	65.4	47.0	30.4	16.6	6.4	0.9	0.9
117.5°	58.9	42.4	26.7	14.7	5.5	0.9	0.9
120°	53.4	37.8	23.9	12.9	4.6	0.9	0.9
122.5°	47.9	34.1	21.2	11.1	3.7	0.9	0.9
125°	43.3	30.4	18.4	9.2	2.8	0.9	0.9
127.5°	38.7	26.7	16.6	8.3	2.8	0.9	0.9
130°	34.1	23.9	13.8	6.4	1.8	0.9	0.9
132.5°	30.4	20.3	12.0	5.5	1.8	0.9	0.9
135°	26.7	17.5	10.1	3.7	1.8	0.9	0.9
137.5°	23.0	14.7	8.3	2.8	0.9	0.9	0.9
140°	19.3	12.9	6.4	2.8	0.9	0.9	0.9
142.5°	16.6	10.1	4.6	1.8	0.9	0.9	0.9
145°	12.9	8.3	3.7	1.8	0.9	0.9	0.9
147.5°	10.1	6.4	2.8	1.8	0.9	0.9	0.9
150°	7.4	4.6	2.8	0.9	0.9	0.9	0.9
152.5°	5.5	3.7	1.8	0.9	0.9	0.9	0.9
155°	3.7	2.8	1.8	0.9	0.9	0.9	0.9
157.5°	2.8	1.8	0.9	0.9	0.9	0.9	0.9
160°	1.8	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)