

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-LD5-47SL-LW-UNV-L935-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-LD5-47SL-LW-UNV-L935-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

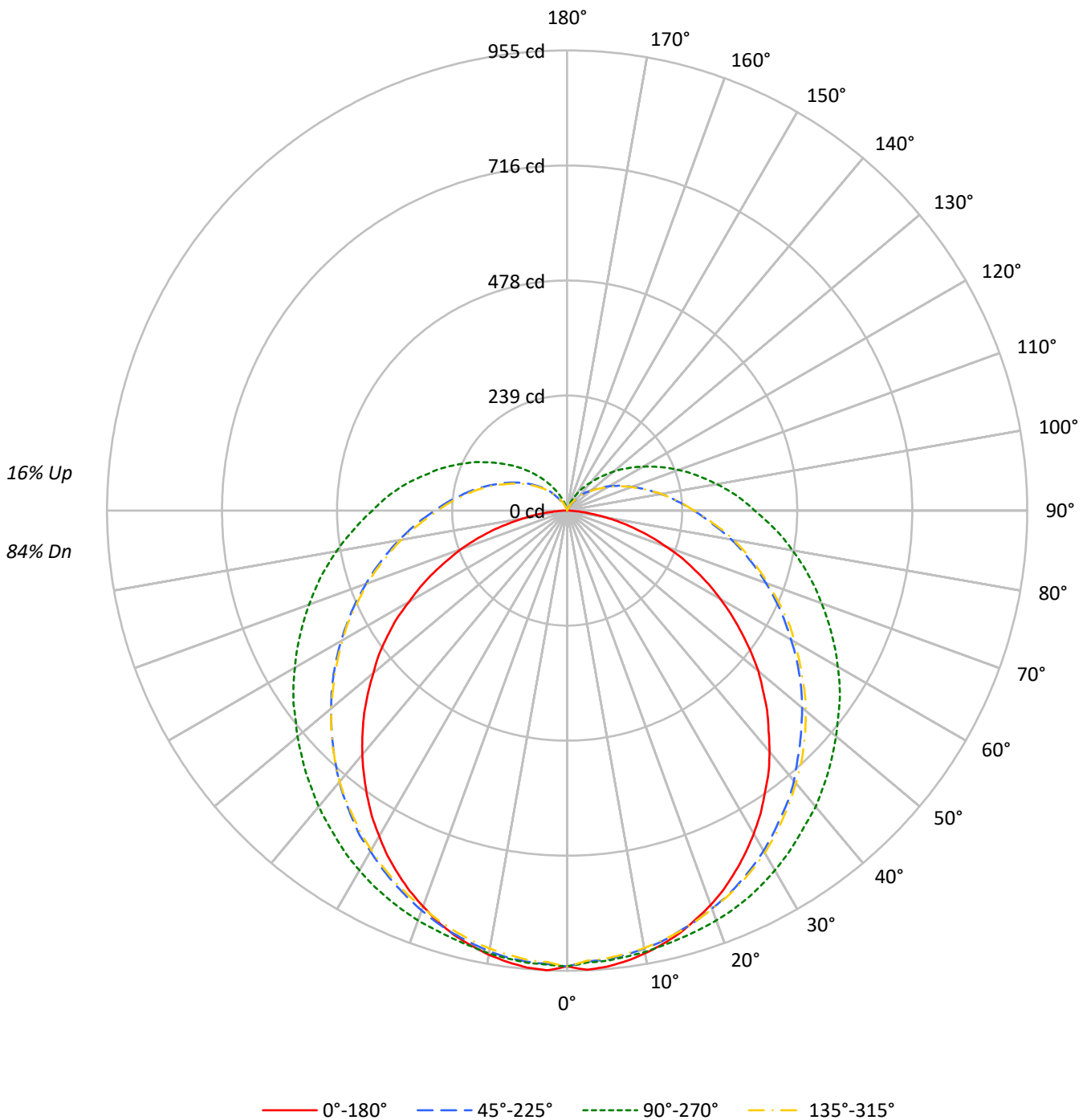
Lumens per Lamp: N/A  
Luminaire Lumens: 4110.0 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 41  
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: 25 FT



TEST NUMBER: P#  
CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**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	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°	7645	7645	7645	7645
5°	7685	7367	7701	7398
10°	7614	7158	7638	7181
15°	7526	6979	7559	6987
20°	7408	6848	7433	6848
25°	7262	6731	7305	6724
30°	7098	6612	7153	6612
35°	6907	6501	6985	6509
40°	6719	6436	6801	6436
45°	6503	6368	6602	6376
50°	6277	6328	6362	6345
55°	5963	6333	6150	6361
60°	5630	6352	5814	6392
65°	5258	6417	5491	6480
70°	4733	6535	5103	6628
75°	4130	6748	4521	6878
80°	3194	7065	3629	7228
85°	1906	7573	2384	7783



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.6	2.2
10°-20°	257.6	6.3
20°-30°	394.9	9.6
30°-40°	487.2	11.9
40°-50°	528.5	12.9
50°-60°	520.9	12.7
60°-70°	471.0	11.5
70°-80°	392.4	9.5
80°-90°	303.9	7.4
90°-100°	230.5	5.6
100°-110°	170.6	4.1
110°-120°	118.6	2.9
120°-130°	75.7	1.8
130°-140°	42.5	1.0
140°-150°	19.4	0.5
150°-160°	6.0	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	742.1	18.1
0°-40°	1229.2	29.9
0°-60°	2278.7	55.4
0°-90°	3446.0	83.8
90°-120°	519.7	12.6
90°-150°	657.3	16.0
90°-180°	664.0	16.2
0°-180°	4110.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	946	946	946	946	946	
5°	950	938	952	942	950	90
15°	907	918	911	919	907	256
25°	826	887	831	886	826	381
35°	716	832	724	833	716	448
45°	587	766	596	767	587	452
55°	442	690	456	694	442	396
65°	293	606	306	612	293	291
75°	148	519	162	529	148	156
85°	28	432	35	444	28	34
90°	1	389	2	404	1	2
95°	1	353	1	370	1	1
105°	1	280	1	297	1	1
115°	1	214	1	232	1	1
125°	1	154	1	171	1	1
135°	1	100	1	118	1	1
145°	1	58	1	71	1	1
155°	1	24	1	33	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-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	954.0	954.0	953.0	951.0	952.0	955.0	953.0	948.0	945.0	937.0	939.0
5°	950.0	950.0	949.0	947.0	948.0	952.0	950.0	946.0	942.0	935.0	938.0
7.5°	943.0	943.0	942.0	940.0	942.0	946.0	944.0	940.0	937.0	930.0	933.0
10°	933.0	934.0	933.0	930.0	934.0	938.0	937.0	932.0	929.0	923.0	926.0
12.5°	921.1	922.1	921.1	920.1	922.1	928.0	926.0	922.1	920.1	915.1	918.1
15°	907.1	908.1	906.1	906.1	908.1	914.1	914.1	910.1	908.1	903.1	909.1
17.5°	889.1	890.1	889.1	889.1	891.1	897.1	898.1	896.1	894.1	892.1	898.1
20°	871.2	870.2	870.2	869.2	873.2	882.1	881.1	881.1	879.1	879.1	886.1
22.5°	850.2	850.2	849.2	849.2	854.2	862.2	862.2	864.2	862.2	866.2	872.2
25°	826.3	827.3	826.3	828.3	832.2	841.2	842.2	845.2	846.2	850.2	857.2
27.5°	801.3	802.3	801.3	803.3	810.3	817.3	822.3	826.3	827.3	833.2	842.2
30°	774.4	774.4	775.4	777.4	785.3	796.3	800.3	805.3	805.3	815.3	824.3
32.5°	746.4	746.4	746.4	750.4	759.4	772.4	777.4	783.3	785.3	795.3	805.3
35°	715.5	716.5	716.5	719.5	731.5	744.4	751.4	758.4	762.4	774.4	784.3
37.5°	686.5	688.5	685.6	689.5	706.5	717.5	725.5	732.5	739.4	755.4	763.4
40°	653.6	655.6	654.6	662.6	676.6	690.5	699.5	706.5	716.5	732.5	741.4
42.5°	618.7	620.7	622.7	631.7	646.6	660.6	671.6	680.6	692.5	706.5	721.5
45°	586.8	586.8	589.8	600.7	616.7	631.7	644.6	654.6	668.6	683.6	698.5
47.5°	550.8	551.8	555.8	568.8	585.8	603.7	615.7	628.7	643.6	659.6	676.6
50°	517.9	517.9	523.9	537.9	553.8	573.8	586.8	601.7	617.7	636.7	653.6
52.5°	480.0	482.0	491.0	503.9	524.9	542.9	557.8	573.8	592.7	612.7	631.7
55°	442.1	446.1	453.0	471.0	493.0	509.9	527.9	547.8	565.8	587.8	609.7
57.5°	405.1	408.1	419.1	437.1	460.0	481.0	499.9	518.9	540.9	562.8	585.8
60°	367.2	371.2	384.2	402.2	427.1	449.1	471.0	491.0	513.9	536.9	560.8
62.5°	331.3	334.3	349.3	370.2	395.2	419.1	441.1	465.0	490.0	511.9	535.9
65°	293.4	298.4	315.3	334.3	363.2	387.2	412.1	438.1	464.0	488.0	510.9
67.5°	258.5	261.4	279.4	301.4	330.3	357.2	383.2	411.1	438.1	463.0	486.0
70°	217.5	227.5	245.5	268.4	299.4	327.3	355.2	384.2	413.1	439.1	461.0
72.5°	183.6	191.6	211.6	236.5	266.4	299.4	328.3	359.2	388.2	415.1	438.1
75°	147.7	155.7	178.6	206.6	237.5	272.4	302.4	334.3	364.2	391.2	415.1
77.5°	112.8	122.7	147.7	176.6	210.6	246.5	277.4	309.3	340.3	369.2	393.2
80°	80.8	91.8	118.7	151.7	184.6	220.5	254.5	286.4	317.3	346.3	371.2
82.5°	51.9	63.9	92.8	125.7	160.7	196.6	231.5	263.4	294.4	323.3	349.3
85°	27.9	40.9	70.9	103.8	138.7	174.6	209.6	243.5	273.4	300.4	328.3
87.5°	8.0	23.9	52.9	85.8	121.7	154.7	188.6	222.5	252.5	281.4	306.4
90°	1.0	14.0	39.9	70.9	105.8	137.7	171.6	203.6	233.5	262.4	287.4
92.5°	1.0	9.0	30.9	58.9	90.8	123.7	157.7	188.6	216.5	245.5	270.4
95°	1.0	7.0	24.9	49.9	79.8	110.8	142.7	172.6	201.6	228.5	253.5
97.5°	1.0	5.0	20.0	42.9	69.9	98.8	129.7	159.7	187.6	213.5	236.5
100°	1.0	4.0	16.0	36.9	60.9	88.8	116.8	145.7	172.6	197.6	221.5
102.5°	1.0	3.0	14.0	30.9	53.9	78.8	105.8	132.7	158.7	182.6	206.6
105°	1.0	3.0	12.0	26.9	47.9	70.9	95.8	121.7	145.7	168.6	190.6
107.5°	1.0	2.0	10.0	23.0	41.9	63.9	86.8	111.8	133.7	155.7	176.6
110°	1.0	2.0	8.0	21.0	36.9	56.9	78.8	101.8	122.7	143.7	163.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	2.0	7.0	18.0	31.9	50.9	70.9	91.8	111.8	132.7	150.7
115°	1.0	2.0	6.0	16.0	29.9	43.9	63.9	82.8	102.8	121.7	138.7
117.5°	1.0	2.0	5.0	13.0	25.9	39.9	55.9	74.8	92.8	110.8	126.7
120°	1.0	2.0	4.0	12.0	23.0	35.9	49.9	66.9	83.8	100.8	117.8
122.5°	1.0	1.0	4.0	10.0	20.0	31.9	45.9	58.9	74.8	90.8	105.8
125°	1.0	1.0	4.0	9.0	17.0	28.9	40.9	52.9	66.9	80.8	93.8
127.5°	1.0	1.0	3.0	7.0	15.0	24.9	35.9	48.9	58.9	71.8	84.8
130°	1.0	1.0	3.0	6.0	13.0	21.0	31.9	42.9	54.9	63.9	74.8
132.5°	1.0	1.0	3.0	5.0	10.0	17.0	26.9	36.9	47.9	57.9	66.9
135°	1.0	1.0	2.0	4.0	8.0	14.0	22.0	30.9	41.9	51.9	60.9
137.5°	1.0	1.0	2.0	4.0	6.0	12.0	17.0	24.9	34.9	43.9	52.9
140°	1.0	1.0	2.0	3.0	5.0	9.0	14.0	20.0	27.9	35.9	45.9
142.5°	1.0	1.0	1.0	3.0	4.0	7.0	11.0	16.0	22.0	28.9	36.9
145°	1.0	1.0	1.0	3.0	4.0	5.0	9.0	13.0	17.0	22.0	28.9
147.5°	1.0	1.0	1.0	2.0	3.0	4.0	7.0	10.0	13.0	17.0	21.0
150°	1.0	1.0	1.0	2.0	3.0	4.0	5.0	7.0	10.0	14.0	17.0
152.5°	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.0	7.0	10.0	12.0
155°	1.0	1.0	1.0	1.0	2.0	3.0	4.0	4.0	5.0	7.0	9.0
157.5°	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0	4.0	4.0	6.0
160°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0	3.0	3.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0	3.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	939.0	940.0	943.0	943.0	941.0	941.0	940.0	939.0	940.0	942.0	942.0
5°	937.0	938.0	941.0	942.0	940.0	939.0	939.0	938.0	939.0	941.0	941.0
7.5°	933.0	934.0	937.0	938.0	936.0	936.0	935.0	934.0	936.0	937.0	937.0
10°	927.0	928.0	932.0	933.0	932.0	931.0	931.0	930.0	931.0	933.0	933.0
12.5°	919.1	921.1	926.0	926.0	926.0	925.0	925.0	924.0	925.0	927.0	926.0
15°	910.1	914.1	918.1	920.1	920.1	920.1	919.1	918.1	920.1	921.1	920.1
17.5°	900.1	905.1	911.1	913.1	913.1	914.1	913.1	912.1	914.1	914.1	913.1
20°	890.1	895.1	901.1	903.1	905.1	906.1	906.1	905.1	906.1	907.1	906.1
22.5°	877.1	883.1	890.1	893.1	895.1	897.1	897.1	897.1	898.1	899.1	897.1
25°	863.2	870.2	878.1	881.1	885.1	886.1	887.1	887.1	888.1	889.1	886.1
27.5°	848.2	856.2	864.2	869.2	872.2	874.2	874.2	875.2	876.1	877.1	874.2
30°	830.2	842.2	849.2	853.2	857.2	860.2	861.2	862.2	863.2	864.2	861.2
32.5°	814.3	824.3	833.2	838.2	843.2	847.2	848.2	848.2	850.2	850.2	847.2
35°	795.3	807.3	816.3	821.3	827.3	830.2	832.2	832.2	834.2	834.2	831.2
37.5°	776.4	788.3	798.3	804.3	811.3	815.3	816.3	816.3	818.3	818.3	814.3
40°	756.4	769.4	780.4	787.3	793.3	798.3	799.3	802.3	802.3	801.3	797.3
42.5°	736.4	748.4	760.4	768.4	776.4	781.3	783.3	784.3	784.3	783.3	780.4
45°	714.5	728.5	739.4	749.4	757.4	762.4	765.4	766.4	766.4	764.4	761.4
47.5°	693.5	707.5	718.5	729.5	737.4	743.4	746.4	747.4	746.4	745.4	742.4
50°	671.6	687.5	698.5	709.5	717.5	722.5	727.5	728.5	727.5	726.5	720.5
52.5°	648.6	665.6	677.6	688.5	697.5	703.5	707.5	708.5	708.5	706.5	702.5
55°	625.7	640.6	655.6	667.6	677.6	683.6	688.5	690.5	688.5	686.5	681.6
57.5°	604.7	618.7	633.7	646.6	656.6	664.6	668.6	670.6	668.6	665.6	660.6
60°	579.8	594.7	611.7	623.7	634.7	642.6	644.6	648.6	646.6	643.6	638.7
62.5°	555.8	573.8	588.8	603.7	612.7	621.7	625.7	627.7	625.7	622.7	617.7
65°	530.9	550.8	565.8	580.8	590.8	599.7	604.7	605.7	603.7	600.7	595.7
67.5°	507.9	526.9	542.9	558.8	567.8	576.8	581.8	583.8	581.8	577.8	572.8
70°	485.0	503.9	522.9	534.9	545.8	555.8	558.8	561.8	559.8	555.8	549.8
72.5°	462.0	482.0	500.9	512.9	524.9	533.9	537.9	540.9	538.9	534.9	527.9
75°	438.1	459.0	478.0	491.0	502.9	511.9	515.9	518.9	516.9	512.9	504.9
77.5°	416.1	437.1	455.0	469.0	481.0	489.0	496.0	497.0	495.0	491.0	483.0
80°	393.2	414.1	433.1	447.1	459.0	467.0	472.0	475.0	473.0	469.0	461.0
82.5°	373.2	392.2	411.1	425.1	437.1	447.1	451.0	454.0	453.0	447.1	441.1
85°	351.3	373.2	388.2	403.1	415.1	425.1	428.1	432.1	431.1	426.1	418.1
87.5°	329.3	351.3	369.2	384.2	395.2	403.1	408.1	410.1	409.1	404.1	395.2
90°	311.3	331.3	349.3	365.2	374.2	383.2	388.2	389.2	389.2	383.2	376.2
92.5°	294.4	313.3	331.3	346.3	357.2	365.2	369.2	371.2	370.2	365.2	357.2
95°	275.4	296.4	313.3	328.3	339.3	347.3	351.3	353.3	352.3	347.3	339.3
97.5°	259.5	278.4	295.4	309.3	320.3	328.3	332.3	334.3	334.3	329.3	321.3
100°	243.5	262.4	278.4	292.4	302.4	310.3	314.3	315.3	314.3	310.3	302.4
102.5°	227.5	245.5	261.4	274.4	285.4	292.4	296.4	297.4	297.4	292.4	284.4
105°	211.6	229.5	244.5	258.5	267.4	274.4	277.4	280.4	279.4	275.4	267.4
107.5°	196.6	214.5	228.5	241.5	250.5	257.5	260.4	263.4	262.4	258.5	250.5
110°	182.6	199.6	212.6	225.5	233.5	240.5	245.5	246.5	244.5	240.5	233.5





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	169.6	184.6	197.6	209.6	218.5	223.5	227.5	229.5	227.5	223.5	218.5
115°	155.7	170.6	183.6	194.6	202.6	208.6	211.6	213.5	211.6	207.6	202.6
117.5°	142.7	156.7	169.6	180.6	187.6	192.6	195.6	197.6	195.6	192.6	187.6
120°	131.7	143.7	155.7	165.7	173.6	177.6	180.6	182.6	181.6	177.6	172.6
122.5°	118.7	131.7	142.7	152.7	159.7	163.7	165.7	167.6	166.6	163.7	158.7
125°	107.8	118.7	129.7	138.7	145.7	149.7	151.7	153.7	152.7	149.7	143.7
127.5°	95.8	107.8	116.8	125.7	130.7	136.7	137.7	139.7	138.7	135.7	130.7
130°	86.8	95.8	104.8	112.8	118.7	122.7	124.7	125.7	123.7	121.7	116.8
132.5°	75.8	85.8	93.8	100.8	104.8	108.8	110.8	111.8	111.8	108.8	104.8
135°	67.9	74.8	81.8	88.8	92.8	96.8	98.8	99.8	98.8	96.8	92.8
137.5°	60.9	66.9	71.8	77.8	82.8	84.8	86.8	86.8	85.8	84.8	81.8
140°	52.9	59.9	64.9	68.9	72.8	73.8	75.8	75.8	74.8	73.8	71.8
142.5°	44.9	50.9	55.9	60.9	63.9	65.9	66.9	67.9	66.9	65.9	62.9
145°	35.9	42.9	47.9	50.9	54.9	55.9	56.9	57.9	56.9	55.9	52.9
147.5°	27.9	33.9	38.9	42.9	45.9	46.9	47.9	48.9	47.9	45.9	44.9
150°	20.0	24.9	30.9	34.9	36.9	38.9	38.9	38.9	39.9	37.9	35.9
152.5°	16.0	18.0	22.0	25.9	28.9	29.9	30.9	30.9	29.9	29.9	27.9
155°	11.0	13.0	16.0	19.0	22.0	23.0	23.9	23.9	23.0	23.0	22.0
157.5°	7.0	9.0	11.0	13.0	16.0	17.0	18.0	18.0	18.0	17.0	16.0
160°	4.0	5.0	6.0	8.0	10.0	11.0	12.0	12.0	12.0	12.0	11.0
162.5°	3.0	3.0	3.0	4.0	5.0	6.0	7.0	7.0	7.0	7.0	6.0
165°	2.0	2.0	2.0	2.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	941.0	941.0	942.0	940.0	934.0	935.0	935.0	939.0	941.0	942.0	947.0
5°	939.0	939.0	941.0	938.0	933.0	933.0	933.0	937.0	938.0	940.0	944.0
7.5°	936.0	936.0	937.0	934.0	928.0	928.0	927.0	931.0	933.0	934.0	938.0
10°	931.0	931.0	932.0	929.0	922.1	922.1	921.1	924.0	925.0	927.0	930.0
12.5°	924.0	924.0	924.0	921.1	914.1	913.1	912.1	915.1	915.1	916.1	919.1
15°	918.1	916.1	916.1	913.1	906.1	904.1	902.1	903.1	905.1	904.1	906.1
17.5°	911.1	909.1	907.1	904.1	895.1	892.1	890.1	891.1	890.1	889.1	891.1
20°	903.1	900.1	899.1	894.1	885.1	880.1	876.1	874.2	875.2	872.2	873.2
22.5°	894.1	890.1	888.1	882.1	873.2	867.2	862.2	858.2	857.2	853.2	854.2
25°	883.1	878.1	875.2	870.2	860.2	853.2	847.2	841.2	838.2	833.2	832.2
27.5°	870.2	865.2	861.2	856.2	846.2	837.2	830.2	822.3	818.3	812.3	809.3
30°	857.2	851.2	845.2	841.2	830.2	820.3	809.3	802.3	796.3	789.3	784.3
32.5°	841.2	835.2	829.2	823.3	813.3	801.3	792.3	781.3	774.4	766.4	760.4
35°	825.3	817.3	811.3	803.3	794.3	780.4	769.4	758.4	749.4	740.4	733.5
37.5°	807.3	801.3	792.3	785.3	774.4	760.4	748.4	734.4	726.5	714.5	705.5
40°	790.3	783.3	774.4	765.4	754.4	738.4	725.5	709.5	700.5	686.5	677.6
42.5°	773.4	763.4	754.4	744.4	732.5	717.5	701.5	685.6	673.6	660.6	647.6
45°	754.4	743.4	732.5	721.5	709.5	694.5	677.6	660.6	645.6	633.7	617.7
47.5°	734.4	723.5	710.5	698.5	685.6	670.6	652.6	634.7	618.7	604.7	587.8
50°	714.5	703.5	689.5	676.6	661.6	646.6	627.7	606.7	589.8	571.8	556.8
52.5°	693.5	682.6	669.6	652.6	636.7	621.7	601.7	579.8	560.8	545.8	526.9
55°	672.6	661.6	646.6	629.7	613.7	594.7	575.8	553.8	532.9	514.9	496.0
57.5°	650.6	640.6	623.7	609.7	589.8	569.8	549.8	528.9	505.9	485.0	463.0
60°	628.7	617.7	601.7	584.8	564.8	544.8	523.9	500.9	477.0	454.0	434.1
62.5°	608.7	594.7	579.8	561.8	540.9	521.9	497.9	473.0	449.1	425.1	401.2
65°	585.8	570.8	556.8	538.9	516.9	495.0	471.0	446.1	420.1	394.2	370.2
67.5°	562.8	547.8	532.9	514.9	492.0	469.0	444.1	419.1	390.2	365.2	337.3
70°	539.9	527.9	508.9	490.0	469.0	444.1	419.1	392.2	362.2	335.3	306.4
72.5°	516.9	504.9	486.0	466.0	446.1	420.1	393.2	366.2	338.3	307.4	276.4
75°	495.0	480.0	463.0	444.1	423.1	396.2	369.2	341.3	308.3	279.4	247.5
77.5°	474.0	460.0	443.1	422.1	399.2	373.2	345.3	316.3	283.4	252.5	217.5
80°	451.0	437.1	420.1	399.2	376.2	351.3	321.3	291.4	259.5	225.5	189.6
82.5°	429.1	416.1	397.2	378.2	353.3	328.3	298.4	268.4	234.5	201.6	166.6
85°	406.1	393.2	375.2	355.2	331.3	304.4	276.4	246.5	212.6	178.6	143.7
87.5°	386.2	371.2	353.3	333.3	309.3	283.4	256.5	224.5	191.6	158.7	122.7
90°	365.2	351.3	333.3	313.3	289.4	263.4	235.5	205.6	173.6	139.7	105.8
92.5°	347.3	332.3	315.3	295.4	271.4	246.5	218.5	188.6	157.7	124.7	91.8
95°	329.3	314.3	298.4	278.4	254.5	229.5	201.6	172.6	142.7	110.8	79.8
97.5°	309.3	296.4	280.4	261.4	237.5	213.5	186.6	158.7	129.7	98.8	69.9
100°	293.4	278.4	263.4	243.5	221.5	198.6	171.6	144.7	116.8	87.8	60.9
102.5°	275.4	261.4	246.5	227.5	205.6	182.6	157.7	131.7	105.8	78.8	52.9
105°	258.5	245.5	229.5	211.6	190.6	168.6	144.7	120.7	95.8	69.9	46.9
107.5°	241.5	228.5	213.5	196.6	176.6	154.7	132.7	108.8	85.8	62.9	41.9
110°	224.5	212.6	198.6	181.6	162.7	142.7	121.7	99.8	76.8	55.9	36.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	209.6	197.6	183.6	167.6	149.7	130.7	110.8	89.8	68.9	49.9	31.9
115°	194.6	183.6	169.6	155.7	137.7	119.7	100.8	80.8	61.9	44.9	27.9
117.5°	179.6	168.6	155.7	141.7	125.7	108.8	90.8	71.8	55.9	39.9	24.9
120°	164.7	154.7	142.7	129.7	115.8	98.8	80.8	64.9	49.9	34.9	22.0
122.5°	150.7	141.7	130.7	118.7	103.8	87.8	72.8	58.9	44.9	30.9	18.0
125°	137.7	128.7	118.7	106.8	92.8	78.8	65.9	52.9	38.9	26.9	15.0
127.5°	124.7	115.8	105.8	94.8	83.8	70.9	58.9	46.9	34.9	23.9	13.0
130°	111.8	103.8	94.8	85.8	74.8	62.9	52.9	40.9	29.9	19.0	11.0
132.5°	98.8	92.8	84.8	75.8	65.9	56.9	45.9	35.9	25.9	17.0	10.0
135°	87.8	81.8	74.8	66.9	58.9	49.9	39.9	30.9	22.0	14.0	8.0
137.5°	77.8	72.8	65.9	58.9	51.9	42.9	34.9	25.9	18.0	12.0	6.0
140°	68.9	63.9	57.9	50.9	44.9	36.9	28.9	21.0	16.0	10.0	5.0
142.5°	59.9	54.9	49.9	43.9	37.9	30.9	23.9	18.0	13.0	8.0	5.0
145°	50.9	46.9	41.9	36.9	30.9	24.9	20.0	15.0	10.0	6.0	4.0
147.5°	41.9	38.9	33.9	29.9	24.9	20.0	16.0	12.0	8.0	5.0	3.0
150°	33.9	30.9	26.9	23.0	20.0	16.0	13.0	9.0	6.0	5.0	3.0
152.5°	25.9	23.9	21.0	19.0	16.0	12.0	9.0	7.0	5.0	4.0	2.0
155°	21.0	19.0	17.0	14.0	12.0	9.0	7.0	5.0	4.0	3.0	2.0
157.5°	15.0	14.0	12.0	10.0	8.0	6.0	5.0	5.0	3.0	2.0	1.0
160°	10.0	9.0	8.0	6.0	5.0	5.0	4.0	3.0	2.0	2.0	1.0
162.5°	6.0	5.0	5.0	5.0	4.0	4.0	3.0	2.0	2.0	1.0	1.0
165°	4.0	4.0	4.0	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	947.0	944.0	948.0	955.0	956.0	955.0	953.0	956.0	960.0	959.0	952.0
5°	945.0	941.0	945.0	952.0	952.0	951.0	950.0	953.0	957.0	956.0	950.0
7.5°	939.0	935.0	939.0	945.0	946.0	944.0	944.0	947.0	951.0	950.0	945.0
10°	931.0	927.0	929.0	936.0	938.0	936.0	936.0	939.0	944.0	943.0	937.0
12.5°	919.1	916.1	918.1	924.0	926.0	925.0	924.0	928.0	933.0	933.0	927.0
15°	906.1	902.1	904.1	911.1	912.1	910.1	911.1	914.1	920.1	920.1	915.1
17.5°	891.1	886.1	889.1	894.1	895.1	895.1	895.1	899.1	906.1	905.1	901.1
20°	874.2	867.2	869.2	874.2	876.1	876.1	876.1	883.1	888.1	888.1	884.1
22.5°	854.2	849.2	849.2	854.2	857.2	856.2	856.2	862.2	869.2	868.2	868.2
25°	831.2	827.3	825.3	831.2	832.2	833.2	835.2	841.2	849.2	849.2	850.2
27.5°	807.3	803.3	802.3	807.3	808.3	809.3	811.3	818.3	826.3	827.3	829.2
30°	784.3	778.4	776.4	780.4	782.3	783.3	783.3	794.3	801.3	804.3	808.3
32.5°	757.4	751.4	746.4	753.4	754.4	756.4	757.4	768.4	776.4	781.3	787.3
35°	730.5	720.5	718.5	723.5	725.5	726.5	728.5	740.4	751.4	755.4	763.4
37.5°	700.5	693.5	687.5	692.5	694.5	695.5	701.5	712.5	723.5	729.5	737.4
40°	672.6	663.6	658.6	661.6	663.6	664.6	671.6	683.6	696.5	703.5	713.5
42.5°	641.6	629.7	625.7	628.7	629.7	632.7	638.7	654.6	667.6	677.6	685.6
45°	610.7	601.7	592.7	595.7	596.7	598.7	607.7	624.7	638.7	650.6	659.6
47.5°	578.8	567.8	558.8	560.8	564.8	565.8	575.8	595.7	608.7	621.7	633.7
50°	546.8	531.9	524.9	524.9	526.9	531.9	544.8	564.8	578.8	593.7	606.7
52.5°	513.9	499.9	492.0	493.0	495.0	500.9	512.9	532.9	548.8	564.8	580.8
55°	481.0	466.0	458.0	456.0	458.0	466.0	480.0	500.9	516.9	535.9	552.8
57.5°	448.1	430.1	423.1	420.1	422.1	432.1	446.1	468.0	488.0	505.9	525.9
60°	412.1	398.2	386.2	379.2	384.2	397.2	412.1	435.1	456.0	476.0	497.9
62.5°	381.2	363.2	350.3	343.3	348.3	359.2	380.2	402.2	425.1	448.1	470.0
65°	346.3	328.3	313.3	306.4	311.3	324.3	345.3	369.2	394.2	417.1	443.1
67.5°	312.3	293.4	275.4	268.4	274.4	288.4	311.3	338.3	365.2	389.2	417.1
70°	279.4	258.5	239.5	234.5	238.5	257.5	279.4	306.4	334.3	362.2	391.2
72.5°	249.5	223.5	203.6	197.6	202.6	223.5	248.5	276.4	306.4	336.3	367.2
75°	214.5	190.6	168.6	161.7	167.6	186.6	217.5	247.5	279.4	311.3	340.3
77.5°	186.6	158.7	135.7	124.7	134.7	158.7	188.6	220.5	253.5	286.4	319.3
80°	157.7	128.7	103.8	91.8	102.8	128.7	158.7	193.6	230.5	263.4	293.4
82.5°	131.7	100.8	74.8	61.9	73.8	102.8	135.7	170.6	206.6	239.5	274.4
85°	107.8	75.8	48.9	34.9	51.9	77.8	112.8	148.7	185.6	219.5	253.5
87.5°	87.8	56.9	29.9	15.0	31.9	60.9	93.8	129.7	166.6	200.6	232.5
90°	71.8	40.9	16.0	2.0	19.0	45.9	77.8	112.8	147.7	182.6	214.5
92.5°	58.9	30.9	9.0	1.0	12.0	36.9	66.9	99.8	133.7	167.6	198.6
95°	48.9	23.9	6.0	1.0	9.0	28.9	56.9	88.8	120.7	153.7	184.6
97.5°	41.9	20.0	5.0	1.0	7.0	24.9	48.9	78.8	109.8	140.7	170.6
100°	35.9	16.0	4.0	1.0	6.0	21.0	42.9	69.9	98.8	128.7	157.7
102.5°	30.9	13.0	3.0	1.0	5.0	18.0	37.9	62.9	88.8	117.8	145.7
105°	26.9	11.0	3.0	1.0	4.0	16.0	33.9	55.9	81.8	107.8	134.7
107.5°	23.0	9.0	2.0	1.0	3.0	13.0	29.9	50.9	73.8	98.8	123.7
110°	20.0	8.0	2.0	1.0	3.0	12.0	25.9	45.9	66.9	89.8	113.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	17.0	6.0	2.0	1.0	2.0	10.0	23.0	40.9	60.9	81.8	104.8
115°	15.0	5.0	1.0	1.0	2.0	9.0	21.0	36.9	54.9	74.8	95.8
117.5°	12.0	4.0	1.0	1.0	1.0	7.0	18.0	32.9	49.9	68.9	87.8
120°	10.0	4.0	1.0	1.0	1.0	6.0	16.0	28.9	44.9	61.9	79.8
122.5°	9.0	3.0	1.0	1.0	1.0	5.0	14.0	25.9	39.9	55.9	72.8
125°	8.0	3.0	1.0	1.0	1.0	4.0	12.0	23.0	35.9	49.9	65.9
127.5°	6.0	3.0	1.0	1.0	1.0	3.0	11.0	20.0	31.9	44.9	58.9
130°	5.0	2.0	1.0	1.0	1.0	3.0	9.0	18.0	27.9	39.9	52.9
132.5°	4.0	2.0	1.0	1.0	1.0	2.0	7.0	14.0	23.9	34.9	46.9
135°	4.0	2.0	1.0	1.0	1.0	2.0	5.0	12.0	20.0	29.9	39.9
137.5°	4.0	1.0	1.0	1.0	1.0	2.0	4.0	9.0	16.0	23.9	32.9
140°	3.0	1.0	1.0	1.0	1.0	1.0	3.0	7.0	13.0	20.0	27.9
142.5°	3.0	1.0	1.0	1.0	1.0	1.0	3.0	5.0	10.0	16.0	22.0
145°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	4.0	8.0	12.0	18.0
147.5°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	6.0	10.0	14.0
150°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	7.0	11.0
152.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	5.0	7.0
155°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	4.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	949.0	942.0	944.0	943.0	945.0	948.0	948.0	947.0	947.0	945.0	943.0
5°	947.0	940.0	943.0	942.0	944.0	947.0	947.0	946.0	946.0	943.0	942.0
7.5°	941.0	936.0	938.0	938.0	940.0	943.0	943.0	942.0	942.0	939.0	938.0
10°	935.0	929.0	932.0	932.0	934.0	938.0	938.0	937.0	937.0	934.0	933.0
12.5°	925.0	919.1	924.0	925.0	927.0	931.0	930.0	930.0	930.0	927.0	926.0
15°	913.1	909.1	914.1	915.1	918.1	923.0	923.0	923.0	923.0	920.1	919.1
17.5°	900.1	897.1	902.1	904.1	908.1	913.1	913.1	914.1	915.1	913.1	912.1
20°	885.1	883.1	888.1	892.1	898.1	903.1	905.1	906.1	908.1	906.1	905.1
22.5°	868.2	868.2	875.2	879.1	886.1	891.1	894.1	897.1	899.1	897.1	896.1
25°	849.2	852.2	859.2	866.2	874.2	879.1	882.1	886.1	888.1	887.1	886.1
27.5°	831.2	835.2	844.2	851.2	858.2	866.2	869.2	874.2	876.1	876.1	875.2
30°	810.3	816.3	826.3	834.2	843.2	851.2	855.2	860.2	863.2	861.2	862.2
32.5°	790.3	800.3	808.3	817.3	827.3	835.2	840.2	846.2	849.2	848.2	849.2
35°	768.4	778.4	789.3	798.3	810.3	818.3	825.3	830.2	834.2	833.2	833.2
37.5°	744.4	757.4	768.4	780.4	791.3	800.3	807.3	813.3	817.3	817.3	817.3
40°	721.5	735.4	746.4	760.4	774.4	782.3	790.3	796.3	800.3	801.3	802.3
42.5°	696.5	711.5	724.5	739.4	753.4	763.4	772.4	779.4	783.3	785.3	784.3
45°	673.6	687.5	702.5	719.5	732.5	742.4	753.4	761.4	765.4	766.4	767.4
47.5°	647.6	663.6	680.6	697.5	710.5	723.5	733.5	741.4	745.4	748.4	748.4
50°	622.7	639.6	658.6	676.6	690.5	703.5	713.5	722.5	727.5	729.5	730.5
52.5°	599.7	615.7	635.7	653.6	667.6	680.6	693.5	703.5	708.5	710.5	710.5
55°	571.8	591.7	613.7	630.7	645.6	660.6	673.6	683.6	688.5	691.5	693.5
57.5°	545.8	566.8	589.8	607.7	625.7	639.6	651.6	664.6	668.6	672.6	673.6
60°	520.9	541.9	563.8	583.8	601.7	616.7	630.7	641.6	648.6	650.6	652.6
62.5°	495.0	516.9	539.9	559.8	578.8	596.7	609.7	619.7	627.7	630.7	632.7
65°	470.0	493.0	515.9	536.9	556.8	574.8	587.8	597.7	605.7	610.7	611.7
67.5°	443.1	468.0	492.0	513.9	533.9	552.8	565.8	575.8	583.8	589.8	590.8
70°	418.1	444.1	468.0	492.0	511.9	530.9	544.8	554.8	563.8	567.8	569.8
72.5°	394.2	421.1	446.1	470.0	490.0	508.9	523.9	533.9	542.9	547.8	548.8
75°	371.2	398.2	425.1	448.1	469.0	488.0	502.9	513.9	521.9	526.9	528.9
77.5°	348.3	376.2	403.1	426.1	448.1	467.0	480.0	493.0	500.9	506.9	506.9
80°	325.3	354.3	382.2	405.1	427.1	444.1	459.0	472.0	480.0	486.0	486.0
82.5°	305.4	333.3	360.2	383.2	405.1	424.1	439.1	451.0	460.0	464.0	465.0
85°	282.4	313.3	338.3	363.2	384.2	402.2	417.1	430.1	438.1	442.1	444.1
87.5°	263.4	293.4	320.3	342.3	363.2	381.2	398.2	409.1	417.1	422.1	424.1
90°	245.5	274.4	301.4	323.3	345.3	362.2	378.2	389.2	398.2	402.2	404.1
92.5°	229.5	258.5	284.4	306.4	327.3	346.3	361.2	372.2	380.2	384.2	387.2
95°	214.5	242.5	267.4	291.4	311.3	328.3	344.3	355.2	364.2	367.2	370.2
97.5°	199.6	226.5	251.5	274.4	295.4	311.3	326.3	337.3	344.3	349.3	352.3
100°	186.6	212.6	236.5	258.5	278.4	293.4	309.3	319.3	326.3	330.3	334.3
102.5°	172.6	198.6	221.5	242.5	263.4	277.4	292.4	302.4	308.3	315.3	315.3
105°	160.7	184.6	207.6	227.5	245.5	262.4	275.4	285.4	292.4	297.4	297.4
107.5°	147.7	171.6	193.6	214.5	231.5	247.5	259.5	268.4	276.4	279.4	282.4
110°	137.7	158.7	180.6	200.6	216.5	231.5	243.5	253.5	260.4	263.4	265.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	125.7	147.7	167.6	186.6	202.6	216.5	228.5	236.5	243.5	247.5	248.5
115°	115.8	136.7	154.7	172.6	189.6	201.6	212.6	220.5	227.5	230.5	232.5
117.5°	106.8	125.7	143.7	158.7	174.6	187.6	198.6	205.6	211.6	215.5	217.5
120°	97.8	115.8	131.7	146.7	161.7	173.6	183.6	190.6	197.6	200.6	200.6
122.5°	88.8	105.8	120.7	134.7	148.7	159.7	170.6	176.6	182.6	185.6	185.6
125°	80.8	96.8	110.8	123.7	136.7	146.7	155.7	162.7	168.6	170.6	170.6
127.5°	72.8	87.8	100.8	112.8	123.7	133.7	142.7	149.7	154.7	156.7	156.7
130°	65.9	78.8	90.8	102.8	113.8	121.7	130.7	136.7	139.7	142.7	143.7
132.5°	58.9	70.9	81.8	91.8	102.8	110.8	117.8	123.7	126.7	129.7	130.7
135°	51.9	62.9	72.8	82.8	91.8	99.8	105.8	110.8	114.8	116.8	117.8
137.5°	43.9	55.9	64.9	72.8	82.8	88.8	95.8	98.8	102.8	104.8	104.8
140°	36.9	45.9	55.9	63.9	71.8	77.8	83.8	88.8	91.8	92.8	92.8
142.5°	29.9	37.9	45.9	55.9	62.9	67.9	73.8	77.8	79.8	80.8	81.8
145°	23.9	29.9	36.9	45.9	53.9	59.9	62.9	66.9	68.9	69.9	70.9
147.5°	18.0	23.9	29.9	35.9	43.9	49.9	52.9	56.9	58.9	59.9	59.9
150°	14.0	18.0	22.0	27.9	33.9	40.9	44.9	47.9	48.9	49.9	49.9
152.5°	10.0	14.0	17.0	21.0	24.9	30.9	36.9	38.9	39.9	40.9	40.9
155°	7.0	10.0	12.0	15.0	18.0	23.0	27.9	30.9	31.9	32.9	32.9
157.5°	5.0	7.0	8.0	11.0	13.0	15.0	19.0	23.9	24.9	24.9	24.9
160°	3.0	4.0	5.0	7.0	8.0	10.0	12.0	15.0	18.0	18.0	18.0
162.5°	2.0	3.0	3.0	4.0	4.0	6.0	7.0	8.0	11.0	12.0	12.0
165°	1.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	5.0	6.0	6.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	944.0	946.0	945.0	945.0	945.0	947.0	945.0	936.0	938.0	940.0	942.0
5°	943.0	944.0	944.0	943.0	943.0	945.0	943.0	934.0	936.0	938.0	939.0
7.5°	939.0	940.0	940.0	940.0	939.0	941.0	938.0	930.0	930.0	932.0	933.0
10°	934.0	936.0	935.0	934.0	934.0	934.0	932.0	923.0	923.0	924.0	925.0
12.5°	928.0	928.0	928.0	927.0	926.0	926.0	924.0	915.1	914.1	916.1	915.1
15°	920.1	922.1	920.1	919.1	917.1	917.1	914.1	905.1	903.1	904.1	903.1
17.5°	913.1	914.1	912.1	910.1	908.1	907.1	904.1	894.1	891.1	892.1	890.1
20°	906.1	906.1	904.1	902.1	899.1	896.1	892.1	882.1	877.1	877.1	873.2
22.5°	897.1	897.1	895.1	892.1	889.1	885.1	881.1	871.2	863.2	861.2	858.2
25°	887.1	886.1	885.1	882.1	876.1	872.2	868.2	857.2	848.2	844.2	839.2
27.5°	875.2	875.2	872.2	869.2	863.2	858.2	853.2	843.2	831.2	826.3	819.3
30°	862.2	862.2	859.2	855.2	849.2	843.2	837.2	825.3	813.3	806.3	798.3
32.5°	849.2	848.2	845.2	841.2	835.2	826.3	821.3	809.3	795.3	787.3	776.4
35°	833.2	832.2	829.2	824.3	816.3	809.3	801.3	790.3	774.4	764.4	752.4
37.5°	817.3	816.3	814.3	807.3	799.3	791.3	781.3	770.4	755.4	742.4	730.5
40°	801.3	800.3	796.3	791.3	781.3	771.4	761.4	750.4	734.4	719.5	706.5
42.5°	784.3	783.3	778.4	772.4	761.4	751.4	739.4	727.5	711.5	693.5	680.6
45°	767.4	765.4	760.4	753.4	741.4	730.5	718.5	704.5	688.5	671.6	654.6
47.5°	749.4	746.4	741.4	731.5	721.5	709.5	695.5	680.6	664.6	645.6	627.7
50°	729.5	727.5	721.5	712.5	700.5	688.5	672.6	657.6	638.7	620.7	598.7
52.5°	710.5	706.5	701.5	691.5	679.6	666.6	649.6	631.7	612.7	595.7	572.8
55°	690.5	688.5	681.6	673.6	658.6	643.6	627.7	608.7	587.8	567.8	545.8
57.5°	671.6	667.6	661.6	650.6	637.7	622.7	605.7	585.8	562.8	541.9	517.9
60°	652.6	646.6	639.6	629.7	615.7	599.7	581.8	560.8	537.9	514.9	490.0
62.5°	631.7	626.7	618.7	608.7	594.7	577.8	558.8	536.9	514.9	491.0	464.0
65°	610.7	605.7	597.7	587.8	573.8	554.8	534.9	512.9	488.0	465.0	436.1
67.5°	589.8	584.8	575.8	564.8	550.8	532.9	511.9	489.0	464.0	439.1	409.1
70°	568.8	562.8	554.8	542.9	528.9	509.9	489.0	465.0	440.1	413.1	383.2
72.5°	547.8	542.9	532.9	521.9	506.9	488.0	467.0	443.1	417.1	389.2	359.2
75°	526.9	520.9	513.9	500.9	485.0	467.0	445.1	421.1	393.2	366.2	335.3
77.5°	505.9	500.9	492.0	479.0	464.0	445.1	423.1	399.2	371.2	343.3	310.3
80°	485.0	479.0	472.0	460.0	443.1	424.1	401.2	377.2	349.3	320.3	287.4
82.5°	464.0	458.0	450.0	438.1	422.1	403.1	381.2	355.2	327.3	297.4	266.4
85°	443.1	438.1	429.1	417.1	400.2	381.2	359.2	336.3	306.4	276.4	245.5
87.5°	422.1	417.1	408.1	396.2	380.2	361.2	339.3	315.3	286.4	258.5	224.5
90°	402.2	398.2	389.2	377.2	361.2	342.3	322.3	296.4	268.4	240.5	208.6
92.5°	384.2	380.2	372.2	360.2	346.3	325.3	305.4	280.4	252.5	223.5	192.6
95°	368.2	363.2	355.2	344.3	327.3	309.3	289.4	264.4	237.5	208.6	178.6
97.5°	350.3	345.3	337.3	325.3	311.3	292.4	272.4	248.5	221.5	194.6	164.7
100°	332.3	327.3	318.3	308.3	294.4	275.4	256.5	232.5	207.6	181.6	152.7
102.5°	314.3	309.3	301.4	291.4	277.4	260.4	241.5	218.5	193.6	167.6	140.7
105°	297.4	292.4	284.4	274.4	261.4	244.5	224.5	204.6	180.6	155.7	129.7
107.5°	280.4	275.4	268.4	258.5	245.5	229.5	210.6	189.6	167.6	143.7	118.7
110°	263.4	259.5	251.5	242.5	229.5	213.5	196.6	176.6	154.7	132.7	108.8





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	247.5	243.5	235.5	225.5	214.5	199.6	182.6	163.7	142.7	121.7	98.8
115°	231.5	226.5	219.5	210.6	199.6	185.6	169.6	152.7	131.7	111.8	90.8
117.5°	215.5	211.6	204.6	195.6	185.6	171.6	156.7	140.7	120.7	101.8	82.8
120°	199.6	196.6	189.6	181.6	171.6	158.7	144.7	128.7	110.8	92.8	74.8
122.5°	184.6	181.6	174.6	167.6	157.7	145.7	132.7	117.8	101.8	84.8	68.9
125°	170.6	166.6	160.7	153.7	144.7	133.7	120.7	106.8	91.8	76.8	61.9
127.5°	155.7	152.7	148.7	140.7	131.7	121.7	109.8	97.8	83.8	69.9	55.9
130°	143.7	139.7	134.7	128.7	120.7	110.8	99.8	87.8	75.8	62.9	48.9
132.5°	129.7	125.7	121.7	115.8	108.8	99.8	89.8	78.8	67.9	55.9	43.9
135°	116.8	113.8	109.8	103.8	96.8	89.8	79.8	69.9	59.9	48.9	38.9
137.5°	104.8	101.8	97.8	93.8	86.8	79.8	70.9	61.9	52.9	42.9	33.9
140°	92.8	90.8	86.8	82.8	76.8	69.9	61.9	53.9	45.9	36.9	28.9
142.5°	80.8	78.8	75.8	71.8	66.9	60.9	53.9	46.9	38.9	31.9	24.9
145°	69.9	68.9	65.9	61.9	57.9	51.9	45.9	39.9	32.9	26.9	20.0
147.5°	58.9	57.9	55.9	52.9	48.9	43.9	38.9	32.9	27.9	22.0	16.0
150°	48.9	47.9	46.9	42.9	40.9	35.9	31.9	26.9	23.0	17.0	13.0
152.5°	39.9	39.9	37.9	34.9	32.9	28.9	25.9	22.0	18.0	14.0	10.0
155°	31.9	30.9	29.9	27.9	25.9	23.0	20.0	17.0	14.0	10.0	7.0
157.5°	24.9	23.9	23.0	21.0	19.0	18.0	15.0	12.0	9.0	7.0	5.0
160°	18.0	17.0	16.0	15.0	14.0	12.0	10.0	8.0	6.0	4.0	3.0
162.5°	12.0	11.0	11.0	10.0	9.0	7.0	6.0	5.0	4.0	3.0	2.0
165°	6.0	6.0	5.0	5.0	4.0	3.0	3.0	3.0	2.0	2.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	946.0	946.0	946.0	946.0	946.0	946.0	946.0
2.5°	941.0	941.0	945.0	944.0	941.0	947.0	954.0
5°	938.0	938.0	941.0	941.0	938.0	944.0	950.0
7.5°	933.0	932.0	935.0	935.0	931.0	936.0	943.0
10°	924.0	923.0	926.0	926.0	922.1	927.0	933.0
12.5°	914.1	912.1	915.1	914.1	910.1	915.1	921.1
15°	901.1	900.1	902.1	900.1	896.1	901.1	907.1
17.5°	888.1	885.1	886.1	886.1	879.1	884.1	889.1
20°	871.2	867.2	868.2	867.2	862.2	865.2	871.2
22.5°	854.2	848.2	848.2	847.2	841.2	845.2	850.2
25°	833.2	826.3	826.3	825.3	818.3	821.3	826.3
27.5°	812.3	805.3	802.3	801.3	794.3	794.3	801.3
30°	790.3	780.4	778.4	775.4	768.4	768.4	774.4
32.5°	769.4	755.4	751.4	747.4	740.4	739.4	746.4
35°	741.4	730.5	723.5	719.5	711.5	709.5	715.5
37.5°	718.5	704.5	694.5	689.5	681.6	678.6	686.5
40°	693.5	678.6	665.6	662.6	650.6	646.6	653.6
42.5°	665.6	649.6	636.7	630.7	621.7	617.7	618.7
45°	637.7	620.7	606.7	598.7	589.8	582.8	586.8
47.5°	608.7	593.7	576.8	564.8	553.8	548.8	550.8
50°	579.8	561.8	545.8	532.9	519.9	513.9	517.9
52.5°	550.8	531.9	513.9	499.9	485.0	479.0	480.0
55°	522.9	502.9	482.0	467.0	453.0	444.1	442.1
57.5°	495.0	473.0	451.0	434.1	416.1	408.1	405.1
60°	465.0	442.1	419.1	399.2	380.2	371.2	367.2
62.5°	437.1	412.1	386.2	365.2	346.3	334.3	331.3
65°	410.1	381.2	355.2	331.3	310.3	297.4	293.4
67.5°	381.2	351.3	323.3	297.4	277.4	260.4	258.5
70°	354.3	322.3	291.4	264.4	242.5	225.5	217.5
72.5°	327.3	294.4	262.4	233.5	205.6	189.6	183.6
75°	301.4	267.4	233.5	203.6	172.6	153.7	147.7
77.5°	277.4	242.5	206.6	173.6	144.7	120.7	112.8
80°	254.5	218.5	180.6	146.7	115.8	89.8	80.8
82.5°	230.5	196.6	157.7	121.7	89.8	62.9	51.9
85°	209.6	175.6	136.7	100.8	68.9	39.9	27.9
87.5°	192.6	155.7	120.7	84.8	51.9	23.0	8.0
90°	175.6	139.7	104.8	69.9	38.9	13.0	1.0
92.5°	160.7	126.7	91.8	59.9	29.9	9.0	1.0
95°	146.7	113.8	80.8	49.9	23.9	6.0	1.0
97.5°	133.7	102.8	71.8	42.9	20.0	5.0	1.0
100°	122.7	92.8	63.9	37.9	17.0	4.0	1.0
102.5°	111.8	83.8	56.9	32.9	15.0	3.0	1.0
105°	102.8	75.8	50.9	29.9	13.0	3.0	1.0
107.5°	93.8	68.9	45.9	25.9	11.0	2.0	1.0
110°	84.8	62.9	40.9	23.0	10.0	2.0	1.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L935-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	77.8	56.9	36.9	21.0	8.0	2.0	1.0
115°	70.9	50.9	32.9	18.0	7.0	1.0	1.0
117.5°	63.9	45.9	28.9	16.0	6.0	1.0	1.0
120°	57.9	40.9	25.9	14.0	5.0	1.0	1.0
122.5°	51.9	36.9	23.0	12.0	4.0	1.0	1.0
125°	46.9	32.9	20.0	10.0	3.0	1.0	1.0
127.5°	41.9	28.9	18.0	9.0	3.0	1.0	1.0
130°	36.9	25.9	15.0	7.0	2.0	1.0	1.0
132.5°	32.9	22.0	13.0	6.0	2.0	1.0	1.0
135°	28.9	19.0	11.0	4.0	2.0	1.0	1.0
137.5°	24.9	16.0	9.0	3.0	1.0	1.0	1.0
140°	21.0	14.0	7.0	3.0	1.0	1.0	1.0
142.5°	18.0	11.0	5.0	2.0	1.0	1.0	1.0
145°	14.0	9.0	4.0	2.0	1.0	1.0	1.0
147.5°	11.0	7.0	3.0	2.0	1.0	1.0	1.0
150°	8.0	5.0	3.0	1.0	1.0	1.0	1.0
152.5°	6.0	4.0	2.0	1.0	1.0	1.0	1.0
155°	4.0	3.0	2.0	1.0	1.0	1.0	1.0
157.5°	3.0	2.0	1.0	1.0	1.0	1.0	1.0
160°	2.0	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
165°	1.0	1.0	1.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)