

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-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-LD5-47SL-LW-UNV-L940-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

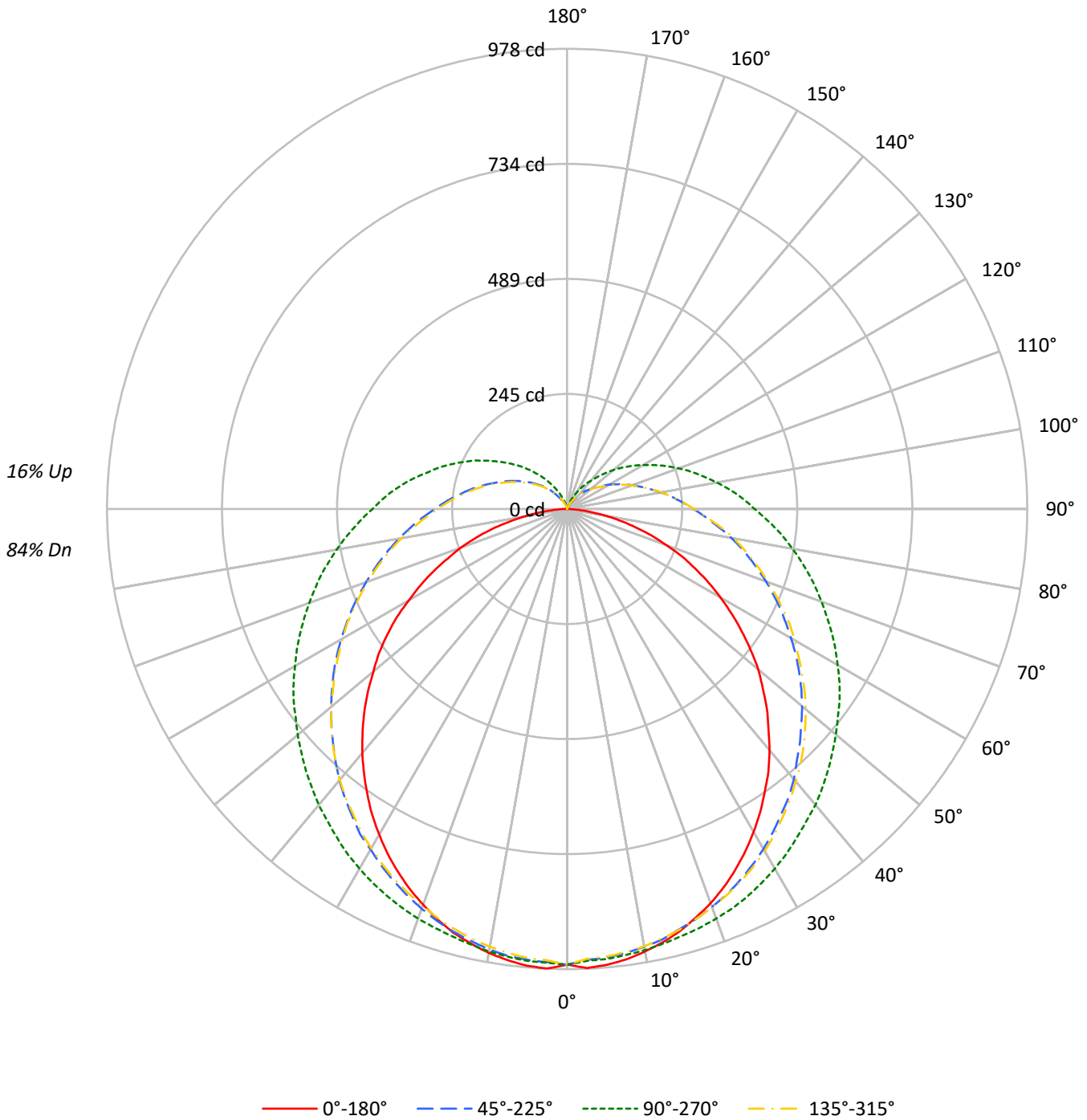
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4207.0 lumens  
Efficiency: N/A  
Efficacy: 102.6 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-L940-CD1-U

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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°	7825	7825	7825	7825
5°	7866	7541	7883	7573
10°	7793	7327	7819	7350
15°	7703	7143	7737	7151
20°	7582	7009	7608	7009
25°	7433	6891	7478	6882
30°	7265	6768	7322	6768
35°	7070	6655	7149	6663
40°	6877	6588	6961	6588
45°	6656	6519	6758	6527
50°	6425	6477	6512	6495
55°	6103	6483	6296	6511
60°	5763	6502	5950	6543
65°	5381	6568	5620	6633
70°	4846	6689	5222	6783
75°	4228	6908	4628	7041
80°	3269	7231	3716	7398
85°	1954	7751	2446	7965



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.7	2.2
10°-20°	263.6	6.3
20°-30°	404.2	9.6
30°-40°	498.7	11.9
40°-50°	541.0	12.9
50°-60°	533.2	12.7
60°-70°	482.1	11.5
70°-80°	401.6	9.5
80°-90°	311.1	7.4
90°-100°	235.9	5.6
100°-110°	174.6	4.2
110°-120°	121.4	2.9
120°-130°	77.5	1.8
130°-140°	43.5	1.0
140°-150°	19.9	0.5
150°-160°	6.2	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	759.6	18.1
0°-40°	1258.2	29.9
0°-60°	2332.5	55.4
0°-90°	3527.3	83.8
90°-120°	532.0	12.6
90°-150°	672.8	16.0
90°-180°	680.0	16.2
0°-180°	4207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	968	968	968	968	968	
5°	972	960	974	964	972	92
15°	928	940	933	941	928	262
25°	846	908	851	907	846	390
35°	732	852	740	853	732	459
45°	601	784	610	786	601	463
55°	452	707	467	710	452	405
65°	300	620	314	626	300	298
75°	151	531	166	541	151	160
85°	29	442	36	454	29	35
90°	1	398	2	414	1	2
95°	1	362	1	379	1	1
105°	1	287	1	304	1	1
115°	1	219	1	238	1	1
125°	1	157	1	175	1	1
135°	1	102	1	120	1	1
145°	1	59	1	72	1	1
155°	1	24	1	34	1	0
165°	1	4	1	6	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	976.5	976.5	975.5	973.4	974.5	977.5	975.5	970.4	967.3	959.1	961.2
5°	972.4	972.4	971.4	969.3	970.4	974.5	972.4	968.3	964.2	957.1	960.2
7.5°	965.3	965.3	964.2	962.2	964.2	968.3	966.3	962.2	959.1	952.0	955.0
10°	955.0	956.1	955.0	952.0	956.1	960.2	959.1	954.0	951.0	944.8	947.9
12.5°	942.8	943.8	942.8	941.8	943.8	949.9	947.9	943.8	941.8	936.7	939.7
15°	928.5	929.5	927.5	927.5	929.5	935.6	935.6	931.6	929.5	924.4	930.5
17.5°	910.1	911.1	910.1	910.1	912.1	918.3	919.3	917.3	915.2	913.2	919.3
20°	891.7	890.7	890.7	889.7	893.8	903.0	901.9	901.9	899.9	899.9	907.0
22.5°	870.3	870.3	869.2	869.2	874.4	882.5	882.5	884.6	882.5	886.6	892.7
25°	845.8	846.8	845.8	847.8	851.9	861.1	862.1	865.2	866.2	870.3	877.4
27.5°	820.2	821.2	820.2	822.3	829.4	836.6	841.7	845.8	846.8	852.9	862.1
30°	792.6	792.6	793.7	795.7	803.9	815.1	819.2	824.3	824.3	834.5	843.7
32.5°	764.0	764.0	764.0	768.1	777.3	790.6	795.7	801.8	803.9	814.1	824.3
35°	732.4	733.4	733.4	736.5	748.7	762.0	769.1	776.3	780.4	792.6	802.9
37.5°	702.8	704.8	701.7	705.8	723.2	734.4	742.6	749.7	756.9	773.2	781.4
40°	669.0	671.1	670.1	678.2	692.5	706.8	716.0	723.2	733.4	749.7	758.9
42.5°	633.3	635.3	637.4	646.6	661.9	676.2	687.4	696.6	708.9	723.2	738.5
45°	600.6	600.6	603.7	614.9	631.3	646.6	659.9	670.1	684.4	699.7	715.0
47.5°	563.8	564.9	568.9	582.2	599.6	618.0	630.2	643.5	658.8	675.2	692.5
50°	530.1	530.1	536.3	550.6	566.9	587.3	600.6	615.9	632.3	651.7	669.0
52.5°	491.3	493.4	502.5	515.8	537.3	555.7	571.0	587.3	606.7	627.2	646.6
55°	452.5	456.6	463.7	482.1	504.6	522.0	540.3	560.8	579.2	601.6	624.1
57.5°	414.7	417.8	429.0	447.4	470.9	492.3	511.7	531.2	553.6	576.1	599.6
60°	375.9	380.0	393.3	411.6	437.2	459.6	482.1	502.5	526.0	549.5	574.1
62.5°	339.1	342.2	357.5	379.0	404.5	429.0	451.5	476.0	501.5	524.0	548.5
65°	300.3	305.4	322.8	342.2	371.8	396.3	421.9	448.4	475.0	499.5	523.0
67.5°	264.6	267.6	286.0	308.5	338.1	365.7	392.2	420.8	448.4	473.9	497.4
70°	222.7	232.9	251.3	274.8	306.4	335.0	363.6	393.3	422.9	449.4	471.9
72.5°	187.9	196.1	216.5	242.1	272.7	306.4	336.1	367.7	397.3	424.9	448.4
75°	151.2	159.3	182.8	211.4	243.1	278.9	309.5	342.2	372.8	400.4	424.9
77.5°	115.4	125.6	151.2	180.8	215.5	252.3	284.0	316.6	348.3	377.9	402.4
80°	82.7	94.0	121.6	155.3	189.0	225.7	260.5	293.2	324.8	354.4	380.0
82.5°	53.1	65.4	95.0	128.7	164.5	201.2	237.0	269.7	301.3	330.9	357.5
85°	28.6	41.9	72.5	106.2	142.0	178.8	214.5	249.2	279.9	307.5	336.1
87.5°	8.2	24.5	54.1	87.8	124.6	158.3	193.1	227.8	258.4	288.0	313.6
90°	1.0	14.3	40.9	72.5	108.3	141.0	175.7	208.4	239.0	268.6	294.2
92.5°	1.0	9.2	31.7	60.3	93.0	126.7	161.4	193.1	221.7	251.3	276.8
95°	1.0	7.2	25.5	51.1	81.7	113.4	146.1	176.7	206.3	233.9	259.4
97.5°	1.0	5.1	20.4	43.9	71.5	101.1	132.8	163.4	192.0	218.6	242.1
100°	1.0	4.1	16.3	37.8	62.3	90.9	119.5	149.1	176.7	202.2	226.8
102.5°	1.0	3.1	14.3	31.7	55.2	80.7	108.3	135.9	162.4	186.9	211.4
105°	1.0	3.1	12.3	27.6	49.0	72.5	98.1	124.6	149.1	172.6	195.1
107.5°	1.0	2.0	10.2	23.5	42.9	65.4	88.9	114.4	136.9	159.3	180.8
110°	1.0	2.0	8.2	21.5	37.8	58.2	80.7	104.2	125.6	147.1	167.5



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CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.0	2.0	7.2	18.4	32.7	52.1	72.5	94.0	114.4	135.9	154.2
115°	1.0	2.0	6.1	16.3	30.6	44.9	65.4	84.8	105.2	124.6	142.0
117.5°	1.0	2.0	5.1	13.3	26.6	40.9	57.2	76.6	95.0	113.4	129.7
120°	1.0	2.0	4.1	12.3	23.5	36.8	51.1	68.4	85.8	103.2	120.5
122.5°	1.0	1.0	4.1	10.2	20.4	32.7	47.0	60.3	76.6	93.0	108.3
125°	1.0	1.0	4.1	9.2	17.4	29.6	41.9	54.1	68.4	82.7	96.0
127.5°	1.0	1.0	3.1	7.2	15.3	25.5	36.8	50.1	60.3	73.5	86.8
130°	1.0	1.0	3.1	6.1	13.3	21.5	32.7	43.9	56.2	65.4	76.6
132.5°	1.0	1.0	3.1	5.1	10.2	17.4	27.6	37.8	49.0	59.2	68.4
135°	1.0	1.0	2.0	4.1	8.2	14.3	22.5	31.7	42.9	53.1	62.3
137.5°	1.0	1.0	2.0	4.1	6.1	12.3	17.4	25.5	35.8	44.9	54.1
140°	1.0	1.0	2.0	3.1	5.1	9.2	14.3	20.4	28.6	36.8	47.0
142.5°	1.0	1.0	1.0	3.1	4.1	7.2	11.2	16.3	22.5	29.6	37.8
145°	1.0	1.0	1.0	3.1	4.1	5.1	9.2	13.3	17.4	22.5	29.6
147.5°	1.0	1.0	1.0	2.0	3.1	4.1	7.2	10.2	13.3	17.4	21.5
150°	1.0	1.0	1.0	2.0	3.1	4.1	5.1	7.2	10.2	14.3	17.4
152.5°	1.0	1.0	1.0	2.0	2.0	3.1	4.1	5.1	7.2	10.2	12.3
155°	1.0	1.0	1.0	1.0	2.0	3.1	4.1	4.1	5.1	7.2	9.2
157.5°	1.0	1.0	1.0	1.0	2.0	2.0	3.1	3.1	4.1	4.1	6.1
160°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.1	3.1	3.1	3.1
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.1	3.1
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	961.2	962.2	965.3	965.3	963.2	963.2	962.2	961.2	962.2	964.2	964.2
5°	959.1	960.2	963.2	964.2	962.2	961.2	961.2	960.2	961.2	963.2	963.2
7.5°	955.0	956.1	959.1	960.2	958.1	958.1	957.1	956.1	958.1	959.1	959.1
10°	948.9	949.9	954.0	955.0	954.0	953.0	953.0	952.0	953.0	955.0	955.0
12.5°	940.7	942.8	947.9	947.9	947.9	946.9	946.9	945.9	946.9	948.9	947.9
15°	931.6	935.6	939.7	941.8	941.8	941.8	940.7	939.7	941.8	942.8	941.8
17.5°	921.3	926.4	932.6	934.6	934.6	935.6	934.6	933.6	935.6	935.6	934.6
20°	911.1	916.2	922.4	924.4	926.4	927.5	927.5	926.4	927.5	928.5	927.5
22.5°	897.8	904.0	911.1	914.2	916.2	918.3	918.3	918.3	919.3	920.3	918.3
25°	883.5	890.7	898.9	901.9	906.0	907.0	908.1	908.1	909.1	910.1	907.0
27.5°	868.2	876.4	884.6	889.7	892.7	894.8	894.8	895.8	896.8	897.8	894.8
30°	849.8	862.1	869.2	873.3	877.4	880.5	881.5	882.5	883.5	884.6	881.5
32.5°	833.5	843.7	852.9	858.0	863.1	867.2	868.2	868.2	870.3	870.3	867.2
35°	814.1	826.3	835.5	840.6	846.8	849.8	851.9	851.9	853.9	853.9	850.9
37.5°	794.7	806.9	817.2	823.3	830.4	834.5	835.5	835.5	837.6	837.6	833.5
40°	774.3	787.5	798.8	805.9	812.0	817.2	818.2	821.2	821.2	820.2	816.1
42.5°	753.8	766.1	778.3	786.5	794.7	799.8	801.8	802.9	802.9	801.8	798.8
45°	731.4	745.7	756.9	767.1	775.3	780.4	783.4	784.5	784.5	782.4	779.4
47.5°	709.9	724.2	735.4	746.7	754.8	761.0	764.0	765.1	764.0	763.0	760.0
50°	687.4	703.8	715.0	726.2	734.4	739.5	744.6	745.7	744.6	743.6	737.5
52.5°	663.9	681.3	693.6	704.8	714.0	720.1	724.2	725.2	725.2	723.2	719.1
55°	640.4	655.8	671.1	683.3	693.6	699.7	704.8	706.8	704.8	702.8	697.6
57.5°	619.0	633.3	648.6	661.9	672.1	680.3	684.4	686.4	684.4	681.3	676.2
60°	593.5	608.8	626.1	638.4	649.6	657.8	659.9	663.9	661.9	658.8	653.7
62.5°	568.9	587.3	602.7	618.0	627.2	636.4	640.4	642.5	640.4	637.4	632.3
65°	543.4	563.8	579.2	594.5	604.7	613.9	619.0	620.0	618.0	614.9	609.8
67.5°	519.9	539.3	555.7	572.0	581.2	590.4	595.5	597.5	595.5	591.4	586.3
70°	496.4	515.8	535.2	547.5	558.7	568.9	572.0	575.1	573.0	568.9	562.8
72.5°	472.9	493.4	512.8	525.0	537.3	546.5	550.6	553.6	551.6	547.5	540.3
75°	448.4	469.9	489.3	502.5	514.8	524.0	528.1	531.2	529.1	525.0	516.9
77.5°	425.9	447.4	465.8	480.1	492.3	500.5	507.7	508.7	506.6	502.5	494.4
80°	402.4	423.9	443.3	457.6	469.9	478.0	483.1	486.2	484.2	480.1	471.9
82.5°	382.0	401.4	420.8	435.1	447.4	457.6	461.7	464.8	463.7	457.6	451.5
85°	359.5	382.0	397.3	412.7	424.9	435.1	438.2	442.3	441.3	436.2	428.0
87.5°	337.1	359.5	377.9	393.3	404.5	412.7	417.8	419.8	418.8	413.7	404.5
90°	318.7	339.1	357.5	373.8	383.0	392.2	397.3	398.4	398.4	392.2	385.1
92.5°	301.3	320.7	339.1	354.4	365.7	373.8	377.9	380.0	379.0	373.8	365.7
95°	281.9	303.4	320.7	336.1	347.3	355.5	359.5	361.6	360.6	355.5	347.3
97.5°	265.6	285.0	302.3	316.6	327.9	336.1	340.1	342.2	342.2	337.1	328.9
100°	249.2	268.6	285.0	299.3	309.5	317.7	321.8	322.8	321.8	317.7	309.5
102.5°	232.9	251.3	267.6	280.9	292.1	299.3	303.4	304.4	304.4	299.3	291.1
105°	216.5	234.9	250.3	264.6	273.7	280.9	284.0	287.0	286.0	281.9	273.7
107.5°	201.2	219.6	233.9	247.2	256.4	263.5	266.6	269.7	268.6	264.6	256.4
110°	186.9	204.3	217.6	230.8	239.0	246.2	251.3	252.3	250.3	246.2	239.0





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	173.6	189.0	202.2	214.5	223.7	228.8	232.9	234.9	232.9	228.8	223.7
115°	159.3	174.7	187.9	199.2	207.4	213.5	216.5	218.6	216.5	212.5	207.4
117.5°	146.1	160.4	173.6	184.9	192.0	197.1	200.2	202.2	200.2	197.1	192.0
120°	134.8	147.1	159.3	169.6	177.7	181.8	184.9	186.9	185.9	181.8	176.7
122.5°	121.6	134.8	146.1	156.3	163.4	167.5	169.6	171.6	170.6	167.5	162.4
125°	110.3	121.6	132.8	142.0	149.1	153.2	155.3	157.3	156.3	153.2	147.1
127.5°	98.1	110.3	119.5	128.7	133.8	139.9	141.0	143.0	142.0	138.9	133.8
130°	88.9	98.1	107.3	115.4	121.6	125.6	127.7	128.7	126.7	124.6	119.5
132.5°	77.6	87.8	96.0	103.2	107.3	111.3	113.4	114.4	114.4	111.3	107.3
135°	69.5	76.6	83.8	90.9	95.0	99.1	101.1	102.1	101.1	99.1	95.0
137.5°	62.3	68.4	73.5	79.7	84.8	86.8	88.9	88.9	87.8	86.8	83.8
140°	54.1	61.3	66.4	70.5	74.6	75.6	77.6	77.6	76.6	75.6	73.5
142.5°	46.0	52.1	57.2	62.3	65.4	67.4	68.4	69.5	68.4	67.4	64.4
145°	36.8	43.9	49.0	52.1	56.2	57.2	58.2	59.2	58.2	57.2	54.1
147.5°	28.6	34.7	39.8	43.9	47.0	48.0	49.0	50.1	49.0	47.0	46.0
150°	20.4	25.5	31.7	35.8	37.8	39.8	39.8	39.8	40.9	38.8	36.8
152.5°	16.3	18.4	22.5	26.6	29.6	30.6	31.7	31.7	30.6	30.6	28.6
155°	11.2	13.3	16.3	19.4	22.5	23.5	24.5	24.5	23.5	23.5	22.5
157.5°	7.2	9.2	11.2	13.3	16.3	17.4	18.4	18.4	18.4	17.4	16.3
160°	4.1	5.1	6.1	8.2	10.2	11.2	12.3	12.3	12.3	12.3	11.2
162.5°	3.1	3.1	3.1	4.1	5.1	6.1	7.2	7.2	7.2	7.2	6.1
165°	2.0	2.0	2.0	2.0	2.0	3.1	4.1	4.1	4.1	4.1	4.1
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	963.2	963.2	964.2	962.2	956.1	957.1	957.1	961.2	963.2	964.2	969.3
5°	961.2	961.2	963.2	960.2	955.0	955.0	955.0	959.1	960.2	962.2	966.3
7.5°	958.1	958.1	959.1	956.1	949.9	949.9	948.9	953.0	955.0	956.1	960.2
10°	953.0	953.0	954.0	951.0	943.8	943.8	942.8	945.9	946.9	948.9	952.0
12.5°	945.9	945.9	945.9	942.8	935.6	934.6	933.6	936.7	936.7	937.7	940.7
15°	939.7	937.7	937.7	934.6	927.5	925.4	923.4	924.4	926.4	925.4	927.5
17.5°	932.6	930.5	928.5	925.4	916.2	913.2	911.1	912.1	911.1	910.1	912.1
20°	924.4	921.3	920.3	915.2	906.0	900.9	896.8	894.8	895.8	892.7	893.8
22.5°	915.2	911.1	909.1	903.0	893.8	887.6	882.5	878.4	877.4	873.3	874.4
25°	904.0	898.9	895.8	890.7	880.5	873.3	867.2	861.1	858.0	852.9	851.9
27.5°	890.7	885.6	881.5	876.4	866.2	857.0	849.8	841.7	837.6	831.5	828.4
30°	877.4	871.3	865.2	861.1	849.8	839.6	828.4	821.2	815.1	808.0	802.9
32.5°	861.1	854.9	848.8	842.7	832.5	820.2	811.0	799.8	792.6	784.5	778.3
35°	844.7	836.6	830.4	822.3	813.1	798.8	787.5	776.3	767.1	757.9	750.8
37.5°	826.3	820.2	811.0	803.9	792.6	778.3	766.1	751.8	743.6	731.4	722.2
40°	809.0	801.8	792.6	783.4	772.2	755.9	742.6	726.2	717.1	702.8	693.6
42.5°	791.6	781.4	772.2	762.0	749.7	734.4	718.1	701.7	689.5	676.2	662.9
45°	772.2	761.0	749.7	738.5	726.2	710.9	693.6	676.2	660.9	648.6	632.3
47.5°	751.8	740.5	727.3	715.0	701.7	686.4	668.0	649.6	633.3	619.0	601.6
50°	731.4	720.1	705.8	692.5	677.2	661.9	642.5	621.0	603.7	585.3	570.0
52.5°	709.9	698.7	685.4	668.0	651.7	636.4	615.9	593.5	574.1	558.7	539.3
55°	688.5	677.2	661.9	644.5	628.2	608.8	589.4	566.9	545.5	527.1	507.7
57.5°	666.0	655.8	638.4	624.1	603.7	583.2	562.8	541.4	517.9	496.4	473.9
60°	643.5	632.3	615.9	598.6	578.1	557.7	536.3	512.8	488.2	464.8	444.3
62.5°	623.1	608.8	593.5	575.1	553.6	534.2	509.7	484.2	459.6	435.1	410.6
65°	599.6	584.3	570.0	551.6	529.1	506.6	482.1	456.6	430.0	403.5	379.0
67.5°	576.1	560.8	545.5	527.1	503.6	480.1	454.5	429.0	399.4	373.8	345.2
70°	552.6	540.3	520.9	501.5	480.1	454.5	429.0	401.4	370.8	343.2	313.6
72.5°	529.1	516.9	497.4	477.0	456.6	430.0	402.4	374.9	346.3	314.6	282.9
75°	506.6	491.3	473.9	454.5	433.1	405.5	377.9	349.3	315.6	286.0	253.3
77.5°	485.2	470.9	453.5	432.1	408.6	382.0	353.4	323.8	290.1	258.4	222.7
80°	461.7	447.4	430.0	408.6	385.1	359.5	328.9	298.3	265.6	230.8	194.1
82.5°	439.2	425.9	406.5	387.1	361.6	336.1	305.4	274.8	240.0	206.3	170.6
85°	415.7	402.4	384.1	363.6	339.1	311.5	282.9	252.3	217.6	182.8	147.1
87.5°	395.3	380.0	361.6	341.2	316.6	290.1	262.5	229.8	196.1	162.4	125.6
90°	373.8	359.5	341.2	320.7	296.2	269.7	241.1	210.4	177.7	143.0	108.3
92.5°	355.5	340.1	322.8	302.3	277.8	252.3	223.7	193.1	161.4	127.7	94.0
95°	337.1	321.8	305.4	285.0	260.5	234.9	206.3	176.7	146.1	113.4	81.7
97.5°	316.6	303.4	287.0	267.6	243.1	218.6	191.0	162.4	132.8	101.1	71.5
100°	300.3	285.0	269.7	249.2	226.8	203.3	175.7	148.1	119.5	89.9	62.3
102.5°	281.9	267.6	252.3	232.9	210.4	186.9	161.4	134.8	108.3	80.7	54.1
105°	264.6	251.3	234.9	216.5	195.1	172.6	148.1	123.6	98.1	71.5	48.0
107.5°	247.2	233.9	218.6	201.2	180.8	158.3	135.9	111.3	87.8	64.4	42.9
110°	229.8	217.6	203.3	185.9	166.5	146.1	124.6	102.1	78.7	57.2	37.8



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	214.5	202.2	187.9	171.6	153.2	133.8	113.4	91.9	70.5	51.1	32.7
115°	199.2	187.9	173.6	159.3	141.0	122.6	103.2	82.7	63.3	46.0	28.6
117.5°	183.9	172.6	159.3	145.0	128.7	111.3	93.0	73.5	57.2	40.9	25.5
120°	168.5	158.3	146.1	132.8	118.5	101.1	82.7	66.4	51.1	35.8	22.5
122.5°	154.2	145.0	133.8	121.6	106.2	89.9	74.6	60.3	46.0	31.7	18.4
125°	141.0	131.8	121.6	109.3	95.0	80.7	67.4	54.1	39.8	27.6	15.3
127.5°	127.7	118.5	108.3	97.0	85.8	72.5	60.3	48.0	35.8	24.5	13.3
130°	114.4	106.2	97.0	87.8	76.6	64.4	54.1	41.9	30.6	19.4	11.2
132.5°	101.1	95.0	86.8	77.6	67.4	58.2	47.0	36.8	26.6	17.4	10.2
135°	89.9	83.8	76.6	68.4	60.3	51.1	40.9	31.7	22.5	14.3	8.2
137.5°	79.7	74.6	67.4	60.3	53.1	43.9	35.8	26.6	18.4	12.3	6.1
140°	70.5	65.4	59.2	52.1	46.0	37.8	29.6	21.5	16.3	10.2	5.1
142.5°	61.3	56.2	51.1	44.9	38.8	31.7	24.5	18.4	13.3	8.2	5.1
145°	52.1	48.0	42.9	37.8	31.7	25.5	20.4	15.3	10.2	6.1	4.1
147.5°	42.9	39.8	34.7	30.6	25.5	20.4	16.3	12.3	8.2	5.1	3.1
150°	34.7	31.7	27.6	23.5	20.4	16.3	13.3	9.2	6.1	5.1	3.1
152.5°	26.6	24.5	21.5	19.4	16.3	12.3	9.2	7.2	5.1	4.1	2.0
155°	21.5	19.4	17.4	14.3	12.3	9.2	7.2	5.1	4.1	3.1	2.0
157.5°	15.3	14.3	12.3	10.2	8.2	6.1	5.1	5.1	3.1	2.0	1.0
160°	10.2	9.2	8.2	6.1	5.1	5.1	4.1	3.1	2.0	2.0	1.0
162.5°	6.1	5.1	5.1	5.1	4.1	4.1	3.1	2.0	2.0	1.0	1.0
165°	4.1	4.1	4.1	3.1	3.1	3.1	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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	969.3	966.3	970.4	977.5	978.5	977.5	975.5	978.5	982.6	981.6	974.5
5°	967.3	963.2	967.3	974.5	974.5	973.4	972.4	975.5	979.6	978.5	972.4
7.5°	961.2	957.1	961.2	967.3	968.3	966.3	966.3	969.3	973.4	972.4	967.3
10°	953.0	948.9	951.0	958.1	960.2	958.1	958.1	961.2	966.3	965.3	959.1
12.5°	940.7	937.7	939.7	945.9	947.9	946.9	945.9	949.9	955.0	955.0	948.9
15°	927.5	923.4	925.4	932.6	933.6	931.6	932.6	935.6	941.8	941.8	936.7
17.5°	912.1	907.0	910.1	915.2	916.2	916.2	916.2	920.3	927.5	926.4	922.4
20°	894.8	887.6	889.7	894.8	896.8	896.8	896.8	904.0	909.1	909.1	905.0
22.5°	874.4	869.2	869.2	874.4	877.4	876.4	876.4	882.5	889.7	888.7	888.7
25°	850.9	846.8	844.7	850.9	851.9	852.9	854.9	861.1	869.2	869.2	870.3
27.5°	826.3	822.3	821.2	826.3	827.4	828.4	830.4	837.6	845.8	846.8	848.8
30°	802.9	796.7	794.7	798.8	800.8	801.8	801.8	813.1	820.2	823.3	827.4
32.5°	775.3	769.1	764.0	771.2	772.2	774.3	775.3	786.5	794.7	799.8	805.9
35°	747.7	737.5	735.4	740.5	742.6	743.6	745.7	757.9	769.1	773.2	781.4
37.5°	717.1	709.9	703.8	708.9	710.9	711.9	718.1	729.3	740.5	746.7	754.8
40°	688.5	679.3	674.2	677.2	679.3	680.3	687.4	699.7	713.0	720.1	730.3
42.5°	656.8	644.5	640.4	643.5	644.5	647.6	653.7	670.1	683.3	693.6	701.7
45°	625.1	615.9	606.7	609.8	610.8	612.9	622.1	639.4	653.7	666.0	675.2
47.5°	592.4	581.2	572.0	574.1	578.1	579.2	589.4	609.8	623.1	636.4	648.6
50°	559.8	544.4	537.3	537.3	539.3	544.4	557.7	578.1	592.4	607.8	621.0
52.5°	526.0	511.7	503.6	504.6	506.6	512.8	525.0	545.5	561.8	578.1	594.5
55°	492.3	477.0	468.8	466.8	468.8	477.0	491.3	512.8	529.1	548.5	565.9
57.5°	458.6	440.2	433.1	430.0	432.1	442.3	456.6	479.1	499.5	517.9	538.3
60°	421.9	407.6	395.3	388.1	393.3	406.5	421.9	445.3	466.8	487.2	509.7
62.5°	390.2	371.8	358.5	351.4	356.5	367.7	389.2	411.6	435.1	458.6	481.1
65°	354.4	336.1	320.7	313.6	318.7	332.0	353.4	377.9	403.5	427.0	453.5
67.5°	319.7	300.3	281.9	274.8	280.9	295.2	318.7	346.3	373.8	398.4	427.0
70°	286.0	264.6	245.1	240.0	244.1	263.5	286.0	313.6	342.2	370.8	400.4
72.5°	255.4	228.8	208.4	202.2	207.4	228.8	254.3	282.9	313.6	344.2	375.9
75°	219.6	195.1	172.6	165.5	171.6	191.0	222.7	253.3	286.0	318.7	348.3
77.5°	191.0	162.4	138.9	127.7	137.9	162.4	193.1	225.7	259.4	293.2	326.9
80°	161.4	131.8	106.2	94.0	105.2	131.8	162.4	198.2	236.0	269.7	300.3
82.5°	134.8	103.2	76.6	63.3	75.6	105.2	138.9	174.7	211.4	245.1	280.9
85°	110.3	77.6	50.1	35.8	53.1	79.7	115.4	152.2	190.0	224.7	259.4
87.5°	89.9	58.2	30.6	15.3	32.7	62.3	96.0	132.8	170.6	205.3	238.0
90°	73.5	41.9	16.3	2.0	19.4	47.0	79.7	115.4	151.2	186.9	219.6
92.5°	60.3	31.7	9.2	1.0	12.3	37.8	68.4	102.1	136.9	171.6	203.3
95°	50.1	24.5	6.1	1.0	9.2	29.6	58.2	90.9	123.6	157.3	189.0
97.5°	42.9	20.4	5.1	1.0	7.2	25.5	50.1	80.7	112.4	144.0	174.7
100°	36.8	16.3	4.1	1.0	6.1	21.5	43.9	71.5	101.1	131.8	161.4
102.5°	31.7	13.3	3.1	1.0	5.1	18.4	38.8	64.4	90.9	120.5	149.1
105°	27.6	11.2	3.1	1.0	4.1	16.3	34.7	57.2	83.8	110.3	137.9
107.5°	23.5	9.2	2.0	1.0	3.1	13.3	30.6	52.1	75.6	101.1	126.7
110°	20.4	8.2	2.0	1.0	3.1	12.3	26.6	47.0	68.4	91.9	116.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	17.4	6.1	2.0	1.0	2.0	10.2	23.5	41.9	62.3	83.8	107.3
115°	15.3	5.1	1.0	1.0	2.0	9.2	21.5	37.8	56.2	76.6	98.1
117.5°	12.3	4.1	1.0	1.0	1.0	7.2	18.4	33.7	51.1	70.5	89.9
120°	10.2	4.1	1.0	1.0	1.0	6.1	16.3	29.6	46.0	63.3	81.7
122.5°	9.2	3.1	1.0	1.0	1.0	5.1	14.3	26.6	40.9	57.2	74.6
125°	8.2	3.1	1.0	1.0	1.0	4.1	12.3	23.5	36.8	51.1	67.4
127.5°	6.1	3.1	1.0	1.0	1.0	3.1	11.2	20.4	32.7	46.0	60.3
130°	5.1	2.0	1.0	1.0	1.0	3.1	9.2	18.4	28.6	40.9	54.1
132.5°	4.1	2.0	1.0	1.0	1.0	2.0	7.2	14.3	24.5	35.8	48.0
135°	4.1	2.0	1.0	1.0	1.0	2.0	5.1	12.3	20.4	30.6	40.9
137.5°	4.1	1.0	1.0	1.0	1.0	2.0	4.1	9.2	16.3	24.5	33.7
140°	3.1	1.0	1.0	1.0	1.0	1.0	3.1	7.2	13.3	20.4	28.6
142.5°	3.1	1.0	1.0	1.0	1.0	1.0	3.1	5.1	10.2	16.3	22.5
145°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	4.1	8.2	12.3	18.4
147.5°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.1	6.1	10.2	14.3
150°	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.1	4.1	7.2	11.2
152.5°	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.1	5.1	7.2
155°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.1	4.1	5.1
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.1	4.1
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.1
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	971.4	964.2	966.3	965.3	967.3	970.4	970.4	969.3	969.3	967.3	965.3
5°	969.3	962.2	965.3	964.2	966.3	969.3	969.3	968.3	968.3	965.3	964.2
7.5°	963.2	958.1	960.2	960.2	962.2	965.3	965.3	964.2	964.2	961.2	960.2
10°	957.1	951.0	954.0	954.0	956.1	960.2	960.2	959.1	959.1	956.1	955.0
12.5°	946.9	940.7	945.9	946.9	948.9	953.0	952.0	952.0	952.0	948.9	947.9
15°	934.6	930.5	935.6	936.7	939.7	944.8	944.8	944.8	944.8	941.8	940.7
17.5°	921.3	918.3	923.4	925.4	929.5	934.6	934.6	935.6	936.7	934.6	933.6
20°	906.0	904.0	909.1	913.2	919.3	924.4	926.4	927.5	929.5	927.5	926.4
22.5°	888.7	888.7	895.8	899.9	907.0	912.1	915.2	918.3	920.3	918.3	917.3
25°	869.2	872.3	879.5	886.6	894.8	899.9	903.0	907.0	909.1	908.1	907.0
27.5°	850.9	854.9	864.1	871.3	878.4	886.6	889.7	894.8	896.8	896.8	895.8
30°	829.4	835.5	845.8	853.9	863.1	871.3	875.4	880.5	883.5	881.5	882.5
32.5°	809.0	819.2	827.4	836.6	846.8	854.9	860.1	866.2	869.2	868.2	869.2
35°	786.5	796.7	808.0	817.2	829.4	837.6	844.7	849.8	853.9	852.9	852.9
37.5°	762.0	775.3	786.5	798.8	810.0	819.2	826.3	832.5	836.6	836.6	836.6
40°	738.5	752.8	764.0	778.3	792.6	800.8	809.0	815.1	819.2	820.2	821.2
42.5°	713.0	728.3	741.6	756.9	771.2	781.4	790.6	797.7	801.8	803.9	802.9
45°	689.5	703.8	719.1	736.5	749.7	760.0	771.2	779.4	783.4	784.5	785.5
47.5°	662.9	679.3	696.6	714.0	727.3	740.5	750.8	758.9	763.0	766.1	766.1
50°	637.4	654.7	674.2	692.5	706.8	720.1	730.3	739.5	744.6	746.7	747.7
52.5°	613.9	630.2	650.7	669.0	683.3	696.6	709.9	720.1	725.2	727.3	727.3
55°	585.3	605.7	628.2	645.6	660.9	676.2	689.5	699.7	704.8	707.9	709.9
57.5°	558.7	580.2	603.7	622.1	640.4	654.7	667.0	680.3	684.4	688.5	689.5
60°	533.2	554.6	577.1	597.5	615.9	631.3	645.6	656.8	663.9	666.0	668.0
62.5°	506.6	529.1	552.6	573.0	592.4	610.8	624.1	634.3	642.5	645.6	647.6
65°	481.1	504.6	528.1	549.5	570.0	588.4	601.6	611.8	620.0	625.1	626.1
67.5°	453.5	479.1	503.6	526.0	546.5	565.9	579.2	589.4	597.5	603.7	604.7
70°	428.0	454.5	479.1	503.6	524.0	543.4	557.7	567.9	577.1	581.2	583.2
72.5°	403.5	431.0	456.6	481.1	501.5	520.9	536.3	546.5	555.7	560.8	561.8
75°	380.0	407.6	435.1	458.6	480.1	499.5	514.8	526.0	534.2	539.3	541.4
77.5°	356.5	385.1	412.7	436.2	458.6	478.0	491.3	504.6	512.8	518.9	518.9
80°	333.0	362.6	391.2	414.7	437.2	454.5	469.9	483.1	491.3	497.4	497.4
82.5°	312.6	341.2	368.7	392.2	414.7	434.1	449.4	461.7	470.9	475.0	476.0
85°	289.1	320.7	346.3	371.8	393.3	411.6	427.0	440.2	448.4	452.5	454.5
87.5°	269.7	300.3	327.9	350.4	371.8	390.2	407.6	418.8	427.0	432.1	434.1
90°	251.3	280.9	308.5	330.9	353.4	370.8	387.1	398.4	407.6	411.6	413.7
92.5°	234.9	264.6	291.1	313.6	335.0	354.4	369.8	381.0	389.2	393.3	396.3
95°	219.6	248.2	273.7	298.3	318.7	336.1	352.4	363.6	372.8	375.9	379.0
97.5°	204.3	231.9	257.4	280.9	302.3	318.7	334.0	345.2	352.4	357.5	360.6
100°	191.0	217.6	242.1	264.6	285.0	300.3	316.6	326.9	334.0	338.1	342.2
102.5°	176.7	203.3	226.8	248.2	269.7	284.0	299.3	309.5	315.6	322.8	322.8
105°	164.5	189.0	212.5	232.9	251.3	268.6	281.9	292.1	299.3	304.4	304.4
107.5°	151.2	175.7	198.2	219.6	237.0	253.3	265.6	274.8	282.9	286.0	289.1
110°	141.0	162.4	184.9	205.3	221.7	237.0	249.2	259.4	266.6	269.7	271.7



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	128.7	151.2	171.6	191.0	207.4	221.7	233.9	242.1	249.2	253.3	254.3
115°	118.5	139.9	158.3	176.7	194.1	206.3	217.6	225.7	232.9	236.0	238.0
117.5°	109.3	128.7	147.1	162.4	178.8	192.0	203.3	210.4	216.5	220.6	222.7
120°	100.1	118.5	134.8	150.2	165.5	177.7	187.9	195.1	202.2	205.3	205.3
122.5°	90.9	108.3	123.6	137.9	152.2	163.4	174.7	180.8	186.9	190.0	190.0
125°	82.7	99.1	113.4	126.7	139.9	150.2	159.3	166.5	172.6	174.7	174.7
127.5°	74.6	89.9	103.2	115.4	126.7	136.9	146.1	153.2	158.3	160.4	160.4
130°	67.4	80.7	93.0	105.2	116.4	124.6	133.8	139.9	143.0	146.1	147.1
132.5°	60.3	72.5	83.8	94.0	105.2	113.4	120.5	126.7	129.7	132.8	133.8
135°	53.1	64.4	74.6	84.8	94.0	102.1	108.3	113.4	117.5	119.5	120.5
137.5°	44.9	57.2	66.4	74.6	84.8	90.9	98.1	101.1	105.2	107.3	107.3
140°	37.8	47.0	57.2	65.4	73.5	79.7	85.8	90.9	94.0	95.0	95.0
142.5°	30.6	38.8	47.0	57.2	64.4	69.5	75.6	79.7	81.7	82.7	83.8
145°	24.5	30.6	37.8	47.0	55.2	61.3	64.4	68.4	70.5	71.5	72.5
147.5°	18.4	24.5	30.6	36.8	44.9	51.1	54.1	58.2	60.3	61.3	61.3
150°	14.3	18.4	22.5	28.6	34.7	41.9	46.0	49.0	50.1	51.1	51.1
152.5°	10.2	14.3	17.4	21.5	25.5	31.7	37.8	39.8	40.9	41.9	41.9
155°	7.2	10.2	12.3	15.3	18.4	23.5	28.6	31.7	32.7	33.7	33.7
157.5°	5.1	7.2	8.2	11.2	13.3	15.3	19.4	24.5	25.5	25.5	25.5
160°	3.1	4.1	5.1	7.2	8.2	10.2	12.3	15.3	18.4	18.4	18.4
162.5°	2.0	3.1	3.1	4.1	4.1	6.1	7.2	8.2	11.2	12.3	12.3
165°	1.0	2.0	2.0	2.0	2.0	2.0	3.1	3.1	5.1	6.1	6.1
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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	966.3	968.3	967.3	967.3	967.3	969.3	967.3	958.1	960.2	962.2	964.2
5°	965.3	966.3	966.3	965.3	965.3	967.3	965.3	956.1	958.1	960.2	961.2
7.5°	961.2	962.2	962.2	962.2	961.2	963.2	960.2	952.0	952.0	954.0	955.0
10°	956.1	958.1	957.1	956.1	956.1	956.1	954.0	944.8	944.8	945.9	946.9
12.5°	949.9	949.9	949.9	948.9	947.9	947.9	945.9	936.7	935.6	937.7	936.7
15°	941.8	943.8	941.8	940.7	938.7	938.7	935.6	926.4	924.4	925.4	924.4
17.5°	934.6	935.6	933.6	931.6	929.5	928.5	925.4	915.2	912.1	913.2	911.1
20°	927.5	927.5	925.4	923.4	920.3	917.3	913.2	903.0	897.8	897.8	893.8
22.5°	918.3	918.3	916.2	913.2	910.1	906.0	901.9	891.7	883.5	881.5	878.4
25°	908.1	907.0	906.0	903.0	896.8	892.7	888.7	877.4	868.2	864.1	859.0
27.5°	895.8	895.8	892.7	889.7	883.5	878.4	873.3	863.1	850.9	845.8	838.6
30°	882.5	882.5	879.5	875.4	869.2	863.1	857.0	844.7	832.5	825.3	817.2
32.5°	869.2	868.2	865.2	861.1	854.9	845.8	840.6	828.4	814.1	805.9	794.7
35°	852.9	851.9	848.8	843.7	835.5	828.4	820.2	809.0	792.6	782.4	770.2
37.5°	836.6	835.5	833.5	826.3	818.2	810.0	799.8	788.6	773.2	760.0	747.7
40°	820.2	819.2	815.1	810.0	799.8	789.6	779.4	768.1	751.8	736.5	723.2
42.5°	802.9	801.8	796.7	790.6	779.4	769.1	756.9	744.6	728.3	709.9	696.6
45°	785.5	783.4	778.3	771.2	758.9	747.7	735.4	721.1	704.8	687.4	670.1
47.5°	767.1	764.0	758.9	748.7	738.5	726.2	711.9	696.6	680.3	660.9	642.5
50°	746.7	744.6	738.5	729.3	717.1	704.8	688.5	673.1	653.7	635.3	612.9
52.5°	727.3	723.2	718.1	707.9	695.6	682.3	665.0	646.6	627.2	609.8	586.3
55°	706.8	704.8	697.6	689.5	674.2	658.8	642.5	623.1	601.6	581.2	558.7
57.5°	687.4	683.3	677.2	666.0	652.7	637.4	620.0	599.6	576.1	554.6	530.1
60°	668.0	661.9	654.7	644.5	630.2	613.9	595.5	574.1	550.6	527.1	501.5
62.5°	646.6	641.5	633.3	623.1	608.8	591.4	572.0	549.5	527.1	502.5	475.0
65°	625.1	620.0	611.8	601.6	587.3	567.9	547.5	525.0	499.5	476.0	446.4
67.5°	603.7	598.6	589.4	578.1	563.8	545.5	524.0	500.5	475.0	449.4	418.8
70°	582.2	576.1	567.9	555.7	541.4	522.0	500.5	476.0	450.5	422.9	392.2
72.5°	560.8	555.7	545.5	534.2	518.9	499.5	478.0	453.5	427.0	398.4	367.7
75°	539.3	533.2	526.0	512.8	496.4	478.0	455.6	431.0	402.4	374.9	343.2
77.5°	517.9	512.8	503.6	490.3	475.0	455.6	433.1	408.6	380.0	351.4	317.7
80°	496.4	490.3	483.1	470.9	453.5	434.1	410.6	386.1	357.5	327.9	294.2
82.5°	475.0	468.8	460.7	448.4	432.1	412.7	390.2	363.6	335.0	304.4	272.7
85°	453.5	448.4	439.2	427.0	409.6	390.2	367.7	344.2	313.6	282.9	251.3
87.5°	432.1	427.0	417.8	405.5	389.2	369.8	347.3	322.8	293.2	264.6	229.8
90°	411.6	407.6	398.4	386.1	369.8	350.4	329.9	303.4	274.8	246.2	213.5
92.5°	393.3	389.2	381.0	368.7	354.4	333.0	312.6	287.0	258.4	228.8	197.1
95°	376.9	371.8	363.6	352.4	335.0	316.6	296.2	270.7	243.1	213.5	182.8
97.5°	358.5	353.4	345.2	333.0	318.7	299.3	278.9	254.3	226.8	199.2	168.5
100°	340.1	335.0	325.8	315.6	301.3	281.9	262.5	238.0	212.5	185.9	156.3
102.5°	321.8	316.6	308.5	298.3	284.0	266.6	247.2	223.7	198.2	171.6	144.0
105°	304.4	299.3	291.1	280.9	267.6	250.3	229.8	209.4	184.9	159.3	132.8
107.5°	287.0	281.9	274.8	264.6	251.3	234.9	215.5	194.1	171.6	147.1	121.6
110°	269.7	265.6	257.4	248.2	234.9	218.6	201.2	180.8	158.3	135.9	111.3





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	253.3	249.2	241.1	230.8	219.6	204.3	186.9	167.5	146.1	124.6	101.1
115°	237.0	231.9	224.7	215.5	204.3	190.0	173.6	156.3	134.8	114.4	93.0
117.5°	220.6	216.5	209.4	200.2	190.0	175.7	160.4	144.0	123.6	104.2	84.8
120°	204.3	201.2	194.1	185.9	175.7	162.4	148.1	131.8	113.4	95.0	76.6
122.5°	189.0	185.9	178.8	171.6	161.4	149.1	135.9	120.5	104.2	86.8	70.5
125°	174.7	170.6	164.5	157.3	148.1	136.9	123.6	109.3	94.0	78.7	63.3
127.5°	159.3	156.3	152.2	144.0	134.8	124.6	112.4	100.1	85.8	71.5	57.2
130°	147.1	143.0	137.9	131.8	123.6	113.4	102.1	89.9	77.6	64.4	50.1
132.5°	132.8	128.7	124.6	118.5	111.3	102.1	91.9	80.7	69.5	57.2	44.9
135°	119.5	116.4	112.4	106.2	99.1	91.9	81.7	71.5	61.3	50.1	39.8
137.5°	107.3	104.2	100.1	96.0	88.9	81.7	72.5	63.3	54.1	43.9	34.7
140°	95.0	93.0	88.9	84.8	78.7	71.5	63.3	55.2	47.0	37.8	29.6
142.5°	82.7	80.7	77.6	73.5	68.4	62.3	55.2	48.0	39.8	32.7	25.5
145°	71.5	70.5	67.4	63.3	59.2	53.1	47.0	40.9	33.7	27.6	20.4
147.5°	60.3	59.2	57.2	54.1	50.1	44.9	39.8	33.7	28.6	22.5	16.3
150°	50.1	49.0	48.0	43.9	41.9	36.8	32.7	27.6	23.5	17.4	13.3
152.5°	40.9	40.9	38.8	35.8	33.7	29.6	26.6	22.5	18.4	14.3	10.2
155°	32.7	31.7	30.6	28.6	26.6	23.5	20.4	17.4	14.3	10.2	7.2
157.5°	25.5	24.5	23.5	21.5	19.4	18.4	15.3	12.3	9.2	7.2	5.1
160°	18.4	17.4	16.3	15.3	14.3	12.3	10.2	8.2	6.1	4.1	3.1
162.5°	12.3	11.2	11.2	10.2	9.2	7.2	6.1	5.1	4.1	3.1	2.0
165°	6.1	6.1	5.1	5.1	4.1	3.1	3.1	3.1	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-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	968.3	968.3	968.3	968.3	968.3	968.3	968.3
2.5°	963.2	963.2	967.3	966.3	963.2	969.3	976.5
5°	960.2	960.2	963.2	963.2	960.2	966.3	972.4
7.5°	955.0	954.0	957.1	957.1	953.0	958.1	965.3
10°	945.9	944.8	947.9	947.9	943.8	948.9	955.0
12.5°	935.6	933.6	936.7	935.6	931.6	936.7	942.8
15°	922.4	921.3	923.4	921.3	917.3	922.4	928.5
17.5°	909.1	906.0	907.0	907.0	899.9	905.0	910.1
20°	891.7	887.6	888.7	887.6	882.5	885.6	891.7
22.5°	874.4	868.2	868.2	867.2	861.1	865.2	870.3
25°	852.9	845.8	845.8	844.7	837.6	840.6	845.8
27.5°	831.5	824.3	821.2	820.2	813.1	813.1	820.2
30°	809.0	798.8	796.7	793.7	786.5	786.5	792.6
32.5°	787.5	773.2	769.1	765.1	757.9	756.9	764.0
35°	758.9	747.7	740.5	736.5	728.3	726.2	732.4
37.5°	735.4	721.1	710.9	705.8	697.6	694.6	702.8
40°	709.9	694.6	681.3	678.2	666.0	661.9	669.0
42.5°	681.3	665.0	651.7	645.6	636.4	632.3	633.3
45°	652.7	635.3	621.0	612.9	603.7	596.5	600.6
47.5°	623.1	607.8	590.4	578.1	566.9	561.8	563.8
50°	593.5	575.1	558.7	545.5	532.2	526.0	530.1
52.5°	563.8	544.4	526.0	511.7	496.4	490.3	491.3
55°	535.2	514.8	493.4	478.0	463.7	454.5	452.5
57.5°	506.6	484.2	461.7	444.3	425.9	417.8	414.7
60°	476.0	452.5	429.0	408.6	389.2	380.0	375.9
62.5°	447.4	421.9	395.3	373.8	354.4	342.2	339.1
65°	419.8	390.2	363.6	339.1	317.7	304.4	300.3
67.5°	390.2	359.5	330.9	304.4	284.0	266.6	264.6
70°	362.6	329.9	298.3	270.7	248.2	230.8	222.7
72.5°	335.0	301.3	268.6	239.0	210.4	194.1	187.9
75°	308.5	273.7	239.0	208.4	176.7	157.3	151.2
77.5°	284.0	248.2	211.4	177.7	148.1	123.6	115.4
80°	260.5	223.7	184.9	150.2	118.5	91.9	82.7
82.5°	236.0	201.2	161.4	124.6	91.9	64.4	53.1
85°	214.5	179.8	139.9	103.2	70.5	40.9	28.6
87.5°	197.1	159.3	123.6	86.8	53.1	23.5	8.2
90°	179.8	143.0	107.3	71.5	39.8	13.3	1.0
92.5°	164.5	129.7	94.0	61.3	30.6	9.2	1.0
95°	150.2	116.4	82.7	51.1	24.5	6.1	1.0
97.5°	136.9	105.2	73.5	43.9	20.4	5.1	1.0
100°	125.6	95.0	65.4	38.8	17.4	4.1	1.0
102.5°	114.4	85.8	58.2	33.7	15.3	3.1	1.0
105°	105.2	77.6	52.1	30.6	13.3	3.1	1.0
107.5°	96.0	70.5	47.0	26.6	11.2	2.0	1.0
110°	86.8	64.4	41.9	23.5	10.2	2.0	1.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-47SL-LW-UNV-L940-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	79.7	58.2	37.8	21.5	8.2	2.0	1.0
115°	72.5	52.1	33.7	18.4	7.2	1.0	1.0
117.5°	65.4	47.0	29.6	16.3	6.1	1.0	1.0
120°	59.2	41.9	26.6	14.3	5.1	1.0	1.0
122.5°	53.1	37.8	23.5	12.3	4.1	1.0	1.0
125°	48.0	33.7	20.4	10.2	3.1	1.0	1.0
127.5°	42.9	29.6	18.4	9.2	3.1	1.0	1.0
130°	37.8	26.6	15.3	7.2	2.0	1.0	1.0
132.5°	33.7	22.5	13.3	6.1	2.0	1.0	1.0
135°	29.6	19.4	11.2	4.1	2.0	1.0	1.0
137.5°	25.5	16.3	9.2	3.1	1.0	1.0	1.0
140°	21.5	14.3	7.2	3.1	1.0	1.0	1.0
142.5°	18.4	11.2	5.1	2.0	1.0	1.0	1.0
145°	14.3	9.2	4.1	2.0	1.0	1.0	1.0
147.5°	11.2	7.2	3.1	2.0	1.0	1.0	1.0
150°	8.2	5.1	3.1	1.0	1.0	1.0	1.0
152.5°	6.1	4.1	2.0	1.0	1.0	1.0	1.0
155°	4.1	3.1	2.0	1.0	1.0	1.0	1.0
157.5°	3.1	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)