

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-LD5-56SL-LW-UNV-L930-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-LD5-56SL-LW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
WIDE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

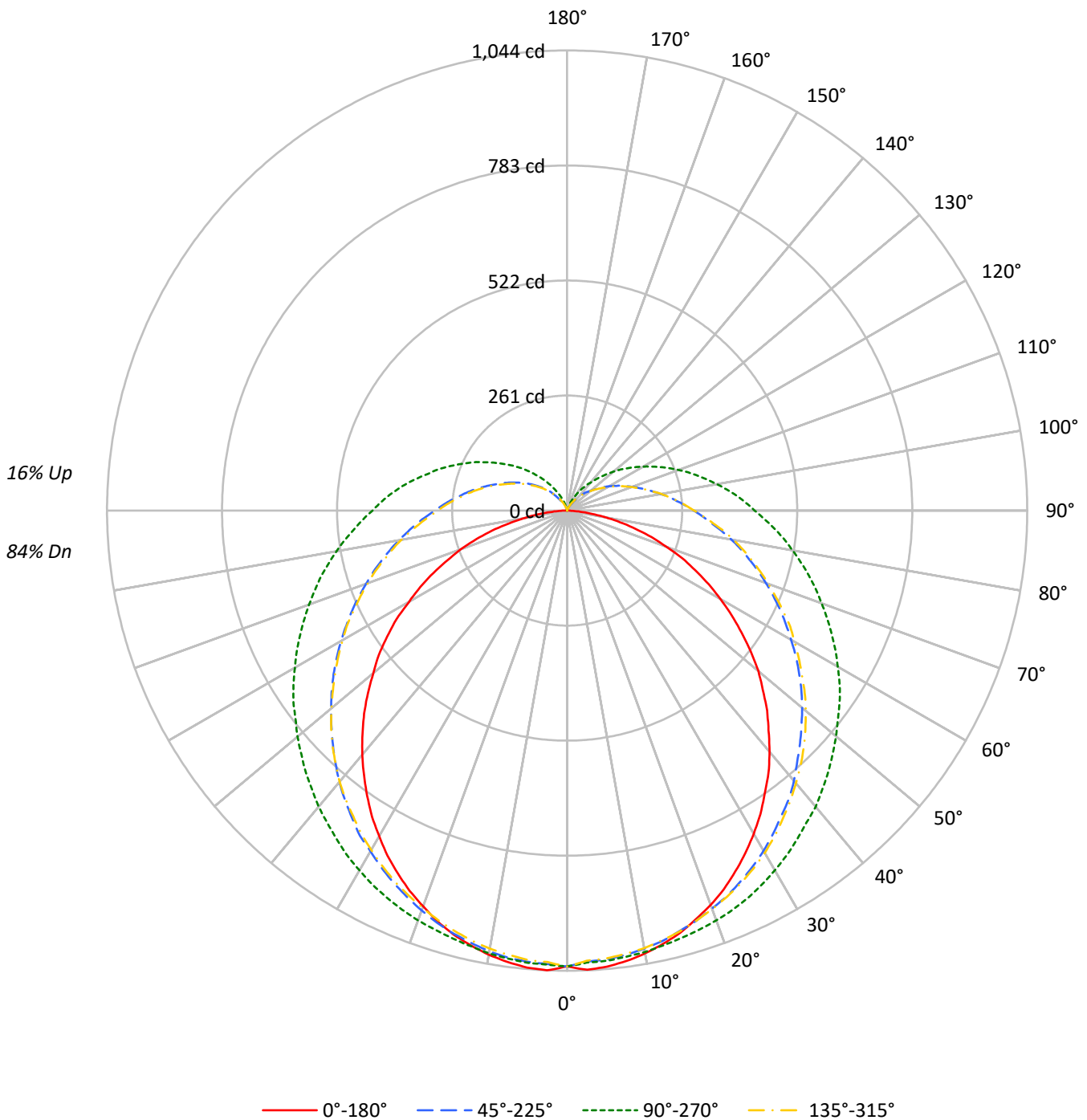
Lumens per Lamp: N/A
Luminaire Lumens: 4493.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 52
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



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Luminous Intensity Polar Plot





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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°	8357	8357	8357	8357
5°	8401	8053	8419	8088
10°	8324	7825	8350	7850
15°	8227	7629	8263	7637
20°	8097	7486	8125	7486
25°	7939	7359	7986	7351
30°	7759	7228	7819	7228
35°	7551	7107	7635	7116
40°	7345	7036	7435	7036
45°	7108	6961	7218	6971
50°	6863	6917	6955	6936
55°	6518	6924	6723	6954
60°	6154	6945	6355	6987
65°	5747	7015	6002	7084
70°	5174	7144	5579	7245
75°	4516	7377	4941	7519
80°	3495	7724	3969	7902
85°	2084	8279	2610	8507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.0	2.2
10°-20°	281.6	6.3
20°-30°	431.7	9.6
30°-40°	532.6	11.9
40°-50°	577.8	12.9
50°-60°	569.5	12.7
60°-70°	514.9	11.5
70°-80°	428.9	9.5
80°-90°	332.2	7.4
90°-100°	252.0	5.6
100°-110°	186.5	4.2
110°-120°	129.7	2.9
120°-130°	82.8	1.8
130°-140°	46.4	1.0
140°-150°	21.2	0.5
150°-160°	6.6	0.1
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	811.2	18.1
0°-40°	1343.8	29.9
0°-60°	2491.0	55.4
0°-90°	3767.1	83.8
90°-120°	568.1	12.6
90°-150°	718.5	16.0
90°-180°	726.0	16.2
0°-180°	4493.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1034	1034	1034	1034	1034	
5°	1038	1025	1041	1030	1038	99
15°	992	1004	996	1005	992	279
25°	903	970	909	969	903	416
35°	782	910	791	911	782	490
45°	641	838	651	839	641	494
55°	483	755	498	758	483	433
65°	321	662	335	669	321	318
75°	162	567	177	578	162	171
85°	30	472	38	485	30	37
90°	1	425	2	442	1	2
95°	1	386	1	405	1	1
105°	1	306	1	325	1	1
115°	1	233	1	254	1	1
125°	1	168	1	186	1	1
135°	1	109	1	129	1	1
145°	1	63	1	78	1	1
155°	1	26	1	36	1	1
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1042.9	1042.9	1041.8	1039.6	1040.7	1044.0	1041.8	1036.3	1033.1	1024.3	1026.5
5°	1038.5	1038.5	1037.4	1035.2	1036.3	1040.7	1038.5	1034.2	1029.8	1022.2	1025.4
7.5°	1030.9	1030.9	1029.8	1027.6	1029.8	1034.2	1032.0	1027.6	1024.3	1016.7	1020.0
10°	1020.0	1021.1	1020.0	1016.7	1021.1	1025.4	1024.3	1018.9	1015.6	1009.1	1012.3
12.5°	1006.9	1008.0	1006.9	1005.8	1008.0	1014.5	1012.3	1008.0	1005.8	1000.3	1003.6
15°	991.6	992.7	990.5	990.5	992.7	999.2	999.2	994.9	992.7	987.2	993.8
17.5°	972.0	973.1	972.0	972.0	974.2	980.7	981.8	979.6	977.4	975.2	981.8
20°	952.3	951.2	951.2	950.2	954.5	964.3	963.2	963.2	961.1	961.1	968.7
22.5°	929.4	929.4	928.3	928.3	933.8	942.5	942.5	944.7	942.5	946.9	953.4
25°	903.3	904.3	903.3	905.4	909.8	919.6	920.7	924.0	925.1	929.4	937.1
27.5°	876.0	877.1	876.0	878.2	885.8	893.4	898.9	903.3	904.3	910.9	920.7
30°	846.5	846.5	847.6	849.8	858.5	870.5	874.9	880.3	880.3	891.3	901.1
32.5°	816.0	816.0	816.0	820.3	830.2	844.3	849.8	856.3	858.5	869.4	880.3
35°	782.2	783.3	783.3	786.5	799.6	813.8	821.4	829.1	833.4	846.5	857.4
37.5°	750.5	752.7	749.4	753.8	772.3	784.3	793.1	800.7	808.3	825.8	834.5
40°	714.5	716.7	715.6	724.3	739.6	754.9	764.7	772.3	783.3	800.7	810.5
42.5°	676.3	678.5	680.7	690.5	706.9	722.2	734.2	744.0	757.1	772.3	788.7
45°	641.4	641.4	644.7	656.7	674.2	690.5	704.7	715.6	730.9	747.3	763.6
47.5°	602.2	603.3	607.6	621.8	640.3	660.0	673.1	687.3	703.6	721.1	739.6
50°	566.2	566.2	572.7	588.0	605.4	627.3	641.4	657.8	675.3	696.0	714.5
52.5°	524.7	526.9	536.7	550.9	573.8	593.4	609.8	627.3	648.0	669.8	690.5
55°	483.3	487.6	495.3	514.9	538.9	557.4	577.1	598.9	618.5	642.5	666.5
57.5°	442.9	446.2	458.2	477.8	502.9	525.8	546.5	567.3	591.3	615.3	640.3
60°	401.4	405.8	420.0	439.6	466.9	490.9	514.9	536.7	561.8	586.9	613.1
62.5°	362.2	365.4	381.8	404.7	432.0	458.2	482.2	508.4	535.6	559.6	585.8
65°	320.7	326.2	344.7	365.4	397.1	423.3	450.5	478.9	507.3	533.4	558.5
67.5°	282.5	285.8	305.4	329.4	361.1	390.5	418.9	449.4	478.9	506.2	531.3
70°	237.8	248.7	268.4	293.4	327.3	357.8	388.4	420.0	451.6	480.0	504.0
72.5°	200.7	209.4	231.3	258.5	291.3	327.3	358.9	392.7	424.4	453.8	478.9
75°	161.5	170.2	195.3	225.8	259.6	297.8	330.5	365.4	398.2	427.6	453.8
77.5°	123.3	134.2	161.5	193.1	230.2	269.4	303.3	338.2	372.0	403.6	429.8
80°	88.4	100.4	129.8	165.8	201.8	241.1	278.2	313.1	346.9	378.5	405.8
82.5°	56.7	69.8	101.5	137.5	175.6	214.9	253.1	288.0	321.8	353.4	381.8
85°	30.5	44.7	77.5	113.5	151.6	190.9	229.1	266.2	298.9	328.4	358.9
87.5°	8.7	26.2	57.8	93.8	133.1	169.1	206.2	243.3	276.0	307.6	334.9
90°	1.1	15.3	43.6	77.5	115.6	150.5	187.6	222.5	255.3	286.9	314.2
92.5°	1.1	9.8	33.8	64.4	99.3	135.3	172.4	206.2	236.7	268.4	295.6
95°	1.1	7.6	27.3	54.5	87.3	121.1	156.0	188.7	220.4	249.8	277.1
97.5°	1.1	5.5	21.8	46.9	76.4	108.0	141.8	174.5	205.1	233.4	258.5
100°	1.1	4.4	17.5	40.4	66.5	97.1	127.6	159.3	188.7	216.0	242.2
102.5°	1.1	3.3	15.3	33.8	58.9	86.2	115.6	145.1	173.5	199.6	225.8
105°	1.1	3.3	13.1	29.5	52.4	77.5	104.7	133.1	159.3	184.4	208.4
107.5°	1.1	2.2	10.9	25.1	45.8	69.8	94.9	122.2	146.2	170.2	193.1
110°	1.1	2.2	8.7	22.9	40.4	62.2	86.2	111.3	134.2	157.1	178.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.1	2.2	7.6	19.6	34.9	55.6	77.5	100.4	122.2	145.1	164.7
115°	1.1	2.2	6.5	17.5	32.7	48.0	69.8	90.5	112.4	133.1	151.6
117.5°	1.1	2.2	5.5	14.2	28.4	43.6	61.1	81.8	101.5	121.1	138.5
120°	1.1	2.2	4.4	13.1	25.1	39.3	54.5	73.1	91.6	110.2	128.7
122.5°	1.1	1.1	4.4	10.9	21.8	34.9	50.2	64.4	81.8	99.3	115.6
125°	1.1	1.1	4.4	9.8	18.5	31.6	44.7	57.8	73.1	88.4	102.5
127.5°	1.1	1.1	3.3	7.6	16.4	27.3	39.3	53.5	64.4	78.5	92.7
130°	1.1	1.1	3.3	6.5	14.2	22.9	34.9	46.9	60.0	69.8	81.8
132.5°	1.1	1.1	3.3	5.5	10.9	18.5	29.5	40.4	52.4	63.3	73.1
135°	1.1	1.1	2.2	4.4	8.7	15.3	24.0	33.8	45.8	56.7	66.5
137.5°	1.1	1.1	2.2	4.4	6.5	13.1	18.5	27.3	38.2	48.0	57.8
140°	1.1	1.1	2.2	3.3	5.5	9.8	15.3	21.8	30.5	39.3	50.2
142.5°	1.1	1.1	1.1	3.3	4.4	7.6	12.0	17.5	24.0	31.6	40.4
145°	1.1	1.1	1.1	3.3	4.4	5.5	9.8	14.2	18.5	24.0	31.6
147.5°	1.1	1.1	1.1	2.2	3.3	4.4	7.6	10.9	14.2	18.5	22.9
150°	1.1	1.1	1.1	2.2	3.3	4.4	5.5	7.6	10.9	15.3	18.5
152.5°	1.1	1.1	1.1	2.2	2.2	3.3	4.4	5.5	7.6	10.9	13.1
155°	1.1	1.1	1.1	1.1	2.2	3.3	4.4	4.4	5.5	7.6	9.8
157.5°	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	4.4	4.4	6.5
160°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	3.3	3.3	3.3
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	3.3	3.3
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2
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°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1026.5	1027.6	1030.9	1030.9	1028.7	1028.7	1027.6	1026.5	1027.6	1029.8	1029.8
5°	1024.3	1025.4	1028.7	1029.8	1027.6	1026.5	1026.5	1025.4	1026.5	1028.7	1028.7
7.5°	1020.0	1021.1	1024.3	1025.4	1023.2	1023.2	1022.2	1021.1	1023.2	1024.3	1024.3
10°	1013.4	1014.5	1018.9	1020.0	1018.9	1017.8	1017.8	1016.7	1017.8	1020.0	1020.0
12.5°	1004.7	1006.9	1012.3	1012.3	1012.3	1011.2	1011.2	1010.2	1011.2	1013.4	1012.3
15°	994.9	999.2	1003.6	1005.8	1005.8	1005.8	1004.7	1003.6	1005.8	1006.9	1005.8
17.5°	984.0	989.4	996.0	998.2	998.2	999.2	998.2	997.1	999.2	999.2	998.2
20°	973.1	978.5	985.1	987.2	989.4	990.5	990.5	989.4	990.5	991.6	990.5
22.5°	958.9	965.4	973.1	976.3	978.5	980.7	980.7	980.7	981.8	982.9	980.7
25°	943.6	951.2	960.0	963.2	967.6	968.7	969.8	969.8	970.9	972.0	968.7
27.5°	927.3	936.0	944.7	950.2	953.4	955.6	955.6	956.7	957.8	958.9	955.6
30°	907.6	920.7	928.3	932.7	937.1	940.3	941.4	942.5	943.6	944.7	941.4
32.5°	890.2	901.1	910.9	916.3	921.8	926.2	927.3	927.3	929.4	929.4	926.2
35°	869.4	882.5	892.3	897.8	904.3	907.6	909.8	909.8	912.0	912.0	908.7
37.5°	848.7	861.8	872.7	879.3	886.9	891.3	892.3	892.3	894.5	894.5	890.2
40°	826.9	841.1	853.1	860.7	867.3	872.7	873.8	877.1	877.1	876.0	871.6
42.5°	805.1	818.2	831.3	840.0	848.7	854.2	856.3	857.4	857.4	856.3	853.1
45°	781.1	796.3	808.3	819.3	828.0	833.4	836.7	837.8	837.8	835.6	832.3
47.5°	758.2	773.4	785.4	797.4	806.2	812.7	816.0	817.1	816.0	814.9	811.6
50°	734.2	751.6	763.6	775.6	784.3	789.8	795.3	796.3	795.3	794.2	787.6
52.5°	709.1	727.6	740.7	752.7	762.5	769.1	773.4	774.5	774.5	772.3	768.0
55°	684.0	700.3	716.7	729.8	740.7	747.3	752.7	754.9	752.7	750.5	745.1
57.5°	661.1	676.3	692.7	706.9	717.8	726.5	730.9	733.1	730.9	727.6	722.2
60°	633.8	650.2	668.7	681.8	693.8	702.5	704.7	709.1	706.9	703.6	698.2
62.5°	607.6	627.3	643.6	660.0	669.8	679.6	684.0	686.2	684.0	680.7	675.3
65°	580.3	602.2	618.5	634.9	645.8	655.6	661.1	662.2	660.0	656.7	651.3
67.5°	555.3	576.0	593.4	610.9	620.7	630.5	636.0	638.2	636.0	631.6	626.2
70°	530.2	550.9	571.6	584.7	596.7	607.6	610.9	614.2	612.0	607.6	601.1
72.5°	505.1	526.9	547.6	560.7	573.8	583.6	588.0	591.3	589.1	584.7	577.1
75°	478.9	501.8	522.5	536.7	549.8	559.6	564.0	567.3	565.1	560.7	552.0
77.5°	454.9	477.8	497.4	512.7	525.8	534.5	542.2	543.3	541.1	536.7	528.0
80°	429.8	452.7	473.4	488.7	501.8	510.5	516.0	519.3	517.1	512.7	504.0
82.5°	408.0	428.7	449.4	464.7	477.8	488.7	493.1	496.4	495.3	488.7	482.2
85°	384.0	408.0	424.4	440.7	453.8	464.7	468.0	472.4	471.3	465.8	457.1
87.5°	360.0	384.0	403.6	420.0	432.0	440.7	446.2	448.4	447.3	441.8	432.0
90°	340.4	362.2	381.8	399.3	409.1	418.9	424.4	425.4	425.4	418.9	411.3
92.5°	321.8	342.5	362.2	378.5	390.5	399.3	403.6	405.8	404.7	399.3	390.5
95°	301.1	324.0	342.5	358.9	370.9	379.6	384.0	386.2	385.1	379.6	370.9
97.5°	283.6	304.4	322.9	338.2	350.2	358.9	363.3	365.4	365.4	360.0	351.3
100°	266.2	286.9	304.4	319.6	330.5	339.3	343.6	344.7	343.6	339.3	330.5
102.5°	248.7	268.4	285.8	300.0	312.0	319.6	324.0	325.1	325.1	319.6	310.9
105°	231.3	250.9	267.3	282.5	292.4	300.0	303.3	306.5	305.4	301.1	292.4
107.5°	214.9	234.5	249.8	264.0	273.8	281.4	284.7	288.0	286.9	282.5	273.8
110°	199.6	218.2	232.4	246.5	255.3	262.9	268.4	269.4	267.3	262.9	255.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	185.5	201.8	216.0	229.1	238.9	244.4	248.7	250.9	248.7	244.4	238.9
115°	170.2	186.5	200.7	212.7	221.4	228.0	231.3	233.4	231.3	226.9	221.4
117.5°	156.0	171.3	185.5	197.4	205.1	210.5	213.8	216.0	213.8	210.5	205.1
120°	144.0	157.1	170.2	181.1	189.8	194.2	197.4	199.6	198.5	194.2	188.7
122.5°	129.8	144.0	156.0	166.9	174.5	178.9	181.1	183.3	182.2	178.9	173.5
125°	117.8	129.8	141.8	151.6	159.3	163.6	165.8	168.0	166.9	163.6	157.1
127.5°	104.7	117.8	127.6	137.5	142.9	149.5	150.5	152.7	151.6	148.4	142.9
130°	94.9	104.7	114.5	123.3	129.8	134.2	136.4	137.5	135.3	133.1	127.6
132.5°	82.9	93.8	102.5	110.2	114.5	118.9	121.1	122.2	122.2	118.9	114.5
135°	74.2	81.8	89.5	97.1	101.5	105.8	108.0	109.1	108.0	105.8	101.5
137.5°	66.5	73.1	78.5	85.1	90.5	92.7	94.9	94.9	93.8	92.7	89.5
140°	57.8	65.5	70.9	75.3	79.6	80.7	82.9	82.9	81.8	80.7	78.5
142.5°	49.1	55.6	61.1	66.5	69.8	72.0	73.1	74.2	73.1	72.0	68.7
145°	39.3	46.9	52.4	55.6	60.0	61.1	62.2	63.3	62.2	61.1	57.8
147.5°	30.5	37.1	42.5	46.9	50.2	51.3	52.4	53.5	52.4	50.2	49.1
150°	21.8	27.3	33.8	38.2	40.4	42.5	42.5	42.5	43.6	41.5	39.3
152.5°	17.5	19.6	24.0	28.4	31.6	32.7	33.8	33.8	32.7	32.7	30.5
155°	12.0	14.2	17.5	20.7	24.0	25.1	26.2	26.2	25.1	25.1	24.0
157.5°	7.6	9.8	12.0	14.2	17.5	18.5	19.6	19.6	19.6	18.5	17.5
160°	4.4	5.5	6.5	8.7	10.9	12.0	13.1	13.1	13.1	13.1	12.0
162.5°	3.3	3.3	3.3	4.4	5.5	6.5	7.6	7.6	7.6	7.6	6.5
165°	2.2	2.2	2.2	2.2	2.2	3.3	4.4	4.4	4.4	4.4	4.4
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1028.7	1028.7	1029.8	1027.6	1021.1	1022.2	1022.2	1026.5	1028.7	1029.8	1035.2
5°	1026.5	1026.5	1028.7	1025.4	1020.0	1020.0	1020.0	1024.3	1025.4	1027.6	1032.0
7.5°	1023.2	1023.2	1024.3	1021.1	1014.5	1014.5	1013.4	1017.8	1020.0	1021.1	1025.4
10°	1017.8	1017.8	1018.9	1015.6	1008.0	1008.0	1006.9	1010.2	1011.2	1013.4	1016.7
12.5°	1010.2	1010.2	1010.2	1006.9	999.2	998.2	997.1	1000.3	1000.3	1001.4	1004.7
15°	1003.6	1001.4	1001.4	998.2	990.5	988.3	986.2	987.2	989.4	988.3	990.5
17.5°	996.0	993.8	991.6	988.3	978.5	975.2	973.1	974.2	973.1	972.0	974.2
20°	987.2	984.0	982.9	977.4	967.6	962.2	957.8	955.6	956.7	953.4	954.5
22.5°	977.4	973.1	970.9	964.3	954.5	948.0	942.5	938.2	937.1	932.7	933.8
25°	965.4	960.0	956.7	951.2	940.3	932.7	926.2	919.6	916.3	910.9	909.8
27.5°	951.2	945.8	941.4	936.0	925.1	915.3	907.6	898.9	894.5	888.0	884.7
30°	937.1	930.5	924.0	919.6	907.6	896.7	884.7	877.1	870.5	862.9	857.4
32.5°	919.6	913.1	906.5	900.0	889.1	876.0	866.2	854.2	846.5	837.8	831.3
35°	902.2	893.4	886.9	878.2	868.3	853.1	841.1	829.1	819.3	809.4	801.8
37.5°	882.5	876.0	866.2	858.5	846.5	831.3	818.2	802.9	794.2	781.1	771.3
40°	864.0	856.3	846.5	836.7	824.7	807.3	793.1	775.6	765.8	750.5	740.7
42.5°	845.4	834.5	824.7	813.8	800.7	784.3	766.9	749.4	736.3	722.2	708.0
45°	824.7	812.7	800.7	788.7	775.6	759.3	740.7	722.2	705.8	692.7	675.3
47.5°	802.9	790.9	776.7	763.6	749.4	733.1	713.4	693.8	676.3	661.1	642.5
50°	781.1	769.1	753.8	739.6	723.3	706.9	686.2	663.3	644.7	625.1	608.7
52.5°	758.2	746.2	732.0	713.4	696.0	679.6	657.8	633.8	613.1	596.7	576.0
55°	735.3	723.3	706.9	688.3	670.9	650.2	629.4	605.4	582.5	562.9	542.2
57.5°	711.3	700.3	681.8	666.5	644.7	622.9	601.1	578.2	553.1	530.2	506.2
60°	687.3	675.3	657.8	639.3	617.4	595.6	572.7	547.6	521.4	496.4	474.5
62.5°	665.4	650.2	633.8	614.2	591.3	570.5	544.4	517.1	490.9	464.7	438.5
65°	640.3	624.0	608.7	589.1	565.1	541.1	514.9	487.6	459.3	430.9	404.7
67.5°	615.3	598.9	582.5	562.9	537.8	512.7	485.4	458.2	426.5	399.3	368.7
70°	590.2	577.1	556.4	535.6	512.7	485.4	458.2	428.7	396.0	366.5	334.9
72.5°	565.1	552.0	531.3	509.4	487.6	459.3	429.8	400.4	369.8	336.0	302.2
75°	541.1	524.7	506.2	485.4	462.5	433.1	403.6	373.1	337.1	305.4	270.5
77.5°	518.2	502.9	484.4	461.4	436.4	408.0	377.4	345.8	309.8	276.0	237.8
80°	493.1	477.8	459.3	436.4	411.3	384.0	351.3	318.5	283.6	246.5	207.3
82.5°	469.1	454.9	434.2	413.4	386.2	358.9	326.2	293.4	256.4	220.4	182.2
85°	444.0	429.8	410.2	388.4	362.2	332.7	302.2	269.4	232.4	195.3	157.1
87.5°	422.2	405.8	386.2	364.4	338.2	309.8	280.4	245.4	209.4	173.5	134.2
90°	399.3	384.0	364.4	342.5	316.4	288.0	257.4	224.7	189.8	152.7	115.6
92.5°	379.6	363.3	344.7	322.9	296.7	269.4	238.9	206.2	172.4	136.4	100.4
95°	360.0	343.6	326.2	304.4	278.2	250.9	220.4	188.7	156.0	121.1	87.3
97.5°	338.2	324.0	306.5	285.8	259.6	233.4	204.0	173.5	141.8	108.0	76.4
100°	320.7	304.4	288.0	266.2	242.2	217.1	187.6	158.2	127.6	96.0	66.5
102.5°	301.1	285.8	269.4	248.7	224.7	199.6	172.4	144.0	115.6	86.2	57.8
105°	282.5	268.4	250.9	231.3	208.4	184.4	158.2	132.0	104.7	76.4	51.3
107.5°	264.0	249.8	233.4	214.9	193.1	169.1	145.1	118.9	93.8	68.7	45.8
110°	245.4	232.4	217.1	198.5	177.8	156.0	133.1	109.1	84.0	61.1	40.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	229.1	216.0	200.7	183.3	163.6	142.9	121.1	98.2	75.3	54.5	34.9
115°	212.7	200.7	185.5	170.2	150.5	130.9	110.2	88.4	67.6	49.1	30.5
117.5°	196.4	184.4	170.2	154.9	137.5	118.9	99.3	78.5	61.1	43.6	27.3
120°	180.0	169.1	156.0	141.8	126.5	108.0	88.4	70.9	54.5	38.2	24.0
122.5°	164.7	154.9	142.9	129.8	113.5	96.0	79.6	64.4	49.1	33.8	19.6
125°	150.5	140.7	129.8	116.7	101.5	86.2	72.0	57.8	42.5	29.5	16.4
127.5°	136.4	126.5	115.6	103.6	91.6	77.5	64.4	51.3	38.2	26.2	14.2
130°	122.2	113.5	103.6	93.8	81.8	68.7	57.8	44.7	32.7	20.7	12.0
132.5°	108.0	101.5	92.7	82.9	72.0	62.2	50.2	39.3	28.4	18.5	10.9
135°	96.0	89.5	81.8	73.1	64.4	54.5	43.6	33.8	24.0	15.3	8.7
137.5°	85.1	79.6	72.0	64.4	56.7	46.9	38.2	28.4	19.6	13.1	6.5
140°	75.3	69.8	63.3	55.6	49.1	40.4	31.6	22.9	17.5	10.9	5.5
142.5°	65.5	60.0	54.5	48.0	41.5	33.8	26.2	19.6	14.2	8.7	5.5
145°	55.6	51.3	45.8	40.4	33.8	27.3	21.8	16.4	10.9	6.5	4.4
147.5°	45.8	42.5	37.1	32.7	27.3	21.8	17.5	13.1	8.7	5.5	3.3
150°	37.1	33.8	29.5	25.1	21.8	17.5	14.2	9.8	6.5	5.5	3.3
152.5°	28.4	26.2	22.9	20.7	17.5	13.1	9.8	7.6	5.5	4.4	2.2
155°	22.9	20.7	18.5	15.3	13.1	9.8	7.6	5.5	4.4	3.3	2.2
157.5°	16.4	15.3	13.1	10.9	8.7	6.5	5.5	5.5	3.3	2.2	1.1
160°	10.9	9.8	8.7	6.5	5.5	5.5	4.4	3.3	2.2	2.2	1.1
162.5°	6.5	5.5	5.5	5.5	4.4	4.4	3.3	2.2	2.2	1.1	1.1
165°	4.4	4.4	4.4	3.3	3.3	3.3	2.2	1.1	1.1	1.1	1.1
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1035.2	1032.0	1036.3	1044.0	1045.1	1044.0	1041.8	1045.1	1049.4	1048.3	1040.7
5°	1033.1	1028.7	1033.1	1040.7	1040.7	1039.6	1038.5	1041.8	1046.2	1045.1	1038.5
7.5°	1026.5	1022.2	1026.5	1033.1	1034.2	1032.0	1032.0	1035.2	1039.6	1038.5	1033.1
10°	1017.8	1013.4	1015.6	1023.2	1025.4	1023.2	1023.2	1026.5	1032.0	1030.9	1024.3
12.5°	1004.7	1001.4	1003.6	1010.2	1012.3	1011.2	1010.2	1014.5	1020.0	1020.0	1013.4
15°	990.5	986.2	988.3	996.0	997.1	994.9	996.0	999.2	1005.8	1005.8	1000.3
17.5°	974.2	968.7	972.0	977.4	978.5	978.5	978.5	982.9	990.5	989.4	985.1
20°	955.6	948.0	950.2	955.6	957.8	957.8	957.8	965.4	970.9	970.9	966.5
22.5°	933.8	928.3	928.3	933.8	937.1	936.0	936.0	942.5	950.2	949.1	949.1
25°	908.7	904.3	902.2	908.7	909.8	910.9	913.1	919.6	928.3	928.3	929.4
27.5°	882.5	878.2	877.1	882.5	883.6	884.7	886.9	894.5	903.3	904.3	906.5
30°	857.4	850.9	848.7	853.1	855.3	856.3	856.3	868.3	876.0	879.3	883.6
32.5°	828.0	821.4	816.0	823.6	824.7	826.9	828.0	840.0	848.7	854.2	860.7
35°	798.5	787.6	785.4	790.9	793.1	794.2	796.3	809.4	821.4	825.8	834.5
37.5°	765.8	758.2	751.6	757.1	759.3	760.3	766.9	778.9	790.9	797.4	806.2
40°	735.3	725.4	720.0	723.3	725.4	726.5	734.2	747.3	761.4	769.1	780.0
42.5°	701.4	688.3	684.0	687.3	688.3	691.6	698.2	715.6	729.8	740.7	749.4
45°	667.6	657.8	648.0	651.3	652.3	654.5	664.3	682.9	698.2	711.3	721.1
47.5°	632.7	620.7	610.9	613.1	617.4	618.5	629.4	651.3	665.4	679.6	692.7
50°	597.8	581.4	573.8	573.8	576.0	581.4	595.6	617.4	632.7	649.1	663.3
52.5°	561.8	546.5	537.8	538.9	541.1	547.6	560.7	582.5	600.0	617.4	634.9
55°	525.8	509.4	500.7	498.5	500.7	509.4	524.7	547.6	565.1	585.8	604.3
57.5°	489.8	470.2	462.5	459.3	461.4	472.4	487.6	511.6	533.4	553.1	574.9
60°	450.5	435.3	422.2	414.5	420.0	434.2	450.5	475.6	498.5	520.4	544.4
62.5°	416.7	397.1	382.9	375.3	380.7	392.7	415.6	439.6	464.7	489.8	513.8
65°	378.5	358.9	342.5	334.9	340.4	354.5	377.4	403.6	430.9	456.0	484.4
67.5°	341.4	320.7	301.1	293.4	300.0	315.3	340.4	369.8	399.3	425.4	456.0
70°	305.4	282.5	261.8	256.4	260.7	281.4	305.4	334.9	365.4	396.0	427.6
72.5°	272.7	244.4	222.5	216.0	221.4	244.4	271.6	302.2	334.9	367.6	401.4
75°	234.5	208.4	184.4	176.7	183.3	204.0	237.8	270.5	305.4	340.4	372.0
77.5°	204.0	173.5	148.4	136.4	147.3	173.5	206.2	241.1	277.1	313.1	349.1
80°	172.4	140.7	113.5	100.4	112.4	140.7	173.5	211.6	252.0	288.0	320.7
82.5°	144.0	110.2	81.8	67.6	80.7	112.4	148.4	186.5	225.8	261.8	300.0
85°	117.8	82.9	53.5	38.2	56.7	85.1	123.3	162.5	202.9	240.0	277.1
87.5°	96.0	62.2	32.7	16.4	34.9	66.5	102.5	141.8	182.2	219.3	254.2
90°	78.5	44.7	17.5	2.2	20.7	50.2	85.1	123.3	161.5	199.6	234.5
92.5°	64.4	33.8	9.8	1.1	13.1	40.4	73.1	109.1	146.2	183.3	217.1
95°	53.5	26.2	6.5	1.1	9.8	31.6	62.2	97.1	132.0	168.0	201.8
97.5°	45.8	21.8	5.5	1.1	7.6	27.3	53.5	86.2	120.0	153.8	186.5
100°	39.3	17.5	4.4	1.1	6.5	22.9	46.9	76.4	108.0	140.7	172.4
102.5°	33.8	14.2	3.3	1.1	5.5	19.6	41.5	68.7	97.1	128.7	159.3
105°	29.5	12.0	3.3	1.1	4.4	17.5	37.1	61.1	89.5	117.8	147.3
107.5°	25.1	9.8	2.2	1.1	3.3	14.2	32.7	55.6	80.7	108.0	135.3
110°	21.8	8.7	2.2	1.1	3.3	13.1	28.4	50.2	73.1	98.2	124.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	18.5	6.5	2.2	1.1	2.2	10.9	25.1	44.7	66.5	89.5	114.5
115°	16.4	5.5	1.1	1.1	2.2	9.8	22.9	40.4	60.0	81.8	104.7
117.5°	13.1	4.4	1.1	1.1	1.1	7.6	19.6	36.0	54.5	75.3	96.0
120°	10.9	4.4	1.1	1.1	1.1	6.5	17.5	31.6	49.1	67.6	87.3
122.5°	9.8	3.3	1.1	1.1	1.1	5.5	15.3	28.4	43.6	61.1	79.6
125°	8.7	3.3	1.1	1.1	1.1	4.4	13.1	25.1	39.3	54.5	72.0
127.5°	6.5	3.3	1.1	1.1	1.1	3.3	12.0	21.8	34.9	49.1	64.4
130°	5.5	2.2	1.1	1.1	1.1	3.3	9.8	19.6	30.5	43.6	57.8
132.5°	4.4	2.2	1.1	1.1	1.1	2.2	7.6	15.3	26.2	38.2	51.3
135°	4.4	2.2	1.1	1.1	1.1	2.2	5.5	13.1	21.8	32.7	43.6
137.5°	4.4	1.1	1.1	1.1	1.1	2.2	4.4	9.8	17.5	26.2	36.0
140°	3.3	1.1	1.1	1.1	1.1	1.1	3.3	7.6	14.2	21.8	30.5
142.5°	3.3	1.1	1.1	1.1	1.1	1.1	3.3	5.5	10.9	17.5	24.0
145°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	4.4	8.7	13.1	19.6
147.5°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.3	6.5	10.9	15.3
150°	2.2	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4	7.6	12.0
152.5°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	5.5	7.6
155°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4	5.5
157.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3	4.4
160°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2	3.3
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1037.4	1029.8	1032.0	1030.9	1033.1	1036.3	1036.3	1035.2	1035.2	1033.1	1030.9
5°	1035.2	1027.6	1030.9	1029.8	1032.0	1035.2	1035.2	1034.2	1034.2	1030.9	1029.8
7.5°	1028.7	1023.2	1025.4	1025.4	1027.6	1030.9	1030.9	1029.8	1029.8	1026.5	1025.4
10°	1022.2	1015.6	1018.9	1018.9	1021.1	1025.4	1025.4	1024.3	1024.3	1021.1	1020.0
12.5°	1011.2	1004.7	1010.2	1011.2	1013.4	1017.8	1016.7	1016.7	1016.7	1013.4	1012.3
15°	998.2	993.8	999.2	1000.3	1003.6	1009.1	1009.1	1009.1	1009.1	1005.8	1004.7
17.5°	984.0	980.7	986.2	988.3	992.7	998.2	998.2	999.2	1000.3	998.2	997.1
20°	967.6	965.4	970.9	975.2	981.8	987.2	989.4	990.5	992.7	990.5	989.4
22.5°	949.1	949.1	956.7	961.1	968.7	974.2	977.4	980.7	982.9	980.7	979.6
25°	928.3	931.6	939.2	946.9	955.6	961.1	964.3	968.7	970.9	969.8	968.7
27.5°	908.7	913.1	922.9	930.5	938.2	946.9	950.2	955.6	957.8	957.8	956.7
30°	885.8	892.3	903.3	912.0	921.8	930.5	934.9	940.3	943.6	941.4	942.5
32.5°	864.0	874.9	883.6	893.4	904.3	913.1	918.5	925.1	928.3	927.3	928.3
35°	840.0	850.9	862.9	872.7	885.8	894.5	902.2	907.6	912.0	910.9	910.9
37.5°	813.8	828.0	840.0	853.1	865.1	874.9	882.5	889.1	893.4	893.4	893.4
40°	788.7	804.0	816.0	831.3	846.5	855.3	864.0	870.5	874.9	876.0	877.1
42.5°	761.4	777.8	792.0	808.3	823.6	834.5	844.3	852.0	856.3	858.5	857.4
45°	736.3	751.6	768.0	786.5	800.7	811.6	823.6	832.3	836.7	837.8	838.9
47.5°	708.0	725.4	744.0	762.5	776.7	790.9	801.8	810.5	814.9	818.2	818.2
50°	680.7	699.3	720.0	739.6	754.9	769.1	780.0	789.8	795.3	797.4	798.5
52.5°	655.6	673.1	694.9	714.5	729.8	744.0	758.2	769.1	774.5	776.7	776.7
55°	625.1	646.9	670.9	689.4	705.8	722.2	736.3	747.3	752.7	756.0	758.2
57.5°	596.7	619.6	644.7	664.3	684.0	699.3	712.3	726.5	730.9	735.3	736.3
60°	569.4	592.3	616.3	638.2	657.8	674.2	689.4	701.4	709.1	711.3	713.4
62.5°	541.1	565.1	590.2	612.0	632.7	652.3	666.5	677.4	686.2	689.4	691.6
65°	513.8	538.9	564.0	586.9	608.7	628.3	642.5	653.4	662.2	667.6	668.7
67.5°	484.4	511.6	537.8	561.8	583.6	604.3	618.5	629.4	638.2	644.7	645.8
70°	457.1	485.4	511.6	537.8	559.6	580.3	595.6	606.5	616.3	620.7	622.9
72.5°	430.9	460.4	487.6	513.8	535.6	556.4	572.7	583.6	593.4	598.9	600.0
75°	405.8	435.3	464.7	489.8	512.7	533.4	549.8	561.8	570.5	576.0	578.2
77.5°	380.7	411.3	440.7	465.8	489.8	510.5	524.7	538.9	547.6	554.2	554.2
80°	355.6	387.3	417.8	442.9	466.9	485.4	501.8	516.0	524.7	531.3	531.3
82.5°	333.8	364.4	393.8	418.9	442.9	463.6	480.0	493.1	502.9	507.3	508.4
85°	308.7	342.5	369.8	397.1	420.0	439.6	456.0	470.2	478.9	483.3	485.4
87.5°	288.0	320.7	350.2	374.2	397.1	416.7	435.3	447.3	456.0	461.4	463.6
90°	268.4	300.0	329.4	353.4	377.4	396.0	413.4	425.4	435.3	439.6	441.8
92.5°	250.9	282.5	310.9	334.9	357.8	378.5	394.9	406.9	415.6	420.0	423.3
95°	234.5	265.1	292.4	318.5	340.4	358.9	376.4	388.4	398.2	401.4	404.7
97.5°	218.2	247.6	274.9	300.0	322.9	340.4	356.7	368.7	376.4	381.8	385.1
100°	204.0	232.4	258.5	282.5	304.4	320.7	338.2	349.1	356.7	361.1	365.4
102.5°	188.7	217.1	242.2	265.1	288.0	303.3	319.6	330.5	337.1	344.7	344.7
105°	175.6	201.8	226.9	248.7	268.4	286.9	301.1	312.0	319.6	325.1	325.1
107.5°	161.5	187.6	211.6	234.5	253.1	270.5	283.6	293.4	302.2	305.4	308.7
110°	150.5	173.5	197.4	219.3	236.7	253.1	266.2	277.1	284.7	288.0	290.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	137.5	161.5	183.3	204.0	221.4	236.7	249.8	258.5	266.2	270.5	271.6
115°	126.5	149.5	169.1	188.7	207.3	220.4	232.4	241.1	248.7	252.0	254.2
117.5°	116.7	137.5	157.1	173.5	190.9	205.1	217.1	224.7	231.3	235.6	237.8
120°	106.9	126.5	144.0	160.4	176.7	189.8	200.7	208.4	216.0	219.3	219.3
122.5°	97.1	115.6	132.0	147.3	162.5	174.5	186.5	193.1	199.6	202.9	202.9
125°	88.4	105.8	121.1	135.3	149.5	160.4	170.2	177.8	184.4	186.5	186.5
127.5°	79.6	96.0	110.2	123.3	135.3	146.2	156.0	163.6	169.1	171.3	171.3
130°	72.0	86.2	99.3	112.4	124.4	133.1	142.9	149.5	152.7	156.0	157.1
132.5°	64.4	77.5	89.5	100.4	112.4	121.1	128.7	135.3	138.5	141.8	142.9
135°	56.7	68.7	79.6	90.5	100.4	109.1	115.6	121.1	125.5	127.6	128.7
137.5°	48.0	61.1	70.9	79.6	90.5	97.1	104.7	108.0	112.4	114.5	114.5
140°	40.4	50.2	61.1	69.8	78.5	85.1	91.6	97.1	100.4	101.5	101.5
142.5°	32.7	41.5	50.2	61.1	68.7	74.2	80.7	85.1	87.3	88.4	89.5
145°	26.2	32.7	40.4	50.2	58.9	65.5	68.7	73.1	75.3	76.4	77.5
147.5°	19.6	26.2	32.7	39.3	48.0	54.5	57.8	62.2	64.4	65.5	65.5
150°	15.3	19.6	24.0	30.5	37.1	44.7	49.1	52.4	53.5	54.5	54.5
152.5°	10.9	15.3	18.5	22.9	27.3	33.8	40.4	42.5	43.6	44.7	44.7
155°	7.6	10.9	13.1	16.4	19.6	25.1	30.5	33.8	34.9	36.0	36.0
157.5°	5.5	7.6	8.7	12.0	14.2	16.4	20.7	26.2	27.3	27.3	27.3
160°	3.3	4.4	5.5	7.6	8.7	10.9	13.1	16.4	19.6	19.6	19.6
162.5°	2.2	3.3	3.3	4.4	4.4	6.5	7.6	8.7	12.0	13.1	13.1
165°	1.1	2.2	2.2	2.2	2.2	2.2	3.3	3.3	5.5	6.5	6.5
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1032.0	1034.2	1033.1	1033.1	1033.1	1035.2	1033.1	1023.2	1025.4	1027.6	1029.8
5°	1030.9	1032.0	1032.0	1030.9	1030.9	1033.1	1030.9	1021.1	1023.2	1025.4	1026.5
7.5°	1026.5	1027.6	1027.6	1027.6	1026.5	1028.7	1025.4	1016.7	1016.7	1018.9	1020.0
10°	1021.1	1023.2	1022.2	1021.1	1021.1	1021.1	1018.9	1009.1	1009.1	1010.2	1011.2
12.5°	1014.5	1014.5	1014.5	1013.4	1012.3	1012.3	1010.2	1000.3	999.2	1001.4	1000.3
15°	1005.8	1008.0	1005.8	1004.7	1002.5	1002.5	999.2	989.4	987.2	988.3	987.2
17.5°	998.2	999.2	997.1	994.9	992.7	991.6	988.3	977.4	974.2	975.2	973.1
20°	990.5	990.5	988.3	986.2	982.9	979.6	975.2	964.3	958.9	958.9	954.5
22.5°	980.7	980.7	978.5	975.2	972.0	967.6	963.2	952.3	943.6	941.4	938.2
25°	969.8	968.7	967.6	964.3	957.8	953.4	949.1	937.1	927.3	922.9	917.4
27.5°	956.7	956.7	953.4	950.2	943.6	938.2	932.7	921.8	908.7	903.3	895.6
30°	942.5	942.5	939.2	934.9	928.3	921.8	915.3	902.2	889.1	881.4	872.7
32.5°	928.3	927.3	924.0	919.6	913.1	903.3	897.8	884.7	869.4	860.7	848.7
35°	910.9	909.8	906.5	901.1	892.3	884.7	876.0	864.0	846.5	835.6	822.5
37.5°	893.4	892.3	890.2	882.5	873.8	865.1	854.2	842.2	825.8	811.6	798.5
40°	876.0	874.9	870.5	865.1	854.2	843.3	832.3	820.3	802.9	786.5	772.3
42.5°	857.4	856.3	850.9	844.3	832.3	821.4	808.3	795.3	777.8	758.2	744.0
45°	838.9	836.7	831.3	823.6	810.5	798.5	785.4	770.2	752.7	734.2	715.6
47.5°	819.3	816.0	810.5	799.6	788.7	775.6	760.3	744.0	726.5	705.8	686.2
50°	797.4	795.3	788.7	778.9	765.8	752.7	735.3	718.9	698.2	678.5	654.5
52.5°	776.7	772.3	766.9	756.0	742.9	728.7	710.2	690.5	669.8	651.3	626.2
55°	754.9	752.7	745.1	736.3	720.0	703.6	686.2	665.4	642.5	620.7	596.7
57.5°	734.2	729.8	723.3	711.3	697.1	680.7	662.2	640.3	615.3	592.3	566.2
60°	713.4	706.9	699.3	688.3	673.1	655.6	636.0	613.1	588.0	562.9	535.6
62.5°	690.5	685.1	676.3	665.4	650.2	631.6	610.9	586.9	562.9	536.7	507.3
65°	667.6	662.2	653.4	642.5	627.3	606.5	584.7	560.7	533.4	508.4	476.7
67.5°	644.7	639.3	629.4	617.4	602.2	582.5	559.6	534.5	507.3	480.0	447.3
70°	621.8	615.3	606.5	593.4	578.2	557.4	534.5	508.4	481.1	451.6	418.9
72.5°	598.9	593.4	582.5	570.5	554.2	533.4	510.5	484.4	456.0	425.4	392.7
75°	576.0	569.4	561.8	547.6	530.2	510.5	486.5	460.4	429.8	400.4	366.5
77.5°	553.1	547.6	537.8	523.6	507.3	486.5	462.5	436.4	405.8	375.3	339.3
80°	530.2	523.6	516.0	502.9	484.4	463.6	438.5	412.4	381.8	350.2	314.2
82.5°	507.3	500.7	492.0	478.9	461.4	440.7	416.7	388.4	357.8	325.1	291.3
85°	484.4	478.9	469.1	456.0	437.4	416.7	392.7	367.6	334.9	302.2	268.4
87.5°	461.4	456.0	446.2	433.1	415.6	394.9	370.9	344.7	313.1	282.5	245.4
90°	439.6	435.3	425.4	412.4	394.9	374.2	352.4	324.0	293.4	262.9	228.0
92.5°	420.0	415.6	406.9	393.8	378.5	355.6	333.8	306.5	276.0	244.4	210.5
95°	402.5	397.1	388.4	376.4	357.8	338.2	316.4	289.1	259.6	228.0	195.3
97.5°	382.9	377.4	368.7	355.6	340.4	319.6	297.8	271.6	242.2	212.7	180.0
100°	363.3	357.8	348.0	337.1	321.8	301.1	280.4	254.2	226.9	198.5	166.9
102.5°	343.6	338.2	329.4	318.5	303.3	284.7	264.0	238.9	211.6	183.3	153.8
105°	325.1	319.6	310.9	300.0	285.8	267.3	245.4	223.6	197.4	170.2	141.8
107.5°	306.5	301.1	293.4	282.5	268.4	250.9	230.2	207.3	183.3	157.1	129.8
110°	288.0	283.6	274.9	265.1	250.9	233.4	214.9	193.1	169.1	145.1	118.9



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	270.5	266.2	257.4	246.5	234.5	218.2	199.6	178.9	156.0	133.1	108.0
115°	253.1	247.6	240.0	230.2	218.2	202.9	185.5	166.9	144.0	122.2	99.3
117.5°	235.6	231.3	223.6	213.8	202.9	187.6	171.3	153.8	132.0	111.3	90.5
120°	218.2	214.9	207.3	198.5	187.6	173.5	158.2	140.7	121.1	101.5	81.8
122.5°	201.8	198.5	190.9	183.3	172.4	159.3	145.1	128.7	111.3	92.7	75.3
125°	186.5	182.2	175.6	168.0	158.2	146.2	132.0	116.7	100.4	84.0	67.6
127.5°	170.2	166.9	162.5	153.8	144.0	133.1	120.0	106.9	91.6	76.4	61.1
130°	157.1	152.7	147.3	140.7	132.0	121.1	109.1	96.0	82.9	68.7	53.5
132.5°	141.8	137.5	133.1	126.5	118.9	109.1	98.2	86.2	74.2	61.1	48.0
135°	127.6	124.4	120.0	113.5	105.8	98.2	87.3	76.4	65.5	53.5	42.5
137.5°	114.5	111.3	106.9	102.5	94.9	87.3	77.5	67.6	57.8	46.9	37.1
140°	101.5	99.3	94.9	90.5	84.0	76.4	67.6	58.9	50.2	40.4	31.6
142.5°	88.4	86.2	82.9	78.5	73.1	66.5	58.9	51.3	42.5	34.9	27.3
145°	76.4	75.3	72.0	67.6	63.3	56.7	50.2	43.6	36.0	29.5	21.8
147.5°	64.4	63.3	61.1	57.8	53.5	48.0	42.5	36.0	30.5	24.0	17.5
150°	53.5	52.4	51.3	46.9	44.7	39.3	34.9	29.5	25.1	18.5	14.2
152.5°	43.6	43.6	41.5	38.2	36.0	31.6	28.4	24.0	19.6	15.3	10.9
155°	34.9	33.8	32.7	30.5	28.4	25.1	21.8	18.5	15.3	10.9	7.6
157.5°	27.3	26.2	25.1	22.9	20.7	19.6	16.4	13.1	9.8	7.6	5.5
160°	19.6	18.5	17.5	16.4	15.3	13.1	10.9	8.7	6.5	4.4	3.3
162.5°	13.1	12.0	12.0	10.9	9.8	7.6	6.5	5.5	4.4	3.3	2.2
165°	6.5	6.5	5.5	5.5	4.4	3.3	3.3	3.3	2.2	2.2	1.1
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-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2	1034.2
2.5°	1028.7	1028.7	1033.1	1032.0	1028.7	1035.2	1042.9
5°	1025.4	1025.4	1028.7	1028.7	1025.4	1032.0	1038.5
7.5°	1020.0	1018.9	1022.2	1022.2	1017.8	1023.2	1030.9
10°	1010.2	1009.1	1012.3	1012.3	1008.0	1013.4	1020.0
12.5°	999.2	997.1	1000.3	999.2	994.9	1000.3	1006.9
15°	985.1	984.0	986.2	984.0	979.6	985.1	991.6
17.5°	970.9	967.6	968.7	968.7	961.1	966.5	972.0
20°	952.3	948.0	949.1	948.0	942.5	945.8	952.3
22.5°	933.8	927.3	927.3	926.2	919.6	924.0	929.4
25°	910.9	903.3	903.3	902.2	894.5	897.8	903.3
27.5°	888.0	880.3	877.1	876.0	868.3	868.3	876.0
30°	864.0	853.1	850.9	847.6	840.0	840.0	846.5
32.5°	841.1	825.8	821.4	817.1	809.4	808.3	816.0
35°	810.5	798.5	790.9	786.5	777.8	775.6	782.2
37.5°	785.4	770.2	759.3	753.8	745.1	741.8	750.5
40°	758.2	741.8	727.6	724.3	711.3	706.9	714.5
42.5°	727.6	710.2	696.0	689.4	679.6	675.3	676.3
45°	697.1	678.5	663.3	654.5	644.7	637.1	641.4
47.5°	665.4	649.1	630.5	617.4	605.4	600.0	602.2
50°	633.8	614.2	596.7	582.5	568.3	561.8	566.2
52.5°	602.2	581.4	561.8	546.5	530.2	523.6	524.7
55°	571.6	549.8	526.9	510.5	495.3	485.4	483.3
57.5°	541.1	517.1	493.1	474.5	454.9	446.2	442.9
60°	508.4	483.3	458.2	436.4	415.6	405.8	401.4
62.5°	477.8	450.5	422.2	399.3	378.5	365.4	362.2
65°	448.4	416.7	388.4	362.2	339.3	325.1	320.7
67.5°	416.7	384.0	353.4	325.1	303.3	284.7	282.5
70°	387.3	352.4	318.5	289.1	265.1	246.5	237.8
72.5°	357.8	321.8	286.9	255.3	224.7	207.3	200.7
75°	329.4	292.4	255.3	222.5	188.7	168.0	161.5
77.5°	303.3	265.1	225.8	189.8	158.2	132.0	123.3
80°	278.2	238.9	197.4	160.4	126.5	98.2	88.4
82.5°	252.0	214.9	172.4	133.1	98.2	68.7	56.7
85°	229.1	192.0	149.5	110.2	75.3	43.6	30.5
87.5°	210.5	170.2	132.0	92.7	56.7	25.1	8.7
90°	192.0	152.7	114.5	76.4	42.5	14.2	1.1
92.5°	175.6	138.5	100.4	65.5	32.7	9.8	1.1
95°	160.4	124.4	88.4	54.5	26.2	6.5	1.1
97.5°	146.2	112.4	78.5	46.9	21.8	5.5	1.1
100°	134.2	101.5	69.8	41.5	18.5	4.4	1.1
102.5°	122.2	91.6	62.2	36.0	16.4	3.3	1.1
105°	112.4	82.9	55.6	32.7	14.2	3.3	1.1
107.5°	102.5	75.3	50.2	28.4	12.0	2.2	1.1
110°	92.7	68.7	44.7	25.1	10.9	2.2	1.1



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-56SL-LW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	85.1	62.2	40.4	22.9	8.7	2.2	1.1
115°	77.5	55.6	36.0	19.6	7.6	1.1	1.1
117.5°	69.8	50.2	31.6	17.5	6.5	1.1	1.1
120°	63.3	44.7	28.4	15.3	5.5	1.1	1.1
122.5°	56.7	40.4	25.1	13.1	4.4	1.1	1.1
125°	51.3	36.0	21.8	10.9	3.3	1.1	1.1
127.5°	45.8	31.6	19.6	9.8	3.3	1.1	1.1
130°	40.4	28.4	16.4	7.6	2.2	1.1	1.1
132.5°	36.0	24.0	14.2	6.5	2.2	1.1	1.1
135°	31.6	20.7	12.0	4.4	2.2	1.1	1.1
137.5°	27.3	17.5	9.8	3.3	1.1	1.1	1.1
140°	22.9	15.3	7.6	3.3	1.1	1.1	1.1
142.5°	19.6	12.0	5.5	2.2	1.1	1.1	1.1
145°	15.3	9.8	4.4	2.2	1.1	1.1	1.1
147.5°	12.0	7.6	3.3	2.2	1.1	1.1	1.1
150°	8.7	5.5	3.3	1.1	1.1	1.1	1.1
152.5°	6.5	4.4	2.2	1.1	1.1	1.1	1.1
155°	4.4	3.3	2.2	1.1	1.1	1.1	1.1
157.5°	3.3	2.2	1.1	1.1	1.1	1.1	1.1
160°	2.2	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
165°	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)