

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-LD5-70SL-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-LD5-70SL-LW-UNV-L930-CD1-U  
Description: 4FT LINEAR SNLED LED FIXTURE  
WIDE FROSTED LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

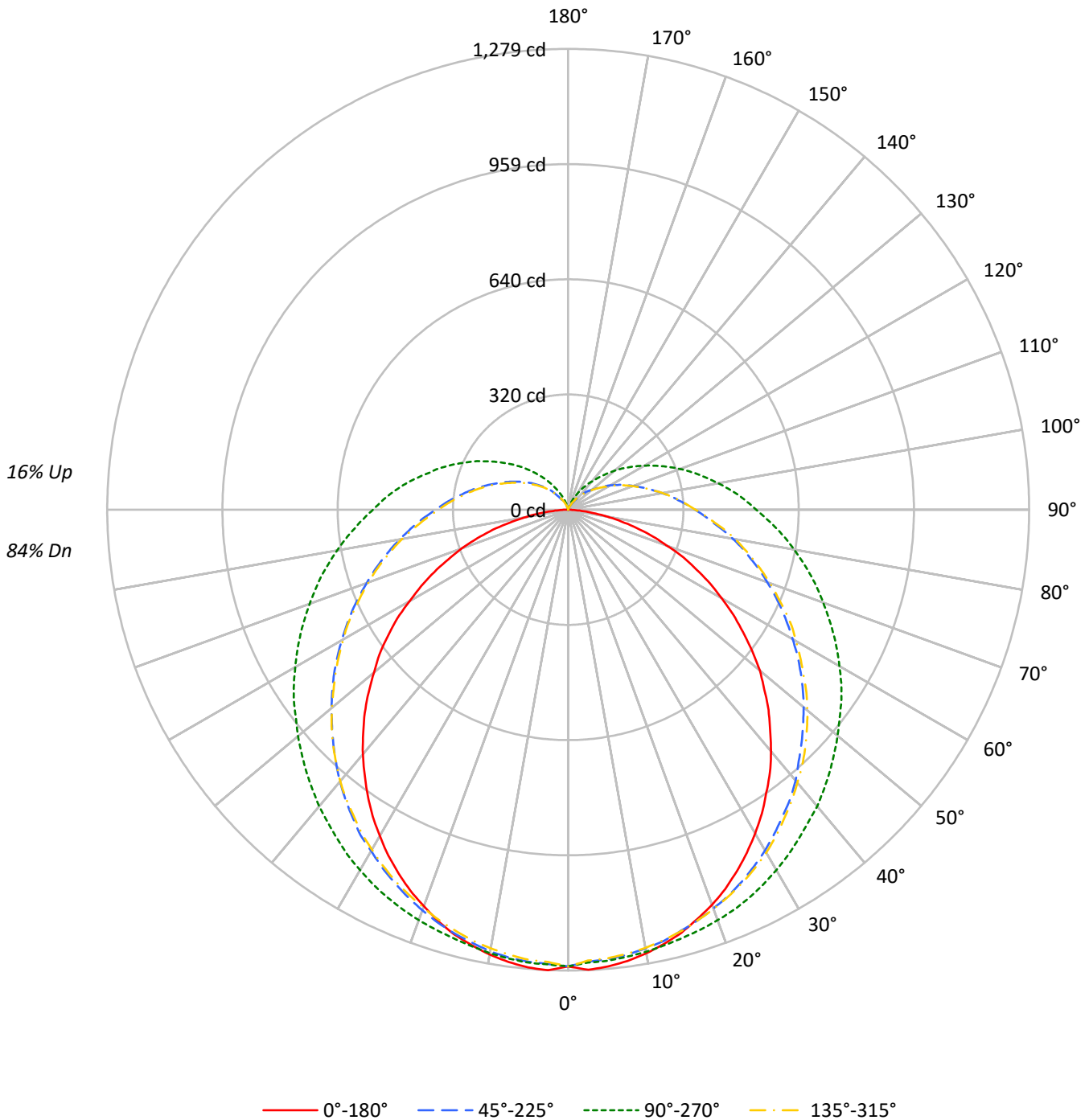
Lumens per Lamp: N/A  
Luminaire Lumens: 5506.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.36 / 1.44  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 70  
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	
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°	10241	10241	10241	10241
5°	10296	9869	10317	9912
10°	10200	9589	10234	9620
15°	10082	9349	10126	9359
20°	9924	9174	9958	9174
25°	9728	9018	9787	9008
30°	9509	8858	9582	8858
35°	9253	8709	9357	8720
40°	9001	8622	9111	8622
45°	8712	8531	8845	8542
50°	8409	8477	8523	8500
55°	7987	8485	8239	8522
60°	7543	8510	7789	8563
65°	7043	8597	7355	8681
70°	6341	8754	6837	8878
75°	5534	9041	6056	9214
80°	4281	9464	4862	9683
85°	2555	10144	3197	10426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.1	2.2
10°-20°	345.0	6.3
20°-30°	529.0	9.6
30°-40°	652.6	11.9
40°-50°	708.1	12.9
50°-60°	697.9	12.7
60°-70°	631.0	11.5
70°-80°	525.7	9.5
80°-90°	407.1	7.4
90°-100°	308.8	5.6
100°-110°	228.5	4.1
110°-120°	158.9	2.9
120°-130°	101.4	1.8
130°-140°	56.9	1.0
140°-150°	26.0	0.5
150°-160°	8.0	0.1
160°-170°	1.0	0.0
170°-180°	0.0	0.0
0°-30°	994.1	18.1
0°-40°	1646.7	29.9
0°-60°	3052.7	55.4
0°-90°	4616.4	83.8
90°-120°	696.2	12.6
90°-150°	880.5	16.0
90°-180°	890.0	16.2
0°-180°	5506.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1267	1267	1267	1267	1267	
5°	1273	1257	1275	1262	1273	121
15°	1215	1230	1220	1231	1215	342
25°	1107	1188	1114	1187	1107	510
35°	958	1115	969	1116	958	600
45°	786	1027	798	1028	786	606
55°	592	925	611	929	592	530
65°	393	812	410	820	393	390
75°	198	695	217	708	198	210
85°	37	579	47	595	37	45
90°	1	521	3	541	1	2
95°	1	473	1	496	1	1
105°	1	376	1	398	1	1
115°	1	286	1	312	1	1
125°	1	206	1	229	1	1
135°	1	134	1	158	1	1
145°	1	78	1	95	1	1
155°	1	32	1	44	1	1
165°	1	5	1	8	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1278.0	1278.0	1276.7	1274.0	1275.3	1279.4	1276.7	1270.0	1266.0	1255.3	1258.0
5°	1272.7	1272.7	1271.3	1268.7	1270.0	1275.3	1272.7	1267.3	1262.0	1252.6	1256.6
7.5°	1263.3	1263.3	1262.0	1259.3	1262.0	1267.3	1264.6	1259.3	1255.3	1245.9	1249.9
10°	1249.9	1251.3	1249.9	1245.9	1251.3	1256.6	1255.3	1248.6	1244.6	1236.6	1240.6
12.5°	1233.9	1235.2	1233.9	1232.6	1235.2	1243.3	1240.6	1235.2	1232.6	1225.9	1229.9
15°	1215.2	1216.5	1213.8	1213.8	1216.5	1224.5	1224.5	1219.2	1216.5	1209.8	1217.9
17.5°	1191.1	1192.5	1191.1	1191.1	1193.8	1201.8	1203.2	1200.5	1197.8	1195.1	1203.2
20°	1167.1	1165.7	1165.7	1164.4	1169.7	1181.8	1180.4	1180.4	1177.8	1177.8	1187.1
22.5°	1139.0	1139.0	1137.6	1137.6	1144.3	1155.0	1155.0	1157.7	1155.0	1160.4	1168.4
25°	1106.9	1108.2	1106.9	1109.6	1114.9	1127.0	1128.3	1132.3	1133.6	1139.0	1148.3
27.5°	1073.5	1074.8	1073.5	1076.2	1085.5	1094.9	1101.6	1106.9	1108.2	1116.3	1128.3
30°	1037.4	1037.4	1038.7	1041.4	1052.1	1066.8	1072.1	1078.8	1078.8	1092.2	1104.2
32.5°	1000.0	1000.0	1000.0	1005.3	1017.3	1034.7	1041.4	1049.4	1052.1	1065.5	1078.8
35°	958.5	959.8	959.8	963.9	979.9	997.3	1006.6	1016.0	1021.3	1037.4	1050.8
37.5°	919.7	922.4	918.4	923.8	946.5	961.2	971.9	981.2	990.6	1012.0	1022.7
40°	875.6	878.3	877.0	887.7	906.4	925.1	937.1	946.5	959.8	981.2	993.3
42.5°	828.8	831.5	834.2	846.2	866.3	885.0	899.7	911.7	927.8	946.5	966.5
45°	786.1	786.1	790.1	804.8	826.2	846.2	863.6	877.0	895.7	915.7	935.8
47.5°	737.9	739.3	744.6	762.0	784.7	808.8	824.8	842.2	862.3	883.6	906.4
50°	693.8	693.8	701.8	720.6	741.9	768.7	786.1	806.1	827.5	852.9	875.6
52.5°	643.0	645.7	657.7	675.1	703.2	727.2	747.3	768.7	794.1	820.8	846.2
55°	592.2	597.6	606.9	631.0	660.4	683.1	707.2	733.9	758.0	787.4	816.8
57.5°	542.8	546.8	561.5	585.5	616.3	644.4	669.8	695.2	724.6	754.0	784.7
60°	492.0	497.3	514.7	538.7	572.2	601.6	631.0	657.7	688.5	719.2	751.3
62.5°	443.8	447.8	467.9	496.0	529.4	561.5	590.9	623.0	656.4	685.8	717.9
65°	393.0	399.7	422.4	447.8	486.6	518.7	552.1	586.9	621.6	653.7	684.5
67.5°	346.2	350.3	374.3	403.7	442.5	478.6	513.3	550.8	586.9	620.3	651.0
70°	291.4	304.8	328.9	359.6	401.1	438.5	475.9	514.7	553.4	588.2	617.6
72.5°	246.0	256.7	283.4	316.8	356.9	401.1	439.8	481.3	520.0	556.1	586.9
75°	197.9	208.5	239.3	276.7	318.2	365.0	405.1	447.8	487.9	524.0	556.1
77.5°	151.1	164.4	197.9	236.6	282.1	330.2	371.6	414.4	455.9	494.6	526.7
80°	108.3	123.0	159.1	203.2	247.3	295.4	340.9	383.7	425.1	463.9	497.3
82.5°	69.5	85.6	124.3	168.4	215.2	263.4	310.1	352.9	394.4	433.1	467.9
85°	37.4	54.8	94.9	139.0	185.8	233.9	280.7	326.2	366.3	402.4	439.8
87.5°	10.7	32.1	70.9	115.0	163.1	207.2	252.7	298.1	338.2	377.0	410.4
90°	1.3	18.7	53.5	94.9	141.7	184.5	229.9	272.7	312.8	351.6	385.0
92.5°	1.3	12.0	41.4	78.9	121.7	165.8	211.2	252.7	290.1	328.9	362.3
95°	1.3	9.4	33.4	66.8	106.9	148.4	191.2	231.3	270.0	306.1	339.6
97.5°	1.3	6.7	26.7	57.5	93.6	132.3	173.8	213.9	251.3	286.1	316.8
100°	1.3	5.3	21.4	49.5	81.5	119.0	156.4	195.2	231.3	264.7	296.8
102.5°	1.3	4.0	18.7	41.4	72.2	105.6	141.7	177.8	212.6	244.6	276.7
105°	1.3	4.0	16.0	36.1	64.2	94.9	128.3	163.1	195.2	225.9	255.3
107.5°	1.3	2.7	13.4	30.7	56.1	85.6	116.3	149.7	179.1	208.5	236.6
110°	1.3	2.7	10.7	28.1	49.5	76.2	105.6	136.4	164.4	192.5	219.2



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1.3	2.7	9.4	24.1	42.8	68.2	94.9	123.0	149.7	177.8	201.9
115°	1.3	2.7	8.0	21.4	40.1	58.8	85.6	111.0	137.7	163.1	185.8
117.5°	1.3	2.7	6.7	17.4	34.8	53.5	74.9	100.3	124.3	148.4	169.8
120°	1.3	2.7	5.3	16.0	30.7	48.1	66.8	89.6	112.3	135.0	157.7
122.5°	1.3	1.3	5.3	13.4	26.7	42.8	61.5	78.9	100.3	121.7	141.7
125°	1.3	1.3	5.3	12.0	22.7	38.8	54.8	70.9	89.6	108.3	125.7
127.5°	1.3	1.3	4.0	9.4	20.1	33.4	48.1	65.5	78.9	96.3	113.6
130°	1.3	1.3	4.0	8.0	17.4	28.1	42.8	57.5	73.5	85.6	100.3
132.5°	1.3	1.3	4.0	6.7	13.4	22.7	36.1	49.5	64.2	77.5	89.6
135°	1.3	1.3	2.7	5.3	10.7	18.7	29.4	41.4	56.1	69.5	81.5
137.5°	1.3	1.3	2.7	5.3	8.0	16.0	22.7	33.4	46.8	58.8	70.9
140°	1.3	1.3	2.7	4.0	6.7	12.0	18.7	26.7	37.4	48.1	61.5
142.5°	1.3	1.3	1.3	4.0	5.3	9.4	14.7	21.4	29.4	38.8	49.5
145°	1.3	1.3	1.3	4.0	5.3	6.7	12.0	17.4	22.7	29.4	38.8
147.5°	1.3	1.3	1.3	2.7	4.0	5.3	9.4	13.4	17.4	22.7	28.1
150°	1.3	1.3	1.3	2.7	4.0	5.3	6.7	9.4	13.4	18.7	22.7
152.5°	1.3	1.3	1.3	2.7	2.7	4.0	5.3	6.7	9.4	13.4	16.0
155°	1.3	1.3	1.3	1.3	2.7	4.0	5.3	5.3	6.7	9.4	12.0
157.5°	1.3	1.3	1.3	1.3	2.7	2.7	4.0	4.0	5.3	5.3	8.0
160°	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0	4.0	4.0	4.0
162.5°	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	2.7	4.0	4.0
165°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	2.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1258.0	1259.3	1263.3	1263.3	1260.6	1260.6	1259.3	1258.0	1259.3	1262.0	1262.0
5°	1255.3	1256.6	1260.6	1262.0	1259.3	1258.0	1258.0	1256.6	1258.0	1260.6	1260.6
7.5°	1249.9	1251.3	1255.3	1256.6	1254.0	1254.0	1252.6	1251.3	1254.0	1255.3	1255.3
10°	1241.9	1243.3	1248.6	1249.9	1248.6	1247.3	1247.3	1245.9	1247.3	1249.9	1249.9
12.5°	1231.2	1233.9	1240.6	1240.6	1240.6	1239.2	1239.2	1237.9	1239.2	1241.9	1240.6
15°	1219.2	1224.5	1229.9	1232.6	1232.6	1232.6	1231.2	1229.9	1232.6	1233.9	1232.6
17.5°	1205.8	1212.5	1220.5	1223.2	1223.2	1224.5	1223.2	1221.9	1224.5	1224.5	1223.2
20°	1192.5	1199.1	1207.2	1209.8	1212.5	1213.8	1213.8	1212.5	1213.8	1215.2	1213.8
22.5°	1175.1	1183.1	1192.5	1196.5	1199.1	1201.8	1201.8	1201.8	1203.2	1204.5	1201.8
25°	1156.4	1165.7	1176.4	1180.4	1185.8	1187.1	1188.4	1188.4	1189.8	1191.1	1187.1
27.5°	1136.3	1147.0	1157.7	1164.4	1168.4	1171.1	1171.1	1172.4	1173.7	1175.1	1171.1
30°	1112.2	1128.3	1137.6	1143.0	1148.3	1152.4	1153.7	1155.0	1156.4	1157.7	1153.7
32.5°	1090.9	1104.2	1116.3	1122.9	1129.6	1135.0	1136.3	1136.3	1139.0	1139.0	1135.0
35°	1065.5	1081.5	1093.5	1100.2	1108.2	1112.2	1114.9	1114.9	1117.6	1117.6	1113.6
37.5°	1040.1	1056.1	1069.5	1077.5	1086.8	1092.2	1093.5	1093.5	1096.2	1096.2	1090.9
40°	1013.3	1030.7	1045.4	1054.8	1062.8	1069.5	1070.8	1074.8	1074.8	1073.5	1068.1
42.5°	986.6	1002.6	1018.7	1029.4	1040.1	1046.7	1049.4	1050.8	1050.8	1049.4	1045.4
45°	957.2	975.9	990.6	1004.0	1014.7	1021.3	1025.4	1026.7	1026.7	1024.0	1020.0
47.5°	929.1	947.8	962.5	977.2	987.9	995.9	1000.0	1001.3	1000.0	998.6	994.6
50°	899.7	921.1	935.8	950.5	961.2	967.9	974.6	975.9	974.6	973.2	965.2
52.5°	868.9	891.7	907.7	922.4	934.4	942.5	947.8	949.2	949.2	946.5	941.1
55°	838.2	858.2	878.3	894.3	907.7	915.7	922.4	925.1	922.4	919.7	913.1
57.5°	810.1	828.8	848.9	866.3	879.6	890.3	895.7	898.4	895.7	891.7	885.0
60°	776.7	796.8	819.5	835.5	850.2	860.9	863.6	868.9	866.3	862.3	855.6
62.5°	744.6	768.7	788.7	808.8	820.8	832.8	838.2	840.9	838.2	834.2	827.5
65°	711.2	737.9	758.0	778.0	791.4	803.4	810.1	811.5	808.8	804.8	798.1
67.5°	680.4	705.8	727.2	748.6	760.7	772.7	779.4	782.0	779.4	774.0	767.3
70°	649.7	675.1	700.5	716.5	731.2	744.6	748.6	752.6	750.0	744.6	736.6
72.5°	619.0	645.7	671.1	687.1	703.2	715.2	720.6	724.6	721.9	716.5	707.2
75°	586.9	614.9	640.3	657.7	673.8	685.8	691.1	695.2	692.5	687.1	676.4
77.5°	557.5	585.5	609.6	628.3	644.4	655.0	664.4	665.7	663.1	657.7	647.0
80°	526.7	554.8	580.2	598.9	614.9	625.6	632.3	636.3	633.7	628.3	617.6
82.5°	500.0	525.4	550.8	569.5	585.5	598.9	604.2	608.3	606.9	598.9	590.9
85°	470.6	500.0	520.0	540.1	556.1	569.5	573.5	578.8	577.5	570.8	560.1
87.5°	441.2	470.6	494.6	514.7	529.4	540.1	546.8	549.4	548.1	541.4	529.4
90°	417.1	443.8	467.9	489.3	501.3	513.3	520.0	521.4	521.4	513.3	504.0
92.5°	394.4	419.8	443.8	463.9	478.6	489.3	494.6	497.3	496.0	489.3	478.6
95°	369.0	397.0	419.8	439.8	454.5	465.2	470.6	473.2	471.9	465.2	454.5
97.5°	347.6	373.0	395.7	414.4	429.1	439.8	445.2	447.8	447.8	441.2	430.5
100°	326.2	351.6	373.0	391.7	405.1	415.8	421.1	422.4	421.1	415.8	405.1
102.5°	304.8	328.9	350.3	367.6	382.3	391.7	397.0	398.4	398.4	391.7	381.0
105°	283.4	307.5	327.5	346.2	358.3	367.6	371.6	375.7	374.3	369.0	358.3
107.5°	263.4	287.4	306.1	323.5	335.5	344.9	348.9	352.9	351.6	346.2	335.5
110°	244.6	267.4	284.7	302.1	312.8	322.2	328.9	330.2	327.5	322.2	312.8





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	227.3	247.3	264.7	280.7	292.8	299.5	304.8	307.5	304.8	299.5	292.8
115°	208.5	228.6	246.0	260.7	271.4	279.4	283.4	286.1	283.4	278.1	271.4
117.5°	191.2	209.9	227.3	242.0	251.3	258.0	262.0	264.7	262.0	258.0	251.3
120°	176.5	192.5	208.5	221.9	232.6	238.0	242.0	244.6	243.3	238.0	231.3
122.5°	159.1	176.5	191.2	204.5	213.9	219.2	221.9	224.6	223.3	219.2	212.6
125°	144.4	159.1	173.8	185.8	195.2	200.5	203.2	205.9	204.5	200.5	192.5
127.5°	128.3	144.4	156.4	168.4	175.1	183.1	184.5	187.2	185.8	181.8	175.1
130°	116.3	128.3	140.4	151.1	159.1	164.4	167.1	168.4	165.8	163.1	156.4
132.5°	101.6	115.0	125.7	135.0	140.4	145.7	148.4	149.7	149.7	145.7	140.4
135°	90.9	100.3	109.6	119.0	124.3	129.7	132.3	133.7	132.3	129.7	124.3
137.5°	81.5	89.6	96.3	104.3	111.0	113.6	116.3	116.3	115.0	113.6	109.6
140°	70.9	80.2	86.9	92.2	97.6	98.9	101.6	101.6	100.3	98.9	96.3
142.5°	60.2	68.2	74.9	81.5	85.6	88.2	89.6	90.9	89.6	88.2	84.2
145°	48.1	57.5	64.2	68.2	73.5	74.9	76.2	77.5	76.2	74.9	70.9
147.5°	37.4	45.5	52.1	57.5	61.5	62.8	64.2	65.5	64.2	61.5	60.2
150°	26.7	33.4	41.4	46.8	49.5	52.1	52.1	52.1	53.5	50.8	48.1
152.5°	21.4	24.1	29.4	34.8	38.8	40.1	41.4	41.4	40.1	40.1	37.4
155°	14.7	17.4	21.4	25.4	29.4	30.7	32.1	32.1	30.7	30.7	29.4
157.5°	9.4	12.0	14.7	17.4	21.4	22.7	24.1	24.1	24.1	22.7	21.4
160°	5.3	6.7	8.0	10.7	13.4	14.7	16.0	16.0	16.0	16.0	14.7
162.5°	4.0	4.0	4.0	5.3	6.7	8.0	9.4	9.4	9.4	9.4	8.0
165°	2.7	2.7	2.7	2.7	2.7	4.0	5.3	5.3	5.3	5.3	5.3
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-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1260.6	1260.6	1262.0	1259.3	1251.3	1252.6	1252.6	1258.0	1260.6	1262.0	1268.7
5°	1258.0	1258.0	1260.6	1256.6	1249.9	1249.9	1249.9	1255.3	1256.6	1259.3	1264.6
7.5°	1254.0	1254.0	1255.3	1251.3	1243.3	1243.3	1241.9	1247.3	1249.9	1251.3	1256.6
10°	1247.3	1247.3	1248.6	1244.6	1235.2	1235.2	1233.9	1237.9	1239.2	1241.9	1245.9
12.5°	1237.9	1237.9	1237.9	1233.9	1224.5	1223.2	1221.9	1225.9	1225.9	1227.2	1231.2
15°	1229.9	1227.2	1227.2	1223.2	1213.8	1211.2	1208.5	1209.8	1212.5	1211.2	1213.8
17.5°	1220.5	1217.9	1215.2	1211.2	1199.1	1195.1	1192.5	1193.8	1192.5	1191.1	1193.8
20°	1209.8	1205.8	1204.5	1197.8	1185.8	1179.1	1173.7	1171.1	1172.4	1168.4	1169.7
22.5°	1197.8	1192.5	1189.8	1181.8	1169.7	1161.7	1155.0	1149.7	1148.3	1143.0	1144.3
25°	1183.1	1176.4	1172.4	1165.7	1152.4	1143.0	1135.0	1127.0	1122.9	1116.3	1114.9
27.5°	1165.7	1159.0	1153.7	1147.0	1133.6	1121.6	1112.2	1101.6	1096.2	1088.2	1084.2
30°	1148.3	1140.3	1132.3	1127.0	1112.2	1098.9	1084.2	1074.8	1066.8	1057.4	1050.8
32.5°	1127.0	1118.9	1110.9	1102.9	1089.5	1073.5	1061.4	1046.7	1037.4	1026.7	1018.7
35°	1105.6	1094.9	1086.8	1076.2	1064.1	1045.4	1030.7	1016.0	1004.0	991.9	982.6
37.5°	1081.5	1073.5	1061.4	1052.1	1037.4	1018.7	1002.6	983.9	973.2	957.2	945.1
40°	1058.8	1049.4	1037.4	1025.4	1010.6	989.3	971.9	950.5	938.5	919.7	907.7
42.5°	1036.0	1022.7	1010.6	997.3	981.2	961.2	939.8	918.4	902.4	885.0	867.6
45°	1010.6	995.9	981.2	966.5	950.5	930.4	907.7	885.0	864.9	848.9	827.5
47.5°	983.9	969.2	951.8	935.8	918.4	898.4	874.3	850.2	828.8	810.1	787.4
50°	957.2	942.5	923.8	906.4	886.3	866.3	840.9	812.8	790.1	766.0	746.0
52.5°	929.1	914.4	897.0	874.3	852.9	832.8	806.1	776.7	751.3	731.2	705.8
55°	901.0	886.3	866.3	843.5	822.2	796.8	771.4	741.9	713.9	689.8	664.4
57.5°	871.6	858.2	835.5	816.8	790.1	763.3	736.6	708.5	677.8	649.7	620.3
60°	842.2	827.5	806.1	783.4	756.6	729.9	701.8	671.1	639.0	608.3	581.5
62.5°	815.5	796.8	776.7	752.6	724.6	699.2	667.1	633.7	601.6	569.5	537.4
65°	784.7	764.7	746.0	721.9	692.5	663.1	631.0	597.6	562.8	528.0	496.0
67.5°	754.0	733.9	713.9	689.8	659.1	628.3	594.9	561.5	522.7	489.3	451.9
70°	723.2	707.2	681.8	656.4	628.3	594.9	561.5	525.4	485.3	449.2	410.4
72.5°	692.5	676.4	651.0	624.3	597.6	562.8	526.7	490.6	453.2	411.7	370.3
75°	663.1	643.0	620.3	594.9	566.8	530.7	494.6	457.2	413.1	374.3	331.5
77.5°	635.0	616.3	593.6	565.5	534.7	500.0	462.5	423.8	379.7	338.2	291.4
80°	604.2	585.5	562.8	534.7	504.0	470.6	430.5	390.4	347.6	302.1	254.0
82.5°	574.8	557.5	532.1	506.7	473.2	439.8	399.7	359.6	314.2	270.0	223.3
85°	544.1	526.7	502.6	475.9	443.8	407.7	370.3	330.2	284.7	239.3	192.5
87.5°	517.4	497.3	473.2	446.5	414.4	379.7	343.6	300.8	256.7	212.6	164.4
90°	489.3	470.6	446.5	419.8	387.7	352.9	315.5	275.4	232.6	187.2	141.7
92.5°	465.2	445.2	422.4	395.7	363.6	330.2	292.8	252.7	211.2	167.1	123.0
95°	441.2	421.1	399.7	373.0	340.9	307.5	270.0	231.3	191.2	148.4	106.9
97.5°	414.4	397.0	375.7	350.3	318.2	286.1	250.0	212.6	173.8	132.3	93.6
100°	393.0	373.0	352.9	326.2	296.8	266.0	229.9	193.8	156.4	117.6	81.5
102.5°	369.0	350.3	330.2	304.8	275.4	244.6	211.2	176.5	141.7	105.6	70.9
105°	346.2	328.9	307.5	283.4	255.3	225.9	193.8	161.8	128.3	93.6	62.8
107.5°	323.5	306.1	286.1	263.4	236.6	207.2	177.8	145.7	115.0	84.2	56.1
110°	300.8	284.7	266.0	243.3	217.9	191.2	163.1	133.7	102.9	74.9	49.5



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	280.7	264.7	246.0	224.6	200.5	175.1	148.4	120.3	92.2	66.8	42.8
115°	260.7	246.0	227.3	208.5	184.5	160.4	135.0	108.3	82.9	60.2	37.4
117.5°	240.6	225.9	208.5	189.8	168.4	145.7	121.7	96.3	74.9	53.5	33.4
120°	220.6	207.2	191.2	173.8	155.1	132.3	108.3	86.9	66.8	46.8	29.4
122.5°	201.9	189.8	175.1	159.1	139.0	117.6	97.6	78.9	60.2	41.4	24.1
125°	184.5	172.5	159.1	143.0	124.3	105.6	88.2	70.9	52.1	36.1	20.1
127.5°	167.1	155.1	141.7	127.0	112.3	94.9	78.9	62.8	46.8	32.1	17.4
130°	149.7	139.0	127.0	115.0	100.3	84.2	70.9	54.8	40.1	25.4	14.7
132.5°	132.3	124.3	113.6	101.6	88.2	76.2	61.5	48.1	34.8	22.7	13.4
135°	117.6	109.6	100.3	89.6	78.9	66.8	53.5	41.4	29.4	18.7	10.7
137.5°	104.3	97.6	88.2	78.9	69.5	57.5	46.8	34.8	24.1	16.0	8.0
140°	92.2	85.6	77.5	68.2	60.2	49.5	38.8	28.1	21.4	13.4	6.7
142.5°	80.2	73.5	66.8	58.8	50.8	41.4	32.1	24.1	17.4	10.7	6.7
145°	68.2	62.8	56.1	49.5	41.4	33.4	26.7	20.1	13.4	8.0	5.3
147.5°	56.1	52.1	45.5	40.1	33.4	26.7	21.4	16.0	10.7	6.7	4.0
150°	45.5	41.4	36.1	30.7	26.7	21.4	17.4	12.0	8.0	6.7	4.0
152.5°	34.8	32.1	28.1	25.4	21.4	16.0	12.0	9.4	6.7	5.3	2.7
155°	28.1	25.4	22.7	18.7	16.0	12.0	9.4	6.7	5.3	4.0	2.7
157.5°	20.1	18.7	16.0	13.4	10.7	8.0	6.7	6.7	4.0	2.7	1.3
160°	13.4	12.0	10.7	8.0	6.7	6.7	5.3	4.0	2.7	2.7	1.3
162.5°	8.0	6.7	6.7	6.7	5.3	5.3	4.0	2.7	2.7	1.3	1.3
165°	5.3	5.3	5.3	4.0	4.0	4.0	2.7	1.3	1.3	1.3	1.3
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-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1268.7	1264.6	1270.0	1279.4	1280.7	1279.4	1276.7	1280.7	1286.0	1284.7	1275.3
5°	1266.0	1260.6	1266.0	1275.3	1275.3	1274.0	1272.7	1276.7	1282.0	1280.7	1272.7
7.5°	1258.0	1252.6	1258.0	1266.0	1267.3	1264.6	1264.6	1268.7	1274.0	1272.7	1266.0
10°	1247.3	1241.9	1244.6	1254.0	1256.6	1254.0	1254.0	1258.0	1264.6	1263.3	1255.3
12.5°	1231.2	1227.2	1229.9	1237.9	1240.6	1239.2	1237.9	1243.3	1249.9	1249.9	1241.9
15°	1213.8	1208.5	1211.2	1220.5	1221.9	1219.2	1220.5	1224.5	1232.6	1232.6	1225.9
17.5°	1193.8	1187.1	1191.1	1197.8	1199.1	1199.1	1199.1	1204.5	1213.8	1212.5	1207.2
20°	1171.1	1161.7	1164.4	1171.1	1173.7	1173.7	1173.7	1183.1	1189.8	1189.8	1184.4
22.5°	1144.3	1137.6	1137.6	1144.3	1148.3	1147.0	1147.0	1155.0	1164.4	1163.0	1163.0
25°	1113.6	1108.2	1105.6	1113.6	1114.9	1116.3	1118.9	1127.0	1137.6	1137.6	1139.0
27.5°	1081.5	1076.2	1074.8	1081.5	1082.8	1084.2	1086.8	1096.2	1106.9	1108.2	1110.9
30°	1050.8	1042.7	1040.1	1045.4	1048.1	1049.4	1049.4	1064.1	1073.5	1077.5	1082.8
32.5°	1014.7	1006.6	1000.0	1009.3	1010.6	1013.3	1014.7	1029.4	1040.1	1046.7	1054.8
35°	978.6	965.2	962.5	969.2	971.9	973.2	975.9	991.9	1006.6	1012.0	1022.7
37.5°	938.5	929.1	921.1	927.8	930.4	931.8	939.8	954.5	969.2	977.2	987.9
40°	901.0	889.0	882.3	886.3	889.0	890.3	899.7	915.7	933.1	942.5	955.8
42.5°	859.6	843.5	838.2	842.2	843.5	847.6	855.6	877.0	894.3	907.7	918.4
45°	818.1	806.1	794.1	798.1	799.4	802.1	814.1	836.9	855.6	871.6	883.6
47.5°	775.4	760.7	748.6	751.3	756.6	758.0	771.4	798.1	815.5	832.8	848.9
50°	732.6	712.5	703.2	703.2	705.8	712.5	729.9	756.6	775.4	795.4	812.8
52.5°	688.5	669.8	659.1	660.4	663.1	671.1	687.1	713.9	735.3	756.6	778.0
55°	644.4	624.3	613.6	610.9	613.6	624.3	643.0	671.1	692.5	717.9	740.6
57.5°	600.2	576.2	566.8	562.8	565.5	578.8	597.6	627.0	653.7	677.8	704.5
60°	552.1	533.4	517.4	508.0	514.7	532.1	552.1	582.9	610.9	637.7	667.1
62.5°	510.7	486.6	469.2	459.9	466.6	481.3	509.3	538.7	569.5	600.2	629.6
65°	463.9	439.8	419.8	410.4	417.1	434.5	462.5	494.6	528.0	558.8	593.6
67.5°	418.4	393.0	369.0	359.6	367.6	386.3	417.1	453.2	489.3	521.4	558.8
70°	374.3	346.2	320.8	314.2	319.5	344.9	374.3	410.4	447.8	485.3	524.0
72.5°	334.2	299.5	272.7	264.7	271.4	299.5	332.9	370.3	410.4	450.5	492.0
75°	287.4	255.3	225.9	216.6	224.6	250.0	291.4	331.5	374.3	417.1	455.9
77.5°	250.0	212.6	181.8	167.1	180.5	212.6	252.7	295.4	339.6	383.7	427.8
80°	211.2	172.5	139.0	123.0	137.7	172.5	212.6	259.3	308.8	352.9	393.0
82.5°	176.5	135.0	100.3	82.9	98.9	137.7	181.8	228.6	276.7	320.8	367.6
85°	144.4	101.6	65.5	46.8	69.5	104.3	151.1	199.2	248.7	294.1	339.6
87.5°	117.6	76.2	40.1	20.1	42.8	81.5	125.7	173.8	223.3	268.7	311.5
90°	96.3	54.8	21.4	2.7	25.4	61.5	104.3	151.1	197.9	244.6	287.4
92.5°	78.9	41.4	12.0	1.3	16.0	49.5	89.6	133.7	179.1	224.6	266.0
95°	65.5	32.1	8.0	1.3	12.0	38.8	76.2	119.0	161.8	205.9	247.3
97.5°	56.1	26.7	6.7	1.3	9.4	33.4	65.5	105.6	147.1	188.5	228.6
100°	48.1	21.4	5.3	1.3	8.0	28.1	57.5	93.6	132.3	172.5	211.2
102.5°	41.4	17.4	4.0	1.3	6.7	24.1	50.8	84.2	119.0	157.7	195.2
105°	36.1	14.7	4.0	1.3	5.3	21.4	45.5	74.9	109.6	144.4	180.5
107.5°	30.7	12.0	2.7	1.3	4.0	17.4	40.1	68.2	98.9	132.3	165.8
110°	26.7	10.7	2.7	1.3	4.0	16.0	34.8	61.5	89.6	120.3	152.4



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	22.7	8.0	2.7	1.3	2.7	13.4	30.7	54.8	81.5	109.6	140.4
115°	20.1	6.7	1.3	1.3	2.7	12.0	28.1	49.5	73.5	100.3	128.3
117.5°	16.0	5.3	1.3	1.3	1.3	9.4	24.1	44.1	66.8	92.2	117.6
120°	13.4	5.3	1.3	1.3	1.3	8.0	21.4	38.8	60.2	82.9	106.9
122.5°	12.0	4.0	1.3	1.3	1.3	6.7	18.7	34.8	53.5	74.9	97.6
125°	10.7	4.0	1.3	1.3	1.3	5.3	16.0	30.7	48.1	66.8	88.2
127.5°	8.0	4.0	1.3	1.3	1.3	4.0	14.7	26.7	42.8	60.2	78.9
130°	6.7	2.7	1.3	1.3	1.3	4.0	12.0	24.1	37.4	53.5	70.9
132.5°	5.3	2.7	1.3	1.3	1.3	2.7	9.4	18.7	32.1	46.8	62.8
135°	5.3	2.7	1.3	1.3	1.3	2.7	6.7	16.0	26.7	40.1	53.5
137.5°	5.3	1.3	1.3	1.3	1.3	2.7	5.3	12.0	21.4	32.1	44.1
140°	4.0	1.3	1.3	1.3	1.3	1.3	4.0	9.4	17.4	26.7	37.4
142.5°	4.0	1.3	1.3	1.3	1.3	1.3	4.0	6.7	13.4	21.4	29.4
145°	2.7	1.3	1.3	1.3	1.3	1.3	2.7	5.3	10.7	16.0	24.1
147.5°	2.7	1.3	1.3	1.3	1.3	1.3	2.7	4.0	8.0	13.4	18.7
150°	2.7	1.3	1.3	1.3	1.3	1.3	2.7	4.0	5.3	9.4	14.7
152.5°	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0	6.7	9.4
155°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	4.0	5.3	6.7
157.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0	5.3
160°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7	4.0
162.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.7	2.7
165°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1271.3	1262.0	1264.6	1263.3	1266.0	1270.0	1270.0	1268.7	1268.7	1266.0	1263.3
5°	1268.7	1259.3	1263.3	1262.0	1264.6	1268.7	1268.7	1267.3	1267.3	1263.3	1262.0
7.5°	1260.6	1254.0	1256.6	1256.6	1259.3	1263.3	1263.3	1262.0	1262.0	1258.0	1256.6
10°	1252.6	1244.6	1248.6	1248.6	1251.3	1256.6	1256.6	1255.3	1255.3	1251.3	1249.9
12.5°	1239.2	1231.2	1237.9	1239.2	1241.9	1247.3	1245.9	1245.9	1245.9	1241.9	1240.6
15°	1223.2	1217.9	1224.5	1225.9	1229.9	1236.6	1236.6	1236.6	1236.6	1232.6	1231.2
17.5°	1205.8	1201.8	1208.5	1211.2	1216.5	1223.2	1223.2	1224.5	1225.9	1223.2	1221.9
20°	1185.8	1183.1	1189.8	1195.1	1203.2	1209.8	1212.5	1213.8	1216.5	1213.8	1212.5
22.5°	1163.0	1163.0	1172.4	1177.8	1187.1	1193.8	1197.8	1201.8	1204.5	1201.8	1200.5
25°	1137.6	1141.7	1151.0	1160.4	1171.1	1177.8	1181.8	1187.1	1189.8	1188.4	1187.1
27.5°	1113.6	1118.9	1131.0	1140.3	1149.7	1160.4	1164.4	1171.1	1173.7	1173.7	1172.4
30°	1085.5	1093.5	1106.9	1117.6	1129.6	1140.3	1145.7	1152.4	1156.4	1153.7	1155.0
32.5°	1058.8	1072.1	1082.8	1094.9	1108.2	1118.9	1125.6	1133.6	1137.6	1136.3	1137.6
35°	1029.4	1042.7	1057.4	1069.5	1085.5	1096.2	1105.6	1112.2	1117.6	1116.3	1116.3
37.5°	997.3	1014.7	1029.4	1045.4	1060.1	1072.1	1081.5	1089.5	1094.9	1094.9	1094.9
40°	966.5	985.2	1000.0	1018.7	1037.4	1048.1	1058.8	1066.8	1072.1	1073.5	1074.8
42.5°	933.1	953.2	970.5	990.6	1009.3	1022.7	1034.7	1044.1	1049.4	1052.1	1050.8
45°	902.4	921.1	941.1	963.9	981.2	994.6	1009.3	1020.0	1025.4	1026.7	1028.0
47.5°	867.6	889.0	911.7	934.4	951.8	969.2	982.6	993.3	998.6	1002.6	1002.6
50°	834.2	856.9	882.3	906.4	925.1	942.5	955.8	967.9	974.6	977.2	978.6
52.5°	803.4	824.8	851.6	875.6	894.3	911.7	929.1	942.5	949.2	951.8	951.8
55°	766.0	792.7	822.2	844.9	864.9	885.0	902.4	915.7	922.4	926.4	929.1
57.5°	731.2	759.3	790.1	814.1	838.2	856.9	873.0	890.3	895.7	901.0	902.4
60°	697.8	725.9	755.3	782.0	806.1	826.2	844.9	859.6	868.9	871.6	874.3
62.5°	663.1	692.5	723.2	750.0	775.4	799.4	816.8	830.2	840.9	844.9	847.6
65°	629.6	660.4	691.1	719.2	746.0	770.0	787.4	800.8	811.5	818.1	819.5
67.5°	593.6	627.0	659.1	688.5	715.2	740.6	758.0	771.4	782.0	790.1	791.4
70°	560.1	594.9	627.0	659.1	685.8	711.2	729.9	743.3	755.3	760.7	763.3
72.5°	528.0	564.1	597.6	629.6	656.4	681.8	701.8	715.2	727.2	733.9	735.3
75°	497.3	533.4	569.5	600.2	628.3	653.7	673.8	688.5	699.2	705.8	708.5
77.5°	466.6	504.0	540.1	570.8	600.2	625.6	643.0	660.4	671.1	679.1	679.1
80°	435.8	474.6	512.0	542.8	572.2	594.9	614.9	632.3	643.0	651.0	651.0
82.5°	409.1	446.5	482.6	513.3	542.8	568.2	588.2	604.2	616.3	621.6	623.0
85°	378.3	419.8	453.2	486.6	514.7	538.7	558.8	576.2	586.9	592.2	594.9
87.5°	352.9	393.0	429.1	458.5	486.6	510.7	533.4	548.1	558.8	565.5	568.2
90°	328.9	367.6	403.7	433.1	462.5	485.3	506.7	521.4	533.4	538.7	541.4
92.5°	307.5	346.2	381.0	410.4	438.5	463.9	483.9	498.6	509.3	514.7	518.7
95°	287.4	324.9	358.3	390.4	417.1	439.8	461.2	475.9	487.9	492.0	496.0
97.5°	267.4	303.5	336.9	367.6	395.7	417.1	437.1	451.9	461.2	467.9	471.9
100°	250.0	284.7	316.8	346.2	373.0	393.0	414.4	427.8	437.1	442.5	447.8
102.5°	231.3	266.0	296.8	324.9	352.9	371.6	391.7	405.1	413.1	422.4	422.4
105°	215.2	247.3	278.1	304.8	328.9	351.6	369.0	382.3	391.7	398.4	398.4
107.5°	197.9	229.9	259.3	287.4	310.1	331.5	347.6	359.6	370.3	374.3	378.3
110°	184.5	212.6	242.0	268.7	290.1	310.1	326.2	339.6	348.9	352.9	355.6



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	168.4	197.9	224.6	250.0	271.4	290.1	306.1	316.8	326.2	331.5	332.9
115°	155.1	183.1	207.2	231.3	254.0	270.0	284.7	295.4	304.8	308.8	311.5
117.5°	143.0	168.4	192.5	212.6	233.9	251.3	266.0	275.4	283.4	288.8	291.4
120°	131.0	155.1	176.5	196.5	216.6	232.6	246.0	255.3	264.7	268.7	268.7
122.5°	119.0	141.7	161.8	180.5	199.2	213.9	228.6	236.6	244.6	248.7	248.7
125°	108.3	129.7	148.4	165.8	183.1	196.5	208.5	217.9	225.9	228.6	228.6
127.5°	97.6	117.6	135.0	151.1	165.8	179.1	191.2	200.5	207.2	209.9	209.9
130°	88.2	105.6	121.7	137.7	152.4	163.1	175.1	183.1	187.2	191.2	192.5
132.5°	78.9	94.9	109.6	123.0	137.7	148.4	157.7	165.8	169.8	173.8	175.1
135°	69.5	84.2	97.6	111.0	123.0	133.7	141.7	148.4	153.7	156.4	157.7
137.5°	58.8	74.9	86.9	97.6	111.0	119.0	128.3	132.3	137.7	140.4	140.4
140°	49.5	61.5	74.9	85.6	96.3	104.3	112.3	119.0	123.0	124.3	124.3
142.5°	40.1	50.8	61.5	74.9	84.2	90.9	98.9	104.3	106.9	108.3	109.6
145°	32.1	40.1	49.5	61.5	72.2	80.2	84.2	89.6	92.2	93.6	94.9
147.5°	24.1	32.1	40.1	48.1	58.8	66.8	70.9	76.2	78.9	80.2	80.2
150°	18.7	24.1	29.4	37.4	45.5	54.8	60.2	64.2	65.5	66.8	66.8
152.5°	13.4	18.7	22.7	28.1	33.4	41.4	49.5	52.1	53.5	54.8	54.8
155°	9.4	13.4	16.0	20.1	24.1	30.7	37.4	41.4	42.8	44.1	44.1
157.5°	6.7	9.4	10.7	14.7	17.4	20.1	25.4	32.1	33.4	33.4	33.4
160°	4.0	5.3	6.7	9.4	10.7	13.4	16.0	20.1	24.1	24.1	24.1
162.5°	2.7	4.0	4.0	5.3	5.3	8.0	9.4	10.7	14.7	16.0	16.0
165°	1.3	2.7	2.7	2.7	2.7	2.7	4.0	4.0	6.7	8.0	8.0
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-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1264.6	1267.3	1266.0	1266.0	1266.0	1268.7	1266.0	1254.0	1256.6	1259.3	1262.0
5°	1263.3	1264.6	1264.6	1263.3	1263.3	1266.0	1263.3	1251.3	1254.0	1256.6	1258.0
7.5°	1258.0	1259.3	1259.3	1259.3	1258.0	1260.6	1256.6	1245.9	1245.9	1248.6	1249.9
10°	1251.3	1254.0	1252.6	1251.3	1251.3	1251.3	1248.6	1236.6	1236.6	1237.9	1239.2
12.5°	1243.3	1243.3	1243.3	1241.9	1240.6	1240.6	1237.9	1225.9	1224.5	1227.2	1225.9
15°	1232.6	1235.2	1232.6	1231.2	1228.6	1228.6	1224.5	1212.5	1209.8	1211.2	1209.8
17.5°	1223.2	1224.5	1221.9	1219.2	1216.5	1215.2	1211.2	1197.8	1193.8	1195.1	1192.5
20°	1213.8	1213.8	1211.2	1208.5	1204.5	1200.5	1195.1	1181.8	1175.1	1175.1	1169.7
22.5°	1201.8	1201.8	1199.1	1195.1	1191.1	1185.8	1180.4	1167.1	1156.4	1153.7	1149.7
25°	1188.4	1187.1	1185.8	1181.8	1173.7	1168.4	1163.0	1148.3	1136.3	1131.0	1124.3
27.5°	1172.4	1172.4	1168.4	1164.4	1156.4	1149.7	1143.0	1129.6	1113.6	1106.9	1097.5
30°	1155.0	1155.0	1151.0	1145.7	1137.6	1129.6	1121.6	1105.6	1089.5	1080.2	1069.5
32.5°	1137.6	1136.3	1132.3	1127.0	1118.9	1106.9	1100.2	1084.2	1065.5	1054.8	1040.1
35°	1116.3	1114.9	1110.9	1104.2	1093.5	1084.2	1073.5	1058.8	1037.4	1024.0	1008.0
37.5°	1094.9	1093.5	1090.9	1081.5	1070.8	1060.1	1046.7	1032.0	1012.0	994.6	978.6
40°	1073.5	1072.1	1066.8	1060.1	1046.7	1033.4	1020.0	1005.3	983.9	963.9	946.5
42.5°	1050.8	1049.4	1042.7	1034.7	1020.0	1006.6	990.6	974.6	953.2	929.1	911.7
45°	1028.0	1025.4	1018.7	1009.3	993.3	978.6	962.5	943.8	922.4	899.7	877.0
47.5°	1004.0	1000.0	993.3	979.9	966.5	950.5	931.8	911.7	890.3	864.9	840.9
50°	977.2	974.6	966.5	954.5	938.5	922.4	901.0	881.0	855.6	831.5	802.1
52.5°	951.8	946.5	939.8	926.4	910.4	893.0	870.3	846.2	820.8	798.1	767.3
55°	925.1	922.4	913.1	902.4	882.3	862.3	840.9	815.5	787.4	760.7	731.2
57.5°	899.7	894.3	886.3	871.6	854.2	834.2	811.5	784.7	754.0	725.9	693.8
60°	874.3	866.3	856.9	843.5	824.8	803.4	779.4	751.3	720.6	689.8	656.4
62.5°	846.2	839.5	828.8	815.5	796.8	774.0	748.6	719.2	689.8	657.7	621.6
65°	818.1	811.5	800.8	787.4	768.7	743.3	716.5	687.1	653.7	623.0	584.2
67.5°	790.1	783.4	771.4	756.6	737.9	713.9	685.8	655.0	621.6	588.2	548.1
70°	762.0	754.0	743.3	727.2	708.5	683.1	655.0	623.0	589.5	553.4	513.3
72.5°	733.9	727.2	713.9	699.2	679.1	653.7	625.6	593.6	558.8	521.4	481.3
75°	705.8	697.8	688.5	671.1	649.7	625.6	596.2	564.1	526.7	490.6	449.2
77.5°	677.8	671.1	659.1	641.7	621.6	596.2	566.8	534.7	497.3	459.9	415.8
80°	649.7	641.7	632.3	616.3	593.6	568.2	537.4	505.3	467.9	429.1	385.0
82.5°	621.6	613.6	602.9	586.9	565.5	540.1	510.7	475.9	438.5	398.4	356.9
85°	593.6	586.9	574.8	558.8	536.1	510.7	481.3	450.5	410.4	370.3	328.9
87.5°	565.5	558.8	546.8	530.7	509.3	483.9	454.5	422.4	383.7	346.2	300.8
90°	538.7	533.4	521.4	505.3	483.9	458.5	431.8	397.0	359.6	322.2	279.4
92.5°	514.7	509.3	498.6	482.6	463.9	435.8	409.1	375.7	338.2	299.5	258.0
95°	493.3	486.6	475.9	461.2	438.5	414.4	387.7	354.3	318.2	279.4	239.3
97.5°	469.2	462.5	451.9	435.8	417.1	391.7	365.0	332.9	296.8	260.7	220.6
100°	445.2	438.5	426.5	413.1	394.4	369.0	343.6	311.5	278.1	243.3	204.5
102.5°	421.1	414.4	403.7	390.4	371.6	348.9	323.5	292.8	259.3	224.6	188.5
105°	398.4	391.7	381.0	367.6	350.3	327.5	300.8	274.1	242.0	208.5	173.8
107.5°	375.7	369.0	359.6	346.2	328.9	307.5	282.1	254.0	224.6	192.5	159.1
110°	352.9	347.6	336.9	324.9	307.5	286.1	263.4	236.6	207.2	177.8	145.7





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	331.5	326.2	315.5	302.1	287.4	267.4	244.6	219.2	191.2	163.1	132.3
115°	310.1	303.5	294.1	282.1	267.4	248.7	227.3	204.5	176.5	149.7	121.7
117.5°	288.8	283.4	274.1	262.0	248.7	229.9	209.9	188.5	161.8	136.4	111.0
120°	267.4	263.4	254.0	243.3	229.9	212.6	193.8	172.5	148.4	124.3	100.3
122.5°	247.3	243.3	233.9	224.6	211.2	195.2	177.8	157.7	136.4	113.6	92.2
125°	228.6	223.3	215.2	205.9	193.8	179.1	161.8	143.0	123.0	102.9	82.9
127.5°	208.5	204.5	199.2	188.5	176.5	163.1	147.1	131.0	112.3	93.6	74.9
130°	192.5	187.2	180.5	172.5	161.8	148.4	133.7	117.6	101.6	84.2	65.5
132.5°	173.8	168.4	163.1	155.1	145.7	133.7	120.3	105.6	90.9	74.9	58.8
135°	156.4	152.4	147.1	139.0	129.7	120.3	106.9	93.6	80.2	65.5	52.1
137.5°	140.4	136.4	131.0	125.7	116.3	106.9	94.9	82.9	70.9	57.5	45.5
140°	124.3	121.7	116.3	111.0	102.9	93.6	82.9	72.2	61.5	49.5	38.8
142.5°	108.3	105.6	101.6	96.3	89.6	81.5	72.2	62.8	52.1	42.8	33.4
145°	93.6	92.2	88.2	82.9	77.5	69.5	61.5	53.5	44.1	36.1	26.7
147.5°	78.9	77.5	74.9	70.9	65.5	58.8	52.1	44.1	37.4	29.4	21.4
150°	65.5	64.2	62.8	57.5	54.8	48.1	42.8	36.1	30.7	22.7	17.4
152.5°	53.5	53.5	50.8	46.8	44.1	38.8	34.8	29.4	24.1	18.7	13.4
155°	42.8	41.4	40.1	37.4	34.8	30.7	26.7	22.7	18.7	13.4	9.4
157.5°	33.4	32.1	30.7	28.1	25.4	24.1	20.1	16.0	12.0	9.4	6.7
160°	24.1	22.7	21.4	20.1	18.7	16.0	13.4	10.7	8.0	5.3	4.0
162.5°	16.0	14.7	14.7	13.4	12.0	9.4	8.0	6.7	5.3	4.0	2.7
165°	8.0	8.0	6.7	6.7	5.3	4.0	4.0	4.0	2.7	2.7	1.3
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-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3	1267.3
2.5°	1260.6	1260.6	1266.0	1264.6	1260.6	1268.7	1278.0
5°	1256.6	1256.6	1260.6	1260.6	1256.6	1264.6	1272.7
7.5°	1249.9	1248.6	1252.6	1252.6	1247.3	1254.0	1263.3
10°	1237.9	1236.6	1240.6	1240.6	1235.2	1241.9	1249.9
12.5°	1224.5	1221.9	1225.9	1224.5	1219.2	1225.9	1233.9
15°	1207.2	1205.8	1208.5	1205.8	1200.5	1207.2	1215.2
17.5°	1189.8	1185.8	1187.1	1187.1	1177.8	1184.4	1191.1
20°	1167.1	1161.7	1163.0	1161.7	1155.0	1159.0	1167.1
22.5°	1144.3	1136.3	1136.3	1135.0	1127.0	1132.3	1139.0
25°	1116.3	1106.9	1106.9	1105.6	1096.2	1100.2	1106.9
27.5°	1088.2	1078.8	1074.8	1073.5	1064.1	1064.1	1073.5
30°	1058.8	1045.4	1042.7	1038.7	1029.4	1029.4	1037.4
32.5°	1030.7	1012.0	1006.6	1001.3	991.9	990.6	1000.0
35°	993.3	978.6	969.2	963.9	953.2	950.5	958.5
37.5°	962.5	943.8	930.4	923.8	913.1	909.0	919.7
40°	929.1	909.0	891.7	887.7	871.6	866.3	875.6
42.5°	891.7	870.3	852.9	844.9	832.8	827.5	828.8
45°	854.2	831.5	812.8	802.1	790.1	780.7	786.1
47.5°	815.5	795.4	772.7	756.6	741.9	735.3	737.9
50°	776.7	752.6	731.2	713.9	696.5	688.5	693.8
52.5°	737.9	712.5	688.5	669.8	649.7	641.7	643.0
55°	700.5	673.8	645.7	625.6	606.9	594.9	592.2
57.5°	663.1	633.7	604.2	581.5	557.5	546.8	542.8
60°	623.0	592.2	561.5	534.7	509.3	497.3	492.0
62.5°	585.5	552.1	517.4	489.3	463.9	447.8	443.8
65°	549.4	510.7	475.9	443.8	415.8	398.4	393.0
67.5°	510.7	470.6	433.1	398.4	371.6	348.9	346.2
70°	474.6	431.8	390.4	354.3	324.9	302.1	291.4
72.5°	438.5	394.4	351.6	312.8	275.4	254.0	246.0
75°	403.7	358.3	312.8	272.7	231.3	205.9	197.9
77.5°	371.6	324.9	276.7	232.6	193.8	161.8	151.1
80°	340.9	292.8	242.0	196.5	155.1	120.3	108.3
82.5°	308.8	263.4	211.2	163.1	120.3	84.2	69.5
85°	280.7	235.3	183.1	135.0	92.2	53.5	37.4
87.5°	258.0	208.5	161.8	113.6	69.5	30.7	10.7
90°	235.3	187.2	140.4	93.6	52.1	17.4	1.3
92.5°	215.2	169.8	123.0	80.2	40.1	12.0	1.3
95°	196.5	152.4	108.3	66.8	32.1	8.0	1.3
97.5°	179.1	137.7	96.3	57.5	26.7	6.7	1.3
100°	164.4	124.3	85.6	50.8	22.7	5.3	1.3
102.5°	149.7	112.3	76.2	44.1	20.1	4.0	1.3
105°	137.7	101.6	68.2	40.1	17.4	4.0	1.3
107.5°	125.7	92.2	61.5	34.8	14.7	2.7	1.3
110°	113.6	84.2	54.8	30.7	13.4	2.7	1.3



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-70SL-LW-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	104.3	76.2	49.5	28.1	10.7	2.7	1.3
115°	94.9	68.2	44.1	24.1	9.4	1.3	1.3
117.5°	85.6	61.5	38.8	21.4	8.0	1.3	1.3
120°	77.5	54.8	34.8	18.7	6.7	1.3	1.3
122.5°	69.5	49.5	30.7	16.0	5.3	1.3	1.3
125°	62.8	44.1	26.7	13.4	4.0	1.3	1.3
127.5°	56.1	38.8	24.1	12.0	4.0	1.3	1.3
130°	49.5	34.8	20.1	9.4	2.7	1.3	1.3
132.5°	44.1	29.4	17.4	8.0	2.7	1.3	1.3
135°	38.8	25.4	14.7	5.3	2.7	1.3	1.3
137.5°	33.4	21.4	12.0	4.0	1.3	1.3	1.3
140°	28.1	18.7	9.4	4.0	1.3	1.3	1.3
142.5°	24.1	14.7	6.7	2.7	1.3	1.3	1.3
145°	18.7	12.0	5.3	2.7	1.3	1.3	1.3
147.5°	14.7	9.4	4.0	2.7	1.3	1.3	1.3
150°	10.7	6.7	4.0	1.3	1.3	1.3	1.3
152.5°	8.0	5.3	2.7	1.3	1.3	1.3	1.3
155°	5.3	4.0	2.7	1.3	1.3	1.3	1.3
157.5°	4.0	2.7	1.3	1.3	1.3	1.3	1.3
160°	2.7	1.3	1.3	1.3	1.3	1.3	1.3
162.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
165°	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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)