

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: NEO-RAY

Report Number: P333444-935

Luminaire Tested: **S125DIW-S1090D1050U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333444-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S1090D1050U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7281.8 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

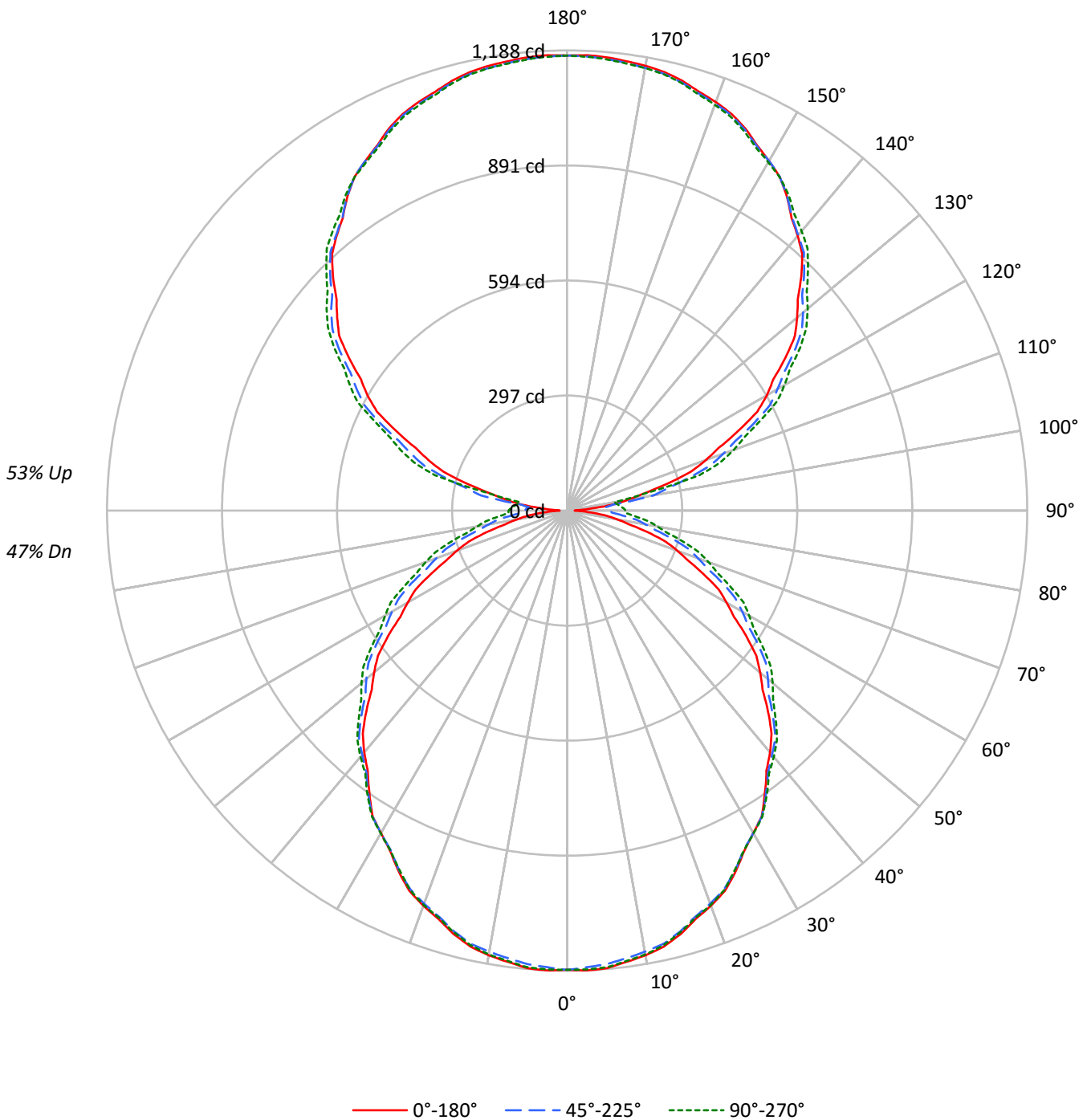
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333444-935

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Luminous Intensity Polar Plot





TEST NUMBER: P333444-935

CATALOG NUMBER: S125DIW-S1090D1050U935-4F0-1E-UDD-D

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	85	81	78	71	68	66	58	56	55	46	45	44	38
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	36	33	31	26
4	73	62	54	47	67	57	50	44	48	42	38	39	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.5
10°-20°	318.2	4.4
20°-30°	473.3	6.5
30°-40°	560.6	7.7
40°-50°	579.6	8.0
50°-60°	533.9	7.3
60°-70°	431.6	5.9
70°-80°	289.0	4.0
80°-90°	152.3	2.1
90°-100°	126.8	1.7
100°-110°	325.1	4.5
110°-120°	518.7	7.1
120°-130°	636.0	8.7
130°-140°	669.0	9.2
140°-150°	620.3	8.5
150°-160°	500.1	6.9
160°-170°	323.4	4.4
170°-180°	111.6	1.5
0°-30°	903.6	12.4
0°-40°	1464.2	20.1
0°-60°	2577.8	35.4
0°-90°	3450.8	47.4
90°-120°	970.6	13.3
90°-150°	2895.9	39.8
90°-180°	3831.0	52.6
0°-180°	7281.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	20	64	109	139	151	14
95°	65	91	99	128	137	75
105°	266	289	323	346	354	282
115°	488	501	531	548	550	483
125°	688	694	716	731	735	614
135°	855	859	865	878	879	659
145°	990	990	990	996	996	618
155°	1088	1084	1085	1087	1081	501
165°	1149	1144	1144	1149	1142	324
175°	1175	1170	1170	1177	1170	112
180°	1175	1175	1175	1175	1175	



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CATALOG NUMBER: S125DIW-S1090D1050U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.4	45.0	53.6	62.2	70.8	79.6	88.6	97.6	106.7	115.8	121.9
90°	19.5	29.3	39.1	48.9	58.7	68.7	78.9	88.9	99.1	109.3	116.1
92.5°	30.1	36.7	43.3	49.9	56.4	64.7	75.0	85.2	95.3	105.6	112.2
95°	64.7	70.9	77.0	83.2	89.3	93.1	94.5	95.9	97.4	98.8	105.5
97.5°	117.4	124.4	131.5	138.6	145.7	146.2	140.1	134.1	127.9	121.9	121.8
100°	158.2	164.2	170.2	176.2	182.2	189.8	198.8	207.8	216.9	225.9	202.5
102.5°	199.8	205.5	211.3	217.0	222.7	229.9	238.4	246.9	255.5	264.0	263.7
105°	266.5	271.4	276.3	281.2	286.1	292.4	300.1	307.9	315.6	323.4	328.6
107.5°	335.8	339.3	342.9	346.3	349.8	355.5	363.3	371.2	379.0	386.8	391.9
110°	380.8	383.9	387.0	390.1	393.2	398.6	406.2	413.8	421.5	429.0	433.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	424.0	427.0	429.9	432.8	435.8	440.9	448.2	455.4	462.7	469.9	473.9
115°	487.7	490.4	493.2	495.9	498.8	503.6	510.5	517.4	524.3	531.2	535.1
117.5°	553.5	554.7	555.9	557.0	558.1	562.2	569.4	576.4	583.5	590.6	594.0
120°	595.3	595.9	596.5	597.1	597.6	601.2	607.7	614.2	620.8	627.3	631.3
122.5°	631.4	632.4	633.5	634.6	635.7	639.3	645.2	651.3	657.3	663.3	667.1
125°	688.2	689.3	690.4	691.5	692.6	695.8	700.9	706.1	711.3	716.4	719.8
127.5°	741.6	742.3	743.0	743.7	744.4	746.8	751.0	755.1	759.1	763.3	766.7
130°	775.0	775.7	776.4	777.1	777.8	780.1	783.9	787.7	791.5	795.3	798.4
132.5°	807.5	808.6	809.7	810.7	811.8	813.6	815.9	818.2	820.6	822.9	826.5
135°	854.8	855.7	856.6	857.6	858.4	859.6	861.0	862.5	863.8	865.3	868.2
137.5°	898.3	899.1	899.9	900.7	901.5	902.2	902.7	903.3	903.8	904.3	907.4
140°	925.9	926.3	926.7	927.1	927.5	927.7	927.8	927.8	927.9	928.0	931.2
142.5°	951.7	951.7	951.7	951.8	951.8	952.0	952.4	952.6	953.0	953.3	955.8
145°	989.5	989.6	989.8	989.9	990.1	990.1	990.1	990.1	990.1	990.1	991.6
147.5°	1021.4	1021.4	1021.3	1021.2	1021.1	1021.2	1021.4	1021.7	1021.9	1022.1	1022.8
150°	1042.3	1042.0	1041.6	1041.2	1040.8	1040.8	1041.2	1041.6	1042.0	1042.3	1042.8
152.5°	1062.6	1061.7	1060.8	1060.0	1059.1	1058.9	1059.3	1059.7	1060.1	1060.4	1060.8
155°	1088.5	1087.4	1086.2	1085.0	1083.8	1083.5	1083.8	1084.3	1084.6	1085.0	1085.5
157.5°	1108.5	1107.8	1107.2	1106.5	1105.7	1105.4	1105.4	1105.4	1105.5	1105.5	1106.2
160°	1122.5	1121.3	1120.2	1119.0	1117.8	1117.3	1117.5	1117.8	1117.9	1118.1	1118.9
162.5°	1133.6	1132.5	1131.3	1130.1	1128.9	1128.4	1128.7	1128.9	1129.0	1129.2	1130.3
165°	1148.6	1147.5	1146.2	1145.1	1143.9	1143.4	1143.7	1143.8	1144.0	1144.2	1145.4
167.5°	1159.7	1158.6	1157.4	1156.2	1154.9	1154.4	1154.6	1154.8	1155.0	1155.2	1156.6
170°	1166.0	1164.7	1163.3	1161.9	1160.5	1160.0	1160.2	1160.4	1160.5	1160.8	1162.4
172.5°	1170.2	1168.8	1167.4	1166.1	1164.8	1164.2	1164.6	1164.9	1165.3	1165.6	1167.0
175°	1174.7	1173.5	1172.3	1171.2	1170.0	1169.6	1169.8	1169.9	1170.2	1170.4	1171.9
177.5°	1176.8	1175.9	1174.9	1174.0	1173.1	1172.7	1172.9	1173.0	1173.1	1173.3	1174.4
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	128.0	134.1	140.3	144.3	146.3	148.2	150.1	152.1
90°	123.0	129.9	136.9	141.5	143.9	146.3	148.7	151.1
92.5°	118.9	125.6	132.3	136.7	138.8	140.9	142.9	145.1
95°	112.1	118.7	125.4	129.6	131.4	133.2	135.0	136.8
97.5°	121.8	121.7	121.7	122.6	124.3	126.1	127.9	129.7
100°	179.1	155.7	132.2	121.0	121.7	122.5	123.3	124.1
102.5°	263.5	263.3	263.0	257.1	245.5	233.8	222.3	210.7
105°	333.7	338.9	344.1	347.5	349.0	350.7	352.3	354.0
107.5°	397.1	402.3	407.4	410.5	411.6	412.6	413.5	414.6
110°	437.7	442.0	446.3	449.5	451.5	453.6	455.6	457.5



TEST NUMBER: P333444-935

CATALOG NUMBER: S125DIW-S1090D1050U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	477.9	481.8	485.8	488.5	490.1	491.6	493.2	494.7
115°	539.0	542.9	546.7	548.9	549.2	549.7	550.0	550.4
117.5°	597.4	600.8	604.2	606.5	607.7	609.0	610.2	611.5
120°	635.3	639.3	643.3	645.6	646.2	646.8	647.4	647.9
122.5°	670.9	674.7	678.5	680.6	681.1	681.5	681.9	682.3
125°	723.2	726.5	729.9	731.8	732.5	733.3	734.0	734.7
127.5°	770.1	773.5	776.9	778.6	778.7	778.8	778.9	778.9
130°	801.4	804.4	807.4	809.2	809.5	809.8	810.1	810.5
132.5°	830.0	833.4	837.0	838.8	838.9	839.0	839.1	839.2
135°	871.2	874.2	877.2	878.7	878.8	879.0	879.1	879.3
137.5°	910.5	913.7	916.8	918.3	918.4	918.4	918.4	918.5
140°	934.4	937.6	940.9	942.5	942.3	942.2	942.0	941.9
142.5°	958.3	960.8	963.3	964.5	964.4	964.2	964.1	964.0
145°	993.1	994.5	996.0	996.7	996.6	996.4	996.3	996.2
147.5°	1023.4	1024.1	1024.7	1024.6	1023.6	1022.7	1021.7	1020.9
150°	1043.1	1043.5	1043.9	1043.4	1042.2	1040.9	1039.6	1038.3
152.5°	1061.2	1061.6	1062.0	1061.5	1060.1	1058.9	1057.5	1056.2
155°	1086.2	1086.8	1087.4	1086.8	1085.3	1083.7	1082.2	1080.6
157.5°	1106.8	1107.4	1108.0	1107.6	1106.0	1104.5	1102.9	1101.4
160°	1119.6	1120.4	1121.2	1120.8	1119.3	1117.8	1116.2	1114.7
162.5°	1131.4	1132.5	1133.6	1133.2	1131.5	1129.9	1128.2	1126.4
165°	1146.5	1147.7	1148.8	1148.7	1147.1	1145.6	1144.0	1142.5
167.5°	1158.0	1159.3	1160.8	1160.6	1158.8	1157.1	1155.4	1153.7
170°	1163.9	1165.4	1167.0	1166.8	1165.1	1163.4	1161.7	1159.9
172.5°	1168.5	1169.8	1171.2	1171.0	1169.3	1167.5	1165.8	1164.1
175°	1173.5	1175.0	1176.6	1176.5	1174.7	1172.9	1171.2	1169.5
177.5°	1175.4	1176.6	1177.7	1177.6	1176.3	1175.1	1173.9	1172.6
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7

(END OF REPORT)