

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: P333414-940

Luminaire Tested: **S125DIW-S850D1050U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333414-940
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-S850D1050U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 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: 6664.3 lumens
Efficiency: N/A
Efficacy: 126.7 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

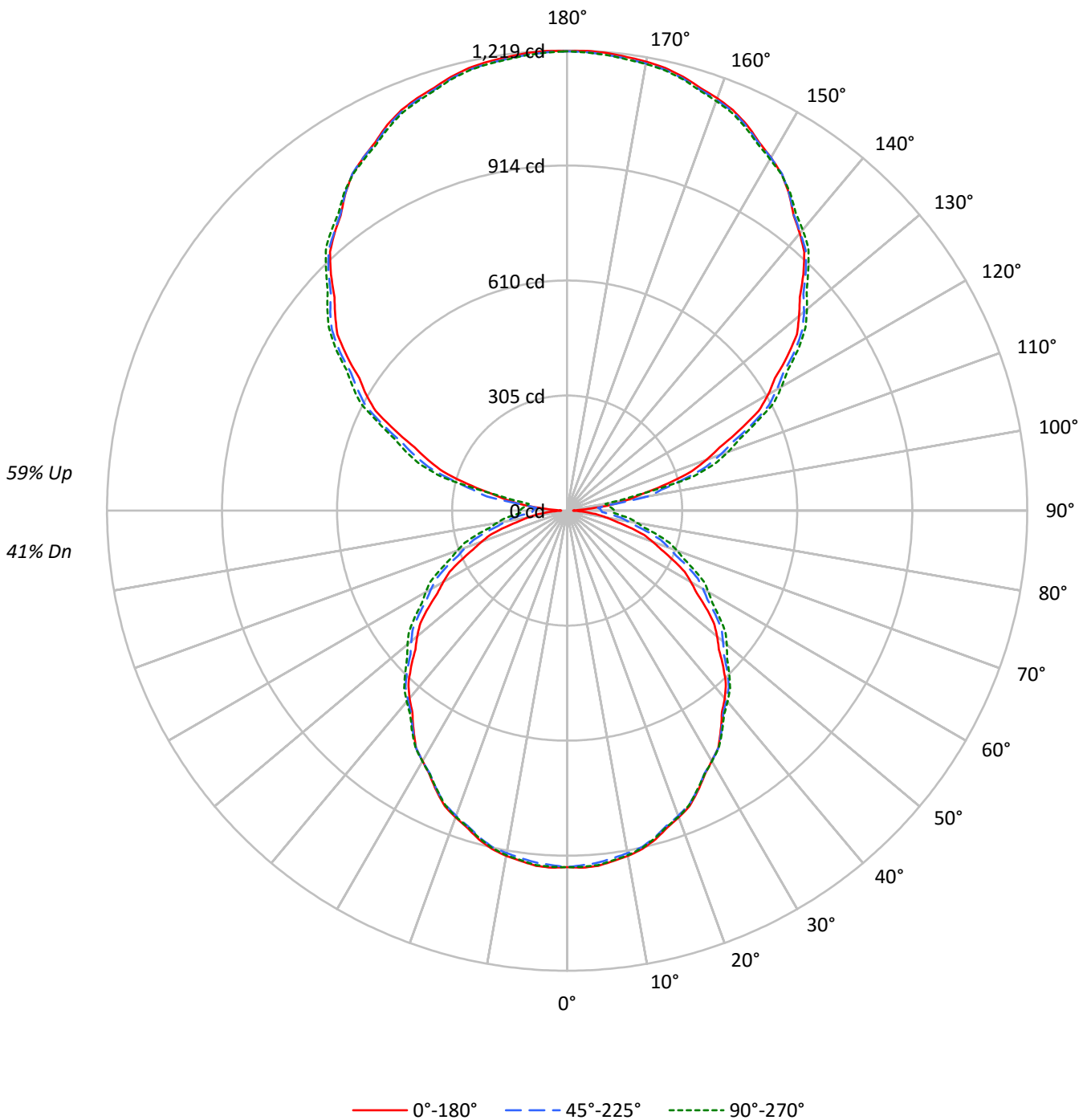
Input Watts (W): 52.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S125DIW-S850D1050U940-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333414-940

CATALOG NUMBER: S125DIW-S850D1050U940-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	42	40	39	33
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	25	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	12	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6101	6101	6101
5°	6113	5988	6007
10°	6069	5881	5872
15°	5998	5753	5701
20°	5900	5595	5529
25°	5784	5425	5318
30°	5644	5239	5126
35°	5513	5068	4951
40°	5379	4888	4773
45°	5228	4733	4617
50°	5084	4566	4479
55°	4912	4408	4315
60°	4722	4227	4149
65°	4525	4039	3961
70°	4301	3780	3769
75°	3945	3533	3533
80°	3483	3233	3276
85°	3046	3031	3195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	1.3
10°-20°	253.6	3.8
20°-30°	377.1	5.7
30°-40°	446.7	6.7
40°-50°	461.8	6.9
50°-60°	425.4	6.4
60°-70°	343.9	5.2
70°-80°	230.3	3.5
80°-90°	122.0	1.8
90°-100°	111.2	1.7
100°-110°	321.9	4.8
110°-120°	527.3	7.9
120°-130°	653.0	9.8
130°-140°	690.4	10.4
140°-150°	642.0	9.6
150°-160°	518.0	7.8
160°-170°	335.0	5.0
170°-180°	115.5	1.7
0°-30°	720.0	10.8
0°-40°	1166.7	17.5
0°-60°	2053.9	30.8
0°-90°	2750.1	41.3
90°-120°	960.4	14.4
90°-150°	2945.7	44.2
90°-180°	3914.0	58.7
0°-180°	6664.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	942	936	943	943	90
15°	902	903	896	902	898	254
25°	820	822	817	820	816	377
35°	709	715	713	716	716	444
45°	584	594	599	605	607	451
55°	449	464	479	489	493	401
65°	309	331	353	366	370	307
75°	170	195	224	242	247	181
85°	51	82	114	134	142	54
90°	16	53	90	115	125	12
95°	63	84	82	106	113	75
105°	274	292	320	338	344	290
115°	503	515	539	552	553	499
125°	712	718	736	746	749	635
135°	885	889	894	904	903	682
145°	1024	1025	1025	1030	1029	640
155°	1127	1122	1124	1126	1119	519
165°	1190	1184	1185	1190	1183	336
175°	1217	1212	1212	1218	1211	116
180°	1217	1217	1217	1217	1217	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	946.8	946.6	946.2	945.8	945.5	944.8	943.6	942.4	941.3	940.1	941.3
5°	944.6	944.2	943.8	943.3	943.0	942.0	940.6	939.1	937.7	936.3	937.9
7.5°	936.3	936.1	935.9	935.8	935.6	934.8	933.4	931.8	930.3	928.9	930.3
10°	928.9	928.9	928.9	928.9	928.9	928.1	926.4	924.8	923.1	921.5	922.9
12.5°	918.5	918.6	918.8	919.0	919.2	918.6	917.3	916.0	914.6	913.3	914.4
15°	902.1	902.2	902.4	902.6	902.9	902.2	900.8	899.4	897.9	896.4	897.7
17.5°	880.6	880.9	881.4	881.7	882.2	881.6	880.2	878.8	877.4	875.9	876.8
20°	865.0	865.4	865.8	866.2	866.7	866.1	864.7	863.3	861.7	860.3	860.9
22.5°	847.2	847.9	848.6	849.4	850.2	849.7	848.1	846.5	844.9	843.3	844.1
25°	819.6	820.2	820.8	821.4	822.1	821.7	820.6	819.3	818.1	816.8	817.6
27.5°	788.8	789.8	790.7	791.6	792.5	792.2	790.9	789.4	788.0	786.7	787.2
30°	765.9	767.1	768.4	769.5	770.8	770.8	769.5	768.4	767.1	765.9	766.3
32.5°	745.1	746.2	747.3	748.3	749.4	749.5	748.6	747.7	746.8	745.9	746.3
35°	709.4	710.9	712.3	713.7	715.2	715.6	715.0	714.3	713.7	713.1	713.7
37.5°	673.6	674.9	676.3	677.6	678.9	679.5	679.2	679.0	678.9	678.7	679.5
40°	649.2	650.9	652.5	654.2	655.8	656.5	656.3	656.1	655.9	655.7	656.5
42.5°	622.5	624.6	626.8	628.9	631.1	632.4	632.8	633.3	633.7	634.2	635.2
45°	584.3	586.7	588.9	591.1	593.4	595.0	596.1	597.1	598.2	599.1	600.7
47.5°	545.3	547.4	549.5	551.6	553.7	555.6	557.4	559.2	560.9	562.7	564.8
50°	518.6	520.8	523.2	525.4	527.6	529.9	532.2	534.5	536.7	539.0	541.3
52.5°	490.4	493.2	496.0	498.7	501.5	504.3	507.0	509.8	512.6	515.3	517.7
55°	449.2	452.5	455.8	459.1	462.4	465.7	469.0	472.3	475.5	478.8	481.1
57.5°	406.9	410.9	414.8	418.7	422.8	426.6	430.4	434.2	437.9	441.8	444.3
60°	378.8	382.9	387.0	391.1	395.2	399.4	403.5	407.6	411.7	415.8	418.9
62.5°	351.3	355.4	359.6	363.7	367.8	372.1	376.6	381.0	385.4	389.9	393.3
65°	309.3	314.1	318.8	323.5	328.2	333.1	338.0	343.0	347.9	352.8	356.0
67.5°	269.7	274.3	278.8	283.4	287.9	292.7	297.7	302.8	307.8	312.8	316.6
70°	240.8	245.5	250.2	255.0	259.8	264.7	270.1	275.4	280.8	286.1	290.1
72.5°	212.7	217.5	222.4	227.3	232.2	237.6	243.4	249.3	255.1	261.0	265.2
75°	170.4	175.8	181.1	186.5	191.8	197.8	204.4	211.0	217.5	224.1	228.2
77.5°	129.8	136.0	142.2	148.4	154.5	160.8	167.1	173.4	179.8	186.2	190.6
80°	104.7	110.8	117.0	123.1	129.4	135.9	142.9	149.9	156.9	163.9	168.4
82.5°	81.7	88.2	94.7	101.2	107.7	114.5	121.7	128.9	136.0	143.2	147.6
85°	50.9	57.7	64.6	71.3	78.1	85.1	92.3	99.5	106.7	113.9	118.4
87.5°	29.1	36.0	42.9	49.8	56.7	63.8	71.1	78.4	85.6	92.9	97.8
90°	15.7	23.9	32.1	40.3	48.5	56.8	65.2	73.6	81.9	90.3	96.1
92.5°	27.2	32.2	37.2	42.1	47.1	53.8	62.2	70.6	79.0	87.4	93.0
95°	63.4	68.2	72.9	77.7	82.5	84.5	83.9	83.3	82.7	82.0	87.6
97.5°	118.2	124.1	130.0	136.0	141.9	140.6	132.3	123.9	115.7	107.4	106.0
100°	160.8	165.7	170.7	175.6	180.5	186.6	194.0	201.4	208.8	216.2	190.6
102.5°	204.0	208.8	213.6	218.3	223.1	228.9	235.8	242.7	249.6	256.5	255.0
105°	273.5	277.6	281.7	285.8	289.9	295.0	301.1	307.4	313.5	319.7	323.8
107.5°	345.6	348.4	351.2	354.0	356.8	361.3	367.7	374.0	380.3	386.6	390.7
110°	392.4	394.9	397.4	399.8	402.3	406.7	412.9	419.0	425.2	431.3	434.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	437.2	439.7	442.1	444.6	447.0	451.2	457.0	462.9	468.7	474.6	477.5
115°	503.4	505.8	508.3	510.7	513.2	517.1	522.7	528.2	533.8	539.3	542.2
117.5°	571.9	572.8	573.7	574.6	575.5	578.9	584.7	590.6	596.4	602.2	604.7
120°	615.2	615.6	616.0	616.4	616.9	619.7	625.1	630.4	635.7	641.1	644.2
122.5°	652.6	653.7	654.8	655.9	656.9	659.9	664.7	669.5	674.4	679.2	682.2
125°	711.7	712.8	714.1	715.2	716.5	719.1	723.2	727.4	731.5	735.6	738.1
127.5°	767.2	767.9	768.7	769.5	770.3	772.4	775.6	778.9	782.1	785.4	788.0
130°	801.8	802.6	803.4	804.2	805.0	806.9	810.0	813.1	816.2	819.3	821.5
132.5°	835.7	836.9	837.9	839.1	840.2	841.7	843.5	845.3	846.9	848.7	851.5
135°	884.8	885.7	886.7	887.8	888.8	889.7	890.8	891.9	892.9	893.9	896.2
137.5°	929.9	930.8	931.6	932.5	933.4	934.0	934.3	934.7	935.0	935.3	937.8
140°	958.7	959.1	959.5	959.9	960.3	960.5	960.5	960.6	960.6	960.6	963.2
142.5°	985.4	985.4	985.5	985.6	985.7	985.9	986.2	986.5	986.9	987.2	989.2
145°	1024.5	1024.8	1024.9	1025.1	1025.3	1025.4	1025.4	1025.4	1025.4	1025.4	1026.6
147.5°	1057.8	1057.8	1057.7	1057.7	1057.6	1057.7	1057.8	1058.1	1058.4	1058.5	1059.2
150°	1079.5	1079.1	1078.7	1078.3	1077.9	1077.9	1078.3	1078.7	1079.1	1079.5	1080.0
152.5°	1100.5	1099.6	1098.7	1097.8	1096.9	1096.7	1097.1	1097.5	1097.9	1098.2	1098.7
155°	1127.3	1126.1	1124.9	1123.7	1122.5	1122.1	1122.5	1122.9	1123.3	1123.7	1124.3
157.5°	1148.1	1147.4	1146.7	1145.9	1145.1	1144.9	1144.9	1144.9	1145.0	1145.0	1145.7
160°	1162.5	1161.3	1160.1	1158.9	1157.7	1157.2	1157.4	1157.6	1157.8	1158.0	1158.8
162.5°	1174.0	1172.9	1171.6	1170.5	1169.2	1168.7	1168.9	1169.1	1169.3	1169.5	1170.6
165°	1189.5	1188.4	1187.1	1186.0	1184.7	1184.2	1184.5	1184.6	1184.8	1185.0	1186.2
167.5°	1201.0	1199.9	1198.6	1197.4	1196.1	1195.6	1195.8	1196.0	1196.2	1196.4	1197.8
170°	1207.6	1206.2	1204.8	1203.4	1201.9	1201.4	1201.6	1201.8	1201.9	1202.2	1203.8
172.5°	1211.9	1210.5	1209.1	1207.7	1206.3	1205.8	1206.1	1206.5	1206.8	1207.2	1208.6
175°	1216.6	1215.4	1214.2	1213.0	1211.7	1211.3	1211.5	1211.7	1211.9	1212.1	1213.7
177.5°	1218.8	1217.8	1216.8	1215.8	1215.0	1214.5	1214.7	1214.9	1215.0	1215.1	1216.3
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	944.6	944.6	944.6	944.6	944.6	944.6	944.6	944.6
2.5°	942.4	943.6	944.8	945.3	945.1	944.9	944.8	944.6
5°	939.6	941.2	942.9	943.6	943.3	943.2	943.0	942.8
7.5°	931.7	933.2	934.6	935.2	935.0	934.9	934.6	934.4
10°	924.3	925.8	927.2	927.8	927.6	927.5	927.2	927.0
12.5°	915.5	916.7	917.7	918.0	917.5	916.9	916.4	915.9
15°	898.9	900.2	901.4	901.6	900.8	899.9	899.1	898.3
17.5°	877.8	878.8	879.7	879.9	879.4	879.0	878.4	878.0
20°	861.6	862.2	862.8	863.1	863.1	863.1	863.1	863.1
22.5°	844.9	845.6	846.4	846.6	846.1	845.6	845.1	844.6
25°	818.5	819.3	820.1	820.0	818.9	818.0	816.9	815.9
27.5°	787.7	788.4	788.9	789.1	788.6	788.3	787.9	787.6
30°	766.7	767.1	767.5	767.7	767.4	767.2	767.0	766.8
32.5°	746.7	747.1	747.5	747.6	747.4	747.3	747.0	746.8
35°	714.3	715.0	715.6	715.9	715.9	715.9	715.9	715.9
37.5°	680.3	681.1	681.9	682.3	682.2	682.2	682.1	682.0
40°	657.3	658.2	659.0	659.6	660.0	660.4	660.8	661.2
42.5°	636.1	637.1	638.1	638.6	638.7	638.8	638.9	639.0
45°	602.1	603.5	604.9	605.7	606.0	606.2	606.4	606.6
47.5°	566.9	569.0	571.1	572.4	572.8	573.3	573.7	574.2
50°	543.5	545.8	548.0	549.5	550.1	550.7	551.3	552.0
52.5°	520.1	522.5	525.0	526.5	526.9	527.4	527.8	528.2
55°	483.3	485.6	487.9	489.4	490.2	491.1	491.9	492.7
57.5°	446.9	449.5	452.1	453.7	454.3	455.0	455.6	456.2
60°	422.0	425.1	428.2	430.0	430.6	431.2	431.9	432.5
62.5°	396.7	400.1	403.6	405.6	406.4	407.2	408.0	408.8
65°	359.0	362.1	365.2	367.1	368.0	368.8	369.6	370.4
67.5°	320.3	324.0	327.8	330.2	331.3	332.3	333.4	334.5
70°	294.0	297.9	301.8	304.3	305.6	306.8	308.1	309.3
72.5°	269.5	273.7	277.9	280.5	281.4	282.3	283.2	284.1
75°	232.4	236.5	240.6	243.2	244.2	245.2	246.2	247.3
77.5°	195.2	199.7	204.3	207.0	207.8	208.6	209.4	210.3
80°	173.0	177.5	182.0	184.7	185.6	186.4	187.2	188.0
82.5°	151.9	156.2	160.6	163.5	165.1	166.5	168.0	169.5
85°	123.0	127.5	132.1	135.1	136.8	138.4	140.1	141.7
87.5°	102.8	107.7	112.6	115.9	117.4	119.0	120.6	122.2
90°	101.8	107.5	113.3	117.2	119.2	121.3	123.3	125.4
92.5°	98.5	104.2	109.7	113.3	115.0	116.8	118.5	120.2
95°	93.1	98.6	104.2	107.6	109.1	110.5	112.0	113.4
97.5°	104.7	103.3	102.0	102.1	103.4	104.9	106.3	107.6
100°	165.1	139.6	114.0	101.5	101.9	102.4	102.8	103.2
102.5°	253.5	252.0	250.6	243.6	231.2	218.8	206.4	194.0
105°	327.9	332.1	336.2	338.9	340.1	341.3	342.5	343.8
107.5°	394.9	399.0	403.1	405.6	406.2	406.9	407.5	408.2
110°	437.9	441.2	444.5	447.0	448.7	450.3	451.9	453.6



TEST NUMBER: P333414-940

CATALOG NUMBER: S125DIW-S850D1050U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	480.5	483.5	486.4	488.6	489.7	490.9	492.0	493.2
115°	545.2	548.0	551.0	552.4	552.5	552.5	552.5	552.6
117.5°	607.1	609.6	612.0	613.7	614.6	615.5	616.4	617.2
120°	647.3	650.3	653.4	655.1	655.3	655.6	655.9	656.0
122.5°	685.1	688.0	691.0	692.5	692.5	692.6	692.7	692.8
125°	740.6	743.1	745.6	747.0	747.4	747.9	748.2	748.7
127.5°	790.6	793.3	795.9	797.0	796.7	796.4	796.1	795.9
130°	823.9	826.1	828.4	829.6	829.6	829.6	829.6	829.6
132.5°	854.3	857.0	859.8	861.1	860.9	860.9	860.7	860.6
135°	898.5	900.7	903.0	904.1	903.9	903.7	903.6	903.4
137.5°	940.3	942.9	945.4	946.5	946.3	946.1	945.8	945.7
140°	965.8	968.5	971.2	972.3	972.0	971.5	971.2	970.8
142.5°	991.2	993.2	995.2	996.0	995.7	995.3	994.9	994.5
145°	1027.9	1029.1	1030.3	1030.7	1030.4	1030.0	1029.6	1029.2
147.5°	1059.7	1060.3	1060.9	1060.6	1059.5	1058.5	1057.4	1056.3
150°	1080.3	1080.8	1081.1	1080.7	1079.2	1077.8	1076.5	1075.0
152.5°	1099.0	1099.5	1099.8	1099.4	1098.0	1096.5	1095.2	1093.8
155°	1124.9	1125.5	1126.1	1125.6	1124.0	1122.4	1120.8	1119.2
157.5°	1146.3	1146.9	1147.5	1147.1	1145.5	1143.9	1142.3	1140.7
160°	1159.6	1160.4	1161.2	1160.7	1159.2	1157.6	1156.0	1154.4
162.5°	1171.8	1172.9	1174.0	1173.7	1171.9	1170.2	1168.4	1166.6
165°	1187.4	1188.7	1189.8	1189.6	1188.0	1186.4	1184.8	1183.2
167.5°	1199.3	1200.7	1202.2	1202.0	1200.2	1198.4	1196.6	1194.8
170°	1205.4	1207.0	1208.6	1208.4	1206.7	1204.9	1203.1	1201.2
172.5°	1210.1	1211.6	1213.0	1212.8	1211.0	1209.2	1207.4	1205.6
175°	1215.3	1216.9	1218.5	1218.4	1216.6	1214.8	1213.0	1211.2
177.5°	1217.4	1218.5	1219.7	1219.6	1218.3	1217.0	1215.8	1214.4
180°	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6	1216.6

(END OF REPORT)