

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: P333235-940

Luminaire Tested: **S125DIP-S850D1035U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333235-940
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: S125DIP-S850D1035U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6616.6 lumens
Efficiency: N/A
Efficacy: 127.2 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

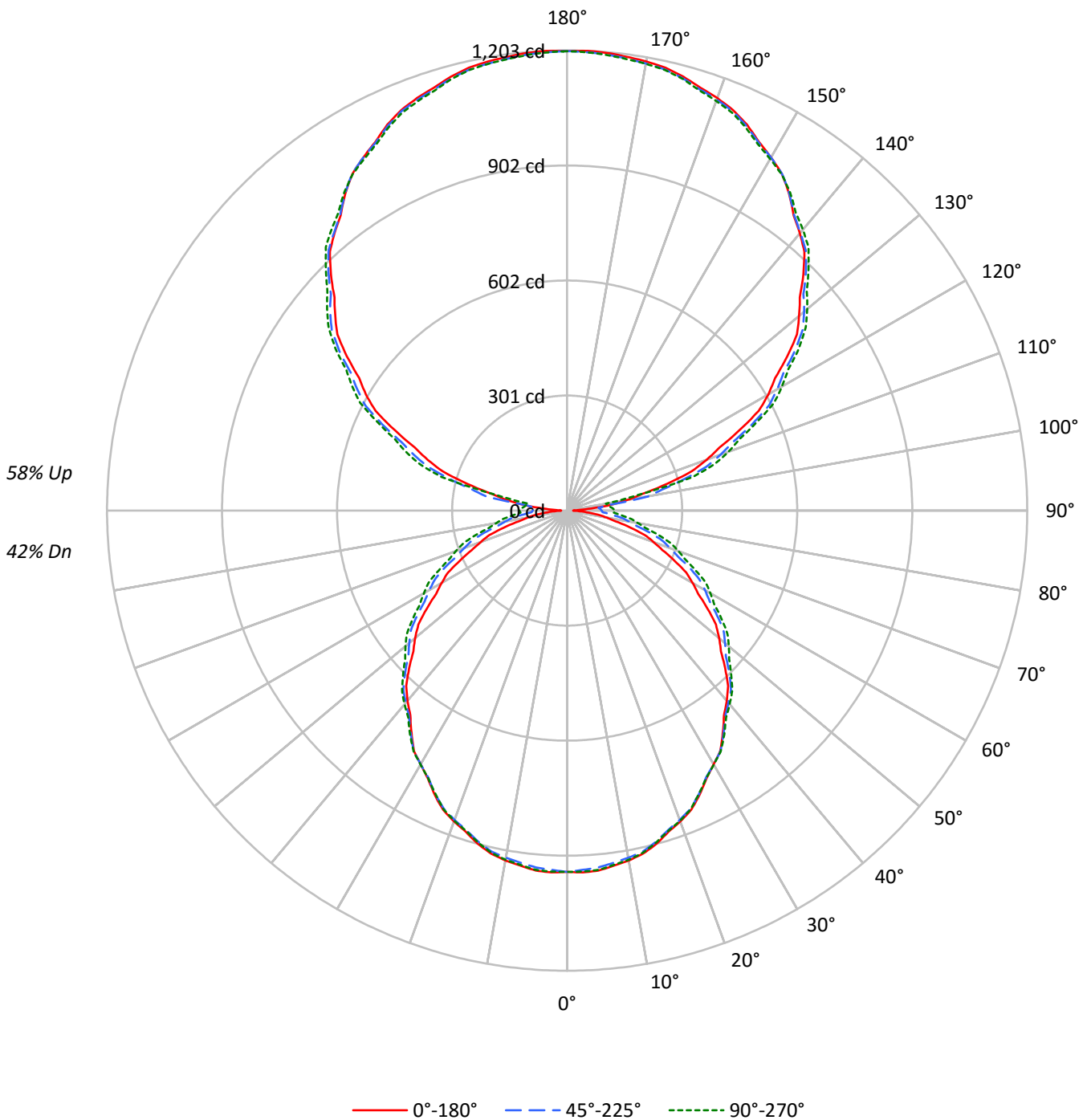
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333235-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-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	79	79	79	63	63	63	48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52	47	45	42	36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	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	26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	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	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10

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	1.4
10°-20°	253.6	3.8
20°-30°	377.1	5.7
30°-40°	446.7	6.8
40°-50°	461.8	7.0
50°-60°	425.4	6.4
60°-70°	343.9	5.2
70°-80°	230.3	3.5
80°-90°	121.9	1.8
90°-100°	110.7	1.7
100°-110°	318.4	4.8
110°-120°	521.0	7.9
120°-130°	644.9	9.7
130°-140°	681.7	10.3
140°-150°	633.8	9.6
150°-160°	511.4	7.7
160°-170°	330.7	5.0
170°-180°	114.1	1.7
0°-30°	720.0	10.9
0°-40°	1166.7	17.6
0°-60°	2053.9	31.0
0°-90°	2750.0	41.6
90°-120°	950.1	14.4
90°-150°	2910.4	44.0
90°-180°	3867.0	58.4
0°-180°	6616.6	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	52	90	115	125	12
95°	63	83	82	106	113	74
105°	270	289	316	334	340	286
115°	497	509	533	545	546	493
125°	703	709	726	737	740	627
135°	874	878	883	892	892	673
145°	1012	1012	1012	1017	1016	632
155°	1113	1108	1109	1112	1105	513
165°	1174	1169	1170	1175	1168	332
175°	1201	1196	1197	1203	1196	114
180°	1201	1201	1201	1201	1201	



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CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-D

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	35.9	42.9	49.8	56.7	63.8	71.1	78.3	85.6	92.8	97.8
90°	15.7	23.9	32.0	40.2	48.4	56.6	65.0	73.4	81.8	90.2	95.9
92.5°	27.0	32.0	37.0	42.0	47.0	53.7	62.1	70.4	78.8	87.2	92.7
95°	62.8	67.5	72.3	77.0	81.9	83.9	83.4	82.9	82.4	81.9	87.4
97.5°	116.9	122.8	128.7	134.6	140.4	139.3	131.2	123.1	114.9	106.7	105.5
100°	158.9	163.8	168.7	173.6	178.5	184.7	192.1	199.5	206.8	214.2	189.0
102.5°	201.6	206.3	211.1	215.8	220.5	226.4	233.3	240.1	247.1	254.0	252.5
105°	270.1	274.2	278.3	282.3	286.4	291.6	297.7	303.9	310.0	316.3	320.4
107.5°	341.3	344.1	346.9	349.6	352.5	357.0	363.4	369.7	376.0	382.4	386.5
110°	387.5	390.0	392.5	394.9	397.4	401.7	407.9	414.0	420.2	426.4	429.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	431.7	434.2	436.6	439.1	441.5	445.7	451.5	457.4	463.2	469.0	472.0
115°	497.0	499.4	501.9	504.4	506.8	510.8	516.3	521.8	527.4	532.9	535.8
117.5°	564.6	565.5	566.5	567.4	568.3	571.7	577.5	583.3	589.1	594.9	597.4
120°	607.4	607.8	608.2	608.7	609.0	612.0	617.2	622.6	627.9	633.3	636.3
122.5°	644.4	645.4	646.5	647.6	648.5	651.5	656.4	661.2	666.0	670.9	673.9
125°	702.7	703.8	705.0	706.1	707.3	710.0	714.1	718.2	722.4	726.5	729.0
127.5°	757.4	758.2	759.0	759.8	760.5	762.6	765.8	769.1	772.4	775.6	778.2
130°	791.7	792.4	793.2	794.0	794.8	796.7	799.8	802.8	805.9	809.0	811.3
132.5°	825.1	826.2	827.2	828.4	829.5	831.0	832.8	834.6	836.3	838.1	840.9
135°	873.5	874.5	875.5	876.5	877.4	878.4	879.5	880.6	881.5	882.6	884.9
137.5°	918.0	918.9	919.7	920.6	921.5	922.0	922.4	922.7	923.1	923.5	926.0
140°	946.5	946.9	947.3	947.6	948.1	948.2	948.2	948.2	948.2	948.2	950.9
142.5°	972.9	972.9	972.9	973.0	973.1	973.3	973.7	973.9	974.3	974.6	976.6
145°	1011.5	1011.6	1011.8	1012.0	1012.3	1012.4	1012.4	1012.4	1012.4	1012.4	1013.5
147.5°	1044.4	1044.3	1044.2	1044.1	1044.0	1044.1	1044.4	1044.6	1044.8	1045.1	1045.6
150°	1065.8	1065.3	1065.0	1064.5	1064.2	1064.2	1064.5	1065.0	1065.3	1065.8	1066.1
152.5°	1086.4	1085.6	1084.7	1083.8	1082.9	1082.7	1083.1	1083.4	1083.9	1084.2	1084.7
155°	1112.9	1111.8	1110.5	1109.4	1108.2	1107.8	1108.2	1108.6	1108.9	1109.4	1110.0
157.5°	1133.4	1132.7	1132.0	1131.3	1130.6	1130.2	1130.2	1130.3	1130.3	1130.4	1131.0
160°	1147.6	1146.5	1145.3	1144.1	1142.9	1142.4	1142.6	1142.8	1143.0	1143.2	1144.0
162.5°	1159.0	1157.9	1156.6	1155.5	1154.3	1153.8	1154.0	1154.2	1154.4	1154.6	1155.7
165°	1174.4	1173.1	1172.0	1170.8	1169.7	1169.1	1169.3	1169.5	1169.7	1169.9	1171.1
167.5°	1185.8	1184.5	1183.3	1182.1	1180.9	1180.4	1180.5	1180.7	1180.9	1181.2	1182.6
170°	1192.1	1190.8	1189.4	1188.0	1186.6	1186.1	1186.2	1186.4	1186.6	1186.9	1188.4
172.5°	1196.4	1195.1	1193.6	1192.3	1190.9	1190.4	1190.7	1191.1	1191.4	1191.8	1193.2
175°	1201.0	1199.9	1198.7	1197.5	1196.3	1195.9	1196.1	1196.2	1196.4	1196.6	1198.2
177.5°	1203.2	1202.3	1201.3	1200.3	1199.4	1199.0	1199.2	1199.4	1199.5	1199.6	1200.8
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0



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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°	102.7	107.6	112.6	115.8	117.4	119.0	120.5	122.1
90°	101.7	107.4	113.1	117.0	119.0	121.0	123.1	125.1
92.5°	98.4	103.9	109.4	113.1	114.9	116.5	118.2	119.9
95°	92.9	98.4	103.9	107.4	108.9	110.3	111.7	113.2
97.5°	104.2	103.0	101.7	101.8	103.3	104.6	106.0	107.5
100°	163.9	138.8	113.5	101.2	101.7	102.1	102.5	103.0
102.5°	251.1	249.7	248.3	241.5	229.3	217.0	204.8	192.6
105°	324.5	328.6	332.7	335.4	336.6	337.9	339.1	340.4
107.5°	390.6	394.7	398.8	401.2	401.9	402.5	403.2	403.9
110°	433.0	436.3	439.6	442.1	443.7	445.4	447.0	448.7



TEST NUMBER: P333235-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	475.0	478.0	481.0	483.0	484.2	485.4	486.5	487.7
115°	538.8	541.6	544.6	546.1	546.1	546.2	546.2	546.3
117.5°	599.9	602.4	604.8	606.5	607.3	608.2	609.1	610.0
120°	639.4	642.6	645.7	647.4	647.6	647.8	648.1	648.4
122.5°	676.8	679.7	682.6	684.1	684.2	684.3	684.4	684.5
125°	731.5	734.0	736.5	737.9	738.3	738.8	739.2	739.7
127.5°	780.9	783.5	786.0	787.2	786.9	786.7	786.4	786.1
130°	813.6	815.8	818.1	819.3	819.4	819.4	819.4	819.5
132.5°	843.6	846.4	849.2	850.4	850.3	850.2	850.1	850.0
135°	887.2	889.5	891.7	892.8	892.6	892.5	892.3	892.2
137.5°	928.4	930.9	933.4	934.6	934.4	934.2	934.0	933.8
140°	953.6	956.3	958.9	960.1	959.7	959.3	958.9	958.6
142.5°	978.7	980.6	982.7	983.5	983.1	982.8	982.4	982.0
145°	1014.8	1016.0	1017.3	1017.6	1017.3	1016.9	1016.6	1016.2
147.5°	1046.2	1046.8	1047.3	1047.1	1046.1	1045.0	1043.9	1042.9
150°	1066.6	1066.9	1067.3	1066.8	1065.4	1064.1	1062.7	1061.3
152.5°	1085.0	1085.5	1085.8	1085.4	1084.0	1082.6	1081.2	1079.8
155°	1110.5	1111.2	1111.8	1111.3	1109.6	1108.0	1106.5	1104.9
157.5°	1131.7	1132.3	1132.9	1132.5	1130.9	1129.3	1127.7	1126.1
160°	1144.8	1145.6	1146.4	1145.9	1144.4	1142.8	1141.2	1139.6
162.5°	1156.8	1157.9	1159.0	1158.7	1157.0	1155.2	1153.5	1151.7
165°	1172.2	1173.5	1174.7	1174.5	1172.9	1171.3	1169.7	1168.1
167.5°	1184.0	1185.4	1186.9	1186.7	1184.9	1183.1	1181.3	1179.6
170°	1190.0	1191.6	1193.2	1193.0	1191.2	1189.5	1187.8	1186.0
172.5°	1194.6	1196.1	1197.5	1197.3	1195.5	1193.7	1191.9	1190.3
175°	1199.8	1201.4	1202.9	1202.8	1201.0	1199.3	1197.5	1195.7
177.5°	1201.8	1203.0	1204.1	1204.0	1202.7	1201.5	1200.2	1198.9
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0

(END OF REPORT)