

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: P333236-940

Luminaire Tested: **S125DIP-S850D1035U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333236-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6120.4 lumens
Efficiency: N/A
Efficacy: 117.7 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

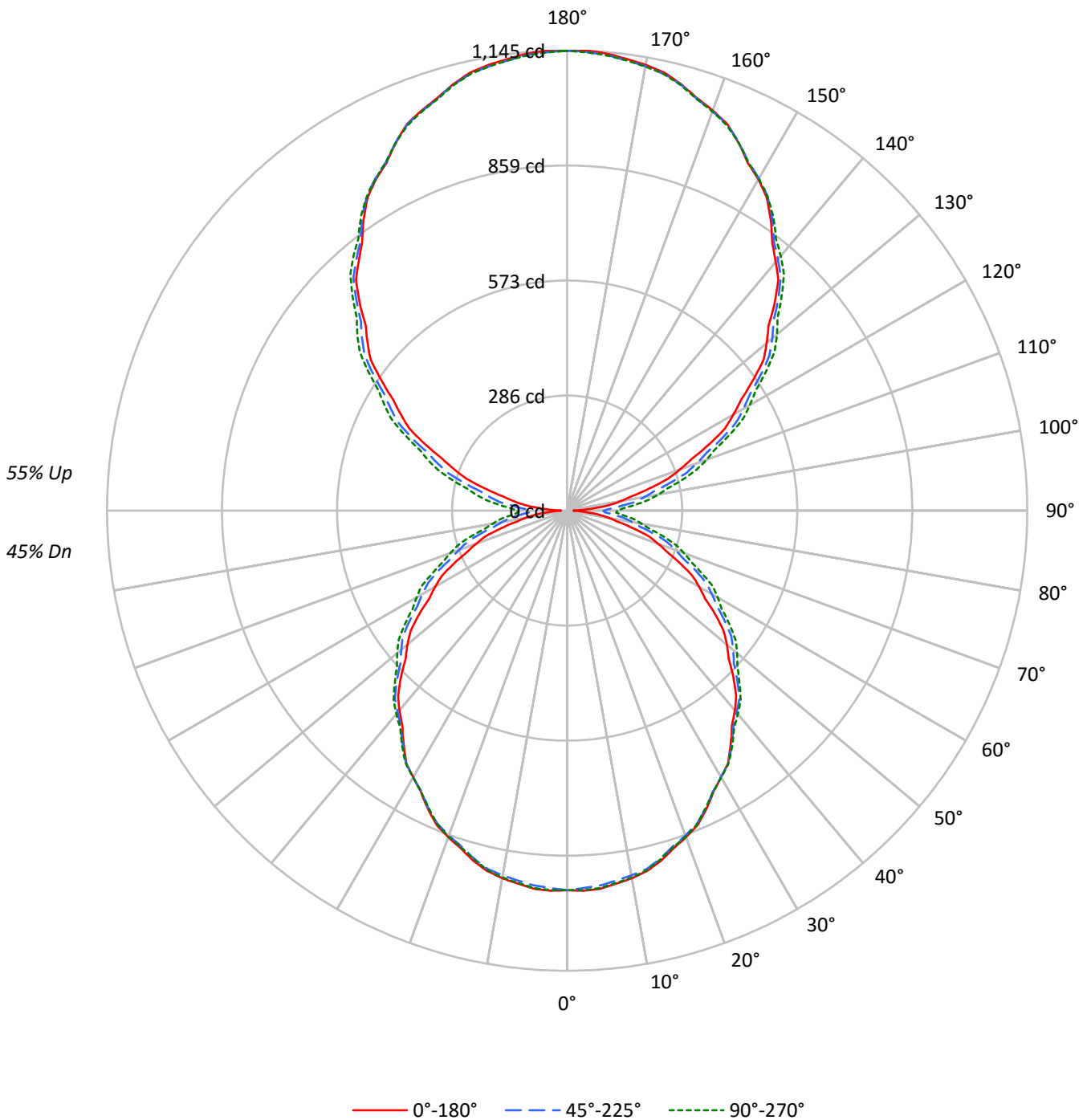
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	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	1.5
10°-20°	253.6	4.1
20°-30°	377.1	6.2
30°-40°	446.7	7.3
40°-50°	461.8	7.5
50°-60°	425.4	7.0
60°-70°	343.9	5.6
70°-80°	230.3	3.8
80°-90°	121.9	2.0
90°-100°	143.6	2.3
100°-110°	275.7	4.5
110°-120°	416.3	6.8
120°-130°	523.2	8.5
130°-140°	573.3	9.4
140°-150°	555.5	9.1
150°-160°	465.2	7.6
160°-170°	309.2	5.1
170°-180°	108.2	1.8
0°-30°	720.0	11.8
0°-40°	1166.7	19.1
0°-60°	2053.9	33.6
0°-90°	2750.0	44.9
90°-120°	835.7	13.7
90°-150°	2487.7	40.6
90°-180°	3370.0	55.1
0°-180°	6120.4	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	13
95°	70	97	136	162	171	71
105°	211	231	264	287	297	226
115°	389	400	425	440	446	385
125°	564	569	588	600	604	504
135°	730	735	742	753	755	563
145°	883	886	888	893	894	552
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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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	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°	34.9	42.1	49.3	56.4	63.7	71.7	80.6	89.4	98.3	107.2	113.1
95°	69.9	75.6	81.4	87.1	92.9	100.2	109.2	118.2	127.2	136.2	142.0
97.5°	107.1	112.1	117.0	122.0	127.0	134.2	143.7	153.2	162.6	172.1	177.7
100°	134.8	139.1	143.5	147.8	152.1	158.8	168.0	177.2	186.3	195.5	201.6
102.5°	164.7	169.5	174.2	179.1	183.9	190.1	197.8	205.5	213.3	221.0	227.1
105°	211.3	215.6	219.9	224.2	228.5	234.3	241.7	249.0	256.4	263.7	269.0
107.5°	262.9	266.7	270.5	274.3	278.0	283.4	290.2	297.0	303.9	310.7	315.4
110°	298.5	301.9	305.4	308.9	312.3	317.2	323.6	329.9	336.3	342.7	347.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	335.6	338.0	340.5	343.0	345.4	349.9	356.2	362.6	368.9	375.3	379.3
115°	389.2	391.5	393.7	395.9	398.1	402.2	408.0	413.7	419.4	425.2	428.6
117.5°	443.2	444.4	445.8	447.1	448.4	451.7	457.2	462.5	468.0	473.4	477.1
120°	477.3	478.9	480.5	482.1	483.8	487.1	492.0	497.0	501.9	506.8	510.2
122.5°	513.6	514.2	515.0	515.6	516.2	519.1	524.1	529.2	534.3	539.4	542.6
125°	563.7	564.6	565.6	566.6	567.6	570.2	574.5	578.9	583.2	587.5	590.4
127.5°	616.2	616.6	617.1	617.6	618.0	620.1	623.7	627.3	630.9	634.5	637.4
130°	648.2	649.0	649.8	650.6	651.3	653.4	656.7	660.0	663.2	666.5	669.1
132.5°	679.5	681.1	682.7	684.2	685.8	687.7	689.8	692.0	694.1	696.2	698.9
135°	730.0	731.0	732.0	733.0	734.0	735.3	736.9	738.6	740.2	741.8	744.5
137.5°	777.6	778.6	779.5	780.5	781.5	782.6	783.7	784.9	786.0	787.1	789.8
140°	807.4	808.5	809.5	810.5	811.5	812.3	813.2	814.0	814.8	815.6	818.2
142.5°	838.1	838.7	839.5	840.1	840.8	841.5	842.3	843.1	843.9	844.7	846.9
145°	883.2	883.8	884.3	884.9	885.5	886.1	886.7	887.3	887.9	888.5	889.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.8
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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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°	119.0	124.8	130.6	134.6	136.4	138.3	140.2	142.0
95°	147.9	153.9	159.8	163.7	165.5	167.4	169.2	171.0
97.5°	183.3	189.0	194.7	198.2	199.9	201.5	203.1	204.8
100°	207.7	213.7	219.9	223.7	225.4	227.0	228.6	230.2
102.5°	233.2	239.2	245.4	249.3	251.1	252.9	254.7	256.5
105°	274.3	279.6	284.9	288.6	290.6	292.7	294.7	296.8
107.5°	320.0	324.8	329.4	332.3	333.6	334.8	336.1	337.2
110°	351.7	356.1	360.7	363.6	364.8	366.0	367.3	368.5



TEST NUMBER: P333236-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	383.3	387.4	391.4	394.0	395.0	396.1	397.2	398.2
115°	432.1	435.7	439.2	441.5	442.5	443.5	444.5	445.6
117.5°	480.7	484.4	488.0	490.2	490.8	491.4	492.0	492.6
120°	513.8	517.3	520.8	522.7	523.2	523.6	524.1	524.5
122.5°	545.7	548.9	552.1	554.0	554.6	555.2	555.8	556.4
125°	593.3	596.2	599.1	600.9	601.8	602.6	603.4	604.3
127.5°	640.2	643.0	645.9	647.7	648.5	649.3	650.1	650.9
130°	671.8	674.5	677.2	678.9	679.5	680.1	680.7	681.4
132.5°	701.6	704.4	707.0	708.5	708.8	709.1	709.4	709.7
135°	747.2	749.8	752.5	754.0	754.2	754.5	754.7	754.9
137.5°	792.5	795.1	797.8	799.1	798.9	798.7	798.5	798.3
140°	820.8	823.5	826.2	827.4	827.2	827.1	826.9	826.8
142.5°	849.0	851.2	853.4	854.3	854.2	854.0	853.9	853.7
145°	890.6	891.5	892.6	893.2	893.4	893.7	893.9	894.1
147.5°	929.6	930.4	931.2	931.1	930.1	929.2	928.2	927.2
150°	954.3	954.3	954.3	954.2	954.0	953.9	953.7	953.5
152.5°	978.1	978.6	979.0	978.9	978.3	977.6	977.0	976.2
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)