

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: P333245-940

Luminaire Tested: **S125DIP-S850D1205U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333245-940
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-S850D1205U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6644.2 lumens
Efficiency: N/A
Efficacy: 116.8 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

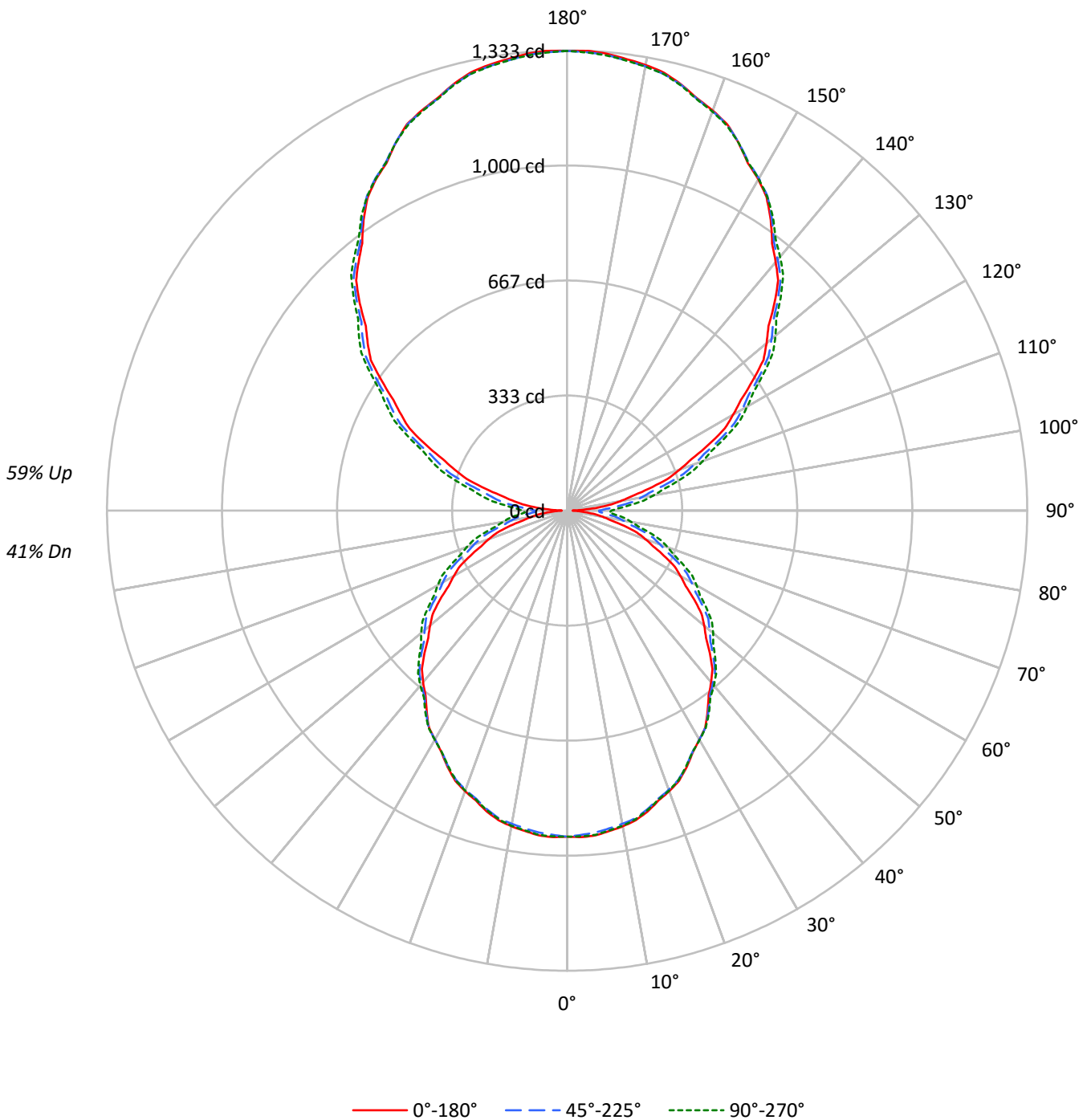
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	40	39	34
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	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	20	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	26	22	28	22	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	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	1.3
10°-20°	253.6	3.8
20°-30°	377.1	5.7
30°-40°	446.7	6.7
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°	122.4	1.8
90°-100°	156.2	2.4
100°-110°	312.8	4.7
110°-120°	479.2	7.2
120°-130°	605.9	9.1
130°-140°	666.0	10.0
140°-150°	646.4	9.7
150°-160°	541.5	8.1
160°-170°	359.9	5.4
170°-180°	126.0	1.9
0°-30°	720.0	10.8
0°-40°	1166.7	17.6
0°-60°	2053.9	30.9
0°-90°	2750.5	41.4
90°-120°	948.1	14.3
90°-150°	2866.4	43.1
90°-180°	3894.0	58.6
0°-180°	6644.2	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	54	93	118	129	14
95°	79	106	147	174	184	81
105°	245	265	299	322	333	261
115°	452	464	489	504	509	447
125°	656	662	680	693	697	587
135°	849	855	862	874	875	655
145°	1028	1031	1034	1038	1039	642
155°	1175	1175	1176	1180	1175	541
165°	1278	1276	1277	1280	1274	360
175°	1328	1324	1324	1330	1323	126
180°	1332	1332	1332	1332	1332	



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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	43.0	49.9	56.9	64.0	71.3	78.6	86.1	93.4	98.3
90°	15.9	24.3	32.7	41.1	49.6	58.1	66.7	75.3	83.9	92.6	98.4
92.5°	38.4	45.8	53.1	60.5	67.9	76.2	85.3	94.5	103.6	112.8	118.9
95°	79.4	85.2	91.0	96.8	102.6	110.2	119.5	128.8	138.1	147.4	153.6
97.5°	122.9	127.9	132.9	137.9	142.9	150.3	160.2	170.1	180.1	190.0	195.8
100°	155.2	159.6	163.9	168.3	172.5	179.5	189.0	198.7	208.2	217.8	224.2
102.5°	190.2	195.1	200.0	204.9	209.8	216.2	224.2	232.1	240.0	248.0	254.4
105°	244.6	249.1	253.5	257.9	262.3	268.4	275.9	283.5	291.1	298.6	304.1
107.5°	304.8	308.8	312.7	316.6	320.7	326.1	333.1	340.1	347.1	354.0	358.8
110°	346.3	350.0	353.6	357.2	360.9	365.9	372.3	378.8	385.2	391.7	396.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	389.5	392.0	394.6	397.2	399.8	404.3	410.7	417.2	423.7	430.2	434.3
115°	452.2	454.5	456.9	459.2	461.6	465.7	471.5	477.3	483.1	488.9	492.4
117.5°	515.1	516.4	517.8	519.2	520.5	524.0	529.4	534.8	540.4	545.8	549.6
120°	554.8	556.6	558.4	560.2	562.0	565.3	570.2	575.2	580.1	585.1	588.6
122.5°	597.3	597.9	598.6	599.3	600.0	603.0	608.1	613.3	618.5	623.7	626.8
125°	655.5	656.7	657.8	659.0	660.2	663.0	667.3	671.6	676.0	680.3	683.1
127.5°	716.8	717.3	717.9	718.5	719.1	721.1	724.8	728.4	732.1	735.8	738.6
130°	754.0	755.0	755.9	756.9	757.8	759.9	763.3	766.6	770.0	773.3	776.0
132.5°	790.6	792.5	794.2	796.1	798.0	800.0	802.1	804.2	806.4	808.5	811.1
135°	849.4	850.7	851.9	853.0	854.2	855.6	857.3	859.0	860.6	862.3	865.0
137.5°	904.8	906.0	907.1	908.3	909.5	910.7	911.9	913.1	914.4	915.5	918.2
140°	939.8	940.8	942.0	943.2	944.3	945.4	946.3	947.2	948.1	949.0	951.6
142.5°	975.4	976.2	977.0	977.8	978.6	979.5	980.3	981.2	982.2	983.1	985.3
145°	1027.8	1028.5	1029.2	1029.9	1030.6	1031.4	1032.1	1032.8	1033.4	1034.1	1035.2
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1081.0
150°	1107.7	1107.5	1107.2	1107.1	1106.8	1107.1	1108.0	1108.9	1109.9	1110.8	1110.8
152.5°	1134.3	1134.5	1134.9	1135.2	1135.5	1135.9	1136.2	1136.6	1137.0	1137.4	1137.9
155°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.2	1175.5	1175.6	1175.9	1176.1	1177.1
157.5°	1211.6	1211.0	1210.5	1210.1	1209.5	1209.3	1209.6	1209.9	1210.1	1210.3	1211.2
160°	1233.1	1232.4	1231.7	1231.0	1230.3	1230.1	1230.3	1230.6	1230.8	1231.0	1231.9
162.5°	1252.1	1251.7	1251.2	1250.6	1250.1	1249.9	1249.9	1250.0	1250.0	1250.1	1251.2
165°	1277.6	1277.2	1276.8	1276.3	1275.8	1275.7	1275.9	1276.1	1276.4	1276.6	1277.6
167.5°	1299.2	1298.2	1297.4	1296.5	1295.5	1295.0	1295.0	1295.0	1295.0	1295.0	1296.5
170°	1310.8	1309.9	1308.9	1308.1	1307.2	1306.6	1306.6	1306.6	1306.6	1306.6	1308.1
172.5°	1319.1	1318.2	1317.2	1316.3	1315.5	1314.9	1314.9	1314.9	1314.9	1314.9	1316.3
175°	1328.4	1327.5	1326.6	1325.6	1324.7	1324.3	1324.3	1324.3	1324.3	1324.3	1325.6
177.5°	1333.2	1332.5	1331.7	1331.0	1330.3	1329.8	1329.6	1329.5	1329.2	1329.0	1330.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5



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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°	103.3	108.3	113.2	116.5	118.1	119.6	121.2	122.8
90°	104.3	110.2	116.1	120.0	122.2	124.3	126.4	128.6
92.5°	124.9	131.0	137.1	141.2	143.1	145.0	147.0	148.9
95°	159.7	165.8	171.9	175.9	177.9	179.8	181.6	183.6
97.5°	201.7	207.5	213.4	217.1	218.8	220.5	222.1	223.8
100°	230.6	237.0	243.3	247.4	249.1	250.8	252.5	254.2
102.5°	260.8	267.2	273.7	277.8	279.7	281.6	283.5	285.3
105°	309.6	315.0	320.6	324.4	326.5	328.7	330.8	332.9
107.5°	363.6	368.4	373.1	376.1	377.4	378.5	379.8	381.0
110°	400.9	405.5	410.1	413.0	414.2	415.4	416.6	417.9



TEST NUMBER: P333245-940

CATALOG NUMBER: S125DIP-S850D1205U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	438.3	442.4	446.5	449.0	450.0	451.0	452.1	453.1
115°	495.9	499.4	502.8	505.1	506.0	507.1	508.1	509.1
117.5°	553.2	556.9	560.5	562.7	563.1	563.7	564.1	564.5
120°	592.2	595.7	599.1	601.0	601.4	601.7	602.0	602.4
122.5°	629.9	633.1	636.2	638.0	638.6	639.1	639.5	640.1
125°	686.0	688.8	691.7	693.5	694.3	695.1	695.9	696.7
127.5°	741.4	744.2	747.0	748.8	749.5	750.3	751.0	751.7
130°	778.6	781.3	783.9	785.5	786.1	786.7	787.2	787.8
132.5°	813.8	816.5	819.1	820.6	820.7	821.0	821.2	821.4
135°	867.6	870.3	873.0	874.4	874.5	874.6	874.7	874.8
137.5°	921.0	923.6	926.3	927.6	927.2	926.8	926.6	926.2
140°	954.4	957.2	959.8	961.1	960.7	960.4	960.0	959.7
142.5°	987.6	989.7	991.9	992.9	992.6	992.2	991.9	991.6
145°	1036.2	1037.2	1038.2	1038.8	1038.9	1039.1	1039.2	1039.4
147.5°	1081.9	1082.8	1083.7	1083.5	1082.4	1081.1	1080.0	1078.7
150°	1110.8	1110.8	1110.8	1110.7	1110.4	1110.2	1109.9	1109.6
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.8	1137.1	1136.3
155°	1177.9	1178.8	1179.8	1179.6	1178.5	1177.3	1176.3	1175.1
157.5°	1212.1	1213.1	1214.0	1213.7	1212.2	1210.7	1209.2	1207.6
160°	1232.9	1233.8	1234.7	1234.6	1233.4	1232.3	1231.1	1230.0
162.5°	1252.3	1253.4	1254.5	1254.4	1253.0	1251.7	1250.4	1249.0
165°	1278.4	1279.3	1280.3	1280.1	1278.7	1277.3	1275.9	1274.5
167.5°	1297.8	1299.2	1300.6	1300.6	1299.1	1297.7	1296.3	1294.9
170°	1309.4	1310.8	1312.2	1312.1	1310.5	1308.9	1307.2	1305.6
172.5°	1317.7	1319.1	1320.4	1320.4	1319.0	1317.6	1316.2	1314.7
175°	1327.0	1328.4	1329.8	1329.7	1328.1	1326.5	1324.8	1323.2
177.5°	1331.2	1332.4	1333.5	1333.4	1332.1	1330.8	1329.5	1328.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5

(END OF REPORT)