

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

Luminaire Tested: **S125DIP-S850D1205U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333245  
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-S850D1205U835-4F0-1E-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: 7451.1 lumens  
Efficiency: N/A  
Efficacy: 131.0 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

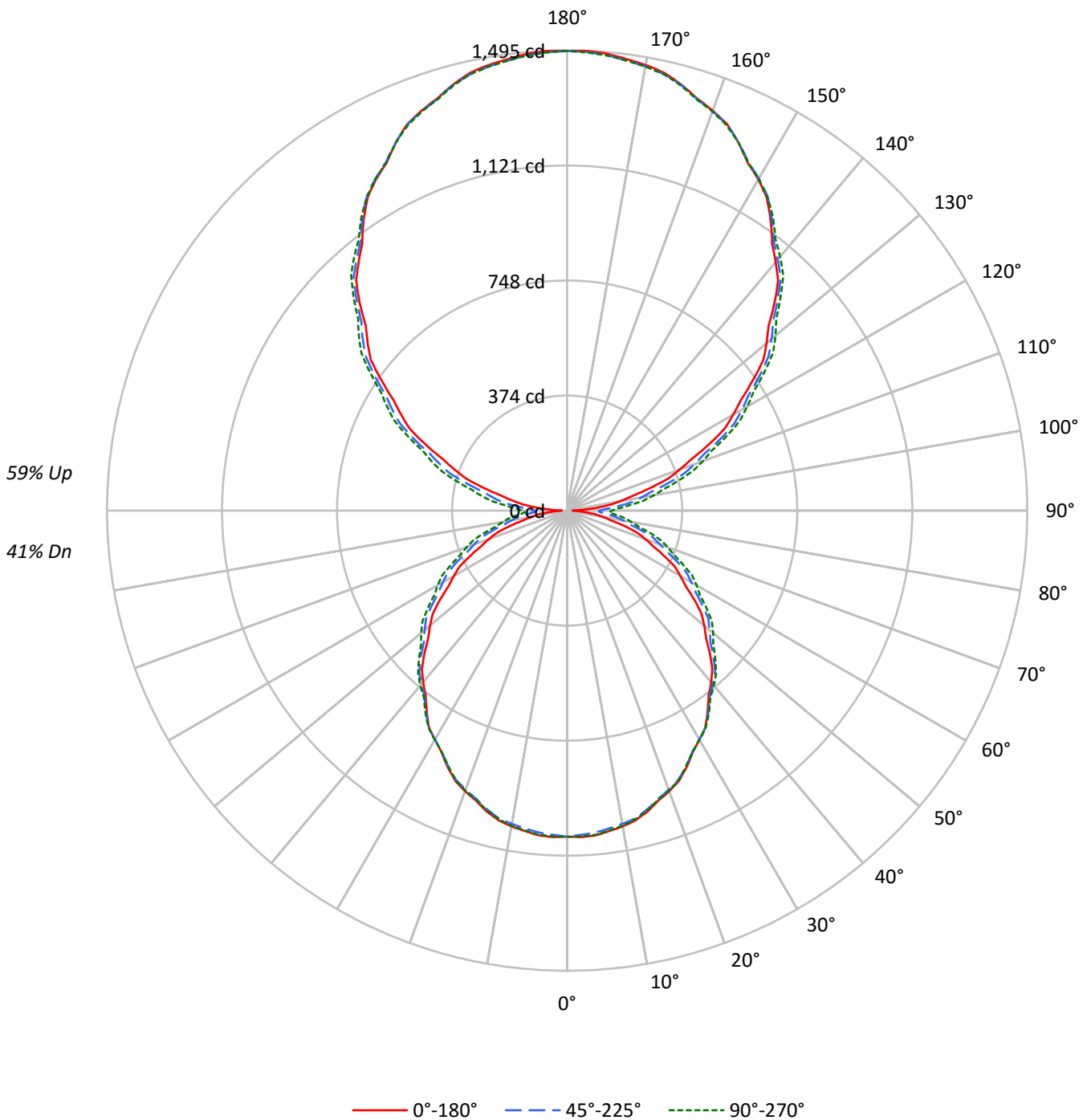
Input Watts (W): 56.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	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°	6841	6841	6841
5°	6855	6715	6737
10°	6806	6595	6585
15°	6726	6452	6393
20°	6616	6274	6201
25°	6486	6084	5964
30°	6329	5876	5749
35°	6182	5684	5552
40°	6032	5481	5353
45°	5863	5308	5178
50°	5702	5120	5022
55°	5508	4943	4839
60°	5296	4741	4653
65°	5075	4530	4443
70°	4822	4240	4228
75°	4425	3962	3962
80°	3905	3625	3673
85°	3417	3398	3583



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.2	1.3
10°-20°	284.4	3.8
20°-30°	422.9	5.7
30°-40°	500.9	6.7
40°-50°	517.9	7.0
50°-60°	477.1	6.4
60°-70°	385.7	5.2
70°-80°	258.3	3.5
80°-90°	137.2	1.8
90°-100°	175.2	2.4
100°-110°	350.8	4.7
110°-120°	537.4	7.2
120°-130°	679.4	9.1
130°-140°	746.9	10.0
140°-150°	724.9	9.7
150°-160°	607.3	8.1
160°-170°	403.7	5.4
170°-180°	141.3	1.9
0°-30°	807.4	10.8
0°-40°	1308.3	17.6
0°-60°	2303.3	30.9
0°-90°	3084.5	41.4
90°-120°	1063.3	14.3
90°-150°	3214.5	43.1
90°-180°	4367.0	58.6
0°-180°	7451.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1059	1057	1050	1058	1057	100
15°	1012	1012	1005	1011	1007	285
25°	919	922	916	920	915	423
35°	796	802	800	803	803	498
45°	655	666	672	679	680	506
55°	504	520	537	548	552	450
65°	347	371	396	411	415	344
75°	191	218	251	271	277	203
85°	57	92	128	150	159	61
90°	18	60	104	132	144	15
95°	89	119	165	195	206	91
105°	274	298	335	362	373	293
115°	507	520	548	565	571	501
125°	735	742	763	777	781	658
135°	953	959	967	980	981	734
145°	1153	1156	1160	1165	1166	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1061.8	1061.5	1061.1	1060.7	1060.3	1059.5	1058.2	1056.9	1055.6	1054.3	1055.6
5°	1059.3	1058.9	1058.4	1057.9	1057.5	1056.4	1054.8	1053.2	1051.6	1050.0	1051.8
7.5°	1050.0	1049.8	1049.6	1049.4	1049.2	1048.3	1046.7	1045.0	1043.3	1041.7	1043.3
10°	1041.7	1041.7	1041.7	1041.7	1041.7	1040.8	1038.9	1037.1	1035.2	1033.4	1035.0
12.5°	1030.0	1030.2	1030.4	1030.6	1030.8	1030.1	1028.7	1027.2	1025.7	1024.2	1025.5
15°	1011.6	1011.8	1012.0	1012.2	1012.5	1011.8	1010.2	1008.6	1006.9	1005.3	1006.7
17.5°	987.5	987.9	988.4	988.8	989.3	988.7	987.1	985.5	983.9	982.3	983.3
20°	970.0	970.5	970.9	971.4	971.9	971.3	969.7	968.1	966.4	964.8	965.5
22.5°	950.1	950.9	951.7	952.6	953.4	952.9	951.1	949.3	947.5	945.7	946.6
25°	919.1	919.8	920.5	921.2	921.9	921.5	920.2	918.8	917.4	916.0	916.9
27.5°	884.6	885.7	886.7	887.7	888.7	888.4	886.9	885.3	883.7	882.2	882.8
30°	858.9	860.3	861.7	863.0	864.4	864.4	863.0	861.7	860.3	858.9	859.4
32.5°	835.6	836.8	838.0	839.2	840.4	840.5	839.5	838.5	837.5	836.5	836.9
35°	795.5	797.2	798.8	800.4	802.0	802.5	801.8	801.1	800.4	799.7	800.4
37.5°	755.4	756.9	758.4	759.9	761.4	762.0	761.7	761.5	761.3	761.1	762.0
40°	728.0	729.9	731.7	733.6	735.4	736.2	736.0	735.8	735.5	735.3	736.2
42.5°	698.1	700.5	702.9	705.3	707.7	709.2	709.7	710.2	710.7	711.2	712.3
45°	655.3	657.9	660.4	662.9	665.5	667.3	668.5	669.6	670.8	671.9	673.6
47.5°	611.5	613.9	616.2	618.6	620.9	623.1	625.1	627.1	629.0	631.0	633.4
50°	581.6	584.1	586.7	589.2	591.7	594.3	596.8	599.4	601.9	604.4	607.0
52.5°	550.0	553.1	556.2	559.3	562.4	565.5	568.6	571.7	574.8	577.9	580.6
55°	503.7	507.4	511.1	514.8	518.5	522.2	525.9	529.6	533.2	536.9	539.5
57.5°	456.3	460.8	465.2	469.6	474.1	478.4	482.7	486.9	491.1	495.4	498.3
60°	424.8	429.4	434.0	438.6	443.2	447.9	452.5	457.1	461.7	466.3	469.8
62.5°	394.0	398.6	403.3	407.9	412.5	417.3	422.3	427.3	432.2	437.2	441.1
65°	346.9	352.2	357.5	362.8	368.1	373.5	379.1	384.6	390.2	395.7	399.2
67.5°	302.4	307.6	312.7	317.8	322.9	328.3	333.9	339.6	345.2	350.8	355.0
70°	270.0	275.3	280.6	286.0	291.3	296.9	302.9	308.9	314.9	320.9	325.3
72.5°	238.5	243.9	249.4	254.9	260.4	266.4	273.0	279.6	286.1	292.7	297.4
75°	191.1	197.1	203.1	209.1	215.1	221.8	229.2	236.6	243.9	251.3	255.9
77.5°	145.6	152.5	159.5	166.4	173.3	180.3	187.4	194.5	201.6	208.8	213.8
80°	117.4	124.3	131.2	138.1	145.1	152.4	160.3	168.1	176.0	183.8	188.9
82.5°	91.6	98.9	106.2	113.5	120.8	128.4	136.5	144.5	152.5	160.6	165.5
85°	57.1	64.7	72.4	80.0	87.6	95.4	103.5	111.6	119.7	127.7	132.8
87.5°	32.6	40.4	48.2	56.0	63.8	71.8	80.0	88.2	96.5	104.7	110.2
90°	17.8	27.2	36.7	46.1	55.6	65.1	74.8	84.4	94.1	103.8	110.4
92.5°	43.1	51.4	59.6	67.9	76.2	85.5	95.7	106.0	116.2	126.5	133.3
95°	89.0	95.6	102.1	108.6	115.1	123.6	134.0	144.4	154.9	165.3	172.2
97.5°	137.8	143.4	149.0	154.6	160.2	168.6	179.7	190.8	202.0	213.1	219.6
100°	174.1	179.0	183.8	188.7	193.5	201.3	212.0	222.8	233.5	244.3	251.4
102.5°	213.3	218.8	224.3	229.8	235.3	242.5	251.4	260.3	269.2	278.1	285.3
105°	274.3	279.3	284.3	289.2	294.2	301.0	309.4	317.9	326.4	334.9	341.0
107.5°	341.8	346.3	350.7	355.1	359.6	365.7	373.5	381.4	389.2	397.0	402.4
110°	388.4	392.5	396.5	400.6	404.7	410.3	417.5	424.8	432.0	439.3	444.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	436.8	439.6	442.5	445.4	448.3	453.4	460.6	467.9	475.2	482.4	487.0
115°	507.1	509.7	512.4	515.0	517.7	522.3	528.8	535.3	541.8	548.3	552.2
117.5°	577.6	579.1	580.7	582.2	583.7	587.6	593.7	599.8	606.0	612.1	616.3
120°	622.2	624.2	626.2	628.2	630.2	633.9	639.5	645.1	650.6	656.2	660.1
122.5°	669.8	670.5	671.3	672.1	672.9	676.2	682.0	687.8	693.6	699.4	702.9
125°	735.1	736.4	737.7	739.0	740.4	743.5	748.3	753.2	758.1	762.9	766.1
127.5°	803.8	804.4	805.1	805.7	806.4	808.7	812.8	816.9	821.0	825.1	828.3
130°	845.6	846.7	847.7	848.8	849.8	852.2	856.0	859.7	863.5	867.2	870.2
132.5°	886.6	888.7	890.7	892.8	894.9	897.1	899.5	901.9	904.3	906.7	909.6
135°	952.6	954.0	955.3	956.6	957.9	959.5	961.4	963.3	965.1	967.0	970.0
137.5°	1014.7	1016.0	1017.3	1018.6	1020.0	1021.3	1022.6	1024.0	1025.4	1026.7	1029.7
140°	1053.9	1055.1	1056.4	1057.7	1059.0	1060.2	1061.2	1062.2	1063.2	1064.2	1067.2
142.5°	1093.8	1094.7	1095.6	1096.5	1097.4	1098.4	1099.4	1100.4	1101.5	1102.5	1105.0
145°	1152.6	1153.4	1154.2	1155.0	1155.8	1156.6	1157.4	1158.2	1158.9	1159.7	1160.9
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1212.3
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3	1059.3
2.5°	1056.9	1058.2	1059.5	1060.1	1059.9	1059.7	1059.5	1059.3
5°	1053.7	1055.5	1057.4	1058.2	1057.9	1057.7	1057.5	1057.3
7.5°	1044.9	1046.5	1048.1	1048.8	1048.6	1048.4	1048.1	1047.9
10°	1036.6	1038.2	1039.8	1040.5	1040.3	1040.1	1039.8	1039.6
12.5°	1026.7	1028.0	1029.2	1029.5	1028.9	1028.3	1027.7	1027.1
15°	1008.1	1009.5	1010.9	1011.1	1010.2	1009.2	1008.3	1007.4
17.5°	984.4	985.5	986.5	986.8	986.2	985.7	985.1	984.6
20°	966.2	966.9	967.6	967.9	967.9	967.9	967.9	967.9
22.5°	947.5	948.3	949.2	949.4	948.8	948.3	947.7	947.2
25°	917.9	918.8	919.7	919.6	918.4	917.3	916.1	915.0
27.5°	883.4	884.1	884.7	884.9	884.4	884.0	883.6	883.2
30°	859.8	860.3	860.7	860.9	860.6	860.4	860.2	859.9
32.5°	837.4	837.8	838.3	838.4	838.2	838.0	837.7	837.5
35°	801.1	801.8	802.5	802.8	802.8	802.8	802.8	802.8
37.5°	762.9	763.8	764.7	765.2	765.1	765.0	764.9	764.8
40°	737.1	738.1	739.0	739.7	740.1	740.6	741.1	741.5
42.5°	713.4	714.5	715.6	716.2	716.3	716.4	716.5	716.6
45°	675.2	676.8	678.4	679.3	679.6	679.8	680.0	680.3
47.5°	635.7	638.1	640.4	641.9	642.4	642.9	643.4	643.9
50°	609.5	612.1	614.6	616.2	616.9	617.6	618.3	619.0
52.5°	583.3	586.0	588.7	590.4	590.9	591.4	591.9	592.4
55°	542.0	544.6	547.1	548.8	549.7	550.7	551.6	552.5
57.5°	501.2	504.1	507.0	508.8	509.5	510.2	510.9	511.6
60°	473.2	476.7	480.2	482.2	482.9	483.6	484.3	485.0
62.5°	444.9	448.7	452.6	454.9	455.8	456.7	457.5	458.4
65°	402.6	406.1	409.5	411.7	412.7	413.6	414.5	415.4
67.5°	359.2	363.4	367.6	370.3	371.5	372.7	373.9	375.1
70°	329.7	334.1	338.5	341.3	342.7	344.1	345.5	346.9
72.5°	302.2	306.9	311.7	314.6	315.6	316.6	317.6	318.6
75°	260.6	265.2	269.8	272.7	273.8	275.0	276.1	277.3
77.5°	218.9	224.0	229.1	232.1	233.0	233.9	234.8	235.8
80°	194.0	199.1	204.1	207.1	208.1	209.0	209.9	210.8
82.5°	170.3	175.2	180.1	183.4	185.1	186.7	188.4	190.1
85°	137.9	143.0	148.1	151.5	153.4	155.2	157.1	158.9
87.5°	115.8	121.4	126.9	130.6	132.4	134.1	135.9	137.7
90°	117.0	123.6	130.2	134.6	137.0	139.4	141.8	144.2
92.5°	140.1	146.9	153.8	158.3	160.5	162.6	164.8	167.0
95°	179.1	185.9	192.8	197.3	199.5	201.6	203.7	205.9
97.5°	226.2	232.7	239.3	243.5	245.4	247.3	249.1	251.0
100°	258.6	265.8	272.9	277.5	279.4	281.3	283.2	285.1
102.5°	292.5	299.7	306.9	311.5	313.7	315.8	317.9	320.0
105°	347.2	353.3	359.5	363.8	366.2	368.6	371.0	373.3
107.5°	407.7	413.1	418.4	421.8	423.2	424.5	425.9	427.3
110°	449.6	454.7	459.9	463.2	464.5	465.9	467.2	468.6





TEST NUMBER: P333245

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	491.5	496.1	500.7	503.5	504.7	505.8	507.0	508.1
115°	556.1	560.0	563.9	566.4	567.5	568.7	569.8	570.9
117.5°	620.4	624.5	628.6	631.0	631.5	632.1	632.6	633.1
120°	664.1	668.0	671.9	674.0	674.4	674.8	675.1	675.5
122.5°	706.4	710.0	713.5	715.5	716.1	716.7	717.2	717.8
125°	769.3	772.5	775.7	777.7	778.6	779.5	780.4	781.3
127.5°	831.4	834.6	837.7	839.7	840.5	841.4	842.2	843.0
130°	873.2	876.2	879.1	880.9	881.6	882.2	882.8	883.5
132.5°	912.6	915.6	918.6	920.2	920.4	920.7	920.9	921.2
135°	973.0	976.0	979.0	980.6	980.7	980.8	980.9	981.0
137.5°	1032.8	1035.8	1038.8	1040.2	1039.8	1039.4	1039.1	1038.7
140°	1070.3	1073.4	1076.4	1077.8	1077.4	1077.0	1076.6	1076.3
142.5°	1107.5	1109.9	1112.4	1113.5	1113.1	1112.7	1112.4	1112.0
145°	1162.0	1163.2	1164.3	1165.0	1165.1	1165.3	1165.4	1165.6
147.5°	1213.3	1214.3	1215.3	1215.1	1213.8	1212.4	1211.1	1209.7
150°	1245.7	1245.7	1245.7	1245.6	1245.3	1245.0	1244.7	1244.4
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1276.0	1275.2	1274.3
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)