

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: P333237

Luminaire Tested: **S125DIP-S850D1035U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333237
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S850D1035U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6997.0 lumens
Efficiency: N/A
Efficacy: 134.6 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

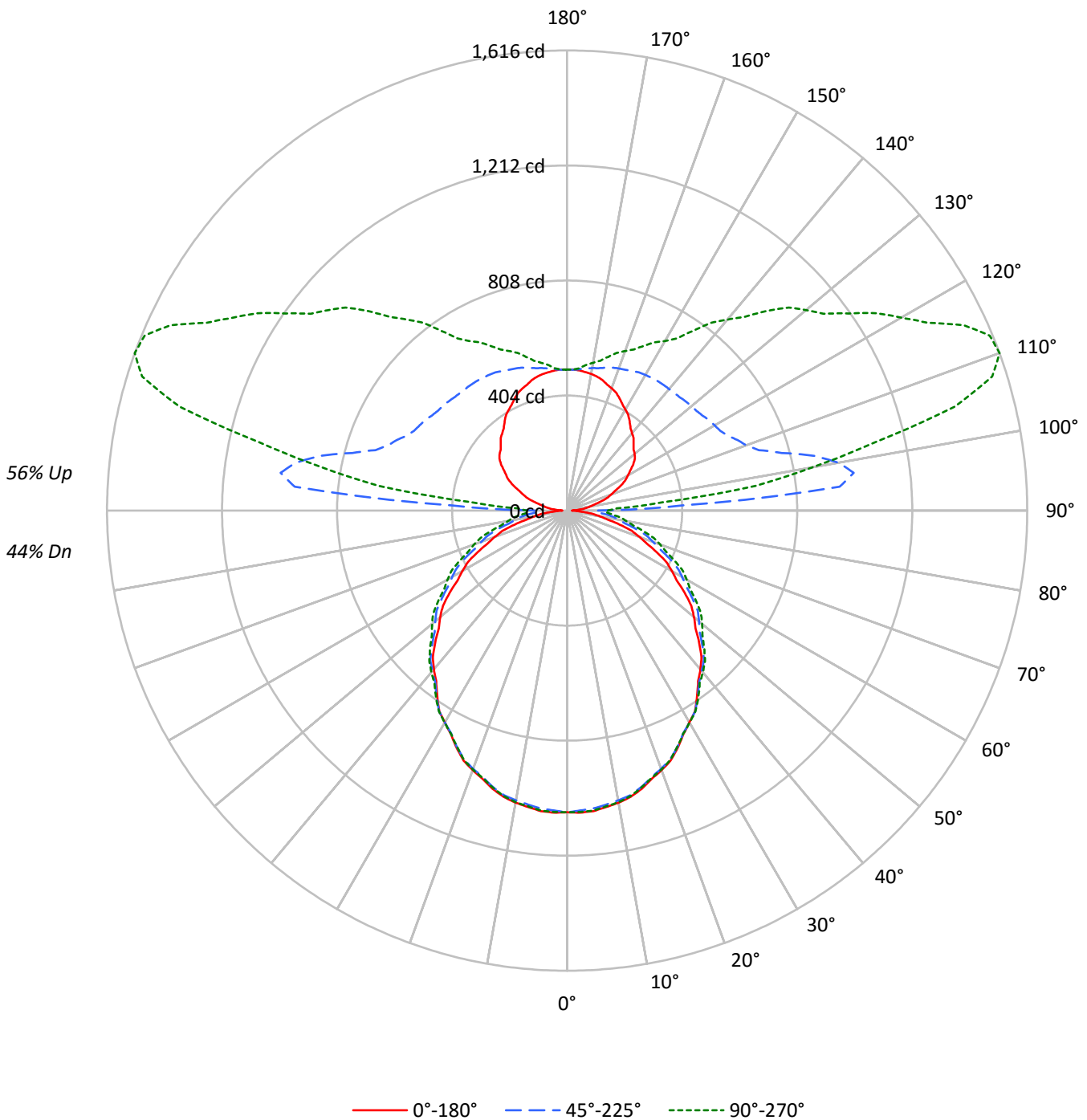
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																			
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	41	36																			
2	87	79	73	68	79	73	67	62	60	56	53	49	46	43	38	36	34	29																			
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25																			
4	72	61	53	47	66	56	49	44	47	41	37	38	34	31	30	27	25	21																			
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	21	18																			
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16																			
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14																			
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12																			
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11																			
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	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	1.4
10°-20°	284.4	4.1
20°-30°	422.9	6.0
30°-40°	500.9	7.2
40°-50°	517.9	7.4
50°-60°	477.1	6.8
60°-70°	385.7	5.5
70°-80°	258.3	3.7
80°-90°	136.7	2.0
90°-100°	434.1	6.2
100°-110°	826.9	11.8
110°-120°	761.2	10.9
120°-130°	607.9	8.7
130°-140°	480.1	6.9
140°-150°	357.2	5.1
150°-160°	250.2	3.6
160°-170°	147.4	2.1
170°-180°	48.0	0.7
0°-30°	807.4	11.5
0°-40°	1308.3	18.7
0°-60°	2303.3	32.9
0°-90°	3084.0	44.1
90°-120°	2022.2	28.9
90°-150°	3467.5	49.6
90°-180°	3913.0	55.9
0°-180°	6997.0	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	59	101	129	139	13
95°	46	138	960	499	340	46
105°	122	184	781	1502	1408	129
115°	208	258	622	1311	1539	205
125°	284	332	581	1036	1207	251
135°	330	395	561	856	991	256
145°	382	437	555	696	770	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



TEST NUMBER: P333237

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D4

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	40.2	48.0	55.8	63.5	71.6	79.6	87.8	95.9	104.1	109.7
90°	17.6	26.0	35.4	44.8	54.1	63.8	72.6	82.4	91.3	101.1	107.4
92.5°	27.1	36.6	51.8	71.0	95.0	131.6	194.1	293.6	400.8	403.7	347.5
95°	46.4	53.4	67.4	84.4	112.4	164.2	278.9	506.3	789.7	960.3	946.4
97.5°	67.0	73.6	84.5	100.9	126.1	164.9	243.2	411.7	707.5	1015.2	1170.6
100°	81.3	88.1	97.0	112.8	136.6	172.7	238.0	375.1	634.1	967.9	1222.3
102.5°	97.2	102.9	110.6	126.8	148.7	183.7	242.4	358.6	578.2	888.7	1185.3
105°	122.2	125.8	134.5	148.2	167.9	201.1	252.0	347.7	521.4	780.9	1072.0
107.5°	146.5	151.6	159.5	170.9	190.6	220.6	269.8	352.5	495.1	705.8	957.5
110°	164.0	168.8	175.5	187.3	205.0	235.6	283.0	358.3	485.6	669.7	891.7



TEST NUMBER: P333237

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.4	186.6	192.0	203.2	220.4	249.8	295.4	366.6	482.4	647.2	841.9
115°	207.9	211.5	216.1	226.7	243.3	272.1	315.0	378.9	480.7	621.5	786.4
117.5°	230.8	234.9	239.1	249.2	267.2	294.7	335.3	393.7	482.7	606.3	751.0
120°	246.8	250.5	255.1	264.8	282.5	310.4	350.7	403.9	486.1	598.2	730.9
122.5°	262.7	265.2	268.8	278.1	297.0	324.6	364.7	415.3	488.5	590.9	713.0
125°	283.7	285.4	290.2	299.0	317.7	345.8	383.4	430.9	493.5	580.9	688.4
127.5°	299.2	302.0	308.1	319.3	339.2	366.9	402.5	445.8	500.1	573.8	665.4
130°	309.6	312.3	320.1	332.9	353.6	381.0	415.2	456.4	504.5	569.7	650.8
132.5°	316.7	320.5	330.0	344.6	366.3	393.4	426.9	464.9	509.1	566.3	637.9
135°	329.5	333.3	345.0	360.8	381.5	409.1	441.7	476.3	514.8	561.4	621.3
137.5°	345.7	348.5	359.5	375.3	395.6	423.7	452.6	485.0	520.9	558.8	607.1
140°	354.4	357.4	369.4	385.4	404.3	431.4	460.6	490.8	522.9	557.1	599.6
142.5°	365.6	367.6	378.6	394.4	412.4	437.7	465.1	493.5	523.9	556.3	593.6
145°	382.4	384.1	393.9	407.6	425.4	448.2	474.2	499.1	526.1	555.0	586.1
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	579.2
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



TEST NUMBER: P333237

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D4

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°	115.2	120.7	126.2	130.0	131.7	133.3	135.1	136.7
90°	113.7	120.1	126.4	131.8	133.4	135.0	137.7	139.3
92.5°	269.0	225.6	199.0	187.6	176.4	175.6	175.8	175.9
95°	803.7	657.1	539.4	458.8	389.6	361.3	354.9	340.5
97.5°	1149.3	1047.7	933.0	819.6	759.4	705.1	677.7	666.5
100°	1304.0	1260.0	1162.0	1061.3	993.8	923.3	887.7	873.2
102.5°	1353.9	1388.7	1344.0	1276.8	1204.5	1154.7	1116.0	1105.4
105°	1316.2	1457.6	1506.1	1498.2	1467.9	1436.6	1418.2	1407.9
107.5°	1198.5	1385.6	1502.9	1558.0	1575.6	1576.9	1571.7	1565.2
110°	1111.8	1305.8	1451.0	1538.8	1585.3	1605.9	1614.5	1616.2



TEST NUMBER: P333237

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1042.6	1226.9	1373.4	1476.4	1543.7	1577.8	1596.8	1605.6
115°	955.2	1114.1	1255.0	1366.6	1445.9	1495.2	1524.5	1538.9
117.5°	896.7	1034.0	1155.7	1258.3	1337.7	1388.8	1418.1	1427.7
120°	864.6	988.3	1102.1	1192.6	1267.8	1317.1	1345.5	1354.8
122.5°	839.4	954.1	1055.7	1140.5	1207.8	1253.1	1281.4	1290.0
125°	802.9	908.5	999.0	1073.3	1130.4	1172.4	1195.6	1206.7
127.5°	765.7	864.1	948.6	1018.2	1070.3	1107.8	1129.9	1135.6
130°	742.8	833.9	915.0	982.1	1033.2	1067.3	1088.4	1095.5
132.5°	719.5	805.0	878.9	943.5	994.4	1028.3	1047.7	1055.4
135°	688.1	760.0	826.9	885.9	931.0	965.1	984.2	991.3
137.5°	661.9	720.3	776.1	826.3	866.5	897.4	914.9	922.4
140°	647.0	696.5	745.0	788.6	826.5	853.4	869.3	875.2
142.5°	634.3	676.2	717.9	755.8	788.0	810.9	826.0	831.1
145°	618.2	650.3	682.4	710.4	735.3	753.2	765.1	770.0
147.5°	603.9	629.4	653.5	674.3	693.7	707.7	714.5	716.7
150°	596.0	617.9	636.9	655.0	670.2	682.4	686.6	687.9
152.5°	588.0	607.5	624.9	638.9	651.5	661.2	665.2	666.3
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)