

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: P333420-930

Luminaire Tested: **S125DIW-S850D1340U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333420-930
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: S125DIW-S850D1340U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7051.0 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

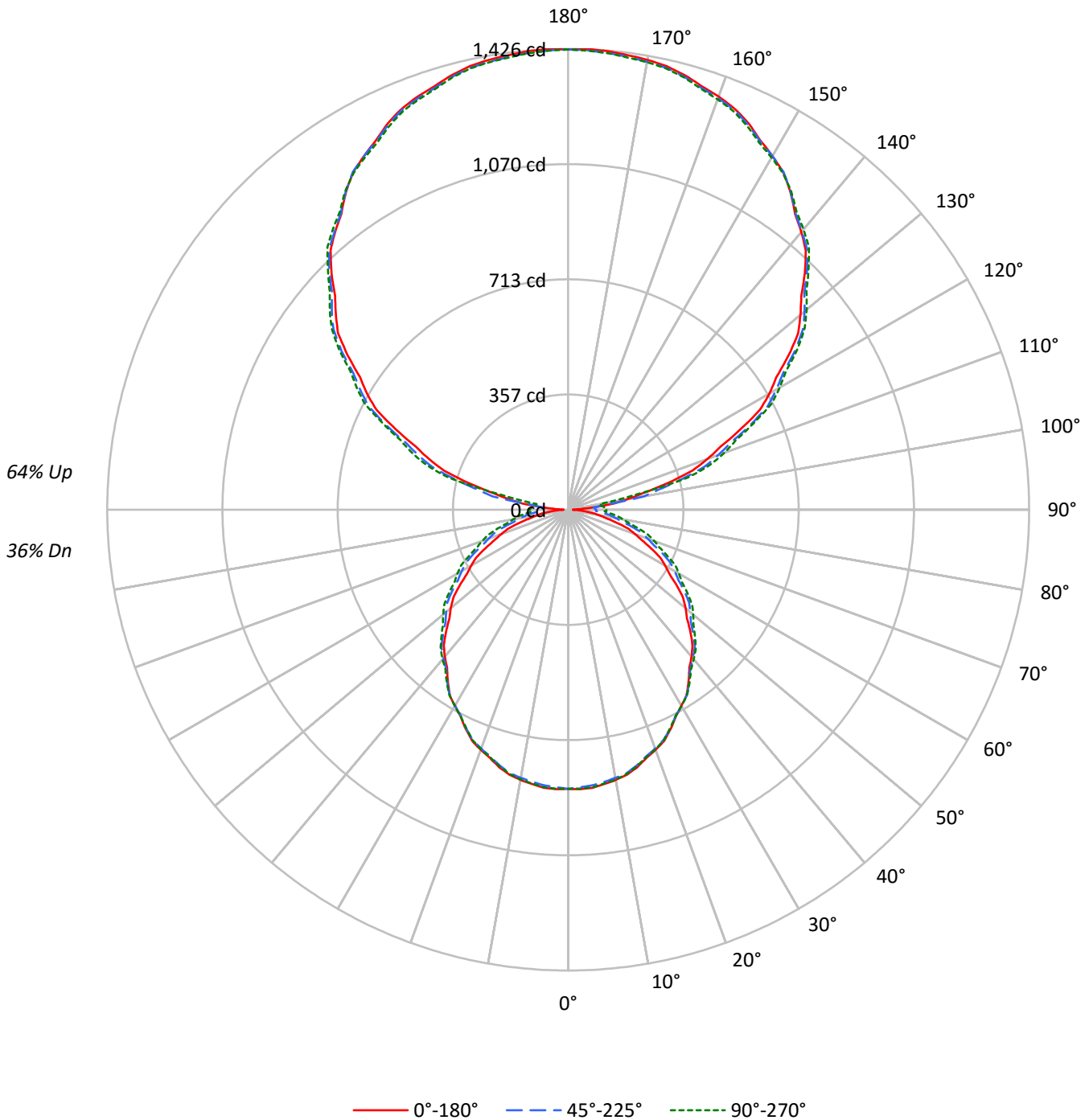
Input Watts (W): 61.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333420-930

CATALOG NUMBER: S125DIW-S850D1340U930-4F0-1E-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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	41	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	28	26	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	58	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	18	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.2
10°-20°	231.8	3.3
20°-30°	344.8	4.9
30°-40°	408.4	5.8
40°-50°	422.2	6.0
50°-60°	389.0	5.5
60°-70°	314.4	4.5
70°-80°	210.6	3.0
80°-90°	112.2	1.6
90°-100°	113.0	1.6
100°-110°	364.1	5.2
110°-120°	608.7	8.6
120°-130°	759.5	10.8
130°-140°	806.0	11.4
140°-150°	751.0	10.7
150°-160°	606.3	8.6
160°-170°	392.1	5.6
170°-180°	135.2	1.9
0°-30°	658.3	9.3
0°-40°	1066.7	15.1
0°-60°	1877.9	26.6
0°-90°	2515.1	35.7
90°-120°	1085.8	15.4
90°-150°	3402.3	48.3
90°-180°	4536.0	64.3
0°-180°	7051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	15	50	86	110	120	12
95°	71	88	79	102	108	85
105°	318	336	361	377	383	337
115°	588	600	622	632	632	582
125°	832	839	856	864	866	743
135°	1035	1041	1044	1053	1051	798
145°	1199	1200	1200	1205	1203	749
155°	1320	1314	1315	1318	1310	608
165°	1392	1386	1387	1393	1385	393
175°	1424	1418	1419	1426	1418	136
180°	1424	1424	1424	1424	1424	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.7	33.0	39.5	45.8	52.2	58.8	65.5	72.2	78.9	85.7	90.3
90°	14.6	22.5	30.4	38.3	46.2	54.1	62.2	70.3	78.3	86.3	91.8
92.5°	28.5	32.7	36.9	41.3	45.5	51.6	59.6	67.6	75.6	83.6	88.9
95°	71.2	75.3	79.6	83.7	88.0	88.8	86.3	83.7	81.2	78.7	84.0
97.5°	135.6	141.3	146.9	152.6	158.2	155.4	143.9	132.5	121.0	109.5	106.9
100°	185.6	190.3	194.9	199.6	204.2	210.0	217.0	224.0	230.9	237.9	206.8
102.5°	236.4	241.0	245.5	250.1	254.6	260.1	266.5	273.0	279.4	285.8	283.0
105°	318.0	321.9	325.9	329.8	333.8	338.6	344.2	349.8	355.5	361.2	364.9
107.5°	402.7	405.2	407.8	410.3	412.9	417.1	423.0	428.9	434.8	440.7	444.4
110°	457.7	460.0	462.3	464.5	466.8	470.8	476.5	482.2	488.0	493.7	496.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	510.1	512.4	514.9	517.2	519.6	523.4	528.9	534.3	539.6	545.0	547.6
115°	587.7	590.3	592.7	595.3	597.7	601.5	606.7	611.8	616.9	622.1	624.5
117.5°	668.2	669.0	669.8	670.7	671.5	674.7	680.2	685.7	691.2	696.8	698.7
120°	718.8	719.2	719.5	719.8	720.2	722.8	727.9	733.0	738.0	743.0	745.8
122.5°	763.0	764.1	765.2	766.5	767.6	770.4	774.9	779.4	783.9	788.4	791.0
125°	832.0	833.5	834.9	836.4	837.9	840.5	844.2	848.0	851.7	855.5	857.6
127.5°	897.2	898.3	899.3	900.3	901.2	903.2	906.1	909.1	912.0	914.9	917.2
130°	937.8	938.8	939.8	940.8	941.8	943.7	946.6	949.4	952.3	955.1	957.1
132.5°	977.6	979.0	980.3	981.6	982.9	984.4	985.9	987.4	989.0	990.4	993.0
135°	1035.1	1036.3	1037.5	1038.8	1040.0	1041.1	1041.9	1042.8	1043.6	1044.4	1046.4
137.5°	1087.9	1089.0	1090.1	1091.2	1092.3	1092.9	1093.1	1093.3	1093.6	1093.7	1096.1
140°	1121.9	1122.3	1122.8	1123.3	1123.8	1124.0	1124.0	1123.9	1123.8	1123.8	1126.3
142.5°	1153.2	1153.2	1153.4	1153.6	1153.6	1153.9	1154.3	1154.6	1155.0	1155.4	1157.2
145°	1199.0	1199.2	1199.5	1199.8	1200.1	1200.2	1200.2	1200.2	1200.2	1200.2	1201.4
147.5°	1238.2	1238.1	1238.0	1238.0	1237.9	1238.0	1238.2	1238.5	1238.8	1239.1	1239.7
150°	1263.6	1263.1	1262.7	1262.2	1261.7	1261.7	1262.2	1262.7	1263.1	1263.6	1264.0
152.5°	1288.0	1287.0	1286.0	1285.0	1283.9	1283.6	1284.1	1284.6	1285.1	1285.5	1286.0
155°	1319.5	1318.1	1316.7	1315.3	1313.9	1313.4	1313.9	1314.3	1314.8	1315.3	1316.0
157.5°	1343.8	1343.0	1342.1	1341.2	1340.4	1340.0	1340.0	1340.1	1340.2	1340.2	1340.9
160°	1360.7	1359.3	1357.9	1356.4	1355.0	1354.5	1354.7	1354.9	1355.2	1355.4	1356.3
162.5°	1374.2	1372.8	1371.3	1369.9	1368.6	1368.0	1368.2	1368.5	1368.6	1368.9	1370.2
165°	1392.4	1390.9	1389.5	1388.1	1386.7	1386.1	1386.3	1386.6	1386.8	1387.1	1388.5
167.5°	1405.8	1404.4	1403.0	1401.5	1400.0	1399.5	1399.6	1399.9	1400.1	1400.4	1402.1
170°	1413.5	1411.9	1410.1	1408.5	1406.9	1406.1	1406.4	1406.6	1406.9	1407.1	1409.0
172.5°	1418.5	1416.9	1415.3	1413.6	1411.9	1411.4	1411.8	1412.2	1412.6	1413.0	1414.7
175°	1424.0	1422.6	1421.2	1419.8	1418.4	1417.8	1418.1	1418.3	1418.5	1418.7	1420.6
177.5°	1426.5	1425.4	1424.3	1423.2	1422.0	1421.6	1421.8	1422.0	1422.1	1422.3	1423.7
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	94.8	99.4	104.0	107.0	108.4	109.8	111.3	112.8
90°	97.3	102.8	108.4	112.1	114.1	116.1	118.1	120.2
92.5°	94.3	99.6	105.0	108.5	110.1	111.8	113.4	115.1
95°	89.4	94.7	100.0	103.3	104.6	105.9	107.2	108.5
97.5°	104.2	101.5	98.9	98.2	99.5	100.7	102.0	103.3
100°	175.9	144.9	113.9	98.5	98.7	98.8	99.1	99.2
102.5°	280.2	277.4	274.6	265.8	250.9	236.1	221.3	206.4
105°	368.7	372.4	376.2	378.6	379.7	380.7	381.9	382.9
107.5°	448.3	452.0	455.8	457.9	458.4	458.9	459.3	459.7
110°	499.5	502.3	505.2	507.4	509.0	510.5	512.1	513.6



TEST NUMBER: P333420-930

CATALOG NUMBER: S125DIW-S850D1340U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	550.1	552.6	555.1	556.9	557.9	558.9	559.9	560.9
115°	627.0	629.4	631.9	632.9	632.7	632.3	632.1	631.9
117.5°	700.7	702.7	704.7	706.0	706.6	707.4	708.0	708.7
120°	748.4	751.2	753.9	755.3	755.2	755.2	755.1	755.1
122.5°	793.6	796.1	798.7	799.9	799.7	799.5	799.2	799.0
125°	859.7	861.8	863.8	865.0	865.2	865.4	865.7	865.9
127.5°	919.5	921.8	924.1	924.9	924.2	923.6	922.9	922.3
130°	959.0	960.9	962.9	963.7	963.5	963.3	963.0	962.8
132.5°	995.4	997.9	1000.5	1001.4	1001.1	1000.7	1000.3	1000.0
135°	1048.4	1050.4	1052.3	1053.1	1052.6	1052.1	1051.7	1051.2
137.5°	1098.4	1100.7	1103.0	1103.9	1103.4	1103.0	1102.5	1102.0
140°	1128.9	1131.4	1133.9	1134.9	1134.2	1133.6	1132.9	1132.3
142.5°	1159.1	1161.0	1162.9	1163.4	1162.8	1162.1	1161.5	1160.8
145°	1202.6	1203.8	1204.9	1205.2	1204.5	1203.9	1203.2	1202.6
147.5°	1240.2	1240.8	1241.4	1241.0	1239.7	1238.3	1237.0	1235.6
150°	1264.5	1264.9	1265.4	1264.9	1263.1	1261.4	1259.8	1258.1
152.5°	1286.5	1286.9	1287.4	1286.8	1285.2	1283.5	1281.8	1280.2
155°	1316.7	1317.4	1318.1	1317.5	1315.6	1313.8	1311.9	1310.0
157.5°	1341.7	1342.5	1343.2	1342.6	1340.8	1338.9	1337.0	1335.1
160°	1357.3	1358.2	1359.2	1358.7	1356.8	1354.9	1353.1	1351.2
162.5°	1371.5	1372.9	1374.2	1373.8	1371.7	1369.6	1367.6	1365.5
165°	1389.8	1391.3	1392.7	1392.4	1390.6	1388.7	1386.8	1384.9
167.5°	1403.8	1405.4	1407.1	1406.9	1404.8	1402.7	1400.6	1398.5
170°	1410.9	1412.8	1414.6	1414.5	1412.4	1410.3	1408.2	1406.1
172.5°	1416.4	1418.1	1419.8	1419.6	1417.5	1415.4	1413.2	1411.1
175°	1422.5	1424.3	1426.2	1426.1	1424.0	1421.9	1419.8	1417.6
177.5°	1425.0	1426.3	1427.6	1427.5	1426.0	1424.5	1422.9	1421.5
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0

(END OF REPORT)