

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: P333366-930

Luminaire Tested: **S125DIW-S375D1560U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333366-930  
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-S375D1560U930-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6278.1 lumens  
Efficiency: N/A  
Efficacy: 117.6 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

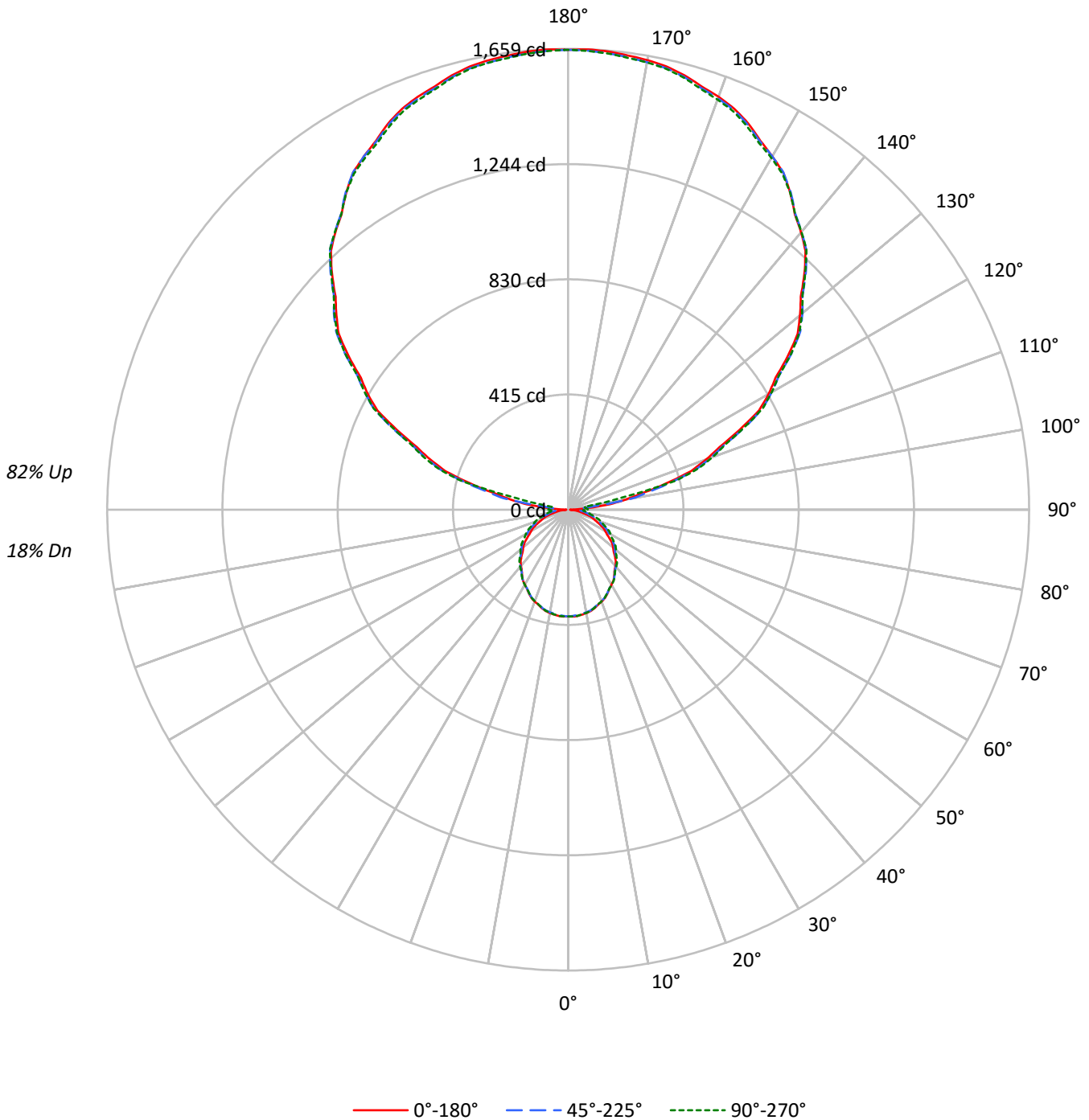
Input Watts (W): 53.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	99	99	99	99	88	88	88	88	65	65	65	45	45	45	27	27	27	18																												
1	90	86	82	79	79	76	73	70	57	55	53	39	38	37	23	22	22	14																												
2	82	75	69	64	72	66	61	57	50	46	43	34	32	31	20	19	18	12																												
3	75	66	59	53	65	58	52	47	44	40	36	30	28	26	18	16	15	10																												
4	68	58	50	45	60	51	45	40	38	34	31	27	24	22	16	14	13	8																												
5	62	51	44	38	55	45	39	34	34	30	26	24	21	19	14	13	11	7																												
6	57	46	38	33	50	41	34	29	31	26	23	21	18	16	13	11	10	6																												
7	53	41	34	28	46	36	30	25	28	23	20	19	16	14	12	10	9	6																												
8	49	37	30	25	43	33	27	22	25	21	17	18	15	12	11	9	8	5																												
9	45	34	27	22	40	30	24	20	23	18	15	16	13	11	10	8	7	5																												
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6	4																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.3	0.6
10°-20°	103.2	1.6
20°-30°	153.4	2.4
30°-40°	181.7	2.9
40°-50°	187.9	3.0
50°-60°	173.1	2.8
60°-70°	139.9	2.2
70°-80°	93.7	1.5
80°-90°	52.0	0.8
90°-100°	87.4	1.4
100°-110°	390.9	6.2
110°-120°	686.0	10.9
120°-130°	870.7	13.9
130°-140°	931.7	14.8
140°-150°	872.0	13.9
150°-160°	704.9	11.2
160°-170°	455.9	7.3
170°-180°	157.2	2.5
0°-30°	292.9	4.7
0°-40°	474.7	7.6
0°-60°	835.7	13.3
0°-90°	1121.3	17.9
90°-120°	1164.3	18.5
90°-150°	3838.8	61.1
90°-180°	5157.0	82.1
0°-180°	6278.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	7	29	50	65	72	7
95°	75	79	47	61	64	93
105°	364	375	386	394	395	386
115°	680	689	700	701	696	674
125°	965	973	981	982	980	861
135°	1202	1209	1210	1211	1206	926
145°	1393	1395	1396	1398	1393	871
155°	1534	1527	1529	1532	1523	707
165°	1619	1612	1613	1619	1610	457
175°	1656	1649	1650	1658	1648	158
180°	1656	1656	1656	1656	1656	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	12.0	15.1	18.3	21.4	24.5	27.6	30.9	34.1	37.3	40.5	42.7
90°	7.3	12.1	17.0	21.9	26.7	31.5	36.3	41.0	45.7	50.5	53.8
92.5°	24.3	25.3	26.3	27.1	28.1	30.9	35.5	40.1	44.8	49.3	52.6
95°	74.8	76.2	77.5	78.9	80.3	77.2	69.7	62.2	54.6	47.1	50.4
97.5°	150.5	153.9	157.4	160.8	164.2	157.0	139.3	121.6	103.8	86.0	80.1
100°	209.1	211.7	214.3	216.9	219.4	222.6	226.3	230.2	233.9	237.7	198.8
102.5°	268.7	271.3	274.0	276.7	279.3	282.3	285.6	288.9	292.1	295.4	289.3
105°	364.2	366.6	369.1	371.5	374.0	376.4	379.0	381.5	383.9	386.5	388.2
107.5°	463.4	464.6	465.7	466.8	468.0	470.0	473.0	476.0	478.9	481.8	483.6
110°	527.9	529.0	529.9	530.9	532.0	533.9	536.8	539.6	542.6	545.4	546.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	588.8	590.3	591.7	593.2	594.6	596.6	599.2	601.9	604.5	607.1	607.6
115°	679.7	681.7	683.6	685.6	687.5	689.7	692.2	694.6	697.1	699.5	699.9
117.5°	773.9	774.2	774.5	774.9	775.2	776.9	780.0	783.1	786.2	789.3	789.3
120°	832.7	832.7	832.7	832.7	832.7	834.1	836.8	839.5	842.3	845.1	845.9
122.5°	884.5	885.7	886.8	887.9	889.2	890.8	893.1	895.3	897.6	899.8	900.6
125°	965.0	966.8	968.6	970.5	972.2	974.0	975.7	977.4	979.0	980.7	981.0
127.5°	1041.4	1042.7	1044.0	1045.2	1046.5	1047.7	1049.0	1050.2	1051.4	1052.6	1053.2
130°	1088.5	1089.8	1091.1	1092.3	1093.6	1095.0	1096.5	1097.9	1099.3	1100.8	1101.1
132.5°	1135.4	1136.9	1138.5	1140.0	1141.6	1142.6	1142.9	1143.1	1143.5	1143.8	1144.8
135°	1202.3	1203.9	1205.4	1207.0	1208.5	1209.3	1209.3	1209.4	1209.4	1209.5	1210.0
137.5°	1263.8	1265.2	1266.6	1267.9	1269.3	1269.8	1269.6	1269.4	1269.2	1269.0	1270.1
140°	1303.7	1304.3	1304.9	1305.5	1305.9	1306.1	1305.9	1305.8	1305.5	1305.4	1306.8
142.5°	1340.1	1340.4	1340.6	1340.9	1341.2	1341.5	1341.9	1342.3	1342.7	1343.0	1343.9
145°	1393.3	1393.8	1394.3	1394.7	1395.2	1395.5	1395.5	1395.5	1395.5	1395.5	1396.1
147.5°	1439.7	1439.5	1439.4	1439.3	1439.2	1439.3	1439.7	1440.0	1440.3	1440.6	1441.0
150°	1469.1	1468.5	1468.0	1467.5	1466.9	1466.9	1467.5	1468.0	1468.5	1469.1	1469.7
152.5°	1497.5	1496.4	1495.2	1494.0	1492.7	1492.4	1493.0	1493.5	1494.1	1494.6	1495.2
155°	1534.1	1532.5	1530.9	1529.3	1527.6	1527.1	1527.6	1528.1	1528.7	1529.3	1530.1
157.5°	1562.4	1561.4	1560.4	1559.4	1558.4	1558.0	1558.0	1558.1	1558.1	1558.2	1559.1
160°	1582.0	1580.4	1578.7	1577.1	1575.5	1574.8	1575.1	1575.3	1575.6	1575.9	1577.0
162.5°	1597.7	1596.1	1594.5	1592.8	1591.1	1590.5	1590.7	1591.1	1591.3	1591.5	1593.1
165°	1618.9	1617.2	1615.5	1613.9	1612.3	1611.6	1611.8	1612.2	1612.4	1612.7	1614.3
167.5°	1634.5	1632.9	1631.2	1629.5	1627.7	1627.1	1627.3	1627.6	1627.9	1628.2	1630.1
170°	1643.4	1641.4	1639.6	1637.6	1635.7	1634.9	1635.2	1635.5	1635.7	1636.0	1638.2
172.5°	1649.3	1647.4	1645.4	1643.6	1641.6	1641.0	1641.4	1641.9	1642.4	1642.9	1644.9
175°	1655.6	1654.0	1652.4	1650.7	1649.1	1648.5	1648.7	1648.9	1649.3	1649.5	1651.7
177.5°	1658.6	1657.3	1656.0	1654.6	1653.3	1652.8	1653.0	1653.3	1653.4	1653.7	1655.2
180°	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	44.9	47.1	49.3	50.8	51.6	52.3	53.1	53.8
90°	57.2	60.4	63.7	66.0	67.4	68.8	70.3	71.7
92.5°	55.8	59.0	62.2	64.3	65.3	66.3	67.2	68.2
95°	53.6	56.7	60.0	61.9	62.5	63.0	63.6	64.2
97.5°	74.1	68.2	62.3	59.6	60.2	60.7	61.3	61.9
100°	159.9	121.0	82.2	62.5	61.8	61.2	60.7	60.1
102.5°	283.4	277.4	271.4	259.3	241.3	223.2	205.2	187.2
105°	389.8	391.5	393.1	394.1	394.4	394.8	395.1	395.4
107.5°	485.3	487.0	488.7	489.4	489.1	488.9	488.5	488.2
110°	547.0	547.8	548.5	549.3	550.2	551.1	552.0	552.8





TEST NUMBER: P333366-930

CATALOG NUMBER: S125DIW-S375D1560U930-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	608.1	608.5	609.0	609.4	609.6	609.8	610.0	610.2
115°	700.3	700.7	701.2	700.8	699.7	698.5	697.4	696.3
117.5°	789.3	789.3	789.3	789.2	789.1	789.0	788.8	788.6
120°	846.8	847.7	848.6	848.6	847.7	846.9	846.0	845.1
122.5°	901.4	902.2	903.0	902.9	901.8	900.7	899.7	898.5
125°	981.2	981.5	981.7	981.6	981.2	980.8	980.4	980.0
127.5°	1053.9	1054.5	1055.2	1054.8	1053.2	1051.7	1050.1	1048.6
130°	1101.5	1101.9	1102.2	1101.9	1101.0	1100.0	1099.1	1098.1
132.5°	1145.8	1146.8	1147.8	1147.8	1146.8	1145.7	1144.8	1143.8
135°	1210.6	1211.1	1211.6	1211.3	1210.1	1208.8	1207.6	1206.4
137.5°	1271.2	1272.3	1273.3	1273.4	1272.3	1271.2	1270.2	1269.0
140°	1308.3	1309.8	1311.2	1311.3	1310.0	1308.7	1307.4	1306.1
142.5°	1344.8	1345.7	1346.6	1346.5	1345.2	1343.9	1342.6	1341.2
145°	1396.9	1397.5	1398.2	1397.9	1396.6	1395.3	1394.0	1392.7
147.5°	1441.5	1442.0	1442.4	1441.8	1440.0	1438.2	1436.3	1434.5
150°	1470.1	1470.7	1471.3	1470.5	1468.4	1466.3	1464.2	1462.1
152.5°	1495.7	1496.2	1496.8	1496.1	1494.1	1492.2	1490.3	1488.3
155°	1530.9	1531.7	1532.5	1531.8	1529.7	1527.5	1525.3	1523.1
157.5°	1559.9	1560.8	1561.7	1561.1	1558.9	1556.7	1554.4	1552.3
160°	1578.0	1579.2	1580.2	1579.7	1577.5	1575.3	1573.1	1571.0
162.5°	1594.6	1596.2	1597.7	1597.3	1594.9	1592.4	1590.1	1587.6
165°	1615.9	1617.6	1619.3	1618.9	1616.8	1614.6	1612.4	1610.2
167.5°	1632.1	1634.0	1636.0	1635.7	1633.3	1630.8	1628.4	1626.0
170°	1640.4	1642.6	1644.7	1644.6	1642.2	1639.7	1637.2	1634.8
172.5°	1646.8	1648.8	1650.7	1650.5	1648.0	1645.6	1643.2	1640.7
175°	1653.8	1656.0	1658.2	1658.1	1655.6	1653.2	1650.7	1648.3
177.5°	1656.8	1658.2	1659.8	1659.7	1657.9	1656.2	1654.4	1652.7
180°	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6	1655.6

(END OF REPORT)