

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: P333362-940

Luminaire Tested: **S125DIW-S375D1340U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333362-940  
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-S375D1340U940-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6141.5 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

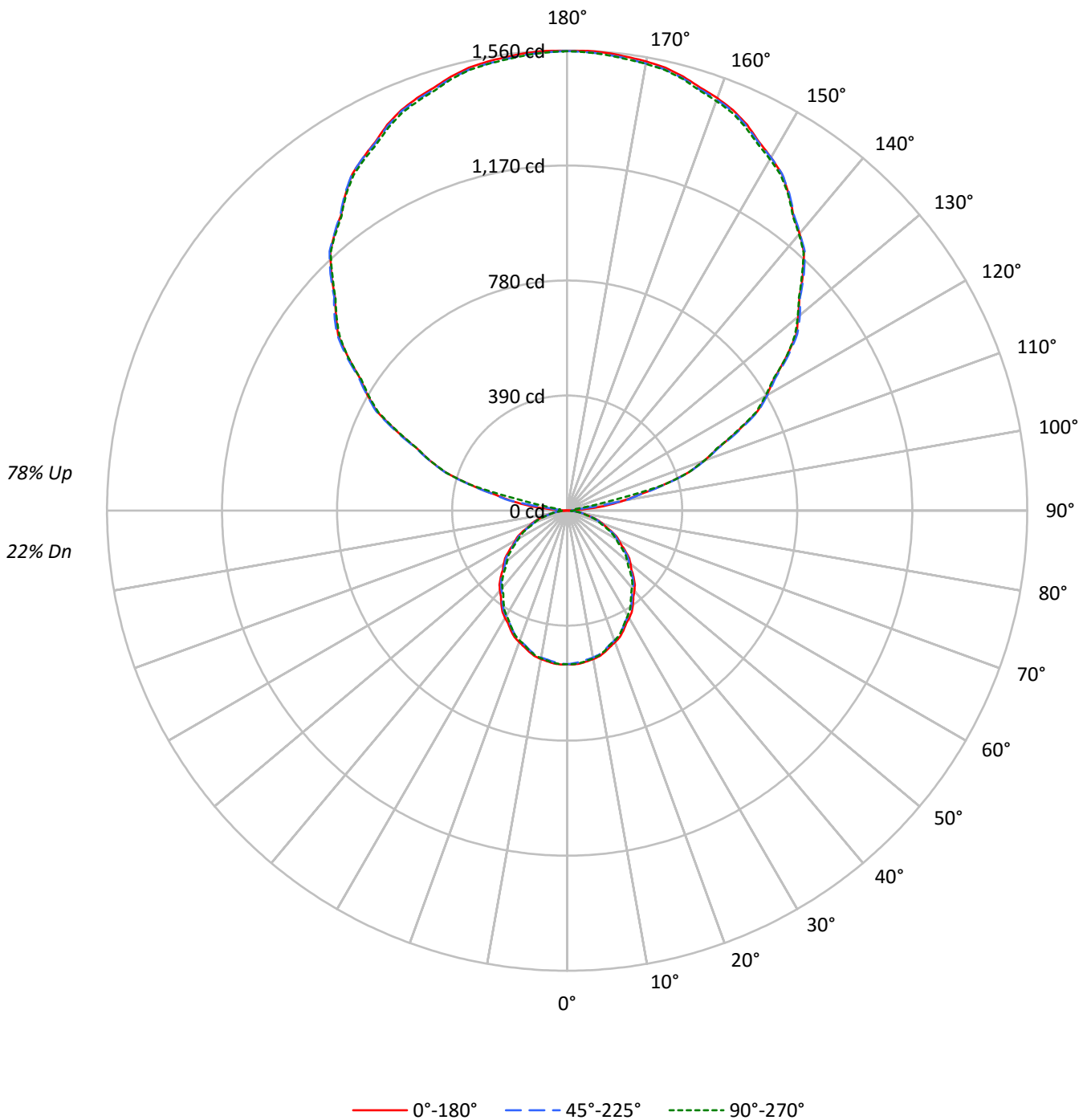
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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	0	
RCR																						
0	101	101	101	101	89	89	89	89	68	68	68	48	48	48	31	31	31	22				
1	92	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	19				
2	83	76	70	65	74	68	63	59	52	49	46	37	35	33	24	23	22	16				
3	76	67	60	54	67	60	54	49	46	42	38	33	30	28	21	19	18	13				
4	69	59	52	46	61	53	46	41	40	36	33	29	26	24	19	17	16	11				
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10				
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	9				
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8				
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7				
9	46	35	27	23	41	31	25	21	24	20	16	18	15	12	12	10	8	6				
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6				

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

	0°	45°	90°
0°	3364	3364	3364
5°	3371	3339	3361
10°	3351	3316	3335
15°	3315	3276	3290
20°	3263	3221	3226
25°	3207	3154	3151
30°	3138	3082	3067
35°	3064	3005	2964
40°	2989	2922	2880
45°	2906	2846	2789
50°	2816	2753	2671
55°	2728	2649	2575
60°	2623	2545	2454
65°	2500	2419	2337
70°	2381	2274	2194
75°	2168	2099	2024
80°	1930	1901	1852
85°	1675	1712	1615



TEST NUMBER: P333362-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	0.8
10°-20°	138.7	2.3
20°-30°	204.9	3.3
30°-40°	239.0	3.9
40°-50°	240.1	3.9
50°-60°	210.7	3.4
60°-70°	157.0	2.6
70°-80°	89.8	1.5
80°-90°	29.4	0.5
90°-100°	56.6	0.9
100°-110°	348.8	5.7
110°-120°	632.6	10.3
120°-130°	811.9	13.2
130°-140°	873.3	14.2
140°-150°	819.7	13.3
150°-160°	663.1	10.8
160°-170°	428.8	7.0
170°-180°	147.9	2.4
0°-30°	392.7	6.4
0°-40°	631.7	10.3
0°-60°	1082.6	17.6
0°-90°	1358.7	22.1
90°-120°	1038.1	16.9
90°-150°	3542.9	57.7
90°-180°	4783.0	77.9
0°-180°	6141.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	520	519	515	519	518	49
15°	496	494	490	492	492	140
25°	450	448	443	443	442	207
35°	389	387	381	379	376	243
45°	318	316	312	307	305	245
55°	242	241	235	232	229	216
65°	164	163	158	155	153	162
75°	87	86	84	83	81	93
85°	23	23	23	23	22	25
90°	1	10	18	24	28	4
95°	66	60	18	24	24	84
105°	340	344	344	344	343	360
115°	637	643	644	640	633	632
125°	906	914	914	910	906	809
135°	1130	1137	1135	1132	1126	871
145°	1310	1313	1313	1313	1307	819
155°	1443	1437	1439	1441	1433	665
165°	1523	1516	1517	1523	1515	430
175°	1558	1551	1552	1560	1550	148
180°	1558	1558	1558	1558	1558	



TEST NUMBER: P333362-940

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	522.2	522.0	521.8	521.6	521.4	520.8	520.1	519.4	518.7	517.9	518.7
5°	520.0	519.9	519.7	519.5	519.3	518.8	517.9	517.0	516.0	515.1	515.9
7.5°	515.3	515.1	515.0	514.8	514.6	514.0	513.0	511.9	511.0	510.0	510.8
10°	511.0	510.9	510.7	510.5	510.3	509.7	508.7	507.7	506.7	505.7	506.4
12.5°	505.8	505.4	505.1	504.8	504.4	503.8	502.8	501.9	501.0	500.1	500.6
15°	495.8	495.5	495.3	495.0	494.6	494.0	493.0	492.0	491.0	490.0	490.4
17.5°	484.3	483.9	483.5	483.1	482.7	482.0	480.9	479.9	478.8	477.8	478.4
20°	474.7	474.6	474.4	474.2	474.0	473.3	472.2	470.9	469.8	468.6	469.2
22.5°	465.2	464.8	464.5	464.2	463.9	463.2	462.0	460.9	459.8	458.7	459.1
25°	450.0	449.6	449.1	448.6	448.2	447.4	446.2	445.0	443.8	442.6	442.8
27.5°	432.3	432.0	431.8	431.5	431.2	430.4	429.3	428.0	426.8	425.5	425.6
30°	420.8	420.5	420.2	419.9	419.6	418.8	417.5	416.1	414.7	413.3	413.1
32.5°	408.2	407.8	407.4	407.0	406.5	405.7	404.5	403.2	402.1	400.8	400.5
35°	388.6	388.3	387.9	387.5	387.2	386.3	385.0	383.8	382.5	381.2	380.8
37.5°	368.3	367.8	367.4	366.8	366.4	365.6	364.4	363.2	361.9	360.8	360.1
40°	354.5	353.9	353.5	353.0	352.6	351.7	350.4	349.2	347.9	346.6	345.8
42.5°	339.6	339.2	338.9	338.4	338.0	337.2	335.9	334.7	333.3	332.1	331.4
45°	318.2	317.8	317.4	317.1	316.6	315.9	314.9	313.8	312.6	311.6	310.5
47.5°	295.1	295.1	295.1	295.2	295.2	294.5	293.2	291.9	290.5	289.2	288.1
50°	280.3	280.0	279.7	279.4	279.1	278.5	277.3	276.3	275.2	274.0	272.9
52.5°	265.1	264.8	264.7	264.5	264.3	263.6	262.4	261.3	260.0	258.9	257.9
55°	242.3	242.0	241.7	241.5	241.2	240.4	239.2	237.9	236.6	235.3	234.5
57.5°	218.4	218.2	218.0	217.9	217.8	217.1	216.1	215.0	213.9	212.9	211.8
60°	203.1	202.8	202.4	202.1	201.7	201.0	200.0	199.0	198.0	197.0	196.1
62.5°	187.3	187.1	186.7	186.5	186.2	185.6	184.8	183.9	183.0	182.2	181.2
65°	163.6	163.5	163.3	163.1	162.9	162.3	161.3	160.2	159.3	158.3	157.4
67.5°	140.6	140.3	139.8	139.5	139.1	138.5	137.8	137.0	136.3	135.5	134.8
70°	126.1	125.6	125.2	124.8	124.3	123.6	122.8	122.0	121.2	120.4	119.8
72.5°	110.3	109.9	109.7	109.3	109.1	108.6	108.1	107.5	107.0	106.5	105.8
75°	86.9	86.8	86.6	86.4	86.2	85.9	85.4	85.0	84.5	84.1	83.8
77.5°	65.5	65.4	65.3	65.2	65.2	65.0	64.7	64.5	64.2	63.9	63.8
80°	51.9	51.9	51.9	51.9	51.9	51.8	51.6	51.5	51.3	51.1	51.0
82.5°	40.0	39.9	39.8	39.6	39.5	39.4	39.3	39.3	39.2	39.2	39.1
85°	22.6	22.7	22.8	22.9	23.0	23.1	23.1	23.1	23.1	23.1	23.0
87.5°	9.1	9.5	10.0	10.3	10.8	11.1	11.4	11.7	11.9	12.3	12.5
90°	1.2	3.2	5.3	7.3	9.4	11.3	13.1	14.9	16.7	18.5	19.8
92.5°	17.7	16.3	14.9	13.5	12.0	12.1	13.7	15.2	16.9	18.5	19.8
95°	65.8	65.0	64.3	63.5	62.7	57.4	47.7	38.0	28.2	18.5	19.8
97.5°	137.4	138.8	140.2	141.5	142.9	133.9	114.7	95.4	76.1	56.8	49.6
100°	192.8	193.6	194.3	195.1	195.9	196.8	197.8	198.9	199.8	200.9	162.6
102.5°	249.1	250.1	251.1	252.1	253.1	253.9	254.5	255.1	255.7	256.3	249.1
105°	339.5	340.5	341.5	342.5	343.6	344.0	344.0	344.0	344.0	344.0	344.0
107.5°	433.2	433.2	433.2	433.2	433.2	433.5	434.0	434.4	435.0	435.5	435.5
110°	494.2	494.2	494.2	494.2	494.2	494.4	494.9	495.4	496.0	496.4	495.7



TEST NUMBER: P333362-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	551.4	552.1	552.7	553.2	553.8	554.4	554.6	554.9	555.3	555.5	554.6
115°	637.3	638.6	639.9	641.1	642.5	643.2	643.5	643.7	644.0	644.3	643.2
117.5°	726.2	726.1	726.1	726.0	726.0	726.5	727.5	728.4	729.4	730.4	729.1
120°	781.6	781.4	781.1	780.9	780.6	780.9	781.6	782.4	783.2	783.9	783.5
122.5°	830.5	831.5	832.5	833.5	834.5	835.2	835.5	835.9	836.2	836.6	836.1
125°	906.3	908.1	909.9	911.7	913.5	914.4	914.4	914.4	914.4	914.4	913.4
127.5°	978.6	979.9	981.1	982.4	983.7	984.3	984.1	984.0	983.8	983.6	983.1
130°	1022.9	1024.2	1025.5	1026.8	1028.1	1028.9	1029.1	1029.3	1029.6	1029.8	1029.1
132.5°	1067.3	1068.7	1070.2	1071.7	1073.2	1073.7	1073.1	1072.5	1072.0	1071.4	1071.3
135°	1130.3	1131.8	1133.4	1134.9	1136.5	1136.9	1136.5	1136.0	1135.4	1134.9	1134.4
137.5°	1188.3	1189.5	1190.9	1192.2	1193.6	1194.0	1193.6	1193.1	1192.7	1192.2	1192.3
140°	1226.1	1226.6	1227.2	1227.6	1228.2	1228.3	1228.1	1227.8	1227.5	1227.3	1227.8
142.5°	1260.3	1260.6	1260.9	1261.2	1261.5	1261.9	1262.2	1262.6	1262.9	1263.3	1263.4
145°	1310.4	1310.9	1311.4	1312.0	1312.4	1312.7	1312.7	1312.7	1312.7	1312.7	1313.0
147.5°	1354.2	1354.2	1354.1	1354.0	1353.9	1354.0	1354.2	1354.6	1354.9	1355.2	1355.5
150°	1382.0	1381.4	1381.0	1380.5	1379.9	1379.9	1380.5	1381.0	1381.4	1382.0	1382.5
152.5°	1408.7	1407.7	1406.5	1405.4	1404.3	1403.9	1404.4	1405.0	1405.5	1406.0	1406.5
155°	1443.1	1441.6	1440.1	1438.6	1437.0	1436.5	1437.0	1437.5	1438.1	1438.6	1439.3
157.5°	1469.7	1468.8	1467.8	1467.0	1466.1	1465.6	1465.6	1465.7	1465.8	1465.8	1466.6
160°	1488.2	1486.7	1485.1	1483.5	1482.0	1481.4	1481.7	1481.9	1482.2	1482.5	1483.5
162.5°	1503.0	1501.5	1499.9	1498.3	1496.8	1496.2	1496.5	1496.7	1496.9	1497.2	1498.6
165°	1522.9	1521.3	1519.7	1518.2	1516.7	1516.0	1516.3	1516.5	1516.8	1517.1	1518.6
167.5°	1537.6	1536.1	1534.5	1532.9	1531.2	1530.6	1530.8	1531.1	1531.3	1531.6	1533.5
170°	1546.0	1544.2	1542.3	1540.5	1538.7	1537.9	1538.2	1538.5	1538.7	1539.0	1541.1
172.5°	1551.5	1549.7	1547.9	1546.0	1544.3	1543.6	1544.1	1544.5	1545.0	1545.4	1547.3
175°	1557.5	1555.9	1554.4	1552.8	1551.3	1550.7	1551.0	1551.2	1551.5	1551.7	1553.7
177.5°	1560.2	1559.0	1557.8	1556.6	1555.3	1554.8	1555.1	1555.2	1555.4	1555.6	1557.1
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5



TEST NUMBER: P333362-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	519.4	520.1	520.8	521.2	521.1	521.0	521.0	520.9
5°	516.7	517.6	518.4	518.8	518.7	518.6	518.5	518.4
7.5°	511.6	512.4	513.2	513.5	513.4	513.4	513.3	513.2
10°	507.1	507.8	508.6	508.9	508.8	508.7	508.6	508.5
12.5°	501.2	501.9	502.4	502.7	502.7	502.7	502.7	502.6
15°	490.9	491.3	491.9	492.0	492.0	492.0	492.0	492.0
17.5°	478.9	479.5	480.1	480.1	479.7	479.2	478.8	478.3
20°	469.8	470.5	471.1	471.3	470.7	470.3	469.8	469.4
22.5°	459.5	459.9	460.4	460.4	460.1	459.8	459.5	459.1
25°	443.0	443.2	443.4	443.3	443.0	442.7	442.5	442.2
27.5°	425.6	425.6	425.7	425.6	425.3	425.0	424.7	424.5
30°	413.0	412.8	412.6	412.4	412.1	411.9	411.5	411.3
32.5°	400.2	399.8	399.5	399.1	398.6	398.1	397.6	397.1
35°	380.3	379.9	379.3	378.8	378.1	377.3	376.6	375.9
37.5°	359.4	358.7	358.0	357.5	357.0	356.7	356.2	355.8
40°	344.9	344.1	343.3	342.8	342.5	342.1	341.9	341.6
42.5°	330.6	329.8	329.0	328.5	328.1	327.6	327.3	326.8
45°	309.3	308.3	307.2	306.5	306.2	305.9	305.7	305.4
47.5°	287.0	285.9	284.7	283.8	283.2	282.6	282.0	281.3
50°	271.7	270.5	269.3	268.4	267.7	267.1	266.4	265.8
52.5°	256.8	255.7	254.7	253.9	253.2	252.4	251.7	251.0
55°	233.6	232.8	232.0	231.3	230.7	230.0	229.3	228.7
57.5°	210.7	209.6	208.6	207.9	207.5	207.1	206.8	206.4
60°	195.2	194.2	193.3	192.5	191.9	191.3	190.6	190.0
62.5°	180.2	179.1	178.2	177.5	177.0	176.5	175.9	175.5
65°	156.6	155.8	155.0	154.4	154.0	153.6	153.3	152.9
67.5°	134.1	133.4	132.7	132.2	132.1	131.8	131.6	131.3
70°	119.2	118.7	118.2	117.7	117.3	117.0	116.5	116.2
72.5°	105.2	104.6	104.0	103.5	103.2	102.8	102.4	102.0
75°	83.6	83.3	82.9	82.7	82.3	81.9	81.6	81.1
77.5°	63.7	63.5	63.3	63.1	62.9	62.6	62.3	62.1
80°	50.9	50.8	50.7	50.6	50.4	50.2	50.0	49.8
82.5°	38.9	38.7	38.6	38.4	38.4	38.4	38.3	38.3
85°	22.9	22.8	22.7	22.6	22.4	22.2	22.0	21.8
87.5°	12.8	13.0	13.3	13.5	13.5	13.5	13.5	13.5
90°	21.0	22.3	23.6	24.6	25.4	26.1	26.9	27.7
92.5°	21.0	22.3	23.6	24.4	24.8	25.1	25.5	25.9
95°	21.0	22.3	23.6	24.3	24.3	24.3	24.3	24.3
97.5°	42.4	35.1	27.8	24.3	24.3	24.3	24.3	24.3
100°	124.4	86.2	48.0	28.4	27.3	26.3	25.2	24.3
102.5°	241.8	234.6	227.4	215.0	197.6	180.1	162.6	145.3
105°	344.0	344.0	344.0	343.9	343.7	343.4	343.1	342.9
107.5°	435.6	435.7	435.7	435.3	434.5	433.8	433.0	432.3
110°	494.9	494.2	493.4	493.1	493.4	493.7	493.9	494.2





TEST NUMBER: P333362-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	553.6	552.7	551.7	551.0	550.6	550.3	549.9	549.6
115°	642.2	641.1	640.2	638.8	637.3	635.8	634.2	632.7
117.5°	727.7	726.4	725.1	724.0	723.4	722.7	722.0	721.4
120°	782.9	782.4	781.9	781.0	779.7	778.4	777.1	775.9
122.5°	835.5	835.0	834.6	833.5	832.1	830.5	829.0	827.6
125°	912.3	911.3	910.3	909.4	908.7	907.9	907.0	906.3
127.5°	982.6	982.0	981.4	980.2	978.3	976.4	974.5	972.6
130°	1028.3	1027.5	1026.8	1025.7	1024.5	1023.1	1021.9	1020.7
132.5°	1071.1	1070.9	1070.8	1070.1	1068.8	1067.6	1066.2	1065.0
135°	1133.9	1133.4	1132.8	1131.8	1130.3	1128.7	1127.2	1125.7
137.5°	1192.4	1192.5	1192.6	1191.9	1190.6	1189.3	1187.9	1186.6
140°	1228.3	1228.8	1229.3	1228.8	1227.3	1225.7	1224.2	1222.6
142.5°	1263.5	1263.6	1263.7	1263.0	1261.4	1259.9	1258.4	1256.9
145°	1313.2	1313.5	1313.8	1313.1	1311.5	1310.0	1308.5	1307.0
147.5°	1355.8	1356.1	1356.5	1355.7	1353.8	1351.9	1350.1	1348.3
150°	1383.0	1383.5	1384.0	1383.2	1381.2	1379.1	1377.1	1375.0
152.5°	1407.0	1407.6	1408.0	1407.4	1405.5	1403.7	1401.9	1400.0
155°	1440.1	1440.8	1441.6	1441.0	1439.0	1436.9	1434.9	1432.8
157.5°	1467.5	1468.3	1469.1	1468.5	1466.4	1464.4	1462.3	1460.3
160°	1484.5	1485.5	1486.6	1486.0	1484.0	1481.9	1479.9	1477.8
162.5°	1500.0	1501.6	1503.0	1502.5	1500.3	1498.0	1495.8	1493.5
165°	1520.1	1521.7	1523.2	1523.0	1520.9	1518.9	1516.8	1514.7
167.5°	1535.3	1537.1	1539.0	1538.7	1536.4	1534.2	1531.9	1529.6
170°	1543.1	1545.2	1547.2	1547.1	1544.8	1542.5	1540.2	1537.8
172.5°	1549.2	1551.0	1552.8	1552.6	1550.3	1548.0	1545.7	1543.4
175°	1555.8	1557.8	1559.9	1559.8	1557.5	1555.1	1552.8	1550.5
177.5°	1558.5	1560.0	1561.4	1561.3	1559.6	1558.0	1556.3	1554.7
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5

(END OF REPORT)