

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: P333360-940

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333360-940  
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-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 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: 6088.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 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: Semi-Indirect

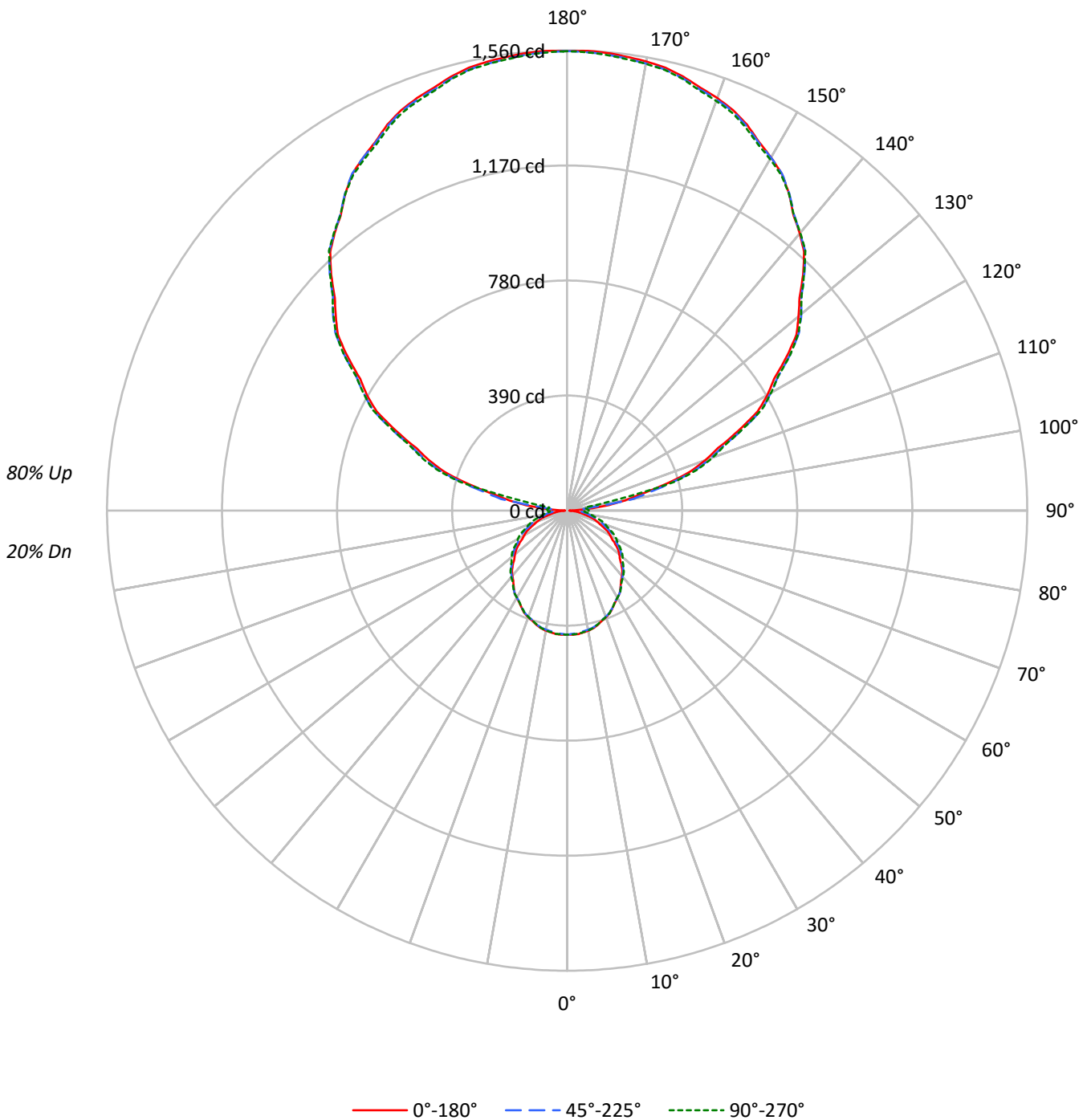
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20																			
1	91	87	83	79	80	77	73	71	58	56	54	41	39	38	25	24	24	16																			
2	82	75	69	64	73	67	62	58	50	47	44	35	33	32	22	21	20	13																			
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11																			
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	10																			
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	8																			
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7																			
7	53	41	34	28	47	37	30	26	28	24	20	20	17	15	12	11	9	6																			
8	49	37	30	25	43	33	27	22	26	21	18	18	15	13	11	10	8	6																			
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5																			
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5																			

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

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.7	0.7
10°-20°	112.8	1.9
20°-30°	167.8	2.8
30°-40°	198.8	3.3
40°-50°	205.5	3.4
50°-60°	189.3	3.1
60°-70°	153.0	2.5
70°-80°	102.5	1.7
80°-90°	56.4	0.9
90°-100°	86.4	1.4
100°-110°	370.8	6.1
110°-120°	647.4	10.6
120°-130°	820.3	13.5
130°-140°	876.9	14.4
140°-150°	820.4	13.5
150°-160°	663.1	10.9
160°-170°	428.8	7.0
170°-180°	147.9	2.4
0°-30°	320.4	5.3
0°-40°	519.2	8.5
0°-60°	914.0	15.0
0°-90°	1225.9	20.1
90°-120°	1104.6	18.1
90°-150°	3622.2	59.5
90°-180°	4862.0	79.9
0°-180°	6088.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	30	52	67	74	7
95°	71	76	49	63	66	88
105°	343	354	367	375	377	364
115°	640	649	660	663	659	634
125°	908	916	924	926	924	811
135°	1131	1137	1138	1141	1136	872
145°	1311	1313	1313	1315	1311	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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.1	16.4	19.8	23.1	26.5	29.9	33.3	36.8	40.3	43.8	46.1
90°	7.8	12.8	17.7	22.7	27.6	32.6	37.5	42.4	47.3	52.3	55.6
92.5°	23.7	25.0	26.3	27.6	28.8	31.8	36.6	41.4	46.2	50.9	54.3
95°	71.2	72.8	74.4	76.0	77.6	75.1	68.5	61.8	55.2	48.6	51.9
97.5°	142.2	145.8	149.3	152.8	156.4	150.0	133.7	117.4	101.1	84.8	79.5
100°	197.3	200.0	202.7	205.5	208.1	211.4	215.4	219.4	223.3	227.3	191.0
102.5°	253.3	256.1	258.9	261.6	264.4	267.5	270.9	274.4	277.9	281.3	276.0
105°	343.1	345.6	348.1	350.6	353.1	355.7	358.5	361.2	364.0	366.8	368.5
107.5°	436.4	437.7	438.9	440.1	441.4	443.5	446.7	449.9	453.0	456.2	458.1
110°	497.0	498.1	499.3	500.3	501.4	503.5	506.6	509.7	512.7	515.9	516.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	554.3	555.8	557.3	558.7	560.3	562.4	565.3	568.0	570.8	573.6	574.4
115°	639.8	641.7	643.6	645.5	647.5	649.8	652.4	655.1	657.6	660.3	660.9
117.5°	728.3	728.6	729.0	729.4	729.8	731.6	734.8	738.0	741.2	744.5	744.7
120°	783.7	783.7	783.7	783.7	783.7	785.2	788.1	790.9	793.8	796.7	797.7
122.5°	832.3	833.4	834.6	835.6	836.7	838.5	840.9	843.3	845.6	848.0	849.0
125°	907.9	909.6	911.3	913.1	914.8	916.6	918.4	920.2	922.0	923.9	924.3
127.5°	979.8	981.0	982.2	983.4	984.6	985.9	987.2	988.6	989.9	991.2	992.0
130°	1024.1	1025.4	1026.5	1027.7	1028.9	1030.3	1031.8	1033.4	1034.9	1036.4	1037.0
132.5°	1068.2	1069.6	1071.1	1072.5	1074.1	1075.0	1075.4	1075.8	1076.3	1076.7	1077.8
135°	1131.1	1132.6	1134.0	1135.5	1136.9	1137.7	1137.8	1137.9	1138.1	1138.2	1138.9
137.5°	1189.0	1190.3	1191.5	1192.8	1194.0	1194.6	1194.4	1194.3	1194.2	1194.0	1195.2
140°	1226.5	1227.1	1227.5	1228.1	1228.6	1228.8	1228.6	1228.4	1228.2	1228.1	1229.6
142.5°	1260.7	1261.0	1261.1	1261.4	1261.7	1261.9	1262.3	1262.7	1263.1	1263.5	1264.4
145°	1310.8	1311.3	1311.6	1312.1	1312.5	1312.7	1312.7	1312.7	1312.7	1312.7	1313.4
147.5°	1354.2	1354.2	1354.1	1354.0	1353.9	1354.0	1354.2	1354.6	1354.9	1355.2	1355.7
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	48.5	50.8	53.2	54.8	55.6	56.4	57.2	58.0
90°	59.0	62.4	65.8	68.2	69.6	71.1	72.5	73.8
92.5°	57.6	60.9	64.2	66.3	67.4	68.4	69.4	70.4
95°	55.1	58.4	61.7	63.8	64.4	65.0	65.6	66.3
97.5°	74.2	68.9	63.6	61.3	61.9	62.5	63.1	63.8
100°	154.6	118.3	82.0	63.7	63.2	62.7	62.2	61.7
102.5°	270.6	265.2	259.8	248.7	231.8	214.9	198.0	181.1
105°	370.4	372.2	374.1	375.1	375.5	375.9	376.3	376.7
107.5°	459.9	461.8	463.6	464.5	464.2	464.0	463.9	463.7
110°	517.7	518.7	519.7	520.7	521.6	522.5	523.3	524.2





TEST NUMBER: P333360-940

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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	575.0	575.7	576.4	576.8	577.1	577.5	577.7	578.0
115°	661.6	662.2	662.8	662.6	661.6	660.7	659.6	658.6
117.5°	744.9	745.1	745.4	745.5	745.4	745.4	745.3	745.3
120°	798.8	799.9	800.8	801.0	800.3	799.6	798.8	798.1
122.5°	850.0	851.0	851.9	851.9	851.0	850.1	849.1	848.2
125°	924.8	925.1	925.6	925.7	925.4	925.1	924.8	924.4
127.5°	992.8	993.6	994.4	994.2	992.7	991.4	990.1	988.6
130°	1037.5	1038.0	1038.5	1038.3	1037.5	1036.7	1035.9	1035.0
132.5°	1079.0	1080.0	1081.2	1081.3	1080.4	1079.5	1078.6	1077.7
135°	1139.6	1140.2	1140.9	1140.7	1139.6	1138.5	1137.5	1136.4
137.5°	1196.3	1197.6	1198.7	1198.8	1197.8	1196.9	1196.0	1195.0
140°	1231.1	1232.7	1234.2	1234.4	1233.1	1232.0	1230.8	1229.7
142.5°	1265.4	1266.3	1267.3	1267.2	1266.1	1264.9	1263.7	1262.5
145°	1314.1	1314.8	1315.5	1315.4	1314.2	1313.0	1311.8	1310.6
147.5°	1356.1	1356.6	1357.0	1356.4	1354.7	1353.0	1351.4	1349.7
150°	1383.0	1383.5	1384.0	1383.3	1381.3	1379.4	1377.4	1375.5
152.5°	1407.0	1407.6	1408.0	1407.4	1405.6	1403.7	1401.9	1400.1
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)