

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: P333363-940

Luminaire Tested: **S125DIW-S375D1340U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333363-940  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
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-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5506.3 lumens  
Efficiency: N/A  
Efficacy: 118.2 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

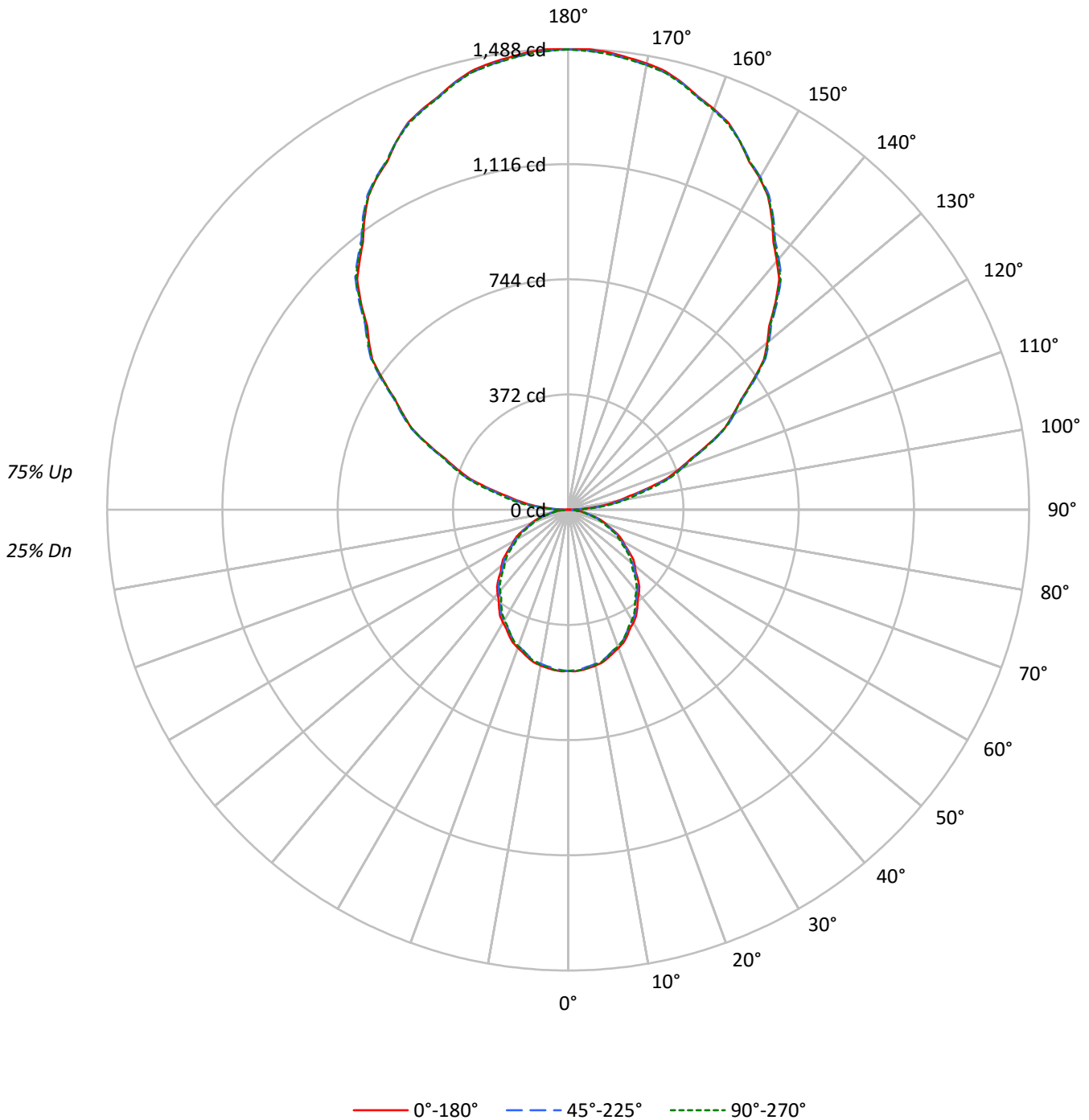
Input Watts (W): 46.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

### Luminous Intensity Polar Plot





TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	28	21
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	49	47	43	39	34	31	29	22	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	28	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	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: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	0.9
10°-20°	138.7	2.5
20°-30°	204.9	3.7
30°-40°	239.0	4.3
40°-50°	240.1	4.4
50°-60°	210.7	3.8
60°-70°	157.0	2.9
70°-80°	89.8	1.6
80°-90°	29.4	0.5
90°-100°	99.5	1.8
100°-110°	294.0	5.3
110°-120°	497.9	9.0
120°-130°	655.3	11.9
130°-140°	734.3	13.3
140°-150°	719.7	13.1
150°-160°	604.5	11.0
160°-170°	401.8	7.3
170°-180°	140.6	2.6
0°-30°	392.7	7.1
0°-40°	631.7	11.5
0°-60°	1082.6	19.7
0°-90°	1358.7	24.7
90°-120°	891.4	16.2
90°-150°	3000.7	54.5
90°-180°	4148.0	75.3
0°-180°	5506.3	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	5
95°	75	78	89	97	100	80
105°	264	270	276	283	287	282
115°	499	503	506	504	503	493
125°	728	734	736	733	732	651
135°	946	953	954	954	950	729
145°	1146	1151	1154	1154	1151	716
155°	1312	1312	1313	1317	1312	604
165°	1426	1424	1425	1429	1423	402
175°	1483	1479	1478	1484	1477	141
180°	1486	1486	1486	1486	1486	



TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**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	12.6
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°	28.0	29.4	30.9	32.3	33.7	35.6	37.8	40.0	42.2	44.4	46.1
95°	75.2	75.7	76.2	76.7	77.2	78.8	81.3	83.9	86.5	89.1	90.9
97.5°	124.9	125.1	125.4	125.6	125.7	127.6	131.2	134.7	138.3	141.8	143.5
100°	161.9	161.9	161.9	161.9	161.9	163.6	166.9	170.3	173.6	177.0	179.3
102.5°	201.7	202.8	203.8	204.8	205.8	207.2	208.9	210.6	212.3	214.0	216.5
105°	263.8	265.0	266.3	267.6	268.9	270.3	271.8	273.4	274.9	276.4	278.0
107.5°	332.2	333.5	334.7	336.1	337.3	338.6	339.7	340.9	342.1	343.3	344.1
110°	379.4	380.7	382.0	383.3	384.5	385.6	386.4	387.1	387.9	388.6	389.4



TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	427.5	428.2	428.8	429.5	430.2	431.1	431.9	432.9	433.9	434.9	435.2
115°	498.6	499.5	500.6	501.6	502.7	503.5	503.9	504.4	505.0	505.5	505.2
117.5°	569.8	570.2	570.7	571.1	571.7	572.1	572.6	573.0	573.5	574.0	574.2
120°	614.2	615.5	616.8	618.0	619.4	620.1	620.4	620.6	620.9	621.2	621.2
122.5°	662.4	662.8	663.3	663.7	664.1	664.8	665.4	666.1	666.7	667.4	667.2
125°	727.5	729.1	730.7	732.2	733.7	734.6	734.9	735.1	735.4	735.7	735.1
127.5°	796.9	797.8	798.7	799.6	800.5	801.0	801.4	801.6	802.0	802.3	802.0
130°	838.6	839.9	841.2	842.5	843.7	844.6	845.2	845.7	846.1	846.7	846.4
132.5°	880.2	882.3	884.5	886.5	888.7	889.7	889.6	889.5	889.4	889.3	889.0
135°	946.2	947.7	949.2	950.8	952.3	953.2	953.5	953.8	954.0	954.3	954.3
137.5°	1008.2	1009.7	1011.2	1012.6	1014.1	1015.1	1015.7	1016.3	1016.9	1017.4	1017.7
140°	1047.9	1049.3	1050.5	1051.9	1053.1	1054.1	1054.9	1055.7	1056.4	1057.2	1057.7
142.5°	1087.8	1088.9	1089.9	1091.0	1092.1	1093.1	1094.0	1095.0	1096.0	1097.0	1097.3
145°	1146.3	1147.3	1148.3	1149.3	1150.4	1151.3	1152.1	1152.8	1153.6	1154.4	1154.4
147.5°	1200.4	1201.0	1201.6	1202.1	1202.7	1203.3	1203.9	1204.5	1205.1	1205.8	1206.4
150°	1236.5	1236.3	1236.0	1235.7	1235.5	1235.8	1236.9	1238.0	1238.9	1240.0	1240.0
152.5°	1266.1	1266.5	1266.9	1267.2	1267.6	1267.9	1268.4	1268.7	1269.2	1269.6	1270.2
155°	1311.7	1311.7	1311.7	1311.7	1311.7	1311.8	1312.1	1312.3	1312.6	1312.9	1313.8
157.5°	1352.4	1351.8	1351.3	1350.7	1350.1	1350.0	1350.2	1350.5	1350.8	1351.0	1352.0
160°	1376.4	1375.7	1374.9	1374.1	1373.4	1373.1	1373.4	1373.7	1373.9	1374.1	1375.2
162.5°	1397.8	1397.2	1396.6	1396.1	1395.5	1395.3	1395.3	1395.3	1395.3	1395.4	1396.7
165°	1426.2	1425.7	1425.1	1424.7	1424.2	1424.1	1424.2	1424.5	1424.8	1425.0	1426.1
167.5°	1450.3	1449.2	1448.2	1447.2	1446.2	1445.6	1445.6	1445.6	1445.6	1445.6	1447.2
170°	1463.2	1462.2	1461.2	1460.2	1459.1	1458.6	1458.6	1458.6	1458.6	1458.6	1460.2
172.5°	1472.5	1471.4	1470.4	1469.4	1468.4	1467.8	1467.8	1467.8	1467.8	1467.8	1469.4
175°	1482.9	1481.8	1480.9	1479.8	1478.8	1478.3	1478.3	1478.3	1478.3	1478.3	1479.8
177.5°	1488.2	1487.4	1486.6	1485.8	1484.9	1484.4	1484.2	1484.0	1483.8	1483.5	1484.8
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4



TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**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	22.4	23.6	24.7	25.4	26.2	27.0	27.7
92.5°	47.8	49.5	51.2	52.3	52.9	53.5	54.0	54.6
95°	92.6	94.4	96.3	97.4	97.9	98.4	99.0	99.5
97.5°	145.2	146.9	148.6	149.6	149.9	150.3	150.5	150.9
100°	181.6	183.9	186.2	187.6	188.2	188.7	189.2	189.7
102.5°	219.0	221.5	224.1	225.7	226.4	227.1	227.8	228.5
105°	279.6	281.1	282.6	283.7	284.5	285.3	286.1	286.9
107.5°	344.8	345.6	346.4	346.8	346.7	346.6	346.6	346.5
110°	390.2	390.9	391.7	392.0	391.7	391.5	391.2	390.9





TEST NUMBER: P333363-940

CATALOG NUMBER: S125DIW-S375D1340U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	435.6	436.0	436.3	436.3	435.9	435.4	434.9	434.4
115°	505.0	504.7	504.4	504.2	503.9	503.6	503.5	503.2
117.5°	574.4	574.5	574.8	574.4	573.4	572.3	571.3	570.2
120°	621.2	621.2	621.2	620.6	619.6	618.6	617.5	616.5
122.5°	667.0	666.8	666.6	666.1	665.2	664.4	663.6	662.8
125°	734.6	734.1	733.6	733.3	733.0	732.7	732.5	732.2
127.5°	801.7	801.5	801.3	800.8	800.4	799.9	799.3	798.8
130°	846.1	846.0	845.7	845.3	844.8	844.3	843.7	843.2
132.5°	888.8	888.5	888.2	887.8	887.1	886.3	885.6	884.8
135°	954.3	954.3	954.3	953.8	952.7	951.7	950.7	949.7
137.5°	1018.1	1018.3	1018.7	1018.2	1016.9	1015.6	1014.3	1013.1
140°	1058.3	1058.7	1059.3	1058.9	1057.6	1056.3	1055.1	1053.7
142.5°	1097.6	1098.0	1098.2	1097.8	1096.4	1095.2	1093.9	1092.6
145°	1154.4	1154.4	1154.4	1154.0	1153.2	1152.4	1151.6	1150.9
147.5°	1206.9	1207.6	1208.2	1207.6	1205.9	1204.2	1202.4	1200.7
150°	1240.0	1240.0	1240.0	1239.7	1239.2	1238.7	1238.1	1237.7
152.5°	1270.8	1271.4	1272.0	1271.9	1271.0	1270.1	1269.1	1268.2
155°	1314.9	1315.9	1317.0	1316.8	1315.5	1314.3	1313.0	1311.7
157.5°	1353.1	1354.1	1355.1	1354.8	1353.1	1351.4	1349.7	1348.0
160°	1376.2	1377.2	1378.2	1378.1	1376.9	1375.6	1374.3	1373.0
162.5°	1397.9	1399.1	1400.3	1400.3	1398.7	1397.2	1395.8	1394.3
165°	1427.1	1428.2	1429.1	1428.9	1427.4	1425.8	1424.2	1422.7
167.5°	1448.8	1450.3	1451.8	1451.8	1450.2	1448.6	1447.0	1445.4
170°	1461.7	1463.2	1464.7	1464.6	1462.9	1461.1	1459.2	1457.4
172.5°	1471.0	1472.5	1474.0	1474.0	1472.4	1470.8	1469.2	1467.6
175°	1481.3	1482.9	1484.4	1484.3	1482.5	1480.7	1478.9	1477.1
177.5°	1486.0	1487.3	1488.5	1488.4	1486.9	1485.5	1484.1	1482.6
180°	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4	1486.4

(END OF REPORT)