

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: P333481-940

Luminaire Tested: **S125DIW-S1270D1340U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333481-940  
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-S1270D1340U940-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP 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: 8543.1 lumens  
Efficiency: N/A  
Efficacy: 112.1 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: General Diffuse

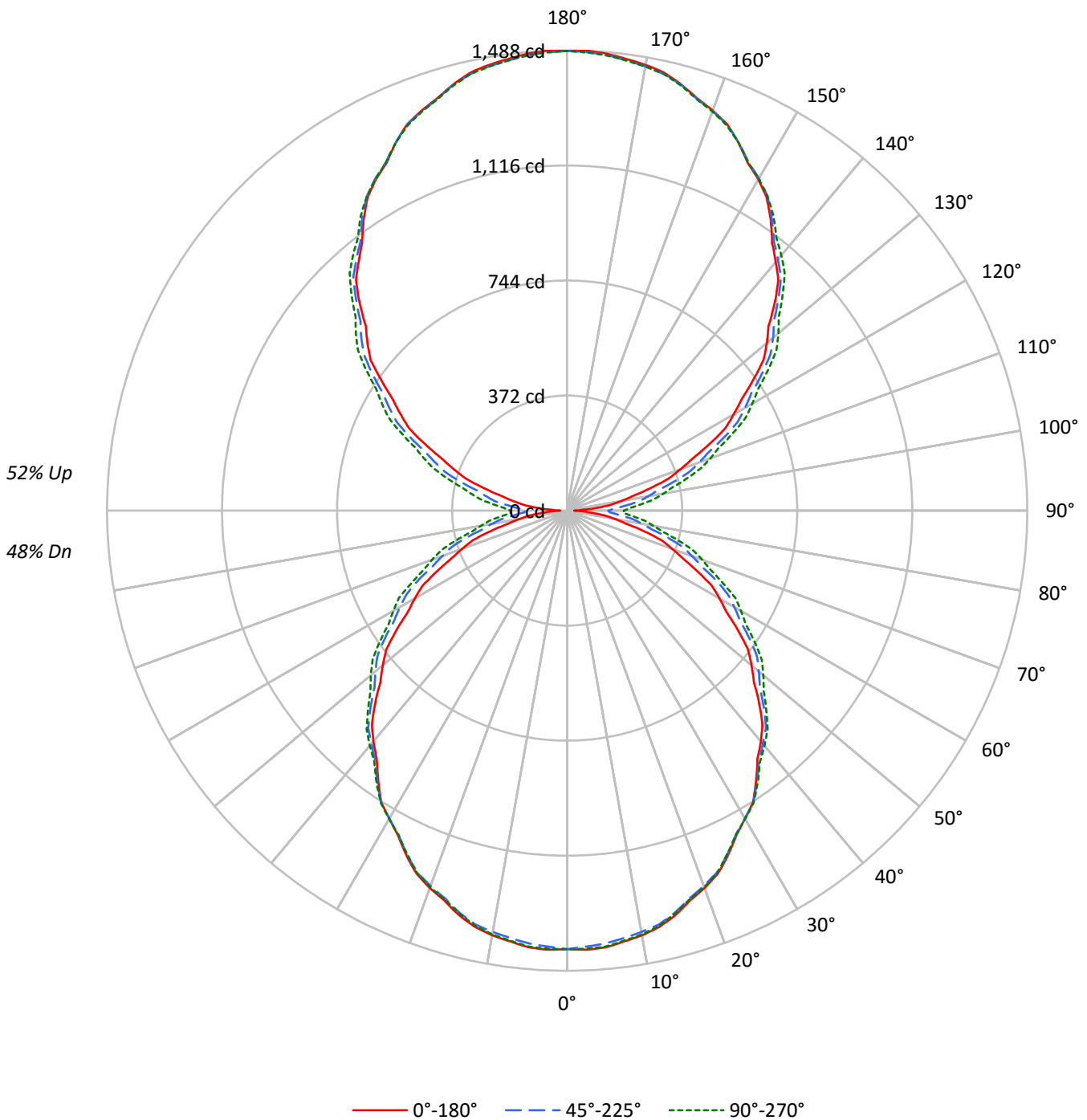
Input Watts (W): 76.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	47	46	45	39
2	88	80	74	68	80	74	68	63	62	58	54	51	48	45	41	39	37	32
3	80	70	62	56	73	65	58	53	54	49	45	45	41	38	36	33	31	27
4	73	62	54	47	67	57	50	44	48	43	38	40	36	32	32	29	27	23
5	67	55	47	41	61	51	43	38	43	37	33	36	31	28	29	26	23	20
6	62	49	41	35	56	46	38	33	39	33	29	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	22	24	21	18	15
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20	25	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	22	18	23	18	15	19	15	13	11

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

	0°	45°	90°
0°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.1	1.6
10°-20°	380.7	4.5
20°-30°	566.1	6.6
30°-40°	670.6	7.8
40°-50°	693.3	8.1
50°-60°	638.7	7.5
60°-70°	516.3	6.0
70°-80°	345.7	4.0
80°-90°	182.6	2.1
90°-100°	200.2	2.3
100°-110°	368.2	4.3
110°-120°	547.6	6.4
120°-130°	683.5	8.0
130°-140°	746.6	8.7
140°-150°	722.2	8.5
150°-160°	604.5	7.1
160°-170°	401.8	4.7
170°-180°	140.6	1.6
0°-30°	1080.9	12.7
0°-40°	1751.4	20.5
0°-60°	3083.4	36.1
0°-90°	4127.9	48.3
90°-120°	1116.0	13.1
90°-150°	3268.3	38.3
90°-180°	4415.0	51.7
0°-180°	8543.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	77	132	169	184	19
95°	93	133	191	228	241	94
105°	276	305	353	386	401	295
115°	507	523	560	583	591	501
125°	733	740	768	787	793	656
135°	949	955	965	983	986	731
145°	1148	1151	1154	1161	1163	717
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.6	53.9	64.2	74.5	84.8	95.4	106.2	117.1	128.0	138.8	146.2
90°	23.4	35.3	47.3	59.2	71.2	83.3	95.6	107.9	120.2	132.5	140.9
92.5°	48.0	58.6	69.2	79.8	90.3	102.1	115.1	128.0	141.0	154.0	162.6
95°	93.3	101.8	110.4	118.9	127.4	138.2	151.3	164.4	177.5	190.6	199.1
97.5°	141.3	148.7	156.2	163.6	171.0	181.6	195.3	209.0	222.7	236.4	244.5
100°	177.3	183.7	190.2	196.7	203.2	213.0	226.2	239.5	252.7	265.9	274.7
102.5°	215.9	222.9	230.0	237.0	244.0	253.2	264.5	275.8	287.2	298.5	307.3
105°	276.3	282.5	288.7	294.9	301.1	309.7	320.5	331.3	342.1	352.9	360.6
107.5°	343.0	348.6	354.0	359.5	365.0	372.7	382.9	393.0	403.1	413.1	420.0
110°	389.1	394.1	399.1	404.1	409.1	416.3	425.7	435.2	444.6	454.0	460.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	437.2	440.9	444.5	448.2	451.7	458.3	467.7	477.1	486.4	495.8	501.8
115°	506.8	510.1	513.3	516.5	519.6	525.5	534.0	542.6	551.2	559.7	565.0
117.5°	576.8	578.6	580.5	582.4	584.2	589.2	597.3	605.4	613.4	621.5	627.0
120°	621.2	623.4	625.6	627.8	630.0	634.8	642.1	649.5	656.9	664.2	669.5
122.5°	668.2	669.1	669.9	670.8	671.7	675.9	683.5	691.0	698.6	706.1	710.9
125°	733.2	734.3	735.6	736.8	738.1	741.9	748.3	754.7	761.2	767.7	772.0
127.5°	801.1	801.7	802.3	802.8	803.4	806.4	811.7	817.1	822.5	827.9	832.1
130°	842.8	843.7	844.7	845.7	846.7	849.6	854.4	859.3	864.1	869.0	873.0
132.5°	883.3	885.4	887.4	889.5	891.4	894.1	897.3	900.6	903.8	907.0	911.2
135°	949.0	950.2	951.5	952.6	953.9	955.7	958.1	960.6	963.0	965.4	969.4
137.5°	1010.7	1011.9	1013.2	1014.4	1015.7	1017.1	1018.7	1020.3	1021.9	1023.5	1027.5
140°	1049.4	1050.6	1052.0	1053.2	1054.5	1055.7	1056.8	1057.8	1058.9	1060.0	1063.9
142.5°	1089.1	1089.9	1090.8	1091.6	1092.4	1093.4	1094.5	1095.5	1096.5	1097.6	1100.8
145°	1147.6	1148.4	1149.1	1149.9	1150.6	1151.3	1152.1	1152.8	1153.6	1154.4	1155.9
147.5°	1200.4	1201.0	1201.6	1202.1	1202.7	1203.3	1203.9	1204.5	1205.1	1205.8	1206.8
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	153.6	161.0	168.3	173.2	175.5	177.7	180.0	182.4
90°	149.3	157.7	166.0	171.7	174.7	177.6	180.6	183.5
92.5°	171.1	179.7	188.2	193.9	196.5	199.3	202.1	204.7
95°	207.8	216.3	225.0	230.6	233.3	235.9	238.6	241.3
97.5°	252.7	260.9	269.1	274.4	276.8	279.2	281.6	284.0
100°	283.6	292.4	301.1	306.7	309.1	311.5	313.9	316.2
102.5°	316.0	324.8	333.6	339.2	341.8	344.4	347.0	349.6
105°	368.4	376.1	383.8	389.1	392.1	395.0	398.0	400.8
107.5°	426.9	433.7	440.7	445.1	446.9	448.8	450.6	452.5
110°	467.3	473.9	480.5	484.8	486.7	488.7	490.5	492.5





TEST NUMBER: P333481-940

CATALOG NUMBER: S125DIW-S1270D1340U940-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	507.7	513.8	519.8	523.6	525.3	527.0	528.7	530.4
115°	570.3	575.6	580.9	584.3	585.9	587.5	589.2	590.8
117.5°	632.4	637.8	643.4	646.6	647.6	648.7	649.8	650.9
120°	674.8	680.0	685.3	688.3	689.1	689.9	690.8	691.6
122.5°	715.7	720.5	725.2	728.2	729.2	730.2	731.3	732.3
125°	776.5	781.0	785.3	788.2	789.5	790.8	792.1	793.4
127.5°	836.5	840.8	845.2	847.9	849.2	850.5	851.8	853.0
130°	877.1	881.2	885.2	887.8	888.8	889.8	890.8	891.9
132.5°	915.2	919.3	923.4	925.7	926.2	926.8	927.4	928.0
135°	973.4	977.4	981.4	983.7	984.3	984.7	985.3	985.8
137.5°	1031.4	1035.4	1039.4	1041.3	1041.3	1041.3	1041.2	1041.1
140°	1067.8	1071.7	1075.7	1077.5	1077.5	1077.5	1077.5	1077.4
142.5°	1104.0	1107.2	1110.4	1112.0	1112.0	1111.9	1111.9	1111.8
145°	1157.4	1159.0	1160.6	1161.5	1162.0	1162.5	1163.0	1163.4
147.5°	1208.0	1209.1	1210.1	1210.1	1209.0	1207.7	1206.6	1205.4
150°	1240.0	1240.0	1240.0	1239.8	1239.7	1239.5	1239.3	1239.0
152.5°	1270.8	1271.4	1272.0	1271.9	1271.0	1270.2	1269.4	1268.5
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)