

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: P333723-930

Luminaire Tested: **S125RDIW-S1270D470U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333723-930  
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: S125RDIW-S1270D470U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5302.1 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Direct

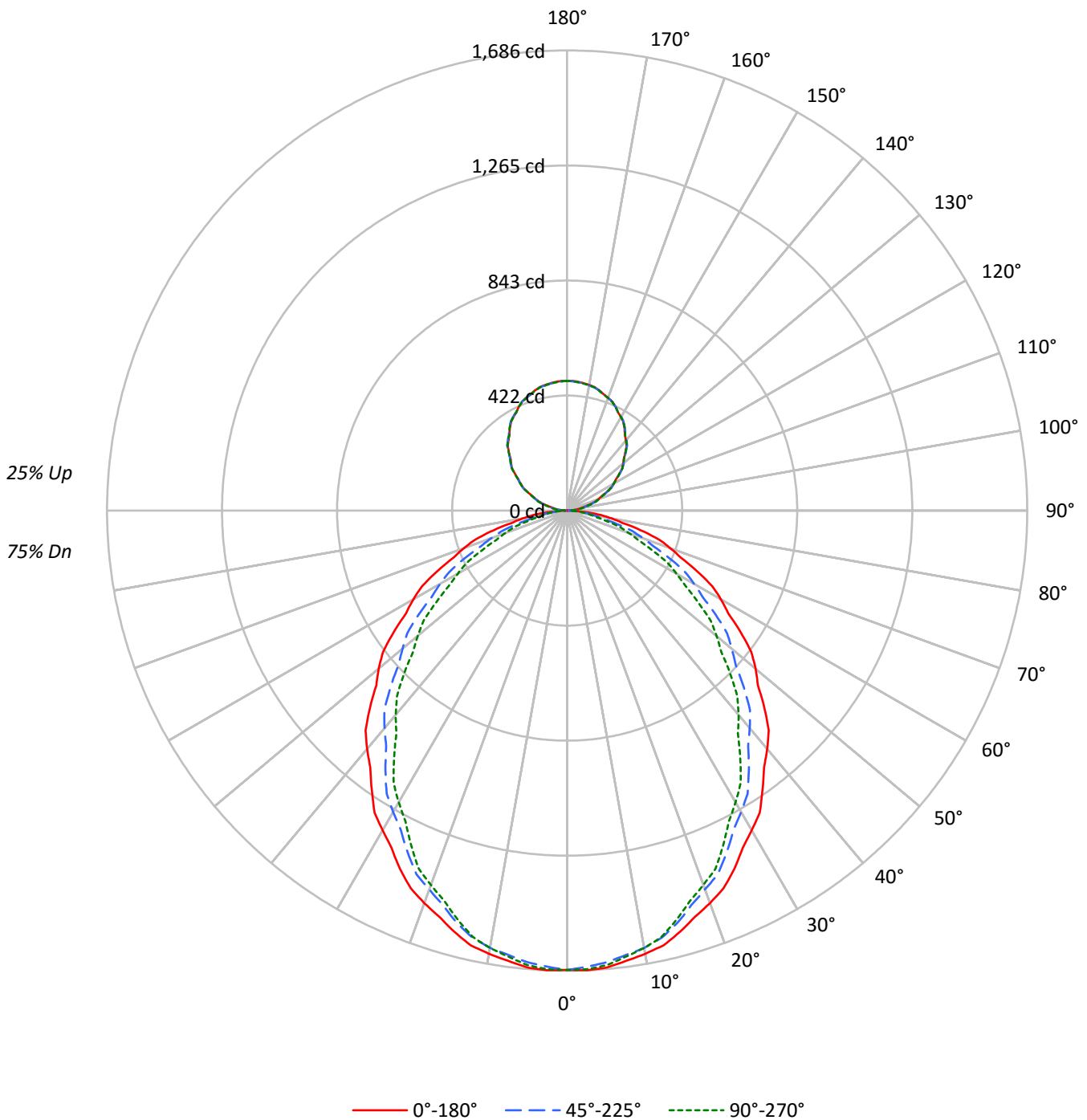
Input Watts (W): 52.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	104	99	95	92	99	95	91	88	86	83	81	78	76	74	70	69	68	64
2	95	87	81	76	90	83	78	73	76	71	67	69	65	62	62	60	57	54
3	87	77	69	63	82	74	67	61	67	62	57	61	57	53	56	52	49	46
4	80	68	60	54	75	65	58	52	60	54	49	55	50	46	50	46	43	40
5	73	61	53	47	69	59	51	45	54	47	43	49	44	40	45	41	37	35
6	68	55	47	41	64	53	45	40	49	42	37	45	39	35	41	37	33	31
7	63	50	42	36	60	48	41	35	44	38	33	41	35	31	38	33	30	27
8	58	46	38	32	55	44	37	31	41	34	30	38	32	28	35	30	27	24
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	27	24	22
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20

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

	0°	45°	90°
0°	10869	10869	10869
5°	10895	10771	10836
10°	10812	10670	10670
15°	10683	10454	10369
20°	10519	10152	10030
25°	10326	9855	9638
30°	10086	9508	9205
35°	9842	9150	8719
40°	9613	8777	8241
45°	9334	8360	7721
50°	9055	7905	7178
55°	8731	7472	6598
60°	8407	6945	5977
65°	8023	6333	5265
70°	7585	5569	4538
75°	6977	4694	3773
80°	6148	3686	3169
85°	5187	3016	2831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.3	3.0
10°-20°	442.3	8.3
20°-30°	641.3	12.1
30°-40°	730.9	13.8
40°-50°	712.5	13.4
50°-60°	599.7	11.3
60°-70°	420.4	7.9
70°-80°	216.1	4.1
80°-90°	55.6	1.0
90°-100°	31.8	0.6
100°-110°	93.9	1.8
110°-120°	159.1	3.0
120°-130°	209.4	3.9
130°-140°	234.6	4.4
140°-150°	229.9	4.3
150°-160°	193.1	3.6
160°-170°	128.4	2.4
170°-180°	44.9	0.8
0°-30°	1241.9	23.4
0°-40°	1972.8	37.2
0°-60°	3284.9	62.0
0°-90°	3977.0	75.0
90°-120°	284.8	5.4
90°-150°	958.7	18.1
90°-180°	1325.0	25.0
0°-180°	5302.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1675	1661	1673	1672	159
15°	1598	1589	1564	1562	1551	450
25°	1449	1428	1383	1367	1352	666
35°	1248	1216	1161	1125	1106	781
45°	1022	983	915	866	845	788
55°	775	733	664	608	586	693
65°	525	480	414	365	344	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	0	3	6	8	9	5
95°	24	25	28	31	32	26
105°	84	86	88	90	92	90
115°	159	161	162	161	161	157
125°	232	235	235	234	234	208
135°	302	304	305	305	303	233
145°	366	368	369	369	368	229
155°	419	419	419	421	419	193
165°	456	455	455	457	454	128
175°	474	472	472	474	472	45
180°	475	475	475	475	475	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1686.0	1685.4	1684.7	1684.0	1683.3	1681.9	1679.6	1677.3	1675.1	1672.8	1675.1
5°	1680.5	1679.4	1678.2	1677.1	1675.9	1673.8	1670.7	1667.6	1664.5	1661.4	1664.2
7.5°	1663.9	1662.9	1661.8	1660.7	1659.6	1657.3	1653.5	1649.8	1646.1	1642.3	1644.3
10°	1648.7	1647.8	1647.0	1646.2	1645.3	1642.9	1638.9	1635.0	1631.0	1627.1	1627.9
12.5°	1631.4	1630.4	1629.2	1628.2	1627.1	1623.9	1618.6	1613.3	1607.9	1602.6	1603.3
15°	1597.8	1596.1	1594.5	1592.8	1591.1	1587.2	1581.3	1575.4	1569.5	1563.5	1563.3
17.5°	1559.9	1557.4	1554.8	1552.2	1549.6	1544.5	1537.1	1529.6	1522.2	1514.7	1513.3
20°	1530.5	1527.6	1524.8	1522.0	1519.1	1513.2	1504.2	1495.2	1486.1	1477.1	1475.7
22.5°	1497.9	1495.1	1492.2	1489.5	1486.6	1480.5	1471.0	1461.5	1452.0	1442.5	1439.7
25°	1449.1	1444.9	1440.6	1436.4	1432.2	1424.8	1414.4	1403.9	1393.4	1383.0	1379.3
27.5°	1393.2	1388.0	1382.9	1377.8	1372.6	1364.5	1353.2	1342.1	1330.9	1319.7	1314.6
30°	1352.5	1347.1	1341.7	1336.4	1331.1	1322.4	1310.5	1298.7	1286.8	1275.0	1268.4
32.5°	1312.9	1306.6	1300.3	1294.0	1287.8	1278.6	1266.5	1254.4	1242.3	1230.2	1223.0
35°	1248.3	1241.5	1234.7	1227.9	1221.2	1211.4	1198.7	1186.0	1173.3	1160.6	1152.3
37.5°	1185.0	1176.7	1168.5	1160.3	1151.9	1141.3	1128.2	1115.1	1102.0	1088.8	1079.0
40°	1140.2	1131.7	1123.2	1114.8	1106.4	1095.3	1081.7	1068.2	1054.6	1041.1	1030.4
42.5°	1093.5	1084.8	1076.0	1067.3	1058.7	1047.3	1033.3	1019.3	1005.3	991.2	981.0
45°	1022.0	1013.8	1005.6	997.4	989.2	977.4	961.8	946.3	930.7	915.3	903.9
47.5°	948.0	939.4	930.7	922.1	913.5	901.3	885.7	870.0	854.4	838.7	827.0
50°	901.2	891.9	882.6	873.3	864.0	851.3	835.1	819.0	802.9	786.8	774.9
52.5°	850.4	840.8	831.3	821.7	812.2	799.8	784.6	769.5	754.2	739.1	726.3
55°	775.4	766.4	757.3	748.3	739.2	726.8	711.0	695.2	679.4	663.6	650.9
57.5°	699.6	690.0	680.3	670.7	661.0	648.6	633.3	618.0	602.8	587.5	575.1
60°	650.9	640.9	631.0	621.2	611.3	598.7	583.4	568.2	552.9	537.7	525.3
62.5°	599.0	589.5	580.1	570.6	561.3	548.8	533.3	517.8	502.3	486.8	475.3
65°	525.0	515.4	505.8	496.2	486.6	474.3	459.3	444.3	429.3	414.4	403.1
67.5°	451.5	441.9	432.3	422.7	413.1	401.1	386.8	372.4	358.1	343.7	333.4
70°	401.7	392.1	382.5	372.8	363.3	351.4	337.3	323.2	309.0	294.9	286.2
72.5°	352.9	343.5	334.1	324.7	315.4	304.0	290.8	277.6	264.4	251.2	243.1
75°	279.6	271.2	262.7	254.2	245.7	235.6	223.7	211.9	200.0	188.1	181.9
77.5°	206.9	200.2	193.4	186.6	179.9	171.7	162.2	152.7	143.2	133.7	129.4
80°	165.3	158.5	151.7	144.9	138.1	130.8	122.9	115.0	107.0	99.1	96.6
82.5°	124.6	118.5	112.3	106.2	100.2	94.4	88.9	83.6	78.1	72.7	71.5
85°	70.0	64.8	59.8	54.6	49.6	46.3	44.9	43.5	42.1	40.7	40.4
87.5°	23.5	22.0	20.5	19.1	17.7	16.9	16.8	16.6	16.6	16.5	16.6
90°	0.4	1.1	1.7	2.4	3.0	3.6	4.2	4.7	5.3	6.0	6.4
92.5°	9.0	9.4	9.9	10.4	10.8	11.3	12.1	12.8	13.5	14.2	14.8
95°	24.1	24.2	24.4	24.5	24.7	25.2	26.0	26.8	27.6	28.5	29.0
97.5°	39.9	39.9	40.0	40.1	40.2	40.8	41.9	43.0	44.2	45.3	45.8
100°	51.8	51.8	51.8	51.8	51.8	52.3	53.3	54.4	55.4	56.5	57.3
102.5°	64.4	64.7	65.1	65.5	65.8	66.2	66.8	67.3	67.8	68.3	69.1
105°	84.2	84.6	85.0	85.4	85.9	86.3	86.8	87.3	87.8	88.3	88.8
107.5°	106.2	106.6	107.0	107.4	107.8	108.2	108.5	108.9	109.3	109.7	109.9
110°	121.2	121.6	122.1	122.5	122.9	123.2	123.4	123.7	123.9	124.2	124.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	136.6	136.8	137.0	137.2	137.5	137.7	138.0	138.4	138.6	138.9	139.1
115°	159.2	159.6	160.0	160.3	160.6	160.9	161.0	161.2	161.3	161.5	161.4
117.5°	182.1	182.1	182.3	182.5	182.6	182.8	183.0	183.0	183.2	183.4	183.4
120°	196.2	196.7	197.1	197.5	197.9	198.1	198.2	198.3	198.4	198.4	198.4
122.5°	211.6	211.7	211.9	212.1	212.1	212.4	212.5	212.8	213.0	213.2	213.1
125°	232.4	232.9	233.4	233.9	234.4	234.7	234.8	234.9	235.0	235.1	234.9
127.5°	254.6	254.9	255.2	255.4	255.8	255.9	256.0	256.1	256.2	256.3	256.2
130°	267.9	268.3	268.7	269.1	269.5	269.9	270.0	270.2	270.4	270.5	270.4
132.5°	281.2	281.8	282.6	283.2	283.9	284.2	284.2	284.1	284.1	284.1	284.0
135°	302.2	302.8	303.3	303.8	304.3	304.5	304.6	304.7	304.8	304.8	304.8
137.5°	322.0	322.5	323.0	323.5	324.0	324.3	324.5	324.7	324.8	325.1	325.1
140°	334.8	335.2	335.6	336.0	336.4	336.8	337.0	337.3	337.5	337.8	337.9
142.5°	347.5	347.8	348.2	348.5	348.9	349.2	349.5	349.8	350.2	350.5	350.6
145°	366.2	366.6	366.9	367.2	367.5	367.8	368.0	368.3	368.5	368.8	368.8
147.5°	383.5	383.7	383.8	384.0	384.3	384.4	384.6	384.8	385.0	385.2	385.4
150°	395.0	394.9	394.8	394.8	394.7	394.8	395.2	395.5	395.8	396.2	396.2
152.5°	404.5	404.6	404.7	404.8	405.0	405.0	405.2	405.4	405.4	405.6	405.8
155°	419.1	419.1	419.1	419.1	419.1	419.1	419.1	419.2	419.3	419.4	419.7
157.5°	432.0	431.9	431.7	431.5	431.3	431.3	431.4	431.5	431.5	431.6	431.9
160°	439.8	439.5	439.2	439.0	438.7	438.6	438.7	438.8	438.9	439.0	439.4
162.5°	446.5	446.4	446.2	446.0	445.8	445.7	445.7	445.7	445.8	445.8	446.2
165°	455.6	455.4	455.3	455.1	454.9	454.9	455.0	455.1	455.2	455.3	455.6
167.5°	463.3	463.0	462.7	462.4	462.0	461.9	461.9	461.9	461.9	461.9	462.4
170°	467.4	467.1	466.8	466.4	466.1	465.9	465.9	465.9	465.9	465.9	466.4
172.5°	470.4	470.1	469.8	469.4	469.1	469.0	469.0	469.0	469.0	469.0	469.4
175°	473.8	473.4	473.0	472.7	472.4	472.2	472.2	472.2	472.2	472.2	472.7
177.5°	475.4	475.2	474.9	474.7	474.3	474.2	474.2	474.1	474.0	473.9	474.3
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1677.3	1679.6	1681.9	1682.9	1682.7	1682.5	1682.2	1682.0
5°	1667.0	1669.9	1672.7	1673.8	1673.2	1672.7	1672.1	1671.5
7.5°	1646.3	1648.3	1650.2	1650.9	1650.2	1649.7	1649.0	1648.5
10°	1628.7	1629.6	1630.4	1630.4	1629.6	1628.7	1627.9	1627.1
12.5°	1603.9	1604.5	1605.2	1604.8	1603.5	1602.2	1600.9	1599.6
15°	1562.9	1562.7	1562.4	1561.0	1558.4	1555.9	1553.3	1550.8
17.5°	1511.9	1510.4	1509.0	1507.3	1505.2	1503.1	1501.0	1498.9
20°	1474.2	1472.8	1471.5	1469.4	1466.9	1464.4	1461.8	1459.3
22.5°	1437.0	1434.2	1431.4	1429.0	1426.9	1424.8	1422.7	1420.7
25°	1375.7	1372.0	1368.3	1364.9	1361.8	1358.7	1355.6	1352.5
27.5°	1309.5	1304.3	1299.2	1295.1	1292.1	1289.1	1286.1	1283.1
30°	1262.0	1255.5	1249.0	1244.5	1241.9	1239.3	1236.8	1234.3
32.5°	1215.9	1208.7	1201.5	1196.3	1193.1	1189.8	1186.7	1183.4
35°	1144.2	1136.0	1127.8	1121.7	1117.8	1113.8	1109.9	1105.9
37.5°	1069.2	1059.4	1049.5	1042.7	1038.9	1035.0	1031.2	1027.4
40°	1019.6	1008.9	998.2	991.1	987.7	984.3	980.9	977.5
42.5°	970.7	960.4	950.1	942.5	937.5	932.5	927.6	922.6
45°	892.6	881.3	870.0	862.3	858.0	853.8	849.5	845.3
47.5°	815.5	803.8	792.1	784.0	779.3	774.6	769.9	765.2
50°	763.1	751.2	739.4	731.3	727.1	722.8	718.6	714.4
52.5°	713.5	700.7	687.9	679.5	675.2	671.0	666.8	662.5
55°	638.1	625.4	612.7	604.1	599.6	595.0	590.5	586.0
57.5°	562.6	550.2	537.8	529.6	525.5	521.5	517.6	513.6
60°	512.8	500.4	488.0	479.6	475.4	471.2	466.9	462.7
62.5°	463.8	452.2	440.8	432.8	428.6	424.4	420.1	415.9
65°	391.8	380.5	369.2	361.4	357.2	352.9	348.7	344.5
67.5°	323.0	312.7	302.4	295.5	292.1	288.7	285.4	281.9
70°	277.4	268.6	259.9	253.8	250.4	247.0	243.6	240.3
72.5°	235.1	227.0	218.8	213.7	211.4	209.2	206.9	204.6
75°	175.7	169.5	163.3	159.1	157.2	155.2	153.3	151.2
77.5°	125.0	120.7	116.3	113.4	111.9	110.5	109.0	107.5
80°	94.1	91.6	88.9	87.4	86.8	86.3	85.8	85.2
82.5°	70.4	69.1	68.0	67.2	66.9	66.5	66.2	65.9
85°	40.1	39.9	39.5	39.3	39.0	38.7	38.4	38.2
87.5°	16.6	16.7	16.8	16.7	16.6	16.4	16.2	16.0
90°	6.8	7.2	7.6	7.9	8.2	8.4	8.6	8.9
92.5°	15.2	15.8	16.4	16.7	16.9	17.0	17.3	17.4
95°	29.6	30.2	30.7	31.1	31.3	31.5	31.6	31.8
97.5°	46.4	47.0	47.5	47.8	47.9	48.0	48.1	48.2
100°	58.0	58.8	59.5	59.9	60.1	60.3	60.4	60.6
102.5°	70.0	70.8	71.6	72.1	72.3	72.6	72.8	73.1
105°	89.3	89.8	90.3	90.7	90.9	91.2	91.4	91.6
107.5°	110.1	110.4	110.6	110.8	110.8	110.7	110.7	110.7
110°	124.7	124.9	125.1	125.2	125.1	125.1	125.0	124.9





TEST NUMBER: P333723-930

CATALOG NUMBER: S125RDIW-S1270D470U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	139.2	139.3	139.4	139.4	139.3	139.1	138.9	138.8
115°	161.3	161.3	161.2	161.1	161.0	160.9	160.9	160.8
117.5°	183.5	183.5	183.6	183.5	183.2	182.9	182.5	182.1
120°	198.4	198.4	198.4	198.3	198.0	197.6	197.3	197.0
122.5°	213.1	213.0	213.0	212.8	212.5	212.3	212.0	211.7
125°	234.7	234.6	234.4	234.2	234.2	234.1	234.0	233.9
127.5°	256.2	256.1	256.0	255.8	255.7	255.5	255.4	255.2
130°	270.4	270.3	270.2	270.0	269.9	269.7	269.5	269.4
132.5°	283.9	283.8	283.7	283.6	283.4	283.2	282.9	282.7
135°	304.8	304.8	304.8	304.7	304.4	304.0	303.7	303.4
137.5°	325.2	325.3	325.5	325.3	324.9	324.5	324.0	323.6
140°	338.1	338.3	338.4	338.3	337.9	337.5	337.0	336.6
142.5°	350.7	350.7	350.8	350.7	350.3	349.8	349.4	349.0
145°	368.8	368.8	368.8	368.7	368.4	368.2	367.9	367.7
147.5°	385.6	385.8	386.0	385.8	385.2	384.7	384.1	383.6
150°	396.2	396.2	396.2	396.1	395.9	395.7	395.6	395.4
152.5°	406.0	406.2	406.3	406.3	406.0	405.8	405.4	405.1
155°	420.0	420.4	420.7	420.7	420.3	419.9	419.5	419.1
157.5°	432.3	432.6	432.9	432.8	432.3	431.7	431.2	430.6
160°	439.7	440.0	440.3	440.3	439.9	439.4	439.0	438.6
162.5°	446.6	446.9	447.4	447.4	446.9	446.4	445.9	445.4
165°	455.9	456.2	456.6	456.5	456.0	455.5	455.0	454.5
167.5°	462.8	463.3	463.8	463.8	463.3	462.8	462.3	461.8
170°	466.9	467.4	468.0	467.9	467.3	466.8	466.2	465.6
172.5°	469.9	470.4	470.9	470.9	470.3	469.9	469.4	468.9
175°	473.2	473.8	474.3	474.2	473.6	473.0	472.5	471.9
177.5°	474.7	475.2	475.6	475.5	475.1	474.6	474.1	473.7
180°	474.8	474.8	474.8	474.8	474.8	474.8	474.8	474.8

(END OF REPORT)