

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: P333579-930

Luminaire Tested: **S125RDIP-S850D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333579-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S850D1205U930-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6174.8 lumens  
Efficiency: N/A  
Efficacy: 108.5 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: General Diffuse

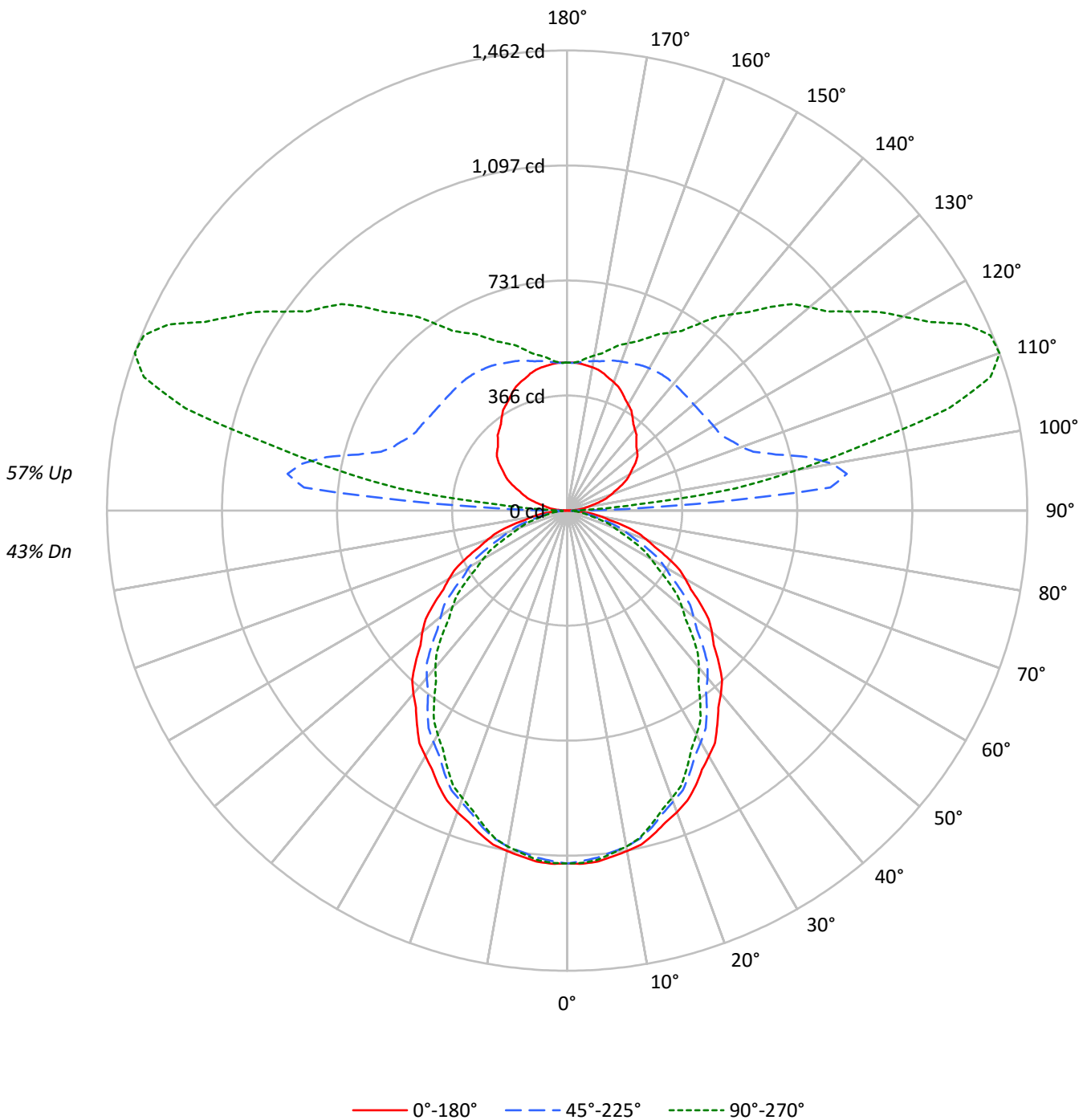
Input Watts (W): 56.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	68	66	56	55	54	44	43	42	37
2	88	81	75	70	80	74	69	65	61	58	55	50	47	45	39	37	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23
5	67	56	48	42	61	52	45	39	43	38	34	35	32	29	28	25	23	20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	16
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	19	16	14
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	16	14	12

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

	0°	45°	90°
0°	7240	7240	7240
5°	7257	7175	7219
10°	7202	7108	7108
15°	7117	6964	6907
20°	7007	6762	6681
25°	6879	6565	6420
30°	6718	6334	6131
35°	6556	6095	5807
40°	6403	5847	5490
45°	6218	5569	5142
50°	6031	5267	4782
55°	5816	4977	4396
60°	5599	4627	3981
65°	5344	4219	3506
70°	5053	3709	3021
75°	4649	3127	2515
80°	4095	2455	2109
85°	3453	2008	1882



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.4	1.7
10°-20°	294.6	4.8
20°-30°	427.2	6.9
30°-40°	486.9	7.9
40°-50°	474.6	7.7
50°-60°	399.5	6.5
60°-70°	280.0	4.5
70°-80°	143.9	2.3
80°-90°	39.0	0.6
90°-100°	340.6	5.5
100°-110°	732.2	11.9
110°-120°	687.1	11.1
120°-130°	556.9	9.0
130°-140°	446.9	7.2
140°-150°	337.2	5.5
150°-160°	237.4	3.8
160°-170°	139.9	2.3
170°-180°	45.5	0.7
0°-30°	827.2	13.4
0°-40°	1314.1	21.3
0°-60°	2188.2	35.4
0°-90°	2651.1	42.9
90°-120°	1759.9	28.5
90°-150°	3100.9	50.2
90°-180°	3524.0	57.1
0°-180°	6174.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1119	1116	1107	1115	1114	106
15°	1064	1059	1042	1040	1033	300
25°	965	952	921	910	901	444
35°	832	810	773	749	737	520
45°	681	655	610	577	563	525
55°	516	488	442	405	390	462
65°	350	320	276	243	229	346
75°	186	160	125	107	101	197
85°	47	32	27	26	25	52
90°	1	9	15	20	22	4
95°	31	92	839	381	223	33
105°	107	150	687	1352	1255	113
115°	191	231	551	1188	1398	188
125°	265	311	529	945	1102	235
135°	311	374	525	792	915	241
145°	362	414	527	656	722	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1123.1	1122.7	1122.2	1121.8	1121.3	1120.3	1118.8	1117.3	1115.8	1114.3	1115.8
5°	1119.4	1118.7	1117.9	1117.1	1116.4	1115.0	1112.9	1110.8	1108.7	1106.7	1108.6
7.5°	1108.4	1107.7	1106.9	1106.2	1105.5	1103.9	1101.5	1098.9	1096.5	1094.0	1095.3
10°	1098.2	1097.6	1097.1	1096.5	1095.9	1094.4	1091.8	1089.1	1086.5	1083.9	1084.3
12.5°	1086.7	1086.0	1085.2	1084.6	1083.9	1081.7	1078.2	1074.6	1071.1	1067.6	1068.0
15°	1064.4	1063.2	1062.1	1060.9	1059.8	1057.3	1053.4	1049.4	1045.5	1041.5	1041.3
17.5°	1039.1	1037.4	1035.7	1034.0	1032.2	1028.8	1023.9	1018.9	1013.9	1008.9	1008.0
20°	1019.5	1017.6	1015.7	1013.8	1011.9	1008.0	1002.0	996.0	989.9	983.9	983.0
22.5°	997.8	995.9	994.0	992.1	990.3	986.2	979.8	973.5	967.2	960.9	959.0
25°	965.3	962.5	959.6	956.8	954.0	949.1	942.2	935.1	928.2	921.3	918.8
27.5°	928.1	924.6	921.2	917.8	914.4	908.9	901.5	894.0	886.6	879.1	875.6
30°	900.9	897.3	893.8	890.2	886.6	880.8	873.0	865.1	857.2	849.3	845.0
32.5°	874.5	870.3	866.2	862.0	857.8	851.7	843.7	835.6	827.5	819.5	814.7
35°	831.5	827.0	822.5	817.9	813.4	806.9	798.5	790.0	781.5	773.1	767.6
37.5°	789.3	783.8	778.4	772.8	767.4	760.3	751.5	742.7	734.0	725.3	718.8
40°	759.5	753.9	748.2	742.6	736.9	729.6	720.6	711.5	702.5	693.5	686.3
42.5°	728.4	722.6	716.8	710.9	705.2	697.7	688.3	679.0	669.6	660.3	653.5
45°	680.8	675.3	669.8	664.4	658.9	651.0	640.7	630.4	620.0	609.7	602.1
47.5°	631.5	625.7	620.0	614.2	608.5	600.4	590.0	579.5	569.1	558.6	550.9
50°	600.3	594.1	587.9	581.7	575.5	567.0	556.3	545.6	534.8	524.2	516.2
52.5°	566.5	560.1	553.8	547.4	541.0	532.8	522.7	512.6	502.4	492.3	483.8
55°	516.5	510.5	504.5	498.5	492.4	484.1	473.6	463.1	452.6	442.0	433.5
57.5°	466.0	459.6	453.1	446.7	440.3	432.0	421.8	411.6	401.5	391.3	383.1
60°	433.5	427.0	420.4	413.8	407.2	398.8	388.7	378.5	368.4	358.2	349.9
62.5°	399.0	392.7	386.5	380.1	373.8	365.6	355.2	345.0	334.6	324.3	316.7
65°	349.7	343.3	336.9	330.5	324.1	315.9	306.0	296.0	286.0	276.1	268.5
67.5°	300.8	294.3	288.0	281.6	275.2	267.2	257.6	248.1	238.6	228.9	222.1
70°	267.6	261.1	254.8	248.3	242.0	234.1	224.7	215.2	205.9	196.4	190.6
72.5°	235.1	228.8	222.6	216.3	210.1	202.5	193.7	184.9	176.1	167.3	161.9
75°	186.3	180.7	175.0	169.3	163.7	156.9	149.0	141.1	133.2	125.3	121.2
77.5°	137.9	133.3	128.8	124.3	119.8	114.4	108.0	101.7	95.4	89.1	86.2
80°	110.1	105.6	101.0	96.5	92.0	87.2	81.9	76.6	71.3	66.0	64.3
82.5°	83.0	78.9	74.8	70.8	66.7	62.9	59.3	55.7	52.0	48.4	47.6
85°	46.6	43.2	39.8	36.4	33.0	30.8	29.9	28.9	28.0	27.1	26.9
87.5°	15.7	14.9	14.3	13.5	12.9	12.6	12.7	13.0	13.0	13.2	13.4
90°	1.0	1.9	3.8	5.7	7.6	9.5	10.4	12.3	13.3	15.2	16.1
92.5°	11.6	14.0	22.0	33.8	50.1	77.7	129.4	216.2	310.4	305.4	247.3
95°	31.2	32.2	39.8	50.2	71.0	113.7	215.1	423.5	684.9	839.4	821.3
97.5°	51.9	53.1	58.4	68.8	87.6	118.2	185.3	338.0	611.6	896.3	1039.3
100°	66.3	68.2	72.0	82.4	100.4	128.8	183.8	307.0	545.7	855.4	1092.3
102.5°	82.3	83.4	86.4	97.6	114.1	141.7	190.6	294.1	495.6	783.4	1060.5
105°	107.0	107.0	111.8	121.2	136.4	163.0	204.6	288.9	447.1	686.8	958.7
107.5°	131.3	133.2	137.7	145.5	161.3	185.1	225.4	297.7	426.6	620.3	854.9
110°	148.7	150.7	154.4	163.0	177.2	201.8	240.6	306.0	420.6	589.2	795.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.2	168.0	171.0	179.6	193.8	217.7	255.0	316.6	420.6	571.0	751.8
115°	191.4	193.2	196.1	204.6	218.8	242.6	277.6	332.5	423.5	551.4	703.8
117.5°	214.1	217.0	220.0	228.5	244.6	267.5	300.7	350.7	429.7	541.7	675.2
120°	229.3	232.1	235.9	244.4	260.5	284.2	317.4	362.8	435.8	537.1	659.3
122.5°	245.2	247.3	250.3	258.8	276.5	300.1	333.3	376.5	441.1	533.4	645.7
125°	265.2	267.2	271.9	280.4	298.4	323.0	354.3	395.0	450.0	528.6	627.1
127.5°	281.0	283.8	289.9	300.7	319.8	344.5	374.5	412.1	460.0	526.4	610.1
130°	290.8	293.7	301.3	313.6	333.5	358.1	387.4	423.5	466.1	524.8	598.8
132.5°	298.4	302.0	311.1	325.0	345.6	370.2	399.6	433.3	472.9	524.8	589.6
135°	310.7	314.5	325.9	341.0	360.9	386.5	415.9	447.1	482.2	524.8	578.9
137.5°	326.3	329.1	339.7	354.9	374.4	400.7	427.5	457.4	490.7	525.9	569.2
140°	335.3	338.2	349.6	364.8	382.7	408.3	435.8	464.2	494.5	526.7	564.6
142.5°	345.9	348.1	358.7	373.8	391.1	415.2	441.1	468.0	496.8	527.5	560.8
145°	361.9	363.8	373.2	386.5	403.6	425.3	450.0	473.7	499.3	526.7	555.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.3
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1	1121.1
2.5°	1117.3	1118.8	1120.3	1121.0	1120.9	1120.7	1120.5	1120.4
5°	1110.4	1112.3	1114.2	1115.0	1114.6	1114.2	1113.9	1113.5
7.5°	1096.7	1098.0	1099.3	1099.7	1099.3	1098.9	1098.5	1098.0
10°	1084.9	1085.5	1086.1	1086.1	1085.5	1084.9	1084.3	1083.9
12.5°	1068.4	1068.8	1069.2	1069.0	1068.1	1067.2	1066.4	1065.5
15°	1041.1	1040.9	1040.7	1039.8	1038.1	1036.4	1034.7	1033.0
17.5°	1007.1	1006.2	1005.2	1004.0	1002.7	1001.3	999.9	998.5
20°	982.0	981.0	980.2	978.8	977.1	975.4	973.7	972.1
22.5°	957.2	955.4	953.5	951.9	950.5	949.1	947.7	946.3
25°	916.4	914.0	911.5	909.2	907.1	905.1	903.0	900.9
27.5°	872.2	868.8	865.4	862.7	860.7	858.7	856.7	854.7
30°	840.7	836.3	831.9	829.0	827.3	825.6	823.9	822.1
32.5°	809.9	805.1	800.4	796.9	794.8	792.6	790.4	788.3
35°	762.1	756.7	751.2	747.2	744.5	741.9	739.3	736.6
37.5°	712.2	705.6	699.1	694.6	692.0	689.4	686.9	684.4
40°	679.1	672.1	664.9	660.1	657.9	655.7	653.4	651.2
42.5°	646.6	639.8	632.9	627.8	624.5	621.2	617.8	614.6
45°	594.6	587.1	579.5	574.4	571.5	568.8	565.9	563.0
47.5°	543.2	535.4	527.7	522.2	519.1	516.0	512.8	509.7
50°	508.3	500.4	492.5	487.1	484.4	481.5	478.7	475.9
52.5°	475.3	466.8	458.3	452.6	449.8	446.9	444.2	441.3
55°	425.1	416.6	408.1	402.4	399.4	396.4	393.4	390.4
57.5°	374.8	366.6	358.2	352.8	350.1	347.4	344.8	342.1
60°	341.6	333.3	325.1	319.5	316.7	313.9	311.0	308.2
62.5°	308.9	301.3	293.6	288.4	285.5	282.7	279.9	277.0
65°	261.0	253.5	245.9	240.8	237.9	235.1	232.3	229.4
67.5°	215.2	208.3	201.4	196.8	194.6	192.3	190.0	187.8
70°	184.7	179.0	173.1	169.1	166.8	164.5	162.3	160.0
72.5°	156.5	151.2	145.8	142.4	140.8	139.3	137.9	136.3
75°	117.1	112.9	108.8	106.1	104.7	103.4	102.1	100.8
77.5°	83.2	80.4	77.5	75.6	74.6	73.6	72.6	71.7
80°	62.7	61.0	59.3	58.2	57.9	57.5	57.1	56.7
82.5°	46.9	46.1	45.2	44.8	44.5	44.4	44.1	43.9
85°	26.7	26.5	26.3	26.2	25.9	25.8	25.6	25.4
87.5°	13.5	13.8	13.9	14.3	14.1	13.9	14.0	13.9
90°	17.0	18.0	18.9	20.9	20.9	20.9	21.8	21.8
92.5°	167.9	121.8	91.7	77.7	65.6	63.3	62.0	60.4
95°	681.1	537.1	420.6	341.0	273.8	245.3	237.8	222.7
97.5°	1014.4	913.5	800.0	689.3	630.7	577.7	550.2	538.1
100°	1165.2	1118.8	1021.2	922.7	857.4	789.1	754.1	738.9
102.5°	1216.0	1244.6	1197.8	1131.1	1061.2	1012.7	974.6	963.3
105°	1186.1	1315.9	1357.6	1347.1	1316.8	1285.6	1266.6	1255.2
107.5°	1079.2	1252.4	1359.4	1408.9	1424.2	1424.1	1417.8	1410.2
110°	1000.4	1180.4	1313.9	1394.5	1437.1	1455.1	1461.8	1461.8





TEST NUMBER: P333579-930

CATALOG NUMBER: S125RDIP-S850D1205U930-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	938.2	1109.1	1244.2	1339.1	1401.5	1432.4	1448.9	1455.7
115°	860.2	1007.1	1136.8	1240.1	1313.9	1359.4	1385.9	1398.2
117.5°	809.8	936.4	1048.1	1142.9	1216.8	1263.8	1290.1	1297.6
120°	782.5	896.2	1000.4	1083.8	1153.9	1199.3	1224.9	1232.5
122.5°	762.1	867.4	960.3	1038.3	1100.8	1142.5	1168.1	1174.9
125°	732.3	828.9	911.3	979.6	1032.6	1071.5	1092.3	1101.8
127.5°	702.0	792.1	869.1	932.9	981.0	1015.4	1035.1	1039.3
130°	683.1	766.4	840.3	901.9	949.3	980.5	999.5	1005.1
132.5°	664.1	742.2	809.2	868.5	915.9	947.1	964.6	971.0
135°	639.4	704.8	765.5	819.5	861.1	892.4	909.5	915.2
137.5°	618.6	671.5	721.9	767.8	805.0	833.5	849.2	855.4
140°	607.2	651.8	695.4	735.2	770.2	794.8	809.0	813.8
142.5°	597.4	635.1	672.6	707.1	736.9	757.7	771.1	775.1
145°	584.5	613.8	643.3	668.8	691.5	707.7	718.1	721.9
147.5°	572.4	596.2	618.8	638.1	656.2	669.0	675.1	676.8
150°	565.6	586.4	604.4	621.4	635.7	647.0	650.9	651.8
152.5°	558.0	576.6	593.0	606.3	618.2	627.3	631.1	632.1
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

(END OF REPORT)