

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: P333307-930

Luminaire Tested: **S125DIP-S1270D590U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333307-930  
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: S125DIP-S1270D590U930-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 590 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5944.2 lumens  
Efficiency: N/A  
Efficacy: 107.9 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-Direct

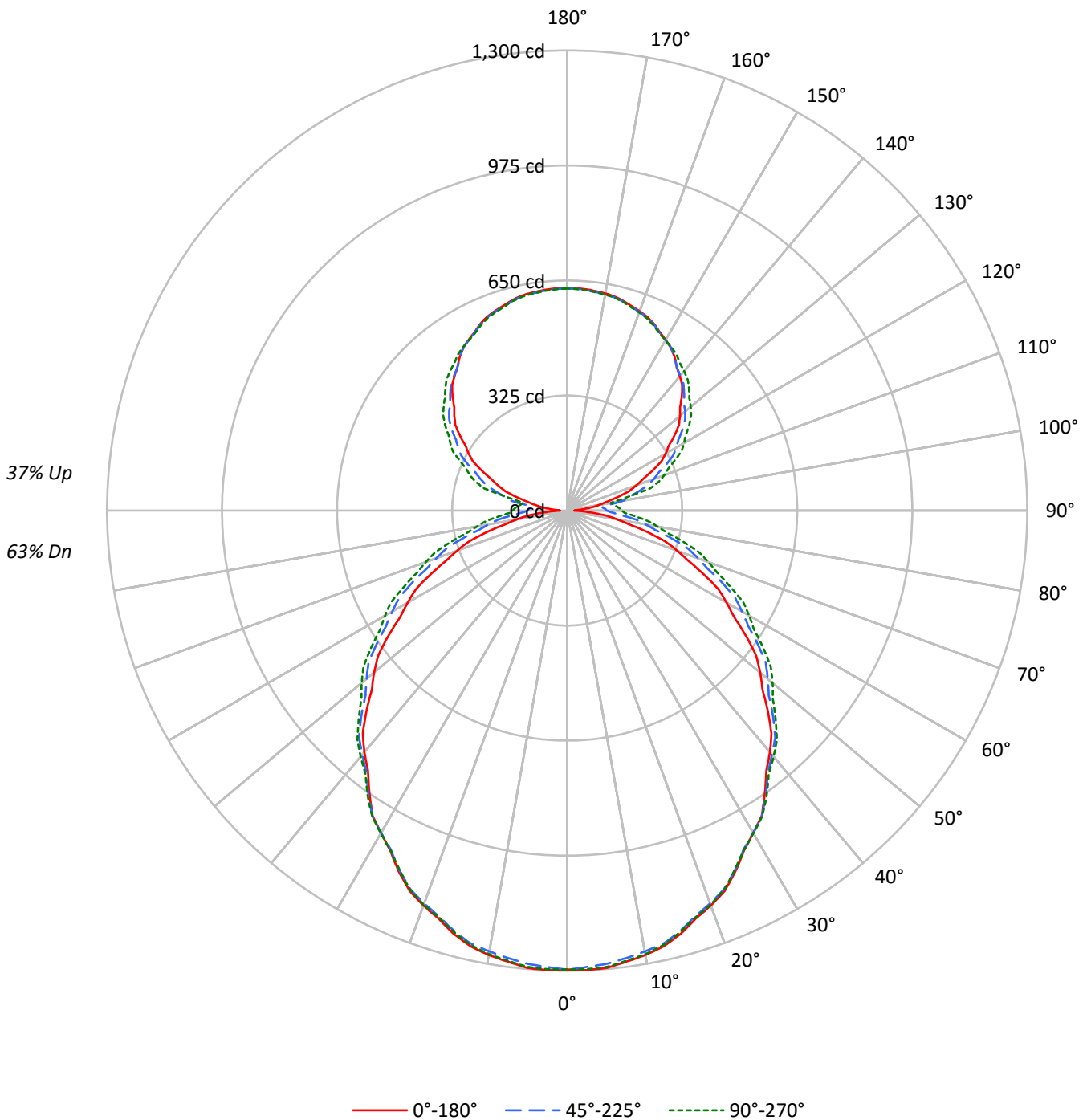
Input Watts (W): 55.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333307-930

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### Luminous Intensity Polar Plot





TEST NUMBER: P333307-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D

**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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	68	68	68	63
1	100	95	91	87	93	89	85	82	78	75	73	68	66	64	59	57	56	52
2	91	82	76	70	85	77	72	67	68	63	60	59	56	53	51	49	46	42
3	82	72	64	58	77	68	61	55	60	54	50	52	48	44	45	42	39	35
4	75	64	55	49	70	60	52	47	53	47	42	46	42	38	40	37	33	30
5	69	57	48	42	64	54	46	40	47	41	36	42	37	33	36	32	29	26
6	64	51	42	36	59	48	40	35	43	36	32	38	32	28	33	29	25	23
7	59	46	38	32	55	43	36	30	39	32	28	34	29	25	30	26	23	20
8	55	42	34	28	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	25	21	18	16
10	48	35	28	23	45	33	26	22	30	24	20	27	22	18	24	19	17	15

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

	0°	45°	90°
0°	8374	8374	8374
5°	8391	8220	8245
10°	8331	8072	8060
15°	8232	7896	7825
20°	8098	7680	7590
25°	7939	7447	7300
30°	7746	7191	7036
35°	7566	6956	6795
40°	7383	6709	6552
45°	7176	6497	6337
50°	6978	6267	6147
55°	6741	6051	5923
60°	6482	5802	5695
65°	6210	5544	5437
70°	5903	5190	5173
75°	5415	4849	4849
80°	4780	4438	4496
85°	4189	4162	4384



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	2.1
10°-20°	348.0	5.9
20°-30°	517.6	8.7
30°-40°	613.1	10.3
40°-50°	633.9	10.7
50°-60°	583.9	9.8
60°-70°	472.0	7.9
70°-80°	316.1	5.3
80°-90°	165.3	2.8
90°-100°	114.8	1.9
100°-110°	208.4	3.5
110°-120°	300.3	5.1
120°-130°	352.9	5.9
130°-140°	363.1	6.1
140°-150°	332.5	5.6
150°-160°	267.2	4.5
160°-170°	172.8	2.9
170°-180°	59.6	1.0
0°-30°	988.2	16.6
0°-40°	1601.3	26.9
0°-60°	2819.2	47.4
0°-90°	3772.6	63.5
90°-120°	623.5	10.5
90°-150°	1672.1	28.1
90°-180°	2172.0	36.5
0°-180°	5944.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1297	1294	1285	1295	1294	123
15°	1238	1239	1230	1237	1233	349
25°	1125	1128	1121	1126	1120	518
35°	974	982	979	982	983	609
45°	802	816	822	831	833	619
55°	616	637	657	671	676	551
65°	424	454	484	503	508	421
75°	234	267	308	332	339	248
85°	70	112	156	183	194	74
90°	21	65	112	142	154	15
95°	43	74	100	129	139	47
105°	148	171	209	233	242	157
115°	264	277	309	329	335	262
125°	370	374	398	415	421	330
135°	458	460	467	482	487	353
145°	529	529	529	535	538	331
155°	582	579	580	581	577	268
165°	614	611	611	614	610	173
175°	628	625	625	628	625	60
180°	628	628	628	628	628	



TEST NUMBER: P333307-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1299.6	1299.2	1298.7	1298.3	1297.8	1296.8	1295.2	1293.6	1292.1	1290.5	1292.1
5°	1296.6	1296.0	1295.4	1294.9	1294.3	1293.1	1291.0	1289.1	1287.1	1285.2	1287.4
7.5°	1285.2	1284.9	1284.7	1284.4	1284.3	1283.1	1281.1	1279.0	1277.0	1275.0	1276.9
10°	1275.0	1275.0	1275.0	1275.0	1275.0	1273.8	1271.5	1269.3	1267.1	1264.8	1266.7
12.5°	1260.7	1260.9	1261.2	1261.4	1261.6	1260.9	1259.1	1257.2	1255.4	1253.6	1255.2
15°	1238.1	1238.4	1238.7	1238.9	1239.3	1238.4	1236.4	1234.4	1232.5	1230.4	1232.2
17.5°	1208.6	1209.2	1209.7	1210.3	1210.9	1210.1	1208.2	1206.2	1204.2	1202.2	1203.5
20°	1187.2	1187.8	1188.4	1189.0	1189.5	1188.8	1186.8	1184.9	1182.8	1180.9	1181.8
22.5°	1162.9	1163.8	1164.9	1165.9	1166.9	1166.3	1164.1	1161.9	1159.7	1157.5	1158.5
25°	1124.9	1125.8	1126.7	1127.5	1128.4	1128.0	1126.3	1124.5	1122.8	1121.1	1122.3
27.5°	1082.8	1084.0	1085.2	1086.5	1087.8	1087.4	1085.5	1083.5	1081.7	1079.7	1080.5
30°	1051.2	1053.0	1054.6	1056.3	1058.0	1058.0	1056.3	1054.6	1053.0	1051.2	1051.8
32.5°	1022.8	1024.3	1025.7	1027.2	1028.7	1028.7	1027.5	1026.3	1025.0	1023.8	1024.3
35°	973.7	975.7	977.6	979.7	981.6	982.2	981.3	980.5	979.7	978.8	979.7
37.5°	924.6	926.4	928.2	930.1	931.9	932.6	932.4	932.1	931.8	931.5	932.6
40°	891.0	893.3	895.6	897.9	900.1	901.1	900.8	900.5	900.3	900.0	901.1
42.5°	854.4	857.4	860.3	863.2	866.3	868.0	868.6	869.3	869.8	870.5	871.8
45°	802.1	805.2	808.3	811.4	814.5	816.8	818.2	819.6	821.0	822.4	824.4
47.5°	748.4	751.3	754.2	757.1	759.9	762.6	765.1	767.5	769.9	772.3	775.3
50°	711.8	714.9	718.0	721.1	724.3	727.4	730.5	733.6	736.7	739.8	742.9
52.5°	673.2	677.0	680.8	684.5	688.4	692.1	695.9	699.7	703.4	707.3	710.6
55°	616.5	621.0	625.6	630.1	634.5	639.1	643.6	648.2	652.6	657.2	660.3
57.5°	558.6	563.9	569.4	574.8	580.2	585.5	590.8	595.9	601.1	606.3	609.9
60°	519.9	525.5	531.2	536.9	542.5	548.1	553.8	559.5	565.1	570.7	574.9
62.5°	482.2	488.0	493.6	499.2	504.8	510.8	516.8	522.9	529.0	535.2	539.8
65°	424.5	431.0	437.6	444.1	450.5	457.2	464.0	470.8	477.5	484.3	488.5
67.5°	370.1	376.4	382.7	389.0	395.3	401.9	408.7	415.6	422.5	429.4	434.6
70°	330.5	337.0	343.5	350.0	356.4	363.4	370.7	378.1	385.5	392.8	398.2
72.5°	291.9	298.6	305.3	312.0	318.8	326.1	334.1	342.2	350.2	358.2	364.0
75°	233.9	241.2	248.6	255.9	263.3	271.5	280.5	289.5	298.6	307.6	313.2
77.5°	178.2	186.7	195.2	203.7	212.1	220.7	229.4	238.1	246.8	255.5	261.7
80°	143.7	152.1	160.6	169.1	177.6	186.5	196.2	205.8	215.4	225.0	231.2
82.5°	112.1	121.1	130.0	138.9	147.8	157.2	167.1	176.8	186.7	196.5	202.5
85°	70.0	79.2	88.5	97.9	107.2	116.8	126.7	136.6	146.4	156.4	162.6
87.5°	39.8	48.9	58.1	67.3	76.6	86.0	95.8	105.6	115.3	125.1	131.7
90°	20.8	30.7	40.5	50.4	60.3	70.4	80.7	91.0	101.3	111.7	118.7
92.5°	25.4	33.3	41.0	48.8	56.6	65.7	76.2	86.7	97.1	107.6	114.4
95°	43.0	50.1	57.1	64.2	71.2	77.5	83.2	88.9	94.6	100.2	107.0
97.5°	70.4	77.5	84.7	91.9	99.1	103.4	104.8	106.3	107.9	109.3	112.3
100°	91.6	97.9	104.1	110.4	116.7	124.5	134.0	143.4	152.9	162.3	152.8
102.5°	113.3	119.2	125.1	130.9	136.8	144.3	153.4	162.4	171.5	180.6	183.4
105°	148.2	153.1	158.1	163.0	168.0	174.6	183.1	191.6	200.1	208.6	214.2
107.5°	184.4	188.3	192.2	196.0	199.8	205.9	214.3	222.6	230.9	239.3	244.9
110°	208.0	211.4	214.7	218.2	221.5	227.3	235.4	243.5	251.7	259.8	264.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	231.1	234.0	237.0	239.9	242.9	248.3	256.1	263.9	271.7	279.5	284.3
115°	264.4	266.9	269.4	271.9	274.3	279.3	286.8	294.2	301.7	309.2	313.8
117.5°	299.0	300.2	301.5	302.8	304.0	308.3	315.7	323.0	330.4	337.7	342.0
120°	321.3	322.0	322.8	323.5	324.2	328.0	334.8	341.6	348.5	355.2	359.9
122.5°	340.0	340.8	341.5	342.3	343.2	346.7	353.1	359.5	366.0	372.4	376.7
125°	370.2	370.7	371.1	371.5	372.0	375.0	380.7	386.4	392.0	397.6	401.8
127.5°	398.1	398.4	398.5	398.8	399.0	401.5	406.0	410.6	415.2	419.7	423.6
130°	416.0	416.2	416.4	416.6	416.9	419.1	423.1	427.1	431.2	435.3	438.9
132.5°	432.8	433.3	433.9	434.4	435.0	436.7	439.4	442.3	445.2	447.9	451.8
135°	458.0	458.3	458.6	458.9	459.3	460.3	462.1	463.9	465.6	467.4	470.9
137.5°	481.0	481.4	481.7	482.0	482.2	482.8	483.6	484.4	485.1	485.9	489.3
140°	495.3	495.5	495.7	495.9	496.1	496.3	496.4	496.7	496.8	497.0	500.3
142.5°	509.1	508.9	508.8	508.7	508.7	508.7	508.9	509.1	509.3	509.5	512.2
145°	529.2	529.1	529.0	529.0	528.9	528.9	528.9	528.9	528.9	528.9	530.4
147.5°	545.6	545.6	545.5	545.5	545.4	545.5	545.6	545.8	545.8	546.0	546.6
150°	556.8	556.6	556.4	556.2	556.0	556.0	556.2	556.4	556.6	556.8	557.0
152.5°	567.6	567.1	566.7	566.2	565.7	565.7	565.8	566.1	566.2	566.5	566.7
155°	581.5	580.8	580.2	579.6	578.9	578.8	578.9	579.2	579.4	579.6	579.9
157.5°	592.2	591.7	591.4	591.0	590.7	590.5	590.5	590.5	590.5	590.6	590.9
160°	599.6	599.0	598.3	597.7	597.1	596.9	597.0	597.0	597.1	597.3	597.7
162.5°	605.5	605.0	604.3	603.6	603.1	602.8	602.9	603.0	603.1	603.2	603.8
165°	613.5	612.9	612.3	611.7	611.1	610.8	610.9	611.0	611.1	611.2	611.8
167.5°	619.5	618.9	618.2	617.6	616.9	616.7	616.8	616.9	616.9	617.1	617.8
170°	622.9	622.2	621.4	620.7	620.0	619.6	619.7	619.9	620.0	620.0	620.9
172.5°	625.1	624.4	623.6	622.9	622.2	621.9	622.1	622.3	622.5	622.6	623.4
175°	627.5	626.9	626.2	625.7	625.0	624.8	624.8	625.0	625.1	625.2	626.0
177.5°	628.6	628.1	627.6	627.1	626.6	626.4	626.5	626.6	626.6	626.7	627.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6	1296.6
2.5°	1293.6	1295.2	1296.8	1297.5	1297.2	1297.1	1296.8	1296.6
5°	1289.6	1291.9	1294.2	1295.2	1294.9	1294.6	1294.3	1294.0
7.5°	1278.9	1280.9	1282.9	1283.7	1283.4	1283.1	1282.9	1282.5
10°	1268.8	1270.7	1272.7	1273.6	1273.3	1273.0	1272.7	1272.4
12.5°	1256.6	1258.2	1259.7	1260.1	1259.4	1258.7	1257.9	1257.2
15°	1233.9	1235.6	1237.2	1237.5	1236.4	1235.3	1234.1	1233.0
17.5°	1204.8	1206.2	1207.5	1207.8	1207.1	1206.4	1205.7	1205.0
20°	1182.6	1183.4	1184.3	1184.7	1184.7	1184.7	1184.7	1184.7
22.5°	1159.7	1160.7	1161.8	1162.0	1161.3	1160.7	1159.9	1159.3
25°	1123.4	1124.5	1125.7	1125.5	1124.1	1122.7	1121.3	1119.9
27.5°	1081.3	1082.1	1082.9	1083.0	1082.5	1082.0	1081.5	1081.0
30°	1052.4	1053.0	1053.5	1053.6	1053.4	1053.0	1052.8	1052.5
32.5°	1024.9	1025.5	1026.1	1026.2	1025.9	1025.6	1025.3	1025.1
35°	980.5	981.3	982.2	982.6	982.6	982.6	982.6	982.6
37.5°	933.8	934.9	936.0	936.5	936.4	936.3	936.2	936.0
40°	902.2	903.4	904.5	905.3	905.9	906.4	907.0	907.6
42.5°	873.2	874.6	875.9	876.6	876.8	876.9	877.0	877.1
45°	826.4	828.3	830.3	831.4	831.8	832.0	832.3	832.6
47.5°	778.1	781.0	783.9	785.6	786.3	786.8	787.5	788.1
50°	746.0	749.1	752.3	754.2	755.0	755.9	756.8	757.6
52.5°	714.0	717.3	720.6	722.6	723.2	723.8	724.5	725.0
55°	663.4	666.5	669.6	671.7	672.9	674.0	675.1	676.3
57.5°	613.4	617.0	620.6	622.8	623.6	624.4	625.3	626.1
60°	579.2	583.4	587.7	590.2	591.1	591.9	592.8	593.6
62.5°	544.5	549.2	553.9	556.8	557.8	559.0	560.0	561.1
65°	492.8	497.0	501.2	503.9	505.1	506.2	507.4	508.4
67.5°	439.7	444.8	450.0	453.2	454.7	456.2	457.7	459.2
70°	403.5	408.9	414.3	417.8	419.5	421.2	422.9	424.5
72.5°	369.8	375.7	381.5	385.0	386.3	387.5	388.7	390.0
75°	318.9	324.6	330.2	333.8	335.2	336.6	338.0	339.4
77.5°	267.9	274.1	280.4	284.1	285.2	286.3	287.4	288.5
80°	237.4	243.6	249.9	253.6	254.6	255.8	256.9	258.0
82.5°	208.5	214.5	220.5	224.5	226.5	228.5	230.6	232.6
85°	168.8	175.0	181.2	185.5	187.7	190.0	192.2	194.4
87.5°	138.3	144.9	151.5	155.8	157.8	159.9	161.9	164.0
90°	125.7	132.7	139.7	144.4	146.7	149.0	151.2	153.5
92.5°	121.2	128.0	134.8	139.3	141.4	143.5	145.6	147.7
95°	113.7	120.4	127.2	131.5	133.5	135.5	137.5	139.4
97.5°	115.4	118.4	121.4	123.8	125.8	127.7	129.6	131.5
100°	143.3	133.9	124.4	120.3	121.6	122.9	124.2	125.5
102.5°	186.1	188.9	191.7	190.5	185.1	179.8	174.5	169.1
105°	219.8	225.5	231.1	234.9	236.8	238.6	240.5	242.4
107.5°	250.5	256.1	261.7	265.2	266.7	268.2	269.5	271.0
110°	269.9	274.9	280.0	283.6	285.6	287.7	289.8	291.9





TEST NUMBER: P333307-930

CATALOG NUMBER: S125DIP-S1270D590U930-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	289.0	293.8	298.5	301.8	303.6	305.5	307.3	309.2
115°	318.5	323.2	327.8	330.7	331.7	332.8	333.9	335.0
117.5°	346.3	350.5	354.8	357.8	359.4	361.0	362.7	364.4
120°	364.4	369.0	373.7	376.5	377.7	378.9	380.0	381.2
122.5°	381.2	385.5	389.9	392.6	393.7	394.8	395.9	397.0
125°	405.9	409.9	414.1	416.7	417.8	418.9	420.0	421.1
127.5°	427.6	431.5	435.5	437.9	438.8	439.7	440.6	441.4
130°	442.5	446.2	449.8	452.1	453.0	453.9	454.8	455.7
132.5°	455.8	459.6	463.5	465.8	466.4	467.2	467.8	468.5
135°	474.3	477.8	481.3	483.4	484.2	485.0	485.8	486.6
137.5°	492.7	496.0	499.5	501.4	502.0	502.6	503.2	503.8
140°	503.6	507.0	510.3	512.2	512.7	513.2	513.7	514.2
142.5°	514.9	517.6	520.2	521.9	522.4	522.9	523.4	523.9
145°	531.9	533.5	534.9	536.0	536.5	537.0	537.5	538.0
147.5°	547.1	547.7	548.3	548.5	548.2	548.0	547.8	547.6
150°	557.2	557.4	557.6	557.4	556.9	556.4	555.8	555.3
152.5°	566.9	567.1	567.3	567.0	566.4	565.7	565.0	564.3
155°	580.2	580.5	580.8	580.6	579.8	578.9	578.1	577.2
157.5°	591.3	591.6	591.9	591.7	590.8	590.0	589.1	588.3
160°	598.1	598.5	598.9	598.7	597.9	597.0	596.2	595.4
162.5°	604.4	605.0	605.5	605.4	604.5	603.6	602.7	601.7
165°	612.5	613.1	613.7	613.6	612.8	612.0	611.1	610.3
167.5°	618.6	619.3	620.0	620.0	619.1	618.1	617.2	616.2
170°	621.7	622.6	623.4	623.3	622.4	621.4	620.5	619.6
172.5°	624.1	624.9	625.7	625.6	624.6	623.7	622.7	621.8
175°	626.8	627.6	628.5	628.4	627.5	626.6	625.7	624.7
177.5°	627.9	628.5	629.1	629.0	628.4	627.7	627.0	626.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5

(END OF REPORT)