

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: P333157-930

Luminaire Tested: **S125DIP-S375D1205U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333157-930  
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-S375D1205U930-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

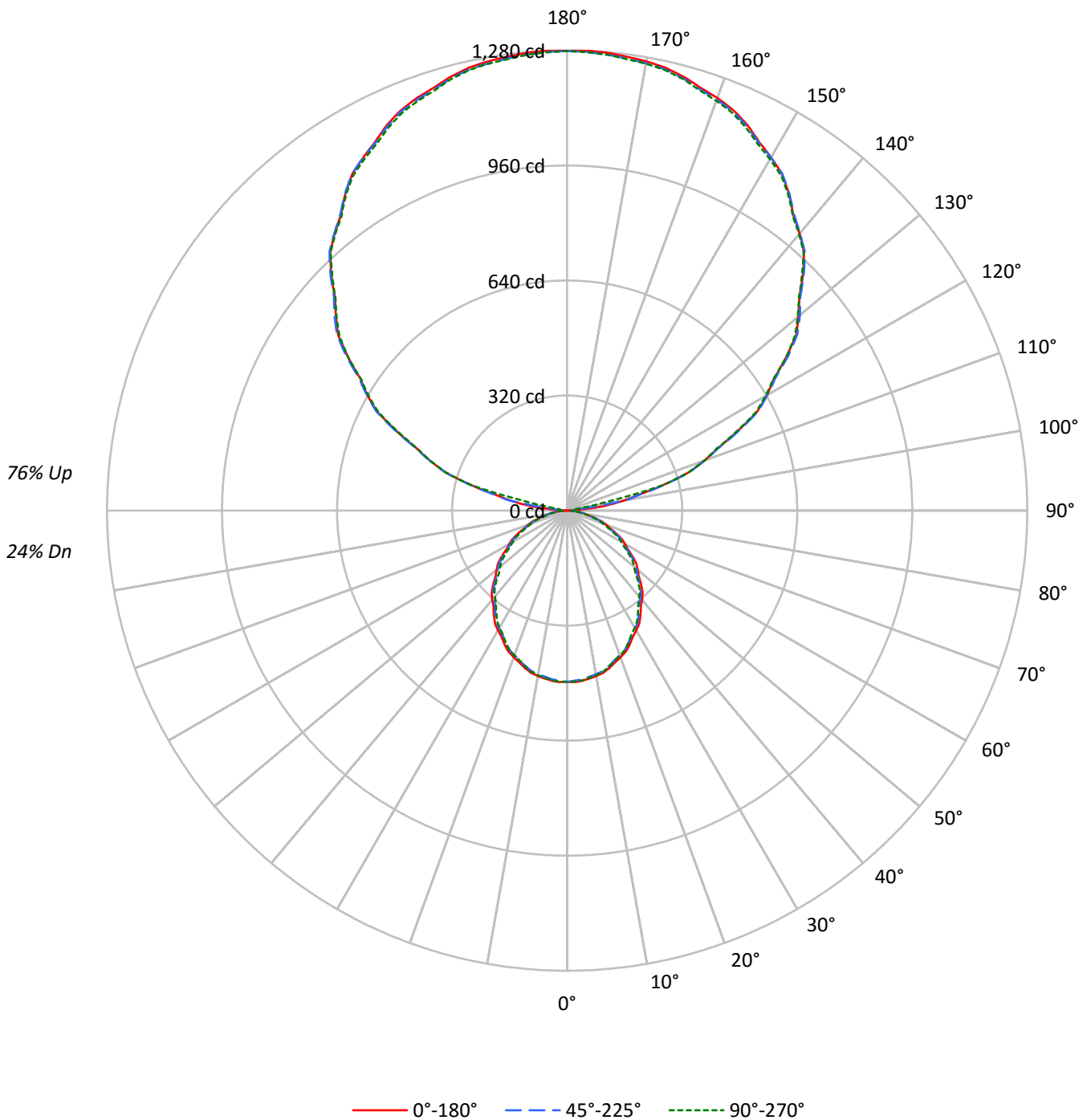
Lumens per Lamp: N/A  
Luminaire Lumens: 5167.2 lumens  
Efficiency: N/A  
Efficacy: 122.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (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: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

### 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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	55	67	60	54	49	46	42	39	34	31	29	22	21	19	14
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	39	56	47	40	36	37	32	28	27	24	21	18	16	14	11
6	59	47	39	34	52	42	35	31	33	28	25	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	38	29	23	18	23	18	15	17	14	12	11	10	8	6

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

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



TEST NUMBER: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.9	0.9
10°-20°	126.9	2.5
20°-30°	187.3	3.6
30°-40°	218.5	4.2
40°-50°	219.5	4.2
50°-60°	192.7	3.7
60°-70°	143.6	2.8
70°-80°	82.1	1.6
80°-90°	26.5	0.5
90°-100°	46.5	0.9
100°-110°	286.3	5.5
110°-120°	519.2	10.0
120°-130°	666.3	12.9
130°-140°	716.7	13.9
140°-150°	672.7	13.0
150°-160°	544.2	10.5
160°-170°	351.9	6.8
170°-180°	121.4	2.3
0°-30°	359.1	6.9
0°-40°	577.6	11.2
0°-60°	989.8	19.2
0°-90°	1242.0	24.0
90°-120°	851.9	16.5
90°-150°	2907.7	56.3
90°-180°	3925.0	76.0
0°-180°	5167.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	1	8	15	20	23	3
95°	54	49	15	20	20	69
105°	279	282	282	282	281	295
115°	523	528	529	525	519	518
125°	744	750	750	747	744	664
135°	928	933	931	929	924	715
145°	1076	1077	1077	1078	1073	672
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



TEST NUMBER: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.3	8.6	9.0	9.4	9.7	9.9	10.2	10.4	10.7	10.8	11.1
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	14.6	13.5	12.2	11.1	9.9	9.9	11.3	12.6	13.9	15.2	16.2
95°	54.0	53.4	52.7	52.1	51.4	47.2	39.1	31.1	23.2	15.2	16.2
97.5°	112.8	113.9	115.0	116.2	117.3	110.0	94.1	78.3	62.5	46.6	40.7
100°	158.2	158.9	159.5	160.1	160.8	161.5	162.3	163.2	164.0	164.9	133.5
102.5°	204.5	205.3	206.1	206.8	207.7	208.3	208.8	209.4	209.9	210.3	204.4
105°	278.6	279.4	280.2	281.1	281.9	282.3	282.3	282.3	282.3	282.3	282.3
107.5°	355.6	355.6	355.6	355.6	355.6	355.7	356.1	356.5	357.0	357.4	357.4
110°	405.5	405.5	405.5	405.5	405.5	405.8	406.2	406.6	407.0	407.4	406.8



TEST NUMBER: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	452.6	453.1	453.6	454.0	454.5	454.9	455.2	455.4	455.7	455.9	455.2
115°	523.0	524.1	525.1	526.2	527.3	527.9	528.1	528.3	528.5	528.7	527.9
117.5°	596.0	596.0	595.9	595.9	595.8	596.2	597.0	597.8	598.6	599.4	598.3
120°	641.5	641.2	641.1	640.8	640.7	640.8	641.5	642.1	642.7	643.4	642.9
122.5°	681.7	682.5	683.2	684.0	684.9	685.4	685.7	686.0	686.3	686.6	686.2
125°	743.8	745.3	746.7	748.2	749.7	750.4	750.4	750.4	750.4	750.4	749.6
127.5°	803.2	804.2	805.2	806.2	807.3	807.8	807.6	807.6	807.4	807.3	806.8
130°	839.5	840.6	841.6	842.7	843.8	844.3	844.6	844.8	845.0	845.2	844.6
132.5°	875.9	877.1	878.3	879.5	880.8	881.2	880.7	880.2	879.8	879.3	879.2
135°	927.6	928.9	930.2	931.4	932.7	933.1	932.7	932.3	931.8	931.4	931.0
137.5°	975.2	976.3	977.4	978.4	979.6	979.9	979.6	979.2	978.8	978.4	978.5
140°	1006.2	1006.7	1007.1	1007.5	1008.0	1008.0	1007.9	1007.6	1007.5	1007.2	1007.6
142.5°	1034.3	1034.5	1034.9	1035.1	1035.3	1035.6	1035.9	1036.2	1036.5	1036.8	1036.9
145°	1075.5	1075.9	1076.3	1076.7	1077.1	1077.3	1077.3	1077.3	1077.3	1077.3	1077.6
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.5
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



TEST NUMBER: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	11.3	11.5	11.7	11.8	11.8	11.8	11.8	11.8
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	17.3	18.3	19.4	20.1	20.3	20.6	21.0	21.2
95°	17.3	18.3	19.4	19.9	19.9	19.9	19.9	19.9
97.5°	34.7	28.8	22.8	19.9	19.9	19.9	19.9	19.9
100°	102.2	70.8	39.4	23.2	22.4	21.6	20.7	19.9
102.5°	198.4	192.6	186.6	176.5	162.2	147.8	133.5	119.2
105°	282.3	282.3	282.3	282.3	282.0	281.8	281.6	281.4
107.5°	357.5	357.5	357.6	357.3	356.6	356.0	355.4	354.7
110°	406.2	405.5	404.9	404.7	404.9	405.1	405.4	405.5





TEST NUMBER: P333157-930

CATALOG NUMBER: S125DIP-S375D1205U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	454.4	453.6	452.7	452.2	451.9	451.6	451.3	451.0
115°	527.0	526.2	525.4	524.3	523.0	521.8	520.5	519.3
117.5°	597.2	596.1	595.0	594.2	593.6	593.1	592.6	592.0
120°	642.5	642.1	641.7	641.0	639.9	638.9	637.8	636.7
122.5°	685.7	685.3	684.9	684.0	682.8	681.6	680.4	679.2
125°	748.8	747.9	747.1	746.3	745.7	745.1	744.4	743.8
127.5°	806.3	805.9	805.4	804.5	802.9	801.3	799.7	798.2
130°	843.9	843.3	842.7	841.8	840.7	839.8	838.7	837.6
132.5°	879.1	878.9	878.8	878.2	877.2	876.1	875.1	874.0
135°	930.6	930.2	929.8	928.9	927.6	926.3	925.1	923.8
137.5°	978.6	978.7	978.8	978.3	977.1	976.1	974.9	973.9
140°	1008.0	1008.4	1008.9	1008.4	1007.2	1006.0	1004.7	1003.5
142.5°	1037.0	1037.1	1037.1	1036.6	1035.3	1034.0	1032.7	1031.5
145°	1077.7	1078.0	1078.2	1077.7	1076.4	1075.1	1073.8	1072.6
147.5°	1112.7	1113.0	1113.2	1112.6	1111.1	1109.5	1108.1	1106.5
150°	1135.1	1135.5	1135.9	1135.2	1133.6	1131.9	1130.2	1128.5
152.5°	1154.7	1155.2	1155.6	1155.0	1153.5	1152.0	1150.5	1149.0
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)