

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: P333282-830

Luminaire Tested: **S125DIP-S1090D1035U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333282-830
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: S125DIP-S1090D1035U830-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7522.2 lumens
Efficiency: N/A
Efficacy: 124.3 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

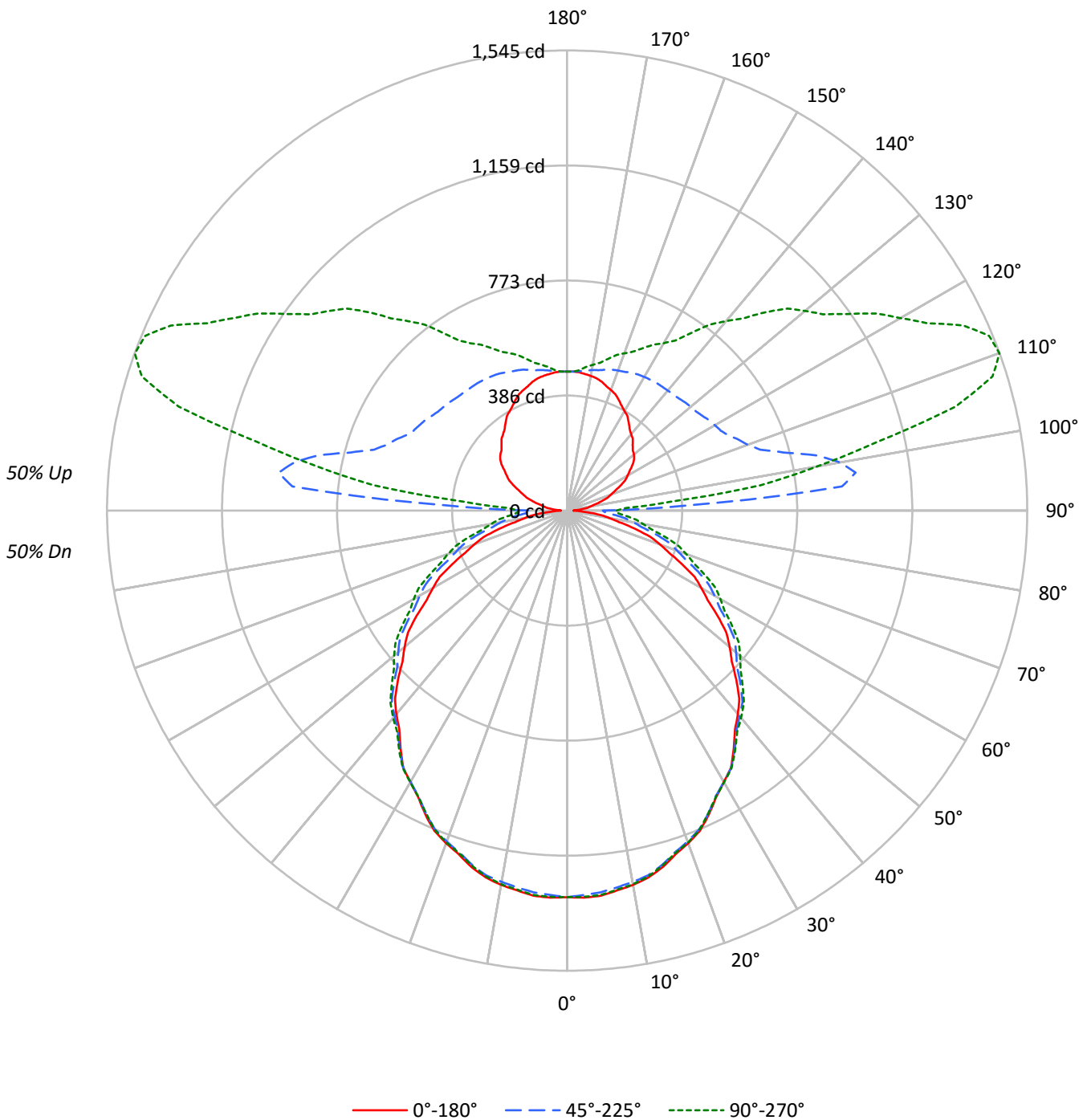
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333282-830

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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	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8399	8227	8253
10°	8339	8080	8068
15°	8240	7905	7833
20°	8107	7687	7597
25°	7947	7455	7307
30°	7754	7199	7044
35°	7574	6964	6802
40°	7390	6715	6559
45°	7184	6503	6343
50°	6986	6274	6153
55°	6748	6056	5928
60°	6488	5808	5700
65°	6217	5549	5444
70°	5908	5194	5179
75°	5420	4854	4854
80°	4780	4442	4501
85°	4183	4164	4388



TEST NUMBER: P333282-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	1.6
10°-20°	348.4	4.6
20°-30°	518.1	6.9
30°-40°	613.7	8.2
40°-50°	634.5	8.4
50°-60°	584.5	7.8
60°-70°	472.5	6.3
70°-80°	316.4	4.2
80°-90°	166.7	2.2
90°-100°	430.4	5.7
100°-110°	795.1	10.6
110°-120°	728.0	9.7
120°-130°	578.9	7.7
130°-140°	455.1	6.1
140°-150°	337.2	4.5
150°-160°	235.8	3.1
160°-170°	139.0	1.8
170°-180°	45.2	0.6
0°-30°	989.2	13.2
0°-40°	1602.9	21.3
0°-60°	2821.9	37.5
0°-90°	3777.5	50.2
90°-120°	1953.4	26.0
90°-150°	3324.7	44.2
90°-180°	3745.0	49.8
0°-180°	7522.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1295	1286	1296	1295	123
15°	1239	1240	1232	1239	1234	349
25°	1126	1129	1122	1127	1121	518
35°	975	983	980	983	984	610
45°	803	816	823	832	833	619
55°	617	637	658	671	677	551
65°	425	454	485	503	509	422
75°	234	268	308	332	340	248
85°	70	112	156	183	195	75
90°	21	70	119	152	164	15
95°	48	142	926	498	351	46
105°	118	181	752	1438	1351	124
115°	198	247	597	1252	1469	195
125°	268	314	554	988	1150	238
135°	311	373	531	813	942	242
145°	361	412	523	658	728	226
155°	410	441	510	576	601	189
165°	448	460	489	519	527	126
175°	466	466	470	475	473	44
180°	467	467	467	467	467	



TEST NUMBER: P333282-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1300.9	1300.4	1300.0	1299.6	1299.1	1298.1	1296.5	1294.9	1293.4	1291.8	1293.4
5°	1297.9	1297.3	1296.8	1296.2	1295.6	1294.3	1292.3	1290.3	1288.4	1286.4	1288.6
7.5°	1286.4	1286.2	1285.9	1285.7	1285.5	1284.4	1282.3	1280.3	1278.3	1276.2	1278.2
10°	1276.2	1276.2	1276.2	1276.2	1276.2	1275.1	1272.8	1270.5	1268.3	1266.0	1268.0
12.5°	1262.0	1262.2	1262.4	1262.6	1262.9	1262.1	1260.3	1258.5	1256.7	1254.8	1256.4
15°	1239.3	1239.6	1239.9	1240.2	1240.5	1239.6	1237.7	1235.7	1233.7	1231.7	1233.4
17.5°	1209.8	1210.3	1210.9	1211.4	1212.0	1211.4	1209.4	1207.4	1205.4	1203.4	1204.8
20°	1188.5	1189.0	1189.6	1190.1	1190.7	1190.0	1188.0	1186.0	1184.0	1182.0	1182.9
22.5°	1163.9	1165.0	1166.0	1167.1	1168.1	1167.4	1165.3	1163.1	1160.8	1158.7	1159.7
25°	1126.1	1126.9	1127.8	1128.6	1129.4	1129.1	1127.4	1125.7	1124.0	1122.3	1123.4
27.5°	1083.8	1085.1	1086.3	1087.6	1088.8	1088.4	1086.6	1084.6	1082.7	1080.8	1081.6
30°	1052.3	1054.0	1055.6	1057.3	1059.0	1059.0	1057.3	1055.6	1054.0	1052.3	1052.8
32.5°	1023.8	1025.2	1026.7	1028.2	1029.6	1029.7	1028.5	1027.3	1026.1	1024.8	1025.4
35°	974.7	976.7	978.6	980.6	982.6	983.2	982.3	981.5	980.6	979.8	980.6
37.5°	925.6	927.4	929.2	930.9	932.7	933.6	933.3	933.0	932.7	932.5	933.6
40°	891.9	894.2	896.5	898.7	901.0	902.0	901.7	901.4	901.2	900.9	902.0
42.5°	855.3	858.3	861.2	864.1	867.0	868.8	869.5	870.1	870.7	871.4	872.7
45°	802.9	806.0	809.1	812.2	815.3	817.6	819.0	820.4	821.8	823.2	825.2
47.5°	749.2	752.1	755.0	757.8	760.7	763.4	765.8	768.3	770.7	773.1	776.0
50°	712.6	715.7	718.8	721.9	725.0	728.1	731.2	734.3	737.4	740.6	743.7
52.5°	673.8	677.7	681.5	685.2	689.0	692.8	696.6	700.4	704.2	707.9	711.3
55°	617.1	621.6	626.1	630.7	635.2	639.7	644.2	648.8	653.3	657.8	660.9
57.5°	559.1	564.5	570.0	575.4	580.8	586.2	591.4	596.5	601.7	606.9	610.5
60°	520.4	526.0	531.7	537.3	543.0	548.7	554.3	560.0	565.6	571.3	575.5
62.5°	482.8	488.4	494.1	499.7	505.4	511.2	517.4	523.5	529.6	535.6	540.4
65°	425.0	431.5	438.0	444.5	451.0	457.6	464.4	471.2	478.0	484.7	489.0
67.5°	370.5	376.8	383.0	389.4	395.6	402.2	409.2	416.0	422.9	429.8	435.0
70°	330.8	337.3	343.8	350.3	356.8	363.7	371.1	378.4	385.8	393.1	398.5
72.5°	292.2	298.9	305.6	312.4	319.1	326.4	334.5	342.5	350.5	358.5	364.4
75°	234.1	241.5	248.8	256.2	263.5	271.7	280.8	289.8	298.9	307.9	313.6
77.5°	178.4	186.9	195.4	203.9	212.4	220.9	229.6	238.4	247.0	255.7	261.9
80°	143.7	152.2	160.7	169.2	177.7	186.7	196.3	205.9	215.6	225.2	231.4
82.5°	112.3	121.1	130.1	139.0	148.0	157.3	167.2	177.0	186.9	196.7	202.7
85°	69.9	79.3	88.6	97.9	107.3	116.9	126.8	136.7	146.6	156.5	162.7
87.5°	39.9	49.1	58.5	68.0	77.4	87.1	96.9	106.9	116.7	126.7	133.4
90°	21.3	31.3	42.2	53.2	64.1	75.3	85.9	97.4	107.9	119.4	126.9
92.5°	29.8	40.6	56.9	76.9	101.5	138.1	199.3	295.3	398.7	403.6	352.1
95°	47.6	55.9	70.8	88.5	116.5	167.3	277.7	494.3	763.6	926.5	914.9
97.5°	66.5	74.4	86.2	103.2	128.4	166.8	242.7	403.7	684.7	976.9	1124.6
100°	79.8	87.7	97.4	113.7	137.5	173.2	236.9	368.2	614.3	931.0	1172.2
102.5°	94.6	101.2	109.8	126.4	148.2	182.9	240.3	351.8	560.8	855.5	1136.3
105°	117.8	122.3	131.5	145.4	165.0	197.9	247.8	340.0	505.6	752.1	1027.8
107.5°	140.3	146.1	154.4	166.0	185.5	215.2	263.3	343.2	479.6	680.0	918.6
110°	156.7	161.9	169.1	181.0	198.4	228.6	275.0	347.9	469.7	645.1	855.5



TEST NUMBER: P333282-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	173.9	178.5	184.3	195.5	212.3	241.2	286.0	354.8	465.8	622.9	807.6
115°	197.7	201.5	206.3	216.8	232.9	261.1	303.2	365.1	462.9	597.2	753.8
117.5°	219.0	223.1	227.4	237.2	254.5	281.4	321.3	378.0	463.4	581.5	719.0
120°	234.0	237.7	242.3	251.7	268.5	295.7	335.2	386.8	465.8	573.0	699.1
122.5°	248.8	251.3	254.8	263.6	281.4	308.3	347.5	396.7	467.2	565.1	681.3
125°	268.5	270.1	274.6	282.8	300.4	327.5	364.2	410.3	470.5	554.3	656.7
127.5°	282.9	285.4	291.2	301.6	320.4	346.9	381.5	423.4	475.7	546.2	633.6
130°	292.7	295.2	302.5	314.4	333.8	360.1	393.3	433.0	479.4	541.6	619.0
132.5°	299.2	302.7	311.7	325.4	345.8	371.7	404.0	440.5	483.0	537.5	605.9
135°	311.1	314.6	325.6	340.4	359.9	386.2	417.3	450.3	487.1	531.4	588.7
137.5°	326.3	328.9	339.2	354.1	373.2	399.7	427.3	458.0	492.0	528.0	574.2
140°	334.3	337.1	348.5	363.5	381.4	407.0	434.5	463.1	493.4	525.7	566.5
142.5°	344.9	346.8	357.0	371.8	388.8	412.6	438.5	465.2	493.9	524.4	560.2
145°	360.7	362.3	371.5	384.3	401.0	422.4	447.0	470.4	495.9	523.1	552.8
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	546.0
150°	385.8	387.7	394.3	406.5	419.6	435.6	456.4	476.1	496.8	518.4	541.0
152.5°	396.3	397.5	403.3	414.0	426.4	440.9	460.1	477.6	496.1	515.5	535.7
155°	410.2	410.2	415.8	425.3	434.7	447.9	463.8	478.9	494.0	510.0	526.9
157.5°	422.6	422.4	427.0	435.1	443.4	453.4	467.0	479.8	491.5	504.4	518.6
160°	430.9	430.0	433.8	440.4	447.9	456.4	468.5	479.8	489.3	500.6	511.9
162.5°	437.7	436.8	440.5	446.4	452.4	459.4	470.0	479.1	487.0	496.1	505.9
165°	447.9	446.0	448.8	453.6	457.3	463.0	470.4	478.0	483.6	489.3	496.8
167.5°	454.7	453.7	455.4	458.1	460.7	464.2	470.4	475.7	478.3	482.7	488.0
170°	459.2	458.3	459.2	461.1	463.0	465.7	470.4	474.2	476.1	478.9	482.7
172.5°	462.2	460.5	461.5	463.3	464.4	465.7	469.7	472.7	473.1	474.4	477.4
175°	465.7	463.8	464.8	465.7	465.7	465.7	468.5	470.4	469.5	469.5	470.4
177.5°	467.4	465.9	465.9	466.7	465.9	465.9	467.4	468.2	466.7	466.7	467.4
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7



TEST NUMBER: P333282-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1294.9	1296.5	1298.1	1298.7	1298.5	1298.3	1298.1	1297.9
5°	1290.9	1293.2	1295.4	1296.5	1296.2	1295.9	1295.6	1295.3
7.5°	1280.2	1282.1	1284.1	1285.0	1284.7	1284.4	1284.1	1283.8
10°	1270.0	1272.0	1273.9	1274.8	1274.5	1274.2	1273.9	1273.7
12.5°	1257.9	1259.4	1260.9	1261.3	1260.7	1259.9	1259.1	1258.4
15°	1235.1	1236.8	1238.5	1238.8	1237.7	1236.5	1235.4	1234.3
17.5°	1206.1	1207.3	1208.6	1208.9	1208.2	1207.6	1206.9	1206.3
20°	1183.7	1184.6	1185.4	1185.9	1185.9	1185.9	1185.9	1185.9
22.5°	1160.8	1161.9	1162.9	1163.1	1162.4	1161.8	1161.1	1160.5
25°	1124.5	1125.7	1126.8	1126.6	1125.2	1123.8	1122.4	1121.0
27.5°	1082.3	1083.2	1083.9	1084.1	1083.5	1083.1	1082.5	1082.0
30°	1053.4	1054.0	1054.5	1054.7	1054.4	1054.1	1053.9	1053.6
32.5°	1026.0	1026.5	1027.1	1027.2	1026.9	1026.6	1026.3	1026.1
35°	981.5	982.3	983.2	983.5	983.5	983.5	983.5	983.5
37.5°	934.7	935.9	937.0	937.5	937.4	937.3	937.1	937.0
40°	903.1	904.3	905.4	906.3	906.8	907.4	908.0	908.5
42.5°	874.0	875.4	876.8	877.5	877.6	877.7	877.9	878.0
45°	827.2	829.2	831.1	832.3	832.5	832.8	833.1	833.4
47.5°	778.9	781.7	784.7	786.4	787.0	787.7	788.2	788.9
50°	746.8	749.9	753.0	755.0	755.8	756.7	757.5	758.4
52.5°	714.6	717.9	721.3	723.3	723.9	724.5	725.2	725.8
55°	664.0	667.1	670.2	672.4	673.5	674.7	675.8	676.9
57.5°	614.1	617.6	621.2	623.4	624.2	625.1	625.9	626.8
60°	579.8	584.0	588.2	590.8	591.6	592.5	593.3	594.2
62.5°	545.1	549.8	554.5	557.3	558.5	559.5	560.5	561.7
65°	493.2	497.5	501.7	504.4	505.6	506.7	507.8	509.0
67.5°	440.1	445.3	450.4	453.7	455.2	456.7	458.1	459.6
70°	403.9	409.3	414.6	418.2	419.9	421.6	423.3	425.0
72.5°	370.2	376.1	381.8	385.4	386.6	387.9	389.1	390.4
75°	319.2	324.9	330.5	334.0	335.5	336.9	338.3	339.7
77.5°	268.2	274.4	280.6	284.3	285.4	286.5	287.7	288.8
80°	237.6	243.8	250.1	253.7	254.9	256.0	257.1	258.3
82.5°	208.7	214.7	220.6	224.7	226.8	228.8	230.8	232.8
85°	168.9	175.1	181.3	185.6	187.8	190.1	192.4	194.6
87.5°	140.1	146.8	153.4	158.1	160.0	162.0	164.2	166.2
90°	134.3	141.8	149.2	155.3	157.3	159.3	162.2	164.2
92.5°	279.6	240.1	216.4	206.7	196.6	196.3	197.0	197.5
95°	781.8	645.1	535.6	460.6	395.8	369.5	364.0	350.9
97.5°	1105.9	1011.5	904.7	798.8	742.6	691.8	666.5	656.3
100°	1250.7	1210.5	1119.5	1025.5	962.2	896.2	863.1	849.7
102.5°	1296.6	1330.7	1289.9	1227.4	1159.6	1113.1	1077.0	1067.4
105°	1259.3	1393.8	1441.0	1434.4	1406.3	1377.2	1360.4	1351.0
107.5°	1147.0	1324.6	1436.4	1489.3	1506.3	1507.9	1503.4	1497.6
110°	1064.1	1248.3	1386.4	1470.0	1514.3	1534.2	1542.8	1544.7



TEST NUMBER: P333282-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	997.9	1172.8	1312.1	1409.9	1473.9	1506.5	1524.8	1533.6
115°	914.2	1065.1	1199.1	1305.0	1380.2	1427.0	1455.0	1469.0
117.5°	857.4	988.0	1103.8	1201.3	1276.6	1325.1	1353.2	1362.6
120°	826.2	944.0	1052.3	1138.3	1209.7	1256.5	1283.6	1292.9
122.5°	801.4	910.6	1007.4	1088.1	1151.9	1195.0	1222.1	1230.6
125°	765.6	866.1	952.5	1023.2	1077.3	1117.3	1139.4	1150.3
127.5°	729.0	822.7	903.3	969.7	1019.1	1054.8	1076.0	1081.9
130°	706.7	793.4	870.8	934.6	983.1	1015.6	1035.8	1042.8
132.5°	683.8	765.3	835.8	897.3	945.6	977.8	996.3	1003.9
135°	652.6	721.2	785.1	841.3	884.1	916.6	934.9	942.0
137.5°	626.7	682.5	735.9	783.7	821.9	851.3	868.0	875.3
140°	611.9	659.2	705.6	747.2	783.2	808.8	824.1	829.9
142.5°	599.2	639.2	679.2	715.3	746.0	767.8	782.3	787.4
145°	583.3	614.0	644.5	671.2	694.9	712.1	723.5	728.4
147.5°	569.4	593.6	616.4	636.1	654.5	667.8	674.3	676.6
150°	561.8	582.4	600.3	617.4	631.8	643.4	647.4	648.7
152.5°	554.2	572.6	589.0	602.2	614.2	623.2	627.1	628.0
155°	542.9	558.0	571.2	581.5	590.9	597.5	600.3	601.2
157.5°	531.6	544.0	554.2	562.3	569.7	575.0	577.7	577.5
160°	524.1	533.5	542.9	549.5	556.1	560.8	562.7	561.8
162.5°	515.9	524.4	532.3	538.2	543.3	547.2	547.6	547.4
165°	504.4	511.0	516.6	521.2	525.0	526.9	526.9	526.9
167.5°	493.4	497.8	502.1	505.5	507.4	509.1	508.3	508.1
170°	487.4	490.2	493.0	494.9	496.8	497.8	497.8	496.8
172.5°	480.6	483.4	485.5	486.6	487.0	488.7	487.2	486.3
175°	473.3	473.3	475.1	475.1	475.1	476.1	474.2	473.3
177.5°	468.2	468.9	468.9	468.9	468.2	468.9	466.7	466.7
180°	466.7	466.7	466.7	466.7	466.7	466.7	466.7	466.7

(END OF REPORT)