

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: P333325-830

Luminaire Tested: **S125DIP-S1270D1035U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333325-830  
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-S1270D1035U830-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8543.9 lumens  
Efficiency: N/A  
Efficacy: 127.9 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: General Diffuse

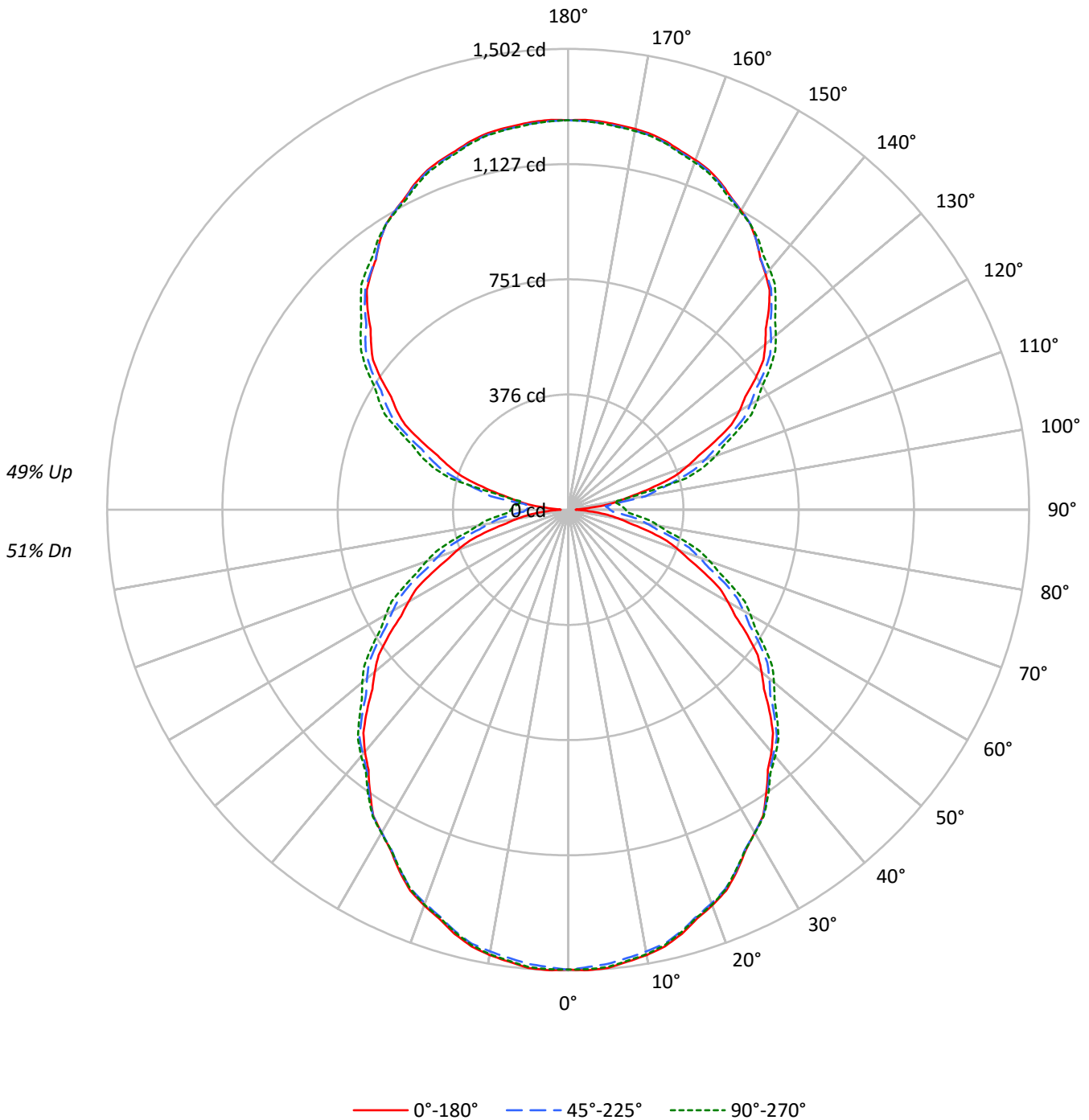
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333325-830

CATALOG NUMBER: S125DIP-S1270D1035U830-4F0-1E-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	107	107	107	107	99	99	99	99	84	84	84		70	70	70		57	57	57	51
1	97	93	88	85	90	86	82	79	72	70	67		60	58	57		49	48	47	41
2	88	80	74	69	81	74	69	64	63	59	55		53	49	47		43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46		46	42	39		38	35	33	29
4	73	62	54	48	67	58	50	45	49	43	39		41	37	33		34	31	28	24
5	67	55	47	41	62	51	44	38	44	38	34		37	32	29		30	27	24	21
6	62	50	41	35	57	46	39	33	39	34	29		33	29	25		27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26		30	26	22		25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23		28	23	20		23	19	17	14
9	49	37	29	24	46	34	28	23	30	24	20		25	21	18		21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18		23	19	16		20	16	14	12

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

	0°	45°	90°
0°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	1.7
10°-20°	402.4	4.7
20°-30°	598.4	7.0
30°-40°	708.8	8.3
40°-50°	732.8	8.6
50°-60°	675.1	7.9
60°-70°	545.7	6.4
70°-80°	365.5	4.3
80°-90°	192.2	2.2
90°-100°	152.5	1.8
100°-110°	362.8	4.2
110°-120°	568.2	6.7
120°-130°	691.6	8.1
130°-140°	724.9	8.5
140°-150°	670.8	7.9
150°-160°	540.5	6.3
160°-170°	349.6	4.1
170°-180°	120.6	1.4
0°-30°	1142.5	13.4
0°-40°	1851.2	21.7
0°-60°	3259.1	38.1
0°-90°	4362.5	51.1
90°-120°	1083.5	12.7
90°-150°	3170.8	37.1
90°-180°	4181.0	48.9
0°-180°	8543.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	24	79	136	173	187	18
95°	73	107	122	158	170	83
105°	290	318	361	390	400	307
115°	528	545	582	604	608	524
125°	745	751	779	798	803	665
135°	924	929	937	953	956	712
145°	1070	1070	1070	1078	1079	668
155°	1176	1171	1173	1175	1168	542
165°	1241	1236	1237	1242	1235	351
175°	1270	1264	1265	1271	1264	121
180°	1270	1270	1270	1270	1270	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	46.0	56.8	67.6	78.4	89.2	100.3	111.7	123.1	134.5	145.8	153.5
90°	24.4	36.6	48.7	60.8	73.0	85.3	97.8	110.5	123.0	135.5	144.1
92.5°	35.6	44.1	52.7	61.2	69.7	80.2	92.8	105.6	118.2	130.8	139.1
95°	72.8	80.6	88.5	96.3	104.2	109.7	112.8	116.0	119.1	122.3	130.5
97.5°	129.3	138.1	146.8	155.6	164.4	166.3	161.3	156.3	151.3	146.2	147.2
100°	173.3	180.8	188.3	195.8	203.3	212.6	223.9	235.3	246.5	257.8	233.5
102.5°	218.1	225.2	232.3	239.5	246.6	255.5	266.2	276.9	287.6	298.3	299.0
105°	289.9	296.0	302.0	308.1	314.1	322.1	331.9	341.7	351.5	361.3	367.8
107.5°	364.6	369.0	373.4	377.9	382.3	389.5	399.3	409.1	419.0	428.8	435.3
110°	413.1	417.0	420.9	424.8	428.8	435.5	445.1	454.6	464.2	473.7	479.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	459.8	463.4	467.0	470.7	474.3	480.7	489.8	499.0	508.1	517.3	522.4
115°	528.3	531.6	535.0	538.3	541.6	547.6	556.4	565.1	573.7	582.5	587.5
117.5°	599.3	600.8	602.2	603.7	605.1	610.3	619.2	627.9	636.8	645.6	650.1
120°	644.5	645.3	646.0	646.8	647.5	652.1	660.2	668.3	676.5	684.6	689.7
122.5°	683.2	684.5	685.7	686.9	688.2	692.6	700.1	707.7	715.2	722.7	727.6
125°	744.6	745.7	746.9	748.1	749.2	753.0	759.6	766.1	772.6	779.1	783.5
127.5°	802.1	802.8	803.5	804.3	804.9	807.9	813.1	818.4	823.6	828.9	833.2
130°	838.2	839.0	839.6	840.4	841.1	843.9	848.7	853.4	858.2	863.0	867.0
132.5°	873.2	874.3	875.4	876.7	877.8	879.9	883.0	886.0	889.1	892.1	896.6
135°	924.3	925.2	926.1	927.1	928.0	929.3	931.2	933.1	935.0	936.9	940.7
137.5°	971.2	972.0	972.9	973.7	974.5	975.3	976.0	976.8	977.5	978.3	982.2
140°	1000.9	1001.4	1001.7	1002.2	1002.6	1002.9	1003.0	1003.1	1003.2	1003.3	1007.3
142.5°	1028.8	1028.8	1028.8	1028.8	1028.7	1028.9	1029.3	1029.6	1030.0	1030.3	1033.5
145°	1069.6	1069.7	1069.8	1069.9	1070.0	1070.1	1070.1	1070.1	1070.1	1070.1	1071.9
147.5°	1103.9	1103.8	1103.7	1103.6	1103.5	1103.6	1103.9	1104.2	1104.4	1104.7	1105.4
150°	1126.5	1126.1	1125.7	1125.2	1124.8	1124.8	1125.2	1125.7	1126.1	1126.5	1126.9
152.5°	1148.3	1147.5	1146.5	1145.6	1144.6	1144.4	1144.8	1145.2	1145.7	1146.0	1146.5
155°	1176.4	1175.2	1173.8	1172.6	1171.4	1170.9	1171.4	1171.8	1172.1	1172.6	1173.3
157.5°	1198.0	1197.2	1196.6	1195.8	1195.0	1194.7	1194.7	1194.8	1194.8	1194.9	1195.5
160°	1213.1	1211.8	1210.6	1209.3	1208.1	1207.5	1207.8	1208.0	1208.2	1208.3	1209.2
162.5°	1225.1	1223.9	1222.6	1221.3	1220.1	1219.6	1219.7	1220.0	1220.2	1220.4	1221.6
165°	1241.3	1240.0	1238.8	1237.6	1236.3	1235.8	1236.0	1236.1	1236.4	1236.6	1237.8
167.5°	1253.4	1252.1	1250.8	1249.4	1248.2	1247.6	1247.8	1248.0	1248.2	1248.5	1250.0
170°	1260.1	1258.7	1257.2	1255.7	1254.2	1253.7	1253.9	1254.1	1254.2	1254.5	1256.1
172.5°	1264.6	1263.2	1261.7	1260.3	1258.8	1258.3	1258.6	1259.0	1259.3	1259.7	1261.2
175°	1269.5	1268.3	1267.1	1265.7	1264.5	1264.0	1264.2	1264.4	1264.6	1264.8	1266.5
177.5°	1271.8	1270.8	1269.8	1268.8	1267.8	1267.3	1267.5	1267.7	1267.9	1268.0	1269.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	161.3	169.0	176.7	181.8	184.2	186.6	189.1	191.4
90°	152.7	161.3	169.8	175.5	178.4	181.3	184.3	187.2
92.5°	147.4	155.7	164.0	169.5	172.0	174.7	177.2	179.8
95°	138.8	147.0	155.2	160.5	162.8	165.0	167.4	169.7
97.5°	148.2	149.1	150.1	151.7	153.9	156.1	158.3	160.5
100°	209.2	184.9	160.6	149.0	150.1	151.3	152.4	153.4
102.5°	299.6	300.4	301.0	295.3	283.0	270.8	258.5	246.3
105°	374.4	380.9	387.4	391.7	393.8	395.9	397.9	400.0
107.5°	441.8	448.3	454.8	458.7	460.1	461.6	462.9	464.3
110°	484.9	490.5	496.1	500.1	502.6	505.1	507.6	510.1





TEST NUMBER: P333325-830

CATALOG NUMBER: S125DIP-S1270D1035U830-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	527.5	532.6	537.8	541.4	543.4	545.4	547.3	549.3
115°	592.5	597.6	602.6	605.5	606.1	606.9	607.6	608.3
117.5°	654.5	659.0	663.5	666.6	668.2	669.9	671.6	673.3
120°	694.8	699.9	705.1	708.1	709.1	709.9	710.9	711.8
122.5°	732.5	737.4	742.3	745.1	745.8	746.6	747.3	748.1
125°	788.0	792.3	796.7	799.4	800.4	801.4	802.4	803.4
127.5°	837.6	842.0	846.3	848.7	849.0	849.4	849.7	850.1
130°	870.8	874.8	878.7	881.0	881.6	882.2	882.8	883.4
132.5°	901.1	905.5	909.9	912.3	912.7	912.9	913.3	913.6
135°	944.5	948.3	952.2	954.2	954.6	955.0	955.4	955.7
137.5°	986.1	990.0	994.0	996.1	996.3	996.6	996.7	996.9
140°	1011.3	1015.4	1019.4	1021.4	1021.4	1021.5	1021.5	1021.6
142.5°	1036.6	1039.8	1042.9	1044.5	1044.6	1044.6	1044.7	1044.7
145°	1073.7	1075.5	1077.4	1078.4	1078.4	1078.5	1078.5	1078.6
147.5°	1106.2	1107.0	1107.8	1107.7	1106.7	1105.9	1104.9	1104.0
150°	1127.4	1127.8	1128.1	1127.7	1126.3	1125.0	1123.7	1122.3
152.5°	1146.9	1147.4	1147.7	1147.3	1145.8	1144.3	1142.9	1141.5
155°	1173.8	1174.5	1175.2	1174.6	1172.9	1171.2	1169.6	1167.9
157.5°	1196.2	1196.8	1197.5	1197.0	1195.3	1193.6	1191.9	1190.3
160°	1210.0	1210.9	1211.7	1211.3	1209.7	1208.0	1206.3	1204.6
162.5°	1222.8	1223.9	1225.1	1224.7	1222.9	1221.1	1219.3	1217.4
165°	1239.1	1240.4	1241.6	1241.4	1239.7	1238.0	1236.4	1234.7
167.5°	1251.5	1253.0	1254.5	1254.3	1252.5	1250.6	1248.7	1246.8
170°	1257.8	1259.5	1261.2	1261.0	1259.1	1257.4	1255.5	1253.6
172.5°	1262.7	1264.2	1265.7	1265.6	1263.7	1261.8	1259.9	1258.1
175°	1268.2	1269.9	1271.5	1271.4	1269.5	1267.6	1265.7	1263.9
177.5°	1270.4	1271.6	1272.7	1272.6	1271.3	1270.0	1268.7	1267.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5

(END OF REPORT)