

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: P333327-830

Luminaire Tested: **S125DIP-S1270D1035U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333327-830  
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-S1270D1035U830-4F0-1E-UDD-D4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 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: 8145.1 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

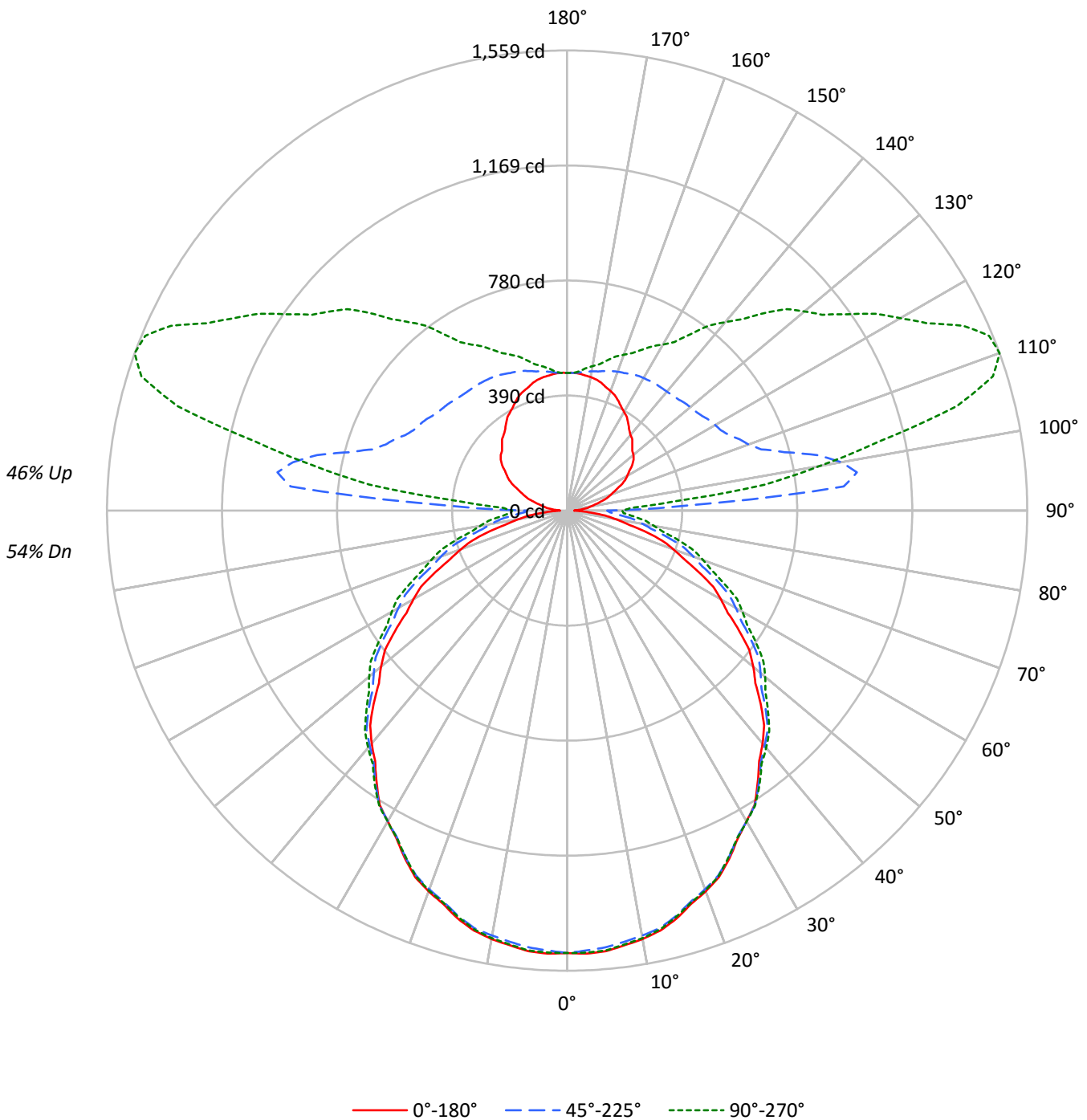
Input Watts (W): 66.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	54
1	98	93	89	85	90	86	83	79	74	71	68	62	60	58	51	50	49	43
2	89	81	74	69	82	75	69	64	64	60	56	54	51	48	45	42	40	36
3	81	71	63	57	74	66	59	54	56	51	47	47	44	40	39	36	34	30
4	74	63	54	48	68	58	51	45	50	44	40	42	38	34	35	32	29	25
5	68	56	47	41	62	52	44	39	44	39	34	38	33	30	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	30	34	29	26	28	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	22	20	17
8	53	41	33	27	49	38	31	26	33	27	23	28	24	20	24	20	17	15
9	50	37	30	24	46	35	28	23	30	25	21	26	21	18	22	18	16	14
10	46	34	27	22	43	32	25	21	28	22	19	24	20	16	20	17	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	4.9
20°-30°	598.4	7.3
30°-40°	708.8	8.7
40°-50°	732.8	9.0
50°-60°	675.1	8.3
60°-70°	545.7	6.7
70°-80°	365.5	4.5
80°-90°	192.1	2.4
90°-100°	444.6	5.5
100°-110°	805.6	9.9
110°-120°	735.0	9.0
120°-130°	582.9	7.2
130°-140°	456.9	5.6
140°-150°	337.6	4.1
150°-160°	235.8	2.9
160°-170°	139.0	1.7
170°-180°	45.2	0.6
0°-30°	1142.5	14.0
0°-40°	1851.2	22.7
0°-60°	3259.1	40.0
0°-90°	4362.4	53.6
90°-120°	1985.2	24.4
90°-150°	3362.7	41.3
90°-180°	3783.0	46.4
0°-180°	8145.1	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	186	17
95°	50	150	941	517	371	48
105°	120	187	763	1452	1367	126
115°	199	250	605	1263	1481	196
125°	269	315	559	995	1159	239
135°	312	373	533	817	947	242
145°	361	412	523	659	730	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	



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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	56.6	67.5	78.3	89.2	100.3	111.6	123.1	134.4	145.8	153.5
90°	24.4	35.8	48.2	60.5	72.9	85.5	97.6	110.6	122.5	135.5	144.0
92.5°	32.6	44.8	62.3	83.7	109.5	147.5	210.3	307.8	412.6	419.1	368.6
95°	50.1	59.6	75.6	94.4	123.7	175.8	287.6	505.7	776.5	940.9	930.2
97.5°	68.9	77.7	90.6	108.6	134.9	174.5	251.8	414.2	696.6	990.2	1139.0
100°	82.0	90.8	101.4	118.6	143.4	180.2	245.2	378.0	625.6	943.7	1185.8
102.5°	96.7	104.2	113.5	130.9	153.6	189.4	248.1	361.0	571.5	867.5	1149.2
105°	119.5	124.8	134.7	149.3	169.7	203.5	254.7	348.2	515.1	763.0	1039.5
107.5°	141.9	148.2	157.1	169.3	189.4	220.0	269.5	350.6	488.1	689.8	929.3
110°	158.0	163.8	171.4	183.9	201.9	232.9	280.6	354.7	477.7	654.3	865.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.3	180.3	186.5	198.1	215.4	245.1	291.1	361.1	473.3	631.5	817.0
115°	198.9	203.0	208.1	219.0	235.4	264.2	307.6	370.6	469.4	604.9	762.3
117.5°	220.0	224.3	228.8	238.8	256.3	283.8	324.8	382.5	469.0	588.2	726.5
120°	235.1	238.8	243.6	253.1	270.0	297.7	338.2	390.9	470.9	579.1	706.0
122.5°	249.7	252.2	255.7	264.6	282.6	309.9	350.2	400.3	471.6	570.6	687.5
125°	269.4	270.9	275.2	283.4	301.0	328.6	366.1	413.1	474.2	558.8	661.9
127.5°	283.5	286.0	291.7	302.1	320.7	347.7	383.0	425.7	478.6	549.8	637.8
130°	293.2	295.8	302.9	314.9	334.3	360.9	394.6	435.0	481.8	544.8	622.7
132.5°	299.6	303.1	312.1	325.7	346.2	372.4	405.1	442.1	485.0	540.1	609.0
135°	311.6	315.0	325.9	340.7	360.1	386.5	417.9	451.3	488.4	533.0	590.9
137.5°	326.7	329.2	339.5	354.3	373.4	400.0	427.6	458.5	492.8	528.9	575.6
140°	334.5	337.3	348.6	363.7	381.6	407.2	434.8	463.4	493.8	526.1	567.3
142.5°	345.1	346.9	357.2	371.9	388.8	412.6	438.5	465.2	493.9	524.5	560.7
145°	360.9	362.4	371.6	384.4	401.0	422.4	447.0	470.4	495.9	523.1	553.0
147.5°	376.0	377.1	385.2	397.5	412.1	431.1	452.6	473.8	496.8	520.7	546.1
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



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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	168.9	176.6	181.9	184.2	186.5	189.0	191.2
90°	152.5	160.9	169.4	176.2	178.4	180.7	184.0	186.2
92.5°	297.0	258.5	235.9	226.7	217.0	217.0	217.9	218.8
95°	798.1	662.3	553.7	479.5	415.0	389.0	383.8	371.0
97.5°	1121.2	1027.7	921.9	816.5	760.5	710.1	685.0	675.2
100°	1265.1	1225.9	1135.8	1042.4	979.4	913.6	880.7	867.6
102.5°	1310.3	1345.3	1305.4	1243.5	1176.0	1129.7	1093.9	1084.6
105°	1271.9	1407.3	1455.3	1449.3	1421.5	1392.8	1376.2	1367.3
107.5°	1158.6	1337.1	1449.8	1503.2	1520.5	1522.3	1518.2	1512.6
110°	1075.1	1260.1	1398.9	1483.2	1527.8	1547.9	1556.8	1559.2





TEST NUMBER: P333327-830

CATALOG NUMBER: S125DIP-S1270D1035U830-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1008.1	1183.8	1323.9	1422.3	1486.5	1519.5	1538.1	1547.2
115°	923.4	1075.2	1209.9	1316.4	1391.8	1438.9	1467.2	1481.4
117.5°	865.6	996.9	1113.5	1211.4	1287.0	1336.0	1364.3	1374.1
120°	833.9	952.3	1061.4	1147.9	1219.6	1266.6	1294.0	1303.4
122.5°	808.3	918.2	1015.7	1096.8	1160.9	1204.3	1231.6	1240.4
125°	771.6	872.8	959.9	1031.0	1085.3	1125.6	1147.9	1159.0
127.5°	734.0	828.3	909.6	976.4	1026.1	1062.0	1083.5	1089.5
130°	711.1	798.4	876.4	940.7	989.3	1022.0	1042.5	1049.7
132.5°	687.5	769.7	840.8	902.7	951.1	983.5	1002.2	1010.0
135°	655.3	724.5	789.0	845.6	888.6	921.2	939.8	947.2
137.5°	628.6	684.9	738.9	787.0	825.4	854.9	871.9	879.3
140°	613.2	661.1	707.9	749.9	786.0	811.8	827.2	833.2
142.5°	600.0	640.6	680.9	717.4	748.2	770.2	784.9	790.1
145°	583.8	614.6	645.5	672.3	696.2	713.5	725.1	730.2
147.5°	569.6	593.8	616.7	636.4	654.9	668.3	674.9	677.2
150°	561.8	582.4	600.3	617.4	631.9	643.5	647.5	648.8
152.5°	554.2	572.6	589.0	602.2	614.2	623.2	627.1	628.1
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)