

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: P333335-830

Luminaire Tested: **S125DIP-S1270D1205U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333335-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DIP-S1270D1205U830-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8573.1 lumens  
Efficiency: N/A  
Efficacy: 119.6 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

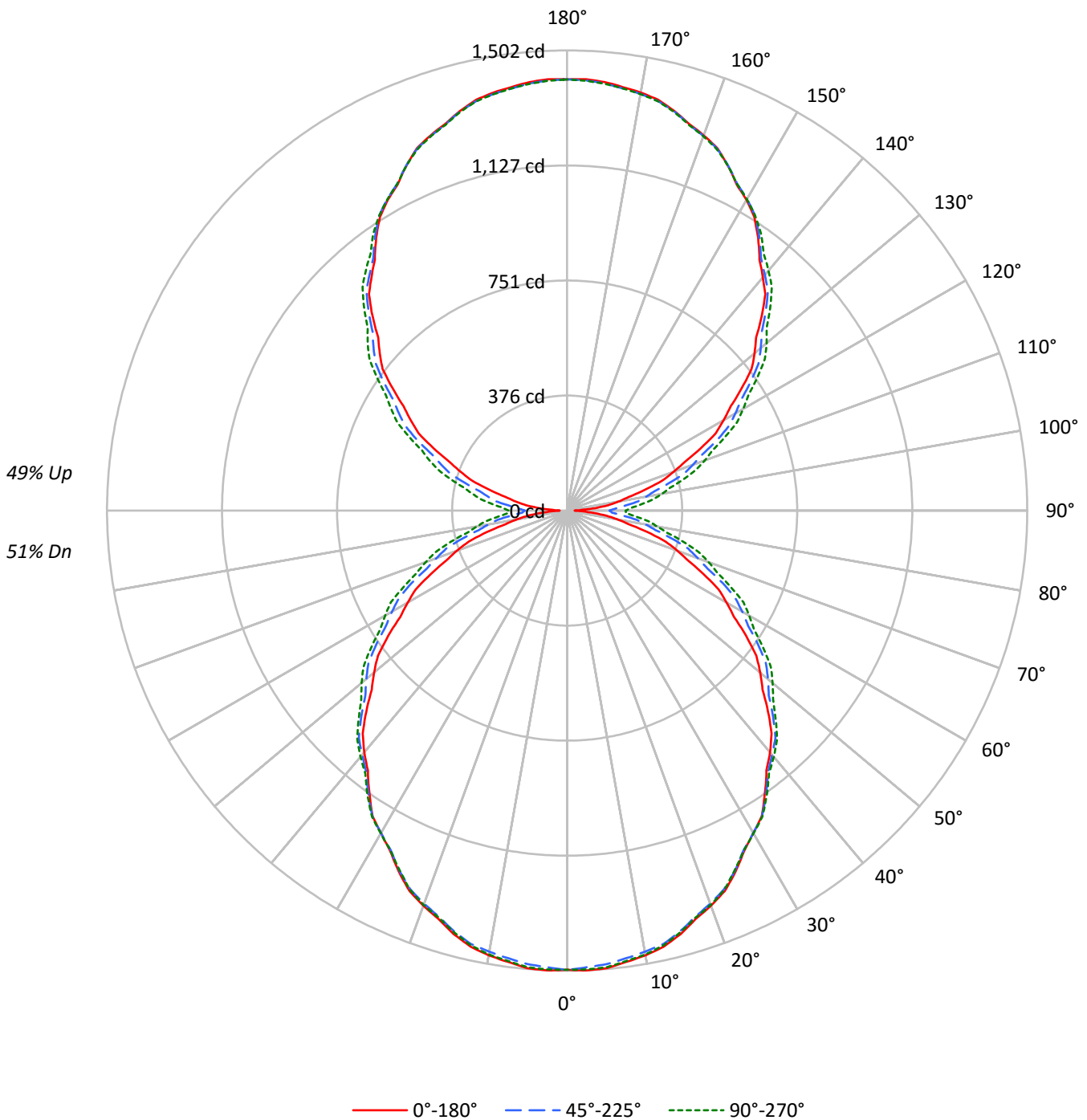
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	68	81	74	69	64	63	59	55		52	49	47		43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46		46	42	39		38	35	33	28
4	73	62	54	48	67	58	50	45	49	43	39		41	37	33		34	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33		37	32	29		30	27	24	21
6	62	50	41	35	57	46	39	33	39	33	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	40	33	27	49	38	31	26	32	27	23		27	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	20	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	8.5
50°-60°	675.1	7.9
60°-70°	545.7	6.4
70°-80°	365.5	4.3
80°-90°	192.6	2.2
90°-100°	200.6	2.3
100°-110°	356.8	4.2
110°-120°	524.1	6.1
120°-130°	650.4	7.6
130°-140°	708.3	8.3
140°-150°	684.1	8.0
150°-160°	572.4	6.7
160°-170°	380.5	4.4
170°-180°	133.1	1.6
0°-30°	1142.5	13.3
0°-40°	1851.2	21.6
0°-60°	3259.1	38.0
0°-90°	4362.9	50.9
90°-120°	1081.4	12.6
90°-150°	3124.2	36.4
90°-180°	4210.0	49.1
0°-180°	8573.1	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°	25	80	138	176	191	20
95°	90	132	192	230	244	91
105°	263	293	343	377	392	281
115°	481	497	536	560	569	475
125°	695	701	730	751	758	622
135°	899	904	915	934	938	693
145°	1087	1090	1093	1100	1103	679
155°	1242	1242	1243	1247	1242	572
165°	1350	1348	1349	1353	1347	381
175°	1404	1400	1400	1406	1399	133
180°	1407	1407	1407	1407	1407	



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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°	46.1	56.9	67.8	78.6	89.4	100.6	112.0	123.5	134.9	146.4	154.1
90°	24.6	37.0	49.4	61.8	74.2	86.8	99.6	112.4	125.3	138.0	146.8
92.5°	47.7	58.7	69.7	80.8	91.8	104.1	117.4	130.9	144.4	157.9	166.7
95°	90.3	99.2	108.3	117.3	126.2	137.4	151.0	164.6	178.0	191.6	200.5
97.5°	135.6	143.5	151.3	159.1	167.0	178.0	192.0	206.0	220.2	234.2	242.7
100°	169.5	176.3	183.2	190.1	196.9	207.2	220.7	234.4	248.0	261.6	270.7
102.5°	206.0	213.3	220.6	227.9	235.3	244.8	256.6	268.3	280.2	292.0	301.0
105°	263.0	269.4	275.8	282.3	288.7	297.6	308.9	320.1	331.3	342.6	350.6
107.5°	326.0	331.7	337.3	343.0	348.6	356.8	367.3	377.8	388.3	398.9	406.0
110°	369.6	374.7	379.8	384.9	390.1	397.6	407.5	417.4	427.3	437.1	444.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	415.1	418.9	422.6	426.4	430.2	437.0	446.8	456.6	466.4	476.2	482.5
115°	480.9	484.2	487.4	490.7	493.9	500.0	509.0	518.0	527.0	535.9	541.6
117.5°	546.9	548.8	550.7	552.7	554.7	559.9	568.4	576.8	585.2	593.7	599.5
120°	588.9	591.2	593.3	595.5	597.8	602.7	610.5	618.2	625.9	633.8	639.2
122.5°	633.3	634.2	635.1	636.0	636.9	641.3	649.2	657.0	665.0	672.8	678.0
125°	694.8	696.0	697.1	698.2	699.4	703.3	710.1	716.8	723.6	730.4	735.1
127.5°	759.0	759.6	760.1	760.5	761.1	764.1	769.8	775.4	781.1	786.7	791.4
130°	798.5	799.4	800.3	801.2	802.0	805.0	810.1	815.1	820.2	825.3	829.6
132.5°	836.7	838.7	840.6	842.5	844.4	847.2	850.6	854.0	857.4	860.8	865.2
135°	898.9	900.0	901.2	902.3	903.4	905.2	907.8	910.3	912.9	915.4	919.6
137.5°	957.2	958.5	959.6	960.7	961.9	963.3	965.0	966.6	968.3	969.9	974.0
140°	993.8	995.0	996.3	997.4	998.6	999.8	1000.9	1001.9	1003.0	1004.0	1008.1
142.5°	1031.4	1032.3	1033.0	1033.8	1034.5	1035.4	1036.4	1037.4	1038.4	1039.3	1042.7
145°	1086.8	1087.5	1088.2	1088.8	1089.5	1090.1	1090.9	1091.7	1092.3	1093.1	1094.8
147.5°	1136.7	1137.2	1137.7	1138.3	1138.8	1139.3	1140.0	1140.6	1141.1	1141.7	1142.8
150°	1170.8	1170.6	1170.4	1170.2	1169.9	1170.3	1171.2	1172.1	1173.2	1174.1	1174.1
152.5°	1198.9	1199.2	1199.6	1200.0	1200.2	1200.6	1201.0	1201.4	1201.8	1202.2	1202.8
155°	1242.1	1242.1	1242.1	1242.1	1242.1	1242.2	1242.5	1242.6	1242.9	1243.1	1244.2
157.5°	1280.6	1280.1	1279.5	1279.0	1278.5	1278.3	1278.6	1278.8	1279.0	1279.3	1280.3
160°	1303.3	1302.7	1301.9	1301.2	1300.4	1300.2	1300.4	1300.7	1301.0	1301.2	1302.1
162.5°	1323.5	1323.0	1322.5	1321.9	1321.4	1321.2	1321.2	1321.3	1321.3	1321.4	1322.5
165°	1350.5	1350.0	1349.5	1349.1	1348.5	1348.4	1348.7	1348.9	1349.2	1349.3	1350.4
167.5°	1373.3	1372.2	1371.3	1370.4	1369.3	1368.9	1368.9	1368.9	1368.9	1368.9	1370.4
170°	1385.5	1384.6	1383.6	1382.6	1381.7	1381.1	1381.1	1381.1	1381.1	1381.1	1382.6
172.5°	1394.3	1393.4	1392.3	1391.4	1390.4	1389.9	1389.9	1389.9	1389.9	1389.9	1391.4
175°	1404.1	1403.2	1402.2	1401.2	1400.2	1399.8	1399.8	1399.8	1399.8	1399.8	1401.2
177.5°	1409.2	1408.4	1407.6	1406.8	1406.1	1405.6	1405.4	1405.2	1405.0	1404.8	1406.0
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4



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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°	161.8	169.6	177.4	182.5	184.9	187.3	189.7	192.2
90°	155.5	164.2	173.0	178.8	181.8	184.8	187.8	190.9
92.5°	175.6	184.5	193.3	199.2	202.0	204.7	207.5	210.4
95°	209.4	218.3	227.2	233.0	235.7	238.6	241.3	244.1
97.5°	251.1	259.6	268.1	273.5	276.1	278.6	281.1	283.6
100°	279.7	288.8	297.8	303.6	306.0	308.5	310.9	313.4
102.5°	309.9	319.0	327.9	333.8	336.4	339.0	341.7	344.3
105°	358.5	366.6	374.6	380.0	383.0	386.1	389.1	392.1
107.5°	413.2	420.5	427.6	432.3	434.2	436.2	438.2	440.2
110°	450.9	457.9	464.9	469.3	471.4	473.4	475.4	477.5





TEST NUMBER: P333335-830

CATALOG NUMBER: S125DIP-S1270D1205U830-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	488.8	495.0	501.3	505.4	507.3	509.1	511.0	512.7
115°	547.2	552.9	558.5	562.1	563.9	565.6	567.3	569.0
117.5°	605.2	611.0	616.7	620.2	621.4	622.7	624.0	625.2
120°	644.8	650.4	655.9	659.2	660.2	661.2	662.1	663.2
122.5°	683.1	688.2	693.2	696.4	697.6	698.7	699.9	701.1
125°	739.9	744.6	749.3	752.4	753.8	755.2	756.6	758.0
127.5°	795.9	800.5	805.1	808.0	809.5	810.9	812.3	813.7
130°	833.9	838.2	842.5	845.3	846.5	847.6	848.8	849.9
132.5°	869.5	873.8	878.2	880.7	881.4	882.0	882.8	883.4
135°	923.9	928.1	932.4	934.8	935.5	936.1	936.8	937.5
137.5°	978.2	982.3	986.5	988.5	988.6	988.7	988.8	988.9
140°	1012.2	1016.2	1020.3	1022.5	1022.5	1022.6	1022.7	1022.8
142.5°	1046.0	1049.4	1052.8	1054.5	1054.6	1054.7	1054.8	1054.9
145°	1096.4	1098.0	1099.7	1100.7	1101.3	1101.8	1102.5	1103.1
147.5°	1144.0	1145.0	1146.1	1146.1	1145.1	1144.1	1142.9	1141.9
150°	1174.1	1174.1	1174.1	1174.0	1173.9	1173.7	1173.6	1173.5
152.5°	1203.3	1203.9	1204.5	1204.4	1203.6	1202.8	1201.9	1201.2
155°	1245.1	1246.0	1247.1	1246.9	1245.7	1244.4	1243.3	1242.1
157.5°	1281.2	1282.2	1283.2	1282.9	1281.3	1279.7	1278.1	1276.5
160°	1303.2	1304.1	1305.0	1305.0	1303.7	1302.5	1301.3	1300.1
162.5°	1323.7	1324.8	1326.1	1325.9	1324.5	1323.0	1321.6	1320.2
165°	1351.3	1352.3	1353.3	1353.0	1351.6	1350.1	1348.7	1347.2
167.5°	1371.8	1373.3	1374.7	1374.7	1373.2	1371.7	1370.2	1368.7
170°	1384.0	1385.5	1387.0	1386.9	1385.2	1383.5	1381.8	1380.1
172.5°	1392.8	1394.3	1395.7	1395.7	1394.2	1392.7	1391.2	1389.7
175°	1402.7	1404.1	1405.6	1405.5	1403.8	1402.1	1400.3	1398.6
177.5°	1407.1	1408.3	1409.5	1409.4	1408.1	1406.7	1405.3	1403.9
180°	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4	1407.4

(END OF REPORT)