

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: P333334-830

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333334-830
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-S1270D1205U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9183.5 lumens
Efficiency: N/A
Efficacy: 128.1 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

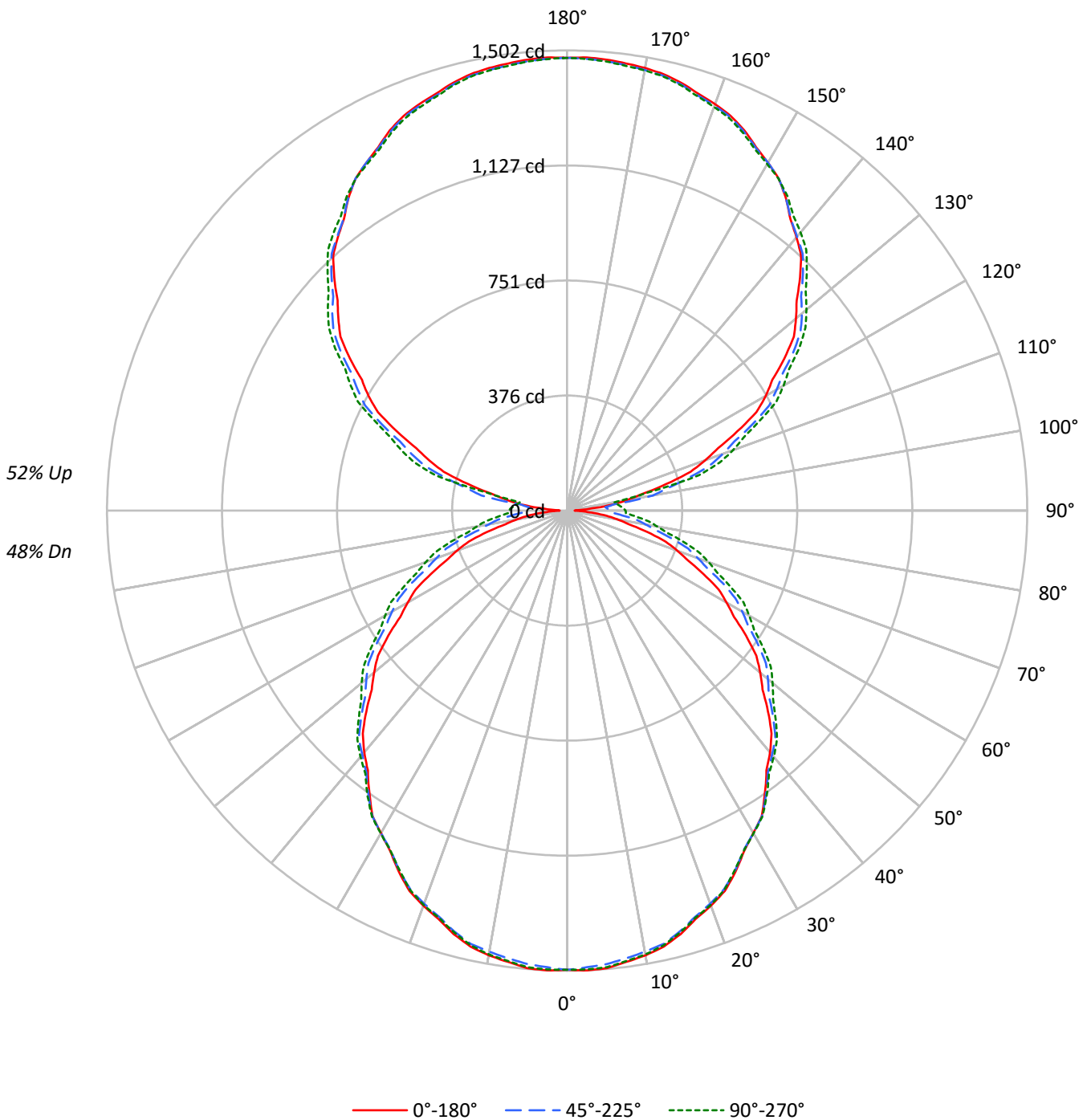
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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CATALOG NUMBER: S125DIP-S1270D1205U830-4F0-1E-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	98	98	98	98	82	82	82		67	67	67		54	54	54	48
1	97	92	88	84	88	85	81	78	71	68	66		58	56	55		46	45	44	39
2	88	80	73	68	80	73	68	63	62	57	54		51	48	45		40	38	37	32
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38		40	35	32		32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33		35	31	28		28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28		32	28	24		26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	25	21		24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22		26	22	19		22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20		24	20	17		20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18		22	18	15		18	15	13	11

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	1.5
10°-20°	402.4	4.4
20°-30°	598.4	6.5
30°-40°	708.8	7.7
40°-50°	732.8	8.0
50°-60°	675.1	7.4
60°-70°	545.7	5.9
70°-80°	365.5	4.0
80°-90°	192.6	2.1
90°-100°	160.0	1.7
100°-110°	409.4	4.5
110°-120°	652.8	7.1
120°-130°	800.2	8.7
130°-140°	841.6	9.2
140°-150°	780.4	8.5
150°-160°	629.1	6.9
160°-170°	406.9	4.4
170°-180°	140.3	1.5
0°-30°	1142.5	12.4
0°-40°	1851.2	20.2
0°-60°	3259.1	35.5
0°-90°	4362.9	47.5
90°-120°	1222.2	13.3
90°-150°	3644.3	39.7
90°-180°	4821.0	52.5
0°-180°	9183.5	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	18
95°	82	115	125	161	173	95
105°	335	364	407	436	446	355
115°	614	631	668	690	693	608
125°	866	873	901	920	924	773
135°	1075	1081	1088	1104	1106	829
145°	1245	1245	1246	1253	1253	778
155°	1369	1363	1365	1368	1359	631
165°	1445	1439	1439	1445	1437	408
175°	1478	1472	1472	1480	1471	141
180°	1478	1478	1478	1478	1478	



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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°	38.0	46.4	54.7	63.0	71.3	81.8	94.7	107.5	120.5	133.4	141.8
95°	81.5	89.3	97.1	104.8	112.5	117.3	119.2	121.1	122.9	124.8	133.2
97.5°	147.7	156.7	165.6	174.6	183.5	184.2	176.6	169.0	161.5	153.8	153.8
100°	199.1	206.7	214.2	221.9	229.4	238.9	250.3	261.8	273.2	284.6	255.2
102.5°	251.4	258.6	265.9	273.1	280.4	289.5	300.2	310.9	321.8	332.5	332.2
105°	335.3	341.5	347.7	353.8	360.1	368.1	377.9	387.7	397.5	407.3	413.8
107.5°	422.4	426.9	431.3	435.7	440.3	447.4	457.3	467.2	477.0	486.9	493.5
110°	479.1	483.1	486.9	490.9	494.8	501.5	511.2	520.8	530.5	540.1	545.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	533.5	537.2	540.9	544.6	548.4	554.8	563.9	573.2	582.3	591.4	596.5
115°	613.5	617.0	620.5	624.0	627.5	633.6	642.3	651.1	659.8	668.5	673.4
117.5°	696.4	697.9	699.3	700.7	702.2	707.4	716.3	725.3	734.2	743.2	747.5
120°	748.9	749.7	750.5	751.1	751.9	756.4	764.6	772.9	781.1	789.4	794.4
122.5°	794.2	795.6	797.0	798.3	799.7	804.2	811.8	819.4	827.0	834.6	839.4
125°	865.7	867.1	868.6	869.9	871.3	875.2	881.7	888.3	894.8	901.4	905.6
127.5°	932.8	933.8	934.6	935.6	936.4	939.5	944.7	949.9	955.1	960.4	964.6
130°	975.0	975.8	976.8	977.6	978.5	981.4	986.2	991.0	995.8	1000.6	1004.5
132.5°	1015.9	1017.2	1018.5	1019.8	1021.2	1023.4	1026.3	1029.4	1032.4	1035.4	1039.8
135°	1075.3	1076.5	1077.6	1078.7	1079.9	1081.4	1083.2	1085.0	1086.8	1088.5	1092.3
137.5°	1130.0	1131.1	1132.1	1133.0	1134.1	1134.9	1135.6	1136.2	1136.9	1137.6	1141.5
140°	1164.8	1165.3	1165.7	1166.2	1166.8	1167.1	1167.2	1167.2	1167.2	1167.3	1171.4
142.5°	1197.2	1197.2	1197.3	1197.3	1197.3	1197.6	1198.0	1198.3	1198.8	1199.2	1202.3
145°	1244.7	1244.9	1245.1	1245.2	1245.4	1245.5	1245.5	1245.5	1245.5	1245.5	1247.4
147.5°	1284.9	1284.8	1284.7	1284.6	1284.5	1284.6	1284.9	1285.2	1285.5	1285.8	1286.6
150°	1311.2	1310.7	1310.2	1309.8	1309.3	1309.3	1309.8	1310.2	1310.7	1311.2	1311.6
152.5°	1336.6	1335.6	1334.5	1333.4	1332.3	1332.0	1332.6	1333.0	1333.5	1334.0	1334.5
155°	1369.2	1367.8	1366.3	1364.9	1363.4	1362.9	1363.4	1363.9	1364.4	1364.9	1365.6
157.5°	1394.5	1393.5	1392.7	1391.9	1390.9	1390.5	1390.6	1390.6	1390.7	1390.7	1391.5
160°	1412.0	1410.5	1409.1	1407.6	1406.2	1405.5	1405.8	1406.0	1406.3	1406.5	1407.5
162.5°	1426.0	1424.6	1423.1	1421.6	1420.1	1419.6	1419.8	1420.0	1420.3	1420.5	1421.9
165°	1444.8	1443.4	1441.9	1440.5	1439.0	1438.4	1438.6	1438.9	1439.1	1439.4	1440.9
167.5°	1458.9	1457.4	1455.9	1454.3	1452.8	1452.2	1452.5	1452.6	1452.9	1453.2	1454.9
170°	1466.8	1465.1	1463.3	1461.6	1459.9	1459.2	1459.4	1459.7	1459.9	1460.2	1462.2
172.5°	1472.0	1470.3	1468.6	1466.9	1465.2	1464.5	1465.0	1465.5	1465.8	1466.3	1468.1
175°	1477.7	1476.2	1474.8	1473.3	1471.9	1471.2	1471.5	1471.8	1472.0	1472.3	1474.1
177.5°	1480.4	1479.1	1478.0	1476.9	1475.6	1475.2	1475.4	1475.6	1475.7	1475.9	1477.3
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7



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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°	161.8	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°	150.2	158.7	167.2	172.8	175.4	178.0	180.6	183.2
95°	141.6	150.1	158.4	163.7	166.1	168.3	170.6	172.9
97.5°	153.8	153.8	153.8	154.9	157.1	159.4	161.6	163.8
100°	225.8	196.4	167.0	152.8	153.7	154.8	155.7	156.7
102.5°	332.0	331.7	331.5	324.0	309.4	294.8	280.2	265.6
105°	420.3	426.9	433.4	437.6	439.7	441.8	443.7	445.8
107.5°	500.0	506.5	513.0	516.9	518.2	519.5	520.8	522.1
110°	551.0	556.5	561.9	566.0	568.5	571.1	573.5	576.1



TEST NUMBER: P333334-830

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	601.5	606.5	611.5	615.0	617.0	619.0	620.9	622.8
115°	678.3	683.2	688.2	690.9	691.4	691.8	692.4	692.9
117.5°	751.8	756.1	760.3	763.3	764.9	766.5	768.1	769.7
120°	799.5	804.6	809.5	812.5	813.2	814.0	814.7	815.5
122.5°	844.2	848.9	853.8	856.5	857.1	857.5	858.1	858.7
125°	909.8	914.1	918.4	921.0	921.8	922.7	923.7	924.5
127.5°	968.9	973.2	977.5	979.7	979.8	979.9	980.0	980.1
130°	1008.3	1012.1	1016.0	1018.1	1018.5	1019.0	1019.4	1019.7
132.5°	1044.2	1048.6	1053.0	1055.4	1055.5	1055.6	1055.8	1055.9
135°	1096.1	1099.9	1103.5	1105.5	1105.7	1105.9	1106.1	1106.3
137.5°	1145.5	1149.4	1153.4	1155.4	1155.5	1155.5	1155.5	1155.6
140°	1175.5	1179.6	1183.6	1185.6	1185.4	1185.3	1185.2	1185.1
142.5°	1205.5	1208.7	1211.8	1213.3	1213.2	1213.1	1212.9	1212.8
145°	1249.2	1251.1	1253.0	1253.9	1253.7	1253.5	1253.4	1253.2
147.5°	1287.4	1288.3	1289.0	1288.8	1287.7	1286.6	1285.3	1284.2
150°	1312.2	1312.7	1313.2	1312.6	1311.0	1309.4	1307.7	1306.1
152.5°	1334.9	1335.5	1336.0	1335.3	1333.6	1332.0	1330.3	1328.6
155°	1366.3	1367.1	1367.8	1367.2	1365.3	1363.3	1361.3	1359.4
157.5°	1392.3	1393.1	1393.8	1393.3	1391.3	1389.4	1387.4	1385.4
160°	1408.4	1409.4	1410.4	1409.9	1408.0	1406.0	1404.1	1402.1
162.5°	1423.2	1424.7	1426.0	1425.6	1423.4	1421.3	1419.2	1417.0
165°	1442.3	1443.8	1445.2	1444.9	1443.0	1441.1	1439.1	1437.2
167.5°	1456.7	1458.4	1460.2	1460.0	1457.7	1455.6	1453.4	1451.2
170°	1464.1	1466.0	1468.0	1467.8	1465.7	1463.5	1461.3	1459.1
172.5°	1469.8	1471.6	1473.3	1473.1	1470.9	1468.8	1466.5	1464.3
175°	1476.1	1478.1	1480.0	1479.9	1477.7	1475.6	1473.3	1471.1
177.5°	1478.7	1480.1	1481.4	1481.3	1479.8	1478.2	1476.6	1475.1
180°	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7	1477.7

(END OF REPORT)