

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: P333285

Luminaire Tested: **S125DIP-S1090D1035U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333285
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-S1090D1035U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8156.1 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

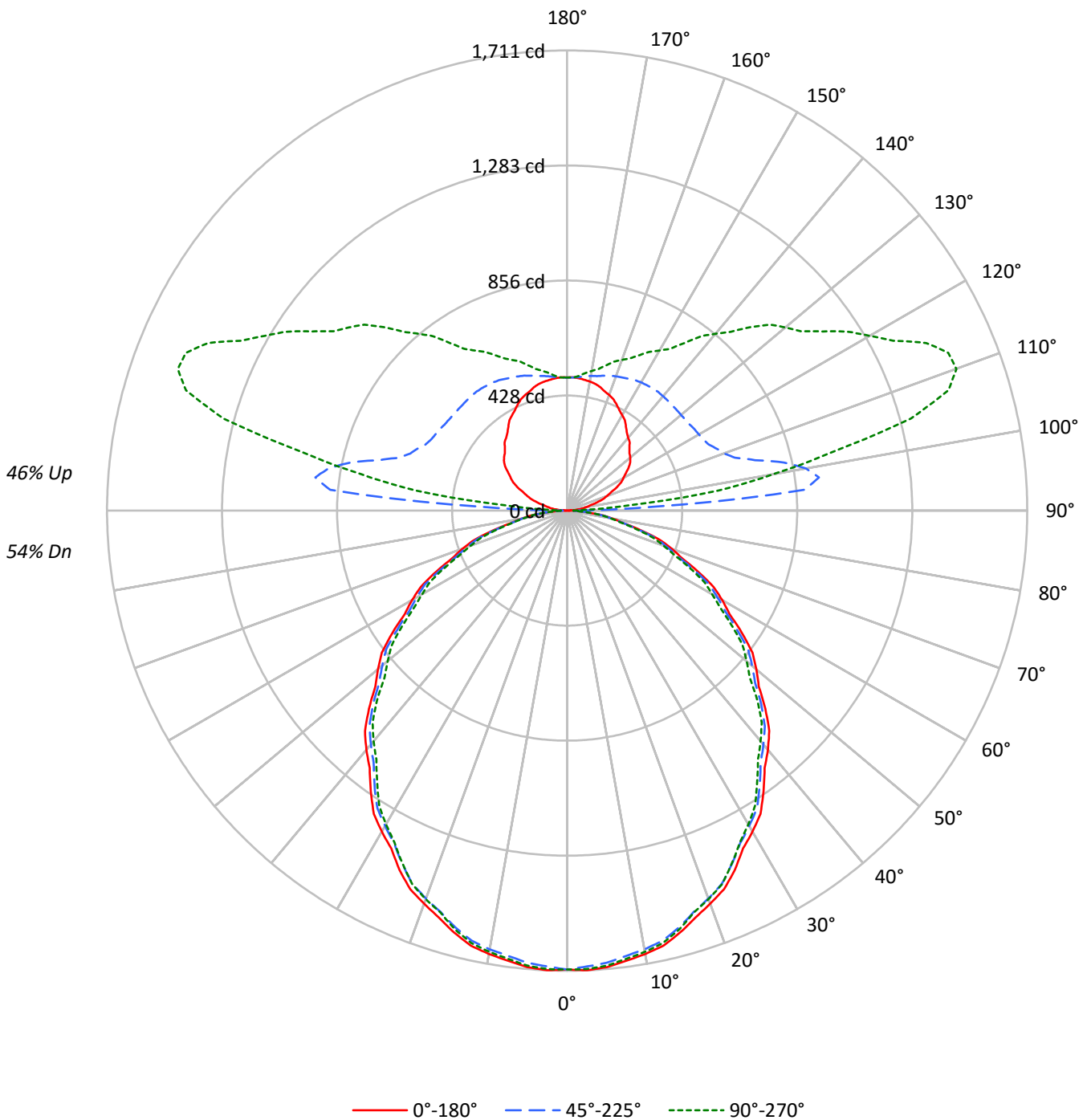
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54					54			
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51	46					46			
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43	38					38			
3	82	72	65	59	76	67	61	56	58	53	49	49	46	42	41	39	36	32					32			
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31	28					28			
5	69	57	49	43	64	53	46	40	46	40	36	40	35	32	33	30	27	24					24			
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21					21			
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	28	24	21	19					19			
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19	17					17			
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	23	20	17	15					15			
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14					14			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11021	11021	11021
5°	11045	10940	11010
10°	10978	10863	10925
15°	10858	10732	10777
20°	10689	10549	10568
25°	10505	10332	10322
30°	10279	10097	10047
35°	10037	9845	9707
40°	9788	9571	9435
45°	9519	9322	9136
50°	9224	9020	8748
55°	8938	8679	8436
60°	8596	8335	8038
65°	8189	7922	7653
70°	7801	7444	7189
75°	7107	6872	6635
80°	6326	6226	6073
85°	5498	5602	5298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.9	2.0
10°-20°	454.5	5.6
20°-30°	671.0	8.2
30°-40°	783.0	9.6
40°-50°	786.4	9.6
50°-60°	690.3	8.5
60°-70°	514.4	6.3
70°-80°	294.1	3.6
80°-90°	88.3	1.1
90°-100°	358.9	4.4
100°-110°	771.5	9.5
110°-120°	724.1	8.9
120°-130°	586.8	7.2
130°-140°	470.9	5.8
140°-150°	355.4	4.4
150°-160°	250.1	3.1
160°-170°	147.4	1.8
170°-180°	48.0	0.6
0°-30°	1286.4	15.8
0°-40°	2069.4	25.4
0°-60°	3546.2	43.5
0°-90°	4443.0	54.5
90°-120°	1854.5	22.7
90°-150°	3267.6	40.1
90°-180°	3713.0	45.5
0°-180°	8156.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1706	1706	1706	1706	1706	
5°	1704	1700	1688	1699	1698	162
15°	1624	1619	1605	1612	1612	458
25°	1474	1467	1450	1452	1448	678
35°	1273	1267	1249	1242	1231	796
45°	1042	1036	1021	1005	1000	803
55°	794	789	771	759	749	708
65°	536	533	518	507	501	532
75°	285	282	275	271	266	304
85°	74	76	76	74	72	83
90°	1	9	16	21	23	6
95°	33	97	884	401	235	35
105°	113	158	724	1425	1323	119
115°	202	243	581	1252	1474	198
125°	280	327	557	996	1161	248
135°	327	394	553	835	964	254
145°	381	437	555	691	761	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1710.7	1710.0	1709.2	1708.5	1707.8	1706.2	1703.8	1701.4	1699.0	1696.6	1699.0
5°	1703.7	1703.1	1702.5	1701.9	1701.3	1699.5	1696.5	1693.5	1690.5	1687.5	1690.2
7.5°	1688.0	1687.4	1686.8	1686.2	1685.6	1683.6	1680.3	1677.0	1673.7	1670.4	1673.1
10°	1674.0	1673.4	1672.8	1672.2	1671.6	1669.6	1666.3	1663.0	1659.7	1656.4	1658.8
12.5°	1656.7	1655.6	1654.5	1653.4	1652.4	1650.3	1647.2	1644.2	1641.1	1638.0	1640.0
15°	1624.0	1623.1	1622.2	1621.3	1620.4	1618.3	1615.0	1611.7	1608.4	1605.1	1606.6
17.5°	1586.5	1585.2	1583.8	1582.5	1581.2	1578.8	1575.4	1572.0	1568.6	1565.1	1567.0
20°	1555.2	1554.6	1554.0	1553.4	1552.8	1550.5	1546.6	1542.7	1538.8	1534.9	1537.0
22.5°	1523.8	1522.8	1521.7	1520.6	1519.5	1517.1	1513.5	1509.8	1506.2	1502.5	1503.9
25°	1474.2	1472.7	1471.2	1469.7	1468.2	1465.5	1461.6	1457.7	1453.8	1449.9	1450.5
27.5°	1416.1	1415.2	1414.3	1413.4	1412.5	1410.1	1406.0	1402.0	1398.0	1394.0	1394.1
30°	1378.3	1377.4	1376.5	1375.6	1374.7	1372.0	1367.5	1363.0	1358.5	1354.0	1353.4
32.5°	1337.3	1335.9	1334.5	1333.1	1331.8	1329.1	1325.0	1321.0	1317.0	1313.0	1311.9
35°	1273.0	1271.8	1270.6	1269.4	1268.2	1265.5	1261.3	1257.1	1252.9	1248.7	1247.2
37.5°	1206.3	1204.8	1203.3	1201.8	1200.3	1197.6	1193.6	1189.7	1185.7	1181.8	1179.5
40°	1161.0	1159.5	1158.0	1156.5	1155.0	1152.1	1147.9	1143.7	1139.5	1135.3	1132.6
42.5°	1112.4	1111.1	1109.9	1108.6	1107.3	1104.6	1100.4	1096.2	1092.0	1087.8	1085.3
45°	1042.2	1041.0	1039.8	1038.6	1037.4	1035.0	1031.4	1027.8	1024.2	1020.6	1017.0
47.5°	966.6	966.6	966.7	966.8	966.8	964.7	960.4	956.0	951.7	947.4	943.7
50°	918.0	917.1	916.2	915.3	914.4	912.1	908.5	904.9	901.3	897.7	893.8
52.5°	868.3	867.6	867.0	866.3	865.7	863.4	859.6	855.7	851.9	848.0	844.6
55°	793.8	792.9	792.0	791.1	790.2	787.6	783.4	779.2	775.0	770.8	768.1
57.5°	715.2	714.7	714.3	713.8	713.3	711.3	707.7	704.2	700.7	697.1	693.6
60°	665.5	664.3	663.1	661.9	660.7	658.5	655.2	651.9	648.6	645.3	642.3
62.5°	613.7	612.7	611.8	610.8	609.9	608.0	605.1	602.3	599.5	596.7	593.4
65°	535.9	535.3	534.7	534.1	533.5	531.6	528.3	525.0	521.7	518.4	515.7
67.5°	460.6	459.3	458.1	456.8	455.6	453.7	451.2	448.8	446.3	443.9	441.6
70°	413.1	411.6	410.1	408.6	407.1	405.0	402.3	399.6	396.9	394.2	392.4
72.5°	361.3	360.2	359.2	358.2	357.2	355.8	354.1	352.3	350.6	348.8	346.8
75°	284.8	284.2	283.6	283.0	282.4	281.4	279.9	278.4	276.9	275.4	274.5
77.5°	214.4	214.1	213.9	213.7	213.4	212.9	212.0	211.2	210.4	209.5	209.0
80°	170.1	170.1	170.1	170.1	170.1	169.8	169.2	168.6	168.0	167.4	167.1
82.5°	131.2	130.7	130.3	129.8	129.3	129.0	128.9	128.8	128.6	128.5	128.0
85°	74.2	74.5	74.8	75.1	75.4	75.6	75.6	75.6	75.6	75.6	75.3
87.5°	29.4	29.6	30.0	30.4	30.8	31.0	31.0	31.2	31.1	31.3	31.5
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.5	52.7	81.9	136.4	227.8	327.0	321.8	260.5
95°	32.9	33.9	41.9	52.9	74.9	119.8	226.6	446.2	721.8	884.5	865.5
97.5°	54.7	55.9	61.5	72.5	92.2	124.6	195.3	356.2	644.5	944.6	1095.1
100°	69.9	71.9	75.9	86.8	105.8	135.8	193.7	323.4	575.0	901.4	1151.0
102.5°	86.7	87.8	91.0	102.8	120.2	149.3	200.9	309.9	522.3	825.6	1117.5
105°	112.8	112.8	117.8	127.8	143.8	171.7	215.6	304.5	471.2	723.7	1010.3
107.5°	138.4	140.4	145.1	153.3	169.9	195.1	237.6	313.7	449.6	653.7	900.8
110°	156.7	158.7	162.7	171.7	186.7	212.6	253.6	322.4	443.2	620.9	838.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.1	177.1	180.3	189.3	204.2	229.4	268.7	333.6	443.2	601.8	792.2
115°	201.7	203.6	206.6	215.6	230.6	255.6	292.5	350.4	446.2	581.0	741.7
117.5°	225.6	228.6	231.8	240.8	257.8	281.9	316.9	369.6	452.8	570.8	711.6
120°	241.6	244.6	248.6	257.6	274.5	299.5	334.4	382.3	459.2	566.0	694.8
122.5°	258.4	260.5	263.7	272.7	291.3	316.3	351.2	396.7	464.8	562.0	680.4
125°	279.5	281.5	286.5	295.5	314.5	340.4	373.4	416.3	474.2	557.0	660.9
127.5°	296.1	299.1	305.5	316.9	337.0	363.0	394.7	434.2	484.8	554.6	642.9
130°	306.5	309.5	317.5	330.4	351.4	377.3	408.3	446.2	491.2	553.0	630.9
132.5°	314.5	318.2	327.8	342.4	364.2	390.1	421.1	456.6	498.3	553.0	621.3
135°	327.4	331.4	343.4	359.4	380.3	407.3	438.2	471.2	508.1	553.0	609.9
137.5°	343.8	346.8	358.0	374.0	394.5	422.3	450.4	482.0	517.1	554.2	599.8
140°	353.4	356.4	368.4	384.3	403.3	430.3	459.2	489.2	521.1	555.0	595.0
142.5°	364.6	366.8	377.9	393.9	412.1	437.4	464.8	493.1	523.5	555.8	591.0
145°	381.3	383.3	393.3	407.3	425.3	448.2	474.2	499.1	526.1	555.0	585.0
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	578.8
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1701.4	1703.8	1706.2	1707.3	1707.1	1706.8	1706.6	1706.4
5°	1692.9	1695.6	1698.3	1699.5	1699.2	1698.9	1698.6	1698.3
7.5°	1675.7	1678.4	1681.0	1682.2	1681.9	1681.6	1681.3	1681.0
10°	1661.2	1663.6	1666.0	1667.1	1666.8	1666.5	1666.2	1665.9
12.5°	1641.9	1643.8	1645.7	1646.7	1646.6	1646.5	1646.5	1646.4
15°	1608.1	1609.6	1611.1	1611.9	1611.9	1611.9	1611.9	1611.9
17.5°	1568.9	1570.7	1572.6	1572.8	1571.3	1569.8	1568.3	1566.8
20°	1539.1	1541.2	1543.3	1543.6	1542.1	1540.6	1539.1	1537.6
22.5°	1505.3	1506.7	1508.0	1508.2	1507.2	1506.2	1505.2	1504.1
25°	1451.1	1451.7	1452.3	1452.1	1451.2	1450.3	1449.4	1448.5
27.5°	1394.2	1394.3	1394.5	1394.1	1393.2	1392.3	1391.4	1390.5
30°	1352.8	1352.2	1351.6	1350.9	1350.0	1349.1	1348.2	1347.3
32.5°	1310.8	1309.7	1308.7	1307.3	1305.7	1304.1	1302.4	1300.8
35°	1245.7	1244.2	1242.7	1240.8	1238.4	1236.0	1233.6	1231.2
37.5°	1177.3	1175.1	1172.9	1171.1	1169.7	1168.3	1166.9	1165.6
40°	1129.9	1127.2	1124.5	1122.7	1121.8	1120.9	1120.0	1119.1
42.5°	1082.9	1080.4	1078.0	1076.0	1074.7	1073.3	1071.9	1070.5
45°	1013.4	1009.8	1006.2	1003.9	1003.0	1002.1	1001.2	1000.3
47.5°	940.1	936.4	932.8	929.9	927.8	925.7	923.6	921.5
50°	889.9	886.0	882.1	879.1	877.0	874.9	872.8	870.7
52.5°	841.2	837.8	834.4	831.5	829.1	826.8	824.5	822.1
55°	765.4	762.7	760.0	757.6	755.5	753.4	751.3	749.2
57.5°	690.2	686.7	683.2	680.9	679.8	678.6	677.5	676.3
60°	639.3	636.3	633.3	630.7	628.6	626.5	624.4	622.3
62.5°	590.2	587.0	583.7	581.3	579.7	578.1	576.4	574.8
65°	513.0	510.3	507.6	505.6	504.4	503.2	502.0	500.8
67.5°	439.3	437.0	434.7	433.2	432.5	431.8	431.1	430.4
70°	390.6	388.8	387.0	385.5	384.3	383.1	381.9	380.7
72.5°	344.8	342.7	340.7	339.1	337.9	336.7	335.5	334.3
75°	273.6	272.7	271.8	270.7	269.5	268.3	267.1	265.9
77.5°	208.4	207.9	207.4	206.7	205.8	205.0	204.1	203.3
80°	166.8	166.5	166.2	165.7	165.1	164.5	163.9	163.3
82.5°	127.4	126.9	126.4	126.0	125.9	125.8	125.7	125.5
85°	75.0	74.7	74.4	73.9	73.3	72.7	72.1	71.5
87.5°	31.7	31.9	32.1	32.2	31.8	31.3	31.0	30.5
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	176.9	128.4	96.6	81.9	69.1	66.7	65.3	63.7
95°	717.8	566.0	443.2	359.4	288.5	258.6	250.6	234.6
97.5°	1069.0	962.5	842.9	726.3	664.7	608.7	579.8	567.0
100°	1227.9	1179.0	1076.1	972.3	903.4	831.6	794.6	778.7
102.5°	1281.4	1311.5	1262.2	1191.9	1118.3	1067.2	1027.0	1015.0
105°	1249.8	1386.6	1430.5	1419.5	1387.6	1354.7	1334.7	1322.7
107.5°	1137.2	1319.7	1432.5	1484.6	1500.8	1500.6	1494.0	1486.0
110°	1054.2	1243.8	1384.6	1469.5	1514.4	1533.3	1540.3	1540.3



TEST NUMBER: P333285

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	988.7	1168.8	1311.1	1411.2	1476.8	1509.4	1526.8	1533.9
115°	906.4	1061.2	1197.9	1306.7	1384.6	1432.5	1460.5	1473.5
117.5°	853.3	986.7	1104.5	1204.3	1282.2	1331.7	1359.4	1367.4
120°	824.6	944.4	1054.2	1142.0	1215.9	1263.8	1290.8	1298.8
122.5°	803.0	914.0	1011.8	1094.1	1160.0	1203.9	1230.9	1238.1
125°	771.7	873.5	960.3	1032.2	1088.1	1129.0	1151.0	1161.0
127.5°	739.7	834.8	915.8	983.1	1033.8	1069.9	1090.7	1095.1
130°	719.8	807.6	885.5	950.4	1000.3	1033.2	1053.2	1059.2
132.5°	699.8	782.0	852.7	915.2	965.1	998.1	1016.4	1023.2
135°	673.8	742.7	806.6	863.5	907.4	940.4	958.3	964.3
137.5°	651.9	707.6	760.7	809.0	848.3	878.3	894.9	901.4
140°	639.9	686.8	732.7	774.7	811.6	837.6	852.5	857.5
142.5°	629.5	669.2	708.8	745.1	776.5	798.4	812.6	816.8
145°	615.9	646.9	677.8	704.8	728.7	745.7	756.7	760.7
147.5°	603.2	628.3	652.1	672.4	691.4	705.0	711.4	713.2
150°	596.0	617.9	636.9	654.9	669.8	681.8	685.8	686.8
152.5°	588.0	607.5	624.9	638.9	651.5	661.1	665.0	666.0
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)