

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: P333258

Luminaire Tested: **S125DIP-S1090D365U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333258
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-S1090D365U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5755.8 lumens
Efficiency: N/A
Efficacy: 132.3 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: Semi-Direct

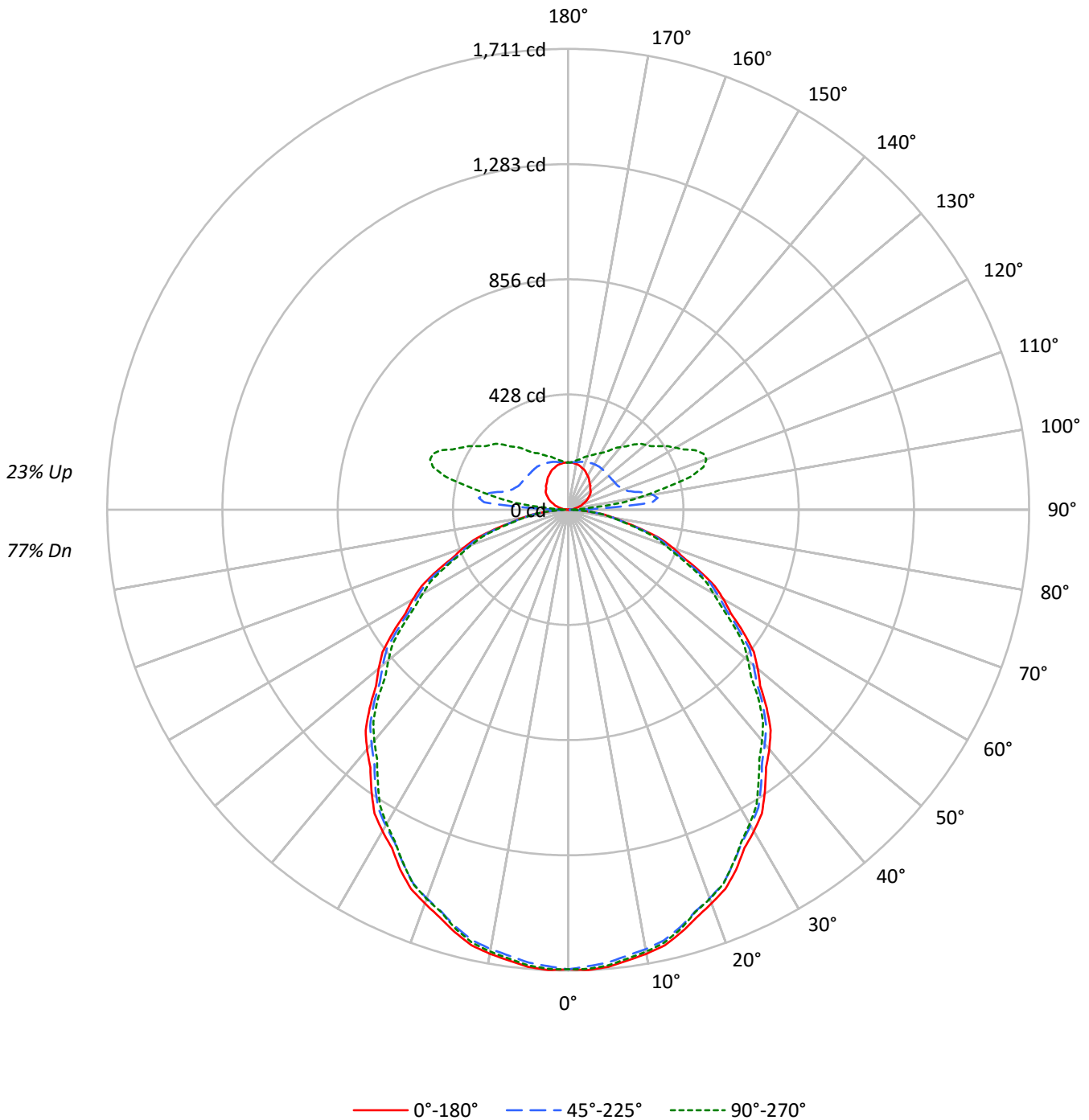
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	104	99	95	91	99	95	91	88	86	84	81	79	76	74	72	70	68	65
2	94	87	80	75	90	83	77	72	76	71	67	69	65	62	63	60	57	54
3	86	76	68	62	82	73	66	60	67	61	56	61	56	53	56	52	49	46
4	79	68	59	53	75	65	57	51	59	53	48	54	49	45	50	46	42	39
5	73	60	52	45	69	58	50	44	53	47	42	49	43	39	45	40	37	34
6	67	54	46	40	64	52	44	39	48	41	36	44	39	34	41	36	32	30
7	62	49	41	35	59	47	40	34	44	37	32	40	35	31	37	32	29	27
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26	24
9	54	41	33	28	51	40	32	27	37	30	26	34	29	25	32	27	23	21
10	50	38	30	25	48	37	29	25	34	28	24	32	26	22	29	25	21	19

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	2.8
10°-20°	454.5	7.9
20°-30°	671.0	11.7
30°-40°	783.0	13.6
40°-50°	786.4	13.7
50°-60°	690.3	12.0
60°-70°	514.4	8.9
70°-80°	294.1	5.1
80°-90°	86.5	1.5
90°-100°	127.1	2.2
100°-110°	273.1	4.7
110°-120°	256.3	4.5
120°-130°	207.7	3.6
130°-140°	166.7	2.9
140°-150°	125.8	2.2
150°-160°	88.6	1.5
160°-170°	52.2	0.9
170°-180°	17.0	0.3
0°-30°	1286.4	22.4
0°-40°	2069.4	36.0
0°-60°	3546.2	61.6
0°-90°	4441.2	77.2
90°-120°	656.5	11.4
90°-150°	1156.8	20.1
90°-180°	1315.0	22.8
0°-180°	5755.8	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°	0	3	6	7	8	5
95°	12	34	313	142	83	12
105°	40	56	256	504	468	42
115°	71	86	206	443	522	70
125°	99	116	197	353	411	88
135°	116	139	196	296	341	90
145°	135	155	196	245	269	85
155°	154	166	192	216	226	71
165°	168	173	184	195	198	47
175°	175	175	176	178	178	17
180°	175	175	175	175	175	



TEST NUMBER: P333258

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-F4

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°	29.2	29.3	29.4	29.6	29.7	29.7	29.6	29.5	29.3	29.2	29.3
90°	0.4	0.7	1.4	2.1	2.8	3.5	3.9	4.6	4.9	5.7	6.0
92.5°	4.3	5.2	8.2	12.6	18.7	29.0	48.3	80.6	115.8	113.9	92.2
95°	11.7	12.0	14.8	18.7	26.5	42.4	80.2	158.0	255.5	313.1	306.4
97.5°	19.4	19.8	21.8	25.7	32.7	44.1	69.1	126.1	228.2	334.4	387.7
100°	24.7	25.4	26.9	30.7	37.5	48.1	68.6	114.5	203.6	319.1	407.5
102.5°	30.7	31.1	32.2	36.4	42.6	52.9	71.1	109.7	184.9	292.3	395.6
105°	39.9	39.9	41.7	45.2	50.9	60.8	76.3	107.8	166.8	256.2	357.7
107.5°	49.0	49.7	51.4	54.3	60.2	69.1	84.1	111.0	159.2	231.4	318.9
110°	55.5	56.2	57.6	60.8	66.1	75.3	89.8	114.2	156.9	219.8	296.9



TEST NUMBER: P333258

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	62.0	62.7	63.8	67.0	72.3	81.2	95.1	118.1	156.9	213.0	280.5
115°	71.4	72.1	73.2	76.3	81.6	90.5	103.6	124.0	158.0	205.7	262.6
117.5°	79.9	80.9	82.1	85.2	91.3	99.8	112.2	130.8	160.3	202.1	251.9
120°	85.5	86.6	88.0	91.2	97.2	106.0	118.4	135.4	162.6	200.4	246.0
122.5°	91.5	92.2	93.4	96.6	103.1	112.0	124.3	140.4	164.5	199.0	240.9
125°	99.0	99.7	101.4	104.6	111.3	120.5	132.2	147.4	167.9	197.2	234.0
127.5°	104.8	105.9	108.1	112.2	119.3	128.5	139.7	153.7	171.6	196.4	227.6
130°	108.5	109.6	112.4	117.0	124.4	133.6	144.5	158.0	173.9	195.8	223.4
132.5°	111.3	112.7	116.1	121.2	128.9	138.1	149.1	161.7	176.4	195.8	220.0
135°	115.9	117.3	121.6	127.2	134.7	144.2	155.1	166.8	179.9	195.8	215.9
137.5°	121.7	122.8	126.7	132.4	139.7	149.5	159.5	170.6	183.1	196.2	212.3
140°	125.1	126.2	130.4	136.1	142.8	152.3	162.6	173.2	184.5	196.5	210.6
142.5°	129.1	129.8	133.8	139.5	145.9	154.9	164.5	174.6	185.3	196.8	209.2
145°	135.0	135.7	139.2	144.2	150.6	158.7	167.9	176.7	186.2	196.5	207.1
147.5°	141.2	141.6	144.7	149.3	154.8	161.9	170.0	178.0	186.6	195.6	204.9
150°	144.9	145.6	148.1	152.7	157.6	163.6	171.4	178.8	186.6	194.7	203.2
152.5°	148.9	149.3	151.5	155.5	160.2	165.6	172.8	179.4	186.3	193.6	201.2
155°	154.1	154.1	156.2	159.7	163.3	168.2	174.2	179.9	185.5	191.6	197.9
157.5°	158.8	158.7	160.4	163.4	166.5	170.3	175.4	180.2	184.6	189.4	194.8
160°	161.9	161.5	162.9	165.4	168.2	171.4	176.0	180.2	183.8	188.0	192.3
162.5°	164.4	164.1	165.5	167.7	169.9	172.5	176.6	180.0	182.9	186.3	190.0
165°	168.2	167.5	168.6	170.3	171.8	173.9	176.7	179.5	181.7	183.8	186.6
167.5°	170.8	170.4	171.1	172.0	173.0	174.4	176.7	178.7	179.7	181.3	183.3
170°	172.5	172.1	172.5	173.2	173.9	174.9	176.7	178.1	178.8	179.9	181.3
172.5°	173.6	173.0	173.3	174.0	174.4	174.9	176.4	177.6	177.7	178.2	179.3
175°	174.9	174.2	174.6	174.9	174.9	174.9	176.0	176.7	176.4	176.4	176.7
177.5°	175.6	175.0	175.0	175.3	175.0	175.0	175.6	175.9	175.3	175.3	175.6
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3



TEST NUMBER: P333258

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-F4

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°	29.4	29.4	29.5	29.4	28.9	28.4	28.0	27.5
90°	6.4	6.7	7.1	7.8	7.8	7.8	8.1	8.1
92.5°	62.6	45.4	34.2	29.0	24.5	23.6	23.1	22.5
95°	254.1	200.4	156.9	127.2	102.1	91.5	88.7	83.1
97.5°	378.4	340.8	298.4	257.1	235.3	215.5	205.3	200.7
100°	434.7	417.4	381.0	344.2	319.8	294.4	281.3	275.7
102.5°	453.6	464.3	446.9	422.0	395.9	377.8	363.6	359.4
105°	442.5	490.9	506.4	502.6	491.2	479.6	472.5	468.3
107.5°	402.6	467.2	507.1	525.6	531.3	531.3	528.9	526.1
110°	373.2	440.4	490.2	520.2	536.1	542.8	545.3	545.3



TEST NUMBER: P333258

CATALOG NUMBER: S125DIP-S1090D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	350.0	413.8	464.2	499.6	522.8	534.4	540.5	543.1
115°	320.9	375.7	424.1	462.6	490.2	507.1	517.0	521.6
117.5°	302.1	349.3	391.0	426.4	453.9	471.5	481.3	484.1
120°	291.9	334.3	373.2	404.3	430.5	447.4	457.0	459.8
122.5°	284.3	323.6	358.2	387.3	410.7	426.2	435.8	438.3
125°	273.2	309.2	340.0	365.4	385.2	399.7	407.5	411.0
127.5°	261.9	295.5	324.2	348.0	366.0	378.8	386.1	387.7
130°	254.8	285.9	313.5	336.5	354.1	365.8	372.9	375.0
132.5°	247.7	276.9	301.9	324.0	341.7	353.3	359.8	362.2
135°	238.6	262.9	285.6	305.7	321.3	332.9	339.3	341.4
137.5°	230.8	250.5	269.3	286.4	300.3	310.9	316.8	319.1
140°	226.5	243.1	259.4	274.2	287.3	296.5	301.8	303.6
142.5°	222.9	236.9	250.9	263.8	274.9	282.7	287.7	289.2
145°	218.1	229.0	240.0	249.5	258.0	264.0	267.9	269.3
147.5°	213.5	222.4	230.9	238.1	244.8	249.6	251.8	252.5
150°	211.0	218.8	225.5	231.8	237.1	241.4	242.8	243.1
152.5°	208.2	215.1	221.2	226.2	230.6	234.0	235.4	235.8
155°	203.9	209.6	214.5	218.4	221.9	224.4	225.5	225.8
157.5°	199.7	204.3	208.2	211.2	214.0	216.0	217.0	216.9
160°	196.9	200.4	203.9	206.4	208.9	210.6	211.3	211.0
162.5°	193.7	197.0	200.0	202.2	204.1	205.5	205.7	205.6
165°	189.4	191.9	194.0	195.8	197.2	197.9	197.9	197.9
167.5°	185.3	187.0	188.6	189.9	190.6	191.2	190.9	190.8
170°	183.1	184.1	185.2	185.9	186.6	187.0	187.0	186.6
172.5°	180.5	181.6	182.4	182.8	182.9	183.6	183.0	182.6
175°	177.8	177.8	178.5	178.5	178.5	178.8	178.1	177.8
177.5°	175.9	176.1	176.1	176.1	175.9	176.1	175.3	175.3
180°	175.3	175.3	175.3	175.3	175.3	175.3	175.3	175.3

(END OF REPORT)