

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: P333303-940

Luminaire Tested: **S125DIP-S1270D365U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333303-940  
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-S1270D365U940-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 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: 5745.9 lumens  
Efficiency: N/A  
Efficacy: 115.4 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

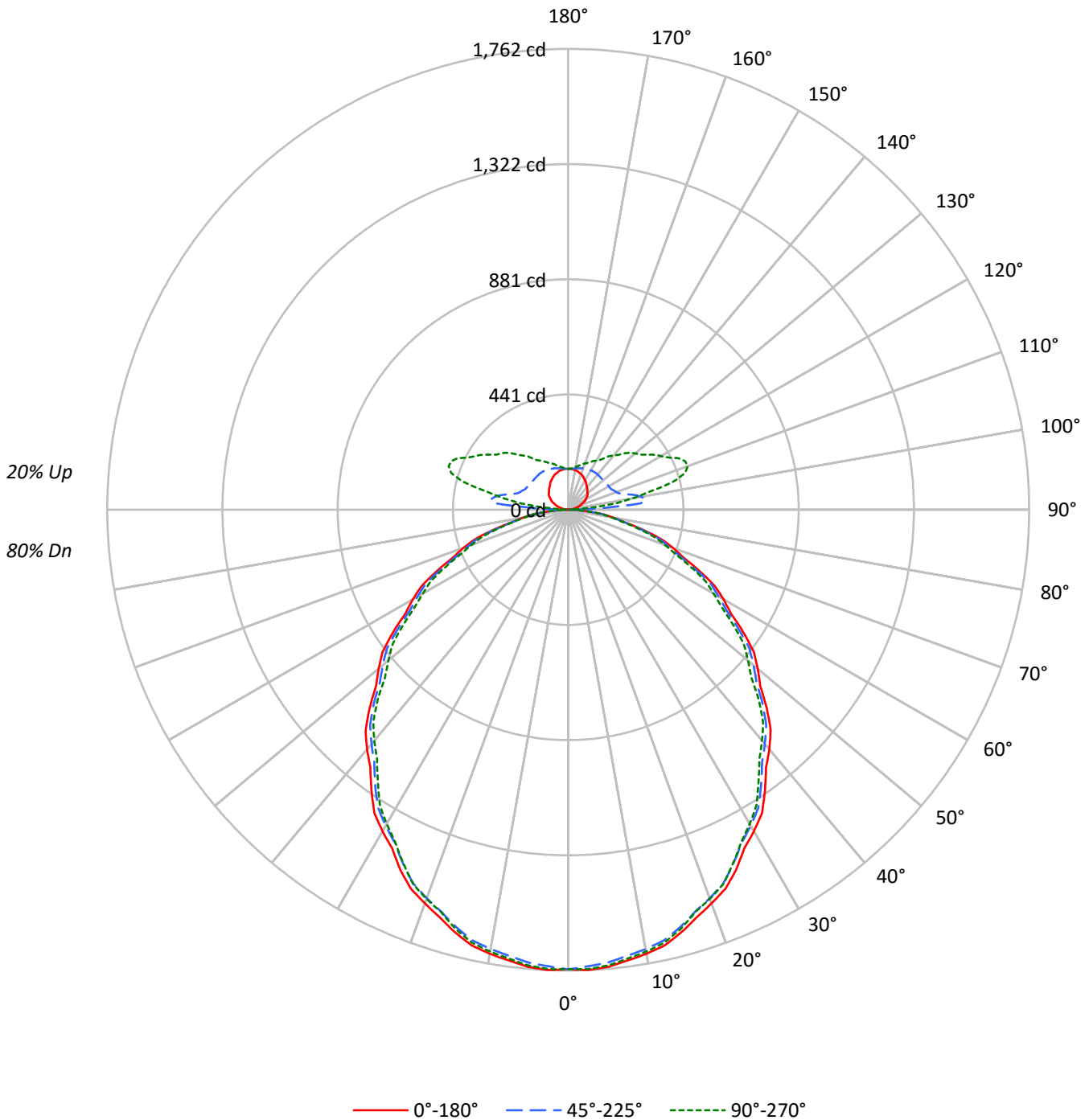
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80
1	104	100	96	92	100	96	92	89	88	85	82	80	78	76	74	72	70	67
2	95	87	81	75	91	84	78	73	77	72	68	70	67	63	65	62	59	56
3	87	77	69	63	83	74	66	61	68	62	57	62	58	54	57	54	50	47
4	79	68	60	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	45	54	47	42	50	44	40	46	42	38	35
6	67	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	33	31
7	62	50	41	35	60	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	44	36	31	41	34	29	38	32	28	35	30	27	25
9	54	41	33	28	52	40	33	28	37	31	26	35	29	25	33	28	24	22
10	51	38	31	25	49	37	30	25	35	28	24	32	27	23	30	25	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11349	11349	11349
5°	11374	11267	11339
10°	11305	11187	11252
15°	11183	11053	11099
20°	11008	10864	10883
25°	10819	10641	10630
30°	10586	10399	10347
35°	10336	10139	9996
40°	10080	9857	9716
45°	9803	9600	9409
50°	9499	9289	9010
55°	9205	8939	8688
60°	8853	8584	8280
65°	8436	8159	7882
70°	8033	7666	7404
75°	7321	7079	6832
80°	6512	6412	6259
85°	5669	5765	5461



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.7	2.9
10°-20°	468.1	8.1
20°-30°	691.1	12.0
30°-40°	806.4	14.0
40°-50°	809.9	14.1
50°-60°	710.9	12.4
60°-70°	529.7	9.2
70°-80°	302.9	5.3
80°-90°	89.0	1.5
90°-100°	113.3	2.0
100°-110°	243.6	4.2
110°-120°	228.6	4.0
120°-130°	185.2	3.2
130°-140°	148.7	2.6
140°-150°	112.2	2.0
150°-160°	79.0	1.4
160°-170°	46.5	0.8
170°-180°	15.1	0.3
0°-30°	1324.8	23.1
0°-40°	2131.2	37.1
0°-60°	3652.1	63.6
0°-90°	4573.7	79.6
90°-120°	585.4	10.2
90°-150°	1031.5	18.0
90°-180°	1172.0	20.4
0°-180°	5745.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1754	1751	1738	1750	1749	166
15°	1672	1668	1653	1660	1660	471
25°	1518	1511	1493	1496	1492	698
35°	1311	1305	1286	1279	1268	820
45°	1073	1067	1051	1035	1030	827
55°	818	812	794	781	772	730
65°	552	548	534	522	516	548
75°	293	290	284	279	274	313
85°	76	78	78	76	74	85
90°	0	3	5	7	7	5
95°	10	31	279	127	74	11
105°	36	50	228	450	418	38
115°	64	77	183	395	465	63
125°	88	103	176	314	366	78
135°	103	124	175	264	304	80
145°	120	138	175	218	240	75
155°	137	148	171	193	201	63
165°	150	154	164	174	176	42
175°	156	156	157	159	158	15
180°	156	156	156	156	156	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1761.8	1761.0	1760.3	1759.5	1758.8	1757.2	1754.7	1752.2	1749.8	1747.3	1749.8
5°	1754.5	1753.9	1753.3	1752.7	1752.0	1750.2	1747.1	1744.0	1741.0	1737.9	1740.6
7.5°	1738.4	1737.8	1737.1	1736.5	1735.9	1733.9	1730.5	1727.2	1723.8	1720.4	1723.1
10°	1723.9	1723.3	1722.7	1722.1	1721.4	1719.5	1716.1	1712.7	1709.2	1705.8	1708.3
12.5°	1706.1	1705.0	1704.0	1702.8	1701.7	1699.6	1696.4	1693.3	1690.1	1686.9	1689.0
15°	1672.5	1671.6	1670.6	1669.7	1668.8	1666.6	1663.2	1659.8	1656.4	1653.1	1654.6
17.5°	1633.9	1632.5	1631.1	1629.8	1628.4	1625.9	1622.5	1618.9	1615.4	1611.9	1613.8
20°	1601.6	1601.0	1600.4	1599.7	1599.1	1596.8	1592.8	1588.8	1584.7	1580.7	1582.9
22.5°	1569.3	1568.3	1567.1	1566.0	1564.9	1562.5	1558.7	1555.0	1551.1	1547.4	1548.8
25°	1518.2	1516.6	1515.1	1513.6	1512.0	1509.2	1505.2	1501.2	1497.2	1493.2	1493.8
27.5°	1458.4	1457.5	1456.5	1455.6	1454.7	1452.2	1448.0	1443.9	1439.8	1435.6	1435.7
30°	1419.5	1418.5	1417.6	1416.7	1415.8	1413.0	1408.4	1403.7	1399.1	1394.5	1393.8
32.5°	1377.2	1375.8	1374.4	1373.0	1371.5	1368.8	1364.6	1360.5	1356.3	1352.2	1351.1
35°	1311.0	1309.8	1308.6	1307.3	1306.1	1303.3	1299.0	1294.7	1290.3	1286.0	1284.5
37.5°	1242.3	1240.8	1239.3	1237.7	1236.2	1233.3	1229.3	1225.2	1221.1	1217.1	1214.8
40°	1195.6	1194.1	1192.6	1191.0	1189.5	1186.5	1182.2	1177.9	1173.6	1169.2	1166.4
42.5°	1145.6	1144.3	1143.0	1141.7	1140.4	1137.6	1133.3	1128.9	1124.6	1120.3	1117.8
45°	1073.3	1072.1	1070.9	1069.6	1068.4	1065.9	1062.2	1058.5	1054.8	1051.1	1047.3
47.5°	995.4	995.5	995.6	995.6	995.7	993.5	989.1	984.6	980.2	975.7	972.0
50°	945.4	944.5	943.5	942.6	941.6	939.3	935.7	931.9	928.3	924.5	920.5
52.5°	894.2	893.6	892.9	892.2	891.5	889.2	885.2	881.3	877.4	873.3	869.9
55°	817.5	816.5	815.6	814.7	813.8	811.2	806.8	802.5	798.2	793.9	791.0
57.5°	736.6	736.1	735.6	735.1	734.6	732.5	728.9	725.2	721.6	717.9	714.3
60°	685.4	684.2	683.0	681.7	680.5	678.1	674.8	671.4	668.0	664.6	661.5
62.5°	632.0	631.1	630.1	629.0	628.0	626.2	623.2	620.3	617.4	614.5	611.2
65°	552.0	551.3	550.7	550.1	549.5	547.4	544.0	540.6	537.3	533.9	531.1
67.5°	474.4	473.1	471.8	470.5	469.2	467.3	464.8	462.2	459.7	457.1	454.8
70°	425.4	423.9	422.3	420.8	419.3	417.1	414.3	411.5	408.8	406.0	404.1
72.5°	372.0	371.0	370.0	368.9	367.8	366.4	364.6	362.8	361.1	359.3	357.1
75°	293.4	292.7	292.1	291.5	290.9	289.8	288.3	286.7	285.2	283.7	282.7
77.5°	220.8	220.5	220.3	220.1	219.8	219.3	218.4	217.5	216.6	215.8	215.3
80°	175.1	175.1	175.1	175.1	175.1	174.9	174.2	173.6	173.0	172.4	172.1
82.5°	135.1	134.6	134.1	133.7	133.1	132.9	132.7	132.6	132.5	132.3	131.8
85°	76.5	76.8	77.0	77.4	77.7	77.8	77.8	77.8	77.8	77.8	77.6
87.5°	30.1	30.1	30.3	30.4	30.5	30.5	30.3	30.2	30.1	30.0	30.0
90°	0.4	0.6	1.2	1.9	2.5	3.1	3.5	4.1	4.4	5.1	5.4
92.5°	3.8	4.6	7.3	11.2	16.7	25.9	43.1	71.9	103.3	101.6	82.2
95°	10.4	10.7	13.2	16.7	23.6	37.8	71.5	140.9	227.8	279.2	273.2
97.5°	17.3	17.7	19.4	22.9	29.2	39.3	61.6	112.4	203.5	298.2	345.7
100°	22.0	22.6	24.0	27.4	33.4	42.9	61.2	102.1	181.6	284.5	363.4
102.5°	27.4	27.7	28.7	32.5	38.0	47.2	63.4	97.8	164.9	260.6	352.8
105°	35.6	35.6	37.2	40.3	45.4	54.2	68.0	96.1	148.7	228.5	319.0
107.5°	43.7	44.3	45.8	48.4	53.7	61.6	75.0	99.0	142.0	206.3	284.4
110°	49.5	50.1	51.4	54.2	58.9	67.1	80.1	101.8	139.9	196.0	264.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	55.3	55.9	56.9	59.7	64.5	72.4	84.8	105.3	139.9	189.9	250.1
115°	63.7	64.3	65.3	68.0	72.8	80.7	92.4	110.6	140.9	183.4	234.2
117.5°	71.2	72.1	73.2	76.0	81.4	89.0	100.0	116.6	142.9	180.2	224.6
120°	76.2	77.2	78.5	81.3	86.7	94.5	105.6	120.7	145.0	178.7	219.4
122.5°	81.6	82.2	83.3	86.1	91.9	99.9	110.8	125.2	146.7	177.5	214.8
125°	88.3	88.9	90.4	93.3	99.2	107.5	117.9	131.4	149.7	175.8	208.7
127.5°	93.5	94.4	96.4	100.0	106.4	114.6	124.6	137.1	153.0	175.1	203.0
130°	96.8	97.7	100.2	104.3	110.9	119.1	128.9	140.9	155.1	174.6	199.2
132.5°	99.2	100.5	103.5	108.1	114.9	123.1	133.0	144.2	157.3	174.6	196.2
135°	103.3	104.6	108.4	113.4	120.1	128.6	138.3	148.7	160.4	174.6	192.5
137.5°	108.5	109.5	113.0	118.1	124.6	133.3	142.2	152.1	163.3	175.0	189.3
140°	111.6	112.5	116.3	121.4	127.3	135.8	145.0	154.4	164.5	175.2	187.8
142.5°	115.1	115.7	119.3	124.4	130.1	138.1	146.7	155.7	165.2	175.5	186.5
145°	120.4	121.0	124.1	128.6	134.3	141.5	149.7	157.6	166.0	175.2	184.7
147.5°	125.9	126.3	129.0	133.1	138.0	144.4	151.6	158.7	166.4	174.4	182.7
150°	129.2	129.8	132.1	136.2	140.5	145.9	152.8	159.4	166.4	173.6	181.2
152.5°	132.8	133.1	135.1	138.7	142.9	147.7	154.1	160.0	166.1	172.6	179.4
155°	137.4	137.4	139.3	142.4	145.6	150.0	155.3	160.4	165.4	170.9	176.5
157.5°	141.6	141.5	143.0	145.7	148.5	151.9	156.4	160.7	164.6	168.9	173.7
160°	144.4	144.0	145.3	147.5	150.0	152.8	156.9	160.7	163.9	167.6	171.5
162.5°	146.6	146.3	147.6	149.5	151.5	153.8	157.5	160.5	163.1	166.1	169.4
165°	150.0	149.4	150.3	151.9	153.2	155.1	157.6	160.1	162.0	163.9	166.4
167.5°	152.3	151.9	152.6	153.4	154.3	155.5	157.6	159.3	160.2	161.7	163.5
170°	153.8	153.5	153.8	154.4	155.1	156.0	157.6	158.8	159.4	160.4	161.7
172.5°	154.8	154.3	154.5	155.2	155.5	156.0	157.3	158.4	158.5	158.9	159.9
175°	156.0	155.3	155.7	156.0	156.0	156.0	156.9	157.6	157.3	157.3	157.6
177.5°	156.6	156.0	156.0	156.3	156.0	156.0	156.6	156.9	156.3	156.3	156.6
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1752.2	1754.7	1757.2	1758.3	1758.1	1757.8	1757.6	1757.3
5°	1743.4	1746.2	1749.0	1750.2	1749.9	1749.6	1749.3	1749.0
7.5°	1725.7	1728.5	1731.2	1732.4	1732.1	1731.8	1731.5	1731.2
10°	1710.8	1713.3	1715.7	1716.8	1716.5	1716.2	1715.9	1715.7
12.5°	1691.0	1692.9	1694.9	1695.9	1695.8	1695.7	1695.7	1695.6
15°	1656.2	1657.7	1659.2	1660.0	1660.0	1660.0	1660.0	1660.0
17.5°	1615.7	1617.7	1619.5	1619.7	1618.2	1616.7	1615.1	1613.6
20°	1585.1	1587.2	1589.4	1589.7	1588.1	1586.6	1585.1	1583.5
22.5°	1550.2	1551.7	1553.1	1553.3	1552.2	1551.1	1550.1	1549.1
25°	1494.4	1495.0	1495.7	1495.5	1494.6	1493.6	1492.7	1491.7
27.5°	1435.8	1436.0	1436.1	1435.7	1434.8	1433.9	1432.9	1432.0
30°	1393.2	1392.6	1392.0	1391.2	1390.3	1389.4	1388.4	1387.5
32.5°	1350.0	1348.9	1347.7	1346.3	1344.7	1343.0	1341.3	1339.7
35°	1282.9	1281.4	1279.9	1277.8	1275.3	1272.9	1270.4	1267.9
37.5°	1212.5	1210.2	1207.9	1206.0	1204.6	1203.2	1201.8	1200.3
40°	1163.7	1160.9	1158.1	1156.3	1155.3	1154.4	1153.4	1152.5
42.5°	1115.3	1112.7	1110.2	1108.2	1106.8	1105.4	1103.9	1102.5
45°	1043.7	1039.9	1036.3	1033.9	1033.0	1032.1	1031.1	1030.2
47.5°	968.1	964.4	960.6	957.7	955.5	953.3	951.2	949.0
50°	916.5	912.5	908.5	905.4	903.2	901.1	898.9	896.7
52.5°	866.3	862.8	859.3	856.3	853.9	851.5	849.1	846.7
55°	788.3	785.5	782.7	780.2	778.1	776.0	773.7	771.6
57.5°	710.8	707.2	703.6	701.2	700.1	698.9	697.7	696.5
60°	658.4	655.3	652.2	649.6	647.4	645.2	643.1	641.0
62.5°	607.8	604.5	601.2	598.7	597.0	595.3	593.6	592.0
65°	528.3	525.5	522.7	520.8	519.5	518.3	517.0	515.8
67.5°	452.5	450.0	447.7	446.2	445.4	444.7	444.0	443.2
70°	402.3	400.4	398.5	397.0	395.7	394.5	393.3	392.1
72.5°	355.1	352.9	350.9	349.2	347.9	346.7	345.4	344.2
75°	281.8	280.8	279.9	278.8	277.6	276.3	275.1	273.8
77.5°	214.6	214.1	213.6	212.9	212.0	211.1	210.3	209.4
80°	171.7	171.5	171.1	170.7	170.0	169.4	168.8	168.3
82.5°	131.3	130.7	130.1	129.8	129.7	129.6	129.4	129.3
85°	77.2	77.0	76.6	76.2	75.5	74.9	74.3	73.7
87.5°	30.1	30.1	30.1	30.1	29.6	29.1	28.6	28.2
90°	5.7	6.0	6.3	7.0	7.0	7.0	7.2	7.2
92.5°	55.8	40.5	30.5	25.9	21.8	21.0	20.6	20.1
95°	226.6	178.7	139.9	113.4	91.0	81.6	79.1	74.1
97.5°	337.4	303.9	266.1	229.3	209.8	192.2	183.1	179.0
100°	387.6	372.2	339.7	306.9	285.2	262.5	250.8	245.8
102.5°	404.5	414.0	398.5	376.3	353.0	336.9	324.2	320.5
105°	394.6	437.7	451.6	448.2	438.0	427.7	421.3	417.6
107.5°	359.0	416.6	452.2	468.7	473.8	473.8	471.6	469.1
110°	332.8	392.7	437.1	463.9	478.0	484.0	486.2	486.2





TEST NUMBER: P333303-940

CATALOG NUMBER: S125DIP-S1270D365U940-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	312.1	369.0	413.9	445.5	466.2	476.5	482.0	484.3
115°	286.1	335.0	378.2	412.5	437.1	452.2	461.0	465.1
117.5°	269.4	311.5	348.7	380.2	404.7	420.4	429.2	431.7
120°	260.3	298.1	332.8	360.5	383.9	399.0	407.5	410.0
122.5°	253.5	288.6	319.4	345.4	366.2	380.0	388.6	390.8
125°	243.6	275.7	303.2	325.8	343.5	356.4	363.4	366.5
127.5°	233.5	263.5	289.1	310.3	326.4	337.8	344.3	345.7
130°	227.2	254.9	279.6	300.1	315.8	326.2	332.5	334.4
132.5°	220.9	246.9	269.2	288.9	304.7	315.0	320.8	323.0
135°	212.8	234.4	254.7	272.6	286.5	296.9	302.6	304.4
137.5°	205.8	223.4	240.1	255.4	267.8	277.2	282.5	284.5
140°	202.0	216.8	231.3	244.5	256.2	264.4	269.1	270.7
142.5°	198.8	211.2	223.7	235.2	245.1	252.1	256.5	257.9
145°	194.5	204.2	214.0	222.5	230.1	235.4	238.9	240.1
147.5°	190.4	198.3	205.9	212.3	218.3	222.6	224.5	225.2
150°	188.2	195.1	201.1	206.7	211.4	215.3	216.5	216.8
152.5°	185.7	191.8	197.2	201.7	205.6	208.7	209.9	210.3
155°	181.8	186.9	191.3	194.7	197.9	200.1	201.1	201.3
157.5°	178.1	182.2	185.7	188.3	190.8	192.6	193.5	193.4
160°	175.6	178.7	181.8	184.0	186.3	187.8	188.4	188.2
162.5°	172.7	175.7	178.3	180.3	182.0	183.2	183.4	183.3
165°	168.9	171.1	173.0	174.6	175.8	176.5	176.5	176.5
167.5°	165.2	166.7	168.2	169.3	170.0	170.5	170.2	170.1
170°	163.3	164.2	165.1	165.8	166.4	166.7	166.7	166.4
172.5°	161.0	161.9	162.6	163.0	163.1	163.7	163.2	162.8
175°	158.5	158.5	159.2	159.2	159.2	159.4	158.8	158.5
177.5°	156.9	157.0	157.0	157.0	156.9	157.0	156.3	156.3
180°	156.3	156.3	156.3	156.3	156.3	156.3	156.3	156.3

(END OF REPORT)