

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: P333614-940

Luminaire Tested: **S125RDIP-S1270D365U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333614-940  
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: S125RDIP-S1270D365U940-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5479.6 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Semi-Direct

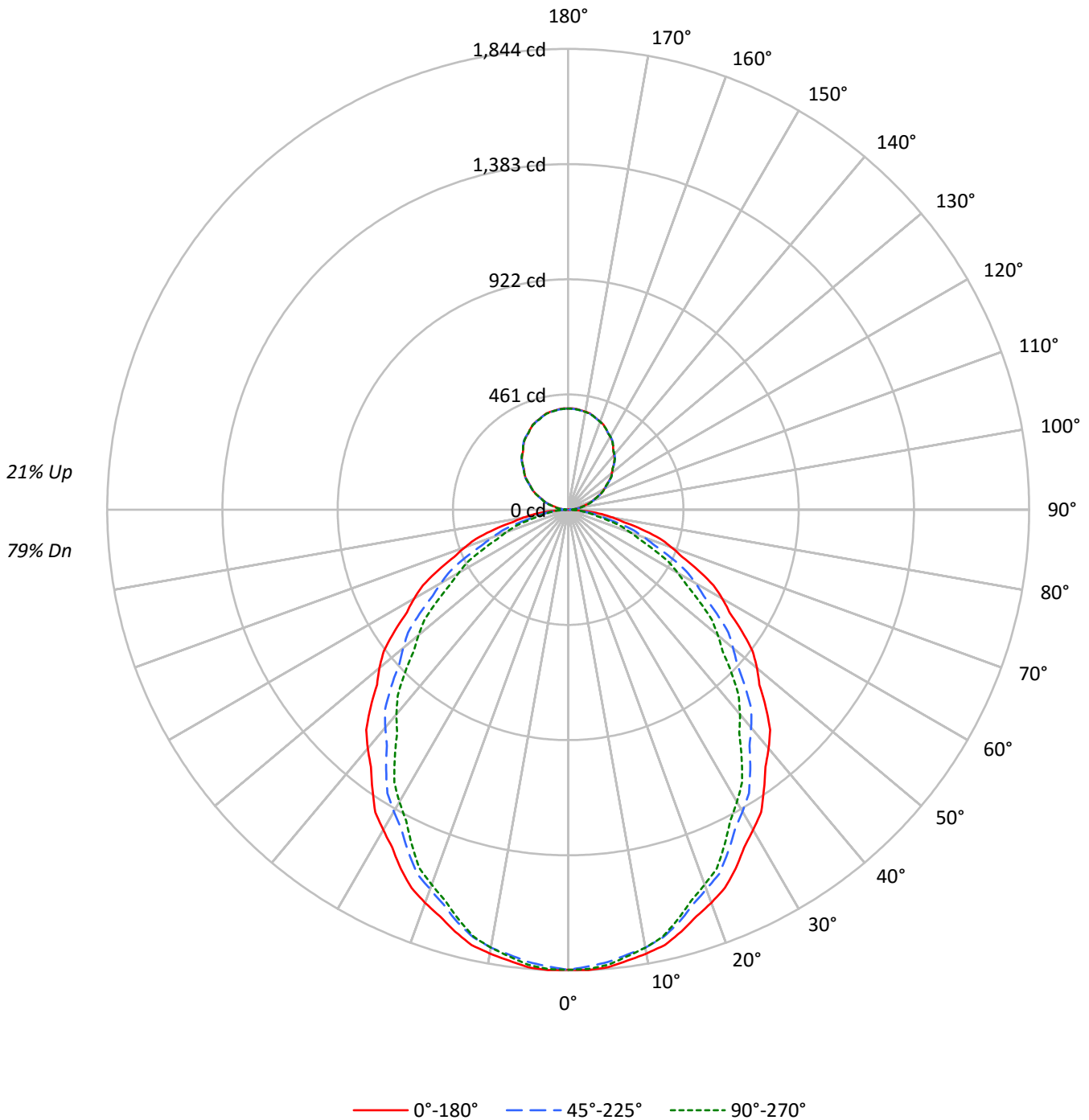
Input Watts (W): 49.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	79
1	105	100	96	93	100	96	93	89	88	85	83	81	79	77	74	72	71	68
2	96	88	82	77	91	84	79	74	78	73	69	71	68	65	66	63	60	57
3	88	78	70	64	83	75	68	62	69	63	59	63	59	55	58	55	52	49
4	80	69	61	55	77	67	59	53	61	55	50	57	52	48	52	48	45	42
5	74	62	54	47	70	60	52	46	55	49	44	51	46	42	47	43	39	37
6	68	56	47	41	65	54	46	40	50	43	39	46	41	37	43	38	35	32
7	63	51	42	37	61	49	41	36	46	39	34	42	37	33	39	35	31	29
8	59	46	38	33	56	45	37	32	42	35	31	39	33	29	36	32	28	26
9	55	42	35	29	53	41	34	29	38	32	28	36	30	26	34	29	25	23
10	52	39	32	27	49	38	31	26	36	29	25	33	28	24	31	27	23	21

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

	0°	45°	90°
0°	11889	11889	11889
5°	11916	11780	11852
10°	11825	11671	11671
15°	11685	11433	11340
20°	11504	11103	10970
25°	11294	10779	10541
30°	11032	10399	10068
35°	10764	10008	9536
40°	10514	9599	9014
45°	10209	9143	8444
50°	9904	8647	7850
55°	9549	8172	7218
60°	9195	7596	6536
65°	8775	6927	5757
70°	8295	6090	4962
75°	7633	5133	4127
80°	6721	4032	3466
85°	5669	3298	3090



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.1	3.2
10°-20°	483.7	8.8
20°-30°	701.4	12.8
30°-40°	799.4	14.6
40°-50°	779.2	14.2
50°-60°	655.9	12.0
60°-70°	459.8	8.4
70°-80°	236.3	4.3
80°-90°	60.6	1.1
90°-100°	27.1	0.5
100°-110°	80.1	1.5
110°-120°	135.7	2.5
120°-130°	178.6	3.3
130°-140°	200.1	3.7
140°-150°	196.1	3.6
150°-160°	164.7	3.0
160°-170°	109.5	2.0
170°-180°	38.3	0.7
0°-30°	1358.2	24.8
0°-40°	2157.6	39.4
0°-60°	3592.8	65.6
0°-90°	4349.5	79.4
90°-120°	242.9	4.4
90°-150°	817.6	14.9
90°-180°	1130.0	20.6
0°-180°	5479.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1841	1841	1841	1841	1841	
5°	1838	1832	1817	1830	1828	174
15°	1748	1738	1710	1708	1696	492
25°	1585	1562	1513	1495	1479	729
35°	1365	1330	1269	1230	1210	854
45°	1118	1075	1001	947	924	862
55°	848	802	726	665	641	758
65°	574	525	453	400	377	569
75°	306	263	206	176	165	324
85°	76	52	44	43	42	86
90°	0	3	5	7	8	5
95°	20	21	24	26	27	22
105°	72	74	75	77	78	77
115°	136	137	138	137	137	134
125°	198	200	200	200	200	177
135°	258	260	260	260	259	199
145°	312	314	314	314	314	195
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8
2.5°	1844.1	1843.3	1842.5	1841.8	1841.1	1839.5	1837.0	1834.5	1832.1	1829.6	1832.1
5°	1838.0	1836.7	1835.5	1834.2	1833.0	1830.7	1827.3	1823.9	1820.5	1817.1	1820.2
7.5°	1819.9	1818.7	1817.6	1816.3	1815.2	1812.6	1808.5	1804.4	1800.4	1796.3	1798.4
10°	1803.2	1802.2	1801.3	1800.5	1799.5	1796.9	1792.5	1788.2	1783.9	1779.6	1780.5
12.5°	1784.3	1783.2	1781.9	1780.7	1779.6	1776.1	1770.3	1764.5	1758.6	1752.8	1753.5
15°	1747.6	1745.7	1743.9	1742.0	1740.2	1736.0	1729.5	1723.1	1716.5	1710.0	1709.8
17.5°	1706.1	1703.3	1700.5	1697.6	1694.8	1689.3	1681.1	1672.9	1664.8	1656.6	1655.1
20°	1673.9	1670.8	1667.7	1664.6	1661.5	1655.0	1645.2	1635.3	1625.4	1615.5	1614.0
22.5°	1638.3	1635.2	1632.1	1629.1	1625.9	1619.3	1608.8	1598.5	1588.0	1577.7	1574.7
25°	1584.9	1580.3	1575.7	1571.0	1566.4	1558.4	1546.9	1535.5	1524.0	1512.6	1508.6
27.5°	1523.8	1518.1	1512.5	1506.9	1501.3	1492.4	1480.1	1467.8	1455.6	1443.4	1437.8
30°	1479.3	1473.4	1467.5	1461.7	1455.8	1446.4	1433.3	1420.4	1407.4	1394.5	1387.3
32.5°	1435.9	1429.1	1422.2	1415.3	1408.5	1398.4	1385.2	1372.0	1358.7	1345.5	1337.7
35°	1365.3	1357.8	1350.4	1343.0	1335.6	1324.9	1311.0	1297.2	1283.3	1269.4	1260.3
37.5°	1296.0	1287.0	1278.0	1269.0	1259.9	1248.2	1233.9	1219.6	1205.2	1190.9	1180.2
40°	1247.1	1237.8	1228.5	1219.2	1210.1	1197.9	1183.1	1168.3	1153.4	1138.6	1126.9
42.5°	1196.0	1186.4	1176.9	1167.3	1157.9	1145.4	1130.2	1114.8	1099.5	1084.1	1072.9
45°	1117.8	1108.8	1099.8	1090.9	1081.9	1069.0	1052.0	1035.0	1018.0	1001.0	988.6
47.5°	1036.9	1027.4	1018.0	1008.5	999.1	985.8	968.7	951.5	934.4	917.3	904.6
50°	985.7	975.5	965.3	955.1	944.9	931.0	913.4	895.8	878.2	860.6	847.6
52.5°	930.1	919.6	909.2	898.8	888.3	874.8	858.2	841.6	824.9	808.3	794.3
55°	848.1	838.2	828.3	818.4	808.5	795.0	777.7	760.4	743.1	725.8	711.9
57.5°	765.2	754.7	744.0	733.5	722.9	709.4	692.7	675.9	659.2	642.6	629.0
60°	711.9	701.0	690.2	679.4	668.6	654.8	638.1	621.4	604.8	588.1	574.5
62.5°	655.1	644.8	634.5	624.1	613.9	600.2	583.3	566.3	549.4	532.4	519.9
65°	574.2	563.7	553.2	542.7	532.2	518.7	502.4	486.0	469.6	453.3	440.9
67.5°	493.8	483.3	472.8	462.4	451.8	438.7	423.0	407.3	391.6	375.9	364.6
70°	439.3	428.8	418.3	407.8	397.3	384.3	368.9	353.5	338.0	322.5	313.0
72.5°	385.9	375.7	365.4	355.2	344.9	332.5	318.1	303.6	289.2	274.7	265.9
75°	305.9	296.6	287.3	278.0	268.8	257.7	244.7	231.8	218.7	205.7	198.9
77.5°	226.3	218.9	211.5	204.1	196.7	187.8	177.4	167.0	156.7	146.2	141.5
80°	180.7	173.3	165.9	158.5	151.1	143.0	134.4	125.7	117.1	108.4	105.7
82.5°	136.3	129.6	122.9	116.2	109.6	103.3	97.3	91.4	85.4	79.5	78.2
85°	76.5	70.9	65.4	59.7	54.2	50.6	49.1	47.6	46.0	44.5	44.1
87.5°	25.7	24.0	22.4	20.8	19.2	18.3	18.1	18.0	17.8	17.7	17.7
90°	0.4	0.9	1.4	2.0	2.6	3.1	3.6	4.1	4.5	5.1	5.4
92.5°	7.7	8.0	8.4	8.8	9.2	9.7	10.3	10.9	11.5	12.1	12.6
95°	20.5	20.6	20.8	20.9	21.0	21.5	22.2	22.8	23.5	24.3	24.8
97.5°	34.1	34.1	34.2	34.2	34.2	34.8	35.8	36.7	37.6	38.6	39.1
100°	44.1	44.1	44.1	44.1	44.1	44.6	45.5	46.4	47.3	48.2	48.9
102.5°	54.9	55.3	55.6	55.8	56.1	56.4	56.9	57.3	57.9	58.3	59.0
105°	71.9	72.2	72.6	72.9	73.3	73.7	74.1	74.5	74.9	75.3	75.7
107.5°	90.5	90.9	91.2	91.6	91.9	92.3	92.6	92.9	93.2	93.5	93.7
110°	103.3	103.7	104.1	104.4	104.8	105.0	105.2	105.5	105.7	105.9	106.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	116.5	116.6	116.8	117.0	117.2	117.4	117.7	118.0	118.2	118.5	118.6
115°	135.8	136.1	136.4	136.7	137.0	137.1	137.3	137.4	137.6	137.8	137.7
117.5°	155.2	155.3	155.5	155.6	155.8	155.9	156.0	156.1	156.2	156.4	156.4
120°	167.4	167.7	168.1	168.4	168.7	169.0	169.1	169.1	169.2	169.2	169.2
122.5°	180.5	180.6	180.7	180.8	180.9	181.1	181.3	181.5	181.6	181.8	181.8
125°	198.2	198.7	199.1	199.5	199.9	200.2	200.3	200.3	200.4	200.5	200.3
127.5°	217.1	217.4	217.7	217.8	218.1	218.3	218.4	218.5	218.6	218.6	218.6
130°	228.5	228.8	229.2	229.5	229.9	230.2	230.2	230.4	230.6	230.7	230.6
132.5°	239.9	240.4	241.0	241.6	242.1	242.5	242.4	242.4	242.4	242.3	242.2
135°	257.8	258.2	258.7	259.0	259.5	259.8	259.8	259.8	259.9	260.0	260.0
137.5°	274.7	275.1	275.5	275.9	276.3	276.6	276.8	276.9	277.1	277.2	277.3
140°	285.5	285.9	286.2	286.6	287.0	287.2	287.4	287.7	287.8	288.0	288.2
142.5°	296.4	296.7	296.9	297.3	297.6	297.8	298.1	298.4	298.6	298.9	299.0
145°	312.4	312.6	312.9	313.2	313.4	313.7	313.9	314.1	314.3	314.5	314.5
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	328.7
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8	1840.8
2.5°	1834.5	1837.0	1839.5	1840.6	1840.4	1840.1	1839.9	1839.6
5°	1823.3	1826.4	1829.4	1830.7	1830.1	1829.4	1828.8	1828.2
7.5°	1800.5	1802.8	1804.9	1805.6	1804.9	1804.3	1803.6	1803.0
10°	1781.4	1782.4	1783.2	1783.2	1782.4	1781.4	1780.5	1779.6
12.5°	1754.3	1754.9	1755.6	1755.2	1753.8	1752.4	1751.0	1749.5
15°	1709.4	1709.1	1708.8	1707.3	1704.5	1701.7	1698.9	1696.1
17.5°	1653.6	1652.0	1650.5	1648.6	1646.3	1644.0	1641.7	1639.4
20°	1612.4	1610.9	1609.4	1607.1	1604.4	1601.6	1598.8	1596.1
22.5°	1571.6	1568.6	1565.6	1562.9	1560.7	1558.4	1556.0	1553.8
25°	1504.6	1500.6	1496.6	1492.8	1489.4	1486.0	1482.6	1479.3
27.5°	1432.2	1426.6	1420.9	1416.5	1413.2	1409.9	1406.6	1403.4
30°	1380.3	1373.1	1366.0	1361.1	1358.3	1355.5	1352.7	1350.0
32.5°	1329.8	1322.0	1314.1	1308.4	1304.9	1301.4	1297.9	1294.3
35°	1251.4	1242.4	1233.5	1226.8	1222.5	1218.2	1213.9	1209.5
37.5°	1169.4	1158.7	1147.9	1140.4	1136.2	1132.0	1127.8	1123.6
40°	1115.2	1103.4	1091.7	1084.0	1080.2	1076.6	1072.8	1069.2
42.5°	1061.7	1050.4	1039.2	1030.8	1025.4	1019.9	1014.5	1009.1
45°	976.2	963.9	951.5	943.1	938.4	933.8	929.2	924.5
47.5°	891.9	879.1	866.4	857.5	852.3	847.2	842.0	837.0
50°	834.6	821.6	808.7	799.9	795.2	790.6	786.0	781.3
52.5°	780.3	766.4	752.4	743.2	738.5	733.9	729.2	724.6
55°	697.9	684.0	670.1	660.7	655.8	650.8	645.9	641.0
57.5°	615.4	601.8	588.2	579.3	574.8	570.4	566.1	561.7
60°	560.9	547.3	533.7	524.6	520.0	515.3	510.7	506.0
62.5°	507.3	494.6	482.1	473.4	468.8	464.1	459.5	454.9
65°	428.6	416.2	403.8	395.3	390.7	386.0	381.4	376.7
67.5°	353.3	342.0	330.7	323.2	319.5	315.8	312.1	308.4
70°	303.4	293.8	284.3	277.6	273.8	270.2	266.4	262.8
72.5°	257.1	248.3	239.3	233.7	231.2	228.8	226.3	223.8
75°	192.2	185.4	178.6	174.1	171.9	169.8	167.6	165.4
77.5°	136.7	132.0	127.2	124.0	122.4	120.8	119.2	117.6
80°	102.9	100.1	97.3	95.6	95.0	94.3	93.8	93.2
82.5°	77.0	75.6	74.4	73.5	73.1	72.8	72.4	72.1
85°	43.9	43.6	43.2	43.0	42.6	42.4	42.0	41.7
87.5°	17.8	17.9	18.0	17.9	17.7	17.5	17.3	17.1
90°	5.7	6.1	6.4	6.7	7.0	7.1	7.3	7.6
92.5°	13.0	13.5	13.9	14.3	14.4	14.5	14.7	14.9
95°	25.2	25.8	26.2	26.6	26.7	26.8	26.9	27.1
97.5°	39.6	40.0	40.5	40.8	40.8	40.9	41.0	41.1
100°	49.5	50.1	50.7	51.1	51.3	51.5	51.5	51.7
102.5°	59.7	60.4	61.1	61.5	61.7	61.9	62.1	62.2
105°	76.2	76.6	77.0	77.3	77.5	77.8	77.9	78.2
107.5°	94.0	94.2	94.3	94.5	94.4	94.4	94.4	94.4
110°	106.3	106.6	106.7	106.8	106.7	106.6	106.6	106.6





TEST NUMBER: P333614-940

CATALOG NUMBER: S125RDIP-S1270D365U940-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	118.7	118.8	118.9	118.9	118.8	118.6	118.5	118.4
115°	137.6	137.5	137.4	137.4	137.3	137.2	137.1	137.1
117.5°	156.5	156.6	156.6	156.5	156.2	156.0	155.7	155.3
120°	169.2	169.2	169.2	169.1	168.8	168.5	168.3	168.0
122.5°	181.7	181.6	181.6	181.5	181.3	181.0	180.8	180.6
125°	200.2	200.0	199.9	199.7	199.7	199.7	199.6	199.5
127.5°	218.5	218.4	218.3	218.2	218.1	217.9	217.8	217.7
130°	230.6	230.5	230.4	230.3	230.2	230.1	229.9	229.8
132.5°	242.2	242.1	242.0	241.9	241.7	241.5	241.3	241.1
135°	260.0	260.0	260.0	259.8	259.6	259.3	259.0	258.8
137.5°	277.4	277.5	277.6	277.4	277.1	276.7	276.3	276.0
140°	288.4	288.5	288.6	288.6	288.2	287.8	287.5	287.1
142.5°	299.1	299.2	299.3	299.1	298.7	298.4	298.1	297.7
145°	314.5	314.5	314.5	314.4	314.2	314.0	313.8	313.6
147.5°	328.9	329.0	329.2	329.0	328.6	328.1	327.6	327.2
150°	337.9	337.9	337.9	337.8	337.7	337.5	337.3	337.2
152.5°	346.3	346.4	346.6	346.5	346.3	346.1	345.8	345.5
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

(END OF REPORT)