

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: P333613-940

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333613-940
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: S125RDIP-S1270D365U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5655.3 lumens
Efficiency: N/A
Efficacy: 113.6 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

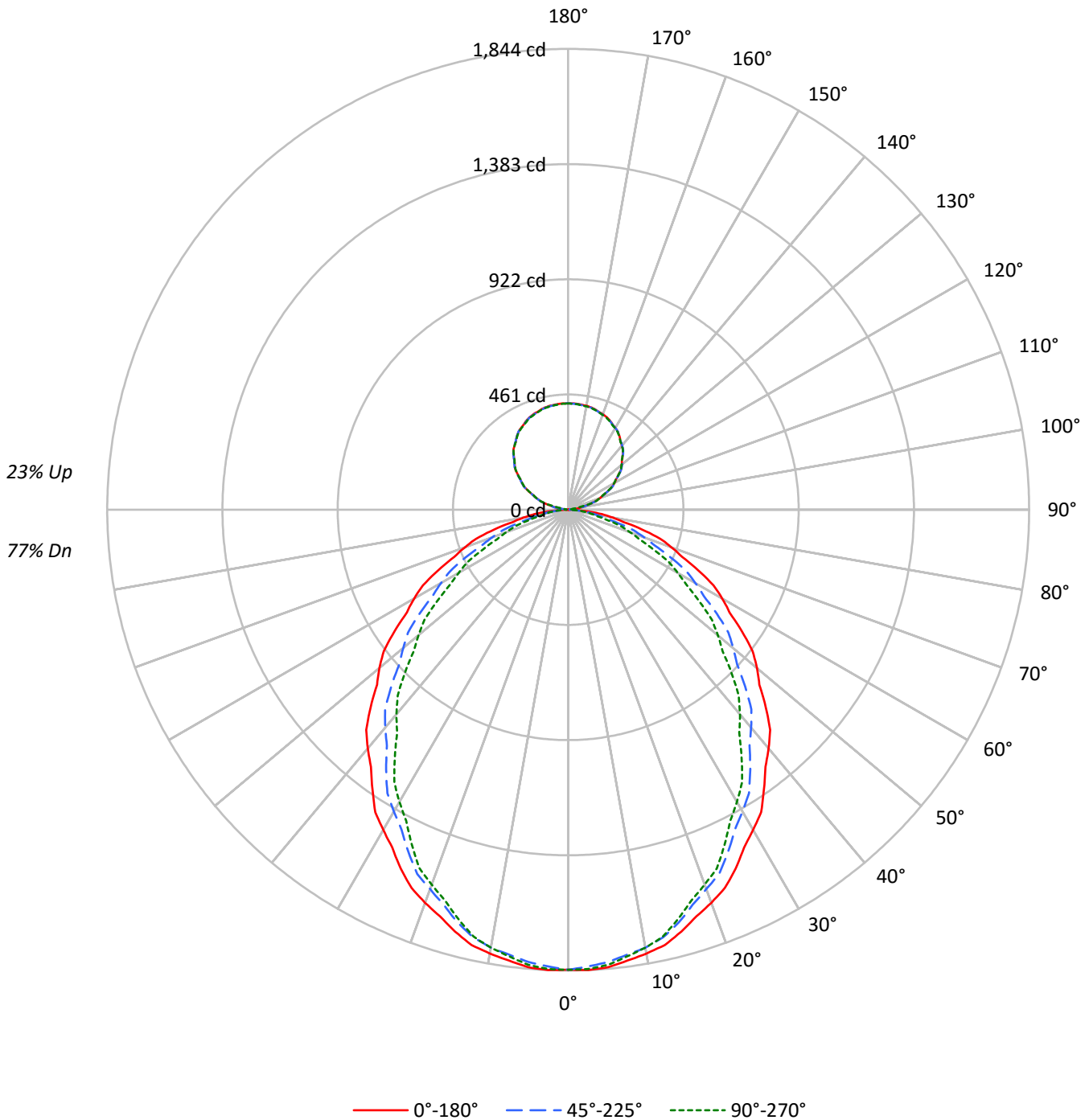
Input Watts (W): 49.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	0	
RCR																						
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77				
1	104	100	96	92	99	95	92	89	87	84	82	79	77	75	72	71	69	66				
2	95	88	81	76	90	84	78	73	77	72	68	70	66	63	64	61	59	55				
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47				
4	80	69	61	54	76	66	59	53	61	54	50	56	51	47	51	47	44	41				
5	74	62	53	47	70	59	51	46	54	48	43	50	45	41	46	42	38	36				
6	68	56	47	41	65	53	46	40	49	43	38	45	40	36	42	37	34	31				
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	38	34	30	28				
8	59	46	38	32	56	44	37	32	41	35	30	38	33	29	35	31	27	25				
9	55	42	34	29	52	41	33	29	38	32	27	35	30	26	33	28	25	23				
10	51	39	31	26	49	38	31	26	35	29	25	33	27	24	30	26	22	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	3.1
10°-20°	483.7	8.6
20°-30°	701.4	12.4
30°-40°	799.4	14.1
40°-50°	779.2	13.8
50°-60°	655.9	11.6
60°-70°	459.8	8.1
70°-80°	236.3	4.2
80°-90°	60.6	1.1
90°-100°	15.5	0.3
100°-110°	95.2	1.7
110°-120°	172.7	3.1
120°-130°	221.7	3.9
130°-140°	238.4	4.2
140°-150°	223.8	4.0
150°-160°	181.0	3.2
160°-170°	117.1	2.1
170°-180°	40.4	0.7
0°-30°	1358.2	24.0
0°-40°	2157.6	38.2
0°-60°	3592.8	63.5
0°-90°	4349.5	76.9
90°-120°	283.4	5.0
90°-150°	967.3	17.1
90°-180°	1306.0	23.1
0°-180°	5655.3	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	4
95°	18	16	5	6	7	23
105°	93	94	94	94	94	98
115°	174	176	176	175	173	172
125°	247	250	250	248	247	221
135°	309	310	310	309	307	238
145°	358	358	358	359	357	224
155°	394	392	393	394	391	181
165°	416	414	414	416	414	117
175°	425	424	424	426	423	40
180°	425	425	425	425	425	



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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°	4.8	4.5	4.1	3.7	3.3	3.3	3.7	4.2	4.6	5.1	5.4
95°	17.9	17.7	17.6	17.3	17.1	15.7	13.0	10.3	7.7	5.1	5.4
97.5°	37.5	37.9	38.3	38.6	39.1	36.6	31.3	26.0	20.8	15.5	13.6
100°	52.6	52.9	53.1	53.2	53.5	53.7	54.0	54.3	54.6	54.8	44.4
102.5°	68.0	68.3	68.6	68.8	69.1	69.3	69.5	69.6	69.8	70.0	68.0
105°	92.6	92.9	93.3	93.5	93.8	93.9	93.9	93.9	93.9	93.9	93.9
107.5°	118.2	118.2	118.2	118.2	118.2	118.3	118.5	118.6	118.8	118.9	118.9
110°	134.9	134.9	134.9	134.9	134.9	135.0	135.1	135.3	135.4	135.5	135.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.5	150.7	150.9	151.1	151.2	151.3	151.4	151.5	151.6	151.7	151.4
115°	174.0	174.3	174.7	175.0	175.4	175.6	175.7	175.8	175.8	175.8	175.6
117.5°	198.2	198.2	198.2	198.2	198.2	198.3	198.6	198.9	199.1	199.4	199.0
120°	213.4	213.3	213.3	213.2	213.1	213.2	213.4	213.6	213.8	214.0	213.9
122.5°	226.8	227.0	227.3	227.6	227.8	228.0	228.1	228.2	228.3	228.4	228.3
125°	247.4	247.9	248.4	248.9	249.4	249.7	249.7	249.7	249.7	249.7	249.3
127.5°	267.2	267.5	267.9	268.2	268.6	268.8	268.7	268.7	268.6	268.6	268.4
130°	279.3	279.6	280.0	280.4	280.7	280.9	281.0	281.0	281.1	281.2	281.0
132.5°	291.4	291.8	292.2	292.6	293.0	293.1	293.0	292.8	292.7	292.5	292.5
135°	308.6	309.0	309.4	309.9	310.2	310.4	310.2	310.1	310.0	309.9	309.7
137.5°	324.4	324.8	325.1	325.5	325.8	326.0	325.8	325.7	325.6	325.5	325.5
140°	334.7	334.9	335.0	335.2	335.3	335.4	335.3	335.2	335.1	335.1	335.2
142.5°	344.1	344.2	344.3	344.3	344.4	344.5	344.6	344.7	344.8	344.9	344.9
145°	357.8	357.9	358.0	358.2	358.3	358.4	358.4	358.4	358.4	358.4	358.5
147.5°	369.7	369.7	369.7	369.6	369.6	369.6	369.7	369.8	369.9	370.0	370.1
150°	377.3	377.2	377.0	376.8	376.7	376.7	376.8	377.0	377.2	377.3	377.5
152.5°	384.6	384.3	384.0	383.7	383.3	383.3	383.4	383.6	383.7	383.9	384.0
155°	394.0	393.6	393.2	392.7	392.4	392.2	392.4	392.4	392.6	392.7	393.0
157.5°	401.3	401.0	400.7	400.5	400.3	400.1	400.1	400.2	400.2	400.2	400.4
160°	406.3	405.9	405.5	405.0	404.7	404.5	404.5	404.6	404.7	404.7	405.0
162.5°	410.4	409.9	409.5	409.0	408.7	408.5	408.6	408.6	408.7	408.8	409.1
165°	415.7	415.4	414.9	414.5	414.1	413.9	413.9	414.0	414.1	414.2	414.6
167.5°	419.8	419.4	418.9	418.5	418.0	417.9	417.9	418.0	418.1	418.1	418.7
170°	422.0	421.6	421.1	420.6	420.1	419.9	420.0	420.0	420.1	420.2	420.7
172.5°	423.6	423.1	422.6	422.1	421.6	421.4	421.5	421.7	421.8	422.0	422.4
175°	425.2	424.8	424.4	423.9	423.6	423.4	423.4	423.5	423.6	423.7	424.2
177.5°	426.0	425.6	425.3	425.0	424.6	424.5	424.5	424.6	424.6	424.7	425.1
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2



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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°	5.7	6.1	6.4	6.7	6.8	6.9	7.0	7.0
95°	5.7	6.1	6.4	6.6	6.6	6.6	6.6	6.6
97.5°	11.6	9.5	7.6	6.6	6.6	6.6	6.6	6.6
100°	34.0	23.5	13.1	7.8	7.5	7.2	6.9	6.6
102.5°	66.0	64.0	62.1	58.7	53.9	49.2	44.4	39.7
105°	93.9	93.9	93.9	93.9	93.8	93.7	93.7	93.6
107.5°	119.0	119.0	119.0	118.9	118.7	118.4	118.2	118.0
110°	135.1	134.9	134.7	134.6	134.7	134.7	134.8	134.9



TEST NUMBER: P333613-940

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	151.1	150.9	150.6	150.4	150.3	150.3	150.2	150.1
115°	175.3	175.0	174.8	174.4	174.0	173.6	173.2	172.7
117.5°	198.7	198.3	198.0	197.7	197.5	197.3	197.2	197.0
120°	213.7	213.6	213.5	213.2	212.9	212.5	212.1	211.8
122.5°	228.1	228.0	227.8	227.6	227.1	226.8	226.3	226.0
125°	249.1	248.8	248.5	248.3	248.1	247.9	247.6	247.4
127.5°	268.2	268.0	268.0	267.6	267.1	266.5	266.1	265.6
130°	280.7	280.5	280.4	280.0	279.7	279.4	279.0	278.7
132.5°	292.4	292.4	292.3	292.1	291.8	291.4	291.1	290.8
135°	309.6	309.4	309.2	309.0	308.6	308.2	307.7	307.3
137.5°	325.6	325.6	325.6	325.4	325.0	324.7	324.3	324.0
140°	335.4	335.5	335.6	335.5	335.1	334.7	334.2	333.8
142.5°	344.9	345.0	345.0	344.8	344.4	343.9	343.6	343.1
145°	358.6	358.6	358.6	358.5	358.1	357.7	357.2	356.8
147.5°	370.1	370.2	370.3	370.1	369.6	369.1	368.6	368.1
150°	377.6	377.7	377.8	377.6	377.1	376.6	375.9	375.4
152.5°	384.1	384.2	384.4	384.2	383.7	383.3	382.7	382.2
155°	393.2	393.3	393.6	393.4	392.9	392.3	391.7	391.2
157.5°	400.6	400.8	401.1	400.9	400.4	399.8	399.2	398.7
160°	405.3	405.6	405.8	405.7	405.1	404.6	404.0	403.5
162.5°	409.6	409.9	410.4	410.2	409.6	408.9	408.4	407.8
165°	415.0	415.4	415.9	415.8	415.3	414.6	414.1	413.6
167.5°	419.2	419.6	420.2	420.1	419.5	418.8	418.2	417.6
170°	421.2	421.9	422.4	422.4	421.8	421.2	420.4	419.8
172.5°	422.9	423.5	423.9	423.9	423.3	422.6	422.0	421.3
175°	424.7	425.3	425.9	425.9	425.2	424.5	423.9	423.3
177.5°	425.5	425.9	426.2	426.2	425.8	425.3	424.9	424.5
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2

(END OF REPORT)