

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: P333620-940

Luminaire Tested: **S125RDIP-S1270D590U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333620-940
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-S1270D590U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6174.1 lumens
Efficiency: N/A
Efficacy: 112.1 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

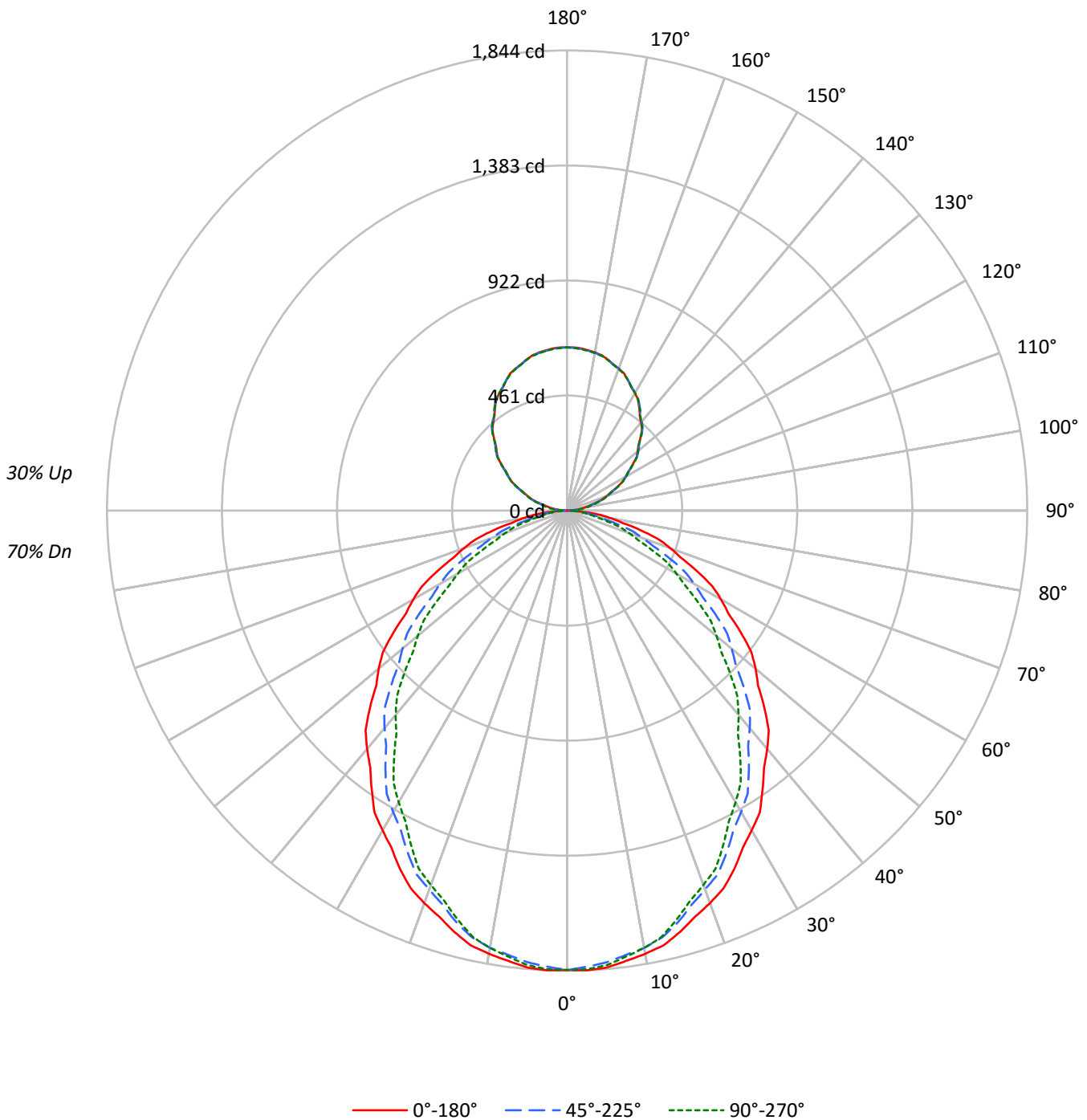
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	65	64
2	94	86	80	75	88	82	76	72	74	69	66	66	63	60	59	57	54
3	86	76	69	63	81	72	66	60	65	60	56	59	55	51	53	49	47
4	79	68	60	53	74	64	57	51	58	52	48	53	48	44	47	43	40
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	43	39	35
6	67	55	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31
7	62	49	41	36	59	47	40	34	43	37	32	39	34	30	36	31	28
8	58	45	37	32	55	43	36	31	39	33	29	36	31	27	33	28	25
9	54	41	34	28	51	40	32	28	36	30	26	33	28	24	30	26	23
10	50	38	31	26	48	36	30	25	34	28	24	31	26	22	28	24	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	2.8
10°-20°	483.7	7.8
20°-30°	701.4	11.4
30°-40°	799.4	12.9
40°-50°	779.2	12.6
50°-60°	655.9	10.6
60°-70°	459.8	7.4
70°-80°	236.3	3.8
80°-90°	61.1	1.0
90°-100°	43.8	0.7
100°-110°	129.3	2.1
110°-120°	219.0	3.5
120°-130°	288.2	4.7
130°-140°	322.9	5.2
140°-150°	316.5	5.1
150°-160°	265.8	4.3
160°-170°	176.7	2.9
170°-180°	61.8	1.0
0°-30°	1358.2	22.0
0°-40°	2157.6	34.9
0°-60°	3592.8	58.2
0°-90°	4350.1	70.5
90°-120°	392.0	6.3
90°-150°	1319.7	21.4
90°-180°	1824.0	29.5
0°-180°	6174.1	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	5	8	11	12	5
95°	33	34	39	43	44	35
105°	116	119	122	125	126	124
115°	219	221	222	222	221	217
125°	320	323	324	322	322	286
135°	416	419	420	420	418	321
145°	504	506	508	508	506	315
155°	577	577	577	579	577	266
165°	627	626	627	628	626	177
175°	652	650	650	653	650	62
180°	654	654	654	654	654	



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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	24.2	22.6	21.0	19.5	18.6	18.5	18.5	18.4	18.3	18.5
90°	0.5	1.4	2.3	3.2	4.1	5.0	5.8	6.6	7.3	8.1	8.7
92.5°	12.3	12.9	13.6	14.2	14.8	15.6	16.6	17.6	18.5	19.5	20.2
95°	33.1	33.3	33.5	33.7	34.0	34.7	35.8	36.9	38.1	39.1	39.9
97.5°	54.9	55.0	55.1	55.2	55.3	56.1	57.7	59.2	60.8	62.3	63.1
100°	71.2	71.2	71.2	71.2	71.2	72.0	73.4	74.9	76.3	77.8	78.8
102.5°	88.7	89.2	89.6	90.1	90.5	91.1	91.8	92.6	93.4	94.1	95.2
105°	116.0	116.5	117.1	117.7	118.2	118.9	119.6	120.2	120.9	121.5	122.3
107.5°	146.1	146.7	147.2	147.8	148.4	148.9	149.5	149.9	150.4	151.0	151.3
110°	166.8	167.4	168.0	168.5	169.2	169.6	169.9	170.2	170.6	170.9	171.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	188.0	188.3	188.6	188.9	189.2	189.6	190.0	190.4	190.8	191.3	191.5
115°	219.3	219.7	220.2	220.6	221.1	221.4	221.6	221.9	222.0	222.3	222.2
117.5°	250.6	250.7	251.0	251.2	251.4	251.6	251.8	252.0	252.2	252.4	252.5
120°	270.1	270.7	271.3	271.8	272.4	272.7	272.9	273.0	273.0	273.1	273.1
122.5°	291.3	291.5	291.7	291.9	292.1	292.3	292.7	292.9	293.2	293.6	293.5
125°	319.9	320.7	321.3	322.0	322.7	323.1	323.2	323.3	323.4	323.5	323.3
127.5°	350.5	350.9	351.2	351.6	352.0	352.3	352.4	352.6	352.7	352.8	352.8
130°	368.8	369.3	370.0	370.5	371.0	371.5	371.7	371.9	372.1	372.4	372.3
132.5°	387.1	388.1	389.0	389.9	390.8	391.3	391.2	391.2	391.1	391.1	391.0
135°	416.1	416.8	417.5	418.1	418.8	419.2	419.4	419.5	419.5	419.6	419.6
137.5°	443.4	444.1	444.7	445.3	446.0	446.5	446.7	446.9	447.2	447.5	447.5
140°	460.8	461.5	462.0	462.5	463.2	463.6	464.0	464.3	464.6	464.9	465.2
142.5°	478.4	478.8	479.3	479.8	480.3	480.7	481.2	481.6	482.1	482.4	482.6
145°	504.1	504.5	505.1	505.5	506.0	506.3	506.7	507.0	507.4	507.7	507.7
147.5°	527.9	528.2	528.4	528.7	529.0	529.1	529.4	529.8	530.0	530.3	530.6
150°	543.8	543.7	543.6	543.5	543.3	543.5	543.9	544.4	544.8	545.3	545.3
152.5°	556.8	557.0	557.1	557.3	557.4	557.6	557.8	557.9	558.1	558.4	558.7
155°	576.8	576.8	576.8	576.8	576.8	576.9	577.0	577.1	577.3	577.4	577.8
157.5°	594.8	594.5	594.2	594.1	593.8	593.7	593.8	594.0	594.1	594.1	594.6
160°	605.4	605.0	604.7	604.3	604.0	603.9	604.0	604.1	604.2	604.3	604.8
162.5°	614.7	614.5	614.2	613.9	613.7	613.6	613.6	613.7	613.7	613.7	614.2
165°	627.2	627.0	626.8	626.5	626.3	626.2	626.3	626.5	626.6	626.7	627.1
167.5°	637.8	637.4	636.9	636.4	636.0	635.8	635.8	635.8	635.8	635.8	636.4
170°	643.5	643.0	642.6	642.1	641.7	641.5	641.5	641.5	641.5	641.5	642.1
172.5°	647.6	647.1	646.7	646.2	645.8	645.5	645.5	645.5	645.5	645.5	646.2
175°	652.1	651.7	651.2	650.8	650.3	650.1	650.1	650.1	650.1	650.1	650.8
177.5°	654.5	654.2	653.8	653.4	653.0	652.8	652.7	652.6	652.6	652.5	653.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7



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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°	18.5	18.6	18.7	18.7	18.5	18.4	18.2	18.0
90°	9.3	9.8	10.4	10.9	11.2	11.5	11.9	12.2
92.5°	21.0	21.8	22.6	23.0	23.3	23.5	23.7	24.0
95°	40.8	41.6	42.4	42.8	43.1	43.3	43.5	43.8
97.5°	63.8	64.6	65.4	65.8	65.9	66.1	66.2	66.3
100°	79.9	80.9	81.9	82.5	82.8	83.0	83.2	83.5
102.5°	96.3	97.5	98.5	99.2	99.6	99.9	100.2	100.5
105°	123.0	123.6	124.3	124.8	125.1	125.5	125.8	126.2
107.5°	151.7	152.0	152.3	152.5	152.5	152.5	152.4	152.4
110°	171.6	171.9	172.3	172.4	172.3	172.2	172.0	171.9



TEST NUMBER: P333620-940

CATALOG NUMBER: S125RDIP-S1270D590U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	191.6	191.7	191.9	191.9	191.7	191.5	191.3	191.1
115°	222.0	221.9	221.9	221.8	221.6	221.5	221.4	221.3
117.5°	252.6	252.7	252.8	252.6	252.2	251.7	251.3	250.7
120°	273.1	273.1	273.1	273.0	272.5	272.1	271.6	271.2
122.5°	293.4	293.3	293.2	292.9	292.6	292.2	291.9	291.5
125°	323.1	322.9	322.6	322.4	322.4	322.3	322.1	322.0
127.5°	352.6	352.5	352.4	352.2	352.0	351.8	351.5	351.3
130°	372.1	372.0	371.9	371.8	371.5	371.3	371.0	370.9
132.5°	390.8	390.7	390.7	390.4	390.1	389.8	389.5	389.1
135°	419.6	419.6	419.6	419.5	419.0	418.6	418.1	417.7
137.5°	447.7	447.8	448.0	447.8	447.2	446.7	446.1	445.5
140°	465.4	465.7	465.8	465.7	465.1	464.6	464.0	463.4
142.5°	482.7	482.9	483.0	482.8	482.2	481.6	481.1	480.5
145°	507.7	507.7	507.7	507.5	507.2	506.8	506.5	506.1
147.5°	530.8	531.1	531.4	531.1	530.3	529.6	528.8	528.1
150°	545.3	545.3	545.3	545.2	545.0	544.7	544.6	544.3
152.5°	558.9	559.2	559.5	559.4	558.9	558.6	558.1	557.8
155°	578.3	578.7	579.2	579.2	578.5	578.0	577.4	576.8
157.5°	595.0	595.5	595.9	595.8	595.0	594.3	593.6	592.8
160°	605.2	605.6	606.1	606.1	605.6	604.9	604.4	603.9
162.5°	614.7	615.3	615.9	615.8	615.2	614.5	613.9	613.1
165°	627.6	628.0	628.6	628.4	627.8	627.1	626.3	625.7
167.5°	637.1	637.8	638.5	638.5	637.8	637.0	636.3	635.7
170°	642.8	643.5	644.2	644.1	643.4	642.6	641.8	641.0
172.5°	646.9	647.6	648.3	648.3	647.6	646.8	646.1	645.4
175°	651.5	652.1	652.8	652.7	652.0	651.2	650.4	649.6
177.5°	653.5	654.1	654.6	654.6	654.0	653.4	652.6	652.0
180°	653.7	653.7	653.7	653.7	653.7	653.7	653.7	653.7

(END OF REPORT)