

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: P333726-940

Luminaire Tested: **S125RDIW-S1270D770U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333726-940
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: S125RDIW-S1270D770U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7087.6 lumens
Efficiency: N/A
Efficacy: 118.5 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

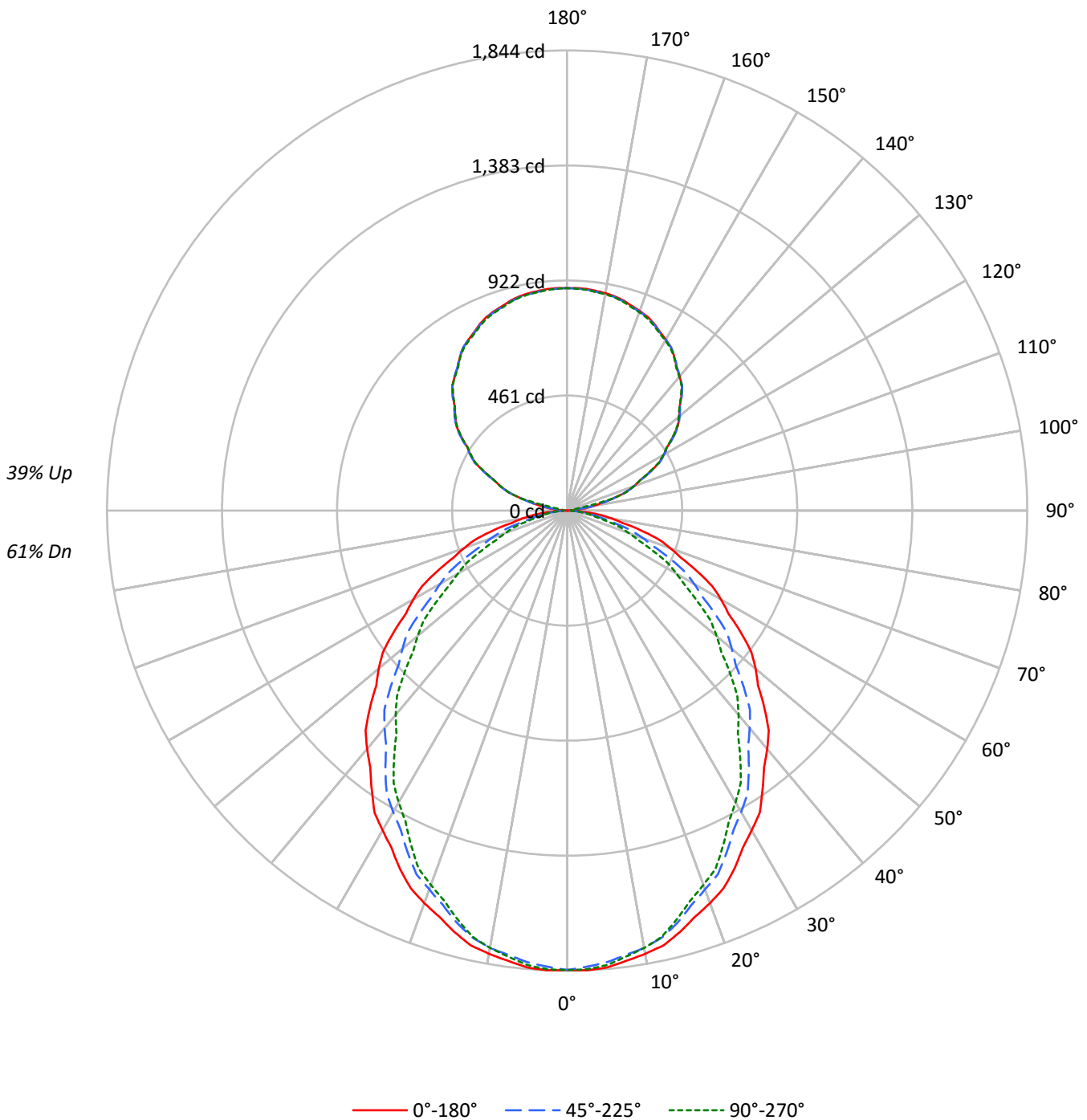
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	62	57	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	45	39	34	39	35	31	34	31	28	25
7	60	48	40	34	57	45	38	33	41	35	30	36	31	27	32	28	25	22
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22	20
9	52	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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	2.4
10°-20°	483.7	6.8
20°-30°	701.4	9.9
30°-40°	799.4	11.3
40°-50°	779.2	11.0
50°-60°	655.9	9.3
60°-70°	459.8	6.5
70°-80°	236.3	3.3
80°-90°	61.6	0.9
90°-100°	32.4	0.5
100°-110°	199.6	2.8
110°-120°	362.0	5.1
120°-130°	464.6	6.6
130°-140°	499.8	7.1
140°-150°	469.1	6.6
150°-160°	379.5	5.4
160°-170°	245.4	3.5
170°-180°	84.6	1.2
0°-30°	1358.2	19.2
0°-40°	2157.6	30.4
0°-60°	3592.8	50.7
0°-90°	4350.5	61.4
90°-120°	594.1	8.4
90°-150°	2027.6	28.6
90°-180°	2737.0	38.6
0°-180°	7087.6	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°	1	6	11	14	16	5
95°	38	34	11	14	14	48
105°	194	197	197	197	196	206
115°	365	368	369	366	362	361
125°	519	523	523	521	519	463
135°	647	651	650	648	644	498
145°	750	751	751	752	748	469
155°	826	822	823	825	820	380
165°	872	868	868	872	867	246
175°	891	888	888	893	887	85
180°	891	891	891	891	891	



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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	24.3	22.7	21.2	19.7	19.0	18.9	18.9	18.8	18.8	18.9
90°	0.6	1.9	3.0	4.2	5.4	6.4	7.5	8.6	9.5	10.6	11.3
92.5°	10.2	9.4	8.6	7.7	6.9	7.0	7.8	8.7	9.6	10.6	11.3
95°	37.6	37.2	36.7	36.4	35.9	32.9	27.3	21.8	16.1	10.6	11.3
97.5°	78.6	79.5	80.3	81.0	81.8	76.7	65.6	54.6	43.5	32.5	28.4
100°	110.3	110.8	111.2	111.6	112.1	112.6	113.2	113.8	114.4	114.9	93.1
102.5°	142.6	143.1	143.7	144.3	144.8	145.3	145.6	146.0	146.3	146.7	142.6
105°	194.2	194.8	195.5	196.0	196.6	196.9	196.9	196.9	196.9	196.9	196.9
107.5°	247.9	247.9	247.9	247.9	247.9	248.1	248.3	248.6	249.0	249.2	249.2
110°	282.8	282.8	282.8	282.8	282.8	282.9	283.2	283.6	283.8	284.1	283.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	315.6	315.9	316.3	316.6	317.0	317.3	317.4	317.6	317.8	318.0	317.4
115°	364.7	365.4	366.2	366.9	367.7	368.1	368.3	368.4	368.5	368.7	368.1
117.5°	415.6	415.5	415.5	415.5	415.4	415.7	416.3	416.9	417.4	417.9	417.2
120°	447.3	447.2	447.0	446.8	446.7	446.8	447.3	447.7	448.2	448.6	448.4
122.5°	475.3	475.9	476.4	477.0	477.6	478.0	478.1	478.3	478.6	478.8	478.5
125°	518.7	519.7	520.8	521.7	522.8	523.3	523.3	523.3	523.3	523.3	522.7
127.5°	560.0	560.8	561.5	562.2	562.9	563.3	563.2	563.1	563.0	562.9	562.6
130°	585.4	586.1	586.8	587.6	588.4	588.8	588.9	589.1	589.2	589.3	588.9
132.5°	610.7	611.6	612.5	613.3	614.2	614.5	614.1	613.8	613.5	613.1	613.1
135°	646.8	647.7	648.6	649.5	650.4	650.7	650.4	650.1	649.8	649.5	649.2
137.5°	680.0	680.8	681.5	682.3	683.1	683.3	683.1	682.8	682.5	682.2	682.3
140°	701.7	702.0	702.3	702.6	702.8	702.9	702.8	702.7	702.5	702.3	702.7
142.5°	721.2	721.4	721.6	721.8	721.9	722.1	722.4	722.6	722.7	723.0	723.0
145°	749.9	750.2	750.6	750.8	751.1	751.3	751.3	751.3	751.3	751.3	751.4
147.5°	775.1	775.0	774.9	774.9	774.8	774.9	775.1	775.2	775.3	775.5	775.7
150°	790.9	790.6	790.3	790.0	789.7	789.7	790.0	790.3	790.6	790.9	791.2
152.5°	806.2	805.6	804.9	804.3	803.6	803.4	803.8	804.1	804.3	804.6	804.9
155°	825.9	825.0	824.1	823.2	822.4	822.1	822.4	822.7	823.0	823.2	823.7
157.5°	841.1	840.6	840.1	839.5	839.0	838.7	838.7	838.8	838.8	838.8	839.4
160°	851.7	850.8	849.9	849.0	848.2	847.7	847.9	848.1	848.2	848.4	849.0
162.5°	860.1	859.3	858.4	857.5	856.6	856.2	856.4	856.6	856.7	856.8	857.6
165°	871.5	870.6	869.8	868.9	868.0	867.6	867.7	867.9	868.1	868.2	869.1
167.5°	879.9	879.0	878.2	877.3	876.3	875.9	876.1	876.2	876.4	876.6	877.5
170°	884.8	883.7	882.6	881.6	880.6	880.1	880.3	880.5	880.6	880.7	881.9
172.5°	887.9	886.9	885.8	884.8	883.8	883.4	883.7	884.0	884.2	884.5	885.5
175°	891.4	890.5	889.6	888.7	887.8	887.4	887.6	887.7	887.9	888.1	889.2
177.5°	892.9	892.2	891.5	890.8	890.1	889.7	889.9	890.0	890.1	890.3	891.1
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4



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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°	19.1	19.3	19.4	19.4	19.3	19.1	18.9	18.7
90°	12.0	12.8	13.5	14.1	14.5	15.0	15.4	15.9
92.5°	12.0	12.8	13.5	14.0	14.2	14.4	14.6	14.8
95°	12.0	12.8	13.5	13.9	13.9	13.9	13.9	13.9
97.5°	24.3	20.1	16.0	13.9	13.9	13.9	13.9	13.9
100°	71.2	49.3	27.5	16.2	15.6	15.1	14.4	13.9
102.5°	138.4	134.3	130.1	123.1	113.1	103.1	93.1	83.1
105°	196.9	196.9	196.9	196.8	196.7	196.5	196.4	196.3
107.5°	249.3	249.3	249.3	249.1	248.7	248.3	247.8	247.4
110°	283.2	282.8	282.3	282.2	282.3	282.5	282.7	282.8



TEST NUMBER: P333726-940

CATALOG NUMBER: S125RDIW-S1270D770U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	316.8	316.3	315.7	315.3	315.1	315.0	314.7	314.5
115°	367.5	366.9	366.3	365.6	364.7	363.8	362.9	362.0
117.5°	416.4	415.7	414.9	414.4	413.9	413.6	413.2	412.9
120°	448.1	447.7	447.5	446.9	446.2	445.5	444.8	444.0
122.5°	478.1	477.9	477.6	477.0	476.2	475.3	474.5	473.6
125°	522.1	521.6	520.9	520.4	520.0	519.5	519.2	518.7
127.5°	562.3	562.0	561.7	561.0	559.8	558.7	557.7	556.6
130°	588.5	588.1	587.6	587.0	586.3	585.6	584.8	584.1
132.5°	613.0	612.9	612.8	612.4	611.6	610.9	610.2	609.5
135°	648.9	648.6	648.4	647.7	646.8	646.0	645.1	644.2
137.5°	682.4	682.4	682.5	682.2	681.4	680.6	679.8	679.1
140°	702.9	703.2	703.6	703.2	702.3	701.5	700.6	699.7
142.5°	723.1	723.2	723.2	722.8	721.9	721.0	720.1	719.3
145°	751.5	751.7	751.8	751.4	750.6	749.7	748.9	748.0
147.5°	775.9	776.1	776.2	775.8	774.8	773.7	772.7	771.6
150°	791.5	791.8	792.1	791.7	790.4	789.3	788.1	786.9
152.5°	805.2	805.5	805.8	805.4	804.3	803.3	802.3	801.2
155°	824.1	824.6	825.0	824.7	823.5	822.3	821.2	819.9
157.5°	839.8	840.3	840.7	840.3	839.2	838.0	836.9	835.7
160°	849.5	850.2	850.7	850.4	849.3	848.1	846.9	845.7
162.5°	858.4	859.3	860.1	859.9	858.6	857.3	856.0	854.7
165°	870.0	870.8	871.7	871.6	870.4	869.2	868.1	866.8
167.5°	878.6	879.7	880.7	880.7	879.3	878.0	876.6	875.3
170°	883.1	884.3	885.5	885.4	884.0	882.7	881.4	880.1
172.5°	886.5	887.6	888.7	888.5	887.3	885.9	884.6	883.2
175°	890.4	891.5	892.7	892.6	891.4	890.0	888.7	887.3
177.5°	891.9	892.7	893.6	893.5	892.5	891.6	890.6	889.7
180°	891.4	891.4	891.4	891.4	891.4	891.4	891.4	891.4

(END OF REPORT)