

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: P333471

Luminaire Tested: **S125DIW-S1270D770U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333471
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: S125DIW-S1270D770U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7792.1 lumens
Efficiency: N/A
Efficacy: 130.3 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

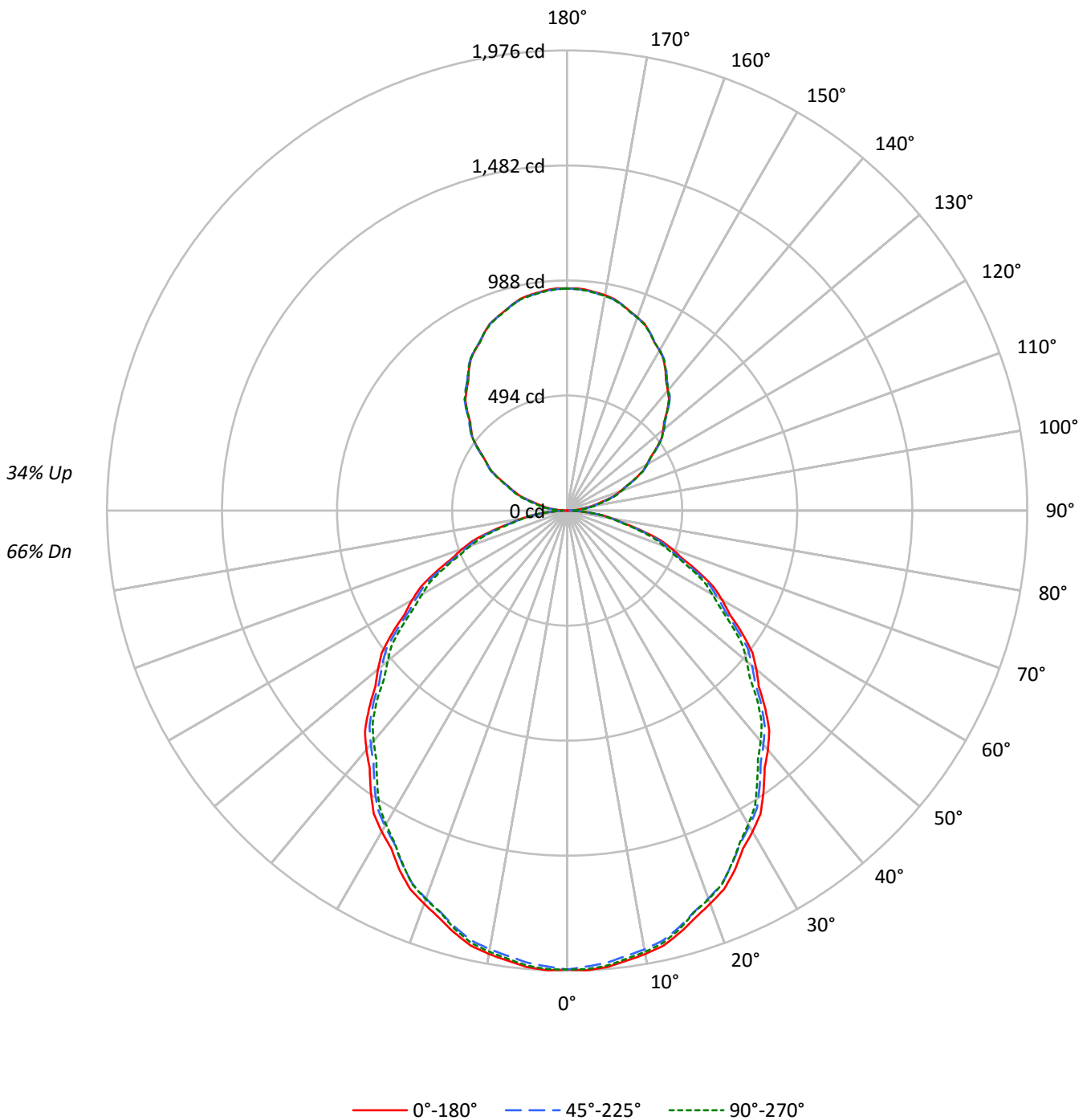
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	60	55
2	92	84	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	48	49	45	43	39
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	40	34	57	45	38	32	41	35	30	36	31	28	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	25	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20	18
10	49	37	29	24	46	35	28	23	32	26	22	28	24	20	26	21	18	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12727	12727	12727
5°	12756	12635	12716
10°	12679	12545	12618
15°	12541	12395	12447
20°	12344	12183	12205
25°	12133	11932	11921
30°	11872	11662	11604
35°	11591	11371	11211
40°	11304	11054	10897
45°	10993	10766	10552
50°	10652	10417	10104
55°	10323	10025	9743
60°	9928	9627	9285
65°	9459	9149	8839
70°	9009	8597	8303
75°	8210	7938	7663
80°	7305	7189	7018
85°	6358	6469	6121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.8	2.4
10°-20°	524.9	6.7
20°-30°	775.0	9.9
30°-40°	904.3	11.6
40°-50°	908.3	11.7
50°-60°	797.3	10.2
60°-70°	594.1	7.6
70°-80°	339.7	4.4
80°-90°	100.9	1.3
90°-100°	63.9	0.8
100°-110°	188.7	2.4
110°-120°	319.6	4.1
120°-130°	420.6	5.4
130°-140°	471.2	6.0
140°-150°	461.9	5.9
150°-160°	387.9	5.0
160°-170°	257.9	3.3
170°-180°	90.2	1.2
0°-30°	1485.7	19.1
0°-40°	2390.0	30.7
0°-60°	4095.6	52.6
0°-90°	5130.3	65.8
90°-120°	572.1	7.3
90°-150°	1925.8	24.7
90°-180°	2662.0	34.2
0°-180°	7792.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1971	1971	1971	1971	1971	
5°	1968	1964	1949	1962	1961	187
15°	1876	1870	1854	1861	1862	528
25°	1703	1694	1674	1677	1673	783
35°	1470	1463	1442	1434	1422	919
45°	1204	1197	1179	1161	1155	927
55°	917	911	890	876	865	818
65°	619	615	599	585	578	614
75°	329	326	318	313	307	351
85°	86	87	87	86	83	96
90°	1	7	12	16	18	7
95°	48	50	57	62	64	52
105°	169	173	177	182	184	181
115°	320	323	324	324	323	316
125°	467	471	472	471	470	418
135°	607	612	612	612	610	468
145°	736	739	741	741	739	460
155°	842	842	843	845	842	388
165°	915	914	915	917	913	258
175°	952	949	949	953	948	90
180°	954	954	954	954	954	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1975.7	1974.9	1974.1	1973.2	1972.4	1970.6	1967.8	1965.0	1962.3	1959.5	1962.3
5°	1967.6	1966.9	1966.2	1965.5	1964.8	1962.8	1959.3	1955.8	1952.4	1948.9	1952.0
7.5°	1949.5	1948.8	1948.1	1947.4	1946.7	1944.5	1940.7	1936.9	1933.1	1929.3	1932.3
10°	1933.3	1932.6	1931.9	1931.2	1930.5	1928.3	1924.5	1920.7	1916.8	1913.0	1915.8
12.5°	1913.3	1912.1	1910.9	1909.6	1908.4	1906.0	1902.4	1898.9	1895.4	1891.8	1894.1
15°	1875.6	1874.6	1873.5	1872.5	1871.5	1869.0	1865.2	1861.4	1857.6	1853.8	1855.5
17.5°	1832.3	1830.8	1829.2	1827.7	1826.2	1823.4	1819.5	1815.5	1811.6	1807.6	1809.8
20°	1796.1	1795.4	1794.7	1794.0	1793.3	1790.7	1786.2	1781.7	1777.2	1772.7	1775.1
22.5°	1759.9	1758.7	1757.4	1756.2	1754.9	1752.2	1748.0	1743.8	1739.5	1735.3	1736.9
25°	1702.6	1700.8	1699.1	1697.4	1695.6	1692.5	1688.0	1683.5	1679.0	1674.5	1675.2
27.5°	1635.5	1634.5	1633.4	1632.4	1631.4	1628.5	1623.9	1619.2	1614.6	1609.9	1610.1
30°	1591.9	1590.8	1589.8	1588.7	1587.7	1584.6	1579.4	1574.2	1569.0	1563.8	1563.1
32.5°	1544.5	1542.9	1541.3	1539.7	1538.1	1535.0	1530.3	1525.7	1521.0	1516.4	1515.2
35°	1470.2	1468.9	1467.5	1466.1	1464.7	1461.6	1456.7	1451.9	1447.0	1442.2	1440.5
37.5°	1393.2	1391.5	1389.8	1388.0	1386.3	1383.1	1378.6	1374.0	1369.4	1364.9	1362.3
40°	1340.8	1339.1	1337.4	1335.6	1333.9	1330.6	1325.8	1320.9	1316.1	1311.2	1308.1
42.5°	1284.7	1283.3	1281.8	1280.3	1278.9	1275.7	1270.9	1266.0	1261.2	1256.3	1253.5
45°	1203.6	1202.3	1200.9	1199.5	1198.1	1195.3	1191.2	1187.0	1182.9	1178.7	1174.5
47.5°	1116.3	1116.4	1116.5	1116.5	1116.6	1114.1	1109.2	1104.2	1099.2	1094.2	1090.0
50°	1060.2	1059.2	1058.1	1057.1	1056.0	1053.4	1049.3	1045.1	1041.0	1036.8	1032.3
52.5°	1002.8	1002.1	1001.3	1000.5	999.8	997.2	992.7	988.3	983.9	979.4	975.5
55°	916.8	915.7	914.7	913.6	912.6	909.7	904.8	900.0	895.1	890.3	887.1
57.5°	826.0	825.5	824.9	824.4	823.8	821.5	817.4	813.3	809.2	805.1	801.1
60°	768.6	767.3	765.9	764.5	763.1	760.5	756.7	752.9	749.1	745.3	741.8
62.5°	708.8	707.7	706.6	705.4	704.3	702.2	698.9	695.6	692.4	689.1	685.4
65°	619.0	618.3	617.6	616.9	616.2	613.9	610.1	606.3	602.5	598.7	595.6
67.5°	532.0	530.5	529.1	527.6	526.2	524.0	521.2	518.3	515.5	512.6	510.0
70°	477.1	475.4	473.6	471.9	470.2	467.7	464.6	461.5	458.4	455.3	453.2
72.5°	417.2	416.0	414.9	413.7	412.5	410.9	408.9	406.9	404.9	402.9	400.5
75°	329.0	328.3	327.6	326.9	326.2	325.0	323.3	321.5	319.8	318.1	317.0
77.5°	247.6	247.3	247.0	246.8	246.5	245.9	244.9	243.9	242.9	242.0	241.4
80°	196.4	196.4	196.4	196.4	196.4	196.1	195.4	194.7	194.0	193.3	193.0
82.5°	151.5	151.0	150.4	149.9	149.3	149.0	148.8	148.7	148.6	148.4	147.8
85°	85.8	86.1	86.4	86.8	87.1	87.3	87.3	87.3	87.3	87.3	87.0
87.5°	33.8	34.1	34.4	34.6	34.9	35.0	34.9	34.9	34.9	34.8	35.0
90°	0.7	2.1	3.4	4.7	6.0	7.3	8.4	9.6	10.7	11.9	12.7
92.5°	18.0	18.9	19.8	20.7	21.7	22.8	24.3	25.7	27.1	28.5	29.6
95°	48.3	48.6	48.9	49.2	49.6	50.6	52.2	53.9	55.5	57.2	58.3
97.5°	80.2	80.3	80.4	80.6	80.7	81.9	84.2	86.5	88.7	91.0	92.1
100°	103.9	103.9	103.9	103.9	103.9	105.0	107.1	109.3	111.4	113.6	115.1
102.5°	129.5	130.1	130.8	131.4	132.1	133.0	134.1	135.2	136.2	137.3	139.0
105°	169.3	170.1	170.9	171.7	172.6	173.5	174.5	175.4	176.4	177.4	178.4
107.5°	213.2	214.0	214.9	215.7	216.5	217.3	218.1	218.8	219.6	220.3	220.8
110°	243.5	244.3	245.1	246.0	246.8	247.4	247.9	248.4	248.9	249.4	249.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	274.4	274.8	275.2	275.7	276.1	276.6	277.2	277.9	278.5	279.1	279.4
115°	320.0	320.6	321.3	321.9	322.6	323.1	323.4	323.7	324.1	324.4	324.2
117.5°	365.7	366.0	366.3	366.6	366.9	367.2	367.5	367.8	368.1	368.4	368.5
120°	394.2	395.0	395.8	396.7	397.5	398.0	398.1	398.3	398.5	398.6	398.6
122.5°	425.1	425.4	425.7	426.0	426.3	426.6	427.0	427.5	427.9	428.3	428.2
125°	466.9	467.9	468.9	469.9	470.9	471.5	471.6	471.8	472.0	472.1	471.8
127.5°	511.5	512.0	512.6	513.2	513.7	514.1	514.3	514.5	514.7	514.9	514.7
130°	538.2	539.0	539.9	540.7	541.5	542.1	542.4	542.7	543.1	543.4	543.2
132.5°	564.9	566.3	567.6	569.0	570.3	571.0	570.9	570.8	570.8	570.7	570.6
135°	607.2	608.2	609.2	610.2	611.2	611.8	611.9	612.1	612.3	612.4	612.4
137.5°	647.0	648.0	648.9	649.9	650.9	651.5	651.9	652.2	652.6	653.0	653.2
140°	672.6	673.4	674.2	675.0	675.9	676.5	677.0	677.5	678.0	678.5	678.8
142.5°	698.1	698.8	699.5	700.2	700.9	701.5	702.2	702.8	703.4	704.0	704.2
145°	735.7	736.3	737.0	737.6	738.3	738.9	739.4	739.9	740.4	740.9	740.9
147.5°	770.4	770.8	771.1	771.5	771.9	772.2	772.6	773.0	773.4	773.8	774.2
150°	793.6	793.4	793.2	793.1	792.9	793.2	793.8	794.5	795.1	795.8	795.8
152.5°	812.6	812.8	813.0	813.3	813.5	813.7	814.0	814.3	814.5	814.8	815.2
155°	841.8	841.8	841.8	841.8	841.8	841.9	842.1	842.2	842.4	842.6	843.2
157.5°	868.0	867.6	867.2	866.9	866.5	866.4	866.6	866.7	866.9	867.1	867.7
160°	883.4	882.9	882.4	881.9	881.4	881.2	881.4	881.6	881.7	881.9	882.6
162.5°	897.1	896.7	896.3	896.0	895.6	895.4	895.5	895.5	895.5	895.6	896.4
165°	915.3	915.0	914.7	914.3	914.0	913.9	914.1	914.2	914.4	914.6	915.2
167.5°	930.8	930.1	929.4	928.8	928.1	927.8	927.8	927.8	927.8	927.8	928.8
170°	939.1	938.4	937.7	937.1	936.4	936.1	936.1	936.1	936.1	936.1	937.1
172.5°	945.0	944.3	943.7	943.0	942.4	942.0	942.0	942.0	942.0	942.0	943.0
175°	951.7	951.0	950.4	949.7	949.0	948.7	948.7	948.7	948.7	948.7	949.7
177.5°	955.1	954.6	954.0	953.5	953.0	952.7	952.5	952.4	952.3	952.1	952.9
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7	1970.7
2.5°	1965.0	1967.8	1970.6	1971.8	1971.6	1971.3	1971.0	1970.7
5°	1955.1	1958.3	1961.4	1962.8	1962.4	1962.1	1961.7	1961.4
7.5°	1935.3	1938.4	1941.4	1942.8	1942.5	1942.1	1941.8	1941.4
10°	1918.6	1921.4	1924.1	1925.3	1925.0	1924.6	1924.3	1924.0
12.5°	1896.3	1898.5	1900.7	1901.8	1901.7	1901.6	1901.6	1901.5
15°	1857.3	1859.0	1860.7	1861.6	1861.6	1861.6	1861.6	1861.6
17.5°	1811.9	1814.1	1816.2	1816.4	1814.7	1813.0	1811.2	1809.5
20°	1777.6	1780.0	1782.4	1782.8	1781.0	1779.3	1777.6	1775.8
22.5°	1738.5	1740.1	1741.7	1741.9	1740.7	1739.5	1738.3	1737.2
25°	1675.9	1676.6	1677.3	1677.1	1676.1	1675.0	1674.0	1672.9
27.5°	1610.2	1610.4	1610.5	1610.0	1609.0	1608.0	1606.9	1605.9
30°	1562.4	1561.7	1561.0	1560.2	1559.1	1558.1	1557.0	1556.0
32.5°	1513.9	1512.7	1511.4	1509.8	1508.0	1506.1	1504.2	1502.4
35°	1438.7	1437.0	1435.3	1433.0	1430.2	1427.5	1424.7	1421.9
37.5°	1359.7	1357.2	1354.6	1352.5	1350.9	1349.3	1347.7	1346.1
40°	1305.0	1301.9	1298.7	1296.7	1295.6	1294.6	1293.5	1292.5
42.5°	1250.7	1247.8	1245.0	1242.8	1241.2	1239.6	1238.0	1236.4
45°	1170.4	1166.2	1162.1	1159.5	1158.4	1157.4	1156.3	1155.3
47.5°	1085.7	1081.5	1077.3	1074.0	1071.5	1069.1	1066.7	1064.3
50°	1027.8	1023.3	1018.8	1015.3	1012.9	1010.5	1008.1	1005.6
52.5°	971.5	967.6	963.6	960.3	957.6	954.9	952.2	949.5
55°	884.0	880.9	877.8	875.0	872.6	870.2	867.7	865.3
57.5°	797.1	793.1	789.1	786.4	785.1	783.8	782.4	781.1
60°	738.3	734.9	731.4	728.5	726.0	723.6	721.2	718.8
62.5°	681.6	677.9	674.2	671.4	669.5	667.6	665.7	663.9
65°	592.5	589.3	586.2	584.0	582.6	581.2	579.8	578.4
67.5°	507.4	504.7	502.1	500.4	499.5	498.7	497.9	497.0
70°	451.1	449.0	446.9	445.2	443.8	442.4	441.1	439.7
72.5°	398.2	395.8	393.5	391.6	390.2	388.8	387.4	386.0
75°	316.0	314.9	313.9	312.7	311.3	309.9	308.5	307.1
77.5°	240.7	240.1	239.5	238.7	237.7	236.7	235.8	234.8
80°	192.6	192.3	191.9	191.4	190.7	190.0	189.3	188.7
82.5°	147.2	146.6	145.9	145.6	145.4	145.3	145.1	145.0
85°	86.6	86.3	85.9	85.4	84.7	84.0	83.3	82.6
87.5°	35.1	35.3	35.5	35.3	34.9	34.4	34.0	33.5
90°	13.5	14.4	15.2	15.8	16.3	16.8	17.3	17.8
92.5°	30.7	31.8	32.9	33.6	34.0	34.3	34.7	35.0
95°	59.5	60.6	61.8	62.5	62.9	63.2	63.5	63.8
97.5°	93.2	94.3	95.4	96.0	96.2	96.4	96.6	96.8
100°	116.5	118.0	119.5	120.4	120.8	121.1	121.4	121.7
102.5°	140.6	142.2	143.8	144.8	145.3	145.8	146.2	146.7
105°	179.4	180.4	181.4	182.1	182.6	183.1	183.6	184.1
107.5°	221.3	221.8	222.3	222.5	222.5	222.5	222.4	222.4
110°	250.4	250.9	251.4	251.6	251.4	251.2	251.1	250.9



TEST NUMBER: P333471

CATALOG NUMBER: S125DIW-S1270D770U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	279.6	279.8	280.0	280.0	279.7	279.4	279.1	278.8
115°	324.1	323.9	323.7	323.6	323.4	323.3	323.1	322.9
117.5°	368.6	368.7	368.9	368.6	368.0	367.3	366.6	366.0
120°	398.6	398.6	398.6	398.3	397.7	397.0	396.3	395.7
122.5°	428.1	427.9	427.8	427.5	426.9	426.4	425.9	425.4
125°	471.5	471.1	470.8	470.6	470.4	470.2	470.1	469.9
127.5°	514.6	514.4	514.2	514.0	513.7	513.3	513.0	512.7
130°	543.1	542.9	542.7	542.5	542.2	541.8	541.5	541.2
132.5°	570.4	570.2	570.1	569.7	569.3	568.8	568.4	567.9
135°	612.4	612.4	612.4	612.1	611.4	610.8	610.1	609.5
137.5°	653.4	653.6	653.8	653.4	652.6	651.8	651.0	650.1
140°	679.2	679.5	679.8	679.6	678.8	677.9	677.1	676.3
142.5°	704.4	704.6	704.8	704.5	703.7	702.9	702.0	701.2
145°	740.9	740.9	740.9	740.6	740.1	739.6	739.1	738.6
147.5°	774.6	775.0	775.4	775.0	773.9	772.8	771.7	770.6
150°	795.8	795.8	795.8	795.6	795.3	795.0	794.6	794.3
152.5°	815.6	816.0	816.4	816.3	815.7	815.1	814.5	813.9
155°	843.9	844.5	845.2	845.1	844.3	843.5	842.6	841.8
157.5°	868.4	869.0	869.7	869.5	868.4	867.3	866.2	865.1
160°	883.2	883.9	884.5	884.5	883.6	882.8	882.0	881.2
162.5°	897.2	897.9	898.7	898.7	897.7	896.7	895.8	894.8
165°	915.9	916.6	917.2	917.0	916.1	915.1	914.1	913.1
167.5°	929.8	930.8	931.7	931.7	930.7	929.7	928.7	927.6
170°	938.1	939.1	940.1	940.0	938.8	937.7	936.5	935.4
172.5°	944.0	945.0	946.0	946.0	945.0	943.9	942.9	941.9
175°	950.7	951.7	952.7	952.6	951.4	950.3	949.1	948.0
177.5°	953.7	954.5	955.3	955.2	954.3	953.4	952.5	951.5
180°	953.9	953.9	953.9	953.9	953.9	953.9	953.9	953.9

(END OF REPORT)