

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: P333465

Luminaire Tested: **S125DIW-S1270D470U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333465
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-S1270D470U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6754.7 lumens
Efficiency: N/A
Efficacy: 128.9 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

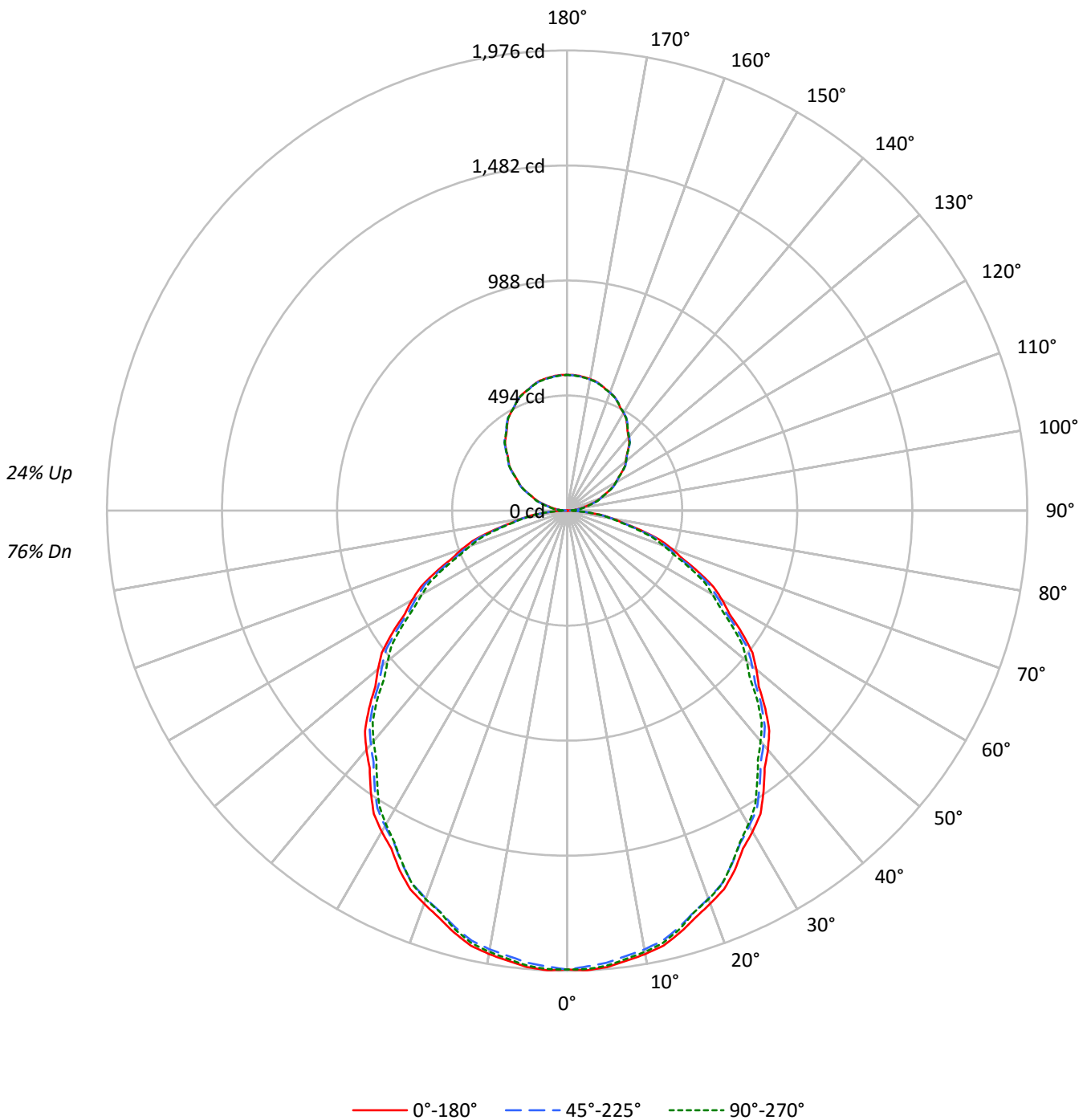
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	71	69	67	64
2	94	86	80	74	89	82	77	72	75	71	67	68	65	61	62	59	57	53
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	79	67	59	53	75	64	57	51	59	53	48	54	49	45	49	45	42	39
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	34
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	36	32	29
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	28	26
8	58	45	37	31	55	43	35	30	40	33	29	37	31	27	34	29	26	23
9	54	41	33	28	51	39	32	27	37	30	26	34	28	24	31	27	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	19

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	2.8
10°-20°	524.9	7.8
20°-30°	775.0	11.5
30°-40°	904.3	13.4
40°-50°	908.3	13.4
50°-60°	797.3	11.8
60°-70°	594.1	8.8
70°-80°	339.7	5.0
80°-90°	100.1	1.5
90°-100°	39.0	0.6
100°-110°	115.2	1.7
110°-120°	195.1	2.9
120°-130°	256.8	3.8
130°-140°	287.7	4.3
140°-150°	282.0	4.2
150°-160°	236.9	3.5
160°-170°	157.4	2.3
170°-180°	55.1	0.8
0°-30°	1485.7	22.0
0°-40°	2390.0	35.4
0°-60°	4095.6	60.6
0°-90°	5129.5	75.9
90°-120°	349.3	5.2
90°-150°	1175.8	17.4
90°-180°	1625.0	24.1
0°-180°	6754.7	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°	0	4	7	10	11	6
95°	30	31	35	38	39	31
105°	103	106	108	111	112	110
115°	195	197	198	198	197	193
125°	285	288	288	287	287	255
135°	371	373	374	374	372	286
145°	449	451	452	452	451	281
155°	514	514	514	516	514	237
165°	559	558	558	560	558	158
175°	581	579	579	582	579	55
180°	582	582	582	582	582	



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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	33.9	34.1	34.3	34.4	34.4	34.3	34.2	34.0	33.9	34.0
90°	0.5	1.3	2.1	2.9	3.7	4.4	5.1	5.8	6.5	7.3	7.8
92.5°	11.0	11.5	12.1	12.7	13.2	13.9	14.8	15.7	16.5	17.4	18.1
95°	29.5	29.7	29.9	30.1	30.3	30.9	31.9	32.9	33.9	34.9	35.6
97.5°	48.9	49.0	49.1	49.2	49.3	50.0	51.4	52.8	54.2	55.6	56.2
100°	63.5	63.5	63.5	63.5	63.5	64.1	65.4	66.7	68.0	69.3	70.3
102.5°	79.0	79.4	79.9	80.3	80.7	81.2	81.9	82.5	83.2	83.8	84.8
105°	103.3	103.8	104.3	104.8	105.4	105.9	106.5	107.1	107.7	108.3	108.9
107.5°	130.2	130.7	131.2	131.7	132.2	132.7	133.1	133.6	134.1	134.5	134.8
110°	148.7	149.2	149.7	150.2	150.7	151.1	151.4	151.7	152.0	152.3	152.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.5	167.8	168.0	168.3	168.6	168.9	169.3	169.7	170.0	170.4	170.6
115°	195.3	195.7	196.2	196.6	197.0	197.3	197.5	197.7	197.9	198.1	198.0
117.5°	223.3	223.4	223.6	223.8	224.0	224.2	224.4	224.5	224.7	224.9	225.0
120°	240.7	241.2	241.7	242.2	242.7	243.0	243.1	243.2	243.3	243.4	243.4
122.5°	259.5	259.7	259.9	260.1	260.2	260.5	260.7	261.0	261.3	261.5	261.4
125°	285.1	285.7	286.3	286.9	287.5	287.9	288.0	288.1	288.2	288.3	288.1
127.5°	312.3	312.6	313.0	313.3	313.7	313.9	314.0	314.1	314.2	314.4	314.3
130°	328.6	329.1	329.6	330.1	330.6	331.0	331.2	331.4	331.6	331.8	331.7
132.5°	344.9	345.7	346.6	347.4	348.2	348.6	348.6	348.5	348.5	348.4	348.3
135°	370.7	371.4	372.0	372.6	373.2	373.5	373.6	373.7	373.8	373.9	373.9
137.5°	395.0	395.6	396.2	396.8	397.4	397.8	398.0	398.2	398.4	398.7	398.8
140°	410.6	411.1	411.6	412.1	412.6	413.1	413.4	413.7	414.0	414.3	414.5
142.5°	426.2	426.6	427.1	427.5	427.9	428.3	428.7	429.1	429.5	429.9	430.0
145°	449.2	449.6	450.0	450.4	450.8	451.1	451.4	451.7	452.0	452.3	452.3
147.5°	470.4	470.6	470.8	471.0	471.3	471.5	471.7	472.0	472.2	472.5	472.7
150°	484.5	484.4	484.3	484.2	484.1	484.3	484.7	485.1	485.5	485.9	485.9
152.5°	496.1	496.3	496.4	496.5	496.7	496.8	497.0	497.2	497.3	497.5	497.7
155°	514.0	514.0	514.0	514.0	514.0	514.0	514.1	514.2	514.3	514.4	514.8
157.5°	529.9	529.7	529.5	529.3	529.0	529.0	529.1	529.2	529.3	529.4	529.8
160°	539.4	539.1	538.7	538.4	538.1	538.0	538.1	538.2	538.3	538.4	538.9
162.5°	547.7	547.5	547.3	547.0	546.8	546.7	546.7	546.7	546.8	546.8	547.3
165°	558.8	558.6	558.4	558.2	558.0	558.0	558.1	558.2	558.3	558.4	558.8
167.5°	568.3	567.9	567.5	567.1	566.7	566.5	566.5	566.5	566.5	566.5	567.1
170°	573.3	572.9	572.5	572.1	571.7	571.5	571.5	571.5	571.5	571.5	572.1
172.5°	577.0	576.6	576.2	575.8	575.4	575.2	575.2	575.2	575.2	575.2	575.8
175°	581.1	580.6	580.2	579.8	579.4	579.2	579.2	579.2	579.2	579.2	579.8
177.5°	583.1	582.8	582.5	582.2	581.8	581.6	581.6	581.5	581.4	581.3	581.8
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4



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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°	34.1	34.2	34.3	34.1	33.6	33.1	32.6	32.1
90°	8.3	8.8	9.3	9.7	10.0	10.3	10.6	10.9
92.5°	18.7	19.4	20.1	20.5	20.7	20.9	21.2	21.4
95°	36.3	37.0	37.7	38.2	38.4	38.6	38.8	39.0
97.5°	56.9	57.6	58.2	58.6	58.7	58.9	59.0	59.1
100°	71.2	72.1	73.0	73.5	73.7	73.9	74.1	74.3
102.5°	85.8	86.8	87.8	88.4	88.7	89.0	89.3	89.6
105°	109.5	110.1	110.7	111.2	111.5	111.8	112.1	112.4
107.5°	135.1	135.4	135.7	135.9	135.9	135.8	135.8	135.8
110°	152.9	153.2	153.5	153.6	153.5	153.4	153.3	153.2



TEST NUMBER: P333465

CATALOG NUMBER: S125DIW-S1270D470U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	170.7	170.8	171.0	171.0	170.8	170.6	170.4	170.2
115°	197.9	197.8	197.7	197.6	197.5	197.4	197.3	197.2
117.5°	225.1	225.1	225.2	225.1	224.7	224.3	223.8	223.4
120°	243.4	243.4	243.4	243.2	242.8	242.4	242.0	241.6
122.5°	261.4	261.3	261.2	261.0	260.7	260.4	260.0	259.7
125°	287.9	287.7	287.5	287.3	287.2	287.1	287.0	286.9
127.5°	314.2	314.1	314.0	313.8	313.6	313.4	313.2	313.0
130°	331.6	331.5	331.4	331.2	331.0	330.8	330.6	330.4
132.5°	348.2	348.1	348.0	347.9	347.6	347.3	347.0	346.7
135°	373.9	373.9	373.9	373.7	373.3	372.9	372.5	372.1
137.5°	398.9	399.0	399.2	399.0	398.5	398.0	397.4	396.9
140°	414.7	414.9	415.1	414.9	414.4	413.9	413.4	412.9
142.5°	430.1	430.2	430.3	430.1	429.6	429.1	428.6	428.1
145°	452.3	452.3	452.3	452.2	451.9	451.6	451.3	451.0
147.5°	472.9	473.2	473.4	473.2	472.5	471.8	471.1	470.5
150°	485.9	485.9	485.9	485.8	485.6	485.4	485.2	485.0
152.5°	498.0	498.2	498.4	498.4	498.0	497.7	497.3	496.9
155°	515.2	515.6	516.0	516.0	515.5	515.0	514.5	514.0
157.5°	530.2	530.6	531.0	530.9	530.2	529.5	528.9	528.2
160°	539.3	539.7	540.1	540.0	539.5	539.0	538.5	538.0
162.5°	547.8	548.2	548.7	548.7	548.1	547.5	546.9	546.3
165°	559.2	559.6	560.0	559.9	559.3	558.7	558.1	557.5
167.5°	567.7	568.3	568.9	568.9	568.2	567.6	567.0	566.4
170°	572.7	573.3	574.0	573.9	573.2	572.5	571.8	571.1
172.5°	576.4	577.0	577.6	577.6	576.9	576.3	575.7	575.1
175°	580.4	581.1	581.7	581.6	580.9	580.2	579.5	578.8
177.5°	582.3	582.8	583.3	583.2	582.7	582.1	581.5	581.0
180°	582.4	582.4	582.4	582.4	582.4	582.4	582.4	582.4

(END OF REPORT)