

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: P333310-830

Luminaire Tested: **S125DIP-S1270D590U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333310-830
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: S125DIP-S1270D590U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7062.7 lumens
Efficiency: N/A
Efficacy: 128.2 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

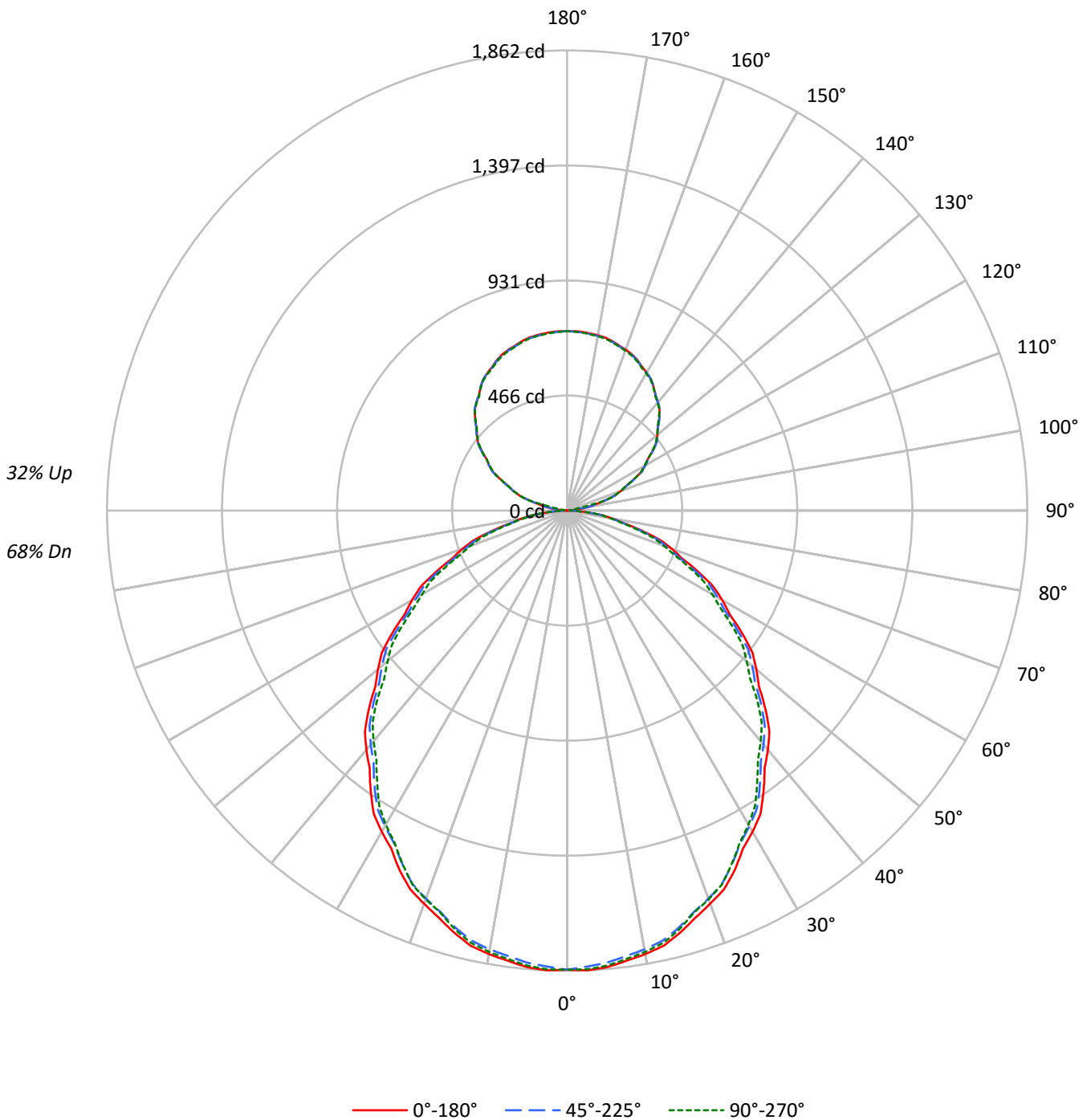
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	68
1	102	97	93	90	96	92	88	85	82	79	77	73	71	69	64	63	62	57
2	93	85	79	73	87	80	75	70	72	67	64	64	61	58	57	54	52	48
3	85	75	67	61	80	71	64	58	63	58	53	57	52	49	50	47	44	41
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38	35
5	71	59	51	44	67	56	48	43	51	44	39	45	40	36	40	36	33	30
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	32	29	27
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26	24
8	56	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23	21
9	53	40	32	27	50	38	31	26	35	29	24	32	26	23	28	24	21	19
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11996	11996	11996
5°	12023	11909	11985
10°	11950	11825	11893
15°	11820	11683	11732
20°	11635	11483	11504
25°	11436	11247	11236
30°	11189	10992	10937
35°	10925	10717	10566
40°	10655	10420	10270
45°	10361	10147	9945
50°	10040	9818	9523
55°	9730	9448	9183
60°	9357	9074	8751
65°	8915	8623	8332
70°	8492	8103	7825
75°	7738	7481	7224
80°	6884	6776	6616
85°	5995	6099	5772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.1	2.5
10°-20°	494.7	7.0
20°-30°	730.5	10.3
30°-40°	852.4	12.1
40°-50°	856.1	12.1
50°-60°	751.5	10.6
60°-70°	559.9	7.9
70°-80°	320.2	4.5
80°-90°	94.7	1.3
90°-100°	26.4	0.4
100°-110°	162.5	2.3
110°-120°	294.7	4.2
120°-130°	378.2	5.4
130°-140°	406.7	5.8
140°-150°	381.8	5.4
150°-160°	308.8	4.4
160°-170°	199.7	2.8
170°-180°	68.9	1.0
0°-30°	1400.3	19.8
0°-40°	2252.7	31.9
0°-60°	3860.3	54.7
0°-90°	4835.0	68.5
90°-120°	483.5	6.8
90°-150°	1650.2	23.4
90°-180°	2228.0	31.5
0°-180°	7062.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1854	1851	1837	1849	1849	176
15°	1768	1763	1747	1754	1755	498
25°	1605	1597	1578	1581	1577	738
35°	1386	1379	1359	1352	1340	866
45°	1134	1128	1111	1094	1089	874
55°	864	859	839	826	816	771
65°	583	580	564	551	545	579
75°	310	307	300	295	290	331
85°	81	82	82	81	78	90
90°	1	5	9	11	13	6
95°	31	28	9	11	11	39
105°	158	160	160	160	160	168
115°	297	299	300	298	295	294
125°	422	426	426	424	422	377
135°	526	529	529	527	524	406
145°	610	611	611	612	609	382
155°	672	669	670	671	667	310
165°	709	706	707	709	706	200
175°	726	722	723	727	722	69
180°	726	726	726	726	726	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1862.2	1861.4	1860.7	1859.8	1859.1	1857.4	1854.7	1852.1	1849.6	1846.9	1849.6
5°	1854.5	1853.9	1853.2	1852.6	1851.9	1850.0	1846.7	1843.4	1840.2	1836.9	1839.8
7.5°	1837.5	1836.8	1836.2	1835.5	1834.8	1832.8	1829.2	1825.6	1822.0	1818.4	1821.3
10°	1822.2	1821.6	1820.9	1820.2	1819.6	1817.5	1813.9	1810.3	1806.7	1803.1	1805.7
12.5°	1803.4	1802.2	1801.1	1799.9	1798.7	1796.5	1793.1	1789.8	1786.5	1783.1	1785.3
15°	1767.8	1766.9	1765.9	1764.9	1764.0	1761.6	1758.0	1754.4	1750.9	1747.3	1748.9
17.5°	1727.0	1725.6	1724.1	1722.7	1721.3	1718.6	1715.0	1711.2	1707.5	1703.7	1705.8
20°	1692.9	1692.2	1691.6	1690.9	1690.3	1687.8	1683.6	1679.3	1675.1	1670.8	1673.1
22.5°	1658.8	1657.6	1656.4	1655.3	1654.1	1651.5	1647.6	1643.6	1639.6	1635.6	1637.1
25°	1604.8	1603.1	1601.5	1599.9	1598.2	1595.3	1591.0	1586.8	1582.5	1578.3	1578.9
27.5°	1541.5	1540.6	1539.5	1538.6	1537.7	1534.9	1530.6	1526.2	1521.8	1517.4	1517.6
30°	1500.4	1499.4	1498.5	1497.4	1496.5	1493.6	1488.7	1483.8	1478.8	1473.9	1473.3
32.5°	1455.8	1454.2	1452.7	1451.2	1449.7	1446.8	1442.4	1438.0	1433.6	1429.3	1428.1
35°	1385.7	1384.5	1383.2	1381.9	1380.5	1377.6	1373.0	1368.5	1363.9	1359.3	1357.7
37.5°	1313.2	1311.5	1309.9	1308.2	1306.6	1303.6	1299.4	1295.1	1290.7	1286.5	1284.0
40°	1263.8	1262.2	1260.6	1258.9	1257.3	1254.1	1249.6	1245.0	1240.5	1235.9	1232.9
42.5°	1210.9	1209.6	1208.2	1206.7	1205.4	1202.4	1197.9	1193.3	1188.7	1184.1	1181.5
45°	1134.4	1133.2	1131.9	1130.6	1129.3	1126.6	1122.8	1118.8	1114.9	1111.0	1107.0
47.5°	1052.2	1052.3	1052.3	1052.3	1052.4	1050.1	1045.5	1040.8	1036.0	1031.3	1027.4
50°	999.3	998.3	997.3	996.4	995.3	992.9	989.0	985.1	981.2	977.2	973.0
52.5°	945.2	944.5	943.8	943.0	942.4	939.9	935.7	931.5	927.4	923.1	919.5
55°	864.1	863.1	862.1	861.1	860.2	857.4	852.8	848.3	843.7	839.1	836.1
57.5°	778.5	778.1	777.5	777.0	776.5	774.3	770.4	766.6	762.7	758.8	755.1
60°	724.4	723.2	721.9	720.6	719.3	716.8	713.2	709.6	706.1	702.5	699.2
62.5°	668.1	667.0	666.0	664.9	663.8	661.9	658.7	655.6	652.6	649.5	646.0
65°	583.4	582.8	582.1	581.5	580.8	578.6	575.0	571.5	567.9	564.3	561.4
67.5°	501.4	500.0	498.7	497.3	496.0	493.9	491.3	488.5	485.9	483.1	480.7
70°	449.7	448.1	446.4	444.8	443.2	440.8	437.9	435.0	432.1	429.1	427.2
72.5°	393.2	392.1	391.1	389.9	388.8	387.3	385.4	383.5	381.6	379.8	377.5
75°	310.1	309.4	308.8	308.1	307.5	306.3	304.7	303.0	301.4	299.8	298.8
77.5°	233.4	233.1	232.8	232.6	232.3	231.8	230.8	229.9	228.9	228.1	227.5
80°	185.1	185.1	185.1	185.1	185.1	184.8	184.2	183.5	182.9	182.2	181.9
82.5°	142.8	142.3	141.8	141.3	140.7	140.4	140.3	140.2	140.1	139.9	139.3
85°	80.9	81.2	81.4	81.8	82.1	82.3	82.3	82.3	82.3	82.3	82.0
87.5°	31.9	32.0	32.2	32.4	32.6	32.7	32.6	32.5	32.4	32.3	32.4
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	8.3	7.6	7.0	6.3	5.6	5.7	6.4	7.2	7.8	8.6	9.2
95°	30.6	30.3	30.0	29.6	29.2	26.8	22.2	17.7	13.1	8.6	9.2
97.5°	64.0	64.7	65.3	65.9	66.5	62.4	53.4	44.4	35.4	26.5	23.1
100°	89.8	90.2	90.5	90.9	91.2	91.6	92.2	92.7	93.1	93.6	75.8
102.5°	116.0	116.5	117.0	117.4	117.8	118.2	118.5	118.9	119.1	119.4	116.0
105°	158.1	158.5	159.1	159.6	160.0	160.2	160.2	160.2	160.2	160.2	160.2
107.5°	201.8	201.8	201.8	201.8	201.8	201.9	202.1	202.4	202.6	202.8	202.8
110°	230.2	230.2	230.2	230.2	230.2	230.3	230.5	230.7	231.0	231.2	230.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	256.8	257.1	257.4	257.7	258.0	258.2	258.4	258.4	258.6	258.7	258.4
115°	296.8	297.5	298.0	298.6	299.3	299.6	299.7	299.8	299.9	300.1	299.6
117.5°	338.3	338.2	338.2	338.2	338.2	338.4	338.8	339.3	339.7	340.2	339.6
120°	364.1	363.9	363.8	363.7	363.5	363.7	364.1	364.4	364.8	365.1	364.9
122.5°	386.8	387.3	387.8	388.2	388.7	389.0	389.2	389.4	389.5	389.6	389.5
125°	422.2	423.0	423.8	424.6	425.5	425.9	425.9	425.9	425.9	425.9	425.5
127.5°	455.8	456.4	457.0	457.6	458.2	458.5	458.4	458.4	458.3	458.2	457.9
130°	476.5	477.0	477.7	478.2	478.8	479.2	479.3	479.5	479.6	479.7	479.3
132.5°	497.1	497.8	498.5	499.2	499.8	500.1	499.8	499.5	499.3	499.1	499.0
135°	526.5	527.2	527.9	528.6	529.3	529.6	529.3	529.0	528.9	528.6	528.4
137.5°	553.5	554.1	554.7	555.3	555.9	556.2	555.9	555.7	555.5	555.3	555.3
140°	571.1	571.4	571.6	571.8	572.0	572.1	572.0	571.8	571.7	571.7	571.8
142.5°	587.0	587.2	587.3	587.5	587.6	587.8	588.0	588.1	588.2	588.4	588.4
145°	610.4	610.6	610.9	611.1	611.3	611.4	611.4	611.4	611.4	611.4	611.5
147.5°	630.7	630.7	630.7	630.7	630.6	630.7	630.7	630.9	631.0	631.2	631.4
150°	643.7	643.5	643.2	643.0	642.7	642.7	643.0	643.2	643.5	643.7	643.9
152.5°	656.2	655.6	655.2	654.6	654.0	653.9	654.1	654.4	654.6	654.9	655.2
155°	672.2	671.5	670.8	670.1	669.3	669.1	669.3	669.6	669.8	670.1	670.4
157.5°	684.6	684.1	683.7	683.2	682.9	682.7	682.7	682.7	682.7	682.8	683.2
160°	693.1	692.5	691.7	691.0	690.3	690.0	690.1	690.2	690.3	690.5	691.0
162.5°	700.0	699.4	698.6	697.9	697.2	696.9	697.0	697.1	697.2	697.4	698.0
165°	709.3	708.6	707.8	707.2	706.4	706.2	706.2	706.3	706.5	706.6	707.3
167.5°	716.1	715.5	714.7	714.0	713.2	712.9	713.0	713.1	713.2	713.4	714.3
170°	720.1	719.3	718.4	717.6	716.7	716.3	716.4	716.6	716.7	716.8	717.7
172.5°	722.6	721.8	721.0	720.1	719.3	719.0	719.2	719.4	719.6	719.8	720.7
175°	725.5	724.7	724.0	723.3	722.6	722.3	722.4	722.6	722.6	722.7	723.7
177.5°	726.7	726.1	725.6	725.0	724.4	724.2	724.2	724.3	724.4	724.5	725.3
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5	1857.5
2.5°	1852.1	1854.7	1857.4	1858.5	1858.3	1858.0	1857.8	1857.5
5°	1842.8	1845.8	1848.7	1850.0	1849.6	1849.4	1849.0	1848.7
7.5°	1824.1	1827.0	1829.9	1831.2	1830.9	1830.5	1830.2	1829.9
10°	1808.4	1811.0	1813.5	1814.7	1814.4	1814.0	1813.7	1813.5
12.5°	1787.3	1789.4	1791.5	1792.5	1792.4	1792.3	1792.3	1792.2
15°	1750.6	1752.2	1753.8	1754.6	1754.6	1754.6	1754.6	1754.6
17.5°	1707.8	1709.9	1711.8	1712.0	1710.4	1708.8	1707.1	1705.5
20°	1675.5	1677.7	1680.0	1680.4	1678.7	1677.1	1675.5	1673.8
22.5°	1638.6	1640.1	1641.6	1641.8	1640.7	1639.6	1638.4	1637.4
25°	1579.6	1580.3	1580.9	1580.7	1579.8	1578.8	1577.8	1576.8
27.5°	1517.7	1517.9	1518.0	1517.5	1516.6	1515.6	1514.6	1513.6
30°	1472.6	1472.0	1471.3	1470.6	1469.5	1468.6	1467.5	1466.6
32.5°	1426.9	1425.8	1424.6	1423.1	1421.4	1419.6	1417.8	1416.1
35°	1356.0	1354.4	1352.8	1350.7	1348.0	1345.5	1342.8	1340.2
37.5°	1281.6	1279.2	1276.8	1274.8	1273.3	1271.8	1270.3	1268.8
40°	1230.0	1227.1	1224.1	1222.2	1221.2	1220.2	1219.2	1218.2
42.5°	1178.8	1176.1	1173.5	1171.4	1169.9	1168.4	1166.9	1165.4
45°	1103.2	1099.2	1095.3	1092.9	1091.8	1090.9	1089.9	1088.9
47.5°	1023.3	1019.4	1015.4	1012.3	1009.9	1007.7	1005.4	1003.1
50°	968.7	964.5	960.3	957.0	954.7	952.4	950.2	947.8
52.5°	915.7	912.0	908.2	905.1	902.6	900.0	897.5	894.9
55°	833.2	830.3	827.4	824.7	822.5	820.2	817.8	815.6
57.5°	751.3	747.5	743.8	741.2	740.0	738.8	737.4	736.2
60°	695.9	692.7	689.4	686.6	684.3	682.0	679.8	677.5
62.5°	642.4	638.9	635.5	632.8	631.0	629.2	627.5	625.8
65°	558.5	555.4	552.5	550.4	549.1	547.8	546.5	545.2
67.5°	478.2	475.7	473.3	471.6	470.8	470.0	469.3	468.4
70°	425.2	423.2	421.2	419.6	418.3	417.0	415.8	414.4
72.5°	375.3	373.1	370.9	369.1	367.8	366.5	365.1	363.8
75°	297.8	296.8	295.9	294.7	293.4	292.1	290.8	289.5
77.5°	226.9	226.3	225.7	225.0	224.0	223.1	222.3	221.3
80°	181.5	181.3	180.9	180.4	179.7	179.1	178.4	177.9
82.5°	138.7	138.2	137.5	137.2	137.0	137.0	136.8	136.7
85°	81.6	81.3	81.0	80.5	79.8	79.2	78.5	77.9
87.5°	32.5	32.6	32.8	32.6	32.1	31.7	31.3	30.8
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	9.8	10.4	11.0	11.4	11.5	11.7	11.9	12.1
95°	9.8	10.4	11.0	11.3	11.3	11.3	11.3	11.3
97.5°	19.7	16.3	13.0	11.3	11.3	11.3	11.3	11.3
100°	58.0	40.2	22.3	13.2	12.7	12.3	11.8	11.3
102.5°	112.6	109.2	105.9	100.2	92.0	83.9	75.8	67.7
105°	160.2	160.2	160.2	160.2	160.0	159.9	159.9	159.7
107.5°	202.9	202.9	202.9	202.7	202.5	202.1	201.7	201.3
110°	230.5	230.2	229.8	229.7	229.8	229.9	230.1	230.2



TEST NUMBER: P333310-830

CATALOG NUMBER: S125DIP-S1270D590U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	257.9	257.4	256.9	256.7	256.5	256.3	256.2	256.0
115°	299.1	298.6	298.1	297.6	296.8	296.1	295.4	294.7
117.5°	338.9	338.3	337.7	337.2	337.0	336.6	336.3	336.0
120°	364.7	364.4	364.2	363.7	363.2	362.6	361.9	361.4
122.5°	389.2	389.0	388.7	388.2	387.6	386.8	386.2	385.5
125°	425.0	424.4	424.0	423.6	423.2	422.8	422.5	422.2
127.5°	457.6	457.4	457.1	456.6	455.6	454.8	453.9	453.0
130°	479.0	478.6	478.2	477.8	477.2	476.5	476.0	475.4
132.5°	498.9	498.8	498.8	498.4	497.9	497.2	496.6	496.1
135°	528.1	527.9	527.6	527.2	526.5	525.8	525.0	524.3
137.5°	555.3	555.4	555.4	555.2	554.6	553.9	553.4	552.7
140°	572.1	572.3	572.6	572.3	571.7	570.9	570.2	569.5
142.5°	588.5	588.5	588.6	588.2	587.6	586.8	586.1	585.4
145°	611.7	611.8	611.9	611.6	610.9	610.2	609.4	608.7
147.5°	631.5	631.7	631.8	631.4	630.6	629.7	628.9	628.0
150°	644.1	644.4	644.6	644.3	643.4	642.3	641.4	640.5
152.5°	655.3	655.6	655.8	655.5	654.7	653.8	652.9	652.1
155°	670.8	671.1	671.5	671.2	670.2	669.3	668.4	667.3
157.5°	683.5	683.9	684.3	684.0	683.1	682.0	681.1	680.1
160°	691.4	691.9	692.4	692.1	691.2	690.2	689.3	688.3
162.5°	698.7	699.4	700.0	699.8	698.8	697.8	696.7	695.6
165°	708.0	708.8	709.5	709.4	708.4	707.5	706.5	705.5
167.5°	715.1	716.0	716.8	716.7	715.7	714.5	713.5	712.4
170°	718.8	719.7	720.7	720.6	719.5	718.4	717.4	716.3
172.5°	721.5	722.5	723.3	723.2	722.1	721.0	719.9	718.9
175°	724.6	725.6	726.6	726.5	725.5	724.3	723.3	722.2
177.5°	725.9	726.6	727.3	727.2	726.4	725.7	724.9	724.2
180°	725.5	725.5	725.5	725.5	725.5	725.5	725.5	725.5

(END OF REPORT)