

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: P333312

Luminaire Tested: **S125DIP-S1270D590U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333312
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1270D590U835-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

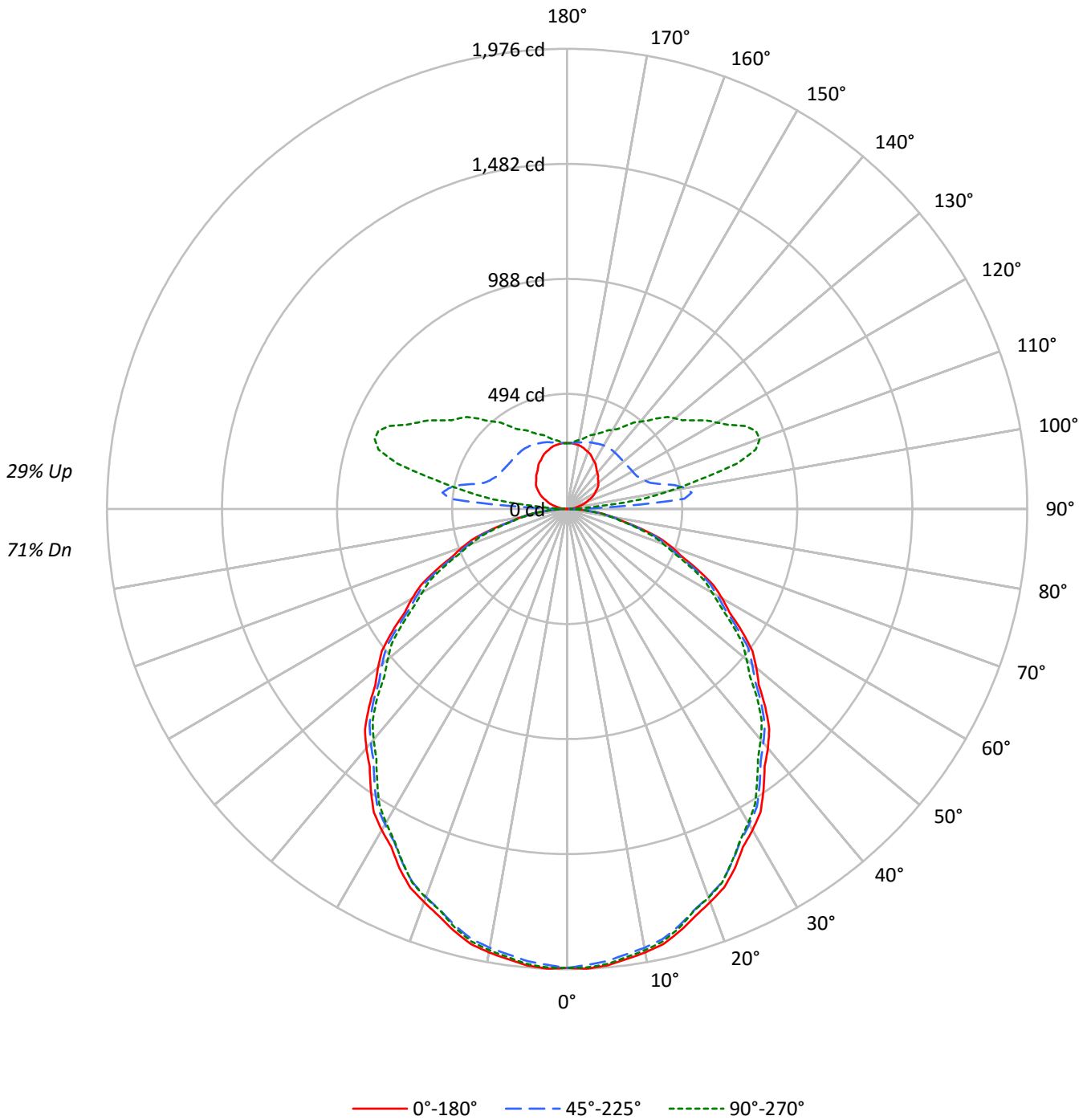
Lumens per Lamp: N/A
Luminaire Lumens: 7251.5 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	65	63	59
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53	50
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45	42
4	78	67	58	52	73	63	56	50	57	51	46	51	47	43	46	42	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	37	34	31
6	66	53	45	39	62	51	43	38	46	40	35	42	37	32	38	33	30	27
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	35	30	38	32	28	35	30	26	32	27	24	22
9	53	40	33	27	50	39	31	26	35	29	25	32	27	23	29	25	22	20
10	50	37	30	25	47	36	29	24	33	27	22	30	25	21	27	23	20	18

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	2.6
10°-20°	524.9	7.2
20°-30°	775.0	10.7
30°-40°	904.3	12.5
40°-50°	908.3	12.5
50°-60°	797.3	11.0
60°-70°	594.1	8.2
70°-80°	339.7	4.7
80°-90°	100.4	1.4
90°-100°	205.1	2.8
100°-110°	440.9	6.1
110°-120°	413.8	5.7
120°-130°	335.3	4.6
130°-140°	269.1	3.7
140°-150°	203.1	2.8
150°-160°	142.9	2.0
160°-170°	84.3	1.2
170°-180°	27.4	0.4
0°-30°	1485.7	20.5
0°-40°	2390.0	33.0
0°-60°	4095.6	56.5
0°-90°	5129.8	70.7
90°-120°	1059.7	14.6
90°-150°	1867.2	25.7
90°-180°	2122.0	29.3
0°-180°	7251.5	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	5	9	12	13	6
95°	19	56	505	229	134	20
105°	64	90	414	814	756	68
115°	115	139	332	716	842	113
125°	160	187	318	569	663	142
135°	187	225	316	477	551	145
145°	218	250	317	395	435	137
155°	249	268	309	349	364	114
165°	272	279	297	315	319	76
175°	282	282	285	288	287	27
180°	283	283	283	283	283	



TEST NUMBER: P333312

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-F4

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	34.4	34.6	34.7	34.5	34.5	34.3	34.3	34.4
90°	0.6	1.1	2.3	3.4	4.6	5.7	6.3	7.4	8.0	9.1	9.7
92.5°	7.0	8.4	13.2	20.3	30.1	46.8	77.9	130.2	186.9	183.9	148.9
95°	18.8	19.4	24.0	30.2	42.8	68.5	129.5	255.0	412.4	505.4	494.6
97.5°	31.3	31.9	35.1	41.4	52.7	71.2	111.6	203.5	368.3	539.7	625.8
100°	39.9	41.1	43.4	49.6	60.5	77.6	110.7	184.8	328.6	515.1	657.7
102.5°	49.5	50.2	52.0	58.8	68.7	85.3	114.8	177.1	298.4	471.7	638.5
105°	64.5	64.5	67.3	73.0	82.1	98.1	123.2	174.0	269.2	413.6	577.3
107.5°	79.1	80.2	82.9	87.6	97.1	111.5	135.8	179.2	256.9	373.5	514.8
110°	89.6	90.7	93.0	98.1	106.7	121.5	144.9	184.2	253.3	354.8	479.2



TEST NUMBER: P333312

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	100.1	101.2	103.0	108.2	116.7	131.1	153.6	190.6	253.3	343.9	452.7
115°	115.2	116.4	118.1	123.2	131.8	146.0	167.1	200.2	255.0	332.0	423.8
117.5°	128.9	130.6	132.5	137.6	147.3	161.1	181.1	211.2	258.7	326.2	406.6
120°	138.0	139.8	142.0	147.2	156.9	171.1	191.1	218.5	262.4	323.4	397.0
122.5°	147.6	148.9	150.7	155.8	166.5	180.7	200.7	226.7	265.6	321.2	388.8
125°	159.7	160.9	163.7	168.8	179.7	194.5	213.3	237.9	271.0	318.3	377.6
127.5°	169.2	170.9	174.6	181.1	192.6	207.4	225.5	248.1	277.0	316.9	367.4
130°	175.1	176.8	181.4	188.8	200.8	215.6	233.3	255.0	280.7	316.0	360.5
132.5°	179.7	181.9	187.3	195.7	208.1	222.9	240.6	260.9	284.8	316.0	355.0
135°	187.1	189.4	196.2	205.4	217.3	232.7	250.4	269.2	290.3	316.0	348.5
137.5°	196.5	198.2	204.6	213.7	225.4	241.3	257.4	275.4	295.5	316.7	342.7
140°	201.9	203.6	210.5	219.6	230.5	245.9	262.4	279.5	297.8	317.2	340.0
142.5°	208.3	209.6	216.0	225.1	235.5	250.0	265.6	281.8	299.1	317.6	337.7
145°	217.9	219.0	224.7	232.7	243.0	256.1	271.0	285.2	300.6	317.2	334.3
147.5°	227.9	228.6	233.5	240.9	249.8	261.4	274.4	287.3	301.2	315.7	330.7
150°	233.9	235.0	239.0	246.4	254.4	264.1	276.7	288.6	301.2	314.3	328.0
152.5°	240.3	240.9	244.5	251.0	258.5	267.3	278.9	289.5	300.7	312.5	324.8
155°	248.7	248.7	252.1	257.8	263.5	271.5	281.2	290.3	299.5	309.2	319.4
157.5°	256.2	256.1	258.9	263.8	268.8	274.8	283.2	290.9	298.0	305.7	314.4
160°	261.3	260.7	263.0	267.0	271.5	276.7	284.1	290.9	296.6	303.5	310.3
162.5°	265.4	264.8	267.1	270.6	274.3	278.5	285.0	290.5	295.3	300.7	306.7
165°	271.5	270.4	272.1	274.9	277.2	280.7	285.2	289.8	293.2	296.6	301.2
167.5°	275.6	275.1	276.1	277.7	279.3	281.4	285.2	288.4	290.0	292.6	295.8
170°	278.4	277.8	278.4	279.5	280.7	282.4	285.2	287.5	288.6	290.3	292.6
172.5°	280.2	279.2	279.7	280.9	281.6	282.4	284.8	286.6	286.8	287.6	289.4
175°	282.4	281.2	281.8	282.4	282.4	282.4	284.1	285.2	284.6	284.6	285.2
177.5°	283.4	282.5	282.5	282.9	282.5	282.5	283.4	283.8	282.9	282.9	283.4
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9



TEST NUMBER: P333312

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-F4

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°	34.5	34.6	34.7	34.7	34.1	33.6	33.1	32.6
90°	10.3	10.8	11.4	12.5	12.5	12.5	13.1	13.1
92.5°	101.1	73.4	55.2	46.8	39.5	38.1	37.3	36.4
95°	410.1	323.4	253.3	205.4	164.9	147.7	143.2	134.1
97.5°	610.8	550.0	481.7	415.0	379.8	347.8	331.3	324.0
100°	701.6	673.7	614.9	555.6	516.2	475.2	454.1	444.9
102.5°	732.2	749.4	721.2	681.1	639.0	609.8	586.9	580.0
105°	714.2	792.3	817.4	811.1	792.9	774.1	762.7	755.8
107.5°	649.8	754.1	818.6	848.3	857.6	857.5	853.7	849.1
110°	602.4	710.8	791.2	839.7	865.3	876.2	880.2	880.2



TEST NUMBER: P333312

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	565.0	667.9	749.2	806.4	843.9	862.5	872.4	876.5
115°	517.9	606.4	684.5	746.7	791.2	818.6	834.5	842.0
117.5°	487.6	563.8	631.1	688.2	732.7	761.0	776.8	781.4
120°	471.2	539.6	602.4	652.6	694.8	722.2	737.6	742.1
122.5°	458.9	522.3	578.2	625.2	662.8	687.9	703.3	707.4
125°	440.9	499.1	548.8	589.8	621.8	645.2	657.7	663.4
127.5°	422.7	477.0	523.3	561.8	590.7	611.4	623.2	625.8
130°	411.3	461.5	506.0	543.0	571.6	590.4	601.8	605.2
132.5°	399.9	446.9	487.3	523.0	551.5	570.3	580.8	584.7
135°	385.0	424.4	460.9	493.4	518.5	537.3	547.6	551.0
137.5°	372.5	404.3	434.7	462.3	484.7	501.9	511.3	515.1
140°	365.6	392.5	418.7	442.7	463.8	478.6	487.1	490.0
142.5°	359.7	382.4	405.0	425.8	443.7	456.2	464.3	466.7
145°	352.0	369.6	387.3	402.7	416.4	426.1	432.4	434.7
147.5°	344.7	359.0	372.6	384.2	395.1	402.8	406.5	407.5
150°	340.5	353.1	363.9	374.2	382.8	389.6	391.9	392.5
152.5°	336.0	347.2	357.1	365.1	372.3	377.7	380.0	380.6
155°	329.1	338.3	346.2	352.5	358.2	362.2	363.9	364.5
157.5°	322.3	329.8	336.0	340.9	345.3	348.6	350.2	350.1
160°	317.7	323.4	329.1	333.1	337.1	340.0	341.1	340.5
162.5°	312.7	318.0	322.7	326.3	329.4	331.8	332.0	331.9
165°	305.7	309.7	313.2	316.0	318.3	319.4	319.4	319.4
167.5°	299.1	301.8	304.4	306.4	307.6	308.6	308.1	308.0
170°	295.5	297.2	298.9	300.0	301.2	301.8	301.8	301.2
172.5°	291.4	293.1	294.3	295.0	295.3	296.3	295.4	294.8
175°	286.9	286.9	288.1	288.1	288.1	288.6	287.5	286.9
177.5°	283.8	284.3	284.3	284.3	283.8	284.3	282.9	282.9
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9

(END OF REPORT)