

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: P333309

Luminaire Tested: **S125DIP-S1270D590U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333309
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7049.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Direct

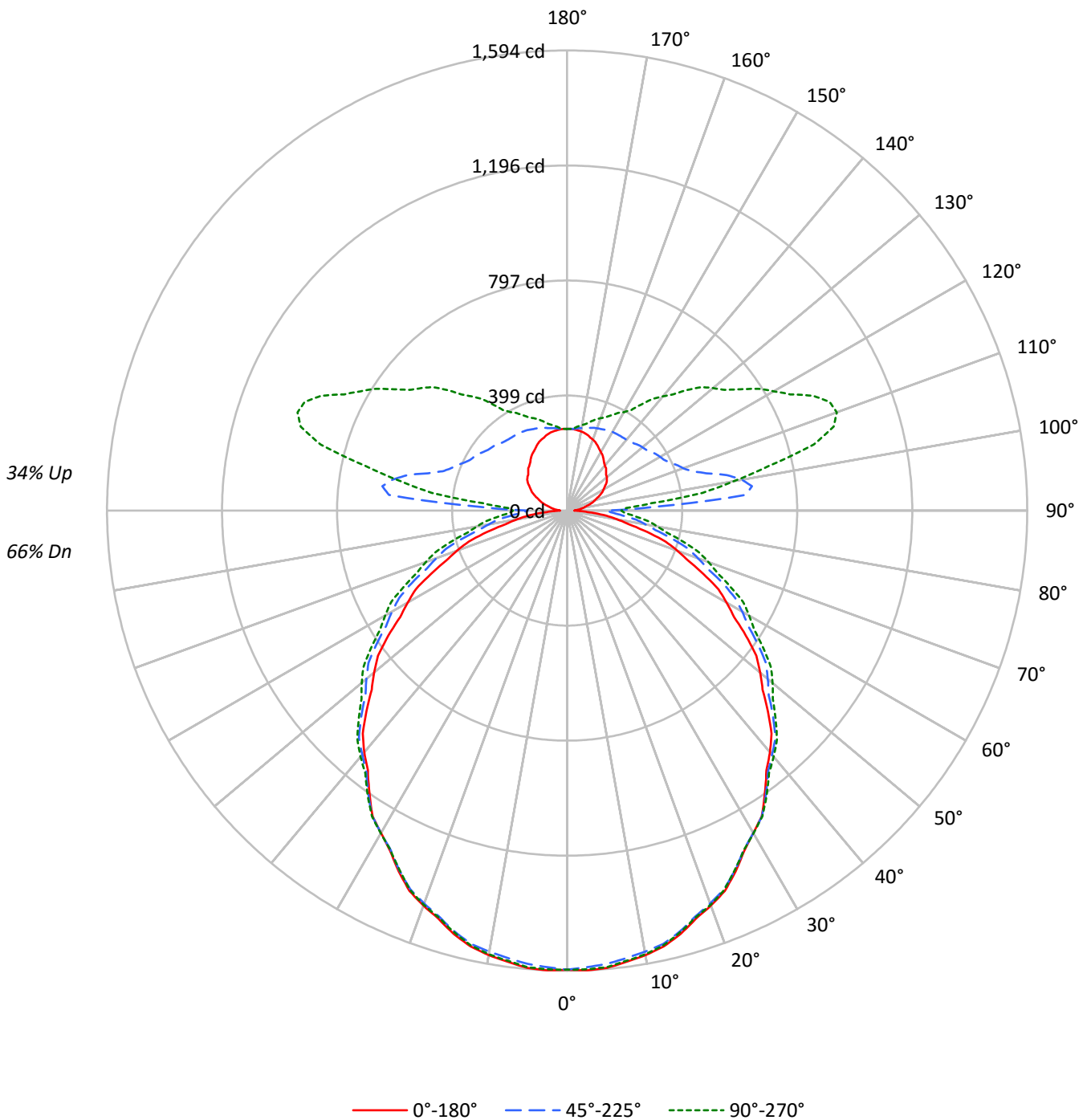
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	70	70	70	66																												
1	100	95	91	87	94	90	86	83	79	76	74	70	67	65	61	59	58	53																												
2	91	83	76	70	85	78	72	67	69	64	60	61	57	54	53	50	48	44																												
3	83	73	65	58	77	68	61	56	61	55	50	53	49	45	47	43	40	37																												
4	76	64	56	49	71	60	53	47	54	48	43	47	42	38	41	38	34	31																												
5	69	57	48	42	65	54	46	40	48	42	37	42	37	33	37	33	30	27																												
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	34	30	26	24																												
7	59	46	38	32	55	44	36	31	39	33	28	35	30	26	31	27	23	21																												
8	55	42	34	28	52	40	32	27	36	30	25	32	27	23	28	24	21	19																												
9	51	38	31	25	48	36	29	24	33	27	22	29	24	21	26	22	19	17																												
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10271	10271	10271
5°	10291	10081	10113
10°	10218	9901	9886
15°	10097	9686	9597
20°	9933	9419	9309
25°	9738	9134	8953
30°	9501	8820	8630
35°	9281	8532	8335
40°	9056	8229	8036
45°	8802	7969	7773
50°	8560	7687	7539
55°	8269	7421	7265
60°	7950	7117	6985
65°	7617	6800	6669
70°	7241	6366	6346
75°	6643	5948	5948
80°	5861	5444	5515
85°	5135	5104	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	2.1
10°-20°	426.9	6.1
20°-30°	634.8	9.0
30°-40°	752.0	10.7
40°-50°	777.5	11.0
50°-60°	716.2	10.2
60°-70°	579.0	8.2
70°-80°	387.7	5.5
80°-90°	202.7	2.9
90°-100°	317.9	4.5
100°-110°	524.1	7.4
110°-120°	469.5	6.7
120°-130°	367.0	5.2
130°-140°	282.9	4.0
140°-150°	205.9	2.9
150°-160°	143.0	2.0
160°-170°	84.3	1.2
170°-180°	27.4	0.4
0°-30°	1212.1	17.2
0°-40°	1964.1	27.9
0°-60°	3457.8	49.1
0°-90°	4627.2	65.6
90°-120°	1311.5	18.6
90°-150°	2167.2	30.7
90°-180°	2422.0	34.4
0°-180°	7049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1590	1587	1576	1588	1587	151
15°	1519	1519	1509	1518	1512	428
25°	1380	1384	1375	1381	1374	635
35°	1194	1204	1200	1205	1205	747
45°	984	1000	1009	1019	1021	759
55°	756	781	806	823	830	676
65°	521	557	594	616	624	517
75°	287	328	377	407	416	304
85°	86	137	192	225	238	91
90°	26	80	137	174	188	18
95°	39	117	619	376	293	36
105°	78	130	499	930	884	83
115°	125	161	393	803	940	123
125°	166	194	354	629	732	147
135°	190	227	328	509	592	148
145°	220	250	317	403	449	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1594.0	1593.5	1592.9	1592.4	1591.8	1590.6	1588.6	1586.7	1584.8	1582.8	1584.8
5°	1590.3	1589.6	1588.9	1588.2	1587.5	1586.0	1583.5	1581.1	1578.7	1576.3	1579.0
7.5°	1576.3	1576.0	1575.7	1575.4	1575.2	1573.8	1571.3	1568.8	1566.3	1563.8	1566.2
10°	1563.8	1563.8	1563.8	1563.8	1563.8	1562.4	1559.6	1556.9	1554.1	1551.3	1553.7
12.5°	1546.3	1546.6	1546.9	1547.2	1547.4	1546.5	1544.3	1542.0	1539.8	1537.6	1539.5
15°	1518.6	1518.9	1519.3	1519.6	1520.0	1518.9	1516.5	1514.1	1511.7	1509.2	1511.3
17.5°	1482.4	1483.1	1483.8	1484.5	1485.2	1484.3	1481.9	1479.5	1477.0	1474.6	1476.2
20°	1456.2	1456.9	1457.6	1458.3	1459.0	1458.1	1455.7	1453.3	1450.8	1448.4	1449.5
22.5°	1426.3	1427.5	1428.8	1430.0	1431.3	1430.5	1427.8	1425.1	1422.4	1419.7	1421.0
25°	1379.8	1380.9	1381.9	1382.9	1384.0	1383.5	1381.4	1379.3	1377.2	1375.1	1376.5
27.5°	1328.1	1329.6	1331.1	1332.6	1334.2	1333.7	1331.4	1329.0	1326.7	1324.3	1325.3
30°	1289.4	1291.5	1293.5	1295.6	1297.7	1297.7	1295.6	1293.5	1291.5	1289.4	1290.1
32.5°	1254.5	1256.3	1258.1	1259.9	1261.7	1261.8	1260.3	1258.8	1257.2	1255.7	1256.4
35°	1194.3	1196.7	1199.1	1201.6	1204.0	1204.7	1203.6	1202.6	1201.6	1200.5	1201.6
37.5°	1134.1	1136.3	1138.5	1140.8	1143.0	1143.9	1143.6	1143.2	1142.9	1142.5	1143.9
40°	1092.9	1095.7	1098.5	1101.3	1104.0	1105.2	1104.9	1104.5	1104.2	1103.9	1105.2
42.5°	1048.0	1051.6	1055.2	1058.8	1062.5	1064.6	1065.4	1066.2	1066.9	1067.7	1069.3
45°	983.8	987.6	991.4	995.2	999.0	1001.8	1003.6	1005.3	1007.0	1008.7	1011.2
47.5°	918.0	921.5	925.1	928.6	932.1	935.4	938.4	941.4	944.3	947.3	950.9
50°	873.1	876.9	880.7	884.5	888.4	892.2	896.0	899.8	903.6	907.4	911.2
52.5°	825.7	830.4	835.0	839.6	844.3	848.9	853.6	858.2	862.8	867.5	871.6
55°	756.2	761.7	767.3	772.8	778.3	783.9	789.4	795.0	800.5	806.1	809.9
57.5°	685.1	691.7	698.4	705.0	711.7	718.2	724.6	730.9	737.3	743.7	748.1
60°	637.7	644.6	651.5	658.5	665.4	672.3	679.3	686.2	693.1	700.0	705.2
62.5°	591.5	598.5	605.4	612.3	619.2	626.5	633.9	641.4	648.9	656.4	662.1
65°	520.7	528.7	536.7	544.7	552.6	560.8	569.1	577.4	585.7	594.0	599.2
67.5°	454.0	461.7	469.4	477.1	484.8	492.9	501.3	509.8	518.2	526.7	533.0
70°	405.4	413.3	421.3	429.3	437.2	445.7	454.7	463.8	472.8	481.8	488.4
72.5°	358.0	366.2	374.5	382.7	391.0	400.0	409.8	419.7	429.5	439.4	446.5
75°	286.9	295.9	304.9	313.9	322.9	333.0	344.0	355.1	366.2	377.3	384.2
77.5°	218.6	229.0	239.4	249.8	260.2	270.7	281.4	292.0	302.7	313.4	321.0
80°	176.2	186.6	197.0	207.4	217.8	228.8	240.6	252.4	264.2	276.0	283.6
82.5°	137.5	148.5	159.4	170.4	181.3	192.8	204.9	216.9	229.0	241.0	248.4
85°	85.8	97.2	108.6	120.1	131.5	143.3	155.4	167.5	179.6	191.8	199.4
87.5°	48.8	60.0	71.3	82.6	93.9	105.6	117.5	129.5	141.4	153.4	161.5
90°	25.5	37.2	49.4	61.6	73.9	86.4	98.8	111.7	124.1	137.0	145.5
92.5°	29.4	41.1	56.2	73.5	93.6	121.4	164.6	228.9	297.7	306.8	279.4
95°	39.1	48.7	62.2	77.5	99.1	135.1	208.0	345.2	514.5	619.2	616.0
97.5°	49.7	58.4	69.8	84.1	103.5	131.8	183.5	286.8	462.9	645.8	739.1
100°	57.1	65.5	75.1	88.6	106.7	133.0	177.2	262.4	417.3	614.9	764.8
102.5°	65.4	72.8	81.4	94.8	111.5	136.9	177.1	250.2	382.4	566.5	740.3
105°	78.5	84.0	92.4	103.7	118.3	142.3	177.8	238.9	344.6	499.3	670.0
107.5°	91.2	97.1	104.5	113.9	128.1	149.8	184.1	237.5	325.2	451.8	599.9
110°	100.5	105.8	112.2	121.5	134.2	156.0	189.1	238.1	316.8	428.1	559.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	111.0	115.4	120.6	129.0	140.9	161.7	193.6	240.1	312.1	412.1	527.3
115°	124.6	128.1	132.3	139.8	150.8	170.8	200.9	243.0	306.8	392.8	490.9
117.5°	136.7	140.0	143.4	150.2	161.5	180.3	208.8	247.4	303.5	379.5	465.8
120°	145.8	148.6	151.9	158.1	168.8	187.6	215.5	250.9	302.8	371.8	451.2
122.5°	154.2	155.9	158.2	163.8	174.9	193.3	220.9	254.6	301.2	364.5	437.8
125°	166.0	166.8	169.3	174.0	184.5	202.7	228.4	259.9	299.9	354.2	419.0
127.5°	173.9	175.2	178.5	184.7	195.9	213.4	237.2	265.5	300.0	345.6	401.2
130°	179.8	181.2	185.4	192.4	204.1	221.2	243.7	270.2	300.7	341.0	390.3
132.5°	183.1	185.2	190.6	198.9	211.2	227.9	249.3	273.4	301.0	336.0	379.8
135°	190.2	192.2	198.7	207.4	219.1	235.5	255.6	276.9	300.4	328.5	365.5
137.5°	199.3	200.7	206.8	215.7	227.1	243.4	260.7	279.9	301.2	323.6	353.7
140°	203.5	205.2	212.0	221.2	232.0	247.6	264.5	281.9	300.5	320.3	346.9
142.5°	209.9	210.9	217.0	225.8	235.9	250.3	266.0	282.3	299.7	318.2	341.6
145°	219.5	220.3	225.6	233.3	243.2	256.1	271.0	285.2	300.6	317.2	336.0
147.5°	227.9	228.6	233.5	240.9	249.8	261.4	274.4	287.3	301.2	315.7	331.3
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3	1590.3
2.5°	1586.7	1588.6	1590.6	1591.4	1591.1	1590.9	1590.6	1590.3
5°	1581.8	1584.6	1587.4	1588.6	1588.2	1587.9	1587.5	1587.2
7.5°	1568.6	1571.1	1573.5	1574.5	1574.2	1573.8	1573.5	1573.1
10°	1556.2	1558.6	1561.0	1562.1	1561.7	1561.4	1561.0	1560.7
12.5°	1541.3	1543.2	1545.1	1545.6	1544.7	1543.8	1542.9	1542.0
15°	1513.4	1515.5	1517.5	1517.9	1516.5	1515.1	1513.7	1512.3
17.5°	1477.8	1479.4	1481.0	1481.4	1480.5	1479.7	1478.9	1478.0
20°	1450.5	1451.5	1452.6	1453.1	1453.1	1453.1	1453.1	1453.1
22.5°	1422.4	1423.7	1425.0	1425.2	1424.4	1423.6	1422.7	1421.9
25°	1377.9	1379.3	1380.7	1380.5	1378.8	1377.0	1375.3	1373.6
27.5°	1326.3	1327.2	1328.2	1328.4	1327.7	1327.1	1326.5	1325.9
30°	1290.8	1291.5	1292.2	1292.3	1292.0	1291.6	1291.3	1290.9
32.5°	1257.1	1257.8	1258.5	1258.7	1258.3	1258.0	1257.6	1257.3
35°	1202.6	1203.6	1204.7	1205.2	1205.2	1205.2	1205.2	1205.2
37.5°	1145.3	1146.7	1148.1	1148.7	1148.5	1148.4	1148.3	1148.1
40°	1106.6	1108.0	1109.4	1110.4	1111.1	1111.8	1112.5	1113.2
42.5°	1071.0	1072.7	1074.3	1075.2	1075.4	1075.5	1075.7	1075.8
45°	1013.6	1016.0	1018.4	1019.8	1020.2	1020.5	1020.9	1021.2
47.5°	954.4	957.9	961.5	963.6	964.4	965.1	965.9	966.7
50°	915.0	918.8	922.7	925.1	926.1	927.2	928.2	929.2
52.5°	875.7	879.8	883.8	886.3	887.0	887.8	888.6	889.3
55°	813.7	817.5	821.3	823.9	825.3	826.7	828.1	829.5
57.5°	752.4	756.8	761.2	763.9	764.9	765.9	767.0	768.0
60°	710.4	715.6	720.8	723.9	725.0	726.0	727.1	728.1
62.5°	667.9	673.6	679.4	682.9	684.2	685.6	686.9	688.2
65°	604.4	609.6	614.8	618.1	619.5	620.9	622.3	623.6
67.5°	539.3	545.6	551.9	555.9	557.7	559.5	561.4	563.2
70°	494.9	501.5	508.1	512.4	514.5	516.6	518.7	520.7
72.5°	453.6	460.8	467.9	472.2	473.8	475.3	476.8	478.3
75°	391.2	398.1	405.0	409.4	411.1	412.8	414.6	416.3
77.5°	328.6	336.2	343.9	348.4	349.8	351.1	352.5	353.9
80°	291.2	298.8	306.5	311.0	312.3	313.7	315.1	316.5
82.5°	255.7	263.1	270.4	275.3	277.8	280.3	282.8	285.3
85°	207.0	214.6	222.3	227.5	230.2	233.0	235.8	238.5
87.5°	169.5	177.6	185.7	191.1	193.6	196.0	198.5	200.9
90°	154.1	162.6	171.1	177.5	179.9	182.3	185.3	187.7
92.5°	239.3	219.3	208.8	205.5	200.6	201.6	203.3	204.8
95°	539.2	460.1	397.6	354.7	316.6	301.9	299.8	293.1
97.5°	731.4	677.9	616.8	555.0	522.1	492.5	478.3	473.4
100°	816.0	795.3	743.8	689.2	651.9	612.9	593.9	586.8
102.5°	841.0	865.2	844.0	808.4	768.4	741.3	720.4	715.7
105°	813.8	898.9	930.9	929.3	913.5	897.1	888.1	883.7
107.5°	741.8	853.0	924.3	958.6	969.9	972.0	970.4	967.9
110°	688.8	803.8	890.8	943.8	971.9	985.1	991.6	994.0



TEST NUMBER: P333309

CATALOG NUMBER: S125DIP-S1270D590U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	645.9	755.1	842.7	904.2	944.2	965.2	977.6	984.1
115°	591.2	685.9	770.3	836.6	883.2	912.6	930.7	940.2
117.5°	552.7	634.8	708.0	769.2	816.0	846.7	864.9	871.8
120°	531.3	605.6	674.3	728.4	772.7	802.2	819.7	826.3
122.5°	513.4	582.5	644.0	694.8	734.6	761.7	779.2	785.4
125°	487.9	551.6	606.8	651.5	685.2	710.3	724.6	732.0
127.5°	461.6	521.1	572.5	614.5	645.5	668.2	682.0	686.6
130°	445.9	501.0	550.3	590.7	620.9	641.5	654.6	659.8
132.5°	429.5	481.4	526.6	565.5	595.5	615.7	627.7	633.0
135°	406.5	450.4	491.4	527.0	553.9	574.4	586.4	591.6
137.5°	387.5	423.4	457.9	488.2	512.1	530.6	541.4	546.6
140°	376.4	407.0	437.1	463.6	486.1	502.3	512.3	516.5
142.5°	366.8	392.8	418.7	441.7	461.0	475.0	484.5	488.2
145°	355.4	374.8	394.3	411.2	426.3	437.4	445.0	448.7
147.5°	345.8	360.7	374.8	387.0	398.5	406.9	411.2	412.8
150°	340.5	353.1	363.9	374.4	383.3	390.5	393.1	394.0
152.5°	336.0	347.2	357.1	365.1	372.4	377.9	380.3	380.9
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)