

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: P333336

Luminaire Tested: **S125DIP-S1270D1205U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333336
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-S1270D1205U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9250.9 lumens
Efficiency: N/A
Efficacy: 129.0 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: General Diffuse

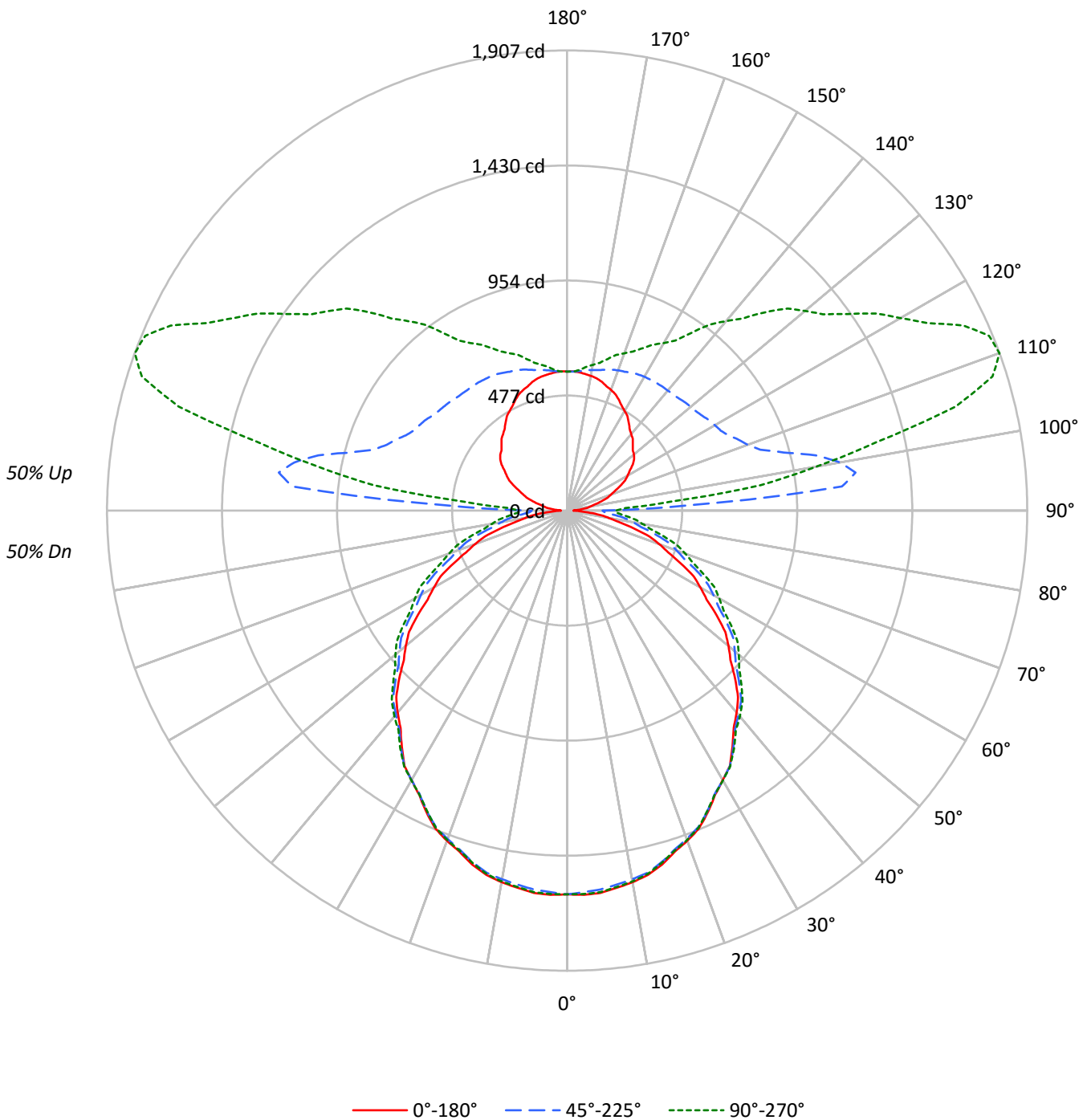
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	18	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	19	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

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



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.4	1.6
10°-20°	426.9	4.6
20°-30°	634.8	6.9
30°-40°	752.0	8.1
40°-50°	777.5	8.4
50°-60°	716.2	7.7
60°-70°	579.0	6.3
70°-80°	387.7	4.2
80°-90°	204.3	2.2
90°-100°	530.6	5.7
100°-110°	981.2	10.6
110°-120°	898.5	9.7
120°-130°	714.7	7.7
130°-140°	562.0	6.1
140°-150°	416.4	4.5
150°-160°	291.2	3.1
160°-170°	171.6	1.9
170°-180°	55.8	0.6
0°-30°	1212.1	13.1
0°-40°	1964.1	21.2
0°-60°	3457.8	37.4
0°-90°	4628.8	50.0
90°-120°	2410.4	26.1
90°-150°	4103.4	44.4
90°-180°	4622.0	50.0
0°-180°	9250.9	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	85	146	187	201	19
95°	59	175	1143	614	432	57
105°	145	224	928	1774	1667	153
115°	244	305	737	1546	1813	240
125°	332	388	684	1219	1420	294
135°	384	461	656	1004	1163	298
145°	445	508	646	812	899	279
155°	507	545	630	712	742	233
165°	553	568	604	641	651	156
175°	575	575	580	587	584	55
180°	576	576	576	576	576	



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

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°	48.9	60.2	71.7	83.3	94.9	106.8	118.8	131.0	143.0	155.3	163.5
90°	26.1	38.4	51.8	65.2	78.6	92.3	105.3	119.4	132.3	146.4	155.6
92.5°	36.6	49.9	69.9	94.6	124.8	169.9	245.4	363.9	491.5	497.5	433.8
95°	58.6	68.8	87.1	108.9	143.4	206.1	342.2	609.7	942.1	1143.3	1128.9
97.5°	82.1	91.6	106.2	127.1	158.2	205.6	299.2	497.9	844.8	1205.5	1388.0
100°	98.5	108.1	120.0	140.1	169.4	213.5	291.9	454.1	758.0	1149.0	1446.8
102.5°	116.8	124.9	135.3	155.7	182.7	225.4	296.2	433.8	691.9	1055.7	1402.5
105°	145.3	150.9	162.2	179.4	203.5	244.0	305.6	419.4	623.8	928.2	1268.6
107.5°	173.2	180.2	190.5	204.8	228.8	265.4	324.9	423.4	591.6	839.1	1133.7
110°	193.3	199.8	208.6	223.2	244.8	282.0	339.3	429.2	579.5	796.0	1055.9



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	214.7	220.4	227.4	241.2	262.0	297.6	352.8	437.8	574.8	768.7	996.7
115°	244.1	248.8	254.7	267.6	287.5	322.2	374.2	450.6	571.2	737.1	930.4
117.5°	270.4	275.5	280.8	292.8	314.2	347.4	396.6	466.4	571.9	717.7	887.5
120°	289.0	293.5	299.2	310.7	331.5	365.0	413.7	477.4	574.9	707.2	862.9
122.5°	307.3	310.3	314.5	325.5	347.5	380.7	429.0	489.7	576.7	697.5	840.9
125°	331.6	333.6	339.0	349.1	370.9	404.4	449.6	506.5	580.9	684.2	810.6
127.5°	349.3	352.5	359.5	372.4	395.6	428.4	471.1	522.8	587.3	674.3	782.1
130°	361.4	364.5	373.5	388.2	412.3	444.8	485.6	534.6	591.8	668.7	764.2
132.5°	369.4	373.8	384.9	401.8	427.0	459.1	498.8	544.0	596.3	663.7	748.0
135°	384.2	388.5	402.1	420.4	444.4	476.9	515.3	556.1	601.5	656.2	726.9
137.5°	403.0	406.2	418.9	437.2	460.9	493.7	527.6	565.5	607.6	652.0	709.1
140°	412.9	416.4	430.3	448.9	471.0	502.5	536.6	571.8	609.3	649.2	699.5
142.5°	425.9	428.2	440.9	459.2	480.1	509.5	541.4	574.5	609.9	647.6	691.8
145°	445.4	447.4	458.7	474.6	495.2	521.7	551.9	581.0	612.4	646.0	682.6
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	674.3
150°	476.4	478.7	486.9	502.0	518.2	538.0	563.5	588.0	613.5	640.2	668.1
152.5°	489.4	490.8	498.0	511.3	526.6	544.5	568.2	589.8	612.6	636.5	661.6
155°	506.6	506.6	513.6	525.2	536.8	553.1	572.8	591.4	610.0	629.8	650.7
157.5°	522.0	521.7	527.3	537.3	547.5	559.8	576.8	592.6	607.0	622.8	640.5
160°	532.2	531.0	535.7	543.8	553.1	563.5	578.7	592.6	604.2	618.2	632.1
162.5°	540.5	539.4	544.0	551.2	558.7	567.3	580.5	591.7	601.4	612.6	624.7
165°	553.1	550.8	554.3	560.1	564.7	571.7	581.0	590.3	597.2	604.2	613.5
167.5°	561.5	560.3	562.4	565.6	568.9	573.3	581.0	587.5	590.7	596.1	602.6
170°	567.0	565.9	567.0	569.4	571.7	575.2	581.0	585.6	588.0	591.4	596.1
172.5°	570.8	568.7	569.8	572.1	573.5	575.2	580.0	583.8	584.2	585.9	589.6
175°	575.2	572.8	574.0	575.2	575.2	575.2	578.7	581.0	579.8	579.8	581.0
177.5°	577.3	575.4	575.4	576.3	575.4	575.4	577.3	578.2	576.3	576.3	577.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

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°	171.7	179.9	188.1	193.7	196.2	198.6	201.2	203.7
90°	164.7	173.8	183.0	190.5	192.9	195.3	198.9	201.3
92.5°	344.1	295.4	266.1	254.0	241.5	241.2	242.0	242.5
95°	964.5	795.5	660.2	567.6	487.6	455.1	448.3	432.1
97.5°	1364.8	1248.2	1116.3	985.4	915.9	853.2	821.9	809.4
100°	1543.5	1493.9	1381.5	1265.3	1187.2	1105.6	1064.7	1048.2
102.5°	1600.3	1642.4	1592.0	1514.7	1431.0	1373.6	1329.0	1317.1
105°	1554.4	1720.5	1778.6	1770.4	1735.7	1699.8	1679.0	1667.4
107.5°	1415.7	1635.0	1773.1	1838.3	1859.2	1861.2	1855.6	1848.5
110°	1313.5	1540.8	1711.2	1814.5	1869.2	1893.7	1904.3	1906.7



TEST NUMBER: P333336

CATALOG NUMBER: S125DIP-S1270D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1231.7	1447.6	1619.6	1740.4	1819.3	1859.6	1882.3	1893.0
115°	1128.3	1314.7	1480.1	1610.9	1703.6	1761.5	1796.1	1813.3
117.5°	1058.3	1219.5	1362.5	1482.8	1575.8	1635.8	1670.4	1682.1
120°	1019.9	1165.2	1298.9	1405.2	1493.2	1551.1	1584.5	1595.9
122.5°	989.2	1124.1	1243.6	1343.1	1421.9	1475.1	1508.6	1519.0
125°	945.1	1069.2	1175.8	1263.1	1329.9	1379.3	1406.6	1420.0
127.5°	900.0	1015.7	1115.2	1197.1	1258.1	1302.2	1328.4	1335.5
130°	872.4	979.5	1075.0	1153.8	1213.7	1253.7	1278.7	1287.4
132.5°	844.2	944.8	1031.9	1107.8	1167.3	1207.1	1230.0	1239.3
135°	805.8	890.5	969.4	1038.7	1091.6	1131.6	1154.3	1163.0
137.5°	773.8	842.7	908.6	967.6	1014.8	1051.0	1071.7	1080.7
140°	755.6	814.0	871.2	922.6	967.0	998.6	1017.4	1024.6
142.5°	739.9	789.4	838.6	883.3	921.1	948.1	966.0	972.2
145°	720.4	758.1	795.9	828.8	858.1	879.2	893.4	899.4
147.5°	703.2	733.0	761.2	785.5	808.2	824.6	832.7	835.4
150°	693.7	719.3	741.3	762.4	780.2	794.5	799.5	801.0
152.5°	684.4	707.2	727.4	743.7	758.4	769.6	774.3	775.6
155°	670.4	689.0	705.3	718.1	729.7	737.8	741.3	742.5
157.5°	656.5	671.8	684.4	694.4	703.4	710.2	713.4	713.2
160°	647.2	658.8	670.4	678.6	686.7	692.5	694.9	693.7
162.5°	637.0	647.7	657.4	664.6	670.9	675.8	676.3	676.0
165°	622.8	630.9	637.9	643.7	648.4	650.7	650.7	650.7
167.5°	609.3	614.7	620.0	624.2	626.5	628.6	627.7	627.5
170°	601.9	605.4	608.9	611.2	613.5	614.7	614.7	613.5
172.5°	593.5	597.0	599.6	601.0	601.4	603.5	601.7	600.5
175°	584.5	584.5	586.8	586.8	586.8	588.0	585.6	584.5
177.5°	578.2	579.1	579.1	579.1	578.2	579.1	576.3	576.3
180°	576.3	576.3	576.3	576.3	576.3	576.3	576.3	576.3

(END OF REPORT)