

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: P333291

Luminaire Tested: **S125DIP-S1090D1205U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333291
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-S1090D1205U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 8590.1 lumens
Efficiency: N/A
Efficacy: 131.3 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

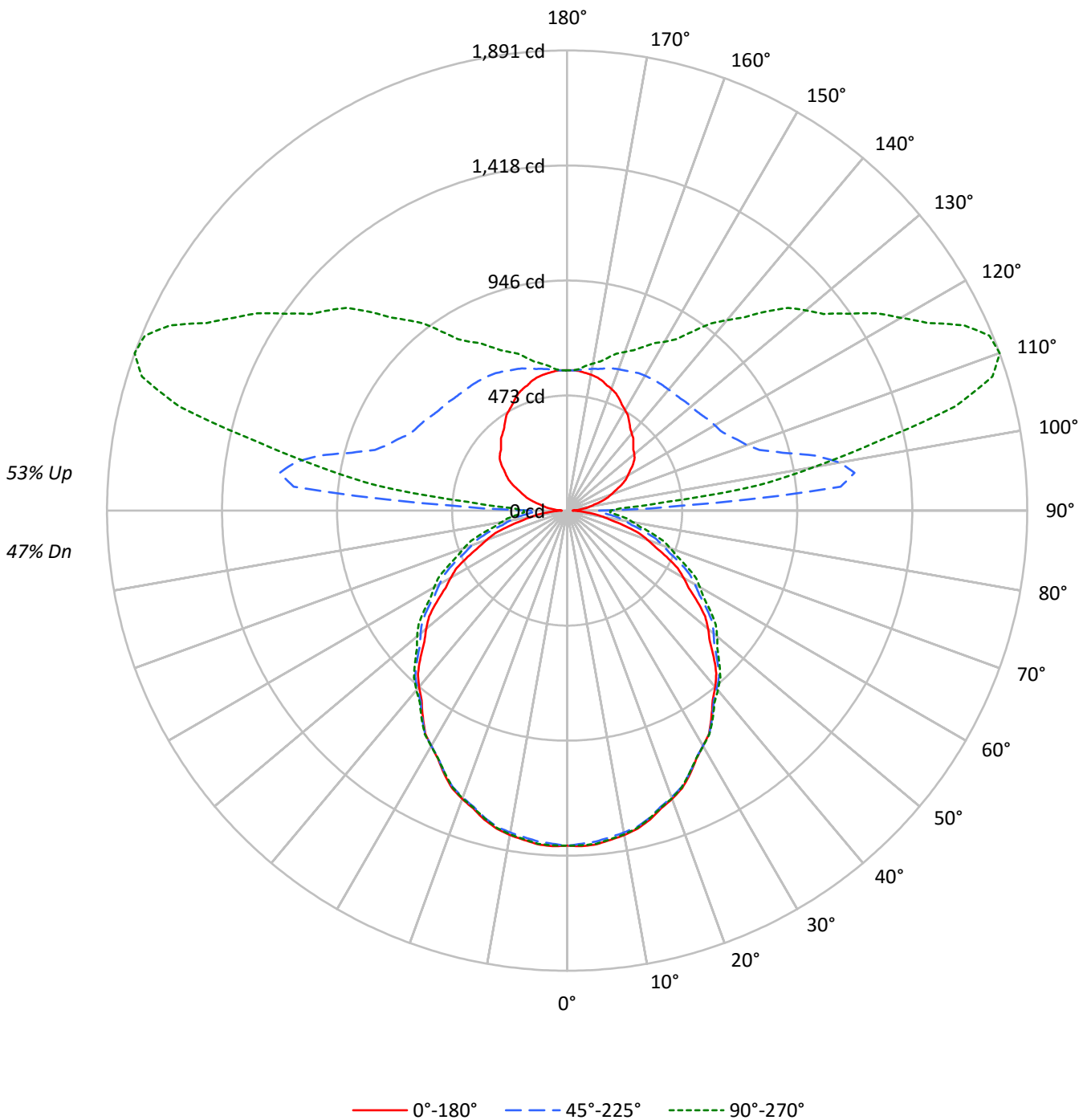
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47
1	96	92	88	84	88	84	81	78	70	68	65	58	56	54	46	45	43	38
2	87	80	73	68	80	73	68	63	61	57	54	50	47	45	40	38	36	31
3	80	70	62	56	73	64	58	52	54	49	45	44	40	37	35	33	30	26
4	73	62	54	47	66	57	50	44	48	42	38	39	35	32	31	28	26	22
5	67	55	46	40	61	51	43	38	43	37	33	35	31	27	28	25	22	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	25	22	20	17
7	57	44	36	30	52	41	34	29	35	29	25	29	24	21	23	20	17	15
8	53	40	32	27	48	37	30	25	31	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	22	29	23	20	24	20	17	20	16	14	12
10	46	33	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8893	8893	8893
5°	8911	8729	8756
10°	8847	8573	8560
15°	8743	8387	8310
20°	8601	8156	8061
25°	8432	7909	7752
30°	8227	7637	7473
35°	8036	7388	7217
40°	7841	7125	6959
45°	7621	6900	6730
50°	7412	6656	6528
55°	7159	6425	6290
60°	6883	6162	6048
65°	6596	5888	5775
70°	6269	5512	5495
75°	5751	5151	5149
80°	5072	4712	4775
85°	4441	4417	4657



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.5
10°-20°	369.6	4.3
20°-30°	549.7	6.4
30°-40°	651.1	7.6
40°-50°	673.2	7.8
50°-60°	620.1	7.2
60°-70°	501.3	5.8
70°-80°	335.7	3.9
80°-90°	177.3	2.1
90°-100°	515.4	6.0
100°-110°	970.1	11.3
110°-120°	891.1	10.4
120°-130°	710.4	8.3
130°-140°	560.1	6.5
140°-150°	416.1	4.8
150°-160°	291.2	3.4
160°-170°	171.6	2.0
170°-180°	55.8	0.7
0°-30°	1049.5	12.2
0°-40°	1700.6	19.8
0°-60°	2994.0	34.9
0°-90°	4008.3	46.7
90°-120°	2376.6	27.7
90°-150°	4063.2	47.3
90°-180°	4582.0	53.3
0°-180°	8590.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1374	1365	1375	1374	131
15°	1315	1316	1307	1314	1310	370
25°	1195	1198	1191	1195	1189	550
35°	1034	1043	1040	1043	1044	647
45°	852	866	873	882	884	657
55°	655	676	698	712	718	585
65°	451	482	514	534	540	447
75°	248	284	327	353	360	263
85°	74	119	166	195	206	79
90°	23	75	129	165	178	17
95°	56	167	1128	594	411	55
105°	144	218	917	1759	1650	151
115°	243	302	729	1534	1800	239
125°	331	387	679	1212	1411	293
135°	384	460	654	1000	1158	298
145°	445	508	646	811	898	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	



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CATALOG NUMBER: S125DIP-S1090D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.2	1379.7	1379.2	1378.8	1378.3	1377.2	1375.5	1373.8	1372.2	1370.5	1372.2
5°	1377.0	1376.4	1375.8	1375.2	1374.6	1373.2	1371.1	1369.0	1366.9	1364.8	1367.2
7.5°	1364.8	1364.6	1364.3	1364.1	1363.9	1362.7	1360.5	1358.3	1356.2	1354.0	1356.1
10°	1354.0	1354.0	1354.0	1354.0	1354.0	1352.8	1350.4	1348.0	1345.6	1343.2	1345.3
12.5°	1338.9	1339.1	1339.4	1339.6	1339.9	1339.0	1337.1	1335.2	1333.3	1331.3	1333.0
15°	1314.9	1315.2	1315.5	1315.8	1316.1	1315.2	1313.1	1311.0	1308.9	1306.8	1308.6
17.5°	1283.5	1284.1	1284.7	1285.3	1285.9	1285.2	1283.1	1281.0	1278.9	1276.8	1278.2
20°	1260.9	1261.5	1262.1	1262.7	1263.3	1262.5	1260.4	1258.3	1256.2	1254.1	1255.0
22.5°	1234.9	1236.0	1237.1	1238.2	1239.3	1238.6	1236.3	1234.0	1231.6	1229.3	1230.4
25°	1194.7	1195.6	1196.5	1197.4	1198.3	1197.9	1196.1	1194.3	1192.5	1190.7	1191.9
27.5°	1149.9	1151.2	1152.5	1153.9	1155.2	1154.8	1152.8	1150.7	1148.7	1146.7	1147.5
30°	1116.4	1118.2	1120.0	1121.8	1123.6	1123.6	1121.8	1120.0	1118.2	1116.4	1117.0
32.5°	1086.2	1087.7	1089.3	1090.9	1092.4	1092.5	1091.2	1089.9	1088.6	1087.3	1087.9
35°	1034.1	1036.2	1038.3	1040.4	1042.5	1043.1	1042.2	1041.3	1040.4	1039.5	1040.4
37.5°	982.0	983.9	985.8	987.7	989.6	990.5	990.2	989.9	989.6	989.3	990.5
40°	946.3	948.7	951.1	953.5	955.9	957.0	956.7	956.4	956.1	955.8	957.0
42.5°	907.4	910.6	913.7	916.8	919.9	921.8	922.5	923.1	923.8	924.5	925.9
45°	851.8	855.1	858.4	861.7	865.0	867.4	868.9	870.4	871.9	873.4	875.5
47.5°	794.9	797.9	801.0	804.0	807.1	809.9	812.5	815.1	817.7	820.2	823.3
50°	756.0	759.3	762.6	765.9	769.2	772.5	775.8	779.1	782.4	785.7	789.0
52.5°	714.9	719.0	723.0	727.0	731.0	735.0	739.1	743.1	747.1	751.1	754.7
55°	654.7	659.5	664.3	669.1	673.9	678.7	683.5	688.3	693.1	697.9	701.2
57.5°	593.2	598.9	604.7	610.5	616.2	621.9	627.4	632.9	638.4	643.9	647.7
60°	552.1	558.1	564.1	570.1	576.1	582.1	588.1	594.1	600.1	606.1	610.6
62.5°	512.2	518.2	524.2	530.2	536.2	542.4	548.9	555.4	561.9	568.3	573.3
65°	450.9	457.8	464.7	471.6	478.5	485.5	492.7	499.9	507.1	514.3	518.8
67.5°	393.1	399.8	406.4	413.1	419.7	426.7	434.1	441.4	448.7	456.0	461.5
70°	351.0	357.9	364.8	371.7	378.6	385.9	393.7	401.5	409.3	417.1	422.8
72.5°	310.0	317.1	324.2	331.4	338.5	346.3	354.9	363.4	371.9	380.4	386.6
75°	248.4	256.2	264.0	271.8	279.6	288.3	297.9	307.5	317.1	326.7	332.7
77.5°	189.3	198.3	207.3	216.3	225.3	234.4	243.6	252.9	262.1	271.3	277.9
80°	152.5	161.5	170.5	179.5	188.5	198.1	208.3	218.5	228.7	238.9	245.5
82.5°	119.1	128.5	138.0	147.5	157.0	166.9	177.4	187.8	198.3	208.7	215.1
85°	74.2	84.1	94.0	103.9	113.8	124.0	134.5	145.0	155.5	166.0	172.6
87.5°	42.4	52.2	62.2	72.3	82.4	92.7	103.2	113.8	124.3	134.9	142.1
90°	22.8	33.5	45.4	57.4	69.3	81.5	92.9	105.4	116.8	129.3	137.4
92.5°	33.6	45.5	64.2	87.4	116.3	159.9	233.8	350.7	476.6	481.0	416.3
95°	55.9	64.9	82.0	102.5	135.9	197.2	331.7	597.5	928.4	1128.0	1112.6
97.5°	79.6	88.0	101.5	121.3	151.4	197.5	289.6	486.7	832.1	1191.2	1372.8
100°	96.2	104.8	115.8	134.8	163.2	206.0	283.0	443.7	746.1	1135.6	1432.4
102.5°	114.6	121.8	131.4	150.9	176.9	218.5	287.8	424.0	680.7	1043.0	1388.8
105°	143.5	148.3	158.9	175.3	198.7	238.1	298.2	410.6	613.7	916.7	1256.1
107.5°	171.6	178.0	187.6	201.2	224.6	260.3	318.4	415.6	582.5	828.6	1122.3
110°	191.9	197.8	206.0	220.1	241.1	277.3	333.4	422.0	571.0	786.2	1045.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	213.3	218.5	225.1	238.4	258.7	293.5	347.4	431.1	566.9	759.6	986.7
115°	242.8	247.2	252.8	265.4	284.9	318.9	369.7	444.9	564.2	728.9	921.4
117.5°	269.4	274.2	279.3	291.2	312.3	344.8	392.8	461.6	565.9	710.6	879.5
120°	287.9	292.3	297.9	309.2	329.9	362.8	410.4	473.1	569.4	700.7	855.7
122.5°	306.4	309.4	313.5	324.4	346.4	379.0	426.3	486.0	571.9	691.7	834.4
125°	330.7	332.8	338.3	348.4	370.2	403.3	447.6	503.6	577.0	679.4	805.1
127.5°	348.7	351.9	359.0	372.0	395.1	427.6	469.5	520.5	584.2	670.4	777.6
130°	360.8	364.0	373.0	387.8	411.9	444.0	484.2	532.6	589.1	665.3	760.2
132.5°	369.0	373.3	384.4	401.3	426.6	458.4	497.7	542.3	594.1	661.0	744.7
135°	383.8	388.2	401.8	420.1	444.2	476.5	514.6	555.0	600.1	654.5	724.7
137.5°	402.6	405.9	418.6	437.0	460.7	493.4	527.2	564.9	606.8	651.1	707.6
140°	412.7	416.2	430.1	448.7	470.8	502.3	536.3	571.5	608.9	648.7	698.5
142.5°	425.7	428.0	440.8	459.1	480.0	509.5	541.4	574.4	609.8	647.5	691.2
145°	445.2	447.2	458.6	474.5	495.1	521.7	551.9	581.0	612.4	646.0	682.4
147.5°	464.3	465.7	475.7	490.8	508.9	532.4	558.9	585.2	613.5	643.0	674.2
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1373.8	1375.5	1377.2	1377.9	1377.7	1377.4	1377.2	1377.0
5°	1369.6	1372.0	1374.4	1375.5	1375.2	1374.9	1374.6	1374.3
7.5°	1358.2	1360.3	1362.4	1363.3	1363.0	1362.7	1362.4	1362.1
10°	1347.4	1349.5	1351.6	1352.5	1352.2	1351.9	1351.6	1351.3
12.5°	1334.6	1336.2	1337.8	1338.2	1337.5	1336.7	1335.9	1335.1
15°	1310.4	1312.2	1314.0	1314.3	1313.1	1311.9	1310.7	1309.5
17.5°	1279.6	1280.9	1282.3	1282.6	1281.9	1281.2	1280.5	1279.8
20°	1255.9	1256.8	1257.7	1258.2	1258.2	1258.2	1258.2	1258.2
22.5°	1231.6	1232.7	1233.8	1234.0	1233.3	1232.6	1231.9	1231.2
25°	1193.1	1194.3	1195.5	1195.3	1193.8	1192.3	1190.8	1189.3
27.5°	1148.3	1149.2	1150.0	1150.2	1149.6	1149.1	1148.5	1148.0
30°	1117.6	1118.2	1118.8	1119.0	1118.7	1118.4	1118.1	1117.8
32.5°	1088.5	1089.1	1089.7	1089.8	1089.5	1089.2	1088.9	1088.6
35°	1041.3	1042.2	1043.1	1043.5	1043.5	1043.5	1043.5	1043.5
37.5°	991.7	992.9	994.1	994.6	994.5	994.4	994.2	994.1
40°	958.2	959.4	960.6	961.5	962.1	962.7	963.3	963.9
42.5°	927.3	928.8	930.2	931.0	931.1	931.2	931.4	931.5
45°	877.6	879.7	881.8	883.0	883.3	883.6	883.9	884.2
47.5°	826.4	829.4	832.5	834.3	835.0	835.7	836.3	837.0
50°	792.3	795.6	798.9	801.0	801.9	802.8	803.7	804.6
52.5°	758.2	761.7	765.3	767.4	768.0	768.7	769.4	770.0
55°	704.5	707.8	711.1	713.4	714.6	715.8	717.0	718.2
57.5°	651.5	655.3	659.1	661.4	662.3	663.2	664.1	665.0
60°	615.1	619.6	624.1	626.8	627.7	628.6	629.5	630.4
62.5°	578.3	583.3	588.3	591.3	592.5	593.6	594.7	595.9
65°	523.3	527.8	532.3	535.2	536.4	537.6	538.8	540.0
67.5°	466.9	472.4	477.9	481.4	482.9	484.5	486.0	487.6
70°	428.5	434.2	439.9	443.7	445.5	447.3	449.1	450.9
72.5°	392.8	399.0	405.1	408.9	410.2	411.5	412.8	414.2
75°	338.7	344.7	350.7	354.4	355.9	357.4	358.9	360.4
77.5°	284.5	291.1	297.7	301.6	302.8	304.0	305.2	306.4
80°	252.1	258.7	265.3	269.2	270.4	271.6	272.8	274.0
82.5°	221.4	227.8	234.1	238.4	240.6	242.7	244.9	247.0
85°	179.2	185.8	192.4	196.9	199.3	201.7	204.1	206.5
87.5°	149.2	156.3	163.5	168.4	170.5	172.6	175.0	177.1
90°	145.4	153.5	161.5	168.4	170.5	172.6	175.8	177.9
92.5°	325.6	275.8	245.5	232.7	219.9	219.2	219.7	219.9
95°	947.2	777.2	640.9	547.6	467.2	434.4	427.2	410.8
97.5°	1348.6	1231.1	1098.2	966.6	896.8	833.8	802.2	789.3
100°	1528.2	1477.6	1364.2	1247.4	1169.0	1087.2	1046.0	1029.2
102.5°	1585.7	1626.8	1575.5	1497.6	1413.7	1356.0	1311.1	1298.9
105°	1541.0	1706.2	1763.3	1754.6	1719.5	1683.3	1662.1	1650.3
107.5°	1403.3	1621.7	1758.9	1823.5	1844.2	1845.8	1840.0	1832.6
110°	1301.9	1528.3	1697.9	1800.5	1854.9	1879.1	1889.3	1891.4



TEST NUMBER: P333291

CATALOG NUMBER: S125DIP-S1090D1205U835-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1220.9	1435.9	1607.1	1727.3	1805.8	1845.8	1868.1	1878.6
115°	1118.5	1304.0	1468.6	1598.9	1691.3	1748.9	1783.2	1800.1
117.5°	1049.6	1209.9	1352.2	1471.9	1564.6	1624.3	1658.6	1669.9
120°	1011.8	1156.4	1289.3	1395.0	1482.8	1540.3	1573.5	1584.6
122.5°	981.9	1116.0	1234.7	1333.8	1412.3	1465.2	1498.4	1508.6
125°	938.8	1062.2	1168.1	1254.9	1321.4	1370.6	1397.6	1410.8
127.5°	894.7	1009.8	1108.6	1190.0	1250.8	1294.6	1320.5	1327.3
130°	867.8	974.2	1069.1	1147.4	1207.0	1246.9	1271.6	1280.1
132.5°	840.2	940.2	1026.6	1102.1	1161.4	1201.1	1223.7	1232.9
135°	802.9	887.0	965.3	1034.2	1086.8	1126.7	1149.1	1157.5
137.5°	771.8	840.2	905.5	964.1	1011.1	1047.2	1067.6	1076.5
140°	754.1	812.0	868.8	919.8	964.0	995.4	1014.1	1021.1
142.5°	738.9	788.0	836.8	881.1	918.8	945.6	963.3	969.3
145°	719.9	757.4	795.0	827.7	856.8	877.7	891.7	897.6
147.5°	703.0	732.8	760.9	785.1	807.7	824.1	832.1	834.7
150°	693.7	719.3	741.3	762.4	780.1	794.4	799.3	800.8
152.5°	684.4	707.2	727.4	743.7	758.4	769.6	774.3	775.5
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)