

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: P333450

Luminaire Tested: **S125DIW-S1090D1340U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333450
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: S125DIW-S1090D1340U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

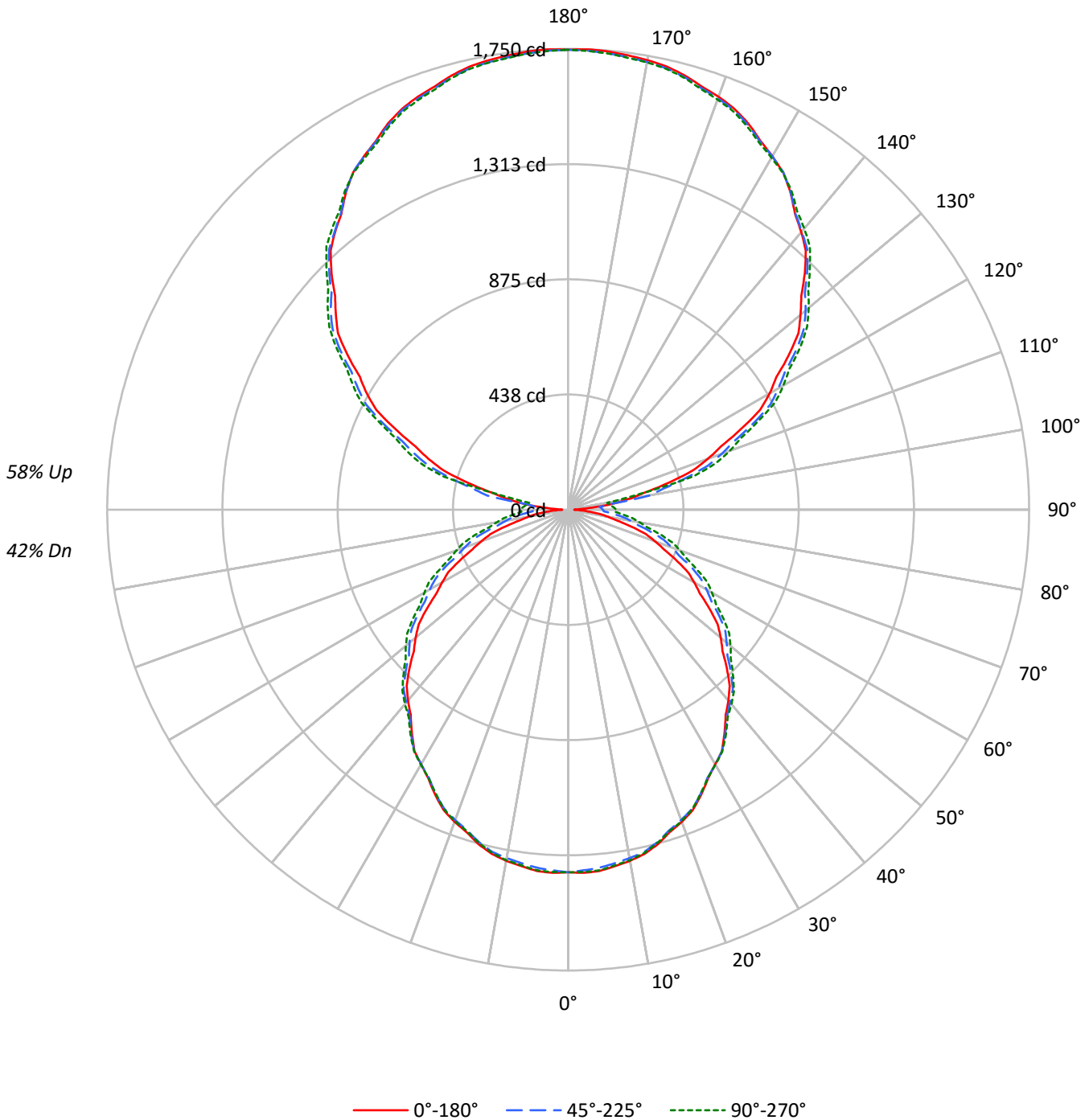
Lumens per Lamp: N/A
Luminaire Lumens: 9632.1 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): 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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	79	72	67	62	59	55	52	47	45	42	36	35	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	29	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	21	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10

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	1.4
10°-20°	369.6	3.8
20°-30°	549.7	5.7
30°-40°	651.1	6.8
40°-50°	673.2	7.0
50°-60°	620.1	6.4
60°-70°	501.3	5.2
70°-80°	335.7	3.5
80°-90°	177.7	1.8
90°-100°	161.2	1.7
100°-110°	463.2	4.8
110°-120°	757.7	7.9
120°-130°	937.9	9.7
130°-140°	991.3	10.3
140°-150°	921.7	9.6
150°-160°	743.6	7.7
160°-170°	480.9	5.0
170°-180°	165.9	1.7
0°-30°	1049.5	10.9
0°-40°	1700.6	17.7
0°-60°	2994.0	31.1
0°-90°	4008.7	41.6
90°-120°	1382.1	14.3
90°-150°	4233.0	43.9
90°-180°	5623.0	58.4
0°-180°	9632.1	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	77	131	168	182	17
95°	91	121	119	154	165	108
105°	393	420	460	486	495	416
115°	723	740	775	793	795	716
125°	1022	1031	1056	1072	1076	912
135°	1270	1277	1284	1298	1298	979
145°	1471	1472	1472	1480	1478	919
155°	1618	1611	1613	1616	1607	745
165°	1708	1700	1701	1708	1699	482
175°	1747	1739	1740	1749	1739	166
180°	1747	1747	1747	1747	1747	



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CATALOG NUMBER: S125DIW-S1090D1340U835-4F0-1E-UDD-D

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	52.4	62.5	72.6	82.6	92.9	103.6	114.2	124.8	135.4	142.5
90°	22.9	34.8	46.7	58.6	70.5	82.6	94.8	107.0	119.2	131.4	139.8
92.5°	39.4	46.6	53.9	61.2	68.5	78.2	90.4	102.6	114.9	127.1	135.2
95°	91.4	98.3	105.2	112.2	119.1	122.2	121.5	120.7	120.0	119.3	127.3
97.5°	170.0	178.6	187.2	195.7	204.3	202.7	190.9	179.1	167.3	155.5	153.7
100°	231.1	238.2	245.4	252.6	259.7	268.7	279.4	290.2	300.9	311.7	275.1
102.5°	293.2	300.1	307.0	313.9	320.8	329.3	339.4	349.4	359.5	369.5	367.5
105°	392.8	398.8	404.7	410.7	416.6	424.1	433.1	442.1	451.1	460.1	466.1
107.5°	496.3	500.4	504.5	508.6	512.6	519.3	528.5	537.7	546.9	556.1	562.1
110°	563.6	567.2	570.8	574.4	578.0	584.3	593.3	602.2	611.2	620.2	625.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	627.8	631.4	635.0	638.5	642.1	648.1	656.6	665.2	673.7	682.2	686.5
115°	722.8	726.3	729.9	733.4	737.0	742.8	750.9	758.9	767.0	775.1	779.4
117.5°	821.1	822.5	823.8	825.1	826.4	831.3	839.8	848.3	856.8	865.2	868.8
120°	883.3	883.9	884.5	885.1	885.7	889.9	897.7	905.5	913.2	921.0	925.5
122.5°	937.1	938.6	940.1	941.7	943.2	947.5	954.5	961.6	968.6	975.7	980.0
125°	1021.8	1023.5	1025.2	1026.9	1028.6	1032.5	1038.5	1044.5	1050.5	1056.5	1060.1
127.5°	1101.5	1102.6	1103.8	1104.9	1106.0	1109.0	1113.7	1118.5	1123.2	1128.0	1131.8
130°	1151.2	1152.3	1153.5	1154.6	1155.7	1158.6	1163.1	1167.5	1172.0	1176.5	1179.8
132.5°	1199.8	1201.4	1203.1	1204.7	1206.3	1208.4	1211.0	1213.6	1216.2	1218.8	1222.8
135°	1270.3	1271.7	1273.1	1274.5	1276.0	1277.4	1279.0	1280.5	1282.0	1283.5	1286.9
137.5°	1335.0	1336.2	1337.5	1338.8	1340.0	1340.9	1341.4	1341.9	1342.4	1342.9	1346.5
140°	1376.4	1376.9	1377.5	1378.1	1378.7	1379.0	1379.0	1379.0	1379.0	1379.0	1382.9
142.5°	1414.7	1414.8	1414.9	1415.0	1415.1	1415.4	1415.9	1416.3	1416.8	1417.3	1420.2
145°	1470.9	1471.2	1471.4	1471.7	1472.0	1472.1	1472.1	1472.1	1472.1	1472.1	1473.9
147.5°	1518.7	1518.6	1518.5	1518.4	1518.3	1518.4	1518.7	1519.1	1519.4	1519.8	1520.6
150°	1549.8	1549.2	1548.7	1548.1	1547.5	1547.5	1548.1	1548.7	1549.2	1549.8	1550.4
152.5°	1579.8	1578.6	1577.3	1576.1	1574.8	1574.4	1575.0	1575.6	1576.2	1576.7	1577.3
155°	1618.4	1616.7	1615.0	1613.3	1611.5	1611.0	1611.5	1612.1	1612.7	1613.3	1614.1
157.5°	1648.2	1647.2	1646.1	1645.1	1644.1	1643.6	1643.6	1643.7	1643.8	1643.8	1644.7
160°	1668.9	1667.2	1665.5	1663.7	1662.0	1661.3	1661.6	1661.9	1662.2	1662.5	1663.6
162.5°	1685.5	1683.8	1682.0	1680.3	1678.6	1677.9	1678.2	1678.5	1678.7	1679.0	1680.6
165°	1707.8	1706.0	1704.3	1702.6	1700.9	1700.1	1700.4	1700.7	1701.0	1701.3	1703.0
167.5°	1724.3	1722.6	1720.8	1719.0	1717.2	1716.5	1716.7	1717.0	1717.3	1717.6	1719.7
170°	1733.7	1731.7	1729.6	1727.6	1725.6	1724.7	1725.0	1725.3	1725.6	1725.9	1728.2
172.5°	1739.9	1737.9	1735.9	1733.8	1731.8	1731.1	1731.6	1732.1	1732.6	1733.1	1735.2
175°	1746.6	1744.9	1743.2	1741.4	1739.7	1739.0	1739.3	1739.6	1739.9	1740.1	1742.4
177.5°	1749.7	1748.3	1747.0	1745.6	1744.2	1743.6	1743.9	1744.1	1744.3	1744.5	1746.2
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6



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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°	149.7	156.9	164.1	168.8	171.1	173.4	175.7	177.9
90°	148.1	156.4	164.8	170.4	173.4	176.3	179.3	182.3
92.5°	143.3	151.4	159.5	164.8	167.3	169.8	172.3	174.8
95°	135.3	143.4	151.4	156.5	158.6	160.7	162.8	164.9
97.5°	151.9	150.1	148.2	148.4	150.4	152.4	154.5	156.5
100°	238.5	202.0	165.4	147.4	148.1	148.7	149.4	150.0
102.5°	365.4	363.3	361.3	351.4	333.6	315.9	298.1	280.3
105°	472.1	478.1	484.1	488.0	489.8	491.6	493.4	495.2
107.5°	568.1	574.1	580.1	583.6	584.6	585.6	586.6	587.6
110°	629.9	634.7	639.5	643.1	645.5	647.9	650.3	652.7



TEST NUMBER: P333450

CATALOG NUMBER: S125DIW-S1090D1340U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	690.9	695.3	699.6	702.7	704.4	706.1	707.7	709.4
115°	783.6	787.9	792.1	794.3	794.3	794.4	794.5	794.6
117.5°	872.4	876.0	879.6	882.1	883.4	884.7	886.0	887.3
120°	930.0	934.6	939.1	941.5	941.9	942.2	942.6	943.0
122.5°	984.3	988.6	992.8	995.0	995.2	995.3	995.4	995.6
125°	1063.8	1067.4	1071.1	1073.2	1073.9	1074.5	1075.1	1075.8
127.5°	1135.6	1139.4	1143.2	1144.9	1144.5	1144.1	1143.7	1143.3
130°	1183.2	1186.5	1189.9	1191.6	1191.6	1191.7	1191.7	1191.8
132.5°	1226.9	1230.9	1234.9	1236.8	1236.7	1236.5	1236.3	1236.1
135°	1290.2	1293.5	1296.8	1298.4	1298.2	1297.9	1297.7	1297.5
137.5°	1350.2	1353.9	1357.5	1359.2	1358.9	1358.6	1358.3	1358.0
140°	1386.8	1390.6	1394.5	1396.2	1395.7	1395.1	1394.6	1394.1
142.5°	1423.1	1426.1	1429.0	1430.2	1429.7	1429.1	1428.6	1428.1
145°	1475.7	1477.5	1479.3	1479.9	1479.4	1478.9	1478.3	1477.8
147.5°	1521.4	1522.2	1523.1	1522.7	1521.2	1519.7	1518.1	1516.6
150°	1551.0	1551.5	1552.1	1551.4	1549.4	1547.4	1545.4	1543.4
152.5°	1577.9	1578.5	1579.0	1578.3	1576.3	1574.3	1572.3	1570.3
155°	1615.0	1615.8	1616.7	1616.0	1613.7	1611.4	1609.1	1606.8
157.5°	1645.7	1646.6	1647.5	1646.8	1644.5	1642.2	1639.9	1637.6
160°	1664.8	1665.9	1667.1	1666.5	1664.2	1661.9	1659.6	1657.3
162.5°	1682.2	1683.9	1685.5	1685.0	1682.5	1679.9	1677.4	1674.9
165°	1704.7	1706.5	1708.2	1707.9	1705.6	1703.3	1701.0	1698.7
167.5°	1721.8	1723.8	1725.9	1725.6	1723.0	1720.5	1717.9	1715.3
170°	1730.5	1732.8	1735.1	1735.0	1732.4	1729.8	1727.2	1724.6
172.5°	1737.3	1739.4	1741.4	1741.2	1738.6	1736.0	1733.4	1730.8
175°	1744.7	1747.0	1749.3	1749.2	1746.6	1744.0	1741.4	1738.8
177.5°	1747.8	1749.4	1751.0	1750.9	1749.0	1747.2	1745.3	1743.5
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6

(END OF REPORT)