

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: P333281-840

Luminaire Tested: **S125DIP-S1090D1035U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333281-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D1035U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7924.9 lumens
Efficiency: N/A
Efficacy: 131.0 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

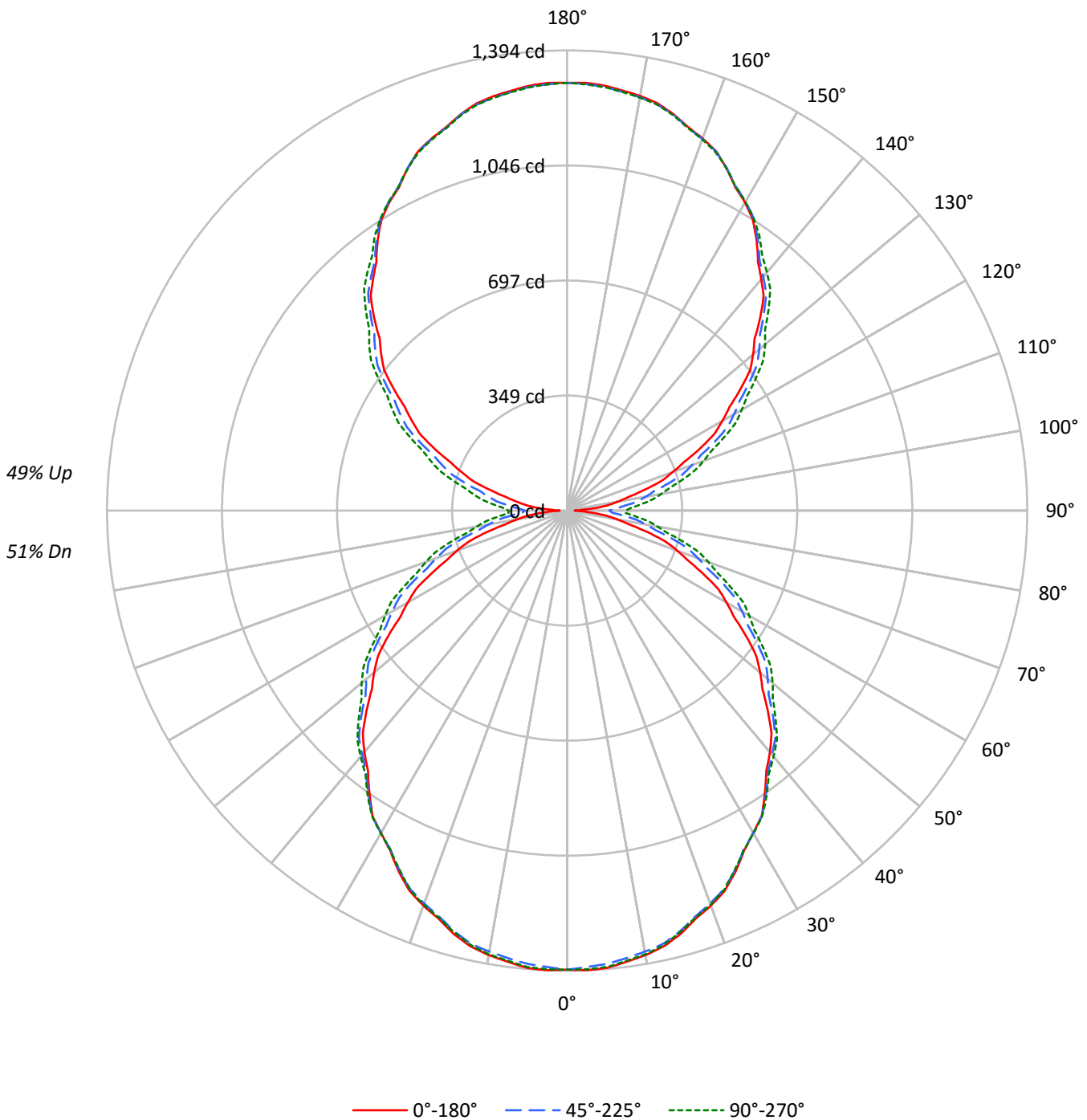
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	69	81	74	69	64	63	59	55	53	49	47	43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	33	29
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	34	31	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	28	23	20	23	19	17	14
9	49	37	29	24	46	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8981	8981	8981
5°	8999	8815	8843
10°	8935	8658	8644
15°	8829	8469	8392
20°	8685	8236	8140
25°	8515	7987	7828
30°	8308	7712	7547
35°	8115	7461	7288
40°	7918	7195	7027
45°	7696	6968	6796
50°	7485	6722	6592
55°	7230	6489	6352
60°	6950	6223	6107
65°	6660	5946	5832
70°	6332	5566	5549
75°	5809	5201	5201
80°	5122	4760	4822
85°	4483	4460	4702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	1.7
10°-20°	373.3	4.7
20°-30°	555.1	7.0
30°-40°	657.5	8.3
40°-50°	679.8	8.6
50°-60°	626.3	7.9
60°-70°	506.2	6.4
70°-80°	339.0	4.3
80°-90°	178.6	2.3
90°-100°	185.4	2.3
100°-110°	329.0	4.2
110°-120°	482.8	6.1
120°-130°	598.9	7.6
130°-140°	652.1	8.2
140°-150°	629.7	7.9
150°-160°	526.9	6.6
160°-170°	350.2	4.4
170°-180°	122.6	1.5
0°-30°	1059.9	13.4
0°-40°	1717.4	21.7
0°-60°	3023.5	38.2
0°-90°	4047.4	51.1
90°-120°	997.2	12.6
90°-150°	2877.9	36.3
90°-180°	3877.0	48.9
0°-180°	7924.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1391	1387	1378	1389	1388	132
15°	1328	1329	1320	1327	1322	374
25°	1206	1210	1202	1207	1201	555
35°	1044	1053	1050	1054	1054	653
45°	860	875	882	891	893	664
55°	661	683	705	719	725	591
65°	455	487	519	539	545	452
75°	251	287	330	356	364	266
85°	75	120	168	197	208	80
90°	23	75	128	163	177	18
95°	83	122	177	213	226	84
105°	242	270	316	348	362	259
115°	443	458	494	516	524	438
125°	640	646	673	692	698	572
135°	828	832	843	860	863	638
145°	1000	1003	1006	1013	1015	625
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1393.8	1393.3	1392.8	1392.4	1391.9	1390.8	1389.1	1387.4	1385.7	1384.0	1385.7
5°	1390.6	1390.0	1389.4	1388.8	1388.2	1386.7	1384.6	1382.5	1380.4	1378.3	1380.7
7.5°	1378.3	1378.1	1377.8	1377.6	1377.4	1376.1	1373.9	1371.7	1369.6	1367.4	1369.5
10°	1367.4	1367.4	1367.4	1367.4	1367.4	1366.1	1363.7	1361.3	1358.9	1356.5	1358.6
12.5°	1352.1	1352.3	1352.6	1352.8	1353.1	1352.2	1350.3	1348.4	1346.5	1344.4	1346.2
15°	1327.9	1328.2	1328.5	1328.8	1329.1	1328.2	1326.1	1323.9	1321.8	1319.7	1321.5
17.5°	1296.2	1296.8	1297.4	1298.0	1298.6	1297.9	1295.8	1293.6	1291.5	1289.4	1290.8
20°	1273.3	1273.9	1274.6	1275.2	1275.8	1275.0	1272.8	1270.7	1268.6	1266.5	1267.4
22.5°	1247.1	1248.2	1249.3	1250.4	1251.5	1250.8	1248.5	1246.2	1243.7	1241.4	1242.5
25°	1206.5	1207.4	1208.3	1209.2	1210.1	1209.7	1207.9	1206.1	1204.3	1202.4	1203.7
27.5°	1161.2	1162.6	1163.9	1165.3	1166.6	1166.2	1164.2	1162.1	1160.0	1158.0	1158.8
30°	1127.4	1129.2	1131.0	1132.9	1134.7	1134.7	1132.9	1131.0	1129.2	1127.4	1128.0
32.5°	1096.9	1098.4	1100.0	1101.7	1103.2	1103.3	1102.0	1100.7	1099.3	1098.0	1098.6
35°	1044.3	1046.4	1048.5	1050.7	1052.8	1053.4	1052.5	1051.6	1050.7	1049.8	1050.7
37.5°	991.7	993.6	995.5	997.4	999.4	1000.3	1000.0	999.7	999.4	999.1	1000.3
40°	955.6	958.1	960.5	962.9	965.3	966.4	966.1	965.8	965.5	965.2	966.4
42.5°	916.4	919.6	922.7	925.8	929.0	930.9	931.6	932.2	932.9	933.6	935.0
45°	860.2	863.5	866.9	870.2	873.5	876.0	877.5	879.0	880.5	882.0	884.1
47.5°	802.7	805.8	808.9	811.9	815.1	817.9	820.5	823.1	825.8	828.3	831.4
50°	763.5	766.8	770.1	773.5	776.8	780.1	783.5	786.8	790.1	793.5	796.8
52.5°	722.0	726.1	730.1	734.2	738.2	742.3	746.4	750.4	754.5	758.5	762.1
55°	661.2	666.0	670.9	675.7	680.5	685.4	690.2	695.1	699.9	704.8	708.1
57.5°	599.1	604.8	610.7	616.5	622.3	628.0	633.6	639.1	644.7	650.3	654.1
60°	557.5	563.6	569.7	575.7	581.8	587.8	593.9	600.0	606.0	612.1	616.6
62.5°	517.3	523.3	529.4	535.4	541.5	547.8	554.3	560.9	567.4	573.9	579.0
65°	455.3	462.3	469.3	476.3	483.2	490.3	497.6	504.8	512.1	519.4	523.9
67.5°	397.0	403.7	410.4	417.2	423.8	430.9	438.4	445.8	453.1	460.5	466.1
70°	354.5	361.4	368.4	375.4	382.3	389.7	397.6	405.5	413.3	421.2	427.0
72.5°	313.1	320.2	327.4	334.7	341.8	349.7	358.4	367.0	375.6	384.2	390.4
75°	250.9	258.7	266.6	274.5	282.4	291.1	300.8	310.5	320.2	329.9	336.0
77.5°	191.2	200.3	209.3	218.4	227.5	236.7	246.0	255.4	264.7	274.0	280.6
80°	154.0	163.1	172.2	181.3	190.4	200.1	210.4	220.7	231.0	241.3	247.9
82.5°	120.3	129.8	139.4	149.0	158.5	168.5	179.2	189.7	200.3	210.8	217.2
85°	74.9	84.9	94.9	104.9	114.9	125.2	135.8	146.4	157.0	167.6	174.3
87.5°	42.7	52.8	62.8	72.9	82.9	93.3	103.9	114.5	125.1	135.7	142.9
90°	22.8	34.3	45.7	57.3	68.8	80.5	92.3	104.2	116.0	127.9	136.0
92.5°	44.0	54.2	64.4	74.7	84.9	96.2	108.8	121.2	133.7	146.1	154.3
95°	83.2	91.6	99.9	108.3	116.5	126.9	139.6	152.1	164.6	177.1	185.4
97.5°	125.0	132.2	139.5	146.7	154.0	164.2	177.2	190.3	203.3	216.3	224.2
100°	156.1	162.5	168.8	175.2	181.6	191.1	203.7	216.3	228.9	241.5	249.8
102.5°	189.8	196.5	203.3	210.1	216.8	225.7	236.6	247.5	258.4	269.4	277.7
105°	242.2	248.1	254.1	260.0	266.0	274.2	284.7	295.1	305.5	316.0	323.4
107.5°	300.2	305.4	310.6	315.9	321.1	328.6	338.4	348.2	357.9	367.7	374.4
110°	340.2	345.0	349.7	354.5	359.2	366.2	375.4	384.6	393.6	402.8	409.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	382.1	385.7	389.2	392.6	396.2	402.4	411.5	420.6	429.7	438.8	444.6
115°	442.7	445.8	448.8	451.8	454.7	460.5	468.8	477.1	485.4	493.7	499.0
117.5°	503.4	505.2	507.1	508.9	510.7	515.4	523.3	531.2	539.1	546.9	552.2
120°	542.2	544.2	546.2	548.3	550.3	554.9	562.1	569.3	576.4	583.7	588.9
122.5°	583.0	583.8	584.7	585.5	586.3	590.4	597.7	605.0	612.3	619.7	624.4
125°	639.6	640.7	641.7	642.8	643.8	647.4	653.7	660.0	666.3	672.6	677.0
127.5°	698.7	699.2	699.6	700.1	700.5	703.5	708.6	713.9	719.1	724.4	728.6
130°	735.1	735.9	736.7	737.5	738.3	741.0	745.8	750.4	755.1	759.8	763.9
132.5°	770.2	772.0	773.8	775.6	777.4	779.8	783.0	786.2	789.4	792.5	796.6
135°	827.5	828.5	829.5	830.5	831.6	833.3	835.7	838.0	840.3	842.6	846.6
137.5°	881.2	882.2	883.3	884.3	885.4	886.8	888.3	889.8	891.3	892.8	896.7
140°	914.8	915.9	917.1	918.2	919.3	920.3	921.3	922.3	923.2	924.2	928.0
142.5°	949.5	950.2	950.9	951.6	952.3	953.1	954.0	954.9	955.8	956.7	959.9
145°	1000.5	1001.1	1001.7	1002.3	1002.9	1003.5	1004.2	1004.8	1005.5	1006.2	1007.7
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1052.0
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1387.4	1389.1	1390.8	1391.5	1391.3	1391.0	1390.8	1390.6
5°	1383.1	1385.5	1388.0	1389.1	1388.8	1388.5	1388.2	1387.9
7.5°	1371.6	1373.7	1375.8	1376.7	1376.4	1376.1	1375.8	1375.5
10°	1360.7	1362.8	1364.9	1365.8	1365.5	1365.2	1364.9	1364.6
12.5°	1347.8	1349.4	1351.0	1351.4	1350.7	1349.9	1349.1	1348.3
15°	1323.3	1325.1	1327.0	1327.3	1326.1	1324.8	1323.6	1322.4
17.5°	1292.2	1293.5	1294.9	1295.3	1294.5	1293.8	1293.1	1292.4
20°	1268.3	1269.2	1270.1	1270.6	1270.6	1270.6	1270.6	1270.6
22.5°	1243.7	1244.9	1246.0	1246.2	1245.5	1244.8	1244.1	1243.3
25°	1204.9	1206.1	1207.3	1207.1	1205.6	1204.1	1202.5	1201.0
27.5°	1159.6	1160.5	1161.3	1161.5	1160.9	1160.4	1159.8	1159.3
30°	1128.6	1129.2	1129.8	1130.0	1129.7	1129.4	1129.1	1128.8
32.5°	1099.2	1099.8	1100.4	1100.6	1100.2	1099.9	1099.6	1099.3
35°	1051.6	1052.5	1053.4	1053.8	1053.8	1053.8	1053.8	1053.8
37.5°	1001.5	1002.7	1003.9	1004.4	1004.3	1004.2	1004.0	1003.9
40°	967.7	968.9	970.1	971.0	971.6	972.2	972.8	973.4
42.5°	936.4	938.0	939.4	940.2	940.3	940.4	940.6	940.7
45°	886.3	888.4	890.5	891.7	892.0	892.3	892.6	892.9
47.5°	834.6	837.6	840.7	842.5	843.2	843.9	844.6	845.3
50°	800.1	803.4	806.8	808.9	809.8	810.7	811.6	812.5
52.5°	765.7	769.2	772.8	775.0	775.6	776.3	777.0	777.6
55°	711.4	714.8	718.1	720.4	721.6	722.9	724.1	725.3
57.5°	657.9	661.8	665.6	667.9	668.8	669.7	670.7	671.6
60°	621.2	625.7	630.3	633.0	633.9	634.8	635.7	636.6
62.5°	584.0	589.1	594.1	597.1	598.3	599.5	600.6	601.8
65°	528.5	533.0	537.6	540.5	541.7	542.9	544.1	545.3
67.5°	471.5	477.1	482.6	486.1	487.7	489.3	490.8	492.4
70°	432.7	438.5	444.2	448.1	449.9	451.7	453.5	455.3
72.5°	396.7	402.9	409.1	412.9	414.2	415.6	416.9	418.3
75°	342.0	348.1	354.2	357.9	359.4	360.9	362.4	364.0
77.5°	287.3	294.0	300.6	304.6	305.8	307.0	308.2	309.4
80°	254.6	261.3	267.9	271.9	273.1	274.3	275.5	276.7
82.5°	223.6	230.0	236.4	240.8	243.0	245.1	247.3	249.4
85°	181.0	187.6	194.3	198.8	201.3	203.7	206.1	208.5
87.5°	150.2	157.3	164.5	169.3	171.5	173.7	176.0	178.2
90°	144.1	152.2	160.3	165.7	168.5	171.3	174.1	176.9
92.5°	162.6	170.8	178.9	184.4	187.0	189.6	192.2	194.8
95°	193.6	201.9	210.1	215.5	218.0	220.7	223.2	225.8
97.5°	232.0	239.8	247.7	252.8	255.1	257.4	259.7	262.1
100°	258.2	266.6	275.0	280.3	282.6	284.9	287.1	289.4
102.5°	286.0	294.4	302.7	308.0	310.5	313.0	315.4	317.8
105°	330.7	338.1	345.6	350.6	353.5	356.3	359.0	361.8
107.5°	381.0	387.7	394.4	398.6	400.4	402.2	404.1	406.0
110°	415.7	422.1	428.6	432.7	434.6	436.5	438.4	440.3



TEST NUMBER: P333281-840

CATALOG NUMBER: S125DIP-S1090D1035U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	450.4	456.3	462.1	465.9	467.6	469.3	471.0	472.7
115°	504.2	509.5	514.6	518.1	519.7	521.3	522.9	524.4
117.5°	557.5	562.9	568.3	571.5	572.6	573.8	574.9	576.1
120°	594.0	599.2	604.3	607.3	608.2	609.2	610.1	611.0
122.5°	629.0	633.8	638.5	641.5	642.6	643.7	644.8	645.9
125°	681.4	685.8	690.1	693.0	694.3	695.6	696.9	698.2
127.5°	732.9	737.2	741.4	744.2	745.5	746.8	748.1	749.4
130°	767.8	771.8	775.9	778.4	779.5	780.5	781.6	782.6
132.5°	800.6	804.6	808.6	810.9	811.6	812.2	812.8	813.5
135°	850.5	854.4	858.4	860.7	861.3	861.9	862.5	863.1
137.5°	900.5	904.3	908.2	910.2	910.3	910.3	910.4	910.5
140°	931.8	935.5	939.4	941.3	941.4	941.5	941.6	941.6
142.5°	962.9	966.0	969.2	970.8	970.9	971.0	971.1	971.2
145°	1009.3	1010.8	1012.3	1013.3	1013.8	1014.3	1014.9	1015.4
147.5°	1053.0	1054.0	1055.0	1055.1	1054.1	1053.1	1052.1	1051.2
150°	1080.8	1080.8	1080.8	1080.8	1080.6	1080.5	1080.3	1080.2
152.5°	1107.7	1108.2	1108.7	1108.6	1107.9	1107.1	1106.4	1105.7
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)