

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: P333290-840

Luminaire Tested: **S125DIP-S1090D1205U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333290-840
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-S1090D1205U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8518.1 lumens
Efficiency: N/A
Efficacy: 130.2 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

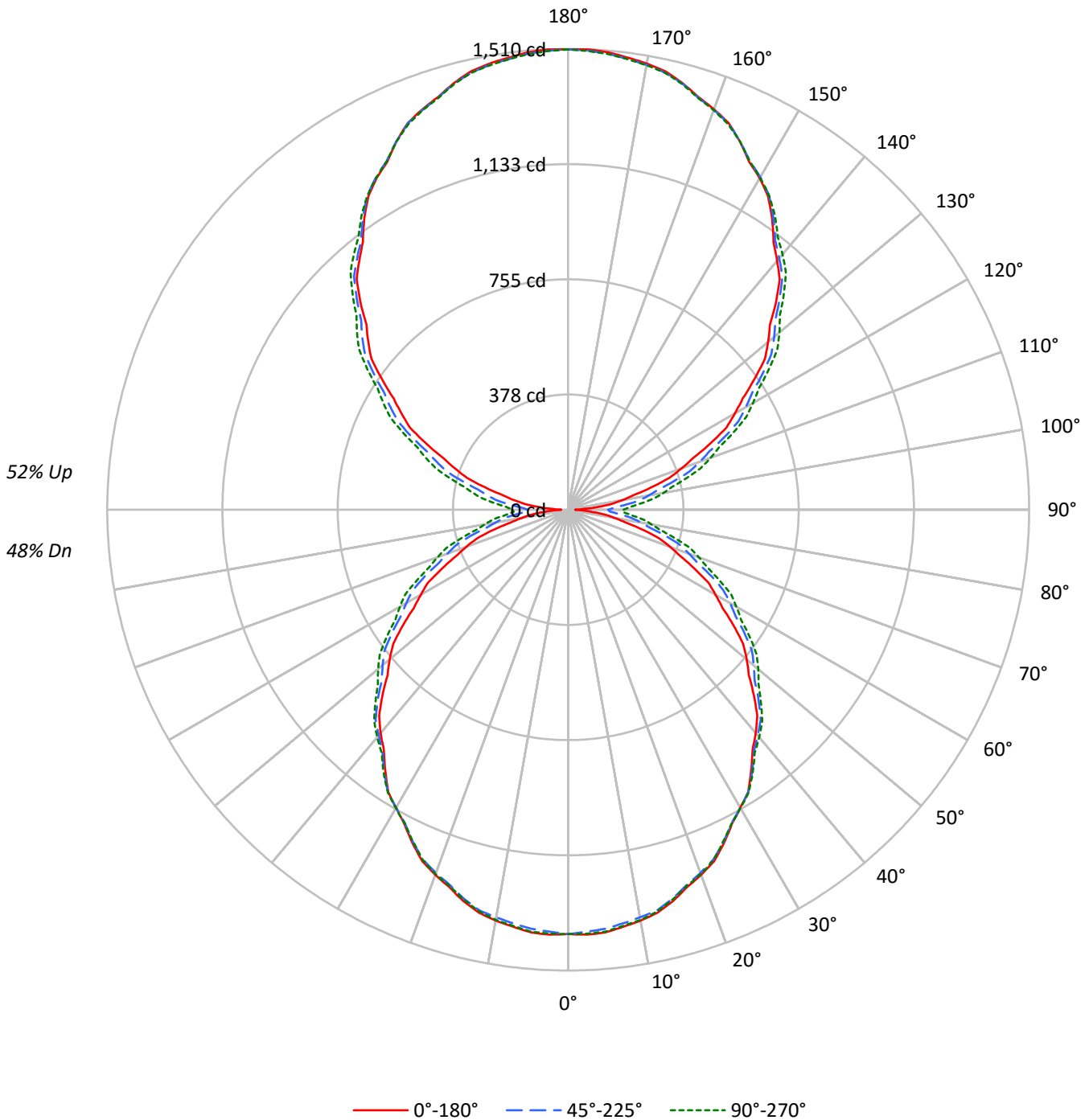
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82		67	67	67		54	54	54	48
1	97	92	88	84	88	85	81	78	71	68	66		58	56	55		46	45	44	39
2	88	80	73	68	80	73	68	63	62	57	54		51	48	45		40	38	37	32
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38		40	35	32		32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33		35	31	28		28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28		32	28	24		26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	25	21		24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22		26	22	19		22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20		24	20	17		20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18		22	18	15		18	15	13	11

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	1.5
10°-20°	373.3	4.4
20°-30°	555.1	6.5
30°-40°	657.5	7.7
40°-50°	679.8	8.0
50°-60°	626.3	7.4
60°-70°	506.2	5.9
70°-80°	339.0	4.0
80°-90°	179.1	2.1
90°-100°	199.7	2.3
100°-110°	371.0	4.4
110°-120°	553.9	6.5
120°-130°	692.5	8.1
130°-140°	757.1	8.9
140°-150°	732.6	8.6
150°-160°	613.3	7.2
160°-170°	407.6	4.8
170°-180°	142.7	1.7
0°-30°	1059.9	12.4
0°-40°	1717.4	20.2
0°-60°	3023.5	35.5
0°-90°	4047.9	47.5
90°-120°	1124.6	13.2
90°-150°	3306.7	38.8
90°-180°	4470.0	52.5
0°-180°	8518.1	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	76	131	166	181	19
95°	94	133	190	227	240	95
105°	280	309	356	389	403	299
115°	514	530	566	588	596	508
125°	744	751	778	796	803	665
135°	963	969	979	996	999	742
145°	1164	1168	1171	1178	1180	727
155°	1331	1331	1332	1336	1331	613
165°	1447	1445	1446	1450	1443	408
175°	1504	1500	1500	1506	1498	143
180°	1508	1508	1508	1508	1508	



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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°	42.8	52.9	63.0	73.1	83.2	93.6	104.3	114.9	125.6	136.2	143.5
90°	23.0	34.7	46.6	58.4	70.1	82.1	94.2	106.3	118.5	130.6	138.9
92.5°	48.1	58.5	68.9	79.3	89.8	101.4	114.1	126.9	139.7	152.5	161.0
95°	94.0	102.4	110.8	119.2	127.5	138.3	151.2	164.1	176.9	189.9	198.3
97.5°	142.8	150.2	157.4	164.7	172.0	182.5	196.0	209.5	223.1	236.6	244.7
100°	179.3	185.6	192.0	198.3	204.7	214.5	227.5	240.7	253.7	266.8	275.5
102.5°	218.5	225.5	232.4	239.3	246.2	255.3	266.5	277.6	288.8	300.0	308.6
105°	279.8	286.0	292.2	298.3	304.5	312.9	323.5	334.2	344.8	355.5	363.0
107.5°	347.7	353.0	358.5	364.0	369.4	377.1	387.0	396.9	406.8	416.8	423.5
110°	394.5	399.4	404.3	409.3	414.2	421.3	430.6	439.8	449.1	458.4	464.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	443.2	446.9	450.4	454.0	457.6	464.0	473.2	482.5	491.7	501.0	506.9
115°	513.9	517.2	520.3	523.4	526.6	532.4	540.8	549.2	557.5	566.0	571.2
117.5°	584.9	586.7	588.7	590.5	592.4	597.2	605.1	613.1	621.0	628.9	634.3
120°	630.0	632.2	634.4	636.6	638.8	643.5	650.8	658.0	665.2	672.5	677.6
122.5°	677.7	678.5	679.4	680.3	681.3	685.4	692.8	700.2	707.6	715.0	719.7
125°	743.6	744.9	746.1	747.4	748.6	752.5	758.7	765.1	771.4	777.7	782.0
127.5°	812.6	813.2	813.9	814.4	815.0	817.9	823.1	828.5	833.7	839.0	843.2
130°	854.9	855.9	856.9	857.9	858.9	861.8	866.6	871.3	876.1	880.8	884.8
132.5°	896.1	898.1	900.2	902.3	904.3	907.0	910.2	913.3	916.5	919.7	923.6
135°	962.7	963.9	965.2	966.4	967.8	969.6	971.9	974.3	976.6	979.1	983.0
137.5°	1025.3	1026.5	1027.8	1029.1	1030.4	1031.8	1033.4	1035.0	1036.6	1038.2	1042.1
140°	1064.6	1065.9	1067.1	1068.4	1069.8	1071.0	1072.1	1073.2	1074.2	1075.3	1079.1
142.5°	1104.9	1105.8	1106.6	1107.5	1108.3	1109.3	1110.3	1111.4	1112.5	1113.5	1116.7
145°	1164.3	1165.1	1165.8	1166.5	1167.3	1168.0	1168.8	1169.6	1170.3	1171.1	1172.7
147.5°	1217.9	1218.4	1219.0	1219.6	1220.1	1220.7	1221.4	1222.0	1222.6	1223.2	1224.4
150°	1254.5	1254.3	1253.9	1253.7	1253.4	1253.8	1254.9	1255.9	1257.0	1258.0	1258.0
152.5°	1284.5	1284.9	1285.3	1285.7	1286.0	1286.4	1286.8	1287.2	1287.7	1288.1	1288.7
155°	1330.8	1330.8	1330.8	1330.8	1330.8	1330.9	1331.2	1331.4	1331.7	1331.9	1333.0
157.5°	1372.1	1371.5	1370.9	1370.4	1369.8	1369.6	1369.9	1370.2	1370.4	1370.7	1371.7
160°	1396.4	1395.7	1394.9	1394.1	1393.3	1393.1	1393.3	1393.6	1393.9	1394.1	1395.1
162.5°	1418.1	1417.5	1416.9	1416.3	1415.7	1415.5	1415.5	1415.6	1415.6	1415.7	1416.9
165°	1446.9	1446.4	1445.9	1445.4	1444.8	1444.7	1445.0	1445.2	1445.5	1445.7	1446.8
167.5°	1471.4	1470.3	1469.3	1468.2	1467.1	1466.6	1466.6	1466.6	1466.6	1466.6	1468.2
170°	1484.5	1483.5	1482.4	1481.4	1480.4	1479.8	1479.8	1479.8	1479.8	1479.8	1481.4
172.5°	1493.9	1492.9	1491.8	1490.8	1489.8	1489.1	1489.1	1489.1	1489.1	1489.1	1490.8
175°	1504.4	1503.4	1502.4	1501.3	1500.3	1499.8	1499.8	1499.8	1499.8	1499.8	1501.3
177.5°	1509.8	1509.0	1508.1	1507.3	1506.5	1506.0	1505.8	1505.6	1505.3	1505.1	1506.4
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9



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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°	150.8	157.9	165.2	170.0	172.2	174.5	176.7	179.0
90°	147.1	155.4	163.7	169.3	172.2	175.0	177.9	180.9
92.5°	169.4	177.8	186.3	191.9	194.5	197.2	200.0	202.6
95°	206.8	215.3	223.9	229.4	232.1	234.7	237.3	239.9
97.5°	252.8	260.8	268.9	274.2	276.5	278.9	281.2	283.7
100°	284.2	293.0	301.6	307.2	309.5	311.8	314.2	316.5
102.5°	317.3	326.0	334.7	340.3	342.8	345.4	347.9	350.5
105°	370.7	378.3	386.0	391.2	394.2	397.0	399.9	402.8
107.5°	430.3	437.1	443.8	448.2	450.0	451.8	453.6	455.4
110°	471.4	478.0	484.5	488.8	490.6	492.4	494.3	496.1



TEST NUMBER: P333290-840

CATALOG NUMBER: S125DIP-S1090D1205U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	512.7	518.6	524.4	528.3	529.9	531.5	533.2	534.8
115°	576.3	581.6	586.7	590.2	591.7	593.3	594.8	596.3
117.5°	639.6	645.0	650.4	653.6	654.6	655.6	656.6	657.6
120°	682.8	687.9	693.1	696.0	696.8	697.5	698.3	699.1
122.5°	724.4	729.1	733.8	736.7	737.6	738.6	739.6	740.6
125°	786.4	790.7	795.0	797.8	799.0	800.3	801.5	802.8
127.5°	847.5	851.7	856.0	858.7	859.9	861.1	862.3	863.6
130°	888.8	892.7	896.8	899.2	900.2	901.2	902.2	903.2
132.5°	927.6	931.6	935.5	937.9	938.4	938.9	939.5	940.0
135°	986.9	990.9	994.8	997.0	997.4	997.9	998.5	998.9
137.5°	1046.0	1049.9	1053.8	1055.7	1055.6	1055.5	1055.4	1055.3
140°	1083.0	1086.9	1090.8	1092.6	1092.5	1092.5	1092.4	1092.3
142.5°	1119.8	1123.0	1126.1	1127.7	1127.6	1127.5	1127.4	1127.3
145°	1174.2	1175.7	1177.2	1178.2	1178.6	1179.0	1179.5	1179.9
147.5°	1225.5	1226.6	1227.7	1227.7	1226.4	1225.2	1224.0	1222.7
150°	1258.0	1258.0	1258.0	1257.9	1257.7	1257.5	1257.3	1257.0
152.5°	1289.3	1289.9	1290.5	1290.4	1289.5	1288.7	1287.8	1286.9
155°	1334.0	1335.0	1336.2	1336.0	1334.6	1333.3	1332.1	1330.8
157.5°	1372.7	1373.8	1374.8	1374.5	1372.8	1371.1	1369.4	1367.7
160°	1396.2	1397.2	1398.3	1398.2	1396.8	1395.5	1394.2	1393.0
162.5°	1418.3	1419.5	1420.8	1420.6	1419.1	1417.5	1416.0	1414.5
165°	1447.8	1448.9	1450.0	1449.7	1448.1	1446.5	1445.0	1443.4
167.5°	1469.8	1471.4	1472.9	1472.9	1471.3	1469.7	1468.0	1466.4
170°	1482.9	1484.5	1486.0	1485.9	1484.1	1482.3	1480.5	1478.6
172.5°	1492.3	1493.9	1495.4	1495.4	1493.8	1492.2	1490.6	1488.9
175°	1502.9	1504.4	1506.0	1505.9	1504.1	1502.3	1500.4	1498.5
177.5°	1507.6	1508.9	1510.2	1510.1	1508.6	1507.1	1505.7	1504.2
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9

(END OF REPORT)