

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: P333481-840

Luminaire Tested: **S125DIW-S1270D1340U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333481-840
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: S125DIW-S1270D1340U840-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9675.1 lumens
Efficiency: N/A
Efficacy: 127.0 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

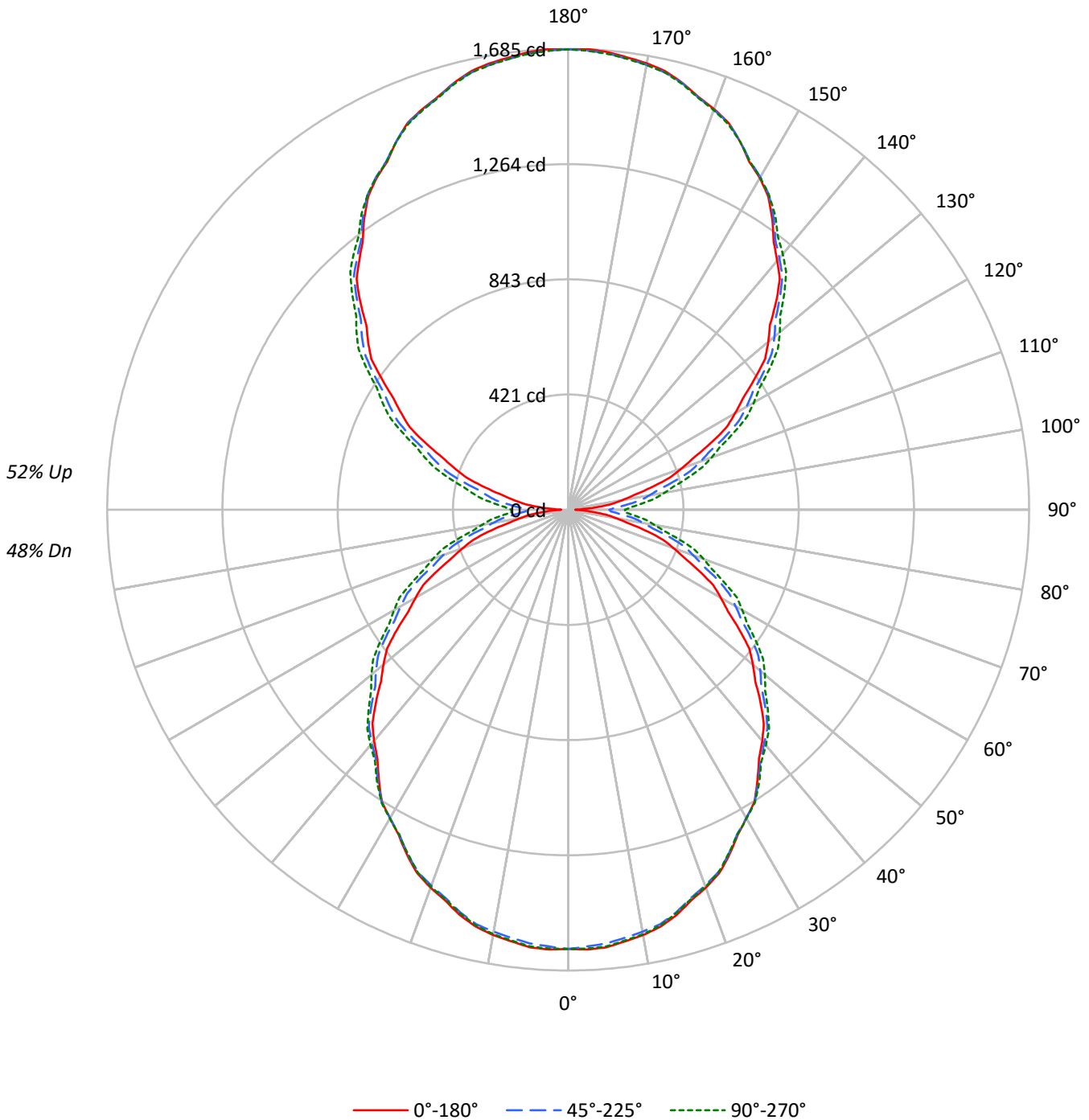
Input Watts (W): 76.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82		68	68	68		55	55	55	48
1	97	92	88	84	89	85	81	78	71	69	66		59	57	55		47	46	45	39
2	88	80	74	68	80	74	68	63	62	58	54		51	48	45		41	39	37	32
3	80	70	62	56	73	65	58	53	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	43	38		40	36	32		32	29	27	23
5	67	55	47	41	61	51	43	38	43	37	33		36	31	28		29	26	23	20
6	62	49	41	35	56	46	38	33	39	33	29		32	28	24		26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	25	22		24	21	18	15
8	53	40	32	27	48	37	30	25	32	26	22		27	22	19		22	19	16	14
9	49	37	29	24	45	34	27	23	29	24	20		25	20	17		20	17	14	12
10	46	34	26	21	42	31	25	20	27	22	18		23	18	15		19	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10372	10372	10372
5°	10393	10181	10213
10°	10318	9998	9984
15°	10197	9781	9692
20°	10031	9512	9401
25°	9834	9224	9042
30°	9595	8907	8715
35°	9372	8616	8417
40°	9145	8310	8116
45°	8889	8048	7849
50°	8644	7763	7614
55°	8351	7495	7337
60°	8029	7187	7054
65°	7692	6868	6736
70°	7312	6430	6408
75°	6707	6007	6007
80°	5917	5497	5569
85°	5183	5154	5432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.9	1.6
10°-20°	431.1	4.5
20°-30°	641.1	6.6
30°-40°	759.4	7.8
40°-50°	785.2	8.1
50°-60°	723.3	7.5
60°-70°	584.7	6.0
70°-80°	391.6	4.0
80°-90°	206.7	2.1
90°-100°	226.7	2.3
100°-110°	416.9	4.3
110°-120°	620.2	6.4
120°-130°	774.1	8.0
130°-140°	845.5	8.7
140°-150°	817.9	8.5
150°-160°	684.6	7.1
160°-170°	455.0	4.7
170°-180°	159.2	1.6
0°-30°	1224.1	12.7
0°-40°	1983.5	20.5
0°-60°	3491.9	36.1
0°-90°	4674.9	48.3
90°-120°	1263.8	13.1
90°-150°	3701.3	38.3
90°-180°	5000.0	51.7
0°-180°	9675.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1606	1606	1606	1606	1606	
5°	1606	1602	1592	1604	1603	152
15°	1534	1534	1524	1533	1527	432
25°	1393	1397	1389	1394	1387	641
35°	1206	1216	1212	1217	1217	755
45°	994	1010	1019	1029	1031	766
55°	764	789	814	831	838	682
65°	526	562	600	623	630	522
75°	290	331	381	411	420	307
85°	87	139	194	227	241	92
90°	26	87	150	191	208	21
95°	106	150	216	258	273	107
105°	313	346	400	438	454	334
115°	574	592	634	660	669	568
125°	830	838	869	891	898	743
135°	1075	1081	1093	1113	1116	828
145°	1300	1303	1307	1315	1318	812
155°	1486	1486	1487	1491	1486	684
165°	1615	1613	1614	1618	1611	455
175°	1679	1674	1674	1681	1673	160
180°	1683	1683	1683	1683	1683	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1609.7	1609.2	1608.6	1608.1	1607.5	1606.3	1604.3	1602.4	1600.4	1598.4	1600.4
5°	1606.0	1605.3	1604.6	1603.9	1603.2	1601.6	1599.1	1596.7	1594.3	1591.9	1594.6
7.5°	1591.9	1591.5	1591.2	1590.9	1590.7	1589.3	1586.8	1584.3	1581.8	1579.2	1581.7
10°	1579.2	1579.2	1579.2	1579.2	1579.2	1577.8	1575.0	1572.3	1569.4	1566.6	1569.0
12.5°	1561.6	1561.9	1562.2	1562.5	1562.7	1561.8	1559.5	1557.2	1555.0	1552.8	1554.7
15°	1533.6	1533.9	1534.3	1534.6	1535.0	1533.9	1531.5	1529.0	1526.6	1524.1	1526.2
17.5°	1497.0	1497.7	1498.4	1499.1	1499.9	1498.9	1496.5	1494.1	1491.6	1489.1	1490.8
20°	1470.6	1471.3	1472.0	1472.7	1473.4	1472.5	1470.1	1467.6	1465.1	1462.7	1463.8
22.5°	1440.4	1441.6	1442.9	1444.1	1445.4	1444.6	1441.9	1439.2	1436.4	1433.7	1435.0
25°	1393.4	1394.5	1395.5	1396.5	1397.7	1397.1	1395.0	1392.9	1390.8	1388.7	1390.1
27.5°	1341.2	1342.7	1344.2	1345.7	1347.4	1346.9	1344.5	1342.1	1339.8	1337.4	1338.4
30°	1302.1	1304.2	1306.3	1308.4	1310.5	1310.5	1308.4	1306.3	1304.2	1302.1	1302.8
32.5°	1266.9	1268.7	1270.5	1272.3	1274.1	1274.2	1272.7	1271.2	1269.6	1268.1	1268.8
35°	1206.1	1208.5	1210.9	1213.5	1215.9	1216.6	1215.5	1214.5	1213.5	1212.3	1213.5
37.5°	1145.3	1147.5	1149.7	1152.1	1154.3	1155.2	1154.9	1154.5	1154.2	1153.8	1155.2
40°	1103.7	1106.5	1109.3	1112.2	1114.9	1116.1	1115.8	1115.4	1115.1	1114.8	1116.1
42.5°	1058.3	1062.0	1065.6	1069.2	1073.0	1075.1	1075.9	1076.7	1077.4	1078.2	1079.8
45°	993.5	997.3	1001.2	1005.0	1008.9	1011.7	1013.5	1015.2	1016.9	1018.7	1021.2
47.5°	927.1	930.6	934.2	937.8	941.3	944.6	947.7	950.7	953.6	956.6	960.3
50°	881.7	885.6	889.4	893.2	897.2	901.0	904.8	908.7	912.5	916.4	920.2
52.5°	833.8	838.6	843.2	847.9	852.6	857.3	862.0	866.7	871.3	876.1	880.2
55°	763.7	769.2	774.9	780.4	786.0	791.6	797.2	802.8	808.4	814.1	817.9
57.5°	691.9	698.5	705.3	712.0	718.7	725.3	731.7	738.1	744.6	751.0	755.5
60°	644.0	651.0	657.9	665.0	672.0	678.9	686.0	693.0	699.9	706.9	712.2
62.5°	597.3	604.4	611.4	618.3	625.3	632.7	640.2	647.7	655.3	662.9	668.6
65°	525.8	533.9	542.0	550.1	558.1	566.3	574.7	583.1	591.5	599.9	605.1
67.5°	458.5	466.3	474.0	481.8	489.6	497.8	506.2	514.8	523.3	531.9	538.3
70°	409.4	417.4	425.5	433.5	441.5	450.1	459.2	468.4	477.5	486.6	493.2
72.5°	361.5	369.8	378.2	386.5	394.9	403.9	413.8	423.8	433.7	443.7	450.9
75°	289.7	298.8	307.9	317.0	326.1	336.3	347.4	358.6	369.8	381.0	388.0
77.5°	220.8	231.3	241.8	252.3	262.8	273.4	284.2	294.9	305.7	316.5	324.2
80°	177.9	188.4	198.9	209.4	219.9	231.1	243.0	254.9	266.8	278.7	286.4
82.5°	138.9	150.0	161.0	172.1	183.1	194.7	206.9	219.0	231.3	243.4	250.9
85°	86.6	98.2	109.7	121.3	132.8	144.7	156.9	169.2	181.4	193.7	201.4
87.5°	49.4	61.1	72.7	84.3	96.0	108.1	120.3	132.6	144.9	157.2	165.6
90°	26.5	40.0	53.5	67.1	80.6	94.3	108.3	122.2	136.1	150.1	159.6
92.5°	54.3	66.3	78.4	90.4	102.3	115.6	130.4	145.0	159.7	174.4	184.1
95°	105.6	115.3	125.0	134.6	144.3	156.5	171.4	186.2	201.0	215.8	225.5
97.5°	160.1	168.4	176.9	185.3	193.7	205.7	221.2	236.7	252.2	267.7	276.9
100°	200.8	208.0	215.4	222.8	230.1	241.3	256.2	271.2	286.2	301.1	311.1
102.5°	244.5	252.5	260.4	268.4	276.3	286.7	299.5	312.4	325.3	338.1	348.0
105°	312.9	319.9	327.0	334.0	341.0	350.7	362.9	375.2	387.4	399.7	408.4
107.5°	388.5	394.8	400.9	407.2	413.3	422.1	433.6	445.0	456.5	467.9	475.6
110°	440.7	446.4	452.0	457.7	463.3	471.5	482.1	492.8	503.5	514.1	521.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	495.1	499.3	503.4	507.6	511.6	519.0	529.7	540.3	550.9	561.5	568.3
115°	574.0	577.6	581.3	584.9	588.4	595.1	604.8	614.5	624.2	633.9	639.9
117.5°	653.2	655.3	657.4	659.5	661.7	667.3	676.4	685.6	694.7	703.9	710.0
120°	703.5	706.0	708.5	710.9	713.5	718.9	727.2	735.6	744.0	752.2	758.2
122.5°	756.7	757.7	758.7	759.7	760.7	765.5	774.1	782.5	791.1	799.6	805.1
125°	830.3	831.6	833.0	834.5	835.9	840.2	847.5	854.7	862.0	869.4	874.3
127.5°	907.3	908.0	908.6	909.2	909.9	913.2	919.3	925.3	931.5	937.6	942.4
130°	954.4	955.5	956.6	957.8	958.9	962.2	967.7	973.1	978.6	984.1	988.7
132.5°	1000.4	1002.7	1005.0	1007.3	1009.6	1012.6	1016.2	1020.0	1023.6	1027.2	1031.9
135°	1074.7	1076.1	1077.5	1078.8	1080.3	1082.4	1085.1	1087.8	1090.6	1093.3	1097.8
137.5°	1144.6	1146.0	1147.4	1148.8	1150.2	1151.9	1153.7	1155.5	1157.3	1159.1	1163.7
140°	1188.4	1189.8	1191.3	1192.8	1194.3	1195.6	1196.8	1198.0	1199.2	1200.4	1204.9
142.5°	1233.4	1234.4	1235.4	1236.3	1237.2	1238.3	1239.5	1240.6	1241.8	1243.0	1246.7
145°	1299.7	1300.6	1301.4	1302.2	1303.0	1303.8	1304.7	1305.6	1306.5	1307.4	1309.1
147.5°	1359.5	1360.1	1360.8	1361.4	1362.0	1362.7	1363.4	1364.1	1364.8	1365.5	1366.8
150°	1400.4	1400.1	1399.8	1399.5	1399.2	1399.6	1400.8	1402.0	1403.1	1404.3	1404.3
152.5°	1433.9	1434.3	1434.7	1435.1	1435.5	1435.9	1436.4	1436.8	1437.3	1437.8	1438.6
155°	1485.5	1485.5	1485.5	1485.5	1485.5	1485.6	1485.9	1486.2	1486.5	1486.8	1487.9
157.5°	1531.6	1531.0	1530.3	1529.6	1529.0	1528.8	1529.1	1529.4	1529.7	1530.0	1531.2
160°	1558.8	1558.0	1557.1	1556.2	1555.4	1555.1	1555.4	1555.7	1555.9	1556.2	1557.4
162.5°	1583.0	1582.4	1581.7	1581.0	1580.4	1580.1	1580.1	1580.2	1580.2	1580.3	1581.8
165°	1615.2	1614.6	1614.0	1613.5	1612.9	1612.8	1613.0	1613.3	1613.6	1613.9	1615.1
167.5°	1642.4	1641.2	1640.1	1638.9	1637.8	1637.2	1637.2	1637.2	1637.2	1637.2	1638.9
170°	1657.1	1656.0	1654.8	1653.7	1652.4	1651.8	1651.8	1651.8	1651.8	1651.8	1653.7
172.5°	1667.6	1666.4	1665.3	1664.1	1662.9	1662.3	1662.3	1662.3	1662.3	1662.3	1664.1
175°	1679.4	1678.2	1677.1	1675.9	1674.8	1674.2	1674.2	1674.2	1674.2	1674.2	1675.9
177.5°	1685.4	1684.5	1683.5	1682.6	1681.6	1681.1	1680.8	1680.6	1680.4	1680.1	1681.5
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0	1606.0
2.5°	1602.4	1604.3	1606.3	1607.1	1606.8	1606.6	1606.3	1606.0
5°	1597.4	1600.2	1603.1	1604.3	1603.9	1603.6	1603.2	1602.9
7.5°	1584.1	1586.6	1589.0	1590.0	1589.7	1589.3	1589.0	1588.6
10°	1571.6	1574.0	1576.4	1577.5	1577.1	1576.8	1576.4	1576.1
12.5°	1556.5	1558.4	1560.3	1560.8	1559.9	1559.0	1558.1	1557.2
15°	1528.3	1530.5	1532.5	1532.9	1531.5	1530.0	1528.6	1527.2
17.5°	1492.4	1494.0	1495.6	1496.0	1495.1	1494.3	1493.5	1492.6
20°	1464.8	1465.8	1466.9	1467.4	1467.4	1467.4	1467.4	1467.4
22.5°	1436.4	1437.7	1439.1	1439.3	1438.5	1437.6	1436.7	1435.9
25°	1391.5	1392.9	1394.3	1394.1	1392.4	1390.6	1388.9	1387.2
27.5°	1339.4	1340.3	1341.3	1341.5	1340.8	1340.2	1339.6	1339.0
30°	1303.5	1304.2	1304.9	1305.0	1304.7	1304.3	1304.0	1303.6
32.5°	1269.5	1270.2	1270.9	1271.1	1270.7	1270.4	1270.0	1269.7
35°	1214.5	1215.5	1216.6	1217.1	1217.1	1217.1	1217.1	1217.1
37.5°	1156.6	1158.0	1159.4	1160.0	1159.8	1159.7	1159.6	1159.4
40°	1117.5	1118.9	1120.3	1121.4	1122.1	1122.8	1123.5	1124.2
42.5°	1081.6	1083.3	1084.9	1085.8	1086.0	1086.1	1086.3	1086.4
45°	1023.6	1026.0	1028.4	1029.9	1030.3	1030.6	1031.0	1031.3
47.5°	963.8	967.3	971.0	973.1	973.9	974.6	975.4	976.2
50°	924.0	927.9	931.8	934.2	935.2	936.3	937.4	938.4
52.5°	884.3	888.5	892.5	895.0	895.8	896.6	897.4	898.1
55°	821.7	825.6	829.4	832.0	833.4	834.9	836.3	837.7
57.5°	759.8	764.3	768.7	771.4	772.4	773.5	774.6	775.6
60°	717.4	722.7	727.9	731.0	732.2	733.2	734.3	735.3
62.5°	674.5	680.2	686.1	689.6	690.9	692.4	693.7	695.0
65°	610.4	615.6	620.9	624.2	625.6	627.0	628.4	629.8
67.5°	544.6	551.0	557.3	561.4	563.2	565.0	566.9	568.8
70°	499.8	506.4	513.1	517.5	519.6	521.7	523.8	525.8
72.5°	458.1	465.3	472.5	476.9	478.5	480.0	481.5	483.0
75°	395.1	402.0	409.0	413.4	415.2	416.9	418.7	420.4
77.5°	331.8	339.5	347.3	351.8	353.3	354.6	356.0	357.4
80°	294.1	301.7	309.5	314.1	315.4	316.8	318.2	319.6
82.5°	258.2	265.7	273.1	278.0	280.5	283.1	285.6	288.1
85°	209.0	216.7	224.5	229.7	232.5	235.3	238.1	240.9
87.5°	173.9	182.3	190.6	196.1	198.7	201.3	203.9	206.5
90°	169.1	178.5	188.0	194.5	197.8	201.2	204.5	207.8
92.5°	193.8	203.5	213.1	219.5	222.6	225.7	228.8	231.9
95°	235.3	245.0	254.8	261.2	264.2	267.2	270.2	273.3
97.5°	286.2	295.5	304.8	310.7	313.5	316.2	318.9	321.6
100°	321.1	331.1	341.0	347.4	350.0	352.7	355.5	358.1
102.5°	357.9	367.8	377.8	384.2	387.1	390.0	392.9	395.9
105°	417.2	426.0	434.6	440.7	444.0	447.4	450.7	453.9
107.5°	483.4	491.2	499.1	504.0	506.1	508.3	510.3	512.4
110°	529.2	536.7	544.2	549.1	551.2	553.4	555.5	557.7



TEST NUMBER: P333481-840

CATALOG NUMBER: S125DIW-S1270D1340U840-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	575.0	581.9	588.7	593.0	594.9	596.8	598.7	600.7
115°	645.9	651.9	657.9	661.8	663.6	665.4	667.2	669.0
117.5°	716.2	722.4	728.6	732.3	733.5	734.7	735.9	737.1
120°	764.2	770.1	776.1	779.5	780.4	781.3	782.3	783.3
122.5°	810.5	816.0	821.3	824.7	825.9	827.0	828.2	829.3
125°	879.4	884.4	889.4	892.6	894.1	895.5	897.1	898.5
127.5°	947.4	952.2	957.2	960.3	961.7	963.2	964.6	966.0
130°	993.3	997.9	1002.5	1005.4	1006.5	1007.7	1008.9	1010.1
132.5°	1036.4	1041.1	1045.7	1048.3	1048.9	1049.7	1050.3	1051.0
135°	1102.4	1106.9	1111.5	1114.1	1114.7	1115.2	1115.8	1116.4
137.5°	1168.1	1172.6	1177.1	1179.3	1179.2	1179.2	1179.1	1179.0
140°	1209.3	1213.8	1218.2	1220.3	1220.3	1220.2	1220.2	1220.1
142.5°	1250.3	1253.9	1257.6	1259.3	1259.3	1259.2	1259.2	1259.1
145°	1310.8	1312.6	1314.3	1315.5	1316.0	1316.6	1317.1	1317.6
147.5°	1368.1	1369.3	1370.5	1370.5	1369.2	1367.8	1366.4	1365.1
150°	1404.3	1404.3	1404.3	1404.1	1403.9	1403.7	1403.5	1403.2
152.5°	1439.2	1439.9	1440.6	1440.5	1439.5	1438.6	1437.5	1436.5
155°	1489.1	1490.3	1491.5	1491.3	1489.9	1488.4	1486.9	1485.5
157.5°	1532.4	1533.5	1534.7	1534.3	1532.4	1530.5	1528.5	1526.6
160°	1558.5	1559.7	1560.8	1560.7	1559.3	1557.8	1556.4	1554.9
162.5°	1583.2	1584.5	1585.9	1585.8	1584.1	1582.4	1580.7	1579.0
165°	1616.2	1617.4	1618.5	1618.2	1616.5	1614.8	1613.0	1611.2
167.5°	1640.7	1642.4	1644.2	1644.2	1642.3	1640.5	1638.7	1636.9
170°	1655.4	1657.1	1658.8	1658.7	1656.7	1654.7	1652.5	1650.5
172.5°	1665.9	1667.6	1669.3	1669.3	1667.5	1665.7	1663.9	1662.0
175°	1677.6	1679.4	1681.1	1680.9	1678.9	1676.9	1674.9	1672.8
177.5°	1682.9	1684.4	1685.8	1685.7	1683.9	1682.3	1680.7	1679.1
180°	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3	1683.3

(END OF REPORT)