

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: P333327-840

Luminaire Tested: **S125DIP-S1270D1035U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333327-840
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-S1270D1035U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8726.8 lumens
Efficiency: N/A
Efficacy: 130.6 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

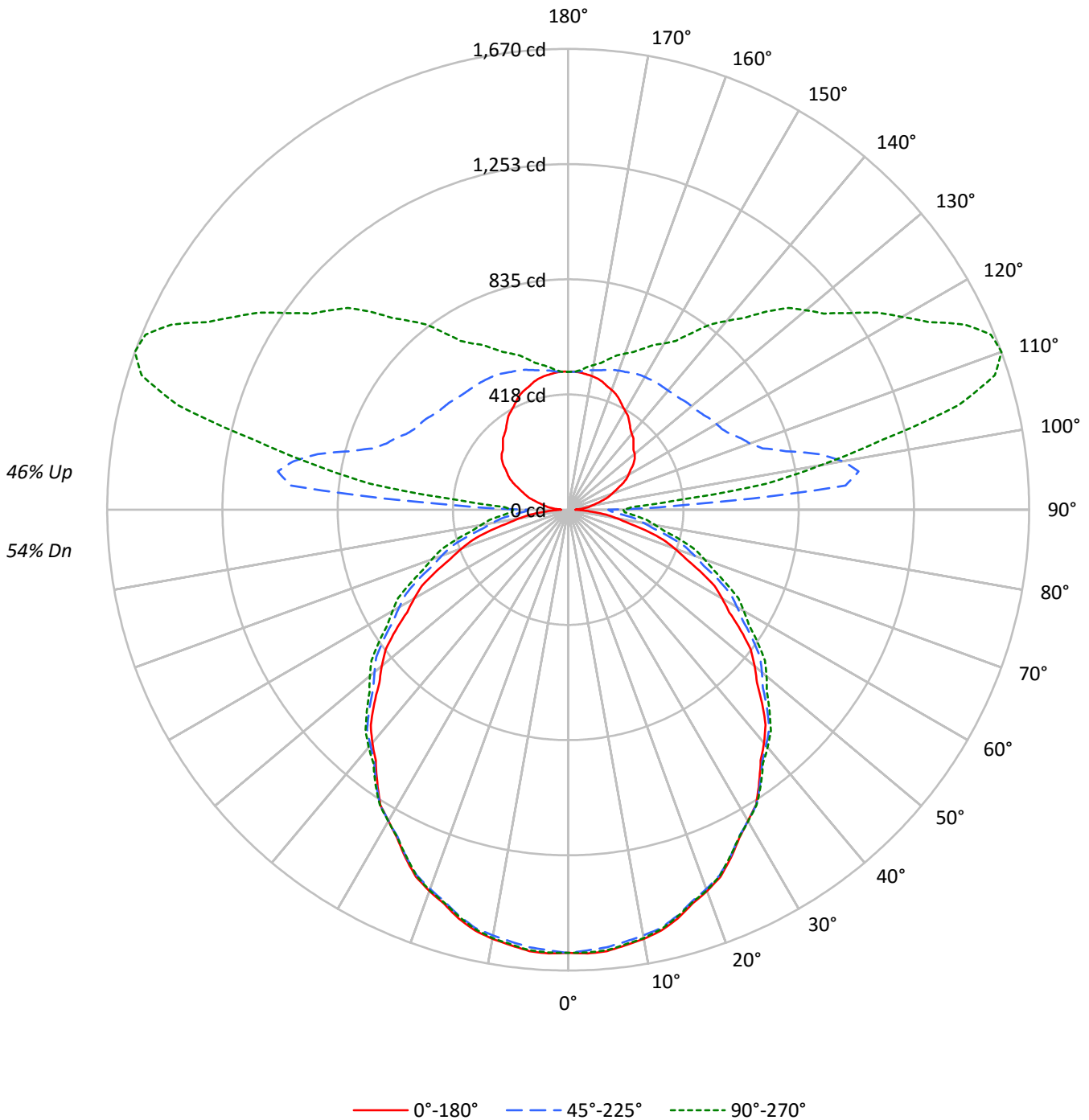
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	54
1	98	93	89	85	90	86	83	79	74	71	68	62	60	58	51	50	49	43
2	89	81	74	69	82	75	69	64	64	60	56	54	51	48	45	42	40	36
3	81	71	63	57	74	66	59	54	56	51	47	47	44	40	39	36	34	30
4	74	63	54	48	68	58	51	45	50	44	40	42	38	34	35	32	29	25
5	68	56	47	41	62	52	44	39	44	39	34	38	33	30	31	28	25	22
6	62	50	41	35	57	46	39	33	40	34	30	34	29	26	28	25	22	19
7	58	45	37	31	53	42	35	29	36	30	26	31	26	23	26	22	20	17
8	53	41	33	27	49	38	31	26	33	27	23	28	24	20	24	20	17	15
9	50	37	30	24	46	35	28	23	30	25	21	26	21	18	22	18	16	14
10	46	34	27	22	43	32	25	21	28	22	19	24	20	16	20	17	14	12

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	1.7
10°-20°	431.1	4.9
20°-30°	641.1	7.3
30°-40°	759.4	8.7
40°-50°	785.2	9.0
50°-60°	723.3	8.3
60°-70°	584.7	6.7
70°-80°	391.6	4.5
80°-90°	205.8	2.4
90°-100°	476.4	5.5
100°-110°	863.2	9.9
110°-120°	787.5	9.0
120°-130°	624.6	7.2
130°-140°	489.5	5.6
140°-150°	361.7	4.1
150°-160°	252.6	2.9
160°-170°	148.9	1.7
170°-180°	48.4	0.6
0°-30°	1224.1	14.0
0°-40°	1983.5	22.7
0°-60°	3491.9	40.0
0°-90°	4674.0	53.6
90°-120°	2127.1	24.4
90°-150°	3602.9	41.3
90°-180°	4053.0	46.4
0°-180°	8726.8	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	85	145	185	200	19
95°	54	160	1008	554	398	51
105°	128	200	818	1556	1465	135
115°	213	268	648	1353	1587	210
125°	289	337	599	1067	1242	256
135°	334	400	571	876	1015	259
145°	387	441	560	706	782	242
155°	440	473	546	618	644	202
165°	480	493	524	556	564	135
175°	499	499	503	509	507	47
180°	500	500	500	500	500	



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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°	49.3	60.7	72.3	83.9	95.5	107.4	119.6	131.9	144.0	156.2	164.5
90°	26.2	38.4	51.6	64.8	78.1	91.6	104.5	118.5	131.3	145.2	154.3
92.5°	34.9	48.0	66.8	89.7	117.3	158.0	225.3	329.8	442.1	449.1	395.0
95°	53.7	63.8	81.0	101.2	132.5	188.3	308.1	541.8	831.9	1008.1	996.6
97.5°	73.8	83.2	97.0	116.3	144.5	186.9	269.8	443.8	746.4	1061.0	1220.3
100°	87.9	97.3	108.7	127.0	153.6	193.1	262.8	405.0	670.2	1011.1	1270.5
102.5°	103.6	111.6	121.6	140.3	164.6	202.9	265.8	386.8	612.3	929.5	1231.3
105°	128.1	133.7	144.3	160.0	181.8	218.0	272.9	373.0	551.9	817.5	1113.8
107.5°	152.0	158.8	168.3	181.4	202.9	235.7	288.7	375.7	523.0	739.1	995.7
110°	169.3	175.5	183.7	197.0	216.3	249.5	300.6	380.0	511.8	701.0	927.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	187.8	193.2	199.9	212.3	230.8	262.6	311.8	386.9	507.1	676.6	875.4
115°	213.1	217.5	223.0	234.6	252.2	283.1	329.5	397.1	502.9	648.1	816.8
117.5°	235.7	240.3	245.2	255.9	274.6	304.1	348.0	409.8	502.5	630.3	778.4
120°	251.9	255.9	260.9	271.1	289.3	319.0	362.3	418.8	504.5	620.5	756.4
122.5°	267.5	270.2	274.0	283.5	302.8	332.0	375.2	428.9	505.3	611.4	736.6
125°	288.6	290.2	294.9	303.7	322.4	352.0	392.2	442.6	508.1	598.7	709.2
127.5°	303.8	306.4	312.6	323.7	343.7	372.5	410.4	456.1	512.8	589.1	683.4
130°	314.2	316.9	324.6	337.4	358.2	386.7	422.8	466.1	516.2	583.7	667.2
132.5°	321.0	324.8	334.4	349.0	370.9	399.0	434.0	473.7	519.7	578.7	652.5
135°	333.9	337.5	349.2	365.1	385.9	414.1	447.8	483.5	523.3	571.1	633.1
137.5°	350.0	352.7	363.8	379.6	400.1	428.6	458.2	491.3	528.0	566.6	616.7
140°	358.4	361.4	373.5	389.7	408.9	436.3	465.9	496.4	529.1	563.7	607.8
142.5°	369.7	371.6	382.7	398.5	416.6	442.1	469.8	498.5	529.2	562.0	600.8
145°	386.7	388.3	398.1	411.8	429.6	452.6	478.9	504.0	531.3	560.5	592.5
147.5°	402.8	404.0	412.7	425.9	441.5	461.9	484.9	507.7	532.3	557.8	585.1
150°	413.3	415.4	422.4	435.6	449.6	466.8	489.0	510.1	532.3	555.4	579.7
152.5°	424.6	425.9	432.1	443.5	456.9	472.4	493.0	511.7	531.5	552.3	574.0
155°	439.5	439.5	445.6	455.7	465.7	479.9	497.0	513.1	529.3	546.4	564.5
157.5°	452.8	452.6	457.5	466.2	475.0	485.7	500.4	514.1	526.6	540.4	555.6
160°	461.7	460.7	464.7	471.8	479.9	489.0	502.0	514.1	524.2	536.3	548.5
162.5°	469.0	468.0	472.0	478.3	484.7	492.2	503.6	513.3	521.8	531.5	542.0
165°	479.9	477.9	480.9	485.9	490.0	496.0	504.0	512.1	518.2	524.2	532.3
167.5°	487.2	486.1	488.0	490.8	493.6	497.4	504.0	509.7	512.5	517.2	522.8
170°	492.0	491.0	492.0	494.0	496.0	499.0	504.0	508.1	510.1	513.1	517.2
172.5°	495.2	493.4	494.4	496.3	497.6	499.0	503.2	506.4	506.9	508.3	511.5
175°	499.0	497.0	498.0	499.0	499.0	499.0	502.0	504.0	503.0	503.0	504.0
177.5°	500.8	499.2	499.2	500.0	499.2	499.2	500.8	501.6	500.0	500.0	500.8
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0



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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°	172.8	181.0	189.2	194.9	197.3	199.9	202.5	204.9
90°	163.4	172.4	181.5	188.7	191.2	193.6	197.1	199.5
92.5°	318.2	277.0	252.8	242.9	232.5	232.5	233.5	234.4
95°	855.2	709.6	593.3	513.7	444.6	416.8	411.2	397.5
97.5°	1201.2	1101.2	987.7	874.8	814.9	760.8	734.0	723.5
100°	1355.4	1313.4	1216.9	1116.8	1049.4	978.9	943.6	929.6
102.5°	1403.9	1441.4	1398.7	1332.3	1260.0	1210.4	1172.0	1162.1
105°	1362.7	1507.8	1559.2	1552.9	1523.1	1492.3	1474.5	1464.9
107.5°	1241.3	1432.6	1553.4	1610.5	1629.1	1631.0	1626.6	1620.6
110°	1151.9	1350.1	1498.8	1589.1	1636.9	1658.5	1668.0	1670.5



TEST NUMBER: P333327-840

CATALOG NUMBER: S125DIP-S1270D1035U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1080.2	1268.4	1418.5	1523.9	1592.7	1628.0	1648.0	1657.7
115°	989.4	1152.0	1296.4	1410.4	1491.2	1541.7	1572.0	1587.2
117.5°	927.5	1068.1	1193.1	1298.0	1379.0	1431.4	1461.8	1472.3
120°	893.4	1020.4	1137.2	1229.9	1306.7	1357.1	1386.4	1396.5
122.5°	866.1	983.8	1088.2	1175.2	1243.9	1290.3	1319.6	1329.0
125°	826.7	935.1	1028.4	1104.7	1162.9	1206.0	1229.9	1241.7
127.5°	786.4	887.5	974.5	1046.1	1099.3	1137.8	1160.8	1167.3
130°	761.8	855.5	939.0	1007.8	1060.0	1095.0	1116.9	1124.7
132.5°	736.6	824.7	900.9	967.1	1019.1	1053.8	1073.8	1082.2
135°	702.2	776.3	845.4	905.9	952.1	987.0	1006.9	1014.8
137.5°	673.5	733.9	791.6	843.2	884.3	915.9	934.1	942.1
140°	657.0	708.3	758.5	803.4	842.1	869.8	886.3	892.7
142.5°	642.9	686.3	729.5	768.6	801.6	825.3	840.9	846.6
145°	625.5	658.5	691.6	720.3	745.9	764.5	776.9	782.3
147.5°	610.3	636.2	660.8	681.9	701.7	716.0	723.1	725.6
150°	601.9	624.0	643.2	661.5	677.0	689.4	693.8	695.2
152.5°	593.8	613.5	631.1	645.2	658.0	667.7	671.9	673.0
155°	581.7	597.8	612.0	623.0	633.1	640.2	643.2	644.2
157.5°	569.6	582.9	593.8	602.5	610.4	616.1	618.9	618.7
160°	561.5	571.6	581.7	588.8	595.8	600.9	602.9	601.9
162.5°	552.7	561.9	570.4	576.6	582.1	586.3	586.7	586.5
165°	540.4	547.4	553.5	558.5	562.5	564.5	564.5	564.5
167.5°	528.7	533.3	538.0	541.6	543.6	545.4	544.6	544.4
170°	522.2	525.2	528.3	530.3	532.3	533.3	533.3	532.3
172.5°	514.9	518.0	520.2	521.4	521.8	523.6	522.0	521.0
175°	507.1	507.1	509.1	509.1	509.1	510.1	508.1	507.1
177.5°	501.6	502.4	502.4	502.4	501.6	502.4	500.0	500.0
180°	500.0	500.0	500.0	500.0	500.0	500.0	500.0	500.0

(END OF REPORT)