

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: P333334-840

Luminaire Tested: **S125DIP-S1270D1205U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333334-840
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: S125DIP-S1270D1205U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9839.5 lumens
Efficiency: N/A
Efficacy: 137.2 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

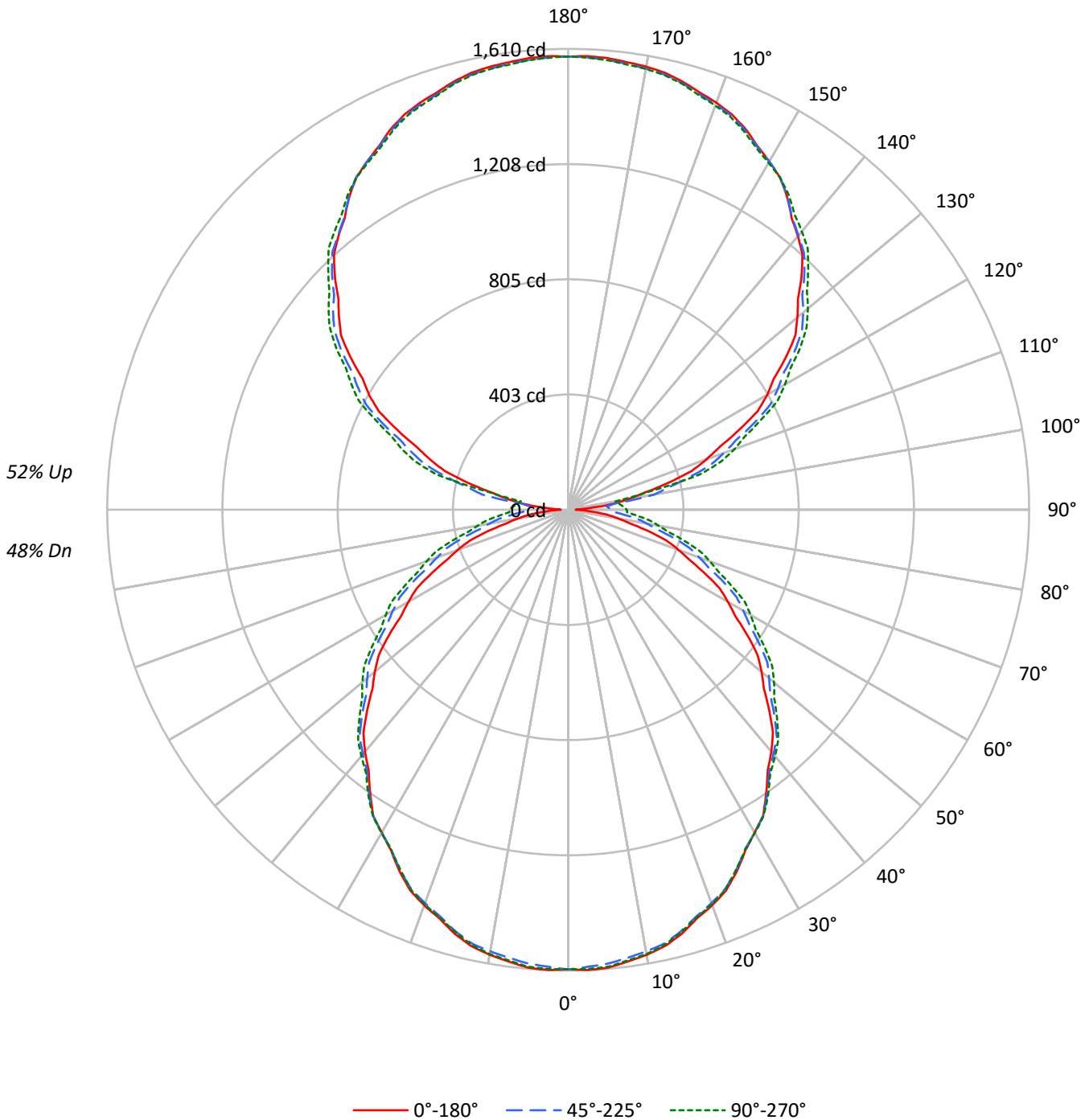
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333334-840

CATALOG NUMBER: S125DIP-S1270D1205U840-4F0-1E-UDD-D

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°	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	1.5
10°-20°	431.1	4.4
20°-30°	641.1	6.5
30°-40°	759.4	7.7
40°-50°	785.2	8.0
50°-60°	723.3	7.4
60°-70°	584.7	5.9
70°-80°	391.6	4.0
80°-90°	206.4	2.1
90°-100°	171.5	1.7
100°-110°	438.6	4.5
110°-120°	699.4	7.1
120°-130°	857.3	8.7
130°-140°	901.7	9.2
140°-150°	836.1	8.5
150°-160°	674.1	6.9
160°-170°	435.9	4.4
170°-180°	150.4	1.5
0°-30°	1224.1	12.4
0°-40°	1983.5	20.2
0°-60°	3491.9	35.5
0°-90°	4674.5	47.5
90°-120°	1309.5	13.3
90°-150°	3904.6	39.7
90°-180°	5165.0	52.5
0°-180°	9839.5	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	86	148	188	204	20
95°	87	123	134	173	185	101
105°	359	390	436	467	478	381
115°	657	676	716	739	742	651
125°	928	936	966	985	991	828
135°	1152	1158	1166	1183	1185	888
145°	1334	1334	1334	1343	1343	833
155°	1467	1461	1462	1465	1456	676
165°	1548	1542	1542	1548	1540	437
175°	1583	1577	1577	1586	1576	151
180°	1583	1583	1583	1583	1583	



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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	61.0	72.6	84.2	95.8	107.8	120.0	132.3	144.5	156.8	165.1
90°	26.4	39.7	52.9	66.2	79.5	93.0	106.7	120.5	134.2	147.8	157.2
92.5°	40.7	49.7	58.6	67.5	76.3	87.7	101.5	115.2	129.1	142.9	151.9
95°	87.4	95.6	104.0	112.3	120.6	125.7	127.7	129.8	131.7	133.7	142.7
97.5°	158.2	167.8	177.4	187.0	196.6	197.3	189.2	181.1	173.0	164.8	164.8
100°	213.3	221.5	229.5	237.7	245.8	256.0	268.2	280.5	292.8	305.0	273.5
102.5°	269.3	277.1	284.9	292.7	300.4	310.1	321.6	333.2	344.8	356.3	356.0
105°	359.2	365.9	372.5	379.1	385.8	394.4	404.9	415.4	425.9	436.4	443.3
107.5°	452.6	457.4	462.1	466.9	471.7	479.4	490.0	500.6	511.1	521.7	528.8
110°	513.3	517.6	521.7	525.9	530.2	537.3	547.8	558.1	568.4	578.7	584.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	571.6	575.5	579.6	583.5	587.5	594.4	604.2	614.1	623.9	633.7	639.1
115°	657.3	661.1	664.8	668.5	672.3	678.8	688.2	697.6	706.9	716.3	721.5
117.5°	746.1	747.7	749.2	750.7	752.3	757.9	767.5	777.1	786.7	796.3	800.9
120°	802.4	803.2	804.1	804.8	805.6	810.4	819.2	828.1	836.9	845.8	851.1
122.5°	850.9	852.4	853.9	855.4	856.9	861.6	869.8	878.0	886.1	894.2	899.4
125°	927.6	929.1	930.6	932.0	933.5	937.8	944.7	951.7	958.8	965.7	970.3
127.5°	999.5	1000.5	1001.4	1002.4	1003.3	1006.6	1012.2	1017.7	1023.3	1029.0	1033.5
130°	1044.6	1045.5	1046.5	1047.4	1048.4	1051.5	1056.6	1061.8	1066.9	1072.1	1076.2
132.5°	1088.4	1089.8	1091.3	1092.7	1094.2	1096.5	1099.6	1102.9	1106.1	1109.3	1114.1
135°	1152.2	1153.4	1154.6	1155.8	1157.0	1158.6	1160.5	1162.5	1164.4	1166.3	1170.3
137.5°	1210.7	1211.8	1212.9	1214.0	1215.1	1216.0	1216.7	1217.4	1218.1	1218.8	1223.0
140°	1248.0	1248.5	1249.0	1249.5	1250.1	1250.4	1250.5	1250.5	1250.6	1250.7	1255.1
142.5°	1282.7	1282.7	1282.8	1282.8	1282.8	1283.1	1283.5	1283.9	1284.4	1284.9	1288.2
145°	1333.6	1333.8	1334.0	1334.1	1334.3	1334.4	1334.4	1334.4	1334.4	1334.4	1336.5
147.5°	1376.6	1376.5	1376.4	1376.3	1376.2	1376.3	1376.6	1377.0	1377.4	1377.7	1378.5
150°	1404.8	1404.3	1403.8	1403.3	1402.8	1402.8	1403.3	1403.8	1404.3	1404.8	1405.3
152.5°	1432.1	1431.0	1429.8	1428.7	1427.4	1427.1	1427.7	1428.3	1428.8	1429.3	1429.8
155°	1467.0	1465.5	1463.9	1462.4	1460.8	1460.3	1460.8	1461.3	1461.9	1462.4	1463.2
157.5°	1494.1	1493.1	1492.2	1491.3	1490.3	1489.9	1490.0	1490.0	1490.1	1490.1	1490.9
160°	1512.9	1511.3	1509.7	1508.1	1506.6	1505.9	1506.2	1506.4	1506.7	1506.9	1508.0
162.5°	1527.8	1526.3	1524.7	1523.2	1521.6	1521.0	1521.2	1521.5	1521.8	1522.0	1523.5
165°	1548.0	1546.5	1544.9	1543.4	1541.8	1541.2	1541.4	1541.7	1541.9	1542.2	1543.8
167.5°	1563.1	1561.5	1559.8	1558.2	1556.6	1555.9	1556.2	1556.4	1556.7	1557.0	1558.8
170°	1571.6	1569.7	1567.8	1566.0	1564.2	1563.5	1563.7	1564.0	1564.2	1564.5	1566.6
172.5°	1577.1	1575.3	1573.5	1571.7	1569.8	1569.1	1569.6	1570.1	1570.5	1571.0	1573.0
175°	1583.3	1581.7	1580.1	1578.5	1577.0	1576.3	1576.6	1576.9	1577.1	1577.4	1579.4
177.5°	1586.1	1584.8	1583.6	1582.4	1581.0	1580.5	1580.7	1580.9	1581.1	1581.3	1582.9
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3



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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°	173.4	181.7	190.1	195.5	198.1	200.7	203.3	205.9
90°	166.6	175.9	185.3	191.6	194.8	198.0	201.3	204.5
92.5°	161.0	170.1	179.2	185.1	187.9	190.7	193.5	196.3
95°	151.7	160.8	169.8	175.4	177.9	180.4	182.8	185.2
97.5°	164.8	164.8	164.8	165.9	168.3	170.8	173.1	175.5
100°	242.0	210.5	178.9	163.7	164.7	165.8	166.8	167.9
102.5°	355.7	355.4	355.2	347.2	331.5	315.9	300.2	284.6
105°	450.3	457.4	464.3	468.9	471.1	473.3	475.4	477.7
107.5°	535.7	542.7	549.7	553.8	555.2	556.6	558.1	559.4
110°	590.4	596.2	602.1	606.4	609.2	611.9	614.5	617.2



TEST NUMBER: P333334-840

CATALOG NUMBER: S125DIP-S1270D1205U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	644.5	649.8	655.2	658.9	661.1	663.2	665.2	667.3
115°	726.8	732.1	737.3	740.2	740.7	741.2	741.8	742.4
117.5°	805.5	810.1	814.7	817.8	819.5	821.2	822.9	824.7
120°	856.6	862.0	867.4	870.5	871.3	872.1	872.9	873.7
122.5°	904.5	909.6	914.7	917.7	918.3	918.8	919.4	920.0
125°	974.8	979.4	984.0	986.7	987.6	988.7	989.7	990.6
127.5°	1038.1	1042.7	1047.3	1049.7	1049.8	1049.9	1050.0	1050.1
130°	1080.4	1084.4	1088.5	1090.9	1091.3	1091.8	1092.2	1092.6
132.5°	1118.8	1123.5	1128.2	1130.7	1130.8	1131.0	1131.3	1131.4
135°	1174.4	1178.4	1182.3	1184.5	1184.7	1184.9	1185.1	1185.3
137.5°	1227.3	1231.5	1235.8	1237.9	1238.0	1238.0	1238.0	1238.1
140°	1259.5	1263.8	1268.2	1270.3	1270.1	1270.0	1269.8	1269.7
142.5°	1291.6	1295.1	1298.4	1300.0	1299.9	1299.7	1299.5	1299.4
145°	1338.5	1340.5	1342.5	1343.4	1343.2	1343.0	1342.9	1342.7
147.5°	1379.4	1380.3	1381.1	1380.9	1379.7	1378.5	1377.2	1375.9
150°	1405.9	1406.4	1406.9	1406.3	1404.6	1402.9	1401.1	1399.4
152.5°	1430.3	1430.9	1431.4	1430.7	1428.9	1427.1	1425.3	1423.5
155°	1463.9	1464.7	1465.5	1464.8	1462.8	1460.7	1458.5	1456.5
157.5°	1491.8	1492.6	1493.4	1492.8	1490.7	1488.6	1486.5	1484.4
160°	1509.0	1510.1	1511.2	1510.7	1508.5	1506.4	1504.4	1502.3
162.5°	1524.9	1526.4	1527.8	1527.4	1525.1	1522.8	1520.6	1518.2
165°	1545.3	1546.9	1548.4	1548.1	1546.1	1544.0	1541.9	1539.8
167.5°	1560.7	1562.6	1564.5	1564.3	1561.9	1559.5	1557.2	1554.9
170°	1568.6	1570.7	1572.9	1572.7	1570.3	1568.0	1565.7	1563.3
172.5°	1574.8	1576.7	1578.5	1578.3	1576.0	1573.7	1571.2	1568.9
175°	1581.5	1583.7	1585.7	1585.6	1583.3	1580.9	1578.5	1576.2
177.5°	1584.3	1585.8	1587.2	1587.1	1585.5	1583.8	1582.1	1580.4
180°	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3	1583.3

(END OF REPORT)