

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: P333336-840

Luminaire Tested: **S125DIP-S1270D1205U840-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333336-840
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-S1270D1205U840-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9342.1 lumens
Efficiency: N/A
Efficacy: 130.3 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

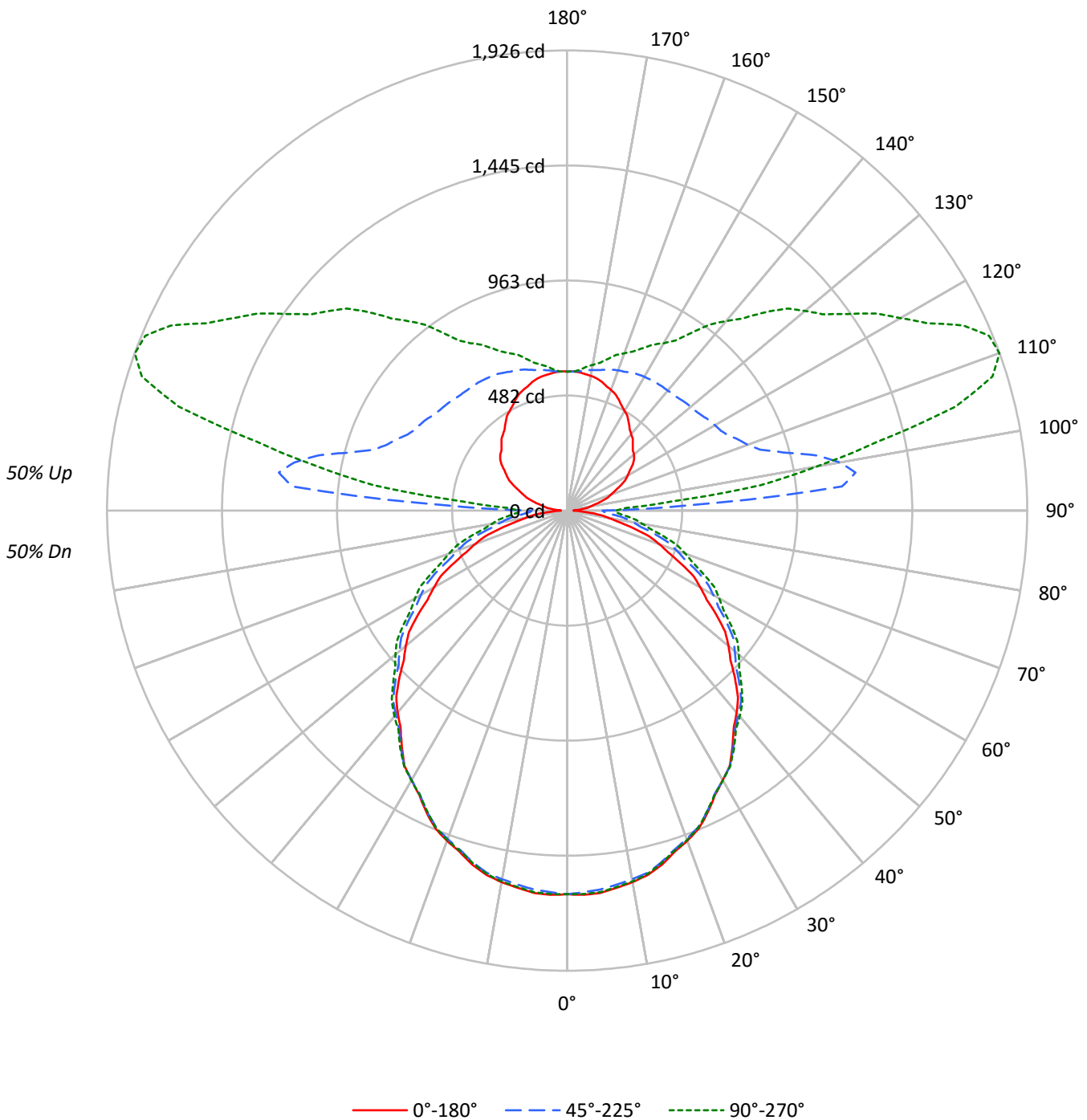
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	48	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	33
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	43	38	33	36	32	28	30	26	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	18	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	19	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	17	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	16	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	1.6
10°-20°	431.1	4.6
20°-30°	641.1	6.9
30°-40°	759.4	8.1
40°-50°	785.2	8.4
50°-60°	723.3	7.7
60°-70°	584.7	6.3
70°-80°	391.6	4.2
80°-90°	206.3	2.2
90°-100°	535.8	5.7
100°-110°	990.9	10.6
110°-120°	907.4	9.7
120°-130°	721.7	7.7
130°-140°	567.5	6.1
140°-150°	420.5	4.5
150°-160°	294.0	3.1
160°-170°	173.3	1.9
170°-180°	56.4	0.6
0°-30°	1224.1	13.1
0°-40°	1983.5	21.2
0°-60°	3491.9	37.4
0°-90°	4674.5	50.0
90°-120°	2434.1	26.1
90°-150°	4143.9	44.4
90°-180°	4668.0	50.0
0°-180°	9342.1	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	86	148	189	203	19
95°	59	176	1155	620	436	57
105°	147	226	937	1792	1684	155
115°	246	308	744	1561	1831	243
125°	335	392	691	1232	1434	297
135°	388	465	663	1014	1174	301
145°	450	513	652	820	908	282
155°	512	550	636	719	750	236
165°	559	574	610	647	657	157
175°	581	581	586	593	590	55
180°	582	582	582	582	582	



TEST NUMBER: P333336-840

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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	60.8	72.4	84.1	95.8	107.9	120.0	132.3	144.4	156.8	165.1
90°	26.4	38.8	52.3	65.8	79.4	93.2	106.3	120.6	133.6	147.8	157.1
92.5°	37.0	50.4	70.6	95.5	126.0	171.6	247.8	367.5	496.3	502.4	438.1
95°	59.2	69.5	88.0	110.0	144.8	208.1	345.6	615.7	951.4	1154.6	1140.0
97.5°	82.9	92.5	107.2	128.4	159.8	207.6	302.2	502.8	853.1	1217.4	1401.7
100°	99.5	109.2	121.2	141.5	171.1	215.6	294.8	458.6	765.5	1160.3	1461.1
102.5°	118.0	126.1	136.6	157.2	184.5	227.6	299.1	438.1	698.7	1066.1	1416.3
105°	146.7	152.4	163.8	181.2	205.5	246.4	308.6	423.5	630.0	937.4	1281.1
107.5°	174.9	182.0	192.4	206.8	231.1	268.0	328.1	427.6	597.4	847.4	1144.9
110°	195.2	201.8	210.7	225.4	247.2	284.8	342.6	433.4	585.2	803.9	1066.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	216.8	222.6	229.6	243.6	264.6	300.5	356.3	442.1	580.5	776.3	1006.5
115°	246.5	251.3	257.2	270.2	290.3	325.4	377.9	455.0	576.8	744.4	939.6
117.5°	273.1	278.2	283.6	295.7	317.3	350.8	400.5	471.0	577.5	724.8	896.3
120°	291.9	296.4	302.2	313.8	334.8	368.6	417.8	482.1	580.6	714.2	871.4
122.5°	310.3	313.4	317.6	328.7	350.9	384.5	433.2	494.5	582.4	704.4	849.2
125°	334.9	336.9	342.3	352.5	374.6	408.4	454.0	511.5	586.6	690.9	818.6
127.5°	352.7	356.0	363.0	376.1	399.5	432.6	475.7	528.0	593.1	681.0	789.8
130°	365.0	368.1	377.2	392.0	416.4	449.2	490.4	539.9	597.6	675.3	771.7
132.5°	373.0	377.5	388.7	405.8	431.2	463.6	503.7	549.4	602.2	670.2	755.4
135°	388.0	392.3	406.1	424.5	448.8	481.6	520.4	561.6	607.4	662.7	734.1
137.5°	407.0	410.2	423.0	441.5	465.4	498.6	532.8	571.1	613.6	658.4	716.1
140°	417.0	420.5	434.5	453.3	475.6	507.5	541.9	577.4	615.3	655.6	706.4
142.5°	430.1	432.4	445.2	463.7	484.8	514.5	546.7	580.2	615.9	654.0	698.6
145°	449.8	451.8	463.2	479.3	500.1	526.8	557.3	586.7	618.4	652.4	689.3
147.5°	468.9	470.3	480.4	495.6	513.9	537.7	564.4	591.0	619.6	649.3	681.0
150°	481.1	483.4	491.7	507.0	523.3	543.3	569.1	593.8	619.6	646.5	674.7
152.5°	494.2	495.6	502.9	516.3	531.8	549.9	573.8	595.6	618.6	642.8	668.1
155°	511.6	511.6	518.7	530.4	542.1	558.6	578.5	597.2	616.0	636.0	657.1
157.5°	527.1	526.8	532.5	542.6	552.9	565.3	582.5	598.4	613.0	628.9	646.8
160°	537.5	536.2	541.0	549.2	558.6	569.1	584.4	598.4	610.2	624.3	638.3
162.5°	545.8	544.7	549.4	556.6	564.2	572.9	586.2	597.5	607.3	618.6	630.9
165°	558.6	556.2	559.8	565.6	570.3	577.3	586.7	596.1	603.1	610.2	619.6
167.5°	567.0	565.8	567.9	571.2	574.5	579.0	586.7	593.3	596.5	602.0	608.5
170°	572.6	571.5	572.6	575.0	577.3	580.9	586.7	591.4	593.8	597.2	602.0
172.5°	576.4	574.3	575.4	577.7	579.2	580.9	585.7	589.6	590.0	591.7	595.4
175°	580.9	578.5	579.7	580.9	580.9	580.9	584.4	586.7	585.5	585.5	586.7
177.5°	583.0	581.1	581.1	582.0	581.1	581.1	583.0	583.9	582.0	582.0	583.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0



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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°	173.4	181.7	190.0	195.6	198.1	200.6	203.2	205.7
90°	166.3	175.5	184.8	192.4	194.8	197.2	200.9	203.3
92.5°	347.5	298.3	268.7	256.5	243.9	243.6	244.4	244.9
95°	974.0	803.3	666.7	573.2	492.4	459.6	452.7	436.4
97.5°	1378.3	1260.5	1127.3	995.1	924.9	861.6	830.0	817.4
100°	1558.7	1508.6	1395.1	1277.8	1198.9	1116.5	1075.2	1058.5
102.5°	1616.1	1658.6	1607.7	1529.6	1445.1	1387.2	1342.1	1330.1
105°	1569.7	1737.5	1796.1	1787.9	1752.8	1716.6	1695.6	1683.8
107.5°	1429.7	1651.1	1790.6	1856.4	1877.5	1879.6	1873.9	1866.7
110°	1326.5	1556.0	1728.1	1832.4	1887.6	1912.4	1923.1	1925.5



TEST NUMBER: P333336-840

CATALOG NUMBER: S125DIP-S1270D1205U840-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1243.9	1461.9	1635.6	1757.6	1837.2	1877.9	1900.9	1911.7
115°	1139.4	1327.7	1494.7	1626.8	1720.4	1778.9	1813.8	1831.2
117.5°	1068.7	1231.5	1375.9	1497.4	1591.3	1651.9	1686.9	1698.7
120°	1030.0	1176.7	1311.7	1419.1	1507.9	1566.4	1600.1	1611.6
122.5°	999.0	1135.2	1255.9	1356.3	1435.9	1489.7	1523.5	1534.0
125°	954.4	1079.7	1187.4	1275.6	1343.0	1392.9	1420.5	1434.0
127.5°	908.9	1025.7	1126.2	1208.9	1270.5	1315.0	1341.5	1348.7
130°	881.0	989.2	1085.6	1165.2	1225.7	1266.1	1291.3	1300.1
132.5°	852.5	954.1	1042.1	1118.7	1178.8	1219.0	1242.1	1251.5
135°	813.7	899.3	979.0	1048.9	1102.4	1142.8	1165.7	1174.5
137.5°	781.4	851.0	917.6	977.1	1024.8	1061.4	1082.3	1091.4
140°	763.1	822.0	879.8	931.7	976.5	1008.5	1027.4	1034.7
142.5°	747.2	797.2	846.9	892.0	930.2	957.5	975.5	981.8
145°	727.5	765.6	803.8	837.0	866.6	887.9	902.2	908.3
147.5°	710.1	740.2	768.7	793.2	816.2	832.7	840.9	843.6
150°	700.5	726.4	748.6	769.9	787.9	802.3	807.4	808.9
152.5°	691.2	714.2	734.6	751.0	765.9	777.2	781.9	783.3
155°	677.0	695.8	712.3	725.2	736.9	745.1	748.6	749.8
157.5°	663.0	678.4	691.2	701.3	710.3	717.2	720.4	720.2
160°	653.6	665.3	677.0	685.3	693.5	699.3	701.8	700.5
162.5°	643.3	654.1	663.9	671.2	677.5	682.5	683.0	682.7
165°	628.9	637.1	644.2	650.1	654.8	657.1	657.1	657.1
167.5°	615.3	620.8	626.1	630.4	632.7	634.8	633.9	633.7
170°	607.8	611.4	614.9	617.2	619.6	620.8	620.8	619.6
172.5°	599.4	602.9	605.5	606.9	607.3	609.5	607.6	606.4
175°	590.3	590.3	592.6	592.6	592.6	593.8	591.4	590.3
177.5°	583.9	584.8	584.8	584.8	583.9	584.8	582.0	582.0
180°	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0

(END OF REPORT)