

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: P333487-830

Luminaire Tested: **S125DIW-S1270D1560U830-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333487-830
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-S1270D1560U830-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9743.8 lumens
Efficiency: N/A
Efficacy: 117.5 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

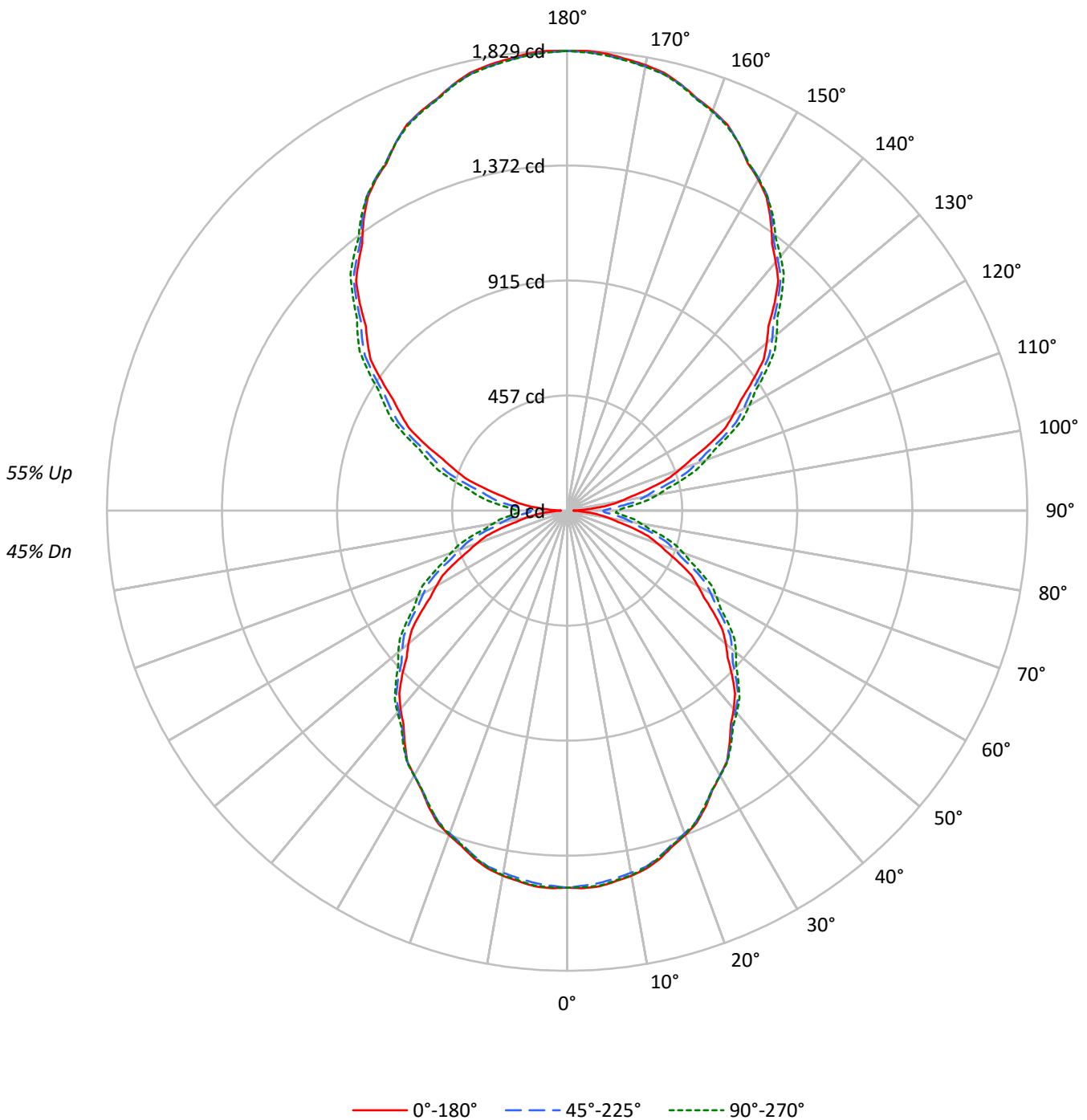
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	21	19	16
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9680	9680	9680
5°	9700	9502	9532
10°	9630	9332	9318
15°	9517	9129	9046
20°	9362	8878	8774
25°	9178	8609	8439
30°	8955	8314	8134
35°	8748	8042	7856
40°	8535	7756	7574
45°	8297	7510	7326
50°	8068	7245	7106
55°	7794	6995	6847
60°	7494	6708	6584
65°	7180	6410	6286
70°	6825	6000	5981
75°	6261	5606	5607
80°	5525	5130	5198
85°	4842	4811	5069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	1.5
10°-20°	402.4	4.1
20°-30°	598.4	6.1
30°-40°	708.8	7.3
40°-50°	732.8	7.5
50°-60°	675.1	6.9
60°-70°	545.7	5.6
70°-80°	365.5	3.8
80°-90°	193.5	2.0
90°-100°	228.7	2.3
100°-110°	439.7	4.5
110°-120°	664.5	6.8
120°-130°	835.2	8.6
130°-140°	915.4	9.4
140°-150°	887.1	9.1
150°-160°	742.9	7.6
160°-170°	493.8	5.1
170°-180°	172.8	1.8
0°-30°	1142.5	11.7
0°-40°	1851.2	19.0
0°-60°	3259.1	33.4
0°-90°	4363.8	44.8
90°-120°	1332.9	13.7
90°-150°	3970.5	40.7
90°-180°	5380.0	55.2
0°-180°	9743.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1499	1496	1486	1497	1496	142
15°	1431	1432	1422	1430	1425	403
25°	1300	1304	1296	1301	1295	598
35°	1126	1135	1132	1136	1136	704
45°	927	943	951	961	962	715
55°	713	736	760	775	782	637
65°	491	525	560	581	588	487
75°	270	309	356	384	392	287
85°	81	130	181	212	225	86
90°	25	83	143	183	199	21
95°	112	154	217	257	272	114
105°	337	369	421	457	473	360
115°	622	639	678	703	711	614
125°	900	908	938	958	964	805
135°	1166	1173	1184	1203	1205	898
145°	1410	1414	1419	1426	1428	881
155°	1612	1612	1613	1618	1612	742
165°	1753	1750	1751	1756	1748	494
175°	1822	1817	1817	1824	1815	173
180°	1827	1827	1827	1827	1827	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1502.4	1501.9	1501.4	1500.9	1500.3	1499.2	1497.3	1495.5	1493.7	1491.9	1493.7
5°	1498.9	1498.3	1497.6	1496.9	1496.3	1494.9	1492.5	1490.3	1488.0	1485.7	1488.3
7.5°	1485.7	1485.4	1485.2	1484.9	1484.7	1483.4	1481.0	1478.7	1476.3	1473.9	1476.2
10°	1473.9	1473.9	1473.9	1473.9	1473.9	1472.6	1470.0	1467.4	1464.8	1462.2	1464.4
12.5°	1457.5	1457.7	1458.0	1458.3	1458.5	1457.6	1455.6	1453.4	1451.3	1449.3	1451.0
15°	1431.3	1431.6	1432.0	1432.3	1432.7	1431.6	1429.4	1427.1	1424.8	1422.5	1424.5
17.5°	1397.2	1397.9	1398.5	1399.2	1399.9	1399.0	1396.8	1394.5	1392.1	1389.9	1391.4
20°	1372.5	1373.2	1373.9	1374.5	1375.2	1374.3	1372.1	1369.8	1367.4	1365.2	1366.2
22.5°	1344.3	1345.5	1346.7	1347.8	1349.1	1348.3	1345.8	1343.2	1340.7	1338.1	1339.4
25°	1300.5	1301.6	1302.5	1303.4	1304.5	1304.0	1302.0	1300.0	1298.1	1296.1	1297.4
27.5°	1251.8	1253.2	1254.6	1256.0	1257.5	1257.1	1254.9	1252.6	1250.5	1248.2	1249.2
30°	1215.3	1217.3	1219.2	1221.2	1223.1	1223.1	1221.2	1219.2	1217.3	1215.3	1216.0
32.5°	1182.4	1184.1	1185.8	1187.5	1189.2	1189.3	1187.9	1186.5	1185.0	1183.6	1184.2
35°	1125.7	1127.9	1130.2	1132.6	1134.8	1135.5	1134.4	1133.5	1132.6	1131.5	1132.6
37.5°	1068.9	1071.0	1073.1	1075.3	1077.3	1078.2	1077.9	1077.5	1077.2	1076.9	1078.2
40°	1030.1	1032.7	1035.4	1038.0	1040.6	1041.7	1041.4	1041.0	1040.8	1040.5	1041.7
42.5°	987.8	991.2	994.6	998.0	1001.5	1003.4	1004.2	1004.9	1005.6	1006.4	1007.9
45°	927.3	930.9	934.4	938.0	941.6	944.2	945.9	947.5	949.1	950.7	953.1
47.5°	865.3	868.6	871.9	875.2	878.5	881.7	884.5	887.3	890.0	892.9	896.3
50°	822.9	826.5	830.1	833.7	837.4	840.9	844.5	848.1	851.7	855.3	858.8
52.5°	778.3	782.7	787.0	791.4	795.8	800.1	804.6	808.9	813.2	817.7	821.5
55°	712.8	717.9	723.2	728.4	733.6	738.9	744.0	749.3	754.5	759.8	763.4
57.5°	645.7	652.0	658.3	664.5	670.8	676.9	683.0	688.9	694.9	701.0	705.1
60°	601.1	607.6	614.1	620.7	627.2	633.7	640.3	646.8	653.3	659.8	664.7
62.5°	557.5	564.1	570.6	577.1	583.6	590.5	597.5	604.5	611.6	618.7	624.1
65°	490.8	498.3	505.9	513.4	520.8	528.6	536.4	544.2	552.0	559.9	564.8
67.5°	427.9	435.2	442.4	449.7	456.9	464.6	472.5	480.5	488.4	496.4	502.4
70°	382.1	389.6	397.1	404.6	412.1	420.1	428.6	437.2	445.6	454.1	460.3
72.5°	337.4	345.2	353.0	360.7	368.5	377.0	386.3	395.6	404.8	414.2	420.8
75°	270.4	278.9	287.4	295.9	304.3	313.9	324.2	334.7	345.2	355.6	362.1
77.5°	206.0	215.8	225.6	235.4	245.2	255.1	265.2	275.2	285.3	295.4	302.6
80°	166.1	175.9	185.7	195.5	205.3	215.7	226.8	237.9	249.0	260.1	267.3
82.5°	129.6	140.0	150.2	160.6	170.9	181.7	193.1	204.4	215.8	227.2	234.1
85°	80.9	91.6	102.4	113.2	123.9	135.1	146.5	157.9	169.3	180.8	187.9
87.5°	46.1	57.1	68.1	79.0	89.9	101.2	112.7	124.3	135.8	147.4	155.2
90°	25.0	37.9	50.9	63.9	76.8	90.0	103.3	116.6	130.0	143.3	152.3
92.5°	55.5	67.0	78.4	89.8	101.3	114.0	128.2	142.2	156.3	170.4	179.7
95°	111.5	120.6	129.8	138.8	148.0	159.7	173.9	188.2	202.5	216.7	226.1
97.5°	170.9	178.8	186.6	194.5	202.5	214.0	229.0	244.0	259.1	274.2	283.1
100°	215.2	222.1	228.8	235.7	242.6	253.4	267.9	282.4	297.0	311.5	321.2
102.5°	262.9	270.5	278.1	285.7	293.3	303.2	315.5	327.8	340.1	352.3	362.0
105°	337.3	344.1	350.9	357.8	364.6	373.8	385.5	397.2	408.9	420.6	429.0
107.5°	419.7	425.7	431.8	437.8	443.8	452.2	463.1	474.0	484.8	495.7	503.1
110°	476.5	482.0	487.6	493.0	498.5	506.3	516.4	526.5	536.6	546.7	553.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	535.6	539.6	543.6	547.5	551.5	558.6	568.6	578.7	588.8	598.9	605.2
115°	621.5	625.0	628.6	632.2	635.7	642.1	651.1	660.3	669.4	678.5	684.1
117.5°	707.6	709.6	711.7	713.8	715.9	721.2	729.8	738.4	747.0	755.6	761.4
120°	762.1	764.7	767.3	769.9	772.4	777.6	785.4	793.2	801.1	808.9	814.5
122.5°	820.1	821.1	822.2	823.2	824.3	828.8	836.9	844.9	853.0	861.1	866.1
125°	900.0	901.5	903.1	904.7	906.3	910.5	917.4	924.2	931.0	937.9	942.4
127.5°	983.8	984.6	985.3	986.1	986.8	990.0	995.8	1001.5	1007.3	1013.0	1017.5
130°	1035.0	1036.2	1037.6	1038.8	1040.0	1043.2	1048.5	1053.7	1058.9	1064.0	1068.3
132.5°	1085.0	1087.5	1090.1	1092.6	1095.1	1098.1	1101.5	1104.8	1108.2	1111.6	1115.9
135°	1165.7	1167.3	1168.8	1170.4	1172.1	1174.1	1176.7	1179.3	1181.9	1184.5	1188.7
137.5°	1241.6	1243.2	1244.8	1246.3	1247.9	1249.6	1251.4	1253.2	1255.0	1256.8	1261.0
140°	1289.4	1290.9	1292.5	1294.1	1295.7	1297.1	1298.4	1299.7	1300.9	1302.2	1306.5
142.5°	1338.2	1339.4	1340.4	1341.4	1342.6	1343.7	1344.9	1346.2	1347.5	1348.8	1352.2
145°	1410.1	1411.1	1412.0	1413.0	1413.9	1414.9	1415.8	1416.7	1417.7	1418.6	1420.3
147.5°	1475.3	1475.9	1476.6	1477.3	1478.0	1478.8	1479.5	1480.3	1481.0	1481.8	1483.1
150°	1519.6	1519.3	1519.0	1518.6	1518.3	1518.8	1520.0	1521.4	1522.6	1523.9	1523.9
152.5°	1555.9	1556.4	1556.9	1557.3	1557.7	1558.2	1558.8	1559.2	1559.7	1560.3	1561.0
155°	1612.0	1612.0	1612.0	1612.0	1612.0	1612.1	1612.5	1612.8	1613.1	1613.4	1614.7
157.5°	1662.0	1661.3	1660.7	1659.9	1659.3	1659.1	1659.3	1659.7	1660.0	1660.3	1661.6
160°	1691.6	1690.6	1689.7	1688.8	1687.8	1687.5	1687.8	1688.1	1688.5	1688.8	1690.0
162.5°	1717.8	1717.0	1716.4	1715.7	1715.0	1714.7	1714.7	1714.8	1714.9	1714.9	1716.5
165°	1752.8	1752.1	1751.4	1750.9	1750.2	1750.0	1750.4	1750.7	1751.0	1751.3	1752.6
167.5°	1782.3	1781.0	1779.8	1778.5	1777.3	1776.6	1776.6	1776.6	1776.6	1776.6	1778.5
170°	1798.2	1797.0	1795.6	1794.4	1793.2	1792.5	1792.5	1792.5	1792.5	1792.5	1794.4
172.5°	1809.6	1808.4	1807.0	1805.8	1804.5	1803.9	1803.9	1803.9	1803.9	1803.9	1805.8
175°	1822.4	1821.1	1819.9	1818.5	1817.3	1816.7	1816.7	1816.7	1816.7	1816.7	1818.5
177.5°	1828.9	1827.9	1826.9	1825.9	1824.9	1824.2	1824.0	1823.7	1823.4	1823.3	1824.8
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1495.5	1497.3	1499.2	1500.0	1499.7	1499.5	1499.2	1498.9
5°	1490.9	1493.6	1496.2	1497.3	1496.9	1496.7	1496.3	1496.0
7.5°	1478.5	1480.8	1483.1	1484.0	1483.8	1483.4	1483.1	1482.7
10°	1466.8	1469.0	1471.3	1472.3	1472.0	1471.7	1471.3	1471.0
12.5°	1452.7	1454.5	1456.3	1456.8	1455.9	1455.1	1454.2	1453.4
15°	1426.4	1428.4	1430.3	1430.7	1429.4	1428.0	1426.7	1425.4
17.5°	1392.9	1394.4	1395.9	1396.3	1395.4	1394.7	1393.9	1393.1
20°	1367.2	1368.1	1369.1	1369.6	1369.6	1369.6	1369.6	1369.6
22.5°	1340.7	1341.9	1343.1	1343.3	1342.6	1341.8	1341.0	1340.2
25°	1298.7	1300.0	1301.4	1301.2	1299.6	1297.9	1296.3	1294.7
27.5°	1250.1	1250.9	1251.9	1252.1	1251.4	1250.8	1250.3	1249.7
30°	1216.6	1217.3	1218.0	1218.0	1217.8	1217.4	1217.1	1216.7
32.5°	1184.9	1185.5	1186.2	1186.4	1186.0	1185.7	1185.3	1185.1
35°	1133.5	1134.4	1135.5	1136.0	1136.0	1136.0	1136.0	1136.0
37.5°	1079.5	1080.8	1082.1	1082.7	1082.5	1082.4	1082.3	1082.1
40°	1043.0	1044.3	1045.7	1046.6	1047.3	1047.9	1048.6	1049.2
42.5°	1009.5	1011.1	1012.6	1013.4	1013.6	1013.7	1013.9	1014.0
45°	955.4	957.6	959.9	961.2	961.6	961.9	962.2	962.5
47.5°	899.6	902.9	906.3	908.2	909.0	909.6	910.4	911.2
50°	862.4	866.0	869.7	871.9	872.9	873.9	874.9	875.8
52.5°	825.4	829.2	833.0	835.4	836.0	836.8	837.5	838.2
55°	766.9	770.5	774.1	776.6	777.9	779.2	780.5	781.8
57.5°	709.2	713.3	717.5	720.0	721.0	721.9	722.9	723.9
60°	669.6	674.5	679.4	682.3	683.3	684.3	685.3	686.3
62.5°	629.5	634.9	640.4	643.7	644.9	646.2	647.4	648.7
65°	569.7	574.6	579.5	582.6	583.9	585.2	586.5	587.8
67.5°	508.3	514.3	520.2	524.0	525.7	527.4	529.1	530.8
70°	466.5	472.7	478.9	483.0	484.9	486.9	488.9	490.8
72.5°	427.5	434.3	441.0	445.1	446.6	448.0	449.4	450.8
75°	368.7	375.2	381.7	385.9	387.5	389.1	390.8	392.4
77.5°	309.7	316.9	324.1	328.4	329.7	330.9	332.2	333.6
80°	274.5	281.6	288.9	293.1	294.4	295.7	297.0	298.3
82.5°	241.0	248.0	254.9	259.5	261.8	264.2	266.6	268.9
85°	195.1	202.3	209.5	214.4	217.0	219.6	222.3	224.8
87.5°	163.1	170.9	178.7	183.9	186.3	188.8	191.2	193.8
90°	161.5	170.5	179.6	185.8	189.0	192.3	195.5	198.7
92.5°	189.1	198.4	207.7	213.9	216.9	219.8	222.8	225.8
95°	235.5	244.9	254.3	260.4	263.3	266.3	269.2	272.1
97.5°	292.1	301.0	310.0	315.8	318.4	320.9	323.6	326.1
100°	330.9	340.6	350.3	356.5	359.1	361.7	364.3	366.8
102.5°	371.7	381.4	391.1	397.4	400.2	403.0	405.9	408.8
105°	437.4	445.8	454.3	460.1	463.4	466.6	469.8	473.1
107.5°	510.5	517.9	525.4	530.0	532.0	534.0	535.9	537.9
110°	561.0	568.2	575.3	579.9	581.8	583.8	585.8	587.8



TEST NUMBER: P333487-830

CATALOG NUMBER: S125DIW-S1270D1560U830-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	611.6	618.0	624.4	628.5	630.2	631.9	633.6	635.3
115°	689.7	695.2	700.8	704.4	706.0	707.7	709.3	711.0
117.5°	767.2	773.0	778.8	782.2	783.2	784.1	785.0	786.1
120°	820.0	825.6	831.1	834.2	834.9	835.7	836.3	837.0
122.5°	871.1	876.2	881.2	884.2	885.1	886.1	887.0	888.0
125°	947.1	951.7	956.2	959.2	960.5	961.9	963.2	964.5
127.5°	1022.0	1026.5	1031.0	1034.0	1035.2	1036.5	1037.7	1039.0
130°	1072.6	1076.9	1081.1	1083.7	1084.7	1085.7	1086.8	1087.7
132.5°	1120.2	1124.5	1128.7	1131.1	1131.5	1132.0	1132.6	1133.0
135°	1193.0	1197.2	1201.5	1203.8	1204.2	1204.6	1204.9	1205.2
137.5°	1265.3	1269.5	1273.8	1275.7	1275.4	1275.2	1274.9	1274.6
140°	1310.6	1314.8	1319.1	1321.1	1320.8	1320.5	1320.2	1319.9
142.5°	1355.7	1359.1	1362.5	1364.1	1363.9	1363.6	1363.3	1363.0
145°	1421.9	1423.5	1425.2	1426.2	1426.5	1426.9	1427.3	1427.7
147.5°	1484.3	1485.6	1486.9	1486.8	1485.2	1483.7	1482.1	1480.5
150°	1523.9	1523.9	1523.9	1523.7	1523.4	1523.1	1522.8	1522.5
152.5°	1561.8	1562.5	1563.3	1563.1	1562.1	1560.9	1559.9	1558.9
155°	1615.9	1617.2	1618.4	1618.3	1616.7	1615.1	1613.5	1612.0
157.5°	1662.8	1664.2	1665.4	1665.0	1662.8	1660.8	1658.7	1656.6
160°	1691.3	1692.5	1693.8	1693.7	1692.1	1690.5	1688.9	1687.3
162.5°	1718.0	1719.5	1721.0	1720.8	1719.0	1717.1	1715.3	1713.4
165°	1753.8	1755.1	1756.3	1756.1	1754.2	1752.3	1750.4	1748.4
167.5°	1780.4	1782.3	1784.1	1784.1	1782.2	1780.3	1778.3	1776.3
170°	1796.3	1798.2	1800.1	1800.0	1797.7	1795.5	1793.3	1791.1
172.5°	1807.7	1809.6	1811.5	1811.5	1809.5	1807.5	1805.5	1803.6
175°	1820.5	1822.4	1824.3	1824.1	1821.9	1819.7	1817.5	1815.2
177.5°	1826.3	1827.8	1829.3	1829.2	1827.4	1825.6	1823.8	1822.1
180°	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6	1826.6

(END OF REPORT)