

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1037542

Luminaire Tested: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-30)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K
Description: Define 3 Regressed Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

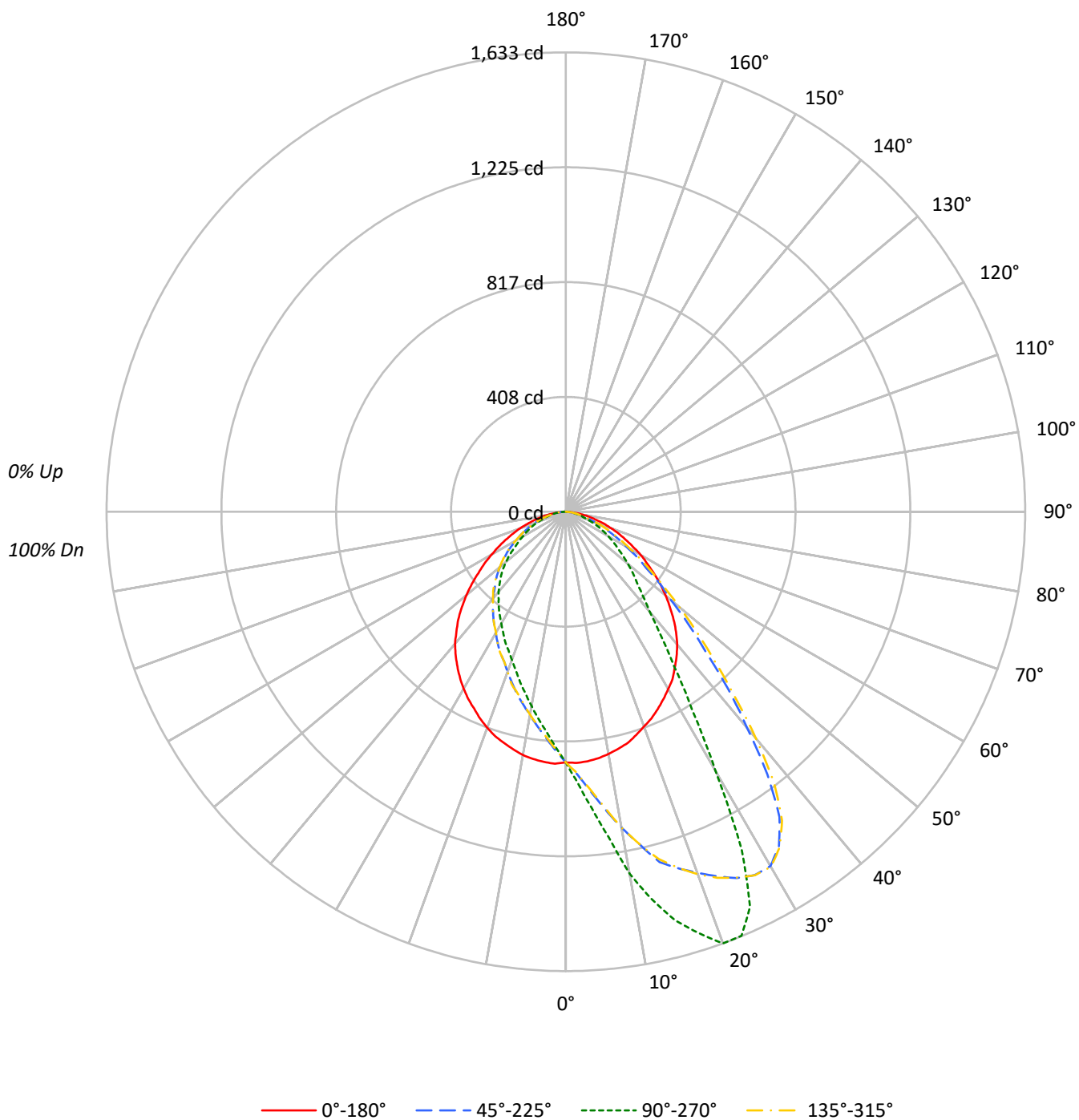
Lumens per Lamp: N/A
Luminaire Lumens: 2219.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V):
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: 24 FT

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	110	106	102	99	108	104	100	97	100	97	94		96	93	91		92	90	89		87
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83	79	77		74
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		74	70	66		64
4	86	75	67	61	84	74	66	61	71	65	60		69	64	59		67	62	58		56
5	80	68	60	53	78	67	59	53	65	58	53		63	57	52		61	56	52		50
6	74	62	53	47	72	61	53	47	59	52	47		57	51	46		56	50	46		44
7	69	56	48	42	67	55	48	42	54	47	42		53	46	42		51	46	41		39
8	64	52	44	38	63	51	43	38	50	43	38		48	42	38		47	42	37		36
9	60	48	40	35	59	47	40	35	46	39	34		45	39	34		44	38	34		32
10	57	44	37	32	55	44	36	32	43	36	31		42	36	31		41	35	31		29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9592	9592	9592	9592
5°	9621	11434	9646	8483
10°	9557	14277	9599	7664
15°	9480	16758	9480	6989
20°	9308	18702	9360	6415
25°	9188	18404	9170	6062
30°	9047	13228	9027	5699
35°	8872	8833	8833	5464
40°	8651	6507	8609	5221
45°	8246	5459	8234	4982
50°	7743	4816	7716	4650
55°	7172	4224	7116	4194
60°	6620	3761	6553	3843
65°	5965	3303	6006	3576
70°	5378	2593	5523	3267
75°	4666	2283	4853	2982
80°	3880	1984	4209	2932
85°	3112	1606	3396	3112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 15644 cd/sqm

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.5	3.9
10°-20°	274.0	12.3
20°-30°	431.5	19.4
30°-40°	448.7	20.2
40°-50°	383.8	17.3
50°-60°	292.6	13.2
60°-70°	187.5	8.4
70°-80°	89.8	4.0
80°-90°	23.6	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	792.9	35.7
0°-40°	1241.6	56.0
0°-60°	1918.1	86.4
0°-90°	2219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2219.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	891	891	891	891	891	
5°	890	1058	893	785	890	84
15°	851	1504	851	627	851	239
25°	774	1550	772	510	774	356
35°	675	672	672	416	675	423
45°	542	359	541	327	542	417
55°	382	225	379	224	382	343
65°	234	130	236	140	234	234
75°	112	55	117	72	112	121
85°	25	13	28	25	25	29
90°	0	0	0	0	0	

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	893.4	899.5	904.1	907.2	914.8	919.4	923.2	930.1	930.1	931.6	934.6
5°	890.4	903.4	912.5	924.7	940.7	948.4	959.0	968.2	981.2	988.0	994.9
7.5°	883.5	901.8	920.9	939.2	962.9	978.1	988.8	1012.5	1029.2	1049.8	1065.9
10°	874.4	899.5	924.0	952.2	984.2	1007.1	1023.1	1054.4	1086.5	1115.5	1139.9
12.5°	862.9	893.4	928.5	962.9	1007.9	1030.8	1056.7	1095.6	1141.4	1178.0	1210.8
15°	850.7	885.8	925.5	967.4	1023.9	1055.9	1093.3	1140.6	1191.8	1244.4	1289.4
17.5°	831.6	875.9	920.1	981.2	1047.6	1066.6	1098.7	1163.5	1226.9	1274.2	1329.1
20°	812.6	862.2	917.8	972.8	1044.5	1088.8	1118.5	1187.2	1255.1	1312.3	1364.9
22.5°	795.0	846.9	904.9	974.3	1041.4	1085.7	1123.1	1194.8	1273.4	1337.5	1402.3
25°	773.6	830.1	894.2	959.8	1041.4	1075.0	1116.2	1199.4	1282.5	1356.6	1436.7
27.5°	750.8	808.0	871.3	938.4	1013.2	1062.8	1103.2	1192.5	1294.0	1373.3	1455.7
30°	727.9	786.6	847.7	907.9	991.9	1039.2	1085.7	1184.1	1300.1	1390.9	1454.2
32.5°	705.7	755.3	815.6	874.4	957.5	1009.4	1062.0	1175.7	1302.4	1378.7	1409.2
35°	675.2	727.1	775.9	838.5	922.4	973.5	1035.3	1175.0	1292.5	1339.8	1324.5
37.5°	647.0	690.5	737.0	792.7	878.9	945.3	1009.4	1155.1	1259.7	1262.7	1176.5
40°	615.7	651.6	690.5	749.2	842.3	907.9	977.4	1124.6	1200.1	1155.1	1003.3
42.5°	579.9	611.9	642.4	699.6	801.1	874.4	949.1	1086.5	1113.9	1010.2	852.2
45°	541.7	567.6	595.9	656.2	757.6	830.1	904.9	1027.7	999.5	853.0	702.7
47.5°	502.0	524.2	551.6	606.6	711.1	785.1	856.0	943.8	872.1	714.9	589.0
50°	462.4	479.9	506.6	563.1	663.8	730.9	796.5	853.8	753.0	613.4	486.8
52.5°	423.4	437.2	464.6	512.7	610.4	674.5	721.8	743.9	641.7	506.6	422.7
55°	382.2	397.5	415.8	464.6	561.5	608.8	640.1	639.4	534.1	429.6	349.4
57.5°	342.6	356.3	372.3	421.2	499.7	531.8	558.5	545.5	445.6	351.7	299.8
60°	307.5	315.1	332.7	373.9	433.4	460.8	476.1	454.0	363.9	296.8	248.0
62.5°	269.3	277.0	291.5	330.4	367.0	381.5	394.5	366.2	300.6	241.9	212.1
65°	234.2	244.1	253.3	284.6	304.4	322.0	320.4	296.8	235.0	196.8	172.4
67.5°	203.7	207.5	215.2	234.2	243.4	256.4	257.1	230.4	189.2	160.2	145.7
70°	170.9	174.7	180.1	189.2	195.3	198.4	196.8	173.2	142.7	125.1	112.2
72.5°	142.7	141.9	145.7	145.7	151.8	151.1	146.5	128.2	108.3	93.8	86.2
75°	112.2	112.9	113.7	112.2	109.9	106.8	103.0	89.3	76.3	69.4	62.6
77.5°	87.7	86.2	87.0	81.6	78.6	75.5	70.2	63.3	52.6	51.1	48.1
80°	62.6	61.8	61.0	58.7	51.9	48.8	45.0	41.2	38.9	37.4	36.6
82.5°	42.0	42.0	40.4	35.9	32.0	29.8	29.0	27.5	25.2	25.2	24.4
85°	25.2	24.4	22.9	18.3	16.0	16.0	16.0	16.0	14.5	14.5	13.7
87.5°	9.9	9.2	6.9	6.9	6.1	6.1	6.1	5.3	5.3	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	940.7	940.7	947.6	954.5	950.7	952.9	961.3	958.3	964.4	963.6	965.9
5°	1011.7	1020.1	1027.0	1041.4	1043.7	1041.4	1055.9	1059.8	1066.6	1058.2	1062.0
7.5°	1091.8	1109.4	1126.1	1147.5	1154.4	1155.9	1163.5	1174.2	1183.4	1166.6	1175.0
10°	1169.6	1196.3	1230.7	1249.7	1266.5	1272.6	1278.7	1285.6	1296.3	1306.2	1298.6
12.5°	1253.6	1292.5	1325.3	1359.6	1380.2	1377.9	1395.5	1400.0	1408.4	1410.7	1413.8
15°	1322.2	1377.2	1397.8	1448.9	1453.5	1468.7	1488.5	1506.1	1508.4	1503.8	1503.8
17.5°	1387.8	1435.1	1471.8	1513.0	1521.4	1534.3	1559.5	1567.9	1570.9	1570.2	1570.2
20°	1441.2	1472.5	1534.3	1568.7	1582.4	1599.2	1616.7	1627.4	1629.7	1632.7	1628.2
22.5°	1476.3	1523.6	1574.0	1602.2	1613.7	1619.8	1631.2	1634.3	1630.5	1631.2	1632.0
25°	1503.8	1550.3	1580.9	1588.5	1587.7	1580.1	1571.7	1557.2	1555.7	1549.6	1537.4
27.5°	1511.4	1529.0	1525.2	1493.9	1462.6	1459.6	1409.2	1381.7	1350.5	1355.0	1337.5
30°	1470.2	1447.3	1393.2	1313.8	1281.0	1227.6	1171.2	1112.4	1089.5	1064.3	1110.9
32.5°	1369.5	1287.9	1191.8	1088.8	1033.8	986.5	926.2	883.5	859.1	838.5	878.2
35°	1217.7	1090.3	962.9	865.2	820.2	777.5	721.0	699.6	669.1	672.2	676.0
37.5°	1022.4	882.0	785.9	689.7	660.0	642.4	601.2	568.4	557.7	554.7	554.7
40°	839.3	724.1	638.6	563.1	540.2	525.7	492.9	477.6	466.2	463.1	466.9
42.5°	694.3	595.9	529.5	479.1	463.1	444.8	431.1	412.0	409.7	404.4	411.2
45°	582.9	497.5	447.9	411.2	397.5	390.6	375.4	363.9	359.4	358.6	363.9
47.5°	494.4	428.0	384.5	361.6	351.0	344.1	331.1	326.5	322.0	323.5	321.2
50°	415.1	365.5	337.2	316.6	309.8	302.9	294.5	289.9	287.6	287.6	286.9
52.5°	356.3	315.1	296.8	277.7	274.7	270.9	261.7	258.6	254.8	254.1	257.1
55°	305.2	277.0	258.6	247.2	244.1	236.5	232.7	228.9	226.6	225.1	225.8
57.5°	260.9	239.6	227.4	217.4	212.1	209.1	202.2	201.4	199.9	199.9	199.1
60°	224.3	209.1	194.6	188.5	184.6	180.8	180.1	175.5	173.2	174.7	174.0
62.5°	190.0	177.8	169.4	162.5	160.2	157.2	154.9	153.4	151.1	151.8	151.8
65°	158.7	148.8	142.7	136.6	135.8	132.8	132.0	130.5	130.5	129.7	131.2
67.5°	130.5	123.6	118.3	114.4	112.2	112.9	109.9	107.6	107.6	106.8	109.1
70°	103.8	99.9	94.6	90.0	87.0	87.0	83.2	82.4	82.4	82.4	81.6
72.5°	80.1	73.2	71.0	69.4	69.4	69.4	67.9	67.9	67.1	67.9	67.1
75°	59.5	58.7	57.2	56.5	56.5	55.7	54.9	54.9	54.9	54.9	54.9
77.5°	46.5	46.5	45.0	44.3	44.3	44.3	43.5	43.5	42.7	42.7	42.7
80°	34.3	34.3	32.8	32.8	32.8	32.0	32.0	32.0	32.8	32.0	32.0
82.5°	23.7	23.7	22.9	23.7	22.9	22.1	22.1	22.1	21.4	22.1	22.1
85°	13.7	13.7	13.0	12.2	13.0	13.0	12.2	13.0	12.2	13.0	12.2
87.5°	5.3	4.6	4.6	4.6	3.8	4.6	3.8	3.8	4.6	3.8	4.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	962.1	957.5	954.5	952.2	949.9	956.8	947.6	937.7	930.8	926.2	924.7
5°	1062.8	1052.9	1044.5	1037.6	1039.2	1039.2	1023.1	1005.6	990.3	981.9	972.8
7.5°	1179.5	1168.9	1152.1	1148.3	1145.2	1126.1	1110.1	1078.1	1059.0	1039.9	1023.1
10°	1295.5	1281.8	1265.8	1260.4	1252.8	1229.1	1204.7	1163.5	1139.9	1104.8	1082.6
12.5°	1403.9	1387.1	1371.1	1367.2	1355.8	1335.2	1293.2	1250.5	1210.1	1172.7	1133.8
15°	1494.7	1490.1	1465.7	1450.4	1425.2	1397.0	1387.8	1329.9	1278.7	1239.8	1169.6
17.5°	1570.9	1549.6	1526.7	1516.8	1506.9	1474.1	1441.2	1381.7	1326.8	1269.6	1224.6
20°	1632.0	1608.3	1592.3	1577.8	1573.2	1535.9	1484.0	1431.3	1371.1	1307.0	1248.2
22.5°	1635.0	1632.0	1621.3	1612.9	1603.8	1579.3	1538.1	1472.5	1408.4	1338.2	1261.2
25°	1571.7	1567.1	1597.7	1590.0	1596.1	1587.0	1564.8	1509.9	1435.1	1352.7	1274.9
27.5°	1381.0	1427.5	1475.6	1492.4	1503.8	1536.6	1547.3	1516.8	1456.5	1368.8	1281.8
30°	1121.6	1183.4	1261.2	1303.1	1335.2	1396.2	1475.6	1485.5	1457.3	1387.1	1280.3
32.5°	880.5	936.9	999.5	1049.1	1091.8	1216.9	1323.7	1400.8	1414.5	1377.9	1284.1
35°	709.6	734.0	793.5	840.8	898.8	1005.6	1131.5	1255.8	1339.8	1344.3	1272.6
37.5°	585.2	598.2	650.0	676.8	711.1	804.9	922.4	1084.9	1215.4	1277.2	1240.6
40°	484.5	514.2	544.0	559.3	583.7	648.5	761.4	888.9	1050.6	1165.0	1191.0
42.5°	420.4	433.4	452.4	473.8	489.1	545.5	621.1	737.8	883.5	1043.0	1114.7
45°	370.8	375.4	395.2	409.0	425.0	464.6	518.1	615.7	743.9	901.1	1023.1
47.5°	329.6	338.8	349.4	357.8	368.5	399.0	444.8	515.8	628.7	769.1	900.3
50°	293.0	298.3	312.1	315.9	323.5	344.9	380.0	434.1	527.2	639.4	775.2
52.5°	258.6	268.6	273.9	279.2	286.1	303.7	326.5	370.8	441.0	546.3	661.5
55°	231.9	235.0	242.6	247.2	252.5	264.7	284.6	317.4	372.3	456.3	565.4
57.5°	206.0	206.0	213.6	217.4	222.8	231.9	249.5	274.7	314.3	376.9	476.9
60°	178.5	179.3	185.4	190.0	191.5	200.7	215.2	235.0	265.5	311.3	392.9
62.5°	154.1	157.9	161.0	162.5	167.9	173.2	185.4	199.1	220.5	260.9	318.9
65°	133.5	134.3	136.6	138.1	140.4	146.5	155.6	164.8	183.1	212.9	260.2
67.5°	109.9	112.9	116.0	116.0	118.3	121.3	130.5	138.1	151.8	169.4	201.4
70°	82.4	83.9	88.5	90.8	93.8	99.2	103.8	108.3	119.0	132.0	156.4
72.5°	68.7	68.7	70.2	71.0	71.0	74.8	81.6	86.2	91.6	100.7	117.5
75°	54.9	54.9	57.2	56.5	58.0	59.5	60.3	63.3	66.4	73.2	83.2
77.5°	43.5	44.3	44.3	45.0	45.0	45.8	46.5	48.1	49.6	53.4	58.0
80°	32.0	32.8	32.8	33.6	33.6	34.3	35.1	35.9	37.4	38.9	41.2
82.5°	22.1	22.9	22.9	23.7	22.9	23.7	24.4	24.4	25.2	26.7	27.5
85°	13.0	13.0	13.7	13.0	13.0	13.0	13.7	13.7	14.5	16.8	16.8
87.5°	3.8	4.6	3.8	4.6	4.6	4.6	4.6	5.3	5.3	6.1	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	922.4	918.6	914.8	914.8	906.4	898.8	895.0	896.5	891.9	885.8	879.7
5°	962.9	947.6	944.6	936.2	924.7	908.7	900.3	892.7	883.5	871.3	859.9
7.5°	1000.2	980.4	969.7	961.3	939.2	917.1	898.8	886.6	870.5	852.2	838.5
10°	1049.1	1012.5	1001.0	981.9	950.7	919.4	898.0	878.2	856.0	834.7	816.4
12.5°	1088.0	1046.0	1024.7	1005.6	965.2	925.5	889.6	865.2	838.5	814.8	791.2
15°	1132.2	1084.9	1047.6	1024.7	973.5	925.5	885.0	850.7	821.0	792.0	771.4
17.5°	1153.6	1094.1	1077.3	1044.5	970.5	922.4	872.8	836.2	800.4	766.8	742.4
20°	1187.2	1117.7	1075.8	1053.7	988.0	917.1	859.1	817.1	779.8	743.9	718.0
22.5°	1189.5	1113.9	1086.5	1044.5	963.6	901.1	846.9	795.8	752.3	718.7	692.0
25°	1184.1	1107.1	1068.9	1035.3	968.2	891.9	822.5	772.1	729.4	690.5	659.2
27.5°	1181.8	1087.2	1051.4	1017.8	942.3	865.2	808.0	750.8	701.9	667.6	635.6
30°	1178.8	1065.9	1022.4	983.5	914.0	844.6	775.9	726.3	679.8	636.3	604.3
32.5°	1158.9	1036.9	992.6	951.4	876.6	807.2	753.0	700.4	650.0	609.6	580.6
35°	1152.8	1010.2	952.2	907.9	834.7	772.9	715.7	672.2	624.9	584.4	550.1
37.5°	1135.3	982.7	920.1	863.7	787.4	728.6	686.7	643.2	597.4	553.9	526.4
40°	1104.8	950.7	879.7	821.7	743.1	683.6	644.7	612.7	567.6	528.7	495.2
42.5°	1059.8	917.8	841.6	780.5	693.5	637.8	605.8	575.3	537.1	496.7	469.2
45°	1007.9	874.4	803.4	735.5	647.0	592.8	559.3	540.9	505.8	471.5	439.5
47.5°	936.9	829.3	759.2	689.0	598.9	546.3	519.6	501.3	476.9	439.5	413.5
50°	847.7	771.4	705.0	642.4	551.6	501.3	474.6	460.8	440.2	413.5	388.3
52.5°	748.5	704.2	649.3	591.3	503.6	456.3	431.8	421.2	405.9	380.7	359.4
55°	648.5	629.4	592.1	534.8	453.2	414.3	392.9	379.2	367.7	349.4	331.1
57.5°	559.3	550.1	524.2	479.9	411.2	370.8	352.5	343.3	334.2	320.4	302.1
60°	466.9	476.9	450.2	428.0	365.5	330.4	314.3	304.4	299.8	287.6	276.2
62.5°	386.8	396.0	380.7	363.9	319.7	288.4	278.5	269.3	266.3	255.6	244.1
65°	314.3	325.8	314.3	305.2	278.5	252.5	240.3	235.8	232.7	225.8	216.7
67.5°	250.3	261.7	256.4	244.9	236.5	215.2	208.3	203.7	202.2	196.8	189.2
70°	188.5	204.5	206.0	199.1	191.5	181.6	177.0	175.5	171.7	167.1	162.5
72.5°	135.8	154.1	154.9	154.9	150.3	150.3	145.7	143.4	143.4	138.9	133.5
75°	99.9	112.2	113.7	115.2	117.5	119.8	116.7	116.7	116.0	111.4	109.1
77.5°	66.4	77.1	80.9	86.2	89.3	89.3	90.8	92.3	90.8	88.5	87.0
80°	42.7	50.4	54.9	58.0	62.6	64.9	67.1	67.9	66.4	65.6	63.3
82.5°	28.2	30.5	32.8	36.6	42.0	45.8	45.8	45.0	46.5	45.8	45.0
85°	16.0	17.5	18.3	19.1	22.1	25.9	26.7	27.5	29.0	27.5	25.9
87.5°	6.1	6.9	6.9	6.9	8.4	9.2	11.4	14.5	13.7	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	879.7	875.9	874.4	870.5	861.4	855.3	848.4	843.8	844.6	840.8	843.1
5°	852.2	851.5	846.1	838.5	825.5	818.7	806.5	800.4	797.3	798.1	793.5
7.5°	829.3	822.5	818.7	806.5	794.2	779.8	769.8	764.5	759.9	755.3	752.3
10°	803.4	797.3	791.2	778.2	761.4	747.7	734.0	728.6	721.8	718.7	716.4
12.5°	775.9	772.1	764.5	749.2	730.2	717.2	701.2	698.1	689.0	682.9	681.3
15°	750.8	748.5	734.7	717.2	698.1	685.1	671.4	662.3	647.0	650.0	644.7
17.5°	724.1	714.1	705.7	682.1	672.9	653.1	637.1	632.5	621.8	615.0	608.1
20°	694.3	688.2	677.5	662.3	640.1	617.2	605.0	597.4	591.3	580.6	577.6
22.5°	666.1	658.4	649.3	629.4	610.4	591.3	574.5	567.6	560.0	552.4	547.8
25°	643.9	632.5	622.6	598.2	579.1	563.1	552.4	540.9	530.3	525.7	524.2
27.5°	609.6	602.7	592.8	569.9	552.4	534.8	524.9	517.3	505.8	500.5	495.9
30°	587.5	573.8	562.3	544.0	526.4	507.4	498.2	489.1	482.2	475.3	470.0
32.5°	557.7	547.0	537.9	519.6	502.0	484.5	474.6	460.8	457.0	451.7	445.6
35°	528.7	521.9	512.0	492.1	473.0	460.8	450.2	437.2	432.6	428.8	423.4
37.5°	501.3	491.4	484.5	465.4	448.6	434.1	425.7	415.1	412.0	407.4	403.6
40°	477.6	467.7	460.8	441.8	424.2	409.0	403.6	392.9	388.3	383.0	380.7
42.5°	450.9	442.5	433.4	419.6	401.3	386.1	375.4	369.3	363.2	360.9	356.3
45°	422.7	415.1	408.2	392.9	373.9	363.2	354.0	345.6	341.0	337.2	334.2
47.5°	398.3	391.4	382.2	365.5	350.2	340.3	331.1	322.7	318.2	313.6	309.8
50°	370.0	366.2	356.3	340.3	325.8	314.3	305.9	298.3	295.3	289.9	283.8
52.5°	344.9	338.0	329.6	316.6	303.7	289.9	278.5	273.9	268.6	265.5	260.2
55°	315.1	310.5	301.4	289.9	276.2	264.7	256.4	250.3	243.4	240.3	233.5
57.5°	289.9	281.5	277.0	262.5	249.5	238.0	231.9	225.8	218.2	213.6	210.6
60°	262.5	254.8	248.0	235.8	226.6	214.4	205.2	199.9	194.6	188.5	185.4
62.5°	235.8	229.7	221.3	211.3	199.9	190.0	183.1	175.5	172.4	166.3	164.0
65°	206.8	202.2	195.3	183.9	174.7	166.3	159.5	153.4	150.3	148.0	146.5
67.5°	180.8	174.7	170.1	160.2	150.3	143.4	139.6	135.8	132.0	129.7	127.4
70°	154.1	149.5	145.0	135.8	128.9	122.8	119.8	116.7	114.4	112.2	109.9
72.5°	126.7	124.4	119.8	113.7	108.3	103.8	101.5	97.7	95.4	91.6	90.0
75°	104.5	100.7	98.4	93.1	88.5	84.7	81.6	77.1	74.0	72.5	71.7
77.5°	82.4	80.9	77.8	73.2	71.0	67.1	62.6	61.0	59.5	59.5	58.7
80°	61.8	59.5	57.2	53.4	51.1	48.1	48.1	48.1	47.3	48.1	47.3
82.5°	42.0	40.4	38.9	36.6	35.9	35.9	36.6	36.6	36.6	36.6	36.6
85°	24.4	24.4	24.4	25.2	24.4	24.4	25.2	25.9	25.2	25.2	24.4
87.5°	11.4	11.4	12.2	12.2	13.0	13.0	13.0	13.0	13.0	13.0	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	842.3	843.1	840.8	836.2	835.4	837.0	841.6	840.0	836.2	843.1	837.0
5°	795.8	792.0	790.4	792.0	787.4	785.1	789.7	787.4	789.7	790.4	792.7
7.5°	750.8	751.5	746.9	747.7	741.6	743.1	743.1	743.1	745.4	746.9	750.0
10°	711.8	713.4	708.0	708.8	704.2	701.2	703.5	708.0	708.0	708.0	709.6
12.5°	680.6	673.7	669.9	669.1	663.8	662.3	666.8	668.4	672.2	672.2	674.5
15°	641.7	640.1	637.1	637.1	624.1	627.2	628.7	634.0	641.7	635.6	637.1
17.5°	606.6	602.7	598.9	597.4	595.9	591.3	597.4	596.6	601.2	602.0	604.3
20°	575.3	572.2	564.6	565.4	566.9	560.0	563.8	563.8	568.4	573.0	578.3
22.5°	544.8	541.7	537.9	539.4	534.8	533.3	533.3	537.1	542.5	546.3	545.5
25°	521.1	515.8	513.5	511.2	508.9	510.4	508.1	512.0	515.8	518.1	515.8
27.5°	494.4	492.1	487.5	485.2	481.4	483.0	484.5	487.5	489.8	489.8	492.1
30°	468.5	465.4	463.9	461.6	461.6	458.5	459.3	462.4	464.6	466.9	470.0
32.5°	443.3	441.0	438.7	438.7	437.2	436.4	435.7	440.2	440.2	444.8	444.8
35°	422.7	418.9	418.9	415.1	416.6	415.8	414.3	417.3	418.1	421.2	420.4
37.5°	399.8	399.8	398.3	394.5	391.4	392.2	396.0	396.0	398.3	397.5	399.8
40°	376.9	375.4	375.4	373.1	372.3	371.6	372.3	373.1	376.9	376.1	376.9
42.5°	354.0	354.8	351.0	351.0	351.0	348.7	349.4	350.2	351.7	353.3	355.5
45°	331.9	330.4	329.6	328.1	326.5	327.3	326.5	329.6	328.8	330.4	332.7
47.5°	308.2	305.9	305.2	302.1	302.1	303.7	302.9	305.2	305.9	308.2	306.7
50°	285.3	282.3	280.0	280.8	276.2	277.7	277.7	280.0	282.3	283.1	284.6
52.5°	258.6	257.9	257.1	253.3	252.5	251.8	252.5	253.3	256.4	258.6	259.4
55°	232.7	231.9	227.4	225.8	223.5	223.5	225.1	225.8	231.2	231.9	235.0
57.5°	209.1	206.8	201.4	200.7	200.7	200.7	198.4	201.4	202.9	206.8	206.8
60°	183.1	183.1	178.5	178.5	179.3	178.5	178.5	179.3	179.3	182.3	183.9
62.5°	162.5	161.7	161.7	160.2	159.5	160.2	159.5	159.5	160.2	162.5	164.8
65°	144.2	143.4	142.7	141.9	140.4	140.4	141.1	142.7	142.7	144.2	145.0
67.5°	126.7	126.7	125.1	125.1	124.4	123.6	124.4	123.6	126.7	126.7	127.4
70°	109.1	108.3	106.1	105.3	103.0	103.8	103.8	106.1	106.8	108.3	109.9
72.5°	87.7	87.7	86.2	84.7	85.5	83.9	83.9	84.7	84.7	87.0	87.7
75°	72.5	71.0	70.2	71.0	70.2	71.7	70.2	70.2	71.7	71.7	71.7
77.5°	59.5	59.5	58.7	58.7	59.5	58.7	59.5	59.5	59.5	58.7	59.5
80°	48.8	48.1	48.1	48.1	47.3	47.3	47.3	47.3	47.3	47.3	47.3
82.5°	36.6	36.6	35.9	36.6	36.6	35.9	36.6	35.9	35.9	36.6	36.6
85°	24.4	25.9	24.4	24.4	25.2	25.2	25.9	25.2	25.9	24.4	25.2
87.5°	13.0	13.7	13.7	13.0	13.0	13.7	13.7	13.7	14.5	13.0	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1	891.1
2.5°	843.1	846.1	843.1	837.0	843.1	846.9	850.7	856.8	859.9	859.9	864.4
5°	795.0	801.1	798.8	797.3	803.4	807.2	813.3	821.0	829.3	834.7	840.8
7.5°	752.3	756.1	759.9	759.9	766.0	774.4	783.6	792.7	803.4	811.0	815.6
10°	714.9	718.0	720.2	723.3	732.4	741.6	753.8	765.3	774.4	782.8	790.4
12.5°	679.0	683.6	689.0	691.2	698.1	709.6	721.0	734.7	749.2	757.6	765.3
15°	644.7	647.0	653.1	660.0	666.1	678.3	692.8	707.3	719.5	732.4	739.3
17.5°	609.6	610.4	626.4	622.6	642.4	653.9	661.5	675.2	695.1	705.7	716.4
20°	575.3	582.9	589.8	593.6	604.3	617.2	639.4	650.0	666.1	676.0	685.1
22.5°	548.6	560.0	560.0	569.2	574.5	586.7	602.7	623.3	640.9	647.8	660.7
25°	524.9	530.3	539.4	542.5	552.4	563.1	573.8	595.9	615.0	624.1	633.3
27.5°	494.4	501.3	513.5	513.5	526.4	537.9	550.9	565.4	584.4	597.4	607.3
30°	470.8	477.6	483.0	491.4	496.7	507.4	530.3	540.9	557.7	569.2	581.4
32.5°	448.6	454.0	458.5	467.7	473.8	486.0	498.2	517.3	531.8	542.5	555.4
35°	424.2	429.6	435.7	442.5	451.7	463.1	474.6	490.6	505.1	515.0	525.7
37.5°	401.3	405.1	414.3	418.9	426.5	437.2	451.7	468.5	481.4	489.1	499.7
40°	379.2	382.2	389.1	397.5	402.8	411.2	426.5	441.0	457.0	466.2	474.6
42.5°	355.5	359.4	365.5	373.9	382.2	391.4	399.8	416.6	431.1	438.7	447.9
45°	334.9	337.2	341.8	350.2	358.6	365.5	378.4	393.7	407.4	413.5	423.4
47.5°	310.5	312.8	319.7	323.5	332.7	341.8	354.8	370.0	382.2	388.3	397.5
50°	285.3	287.6	292.2	300.6	306.7	316.6	328.1	341.0	356.3	364.7	370.0
52.5°	260.9	265.5	269.3	276.2	283.8	293.7	304.4	316.6	329.6	338.0	344.1
55°	236.5	240.3	244.9	248.7	257.9	267.0	279.2	290.7	302.1	309.8	316.6
57.5°	209.1	214.4	219.0	226.6	233.5	241.1	254.8	264.0	277.7	283.1	289.2
60°	185.4	190.7	194.6	200.7	206.8	216.7	225.8	237.3	248.7	255.6	263.2
62.5°	165.6	167.9	170.1	176.2	182.3	191.5	200.7	212.1	224.3	228.1	234.2
65°	145.7	148.0	151.8	157.2	161.7	167.1	177.0	186.2	197.6	203.7	206.0
67.5°	128.9	131.2	132.0	135.8	139.6	145.7	151.1	160.2	170.9	174.7	179.3
70°	109.9	113.7	114.4	117.5	119.0	122.8	128.9	135.8	144.2	151.1	154.9
72.5°	87.7	93.1	94.6	99.2	101.5	105.3	109.9	115.2	120.5	123.6	126.7
75°	71.7	73.2	74.0	77.8	81.6	87.0	89.3	92.3	96.9	100.7	103.8
77.5°	59.5	60.3	61.0	61.0	61.8	64.9	69.4	73.2	76.3	77.8	80.1
80°	48.1	47.3	47.3	48.1	48.1	48.1	49.6	54.9	56.5	60.3	59.5
82.5°	37.4	35.9	36.6	35.9	35.9	35.9	35.9	36.6	36.6	38.9	40.4
85°	24.4	25.2	24.4	24.4	23.7	24.4	23.7	23.7	22.9	22.9	22.1
87.5°	13.0	13.7	13.0	13.0	12.2	13.0	12.2	12.2	11.4	11.4	9.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037542

CATALOG NUMBER: S123RDS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	891.1	891.1	891.1	891.1
2.5°	868.3	873.6	884.3	893.4
5°	849.9	858.3	874.4	890.4
7.5°	827.8	840.8	861.4	883.5
10°	806.5	823.2	848.4	874.4
12.5°	785.1	802.6	829.3	862.9
15°	759.9	778.2	810.3	850.7
17.5°	737.8	762.2	791.2	831.6
20°	714.1	732.4	769.8	812.6
22.5°	684.4	714.9	750.0	795.0
25°	660.7	687.4	722.5	773.6
27.5°	631.7	663.0	705.7	750.8
30°	608.1	634.0	673.7	727.9
32.5°	580.6	611.1	652.3	705.7
35°	556.2	582.1	621.1	675.2
37.5°	527.2	555.4	598.9	647.0
40°	502.0	529.5	570.7	615.7
42.5°	471.5	500.5	541.7	579.9
45°	447.1	473.8	506.6	541.7
47.5°	417.3	445.6	477.6	502.0
50°	390.6	416.6	441.8	462.4
52.5°	361.6	385.3	408.2	423.4
55°	334.9	353.3	371.6	382.2
57.5°	303.7	321.2	336.5	342.6
60°	276.2	290.7	300.6	307.5
62.5°	247.2	257.9	265.5	269.3
65°	219.0	226.6	230.4	234.2
67.5°	190.0	196.8	199.1	203.7
70°	159.5	167.1	168.6	170.9
72.5°	136.6	136.6	139.6	142.7
75°	109.1	110.6	112.2	112.2
77.5°	85.5	85.5	87.0	87.7
80°	62.6	63.3	63.3	62.6
82.5°	42.7	44.3	42.7	42.0
85°	23.7	26.7	25.2	25.2
87.5°	9.9	9.9	11.4	9.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)