

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: P1037323

Luminaire Tested: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037323
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B560DB2750-4F0-XX-W2A-A_3000K
Description: Define 3 Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

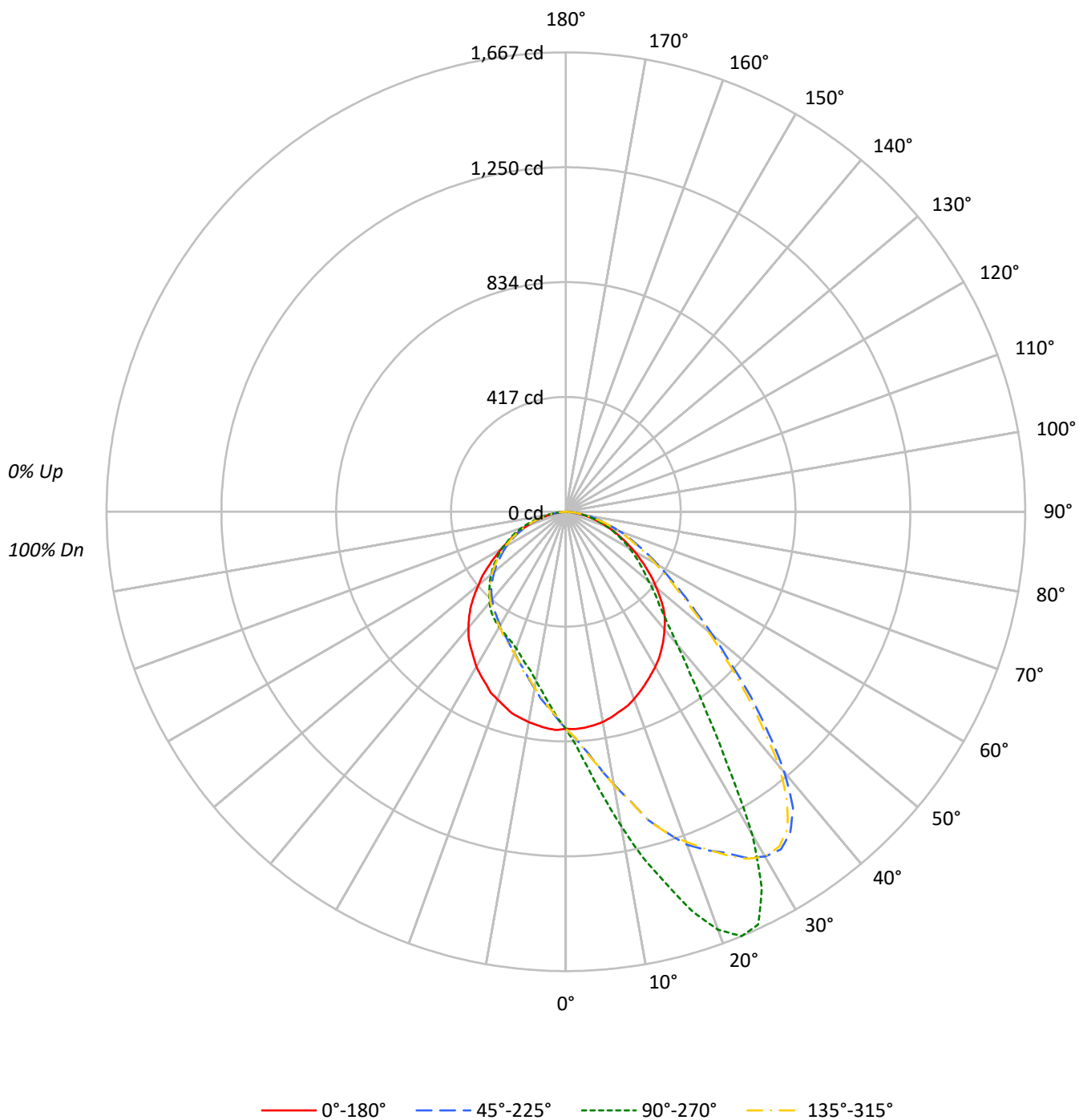
Lumens per Lamp: N/A
Luminaire Lumens: 2376.0 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1037323

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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	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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62			
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56	53			
5	78	66	57	51	76	64	56	50	62	55	50	60	54	49	59	53	49	47			
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43	41			
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38	36			
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35	33			
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31	29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8473	8473	8473	8473
5°	8498	10105	8523	7542
10°	8463	12648	8471	6812
15°	8364	15514	8432	6342
20°	8284	18481	8301	6038
25°	8153	19624	8172	5970
30°	8069	16819	8069	6002
35°	7959	11698	7909	6064
40°	7825	8810	7728	6045
45°	7652	7316	7432	5969
50°	7192	6553	6936	5915
55°	6685	6127	6412	5840
60°	6174	5748	5847	5780
65°	5616	5402	5344	5596
70°	5042	5067	4705	5328
75°	4408	4537	4126	4887
80°	3639	3973	3360	4209
85°	2828	3112	2260	2828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 17081 cd/sqm

TEST NUMBER: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	3.3
10°-20°	248.7	10.5
20°-30°	418.4	17.6
30°-40°	472.9	19.9
40°-50°	423.5	17.8
50°-60°	341.9	14.4
60°-70°	238.2	10.0
70°-80°	125.0	5.3
80°-90°	30.0	1.3
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°	744.5	31.3
0°-40°	1217.4	51.2
0°-60°	1982.7	83.4
0°-90°	2376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2376.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	787	787	787	787	787	
5°	786	935	789	698	786	75
15°	751	1392	757	569	751	212
25°	686	1652	688	503	686	317
35°	606	890	602	462	606	379
45°	503	481	488	392	503	384
55°	356	326	342	311	356	319
65°	220	212	210	220	220	220
75°	106	109	99	118	106	114
85°	23	25	18	23	23	28
90°	0	0	0	0	0	

TEST NUMBER: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	789.5	795.6	798.7	803.3	807.8	814.7	817.0	820.8	819.3	822.3	823.9
5°	786.5	797.2	806.3	817.7	828.4	836.1	843.7	855.9	865.0	866.6	873.4
7.5°	781.1	796.4	812.4	828.4	849.0	861.2	875.0	891.7	905.5	927.6	936.0
10°	774.3	795.6	818.5	840.6	868.9	887.9	904.7	932.9	961.2	984.0	1005.4
12.5°	763.6	790.3	820.0	852.8	889.5	911.6	934.5	971.8	1014.6	1049.6	1072.5
15°	750.6	784.2	822.3	857.4	897.8	939.0	963.4	1005.4	1066.4	1099.2	1158.0
17.5°	739.9	774.3	812.4	867.3	922.3	963.4	981.0	1058.0	1100.0	1154.9	1221.3
20°	723.2	766.6	815.5	870.4	941.3	966.5	1002.4	1080.2	1132.0	1203.7	1285.4
22.5°	705.6	752.1	810.9	868.1	947.4	974.1	1022.9	1084.7	1167.1	1238.1	1328.1
25°	686.5	736.9	796.4	864.3	942.1	981.0	1026.8	1103.0	1192.3	1281.5	1364.7
27.5°	667.5	722.4	784.2	852.1	927.6	973.4	1019.1	1098.5	1212.9	1309.8	1415.8
30°	649.2	704.1	765.9	835.3	914.6	958.9	1002.4	1101.5	1228.9	1338.0	1444.8
32.5°	629.3	685.8	750.6	808.6	888.7	936.0	984.8	1101.5	1238.8	1354.8	1452.4
35°	605.7	663.7	719.3	777.3	856.7	909.3	964.2	1093.9	1248.0	1360.1	1420.4
37.5°	582.8	633.9	682.0	738.4	821.6	878.0	941.3	1084.7	1243.4	1337.2	1354.0
40°	556.9	608.0	646.9	699.5	787.2	852.8	916.9	1072.5	1223.6	1283.1	1234.2
42.5°	531.7	572.1	605.7	656.8	752.1	816.2	885.6	1050.4	1184.7	1196.9	1087.0
45°	502.7	531.7	561.4	619.4	714.0	779.6	856.7	1018.4	1122.1	1087.0	948.2
47.5°	465.3	491.3	524.1	577.5	673.6	741.5	814.7	977.2	1031.3	958.1	806.3
50°	429.5	451.6	482.1	534.0	630.9	697.2	775.0	912.3	939.0	823.9	694.9
52.5°	393.6	410.4	440.1	492.0	588.9	653.0	723.9	846.0	830.7	707.1	592.7
55°	356.2	370.7	399.0	450.1	540.1	601.1	669.0	764.3	724.7	607.2	515.7
57.5°	319.6	334.9	363.9	406.6	491.3	550.8	604.9	679.7	620.2	526.3	445.5
60°	286.8	299.8	321.9	363.9	440.9	489.0	538.6	589.7	540.1	449.3	387.5
62.5°	252.5	264.7	285.3	323.4	389.8	432.5	472.2	514.1	459.2	392.9	337.9
65°	220.5	230.4	249.4	284.5	338.7	373.8	405.8	434.8	390.6	329.5	288.3
67.5°	191.5	199.9	215.9	247.2	292.9	318.1	344.0	368.4	331.1	282.2	247.2
70°	160.2	167.1	181.6	204.4	241.1	267.0	286.1	304.4	270.8	231.9	208.3
72.5°	132.7	139.6	148.8	172.4	197.6	213.6	234.2	244.1	225.0	193.0	169.3
75°	106.0	111.4	119.8	135.0	158.7	169.3	182.3	189.9	172.4	151.0	136.5
77.5°	83.1	85.4	91.5	102.2	118.2	130.4	140.4	144.9	132.7	119.0	106.8
80°	58.7	61.8	66.4	75.5	87.7	91.5	97.6	103.0	95.4	83.1	75.5
82.5°	38.9	42.7	45.0	48.8	56.4	61.0	62.6	67.1	60.3	55.7	52.6
85°	22.9	24.4	25.2	27.5	31.3	33.6	35.9	36.6	35.1	34.3	31.3
87.5°	11.4	11.4	11.4	13.0	13.7	15.3	16.0	16.0	16.0	15.3	14.5
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	829.2	830.7	836.1	839.9	847.5	846.7	846.7	846.0	843.7	847.5	849.8
5°	887.2	900.1	901.7	918.4	919.2	926.1	930.6	926.8	936.0	935.2	928.4
7.5°	958.9	976.4	984.8	1000.8	1019.1	1014.6	1032.1	1035.2	1033.6	1041.3	1046.6
10°	1037.4	1068.0	1089.3	1119.1	1126.7	1131.3	1142.7	1152.6	1172.5	1157.2	1167.1
12.5°	1127.5	1149.6	1177.8	1225.1	1248.7	1264.0	1269.3	1276.2	1289.9	1281.5	1282.3
15°	1203.0	1232.7	1280.8	1339.5	1346.4	1365.5	1360.9	1402.1	1421.9	1392.2	1408.9
17.5°	1281.5	1321.2	1378.4	1429.5	1458.5	1471.5	1483.7	1523.4	1521.8	1517.3	1521.1
20°	1331.9	1396.7	1467.7	1535.6	1544.0	1553.9	1586.7	1603.5	1600.4	1613.4	1621.8
22.5°	1402.8	1471.5	1547.0	1592.0	1611.1	1622.5	1648.5	1659.1	1663.7	1666.8	1661.4
25°	1462.3	1535.6	1591.3	1630.9	1642.4	1648.5	1656.9	1659.9	1657.6	1652.3	1656.9
27.5°	1502.8	1561.5	1599.6	1617.9	1611.8	1601.9	1585.9	1575.2	1551.6	1540.1	1553.9
30°	1519.5	1545.5	1556.9	1526.4	1495.9	1471.5	1441.0	1384.5	1340.3	1353.2	1335.7
32.5°	1492.8	1476.1	1421.1	1342.6	1318.9	1279.3	1193.1	1126.7	1129.0	1093.9	1108.4
35°	1414.3	1338.0	1234.2	1115.2	1084.0	1062.6	968.0	953.5	923.0	890.2	899.4
37.5°	1275.4	1164.1	1038.2	950.5	903.9	857.4	804.0	772.0	753.7	739.9	750.6
40°	1106.1	970.3	866.6	788.0	748.3	718.6	682.0	649.9	629.3	627.0	630.9
42.5°	939.8	825.4	730.0	655.3	642.3	607.2	583.6	558.4	552.3	542.4	547.7
45°	795.6	702.6	624.0	563.0	547.7	538.6	509.6	493.5	486.7	480.6	489.7
47.5°	691.1	593.5	536.3	499.6	484.4	469.1	453.1	442.4	437.1	437.9	437.1
50°	590.4	518.7	468.4	440.1	431.0	420.3	407.3	400.5	398.2	391.3	396.7
52.5°	508.0	456.2	421.1	394.4	387.5	379.9	369.2	365.4	360.1	358.5	358.5
55°	441.7	401.2	373.0	355.5	347.1	341.0	334.9	330.3	326.5	326.5	326.5
57.5°	389.8	354.7	334.1	318.9	315.8	309.7	302.8	302.8	297.5	296.7	299.0
60°	345.6	314.3	298.3	285.3	280.7	279.2	272.3	272.3	270.8	267.0	270.0
62.5°	300.6	277.7	263.9	254.0	249.4	249.4	244.1	240.3	240.3	241.1	239.5
65°	259.4	242.6	230.4	222.7	220.5	217.4	216.6	213.6	211.3	212.1	211.3
67.5°	222.7	209.8	201.4	195.3	191.5	189.9	187.7	187.7	186.1	186.9	183.1
70°	189.9	177.0	170.1	164.0	162.5	162.5	159.4	160.2	158.7	161.0	159.4
72.5°	156.4	146.5	141.1	138.8	137.3	136.5	135.0	133.5	132.7	134.3	133.5
75°	126.6	118.2	114.4	112.9	111.4	111.4	110.6	109.8	109.1	109.1	109.1
77.5°	98.4	93.1	88.5	90.0	87.7	88.5	86.2	86.2	87.0	86.2	86.2
80°	72.5	68.7	68.7	67.1	64.1	65.6	65.6	63.3	62.6	64.1	61.8
82.5°	48.1	47.3	45.8	45.0	43.5	44.2	43.5	42.7	42.0	43.5	42.0
85°	28.2	28.2	27.5	25.9	27.5	26.7	25.9	25.9	25.2	25.2	25.2
87.5°	14.5	13.0	13.0	12.2	13.0	11.4	12.2	11.4	10.7	11.4	10.7
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	843.7	846.0	839.9	838.3	838.3	841.4	839.1	818.5	822.3	817.7	816.2
5°	936.7	932.2	926.1	923.0	919.2	908.5	907.8	884.1	879.5	864.3	857.4
7.5°	1039.0	1035.2	1016.8	1014.6	1013.0	1003.1	977.9	952.8	934.5	916.9	900.1
10°	1155.7	1144.2	1135.8	1119.1	1110.7	1096.9	1064.1	1040.5	1009.2	982.5	947.4
12.5°	1296.0	1283.1	1254.8	1242.6	1232.0	1193.8	1161.0	1134.3	1073.3	1055.0	1011.5
15°	1399.0	1371.6	1368.5	1341.8	1340.3	1298.3	1235.8	1206.8	1159.5	1092.4	1047.4
17.5°	1510.4	1486.0	1466.9	1434.9	1430.3	1390.6	1344.9	1273.9	1222.0	1158.0	1100.8
20°	1592.0	1579.0	1546.2	1533.3	1506.6	1473.0	1425.7	1338.0	1274.7	1210.6	1140.4
22.5°	1656.9	1643.9	1617.9	1600.4	1585.1	1541.7	1485.2	1410.5	1323.5	1239.6	1167.1
25°	1656.1	1652.3	1641.6	1633.2	1621.8	1589.7	1542.4	1470.7	1373.8	1281.5	1180.9
27.5°	1562.3	1572.9	1591.3	1600.4	1598.1	1593.5	1566.8	1506.6	1419.6	1309.8	1196.9
30°	1367.0	1405.9	1440.2	1486.0	1499.7	1533.3	1548.5	1514.2	1444.8	1342.6	1217.5
32.5°	1133.6	1190.0	1264.8	1289.9	1333.4	1398.3	1470.7	1483.7	1440.2	1361.6	1230.4
35°	929.9	976.4	1034.4	1074.1	1113.0	1218.2	1309.8	1389.1	1403.6	1351.7	1227.4
37.5°	769.7	802.5	853.6	887.2	923.0	1013.0	1141.2	1244.2	1316.6	1318.2	1219.0
40°	653.7	668.2	712.5	736.9	771.2	849.0	963.4	1097.7	1203.7	1252.6	1196.9
42.5°	553.8	572.9	609.5	627.8	649.9	717.8	793.3	920.7	1051.9	1156.4	1155.7
45°	494.3	508.0	524.8	540.1	565.3	605.7	691.9	787.2	913.1	1031.3	1077.9
47.5°	441.7	454.6	471.4	476.0	492.8	530.9	583.6	666.7	784.2	901.7	989.4
50°	397.4	408.1	419.6	427.9	435.6	466.8	506.5	576.7	670.5	784.2	893.3
52.5°	363.1	370.7	380.6	385.2	392.1	415.0	445.5	497.4	574.4	678.2	784.2
55°	331.1	336.4	342.5	350.1	353.2	370.0	393.6	437.9	495.1	588.1	688.8
57.5°	301.3	303.6	307.4	312.0	315.8	330.3	350.9	380.6	431.0	502.7	598.1
60°	267.8	273.9	276.1	280.7	283.0	294.5	310.5	335.6	374.5	436.3	508.0
62.5°	239.5	243.3	247.2	249.4	254.8	258.6	271.6	294.5	326.5	372.3	437.1
65°	214.4	215.9	218.2	220.5	222.0	226.6	238.8	254.0	278.4	318.9	369.2
67.5°	185.4	186.9	189.9	190.7	192.2	198.3	205.2	218.2	238.8	269.3	310.5
70°	157.1	159.4	161.0	162.5	164.8	167.1	174.7	185.4	201.4	222.7	254.8
72.5°	132.7	135.0	135.0	136.5	135.8	138.8	146.5	154.1	164.8	182.3	210.5
75°	108.3	108.3	109.8	110.6	111.4	114.4	117.5	123.6	132.0	145.7	163.2
77.5°	85.4	84.7	86.2	86.2	86.2	88.5	91.5	94.6	99.9	109.8	123.6
80°	62.6	62.6	64.1	64.8	63.3	64.1	65.6	68.7	72.5	79.3	87.0
82.5°	41.2	44.2	43.5	44.2	43.5	45.0	45.8	46.5	48.1	51.1	56.4
85°	25.2	25.2	25.2	25.9	25.2	25.9	25.9	25.9	26.7	28.2	30.5
87.5°	10.7	10.7	10.7	11.4	10.7	10.7	11.4	10.7	11.4	11.4	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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	808.6	806.3	806.3	804.8	800.2	791.8	791.0	792.6	788.0	783.4	776.6
5°	848.3	833.8	829.2	824.6	815.5	800.2	794.1	788.8	780.4	770.5	759.8
7.5°	881.8	861.2	855.1	846.7	828.4	807.1	793.3	781.9	770.5	756.7	743.8
10°	923.8	894.0	879.5	867.3	842.2	812.4	791.8	775.0	756.7	739.9	723.2
12.5°	971.1	923.0	918.4	888.7	859.7	815.5	790.3	765.9	741.5	720.9	703.3
15°	1010.7	958.1	939.0	919.2	863.5	808.6	784.2	756.7	728.5	706.4	680.4
17.5°	1035.9	992.4	952.0	925.3	867.3	818.5	771.2	739.9	710.2	679.7	658.3
20°	1066.4	1003.1	968.0	932.2	875.0	810.9	763.6	724.7	688.1	660.6	634.7
22.5°	1096.9	1011.5	982.5	943.6	876.5	803.3	749.9	711.0	669.0	641.5	613.3
25°	1093.9	1023.7	975.7	942.9	861.2	796.4	733.8	688.1	649.2	614.1	585.8
27.5°	1096.2	1010.0	961.2	923.0	850.5	786.5	717.1	669.0	628.6	592.0	562.2
30°	1096.9	989.4	946.7	900.9	830.7	762.8	698.0	649.2	606.4	566.8	540.1
32.5°	1094.7	972.6	919.2	878.0	799.4	739.9	675.9	624.0	580.5	543.9	518.7
35°	1089.3	952.8	891.0	839.1	767.4	707.1	655.3	601.9	555.3	521.8	492.8
37.5°	1074.8	931.4	861.2	810.1	730.0	669.0	623.2	579.0	534.0	494.3	469.9
40°	1064.1	902.4	831.5	775.8	689.6	630.1	592.0	550.0	505.8	469.9	446.3
42.5°	1039.7	875.0	801.0	734.6	649.9	588.9	553.0	519.5	481.3	446.3	424.9
45°	1000.1	845.2	763.6	696.5	606.4	548.5	515.7	488.2	454.6	421.1	399.7
47.5°	944.4	802.5	723.9	656.8	563.7	505.0	472.2	451.6	424.9	396.7	378.4
50°	884.1	756.0	683.5	617.1	522.5	465.3	433.3	414.2	396.7	370.7	353.2
52.5°	805.5	706.4	637.0	573.6	478.3	423.4	395.1	381.4	363.1	344.8	329.5
55°	729.3	642.3	585.1	524.8	434.8	383.7	356.2	341.7	331.1	315.8	303.6
57.5°	640.8	582.8	530.2	475.2	394.4	347.8	321.9	304.4	297.5	290.6	279.2
60°	559.2	514.9	472.2	426.4	352.4	310.5	285.3	271.6	264.7	260.1	252.5
62.5°	484.4	450.1	413.5	376.8	309.7	271.6	252.5	238.8	232.7	231.9	225.0
65°	412.7	388.3	358.5	322.7	270.0	236.5	218.2	209.8	202.9	202.9	197.6
67.5°	341.0	324.2	300.6	275.4	234.2	202.9	186.1	178.5	174.7	174.7	170.9
70°	283.8	272.3	251.0	228.8	193.0	169.3	156.4	149.5	147.2	148.0	144.9
72.5°	230.4	218.2	200.6	184.6	157.9	140.4	131.2	123.6	119.8	120.5	119.8
75°	178.5	172.4	157.1	144.9	123.6	111.4	103.0	99.2	96.1	96.9	95.4
77.5°	134.3	125.1	116.7	108.3	95.4	85.4	78.6	74.8	72.5	72.5	72.5
80°	91.5	90.0	83.1	78.6	67.9	60.3	54.9	54.2	51.9	51.9	51.9
82.5°	59.5	55.7	51.9	48.8	42.7	38.1	35.9	34.3	33.6	32.8	34.3
85°	32.8	30.5	29.0	25.9	23.6	21.4	19.1	18.3	17.5	18.3	17.5
87.5°	13.0	10.7	10.7	9.9	9.2	8.4	8.4	6.9	6.9	6.1	6.1
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	775.0	774.3	775.8	771.2	763.6	759.8	749.1	746.8	746.0	746.8	747.6
5°	753.7	752.9	750.6	743.0	733.8	727.0	714.0	713.2	708.7	704.1	706.4
7.5°	733.1	730.0	725.4	715.5	703.3	695.7	685.0	677.4	671.3	667.5	664.4
10°	712.5	707.9	703.3	690.4	675.1	663.7	650.7	644.6	637.7	634.7	631.6
12.5°	685.8	681.2	672.8	657.6	648.4	633.9	620.9	614.8	611.0	604.9	601.1
15°	664.4	655.3	650.7	634.7	615.6	614.1	590.4	588.9	581.3	581.3	575.2
17.5°	640.0	633.1	624.8	608.7	595.0	581.3	569.1	564.5	557.6	556.1	553.0
20°	616.4	607.2	604.2	588.1	573.6	556.9	543.9	539.3	536.3	533.2	535.5
22.5°	592.0	584.3	576.7	562.2	551.5	534.7	527.1	522.5	518.0	516.4	517.2
25°	568.3	561.4	553.8	539.3	527.9	514.1	507.3	505.0	502.7	502.7	501.9
27.5°	545.4	538.6	531.7	518.7	507.3	497.4	492.0	489.7	487.4	489.0	490.5
30°	521.8	515.7	509.6	498.1	489.0	479.8	476.8	475.2	474.5	478.3	478.3
32.5°	500.4	495.1	490.5	479.8	470.7	463.0	460.7	461.5	462.3	464.6	466.1
35°	478.3	474.5	469.9	460.7	453.1	446.3	447.0	447.0	448.5	452.4	455.4
37.5°	458.5	453.1	449.3	441.7	435.6	429.5	431.8	434.0	435.6	440.1	441.7
40°	434.8	432.5	429.5	421.8	416.5	415.7	416.5	418.0	421.1	423.4	425.7
42.5°	415.7	412.7	408.9	402.8	398.2	399.0	399.7	401.2	402.8	406.6	408.9
45°	394.4	392.1	389.0	383.7	379.9	380.6	381.4	381.4	382.9	387.5	389.0
47.5°	370.7	371.5	367.7	362.3	360.1	360.1	360.1	361.6	365.4	366.9	367.7
50°	347.8	346.3	345.6	340.2	338.7	337.9	338.7	339.5	344.8	344.0	346.3
52.5°	323.4	323.4	322.7	319.6	317.3	317.3	315.8	319.6	321.1	322.7	325.0
55°	299.8	297.5	296.7	295.2	292.2	291.4	292.9	297.5	299.0	300.6	302.8
57.5°	273.9	273.9	272.3	270.0	270.0	270.0	270.0	273.1	275.4	276.9	281.5
60°	250.2	247.2	244.9	244.9	244.9	244.1	248.7	248.7	253.3	254.0	255.5
62.5°	222.0	220.5	218.9	219.7	218.9	220.5	222.0	225.0	225.8	228.1	230.4
65°	195.3	195.3	193.8	198.3	195.3	195.3	199.1	199.1	200.6	202.9	206.0
67.5°	169.3	170.1	168.6	168.6	170.1	170.9	171.6	174.7	175.4	178.5	182.3
70°	142.6	144.2	144.9	143.4	144.9	146.5	148.0	148.8	151.8	153.3	155.6
72.5°	119.0	120.5	118.2	119.0	119.8	121.3	122.1	123.6	125.1	129.7	131.2
75°	95.4	94.6	93.8	96.9	95.4	98.4	99.2	99.2	100.7	104.5	106.0
77.5°	73.2	73.2	74.0	72.5	74.8	74.0	74.8	77.0	79.3	79.3	85.4
80°	51.1	52.6	52.6	52.6	53.4	54.2	52.6	56.4	57.2	57.2	59.5
82.5°	32.8	33.6	32.8	34.3	34.3	35.9	35.1	35.9	37.4	38.9	39.7
85°	17.5	17.5	19.1	19.1	18.3	19.1	18.3	19.1	20.6	20.6	21.4
87.5°	6.1	6.1	6.1	6.1	6.9	6.1	6.9	6.9	6.1	6.1	8.4
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	746.8	747.6	744.5	742.2	748.3	744.5	744.5	745.3	743.8	746.0	745.3
5°	704.8	705.6	700.3	701.8	698.7	698.0	697.2	701.8	701.0	700.3	701.8
7.5°	663.7	663.7	661.4	659.8	659.8	657.6	660.6	659.8	661.4	661.4	663.7
10°	629.3	630.9	627.0	623.2	622.5	623.2	623.2	624.0	624.8	630.1	629.3
12.5°	601.1	598.8	598.1	595.8	592.0	590.4	588.9	597.3	595.0	595.0	595.0
15°	569.8	575.2	574.4	567.5	566.0	569.1	567.5	567.5	575.2	574.4	573.6
17.5°	553.0	551.5	550.0	546.2	546.9	546.2	546.9	546.9	551.5	551.5	551.5
20°	534.0	530.9	530.9	529.4	529.4	527.1	530.2	530.9	534.0	534.0	534.7
22.5°	517.2	514.9	514.9	514.1	515.7	512.6	515.7	516.4	516.4	518.7	518.7
25°	502.7	501.2	501.2	502.7	502.7	502.7	502.7	505.8	503.5	504.2	503.5
27.5°	489.7	490.5	491.3	492.0	491.3	492.0	492.8	494.3	495.1	494.3	492.8
30°	477.5	479.8	480.6	480.6	482.1	482.9	483.6	483.6	484.4	482.1	483.6
32.5°	468.4	468.4	469.9	470.7	472.2	473.0	473.0	474.5	473.7	471.4	472.2
35°	455.4	455.4	458.5	460.0	462.3	461.5	462.3	462.3	463.0	461.5	459.2
37.5°	442.4	444.0	444.0	447.0	447.8	448.5	447.8	449.3	448.5	447.0	446.3
40°	427.2	426.4	427.2	429.5	430.2	430.2	430.2	431.8	431.8	431.8	431.0
42.5°	408.1	410.4	409.6	411.9	411.2	411.2	412.7	414.2	415.0	412.7	413.5
45°	389.8	389.8	391.3	391.3	392.1	392.1	395.1	393.6	395.1	393.6	394.4
47.5°	370.0	370.7	370.7	371.5	373.0	374.5	373.0	373.8	373.8	374.5	373.0
50°	347.8	347.8	349.4	351.7	354.7	353.2	352.4	355.5	353.2	353.2	351.7
52.5°	325.0	327.3	328.0	330.3	332.6	333.4	334.1	332.6	333.4	331.1	331.8
55°	302.8	303.6	306.7	308.9	311.2	311.2	310.5	311.2	312.0	308.9	308.9
57.5°	280.7	283.0	286.1	286.1	289.1	289.1	288.3	288.3	289.1	286.8	286.1
60°	257.1	259.4	263.2	263.2	267.8	268.5	267.0	265.5	265.5	263.2	263.9
62.5°	231.9	234.2	236.5	240.3	243.3	241.8	244.9	241.8	242.6	238.0	238.0
65°	209.8	210.5	214.4	218.2	218.2	219.7	218.2	218.9	216.6	216.6	213.6
67.5°	183.8	183.8	187.7	191.5	195.3	195.3	195.3	193.0	193.0	190.7	190.7
70°	161.0	160.2	164.0	166.3	168.6	169.3	167.8	167.1	165.5	163.2	162.5
72.5°	132.7	134.3	138.1	139.6	143.4	142.6	146.5	141.9	141.9	138.1	137.3
75°	107.6	109.1	112.9	115.2	117.5	117.5	119.8	117.5	114.4	112.9	112.1
77.5°	85.4	84.7	87.7	91.5	92.3	91.5	93.1	92.3	89.3	89.3	87.7
80°	61.0	63.3	66.4	65.6	68.7	67.9	67.9	66.4	66.4	64.1	65.6
82.5°	40.4	42.7	43.5	42.7	43.5	45.0	45.8	45.0	45.0	43.5	44.2
85°	21.4	21.4	22.9	23.6	22.9	22.9	23.6	25.9	24.4	22.9	24.4
87.5°	6.9	6.1	6.1	6.9	6.1	6.1	6.9	6.9	7.6	7.6	7.6
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2	787.2
2.5°	747.6	749.1	749.9	746.8	744.5	748.3	753.7	757.5	760.5	764.3	766.6
5°	703.3	708.7	708.7	710.2	712.5	716.3	726.2	733.1	739.2	743.8	747.6
7.5°	665.9	669.8	672.0	675.9	679.7	685.0	696.5	706.4	715.5	720.9	727.0
10°	632.4	635.4	639.2	641.5	648.4	656.0	670.5	678.9	689.6	698.0	705.6
12.5°	600.3	611.0	613.3	612.5	618.7	627.0	641.5	654.5	665.9	674.3	682.7
15°	577.5	581.3	585.8	585.1	598.1	600.3	612.5	627.8	643.1	648.4	656.0
17.5°	552.3	558.4	563.0	565.3	569.1	577.5	588.9	600.3	620.2	620.9	640.8
20°	532.5	538.6	541.6	544.7	546.9	556.9	566.8	579.7	595.8	604.2	614.8
22.5°	519.5	522.5	524.8	527.1	530.2	535.5	547.7	562.2	572.9	582.0	588.9
25°	504.2	507.3	510.3	511.9	514.1	517.2	526.3	537.8	553.0	559.2	566.0
27.5°	493.5	493.5	495.1	495.1	498.1	501.2	508.0	518.7	530.9	538.6	547.7
30°	482.1	481.3	482.1	481.3	480.6	485.2	491.3	500.4	508.8	518.0	524.1
32.5°	470.7	469.9	469.9	470.7	467.6	469.9	473.0	481.3	490.5	495.1	501.9
35°	458.5	456.9	456.9	456.9	455.4	453.9	456.9	464.6	470.7	476.8	482.1
37.5°	446.3	444.0	444.0	442.4	440.9	438.6	438.6	444.7	453.1	455.4	462.3
40°	429.5	429.5	427.9	427.2	425.7	424.1	421.8	427.2	434.8	437.1	442.4
42.5°	412.7	410.4	409.6	409.6	409.6	407.3	405.8	409.6	414.2	418.0	421.1
45°	393.6	392.1	392.9	392.1	390.6	389.8	389.0	390.6	395.9	397.4	401.2
47.5°	373.0	372.3	372.3	371.5	370.7	371.5	368.4	372.3	373.8	375.3	378.4
50°	351.7	350.9	350.1	349.4	349.4	350.1	349.4	349.4	352.4	354.0	357.0
52.5°	330.3	328.0	328.0	327.3	327.3	325.7	327.3	328.0	329.5	331.1	332.6
55°	307.4	307.4	305.1	305.1	303.6	303.6	304.4	303.6	306.7	308.2	308.2
57.5°	285.3	282.2	283.0	281.5	280.0	279.2	279.2	280.7	282.2	282.2	283.8
60°	261.6	258.6	257.8	254.8	256.3	254.0	254.8	254.8	257.8	256.3	257.8
62.5°	238.0	234.2	231.9	230.4	230.4	231.1	229.6	228.8	230.4	231.9	234.9
65°	212.8	210.5	208.3	206.0	206.0	205.2	206.7	204.4	203.7	204.4	206.0
67.5°	186.9	184.6	182.3	180.0	180.8	178.5	177.0	179.3	177.7	178.5	180.0
70°	161.7	160.2	155.6	154.1	153.3	154.1	153.3	151.8	154.1	153.3	154.1
72.5°	136.5	135.0	132.7	128.9	128.9	128.2	127.4	127.4	126.6	126.6	126.6
75°	112.1	109.1	106.8	106.0	104.5	103.7	103.0	101.5	102.2	103.0	101.5
77.5°	87.0	83.1	82.4	82.4	80.1	80.1	80.9	80.1	79.3	79.3	79.3
80°	64.1	61.0	61.0	59.5	58.0	58.0	58.0	58.0	57.2	56.4	57.2
82.5°	41.2	40.4	39.7	39.7	41.2	38.1	39.7	38.9	38.1	38.1	37.4
85°	22.9	23.6	22.9	23.6	22.1	22.9	22.9	22.9	22.1	22.9	21.4
87.5°	8.4	8.4	8.4	9.2	9.2	9.2	9.2	9.2	9.9	9.2	9.2
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: P1037323

CATALOG NUMBER: S123DS-B560DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	787.2	787.2	787.2	787.2
2.5°	770.5	772.7	780.4	789.5
5°	755.2	761.3	772.0	786.5
7.5°	738.4	747.6	762.8	781.1
10°	719.3	732.3	751.4	774.3
12.5°	698.7	715.5	739.9	763.6
15°	685.8	702.6	724.7	750.6
17.5°	660.6	680.4	703.3	739.9
20°	634.7	656.8	686.5	723.2
22.5°	614.8	638.5	666.7	705.6
25°	591.2	615.6	646.1	686.5
27.5°	566.0	590.4	624.8	667.5
30°	546.9	570.6	603.4	649.2
32.5°	524.1	546.9	581.3	629.3
35°	498.1	524.1	556.9	605.7
37.5°	478.3	501.9	536.3	582.8
40°	456.9	477.5	511.1	556.9
42.5°	434.0	456.9	485.9	531.7
45°	412.7	429.5	459.2	502.7
47.5°	389.8	408.9	431.8	465.3
50°	365.4	381.4	406.6	429.5
52.5°	341.7	354.7	376.1	393.6
55°	316.6	329.5	345.6	356.2
57.5°	292.9	302.1	312.8	319.6
60°	263.9	273.1	280.0	286.8
62.5°	238.0	244.9	248.7	252.5
65°	211.3	215.1	217.4	220.5
67.5°	182.3	186.1	186.9	191.5
70°	155.6	156.4	157.9	160.2
72.5°	130.4	132.0	131.2	132.7
75°	104.5	106.0	104.5	106.0
77.5°	79.3	80.9	80.9	83.1
80°	57.2	58.0	58.7	58.7
82.5°	37.4	39.7	38.1	38.9
85°	21.4	22.1	22.1	22.9
87.5°	9.9	10.7	9.9	11.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)