

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: P994981

Luminaire Tested: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994981
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: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K
Description: Define 3 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

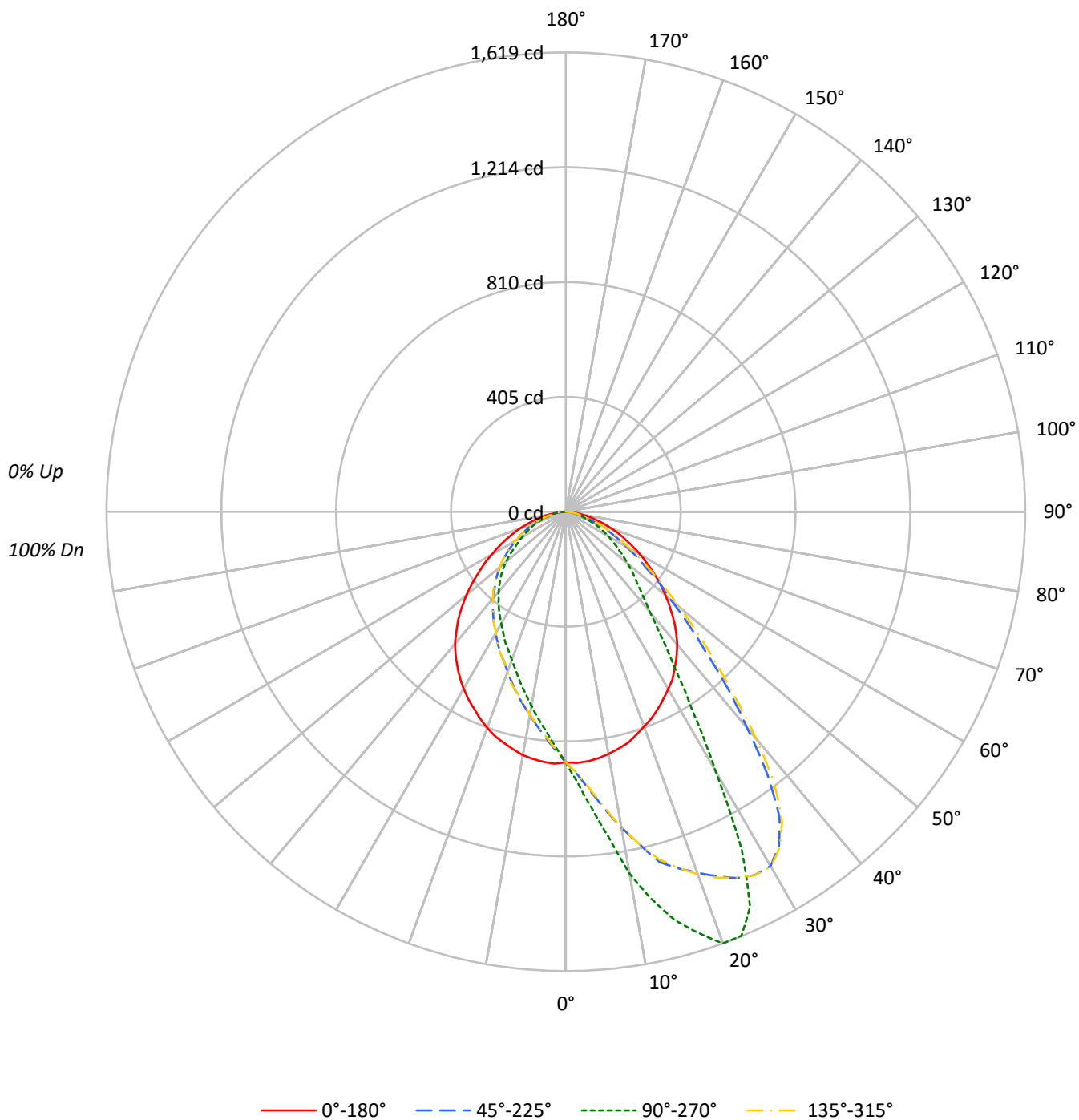
Lumens per Lamp: N/A
Luminaire Lumens: 2200.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V): 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: 24 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				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	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°	9510	9510	9510	9510
5°	9539	11337	9562	8411
10°	9475	14154	9517	7599
15°	9399	16614	9399	6929
20°	9228	18543	9279	6360
25°	9109	18246	9092	6011
30°	8969	13115	8950	5650
35°	8796	8757	8757	5418
40°	8577	6452	8535	5176
45°	8176	5412	8164	4940
50°	7676	4776	7651	4610
55°	7112	4187	7054	4159
60°	6562	3729	6497	3810
65°	5914	3275	5952	3545
70°	5331	2571	5476	3238
75°	4625	2267	4812	2957
80°	3843	1971	4172	2907
85°	3088	1593	3359	3088

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 15510 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	3.9
10°-20°	271.6	12.3
20°-30°	427.8	19.4
30°-40°	444.8	20.2
40°-50°	380.6	17.3
50°-60°	290.1	13.2
60°-70°	185.9	8.4
70°-80°	89.1	4.0
80°-90°	23.4	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°	786.1	35.7
0°-40°	1231.0	56.0
0°-60°	1901.6	86.4
0°-90°	2200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2200.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	884	884	884	884	884	
5°	883	1049	885	778	883	84
15°	843	1491	843	622	843	237
25°	767	1536	766	506	767	353
35°	669	666	666	412	669	419
45°	537	356	536	324	537	414
55°	379	223	376	222	379	340
65°	232	129	234	139	232	232
75°	111	54	116	71	111	120
85°	25	13	27	25	25	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	885.8	891.8	896.4	899.4	907.0	911.5	915.3	922.1	922.1	923.6	926.6
5°	882.8	895.6	904.7	916.8	932.7	940.2	950.8	959.9	972.8	979.6	986.4
7.5°	876.0	894.1	913.0	931.2	954.6	969.7	980.3	1003.8	1020.4	1040.9	1056.7
10°	866.9	891.8	916.0	944.0	975.8	998.5	1014.4	1045.4	1077.2	1105.9	1130.1
12.5°	855.5	885.8	920.6	954.6	999.2	1021.9	1047.7	1086.2	1131.6	1167.9	1200.5
15°	843.4	878.2	917.6	959.2	1015.1	1046.9	1084.0	1130.9	1181.5	1233.7	1278.4
17.5°	824.5	868.4	912.3	972.8	1038.6	1057.5	1089.3	1153.6	1216.3	1263.2	1317.7
20°	805.6	854.8	910.0	964.5	1035.6	1079.4	1108.9	1177.0	1244.3	1301.1	1353.3
22.5°	788.2	839.6	897.1	966.0	1032.5	1076.4	1113.5	1184.6	1262.5	1326.0	1390.3
25°	767.0	823.0	886.5	951.6	1032.5	1065.8	1106.7	1189.1	1271.6	1344.9	1424.4
27.5°	744.3	801.1	863.8	930.4	1004.5	1053.7	1093.8	1182.3	1282.9	1361.6	1443.3
30°	721.6	779.9	840.4	900.2	983.4	1030.3	1076.4	1174.0	1289.0	1379.0	1441.8
32.5°	699.7	748.9	808.6	866.9	949.3	1000.8	1053.0	1165.7	1291.2	1366.9	1397.1
35°	669.4	720.9	769.3	831.3	914.5	965.2	1026.5	1164.9	1281.4	1328.3	1313.2
37.5°	641.5	684.6	730.7	785.9	871.4	937.2	1000.8	1145.2	1248.9	1251.9	1166.4
40°	610.4	646.0	684.6	742.8	835.1	900.2	969.0	1115.0	1189.9	1145.2	994.7
42.5°	574.9	606.7	636.9	693.6	794.3	866.9	941.0	1077.2	1104.4	1001.5	844.9
45°	537.1	562.8	590.8	650.5	751.1	823.0	897.1	1018.9	990.9	845.7	696.7
47.5°	497.7	519.7	546.9	601.4	705.0	778.4	848.7	935.7	864.6	708.8	584.0
50°	458.4	475.8	502.3	558.2	658.1	724.7	789.7	846.4	746.6	608.2	482.6
52.5°	419.8	433.4	460.7	508.3	605.1	668.7	715.6	737.5	636.2	502.3	419.1
55°	379.0	394.1	412.3	460.7	556.7	603.6	634.6	633.9	529.5	425.9	346.4
57.5°	339.6	353.3	369.1	417.6	495.5	527.2	553.7	540.9	441.8	348.7	297.3
60°	304.8	312.4	329.8	370.7	429.7	456.9	472.0	450.1	360.8	294.3	245.8
62.5°	267.0	274.6	289.0	327.5	363.8	378.2	391.1	363.1	298.0	239.8	210.3
65°	232.2	242.1	251.1	282.1	301.8	319.2	317.7	294.3	233.0	195.2	171.0
67.5°	202.0	205.7	213.3	232.2	241.3	254.2	254.9	228.4	187.6	158.9	144.5
70°	169.4	173.2	178.5	187.6	193.6	196.7	195.2	171.7	141.5	124.1	111.2
72.5°	141.5	140.7	144.5	144.5	150.5	149.8	145.2	127.1	107.4	93.0	85.5
75°	111.2	112.0	112.7	111.2	108.9	105.9	102.1	88.5	75.6	68.8	62.0
77.5°	87.0	85.5	86.2	80.9	77.9	74.9	69.6	62.8	52.2	50.7	47.7
80°	62.0	61.3	60.5	58.2	51.4	48.4	44.6	40.8	38.6	37.1	36.3
82.5°	41.6	41.6	40.1	35.6	31.8	29.5	28.7	27.2	25.0	25.0	24.2
85°	25.0	24.2	22.7	18.2	15.9	15.9	15.9	15.9	14.4	14.4	13.6
87.5°	9.8	9.1	6.8	6.8	6.1	6.1	6.1	5.3	5.3	4.5	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	932.7	932.7	939.5	946.3	942.5	944.8	953.1	950.1	956.1	955.4	957.6
5°	1003.0	1011.4	1018.2	1032.5	1034.8	1032.5	1046.9	1050.7	1057.5	1049.2	1053.0
7.5°	1082.5	1099.9	1116.5	1137.7	1144.5	1146.0	1153.6	1164.2	1173.2	1156.6	1164.9
10°	1159.6	1186.1	1220.1	1239.0	1255.7	1261.7	1267.8	1274.6	1285.2	1295.0	1287.5
12.5°	1242.8	1281.4	1313.9	1348.0	1368.4	1366.1	1383.5	1388.1	1396.4	1398.6	1401.7
15°	1310.9	1365.4	1385.8	1436.5	1441.0	1456.1	1475.8	1493.2	1495.5	1490.9	1490.9
17.5°	1376.0	1422.9	1459.2	1500.0	1508.3	1521.2	1546.2	1554.5	1557.5	1556.7	1556.7
20°	1428.9	1459.9	1521.2	1555.2	1568.8	1585.5	1602.9	1613.5	1615.7	1618.8	1614.2
22.5°	1463.7	1510.6	1560.5	1588.5	1599.9	1605.9	1617.3	1620.3	1616.5	1617.3	1618.0
25°	1490.9	1537.1	1567.3	1574.9	1574.1	1566.6	1558.3	1543.9	1542.4	1536.3	1524.2
27.5°	1498.5	1515.9	1512.1	1481.1	1450.1	1447.1	1397.1	1369.9	1338.9	1343.4	1326.0
30°	1457.6	1435.0	1381.2	1302.6	1270.1	1217.1	1161.1	1102.9	1080.2	1055.2	1101.4
32.5°	1357.8	1276.9	1181.5	1079.4	1025.0	978.1	918.3	876.0	851.7	831.3	870.7
35°	1207.3	1080.9	954.6	857.8	813.2	770.8	714.8	693.6	663.4	666.4	670.2
37.5°	1013.6	874.4	779.1	683.8	654.3	636.9	596.1	563.5	553.0	549.9	549.9
40°	832.1	717.9	633.1	558.2	535.6	521.2	488.7	473.5	462.2	459.2	462.9
42.5°	688.4	590.8	525.0	475.0	459.2	441.0	427.4	408.5	406.2	400.9	407.7
45°	577.9	493.2	444.0	407.7	394.1	387.3	372.2	360.8	356.3	355.5	360.8
47.5°	490.2	424.4	381.2	358.5	348.0	341.2	328.3	323.8	319.2	320.7	318.5
50°	411.5	362.3	334.3	313.9	307.1	300.3	292.0	287.4	285.2	285.2	284.4
52.5°	353.3	312.4	294.3	275.3	272.3	268.5	259.5	256.4	252.6	251.9	254.9
55°	302.6	274.6	256.4	245.1	242.1	234.5	230.7	226.9	224.7	223.1	223.9
57.5°	258.7	237.5	225.4	215.6	210.3	207.3	200.5	199.7	198.2	198.2	197.4
60°	222.4	207.3	192.9	186.8	183.1	179.3	178.5	174.0	171.7	173.2	172.5
62.5°	188.4	176.2	167.9	161.1	158.9	155.8	153.6	152.0	149.8	150.5	150.5
65°	157.3	147.5	141.5	135.4	134.6	131.6	130.9	129.4	129.4	128.6	130.1
67.5°	129.4	122.5	117.2	113.5	111.2	112.0	108.9	106.7	106.7	105.9	108.2
70°	102.9	99.1	93.8	89.3	86.2	86.2	82.5	81.7	81.7	81.7	80.9
72.5°	79.4	72.6	70.3	68.8	68.8	68.8	67.3	67.3	66.6	67.3	66.6
75°	59.0	58.2	56.7	56.0	56.0	55.2	54.5	54.5	54.5	54.5	54.5
77.5°	46.1	46.1	44.6	43.9	43.9	43.9	43.1	43.1	42.4	42.4	42.4
80°	34.0	34.0	32.5	32.5	32.5	31.8	31.8	31.8	32.5	31.8	31.8
82.5°	23.4	23.4	22.7	23.4	22.7	21.9	21.9	21.9	21.2	21.9	21.9
85°	13.6	13.6	12.9	12.1	12.9	12.9	12.1	12.9	12.1	12.9	12.1
87.5°	5.3	4.5	4.5	4.5	3.8	4.5	3.8	3.8	4.5	3.8	4.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	953.9	949.3	946.3	944.0	941.8	948.6	939.5	929.7	922.8	918.3	916.8
5°	1053.7	1043.9	1035.6	1028.7	1030.3	1030.3	1014.4	997.0	981.9	973.5	964.5
7.5°	1169.4	1158.9	1142.2	1138.4	1135.4	1116.5	1100.6	1068.8	1049.9	1031.0	1014.4
10°	1284.4	1270.8	1254.9	1249.6	1242.1	1218.6	1194.4	1153.6	1130.1	1095.3	1073.4
12.5°	1391.8	1375.2	1359.3	1355.5	1344.2	1323.8	1282.2	1239.8	1199.7	1162.6	1124.1
15°	1481.9	1477.3	1453.1	1438.0	1413.0	1385.0	1376.0	1318.5	1267.8	1229.2	1159.6
17.5°	1557.5	1536.3	1513.6	1503.8	1494.0	1461.4	1428.9	1369.9	1315.4	1258.7	1214.1
20°	1618.0	1594.6	1578.7	1564.3	1559.8	1522.7	1471.3	1419.1	1359.3	1295.8	1237.5
22.5°	1621.0	1618.0	1607.4	1599.1	1590.0	1565.8	1525.0	1459.9	1396.4	1326.8	1250.4
25°	1558.3	1553.7	1584.0	1576.4	1582.5	1573.4	1551.4	1497.0	1422.9	1341.2	1264.0
27.5°	1369.1	1415.3	1462.9	1479.6	1490.9	1523.5	1534.0	1503.8	1444.0	1357.0	1270.8
30°	1112.0	1173.2	1250.4	1292.0	1323.8	1384.3	1462.9	1472.8	1444.8	1375.2	1269.3
32.5°	872.9	928.9	990.9	1040.1	1082.5	1206.5	1312.4	1388.8	1402.4	1366.1	1273.1
35°	703.5	727.7	786.7	833.6	891.1	997.0	1121.8	1245.1	1328.3	1332.8	1261.7
37.5°	580.2	593.0	644.5	671.0	705.0	798.0	914.5	1075.6	1205.0	1266.3	1230.0
40°	480.3	509.8	539.3	554.5	578.7	643.0	754.9	881.2	1041.6	1155.1	1180.8
42.5°	416.8	429.7	448.6	469.7	484.9	540.9	615.7	731.5	876.0	1034.0	1105.1
45°	367.6	372.2	391.8	405.4	421.3	460.7	513.6	610.4	737.5	893.3	1014.4
47.5°	326.8	335.9	346.4	354.8	365.4	395.6	441.0	511.3	623.3	762.5	892.6
50°	290.5	295.8	309.4	313.2	320.7	341.9	376.7	430.4	522.7	633.9	768.5
52.5°	256.4	266.3	271.6	276.9	283.7	301.1	323.8	367.6	437.2	541.6	655.8
55°	230.0	233.0	240.5	245.1	250.4	262.5	282.1	314.7	369.1	452.3	560.5
57.5°	204.2	204.2	211.8	215.6	220.9	230.0	247.4	272.3	311.7	373.7	472.8
60°	177.0	177.8	183.8	188.4	189.9	198.9	213.3	233.0	263.2	308.6	389.6
62.5°	152.8	156.6	159.6	161.1	166.4	171.7	183.8	197.4	218.6	258.7	316.2
65°	132.4	133.1	135.4	136.9	139.2	145.2	154.3	163.4	181.5	211.0	257.9
67.5°	108.9	112.0	115.0	115.0	117.2	120.3	129.4	136.9	150.5	167.9	199.7
70°	81.7	83.2	87.7	90.0	93.0	98.3	102.9	107.4	118.0	130.9	155.1
72.5°	68.1	68.1	69.6	70.3	70.3	74.1	80.9	85.5	90.8	99.8	116.5
75°	54.5	54.5	56.7	56.0	57.5	59.0	59.8	62.8	65.8	72.6	82.5
77.5°	43.1	43.9	43.9	44.6	44.6	45.4	46.1	47.7	49.2	53.0	57.5
80°	31.8	32.5	32.5	33.3	33.3	34.0	34.8	35.6	37.1	38.6	40.8
82.5°	21.9	22.7	22.7	23.4	22.7	23.4	24.2	24.2	25.0	26.5	27.2
85°	12.9	12.9	13.6	12.9	12.9	12.9	13.6	13.6	14.4	16.6	16.6
87.5°	3.8	4.5	3.8	4.5	4.5	4.5	4.5	5.3	5.3	6.1	6.8
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: P994981

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	914.5	910.7	907.0	907.0	898.6	891.1	887.3	888.8	884.3	878.2	872.2
5°	954.6	939.5	936.5	928.1	916.8	900.9	892.6	885.0	876.0	863.8	852.5
7.5°	991.7	972.0	961.4	953.1	931.2	909.2	891.1	879.0	863.1	844.9	831.3
10°	1040.1	1003.8	992.4	973.5	942.5	911.5	890.3	870.7	848.7	827.5	809.4
12.5°	1078.7	1037.1	1015.9	997.0	956.9	917.6	882.0	857.8	831.3	807.9	784.4
15°	1122.5	1075.6	1038.6	1015.9	965.2	917.6	877.5	843.4	813.9	785.2	764.8
17.5°	1143.7	1084.7	1068.1	1035.6	962.2	914.5	865.4	829.1	793.5	760.2	736.0
20°	1177.0	1108.2	1066.6	1044.6	979.6	909.2	851.7	810.1	773.1	737.5	711.8
22.5°	1179.3	1104.4	1077.2	1035.6	955.4	893.3	839.6	789.0	745.8	712.6	686.1
25°	1174.0	1097.6	1059.8	1026.5	959.9	884.3	815.4	765.5	723.2	684.6	653.6
27.5°	1171.7	1077.9	1042.4	1009.1	934.2	857.8	801.1	744.3	695.9	661.9	630.1
30°	1168.7	1056.7	1013.6	975.0	906.2	837.4	769.3	720.1	674.0	630.9	599.1
32.5°	1149.0	1028.0	984.1	943.3	869.1	800.3	746.6	694.4	644.5	604.4	575.6
35°	1143.0	1001.5	944.0	900.2	827.5	766.3	709.5	666.4	619.5	579.4	545.4
37.5°	1125.6	974.3	912.3	856.3	780.6	722.4	680.8	637.7	592.3	549.2	521.9
40°	1095.3	942.5	872.2	814.7	736.8	677.8	639.2	607.4	562.8	524.2	490.9
42.5°	1050.7	910.0	834.3	773.8	687.6	632.4	600.6	570.4	532.5	492.4	465.2
45°	999.2	866.9	796.5	729.2	641.5	587.7	554.5	536.3	501.5	467.5	435.7
47.5°	928.9	822.2	752.7	683.1	593.8	541.6	515.1	497.0	472.8	435.7	410.0
50°	840.4	764.8	698.9	636.9	546.9	497.0	470.5	456.9	436.5	410.0	385.0
52.5°	742.1	698.2	643.7	586.2	499.2	452.3	428.1	417.6	402.4	377.5	356.3
55°	643.0	624.1	587.0	530.3	449.3	410.7	389.6	375.9	364.6	346.4	328.3
57.5°	554.5	545.4	519.7	475.8	407.7	367.6	349.5	340.4	331.3	317.7	299.5
60°	462.9	472.8	446.3	424.4	362.3	327.5	311.7	301.8	297.3	285.2	273.8
62.5°	383.5	392.6	377.5	360.8	316.9	285.9	276.1	267.0	264.0	253.4	242.1
65°	311.7	323.0	311.7	302.6	276.1	250.4	238.3	233.7	230.7	223.9	214.8
67.5°	248.1	259.5	254.2	242.8	234.5	213.3	206.5	202.0	200.5	195.2	187.6
70°	186.8	202.7	204.2	197.4	189.9	180.0	175.5	174.0	170.2	165.7	161.1
72.5°	134.6	152.8	153.6	153.6	149.0	149.0	144.5	142.2	142.2	137.7	132.4
75°	99.1	111.2	112.7	114.2	116.5	118.8	115.7	115.7	115.0	110.4	108.2
77.5°	65.8	76.4	80.2	85.5	88.5	88.5	90.0	91.5	90.0	87.7	86.2
80°	42.4	49.9	54.5	57.5	62.0	64.3	66.6	67.3	65.8	65.1	62.8
82.5°	28.0	30.3	32.5	36.3	41.6	45.4	45.4	44.6	46.1	45.4	44.6
85°	15.9	17.4	18.2	18.9	21.9	25.7	26.5	27.2	28.7	27.2	25.7
87.5°	6.1	6.8	6.8	6.8	8.3	9.1	11.3	14.4	13.6	12.1	12.1
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: P994981

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	872.2	868.4	866.9	863.1	854.0	848.0	841.2	836.6	837.4	833.6	835.9
5°	844.9	844.2	838.9	831.3	818.5	811.7	799.6	793.5	790.5	791.2	786.7
7.5°	822.2	815.4	811.7	799.6	787.4	773.1	763.2	757.9	753.4	748.9	745.8
10°	796.5	790.5	784.4	771.6	754.9	741.3	727.7	722.4	715.6	712.6	710.3
12.5°	769.3	765.5	757.9	742.8	723.9	711.0	695.2	692.1	683.1	677.0	675.5
15°	744.3	742.1	728.4	711.0	692.1	679.3	665.7	656.6	641.5	644.5	639.2
17.5°	717.9	708.0	699.7	676.3	667.2	647.5	631.6	627.1	616.5	609.7	602.9
20°	688.4	682.3	671.7	656.6	634.6	612.0	599.9	592.3	586.2	575.6	572.6
22.5°	660.4	652.8	643.7	624.1	605.1	586.2	569.6	562.8	555.2	547.7	543.1
25°	638.4	627.1	617.2	593.0	574.1	558.2	547.7	536.3	525.7	521.2	519.7
27.5°	604.4	597.6	587.7	565.1	547.7	530.3	520.4	512.9	501.5	496.2	491.7
30°	582.5	568.8	557.5	539.3	521.9	503.0	494.0	484.9	478.1	471.3	466.0
32.5°	553.0	542.4	533.3	515.1	497.7	480.3	470.5	456.9	453.1	447.8	441.8
35°	524.2	517.4	507.6	487.9	469.0	456.9	446.3	433.4	428.9	425.1	419.8
37.5°	497.0	487.1	480.3	461.4	444.8	430.4	422.1	411.5	408.5	403.9	400.2
40°	473.5	463.7	456.9	438.0	420.6	405.4	400.2	389.6	385.0	379.7	377.5
42.5°	447.1	438.7	429.7	416.0	397.9	382.8	372.2	366.1	360.1	357.8	353.3
45°	419.1	411.5	404.7	389.6	370.7	360.1	351.0	342.7	338.1	334.3	331.3
47.5°	394.9	388.1	379.0	362.3	347.2	337.4	328.3	320.0	315.4	310.9	307.1
50°	366.9	363.1	353.3	337.4	323.0	311.7	303.3	295.8	292.7	287.4	281.4
52.5°	341.9	335.1	326.8	313.9	301.1	287.4	276.1	271.6	266.3	263.2	257.9
55°	312.4	307.9	298.8	287.4	273.8	262.5	254.2	248.1	241.3	238.3	231.5
57.5°	287.4	279.1	274.6	260.2	247.4	236.0	230.0	223.9	216.3	211.8	208.8
60°	260.2	252.6	245.8	233.7	224.7	212.6	203.5	198.2	192.9	186.8	183.8
62.5°	233.7	227.7	219.4	209.5	198.2	188.4	181.5	174.0	171.0	164.9	162.6
65°	205.0	200.5	193.6	182.3	173.2	164.9	158.1	152.0	149.0	146.7	145.2
67.5°	179.3	173.2	168.7	158.9	149.0	142.2	138.4	134.6	130.9	128.6	126.3
70°	152.8	148.3	143.7	134.6	127.8	121.8	118.8	115.7	113.5	111.2	108.9
72.5°	125.6	123.3	118.8	112.7	107.4	102.9	100.6	96.8	94.6	90.8	89.3
75°	103.6	99.8	97.6	92.3	87.7	84.0	80.9	76.4	73.4	71.9	71.1
77.5°	81.7	80.2	77.2	72.6	70.3	66.6	62.0	60.5	59.0	59.0	58.2
80°	61.3	59.0	56.7	53.0	50.7	47.7	47.7	47.7	46.9	47.7	46.9
82.5°	41.6	40.1	38.6	36.3	35.6	35.6	36.3	36.3	36.3	36.3	36.3
85°	24.2	24.2	24.2	25.0	24.2	24.2	25.0	25.7	25.0	25.0	24.2
87.5°	11.3	11.3	12.1	12.1	12.9	12.9	12.9	12.9	12.9	12.9	13.6
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: P994981

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	835.1	835.9	833.6	829.1	828.3	829.8	834.3	832.8	829.1	835.9	829.8
5°	789.0	785.2	783.7	785.2	780.6	778.4	782.9	780.6	782.9	783.7	785.9
7.5°	744.3	745.1	740.5	741.3	735.3	736.8	736.8	736.8	739.0	740.5	743.6
10°	705.8	707.3	702.0	702.7	698.2	695.2	697.4	702.0	702.0	702.0	703.5
12.5°	674.7	667.9	664.1	663.4	658.1	656.6	661.1	662.6	666.4	666.4	668.7
15°	636.2	634.6	631.6	631.6	618.8	621.8	623.3	628.6	636.2	630.1	631.6
17.5°	601.4	597.6	593.8	592.3	590.8	586.2	592.3	591.5	596.1	596.8	599.1
20°	570.4	567.3	559.8	560.5	562.0	555.2	559.0	559.0	563.5	568.1	573.4
22.5°	540.1	537.1	533.3	534.8	530.3	528.7	528.7	532.5	537.8	541.6	540.9
25°	516.6	511.3	509.1	506.8	504.5	506.1	503.8	507.6	511.3	513.6	511.3
27.5°	490.2	487.9	483.4	481.1	477.3	478.8	480.3	483.4	485.6	485.6	487.9
30°	464.5	461.4	459.9	457.6	457.6	454.6	455.4	458.4	460.7	462.9	466.0
32.5°	439.5	437.2	434.9	434.9	433.4	432.7	431.9	436.5	436.5	441.0	441.0
35°	419.1	415.3	415.3	411.5	413.0	412.3	410.7	413.8	414.5	417.6	416.8
37.5°	396.4	396.4	394.9	391.1	388.1	388.8	392.6	392.6	394.9	394.1	396.4
40°	373.7	372.2	372.2	369.9	369.1	368.4	369.1	369.9	373.7	372.9	373.7
42.5°	351.0	351.7	348.0	348.0	348.0	345.7	346.4	347.2	348.7	350.2	352.5
45°	329.0	327.5	326.8	325.3	323.8	324.5	323.8	326.8	326.0	327.5	329.8
47.5°	305.6	303.3	302.6	299.5	299.5	301.1	300.3	302.6	303.3	305.6	304.1
50°	282.9	279.9	277.6	278.4	273.8	275.3	275.3	277.6	279.9	280.6	282.1
52.5°	256.4	255.7	254.9	251.1	250.4	249.6	250.4	251.1	254.2	256.4	257.2
55°	230.7	230.0	225.4	223.9	221.6	221.6	223.1	223.9	229.2	230.0	233.0
57.5°	207.3	205.0	199.7	198.9	198.9	198.9	196.7	199.7	201.2	205.0	205.0
60°	181.5	181.5	177.0	177.0	177.8	177.0	177.0	177.8	177.8	180.8	182.3
62.5°	161.1	160.4	160.4	158.9	158.1	158.9	158.1	158.1	158.9	161.1	163.4
65°	143.0	142.2	141.5	140.7	139.2	139.2	139.9	141.5	141.5	143.0	143.7
67.5°	125.6	125.6	124.1	124.1	123.3	122.5	123.3	122.5	125.6	125.6	126.3
70°	108.2	107.4	105.1	104.4	102.1	102.9	102.9	105.1	105.9	107.4	108.9
72.5°	87.0	87.0	85.5	84.0	84.7	83.2	83.2	84.0	84.0	86.2	87.0
75°	71.9	70.3	69.6	70.3	69.6	71.1	69.6	69.6	71.1	71.1	71.1
77.5°	59.0	59.0	58.2	58.2	59.0	58.2	59.0	59.0	59.0	58.2	59.0
80°	48.4	47.7	47.7	47.7	46.9	46.9	46.9	46.9	46.9	46.9	46.9
82.5°	36.3	36.3	35.6	36.3	36.3	35.6	36.3	35.6	35.6	36.3	36.3
85°	24.2	25.7	24.2	24.2	25.0	25.0	25.7	25.0	25.7	24.2	25.0
87.5°	12.9	13.6	13.6	12.9	12.9	13.6	13.6	13.6	14.4	12.9	13.6
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: P994981

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5	883.5
2.5°	835.9	838.9	835.9	829.8	835.9	839.6	843.4	849.5	852.5	852.5	857.0
5°	788.2	794.3	792.0	790.5	796.5	800.3	806.4	813.9	822.2	827.5	833.6
7.5°	745.8	749.6	753.4	753.4	759.5	767.8	776.9	785.9	796.5	804.1	808.6
10°	708.8	711.8	714.1	717.1	726.2	735.3	747.4	758.7	767.8	776.1	783.7
12.5°	673.2	677.8	683.1	685.3	692.1	703.5	714.8	728.4	742.8	751.1	758.7
15°	639.2	641.5	647.5	654.3	660.4	672.5	686.8	701.2	713.3	726.2	733.0
17.5°	604.4	605.1	621.0	617.2	636.9	648.3	655.8	669.4	689.1	699.7	710.3
20°	570.4	577.9	584.7	588.5	599.1	612.0	633.9	644.5	660.4	670.2	679.3
22.5°	543.9	555.2	555.2	564.3	569.6	581.7	597.6	618.0	635.4	642.2	655.1
25°	520.4	525.7	534.8	537.8	547.7	558.2	568.8	590.8	609.7	618.8	627.8
27.5°	490.2	497.0	509.1	509.1	521.9	533.3	546.1	560.5	579.4	592.3	602.1
30°	466.7	473.5	478.8	487.1	492.4	503.0	525.7	536.3	553.0	564.3	576.4
32.5°	444.8	450.1	454.6	463.7	469.7	481.8	494.0	512.9	527.2	537.8	550.7
35°	420.6	425.9	431.9	438.7	447.8	459.2	470.5	486.4	500.8	510.6	521.2
37.5°	397.9	401.7	410.7	415.3	422.8	433.4	447.8	464.5	477.3	484.9	495.5
40°	375.9	379.0	385.8	394.1	399.4	407.7	422.8	437.2	453.1	462.2	470.5
42.5°	352.5	356.3	362.3	370.7	379.0	388.1	396.4	413.0	427.4	434.9	444.0
45°	332.1	334.3	338.9	347.2	355.5	362.3	375.2	390.3	403.9	410.0	419.8
47.5°	307.9	310.1	316.9	320.7	329.8	338.9	351.7	366.9	379.0	385.0	394.1
50°	282.9	285.2	289.7	298.0	304.1	313.9	325.3	338.1	353.3	361.6	366.9
52.5°	258.7	263.2	267.0	273.8	281.4	291.2	301.8	313.9	326.8	335.1	341.2
55°	234.5	238.3	242.8	246.6	255.7	264.8	276.9	288.2	299.5	307.1	313.9
57.5°	207.3	212.6	217.1	224.7	231.5	239.0	252.6	261.7	275.3	280.6	286.7
60°	183.8	189.1	192.9	198.9	205.0	214.8	223.9	235.3	246.6	253.4	261.0
62.5°	164.1	166.4	168.7	174.7	180.8	189.9	198.9	210.3	222.4	226.2	232.2
65°	144.5	146.7	150.5	155.8	160.4	165.7	175.5	184.6	195.9	202.0	204.2
67.5°	127.8	130.1	130.9	134.6	138.4	144.5	149.8	158.9	169.4	173.2	177.8
70°	108.9	112.7	113.5	116.5	118.0	121.8	127.8	134.6	143.0	149.8	153.6
72.5°	87.0	92.3	93.8	98.3	100.6	104.4	108.9	114.2	119.5	122.5	125.6
75°	71.1	72.6	73.4	77.2	80.9	86.2	88.5	91.5	96.1	99.8	102.9
77.5°	59.0	59.8	60.5	60.5	61.3	64.3	68.8	72.6	75.6	77.2	79.4
80°	47.7	46.9	46.9	47.7	47.7	47.7	49.2	54.5	56.0	59.8	59.0
82.5°	37.1	35.6	36.3	35.6	35.6	35.6	35.6	36.3	36.3	38.6	40.1
85°	24.2	25.0	24.2	24.2	23.4	24.2	23.4	23.4	22.7	22.7	21.9
87.5°	12.9	13.6	12.9	12.9	12.1	12.9	12.1	12.1	11.3	11.3	9.8
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: P994981

CATALOG NUMBER: S123RDR-B560DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	883.5	883.5	883.5	883.5
2.5°	860.8	866.1	876.7	885.8
5°	842.7	851.0	866.9	882.8
7.5°	820.7	833.6	854.0	876.0
10°	799.6	816.2	841.2	866.9
12.5°	778.4	795.8	822.2	855.5
15°	753.4	771.6	803.3	843.4
17.5°	731.5	755.7	784.4	824.5
20°	708.0	726.2	763.2	805.6
22.5°	678.5	708.8	743.6	788.2
25°	655.1	681.5	716.3	767.0
27.5°	626.3	657.3	699.7	744.3
30°	602.9	628.6	667.9	721.6
32.5°	575.6	605.9	646.8	699.7
35°	551.4	577.2	615.7	669.4
37.5°	522.7	550.7	593.8	641.5
40°	497.7	525.0	565.8	610.4
42.5°	467.5	496.2	537.1	574.9
45°	443.3	469.7	502.3	537.1
47.5°	413.8	441.8	473.5	497.7
50°	387.3	413.0	438.0	458.4
52.5°	358.5	382.0	404.7	419.8
55°	332.1	350.2	368.4	379.0
57.5°	301.1	318.5	333.6	339.6
60°	273.8	288.2	298.0	304.8
62.5°	245.1	255.7	263.2	267.0
65°	217.1	224.7	228.4	232.2
67.5°	188.4	195.2	197.4	202.0
70°	158.1	165.7	167.2	169.4
72.5°	135.4	135.4	138.4	141.5
75°	108.2	109.7	111.2	111.2
77.5°	84.7	84.7	86.2	87.0
80°	62.0	62.8	62.8	62.0
82.5°	42.4	43.9	42.4	41.6
85°	23.4	26.5	25.0	25.0
87.5°	9.8	9.8	11.3	9.8
90°	0.0	0.0	0.0	0.0

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