

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: P333367-927

Luminaire Tested: **S125DIW-S375D1560U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333367-927
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-S375D1560U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 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: 5444.0 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

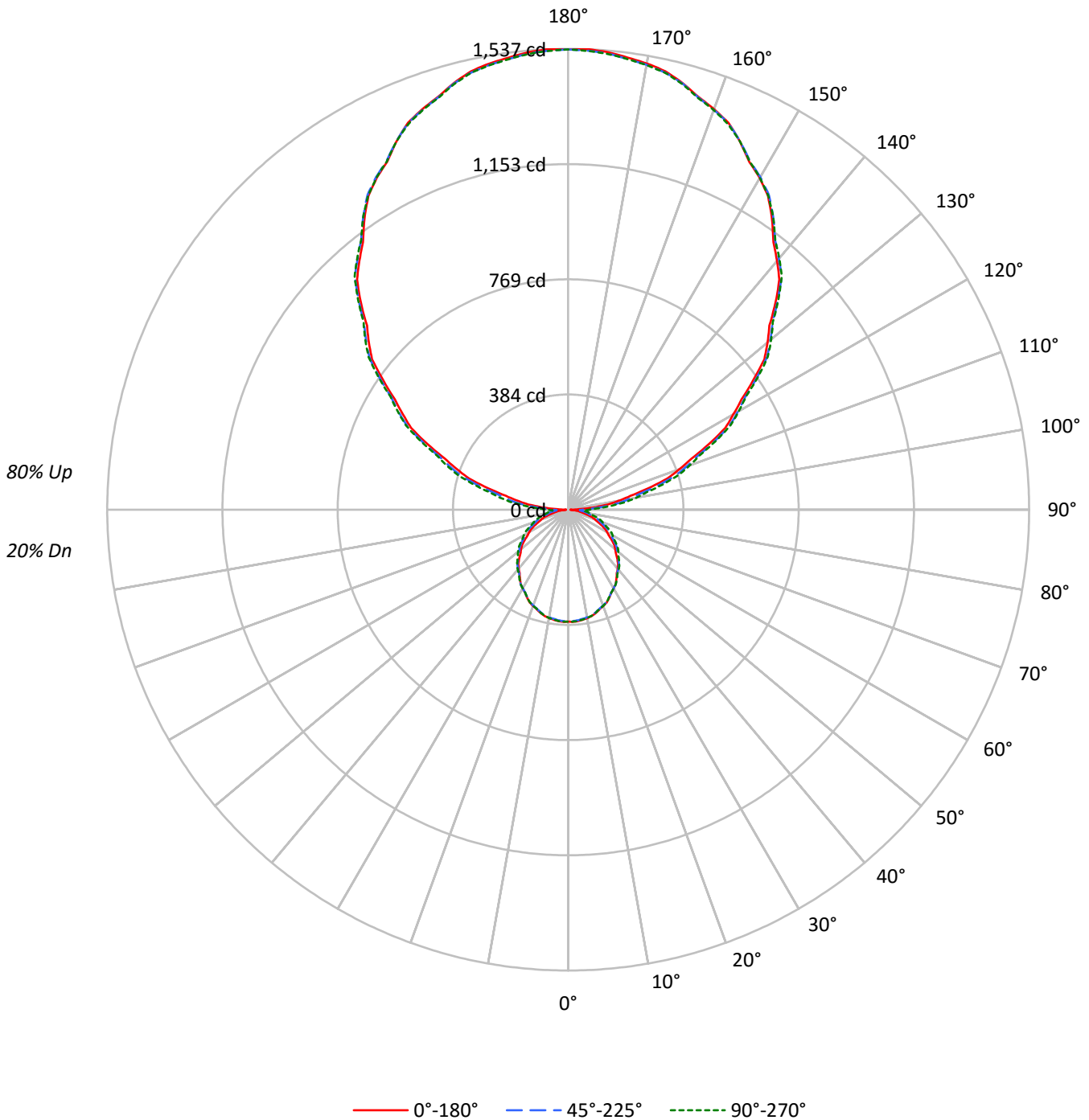
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





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CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	86	83	79	80	76	73	70	58	56	54	41	39	38	25	24	23	16
2	82	75	69	64	73	67	62	57	50	47	44	35	33	32	22	20	19	13
3	75	66	59	53	66	58	53	48	44	40	37	31	29	27	19	18	16	11
4	69	58	51	45	60	52	45	40	39	35	31	28	25	23	17	15	14	9
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	15	13	12	8
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11	7
7	53	41	34	28	47	37	30	26	28	23	20	20	17	15	12	11	9	6
8	49	37	30	25	43	33	27	22	25	21	18	18	15	13	11	10	8	6
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	10	9	7	5
10	42	31	24	19	37	28	22	18	21	17	14	15	12	10	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	0.6
10°-20°	100.2	1.8
20°-30°	149.1	2.7
30°-40°	176.6	3.2
40°-50°	182.6	3.4
50°-60°	168.2	3.1
60°-70°	135.9	2.5
70°-80°	91.0	1.7
80°-90°	50.6	0.9
90°-100°	129.3	2.4
100°-110°	323.2	5.9
110°-120°	527.4	9.7
120°-130°	684.3	12.6
130°-140°	761.7	14.0
140°-150°	744.0	13.7
150°-160°	624.3	11.5
160°-170°	415.0	7.6
170°-180°	145.2	2.7
0°-30°	284.6	5.2
0°-40°	461.2	8.5
0°-60°	812.0	14.9
0°-90°	1089.5	20.0
90°-120°	979.9	18.0
90°-150°	3169.9	58.2
90°-180°	4354.0	80.0
0°-180°	5444.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	7	28	49	63	70	8
95°	82	95	119	134	140	87
105°	276	288	306	320	326	294
115°	517	525	536	542	543	511
125°	753	760	768	772	772	674
135°	978	985	989	993	990	754
145°	1184	1189	1192	1194	1192	740
155°	1355	1355	1356	1360	1355	624
165°	1473	1471	1472	1476	1470	415
175°	1532	1527	1527	1533	1526	145
180°	1535	1535	1535	1535	1535	



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.6	14.7	17.7	20.8	23.8	26.9	30.0	33.1	36.3	39.4	41.5
90°	7.1	11.8	16.5	21.2	26.0	30.7	35.3	39.9	44.5	49.1	52.4
92.5°	34.2	38.1	42.0	45.9	49.7	54.3	59.4	64.5	69.6	74.7	78.3
95°	82.4	85.1	87.7	90.4	93.0	97.0	102.4	107.9	113.3	118.7	122.4
97.5°	133.3	135.5	137.6	139.7	141.8	146.1	152.3	158.7	165.0	171.3	174.8
100°	171.3	173.0	174.7	176.4	178.2	182.0	188.1	194.1	200.2	206.2	210.3
102.5°	212.1	214.8	217.4	220.0	222.7	226.1	230.4	234.7	239.0	243.3	247.6
105°	275.7	278.3	281.0	283.6	286.2	289.5	293.6	297.6	301.7	305.7	308.9
107.5°	345.9	348.4	350.9	353.3	355.7	358.7	362.3	365.8	369.4	373.0	375.4
110°	394.4	396.7	399.0	401.3	403.6	406.3	409.4	412.5	415.6	418.7	421.0



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	444.2	445.6	447.1	448.5	450.0	452.3	455.6	458.8	462.0	465.2	467.1
115°	517.1	518.8	520.4	522.0	523.6	525.8	528.5	531.1	533.8	536.4	537.6
117.5°	590.3	591.2	592.1	592.9	593.7	595.4	597.9	600.4	602.9	605.4	607.0
120°	636.2	637.8	639.4	641.0	642.5	644.4	646.5	648.6	650.8	652.9	654.3
122.5°	685.6	686.3	686.8	687.5	688.0	689.6	692.1	694.6	697.0	699.6	700.7
125°	753.0	754.5	756.0	757.5	759.0	760.7	762.6	764.5	766.4	768.3	769.1
127.5°	824.3	825.1	825.9	826.7	827.6	828.8	830.4	832.1	833.8	835.4	836.4
130°	867.3	868.5	869.8	871.0	872.3	873.7	875.4	877.1	878.8	880.4	881.3
132.5°	910.0	912.2	914.3	916.5	918.6	920.1	920.9	921.6	922.4	923.2	924.1
135°	978.0	979.5	981.0	982.5	984.0	985.2	986.1	986.9	987.8	988.6	989.7
137.5°	1042.0	1043.5	1045.0	1046.4	1047.9	1049.1	1050.0	1050.8	1051.6	1052.5	1053.8
140°	1082.8	1084.1	1085.4	1086.8	1088.1	1089.3	1090.1	1091.0	1091.9	1092.7	1094.2
142.5°	1123.9	1125.0	1126.0	1127.0	1128.1	1129.2	1130.1	1131.2	1132.2	1133.2	1134.3
145°	1184.4	1185.3	1186.3	1187.3	1188.3	1189.1	1189.9	1190.7	1191.5	1192.3	1192.8
147.5°	1239.9	1240.5	1241.0	1241.7	1242.2	1242.9	1243.5	1244.1	1244.8	1245.4	1246.2
150°	1277.2	1276.9	1276.7	1276.4	1276.1	1276.5	1277.6	1278.7	1279.7	1280.8	1280.8
152.5°	1307.7	1308.1	1308.5	1308.8	1309.2	1309.6	1310.1	1310.5	1310.9	1311.4	1312.0
155°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1355.3	1355.5	1355.7	1356.1	1357.1
157.5°	1396.9	1396.3	1395.7	1395.1	1394.6	1394.4	1394.6	1395.0	1395.2	1395.4	1396.5
160°	1421.7	1420.9	1420.1	1419.4	1418.6	1418.3	1418.6	1418.8	1419.1	1419.4	1420.4
162.5°	1443.8	1443.1	1442.6	1442.0	1441.4	1441.1	1441.1	1441.2	1441.3	1441.3	1442.6
165°	1473.1	1472.6	1472.0	1471.6	1471.0	1470.8	1471.2	1471.4	1471.6	1472.0	1473.0
167.5°	1497.9	1496.9	1495.9	1494.8	1493.7	1493.2	1493.2	1493.2	1493.2	1493.2	1494.8
170°	1511.3	1510.3	1509.2	1508.2	1507.1	1506.6	1506.6	1506.6	1506.6	1506.6	1508.2
172.5°	1520.9	1519.9	1518.8	1517.7	1516.6	1516.2	1516.2	1516.2	1516.2	1516.2	1517.7
175°	1531.7	1530.6	1529.5	1528.4	1527.4	1526.9	1526.9	1526.9	1526.9	1526.9	1528.4
177.5°	1537.2	1536.3	1535.5	1534.6	1533.7	1533.2	1533.0	1532.8	1532.6	1532.4	1533.7
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	43.6	45.8	47.9	49.4	50.1	50.9	51.6	52.3
90°	55.5	58.7	61.9	64.2	65.6	66.9	68.3	69.7
92.5°	81.8	85.4	89.0	91.3	92.4	93.6	94.7	95.9
95°	126.0	129.7	133.3	135.7	136.8	137.9	139.0	140.1
97.5°	178.3	181.7	185.2	187.4	188.2	189.1	190.0	190.8
100°	214.4	218.5	222.6	225.1	226.2	227.2	228.2	229.3
102.5°	251.8	256.0	260.2	263.0	264.3	265.5	266.7	267.9
105°	312.1	315.4	318.5	320.8	322.2	323.6	325.0	326.3
107.5°	377.8	380.2	382.6	384.0	384.5	384.9	385.4	385.9
110°	423.3	425.6	428.0	429.4	429.6	429.9	430.2	430.6



TEST NUMBER: P333367-927

CATALOG NUMBER: S125DIW-S375D1560U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	469.0	470.8	472.7	473.6	473.7	473.8	473.9	474.0
115°	538.8	540.0	541.1	541.9	542.1	542.3	542.6	542.8
117.5°	608.6	610.1	611.7	612.3	611.8	611.2	610.8	610.2
120°	655.7	657.0	658.5	658.9	658.3	657.7	657.1	656.6
122.5°	701.7	702.8	703.9	704.3	704.0	703.6	703.2	702.9
125°	769.8	770.6	771.3	771.8	772.0	772.1	772.2	772.4
127.5°	837.3	838.2	839.2	839.6	839.6	839.5	839.4	839.4
130°	882.2	883.0	883.9	884.3	884.2	884.0	883.9	883.8
132.5°	925.0	925.8	926.7	926.9	926.5	926.1	925.7	925.3
135°	990.7	991.7	992.8	993.0	992.4	991.7	991.0	990.4
137.5°	1055.0	1056.4	1057.6	1057.7	1056.8	1055.7	1054.7	1053.8
140°	1095.6	1097.0	1098.4	1098.7	1097.6	1096.6	1095.7	1094.6
142.5°	1135.4	1136.5	1137.6	1137.6	1136.6	1135.6	1134.6	1133.6
145°	1193.2	1193.6	1194.0	1194.0	1193.5	1193.0	1192.6	1192.1
147.5°	1246.9	1247.7	1248.5	1248.0	1246.3	1244.7	1243.0	1241.3
150°	1280.8	1280.8	1280.8	1280.6	1280.1	1279.6	1279.2	1278.7
152.5°	1312.6	1313.3	1313.9	1313.8	1312.8	1311.9	1310.9	1310.0
155°	1358.1	1359.2	1360.3	1360.2	1358.8	1357.5	1356.1	1354.9
157.5°	1397.6	1398.7	1399.7	1399.4	1397.6	1395.8	1394.1	1392.3
160°	1421.5	1422.5	1423.6	1423.5	1422.1	1420.8	1419.5	1418.2
162.5°	1443.9	1445.2	1446.4	1446.3	1444.8	1443.2	1441.7	1440.1
165°	1474.0	1475.1	1476.2	1475.9	1474.3	1472.7	1471.2	1469.5
167.5°	1496.4	1497.9	1499.5	1499.5	1497.9	1496.3	1494.6	1492.9
170°	1509.7	1511.3	1512.9	1512.8	1510.9	1509.1	1507.2	1505.4
172.5°	1519.3	1520.9	1522.5	1522.5	1520.8	1519.2	1517.5	1515.9
175°	1530.1	1531.7	1533.3	1533.1	1531.3	1529.4	1527.6	1525.7
177.5°	1534.9	1536.2	1537.5	1537.4	1535.9	1534.4	1532.9	1531.4
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2

(END OF REPORT)