

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: P333651-927

Luminaire Tested: **S125RDIW-S375D1050U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333651-927
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: S125RDIW-S375D1050U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4025.6 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

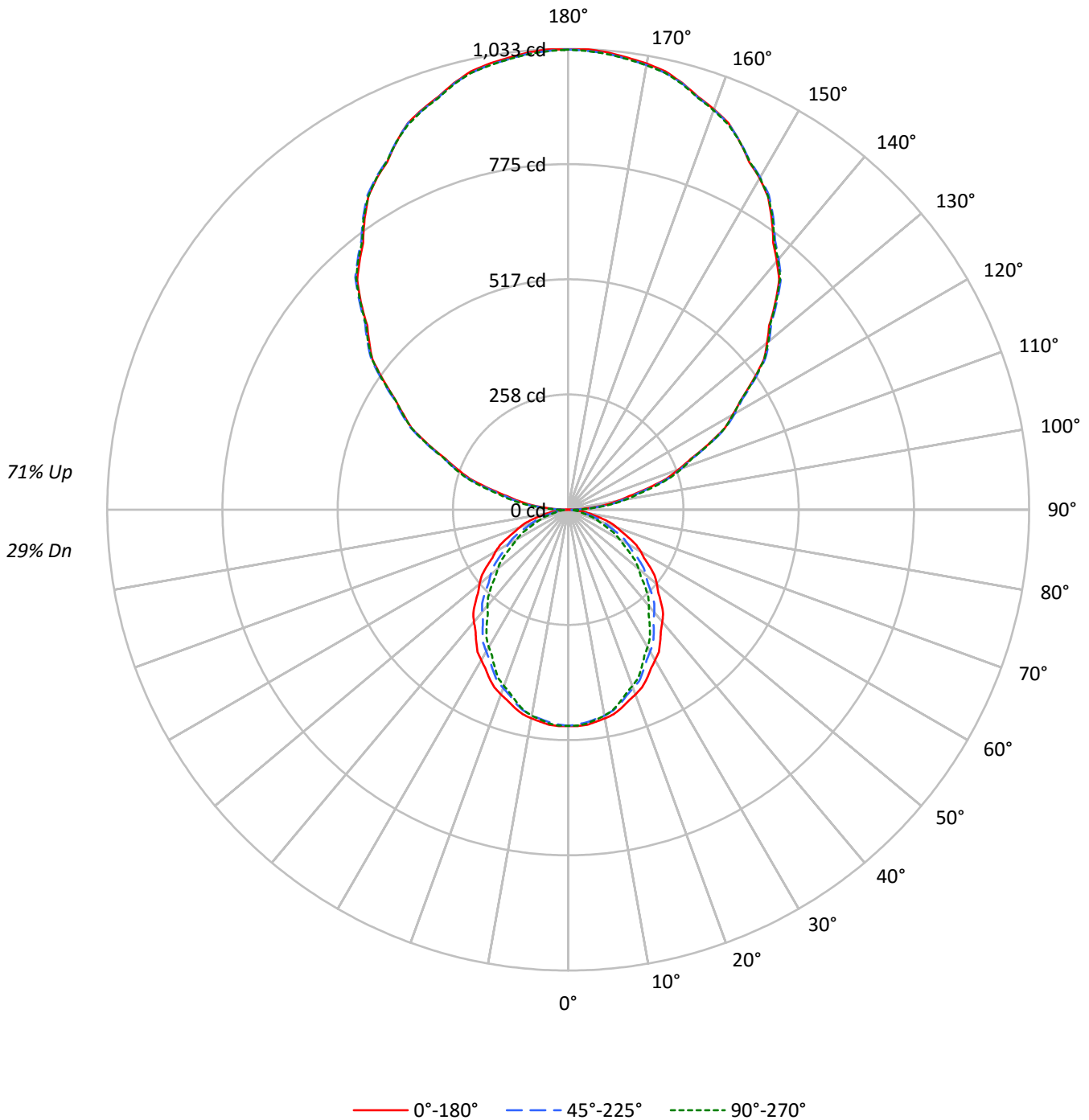
Input Watts (W): 38
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	93	89	85	82	83	80	77	74	63	61	59	47	46	44	32	32	31	24
2	85	78	72	67	76	70	65	61	55	52	49	41	39	37	29	27	26	20
3	77	68	61	56	69	61	56	51	49	44	41	37	34	32	25	24	22	17
4	71	60	53	47	63	54	48	43	43	39	35	33	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	19	17	15	12
7	55	43	36	30	49	39	33	28	31	26	23	24	21	18	17	15	13	10
8	51	39	32	27	46	36	29	25	28	24	20	22	18	16	16	13	12	9
9	47	36	29	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	24	19	24	19	16	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3130	3130	3130
5°	3138	3102	3121
10°	3114	3074	3074
15°	3077	3011	2986
20°	3030	2924	2889
25°	2974	2838	2776
30°	2905	2738	2651
35°	2834	2636	2511
40°	2769	2528	2373
45°	2689	2408	2223
50°	2608	2277	2067
55°	2514	2152	1901
60°	2421	2001	1721
65°	2311	1825	1516
70°	2185	1603	1307
75°	2011	1352	1088
80°	1770	1060	915
85°	1489	867	815



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.1
10°-20°	127.4	3.2
20°-30°	184.7	4.6
30°-40°	210.5	5.2
40°-50°	205.2	5.1
50°-60°	172.7	4.3
60°-70°	121.1	3.0
70°-80°	62.2	1.5
80°-90°	18.0	0.4
90°-100°	69.1	1.7
100°-110°	204.0	5.1
110°-120°	345.5	8.6
120°-130°	454.7	11.3
130°-140°	509.6	12.7
140°-150°	499.4	12.4
150°-160°	419.5	10.4
160°-170°	278.8	6.9
170°-180°	97.6	2.4
0°-30°	357.7	8.9
0°-40°	568.2	14.1
0°-60°	946.1	23.5
0°-90°	1147.4	28.5
90°-120°	618.6	15.4
90°-150°	2082.3	51.7
90°-180°	2878.0	71.5
0°-180°	4025.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	485	485	485	485	485	
5°	484	482	478	482	481	46
15°	460	458	450	450	447	130
25°	417	411	398	394	390	192
35°	360	350	334	324	318	225
45°	294	283	264	249	243	227
55°	223	211	191	175	169	200
65°	151	138	119	105	99	150
75°	81	69	54	46	44	85
85°	20	14	12	11	11	23
90°	1	7	13	17	19	4
95°	52	54	62	67	69	56
105°	183	187	192	196	199	195
115°	346	349	351	350	349	342
125°	505	509	510	509	508	452
135°	657	661	662	662	659	506
145°	795	799	801	801	799	497
155°	910	910	911	914	910	419
165°	990	988	989	992	987	279
175°	1029	1026	1026	1030	1025	98
180°	1031	1031	1031	1031	1031	



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	485.6	485.4	485.2	485.1	484.8	484.4	483.8	483.1	482.4	481.8	482.4
5°	484.0	483.7	483.4	483.0	482.7	482.1	481.2	480.3	479.4	478.5	479.3
7.5°	479.3	479.0	478.6	478.3	478.0	477.3	476.3	475.2	474.1	473.0	473.6
10°	474.8	474.6	474.4	474.1	473.9	473.2	472.1	470.9	469.8	468.7	468.9
12.5°	469.8	469.5	469.3	469.0	468.7	467.7	466.2	464.7	463.1	461.6	461.8
15°	460.2	459.7	459.2	458.8	458.3	457.2	455.4	453.8	452.0	450.4	450.3
17.5°	449.3	448.5	447.8	447.0	446.3	444.9	442.7	440.5	438.4	436.3	435.9
20°	440.8	440.0	439.2	438.4	437.5	435.9	433.2	430.6	428.0	425.4	425.0
22.5°	431.4	430.6	429.8	429.0	428.2	426.4	423.7	421.0	418.2	415.5	414.7
25°	417.4	416.1	414.9	413.7	412.5	410.4	407.3	404.3	401.3	398.3	397.3
27.5°	401.2	399.8	398.3	396.8	395.3	393.0	389.8	386.5	383.3	380.1	378.6
30°	389.5	388.0	386.4	384.9	383.3	380.9	377.5	374.1	370.7	367.2	365.4
32.5°	378.1	376.3	374.5	372.7	370.9	368.3	364.8	361.3	357.8	354.3	352.3
35°	359.5	357.6	355.6	353.6	351.7	348.9	345.2	341.6	337.9	334.3	331.9
37.5°	341.3	338.9	336.5	334.1	331.8	328.7	325.0	321.2	317.4	313.6	310.8
40°	328.4	326.0	323.5	321.1	318.6	315.4	311.6	307.7	303.7	299.8	296.8
42.5°	314.9	312.4	309.9	307.4	304.9	301.7	297.6	293.6	289.5	285.5	282.6
45°	294.4	292.0	289.6	287.2	284.9	281.5	277.0	272.6	268.1	263.6	260.3
47.5°	273.1	270.5	268.1	265.5	263.1	259.6	255.1	250.6	246.1	241.5	238.2
50°	259.6	256.9	254.2	251.5	248.8	245.2	240.5	235.9	231.2	226.6	223.2
52.5°	244.9	242.2	239.4	236.7	233.9	230.4	226.0	221.6	217.2	212.9	209.2
55°	223.3	220.7	218.1	215.6	212.9	209.4	204.8	200.2	195.7	191.1	187.4
57.5°	201.5	198.8	195.9	193.1	190.4	186.8	182.4	178.0	173.6	169.2	165.6
60°	187.4	184.6	181.7	178.9	176.0	172.5	168.0	163.7	159.2	154.9	151.3
62.5°	172.5	169.8	167.1	164.4	161.6	158.0	153.6	149.2	144.7	140.2	136.9
65°	151.2	148.5	145.7	142.9	140.1	136.6	132.3	128.0	123.7	119.4	116.1
67.5°	130.1	127.3	124.5	121.8	119.0	115.5	111.4	107.3	103.1	99.0	96.0
70°	115.7	113.0	110.2	107.4	104.6	101.2	97.1	93.1	89.0	84.9	82.4
72.5°	101.6	98.9	96.3	93.6	90.9	87.5	83.7	79.9	76.1	72.3	70.0
75°	80.6	78.1	75.7	73.2	70.8	67.9	64.4	61.0	57.6	54.2	52.4
77.5°	59.6	57.7	55.7	53.7	51.8	49.4	46.7	44.0	41.3	38.5	37.2
80°	47.6	45.6	43.7	41.7	39.8	37.7	35.4	33.1	30.8	28.5	27.8
82.5°	35.9	34.1	32.4	30.6	28.8	27.2	25.7	24.1	22.5	20.9	20.6
85°	20.1	18.7	17.2	15.8	14.3	13.3	12.9	12.5	12.1	11.7	11.6
87.5°	6.9	6.7	6.6	6.4	6.2	6.3	6.4	6.6	6.8	7.0	7.1
90°	0.8	2.2	3.6	5.1	6.5	7.8	9.1	10.4	11.6	12.8	13.7
92.5°	19.4	20.4	21.4	22.4	23.4	24.7	26.2	27.7	29.3	30.8	32.0
95°	52.2	52.5	52.9	53.2	53.6	54.7	56.5	58.2	60.0	61.8	63.1
97.5°	86.7	86.8	87.0	87.1	87.3	88.6	91.0	93.5	95.9	98.4	99.6
100°	112.4	112.4	112.4	112.4	112.4	113.5	115.8	118.2	120.5	122.8	124.5
102.5°	140.0	140.7	141.4	142.1	142.8	143.8	145.0	146.2	147.3	148.5	150.3
105°	183.0	183.9	184.8	185.7	186.6	187.6	188.6	189.7	190.8	191.9	192.9
107.5°	230.5	231.4	232.3	233.2	234.1	235.0	235.8	236.6	237.4	238.2	238.8
110°	263.2	264.2	265.1	265.9	266.9	267.6	268.1	268.6	269.2	269.7	270.2



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.7	297.1	297.6	298.1	298.5	299.1	299.8	300.5	301.1	301.8	302.1
115°	345.9	346.7	347.4	348.1	348.8	349.4	349.7	350.1	350.4	350.8	350.6
117.5°	395.4	395.7	396.0	396.3	396.7	397.0	397.4	397.7	398.0	398.3	398.5
120°	426.2	427.1	428.0	428.9	429.8	430.3	430.5	430.7	430.9	431.0	431.0
122.5°	459.6	459.9	460.3	460.6	460.9	461.3	461.8	462.2	462.7	463.2	463.0
125°	504.9	506.0	507.0	508.1	509.1	509.8	510.0	510.2	510.3	510.5	510.2
127.5°	553.0	553.7	554.3	554.8	555.5	555.9	556.1	556.3	556.5	556.7	556.6
130°	581.9	582.8	583.8	584.6	585.5	586.1	586.5	586.8	587.2	587.6	587.4
132.5°	610.9	612.3	613.8	615.2	616.7	617.4	617.3	617.3	617.2	617.1	617.0
135°	656.6	657.7	658.7	659.8	660.9	661.5	661.7	661.9	662.0	662.2	662.2
137.5°	699.7	700.7	701.7	702.7	703.8	704.5	704.9	705.3	705.7	706.1	706.2
140°	727.2	728.1	729.0	729.9	730.8	731.5	732.1	732.6	733.1	733.6	734.0
142.5°	754.9	755.6	756.4	757.1	757.9	758.6	759.2	759.9	760.6	761.3	761.4
145°	795.4	796.1	796.9	797.6	798.3	798.9	799.5	800.0	800.6	801.1	801.1
147.5°	833.1	833.5	833.9	834.2	834.6	835.0	835.4	835.8	836.3	836.7	837.2
150°	858.1	857.9	857.7	857.5	857.4	857.6	858.3	859.0	859.8	860.5	860.5
152.5°	878.6	878.8	879.1	879.4	879.6	879.9	880.2	880.4	880.7	881.1	881.5
155°	910.2	910.2	910.2	910.2	910.2	910.3	910.5	910.7	910.9	911.1	911.8
157.5°	938.5	938.1	937.7	937.3	936.9	936.8	937.0	937.2	937.4	937.5	938.3
160°	955.2	954.7	954.1	953.6	953.1	952.9	953.1	953.2	953.4	953.6	954.3
162.5°	969.9	969.6	969.2	968.8	968.4	968.2	968.3	968.3	968.4	968.4	969.2
165°	989.8	989.4	989.0	988.6	988.2	988.2	988.4	988.6	988.7	988.9	989.6
167.5°	1006.4	1005.7	1005.0	1004.2	1003.5	1003.2	1003.2	1003.2	1003.2	1003.2	1004.2
170°	1015.4	1014.7	1014.0	1013.3	1012.6	1012.2	1012.2	1012.2	1012.2	1012.2	1013.3
172.5°	1021.8	1021.1	1020.4	1019.7	1019.0	1018.6	1018.6	1018.6	1018.6	1018.6	1019.7
175°	1029.0	1028.3	1027.6	1026.9	1026.2	1025.8	1025.8	1025.8	1025.8	1025.8	1026.9
177.5°	1032.8	1032.1	1031.6	1031.0	1030.5	1030.1	1029.9	1029.8	1029.7	1029.5	1030.4
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	484.7	484.7	484.7	484.7	484.7	484.7	484.7	484.7
2.5°	483.1	483.8	484.4	484.7	484.7	484.6	484.5	484.4
5°	480.1	480.9	481.7	482.1	482.0	481.7	481.6	481.4
7.5°	474.1	474.8	475.3	475.5	475.3	475.2	475.0	474.8
10°	469.1	469.4	469.6	469.6	469.4	469.1	468.9	468.7
12.5°	461.9	462.2	462.3	462.2	461.8	461.4	461.1	460.7
15°	450.1	450.0	450.0	449.6	448.9	448.1	447.4	446.6
17.5°	435.5	435.1	434.7	434.1	433.6	432.9	432.3	431.7
20°	424.6	424.2	423.8	423.3	422.5	421.8	421.0	420.3
22.5°	413.8	413.0	412.3	411.5	411.0	410.4	409.8	409.2
25°	396.2	395.1	394.1	393.2	392.2	391.3	390.5	389.5
27.5°	377.2	375.7	374.1	373.0	372.2	371.3	370.4	369.6
30°	363.5	361.6	359.7	358.5	357.7	357.0	356.2	355.5
32.5°	350.2	348.2	346.0	344.6	343.6	342.7	341.7	340.9
35°	329.5	327.2	324.8	323.1	321.9	320.8	319.6	318.5
37.5°	307.9	305.1	302.3	300.3	299.2	298.1	297.0	295.9
40°	293.7	290.6	287.5	285.4	284.5	283.5	282.5	281.5
42.5°	279.6	276.6	273.6	271.5	270.1	268.5	267.1	265.7
45°	257.1	253.8	250.6	248.3	247.2	245.9	244.7	243.4
47.5°	234.9	231.5	228.1	225.8	224.4	223.1	221.7	220.4
50°	219.8	216.3	212.9	210.6	209.5	208.2	207.0	205.7
52.5°	205.5	201.8	198.1	195.7	194.5	193.3	192.0	190.8
55°	183.8	180.1	176.5	174.0	172.7	171.3	170.1	168.8
57.5°	162.1	158.5	154.9	152.5	151.4	150.2	149.1	147.9
60°	147.7	144.1	140.5	138.2	136.9	135.7	134.5	133.2
62.5°	133.6	130.2	126.9	124.7	123.4	122.2	121.0	119.8
65°	112.8	109.6	106.3	104.1	102.9	101.6	100.4	99.2
67.5°	93.0	90.1	87.1	85.1	84.1	83.2	82.1	81.2
70°	79.9	77.4	74.9	73.1	72.1	71.1	70.2	69.2
72.5°	67.7	65.4	63.1	61.6	60.9	60.3	59.6	58.9
75°	50.6	48.8	47.1	45.9	45.3	44.7	44.1	43.6
77.5°	36.0	34.8	33.5	32.6	32.2	31.8	31.4	31.0
80°	27.1	26.4	25.7	25.2	25.0	24.9	24.7	24.6
82.5°	20.3	19.9	19.6	19.3	19.3	19.2	19.1	18.9
85°	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
87.5°	7.3	7.5	7.7	7.8	7.8	7.8	7.9	7.9
90°	14.7	15.5	16.4	17.1	17.7	18.2	18.7	19.3
92.5°	33.2	34.4	35.6	36.3	36.7	37.1	37.5	37.9
95°	64.3	65.5	66.8	67.6	68.0	68.3	68.7	69.0
97.5°	100.8	102.0	103.1	103.8	104.0	104.3	104.5	104.6
100°	126.0	127.6	129.2	130.2	130.6	130.9	131.3	131.7
102.5°	152.0	153.8	155.5	156.6	157.1	157.6	158.1	158.6
105°	194.0	195.0	196.1	196.9	197.5	198.0	198.5	199.1
107.5°	239.3	239.9	240.3	240.7	240.6	240.6	240.5	240.5
110°	270.8	271.3	271.9	272.0	271.9	271.6	271.5	271.3



TEST NUMBER: P333651-927

CATALOG NUMBER: S125RDIW-S375D1050U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	302.3	302.5	302.8	302.8	302.5	302.1	301.8	301.5
115°	350.4	350.2	350.1	349.9	349.7	349.5	349.4	349.2
117.5°	398.5	398.7	398.9	398.5	397.8	397.1	396.4	395.7
120°	431.0	431.0	431.0	430.7	430.0	429.3	428.6	427.9
122.5°	462.9	462.7	462.6	462.2	461.7	461.1	460.5	459.9
125°	509.8	509.5	509.1	508.8	508.7	508.4	508.3	508.1
127.5°	556.3	556.2	556.0	555.8	555.4	555.1	554.7	554.4
130°	587.2	587.0	586.8	586.6	586.2	585.9	585.5	585.2
132.5°	616.7	616.6	616.4	616.1	615.5	615.1	614.6	614.0
135°	662.2	662.2	662.2	661.9	661.2	660.4	659.7	659.0
137.5°	706.5	706.7	706.9	706.5	705.7	704.8	703.9	703.0
140°	734.4	734.7	735.1	734.8	734.0	733.0	732.1	731.3
142.5°	761.7	761.9	762.2	761.8	760.9	760.0	759.1	758.2
145°	801.1	801.1	801.1	800.8	800.3	799.7	799.2	798.7
147.5°	837.6	838.0	838.4	838.0	836.9	835.6	834.4	833.2
150°	860.5	860.5	860.5	860.3	859.9	859.6	859.2	858.9
152.5°	881.9	882.3	882.7	882.6	882.0	881.4	880.7	880.0
155°	912.5	913.2	913.9	913.8	912.9	912.0	911.2	910.2
157.5°	939.0	939.7	940.4	940.2	939.0	937.8	936.6	935.5
160°	955.1	955.8	956.5	956.3	955.5	954.6	953.7	952.8
162.5°	970.1	970.9	971.8	971.7	970.7	969.6	968.6	967.6
165°	990.3	991.0	991.7	991.6	990.5	989.4	988.4	987.3
167.5°	1005.4	1006.4	1007.5	1007.5	1006.4	1005.3	1004.2	1003.1
170°	1014.3	1015.4	1016.4	1016.4	1015.1	1013.9	1012.6	1011.4
172.5°	1020.7	1021.8	1022.9	1022.9	1021.8	1020.6	1019.5	1018.4
175°	1027.9	1029.0	1030.2	1030.0	1028.8	1027.5	1026.3	1025.0
177.5°	1031.3	1032.1	1032.9	1032.8	1031.9	1030.9	1029.9	1028.9
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4

(END OF REPORT)