

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: P333500-927

Luminaire Tested: **S125RDIP-S375D590U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333500-927
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: S125RDIP-S375D590U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2766.9 lumens
Efficiency: N/A
Efficacy: 108.1 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: General Diffuse

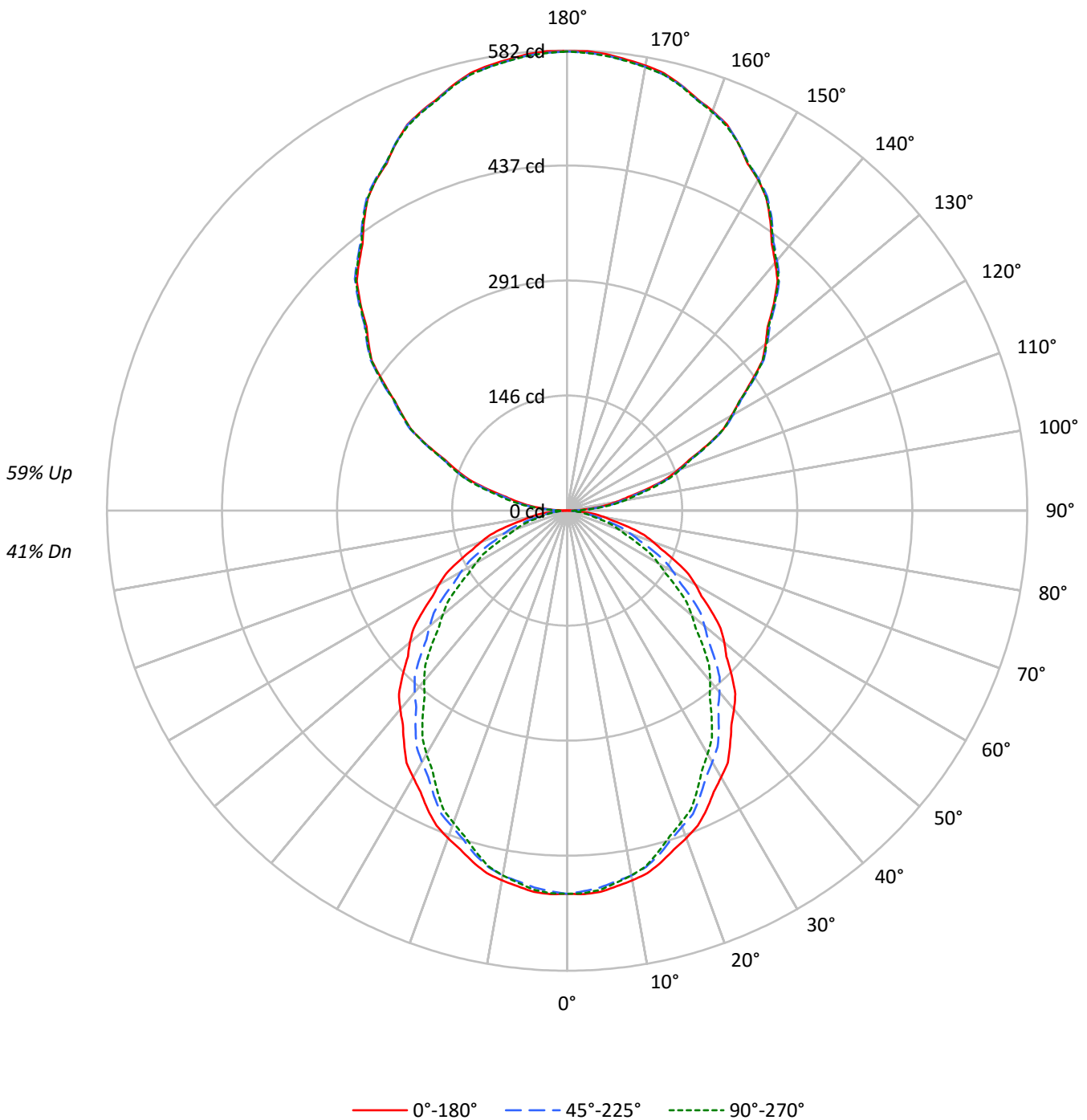
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	53	43	42	41	35
2	88	80	74	69	80	74	68	64	61	57	54	49	46	44	38	36	35	30
3	80	71	64	58	73	65	59	54	54	49	45	43	40	38	34	32	30	25
4	73	63	55	49	67	58	51	46	48	43	39	39	35	32	30	28	26	22
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	27	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	31	28	25	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	13
9	49	37	30	25	45	35	28	24	29	24	20	24	20	17	19	16	14	12
10	46	34	27	23	42	32	25	21	27	22	18	22	18	16	18	15	13	11

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: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	1.6
10°-20°	127.4	4.6
20°-30°	184.7	6.7
30°-40°	210.5	7.6
40°-50°	205.2	7.4
50°-60°	172.7	6.2
60°-70°	121.1	4.4
70°-80°	62.2	2.2
80°-90°	17.0	0.6
90°-100°	38.9	1.4
100°-110°	114.9	4.2
110°-120°	194.5	7.0
120°-130°	256.0	9.3
130°-140°	286.9	10.4
140°-150°	281.2	10.2
150°-160°	236.2	8.5
160°-170°	157.0	5.7
170°-180°	54.9	2.0
0°-30°	357.7	12.9
0°-40°	568.2	20.5
0°-60°	946.1	34.2
0°-90°	1146.4	41.4
90°-120°	348.3	12.6
90°-150°	1172.4	42.4
90°-180°	1620.0	58.5
0°-180°	2766.9	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°	0	4	7	10	11	3
95°	29	30	35	38	39	31
105°	103	105	108	111	112	110
115°	195	197	198	197	197	193
125°	284	287	287	287	286	254
135°	370	372	373	373	371	285
145°	448	450	451	451	450	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-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°	6.8	6.5	6.3	5.9	5.6	5.5	5.6	5.7	5.8	5.9	5.9
90°	0.5	1.3	2.1	2.9	3.6	4.4	5.1	5.9	6.5	7.2	7.8
92.5°	10.9	11.5	12.0	12.6	13.2	13.9	14.7	15.6	16.5	17.3	18.0
95°	29.4	29.5	29.8	29.9	30.2	30.8	31.8	32.8	33.8	34.8	35.5
97.5°	48.8	48.9	49.0	49.0	49.1	49.8	51.3	52.6	54.0	55.4	56.1
100°	63.3	63.3	63.3	63.3	63.3	63.9	65.2	66.5	67.8	69.2	70.0
102.5°	78.8	79.2	79.6	80.0	80.4	81.0	81.6	82.3	82.9	83.6	84.6
105°	103.1	103.5	104.0	104.6	105.0	105.6	106.2	106.8	107.4	108.0	108.6
107.5°	129.8	130.3	130.8	131.3	131.8	132.3	132.8	133.2	133.6	134.1	134.4
110°	148.2	148.7	149.2	149.7	150.3	150.7	150.9	151.2	151.5	151.9	152.2



TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	167.0	167.3	167.5	167.8	168.1	168.4	168.8	169.1	169.5	169.9	170.1
115°	194.8	195.2	195.6	196.0	196.4	196.7	196.9	197.1	197.3	197.5	197.4
117.5°	222.6	222.8	223.0	223.2	223.3	223.6	223.7	223.9	224.0	224.3	224.3
120°	240.0	240.5	241.0	241.5	242.0	242.2	242.4	242.5	242.6	242.6	242.6
122.5°	258.8	259.0	259.1	259.3	259.5	259.7	260.0	260.2	260.5	260.8	260.7
125°	284.2	284.9	285.4	286.1	286.7	287.0	287.1	287.2	287.3	287.4	287.2
127.5°	311.4	311.7	312.0	312.4	312.8	313.0	313.1	313.2	313.3	313.5	313.4
130°	327.6	328.1	328.7	329.2	329.6	330.0	330.2	330.4	330.6	330.8	330.7
132.5°	343.9	344.8	345.5	346.3	347.2	347.6	347.5	347.5	347.5	347.5	347.4
135°	369.6	370.3	370.9	371.5	372.1	372.4	372.6	372.6	372.7	372.8	372.8
137.5°	393.9	394.5	395.1	395.6	396.2	396.6	396.9	397.0	397.3	397.5	397.6
140°	409.4	410.0	410.4	410.9	411.5	411.9	412.2	412.5	412.7	413.0	413.3
142.5°	425.0	425.4	425.8	426.3	426.7	427.1	427.5	427.9	428.3	428.6	428.7
145°	447.8	448.2	448.7	449.1	449.5	449.8	450.1	450.4	450.8	451.0	451.0
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.3
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-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°	6.0	6.2	6.3	6.3	6.3	6.3	6.3	6.3
90°	8.2	8.7	9.3	9.7	10.0	10.2	10.5	10.9
92.5°	18.7	19.3	20.0	20.4	20.7	20.9	21.1	21.3
95°	36.2	36.9	37.6	38.0	38.3	38.5	38.7	38.9
97.5°	56.7	57.4	58.1	58.5	58.5	58.7	58.8	58.9
100°	71.0	71.9	72.7	73.3	73.5	73.8	73.9	74.1
102.5°	85.6	86.6	87.5	88.2	88.5	88.7	89.0	89.3
105°	109.2	109.8	110.4	110.9	111.1	111.5	111.8	112.1
107.5°	134.8	135.1	135.3	135.5	135.5	135.5	135.4	135.4
110°	152.4	152.7	153.0	153.1	153.0	153.0	152.8	152.7



TEST NUMBER: P333500-927

CATALOG NUMBER: S125RDIP-S375D590U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	170.2	170.3	170.5	170.5	170.3	170.1	169.9	169.8
115°	197.3	197.2	197.1	197.0	196.9	196.8	196.7	196.6
117.5°	224.4	224.5	224.6	224.4	224.0	223.6	223.2	222.8
120°	242.6	242.6	242.6	242.5	242.1	241.7	241.3	240.9
122.5°	260.6	260.5	260.5	260.2	259.9	259.6	259.3	259.0
125°	287.0	286.8	286.6	286.5	286.4	286.3	286.1	286.1
127.5°	313.2	313.1	313.1	312.9	312.7	312.5	312.3	312.1
130°	330.6	330.5	330.4	330.3	330.0	329.9	329.6	329.5
132.5°	347.2	347.1	347.1	346.8	346.6	346.3	346.0	345.7
135°	372.8	372.8	372.8	372.6	372.2	371.9	371.5	371.1
137.5°	397.8	397.8	398.0	397.8	397.3	396.8	396.3	395.8
140°	413.4	413.7	413.8	413.7	413.2	412.7	412.2	411.7
142.5°	428.8	429.0	429.0	428.9	428.4	427.9	427.4	426.9
145°	451.0	451.0	451.0	450.8	450.6	450.3	450.0	449.6
147.5°	471.6	471.8	472.1	471.8	471.1	470.5	469.8	469.1
150°	484.4	484.4	484.4	484.3	484.2	483.9	483.8	483.5
152.5°	496.5	496.8	497.0	496.9	496.5	496.2	495.8	495.5
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

(END OF REPORT)