

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: P333131-930

Luminaire Tested: **S125DIP-S375D590U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333131-930
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: S125DIP-S375D590U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2908.4 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

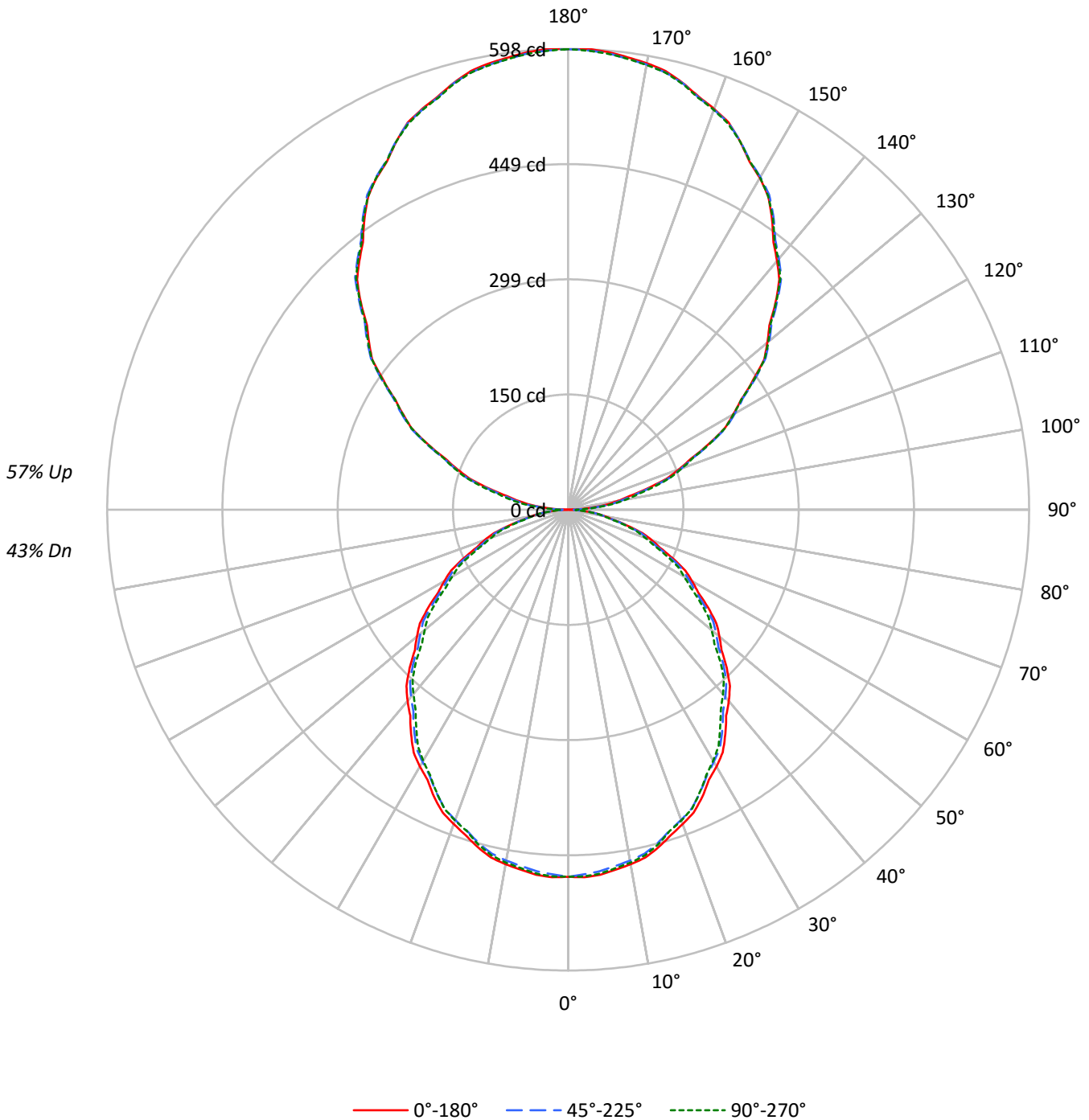
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-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	64	64	64	49	49	49	43
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	44	43	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	37	35	30
3	80	70	63	57	73	65	58	53	54	49	45	43	40	37	34	32	30	25
4	73	62	54	48	66	57	50	45	47	42	38	39	35	32	30	28	26	22
5	67	55	47	41	61	51	44	39	42	37	33	35	31	28	27	24	22	19
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.5
10°-20°	126.9	4.4
20°-30°	187.3	6.4
30°-40°	218.5	7.5
40°-50°	219.5	7.5
50°-60°	192.7	6.6
60°-70°	143.6	4.9
70°-80°	82.1	2.8
80°-90°	25.2	0.9
90°-100°	40.0	1.4
100°-110°	118.2	4.1
110°-120°	200.2	6.9
120°-130°	263.5	9.1
130°-140°	295.3	10.2
140°-150°	289.4	9.9
150°-160°	243.0	8.4
160°-170°	161.6	5.6
170°-180°	56.5	1.9
0°-30°	359.1	12.3
0°-40°	577.6	19.9
0°-60°	989.8	34.0
0°-90°	1240.6	42.7
90°-120°	358.5	12.3
90°-150°	1206.6	41.5
90°-180°	1668.0	57.4
0°-180°	2908.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	0	4	7	10	11	3
95°	30	31	36	39	40	32
105°	106	108	111	114	115	113
115°	200	202	203	203	202	198
125°	292	295	296	295	294	262
135°	380	383	384	384	382	293
145°	461	463	464	464	463	288
155°	527	527	528	530	527	243
165°	574	573	573	575	572	162
175°	596	594	594	597	594	57
180°	598	598	598	598	598	



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.2	8.4	8.6	8.7	8.9	9.0	9.1	9.1	9.2	9.3	9.5
90°	0.5	1.3	2.1	2.9	3.8	4.6	5.3	6.0	6.7	7.4	8.0
92.5°	11.3	11.8	12.4	13.0	13.5	14.3	15.2	16.1	17.0	17.9	18.5
95°	30.2	30.4	30.7	30.8	31.1	31.7	32.7	33.8	34.8	35.8	36.5
97.5°	50.2	50.3	50.4	50.5	50.5	51.3	52.7	54.1	55.6	57.0	57.7
100°	65.1	65.1	65.1	65.1	65.1	65.8	67.1	68.5	69.8	71.2	72.1
102.5°	81.1	81.5	81.9	82.3	82.8	83.3	84.0	84.7	85.4	86.0	87.1
105°	106.1	106.6	107.0	107.6	108.1	108.7	109.3	109.9	110.6	111.1	111.8
107.5°	133.5	134.1	134.6	135.1	135.7	136.2	136.6	137.1	137.5	138.0	138.4
110°	152.5	153.0	153.6	154.1	154.7	155.1	155.3	155.6	156.0	156.3	156.6



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.9	172.2	172.4	172.7	173.0	173.3	173.7	174.1	174.5	174.9	175.0
115°	200.5	200.9	201.3	201.7	202.1	202.4	202.6	202.8	203.0	203.3	203.2
117.5°	229.1	229.3	229.5	229.7	229.8	230.1	230.2	230.4	230.6	230.8	230.9
120°	247.0	247.5	248.0	248.5	249.1	249.3	249.5	249.6	249.6	249.7	249.7
122.5°	266.4	266.5	266.7	266.8	267.1	267.3	267.6	267.8	268.1	268.4	268.3
125°	292.5	293.2	293.8	294.4	295.1	295.4	295.5	295.6	295.7	295.8	295.6
127.5°	320.5	320.8	321.1	321.5	321.9	322.1	322.2	322.4	322.5	322.6	322.5
130°	337.2	337.7	338.3	338.8	339.2	339.7	339.8	340.1	340.2	340.5	340.4
132.5°	353.9	354.8	355.6	356.4	357.3	357.8	357.7	357.7	357.6	357.6	357.5
135°	380.4	381.1	381.7	382.3	382.9	383.3	383.4	383.5	383.6	383.7	383.7
137.5°	405.4	406.0	406.6	407.2	407.8	408.2	408.5	408.6	408.9	409.1	409.2
140°	421.3	421.9	422.4	422.9	423.5	423.9	424.2	424.5	424.8	425.1	425.3
142.5°	437.4	437.8	438.2	438.7	439.1	439.5	439.9	440.3	440.8	441.1	441.2
145°	460.9	461.3	461.8	462.2	462.6	462.9	463.3	463.6	463.9	464.1	464.1
147.5°	482.7	482.9	483.1	483.4	483.6	483.8	484.0	484.4	484.6	484.9	485.1
150°	497.2	497.1	497.0	496.9	496.8	496.9	497.3	497.7	498.1	498.6	498.6
152.5°	509.1	509.2	509.4	509.6	509.6	509.8	510.0	510.1	510.3	510.5	510.8
155°	527.4	527.4	527.4	527.4	527.4	527.5	527.6	527.7	527.8	527.9	528.3
157.5°	543.8	543.6	543.3	543.2	542.9	542.8	542.9	543.1	543.2	543.2	543.6
160°	553.5	553.2	552.9	552.5	552.2	552.1	552.2	552.4	552.4	552.5	552.9
162.5°	562.1	561.8	561.6	561.3	561.1	561.0	561.0	561.1	561.1	561.1	561.6
165°	573.5	573.2	573.1	572.8	572.7	572.6	572.7	572.8	572.9	573.0	573.4
167.5°	583.2	582.8	582.3	581.9	581.5	581.3	581.3	581.3	581.3	581.3	581.9
170°	588.3	587.9	587.5	587.1	586.7	586.5	586.5	586.5	586.5	586.5	587.1
172.5°	592.1	591.7	591.3	590.8	590.4	590.2	590.2	590.2	590.2	590.2	590.8
175°	596.2	595.8	595.4	595.0	594.6	594.4	594.4	594.4	594.4	594.4	595.0
177.5°	598.4	598.1	597.8	597.5	597.0	596.9	596.8	596.7	596.6	596.6	597.0
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	9.5	9.6	9.7	9.8	9.7	9.6	9.5	9.5
90°	8.5	9.0	9.5	9.9	10.3	10.5	10.8	11.2
92.5°	19.2	19.9	20.6	21.0	21.3	21.5	21.7	21.9
95°	37.3	38.0	38.7	39.1	39.4	39.6	39.8	40.0
97.5°	58.4	59.1	59.8	60.2	60.3	60.4	60.5	60.7
100°	73.1	73.9	74.8	75.4	75.7	75.9	76.1	76.3
102.5°	88.1	89.1	90.1	90.7	91.1	91.3	91.6	91.9
105°	112.4	113.0	113.7	114.1	114.4	114.7	115.0	115.4
107.5°	138.7	139.0	139.3	139.4	139.4	139.4	139.3	139.3
110°	156.9	157.2	157.5	157.6	157.5	157.4	157.3	157.2



TEST NUMBER: P333131-930

CATALOG NUMBER: S125DIP-S375D590U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	175.2	175.3	175.5	175.5	175.3	175.0	174.9	174.7
115°	203.0	202.9	202.8	202.8	202.6	202.5	202.4	202.4
117.5°	231.0	231.1	231.1	231.0	230.6	230.2	229.8	229.3
120°	249.7	249.7	249.7	249.6	249.2	248.7	248.3	247.9
122.5°	268.2	268.2	268.1	267.8	267.5	267.2	266.8	266.5
125°	295.4	295.2	295.0	294.8	294.7	294.6	294.5	294.4
127.5°	322.4	322.3	322.2	322.0	321.8	321.6	321.4	321.2
130°	340.2	340.1	340.1	339.9	339.7	339.5	339.2	339.1
132.5°	357.3	357.3	357.2	356.9	356.7	356.4	356.1	355.8
135°	383.7	383.7	383.7	383.5	383.1	382.7	382.3	381.9
137.5°	409.4	409.4	409.6	409.4	408.9	408.4	407.9	407.3
140°	425.5	425.7	425.9	425.7	425.3	424.8	424.2	423.7
142.5°	441.3	441.5	441.6	441.4	440.9	440.3	439.9	439.4
145°	464.1	464.1	464.1	464.0	463.7	463.4	463.1	462.8
147.5°	485.3	485.6	485.8	485.6	484.9	484.2	483.5	482.8
150°	498.6	498.6	498.6	498.5	498.3	498.1	497.9	497.7
152.5°	511.0	511.3	511.5	511.4	511.0	510.7	510.3	510.0
155°	528.7	529.1	529.5	529.5	529.0	528.5	527.9	527.4
157.5°	544.0	544.5	544.9	544.8	544.0	543.4	542.7	542.0
160°	553.3	553.8	554.2	554.2	553.7	553.1	552.6	552.1
162.5°	562.1	562.6	563.1	563.0	562.5	561.8	561.3	560.6
165°	573.8	574.2	574.7	574.5	574.0	573.3	572.7	572.1
167.5°	582.5	583.2	583.8	583.8	583.1	582.4	581.8	581.2
170°	587.7	588.3	589.0	588.9	588.2	587.5	586.8	586.0
172.5°	591.5	592.1	592.7	592.7	592.1	591.4	590.8	590.1
175°	595.7	596.2	596.9	596.8	596.1	595.4	594.7	593.9
177.5°	597.5	598.0	598.5	598.5	597.9	597.4	596.7	596.1
180°	597.7	597.7	597.7	597.7	597.7	597.7	597.7	597.7

(END OF REPORT)