

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: P333131-935

Luminaire Tested: **S125DIP-S375D590U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333131-935
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-S375D590U935-4F0-1E-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: 3071.4 lumens
Efficiency: N/A
Efficacy: 120.0 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

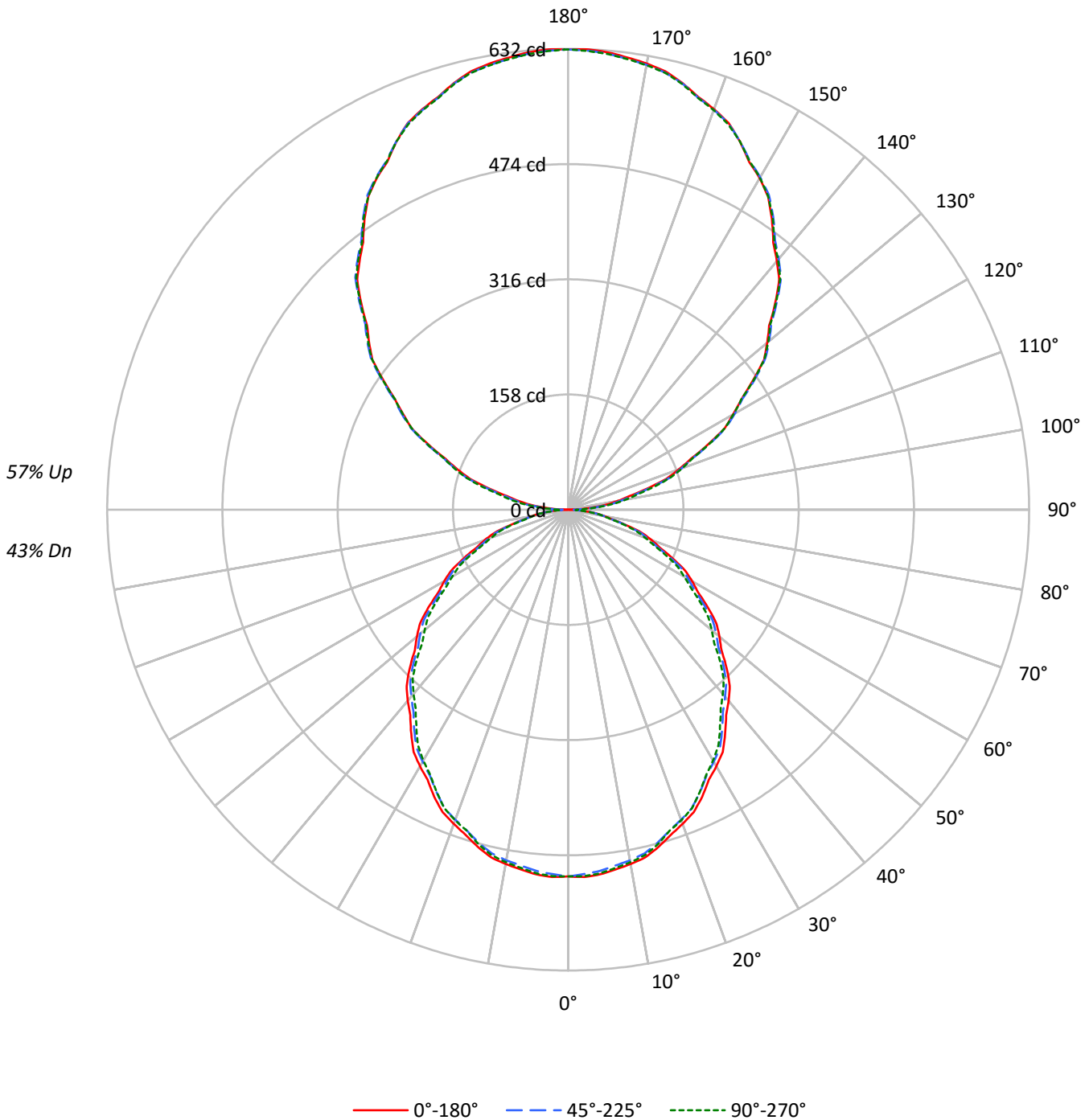
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-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°	3249	3249	3249
5°	3255	3225	3245
10°	3236	3202	3220
15°	3201	3163	3177
20°	3151	3110	3115
25°	3096	3046	3043
30°	3030	2976	2961
35°	2958	2902	2861
40°	2885	2822	2780
45°	2806	2747	2693
50°	2719	2659	2579
55°	2634	2558	2486
60°	2533	2457	2370
65°	2415	2335	2257
70°	2298	2194	2119
75°	2094	2026	1956
80°	1863	1834	1789
85°	1623	1652	1564



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.5
10°-20°	134.0	4.4
20°-30°	197.8	6.4
30°-40°	230.8	7.5
40°-50°	231.8	7.5
50°-60°	203.5	6.6
60°-70°	151.6	4.9
70°-80°	86.7	2.8
80°-90°	26.6	0.9
90°-100°	42.3	1.4
100°-110°	124.8	4.1
110°-120°	211.4	6.9
120°-130°	278.3	9.1
130°-140°	311.8	10.2
140°-150°	305.6	9.9
150°-160°	256.7	8.4
160°-170°	170.6	5.6
170°-180°	59.7	1.9
0°-30°	379.2	12.3
0°-40°	610.0	19.9
0°-60°	1045.3	34.0
0°-90°	1310.2	42.7
90°-120°	378.5	12.3
90°-150°	1274.2	41.5
90°-180°	1761.0	57.3
0°-180°	3071.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	497	501	501	48
15°	479	477	473	475	475	135
25°	434	432	427	428	427	200
35°	375	373	368	366	363	235
45°	307	305	301	296	295	237
55°	234	232	227	224	221	209
65°	158	157	153	149	148	157
75°	84	83	81	80	78	89
85°	22	22	22	22	21	24
90°	0	4	8	10	12	3
95°	32	33	38	41	42	34
105°	112	114	117	120	122	120
115°	212	214	215	214	214	209
125°	309	312	312	311	311	277
135°	402	405	405	405	403	310
145°	487	489	490	490	489	304
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	504.2	504.0	503.9	503.6	503.4	502.9	502.2	501.5	500.8	500.1	500.8
5°	502.1	502.0	501.8	501.6	501.4	500.9	500.1	499.2	498.3	497.4	498.2
7.5°	497.6	497.4	497.2	497.1	496.9	496.3	495.3	494.3	493.4	492.4	493.2
10°	493.4	493.3	493.1	492.9	492.8	492.1	491.2	490.2	489.2	488.3	489.0
12.5°	488.4	488.0	487.7	487.4	487.1	486.5	485.5	484.7	483.7	482.8	483.4
15°	478.7	478.5	478.2	477.9	477.6	477.0	476.0	475.1	474.1	473.1	473.6
17.5°	467.6	467.3	466.8	466.5	466.1	465.4	464.3	463.4	462.4	461.3	461.9
20°	458.4	458.2	458.1	457.9	457.7	457.0	455.9	454.7	453.6	452.5	453.1
22.5°	449.2	448.8	448.5	448.2	447.9	447.2	446.1	445.1	443.9	442.9	443.3
25°	434.5	434.1	433.6	433.2	432.7	432.0	430.8	429.6	428.5	427.4	427.6
27.5°	417.4	417.2	416.9	416.6	416.4	415.6	414.5	413.3	412.1	410.9	411.0
30°	406.3	406.0	405.7	405.4	405.2	404.4	403.1	401.7	400.5	399.1	398.9
32.5°	394.2	393.7	393.4	393.0	392.5	391.8	390.5	389.3	388.2	387.0	386.7
35°	375.2	374.9	374.5	374.2	373.8	373.0	371.8	370.6	369.3	368.1	367.6
37.5°	355.6	355.2	354.7	354.2	353.8	353.0	351.8	350.7	349.5	348.4	347.7
40°	342.2	341.7	341.3	340.9	340.4	339.6	338.4	337.2	335.9	334.7	333.9
42.5°	327.9	327.5	327.2	326.7	326.4	325.6	324.3	323.1	321.8	320.6	319.9
45°	307.2	306.9	306.5	306.2	305.7	305.1	304.0	303.0	301.9	300.8	299.8
47.5°	284.9	284.9	284.9	285.0	285.0	284.4	283.1	281.8	280.5	279.2	278.2
50°	270.6	270.4	270.1	269.8	269.5	268.9	267.8	266.7	265.7	264.6	263.5
52.5°	256.0	255.7	255.5	255.4	255.2	254.5	253.4	252.3	251.1	249.9	249.0
55°	233.9	233.7	233.4	233.2	232.9	232.1	230.9	229.7	228.4	227.2	226.4
57.5°	210.9	210.7	210.5	210.4	210.3	209.7	208.6	207.6	206.6	205.5	204.5
60°	196.1	195.8	195.4	195.1	194.8	194.1	193.1	192.2	191.1	190.2	189.3
62.5°	180.9	180.6	180.3	180.0	179.8	179.2	178.4	177.5	176.7	175.9	175.0
65°	158.0	157.8	157.6	157.5	157.3	156.7	155.8	154.7	153.8	152.8	152.0
67.5°	135.8	135.4	135.0	134.7	134.3	133.7	133.0	132.2	131.6	130.9	130.2
70°	121.7	121.3	120.9	120.5	120.0	119.3	118.6	117.8	117.0	116.2	115.6
72.5°	106.5	106.2	105.9	105.6	105.3	104.9	104.4	103.8	103.3	102.8	102.2
75°	83.9	83.8	83.6	83.4	83.3	82.9	82.5	82.1	81.6	81.2	80.9
77.5°	63.2	63.1	63.0	62.9	62.9	62.8	62.5	62.3	62.0	61.7	61.6
80°	50.1	50.1	50.1	50.1	50.1	50.0	49.9	49.7	49.5	49.3	49.2
82.5°	38.7	38.6	38.4	38.2	38.1	38.1	38.0	38.0	37.9	37.9	37.7
85°	21.9	22.0	22.0	22.1	22.2	22.3	22.3	22.3	22.3	22.3	22.2
87.5°	8.7	8.9	9.0	9.2	9.4	9.6	9.6	9.6	9.7	9.8	10.0
90°	0.5	1.4	2.2	3.1	4.0	4.8	5.6	6.4	7.1	7.8	8.4
92.5°	11.9	12.5	13.1	13.7	14.3	15.1	16.0	17.0	17.9	18.9	19.5
95°	31.9	32.1	32.4	32.5	32.8	33.5	34.5	35.6	36.8	37.8	38.6
97.5°	53.0	53.1	53.2	53.3	53.4	54.2	55.7	57.2	58.7	60.2	61.0
100°	68.8	68.8	68.8	68.8	68.8	69.5	70.9	72.3	73.7	75.2	76.1
102.5°	85.7	86.1	86.5	87.0	87.4	88.0	88.7	89.5	90.1	90.8	92.0
105°	112.0	112.5	113.0	113.7	114.2	114.8	115.5	116.1	116.8	117.4	118.0
107.5°	141.0	141.6	142.2	142.7	143.3	143.8	144.3	144.7	145.3	145.8	146.1
110°	161.1	161.6	162.2	162.7	163.3	163.8	164.0	164.4	164.7	165.1	165.4



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.5	181.8	182.1	182.4	182.7	183.0	183.5	183.8	184.3	184.7	184.9
115°	211.7	212.2	212.6	213.0	213.4	213.8	214.0	214.2	214.4	214.6	214.6
117.5°	241.9	242.1	242.4	242.5	242.7	243.0	243.1	243.3	243.5	243.7	243.8
120°	260.8	261.4	261.9	262.4	263.0	263.3	263.5	263.6	263.6	263.7	263.7
122.5°	281.3	281.5	281.6	281.8	282.1	282.2	282.6	282.8	283.1	283.4	283.4
125°	308.9	309.6	310.2	310.9	311.6	311.9	312.0	312.2	312.3	312.4	312.2
127.5°	338.5	338.8	339.1	339.5	339.9	340.2	340.3	340.4	340.5	340.7	340.6
130°	356.1	356.6	357.2	357.7	358.3	358.7	358.9	359.1	359.3	359.6	359.5
132.5°	373.8	374.7	375.6	376.4	377.4	377.8	377.7	377.7	377.6	377.6	377.5
135°	401.7	402.4	403.1	403.7	404.4	404.8	404.9	405.0	405.1	405.2	405.2
137.5°	428.1	428.8	429.4	430.0	430.7	431.1	431.4	431.5	431.8	432.0	432.1
140°	445.0	445.6	446.1	446.6	447.2	447.6	448.0	448.3	448.6	448.9	449.2
142.5°	461.9	462.4	462.8	463.3	463.7	464.2	464.6	465.0	465.5	465.8	466.0
145°	486.7	487.2	487.7	488.1	488.5	488.9	489.2	489.6	489.9	490.2	490.2
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.3
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	501.5	502.2	502.9	503.3	503.2	503.1	503.1	503.0
5°	498.9	499.8	500.6	500.9	500.8	500.8	500.7	500.6
7.5°	494.0	494.7	495.5	495.8	495.8	495.7	495.6	495.5
10°	489.7	490.3	491.1	491.4	491.3	491.2	491.1	491.0
12.5°	484.0	484.6	485.1	485.3	485.3	485.3	485.3	485.3
15°	474.0	474.4	474.9	475.1	475.1	475.1	475.1	475.1
17.5°	462.4	463.0	463.6	463.6	463.1	462.7	462.3	461.8
20°	453.7	454.3	454.9	455.0	454.5	454.1	453.7	453.2
22.5°	443.7	444.1	444.5	444.5	444.3	443.9	443.7	443.3
25°	427.7	427.9	428.1	428.0	427.7	427.5	427.2	427.0
27.5°	411.0	411.0	411.0	411.0	410.6	410.4	410.1	409.8
30°	398.7	398.6	398.4	398.2	398.0	397.7	397.4	397.1
32.5°	386.4	386.1	385.7	385.4	384.9	384.4	383.9	383.4
35°	367.2	366.8	366.3	365.8	365.1	364.3	363.6	362.9
37.5°	347.1	346.4	345.7	345.2	344.7	344.4	344.0	343.5
40°	333.0	332.3	331.5	331.0	330.7	330.4	330.1	329.8
42.5°	319.2	318.5	317.7	317.2	316.8	316.3	316.0	315.6
45°	298.7	297.6	296.6	295.9	295.7	295.4	295.2	294.9
47.5°	277.1	276.0	274.9	274.1	273.5	272.9	272.2	271.6
50°	262.3	261.1	260.0	259.2	258.5	257.9	257.3	256.7
52.5°	248.0	246.9	245.9	245.1	244.4	243.7	243.1	242.4
55°	225.6	224.8	224.0	223.3	222.7	222.1	221.4	220.8
57.5°	203.5	202.4	201.4	200.7	200.4	200.0	199.7	199.3
60°	188.5	187.5	186.7	185.9	185.3	184.7	184.1	183.5
62.5°	174.0	173.0	172.0	171.3	170.9	170.4	169.9	169.4
65°	151.2	150.4	149.6	149.0	148.7	148.4	148.0	147.7
67.5°	129.5	128.8	128.1	127.7	127.5	127.3	127.1	126.8
70°	115.1	114.6	114.1	113.7	113.3	113.0	112.5	112.2
72.5°	101.6	101.0	100.4	100.0	99.6	99.3	98.8	98.5
75°	80.7	80.4	80.1	79.8	79.5	79.1	78.8	78.4
77.5°	61.5	61.3	61.1	61.0	60.7	60.4	60.2	59.9
80°	49.2	49.1	49.0	48.8	48.6	48.5	48.3	48.1
82.5°	37.5	37.4	37.3	37.1	37.1	37.1	37.0	37.0
85°	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.1
87.5°	10.1	10.2	10.2	10.3	10.2	10.2	10.1	10.0
90°	9.0	9.5	10.1	10.5	10.8	11.1	11.5	11.8
92.5°	20.3	21.0	21.8	22.2	22.5	22.7	22.9	23.2
95°	39.3	40.1	40.9	41.3	41.6	41.8	42.0	42.3
97.5°	61.6	62.4	63.1	63.5	63.6	63.8	63.9	64.1
100°	77.1	78.1	79.0	79.6	79.9	80.2	80.3	80.6
102.5°	93.0	94.1	95.1	95.8	96.2	96.4	96.8	97.0
105°	118.7	119.3	120.0	120.5	120.8	121.1	121.5	121.8
107.5°	146.5	146.8	147.1	147.2	147.2	147.2	147.1	147.1
110°	165.7	166.0	166.3	166.4	166.3	166.3	166.1	166.0



TEST NUMBER: P333131-935

CATALOG NUMBER: S125DIP-S375D590U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	185.0	185.1	185.3	185.3	185.1	184.9	184.7	184.5
115°	214.4	214.3	214.2	214.1	214.0	213.9	213.8	213.7
117.5°	243.9	244.0	244.1	243.9	243.5	243.1	242.6	242.1
120°	263.7	263.7	263.7	263.6	263.1	262.7	262.3	261.8
122.5°	283.3	283.2	283.1	282.8	282.5	282.1	281.8	281.5
125°	311.9	311.8	311.5	311.3	311.3	311.2	311.0	310.9
127.5°	340.4	340.4	340.3	340.1	339.8	339.7	339.4	339.2
130°	359.3	359.2	359.1	359.0	358.7	358.5	358.3	358.1
132.5°	377.4	377.3	377.2	376.9	376.7	376.3	376.1	375.7
135°	405.2	405.2	405.2	405.0	404.6	404.2	403.7	403.3
137.5°	432.3	432.4	432.6	432.4	431.8	431.3	430.8	430.2
140°	449.4	449.6	449.8	449.6	449.1	448.6	448.0	447.5
142.5°	466.1	466.2	466.3	466.1	465.6	465.0	464.5	464.0
145°	490.2	490.2	490.2	490.0	489.7	489.4	489.0	488.7
147.5°	512.6	512.8	513.1	512.8	512.0	511.3	510.6	509.9
150°	526.5	526.5	526.5	526.4	526.2	526.0	525.8	525.6
152.5°	539.7	539.9	540.2	540.1	539.7	539.3	538.9	538.6
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)