

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: P333501-930

Luminaire Tested: **S125RDIP-S375D590U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333501-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S375D590U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2909.7 lumens
Efficiency: N/A
Efficacy: 113.7 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

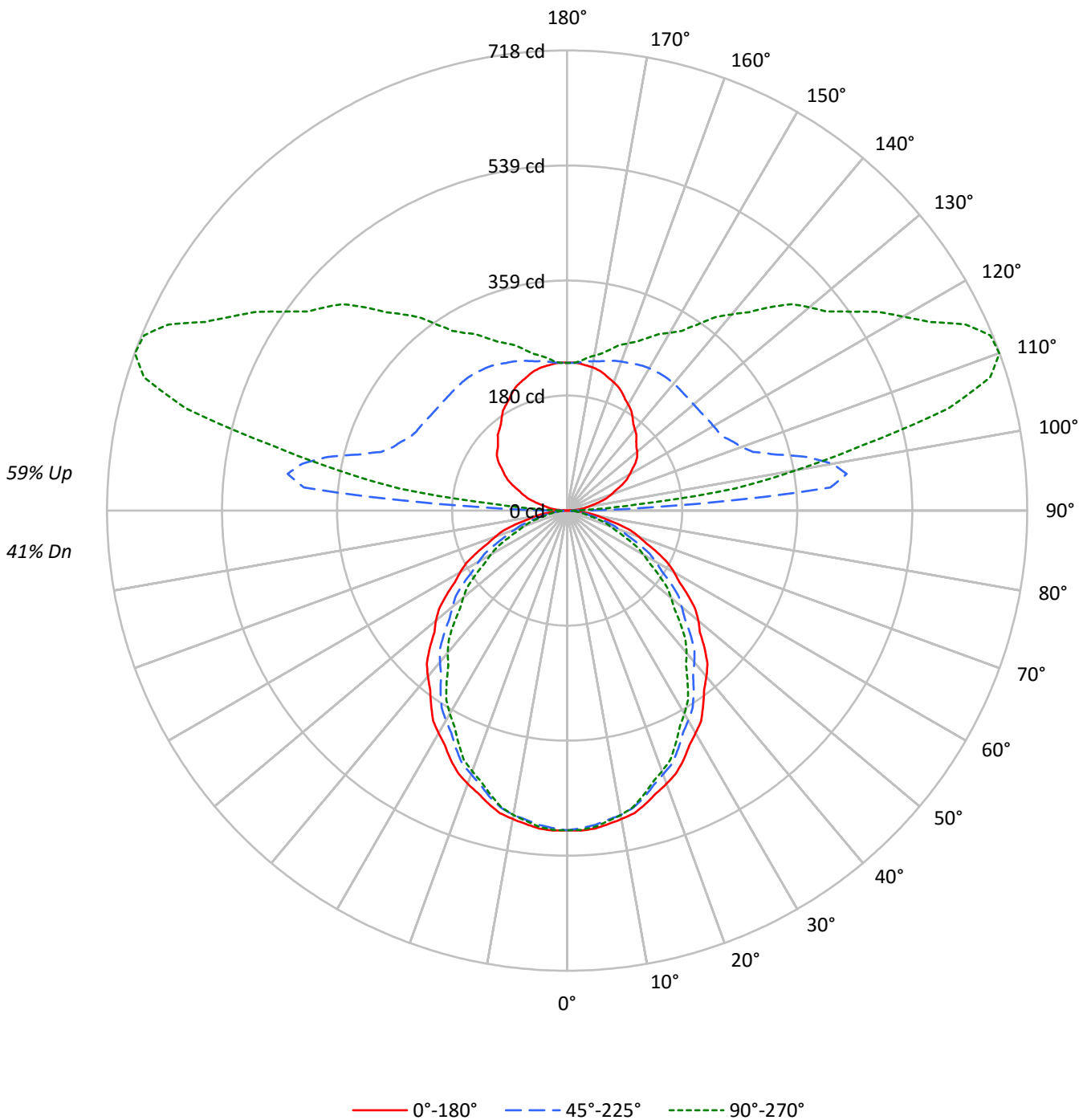
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

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	78	78	78	62	62	62	47	47	47	41
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	35
2	87	80	74	69	79	73	68	64	60	57	54	48	46	44	37	36	34	29
3	80	71	63	58	72	65	58	54	53	49	45	43	40	37	33	31	29	25
4	73	63	55	49	66	57	51	45	47	42	39	38	35	32	30	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	20	17
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	20	17	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	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	32	25	21	27	22	18	22	18	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3222	3222	3222
5°	3229	3192	3212
10°	3205	3163	3163
15°	3167	3099	3074
20°	3118	3009	2973
25°	3061	2921	2857
30°	2990	2818	2729
35°	2917	2713	2584
40°	2850	2602	2443
45°	2767	2478	2288
50°	2685	2344	2127
55°	2587	2215	1956
60°	2492	2059	1771
65°	2378	1878	1560
70°	2247	1650	1344
75°	2069	1392	1118
80°	1822	1093	941
85°	1534	897	837



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.6
10°-20°	131.1	4.5
20°-30°	190.1	6.5
30°-40°	216.7	7.4
40°-50°	211.2	7.3
50°-60°	177.8	6.1
60°-70°	124.6	4.3
70°-80°	64.1	2.2
80°-90°	17.5	0.6
90°-100°	167.2	5.7
100°-110°	359.4	12.4
110°-120°	337.3	11.6
120°-130°	273.4	9.4
130°-140°	219.4	7.5
140°-150°	165.6	5.7
150°-160°	116.5	4.0
160°-170°	68.7	2.4
170°-180°	22.3	0.8
0°-30°	368.1	12.7
0°-40°	584.8	20.1
0°-60°	973.7	33.5
0°-90°	1179.9	40.5
90°-120°	864.0	29.7
90°-150°	1522.3	52.3
90°-180°	1730.0	59.5
0°-180°	2909.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	499	499	499	499	499	
5°	498	496	492	496	496	47
15°	474	471	464	463	460	133
25°	430	423	410	405	401	198
35°	370	361	344	333	328	232
45°	303	292	271	257	250	234
55°	230	217	197	180	174	206
65°	156	142	123	108	102	154
75°	83	71	56	48	45	88
85°	21	14	12	12	11	23
90°	0	4	7	10	11	2
95°	15	45	412	187	109	16
105°	53	73	337	664	616	55
115°	94	113	271	583	686	92
125°	130	153	260	464	541	115
135°	152	183	258	389	449	118
145°	178	203	259	322	354	111
155°	203	218	252	285	297	93
165°	221	227	242	256	260	62
175°	230	230	232	235	234	22
180°	231	231	231	231	231	



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	499.8	499.6	499.4	499.2	499.0	498.6	497.9	497.2	496.5	495.9	496.5
5°	498.1	497.8	497.5	497.1	496.8	496.2	495.2	494.3	493.4	492.4	493.3
7.5°	493.3	492.9	492.6	492.3	492.0	491.2	490.2	489.0	488.0	486.8	487.4
10°	488.7	488.4	488.2	488.0	487.7	487.0	485.8	484.6	483.5	482.3	482.6
12.5°	483.6	483.2	483.0	482.7	482.3	481.4	479.8	478.3	476.6	475.1	475.2
15°	473.6	473.1	472.6	472.1	471.7	470.5	468.7	467.0	465.2	463.5	463.4
17.5°	462.4	461.6	460.9	460.1	459.3	457.9	455.6	453.4	451.2	449.0	448.6
20°	453.6	452.8	452.0	451.2	450.3	448.6	445.9	443.2	440.5	437.8	437.4
22.5°	444.0	443.2	442.4	441.5	440.7	438.9	436.0	433.3	430.4	427.6	426.8
25°	429.6	428.3	427.1	425.7	424.5	422.3	419.2	416.1	413.0	409.9	408.9
27.5°	412.9	411.5	409.9	408.4	406.8	404.5	401.1	397.8	394.5	391.2	389.6
30°	400.9	399.3	397.7	396.2	394.5	392.0	388.5	385.0	381.5	377.9	376.0
32.5°	389.1	387.3	385.5	383.6	381.7	379.0	375.4	371.9	368.3	364.7	362.6
35°	370.0	368.0	366.0	363.9	362.0	359.1	355.3	351.6	347.8	344.1	341.6
37.5°	351.2	348.8	346.3	343.9	341.4	338.3	334.4	330.5	326.7	322.8	319.8
40°	338.0	335.5	333.0	330.4	327.9	324.7	320.7	316.7	312.6	308.6	305.4
42.5°	324.1	321.6	318.9	316.4	313.8	310.5	306.3	302.1	298.0	293.8	290.8
45°	303.0	300.5	298.1	295.6	293.3	289.7	285.1	280.5	275.9	271.3	267.9
47.5°	281.0	278.4	275.9	273.3	270.8	267.2	262.5	257.9	253.2	248.6	245.2
50°	267.2	264.4	261.6	258.9	256.1	252.3	247.5	242.8	238.0	233.3	229.8
52.5°	252.1	249.2	246.4	243.6	240.8	237.1	232.6	228.0	223.6	219.1	215.3
55°	229.8	227.1	224.5	221.8	219.2	215.5	210.8	206.0	201.4	196.7	192.9
57.5°	207.4	204.6	201.6	198.8	195.9	192.2	187.7	183.2	178.7	174.1	170.5
60°	192.9	190.0	187.0	184.1	181.2	177.5	172.9	168.4	163.9	159.4	155.7
62.5°	177.6	174.7	171.9	169.2	166.3	162.7	158.1	153.5	148.9	144.3	140.9
65°	155.6	152.8	149.9	147.1	144.2	140.6	136.2	131.8	127.3	122.9	119.5
67.5°	133.9	131.0	128.2	125.3	122.5	118.9	114.6	110.4	106.2	101.9	98.8
70°	119.0	116.3	113.4	110.6	107.7	104.2	100.0	95.8	91.6	87.4	84.8
72.5°	104.6	101.8	99.1	96.3	93.5	90.1	86.2	82.3	78.4	74.4	72.1
75°	82.9	80.4	77.9	75.3	72.9	69.9	66.3	62.8	59.3	55.8	53.9
77.5°	61.3	59.4	57.3	55.3	53.3	50.9	48.1	45.2	42.5	39.6	38.3
80°	49.0	47.0	45.0	43.0	40.9	38.8	36.4	34.1	31.7	29.4	28.6
82.5°	36.9	35.1	33.3	31.5	29.7	28.0	26.4	24.8	23.2	21.5	21.2
85°	20.7	19.2	17.7	16.2	14.7	13.7	13.3	12.9	12.5	12.1	12.0
87.5°	7.0	6.7	6.4	6.1	5.8	5.7	5.7	5.9	5.9	6.0	6.1
90°	0.5	0.9	1.9	2.8	3.8	4.6	5.1	6.0	6.5	7.4	7.9
92.5°	5.7	6.8	10.8	16.6	24.5	38.2	63.5	106.2	152.4	149.9	121.4
95°	15.3	15.8	19.6	24.6	34.9	55.8	105.6	207.9	336.2	412.1	403.2
97.5°	25.5	26.0	28.6	33.8	43.0	58.0	91.0	165.9	300.3	440.0	510.2
100°	32.5	33.5	35.4	40.4	49.3	63.3	90.3	150.7	267.9	420.0	536.2
102.5°	40.4	40.9	42.4	47.9	56.0	69.5	93.6	144.4	243.3	384.6	520.6
105°	52.6	52.6	54.9	59.5	66.9	80.0	100.4	141.9	219.5	337.2	470.7
107.5°	64.5	65.4	67.6	71.4	79.2	90.9	110.7	146.1	209.5	304.5	419.7
110°	73.1	73.9	75.8	80.0	87.0	99.1	118.1	150.2	206.5	289.3	390.7



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	81.6	82.5	84.0	88.2	95.1	106.9	125.2	155.4	206.5	280.4	369.1
115°	93.9	94.9	96.3	100.4	107.5	119.0	136.2	163.2	207.9	270.7	345.5
117.5°	105.1	106.5	108.0	112.2	120.1	131.3	147.7	172.2	210.9	266.0	331.5
120°	112.5	114.0	115.8	120.0	127.9	139.5	155.8	178.1	213.9	263.7	323.7
122.5°	120.3	121.4	122.9	127.0	135.7	147.3	163.6	184.8	216.5	261.9	317.0
125°	130.2	131.2	133.5	137.6	146.5	158.6	173.9	194.0	220.9	259.5	307.9
127.5°	137.9	139.3	142.4	147.7	157.0	169.1	183.8	202.3	225.8	258.4	299.5
130°	142.8	144.1	147.9	153.9	163.7	175.8	190.2	207.9	228.9	257.6	293.9
132.5°	146.5	148.3	152.7	159.6	169.7	181.7	196.2	212.7	232.2	257.6	289.4
135°	152.5	154.4	160.0	167.5	177.2	189.7	204.2	219.5	236.7	257.6	284.1
137.5°	160.2	161.6	166.8	174.2	183.8	196.7	209.9	224.5	240.9	258.2	279.4
140°	164.6	166.0	171.6	179.0	187.9	200.5	213.9	227.9	242.8	258.6	277.2
142.5°	169.8	170.9	176.1	183.5	192.0	203.8	216.5	229.8	243.9	258.9	275.3
145°	177.7	178.6	183.2	189.7	198.1	208.8	220.9	232.5	245.1	258.6	272.6
147.5°	185.8	186.4	190.4	196.4	203.7	213.1	223.7	234.2	245.6	257.4	269.6
150°	190.7	191.6	194.9	200.9	207.4	215.3	225.6	235.3	245.6	256.2	267.4
152.5°	195.9	196.4	199.3	204.6	210.8	217.9	227.4	236.0	245.2	254.8	264.8
155°	202.8	202.8	205.5	210.2	214.8	221.4	229.3	236.7	244.2	252.1	260.4
157.5°	208.9	208.8	211.1	215.1	219.2	224.0	230.9	237.2	243.0	249.2	256.3
160°	213.0	212.5	214.4	217.7	221.4	225.6	231.6	237.2	241.8	247.4	253.0
162.5°	216.4	215.9	217.8	220.6	223.6	227.1	232.4	236.8	240.8	245.2	250.1
165°	221.4	220.5	221.8	224.1	226.0	228.9	232.5	236.3	239.0	241.8	245.6
167.5°	224.7	224.3	225.1	226.4	227.7	229.4	232.5	235.1	236.4	238.6	241.2
170°	227.0	226.5	227.0	227.9	228.9	230.2	232.5	234.4	235.3	236.7	238.6
172.5°	228.4	227.6	228.0	229.0	229.6	230.2	232.2	233.7	233.8	234.5	235.9
175°	230.2	229.3	229.8	230.2	230.2	230.2	231.6	232.5	232.0	232.0	232.5
177.5°	231.1	230.3	230.3	230.6	230.3	230.3	231.1	231.4	230.6	230.6	231.1
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	497.2	497.9	498.6	498.9	498.8	498.7	498.6	498.6
5°	494.2	495.0	495.8	496.2	496.0	495.8	495.6	495.5
7.5°	488.0	488.6	489.2	489.3	489.2	489.0	488.9	488.6
10°	482.8	483.1	483.3	483.3	483.1	482.8	482.6	482.3
12.5°	475.4	475.6	475.8	475.7	475.3	474.9	474.6	474.2
15°	463.3	463.2	463.1	462.7	461.9	461.2	460.5	459.7
17.5°	448.2	447.8	447.4	446.8	446.2	445.6	444.9	444.3
20°	437.0	436.6	436.2	435.6	434.8	434.1	433.3	432.6
22.5°	425.9	425.1	424.3	423.5	423.0	422.3	421.8	421.1
25°	407.8	406.7	405.6	404.6	403.7	402.8	401.9	400.9
27.5°	388.2	386.6	385.1	383.9	383.0	382.1	381.2	380.3
30°	374.1	372.2	370.2	368.9	368.1	367.4	366.6	365.9
32.5°	360.4	358.3	356.1	354.7	353.7	352.7	351.7	350.8
35°	339.2	336.7	334.3	332.5	331.3	330.2	329.0	327.8
37.5°	316.9	314.1	311.1	309.1	307.9	306.8	305.7	304.5
40°	302.2	299.1	295.9	293.8	292.8	291.8	290.7	289.8
42.5°	287.7	284.7	281.6	279.4	277.9	276.4	274.9	273.5
45°	264.6	261.2	257.9	255.6	254.4	253.1	251.8	250.5
47.5°	241.7	238.2	234.8	232.4	231.0	229.6	228.2	226.8
50°	226.2	222.7	219.2	216.8	215.6	214.3	213.0	211.7
52.5°	211.5	207.7	203.9	201.4	200.2	198.9	197.6	196.4
55°	189.1	185.4	181.6	179.0	177.7	176.3	175.0	173.7
57.5°	166.8	163.1	159.4	156.9	155.8	154.6	153.4	152.2
60°	152.1	148.3	144.6	142.2	140.9	139.7	138.4	137.1
62.5°	137.5	134.0	130.6	128.3	127.0	125.8	124.6	123.3
65°	116.1	112.8	109.4	107.1	105.9	104.6	103.4	102.1
67.5°	95.7	92.7	89.6	87.6	86.6	85.6	84.5	83.6
70°	82.3	79.7	77.0	75.3	74.2	73.2	72.2	71.2
72.5°	69.6	67.3	64.9	63.3	62.7	62.0	61.3	60.7
75°	52.1	50.2	48.4	47.2	46.6	46.0	45.4	44.8
77.5°	37.1	35.8	34.5	33.6	33.2	32.8	32.3	31.9
80°	27.9	27.1	26.4	25.9	25.8	25.6	25.4	25.3
82.5°	20.9	20.5	20.1	19.9	19.8	19.7	19.6	19.5
85°	11.9	11.8	11.7	11.7	11.6	11.5	11.4	11.3
87.5°	6.2	6.3	6.4	6.5	6.4	6.4	6.4	6.4
90°	8.4	8.8	9.3	10.2	10.2	10.2	10.7	10.7
92.5°	82.4	59.8	45.0	38.2	32.2	31.1	30.4	29.7
95°	334.4	263.7	206.5	167.5	134.4	120.4	116.8	109.3
97.5°	498.0	448.4	392.7	338.3	309.7	283.6	270.1	264.2
100°	572.0	549.3	501.3	453.0	420.9	387.4	370.2	362.7
102.5°	597.0	611.0	588.0	555.3	521.0	497.2	478.5	472.9
105°	582.3	646.0	666.4	661.3	646.5	631.1	621.8	616.2
107.5°	529.8	614.8	667.4	691.6	699.2	699.1	696.0	692.3
110°	491.1	579.5	645.1	684.6	705.5	714.4	717.6	717.6



TEST NUMBER: P333501-930

CATALOG NUMBER: S125RDIP-S375D590U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.6	544.5	610.8	657.5	688.0	703.2	711.3	714.6
115°	422.2	494.4	558.1	608.8	645.1	667.4	680.4	686.5
117.5°	397.5	459.7	514.5	561.1	597.4	620.4	633.3	637.1
120°	384.2	439.9	491.1	532.1	566.5	588.8	601.4	605.0
122.5°	374.1	425.8	471.4	509.7	540.4	560.8	573.4	576.7
125°	359.5	406.9	447.4	480.9	507.0	526.0	536.2	540.9
127.5°	344.6	388.9	426.6	458.0	481.6	498.5	508.1	510.2
130°	335.3	376.3	412.5	442.7	466.0	481.4	490.6	493.4
132.5°	326.0	364.4	397.3	426.4	449.6	465.0	473.5	476.7
135°	313.9	346.0	375.8	402.3	422.7	438.1	446.5	449.2
137.5°	303.7	329.6	354.4	376.9	395.2	409.2	416.9	420.0
140°	298.1	320.0	341.4	360.9	378.1	390.2	397.1	399.5
142.5°	293.3	311.8	330.2	347.2	361.7	371.9	378.5	380.5
145°	287.0	301.3	315.8	328.3	339.5	347.4	352.5	354.4
147.5°	281.0	292.7	303.8	313.2	322.1	328.4	331.4	332.2
150°	277.6	287.9	296.7	305.1	312.1	317.6	319.5	320.0
152.5°	273.9	283.1	291.1	297.7	303.5	307.9	309.8	310.3
155°	268.3	275.8	282.3	287.4	292.0	295.3	296.7	297.2
157.5°	262.8	268.9	273.9	277.9	281.5	284.2	285.5	285.4
160°	259.0	263.7	268.3	271.6	274.8	277.2	278.1	277.6
162.5°	254.9	259.3	263.1	266.0	268.6	270.5	270.7	270.6
165°	249.2	252.5	255.4	257.6	259.5	260.4	260.4	260.4
167.5°	243.9	246.1	248.2	249.8	250.8	251.6	251.2	251.1
170°	240.9	242.3	243.7	244.6	245.6	246.1	246.1	245.6
172.5°	237.6	239.0	239.9	240.5	240.8	241.6	240.8	240.4
175°	233.9	233.9	234.9	234.9	234.9	235.3	234.4	233.9
177.5°	231.4	231.8	231.8	231.8	231.4	231.8	230.6	230.6
180°	230.6	230.6	230.6	230.6	230.6	230.6	230.6	230.6

(END OF REPORT)