

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: P333127-930

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333127-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
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-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3118.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

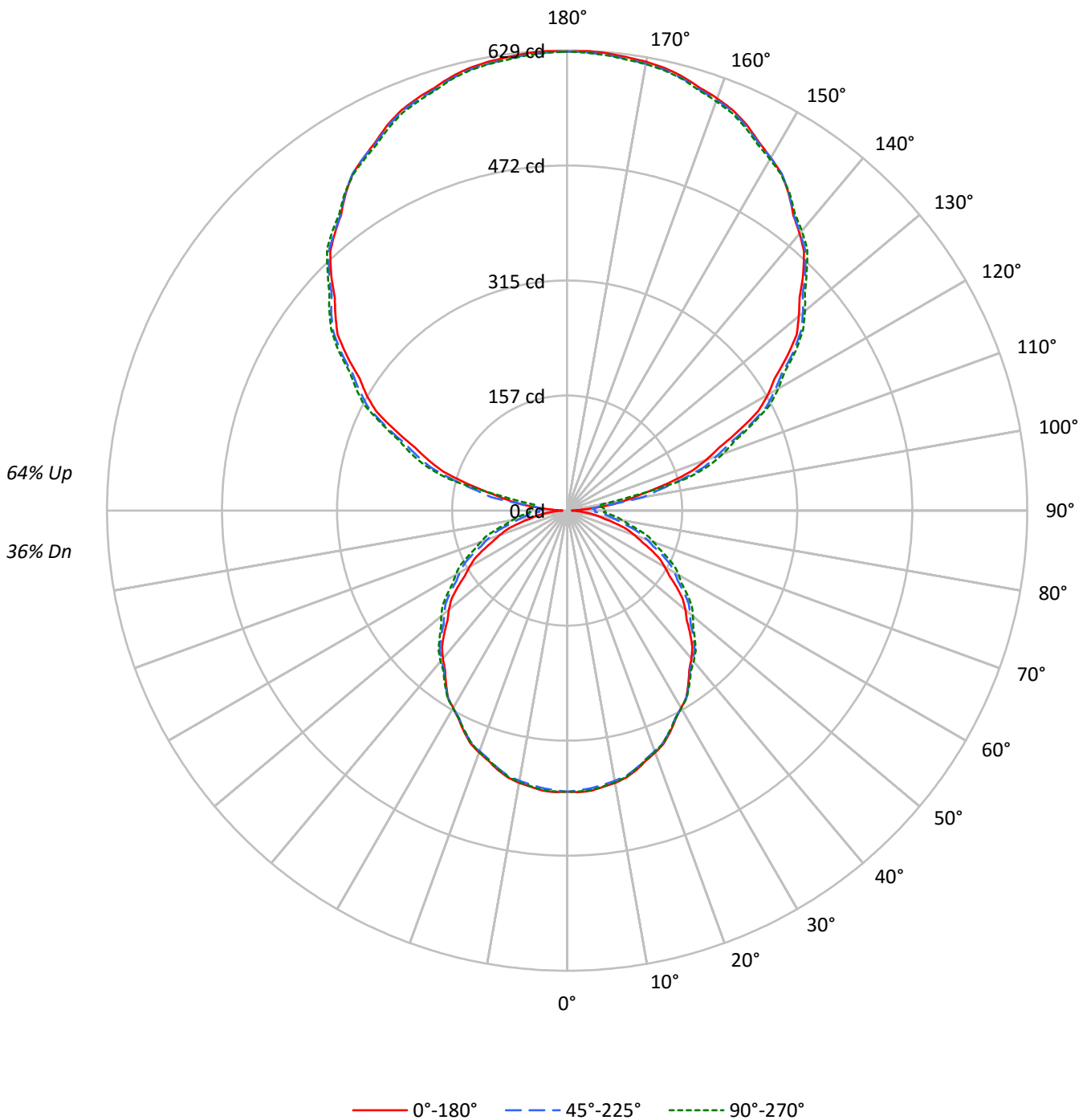
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333127-930

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

Luminous Intensity Polar Plot





TEST NUMBER: P333127-930

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

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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	94	90	86	82	85	81	78	75	65	63	61	51	49	48	37	36	35	29
2	85	78	72	66	77	71	65	61	57	53	50	44	42	39	32	31	29	24
3	78	68	61	55	70	62	56	50	50	45	42	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	53	45	39	59	49	42	36	39	34	30	31	27	24	23	20	18	15
6	60	48	40	34	54	44	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	30	50	39	32	27	32	27	23	25	21	19	19	16	14	11
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	17	15	13	10
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	15	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



TEST NUMBER: P333127-930

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	1.2
10°-20°	103.2	3.3
20°-30°	153.4	4.9
30°-40°	181.7	5.8
40°-50°	187.9	6.0
50°-60°	173.1	5.6
60°-70°	139.9	4.5
70°-80°	93.7	3.0
80°-90°	49.9	1.6
90°-100°	50.1	1.6
100°-110°	160.7	5.2
110°-120°	268.4	8.6
120°-130°	334.8	10.7
130°-140°	355.2	11.4
140°-150°	330.9	10.6
150°-160°	267.2	8.6
160°-170°	172.8	5.5
170°-180°	59.6	1.9
0°-30°	292.9	9.4
0°-40°	474.7	15.2
0°-60°	835.7	26.8
0°-90°	1119.2	35.9
90°-120°	479.1	15.4
90°-150°	1500.0	48.1
90°-180°	1999.0	64.1
0°-180°	3118.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	6	22	38	49	53	5
95°	31	39	35	45	48	38
105°	140	148	159	167	169	149
115°	259	264	274	279	279	257
125°	367	370	377	381	382	327
135°	456	459	460	464	463	351
145°	528	529	529	531	530	330
155°	582	579	580	581	577	268
165°	614	611	611	614	610	173
175°	628	625	625	628	625	60
180°	628	628	628	628	628	



TEST NUMBER: P333127-930

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	11.8	14.7	17.5	20.4	23.2	26.2	29.1	32.1	35.1	38.1	40.1
90°	6.5	10.0	13.5	17.0	20.5	24.1	27.6	31.2	34.7	38.3	40.8
92.5°	12.6	14.5	16.4	18.3	20.2	22.9	26.5	30.0	33.6	37.1	39.5
95°	31.4	33.3	35.1	37.0	38.9	39.3	38.2	37.1	36.0	35.0	37.3
97.5°	59.8	62.3	64.8	67.3	69.9	68.6	63.6	58.5	53.6	48.5	47.4
100°	81.9	83.9	85.9	88.1	90.1	92.7	95.8	98.9	102.0	105.1	91.4
102.5°	104.2	106.2	108.3	110.3	112.3	114.7	117.6	120.4	123.4	126.2	125.0
105°	140.1	141.9	143.7	145.4	147.2	149.3	151.8	154.3	156.9	159.3	161.0
107.5°	177.5	178.6	179.8	180.9	182.1	183.9	186.5	189.1	191.8	194.4	196.1
110°	201.7	202.8	203.7	204.7	205.8	207.5	210.1	212.6	215.2	217.8	219.0



TEST NUMBER: P333127-930

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	224.8	225.8	226.9	228.0	229.0	230.7	233.1	235.5	237.9	240.4	241.5
115°	259.0	260.2	261.2	262.4	263.4	265.1	267.4	269.7	272.0	274.3	275.3
117.5°	294.5	294.8	295.2	295.5	296.0	297.3	299.8	302.2	304.7	307.1	308.0
120°	316.8	316.9	317.1	317.2	317.4	318.6	320.8	323.0	325.3	327.5	328.7
122.5°	336.2	336.7	337.2	337.8	338.3	339.5	341.5	343.5	345.5	347.6	348.7
125°	366.6	367.3	367.9	368.6	369.2	370.4	372.0	373.7	375.4	377.1	378.0
127.5°	395.4	395.8	396.2	396.7	397.1	398.0	399.3	400.6	401.9	403.2	404.2
130°	413.3	413.7	414.1	414.6	415.0	415.9	417.1	418.4	419.7	420.9	421.8
132.5°	430.8	431.4	432.0	432.6	433.2	433.8	434.5	435.1	435.8	436.5	437.6
135°	456.2	456.6	457.2	457.8	458.3	458.8	459.1	459.5	459.9	460.2	461.1
137.5°	479.4	479.9	480.4	480.9	481.3	481.6	481.7	481.8	481.9	482.0	483.0
140°	494.4	494.6	494.8	495.0	495.2	495.3	495.3	495.3	495.2	495.2	496.4
142.5°	508.2	508.2	508.3	508.3	508.3	508.5	508.7	508.8	509.0	509.2	510.0
145°	528.3	528.5	528.6	528.7	528.8	528.9	528.9	528.9	528.9	528.9	529.4
147.5°	545.6	545.6	545.5	545.5	545.4	545.5	545.6	545.8	545.8	546.0	546.3
150°	556.8	556.6	556.4	556.2	556.0	556.0	556.2	556.4	556.6	556.8	557.0
152.5°	567.6	567.1	566.7	566.2	565.7	565.7	565.8	566.1	566.2	566.5	566.7
155°	581.5	580.8	580.2	579.6	578.9	578.8	578.9	579.2	579.4	579.6	579.9
157.5°	592.2	591.7	591.4	591.0	590.7	590.5	590.5	590.5	590.5	590.6	590.9
160°	599.6	599.0	598.3	597.7	597.1	596.9	597.0	597.0	597.1	597.3	597.7
162.5°	605.5	605.0	604.3	603.6	603.1	602.8	602.9	603.0	603.1	603.2	603.8
165°	613.5	612.9	612.3	611.7	611.1	610.8	610.9	611.0	611.1	611.2	611.8
167.5°	619.5	618.9	618.2	617.6	616.9	616.7	616.8	616.9	616.9	617.1	617.8
170°	622.9	622.2	621.4	620.7	620.0	619.6	619.7	619.9	620.0	620.0	620.9
172.5°	625.1	624.4	623.6	622.9	622.2	621.9	622.1	622.3	622.5	622.6	623.4
175°	627.5	626.9	626.2	625.7	625.0	624.8	624.8	625.0	625.1	625.2	626.0
177.5°	628.6	628.1	627.6	627.1	626.6	626.4	626.5	626.6	626.6	626.7	627.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5



TEST NUMBER: P333127-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	42.2	44.2	46.2	47.5	48.2	48.8	49.5	50.1
90°	43.2	45.7	48.1	49.8	50.7	51.6	52.5	53.4
92.5°	41.9	44.3	46.6	48.2	48.9	49.7	50.4	51.1
95°	39.7	42.0	44.4	45.8	46.5	47.0	47.6	48.2
97.5°	46.2	45.0	43.9	43.6	44.2	44.8	45.3	45.9
100°	77.8	64.1	50.5	43.7	43.8	43.9	43.9	44.0
102.5°	123.8	122.5	121.3	117.4	110.9	104.4	97.8	91.3
105°	162.7	164.4	166.1	167.1	167.6	168.1	168.6	169.0
107.5°	197.7	199.4	201.1	202.0	202.3	202.4	202.7	202.8
110°	220.3	221.6	222.8	223.8	224.5	225.2	225.9	226.6



TEST NUMBER: P333127-930

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	242.6	243.7	244.8	245.6	246.1	246.5	247.0	247.4
115°	276.5	277.5	278.7	279.1	279.0	278.9	278.8	278.7
117.5°	308.9	309.8	310.7	311.3	311.6	311.9	312.2	312.5
120°	330.0	331.2	332.4	333.0	333.0	333.0	333.0	333.0
122.5°	349.8	351.0	352.1	352.6	352.5	352.5	352.4	352.3
125°	379.0	379.8	380.7	381.3	381.4	381.5	381.6	381.7
127.5°	405.3	406.3	407.3	407.6	407.4	407.1	406.8	406.5
130°	422.7	423.5	424.4	424.8	424.7	424.6	424.5	424.4
132.5°	438.7	439.9	440.9	441.4	441.2	441.1	440.9	440.8
135°	462.0	462.9	463.8	464.1	463.9	463.7	463.5	463.3
137.5°	484.0	485.1	486.1	486.5	486.3	486.1	485.9	485.7
140°	497.5	498.6	499.7	500.2	499.9	499.6	499.3	499.0
142.5°	510.8	511.6	512.4	512.7	512.4	512.2	511.8	511.6
145°	529.9	530.4	531.0	531.1	530.8	530.5	530.3	529.9
147.5°	546.5	546.7	547.1	546.9	546.3	545.7	545.1	544.5
150°	557.2	557.4	557.6	557.3	556.6	555.9	555.1	554.4
152.5°	566.9	567.1	567.3	567.0	566.3	565.6	564.8	564.1
155°	580.2	580.5	580.8	580.6	579.8	578.9	578.1	577.2
157.5°	591.3	591.6	591.9	591.7	590.8	590.0	589.1	588.3
160°	598.1	598.5	598.9	598.7	597.9	597.0	596.2	595.4
162.5°	604.4	605.0	605.5	605.4	604.5	603.6	602.7	601.7
165°	612.5	613.1	613.7	613.6	612.8	612.0	611.1	610.3
167.5°	618.6	619.3	620.0	620.0	619.1	618.1	617.2	616.2
170°	621.7	622.6	623.4	623.3	622.4	621.4	620.5	619.6
172.5°	624.1	624.9	625.7	625.6	624.6	623.7	622.7	621.8
175°	626.8	627.6	628.5	628.4	627.5	626.6	625.7	624.7
177.5°	627.9	628.5	629.1	629.0	628.4	627.7	627.0	626.4
180°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5

(END OF REPORT)