

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: P333182-927

Luminaire Tested: **S125DIP-S610D810U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333182-927
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: S125DIP-S610D810U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4124.4 lumens
Efficiency: N/A
Efficacy: 107.4 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: General Diffuse

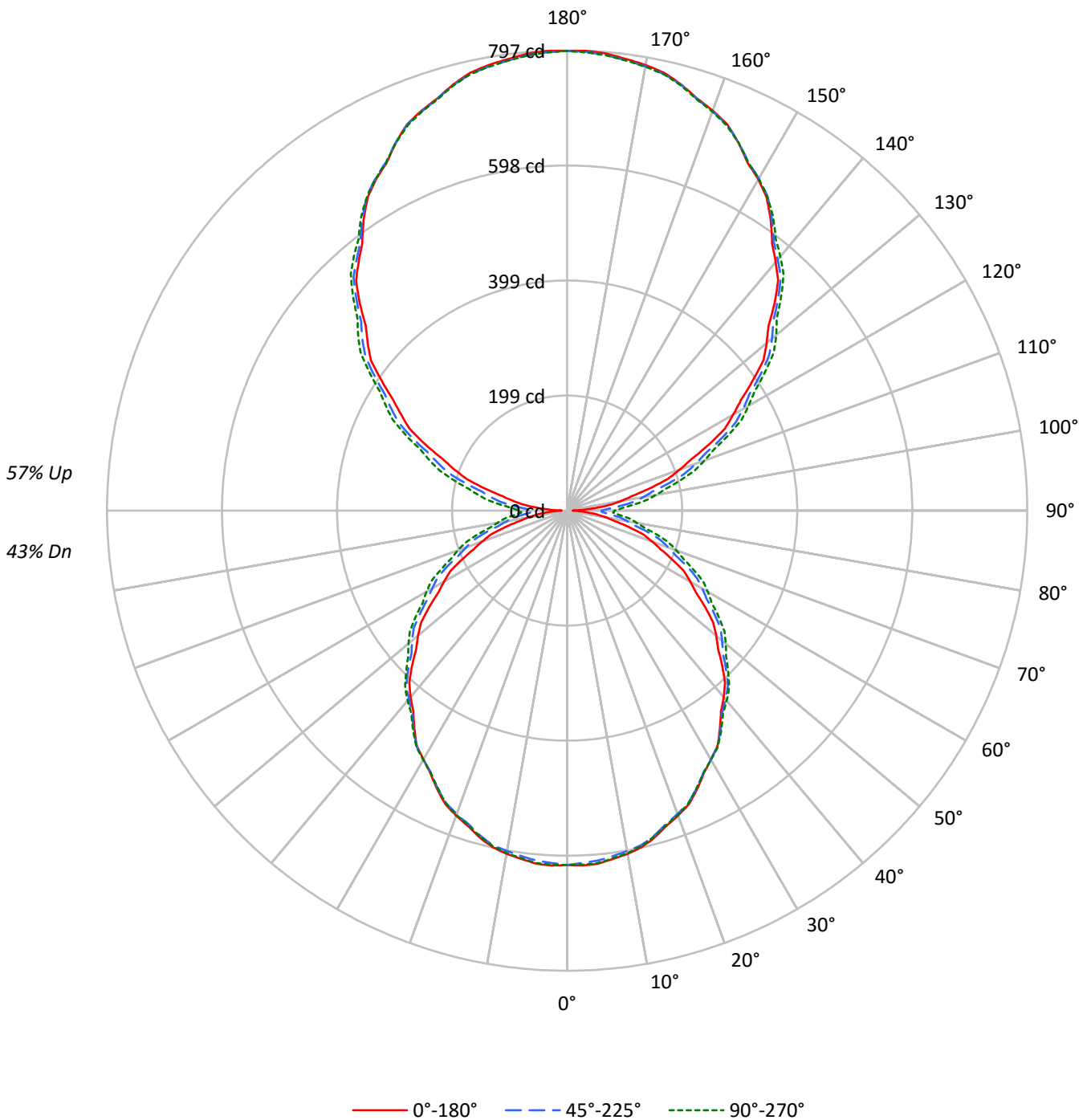
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





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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	106	106	106	106	97	97	97	97	80	80	80		64	64	64		50	50	50	43
1	96	91	87	83	87	83	80	77	69	66	64		55	54	52		43	42	41	35
2	87	79	73	67	79	72	67	62	60	56	52		48	45	43		38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44		42	39	36		33	31	29	24
4	72	61	53	47	66	56	49	44	47	41	37		38	34	31		29	27	24	21
5	66	54	46	40	60	50	43	37	42	36	32		34	30	26		26	24	21	18
6	61	49	40	35	55	45	38	32	37	32	28		30	26	23		24	21	19	16
7	56	44	36	30	51	40	33	28	34	28	24		28	23	20		22	19	16	14
8	52	40	32	27	47	37	30	25	31	25	21		25	21	18		20	17	15	12
9	48	36	29	24	44	33	27	22	28	23	19		23	19	16		18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17		21	17	15		17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.4
10°-20°	164.8	4.0
20°-30°	245.1	5.9
30°-40°	290.3	7.0
40°-50°	300.2	7.3
50°-60°	276.5	6.7
60°-70°	223.5	5.4
70°-80°	149.7	3.6
80°-90°	79.4	1.9
90°-100°	96.9	2.3
100°-110°	189.5	4.6
110°-120°	288.2	7.0
120°-130°	363.2	8.8
130°-140°	398.6	9.7
140°-150°	386.5	9.4
150°-160°	323.7	7.8
160°-170°	215.2	5.2
170°-180°	75.3	1.8
0°-30°	467.9	11.3
0°-40°	758.2	18.4
0°-60°	1334.9	32.4
0°-90°	1787.4	43.3
90°-120°	574.6	13.9
90°-150°	1722.8	41.8
90°-180°	2337.0	56.7
0°-180°	4124.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	10	34	59	76	82	9
95°	48	66	92	109	115	49
105°	147	160	181	196	203	157
115°	271	278	294	304	307	268
125°	392	396	408	416	419	351
135°	508	511	516	523	524	391
145°	614	616	618	621	622	384
155°	702	702	703	705	702	323
165°	764	763	763	765	762	215
175°	794	792	792	795	791	75
180°	796	796	796	796	796	



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	18.9	23.4	27.9	32.4	36.9	41.5	46.3	51.0	55.8	60.5	63.7
90°	10.2	15.6	21.0	26.4	31.8	37.2	42.7	48.2	53.8	59.3	63.1
92.5°	23.7	28.4	33.1	37.9	42.5	47.8	53.7	59.6	65.4	71.2	75.1
95°	48.1	51.8	55.6	59.3	63.1	68.0	73.8	79.8	85.7	91.7	95.5
97.5°	74.0	77.2	80.5	83.7	87.0	91.7	98.0	104.3	110.6	116.8	120.6
100°	93.3	96.2	98.9	101.8	104.6	109.0	115.1	121.1	127.2	133.3	137.4
102.5°	114.2	117.3	120.5	123.6	126.7	130.9	135.9	141.0	146.1	151.2	155.3
105°	146.6	149.5	152.3	155.1	158.0	161.8	166.7	171.5	176.3	181.2	184.7
107.5°	182.6	185.1	187.6	190.1	192.7	196.1	200.6	205.1	209.6	214.0	217.1
110°	207.4	209.7	212.0	214.3	216.6	219.8	223.9	228.1	232.3	236.4	239.4



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	233.1	234.8	236.5	238.1	239.7	242.6	246.8	251.0	255.1	259.3	261.9
115°	270.6	272.1	273.5	275.0	276.6	279.2	282.9	286.7	290.4	294.1	296.4
117.5°	308.2	309.0	309.9	310.8	311.6	313.8	317.3	320.9	324.4	328.0	330.3
120°	331.9	333.0	334.1	335.2	336.3	338.4	341.7	344.8	348.1	351.3	353.6
122.5°	357.2	357.7	358.1	358.5	358.9	360.8	364.2	367.5	370.8	374.1	376.2
125°	392.1	392.8	393.4	394.1	394.8	396.6	399.3	402.2	405.0	407.8	409.7
127.5°	428.6	429.0	429.3	429.6	429.9	431.3	433.6	436.0	438.4	440.7	442.6
130°	450.9	451.5	452.0	452.6	453.1	454.5	456.6	458.8	460.9	463.0	464.8
132.5°	472.7	473.8	474.9	476.0	477.1	478.4	479.7	481.2	482.5	483.9	485.7
135°	507.9	508.6	509.3	510.0	510.7	511.6	512.6	513.7	514.8	515.9	517.6
137.5°	541.0	541.7	542.4	543.0	543.8	544.5	545.3	546.0	546.8	547.6	549.3
140°	561.8	562.5	563.2	563.9	564.6	565.2	565.8	566.3	566.8	567.4	569.1
142.5°	583.1	583.6	584.1	584.6	585.0	585.5	586.1	586.6	587.2	587.7	589.1
145°	614.5	614.9	615.3	615.8	616.2	616.6	617.0	617.3	617.8	618.2	618.9
147.5°	642.9	643.2	643.5	643.8	644.0	644.4	644.8	645.1	645.4	645.7	646.3
150°	662.2	662.0	661.9	661.8	661.6	661.9	662.4	663.0	663.5	664.1	664.1
152.5°	678.0	678.3	678.4	678.7	678.8	679.1	679.2	679.5	679.7	679.9	680.2
155°	702.4	702.4	702.4	702.4	702.4	702.5	702.7	702.8	702.9	703.1	703.6
157.5°	724.3	724.0	723.7	723.3	723.0	722.9	723.1	723.3	723.3	723.5	724.1
160°	737.1	736.7	736.3	735.9	735.5	735.4	735.5	735.6	735.8	735.9	736.5
162.5°	748.5	748.2	747.9	747.7	747.3	747.2	747.2	747.3	747.3	747.3	748.0
165°	763.8	763.5	763.3	763.0	762.7	762.6	762.7	762.9	763.0	763.2	763.7
167.5°	776.7	776.1	775.5	775.0	774.4	774.2	774.2	774.2	774.2	774.2	775.0
170°	783.6	783.1	782.5	782.0	781.4	781.1	781.1	781.1	781.1	781.1	782.0
172.5°	788.5	788.0	787.4	786.9	786.3	786.1	786.1	786.1	786.1	786.1	786.9
175°	794.2	793.6	793.1	792.5	791.9	791.6	791.6	791.6	791.6	791.6	792.5
177.5°	797.0	796.5	796.1	795.7	795.2	795.0	794.9	794.7	794.6	794.5	795.2
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	66.9	70.1	73.4	75.5	76.4	77.5	78.5	79.5
90°	66.8	70.6	74.3	76.9	78.3	79.6	81.0	82.3
92.5°	79.0	82.9	86.7	89.3	90.5	91.7	93.0	94.3
95°	99.4	103.4	107.3	109.8	111.1	112.3	113.4	114.6
97.5°	124.3	128.0	131.7	134.1	135.2	136.3	137.4	138.5
100°	141.4	145.4	149.5	152.0	153.1	154.2	155.3	156.4
102.5°	159.3	163.3	167.4	170.0	171.2	172.4	173.6	174.8
105°	188.1	191.6	195.2	197.6	198.9	200.3	201.6	203.0
107.5°	220.2	223.2	226.3	228.2	229.0	229.8	230.7	231.5
110°	242.3	245.3	248.3	250.1	250.9	251.7	252.5	253.3



TEST NUMBER: P333182-927

CATALOG NUMBER: S125DIP-S610D810U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	264.5	267.1	269.8	271.5	272.1	272.8	273.5	274.2
115°	298.7	301.0	303.2	304.8	305.4	306.0	306.7	307.4
117.5°	332.7	335.1	337.5	338.9	339.2	339.6	339.9	340.3
120°	355.8	358.1	360.4	361.6	361.9	362.2	362.4	362.7
122.5°	378.3	380.3	382.4	383.6	384.0	384.3	384.7	385.0
125°	411.5	413.4	415.3	416.5	417.0	417.6	418.0	418.6
127.5°	444.4	446.2	448.1	449.2	449.8	450.3	450.8	451.2
130°	466.5	468.3	470.0	471.1	471.4	471.8	472.2	472.6
132.5°	487.4	489.2	490.9	491.9	492.0	492.2	492.3	492.5
135°	519.4	521.1	522.8	523.7	523.9	523.9	524.1	524.2
137.5°	551.0	552.8	554.5	555.3	555.2	555.0	554.8	554.7
140°	570.8	572.6	574.3	575.2	575.0	574.9	574.7	574.6
142.5°	590.6	592.0	593.4	594.1	593.9	593.7	593.6	593.4
145°	619.6	620.2	620.9	621.3	621.4	621.5	621.6	621.8
147.5°	646.8	647.4	647.9	647.8	647.1	646.4	645.7	645.1
150°	664.1	664.1	664.1	664.0	663.8	663.7	663.5	663.5
152.5°	680.6	680.9	681.2	681.2	680.7	680.2	679.8	679.3
155°	704.2	704.7	705.3	705.2	704.5	703.9	703.1	702.4
157.5°	724.6	725.2	725.7	725.6	724.6	723.7	722.8	721.9
160°	737.0	737.5	738.1	738.1	737.4	736.7	735.9	735.3
162.5°	748.6	749.3	750.0	749.9	749.1	748.3	747.5	746.7
165°	764.3	764.9	765.3	765.2	764.4	763.6	762.7	761.9
167.5°	775.9	776.7	777.5	777.4	776.7	775.8	774.9	774.0
170°	782.8	783.6	784.4	784.3	783.4	782.4	781.5	780.5
172.5°	787.7	788.5	789.4	789.4	788.5	787.7	786.8	785.9
175°	793.3	794.2	795.0	794.9	793.9	793.0	792.0	791.1
177.5°	795.8	796.5	797.2	797.1	796.3	795.6	794.8	794.0
180°	796.0	796.0	796.0	796.0	796.0	796.0	796.0	796.0

(END OF REPORT)