

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: P332592-930

Luminaire Tested: **SA4XXDIP-C795D590U930-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332592-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C795D590U930-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

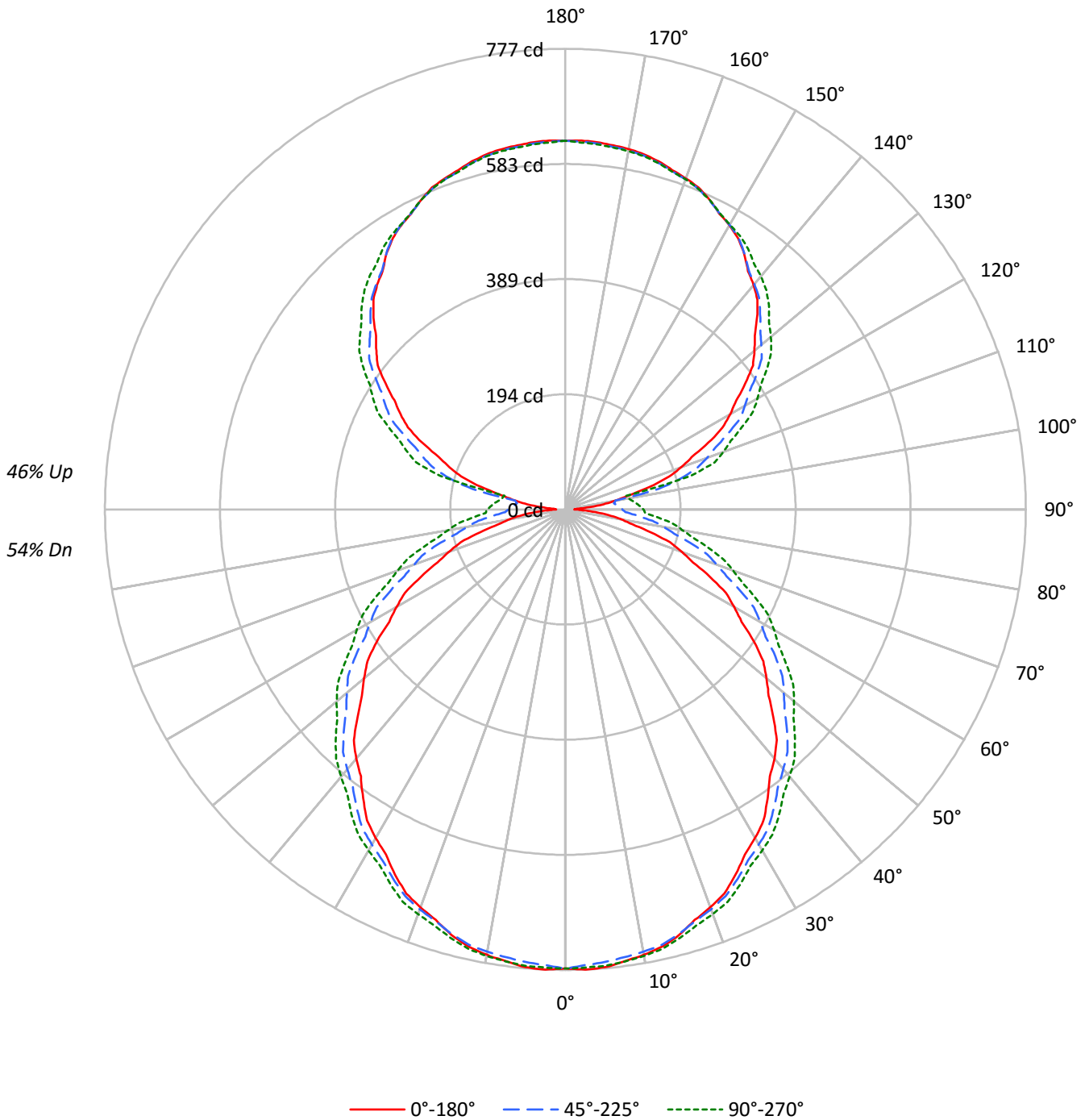
Lumens per Lamp: N/A
Luminaire Lumens: 4565.1 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: General Diffuse

Input Watts (W): 40.3
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



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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	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	54				
1	97	93	88	84	90	86	82	79	73	70	68	61	59	58	51	49	48	43				
2	88	80	74	68	81	74	69	64	63	59	55	53	50	47	44	42	40	35				
3	80	70	62	56	74	65	58	53	56	50	46	47	43	39	39	36	33	29				
4	73	62	54	47	67	57	50	44	49	43	39	41	37	33	34	31	28	25				
5	67	55	46	40	62	51	44	38	44	38	33	37	32	29	31	27	24	21				
6	62	49	41	35	57	46	38	33	39	33	29	33	29	25	28	24	21	18				
7	57	44	36	30	53	41	34	29	36	30	25	30	26	22	25	22	19	16				
8	53	40	32	27	49	38	30	25	32	27	22	28	23	20	23	20	17	14				
9	49	37	29	24	45	34	27	22	30	24	20	25	21	18	21	18	15	13				
10	46	34	26	21	43	31	25	20	27	22	18	23	19	16	20	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6252	6252	6252
5°	6271	6110	6128
10°	6233	6010	6006
15°	6177	5894	5862
20°	6093	5766	5723
25°	5998	5624	5569
30°	5895	5481	5411
35°	5779	5336	5274
40°	5685	5196	5129
45°	5547	5069	5005
50°	5430	4922	4876
55°	5310	4783	4722
60°	5121	4605	4583
65°	4915	4414	4411
70°	4666	4197	4210
75°	4318	3960	4029
80°	3929	3731	3851
85°	3441	3526	3748



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.6
10°-20°	210.1	4.6
20°-30°	317.7	7.0
30°-40°	384.4	8.4
40°-50°	406.4	8.9
50°-60°	382.5	8.4
60°-70°	317.3	7.0
70°-80°	222.9	4.9
80°-90°	127.8	2.8
90°-100°	96.1	2.1
100°-110°	191.0	4.2
110°-120°	296.6	6.5
120°-130°	350.3	7.7
130°-140°	361.4	7.9
140°-150°	331.3	7.3
150°-160°	265.7	5.8
160°-170°	171.4	3.8
170°-180°	59.1	1.3
0°-30°	601.2	13.2
0°-40°	985.6	21.6
0°-60°	1774.4	38.9
0°-90°	2442.4	53.5
90°-120°	583.6	12.8
90°-150°	1626.5	35.6
90°-180°	2123.0	46.5
0°-180°	4565.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	775	772	767	773	773	74
15°	743	744	741	749	748	209
25°	680	685	688	697	698	313
35°	595	605	614	626	629	372
45°	496	513	529	543	548	383
55°	388	407	433	449	455	346
65°	269	297	326	347	355	266
75°	149	182	218	241	250	159
85°	46	83	121	146	156	49
90°	15	55	96	123	132	10
95°	37	51	86	111	120	42
105°	148	169	202	226	218	155
115°	267	277	303	322	329	263
125°	371	373	393	410	416	331
135°	458	458	465	479	486	353
145°	526	527	527	532	537	329
155°	576	577	575	577	576	266
165°	608	606	606	609	605	172
175°	622	619	620	623	618	59
180°	622	622	622	622	622	



TEST NUMBER: P332592-930

CATALOG NUMBER: SA4XXDIP-C795D590U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5
2.5°	777.2	776.7	776.2	775.8	775.3	774.5	773.2	772.0	770.8	769.6	770.6
5°	775.3	774.7	774.1	773.6	773.0	772.0	770.6	769.3	767.9	766.6	768.2
7.5°	768.7	768.3	768.0	767.7	767.3	766.5	765.5	764.3	763.2	762.1	763.9
10°	763.1	763.0	762.8	762.5	762.4	761.8	760.8	759.9	758.9	757.9	759.7
12.5°	755.5	755.5	755.5	755.4	755.4	755.0	754.4	753.7	753.0	752.4	754.0
15°	743.2	743.4	743.6	743.8	744.0	743.8	743.2	742.7	742.0	741.4	743.2
17.5°	726.4	726.9	727.5	728.1	728.7	728.9	728.8	728.7	728.6	728.5	730.3
20°	714.6	715.2	715.8	716.3	716.9	717.3	717.5	717.6	717.9	718.0	720.0
22.5°	701.4	702.1	702.9	703.6	704.3	704.9	705.2	705.6	705.9	706.3	708.2
25°	679.9	681.0	682.2	683.4	684.5	685.4	686.0	686.6	687.1	687.7	689.8
27.5°	656.0	657.6	659.3	661.0	662.8	664.1	665.0	665.8	666.7	667.6	669.5
30°	640.0	641.6	643.1	644.7	646.2	647.6	649.0	650.3	651.7	653.0	655.1
32.5°	622.6	624.5	626.4	628.2	630.1	631.7	633.2	634.7	636.3	637.7	640.2
35°	594.9	597.2	599.6	601.9	604.1	606.3	608.2	610.2	612.0	614.0	616.7
37.5°	567.0	569.6	572.3	574.9	577.6	580.2	582.5	584.9	587.3	589.7	592.5
40°	548.9	551.5	553.9	556.4	559.0	561.6	564.3	567.0	569.6	572.3	575.3
42.5°	528.2	530.9	533.8	536.5	539.4	542.3	545.5	548.7	551.9	555.0	558.2
45°	496.0	499.7	503.4	507.0	510.7	514.4	518.0	521.7	525.3	529.0	532.3
47.5°	465.4	469.1	472.9	476.7	480.5	484.5	488.7	492.9	497.2	501.4	504.8
50°	443.1	447.4	451.6	455.8	460.1	464.3	468.6	472.8	477.0	481.3	485.2
52.5°	420.9	425.2	429.4	433.7	437.9	442.5	447.3	452.2	457.1	461.9	465.7
55°	388.5	392.6	396.6	400.6	404.7	409.6	415.4	421.2	427.0	432.8	436.6
57.5°	352.3	357.3	362.3	367.3	372.3	377.6	383.4	389.1	394.9	400.6	405.2
60°	328.6	333.7	338.7	343.7	348.7	354.4	360.8	367.1	373.5	379.8	384.3
62.5°	305.7	311.3	316.7	322.2	327.7	333.6	340.0	346.3	352.7	359.1	363.5
65°	268.8	275.0	281.2	287.3	293.5	299.9	306.4	313.0	319.5	326.0	330.8
67.5°	233.3	239.9	246.4	252.9	259.5	266.3	273.3	280.3	287.3	294.3	299.2
70°	209.0	215.6	222.1	228.7	235.2	242.1	249.5	256.8	264.1	271.4	276.6
72.5°	185.4	192.1	198.9	205.5	212.2	219.5	227.3	235.1	242.9	250.6	255.7
75°	149.2	156.3	163.4	170.6	177.7	185.3	193.4	201.5	209.6	217.7	223.1
77.5°	115.4	122.9	130.4	138.0	145.5	153.6	162.1	170.6	179.0	187.5	193.0
80°	94.5	102.2	109.9	117.6	125.4	133.5	141.9	150.4	158.9	167.4	173.2
82.5°	73.7	81.7	89.8	97.8	105.7	114.1	122.5	131.0	139.5	148.0	153.8
85°	46.0	54.1	62.1	70.3	78.4	86.7	95.4	104.0	112.8	121.4	127.2
87.5°	25.9	34.0	42.2	50.2	58.3	66.7	75.3	83.9	92.5	101.1	106.8
90°	15.2	24.1	32.9	41.8	50.6	59.6	68.7	77.9	87.0	96.1	102.3
92.5°	19.1	26.0	33.0	40.0	47.0	55.1	64.2	73.3	82.4	91.6	97.6
95°	36.9	39.7	42.6	45.4	48.3	53.6	61.6	69.7	77.7	85.7	91.5
97.5°	64.6	72.2	79.9	87.6	95.2	97.2	93.5	89.8	86.1	82.3	87.5
100°	85.9	92.7	99.5	106.4	113.3	113.3	106.6	99.9	93.1	86.3	89.8
102.5°	110.4	116.1	121.9	127.7	133.4	139.0	144.6	150.0	155.6	161.0	147.2
105°	147.8	152.3	156.7	161.2	165.7	171.8	179.4	187.0	194.7	202.4	208.1
107.5°	184.0	187.4	190.9	194.4	197.9	203.3	210.8	218.3	225.7	233.1	238.3
110°	207.8	210.8	213.9	216.9	219.9	225.1	232.4	239.8	247.2	254.5	259.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	231.0	233.9	236.8	239.8	242.8	247.6	254.3	261.1	267.7	274.5	278.8
115°	266.6	268.6	270.7	272.7	274.8	278.8	284.9	290.9	297.0	303.0	307.5
117.5°	299.4	300.8	302.3	303.8	305.2	308.9	315.0	320.9	326.9	332.8	336.8
120°	321.1	322.0	323.0	324.0	325.0	328.2	333.7	339.2	344.7	350.2	354.2
122.5°	341.9	342.3	342.6	343.0	343.3	346.3	351.6	357.1	362.5	367.9	371.9
125°	370.9	371.1	371.3	371.5	371.8	374.1	378.8	383.4	388.0	392.6	396.6
127.5°	399.0	398.9	398.8	398.7	398.6	400.6	404.8	409.0	413.2	417.4	420.8
130°	416.5	416.5	416.4	416.2	416.1	417.8	421.2	424.6	428.0	431.4	435.0
132.5°	433.3	433.3	433.3	433.3	433.3	434.6	437.5	440.3	443.2	446.1	449.5
135°	457.5	457.4	457.3	457.2	457.1	458.0	459.7	461.5	463.2	465.0	468.2
137.5°	479.7	479.6	479.4	479.3	479.2	479.6	480.7	481.8	482.9	484.0	487.1
140°	494.2	494.2	494.2	494.3	494.3	494.5	494.9	495.3	495.7	496.1	498.9
142.5°	506.5	506.9	507.2	507.6	507.9	508.1	508.1	508.1	508.1	508.1	510.5
145°	526.4	526.5	526.6	526.8	526.8	526.9	526.9	526.9	526.9	526.9	528.2
147.5°	542.3	542.7	543.1	543.5	543.8	544.0	543.9	543.8	543.6	543.6	543.8
150°	553.8	554.1	554.2	554.5	554.7	554.8	554.6	554.6	554.5	554.3	554.3
152.5°	562.8	563.1	563.4	563.7	563.9	564.0	563.9	563.7	563.5	563.3	563.5
155°	576.3	576.3	576.4	576.5	576.7	576.5	576.3	575.9	575.6	575.3	575.7
157.5°	587.7	587.6	587.5	587.5	587.4	587.2	586.9	586.5	586.1	585.8	586.4
160°	594.4	594.0	593.7	593.5	593.1	592.9	592.8	592.7	592.6	592.5	593.1
162.5°	600.3	599.9	599.5	599.2	598.8	598.5	598.3	598.3	598.2	598.1	598.7
165°	607.8	607.3	606.8	606.3	605.8	605.5	605.5	605.5	605.5	605.5	606.3
167.5°	613.8	613.3	612.7	612.2	611.6	611.3	611.3	611.2	611.1	611.1	612.0
170°	617.2	616.5	615.9	615.3	614.7	614.4	614.5	614.6	614.7	614.8	615.6
172.5°	619.4	618.7	618.2	617.5	616.9	616.6	616.8	616.9	616.9	617.0	617.9
175°	621.8	621.2	620.5	620.0	619.3	619.1	619.1	619.3	619.4	619.5	620.4
177.5°	622.9	622.3	621.7	621.2	620.6	620.4	620.5	620.7	620.9	621.0	621.7
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	774.5	774.5	774.5	774.5	774.5	774.5	774.5	774.5
2.5°	771.7	772.8	773.9	774.4	774.2	774.0	773.9	773.7
5°	769.7	771.3	772.7	773.5	773.2	773.1	772.9	772.7
7.5°	765.6	767.3	769.1	769.8	769.6	769.4	769.2	769.1
10°	761.4	763.1	764.9	765.6	765.5	765.2	765.1	764.9
12.5°	755.5	757.2	758.7	759.5	759.5	759.4	759.4	759.3
15°	744.9	746.7	748.4	749.2	749.0	748.8	748.6	748.4
17.5°	732.0	733.8	735.6	736.4	736.2	736.1	735.9	735.7
20°	721.9	723.8	725.8	726.8	726.8	726.8	726.8	726.8
22.5°	710.1	712.0	714.0	715.1	715.4	715.7	716.0	716.3
25°	691.9	694.1	696.2	697.3	697.5	697.7	697.9	698.1
27.5°	671.5	673.4	675.5	676.5	676.8	677.0	677.3	677.4
30°	657.2	659.3	661.5	662.8	663.2	663.5	663.9	664.3
32.5°	642.6	645.1	647.4	648.9	649.2	649.6	650.0	650.4
35°	619.4	622.1	624.8	626.4	627.0	627.5	628.2	628.8
37.5°	595.2	597.9	600.6	602.3	602.9	603.6	604.1	604.8
40°	578.1	581.1	583.9	585.7	586.5	587.3	588.1	588.8
42.5°	561.4	564.6	567.8	569.7	570.3	571.0	571.6	572.2
45°	535.6	538.8	542.1	544.2	545.2	546.2	547.1	548.0
47.5°	508.2	511.6	515.0	517.2	518.4	519.6	520.7	521.9
50°	489.0	492.8	496.7	499.2	500.3	501.6	502.7	503.9
52.5°	469.6	473.4	477.3	479.8	480.9	482.1	483.2	484.5
55°	440.4	444.3	448.2	450.7	451.8	453.0	454.1	455.3
57.5°	409.9	414.4	419.0	421.8	422.9	424.0	425.1	426.2
60°	388.7	393.1	397.5	400.6	402.1	403.7	405.2	406.8
62.5°	367.9	372.3	376.7	379.8	381.3	382.9	384.3	385.9
65°	335.7	340.6	345.4	348.5	350.1	351.6	353.1	354.7
67.5°	304.1	309.0	313.9	317.1	318.6	320.1	321.6	323.1
70°	281.8	287.1	292.3	295.5	296.9	298.2	299.5	300.9
72.5°	260.7	265.8	270.8	274.1	275.6	277.1	278.6	280.1
75°	228.4	233.8	239.3	242.8	244.6	246.3	248.0	249.7
77.5°	198.4	203.9	209.4	213.0	214.9	216.7	218.6	220.5
80°	179.0	184.7	190.5	194.1	195.7	197.2	198.8	200.3
82.5°	159.8	165.8	171.7	175.5	177.2	178.9	180.6	182.3
85°	133.0	138.8	144.6	148.4	150.3	152.2	154.2	156.1
87.5°	112.5	118.2	123.9	127.7	129.4	131.1	132.9	134.6
90°	108.5	114.7	120.9	124.9	126.6	128.4	130.1	131.9
92.5°	103.6	109.7	115.8	119.6	121.2	122.8	124.3	125.9
95°	97.3	103.1	109.0	112.8	114.6	116.5	118.3	120.2
97.5°	92.5	97.7	102.8	106.2	108.0	109.7	111.5	113.2
100°	93.3	96.7	100.1	102.6	104.0	105.5	107.0	108.4
102.5°	133.2	119.3	105.4	99.2	100.8	102.2	103.8	105.3
105°	213.9	219.6	225.3	227.1	224.9	222.7	220.5	218.4
107.5°	243.5	248.7	253.9	257.4	259.2	261.0	262.7	264.5
110°	263.8	268.5	273.0	276.3	278.2	280.1	281.8	283.7



TEST NUMBER: P332592-930

CATALOG NUMBER: SA4XXDIP-C795D590U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	283.0	287.2	291.5	294.6	296.4	298.4	300.4	302.2
115°	311.9	316.4	320.8	323.8	325.1	326.4	327.8	329.1
117.5°	340.8	344.7	348.7	351.4	352.9	354.4	356.0	357.4
120°	358.3	362.4	366.5	369.2	370.5	371.8	373.2	374.5
122.5°	375.9	379.8	383.8	386.5	387.6	388.8	390.0	391.2
125°	400.6	404.6	408.5	411.2	412.4	413.6	414.9	416.1
127.5°	424.2	427.5	431.0	433.3	434.6	435.8	437.0	438.2
130°	438.5	442.1	445.6	448.0	449.2	450.4	451.5	452.7
132.5°	452.9	456.3	459.7	462.0	463.1	464.1	465.2	466.3
135°	471.6	474.8	478.1	480.5	481.8	483.1	484.5	485.9
137.5°	490.2	493.2	496.2	498.1	499.0	500.0	500.9	501.8
140°	501.7	504.5	507.4	509.3	510.4	511.4	512.5	513.6
142.5°	513.0	515.4	517.8	519.4	520.2	521.1	522.0	522.8
145°	529.5	530.7	532.0	533.0	534.0	535.0	536.0	537.0
147.5°	544.0	544.3	544.5	545.0	545.7	546.4	547.1	547.9
150°	554.3	554.3	554.3	554.4	554.5	554.6	554.7	554.8
152.5°	563.6	563.8	563.9	564.0	563.9	563.9	563.8	563.8
155°	576.1	576.5	576.9	577.0	576.7	576.3	576.1	575.8
157.5°	586.9	587.4	587.9	587.9	587.4	586.9	586.4	585.8
160°	593.7	594.4	595.0	595.0	594.4	593.7	593.1	592.5
162.5°	599.3	599.9	600.5	600.5	599.8	599.1	598.4	597.7
165°	607.2	608.0	608.9	608.8	607.8	606.9	606.0	605.0
167.5°	612.9	613.8	614.7	614.7	613.7	612.6	611.6	610.6
170°	616.4	617.3	618.2	618.0	617.0	616.0	614.9	613.9
172.5°	618.7	619.5	620.4	620.2	619.1	618.0	616.9	615.7
175°	621.3	622.2	623.2	623.1	621.8	620.5	619.3	618.1
177.5°	622.4	623.1	623.7	623.5	622.6	621.6	620.5	619.5
180°	621.8	621.8	621.8	621.8	621.8	621.8	621.8	621.8

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