

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: P332592-935

Luminaire Tested: **S124DIP-S795D590U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332592-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S795D590U935-4F0-1E-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: 4821.0 lumens
Efficiency: N/A
Efficacy: 119.6 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

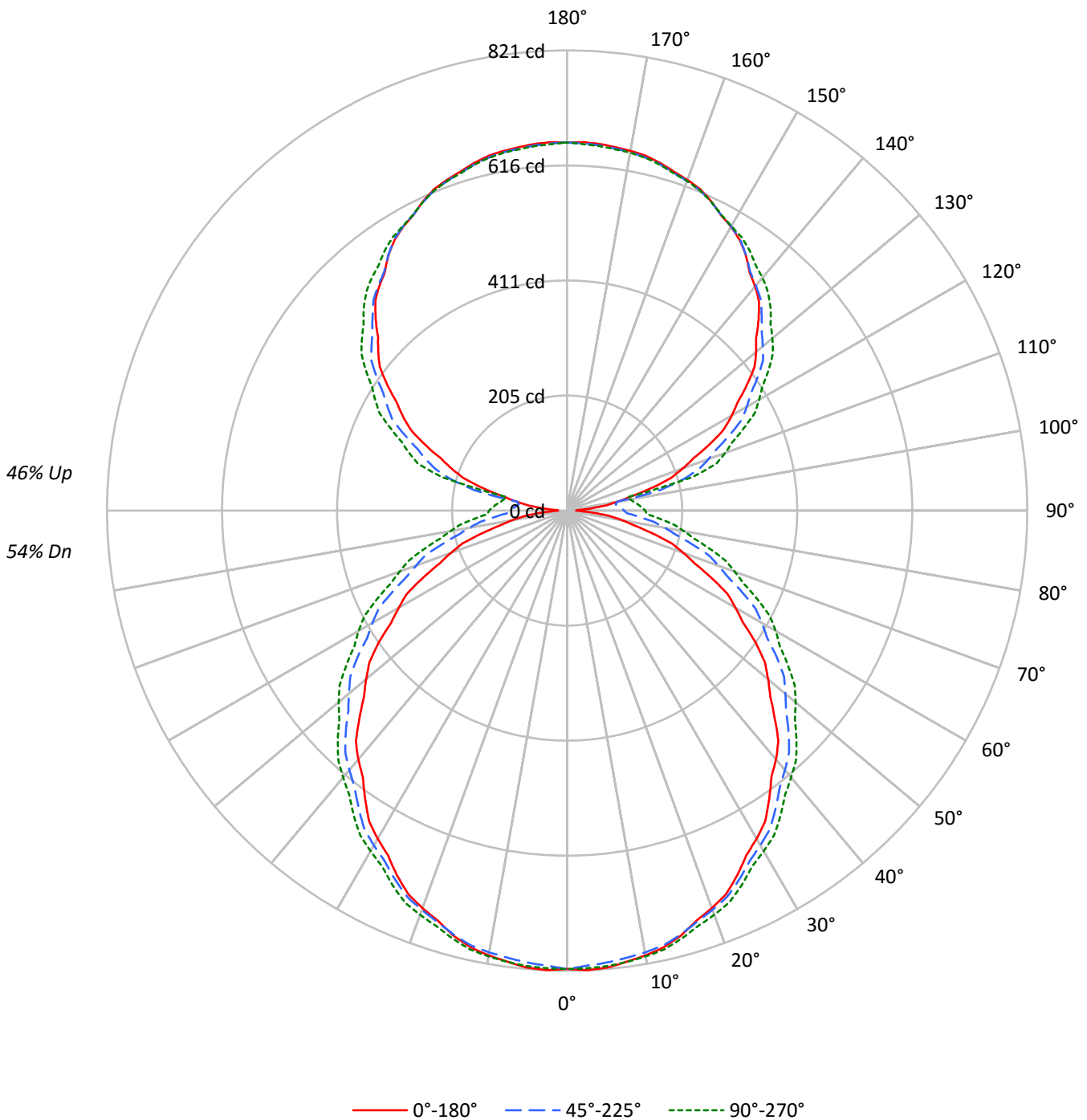
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332592-935

CATALOG NUMBER: S124DIP-S795D590U935-4F0-1E-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	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°	6603	6603	6603
5°	6622	6453	6471
10°	6582	6347	6342
15°	6524	6225	6190
20°	6435	6090	6044
25°	6334	5939	5882
30°	6226	5788	5714
35°	6103	5635	5569
40°	6004	5488	5417
45°	5858	5352	5286
50°	5735	5197	5149
55°	5608	5051	4987
60°	5409	4863	4840
65°	5191	4662	4657
70°	4927	4433	4447
75°	4561	4182	4255
80°	4149	3940	4067
85°	3636	3724	3960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	1.6
10°-20°	221.9	4.6
20°-30°	335.5	7.0
30°-40°	405.9	8.4
40°-50°	429.2	8.9
50°-60°	403.9	8.4
60°-70°	335.1	7.0
70°-80°	235.4	4.9
80°-90°	135.0	2.8
90°-100°	101.5	2.1
100°-110°	201.7	4.2
110°-120°	313.2	6.5
120°-130°	369.9	7.7
130°-140°	381.6	7.9
140°-150°	349.9	7.3
150°-160°	280.6	5.8
160°-170°	181.0	3.8
170°-180°	62.4	1.3
0°-30°	634.9	13.2
0°-40°	1040.8	21.6
0°-60°	1873.9	38.9
0°-90°	2579.4	53.5
90°-120°	616.4	12.8
90°-150°	1717.7	35.6
90°-180°	2242.0	46.5
0°-180°	4821.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	819	816	810	816	816	78
15°	785	786	783	791	790	221
25°	718	723	726	736	737	331
35°	628	639	648	661	664	393
45°	524	541	559	574	579	405
55°	410	430	457	475	481	365
65°	284	313	344	366	374	281
75°	158	192	230	255	264	168
85°	49	87	128	155	165	52
90°	16	58	102	130	139	11
95°	39	54	90	117	127	44
105°	156	178	214	239	231	164
115°	282	292	320	340	348	277
125°	392	394	415	433	440	350
135°	483	483	491	506	513	372
145°	556	556	556	562	567	347
155°	609	609	608	609	608	281
165°	642	640	640	643	639	181
175°	657	654	654	658	653	63
180°	657	657	657	657	657	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	820.8	820.3	819.8	819.3	818.8	817.9	816.6	815.3	814.0	812.7	813.8
5°	818.7	818.1	817.5	816.9	816.3	815.3	813.8	812.4	811.0	809.6	811.2
7.5°	811.8	811.4	811.1	810.7	810.3	809.5	808.4	807.2	806.0	804.9	806.7
10°	805.9	805.7	805.6	805.3	805.1	804.5	803.5	802.5	801.4	800.4	802.3
12.5°	797.9	797.8	797.8	797.7	797.7	797.4	796.7	795.9	795.2	794.5	796.3
15°	784.9	785.1	785.2	785.5	785.7	785.5	784.9	784.3	783.6	783.0	784.9
17.5°	767.1	767.7	768.3	769.0	769.6	769.7	769.6	769.6	769.4	769.3	771.2
20°	754.7	755.3	755.9	756.5	757.1	757.5	757.7	757.9	758.1	758.3	760.3
22.5°	740.7	741.5	742.3	743.0	743.8	744.4	744.8	745.1	745.5	745.9	747.9
25°	718.0	719.2	720.5	721.7	722.9	723.8	724.4	725.0	725.7	726.3	728.5
27.5°	692.8	694.5	696.3	698.1	699.9	701.3	702.2	703.1	704.0	705.0	707.1
30°	675.9	677.5	679.2	680.8	682.4	683.9	685.4	686.7	688.2	689.6	691.8
32.5°	657.5	659.5	661.5	663.4	665.4	667.1	668.7	670.3	671.9	673.5	676.1
35°	628.3	630.7	633.2	635.6	638.0	640.2	642.3	644.4	646.4	648.4	651.3
37.5°	598.7	601.6	604.4	607.2	610.0	612.7	615.2	617.7	620.3	622.8	625.7
40°	579.7	582.4	585.0	587.6	590.3	593.1	595.9	598.7	601.6	604.4	607.5
42.5°	557.8	560.7	563.7	566.6	569.6	572.7	576.1	579.5	582.8	586.1	589.5
45°	523.8	527.7	531.6	535.5	539.3	543.2	547.1	551.0	554.7	558.6	562.1
47.5°	491.5	495.4	499.4	503.4	507.4	511.6	516.1	520.6	525.0	529.5	533.1
50°	468.0	472.4	476.9	481.4	485.9	490.3	494.8	499.3	503.8	508.2	512.4
52.5°	444.5	449.0	453.5	458.0	462.4	467.3	472.3	477.5	482.7	487.8	491.8
55°	410.3	414.6	418.9	423.1	427.4	432.6	438.7	444.8	450.9	457.0	461.1
57.5°	372.0	377.3	382.6	387.9	393.1	398.8	404.9	411.0	417.1	423.1	427.9
60°	347.1	352.4	357.7	363.0	368.2	374.3	381.0	387.7	394.4	401.1	405.8
62.5°	322.9	328.7	334.5	340.3	346.0	352.3	359.0	365.8	372.5	379.2	383.8
65°	283.9	290.4	297.0	303.4	310.0	316.7	323.6	330.5	337.4	344.3	349.4
67.5°	246.3	253.3	260.2	267.1	274.1	281.2	288.6	296.0	303.4	310.8	316.0
70°	220.7	227.6	234.5	241.5	248.4	255.7	263.5	271.2	278.9	286.6	292.1
72.5°	195.8	202.9	210.0	217.1	224.1	231.8	240.0	248.2	256.5	264.7	270.0
75°	157.6	165.1	172.5	180.1	187.6	195.7	204.2	212.8	221.4	229.9	235.6
77.5°	121.8	129.8	137.8	145.8	153.7	162.2	171.2	180.1	189.1	198.0	203.8
80°	99.8	108.0	116.1	124.2	132.4	140.9	149.9	158.9	167.8	176.8	182.9
82.5°	77.8	86.3	94.8	103.2	111.7	120.5	129.4	138.4	147.3	156.3	162.5
85°	48.6	57.1	65.6	74.2	82.7	91.6	100.7	109.9	119.1	128.2	134.3
87.5°	27.4	35.9	44.5	53.0	61.6	70.4	79.5	88.6	97.6	106.8	112.8
90°	16.1	25.5	34.8	44.2	53.5	62.9	72.6	82.2	91.9	101.5	108.1
92.5°	20.1	27.5	34.9	42.3	49.7	58.2	67.8	77.4	87.0	96.7	103.1
95°	38.9	41.9	44.9	48.0	51.0	56.7	65.1	73.6	82.1	90.5	96.6
97.5°	68.2	76.3	84.4	92.5	100.6	102.6	98.8	94.8	90.9	87.0	92.4
100°	90.7	97.9	105.1	112.4	119.7	119.7	112.6	105.5	98.3	91.2	94.9
102.5°	116.6	122.6	128.7	134.8	140.9	146.8	152.7	158.4	164.3	170.0	155.4
105°	156.1	160.8	165.5	170.2	175.0	181.4	189.4	197.5	205.6	213.7	219.7
107.5°	194.3	197.9	201.6	205.3	209.0	214.7	222.6	230.5	238.3	246.2	251.7
110°	219.5	222.7	225.8	229.0	232.2	237.7	245.5	253.2	261.1	268.8	273.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	243.9	247.0	250.1	253.2	256.4	261.5	268.5	275.7	282.8	289.9	294.4
115°	281.5	283.7	285.9	288.0	290.2	294.5	300.8	307.2	313.7	320.0	324.8
117.5°	316.2	317.7	319.3	320.8	322.4	326.2	332.6	338.9	345.2	351.5	355.7
120°	339.1	340.1	341.1	342.2	343.2	346.6	352.4	358.3	364.0	369.8	374.1
122.5°	361.0	361.4	361.8	362.2	362.6	365.7	371.3	377.1	382.8	388.6	392.8
125°	391.7	391.9	392.1	392.4	392.6	395.1	400.0	404.8	409.7	414.7	418.8
127.5°	421.4	421.3	421.1	421.0	420.9	423.1	427.5	432.0	436.4	440.7	444.4
130°	439.9	439.8	439.7	439.5	439.5	441.3	444.8	448.4	451.9	455.6	459.3
132.5°	457.5	457.5	457.5	457.5	457.5	459.0	462.0	465.0	468.0	471.1	474.7
135°	483.1	483.0	482.9	482.8	482.7	483.6	485.4	487.3	489.1	491.0	494.5
137.5°	506.6	506.4	506.3	506.2	506.0	506.5	507.6	508.9	510.0	511.2	514.4
140°	521.9	521.9	521.9	522.0	522.0	522.2	522.6	523.1	523.5	523.9	526.8
142.5°	534.9	535.3	535.6	536.1	536.4	536.6	536.6	536.6	536.6	536.6	539.2
145°	555.9	556.0	556.1	556.3	556.4	556.5	556.5	556.5	556.5	556.5	557.8
147.5°	572.7	573.1	573.5	573.9	574.3	574.5	574.4	574.3	574.1	574.0	574.3
150°	584.9	585.1	585.3	585.6	585.8	585.9	585.7	585.7	585.6	585.4	585.4
152.5°	594.3	594.7	595.0	595.3	595.6	595.6	595.5	595.3	595.0	594.9	595.0
155°	608.6	608.6	608.7	608.8	609.0	608.8	608.6	608.2	607.9	607.5	608.0
157.5°	620.6	620.5	620.4	620.4	620.4	620.1	619.7	619.4	619.0	618.6	619.2
160°	627.7	627.3	627.0	626.7	626.4	626.1	626.0	625.9	625.8	625.7	626.4
162.5°	634.0	633.5	633.1	632.7	632.3	632.1	631.9	631.8	631.7	631.6	632.2
165°	641.9	641.4	640.8	640.2	639.7	639.5	639.5	639.5	639.5	639.5	640.3
167.5°	648.2	647.6	647.0	646.5	645.9	645.6	645.6	645.5	645.4	645.3	646.4
170°	651.8	651.1	650.4	649.8	649.1	648.8	648.9	649.0	649.2	649.3	650.1
172.5°	654.1	653.4	652.8	652.1	651.5	651.2	651.3	651.4	651.5	651.6	652.6
175°	656.7	656.0	655.3	654.7	654.0	653.8	653.8	654.0	654.1	654.2	655.1
177.5°	657.8	657.2	656.6	656.0	655.4	655.1	655.3	655.5	655.7	655.8	656.6
180°	656.7	656.7	656.7	656.7	656.7	656.7	656.7	656.7	656.7	656.7	656.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	814.9	816.1	817.3	817.8	817.6	817.4	817.3	817.1
5°	812.9	814.5	816.1	816.8	816.6	816.4	816.2	816.0
7.5°	808.5	810.3	812.2	813.0	812.8	812.5	812.4	812.2
10°	804.1	805.9	807.8	808.6	808.4	808.1	808.0	807.8
12.5°	797.9	799.6	801.2	802.0	802.0	801.9	801.9	801.8
15°	786.7	788.5	790.3	791.2	791.0	790.7	790.6	790.3
17.5°	773.0	774.9	776.8	777.7	777.5	777.3	777.1	777.0
20°	762.3	764.4	766.5	767.5	767.5	767.5	767.5	767.5
22.5°	749.9	751.9	754.0	755.2	755.5	755.8	756.1	756.5
25°	730.7	733.0	735.2	736.4	736.6	736.8	737.0	737.3
27.5°	709.1	711.2	713.3	714.5	714.7	715.0	715.2	715.4
30°	694.1	696.3	698.5	699.9	700.3	700.7	701.1	701.5
32.5°	678.6	681.2	683.7	685.3	685.6	686.0	686.5	686.9
35°	654.1	656.9	659.8	661.5	662.1	662.7	663.4	664.0
37.5°	628.5	631.5	634.3	636.1	636.7	637.4	638.0	638.7
40°	610.5	613.6	616.6	618.5	619.4	620.2	621.0	621.8
42.5°	592.9	596.2	599.6	601.7	602.3	603.0	603.6	604.2
45°	565.6	569.0	572.5	574.7	575.8	576.8	577.8	578.8
47.5°	536.7	540.3	543.9	546.2	547.5	548.7	549.9	551.1
50°	516.4	520.5	524.5	527.2	528.4	529.7	530.9	532.1
52.5°	495.9	500.0	504.0	506.7	507.9	509.1	510.3	511.6
55°	465.1	469.2	473.3	476.0	477.2	478.4	479.6	480.8
57.5°	432.8	437.6	442.5	445.5	446.6	447.7	448.9	450.0
60°	410.5	415.2	419.8	423.0	424.6	426.3	427.9	429.6
62.5°	388.5	393.2	397.9	401.1	402.7	404.3	405.9	407.5
65°	354.6	359.6	364.7	368.1	369.7	371.3	372.9	374.5
67.5°	321.2	326.3	331.5	334.8	336.5	338.0	339.7	341.2
70°	297.6	303.2	308.7	312.1	313.5	315.0	316.3	317.8
72.5°	275.3	280.7	286.0	289.5	291.0	292.7	294.2	295.8
75°	241.3	246.9	252.7	256.4	258.3	260.1	261.9	263.7
77.5°	209.6	215.3	221.1	225.0	227.0	228.9	230.8	232.8
80°	189.0	195.1	201.2	205.0	206.6	208.3	209.9	211.5
82.5°	168.8	175.0	181.3	185.4	187.1	188.9	190.7	192.5
85°	140.4	146.5	152.7	156.7	158.8	160.7	162.8	164.9
87.5°	118.8	124.8	130.9	134.8	136.6	138.4	140.3	142.2
90°	114.6	121.1	127.7	131.9	133.7	135.6	137.4	139.3
92.5°	109.4	115.9	122.3	126.3	127.9	129.7	131.3	132.9
95°	102.8	108.9	115.1	119.2	121.1	123.0	124.9	126.9
97.5°	97.7	103.1	108.6	112.2	114.1	115.9	117.8	119.6
100°	98.5	102.1	105.7	108.4	109.9	111.4	113.0	114.5
102.5°	140.7	126.0	111.3	104.8	106.4	108.0	109.6	111.2
105°	225.8	231.9	238.0	239.9	237.5	235.2	232.9	230.7
107.5°	257.2	262.6	268.1	271.8	273.7	275.6	277.4	279.3
110°	278.6	283.5	288.3	291.8	293.8	295.8	297.6	299.6



TEST NUMBER: P332592-935

CATALOG NUMBER: S124DIP-S795D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	298.9	303.3	307.8	311.1	313.1	315.1	317.2	319.2
115°	329.4	334.2	338.8	341.9	343.3	344.7	346.1	347.6
117.5°	359.9	364.0	368.2	371.1	372.7	374.3	375.9	377.5
120°	378.4	382.7	387.0	389.9	391.2	392.6	394.1	395.5
122.5°	396.9	401.1	405.4	408.1	409.3	410.6	411.8	413.1
125°	423.0	427.2	431.4	434.2	435.5	436.8	438.2	439.5
127.5°	448.0	451.5	455.1	457.6	458.9	460.2	461.5	462.8
130°	463.1	466.9	470.6	473.1	474.4	475.6	476.8	478.0
132.5°	478.3	481.9	485.5	487.9	489.0	490.2	491.3	492.4
135°	498.0	501.4	504.9	507.4	508.9	510.2	511.7	513.2
137.5°	517.6	520.8	524.0	526.1	527.0	528.1	529.0	529.9
140°	529.9	532.8	535.8	537.9	539.0	540.1	541.2	542.3
142.5°	541.7	544.2	546.8	548.5	549.4	550.3	551.2	552.1
145°	559.1	560.4	561.8	562.9	564.0	565.0	566.0	567.1
147.5°	574.5	574.8	575.1	575.6	576.3	577.0	577.8	578.6
150°	585.4	585.4	585.4	585.5	585.6	585.7	585.8	585.9
152.5°	595.2	595.4	595.6	595.6	595.6	595.5	595.4	595.4
155°	608.4	608.8	609.2	609.3	609.0	608.6	608.4	608.0
157.5°	619.7	620.4	620.9	620.9	620.4	619.7	619.2	618.6
160°	627.0	627.7	628.4	628.4	627.7	627.0	626.4	625.7
162.5°	632.9	633.5	634.2	634.2	633.4	632.7	632.0	631.2
165°	641.2	642.0	643.0	642.9	641.9	640.9	640.0	638.9
167.5°	647.3	648.2	649.2	649.1	648.1	647.0	645.8	644.8
170°	651.0	651.9	652.8	652.6	651.6	650.5	649.4	648.3
172.5°	653.4	654.3	655.1	655.0	653.8	652.6	651.4	650.2
175°	656.2	657.1	658.1	658.0	656.7	655.3	654.0	652.7
177.5°	657.3	658.0	658.7	658.5	657.5	656.4	655.3	654.3
180°	656.7	656.7	656.7	656.7	656.7	656.7	656.7	656.7

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