

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: P332610-940

Luminaire Tested: **S124DIP-S795D1035U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332610-940
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-S795D1035U940-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6572.2 lumens
Efficiency: N/A
Efficacy: 126.4 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

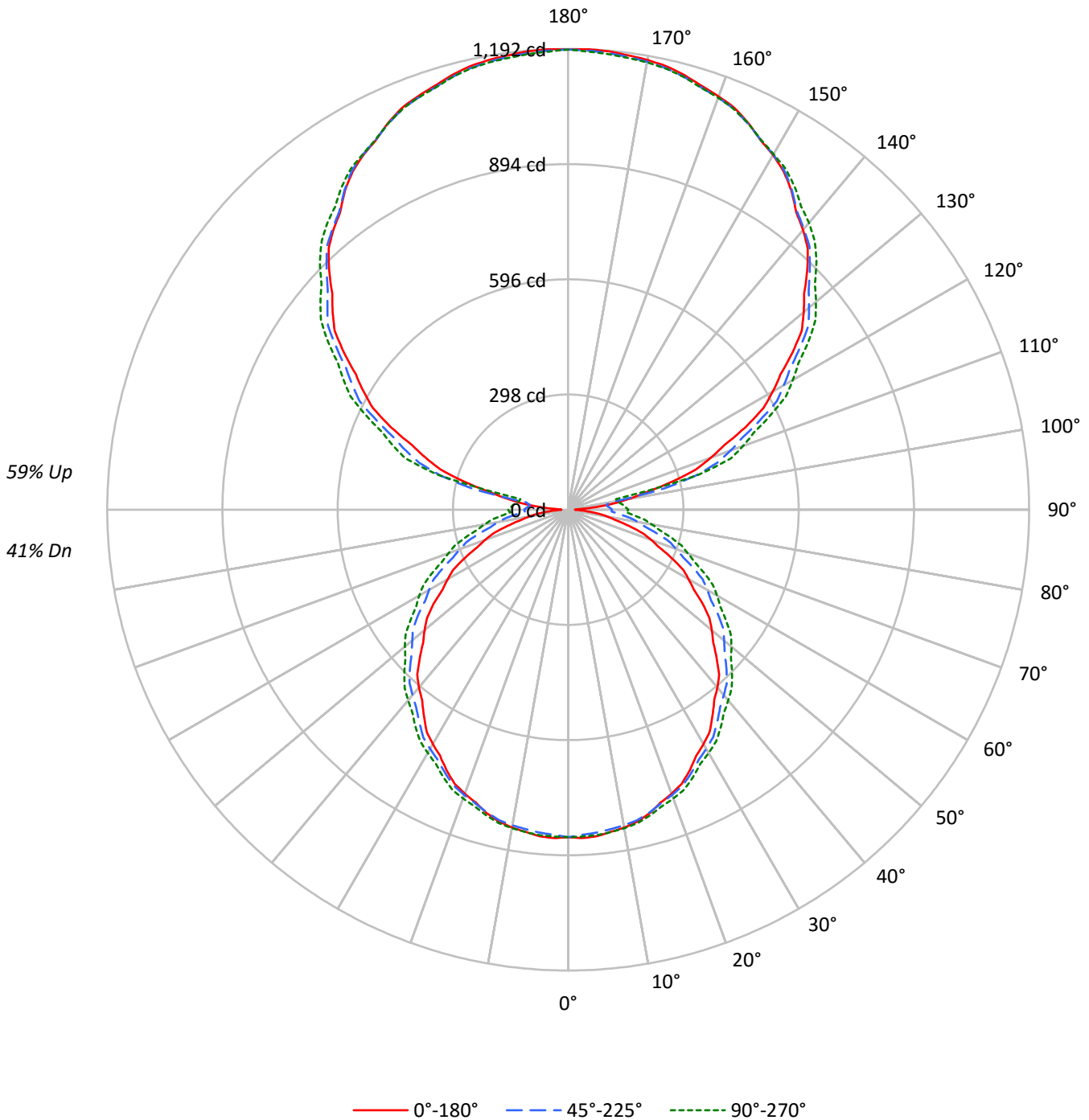
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332610-940

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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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	95	90	86	82	86	82	79	75	67	65	62	53	52	50	41	40	38	33
2	86	78	72	67	78	71	66	61	58	54	51	46	44	41	35	33	32	27
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	28	25	23	19
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20	16
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17	14
7	55	43	35	29	50	40	32	27	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13	11
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6838	6838	6838
5°	6859	6683	6702
10°	6817	6573	6568
15°	6756	6446	6411
20°	6664	6307	6259
25°	6560	6151	6092
30°	6448	5995	5919
35°	6321	5835	5768
40°	6219	5684	5610
45°	6067	5543	5475
50°	5939	5383	5333
55°	5808	5231	5164
60°	5601	5036	5013
65°	5376	4829	4824
70°	5101	4592	4605
75°	4723	4331	4407
80°	4295	4081	4213
85°	3763	3857	4101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	1.2
10°-20°	229.8	3.5
20°-30°	347.5	5.3
30°-40°	420.4	6.4
40°-50°	444.5	6.8
50°-60°	418.3	6.4
60°-70°	347.1	5.3
70°-80°	243.8	3.7
80°-90°	141.3	2.1
90°-100°	122.5	1.9
100°-110°	320.1	4.9
110°-120°	537.1	8.2
120°-130°	653.2	9.9
130°-140°	684.2	10.4
140°-150°	632.6	9.6
150°-160°	508.5	7.7
160°-170°	328.0	5.0
170°-180°	113.0	1.7
0°-30°	657.5	10.0
0°-40°	1077.9	16.4
0°-60°	1940.7	29.5
0°-90°	2672.8	40.7
90°-120°	979.8	14.9
90°-150°	2949.8	44.9
90°-180°	3899.0	59.3
0°-180°	6572.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	848	845	838	846	845	80
15°	813	814	811	819	818	229
25°	744	749	752	762	764	342
35°	651	662	672	684	688	407
45°	542	561	578	594	599	419
55°	425	445	473	492	498	378
65°	294	324	357	379	388	291
75°	163	198	238	264	273	174
85°	50	90	133	160	171	54
90°	18	66	114	145	156	12
95°	61	64	102	132	142	73
105°	276	302	340	369	348	290
115°	506	518	547	568	576	498
125°	707	711	732	751	759	631
135°	874	874	884	900	908	674
145°	1007	1008	1008	1015	1021	629
155°	1103	1104	1101	1104	1102	508
165°	1163	1159	1159	1165	1158	329
175°	1190	1185	1186	1193	1183	113
180°	1190	1190	1190	1190	1190	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0
2.5°	850.1	849.5	849.0	848.6	848.0	847.1	845.7	844.4	843.0	841.7	842.8
5°	847.9	847.3	846.7	846.1	845.4	844.4	842.8	841.4	839.9	838.5	840.2
7.5°	840.7	840.3	840.0	839.6	839.2	838.4	837.2	836.0	834.7	833.6	835.4
10°	834.6	834.5	834.3	834.0	833.8	833.2	832.1	831.1	830.0	828.9	830.9
12.5°	826.3	826.3	826.3	826.2	826.2	825.8	825.1	824.3	823.6	822.9	824.7
15°	812.9	813.1	813.2	813.5	813.7	813.5	812.9	812.3	811.5	810.9	812.9
17.5°	794.4	795.0	795.7	796.4	797.0	797.2	797.1	797.0	796.8	796.7	798.7
20°	781.6	782.2	782.8	783.5	784.1	784.5	784.7	784.9	785.2	785.3	787.5
22.5°	767.1	767.9	768.7	769.5	770.3	771.0	771.3	771.7	772.0	772.5	774.5
25°	743.6	744.8	746.2	747.4	748.7	749.7	750.3	750.9	751.5	752.2	754.5
27.5°	717.5	719.3	721.1	723.0	724.9	726.3	727.3	728.2	729.2	730.1	732.3
30°	700.0	701.7	703.4	705.1	706.8	708.3	709.8	711.2	712.7	714.2	716.5
32.5°	681.0	683.1	685.1	687.1	689.1	690.9	692.6	694.2	695.9	697.5	700.2
35°	650.7	653.2	655.8	658.3	660.8	663.1	665.2	667.4	669.4	671.5	674.5
37.5°	620.1	623.0	626.0	628.8	631.8	634.5	637.1	639.7	642.4	645.0	648.0
40°	600.4	603.2	605.8	608.6	611.4	614.2	617.2	620.1	623.0	626.0	629.2
42.5°	577.7	580.7	583.8	586.8	590.0	593.2	596.6	600.1	603.6	607.0	610.6
45°	542.5	546.5	550.5	554.6	558.6	562.6	566.6	570.6	574.5	578.5	582.2
47.5°	509.0	513.1	517.2	521.4	525.5	529.9	534.5	539.1	543.8	548.4	552.1
50°	484.6	489.3	493.9	498.6	503.2	507.8	512.5	517.1	521.7	526.4	530.7
52.5°	460.4	465.0	469.7	474.3	478.9	483.9	489.2	494.5	499.9	505.2	509.3
55°	424.9	429.4	433.8	438.2	442.6	448.0	454.3	460.7	467.0	473.3	477.5
57.5°	385.3	390.7	396.3	401.7	407.2	413.0	419.4	425.6	431.9	438.2	443.2
60°	359.4	365.0	370.4	375.9	381.4	387.6	394.6	401.5	408.5	415.4	420.3
62.5°	334.4	340.5	346.4	352.4	358.4	364.9	371.8	378.8	385.8	392.7	397.5
65°	294.0	300.8	307.6	314.2	321.0	328.0	335.1	342.3	349.5	356.6	361.9
67.5°	255.1	262.3	269.5	276.6	283.8	291.2	298.9	306.6	314.2	321.9	327.3
70°	228.5	235.8	242.9	250.1	257.3	264.8	272.9	280.9	288.8	296.9	302.6
72.5°	202.8	210.1	217.5	224.8	232.1	240.0	248.6	257.1	265.6	274.1	279.6
75°	163.2	170.9	178.7	186.5	194.3	202.7	211.5	220.3	229.3	238.1	244.0
77.5°	126.2	134.4	142.7	151.0	159.2	168.0	177.3	186.5	195.8	205.1	211.1
80°	103.3	111.8	120.2	128.7	137.1	146.0	155.2	164.5	173.8	183.1	189.4
82.5°	80.6	89.3	98.2	106.9	115.7	124.8	134.0	143.3	152.6	161.8	168.3
85°	50.3	59.1	67.9	76.9	85.7	94.9	104.3	113.8	123.3	132.8	139.1
87.5°	28.6	37.6	46.6	55.7	64.7	74.0	83.6	93.1	102.7	112.3	118.6
90°	17.8	28.4	39.1	49.7	60.3	70.9	81.5	92.2	102.8	113.5	120.8
92.5°	25.6	33.3	41.0	48.8	56.4	65.6	76.2	86.9	97.6	108.3	115.4
95°	61.3	61.5	61.7	62.0	62.2	66.7	75.6	84.4	93.3	102.1	109.0
97.5°	115.1	125.4	135.5	145.7	155.9	154.2	140.7	127.2	113.7	100.1	105.8
100°	156.4	165.5	174.5	183.5	192.6	187.5	168.4	149.5	130.4	111.3	113.6
102.5°	203.4	210.8	218.3	225.7	233.1	239.1	243.5	248.0	252.5	257.0	226.2
105°	276.5	281.9	287.3	292.7	298.1	305.1	314.0	322.8	331.5	340.4	347.4
107.5°	345.9	349.9	354.0	358.0	362.1	368.5	377.2	385.9	394.7	403.4	409.5
110°	392.2	395.7	399.2	402.8	406.4	412.4	421.0	429.5	438.1	446.7	451.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	436.9	440.7	444.3	448.0	451.7	457.4	464.9	472.5	480.1	487.7	492.3
115°	506.0	508.5	511.0	513.4	515.9	520.4	527.0	533.5	540.1	546.6	551.7
117.5°	569.0	570.9	572.8	574.8	576.7	581.0	587.7	594.4	601.2	607.9	612.2
120°	610.9	612.3	613.8	615.2	616.6	620.3	626.2	632.1	638.0	644.0	648.5
122.5°	650.9	651.4	652.0	652.6	653.3	656.6	662.6	668.7	674.8	680.7	685.2
125°	707.0	707.6	708.2	708.7	709.4	712.0	716.9	721.8	726.7	731.6	736.2
127.5°	761.0	761.0	760.9	760.9	760.9	763.4	768.3	773.3	778.3	783.2	786.8
130°	795.1	795.0	795.0	795.0	795.0	797.0	801.0	804.9	809.0	812.9	816.9
132.5°	827.2	827.3	827.4	827.6	827.7	829.6	832.9	836.4	839.9	843.3	847.1
135°	874.2	874.1	873.9	873.7	873.4	874.5	876.7	879.0	881.3	883.6	887.3
137.5°	916.8	916.7	916.6	916.4	916.3	917.0	918.6	920.2	921.8	923.4	926.8
140°	944.6	944.8	944.9	945.1	945.3	945.7	946.3	946.9	947.5	948.2	951.5
142.5°	968.8	969.4	970.1	970.7	971.4	971.8	972.0	972.1	972.1	972.2	975.1
145°	1006.8	1007.2	1007.6	1008.0	1008.3	1008.5	1008.5	1008.5	1008.5	1008.5	1010.0
147.5°	1037.2	1038.2	1039.1	1040.0	1040.9	1041.3	1041.0	1040.8	1040.6	1040.4	1040.7
150°	1059.4	1060.0	1060.5	1061.1	1061.7	1061.8	1061.7	1061.5	1061.3	1061.0	1061.0
152.5°	1077.1	1077.7	1078.3	1078.9	1079.5	1079.6	1079.2	1078.9	1078.5	1078.2	1078.5
155°	1103.0	1103.1	1103.3	1103.5	1103.7	1103.5	1103.0	1102.3	1101.7	1101.2	1101.9
157.5°	1124.8	1124.7	1124.5	1124.4	1124.4	1123.9	1123.3	1122.6	1122.0	1121.2	1122.3
160°	1137.6	1137.0	1136.5	1135.9	1135.2	1134.9	1134.7	1134.4	1134.3	1134.1	1135.2
162.5°	1149.1	1148.3	1147.5	1146.7	1146.0	1145.6	1145.3	1145.1	1145.0	1144.8	1145.9
165°	1163.4	1162.4	1161.5	1160.5	1159.5	1159.0	1159.0	1159.0	1159.0	1159.0	1160.6
167.5°	1174.8	1173.8	1172.8	1171.8	1170.7	1170.2	1170.0	1169.9	1169.8	1169.7	1171.4
170°	1181.2	1180.1	1178.8	1177.7	1176.5	1176.0	1176.2	1176.4	1176.6	1176.8	1178.4
172.5°	1185.5	1184.4	1183.1	1182.0	1180.8	1180.3	1180.4	1180.7	1180.9	1181.1	1182.7
175°	1190.2	1189.0	1187.8	1186.6	1185.4	1184.9	1185.1	1185.4	1185.5	1185.7	1187.5
177.5°	1192.3	1191.1	1190.1	1189.0	1187.8	1187.5	1187.8	1188.1	1188.4	1188.7	1190.0
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	847.0	847.0	847.0	847.0	847.0	847.0	847.0	847.0
2.5°	844.0	845.3	846.4	846.9	846.8	846.6	846.4	846.2
5°	841.9	843.6	845.2	846.0	845.7	845.5	845.3	845.1
7.5°	837.3	839.2	841.2	842.0	841.8	841.5	841.3	841.2
10°	832.8	834.6	836.6	837.4	837.2	837.0	836.8	836.6
12.5°	826.3	828.1	829.8	830.6	830.6	830.5	830.5	830.5
15°	814.8	816.6	818.5	819.4	819.2	818.9	818.8	818.5
17.5°	800.6	802.5	804.5	805.4	805.2	805.0	804.9	804.7
20°	789.5	791.7	793.8	794.9	794.9	794.9	794.9	794.9
22.5°	776.7	778.7	780.9	782.1	782.5	782.7	783.1	783.5
25°	756.8	759.1	761.4	762.7	762.9	763.1	763.3	763.6
27.5°	734.4	736.6	738.8	739.9	740.2	740.5	740.7	740.9
30°	718.8	721.1	723.4	724.9	725.3	725.7	726.1	726.6
32.5°	702.8	705.5	708.1	709.7	710.1	710.5	711.0	711.4
35°	677.4	680.4	683.3	685.1	685.7	686.3	687.1	687.7
37.5°	650.9	654.0	656.9	658.8	659.4	660.1	660.8	661.5
40°	632.3	635.5	638.6	640.6	641.5	642.3	643.2	644.0
42.5°	614.0	617.5	621.0	623.1	623.8	624.5	625.2	625.8
45°	585.8	589.3	592.9	595.2	596.3	597.4	598.4	599.4
47.5°	555.8	559.5	563.3	565.7	567.0	568.3	569.5	570.8
50°	534.8	539.0	543.2	546.0	547.2	548.6	549.8	551.1
52.5°	513.6	517.8	522.0	524.8	526.0	527.3	528.5	529.9
55°	481.7	486.0	490.2	492.9	494.2	495.4	496.7	497.9
57.5°	448.3	453.3	458.3	461.4	462.5	463.7	464.9	466.1
60°	425.2	430.0	434.8	438.1	439.8	441.5	443.2	444.9
62.5°	402.3	407.2	412.1	415.4	417.1	418.7	420.4	422.0
65°	367.2	372.5	377.7	381.2	382.9	384.6	386.2	387.9
67.5°	332.6	338.0	343.3	346.8	348.5	350.1	351.8	353.4
70°	308.3	314.0	319.7	323.2	324.7	326.2	327.6	329.1
72.5°	285.2	290.7	296.2	299.8	301.4	303.1	304.7	306.4
75°	249.9	255.7	261.7	265.6	267.5	269.4	271.3	273.1
77.5°	217.0	223.0	229.0	233.0	235.1	237.0	239.1	241.1
80°	195.7	202.1	208.4	212.3	214.0	215.7	217.4	219.1
82.5°	174.8	181.3	187.8	192.0	193.8	195.6	197.5	199.4
85°	145.4	151.8	158.1	162.3	164.4	166.5	168.6	170.8
87.5°	124.9	131.3	137.6	141.8	143.7	145.6	147.6	149.5
90°	128.0	135.4	142.7	147.4	149.5	151.5	153.6	155.7
92.5°	122.5	129.7	136.7	141.2	142.9	144.7	146.5	148.3
95°	115.8	122.7	129.7	134.1	136.2	138.3	140.4	142.5
97.5°	111.5	117.1	122.7	126.5	128.5	130.5	132.6	134.6
100°	115.9	118.2	120.6	122.5	124.2	125.9	127.6	129.3
102.5°	195.5	164.7	133.9	119.4	121.1	122.8	124.5	126.2
105°	354.5	361.5	368.5	369.3	363.9	358.5	353.0	347.6
107.5°	415.4	421.5	427.6	431.8	434.0	436.3	438.5	440.9
110°	457.1	462.4	467.6	471.4	473.7	475.9	478.2	480.5



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CATALOG NUMBER: S124DIP-S795D1035U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	496.9	501.5	506.1	509.6	512.0	514.5	516.9	519.3
115°	556.7	561.7	566.8	570.0	571.5	573.0	574.4	576.0
117.5°	616.5	620.8	625.1	628.0	629.6	631.2	632.8	634.5
120°	653.2	657.8	662.5	665.4	666.6	668.0	669.2	670.6
122.5°	689.6	694.1	698.6	701.3	702.5	703.6	704.7	705.9
125°	740.7	745.4	749.9	753.0	754.5	755.9	757.4	758.8
127.5°	790.6	794.2	797.9	800.4	801.6	802.9	804.2	805.5
130°	820.9	824.8	828.8	831.5	832.8	834.0	835.3	836.5
132.5°	851.0	854.8	858.6	861.0	862.2	863.3	864.4	865.5
135°	891.1	894.8	898.7	901.3	903.0	904.6	906.3	908.0
137.5°	930.4	933.9	937.4	939.6	940.6	941.5	942.4	943.3
140°	954.8	958.1	961.4	963.8	965.0	966.3	967.5	968.8
142.5°	977.9	980.8	983.6	985.5	986.4	987.4	988.3	989.2
145°	1011.5	1013.0	1014.4	1015.7	1017.0	1018.2	1019.5	1020.7
147.5°	1041.1	1041.4	1041.7	1042.3	1043.2	1044.1	1045.0	1045.8
150°	1061.0	1061.0	1061.0	1061.1	1061.4	1061.6	1061.8	1061.9
152.5°	1078.8	1079.1	1079.4	1079.5	1079.4	1079.3	1079.1	1079.1
155°	1102.7	1103.5	1104.3	1104.4	1103.8	1103.2	1102.6	1102.1
157.5°	1123.3	1124.4	1125.3	1125.3	1124.4	1123.3	1122.3	1121.2
160°	1136.5	1137.6	1138.8	1138.8	1137.6	1136.5	1135.2	1134.1
162.5°	1147.1	1148.3	1149.5	1149.4	1148.1	1146.7	1145.4	1144.1
165°	1162.2	1163.8	1165.3	1165.2	1163.4	1161.6	1159.8	1158.1
167.5°	1173.1	1174.9	1176.6	1176.5	1174.6	1172.6	1170.5	1168.6
170°	1180.0	1181.5	1183.1	1182.9	1181.0	1179.0	1177.0	1175.0
172.5°	1184.3	1185.8	1187.4	1187.1	1185.0	1182.9	1180.7	1178.6
175°	1189.3	1191.1	1192.8	1192.5	1190.2	1187.8	1185.4	1183.0
177.5°	1191.2	1192.5	1193.8	1193.5	1191.6	1189.7	1187.8	1185.9
180°	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2	1190.2

(END OF REPORT)