

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: P332619-930

Luminaire Tested: **S124DIP-S795D1205U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332619-930
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-S795D1205U930-4F0-1E-UDD-D
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6561.5 lumens
Efficiency: N/A
Efficacy: 115.3 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: Semi-Indirect

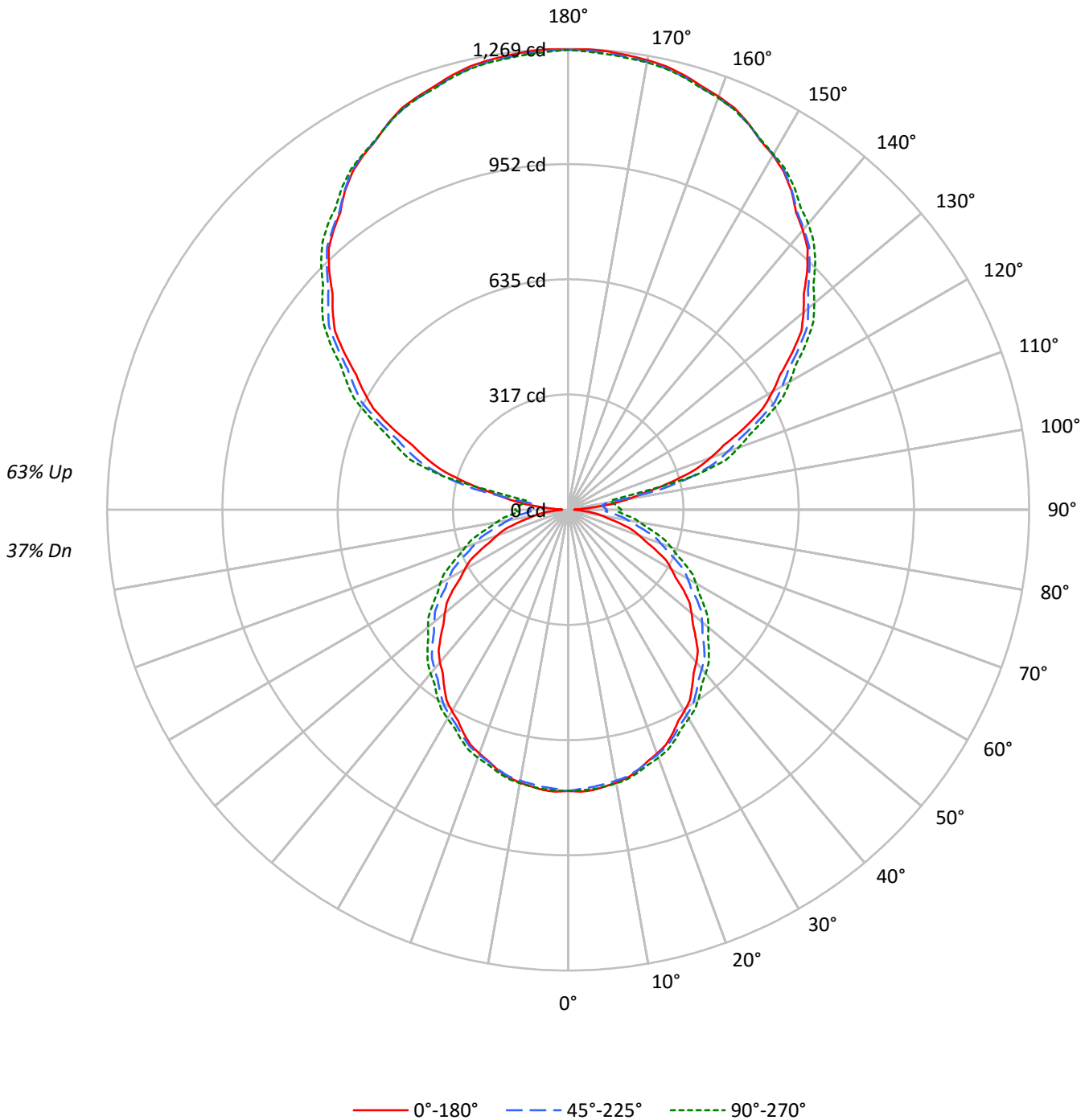
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-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	76	76	76	60	60	60	44	44	44	37
1	94	90	85	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30
2	85	78	71	66	77	71	65	61	57	53	50	45	42	39	33	31	30	24
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25	20
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10	8

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



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.1
10°-20°	210.1	3.2
20°-30°	317.7	4.8
30°-40°	384.4	5.9
40°-50°	406.4	6.2
50°-60°	382.5	5.8
60°-70°	317.3	4.8
70°-80°	222.9	3.4
80°-90°	129.7	2.0
90°-100°	118.1	1.8
100°-110°	331.6	5.1
110°-120°	565.6	8.6
120°-130°	691.7	10.5
130°-140°	726.7	11.1
140°-150°	672.9	10.3
150°-160°	541.2	8.2
160°-170°	349.1	5.3
170°-180°	120.3	1.8
0°-30°	601.2	9.2
0°-40°	985.6	15.0
0°-60°	1774.4	27.0
0°-90°	2444.3	37.3
90°-120°	1015.3	15.5
90°-150°	3106.7	47.3
90°-180°	4117.0	62.7
0°-180°	6561.5	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°	17	62	107	136	146	12
95°	63	62	96	124	134	76
105°	293	317	353	380	356	307
115°	538	549	575	595	602	529
125°	752	756	774	793	800	671
135°	930	930	939	954	962	717
145°	1071	1073	1073	1079	1085	669
155°	1174	1174	1172	1175	1173	541
165°	1238	1234	1234	1240	1232	350
175°	1267	1261	1262	1269	1259	121
180°	1267	1267	1267	1267	1267	



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-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°	26.3	34.6	42.9	51.2	59.5	68.1	76.9	85.7	94.4	103.2	109.0
90°	16.7	26.7	36.8	46.8	56.8	66.8	76.8	86.7	96.7	106.7	113.6
92.5°	25.1	32.2	39.2	46.3	53.4	61.9	71.8	81.9	91.8	101.7	108.4
95°	63.3	62.6	61.8	61.0	60.2	63.8	72.0	80.1	88.2	96.3	102.7
97.5°	120.9	130.9	140.7	150.7	160.6	157.8	142.1	126.5	110.7	95.1	100.3
100°	164.9	173.7	182.5	191.3	200.1	193.7	172.2	150.7	129.1	107.6	109.3
102.5°	214.9	222.1	229.3	236.4	243.6	249.0	252.6	256.2	259.7	263.3	229.8
105°	292.9	298.1	303.2	308.3	313.4	320.1	328.2	336.5	344.6	352.8	359.5
107.5°	366.9	370.6	374.5	378.2	382.0	388.0	396.2	404.4	412.5	420.7	426.4
110°	416.2	419.6	422.8	426.2	429.5	435.2	443.2	451.2	459.2	467.2	472.1



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	464.0	467.5	471.1	474.6	478.1	483.4	490.4	497.4	504.4	511.5	515.7
115°	537.6	540.0	542.3	544.7	547.1	551.2	557.2	563.1	569.1	575.0	579.8
117.5°	604.7	606.6	608.5	610.3	612.2	616.3	622.5	628.7	634.9	641.1	645.0
120°	649.5	650.9	652.3	653.7	655.2	658.5	663.9	669.3	674.7	680.0	684.4
122.5°	691.9	692.5	693.2	693.7	694.4	697.5	703.0	708.7	714.2	719.8	723.9
125°	751.9	752.5	753.2	753.8	754.5	757.0	761.4	765.8	770.2	774.5	778.9
127.5°	809.3	809.3	809.3	809.3	809.3	811.7	816.4	821.0	825.7	830.4	833.7
130°	845.7	845.8	845.8	845.8	845.8	847.7	851.4	855.1	858.8	862.5	866.2
132.5°	879.9	880.0	880.2	880.4	880.6	882.3	885.6	888.8	892.1	895.4	898.9
135°	930.1	929.9	929.7	929.5	929.3	930.3	932.5	934.7	936.9	939.1	942.6
137.5°	975.4	975.3	975.2	975.1	975.0	975.8	977.3	978.8	980.5	982.0	985.3
140°	1004.9	1005.2	1005.4	1005.7	1005.9	1006.3	1006.9	1007.5	1008.1	1008.8	1011.9
142.5°	1030.8	1031.5	1032.3	1033.0	1033.6	1034.1	1034.2	1034.4	1034.5	1034.6	1037.3
145°	1071.4	1071.8	1072.2	1072.7	1073.1	1073.3	1073.3	1073.3	1073.3	1073.3	1074.7
147.5°	1103.8	1104.7	1105.7	1106.7	1107.7	1108.1	1107.9	1107.7	1107.4	1107.3	1107.6
150°	1127.2	1127.9	1128.5	1129.2	1129.8	1130.1	1129.8	1129.7	1129.4	1129.2	1129.2
152.5°	1146.2	1146.9	1147.5	1148.2	1148.8	1148.9	1148.6	1148.2	1147.8	1147.5	1147.8
155°	1173.8	1173.9	1174.2	1174.4	1174.6	1174.4	1173.8	1173.1	1172.5	1171.8	1172.7
157.5°	1197.0	1196.9	1196.8	1196.7	1196.5	1196.1	1195.4	1194.7	1194.0	1193.3	1194.3
160°	1210.7	1210.1	1209.4	1208.8	1208.2	1207.8	1207.5	1207.3	1207.1	1206.9	1208.2
162.5°	1222.8	1222.1	1221.2	1220.4	1219.6	1219.1	1218.9	1218.7	1218.5	1218.3	1219.5
165°	1238.2	1237.1	1236.1	1235.0	1234.0	1233.5	1233.5	1233.5	1233.5	1233.5	1235.1
167.5°	1250.3	1249.2	1248.1	1247.0	1245.9	1245.3	1245.2	1245.0	1245.0	1244.8	1246.7
170°	1257.1	1255.9	1254.6	1253.4	1252.1	1251.6	1251.7	1252.0	1252.1	1252.4	1254.1
172.5°	1261.7	1260.4	1259.1	1257.8	1256.6	1256.1	1256.3	1256.5	1256.7	1256.9	1258.6
175°	1266.6	1265.3	1264.0	1262.8	1261.5	1261.0	1261.2	1261.4	1261.7	1261.8	1263.7
177.5°	1268.9	1267.7	1266.5	1265.3	1264.1	1263.7	1264.0	1264.4	1264.8	1265.1	1266.4
180°	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-UDD-D

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°	114.9	120.7	126.5	130.4	132.2	134.0	135.7	137.5
90°	120.4	127.3	134.1	138.5	140.5	142.4	144.4	146.3
92.5°	115.2	121.9	128.6	132.7	134.4	136.0	137.6	139.3
95°	109.3	115.7	122.1	126.4	128.3	130.3	132.2	134.1
97.5°	105.4	110.6	115.8	119.3	121.2	123.0	124.9	126.8
100°	110.8	112.4	114.1	115.7	117.2	118.8	120.3	121.9
102.5°	196.2	162.6	129.1	113.0	114.5	116.1	117.6	119.2
105°	366.2	372.9	379.7	380.0	374.0	367.9	361.9	355.9
107.5°	432.0	437.7	443.4	447.4	449.5	451.7	453.9	456.1
110°	477.0	481.8	486.7	490.2	492.3	494.5	496.7	498.8



TEST NUMBER: P332619-930

CATALOG NUMBER: S124DIP-S795D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	519.8	524.1	528.2	531.5	533.9	536.2	538.6	540.9
115°	584.4	589.1	593.7	596.7	598.0	599.4	600.7	602.1
117.5°	649.0	652.9	656.8	659.5	661.0	662.4	663.8	665.3
120°	688.6	692.9	697.2	699.9	701.0	702.1	703.2	704.3
122.5°	728.0	732.1	736.2	738.7	739.7	740.7	741.7	742.7
125°	783.2	787.4	791.7	794.6	796.0	797.3	798.7	800.1
127.5°	837.1	840.4	843.8	846.0	847.1	848.2	849.4	850.5
130°	869.9	873.6	877.3	879.6	880.8	882.0	883.1	884.3
132.5°	902.5	906.0	909.5	911.7	912.7	913.7	914.7	915.7
135°	946.1	949.6	953.1	955.6	957.2	958.8	960.3	961.9
137.5°	988.6	991.9	995.2	997.2	998.0	998.9	999.7	1000.5
140°	1015.0	1018.1	1021.3	1023.4	1024.7	1025.8	1027.0	1028.2
142.5°	1040.0	1042.6	1045.3	1047.1	1047.9	1048.7	1049.6	1050.4
145°	1076.0	1077.4	1078.8	1080.1	1081.2	1082.5	1083.7	1084.8
147.5°	1107.9	1108.2	1108.6	1109.1	1109.9	1110.8	1111.6	1112.4
150°	1129.2	1129.2	1129.2	1129.4	1129.5	1129.8	1130.0	1130.2
152.5°	1148.1	1148.4	1148.8	1148.8	1148.8	1148.6	1148.5	1148.3
155°	1173.5	1174.4	1175.3	1175.3	1174.7	1174.0	1173.5	1172.8
157.5°	1195.5	1196.5	1197.7	1197.7	1196.5	1195.5	1194.3	1193.3
160°	1209.4	1210.7	1211.9	1211.9	1210.7	1209.4	1208.2	1206.9
162.5°	1220.8	1222.1	1223.4	1223.3	1221.8	1220.4	1219.0	1217.5
165°	1236.8	1238.5	1240.2	1240.1	1238.2	1236.2	1234.4	1232.5
167.5°	1248.5	1250.3	1252.2	1252.1	1250.0	1247.9	1245.8	1243.7
170°	1255.7	1257.4	1259.1	1258.9	1256.8	1254.7	1252.6	1250.5
172.5°	1260.3	1262.0	1263.6	1263.4	1261.1	1258.8	1256.5	1254.3
175°	1265.7	1267.5	1269.4	1269.1	1266.6	1264.0	1261.5	1259.0
177.5°	1267.8	1269.1	1270.5	1270.2	1268.1	1266.1	1264.0	1262.1
180°	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6	1266.6

(END OF REPORT)