

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

Luminaire Tested: **SA4XXDIP-C795D1205U835-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332619
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-C795D1205U835-4F0-1E-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

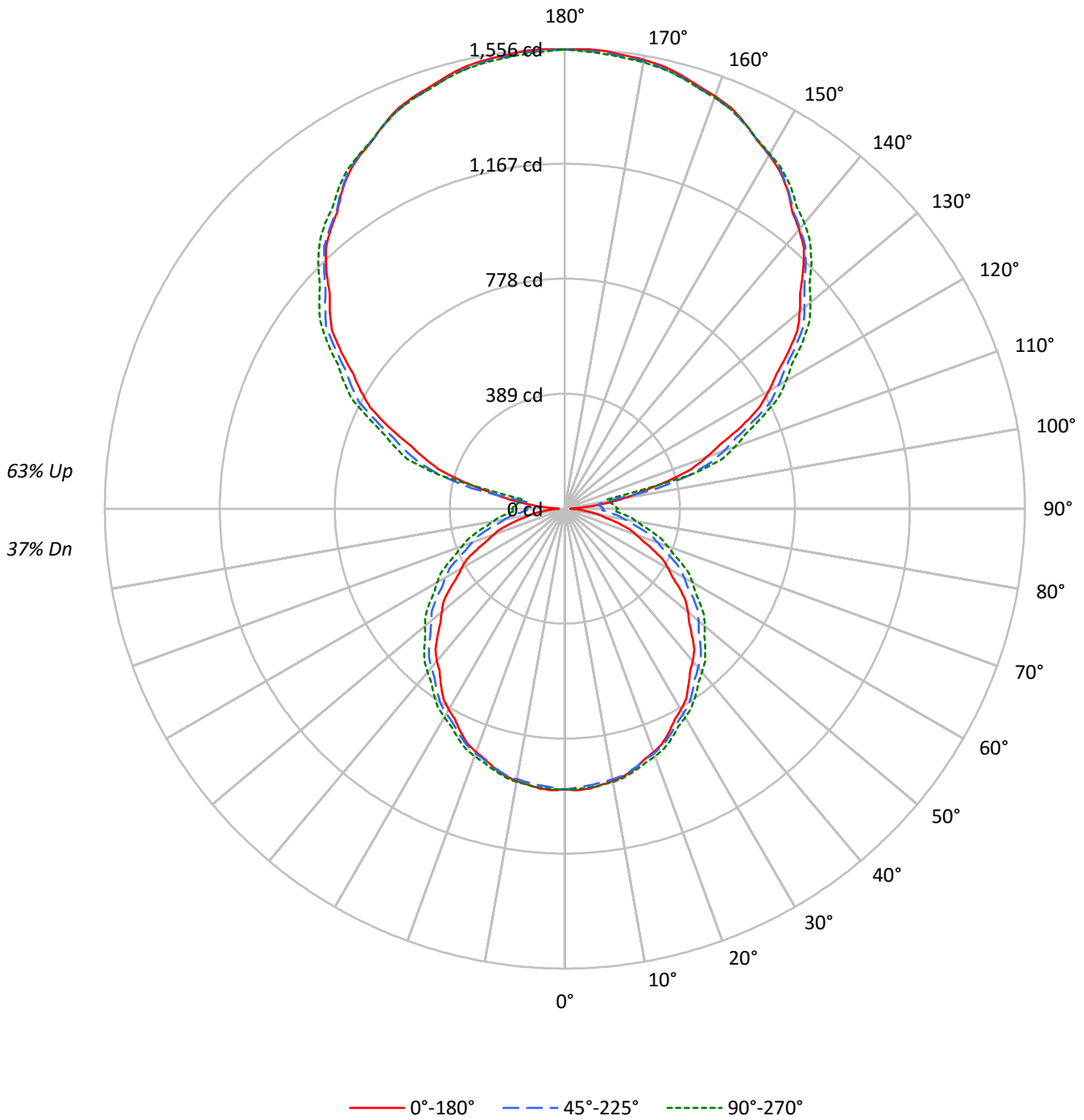
Lumens per Lamp: N/A
Luminaire Lumens: 8048.0 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

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



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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	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°	7668	7668	7668
5°	7692	7494	7516
10°	7645	7371	7366
15°	7577	7230	7190
20°	7473	7073	7019
25°	7357	6898	6831
30°	7231	6723	6637
35°	7088	6544	6468
40°	6974	6374	6291
45°	6804	6217	6140
50°	6661	6036	5980
55°	6513	5866	5792
60°	6282	5649	5621
65°	6029	5415	5409
70°	5722	5149	5165
75°	5296	4857	4943
80°	4819	4575	4724
85°	4219	4325	4598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	1.1
10°-20°	257.7	3.2
20°-30°	389.7	4.8
30°-40°	471.5	5.9
40°-50°	498.5	6.2
50°-60°	469.1	5.8
60°-70°	389.2	4.8
70°-80°	273.4	3.4
80°-90°	159.0	2.0
90°-100°	144.9	1.8
100°-110°	406.7	5.1
110°-120°	693.7	8.6
120°-130°	848.4	10.5
130°-140°	891.4	11.1
140°-150°	825.4	10.3
150°-160°	663.8	8.2
160°-170°	428.1	5.3
170°-180°	147.6	1.8
0°-30°	737.4	9.2
0°-40°	1208.8	15.0
0°-60°	2176.4	27.0
0°-90°	2998.0	37.3
90°-120°	1245.3	15.5
90°-150°	3810.4	47.3
90°-180°	5050.0	62.7
0°-180°	8048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	951	948	940	948	948	90
15°	912	912	909	918	918	257
25°	834	840	844	855	856	384
35°	730	742	753	767	771	457
45°	608	629	649	666	672	470
55°	476	499	531	551	558	424
65°	330	364	400	426	435	327
75°	183	223	267	296	306	195
85°	56	101	149	180	192	60
90°	20	76	131	167	180	14
95°	78	76	118	152	164	93
105°	359	388	433	466	436	377
115°	659	674	705	730	738	649
125°	922	927	950	973	981	823
135°	1141	1140	1152	1171	1180	879
145°	1314	1316	1316	1324	1331	821
155°	1440	1441	1437	1442	1438	664
165°	1519	1513	1513	1521	1512	429
175°	1554	1547	1548	1557	1544	148
180°	1554	1554	1554	1554	1554	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9
2.5°	953.3	952.7	952.1	951.6	951.0	950.0	948.4	946.9	945.4	943.9	945.2
5°	950.9	950.2	949.5	948.8	948.1	946.9	945.2	943.6	941.9	940.3	942.2
7.5°	942.8	942.4	942.0	941.6	941.1	940.2	938.9	937.5	936.1	934.8	936.9
10°	936.0	935.8	935.6	935.3	935.1	934.4	933.2	932.0	930.8	929.6	931.8
12.5°	926.7	926.6	926.6	926.5	926.5	926.1	925.3	924.4	923.6	922.8	924.8
15°	911.6	911.8	912.0	912.3	912.5	912.3	911.6	910.9	910.1	909.4	911.6
17.5°	890.9	891.6	892.3	893.1	893.8	894.0	893.9	893.8	893.6	893.5	895.7
20°	876.5	877.2	877.9	878.6	879.3	879.8	880.0	880.2	880.5	880.7	883.1
22.5°	860.3	861.2	862.1	863.0	863.9	864.6	865.0	865.4	865.8	866.3	868.6
25°	833.9	835.3	836.8	838.2	839.6	840.7	841.4	842.1	842.8	843.5	846.1
27.5°	804.6	806.6	808.7	810.8	812.9	814.5	815.6	816.6	817.7	818.8	821.2
30°	785.0	786.9	788.8	790.7	792.6	794.3	796.0	797.6	799.3	800.9	803.5
32.5°	763.7	766.0	768.3	770.5	772.8	774.8	776.7	778.5	780.4	782.2	785.2
35°	729.7	732.5	735.4	738.2	741.0	743.6	746.0	748.4	750.7	753.1	756.4
37.5°	695.4	698.7	702.0	705.2	708.5	711.6	714.5	717.4	720.4	723.3	726.7
40°	673.3	676.4	679.4	682.5	685.6	688.8	692.1	695.4	698.7	702.0	705.6
42.5°	647.8	651.2	654.7	658.1	661.6	665.2	669.1	673.0	676.9	680.7	684.7
45°	608.4	612.9	617.4	621.9	626.4	630.9	635.4	639.9	644.3	648.8	652.9
47.5°	570.8	575.4	580.0	584.7	589.3	594.2	599.4	604.6	609.8	615.0	619.2
50°	543.5	548.7	553.9	559.1	564.3	569.5	574.7	579.9	585.1	590.3	595.1
52.5°	516.3	521.5	526.7	531.9	537.1	542.7	548.6	554.6	560.6	566.5	571.2
55°	476.5	481.5	486.5	491.4	496.4	502.4	509.5	516.6	523.7	530.8	535.5
57.5°	432.1	438.2	444.4	450.5	456.6	463.2	470.3	477.3	484.4	491.4	497.0
60°	403.1	409.3	415.4	421.6	427.7	434.7	442.5	450.3	458.1	465.9	471.3
62.5°	375.0	381.8	388.5	395.2	401.9	409.2	417.0	424.8	432.6	440.4	445.8
65°	329.7	337.3	344.9	352.4	360.0	367.8	375.8	383.9	391.9	399.9	405.8
67.5°	286.1	294.2	302.2	310.2	318.3	326.6	335.2	343.8	352.4	361.0	367.0
70°	256.3	264.4	272.4	280.5	288.5	297.0	306.0	315.0	323.9	332.9	339.3
72.5°	227.4	235.6	243.9	252.1	260.3	269.2	278.8	288.3	297.9	307.4	313.6
75°	183.0	191.7	200.4	209.2	217.9	227.3	237.2	247.1	257.1	267.0	273.6
77.5°	141.5	150.7	160.0	169.3	178.5	188.4	198.8	209.2	219.6	230.0	236.7
80°	115.9	125.4	134.8	144.3	153.8	163.7	174.1	184.5	194.9	205.3	212.4
82.5°	90.4	100.2	110.1	119.9	129.7	139.9	150.3	160.7	171.1	181.5	188.7
85°	56.4	66.3	76.2	86.2	96.1	106.4	117.0	127.6	138.3	148.9	156.0
87.5°	32.2	42.4	52.6	62.8	73.0	83.5	94.3	105.1	115.8	126.6	133.7
90°	20.5	32.8	45.1	57.4	69.7	81.9	94.2	106.4	118.6	130.9	139.3
92.5°	30.8	39.5	48.1	56.8	65.5	75.9	88.1	100.4	112.6	124.8	133.0
95°	77.7	76.8	75.8	74.8	73.8	73.8	78.3	88.3	98.2	108.2	118.1
97.5°	148.3	160.5	172.6	184.8	197.0	193.5	174.3	155.1	135.8	116.6	123.0
100°	202.3	213.1	223.8	234.6	245.4	237.6	211.2	184.8	158.4	132.0	134.0
102.5°	263.6	272.4	281.2	290.0	298.8	305.4	309.8	314.2	318.5	322.9	281.8
105°	359.3	365.6	371.9	378.2	384.4	392.6	402.6	412.7	422.7	432.7	441.0
107.5°	450.0	454.6	459.3	463.9	468.6	475.9	485.9	496.0	506.0	516.0	523.0
110°	510.5	514.6	518.6	522.7	526.8	533.8	543.6	553.4	563.2	573.1	579.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	569.1	573.4	577.8	582.1	586.4	592.9	601.5	610.1	618.7	627.4	632.5
115°	659.4	662.3	665.2	668.1	671.0	676.1	683.4	690.7	698.0	705.3	711.1
117.5°	741.7	744.0	746.3	748.6	750.9	755.9	763.5	771.1	778.7	786.3	791.1
120°	796.6	798.4	800.1	801.8	803.6	807.7	814.3	820.9	827.5	834.1	839.4
122.5°	848.7	849.4	850.2	850.9	851.7	855.5	862.3	869.2	876.0	882.9	887.9
125°	922.2	923.0	923.8	924.6	925.4	928.5	933.9	939.3	944.7	950.0	955.3
127.5°	992.6	992.7	992.7	992.7	992.7	995.6	1001.3	1007.0	1012.8	1018.5	1022.6
130°	1037.3	1037.4	1037.4	1037.4	1037.4	1039.7	1044.3	1048.8	1053.4	1057.9	1062.4
132.5°	1079.2	1079.4	1079.6	1079.8	1080.1	1082.2	1086.2	1090.2	1094.2	1098.2	1102.5
135°	1140.8	1140.6	1140.3	1140.1	1139.8	1141.0	1143.7	1146.4	1149.1	1151.8	1156.1
137.5°	1196.4	1196.2	1196.1	1196.0	1195.9	1196.8	1198.7	1200.6	1202.6	1204.5	1208.5
140°	1232.6	1232.9	1233.2	1233.5	1233.8	1234.3	1235.0	1235.8	1236.5	1237.3	1241.1
142.5°	1264.3	1265.2	1266.1	1267.0	1267.8	1268.4	1268.5	1268.7	1268.9	1269.0	1272.3
145°	1314.1	1314.6	1315.1	1315.7	1316.2	1316.5	1316.5	1316.5	1316.5	1316.5	1318.2
147.5°	1353.8	1355.0	1356.2	1357.4	1358.6	1359.1	1358.9	1358.6	1358.3	1358.1	1358.5
150°	1382.6	1383.4	1384.2	1385.0	1385.8	1386.1	1385.8	1385.6	1385.3	1385.0	1385.0
152.5°	1405.9	1406.7	1407.5	1408.3	1409.1	1409.2	1408.8	1408.3	1407.8	1407.4	1407.8
155°	1439.7	1439.9	1440.2	1440.4	1440.7	1440.4	1439.7	1438.9	1438.1	1437.3	1438.4
157.5°	1468.2	1468.1	1467.9	1467.8	1467.6	1467.1	1466.2	1465.4	1464.5	1463.6	1464.9
160°	1485.0	1484.2	1483.4	1482.7	1481.9	1481.4	1481.1	1480.8	1480.6	1480.3	1481.9
162.5°	1499.8	1498.9	1497.9	1496.9	1495.9	1495.3	1495.0	1494.8	1494.5	1494.3	1495.8
165°	1518.7	1517.4	1516.1	1514.8	1513.5	1512.9	1512.9	1512.9	1512.9	1512.9	1514.9
167.5°	1533.5	1532.2	1530.9	1529.5	1528.2	1527.4	1527.3	1527.1	1527.0	1526.8	1529.1
170°	1541.9	1540.4	1538.8	1537.3	1535.7	1535.1	1535.3	1535.6	1535.8	1536.1	1538.2
172.5°	1547.5	1545.9	1544.4	1542.8	1541.3	1540.6	1540.9	1541.2	1541.4	1541.7	1543.7
175°	1553.5	1552.0	1550.4	1548.9	1547.3	1546.7	1546.9	1547.2	1547.5	1547.7	1550.0
177.5°	1556.3	1554.9	1553.4	1552.0	1550.5	1550.0	1550.4	1550.8	1551.3	1551.7	1553.3
180°	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9
2.5°	946.5	947.9	949.2	949.8	949.6	949.4	949.2	949.0
5°	944.1	946.0	947.8	948.7	948.4	948.2	948.0	947.7
7.5°	939.0	941.1	943.3	944.2	944.0	943.7	943.5	943.3
10°	933.9	936.0	938.2	939.1	938.9	938.6	938.4	938.2
12.5°	926.7	928.7	930.6	931.5	931.5	931.4	931.4	931.3
15°	913.7	915.8	917.9	918.9	918.7	918.4	918.2	917.9
17.5°	897.8	900.0	902.2	903.2	903.0	902.8	902.6	902.4
20°	885.4	887.8	890.2	891.4	891.4	891.4	891.4	891.4
22.5°	871.0	873.3	875.7	877.1	877.5	877.8	878.2	878.6
25°	848.7	851.3	853.9	855.3	855.5	855.8	856.0	856.3
27.5°	823.6	826.0	828.5	829.8	830.1	830.4	830.7	830.9
30°	806.1	808.7	811.3	812.9	813.4	813.8	814.3	814.8
32.5°	788.2	791.2	794.1	795.9	796.3	796.8	797.3	797.8
35°	759.7	763.0	766.3	768.3	769.0	769.7	770.5	771.2
37.5°	730.0	733.4	736.7	738.8	739.5	740.3	741.0	741.8
40°	709.1	712.7	716.2	718.4	719.4	720.3	721.3	722.2
42.5°	688.6	692.5	696.4	698.8	699.5	700.3	701.1	701.8
45°	656.9	660.9	664.9	667.5	668.7	669.9	671.1	672.2
47.5°	623.3	627.5	631.7	634.4	635.9	637.3	638.7	640.1
50°	599.8	604.5	609.2	612.3	613.7	615.2	616.6	618.0
52.5°	576.0	580.7	585.4	588.5	589.9	591.3	592.7	594.2
55°	540.2	545.0	549.7	552.8	554.2	555.6	557.0	558.4
57.5°	502.7	508.3	513.9	517.4	518.7	520.0	521.4	522.7
60°	476.8	482.2	487.6	491.3	493.2	495.1	497.0	498.9
62.5°	451.2	456.7	462.1	465.8	467.7	469.6	471.4	473.3
65°	411.8	417.7	423.6	427.5	429.4	431.3	433.1	435.0
67.5°	373.0	379.0	385.0	388.9	390.8	392.6	394.5	396.3
70°	345.7	352.1	358.5	362.5	364.1	365.8	367.4	369.1
72.5°	319.8	326.0	332.2	336.2	338.0	339.9	341.7	343.6
75°	280.2	286.8	293.5	297.8	300.0	302.1	304.2	306.3
77.5°	243.4	250.1	256.8	261.3	263.6	265.8	268.1	270.4
80°	219.5	226.6	233.7	238.1	240.0	241.9	243.8	245.7
82.5°	196.0	203.3	210.6	215.3	217.3	219.4	221.5	223.6
85°	163.1	170.2	177.3	182.0	184.4	186.7	189.1	191.5
87.5°	140.9	148.1	155.2	159.9	162.1	164.3	166.5	168.6
90°	147.7	156.1	164.5	169.9	172.3	174.7	177.1	179.5
92.5°	141.3	149.5	157.7	162.8	164.8	166.8	168.8	170.8
95°	134.0	141.9	149.8	155.0	157.4	159.8	162.1	164.5
97.5°	129.3	135.7	142.0	146.3	148.6	150.9	153.2	155.5
100°	135.9	137.9	139.9	141.9	143.8	145.7	147.6	149.5
102.5°	240.6	199.4	158.3	138.6	140.5	142.4	144.3	146.2
105°	449.2	457.4	465.7	466.1	458.7	451.3	443.9	436.5
107.5°	529.9	536.9	543.8	548.7	551.3	554.0	556.7	559.4
110°	585.0	590.9	596.9	601.2	603.8	606.5	609.2	611.8



TEST NUMBER: P332619

CATALOG NUMBER: SA4XXDIP-C795D1205U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	637.6	642.8	647.9	651.9	654.8	657.7	660.6	663.4
115°	716.8	722.5	728.2	731.9	733.5	735.2	736.8	738.5
117.5°	796.0	800.8	805.6	808.9	810.7	812.5	814.2	816.0
120°	844.6	849.9	855.1	858.4	859.8	861.2	862.5	863.9
122.5°	892.9	898.0	903.0	906.1	907.3	908.5	909.7	910.9
125°	960.6	965.8	971.1	974.6	976.3	977.9	979.6	981.3
127.5°	1026.7	1030.8	1034.9	1037.6	1039.0	1040.4	1041.8	1043.2
130°	1067.0	1071.5	1076.0	1078.9	1080.4	1081.8	1083.2	1084.6
132.5°	1106.9	1111.2	1115.5	1118.3	1119.5	1120.7	1121.9	1123.1
135°	1160.4	1164.7	1169.0	1172.1	1174.0	1176.0	1177.9	1179.8
137.5°	1212.6	1216.6	1220.6	1223.1	1224.1	1225.2	1226.2	1227.2
140°	1245.0	1248.8	1252.7	1255.3	1256.8	1258.2	1259.6	1261.1
142.5°	1275.6	1278.8	1282.1	1284.3	1285.3	1286.3	1287.4	1288.4
145°	1319.8	1321.5	1323.2	1324.8	1326.2	1327.7	1329.2	1330.6
147.5°	1358.9	1359.3	1359.7	1360.4	1361.4	1362.4	1363.4	1364.4
150°	1385.0	1385.0	1385.0	1385.2	1385.4	1385.7	1386.0	1386.2
152.5°	1408.2	1408.6	1409.0	1409.1	1409.0	1408.8	1408.7	1408.5
155°	1439.4	1440.4	1441.5	1441.6	1440.8	1440.0	1439.3	1438.5
157.5°	1466.3	1467.6	1469.0	1469.0	1467.6	1466.3	1464.9	1463.6
160°	1483.4	1485.0	1486.5	1486.5	1485.0	1483.4	1481.9	1480.3
162.5°	1497.4	1498.9	1500.5	1500.4	1498.6	1496.9	1495.1	1493.3
165°	1517.0	1519.1	1521.1	1521.0	1518.7	1516.3	1514.0	1511.7
167.5°	1531.4	1533.6	1535.9	1535.7	1533.2	1530.6	1528.0	1525.4
170°	1540.2	1542.3	1544.4	1544.1	1541.5	1538.9	1536.4	1533.8
172.5°	1545.8	1547.9	1549.9	1549.6	1546.8	1544.0	1541.2	1538.4
175°	1552.4	1554.7	1557.0	1556.6	1553.5	1550.4	1547.3	1544.2
177.5°	1555.0	1556.6	1558.3	1557.9	1555.4	1552.9	1550.4	1548.0
180°	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5	1553.5

(END OF REPORT)