

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: P332619-830

Luminaire Tested: **SA4XXDIP-C795D1205U830-4F0-1E-UDD-D**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332619-830
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-C795D1205U830-4F0-1E-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: 7585.6 lumens
Efficiency: N/A
Efficacy: 133.3 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

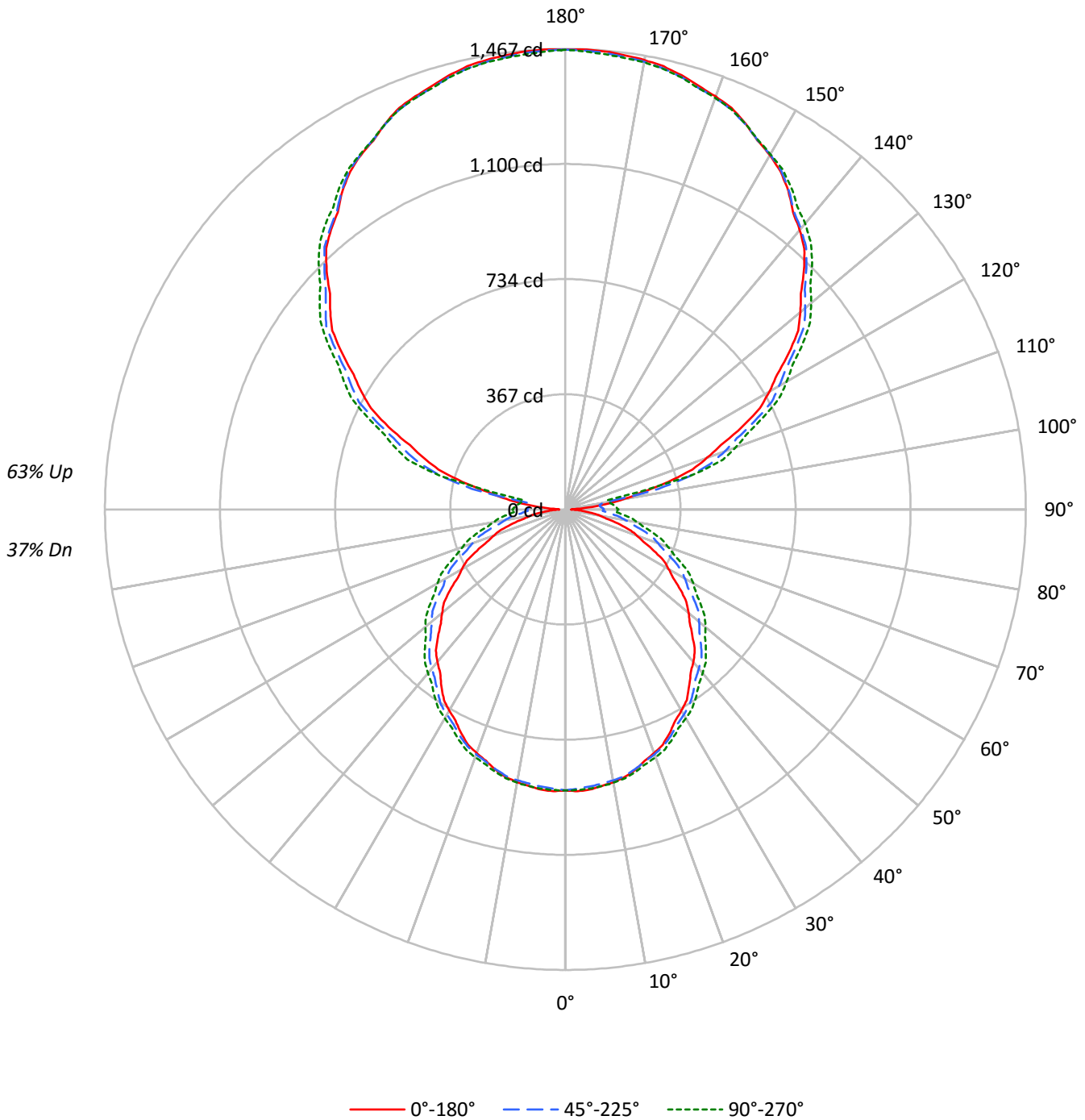
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332619-830

CATALOG NUMBER: SA4XXDIP-C795D1205U830-4F0-1E-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°	7228	7228	7228
5°	7250	7064	7083
10°	7205	6948	6943
15°	7141	6814	6777
20°	7044	6667	6616
25°	6934	6501	6439
30°	6815	6336	6256
35°	6681	6168	6097
40°	6573	6008	5930
45°	6413	5859	5787
50°	6278	5689	5636
55°	6138	5529	5459
60°	5920	5324	5298
65°	5683	5104	5098
70°	5394	4853	4868
75°	4992	4579	4659
80°	4540	4312	4453
85°	3980	4075	4334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	1.1
10°-20°	242.9	3.2
20°-30°	367.3	4.8
30°-40°	444.4	5.9
40°-50°	469.8	6.2
50°-60°	442.2	5.8
60°-70°	366.8	4.8
70°-80°	257.7	3.4
80°-90°	149.9	2.0
90°-100°	136.6	1.8
100°-110°	383.3	5.1
110°-120°	653.8	8.6
120°-130°	799.7	10.5
130°-140°	840.1	11.1
140°-150°	777.9	10.3
150°-160°	625.7	8.2
160°-170°	403.5	5.3
170°-180°	139.1	1.8
0°-30°	695.0	9.2
0°-40°	1139.4	15.0
0°-60°	2051.4	27.0
0°-90°	2825.8	37.3
90°-120°	1173.7	15.5
90°-150°	3591.5	47.3
90°-180°	4760.0	62.8
0°-180°	7585.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	896	893	886	894	893	85
15°	859	860	857	866	865	242
25°	786	792	795	806	807	362
35°	688	700	710	723	727	431
45°	573	593	612	628	634	443
55°	449	471	500	520	526	400
65°	311	343	377	401	410	308
75°	172	210	252	279	289	183
85°	53	95	140	169	180	57
90°	19	71	123	158	169	13
95°	73	72	111	144	155	88
105°	339	366	408	439	411	355
115°	622	635	665	688	696	612
125°	869	874	895	917	925	776
135°	1075	1075	1086	1103	1112	828
145°	1239	1241	1241	1248	1254	774
155°	1357	1358	1355	1359	1356	625
165°	1431	1426	1426	1434	1425	404
175°	1464	1458	1459	1467	1456	139
180°	1464	1464	1464	1464	1464	



TEST NUMBER: P332619-830

CATALOG NUMBER: SA4XXDIP-C795D1205U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	895.3	895.3	895.3	895.3	895.3	895.3	895.3	895.3	895.3	895.3	895.3
2.5°	898.5	898.0	897.4	896.9	896.4	895.4	893.9	892.5	891.1	889.7	890.9
5°	896.3	895.6	894.9	894.3	893.6	892.5	890.9	889.4	887.8	886.3	888.1
7.5°	888.6	888.3	887.9	887.5	887.0	886.2	885.0	883.6	882.3	881.1	883.1
10°	882.2	882.0	881.8	881.6	881.4	880.7	879.6	878.4	877.3	876.2	878.3
12.5°	873.5	873.4	873.4	873.3	873.3	872.9	872.1	871.3	870.5	869.8	871.7
15°	859.2	859.4	859.6	859.9	860.1	859.9	859.2	858.6	857.8	857.1	859.2
17.5°	839.7	840.4	841.0	841.8	842.4	842.6	842.5	842.4	842.3	842.2	844.2
20°	826.1	826.8	827.5	828.1	828.8	829.2	829.4	829.6	829.9	830.1	832.4
22.5°	810.9	811.7	812.6	813.4	814.3	814.9	815.3	815.7	816.1	816.5	818.7
25°	786.0	787.3	788.7	790.0	791.4	792.4	793.1	793.7	794.4	795.0	797.5
27.5°	758.4	760.3	762.2	764.2	766.2	767.7	768.7	769.7	770.7	771.8	774.0
30°	739.9	741.7	743.5	745.3	747.1	748.7	750.3	751.8	753.4	754.9	757.3
32.5°	719.8	722.0	724.2	726.2	728.4	730.3	732.1	733.8	735.6	737.3	740.1
35°	687.8	690.4	693.1	695.8	698.4	700.9	703.1	705.4	707.6	709.8	712.9
37.5°	655.4	658.6	661.7	664.7	667.8	670.7	673.4	676.2	679.0	681.7	684.9
40°	634.6	637.5	640.4	643.3	646.2	649.2	652.3	655.4	658.6	661.7	665.1
42.5°	610.6	613.8	617.1	620.3	623.6	627.0	630.7	634.3	638.0	641.6	645.4
45°	573.4	577.7	581.9	586.2	590.4	594.7	598.9	603.1	607.3	611.5	615.4
47.5°	538.0	542.3	546.7	551.1	555.4	560.1	565.0	569.9	574.8	579.7	583.6
50°	512.3	517.2	522.1	527.0	531.9	536.8	541.7	546.6	551.5	556.4	560.9
52.5°	486.6	491.5	496.4	501.3	506.2	511.5	517.1	522.7	528.4	534.0	538.4
55°	449.1	453.8	458.5	463.2	467.9	473.5	480.2	486.9	493.6	500.3	504.7
57.5°	407.3	413.0	418.9	424.6	430.4	436.6	443.3	449.9	456.6	463.2	468.4
60°	379.9	385.8	391.5	397.4	403.1	409.7	417.1	424.4	431.8	439.1	444.2
62.5°	353.5	359.9	366.2	372.5	378.8	385.7	393.0	400.4	407.7	415.1	420.2
65°	310.8	317.9	325.1	332.2	339.3	346.7	354.2	361.8	369.4	376.9	382.5
67.5°	269.7	277.3	284.8	292.4	300.0	307.8	315.9	324.0	332.2	340.3	345.9
70°	241.6	249.2	256.7	264.4	271.9	279.9	288.4	296.9	305.3	313.8	319.8
72.5°	214.3	222.1	229.9	237.6	245.3	253.7	262.8	271.7	280.8	289.7	295.6
75°	172.5	180.7	188.9	197.2	205.4	214.2	223.6	232.9	242.3	251.7	257.9
77.5°	133.4	142.0	150.8	159.6	168.2	177.6	187.4	197.2	207.0	216.8	223.1
80°	109.2	118.2	127.1	136.0	145.0	154.3	164.1	173.9	183.7	193.5	200.2
82.5°	85.2	94.4	103.8	113.0	122.2	131.9	141.7	151.5	161.3	171.1	177.9
85°	53.2	62.5	71.8	81.2	90.6	100.3	110.3	120.3	130.4	140.3	147.0
87.5°	30.3	40.0	49.6	59.2	68.8	78.7	88.9	99.1	109.1	119.3	126.0
90°	19.3	30.9	42.5	54.1	65.7	77.2	88.8	100.3	111.8	123.4	131.3
92.5°	29.0	37.2	45.3	53.5	61.7	71.5	83.0	94.6	106.1	117.6	125.4
95°	73.2	72.4	71.4	70.5	69.6	73.8	83.2	92.6	102.0	111.3	118.8
97.5°	139.8	151.3	162.7	174.2	185.7	182.4	164.3	146.2	128.0	109.9	115.9
100°	190.7	200.9	210.9	221.1	231.3	223.9	199.1	174.2	149.3	124.4	126.3
102.5°	248.5	256.7	265.0	273.3	281.6	287.9	292.0	296.1	300.2	304.3	265.6
105°	338.7	344.6	350.5	356.5	362.3	370.0	379.5	389.0	398.4	407.8	415.7
107.5°	424.1	428.5	432.9	437.2	441.7	448.6	458.0	467.5	476.9	486.4	492.9
110°	481.2	485.0	488.8	492.7	496.5	503.1	512.4	521.6	530.8	540.2	545.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	536.4	540.5	544.6	548.7	552.7	558.8	566.9	575.0	583.2	591.4	596.2
115°	621.5	624.2	627.0	629.7	632.4	637.3	644.1	651.0	657.9	664.8	670.2
117.5°	699.1	701.3	703.4	705.6	707.8	712.5	719.6	726.8	734.0	741.1	745.6
120°	750.8	752.5	754.1	755.7	757.4	761.3	767.5	773.7	780.0	786.2	791.2
122.5°	799.9	800.6	801.3	802.0	802.8	806.3	812.8	819.3	825.7	832.2	836.9
125°	869.2	870.0	870.7	871.5	872.2	875.2	880.2	885.3	890.4	895.4	900.4
127.5°	935.6	935.7	935.7	935.7	935.7	938.4	943.8	949.1	954.6	960.0	963.8
130°	977.7	977.8	977.8	977.8	977.8	980.0	984.3	988.5	992.9	997.1	1001.4
132.5°	1017.2	1017.4	1017.6	1017.8	1018.0	1020.0	1023.8	1027.6	1031.3	1035.1	1039.2
135°	1075.3	1075.1	1074.8	1074.6	1074.3	1075.4	1078.0	1080.5	1083.1	1085.6	1089.7
137.5°	1127.7	1127.5	1127.4	1127.3	1127.2	1128.0	1129.8	1131.6	1133.5	1135.3	1139.1
140°	1161.8	1162.1	1162.3	1162.6	1162.9	1163.4	1164.0	1164.8	1165.5	1166.2	1169.8
142.5°	1191.7	1192.5	1193.4	1194.2	1195.0	1195.5	1195.6	1195.8	1196.0	1196.1	1199.2
145°	1238.6	1239.1	1239.5	1240.1	1240.6	1240.9	1240.9	1240.9	1240.9	1240.9	1242.5
147.5°	1276.0	1277.1	1278.3	1279.4	1280.5	1281.0	1280.8	1280.5	1280.3	1280.1	1280.4
150°	1303.2	1303.9	1304.7	1305.4	1306.2	1306.5	1306.2	1306.0	1305.7	1305.4	1305.4
152.5°	1325.1	1325.9	1326.6	1327.4	1328.1	1328.2	1327.9	1327.4	1326.9	1326.5	1326.9
155°	1357.0	1357.2	1357.4	1357.6	1357.9	1357.6	1357.0	1356.2	1355.5	1354.7	1355.8
157.5°	1383.8	1383.7	1383.6	1383.5	1383.3	1382.8	1382.0	1381.2	1380.4	1379.5	1380.7
160°	1399.7	1398.9	1398.2	1397.5	1396.8	1396.3	1396.0	1395.7	1395.5	1395.2	1396.8
162.5°	1413.6	1412.8	1411.8	1410.9	1409.9	1409.4	1409.1	1408.9	1408.6	1408.4	1409.9
165°	1431.4	1430.2	1429.0	1427.8	1426.5	1426.0	1426.0	1426.0	1426.0	1426.0	1427.9
167.5°	1445.4	1444.2	1442.9	1441.6	1440.4	1439.6	1439.5	1439.4	1439.3	1439.1	1441.2
170°	1453.3	1451.9	1450.4	1449.0	1447.5	1446.9	1447.1	1447.4	1447.6	1447.8	1449.8
172.5°	1458.6	1457.1	1455.7	1454.2	1452.7	1452.1	1452.4	1452.6	1452.8	1453.1	1455.0
175°	1464.2	1462.8	1461.3	1459.9	1458.4	1457.8	1458.0	1458.3	1458.6	1458.8	1460.9
177.5°	1466.9	1465.6	1464.1	1462.8	1461.4	1460.9	1461.3	1461.7	1462.2	1462.5	1464.1
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	895.3	895.3	895.3	895.3	895.3	895.3	895.3	895.3
2.5°	892.1	893.4	894.7	895.2	895.0	894.8	894.7	894.5
5°	889.9	891.6	893.3	894.2	893.9	893.7	893.5	893.2
7.5°	885.0	887.0	889.1	889.9	889.8	889.5	889.3	889.1
10°	880.2	882.2	884.3	885.1	885.0	884.7	884.5	884.3
12.5°	873.5	875.3	877.1	878.0	878.0	877.9	877.9	877.8
15°	861.2	863.2	865.2	866.1	865.9	865.6	865.4	865.2
17.5°	846.2	848.3	850.4	851.3	851.1	850.9	850.7	850.6
20°	834.5	836.8	839.1	840.2	840.2	840.2	840.2	840.2
22.5°	821.0	823.1	825.4	826.7	827.1	827.4	827.7	828.1
25°	799.9	802.4	804.8	806.2	806.3	806.6	806.8	807.1
27.5°	776.3	778.5	780.9	782.1	782.4	782.7	783.0	783.2
30°	759.8	762.2	764.7	766.2	766.7	767.0	767.5	768.0
32.5°	742.9	745.7	748.5	750.2	750.5	751.0	751.5	752.0
35°	716.0	719.2	722.3	724.2	724.8	725.5	726.2	726.9
37.5°	688.1	691.3	694.4	696.4	697.0	697.8	698.4	699.2
40°	668.4	671.8	675.0	677.1	678.1	678.9	679.9	680.7
42.5°	649.0	652.7	656.4	658.6	659.3	660.1	660.8	661.5
45°	619.2	622.9	626.7	629.1	630.3	631.4	632.5	633.6
47.5°	587.5	591.4	595.4	597.9	599.4	600.7	602.0	603.3
50°	565.3	569.8	574.2	577.1	578.4	579.9	581.2	582.5
52.5°	542.9	547.3	551.8	554.7	556.0	557.3	558.6	560.1
55°	509.2	513.7	518.1	521.0	522.4	523.7	525.0	526.3
57.5°	473.8	479.1	484.4	487.7	488.9	490.1	491.4	492.7
60°	449.4	454.5	459.6	463.1	464.9	466.7	468.4	470.2
62.5°	425.3	430.5	435.5	439.0	440.8	442.6	444.3	446.1
65°	388.1	393.7	399.3	402.9	404.7	406.5	408.2	410.0
67.5°	351.6	357.2	362.9	366.6	368.3	370.0	371.8	373.5
70°	325.8	331.9	337.9	341.7	343.2	344.8	346.3	347.9
72.5°	301.4	307.3	313.1	316.9	318.6	320.4	322.1	323.9
75°	264.1	270.3	276.6	280.7	282.8	284.7	286.7	288.7
77.5°	229.4	235.7	242.0	246.3	248.5	250.5	252.7	254.9
80°	206.9	213.6	220.3	224.4	226.2	228.0	229.8	231.6
82.5°	184.7	191.6	198.5	202.9	204.8	206.8	208.8	210.8
85°	153.7	160.4	167.1	171.5	173.8	176.0	178.2	180.5
87.5°	132.8	139.6	146.3	150.7	152.8	154.9	156.9	158.9
90°	139.2	147.1	155.0	160.1	162.4	164.7	166.9	169.2
92.5°	133.2	140.9	148.6	153.4	155.3	157.2	159.1	161.0
95°	126.3	133.7	141.2	146.1	148.4	150.6	152.8	155.0
97.5°	121.9	127.9	133.8	137.9	140.1	142.2	144.4	146.6
100°	128.1	130.0	131.9	133.7	135.5	137.3	139.1	140.9
102.5°	226.8	187.9	149.2	130.6	132.4	134.2	136.0	137.8
105°	423.4	431.1	438.9	439.3	432.3	425.4	418.4	411.4
107.5°	499.5	506.1	512.6	517.2	519.6	522.2	524.7	527.3
110°	551.4	556.9	562.6	566.7	569.1	571.7	574.2	576.6



TEST NUMBER: P332619-830

CATALOG NUMBER: SA4XXDIP-C795D1205U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	601.0	605.9	610.7	614.4	617.2	619.9	622.6	625.3
115°	675.6	681.0	686.4	689.8	691.4	693.0	694.5	696.1
117.5°	750.3	754.8	759.3	762.4	764.1	765.8	767.4	769.1
120°	796.1	801.1	806.0	809.1	810.4	811.7	812.9	814.3
122.5°	841.6	846.4	851.1	854.0	855.2	856.3	857.4	858.6
125°	905.4	910.3	915.3	918.6	920.2	921.7	923.3	924.9
127.5°	967.7	971.6	975.4	978.0	979.3	980.6	981.9	983.3
130°	1005.7	1009.9	1014.2	1016.9	1018.3	1019.6	1021.0	1022.3
132.5°	1043.3	1047.4	1051.4	1054.0	1055.2	1056.3	1057.4	1058.6
135°	1093.7	1097.8	1101.8	1104.8	1106.5	1108.4	1110.2	1112.0
137.5°	1142.9	1146.7	1150.5	1152.8	1153.8	1154.8	1155.7	1156.7
140°	1173.5	1177.0	1180.7	1183.2	1184.6	1185.9	1187.2	1188.6
142.5°	1202.3	1205.3	1208.4	1210.5	1211.4	1212.4	1213.4	1214.4
145°	1244.0	1245.6	1247.2	1248.7	1250.0	1251.4	1252.8	1254.1
147.5°	1280.8	1281.2	1281.6	1282.2	1283.2	1284.1	1285.1	1286.0
150°	1305.4	1305.4	1305.4	1305.6	1305.8	1306.1	1306.4	1306.6
152.5°	1327.3	1327.7	1328.0	1328.1	1328.0	1327.9	1327.8	1327.6
155°	1356.7	1357.6	1358.7	1358.8	1358.0	1357.3	1356.6	1355.8
157.5°	1382.1	1383.3	1384.6	1384.6	1383.3	1382.1	1380.7	1379.5
160°	1398.2	1399.7	1401.1	1401.1	1399.7	1398.2	1396.8	1395.2
162.5°	1411.4	1412.8	1414.3	1414.2	1412.5	1410.9	1409.2	1407.5
165°	1429.8	1431.8	1433.7	1433.6	1431.4	1429.2	1427.0	1424.8
167.5°	1443.4	1445.5	1447.7	1447.5	1445.1	1442.7	1440.2	1437.8
170°	1451.7	1453.7	1455.7	1455.4	1452.9	1450.5	1448.1	1445.7
172.5°	1457.0	1459.0	1460.8	1460.6	1457.9	1455.3	1452.6	1450.0
175°	1463.2	1465.4	1467.5	1467.2	1464.2	1461.3	1458.4	1455.5
177.5°	1465.7	1467.2	1468.8	1468.4	1466.0	1463.7	1461.3	1459.1
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2

(END OF REPORT)